ALPHA GEOSCIENCE

Geology

Hydrology

Remediation

Water Supply

Data Usability Summary Report
for Alpha Analytical Labs
SDG Number: L2350269

8 Ground Water Samples, 1 Field Duplicate,
1 Equipment Blank, and 1 Trip Blank
Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

The data package contained the documentation as required by NYSDEC ASP. The proper chain of custody procedures were followed by the samplers. All information appeared legible and complete. The data pack contains the results of volatile, semi-volatile, SIM semi-volatile, PCBs, pesticide, total TAL metals and dissolved metals analyses for 8 ground water samples, 1 field duplicate, and 1 equipment blank; general chemistry analyses for 8 ground water samples and 1 field duplicate; and the results of volatile analysis for 1 trip blank.

The overall performances of the analyses are acceptable. Alpha Analytical Labs did fulfill the requirements of the analytical methods.

The data are mostly acceptable with some issues that are identified in the accompanying data validation reviews. The following data were qualified:

- The positive volatile results for acetone were qualified as "not detected" (U) for samples MW-1S and DUP because the level reported in the samples were not significantly greater than (more than 10 times) the highest associated blank level.

- The positive volatile result for tetrachloroethene was qualified as estimated (J) for sample MW-1S because the %D for tetrachloroethene was above the allowable maximum in the associated continuing calibration.

- The "not detected" semi-volatile results for 4-nitroaniline and acetophenone were qualified as estimated (UJ) for sample MW-8S because 1 of 2 percent recoveries for 4-nitroaniline and acetophenone were below QC limits, but not below 30% in the aqueous MS/MSD sample.

- The "not detected" semi-volatile results for 3,3'-dichlorobenzidine, 4-chloroaniline, 3-nitroaniline, and caprolactam were qualified as rejected, unusable (R) for sample MW-8S because 1 or 2 percent recoveries for 3,3'-dichlorobenzidine, 4-chloroaniline, 3-nitroaniline, and caprolactam were below QC limits and below 30% in the aqueous MS/MSD sample.

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- The positive SIM semi-volatile results for naphthalene were qualified as “not detected” (U) for samples MW-1S and DUP because the level reported in the samples were not significantly greater than (more than 5 times) the highest associated blank level.

- The positive SIM semi-volatile results for anthracene were qualified as “not detected” (U) for samples MW-1S, MW-2S, and MW-8S because the level reported in the samples were not significantly greater than (more than 5 times) the highest associated blank level.

- The positive SIM semi-volatile results for phenanthrene were qualified as “not detected” (U) for samples MW-1S and DUP because the level reported in the samples were not significantly greater than (more than 5 times) the highest associated blank level.

- The positive SIM semi-volatile result for fluorene was qualified as “not detected” (U) for sample DUP because the level reported in the sample was not significantly greater than (more than 5 times) the highest associated blank level.

- The positive SIM semi-volatile results for pentachlorophenol were qualified as estimated (J) for samples MW-1S and DUP because the %D for pentachlorophenol was above the allowable maximum in the associated continuing calibration.

- The positive SIM semi-volatile result for 2-chloronaphthalene was qualified as estimated (J) for sample MW-8S because the relative percent difference for 2-chloronaphtahlene was above the allowable maximum in the aqueous MS/MSD sample.

- The positive pesticide results for 4,4'-DDT were qualified as “estimated, biased low” (J-) for samples MW-6D, MW-8S, and DUP because the RPDs for dual column quantitation of 4,4'-DDT were above the allowable maximum, but not above 70% and the lower results were reported.

- The positive pesticide result for 4,4'-DDT was qualified as “rejected, unusable” (R) for sample MW-1S because the RPD for dual column quantitation of 4,4'-DDT was above the allowable maximum and above 100%.

- The positive pesticide result for 4,4'-DDT was qualified as “rejected, unusable” (R) for sample MW-7S because the result for 4,4’-DDT was not confirmed on a second column.

- The positive total and dissolved metal results for arsenic were qualified as estimated (J) for samples MW-8S, MW-2S, and MW-7S because the dissolved results for arsenic were greater than the total results plus 10%.

- The positive dissolved and total metal results for aluminum, arsenic, and iron were qualified as estimated (J) for sample MW-1S because dissolved results for aluminum, arsenic, and iron were greater than the total result plus 10%.

- The positive total and dissolved metal results for arsenic and copper were qualified as estimated (J) for sample MW-3S because dissolved results for arsenic and copper were greater than the total results plus 10%.

- The positive dissolved metal result for iron was qualified as estimated (J) for sample DUP because the relative percent difference for iron was above the allowable maximum in the aqueous dissolved field duplicate pair MW-1S/DUP.

- The positive total metal result for manganese was qualified as "not detected" (U) for sample MW-5S because the level reported in the sample was not significantly greater than (more than 5 times) the highest associated blank level.

- The positive general chemistry results for total nitrogen and nitrate/nitrite were qualified as estimated (J) for samples MW-1S and DUP because the relative percent differences for total nitrogen and nitrate/nitrite were above the allowable maximum in the aqueous dissolved field duplicate pair MW-1S/DUP.

- The positive general chemistry results for total dissolved solids (TDS) were qualified as estimated (J) for all 8 ground samples and the field duplicate because the relative percent difference for TDS was above the allowable maximum in the aqueous dissolved field duplicate pair MW-1S/DUP.

- The "not detected" general chemistry results for sulfide were qualified as estimated (UJ) for all 8 ground water samples and the field duplicate because the percent recovery for sulfide was below QC limits, but not below 30% in the associated aqueous batch spike sample.

- The positive general chemistry results for bromide were qualified as estimated, biased low (J-) for the following samples and the field duplicate because the percent recovery for bromide was below QC limits, but not below 30% in the associated aqueous spike sample.

MW-1S	MW-3S	MW-4D	MW-5S
MW-6D	MW-7S	MW-8S	DUP

- The “not detected” general chemistry result for bromide was qualified as estimated (UJ) for sample MW-2S because the percent recovery for bromide was below QC limits, but not below 30% in the associated aqueous spike sample.

All data that are not qualified rejected (R) are considered usable with estimated (J, J-, or UJ) data associated with a higher level of quantitative uncertainty. Detailed information on data quality is included in the data validation reviews.

Qualified Data Section

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-01	Date Collected	: 08/28/23 16:52
Client ID	: MW-1S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/08/23 11:27
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: PID
Lab File ID	: VE230908A07	Instrument ID	: ELAINE
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
75-09-2	Methylene chloride	ND	2.5	0.70	U	
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U	
67-66-3	Chloroform	ND	2.5	0.70	U	
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U	
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U	
124-48-1	Dibromochloromethane	ND	0.50	0.15	U	
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U	
127-18-4	Tetrachloroethene	0.21	0.50	0.18	J	J
108-90-7	Chlorobenzene	ND	2.5	0.70	U	
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U	
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U	
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U	
75-27-4	Bromodichloromethane	ND	0.50	0.19	U	
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U	
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U	
75-25-2	Bromoform	ND	2.0	0.65	U	
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U	
71-43-2	Benzene	0.28	0.50	0.16	J	
108-88-3	Toluene	ND	2.5	0.70	U	
100-41-4	Ethylbenzene	ND	2.5	0.70	U	
74-87-3	Chloromethane	ND	2.5	0.70	U	
74-83-9	Bromomethane	ND	2.5	0.70	U	
75-01-4	Vinyl chloride	ND	1.0	0.07	U	
75-00-3	Chloroethane	ND	2.5	0.70	U	
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U	

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-01	Date Collected	: 08/28/23 16:52
Client ID	: MW-1S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/08/23 11:27
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: PID
Lab File ID	: VE230908A07	Instrument ID	: ELAINE
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U	
79-01-6	Trichloroethene	ND	0.50	0.18	U	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U	
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U	
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U	
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U	
179601-23-1	p/m-Xylene	ND	2.5	0.70	U	
95-47-6	o-Xylene	ND	2.5	0.70	U	
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U	
100-42-5	Styrene	ND	2.5	0.70	U	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U	
67-64-1	Acetone	1.9	5.0	1.5	J	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U	
78-93-3	2-Butanone	ND	5.0	1.9	U	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U	
591-78-6	2-Hexanone	ND	5.0	1.0	U	
74-97-5	Bromochloromethane	ND	2.5	0.70	U	
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U	
98-82-8	Isopropylbenzene	ND	2.5	0.70	U	
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U	
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U	
79-20-9	Methyl Acetate	ND	2.0	0.23	U	
110-82-7	Cyclohexane	ND	10	0.27	U	
123-91-1	1,4-Dioxane	ND	250	61.	U	

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 11:27
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A07	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 11:52
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A08	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 11:52
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A08	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 11:52
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A08	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A09	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A09	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A09	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 13:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A16	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	1.4	2.5	0.70	J
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 13:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A16	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 13:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A16	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A10	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A10	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A10	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 13:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A11	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 13:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A11	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 13:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A11	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 14:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A17	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 14:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A17	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 14:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A17	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 14:41
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A18	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-08	Date Collected	: 08/28/23 14:30
Client ID	: MW-8S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/07/23 14:41
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MJV
Lab File ID	: V05230907A18	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 14:41
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A18	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:07
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A19	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	0.24	0.50	0.16	J
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-09	Date Collected	: 08/28/23 00:00
Client ID	: DUP	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/07/23 15:07
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,8260D	Analyst	: MJV
Lab File ID	: V05230907A19	Instrument ID	: VOA105
Sample Amount	: 10 ml	GC Column	: RTX-502.2
Level	: LOW	%Solids	: N/A
Extract Volume (MeOH)	: N/A	Injection Volume	: N/A

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U	
79-01-6	Trichloroethene	ND	0.50	0.18	U	
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U	
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U	
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U	
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U	
179601-23-1	p/m-Xylene	ND	2.5	0.70	U	
95-47-6	o-Xylene	ND	2.5	0.70	U	
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U	
100-42-5	Styrene	ND	2.5	0.70	U	
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U	
67-64-1	Acetone	3.4	5.0	1.5	J	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U	
78-93-3	2-Butanone	ND	5.0	1.9	U	
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U	
591-78-6	2-Hexanone	ND	5.0	1.0	U	
74-97-5	Bromochloromethane	ND	2.5	0.70	U	
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U	
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U	
98-82-8	Isopropylbenzene	ND	2.5	0.70	U	
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U	
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U	
79-20-9	Methyl Acetate	ND	2.0	0.23	U	
110-82-7	Cyclohexane	ND	10	0.27	U	
123-91-1	1,4-Dioxane	ND	250	61.	U	

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:07
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A19	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:32
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A20	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:32
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A20	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:32
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A20	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-12	**Date Collected**	: 08/29/23 00:00
Client ID	: TRIP BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:58
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A21	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-12	**Date Collected**	: 08/29/23 00:00
Client ID	: TRIP BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:58
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A21	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	1.8	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-12	**Date Collected**	: 08/29/23 00:00
Client ID	: TRIP BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:58
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A21	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 13:45
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-01	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 13:45
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-01	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	0.77	5.0	0.57	J
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 13:45
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-01	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 14:31
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-02	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 14:31
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-02	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 14:31
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-02	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 14:54
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-03	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 14:54
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-03	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 14:54
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-03	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 07:00
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-04	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: SV106
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 07:00
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-04	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: SV106
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 07:00
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-04	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: SV106
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 06:36
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-05	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: SV106
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 06:36
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-05	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: SV106
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 06:36
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-05	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: SV106
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:16
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-06	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:16
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-06	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:16
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-06	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:38
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-07	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:38
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-07	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:38
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-07	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-08	Date Collected	: 08/28/23 14:30
Client ID	: MW-8S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 08/31/23 16:01
Sample Matrix	: WATER	Date Extracted	: 08/30/23
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 50269-08	Analyst	: JG
Sample Amount	: 275 ml	Instrument ID	: DAKOTA
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U	
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U	R
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U	
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U	
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U	
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U	
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U	
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U	
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U	
78-59-1	Isophorone	ND	5.0	1.2	U	
98-95-3	Nitrobenzene	ND	2.0	0.77	U	
86-30-6	NDPA/DPA	ND	2.0	0.42	U	
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U	
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U	
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U	
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U	
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U	
84-66-2	Diethyl phthalate	ND	5.0	0.38	U	
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U	
92-52-4	Biphenyl	ND	2.0	0.46	U	
106-47-8	4-Chloroaniline	ND	5.0	1.1	U	R
88-74-4	2-Nitroaniline	ND	5.0	0.50	U	

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-08	Date Collected	: 08/28/23 14:30
Client ID	: MW-8S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 08/31/23 16:01
Sample Matrix	: WATER	Date Extracted	: 08/30/23
Analytical Method	: 1,8270E	Dilution Factor	: 1
Lab File ID	: 50269-08	Analyst	: JG
Sample Amount	: 275 ml	Instrument ID	: DAKOTA
Extraction Method	: EPA 3510C	GC Column	: RTX5-MS
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
99-09-2	3-Nitroaniline	ND	5.0	0.81	U	R
100-01-6	4-Nitroaniline	ND	5.0	0.80	U	UJ
132-64-9	Dibenzofuran	ND	2.0	0.50	U	
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U	
98-86-2	Acetophenone	ND	5.0	0.53	U	UJ
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U	
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U	
95-57-8	2-Chlorophenol	ND	2.0	0.48	U	
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U	
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U	
88-75-5	2-Nitrophenol	ND	10	0.85	U	
100-02-7	4-Nitrophenol	ND	10	0.67	U	
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U	
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U	
108-95-2	Phenol	ND	5.0	0.57	U	
95-48-7	2-Methylphenol	ND	5.0	0.49	U	
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U	
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U	
86-74-8	Carbazole	ND	2.0	0.49	U	
1912-24-9	Atrazine	ND	10	0.76	U	
100-52-7	Benzaldehyde	ND	5.0	0.53	U	
105-60-2	Caprolactam	ND	10	3.3	U	R

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 16:01
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-08	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 17:08
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-09	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 17:08
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-09	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	0.92	5.0	0.57	J
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 17:08
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-09	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 17:22
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-11	**Analyst**	: SZ
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 17:22
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-11	**Analyst**	: SZ
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 17:22
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-11	**Analyst**	: SZ
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-01	Date Collected	: 08/28/23 16:52
Client ID	: MW-1S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/07/23 14:51
Sample Matrix	: WATER	Date Extracted	: 08/30/23
Analytical Method	: 1,8270E-SIM	Dilution Factor	: 1
Lab File ID	: 50269-01	Analyst	: JJW
Sample Amount	: 275 ml	Instrument ID	: SV128
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
83-32-9	Acenaphthene	0.10	0.10	0.01	J	
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U	
206-44-0	Fluoranthene	0.03	0.10	0.02	J	
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U	
91-20-3	Naphthalene	0.22	0.10	0.05		U
56-55-3	Benzo(a)anthracene	0.03	0.10	0.02	J	
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U	
218-01-9	Chrysene	ND	0.10	0.01	U	
208-96-8	Acenaphthylene	0.01	0.10	0.01	J	
120-12-7	Anthracene	0.07	0.10	0.01	J	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U	
86-73-7	Fluorene	0.06	0.10	0.01	J	
85-01-8	Phenanthrene	0.09	0.10	0.02	J	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U	
129-00-0	Pyrene	0.03	0.10	0.02	J	
91-57-6	2-Methylnaphthalene	0.05	0.10	0.02	J	
87-86-5	Pentachlorophenol	0.23	0.80	0.01	J	J
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U	
67-72-1	Hexachloroethane	ND	0.80	0.06	U	

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-02	Date Collected	: 08/28/23 15:34
Client ID	: MW-2S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 08/31/23 18:30
Sample Matrix	: WATER	Date Extracted	: 08/30/23
Analytical Method	: 1,8270E-SIM	Dilution Factor	: 1
Lab File ID	: 50269-02	Analyst	: DV
Sample Amount	: 275 ml	Instrument ID	: SV119
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
83-32-9	Acenaphthene	ND	0.10	0.01	U	
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U	
206-44-0	Fluoranthene	ND	0.10	0.02	U	
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U	
91-20-3	Naphthalene	ND	0.10	0.05	U	
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U	
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U	
218-01-9	Chrysene	ND	0.10	0.01	U	
208-96-8	Acenaphthylene	ND	0.10	0.01	U	
120-12-7	Anthracene	0.02	0.10	0.01	J	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U	
86-73-7	Fluorene	ND	0.10	0.01	U	
85-01-8	Phenanthrene	ND	0.10	0.02	U	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U	
129-00-0	Pyrene	ND	0.10	0.02	U	
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U	
87-86-5	Pentachlorophenol	ND	0.80	0.01	U	
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U	
67-72-1	Hexachloroethane	ND	0.80	0.06	U	

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 18:46
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-03	**Analyst**	: DV
Sample Amount	: 275 ml	**Instrument ID**	: SV119
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:07
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-04	**Analyst**	: JJW
Sample Amount	: 275 ml	**Instrument ID**	: SV128
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/09/23 11:32
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-05	**Analyst**	: JJW
Sample Amount	: 275 ml	**Instrument ID**	: SV128
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 19:03
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-06	**Analyst**	: DV
Sample Amount	: 275 ml	**Instrument ID**	: SV119
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:41
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-07	**Analyst**	: JJW
Sample Amount	: 275 ml	**Instrument ID**	: SV128
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-08	Date Collected	: 08/28/23 14:30
Client ID	: MW-8S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/07/23 15:58
Sample Matrix	: WATER	Date Extracted	: 08/30/23
Analytical Method	: 1,8270E-SIM	Dilution Factor	: 1
Lab File ID	: 50269-08	Analyst	: JJW
Sample Amount	: 275 ml	Instrument ID	: SV128
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
83-32-9	Acenaphthene	ND	0.10	0.01	U	
91-58-7	2-Chloronaphthalene	0.02	0.20	0.02	J	J
206-44-0	Fluoranthene	ND	0.10	0.02	U	
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U	
91-20-3	Naphthalene	ND	0.10	0.05	U	
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U	
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U	
218-01-9	Chrysene	ND	0.10	0.01	U	
208-96-8	Acenaphthylene	ND	0.10	0.01	U	
120-12-7	Anthracene	0.04	0.10	0.01	J	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U	
86-73-7	Fluorene	ND	0.10	0.01	U	
85-01-8	Phenanthrene	ND	0.10	0.02	U	
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U	
129-00-0	Pyrene	ND	0.10	0.02	U	
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U	
87-86-5	Pentachlorophenol	ND	0.80	0.01	U	
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U	
67-72-1	Hexachloroethane	ND	0.80	0.06	U	

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-09	Date Collected	: 08/28/23 00:00
Client ID	: DUP	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/07/23 16:49
Sample Matrix	: WATER	Date Extracted	: 08/30/23
Analytical Method	: 1,8270E-SIM	Dilution Factor	: 1
Lab File ID	: 50269-09	Analyst	: JJW
Sample Amount	: 275 ml	Instrument ID	: SV128
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
83-32-9	Acenaphthene	0.10	0.10	0.01	J	
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U	
206-44-0	Fluoranthene	ND	0.10	0.02	U	
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U	
91-20-3	Naphthalene	0.24	0.10	0.05		U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U	
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U	
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U	
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U	
218-01-9	Chrysene	ND	0.10	0.01	U	
208-96-8	Acenaphthylene	0.02	0.10	0.01	J	
120-12-7	Anthracene	0.12	0.10	0.01		
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U	
86-73-7	Fluorene	0.05	0.10	0.01	J	U
85-01-8	Phenanthrene	0.08	0.10	0.02	J	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U	
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U	
129-00-0	Pyrene	ND	0.10	0.02	U	
91-57-6	2-Methylnaphthalene	0.05	0.10	0.02	J	
87-86-5	Pentachlorophenol	0.85	0.80	0.01		J
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U	
67-72-1	Hexachloroethane	ND	0.80	0.06	U	

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 13:43
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-11	**Analyst**	: AH
Sample Amount	: 275 ml	**Instrument ID**	: SV128
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	0.05	0.10	0.05	J
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	0.03	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 18:25
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-43	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 18:34
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-44	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 18:44
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-45	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 18:53
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-46	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 19:02
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-47	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 19:02
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-47	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-PesticideII
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 19:12
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-48	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 19:21
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-49	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 17:57
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-40	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 19:31
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-50	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 23:02
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-56	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 13:05
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-23	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-01	Date Collected	: 08/28/23 16:52
Client ID	: MW-1S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/03/23 13:05
Sample Matrix	: WATER	Date Extracted	: 09/02/23
Analytical Method	: 1,8081B	Dilution Factor	: 1
Lab File ID	: 10230903a-23	Analyst	: MMG
Sample Amount	: 140 ml	Instrument ID	: PEST10
Extraction Method	: EPA 3510C	GC Column	: CLPPesticidesII
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL
Sulfur Cleanup	: N		

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
50-29-3	4,4'-DDT	0.005	0.029	0.003	JIP	R

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 13:16
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-24	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
50-29-3	4,4'-DDT	0.004	0.029	0.003	J
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 13:16
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-24	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 16:56
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230905a-47	**Analyst**	: JAG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
50-29-3	4,4'-DDT	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 16:56
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230905a-47	**Analyst**	: JAG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 16:26
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-47	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
50-29-3	4,4'-DDT	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 16:26
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-47	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 16:37
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-48	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	UIP
72-54-8	4,4'-DDD	ND	0.029	0.003	U
50-29-3	4,4'-DDT	ND	0.029	0.003	UIP
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 16:37
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-48	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 13:38
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-26	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-06	Date Collected	: 08/28/23 17:51
Client ID	: MW-6D	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/03/23 13:38
Sample Matrix	: WATER	Date Extracted	: 09/02/23
Analytical Method	: 1,8081B	Dilution Factor	: 1
Lab File ID	: 10230903a-26	Analyst	: MMG
Sample Amount	: 140 ml	Instrument ID	: PEST10
Extraction Method	: EPA 3510C	GC Column	: CLPPesticidesII
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL
Sulfur Cleanup	: N		

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
50-29-3	4,4'-DDT	0.010	0.029	0.003	JIP	J-

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 14:00
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-28	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-07	Date Collected	: 08/28/23 16:35
Client ID	: MW-7S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/03/23 14:00
Sample Matrix	: WATER	Date Extracted	: 09/02/23
Analytical Method	: 1,8081B	Dilution Factor	: 1
Lab File ID	: 10230903a-28	Analyst	: MMG
Sample Amount	: 140 ml	Instrument ID	: PEST10
Extraction Method	: EPA 3510C	GC Column	: CLPPesticidesII
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL
Sulfur Cleanup	: N		

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
50-29-3	4,4'-DDT	0.003	0.029	0.003	J	R

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 14:11
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-29	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-08	Date Collected	: 08/28/23 14:30
Client ID	: MW-8S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/03/23 14:11
Sample Matrix	: WATER	Date Extracted	: 09/02/23
Analytical Method	: 1,8081B	Dilution Factor	: 1
Lab File ID	: 10230903a-29	Analyst	: MMG
Sample Amount	: 140 ml	Instrument ID	: PEST10
Extraction Method	: EPA 3510C	GC Column	: CLPPesticidesII
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL
Sulfur Cleanup	: N		

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
50-29-3	4,4'-DDT	0.004	0.029	0.003	JIP	J-

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-09	Date Collected	: 08/28/23 00:00
Client ID	: DUP	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/03/23 14:44
Sample Matrix	: WATER	Date Extracted	: 09/02/23
Analytical Method	: 1,8081B	Dilution Factor	: 1
Lab File ID	: 10230903a-32	Analyst	: MMG
Sample Amount	: 140 ml	Instrument ID	: PEST10
Extraction Method	: EPA 3510C	GC Column	: CLPPesticides
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL
Sulfur Cleanup	: N		

		ug/L				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
319-86-8	Delta-BHC	ND	0.014	0.003	U	
58-89-9	Lindane	ND	0.014	0.003	U	
319-84-6	Alpha-BHC	ND	0.014	0.003	U	
319-85-7	Beta-BHC	ND	0.014	0.004	U	
76-44-8	Heptachlor	ND	0.014	0.002	U	
309-00-2	Aldrin	ND	0.014	0.002	U	
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U	
72-20-8	Endrin	ND	0.029	0.003	U	
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U	
53494-70-5	Endrin ketone	ND	0.029	0.003	U	
60-57-1	Dieldrin	ND	0.029	0.003	U	
72-55-9	4,4'-DDE	ND	0.029	0.003	U	
72-54-8	4,4'-DDD	ND	0.029	0.003	U	
50-29-3	4,4'-DDT	0.005	0.029	0.003	J	J-
959-98-8	Endosulfan I	ND	0.014	0.002	U	
33213-65-9	Endosulfan II	ND	0.029	0.004	U	
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U	
72-43-5	Methoxychlor	ND	0.143	0.005	U	
8001-35-2	Toxaphene	ND	0.143	0.045	U	
5103-71-9	cis-Chlordane	ND	0.014	0.005	U	
5103-74-2	trans-Chlordane	ND	0.014	0.004	U	

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 14:44
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-32	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 16:47
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-49	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
50-29-3	4,4'-DDT	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 16:47
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-49	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-08	Date Collected	: 08/28/23 14:30
Client ID	: MW-8S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/03/23 17:18
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: WKP
Lab File ID	: WG1823417.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 09/01/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
7429-90-5	Aluminum, Total	0.00748	0.0100	0.00327	J	
7440-36-0	Antimony, Total	0.00079	0.00400	0.00042	J	
7440-38-2	Arsenic, Total	0.00044	0.00050	0.00016	J	J
7440-39-3	Barium, Total	0.03972	0.00050	0.00017		
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U	
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U	
7440-70-2	Calcium, Total	44.6	0.100	0.0394		
7440-47-3	Chromium, Total	0.00079	0.00100	0.00017	J	
7440-48-4	Cobalt, Total	0.00028	0.00050	0.00016	J	
7440-50-8	Copper, Total	0.00480	0.00100	0.00038		
7439-89-6	Iron, Total	ND	0.0500	0.0191	U	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U	
7439-95-4	Magnesium, Total	4.82	0.0700	0.0242		
7439-96-5	Manganese, Total	0.04738	0.00100	0.00044		
7440-02-0	Nickel, Total	0.00067	0.00200	0.00055	J	
7440-09-7	Potassium, Total	37.5	0.100	0.0309		
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U	
7440-22-4	Silver, Total	ND	0.00040	0.00016	U	
7440-23-5	Sodium, Total	49.3	0.100	0.0293		
7440-28-0	Thallium, Total	0.00030	0.00100	0.00014	J	
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U	
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U	

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-08	Date Collected	: 08/28/23 14:30
Client ID	: MW-8S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/05/23 17:04
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: EJF
Lab File ID	: WG1823506.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 09/01/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	0.00359	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	0.00064	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00054	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.03883	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	42.5	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00033	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00028	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00436	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	4.91	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.04496	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00095	0.00200	0.00055	J
7440-09-7	Potassium, Dissolved	37.6	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	49.5	0.100	0.0293	
7440-28-0	Thallium, Dissolved	0.00030	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-01	Date Collected	: 08/28/23 16:52
Client ID	: MW-1S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:12
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: EJF
Lab File ID	: WG1827292.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 09/01/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
7429-90-5	Aluminum, Dissolved	1.08	0.0100	0.00327		J
7440-36-0	Antimony, Dissolved	0.00078	0.00400	0.00042	J	
7440-38-2	Arsenic, Dissolved	0.00597	0.00050	0.00016		J
7440-39-3	Barium, Dissolved	0.00751	0.00050	0.00017		
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U	
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U	
7440-70-2	Calcium, Dissolved	99.3	0.100	0.0394		
7440-47-3	Chromium, Dissolved	0.00022	0.00100	0.00017	J	
7440-48-4	Cobalt, Dissolved	0.00065	0.00050	0.00016		
7440-50-8	Copper, Dissolved	0.00123	0.00100	0.00038		
7439-89-6	Iron, Dissolved	0.111	0.0500	0.0191		J
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U	
7439-95-4	Magnesium, Dissolved	0.313	0.0700	0.0242		
7439-96-5	Manganese, Dissolved	0.05786	0.00100	0.00044		
7440-02-0	Nickel, Dissolved	0.00721	0.00200	0.00055		
7440-09-7	Potassium, Dissolved	34.8	0.100	0.0309		
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U	
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U	
7440-23-5	Sodium, Dissolved	69.8	0.100	0.0293		
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U	
7440-62-2	Vanadium, Dissolved	0.01985	0.00500	0.00157		
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U	

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-02	Date Collected	: 08/28/23 15:34
Client ID	: MW-2S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:17
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: EJF
Lab File ID	: WG1827292.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 09/01/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	0.00350	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00057	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.03566	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	72.4	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00254	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	0.00056	0.00050	0.00016	
7440-50-8	Copper, Dissolved	0.00184	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	7.10	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	16.2	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	8.29	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-03	Date Collected	: 08/28/23 14:38
Client ID	: MW-3S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:21
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: EJF
Lab File ID	: WG1827292.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 09/01/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U	
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U	
7440-38-2	Arsenic, Dissolved	0.00061	0.00050	0.00016		J
7440-39-3	Barium, Dissolved	0.06189	0.00050	0.00017		
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U	
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U	
7440-70-2	Calcium, Dissolved	74.3	0.100	0.0394		
7440-47-3	Chromium, Dissolved	0.00042	0.00100	0.00017	J	
7440-48-4	Cobalt, Dissolved	0.00050	0.00050	0.00016		
7440-50-8	Copper, Dissolved	0.00191	0.00100	0.00038		J
7439-89-6	Iron, Dissolved	0.0205	0.0500	0.0191	J	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U	
7439-95-4	Magnesium, Dissolved	6.52	0.0700	0.0242		
7439-96-5	Manganese, Dissolved	0.00479	0.00100	0.00044		
7440-02-0	Nickel, Dissolved	0.00156	0.00200	0.00055	J	
7440-09-7	Potassium, Dissolved	18.0	0.100	0.0309		
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U	
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U	
7440-23-5	Sodium, Dissolved	10.2	0.100	0.0293		
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U	
7440-62-2	Vanadium, Dissolved	0.00189	0.00500	0.00157	J	
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U	

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-04	Date Collected	: 08/29/23 10:16
Client ID	: MW-4D	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:26
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: EJF
Lab File ID	: WG1827292.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 09/01/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00016	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.04516	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	20.5	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00124	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	0.0217	0.0500	0.0191	J
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	11.8	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00088	0.00100	0.00044	J
7440-02-0	Nickel, Dissolved	0.00189	0.00200	0.00055	J
7440-09-7	Potassium, Dissolved	1.31	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	61.5	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-05	Date Collected	: 08/29/23 09:10
Client ID	: MW-5S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:31
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: EJF
Lab File ID	: WG1827292.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 09/01/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	0.00703	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00037	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.00769	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	13.6	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00042	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	2.24	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00075	0.00100	0.00044	J
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	2.32	0.100	0.0309	
7782-49-2	Selenium, Dissolved	0.00227	0.00500	0.00173	J
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	6.62	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-06	Date Collected	: 08/28/23 17:51
Client ID	: MW-6D	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:35
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: EJF
Lab File ID	: WG1827292.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 09/01/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	0.00477	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00031	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.05808	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	68.8	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00194	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	0.00029	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00086	0.00100	0.00038	J
7439-89-6	Iron, Dissolved	0.0303	0.0500	0.0191	J
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	16.6	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.7506	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00141	0.00200	0.00055	J
7440-09-7	Potassium, Dissolved	23.8	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	26.0	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-07	Date Collected	: 08/28/23 16:35
Client ID	: MW-7S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:40
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: EJF
Lab File ID	: WG1827292.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 09/01/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	0.00334	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00050	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.09938	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	166.	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00059	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00038	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00185	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	15.9	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.01123	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00083	0.00200	0.00055	J
7440-09-7	Potassium, Dissolved	14.3	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	29.8	0.100	0.0293	
7440-28-0	Thallium, Dissolved	0.00026	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-09	Date Collected	: 08/28/23 00:00
Client ID	: DUP	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 17:37
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: EJF
Lab File ID	: WG1827292.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 09/01/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	1.02	0.0100	0.00327	
7440-36-0	Antimony, Dissolved	0.00118	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00498	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.00741	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	98.4	0.100	0.0394	
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	0.00063	0.00050	0.00016	
7440-50-8	Copper, Dissolved	0.00118	0.00100	0.00038	
7439-89-6	Iron, Dissolved	0.0542	0.0500	0.0191	J
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	0.291	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.05482	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00691	0.00200	0.00055	
7440-09-7	Potassium, Dissolved	33.8	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	66.1	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	0.01964	0.00500	0.00157	
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-11	Date Collected	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 17:00
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: EJF
Lab File ID	: WG1827292.pdf	Instrument ID	: ICPMSQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 09/01/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	ND	0.100	0.0394	U
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	ND	0.0700	0.0242	U
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	ND	0.100	0.0309	U
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	ND	0.100	0.0293	U
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-01	Date Collected	: 08/28/23 16:52
Client ID	: MW-1S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:04
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: SMV
Lab File ID	: WG1827474.pdf	Instrument ID	: ICPMSRQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 08/31/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
7429-90-5	Aluminum, Total	0.804	0.0100	0.00327		J
7440-36-0	Antimony, Total	0.00068	0.00400	0.00042	J	
7440-38-2	Arsenic, Total	0.00529	0.00050	0.00016		J
7440-39-3	Barium, Total	0.00738	0.00050	0.00017		
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U	
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U	
7440-70-2	Calcium, Total	101.	0.100	0.0394		
7440-47-3	Chromium, Total	0.00017	0.00100	0.00017	J	
7440-48-4	Cobalt, Total	0.00064	0.00050	0.00016		
7440-50-8	Copper, Total	0.00145	0.00100	0.00038		
7439-89-6	Iron, Total	0.0607	0.0500	0.0191		J
7439-92-1	Lead, Total	ND	0.00100	0.00034	U	
7439-95-4	Magnesium, Total	0.310	0.0700	0.0242		
7439-96-5	Manganese, Total	0.07072	0.00100	0.00044		
7440-02-0	Nickel, Total	0.00715	0.00200	0.00055		
7440-09-7	Potassium, Total	39.4	0.100	0.0309		
7782-49-2	Selenium, Total	0.00190	0.00500	0.00173	J	
7440-22-4	Silver, Total	ND	0.00040	0.00016	U	
7440-23-5	Sodium, Total	67.7	0.100	0.0293		
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U	
7440-62-2	Vanadium, Total	0.02120	0.00500	0.00157		
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U	

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-02	Date Collected	: 08/28/23 15:34
Client ID	: MW-2S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:09
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: SMV
Lab File ID	: WG1827474.pdf	Instrument ID	: ICPMSRQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 08/31/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
7429-90-5	Aluminum, Total	0.00508	0.0100	0.00327	J	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U	
7440-38-2	Arsenic, Total	0.00022	0.00050	0.00016	J	J
7440-39-3	Barium, Total	0.03701	0.00050	0.00017		
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U	
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U	
7440-70-2	Calcium, Total	75.0	0.100	0.0394		
7440-47-3	Chromium, Total	0.00258	0.00100	0.00017		
7440-48-4	Cobalt, Total	0.00055	0.00050	0.00016		
7440-50-8	Copper, Total	0.00185	0.00100	0.00038		
7439-89-6	Iron, Total	ND	0.0500	0.0191	U	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U	
7439-95-4	Magnesium, Total	7.20	0.0700	0.0242		
7439-96-5	Manganese, Total	ND	0.00100	0.00044	U	
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U	
7440-09-7	Potassium, Total	18.6	0.100	0.0309		
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U	
7440-22-4	Silver, Total	ND	0.00040	0.00016	U	
7440-23-5	Sodium, Total	8.30	0.100	0.0293		
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U	
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U	
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U	

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-03	Date Collected	: 08/28/23 14:38
Client ID	: MW-3S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:13
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: SMV
Lab File ID	: WG1827474.pdf	Instrument ID	: ICPMSRQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 08/31/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U	
7440-38-2	Arsenic, Total	0.00035	0.00050	0.00016	J	J
7440-39-3	Barium, Total	0.06158	0.00050	0.00017		
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U	
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U	
7440-70-2	Calcium, Total	82.9	0.100	0.0394		
7440-47-3	Chromium, Total	0.00062	0.00100	0.00017	J	
7440-48-4	Cobalt, Total	0.00063	0.00050	0.00016		
7440-50-8	Copper, Total	0.00145	0.00100	0.00038		J
7439-89-6	Iron, Total	0.0373	0.0500	0.0191	J	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U	
7439-95-4	Magnesium, Total	6.90	0.0700	0.0242		
7439-96-5	Manganese, Total	0.00940	0.00100	0.00044		
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U	
7440-09-7	Potassium, Total	21.2	0.100	0.0309		
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U	
7440-22-4	Silver, Total	ND	0.00040	0.00016	U	
7440-23-5	Sodium, Total	10.9	0.100	0.0293		
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U	
7440-62-2	Vanadium, Total	0.00215	0.00500	0.00157	J	
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U	

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-04	Date Collected	: 08/29/23 10:16
Client ID	: MW-4D	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:18
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: SMV
Lab File ID	: WG1827474.pdf	Instrument ID	: ICPMSRQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 08/31/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	0.0351	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.04657	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	22.4	0.100	0.0394	
7440-47-3	Chromium, Total	0.00642	0.00100	0.00017	
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	0.109	0.0500	0.0191	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	13.3	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00904	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00373	0.00200	0.00055	
7440-09-7	Potassium, Total	1.36	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	59.9	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

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METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-05	Date Collected	: 08/29/23 09:10
Client ID	: MW-5S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:23
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: SMV
Lab File ID	: WG1827474.pdf	Instrument ID	: ICPMSRQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 08/31/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	0.0125	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00019	0.00050	0.00016	J
7440-39-3	Barium, Total	0.00836	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	14.2	0.100	0.0394	
7440-47-3	Chromium, Total	0.00035	0.00100	0.00017	J
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	0.0243	0.0500	0.0191	J
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	2.54	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00409	0.00100	0.00044	U
7440-02-0	Nickel, Total	0.00055	0.00200	0.00055	J
7440-09-7	Potassium, Total	2.57	0.100	0.0309	
7782-49-2	Selenium, Total	0.00211	0.00500	0.00173	J
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	7.26	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-06	Date Collected	: 08/28/23 17:51
Client ID	: MW-6D	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:28
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: SMV
Lab File ID	: WG1827474.pdf	Instrument ID	: ICPMSRQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 08/31/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	0.0463	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00028	0.00050	0.00016	J
7440-39-3	Barium, Total	0.05936	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	77.5	0.100	0.0394	
7440-47-3	Chromium, Total	0.01104	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00044	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00124	0.00100	0.00038	
7439-89-6	Iron, Total	0.210	0.0500	0.0191	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	19.7	0.0700	0.0242	
7439-96-5	Manganese, Total	0.9300	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00713	0.00200	0.00055	
7440-09-7	Potassium, Total	29.9	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	25.5	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

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METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-07	Date Collected	: 08/28/23 16:35
Client ID	: MW-7S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 16:33
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: SMV
Lab File ID	: WG1827474.pdf	Instrument ID	: ICPMSRQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 08/31/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
7429-90-5	Aluminum, Total	0.00485	0.0100	0.00327	J	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U	
7440-38-2	Arsenic, Total	0.00024	0.00050	0.00016	J	J
7440-39-3	Barium, Total	0.1016	0.00050	0.00017		
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U	
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U	
7440-70-2	Calcium, Total	172.	0.100	0.0394		
7440-47-3	Chromium, Total	0.00120	0.00100	0.00017		
7440-48-4	Cobalt, Total	0.00037	0.00050	0.00016	J	
7440-50-8	Copper, Total	0.00200	0.00100	0.00038		
7439-89-6	Iron, Total	ND	0.0500	0.0191	U	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U	
7439-95-4	Magnesium, Total	18.6	0.0700	0.0242		
7439-96-5	Manganese, Total	0.01425	0.00100	0.00044		
7440-02-0	Nickel, Total	0.00103	0.00200	0.00055	J	
7440-09-7	Potassium, Total	15.8	0.100	0.0309		
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U	
7440-22-4	Silver, Total	ND	0.00040	0.00016	U	
7440-23-5	Sodium, Total	29.0	0.100	0.0293		
7440-28-0	Thallium, Total	0.00023	0.00100	0.00014	J	
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U	
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U	

Form 1
METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-09	Date Collected	: 08/28/23 00:00
Client ID	: DUP	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 14:23
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: SMV
Lab File ID	: WG1827474.pdf	Instrument ID	: ICPMSRQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 09/01/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	0.821	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00065	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.00502	0.00050	0.00016	
7440-39-3	Barium, Total	0.00769	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	101.	0.100	0.0394	
7440-47-3	Chromium, Total	0.00020	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00062	0.00050	0.00016	
7440-50-8	Copper, Total	0.00138	0.00100	0.00038	
7439-89-6	Iron, Total	0.0638	0.0500	0.0191	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	0.322	0.0700	0.0242	
7439-96-5	Manganese, Total	0.07032	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00689	0.00200	0.00055	
7440-09-7	Potassium, Total	38.2	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	63.5	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.02094	0.00500	0.00157	
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

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METALS

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-11	Date Collected	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/14/23 13:59
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 1,6020B	Analyst	: SMV
Lab File ID	: WG1827474.pdf	Instrument ID	: ICPMSRQ
Sample Amount	: 50ml	%Solids	: N/A
Digestion Method	: EPA 3005A	Date Digested	: 09/01/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7429-90-5	Aluminum, Total	0.00481	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.00025	0.00050	0.00017	J
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	ND	0.100	0.0394	U
7440-47-3	Chromium, Total	0.00097	0.00100	0.00017	J
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	ND	0.0700	0.0242	U
7439-96-5	Manganese, Total	0.00116	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00084	0.00200	0.00055	J
7440-09-7	Potassium, Total	ND	0.100	0.0309	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	ND	0.100	0.0293	U
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 21:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	0.00009	0.00020	0.00009	J

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 21:28
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 21:54
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 21:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	0.00013	0.00020	0.00009	J

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 22:00
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	0.00015	0.00020	0.00009	J

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 22:04
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	0.00011	0.00020	0.00009	J

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 22:07
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	0.00010	0.00020	0.00009	J

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:41
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:44
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:47
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:54
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 14:00
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:31
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 14:10
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 14:14
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 09:19
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1824497.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 09:39
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1824497.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 09:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1824497.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-01	Date Collected	:	08/28/23 16:52
Client ID	:	MW-1S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/13/23 11:20
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	107,-	Analyst	:	MRM
Lab File ID	:	WG1826994.csv	Instrument ID	:	
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Total Nitrogen	0.46	0.30	0.30	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 22:51
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: WMT
Lab File ID	: WG1826738.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	1.5	0.30	0.30	

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-03	Date Collected	:	08/28/23 14:38
Client ID	:	MW-3S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/12/23 22:51
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	107,-	Analyst	:	WMT
Lab File ID	:	WG1826738.csv	Instrument ID	:	
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Total Nitrogen	2.0	0.30	0.30	

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-04	Date Collected	:	08/29/23 10:16
Client ID	:	MW-4D	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/12/23 22:51
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	107,-	Analyst	:	WMT
Lab File ID	:	WG1826738.csv	Instrument ID	:	
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Total Nitrogen	0.46	0.30	0.30	

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-05	Date Collected	:	08/29/23 09:10
Client ID	:	MW-5S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/12/23 22:51
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	107,-	Analyst	:	WMT
Lab File ID	:	WG1826738.csv	Instrument ID	:	
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Total Nitrogen	0.92	0.30	0.30	

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-06	Date Collected	:	08/28/23 17:51
Client ID	:	MW-6D	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/12/23 22:51
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	107,-	Analyst	:	WMT
Lab File ID	:	WG1826738.csv	Instrument ID	:	
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Total Nitrogen	2.6	0.30	0.30	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-07**	**Date Collected**	:	**08/28/23 16:35**
Client ID	:	**MW-7S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/12/23 22:51**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**WMT**
Lab File ID	:	**WG1826738.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**10.**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-08**	**Date Collected**	:	**08/28/23 14:30**
Client ID	:	**MW-8S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/12/23 22:51**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**WMT**
Lab File ID	:	**WG1826738.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**0.97**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-09	Date Collected	:	08/28/23 00:00
Client ID	:	DUP	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/12/23 22:51
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	107,-	Analyst	:	WMT
Lab File ID	:	WG1826738.csv	Instrument ID	:	
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Total Nitrogen	3.7	0.30	0.30	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/13/23 13:16
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230913-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/12/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	3.49	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:55
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230908-F	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.301	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 17:25
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: AVT
Lab File ID	: NH320230906-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.173	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 17:26
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: AVT
Lab File ID	: NH320230906-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.268	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 17:29
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: AVT
Lab File ID	: NH320230906-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.168	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/11/23 10:34
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230911-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/08/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	1.39	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/11/23 10:35
Sample Matrix	: WATER	**Dilution Factor**	: 2
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230911-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/08/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.210	0.600	0.132	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2350269
Project Name	:	HUNTINGTON READY MIX	**Project Number**	:	20116
Lab ID	:	L2350269-08	**Date Collected**	:	08/28/23 14:30
Client ID	:	MW-8S	**Date Received**	:	08/29/23
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	09/11/23 10:36
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	121,4500NH3-H	**Analyst**	:	KEP
Lab File ID	:	NH320230911-D	**Instrument ID**	:	LACHAT
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	09/08/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.435	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/11/23 10:37
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230911-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/08/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	3.54	0.300	0.066	

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-01	Date Collected	:	08/28/23 16:52
Client ID	:	MW-1S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/12/23 14:13
Sample Matrix	:	WATER	Dilution Factor	:	2
Analytical Method	:	44,350.1	Analyst	:	KEP
Lab File ID	:	NH320230912-H	Instrument ID	:	LACHAT5
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	09/11/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7664-41-7	Nitrogen, Ammonia	2.65	0.150	0.048	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 14:16
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.034	0.075	0.024	J

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-03**	**Date Collected**	:	**08/28/23 14:38**
Client ID	:	**MW-3S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/12/23 14:17**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**44,350.1**	**Analyst**	:	**KEP**
Lab File ID	:	**NH320230912-H**	**Instrument ID**	:	**LACHAT5**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	**09/11/23**

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	**Nitrogen, Ammonia**	**ND**	**0.075**	**0.024**	**U**

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 14:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	ND	0.075	0.024	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 14:19
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.033	0.075	0.024	J

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-06**	**Date Collected**	:	**08/28/23 17:51**
Client ID	:	**MW-6D**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/12/23 14:22**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**44,350.1**	**Analyst**	:	**KEP**
Lab File ID	:	**NH320230912-H**	**Instrument ID**	:	**LACHAT5**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	**09/11/23**

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	**Nitrogen, Ammonia**	**1.09**	**0.075**	**0.024**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 14:23
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	ND	0.075	0.024	U

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-08**	**Date Collected**	:	**08/28/23 14:30**
Client ID	:	**MW-8S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/12/23 14:41**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**44,350.1**	**Analyst**	:	**KEP**
Lab File ID	:	**NH320230912-H**	**Instrument ID**	:	**LACHAT5**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	**09/11/23**

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	**Nitrogen, Ammonia**	**ND**	**0.075**	**0.024**	**U**

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-09**	**Date Collected**	:	**08/28/23 00:00**
Client ID	:	**DUP**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/12/23 14:25**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**44,350.1**	**Analyst**	:	**KEP**
Lab File ID	:	**NH320230912-H**	**Instrument ID**	:	**LACHAT5**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	**09/11/23**

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	**Nitrogen, Ammonia**	**2.45**	**0.075**	**0.024**	

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-01	Date Collected	:	08/28/23 16:52
Client ID	:	MW-1S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	08/31/23 04:52
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,4500NO3-F	Analyst	:	KAF
Lab File ID	:	NO3230831-A1	Instrument ID	:	LACHAT
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Nitrogen, Nitrate/Nitrite	0.11	0.10	0.046	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 04:56
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3230831-A1	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	1.2	0.10	0.046	

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2350269
Project Name	:	HUNTINGTON READY MIX	**Project Number**	:	20116
Lab ID	:	L2350269-03	**Date Collected**	:	08/28/23 14:38
Client ID	:	MW-3S	**Date Received**	:	08/29/23
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	08/31/23 04:57
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	121,4500NO3-F	**Analyst**	:	KAF
Lab File ID	:	NO3230831-A1	**Instrument ID**	:	LACHAT
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	2.0	0.10	0.046	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-04**	**Date Collected**	:	**08/29/23 10:16**
Client ID	:	**MW-4D**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/31/23 04:58**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3230831-A1**	**Instrument ID**	:	**LACHAT**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**0.46**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-05**	**Date Collected**	:	**08/29/23 09:10**
Client ID	:	**MW-5S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/31/23 05:03**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3230831-A1**	**Instrument ID**	:	**LACHAT**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**0.92**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 05:05
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3230831-A1	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	1.2	0.10	0.046	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-07**	**Date Collected**	:	**08/28/23 16:35**
Client ID	:	**MW-7S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/31/23 05:23**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**5**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3230831-A1**	**Instrument ID**	:	**LACHAT**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**10.**	**0.50**	**0.23**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-08**	**Date Collected**	:	**08/28/23 14:30**
Client ID	:	**MW-8S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/31/23 05:24**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3230831-A1**	**Instrument ID**	:	**LACHAT**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**0.53**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-09	Date Collected	:	08/28/23 00:00
Client ID	:	DUP	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	08/31/23 05:09
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,4500NO3-F	Analyst	:	KAF
Lab File ID	:	NO3230831-A1	Instrument ID	:	LACHAT
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Nitrogen, Nitrate/Nitrite	0.14	0.10	0.046	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-01	Date Collected	:	08/28/23 16:52
Client ID	:	MW-1S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/01/23 04:50
Sample Matrix	:	WATER	Dilution Factor	:	1.3
Analytical Method	:	121,2540C	Analyst	:	DEW
Lab File ID	:	WG1822690.pdf	Instrument ID	:	BALANCE#22
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	520	13	4.0	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-02	Date Collected	:	08/28/23 15:34
Client ID	:	MW-2S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/01/23 04:50
Sample Matrix	:	WATER	Dilution Factor	:	1.3
Analytical Method	:	121,2540C	Analyst	:	DEW
Lab File ID	:	WG1822690.pdf	Instrument ID	:	BALANCE#22
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	280	13	4.0	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-03	Date Collected	:	08/28/23 14:38
Client ID	:	MW-3S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/01/23 04:50
Sample Matrix	:	WATER	Dilution Factor	:	1.3
Analytical Method	:	121,2540C	Analyst	:	DEW
Lab File ID	:	WG1822690.pdf	Instrument ID	:	BALANCE#22
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	300	13	4.0	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-04	Date Collected	:	08/29/23 10:16
Client ID	:	MW-4D	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/01/23 04:50
Sample Matrix	:	WATER	Dilution Factor	:	1.3
Analytical Method	:	121,2540C	Analyst	:	DEW
Lab File ID	:	WG1822690.pdf	Instrument ID	:	BALANCE#22
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	240	13	4.0	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-05	Date Collected	:	08/29/23 09:10
Client ID	:	MW-5S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/01/23 04:50
Sample Matrix	:	WATER	Dilution Factor	:	1.3
Analytical Method	:	121,2540C	Analyst	:	DEW
Lab File ID	:	WG1822690.pdf	Instrument ID	:	BALANCE#22
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	82.	13	4.0	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-06	Date Collected	:	08/28/23 17:51
Client ID	:	MW-6D	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/01/23 04:50
Sample Matrix	:	WATER	Dilution Factor	:	1.3
Analytical Method	:	121,2540C	Analyst	:	DEW
Lab File ID	:	WG1822690.pdf	Instrument ID	:	BALANCE#22
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	400	13	4.0	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-07	Date Collected	:	08/28/23 16:35
Client ID	:	MW-7S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/01/23 04:50
Sample Matrix	:	WATER	Dilution Factor	:	1.3
Analytical Method	:	121,2540C	Analyst	:	DEW
Lab File ID	:	WG1822690.pdf	Instrument ID	:	BALANCE#22
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	600	13	4.0	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-08	Date Collected	:	08/28/23 14:30
Client ID	:	MW-8S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/01/23 04:50
Sample Matrix	:	WATER	Dilution Factor	:	1.3
Analytical Method	:	121,2540C	Analyst	:	DEW
Lab File ID	:	WG1822690.pdf	Instrument ID	:	BALANCE#22
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	330	13	4.0	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-09	Date Collected	:	08/28/23 00:00
Client ID	:	DUP	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/01/23 04:50
Sample Matrix	:	WATER	Dilution Factor	:	1.3
Analytical Method	:	121,2540C	Analyst	:	DEW
Lab File ID	:	WG1822690.pdf	Instrument ID	:	BALANCE#22
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
NONE	Solids, Total Dissolved	600	13	4.0	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-01	Date Collected	:	08/28/23 16:52
Client ID	:	MW-1S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	08/31/23 12:49
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,4500S2-D	Analyst	:	LOF
Lab File ID	:	WG1822398.csv	Instrument ID	:	GENSYS10VI
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	08/31/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
18496-25-8	Sulfide	ND	0.10	0.10	U	UJ

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-02	Date Collected	:	08/28/23 15:34
Client ID	:	MW-2S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	08/31/23 12:49
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,4500S2-D	Analyst	:	LOF
Lab File ID	:	WG1822398.csv	Instrument ID	:	GENSYS10VI
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	08/31/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
18496-25-8	Sulfide	ND	0.10	0.10	U	UJ

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-03	Date Collected	:	08/28/23 14:38
Client ID	:	MW-3S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	08/31/23 15:46
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,4500S2-D	Analyst	:	LOF
Lab File ID	:	WG1822398.csv	Instrument ID	:	GENSYS10VI
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	08/31/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
18496-25-8	Sulfide	ND	0.10	0.10	U	UJ

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-04	Date Collected	:	08/29/23 10:16
Client ID	:	MW-4D	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	08/31/23 15:47
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,4500S2-D	Analyst	:	LOF
Lab File ID	:	WG1822398.csv	Instrument ID	:	GENSYS10VI
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	08/31/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
18496-25-8	Sulfide	ND	0.10	0.10	U	UJ

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-05	Date Collected	:	08/29/23 09:10
Client ID	:	MW-5S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	08/31/23 15:47
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,4500S2-D	Analyst	:	LOF
Lab File ID	:	WG1822398.csv	Instrument ID	:	GENSYS10VI
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	08/31/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
18496-25-8	Sulfide	ND	0.10	0.10	U	UJ

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-06	Date Collected	:	08/28/23 17:51
Client ID	:	MW-6D	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	08/31/23 15:48
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,4500S2-D	Analyst	:	LOF
Lab File ID	:	WG1822398.csv	Instrument ID	:	GENSYS10VI
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	08/31/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
18496-25-8	Sulfide	ND	0.10	0.10	U	UJ

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-07	Date Collected	:	08/28/23 16:35
Client ID	:	MW-7S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	08/31/23 15:49
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,4500S2-D	Analyst	:	LOF
Lab File ID	:	WG1822398.csv	Instrument ID	:	GENSYS10VI
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	08/31/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
18496-25-8	Sulfide	ND	0.10	0.10	U	UJ

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-08	Date Collected	:	08/28/23 14:30
Client ID	:	MW-8S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	08/31/23 15:49
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,4500S2-D	Analyst	:	LOF
Lab File ID	:	WG1822398.csv	Instrument ID	:	GENSYS10VI
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	08/31/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
18496-25-8	Sulfide	ND	0.10	0.10	U	UJ

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-09	Date Collected	:	08/28/23 00:00
Client ID	:	DUP	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	08/31/23 15:49
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,4500S2-D	Analyst	:	LOF
Lab File ID	:	WG1822398.csv	Instrument ID	:	GENSYS10VI
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	08/31/23

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
18496-25-8	Sulfide	ND	0.10	0.10	U	UJ

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/11/23 12:22
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 230911.csv	**Instrument ID**	: METTLER
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	85.2	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824053.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	41.2	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824053.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824053.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824053.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825164.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825164.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825164.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-09	Date Collected	:	08/28/23 00:00
Client ID	:	DUP	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/07/23 15:01
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,2320B	Analyst	:	MRS
Lab File ID	:	WG1825164.csv	Instrument ID	:	
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg CaCO3/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
3812-32-6	Alkalinity, Carbonate	36.8	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824049.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824049.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	154.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824049.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	154.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824049.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	57.0	2.00	NA	

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-05	Date Collected	:	08/29/23 09:10
Client ID	:	MW-5S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/07/23 15:01
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,2320B	Analyst	:	MRS
Lab File ID	:	WG1825166.csv	Instrument ID	:	
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg CaCO3/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
71-52-3	Alkalinity, Bicarbonate	21.8	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825166.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	161.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825166.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	286.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825166.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	2.60	2.00	NA	

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2350269
Project Name	:	HUNTINGTON READY MIX	**Project Number**	:	20116
Lab ID	:	L2350269-01	**Date Collected**	:	08/28/23 16:52
Client ID	:	MW-1S	**Date Received**	:	08/29/23
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	09/05/23 13:29
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	121,4500P-E(M)	**Analyst**	:	RDS
Lab File ID	:	PHOS090523-WG1823610.csv	**Instrument ID**	:	SEAL
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.095	0.031	0.012	

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2350269
Project Name	:	HUNTINGTON READY MIX	**Project Number**	:	20116
Lab ID	:	L2350269-02	**Date Collected**	:	08/28/23 15:34
Client ID	:	MW-2S	**Date Received**	:	08/29/23
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	09/05/23 13:30
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	121,4500P-E(M)	**Analyst**	:	RDS
Lab File ID	:	PHOS090523-WG1823610.csv	**Instrument ID**	:	SEAL
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-03	Date Collected	:	08/28/23 14:38
Client ID	:	MW-3S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/05/23 13:31
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	121,4500P-E(M)	Analyst	:	RDS
Lab File ID	:	PHOS090523-WG1823610.csv	Instrument ID	:	SEAL
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	09/05/23

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2350269
Project Name	:	HUNTINGTON READY MIX	**Project Number**	:	20116
Lab ID	:	L2350269-04	**Date Collected**	:	08/29/23 10:16
Client ID	:	MW-4D	**Date Received**	:	08/29/23
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	09/05/23 13:32
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	121,4500P-E(M)	**Analyst**	:	RDS
Lab File ID	:	PHOS090523-WG1823610.csv	**Instrument ID**	:	SEAL
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.043	0.031	0.012	

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2350269
Project Name	:	HUNTINGTON READY MIX	**Project Number**	:	20116
Lab ID	:	L2350269-05	**Date Collected**	:	08/29/23 09:10
Client ID	:	MW-5S	**Date Received**	:	08/29/23
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	09/05/23 13:36
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	121,4500P-E(M)	**Analyst**	:	RDS
Lab File ID	:	PHOS090523-WG1823610.csv	**Instrument ID**	:	SEAL
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2350269
Project Name	:	HUNTINGTON READY MIX	**Project Number**	:	20116
Lab ID	:	L2350269-06	**Date Collected**	:	08/28/23 17:51
Client ID	:	MW-6D	**Date Received**	:	08/29/23
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	09/05/23 13:37
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	121,4500P-E(M)	**Analyst**	:	RDS
Lab File ID	:	PHOS090523-WG1823610.csv	**Instrument ID**	:	SEAL
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.061	0.031	0.012	

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2350269
Project Name	:	HUNTINGTON READY MIX	**Project Number**	:	20116
Lab ID	:	L2350269-07	**Date Collected**	:	08/28/23 16:35
Client ID	:	MW-7S	**Date Received**	:	08/29/23
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	09/05/23 13:38
Sample Matrix	:	WATER	**Dilution Factor**	:	1
Analytical Method	:	121,4500P-E(M)	**Analyst**	:	RDS
Lab File ID	:	PHOS090523-WG1823610.csv	**Instrument ID**	:	SEAL
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:39
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: RDS
Lab File ID	: PHOS090523-WG1823610.csv	**Instrument ID**	: SEAL
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:40
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: RDS
Lab File ID	: PHOS090523-WG1823610.csv	**Instrument ID**	: SEAL
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.086	0.031	0.012	

Form 1
WETCHEM

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-01	Date Collected	: 08/28/23 16:52
Client ID	: MW-1S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/02/23 17:20
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 44,300.0	Analyst	: CVN,
Lab File ID	: WG1823254	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
24959-67-9	Bromide	0.124	0.050	0.013	J-
16887-00-6	Chloride	49.6	0.500	0.083	
16984-48-8	Fluoride	0.113	0.050	0.037	

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2350269
Project Name	:	HUNTINGTON READY MIX	**Project Number**	:	20116
Lab ID	:	L2350269-01	**Date Collected**	:	08/28/23 16:52
Client ID	:	MW-1S	**Date Received**	:	08/29/23
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	09/02/23 10:53
Sample Matrix	:	WATER	**Dilution Factor**	:	10
Analytical Method	:	44,300.0	**Analyst**	:	CVN
Lab File ID	:	WG1823254	**Instrument ID**	:	IC3
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	301.	10.0	4.54	

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-02	Date Collected	:	08/28/23 15:34
Client ID	:	MW-2S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/02/23 17:32
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	44,300.0	Analyst	:	CVN,
Lab File ID	:	WG1823254	Instrument ID	:	IC3
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l				
CAS NO.	Parameter	Results	RL	MDL	Qualifier	
24959-67-9	Bromide	ND	0.050	0.013	U	UJ
16887-00-6	Chloride	7.39	0.500	0.083		
16984-48-8	Fluoride	0.088	0.050	0.037		
14808-79-8	Sulfate	72.9	1.00	0.454		

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-03	Date Collected	:	08/28/23 14:38
Client ID	:	MW-3S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/02/23 17:44
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	44,300.0	Analyst	:	CVN,
Lab File ID	:	WG1823254	Instrument ID	:	IC3
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
24959-67-9	Bromide	0.071	0.050	0.013	J-
16887-00-6	Chloride	8.41	0.500	0.083	
16984-48-8	Fluoride	0.087	0.050	0.037	
14808-79-8	Sulfate	81.0	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 11:29
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16887-00-6	Chloride	129.	5.00	0.839	

Form 1
WETCHEM

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-04	Date Collected	: 08/29/23 10:16
Client ID	: MW-4D	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/02/23 17:56
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 44,300.0	Analyst	: CVN,
Lab File ID	: WG1823254	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
24959-67-9	Bromide	0.074	0.050	0.013	J-
16984-48-8	Fluoride	0.045	0.050	0.037	J
14808-79-8	Sulfate	5.93	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-05	Date Collected	: 08/29/23 09:10
Client ID	: MW-5S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/02/23 18:32
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 44,300.0	Analyst	: CVN,
Lab File ID	: WG1823254	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
24959-67-9	Bromide	0.079	0.050	0.013	J-
16887-00-6	Chloride	12.5	0.500	0.083	
16984-48-8	Fluoride	ND	0.050	0.037	U
14808-79-8	Sulfate	24.0	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-06	Date Collected	: 08/28/23 17:51
Client ID	: MW-6D	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/02/23 18:44
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 44,300.0	Analyst	: CVN,
Lab File ID	: WG1823254	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
24959-67-9	Bromide	0.123	0.050	0.013	J-
16887-00-6	Chloride	43.3	0.500	0.083	
16984-48-8	Fluoride	0.037	0.050	0.037	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2350269
Project Name	:	HUNTINGTON READY MIX	**Project Number**	:	20116
Lab ID	:	L2350269-06	**Date Collected**	:	08/28/23 17:51
Client ID	:	MW-6D	**Date Received**	:	08/29/23
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	09/02/23 11:53
Sample Matrix	:	WATER	**Dilution Factor**	:	10
Analytical Method	:	44,300.0	**Analyst**	:	CVN,
Lab File ID	:	WG1823254C	**Instrument ID**	:	IC3
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	115.	10.0	4.54	

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2350269
Project Name	:	HUNTINGTON READY MIX	**Project Number**	:	20116
Lab ID	:	L2350269-07	**Date Collected**	:	08/28/23 16:35
Client ID	:	MW-7S	**Date Received**	:	08/29/23
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	09/02/23 12:30
Sample Matrix	:	WATER	**Dilution Factor**	:	10
Analytical Method	:	44,300.0	**Analyst**	:	CVN,
Lab File ID	:	WG1823254B	**Instrument ID**	:	IC3
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	158.	10.0	4.54	

Form 1
WETCHEM

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: L2350269-07	Date Collected	: 08/28/23 16:35
Client ID	: MW-7S	Date Received	: 08/29/23
Sample Location	: SPEONK, NY	Date Analyzed	: 09/02/23 18:56
Sample Matrix	: WATER	Dilution Factor	: 1
Analytical Method	: 44,300.0	Analyst	: CVN,
Lab File ID	: WG1823254	Instrument ID	: IC3
Sample Amount	:	%Solids	: N/A
Digestion Method	:	Date Digested	:

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
24959-67-9	Bromide	0.141	0.050	0.013	J-
16887-00-6	Chloride	23.4	0.500	0.083	
16984-48-8	Fluoride	0.038	0.050	0.037	J

Form 1
WETCHEM

Client	:	Alpha Geoscience	**Lab Number**	:	L2350269
Project Name	:	HUNTINGTON READY MIX	**Project Number**	:	20116
Lab ID	:	L2350269-08	**Date Collected**	:	08/28/23 14:30
Client ID	:	MW-8S	**Date Received**	:	08/29/23
Sample Location	:	SPEONK, NY	**Date Analyzed**	:	09/02/23 12:42
Sample Matrix	:	WATER	**Dilution Factor**	:	10
Analytical Method	:	44,300.0	**Analyst**	:	CVN,
Lab File ID	:	WG1823254	**Instrument ID**	:	IC3
Sample Amount	:		**%Solids**	:	N/A
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16887-00-6	Chloride	71.2	5.00	0.839	

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-08	Date Collected	:	08/28/23 14:30
Client ID	:	MW-8S	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/02/23 19:45
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	44,300.0	Analyst	:	CVN,
Lab File ID	:	WG1823254	Instrument ID	:	IC3
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
24959-67-9	Bromide	0.197	0.050	0.013	J-
16984-48-8	Fluoride	0.039	0.050	0.037	J
14808-79-8	Sulfate	90.3	1.00	0.454	

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-09	Date Collected	:	08/28/23 00:00
Client ID	:	DUP	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/02/23 19:57
Sample Matrix	:	WATER	Dilution Factor	:	1
Analytical Method	:	44,300.0	Analyst	:	CVN,
Lab File ID	:	WG1823254	Instrument ID	:	IC3
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
24959-67-9	Bromide	0.120	0.050	0.013	J-
16984-48-8	Fluoride	0.115	0.050	0.037	

Form 1
WETCHEM

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab ID	:	L2350269-09	Date Collected	:	08/28/23 00:00
Client ID	:	DUP	Date Received	:	08/29/23
Sample Location	:	SPEONK, NY	Date Analyzed	:	09/02/23 12:54
Sample Matrix	:	WATER	Dilution Factor	:	10
Analytical Method	:	44,300.0	Analyst	:	CVN,
Lab File ID	:	WG1823254B	Instrument ID	:	IC3
Sample Amount	:		%Solids	:	N/A
Digestion Method	:		Date Digested	:	

		mg/l			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
16887-00-6	Chloride	50.7	5.00	0.839	
14808-79-8	Sulfate	313.	10.0	4.54	

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: L2350269
Pace Project No.: 30618113

Sample: MW-1S **Lab ID: 30618113001** Collected: 08/28/23 16:52 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 13:58		

Sample: MW-2S **Lab ID: 30618113002** Collected: 08/28/23 15:34 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 14:24		

Sample: MW-3S **Lab ID: 30618113003** Collected: 08/28/23 14:38 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 14:49		

Sample: MW-4D **Lab ID: 30618113004** Collected: 08/29/23 10:16 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 16:05		

Sample: MW-5S **Lab ID: 30618113005** Collected: 08/29/23 09:10 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 16:31		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

ANALYTICAL RESULTS

Project: L2350269
Pace Project No.: 30618113

Sample: MW-6D **Lab ID: 30618113006** Collected: 08/28/23 17:51 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 18:12		

Sample: MW-7S **Lab ID: 30618113007** Collected: 08/28/23 16:35 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 18:38		

Sample: MW-8S **Lab ID: 30618113008** Collected: 08/28/23 14:30 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 19:03		

Sample: DUP **Lab ID: 30618113009** Collected: 08/28/23 00:00 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 19:28		

REPORT OF LABORATORY ANALYSIS

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VOC Data Section

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 8260C Volatiles Data
for Alpha Analytical, SDG Number: L2350269

8 Ground Water Samples, 1 Field Duplicate,
1 Equipment Blank, and 1 Trip Blank
Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: The samples were analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The BFB tuning criteria were within control limits.

Initial Calibration: The average RRFs for acetone, 2-butanone, 4-methyl-2-pentanone, and 1,1,2-trichloroethane were below the method minimums, but not below 0.010 for ELAINE on 07-25-23. The average RRFs for acetone, methyl acetate, 2-butanone, 4-methyl-2-pentanone, 1,1,2-trichloroethane, and 2-hexanone were below the method minimums, but not below 0.010 for VOA105 on 08-08-23. No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no average RRF is less than 0.010.

The average RRFs for target compounds were above the allowable minimum (0.001 for 1,4-dioxane and 0.010 for all others) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for acetone, methyl acetate, 2-butanone, 4-methyl-2-pentanone, 1,1,2-trichloroethane, and 2-hexanone were below the method minimums, but not below 0.010 on 09-07-23 (V05230907A01). The RRF for 4-methyl-2-pentanone was below the method minimums, but not below 0.010 on 09-08-23 (VE230908A01). The %Ds for chloroethane and 2-hexanone were above the method maximum on 09-07-23 (V05230907A01). The %Ds for chloromethane, bromomethane, acetone, methyl acetate, 2-butanone, tetrachloroethene, and 1,1,2-trichloroethane were above the method maximum on 09-08-23 (VE230908A01). No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no RRF is less than 0.010.

The RRFs for target compounds were above the allowable minimum (0.001 for 1,4-dioxane and 0.010 for all others), as required.

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The %Ds for chloroethane and 2-hexanone were above the allowable maximum (20%) on 09-07-23 (V05230907A01). The %Ds for chloromethane, bromomethane, acetone, methyl acetate, 2-butanone, 1,4-dioxane, tetrachloroethene, and 1,1,2-trichloroethane were above the allowable maximum (20%) on 09-08-23 (VE230908A01). Positive results for bromomethane should be considered estimated (J) in associated samples.

Blanks: The analyses of the method and equipment blanks reported target compounds as not detected. The trip blank contained a trace of acetone (1.8 ug/L). Positive results for acetone that are less than 10 times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: The surrogate recoveries were within control limits for the ground water samples, field blank, and trip blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for target compounds were below the allowable maximum, but 2 of 2 percent recoveries (%Rs) for 1,1,2,2-tetrachloroethane, acetone, 2-butanone, 4-methyl-2-pentanone, 2-hexanone, and 1,4-dioxane, and 1 of 2 %Rs for carbon disulfide and freon-113 were within QC limits for aqueous MS/MSD sample MW-8S. Sample MW-8S reported these compounds as "not detected"; therefore, no action is taken.

Laboratory Control Sample: The relative percent differences (RPDs) for target compounds were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for aqueous samples WG1824710-3/4.

The RPDs for target compounds were below the allowable maximum, but 1 of 2 %Rs for acetone, methyl acetate, and 1,4-dioxane were above QC limits for aqueous samples WG1825752-3/4. Positive results for these compounds should be considered estimated, biased high (J+) in associated aqueous samples.

Field Duplicates: The analyses of aqueous field duplicate pair MW-1S/DUP reported target compounds as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds and surrogates were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1825752-3 **Analysis Date** : 09/08/23 08:56	**File ID**	: VE230908A01
LCSD Sample ID	: WG1825752-4 **Analysis Date** : 09/08/23 09:21	**File ID**	: VE230908A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	10	11	110	10	10	100	10	70-130	20
1,1-Dichloroethane	10	10	100	10	9.6	96	4	70-130	20
Chloroform	10	11	110	10	10	100	10	70-130	20
Carbon tetrachloride	10	11	110	10	11	110	0	63-132	20
1,2-Dichloropropane	10	10	100	10	9.5	95	5	70-130	20
Dibromochloromethane	10	11	110	10	11	110	0	63-130	20
1,1,2-Trichloroethane	10	12	120	10	12	120	0	70-130	20
Tetrachloroethene	10	12	120	10	12	120	0	70-130	20
Chlorobenzene	10	12	120	10	11	110	9	75-130	20
Trichlorofluoromethane	10	9.1	91	10	8.7	87	4	62-150	20
1,2-Dichloroethane	10	9.1	91	10	8.7	87	4	70-130	20
1,1,1-Trichloroethane	10	10	100	10	10	100	0	67-130	20
Bromodichloromethane	10	10	100	10	10	100	0	67-130	20
trans-1,3-Dichloropropene	10	10	100	10	10	100	0	70-130	20
cis-1,3-Dichloropropene	10	10	100	10	9.9	99	1	70-130	20
Bromoform	10	10	100	10	11	110	10	54-136	20
1,1,2,2-Tetrachloroethane	10	11	110	10	11	110	0	67-130	20
Benzene	10	11	110	10	10	100	10	70-130	20
Toluene	10	12	120	10	11	110	9	70-130	20
Ethylbenzene	10	11	110	10	10	100	10	70-130	20
Chloromethane	10	12	120	10	12	120	0	64-130	20
Bromomethane	10	5.9	59	10	5.5	55	7	39-139	20
Vinyl chloride	10	8.8	88	10	8.2	82	7	55-140	20
Chloroethane	10	8.1	81	10	7.4	74	9	55-138	20
1,1-Dichloroethene	10	11	110	10	10	100	10	61-145	20
trans-1,2-Dichloroethene	10	11	110	10	10	100	10	70-130	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client : Alpha Geoscience
Lab Number : L2350269
Project Name : HUNTINGTON READY MIX
Project Number : 20116
Matrix (Level) : WATER (LOW)
LCS Sample ID : WG1825752-3 Analysis Date : 09/08/23 08:56 File ID : VE230908A01
LCSD Sample ID : WG1825752-4 Analysis Date : 09/08/23 09:21 File ID : VE230908A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Trichloroethene	10	11	110	10	10	100	10	70-130	20
1,2-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
1,3-Dichlorobenzene	10	10	100	10	11	110	10	70-130	20
1,4-Dichlorobenzene	10	11	110	10	11	110	0	70-130	20
Methyl tert butyl ether	10	9.3	93	10	9.4	94	1	63-130	20
p/m-Xylene	20	22	110	20	21	105	5	70-130	20
o-Xylene	20	21	105	20	21	105	0	70-130	20
cis-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20
Styrene	20	22	110	20	21	105	5	70-130	20
Dichlorodifluoromethane	10	10	100	10	9.7	97	3	36-147	20
Acetone	10	13	130	10	15	150 Q	14	58-148	20
Carbon disulfide	10	12	120	10	11	110	9	51-130	20
2-Butanone	10	12	120	10	13	130	8	63-138	20
4-Methyl-2-pentanone	10	9.7	97	10	10	100	3	59-130	20
2-Hexanone	10	11	110	10	12	120	9	57-130	20
Bromochloromethane	10	12	120	10	11	110	9	70-130	20
1,2-Dibromoethane	10	11	110	10	11	110	0	70-130	20
1,2-Dibromo-3-chloropropane	10	11	110	10	12	120	9	41-144	20
Isopropylbenzene	10	9.2	92	10	9.0	90	2	70-130	20
1,2,3-Trichlorobenzene	10	9.7	97	10	10	100	3	70-130	20
1,2,4-Trichlorobenzene	10	9.6	96	10	10	100	4	70-130	20
Methyl Acetate	10	13	130	10	14	140 Q	7	70-130	20
Cyclohexane	10	10	100	10	9.9	99	1	70-130	20
1,4-Dioxane	500	830	166 Q	500	810	162	2	56-162	20
Freon-113	10	12	120	10	11	110	9	70-130	20
Methyl cyclohexane	10	11	110	10	9.9	99	11	70-130	20

Matrix Spike Sample Summary
Form 3
Volatiles

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Client Sample ID	: MW-8S	Matrix (Level)	: WATER (LOW)
Lab Sample ID	: L2350269-08	Analysis Date	: 09/07/23 14:41
Matrix Spike	: WG1824710-6	MS Analysis Date	: 09/07/23 18:31
Matrix Spike Dup	: WG1824710-7	MSD Analysis Date	: 09/07/23 18:57

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	ND	10	11	110	10	11	110	0	70-130	20
1,1-Dichloroethane	ND	10	12	120	10	12	120	0	70-130	20
Chloroform	ND	10	12	120	10	12	120	0	70-130	20
Carbon tetrachloride	ND	10	12	120	10	12	120	0	63-132	20
1,2-Dichloropropane	ND	10	12	120	10	12	120	0	70-130	20
Dibromochloromethane	ND	10	12	120	10	13	130	8	63-130	20
1,1,2-Trichloroethane	ND	10	13	130	10	13	130	0	70-130	20
Tetrachloroethene	ND	10	12	120	10	12	120	0	70-130	20
Chlorobenzene	ND	10	12	120	10	12	120	0	75-130	20
Trichlorofluoromethane	ND	10	14	140	10	14	140	0	62-150	20
1,2-Dichloroethane	ND	10	12	120	10	12	120	0	70-130	20
1,1,1-Trichloroethane	ND	10	12	120	10	12	120	0	67-130	20
Bromodichloromethane	ND	10	12	120	10	12	120	0	67-130	20
trans-1,3-Dichloropropene	ND	10	12	120	10	12	120	0	70-130	20
cis-1,3-Dichloropropene	ND	10	10	100	10	11	110	10	70-130	20
Bromoform	ND	10	11	110	10	11	110	0	54-136	20
1,1,2,2-Tetrachloroethane	ND	10	14	140 Q	10	14	140 Q	0	67-130	20
Benzene	ND	10	12	120	10	12	120	0	70-130	20
Toluene	ND	10	12	120	10	12	120	0	70-130	20
Ethylbenzene	ND	10	12	120	10	12	120	0	70-130	20
Chloromethane	ND	10	12	120	10	13	130	8	64-130	20
Bromomethane	ND	10	9.3	93	10	10	100	7	39-139	20

Matrix Spike Sample Summary
Form 3
Volatiles

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Client Sample ID	: MW-8S	Matrix (Level)	: WATER (LOW)
Lab Sample ID	: L2350269-08	Analysis Date	: 09/07/23 14:41
Matrix Spike	: WG1824710-6	MS Analysis Date	: 09/07/23 18:31
Matrix Spike Dup	: WG1824710-7	MSD Analysis Date	: 09/07/23 18:57

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Vinyl chloride	ND	10	14	140	10	14	140	0	55-140	20
Chloroethane	ND	10	13	130	10	13	130	0	55-138	20
1,1-Dichloroethene	ND	10	13	130	10	14	140	7	61-145	20
trans-1,2-Dichloroethene	ND	10	11	110	10	11	110	0	70-130	20
Trichloroethene	ND	10	11	110	10	11	110	0	70-130	20
1,2-Dichlorobenzene	ND	10	12	120	10	12	120	0	70-130	20
1,3-Dichlorobenzene	ND	10	12	120	10	12	120	0	70-130	20
1,4-Dichlorobenzene	ND	10	12	120	10	12	120	0	70-130	20
Methyl tert butyl ether	ND	10	11	110	10	11	110	0	63-130	20
p/m-Xylene	ND	20	24	120	20	24	120	0	70-130	20
o-Xylene	ND	20	24	120	20	24	120	0	70-130	20
cis-1,2-Dichloroethene	ND	10	11	110	10	12	120	9	70-130	20
Styrene	ND	20	24	120	20	24	120	0	70-130	20
Dichlorodifluoromethane	ND	10	12	120	10	12	120	0	36-147	20
Acetone	ND	10	16	160 Q	10	17	170 Q	6	58-148	20
Carbon disulfide	ND	10	13	130	10	14	140 Q	7	51-130	20
2-Butanone	ND	10	14	140 Q	10	14	140 Q	0	63-138	20
4-Methyl-2-pentanone	ND	10	15	150 Q	10	15	150 Q	0	59-130	20
2-Hexanone	ND	10	14	140 Q	10	14	140 Q	0	57-130	20
Bromochloromethane	ND	10	12	120	10	12	120	0	70-130	20
1,2-Dibromoethane	ND	10	12	120	10	13	130	8	70-130	20
1,2-Dibromo-3-chloropropane	ND	10	14	140	10	13	130	7	41-144	20

Matrix Spike Sample Summary
Form 3
Volatiles

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Client Sample ID	: MW-8S	Matrix (Level)	: WATER (LOW)
Lab Sample ID	: L2350269-08	Analysis Date	: 09/07/23 14:41
Matrix Spike	: WG1824710-6	MS Analysis Date	: 09/07/23 18:31
Matrix Spike Dup	: WG1824710-7	MSD Analysis Date	: 09/07/23 18:57

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Isopropylbenzene	ND	10	12	120	10	12	120	0	70-130	20
1,2,3-Trichlorobenzene	ND	10	11	110	10	11	110	0	70-130	20
1,2,4-Trichlorobenzene	ND	10	10	100	10	10	100	0	70-130	20
Methyl Acetate	ND	10	13	130	10	13	130	0	70-130	20
Cyclohexane	ND	10	12	120	10	12	120	0	70-130	20
1,4-Dioxane	ND	500	980	196 Q	500	980	196 Q	0	56-162	20
Freon-113	ND	10	13	130	10	14	140 Q	7	70-130	20
Methyl cyclohexane	ND	10	11	110	10	11	110	0	70-130	20

Initial Calibration Summary
Form 6
Volatiles

Client	: **Alpha Geoscience**	**Lab Number**	: **L2350269**
Project Name	: **HUNTINGTON READY MIX**	**Project Number**	: **20116**
Instrument ID	: **ELAINE**	**Ical Ref**	: **ICAL20198**
Calibration dates	: **07/25/23 21:39 07/26/23 01:41**		

Calibration Files
L11 =VE230725N04.D L1 =VE230725N06.D L2 =VE230725N08.D L3 =VE230725N10.D L4 =VE230725N11.D
L6 =VE230725N12.D L8 =VE230725N13.D L10 =VE230725N14.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	TP	Dichlorodifluo		0.219	0.309	0.327	0.312	0.294	0.289	0.282	0.290	12.09
3)	TP	Chloromethane		0.359	0.410	0.410	0.371	0.352	0.342	0.333	0.368	8.46
4)	TC	Vinyl chloride	0.360	0.324	0.423	0.439	0.415	0.386	0.386	0.370	0.388	9.63
5)	TP	Bromomethane		0.246	0.270	0.245	0.229	0.203	0.200	0.196	0.227	12.46
6)	TP	Chloroethane		0.194	0.256	0.260	0.250	0.234	0.228	0.219	0.234	9.87
7)	TP	Trichlorofluor		0.277	0.372	0.419	0.392	0.376	0.372	0.358	0.367	12.04
8)	TP	Ethyl ether		0.095	0.123	0.133	0.126	0.126	0.125	0.123	0.122	9.96
10)	TC	1,1-Dichloroet		0.161	0.218	0.232	0.217	0.212	0.209	0.205	0.208	10.80
11)	TP	Carbon disulfide		0.565	0.693	0.709	0.670	0.644	0.621	0.604	0.644	7.96
12)	TP	Freon-113		0.137	0.224	0.251	0.238	0.223	0.218	0.215	0.215	17.05
13)	TP	Iodomethane		0.182	0.213	0.270	0.287	0.303	0.300	0.292	0.264	17.90
14)	TP	Acrolein			0.035	0.035	0.035	0.033	0.032	0.032	0.034	4.58
15)	TP	Methylene chlo		0.325	0.255	0.258	0.241	0.230	0.226	0.223	0.251	14.04
17)	TP	Acetone			0.083	0.057	0.054	0.049	0.047	0.047	*L	0.9992
18)	TP	trans-1,2-Dich		0.191	0.241	0.250	0.235	0.228	0.225	0.219	0.227	8.35
19)	TP	Methyl acetate			0.165	0.141	0.141	0.137	0.133	0.133	0.142	8.41
21)	TP	Methyl tert butyl ether		0.526	0.552	0.571	0.598	0.597	0.592	0.584	0.574	4.66
22)	TP	tert-Butyl alc		0.013	0.015	0.014	0.014	0.013	0.013	0.013	0.014	6.12
24)	TP	Diisopropyl ether		0.801	0.906	0.971	0.991	0.975	0.955	0.937	0.934	6.94
25)	TP	1,1-Dichloroet		0.493	0.581	0.611	0.567	0.539	0.526	0.516	0.548	7.46
26)	TP	Halothane		0.121	0.179	0.194	0.185	0.178	0.174	0.174	0.172	13.76
27)	TP	Acrylonitrile		0.067	0.072	0.076	0.074	0.071	0.069	0.068	0.071	4.92
28)	TP	Ethyl tert-but		0.799	0.825	0.882	0.914	0.912	0.902	0.898	0.876	5.21
29)	TP	Vinyl acetate			0.360	0.329	0.387	0.357	0.330	0.319	0.347	7.33
30)	TP	cis-1,2-Dichlo		0.235	0.273	0.286	0.264	0.256	0.259	0.257	0.261	5.98
31)	TP	2,2-Dichloropr		0.366	0.391	0.406	0.394	0.372	0.366	0.355	0.379	4.90
33)	TP	Bromochloromet		0.105	0.119	0.119	0.114	0.108	0.105	0.104	0.111	6.21
34)	TP	Cyclohexane		0.476	0.590	0.653	0.619	0.593	0.576	0.568	0.582	9.42
35)	TC	Chloroform		0.402	0.465	0.446	0.419	0.411	0.405	0.396	0.420	6.04
36)	TP	Ethyl acetate			0.197	0.192	0.195	0.190	0.187	0.186	0.191	2.38
37)	TP	Carbon tetrachloride	0.253	0.245	0.322	0.336	0.327	0.318	0.315	0.316	0.304	11.43
38)	TP	Tetrahydrofuran			0.055	0.062	0.059	0.058	0.056	0.057	0.058	4.35
39)	S	Dibromofluoromethane	0.300	0.300	0.296	0.285	0.276	0.266	0.266	0.266	0.282	5.47
40)	TP	1,1,1-Trichlor		0.332	0.384	0.410	0.391	0.376	0.368	0.363	0.375	6.58
42)	TP	2-Butanone			0.098	0.078	0.078	0.083	0.081	0.082	0.083	8.97

Initial Calibration Summary
Form 6
Volatiles

Client	: **Alpha Geoscience**	**Lab Number**	: **L2350269**
Project Name	: **HUNTINGTON READY MIX**	**Project Number**	: **20116**
Instrument ID	: **ELAINE**	**Ical Ref**	: **ICAL20198**
Calibration dates	: **07/25/23 21:39 07/26/23 01:41**		

Calibration Files
L11 =VE230725N04.D L1 =VE230725N06.D L2 =VE230725N08.D L3 =VE230725N10.D L4 =VE230725N11.D
L6 =VE230725N12.D L8 =VE230725N13.D L10 =VE230725N14.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
43) TP	1,1-Dichloropr		0.232	0.306	0.340	0.340	0.332	0.327	0.323	0.314	12.17
45) TP	Benzene	0.928	0.859	0.955	0.992	0.974	0.956	0.948	0.935	0.943	4.20
46) TP	Tertiary-Amyl Methyl Ether		0.552	0.560	0.583	0.595	0.604	0.607	0.613	0.588	4.03
47) S	1,2-Dichloroethane-d4	0.393	0.386	0.381	0.394	0.363	0.351	0.348	0.349	0.370	5.37
48) T	1,2-Dichloroet		0.393	0.397	0.402	0.391	0.374	0.366	0.363	0.384	4.14
51) TP	Methyl cyclohe		0.291	0.390	0.431	0.436	0.439	0.434	0.444	0.409	13.51
52) TP	Trichloroethene	0.229	0.208	0.250	0.275	0.269	0.269	0.269	0.271	0.255	9.58
54) TP	Dibromomethane		0.104	0.133	0.135	0.133	0.132	0.130	0.132	0.128	8.52
55) TC	1,2-Dichloropr		0.250	0.300	0.315	0.313	0.306	0.299	0.296	0.297	7.39
57) TP	2-Chloroethyl		0.132	0.140	0.152	0.161	0.161	0.161	0.162	0.153	7.87
58) TP	Bromodichlorom		0.300	0.335	0.345	0.339	0.329	0.327	0.326	0.328	4.40
61) TP	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	7.56
62) TP	cis-1,3-Dichlo		0.320	0.360	0.381	0.403	0.402	0.398	0.398	0.380	8.15
63) I	Chlorobenzene-d5	----------ISTD----------									
64) S	Toluene-d8	1.232	1.253	1.244	1.259	1.231	1.235	1.225	1.200	1.235	1.47
65) TC	Toluene		0.583	0.678	0.717	0.698	0.682	0.676	0.660	0.671	6.32
66) TP	4-Methyl-2-pen			0.073	0.081	0.086	0.084	0.083	0.082	0.081	5.68
67) TP	Tetrachloroethene		0.204	0.253	0.285	0.279	0.277	0.275	0.274	0.264	10.68
69) TP	trans-1,3-Dich		0.327	0.350	0.387	0.406	0.404	0.397	0.388	0.380	7.89
71) TP	Ethyl methacry		0.243	0.248	0.273	0.275	0.267	0.265	0.258	0.261	4.69
72) TP	1,1,2-Trichlor		0.126	0.172	0.182	0.185	0.183	0.180	0.177	0.172#	12.10
73) TP	Chlorodibromom		0.198	0.223	0.250	0.256	0.259	0.256	0.256	0.243	9.56
74) TP	1,3-Dichloropr		0.343	0.350	0.380	0.392	0.383	0.376	0.370	0.371	4.80
75) TP	1,2-Dibromoethane		0.179	0.184	0.211	0.216	0.213	0.209	0.208	0.203	7.38
77) TP	2-Hexanone		0.185	0.143	0.141	0.140	0.135	0.132	0.129	0.144	13.05
78) TP	Chlorobenzene		0.674	0.722	0.760	0.751	0.740	0.734	0.724	0.729	3.81
79) TC	Ethylbenzene		1.155	1.343	1.455	1.409	1.361	1.326	1.286	1.334	7.21
80) TP	1,1,1,2-Tetrac		0.195	0.233	0.265	0.271	0.268	0.266	0.262	0.251	11.18
81) TP	p/m Xylene		0.454	0.513	0.560	0.546	0.525	0.515	0.509	0.517	6.50
82) TP	o Xylene		0.473	0.510	0.550	0.537	0.522	0.514	0.503	0.516	4.80
83) TP	Styrene		0.724	0.787	0.905	0.897	0.874	0.860	0.831	0.840	7.71
84) I	1,4-Dichlorobenzene-d4	----------ISTD----------									
85) TP	Bromoform		0.205	0.221	0.243	0.260	0.268	0.277	0.283	0.251	11.67
87) TP	Isopropylbenzene		2.083	2.512	2.633	2.577	2.544	2.542	2.514	2.487	7.35
88) S	4-Bromofluorobenzene	0.933	0.962	0.937	0.903	0.911	0.908	0.936	0.901	0.924	2.31
89) TP	Bromobenzene		0.523	0.551	0.567	0.560	0.559	0.565	0.559	0.555	2.69

Initial Calibration Summary
Form 6
Volatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: ELAINE**	**Ical Ref**	**: ICAL20198**
Calibration dates	**: 07/25/23 21:39 07/26/23 01:41**		

Calibration Files
L11 =VE230725N04.D L1 =VE230725N06.D L2 =VE230725N08.D L3 =VE230725N10.D L4 =VE230725N11.D
L6 =VE230725N12.D L8 =VE230725N13.D L10 =VE230725N14.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
90) TP	n-Propylbenzene		2.498	3.091	3.215	3.167	3.111	3.057	2.946	3.012	8.04
91) TP	1,4-Dichlorobu		0.900	0.868	0.867	0.857	0.842	0.840	0.818	0.856	3.05
92) TP	1,1,2,2-Tetrac		0.411	0.413	0.392	0.409	0.407	0.403	0.394	0.404	2.06
93) TP	4-Ethyltoluene		2.129	2.494	2.627	2.607	2.546	2.510	2.426	2.477	6.78
94) TP	2-Chlorotoluene		1.584	1.832	1.895	1.801	1.762	1.748	1.685	1.758	5.78
95) TP	1,3,5-Trimethy		1.774	2.126	2.220	2.222	2.173	2.144	2.085	2.106	7.35
96) TP	1,2,3-Trichlor		0.347	0.379	0.364	0.362	0.357	0.357	0.355	0.360	2.71
97) TP	trans-1,4-Dich		0.181	0.174	0.177	0.179	0.176	0.174	0.169	0.176	2.24
98) TP	4-Chlorotoluene		1.698	1.809	1.908	1.880	1.838	1.828	1.782	1.820	3.77
99) TP	tert-Butylbenzene		1.448	1.791	1.887	1.853	1.807	1.783	1.742	1.759	8.25
102) TP	1,2,4-Trimethy		1.761	2.037	2.187	2.179	2.148	2.117	2.074	2.072	7.12
103) TP	sec-Butylbenzene		2.171	2.675	2.823	2.785	2.727	2.653	2.596	2.633	8.27
104) TP	p-Isopropyltol		1.803	2.213	2.344	2.353	2.325	2.249	2.276	2.223	8.65
105) TP	1,3-Dichlorobe		1.003	1.158	1.195	1.159	1.132	1.119	1.114	1.126	5.42
106) TP	1,4-Dichlorobe		1.040	1.125	1.175	1.149	1.134	1.112	1.121	1.122	3.72
107) TP	p-Diethylbenzene		1.046	1.283	1.384	1.392	1.380	1.326	1.396	1.315	9.57
108) TP	n-Butylbenzene		1.532	1.879	2.050	2.072	2.005	1.908	1.949	1.914	9.54
109) TP	1,2-Dichlorobe		0.972	1.062	1.098	1.086	1.062	1.044	1.059	1.055	3.85
110) TP	1,2,4,5-Tetram		1.695	1.924	2.059	2.073	2.023	2.060	2.125	1.994	7.31
111) TP	1,2-Dibromo-3-		0.041	0.063	0.065	0.066	0.064	0.066	0.068	0.062	15.40
112) TP	1,3,5-Trichlor		0.623	0.702	0.732	0.744	0.713	0.739	0.749	0.715	6.09
113) TP	Hexachlorobuta		0.171	0.220	0.225	0.223	0.210	0.214	0.210	0.211	8.68
114) TP	1,2,4-Trichlor		0.581	0.592	0.625	0.634	0.613	0.641	0.631	0.617	3.67
115) TP	Naphthalene		1.501	1.459	1.491	1.521	1.527	1.598	1.560	1.522	3.01
116) TP	1,2,3-Trichlor		0.507	0.560	0.558	0.564	0.577	0.588	0.580	0.562	4.73

Initial Calibration Summary
Form 6
Volatiles

Client	: **Alpha Geoscience**	**Lab Number**	: **L2350269**
Project Name	: **HUNTINGTON READY MIX**	**Project Number**	: **20116**
Instrument ID	: **VOA105**	**Ical Ref**	: **ICAL20245**
Calibration dates	: **08/08/23 20:56 08/09/23 01:10**		

Calibration Files
L11 =V05230808N04.D L1 =V05230808N06.D L2 =V05230808N08.D L3 =V05230808N10.D L4 =V05230808N11.D
L6 =V05230808N12.D L8 =V05230808N13.D L10 =V05230808N14.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	ISTD									
2)	TP	Dichlorodifluo			0.230	0.321	0.334	0.355	0.352	0.355	0.324	14.90
3)	TP	Chloromethane		0.269	0.297	0.307	0.318	0.327	0.329	0.329	0.311	7.03
4)	TC	Vinyl chloride	0.277	0.249	0.288	0.340	0.351	0.368	0.365	0.368	0.326	14.56
5)	TP	Bromomethane		0.236	0.245	0.231	0.238	0.262	0.274	0.277	0.252	7.49
6)	TP	Chloroethane		0.203	0.224	0.238	0.243	0.248	0.241	0.229	0.232	6.56
7)	TP	Trichlorofluor		0.327	0.367	0.505	0.523	0.553	0.550	0.544	0.481	19.52
8)	TP	Ethyl ether		0.129	0.127	0.136	0.139	0.145	0.146	0.146	0.138	5.90
10)	TC	1,1-Dichloroet		0.220	0.250	0.296	0.306	0.318	0.316	0.316	0.289	13.35
11)	TP	Carbon disulfide		0.755	0.817	0.918	0.973	1.009	0.991	0.973	0.920	10.54
12)	TP	Freon-113			0.211	0.325	0.341	0.356	0.347	0.340	0.320	17.01
13)	TP	Iodomethane			0.318	0.416	0.455	0.466	0.460	0.454	0.428	13.26
14)	TP	Acrolein		0.017	0.022	0.021	0.024	0.025	0.025	0.026	0.023	13.05
15)	TP	Methylene chlo		0.272	0.272	0.258	0.261	0.265	0.266	0.268	0.266	2.02
17)	TP	Acetone			0.051	0.039	0.042	0.041	0.041	0.044	0.043	9.67
18)	TP	trans-1,2-Dich		0.212	0.245	0.266	0.277	0.284	0.284	0.285	0.265	10.29
19)	TP	Methyl acetate		0.080	0.076	0.098	0.102	0.110	0.110	0.110	0.098	14.87
20)	TP	Methyl tert butyl ether		0.495	0.509	0.544	0.567	0.595	0.600	0.605	0.559	7.99
21)	TP	tert-Butyl alc		0.009	0.009	0.009	0.009	0.010	0.010	0.011	0.010#	8.21
22)	TP	Diisopropyl ether		0.626	0.671	0.692	0.740	0.769	0.783	0.796	0.725	8.81
23)	TP	1,1-Dichloroet		0.390	0.453	0.460	0.475	0.484	0.484	0.490	0.462	7.44
24)	TP	Halothane		0.151	0.175	0.215	0.226	0.234	0.232	0.234	0.210	15.83
25)	TP	Acrylonitrile			0.054	0.052	0.054	0.057	0.057	0.057	0.055	3.64
26)	TP	Ethyl tert-but		0.609	0.591	0.623	0.667	0.703	0.713	0.728	0.662	8.29
27)	TP	Vinyl acetate			0.126	0.150	0.183	0.181	0.214	0.212	0.178	19.40
28)	TP	cis-1,2-Dichlo		0.232	0.286	0.293	0.304	0.310	0.311	0.312	0.293	9.80
29)	TP	2,2-Dichloropr		0.272	0.308	0.346	0.371	0.383	0.385	0.388	0.350	12.80
30)	TP	Bromochloromet		0.124	0.137	0.138	0.141	0.139	0.138	0.137	0.136	4.07
31)	TP	Cyclohexane			0.277	0.459	0.479	0.507	0.503	0.507	0.455	19.65
32)	TC	Chloroform		0.416	0.459	0.455	0.467	0.475	0.477	0.481	0.461	4.83
33)	TP	Ethyl acetate			0.129	0.131	0.141	0.152	0.155	0.156	0.144	8.31
34)	TP	Carbon tetrachloride		0.245	0.277	0.360	0.394	0.421	0.424	0.430	*Q	0.9996
35)	TP	Tetrahydrofuran			0.045	0.044	0.043	0.043	0.043	0.043	0.043	2.01
36)	S	Dibromofluoromethane	0.318	0.322	0.323	0.318	0.315	0.313	0.312	0.314	0.317	1.31
37)	TP	1,1,1-Trichlor		0.293	0.360	0.420	0.441	0.457	0.458	0.458	0.412	15.32
39)	TP	2-Butanone			0.065	0.055	0.059	0.064	0.065	0.065	0.062	6.72

Initial Calibration Summary
Form 6
Volatiles

Client	: **Alpha Geoscience**	**Lab Number**	: **L2350269**
Project Name	: **HUNTINGTON READY MIX**	**Project Number**	: **20116**
Instrument ID	: **VOA105**	**Ical Ref**	: **ICAL20245**
Calibration dates	: **08/08/23 20:56 08/09/23 01:10**		

Calibration Files
L11 =V05230808N04.D L1 =V05230808N06.D L2 =V05230808N08.D L3 =V05230808N10.D L4 =V05230808N11.D
L6 =V05230808N12.D L8 =V05230808N13.D L10 =V05230808N14.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
40) TP	1,1-Dichloropr		0.237	0.278	0.341	0.363	0.384	0.383	0.386	0.339	17.45
41) TP	Benzene	0.797	0.849	0.909	0.961	1.014	1.049	1.060	1.067	0.963	10.65
42) TP	Tertiary-Amyl Methyl Ether		0.503	0.522	0.542	0.574	0.610	0.621	0.636	0.573	9.05
43) S	1,2-Dichloroethane-d4	0.311	0.308	0.306	0.321	0.301	0.305	0.307	0.305	0.308	1.94
44) TP	1,2-Dichloroet		0.329	0.299	0.307	0.313	0.322	0.325	0.329	0.318	3.62
47) TP	Methyl cyclohe			0.259	0.447	0.481	0.514	0.513	0.527	*L	0.9997
48) TP	Trichloroethene	0.275	0.283	0.276	0.304	0.320	0.333	0.335	0.344	0.309	9.11
50) TP	Dibromomethane		0.127	0.138	0.143	0.148	0.153	0.155	0.158	0.146	7.44
51) TC	1,2-Dichloropr		0.216	0.232	0.240	0.251	0.260	0.265		0.244	7.62
53) TP	2-Chloroethyl			0.094	0.110	0.120	0.132	0.134	0.137	0.121	13.74
54) TP	Bromodichlorom		0.283	0.306	0.322	0.343	0.362	0.369	0.378	0.337	10.47
57) TP	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	3.16
58) TP	cis-1,3-Dichlo		0.289	0.327	0.358	0.389	0.414	0.424	0.435	0.377	14.43
59) I	Chlorobenzene-d5	----------ISTD----------									
60) S	Toluene-d8	1.176	1.181	1.184	1.177	1.174	1.158	1.148	1.130	1.166	1.60
61) TC	Toluene		0.576	0.643	0.668	0.690	0.711	0.713	0.713	0.674	7.47
62) TP	4-Methyl-2-pen		0.038	0.046	0.051	0.055	0.058	0.058	0.057	0.052	14.87
63) TP	Tetrachloroethene		0.230	0.275	0.329	0.350	0.358	0.354	0.351	0.321	15.40
65) TP	trans-1,3-Dich		0.265	0.280	0.314	0.350	0.369	0.372	0.371	0.332	13.67
67) TP	Ethyl methacry		0.169	0.194	0.209	0.226	0.236	0.235	0.233	0.214	11.77
68) TP	1,1,2-Trichlor		0.157	0.160	0.164	0.174	0.178	0.178	0.179	0.170#	5.51
69) TP	Chlorodibromom		0.212	0.217	0.241	0.272	0.288	0.291	0.293	0.259	13.58
70) TP	1,3-Dichloropr		0.316	0.310	0.324	0.346	0.354	0.352	0.352	0.336	5.57
71) TP	1,2-Dibromoethane		0.204	0.216	0.220	0.235	0.244	0.245	0.243	0.230	7.11
72) TP	2-Hexanone		0.097	0.083	0.087	0.093	0.097	0.095	0.094	0.092	5.63
73) TP	Chlorobenzene		0.695	0.735	0.756	0.789	0.811	0.817	0.821	0.775	6.19
74) TC	Ethylbenzene		1.102	1.185	1.283	1.359	1.401	1.401	1.398	1.304	9.17
75) TP	1,1,1,2-Tetrac		0.235	0.247	0.266	0.289	0.301	0.304	0.305	0.278	10.35
76) TP	p/m Xylene		0.407	0.467	0.507	0.532	0.542	0.549	0.568	0.510	11.01
77) TP	o Xylene		0.398	0.464	0.487	0.509	0.526	0.537	0.557	0.497	10.80
78) TP	Styrene		0.648	0.731	0.794	0.843	0.888	0.904	0.909	0.817	12.05
79) I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80) TP	Bromoform		0.195	0.203	0.233	0.274	0.304	0.316	0.321	*Q	0.9990
82) TP	Isopropylbenzene		1.630	1.833	2.201	2.385	2.481	2.542	2.518	2.227	16.24
83) S	4-Bromofluorobenzene	0.787	0.783	0.779	0.790	0.790	0.782	0.780	0.768	0.783	0.91
84) TP	Bromobenzene		0.483	0.535	0.550	0.591	0.603	0.615		0.563	8.85

Initial Calibration Summary
Form 6
Volatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: VOA105**	**Ical Ref**	**: ICAL20245**
Calibration dates	**: 08/08/23 20:56 08/09/23 01:10**		

Calibration Files
L11 =V05230808N04.D L1 =V05230808N06.D L2 =V05230808N08.D L3 =V05230808N10.D L4 =V05230808N11.D
L6 =V05230808N12.D L8 =V05230808N13.D L10 =V05230808N14.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
85) TP	n-Propylbenzene		1.905	2.154	2.551	2.753	2.868	2.926	2.873	2.576	15.50
86) TP	1,4-Dichlorobu		0.484	0.496	0.503	0.537	0.564	0.574	0.572	0.533	7.19
87) TP	1,1,2,2-Tetrac		0.357	0.338	0.338	0.359	0.379	0.388	0.390	0.364	5.99
88) TP	4-Ethyltoluene		1.644	1.886	2.165	2.330	2.411	2.440		2.146	14.89
89) TP	2-Chlorotoluene		1.311	1.409	1.493	1.573	1.615	1.667	1.608	1.525	8.37
90) TP	1,3,5-Trimethy		1.544	1.706	1.873	2.022	2.068	2.105	2.130	1.921	11.64
91) TP	1,2,3-Trichlor		0.304	0.289	0.286	0.300	0.317	0.327	0.333	0.308	5.92
92) TP	trans-1,4-Dich		0.068	0.098	0.106	0.118	0.116	0.121	0.121	0.107	17.95
93) TP	4-Chlorotoluene		1.330	1.476	1.531	1.623	1.661	1.703	1.713	1.577	8.85
94) TP	tert-Butylbenzene		1.117	1.288	1.558	1.721	1.794	1.832	1.856	1.595	18.18
97) TP	1,2,4-Trimethy		1.444	1.689	1.838	1.949	2.017	2.065	2.064	1.867	12.34
98) TP	sec-Butylbenzene		1.601	1.754	2.301	2.494	2.621	2.661	2.659	2.299	19.35
99) TP	p-Isopropyltol		1.413	1.609	2.016	2.193	2.282	2.341	2.337	2.027	18.45
100) TP	1,3-Dichlorobe		0.919	1.015	1.054	1.125	1.157	1.174	1.186	1.090	9.01
101) TP	1,4-Dichlorobe		1.054	1.060	1.066	1.116	1.138	1.157	1.165	1.108	4.31
102) TP	p-Diethylbenzene		0.827	0.981	1.187	1.298	1.364	1.395		1.175	19.34
103) TP	n-Butylbenzene		1.090	1.256	1.635	1.804	1.902	1.924	1.952	*Q	0.9996
104) TP	1,2-Dichlorobe		0.895	0.947	0.975	1.035	1.045	1.071	1.075	1.006	6.80
105) TP	1,2,4,5-Tetram		1.361	1.497	1.738	1.963	2.107	2.153	2.166	1.855	17.69
106) TP	1,2-Dibromo-3-		0.043	0.056	0.057	0.065	0.071	0.072	0.071	0.062	17.36
107) TP	1,3,5-Trichlor		0.622	0.689	0.757	0.825	0.842	0.847	0.843	0.775	11.54
108) TP	Hexachlorobuta		0.187	0.191	0.247	0.291	0.304	0.306	0.307	*Q	0.9993
109) TP	1,2,4-Trichlor		0.570	0.611	0.667	0.732	0.753	0.754	0.723	0.687	10.65
110) TP	Naphthalene		1.351	1.338	1.456	1.564	1.630	1.600	1.538	1.497	7.84
111) TP	1,2,3-Trichlor		0.542	0.573	0.608	0.657	0.669	0.668	0.649	0.624	8.10

Calibration Verification Summary
Form 7
Volatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: VOA105		Calibration Date	: 09/07/23 07:28	
Lab File ID	: V05230907A01		Init. Calib. Date(s)	: 08/08/23	08/09/23
Sample No	: WG1824710-2		Init. Calib. Times	: 20:56	01:10
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	72	-.01
Dichlorodifluoromethane	0.324	0.324	-	0	20	72	0
Chloromethane	0.311	0.325	-	-4.5	20	76	0
Vinyl chloride	0.326	0.346	-	-6.1	20	73	0
Bromomethane	0.252	0.257	-	-2	20	80	0
Chloroethane	0.232	0.279	-	-20.3*	20	84	0
Trichlorofluoromethane	0.481	0.497	-	-3.3	20	71	0
Ethyl ether	0.138	0.124	-	10.1	20	66	0
1,1-Dichloroethene	0.289	0.3	-	-3.8	20	73	0
Carbon disulfide	0.92	0.985	-	-7.1	20	77	0
Freon-113	0.32	0.333	-	-4.1	20	74	0
Iodomethane	0.428	0.284	-	33.6*	20	49	0
Acrolein	0.023	0.029	-	-26.1*	20	97	0
Methylene chloride	0.266	0.275	-	-3.4	20	76	0
Acetone	0.043	0.039	-	9.3	20	72	0
trans-1,2-Dichloroethene	0.265	0.28	-	-5.7	20	76	0
Methyl acetate	0.098	0.095	-	3.1	20	69	0
Methyl tert-butyl ether	0.559	0.453	-	19	20	60	0
tert-Butyl alcohol	0.00966	0.00949*	-	1.8	20	72	0
Diisopropyl ether	0.725	0.696	-	4	20	72	0
1,1-Dichloroethane	0.462	0.488	-	-5.6	20	76	0
Halothane	0.21	0.223	-	-6.2	20	74	0
Acrylonitrile	0.055	0.048	-	12.7	20	66	0
Ethyl tert-butyl ether	0.662	0.591	-	10.7	20	68	0
Vinyl acetate	0.178	0.309	-	-73.6*	20	147	0
cis-1,2-Dichloroethene	0.293	0.313	-	-6.8	20	77	0
2,2-Dichloropropane	0.35	0.406	-	-16	20	84	0
Bromochloromethane	0.136	0.152	-	-11.8	20	79	0
Cyclohexane	0.455	0.47	-	-3.3	20	74	0
Chloroform	0.461	0.491	-	-6.5	20	77	0
Ethyl acetate	0.144	0.131	-	9	20	71	0
Carbon tetrachloride	10	10.271	-	-2.7	20	80	0
Tetrahydrofuran	0.043	0.038	-	11.6	20	62	0
Dibromofluoromethane	0.317	0.329	-	-3.8	20	74	0
1,1,1-Trichloroethane	0.412	0.445	-	-8	20	76	0
2-Butanone	0.062	0.054	-	12.9	20	70	-.01
1,1-Dichloropropene	0.339	0.346	-	-2.1	20	73	0
Benzene	0.963	1.016	-	-5.5	20	76	0
tert-Amyl methyl ether	0.573	0.477	-	16.8	20	63	0
1,2-Dichloroethane-d4	0.308	0.328	-	-6.5	20	73	0
1,2-Dichloroethane	0.318	0.324	-	-1.9	20	76	0
Methyl cyclohexane	10	9.765	-	2.3	20	72	-.01
Trichloroethene	0.309	0.293	-	5.2	20	69	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: VOA105		Calibration Date	: 09/07/23 07:28	
Lab File ID	: V05230907A01		Init. Calib. Date(s)	: 08/08/23	08/09/23
Sample No	: WG1824710-2		Init. Calib. Times	: 20:56	01:10
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.146	0.148	-	-1.4	20	74	0
1,2-Dichloropropane	0.244	0.247	-	-1.2	20	74	0
Bromodichloromethane	0.337	0.351	-	-4.2	20	78	0
1,4-Dioxane	0.00119	0.00124*	-	-4.2	20	73	0
cis-1,3-Dichloropropene	0.377	0.371	-	1.6	20	74	0
Chlorobenzene-d5	1	1	-	0	20	69	0
Toluene-d8	1.166	1.186	-	-1.7	20	69	0
Toluene	0.674	0.713	-	-5.8	20	73	0
4-Methyl-2-pentanone	0.052	0.043	-	17.3	20	58	0
Tetrachloroethene	0.321	0.349	-	-8.7	20	73	0
trans-1,3-Dichloropropene	0.332	0.334	-	-0.6	20	73	0
Ethyl methacrylate	0.214	0.17	-	20.6*	20	56	0
1,1,2-Trichloroethane	0.17	0.172*	-	-1.2	20	72	0
Chlorodibromomethane	0.259	0.273	-	-5.4	20	78	0
1,3-Dichloropropane	0.336	0.336	-	0	20	71	0
1,2-Dibromoethane	0.23	0.229	-	0.4	20	72	0
2-Hexanone	0.092	0.068	-	26.1*	20	54	0
Chlorobenzene	0.775	0.84	-	-8.4	20	76	0
Ethylbenzene	1.304	1.393	-	-6.8	20	75	0
1,1,1,2-Tetrachloroethane	0.278	0.293	-	-5.4	20	76	0
p/m Xylene	0.51	0.565	-	-10.8	20	77	0
o Xylene	0.497	0.54	-	-8.7	20	76	0
Styrene	0.817	0.882	-	-8	20	76	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	71	0
Bromoform	10	8.91	-	10.9	20	75	-.01
Isopropylbenzene	2.227	2.365	-	-6.2	20	77	0
4-Bromofluorobenzene	0.783	0.762	-	2.7	20	69	0
Bromobenzene	0.563	0.607	-	-7.8	20	79	0
n-Propylbenzene	2.576	2.784	-	-8.1	20	78	0
1,4-Dichlorobutane	0.533	0.44	-	17.4	20	62	0
1,1,2,2-Tetrachloroethane	0.364	0.356	-	2.2	20	75	0
4-Ethyltoluene	2.146	2.394	-	-11.6	20	79	0
2-Chlorotoluene	1.525	1.622	-	-6.4	20	78	0
1,3,5-Trimethylbenzene	1.921	2.023	-	-5.3	20	77	0
1,2,3-Trichloropropane	0.308	0.271	-	12	20	68	0
trans-1,4-Dichloro-2-buten	0.107	0.086	-	19.6	20	58	0
4-Chlorotoluene	1.577	1.677	-	-6.3	20	78	0
tert-Butylbenzene	1.595	1.75	-	-9.7	20	80	0
1,2,4-Trimethylbenzene	1.867	1.902	-	-1.9	20	74	0
sec-Butylbenzene	2.299	2.563	-	-11.5	20	79	0
p-Isopropyltoluene	2.027	2.224	-	-9.7	20	79	0
1,3-Dichlorobenzene	1.09	1.2	-	-10.1	20	81	0
1,4-Dichlorobenzene	1.108	1.19	-	-7.4	20	80	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: VOA105		**Calibration Date**	: 09/07/23 07:28	
Lab File ID	: V05230907A01		**Init. Calib. Date(s)**	: 08/08/23	08/09/23
Sample No	: WG1824710-2		**Init. Calib. Times**	: 20:56	01:10
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.175	1.306	-	-11.1	20	79	0
n-Butylbenzene	10	10.29	-	-2.9	20	80	0
1,2-Dichlorobenzene	1.006	1.067	-	-6.1	20	78	0
1,2,4,5-Tetramethylbenzene	1.855	1.692	-	8.8	20	69	0
1,2-Dibromo-3-chloropropan	0.062	0.058	-	6.5	20	72	0
1,3,5-Trichlorobenzene	0.775	0.79	-	-1.9	20	74	0
Hexachlorobutadiene	10	9.966	-	0.3	20	82	0
1,2,4-Trichlorobenzene	0.687	0.646	-	6	20	69	0
Naphthalene	1.497	1.291	-	13.8	20	63	0
1,2,3-Trichlorobenzene	0.624	0.591	-	5.3	20	69	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Volatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: ELAINE		Calibration Date	: 09/08/23 08:56	
Lab File ID	: VE230908A01		Init. Calib. Date(s)	: 07/25/23	07/26/23
Sample No	: WG1825752-2		Init. Calib. Times	: 21:39	01:41
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	87	0
Dichlorodifluoromethane	0.29	0.304	-	-4.8	20	81	0
Chloromethane	0.368	0.45	-	-22.3*	20	95	0
Vinyl chloride	0.388	0.342	-	11.9	20	68	0
Bromomethane	0.227	0.133	-	41.4*	20	47	0
Chloroethane	0.234	0.19	-	18.8	20	64	-.01
Trichlorofluoromethane	0.367	0.334	-	9	20	69	0
Ethyl ether	0.122	0.104	-	14.8	20	68	0
1,1-Dichloroethene	0.208	0.222	-	-6.7	20	83	0
Carbon disulfide	0.644	0.756	-	-17.4	20	92	0
Freon-113	0.215	0.251	-	-16.7	20	87	0
Methylene chloride	0.251	0.275	-	-9.6	20	93	0
Acetone	10	13.269	-	-32.7*	20	108	0
trans-1,2-Dichloroethene	0.227	0.248	-	-9.3	20	86	0
Methyl acetate	0.142	0.189	-	-33.1*	20	116	0
Methyl tert-butyl ether	0.574	0.535	-	6.8	20	81	0
tert-Butyl alcohol	0.014	0.019	-	-35.7*	20	116	-.01
Diisopropyl ether	0.934	1.176	-	-25.9*	20	105	0
1,1-Dichloroethane	0.548	0.545	-	0.5	20	77	0
Halothane	0.172	0.196	-	-14	20	88	0
Acrylonitrile	0.071	0.079	-	-11.3	20	90	0
Ethyl tert-butyl ether	0.876	0.839	-	4.2	20	83	0
Vinyl acetate	0.347	0.564	-	-62.5*	20	149	0
cis-1,2-Dichloroethene	0.261	0.277	-	-6.1	20	84	0
2,2-Dichloropropane	0.379	0.374	-	1.3	20	80	0
Bromochloromethane	0.111	0.13	-	-17.1	20	95	0
Cyclohexane	0.582	0.594	-	-2.1	20	79	0
Chloroform	0.42	0.451	-	-7.4	20	88	0
Ethyl acetate	0.191	0.254	-	-33*	20	114	0
Carbon tetrachloride	0.304	0.332	-	-9.2	20	86	0
Tetrahydrofuran	0.058	0.085	-	-46.6*	20	119	-.01
Dibromofluoromethane	0.282	0.291	-	-3.2	20	89	0
1,1,1-Trichloroethane	0.375	0.392	-	-4.5	20	83	0
2-Butanone	0.083	0.103	-	-24.1*	20	114	0
1,1-Dichloropropene	0.314	0.327	-	-4.1	20	83	0
Benzene	0.943	1.055	-	-11.9	20	92	0
tert-Amyl methyl ether	0.588	0.593	-	-0.9	20	88	-.01
1,2-Dichloroethane-d4	0.37	0.353	-	4.6	20	78	0
1,2-Dichloroethane	0.384	0.351	-	8.6	20	76	0
Methyl cyclohexane	0.409	0.434	-	-6.1	20	87	0
Trichloroethene	0.255	0.271	-	-6.3	20	86	0
Dibromomethane	0.128	0.135	-	-5.5	20	87	0
1,2-Dichloropropane	0.297	0.298	-	-0.3	20	82	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: ELAINE		Calibration Date	: 09/08/23 08:56	
Lab File ID	: VE230908A01		Init. Calib. Date(s)	: 07/25/23	07/26/23
Sample No	: WG1825752-2		Init. Calib. Times	: 21:39	01:41
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.328	0.342	-	-4.3	20	86	0
1,4-Dioxane	0.00107	0.00177*	-	-65.4*	20	138	0
cis-1,3-Dichloropropene	0.38	0.396	-	-4.2	20	90	0
Chlorobenzene-d5	1	1	-	0	20	86	0
Toluene-d8	1.235	1.326	-	-7.4	20	90	0
Toluene	0.671	0.788	-	-17.4	20	94	0
4-Methyl-2-pentanone	0.081	0.079	-	2.5	20	83	0
Tetrachloroethene	0.264	0.329	-	-24.6*	20	99	0
trans-1,3-Dichloropropene	0.38	0.402	-	-5.8	20	89	0
Ethyl methacrylate	0.261	0.226	-	13.4	20	71	0
1,1,2-Trichloroethane	0.172	0.211	-	-22.7*	20	99	0
Chlorodibromomethane	0.243	0.272	-	-11.9	20	93	0
1,3-Dichloropropane	0.371	0.419	-	-12.9	20	95	0
1,2-Dibromoethane	0.203	0.221	-	-8.9	20	90	0
2-Hexanone	0.144	0.163	-	-13.2	20	100	0
Chlorobenzene	0.729	0.843	-	-15.6	20	95	0
Ethylbenzene	1.334	1.419	-	-6.4	20	84	0
1,1,1,2-Tetrachloroethane	0.251	0.309	-	-23.1*	20	100	0
p/m Xylene	0.517	0.573	-	-10.8	20	88	0
o Xylene	0.516	0.552	-	-7	20	86	0
Styrene	0.84	0.914	-	-8.8	20	87	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	97	0
Bromoform	0.251	0.263	-	-4.8	20	105	0
Isopropylbenzene	2.487	2.277	-	8.4	20	84	0
4-Bromofluorobenzene	0.924	0.745	-	19.4	20	80	0
Bromobenzene	0.555	0.561	-	-1.1	20	96	0
n-Propylbenzene	3.012	2.877	-	4.5	20	87	0
1,4-Dichlorobutane	0.856	0.745	-	13	20	83	0
1,1,2,2-Tetrachloroethane	0.404	0.462	-	-14.4	20	114	0
4-Ethyltoluene	2.477	2.374	-	4.2	20	88	0
2-Chlorotoluene	1.758	1.686	-	4.1	20	86	0
1,3,5-Trimethylbenzene	2.106	2.009	-	4.6	20	88	0
1,2,3-Trichloropropane	0.36	0.361	-	-0.3	20	96	0
trans-1,4-Dichloro-2-buten	0.176	0.152	-	13.6	20	83	0
4-Chlorotoluene	1.82	1.731	-	4.9	20	88	0
tert-Butylbenzene	1.759	1.608	-	8.6	20	83	0
1,2,4-Trimethylbenzene	2.072	1.975	-	4.7	20	87	0
sec-Butylbenzene	2.633	2.465	-	6.4	20	85	0
p-Isopropyltoluene	2.223	2.044	-	8.1	20	85	0
1,3-Dichlorobenzene	1.126	1.192	-	-5.9	20	97	0
1,4-Dichlorobenzene	1.122	1.205	-	-7.4	20	99	0
p-Diethylbenzene	1.315	1.199	-	8.8	20	84	0
n-Butylbenzene	1.914	1.867	-	2.5	20	88	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Volatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: ELAINE		**Calibration Date**	: 09/08/23 08:56	
Lab File ID	: VE230908A01		**Init. Calib. Date(s)**	: 07/25/23	07/26/23
Sample No	: WG1825752-2		**Init. Calib. Times**	: 21:39	01:41
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichlorobenzene	1.055	1.106	-	-4.8	20	98	0
1,2,4,5-Tetramethylbenzene	1.994	1.646	-	17.5	20	77	0
1,2-Dibromo-3-chloropropan	0.062	0.067	-	-8.1	20	99	0
1,3,5-Trichlorobenzene	0.715	0.735	-	-2.8	20	97	0
Hexachlorobutadiene	0.211	0.207	-	1.9	20	89	0
1,2,4-Trichlorobenzene	0.617	0.594	-	3.7	20	92	0
Naphthalene	1.522	1.235	-	18.9	20	80	0
1,2,3-Trichlorobenzene	0.562	0.545	-	3	20	95	0

*** Value outside of QC limits.**

SVOC Data Section

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 8270D Semi-Volatiles
Data for Alpha Analytical, SDG Number: L2350269

8 Ground Water Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: Samples were extracted and analyzed within USEPA SW-846 holding times.

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The average RRFs for 2-chloronaphthalene and 2,6-dinitrotoluene were below the method minimums, but not below 0.010 for DAKOTA on 04-13-23. The average RRFs for 2-chloronaphthalene and 2,6-dinitrotoluene were below the method minimums, but not below 0.010 for SV106 on 09-02-23. No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no average RRF is less than 0.010.

The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The average RRFs for 2-chloronaphthalene and 2,6-dinitrotoluene were below the method minimums, but not below 0.010 on 08-31-23 (WG1822460-3). The average RRFs for 2-chloronaphthalene and 2,6-dinitrotoluene were below the method minimums, but not below 0.010 on 09-01-23 (WG1822785-3). The average RRF for 2-chloronaphthalene was below the method minimums, but not below 0.010 on 09-05-23 (WG1823865-3). The average RRFs for 2-chloronaphthalene and 2,6-dinitrotoluene were below the method minimums, but not below 0.010 on 09-06-23 (WG1824168-3). The %Ds for hexachlorocyclopentadiene, 2,4,6-trichlorophenol, 2,4,5-trichlorophenol, 2,4-dinitrophenol, and 4,6-dinitro-o-cresol were above the method maximum on 08-31-23 (WG1822460-3). The %Ds for hexachlorocyclopentadiene, 2,4,6-trichlorophenol, 2,4,5-trichlorophenol, and 4,6-dinitro-o-cresol were above the method maximum on 09-01-23 (WG1822785-3). The %Ds for 2,4-dimethylphenol, 2-nitroaniline, 2,6-dinitrotoluene, and 4-nitrophenol were above the method maximum on 09-05-23 (WG1823865-3). The %Ds for hexachlorobutadiene, hexachlorocyclopentadiene, and 2,4,5-trichlorophenol were above the method maximum on 09-06-23 (WG1824168-3). No action is taken on fewer than 20% of the compounds with method criteria outside control limits per calibration, provided no RRF is less than 0.010.

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The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %Ds for hexachlorocyclopentadiene, 2,4,6-trichlorophenol, 2,4,5-trichlorophenol, 2,4-dinitrophenol, and 4,6-dinitro-o-cresol were above the allowable maximum (20%) on 08-31-23 (WG1822460-3). The %Ds for benzaldehyde and acetophenone were above the allowable maximum (20%) on 08-31-23 (WG1822460-4). The %Ds for hexachlorocyclopentadiene, 2,4,6-trichlorophenol, 2,4,5-trichlorophenol, and 4,6-dinitro-o-cresol were above the allowable maximum (20%) on 09-01-23 (WG1822785-3). The %Ds for benzaldehyde and acetophenone were above the allowable maximum (20%) on 09-01-23 (WG1822785-4). The %Ds for 2,4-dimethylphenol, 2-nitroaniline, 2,6-dinitrotoluene, and 4-nitrophenol were above the allowable maximum on 09-05-23 (WG1823865-3). The %Ds for hexchlorobutadiene, hexachlorocyclopentadiene, and 2,4,5-trichlorophenol were above the allowable maximum (20%) on 09-06-23 (WG1824168-3). The %D for benzaldehyde was above the allowable maximum (20%) on 09-06-23 (WG1824168-4). Positive results for these compounds should be considered estimated (J) in associated samples.

Blanks: The analyses of the method and field blanks reported target compounds as not detected.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: One of three acid extractable surrogate recoveries for samples MW-2S and MW-3S was above control limits. One of three acid extractable surrogate recoveries for sample MW-8S was below control limits, but not below 10%. No action is taken on one surrogate recovery per fraction outside control limits, provided no recovery is less than 10%.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for 41 compounds (highlighted yellow on attached Form 3) were above the allowable maximum; 1 of 2 percent recoveries (%Rs) for 4-nitrophenol was above QC limits; 1 of 2 %Rs for 4-nitroaniline and acetophenone were below QC limits, but not below 30%; and 2 of 2 %Rs for 3,3'-dichlorobenzidine and 4-chloroaniline and 1 of 2 %Rs for 3-nitroanilne and caprolactam were below QC limits and 1 or 2 below 30% for aqueous MS/MSD sample MW-8S. The "not detected" results for 4-nitroaniline and acetophenone should be considered estimated (UJ) and "not detected" results for 3,3'-dichlorobenzidine, 4-chloroaniline, 3-nitroanilne, and caprolactam rejected, unusable (R) in sample MW-8S.

Laboratory Control Sample: The relative percent differences (RPDs) for target compounds were below the allowable maximum, but 2 of 2 percent recoveries (%Rs) for 4-nitrophenol were above QC limits for aqueous samples WG1822188-2/3. The RPDs for target compounds were below the allowable maximum, but 1 of 2 %Rs for 4-nitrophenol was above QC limits for aqueous samples WG1823488-2/3. Positive results for 4-nitrophenol should be considered estimated, biased high (J+) in associated aqueous samples.

Field Duplicates: The analyses of aqueous field duplicate pair MW-1S/DUP reported target compounds as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Compound ID: Checked compounds and surrogates were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Laboratory Control Sample Summary
Form 3
Semivolatiles

Client : Alpha Geoscience
Lab Number : L2350269
Project Name : HUNTINGTON READY MIX
Project Number : 20116
Matrix (Level) : WATER (LOW)
LCS Sample ID : WG1822188-2 Analysis Date : 08/31/23 11:54 File ID : 822188-2
LCSD Sample ID : WG1822188-3 Analysis Date : 08/31/23 12:17 File ID : 822188-3

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Bis(2-chloroethyl)ether	18	12.	65	18	13.	70	7	40-140	30
3,3'-Dichlorobenzidine	18	7.5	41	18	7.9	43	5	40-140	30
2,4-Dinitrotoluene	18	16.	91	18	17.	92	1	48-143	30
2,6-Dinitrotoluene	18	16.	89	18	19.	104	16	40-140	30
4-Chlorophenyl phenyl ether	18	15.	82	18	16.	90	9	40-140	30
4-Bromophenyl phenyl ether	18	16.	91	18	17.	96	5	40-140	30
Bis(2-chloroisopropyl)ether	18	11.	63	18	13.	70	11	40-140	30
Bis(2-chloroethoxy)methane	18	13.	71	18	14.	74	4	40-140	30
Hexachlorocyclopentadiene	18	14.	78	18	16.	89	13	40-140	30
Isophorone	18	13.	70	18	14.	76	8	40-140	30
Nitrobenzene	18	13.	71	18	14.	80	12	40-140	30
NDPA/DPA	18	14.	80	18	15.	85	6	40-140	30
n-Nitrosodi-n-propylamine	18	14.	74	18	15.	84	13	29-132	30
Bis(2-ethylhexyl)phthalate	18	16.	90	18	19.	105	15	40-140	30
Butyl benzyl phthalate	18	16.	88	18	17.	96	9	40-140	30
Di-n-butylphthalate	18	15.	84	18	16.	90	7	40-140	30
Di-n-octylphthalate	18	16.	86	18	18.	98	13	40-140	30
Diethyl phthalate	18	14.	79	18	15.	81	3	40-140	30
Dimethyl phthalate	18	15.	82	18	15.	82	0	40-140	30
Biphenyl	18	12.	65	18	13.	74	13	40-140	30
4-Chloroaniline	18	11.	61	18	9.8	54	12	40-140	30
2-Nitroaniline	18	17.	92	18	17.	94	2	52-143	30
3-Nitroaniline	18	11.	62	18	12.	64	3	25-145	30
4-Nitroaniline	18	13.	70	18	13.	73	4	51-143	30
Dibenzofuran	18	15.	84	18	16.	90	7	40-140	30
1,2,4,5-Tetrachlorobenzene	18	13.	71	18	15.	83	16	2-134	30

Laboratory Control Sample Summary
Form 3
Semivolatiles

Client : Alpha Geoscience
Lab Number : L2350269
Project Name : HUNTINGTON READY MIX
Project Number : 20116
Matrix (Level) : WATER (LOW)
LCS Sample ID : WG1822188-2 Analysis Date : 08/31/23 11:54 File ID : 822188-2
LCSD Sample ID : WG1822188-3 Analysis Date : 08/31/23 12:17 File ID : 822188-3

	Laboratory Control Sample				Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R		True (ug/l)	Found (ug/l)	%R		RPD	Recovery Limits	RPD Limit
Acetophenone	18	9.9	55		18	11.	60		9	39-129	30
2,4,6-Trichlorophenol	18	19.	103		18	20.	109		6	30-130	30
p-Chloro-m-cresol	18	17.	92		18	18.	96		4	23-97	30
2-Chlorophenol	18	13.	70		18	14.	80		13	27-123	30
2,4-Dichlorophenol	18	16.	86		18	18.	98		13	30-130	30
2,4-Dimethylphenol	18	14.	75		18	15.	82		9	30-130	30
2-Nitrophenol	18	14.	78		18	16.	89		13	30-130	30
4-Nitrophenol	18	16.	87	Q	18	15.	84	Q	4	10-80	30
2,4-Dinitrophenol	18	19.	106		18	19.	107		1	20-130	30
4,6-Dinitro-o-cresol	18	19.	105		18	20.	108		3	20-164	30
Phenol	18	9.8	54		18	10.	56		4	12-110	30
2-Methylphenol	18	12.	68		18	14.	76		11	30-130	30
3-Methylphenol/4-Methylphenol	18	13.	73		18	13.	73		0	30-130	30
2,4,5-Trichlorophenol	18	20.	113		18	21.	116		3	30-130	30
Carbazole	18	16.	87		18	16.	88		1	55-144	30
Atrazine	18	17.	93		18	17.	94		1	40-140	30
Benzaldehyde	18	11.	60		18	12.	68		13	40-140	30
Caprolactam	18	7.2	40		18	7.0	38		5	10-130	30
2,3,4,6-Tetrachlorophenol	18	19.	104		18	20.	108		4	40-140	30

Laboratory Control Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1823488-2	Analysis Date : 09/05/23 23:11	File ID : 823488-2
LCSD Sample ID	: WG1823488-3	Analysis Date : 09/05/23 23:33	File ID : 823488-3

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Bis(2-chloroethyl)ether	18	9.4	52	18	11.	63	19	40-140	30
3,3'-Dichlorobenzidine	18	10.	57	18	10.	57	0	40-140	30
2,4-Dinitrotoluene	18	12.	64	18	14.	76	17	48-143	30
2,6-Dinitrotoluene	18	13.	73	18	15.	85	15	40-140	30
4-Chlorophenyl phenyl ether	18	12.	66	18	14.	76	14	40-140	30
4-Bromophenyl phenyl ether	18	14.	77	18	15.	83	8	40-140	30
Bis(2-chloroisopropyl)ether	18	9.3	51	18	11.	62	19	40-140	30
Bis(2-chloroethoxy)methane	18	10.	58	18	12.	66	13	40-140	30
Hexachlorocyclopentadiene	18	12.	66	18	14.	78	17	40-140	30
Isophorone	18	10.	57	18	12.	66	15	40-140	30
Nitrobenzene	18	11.	58	18	12.	67	14	40-140	30
NDPA/DPA	18	11.	62	18	13.	72	15	40-140	30
n-Nitrosodi-n-propylamine	18	11.	60	18	13.	70	15	29-132	30
Bis(2-ethylhexyl)phthalate	18	14.	78	18	17.	94	19	40-140	30
Butyl benzyl phthalate	18	13.	74	18	16.	85	14	40-140	30
Di-n-butylphthalate	18	12.	69	18	14.	76	10	40-140	30
Di-n-octylphthalate	18	13.	72	18	16.	89	21	40-140	30
Diethyl phthalate	18	12.	67	18	14.	75	11	40-140	30
Dimethyl phthalate	18	14.	75	18	15.	83	10	40-140	30
Biphenyl	18	10.	55	18	11.	61	10	40-140	30
4-Chloroaniline	18	14.	79	18	14.	78	1	40-140	30
2-Nitroaniline	18	13.	74	18	15.	83	11	52-143	30
3-Nitroaniline	18	12.	64	18	13.	70	9	25-145	30
4-Nitroaniline	18	12.	64	18	14.	75	16	51-143	30
Dibenzofuran	18	12.	67	18	14.	75	11	40-140	30
1,2,4,5-Tetrachlorobenzene	18	11.	62	18	12.	69	11	2-134	30

Laboratory Control Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1823488-2 Analysis Date : 09/05/23 23:11	File ID	: 823488-2
LCSD Sample ID	: WG1823488-3 Analysis Date : 09/05/23 23:33	File ID	: 823488-3

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Acetophenone	18	8.1	45	18	9.4	52	14	39-129	30
2,4,6-Trichlorophenol	18	15.	85	18	18.	100	16	30-130	30
p-Chloro-m-cresol	18	14.	74	18	16.	91	21	23-97	30
2-Chlorophenol	18	10.	57	18	12.	67	16	27-123	30
2,4-Dichlorophenol	18	13.	74	18	16.	88	17	30-130	30
2,4-Dimethylphenol	18	12.	64	18	14.	78	20	30-130	30
2-Nitrophenol	18	12.	64	18	14.	76	17	30-130	30
4-Nitrophenol	18	14.	75	18	15.	83 Q	10	10-80	30
2,4-Dinitrophenol	18	16.	86	18	17.	94	9	20-130	30
4,6-Dinitro-o-cresol	18	15.	83	18	18.	97	16	20-164	30
Phenol	18	7.8	43	18	10.	55	24	12-110	30
2-Methylphenol	18	11.	59	18	13.	70	17	30-130	30
3-Methylphenol/4-Methylphenol	18	12.	67	18	14.	77	14	30-130	30
2,4,5-Trichlorophenol	18	17.	96	18	19.	105	9	30-130	30
Carbazole	18	12.	66	18	13.	74	11	55-144	30
Atrazine	18	14.	75	18	16.	86	14	40-140	30
Benzaldehyde	18	9.8	54	18	11.	60	11	40-140	30
Caprolactam	18	5.5	30	18	6.1	33	10	10-130	30
2,3,4,6-Tetrachlorophenol	18	15.	83	18	17.	96	15	40-140	30

Matrix Spike Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Client Sample ID	: MW-8S	Matrix (Level)	: WATER (LOW)
Lab Sample ID	: L2350269-08	Analysis Date	: 08/31/23 16:01
Matrix Spike	: WG1822188-4	MS Analysis Date	: 08/31/23 16:23
Matrix Spike Dup	: WG1822188-5	MSD Analysis Date	: 08/31/23 16:46

		Matrix Spike Sample				Matrix Spike Duplicate						
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R		Spike Added (ug/l)	Spike Conc. (ug/l)	%R		RPD	Recovery Limits	RPD Limit
Bis(2-chloroethyl)ether	ND	18.2	12.	66		18.2	7.5	41		46 Q	40-140	30
3,3'-Dichlorobenzidine	ND	18.2	ND	0	Q	18.2	ND	0	Q	NC	40-140	30
2,4-Dinitrotoluene	ND	18.2	16.	88		18.2	10.	55		46 Q	48-143	30
2,6-Dinitrotoluene	ND	18.2	18.	99		18.2	12.	66		40 Q	40-140	30
4-Chlorophenyl phenyl ether	ND	18.2	16.	88		18.2	10.	55		46 Q	40-140	30
4-Bromophenyl phenyl ether	ND	18.2	17.	94		18.2	11.	61		43 Q	40-140	30
Bis(2-chloroisopropyl)ether	ND	18.2	13.	72		18.2	7.6	42		52 Q	40-140	30
Bis(2-chloroethoxy)methane	ND	18.2	14.	77		18.2	8.2	45		52 Q	40-140	30
Hexachlorocyclopentadiene	ND	18.2	18.J	99		18.2	11.J	61		48 Q	40-140	30
Isophorone	ND	18.2	14.	77		18.2	8.3	46		51 Q	40-140	30
Nitrobenzene	ND	18.2	15.	83		18.2	9.1	50		49 Q	40-140	30
NDPA/DPA	ND	18.2	14.	77		18.2	9.1	50		42 Q	40-140	30
n-Nitrosodi-n-propylamine	ND	18.2	15.	83		18.2	8.8	48		52 Q	29-132	30
Bis(2-ethylhexyl)phthalate	ND	18.2	18.	99		18.2	11.	61		48 Q	40-140	30
Butyl benzyl phthalate	ND	18.2	17.	94		18.2	11.	61		43 Q	40-140	30
Di-n-butylphthalate	ND	18.2	16.	88		18.2	10.	55		46 Q	40-140	30
Di-n-octylphthalate	ND	18.2	17.	94		18.2	11.	61		43 Q	40-140	30
Diethyl phthalate	ND	18.2	15.	83		18.2	9.9	54		41 Q	40-140	30
Dimethyl phthalate	ND	18.2	16.	88		18.2	10.	55		46 Q	40-140	30
Biphenyl	ND	18.2	13.	72		18.2	8.0	44		48 Q	40-140	30
4-Chloroaniline	ND	18.2	7.0	39	Q	18.2	ND	0	Q	NC	40-140	30
2-Nitroaniline	ND	18.2	17.	94		18.2	11.	61		43 Q	52-143	30

Matrix Spike Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Client Sample ID	: MW-8S	Matrix (Level)	: WATER (LOW)
Lab Sample ID	: L2350269-08	Analysis Date	: 08/31/23 16:01
Matrix Spike	: WG1822188-4	MS Analysis Date	: 08/31/23 16:23
Matrix Spike Dup	: WG1822188-5	MSD Analysis Date	: 08/31/23 16:46

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
3-Nitroaniline	ND	18.2	12.	66	18.2	2.5J	14 Q	131 Q	25-145	30
4-Nitroaniline	ND	18.2	12.	66	18.2	7.9	43 Q	41 Q	51-143	30
Dibenzofuran	ND	18.2	16.	88	18.2	9.9	54	47 Q	40-140	30
1,2,4,5-Tetrachlorobenzene	ND	18.2	14.	77	18.2	8.6J	47	48 Q	2-134	30
Acetophenone	ND	18.2	11.	61	18.2	6.8	37 Q	47 Q	39-129	30
2,4,6-Trichlorophenol	ND	18.2	20.	110	18.2	13.	72	42 Q	30-130	30
p-Chloro-m-cresol	ND	18.2	17.	94	18.2	11.	61	43 O	23-97	30
2-Chlorophenol	ND	18.2	14.	77	18.2	7.7	42	58 Q	27-123	30
2,4-Dichlorophenol	ND	18.2	17.	94	18.2	9.8	54	54 Q	30-130	30
2,4-Dimethylphenol	ND	18.2	11.	61	18.2	7.5	41	38 Q	30-130	30
2-Nitrophenol	ND	18.2	16.	88	18.2	9.8J	54	48 Q	30-130	30
4-Nitrophenol	ND	18.2	17.	94 Q	18.2	12.	66	34 Q	10-80	30
2,4-Dinitrophenol	ND	18.2	23.	130	18.2	15.J	83	42 Q	20-130	30
4,6-Dinitro-o-cresol	ND	18.2	20.	110	18.2	14.	77	35 Q	20-164	30
Phenol	ND	18.2	10.	55	18.2	6.2	34	47 Q	12-110	30
2-Methylphenol	ND	18.2	13.	72	18.2	8.0	44	48 Q	30-130	30
3-Methylphenol/4-Methylphenol	ND	18.2	14.	77	18.2	8.4	46	50 Q	30-130	30
2,4,5-Trichlorophenol	ND	18.2	22.	120	18.2	14.	77	44 Q	30-130	30
Carbazole	ND	18.2	16.	88	18.2	10.	55	46 Q	55-144	30
Atrazine	ND	18.2	18.	99	18.2	14.	77	25	40-140	30
Benzaldehyde	ND	18.2	12.	66	18.2	7.4	41	47 Q	40-140	30
Caprolactam	ND	18.2	8.3J	46	18.2	ND	0 Q	NC	10-130	30

Matrix Spike Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Client Sample ID	: MW-8S		Matrix (Level)	: WATER (LOW)	
Lab Sample ID	: L2350269-08		Analysis Date	: 08/31/23 16:01	
Matrix Spike	: WG1822188-4		MS Analysis Date	: 08/31/23 16:23	
Matrix Spike Dup	: WG1822188-5		MSD Analysis Date	: 08/31/23 16:46	

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
2,3,4,6-Tetrachlorophenol	ND	18.2	20.	110	18.2	13.	72	42 Q	40-140	30

Surrogate Recovery Summary
Form 2
Semivolatiles

Client: Alpha Geoscience
Project Name: HUNTINGTON READY MIX

Lab Number: L2350269
Project Number: 20116
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
MW-1S (L2350269-01)	61	48	71	84	101	70	0
MW-2S (L2350269-02)	70	53	75	93	124*	89	1
MW-3S (L2350269-03)	65	52	78	91	123*	89	1
MW-4D (L2350269-04)	59	47	64	64	68	63	0
MW-5S (L2350269-05)	65	55	75	72	71	73	0
MW-6D (L2350269-06)	28	21	84	96	84	89	0
MW-7S (L2350269-07)	76	64	84	95	119	85	0
MW-8S (L2350269-08)	14*	15	66	82	59	83	1
DUP (L2350269-09)	61	53	68	77	102	62	0
EQUIPMENT BLANK (L2350269-11)	59	47	67	84	118	78	0
WG1822188-1BLANK	65	49	66	77	108	80	0
WG1822188-2LCS	64	58	76	88	124*	86	1
WG1822188-3LCSD	66	56	73	93	113	87	0
MW-8SMS	71	57	81	99	125*	87	1
MW-8SMSD	42	33	47	58	77	56	0
WG1823488-1BLANK	59	44	68	81	101	80	0
WG1823488-2LCS	50	40	56	64	92	62	0
WG1823488-3LCSD	55	50	60	71	96	65	0

QC LIMITS

(21-120)	2FP = 2-FLUOROPHENOL
(10-120)	PHL = PHENOL-D6
(23-120)	NBZ = NITROBENZENE-D5
(15-120)	FBP = 2-FLUOROBIPHENYL
(10-120)	TBP = 2,4,6-TRIBROMOPHENOL
(41-149)	TPH = 4-TERPHENYL-D14

*** Values outside of QC limits**

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: DAKOTA**	**Ical Ref**	**: ICAL19934**
Calibration dates	**: 04/13/23 01:37 04/13/23 14:37**		

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
1)	I	IS1_1,4-Dichlorobenzene-d4	----------ISTD----------											
2)	t	N-Nitrosodimethylamine		0.548	0.717	0.739	0.740	0.728	0.733	0.742	0.803	0.841	*L	0.9975
3)	t	Pyridine		0.548	0.958	1.071	1.249	0.932	1.065	1.192	1.240	1.294	*L	0.9955
4)	S	2-Fluorophenol	0.933	0.866	0.977	1.070	1.041	1.032	1.052	1.068	1.139	1.150	1.033	8.47
5)	T	Aniline	1.890	1.522	1.638	1.827	1.811	1.793	1.800	1.795	1.882	1.944	1.790	6.95
6)	t	2-Chlorophenol	1.032	1.123	1.072	1.267	1.215	1.225	1.215	1.252	1.265	1.288	1.195	7.41
7)	S	Phenol-d6	1.112	1.228	1.214	1.354	1.302	1.344	1.325	1.415	1.437	1.505	1.324	8.80
8)	T	Phenol	1.395	1.468	1.430	1.646	1.600	1.496	1.508	1.551	1.616	1.676	1.539	6.14
9)	T	bis(2-Chloroethyl)ether	0.895	1.148	1.079	1.150	1.122	1.013	1.029	1.060	1.058	1.109	1.066	7.16
10)	T	1,3-Dichlorobenzene	1.458	1.394	1.455	1.463	1.451	1.401	1.393	1.413	1.456	1.469	1.435	2.14
11)	T	1,4-Dichlorobenzene	1.505	1.417	1.477	1.489	1.493	1.371	1.421	1.412	1.462	1.470	1.452	3.01
12)	T	1,2-Dichlorobenzene	1.419	1.442	1.380	1.471	1.429	1.406	1.362	1.369	1.391	1.389	1.406	2.46
13)	t	Benzyl alcohol	0.774	0.890	0.931	0.918	0.976	0.959	0.915	0.967	0.992	1.044	0.936	7.71
14)	T	bis(2-chloroisopropyl)ether	1.732	1.783	1.706	1.958	1.860	1.769	1.714	1.784	1.742	1.796	1.785	4.26
15)	T	2-Methylphenol	0.768	1.072	1.002	1.041	1.013	1.034	1.015	1.040	1.070	1.107	1.016	9.14
16)	T	Hexachloroethane	0.661	0.565	0.498	0.546	0.555	0.528	0.532	0.532	0.543	0.548	0.551	7.75
17)	T	n-Nitrosodi-n-propylamine	0.570	0.835	0.767	0.893	0.849	0.806	0.839	0.855	0.862	0.903	0.818	11.68
18)	T	3-Methylphenol/4-Methylphenol	0.768	0.849	1.066	1.122	1.143	1.064	1.063	1.107	1.138	1.176	1.050	12.75
19)	S	Nitrobenzene-d5	1.334	1.159	1.236	1.354	1.273	1.246	1.238	1.249	1.269	1.329	1.269	4.56
20)	T	Nitrobenzene	1.162	1.276	1.152	1.279	1.307	1.197	1.186	1.251	1.236	1.288	1.234	4.51
21)	T	Isophorone	1.951	1.920	2.057	2.350	2.279	2.171	2.207	2.240	2.264	2.389	2.183	7.31
22)	T	2-Nitrophenol	0.460	0.456	0.547	0.584	0.549	0.617	0.599	0.618	0.661	0.676	0.577	13.06
23)	T	2,4-Dimethylphenol	1.026	1.047	1.051	1.178	1.146	1.121	1.087	1.115	1.133	1.198	1.110	5.15
24)	T	bis(2-Chloroethoxy)methane	1.542	1.401	1.426	1.489	1.398	1.385	1.364	1.358	1.367	1.430	1.416	4.17
25)	T	2,4-Dichlorophenol	0.949	0.937	0.945	1.098	1.080	0.990	1.068	1.094	1.112	1.163	1.044	7.77
26)	T	1,2,4-Trichlorobenzene	1.294	1.381	1.197	1.360	1.280	1.304	1.221	1.221	1.236	1.269	1.276	4.76
27)	I	IS2_1,4-Dichlorobenzene-d4	----------ISTD----------											
28)	T	Benzaldehyde	1.153	0.824	0.990	0.991	1.037	1.136	1.126	1.113	1.082	1.008	1.046	9.48
29)	T	Acetophenone	1.813	1.661	1.714	1.792	1.850	1.967	1.918	1.977	1.881	1.740	1.831	5.84
30)	T	m-Toluidine	0.472	0.864	1.395	1.607	1.633	1.864	1.863	1.871	1.818	1.689	*L	0.9975
31)	T	2-Chloroaniline	1.585	1.504	1.624	1.727	1.680	1.836	1.816	1.828	1.736	1.598	1.693	6.78
32)	I	IS3_1,4-Dichlorobenzene-d4	----------ISTD----------											
33)	T	n-Decane	1.438	1.152	1.216	1.252	1.221	1.272	1.155	1.198	1.219	1.190	1.231	6.63
34)	I	IS1_Naphthalene-d8	----------ISTD----------											
35)	T	Naphthalene	1.018	0.994	0.965	0.975	0.990	0.956	0.955	0.963	0.945	0.949	0.971	2.40
36)	T	Benzoic Acid					0.080	0.130	0.171	0.189	0.228	0.243	*L	0.9968

Initial Calibration Summary
Form 6
Semivolatiles

Client	: **Alpha Geoscience**	**Lab Number**	: **L2350269**
Project Name	: **HUNTINGTON READY MIX**	**Project Number**	: **20116**
Instrument ID	: **DAKOTA**	**Ical Ref**	: **ICAL19934**
Calibration dates	: **04/13/23 01:37 04/13/23 14:37**		

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
37)	T	4-Chloroaniline	0.092	0.110	0.118	0.124	0.116	0.108	0.114	0.123	0.118	0.123	0.115	8.30
38)	T	Hexachlorobutadiene	0.207	0.179	0.215	0.194	0.200	0.194	0.197	0.199	0.196	0.195	0.198	4.77
39)	T	p-Chloro-m-cresol	0.223	0.182	0.240	0.256	0.261	0.257	0.266	0.277	0.281	0.293	0.254	12.65
40)	T	2-Methylnaphthalene	0.571	0.609	0.587	0.649	0.667	0.619	0.642	0.651	0.649	0.668	0.631	5.29
41)	T	1-Methylnaphthalene	0.228	0.185	0.212	0.217	0.231	0.222	0.211	0.226	0.222	0.229	0.218	6.15
42)	T	Hexachlorocyclopentadiene	0.218	0.216	0.219	0.254	0.237	0.240	0.249	0.249	0.251	0.258	0.239	6.77
43)	T	2,4,6-Trichlorophenol		0.128	0.188	0.201	0.222	0.214	0.228	0.231	0.237	0.251	*L	0.9985
44)	T	2,4,5-Trichlorophenol		0.164	0.198	0.228	0.241	0.242	0.241	0.259	0.261	0.268	0.234	14.32
45)	S	2-Fluorobiphenyl	0.836	0.721	0.803	0.796	0.821	0.782	0.778	0.781	0.768	0.784	0.787	3.97
46)	T	2-Chloronaphthalene	0.707	0.647	0.685	0.706	0.709	0.684	0.693	0.706	0.686	0.699	0.692	2.67
47)	T	2-Nitroaniline	0.142	0.175	0.177	0.199	0.211	0.202	0.214	0.218	0.225	0.238	0.200	14.09
48)	T	1,4-Dinitrobenzene			0.072	0.080	0.095	0.094	0.092	0.104	0.101	0.109	0.093	13.08
49)	T	1,3-Dinitrobenzene				0.104	0.097	0.099	0.109	0.115	0.115	0.122	0.109	8.38
50)	T	Dimethyl phthalate	0.742	0.733	0.762	0.842	0.871	0.817	0.809	0.845	0.815	0.854	0.809	5.95
51)	T	Acenaphthylene	0.967	0.966	0.975	1.090	1.124	1.061	1.068	1.087	1.060	1.096	1.049	5.58
52)	T	2,6-Dinitrotoluene	0.132	0.173	0.131	0.165	0.177	0.174	0.168	0.184	0.176	0.192	0.167	12.21
53)	T	1,2-Dinitrobenzene			0.049	0.064	0.069	0.067	0.064	0.067	0.070	0.073	0.065	11.19
54)	I	IS2_Naphthalene-d8	----------ISTD----------											
55)	T	a-Terpineol	0.271	0.269	0.269	0.258	0.282	0.291	0.278	0.292	0.289	0.266	0.277	4.21
56)	T	3-Chloroaniline	0.096	0.121	0.150	0.133	0.145	0.158	0.149	0.148	0.144	0.133	0.138	13.05
57)	T	2,6-Dichlorophenol	0.193	0.251	0.259	0.263	0.274	0.294	0.305	0.314	0.316	0.292	0.276	13.50
58)	T	1-chloro-2-nitrobenzene	0.162	0.134	0.138	0.152	0.149	0.156	0.151	0.155	0.151	0.139	0.149	6.10
59)	T	Caprolactam				0.114	0.134	0.150	0.161	0.164	0.161	0.157	0.149	12.30
60)	T	1,2,4,5-Tetrachlorobenzene	0.440	0.404	0.388	0.397	0.400	0.419	0.403	0.409	0.396	0.365	0.402	4.86
61)	T	Biphenyl	0.913	0.868	0.913	0.891	0.899	0.944	0.936	0.927	0.895	0.824	0.901	3.93
62)	I	IS1_Acenaphthene-d10	----------ISTD----------											
63)	T	3-Nitroaniline	0.255	0.255	0.315	0.319	0.315	0.338	0.332	0.346	0.355	0.353	0.318	11.46
64)	T	Acenaphthene	1.114	1.114	1.030	1.121	1.116	1.078	1.064	1.075	1.109	1.072	1.089	2.76
65)	T	2,4-Dinitrophenol					0.138	0.155	0.160	0.174	0.197	0.202	*L	0.9974
66)	T	Dibenzofuran	1.784	1.750	1.693	1.854	1.765	1.728	1.685	1.710	1.723	1.681	1.737	3.07
67)	T	2,4-Dinitrotoluene	0.318	0.352	0.345	0.381	0.389	0.413	0.411	0.429	0.445	0.434	0.392	10.84
68)	T	4-Nitrophenol				0.230	0.258	0.255	0.260	0.282	0.289	0.285	*L	0.9994
69)	T	2,3,5,6-Tetrachlorophenol			0.263	0.332	0.338	0.348	0.356	0.375	0.397	0.389	*L	0.9993
70)	T	2,3,4,6-Tetrachlorophenol			0.285	0.328	0.357	0.355	0.361	0.377	0.389	0.385	*L	0.9997
71)	T	Diethyl phthalate	1.487	1.484	1.390	1.484	1.457	1.469	1.452	1.473	1.493	1.474	1.466	2.03
72)	T	Fluorene	1.429	1.361	1.373	1.403	1.440	1.408	1.371	1.407	1.419	1.393	1.400	1.85

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: DAKOTA**	**Ical Ref**	**: ICAL19934**
Calibration dates	**: 04/13/23 01:37 04/13/23 14:37**		

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
73)	T	4-Chlorophenyl-phenylether	0.652	0.753	0.696	0.687	0.698	0.664	0.657	0.673	0.666	0.659	0.681	4.44
74)	T	4-Nitroaniline	0.240	0.253	0.283	0.321	0.331	0.329	0.340	0.349	0.357	0.357	0.316	13.50
75)	T	4,6-Dinitro-o-cresol				0.170	0.179	0.205	0.212	0.229	0.250	0.248	*L	0.9987
76)	T	NDPA/DPA	1.256	1.121	1.143	1.219	1.197	1.219	1.180	1.204	1.221	1.187	1.195	3.31
77)	T	Azobenzene	1.103	1.257	1.199	1.316	1.306	1.310	1.261	1.282	1.281	1.240	1.256	5.13
78)	S	2,4,6-Tribromophenol		0.179	0.210	0.240	0.229	0.230	0.233	0.246	0.257	0.259	0.232	10.80
79)	T	4-Bromophenyl-phenylether	0.324	0.395	0.454	0.464	0.422	0.429	0.417	0.431	0.458	0.457	0.425	9.86
80)	T	Hexachlorobenzene	0.543	0.499	0.530	0.560	0.544	0.507	0.522	0.533	0.543	0.538	0.532	3.46
81)	T	Pentachlorophenol				0.246	0.251	0.261	0.297	0.315	0.346	0.349	*L	0.9981
82)	I	IS2_Acenaphthene-d10	----------ISTD----------											
83)	T	Dichloran			0.169	0.179	0.163	0.181	0.211	0.231	0.233	0.232	*L	0.9977
84)	T	Pentachloronitrobenzene	0.219	0.221	0.165	0.175	0.190	0.205	0.206	0.225	0.217	0.209	0.203	9.97
85)	I	IS3_Acenaphthene-d10	----------ISTD----------											
86)	T	Atrazine	0.362	0.313	0.346	0.320	0.327	0.375	0.391	0.357	0.403	0.439	0.363	10.98
87)	I	IS1_Phenanthrene-d10	----------ISTD----------											
88)	T	Phenanthrene	1.058	1.104	1.057	1.019	1.046	0.997	1.017	1.022	1.002	0.979	1.030	3.56
89)	T	Anthracene	1.013	0.995	0.965	0.988	1.028	0.988	1.011	1.012	0.996	0.982	0.998	1.85
90)	T	Carbazole	0.873	0.949	0.893	0.912	0.977	0.950	0.980	0.978	0.954	0.939	0.941	3.92
91)	T	Di-n-butylphthalate	1.074	1.038	1.046	1.095	1.115	1.076	1.150	1.151	1.178	1.155	1.108	4.45
92)	T	Fluoranthene	1.160	1.162	1.153	1.217	1.252	1.182	1.229	1.230	1.255	1.237	1.208	3.29
93)	T	Benzidine				0.711	0.748	0.676	0.827	0.837	0.873	0.869	0.791	10.00
94)	T	Pyrene	1.206	1.319	1.272	1.268	1.349	1.256	1.277	1.290	1.273	1.258	1.277	3.00
95)	S	4-Terphenyl-d14	0.976	0.954	0.960	0.979	1.026	0.964	0.985	0.979	0.980	0.974	0.978	2.01
96)	T	Butyl benzyl phthalate	0.411	0.426	0.461	0.496	0.497	0.487	0.533	0.534	0.592	0.599	0.504	12.46
97)	I	IS2_Phenanthrene-d10	----------ISTD----------											
98)	T	Diphenamid	0.492	0.457	0.445	0.464	0.475	0.521	0.542	0.559	0.543	0.515	0.501	8.02
99)	I	IS3_Phenanthrene-d10	----------ISTD----------											
100)	T	n-Octadecane	0.381	0.394	0.346	0.362	0.387	0.402	0.411	0.387	0.396	0.390	0.386	4.90
101)	T	Parathion			0.083	0.077	0.086	0.096	0.107	0.097	0.123	0.128	*Q	0.9983
102)	T	3,3'-Dimethylbenzidine		0.198	0.425	0.486	0.524	0.652	0.721	0.688	0.859	0.856	*Q	0.9978
103)	I	IS1_Chrysene-d12	----------ISTD----------											
104)	T	Benzo[a]anthracene	1.244	1.246	1.228	1.206	1.255	1.254	1.245	1.279	1.307	1.274	1.254	2.23
105)	T	3,3'-Dichlorobenzidine	0.464	0.433	0.404	0.442	0.464	0.477	0.501	0.529	0.553	0.554	0.482	10.61
106)	T	Chrysene	1.204	1.121	1.194	1.193	1.225	1.203	1.174	1.208	1.178	1.143	1.184	2.66
107)	T	bis(2-Ethylhexyl)phthalate	0.621	0.587	0.619	0.671	0.694	0.708	0.744	0.769	0.805	0.785	0.700	10.79
108)	T	Di-n-octylphthalate			1.020	1.118	1.110	1.207	1.317	1.381	1.521	1.493	1.271	14.64

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: DAKOTA**	**Ical Ref**	**: ICAL19934**
Calibration dates	**: 04/13/23 01:37 04/13/23 14:37**		

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
109)	T	Benzo(b)fluoranthene	1.270	1.437	1.229	1.327	1.308	1.327	1.424	1.438	1.454	1.394	1.361	5.80
110)	T	Benzo(k)fluoranthene	1.230	1.156	1.246	1.300	1.322	1.347	1.303	1.394	1.356	1.335	1.299	5.41
111)	T	Benzo(a)pyrene	1.077	1.099	1.122	1.128	1.148	1.194	1.241	1.287	1.275	1.257	1.183	6.58
112)	I	IS1_Perylene-d12	----------ISTD----------											
113)	T	Indeno(1,2,3-cd)pyrene	1.010	0.946	0.999	0.997	0.998	1.063	1.092	1.153	1.182	1.164	1.060	7.86
114)	T	Dibenzo[a,h]anthracene	1.050	1.040	1.065	1.091	1.140	1.095	1.143	1.176	1.158	1.154	1.111	4.42
115)	T	Benzo(g,h,i)perylene	1.137	1.014	1.057	1.073	1.163	1.107	1.170	1.182	1.155	1.157	1.122	5.01

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: SV106**	**Ical Ref**	**: ICAL20337**
Calibration dates	**: 09/02/23 12:13 09/03/23 00:52**		

Calibration Files

L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
1)	I	IS1_1,4-Dichlorobenzene-d4	----------ISTD----------											
2)	t	N-Nitrosodimethylamine		0.648	0.703	0.681	0.660	0.622	0.719	0.685	0.676	0.702	0.677	4.47
3)	t	Pyridine	1.054	1.120	1.163	1.116	1.175	1.061	1.236	1.233	1.179	1.168	1.151	5.45
4)	S	2-Fluorophenol	1.088	1.096	1.126	1.083	1.108	0.995	1.181	1.182	1.146	1.151	1.116	4.99
5)	T	Aniline	1.838	1.833	1.964	1.902	1.868	1.720	2.000	1.918	1.903	1.985	1.893	4.42
6)	t	2-Chlorophenol	1.219	1.195	1.332	1.275	1.232	1.185	1.371	1.300	1.302	1.333	1.274	5.01
7)	S	Phenol-d6	1.324	1.450	1.447	1.418	1.415	1.329	1.552	1.459	1.466	1.513	1.437	4.96
8)	T	Phenol	1.574	1.402	1.560	1.504	1.542	1.373	1.603	1.551	1.523	1.579	1.521	5.01
9)	T	bis(2-Chloroethyl)ether	1.344	1.167	1.223	1.216	1.205	1.114	1.275	1.221	1.206	1.247	1.222	5.00
10)	T	1,3-Dichlorobenzene	1.513	1.406	1.544	1.452	1.452	1.343	1.510	1.469	1.451	1.468	1.461	3.91
11)	T	1,4-Dichlorobenzene	1.759	1.418	1.531	1.494	1.463	1.344	1.561	1.490	1.474	1.497	1.503	7.18
12)	T	1,2-Dichlorobenzene	1.543	1.424	1.464	1.456	1.374	1.288	1.496	1.422	1.403	1.441	1.431	4.84
13)	t	Benzyl alcohol	1.065	0.893	1.101	1.048	1.048	0.989	1.167	1.122	1.117	1.185	1.074	8.05
14)	T	bis(2-chloroisopropyl)ether	1.769	1.838	1.890	1.806	1.800	1.644	1.898	1.820	1.744	1.786	1.800	4.06
15)	T	2-Methylphenol	1.062	1.118	1.139	1.150	1.104	1.017	1.221	1.184	1.167	1.215	1.138	5.70
16)	T	Hexachloroethane	0.590	0.574	0.631	0.572	0.572	0.535	0.613	0.589	0.585	0.600	0.586	4.46
17)	T	n-Nitrosodi-n-propylamine	0.970	0.903	0.936	0.894	0.893	0.833	0.981	0.922	0.925	0.978	0.923	4.98
18)	T	3-Methylphenol/4-Methylphenol	1.065	1.100	1.213	1.221	1.177	1.092	1.292	1.238	1.227	1.309	1.193	7.02
19)	S	Nitrobenzene-d5	1.349	1.280	1.290	1.189	1.281	1.160	1.381	1.348	1.345	1.407	1.303	6.12
20)	T	Nitrobenzene	1.173	1.318	1.243	1.244	1.278	1.189	1.396	1.359	1.350	1.396	1.295	6.30
21)	T	Isophorone	2.439	2.405	2.498	2.425	2.467	2.235	2.627	2.531	2.491	2.660	2.478	4.81
22)	T	2-Nitrophenol	0.473	0.461	0.464	0.461	0.482	0.467	0.596	0.573	0.581	0.621	0.518	12.71
23)	T	2,4-Dimethylphenol	1.263	1.209	1.251	1.250	1.287	1.202	1.384	1.328	1.310	1.324	1.281	4.45
24)	T	bis(2-Chloroethoxy)methane	1.673	1.453	1.571	1.543	1.508	1.418	1.628	1.583	1.526	1.621	1.552	5.12
25)	T	2,4-Dichlorophenol	0.973	0.961	1.024	1.067	1.090	1.018	1.186	1.141	1.104	1.192	1.076	7.62
26)	T	1,2,4-Trichlorobenzene	1.228	1.215	1.287	1.261	1.240	1.103	1.291	1.244	1.212	1.268	1.235	4.36
27)	I	IS2_1,4-Dichlorobenzene-d4	----------ISTD----------											
28)	T	Benzaldehyde			1.071	0.918	0.885	1.299	0.926	0.801	0.740	0.787	0.928	19.58
29)	T	Acetophenone	2.251	1.920	1.957	1.826	1.903	2.587	1.898	1.810	1.883	1.906	1.994	12.10
30)	T	m-Toluidine			1.492	1.442	1.434	2.182	1.574	1.433	1.382	1.459	1.550	16.86
31)	T	2-Chloroaniline	1.889	1.484	1.696	1.521	1.557	2.203	1.625	1.546	1.579	1.606	1.670	13.12
32)	I	IS3_1,4-Dichlorobenzene-d4	----------ISTD----------											
33)	T	n-Decane	1.354	1.422	1.378	1.307	1.338	1.336	1.316	1.338	1.318	1.363	1.347	2.55
34)	I	IS1_Naphthalene-d8	----------ISTD----------											
35)	T	Naphthalene	1.046	0.979	1.049	1.016	0.962	0.894	1.038	1.026	1.019	1.055	1.008	4.98
36)	T	Benzoic Acid					0.154	0.161	0.230	0.246	0.255	0.273	*L	0.9982

Initial Calibration Summary
Form 6
Semivolatiles

Client	: **Alpha Geoscience**	**Lab Number**	: **L2350269**
Project Name	: **HUNTINGTON READY MIX**	**Project Number**	: **20116**
Instrument ID	: **SV106**	**Ical Ref**	: **ICAL20337**
Calibration dates	: **09/02/23 12:13 09/03/23 00:52**		

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

	Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
37) T	4-Chloroaniline	0.147	0.112	0.132	0.134	0.127	0.119	0.142	0.136	0.133	0.138	0.132	7.98
38) T	Hexachlorobutadiene	0.233	0.210	0.211	0.200	0.208	0.180	0.206	0.206	0.199	0.203	0.206	6.37
39) T	p-Chloro-m-cresol	0.257	0.259	0.292	0.275	0.293	0.268	0.314	0.315	0.312	0.330	0.291	8.87
40) T	2-Methylnaphthalene	0.631	0.635	0.683	0.650	0.622	0.571	0.661	0.653	0.641	0.673	0.642	4.86
41) T	1-Methylnaphthalene	0.217	0.243	0.253	0.253	0.232	0.218	0.251	0.249	0.240	0.251	0.241	5.70
42) T	Hexachlorocyclopentadiene	0.212	0.203	0.213	0.219	0.221	0.195	0.234	0.230	0.232	0.234	0.219	6.17
43) T	2,4,6-Trichlorophenol	0.195	0.184	0.205	0.202	0.204	0.182	0.227	0.222	0.223	0.242	0.209	9.27
44) T	2,4,5-Trichlorophenol	0.230	0.191	0.222	0.220	0.220	0.196	0.243	0.241	0.240	0.241	0.224	8.26
45) S	2-Fluorobiphenyl	0.835	0.731	0.799	0.785	0.737	0.676	0.772	0.771	0.748	0.781	0.764	5.70
46) T	2-Chloronaphthalene	0.685	0.640	0.719	0.682	0.665	0.597	0.684	0.674	0.658	0.687	0.669	4.89
47) T	2-Nitroaniline			0.158	0.153	0.162	0.156	0.192	0.195	0.197	0.208	*L	0.9975
48) T	1,4-Dinitrobenzene				0.069	0.069	0.061	0.083	0.085	0.089	0.096	*L	0.9958
49) T	1,3-Dinitrobenzene				0.080	0.076	0.076	0.094	0.099	0.107	0.112	*L	0.9969
50) T	Dimethyl phthalate	0.828	0.719	0.845	0.777	0.777	0.710	0.808	0.810	0.779	0.821	0.787	5.69
51) T	Acenaphthylene	1.110	1.006	1.125	1.073	1.054	0.948	1.112	1.118	1.083	1.140	1.077	5.59
52) T	2,6-Dinitrotoluene			0.129	0.136	0.133	0.126	0.159	0.161	0.159	0.167	*L	0.9978
53) T	1,2-Dinitrobenzene				0.055	0.058	0.056	0.069	0.069	0.067	0.070	0.063	10.66
54) I	IS2_Naphthalene-d8	----------ISTD----------											
55) T	a-Terpineol	0.327	0.276	0.274	0.267	0.267	0.376	0.273	0.268	0.284	0.275	0.289	12.23
56) T	3-Chloroaniline	0.150	0.143	0.153	0.145	0.145	0.202	0.148	0.139	0.140	0.138	0.150	12.50
57) T	2,6-Dichlorophenol	0.269	0.249	0.244	0.254	0.263	0.378	0.272	0.270	0.285	0.282	0.277	13.72
58) T	1-chloro-2-nitrobenzene	0.125	0.121	0.128	0.116	0.115	0.174	0.128	0.130	0.139	0.135	0.131	13.00
59) T	Caprolactam	0.122	0.140	0.132	0.129	0.135	0.199	0.150	0.148	0.160	0.152	0.147	14.87
60) T	1,2,4,5-Tetrachlorobenzene	0.383	0.370	0.337	0.334	0.319	0.446	0.323	0.316	0.332	0.321	0.348	11.76
61) T	Biphenyl	0.951	0.858	0.839	0.798	0.794	1.117	0.800	0.785	0.813	0.802	0.856	12.19
62) I	IS1_Acenaphthene-d10	----------ISTD----------											
63) T	3-Nitroaniline		0.218	0.276	0.261	0.272	0.262	0.330	0.312	0.313	0.331	0.286	13.35
64) T	Acenaphthene	1.245	1.152	1.174	1.130	1.082	0.999	1.158	1.107	1.095	1.164	1.131	5.82
65) T	2,4-Dinitrophenol				0.094	0.110	0.108	0.137	0.138	0.155	0.165	*L	0.9965
66) T	Dibenzofuran	1.692	1.754	1.791	1.672	1.656	1.509	1.750	1.672	1.669	1.738	1.690	4.63
67) T	2,4-Dinitrotoluene			0.309	0.306	0.304	0.304	0.380	0.371	0.389	0.411	*L	0.9969
68) T	4-Nitrophenol			0.234	0.230	0.243	0.226	0.283	0.277	0.285	0.309	*L	0.9963
69) T	2,3,5,6-Tetrachlorophenol	0.295	0.260	0.324	0.326	0.326	0.298	0.359	0.347	0.349	0.367	0.325	10.18
70) T	2,3,4,6-Tetrachlorophenol	0.349	0.297	0.356	0.307	0.333	0.306	0.369	0.347	0.344	0.363	0.337	7.51
71) T	Diethyl phthalate	1.394	1.403	1.479	1.414	1.390	1.303	1.459	1.395	1.423	1.488	1.415	3.78
72) T	Fluorene	1.342	1.330	1.403	1.298	1.306	1.208	1.405	1.344	1.329	1.388	1.336	4.38

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: SV106**	**Ical Ref**	**: ICAL20337**
Calibration dates	**: 09/02/23 12:13 09/03/23 00:52**		

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
73)	T	4-Chlorophenyl-phenylether	0.686	0.675	0.667	0.641	0.614	0.566	0.645	0.624	0.610	0.646	0.637	5.59
74)	T	4-Nitroaniline	0.230	0.257	0.293	0.286	0.295	0.277	0.303	0.303	0.316	0.329	0.289	9.99
75)	T	4,6-Dinitro-o-cresol				0.126	0.148	0.131	0.181	0.183	0.203	0.221	*L	0.9946
76)	T	NDPA/DPA	1.117	1.080	1.188	1.110	1.101	1.034	1.182	1.135	1.121	1.169	1.124	4.24
77)	T	Azobenzene	1.389	1.345	1.370	1.263	1.289	1.195	1.348	1.320	1.300	1.373	1.319	4.51
78)	S	2,4,6-Tribromophenol	0.157	0.167	0.185	0.176	0.170	0.170	0.197	0.198	0.201	0.215	0.184	10.14
79)	T	4-Bromophenyl-phenylether	0.407	0.386	0.399	0.346	0.357	0.332	0.375	0.367	0.362	0.379	0.371	6.24
80)	T	Hexachlorobenzene	0.509	0.443	0.462	0.418	0.409	0.375	0.431	0.415	0.415	0.440	0.432	8.29
81)	T	Pentachlorophenol			0.215	0.223	0.221	0.215	0.270	0.262	0.269	0.292	*L	0.9965
82)	I	IS2_Acenaphthene-d10	----------ISTD----------											
83)	T	Dichloran				0.106	0.112	0.170	0.134	0.139	0.168	0.161	*L	0.9968
84)	T	Pentachloronitrobenzene			0.127	0.121	0.141	0.221	0.165	0.165	0.183	0.177	*L	0.9980
85)	I	IS3_Acenaphthene-d10	----------ISTD----------											
86)	T	Atrazine	0.349	0.348	0.329	0.319	0.327	0.341	0.343	0.344	0.374	0.371	0.345	5.15
87)	I	IS1_Phenanthrene-d10	----------ISTD----------											
88)	T	Phenanthrene	1.156	1.108	1.102	1.068	1.103	0.974	1.096	1.069	1.087	1.130	1.089	4.45
89)	T	Anthracene	1.094	1.003	1.131	1.087	1.102	0.980	1.115	1.078	1.107	1.145	1.084	4.88
90)	T	Carbazole	0.877	0.956	1.011	1.020	0.994	0.914	1.023	1.006	1.049	1.058	0.991	5.86
91)	T	Di-n-butylphthalate	1.197	1.122	1.237	1.231	1.251	1.163	1.356	1.316	1.384	1.431	1.269	7.89
92)	T	Fluoranthene	1.161	1.071	1.171	1.161	1.161	1.044	1.213	1.191	1.219	1.254	1.165	5.52
93)	T	Benzidine	0.656	0.641	0.750	0.762	0.786	0.704	0.850	0.847	0.869	0.832	0.770	10.67
94)	T	Pyrene	1.204	1.183	1.265	1.248	1.228	1.103	1.271	1.240	1.272	1.315	1.233	4.79
95)	S	4-Terphenyl-d14	0.837	0.839	0.902	0.885	0.864	0.794	0.919	0.883	0.905	0.945	0.877	5.09
96)	T	Butyl benzyl phthalate			0.406	0.510	0.497	0.523	0.495	0.587	0.583	0.631	0.641	0.541	13.94
97)	I	IS2_Phenanthrene-d10	----------ISTD----------											
98)	T	Diphenamid	0.469	0.442	0.454	0.474	0.474	0.699	0.509	0.489	0.531	0.539	0.508	14.56
99)	I	IS3_Phenanthrene-d10	----------ISTD----------											
100)	T	n-Octadecane	0.468	0.466	0.443	0.422	0.457	0.467	0.456	0.469	0.466	0.483	0.460	3.67
101)	T	Parathion	0.091	0.089	0.084	0.078	0.085	0.085	0.093	0.101	0.112	0.120	0.094	14.22
102)	T	3,3'-Dimethylbenzidine				0.389	0.505	0.540	0.594	0.659	0.717	0.744	0.780	*L	0.9978
103)	I	IS1_Chrysene-d12	----------ISTD----------											
104)	T	Benzo[a]anthracene	1.463	1.326	1.375	1.250	1.283	1.188	1.340	1.321	1.331	1.377	1.326	5.66
105)	T	3,3'-Dichlorobenzidine	0.428	0.404	0.475	0.442	0.471	0.439	0.510	0.506	0.516	0.525	0.472	8.89
106)	T	Chrysene	1.392	1.242	1.284	1.202	1.205	1.095	1.258	1.210	1.203	1.216	1.231	6.11
107)	T	bis(2-Ethylhexyl)phthalate	0.726	0.750	0.902	0.872	0.879	0.827	0.990	0.965	0.973	1.003	0.889	11.02
108)	T	Di-n-octylphthalate	1.204	1.244	1.446	1.403	1.484	1.405	1.693	1.661	1.718	1.736	1.499	12.98

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: SV106**	**Ical Ref**	**: ICAL20337**
Calibration dates	**: 09/02/23 12:13 09/03/23 00:52**		

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
109)	T	Benzo(b)fluoranthene	1.277	1.135	1.311	1.217	1.346	1.123	1.379	1.315	1.304	1.254	1.266	6.73
110)	T	Benzo(k)fluoranthene	1.284	1.239	1.215	1.255	1.110	1.160	1.226	1.219	1.186	1.245	1.214	4.15
111)	T	Benzo(a)pyrene	1.056	0.984	1.138	1.086	1.070	0.993	1.161	1.123	1.116	1.108	1.083	5.43
112)	I	IS1_Perylene-d12	----------ISTD----------											
113)	T	Indeno(1,2,3-cd)pyrene	0.916	0.838	0.921	0.920	0.887	0.832	0.993	0.979	1.058	1.000	0.935	7.81
114)	T	Dibenzo[a,h]anthracene	0.899	0.918	0.990	0.974	0.975	0.921	1.091	1.064	1.090	1.073	0.999	7.49
115)	T	Benzo(g,h,i)perylene	0.969	0.962	1.043	0.994	0.967	0.906	1.065	1.022	1.042	0.945	0.991	5.09

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: DAKOTA		Calibration Date	: 08/31/23 10:12	
Lab File ID	: ABN0831		Init. Calib. Date(s)	: 04/13/23	04/13/23
Sample No	: WG1822460-3		Init. Calib. Times	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	81	0
n-Nitrosodimethylamine	5	4.311	-	13.8	20	74	0
Pyridine	5	3.789	-	24.2*	20	76	0
2-Fluorophenol	1.033	0.96	-	7.1	20	75	0
Aniline	1.79	1.505	-	15.9	20	68	0
2-Chlorophenol	1.195	1.097	-	8.2	20	73	0
Phenol-d6	1.324	1.183	-	10.6	20	71	0
Phenol	1.539	1.243	-	19.2	20	67	0
Bis(2-chloroethyl)ether	1.066	0.896	-	15.9	20	72	0
1,3-Dichlorobenzene	1.435	1.369	-	4.6	20	79	0
1,4-Dichlorobenzene	1.452	1.364	-	6.1	20	81	0
1,2-Dichlorobenzene	1.406	1.309	-	6.9	20	75	0
Benzyl alcohol	0.936	0.863	-	7.8	20	73	0
Bis(2-chloroisopropyl)ethe	1.785	1.495	-	16.2	20	68	0
2-Methylphenol	1.016	0.933	-	8.2	20	73	0
Hexachloroethane	0.551	0.54	-	2	20	83	0
n-Nitrosodi-n-propylamine	0.818	0.744	-	9	20	75	0
3-Methylphenol/4-Methylphe	1.05	0.983	-	6.4	20	75	0
Nitrobenzene-d5	1.269	1.189	-	6.3	20	77	0
Nitrobenzene	1.234	1.159	-	6.1	20	78	0
Isophorone	2.183	1.956	-	10.4	20	73	0
2-Nitrophenol	0.577	0.596	-	-3.3	20	78	0
2,4-Dimethylphenol	1.11	1.051	-	5.3	20	76	0
Bis(2-chloroethoxy)methane	1.416	1.215	-	14.2	20	71	0
2,4-Dichlorophenol	1.044	1.101	-	-5.5	20	90	0
1,2,4-Trichlorobenzene	1.276	1.393	-	-9.2	20	87	0
IS1_Naphthalene-d8	1	1	-	0	20	75	0
Naphthalene	0.971	0.89	-	8.3	20	69	0
Benzoic Acid	5	6.421	-	-28.4*	20	115	0
4-Chloroaniline	0.115	0.111	-	3.5	20	77	0
Hexachlorobutadiene	0.198	0.231	-	-16.7	20	89	0
p-Chloro-m-cresol	0.254	0.272	-	-7.1	20	79	0
2-Methylnaphthalene	0.631	0.626	-	0.8	20	75	0
1-Methylnaphthalene	0.218	0.22	-	-0.9	20	74	0
Hexachlorocyclopentadiene	0.239	0.306	-	-28*	20	95	0
2,4,6-Trichlorophenol	5	6.047	-	-20.9*	20	98	0
2,4,5-Trichlorophenol	0.234	0.302	-	-29.1*	20	93	0
2-Fluorobiphenyl	0.787	0.855	-	-8.6	20	81	0
2-Chloronaphthalene	0.692	0.725	-	-4.8	20	79	0
2-Nitroaniline	0.2	0.227	-	-13.5	20	84	0
1,4-Dinitrobenzene	0.093	0.099	-	-6.5	20	78	0
1,3-Dinitrobenzene	0.109	0.116	-	-6.4	20	87	0
Dimethyl phthalate	0.809	0.907	-	-12.1	20	83	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: DAKOTA		Calibration Date	: 08/31/23 10:12	
Lab File ID	: ABN0831		Init. Calib. Date(s)	: 04/13/23	04/13/23
Sample No	: WG1822460-3		Init. Calib. Times	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.049	1.16	-	-10.6	20	82	0
2,6-Dinitrotoluene	0.167	0.188	-	-12.6	20	81	0
1,2-Dinitrobenzene	0.065	0.074	-	-13.8	20	83	0
IS1_Acenaphthene-d10	1	1	-	0	20	85	0
3-Nitroaniline	0.318	0.294	-	7.5	20	74	0
Acenaphthene	1.089	0.961	-	11.8	20	76	0
2,4-Dinitrophenol	5	6.23	-	-24.6*	20	111	0
Dibenzofuran	1.737	1.689	-	2.8	20	83	0
2,4-Dinitrotoluene	0.392	0.408	-	-4.1	20	84	0
4-Nitrophenol	5	5.261	-	-5.2	20	93	0
2,3,5,6-Tetrachlorophenol	5	5.81	-	-16.2	20	104	0
2,3,4,6-Tetrachlorophenol	5	5.621	-	-12.4	20	99	0
Diethyl phthalate	1.466	1.37	-	6.5	20	79	0
Fluorene	1.4	1.32	-	5.7	20	80	0
4-Chlorophenyl phenyl ethe	0.681	0.681	-	0	20	87	0
4-Nitroaniline	0.316	0.298	-	5.7	20	77	0
4,6-Dinitro-o-cresol	5	6.055	-	-21.1*	20	108	0
NDPA/DPA	1.195	1.086	-	9.1	20	76	0
Azobenzene	1.256	1.189	-	5.3	20	77	0
2,4,6-Tribromophenol	0.232	0.323	-	-39.2*	20	119	0
4-Bromophenyl phenyl ether	0.425	0.457	-	-7.5	20	91	0
Hexachlorobenzene	0.532	0.582	-	-9.4	20	98	0
Pentachlorophenol	5	6.378	-	-27.6*	20	125	0
IS1_Phenanthrene-d10	1	1	-	0	20	87	0
Phenanthrene	1.03	0.886	-	14	20	78	0
Anthracene	0.998	0.908	-	9	20	80	0
Carbazole	0.941	0.857	-	8.9	20	79	0
Di-n-butylphthalate	1.108	1.006	-	9.2	20	82	0
Fluoranthene	1.208	1.128	-	6.6	20	83	0
Benzidine	0.791	0.779	-	1.5	20	101	0
Pyrene	1.277	1.249	-	2.2	20	87	0
4-Terphenyl-d14	0.978	0.988	-	-1	20	89	0
Butyl benzyl phthalate	0.504	0.467	-	7.3	20	84	0
IS1_Chrysene-d12	1	1	-	0	20	91	0
Benzo(a)anthracene	1.254	1.157	-	7.7	20	84	0
3,3'-Dichlorobenzidine	0.482	0.49	-	-1.7	20	93	0
Chrysene	1.184	1.126	-	4.9	20	85	0
Bis(2-ethylhexyl)phthalate	0.7	0.66	-	5.7	20	85	0
Di-n-octylphthalate	1.271	1.142	-	10.1	20	86	0
Benzo(b)fluoranthene	1.361	1.376	-	-1.1	20	94	0
Benzo(k)fluoranthene	1.299	1.212	-	6.7	20	82	0
Benzo(a)pyrene	1.183	1.207	-	-2	20	92	0
IS1_Perylene-d12	1	1	-	0	20	90	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: DAKOTA		**Calibration Date**	: 08/31/23 10:12	
Lab File ID	: ABN0831		**Init. Calib. Date(s)**	: 04/13/23	04/13/23
Sample No	: WG1822460-3		**Init. Calib. Times**	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	1.06	0.942	-	11.1	20	79	0
Dibenzo(a,h)anthracene	1.111	0.985	-	11.3	20	81	0
Benzo(ghi)perylene	1.122	1.088	-	3	20	88	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: DAKOTA		Calibration Date	: 08/31/23 10:35	
Lab File ID	: AP90831		Init. Calib. Date(s)	: 04/13/23	04/13/23
Sample No	: WG1822460-4		Init. Calib. Times	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS2_1,4-Dichlorobenzene-d4	1	1	-	0	20	100	0
Benzaldehyde	1.046	0.645	-	38.3*	20	57	0
Acetophenone	1.831	1.38	-	24.6*	20	70	0
m-Toluidine	5	3.302	-	34*	20	60	0
2-Chloroaniline	1.693	1.311	-	22.6*	20	71	0
IS2_Naphthalene-d8	1	1	-	0	20	86	0
a-Terpineol	0.277	0.252	-	9	20	75	0
3-Chloroaniline	0.138	0.129	-	6.5	20	71	0
2,6-Dichlorophenol	0.276	0.303	-	-9.8	20	89	0
1-chloro-2-nitrobenzene	0.149	0.129	-	13.4	20	71	0
Caprolactam	0.149	0.13	-	12.8	20	75	0
1,2,4,5-Tetrachlorobenzene	0.402	0.407	-	-1.2	20	84	0
Biphenyl	0.901	0.783	-	13.1	20	72	0
IS2_Acenaphthene-d10	1	1	-	0	20	98	0
Dichloran	5	4.343	-	13.1	20	96	0
Pentachloronitrobenzene	0.203	0.194	-	4.4	20	93	0
IS2_Phenanthrene-d10	1	1	-	0	20	108	0
Diphenamid	0.501	0.38	-	24.2*	20	79	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: DAKOTA		Calibration Date	: 09/01/23 06:40	
Lab File ID	: ABN0901		Init. Calib. Date(s)	: 04/13/23	04/13/23
Sample No	: WG1822785-3		Init. Calib. Times	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	86	0
n-Nitrosodimethylamine	5	4.103	-	17.9	20	75	0
Pyridine	5	4.083	-	18.3	20	88	0
2-Fluorophenol	1.033	1.016	-	1.6	20	85	0
Aniline	1.79	1.5	-	16.2	20	72	0
2-Chlorophenol	1.195	1.105	-	7.5	20	78	0
Phenol-d6	1.324	1.203	-	9.1	20	77	0
Phenol	1.539	1.245	-	19.1	20	72	0
Bis(2-chloroethyl)ether	1.066	0.961	-	9.8	20	82	0
1,3-Dichlorobenzene	1.435	1.362	-	5.1	20	84	0
1,4-Dichlorobenzene	1.452	1.42	-	2.2	20	89	0
1,2-Dichlorobenzene	1.406	1.361	-	3.2	20	84	0
Benzyl alcohol	0.936	0.912	-	2.6	20	82	0
Bis(2-chloroisopropyl)ethe	1.785	1.552	-	13.1	20	76	0
2-Methylphenol	1.016	0.922	-	9.3	20	77	0
Hexachloroethane	0.551	0.577	-	-4.7	20	94	0
n-Nitrosodi-n-propylamine	0.818	0.818	-	0	20	88	0
3-Methylphenol/4-Methylphe	1.05	0.947	-	9.8	20	77	0
Nitrobenzene-d5	1.269	1.214	-	4.3	20	84	0
Nitrobenzene	1.234	1.153	-	6.6	20	83	0
Isophorone	2.183	2.045	-	6.3	20	81	0
2-Nitrophenol	0.577	0.587	-	-1.7	20	82	0
2,4-Dimethylphenol	1.11	1.134	-	-2.2	20	87	0
Bis(2-chloroethoxy)methane	1.416	1.291	-	8.8	20	81	0
2,4-Dichlorophenol	1.044	1.167	-	-11.8	20	102	0
1,2,4-Trichlorobenzene	1.276	1.419	-	-11.2	20	94	0
IS1_Naphthalene-d8	1	1	-	0	20	80	0
Naphthalene	0.971	0.901	-	7.2	20	75	0
Benzoic Acid	5	5.676	-	-13.5	20	100	0
4-Chloroaniline	0.115	0.115	-	0	20	85	0
Hexachlorobutadiene	0.198	0.228	-	-15.2	20	94	0
p-Chloro-m-cresol	0.254	0.266	-	-4.7	20	83	0
2-Methylnaphthalene	0.631	0.667	-	-5.7	20	86	0
1-Methylnaphthalene	0.218	0.214	-	1.8	20	77	0
Hexachlorocyclopentadiene	0.239	0.324	-	-35.6*	20	108	0
2,4,6-Trichlorophenol	5	6.199	-	-24*	20	108	0
2,4,5-Trichlorophenol	0.234	0.298	-	-27.4*	20	99	0
2-Fluorobiphenyl	0.787	0.891	-	-13.2	20	91	0
2-Chloronaphthalene	0.692	0.756	-	-9.2	20	89	0
2-Nitroaniline	0.2	0.203	-	-1.5	20	81	0
1,4-Dinitrobenzene	0.093	0.099	-	-6.5	20	84	0
1,3-Dinitrobenzene	0.109	0.107	-	1.8	20	87	0
Dimethyl phthalate	0.809	0.914	-	-13	20	90	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: DAKOTA		Calibration Date	: 09/01/23 06:40	
Lab File ID	: ABN0901		Init. Calib. Date(s)	: 04/13/23	04/13/23
Sample No	: WG1822785-3		Init. Calib. Times	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.049	1.151	-	-9.7	20	87	0
2,6-Dinitrotoluene	0.167	0.187	-	-12	20	86	0
1,2-Dinitrobenzene	0.065	0.073	-	-12.3	20	87	0
IS1_Acenaphthene-d10	1	1	-	0	20	93	0
3-Nitroaniline	0.318	0.288	-	9.4	20	80	0
Acenaphthene	1.089	0.96	-	11.8	20	83	0
2,4-Dinitrophenol	5	5.914	-	-18.3	20	114	0
Dibenzofuran	1.737	1.644	-	5.4	20	89	0
2,4-Dinitrotoluene	0.392	0.374	-	4.6	20	85	0
4-Nitrophenol	5	4.979	-	0.4	20	96	0
2,3,5,6-Tetrachlorophenol	5	5.614	-	-12.3	20	110	0
2,3,4,6-Tetrachlorophenol	5	5.794	-	-15.9	20	112	0
Diethyl phthalate	1.466	1.368	-	6.7	20	87	0
Fluorene	1.4	1.248	-	10.9	20	83	0
4-Chlorophenyl phenyl ethe	0.681	0.668	-	1.9	20	94	0
4-Nitroaniline	0.316	0.299	-	5.4	20	85	0
4,6-Dinitro-o-cresol	5	6.06	-	-21.2*	20	119	0
NDPA/DPA	1.195	1.092	-	8.6	20	84	0
Azobenzene	1.256	1.159	-	7.7	20	83	0
2,4,6-Tribromophenol	0.232	0.324	-	-39.7*	20	132	0
4-Bromophenyl phenyl ether	0.425	0.441	-	-3.8	20	96	0
Hexachlorobenzene	0.532	0.59	-	-10.9	20	109	0
Pentachlorophenol	5	6.15	-	-23*	20	132	0
IS1_Phenanthrene-d10	1	1	-	0	20	94	0
Phenanthrene	1.03	0.915	-	11.2	20	86	0
Anthracene	0.998	0.931	-	6.7	20	88	0
Carbazole	0.941	0.86	-	8.6	20	85	0
Di-n-butylphthalate	1.108	1.027	-	7.3	20	90	0
Fluoranthene	1.208	1.16	-	4	20	92	0
Benzidine	0.791	0.767	-	3	20	106	0
Pyrene	1.277	1.251	-	2	20	93	0
4-Terphenyl-d14	0.978	0.978	-	0	20	95	0
Butyl benzyl phthalate	0.504	0.474	-	6	20	91	0
IS1_Chrysene-d12	1	1	-	0	20	98	0
Benzo(a)anthracene	1.254	1.156	-	7.8	20	90	0
3,3'-Dichlorobenzidine	0.482	0.487	-	-1	20	100	0
Chrysene	1.184	1.113	-	6	20	90	0
Bis(2-ethylhexyl)phthalate	0.7	0.656	-	6.3	20	91	0
Di-n-octylphthalate	1.271	1.145	-	9.9	20	93	0
Benzo(b)fluoranthene	1.361	1.287	-	5.4	20	95	0
Benzo(k)fluoranthene	1.299	1.263	-	2.8	20	92	0
Benzo(a)pyrene	1.183	1.191	-	-0.7	20	97	0
IS1_Perylene-d12	1	1	-	0	20	97	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: DAKOTA		**Calibration Date**	: 09/01/23 06:40	
Lab File ID	: ABN0901		**Init. Calib. Date(s)**	: 04/13/23	04/13/23
Sample No	: WG1822785-3		**Init. Calib. Times**	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	1.06	0.945	-	10.8	20	86	0
Dibenzo(a,h)anthracene	1.111	0.991	-	10.8	20	88	0
Benzo(ghi)perylene	1.122	1.06	-	5.5	20	93	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: DAKOTA		Calibration Date	: 09/01/23 07:02	
Lab File ID	: AP90901		Init. Calib. Date(s)	: 04/13/23	04/13/23
Sample No	: WG1822785-4		Init. Calib. Times	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS2_1,4-Dichlorobenzene-d4	1	1	-	0	20	113	0
Benzaldehyde	1.046	0.655	-	37.4*	20	65	0
Acetophenone	1.831	1.409	-	23*	20	81	0
m-Toluidine	5	3.317	-	33.7*	20	68	0
2-Chloroaniline	1.693	1.291	-	23.7*	20	79	0
IS2_Naphthalene-d8	1	1	-	0	20	104	0
a-Terpineol	0.277	0.236	-	14.8	20	84	0
3-Chloroaniline	0.138	0.125	-	9.4	20	82	0
2,6-Dichlorophenol	0.276	0.305	-	-10.5	20	108	0
1-chloro-2-nitrobenzene	0.149	0.123	-	17.4	20	82	0
Caprolactam	0.149	0.132	-	11.4	20	91	0
1,2,4,5-Tetrachlorobenzene	0.402	0.428	-	-6.5	20	106	0
Biphenyl	0.901	0.787	-	12.7	20	86	0
IS2_Acenaphthene-d10	1	1	-	0	20	120	0
Dichloran	5	4.461	-	10.8	20	122	0
Pentachloronitrobenzene	0.203	0.205	-	-1	20	120	0
IS2_Phenanthrene-d10	1	1	-	0	20	135	0
Diphenamid	0.501	0.397	-	20.8*	20	103	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: SV106		Calibration Date	: 09/05/23 21:04	
Lab File ID	: ABN0905		Init. Calib. Date(s)	: 09/02/23	09/03/23
Sample No	: WG1823865-3		Init. Calib. Times	: 12:13	00:52
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	98	0
n-Nitrosodimethylamine	0.677	0.621	-	8.3	20	97	0
Pyridine	1.151	1.087	-	5.6	20	100	0
2-Fluorophenol	1.116	0.984	-	11.8	20	97	0
Aniline	1.893	1.625	-	14.2	20	92	0
2-Chlorophenol	1.274	1.082	-	15.1	20	89	0
Phenol-d6	1.437	1.147	-	20.2*	20	84	0
Phenol	1.521	1.293	-	15	20	92	0
Bis(2-chloroethyl)ether	1.222	1.048	-	14.2	20	92	0
1,3-Dichlorobenzene	1.461	1.268	-	13.2	20	92	0
1,4-Dichlorobenzene	1.503	1.314	-	12.6	20	95	0
1,2-Dichlorobenzene	1.431	1.238	-	13.5	20	94	0
Benzyl alcohol	1.074	0.896	-	16.6	20	88	0
Bis(2-chloroisopropyl)ethe	1.8	1.53	-	15	20	91	0
2-Methylphenol	1.138	0.956	-	16	20	92	0
Hexachloroethane	0.586	0.503	-	14.2	20	92	0
n-Nitrosodi-n-propylamine	0.923	0.763	-	17.3	20	89	0
3-Methylphenol/4-Methylphe	1.193	1.006	-	15.7	20	90	0
Nitrobenzene-d5	1.303	1.05	-	19.4	20	88	0
Nitrobenzene	1.295	1.089	-	15.9	20	89	0
Isophorone	2.478	2.031	-	18	20	89	0
2-Nitrophenol	0.518	0.434	-	16.2	20	91	0
2,4-Dimethylphenol	1.281	1.01	-	21.2*	20	82	0
Bis(2-chloroethoxy)methane	1.552	1.296	-	16.5	20	89	0
2,4-Dichlorophenol	1.076	0.869	-	19.2	20	83	0
1,2,4-Trichlorobenzene	1.235	1.059	-	14.3	20	94	0
IS1_Naphthalene-d8	1	1	-	0	20	92	0
Naphthalene	1.008	0.887	-	12	20	91	0
Benzoic Acid	5	4.166	-	16.7	20	80	0
4-Chloroaniline	0.132	0.112	-	15.2	20	86	0
Hexachlorobutadiene	0.206	0.184	-	10.7	20	93	0
p-Chloro-m-cresol	0.291	0.248	-	14.8	20	85	0
2-Methylnaphthalene	0.642	0.566	-	11.8	20	91	0
1-Methylnaphthalene	0.241	0.222	-	7.9	20	93	0
Hexachlorocyclopentadiene	0.219	0.195	-	11	20	92	0
2,4,6-Trichlorophenol	0.209	0.175	-	16.3	20	88	0
2,4,5-Trichlorophenol	0.224	0.19	-	15.2	20	89	0
2-Fluorobiphenyl	0.764	0.644	-	15.7	20	87	0
2-Chloronaphthalene	0.669	0.58	-	13.3	20	89	0
2-Nitroaniline	5	3.957	-	20.9*	20	84	0
1,4-Dinitrobenzene	5	4.159	-	16.8	20	92	0
1,3-Dinitrobenzene	5	4.112	-	17.8	20	84	0
Dimethyl phthalate	0.787	0.67	-	14.9	20	86	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: SV106		Calibration Date	: 09/05/23 21:04	
Lab File ID	: ABN0905		Init. Calib. Date(s)	: 09/02/23	09/03/23
Sample No	: WG1823865-3		Init. Calib. Times	: 12:13	00:52
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.077	0.93	-	13.6	20	90	0
2,6-Dinitrotoluene	5	3.97	-	20.6*	20	85	0
1,2-Dinitrobenzene	0.063	0.053	-	15.9	20	86	0
IS1_Acenaphthene-d10	1	1	-	0	20	92	0
3-Nitroaniline	0.286	0.248	-	13.3	20	87	0
Acenaphthene	1.131	0.987	-	12.7	20	91	0
2,4-Dinitrophenol	5	4.116	-	17.7	20	82	0
Dibenzofuran	1.69	1.48	-	12.4	20	90	0
2,4-Dinitrotoluene	5	4.081	-	18.4	20	87	0
4-Nitrophenol	5	3.886	-	22.3*	20	83	0
2,3,5,6-Tetrachlorophenol	0.325	0.259	-	20.3*	20	80	0
2,3,4,6-Tetrachlorophenol	0.337	0.279	-	17.2	20	83	0
Diethyl phthalate	1.415	1.222	-	13.6	20	86	0
Fluorene	1.336	1.175	-	12.1	20	89	0
4-Chlorophenyl phenyl ethe	0.637	0.547	-	14.1	20	89	0
4-Nitroaniline	0.289	0.244	-	15.6	20	81	0
4,6-Dinitro-o-cresol	5	4.452	-	11	20	99	0
NDPA/DPA	1.124	0.949	-	15.6	20	84	0
Azobenzene	1.319	1.13	-	14.3	20	87	0
2,4,6-Tribromophenol	0.184	0.153	-	16.8	20	82	0
4-Bromophenyl phenyl ether	0.371	0.318	-	14.3	20	88	0
Hexachlorobenzene	0.432	0.358	-	17.1	20	87	0
Pentachlorophenol	5	4.039	-	19.2	20	86	0
IS1_Phenanthrene-d10	1	1	-	0	20	89	0
Phenanthrene	1.089	0.942	-	13.5	20	86	0
Anthracene	1.084	0.976	-	10	20	89	0
Carbazole	0.991	0.882	-	11	20	86	0
Di-n-butylphthalate	1.269	1.077	-	15.1	20	83	0
Fluoranthene	1.165	1.002	-	14	20	86	0
Benzidine	0.77	0.624	-	19	20	79	0
Pyrene	1.233	1.088	-	11.8	20	88	0
4-Terphenyl-d14	0.877	0.758	-	13.6	20	85	0
Butyl benzyl phthalate	0.541	0.452	-	16.5	20	81	0
IS1_Chrysene-d12	1	1	-	0	20	88	0
Benzo(a)anthracene	1.326	1.133	-	14.6	20	84	0
3,3'-Dichlorobenzidine	0.472	0.4	-	15.3	20	81	0
Chrysene	1.231	1.066	-	13.4	20	86	0
Bis(2-ethylhexyl)phthalate	0.889	0.752	-	15.4	20	80	0
Di-n-octylphthalate	1.499	1.25	-	16.6	20	79	0
Benzo(b)fluoranthene	1.266	1.102	-	13	20	87	0
Benzo(k)fluoranthene	1.214	1.098	-	9.6	20	84	0
Benzo(a)pyrene	1.083	0.953	-	12	20	85	0
IS1_Perylene-d12	1	1	-	0	20	89	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: SV106		**Calibration Date**	: 09/05/23 21:04	
Lab File ID	: ABN0905		**Init. Calib. Date(s)**	: 09/02/23	09/03/23
Sample No	: WG1823865-3		**Init. Calib. Times**	: 12:13	00:52
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	0.935	0.833	-	10.9	20	89	0
Dibenzo(a,h)anthracene	0.999	0.885	-	11.4	20	86	0
Benzo(ghi)perylene	0.991	0.886	-	10.6	20	87	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: DAKOTA		Calibration Date	: 09/06/23 10:19	
Lab File ID	: ABN0906		Init. Calib. Date(s)	: 04/13/23	04/13/23
Sample No	: WG1824168-3		Init. Calib. Times	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	94	0
n-Nitrosodimethylamine	5	4.154	-	16.9	20	83	0
Pyridine	5	4.53	-	9.4	20	107	0
2-Fluorophenol	1.033	1.037	-	-0.4	20	94	0
Aniline	1.79	1.534	-	14.3	20	80	0
2-Chlorophenol	1.195	1.081	-	9.5	20	83	0
Phenol-d6	1.324	1.232	-	6.9	20	86	0
Phenol	1.539	1.282	-	16.7	20	80	0
Bis(2-chloroethyl)ether	1.066	0.939	-	11.9	20	87	0
1,3-Dichlorobenzene	1.435	1.372	-	4.4	20	92	0
1,4-Dichlorobenzene	1.452	1.435	-	1.2	20	98	0
1,2-Dichlorobenzene	1.406	1.364	-	3	20	91	0
Benzyl alcohol	0.936	0.916	-	2.1	20	89	0
Bis(2-chloroisopropyl)ethe	1.785	1.521	-	14.8	20	81	0
2-Methylphenol	1.016	0.93	-	8.5	20	84	0
Hexachloroethane	0.551	0.56	-	-1.6	20	99	0
n-Nitrosodi-n-propylamine	0.818	0.782	-	4.4	20	91	0
3-Methylphenol/4-Methylphe	1.05	0.976	-	7	20	86	0
Nitrobenzene-d5	1.269	1.226	-	3.4	20	92	0
Nitrobenzene	1.234	1.178	-	4.5	20	92	0
Isophorone	2.183	1.971	-	9.7	20	85	0
2-Nitrophenol	0.577	0.554	-	4	20	84	0
2,4-Dimethylphenol	1.11	1.064	-	4.1	20	89	0
Bis(2-chloroethoxy)methane	1.416	1.285	-	9.3	20	87	0
2,4-Dichlorophenol	1.044	1.104	-	-5.7	20	104	0
1,2,4-Trichlorobenzene	1.276	1.377	-	-7.9	20	99	0
IS1_Naphthalene-d8	1	1	-	0	20	86	0
Naphthalene	0.971	0.881	-	9.3	20	79	0
Benzoic Acid	5	6.194	-	-23.9*	20	125	0
4-Chloroaniline	0.115	0.117	-	-1.7	20	94	0
Hexachlorobutadiene	0.198	0.245	-	-23.7*	20	109	0
p-Chloro-m-cresol	0.254	0.266	-	-4.7	20	89	0
2-Methylnaphthalene	0.631	0.63	-	0.2	20	88	0
1-Methylnaphthalene	0.218	0.219	-	-0.5	20	85	0
Hexachlorocyclopentadiene	0.239	0.318	-	-33.1*	20	114	0
2,4,6-Trichlorophenol	5	5.943	-	-18.9	20	112	0
2,4,5-Trichlorophenol	0.234	0.295	-	-26.1*	20	105	0
2-Fluorobiphenyl	0.787	0.849	-	-7.9	20	94	0
2-Chloronaphthalene	0.692	0.712	-	-2.9	20	90	0
2-Nitroaniline	0.2	0.208	-	-4	20	89	0
1,4-Dinitrobenzene	0.093	0.099	-	-6.5	20	91	0
1,3-Dinitrobenzene	0.109	0.113	-	-3.7	20	98	0
Dimethyl phthalate	0.809	0.894	-	-10.5	20	94	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: DAKOTA		Calibration Date	: 09/06/23 10:19	
Lab File ID	: ABN0906		Init. Calib. Date(s)	: 04/13/23	04/13/23
Sample No	: WG1824168-3		Init. Calib. Times	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.049	1.159	-	-10.5	20	94	0
2,6-Dinitrotoluene	0.167	0.179	-	-7.2	20	89	0
1,2-Dinitrobenzene	0.065	0.068	-	-4.6	20	88	0
IS1_Acenaphthene-d10	1	1	-	0	20	97	0
3-Nitroaniline	0.318	0.309	-	2.8	20	88	0
Acenaphthene	1.089	0.969	-	11	20	87	0
2,4-Dinitrophenol	5	5.78	-	-15.6	20	115	0
Dibenzofuran	1.737	1.714	-	1.3	20	96	0
2,4-Dinitrotoluene	0.392	0.373	-	4.8	20	87	0
4-Nitrophenol	5	5.133	-	-2.7	20	103	0
2,3,5,6-Tetrachlorophenol	5	5.819	-	-16.4	20	118	0
2,3,4,6-Tetrachlorophenol	5	5.881	-	-17.6	20	118	0
Diethyl phthalate	1.466	1.409	-	3.9	20	93	0
Fluorene	1.4	1.272	-	9.1	20	87	0
4-Chlorophenyl phenyl ethe	0.681	0.668	-	1.9	20	97	0
4-Nitroaniline	0.316	0.296	-	6.3	20	87	0
4,6-Dinitro-o-cresol	5	5.976	-	-19.5	20	122	0
NDPA/DPA	1.195	1.104	-	7.6	20	88	0
Azobenzene	1.256	1.214	-	3.3	20	90	0
2,4,6-Tribromophenol	0.232	0.327	-	-40.9*	20	138	0
4-Bromophenyl phenyl ether	0.425	0.459	-	-8	20	104	0
Hexachlorobenzene	0.532	0.615	-	-15.6	20	118	0
Pentachlorophenol	5	6.275	-	-25.5*	20	140	0
IS1_Phenanthrene-d10	1	1	-	0	20	96	0
Phenanthrene	1.03	0.891	-	13.5	20	86	0
Anthracene	0.998	0.92	-	7.8	20	89	0
Carbazole	0.941	0.87	-	7.5	20	88	0
Di-n-butylphthalate	1.108	1.046	-	5.6	20	93	0
Fluoranthene	1.208	1.138	-	5.8	20	92	0
Benzidine	0.791	0.758	-	4.2	20	108	0
Pyrene	1.277	1.206	-	5.6	20	92	0
4-Terphenyl-d14	0.978	0.938	-	4.1	20	93	0
Butyl benzyl phthalate	0.504	0.461	-	8.5	20	91	0
IS1_Chrysene-d12	1	1	-	0	20	96	0
Benzo(a)anthracene	1.254	1.153	-	8.1	20	88	0
3,3'-Dichlorobenzidine	0.482	0.485	-	-0.6	20	98	0
Chrysene	1.184	1.082	-	8.6	20	86	0
Bis(2-ethylhexyl)phthalate	0.7	0.696	-	0.6	20	95	0
Di-n-octylphthalate	1.271	1.193	-	6.1	20	95	0
Benzo(b)fluoranthene	1.361	1.294	-	4.9	20	94	0
Benzo(k)fluoranthene	1.299	1.166	-	10.2	20	83	0
Benzo(a)pyrene	1.183	1.156	-	2.3	20	93	0
IS1_Perylene-d12	1	1	-	0	20	93	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: DAKOTA		**Calibration Date**	: 09/06/23 10:19	
Lab File ID	: ABN0906		**Init. Calib. Date(s)**	: 04/13/23	04/13/23
Sample No	: WG1824168-3		**Init. Calib. Times**	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	1.06	0.922	-	13	20	81	0
Dibenzo(a,h)anthracene	1.111	0.97	-	12.7	20	82	0
Benzo(ghi)perylene	1.122	1.049	-	6.5	20	88	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: DAKOTA		Calibration Date	: 09/06/23 10:41	
Lab File ID	: AP90906		Init. Calib. Date(s)	: 04/13/23	04/13/23
Sample No	: WG1824168-4		Init. Calib. Times	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS2_1,4-Dichlorobenzene-d4	1	1	-	0	20	93	0
Benzaldehyde	1.046	0.673	-	35.7*	20	55	0
Acetophenone	1.831	1.523	-	16.8	20	72	0
m-Toluidine	5	3.34	-	33.2*	20	56	0
2-Chloroaniline	1.693	1.382	-	18.4	20	70	0
IS2_Naphthalene-d8	1	1	-	0	20	84	0
a-Terpineol	0.277	0.255	-	7.9	20	74	0
3-Chloroaniline	0.138	0.13	-	5.8	20	69	0
2,6-Dichlorophenol	0.276	0.305	-	-10.5	20	87	0
1-chloro-2-nitrobenzene	0.149	0.137	-	8.1	20	74	0
Caprolactam	0.149	0.147	-	1.3	20	82	0
1,2,4,5-Tetrachlorobenzene	0.402	0.418	-	-4	20	84	0
Biphenyl	0.901	0.858	-	4.8	20	76	0
IS2_Acenaphthene-d10	1	1	-	0	20	103	0
Dichloran	5	4.432	-	11.4	20	104	0
Pentachloronitrobenzene	0.203	0.212	-	-4.4	20	107	0
IS2_Phenanthrene-d10	1	1	-	0	20	118	0
Diphenamid	0.501	0.4	-	20.2*	20	90	0

* Value outside of QC limits.

SVOC SIM Data Section

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Method 8270D SIM Semi-Volatiles Data for Alpha Analytical, SDG Number: L2350269

8 Ground Water Samples, 1 Field Duplicate, and 1 Equipment Blank Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: The samples were extracted and analyzed within the USEPS SW-846 holding times

GC/MS Tuning and Mass Calibration: The DFTPP tuning criteria were within control limits.

Initial Calibration: The average RRFs for target compounds were above the allowable minimum (0.010) and the %RSDs were below the allowable maximum (30%), as required.

Continuing Calibration: The RRFs for target compounds were above the allowable minimum (0.010), as required.

The %D for pentachlorophenol was above the allowable maximum (20%) on 09-07-23 (CCV0907A). Positive results for pentachlorophenol should be considered estimated (J) in associated sample.

Blanks: Method blank WG1822198-1BLANK contained traces of anthracene (0.02 ug/L), fluorene (0.01 ug/L), phenanthrene (0.02 ug/L), and hexachlorobenzene (0.04 ug/L). The equipment blank contained traces of naphthalene (0.05 ug/L) and phenanthrene (0.03 ug/L). Positive results for these compounds that are less than 5 times the highest blank level should be reported as not detected (U) in associated samples.

Internal Standard Area Summary: The internal standard areas and retention times were within control limits.

Surrogate Recovery: One of three acid extractable surrogate recoveries for samples MW-2S and MW-3S was above control limits. One of three base/neutral recoveries for sample MW-3S was above control limits. No action is taken on one surrogate recovery per fraction outside control limits, provided no recovery is not less than 10%.

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Matrix Spike/Matrix Spike Duplicate: The percent recoveries for target compounds were within QC limits, but relative percent differences for 8 compounds (highlighted yellow on attached Form 3) were above the allowable maximum for aqueous MS/MSD sample MW-8S. The positive result for 2-chloronaphthalene should be considered estimated (J) in sample MW-8S.

Laboratory Control Sample: The relative percent differences for target compounds were below the allowable maximum and the percent recoveries were within QC limits for aqueous samples WG1822198-2/3 and WG1823489-2/3.

Field Duplicates: The relative percent difference for naphthalene was below the allowable maximum (20%) for aqueous field duplicate pair MW-1S/DUP (attached table), as required.

Compound ID: Checked surrogate and compound results were within GC/MS quantitation limits. The mass spectra for detected compounds contained the primary and secondary ions, as outlined in the method.

Surrogate Recovery Summary
Form 2
Semivolatiles

Client: Alpha Geoscience
Project Name: HUNTINGTON READY MIX

Lab Number: L2350269
Project Number: 20116
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
MW-1S (L2350269-01)	65	54	78	76	81	64	0
MW-2S (L2350269-02)	79	69	118	80	131*	82	1
MW-3S (L2350269-03)	77	70	126*	86	128*	80	2
MW-4D (L2350269-04)	61	50	74	69	68	53	0
MW-5S (L2350269-05)	62	55	84	78	73	76	0
MW-6D (L2350269-06)	33	23	114	79	85	79	0
MW-7S (L2350269-07)	79	69	91	85	91	80	0
MW-8S (L2350269-08)	15*	15	72	74	10	74	1
DUP (L2350269-09)	61	51	70	64	66	64	0
EQUIPMENT BLANK (L2350269-11)	76	63	91	92	93	82	0
WG1822198-1BLANK	76	70	110	74	118	70	0
WG1822198-2LCS	92	85	122*	83	124*	82	2
WG1822198-3LCSD	92	84	130*	88	127*	82	2
MW-8SMS	77	67	92	80	85	77	0
MW-8SMSD	45	41	55	51	48	50	0
WG1823489-1BLANK	69	61	115	79	104	74	0
WG1823489-2LCS	71	65	95	67	106	72	0
WG1823489-3LCSD	76	70	100	71	114	77	0

QC LIMITS

(21-120)	2FP = 2-FLUOROPHENOL
(10-120)	PHL = PHENOL-D6
(23-120)	NBZ = NITROBENZENE-D5
(15-120)	FBP = 2-FLUOROBIPHENYL
(10-120)	TBP = 2,4,6-TRIBROMOPHENOL
(41-149)	TPH = 4-TERPHENYL-D14

*** Values outside of QC limits**

FORM II NYTCL-8270-SIM-LVI

Matrix Spike Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Client Sample ID	: MW-8S	Matrix (Level)	: WATER (LOW)
Lab Sample ID	: L2350269-08	Analysis Date	: 09/07/23 15:58
Matrix Spike	: WG1822198-4	MS Analysis Date	: 09/07/23 16:15
Matrix Spike Dup	: WG1822198-5	MSD Analysis Date	: 09/07/23 16:32

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Acenaphthene	ND	18.2	16	88	18.2	10	55	46 Q	40-140	40
2-Chloronaphthalene	0.02J	18.2	14	77	18.2	9.1	50	42 Q	40-140	40
Fluoranthene	ND	18.2	14	77	18.2	9.7	53	36	40-140	40
Hexachlorobutadiene	ND	18.2	13	72	18.2	8.8	48	39	40-140	40
Naphthalene	ND	18.2	14	77	18.2	9.1	50	42 Q	40-140	40
Benzo(a)anthracene	ND	18.2	16	88	18.2	11	61	37	40-140	40
Benzo(a)pyrene	ND	18.2	17	94	18.2	11	61	43 Q	40-140	40
Benzo(b)fluoranthene	ND	18.2	18	99	18.2	12	66	40	40-140	40
Benzo(k)fluoranthene	ND	18.2	19	100	18.2	12	66	45 Q	40-140	40
Chrysene	ND	18.2	16	88	18.2	11	61	37	40-140	40
Acenaphthylene	ND	18.2	14	77	18.2	9.1	50	42 Q	40-140	40
Anthracene	0.04J	18.2	16	88	18.2	11	61	37	40-140	40
Benzo(ghi)perylene	ND	18.2	19	100	18.2	13	72	38	40-140	40
Fluorene	ND	18.2	16	88	18.2	10	55	46 Q	40-140	40
Phenanthrene	ND	18.2	16	88	18.2	11	61	37	40-140	40
Dibenzo(a,h)anthracene	ND	18.2	20	110	18.2	14	77	35	40-140	40
Indeno(1,2,3-cd)pyrene	ND	18.2	18	99	18.2	12	66	40	40-140	40
Pyrene	ND	18.2	14	77	18.2	9.4	52	39	40-140	40
2-Methylnaphthalene	ND	18.2	14	77	18.2	9.3	51	40	40-140	40
Pentachlorophenol	ND	18.2	10	55	18.2	9.3	51	7	40-140	40
Hexachlorobenzene	ND	18.2	16	88	18.2	11	61	37	40-140	40
Hexachloroethane	ND	18.2	14	77	18.2	8.7	48	47 Q	40-140	40

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab ID	: WG1822198-1	Date Collected	: NA
Client ID	: WG1822198-1BLANK	Date Received	: NA
Sample Location	:	Date Analyzed	: 08/31/23 18:14
Sample Matrix	: WATER	Date Extracted	: 08/30/23
Analytical Method	: 1,8270E-SIM	Dilution Factor	: 1
Lab File ID	: 822198-1	Analyst	: AH
Sample Amount	: 275 ml	Instrument ID	: SV119
Extraction Method	: EPA 3510C	GC Column	: RXI-5SilM
Extract Volume	: 1000 uL	%Solids	: N/A
GPC Cleanup	: N	Injection Volume	: 1 uL

		ug/L			
CAS NO.	Parameter	Results	RL	MDL	Qualifier
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	0.02	0.10	0.01	J
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	0.01	0.10	0.01	J
85-01-8	Phenanthrene	0.02	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	0.04	0.80	0.01	J
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: SV128		Calibration Date	: 09/07/23 07:51	
Lab File ID	: CCV0907A		Init. Calib. Date(s)	: 08/31/23	09/05/23
Sample No	: WG1824579-3		Init. Calib. Times	: 09:45	09:24
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene-d4	1	1	.05	0	20	99	0
2-Fluorophenol	1.022	1.042	.05	-2	20	98	0
Phenol-d6	1.251	1.261	.05	-0.8	20	96	0
Bis(2-chloroethyl)ether	1.078	1.128	.05	-4.6	20	99	0
n-nitrosodi-n-propylamine	0.809	0.779	.05	3.7	20	91	0
Hexachloroethane	0.481	0.477	.05	0.8	20	95	0
Nitrobenzene-d5	1.06	0.968	.05	8.7	20	84	0
Naphthalene-d8	1	1	.05	0	20	97	0
Naphthalene	0.977	1.002	.05	-2.6	20	96	0
Hexachlorobutadiene	0.184	0.19	.05	-3.3	20	95	0
2-Methylnaphthalene	0.652	0.641	.05	1.7	20	90	0
1-Methylnaphthalene	0.604	0.631	.05	-4.5	20	96	0
2-Fluorobiphenyl	0.82	0.798	.05	2.7	20	90	0
2-Chloronaphthalene	0.676	0.688	.05	-1.8	20	93	0
2,6-Dinitrotoluene	0.135	0.106	.05	21.5*	20	80	0
Acenaphthylene	1.077	1.073	.05	0.4	20	90	0
Acenaphthene-d10	1	1	.05	0	20	95	0
Acenaphthene	1.267	1.261	.05	0.5	20	91	0
2,4-Dinitrotoluene	0.304	0.241	.05	20.7*	20	78	0
Fluorene	1.383	1.401	.05	-1.3	20	91	0
2,4,6-Tribromophenol	0.168	0.149	.05	11.3	20	80	0
Phenanthrene-d10	1	1	.05	0	20	97	0
4,6-Dinitro-o-cresol	1000	720.47	.05	28*	20	80	0
Hexachlorobenzene	0.215	0.206	.05	4.2	20	89	0
Pentachlorophenol	1000	704.39	.05	29.6*	20	78	0
Phenanthrene	0.997	0.966	.05	3.1	20	92	0
Anthracene	0.971	0.933	.05	3.9	20	89	0
Fluoranthene	1.158	1.113	.05	3.9	20	90	0
Pyrene	1.199	1.184	.05	1.3	20	91	0
4-Terphenyl-d14	0.845	0.778	.05	7.9	20	85	0
Chrysene-d12	1	1	.05	0	20	97	0
Benzo[a]anthracene	1000	932.395	.05	6.8	20	90	0
3,3'-Dichlorobenzidine	0.499	0.415	.05	16.8	20	83	0
Chrysene	1.234	1.183	.05	4.1	20	91	0
Bis(2-ethylhexyl)phthalate	0.779	0.594	.05	23.7*	20	80	0
Perylene-d12	1	1	.05	0	20	96	0
Benzo[b]fluoranthene	1.127	1.123	.05	0.4	20	94	0
Benzo[k]fluoranthene	1.043	0.998	.05	4.3	20	83	0
Benzo[a]pyrene	0.968	0.895	.05	7.5	20	83	0
Indeno[1,2,3-cd]pyrene	0.969	0.885	.05	8.7	20	87	0
Dibenzo[a,h]anthracene	0.932	0.943	.05	-1.2	20	89	0
Benzo[g,h,i]perylene	0.992	0.964	.05	2.8	20	91	0

* Value outside of QC limits.

Pesticide Data Section

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of 8081B Pesticide Data
for Alpha Analytical Labs
SDG Number: L2350269

8 Ground Water Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: The samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: Method blank WG1784637-1 contained a trace of endrin (0.016 ug/L). Positive results for endrin that are less than 5 times the highest blank level should be considered not detected (U) in associated samples.

Surrogate Recovery: One of two surrogate recoveries for equipment blank was below QC limits, but not below 10% on one column. No action is taken on one surrogate recovery outside QC limits on one column, provided the recovery is not less than 10%.

Matrix Spike/Matrix Spike Duplicate: The percent recoveries were for target pesticides within QC limits, but relative percent differences for 19 pesticides (highlighted yellow on attached Form 3) were above the allowable maximum for aqueous MS/MSD sample MW-8S. Sample MW-8S reported these pesticides as "not detected"; therefore, no action is taken.

Laboratory Control Sample: The relative percent differences (RPDs) for target pesticides were below the allowable maximum and the percent recoveries (%Rs) were within QC limits for aqueous samples WG1823255-2/3.

The %Rs for target pesticides were within QC limits, but the RPDs for 7 pesticides (highlighted yellow on attached Form 3) were above the allowable maximum for aqueous samples WG1822374-2/3. Positive results for these pesticides should be considered estimated (J) in associated aqueous samples.

Field Duplicates: The analyses of aqueous field duplicate pair MW-1S/DUP reported target pesticides as either not detected or below the lowest standard; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Initial Calibration: The %RSDs were below the allowable maximum (20%) or the correlation coefficients were above the allowable minimum (0.995) for applicable pesticides on both columns, as required.

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Continuing Calibration: The %Ds for 7 pesticides (highlighted yellow on attached Form 7) were above the allowable maximum (20%) for channel A on 09-03-23 (10230903a-03). The %Ds for 6 pesticides (highlighted yellow on attached Form 7) were above the allowable maximum (20%) for channel B on 09-03-23 (10230903a-03). The %Ds for 5 pesticides (highlighted yellow on attached Form 7) were above the allowable maximum (20%) for channel A on 09-03-23 (10230903a-27). The %Ds for 5 pesticides (highlighted yellow on attached Form 7) were above the allowable maximum (20%) for channel B on 09-03-23 (10230903a-27). Positive results for these pesticides should be considered estimated (J) in associated samples.

DDT/Endrin Breakdown Check: The percent breakdowns were below the allowable maximum (20%) for 4,4'-DDT and endrin, as required.

Pesticide Identification Summary for Single Component Analytes: Checked surrogate and detected pesticide results were within quantitation limits. The RPDs for dual column quantitation of 4,4'-DDT in samples MW-6D, MW-8S, and DUP were above the allowable maximum (25%), but not above 70% and the lower results were reported. Positive results for 4,4'-DDT should be considered estimated, biased low (J-) in the samples.

The RPD for dual column quantitation of 4,4'-DDT in sample MW-1S was above the allowable maximum (25%) and above 100%. The positive result for 4,4'-DDT should be considered rejected, unusable (R) in the sample.

Sample MW-7S reported 4,4'-DDT detected on only one column; therefore, the presence was not confirmed. The positive result for 4,4'-DDT should be considered rejected, unusable (R) in the sample.

Pesticide Identification Summary for Multi-Component Analytes: The analyses of ground water and soil samples reported target multi-component pesticides as not detected.

Surrogate Recovery Summary
Form 2
Pesticides

Client: Alpha Geoscience
Project Name: HUNTINGTON READY MIX

Lab Number: L2350269
Project Number: 20116
Matrix: Water

GC Column 1: CLPPesticides
GC Column 2: CLPPesticidesII

CLIENT ID (LAB SAMPLE NO.)	DCB 1 %REC	DCB 2 %REC	TCX 1 %REC	TCX 2 %REC	OTHER (1)	OTHER (2)	TOT OUT
MW-1S (L2350269-01)	35	35	38	41			0
MW-2S (L2350269-02)	48	47	41	44			0
MW-3S (L2350269-03)	33	30	44	45			0
MW-4D (L2350269-04)	60	59	65	69			0
MW-5S (L2350269-05)	73	71	74	79			0
MW-6D (L2350269-06)	39	40	39	41			0
MW-7S (L2350269-07)	46	46	41	44			0
MW-8S (L2350269-08)	53	56	49	54			0
DUP (L2350269-09)	49	51	45	49			0
EQUIPMENT BLANK (L2350269-11)	30	29*	60	64			1
WG1822374-1BLANK	70	65	65	69			0
WG1822374-2LCS	62	59	59	63			0
WG1822374-3LCSD	75	71	71	75			0
WG1823255-1BLANK	45	46	38	41			0
WG1823255-2LCS	49	50	37	40			0
WG1823255-3LCSD	43	43	41	43			0
MW-8SMS	47	49	41	45			0
MW-8SMSD	65	68	60	66			0

QC LIMITS
(30-150) DCBP = DECACHLOROBIPHENYL
(30-150) TCX = 2,4,5,6-TETRACHLORO-M-XYLENE

*** Values outside of QC limits**

FORM II NYTCL-8081

Laboratory Control Sample Summary
Form 3
Pesticides

Client : Alpha Geoscience
Lab Number : L2350269
Project Name : HUNTINGTON READY MIX
Project Number : 20116
Matrix (Level) : WATER (LOW)
LCS Sample ID : WG1822374-2 Analysis Date : 09/01/23 15:41 File ID : 10230901a-43
LCSD Sample ID : WG1822374-3 Analysis Date : 09/01/23 15:52 File ID : 10230901a-44

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Delta-BHC	0.357	0.247	69	0.357	0.288	81	15	30-150	20
Lindane	0.357	0.240	67	0.357	0.289	81	19	30-150	20
Alpha-BHC	0.357	0.237	66	0.357	0.292	82	21 Q	30-150	20
Beta-BHC	0.357	0.239	67	0.357	0.279	78	15	30-150	20
Heptachlor	0.357	0.244	68	0.357	0.289	81	17	30-150	20
Aldrin	0.357	0.230	64	0.357	0.290	81	23 Q	30-150	20
Heptachlor epoxide	0.357	0.233	65	0.357	0.289	81	21 Q	30-150	20
Endrin	0.357	0.236	66	0.357	0.288	81	20	30-150	20
Endrin aldehyde	0.357	0.172	48	0.357	0.225	63	27 Q	30-150	20
Endrin ketone	0.357	0.266	75	0.357	0.324	91	20	30-150	20
Dieldrin	0.357	0.255	71	0.357	0.314	88	21 Q	30-150	20
4,4'-DDE	0.357	0.241	68	0.357	0.292	82	19	30-150	20
4,4'-DDD	0.357	0.255	71	0.357	0.314	88	21 Q	30-150	20
4,4'-DDT	0.357	0.244	68	0.357	0.300	84	21 Q	30-150	20
Endosulfan I	0.357	0.235	66	0.357	0.286	80	20	30-150	20
Endosulfan II	0.357	0.245	69	0.357	0.299	84	20	30-150	20
Endosulfan sulfate	0.357	0.242	68	0.357	0.293	82	19	30-150	20
Methoxychlor	0.357	0.251	70	0.357	0.302	85	18	30-150	20
cis-Chlordane	0.357	0.216	61	0.357	0.263	74	20	30-150	20
trans-Chlordane	0.357	0.262	73	0.357	0.307	86	16	30-150	20

Matrix Spike Sample Summary
Form 3
Pesticides

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Client Sample ID	: MW-8S	Matrix (Level)	: WATER (LOW)
Lab Sample ID	: L2350269-08	Analysis Date	: 09/03/23 14:11
Matrix Spike	: WG1823255-4	MS Analysis Date	: 09/03/23 14:22
Matrix Spike Dup	: WG1823255-5	MSD Analysis Date	: 09/03/23 14:33

		Matrix Spike Sample			Matrix Spike Duplicate						
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD		Recovery Limits	RPD Limit
Delta-BHC	ND	0.357	0.172	48	0.357	0.249	70	37	Q	30-150	30
Lindane	ND	0.357	0.170	48	0.357	0.237	66	33	Q	30-150	30
Alpha-BHC	ND	0.357	0.169	47	0.357	0.258	72	42	Q	30-150	30
Beta-BHC	ND	0.357	0.172	48	0.357	0.254	71	38	Q	30-150	30
Heptachlor	ND	0.357	0.176	49	0.357	0.247	69	34	Q	30-150	30
Aldrin	ND	0.357	0.165	46	0.357	0.230	64	33	Q	30-150	30
Heptachlor epoxide	ND	0.357	0.173	48	0.357	0.242	68	33	Q	30-150	30
Endrin	ND	0.357	0.177	50	0.357	0.252	71	35	Q	30-150	30
Endrin aldehyde	ND	0.357	0.155	43	0.357	0.212	59	31	Q	30-150	30
Endrin ketone	ND	0.357	0.199	56	0.357	0.277	78	33	Q	30-150	30
Dieldrin	ND	0.357	0.194	54	0.357	0.275	77	35	Q	30-150	30
4,4'-DDE	ND	0.357	0.175	49	0.357	0.241	68	32	Q	30-150	30
4,4'-DDD	ND	0.357	0.192	54	0.357	0.268	75	33	Q	30-150	30
Endosulfan I	ND	0.357	0.186	52	0.357	0.254	71	31	Q	30-150	30
Endosulfan II	ND	0.357	0.184	52	0.357	0.259	72	34	Q	30-150	30
Endosulfan sulfate	ND	0.357	0.180	50	0.357	0.252	71	33	Q	30-150	30
Methoxychlor	ND	0.357	0.218	61	0.357	0.281	79	25		30-150	30
cis-Chlordane	ND	0.357	0.160	45	0.357	0.218	61	31	Q	30-150	30
trans-Chlordane	ND	0.357	0.187	52	0.357	0.258	72	32	Q	30-150	30

Matrix Spike Sample Summary
Form 3
Pesticides

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Client Sample ID	: MW-8S		Matrix (Level)	: WATER (LOW)	
Lab Sample ID	: L2350269-08		Analysis Date	: 09/03/23 14:11	
Matrix Spike	: WG1823255-4		MS Analysis Date	: 09/03/23 14:22	
Matrix Spike Dup	: WG1823255-5		MSD Analysis Date	: 09/03/23 14:33	

		Matrix Spike Sample			Matrix Spike Duplicate						
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD		Recovery Limits	RPD Limit
4,4'-DDT	0.004JIP	0.357	0.182	51	0.357	0.255	71	33	Q	30-150	30

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: PEST10		Calibration Date	: 09/03/23 09:21	
Lab File ID	: 10230903a-03		Init. Calib. Date(s)	: 08/28/23	08/28/23
Sample No	: WG1823359-1		Init. Calib. Times	: 12:28	16:20
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Pesticides	1	1	-	0	15	91	0
2,4,5,6-Tetrachloro-m-xylen	1.014	1.06	-	-4.5	15	108	0
Hexachlorobenzene	1.097	1.23	-	-12.1	15	119	0
alpha-BHC	1.364	1.666	-	-22.1*	15	118	0
gamma-BHC (lindane)	1.306	1.511	-	-15.7*	15	115	0
beta-BHC	0.604	0.619	-	-2.5	15	108	0
delta-BHC	1.308	1.606	-	-22.8*	15	120	0
Heptachlor	1.271	1.47	-	-15.7*	15	117	0
Aldrin	1.157	1.383	-	-19.5*	15	118	0
Alachlor	0.248	0.337	-	-35.9*	15	142	0
Chlorpyrifos	0.655	0.7	-	-6.9	15	115	0
Heptachlor Epoxide	1.141	1.299	-	-13.8	15	115	0
gamma-Chlordane (trans)	1.1	1.323	-	-20.3*	15	127	0
alpha-Chlordane (cis)	1.208	1.332	-	-10.3	15	114	0
4,4'-DDE	1.089	1.305	-	-19.8*	15	116	0
Endosulfan I	1.079	1.237	-	-14.6	15	116	0
Dieldrin	1.093	1.372	-	-25.5*	15	125	0
Endrin	1.128	1.295	-	-14.8	15	113	0
4,4'-DDD	0.885	1.112	-	-25.6*	15	123	0
Endosulfan II	1.02	1.184	-	-16.1*	15	118	0
4,4'-DDT	0.986	1.195	-	-21.2*	15	117	0
Endrin Aldehyde	0.844	0.849	-	-0.6	15	100	0
Methoxychlor	0.563	0.642	-	-14	15	114	0
Mirex	0.905	1.013	-	-11.9	15	116	0
Endosulfan Sulfate	0.979	1.147	-	-17.2*	15	117	0
Endrin Ketone	1.088	1.331	-	-22.3*	15	120	0
Decachlorobiphenyl	0.916	0.979	-	-6.9	15	107	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: PEST10		Calibration Date	: 09/03/23 09:21	
Lab File ID	: 10230903a-03		Init. Calib. Date(s)	: 08/28/23	08/28/23
Sample No	: WG1823359-1		Init. Calib. Times	: 12:28	16:20
Channel	: B				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Pesticides	1	1	-	0	15	89	0
2,4,5,6-Tetrachloro-m-xyl	0.963	1.072	-	-11.3	15	106	0
Hexachlorobenzene	1.075	1.264	-	-17.6*	15	116	0
alpha-BHC	50	56.979	-	-14	15	114	0
gamma-BHC (lindane)	1.285	1.579	-	-22.9*	15	112	0
beta-BHC	0.598	0.638	-	-6.7	15	106	0
delta-BHC	50	58.653	-	-17.3*	15	117	0
Heptachlor	1.298	1.548	-	-19.3*	15	111	0
Aldrin	50	57.623	-	-15.2*	15	112	0
Alachlor	0.197	0.284	-	-44.2*	15	140	0
Chlorpyrifos	0.651	0.704	-	-8.1	15	108	0
Heptachlor Epoxide	1.186	1.399	-	-18*	15	110	0
gamma-Chlordane (trans)	1.246	1.44	-	-15.6*	15	122	0
alpha-Chlordane (cis)	1.208	1.438	-	-19*	15	111	0
4,4'-DDE	50	56.941	-	-13.9	15	111	0
Endosulfan I	1.101	1.328	-	-20.6*	15	111	0
Dieldrin	50	62.4	-	-24.8*	15	120	0
Endrin	1.205	1.394	-	-15.7*	15	108	0
4,4'-DDD	50	59.836	-	-19.7*	15	117	0
Endosulfan II	0.995	1.241	-	-24.7*	15	113	0
4,4'-DDT	50	56.974	-	-13.9	15	109	0
Endrin Aldehyde	0.826	0.858	-	-3.9	15	94	0
Methoxychlor	0.571	0.667	-	-16.8*	15	109	0
Mirex	0.904	1.014	-	-12.2	15	109	0
Endosulfan Sulfate	0.951	1.159	-	-21.9*	15	113	0
Endrin Ketone	1.078	1.348	-	-25*	15	116	0
Decachlorobiphenyl	0.924	0.915	-	1	15	95	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: PEST10		Calibration Date	: 09/03/23 13:49	
Lab File ID	: 10230903a-27		Init. Calib. Date(s)	: 08/28/23	08/28/23
Sample No	: WG1823359-4		Init. Calib. Times	: 12:28	16:20
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Pesticides	1	1	-	0	15	99	0
2,4,5,6-Tetrachloro-m-xylen	1.014	1.042	-	-2.8	15	115	0
Hexachlorobenzene	1.097	1.204	-	-9.8	15	126	0
alpha-BHC	1.364	1.647	-	-20.7*	15	126	0
gamma-BHC (lindane)	1.306	1.493	-	-14.3	15	124	0
beta-BHC	0.604	0.616	-	-2	15	117	0
delta-BHC	1.308	1.614	-	-23.4*	15	131	0
Heptachlor	1.271	1.463	-	-15.1*	15	126	0
Aldrin	1.157	1.362	-	-17.7*	15	126	0
Alachlor	0.248	0.314	-	-26.6*	15	144	0
Chlorpyrifos	0.655	0.695	-	-6.1	15	124	0
Heptachlor Epoxide	1.141	1.299	-	-13.8	15	125	0
gamma-Chlordane (trans)	1.1	1.315	-	-19.5*	15	138	0
alpha-Chlordane (cis)	1.208	1.326	-	-9.8	15	123	0
4,4'-DDE	1.089	1.301	-	-19.5*	15	126	0
Endosulfan I	1.079	1.226	-	-13.6	15	125	0
Dieldrin	1.093	1.361	-	-24.5*	15	135	0
Endrin	1.128	1.287	-	-14.1	15	122	0
4,4'-DDD	0.885	1.11	-	-25.4*	15	133	0
Endosulfan II	1.02	1.175	-	-15.2*	15	127	0
4,4'-DDT	0.986	1.15	-	-16.6*	15	122	0
Endrin Aldehyde	0.844	0.866	-	-2.6	15	111	0
Methoxychlor	0.563	0.652	-	-15.8*	15	126	0
Mirex	0.905	1.002	-	-10.7	15	125	0
Endosulfan Sulfate	0.979	1.151	-	-17.6*	15	128	0
Endrin Ketone	1.088	1.336	-	-22.8*	15	131	0
Decachlorobiphenyl	0.916	0.979	-	-6.9	15	117	0

* Value outside of QC limits.

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		Lab Number	: L2350269	
Project Name	: HUNTINGTON READY MIX		Project Number	: 20116	
Instrument ID	: PEST10		Calibration Date	: 09/03/23 13:49	
Lab File ID	: 10230903a-27		Init. Calib. Date(s)	: 08/28/23	08/28/23
Sample No	: WG1823359-4		Init. Calib. Times	: 12:28	16:20
Channel	: B				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Pesticides	1	1	-	0	15	95	0
2,4,5,6-Tetrachloro-m-xyl	0.963	1.044	-	-8.4	15	110	0
Hexachlorobenzene	1.075	1.227	-	-14.1	15	120	0
alpha-BHC	50	56.008	-	-12	15	119	0
gamma-BHC (lindane)	1.285	1.553	-	-20.9*	15	117	0
beta-BHC	0.598	0.626	-	-4.7	15	111	0
delta-BHC	50	58.477	-	-17*	15	124	0
Heptachlor	1.298	1.539	-	-18.6*	15	117	0
Aldrin	50	56.35	-	-12.7	15	117	0
Alachlor	0.197	0.246	-	-24.9*	15	129	0
Chlorpyrifos	0.651	0.691	-	-6.1	15	113	0
Heptachlor Epoxide	1.186	1.37	-	-15.5*	15	115	0
gamma-Chlordane (trans)	1.246	1.426	-	-14.4	15	128	0
alpha-Chlordane (cis)	1.208	1.409	-	-16.6*	15	116	0
4,4'-DDE	50	55.887	-	-11.8	15	116	0
Endosulfan I	1.101	1.299	-	-18*	15	116	0
Dieldrin	50	61.145	-	-22.3*	15	125	0
Endrin	1.205	1.387	-	-15.1*	15	115	0
4,4'-DDD	50	59.324	-	-18.6*	15	123	0
Endosulfan II	0.995	1.219	-	-22.5*	15	118	0
4,4'-DDT	50	57.986	-	-16*	15	118	0
Endrin Aldehyde	0.826	0.872	-	-5.6	15	102	0
Methoxychlor	0.571	0.678	-	-18.7*	15	118	0
Mirex	0.904	1.001	-	-10.7	15	114	0
Endosulfan Sulfate	0.951	1.151	-	-21*	15	119	0
Endrin Ketone	1.078	1.349	-	-25.1*	15	124	0
Decachlorobiphenyl	0.924	0.966	-	-4.5	15	106	0

* Value outside of QC limits.

Identification Summary
Form 10
Pesticides

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab Sample ID	: L2350269-01		
Client ID	: MW-1S		
Date Analyzed (1)	: 09/03/23 13:05	Date Analyzed (2)	: 09/03/23 13:05
Instrument ID (1)	: PEST10	Instrument ID (2)	: PEST10
GC Column (1)	: CLPPesticides	GC Column (2)	: CLPPesticidesII

Analyte	Col	RT	RT Window From	RT Window To	Concentration	RPD
4,4'-DDT	1	4.54	4.49	4.59	0.0148J	
	2	5.28	5.23	5.33	0.00458J	105

Identification Summary
Form 10
Pesticides

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab Sample ID	:	L2350269-06			
Client ID	:	MW-6D			
Date Analyzed (1)	:	09/03/23 13:38	Date Analyzed (2)	:	09/03/23 13:38
Instrument ID (1)	:	PEST10	Instrument ID (2)	:	PEST10
GC Column (1)	:	CLPPesticides	GC Column (2)	:	CLPPesticidesII

			RT Window			
Analyte	Col	RT	From	To	Concentration	RPD
4,4'-DDT	1	4.54	4.49	4.59	0.02J	
	2	5.28	5.23	5.33	0.00976J	69

Identification Summary
Form 10
Pesticides

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab Sample ID	: L2350269-07		
Client ID	: MW-7S		
Date Analyzed (1)	: 09/03/23 14:00	Date Analyzed (2)	: 09/03/23 14:00
Instrument ID (1)	: PEST10	Instrument ID (2)	: PEST10
GC Column (1)	: CLPPesticides	GC Column (2)	: CLPPesticidesII

Analyte	Col	RT	RT Window From	RT Window To	Concentration	RPD
4,4'-DDT	1	4.54	4.49	4.59	ND	
	2	5.28	5.23	5.33	0.00314J	NC

The detection of 4,4'-DDT was not confirmed on a second column.

Identification Summary
Form 10
Pesticides

Client	: Alpha Geoscience	Lab Number	: L2350269
Project Name	: HUNTINGTON READY MIX	Project Number	: 20116
Lab Sample ID	: L2350269-08		
Client ID	: MW-8S		
Date Analyzed (1)	: 09/03/23 14:11	Date Analyzed (2)	: 09/03/23 14:11
Instrument ID (1)	: PEST10	Instrument ID (2)	: PEST10
GC Column (1)	: CLPPesticides	GC Column (2)	: CLPPesticidesII

Analyte	Col	RT	RT Window From	RT Window To	Concentration	RPD
4,4'-DDT	1	4.54	4.49	4.59	0.00791J	
	2	5.28	5.23	5.33	0.00387J	68

Identification Summary
Form 10
Pesticides

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Lab Sample ID	:	L2350269-09			
Client ID	:	DUP			
Date Analyzed (1)	:	09/03/23 14:44	Date Analyzed (2)	:	09/03/23 14:44
Instrument ID (1)	:	PEST10	Instrument ID (2)	:	PEST10
GC Column (1)	:	CLPPesticides	GC Column (2)	:	CLPPesticidesII

			RT Window			
Analyte	Col	RT	From	To	Concentration	RPD
4,4'-DDT	1	4.54	4.49	4.59	0.00538J	
	2	5.28	5.23	5.33	0.00361J	39

PCB Data Section

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of 8082A PCB Data
for Alpha Analytical Labs
SDG Number: L2350269

8 Ground Water Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: The samples were extracted and analyzed within USEPA SW-846 holding times.

Blanks: The analyses of the method and field blanks reported target aroclors as not detected.

Surrogate Recovery: The surrogate recoveries were within QC limits for the ground water samples and field blank.

Matrix Spike/Matrix Spike Duplicate: The relative percent differences for aroclor 1016 and aroclor 1260 were below the allowable maximum and percent recoveries were within QC limits for aqueous MS/MSD sample MW-8S.

Laboratory Control Sample: The relative percent differences for aroclor 1016 and aroclor 1260 were below the allowable maximums and percent recoveries were within QC limits for aqueous samples WG1823569-2/3.

Field Duplicates: The analyses of aqueous field duplicate pair MW-1S/DUP reported target acroclors as not detected; therefore, valid relative percent differences could not be calculated. The analyses for the field duplicate pair were acceptable.

Initial Calibration: The average %RSDs for aroclor 1016 and aroclor 1260 were below the allowable maximum (20%) on both columns, as required.

Continuing Calibration: The average %Ds for aroclor 1016 and aroclor-1260 were below the allowable maximum (20%) for both columns, as required.

PCB Identification Summary: Checked surrogate results were within quantitation limits. The analyses of the ground water samples reported target aroclors as not detected.

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Metals Data Section

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Geology
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QA/QC Review of TAL Metals Data for
Alpha Analytical Labs, SDG Number: L2350269

8 Ground Water Samples, 1 Field Duplicate,
and 1 Equipment Blank
Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: The samples were analyzed within USEPA SW-846 holding times.

Initial and Continuing Calibration Verification: The percent recoveries for target metals were within control limits (90-110% for all metals except Hg, 80-120% for Hg).

Blanks: The analyses of initial and continuing calibration, method, and dissolved equipment blanks reported target metals as either not detected or below the reporting limits, as required.

The total equipment blank contained manganese (0.0016 mg/L) above the RL. Positive results for manganese that are less than 5 times the highest blank level should be reported as not detected (U) in associated total samples.

ICP Interference Check Sample: The percent recoveries for applicable metals were within control limits (80-120%) for the interference check samples.

Spike Sample Recovery: The percent recoveries for applicable metals were within control limits (75-125%) for dissolved and total aqueous MS/MSD sample MW-8S and total aqueous spike sample MW-1S.

Laboratory Duplicates: The relative percent differences for applicable metals were below the allowable maximum (20%) for dissolved and total aqueous MS/MSD sample MW-8S, as required.

Field Duplicates: The relative percent differences (RPDs) for applicable metals were below the allowable maximum (20%) for the total aqueous field duplicate pair MW-1S/DUP (attached table), as required.

The RPD for iron was above the allowable maximum (20%) for the dissolved aqueous field duplicate pair MW-1S/DUP. Positive results for iron should be considered estimated (J) in dissolved samples MW-1S and DUP.

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Laboratory Control Sample: The percent recoveries for target metals were within control limits for dissolved aqueous samples WG1822318-2 and WG1822319-2, and total aqueous samples WG1822783-2, WG1822316-2, WG1822784-2, and WG1822317-2.

Serial Dilution: The %Ds for applicable metals were below the allowable maximum (10%) for dissolve and total aqueous serial dilution sample MW-8S, as required.

Total vs Dissolved: The dissolved results for arsenic were greater than the total results plus 10% for sample MW-8S, MW-2S, and MW-7S. Positive total and dissolved results for arsenic should be considered estimated (J) in sample MW-8S.

The dissolved results for aluminum, arsenic, and iron were greater than the total results plus 10% for sample MW-1S. Positive total and dissolved results for these metals should be considered estimated (J) in sample MW-1S.

The dissolved results for arsenic and copper were greater than the total results plus 10% for sample MW-3S. Positive total and dissolved results for arsenic and copper should be considered estimated (J) in sample MW-3S.

General Chemistry
Data Section

ALPHA GEOSCIENCE

Geology
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Water Supply

QA/QC Review of Alkalinity Data for
Alpha Analytical Labs, SDG Number: L2350269

8 Ground Water Samples and 1 Field Duplicate
Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analyses of the method and rinse blanks reported alkalinity as not detected.

Laboratory Duplicates: The relative percent differences for carbonate and bicarbonate alkalinity were below the allowable maximum (20%) for aqueous batch duplicate samples WG1826022-2 and WG1824049-2, and duplicate sample DUP, as required.

Field Duplicates: The relative percent difference for carbonate alkalinity was below the allowable maximum (20%) for aqueous field duplicate pair MW-1S/DUP (attached table), as required.

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ALPHA GEOSCIENCE

Geology
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QA/QC Review of Ion Chromatography Data* for
Alpha Analytical Labs, SDG Number: L2350269

8 Ground Water Samples and 1 Field Duplicate
Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analysis of the method blank reported target analytes as not detected.

Spike Sample Recovery: The percent recovery for bromide was below acceptable limits (75-125%) for aqueous spike sample MW-5S. Positive results for bromide should be considered estimated (J-) and "not detected" estimated (UJ) in associated samples.

Laboratory Duplicates: The relative percent differences for applicable analytes were below the allowable maximum (20%) for aqueous duplicate sample MW-5S, as required.

Field Duplicates: The relative percent differences for applicable target analytes were below the allowable maximum (20%) for aqueous field duplicate pair MW-1S/DUP (attached table), as required.

Laboratory Control Sample: The percent recoveries for target analytes were within laboratory QC limits (90-110%) for aqueous sample WG1823254-6.

* ion chromatography includes bromide, chloride, fluoride, and sulfate.

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Form 5a
Matrix Spike

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Client Sample ID	:	MW-5S	Matrix	:	WATER
Lab Sample ID	:	L2350269-05			
Matrix Spike	:	WG1823254-7	MS Analysis Date	:	09/02/23 18:08
Matrix Spike Dup	:		MSD Analysis Date	:	

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Bromide	0.079	0.4	0.369	72	Q					90-110	20
Chloride	12.5	4	16.4	98						90-110	18
Fluoride	ND	0.4	0.385	96						90-110	15
Sulfate	24.0	8	31.4	92						90-110	20

ALPHA GEOSCIENCE

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Water Supply

QA/QC Review of Ammonia Data for
Alpha Analytical Labs, SDG Number: L2350269

8 Ground Water Samples and 1 Field Duplicate
Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analysis of the method blank reported ammonia as not detected.

Spike Sample Recovery: The percent recovery for ammonia was acceptable limits (75-125%) for aqueous spike sample MW-2S.

Laboratory Duplicates: The analysis of aqueous duplicate sample MW-2S was acceptable.

Field Duplicates: The relative percent difference for ammonia was below the allowable maximum (20%) for aqueous field duplicate pair MW-1S/DUP (attached table), as required.

Laboratory Control Sample: The percent recovery for ammonia was within laboratory QC limits (90-110%) for aqueous sample WG1826055-2.

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QA/QC Review of Nitrate Data for
Alpha Analytical Labs, SDG Number: L2350269

8 Ground Water Samples and 1 Field Duplicate
Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analysis of the method blank reported nitrate as not detected.

Spike Sample Recovery: The percent recovery for nitrate was within acceptable limits (75-125%) for aqueous spike sample MW-1S.

Laboratory Duplicates: The relative percent difference for nitrate was below the allowable maximum (20%) for aqueous duplicate sample MW-1s, as required.

Field Duplicates: The relative percent difference for nitrate was above the allowable maximum (20%) for aqueous field duplicate pair MW-1S/DUP (attached table). Positive results for nitrate should be considered estimated (J) in samples MW-1S and DUP.

Laboratory Control Sample: The percent recovery for nitrate was within laboratory QC limits (90-110%) for aqueous sample WG1822231-2.

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QA/QC Review of Nitrate Data for
Alpha Analytical Labs, SDG Number: L2350269

8 Ground Water Samples and 1 Field Duplicate
Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analysis of the method blank reported iodide as not detected.

Spike Sample Recovery: The percent recoveries for iodide were within acceptable limits (75-125%) for aqueous batch MS/MSD sample 3444521.

Laboratory Duplicates: The relative percent difference for iodide was below the allowable maximum (20%) for aqueous batch MS/MSD sample 3444521, as required.

Field Duplicates: The analyses of aqueous field duplicate pair MW-1S/DUP reported iodide as not detected; therefore, a valid relative percent difference could not be calculated. The analyses for the field duplicate pair were acceptable.

Laboratory Control Sample: The percent recovery for iodide was within laboratory QC limits (80-120%) for aqueous sample 3444520.

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QA/QC Review of Phosphate Data for
Alpha Analytical Labs, SDG Number: L2350269

8 Ground Water Samples and 1 Field Duplicate
Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analysis of the method blank reported phosphate as not detected.

Spike Sample Recovery: The percent recovery for phosphate was within acceptable limits (75-125%) for aqueous batch spike sample L2350658-02.

Laboratory Duplicates: The relative percent differences for phosphate were below the allowable maximum (20%) for aqueous batch duplicate samples WG1823610-3 and WG1823610-5, as required.

Field Duplicates: The relative percent difference for phosphate was below the allowable maximum (20%) for aqueous field duplicate pair MW-1S/DUP (attached table), as required.

Laboratory Control Sample: The percent recovery for phosphate was within laboratory QC limits (84-118%) for aqueous sample WG1823610-2.

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QA/QC Review of Sulfide Data for
Alpha Analytical Labs, SDG Number: L2350269

8 Ground Water Samples and 1 Field Duplicate
Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analysis of the method blank reported sulfide as not detected.

Spike Sample Recovery: The percent recovery for sulfide was below acceptance limits (75-125%), but not below 30% for aqueous batch spike sample L2350098-02. Positive results for sulfide should be considered estimated (J-) and "not detected" estimated (UJ) in associated samples.

Laboratory Duplicates: The analysis of aqueous batch duplicate sample WG1822398-3 was acceptable.

Field Duplicates: The analyses of aqueous field duplicate pair MW-1S/DUP reported sulfide as not detected; therefore, a valid relative percent difference could not be calculated. The analyses for the field duplicate pair were acceptable.

Laboratory Control Sample: The percent recovery for sulfide was within laboratory QC limits (75-125%) for aqueous sample WG1822398-2.

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Form 5a
Matrix Spike

Client	:	Alpha Geoscience	Lab Number	:	L2350269
Project Name	:	HUNTINGTON READY MIX	Project Number	:	20116
Client Sample ID	:	NA	Matrix	:	WATER
Lab Sample ID	:	L2350098-02			
Matrix Spike	:	WG1822398-4	MS Analysis Date	:	08/31/23 12:48
Matrix Spike Dup	:		MSD Analysis Date	:	

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Sulfide	ND	0.52	0.22	42	Q					70-130	20

ALPHA GEOSCIENCE

Geology
Hydrology
Remediation
Water Supply

QA/QC Review of Total Kjeldahl Nitrogen Data (TKN) for Alpha Analytical Labs, SDG Number: L2350269

8 Ground Water Samples and 1 Field Duplicate Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analyses of the method blanks reported TKN as either not detected or below the RL.

Spike Sample Recovery: The percent recoveries for TKN were within acceptable limits (75-125%) for aqueous spike samples MW-4D, MW-2S, and MW-6D.

Laboratory Duplicates: The relative percent differences for TKN were below the allowable maximum (20%) for aqueous duplicate sample MW-2S and MW-6D, as required.

Field Duplicates: The relative percent difference for TKN was below the allowable maximum (20%) for aqueous field duplicate pair MW-1S/DUP (attached table), as required.

Laboratory Control Sample: The percent recoveries for TKN were within laboratory QC limits (78-122%) for aqueous samples WG1823843-2, WG1823844-2, WG1825392-2, and WG1826711-2.

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TDS Data Section

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Geology
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Water Supply

QA/QC Review of Total Dissolved Solids Data (TDS) for Alpha Analytical Labs, SDG Number: L2350269

8 Ground Water Samples and 1 Field Duplicate Collected August 28-29, 2023

Prepared by: Donald Anné
October 18, 2023

Holding Times: Samples were analyzed within USEPA SW 846 holding times.

Blanks: The analysis of the method blank reported TDS as not detected.

Laboratory Duplicates: The relative percent difference for TDS was above the allowable maximum (20%) for aqueous batch duplicate sample WG1822690-3. Positive results for TDS should be considered estimated (J) in associated aqueous samples.

Field Duplicates: The relative percent difference for TDS was below the allowable maximum (20%) for aqueous field duplicate pair MW-1S/DUP (attached table), as required.

Laboratory Control Sample: The percent recovery for TDS was within QC limits (80-120%) for aqueous sample WG1822690-2.

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Form 6
Lab Duplicates

Client	: Alpha Geoscience		Lab Number	:	L2350269
Project Name	: HUNTINGTON READY MIX		Project Number	:	20116
Client Sample ID	: NA		Matrix	:	WATER
Lab Sample ID	: NA		Analysis Date	:	09/01/23 04:50
Dup Sample ID	: WG1822690-3		DUP Analysis Date	:	09/01/23 04:50

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Solids, Total Dissolved	1100	1700	43 Q	10

Field Duplicate Calculation Section

Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L2350269

S1= MW-1S **S2=** DUP

Analyte	S1	S2	RPD (%)
Tetrachloroethene	**0.21**	ND	NC
Benzene	**0.28**	**0.24**	NC
Acetone	**1.9**	**3.4**	NC

* RPD is above the allowable maximum 20%.

Results are in units of ug/L.

Bold numbers were values that are below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

Semi-Volatiles

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L2350269

S1= MW-1S **S2=** DUP

Analyte	S1	S2	RPD (%)
Phenol	**0.77**	**0.92**	NC
Acenaphthene (SIM)	**0.10**	**0.10**	NC
Fluoranthene (SIM)	**0.03**	ND	NC
Naphthalene (SIM)	0.22	0.24	9%
Benzo(a)anthracene (SIM)	**0.03**	ND	NC
Acenaphthylene (SIM)	**0.01**	**0.02**	NC
Anthracene (SIM)	**0.07**	0.12	NC
Fluorene (SIM)	**0.06**	**0.05**	NC
Phenanthrene (SIM)	**0.09**	**0.08**	NC
Pyrene (SIM)	**0.03**	ND	NC
2-Methylnaphthalene (SIM)	**0.05**	**0.05**	NC
Pentachlorophenol (SIM)	**0.23**	0.85	NC

* RPD is above the allowable maximum 20%.

Results are in units of ug/L.

Bold numbers were values that are below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

Pesticides

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L2350269

S1= MW-1S **S2=** DUP

Analyte	S1	S2	RPD (%)
4,4'-DDT	**0.005**	**0.005**	NC

* RPD is above the allowable maximum 20%.

Results are in units of ug/L.

Bold numbers were values that are below the CRQL or above the high standard.
ND - Not detected.
NC - Not calculated, both results must be within the linear range for valid RPDs to be calculated.

General Chemistries

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L2350269

S1= MW-1S **S2=** DUP

Analyte	S1	S2	RPD (%)	
Total Nitrogen (calculated)	0.46	3.7	156%	*
Nitrogen, Total Kjeldahl	3.49	3.54	1%	
Nitrogen, Ammonia	2.65	2.45	8%	
Nitrogen, Nitrate/Nitrite	0.11	0.14	24%	*
Solids, Total Dissolved	520	600	14%	
Sulfide	ND	ND	NC	
Alkalinity, Carbonate	41.2	36.8	11%	
Alkalinity, Bicarbonate	ND	2.6	NC	
Phosphate, Total	0.095	0.086	10%	
Bromide	0.124	0.12	3%	
Chloride	49.6	50.7	2%	
Fluoride	0.113	0.115	2%	
Sulfate	301	313	4%	
Iodide	ND	ND	NC	

* RPD is above the allowable maximum 20%.

Results are in units of mg/L with the exception of alkalinity which is reported in mg CaCO3/L .

Bold numbers were values that are below the RL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

TAL Metals-Total

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L2350269

S1= MW-1S **S2=** DUP

Analyte	S1	S2	RPD (%)
aluminum	0.804	0.821	2%
antimony	**0.00068**	**0.00065**	NC
arsenic	0.00529	0.00502	5%
barium	0.00738	0.00769	4%
beryllium	ND	ND	NC
cadmium	ND	ND	NC
calcium	101	101	0%
chromium	**0.00017**	**0.0002**	NC
cobalt	0.00064	0.00062	3%
copper	0.00145	0.00138	5%
iron	0.0607	0.0638	5%
lead	ND	ND	NC
magnesium	0.31	0.322	4%
manganese	0.07072	0.07032	1%
mercury	**0.00009**	ND	NC
nickel	0.00715	0.00689	4%
potassium	39.4	38.2	3%
selenium	**0.0019**	ND	NC
silver	ND	ND	NC
sodium	67.7	63.5	6%
thallium	ND	ND	NC
vanadium	0.0212	0.02094	1%
zinc	ND	ND	NC

* RPD is above the allowable maximum 20%.

All results are in units of mg/L.

Bold numbers were values that are below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

TAL Metals-Dissolved

Calculations for Field Duplicate Relative Percent Difference (RPD)
SDG No. L2350269

S1= MW-1S **S2=** DUP

Analyte	S1	S2	RPD (%)	
aluminum (dissolved)	1.08	1.02	6%	
antimony (dissolved)	**0.00078**	**0.00118**	NC	
arsenic (dissolved)	0.00597	0.00498	18%	
barium (dissolved)	0.00751	0.00741	1%	
beryllium (dissolved)	ND	ND	NC	
cadmium (dissolved)	ND	ND	NC	
calcium (dissolved)	99.3	98.4	1%	
chromium (dissolved)	**0.00022**	ND	NC	
cobalt (dissolved)	0.00065	0.00063	3%	
copper (dissolved)	0.00123	0.00118	4%	
iron (dissolved)	0.111	0.0542	69%	*
lead (dissolved)	ND	ND	NC	
magnesium (dissolved)	0.313	0.291	7%	
manganese (dissolved)	0.05786	0.05482	5%	
mercury (dissolved)	ND	ND	NC	
nickel (dissolved)	0.00721	0.00691	4%	
potassium (dissolved)	34.8	33.8	3%	
selenium (dissolved)	ND	ND	NC	
silver (dissolved)	ND	ND	NC	
sodium (dissolved)	69.8	66.1	5%	
thallium (dissolved)	ND	ND	NC	
vanadium (dissolved)	0.01985	0.01964	1%	
zinc (dissolved)	ND	ND	NC	

* RPD is above the allowable maximum 20%.

All results are in units of mg/L.

Bold numbers were values that are below the CRDL.
ND - Not detected.
NC - Not calculated, both results must be above the CRDL for valid RPDs to be calculated.

Alpha Geoscience: Acronyms and Definitions

Data Validation Acronyms

AA	Atomic absorption, flame technique
BHC	Hexachlorocyclohexane
BFB	Bromofluorobenzene
CCB	Continuing calibration blank
CCC	Calibration check compound
CCV	Continuing calibration verification
CN	Cyanide
CRDL	Contract required detection limit
CRQL	Contract required quantitation limit
CVAA	Atomic adsorption, cold vapor technique
DCAA	2,4-Dichlophenylacetic acid
DCB	Decachlorobiphenyl
DFTPP	Decafluorotriphenyl phosphine
ECD	Electron capture detector
FAA	Atomic absorption, furnace technique
FID	Flame ionization detector
FNP	1-Fluoronaphthalene
GC	Gas chromatography
GC/MS	Gas chromatography/mass spectrometry
GPC	Gel permeation chromatography
ICB	Initial calibration blank
ICP	Inductively coupled plasma-atomic emission spectrometer
ICV	Initial calibration verification
IDL	Instrument detection limit
IS	Internal standard
LCS	Laboratory control sample
LCS/LCSD	Laboratory control sample/laboratory control sample duplicate
MSA	Method of standard additions
MS/MSD	Matrix spike/matrix spike duplicate
PID	Photo ionization detector
PCB	Polychlorinated biphenyl
PCDD	Polychlorinated dibenzodioxins
PCDF	Polychlorinated dibenzofurans
QA	Quality assurance
QC	Quality control
RF	Response factor
RPD	Relative percent difference
RRF	Relative response factor
RRF(number)	Relative response factor at concentration of the number following
RT	Retention time
RRT	Relative retention time
SDG	Sample delivery group
SPCC	System performance check compound
TCX	Tetrachloro-m-xylene
%D	Percent difference
%R	Percent recovery
%RSD	Percent relative standard deviation

Data Validation Qualifiers Used in the QA/QC Reviews for USEPA Region II

U	=	Not detected. The associated number indicates the approximate sample concentration necessary to be detected significantly greater than the level of the highest associated blank.
R	=	Unreliable result; data is rejected or unusable. Analyte may or may not be present in the sample. Supporting data or information is necessary to confirm the result.
N	=	Tentative identification. Analyte is considered present. Special methods may be needed to confirm its presence or absence during future sampling efforts.
J	=	Analyte is present. Reported value may be associated with a higher level of uncertainty than is normally expected with the analytical method.
J-	=	Analyte is present. Reported value may be biased low and associated with a higher level of uncertainty than is normally expected with the analytical method.
J+	=	Analyte is present. Reported value may be biased high andassociated with a higher level of uncertainty than is normally expected with the analytical method.
UJ	=	Not detected, quantitation limit may be inaccurate or imprecise.

Note: These qualifiers are used for data validation purposes. The data validation qualifiers may differ from the qualifiers that the laboratory assigns to the data. Refer to the laboratory analytical report for the definitions of the laboratory qualifiers.

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Alpha Analytical

Laboratory Code: 11148

SDG Number: L2350269

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Project Name: HUNTINGTON READY MIX
Project Number: 20116

Lab Number: L2350269
Report Date: 09/19/23

Alpha Sample ID	Client ID	Matrix	Sample Location	Collection Date/Time	Receive Date
L2350269-01	MW-1S	WATER	SPEONK, NY	08/28/23 16:52	08/29/23
L2350269-02	MW-2S	WATER	SPEONK, NY	08/28/23 15:34	08/29/23
L2350269-03	MW-3S	WATER	SPEONK, NY	08/28/23 14:38	08/29/23
L2350269-04	MW-4D	WATER	SPEONK, NY	08/29/23 10:16	08/29/23
L2350269-05	MW-5S	WATER	SPEONK, NY	08/29/23 09:10	08/29/23
L2350269-06	MW-6D	WATER	SPEONK, NY	08/28/23 17:51	08/29/23
L2350269-07	MW-7S	WATER	SPEONK, NY	08/28/23 16:35	08/29/23
L2350269-08	MW-8S	WATER	SPEONK, NY	08/28/23 14:30	08/29/23
L2350269-09	DUP	WATER	SPEONK, NY	08/28/23 00:00	08/29/23
L2350269-11	EQUIPMENT BLANK	WATER	SPEONK, NY	08/29/23 08:15	08/29/23
L2350269-12	TRIP BLANK	WATER	SPEONK, NY	08/29/23 00:00	08/29/23

Case Narrative

The samples were received in accordance with the Chain of Custody and no significant deviations were encountered during the preparation or analysis unless otherwise noted. Sample Receipt, Container Information, and the Chain of Custody are located at the back of the report.

Results contained within this report relate only to the samples submitted under this Alpha Lab Number and meet NELAP requirements for all NELAP accredited parameters unless otherwise noted in the following narrative. The data presented in this report is organized by parameter (i.e. VOC, SVOC, etc.). Sample specific Quality Control data (i.e. Surrogate Spike Recovery) is reported at the end of the target analyte list for each individual sample, followed by the Laboratory Batch Quality Control at the end of each parameter. Tentatively Identified Compounds (TICs), if requested, are reported for compounds identified to be present and are not part of the method/program Target Compound List, even if only a subset of the TCL are being reported. If a sample was re-analyzed or re-extracted due to a required quality control corrective action and if both sets of data are reported, the Laboratory ID of the re-analysis or re-extraction is designated with an "R" or "RE", respectively. When multiple Batch Quality Control elements are reported (e.g. more than one LCS), the associated samples for each element are noted in the grey shaded header line of each data table. Any Laboratory Batch, Sample Specific % recovery or RPD value that is outside the listed Acceptance Criteria is bolded in the report. All specific QC information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications. Soil/sediments, solids and tissues are reported on a dry weight basis unless otherwise noted. Definitions of all data qualifiers and acronyms used in this report are provided in the Glossary located at the back of the report.

In reference to questions H (CAM) or 4 (RCP) when "NO" is checked, the performance criteria for CAM and RCP methods allow for some quality control failures to occur and still be within method compliance. In these instances the specific failure is not narrated but noted in the associated QC table. The information is also incorporated in the Data Usability format of our Data Merger tool where it can be reviewed along with any associated usability implications.

Please see the associated ADEx data file for a comparison of laboratory reporting limits that were achieved with the regulatory Numerical Standards requested on the Chain of Custody.

HOLD POLICY
For samples submitted on hold, Alpha's policy is to hold samples (with the exception of Air canisters) free of charge for 21 calendar days from the date the project is completed. After 21 calendar days, we will dispose of all samples submitted including those put on hold unless you have contacted your Client Service Representative and made arrangements for Alpha to continue to hold the samples. Air canisters will be disposed after 3 business days from the date the project is completed.

Please contact Client Services at 800-624-9220 with any questions.

Case Narrative (continued)

Report Submission
September 19, 2023: This final report includes the results of all requested analyses.
September 15, 2023: This is a preliminary report.

All non-detect (ND) or estimated concentrations (J-qualified) have been quantitated to the limit noted in the MDL column.

The analysis of Iodide was subcontracted. A copy of the laboratory report is included as an addendum. Please note: This data is only available in PDF format and is not available on Data Merger.

Semivolatile Organics
The WG1822188-4/-5 MS/MSD recoveries, performed on L2350269-08, are below the acceptance criteria for 3,3'-dichlorobenzidine (0%/0%), 4-chloroaniline (MSD 0%), and caprolactam (MSD 0%) due to the concentrations of these compounds in the MS/MSD falling below the reported detection limits.

Total Metals
The WG1823417 CCV recovery, associated with WG1822783-1, was above the acceptance criteria for antimony. Any associated samples with positive detections were re-analyzed under a passing CCV. The samples that were non-detect for these elements are reporting results from the original analyses.
The WG1822783-3 MS recovery for calcium (66%), performed on L2350269-08, does not apply because the sample concentration is greater than four times the spike amount added.

Dissolved Metals
The WG1822318-4 MSD recovery, performed on L2350269-08, is outside the acceptance criteria for potassium (74%). A post digestion spike was performed and was within acceptance criteria.

Nitrogen, Total Kjeldahl
L2350269-07: The sample has an elevated detection limit due to the dilution required by the sample matrix.

Case Narrative (continued)

The WG1825392-4 MS recovery, performed on L2350269-06, is outside the acceptance criteria for nitrogen, total kjeldahl (114%); however, the associated LCS recovery is within criteria. No further action was taken.

Anions by Ion Chromatography

The WG1823254-7 MS recovery, performed on L2350269-05, is outside the acceptance criteria for bromide (72%); however, the associated LCS recovery is within criteria. No further action was taken.

Alkalinity, Bicarbonate

The WG1825166-2 Laboratory Duplicate RPD for alkalinity, bicarbonate (98%), performed on L2350269-09, is above the acceptance criteria; however, the sample and duplicate results are less than five times the reporting limit. Therefore, the RPD is valid.

I, the undersigned, attest under the pains and penalties of perjury that, to the best of my knowledge and belief and based upon my personal inquiry of those responsible for providing the information contained in this analytical report, such information is accurate and complete. This certificate of analysis is not complete unless this page accompanies any and all pages of this report.

Authorized Signature: Tiffani Morrissey Report Date: 09/19/23

Title: Technical Director/Representative

GLOSSARY

Acronyms

DL - Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the limit of quantitation (LOQ). The DL includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

EDL - Estimated Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The EDL includes any adjustments from dilutions, concentrations or moisture content, where applicable. The use of EDLs is specific to the analysis of PAHs using Solid-Phase Microextraction (SPME).

EMPC - Estimated Maximum Possible Concentration: The concentration that results from the signal present at the retention time of an analyte when the ions meet all of the identification criteria except the ion abundance ratio criteria. An EMPC is a worst-case estimate of the concentration.

EPA - Environmental Protection Agency.

LCS - Laboratory Control Sample: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LCSD - Laboratory Control Sample Duplicate: Refer to LCS.

LFB - Laboratory Fortified Blank: A sample matrix, free from the analytes of interest, spiked with verified known amounts of analytes or a material containing known and verified amounts of analytes.

LOD - Limit of Detection: This value represents the level to which a target analyte can reliably be detected for a specific analyte in a specific matrix by a specific method. The LOD includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

LOQ - Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

Limit of Quantitation: The value at which an instrument can accurately measure an analyte at a specific concentration. The LOQ includes any adjustments from dilutions, concentrations or moisture content, where applicable. (DoD report formats only.)

MDL - Method Detection Limit: This value represents the level to which target analyte concentrations are reported as estimated values, when those target analyte concentrations are quantified below the reporting limit (RL). The MDL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

MS - Matrix Spike Sample: A sample prepared by adding a known mass of target analyte to a specified amount of matrix sample for which an independent estimate of target analyte concentration is available. For Method 332.0, the spike recovery is calculated using the native concentration, including estimated values.

MSD - Matrix Spike Sample Duplicate: Refer to MS.

NA - Not Applicable.

NC - Not Calculated: Term is utilized when one or more of the results utilized in the calculation are non-detect at the parameter's reporting unit.

NDPA/DPA - N-Nitrosodiphenylamine/Diphenylamine.

NI - Not Ignitable.

NP - Non-Plastic: Term is utilized for the analysis of Atterberg Limits in soil.

NR - No Results: Term is utilized when 'No Target Compounds Requested' is reported for the analysis of Volatile or Semivolatile Organic TIC only requests.

RL - Reporting Limit: The value at which an instrument can accurately measure an analyte at a specific concentration. The RL includes any adjustments from dilutions, concentrations or moisture content, where applicable.

RPD - Relative Percent Difference: The results from matrix and/or matrix spike duplicates are primarily designed to assess the precision of analytical results in a given matrix and are expressed as relative percent difference (RPD). Values which are less than five times the reporting limit for any individual parameter are evaluated by utilizing the absolute difference between the values; although the RPD value will be provided in the report.

SRM - Standard Reference Material: A reference sample of a known or certified value that is of the same or similar matrix as the associated field samples.

STLP - Semi-dynamic Tank Leaching Procedure per EPA Method 1315.

TEF - Toxic Equivalency Factors: The values assigned to each dioxin and furan to evaluate their toxicity relative to 2,3,7,8-TCDD.

TEQ - Toxic Equivalent: The measure of a sample's toxicity derived by multiplying each dioxin and furan by its corresponding TEF and then summing the resulting values.

TIC - Tentatively Identified Compound: A compound that has been identified to be present and is not part of the target compound list (TCL) for the method and/or program. All TICs are qualitatively identified and reported as estimated concentrations.

Report Format: DU Report with 'J' Qualifiers

Footnotes

1 - The reference for this analyte should be considered modified since this analyte is absent from the target analyte list of the original method.

Terms

Analytical Method: Both the document from which the method originates and the analytical reference method. (Example: EPA 8260B is shown as 1,8260B.) The codes for the reference method documents are provided in the References section of the Addendum.

Chlordane: The target compound Chlordane (CAS No. 57-74-9) is reported for GC ECD analyses. Per EPA,this compound "refers to a mixture of chlordane isomers, other chlorinated hydrocarbons and numerous other components." (Reference: USEPA Toxicological Review of Chlordane, In Support of Summary Information on the Integrated Risk Information System (IRIS), December 1997.)

Difference: With respect to Total Oxidizable Precursor (TOP) Assay analysis, the difference is defined as the Post-Treatment value minus the Pre-Treatment value.

Final pH: As it pertains to Sample Receipt & Container Information section of the report, Final pH reflects pH of container determined after adjustment at the laboratory, if applicable. If no adjustment required, value reflects Initial pH.

Frozen Date/Time: With respect to Volatile Organics in soil, Frozen Date/Time reflects the date/time at which associated Reagent Water-preserved vials were initially frozen. Note: If frozen date/time is beyond 48 hours from sample collection, value will be reflected in 'bold'.

Gasoline Range Organics (GRO): Gasoline Range Organics (GRO) results include all chromatographic peaks eluting from Methyl tert butyl ether through Naphthalene, with the exception of GRO analysis in support of State of Ohio programs, which includes all chromatographic peaks eluting from Hexane through Dodecane.

Initial pH: As it pertains to Sample Receipt & Container Information section of the report, Initial pH reflects pH of container determined upon receipt, if applicable.

PAH Total: With respect to Alkylated PAH analyses, the 'PAHs, Total' result is defined as the summation of results for all or a subset of the following compounds: Naphthalene, C1-C4 Naphthalenes, 2-Methylnaphthalene, 1-Methylnaphthalene, Biphenyl, Acenaphthylene, Acenaphthene, Fluorene, C1-C3 Fluorenes, Phenanthrene, C1-C4 Phenanthrenes/Anthracenes, Anthracene, Fluoranthene, Pyrene, C1-C4 Fluoranthenes/Pyrenes, Benz(a)anthracene, Chrysene, C1-C4 Chrysenes, Benzo(b)fluoranthene, Benzo(j)+(k)fluoranthene, Benzo(e)pyrene, Benzo(a)pyrene, Perylene, Indeno(1,2,3-cd)pyrene, Dibenz(ah)+(ac)anthracene, Benzo(g,h,i)perylene. If a 'Total' result is requested, the results of its individual components will also be reported.

PFAS Total: With respect to PFAS analyses, the 'PFAS, Total (5)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA and PFOS. In addition, the 'PFAS, Total (6)' result is defined as the summation of results for: PFHpA, PFHxS, PFOA, PFNA, PFDA and PFOS. For MassDEP DW compliance analysis only, the 'PFAS, Total (6)' result is defined as the summation of results at or above the RL. Note: If a 'Total' result is requested, the results of its individual components will also be reported.

Total: With respect to Organic analyses, a 'Total' result is defined as the summation of results for individual isomers or Aroclors. If a 'Total' result is requested, the results of its individual components will also be reported. This is applicable to 'Total' results for methods 8260, 8081 and 8082.

Data Qualifiers

A - Spectra identified as "Aldol Condensates" are byproducts of the extraction/concentration procedures when acetone is introduced in the process.

B - The analyte was detected above the reporting limit in the associated method blank. Flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For MCP-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank. For DOD-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte at less than ten times (10x) the concentration found in the blank AND the analyte was detected above one-half the reporting limit (or above the reporting limit for common lab contaminants) in the associated method blank. For NJ-Air-related projects, flag only applies to associated field samples that have detectable concentrations of the analyte above the reporting limit. For NJ-related projects (excluding Air), flag only applies to associated field samples that have detectable concentrations of the analyte, which was detected above the reporting limit in the associated method blank or above five times the reporting limit for common lab contaminants (Phthalates, Acetone, Methylene Chloride, 2-Butanone).

C - Co-elution: The target analyte co-elutes with a known lab standard (i.e. surrogate, internal standards, etc.) for co-extracted analyses.

D - Concentration of analyte was quantified from diluted analysis. Flag only applies to field samples that have detectable concentrations of the analyte.

E - Concentration of analyte exceeds the range of the calibration curve and/or linear range of the instrument.

F - The ratio of quantifier ion response to qualifier ion response falls outside of the laboratory criteria. Results are considered to be an estimated maximum concentration.

G - The concentration may be biased high due to matrix interferences (i.e, co-elution) with non-target compound(s). The result should be considered estimated.

H - The analysis of pH was performed beyond the regulatory-required holding time of 15 minutes from the time of sample collection.

I - The lower value for the two columns has been reported due to obvious interference.

M - Reporting Limit (RL) exceeds the MCP CAM Reporting Limit for this analyte.

NJ - Presumptive evidence of compound. This represents an estimated concentration for Tentatively Identified Compounds (TICs), where

Report Format: DU Report with 'J' Qualifiers

Data Qualifiers

the identification is based on a mass spectral library search.

P - The RPD between the results for the two columns exceeds the method-specified criteria.

Q - The quality control sample exceeds the associated acceptance criteria. For DOD-related projects, LCS and/or Continuing Calibration Standard exceedences are also qualified on all associated sample results. Note: This flag is not applicable for matrix spike recoveries when the sample concentration is greater than 4x the spike added or for batch duplicate RPD when the sample concentrations are less than 5x the RL. (Metals only.)

R - Analytical results are from sample re-analysis.

RE - Analytical results are from sample re-extraction.

S - Analytical results are from modified screening analysis.

V - The surrogate associated with this target analyte has a recovery outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

Z - The batch matrix spike and/or duplicate associated with this target analyte has a recovery/RPD outside the QC acceptance limits. (Applicable to MassDEP DW Compliance samples only.)

J - Estimated value. The Target analyte concentration is below the quantitation limit (RL), but above the Method Detection Limit (MDL) or Estimated Detection Limit (EDL) for SPME-related analyses. This represents an estimated concentration for Tentatively Identified Compounds (TICs). For calculated parameters, this represents that one or more values used in the calculation were estimated.

ND - Not detected at the method detection limit (MDL) for the sample, or estimated detection limit (EDL) for SPME-related analyses.

Volatile Organics Instruments

Volatile Organics:

Instrument: Agilent 7890 GC/5975C MSD	Columns (length x ID x df):
Trap: Supelco K Trap (VOACARB 3000)	RTX-VMS 20m x 0.18mm x 1um
Concentrator: EST Encon (or equivalent)	RTX-VMS 30m x 0.25mm x 1.4um
Autosampler: EST Centurion (or equivalent)	RTX-502.2 40m x 0.18mm x 1um
Purge time: 11 min	

Volatile Organics: VPH

Instrument: Agilent 6890 (or equivalent)	Column Type: Restek RTX 502.2
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 105 Meters
Concentrator: EST Encon (or equivalent)	df: 3.00 um
Autosampler: EST Centurion (or equivalent)	ID: 0.53mm

Volatile Organics: PIANO

Instrument: Agilent 7890 GC/5975C MSD	Column Type: DB-VRX
Trap: Supelco K Trap (VOACARB 3000)	Column Length: 60 Meters
Concentrator: Tekmar Velocity / EST Encon	df: 1.40 um
Autosampler: Varian Archon / EST Centurion	ID: 0.25 mm
Purge time: 11 min	Desorb: 1 min

Volatile Organics: Dissolved Gas

Instrument: Agilent 7890 (or equivalent) with FID/TCD	
	Column Type: Haysep S Column
	Column Length: 2 Meters packed (100/200 mesh)
Autosampler: LEAP Headspace	Purge time: 0.6 min

Volatile Organics in Air Instruments

Volatile Organics in Air:

Instruments: Agilent 6890 GC / 5975 MSD Shimadzu QP2010-SE / QP2020

Concentrator: Entech 7100A or 7200	Column Type: Restek RTX-1
Autosampler: Entech 7016CA or 7016D	Column Length: 60 Meters
	df: 1.00 um
	ID: 0.25 mm or 0.32 mm

Trap 1: Glass Bead: manufacturer-Entech: 20 cm packing material
Trap 2: Tenax: manufacturer-Entech: 20 cm packing material

Semivolatile Organics Instruments - Westborough

Semivolatile Organics (Acid/Base/Neutral Extractables):

Instrument: Agilent 5973N MSD	Injection volume: 1 ul;2 uL LVI
Column Type: Restek RXI-5SILMS	df: 0.32 um
Column Length: 30 Meters	ID: 0.25 mm

Polynuclear Aromatic Hydrocarbons by 8270 SIM:

Instrument: Agilent 5973 MSD	Injection volume: 1 ul;2 uL LVI
Column Type: Restek RXI-5SILMS	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Pesticides/PCB/Herbicides:

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLPPesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Petroleum/EPH:

Instrument: Agilent 6890 w/FID / HP 5890 w/ FID	Injection Volume: 1uL
Column: Restek RTX 5	df: 0.25
Column Length: 30 Meters	
ID: 0.32 mm	

Semivolatile Organic Instruments - Mansfield

Semivolatile Organics (ALK-PAH Extractables):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 1 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8270):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 2 ul
Column Type: ZB-Semivolatiles	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (8270 SIM):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: ZB-5	df: 0.25 um
Column Length: 30 Meters	ID: 0.25 mm

Semivolatile Organics (1,4-Dioxane):

Instrument: Agilent 5973N / 5975 / 5977 MSD	Injection volume: 3 ul
Column Type: RTX-5	df: 0.25um, 0.18 um
Column Length: 30 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (209 Congener):

Instrument: Agilent 5973N / 5975 MSD	Injection volume: 3 ul
Column Type: RTX-5, RTX-PCB	df: 0.25um, 0.18 um
Column Length: 60 Meters	ID: 0.25um, 0.18 mm

Semivolatile Organics (8081):

Instrument: Agilent 6890 / 7890	Injection volume: 1 ul
Column Type: RTX-5 / RTX-CLP II	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Semivolatile Organics (8082):

Instrument: Agilent 6890 w/Dual Micro ECDs	Injection Volume: 1uL
Column A: Restek RTX-CL/STX-CL	df: 0.32
Column B: Restek RTX/STX-CLPPesticide II	df: 0.25
Column Length: 30 Meters	ID: 0.32 mm

Semivolatile Organics (SHC Extractables):

Instrument: Agilent 6890	Injection volume: 1 ul
Column Type: RTX-5	df: 0.25 um
Column Length: 60 Meters	ID: 0.25 mm

Sample Delivery Group Summary

Alpha Job Number : L2350269

Account Name : Alpha Geoscience
Project Number : 20116
Project Name : HUNTINGTON READY MIXED

Received : 29-AUG-2023
Reviewer : Katelyn Wolotschaj

Delivery Information

Samples Delivered By : Alpha Courier

Chain of Custody : Present

Cooler Information

Cooler	Seal/Seal#	Preservation	Temperature(°C)	Additional Information
A	Absent/	Ice	4.6	
B	Absent/	Ice	5.4	
C	Absent/	Ice	2.4	
D	Absent/	Ice	4.5	
E	Absent/	Ice	2.3	

Condition Information

1) All samples on COC received?	**YES**
2) Extra samples received?	**NO**
3) Are there any sample container discrepancies?	**NO**
4) Are there any discrepancies between COC & sample labels?	**NO**
5) Are samples in appropriate containers for requested analysis?	**YES**
6) Are samples properly preserved for requested analysis?	**YES**
7) Are samples within holding time for requested analysis?	**YES**
8) All sampling equipment returned?	**NA**

Volatile Organics/VPH

1) Reagent Water Vials Frozen by Client?	**NO**

Comments

L2350269-11B Container Received Empty.
L2350269-11C Container Received Empty.

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 19 2023, 04:51 pm

Login Number: L2350269
Account: ALPHAGEO Alpha GeoscienceProject: 20116
Received: 29AUG23 Due Date: 22SEP23

Sample #	Client ID	Mat	PR	Collected

L2350269-01 MW-1S 1 S0 28AUG23 16:52

109.52 USD 1ZE306540192950821 8260 Report list built. 8270 Report list built. ASP-B Package Due Date: 09/22/23

ALK-CO3-2320,ALK-HCO3-2320,ASP-B,BR-300,CL-300,E&I-FEE,F-300,NH3-350,NYTCL-8081,NYTCL-8082-LVI,
NYTCL-8260-R2,NYTCL-8270/SIM-LVI,NYTCL-8270-LVI,NYTCL-8270-SIM-LVI,SO4-300,SUB-IODIDE,SULFIDE-4500,
TAL-6020S,AG-6020S,AL-6020S,AS-6020S,BA-6020S,BE-6020S,CA-6020S,CD-6020S,CO-6020S,CR-6020S,CU-6020S,
FE-6020S,HG-S,K-6020S,MG-6020S,MN-6020S,NA-6020S,NI-6020S,PB-6020S,PREPS,SB-6020S,SE-6020S,TL-6020S,
V-6020S,ZN-6020S,TAL-6020T,AG-6020T,AL-6020T,AS-6020T,BA-6020T,BE-6020T,CA-6020T,CD-6020T,CO-6020T,
CR-6020T,CU-6020T,FE-6020T,HG-T,K-6020T,MG-6020T,MN-6020T,NA-6020T,NI-6020T,PB-6020T,PREPT,SB-6020T,
SE-6020T,TL-6020T,V-6020T,ZN-6020T,TDS-2540,TOTALNITROGEN,NO3/NO2-4500,TKN-4500,TNITROGEN,TPO4-4500

L2350269-02 MW-2S 1 S0 28AUG23 15:34

8260 Report list built. 8270 Report list built. Package Due Date: 09/22/23

ALK-CO3-2320,ALK-HCO3-2320,BR-300,CL-300,F-300,NH3-350,NYTCL-8081,NYTCL-8082-LVI,NYTCL-8260-R2,
NYTCL-8270/SIM-LVI,NYTCL-8270-LVI,NYTCL-8270-SIM-LVI,SO4-300,SUB-IODIDE,SULFIDE-4500,TAL-6020S,AG-
6020S,AL-6020S,AS-6020S,BA-6020S,BE-6020S,CA-6020S,CD-6020S,CO-6020S,CR-6020S,CU-6020S,FE-6020S,HG-
S,K-6020S,MG-6020S,MN-6020S,NA-6020S,NI-6020S,PB-6020S,PREPS,SB-6020S,SE-6020S,TL-6020S,V-6020S,ZN-
6020S,TAL-6020T,AG-6020T,AL-6020T,AS-6020T,BA-6020T,BE-6020T,CA-6020T,CD-6020T,CO-6020T,CR-6020T,CU-
6020T,FE-6020T,HG-T,K-6020T,MG-6020T,MN-6020T,NA-6020T,NI-6020T,PB-6020T,PREPT,SB-6020T,SE-6020T,TL-
6020T,V-6020T,ZN-6020T,TDS-2540,TOTALNITROGEN,NO3/NO2-4500,TKN-4500,TNITROGEN,TPO4-4500

L2350269-03 MW-3S 1 S0 28AUG23 14:38

8260 Report list built. 8270 Report list built. Package Due Date: 09/22/23

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 19 2023, 04:51 pm

Login Number: L2350269
Account: ALPHAGEO Alpha GeoscienceProject: 20116
Received: 29AUG23 Due Date: 22SEP23

Sample #	Client ID	Mat	PR	Collected

ALK-CO3-2320,ALK-HCO3-2320,BR-300,CL-300,F-300,NH3-350,NYTCL-8081,NYTCL-8082-LVI,NYTCL-8260-R2,
NYTCL-8270/SIM-LVI,NYTCL-8270-LVI,NYTCL-8270-SIM-LVI,SO4-300,SUB-IODIDE,SULFIDE-4500,TAL-6020S,AG-
6020S,AL-6020S,AS-6020S,BA-6020S,BE-6020S,CA-6020S,CD-6020S,CO-6020S,CR-6020S,CU-6020S,FE-6020S,HG-
S,K-6020S,MG-6020S,MN-6020S,NA-6020S,NI-6020S,PB-6020S,PREPS,SB-6020S,SE-6020S,TL-6020S,V-6020S,ZN-
6020S,TAL-6020T,AG-6020T,AL-6020T,AS-6020T,BA-6020T,BE-6020T,CA-6020T,CD-6020T,CO-6020T,CR-6020T,CU-
6020T,FE-6020T,HG-T,K-6020T,MG-6020T,MN-6020T,NA-6020T,NI-6020T,PB-6020T,PREPT,SB-6020T,SE-6020T,TL-
6020T,V-6020T,ZN-6020T,TDS-2540,TOTALNITROGEN,NO3/NO2-4500,TKN-4500,TNITROGEN,TPO4-4500

L2350269-04 MW-4D 1 S0 29AUG23 10:16
8260 Report list built. 8270 Report list built. Package Due Date: 09/22/23

ALK-CO3-2320,ALK-HCO3-2320,BR-300,CL-300,F-300,NH3-350,NYTCL-8081,NYTCL-8082-LVI,NYTCL-8260-R2,
NYTCL-8270/SIM-LVI,NYTCL-8270-LVI,NYTCL-8270-SIM-LVI,SO4-300,SUB-IODIDE,SULFIDE-4500,TAL-6020S,AG-
6020S,AL-6020S,AS-6020S,BA-6020S,BE-6020S,CA-6020S,CD-6020S,CO-6020S,CR-6020S,CU-6020S,FE-6020S,HG-
S,K-6020S,MG-6020S,MN-6020S,NA-6020S,NI-6020S,PB-6020S,PREPS,SB-6020S,SE-6020S,TL-6020S,V-6020S,ZN-
6020S,TAL-6020T,AG-6020T,AL-6020T,AS-6020T,BA-6020T,BE-6020T,CA-6020T,CD-6020T,CO-6020T,CR-6020T,CU-
6020T,FE-6020T,HG-T,K-6020T,MG-6020T,MN-6020T,NA-6020T,NI-6020T,PB-6020T,PREPT,SB-6020T,SE-6020T,TL-
6020T,V-6020T,ZN-6020T,TDS-2540,TOTALNITROGEN,NO3/NO2-4500,TKN-4500,TNITROGEN,TPO4-4500

L2350269-05 MW-5S 1 S0 29AUG23 09:10
8260 Report list built. 8270 Report list built. Package Due Date: 09/22/23

ALK-CO3-2320,ALK-HCO3-2320,BR-300,CL-300,F-300,NH3-350,NYTCL-8081,NYTCL-8082-LVI,NYTCL-8260-R2,
NYTCL-8270/SIM-LVI,NYTCL-8270-LVI,NYTCL-8270-SIM-LVI,SO4-300,SUB-IODIDE,SULFIDE-4500,TAL-6020S,AG-
6020S,AL-6020S,AS-6020S,BA-6020S,BE-6020S,CA-6020S,CD-6020S,CO-6020S,CR-6020S,CU-6020S,FE-6020S,HG-
S,K-6020S,MG-6020S,MN-6020S,NA-6020S,NI-6020S,PB-6020S,PREPS,SB-6020S,SE-6020S,TL-6020S,V-6020S,ZN-
6020S,TAL-6020T,AG-6020T,AL-6020T,AS-6020T,BA-6020T,BE-6020T,CA-6020T,CD-6020T,CO-6020T,CR-6020T,CU-
6020T,FE-6020T,HG-T,K-6020T,MG-6020T,MN-6020T,NA-6020T,NI-6020T,PB-6020T,PREPT,SB-6020T,SE-6020T,TL-
6020T,V-6020T,ZN-6020T,TDS-2540,TOTALNITROGEN,NO3/NO2-4500,TKN-4500,TNITROGEN,TPO4-4500

L2350269-06 MW-6D 1 S0 28AUG23 17:51
8260 Report list built. 8270 Report list built. Package Due Date: 09/22/23

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 19 2023, 04:51 pm

Login Number: L2350269
Account: ALPHAGEO Alpha GeoscienceProject: 20116
Received: 29AUG23 Due Date: 22SEP23

Sample #	Client ID	Mat	PR	Collected

ALK-CO3-2320,ALK-HCO3-2320,BR-300,CL-300,F-300,NH3-350,NYTCL-8081,NYTCL-8082-LVI,NYTCL-8260-R2,
NYTCL-8270/SIM-LVI,NYTCL-8270-LVI,NYTCL-8270-SIM-LVI,SO4-300,SUB-IODIDE,SULFIDE-4500,TAL-6020S,AG-
6020S,AL-6020S,AS-6020S,BA-6020S,BE-6020S,CA-6020S,CD-6020S,CO-6020S,CR-6020S,CU-6020S,FE-6020S,HG-
S,K-6020S,MG-6020S,MN-6020S,NA-6020S,NI-6020S,PB-6020S,PREPS,SB-6020S,SE-6020S,TL-6020S,V-6020S,ZN-
6020S,TAL-6020T,AG-6020T,AL-6020T,AS-6020T,BA-6020T,BE-6020T,CA-6020T,CD-6020T,CO-6020T,CR-6020T,CU-
6020T,FE-6020T,HG-T,K-6020T,MG-6020T,MN-6020T,NA-6020T,NI-6020T,PB-6020T,PREPT,SB-6020T,SE-6020T,TL-
6020T,V-6020T,ZN-6020T,TDS-2540,TOTALNITROGEN,NO3/NO2-4500,TKN-4500,TNITROGEN,TPO4-4500

L2350269-07 MW-7S 1 S0 28AUG23 16:35
8260 Report list built. 8270 Report list built. Package Due Date: 09/22/23

ALK-CO3-2320,ALK-HCO3-2320,BR-300,CL-300,F-300,NH3-350,NYTCL-8081,NYTCL-8082-LVI,NYTCL-8260-R2,
NYTCL-8270/SIM-LVI,NYTCL-8270-LVI,NYTCL-8270-SIM-LVI,SO4-300,SUB-IODIDE,SULFIDE-4500,TAL-6020S,AG-
6020S,AL-6020S,AS-6020S,BA-6020S,BE-6020S,CA-6020S,CD-6020S,CO-6020S,CR-6020S,CU-6020S,FE-6020S,HG-
S,K-6020S,MG-6020S,MN-6020S,NA-6020S,NI-6020S,PB-6020S,PREPS,SB-6020S,SE-6020S,TL-6020S,V-6020S,ZN-
6020S,TAL-6020T,AG-6020T,AL-6020T,AS-6020T,BA-6020T,BE-6020T,CA-6020T,CD-6020T,CO-6020T,CR-6020T,CU-
6020T,FE-6020T,HG-T,K-6020T,MG-6020T,MN-6020T,NA-6020T,NI-6020T,PB-6020T,PREPT,SB-6020T,SE-6020T,TL-
6020T,V-6020T,ZN-6020T,TDS-2540,TOTALNITROGEN,NO3/NO2-4500,TKN-4500,TNITROGEN,TPO4-4500

L2350269-08 MW-8S 1 S0 28AUG23 14:30
L2350269-08 MS L2350269-08 MSD 8260 Report list built. 8270 Report list built. Package Due Date:
09/22/23

ALK-CO3-2320,ALK-HCO3-2320,BR-300,CL-300,F-300,MS/MSD,NH3-350,NYTCL-8081,NYTCL-8082-LVI,NYTCL-8260-
R2,NYTCL-8270/SIM-LVI,NYTCL-8270-LVI,NYTCL-8270-SIM-LVI,SO4-300,SUB-IODIDE,SULFIDE-4500,TAL-6020S,
AG-6020S,AL-6020S,AS-6020S,BA-6020S,BE-6020S,CA-6020S,CD-6020S,CO-6020S,CR-6020S,CU-6020S,FE-6020S,
HG-S,K-6020S,MG-6020S,MN-6020S,NA-6020S,NI-6020S,PB-6020S,PREPS,SB-6020S,SE-6020S,TL-6020S,V-6020S,
ZN-6020S,TAL-6020T,AG-6020T,AL-6020T,AS-6020T,BA-6020T,BE-6020T,CA-6020T,CD-6020T,CO-6020T,CR-6020T,
CU-6020T,FE-6020T,HG-T,K-6020T,MG-6020T,MN-6020T,NA-6020T,NI-6020T,PB-6020T,PREPT,SB-6020T,SE-6020T,
TL-6020T,V-6020T,ZN-6020T,TDS-2540,TOTALNITROGEN,NO3/NO2-4500,TKN-4500,TNITROGEN,TPO4-4500

L2350269-09 DUP 1 S0 28AUG23 00:00
8260 Report list built. 8270 Report list built. Package Due Date: 09/22/23

ALPHA ANALYTICAL LABORATORIES, INC.
LOGIN CHAIN OF CUSTODY REPORT
Sep 19 2023, 04:51 pm

Login Number: L2350269
Account: ALPHAGEO Alpha GeoscienceProject: 20116
Received: 29AUG23 Due Date: 22SEP23

Sample #	Client ID	Mat	PR	Collected

ALK-CO3-2320,ALK-HCO3-2320,BR-300,CL-300,F-300,NH3-350,NYTCL-8081,NYTCL-8082-LVI,NYTCL-8260-R2,
NYTCL-8270/SIM-LVI,NYTCL-8270-LVI,NYTCL-8270-SIM-LVI,SO4-300,SUB-IODIDE,SULFIDE-4500,TAL-6020S,AG-
6020S,AL-6020S,AS-6020S,BA-6020S,BE-6020S,CA-6020S,CD-6020S,CO-6020S,CR-6020S,CU-6020S,FE-6020S,HG-
S,K-6020S,MG-6020S,MN-6020S,NA-6020S,NI-6020S,PB-6020S,PREPS,SB-6020S,SE-6020S,TL-6020S,V-6020S,ZN-
6020S,TAL-6020T,AG-6020T,AL-6020T,AS-6020T,BA-6020T,BE-6020T,CA-6020T,CD-6020T,CO-6020T,CR-6020T,CU-
6020T,FE-6020T,HG-T,K-6020T,MG-6020T,MN-6020T,NA-6020T,NI-6020T,PB-6020T,PREPT,SB-6020T,SE-6020T,TL-
6020T,V-6020T,ZN-6020T,TDS-2540,TOTALNITROGEN,NO3/NO2-4500,TKN-4500,TNITROGEN,TPO4-4500

L2350269-11 EQUIPMENT BLANK 1 S0 29AUG23 08:15

8270 Report list built. 8260 Report list built. Package Due Date: 09/22/23

NYTCL-8081,NYTCL-8082-LVI,NYTCL-8260-R2,NYTCL-8270/SIM-LVI,NYTCL-8270-LVI,NYTCL-8270-SIM-LVI,TAL-
6020S,AG-6020S,AL-6020S,AS-6020S,BA-6020S,BE-6020S,CA-6020S,CD-6020S,CO-6020S,CR-6020S,CU-6020S,FE-
6020S,HG-S,K-6020S,MG-6020S,MN-6020S,NA-6020S,NI-6020S,PB-6020S,PREPS,SB-6020S,SE-6020S,TL-6020S,V-
6020S,ZN-6020S,TAL-6020T,AG-6020T,AL-6020T,AS-6020T,BA-6020T,BE-6020T,CA-6020T,CD-6020T,CO-6020T,CR-
6020T,CU-6020T,FE-6020T,HG-T,K-6020T,MG-6020T,MN-6020T,NA-6020T,NI-6020T,PB-6020T,PREPT,SB-6020T,SE-
6020T,TL-6020T,V-6020T,ZN-6020T

L2350269-12 TRIP BLANK 1 S0 29AUG23 00:00

8260 Report list built. Package Due Date: 09/22/23

NYTCL-8260-R2

Logged By: Melissa Deyo

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 8130123

ALPHA Job #: L2350269

Client Information

Client: Alpha Geoscience
Address: 679 Plank Rd
Clifton Park, NY 12065
Phone: 1-518-348-6995
Fax: 1-518-348-6966
Email: shulseapple@alphageoscience.co

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Project Information

Project Name: Huntington Ready Mix
Project Location: Speonk, NY
Project # 20116
(Use Project name as Project #) ☐
Project Manager: Scott M Hulseapple
ALPHAQuote #:

Turn-Around Time

Standard ☐ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

Sample Filtration

☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	ALK-Bicarb/Carb	Sulfide 4500	NO3/NO2/NH3/TKN	Total Nitrogen	TPO4-4500	TDS-2540/F-300/SO4	BR-300/CL	SUB-Iodide	Sample Specific Comments	Total Bottle
50269 -01	MW-1S	8/28/23	1652	Water	NS	X	X	X	X	X	X	X	X		6
-02	MW-2S	↓	1534	Water	NS	X	X	X	X	X	X	X	X		6
-03	MW-3S	↓	1438	Water	NS	X	X	X	X	X	X	X	X		6
04	MW-4D	8/29/23	1016	Water		X	X	X	X	X	X	X	X		6
-05	MW-5S		0910	Water	NS	X	X	X	X	X	X	X	X		6
-06	MW-6D	8/28/23	1751	Water	SH	X	X	X	X	X	X	X	X		6
-07	MW-7S	↓	1635	Water	SH	X	X	X	X	X	X	X	X		6
-08	MW-8S	↓	1430	Water	SH	X	X	X	X	X	X	X	X		6
-09	DUP	↓	—	Water	—	X	X	X	X	X	X	X	X		6

ALPHA ANALYTICAL — Westborough, MA 01581, 8 Walkup Dr., TEL: 508-898-9220, FAX: 508-898-9193 | Mansfield, MA 02048, 320 Forbes Blvd, TEL: 508-822-9300, FAX: 508-822-3288

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 8/30/23

ALPHA Job #: L2350269

Client Information

Client: Alpha Geoscience
Address: 679 Plank Rd
Clifton Park,NY 12065
Phone: 1-518-348-6995
Fax: 1-518-348-6966
Email: shulseapple@alphageoscience.co

Project Information

Project Name: Huntington Ready Mix
Project Location: Speonk, NY
Project # 20116
(Use Project name as Project #) ☐
Project Manager: Scott M Hulseapple
ALPHAQuote #:

Turn-Around Time

Standard ☒ Due Date:
Rush (only if pre approved) ☐ # of Days:

Deliverables

☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other NYSDEC EQuIS

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☒ Same as Client Info
PO # 20116

Disposal Site Information

Please identify below location of applicable disposal facilities.
Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

These samples have been previously analyzed by Alpha ☒

Other project specific requirements/comments:

Please specify Metals or TAL.

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TAL Metals	Dissolved TAL Metals	NYTCL 8260	NYTCL 8270	NYTCL 8081	NYTCL 8082			Sample Specific Comments	Total Bottle
50269-01	MW-1S	8/28/23	1652	Water	NS	X	X	X	X	X	X				11
-02	MW-2S	8/28/23	1534	Water	NS	X	X	X	X	X	X				11
-03	MW-3S	8/28/23	1438	Water	NS	X	X	X	X	X	X				11
-04	MW-4D	8/29/23	1016	Water		X	X	X	X	X	X				11
-05	MW-5S	8/29/23	0910	Water	NS	X	X	X	X	X	X				11
-06	MW-6D	8/28/23	1751	Water	SH	X	X	X	X	X	X				11
-07	MW-7S	8/28/23	1635	Water	SH	X	X	X	X	X	X				11
-08	MW-8S	8/28/23	1430	Water	SH	X	X	X	X	X	X				11
-09	DUP	8/28/23	—	Water	—	X	X	X	X	X	X				11
	Container Type					P	P	V	A	A	A				
	Preservative					C	C	B	A	A	A				

Preservative Code: A = None; B = HCl; C = HNO_3; D = H_2SO_4; E = NaOH; F = MeOH; G = $NaHSO_4$; H = $Na_2S_2O_3$; K/E = Zn Ac/NaOH; O = Other

Container Code: P = Plastic; A = Amber Glass; V = Vial; G = Glass; B = Bacteria Cup; C = Cube; O = Other; E = Encore; D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	8/29/23 13		8/29/23 1630
TAL	8/29/23 1630		8/30/23 0850

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.

Form No: 01-25 (rev. 30-Sept-2013)

ALPHA ANALYTICAL

Westborough, MA 01581
8 Walkup Dr.
TEL: 508-898-9220
FAX: 508-898-9193

Mansfield, MA 02048
320 Forbes Blvd
TEL: 508-822-9300
FAX: 508-822-3288

NEW YORK CHAIN OF CUSTODY

Service Centers
Mahwah, NJ 07430: 35 Whitney Rd, Suite 5
Albany, NY 12205: 14 Walker Way
Tonawanda, NY 14150: 275 Cooper Ave, Suite 105

Page 1 of 1

Date Rec'd in Lab: 8/30/23

ALPHA Job #: L2350269

Client Information

Client: Alpha Geoscience
Address: 679 Plank Rd
Clifton Park,NY 12065
Phone: 1-518-348-6995
Fax: 1-518-348-6966
Email: shulseapple@alphageoscience.co

Project Information

Project Name: Huntington Ready Mix
Project Location: Speonk, NY
Project # 20116
(Use Project name as Project #) ☐
Project Manager: Scott M Hulseapple
ALPHAQuote #:

Turn-Around Time

Standard ☐ Due Date:
Rush (only if pre approved) ☐ # of Days:

These samples have been previously analyzed by Alpha ☐

Other project specific requirements/comments:

Please specify Metals or TAL.

Deliverables

☐ ASP-A ☒ ASP-B
☐ EQuIS (1 File) ☐ EQuIS (4 File)
☐ Other

Regulatory Requirement

☐ NY TOGS ☐ NY Part 375
☐ AWQ Standards ☐ NY CP-51
☐ NY Restricted Use ☐ Other
☐ NY Unrestricted Use
☐ NYC Sewer Discharge

Billing Information

☐ Same as Client Info
PO #

Disposal Site Information

Please identify below location of applicable disposal facilities.

Disposal Facility:
☐ NJ ☐ NY
☐ Other: NA

ANALYSIS

Sample Filtration
☐ Done
☐ Lab to do
Preservation
☐ Lab to do
(Please Specify below)

ALPHA Lab ID (Lab Use Only)	Sample ID	Collection Date	Collection Time	Sample Matrix	Sampler's Initials	TAL Metals	Dissolved TAL Metals	NYTCL 8260	NYTCL 8270	NYTCL 8081	NYTCL 8082	Sample Specific Comments	Total Bottle
50269-08	MS > MW-8S	8/28/23	1430	Water	SH	X	X	X	X	X	X	MS/MSD = MW-8S	11
-08	MSD	8/28/23	1430	Water	SH	X	X	X	X	X	X		11
11	Equipment Blank	8/29/23	0815	Water	SH	X	X	X	X	X	X	Could only fill one Vial	11
12	Trip Blank	—	—	Water	—			X					2

Container Type: P P V A A A
Preservative: C C B A A A

Preservative Code:
A = None
B = HCl
C = HNO_3
D = H_2SO_4
E = NaOH
F = MeOH
G = $NaHSO_4$
H = $Na_2S_2O_3$
K/E = Zn Ac/NaOH
O = Other

Container Code
P = Plastic
A = Amber Glass
V = Vial
G = Glass
B = Bacteria Cup
C = Cube
O = Other
E = Encore
D = BOD Bottle

Westboro: Certification No: MA935
Mansfield: Certification No: MA015

Relinquished By:	Date/Time	Received By:	Date/Time
	8/29/23 1630		8/29/23 1630
	8/29/23 1630		8/30/23 0050

Please print clearly, legibly and completely. Samples can not be logged in and turnaround time clock will not start until any ambiguities are resolved. BY EXECUTING THIS COC, THE CLIENT HAS READ AND AGREES TO BE BOUND BY ALPHA'S TERMS & CONDITIONS.

Form No: 01-25 (rev. 30-Sept-2013)

Subcontract Chain of Custody

Pace Analytical
1638 Roseytown Rd, Suite 2
Greensburg, PA 15601

Alpha Job Number
L2350269

Client Information

Client: Alpha Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Phone: 716.427.5229
Email: mdeyo@alphalab.com

Project Information

Project Location: NY
Project Manager: Melissa Deyo

Turnaround & Deliverables Information

Due Date: 09/13/23
Deliverables:

Regulatory Requirements/Report Limits

State/Federal Program:

Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2350269

Report to include Method Blank, LCS/LCSD:

Additional Comments: Send all results/reports to subreports@alphalab.com ; report to the MDL

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
	MW-1S	08-28-23 16:52	WATER	Iodide	
	MW-2S	08-28-23 15:34	WATER	Iodide	
	MW-3S	08-28-23 14:38	WATER	Iodide	
	MW-4D	08-29-23 10:16	WATER	Iodide	
	MW-5S	08-29-23 09:10	WATER	Iodide	
	MW-6D	08-28-23 17:51	WATER	Iodide	
	MW-7S	08-28-23 16:35	WATER	Iodide	
	MW-8S	08-28-23 14:30	WATER	Iodide	
	DUP	08-28-23 00:00	WATER	Iodide	

	Relinquished By:	Date/Time:	Received By:	Date/Time:
		8/30/23		
Form No: AL_subcoc				

Organics

GC/MS 8260
Analysis

Volatiles QC Summary

Surrogate Recovery Summary
Form 2
Volatiles

Client: Alpha Geoscience
Project Name: HUNTINGTON READY MIX

Lab Number: L2350269
Project Number: 20116
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	SMC1 DCA	SMC2 TOL	SMC3 BFB	SMC4 DBFM	TOT OUT
MW-1S (L2350269-01)	99	104	84	113	0
MW-2S (L2350269-02)	99	103	85	114	0
MW-3S (L2350269-03)	100	102	84	115	0
MW-4D (L2350269-04)	116	100	96	113	0
MW-5S (L2350269-05)	99	102	81	114	0
MW-6D (L2350269-06)	101	101	83	116	0
MW-7S (L2350269-07)	115	100	95	111	0
MW-8S (L2350269-08)	117	101	97	112	0
DUP (L2350269-09)	116	99	96	110	0
EQUIPMENT BLANK (L2350269-11)	118	100	96	112	0
TRIP BLANK (L2350269-12)	122	101	97	112	0
WG1824710-3LCS	107	102	97	104	0
WG1824710-4LCSD	105	101	98	103	0
WG1824710-5BLANK	107	101	95	108	0
MW-8SMS	119	104	99	104	0
MW-8SMSD	117	103	98	101	0
WG1825752-3LCS	95	107	81	103	0
WG1825752-4LCSD	95	104	83	103	0
WG1825752-5BLANK	97	101	81	112	0

QC LIMITS

(70-130) DCA = 1,2-DICHLOROETHANE-D4
(70-130) TOL = TOLUENE-D8
(70-130) BFB = 4-BROMOFLUOROBENZENE
(70-130) DBFM = DIBROMOFLUOROMETHANE

*** Values outside of QC limits**

FORM II NYTCL-8260-R2

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1824710-3	**Analysis Date** : 09/07/23 07:28	**File ID** : V05230907A01
LCSD Sample ID	: WG1824710-4	**Analysis Date** : 09/07/23 07:53	**File ID** : V05230907A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	10	10	100	10	10	100	0	70-130	20
1,1-Dichloroethane	10	10	100	10	10	100	0	70-130	20
Chloroform	10	11	110	10	11	110	0	70-130	20
Carbon tetrachloride	10	10	100	10	10	100	0	63-132	20
1,2-Dichloropropane	10	10	100	10	10	100	0	70-130	20
Dibromochloromethane	10	10	100	10	10	100	0	63-130	20
1,1,2-Trichloroethane	10	10	100	10	10	100	0	70-130	20
Tetrachloroethene	10	11	110	10	11	110	0	70-130	20
Chlorobenzene	10	11	110	10	11	110	0	75-130	20
Trichlorofluoromethane	10	10	100	10	10	100	0	62-150	20
1,2-Dichloroethane	10	10	100	10	10	100	0	70-130	20
1,1,1-Trichloroethane	10	11	110	10	11	110	0	67-130	20
Bromodichloromethane	10	10	100	10	10	100	0	67-130	20
trans-1,3-Dichloropropene	10	10	100	10	10	100	0	70-130	20
cis-1,3-Dichloropropene	10	9.9	99	10	10	100	1	70-130	20
Bromoform	10	8.9	89	10	9.1	91	2	54-136	20
1,1,2,2-Tetrachloroethane	10	9.8	98	10	10	100	2	67-130	20
Benzene	10	10	100	10	10	100	0	70-130	20
Toluene	10	10	100	10	10	100	0	70-130	20
Ethylbenzene	10	11	110	10	10	100	10	70-130	20
Chloromethane	10	10	100	10	10	100	0	64-130	20
Bromomethane	10	10	100	10	9.8	98	2	39-139	20
Vinyl chloride	10	11	110	10	10	100	10	55-140	20
Chloroethane	10	12	120	10	12	120	0	55-138	20
1,1-Dichloroethene	10	10	100	10	10	100	0	61-145	20
trans-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1824710-3	**Analysis Date** : 09/07/23 07:28	**File ID** : V05230907A01
LCSD Sample ID	: WG1824710-4	**Analysis Date** : 09/07/23 07:53	**File ID** : V05230907A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Trichloroethene	10	9.5	95	10	9.6	96	1	70-130	20
1,2-Dichlorobenzene	10	11	110	10	11	110	0	70-130	20
1,3-Dichlorobenzene	10	11	110	10	11	110	0	70-130	20
1,4-Dichlorobenzene	10	11	110	10	11	110	0	70-130	20
Methyl tert butyl ether	10	8.1	81	10	8.3	83	2	63-130	20
p/m-Xylene	20	22	110	20	21	105	5	70-130	20
o-Xylene	20	22	110	20	21	105	5	70-130	20
cis-1,2-Dichloroethene	10	11	110	10	11	110	0	70-130	20
Styrene	20	22	110	20	21	105	5	70-130	20
Dichlorodifluoromethane	10	10	100	10	9.7	97	3	36-147	20
Acetone	10	9.1	91	10	9.4	94	3	58-148	20
Carbon disulfide	10	11	110	10	10	100	10	51-130	20
2-Butanone	10	8.7	87	10	8.7	87	0	63-138	20
4-Methyl-2-pentanone	10	8.3	83	10	8.2	82	1	59-130	20
2-Hexanone	10	7.4	74	10	7.7	77	4	57-130	20
Bromochloromethane	10	11	110	10	11	110	0	70-130	20
1,2-Dibromoethane	10	10	100	10	10	100	0	70-130	20
1,2-Dibromo-3-chloropropane	10	9.2	92	10	9.4	94	2	41-144	20
Isopropylbenzene	10	11	110	10	10	100	10	70-130	20
1,2,3-Trichlorobenzene	10	9.5	95	10	9.5	95	0	70-130	20
1,2,4-Trichlorobenzene	10	9.4	94	10	9.4	94	0	70-130	20
Methyl Acetate	10	9.6	96	10	9.7	97	1	70-130	20
Cyclohexane	10	10	100	10	10	100	0	70-130	20
1,4-Dioxane	500	520	104	500	540	108	4	56-162	20
Freon-113	10	10	100	10	10	100	0	70-130	20
Methyl cyclohexane	10	9.8	98	10	9.6	96	2	70-130	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client : Alpha Geoscience **Lab Number** : L2350269
Project Name : HUNTINGTON READY MIX **Project Number** : 20116
Matrix (Level) : WATER (LOW)
LCS Sample ID : WG1825752-3 **Analysis Date** : 09/08/23 08:56 **File ID** : VE230908A01
LCSD Sample ID : WG1825752-4 **Analysis Date** : 09/08/23 09:21 **File ID** : VE230908A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	10	11	110	10	10	100	10	70-130	20
1,1-Dichloroethane	10	10	100	10	9.6	96	4	70-130	20
Chloroform	10	11	110	10	10	100	10	70-130	20
Carbon tetrachloride	10	11	110	10	11	110	0	63-132	20
1,2-Dichloropropane	10	10	100	10	9.5	95	5	70-130	20
Dibromochloromethane	10	11	110	10	11	110	0	63-130	20
1,1,2-Trichloroethane	10	12	120	10	12	120	0	70-130	20
Tetrachloroethene	10	12	120	10	12	120	0	70-130	20
Chlorobenzene	10	12	120	10	11	110	9	75-130	20
Trichlorofluoromethane	10	9.1	91	10	8.7	87	4	62-150	20
1,2-Dichloroethane	10	9.1	91	10	8.7	87	4	70-130	20
1,1,1-Trichloroethane	10	10	100	10	10	100	0	67-130	20
Bromodichloromethane	10	10	100	10	10	100	0	67-130	20
trans-1,3-Dichloropropene	10	10	100	10	10	100	0	70-130	20
cis-1,3-Dichloropropene	10	10	100	10	9.9	99	1	70-130	20
Bromoform	10	10	100	10	11	110	10	54-136	20
1,1,2,2-Tetrachloroethane	10	11	110	10	11	110	0	67-130	20
Benzene	10	11	110	10	10	100	10	70-130	20
Toluene	10	12	120	10	11	110	9	70-130	20
Ethylbenzene	10	11	110	10	10	100	10	70-130	20
Chloromethane	10	12	120	10	12	120	0	64-130	20
Bromomethane	10	5.9	59	10	5.5	55	7	39-139	20
Vinyl chloride	10	8.8	88	10	8.2	82	7	55-140	20
Chloroethane	10	8.1	81	10	7.4	74	9	55-138	20
1,1-Dichloroethene	10	11	110	10	10	100	10	61-145	20
trans-1,2-Dichloroethene	10	11	110	10	10	100	10	70-130	20

Laboratory Control Sample Summary
Form 3
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1825752-3	**Analysis Date** : 09/08/23 08:56	**File ID** : VE230908A01
LCSD Sample ID	: WG1825752-4	**Analysis Date** : 09/08/23 09:21	**File ID** : VE230908A02

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Trichloroethene	10	11	110	10	10	100	10	70-130	20
1,2-Dichlorobenzene	10	10	100	10	10	100	0	70-130	20
1,3-Dichlorobenzene	10	10	100	10	11	110	10	70-130	20
1,4-Dichlorobenzene	10	11	110	10	11	110	0	70-130	20
Methyl tert butyl ether	10	9.3	93	10	9.4	94	1	63-130	20
p/m-Xylene	20	22	110	20	21	105	5	70-130	20
o-Xylene	20	21	105	20	21	105	0	70-130	20
cis-1,2-Dichloroethene	10	10	100	10	10	100	0	70-130	20
Styrene	20	22	110	20	21	105	5	70-130	20
Dichlorodifluoromethane	10	10	100	10	9.7	97	3	36-147	20
Acetone	10	13	130	10	15	150 Q	14	58-148	20
Carbon disulfide	10	12	120	10	11	110	9	51-130	20
2-Butanone	10	12	120	10	13	130	8	63-138	20
4-Methyl-2-pentanone	10	9.7	97	10	10	100	3	59-130	20
2-Hexanone	10	11	110	10	12	120	9	57-130	20
Bromochloromethane	10	12	120	10	11	110	9	70-130	20
1,2-Dibromoethane	10	11	110	10	11	110	0	70-130	20
1,2-Dibromo-3-chloropropane	10	11	110	10	12	120	9	41-144	20
Isopropylbenzene	10	9.2	92	10	9.0	90	2	70-130	20
1,2,3-Trichlorobenzene	10	9.7	97	10	10	100	3	70-130	20
1,2,4-Trichlorobenzene	10	9.6	96	10	10	100	4	70-130	20
Methyl Acetate	10	13	130	10	14	140 Q	7	70-130	20
Cyclohexane	10	10	100	10	9.9	99	1	70-130	20
1,4-Dioxane	500	830	166 Q	500	810	162	2	56-162	20
Freon-113	10	12	120	10	11	110	9	70-130	20
Methyl cyclohexane	10	11	110	10	9.9	99	11	70-130	20

Matrix Spike Sample Summary
Form 3
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2350269-08	**Analysis Date**	: 09/07/23 14:41
Matrix Spike	: WG1824710-6	**MS Analysis Date**	: 09/07/23 18:31
Matrix Spike Dup	: WG1824710-7	**MSD Analysis Date**	: 09/07/23 18:57

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Methylene chloride	ND	10	11	110	10	11	110	0	70-130	20
1,1-Dichloroethane	ND	10	12	120	10	12	120	0	70-130	20
Chloroform	ND	10	12	120	10	12	120	0	70-130	20
Carbon tetrachloride	ND	10	12	120	10	12	120	0	63-132	20
1,2-Dichloropropane	ND	10	12	120	10	12	120	0	70-130	20
Dibromochloromethane	ND	10	12	120	10	13	130	8	63-130	20
1,1,2-Trichloroethane	ND	10	13	130	10	13	130	0	70-130	20
Tetrachloroethene	ND	10	12	120	10	12	120	0	70-130	20
Chlorobenzene	ND	10	12	120	10	12	120	0	75-130	20
Trichlorofluoromethane	ND	10	14	140	10	14	140	0	62-150	20
1,2-Dichloroethane	ND	10	12	120	10	12	120	0	70-130	20
1,1,1-Trichloroethane	ND	10	12	120	10	12	120	0	67-130	20
Bromodichloromethane	ND	10	12	120	10	12	120	0	67-130	20
trans-1,3-Dichloropropene	ND	10	12	120	10	12	120	0	70-130	20
cis-1,3-Dichloropropene	ND	10	10	100	10	11	110	10	70-130	20
Bromoform	ND	10	11	110	10	11	110	0	54-136	20
1,1,2,2-Tetrachloroethane	ND	10	14	140 Q	10	14	140 Q	0	67-130	20
Benzene	ND	10	12	120	10	12	120	0	70-130	20
Toluene	ND	10	12	120	10	12	120	0	70-130	20
Ethylbenzene	ND	10	12	120	10	12	120	0	70-130	20
Chloromethane	ND	10	12	120	10	13	130	8	64-130	20
Bromomethane	ND	10	9.3	93	10	10	100	7	39-139	20

Matrix Spike Sample Summary
Form 3
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2350269-08	**Analysis Date**	: 09/07/23 14:41
Matrix Spike	: WG1824710-6	**MS Analysis Date**	: 09/07/23 18:31
Matrix Spike Dup	: WG1824710-7	**MSD Analysis Date**	: 09/07/23 18:57

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R		Spike Added (ug/l)	Spike Conc. (ug/l)	%R		RPD	Recovery Limits	RPD Limit
Vinyl chloride	ND	10	14	140		10	14	140		0	55-140	20
Chloroethane	ND	10	13	130		10	13	130		0	55-138	20
1,1-Dichloroethene	ND	10	13	130		10	14	140		7	61-145	20
trans-1,2-Dichloroethene	ND	10	11	110		10	11	110		0	70-130	20
Trichloroethene	ND	10	11	110		10	11	110		0	70-130	20
1,2-Dichlorobenzene	ND	10	12	120		10	12	120		0	70-130	20
1,3-Dichlorobenzene	ND	10	12	120		10	12	120		0	70-130	20
1,4-Dichlorobenzene	ND	10	12	120		10	12	120		0	70-130	20
Methyl tert butyl ether	ND	10	11	110		10	11	110		0	63-130	20
p/m-Xylene	ND	20	24	120		20	24	120		0	70-130	20
o-Xylene	ND	20	24	120		20	24	120		0	70-130	20
cis-1,2-Dichloroethene	ND	10	11	110		10	12	120		9	70-130	20
Styrene	ND	20	24	120		20	24	120		0	70-130	20
Dichlorodifluoromethane	ND	10	12	120		10	12	120		0	36-147	20
Acetone	ND	10	16	160	Q	10	17	170	Q	6	58-148	20
Carbon disulfide	ND	10	13	130		10	14	140	Q	7	51-130	20
2-Butanone	ND	10	14	140	Q	10	14	140	Q	0	63-138	20
4-Methyl-2-pentanone	ND	10	15	150	Q	10	15	150	Q	0	59-130	20
2-Hexanone	ND	10	14	140	Q	10	14	140	Q	0	57-130	20
Bromochloromethane	ND	10	12	120		10	12	120		0	70-130	20
1,2-Dibromoethane	ND	10	12	120		10	13	130		8	70-130	20
1,2-Dibromo-3-chloropropane	ND	10	14	140		10	13	130		7	41-144	20

Matrix Spike Sample Summary
Form 3
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2350269-08	**Analysis Date**	: 09/07/23 14:41
Matrix Spike	: WG1824710-6	**MS Analysis Date**	: 09/07/23 18:31
Matrix Spike Dup	: WG1824710-7	**MSD Analysis Date**	: 09/07/23 18:57

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Isopropylbenzene	ND	10	12	120	10	12	120	0	70-130	20
1,2,3-Trichlorobenzene	ND	10	11	110	10	11	110	0	70-130	20
1,2,4-Trichlorobenzene	ND	10	10	100	10	10	100	0	70-130	20
Methyl Acetate	ND	10	13	130	10	13	130	0	70-130	20
Cyclohexane	ND	10	12	120	10	12	120	0	70-130	20
1,4-Dioxane	ND	500	980	196 Q	500	980	196 Q	0	56-162	20
Freon-113	ND	10	13	130	10	14	140 Q	7	70-130	20
Methyl cyclohexane	ND	10	11	110	10	11	110	0	70-130	20

Method Blank Summary
Form 4
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: WG1824710-5	**Lab File ID**	: V05230907A05
Instrument ID	: VOA105		
Matrix	: WATER	**Analysis Date**	: 09/07/23 09:09

Client Sample No.	Lab Sample ID	Analysis Date
WG1824710-3LCS	WG1824710-3	09/07/23 07:28
WG1824710-4LCSD	WG1824710-4	09/07/23 07:53
MW-4D	L2350269-04	09/07/23 13:50
MW-7S	L2350269-07	09/07/23 14:15
MW-8S	L2350269-08	09/07/23 14:41
DUP	L2350269-09	09/07/23 15:07
EQUIPMENT BLANK	L2350269-11	09/07/23 15:32
TRIP BLANK	L2350269-12	09/07/23 15:58
MW-8SMS	WG1824710-6	09/07/23 18:31
MW-8SMSD	WG1824710-7	09/07/23 18:57

Method Blank Summary
Form 4
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: WG1825752-5	**Lab File ID**	: VE230908A05
Instrument ID	: ELAINE		
Matrix	: WATER	**Analysis Date**	: 09/08/23 10:36

Client Sample No.	Lab Sample ID	Analysis Date
WG1825752-3LCS	WG1825752-3	09/08/23 08:56
WG1825752-4LCSD	WG1825752-4	09/08/23 09:21
MW-1S	L2350269-01	09/08/23 11:27
MW-2S	L2350269-02	09/08/23 11:52
MW-3S	L2350269-03	09/08/23 12:18
MW-5S	L2350269-05	09/08/23 12:43
MW-6D	L2350269-06	09/08/23 13:09

Instrument Performance Check (Tune) Summary
Form 5
Volatiles
Bromofluorobenzene (BFB)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ELAINE	**Analysis Date**	: 07/25/23 20:05
Tune Standard	: WG1807846-1	**Tune File ID**	: VE230725NBF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	21.7
75	30.0 - 80.0% of mass 95	44.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.5
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0% of mass 95	78.9
175	5.0 - 9.0% of mass 174	5.8 (7.4)1
176	Greater than 95.0% but less than 101% of mass	76.5 (97)1
177	5.0 - 9.0% of mass 176	5 (6.5)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.19PPB	R1722186-1	VE230725N04	07/25/23 21:39
STD0.5PPB	R1722186-2	VE230725N06	07/25/23 22:27
STD2PPB	R1722186-4	VE230725N08	07/25/23 23:16
STD10PPB	R1722186-3	VE230725N10	07/26/23 00:04
STD30PPB	R1722186-6	VE230725N11	07/26/23 00:28
STD80PPB	R1722186-5	VE230725N12	07/26/23 00:53
STD120PPB	R1722186-7	VE230725N13	07/26/23 01:17
STD200PPB	R1722186-8	VE230725N14	07/26/23 01:41
Correlation Data Summary	R1722186-9	VE230725N19	07/26/23 03:43
ICV Quant Report	R1722186-9	VE230725N19	07/26/23 03:43

Instrument Performance Check (Tune) Summary
Form 5
Volatiles
Bromofluorobenzene (BFB)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ELAINE	**Analysis Date**	: 09/08/23 08:42
Tune Standard	: WG1825752-1	**Tune File ID**	: VE230908ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	28.1
75	30.0 - 80.0% of mass 95	51.6
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.9
173	Less than 2.0% of mass 174	0 (0)1
174	Greater than 50.0% of mass 95	86.9
175	5.0 - 9.0% of mass 174	6.7 (7.7)1
176	Greater than 95.0% but less than 101% of mass	85.3 (98.2)1
177	5.0 - 9.0% of mass 176	5 (5.9)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1825752-2CCAL	WG1825752-2	VE230908A01	09/08/23 08:56
WG1825752-3LCS	WG1825752-3	VE230908A01	09/08/23 08:56
WG1825752-4LCSD	WG1825752-4	VE230908A02	09/08/23 09:21
WG1825752-5BLANK	WG1825752-5	VE230908A05	09/08/23 10:36
MW-1S	L2350269-01	VE230908A07	09/08/23 11:27
MW-2S	L2350269-02	VE230908A08	09/08/23 11:52
MW-3S	L2350269-03	VE230908A09	09/08/23 12:18
MW-5S	L2350269-05	VE230908A10	09/08/23 12:43
MW-6D	L2350269-06	VE230908A11	09/08/23 13:09

Instrument Performance Check (Tune) Summary
Form 5
Volatiles
Bromofluorobenzene (BFB)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: VOA105	**Analysis Date**	: 08/08/23 19:20
Tune Standard	: WG1813882-1	**Tune File ID**	: V05230808NBFB4_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	19.8
75	30.0 - 80.0% of mass 95	48.9
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.3
173	Less than 2.0% of mass 174	0.9 (1)1
174	Greater than 50.0% of mass 95	83.8
175	5.0 - 9.0% of mass 174	6.1 (7.3)1
176	Greater than 95.0% but less than 101% of mass	80.8 (96.4)1
177	5.0 - 9.0% of mass 176	5.5 (6.8)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
STD0.19PPB	R1728015-1	V05230808N04	08/08/23 20:56
STD0.5PPB	R1728015-3	V05230808N06	08/08/23 21:47
STD2.0PPB	R1728015-2	V05230808N08	08/08/23 22:38
STD10PPB	R1728015-6	V05230808N10	08/08/23 23:29
STD30PPB	R1728015-7	V05230808N11	08/08/23 23:54
STD80PPB	R1728015-5	V05230808N12	08/09/23 00:19
STD120PPB	R1728015-4	V05230808N13	08/09/23 00:45
STD200PPB	R1728015-9	V05230808N14	08/09/23 01:10
Correlation Data Summary	R1728015-8	V05230808N20	08/09/23 03:42
ICV Quant Report	R1728015-8	V05230808N20	08/09/23 03:42

Instrument Performance Check (Tune) Summary
Form 5
Volatiles
Bromofluorobenzene (BFB)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: VOA105	**Analysis Date**	: 09/07/23 07:14
Tune Standard	: WG1824710-1	**Tune File ID**	: V05230907ABF1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
50	15.0 - 40.0% of mass 95	20.5
75	30.0 - 80.0% of mass 95	50.5
95	Base Peak, 100% relative abundance	100
96	5.0 - 9.0% of mass 95	6.6
173	Less than 2.0% of mass 174	0.8 (.9)1
174	Greater than 50.0% of mass 95	86.9
175	5.0 - 9.0% of mass 174	6.6 (7.6)1
176	Greater than 95.0% but less than 101% of mass	83.6 (96.2)1
177	5.0 - 9.0% of mass 176	5.4 (6.5)2

1-Value is % of mass 174 2-Value is % of mass 176

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1824710-2CCAL	WG1824710-2	V05230907A01	09/07/23 07:28
WG1824710-3LCS	WG1824710-3	V05230907A01	09/07/23 07:28
WG1824710-4LCSD	WG1824710-4	V05230907A02	09/07/23 07:53
WG1824710-5BLANK	WG1824710-5	V05230907A05	09/07/23 09:09
MW-4D	L2350269-04	V05230907A16	09/07/23 13:50
MW-7S	L2350269-07	V05230907A17	09/07/23 14:15
MW-8S	L2350269-08	V05230907A18	09/07/23 14:41
DUP	L2350269-09	V05230907A19	09/07/23 15:07
EQUIPMENT BLANK	L2350269-11	V05230907A20	09/07/23 15:32
TRIP BLANK	L2350269-12	V05230907A21	09/07/23 15:58
WG1824710-6MS	WG1824710-6	V05230907A27	09/07/23 18:31
WG1824710-7MSD	WG1824710-7	V05230907A28	09/07/23 18:57

Internal Standard Area and RT Summary
Form 8a
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: VOA105	**Analysis Date**	: 09/07/23 07:28:00
Sample No	: WG1824710-2	**Lab File ID**	: V05230907A01

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1824710-2	255314	5.74	234811	9.25	143322	12.01
Upper Limit	510628	6.24	469622	9.75	286644	12.51
Lower Limit	127657	5.24	117406	8.75	71661	11.51
Sample ID						
WG1824710-3 LCS	255314	5.74	234811	9.25	143322	12.01
WG1824710-4 LCSD	255064	5.75	237887	9.25	143319	12.01
WG1824710-5 BLANK	228339	5.75	212380	9.26	128010	12.01
MW-4D	215452	5.75	201692	9.26	119078	12.01
MW-7S	217880	5.75	201960	9.26	120119	12.01
MW-8S	215427	5.75	202224	9.26	118204	12.01
DUP	215441	5.75	200480	9.26	117947	12.01
EQUIPMENT BLANK	215470	5.75	201226	9.26	118067	12.01
TRIP BLANK	219153	5.75	202643	9.26	118424	12.01
MW-8S MS	247970	5.75	229985	9.26	141847	12.01
MW-8S MSD	252165	5.75	233253	9.26	142909	12.01

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ELAINE	**Analysis Date**	: 09/08/23 08:56:00
Sample No	: WG1825752-2	**Lab File ID**	: VE230908A01

	Fluorobenzene (IS)		Chlorobenzene-d5		1,4-Dichlorobenzene-D4	
	Area	RT	Area	RT	Area	RT
WG1825752-2	137394	6.13	115233	9.70	72288	12.37
Upper Limit	274788	6.63	230466	10.20	144576	12.87
Lower Limit	68697	5.63	57617	9.20	36144	11.87
Sample ID						
WG1825752-3 LCS	137394	6.13	115233	9.70	72288	12.37
WG1825752-4 LCSD	138268	6.14	116868	9.70	71577	12.37
WG1825752-5 BLANK	124072	6.14	107824	9.70	62508	12.37
MW-1S	117765	6.14	102367	9.70	58973	12.37
MW-2S	118281	6.14	102413	9.70	57967	12.37
MW-3S	115880	6.14	101711	9.70	57142	12.37
MW-5S	115804	6.14	99854	9.70	57770	12.37
MW-6D	114289	6.14	101911	9.70	56736	12.37

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Date Created: 03/15/23
Created By: Jason Hebert
File: PM14094-1
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Volatile Organics - EPA 8260D (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	3	0.678	ug/l	70-130	20	70-130	20	20			
1,1-Dichloroethane	75-34-3	0.75	0.21	ug/l	70-130	20	70-130	20	20			
Chloroform	67-66-3	0.75	0.222	ug/l	70-130	20	70-130	20	20			
Carbon tetrachloride	56-23-5	0.5	0.134	ug/l	63-132	20	63-132	20	20			
1,2-Dichloropropane	78-87-5	1.75	0.137	ug/l	70-130	20	70-130	20	20			
Dibromochloromethane	124-48-1	0.5	0.149	ug/l	63-130	20	63-130	20	20			
1,1,2-Trichloroethane	79-00-5	0.75	0.144	ug/l	70-130	20	70-130	20	20			
Tetrachloroethene	127-18-4	0.5	0.181	ug/l	70-130	20	70-130	20	20			
Chlorobenzene	108-90-7	0.5	0.178	ug/l	75-130	25	75-130	25	25			
Trichlorofluoromethane	75-69-4	2.5	0.161	ug/l	62-150	20	62-150	20	20			
1,2-Dichloroethane	107-06-2	0.5	0.132	ug/l	70-130	20	70-130	20	20			
1,1,1-Trichloroethane	71-55-6	0.5	0.158	ug/l	67-130	20	67-130	20	20			
Bromodichloromethane	75-27-4	0.5	0.192	ug/l	67-130	20	67-130	20	20			
trans-1,3-Dichloropropene	10061-02-6	0.5	0.164	ug/l	70-130	20	70-130	20	20			
cis-1,3-Dichloropropene	10061-01-5	0.5	0.144	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropene, Total	542-75-6	0.5	0.144	ug/l				20	20			
1,1-Dichloropropene	563-58-6	2.5	0.24	ug/l	70-130	20	70-130	20	20			
Bromoform	75-25-2	2	0.248	ug/l	54-136	20	54-136	20	20			
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.167	ug/l	67-130	20	67-130	20	20			
Benzene	71-43-2	0.5	0.159	ug/l	70-130	25	70-130	25	25			
Toluene	108-88-3	0.75	0.203	ug/l	70-130	25	70-130	25	25			
Ethylbenzene	100-41-4	0.5	0.167	ug/l	70-130	20	70-130	20	20			
Chloromethane	74-87-3	2.5	0.2	ug/l	64-130	20	64-130	20	20			
Bromomethane	74-83-9	1	0.256	ug/l	39-139	20	39-139	20	20			
Vinyl chloride	75-01-4	1	0.0714	ug/l	55-140	20	55-140	20	20			
Chloroethane	75-00-3	1	0.134	ug/l	55-138	20	55-138	20	20			
1,1-Dichloroethene	75-35-4	0.5	0.169	ug/l	61-145	25	61-145	25	25			
trans-1,2-Dichloroethene	156-60-5	0.75	0.163	ug/l	70-130	20	70-130	20	20			
1,2-Dichloroethene (total)	540-59-0	0.5	0.163	ug/l				20	20			
Trichloroethene	79-01-6	0.5	0.175	ug/l	70-130	25	70-130	25	25			
1,2-Dichlorobenzene	95-50-1	2.5	0.184	ug/l	70-130	20	70-130	20	20			
1,3-Dichlorobenzene	541-73-1	2.5	0.186	ug/l	70-130	20	70-130	20	20			
1,4-Dichlorobenzene	106-46-7	2.5	0.187	ug/l	70-130	20	70-130	20	20			
Methyl tert butyl ether	1634-04-4	1	0.166	ug/l	63-130	20	63-130	20	20			
p/m-Xylene	179601-23-1	1	0.332	ug/l	70-130	20	70-130	20	20			
o-Xylene	95-47-6	1	0.392	ug/l	70-130	20	70-130	20	20			
Xylene (Total)	1330-20-7	1	0.33	ug/l				20	20			
cis-1,2-Dichloroethene	156-59-2	0.5	0.187	ug/l	70-130	20	70-130	20	20			
Dibromomethane	74-95-3	5	0.363	ug/l	70-130	20	70-130	20	20			
1,4-Dichlorobutane	110-56-5	5	0.464	ug/l	70-130	20	70-130	20	20			
1,2,3-Trichloropropane	96-18-4	5	0.176	ug/l	64-130	20	64-130	20	20			
Styrene	100-42-5	1	0.359	ug/l	70-130	20	70-130	20	20			

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. ***(Soil/Solids only)***
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Volatile Organics - EPA 8260D (WATER)

Holding Time: 14 days
Container/Sample Preservation: 3 - Vial HCl preserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dichlorodifluoromethane	75-71-8	5	0.244	ug/l	36-147	20	36-147	20	20			
Acetone	67-64-1	5	1.46	ug/l	58-148	20	58-148	20	20			
Carbon disulfide	75-15-0	5	0.299	ug/l	51-130	20	51-130	20	20			
2-Butanone	78-93-3	5	1.94	ug/l	63-138	20	63-138	20	20			
Vinyl acetate	108-05-4	5	0.311	ug/l	70-130	20	70-130	20	20			
4-Methyl-2-pentanone	108-10-1	5	0.416	ug/l	59-130	20	59-130	20	20			
2-Hexanone	591-78-6	5	0.515	ug/l	57-130	20	57-130	20	20			
Ethyl methacrylate	97-63-2	5	0.606	ug/l	70-130	20	70-130	20	20			
Acrylonitrile	107-13-1	5	0.43	ug/l	70-130	20	70-130	20	20			
Bromochloromethane	74-97-5	2.5	0.152	ug/l	70-130	20	70-130	20	20			
Tetrahydrofuran	109-99-9	5	0.525	ug/l	58-130	20	58-130	20	20			
2,2-Dichloropropane	594-20-7	2.5	0.204	ug/l	63-133	20	63-133	20	20			
1,2-Dibromoethane	106-93-4	2	0.193	ug/l	70-130	20	70-130	20	20			
1,3-Dichloropropane	142-28-9	2.5	0.212	ug/l	70-130	20	70-130	20	20			
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.164	ug/l	64-130	20	64-130	20	20			
Bromobenzene	108-86-1	2.5	0.152	ug/l	70-130	20	70-130	20	20			
n-Butylbenzene	104-51-8	0.5	0.192	ug/l	53-136	20	53-136	20	20			
sec-Butylbenzene	135-98-8	0.5	0.181	ug/l	70-130	20	70-130	20	20			
tert-Butylbenzene	98-06-6	2.5	0.196	ug/l	70-130	20	70-130	20	20			
o-Chlorotoluene	95-49-8	2.5	0.215	ug/l	70-130	20	70-130	20	20			
p-Chlorotoluene	106-43-4	2.5	0.185	ug/l	70-130	20	70-130	20	20			
1,2-Dibromo-3-chloropropane	96-12-8	2.5	0.353	ug/l	41-144	20	41-144	20	20			
Hexachlorobutadiene	87-68-3	0.5	0.217	ug/l	63-130	20	63-130	20	20			
Isopropylbenzene	98-82-8	0.5	0.187	ug/l	70-130	20	70-130	20	20			
p-Isopropyltoluene	99-87-6	0.5	0.188	ug/l	70-130	20	70-130	20	20			
Naphthalene	91-20-3	2.5	0.216	ug/l	70-130	20	70-130	20	20			
n-Propylbenzene	103-65-1	0.5	0.173	ug/l	69-130	20	69-130	20	20			
1,2,3-Trichlorobenzene	87-61-6	2.5	0.234	ug/l	70-130	20	70-130	20	20			
1,2,4-Trichlorobenzene	120-82-1	2.5	0.22	ug/l	70-130	20	70-130	20	20			
1,3,5-Trimethylbenzene	108-67-8	2.5	0.217	ug/l	64-130	20	64-130	20	20			
1,2,4-Trimethylbenzene	95-63-6	2.5	0.191	ug/l	70-130	20	70-130	20	20			
trans-1,4-Dichloro-2-butene	110-57-6	2.5	0.213	ug/l	70-130	20	70-130	20	20			
Ethyl ether	60-29-7	2.5	0.163	ug/l	59-134	20	59-134	20	20			
1,2-Dichloroethane-d4	*17060-07-0*									*70-130*		
Toluene-d8	*2037-26-5*									*70-130*		
4-Bromofluorobenzene	*460-00-4*									*70-130*		
Dibromofluoromethane	*1868-53-7*									*70-130*		

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. ***(Soil/Solids only)***
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 03/15/23
Created By: Jason Hebert
File: PM14095-1
Page: 1

VOCs - EPA 8260D/5035 High & Low (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - 1 Vial MeOH/2 Vial Water

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Methylene chloride	75-09-2	5	2.29	ug/kg	70-130	30	70-130	30	30			
1,1-Dichloroethane	75-34-3	1	0.145	ug/kg	70-130	30	70-130	30	30			
Chloroform	67-66-3	1.5	0.14	ug/kg	70-130	30	70-130	30	30			
Carbon tetrachloride	56-23-5	1	0.23	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloropropane	78-87-5	1	0.125	ug/kg	70-130	30	70-130	30	30			
Dibromochloromethane	124-48-1	1	0.14	ug/kg	70-130	30	70-130	30	30			
1,1,2-Trichloroethane	79-00-5	1	0.267	ug/kg	70-130	30	70-130	30	30			
Tetrachloroethene	127-18-4	0.5	0.196	ug/kg	70-130	30	70-130	30	30			
Chlorobenzene	108-90-7	0.5	0.127	ug/kg	70-130	30	70-130	30	30			
Trichlorofluoromethane	75-69-4	4	0.695	ug/kg	70-139	30	70-139	30	30			
1,2-Dichloroethane	107-06-2	1	0.257	ug/kg	70-130	30	70-130	30	30			
1,1,1-Trichloroethane	71-55-6	0.5	0.167	ug/kg	70-130	30	70-130	30	30			
Bromodichloromethane	75-27-4	0.5	0.109	ug/kg	70-130	30	70-130	30	30			
trans-1,3-Dichloropropene	10061-02-6	1	0.273	ug/kg	70-130	30	70-130	30	30			
cis-1,3-Dichloropropene	10061-01-5	0.5	0.158	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropene, Total	542-75-6	0.5	0.158	ug/kg				30	30			
1,1-Dichloropropene	563-58-6	0.5	0.159	ug/kg	70-130	30	70-130	30	30			
Bromoform	75-25-2	4	0.246	ug/kg	70-130	30	70-130	30	30			
1,1,2,2-Tetrachloroethane	79-34-5	0.5	0.166	ug/kg	70-130	30	70-130	30	30			
Benzene	71-43-2	0.5	0.166	ug/kg	70-130	30	70-130	30	30			
Toluene	108-88-3	1	0.543	ug/kg	70-130	30	70-130	30	30			
Ethylbenzene	100-41-4	1	0.141	ug/kg	70-130	30	70-130	30	30			
Chloromethane	74-87-3	4	0.932	ug/kg	52-130	30	52-130	30	30			
Bromomethane	74-83-9	2	0.581	ug/kg	57-147	30	57-147	30	30			
Vinyl chloride	75-01-4	1	0.335	ug/kg	67-130	30	67-130	30	30			
Chloroethane	75-00-3	2	0.452	ug/kg	50-151	30	50-151	30	30			
1,1-Dichloroethene	75-35-4	1	0.238	ug/kg	65-135	30	65-135	30	30			
trans-1,2-Dichloroethene	156-60-5	1.5	0.137	ug/kg	70-130	30	70-130	30	30			
Trichloroethene	79-01-6	0.5	0.137	ug/kg	70-130	30	70-130	30	30			
1,2-Dichlorobenzene	95-50-1	2	0.144	ug/kg	70-130	30	70-130	30	30			
1,3-Dichlorobenzene	541-73-1	2	0.148	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobenzene	106-46-7	2	0.171	ug/kg	70-130	30	70-130	30	30			
Methyl tert butyl ether	1634-04-4	2	0.201	ug/kg	66-130	30	66-130	30	30			
p/m-Xylene	179601-23-1	2	0.56	ug/kg	70-130	30	70-130	30	30			
o-Xylene	95-47-6	1	0.291	ug/kg	70-130	30	70-130	30	30			
Xylene (Total)	1330-20-7	1	0.291	ug/kg				30	30			
cis-1,2-Dichloroethene	156-59-2	1	0.175	ug/kg	70-130	30	70-130	30	30			
1,2-Dichloroethene (total)	540-59-0	1	0.137	ug/kg				30	30			
Dibromomethane	74-95-3	2	0.238	ug/kg	70-130	30	70-130	30	30			
1,4-Dichlorobutane	110-56-5	10	0.226	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichloropropane	96-18-4	2	0.127	ug/kg	68-130	30	68-130	30	30			
Styrene	100-42-5	1	0.196	ug/kg	70-130	30	70-130	30	30			

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

VOCs - EPA 8260D/5035 High & Low (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - 1 Vial MeOH/2 Vial Water

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dichlorodifluoromethane	75-71-8	10	0.915	ug/kg	30-146	30	30-146	30	30			
Acetone	67-64-1	25	10	ug/kg	54-140	30	54-140	30	30			
Carbon disulfide	75-15-0	10	4.55	ug/kg	59-130	30	59-130	30	30			
2-Butanone	78-93-3	10	2.22	ug/kg	70-130	30	70-130	30	30			
Vinyl acetate	108-05-4	10	2.15	ug/kg	70-130	30	70-130	30	30			
4-Methyl-2-pentanone	108-10-1	10	1.28	ug/kg	70-130	30	70-130	30	30			
2-Hexanone	591-78-6	10	1.18	ug/kg	70-130	30	70-130	30	30			
Ethyl methacrylate	97-63-2	10	1.58	ug/kg	70-130	30	70-130	30	30			
Acrylonitrile	107-13-1	4	1.15	ug/kg	70-130	30	70-130	30	30			
Bromochloromethane	74-97-5	2	0.205	ug/kg	70-130	30	70-130	30	30			
Tetrahydrofuran	109-99-9	4	1.59	ug/kg	66-130	30	66-130	30	30			
2,2-Dichloropropane	594-20-7	2	0.202	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromoethane	106-93-4	1	0.279	ug/kg	70-130	30	70-130	30	30			
1,3-Dichloropropane	142-28-9	2	0.167	ug/kg	69-130	30	69-130	30	30			
1,1,1,2-Tetrachloroethane	630-20-6	0.5	0.132	ug/kg	70-130	30	70-130	30	30			
Bromobenzene	108-86-1	2	0.145	ug/kg	70-130	30	70-130	30	30			
n-Butylbenzene	104-51-8	1	0.167	ug/kg	70-130	30	70-130	30	30			
sec-Butylbenzene	135-98-8	1	0.146	ug/kg	70-130	30	70-130	30	30			
tert-Butylbenzene	98-06-6	2	0.118	ug/kg	70-130	30	70-130	30	30			
o-Chlorotoluene	95-49-8	2	0.191	ug/kg	70-130	30	70-130	30	30			
p-Chlorotoluene	106-43-4	2	0.108	ug/kg	70-130	30	70-130	30	30			
1,2-Dibromo-3-chloropropane	96-12-8	3	0.998	ug/kg	68-130	30	68-130	30	30			
Hexachlorobutadiene	87-68-3	4	0.169	ug/kg	67-130	30	67-130	30	30			
Isopropylbenzene	98-82-8	1	0.109	ug/kg	70-130	30	70-130	30	30			
p-Isopropyltoluene	99-87-6	1	0.109	ug/kg	70-130	30	70-130	30	30			
Naphthalene	91-20-3	4	0.65	ug/kg	70-130	30	70-130	30	30			
n-Propylbenzene	103-65-1	1	0.171	ug/kg	70-130	30	70-130	30	30			
1,2,3-Trichlorobenzene	87-61-6	2	0.322	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trichlorobenzene	120-82-1	2	0.272	ug/kg	70-130	30	70-130	30	30			
1,3,5-Trimethylbenzene	108-67-8	2	0.193	ug/kg	70-130	30	70-130	30	30			
1,2,4-Trimethylbenzene	95-63-6	2	0.334	ug/kg	70-130	30	70-130	30	30			
trans-1,4-Dichloro-2-butene	110-57-6	5	1.42	ug/kg	70-130	30	70-130	30	30			
Ethyl ether	60-29-7	2	0.341	ug/kg	67-130	30	67-130	30	30			
1,2-Dichloroethane-d4	*17060-07-0*									*70-130*		
Toluene-d8	*2037-26-5*									*70-130*		
4-Bromofluorobenzene	*460-00-4*									*70-130*		
Dibromofluoromethane	*1868-53-7*									*70-130*		

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. ***(Soil/Solids only)***
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Volatiles Sample Data

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 11:27
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A07	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	0.21	0.50	0.18	J
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	0.28	0.50	0.16	J
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 11:27
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A07	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	1.9	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 11:27
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A07	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 11:52
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A08	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 11:52
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A08	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 11:52
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A08	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A09	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A09	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A09	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 13:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A16	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	1.4	2.5	0.70	J
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 13:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A16	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 13:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A16	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A10	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A10	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A10	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 13:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A11	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 13:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A11	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 13:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A11	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 14:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A17	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 14:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A17	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 14:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A17	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 14:41
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A18	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 14:41
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A18	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 14:41
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A18	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:07
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A19	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	0.24	0.50	0.16	J
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:07
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A19	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	3.4	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:07
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A19	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:32
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A20	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:32
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A20	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:32
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A20	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-12	**Date Collected**	: 08/29/23 00:00
Client ID	: TRIP BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:58
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A21	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-12	**Date Collected**	: 08/29/23 00:00
Client ID	: TRIP BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:58
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A21	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	1.8	5.0	1.5	J
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-12	**Date Collected**	: 08/29/23 00:00
Client ID	: TRIP BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:58
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: MJV
Lab File ID	: V05230907A21	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1824710-5	**Date Collected**	: NA
Client ID	: WG1824710-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/07/23 09:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: V05230907A05	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1824710-5	**Date Collected**	: NA
Client ID	: WG1824710-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/07/23 09:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: V05230907A05	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1824710-5	**Date Collected**	: NA
Client ID	: WG1824710-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/07/23 09:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: V05230907A05	**Instrument ID**	: VOA105
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1825752-5	**Date Collected**	: NA
Client ID	: WG1825752-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/08/23 10:36
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A05	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
75-09-2	Methylene chloride	ND	2.5	0.70	U
75-34-3	1,1-Dichloroethane	ND	2.5	0.70	U
67-66-3	Chloroform	ND	2.5	0.70	U
56-23-5	Carbon tetrachloride	ND	0.50	0.13	U
78-87-5	1,2-Dichloropropane	ND	1.0	0.14	U
124-48-1	Dibromochloromethane	ND	0.50	0.15	U
79-00-5	1,1,2-Trichloroethane	ND	1.5	0.50	U
127-18-4	Tetrachloroethene	ND	0.50	0.18	U
108-90-7	Chlorobenzene	ND	2.5	0.70	U
75-69-4	Trichlorofluoromethane	ND	2.5	0.70	U
107-06-2	1,2-Dichloroethane	ND	0.50	0.13	U
71-55-6	1,1,1-Trichloroethane	ND	2.5	0.70	U
75-27-4	Bromodichloromethane	ND	0.50	0.19	U
10061-02-6	trans-1,3-Dichloropropene	ND	0.50	0.16	U
10061-01-5	cis-1,3-Dichloropropene	ND	0.50	0.14	U
75-25-2	Bromoform	ND	2.0	0.65	U
79-34-5	1,1,2,2-Tetrachloroethane	ND	0.50	0.17	U
71-43-2	Benzene	ND	0.50	0.16	U
108-88-3	Toluene	ND	2.5	0.70	U
100-41-4	Ethylbenzene	ND	2.5	0.70	U
74-87-3	Chloromethane	ND	2.5	0.70	U
74-83-9	Bromomethane	ND	2.5	0.70	U
75-01-4	Vinyl chloride	ND	1.0	0.07	U
75-00-3	Chloroethane	ND	2.5	0.70	U
75-35-4	1,1-Dichloroethene	ND	0.50	0.17	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1825752-5	**Date Collected**	: NA
Client ID	: WG1825752-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/08/23 10:36
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A05	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
156-60-5	trans-1,2-Dichloroethene	ND	2.5	0.70	U
79-01-6	Trichloroethene	ND	0.50	0.18	U
95-50-1	1,2-Dichlorobenzene	ND	2.5	0.70	U
541-73-1	1,3-Dichlorobenzene	ND	2.5	0.70	U
106-46-7	1,4-Dichlorobenzene	ND	2.5	0.70	U
1634-04-4	Methyl tert butyl ether	ND	2.5	0.70	U
179601-23-1	p/m-Xylene	ND	2.5	0.70	U
95-47-6	o-Xylene	ND	2.5	0.70	U
156-59-2	cis-1,2-Dichloroethene	ND	2.5	0.70	U
100-42-5	Styrene	ND	2.5	0.70	U
75-71-8	Dichlorodifluoromethane	ND	5.0	1.0	U
67-64-1	Acetone	ND	5.0	1.5	U
75-15-0	Carbon disulfide	ND	5.0	1.0	U
78-93-3	2-Butanone	ND	5.0	1.9	U
108-10-1	4-Methyl-2-pentanone	ND	5.0	1.0	U
591-78-6	2-Hexanone	ND	5.0	1.0	U
74-97-5	Bromochloromethane	ND	2.5	0.70	U
106-93-4	1,2-Dibromoethane	ND	2.0	0.65	U
96-12-8	1,2-Dibromo-3-chloropropane	ND	2.5	0.70	U
98-82-8	Isopropylbenzene	ND	2.5	0.70	U
87-61-6	1,2,3-Trichlorobenzene	ND	2.5	0.70	U
120-82-1	1,2,4-Trichlorobenzene	ND	2.5	0.70	U
79-20-9	Methyl Acetate	ND	2.0	0.23	U
110-82-7	Cyclohexane	ND	10	0.27	U
123-91-1	1,4-Dioxane	ND	250	61.	U

Results Summary
Form 1
Volatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1825752-5	**Date Collected**	: NA
Client ID	: WG1825752-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/08/23 10:36
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,8260D	**Analyst**	: PID
Lab File ID	: VE230908A05	**Instrument ID**	: ELAINE
Sample Amount	: 10 ml	**GC Column**	: RTX-502.2
Level	: LOW	**%Solids**	: N/A
Extract Volume (MeOH)	: N/A	**Injection Volume**	: N/A

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
76-13-1	Freon-113	ND	2.5	0.70	U
108-87-2	Methyl cyclohexane	ND	10	0.40	U

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A16.D
Acq On : 7 Sep 2023 1:50 pm
Operator : VOA105:MJV
Sample : l2350269-04,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 08 04:33:45 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	215452	10.000	ug/L	0.00
Standard Area 1 = 255314			Recovery =	84.39%		
59) Chlorobenzene-d5	9.255	117	201692	10.000	ug/L	0.01
Standard Area 1 = 234811			Recovery =	85.90%		
79) 1,4-Dichlorobenzene-d4	12.008	152	119078	10.000	ug/L	0.00
Standard Area 1 = 143322			Recovery =	83.08%		
System Monitoring Compounds						
36) Dibromofluoromethane	4.961	113	76993	11.269	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	112.69%		
43) 1,2-Dichloroethane-d4	5.479	65	76984	11.610	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	116.10%		
60) Toluene-d8	7.416	98	235531	10.016	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.16%		
83) 4-Bromofluorobenzene	10.774	95	89061	9.556	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	95.56%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.361	85	91	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	2.075	94	210	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	2.779	76	354	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	0.000		0	N.D.		
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
19) Methyl acetate	0.000		0	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	4.785	83	13766	1.385	ug/L	95
34) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A16.D
Acq On : 7 Sep 2023 1:50 pm
Operator : VOA105:MJV
Sample : l2350269-04,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 08 04:33:45 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
41) Benzene	0.000		0		N.D.	
44) 1,2-Dichloroethane	0.000		0		N.D.	
47) Methyl cyclohexane	0.000		0		N.D.	
48) Trichloroethene	0.000		0		N.D.	
51) 1,2-Dichloropropane	0.000		0		N.D.	
54) Bromodichloromethane	0.000		0		N.D.	
57) 1,4-Dioxane	0.000		0		N.D.	
58) cis-1,3-Dichloropropene	0.000		0		N.D.	
61) Toluene	7.474	92	89		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	
65) trans-1,3-Dichloropropene	0.000		0		N.D.	
68) 1,1,2-Trichloroethane	0.000		0		N.D.	
69) Chlorodibromomethane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	0.000		0		N.D.	
73) Chlorobenzene	0.000		0		N.D.	
74) Ethylbenzene	9.255	91	247		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
100) 1,3-Dichlorobenzene	0.000		0		N.D.	
101) 1,4-Dichlorobenzene	0.000		0		N.D.	
104) 1,2-Dichlorobenzene	0.000		0		N.D.	
106) 1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
109) 1,2,4-Trichlorobenzene	0.000		0		N.D.	
111) 1,2,3-Trichlorobenzene	0.000		0		N.D.	

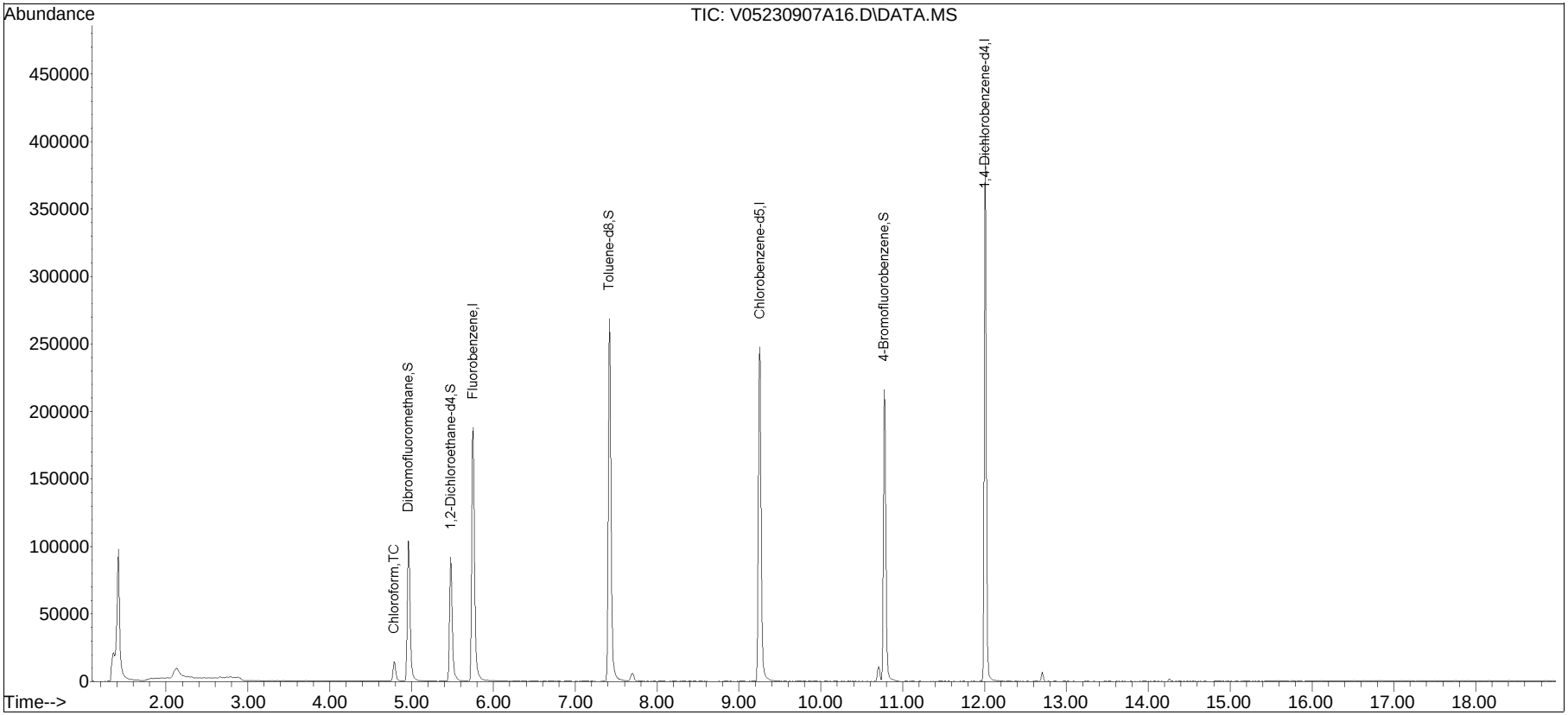
(#) = qualifier out of range (m) = manual integration (+) = signals summed

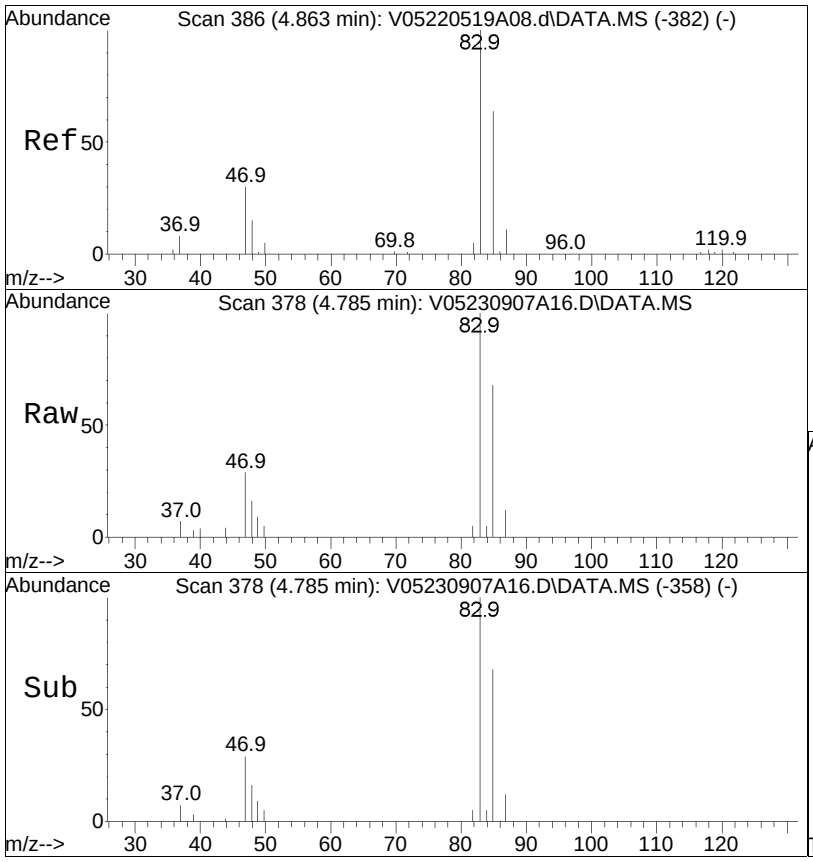
Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A16.D
Acq On : 7 Sep 2023 1:50 pm
Operator : VOA105:MJV
Sample : l2350269-04,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 08 04:33:45 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•

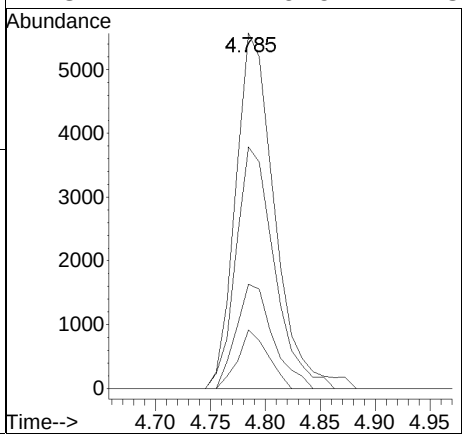




#32
Chloroform
Concen: 1.38 ug/L
RT: 4.785 min Scan# 378
Delta R.T. -0.000 min
Lab File: V05230907A16.D
Acq: 7 Sep 2023 1:50 pm

Tgt Ion: 83 Resp: 13766

Ion	Ratio	Lower	Upper
83	100		
85	67.2	42.8	89.0
47	27.6	13.7	28.4
48	12.7	6.9	14.3



Manual Integration Report

Data Path	: K:\VOA105\2023\230907A\	QMethod	: V105_230808N_8260.m
Data File	: V05230907A16.D	Operator	: VOA105:MJV
Date Inj'd	: 9/7/2023 1:50 pm	Instrument	: VOA105
Sample	: l2350269-04,31,10,10,,a	Quant Date	: 9/8/2023 4:33 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A17.D
Acq On : 7 Sep 2023 2:15 pm
Operator : VOA105:MJV
Sample : l2350269-07,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 08 05:04:17 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	217880	10.000	ug/L	0.00
Standard Area 1 = 255314			Recovery = 85.34%			
59) Chlorobenzene-d5	9.255	117	201960	10.000	ug/L	0.01
Standard Area 1 = 234811			Recovery = 86.01%			
79) 1,4-Dichlorobenzene-d4	12.008	152	120119	10.000	ug/L	0.00
Standard Area 1 = 143322			Recovery = 83.81%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.961	113	76770	11.111	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 111.11%			
43) 1,2-Dichloroethane-d4	5.479	65	77418	11.546	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 115.46%			
60) Toluene-d8	7.416	98	234453	9.957	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.57%			
83) 4-Bromofluorobenzene	10.774	95	89209	9.489	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.89%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	2.065	94	214	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	2.789	76	204	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
19) Methyl acetate	0.000		0	N.D.	d	
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		
34) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A17.D
Acq On : 7 Sep 2023 2:15 pm
Operator : VOA105:MJV
Sample : l2350269-07,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 08 05:04:17 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0	N.D.		
39) 2-Butanone	0.000		0	N.D.		
41) Benzene	0.000		0	N.D.		
44) 1,2-Dichloroethane	0.000		0	N.D.		
47) Methyl cyclohexane	0.000		0	N.D.		
48) Trichloroethene	0.000		0	N.D.		
51) 1,2-Dichloropropane	0.000		0	N.D.		
54) Bromodichloromethane	0.000		0	N.D.		
57) 1,4-Dioxane	0.000		0	N.D.		
58) cis-1,3-Dichloropropene	0.000		0	N.D.		
61) Toluene	0.000		0	N.D.		
62) 4-Methyl-2-pentanone	0.000		0	N.D.		
63) Tetrachloroethene	0.000		0	N.D.	d	
65) trans-1,3-Dichloropropene	0.000		0	N.D.		
68) 1,1,2-Trichloroethane	0.000		0	N.D.		
69) Chlorodibromomethane	0.000		0	N.D.		
71) 1,2-Dibromoethane	0.000		0	N.D.		
72) 2-Hexanone	0.000		0	N.D.		
73) Chlorobenzene	0.000		0	N.D.		
74) Ethylbenzene	9.255	91	197	N.D.		
76) p/m Xylene	0.000		0	N.D.		
77) o Xylene	0.000		0	N.D.		
78) Styrene	0.000		0	N.D.		
80) Bromoform	0.000		0	N.D.		
82) Isopropylbenzene	0.000		0	N.D.		
87) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
100) 1,3-Dichlorobenzene	0.000		0	N.D.		
101) 1,4-Dichlorobenzene	0.000		0	N.D.		
104) 1,2-Dichlorobenzene	0.000		0	N.D.		
106) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
109) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
111) 1,2,3-Trichlorobenzene	0.000		0	N.D.		

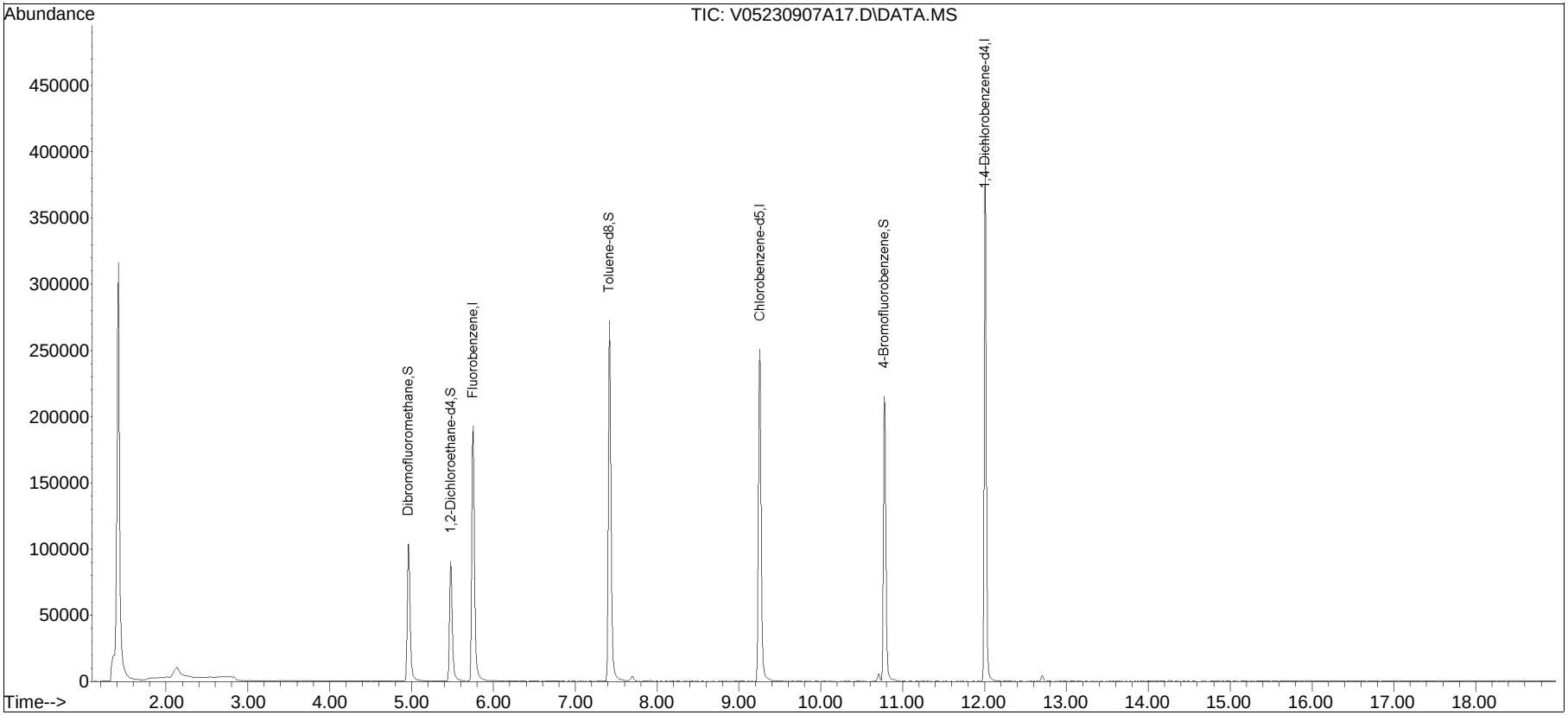
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A17.D
Acq On : 7 Sep 2023 2:15 pm
Operator : VOA105:MJV
Sample : l2350269-07,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 08 05:04:17 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•



Manual Integration Report

Data Path	: K:\VOA105\2023\230907A\	QMethod	: V105_230808N_8260.m
Data File	: V05230907A17.D	Operator	: VOA105:MJV
Date Inj'd	: 9/7/2023 2:15 pm	Instrument	: VOA105
Sample	: l2350269-07,31,10,10,,a	Quant Date	: 9/8/2023 4:33 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A18.D
Acq On : 7 Sep 2023 2:41 pm
Operator : VOA105:MJV
Sample : l2350269-08,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 08 05:04:27 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	215427	10.000	ug/L	0.00
Standard Area 1 = 255314			Recovery = 84.38%			
59) Chlorobenzene-d5	9.255	117	202224	10.000	ug/L	0.01
Standard Area 1 = 234811			Recovery = 86.12%			
79) 1,4-Dichlorobenzene-d4	12.008	152	118204	10.000	ug/L	0.00
Standard Area 1 = 143322			Recovery = 82.47%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.961	113	76454	11.191	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 111.91%			
43) 1,2-Dichloroethane-d4	5.479	65	77837	11.740	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 117.40%			
60) Toluene-d8	7.415	98	237527	10.074	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.74%			
83) 4-Bromofluorobenzene	10.774	95	89618	9.687	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.87%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	2.065	94	249	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	2.779	76	225	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
19) Methyl acetate	0.000		0	N.D.	d	
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		
34) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A18.D
Acq On : 7 Sep 2023 2:41 pm
Operator : VOA105:MJV
Sample : l2350269-08,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 08 05:04:27 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37)	1,1,1-Trichloroethane	0.000		0		N.D.	
39)	2-Butanone	0.000		0		N.D.	
41)	Benzene	0.000		0		N.D.	
44)	1,2-Dichloroethane	0.000		0		N.D.	
47)	Methyl cyclohexane	0.000		0		N.D.	
48)	Trichloroethene	0.000		0		N.D.	
51)	1,2-Dichloropropane	0.000		0		N.D.	
54)	Bromodichloromethane	0.000		0		N.D.	
57)	1,4-Dioxane	0.000		0		N.D.	
58)	cis-1,3-Dichloropropene	0.000		0		N.D.	
61)	Toluene	0.000		0		N.D.	
62)	4-Methyl-2-pentanone	0.000		0		N.D.	
63)	Tetrachloroethene	0.000		0		N.D.	
65)	trans-1,3-Dichloropropene	0.000		0		N.D.	
68)	1,1,2-Trichloroethane	0.000		0		N.D.	
69)	Chlorodibromomethane	0.000		0		N.D.	
71)	1,2-Dibromoethane	0.000		0		N.D.	
72)	2-Hexanone	0.000		0		N.D.	
73)	Chlorobenzene	0.000		0		N.D.	
74)	Ethylbenzene	9.255	91	232		N.D.	
76)	p/m Xylene	0.000		0		N.D.	
77)	o Xylene	0.000		0		N.D.	
78)	Styrene	0.000		0		N.D.	
80)	Bromoform	0.000		0		N.D.	
82)	Isopropylbenzene	0.000		0		N.D.	
87)	1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
100)	1,3-Dichlorobenzene	0.000		0		N.D.	
101)	1,4-Dichlorobenzene	0.000		0		N.D.	
104)	1,2-Dichlorobenzene	0.000		0		N.D.	
106)	1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
109)	1,2,4-Trichlorobenzene	0.000		0		N.D.	
111)	1,2,3-Trichlorobenzene	0.000		0		N.D.	

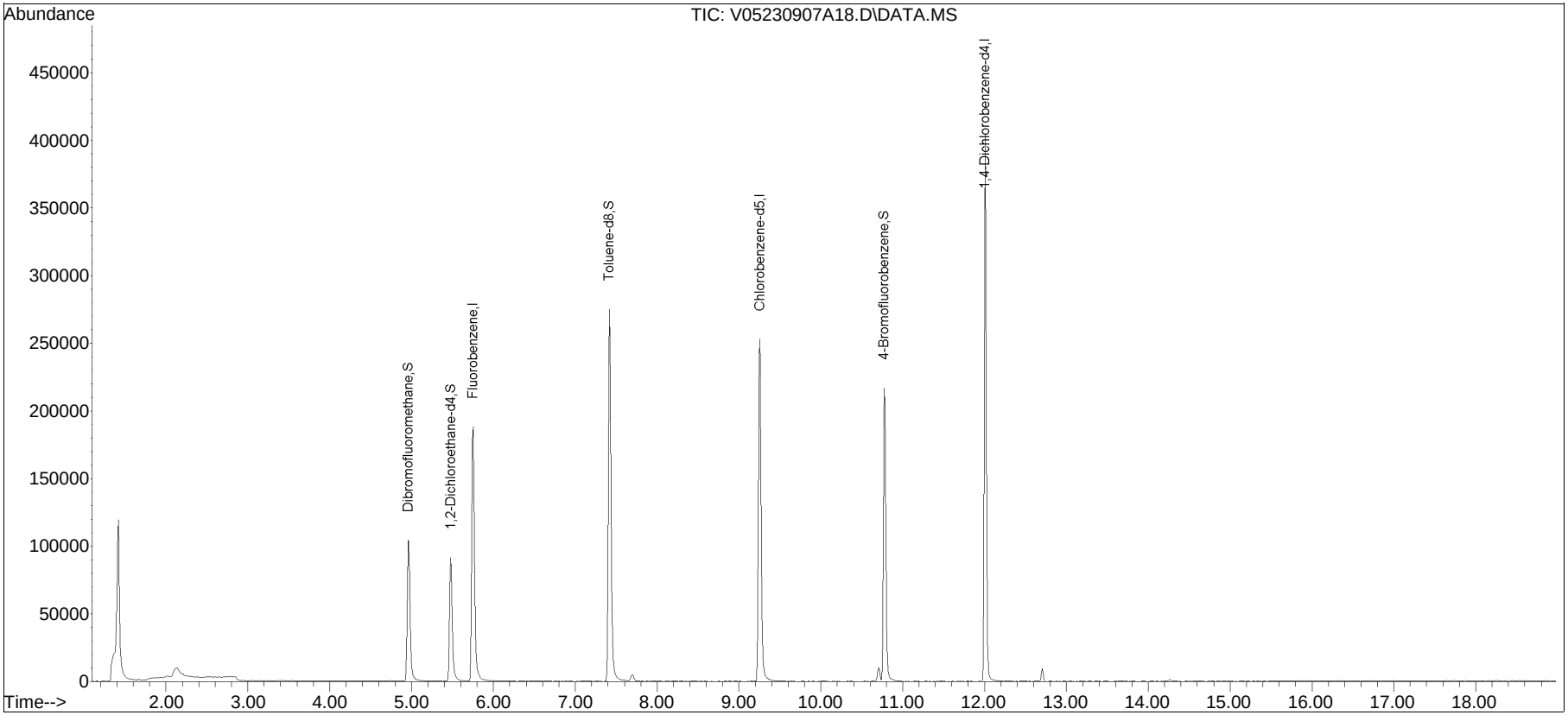
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A18.D
Acq On : 7 Sep 2023 2:41 pm
Operator : VOA105:MJV
Sample : l2350269-08,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 08 05:04:27 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•



Manual Integration Report

Data Path	: K:\VOA105\2023\230907A\	QMethod	: V105_230808N_8260.m
Data File	: V05230907A18.D	Operator	: VOA105:MJV
Date Inj'd	: 9/7/2023 2:41 pm	Instrument	: VOA105
Sample	: l2350269-08,31,10,10,,a	Quant Date	: 9/8/2023 4:33 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A19.D
Acq On : 7 Sep 2023 3:07 pm
Operator : VOA105:MJV
Sample : l2350269-09,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 08 05:04:56 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	215441	10.000	ug/L	0.00
Standard Area 1 = 255314			Recovery = 84.38%			
59) Chlorobenzene-d5	9.255	117	200480	10.000	ug/L	0.01
Standard Area 1 = 234811			Recovery = 85.38%			
79) 1,4-Dichlorobenzene-d4	12.008	152	117947	10.000	ug/L	0.00
Standard Area 1 = 143322			Recovery = 82.30%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.960	113	75459	11.045	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 110.45%			
43) 1,2-Dichloroethane-d4	5.479	65	77025	11.617	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 116.17%			
60) Toluene-d8	7.415	98	231270	9.894	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.94%			
83) 4-Bromofluorobenzene	10.773	95	88723	9.611	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.11%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	2.065	94	429	0.079	ug/L	96
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	2.779	76	293	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	3.376	43	3145	3.397	ug/L #	86
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
19) Methyl acetate	0.000		0	N.D. d		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		
34) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A19.D
Acq On : 7 Sep 2023 3:07 pm
Operator : VOA105:MJV
Sample : l2350269-09,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 08 05:04:56 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0	N.D.		
39) 2-Butanone	0.000		0	N.D. d		
41) Benzene	5.332	78	5077	0.245	ug/L	94
44) 1,2-Dichloroethane	0.000		0	N.D. d		
47) Methyl cyclohexane	0.000		0	N.D.		
48) Trichloroethene	5.939	95	107	N.D.		
51) 1,2-Dichloropropane	0.000		0	N.D.		
54) Bromodichloromethane	0.000		0	N.D.		
57) 1,4-Dioxane	0.000		0	N.D.		
58) cis-1,3-Dichloropropene	0.000		0	N.D.		
61) Toluene	7.484	92	979	0.072	ug/L	78
62) 4-Methyl-2-pentanone	0.000		0	N.D.		
63) Tetrachloroethene	7.914	166	1033	0.161	ug/L #	65
65) trans-1,3-Dichloropropene	0.000		0	N.D.		
68) 1,1,2-Trichloroethane	0.000		0	N.D.		
69) Chlorodibromomethane	0.000		0	N.D.		
71) 1,2-Dibromoethane	0.000		0	N.D.		
72) 2-Hexanone	0.000		0	N.D.		
73) Chlorobenzene	0.000		0	N.D.		
74) Ethylbenzene	9.324	91	663	N.D.		
76) p/m Xylene	9.510	106	219	N.D.		
77) o Xylene	10.049	106	95	N.D.		
78) Styrene	10.137	104	349	N.D.		
80) Bromoform	0.000		0	N.D.		
82) Isopropylbenzene	10.440	105	130	N.D.		
87) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
100) 1,3-Dichlorobenzene	12.027	146	249	N.D.		
101) 1,4-Dichlorobenzene	12.027	146	249	N.D.		
104) 1,2-Dichlorobenzene	0.000		0	N.D.		
106) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
109) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
111) 1,2,3-Trichlorobenzene	0.000		0	N.D.		

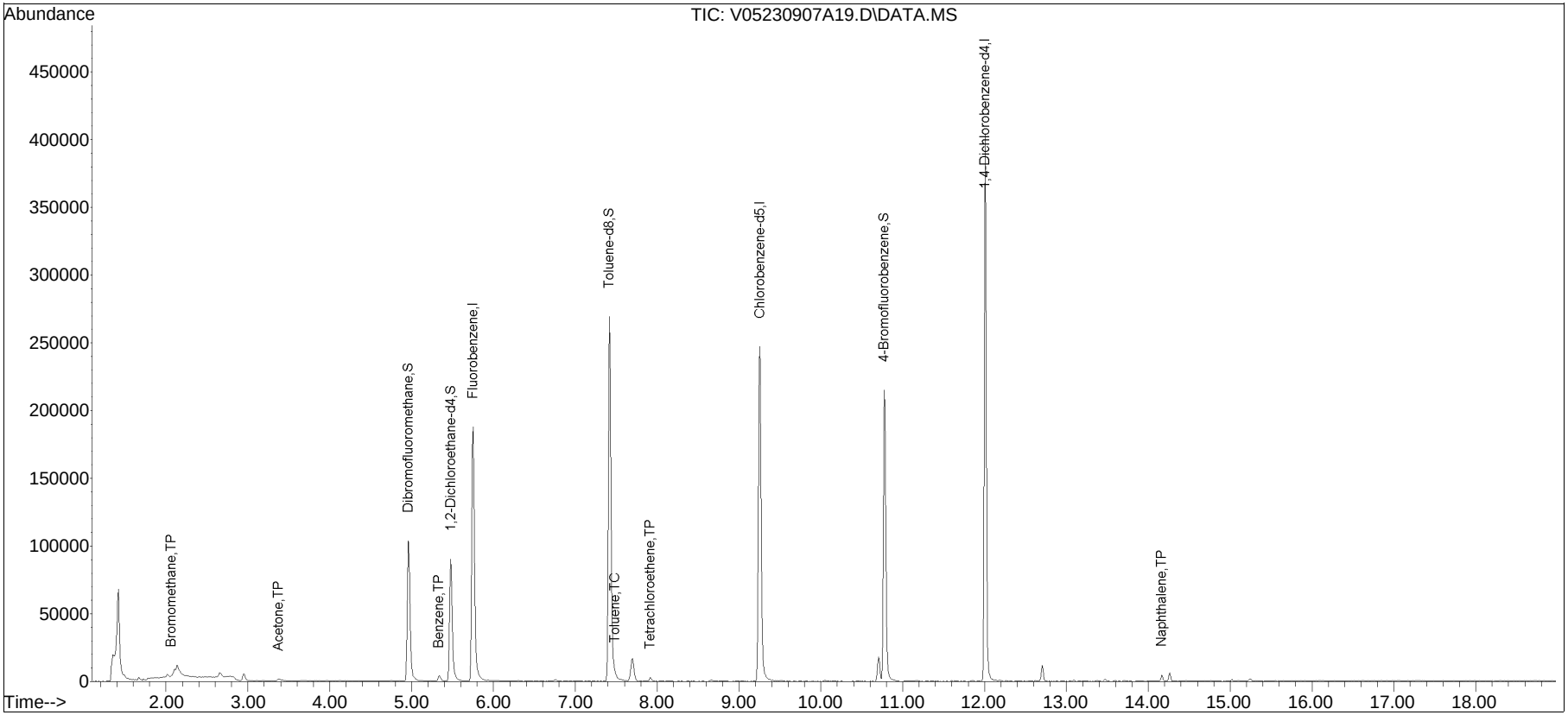
(#) = qualifier out of range (m) = manual integration (+) = signals summed

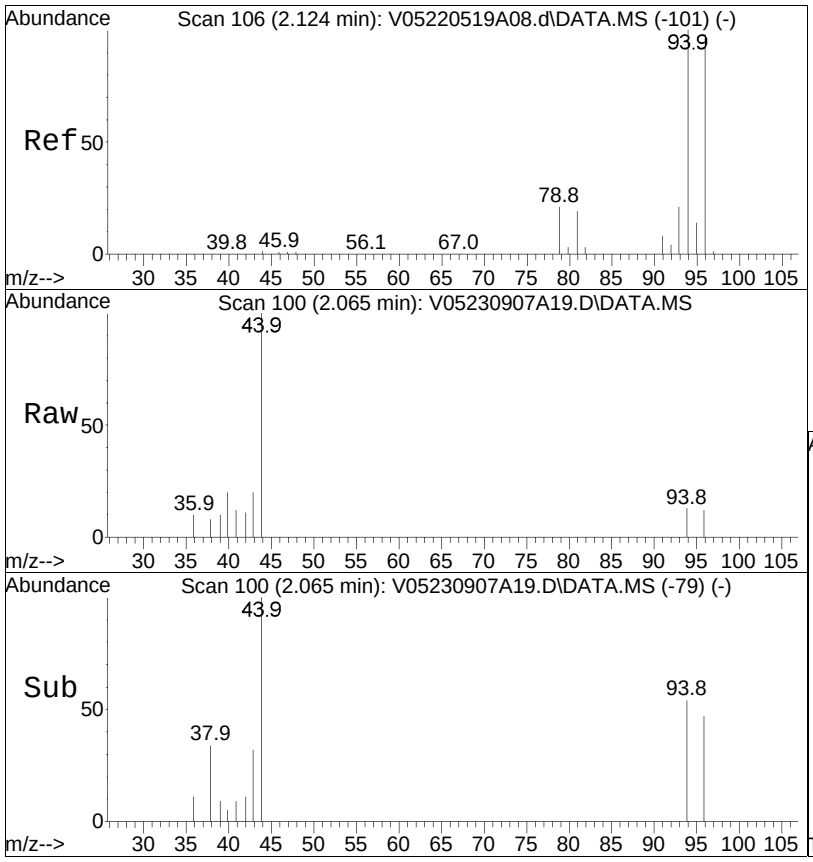
Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A19.D
Acq On : 7 Sep 2023 3:07 pm
Operator : VOA105:MJV
Sample : l2350269-09,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 08 05:04:56 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•

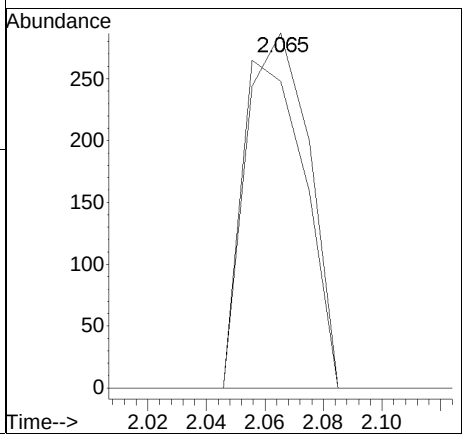


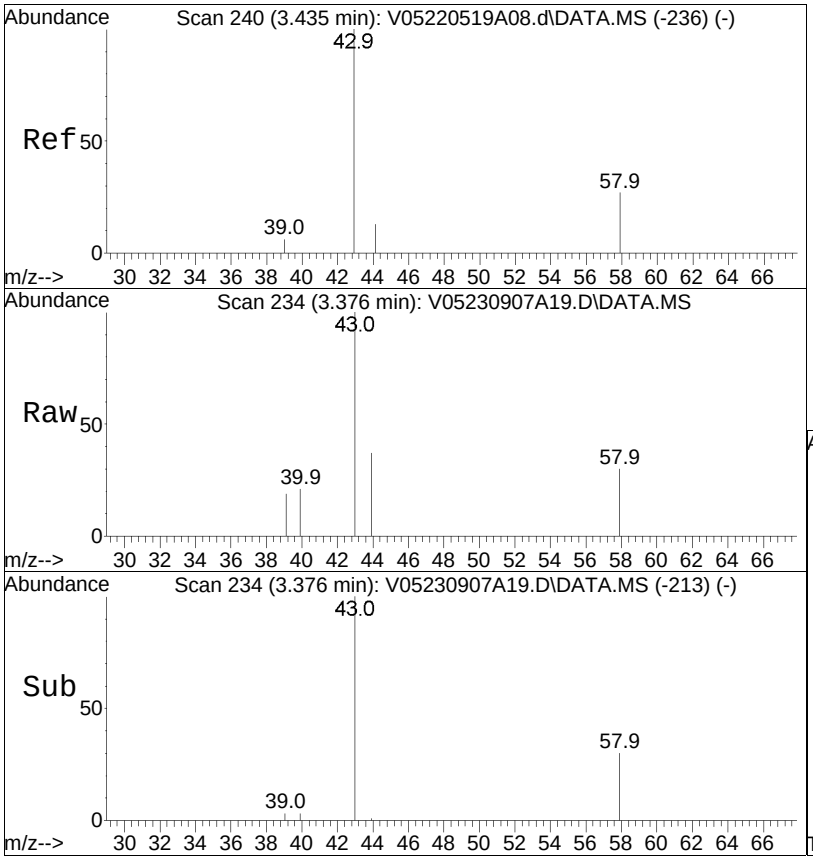


#5
Bromomethane
Concen: 0.08 ug/L
RT: 2.065 min Scan# 100
Delta R.T. 0.009 min
Lab File: V05230907A19.D
Acq: 7 Sep 2023 3:07 pm

Tgt Ion: 94 Resp: 429

Ion	Ratio	Lower	Upper
94	100		
96	91.8	75.4	115.4

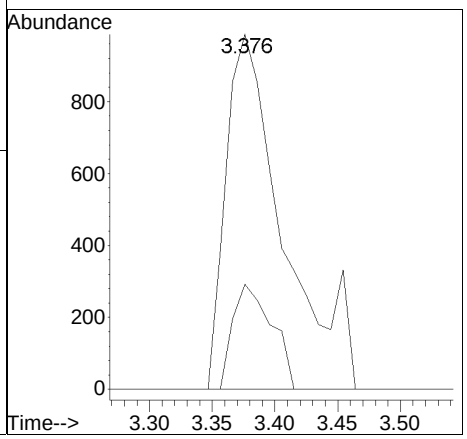


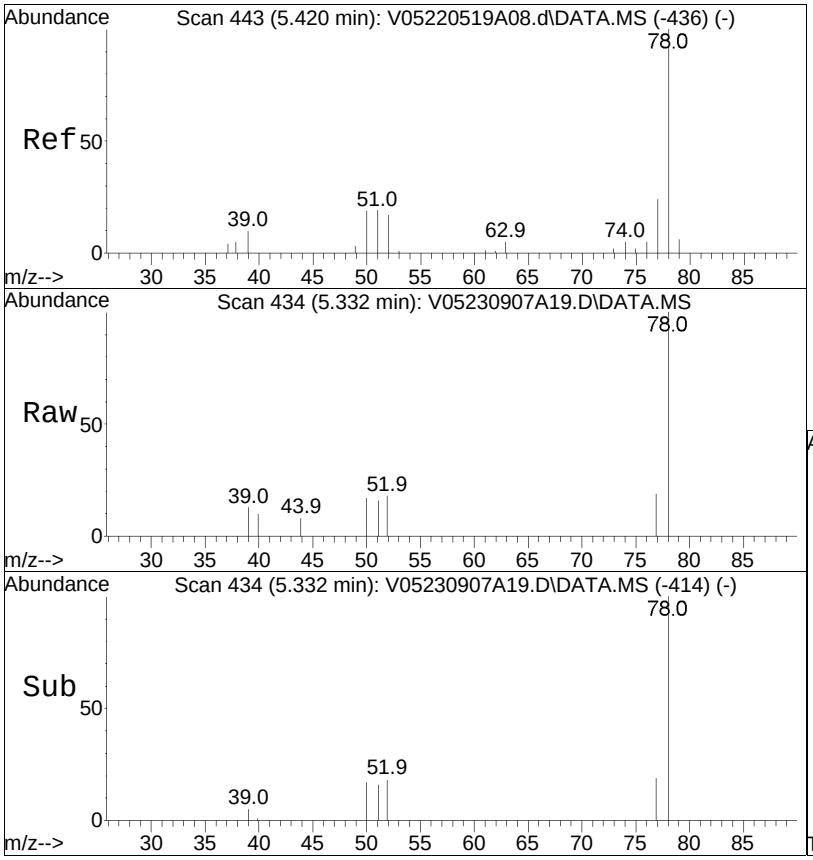


#17
Acetone
Concen: 3.40 ug/L
RT: 3.376 min Scan# 234
Delta R.T. 0.010 min
Lab File: V05230907A19.D
Acq: 7 Sep 2023 3:07 pm

Tgt Ion: 43 Resp: 3145

Ion	Ratio	Lower	Upper
43	100		
58	20.1	22.0	33.0#

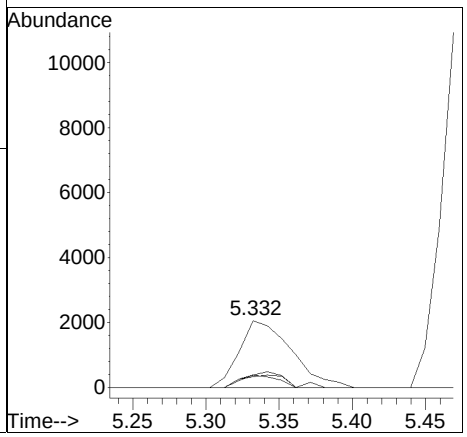


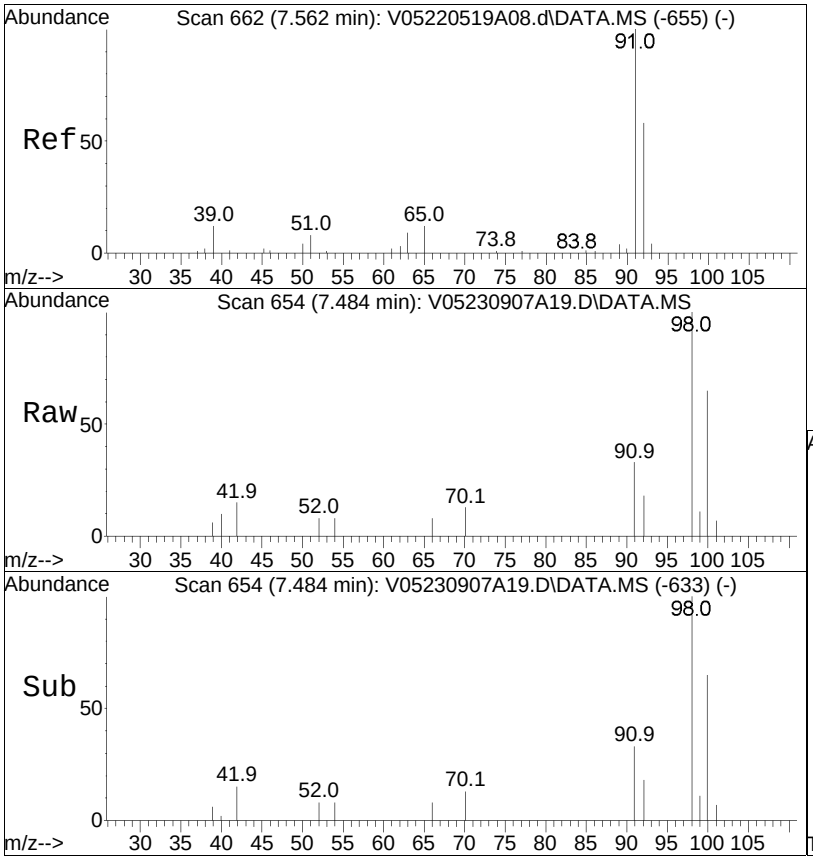


#41
Benzene
Concen: 0.24 ug/L
RT: 5.332 min Scan# 434
Delta R.T. 0.000 min
Lab File: V05230907A19.D
Acq: 7 Sep 2023 3:07 pm

Tgt Ion: 78 Resp: 5077

Ion	Ratio	Lower	Upper
78	100		
77	19.1	15.2	31.6
51	15.1	10.5	21.7
52	13.1	9.5	19.7

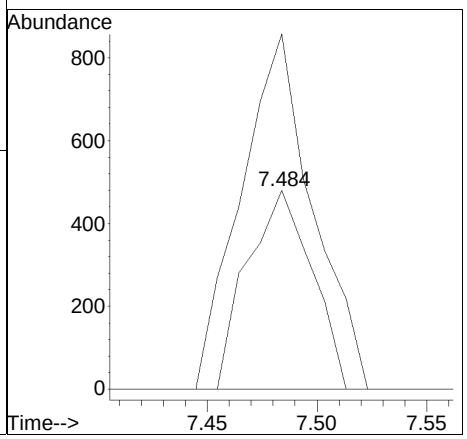


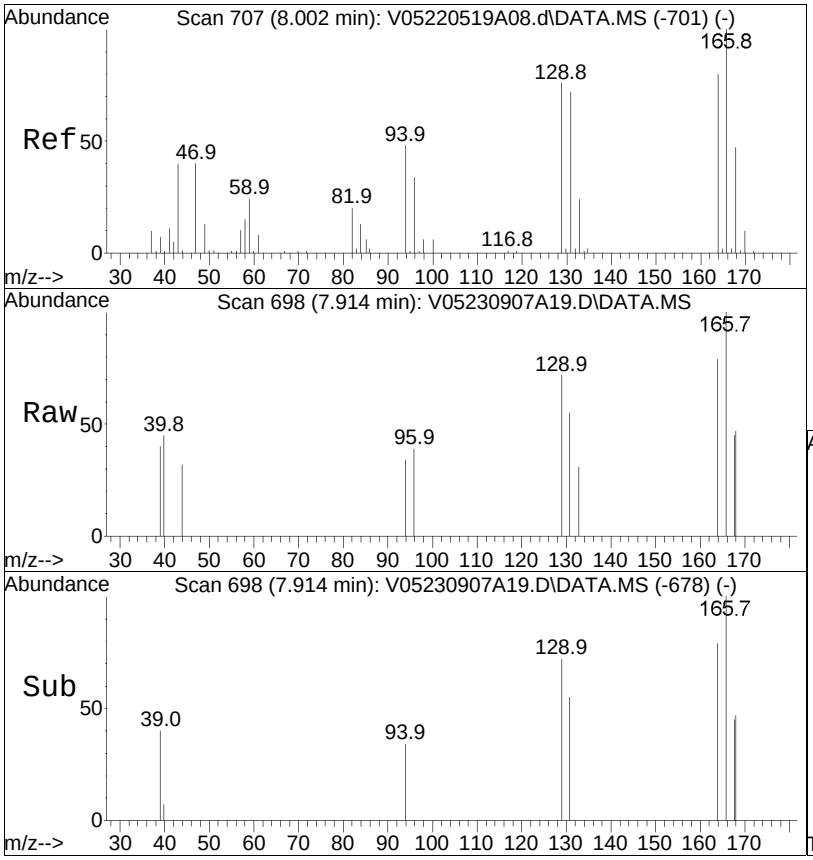


#61
Toluene
Concen: 0.07 ug/L
RT: 7.484 min Scan# 654
Delta R.T. 0.010 min
Lab File: V05230907A19.D
Acq: 7 Sep 2023 3:07 pm

Tgt Ion: 92 Resp: 979

Ion	Ratio	Lower	Upper
92	100		
91	199.2	135.2	202.8

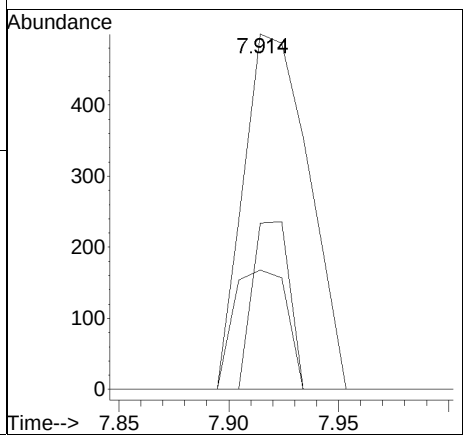




#63
Tetrachloroethene
Concen: 0.16 ug/L
RT: 7.914 min Scan# 698
Delta R.T. 0.000 min
Lab File: V05230907A19.D
Acq: 7 Sep 2023 3:07 pm

Tgt Ion:166 Resp: 1033

Ion	Ratio	Lower	Upper
166	100		
168	26.7	30.2	70.2#
94	27.2	32.5	72.5#



Manual Integration Report

Data Path	: K:\VOA105\2023\230907A\	QMethod	: V105_230808N_8260.m
Data File	: V05230907A19.D	Operator	: VOA105:MJV
Date Inj'd	: 9/7/2023 3:07 pm	Instrument	: VOA105
Sample	: l2350269-09,31,10,10,,a	Quant Date	: 9/8/2023 4:33 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A20.D
Acq On : 7 Sep 2023 3:32 pm
Operator : VOA105:MJV
Sample : l2350269-11,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 08 05:05:19 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	215470	10.000	ug/L	0.00
Standard Area 1 = 255314			Recovery =	84.39%		
59) Chlorobenzene-d5	9.255	117	201226	10.000	ug/L	0.00
Standard Area 1 = 234811			Recovery =	85.70%		
79) 1,4-Dichlorobenzene-d4	12.008	152	118067	10.000	ug/L	0.00
Standard Area 1 = 143322			Recovery =	82.38%		
System Monitoring Compounds						
36) Dibromofluoromethane	4.960	113	76842	11.246	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	112.46%		
43) 1,2-Dichloroethane-d4	5.479	65	78568	11.848	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	118.48%		
60) Toluene-d8	7.415	98	235212	10.026	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.26%		
83) 4-Bromofluorobenzene	10.773	95	89009	9.632	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	96.32%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	2.055	94	222	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	0.000		0	N.D.	d	
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
19) Methyl acetate	0.000		0	N.D.	d	
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		
34) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A20.D
Acq On : 7 Sep 2023 3:32 pm
Operator : VOA105:MJV
Sample : l2350269-11,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 08 05:05:19 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0		N.D.	
39) 2-Butanone	0.000		0		N.D.	
41) Benzene	5.342	78	432		N.D.	
44) 1,2-Dichloroethane	0.000		0		N.D.	
47) Methyl cyclohexane	0.000		0		N.D.	
48) Trichloroethene	0.000		0		N.D.	
51) 1,2-Dichloropropane	0.000		0		N.D.	
54) Bromodichloromethane	0.000		0		N.D.	
57) 1,4-Dioxane	0.000		0		N.D.	
58) cis-1,3-Dichloropropene	0.000		0		N.D.	
61) Toluene	7.474	92	630		N.D.	
62) 4-Methyl-2-pentanone	0.000		0		N.D.	
63) Tetrachloroethene	0.000		0		N.D.	
65) trans-1,3-Dichloropropene	0.000		0		N.D.	
68) 1,1,2-Trichloroethane	0.000		0		N.D.	
69) Chlorodibromomethane	0.000		0		N.D.	
71) 1,2-Dibromoethane	0.000		0		N.D.	
72) 2-Hexanone	8.932	43	98		N.D.	
73) Chlorobenzene	0.000		0		N.D.	
74) Ethylbenzene	9.245	91	108		N.D.	
76) p/m Xylene	0.000		0		N.D.	
77) o Xylene	0.000		0		N.D.	
78) Styrene	0.000		0		N.D.	
80) Bromoform	0.000		0		N.D.	
82) Isopropylbenzene	0.000		0		N.D.	
87) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
100) 1,3-Dichlorobenzene	0.000		0		N.D.	
101) 1,4-Dichlorobenzene	0.000		0		N.D.	
104) 1,2-Dichlorobenzene	0.000		0		N.D.	
106) 1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
109) 1,2,4-Trichlorobenzene	0.000		0		N.D.	
111) 1,2,3-Trichlorobenzene	0.000		0		N.D.	

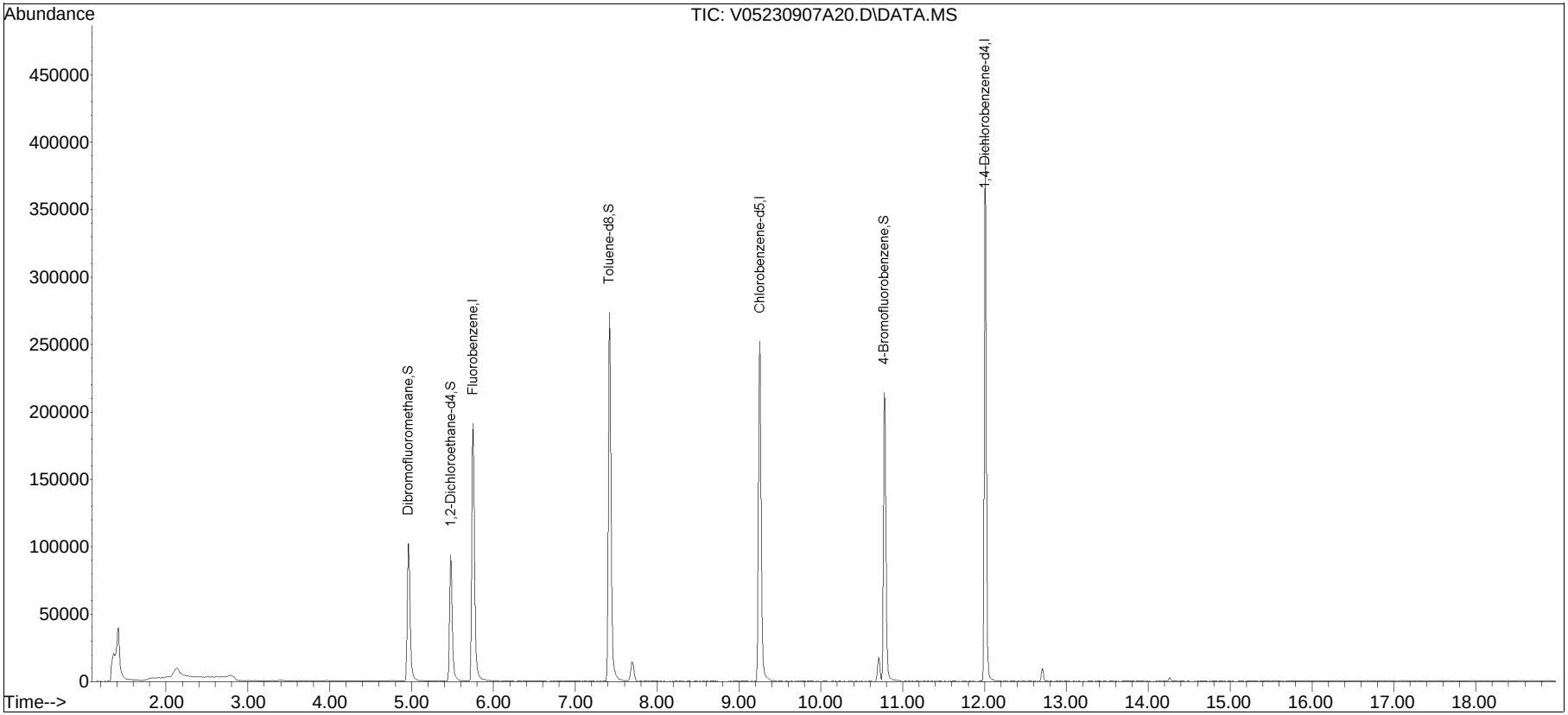
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A20.D
Acq On : 7 Sep 2023 3:32 pm
Operator : VOA105:MJV
Sample : l2350269-11,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 08 05:05:19 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•



Manual Integration Report

Data Path	: K:\VOA105\2023\230907A\	QMethod	: V105_230808N_8260.m
Data File	: V05230907A20.D	Operator	: VOA105:MJV
Date Inj'd	: 9/7/2023 3:32 pm	Instrument	: VOA105
Sample	: l2350269-11,31,10,10,,a	Quant Date	: 9/8/2023 4:34 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A21.D
Acq On : 7 Sep 2023 3:58 pm
Operator : VOA105:MJV
Sample : l2350269-12,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 08 05:05:37 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	219153	10.000	ug/L	0.00
Standard Area 1 = 255314			Recovery =	85.84%		
59) Chlorobenzene-d5	9.255	117	202643	10.000	ug/L	0.01
Standard Area 1 = 234811			Recovery =	86.30%		
79) 1,4-Dichlorobenzene-d4	12.008	152	118424	10.000	ug/L	0.00
Standard Area 1 = 143322			Recovery =	82.63%		
System Monitoring Compounds						
36) Dibromofluoromethane	4.960	113	77748	11.187	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	111.87%		
43) 1,2-Dichloroethane-d4	5.479	65	82401	12.217	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	122.17%		
60) Toluene-d8	7.415	98	237959	10.072	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.72%		
83) 4-Bromofluorobenzene	10.773	95	90135	9.725	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	97.25%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	2.056	94	226	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	2.779	76	263	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	3.376	43	1652	1.754	ug/L #	62
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
19) Methyl acetate	3.454	43	101	N.D.		
20) Methyl tert-butyl ether	0.000		0	N.D.		
23) 1,1-Dichloroethane	0.000		0	N.D.		
28) cis-1,2-Dichloroethene	0.000		0	N.D.		
30) Bromochloromethane	0.000		0	N.D.		
31) Cyclohexane	0.000		0	N.D.		
32) Chloroform	0.000		0	N.D.		
34) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A21.D
Acq On : 7 Sep 2023 3:58 pm
Operator : VOA105:MJV
Sample : l2350269-12,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 08 05:05:37 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0	N.D.		
39) 2-Butanone	4.931	43	91	N.D.		
41) Benzene	0.000		0	N.D.		
44) 1,2-Dichloroethane	0.000		0	N.D.		
47) Methyl cyclohexane	0.000		0	N.D.		
48) Trichloroethene	0.000		0	N.D.		
51) 1,2-Dichloropropane	0.000		0	N.D.		
54) Bromodichloromethane	0.000		0	N.D.		
57) 1,4-Dioxane	0.000		0	N.D.		
58) cis-1,3-Dichloropropene	0.000		0	N.D.		
61) Toluene	0.000		0	N.D.		
62) 4-Methyl-2-pentanone	0.000		0	N.D.		
63) Tetrachloroethene	0.000		0	N.D.		
65) trans-1,3-Dichloropropene	0.000		0	N.D.		
68) 1,1,2-Trichloroethane	0.000		0	N.D.		
69) Chlorodibromomethane	0.000		0	N.D.		
71) 1,2-Dibromoethane	0.000		0	N.D.		
72) 2-Hexanone	0.000		0	N.D.		
73) Chlorobenzene	0.000		0	N.D.		
74) Ethylbenzene	0.000		0	N.D.	d	
76) p/m Xylene	0.000		0	N.D.		
77) o Xylene	0.000		0	N.D.		
78) Styrene	0.000		0	N.D.		
80) Bromoform	0.000		0	N.D.		
82) Isopropylbenzene	0.000		0	N.D.		
87) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
100) 1,3-Dichlorobenzene	0.000		0	N.D.		
101) 1,4-Dichlorobenzene	0.000		0	N.D.		
104) 1,2-Dichlorobenzene	0.000		0	N.D.		
106) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
109) 1,2,4-Trichlorobenzene	0.000		0	N.D.		
111) 1,2,3-Trichlorobenzene	0.000		0	N.D.		

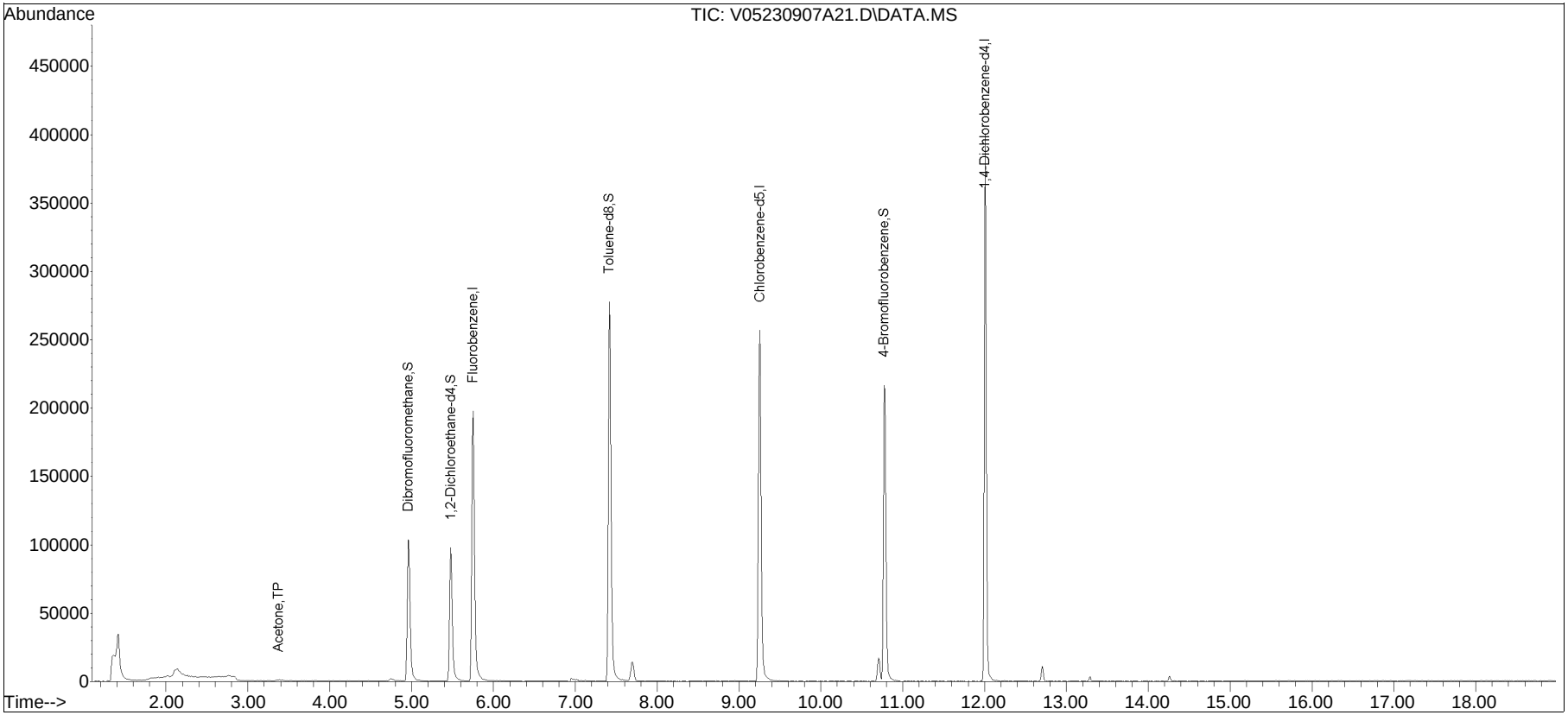
(#) = qualifier out of range (m) = manual integration (+) = signals summed

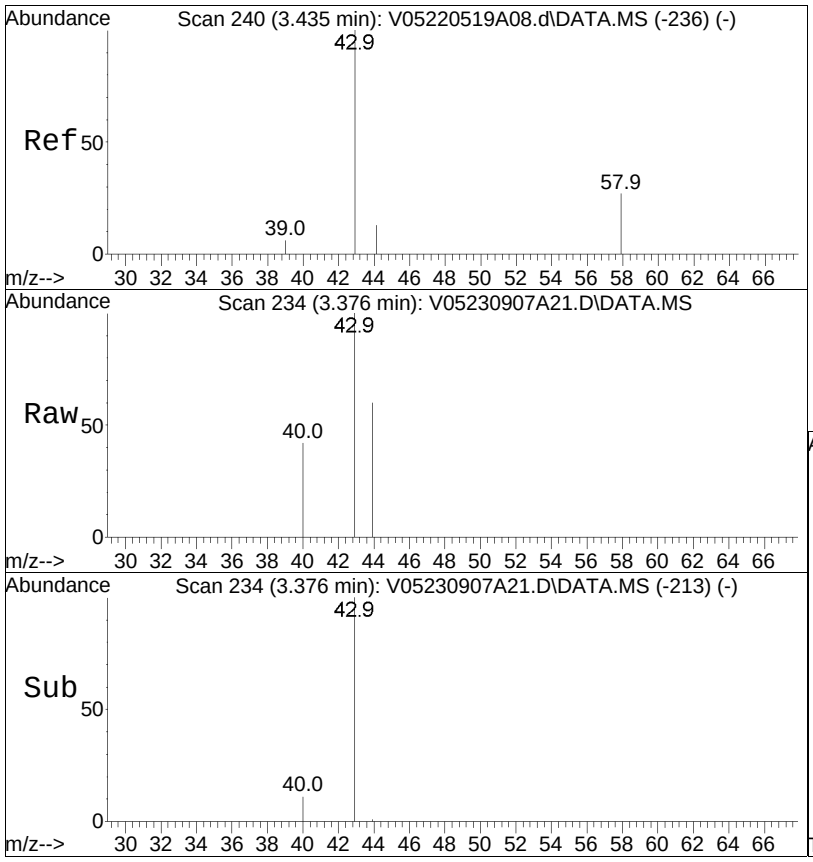
Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A21.D
Acq On : 7 Sep 2023 3:58 pm
Operator : VOA105:MJV
Sample : l2350269-12,31,10,10,,a
Misc : WG1824710,ICAL20245
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 08 05:05:37 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•

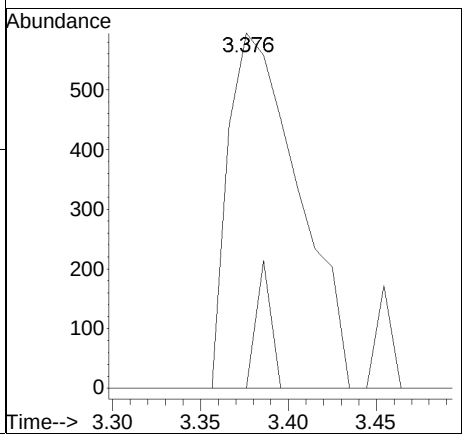




#17
Acetone
Concen: 1.75 ug/L
RT: 3.376 min Scan# 234
Delta R.T. 0.010 min
Lab File: V05230907A21.D
Acq: 7 Sep 2023 3:58 pm

Tgt Ion: 43 Resp: 1652

Ion	Ratio	Lower	Upper
43	100		
58	7.6	22.0	33.0#



Manual Integration Report

Data Path	: K:\VOA105\2023\230907A\	QMethod	: V105_230808N_8260.m
Data File	: V05230907A21.D	Operator	: VOA105:MJV
Date Inj'd	: 9/7/2023 3:58 pm	Instrument	: VOA105
Sample	: l2350269-12,31,10,10,,a	Quant Date	: 9/8/2023 4:34 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A07.D
Acq On : 8 Sep 2023 11:27 am
Operator : ELAINE:PID
Sample : l2350269-01,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:40:03 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.140	96	117765	10.000	ug/L	0.00
Standard Area 1 = 137394			Recovery = 85.71%			
63) Chlorobenzene-d5	9.695	117	102367	10.000	ug/L	0.00
Standard Area 1 = 115233			Recovery = 88.83%			
84) 1,4-Dichlorobenzene-d4	12.369	152	58973	10.000	ug/L	0.00
Standard Area 1 = 72288			Recovery = 81.58%			
System Monitoring Compounds						
39) Dibromofluoromethane	5.316	113	37358	11.261	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 112.61%			
47) 1,2-Dichloroethane-d4	5.850	65	43034	9.864	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.64%			
64) Toluene-d8	7.845	98	131307	10.387	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.87%			
88) 4-Bromofluorobenzene	11.173	95	45836	8.412	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 84.12%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.482	85	168	N.D.		
3) Chloromethane	0.000		0	N.D.	d	
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	2.256	94	170	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	3.051	76	54	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	3.636	43	1990	1.868	ug/L #	88
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
19) Methyl acetate	3.702	43	88	N.D.		
21) Methyl tert-butyl ether	0.000		0	N.D.		
25) 1,1-Dichloroethane	0.000		0	N.D.		
30) cis-1,2-Dichloroethene	0.000		0	N.D.		
33) Bromochloromethane	0.000		0	N.D.		
34) Cyclohexane	0.000		0	N.D.		
35) Chloroform	0.000		0	N.D.		
37) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A07.D
Acq On : 8 Sep 2023 11:27 am
Operator : ELAINE:PID
Sample : l2350269-01,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:40:03 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,1,1-Trichloroethane	0.000		0	N.D.		
42) 2-Butanone	5.425	43	62	N.D.		
45) Benzene	5.711	78	3063	0.276	ug/L #	73
48) 1,2-Dichloroethane	0.000		0	N.D.		
51) Methyl cyclohexane	0.000		0	N.D.		
52) Trichloroethene	6.206	95	82	N.D.		
55) 1,2-Dichloropropane	0.000		0	N.D.		
58) Bromodichloromethane	0.000		0	N.D.		
61) 1,4-Dioxane	0.000		0	N.D.		
62) cis-1,3-Dichloropropene	0.000		0	N.D.		
65) Toluene	7.906	92	678	0.099	ug/L	94
66) 4-Methyl-2-pentanone	0.000		0	N.D.		
67) Tetrachloroethene	8.349	166	561	0.208	ug/L #	46
69) trans-1,3-Dichloropropene	0.000		0	N.D.		
72) 1,1,2-Trichloroethane	0.000		0	N.D.		
73) Chlorodibromomethane	0.000		0	N.D.		
75) 1,2-Dibromoethane	0.000		0	N.D.		
77) 2-Hexanone	9.161	43	52	N.D.		
78) Chlorobenzene	0.000		0	N.D.		
79) Ethylbenzene	9.762	91	579	N.D.		
81) p/m Xylene	9.949	106	187	N.D.		
82) o Xylene	10.488	106	26	N.D.		
83) Styrene	10.544	104	384	N.D.		
85) Bromoform	0.000		0	N.D.		
87) Isopropylbenzene	0.000		0	N.D.		
92) 1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
105) 1,3-Dichlorobenzene	12.383	146	185	N.D.		
106) 1,4-Dichlorobenzene	12.383	146	185	N.D.		
109) 1,2-Dichlorobenzene	0.000		0	N.D.		
111) 1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
114) 1,2,4-Trichlorobenzene	14.211	180	92	N.D.		
116) 1,2,3-Trichlorobenzene	14.667	180	25	N.D.		

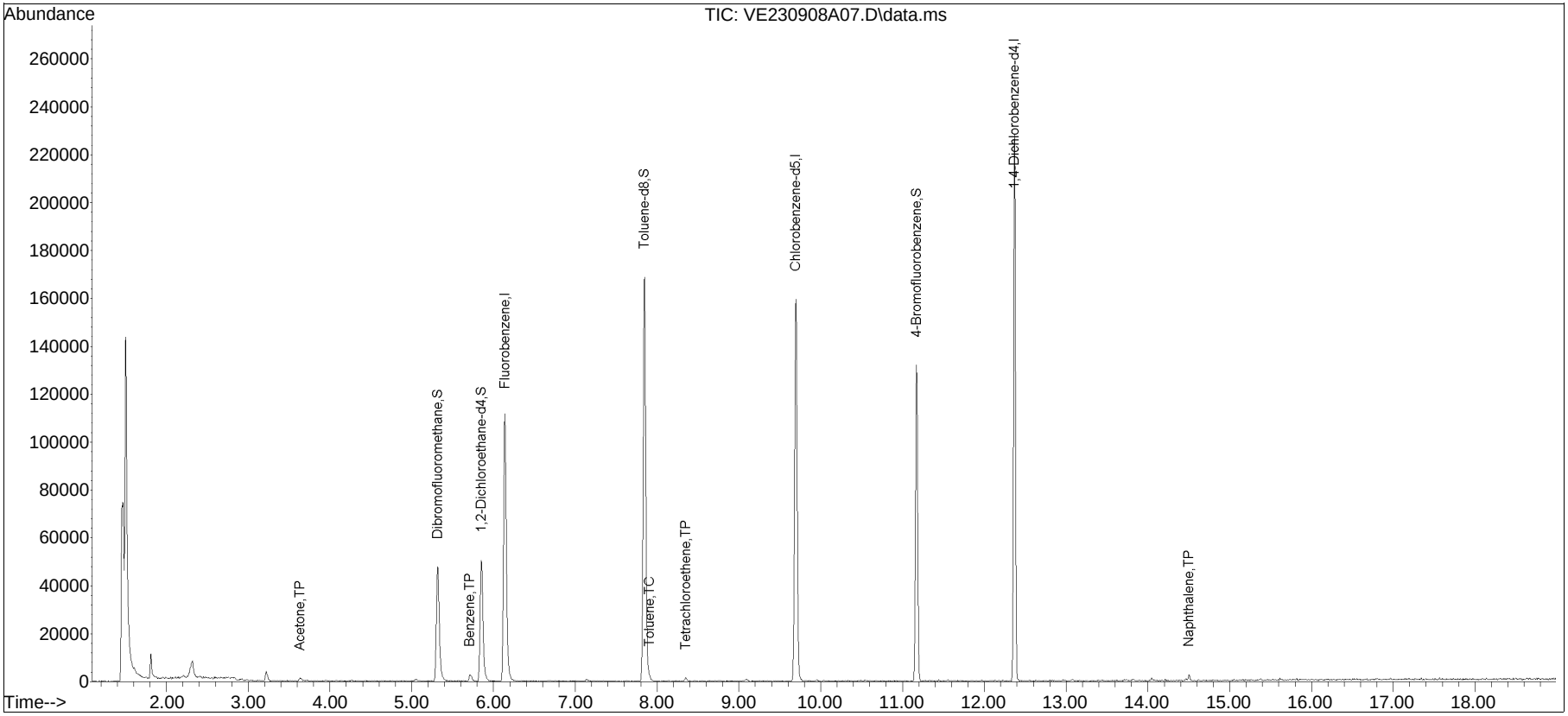
(#) = qualifier out of range (m) = manual integration (+) = signals summed

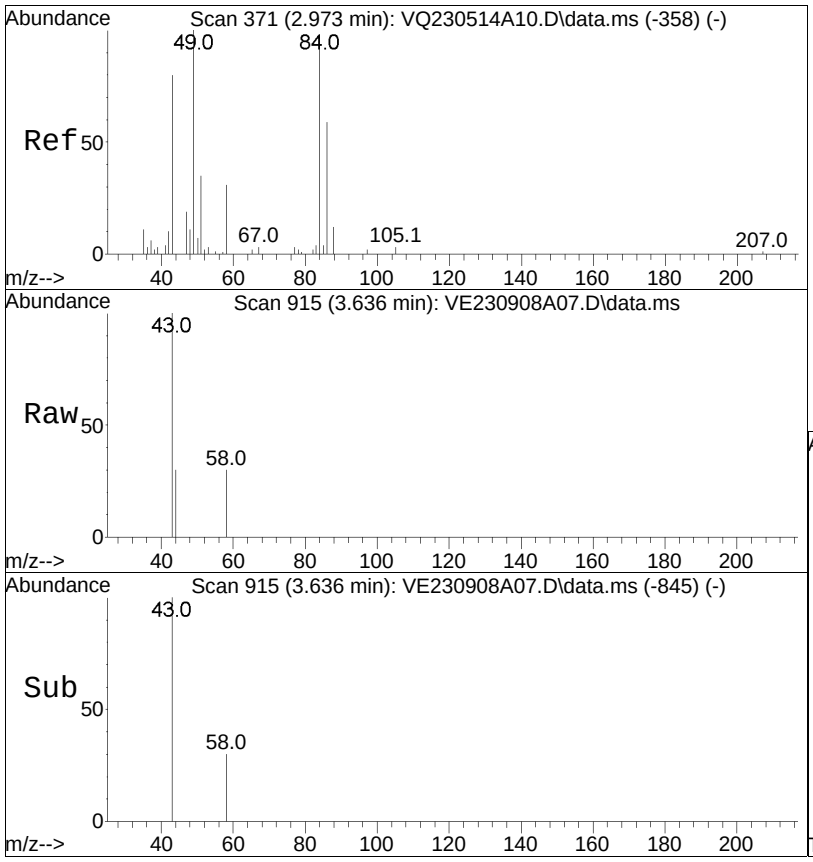
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A07.D
Acq On : 8 Sep 2023 11:27 am
Operator : ELAINE:PID
Sample : l2350269-01,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:40:03 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS908A01.D•

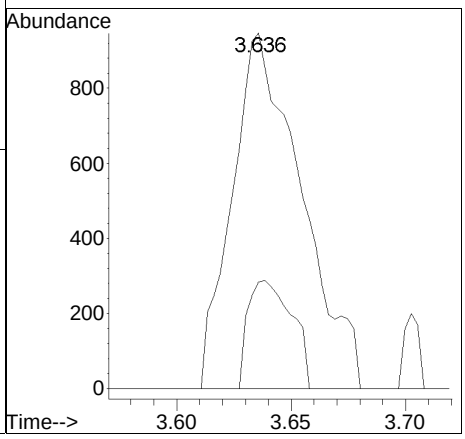


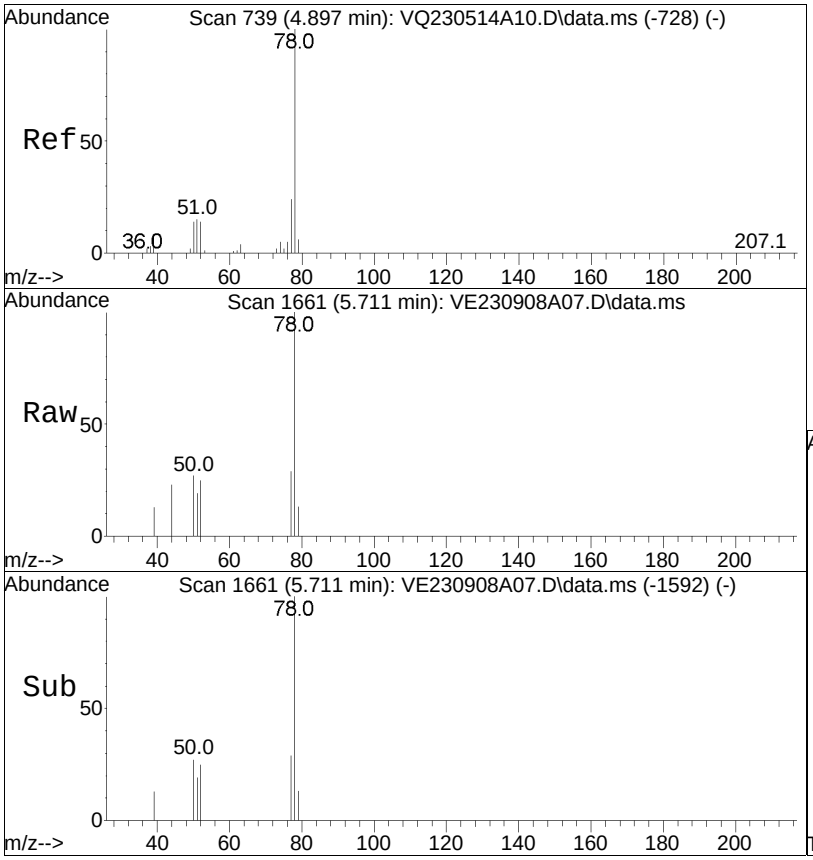


#17
Acetone
Concen: 1.87 ug/L
RT: 3.636 min Scan# 915
Delta R.T. -0.005 min
Lab File: VE230908A07.D
Acq: 8 Sep 2023 11:27 am

Tgt Ion: 43 Resp: 1990

Ion	Ratio	Lower	Upper
43	100		
58	19.3	20.2	30.4#

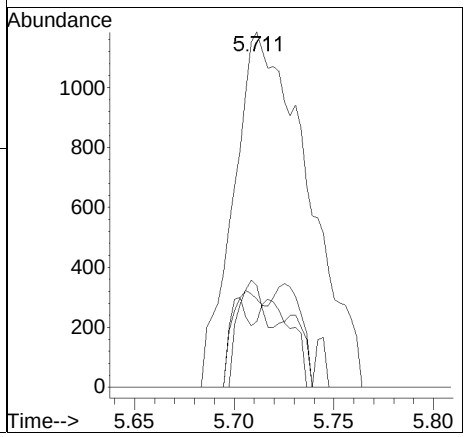


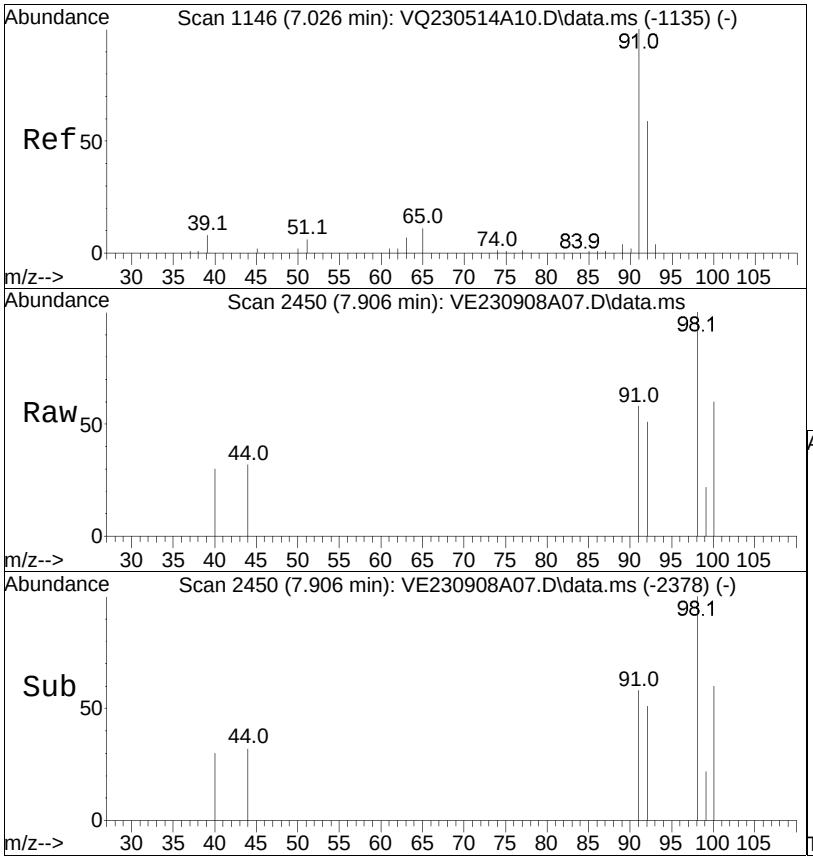


#45
Benzene
Concen: 0.28 ug/L
RT: 5.711 min Scan# 1661
Delta R.T. -0.008 min
Lab File: VE230908A07.D
Acq: 8 Sep 2023 11:27 am

Tgt Ion: 78 Resp: 3063

Ion	Ratio	Lower	Upper
78	100		
77	11.8	15.9	33.1#
51	0.0	12.3	25.5#
52	12.1	11.3	23.5

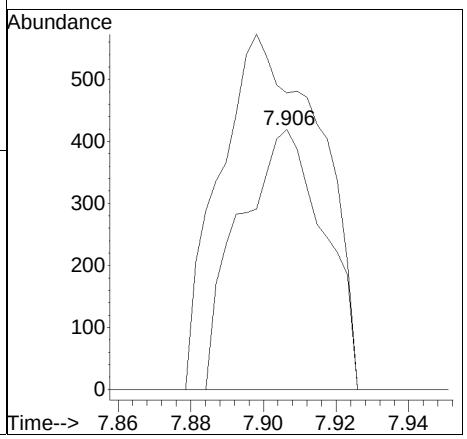


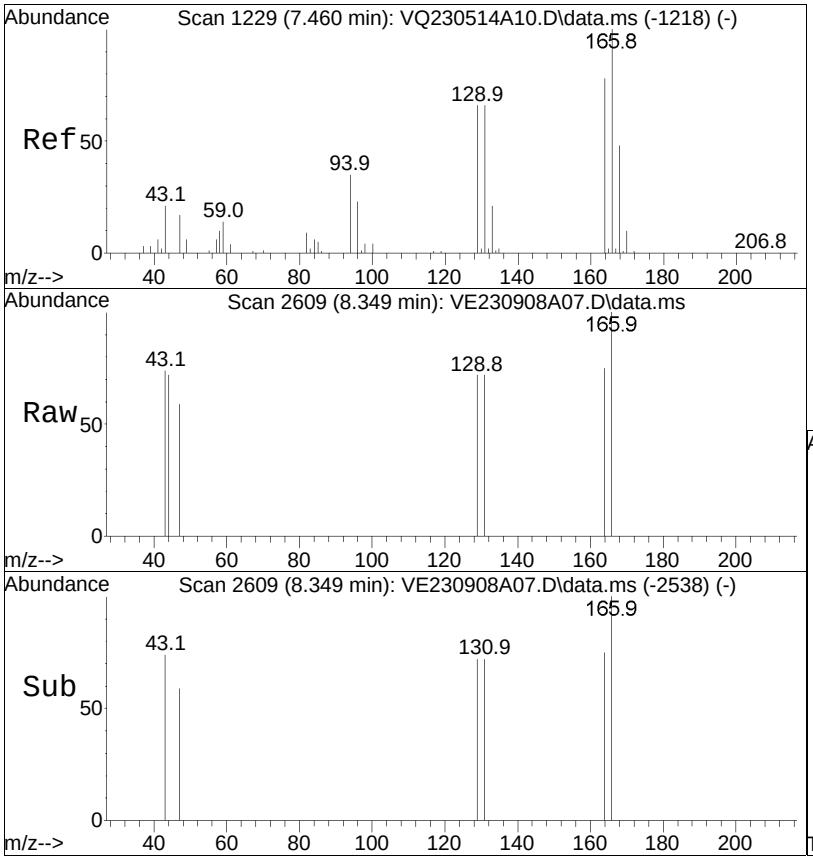


#65
Toluene
Concen: 0.10 ug/L
RT: 7.906 min Scan# 2450
Delta R.T. -0.000 min
Lab File: VE230908A07.D
Acq: 8 Sep 2023 11:27 am

Tgt Ion: 92 Resp: 678

Ion	Ratio	Lower	Upper
92	100		
91	162.2	135.9	203.9

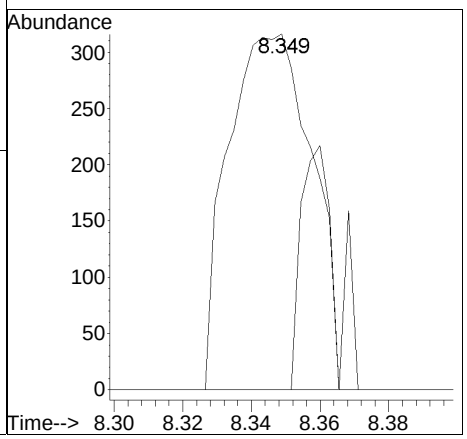




#67
Tetrachloroethene
Concen: 0.21 ug/L
RT: 8.349 min Scan# 2609
Delta R.T. -0.003 min
Lab File: VE230908A07.D
Acq: 8 Sep 2023 11:27 am

Tgt Ion:166 Resp: 561

Ion	Ratio	Lower	Upper
166	100		
168	22.3	28.0	68.0#
94	0.0	27.8	67.8#



Manual Integration Report

Data Path	: K:\Elaine\2023\230908A\	QMethod	: Elaine_230725N_8260.m
Data File	: VE230908A07.D	Operator	: ELAINE:PID
Date Inj'd	: 9/8/2023 11:27 am	Instrument	: Elaine
Sample	: l2350269-01,31,10,10,,a	Quant Date	: 9/10/2023 3:36 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A08.D
Acq On : 8 Sep 2023 11:52 am
Operator : ELAINE:PID
Sample : l2350269-02,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:40:24 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.137	96	118281	10.000	ug/L	0.00
Standard Area 1 = 137394			Recovery = 86.09%			
63) Chlorobenzene-d5	9.698	117	102413	10.000	ug/L	0.00
Standard Area 1 = 115233			Recovery = 88.87%			
84) 1,4-Dichlorobenzene-d4	12.369	152	57967	10.000	ug/L	0.00
Standard Area 1 = 72288			Recovery = 80.19%			
System Monitoring Compounds						
39) Dibromofluoromethane	5.316	113	37847	11.358	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 113.58%			
47) 1,2-Dichloroethane-d4	5.851	65	43478	9.922	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.22%			
64) Toluene-d8	7.845	98	130140	10.291	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.91%			
88) 4-Bromofluorobenzene	11.173	95	45472	8.490	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 84.90%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	0.000		0	N.D.	d	
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	3.057	76	28	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
19) Methyl acetate	0.000		0	N.D.	d	
21) Methyl tert-butyl ether	0.000		0	N.D.		
25) 1,1-Dichloroethane	0.000		0	N.D.		
30) cis-1,2-Dichloroethene	0.000		0	N.D.		
33) Bromochloromethane	0.000		0	N.D.		
34) Cyclohexane	0.000		0	N.D.		
35) Chloroform	0.000		0	N.D.		
37) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A08.D
Acq On : 8 Sep 2023 11:52 am
Operator : ELAINE:PID
Sample : l2350269-02,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:40:24 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,1,1-Trichloroethane	0.000		0		N.D.	
42) 2-Butanone	0.000		0		N.D.	
45) Benzene	0.000		0		N.D.	
48) 1,2-Dichloroethane	0.000		0		N.D.	
51) Methyl cyclohexane	0.000		0		N.D.	
52) Trichloroethene	0.000		0		N.D.	
55) 1,2-Dichloropropane	0.000		0		N.D.	
58) Bromodichloromethane	0.000		0		N.D.	
61) 1,4-Dioxane	0.000		0		N.D.	
62) cis-1,3-Dichloropropene	0.000		0		N.D.	
65) Toluene	0.000		0		N.D.	
66) 4-Methyl-2-pentanone	0.000		0		N.D.	
67) Tetrachloroethene	0.000		0		N.D.	
69) trans-1,3-Dichloropropene	0.000		0		N.D.	
72) 1,1,2-Trichloroethane	0.000		0		N.D.	
73) Chlorodibromomethane	0.000		0		N.D.	
75) 1,2-Dibromoethane	0.000		0		N.D.	
77) 2-Hexanone	0.000		0		N.D.	
78) Chlorobenzene	0.000		0		N.D.	
79) Ethylbenzene	0.000		0		N.D.	
81) p/m Xylene	0.000		0		N.D.	
82) o Xylene	0.000		0		N.D.	
83) Styrene	0.000		0		N.D.	
85) Bromoform	0.000		0		N.D.	
87) Isopropylbenzene	0.000		0		N.D.	
92) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
105) 1,3-Dichlorobenzene	12.386	146	112		N.D.	
106) 1,4-Dichlorobenzene	12.386	146	112		N.D.	
109) 1,2-Dichlorobenzene	0.000		0		N.D.	
111) 1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
114) 1,2,4-Trichlorobenzene	14.211	180	26		N.D.	
116) 1,2,3-Trichlorobenzene	0.000		0		N.D.	

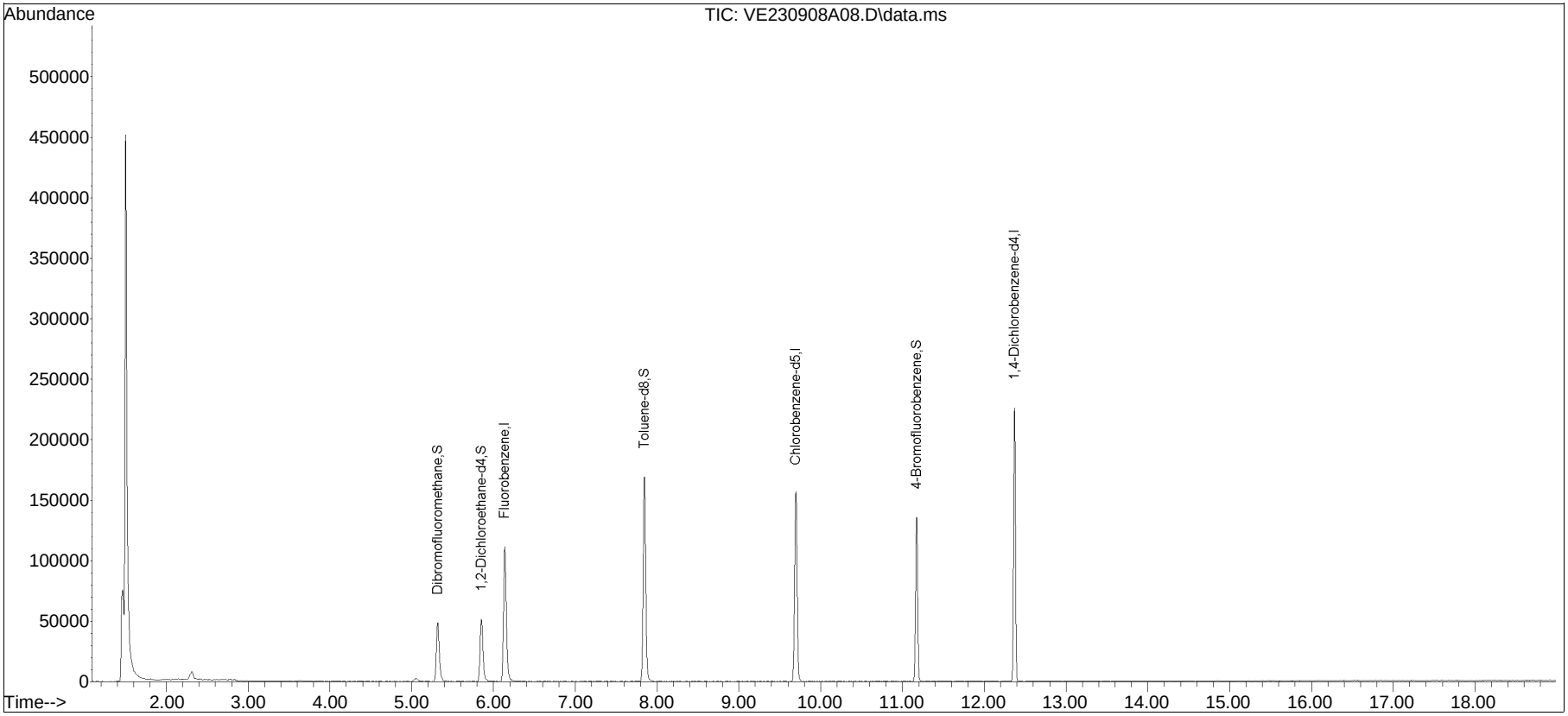
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A08.D
Acq On : 8 Sep 2023 11:52 am
Operator : ELAINE:PID
Sample : l2350269-02,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:40:24 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS908A01.D•



Manual Integration Report

Data Path	: K:\Elaine\2023\230908A\	QMethod	: Elaine_230725N_8260.m
Data File	: VE230908A08.D	Operator	: ELAINE:PID
Date Inj'd	: 9/8/2023 11:52 am	Instrument	: Elaine
Sample	: l2350269-02,31,10,10,,a	Quant Date	: 9/10/2023 3:36 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A09.D
Acq On : 8 Sep 2023 12:18 pm
Operator : ELAINE:PID
Sample : l2350269-03,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:40:34 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.140	96	115880	10.000 ug/L	0.00
Standard Area 1 = 137394			Recovery = 84.34%		
63) Chlorobenzene-d5	9.695	117	101711	10.000 ug/L	0.00
Standard Area 1 = 115233			Recovery = 88.27%		
84) 1,4-Dichlorobenzene-d4	12.372	152	57142	10.000 ug/L	0.00
Standard Area 1 = 72288			Recovery = 79.05%		
System Monitoring Compounds					
39) Dibromofluoromethane	5.319	113	37680	11.543 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 115.43%		
47) 1,2-Dichloroethane-d4	5.850	65	42940	10.002 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.02%		
64) Toluene-d8	7.845	98	128668	10.244 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.44%		
88) 4-Bromofluorobenzene	11.173	95	44441	8.417 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 84.17%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.474	85	116	N.D.	
3) Chloromethane	0.000		0	N.D.	
4) Vinyl chloride	0.000		0	N.D.	
5) Bromomethane	0.000		0	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
10) 1,1-Dichloroethene	0.000		0	N.D.	
11) Carbon disulfide	3.043	76	52	N.D.	
12) Freon-113	0.000		0	N.D.	
15) Methylene chloride	0.000		0	N.D.	
17) Acetone	0.000		0	N.D.	d
18) trans-1,2-Dichloroethene	0.000		0	N.D.	
19) Methyl acetate	3.658	43	81	N.D.	
21) Methyl tert-butyl ether	0.000		0	N.D.	
25) 1,1-Dichloroethane	0.000		0	N.D.	
30) cis-1,2-Dichloroethene	0.000		0	N.D.	
33) Bromochloromethane	0.000		0	N.D.	
34) Cyclohexane	0.000		0	N.D.	
35) Chloroform	0.000		0	N.D.	
37) Carbon tetrachloride	0.000		0	N.D.	

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A09.D
Acq On : 8 Sep 2023 12:18 pm
Operator : ELAINE:PID
Sample : l2350269-03,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:40:34 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40)	1,1,1-Trichloroethane	0.000		0	N.D.		
42)	2-Butanone	0.000		0	N.D.		
45)	Benzene	0.000		0	N.D.		
48)	1,2-Dichloroethane	0.000		0	N.D.		
51)	Methyl cyclohexane	0.000		0	N.D.		
52)	Trichloroethene	0.000		0	N.D.		
55)	1,2-Dichloropropane	0.000		0	N.D.		
58)	Bromodichloromethane	0.000		0	N.D.		
61)	1,4-Dioxane	0.000		0	N.D.		
62)	cis-1,3-Dichloropropene	0.000		0	N.D.		
65)	Toluene	0.000		0	N.D.		
66)	4-Methyl-2-pentanone	0.000		0	N.D.		
67)	Tetrachloroethene	0.000		0	N.D.		
69)	trans-1,3-Dichloropropene	0.000		0	N.D.		
72)	1,1,2-Trichloroethane	0.000		0	N.D.		
73)	Chlorodibromomethane	0.000		0	N.D.		
75)	1,2-Dibromoethane	0.000		0	N.D.		
77)	2-Hexanone	0.000		0	N.D.		
78)	Chlorobenzene	0.000		0	N.D.		
79)	Ethylbenzene	0.000		0	N.D.		
81)	p/m Xylene	0.000		0	N.D.		
82)	o Xylene	0.000		0	N.D.		
83)	Styrene	0.000		0	N.D.		
85)	Bromoform	0.000		0	N.D.		
87)	Isopropylbenzene	0.000		0	N.D.		
92)	1,1,2,2-Tetrachloroethane	0.000		0	N.D.		
105)	1,3-Dichlorobenzene	0.000		0	N.D.		
106)	1,4-Dichlorobenzene	0.000		0	N.D.		
109)	1,2-Dichlorobenzene	0.000		0	N.D.		
111)	1,2-Dibromo-3-chloropr...	0.000		0	N.D.		
114)	1,2,4-Trichlorobenzene	0.000		0	N.D.		
116)	1,2,3-Trichlorobenzene	0.000		0	N.D.		

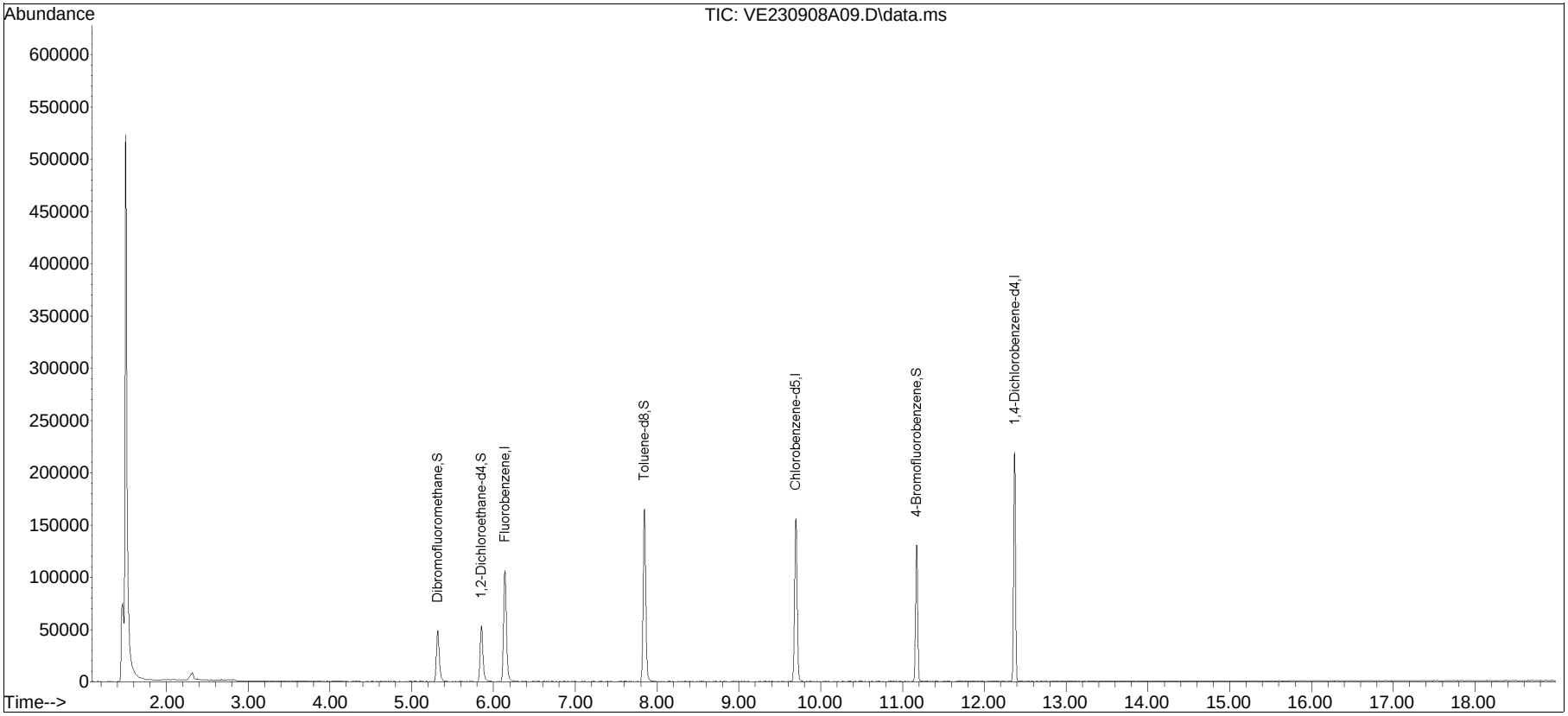
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A09.D
Acq On : 8 Sep 2023 12:18 pm
Operator : ELAINE:PID
Sample : l2350269-03,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:40:34 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS908A01.D•



Manual Integration Report

Data Path	: K:\Elaine\2023\230908A\	QMethod	: Elaine_230725N_8260.m
Data File	: VE230908A09.D	Operator	: ELAINE:PID
Date Inj'd	: 9/8/2023 12:18 pm	Instrument	: Elaine
Sample	: l2350269-03,31,10,10,,a	Quant Date	: 9/10/2023 3:36 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A10.D
Acq On : 8 Sep 2023 12:43 pm
Operator : ELAINE:PID
Sample : l2350269-05,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:41:18 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.140	96	115804	10.000	ug/L	0.00
Standard Area 1 = 137394			Recovery = 84.29%			
63) Chlorobenzene-d5	9.696	117	99854	10.000	ug/L	0.00
Standard Area 1 = 115233			Recovery = 86.65%			
84) 1,4-Dichlorobenzene-d4	12.369	152	57770	10.000	ug/L	0.00
Standard Area 1 = 72288			Recovery = 79.92%			
System Monitoring Compounds						
39) Dibromofluoromethane	5.316	113	37231	11.413	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 114.13%			
47) 1,2-Dichloroethane-d4	5.853	65	42470	9.899	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.99%			
64) Toluene-d8	7.845	98	125884	10.209	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.09%			
88) 4-Bromofluorobenzene	11.173	95	43327	8.117	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 81.17%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.491	85	59	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	0.000		0	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
19) Methyl acetate	0.000		0	N.D.	d	
21) Methyl tert-butyl ether	0.000		0	N.D.		
25) 1,1-Dichloroethane	0.000		0	N.D.		
30) cis-1,2-Dichloroethene	0.000		0	N.D.		
33) Bromochloromethane	0.000		0	N.D.		
34) Cyclohexane	0.000		0	N.D.		
35) Chloroform	5.147	83	277	N.D.		
37) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A10.D
Acq On : 8 Sep 2023 12:43 pm
Operator : ELAINE:PID
Sample : l2350269-05,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:41:18 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,1,1-Trichloroethane	0.000		0		N.D.	
42) 2-Butanone	0.000		0		N.D.	
45) Benzene	0.000		0		N.D.	
48) 1,2-Dichloroethane	0.000		0		N.D.	
51) Methyl cyclohexane	0.000		0		N.D.	
52) Trichloroethene	0.000		0		N.D.	
55) 1,2-Dichloropropane	0.000		0		N.D.	
58) Bromodichloromethane	0.000		0		N.D.	
61) 1,4-Dioxane	0.000		0		N.D.	
62) cis-1,3-Dichloropropene	0.000		0		N.D.	
65) Toluene	7.898	92	52		N.D.	
66) 4-Methyl-2-pentanone	0.000		0		N.D.	
67) Tetrachloroethene	0.000		0		N.D.	
69) trans-1,3-Dichloropropene	0.000		0		N.D.	
72) 1,1,2-Trichloroethane	0.000		0		N.D.	
73) Chlorodibromomethane	0.000		0		N.D.	
75) 1,2-Dibromoethane	0.000		0		N.D.	
77) 2-Hexanone	0.000		0		N.D.	
78) Chlorobenzene	0.000		0		N.D.	
79) Ethylbenzene	9.943	91	83		N.D.	
81) p/m Xylene	0.000		0		N.D.	
82) o Xylene	0.000		0		N.D.	
83) Styrene	0.000		0		N.D.	
85) Bromoform	0.000		0		N.D.	
87) Isopropylbenzene	0.000		0		N.D.	
92) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
105) 1,3-Dichlorobenzene	12.380	146	128		N.D.	
106) 1,4-Dichlorobenzene	12.380	146	128		N.D.	
109) 1,2-Dichlorobenzene	0.000		0		N.D.	
111) 1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
114) 1,2,4-Trichlorobenzene	0.000		0		N.D.	
116) 1,2,3-Trichlorobenzene	0.000		0		N.D.	

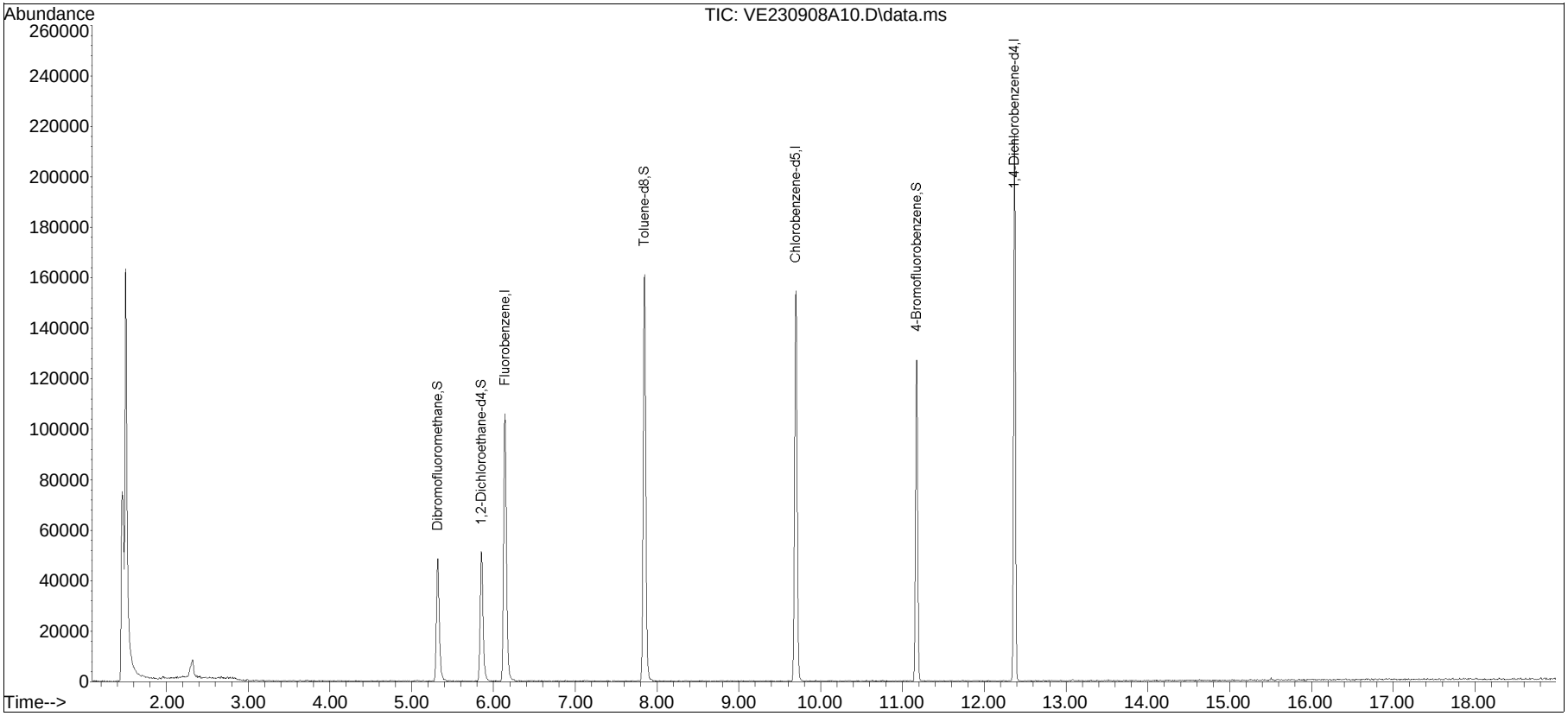
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A10.D
Acq On : 8 Sep 2023 12:43 pm
Operator : ELAINE:PID
Sample : l2350269-05,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:41:18 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS908A01.D•



Manual Integration Report

Data Path	: K:\Elaine\2023\230908A\	QMethod	: Elaine_230725N_8260.m
Data File	: VE230908A10.D	Operator	: ELAINE:PID
Date Inj'd	: 9/8/2023 12:43 pm	Instrument	: Elaine
Sample	: l2350269-05,31,10,10,,a	Quant Date	: 9/10/2023 3:36 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A11.D
Acq On : 8 Sep 2023 1:09 pm
Operator : ELAINE:PID
Sample : l2350269-06,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:41:27 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.140	96	114289	10.000	ug/L	0.00
Standard Area 1 = 137394			Recovery = 83.18%			
63) Chlorobenzene-d5	9.698	117	101911	10.000	ug/L	0.00
Standard Area 1 = 115233			Recovery = 88.44%			
84) 1,4-Dichlorobenzene-d4	12.372	152	56736	10.000	ug/L	0.00
Standard Area 1 = 72288			Recovery = 78.49%			
System Monitoring Compounds						
39) Dibromofluoromethane	5.316	113	37350	11.601	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 116.01%			
47) 1,2-Dichloroethane-d4	5.850	65	42776	10.103	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.03%			
64) Toluene-d8	7.845	98	126956	10.088	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.88%			
88) 4-Bromofluorobenzene	11.173	95	43503	8.298	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 82.98%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.485	85	51	N.D.		
3) Chloromethane	0.000		0	N.D.		
4) Vinyl chloride	0.000		0	N.D.		
5) Bromomethane	0.000		0	N.D.		
6) Chloroethane	0.000		0	N.D.		
7) Trichlorofluoromethane	0.000		0	N.D.		
10) 1,1-Dichloroethene	0.000		0	N.D.		
11) Carbon disulfide	3.043	76	51	N.D.		
12) Freon-113	0.000		0	N.D.		
15) Methylene chloride	0.000		0	N.D.		
17) Acetone	0.000		0	N.D.	d	
18) trans-1,2-Dichloroethene	0.000		0	N.D.		
19) Methyl acetate	0.000		0	N.D.	d	
21) Methyl tert-butyl ether	0.000		0	N.D.		
25) 1,1-Dichloroethane	0.000		0	N.D.		
30) cis-1,2-Dichloroethene	0.000		0	N.D.		
33) Bromochloromethane	0.000		0	N.D.		
34) Cyclohexane	0.000		0	N.D.		
35) Chloroform	0.000		0	N.D.		
37) Carbon tetrachloride	0.000		0	N.D.		

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A11.D
Acq On : 8 Sep 2023 1:09 pm
Operator : ELAINE:PID
Sample : l2350269-06,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:41:27 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,1,1-Trichloroethane	0.000		0		N.D.	
42) 2-Butanone	0.000		0		N.D.	
45) Benzene	0.000		0		N.D.	
48) 1,2-Dichloroethane	0.000		0		N.D.	
51) Methyl cyclohexane	0.000		0		N.D.	
52) Trichloroethene	0.000		0		N.D.	
55) 1,2-Dichloropropane	0.000		0		N.D.	
58) Bromodichloromethane	0.000		0		N.D.	
61) 1,4-Dioxane	0.000		0		N.D.	
62) cis-1,3-Dichloropropene	0.000		0		N.D.	
65) Toluene	0.000		0		N.D.	
66) 4-Methyl-2-pentanone	0.000		0		N.D.	
67) Tetrachloroethene	0.000		0		N.D.	
69) trans-1,3-Dichloropropene	0.000		0		N.D.	
72) 1,1,2-Trichloroethane	0.000		0		N.D.	
73) Chlorodibromomethane	0.000		0		N.D.	
75) 1,2-Dibromoethane	0.000		0		N.D.	
77) 2-Hexanone	0.000		0		N.D.	
78) Chlorobenzene	0.000		0		N.D.	
79) Ethylbenzene	9.949	91	146		N.D.	
81) p/m Xylene	0.000		0		N.D.	
82) o Xylene	0.000		0		N.D.	
83) Styrene	0.000		0		N.D.	
85) Bromoform	0.000		0		N.D.	
87) Isopropylbenzene	0.000		0		N.D.	
92) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
105) 1,3-Dichlorobenzene	12.383	146	50		N.D.	
106) 1,4-Dichlorobenzene	12.383	146	50		N.D.	
109) 1,2-Dichlorobenzene	0.000		0		N.D.	
111) 1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
114) 1,2,4-Trichlorobenzene	0.000		0		N.D.	
116) 1,2,3-Trichlorobenzene	0.000		0		N.D.	

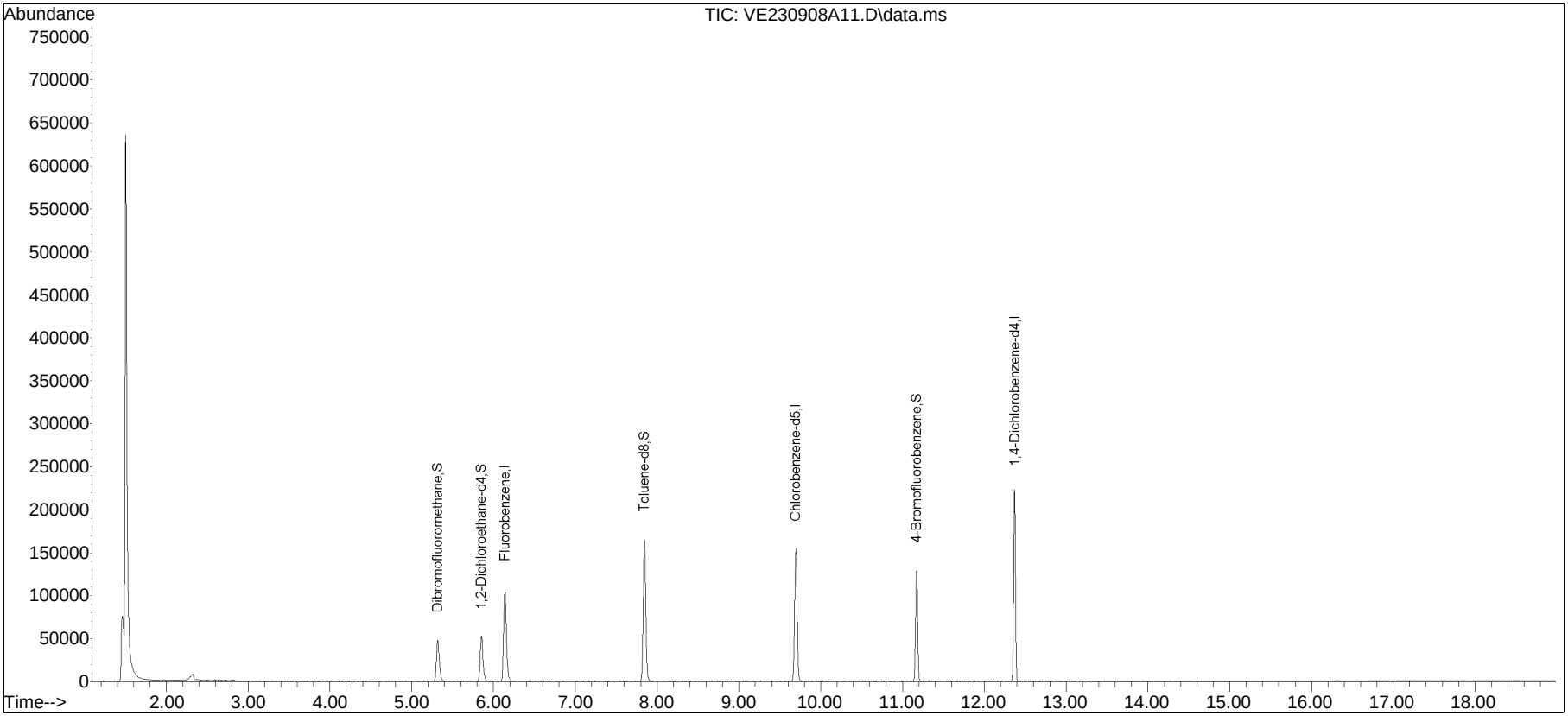
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A11.D
Acq On : 8 Sep 2023 1:09 pm
Operator : ELAINE:PID
Sample : l2350269-06,31,10,10,,a
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 10 15:41:27 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-NY_R2 - NYSOM01.2 + NYSTARS908A01.D•



Manual Integration Report

Data Path	: K:\Elaine\2023\230908A\	QMethod	: Elaine_230725N_8260.m
Data File	: VE230908A11.D	Operator	: ELAINE:PID
Date Inj'd	: 9/8/2023 1:09 pm	Instrument	: Elaine
Sample	: l2350269-06,31,10,10,,a	Quant Date	: 9/10/2023 3:36 pm

There are no manual integrations or false positives in this file.

Volatiles Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Volatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: ELAINE**	**Ical Ref**	**: ICAL20198**
Calibration dates	**: 07/25/23 21:39 07/26/23 01:41**		

Calibration Files
L11 =VE230725N04.D L1 =VE230725N06.D L2 =VE230725N08.D L3 =VE230725N10.D L4 =VE230725N11.D
L6 =VE230725N12.D L8 =VE230725N13.D L10 =VE230725N14.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------ISTD----------									
2)	TP	Dichlorodifluo		0.219	0.309	0.327	0.312	0.294	0.289	0.282	0.290	12.09
3)	TP	Chloromethane		0.359	0.410	0.410	0.371	0.352	0.342	0.333	0.368	8.46
4)	TC	Vinyl chloride	0.360	0.324	0.423	0.439	0.415	0.386	0.386	0.370	0.388	9.63
5)	TP	Bromomethane		0.246	0.270	0.245	0.229	0.203	0.200	0.196	0.227	12.46
6)	TP	Chloroethane		0.194	0.256	0.260	0.250	0.234	0.228	0.219	0.234	9.87
7)	TP	Trichlorofluor		0.277	0.372	0.419	0.392	0.376	0.372	0.358	0.367	12.04
8)	TP	Ethyl ether		0.095	0.123	0.133	0.126	0.126	0.125	0.123	0.122	9.96
10)	TC	1,1-Dichloroet		0.161	0.218	0.232	0.217	0.212	0.209	0.205	0.208	10.80
11)	TP	Carbon disulfide		0.565	0.693	0.709	0.670	0.644	0.621	0.604	0.644	7.96
12)	TP	Freon-113		0.137	0.224	0.251	0.238	0.223	0.218	0.215	0.215	17.05
13)	TP	Iodomethane		0.182	0.213	0.270	0.287	0.303	0.300	0.292	0.264	17.90
14)	TP	Acrolein			0.035	0.035	0.035	0.033	0.032	0.032	0.034	4.58
15)	TP	Methylene chlo		0.325	0.255	0.258	0.241	0.230	0.226	0.223	0.251	14.04
17)	TP	Acetone			0.083	0.057	0.054	0.049	0.047	0.047	*L	0.9992
18)	TP	trans-1,2-Dich		0.191	0.241	0.250	0.235	0.228	0.225	0.219	0.227	8.35
19)	TP	Methyl acetate			0.165	0.141	0.141	0.137	0.133	0.133	0.142	8.41
21)	TP	Methyl tert butyl ether		0.526	0.552	0.571	0.598	0.597	0.592	0.584	0.574	4.66
22)	TP	tert-Butyl alc		0.013	0.015	0.014	0.014	0.013	0.013	0.013	0.014	6.12
24)	TP	Diisopropyl ether		0.801	0.906	0.971	0.991	0.975	0.955	0.937	0.934	6.94
25)	TP	1,1-Dichloroet		0.493	0.581	0.611	0.567	0.539	0.526	0.516	0.548	7.46
26)	TP	Halothane		0.121	0.179	0.194	0.185	0.178	0.174	0.174	0.172	13.76
27)	TP	Acrylonitrile		0.067	0.072	0.076	0.074	0.071	0.069	0.068	0.071	4.92
28)	TP	Ethyl tert-but		0.799	0.825	0.882	0.914	0.912	0.902	0.898	0.876	5.21
29)	TP	Vinyl acetate			0.360	0.329	0.387	0.357	0.330	0.319	0.347	7.33
30)	TP	cis-1,2-Dichlo		0.235	0.273	0.286	0.264	0.256	0.259	0.257	0.261	5.98
31)	TP	2,2-Dichloropr		0.366	0.391	0.406	0.394	0.372	0.366	0.355	0.379	4.90
33)	TP	Bromochloromet		0.105	0.119	0.119	0.114	0.108	0.105	0.104	0.111	6.21
34)	TP	Cyclohexane		0.476	0.590	0.653	0.619	0.593	0.576	0.568	0.582	9.42
35)	TC	Chloroform		0.402	0.465	0.446	0.419	0.411	0.405	0.396	0.420	6.04
36)	TP	Ethyl acetate			0.197	0.192	0.195	0.190	0.187	0.186	0.191	2.38
37)	TP	Carbon tetrachloride	0.253	0.245	0.322	0.336	0.327	0.318	0.315	0.316	0.304	11.43
38)	TP	Tetrahydrofuran			0.055	0.062	0.059	0.058	0.056	0.057	0.058	4.35
39)	S	Dibromofluoromethane	0.300	0.300	0.296	0.285	0.276	0.266	0.266	0.266	0.282	5.47
40)	TP	1,1,1-Trichlor		0.332	0.384	0.410	0.391	0.376	0.368	0.363	0.375	6.58
42)	TP	2-Butanone			0.098	0.078	0.078	0.083	0.081	0.082	0.083	8.97

Initial Calibration Summary
Form 6
Volatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: ELAINE**	**Ical Ref**	**: ICAL20198**
Calibration dates	**: 07/25/23 21:39 07/26/23 01:41**		

Calibration Files
L11 =VE230725N04.D L1 =VE230725N06.D L2 =VE230725N08.D L3 =VE230725N10.D L4 =VE230725N11.D
L6 =VE230725N12.D L8 =VE230725N13.D L10 =VE230725N14.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
43) TP	1,1-Dichloropr		0.232	0.306	0.340	0.340	0.332	0.327	0.323	0.314	12.17
45) TP	Benzene	0.928	0.859	0.955	0.992	0.974	0.956	0.948	0.935	0.943	4.20
46) TP	Tertiary-Amyl Methyl Ether		0.552	0.560	0.583	0.595	0.604	0.607	0.613	0.588	4.03
47) S	1,2-Dichloroethane-d4	0.393	0.386	0.381	0.394	0.363	0.351	0.348	0.349	0.370	5.37
48) T	1,2-Dichloroet		0.393	0.397	0.402	0.391	0.374	0.366	0.363	0.384	4.14
51) TP	Methyl cyclohe		0.291	0.390	0.431	0.436	0.439	0.434	0.444	0.409	13.51
52) TP	Trichloroethene	0.229	0.208	0.250	0.275	0.269	0.269	0.269	0.271	0.255	9.58
54) TP	Dibromomethane		0.104	0.133	0.135	0.133	0.132	0.130	0.132	0.128	8.52
55) TC	1,2-Dichloropr		0.250	0.300	0.315	0.313	0.306	0.299	0.296	0.297	7.39
57) TP	2-Chloroethyl		0.132	0.140	0.152	0.161	0.161	0.161	0.162	0.153	7.87
58) TP	Bromodichlorom		0.300	0.335	0.345	0.339	0.329	0.327	0.326	0.328	4.40
61) TP	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	7.56
62) TP	cis-1,3-Dichlo		0.320	0.360	0.381	0.403	0.402	0.398	0.398	0.380	8.15
63) I	Chlorobenzene-d5	----------ISTD----------									
64) S	Toluene-d8	1.232	1.253	1.244	1.259	1.231	1.235	1.225	1.200	1.235	1.47
65) TC	Toluene		0.583	0.678	0.717	0.698	0.682	0.676	0.660	0.671	6.32
66) TP	4-Methyl-2-pen			0.073	0.081	0.086	0.084	0.083	0.082	0.081	5.68
67) TP	Tetrachloroethene		0.204	0.253	0.285	0.279	0.277	0.275	0.274	0.264	10.68
69) TP	trans-1,3-Dich		0.327	0.350	0.387	0.406	0.404	0.397	0.388	0.380	7.89
71) TP	Ethyl methacry		0.243	0.248	0.273	0.275	0.267	0.265	0.258	0.261	4.69
72) TP	1,1,2-Trichlor		0.126	0.172	0.182	0.185	0.183	0.180	0.177	0.172#	12.10
73) TP	Chlorodibromom		0.198	0.223	0.250	0.256	0.259	0.256	0.256	0.243	9.56
74) TP	1,3-Dichloropr		0.343	0.350	0.380	0.392	0.383	0.376	0.370	0.371	4.80
75) TP	1,2-Dibromoethane		0.179	0.184	0.211	0.216	0.213	0.209	0.208	0.203	7.38
77) TP	2-Hexanone		0.185	0.143	0.141	0.140	0.135	0.132	0.129	0.144	13.05
78) TP	Chlorobenzene		0.674	0.722	0.760	0.751	0.740	0.734	0.724	0.729	3.81
79) TC	Ethylbenzene		1.155	1.343	1.455	1.409	1.361	1.326	1.286	1.334	7.21
80) TP	1,1,1,2-Tetrac		0.195	0.233	0.265	0.271	0.268	0.266	0.262	0.251	11.18
81) TP	p/m Xylene		0.454	0.513	0.560	0.546	0.525	0.515	0.509	0.517	6.50
82) TP	o Xylene		0.473	0.510	0.550	0.537	0.522	0.514	0.503	0.516	4.80
83) TP	Styrene		0.724	0.787	0.905	0.897	0.874	0.860	0.831	0.840	7.71
84) I	1,4-Dichlorobenzene-d4	----------ISTD----------									
85) TP	Bromoform		0.205	0.221	0.243	0.260	0.268	0.277	0.283	0.251	11.67
87) TP	Isopropylbenzene		2.083	2.512	2.633	2.577	2.544	2.542	2.514	2.487	7.35
88) S	4-Bromofluorobenzene	0.933	0.962	0.937	0.903	0.911	0.908	0.936	0.901	0.924	2.31
89) TP	Bromobenzene		0.523	0.551	0.567	0.560	0.559	0.565	0.559	0.555	2.69

Initial Calibration Summary
Form 6
Volatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: ELAINE**	**Ical Ref**	**: ICAL20198**
Calibration dates	**: 07/25/23 21:39 07/26/23 01:41**		

Calibration Files
L11 =VE230725N04.D L1 =VE230725N06.D L2 =VE230725N08.D L3 =VE230725N10.D L4 =VE230725N11.D
L6 =VE230725N12.D L8 =VE230725N13.D L10 =VE230725N14.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
90) TP	n-Propylbenzene		2.498	3.091	3.215	3.167	3.111	3.057	2.946	3.012	8.04
91) TP	1,4-Dichlorobu		0.900	0.868	0.867	0.857	0.842	0.840	0.818	0.856	3.05
92) TP	1,1,2,2-Tetrac		0.411	0.413	0.392	0.409	0.407	0.403	0.394	0.404	2.06
93) TP	4-Ethyltoluene		2.129	2.494	2.627	2.607	2.546	2.510	2.426	2.477	6.78
94) TP	2-Chlorotoluene		1.584	1.832	1.895	1.801	1.762	1.748	1.685	1.758	5.78
95) TP	1,3,5-Trimethy		1.774	2.126	2.220	2.222	2.173	2.144	2.085	2.106	7.35
96) TP	1,2,3-Trichlor		0.347	0.379	0.364	0.362	0.357	0.357	0.355	0.360	2.71
97) TP	trans-1,4-Dich		0.181	0.174	0.177	0.179	0.176	0.174	0.169	0.176	2.24
98) TP	4-Chlorotoluene		1.698	1.809	1.908	1.880	1.838	1.828	1.782	1.820	3.77
99) TP	tert-Butylbenzene		1.448	1.791	1.887	1.853	1.807	1.783	1.742	1.759	8.25
102) TP	1,2,4-Trimethy		1.761	2.037	2.187	2.179	2.148	2.117	2.074	2.072	7.12
103) TP	sec-Butylbenzene		2.171	2.675	2.823	2.785	2.727	2.653	2.596	2.633	8.27
104) TP	p-Isopropyltol		1.803	2.213	2.344	2.353	2.325	2.249	2.276	2.223	8.65
105) TP	1,3-Dichlorobe		1.003	1.158	1.195	1.159	1.132	1.119	1.114	1.126	5.42
106) TP	1,4-Dichlorobe		1.040	1.125	1.175	1.149	1.134	1.112	1.121	1.122	3.72
107) TP	p-Diethylbenzene		1.046	1.283	1.384	1.392	1.380	1.326	1.396	1.315	9.57
108) TP	n-Butylbenzene		1.532	1.879	2.050	2.072	2.005	1.908	1.949	1.914	9.54
109) TP	1,2-Dichlorobe		0.972	1.062	1.098	1.086	1.062	1.044	1.059	1.055	3.85
110) TP	1,2,4,5-Tetram		1.695	1.924	2.059	2.073	2.023	2.060	2.125	1.994	7.31
111) TP	1,2-Dibromo-3-		0.041	0.063	0.065	0.066	0.064	0.066	0.068	0.062	15.40
112) TP	1,3,5-Trichlor		0.623	0.702	0.732	0.744	0.713	0.739	0.749	0.715	6.09
113) TP	Hexachlorobuta		0.171	0.220	0.225	0.223	0.210	0.214	0.210	0.211	8.68
114) TP	1,2,4-Trichlor		0.581	0.592	0.625	0.634	0.613	0.641	0.631	0.617	3.67
115) TP	Naphthalene		1.501	1.459	1.491	1.521	1.527	1.598	1.560	1.522	3.01
116) TP	1,2,3-Trichlor		0.507	0.560	0.558	0.564	0.577	0.588	0.580	0.562	4.73

Initial Calibration Summary
Form 6
Volatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: VOA105**	**Ical Ref**	**: ICAL20245**
Calibration dates	**: 08/08/23 20:56 08/09/23 01:10**		

Calibration Files
L11 =V05230808N04.D L1 =V05230808N06.D L2 =V05230808N08.D L3 =V05230808N10.D L4 =V05230808N11.D
L6 =V05230808N12.D L8 =V05230808N13.D L10 =V05230808N14.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	ISTD									
2)	TP	Dichlorodifluo			0.230	0.321	0.334	0.355	0.352	0.355	0.324	14.90
3)	TP	Chloromethane		0.269	0.297	0.307	0.318	0.327	0.329	0.329	0.311	7.03
4)	TC	Vinyl chloride	0.277	0.249	0.288	0.340	0.351	0.368	0.365	0.368	0.326	14.56
5)	TP	Bromomethane		0.236	0.245	0.231	0.238	0.262	0.274	0.277	0.252	7.49
6)	TP	Chloroethane		0.203	0.224	0.238	0.243	0.248	0.241	0.229	0.232	6.56
7)	TP	Trichlorofluor		0.327	0.367	0.505	0.523	0.553	0.550	0.544	0.481	19.52
8)	TP	Ethyl ether		0.129	0.127	0.136	0.139	0.145	0.146	0.146	0.138	5.90
10)	TC	1,1-Dichloroet		0.220	0.250	0.296	0.306	0.318	0.316	0.316	0.289	13.35
11)	TP	Carbon disulfide		0.755	0.817	0.918	0.973	1.009	0.991	0.973	0.920	10.54
12)	TP	Freon-113			0.211	0.325	0.341	0.356	0.347	0.340	0.320	17.01
13)	TP	Iodomethane			0.318	0.416	0.455	0.466	0.460	0.454	0.428	13.26
14)	TP	Acrolein		0.017	0.022	0.021	0.024	0.025	0.025	0.026	0.023	13.05
15)	TP	Methylene chlo		0.272	0.272	0.258	0.261	0.265	0.266	0.268	0.266	2.02
17)	TP	Acetone			0.051	0.039	0.042	0.041	0.041	0.044	0.043	9.67
18)	TP	trans-1,2-Dich		0.212	0.245	0.266	0.277	0.284	0.284	0.285	0.265	10.29
19)	TP	Methyl acetate		0.080	0.076	0.098	0.102	0.110	0.110	0.110	0.098	14.87
20)	TP	Methyl tert butyl ether		0.495	0.509	0.544	0.567	0.595	0.600	0.605	0.559	7.99
21)	TP	tert-Butyl alc		0.009	0.009	0.009	0.009	0.010	0.010	0.011	0.010#	8.21
22)	TP	Diisopropyl ether		0.626	0.671	0.692	0.740	0.769	0.783	0.796	0.725	8.81
23)	TP	1,1-Dichloroet		0.390	0.453	0.460	0.475	0.484	0.484	0.490	0.462	7.44
24)	TP	Halothane		0.151	0.175	0.215	0.226	0.234	0.232	0.234	0.210	15.83
25)	TP	Acrylonitrile			0.054	0.052	0.054	0.057	0.057	0.057	0.055	3.64
26)	TP	Ethyl tert-but		0.609	0.591	0.623	0.667	0.703	0.713	0.728	0.662	8.29
27)	TP	Vinyl acetate			0.126	0.150	0.183	0.181	0.214	0.212	0.178	19.40
28)	TP	cis-1,2-Dichlo		0.232	0.286	0.293	0.304	0.310	0.311	0.312	0.293	9.80
29)	TP	2,2-Dichloropr		0.272	0.308	0.346	0.371	0.383	0.385	0.388	0.350	12.80
30)	TP	Bromochloromet		0.124	0.137	0.138	0.141	0.139	0.138	0.137	0.136	4.07
31)	TP	Cyclohexane			0.277	0.459	0.479	0.507	0.503	0.507	0.455	19.65
32)	TC	Chloroform		0.416	0.459	0.455	0.467	0.475	0.477	0.481	0.461	4.83
33)	TP	Ethyl acetate			0.129	0.131	0.141	0.152	0.155	0.156	0.144	8.31
34)	TP	Carbon tetrachloride		0.245	0.277	0.360	0.394	0.421	0.424	0.430	*Q	0.9996
35)	TP	Tetrahydrofuran			0.045	0.044	0.043	0.043	0.043	0.043	0.043	2.01
36)	S	Dibromofluoromethane	0.318	0.322	0.323	0.318	0.315	0.313	0.312	0.314	0.317	1.31
37)	TP	1,1,1-Trichlor		0.293	0.360	0.420	0.441	0.457	0.458	0.458	0.412	15.32
39)	TP	2-Butanone			0.065	0.055	0.059	0.064	0.065	0.065	0.062	6.72

Initial Calibration Summary
Form 6
Volatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: VOA105**	**Ical Ref**	**: ICAL20245**
Calibration dates	**: 08/08/23 20:56 08/09/23 01:10**		

Calibration Files
L11 =V05230808N04.D L1 =V05230808N06.D L2 =V05230808N08.D L3 =V05230808N10.D L4 =V05230808N11.D
L6 =V05230808N12.D L8 =V05230808N13.D L10 =V05230808N14.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
40)	TP	1,1-Dichloropr		0.237	0.278	0.341	0.363	0.384	0.383	0.386	0.339	17.45
41)	TP	Benzene	0.797	0.849	0.909	0.961	1.014	1.049	1.060	1.067	0.963	10.65
42)	TP	Tertiary-Amyl Methyl Ether		0.503	0.522	0.542	0.574	0.610	0.621	0.636	0.573	9.05
43)	S	1,2-Dichloroethane-d4	0.311	0.308	0.306	0.321	0.301	0.305	0.307	0.305	0.308	1.94
44)	TP	1,2-Dichloroet		0.329	0.299	0.307	0.313	0.322	0.325	0.329	0.318	3.62
47)	TP	Methyl cyclohe			0.259	0.447	0.481	0.514	0.513	0.527	*L	0.9997
48)	TP	Trichloroethene	0.275	0.283	0.276	0.304	0.320	0.333	0.335	0.344	0.309	9.11
50)	TP	Dibromomethane		0.127	0.138	0.143	0.148	0.153	0.155	0.158	0.146	7.44
51)	TC	1,2-Dichloropr		0.216	0.232	0.240	0.251	0.260	0.265		0.244	7.62
53)	TP	2-Chloroethyl			0.094	0.110	0.120	0.132	0.134	0.137	0.121	13.74
54)	TP	Bromodichlorom		0.283	0.306	0.322	0.343	0.362	0.369	0.378	0.337	10.47
57)	TP	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	3.16
58)	TP	cis-1,3-Dichlo		0.289	0.327	0.358	0.389	0.414	0.424	0.435	0.377	14.43
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.176	1.181	1.184	1.177	1.174	1.158	1.148	1.130	1.166	1.60
61)	TC	Toluene		0.576	0.643	0.668	0.690	0.711	0.713	0.713	0.674	7.47
62)	TP	4-Methyl-2-pen		0.038	0.046	0.051	0.055	0.058	0.058	0.057	0.052	14.87
63)	TP	Tetrachloroethene		0.230	0.275	0.329	0.350	0.358	0.354	0.351	0.321	15.40
65)	TP	trans-1,3-Dich		0.265	0.280	0.314	0.350	0.369	0.372	0.371	0.332	13.67
67)	TP	Ethyl methacry		0.169	0.194	0.209	0.226	0.236	0.235	0.233	0.214	11.77
68)	TP	1,1,2-Trichlor		0.157	0.160	0.164	0.174	0.178	0.178	0.179	0.170#	5.51
69)	TP	Chlorodibromom		0.212	0.217	0.241	0.272	0.288	0.291	0.293	0.259	13.58
70)	TP	1,3-Dichloropr		0.316	0.310	0.324	0.346	0.354	0.352	0.352	0.336	5.57
71)	TP	1,2-Dibromoethane		0.204	0.216	0.220	0.235	0.244	0.245	0.243	0.230	7.11
72)	TP	2-Hexanone		0.097	0.083	0.087	0.093	0.097	0.095	0.094	0.092	5.63
73)	TP	Chlorobenzene		0.695	0.735	0.756	0.789	0.811	0.817	0.821	0.775	6.19
74)	TC	Ethylbenzene		1.102	1.185	1.283	1.359	1.401	1.401	1.398	1.304	9.17
75)	TP	1,1,1,2-Tetrac		0.235	0.247	0.266	0.289	0.301	0.304	0.305	0.278	10.35
76)	TP	p/m Xylene		0.407	0.467	0.507	0.532	0.542	0.549	0.568	0.510	11.01
77)	TP	o Xylene		0.398	0.464	0.487	0.509	0.526	0.537	0.557	0.497	10.80
78)	TP	Styrene		0.648	0.731	0.794	0.843	0.888	0.904	0.909	0.817	12.05
79)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
80)	TP	Bromoform		0.195	0.203	0.233	0.274	0.304	0.316	0.321	*Q	0.9990
82)	TP	Isopropylbenzene		1.630	1.833	2.201	2.385	2.481	2.542	2.518	2.227	16.24
83)	S	4-Bromofluorobenzene	0.787	0.783	0.779	0.790	0.790	0.782	0.780	0.768	0.783	0.91
84)	TP	Bromobenzene		0.483	0.535	0.550	0.591	0.603	0.615		0.563	8.85

Initial Calibration Summary
Form 6
Volatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: VOA105**	**Ical Ref**	**: ICAL20245**
Calibration dates	**: 08/08/23 20:56 08/09/23 01:10**		

Calibration Files
L11 =V05230808N04.D L1 =V05230808N06.D L2 =V05230808N08.D L3 =V05230808N10.D L4 =V05230808N11.D
L6 =V05230808N12.D L8 =V05230808N13.D L10 =V05230808N14.D

	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
85) TP	n-Propylbenzene		1.905	2.154	2.551	2.753	2.868	2.926	2.873	2.576	15.50
86) TP	1,4-Dichlorobu		0.484	0.496	0.503	0.537	0.564	0.574	0.572	0.533	7.19
87) TP	1,1,2,2-Tetrac		0.357	0.338	0.338	0.359	0.379	0.388	0.390	0.364	5.99
88) TP	4-Ethyltoluene		1.644	1.886	2.165	2.330	2.411	2.440		2.146	14.89
89) TP	2-Chlorotoluene		1.311	1.409	1.493	1.573	1.615	1.667	1.608	1.525	8.37
90) TP	1,3,5-Trimethy		1.544	1.706	1.873	2.022	2.068	2.105	2.130	1.921	11.64
91) TP	1,2,3-Trichlor		0.304	0.289	0.286	0.300	0.317	0.327	0.333	0.308	5.92
92) TP	trans-1,4-Dich		0.068	0.098	0.106	0.118	0.116	0.121	0.121	0.107	17.95
93) TP	4-Chlorotoluene		1.330	1.476	1.531	1.623	1.661	1.703	1.713	1.577	8.85
94) TP	tert-Butylbenzene		1.117	1.288	1.558	1.721	1.794	1.832	1.856	1.595	18.18
97) TP	1,2,4-Trimethy		1.444	1.689	1.838	1.949	2.017	2.065	2.064	1.867	12.34
98) TP	sec-Butylbenzene		1.601	1.754	2.301	2.494	2.621	2.661	2.659	2.299	19.35
99) TP	p-Isopropyltol		1.413	1.609	2.016	2.193	2.282	2.341	2.337	2.027	18.45
100) TP	1,3-Dichlorobe		0.919	1.015	1.054	1.125	1.157	1.174	1.186	1.090	9.01
101) TP	1,4-Dichlorobe		1.054	1.060	1.066	1.116	1.138	1.157	1.165	1.108	4.31
102) TP	p-Diethylbenzene		0.827	0.981	1.187	1.298	1.364	1.395		1.175	19.34
103) TP	n-Butylbenzene		1.090	1.256	1.635	1.804	1.902	1.924	1.952	*Q	0.9996
104) TP	1,2-Dichlorobe		0.895	0.947	0.975	1.035	1.045	1.071	1.075	1.006	6.80
105) TP	1,2,4,5-Tetram		1.361	1.497	1.738	1.963	2.107	2.153	2.166	1.855	17.69
106) TP	1,2-Dibromo-3-		0.043	0.056	0.057	0.065	0.071	0.072	0.071	0.062	17.36
107) TP	1,3,5-Trichlor		0.622	0.689	0.757	0.825	0.842	0.847	0.843	0.775	11.54
108) TP	Hexachlorobuta		0.187	0.191	0.247	0.291	0.304	0.306	0.307	*Q	0.9993
109) TP	1,2,4-Trichlor		0.570	0.611	0.667	0.732	0.753	0.754	0.723	0.687	10.65
110) TP	Naphthalene		1.351	1.338	1.456	1.564	1.630	1.600	1.538	1.497	7.84
111) TP	1,2,3-Trichlor		0.542	0.573	0.608	0.657	0.669	0.668	0.649	0.624	8.10

Response Factor Report Elaine

Method Path : K:\Elaine\2023\230725NICAL\
Method File : Elaine_230725N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Jul 26 08:20:35 2023
Response Via : Initial Calibration

Calibration Files
L11 =VE230725N04.D L1 =VE230725N06.D L2 =VE230725N08.D L3 =VE230725N10.D L4 =VE230725N11.D
L6 =VE230725N12.D L8 =VE230725N13.D L10 =VE230725N14.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------	----------	ISTD	----------	----------	----------	----------	----------		
2)	TP	Dichlorodifluo...		0.219	0.309	0.327	0.312	0.294	0.289	0.282	0.290	12.09
3)	TP	Chloromethane		0.359	0.410	0.410	0.371	0.352	0.342	0.333	0.368	8.46
4)	TC	Vinyl chloride	0.360	0.324	0.423	0.439	0.415	0.386	0.386	0.370	0.388	9.63
5)	TP	Bromomethane		0.246	0.270	0.245	0.229	0.203	0.200	0.196	0.227	12.46
6)	TP	Chloroethane		0.194	0.256	0.260	0.250	0.234	0.228	0.219	0.234	9.87
7)	TP	Trichlorofluor...		0.277	0.372	0.419	0.392	0.376	0.372	0.358	0.367	12.04
8)	TP	Ethyl ether		0.095	0.123	0.133	0.126	0.126	0.125	0.123	0.122	9.96
10)	TC	1,1-Dichloroet...		0.161	0.218	0.232	0.217	0.212	0.209	0.205	0.208	10.80
11)	TP	Carbon disulfide		0.565	0.693	0.709	0.670	0.644	0.621	0.604	0.644	7.96
12)	TP	Freon-113		0.137	0.224	0.251	0.238	0.223	0.218	0.215	0.215	17.05
13)	TP	Iodomethane		0.182	0.213	0.270	0.287	0.303	0.300	0.292	0.264	17.90
14)	TP	Acrolein			0.035	0.035	0.035	0.033	0.032	0.032	0.034	4.58
15)	TP	Methylene chlo...		0.325	0.255	0.258	0.241	0.230	0.226	0.223	0.251	14.04
17)	TP	Acetone			0.083	0.057	0.054	0.049	0.047	0.047	*L	0.9992
18)	TP	trans-1,2-Dich...		0.191	0.241	0.250	0.235	0.228	0.225	0.219	0.227	8.35
19)	TP	Methyl acetate			0.165	0.141	0.141	0.137	0.133	0.133	0.142	8.41
21)	TP	Methyl tert-bu...		0.526	0.552	0.571	0.598	0.597	0.592	0.584	0.574	4.66
22)	TP	tert-Butyl alc...		0.013	0.015	0.014	0.014	0.013	0.013	0.013	0.014	6.12
24)	TP	Diisopropyl ether		0.801	0.906	0.971	0.991	0.975	0.955	0.937	0.934	6.94
25)	TP	1,1-Dichloroet...		0.493	0.581	0.611	0.567	0.539	0.526	0.516	0.548	7.46
26)	TP	Halothane		0.121	0.179	0.194	0.185	0.178	0.174	0.174	0.172	13.76
27)	TP	Acrylonitrile		0.067	0.072	0.076	0.074	0.071	0.069	0.068	0.071	4.92
28)	TP	Ethyl tert-but...		0.799	0.825	0.882	0.914	0.912	0.902	0.898	0.876	5.21
29)	TP	Vinyl acetate			0.360	0.329	0.387	0.357	0.330	0.319	0.347	7.33
30)	TP	cis-1,2-Dichlo...		0.235	0.273	0.286	0.264	0.256	0.259	0.257	0.261	5.98
31)	TP	2,2-Dichloropr...		0.366	0.391	0.406	0.394	0.372	0.366	0.355	0.379	4.90
33)	TP	Bromochloromet...		0.105	0.119	0.119	0.114	0.108	0.105	0.104	0.111	6.21
34)	TP	Cyclohexane		0.476	0.590	0.653	0.619	0.593	0.576	0.568	0.582	9.42
35)	TC	Chloroform		0.402	0.465	0.446	0.419	0.411	0.405	0.396	0.420	6.04
36)	TP	Ethyl acetate			0.197	0.192	0.195	0.190	0.187	0.186	0.191	2.38

Method Path : K:\Elaine\2023\230725NICAL\
Method File : Elaine_230725N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Jul 26 08:20:35 2023
Response Via : Initial Calibration

Calibration Files
L11 =VE230725N04.D L1 =VE230725N06.D L2 =VE230725N08.D L3 =VE230725N10.D L4 =VE230725N11.D
L6 =VE230725N12.D L8 =VE230725N13.D L10 =VE230725N14.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
37)	TP	Carbon tetrach...	0.253	0.245	0.322	0.336	0.327	0.318	0.315	0.316	0.304	11.43
38)	TP	Tetrahydrofuran			0.055	0.062	0.059	0.058	0.056	0.057	0.058	4.35
39)	S	Dibromofluorom...	0.300	0.300	0.296	0.285	0.276	0.266	0.266	0.266	0.282	5.47
40)	TP	1,1,1-Trichlor...		0.332	0.384	0.410	0.391	0.376	0.368	0.363	0.375	6.58
42)	TP	2-Butanone			0.098	0.078	0.078	0.083	0.081	0.082	0.083	8.97
43)	TP	1,1-Dichloropr...		0.232	0.306	0.340	0.340	0.332	0.327	0.323	0.314	12.17
45)	TP	Benzene	0.928	0.859	0.955	0.992	0.974	0.956	0.948	0.935	0.943	4.20
46)	TP	tert-Amyl meth...		0.552	0.560	0.583	0.595	0.604	0.607	0.613	0.588	4.03
47)	S	1,2-Dichloroet...	0.393	0.386	0.381	0.394	0.363	0.351	0.348	0.349	0.370	5.37
48)	T	1,2-Dichloroet...		0.393	0.397	0.402	0.391	0.374	0.366	0.363	0.384	4.14
51)	TP	Methyl cyclohe...		0.291	0.390	0.431	0.436	0.439	0.434	0.444	0.409	13.51
52)	TP	Trichloroethene	0.229	0.208	0.250	0.275	0.269	0.269	0.269	0.271	0.255	9.58
54)	TP	Dibromomethane		0.104	0.133	0.135	0.133	0.132	0.130	0.132	0.128	8.52
55)	TC	1,2-Dichloropr...		0.250	0.300	0.315	0.313	0.306	0.299	0.296	0.297	7.39
57)	TP	2-Chloroethyl ...		0.132	0.140	0.152	0.161	0.161	0.161	0.162	0.153	7.87
58)	TP	Bromodichlorom...		0.300	0.335	0.345	0.339	0.329	0.327	0.326	0.328	4.40
61)	TP	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	7.56
62)	TP	cis-1,3-Dichlo...		0.320	0.360	0.381	0.403	0.402	0.398	0.398	0.380	8.15
63)	I	Chlorobenzene-d5	----------ISTD----------									
64)	S	Toluene-d8	1.232	1.253	1.244	1.259	1.231	1.235	1.225	1.200	1.235	1.47
65)	TC	Toluene		0.583	0.678	0.717	0.698	0.682	0.676	0.660	0.671	6.32
66)	TP	4-Methyl-2-pen...			0.073	0.081	0.086	0.084	0.083	0.082	0.081	5.68
67)	TP	Tetrachloroethene		0.204	0.253	0.285	0.279	0.277	0.275	0.274	0.264	10.68
69)	TP	trans-1,3-Dich...		0.327	0.350	0.387	0.406	0.404	0.397	0.388	0.380	7.89
71)	TP	Ethyl methacry...		0.243	0.248	0.273	0.275	0.267	0.265	0.258	0.261	4.69
72)	TP	1,1,2-Trichlor...		0.126	0.172	0.182	0.185	0.183	0.180	0.177	0.172#	12.10
73)	TP	Chlorodibromom...		0.198	0.223	0.250	0.256	0.259	0.256	0.256	0.243	9.56
74)	TP	1,3-Dichloropr...		0.343	0.350	0.380	0.392	0.383	0.376	0.370	0.371	4.80
75)	TP	1,2-Dibromoethane		0.179	0.184	0.211	0.216	0.213	0.209	0.208	0.203	7.38
77)	TP	2-Hexanone		0.185	0.143	0.141	0.140	0.135	0.132	0.129	0.144	13.05
78)	TP	Chlorobenzene		0.674	0.722	0.760	0.751	0.740	0.734	0.724	0.729	3.81

Method Path : K:\Elaine\2023\230725NICAL\
Method File : Elaine_230725N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Jul 26 08:20:35 2023
Response Via : Initial Calibration

Calibration Files
L11 =VE230725N04.D L1 =VE230725N06.D L2 =VE230725N08.D L3 =VE230725N10.D L4 =VE230725N11.D
L6 =VE230725N12.D L8 =VE230725N13.D L10 =VE230725N14.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
79)	TC	Ethylbenzene		1.155	1.343	1.455	1.409	1.361	1.326	1.286	1.334	7.21
80)	TP	1,1,1,2-Tetrac...		0.195	0.233	0.265	0.271	0.268	0.266	0.262	0.251	11.18
81)	TP	p/m Xylene		0.454	0.513	0.560	0.546	0.525	0.515	0.509	0.517	6.50
82)	TP	o Xylene		0.473	0.510	0.550	0.537	0.522	0.514	0.503	0.516	4.80
83)	TP	Styrene		0.724	0.787	0.905	0.897	0.874	0.860	0.831	0.840	7.71
84)	I	1,4-Dichlorobenzene-d4	----------ISTD----------									
85)	TP	Bromoform		0.205	0.221	0.243	0.260	0.268	0.277	0.283	0.251	11.67
87)	TP	Isopropylbenzene		2.083	2.512	2.633	2.577	2.544	2.542	2.514	2.487	7.35
88)	S	4-Bromofluorob...	0.933	0.962	0.937	0.903	0.911	0.908	0.936	0.901	0.924	2.31
89)	TP	Bromobenzene		0.523	0.551	0.567	0.560	0.559	0.565	0.559	0.555	2.69
90)	TP	n-Propylbenzene		2.498	3.091	3.215	3.167	3.111	3.057	2.946	3.012	8.04
91)	TP	1,4-Dichlorobu...		0.900	0.868	0.867	0.857	0.842	0.840	0.818	0.856	3.05
92)	TP	1,1,2,2-Tetrac...		0.411	0.413	0.392	0.409	0.407	0.403	0.394	0.404	2.06
93)	TP	4-Ethyltoluene		2.129	2.494	2.627	2.607	2.546	2.510	2.426	2.477	6.78
94)	TP	2-Chlorotoluene		1.584	1.832	1.895	1.801	1.762	1.748	1.685	1.758	5.78
95)	TP	1,3,5-Trimethy...		1.774	2.126	2.220	2.222	2.173	2.144	2.085	2.106	7.35
96)	TP	1,2,3-Trichlor...		0.347	0.379	0.364	0.362	0.357	0.357	0.355	0.360	2.71
97)	TP	trans-1,4-Dich...		0.181	0.174	0.177	0.179	0.176	0.174	0.169	0.176	2.24
98)	TP	4-Chlorotoluene		1.698	1.809	1.908	1.880	1.838	1.828	1.782	1.820	3.77
99)	TP	tert-Butylbenzene		1.448	1.791	1.887	1.853	1.807	1.783	1.742	1.759	8.25
102)	TP	1,2,4-Trimethy...		1.761	2.037	2.187	2.179	2.148	2.117	2.074	2.072	7.12
103)	TP	sec-Butylbenzene		2.171	2.675	2.823	2.785	2.727	2.653	2.596	2.633	8.27
104)	TP	p-Isopropyltol...		1.803	2.213	2.344	2.353	2.325	2.249	2.276	2.223	8.65
105)	TP	1,3-Dichlorobe...		1.003	1.158	1.195	1.159	1.132	1.119	1.114	1.126	5.42
106)	TP	1,4-Dichlorobe...		1.040	1.125	1.175	1.149	1.134	1.112	1.121	1.122	3.72
107)	TP	p-Diethylbenzene		1.046	1.283	1.384	1.392	1.380	1.326	1.396	1.315	9.57
108)	TP	n-Butylbenzene		1.532	1.879	2.050	2.072	2.005	1.908	1.949	1.914	9.54
109)	TP	1,2-Dichlorobe...		0.972	1.062	1.098	1.086	1.062	1.044	1.059	1.055	3.85
110)	TP	1,2,4,5-Tetram...		1.695	1.924	2.059	2.073	2.023	2.060	2.125	1.994	7.31
111)	TP	1,2-Dibromo-3-...		0.041	0.063	0.065	0.066	0.064	0.066	0.068	0.062	15.40
112)	TP	1,3,5-Trichlor...		0.623	0.702	0.732	0.744	0.713	0.739	0.749	0.715	6.09

Method Path : K:\Elaine\2023\230725NICAL\
Method File : Elaine_230725N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Jul 26 08:20:35 2023
Response Via : Initial Calibration

Calibration Files
L11 =VE230725N04.D L1 =VE230725N06.D L2 =VE230725N08.D L3 =VE230725N10.D L4 =VE230725N11.D
L6 =VE230725N12.D L8 =VE230725N13.D L10 =VE230725N14.D

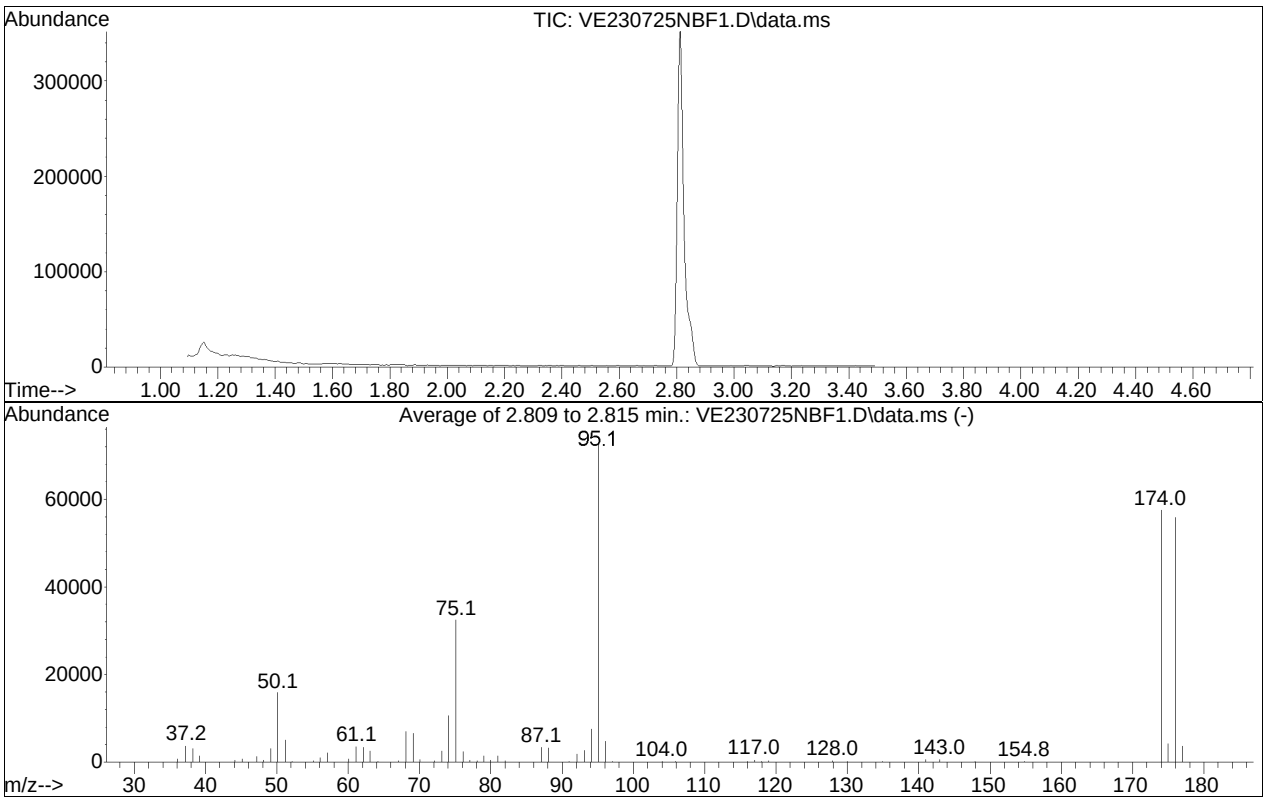
	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
113)	TP Hexachlorobuta...	0.171	0.220	0.225	0.223	0.210	0.214	0.210	0.211		8.68
114)	TP 1,2,4-Trichlor...	0.581	0.592	0.625	0.634	0.613	0.641	0.631	0.617		3.67
115)	TP Naphthalene	1.501	1.459	1.491	1.521	1.527	1.598	1.560	1.522		3.01
116)	TP 1,2,3-Trichlor...	0.507	0.560	0.558	0.564	0.577	0.588	0.580	0.562		4.73

(#) = Out of Range

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725NBF1.D
Acq On : 25 Jul 2023 8:05 pm
Operator : ELAINE:TMS
Sample : WG1807846-1
Misc : WG1807846
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Jul 26 08:20:35 2023



AutoFind: Scans 618, 619, 620; Background Corrected with Scan 605

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	21.7	15849	PASS
75	95	30	60	44.5	32483	PASS
95	95	100	100	100.0	72944	PASS
96	95	5	9	6.5	4747	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	78.9	57557	PASS
175	174	5	9	7.4	4247	PASS
176	174	95	101	97.0	55835	PASS
177	176	5	9	6.5	3639	PASS

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N04.D
Acq On : 25 Jul 2023 9:39 pm
Operator : ELAINE:PID
Sample : I8260STD0.19PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:16:41 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-L11 - Level 11 for 8260-LRR product

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.143	96	168126	10.000	ug/L	0.00
Standard Area 1 = 158342			Recovery = 106.18%			
63) Chlorobenzene-d5	9.701	117	147703	10.000	ug/L	0.00
Standard Area 1 = 134176			Recovery = 110.08%			
84) 1,4-Dichlorobenzene-d4	12.369	152	79673	10.000	ug/L	0.00
Standard Area 1 = 74599			Recovery = 106.80%			
System Monitoring Compounds						
39) Dibromofluoromethane	5.319	113	50477	10.658	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.58%			
47) 1,2-Dichloroethane-d4	5.856	65	66023	10.600	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.00%			
64) Toluene-d8	7.848	98	182014	9.979	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.79%			
88) 4-Bromofluorobenzene	11.176	95	74372	10.103	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.03%			
Target Compounds						Qvalue
4) Vinyl chloride	1.933	62	1149	0.176	ug/L	79
37) Carbon tetrachloride	5.283	117	807M3	0.158	ug/L	
45) Benzene	5.717	78	2965	0.187	ug/L #	85
52) Trichloroethene	6.309	95	731M1	0.171	ug/L	

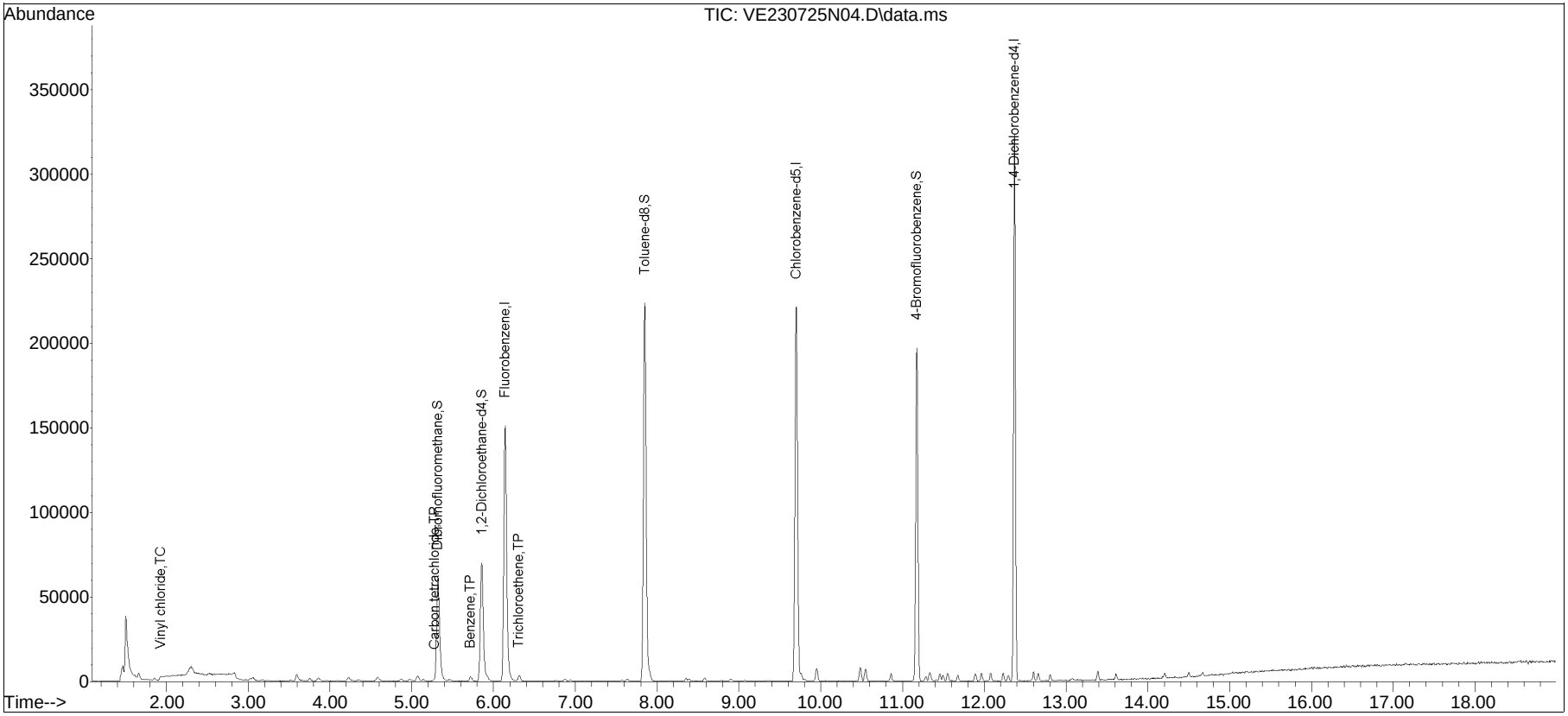
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N04.D
Acq On : 25 Jul 2023 9:39 pm
Operator : ELAINE:PID
Sample : I8260STD0.19PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:16:41 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

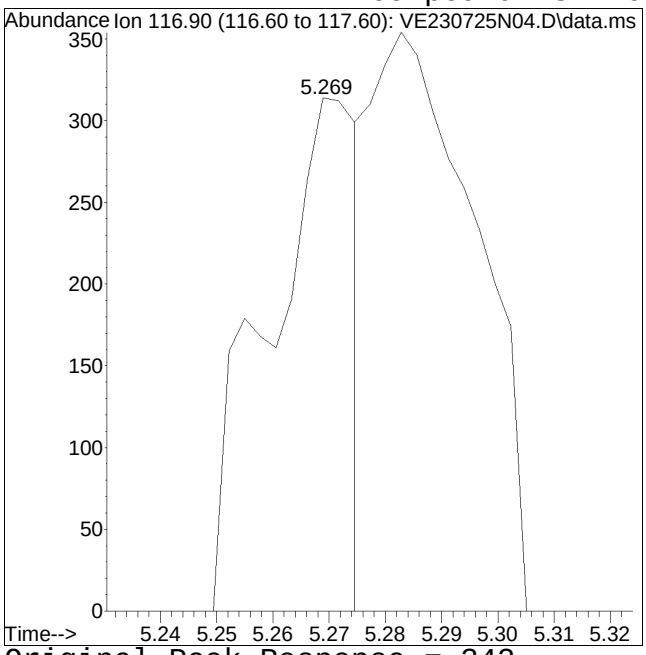
Sub List : 8260-L11 - Level 11 for 8260-LRR product10.D•

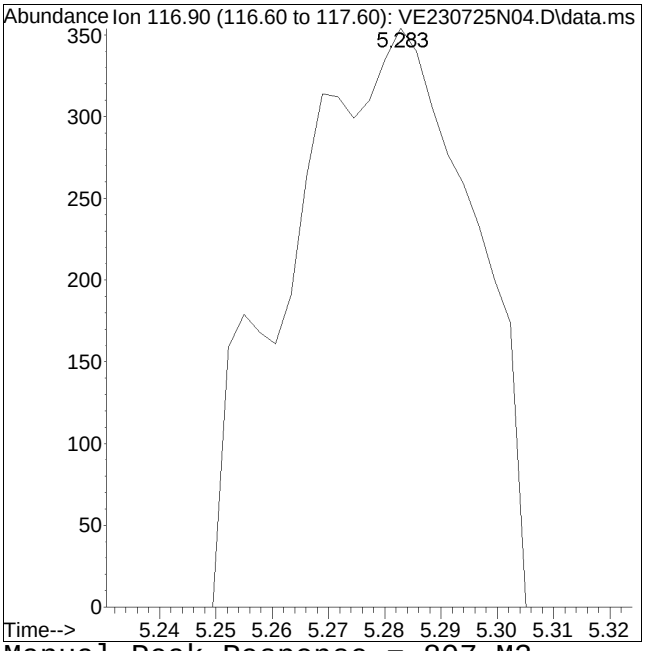


Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N04.D Operator : ELAINE:PID
Date Inj'd : 7/25/2023 9:39 pm Instrument : Elaine
Sample : I8260STD0.19PPB Quant Date : 7/26/2023 8:16 am

Compound #37: Carbon tetrachloride





Original Peak Response = 342 Manual Peak Response = 807 M3

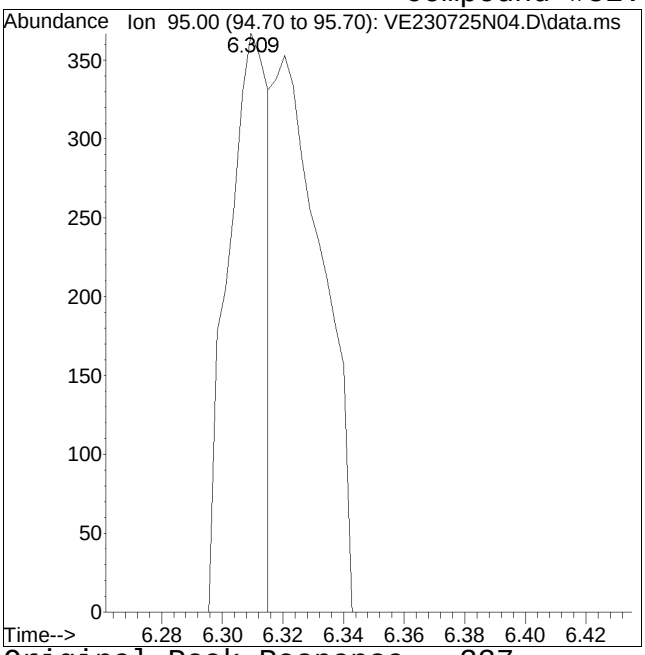
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

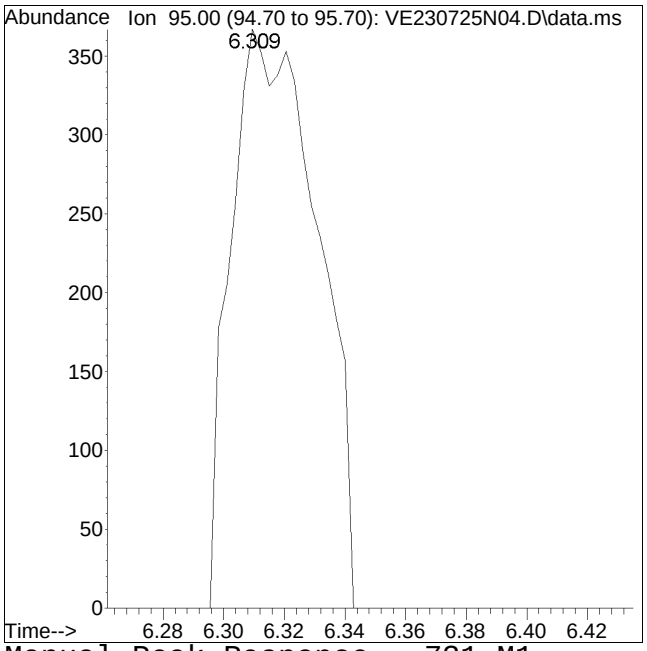
Data Path : K:\Elaine\2023\230725NICALQ
Data File : VE230725N04.D
Date Inj'd : 7/25/2023 9:39 pm
Sample : I8260STD0.19PPB

Method : Elaine_230725N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 7/26/2023 8:16 am

Compound #52: Trichloroethene



Original Peak Response = 337



Manual Peak Response = 731 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N06.D
Acq On : 25 Jul 2023 10:27 pm
Operator : ELAINE:PID
Sample : I8260STD0.5PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:16:50 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.143	96	160161	10.000 ug/L	0.00
Standard Area 1 = 158342			Recovery = 101.15%		
63) Chlorobenzene-d5	9.701	117	139994	10.000 ug/L	0.00
Standard Area 1 = 134176			Recovery = 104.34%		
84) 1,4-Dichlorobenzene-d4	12.369	152	74869	10.000 ug/L	0.00
Standard Area 1 = 74599			Recovery = 100.36%		
System Monitoring Compounds					
39) Dibromofluoromethane	5.322	113	47976	10.633 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.33%		
47) 1,2-Dichloroethane-d4	5.856	65	61780	10.412 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.12%		
64) Toluene-d8	7.848	98	175348	10.143 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.43%		
88) 4-Bromofluorobenzene	11.176	95	72021	10.411 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.11%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.655	85	1751M1	0.377 ug/L	
3) Chloromethane	1.858	50	2872	0.487 ug/L	95
4) Vinyl chloride	1.930	62	2596	0.418 ug/L	80
5) Bromomethane	2.256	94	1966	0.541 ug/L	91
6) Chloroethane	2.381	64	1557	0.415 ug/L	98
7) Trichlorofluoromethane	2.529	101	2217M1	0.378 ug/L	
8) Ethyl ether	2.829	74	762	0.391 ug/L #	8
10) 1,1-Dichloroethene	3.029	96	1289	0.387 ug/L	83
11) Carbon disulfide	3.054	76	4523	0.439 ug/L #	87
12) Freon-113	3.066	101	1097	0.318 ug/L #	43
13) Iodomethane	3.169	142	1461	0.346 ug/L #	83
14) Acrolein	3.361	56	111	0.225 ug/L #	1
15) Methylene chloride	3.597	84	2600	0.647 ug/L	81
17) Acetone	0.000		0	N.D. d	
18) trans-1,2-Dichloroethene	3.756	96	1529	0.420 ug/L	83
19) Methyl acetate	0.000		0	N.D. d	
21) Methyl tert-butyl ether	3.859	73	4214	0.458 ug/L #	83
22) tert-Butyl alcohol	3.956	59	523M1	2.414 ug/L	
24) Diisopropyl ether	4.220	45	6413	0.429 ug/L #	88
25) 1,1-Dichloroethane	4.348	63	3949	0.450 ug/L	90
26) Halothane	4.390	117	967M1	0.351 ug/L	

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N06.D
Acq On : 25 Jul 2023 10:27 pm
Operator : ELAINE:PID
Sample : I8260STD0.5PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:16:50 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) Acrylonitrile	4.398	53	535M3	0.472	ug/L		
28) Ethyl tert-butyl ether	4.582	59	6398	0.456	ug/L		84
29) Vinyl acetate	0.000		0	N.D.	d		
30) cis-1,2-Dichloroethene	4.871	96	1884	0.450	ug/L	#	81
31) 2,2-Dichloropropane	4.983	77	2933M1	0.484	ug/L		
33) Bromochloromethane	5.069	128	838	0.473	ug/L	#	71
34) Cyclohexane	5.074	56	3814	0.409	ug/L	#	42
35) Chloroform	5.138	83	3218	0.478	ug/L		94
36) Ethyl acetate	0.000		0	N.D.	d		
37) Carbon tetrachloride	5.283	117	1959	0.403	ug/L	#	86
38) Tetrahydrofuran	0.000		0	N.D.	d		
40) 1,1,1-Trichloroethane	5.344	97	2657M1	0.442	ug/L		
42) 2-Butanone	0.000		0	N.D.	d		
43) 1,1-Dichloropropene	5.464	75	1856	0.369	ug/L		98
45) Benzene	5.720	78	6880	0.455	ug/L		96
46) tert-Amyl methyl ether	5.842	73	4423	0.470	ug/L	#	84
48) 1,2-Dichloroethane	5.928	62	3148	0.512	ug/L	#	88
51) Methyl cyclohexane	6.318	83	2327	0.355	ug/L	#	63
52) Trichloroethene	6.318	95	1664	0.408	ug/L	#	87
54) Dibromomethane	6.769	93	831	0.404	ug/L		96
55) 1,2-Dichloropropane	6.874	63	2001	0.421	ug/L	#	80
57) 2-Chloroethyl vinyl ether	7.573	63	1057	0.432	ug/L	#	80
58) Bromodichloromethane	6.941	83	2400	0.456	ug/L	#	95
61) 1,4-Dioxane	7.155	88	1882	110.255	ug/L	#	82
62) cis-1,3-Dichloropropene	7.637	75	2559	0.420	ug/L		92
65) Toluene	7.907	92	4084	0.435	ug/L		98
66) 4-Methyl-2-pentanone	0.000		0	N.D.	d		
67) Tetrachloroethene	8.346	166	1428M1	0.387	ug/L		
69) trans-1,3-Dichloropropene	8.391	75	2288	0.430	ug/L		91
71) Ethyl methacrylate	8.586	69	1698	0.464	ug/L		86
72) 1,1,2-Trichloroethane	8.572	83	881	0.366	ug/L	#	86
73) Chlorodibromomethane	8.789	129	1388	0.409	ug/L		91
74) 1,3-Dichloropropane	8.900	76	2400	0.463	ug/L		93
75) 1,2-Dibromoethane	9.064	107	1251M1	0.441	ug/L		
77) 2-Hexanone	9.353	43	1292	0.643	ug/L	#	73
78) Chlorobenzene	9.718	112	4721	0.462	ug/L	#	75
79) Ethylbenzene	9.762	91	8083	0.433	ug/L		100
80) 1,1,1,2-Tetrachloroethane	9.815	131	1362	0.387	ug/L	#	60
81) p/m Xylene	9.952	106	6361	0.878	ug/L		99
82) o Xylene	10.486	106	6620	0.917	ug/L		91

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N06.D
Acq On : 25 Jul 2023 10:27 pm
Operator : ELAINE:PID
Sample : I8260STD0.5PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:16:50 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
83) Styrene	10.547	104	10141	0.863	ug/L		95
85) Bromoform	10.569	173	767	0.408	ug/L	#	54
87) Isopropylbenzene	10.861	105	7797	0.419	ug/L		99
89) Bromobenzene	11.284	156	1959	0.471	ug/L		91
90) n-Propylbenzene	11.332	91	9352	0.415	ug/L		97
91) 1,4-Dichlorobutane	11.346	55	3370	0.526	ug/L	#	86
92) 1,1,2,2-Tetrachloroethane	11.415	83	1538	0.508	ug/L	#	92
93) 4-Ethyltoluene	11.457	105	7971	0.430	ug/L		95
94) 2-Chlorotoluene	11.496	91	5928	0.450	ug/L		91
95) 1,3,5-Trimethylbenzene	11.554	105	6640	0.421	ug/L		99
96) 1,2,3-Trichloropropane	11.554	75	1300	0.482	ug/L	#	91
97) trans-1,4-Dichloro-2-b...	11.604	53	676	0.514	ug/L	#	59
98) 4-Chlorotoluene	11.677	91	6355	0.466	ug/L		96
99) tert-Butylbenzene	11.891	119	5420	0.412	ug/L		99
102) 1,2,4-Trimethylbenzene	11.966	105	6592	0.425	ug/L		94
103) sec-Butylbenzene	12.080	105	8128	0.412	ug/L		94
104) p-Isopropyltoluene	12.230	119	6749	0.405	ug/L		96
105) 1,3-Dichlorobenzene	12.291	146	3753	0.445	ug/L		95
106) 1,4-Dichlorobenzene	12.386	146	3895M3	0.463	ug/L		
107) p-Diethylbenzene	12.598	119	3915	0.398	ug/L		96
108) n-Butylbenzene	12.659	91	5736	0.400	ug/L		96
109) 1,2-Dichlorobenzene	12.803	146	3639	0.461	ug/L		96
110) 1,2,4,5-Tetramethylben...	13.388	119	6344	0.425	ug/L		98
111) 1,2-Dibromo-3-chloropr...	13.577	155	152	0.328	ug/L		89
112) 1,3,5-Trichlorobenzene	13.610	180	2334	0.436	ug/L		95
113) Hexachlorobutadiene	14.181	225	642	0.407	ug/L		92
114) 1,2,4-Trichlorobenzene	14.208	180	2175	0.471	ug/L		97
115) Naphthalene	14.501	128	5619	0.493	ug/L		100
116) 1,2,3-Trichlorobenzene	14.668	180	1899	0.451	ug/L		93

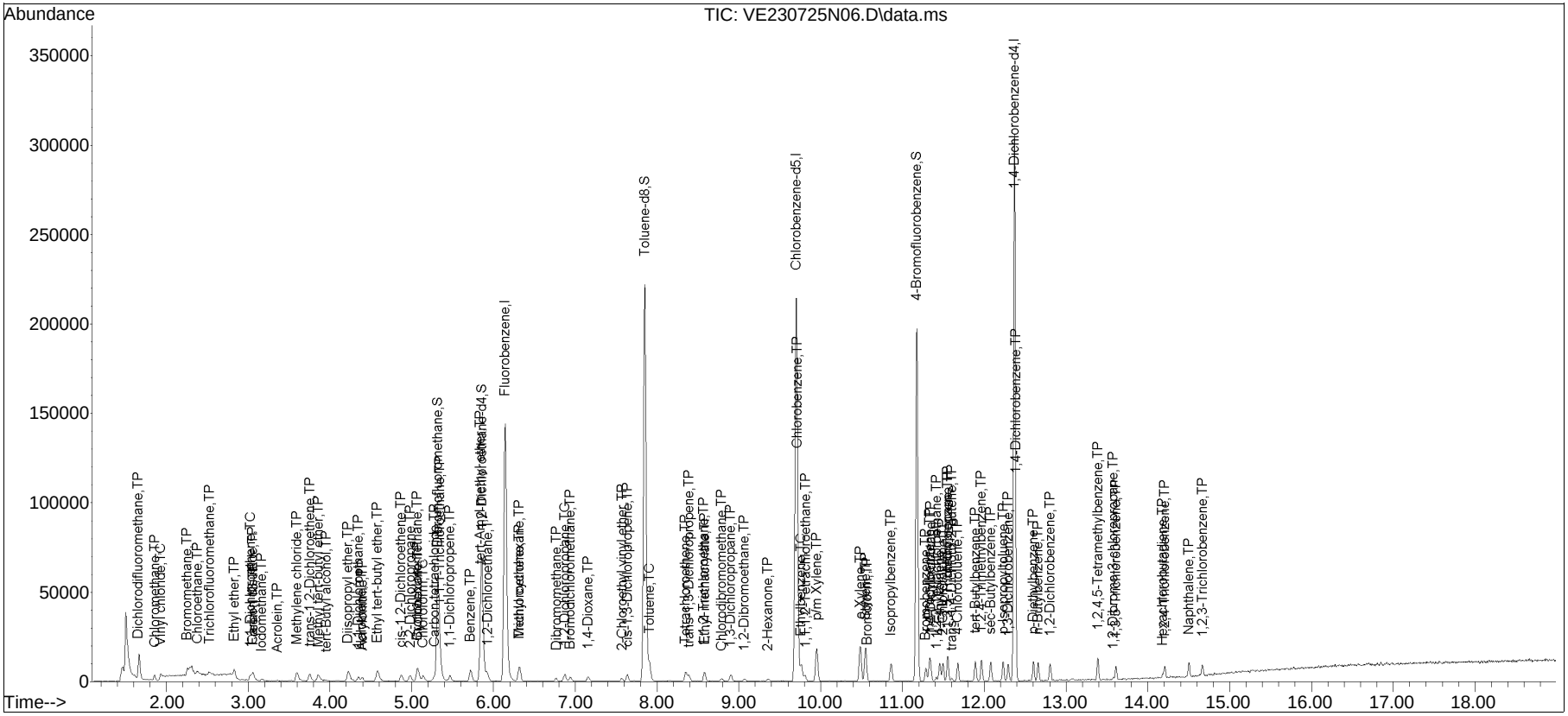
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N06.D
Acq On : 25 Jul 2023 10:27 pm
Operator : ELAINE:PID
Sample : I8260STD0.5PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:16:50 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

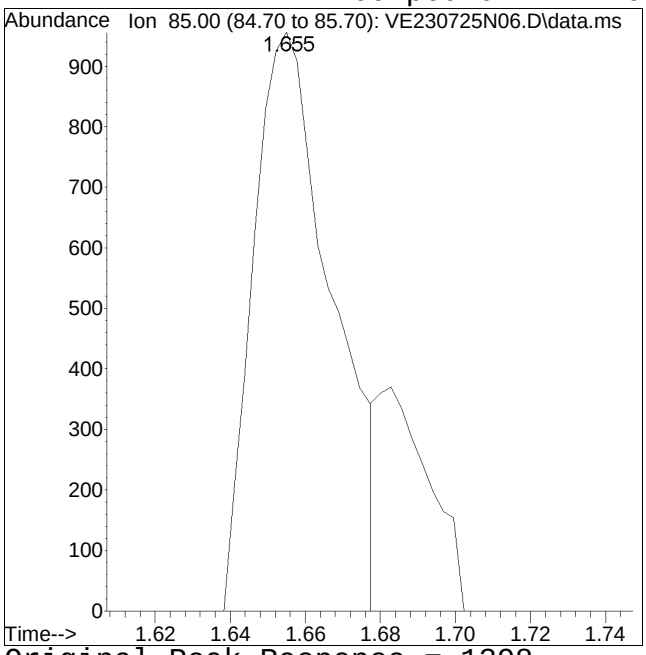
Sub List : 8260-Curve - Megamix plus Diox\VE230725N10.D•

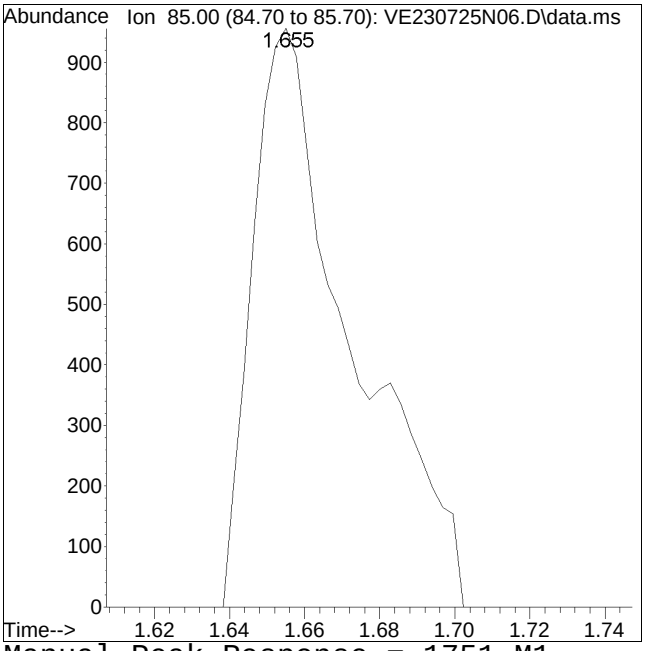


Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N06.D Operator : ELAINE:PID
Date Inj'd : 7/25/2023 10:27 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 7/26/2023 8:16 am

Compound #2: Dichlorodifluoromethane





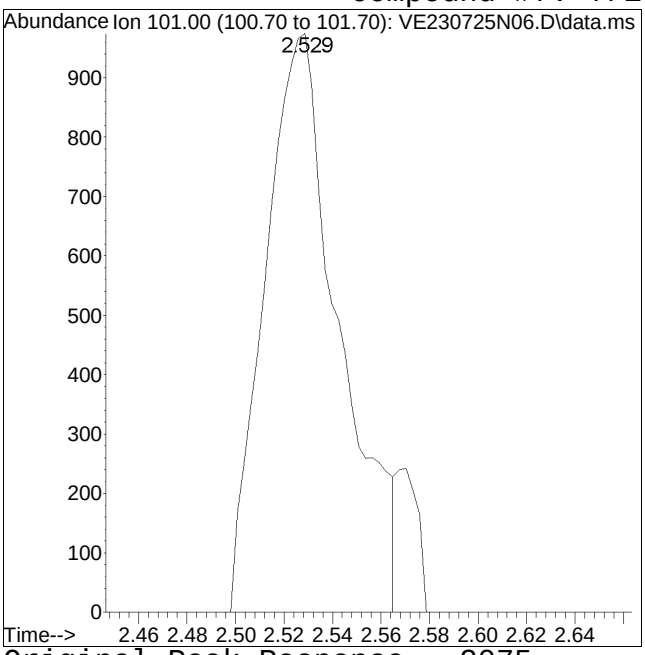
Original Peak Response = 1398 Manual Peak Response = 1751 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

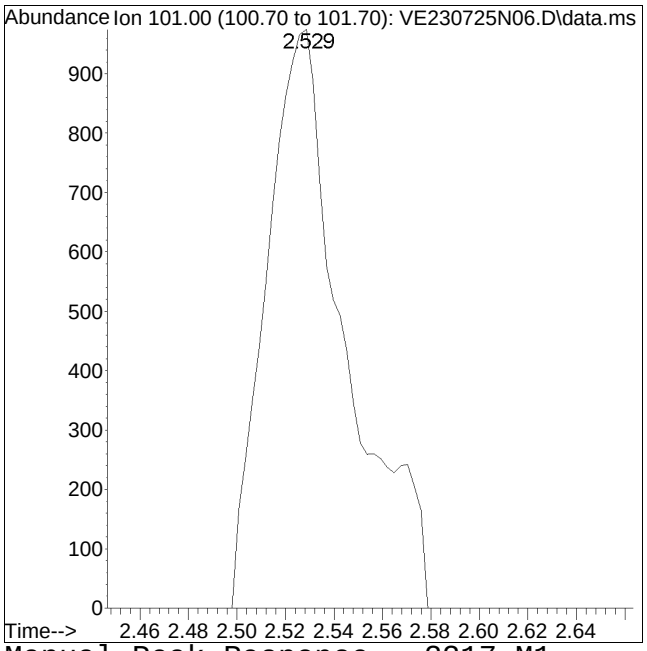
Data Path : K:\Elaine\2023\230725NICALQ
Data File : VE230725N06.D
Date Inj'd : 7/25/2023 10:27 pm
Sample : I8260STD0.5PPB

Method : Elaine_230725N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 7/26/2023 8:16 am

Compound #7: Trichlorofluoromethane



Original Peak Response = 2075



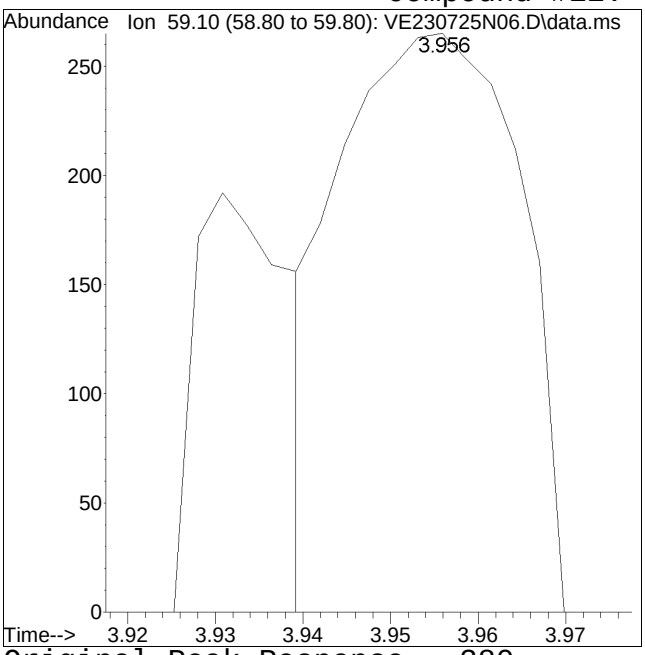
Manual Peak Response = 2217 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

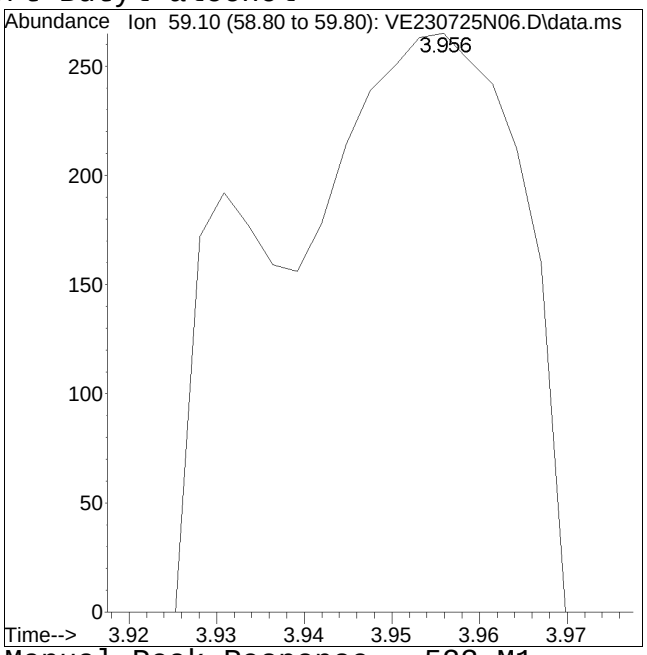
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N06.D Operator : ELAINE:PID
Date Inj'd : 7/25/2023 10:27 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 7/26/2023 8:16 am

Compound #22: tert-Butyl alcohol



Original Peak Response = 380



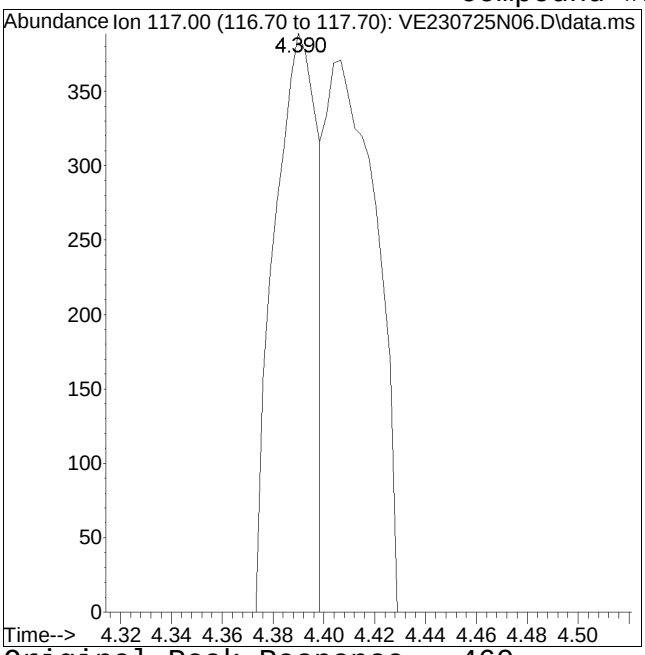
Manual Peak Response = 523 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

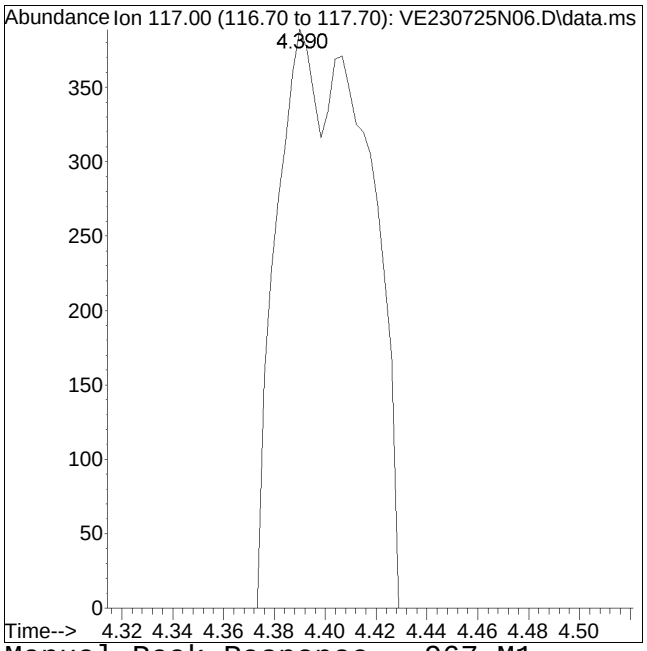
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N06.D Operator : ELAINE:PID
Date Inj'd : 7/25/2023 10:27 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 7/26/2023 8:16 am

Compound #26: Halothane



Original Peak Response = 460



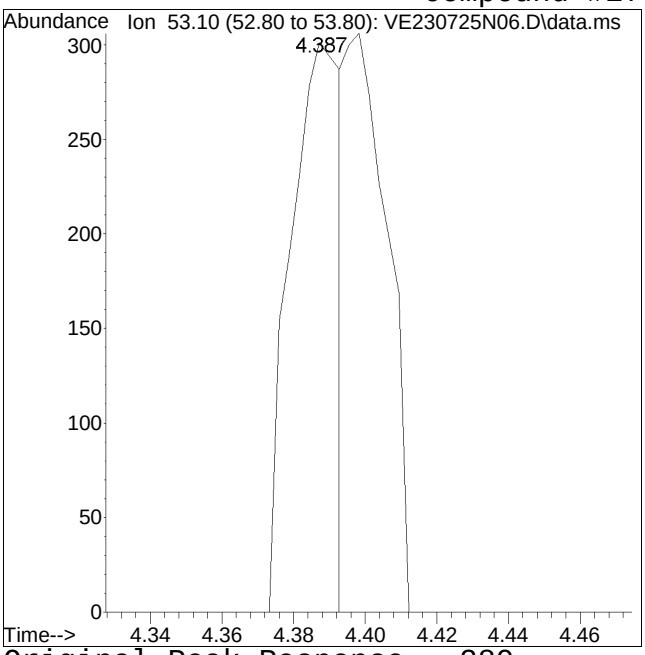
Manual Peak Response = 967 M1

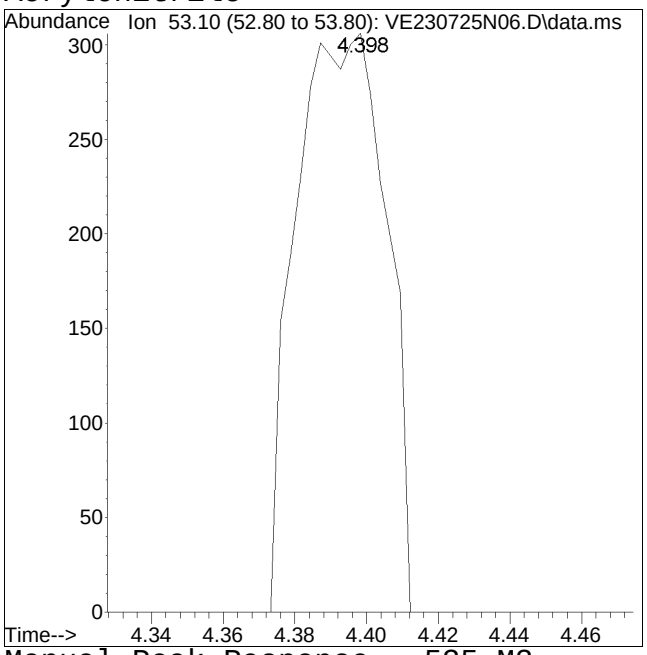
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N06.D Operator : ELAINE:PID
Date Inj'd : 7/25/2023 10:27 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 7/26/2023 8:16 am

Compound #27: Acrylonitrile





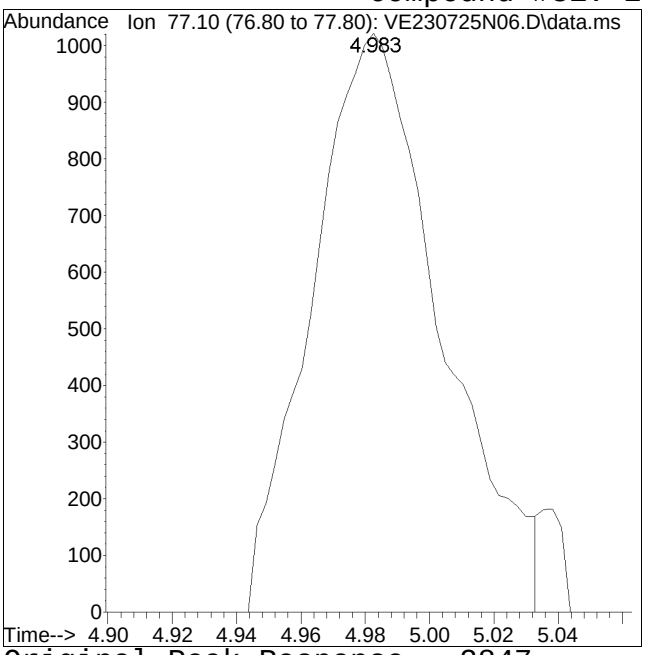
Original Peak Response = 289 Manual Peak Response = 535 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

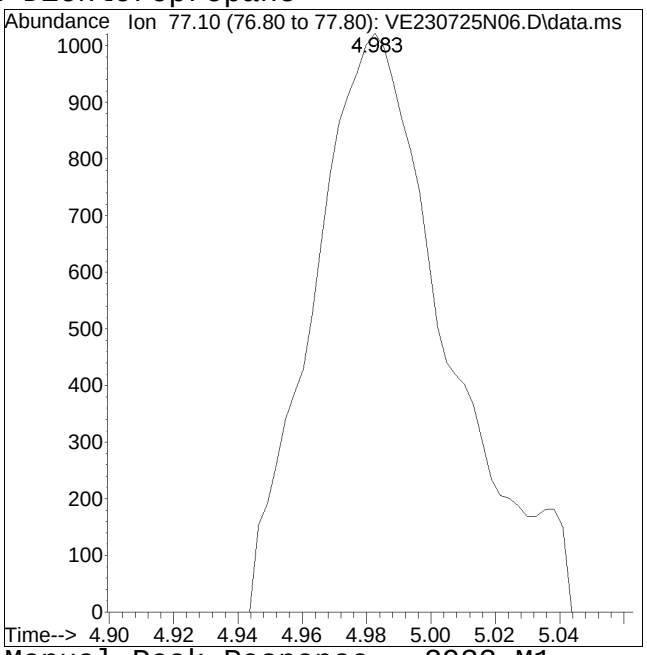
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N06.D Operator : ELAINE:PID
Date Inj'd : 7/25/2023 10:27 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 7/26/2023 8:16 am

Compound #31: 2,2-Dichloropropane



Original Peak Response = 2847



Manual Peak Response = 2933 M1

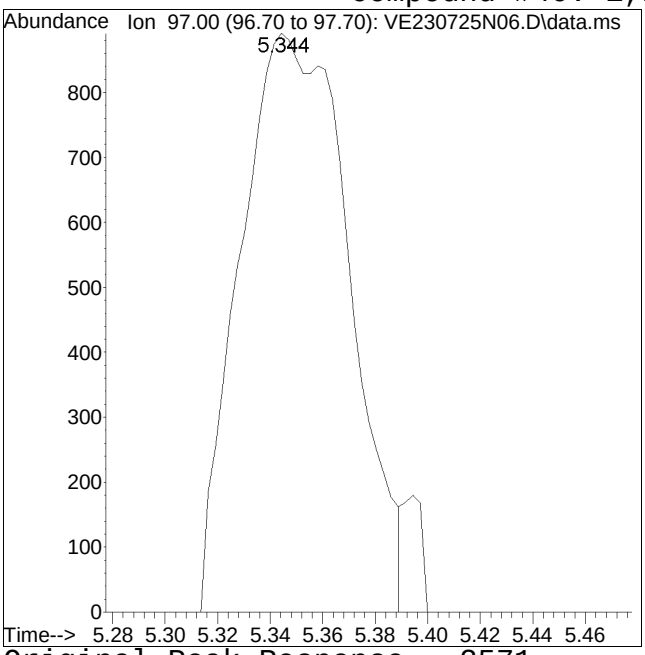
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

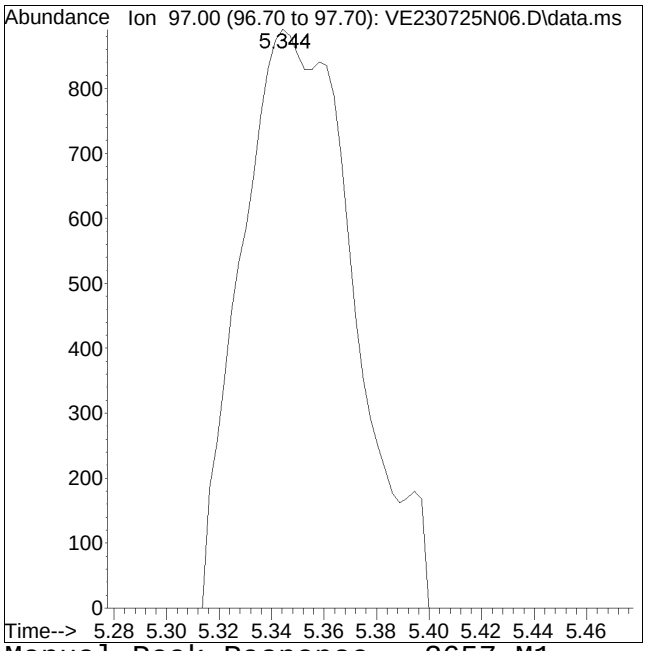
Data Path : K:\Elaine\2023\230725NICALQ
Data File : VE230725N06.D
Date Inj'd : 7/25/2023 10:27 pm
Sample : I8260STD0.5PPB

Method : Elaine_230725N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 7/26/2023 8:16 am

Compound #40: 1,1,1-Trichloroethane



Original Peak Response = 2571



Manual Peak Response = 2657 M1

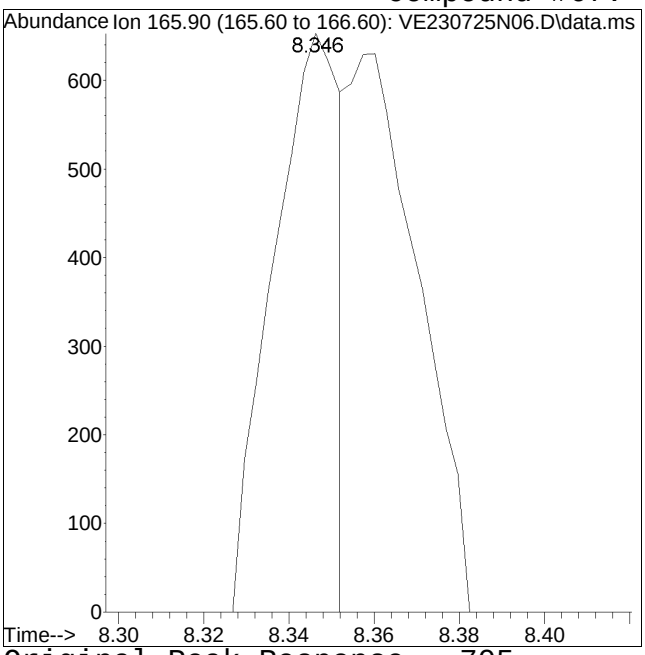
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

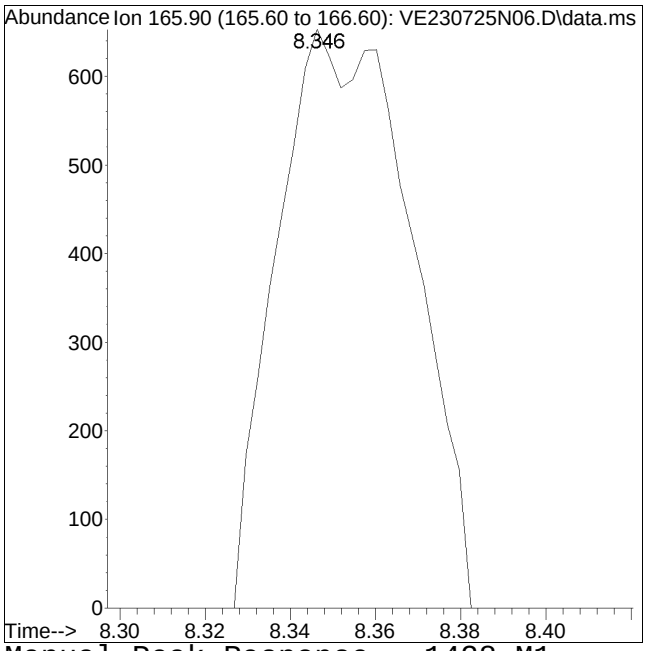
Data Path : K:\Elaine\2023\230725NICALQ
Data File : VE230725N06.D
Date Inj'd : 7/25/2023 10:27 pm
Sample : I8260STD0.5PPB

Method : Elaine_230725N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 7/26/2023 8:16 am

Compound #67: Tetrachloroethene



Original Peak Response = 705



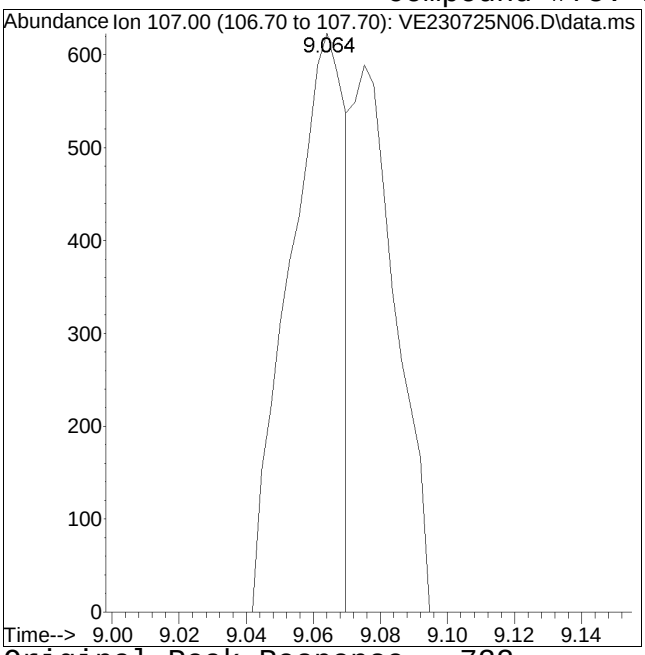
Manual Peak Response = 1428 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

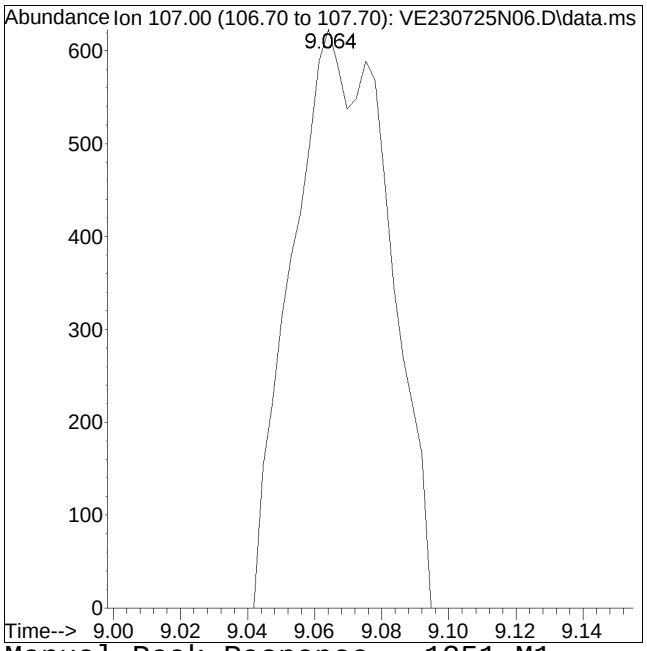
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N06.D Operator : ELAINE:PID
Date Inj'd : 7/25/2023 10:27 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 7/26/2023 8:16 am

Compound #75: 1,2-Dibromoethane



Original Peak Response = 722



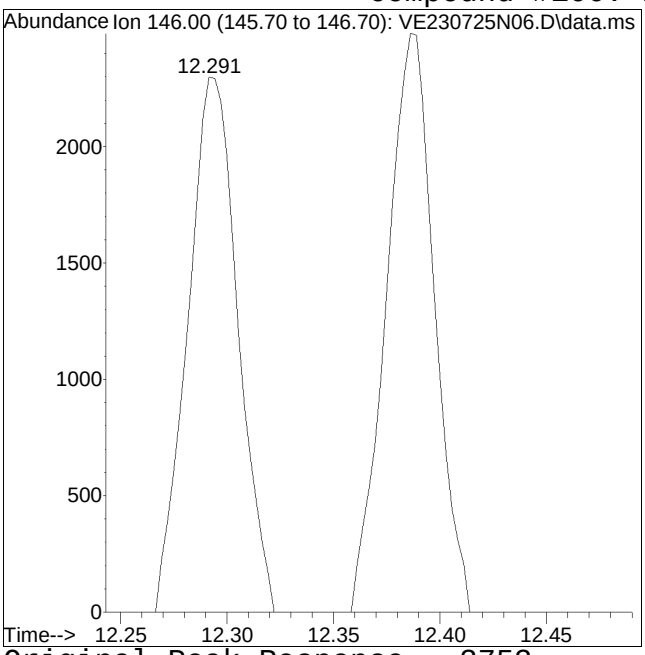
Manual Peak Response = 1251 M1

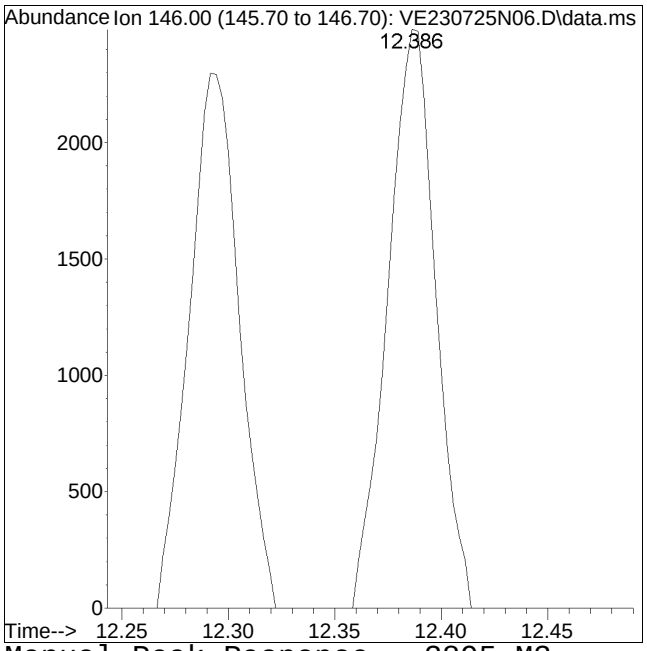
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N06.D Operator : ELAINE:PID
Date Inj'd : 7/25/2023 10:27 pm Instrument : Elaine
Sample : I8260STD0.5PPB Quant Date : 7/26/2023 8:16 am

Compound #106: 1,4-Dichlorobenzene





Original Peak Response = 3753 Manual Peak Response = 3895 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N08.D
Acq On : 25 Jul 2023 11:16 pm
Operator : ELAINE:PID
Sample : I8260STD2PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:16:58 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.143	96	158705	10.000	ug/L	0.00
Standard Area 1 = 158342			Recovery = 100.23%			
63) Chlorobenzene-d5	9.701	117	138481	10.000	ug/L	0.00
Standard Area 1 = 134176			Recovery = 103.21%			
84) 1,4-Dichlorobenzene-d4	12.369	152	73682	10.000	ug/L	0.00
Standard Area 1 = 74599			Recovery = 98.77%			
System Monitoring Compounds						
39) Dibromofluoromethane	5.322	113	46920	10.495	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.95%			
47) 1,2-Dichloroethane-d4	5.856	65	60395	10.272	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.72%			
64) Toluene-d8	7.848	98	172295	10.075	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.75%			
88) 4-Bromofluorobenzene	11.176	95	69020	10.138	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.38%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.655	85	9809	2.129	ug/L	98
3) Chloromethane	1.852	50	13012	2.228	ug/L	99
4) Vinyl chloride	1.930	62	13417	2.180	ug/L	95
5) Bromomethane	2.256	94	8577	2.381	ug/L	98
6) Chloroethane	2.381	64	8116	2.183	ug/L	97
7) Trichlorofluoromethane	2.526	101	11798	2.028	ug/L	88
8) Ethyl ether	2.835	74	3919	2.029	ug/L #	62
10) 1,1-Dichloroethene	3.024	96	6928	2.100	ug/L	84
11) Carbon disulfide	3.054	76	21992	2.153	ug/L	98
12) Freon-113	3.066	101	7107M1	2.081	ug/L	
13) Iodomethane	3.168	142	6774	1.617	ug/L	99
14) Acrolein	3.358	56	1111	2.274	ug/L	99
15) Methylene chloride	3.600	84	8105	2.034	ug/L	75
17) Acetone	3.639	43	2630	2.949	ug/L #	84
18) trans-1,2-Dichloroethene	3.750	96	7638	2.120	ug/L	84
19) Methyl acetate	3.761	43	5230	2.327	ug/L #	88
21) Methyl tert-butyl ether	3.861	73	17534	1.924	ug/L #	80
22) tert-Butyl alcohol	3.950	59	2372	11.049	ug/L #	51
24) Diisopropyl ether	4.226	45	28761	1.941	ug/L	96
25) 1,1-Dichloroethane	4.354	63	18457	2.124	ug/L	97
26) Halothane	4.398	117	5674	2.078	ug/L	96

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N08.D
Acq On : 25 Jul 2023 11:16 pm
Operator : ELAINE:PID
Sample : I8260STD2PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:16:58 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) Acrylonitrile	4.395	53	2270	2.019	ug/L	#	78
28) Ethyl tert-butyl ether	4.582	59	26175	1.883	ug/L	#	79
29) Vinyl acetate	4.585	43	11425	2.075	ug/L	#	91
30) cis-1,2-Dichloroethene	4.874	96	8661	2.088	ug/L		85
31) 2,2-Dichloropropane	4.985	77	12418	2.067	ug/L		87
33) Bromochloromethane	5.069	128	3787	2.155	ug/L	#	75
34) Cyclohexane	5.074	56	18736	2.027	ug/L		74
35) Chloroform	5.141	83	14756	2.211	ug/L		95
36) Ethyl acetate	5.258	43	6266	2.064	ug/L	#	90
37) Carbon tetrachloride	5.280	117	10211	2.118	ug/L		97
38) Tetrahydrofuran	5.294	42	1739	1.897	ug/L	#	74
40) 1,1,1-Trichloroethane	5.347	97	12201	2.050	ug/L		93
42) 2-Butanone	5.447	43	3111M1	2.355	ug/L		
43) 1,1-Dichloropropene	5.469	75	9697	1.945	ug/L		98
45) Benzene	5.720	78	30320	2.025	ug/L		94
46) tert-Amyl methyl ether	5.837	73	17773	1.905	ug/L		92
48) 1,2-Dichloroethane	5.926	62	12601	2.069	ug/L		97
51) Methyl cyclohexane	6.318	83	12384	1.906	ug/L	#	73
52) Trichloroethene	6.318	95	7923	1.959	ug/L		97
54) Dibromomethane	6.766	93	4236	2.080	ug/L		96
55) 1,2-Dichloropropane	6.869	63	9528	2.021	ug/L	#	90
57) 2-Chloroethyl vinyl ether	7.567	63	4459	1.839	ug/L	#	95
58) Bromodichloromethane	6.941	83	10625	2.038	ug/L		96
61) 1,4-Dioxane	7.153	88	7113	420.532	ug/L	#	87
62) cis-1,3-Dichloropropene	7.634	75	11411	1.891	ug/L		90
65) Toluene	7.907	92	18770	2.021	ug/L		99
66) 4-Methyl-2-pentanone	8.349	58	2012	1.784	ug/L	#	97
67) Tetrachloroethene	8.357	166	7005	1.918	ug/L		97
69) trans-1,3-Dichloropropene	8.388	75	9691	1.842	ug/L		91
71) Ethyl methacrylate	8.583	69	6872	1.900	ug/L		95
72) 1,1,2-Trichloroethane	8.580	83	4774	2.003	ug/L		94
73) Chlorodibromomethane	8.786	129	6168	1.836	ug/L		99
74) 1,3-Dichloropropane	8.903	76	9707	1.891	ug/L		97
75) 1,2-Dibromoethane	9.070	107	5085	1.812	ug/L		99
77) 2-Hexanone	9.356	43	3958	1.991	ug/L		95
78) Chlorobenzene	9.723	112	20001	1.980	ug/L	#	80
79) Ethylbenzene	9.762	91	37207	2.015	ug/L		99
80) 1,1,1,2-Tetrachloroethane	9.810	131	6452	1.853	ug/L		97
81) p/m Xylene	9.954	106	28401	3.963	ug/L		99
82) o Xylene	10.483	106	28265	3.958	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N08.D
Acq On : 25 Jul 2023 11:16 pm
Operator : ELAINE:PID
Sample : I8260STD2PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:16:58 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
83)	Styrene	10.547	104	43604	3.750	ug/L		97
85)	Bromoform	10.566	173	3258	1.762	ug/L		99
87)	Isopropylbenzene	10.859	105	37020	2.021	ug/L		99
89)	Bromobenzene	11.284	156	8120	1.986	ug/L		99
90)	n-Propylbenzene	11.332	91	45549	2.052	ug/L		97
91)	1,4-Dichlorobutane	11.345	55	12793	2.028	ug/L		92
92)	1,1,2,2-Tetrachloroethane	11.412	83	6082	2.043	ug/L		95
93)	4-Ethyltoluene	11.457	105	36750	2.014	ug/L		99
94)	2-Chlorotoluene	11.496	91	27002M1	2.085	ug/L		
95)	1,3,5-Trimethylbenzene	11.554	105	31334	2.019	ug/L		98
96)	1,2,3-Trichloropropane	11.551	75	5578	2.103	ug/L		97
97)	trans-1,4-Dichloro-2-b...	11.604	53	2567	1.983	ug/L	#	74
98)	4-Chlorotoluene	11.677	91	26651	1.987	ug/L		99
99)	tert-Butylbenzene	11.891	119	26400	2.037	ug/L		99
102)	1,2,4-Trimethylbenzene	11.966	105	30022	1.967	ug/L		100
103)	sec-Butylbenzene	12.077	105	39422	2.032	ug/L		95
104)	p-Isopropyltoluene	12.230	119	32607	1.991	ug/L		97
105)	1,3-Dichlorobenzene	12.294	146	17070	2.058	ug/L		97
106)	1,4-Dichlorobenzene	12.386	146	16582	2.005	ug/L		96
107)	p-Diethylbenzene	12.600	119	18906	1.951	ug/L		100
108)	n-Butylbenzene	12.659	91	27683	1.963	ug/L		97
109)	1,2-Dichlorobenzene	12.806	146	15647	2.013	ug/L		98
110)	1,2,4,5-Tetramethylben...	13.388	119	28354	1.930	ug/L		99
111)	1,2-Dibromo-3-chloropr...	13.580	155	926	2.031	ug/L		97
112)	1,3,5-Trichlorobenzene	13.610	180	10345	1.965	ug/L		98
113)	Hexachlorobutadiene	14.181	225	3242	2.090	ug/L		97
114)	1,2,4-Trichlorobenzene	14.206	180	8723	1.919	ug/L		99
115)	Naphthalene	14.501	128	21501	1.917	ug/L		100
116)	1,2,3-Trichlorobenzene	14.667	180	8256	1.993	ug/L		95

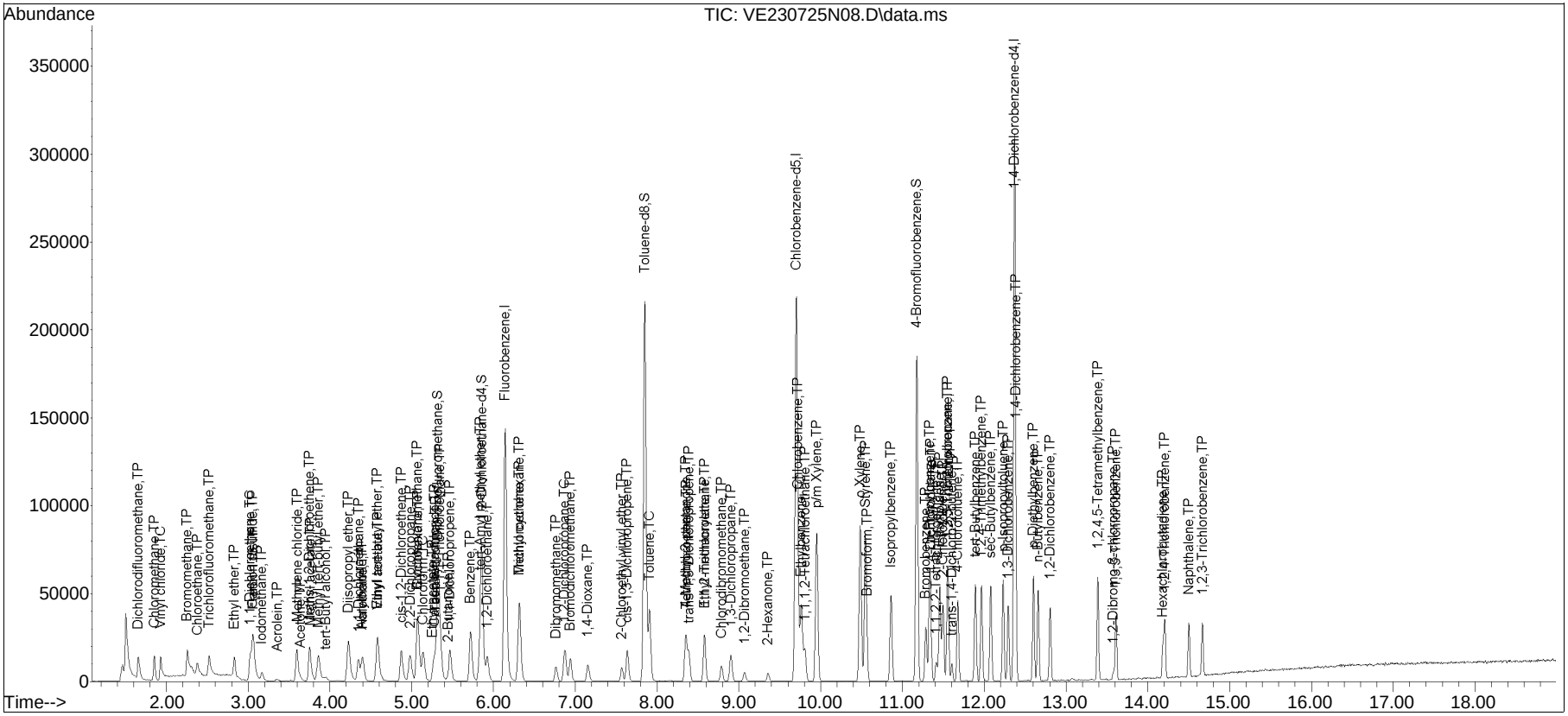
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N08.D
Acq On : 25 Jul 2023 11:16 pm
Operator : ELAINE:PID
Sample : I8260STD2PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:16:58 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

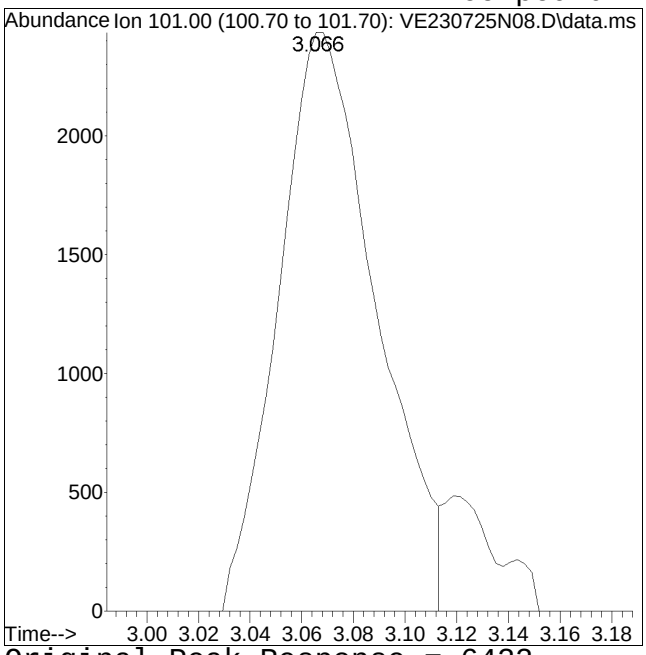
Sub List : 8260-Curve - Megamix plus Diox\VE230725N10.D•

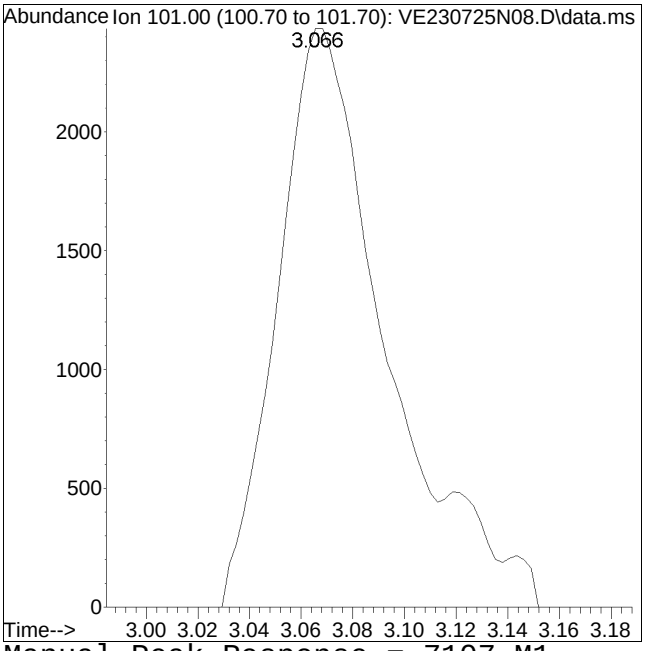


Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N08.D Operator : ELAINE:PID
Date Inj'd : 7/25/2023 11:16 pm Instrument : Elaine
Sample : I8260STD2PPB Quant Date : 7/26/2023 8:16 am

Compound #12: Freon-113





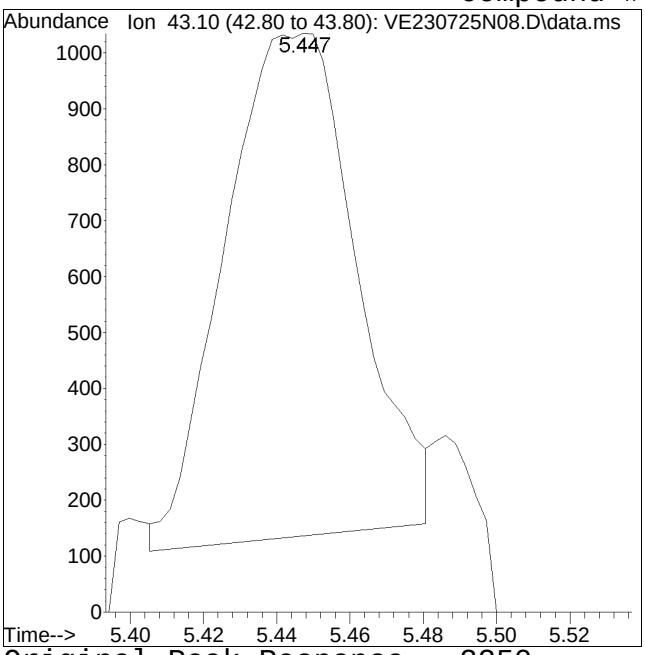
Original Peak Response = 6422 Manual Peak Response = 7107 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

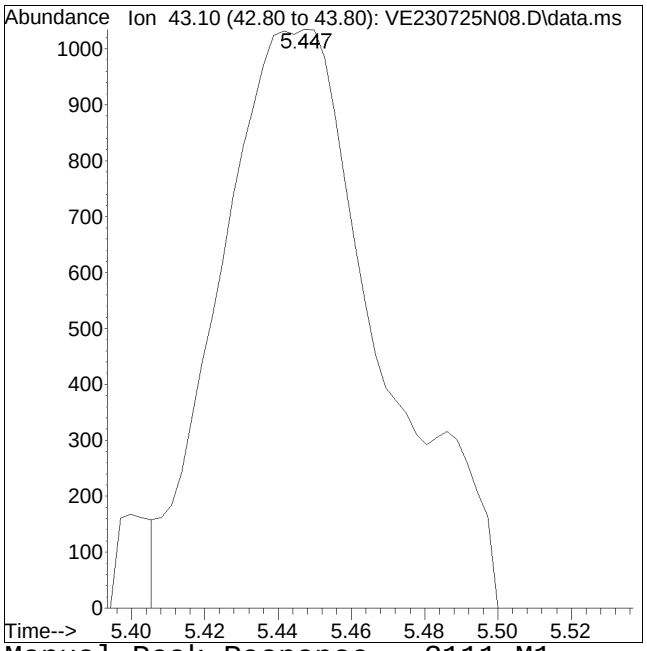
Data Path : K:\Elaine\2023\230725NICALQ
Data File : VE230725N08.D
Date Inj'd : 7/25/2023 11:16 pm
Sample : I8260STD2PPB

Method : Elaine_230725N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 7/26/2023 8:16 am

Compound #42: 2-Butanone



Original Peak Response = 2250



Manual Peak Response = 3111 M1

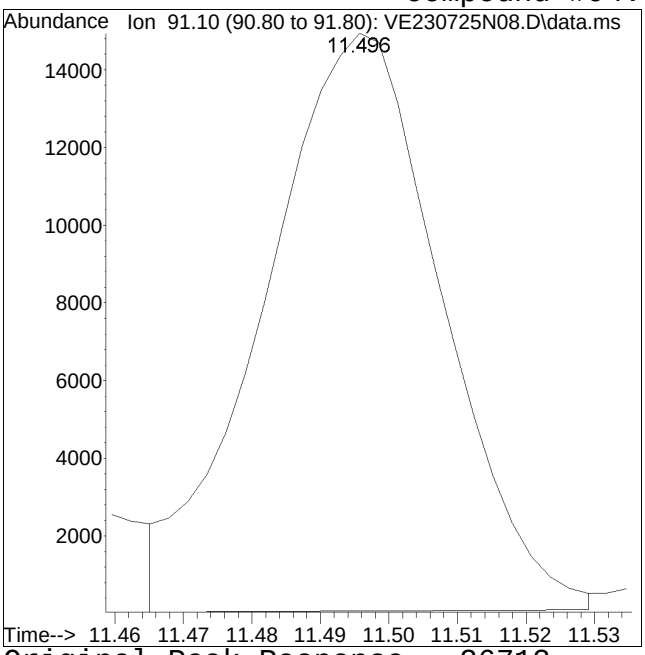
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

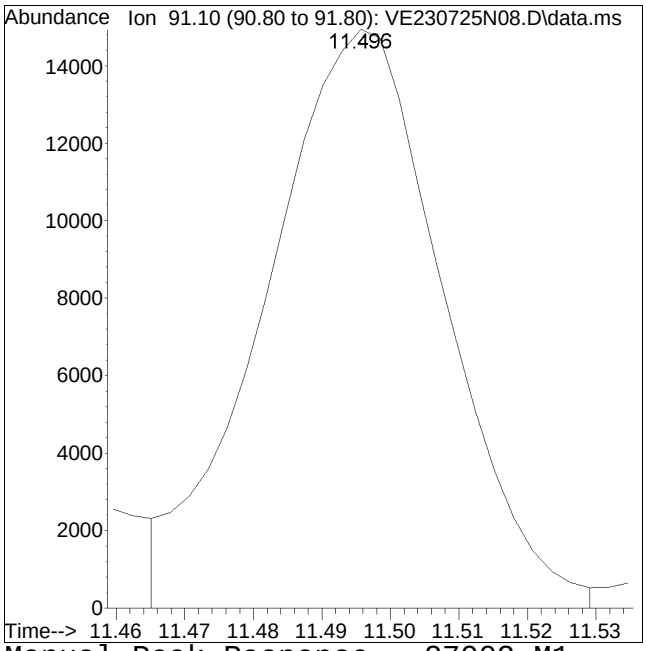
Data Path : K:\Elaine\2023\230725NICALQ
Data File : VE230725N08.D
Date Inj'd : 7/25/2023 11:16 pm
Sample : I8260STD2PPB

Method : Elaine_230725N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 7/26/2023 8:16 am

Compound #94: 2-Chlorotoluene



Original Peak Response = 26712



Manual Peak Response = 27002 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N10.D
Acq On : 26 Jul 2023 12:04 am
Operator : ELAINE:PID
Sample : I8260STD10PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:06 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.143	96	158342	10.000	ug/L	0.00
Standard Area 1 = 158342			Recovery = 100.00%			
63) Chlorobenzene-d5	9.701	117	134176	10.000	ug/L	0.00
Standard Area 1 = 134176			Recovery = 100.00%			
84) 1,4-Dichlorobenzene-d4	12.369	152	74599	10.000	ug/L	0.00
Standard Area 1 = 74599			Recovery = 100.00%			
System Monitoring Compounds						
39) Dibromofluoromethane	5.319	113	45134	10.118	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.18%			
47) 1,2-Dichloroethane-d4	5.856	65	62353	10.629	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.29%			
64) Toluene-d8	7.848	98	168891	10.193	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.93%			
88) 4-Bromofluorobenzene	11.176	95	67393	9.777	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.77%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.655	85	51794	11.266	ug/L	97
3) Chloromethane	1.852	50	64922	11.139	ug/L	98
4) Vinyl chloride	1.930	62	69483	11.315	ug/L	97
5) Bromomethane	2.256	94	38813	10.801	ug/L	99
6) Chloroethane	2.381	64	41098	11.080	ug/L	96
7) Trichlorofluoromethane	2.523	101	66361	11.431	ug/L	97
8) Ethyl ether	2.832	74	20989	10.891	ug/L	73
10) 1,1-Dichloroethene	3.027	96	36814	11.183	ug/L	85
11) Carbon disulfide	3.054	76	112305	11.018	ug/L	99
12) Freon-113	3.068	101	39751	11.665	ug/L	93
13) Iodomethane	3.168	142	42694	10.213	ug/L	97
14) Acrolein	3.355	56	5554	11.395	ug/L	93
15) Methylene chloride	3.594	84	40846	10.273	ug/L	82
17) Acetone	3.641	43	9027M1	10.144	ug/L	
18) trans-1,2-Dichloroethene	3.750	96	39630	11.023	ug/L	87
19) Methyl acetate	3.761	43	22355	9.967	ug/L	96
21) Methyl tert-butyl ether	3.858	73	90364	9.936	ug/L #	87
22) tert-Butyl alcohol	3.947	59	11230	52.433	ug/L #	51
24) Diisopropyl ether	4.223	45	153733	10.399	ug/L	97
25) 1,1-Dichloroethane	4.348	63	96691	11.151	ug/L	96
26) Halothane	4.398	117	30728	11.281	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N10.D
Acq On : 26 Jul 2023 12:04 am
Operator : ELAINE:PID
Sample : I8260STD10PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:06 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) Acrylonitrile	4.390	53	12110M1	10.795	ug/L		
28) Ethyl tert-butyl ether	4.579	59	139719	10.073	ug/L	#	75
29) Vinyl acetate	4.585	43	52160	9.493	ug/L	#	94
30) cis-1,2-Dichloroethene	4.871	96	45229	10.926	ug/L		88
31) 2,2-Dichloropropane	4.977	77	64251	10.717	ug/L		91
33) Bromochloromethane	5.069	128	18913	10.789	ug/L	#	75
34) Cyclohexane	5.074	56	103421	11.216	ug/L		75
35) Chloroform	5.141	83	70552	10.596	ug/L		96
36) Ethyl acetate	5.252	43	30442	10.051	ug/L	#	96
37) Carbon tetrachloride	5.280	117	53137	11.049	ug/L		99
38) Tetrahydrofuran	5.300	42	9799M1	10.712	ug/L		
40) 1,1,1-Trichloroethane	5.347	97	64995	10.947	ug/L		95
42) 2-Butanone	5.439	43	12408	9.413	ug/L	#	65
43) 1,1-Dichloropropene	5.469	75	53830	10.820	ug/L		98
45) Benzene	5.720	78	157094	10.516	ug/L		94
46) tert-Amyl methyl ether	5.839	73	92354	9.922	ug/L		92
48) 1,2-Dichloroethane	5.926	62	63655	10.477	ug/L		98
51) Methyl cyclohexane	6.315	83	68306	10.540	ug/L	#	72
52) Trichloroethene	6.318	95	43532	10.788	ug/L		97
54) Dibromomethane	6.763	93	21369	10.515	ug/L		97
55) 1,2-Dichloropropane	6.872	63	49822	10.594	ug/L	#	92
57) 2-Chloroethyl vinyl ether	7.567	63	24130	9.974	ug/L		88
58) Bromodichloromethane	6.941	83	54585	10.495	ug/L		98
61) 1,4-Dioxane	7.155	88	8805	521.759	ug/L	#	84
62) cis-1,3-Dichloropropene	7.634	75	60348	10.024	ug/L		93
65) Toluene	7.907	92	96157	10.687	ug/L		100
66) 4-Methyl-2-pentanone	8.346	58	10883	9.957	ug/L	#	86
67) Tetrachloroethene	8.352	166	38212	10.797	ug/L		98
69) trans-1,3-Dichloropropene	8.388	75	51912	10.186	ug/L		92
71) Ethyl methacrylate	8.583	69	36627	10.450	ug/L		97
72) 1,1,2-Trichloroethane	8.577	83	24426	10.576	ug/L		97
73) Chlorodibromomethane	8.789	129	33553	10.308	ug/L		98
74) 1,3-Dichloropropane	8.903	76	51011	10.259	ug/L		98
75) 1,2-Dibromoethane	9.070	107	28288	10.406	ug/L		99
77) 2-Hexanone	9.356	43	18857	9.792	ug/L		93
78) Chlorobenzene	9.721	112	101954	10.417	ug/L		98
79) Ethylbenzene	9.765	91	195183	10.908	ug/L		100
80) 1,1,1,2-Tetrachloroethane	9.807	131	35603	10.555	ug/L		97
81) p/m Xylene	9.951	106	150376	21.657	ug/L		98
82) o Xylene	10.483	106	147511	21.319	ug/L		97

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N10.D
Acq On : 26 Jul 2023 12:04 am
Operator : ELAINE:PID
Sample : I8260STD10PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:06 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
83) Styrene	10.550	104	242735	21.546	ug/L		93
85) Bromoform	10.569	173	18121	9.679	ug/L		99
87) Isopropylbenzene	10.858	105	196393	10.588	ug/L		100
89) Bromobenzene	11.284	156	42319	10.222	ug/L		99
90) n-Propylbenzene	11.331	91	239869	10.674	ug/L		97
91) 1,4-Dichlorobutane	11.348	55	64654	10.125	ug/L		92
92) 1,1,2,2-Tetrachloroethane	11.412	83	29215	9.693	ug/L		98
93) 4-Ethyltoluene	11.457	105	196001	10.607	ug/L		99
94) 2-Chlorotoluene	11.493	91	141376M1	10.780	ug/L		
95) 1,3,5-Trimethylbenzene	11.551	105	165624	10.541	ug/L		99
96) 1,2,3-Trichloropropane	11.551	75	27140	10.104	ug/L		100
97) trans-1,4-Dichloro-2-b...	11.604	53	13234	10.096	ug/L	#	77
98) 4-Chlorotoluene	11.676	91	142330	10.481	ug/L		98
99) tert-Butylbenzene	11.891	119	140751	10.727	ug/L		98
102) 1,2,4-Trimethylbenzene	11.966	105	163153	10.556	ug/L		100
103) sec-Butylbenzene	12.080	105	210581	10.722	ug/L		96
104) p-Isopropyltoluene	12.230	119	174853	10.544	ug/L		98
105) 1,3-Dichlorobenzene	12.294	146	89128	10.614	ug/L		98
106) 1,4-Dichlorobenzene	12.383	146	87677	10.471	ug/L		99
107) p-Diethylbenzene	12.600	119	103220	10.521	ug/L		97
108) n-Butylbenzene	12.659	91	152891	10.710	ug/L		97
109) 1,2-Dichlorobenzene	12.806	146	81904	10.410	ug/L		99
110) 1,2,4,5-Tetramethylben...	13.388	119	153613	10.326	ug/L		97
111) 1,2-Dibromo-3-chloropr...	13.577	155	4851	10.508	ug/L		100
112) 1,3,5-Trichlorobenzene	13.610	180	54616	10.246	ug/L		99
113) Hexachlorobutadiene	14.183	225	16812	10.704	ug/L		99
114) 1,2,4-Trichlorobenzene	14.206	180	46650	10.139	ug/L		99
115) Naphthalene	14.500	128	111249	9.796	ug/L		100
116) 1,2,3-Trichlorobenzene	14.667	180	41616	9.924	ug/L		99

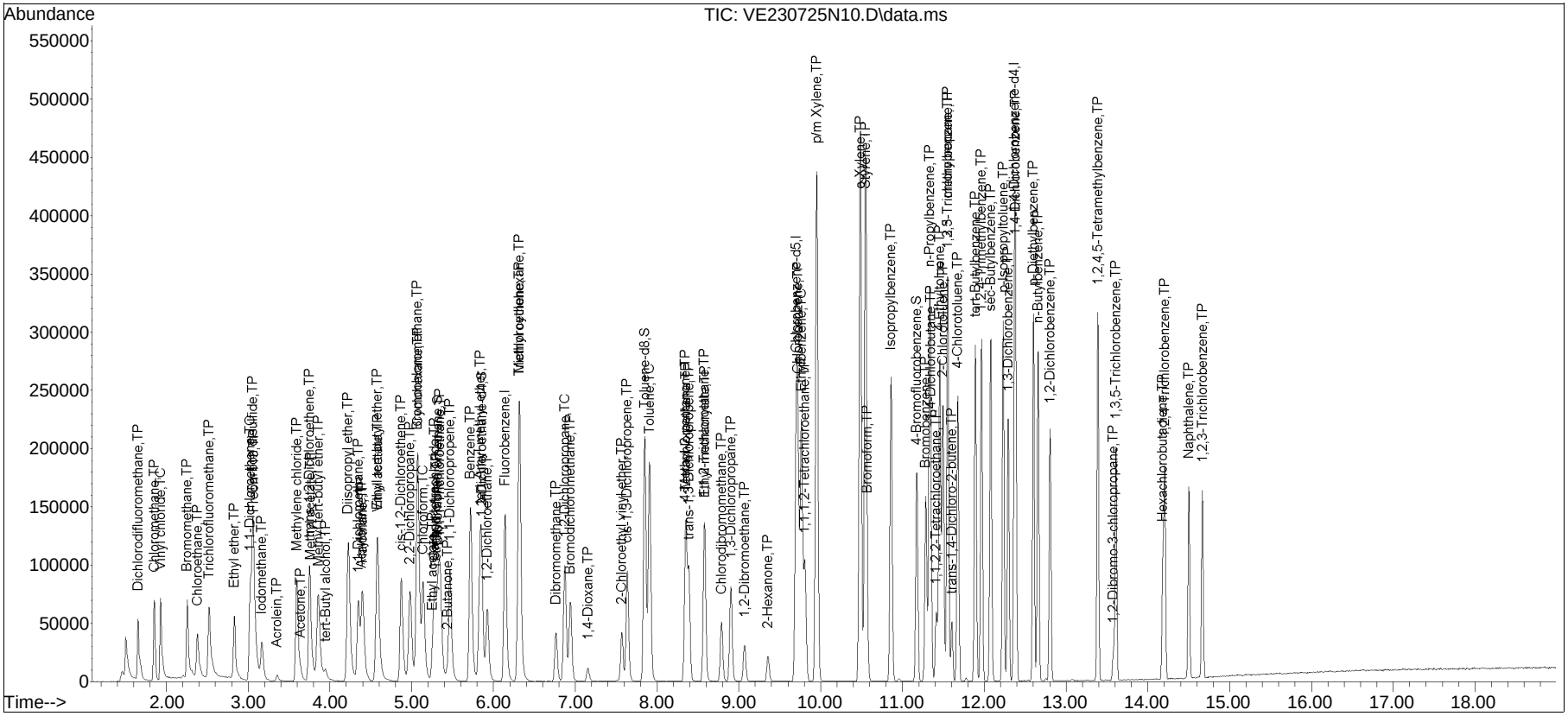
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N10.D
Acq On : 26 Jul 2023 12:04 am
Operator : ELAINE:PID
Sample : I8260STD10PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:06 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

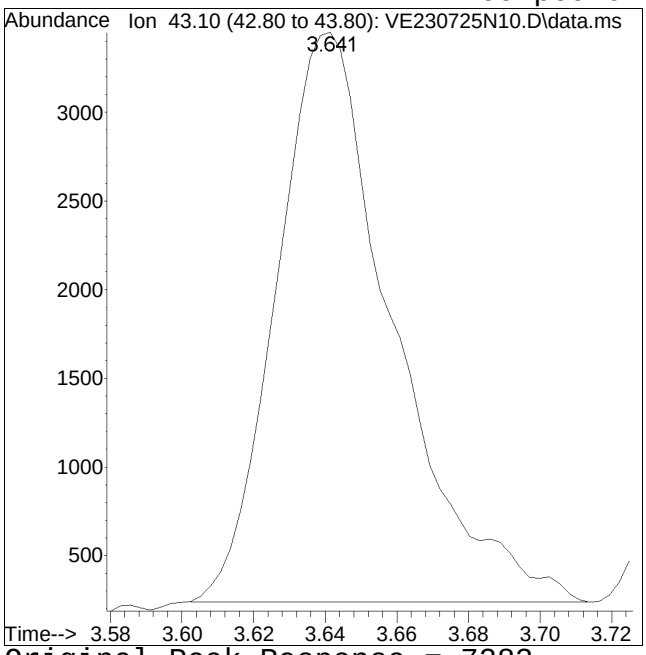
Sub List : 8260-Curve - Megamix plus Diox\VE230725N10.D•

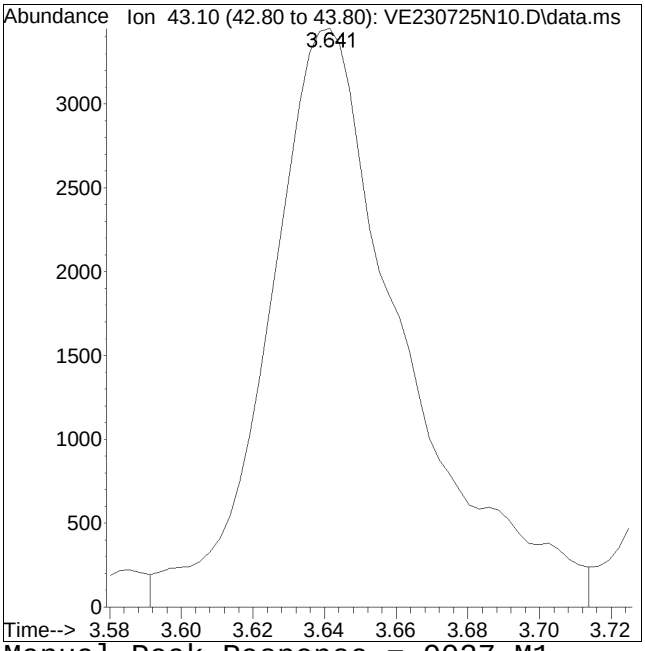


Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N10.D Operator : ELAINE:PID
Date Inj'd : 7/26/2023 12:04 am Instrument : Elaine
Sample : I8260STD10PPB Quant Date : 7/26/2023 8:17 am

Compound #17: Acetone



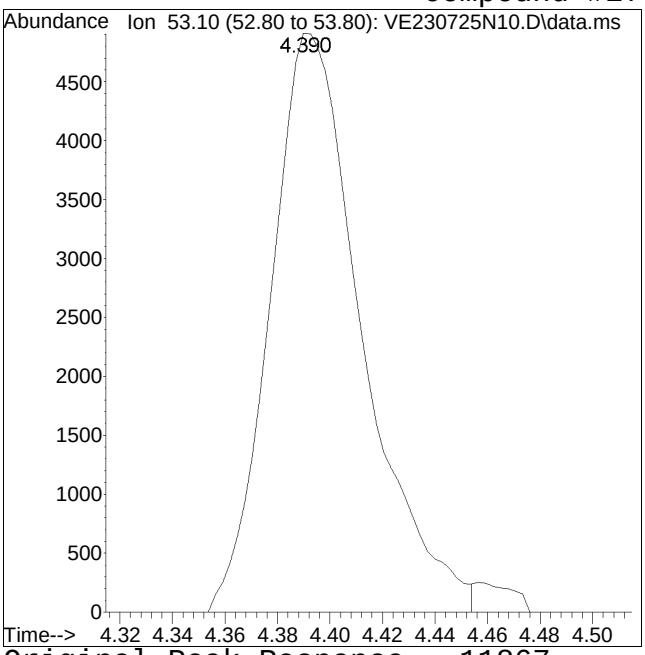


Original Peak Response = 7283 Manual Peak Response = 9027 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

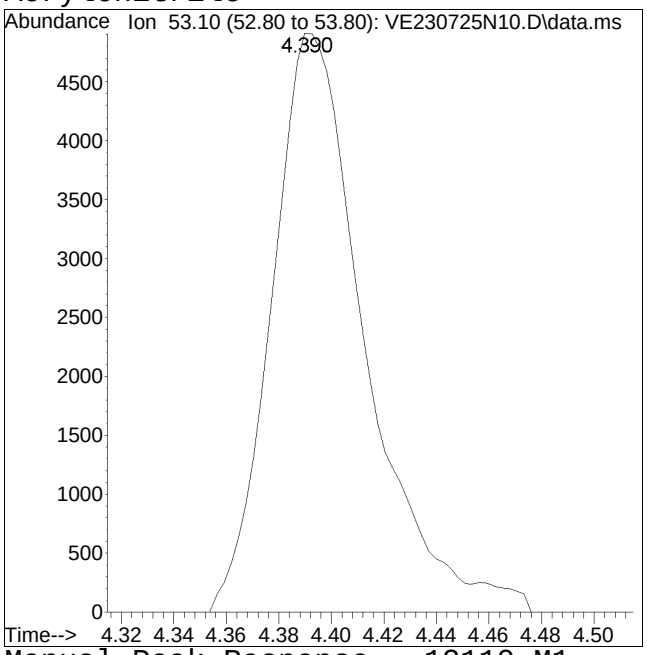
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N10.D Operator : ELAINE:PID
Date Inj'd : 7/26/2023 12:04 am Instrument : Elaine
Sample : I8260STD10PPB Quant Date : 7/26/2023 8:17 am

Compound #27: Acrylonitrile



Original Peak Response = 11867



Manual Peak Response = 12110 M1

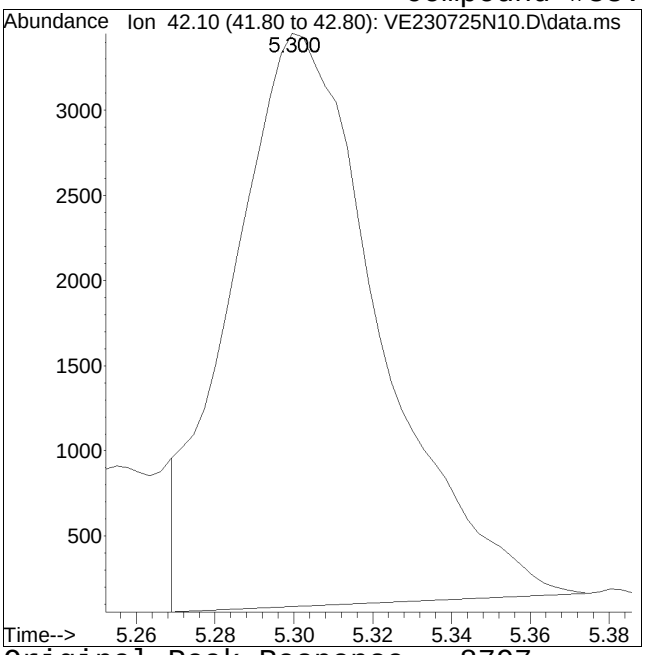
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

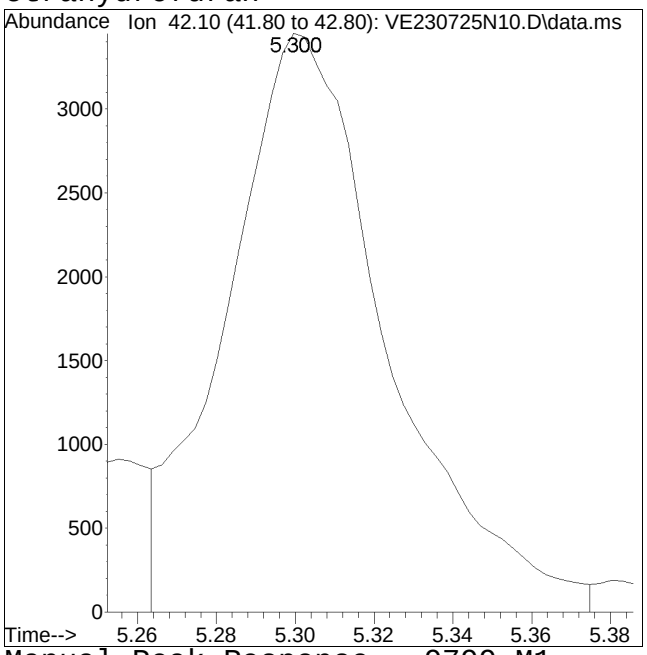
Data Path : K:\Elaine\2023\230725NICALQ
Data File : VE230725N10.D
Date Inj'd : 7/26/2023 12:04 am
Sample : I8260STD10PPB

Method : Elaine_230725N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 7/26/2023 8:17 am

Compound #38: Tetrahydrofuran



Original Peak Response = 8797



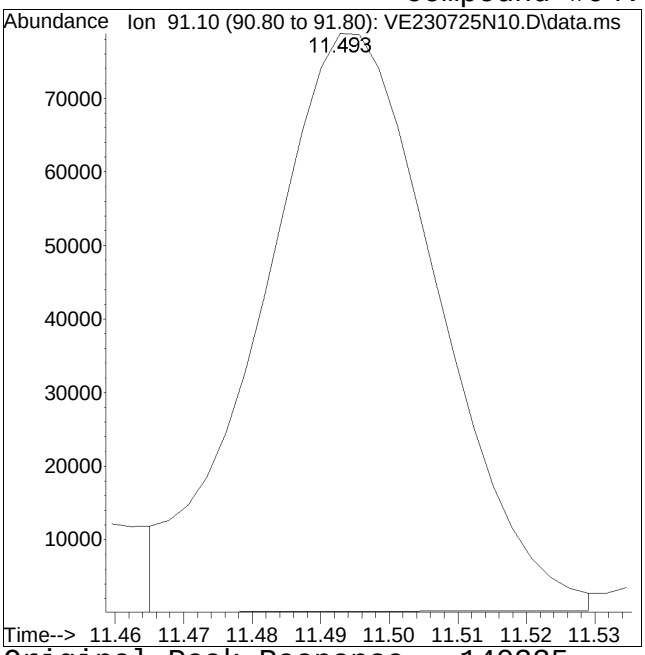
Manual Peak Response = 9799 M1

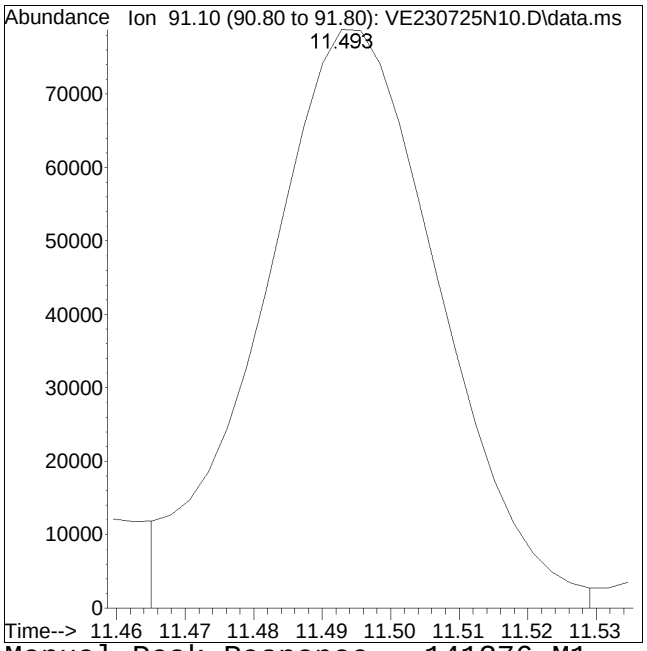
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N10.D Operator : ELAINE:PID
Date Inj'd : 7/26/2023 12:04 am Instrument : Elaine
Sample : I8260STD10PPB Quant Date : 7/26/2023 8:17 am

Compound #94: 2-Chlorotoluene





Original Peak Response = 140335 Manual Peak Response = 141376 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N11.D
Acq On : 26 Jul 2023 12:28 am
Operator : ELAINE:PID
Sample : I8260STD30PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:14 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.145	96	165677	10.000	ug/L	0.00
Standard Area 1 = 158342			Recovery = 104.63%			
63) Chlorobenzene-d5	9.701	117	140051	10.000	ug/L	0.00
Standard Area 1 = 134176			Recovery = 104.38%			
84) 1,4-Dichlorobenzene-d4	12.369	152	78806	10.000	ug/L	0.00
Standard Area 1 = 74599			Recovery = 105.64%			
System Monitoring Compounds						
39) Dibromofluoromethane	5.319	113	45675	9.786	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.86%			
47) 1,2-Dichloroethane-d4	5.856	65	60141	9.798	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.98%			
64) Toluene-d8	7.848	98	172408	9.969	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.69%			
88) 4-Bromofluorobenzene	11.176	95	71824	9.864	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.64%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.652	85	155066	32.235	ug/L	97
3) Chloromethane	1.852	50	184508	30.257	ug/L	97
4) Vinyl chloride	1.930	62	206445	32.131	ug/L	95
5) Bromomethane	2.256	94	113635	30.222	ug/L	96
6) Chloroethane	2.381	64	124132	31.983	ug/L	100
7) Trichlorofluoromethane	2.523	101	194869	32.082	ug/L	100
8) Ethyl ether	2.832	74	62783	31.136	ug/L	70
10) 1,1-Dichloroethene	3.027	96	107958	31.343	ug/L	84
11) Carbon disulfide	3.057	76	333205	31.244	ug/L	99
12) Freon-113	3.068	101	118483	33.229	ug/L	93
13) Iodomethane	3.168	142	142880	32.664	ug/L	98
14) Acrolein	3.355	56	17348	34.018	ug/L	99
15) Methylene chloride	3.594	84	119613	28.752	ug/L	79
17) Acetone	3.639	43	26660	28.632	ug/L	90
18) trans-1,2-Dichloroethene	3.750	96	116820	31.054	ug/L	85
19) Methyl acetate	3.761	43	70158	29.896	ug/L	96
21) Methyl tert-butyl ether	3.856	73	297270	31.240	ug/L #	90
22) tert-Butyl alcohol	3.947	59	34178	152.512	ug/L #	51
24) Diisopropyl ether	4.226	45	492350	31.831	ug/L	96
25) 1,1-Dichloroethane	4.351	63	281953	31.077	ug/L	96
26) Halothane	4.401	117	91712	32.179	ug/L	98

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N11.D
Acq On : 26 Jul 2023 12:28 am
Operator : ELAINE:PID
Sample : I8260STD30PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:14 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) Acrylonitrile	4.393	53	36776	31.333	ug/L		95
28) Ethyl tert-butyl ether	4.579	59	454240	31.299	ug/L	#	78
29) Vinyl acetate	4.585	43	192244	33.439	ug/L		97
30) cis-1,2-Dichloroethene	4.874	96	131452	30.350	ug/L		88
31) 2,2-Dichloropropane	4.980	77	195969	31.241	ug/L		91
33) Bromochloromethane	5.069	128	56759	30.944	ug/L	#	82
34) Cyclohexane	5.074	56	307825	31.907	ug/L		76
35) Chloroform	5.141	83	208230	29.890	ug/L		96
36) Ethyl acetate	5.255	43	96928	30.586	ug/L		97
37) Carbon tetrachloride	5.280	117	162368	32.268	ug/L		97
38) Tetrahydrofuran	5.297	42	29414M1	30.730	ug/L		
40) 1,1,1-Trichloroethane	5.347	97	194267	31.271	ug/L		94
42) 2-Butanone	5.442	43	38747	28.092	ug/L		100
43) 1,1-Dichloropropene	5.469	75	169094	32.485	ug/L		98
45) Benzene	5.720	78	483977	30.964	ug/L		94
46) tert-Amyl methyl ether	5.837	73	295879	30.381	ug/L		92
48) 1,2-Dichloroethane	5.926	62	194459	30.590	ug/L		97
51) Methyl cyclohexane	6.315	83	216812	31.973	ug/L	#	73
52) Trichloroethene	6.321	95	133674	31.659	ug/L		97
54) Dibromomethane	6.763	93	65954	31.017	ug/L		97
55) 1,2-Dichloropropane	6.872	63	155541	31.611	ug/L	#	92
57) 2-Chloroethyl vinyl ether	7.567	63	79886	31.557	ug/L	#	88
58) Bromodichloromethane	6.938	83	168431	30.952	ug/L		99
61) 1,4-Dioxane	7.153	88	10857	614.872	ug/L	#	86
62) cis-1,3-Dichloropropene	7.637	75	200480	31.825	ug/L		96
65) Toluene	7.907	92	293311	31.232	ug/L		99
66) 4-Methyl-2-pentanone	8.346	58	36145	31.683	ug/L	#	81
67) Tetrachloroethene	8.352	166	117238	31.736	ug/L		98
69) trans-1,3-Dichloropropene	8.388	75	170778	32.104	ug/L		94
71) Ethyl methacrylate	8.583	69	115488	31.567	ug/L		97
72) 1,1,2-Trichloroethane	8.577	83	77587	32.186	ug/L		98
73) Chlorodibromomethane	8.789	129	107669	31.690	ug/L		100
74) 1,3-Dichloropropane	8.903	76	164509	31.696	ug/L		99
75) 1,2-Dibromoethane	9.067	107	90618	31.936	ug/L		98
77) 2-Hexanone	9.356	43	58716	29.211	ug/L		90
78) Chlorobenzene	9.723	112	315700	30.904	ug/L		99
79) Ethylbenzene	9.765	91	591947	31.694	ug/L		100
80) 1,1,1,2-Tetrachloroethane	9.807	131	113711	32.296	ug/L		98
81) p/m Xylene	9.952	106	458686	63.289	ug/L		97
82) o Xylene	10.483	106	451293	62.487	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N11.D
Acq On : 26 Jul 2023 12:28 am
Operator : ELAINE:PID
Sample : I8260STD30PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:14 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
83)	Styrene	10.550	104	753513	64.080	ug/L		94
85)	Bromoform	10.569	173	61504	31.096	ug/L		100
87)	Isopropylbenzene	10.861	105	609346	31.097	ug/L		99
89)	Bromobenzene	11.287	156	132386	30.270	ug/L		100
90)	n-Propylbenzene	11.332	91	748788	31.543	ug/L		97
91)	1,4-Dichlorobutane	11.345	55	202596	30.033	ug/L		92
92)	1,1,2,2-Tetrachloroethane	11.412	83	96770	30.392	ug/L		99
93)	4-Ethyltoluene	11.457	105	616382	31.577	ug/L		99
94)	2-Chlorotoluene	11.496	91	425714M1	30.728	ug/L		
95)	1,3,5-Trimethylbenzene	11.554	105	525370	31.651	ug/L		99
96)	1,2,3-Trichloropropane	11.554	75	85582	30.161	ug/L		99
97)	trans-1,4-Dichloro-2-b...	11.604	53	42411	30.627	ug/L	#	79
98)	4-Chlorotoluene	11.677	91	444502	30.986	ug/L		98
99)	tert-Butylbenzene	11.891	119	438098	31.607	ug/L		98
102)	1,2,4-Trimethylbenzene	11.966	105	515145	31.549	ug/L		100
103)	sec-Butylbenzene	12.080	105	658517	31.738	ug/L		95
104)	p-Isopropyltoluene	12.233	119	556261	31.752	ug/L		98
105)	1,3-Dichlorobenzene	12.294	146	273977	30.885	ug/L		98
106)	1,4-Dichlorobenzene	12.386	146	271558	30.700	ug/L		99
107)	p-Diethylbenzene	12.600	119	329137	31.756	ug/L		96
108)	n-Butylbenzene	12.659	91	489962	32.491	ug/L		97
109)	1,2-Dichlorobenzene	12.806	146	256744	30.889	ug/L		100
110)	1,2,4,5-Tetramethylben...	13.388	119	490179	31.191	ug/L		97
111)	1,2-Dibromo-3-chloropr...	13.580	155	15601	31.990	ug/L		98
112)	1,3,5-Trichlorobenzene	13.610	180	175793	31.220	ug/L		99
113)	Hexachlorobutadiene	14.183	225	52698	31.761	ug/L		99
114)	1,2,4-Trichlorobenzene	14.206	180	149814	30.822	ug/L		100
115)	Naphthalene	14.501	128	359484	29.963	ug/L		100
116)	1,2,3-Trichlorobenzene	14.667	180	133447	30.124	ug/L		99

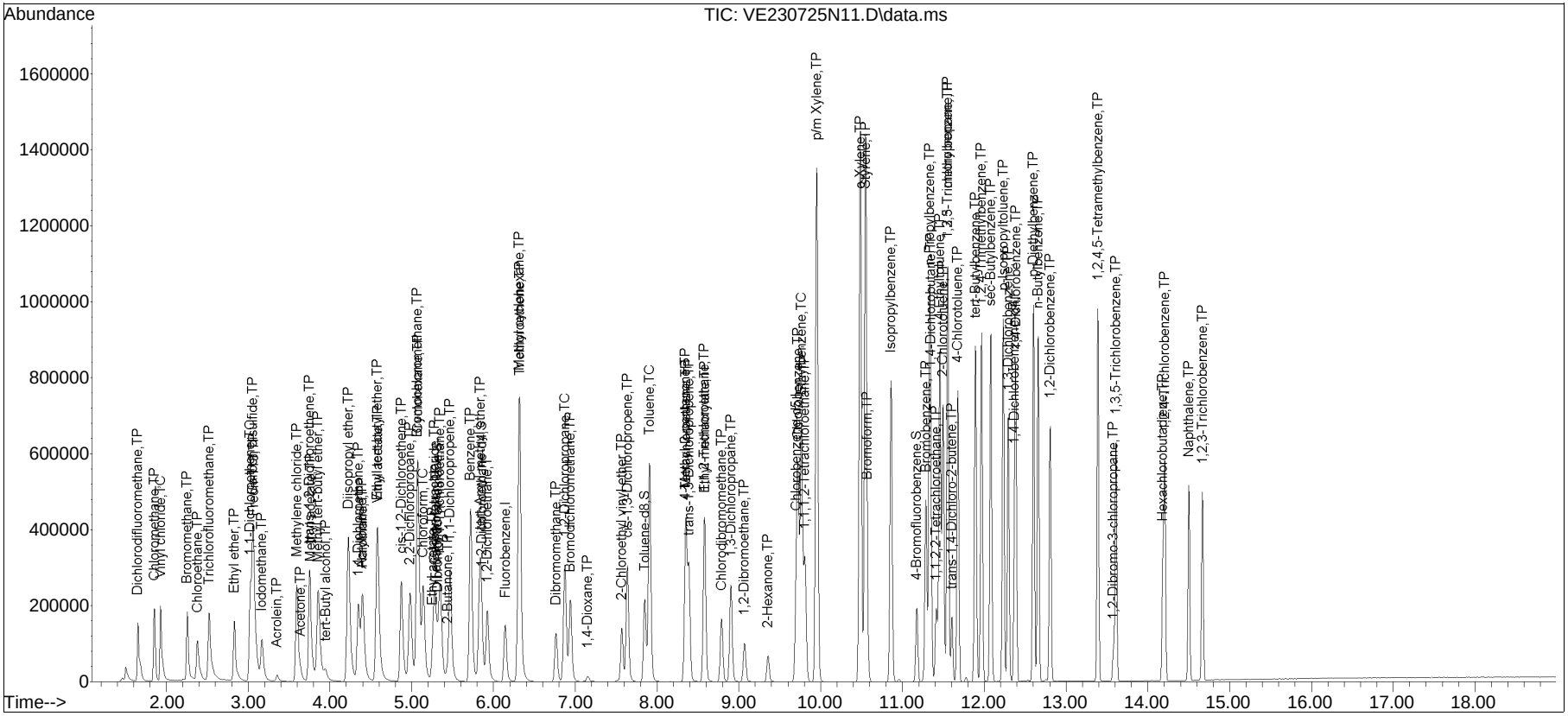
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N11.D
Acq On : 26 Jul 2023 12:28 am
Operator : ELAINE:PID
Sample : I8260STD30PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:14 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

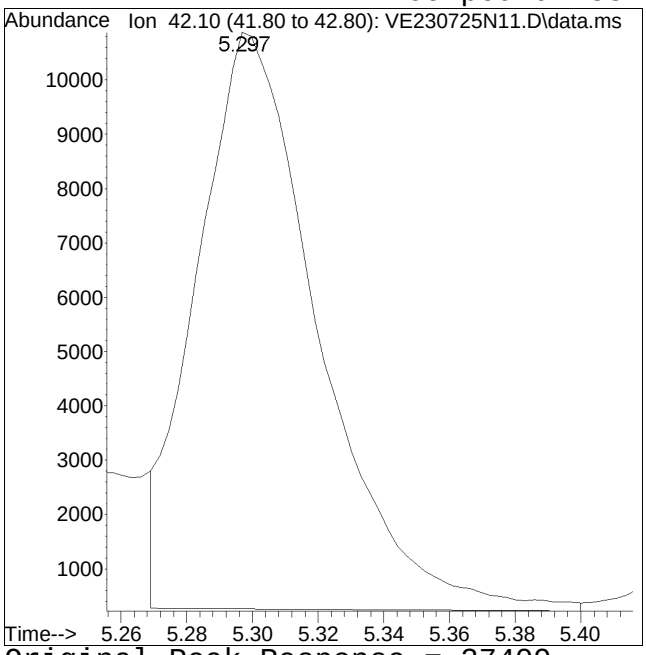
Sub List : 8260-Curve - Megamix plus Diox\VE230725N10.D•

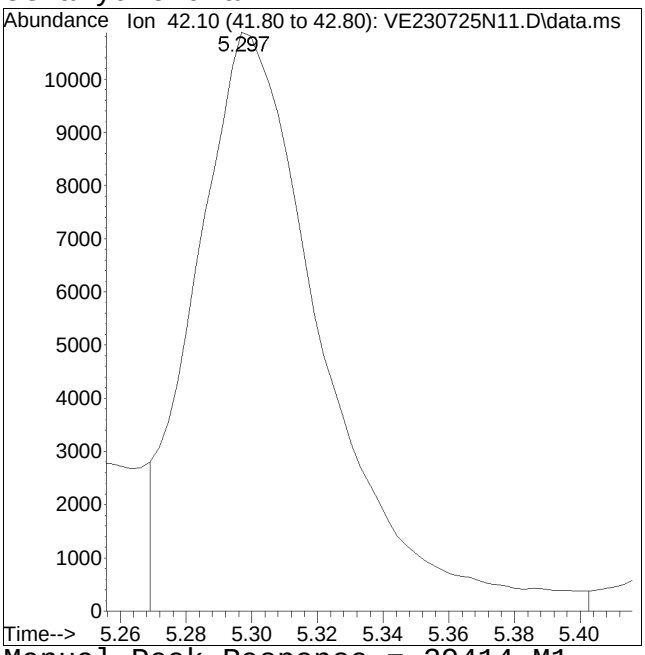


Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N11.D Operator : ELAINE:PID
Date Inj'd : 7/26/2023 12:28 am Instrument : Elaine
Sample : I8260STD30PPB Quant Date : 7/26/2023 8:17 am

Compound #38: Tetrahydrofuran





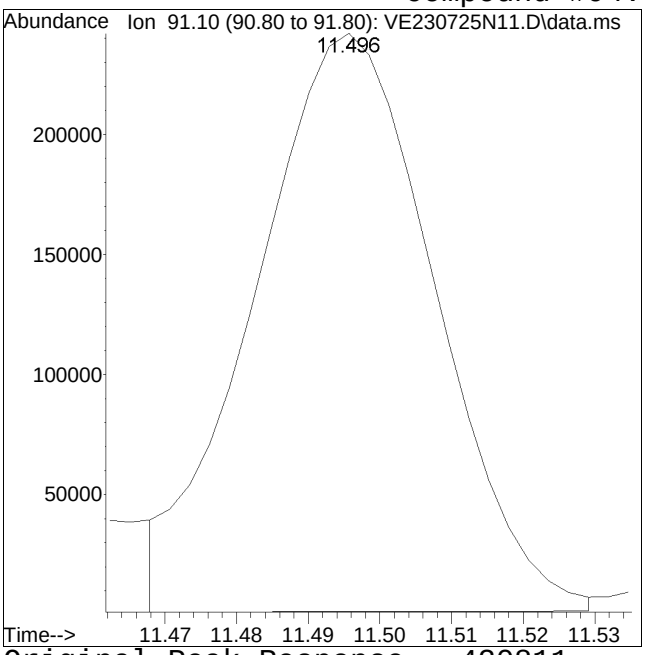
Original Peak Response = 27409 Manual Peak Response = 29414 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

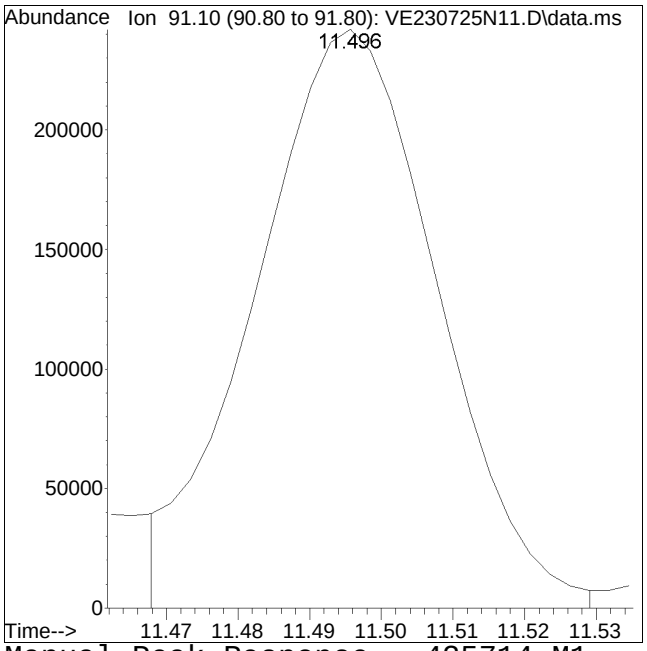
Data Path : K:\Elaine\2023\230725NICALQ
Data File : VE230725N11.D
Date Inj'd : 7/26/2023 12:28 am
Sample : I8260STD30PPB

Method : Elaine_230725N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 7/26/2023 8:17 am

Compound #94: 2-Chlorotoluene



Original Peak Response = 420811



Manual Peak Response = 425714 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N12.D
Acq On : 26 Jul 2023 12:53 am
Operator : ELAINE:PID
Sample : I8260STD80PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:22 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.143	96	172923	10.000	ug/L	0.00
Standard Area 1 = 158342			Recovery = 109.21%			
63) Chlorobenzene-d5	9.701	117	148088	10.000	ug/L	0.00
Standard Area 1 = 134176			Recovery = 110.37%			
84) 1,4-Dichlorobenzene-d4	12.369	152	82254	10.000	ug/L	0.00
Standard Area 1 = 74599			Recovery = 110.26%			
System Monitoring Compounds						
39) Dibromofluoromethane	5.322	113	45947	9.432	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.32%			
47) 1,2-Dichloroethane-d4	5.856	65	60769	9.486	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.86%			
64) Toluene-d8	7.851	98	182920	10.003	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.03%			
88) 4-Bromofluorobenzene	11.176	95	74650	9.822	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.22%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.655	85	407183	81.099	ug/L	98
3) Chloromethane	1.855	50	487605	76.610	ug/L	97
4) Vinyl chloride	1.930	62	533470	79.551	ug/L	97
5) Bromomethane	2.256	94	280459	71.465	ug/L	100
6) Chloroethane	2.378	64	323473	79.852	ug/L	100
7) Trichlorofluoromethane	2.523	101	520793	82.147	ug/L	99
8) Ethyl ether	2.832	74	174636	82.980	ug/L	75
10) 1,1-Dichloroethene	3.026	96	293046	81.513	ug/L	85
11) Carbon disulfide	3.057	76	890331	79.986	ug/L	99
12) Freon-113	3.068	101	308126	82.793	ug/L	96
13) Iodomethane	3.168	142	418591	91.685	ug/L	98
14) Acrolein	3.355	56	44970	84.487	ug/L	98
15) Methylene chloride	3.594	84	318723	73.404	ug/L	81
17) Acetone	3.639	43	68168	70.141	ug/L #	90
18) trans-1,2-Dichloroethene	3.753	96	315876	80.451	ug/L	88
19) Methyl acetate	3.761	43	189283	77.277	ug/L	96
21) Methyl tert-butyl ether	3.858	73	825981	83.165	ug/L #	90
22) tert-Butyl alcohol	3.945	59	90030	384.904	ug/L #	51
24) Diisopropyl ether	4.226	45	1348945	83.557	ug/L	96
25) 1,1-Dichloroethane	4.348	63	745521	78.728	ug/L	96
26) Halothane	4.401	117	246327	82.806	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N12.D
Acq On : 26 Jul 2023 12:53 am
Operator : ELAINE:PID
Sample : I8260STD80PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:22 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) Acrylonitrile	4.392	53	97871	79.890	ug/L		95
28) Ethyl tert-butyl ether	4.579	59	1262186	83.324	ug/L	#	76
29) Vinyl acetate	4.584	43	493691	82.276	ug/L		97
30) cis-1,2-Dichloroethene	4.874	96	354705	78.463	ug/L		89
31) 2,2-Dichloropropane	4.980	77	514703	78.614	ug/L		93
33) Bromochloromethane	5.069	128	150019	78.360	ug/L	#	79
34) Cyclohexane	5.074	56	820942	81.527	ug/L		77
35) Chloroform	5.141	83	568527	78.189	ug/L		96
36) Ethyl acetate	5.255	43	263494	79.662	ug/L	#	96
37) Carbon tetrachloride	5.280	117	439526	83.689	ug/L		99
38) Tetrahydrofuran	5.297	42	79776M6	79.852	ug/L		
40) 1,1,1-Trichloroethane	5.350	97	520046	80.202	ug/L		94
42) 2-Butanone	5.439	43	114351	79.432	ug/L		94
43) 1,1-Dichloropropene	5.469	75	459179	84.517	ug/L		98
45) Benzene	5.720	78	1321945	81.033	ug/L		94
46) tert-Amyl methyl ether	5.836	73	835866	82.230	ug/L		93
48) 1,2-Dichloroethane	5.926	62	517164	77.946	ug/L		97
51) Methyl cyclohexane	6.315	83	607611	85.849	ug/L	#	73
52) Trichloroethene	6.318	95	371606	84.322	ug/L		97
54) Dibromomethane	6.763	93	181931	81.974	ug/L		97
55) 1,2-Dichloropropane	6.874	63	423700	82.500	ug/L	#	92
57) 2-Chloroethyl vinyl ether	7.570	63	222495	84.209	ug/L		88
58) Bromodichloromethane	6.941	83	454731	80.062	ug/L		99
61) 1,4-Dioxane	7.155	88	14196	770.283	ug/L		90
62) cis-1,3-Dichloropropene	7.637	75	556385	84.621	ug/L		97
65) Toluene	7.909	92	807815	81.349	ug/L		100
66) 4-Methyl-2-pentanone	8.346	58	99363	82.371	ug/L	#	83
67) Tetrachloroethene	8.354	166	327804	83.919	ug/L		99
69) trans-1,3-Dichloropropene	8.391	75	478316	85.036	ug/L		95
71) Ethyl methacrylate	8.583	69	316534	81.824	ug/L		96
72) 1,1,2-Trichloroethane	8.577	83	217370	85.279	ug/L		98
73) Chlorodibromomethane	8.788	129	306853	85.413	ug/L		100
74) 1,3-Dichloropropane	8.902	76	454012	82.727	ug/L		99
75) 1,2-Dibromoethane	9.069	107	252130	84.034	ug/L		100
77) 2-Hexanone	9.356	43	160073	75.313	ug/L		89
78) Chlorobenzene	9.723	112	876634	81.157	ug/L	#	89
79) Ethylbenzene	9.765	91	1612855	81.668	ug/L		100
80) 1,1,1,2-Tetrachloroethane	9.807	131	317086	85.170	ug/L		98
81) p/m Xylene	9.951	106	1244432	162.386	ug/L		98
82) o Xylene	10.486	106	1237623	162.065	ug/L		97

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N12.D
Acq On : 26 Jul 2023 12:53 am
Operator : ELAINE:PID
Sample : I8260STD80PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:22 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
83)	Styrene	10.550	104	2069836	166.468	ug/L		94
85)	Bromoform	10.569	173	176341	85.420	ug/L		100
87)	Isopropylbenzene	10.861	105	1674202	81.858	ug/L		99
89)	Bromobenzene	11.287	156	368002	80.617	ug/L		100
90)	n-Propylbenzene	11.334	91	2047291	82.627	ug/L		97
91)	1,4-Dichlorobutane	11.348	55	553778	78.650	ug/L		93
92)	1,1,2,2-Tetrachloroethane	11.412	83	267565	80.510	ug/L		99
93)	4-Ethyltoluene	11.457	105	1675078	82.217	ug/L		99
94)	2-Chlorotoluene	11.496	91	1159431M1	80.179	ug/L		
95)	1,3,5-Trimethylbenzene	11.554	105	1430122	82.546	ug/L		99
96)	1,2,3-Trichloropropane	11.554	75	234979	79.340	ug/L		99
97)	trans-1,4-Dichloro-2-b...	11.604	53	115666	80.025	ug/L	#	81
98)	4-Chlorotoluene	11.679	91	1209646	80.789	ug/L		98
99)	tert-Butylbenzene	11.891	119	1189061	82.190	ug/L		98
102)	1,2,4-Trimethylbenzene	11.966	105	1413601	82.944	ug/L		100
103)	sec-Butylbenzene	12.080	105	1794279	82.853	ug/L		95
104)	p-Isopropyltoluene	12.233	119	1529785	83.660	ug/L		98
105)	1,3-Dichlorobenzene	12.294	146	745080	80.470	ug/L		99
106)	1,4-Dichlorobenzene	12.386	146	746195	80.822	ug/L		99
107)	p-Diethylbenzene	12.603	119	908342	83.966	ug/L		96
108)	n-Butylbenzene	12.659	91	1319227	83.815	ug/L		98
109)	1,2-Dichlorobenzene	12.806	146	698749	80.542	ug/L		99
110)	1,2,4,5-Tetramethylben...	13.390	119	1330883	81.138	ug/L		97
111)	1,2-Dibromo-3-chloropr...	13.582	155	42431	83.359	ug/L		98
112)	1,3,5-Trichlorobenzene	13.610	180	469286	79.848	ug/L		99
113)	Hexachlorobutadiene	14.183	225	138052	79.717	ug/L		100
114)	1,2,4-Trichlorobenzene	14.205	180	403495	79.534	ug/L		100
115)	Naphthalene	14.500	128	1004824	80.243	ug/L		100
116)	1,2,3-Trichlorobenzene	14.667	180	379978	82.180	ug/L		99

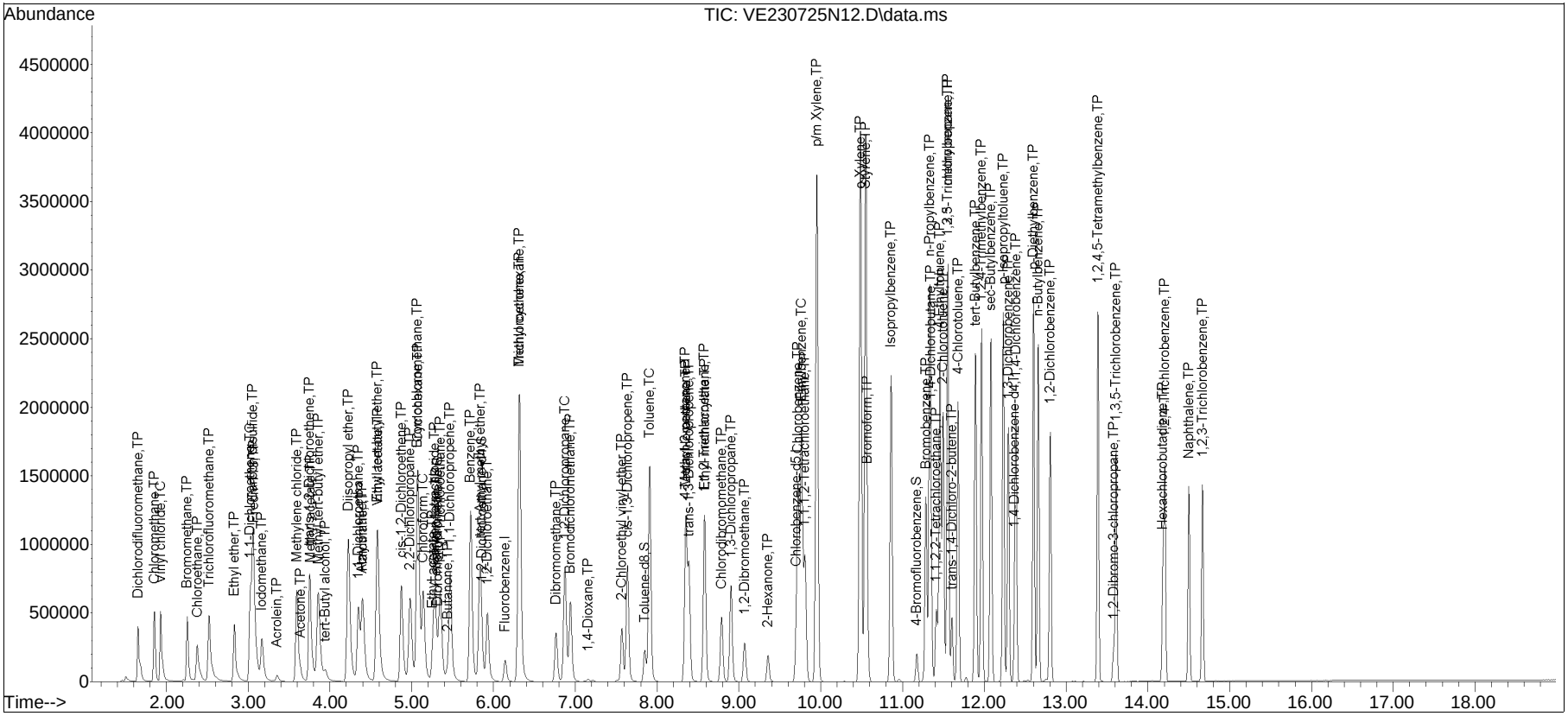
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N12.D
Acq On : 26 Jul 2023 12:53 am
Operator : ELAINE:PID
Sample : I8260STD80PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:22 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

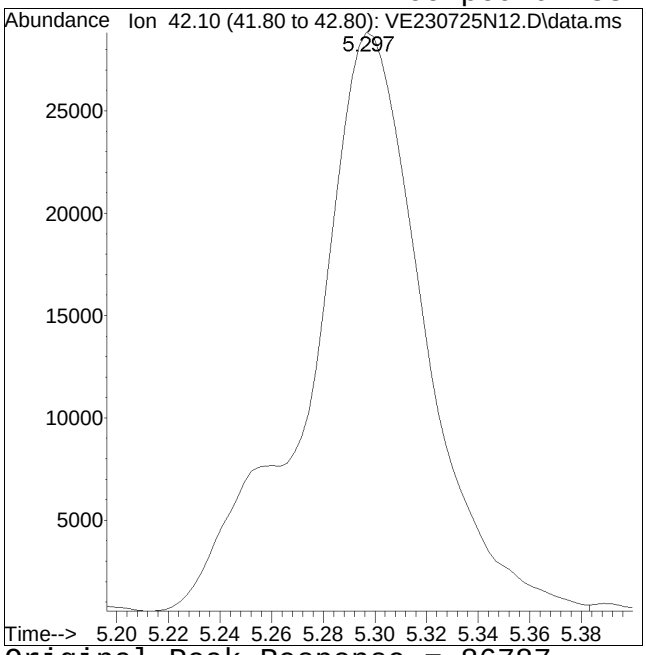
Sub List : 8260-Curve - Megamix plus Diox\VE230725N10.D•



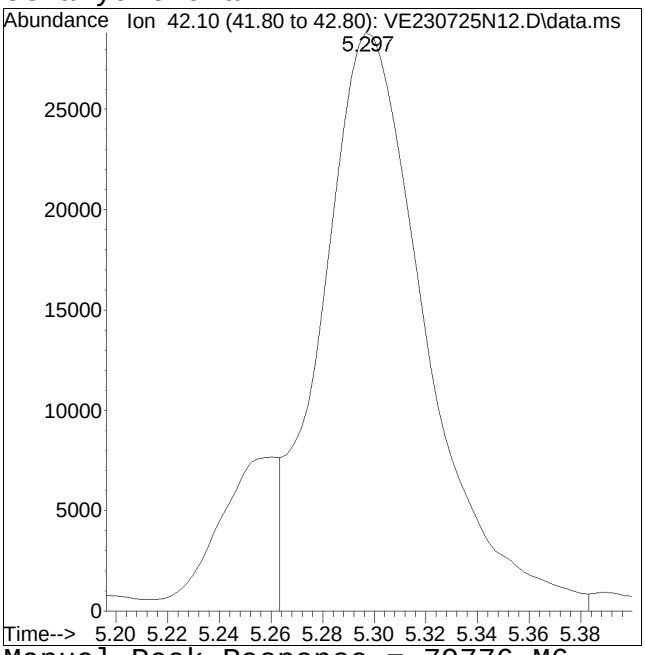
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N12.D Operator : ELAINE:PID
Date Inj'd : 7/26/2023 12:53 am Instrument : Elaine
Sample : I8260STD80PPB Quant Date : 7/26/2023 8:17 am

Compound #38: Tetrahydrofuran



Original Peak Response = 86787



Manual Peak Response = 79776 M6

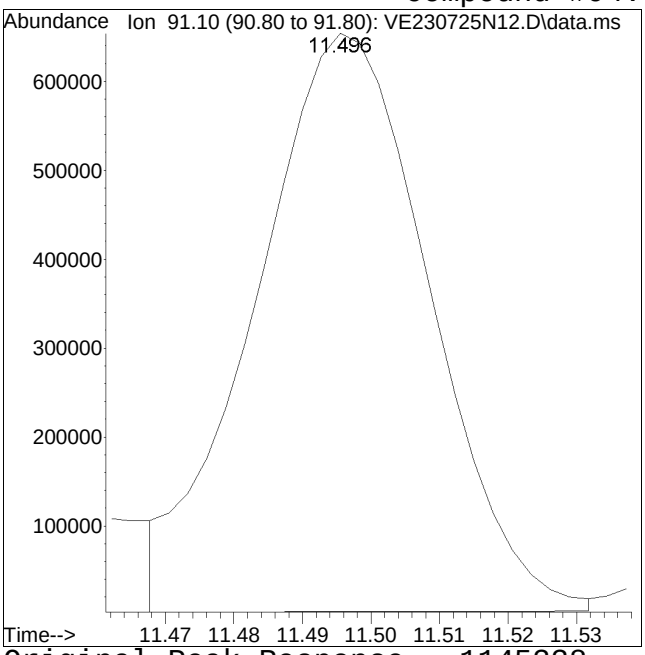
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

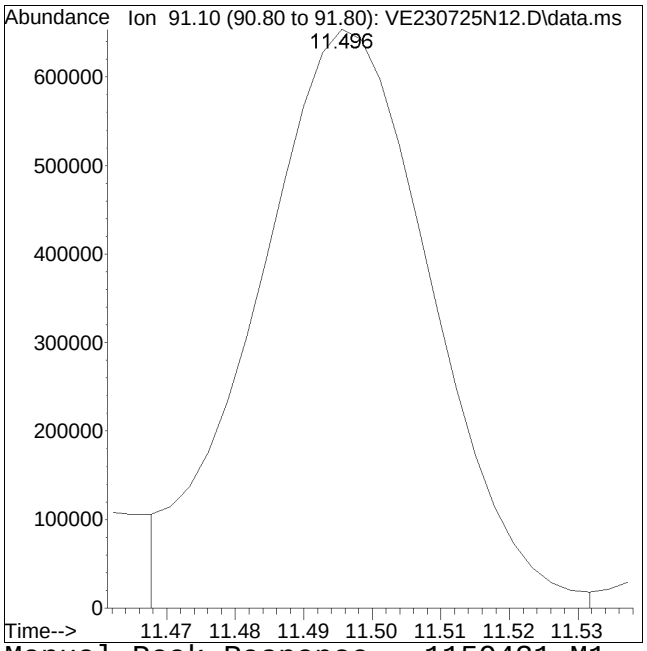
Data Path : K:\Elaine\2023\230725NICALQ
Data File : VE230725N12.D
Date Inj'd : 7/26/2023 12:53 am
Sample : I8260STD80PPB

Method : Elaine_230725N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 7/26/2023 8:17 am

Compound #94: 2-Chlorotoluene



Original Peak Response = 1145338



Manual Peak Response = 1159431 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N13.D
Acq On : 26 Jul 2023 1:17 am
Operator : ELAINE:PID
Sample : I8260STD120PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:30 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.143	96	178136	10.000	ug/L	0.00
Standard Area 1 = 158342			Recovery = 112.50%			
63) Chlorobenzene-d5	9.704	117	154118	10.000	ug/L	0.00
Standard Area 1 = 134176			Recovery = 114.86%			
84) 1,4-Dichlorobenzene-d4	12.372	152	83520	10.000	ug/L	0.00
Standard Area 1 = 74599			Recovery = 111.96%			
System Monitoring Compounds						
39) Dibromofluoromethane	5.322	113	47404	9.446	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.46%			
47) 1,2-Dichloroethane-d4	5.856	65	61959	9.388	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 93.88%			
64) Toluene-d8	7.851	98	188760	9.918	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.18%			
88) 4-Bromofluorobenzene	11.176	95	78171	10.130	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.30%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.652	85	618679	119.616	ug/L	98
3) Chloromethane	1.852	50	730064	111.347	ug/L	97
4) Vinyl chloride	1.930	62	826067	119.577	ug/L	96
5) Bromomethane	2.256	94	427800	105.820	ug/L	100
6) Chloroethane	2.376	64	486808	116.656	ug/L	99
7) Trichlorofluoromethane	2.523	101	795039	121.735	ug/L	99
8) Ethyl ether	2.832	74	267769	123.509	ug/L	77
10) 1,1-Dichloroethene	3.027	96	447287	120.775	ug/L	86
11) Carbon disulfide	3.057	76	1328314	115.841	ug/L	99
12) Freon-113	3.068	101	466915	121.788	ug/L	95
13) Iodomethane	3.168	142	641905	136.484	ug/L	98
14) Acrolein	3.355	56	68206	124.391	ug/L	98
15) Methylene chloride	3.594	84	483403	108.072	ug/L	83
17) Acetone	3.639	43	100421	100.304	ug/L #	89
18) trans-1,2-Dichloroethene	3.753	96	480427	118.779	ug/L	89
19) Methyl acetate	3.761	43	284636	112.806	ug/L	96
21) Methyl tert-butyl ether	3.858	73	1266418	123.780	ug/L #	91
22) tert-Butyl alcohol	3.945	59	133717	554.949	ug/L #	51
24) Diisopropyl ether	4.226	45	2040953	122.722	ug/L	96
25) 1,1-Dichloroethane	4.348	63	1124628	115.286	ug/L	96
26) Halothane	4.401	117	372978	121.712	ug/L	99

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N13.D
Acq On : 26 Jul 2023 1:17 am
Operator : ELAINE:PID
Sample : I8260STD120PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:30 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) Acrylonitrile	4.393	53	146690	116.236	ug/L		96
28) Ethyl tert-butyl ether	4.579	59	1927612	123.529	ug/L	#	75
29) Vinyl acetate	4.585	43	705760	114.176	ug/L		97
30) cis-1,2-Dichloroethene	4.874	96	553022	118.752	ug/L		91
31) 2,2-Dichloropropane	4.982	77	782425	116.007	ug/L		94
33) Bromochloromethane	5.069	128	225304	114.241	ug/L	#	82
34) Cyclohexane	5.074	56	1231057	118.677	ug/L		77
35) Chloroform	5.141	83	865307	115.522	ug/L		96
36) Ethyl acetate	5.255	43	399327	117.195	ug/L	#	96
37) Carbon tetrachloride	5.280	117	672354	124.275	ug/L		98
38) Tetrahydrofuran	5.297	42	119528M6	116.140	ug/L		
40) 1,1,1-Trichloroethane	5.350	97	787226	117.855	ug/L		94
42) 2-Butanone	5.439	43	172490	116.311	ug/L		96
43) 1,1-Dichloropropene	5.472	75	699152	124.920	ug/L		98
45) Benzene	5.723	78	2026323	120.575	ug/L		95
46) tert-Amyl methyl ether	5.837	73	1298049	123.962	ug/L		93
48) 1,2-Dichloroethane	5.926	62	782493	114.485	ug/L		98
51) Methyl cyclohexane	6.315	83	926762	127.110	ug/L	#	75
52) Trichloroethene	6.321	95	574478	126.542	ug/L		97
54) Dibromomethane	6.763	93	278661	121.884	ug/L		98
55) 1,2-Dichloropropane	6.874	63	639977	120.965	ug/L	#	93
57) 2-Chloroethyl vinyl ether	7.570	63	343845	126.329	ug/L		87
58) Bromodichloromethane	6.941	83	698703	119.416	ug/L		100
61) 1,4-Dioxane	7.153	88	20883	1099.963	ug/L		91
62) cis-1,3-Dichloropropene	7.637	75	849888	125.478	ug/L		98
65) Toluene	7.909	92	1249927	120.947	ug/L		99
66) 4-Methyl-2-pentanone	8.346	58	153162	122.001	ug/L	#	82
67) Tetrachloroethene	8.355	166	508422	125.065	ug/L		99
69) trans-1,3-Dichloropropene	8.391	75	734185	125.418	ug/L		96
71) Ethyl methacrylate	8.583	69	489708	121.636	ug/L		96
72) 1,1,2-Trichloroethane	8.580	83	332079	125.185	ug/L		99
73) Chlorodibromomethane	8.789	129	474078	126.797	ug/L		99
74) 1,3-Dichloropropane	8.903	76	696030	121.863	ug/L		99
75) 1,2-Dibromoethane	9.070	107	386388	123.743	ug/L		100
77) 2-Hexanone	9.356	43	244856	110.695	ug/L		90
78) Chlorobenzene	9.723	112	1357351	120.744	ug/L		90
79) Ethylbenzene	9.765	91	2452071	119.304	ug/L		100
80) 1,1,1,2-Tetrachloroethane	9.810	131	492395	127.084	ug/L		98
81) p/m Xylene	9.954	106	1905436	238.912	ug/L		97
82) o Xylene	10.486	106	1902855	239.426	ug/L		96

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N13.D
Acq On : 26 Jul 2023 1:17 am
Operator : ELAINE:PID
Sample : I8260STD120PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:30 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
83)	Styrene	10.553	104	3179437	245.704	ug/L		93
85)	Bromoform	10.572	173	277384	132.329	ug/L		99
87)	Isopropylbenzene	10.861	105	2547957	122.690	ug/L		99
89)	Bromobenzene	11.287	156	566576	122.237	ug/L		99
90)	n-Propylbenzene	11.334	91	3063736	121.775	ug/L		98
91)	1,4-Dichlorobutane	11.348	55	841937	117.764	ug/L		93
92)	1,1,2,2-Tetrachloroethane	11.415	83	404121	119.757	ug/L		99
93)	4-Ethyltoluene	11.460	105	2515393	121.590	ug/L		99
94)	2-Chlorotoluene	11.496	91	1751476M1	119.285	ug/L		
95)	1,3,5-Trimethylbenzene	11.557	105	2148564	122.134	ug/L		99
96)	1,2,3-Trichloropropane	11.554	75	357952	119.030	ug/L		98
97)	trans-1,4-Dichloro-2-b...	11.604	53	174251	118.731	ug/L	#	83
98)	4-Chlorotoluene	11.679	91	1832151	120.510	ug/L		98
99)	tert-Butylbenzene	11.894	119	1787354	121.672	ug/L		99
102)	1,2,4-Trimethylbenzene	11.969	105	2121572	122.598	ug/L		100
103)	sec-Butylbenzene	12.080	105	2658496	120.899	ug/L		95
104)	p-Isopropyltoluene	12.233	119	2253912	121.393	ug/L		98
105)	1,3-Dichlorobenzene	12.294	146	1121199	119.255	ug/L		99
106)	1,4-Dichlorobenzene	12.386	146	1114492	118.884	ug/L		99
107)	p-Diethylbenzene	12.603	119	1328532	120.946	ug/L		96
108)	n-Butylbenzene	12.659	91	1912536	119.668	ug/L		98
109)	1,2-Dichlorobenzene	12.806	146	1046771	118.828	ug/L		99
110)	1,2,4,5-Tetramethylben...	13.390	119	2065013	123.986	ug/L		98
111)	1,2-Dibromo-3-chloropr...	13.582	155	66060	127.812	ug/L		97
112)	1,3,5-Trichlorobenzene	13.613	180	740173	124.030	ug/L		99
113)	Hexachlorobutadiene	14.183	225	214978	122.256	ug/L		100
114)	1,2,4-Trichlorobenzene	14.208	180	642936	124.810	ug/L		99
115)	Naphthalene	14.503	128	1601821	125.978	ug/L		100
116)	1,2,3-Trichlorobenzene	14.667	180	588939	125.443	ug/L		99

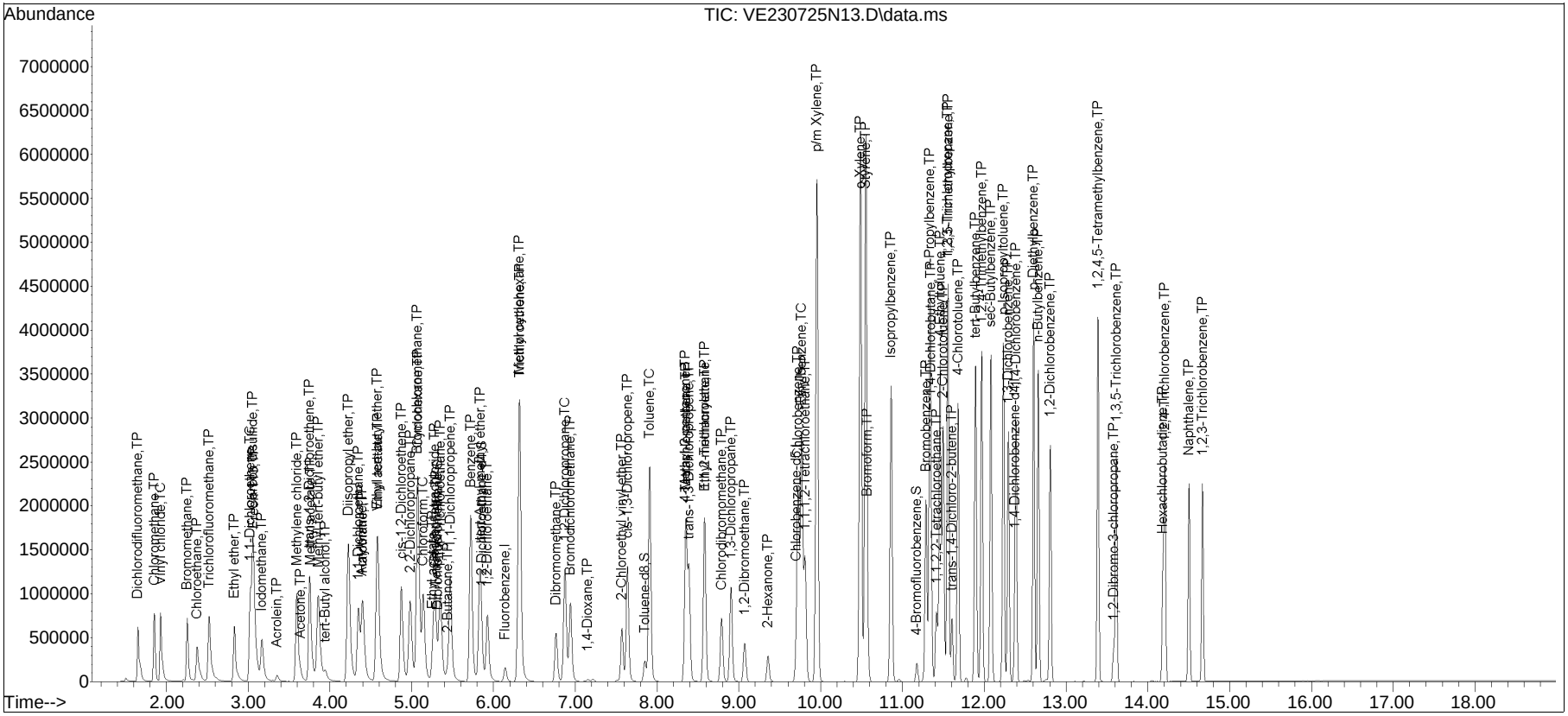
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N13.D
Acq On : 26 Jul 2023 1:17 am
Operator : ELAINE:PID
Sample : I8260STD120PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:30 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

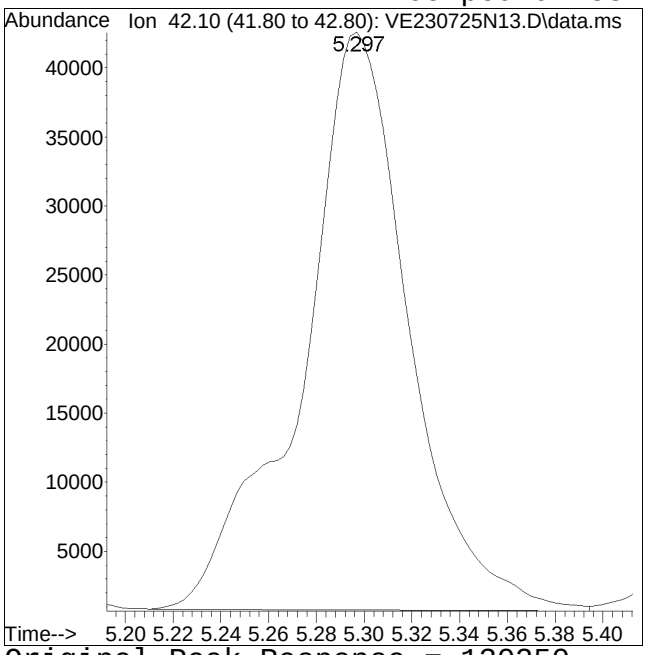
Sub List : 8260-Curve - Megamix plus Diox\VE230725N10.D•



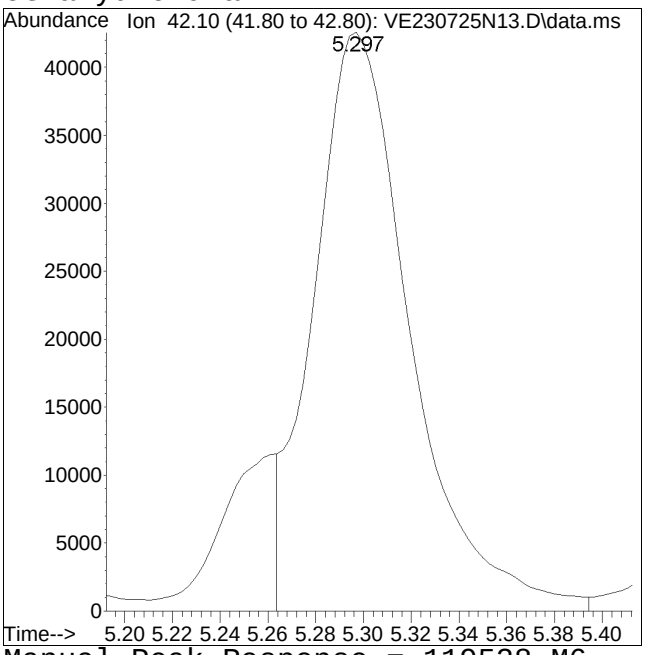
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N13.D Operator : ELAINE:PID
Date Inj'd : 7/26/2023 1:17 am Instrument : Elaine
Sample : I8260STD120PPB Quant Date : 7/26/2023 8:17 am

Compound #38: Tetrahydrofuran



Original Peak Response = 130250



Manual Peak Response = 119528 M6

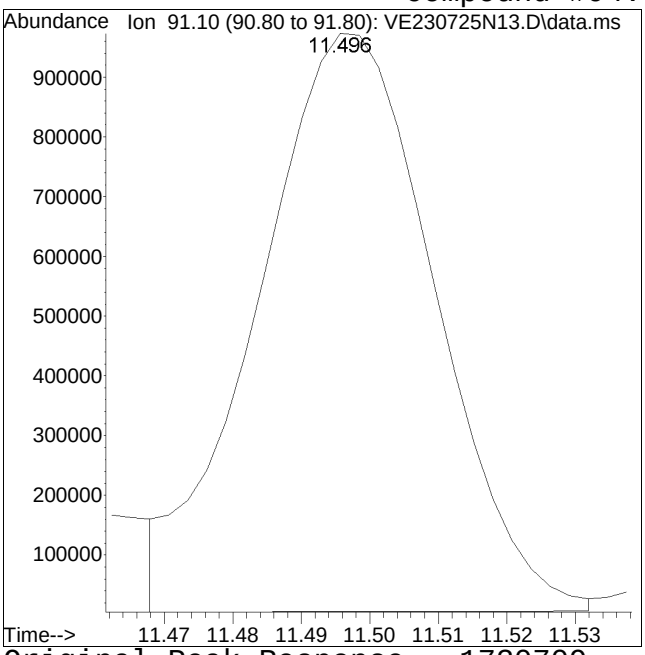
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

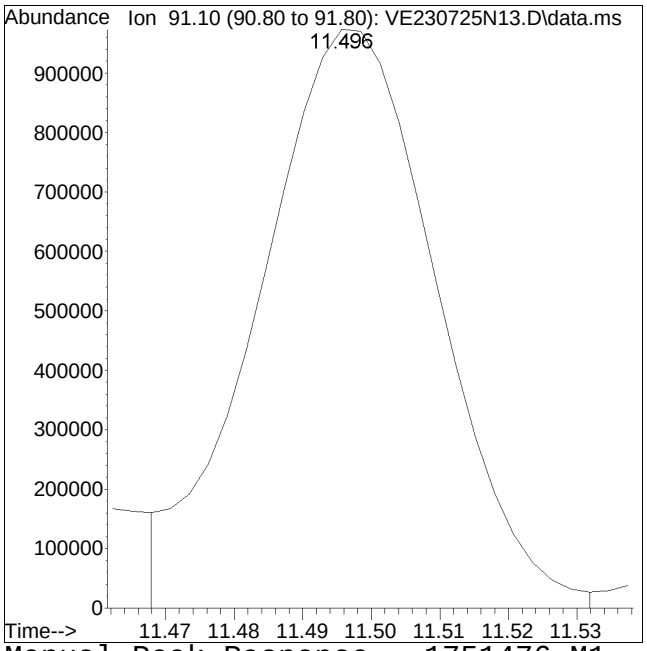
Data Path : K:\Elaine\2023\230725NICALQ
Data File : VE230725N13.D
Date Inj'd : 7/26/2023 1:17 am
Sample : I8260STD120PPB

Method : Elaine_230725N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 7/26/2023 8:17 am

Compound #94: 2-Chlorotoluene



Original Peak Response = 1730709



Manual Peak Response = 1751476 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N14.D
Acq On : 26 Jul 2023 1:41 am
Operator : ELAINE:PID
Sample : I8260STD200PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:38 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.143	96	186698	10.000	ug/L	0.00
Standard Area 1 = 158342			Recovery = 117.91%			
63) Chlorobenzene-d5	9.704	117	165391	10.000	ug/L	0.00
Standard Area 1 = 134176			Recovery = 123.26%			
84) 1,4-Dichlorobenzene-d4	12.372	152	87801	10.000	ug/L	0.00
Standard Area 1 = 74599			Recovery = 117.70%			
System Monitoring Compounds						
39) Dibromofluoromethane	5.322	113	49601	9.431	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.31%			
47) 1,2-Dichloroethane-d4	5.856	65	65119	9.415	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.15%			
64) Toluene-d8	7.851	98	198490	9.719	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.19%			
88) 4-Bromofluorobenzene	11.176	95	79147	9.756	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.56%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.652	85	1052685	194.194	ug/L	98
3) Chloromethane	1.852	50	1242210	180.769	ug/L	97
4) Vinyl chloride	1.927	62	1380214	190.631	ug/L	97
5) Bromomethane	2.256	94	732935	172.983	ug/L	100
6) Chloroethane	2.373	64	817156	186.838	ug/L	100
7) Trichlorofluoromethane	2.523	101	1337750	195.441	ug/L	100
8) Ethyl ether	2.832	74	459063	202.033	ug/L	77
10) 1,1-Dichloroethene	3.026	96	766592	197.500	ug/L	87
11) Carbon disulfide	3.054	76	2253916	187.548	ug/L	99
12) Freon-113	3.068	101	803007	199.847	ug/L	95
13) Iodomethane	3.168	142	1091498	221.435	ug/L	97
14) Acrolein	3.355	56	120271	209.285	ug/L	99
15) Methylene chloride	3.594	84	830861	177.233	ug/L	84
17) Acetone	3.639	43	177188	168.866	ug/L #	88
18) trans-1,2-Dichloroethene	3.750	96	819344	193.282	ug/L	89
19) Methyl acetate	3.761	43	495842	187.498	ug/L	96
21) Methyl tert-butyl ether	3.856	73	2178796	203.190	ug/L #	92
22) tert-Butyl alcohol	3.945	59	246681	976.820	ug/L #	51
24) Diisopropyl ether	4.223	45	3498320	200.706	ug/L	96
25) 1,1-Dichloroethane	4.348	63	1925953	188.376	ug/L	96
26) Halothane	4.401	117	648042	201.775	ug/L	99

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N14.D
Acq On : 26 Jul 2023 1:41 am
Operator : ELAINE:PID
Sample : I8260STD200PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:38 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) Acrylonitrile	4.393	53	252964	191.255	ug/L		96
28) Ethyl tert-butyl ether	4.579	59	3352715	205.002	ug/L	#	74
29) Vinyl acetate	4.584	43	1190507	183.764	ug/L		97
30) cis-1,2-Dichloroethene	4.874	96	958229	196.328	ug/L		91
31) 2,2-Dichloropropane	4.980	77	1324568	187.382	ug/L		94
33) Bromochloromethane	5.069	128	386658	187.064	ug/L	#	81
34) Cyclohexane	5.077	56	2120366	195.035	ug/L		78
35) Chloroform	5.141	83	1480143	188.543	ug/L		96
36) Ethyl acetate	5.255	43	693466	194.186	ug/L		97
37) Carbon tetrachloride	5.280	117	1180789	208.243	ug/L		98
38) Tetrahydrofuran	5.297	42	213624M6	198.050	ug/L		
40) 1,1,1-Trichloroethane	5.350	97	1355858	193.675	ug/L		95
42) 2-Butanone	5.439	43	305523	196.569	ug/L	#	61
43) 1,1-Dichloropropene	5.472	75	1205584	205.528	ug/L		98
45) Benzene	5.720	78	3492503	198.289	ug/L		95
46) tert-Amyl methyl ether	5.836	73	2287233	208.410	ug/L		94
48) 1,2-Dichloroethane	5.926	62	1353871	188.998	ug/L		98
51) Methyl cyclohexane	6.315	83	1657714	216.937	ug/L	#	76
52) Trichloroethene	6.321	95	1013140	212.933	ug/L		97
54) Dibromomethane	6.763	93	491628	205.173	ug/L		98
55) 1,2-Dichloropropane	6.874	63	1104018	199.106	ug/L	#	93
57) 2-Chloroethyl vinyl ether	7.570	63	605971	212.424	ug/L		87
58) Bromodichloromethane	6.941	83	1215701	198.249	ug/L		99
61) 1,4-Dioxane	7.155	88	35749	1796.641	ug/L		90
62) cis-1,3-Dichloropropene	7.639	75	1487163	209.496	ug/L		98
65) Toluene	7.909	92	2184095	196.935	ug/L		100
66) 4-Methyl-2-pentanone	8.346	58	272153	202.008	ug/L		83
67) Tetrachloroethene	8.354	166	906574	207.805	ug/L		99
69) trans-1,3-Dichloropropene	8.391	75	1283303	204.280	ug/L		97
71) Ethyl methacrylate	8.583	69	853661	197.585	ug/L		95
72) 1,1,2-Trichloroethane	8.577	83	585068	205.522	ug/L		99
73) Chlorodibromomethane	8.788	129	845196	210.648	ug/L		99
74) 1,3-Dichloropropane	8.903	76	1222317	199.420	ug/L		99
75) 1,2-Dibromoethane	9.069	107	686898	204.989	ug/L		99
77) 2-Hexanone	9.356	43	428003	180.304	ug/L		88
78) Chlorobenzene	9.723	112	2395252	198.549	ug/L		100
79) Ethylbenzene	9.768	91	4254529	192.892	ug/L		99
80) 1,1,1,2-Tetrachloroethane	9.810	131	867955	208.746	ug/L		98
81) p/m Xylene	9.957	106	3365821	393.256	ug/L		95
82) o Xylene	10.488	106	3328214	390.229	ug/L		94

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N14.D
Acq On : 26 Jul 2023 1:41 am
Operator : ELAINE:PID
Sample : I8260STD200PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:38 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
83)	Styrene	10.552	104	5500251	396.082	ug/L		93
85)	Bromoform	10.572	173	497063	225.567	ug/L		99
87)	Isopropylbenzene	10.864	105	4414759	202.216	ug/L		100
89)	Bromobenzene	11.287	156	980918	201.312	ug/L		100
90)	n-Propylbenzene	11.337	91	5173811	195.618	ug/L		99
91)	1,4-Dichlorobutane	11.348	55	1437219	191.225	ug/L		93
92)	1,1,2,2-Tetrachloroethane	11.415	83	691705	194.985	ug/L		99
93)	4-Ethyltoluene	11.462	105	4259272	195.848	ug/L		99
94)	2-Chlorotoluene	11.498	91	2958936M1	191.693	ug/L		
95)	1,3,5-Trimethylbenzene	11.557	105	3660630	197.940	ug/L		99
96)	1,2,3-Trichloropropane	11.554	75	622671	196.962	ug/L		98
97)	trans-1,4-Dichloro-2-b...	11.607	53	296475	192.162	ug/L	#	83
98)	4-Chlorotoluene	11.682	91	3128657	195.754	ug/L		99
99)	tert-Butylbenzene	11.893	119	3059679	198.129	ug/L		99
102)	1,2,4-Trimethylbenzene	11.969	105	3642847	200.243	ug/L		99
103)	sec-Butylbenzene	12.083	105	4558403	197.193	ug/L		96
104)	p-Isopropyltoluene	12.236	119	3995863	204.718	ug/L		98
105)	1,3-Dichlorobenzene	12.297	146	1956603	197.965	ug/L		99
106)	1,4-Dichlorobenzene	12.389	146	1969278	199.822	ug/L		99
107)	p-Diethylbenzene	12.606	119	2451039	212.256	ug/L		97
108)	n-Butylbenzene	12.661	91	3422576	203.710	ug/L		98
109)	1,2-Dichlorobenzene	12.809	146	1859632	200.811	ug/L		99
110)	1,2,4,5-Tetramethylben...	13.390	119	3731354	213.111	ug/L		98
111)	1,2-Dibromo-3-chloropr...	13.582	155	119992	220.840	ug/L		97
112)	1,3,5-Trichlorobenzene	13.613	180	1314889	209.591	ug/L		99
113)	Hexachlorobutadiene	14.183	225	368276	199.223	ug/L		99
114)	1,2,4-Trichlorobenzene	14.208	180	1107629	204.535	ug/L		99
115)	Naphthalene	14.503	128	2738745	204.891	ug/L		100
116)	1,2,3-Trichlorobenzene	14.670	180	1018429	206.347	ug/L		99

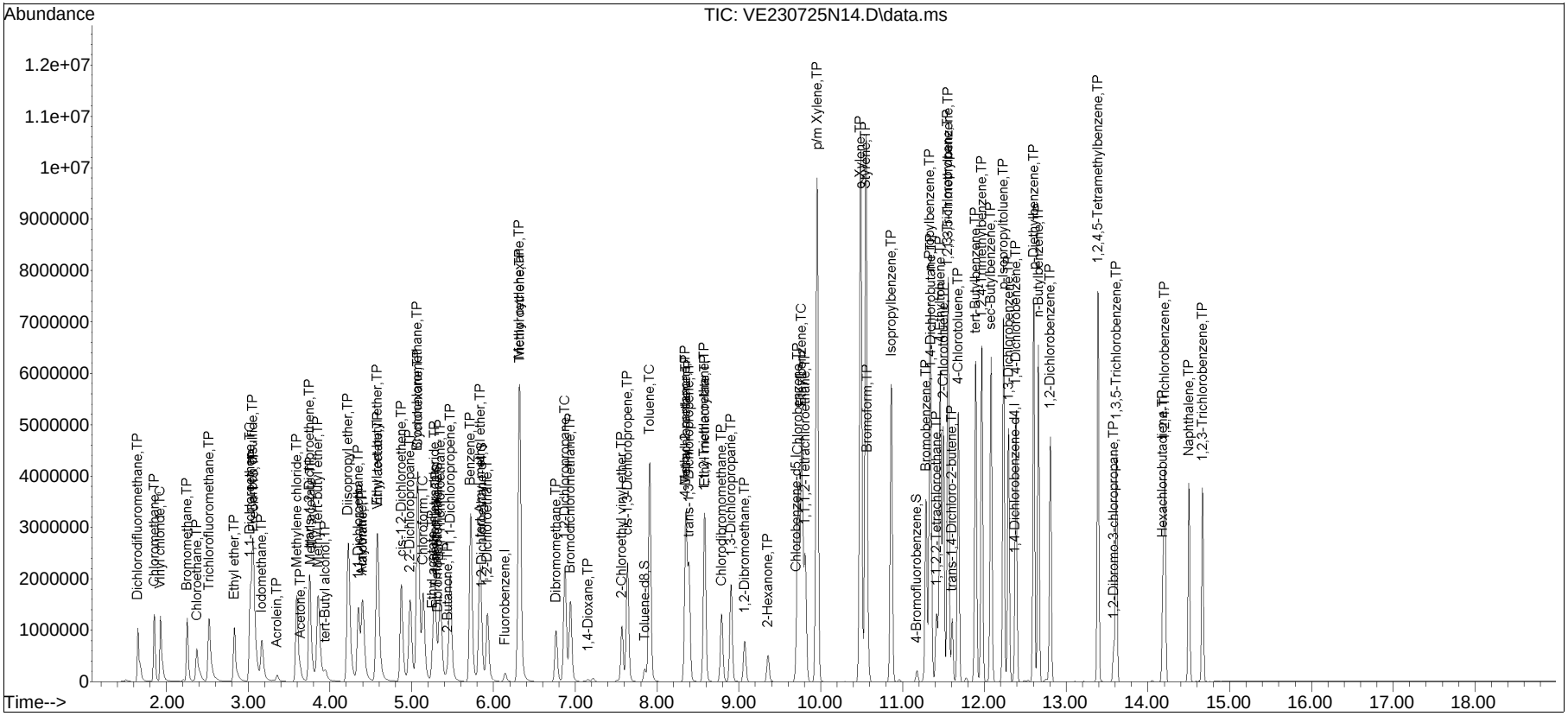
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N14.D
Acq On : 26 Jul 2023 1:41 am
Operator : ELAINE:PID
Sample : I8260STD200PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:17:38 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:16:03 2023
Response via : Initial Calibration

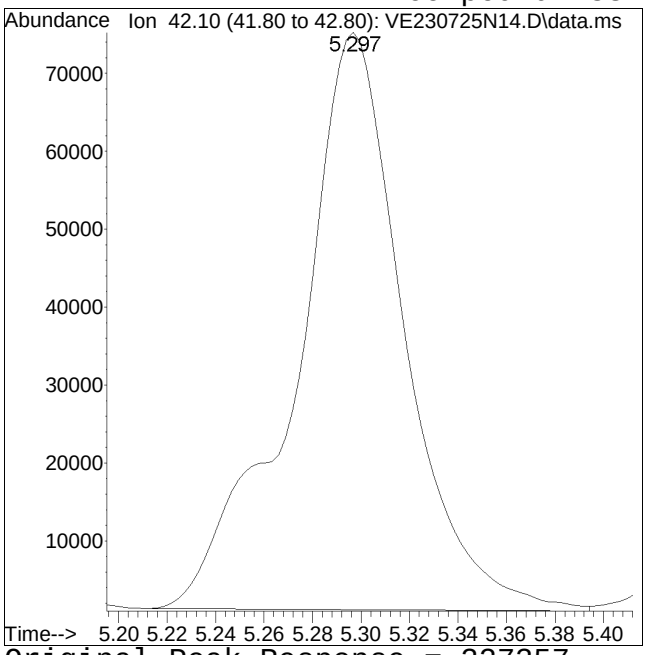
Sub List : 8260-Curve - Megamix plus Diox\VE230725N10.D•



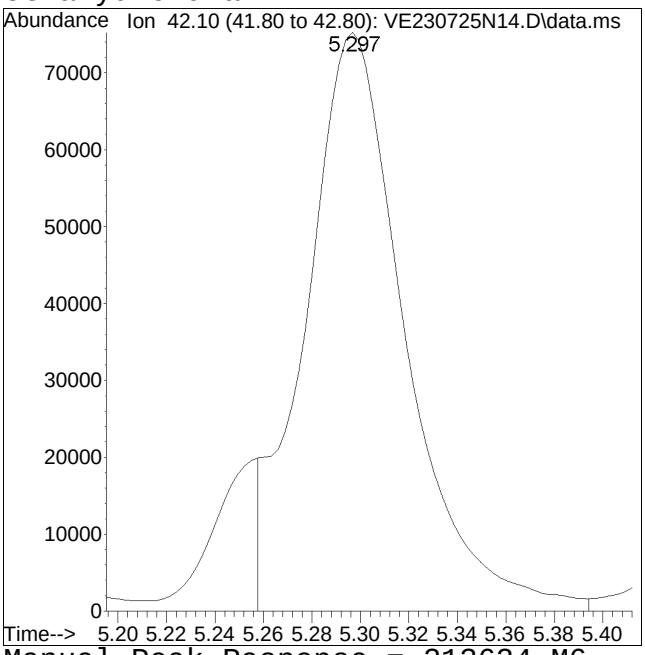
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N14.D Operator : ELAINE:PID
Date Inj'd : 7/26/2023 1:41 am Instrument : Elaine
Sample : I8260STD200PPB Quant Date : 7/26/2023 8:17 am

Compound #38: Tetrahydrofuran



Original Peak Response = 227357



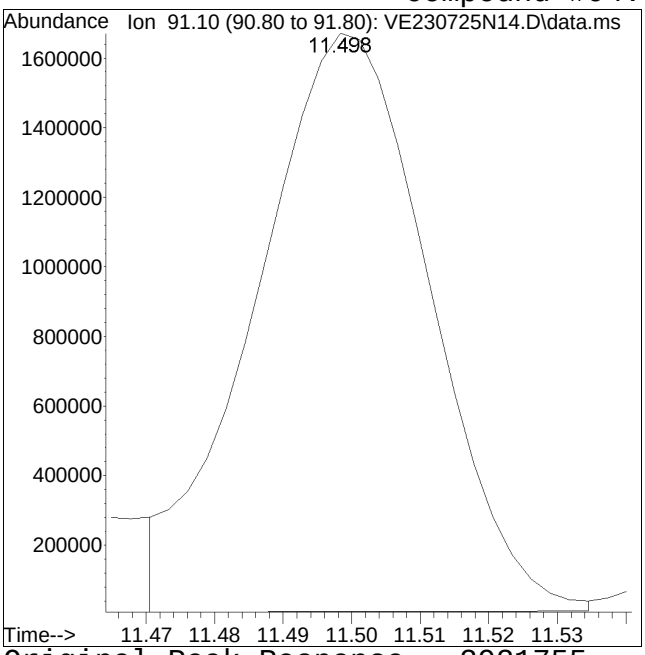
Manual Peak Response = 213624 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

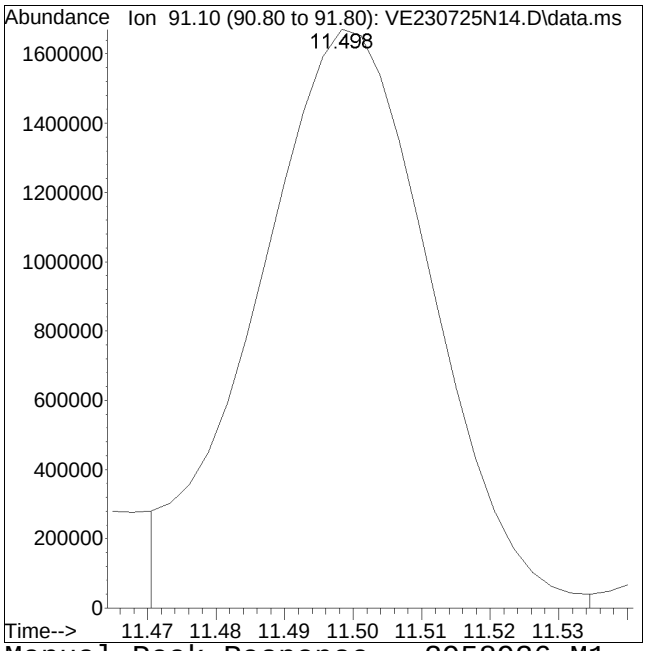
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N14.D Operator : ELAINE:PID
Date Inj'd : 7/26/2023 1:41 am Instrument : Elaine
Sample : I8260STD200PPB Quant Date : 7/26/2023 8:17 am

Compound #94: 2-Chlorotoluene



Original Peak Response = 2921755



Manual Peak Response = 2958936 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N19.D
Acq On : 26 Jul 2023 3:43 am
Operator : ELAINE:PID
Sample : C8260STD10PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:22:04 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	100	0.00
2	TP	Dichlorodifluoromethane	0.290	0.161	44.5#	49#	0.00
3	TP	Chloromethane	0.368	0.296	19.6	72	0.00
4	TC	Vinyl chloride	0.388	0.353	9.0	81	0.00
5	TP	Bromomethane	0.227	0.213	6.2	87	0.00
6	TP	Chloroethane	0.234	0.240	-2.6	92	0.00
7	TP	Trichlorofluoromethane	0.367	0.393	-7.1	94	0.00
8	TP	Ethyl ether	0.122	0.132	-8.2	100	0.00
10	TC	1,1-Dichloroethene	0.208	0.188	9.6	81	0.00
11	TP	Carbon disulfide	0.644	0.599	7.0	84	0.00
12	TP	Freon-113	0.215	0.215	0.0	86	0.00
13	TP	Iodomethane	0.264	0.243	8.0	90	0.00
14	TP	Acrolein	0.034	0.029	14.7	84	0.00
15	TP	Methylene chloride	0.251	0.239	4.8	93	0.00
17	TP	Acetone	* 10.000	9.997	0.0	97	0.00
18	TP	trans-1,2-Dichloroethene	0.227	0.216	4.8	86	0.00
19	TP	Methyl acetate	0.142	0.127	10.6	90	0.00
21	TP	Methyl tert-butyl ether	0.574	0.554	3.5	97	0.00
22	TP	tert-Butyl alcohol	0.014	0.015	-7.1	106	0.00
24	TP	Diisopropyl ether	0.934	0.887	5.0	91	0.00
25	TP	1,1-Dichloroethane	0.548	0.550	-0.4	90	0.00
26	TP	Halothane	0.172	0.179	-4.1	92	0.00
27	TP	Acrylonitrile	0.071	0.075	-5.6	99	0.00
28	TP	Ethyl tert-butyl ether	0.876	0.826	5.7	94	0.00
29	TP	Vinyl acetate	0.347	0.360	-3.7	109	0.00
30	TP	cis-1,2-Dichloroethene	0.261	0.247	5.4	86	0.00
31	TP	2,2-Dichloropropane	0.379	0.338	10.8	83	0.00
33	TP	Bromochloromethane	0.111	0.110	0.9	92	0.00
34	TP	Cyclohexane	0.582	0.555	4.6	85	0.00
35	TC	Chloroform	0.420	0.424	-1.0	95	0.00
36	TP	Ethyl acetate	0.191	0.199	-4.2	104	0.00
37	TP	Carbon tetrachloride	0.304	0.313	-3.0	93	0.00
38	TP	Tetrahydrofuran	0.058	0.063	-8.6	103	0.00
39	S	Dibromofluoromethane	0.282	0.290	-2.8	102	0.00
40	TP	1,1,1-Trichloroethane	0.375	0.379	-1.1	92	0.00
42	TP	2-Butanone	0.083	0.071	14.5	91	0.00
43	TP	1,1-Dichloropropene	0.314	0.314	0.0	92	0.00
45	TP	Benzene	0.943	0.923	2.1	93	0.00
46	TP	tert-Amyl methyl ether	0.588	0.564	4.1	97	0.00

Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N19.D
Acq On : 26 Jul 2023 3:43 am
Operator : ELAINE:PID
Sample : C8260STD10PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:22:04 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
47	S	1,2-Dichloroethane-d4	0.370	0.399	-7.8	101	0.00
48	T	1,2-Dichloroethane	0.384	0.374	2.6	93	0.00
51	TP	Methyl cyclohexane	0.409	0.386	5.6	90	0.00
52	TP	Trichloroethene	0.255	0.257	-0.8	94	0.00
54	TP	Dibromomethane	0.128	0.129	-0.8	96	0.00
55	TC	1,2-Dichloropropane	0.297	0.300	-1.0	95	0.00
57	TP	2-Chloroethyl vinyl ether	0.153	0.141	7.8	93	0.00
58	TP	Bromodichloromethane	0.328	0.325	0.9	94	0.00
61	TP	1,4-Dioxane	0.00107	0.00101#	5.6	91	0.00
62	TP	cis-1,3-Dichloropropene	0.380	0.373	1.8	98	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00
64	S	Toluene-d8	1.235	1.261	-2.1	102	0.00
65	TC	Toluene	0.671	0.662	1.3	94	0.00
66	TP	4-Methyl-2-pentanone	0.081	0.075	7.4	95	0.00
67	TP	Tetrachloroethene	0.264	0.256	3.0	92	0.00
69	TP	trans-1,3-Dichloropropene	0.380	0.376	1.1	99	0.00
71	TP	Ethyl methacrylate	0.261	0.280	-7.3	104	0.00
72	TP	1,1,2-Trichloroethane	0.172	0.171#	0.6	96	0.00
73	TP	Chlorodibromomethane	0.243	0.244	-0.4	99	0.00
74	TP	1,3-Dichloropropane	0.371	0.362	2.4	97	0.00
75	TP	1,2-Dibromoethane	0.203	0.192#	5.4	93	0.00
77	TP	2-Hexanone	0.144	0.132	8.3	96	0.00
78	TP	Chlorobenzene	0.729	0.724	0.7	97	0.00
79	TC	Ethylbenzene	1.334	1.330	0.3	93	0.00
80	TP	1,1,1,2-Tetrachloroethane	0.251	0.236	6.0	91	0.00
81	TP	p/m Xylene	0.517	0.515	0.4	94	0.00
82	TP	o Xylene	0.516	0.504	2.3	94	0.00
83	TP	Styrene	0.840	0.826	1.7	93	0.00
84	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
85	TP	Bromoform	0.251	0.239	4.8	101	0.00
87	TP	Isopropylbenzene	2.487	2.368	4.8	92	0.00
88	S	4-Bromofluorobenzene	0.924	0.914	1.1	103	0.00
89	TP	Bromobenzene	0.555	0.527	5.0	95	0.00
90	TP	n-Propylbenzene	3.012	2.981	1.0	95	0.00
91	TP	1,4-Dichlorobutane	0.856	0.850	0.7	100	0.00
92	TP	1,1,2,2-Tetrachloroethane	0.404	0.381	5.7	99	0.00
93	TP	4-Ethyltoluene	2.477	2.501	-1.0	97	0.00

Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N19.D
Acq On : 26 Jul 2023 3:43 am
Operator : ELAINE:PID
Sample : C8260STD10PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:22:04 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
94 TP	2-Chlorotoluene	1.758	1.762	-0.2	95	0.00
95 TP	1,3,5-Trimethylbenzene	2.106	1.999	5.1	92	0.00
96 TP	1,2,3-Trichloropropane	0.360	0.348	3.3	98	0.00
97 TP	trans-1,4-Dichloro-2-butene	0.176	0.171	2.8	98	0.00
98 TP	4-Chlorotoluene	1.820	1.772	2.6	95	0.00
99 TP	tert-Butylbenzene	1.759	1.712	2.7	93	0.00
102 TP	1,2,4-Trimethylbenzene	2.072	2.079	-0.3	97	0.00
103 TP	sec-Butylbenzene	2.633	2.555	3.0	92	0.00
104 TP	p-Isopropyltoluene	2.223	2.125	4.4	93	0.00
105 TP	1,3-Dichlorobenzene	1.126	1.103	2.0	94	0.00
106 TP	1,4-Dichlorobenzene	1.122	1.053	6.1	92	0.00
107 TP	p-Diethylbenzene	1.315	1.241	5.6	92	0.00
108 TP	n-Butylbenzene	1.914	1.945	-1.6	97	0.00
109 TP	1,2-Dichlorobenzene	1.055	1.034	2.0	96	0.00
110 TP	1,2,4,5-Tetramethylbenzene	1.994	1.864	6.5	92	0.00
111 TP	1,2-Dibromo-3-chloropropane	0.062	0.062	0.0	97	0.00
112 TP	1,3,5-Trichlorobenzene	0.715	0.663	7.3	93	0.00
113 TP	Hexachlorobutadiene	0.211	0.200	5.2	91	0.00
114 TP	1,2,4-Trichlorobenzene	0.617	0.587	4.9	96	0.00
115 TP	Naphthalene	1.522	1.465	3.7	100	0.00
116 TP	1,2,3-Trichlorobenzene	0.562	0.534	5.0	98	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 3 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N19.D
Acq On : 26 Jul 2023 3:43 am
Operator : ELAINE:PID
Sample : C8260STD10PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:22:04 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.143	96	158453	10.000 ug/L	0.00
Standard Area 1 = 158342			Recovery = 100.07%		
63) Chlorobenzene-d5	9.701	117	136896	10.000 ug/L	0.00
Standard Area 1 = 134176			Recovery = 102.03%		
84) 1,4-Dichlorobenzene-d4	12.369	152	76179	10.000 ug/L	0.00
Standard Area 1 = 74599			Recovery = 102.12%		
System Monitoring Compounds					
39) Dibromofluoromethane	5.319	113	45965	10.297 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.97%		
47) 1,2-Dichloroethane-d4	5.856	65	63172	10.761 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.61%		
64) Toluene-d8	7.848	98	172606	10.210 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.10%		
88) 4-Bromofluorobenzene	11.173	95	69652	9.895 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.95%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.652	85	25461	5.534 ug/L	96
3) Chloromethane	1.852	50	46915	8.044 ug/L	99
4) Vinyl chloride	1.927	62	56001	9.113 ug/L	98
5) Bromomethane	2.256	94	33803	9.400 ug/L	99
6) Chloroethane	2.378	64	37972	10.230 ug/L	100
7) Trichlorofluoromethane	2.520	101	62351	10.733 ug/L	100
8) Ethyl ether	2.832	74	20948	10.863 ug/L #	64
10) 1,1-Dichloroethene	3.024	96	29802	9.047 ug/L	81
11) Carbon disulfide	3.054	76	94889	9.303 ug/L	99
12) Freon-113	3.068	101	34138	10.011 ug/L	92
13) Iodomethane	3.166	142	38519	9.207 ug/L	97
14) Acrolein	3.358	56	4653M1	8.739 ug/L	
15) Methylene chloride	3.594	84	37846	9.512 ug/L	80
17) Acetone	3.641	43	8777M1	9.997 ug/L	
18) trans-1,2-Dichloroethene	3.750	96	34190	9.503 ug/L	85
19) Methyl acetate	3.758	43	20106	8.958 ug/L	97
21) Methyl tert-butyl ether	3.858	73	87809	9.649 ug/L #	91
22) tert-Butyl alcohol	3.947	59	11934	55.681 ug/L #	51
24) Diisopropyl ether	4.226	45	140587	9.504 ug/L	98
25) 1,1-Dichloroethane	4.348	63	87150	10.044 ug/L	96
26) Halothane	4.401	117	28366	10.406 ug/L	99

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N19.D
Acq On : 26 Jul 2023 3:43 am
Operator : ELAINE:PID
Sample : C8260STD10PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:22:04 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
27) Acrylonitrile	4.390	53	11945M1	10.641	ug/L		
28) Ethyl tert-butyl ether	4.579	59	130835	9.426	ug/L	#	79
29) Vinyl acetate	4.585	43	57105	10.386	ug/L		97
30) cis-1,2-Dichloroethene	4.871	96	39071	9.432	ug/L		89
31) 2,2-Dichloropropane	4.980	77	53536	8.924	ug/L		91
33) Bromochloromethane	5.069	128	17447	9.945	ug/L	#	81
34) Cyclohexane	5.071	56	87975	9.535	ug/L		79
35) Chloroform	5.141	83	67258	10.095	ug/L		95
36) Ethyl acetate	5.252	43	31552	10.410	ug/L	#	97
37) Carbon tetrachloride	5.280	117	49660	10.319	ug/L		96
38) Tetrahydrofuran	5.302	42	10054M6	10.983	ug/L		
40) 1,1,1-Trichloroethane	5.350	97	60001	10.098	ug/L		95
42) 2-Butanone	5.441	43	11316	8.578	ug/L		98
43) 1,1-Dichloropropene	5.469	75	49756	9.994	ug/L		100
45) Benzene	5.720	78	146253	9.784	ug/L		94
46) tert-Amyl methyl ether	5.837	73	89384	9.596	ug/L		93
48) 1,2-Dichloroethane	5.926	62	59281	9.751	ug/L		98
51) Methyl cyclohexane	6.312	83	61209	9.438	ug/L	#	78
52) Trichloroethene	6.318	95	40778	10.098	ug/L		96
54) Dibromomethane	6.763	93	20517	10.089	ug/L		98
55) 1,2-Dichloropropane	6.874	63	47490	10.091	ug/L	#	92
57) 2-Chloroethyl vinyl ether	7.567	63	22416	9.259	ug/L	#	88
58) Bromodichloromethane	6.941	83	51427	9.881	ug/L		99
61) 1,4-Dioxane	7.153	88	8035	475.798	ug/L	#	86
62) cis-1,3-Dichloropropene	7.637	75	59159	9.819	ug/L		94
65) Toluene	7.907	92	90612	9.871	ug/L		100
66) 4-Methyl-2-pentanone	8.343	58	10333	9.266	ug/L		89
67) Tetrachloroethene	8.352	166	34994	9.691	ug/L		97
69) trans-1,3-Dichloropropene	8.388	75	51534	9.911	ug/L		92
71) Ethyl methacrylate	8.583	69	38263	10.700	ug/L		98
72) 1,1,2-Trichloroethane	8.580	83	23370	9.918	ug/L		98
73) Chlorodibromomethane	8.788	129	33369	10.048	ug/L		99
74) 1,3-Dichloropropane	8.903	76	49586	9.774	ug/L		100
75) 1,2-Dibromoethane	9.069	107	26225	9.455	ug/L		99
77) 2-Hexanone	9.356	43	18128	9.226	ug/L		89
78) Chlorobenzene	9.723	112	99088	9.923	ug/L		98
79) Ethylbenzene	9.762	91	182067	9.973	ug/L		100
80) 1,1,1,2-Tetrachloroethane	9.807	131	32287	9.381	ug/L		97
81) p/m Xylene	9.951	106	141092	19.916	ug/L		97
82) o Xylene	10.483	106	138055	19.556	ug/L		95

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N19.D
Acq On : 26 Jul 2023 3:43 am
Operator : ELAINE:PID
Sample : C8260STD10PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:22:04 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230725NICAL\VE230725N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
83) Styrene	10.547	104	226133	19.674	ug/L		93
85) Bromoform	10.566	173	18234	9.537	ug/L		99
87) Isopropylbenzene	10.858	105	180409	9.524	ug/L		100
89) Bromobenzene	11.284	156	40113	9.488	ug/L		99
90) n-Propylbenzene	11.331	91	227060	9.895	ug/L		97
91) 1,4-Dichlorobutane	11.345	55	64765	9.932	ug/L		95
92) 1,1,2,2-Tetrachloroethane	11.412	83	29033	9.433	ug/L		99
93) 4-Ethyltoluene	11.457	105	190544	10.098	ug/L		98
94) 2-Chlorotoluene	11.496	91	134209M1	10.021	ug/L		
95) 1,3,5-Trimethylbenzene	11.554	105	152290	9.491	ug/L		100
96) 1,2,3-Trichloropropane	11.551	75	26522	9.669	ug/L		99
97) trans-1,4-Dichloro-2-b...	11.601	53	12993	9.706	ug/L	#	76
98) 4-Chlorotoluene	11.676	91	135015	9.736	ug/L		97
99) tert-Butylbenzene	11.891	119	130384	9.731	ug/L		99
102) 1,2,4-Trimethylbenzene	11.966	105	158367	10.033	ug/L		99
103) sec-Butylbenzene	12.080	105	194626	9.704	ug/L		96
104) p-Isopropyltoluene	12.230	119	161885	9.559	ug/L		98
105) 1,3-Dichlorobenzene	12.291	146	84001	9.796	ug/L		98
106) 1,4-Dichlorobenzene	12.386	146	80227	9.383	ug/L		99
107) p-Diethylbenzene	12.600	119	94564	9.438	ug/L		97
108) n-Butylbenzene	12.659	91	148149	10.163	ug/L		98
109) 1,2-Dichlorobenzene	12.806	146	78774	9.804	ug/L		99
110) 1,2,4,5-Tetramethylben...	13.388	119	142006	9.348	ug/L		97
111) 1,2-Dibromo-3-chloropr...	13.579	155	4688	9.944	ug/L		92
112) 1,3,5-Trichlorobenzene	13.610	180	50537	9.284	ug/L		99
113) Hexachlorobutadiene	14.183	225	15254	9.511	ug/L		98
114) 1,2,4-Trichlorobenzene	14.206	180	44730	9.520	ug/L		99
115) Naphthalene	14.500	128	111594	9.622	ug/L		100
116) 1,2,3-Trichlorobenzene	14.667	180	40665	9.496	ug/L		99

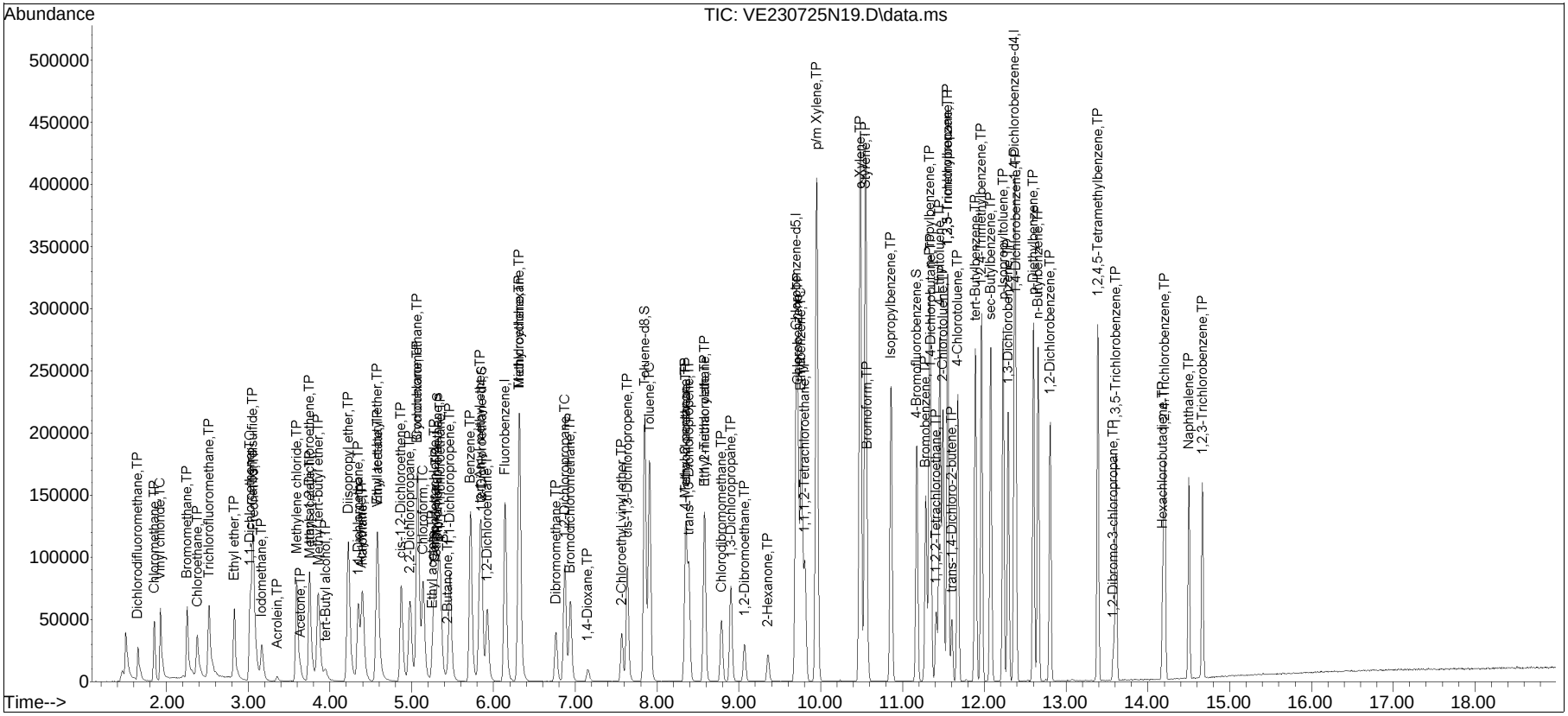
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230725NICAL\
Data File : VE230725N19.D
Acq On : 26 Jul 2023 3:43 am
Operator : ELAINE:PID
Sample : C8260STD10PPB
Misc : WG1807846,ICAL
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Jul 26 08:22:04 2023
Quant Method : K:\Elaine\2023\230725NICAL\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox\VE230725N10.D•

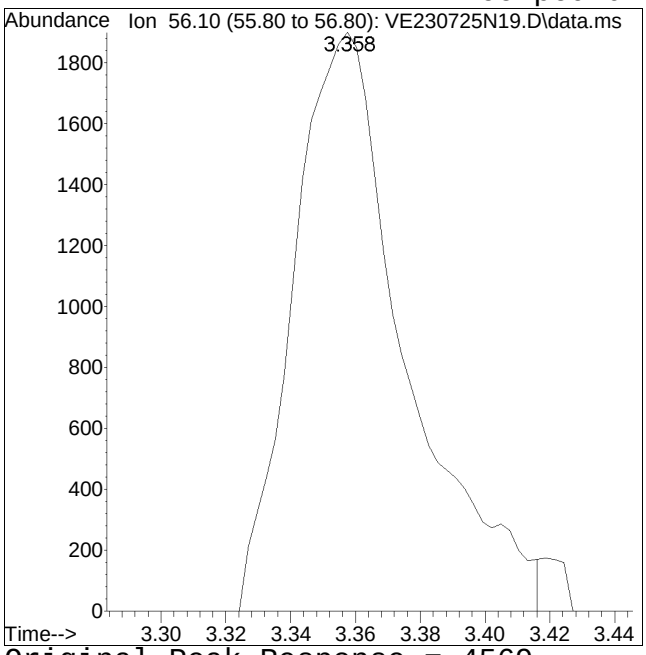


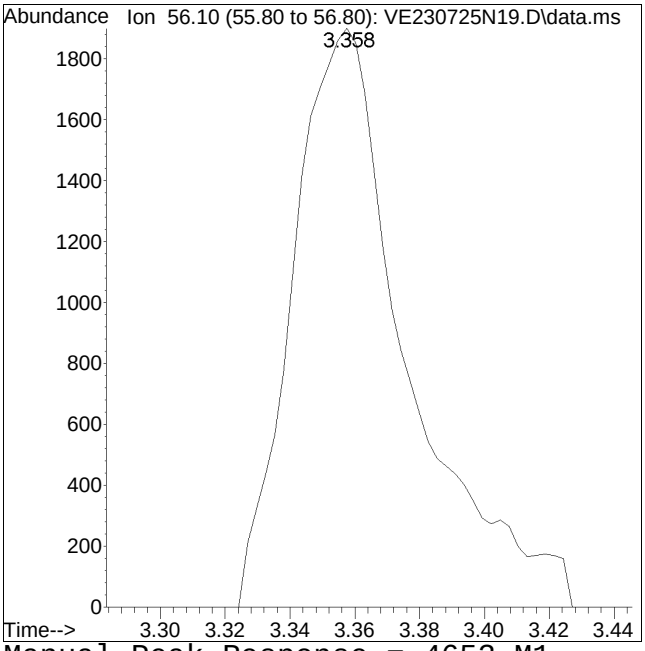
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQ
Data File : VE230725N19.D
Date Inj'd : 7/26/2023 3:43 am
Sample : C8260STD10PPB

Method : Elaine_230725N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 7/26/2023 8:20 am

Compound #14: Acrolein





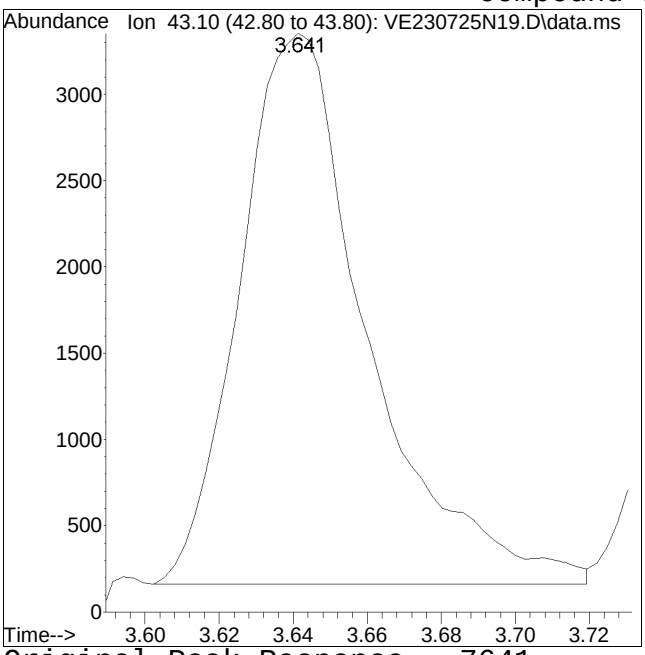
Original Peak Response = 4569 Manual Peak Response = 4653 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

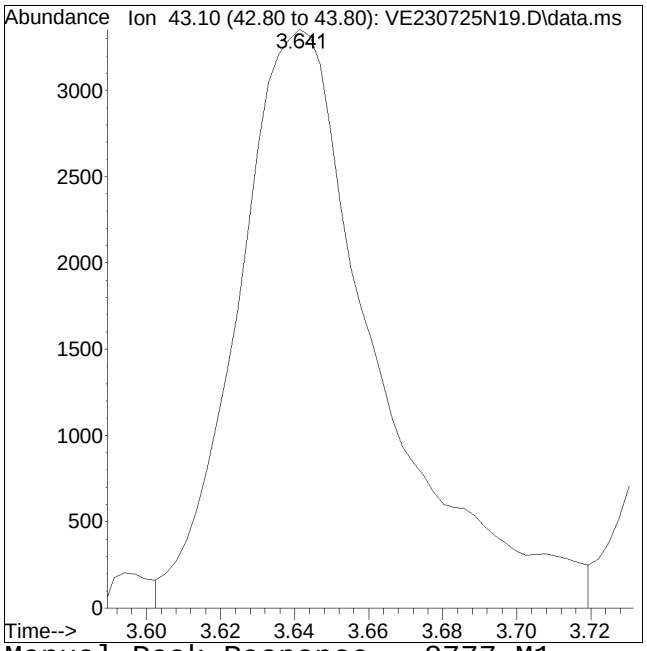
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N19.D Operator : ELAINE:PID
Date Inj'd : 7/26/2023 3:43 am Instrument : Elaine
Sample : C8260STD10PPB Quant Date : 7/26/2023 8:20 am

Compound #17: Acetone



Original Peak Response = 7641



Manual Peak Response = 8777 M1

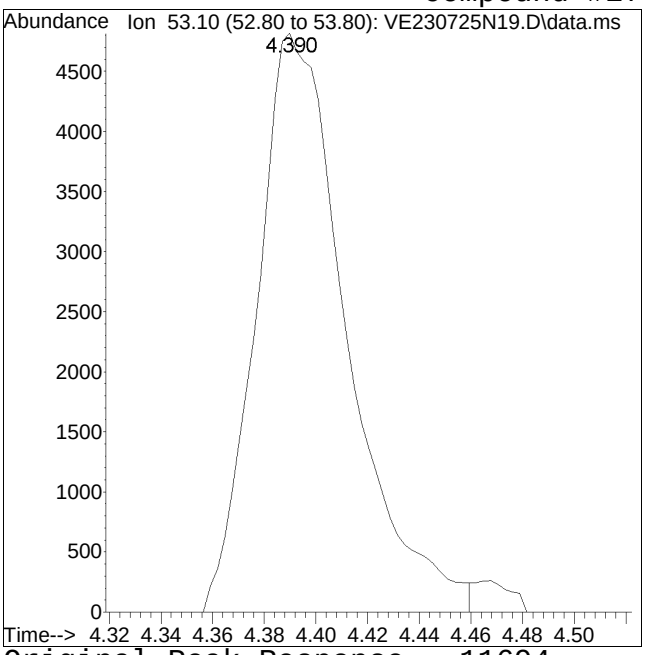
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

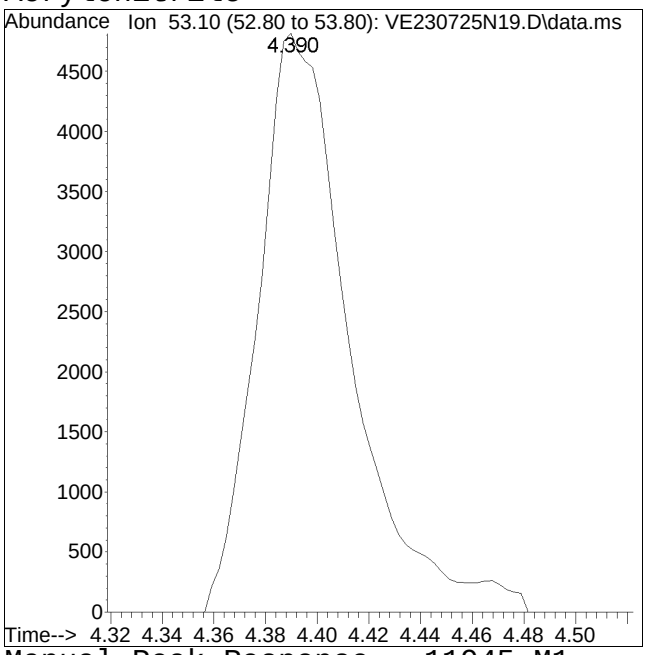
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQ
Data File : VE230725N19.D
Date Inj'd : 7/26/2023 3:43 am
Sample : C8260STD10PPB

Method : Elaine_230725N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 7/26/2023 8:20 am

Compound #27: Acrylonitrile





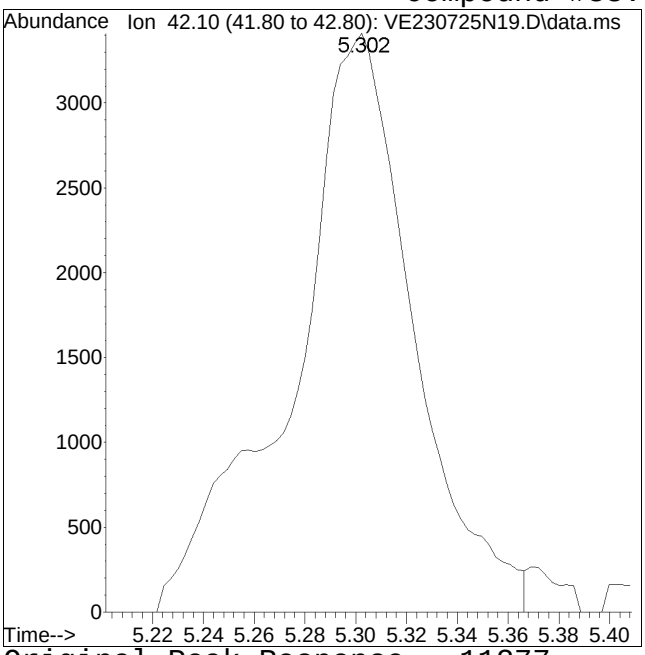
Original Peak Response = 11694 Manual Peak Response = 11945 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

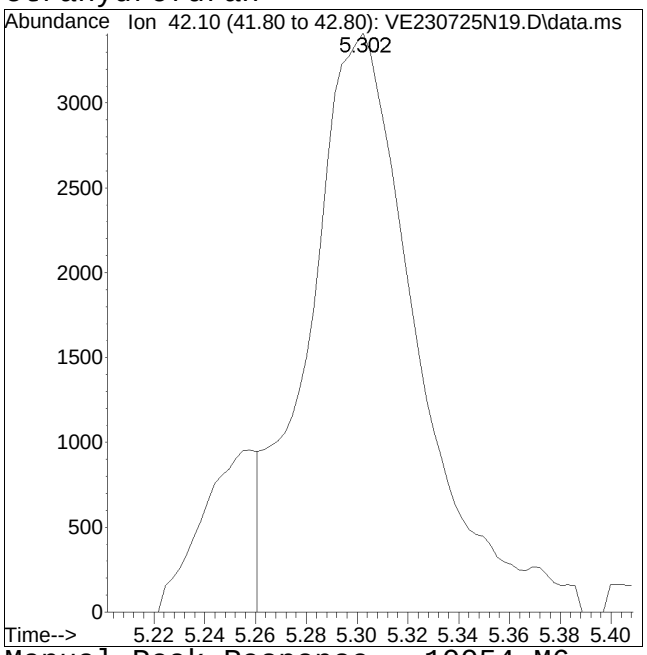
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N19.D Operator : ELAINE:PID
Date Inj'd : 7/26/2023 3:43 am Instrument : Elaine
Sample : C8260STD10PPB Quant Date : 7/26/2023 8:20 am

Compound #38: Tetrahydrofuran



Original Peak Response = 11277



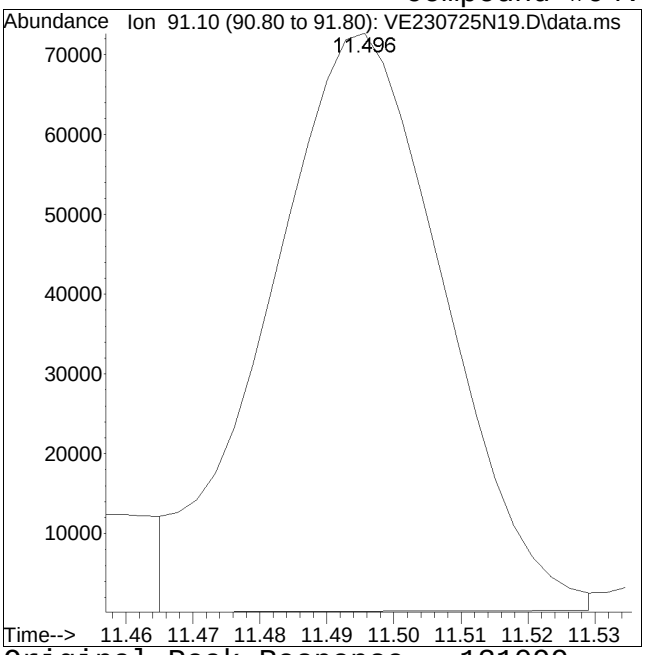
Manual Peak Response = 10054 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

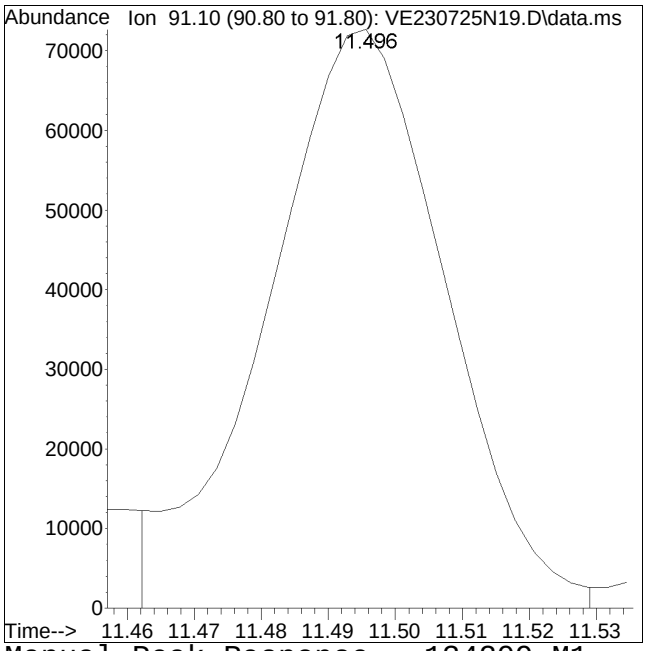
Manual Integration Report

Data Path : K:\Elaine\2023\230725NICALQMethod : Elaine_230725N_8260.m
Data File : VE230725N19.D Operator : ELAINE:PID
Date Inj'd : 7/26/2023 3:43 am Instrument : Elaine
Sample : C8260STD10PPB Quant Date : 7/26/2023 8:20 am

Compound #94: 2-Chlorotoluene



Original Peak Response = 131099



Manual Peak Response = 134209 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Evaluate Relative Error Report Elaine

Method Path : K:\Elaine\2023\230725NICAL\
Method File : Elaine_230725N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Jul 26 08:20:35 2023

	COMPOUND	CalFit	Units	TrueMid	MidConc	%RE	TrueLow	LowConc	%RE
17	TP Acetone	L	ug/L	10.0	10.338	3.4	2.00	1.799	-10.1

Calibration Correlation Report

	COMPOUND	CalFit	CoefOfDet	QuadTerm	LinTerm	Constant
17	TP Acetone	Linear	0.999221	0.000000	0.0473574	0.00805092

Response Factor Report VOA105

Method Path : K:\VOA105\2023\230808NICAL\
Method File : V105_230808N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Aug 09 12:54:55 2023
Response Via : Initial Calibration

Calibration Files
L11 =V05230808N04.D L1 =V05230808N06.D L2 =V05230808N08.D L3 =V05230808N10.D L4 =V05230808N11.D
L6 =V05230808N12.D L8 =V05230808N13.D L10 =V05230808N14.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
1)	I	Fluorobenzene	----------	ISTD	----------							
2)	TP	Dichlorodifluo...		0.230	0.321	0.334	0.355	0.352	0.355	0.324		14.90
3)	TP	Chloromethane	0.269	0.297	0.307	0.318	0.327	0.329	0.329	0.311		7.03
4)	TC	Vinyl chloride	0.277	0.249	0.288	0.340	0.351	0.368	0.365	0.368	0.326	14.56
5)	TP	Bromomethane	0.236	0.245	0.231	0.238	0.262	0.274	0.277	0.252		7.49
6)	TP	Chloroethane	0.203	0.224	0.238	0.243	0.248	0.241	0.229	0.232		6.56
7)	TP	Trichlorofluor...	0.327	0.367	0.505	0.523	0.553	0.550	0.544	0.481		19.52
8)	TP	Ethyl ether	0.129	0.127	0.136	0.139	0.145	0.146	0.146	0.138		5.90
10)	TC	1,1-Dichloroet...	0.220	0.250	0.296	0.306	0.318	0.316	0.316	0.289		13.35
11)	TP	Carbon disulfide	0.755	0.817	0.918	0.973	1.009	0.991	0.973	0.920		10.54
12)	TP	Freon-113		0.211	0.325	0.341	0.356	0.347	0.340	0.320		17.01
13)	TP	Iodomethane		0.318	0.416	0.455	0.466	0.460	0.454	0.428		13.26
14)	TP	Acrolein	0.017	0.022	0.021	0.024	0.025	0.025	0.026	0.023		13.05
15)	TP	Methylene chlo...	0.272	0.272	0.258	0.261	0.265	0.266	0.268	0.266		2.02
17)	TP	Acetone		0.051	0.039	0.042	0.041	0.041	0.044	0.043		9.67
18)	TP	trans-1,2-Dich...	0.212	0.245	0.266	0.277	0.284	0.284	0.285	0.265		10.29
19)	TP	Methyl acetate	0.080	0.076	0.098	0.102	0.110	0.110	0.110	0.098		14.87
20)	TP	Methyl tert-bu...	0.495	0.509	0.544	0.567	0.595	0.600	0.605	0.559		7.99
21)	TP	tert-Butyl alc...	0.009	0.009	0.009	0.009	0.010	0.010	0.011	0.010#		8.21
22)	TP	Diisopropyl ether	0.626	0.671	0.692	0.740	0.769	0.783	0.796	0.725		8.81
23)	TP	1,1-Dichloroet...	0.390	0.453	0.460	0.475	0.484	0.484	0.490	0.462		7.44
24)	TP	Halothane	0.151	0.175	0.215	0.226	0.234	0.232	0.234	0.210		15.83
25)	TP	Acrylonitrile		0.054	0.052	0.054	0.057	0.057	0.057	0.055		3.64
26)	TP	Ethyl tert-but...	0.609	0.591	0.623	0.667	0.703	0.713	0.728	0.662		8.29
27)	TP	Vinyl acetate		0.126	0.150	0.183	0.181	0.214	0.212	0.178		19.40
28)	TP	cis-1,2-Dichlo...	0.232	0.286	0.293	0.304	0.310	0.311	0.312	0.293		9.80
29)	TP	2,2-Dichloropr...	0.272	0.308	0.346	0.371	0.383	0.385	0.388	0.350		12.80
30)	TP	Bromochloromet...	0.124	0.137	0.138	0.141	0.139	0.138	0.137	0.136		4.07
31)	TP	Cyclohexane		0.277	0.459	0.479	0.507	0.503	0.507	0.455		19.65
32)	TC	Chloroform	0.416	0.459	0.455	0.467	0.475	0.477	0.481	0.461		4.83
33)	TP	Ethyl acetate		0.129	0.131	0.141	0.152	0.155	0.156	0.144		8.31

Response Factor Report VOA105

Method Path : K:\VOA105\2023\230808NICAL\
Method File : V105_230808N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Aug 09 12:54:55 2023
Response Via : Initial Calibration

Calibration Files
L11 =V05230808N04.D L1 =V05230808N06.D L2 =V05230808N08.D L3 =V05230808N10.D L4 =V05230808N11.D
L6 =V05230808N12.D L8 =V05230808N13.D L10 =V05230808N14.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
34)	TP	Carbon tetrach...		0.245	0.277	0.360	0.394	0.421	0.424	0.430 *Q		0.9996
35)	TP	Tetrahydrofuran			0.045	0.044	0.043	0.043	0.043	0.043	0.043	2.01
36)	S	Dibromofluorom...	0.318	0.322	0.323	0.318	0.315	0.313	0.312	0.314	0.317	1.31
37)	TP	1,1,1-Trichlor...		0.293	0.360	0.420	0.441	0.457	0.458	0.458	0.412	15.32
39)	TP	2-Butanone			0.065	0.055	0.059	0.064	0.065	0.065	0.062	6.72
40)	TP	1,1-Dichloropr...		0.237	0.278	0.341	0.363	0.384	0.383	0.386	0.339	17.45
41)	TP	Benzene	0.797	0.849	0.909	0.961	1.014	1.049	1.060	1.067	0.963	10.65
42)	TP	tert-Amyl meth...		0.503	0.522	0.542	0.574	0.610	0.621	0.636	0.573	9.05
43)	S	1,2-Dichloroet...	0.311	0.308	0.306	0.321	0.301	0.305	0.307	0.305	0.308	1.94
44)	TP	1,2-Dichloroet...		0.329	0.299	0.307	0.313	0.322	0.325	0.329	0.318	3.62
47)	TP	Methyl cyclohe...			0.259	0.447	0.481	0.514	0.513	0.527 *L		0.9997
48)	TP	Trichloroethene	0.275	0.283	0.276	0.304	0.320	0.333	0.335	0.344	0.309	9.11
50)	TP	Dibromomethane		0.127	0.138	0.143	0.148	0.153	0.155	0.158	0.146	7.44
51)	TC	1,2-Dichloropr...		0.216	0.232	0.240	0.251	0.260	0.265		0.244	7.62
53)	TP	2-Chloroethyl ...			0.094	0.110	0.120	0.132	0.134	0.137	0.121	13.74
54)	TP	Bromodichlorom...		0.283	0.306	0.322	0.343	0.362	0.369	0.378	0.337	10.47
57)	TP	1,4-Dioxane		0.001	0.001	0.001	0.001	0.001	0.001	0.001	0.001#	3.16
58)	TP	cis-1,3-Dichlo...		0.289	0.327	0.358	0.389	0.414	0.424	0.435	0.377	14.43
59)	I	Chlorobenzene-d5	----------ISTD----------									
60)	S	Toluene-d8	1.176	1.181	1.184	1.177	1.174	1.158	1.148	1.130	1.166	1.60
61)	TC	Toluene		0.576	0.643	0.668	0.690	0.711	0.713	0.713	0.674	7.47
62)	TP	4-Methyl-2-pen...		0.038	0.046	0.051	0.055	0.058	0.058	0.057	0.052	14.87
63)	TP	Tetrachloroethene		0.230	0.275	0.329	0.350	0.358	0.354	0.351	0.321	15.40
65)	TP	trans-1,3-Dich...		0.265	0.280	0.314	0.350	0.369	0.372	0.371	0.332	13.67
67)	TP	Ethyl methacry...		0.169	0.194	0.209	0.226	0.236	0.235	0.233	0.214	11.77
68)	TP	1,1,2-Trichlor...		0.157	0.160	0.164	0.174	0.178	0.178	0.179	0.170#	5.51
69)	TP	Chlorodibromom...		0.212	0.217	0.241	0.272	0.288	0.291	0.293	0.259	13.58
70)	TP	1,3-Dichloropr...		0.316	0.310	0.324	0.346	0.354	0.352	0.352	0.336	5.57
71)	TP	1,2-Dibromoethane		0.204	0.216	0.220	0.235	0.244	0.245	0.243	0.230	7.11
72)	TP	2-Hexanone		0.097	0.083	0.087	0.093	0.097	0.095	0.094	0.092	5.63
73)	TP	Chlorobenzene		0.695	0.735	0.756	0.789	0.811	0.817	0.821	0.775	6.19

Method Path : K:\VOA105\2023\230808NICAL\
Method File : V105_230808N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Aug 09 12:54:55 2023
Response Via : Initial Calibration

Calibration Files
L11 =V05230808N04.D L1 =V05230808N06.D L2 =V05230808N08.D L3 =V05230808N10.D L4 =V05230808N11.D
L6 =V05230808N12.D L8 =V05230808N13.D L10 =V05230808N14.D

		Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
74)	TC	Ethylbenzene		1.102	1.185	1.283	1.359	1.401	1.401	1.398	1.304	9.17
75)	TP	1,1,1,2-Tetrac...		0.235	0.247	0.266	0.289	0.301	0.304	0.305	0.278	10.35
76)	TP	p/m Xylene		0.407	0.467	0.507	0.532	0.542	0.549	0.568	0.510	11.01
77)	TP	o Xylene		0.398	0.464	0.487	0.509	0.526	0.537	0.557	0.497	10.80
78)	TP	Styrene		0.648	0.731	0.794	0.843	0.888	0.904	0.909	0.817	12.05
79)	I	1,4-Dichlorobenzene-d4	ISTD									
80)	TP	Bromoform		0.195	0.203	0.233	0.274	0.304	0.316	0.321	*Q	0.9990
82)	TP	Isopropylbenzene		1.630	1.833	2.201	2.385	2.481	2.542	2.518	2.227	16.24
83)	S	4-Bromofluorob...	0.787	0.783	0.779	0.790	0.790	0.782	0.780	0.768	0.783	0.91
84)	TP	Bromobenzene		0.483	0.535	0.550	0.591	0.603	0.615		0.563	8.85
85)	TP	n-Propylbenzene		1.905	2.154	2.551	2.753	2.868	2.926	2.873	2.576	15.50
86)	TP	1,4-Dichlorobu...		0.484	0.496	0.503	0.537	0.564	0.574	0.572	0.533	7.19
87)	TP	1,1,2,2-Tetrac...		0.357	0.338	0.338	0.359	0.379	0.388	0.390	0.364	5.99
88)	TP	4-Ethyltoluene		1.644	1.886	2.165	2.330	2.411	2.440		2.146	14.89
89)	TP	2-Chlorotoluene		1.311	1.409	1.493	1.573	1.615	1.667	1.608	1.525	8.37
90)	TP	1,3,5-Trimethy...		1.544	1.706	1.873	2.022	2.068	2.105	2.130	1.921	11.64
91)	TP	1,2,3-Trichlor...		0.304	0.289	0.286	0.300	0.317	0.327	0.333	0.308	5.92
92)	TP	trans-1,4-Dich...		0.068	0.098	0.106	0.118	0.116	0.121	0.121	0.107	17.95
93)	TP	4-Chlorotoluene		1.330	1.476	1.531	1.623	1.661	1.703	1.713	1.577	8.85
94)	TP	tert-Butylbenzene		1.117	1.288	1.558	1.721	1.794	1.832	1.856	1.595	18.18
97)	TP	1,2,4-Trimethy...		1.444	1.689	1.838	1.949	2.017	2.065	2.064	1.867	12.34
98)	TP	sec-Butylbenzene		1.601	1.754	2.301	2.494	2.621	2.661	2.659	2.299	19.35
99)	TP	p-Isopropyltol...		1.413	1.609	2.016	2.193	2.282	2.341	2.337	2.027	18.45
100)	TP	1,3-Dichlorobe...		0.919	1.015	1.054	1.125	1.157	1.174	1.186	1.090	9.01
101)	TP	1,4-Dichlorobe...		1.054	1.060	1.066	1.116	1.138	1.157	1.165	1.108	4.31
102)	TP	p-Diethylbenzene		0.827	0.981	1.187	1.298	1.364	1.395		1.175	19.34
103)	TP	n-Butylbenzene		1.090	1.256	1.635	1.804	1.902	1.924	1.952	*Q	0.9996
104)	TP	1,2-Dichlorobe...		0.895	0.947	0.975	1.035	1.045	1.071	1.075	1.006	6.80
105)	TP	1,2,4,5-Tetram...		1.361	1.497	1.738	1.963	2.107	2.153	2.166	1.855	17.69
106)	TP	1,2-Dibromo-3-...		0.043	0.056	0.057	0.065	0.071	0.072	0.071	0.062	17.36
107)	TP	1,3,5-Trichlor...		0.622	0.689	0.757	0.825	0.842	0.847	0.843	0.775	11.54

Method Path : K:\VOA105\2023\230808NICAL\
Method File : V105_230808N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Aug 09 12:54:55 2023
Response Via : Initial Calibration

Calibration Files
L11 =V05230808N04.D L1 =V05230808N06.D L2 =V05230808N08.D L3 =V05230808N10.D L4 =V05230808N11.D
L6 =V05230808N12.D L8 =V05230808N13.D L10 =V05230808N14.D

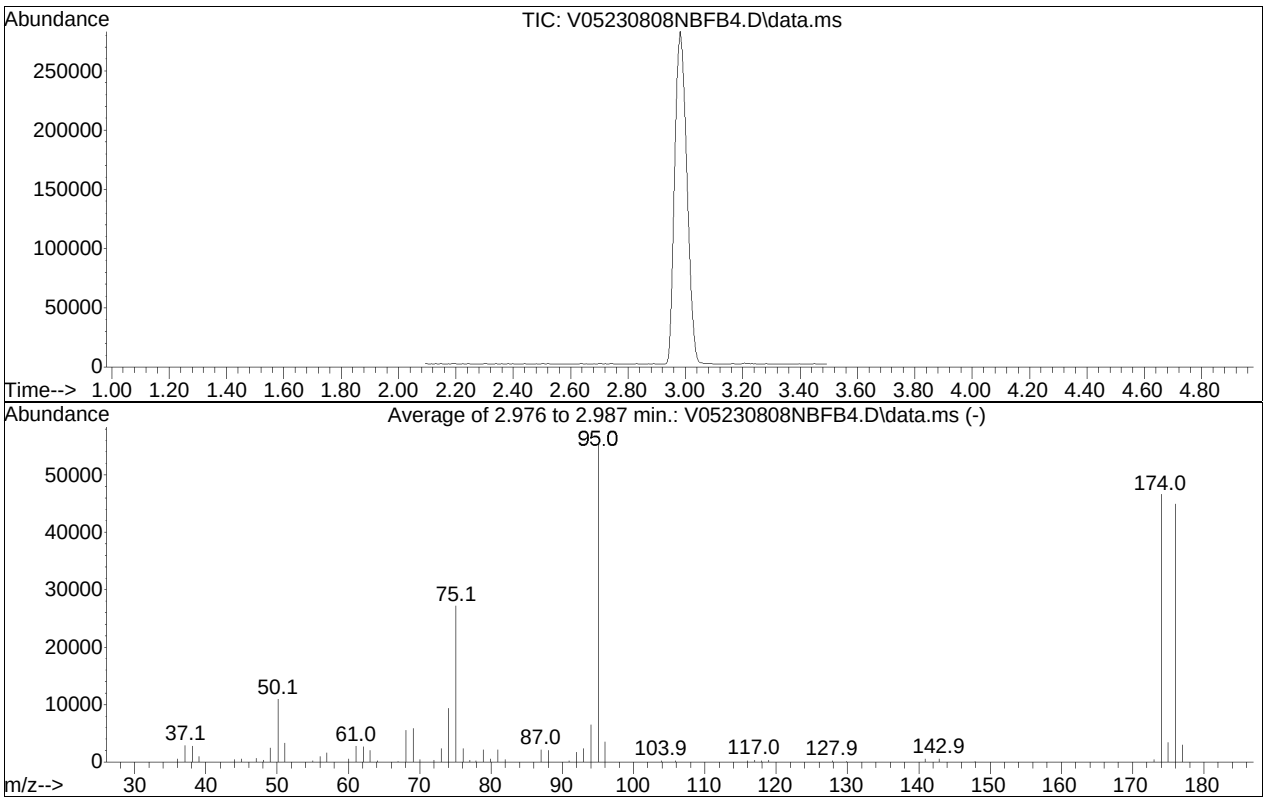
	Compound	L11	L1	L2	L3	L4	L6	L8	L10	Avg	%RSD
108) TP	Hexachlorobuta...	0.187	0.191	0.247	0.291	0.304	0.306	0.307	*Q	0.9993	
109) TP	1,2,4-Trichlor...	0.570	0.611	0.667	0.732	0.753	0.754	0.723	0.687	10.65	
110) TP	Naphthalene	1.351	1.338	1.456	1.564	1.630	1.600	1.538	1.497	7.84	
111) TP	1,2,3-Trichlor...	0.542	0.573	0.608	0.657	0.669	0.668	0.649	0.624	8.10	

(#) = Out of Range

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808NBFB4.D
Acq On : 8 Aug 2023 7:20 pm
Operator : VOA105:KJD
Sample : WG1813882-1
Misc : WG1813882
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Aug 09 12:54:55 2023



AutoFind: Scans 163, 164, 165; Background Corrected with Scan 152

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	19.8	10990	PASS
75	95	30	60	48.9	27187	PASS
95	95	100	100	100.0	55624	PASS
96	95	5	9	6.3	3499	PASS
173	174	0.00	2	1.0	486	PASS
174	95	50	100	83.8	46611	PASS
175	174	5	9	7.3	3420	PASS
176	174	95	101	96.4	44928	PASS
177	176	5	9	6.8	3040	PASS

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N04.D
Acq On : 8 Aug 2023 8:56 pm
Operator : VOA105:PID
Sample : I8260STD0.19PPB
Misc : WG1813882,ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 09 12:44:52 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-L11 - Level 11 for 8260-LRR product

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	345595	10.000	ug/L	0.00
Standard Area 1 = 355895			Recovery = 97.11%			
59) Chlorobenzene-d5	9.255	117	321249	10.000	ug/L	0.00
Standard Area 1 = 341299			Recovery = 94.13%			
79) 1,4-Dichlorobenzene-d4	12.008	152	188004	10.000	ug/L	0.00
Standard Area 1 = 200861			Recovery = 93.60%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.960	113	109982	10.035	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.35%			
43) 1,2-Dichloroethane-d4	5.479	65	107438	10.101	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.01%			
60) Toluene-d8	7.415	98	377860	10.089	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.89%			
83) 4-Bromofluorobenzene	10.773	95	148038	10.061	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.61%			
Target Compounds						Qvalue
4) Vinyl chloride	1.772	62	1822	0.162	ug/L	97
34) Carbon tetrachloride	4.902	117	1770	0.145	ug/L #	88
41) Benzene	5.342	78	5232	0.157	ug/L #	82
48) Trichloroethene	5.938	95	1803	0.169	ug/L	92

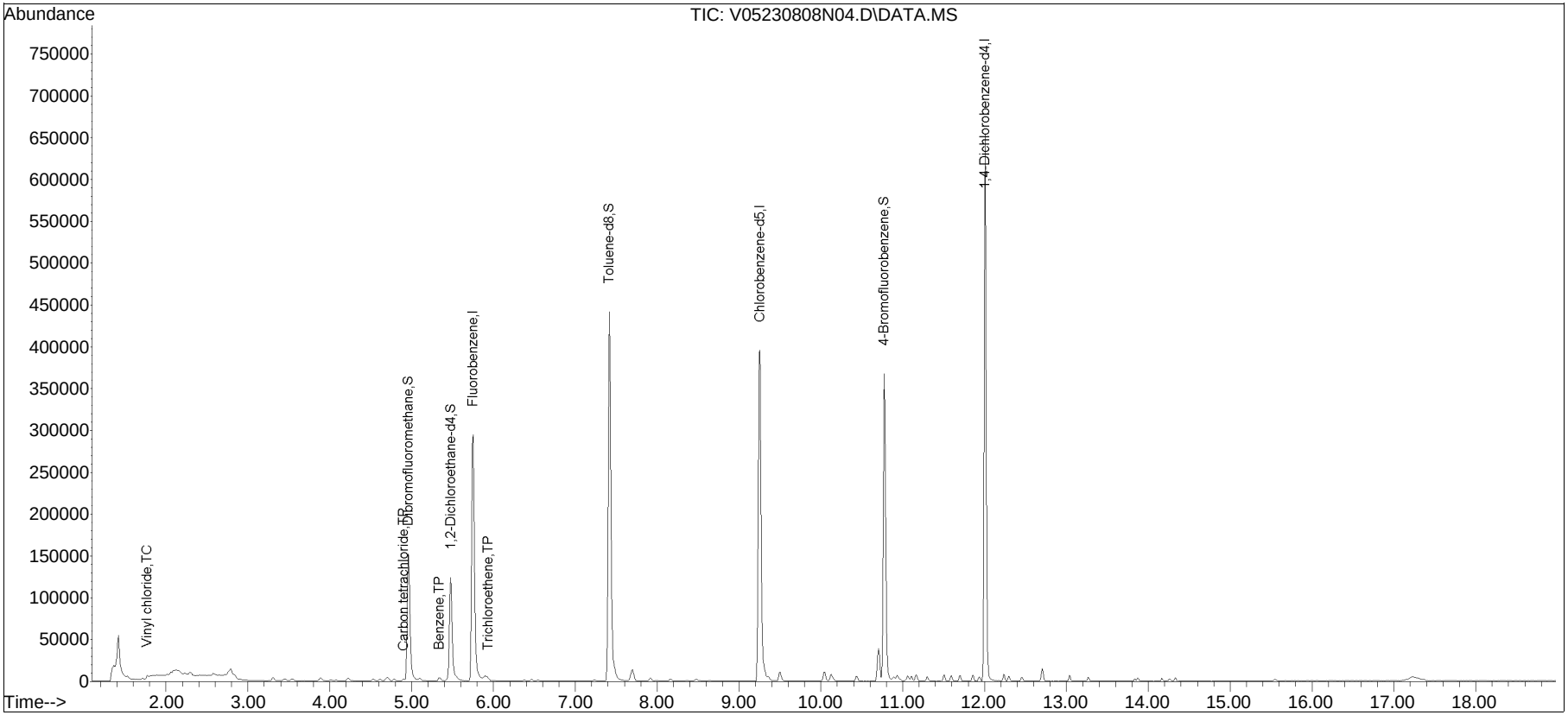
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N04.D
Acq On : 8 Aug 2023 8:56 pm
Operator : VOA105:PID
Sample : I8260STD0.19PPB
Misc : WG1813882,ICAL
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Aug 09 12:44:52 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

Sub List : 8260-L11 - Level 11 for 8260-LRR productN10.D•



Manual Integration Report

Data Path	: K:\VOA105\2023\230808NICALQ	Method	: V105_230808N_8260.m
Data File	: V05230808N04.D	Operator	: VOA105:PID
Date Inj'd	: 8/8/2023 8:56 pm	Instrument	: VOA105
Sample	: I8260STD0.19PPB	Quant Date	: 8/9/2023 12:44 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N06.D
Acq On : 8 Aug 2023 9:47 pm
Operator : VOA105:PID
Sample : I8260STD0.5PPB
Misc : WG1813882,ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 09 12:45:00 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	5.753	96	350242	10.000 ug/L	0.00
Standard Area 1 = 355895			Recovery =	98.41%	
59) Chlorobenzene-d5	9.255	117	326977	10.000 ug/L	0.00
Standard Area 1 = 341299			Recovery =	95.80%	
79) 1,4-Dichlorobenzene-d4	12.008	152	192239	10.000 ug/L	0.00
Standard Area 1 = 200861			Recovery =	95.71%	
System Monitoring Compounds					
36) Dibromofluoromethane	4.960	113	112880	10.163 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.63%	
43) 1,2-Dichloroethane-d4	5.479	65	107773	9.998 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	99.98%	
60) Toluene-d8	7.415	98	386015	10.126 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	101.26%	
83) 4-Bromofluorobenzene	10.773	95	150619	10.011 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.11%	
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.527	85	3455	0.322 ug/L	98
3) Chloromethane	1.713	50	4719	0.434 ug/L	92
4) Vinyl chloride	1.772	62	4359	0.382 ug/L	98
5) Bromomethane	2.056	94	4132	0.469 ug/L	95
6) Chloroethane	2.163	64	3555	0.437 ug/L	90
7) Trichlorofluoromethane	2.300	101	5724	0.340 ug/L	99
8) Ethyl ether	2.574	74	2251	0.465 ug/L #	43
10) 1,1-Dichloroethene	2.760	96	3854	0.381 ug/L	96
11) Carbon disulfide	2.789	76	13230	0.411 ug/L	97
12) Freon-113	2.789	101	3211	0.305 ug/L #	22
13) Iodomethane	2.897	142	4375	0.310 ug/L	85
14) Acrolein	3.112	56	303	0.377 ug/L #	48
15) Methylene chloride	3.307	84	4759	0.511 ug/L	85
17) Acetone	3.376	43	2055M6	1.095 ug/L	
18) trans-1,2-Dichloroethene	3.454	96	3713	0.400 ug/L	94
19) Methyl acetate	3.484	43	1403M6	0.409 ug/L	
20) Methyl tert-butyl ether	3.542	73	8665	0.443 ug/L	89
21) tert-Butyl alcohol	3.660	59	745	2.202 ug/L #	55
22) Diisopropyl ether	3.885	45	10955	0.431 ug/L	85
23) 1,1-Dichloroethane	4.012	63	6837	0.422 ug/L	97
24) Halothane	4.080	117	2649	0.361 ug/L	92

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N06.D
Acq On : 8 Aug 2023 9:47 pm
Operator : VOA105:PID
Sample : I8260STD0.5PPB
Misc : WG1813882,ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 09 12:45:00 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.119	53	467	0.262	ug/L	#	42
26) Ethyl tert-butyl ether	4.227	59	10660	0.460	ug/L	#	74
27) Vinyl acetate	0.000		0	N.D.	d		
28) cis-1,2-Dichloroethene	4.530	96	4057	0.396	ug/L		89
29) 2,2-Dichloropropane	4.608	77	4756	0.388	ug/L		88
30) Bromochloromethane	4.716	128	2174	0.455	ug/L	#	85
31) Cyclohexane	4.696	56	4392	0.294	ug/L		81
32) Chloroform	4.784	83	7281	0.451	ug/L		97
33) Ethyl acetate	0.000		0	N.D.	d		
34) Carbon tetrachloride	4.902	117	4283	0.347	ug/L		96
35) Tetrahydrofuran	0.000		0	N.D.	d		
37) 1,1,1-Trichloroethane	4.970	97	5137	0.356	ug/L		92
39) 2-Butanone	0.000		0	N.D.	d		
40) 1,1-Dichloropropene	5.088	75	4145	0.349	ug/L		90
41) Benzene	5.342	78	14873	0.441	ug/L		97
42) tert-Amyl methyl ether	5.440	73	8810	0.439	ug/L		91
44) 1,2-Dichloroethane	5.547	62	5764	0.518	ug/L		94
47) Methyl cyclohexane	5.899	83	4161	0.279	ug/L		95
48) Trichloroethene	5.929	95	4964	0.459	ug/L		90
50) Dibromomethane	6.369	93	2226	0.435	ug/L		92
51) 1,2-Dichloropropane	6.467	63	3776	0.435	ug/L	#	85
53) 2-Chloroethyl vinyl ether	7.171	63	1293	0.323	ug/L	#	72
54) Bromodichloromethane	6.545	83	4948	0.419	ug/L	#	98
57) 1,4-Dioxane	6.760	88	4230	101.638	ug/L	#	94
58) cis-1,3-Dichloropropene	7.230	75	5054	0.383	ug/L	#	82
61) Toluene	7.474	92	9425	0.428	ug/L		95
62) 4-Methyl-2-pentanone	7.924	58	614	0.363	ug/L	#	43
63) Tetrachloroethene	7.914	166	3754	0.358	ug/L		94
65) trans-1,3-Dichloropropene	7.983	75	4338	0.400	ug/L	#	80
67) Ethyl methacrylate	8.169	69	2771	0.395	ug/L		95
68) 1,1,2-Trichloroethane	8.159	83	2574	0.463	ug/L		95
69) Chlorodibromomethane	8.364	129	3470	0.410	ug/L		91
70) 1,3-Dichloropropane	8.472	76	5161	0.469	ug/L		93
71) 1,2-Dibromoethane	8.638	107	3337	0.444	ug/L		97
72) 2-Hexanone	8.942	43	1579	0.524	ug/L	#	66
73) Chlorobenzene	9.275	112	11356	0.448	ug/L		89
74) Ethylbenzene	9.314	91	18023	0.423	ug/L		96
75) 1,1,1,2-Tetrachloroethane	9.353	131	3845	0.423	ug/L	#	79
76) p/m Xylene	9.500	106	13304	0.797	ug/L		89
77) o Xylene	10.039	106	13012	0.801	ug/L		89

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N06.D
Acq On : 8 Aug 2023 9:47 pm
Operator : VOA105:PID
Sample : I8260STD0.5PPB
Misc : WG1813882,ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 09 12:45:00 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	10.117	104	21202	0.794	ug/L		89
80) Bromoform	10.146	173	1878	0.371	ug/L		96
82) Isopropylbenzene	10.431	105	15671	0.366	ug/L		93
84) Bromobenzene	10.891	156	4640	0.423	ug/L		94
85) n-Propylbenzene	10.930	91	18315	0.370	ug/L		92
86) 1,4-Dichlorobutane	10.960	55	4653	0.454	ug/L		91
87) 1,1,2,2-Tetrachloroethane	11.038	83	3428	0.490	ug/L		97
88) 4-Ethyltoluene	11.058	105	15803	0.376	ug/L		98
89) 2-Chlorotoluene	11.107	91	12601M6	0.430	ug/L		
90) 1,3,5-Trimethylbenzene	11.165	105	14841	0.402	ug/L		94
91) 1,2,3-Trichloropropane	11.175	75	2926	0.494	ug/L		94
92) trans-1,4-Dichloro-2-b...	11.244	53	651	0.317	ug/L	#	38
93) 4-Chlorotoluene	11.293	91	12786	0.422	ug/L		91
94) tert-Butylbenzene	11.508	119	10733	0.350	ug/L		94
97) 1,2,4-Trimethylbenzene	11.586	105	13881	0.387	ug/L		93
98) sec-Butylbenzene	11.694	105	15391	0.348	ug/L		99
99) p-Isopropyltoluene	11.851	119	13581	0.348	ug/L		94
100) 1,3-Dichlorobenzene	11.929	146	8838	0.422	ug/L		98
101) 1,4-Dichlorobenzene	12.018	146	10129M3	0.476	ug/L		
102) p-Diethylbenzene	12.233	119	7945	0.341	ug/L		95
103) n-Butylbenzene	12.292	91	10481	0.330	ug/L		96
104) 1,2-Dichlorobenzene	12.458	146	8602	0.445	ug/L		96
105) 1,2,4,5-Tetramethylben...	13.036	119	13086	0.367	ug/L		96
106) 1,2-Dibromo-3-chloropr...	13.242	155	412	0.344	ug/L		91
107) 1,3,5-Trichlorobenzene	13.262	180	5980	0.401	ug/L		93
108) Hexachlorobutadiene	13.840	225	1794	0.357	ug/L		97
109) 1,2,4-Trichlorobenzene	13.869	180	5479	0.415	ug/L		98
110) Naphthalene	14.163	128	12989	0.451	ug/L		100
111) 1,2,3-Trichlorobenzene	14.329	180	5205	0.434	ug/L		96

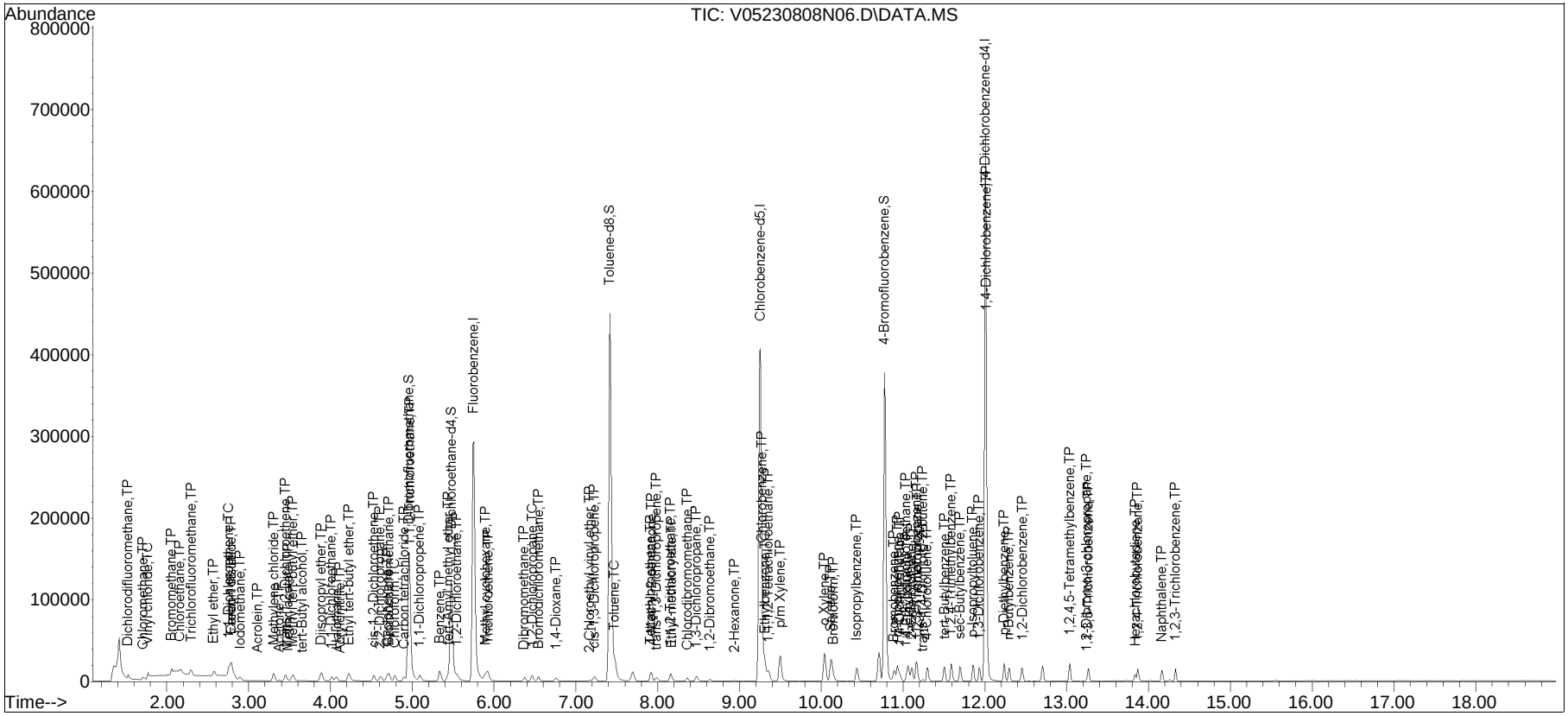
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N06.D
Acq On : 8 Aug 2023 9:47 pm
Operator : VOA105:PID
Sample : I8260STD0.5PPB
Misc : WG1813882,ICAL
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Aug 09 12:45:00 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox\V05230808N10.D•

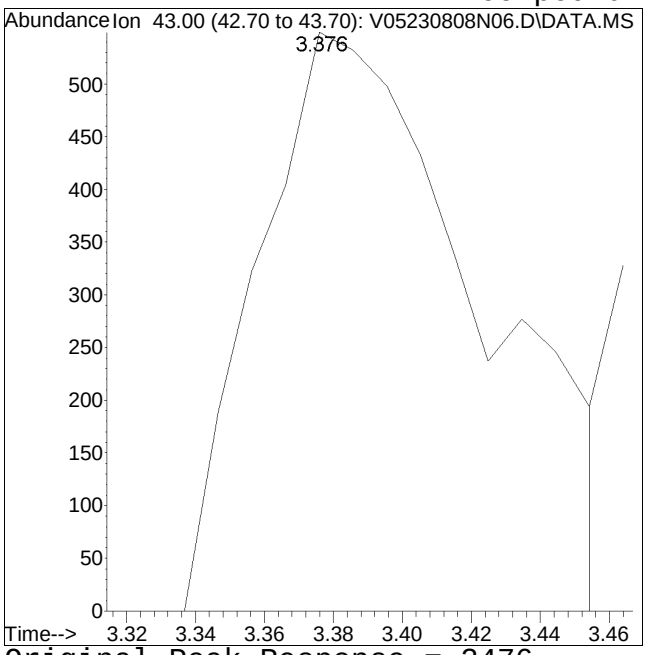


Manual Integration Report

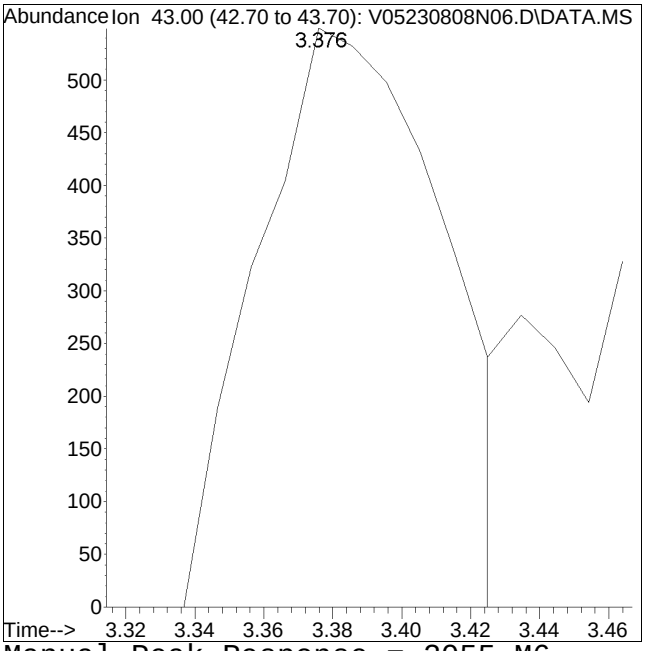
Data Path : K:\VOA105\2023\230808NICALQ
Data File : V05230808N06.D
Date Inj'd : 8/8/2023 9:47 pm
Sample : I8260STD0.5PPB

Method : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 8/9/2023 12:44 pm

Compound #17: Acetone



Original Peak Response = 2476



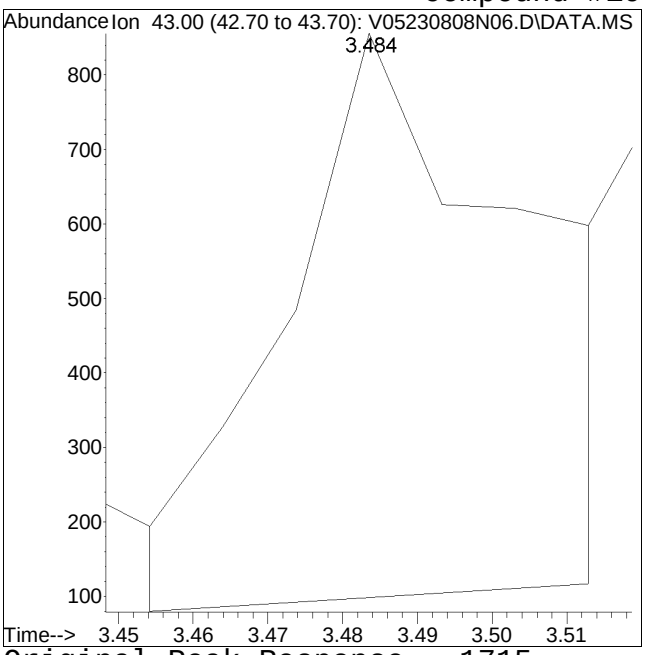
Manual Peak Response = 2055 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

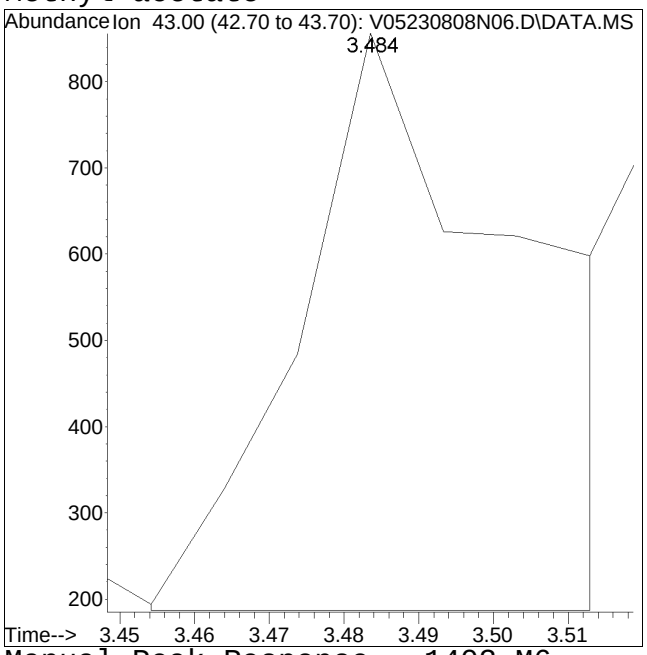
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N06.D Operator : VOA105:PID
Date Inj'd : 8/8/2023 9:47 pm Instrument : VOA105
Sample : I8260STD0.5PPB Quant Date : 8/9/2023 12:44 pm

Compound #19: Methyl acetate



Original Peak Response = 1715



Manual Peak Response = 1403 M6

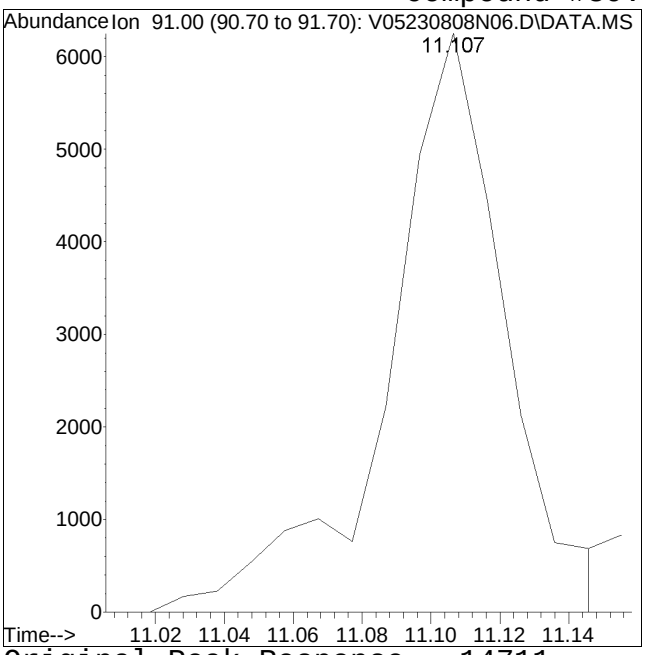
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

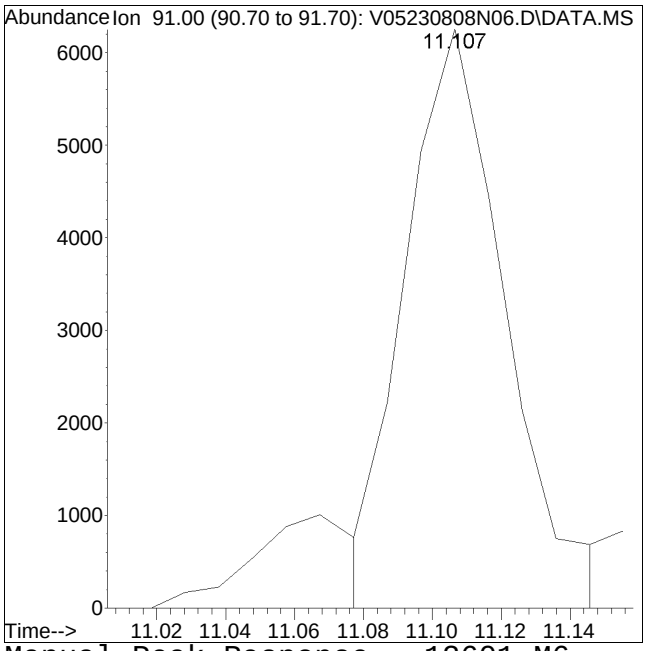
Data Path : K:\VOA105\2023\230808NICALQ
Data File : V05230808N06.D
Date Inj'd : 8/8/2023 9:47 pm
Sample : I8260STD0.5PPB

Method : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 8/9/2023 12:44 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 14711



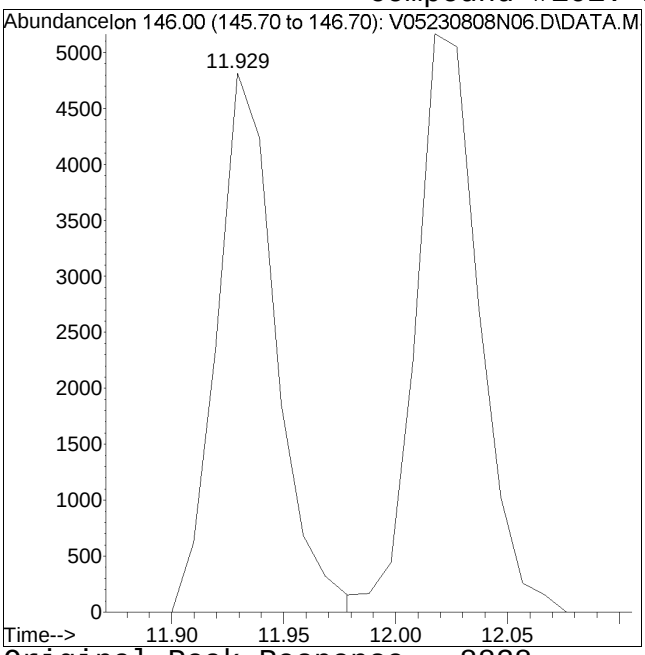
Manual Peak Response = 12601 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

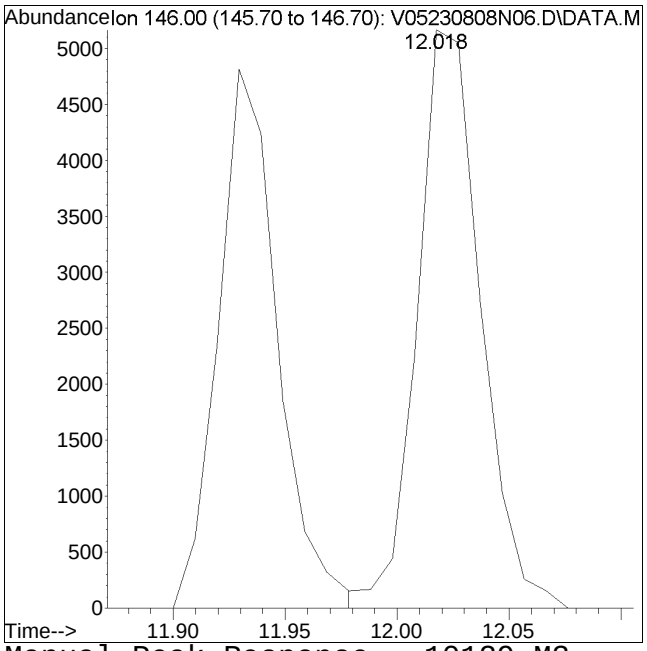
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N06.D Operator : VOA105:PID
Date Inj'd : 8/8/2023 9:47 pm Instrument : VOA105
Sample : I8260STD0.5PPB Quant Date : 8/9/2023 12:44 pm

Compound #101: 1,4-Dichlorobenzene



Original Peak Response = 8838



Manual Peak Response = 10129 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N08.D
Acq On : 8 Aug 2023 10:38 pm
Operator : VOA105:PID
Sample : I8260STD2.0PPB
Misc : WG1813882,ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 09 12:45:08 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	5.753	96	349037	10.000 ug/L	0.00
Standard Area 1 = 355895			Recovery = 98.07%		
59) Chlorobenzene-d5	9.255	117	328315	10.000 ug/L	0.00
Standard Area 1 = 341299			Recovery = 96.20%		
79) 1,4-Dichlorobenzene-d4	12.008	152	194938	10.000 ug/L	0.00
Standard Area 1 = 200861			Recovery = 97.05%		
System Monitoring Compounds					
36) Dibromofluoromethane	4.960	113	112859	10.196 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.96%		
43) 1,2-Dichloroethane-d4	5.479	65	106735	9.936 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.36%		
60) Toluene-d8	7.415	98	388617	10.152 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.52%		
83) 4-Bromofluorobenzene	10.773	95	151939	9.959 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.59%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.527	85	16031	1.500 ug/L	98
3) Chloromethane	1.713	50	20711	1.910 ug/L	98
4) Vinyl chloride	1.772	62	20076	1.765 ug/L	95
5) Bromomethane	2.056	94	17072	1.943 ug/L	100
6) Chloroethane	2.163	64	15636	1.928 ug/L	95
7) Trichlorofluoromethane	2.300	101	25649	1.527 ug/L	98
8) Ethyl ether	2.584	74	8843	1.835 ug/L #	60
10) 1,1-Dichloroethene	2.760	96	17437	1.730 ug/L	98
11) Carbon disulfide	2.789	76	57022	1.777 ug/L	100
12) Freon-113	2.789	101	14722	1.404 ug/L #	33
13) Iodomethane	2.897	142	22192	1.580 ug/L	90
14) Acrolein	3.092	56	1523	1.904 ug/L	91
15) Methylene chloride	3.307	84	19004	2.048 ug/L	89
17) Acetone	3.376	43	3543	1.894 ug/L	90
18) trans-1,2-Dichloroethene	3.454	96	17125	1.853 ug/L	97
19) Methyl acetate	3.474	43	5283M6	1.545 ug/L	
20) Methyl tert-butyl ether	3.542	73	35500	1.819 ug/L	92
21) tert-Butyl alcohol	3.650	59	3138	9.308 ug/L #	74
22) Diisopropyl ether	3.885	45	46852	1.851 ug/L	94
23) 1,1-Dichloroethane	4.021	63	31649	1.961 ug/L	97
24) Halothane	4.070	117	12199	1.668 ug/L	96

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N08.D
Acq On : 8 Aug 2023 10:38 pm
Operator : VOA105:PID
Sample : I8260STD2.0PPB
Misc : WG1813882,ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 09 12:45:08 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.100	53	3763	2.115	ug/L	#	73
26) Ethyl tert-butyl ether	4.227	59	41276	1.786	ug/L	#	74
27) Vinyl acetate	4.266	43	8824M6	1.422	ug/L		
28) cis-1,2-Dichloroethene	4.530	96	19941	1.953	ug/L		94
29) 2,2-Dichloropropane	4.618	77	21532	1.761	ug/L		95
30) Bromochloromethane	4.716	128	9570	2.011	ug/L		93
31) Cyclohexane	4.696	56	19327	1.300	ug/L		88
32) Chloroform	4.784	83	32007	1.987	ug/L		97
33) Ethyl acetate	4.912	43	9002	1.791	ug/L	#	86
34) Carbon tetrachloride	4.902	117	19312	1.570	ug/L		98
35) Tetrahydrofuran	4.941	42	3122	2.070	ug/L	#	74
37) 1,1,1-Trichloroethane	4.970	97	25116	1.745	ug/L		95
39) 2-Butanone	5.097	43	4523M6	2.086	ug/L		
40) 1,1-Dichloropropene	5.088	75	19401	1.640	ug/L		94
41) Benzene	5.332	78	63463	1.888	ug/L		98
42) tert-Amyl methyl ether	5.440	73	36446	1.823	ug/L		90
44) 1,2-Dichloroethane	5.547	62	20906	1.884	ug/L		97
47) Methyl cyclohexane	5.899	83	18050	1.216	ug/L		94
48) Trichloroethene	5.919	95	19285	1.789	ug/L		93
50) Dibromomethane	6.369	93	9649	1.892	ug/L		94
51) 1,2-Dichloropropane	6.467	63	16203	1.873	ug/L	#	88
53) 2-Chloroethyl vinyl ether	7.161	63	6579	1.647	ug/L		96
54) Bromodichloromethane	6.545	83	21333	1.811	ug/L		98
57) 1,4-Dioxane	6.750	88	16670	401.927	ug/L	#	92
58) cis-1,3-Dichloropropene	7.220	75	22841	1.738	ug/L		93
61) Toluene	7.474	92	42254	1.910	ug/L		98
62) 4-Methyl-2-pentanone	7.924	58	3010	1.772	ug/L		88
63) Tetrachloroethene	7.914	166	18059	1.715	ug/L		90
65) trans-1,3-Dichloropropene	7.973	75	18378	1.688	ug/L		86
67) Ethyl methacrylate	8.159	69	12719	1.806	ug/L		98
68) 1,1,2-Trichloroethane	8.149	83	10493	1.879	ug/L		97
69) Chlorodibromomethane	8.364	129	14254	1.675	ug/L		99
70) 1,3-Dichloropropane	8.472	76	20384	1.847	ug/L		97
71) 1,2-Dibromoethane	8.638	107	14162	1.878	ug/L		100
72) 2-Hexanone	8.932	43	5463	1.805	ug/L	#	86
73) Chlorobenzene	9.275	112	48291	1.898	ug/L		93
74) Ethylbenzene	9.304	91	77801	1.817	ug/L		95
75) 1,1,1,2-Tetrachloroethane	9.353	131	16223	1.777	ug/L		92
76) p/m Xylene	9.490	106	61316	3.660	ug/L		85
77) o Xylene	10.039	106	60883	3.732	ug/L		83

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N08.D
Acq On : 8 Aug 2023 10:38 pm
Operator : VOA105:PID
Sample : I8260STD2.0PPB
Misc : WG1813882,ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 09 12:45:08 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	10.117	104	95988	3.579	ug/L		87
80) Bromoform	10.147	173	7900	1.537	ug/L		94
82) Isopropylbenzene	10.431	105	71482	1.646	ug/L		96
84) Bromobenzene	10.891	156	20870	1.876	ug/L		98
85) n-Propylbenzene	10.930	91	83975	1.672	ug/L		96
86) 1,4-Dichlorobutane	10.960	55	19342	1.862	ug/L		90
87) 1,1,2,2-Tetrachloroethane	11.038	83	13180	1.858	ug/L		99
88) 4-Ethyltoluene	11.058	105	73526	1.724	ug/L		96
89) 2-Chlorotoluene	11.107	91	54944M6	1.848	ug/L		
90) 1,3,5-Trimethylbenzene	11.156	105	66506	1.776	ug/L		93
91) 1,2,3-Trichloropropane	11.175	75	11261	1.875	ug/L		99
92) trans-1,4-Dichloro-2-b...	11.234	53	3831	1.840	ug/L	#	86
93) 4-Chlorotoluene	11.293	91	57548M6	1.872	ug/L		
94) tert-Butylbenzene	11.508	119	50214	1.615	ug/L		96
97) 1,2,4-Trimethylbenzene	11.587	105	65869	1.810	ug/L		94
98) sec-Butylbenzene	11.694	105	68378	1.526	ug/L		96
99) p-Isopropyltoluene	11.851	119	62740	1.588	ug/L		95
100) 1,3-Dichlorobenzene	11.929	146	39574	1.863	ug/L		96
101) 1,4-Dichlorobenzene	12.027	146	41320	1.913	ug/L		98
102) p-Diethylbenzene	12.233	119	38255	1.619	ug/L		97
103) n-Butylbenzene	12.292	91	48967	1.521	ug/L		96
104) 1,2-Dichlorobenzene	12.449	146	36938	1.883	ug/L		96
105) 1,2,4,5-Tetramethylben...	13.036	119	58352	1.614	ug/L		95
106) 1,2-Dibromo-3-chloropr...	13.242	155	2186	1.800	ug/L		86
107) 1,3,5-Trichlorobenzene	13.262	180	26845	1.777	ug/L		96
108) Hexachlorobutadiene	13.840	225	7448	1.460	ug/L		96
109) 1,2,4-Trichlorobenzene	13.869	180	23818	1.778	ug/L		97
110) Naphthalene	14.163	128	52182	1.788	ug/L		100
111) 1,2,3-Trichlorobenzene	14.329	180	22349	1.838	ug/L		99

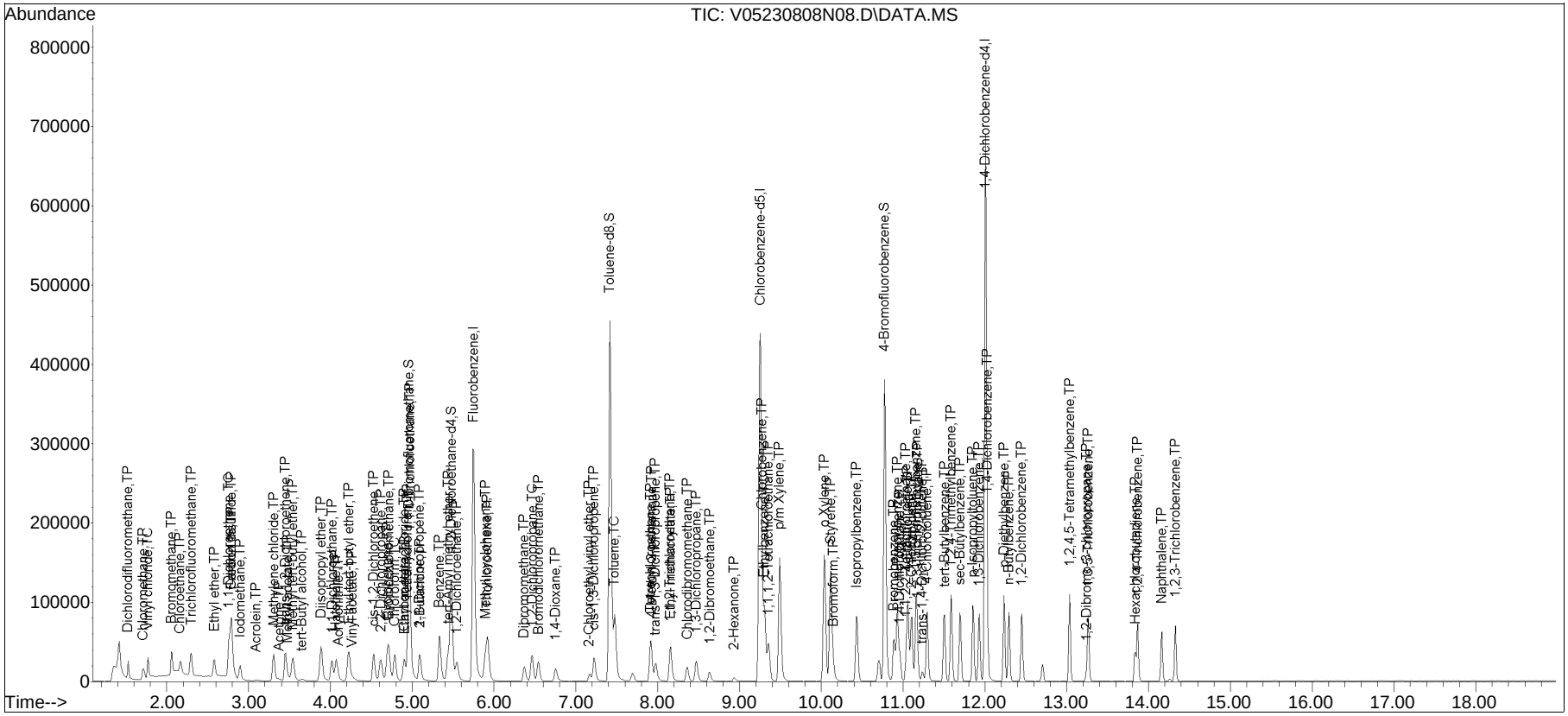
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N08.D
Acq On : 8 Aug 2023 10:38 pm
Operator : VOA105:PID
Sample : I8260STD2.0PPB
Misc : WG1813882,ICAL
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Aug 09 12:45:08 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox\V05230808N10.D•

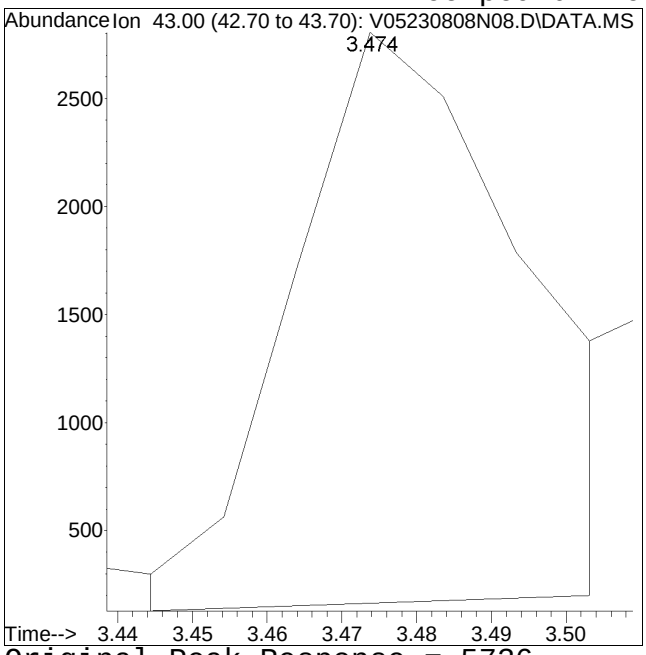


Manual Integration Report

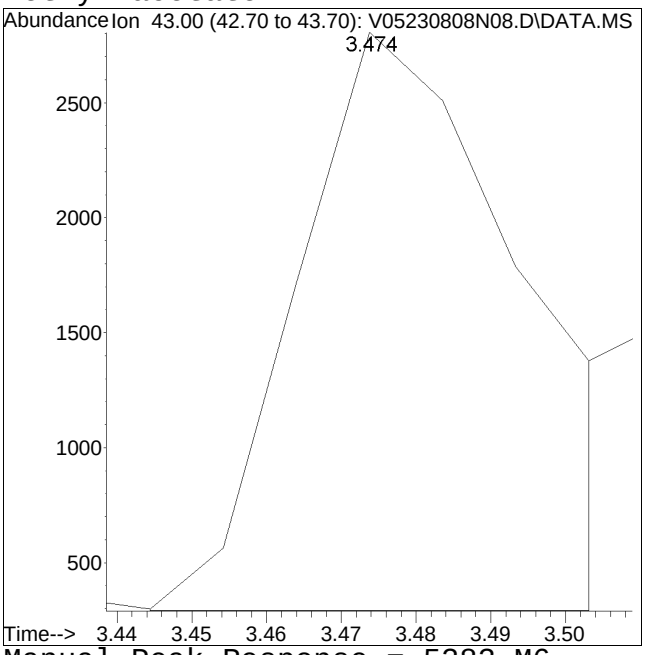
Data Path : K:\VOA105\2023\230808NICALQ
Data File : V05230808N08.D
Date Inj'd : 8/8/2023 10:38 pm
Sample : I8260STD2.0PPB

Method : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 8/9/2023 12:45 pm

Compound #19: Methyl acetate



Original Peak Response = 5736



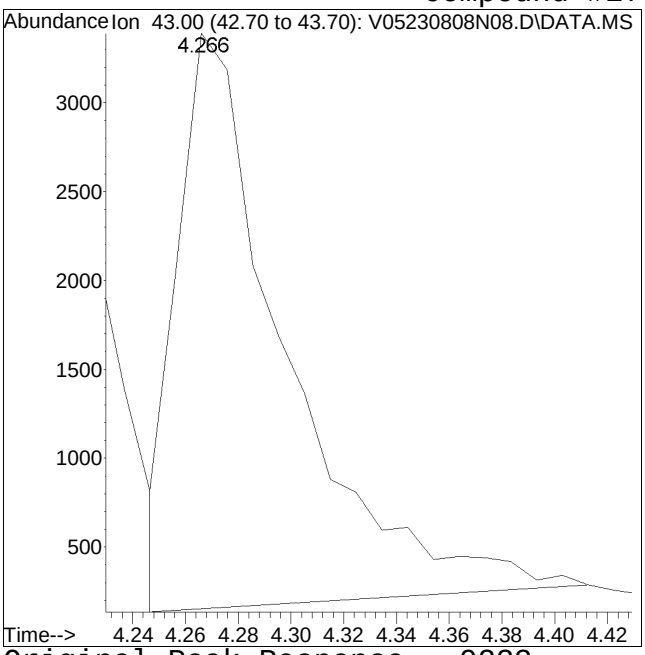
Manual Peak Response = 5283 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

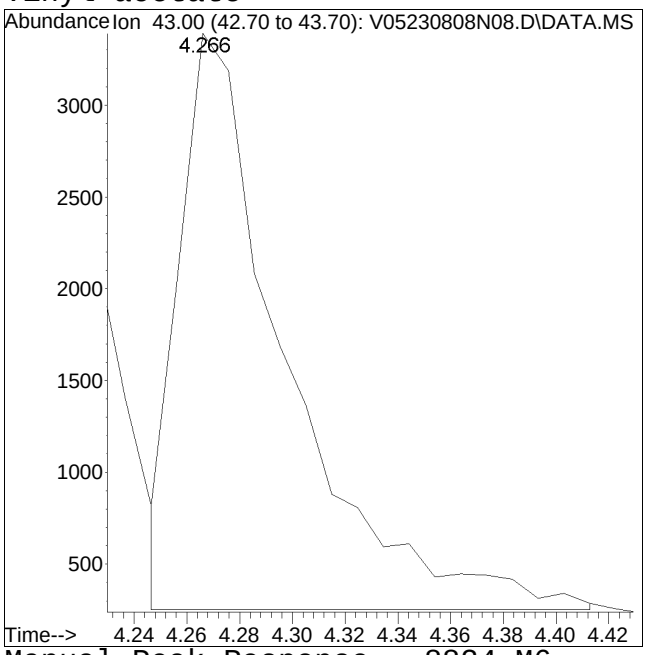
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N08.D Operator : VOA105:PID
Date Inj'd : 8/8/2023 10:38 pm Instrument : VOA105
Sample : I8260STD2.0PPB Quant Date : 8/9/2023 12:45 pm

Compound #27: Vinyl acetate



Original Peak Response = 9233



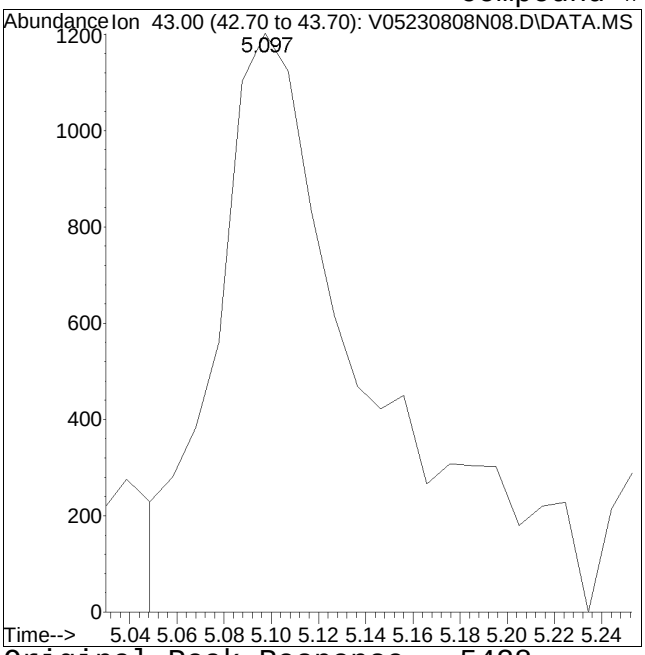
Manual Peak Response = 8824 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

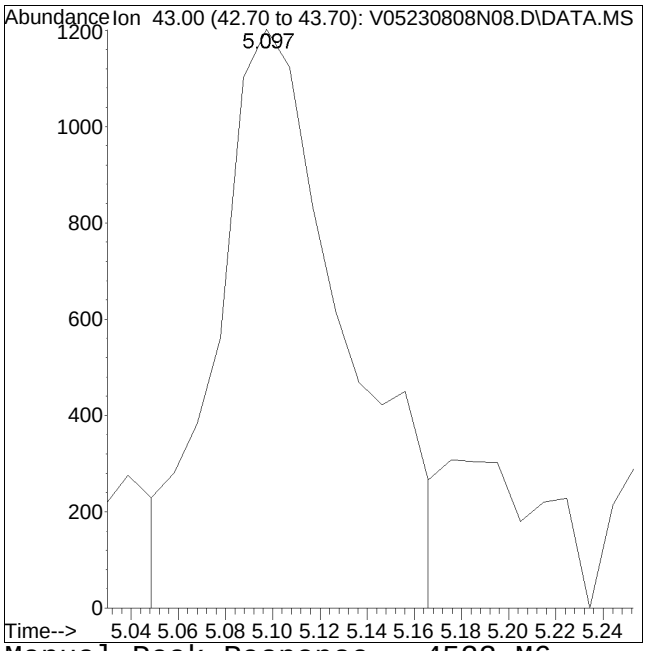
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N08.D Operator : VOA105:PID
Date Inj'd : 8/8/2023 10:38 pm Instrument : VOA105
Sample : I8260STD2.0PPB Quant Date : 8/9/2023 12:45 pm

Compound #39: 2-Butanone



Original Peak Response = 5428



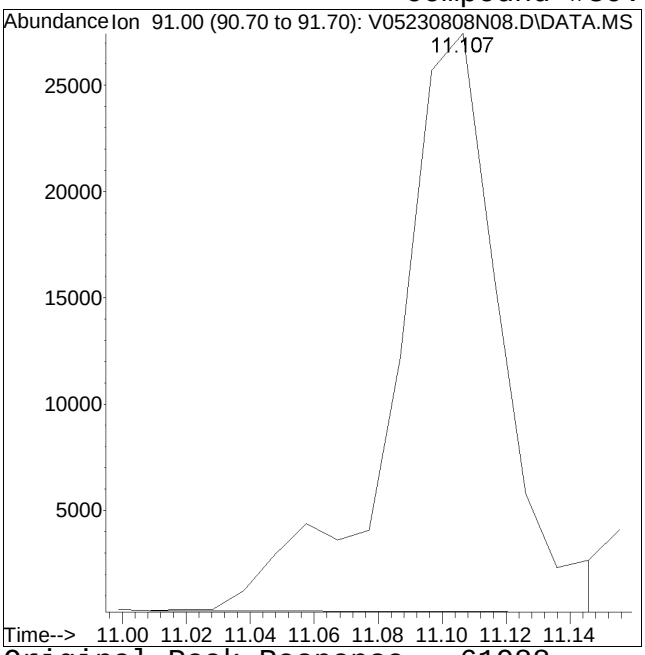
Manual Peak Response = 4523 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

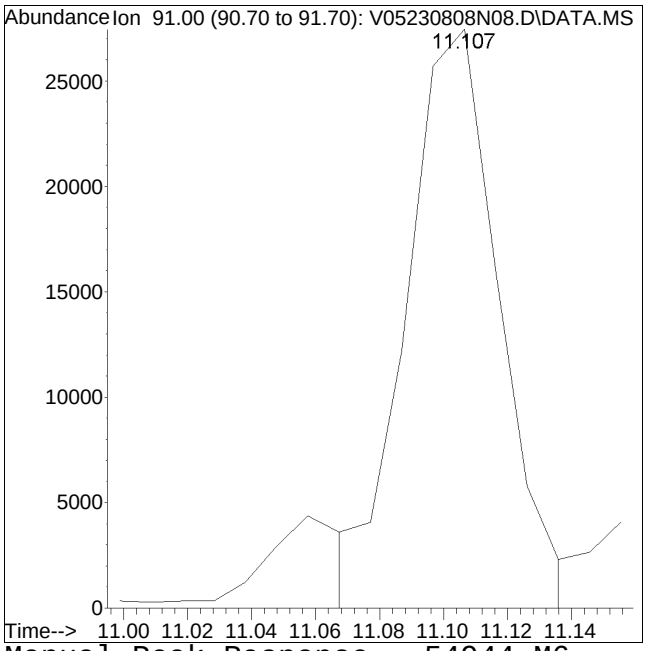
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N08.D Operator : VOA105:PID
Date Inj'd : 8/8/2023 10:38 pm Instrument : VOA105
Sample : I8260STD2.0PPB Quant Date : 8/9/2023 12:45 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 61988



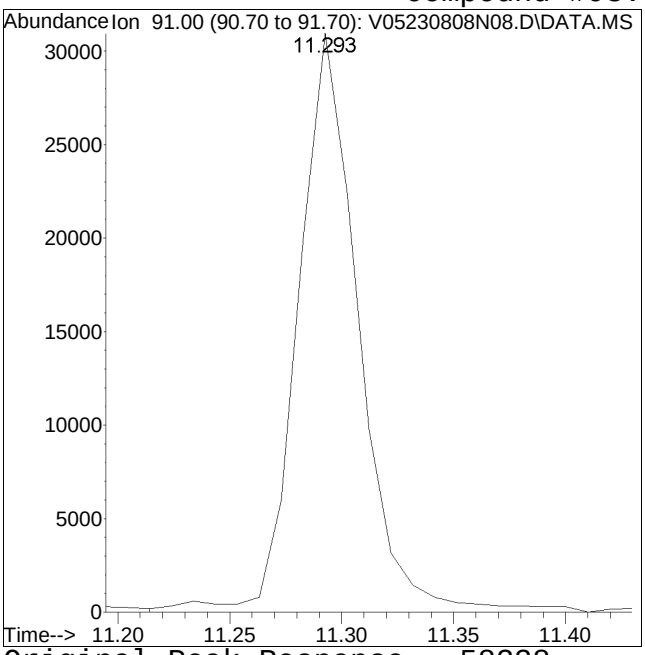
Manual Peak Response = 54944 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

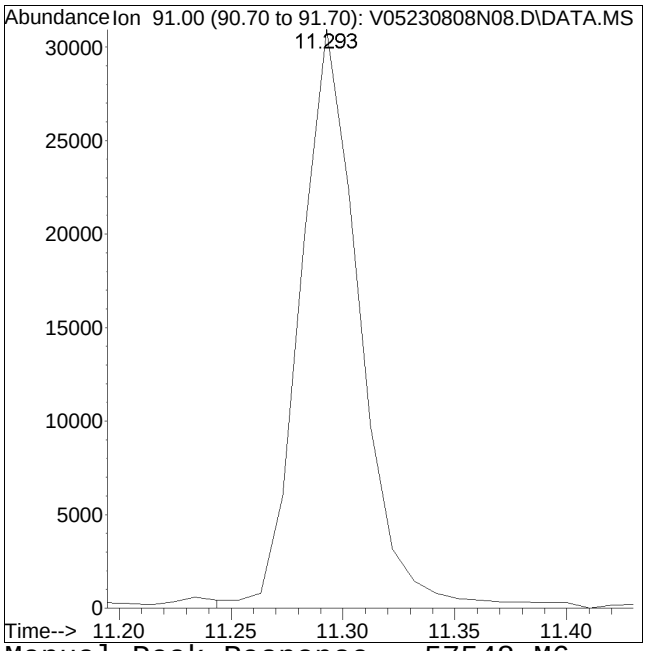
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N08.D Operator : VOA105:PID
Date Inj'd : 8/8/2023 10:38 pm Instrument : VOA105
Sample : I8260STD2.0PPB Quant Date : 8/9/2023 12:45 pm

Compound #93: 4-Chlorotoluene



Original Peak Response = 58338



Manual Peak Response = 57548 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N10.D
Acq On : 8 Aug 2023 11:29 pm
Operator : VOA105:PID
Sample : I8260STD10PPB
Misc : WG1813882,ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 09 12:45:16 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	355895	10.000	ug/L	0.00
Standard Area 1 = 355895			Recovery = 100.00%			
59) Chlorobenzene-d5	9.245	117	341299	10.000	ug/L	0.00
Standard Area 1 = 341299			Recovery = 100.00%			
79) 1,4-Dichlorobenzene-d4	12.008	152	200861	10.000	ug/L	0.00
Standard Area 1 = 200861			Recovery = 100.00%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.961	113	113262	10.036	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.36%			
43) 1,2-Dichloroethane-d4	5.479	65	114090	10.416	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.16%			
60) Toluene-d8	7.416	98	401546	10.091	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.91%			
83) 4-Bromofluorobenzene	10.774	95	158765	10.099	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.99%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.528	85	114250	10.486	ug/L	98
3) Chloromethane	1.713	50	109257	9.880	ug/L	99
4) Vinyl chloride	1.772	62	120949	10.428	ug/L	96
5) Bromomethane	2.056	94	82360	9.191	ug/L	99
6) Chloroethane	2.173	64	84808	10.257	ug/L	96
7) Trichlorofluoromethane	2.300	101	179734	10.491	ug/L	100
8) Ethyl ether	2.584	74	48273	9.822	ug/L #	73
10) 1,1-Dichloroethene	2.760	96	105314	10.245	ug/L	99
11) Carbon disulfide	2.789	76	326712	9.983	ug/L	99
12) Freon-113	2.789	101	115534	10.804	ug/L	79
13) Iodomethane	2.897	142	147949	10.327	ug/L	89
14) Acrolein	3.092	56	7635	9.360	ug/L	94
15) Methylene chloride	3.308	84	91790	9.699	ug/L	87
17) Acetone	3.366	43	13749	7.208	ug/L #	86
18) trans-1,2-Dichloroethene	3.445	96	94789	10.058	ug/L	96
19) Methyl acetate	3.464	43	34782	9.975	ug/L #	86
20) Methyl tert-butyl ether	3.542	73	193572	9.730	ug/L	97
21) tert-Butyl alcohol	3.650	59	16779	48.809	ug/L	82
22) Diisopropyl ether	3.885	45	246102	9.534	ug/L	95
23) 1,1-Dichloroethane	4.012	63	163544	9.940	ug/L	99
24) Halothane	4.071	117	76520	10.259	ug/L	99

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N10.D
Acq On : 8 Aug 2023 11:29 pm
Operator : VOA105:PID
Sample : I8260STD10PPB
Misc : WG1813882,ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 09 12:45:16 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.080	53	18504	10.199	ug/L	#	85
26) Ethyl tert-butyl ether	4.227	59	221659	9.408	ug/L	#	85
27) Vinyl acetate	4.256	43	53463M6	8.447	ug/L		
28) cis-1,2-Dichloroethene	4.530	96	104262	10.014	ug/L		93
29) 2,2-Dichloropropane	4.618	77	123067	9.870	ug/L		98
30) Bromochloromethane	4.716	128	49143	10.129	ug/L		96
31) Cyclohexane	4.696	56	163294	10.770	ug/L		84
32) Chloroform	4.785	83	162020	9.866	ug/L		97
33) Ethyl acetate	4.902	43	46690	9.110	ug/L		98
34) Carbon tetrachloride	4.902	117	128118	10.214	ug/L		99
35) Tetrahydrofuran	4.941	42	15574M6	10.127	ug/L		
37) 1,1,1-Trichloroethane	4.970	97	149568	10.190	ug/L		98
39) 2-Butanone	5.088	43	19574	8.854	ug/L	#	80
40) 1,1-Dichloropropene	5.088	75	121472	10.070	ug/L		93
41) Benzene	5.332	78	342019	9.976	ug/L		97
42) tert-Amyl methyl ether	5.440	73	192999	9.469	ug/L		91
44) 1,2-Dichloroethane	5.547	62	109421	9.670	ug/L		98
47) Methyl cyclohexane	5.900	83	159201	10.516	ug/L		92
48) Trichloroethene	5.919	95	108162	9.842	ug/L		91
50) Dibromomethane	6.369	93	50968	9.802	ug/L		93
51) 1,2-Dichloropropane	6.457	63	85510	9.696	ug/L	#	89
53) 2-Chloroethyl vinyl ether	7.161	63	39081	9.594	ug/L		100
54) Bromodichloromethane	6.535	83	114696	9.550	ug/L		99
57) 1,4-Dioxane	6.750	88	21788	515.203	ug/L	#	96
58) cis-1,3-Dichloropropene	7.220	75	127478	9.512	ug/L		95
61) Toluene	7.474	92	228146	9.922	ug/L		100
62) 4-Methyl-2-pentanone	7.914	58	17327	9.814	ug/L		92
63) Tetrachloroethene	7.914	166	112333	10.260	ug/L		91
65) trans-1,3-Dichloropropene	7.973	75	107093	9.461	ug/L		92
67) Ethyl methacrylate	8.149	69	71246	9.733	ug/L		100
68) 1,1,2-Trichloroethane	8.149	83	56007	9.650	ug/L		98
69) Chlorodibromomethane	8.354	129	82279	9.303	ug/L		99
70) 1,3-Dichloropropane	8.472	76	110731	9.650	ug/L		99
71) 1,2-Dibromoethane	8.628	107	75183	9.590	ug/L		99
72) 2-Hexanone	8.922	43	29662	9.429	ug/L		98
73) Chlorobenzene	9.265	112	257871	9.750	ug/L		89
74) Ethylbenzene	9.304	91	437863	9.838	ug/L		93
75) 1,1,1,2-Tetrachloroethane	9.353	131	90666	9.553	ug/L		97
76) p/m Xylene	9.490	106	345973	19.864	ug/L		84
77) o Xylene	10.039	106	332556	19.607	ug/L		84

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N10.D
Acq On : 8 Aug 2023 11:29 pm
Operator : VOA105:PID
Sample : I8260STD10PPB
Misc : WG1813882,ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 09 12:45:16 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	10.107	104	542225	19.449	ug/L		86
80) Bromoform	10.147	173	46705	8.820	ug/L		95
82) Isopropylbenzene	10.431	105	442192	9.884	ug/L		95
84) Bromobenzene	10.881	156	110478	9.639	ug/L		99
85) n-Propylbenzene	10.930	91	512405	9.903	ug/L		95
86) 1,4-Dichlorobutane	10.960	55	101081	9.443	ug/L		92
87) 1,1,2,2-Tetrachloroethane	11.038	83	67899	9.287	ug/L		98
88) 4-Ethyltoluene	11.058	105	434866	9.896	ug/L		96
89) 2-Chlorotoluene	11.097	91	299902M6	9.789	ug/L		
90) 1,3,5-Trimethylbenzene	11.156	105	376239	9.751	ug/L		93
91) 1,2,3-Trichloropropane	11.175	75	57432M1	9.282	ug/L		
92) trans-1,4-Dichloro-2-b...	11.234	53	21287	9.925	ug/L	#	76
93) 4-Chlorotoluene	11.293	91	307472M6	9.709	ug/L		
94) tert-Butylbenzene	11.498	119	312978	9.768	ug/L		96
97) 1,2,4-Trimethylbenzene	11.587	105	369227	9.848	ug/L		95
98) sec-Butylbenzene	11.694	105	462215	10.010	ug/L		96
99) p-Isopropyltoluene	11.851	119	404883	9.943	ug/L		94
100) 1,3-Dichlorobenzene	11.930	146	211632	9.667	ug/L		97
101) 1,4-Dichlorobenzene	12.018	146	214096	9.621	ug/L		97
102) p-Diethylbenzene	12.233	119	238323	9.791	ug/L		97
103) n-Butylbenzene	12.292	91	328395	9.897	ug/L		97
104) 1,2-Dichlorobenzene	12.449	146	195769	9.687	ug/L		96
105) 1,2,4,5-Tetramethylben...	13.036	119	348998	9.367	ug/L		93
106) 1,2-Dibromo-3-chloropr...	13.242	155	11541	9.224	ug/L		95
107) 1,3,5-Trichlorobenzene	13.262	180	152032	9.767	ug/L		98
108) Hexachlorobutadiene	13.840	225	49641	9.444	ug/L		97
109) 1,2,4-Trichlorobenzene	13.869	180	133910	9.701	ug/L		99
110) Naphthalene	14.163	128	292524	9.729	ug/L		100
111) 1,2,3-Trichlorobenzene	14.330	180	122139	9.749	ug/L		99

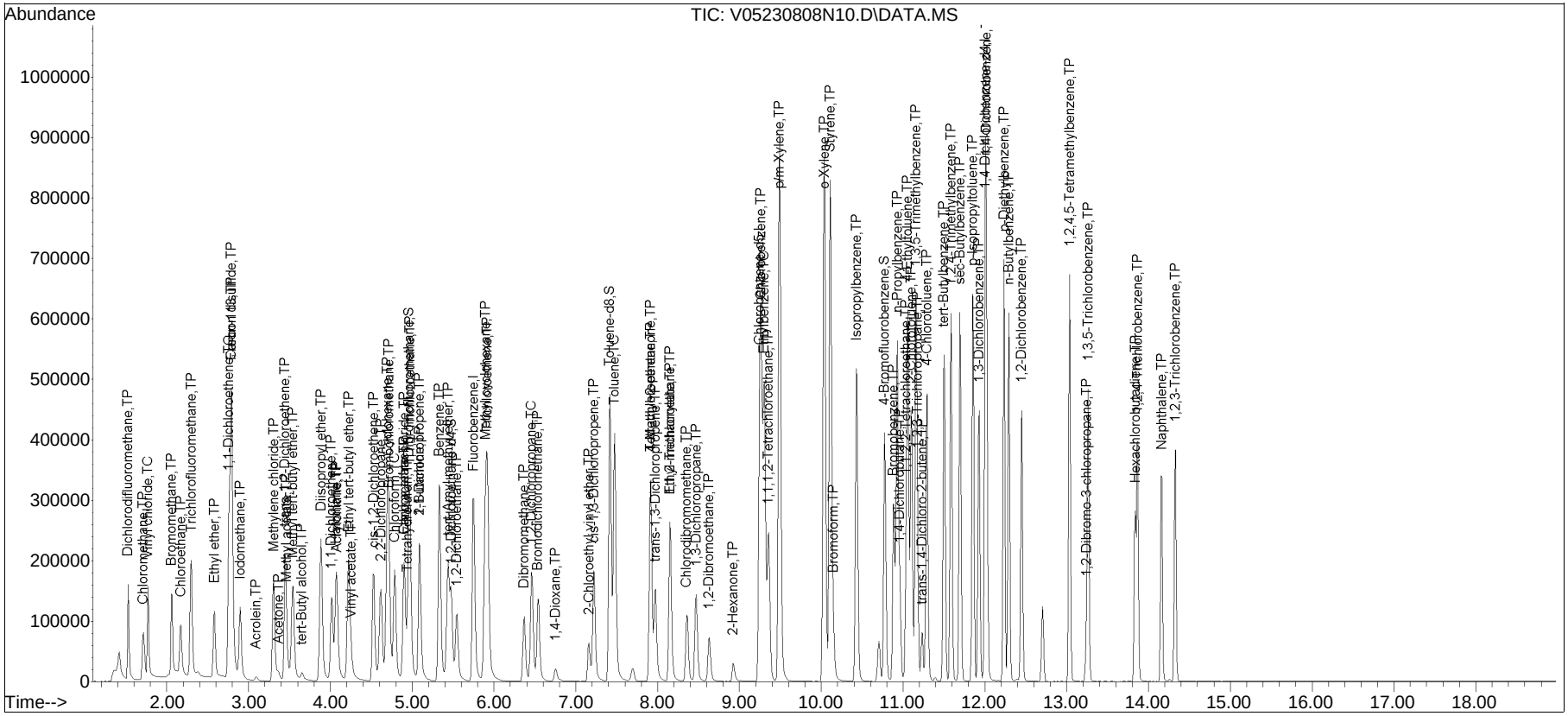
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N10.D
Acq On : 8 Aug 2023 11:29 pm
Operator : VOA105:PID
Sample : I8260STD10PPB
Misc : WG1813882,ICAL
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Aug 09 12:45:16 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

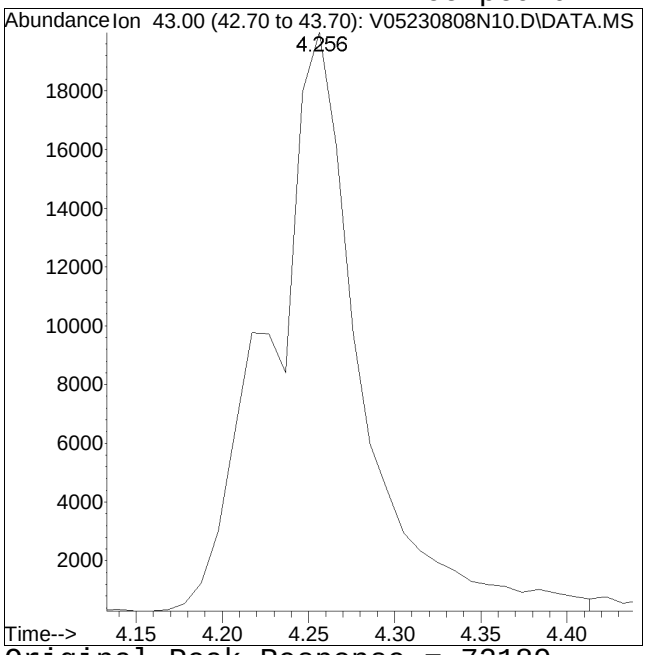
Sub List : 8260-Curve - Megamix plus Diox\V05230808N10.D•



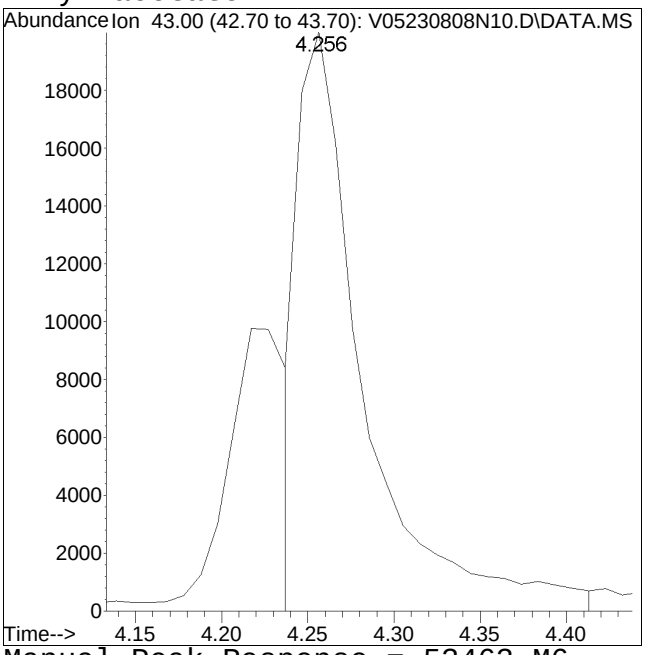
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N10.D Operator : VOA105:PID
Date Inj'd : 8/8/2023 11:29 pm Instrument : VOA105
Sample : I8260STD10PPB Quant Date : 8/9/2023 12:45 pm

Compound #27: Vinyl acetate



Original Peak Response = 72189



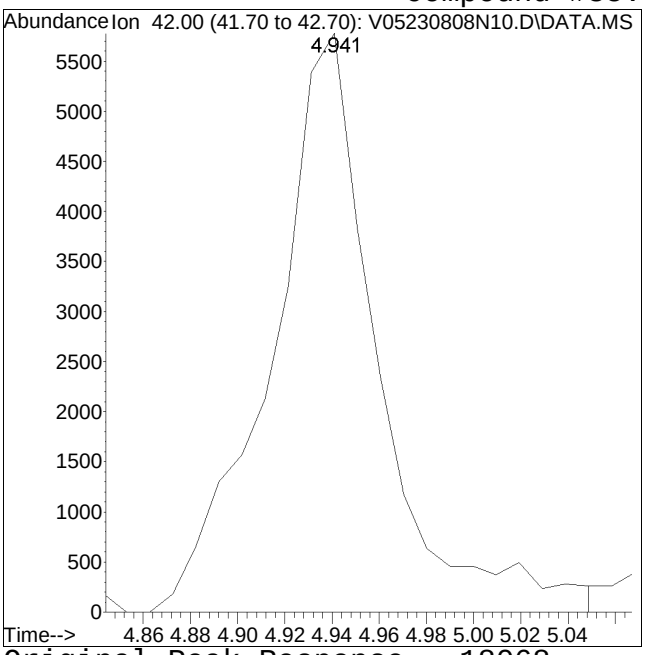
Manual Peak Response = 53463 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

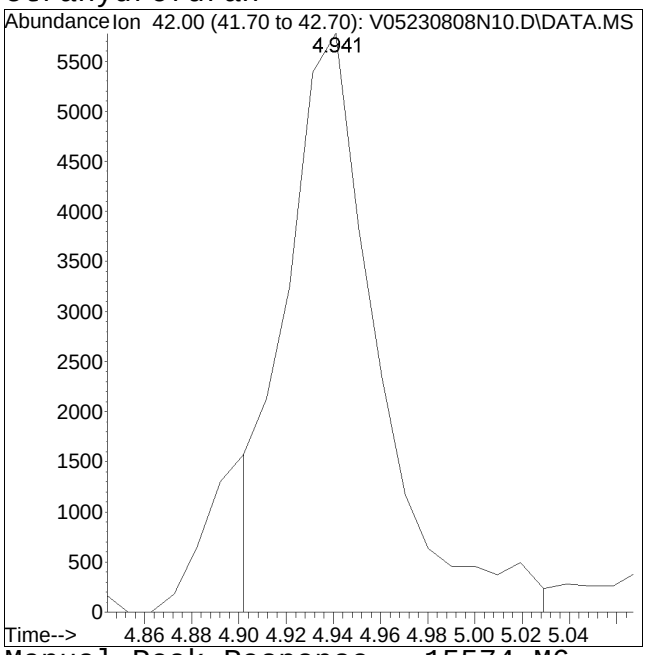
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N10.D Operator : VOA105:PID
Date Inj'd : 8/8/2023 11:29 pm Instrument : VOA105
Sample : I8260STD10PPB Quant Date : 8/9/2023 12:45 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 18068



Manual Peak Response = 15574 M6

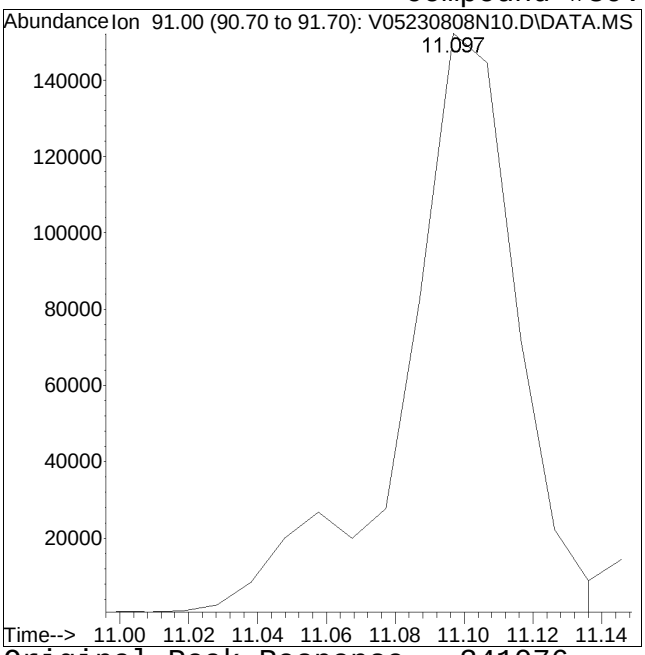
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

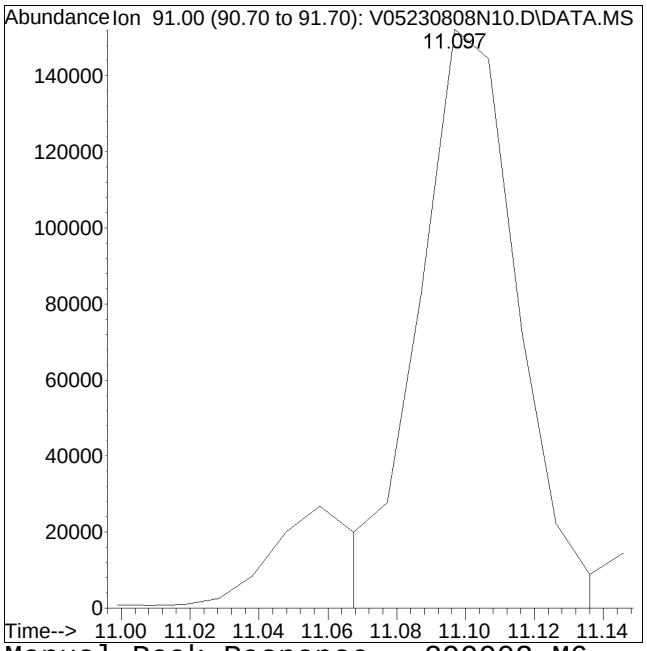
Data Path : K:\VOA105\2023\230808NICALQ
Data File : V05230808N10.D
Date Inj'd : 8/8/2023 11:29 pm
Sample : I8260STD10PPB

Method : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 8/9/2023 12:45 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 341076



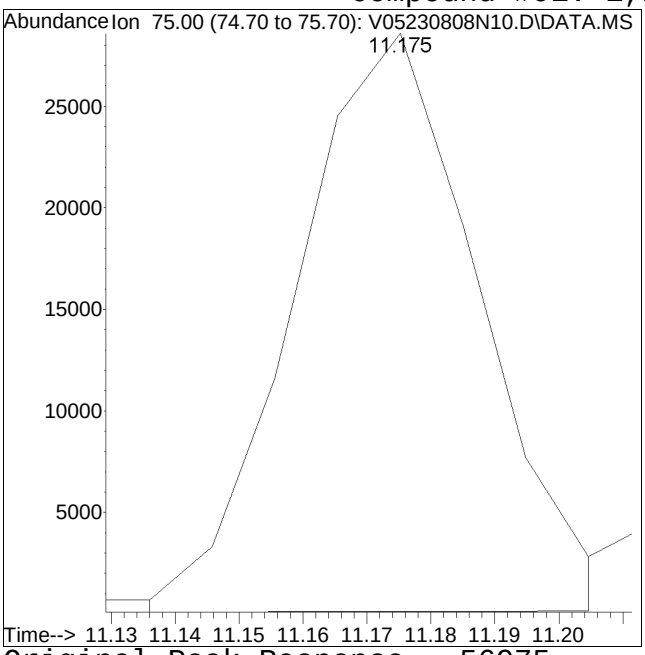
Manual Peak Response = 299902 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

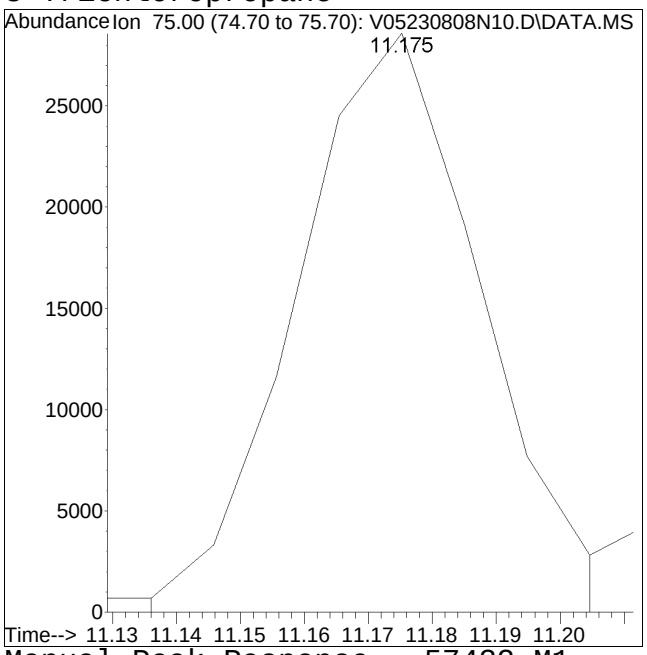
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N10.D Operator : VOA105:PID
Date Inj'd : 8/8/2023 11:29 pm Instrument : VOA105
Sample : I8260STD10PPB Quant Date : 8/9/2023 12:45 pm

Compound #91: 1,2,3-Trichloropropane



Original Peak Response = 56975



Manual Peak Response = 57432 M1

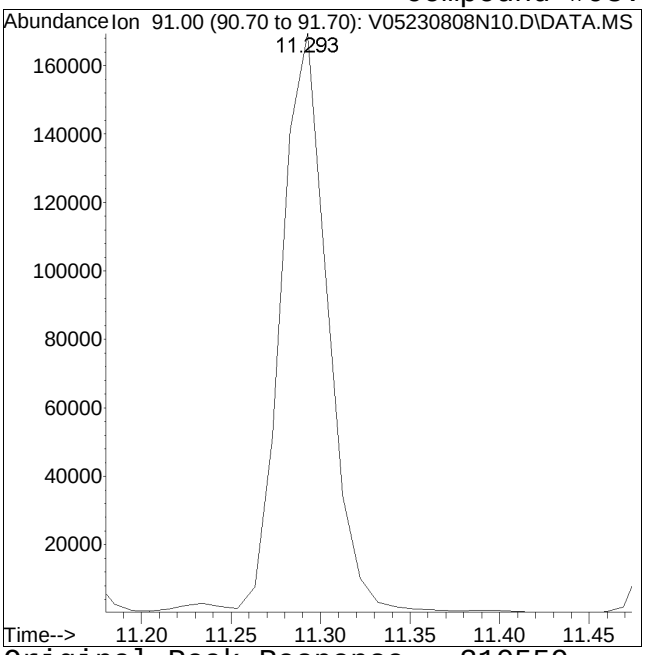
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

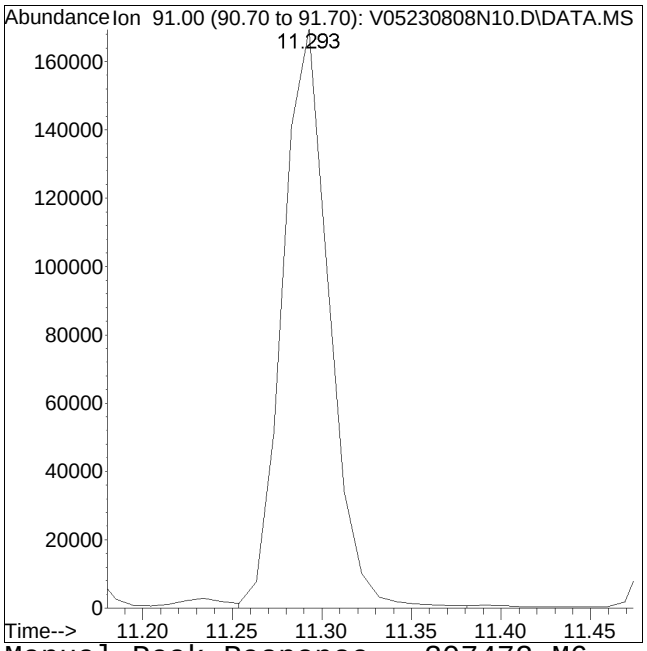
Data Path : K:\VOA105\2023\230808NICALQ
Data File : V05230808N10.D
Date Inj'd : 8/8/2023 11:29 pm
Sample : I8260STD10PPB

Method : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 8/9/2023 12:45 pm

Compound #93: 4-Chlorotoluene



Original Peak Response = 310559



Manual Peak Response = 307472 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N11.D
Acq On : 8 Aug 2023 11:54 pm
Operator : VOA105:PID
Sample : I8260STD30PPB
Misc : WG1813882,ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 09 12:45:24 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	363802	10.000	ug/L	0.00
Standard Area 1 = 355895			Recovery = 102.22%			
59) Chlorobenzene-d5	9.245	117	346499	10.000	ug/L	0.00
Standard Area 1 = 341299			Recovery = 101.52%			
79) 1,4-Dichlorobenzene-d4	12.008	152	200128	10.000	ug/L	0.00
Standard Area 1 = 200861			Recovery = 99.64%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.961	113	114618	9.935	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.35%			
43) 1,2-Dichloroethane-d4	5.479	65	109334	9.765	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.65%			
60) Toluene-d8	7.416	98	406655	10.066	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.66%			
83) 4-Bromofluorobenzene	10.774	95	158083	10.093	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.93%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.528	85	364259	32.704	ug/L	98
3) Chloromethane	1.713	50	346901	30.688	ug/L	98
4) Vinyl chloride	1.772	62	383275	32.326	ug/L	95
5) Bromomethane	2.065	94	259716	28.353	ug/L	99
6) Chloroethane	2.173	64	264732	31.322	ug/L	97
7) Trichlorofluoromethane	2.300	101	570787	32.593	ug/L	100
8) Ethyl ether	2.584	74	151693	30.193	ug/L #	74
10) 1,1-Dichloroethene	2.760	96	334143	31.801	ug/L	98
11) Carbon disulfide	2.789	76	1062358	31.756	ug/L	100
12) Freon-113	2.789	101	372038	34.035	ug/L #	78
13) Iodomethane	2.897	142	496974	33.937	ug/L	90
14) Acrolein	3.092	56	25948	31.119	ug/L	97
15) Methylene chloride	3.308	84	284406	29.399	ug/L	88
17) Acetone	3.357	43	46185	23.687	ug/L	91
18) trans-1,2-Dichloroethene	3.445	96	302717	31.422	ug/L	96
19) Methyl acetate	3.464	43	111376	31.247	ug/L #	86
20) Methyl tert-butyl ether	3.542	73	618846	30.429	ug/L	97
21) tert-Butyl alcohol	3.650	59	51108	145.437	ug/L	91
22) Diisopropyl ether	3.885	45	808033	30.624	ug/L	94
23) 1,1-Dichloroethane	4.012	63	518503	30.830	ug/L	99
24) Halothane	4.071	117	247018	32.399	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N11.D
Acq On : 8 Aug 2023 11:54 pm
Operator : VOA105:PID
Sample : I8260STD30PPB
Misc : WG1813882,ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 09 12:45:24 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.080	53	59045	31.838	ug/L	#	86
26) Ethyl tert-butyl ether	4.227	59	727614	30.211	ug/L		87
27) Vinyl acetate	4.247	43	199448M6	30.827	ug/L		
28) cis-1,2-Dichloroethene	4.520	96	331430	31.142	ug/L		94
29) 2,2-Dichloropropane	4.618	77	404967	31.774	ug/L		99
30) Bromochloromethane	4.716	128	153992	31.050	ug/L		96
31) Cyclohexane	4.697	56	522364	33.704	ug/L		85
32) Chloroform	4.785	83	510094	30.386	ug/L		97
33) Ethyl acetate	4.892	43	154284	29.450	ug/L		95
34) Carbon tetrachloride	4.902	117	429496	33.498	ug/L		98
35) Tetrahydrofuran	4.931	42	46533M6	29.601	ug/L		
37) 1,1,1-Trichloroethane	4.970	97	480837	32.049	ug/L		99
39) 2-Butanone	5.078	43	64371	28.485	ug/L	#	78
40) 1,1-Dichloropropene	5.088	75	396690	32.169	ug/L		94
41) Benzene	5.332	78	1106831	31.583	ug/L		98
42) tert-Amyl methyl ether	5.440	73	626288	30.061	ug/L		91
44) 1,2-Dichloroethane	5.547	62	341596	29.531	ug/L		98
47) Methyl cyclohexane	5.900	83	525084	33.932	ug/L		93
48) Trichloroethene	5.919	95	348946	31.063	ug/L		90
50) Dibromomethane	6.369	93	161255	30.339	ug/L		92
51) 1,2-Dichloropropane	6.457	63	274369	30.435	ug/L	#	90
53) 2-Chloroethyl vinyl ether	7.151	63	131366	31.548	ug/L		97
54) Bromodichloromethane	6.535	83	374728	30.524	ug/L		100
57) 1,4-Dioxane	6.750	88	24348	563.224	ug/L	#	95
58) cis-1,3-Dichloropropene	7.220	75	424841	31.010	ug/L		97
61) Toluene	7.474	92	717332	30.728	ug/L		99
62) 4-Methyl-2-pentanone	7.914	58	56744	31.658	ug/L		95
63) Tetrachloroethene	7.914	166	363379	32.692	ug/L		91
65) trans-1,3-Dichloropropene	7.963	75	364209	31.693	ug/L		93
67) Ethyl methacrylate	8.149	69	234903	31.609	ug/L		99
68) 1,1,2-Trichloroethane	8.149	83	180370	30.611	ug/L		99
69) Chlorodibromomethane	8.355	129	282611	31.474	ug/L		99
70) 1,3-Dichloropropane	8.472	76	359311	30.842	ug/L		100
71) 1,2-Dibromoethane	8.628	107	244691	30.744	ug/L		98
72) 2-Hexanone	8.922	43	96451	30.201	ug/L		98
73) Chlorobenzene	9.275	112	820486	30.558	ug/L		88
74) Ethylbenzene	9.304	91	1412672	31.265	ug/L		94
75) 1,1,1,2-Tetrachloroethane	9.353	131	300875	31.224	ug/L		99
76) p/m Xylene	9.490	106	1105800	62.538	ug/L		85
77) o Xylene	10.039	106	1058530	61.473	ug/L		84

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N11.D
Acq On : 8 Aug 2023 11:54 pm
Operator : VOA105:PID
Sample : I8260STD30PPB
Misc : WG1813882,ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 09 12:45:24 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	10.107	104	1752802	61.927	ug/L		87
80) Bromoform	10.147	173	164371	31.153	ug/L		97
82) Isopropylbenzene	10.431	105	1432095	32.128	ug/L		95
84) Bromobenzene	10.881	156	354548	31.047	ug/L		100
85) n-Propylbenzene	10.930	91	1652954	32.064	ug/L		95
86) 1,4-Dichlorobutane	10.960	55	322516	30.240	ug/L		92
87) 1,1,2,2-Tetrachloroethane	11.038	83	215628	29.602	ug/L		98
88) 4-Ethyltoluene	11.058	105	1398669	31.946	ug/L		96
89) 2-Chlorotoluene	11.097	91	944631M6	30.947	ug/L		
90) 1,3,5-Trimethylbenzene	11.156	105	1213847	31.574	ug/L		94
91) 1,2,3-Trichloropropane	11.175	75	180206	29.232	ug/L		94
92) trans-1,4-Dichloro-2-b...	11.234	53	70726	33.095	ug/L	#	72
93) 4-Chlorotoluene	11.293	91	974264M6	30.876	ug/L		
94) tert-Butylbenzene	11.499	119	1033338	32.368	ug/L		97
97) 1,2,4-Trimethylbenzene	11.587	105	1170314	31.328	ug/L		94
98) sec-Butylbenzene	11.694	105	1497514	32.550	ug/L		97
99) p-Isopropyltoluene	11.851	119	1316372	32.446	ug/L		94
100) 1,3-Dichlorobenzene	11.930	146	675216	30.956	ug/L		97
101) 1,4-Dichlorobenzene	12.018	146	669975	30.216	ug/L		97
102) p-Diethylbenzene	12.233	119	779307	32.132	ug/L		98
103) n-Butylbenzene	12.292	91	1083266	32.767	ug/L		97
104) 1,2-Dichlorobenzene	12.449	146	621562	30.867	ug/L		96
105) 1,2,4,5-Tetramethylben...	13.036	119	1178695	31.751	ug/L		93
106) 1,2-Dibromo-3-chloropr...	13.242	155	39141	31.397	ug/L		98
107) 1,3,5-Trichlorobenzene	13.262	180	495161	31.926	ug/L		98
108) Hexachlorobutadiene	13.840	225	174606	33.339	ug/L		99
109) 1,2,4-Trichlorobenzene	13.869	180	439678	31.970	ug/L		99
110) Naphthalene	14.153	128	939266	31.353	ug/L		100
111) 1,2,3-Trichlorobenzene	14.330	180	394656	31.617	ug/L		99

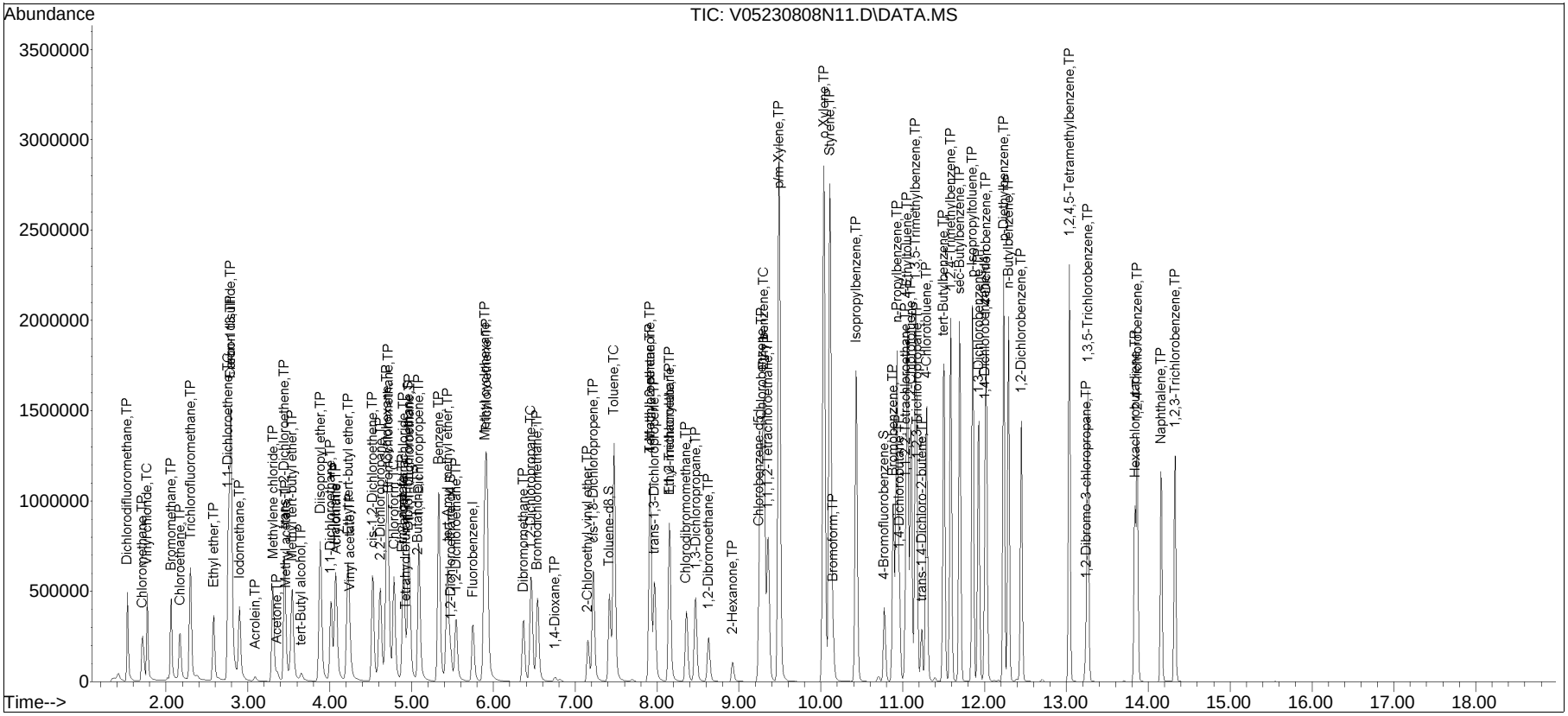
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N11.D
Acq On : 8 Aug 2023 11:54 pm
Operator : VOA105:PID
Sample : I8260STD30PPB
Misc : WG1813882,ICAL
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Aug 09 12:45:24 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

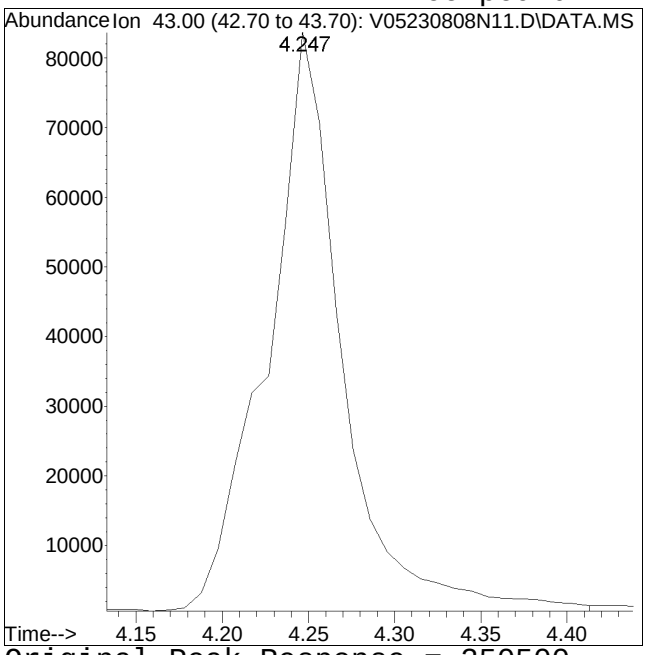
Sub List : 8260-Curve - Megamix plus Diox\V05230808N10.D•



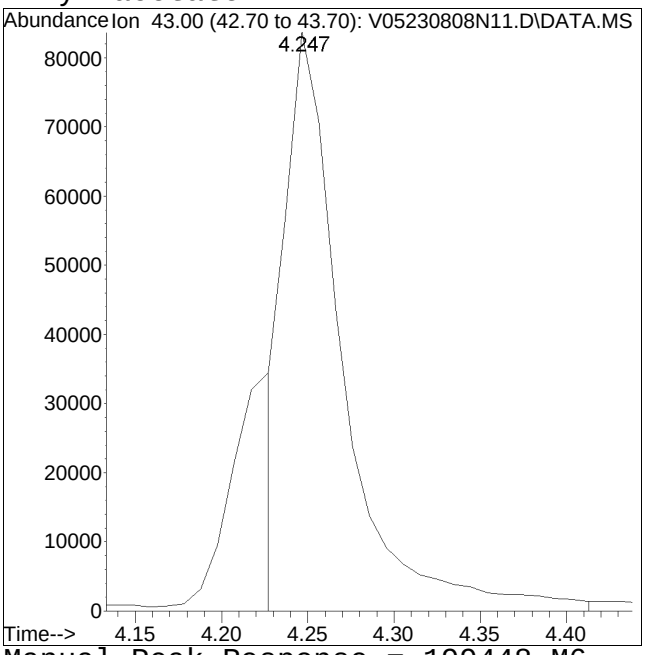
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N11.D Operator : VOA105:PID
Date Inj'd : 8/8/2023 11:54 pm Instrument : VOA105
Sample : I8260STD30PPB Quant Date : 8/9/2023 12:45 pm

Compound #27: Vinyl acetate



Original Peak Response = 250500



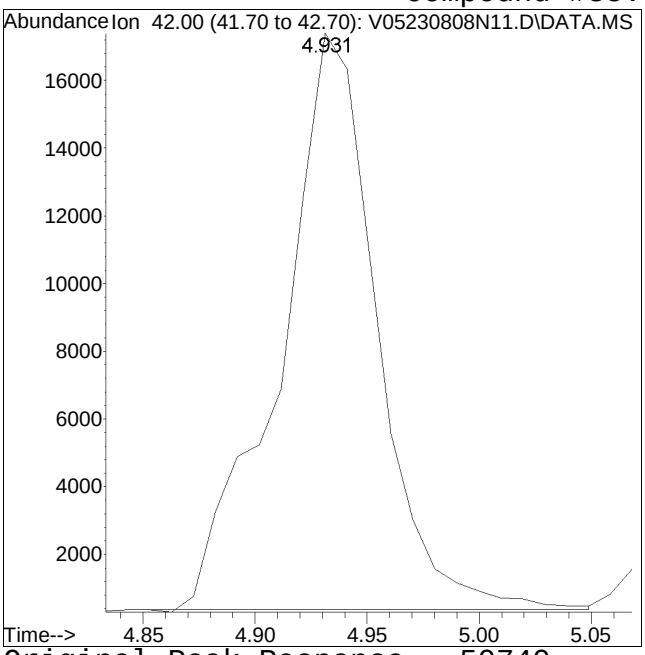
Manual Peak Response = 199448 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

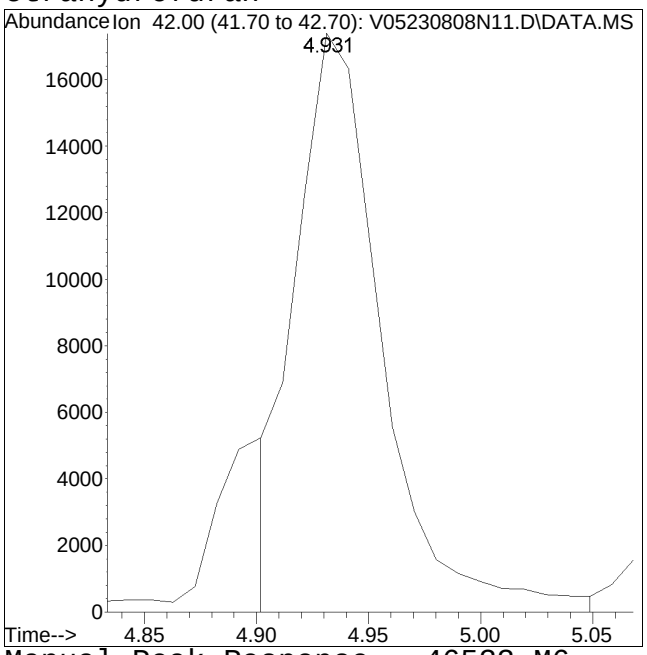
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N11.D Operator : VOA105:PID
Date Inj'd : 8/8/2023 11:54 pm Instrument : VOA105
Sample : I8260STD30PPB Quant Date : 8/9/2023 12:45 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 50740



Manual Peak Response = 46533 M6

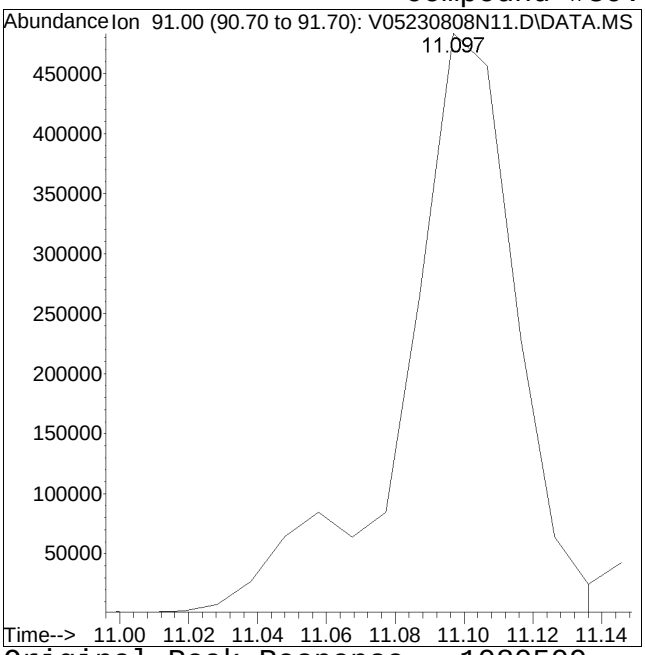
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

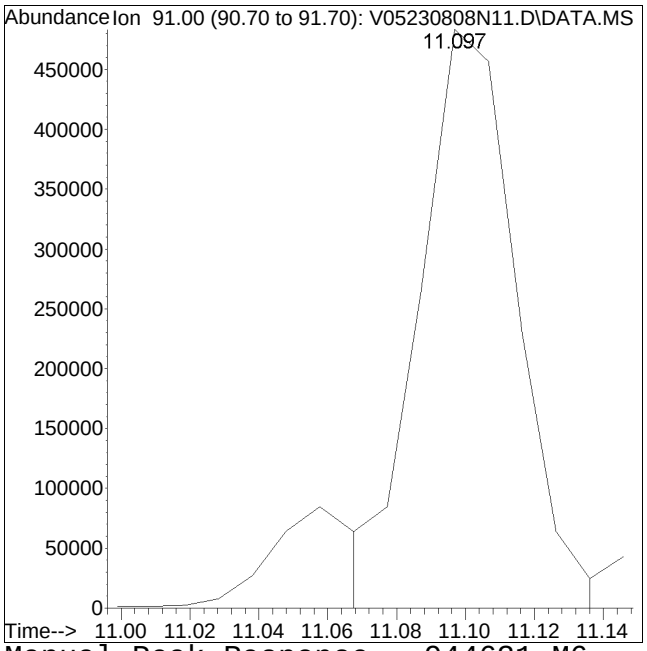
Data Path : K:\VOA105\2023\230808NICALQ
Data File : V05230808N11.D
Date Inj'd : 8/8/2023 11:54 pm
Sample : I8260STD30PPB

Method : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 8/9/2023 12:45 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 1080509



Manual Peak Response = 944631 M6

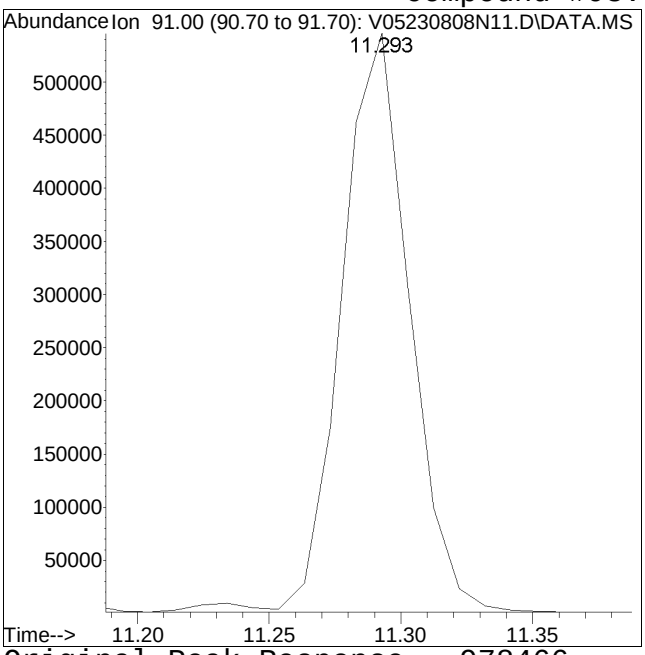
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

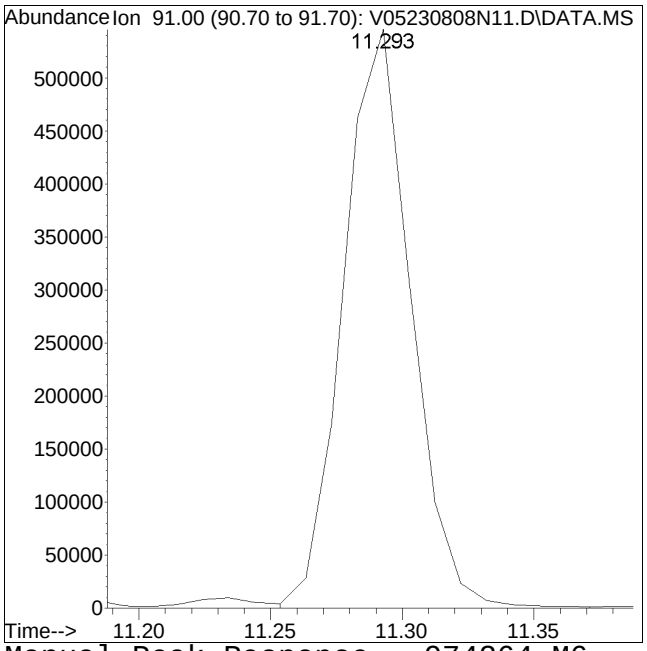
Data Path : K:\VOA105\2023\230808NICALQ
Data File : V05230808N11.D
Date Inj'd : 8/8/2023 11:54 pm
Sample : I8260STD30PPB

Method : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 8/9/2023 12:45 pm

Compound #93: 4-Chlorotoluene



Original Peak Response = 978466



Manual Peak Response = 974264 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N12.D
Acq On : 9 Aug 2023 12:19 am
Operator : VOA105:PID
Sample : I8260STD80PPB
Misc : WG1813882,ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 09 12:45:31 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	364720	10.000	ug/L	0.00
Standard Area 1 = 355895			Recovery = 102.48%			
59) Chlorobenzene-d5	9.245	117	354188	10.000	ug/L	0.00
Standard Area 1 = 341299			Recovery = 103.78%			
79) 1,4-Dichlorobenzene-d4	12.008	152	204452	10.000	ug/L	0.00
Standard Area 1 = 200861			Recovery = 101.79%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.960	113	114235	9.877	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.77%			
43) 1,2-Dichloroethane-d4	5.479	65	111149	9.902	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.02%			
60) Toluene-d8	7.415	98	410056	9.930	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.30%			
83) 4-Bromofluorobenzene	10.774	95	159927	9.994	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.94%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.527	85	1034919	92.684	ug/L	98
3) Chloromethane	1.713	50	953007	84.094	ug/L	99
4) Vinyl chloride	1.772	62	1075139	90.450	ug/L	96
5) Bromomethane	2.056	94	763506	83.142	ug/L	98
6) Chloroethane	2.163	64	722306	85.246	ug/L	96
7) Trichlorofluoromethane	2.300	101	1614602	91.964	ug/L	100
8) Ethyl ether	2.584	74	423532	84.087	ug/L #	76
10) 1,1-Dichloroethene	2.760	96	927551	88.053	ug/L	98
11) Carbon disulfide	2.789	76	2945251	87.819	ug/L	99
12) Freon-113	2.789	101	1038185	94.737	ug/L	79
13) Iodomethane	2.897	142	1358472	92.532	ug/L	90
14) Acrolein	3.083	56	73705	88.171	ug/L	96
15) Methylene chloride	3.308	84	772060	79.607	ug/L	88
17) Acetone	3.356	43	120470	61.630	ug/L #	88
18) trans-1,2-Dichloroethene	3.444	96	827603	85.690	ug/L	96
19) Methyl acetate	3.464	43	322225	90.174	ug/L #	86
20) Methyl tert-butyl ether	3.542	73	1734955	85.095	ug/L	97
21) tert-Butyl alcohol	3.650	59	150202	426.352	ug/L	87
22) Diisopropyl ether	3.885	45	2244744	84.860	ug/L	94
23) 1,1-Dichloroethane	4.012	63	1411711	83.729	ug/L	99
24) Halothane	4.070	117	681761	89.195	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N12.D
Acq On : 9 Aug 2023 12:19 am
Operator : VOA105:PID
Sample : I8260STD80PPB
Misc : WG1813882,ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 09 12:45:31 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.080	53	165026	88.761	ug/L	#	86
26) Ethyl tert-butyl ether	4.227	59	2052602	85.012	ug/L		86
27) Vinyl acetate	4.246	43	528618M6	81.498	ug/L		
28) cis-1,2-Dichloroethene	4.520	96	905740	84.892	ug/L		94
29) 2,2-Dichloropropane	4.618	77	1116101	87.349	ug/L		99
30) Bromochloromethane	4.716	128	405366	81.530	ug/L		96
31) Cyclohexane	4.696	56	1478922	95.182	ug/L		85
32) Chloroform	4.784	83	1384530	82.268	ug/L		98
33) Ethyl acetate	4.892	43	443088	84.364	ug/L		95
34) Carbon tetrachloride	4.902	117	1229107	95.620	ug/L		98
35) Tetrahydrofuran	4.931	42	125367M6	79.549	ug/L		
37) 1,1,1-Trichloroethane	4.970	97	1332173	88.568	ug/L		99
39) 2-Butanone	5.078	43	187270	82.662	ug/L	#	77
40) 1,1-Dichloropropene	5.088	75	1121606	90.727	ug/L		94
41) Benzene	5.332	78	3060751	87.118	ug/L		98
42) tert-Amyl methyl ether	5.440	73	1780558	85.248	ug/L		90
44) 1,2-Dichloroethane	5.538	62	940449	81.098	ug/L		97
47) Methyl cyclohexane	5.899	83	1499113	96.631	ug/L		93
48) Trichloroethene	5.919	95	973021	86.400	ug/L		91
50) Dibromomethane	6.359	93	447341	83.952	ug/L		92
51) 1,2-Dichloropropane	6.457	63	758689	83.948	ug/L	#	89
53) 2-Chloroethyl vinyl ether	7.151	63	384559	92.120	ug/L		96
54) Bromodichloromethane	6.535	83	1055592	85.769	ug/L		99
57) 1,4-Dioxane	6.750	88	34187	788.831	ug/L	#	93
58) cis-1,3-Dichloropropene	7.220	75	1208598	87.996	ug/L		97
61) Toluene	7.474	92	2015191	84.450	ug/L		99
62) 4-Methyl-2-pentanone	7.914	58	164838	89.968	ug/L		97
63) Tetrachloroethene	7.914	166	1013562	89.206	ug/L		91
65) trans-1,3-Dichloropropene	7.963	75	1044553	88.922	ug/L		93
67) Ethyl methacrylate	8.149	69	667574	87.879	ug/L		98
68) 1,1,2-Trichloroethane	8.149	83	505188	83.875	ug/L		98
69) Chlorodibromomethane	8.354	129	816017	88.905	ug/L		99
70) 1,3-Dichloropropane	8.472	76	1002263	84.163	ug/L		100
71) 1,2-Dibromoethane	8.628	107	692646	85.137	ug/L		100
72) 2-Hexanone	8.912	43	274471	84.077	ug/L		99
73) Chlorobenzene	9.265	112	2299113	83.768	ug/L		88
74) Ethylbenzene	9.304	91	3968520	85.924	ug/L		94
75) 1,1,1,2-Tetrachloroethane	9.353	131	852625	86.563	ug/L		99
76) p/m Xylene	9.490	106	3074165	170.084	ug/L		85
77) o Xylene	10.039	106	2981958	169.416	ug/L		85

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N12.D
Acq On : 9 Aug 2023 12:19 am
Operator : VOA105:PID
Sample : I8260STD80PPB
Misc : WG1813882,ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 09 12:45:31 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	10.107	104	5034907	174.022	ug/L		88
80) Bromoform	10.147	173	496786	92.164	ug/L		96
82) Isopropylbenzene	10.431	105	4057332	89.098	ug/L		95
84) Bromobenzene	10.881	156	985708	84.489	ug/L		100
85) n-Propylbenzene	10.930	91	4691581	89.082	ug/L		95
86) 1,4-Dichlorobutane	10.960	55	922019	84.624	ug/L		92
87) 1,1,2,2-Tetrachloroethane	11.038	83	619296	83.221	ug/L		99
88) 4-Ethyltoluene	11.058	105	3943111	88.158	ug/L		96
89) 2-Chlorotoluene	11.107	91	2641912M6	84.720	ug/L		
90) 1,3,5-Trimethylbenzene	11.156	105	3382055	86.111	ug/L		94
91) 1,2,3-Trichloropropane	11.175	75	518441	82.319	ug/L		95
92) trans-1,4-Dichloro-2-b...	11.234	53	189125	86.627	ug/L	#	59
93) 4-Chlorotoluene	11.293	91	2716770M6	84.278	ug/L		
94) tert-Butylbenzene	11.508	119	2934436	89.973	ug/L		95
97) 1,2,4-Trimethylbenzene	11.587	105	3298371	86.427	ug/L		94
98) sec-Butylbenzene	11.694	105	4287576	91.225	ug/L		96
99) p-Isopropyltoluene	11.851	119	3732466	90.052	ug/L		95
100) 1,3-Dichlorobenzene	11.929	146	1892964	84.950	ug/L		97
101) 1,4-Dichlorobenzene	12.018	146	1861446	82.176	ug/L		96
102) p-Diethylbenzene	12.233	119	2231302	90.055	ug/L		98
103) n-Butylbenzene	12.292	91	3111410	92.124	ug/L		97
104) 1,2-Dichlorobenzene	12.449	146	1709914	83.120	ug/L		97
105) 1,2,4,5-Tetramethylben...	13.036	119	3446565	90.879	ug/L		94
106) 1,2-Dibromo-3-chloropr...	13.242	155	116357	91.362	ug/L		98
107) 1,3,5-Trichlorobenzene	13.262	180	1377382	86.931	ug/L		97
108) Hexachlorobutadiene	13.840	225	496487	92.794	ug/L		99
109) 1,2,4-Trichlorobenzene	13.869	180	1231769	87.670	ug/L		99
110) Naphthalene	14.153	128	2666651	87.130	ug/L		100
111) 1,2,3-Trichlorobenzene	14.329	180	1094762	85.849	ug/L		99

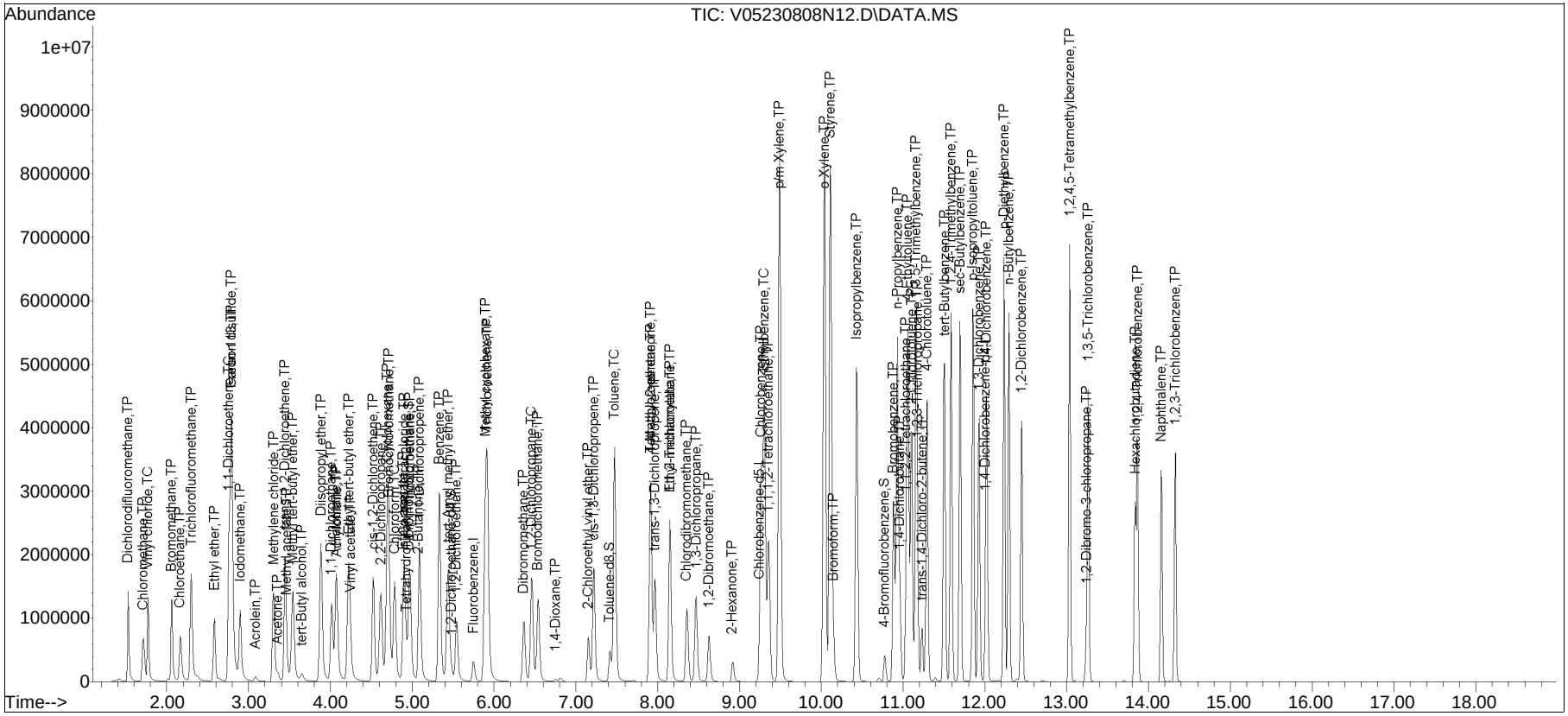
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N12.D
Acq On : 9 Aug 2023 12:19 am
Operator : VOA105:PID
Sample : I8260STD80PPB
Misc : WG1813882,ICAL
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Aug 09 12:45:31 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox\V05230808N10.D•

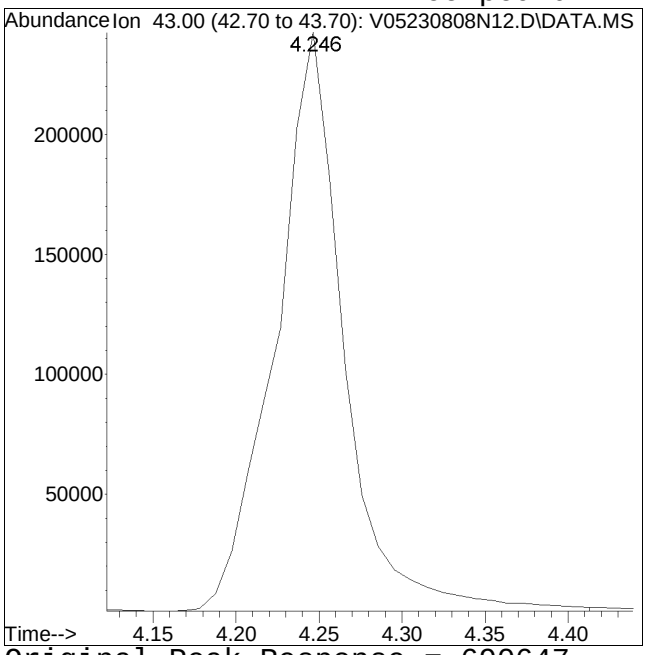


Manual Integration Report

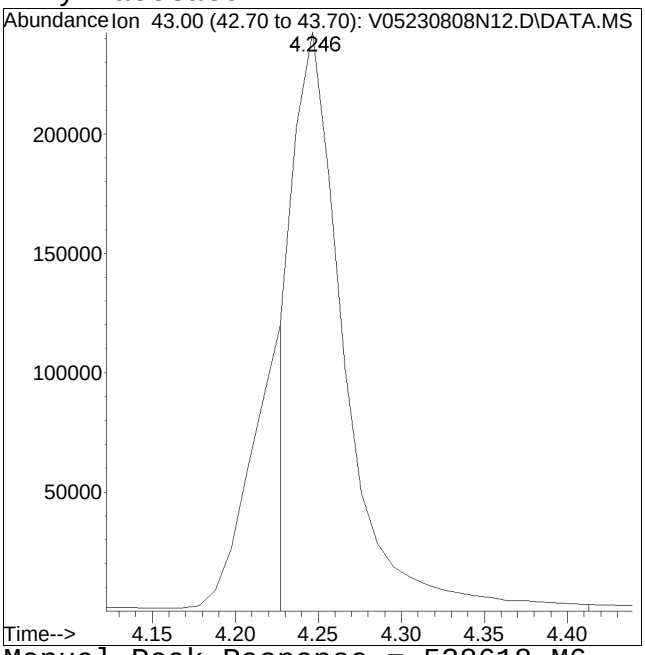
Data Path : K:\VOA105\2023\230808NICALQ
Data File : V05230808N12.D
Date Inj'd : 8/9/2023 12:19 am
Sample : I8260STD80PPB

Method : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 8/9/2023 12:45 pm

Compound #27: Vinyl acetate



Original Peak Response = 690647



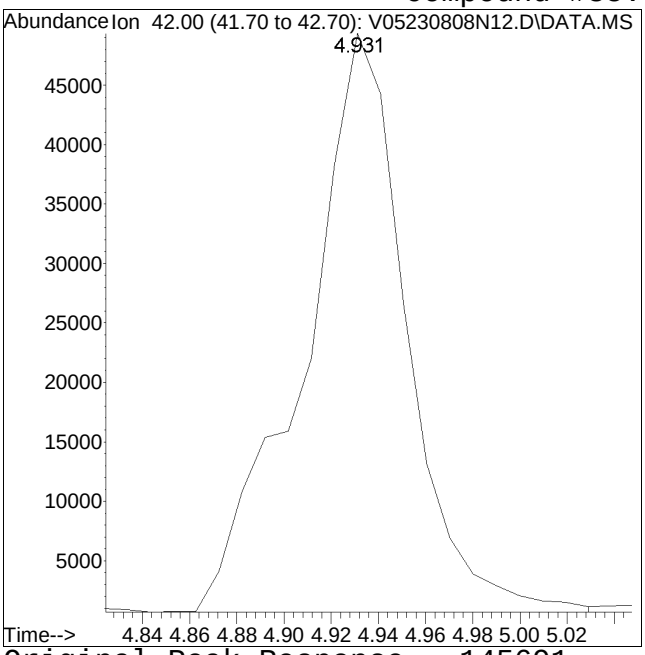
Manual Peak Response = 528618 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

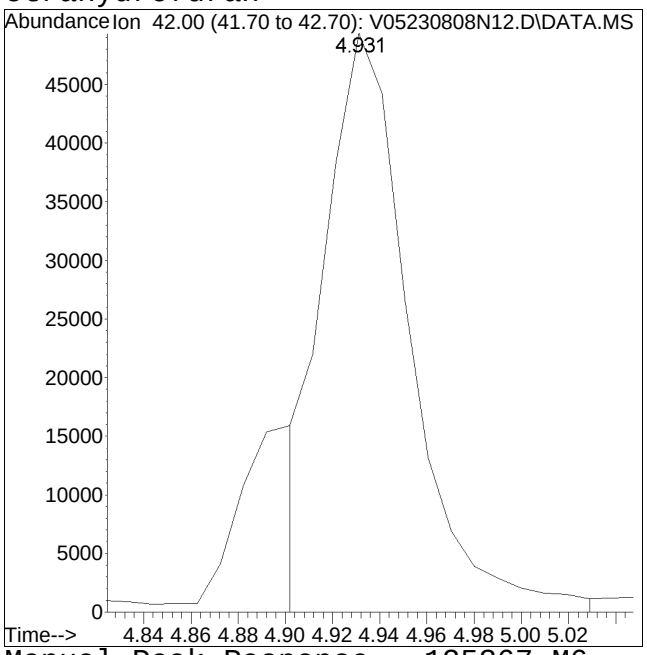
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N12.D Operator : VOA105:PID
Date Inj'd : 8/9/2023 12:19 am Instrument : VOA105
Sample : I8260STD80PPB Quant Date : 8/9/2023 12:45 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 145691



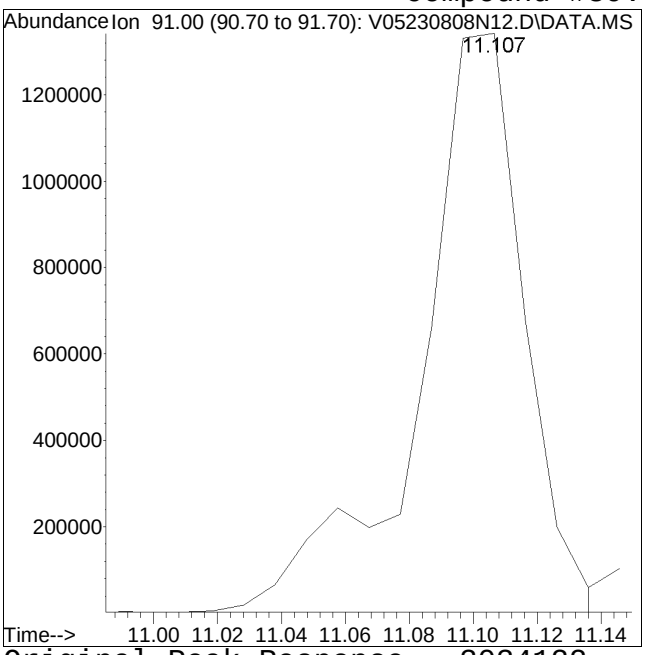
Manual Peak Response = 125367 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

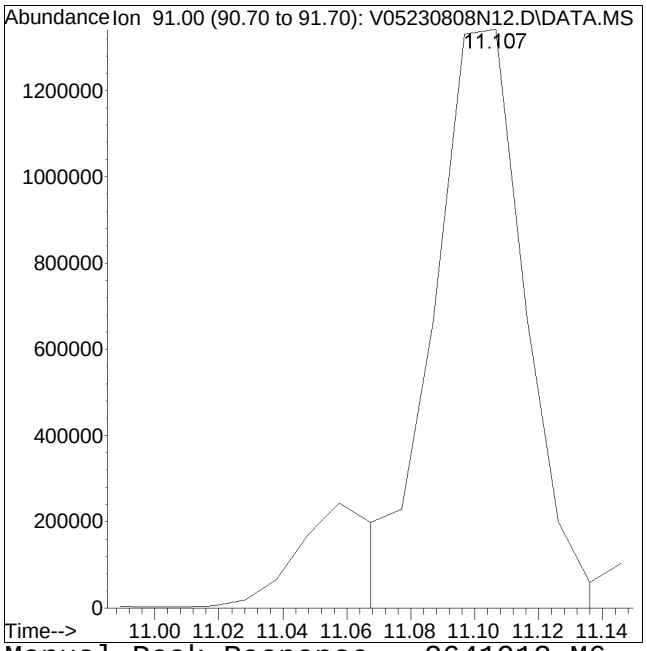
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N12.D Operator : VOA105:PID
Date Inj'd : 8/9/2023 12:19 am Instrument : VOA105
Sample : I8260STD80PPB Quant Date : 8/9/2023 12:45 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 3034122



Manual Peak Response = 2641912 M6

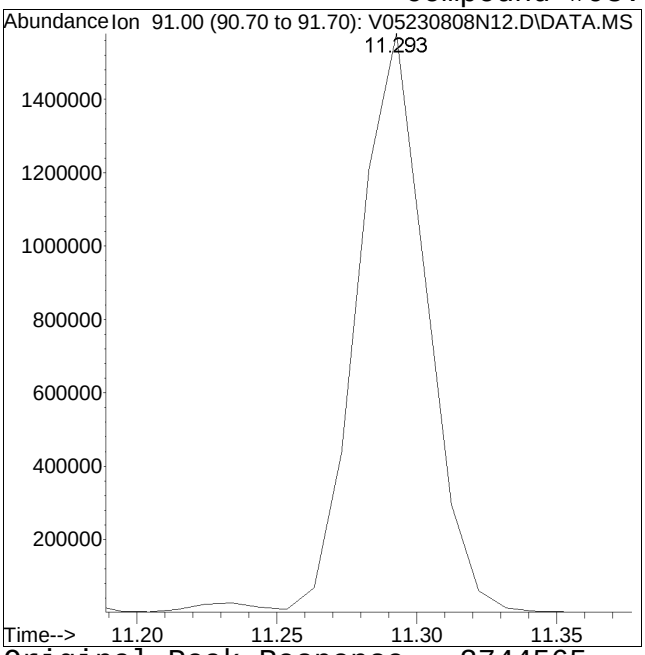
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

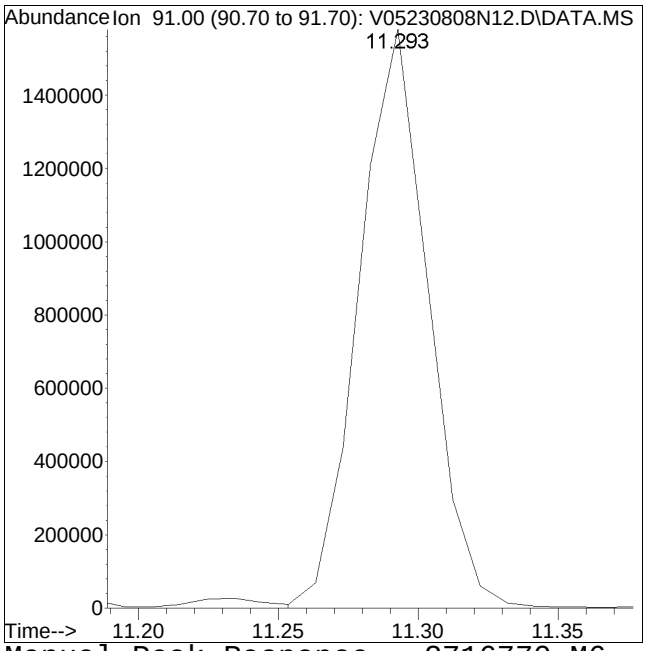
Data Path : K:\VOA105\2023\230808NICALQ
Data File : V05230808N12.D
Date Inj'd : 8/9/2023 12:19 am
Sample : I8260STD80PPB

Method : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 8/9/2023 12:45 pm

Compound #93: 4-Chlorotoluene



Original Peak Response = 2744565



Manual Peak Response = 2716770 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N13.D
Acq On : 9 Aug 2023 12:45 am
Operator : VOA105:PID
Sample : I8260STD120PPB
Misc : WG1813882,ICAL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 09 12:45:40 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	373965	10.000	ug/L	0.00
Standard Area 1 = 355895			Recovery = 105.08%			
59) Chlorobenzene-d5	9.245	117	367882	10.000	ug/L	0.00
Standard Area 1 = 341299			Recovery = 107.79%			
79) 1,4-Dichlorobenzene-d4	12.008	152	209486	10.000	ug/L	0.00
Standard Area 1 = 200861			Recovery = 104.29%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.960	113	116686	9.839	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.39%			
43) 1,2-Dichloroethane-d4	5.479	65	114906	9.984	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.84%			
60) Toluene-d8	7.415	98	422458	9.850	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.50%			
83) 4-Bromofluorobenzene	10.773	95	163389	9.965	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.65%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.527	85	1579018	137.916	ug/L	98
3) Chloromethane	1.713	50	1475507	126.981	ug/L	99
4) Vinyl chloride	1.772	62	1639490	134.518	ug/L	96
5) Bromomethane	2.055	94	1230455	130.678	ug/L	98
6) Chloroethane	2.163	64	1083371	124.697	ug/L	96
7) Trichlorofluoromethane	2.300	101	2467629	137.076	ug/L	100
8) Ethyl ether	2.584	74	655395	126.904	ug/L #	76
10) 1,1-Dichloroethene	2.760	96	1416869	131.179	ug/L	98
11) Carbon disulfide	2.789	76	4445435	129.274	ug/L	100
12) Freon-113	2.789	101	1558343	138.687	ug/L #	78
13) Iodomethane	2.897	142	2062533	137.015	ug/L	90
14) Acrolein	3.082	56	113333	132.226	ug/L	98
15) Methylene chloride	3.298	84	1193701	120.040	ug/L	88
17) Acetone	3.356	43	184840	92.222	ug/L #	88
18) trans-1,2-Dichloroethene	3.444	96	1274019	128.651	ug/L	96
19) Methyl acetate	3.464	43	495057	135.115	ug/L #	86
20) Methyl tert-butyl ether	3.542	73	2690961	128.721	ug/L	97
21) tert-Butyl alcohol	3.650	59	235312	651.426	ug/L	88
22) Diisopropyl ether	3.884	45	3515429	129.612	ug/L	94
23) 1,1-Dichloroethane	4.012	63	2172777	125.683	ug/L	99
24) Halothane	4.070	117	1040823	132.804	ug/L	100

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N13.D
Acq On : 9 Aug 2023 12:45 am
Operator : VOA105:PID
Sample : I8260STD120PPB
Misc : WG1813882,ICAL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 09 12:45:40 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.070	53	255383	133.965	ug/L	#	86
26) Ethyl tert-butyl ether	4.227	59	3201554	129.320	ug/L		87
27) Vinyl acetate	4.246	43	960500M6	144.421	ug/L		
28) cis-1,2-Dichloroethene	4.520	96	1395836	127.592	ug/L		94
29) 2,2-Dichloropropane	4.618	77	1728676	131.946	ug/L		99
30) Bromochloromethane	4.716	128	618492	121.321	ug/L		96
31) Cyclohexane	4.696	56	2257956	141.727	ug/L		85
32) Chloroform	4.784	83	2142769	124.174	ug/L		98
33) Ethyl acetate	4.892	43	693787	128.832	ug/L		95
34) Carbon tetrachloride	4.902	117	1903748	144.444	ug/L		98
35) Tetrahydrofuran	4.931	42	190842M6	118.101	ug/L		
37) 1,1,1-Trichloroethane	4.970	97	2054419	133.209	ug/L		99
39) 2-Butanone	5.078	43	291001	125.274	ug/L	#	77
40) 1,1-Dichloropropene	5.088	75	1719433	135.647	ug/L		94
41) Benzene	5.332	78	4754916	131.993	ug/L		98
42) tert-Amyl methyl ether	5.440	73	2786088	130.093	ug/L		90
44) 1,2-Dichloroethane	5.537	62	1459794	122.771	ug/L		97
47) Methyl cyclohexane	5.899	83	2300267	144.606	ug/L		93
48) Trichloroethene	5.919	95	1502678	130.132	ug/L		92
50) Dibromomethane	6.359	93	695427	127.283	ug/L		92
51) 1,2-Dichloropropane	6.457	63	1190855	128.509	ug/L	#	89
53) 2-Chloroethyl vinyl ether	7.151	63	601450	140.513	ug/L		97
54) Bromodichloromethane	6.535	83	1656233	131.246	ug/L		99
57) 1,4-Dioxane	6.750	88	54846	1234.232	ug/L	#	95
58) cis-1,3-Dichloropropene	7.220	75	1901764	135.041	ug/L		97
61) Toluene	7.474	92	3149193	127.060	ug/L		100
62) 4-Methyl-2-pentanone	7.914	58	255239	134.124	ug/L		98
63) Tetrachloroethene	7.914	166	1561344	132.303	ug/L		92
65) trans-1,3-Dichloropropene	7.963	75	1643115	134.670	ug/L		94
67) Ethyl methacrylate	8.149	69	1036327	131.344	ug/L		97
68) 1,1,2-Trichloroethane	8.149	83	787602	125.896	ug/L		98
69) Chlorodibromomethane	8.354	129	1285646	134.857	ug/L		99
70) 1,3-Dichloropropane	8.472	76	1552961	125.552	ug/L		99
71) 1,2-Dibromoethane	8.628	107	1081585	127.995	ug/L		100
72) 2-Hexanone	8.912	43	420515	124.018	ug/L		98
73) Chlorobenzene	9.275	112	3604655	126.447	ug/L		88
74) Ethylbenzene	9.304	91	6182895	128.885	ug/L		93
75) 1,1,1,2-Tetrachloroethane	9.353	131	1340969	131.075	ug/L		99
76) p/m Xylene	9.490	106	4846790	258.175	ug/L		85
77) o Xylene	10.039	106	4743426	259.460	ug/L		84

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N13.D
Acq On : 9 Aug 2023 12:45 am
Operator : VOA105:PID
Sample : I8260STD120PPB
Misc : WG1813882,ICAL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 09 12:45:40 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78)	Styrene	10.117	104	7979846	265.541	ug/L		89
80)	Bromoform	10.146	173	794630	143.878	ug/L		96
82)	Isopropylbenzene	10.431	105	6389677	136.944	ug/L		94
84)	Bromobenzene	10.881	156	1545567	129.294	ug/L		100
85)	n-Propylbenzene	10.930	91	7356705	136.329	ug/L		95
86)	1,4-Dichlorobutane	10.959	55	1442167	129.183	ug/L		92
87)	1,1,2,2-Tetrachloroethane	11.038	83	974452	127.801	ug/L		99
88)	4-Ethyltoluene	11.057	105	6133820	133.841	ug/L		96
89)	2-Chlorotoluene	11.106	91	4190755M6	131.158	ug/L		
90)	1,3,5-Trimethylbenzene	11.165	105	5290637	131.469	ug/L		94
91)	1,2,3-Trichloropropane	11.175	75	821107	127.245	ug/L		96
92)	trans-1,4-Dichloro-2-b...	11.234	53	304562	136.150	ug/L	#	61
93)	4-Chlorotoluene	11.293	91	4282201	129.647	ug/L		89
94)	tert-Butylbenzene	11.508	119	4605747	137.823	ug/L		95
97)	1,2,4-Trimethylbenzene	11.586	105	5191378	132.761	ug/L		94
98)	sec-Butylbenzene	11.694	105	6689297	138.905	ug/L		96
99)	p-Isopropyltoluene	11.861	119	5885472	138.585	ug/L		95
100)	1,3-Dichlorobenzene	11.929	146	2950344	129.220	ug/L		97
101)	1,4-Dichlorobenzene	12.027	146	2909308	125.349	ug/L		97
102)	p-Diethylbenzene	12.233	119	3506654	138.127	ug/L		98
103)	n-Butylbenzene	12.292	91	4836514	139.760	ug/L		97
104)	1,2-Dichlorobenzene	12.448	146	2692374	127.733	ug/L		96
105)	1,2,4,5-Tetramethylben...	13.036	119	5411095	139.251	ug/L		93
106)	1,2-Dibromo-3-chloropr...	13.242	155	180848	138.588	ug/L		98
107)	1,3,5-Trichlorobenzene	13.262	180	2129467	131.168	ug/L		98
108)	Hexachlorobutadiene	13.840	225	768718	140.221	ug/L		99
109)	1,2,4-Trichlorobenzene	13.869	180	1895815	131.690	ug/L		100
110)	Naphthalene	14.153	128	4022219	128.264	ug/L		100
111)	1,2,3-Trichlorobenzene	14.329	180	1678185	128.437	ug/L		99

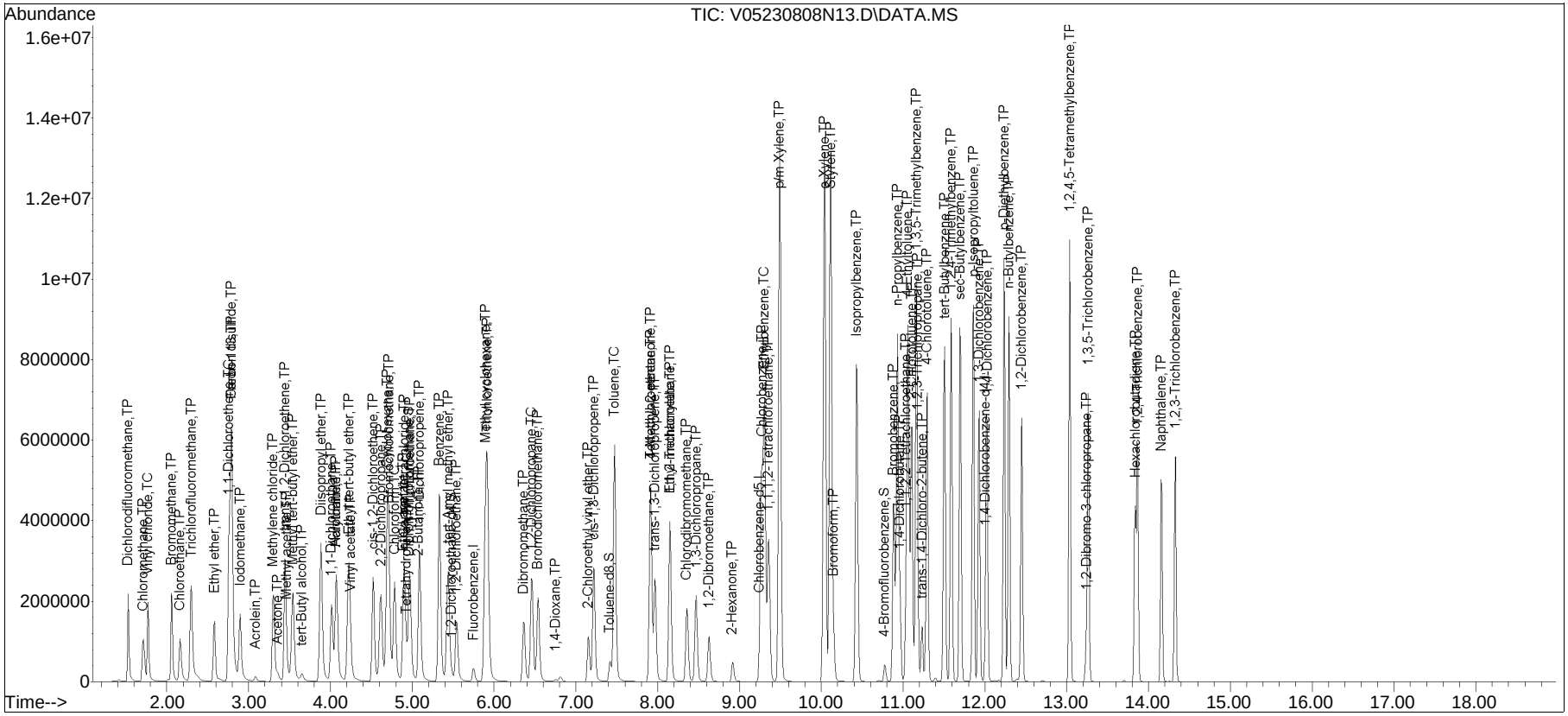
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N13.D
Acq On : 9 Aug 2023 12:45 am
Operator : VOA105:PID
Sample : I8260STD120PPB
Misc : WG1813882,ICAL
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Aug 09 12:45:40 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

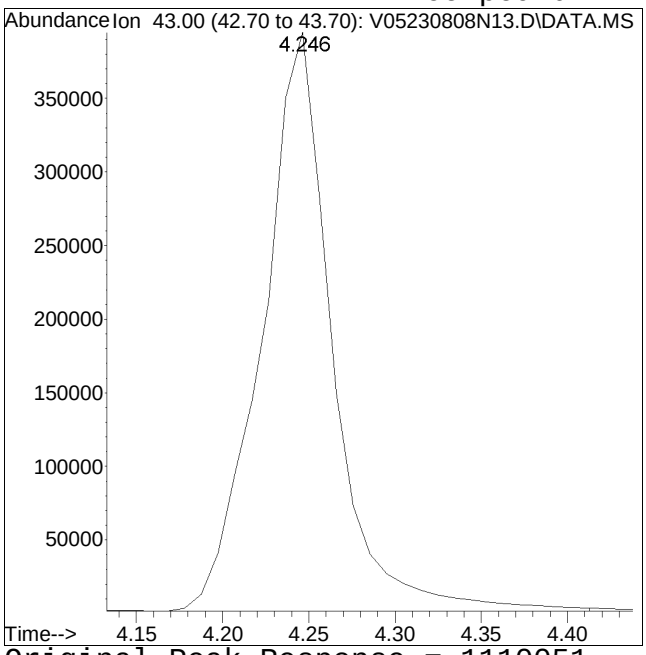
Sub List : 8260-Curve - Megamix plus Diox\V05230808N10.D•



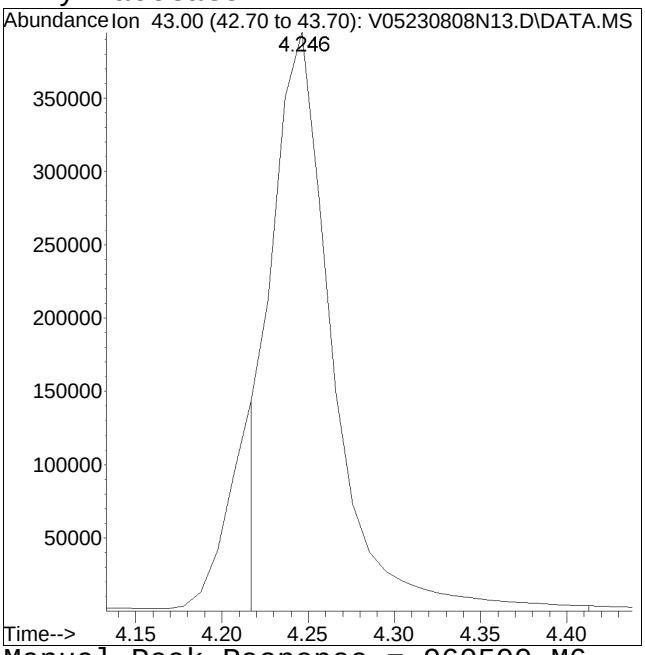
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N13.D Operator : VOA105:PID
Date Inj'd : 8/9/2023 12:45 am Instrument : VOA105
Sample : I8260STD120PPB Quant Date : 8/9/2023 12:45 pm

Compound #27: Vinyl acetate



Original Peak Response = 1110051



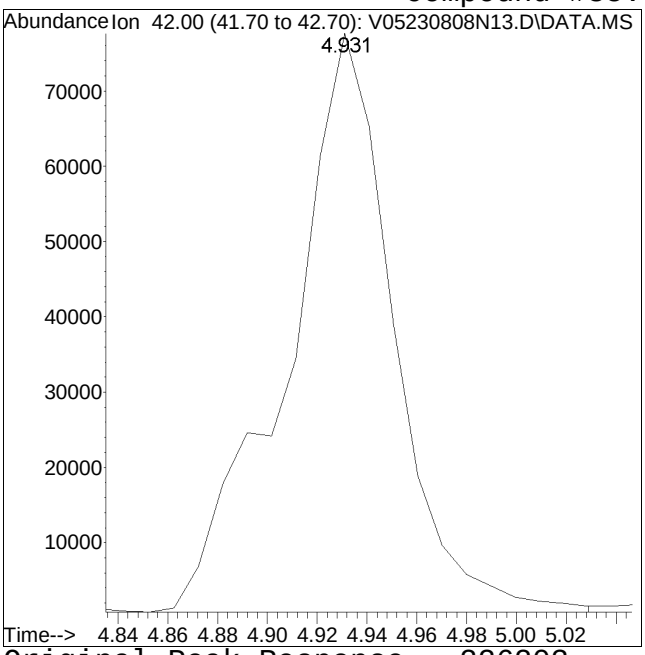
Manual Peak Response = 960500 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

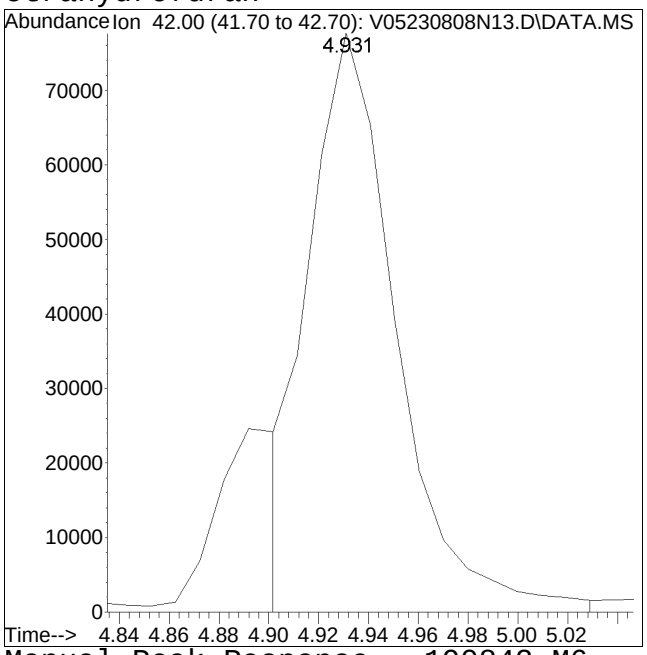
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N13.D Operator : VOA105:PID
Date Inj'd : 8/9/2023 12:45 am Instrument : VOA105
Sample : I8260STD120PPB Quant Date : 8/9/2023 12:45 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 226203



Manual Peak Response = 190842 M6

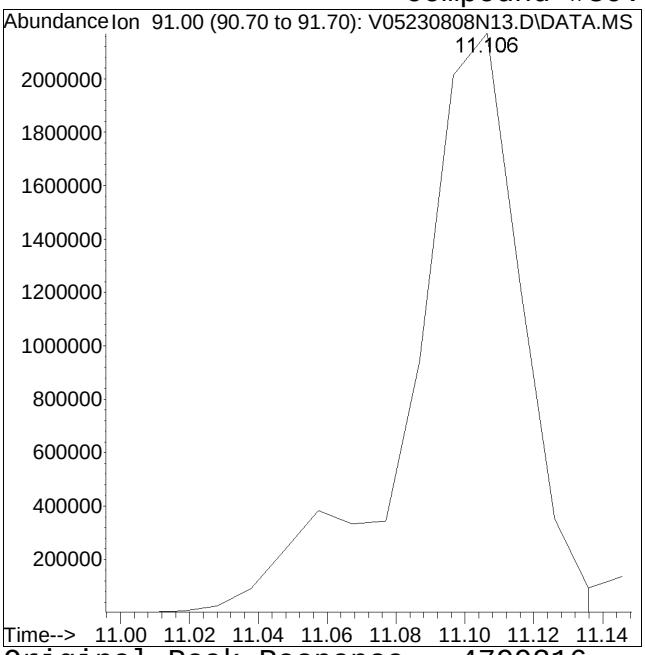
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

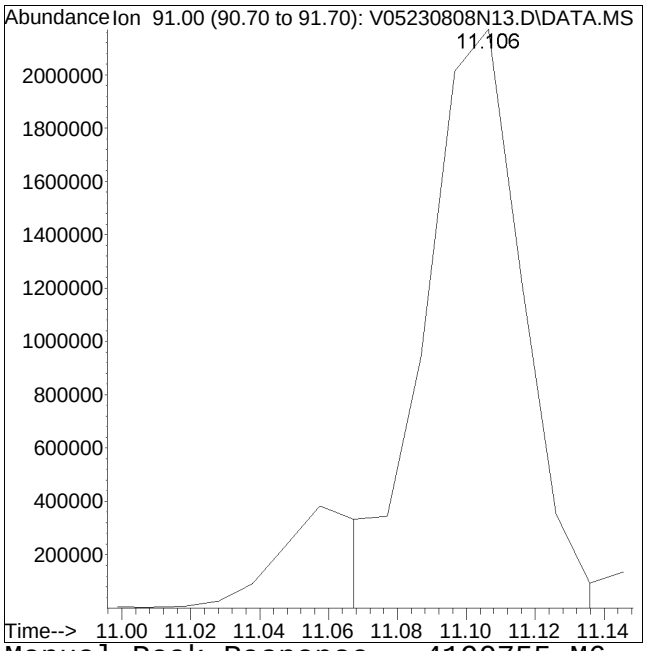
Data Path : K:\VOA105\2023\230808NICALQ
Data File : V05230808N13.D
Date Inj'd : 8/9/2023 12:45 am
Sample : I8260STD120PPB

Method : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 8/9/2023 12:45 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 4799316



Manual Peak Response = 4190755 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N14.D
Acq On : 9 Aug 2023 1:10 am
Operator : VOA105:PID
Sample : I8260STD200PPB
Misc : WG1813882,ICAL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 09 12:45:48 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	380871	10.000	ug/L	0.00
Standard Area 1 = 355895			Recovery = 107.02%			
59) Chlorobenzene-d5	9.255	117	382260	10.000	ug/L	0.00
Standard Area 1 = 341299			Recovery = 112.00%			
79) 1,4-Dichlorobenzene-d4	12.008	152	219460	10.000	ug/L	0.00
Standard Area 1 = 200861			Recovery = 109.26%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.961	113	119783	9.917	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.17%			
43) 1,2-Dichloroethane-d4	5.479	65	115993	9.896	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.96%			
60) Toluene-d8	7.415	98	432132	9.696	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.96%			
83) 4-Bromofluorobenzene	10.774	95	168630	9.818	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 98.18%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.527	85	2702738	231.785	ug/L	98
3) Chloromethane	1.713	50	2503326	211.528	ug/L	99
4) Vinyl chloride	1.772	62	2806690	226.110	ug/L	96
5) Bromomethane	2.056	94	2108103	219.827	ug/L	100
6) Chloroethane	2.153	64	1747712	197.516	ug/L	96
7) Trichlorofluoromethane	2.300	101	4144749	226.065	ug/L	100
8) Ethyl ether	2.584	74	1109581	210.952	ug/L #	77
10) 1,1-Dichloroethene	2.760	96	2408644	218.958	ug/L	99
11) Carbon disulfide	2.789	76	7412360	211.644	ug/L	100
12) Freon-113	2.789	101	2593255	226.605	ug/L #	78
13) Iodomethane	2.897	142	3456313	225.442	ug/L	90
14) Acrolein	3.083	56	194818	223.173	ug/L	97
15) Methylene chloride	3.298	84	2043645	201.785	ug/L	88
17) Acetone	3.356	43	332426	162.850	ug/L	93
18) trans-1,2-Dichloroethene	3.445	96	2171544	215.307	ug/L	96
19) Methyl acetate	3.464	43	834149	223.535	ug/L #	87
20) Methyl tert-butyl ether	3.542	73	4605488	216.308	ug/L	96
21) tert-Butyl alcohol	3.650	59	401399	1091.064	ug/L	85
22) Diisopropyl ether	3.885	45	6060612	219.400	ug/L	95
23) 1,1-Dichloroethane	4.012	63	3729341	211.809	ug/L	99
24) Halothane	4.070	117	1782915	223.367	ug/L	100

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N14.D
Acq On : 9 Aug 2023 1:10 am
Operator : VOA105:PID
Sample : I8260STD200PPB
Misc : WG1813882,ICAL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 09 12:45:48 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.070	53	431916	222.460	ug/L	#	87
26) Ethyl tert-butyl ether	4.227	59	5542802	219.830	ug/L		87
27) Vinyl acetate	4.247	43	1618510M6	238.948	ug/L		
28) cis-1,2-Dichloroethene	4.520	96	2379155	213.533	ug/L		95
29) 2,2-Dichloropropane	4.618	77	2953647	221.358	ug/L		99
30) Bromochloromethane	4.716	128	1044292	201.130	ug/L		95
31) Cyclohexane	4.696	56	3862202	238.027	ug/L		86
32) Chloroform	4.784	83	3665193	208.548	ug/L		97
33) Ethyl acetate	4.892	43	1188708	216.733	ug/L		96
34) Carbon tetrachloride	4.902	117	3273340	243.856	ug/L		98
35) Tetrahydrofuran	4.931	42	324886M6	197.408	ug/L		
37) 1,1,1-Trichloroethane	4.970	97	3492587	222.355	ug/L		99
39) 2-Butanone	5.078	43	494325	208.945	ug/L	#	78
40) 1,1-Dichloropropene	5.088	75	2938360	227.605	ug/L		95
41) Benzene	5.332	78	8131098	221.621	ug/L		97
42) tert-Amyl methyl ether	5.440	73	4847328	222.236	ug/L		90
44) 1,2-Dichloroethane	5.538	62	2506179	206.951	ug/L		97
47) Methyl cyclohexane	5.899	83	4011013	247.580	ug/L		93
48) Trichloroethene	5.919	95	2620172	222.793	ug/L		92
50) Dibromomethane	6.359	93	1204470	216.455	ug/L		93
51) 1,2-Dichloropropane	6.467	63	2055140	217.755	ug/L	#	89
53) 2-Chloroethyl vinyl ether	7.151	63	1044624	239.624	ug/L		96
54) Bromodichloromethane	6.535	83	2875687	223.747	ug/L		98
57) 1,4-Dioxane	6.750	88	90075	1990.257	ug/L		94
58) cis-1,3-Dichloropropene	7.220	75	3312244	230.932	ug/L		96
61) Toluene	7.474	92	5450720	211.648	ug/L		99
62) 4-Methyl-2-pentanone	7.914	58	438517	221.766	ug/L		98
63) Tetrachloroethene	7.914	166	2681928	218.709	ug/L		92
65) trans-1,3-Dichloropropene	7.963	75	2839220	223.951	ug/L		93
67) Ethyl methacrylate	8.149	69	1781780	217.329	ug/L		98
68) 1,1,2-Trichloroethane	8.149	83	1367062	210.303	ug/L		98
69) Chlorodibromomethane	8.354	129	2236276	225.750	ug/L		99
70) 1,3-Dichloropropane	8.472	76	2689954	209.295	ug/L		99
71) 1,2-Dibromoethane	8.628	107	1857555	211.556	ug/L		99
72) 2-Hexanone	8.912	43	715509	203.081	ug/L		99
73) Chlorobenzene	9.275	112	6280236	212.017	ug/L		89
74) Ethylbenzene	9.304	91	10685913	214.375	ug/L		92
75) 1,1,1,2-Tetrachloroethane	9.363	131	2329055	219.094	ug/L		99
76) p/m Xylene	9.490	106	8688109	445.385	ug/L		81
77) o Xylene	10.039	106	8521681	448.593	ug/L		80

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N14.D
Acq On : 9 Aug 2023 1:10 am
Operator : VOA105:PID
Sample : I8260STD200PPB
Misc : WG1813882,ICAL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 09 12:45:48 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	10.117	104	13899698	445.136	ug/L		91
80) Bromoform	10.147	173	1410488	243.780	ug/L		97
82) Isopropylbenzene	10.431	105	11052474	226.112	ug/L		93
84) Bromobenzene	10.881	156	2714032	216.723	ug/L		99
85) n-Propylbenzene	10.930	91	12611699	223.089	ug/L		93
86) 1,4-Dichlorobutane	10.960	55	2512264	214.809	ug/L		93
87) 1,1,2,2-Tetrachloroethane	11.038	83	1710365	214.122	ug/L		100
88) 4-Ethyltoluene	11.058	105	10702788	222.923	ug/L		94
89) 2-Chlorotoluene	11.107	91	7056712M6	210.817	ug/L		
90) 1,3,5-Trimethylbenzene	11.165	105	9348980	221.757	ug/L		93
91) 1,2,3-Trichloropropane	11.175	75	1463090	216.426	ug/L		96
92) trans-1,4-Dichloro-2-b...	11.234	53	530786	226.496	ug/L	#	60
93) 4-Chlorotoluene	11.293	91	7517158	217.245	ug/L	#	89
94) tert-Butylbenzene	11.508	119	8148317	232.750	ug/L		93
97) 1,2,4-Trimethylbenzene	11.587	105	9057391	221.100	ug/L		93
98) sec-Butylbenzene	11.704	105	11670576	231.329	ug/L		94
99) p-Isopropyltoluene	11.861	119	10258210	230.572	ug/L		95
100) 1,3-Dichlorobenzene	11.929	146	5203646	217.553	ug/L		98
101) 1,4-Dichlorobenzene	12.027	146	5112227	210.252	ug/L		97
102) p-Diethylbenzene	12.233	119	6284119	236.281	ug/L		98
103) n-Butylbenzene	12.292	91	8566389	236.292	ug/L		97
104) 1,2-Dichlorobenzene	12.449	146	4716519	213.593	ug/L		97
105) 1,2,4,5-Tetramethylben...	13.036	119	9507365	233.546	ug/L		93
106) 1,2-Dibromo-3-chloropr...	13.242	155	313305	229.181	ug/L		98
107) 1,3,5-Trichlorobenzene	13.262	180	3701363	217.629	ug/L		97
108) Hexachlorobutadiene	13.840	225	1346997	234.538	ug/L		100
109) 1,2,4-Trichlorobenzene	13.869	180	3174500	210.491	ug/L		99
110) Naphthalene	14.163	128	6748976	205.437	ug/L		100
111) 1,2,3-Trichlorobenzene	14.329	180	2848662	208.109	ug/L		99

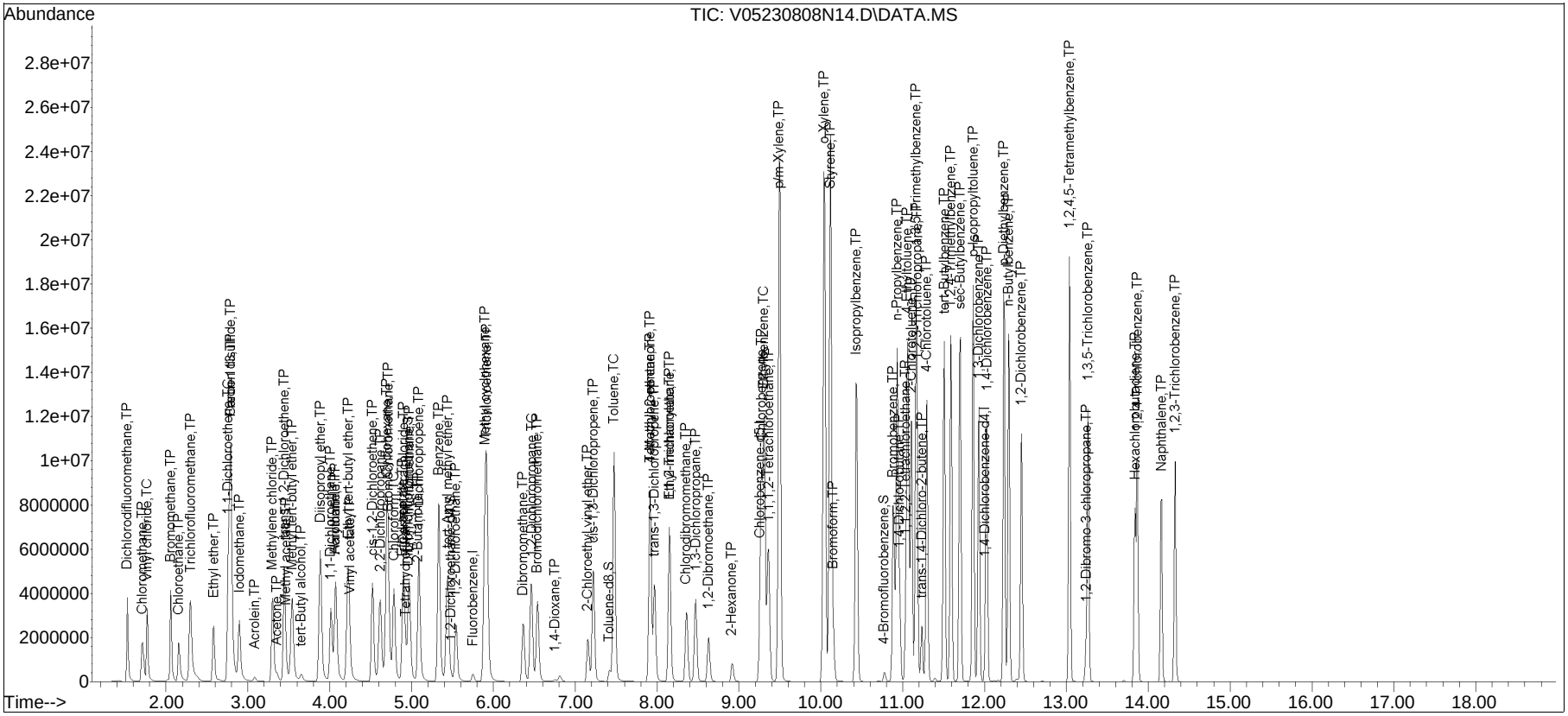
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N14.D
Acq On : 9 Aug 2023 1:10 am
Operator : VOA105:PID
Sample : I8260STD200PPB
Misc : WG1813882,ICAL
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Aug 09 12:45:48 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:44:07 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox\V05230808N10.D•

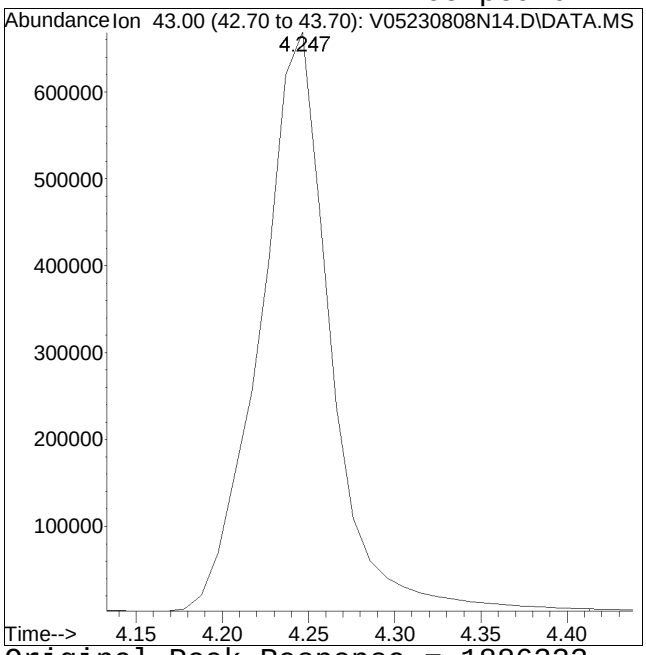


Manual Integration Report

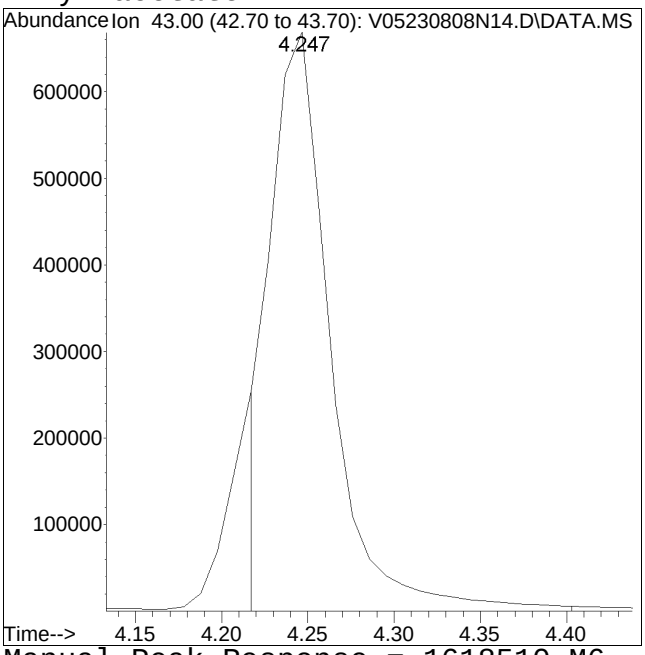
Data Path : K:\VOA105\2023\230808NICALQ
Data File : V05230808N14.D
Date Inj'd : 8/9/2023 1:10 am
Sample : I8260STD200PPB

Method : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 8/9/2023 12:45 pm

Compound #27: Vinyl acetate



Original Peak Response = 1886333



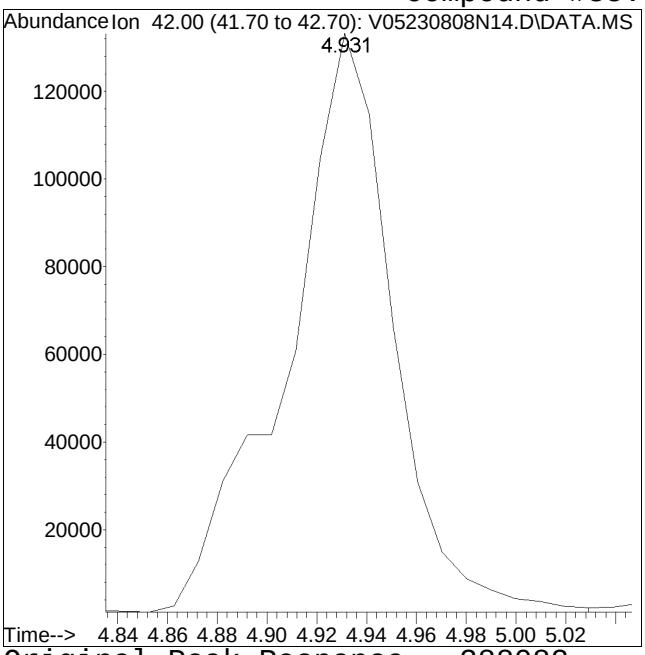
Manual Peak Response = 1618510 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

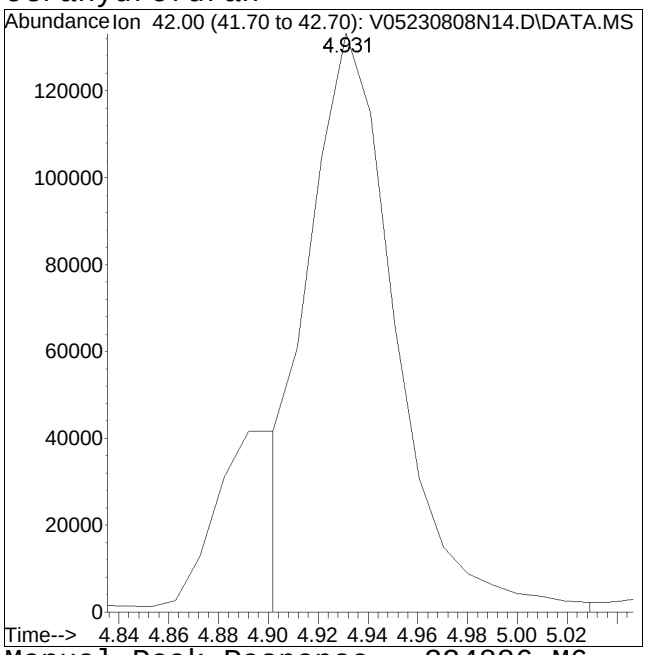
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N14.D Operator : VOA105:PID
Date Inj'd : 8/9/2023 1:10 am Instrument : VOA105
Sample : I8260STD200PPB Quant Date : 8/9/2023 12:45 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 388082



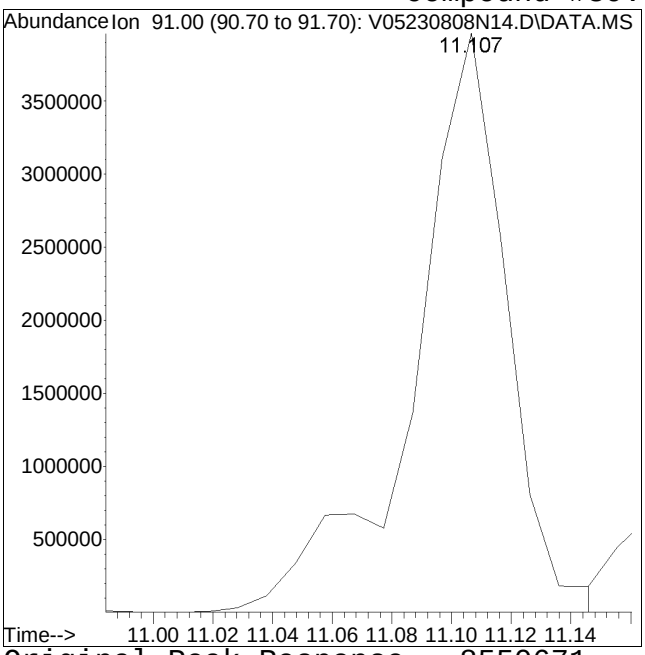
Manual Peak Response = 324886 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

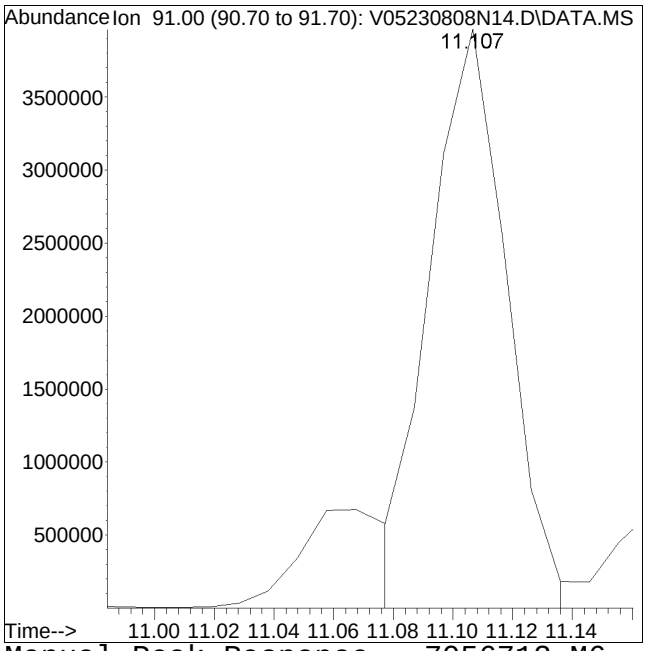
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N14.D Operator : VOA105:PID
Date Inj'd : 8/9/2023 1:10 am Instrument : VOA105
Sample : I8260STD200PPB Quant Date : 8/9/2023 12:45 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 8550671



Manual Peak Response = 7056712 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Evaluate Continuing Calibration Report

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N20.D
Acq On : 9 Aug 2023 3:42 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1813882,ICAL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 09 13:25:39 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	102	0.00
2	TP	Dichlorodifluoromethane	0.324	0.359	-10.8	115	0.00
3	TP	Chloromethane	0.311	0.353	-13.5	118	0.00
4	TC	Vinyl chloride	0.326	0.372	-14.1	112	0.00
5	TP	Bromomethane	0.252	0.301	-19.4	133	0.00
6	TP	Chloroethane	0.232	0.260	-12.1	112	0.00
7	TP	Trichlorofluoromethane	0.481	0.603	-25.4#	122	0.00
8	TP	Ethyl ether	0.138	0.145	-5.1	109	0.00
10	TC	1,1-Dichloroethene	0.289	0.292	-1.0	101	0.00
11	TP	Carbon disulfide	0.920	0.840	8.7	94	0.00
12	TP	Freon-113	0.320	0.333	-4.1	105	0.00
13	TP	Iodomethane	0.428	0.315	26.4#	78	0.00
14	TP	Acrolein	0.023	0.019	17.4	92	0.00
15	TP	Methylene chloride	0.266	0.268	-0.8	106	0.00
17	TP	Acetone	0.043	0.035	18.6	92	0.00
18	TP	trans-1,2-Dichloroethene	0.265	0.271	-2.3	104	0.00
19	TP	Methyl acetate	0.098	0.082	16.3	86	0.00
20	TP	Methyl tert-butyl ether	0.559	0.518	7.3	98	0.00
21	TP	tert-Butyl alcohol	0.00966	0.00818#	15.3	89	0.00
22	TP	Diisopropyl ether	0.725	0.694	4.3	103	0.00
23	TP	1,1-Dichloroethane	0.462	0.477	-3.2	106	0.00
24	TP	Halothane	0.210	0.220	-4.8	105	0.00
25	TP	Acrylonitrile	0.055	0.051	7.3	100	0.00
26	TP	Ethyl tert-butyl ether	0.662	0.615	7.1	101	0.00
27	TP	Vinyl acetate	0.178	0.127	28.7#	87	0.00
28	TP	cis-1,2-Dichloroethene	0.293	0.294	-0.3	103	0.00
29	TP	2,2-Dichloropropane	0.350	0.346	1.1	103	0.00
30	TP	Bromochloromethane	0.136	0.140	-2.9	104	0.00
31	TP	Cyclohexane	0.455	0.463	-1.8	103	0.00
32	TC	Chloroform	0.461	0.475	-3.0	107	0.00
33	TP	Ethyl acetate	0.144	0.127	11.8	99	0.00
34	TP	Carbon tetrachloride	* 10.000	9.727	2.7	108	0.00
35	TP	Tetrahydrofuran	0.043	0.041	4.7	96	0.00
36	S	Dibromofluoromethane	0.317	0.323	-1.9	104	0.00
37	TP	1,1,1-Trichloroethane	0.412	0.453	-10.0	111	0.00
39	TP	2-Butanone	0.062	0.048	22.6#	90	0.00
40	TP	1,1-Dichloropropene	0.339	0.352	-3.8	106	0.00
41	TP	Benzene	0.963	0.998	-3.6	106	0.00
42	TP	tert-Amyl methyl ether	0.573	0.523	8.7	99	0.00

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N20.D
Acq On : 9 Aug 2023 3:42 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1813882,ICAL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 09 13:25:39 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
43	S	1,2-Dichloroethane-d4	0.308	0.317	-2.9	101	0.00
44	TP	1,2-Dichloroethane	0.318	0.310	2.5	103	0.00
47	TP	Methyl cyclohexane	* 10.000	9.739	2.6	103	0.00
48	TP	Trichloroethene	0.309	0.314	-1.6	106	0.00
50	TP	Dibromomethane	0.146	0.142	2.7	102	0.00
51	TC	1,2-Dichloropropane	0.244	0.245	-0.4	104	0.00
53	TP	2-Chloroethyl vinyl ether	0.121	0.102	15.7	95	0.00
54	TP	Bromodichloromethane	0.337	0.331	1.8	105	0.00
57	TP	1,4-Dioxane	0.00119	0.00090#	24.4#	75	0.00
58	TP	cis-1,3-Dichloropropene	0.377	0.368	2.4	105	0.00
59	I	Chlorobenzene-d5	1.000	1.000	0.0	102	0.00
60	S	Toluene-d8	1.166	1.189	-2.0	103	0.00
61	TC	Toluene	0.674	0.674	0.0	103	0.00
62	TP	4-Methyl-2-pentanone	0.052	0.045	13.5	91	0.00
63	TP	Tetrachloroethene	0.321	0.335	-4.4	104	0.00
65	TP	trans-1,3-Dichloropropene	0.332	0.316	4.8	102	0.00
67	TP	Ethyl methacrylate	0.214	0.218	-1.9	106	0.00
68	TP	1,1,2-Trichloroethane	0.170	0.165#	2.9	102	0.00
69	TP	Chlorodibromomethane	0.259	0.247	4.6	104	0.00
70	TP	1,3-Dichloropropane	0.336	0.331	1.5	104	0.00
71	TP	1,2-Dibromoethane	0.230	0.218	5.2	101	0.00
72	TP	2-Hexanone	0.092	0.080	13.0	94	0.00
73	TP	Chlorobenzene	0.775	0.790	-1.9	106	0.00
74	TC	Ethylbenzene	1.304	1.305	-0.1	103	0.00
75	TP	1,1,1,2-Tetrachloroethane	0.278	0.266	4.3	102	0.00
76	TP	p/m Xylene	0.510	0.519	-1.8	104	0.00
77	TP	o Xylene	0.497	0.492	1.0	103	0.00
78	TP	Styrene	0.817	0.808	1.1	104	0.00
79	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	102	0.00
80	TP	Bromoform	* 10.000	8.384	16.2	101	0.00
82	TP	Isopropylbenzene	2.227	2.122	4.7	99	0.00
83	S	4-Bromofluorobenzene	0.783	0.777	0.8	100	0.00
84	TP	Bromobenzene	0.563	0.562	0.2	104	0.01
85	TP	n-Propylbenzene	2.576	2.601	-1.0	104	0.00
86	TP	1,4-Dichlorobutane	0.533	0.521	2.3	106	0.00
87	TP	1,1,2,2-Tetrachloroethane	0.364	0.310	14.8	94	0.00
88	TP	4-Ethyltoluene	2.146	2.210	-3.0	104	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N20.D
Acq On : 9 Aug 2023 3:42 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1813882,ICAL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 09 13:25:39 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
89 TP	2-Chlorotoluene		1.525	1.496	1.9	102	0.00
90 TP	1,3,5-Trimethylbenzene		1.921	1.891	1.6	103	0.00
91 TP	1,2,3-Trichloropropane		0.308	0.272	11.7	97	0.00
92 TP	trans-1,4-Dichloro-2-butene		0.107	0.103	3.7	99	0.00
93 TP	4-Chlorotoluene		1.577	1.544	2.1	103	0.00
94 TP	tert-Butylbenzene		1.595	1.614	-1.2	106	0.01
97 TP	1,2,4-Trimethylbenzene		1.867	1.921	-2.9	107	0.00
98 TP	sec-Butylbenzene		2.299	2.316	-0.7	103	0.00
99 TP	p-Isopropyltoluene		2.027	2.023	0.2	103	0.00
100 TP	1,3-Dichlorobenzene		1.090	1.084	0.6	105	0.00
101 TP	1,4-Dichlorobenzene		1.108	1.109	-0.1	106	0.00
102 TP	p-Diethylbenzene		1.175	1.167	0.7	101	0.00
103 TP	n-Butylbenzene	*	10.000	9.605	3.9	106	0.00
104 TP	1,2-Dichlorobenzene		1.006	1.008	-0.2	106	0.00
105 TP	1,2,4,5-Tetramethylbenzene		1.855	1.717	7.4	101	0.00
106 TP	1,2-Dibromo-3-chloropropane		0.062	0.058	6.5	103	0.00
107 TP	1,3,5-Trichlorobenzene		0.775	0.759	2.1	102	0.00
108 TP	Hexachlorobutadiene	*	10.000	8.874	11.3	104	0.00
109 TP	1,2,4-Trichlorobenzene		0.687	0.684	0.4	105	0.00
110 TP	Naphthalene		1.497	1.448	3.3	102	0.00
111 TP	1,2,3-Trichlorobenzene		0.624	0.617	1.1	104	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 3 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N20.D
Acq On : 9 Aug 2023 3:42 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1813882,ICAL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 09 13:25:39 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	364745	10.000	ug/L	0.00
Standard Area 1 = 355895			Recovery = 102.49%			
59) Chlorobenzene-d5	9.245	117	347258	10.000	ug/L	0.00
Standard Area 1 = 341299			Recovery = 101.75%			
79) 1,4-Dichlorobenzene-d4	12.008	152	205321	10.000	ug/L	0.00
Standard Area 1 = 200861			Recovery = 102.22%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.961	113	117681	10.174	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.74%			
43) 1,2-Dichloroethane-d4	5.479	65	115801	10.316	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.16%			
60) Toluene-d8	7.416	98	413028	10.202	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.02%			
83) 4-Bromofluorobenzene	10.774	95	159445	9.922	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.22%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.528	85	130841	11.061	ug/L	98
3) Chloromethane	1.713	50	128908	11.374	ug/L	98
4) Vinyl chloride	1.772	62	135733	11.418	ug/L	97
5) Bromomethane	2.065	94	109798	11.956	ug/L	99
6) Chloroethane	2.173	64	94683	11.174	ug/L	97
7) Trichlorofluoromethane	2.300	101	219777	12.517	ug/L	100
8) Ethyl ether	2.584	74	52713	10.465	ug/L #	74
10) 1,1-Dichloroethene	2.760	96	106529	10.112	ug/L	98
11) Carbon disulfide	2.789	76	306395	9.135	ug/L	99
12) Freon-113	2.789	101	121595	10.418	ug/L	93
13) Iodomethane	2.897	142	114741	7.350	ug/L	89
14) Acrolein	3.092	56	7004	8.378	ug/L	99
15) Methylene chloride	3.308	84	97669	10.070	ug/L	88
17) Acetone	3.366	43	12691	8.097	ug/L #	83
18) trans-1,2-Dichloroethene	3.445	96	98878	10.237	ug/L	96
19) Methyl acetate	3.464	43	29897	8.366	ug/L #	89
20) Methyl tert-butyl ether	3.542	73	188809	9.260	ug/L	96
21) tert-Butyl alcohol	3.660	59	14927	42.368	ug/L	90
22) Diisopropyl ether	3.885	45	253066	9.566	ug/L	95
23) 1,1-Dichloroethane	4.012	63	173926	10.315	ug/L	99
24) Halothane	4.071	117	80394	10.517	ug/L	99

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N20.D
Acq On : 9 Aug 2023 3:42 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1813882,ICAL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 09 13:25:39 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
25) Acrylonitrile	4.080	53	18574	9.254	ug/L	#	88
26) Ethyl tert-butyl ether	4.227	59	224360	9.292	ug/L	#	84
27) Vinyl acetate	4.256	43	46420M6	7.156	ug/L		
28) cis-1,2-Dichloroethene	4.530	96	107297	10.056	ug/L		93
29) 2,2-Dichloropropane	4.618	77	126183	9.875	ug/L		99
30) Bromochloromethane	4.716	128	50979	10.253	ug/L		98
31) Cyclohexane	4.696	56	168720	10.161	ug/L		86
32) Chloroform	4.785	83	173384	10.302	ug/L		98
33) Ethyl acetate	4.902	43	46415	8.837	ug/L		98
34) Carbon tetrachloride	4.902	117	138688	9.727	ug/L		98
35) Tetrahydrofuran	4.941	42	15001M6	9.518	ug/L		
37) 1,1,1-Trichloroethane	4.970	97	165273	10.987	ug/L		99
39) 2-Butanone	5.088	43	17546	7.744	ug/L		88
40) 1,1-Dichloropropene	5.088	75	128481	10.392	ug/L		94
41) Benzene	5.332	78	364018	10.360	ug/L		98
42) tert-Amyl methyl ether	5.440	73	190895	9.139	ug/L		91
44) 1,2-Dichloroethane	5.547	62	113222	9.763	ug/L		99
47) Methyl cyclohexane	5.900	83	163741	9.739	ug/L		94
48) Trichloroethene	5.919	95	114349	10.153	ug/L		89
50) Dibromomethane	6.369	93	51785	9.718	ug/L		91
51) 1,2-Dichloropropane	6.457	63	89302	10.029	ug/L	#	89
53) 2-Chloroethyl vinyl ether	7.161	63	37097	8.390	ug/L		96
54) Bromodichloromethane	6.535	83	120584	9.797	ug/L		100
57) 1,4-Dioxane	6.750	88	16397	378.319	ug/L	#	94
58) cis-1,3-Dichloropropene	7.220	75	134065	9.760	ug/L		97
61) Toluene	7.474	92	234061	10.005	ug/L		99
62) 4-Methyl-2-pentanone	7.914	58	15778	8.783	ug/L		92
63) Tetrachloroethene	7.914	166	116314	10.441	ug/L		91
65) trans-1,3-Dichloropropene	7.973	75	109584	9.515	ug/L		92
67) Ethyl methacrylate	8.149	69	75569	10.146	ug/L		98
68) 1,1,2-Trichloroethane	8.149	83	57385	9.718	ug/L		96
69) Chlorodibromomethane	8.355	129	85789	9.533	ug/L		99
70) 1,3-Dichloropropane	8.472	76	114798	9.832	ug/L		100
71) 1,2-Dibromoethane	8.628	107	75593	9.477	ug/L		100
72) 2-Hexanone	8.922	43	27925	8.725	ug/L		96
73) Chlorobenzene	9.275	112	274465	10.200	ug/L		88
74) Ethylbenzene	9.304	91	453045	10.005	ug/L		93
75) 1,1,1,2-Tetrachloroethane	9.353	131	92292	9.557	ug/L		98
76) p/m Xylene	9.490	106	360355	20.335	ug/L		84
77) o Xylene	10.039	106	341440	19.786	ug/L		83

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N20.D
Acq On : 9 Aug 2023 3:42 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1813882,ICAL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 09 13:25:39 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230808NICAL\V05230808N10.D
Sub List : 8260-Curve - Megamix plus Diox

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
78) Styrene	10.107	104	561470	19.793	ug/L		86
80) Bromoform	10.147	173	46988	8.384	ug/L		97
82) Isopropylbenzene	10.431	105	435655	9.526	ug/L		94
84) Bromobenzene	10.891	156	115353	9.985	ug/L		100
85) n-Propylbenzene	10.930	91	533941	10.095	ug/L		94
86) 1,4-Dichlorobutane	10.960	55	107022	9.781	ug/L		92
87) 1,1,2,2-Tetrachloroethane	11.038	83	63649	8.517	ug/L		97
88) 4-Ethyltoluene	11.058	105	453778	10.299	ug/L		96
89) 2-Chlorotoluene	11.097	91	307096M6	9.806	ug/L		
90) 1,3,5-Trimethylbenzene	11.156	105	388328	9.845	ug/L		93
91) 1,2,3-Trichloropropane	11.175	75	55937	8.844	ug/L		94
92) trans-1,4-Dichloro-2-b...	11.234	53	21111	9.629	ug/L	#	77
93) 4-Chlorotoluene	11.293	91	317024M6	9.793	ug/L		
94) tert-Butylbenzene	11.508	119	331340	10.116	ug/L		97
97) 1,2,4-Trimethylbenzene	11.587	105	394432	10.292	ug/L		93
98) sec-Butylbenzene	11.694	105	475528	10.075	ug/L		96
99) p-Isopropyltoluene	11.851	119	415460	9.981	ug/L		94
100) 1,3-Dichlorobenzene	11.930	146	222620	9.948	ug/L		97
101) 1,4-Dichlorobenzene	12.018	146	227711	10.010	ug/L		97
102) p-Diethylbenzene	12.233	119	239553	9.928	ug/L		97
103) n-Butylbenzene	12.292	91	349586	9.605	ug/L		97
104) 1,2-Dichlorobenzene	12.449	146	207003	10.020	ug/L		95
105) 1,2,4,5-Tetramethylben...	13.036	119	352552	9.257	ug/L		93
106) 1,2-Dibromo-3-chloropr...	13.242	155	11850	9.265	ug/L		98
107) 1,3,5-Trichlorobenzene	13.262	180	155824	9.793	ug/L		96
108) Hexachlorobutadiene	13.840	225	51491	8.874	ug/L		98
109) 1,2,4-Trichlorobenzene	13.869	180	140438	9.953	ug/L		99
110) Naphthalene	14.163	128	297261	9.672	ug/L		100
111) 1,2,3-Trichlorobenzene	14.330	180	126780	9.900	ug/L		99

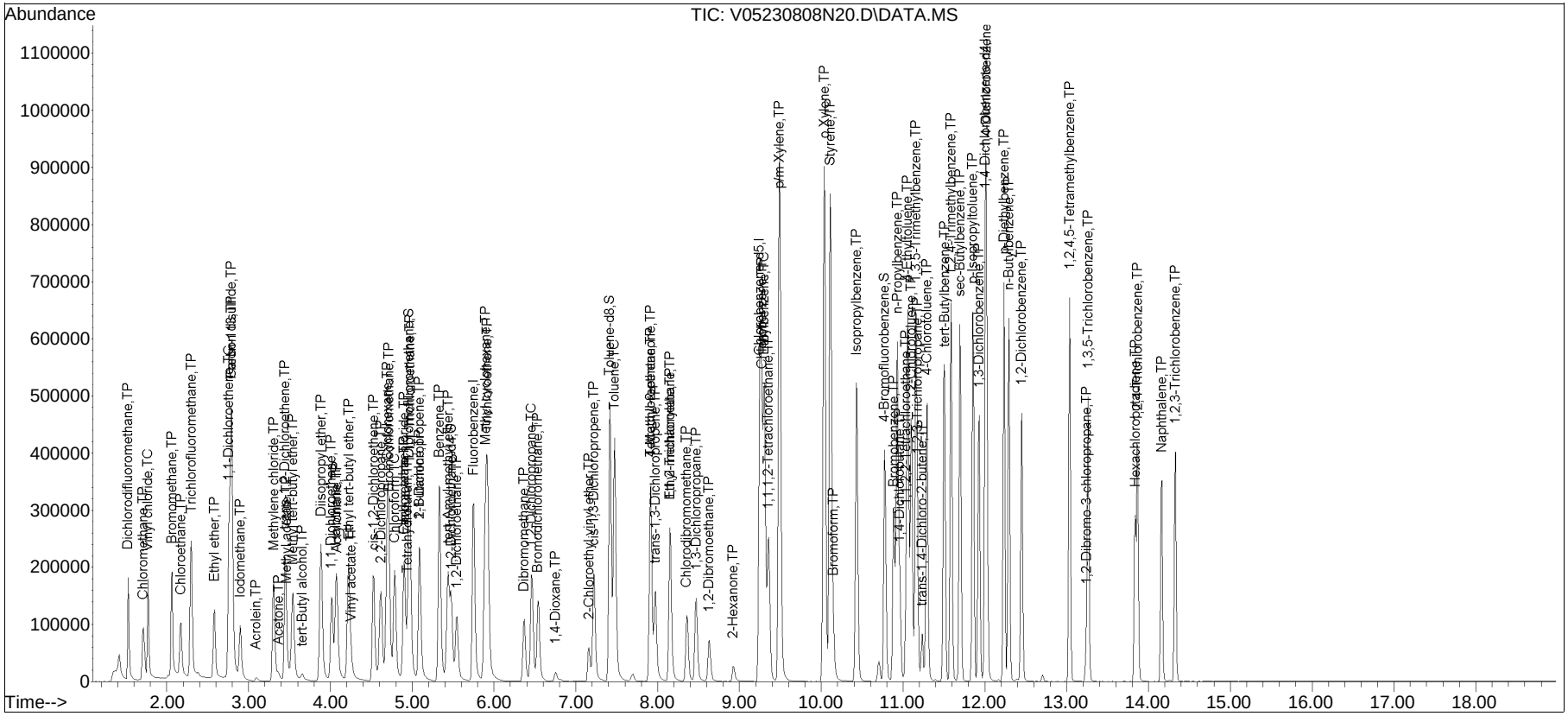
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230808NICAL\
Data File : V05230808N20.D
Acq On : 9 Aug 2023 3:42 am
Operator : VOA105:PID
Sample : C8260STD10PPB
Misc : WG1813882,ICAL
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Aug 09 13:25:39 2023
Quant Method : K:\VOA105\2023\230808NICAL\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve - Megamix plus Diox\V05230808N10.D•

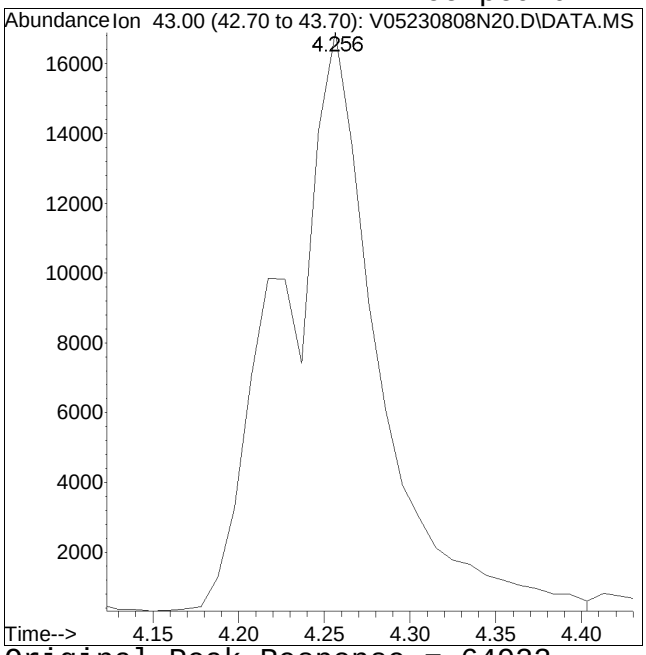


Manual Integration Report

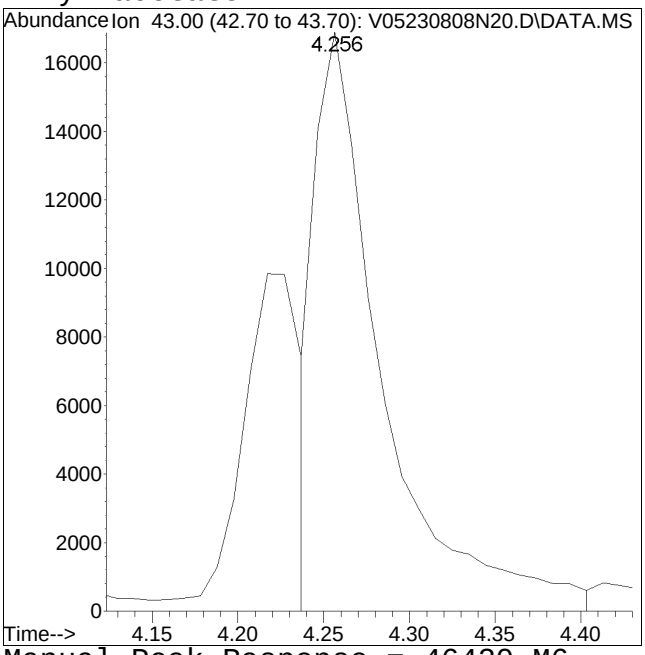
Data Path : K:\VOA105\2023\230808NICALQ
Data File : V05230808N20.D
Date Inj'd : 8/9/2023 3:42 am
Sample : C8260STD10PPB

Method : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 8/9/2023 1:24 pm

Compound #27: Vinyl acetate



Original Peak Response = 64922



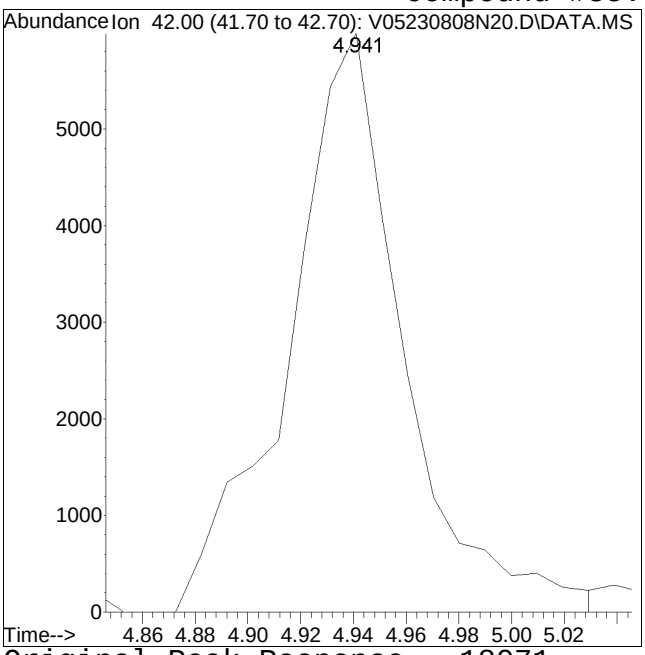
Manual Peak Response = 46420 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

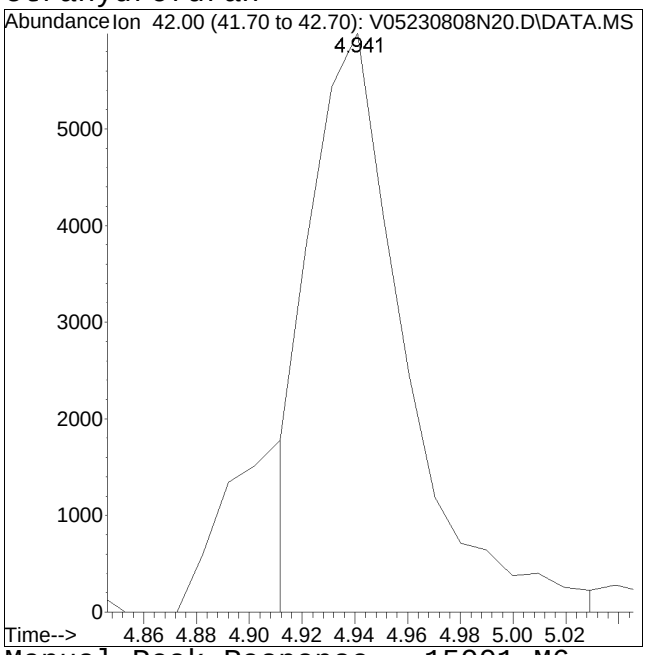
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N20.D Operator : VOA105:PID
Date Inj'd : 8/9/2023 3:42 am Instrument : VOA105
Sample : C8260STD10PPB Quant Date : 8/9/2023 1:24 pm

Compound #35: Tetrahydrofuran



Original Peak Response = 18071



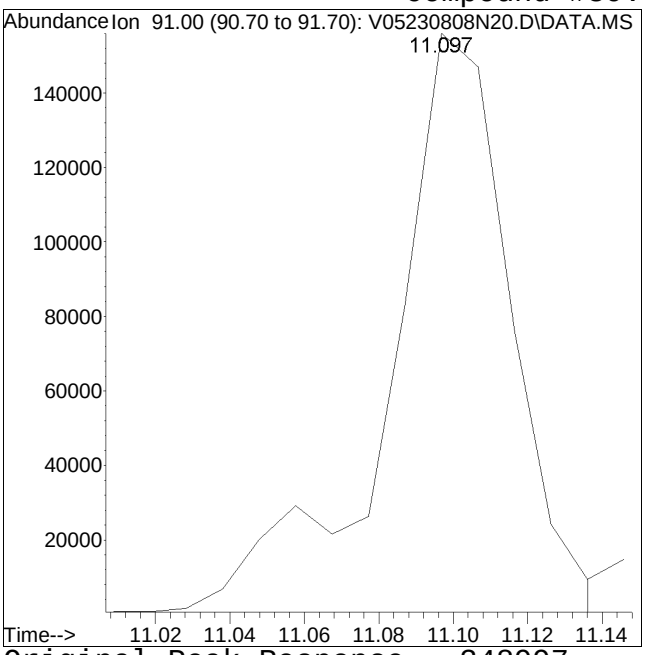
Manual Peak Response = 15001 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

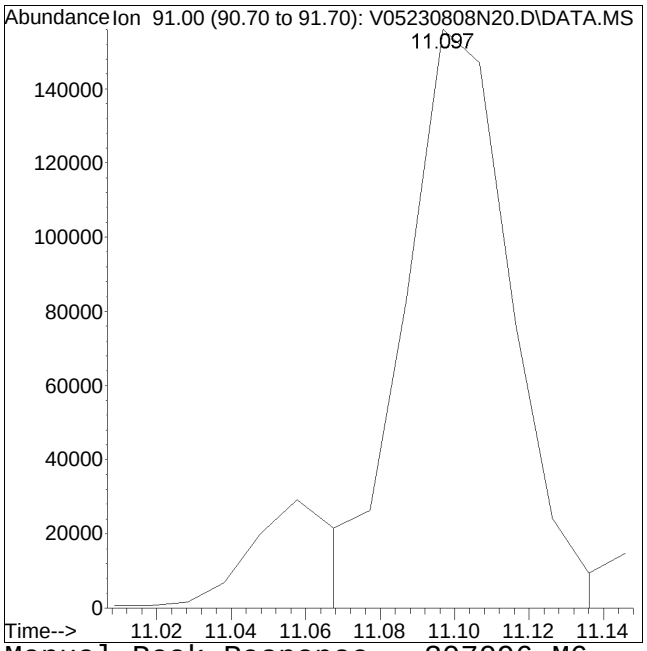
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N20.D Operator : VOA105:PID
Date Inj'd : 8/9/2023 3:42 am Instrument : VOA105
Sample : C8260STD10PPB Quant Date : 8/9/2023 1:24 pm

Compound #89: 2-Chlorotoluene



Original Peak Response = 348997



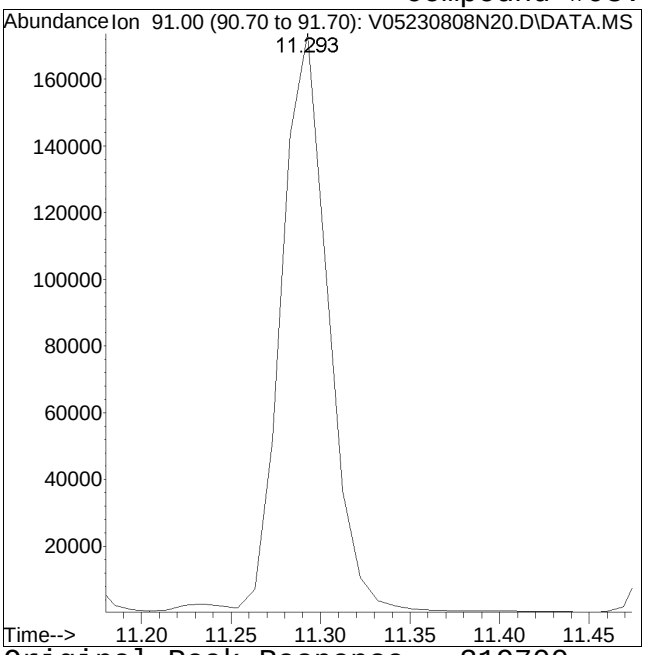
Manual Peak Response = 307096 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

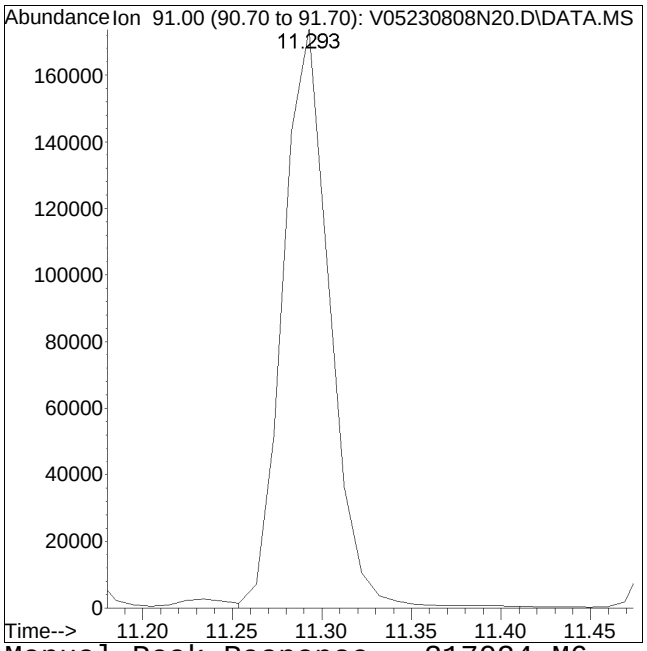
Manual Integration Report

Data Path : K:\VOA105\2023\230808NICALQMethod : V105_230808N_8260.m
Data File : V05230808N20.D Operator : VOA105:PID
Date Inj'd : 8/9/2023 3:42 am Instrument : VOA105
Sample : C8260STD10PPB Quant Date : 8/9/2023 1:24 pm

Compound #93: 4-Chlorotoluene



Original Peak Response = 319700



Manual Peak Response = 317024 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Evaluate Relative Error Report VOA105

Method Path : K:\VOA105\2023\230808NICAL\
Method File : V105_230808N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Aug 09 12:54:55 2023

	COMPOUND	CalFit	Units	TrueMid	MidConc	%RE	TrueLow	LowConc	%RE
34	TP Carbon tetrachloride	Q	ug/L	10.0	9.227	-7.7	0.50	0.616	23.2
47	TP Methyl cyclohexane	L	ug/L	10.0	9.708	-2.9	2.00	2.137	6.9
80	TP Bromoform	Q	ug/L	10.0	8.513	-14.9	0.50	0.642	28.4
103	TP n-Butylbenzene	Q	ug/L	10.0	9.237	-7.6	0.50	0.612	22.4
108	TP Hexachlorobutadiene	Q	ug/L	10.0	8.750	-12.5	0.50	0.645	29.0

Calibration Correlation Report

	COMPOUND	CalFit	CoefOfDet	QuadTerm	LinTerm	Constant
34	TP Carbon tetrachloride	Quadratic	0.999555	0.001532	0.402357	-0.0125742
47	TP Methyl cyclohexane	Linear	0.999701	0.000000	0.522499	-0.0599332
80	TP Bromoform	Quadratic	0.998961	0.002234	0.280937	-0.00827012
103	TP n-Butylbenzene	Quadratic	0.999625	0.006980	1.82554	-0.0573167
108	TP Hexachlorobutadiene	Quadratic	0.999290	0.000844	0.29261	-0.00954234

Continuing Calibration

Calibration Verification Summary
Form 7
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: VOA105	**Calibration Date**	: 09/07/23 07:28		
Lab File ID	: V05230907A01	**Init. Calib. Date(s)**	: 08/08/23	08/09/23	
Sample No	: WG1824710-2	**Init. Calib. Times**	: 20:56	01:10	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	72	-.01
Dichlorodifluoromethane	0.324	0.324	-	0	20	72	0
Chloromethane	0.311	0.325	-	-4.5	20	76	0
Vinyl chloride	0.326	0.346	-	-6.1	20	73	0
Bromomethane	0.252	0.257	-	-2	20	80	0
Chloroethane	0.232	0.279	-	-20.3*	20	84	0
Trichlorofluoromethane	0.481	0.497	-	-3.3	20	71	0
Ethyl ether	0.138	0.124	-	10.1	20	66	0
1,1-Dichloroethene	0.289	0.3	-	-3.8	20	73	0
Carbon disulfide	0.92	0.985	-	-7.1	20	77	0
Freon-113	0.32	0.333	-	-4.1	20	74	0
Iodomethane	0.428	0.284	-	33.6*	20	49	0
Acrolein	0.023	0.029	-	-26.1*	20	97	0
Methylene chloride	0.266	0.275	-	-3.4	20	76	0
Acetone	0.043	0.039	-	9.3	20	72	0
trans-1,2-Dichloroethene	0.265	0.28	-	-5.7	20	76	0
Methyl acetate	0.098	0.095	-	3.1	20	69	0
Methyl tert-butyl ether	0.559	0.453	-	19	20	60	0
tert-Butyl alcohol	0.00966	0.00949*	-	1.8	20	72	0
Diisopropyl ether	0.725	0.696	-	4	20	72	0
1,1-Dichloroethane	0.462	0.488	-	-5.6	20	76	0
Halothane	0.21	0.223	-	-6.2	20	74	0
Acrylonitrile	0.055	0.048	-	12.7	20	66	0
Ethyl tert-butyl ether	0.662	0.591	-	10.7	20	68	0
Vinyl acetate	0.178	0.309	-	-73.6*	20	147	0
cis-1,2-Dichloroethene	0.293	0.313	-	-6.8	20	77	0
2,2-Dichloropropane	0.35	0.406	-	-16	20	84	0
Bromochloromethane	0.136	0.152	-	-11.8	20	79	0
Cyclohexane	0.455	0.47	-	-3.3	20	74	0
Chloroform	0.461	0.491	-	-6.5	20	77	0
Ethyl acetate	0.144	0.131	-	9	20	71	0
Carbon tetrachloride	10	10.271	-	-2.7	20	80	0
Tetrahydrofuran	0.043	0.038	-	11.6	20	62	0
Dibromofluoromethane	0.317	0.329	-	-3.8	20	74	0
1,1,1-Trichloroethane	0.412	0.445	-	-8	20	76	0
2-Butanone	0.062	0.054	-	12.9	20	70	-.01
1,1-Dichloropropene	0.339	0.346	-	-2.1	20	73	0
Benzene	0.963	1.016	-	-5.5	20	76	0
tert-Amyl methyl ether	0.573	0.477	-	16.8	20	63	0
1,2-Dichloroethane-d4	0.308	0.328	-	-6.5	20	73	0
1,2-Dichloroethane	0.318	0.324	-	-1.9	20	76	0
Methyl cyclohexane	10	9.765	-	2.3	20	72	-.01
Trichloroethene	0.309	0.293	-	5.2	20	69	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: VOA105	**Calibration Date**	: 09/07/23 07:28		
Lab File ID	: V05230907A01	**Init. Calib. Date(s)**	: 08/08/23	08/09/23	
Sample No	: WG1824710-2	**Init. Calib. Times**	: 20:56	01:10	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Dibromomethane	0.146	0.148	-	-1.4	20	74	0
1,2-Dichloropropane	0.244	0.247	-	-1.2	20	74	0
Bromodichloromethane	0.337	0.351	-	-4.2	20	78	0
1,4-Dioxane	0.00119	0.00124*	-	-4.2	20	73	0
cis-1,3-Dichloropropene	0.377	0.371	-	1.6	20	74	0
Chlorobenzene-d5	1	1	-	0	20	69	0
Toluene-d8	1.166	1.186	-	-1.7	20	69	0
Toluene	0.674	0.713	-	-5.8	20	73	0
4-Methyl-2-pentanone	0.052	0.043	-	17.3	20	58	0
Tetrachloroethene	0.321	0.349	-	-8.7	20	73	0
trans-1,3-Dichloropropene	0.332	0.334	-	-0.6	20	73	0
Ethyl methacrylate	0.214	0.17	-	20.6*	20	56	0
1,1,2-Trichloroethane	0.17	0.172*	-	-1.2	20	72	0
Chlorodibromomethane	0.259	0.273	-	-5.4	20	78	0
1,3-Dichloropropane	0.336	0.336	-	0	20	71	0
1,2-Dibromoethane	0.23	0.229	-	0.4	20	72	0
2-Hexanone	0.092	0.068	-	26.1*	20	54	0
Chlorobenzene	0.775	0.84	-	-8.4	20	76	0
Ethylbenzene	1.304	1.393	-	-6.8	20	75	0
1,1,1,2-Tetrachloroethane	0.278	0.293	-	-5.4	20	76	0
p/m Xylene	0.51	0.565	-	-10.8	20	77	0
o Xylene	0.497	0.54	-	-8.7	20	76	0
Styrene	0.817	0.882	-	-8	20	76	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	71	0
Bromoform	10	8.91	-	10.9	20	75	-.01
Isopropylbenzene	2.227	2.365	-	-6.2	20	77	0
4-Bromofluorobenzene	0.783	0.762	-	2.7	20	69	0
Bromobenzene	0.563	0.607	-	-7.8	20	79	0
n-Propylbenzene	2.576	2.784	-	-8.1	20	78	0
1,4-Dichlorobutane	0.533	0.44	-	17.4	20	62	0
1,1,2,2-Tetrachloroethane	0.364	0.356	-	2.2	20	75	0
4-Ethyltoluene	2.146	2.394	-	-11.6	20	79	0
2-Chlorotoluene	1.525	1.622	-	-6.4	20	78	0
1,3,5-Trimethylbenzene	1.921	2.023	-	-5.3	20	77	0
1,2,3-Trichloropropane	0.308	0.271	-	12	20	68	0
trans-1,4-Dichloro-2-buten	0.107	0.086	-	19.6	20	58	0
4-Chlorotoluene	1.577	1.677	-	-6.3	20	78	0
tert-Butylbenzene	1.595	1.75	-	-9.7	20	80	0
1,2,4-Trimethylbenzene	1.867	1.902	-	-1.9	20	74	0
sec-Butylbenzene	2.299	2.563	-	-11.5	20	79	0
p-Isopropyltoluene	2.027	2.224	-	-9.7	20	79	0
1,3-Dichlorobenzene	1.09	1.2	-	-10.1	20	81	0
1,4-Dichlorobenzene	1.108	1.19	-	-7.4	20	80	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Volatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: VOA105		**Calibration Date**	: 09/07/23 07:28	
Lab File ID	: V05230907A01		**Init. Calib. Date(s)**	: 08/08/23	08/09/23
Sample No	: WG1824710-2		**Init. Calib. Times**	: 20:56	01:10
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
p-Diethylbenzene	1.175	1.306	-	-11.1	20	79	0
n-Butylbenzene	10	10.29	-	-2.9	20	80	0
1,2-Dichlorobenzene	1.006	1.067	-	-6.1	20	78	0
1,2,4,5-Tetramethylbenzene	1.855	1.692	-	8.8	20	69	0
1,2-Dibromo-3-chloropropan	0.062	0.058	-	6.5	20	72	0
1,3,5-Trichlorobenzene	0.775	0.79	-	-1.9	20	74	0
Hexachlorobutadiene	10	9.966	-	0.3	20	82	0
1,2,4-Trichlorobenzene	0.687	0.646	-	6	20	69	0
Naphthalene	1.497	1.291	-	13.8	20	63	0
1,2,3-Trichlorobenzene	0.624	0.591	-	5.3	20	69	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: ELAINE	**Calibration Date**	: 09/08/23 08:56		
Lab File ID	: VE230908A01	**Init. Calib. Date(s)**	: 07/25/23	07/26/23	
Sample No	: WG1825752-2	**Init. Calib. Times**	: 21:39	01:41	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Fluorobenzene	1	1	-	0	20	87	0
Dichlorodifluoromethane	0.29	0.304	-	-4.8	20	81	0
Chloromethane	0.368	0.45	-	-22.3*	20	95	0
Vinyl chloride	0.388	0.342	-	11.9	20	68	0
Bromomethane	0.227	0.133	-	41.4*	20	47	0
Chloroethane	0.234	0.19	-	18.8	20	64	-.01
Trichlorofluoromethane	0.367	0.334	-	9	20	69	0
Ethyl ether	0.122	0.104	-	14.8	20	68	0
1,1-Dichloroethene	0.208	0.222	-	-6.7	20	83	0
Carbon disulfide	0.644	0.756	-	-17.4	20	92	0
Freon-113	0.215	0.251	-	-16.7	20	87	0
Methylene chloride	0.251	0.275	-	-9.6	20	93	0
Acetone	10	13.269	-	-32.7*	20	108	0
trans-1,2-Dichloroethene	0.227	0.248	-	-9.3	20	86	0
Methyl acetate	0.142	0.189	-	-33.1*	20	116	0
Methyl tert-butyl ether	0.574	0.535	-	6.8	20	81	0
tert-Butyl alcohol	0.014	0.019	-	-35.7*	20	116	-.01
Diisopropyl ether	0.934	1.176	-	-25.9*	20	105	0
1,1-Dichloroethane	0.548	0.545	-	0.5	20	77	0
Halothane	0.172	0.196	-	-14	20	88	0
Acrylonitrile	0.071	0.079	-	-11.3	20	90	0
Ethyl tert-butyl ether	0.876	0.839	-	4.2	20	83	0
Vinyl acetate	0.347	0.564	-	-62.5*	20	149	0
cis-1,2-Dichloroethene	0.261	0.277	-	-6.1	20	84	0
2,2-Dichloropropane	0.379	0.374	-	1.3	20	80	0
Bromochloromethane	0.111	0.13	-	-17.1	20	95	0
Cyclohexane	0.582	0.594	-	-2.1	20	79	0
Chloroform	0.42	0.451	-	-7.4	20	88	0
Ethyl acetate	0.191	0.254	-	-33*	20	114	0
Carbon tetrachloride	0.304	0.332	-	-9.2	20	86	0
Tetrahydrofuran	0.058	0.085	-	-46.6*	20	119	-.01
Dibromofluoromethane	0.282	0.291	-	-3.2	20	89	0
1,1,1-Trichloroethane	0.375	0.392	-	-4.5	20	83	0
2-Butanone	0.083	0.103	-	-24.1*	20	114	0
1,1-Dichloropropene	0.314	0.327	-	-4.1	20	83	0
Benzene	0.943	1.055	-	-11.9	20	92	0
tert-Amyl methyl ether	0.588	0.593	-	-0.9	20	88	-.01
1,2-Dichloroethane-d4	0.37	0.353	-	4.6	20	78	0
1,2-Dichloroethane	0.384	0.351	-	8.6	20	76	0
Methyl cyclohexane	0.409	0.434	-	-6.1	20	87	0
Trichloroethene	0.255	0.271	-	-6.3	20	86	0
Dibromomethane	0.128	0.135	-	-5.5	20	87	0
1,2-Dichloropropane	0.297	0.298	-	-0.3	20	82	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Volatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: ELAINE	**Calibration Date**	: 09/08/23 08:56		
Lab File ID	: VE230908A01	**Init. Calib. Date(s)**	: 07/25/23	07/26/23	
Sample No	: WG1825752-2	**Init. Calib. Times**	: 21:39	01:41	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Bromodichloromethane	0.328	0.342	-	-4.3	20	86	0
1,4-Dioxane	0.00107	0.00177*	-	-65.4*	20	138	0
cis-1,3-Dichloropropene	0.38	0.396	-	-4.2	20	90	0
Chlorobenzene-d5	1	1	-	0	20	86	0
Toluene-d8	1.235	1.326	-	-7.4	20	90	0
Toluene	0.671	0.788	-	-17.4	20	94	0
4-Methyl-2-pentanone	0.081	0.079	-	2.5	20	83	0
Tetrachloroethene	0.264	0.329	-	-24.6*	20	99	0
trans-1,3-Dichloropropene	0.38	0.402	-	-5.8	20	89	0
Ethyl methacrylate	0.261	0.226	-	13.4	20	71	0
1,1,2-Trichloroethane	0.172	0.211	-	-22.7*	20	99	0
Chlorodibromomethane	0.243	0.272	-	-11.9	20	93	0
1,3-Dichloropropane	0.371	0.419	-	-12.9	20	95	0
1,2-Dibromoethane	0.203	0.221	-	-8.9	20	90	0
2-Hexanone	0.144	0.163	-	-13.2	20	100	0
Chlorobenzene	0.729	0.843	-	-15.6	20	95	0
Ethylbenzene	1.334	1.419	-	-6.4	20	84	0
1,1,1,2-Tetrachloroethane	0.251	0.309	-	-23.1*	20	100	0
p/m Xylene	0.517	0.573	-	-10.8	20	88	0
o Xylene	0.516	0.552	-	-7	20	86	0
Styrene	0.84	0.914	-	-8.8	20	87	0
1,4-Dichlorobenzene-d4	1	1	-	0	20	97	0
Bromoform	0.251	0.263	-	-4.8	20	105	0
Isopropylbenzene	2.487	2.277	-	8.4	20	84	0
4-Bromofluorobenzene	0.924	0.745	-	19.4	20	80	0
Bromobenzene	0.555	0.561	-	-1.1	20	96	0
n-Propylbenzene	3.012	2.877	-	4.5	20	87	0
1,4-Dichlorobutane	0.856	0.745	-	13	20	83	0
1,1,2,2-Tetrachloroethane	0.404	0.462	-	-14.4	20	114	0
4-Ethyltoluene	2.477	2.374	-	4.2	20	88	0
2-Chlorotoluene	1.758	1.686	-	4.1	20	86	0
1,3,5-Trimethylbenzene	2.106	2.009	-	4.6	20	88	0
1,2,3-Trichloropropane	0.36	0.361	-	-0.3	20	96	0
trans-1,4-Dichloro-2-buten	0.176	0.152	-	13.6	20	83	0
4-Chlorotoluene	1.82	1.731	-	4.9	20	88	0
tert-Butylbenzene	1.759	1.608	-	8.6	20	83	0
1,2,4-Trimethylbenzene	2.072	1.975	-	4.7	20	87	0
sec-Butylbenzene	2.633	2.465	-	6.4	20	85	0
p-Isopropyltoluene	2.223	2.044	-	8.1	20	85	0
1,3-Dichlorobenzene	1.126	1.192	-	-5.9	20	97	0
1,4-Dichlorobenzene	1.122	1.205	-	-7.4	20	99	0
p-Diethylbenzene	1.315	1.199	-	8.8	20	84	0
n-Butylbenzene	1.914	1.867	-	2.5	20	88	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Volatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: ELAINE		**Calibration Date**	: 09/08/23 08:56	
Lab File ID	: VE230908A01		**Init. Calib. Date(s)**	: 07/25/23	07/26/23
Sample No	: WG1825752-2		**Init. Calib. Times**	: 21:39	01:41
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,2-Dichlorobenzene	1.055	1.106	-	-4.8	20	98	0
1,2,4,5-Tetramethylbenzene	1.994	1.646	-	17.5	20	77	0
1,2-Dibromo-3-chloropropan	0.062	0.067	-	-8.1	20	99	0
1,3,5-Trichlorobenzene	0.715	0.735	-	-2.8	20	97	0
Hexachlorobutadiene	0.211	0.207	-	1.9	20	89	0
1,2,4-Trichlorobenzene	0.617	0.594	-	3.7	20	92	0
Naphthalene	1.522	1.235	-	18.9	20	80	0
1,2,3-Trichlorobenzene	0.562	0.545	-	3	20	95	0

*** Value outside of QC limits.**

Evaluate Continuing Calibration Report

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Acq On : 7 Sep 2023 7:28 am
Operator : VOA105:PID
Sample : WG1824710-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 07:52:09 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	72	-0.01
2	TP	Dichlorodifluoromethane	0.324	0.324	0.0	72	0.00
3	TP	Chloromethane	0.311	0.325	-4.5	76	0.00
4	TC	Vinyl chloride	0.326	0.346	-6.1	73	0.00
5	TP	Bromomethane	0.252	0.257	-2.0	80	0.00
6	TP	Chloroethane	0.232	0.279	-20.3#	84	0.00
7	TP	Trichlorofluoromethane	0.481	0.497	-3.3	71	0.00
8	TP	Ethyl ether	0.138	0.124	10.1	66	0.00
10	TC	1,1-Dichloroethene	0.289	0.300	-3.8	73	0.00
11	TP	Carbon disulfide	0.920	0.985	-7.1	77	0.00
12	TP	Freon-113	0.320	0.333	-4.1	74	0.00
13	TP	Iodomethane	0.428	0.284	33.6#	49#	0.00
14	TP	Acrolein	0.023	0.029	-26.1#	97	0.00
15	TP	Methylene chloride	0.266	0.275	-3.4	76	0.00
17	TP	Acetone	0.043	0.039	9.3	72	0.00
18	TP	trans-1,2-Dichloroethene	0.265	0.280	-5.7	76	0.00
19	TP	Methyl acetate	0.098	0.095	3.1	69	0.00
20	TP	Methyl tert-butyl ether	0.559	0.453	19.0	60	0.00
21	TP	tert-Butyl alcohol	0.00966	0.00949#	1.8	72	0.00
22	TP	Diisopropyl ether	0.725	0.696	4.0	72	0.00
23	TP	1,1-Dichloroethane	0.462	0.488	-5.6	76	0.00
24	TP	Halothane	0.210	0.223	-6.2	74	0.00
25	TP	Acrylonitrile	0.055	0.048	12.7	66	0.00
26	TP	Ethyl tert-butyl ether	0.662	0.591	10.7	68	0.00
27	TP	Vinyl acetate	0.178	0.309	-73.6#	147	0.00
28	TP	cis-1,2-Dichloroethene	0.293	0.313	-6.8	77	0.00
29	TP	2,2-Dichloropropane	0.350	0.406	-16.0	84	0.00
30	TP	Bromochloromethane	0.136	0.152	-11.8	79	0.00
31	TP	Cyclohexane	0.455	0.470	-3.3	74	0.00
32	TC	Chloroform	0.461	0.491	-6.5	77	0.00
33	TP	Ethyl acetate	0.144	0.131	9.0	71	0.00
34	TP	Carbon tetrachloride	* 10.000	10.271	-2.7	80	0.00
35	TP	Tetrahydrofuran	0.043	0.038	11.6	62	0.00
36	S	Dibromofluoromethane	0.317	0.329	-3.8	74	0.00
37	TP	1,1,1-Trichloroethane	0.412	0.445	-8.0	76	0.00
39	TP	2-Butanone	0.062	0.054	12.9	70	-0.01
40	TP	1,1-Dichloropropene	0.339	0.346	-2.1	73	0.00
41	TP	Benzene	0.963	1.016	-5.5	76	0.00
42	TP	tert-Amyl methyl ether	0.573	0.477	16.8	63	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Acq On : 7 Sep 2023 7:28 am
Operator : VOA105:PID
Sample : WG1824710-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 07:52:09 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
43	S	1,2-Dichloroethane-d4	0.308	0.328	-6.5	73	0.00
44	TP	1,2-Dichloroethane	0.318	0.324	-1.9	76	0.00
47	TP	Methyl cyclohexane	* 10.000	9.765	2.3	72	-0.01
48	TP	Trichloroethene	0.309	0.293	5.2	69	0.00
50	TP	Dibromomethane	0.146	0.148	-1.4	74	0.00
51	TC	1,2-Dichloropropane	0.244	0.247	-1.2	74	0.00
54	TP	Bromodichloromethane	0.337	0.351	-4.2	78	0.00
57	TP	1,4-Dioxane	0.00119	0.00124#	-4.2	73	0.00
58	TP	cis-1,3-Dichloropropene	0.377	0.371	1.6	74	0.00
59	I	Chlorobenzene-d5	1.000	1.000	0.0	69	0.00
60	S	Toluene-d8	1.166	1.186	-1.7	69	0.00
61	TC	Toluene	0.674	0.713	-5.8	73	0.00
62	TP	4-Methyl-2-pentanone	0.052	0.043	17.3	58	0.00
63	TP	Tetrachloroethene	0.321	0.349	-8.7	73	0.00
65	TP	trans-1,3-Dichloropropene	0.332	0.334	-0.6	73	0.00
67	TP	Ethyl methacrylate	0.214	0.170	20.6#	56	0.00
68	TP	1,1,2-Trichloroethane	0.170	0.172#	-1.2	72	0.00
69	TP	Chlorodibromomethane	0.259	0.273	-5.4	78	0.00
70	TP	1,3-Dichloropropane	0.336	0.336	0.0	71	0.00
71	TP	1,2-Dibromoethane	0.230	0.229	0.4	72	0.00
72	TP	2-Hexanone	0.092	0.068	26.1#	54	0.00
73	TP	Chlorobenzene	0.775	0.840	-8.4	76	0.00
74	TC	Ethylbenzene	1.304	1.393	-6.8	75	0.00
75	TP	1,1,1,2-Tetrachloroethane	0.278	0.293	-5.4	76	0.00
76	TP	p/m Xylene	0.510	0.565	-10.8	77	0.00
77	TP	o Xylene	0.497	0.540	-8.7	76	0.00
78	TP	Styrene	0.817	0.882	-8.0	76	0.00
79	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	71	0.00
80	TP	Bromoform	* 10.000	8.910	10.9	75	-0.01
82	TP	Isopropylbenzene	2.227	2.365	-6.2	77	0.00
83	S	4-Bromofluorobenzene	0.783	0.762	2.7	69	0.00
84	TP	Bromobenzene	0.563	0.607	-7.8	79	0.00
85	TP	n-Propylbenzene	2.576	2.784	-8.1	78	0.00
86	TP	1,4-Dichlorobutane	0.533	0.440	17.4	62	0.00
87	TP	1,1,2,2-Tetrachloroethane	0.364	0.356	2.2	75	0.00
88	TP	4-Ethyltoluene	2.146	2.394	-11.6	79	0.00
89	TP	2-Chlorotoluene	1.525	1.622	-6.4	78	0.00

Evaluate Continuing Calibration Report

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Acq On : 7 Sep 2023 7:28 am
Operator : VOA105:PID
Sample : WG1824710-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 07:52:09 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

	Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
90 TP	1,3,5-Trimethylbenzene		1.921	2.023	-5.3	77	0.00
91 TP	1,2,3-Trichloropropane		0.308	0.271	12.0	68	0.00
92 TP	trans-1,4-Dichloro-2-butene		0.107	0.086	19.6	58	0.00
93 TP	4-Chlorotoluene		1.577	1.677	-6.3	78	0.00
94 TP	tert-Butylbenzene		1.595	1.750	-9.7	80	0.00
97 TP	1,2,4-Trimethylbenzene		1.867	1.902	-1.9	74	0.00
98 TP	sec-Butylbenzene		2.299	2.563	-11.5	79	0.00
99 TP	p-Isopropyltoluene		2.027	2.224	-9.7	79	0.00
100 TP	1,3-Dichlorobenzene		1.090	1.200	-10.1	81	0.00
101 TP	1,4-Dichlorobenzene		1.108	1.190	-7.4	80	0.00
102 TP	p-Diethylbenzene		1.175	1.306	-11.1	79	0.00
103 TP	n-Butylbenzene	*	10.000	10.290	-2.9	80	0.00
104 TP	1,2-Dichlorobenzene		1.006	1.067	-6.1	78	0.00
105 TP	1,2,4,5-Tetramethylbenzene		1.855	1.692	8.8	69	0.00
106 TP	1,2-Dibromo-3-chloropropane		0.062	0.058	6.5	72	0.00
107 TP	1,3,5-Trichlorobenzene		0.775	0.790	-1.9	74	0.00
108 TP	Hexachlorobutadiene	*	10.000	9.966	0.3	82	0.00
109 TP	1,2,4-Trichlorobenzene		0.687	0.646	6.0	69	0.00
110 TP	Naphthalene		1.497	1.291	13.8	63	0.00
111 TP	1,2,3-Trichlorobenzene		0.624	0.591	5.3	69	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 3 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Acq On : 7 Sep 2023 7:28 am
Operator : VOA105:PID
Sample : WG1824710-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 07:52:09 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.743	96	255314	10.000	ug/L	-0.01
59) Chlorobenzene-d5	9.245	117	234811	10.000	ug/L	0.00
79) 1,4-Dichlorobenzene-d4	12.008	152	143322	10.000	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	4.961	113	83987	10.373	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.73%			
43) 1,2-Dichloroethane-d4	5.479	65	83707	10.653	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.53%			
60) Toluene-d8	7.415	98	278524	10.174	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.74%			
83) 4-Bromofluorobenzene	10.774	95	109195	9.735	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.35%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.527	85	82779	9.998	ug/L	98
3) Chloromethane	1.713	50	82926	10.453	ug/L	99
4) Vinyl chloride	1.772	62	88274	10.609	ug/L	95
5) Bromomethane	2.065	94	65672	10.216	ug/L	100
6) Chloroethane	2.163	64	71302	12.021	ug/L	96
7) Trichlorofluoromethane	2.300	101	126778	10.315	ug/L	100
8) Ethyl ether	2.584	74	31656	8.978	ug/L #	71
10) 1,1-Dichloroethene	2.760	96	76537	10.379	ug/L	98
11) Carbon disulfide	2.789	76	251373	10.707	ug/L	100
12) Freon-113	2.789	101	85044	10.410	ug/L #	74
13) Iodomethane	2.897	142	72594	6.644	ug/L	93
14) Acrolein	3.083	56	7407	12.658	ug/L	91
15) Methylene chloride	3.308	84	70134	10.330	ug/L	85
17) Acetone	3.366	43	9946	9.066	ug/L	98
18) trans-1,2-Dichloroethene	3.445	96	71609	10.592	ug/L	96
19) Methyl acetate	3.464	43	24140	9.650	ug/L	91
20) Methyl tert-butyl ether	3.542	73	115573	8.098	ug/L	93
21) tert-Butyl alcohol	3.660	59	12119	49.141	ug/L	95
22) Diisopropyl ether	3.885	45	177826	9.603	ug/L	95
23) 1,1-Dichloroethane	4.012	63	124655	10.562	ug/L	98
24) Halothane	4.070	117	56825	10.620	ug/L	99
25) Acrylonitrile	4.080	53	12211	8.691	ug/L #	86
26) Ethyl tert-butyl ether	4.217	59	150875	8.926	ug/L	90
27) Vinyl acetate	4.247	43	78775M6	17.349	ug/L	
28) cis-1,2-Dichloroethene	4.520	96	79900	10.698	ug/L	94

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Acq On : 7 Sep 2023 7:28 am
Operator : VOA105:PID
Sample : WG1824710-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 07:52:09 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
29) 2,2-Dichloropropane	4.618	77	103635	11.586	ug/L		98
30) Bromochloromethane	4.716	128	38741	11.131	ug/L		97
31) Cyclohexane	4.696	56	120061	10.330	ug/L		82
32) Chloroform	4.784	83	125335	10.639	ug/L		97
33) Ethyl acetate	4.892	43	33372	9.077	ug/L		97
34) Carbon tetrachloride	4.902	117	102711	10.271	ug/L		99
35) Tetrahydrofuran	4.931	42	9681M6	8.775	ug/L		
37) 1,1,1-Trichloroethane	4.970	97	113542	10.783	ug/L		99
39) 2-Butanone	5.078	43	13793	8.697	ug/L	#	79
40) 1,1-Dichloropropene	5.088	75	88434	10.219	ug/L		94
41) Benzene	5.332	78	259471	10.550	ug/L		97
42) tert-Amyl methyl ether	5.440	73	121892	8.337	ug/L		96
44) 1,2-Dichloroethane	5.547	62	82783	10.198	ug/L		98
47) Methyl cyclohexane	5.890	83	114968	9.765	ug/L		91
48) Trichloroethene	5.919	95	74799	9.488	ug/L		90
50) Dibromomethane	6.359	93	37678	10.101	ug/L		92
51) 1,2-Dichloropropane	6.457	63	63151	10.132	ug/L	#	89
54) Bromodichloromethane	6.535	83	89561	10.395	ug/L		99
57) 1,4-Dioxane	6.750	88	15884	523.562	ug/L		92
58) cis-1,3-Dichloropropene	7.220	75	94832	9.863	ug/L		97
61) Toluene	7.474	92	167404	10.582	ug/L		100
62) 4-Methyl-2-pentanone	7.914	58	10127	8.337	ug/L		91
63) Tetrachloroethene	7.914	166	81876	10.870	ug/L		91
65) trans-1,3-Dichloropropene	7.973	75	78450	10.074	ug/L		92
67) Ethyl methacrylate	8.149	69	39938	7.930	ug/L		84
68) 1,1,2-Trichloroethane	8.149	83	40433	10.126	ug/L		98
69) Chlorodibromomethane	8.354	129	64115	10.537	ug/L		100
70) 1,3-Dichloropropane	8.472	76	78978	10.004	ug/L		100
71) 1,2-Dibromoethane	8.628	107	53826	9.980	ug/L		98
72) 2-Hexanone	8.922	43	16080	7.430	ug/L		96
73) Chlorobenzene	9.265	112	197251	10.841	ug/L		87
74) Ethylbenzene	9.304	91	327125	10.684	ug/L		93
75) 1,1,1,2-Tetrachloroethane	9.353	131	68911	10.553	ug/L		98
76) p/m Xylene	9.490	106	265185	22.131	ug/L		82
77) o Xylene	10.039	106	253444	21.719	ug/L		83
78) Styrene	10.107	104	414216	21.595	ug/L	#	85
80) Bromoform	10.137	173	34943	8.910	ug/L		98
82) Isopropylbenzene	10.431	105	338977	10.619	ug/L		95
84) Bromobenzene	10.881	156	87026	10.791	ug/L		100
85) n-Propylbenzene	10.930	91	399034	10.808	ug/L		94
86) 1,4-Dichlorobutane	10.960	55	62991	8.247	ug/L		91

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Acq On : 7 Sep 2023 7:28 am
Operator : VOA105:PID
Sample : WG1824710-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 07:52:09 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
87)	1,1,2,2-Tetrachloroethane	11.038	83	51024	9.781	ug/L		98
88)	4-Ethyltoluene	11.058	105	343064	11.155	ug/L		95
89)	2-Chlorotoluene	11.097	91	232497M6	10.636	ug/L		
90)	1,3,5-Trimethylbenzene	11.156	105	289940	10.531	ug/L		93
91)	1,2,3-Trichloropropane	11.175	75	38799M1	8.788	ug/L		
92)	trans-1,4-Dichloro-2-b...	11.234	53	12360	8.076	ug/L	#	79
93)	4-Chlorotoluene	11.293	91	240403M6	10.638	ug/L		
94)	tert-Butylbenzene	11.498	119	250842	10.971	ug/L		96
97)	1,2,4-Trimethylbenzene	11.587	105	272534	10.187	ug/L		92
98)	sec-Butylbenzene	11.694	105	367341	11.149	ug/L		96
99)	p-Isopropyltoluene	11.851	119	318692	10.969	ug/L		94
100)	1,3-Dichlorobenzene	11.929	146	172024	11.013	ug/L		97
101)	1,4-Dichlorobenzene	12.018	146	170585	10.743	ug/L		96
102)	p-Diethylbenzene	12.233	119	187130	11.110	ug/L		96
103)	n-Butylbenzene	12.292	91	262081	10.290	ug/L		97
104)	1,2-Dichlorobenzene	12.449	146	152957	10.607	ug/L		96
105)	1,2,4,5-Tetramethylben...	13.036	119	242465	9.120	ug/L		93
106)	1,2-Dibromo-3-chloropr...	13.242	155	8265	9.258	ug/L		93
107)	1,3,5-Trichlorobenzene	13.262	180	113221	10.194	ug/L		97
108)	Hexachlorobutadiene	13.840	225	40548	9.966	ug/L		99
109)	1,2,4-Trichlorobenzene	13.869	180	92569	9.399	ug/L		98
110)	Naphthalene	14.163	128	184966	8.621	ug/L		100
111)	1,2,3-Trichlorobenzene	14.329	180	84748	9.480	ug/L		99

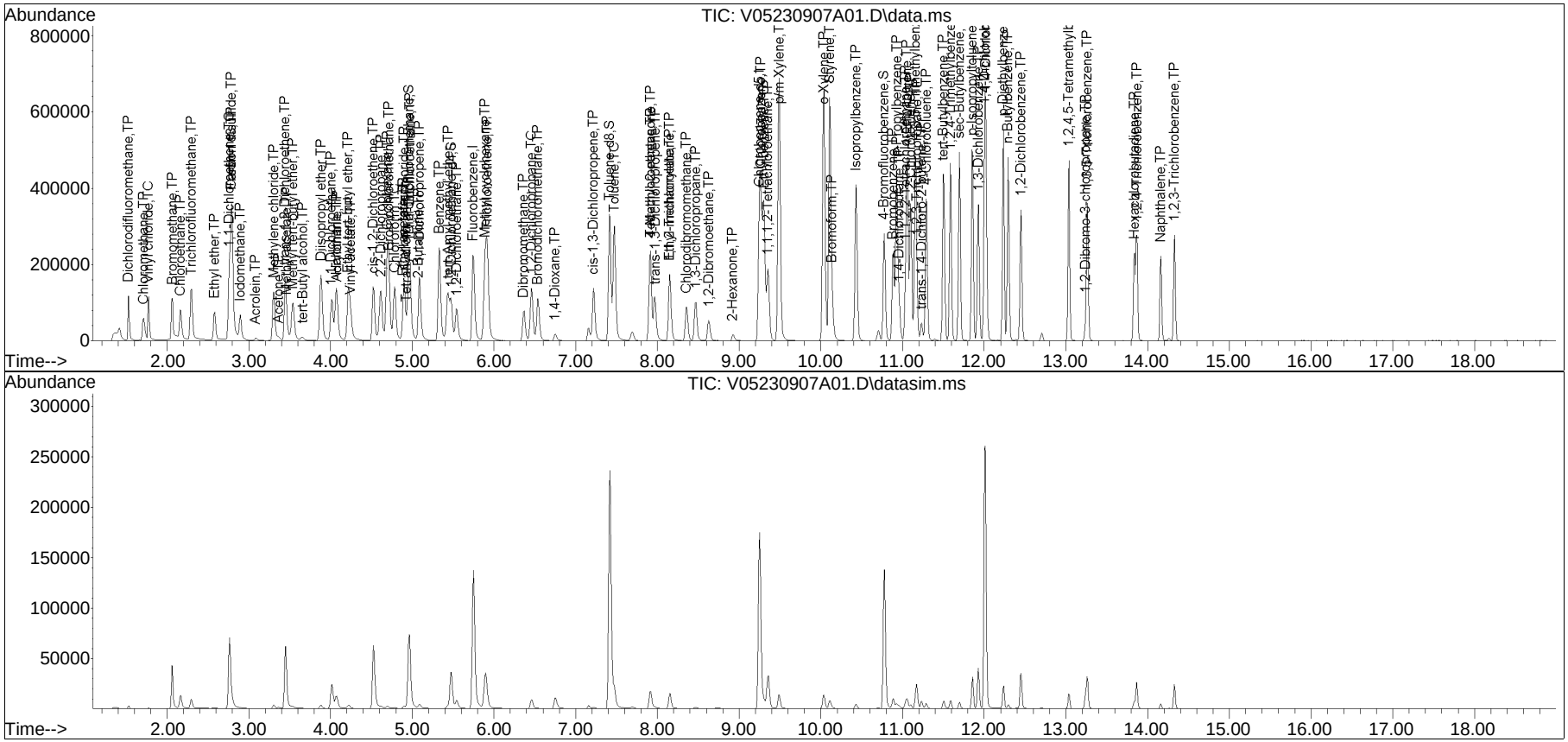
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Acq On : 7 Sep 2023 7:28 am
Operator : VOA105:PID
Sample : WG1824710-2 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 07:52:09 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

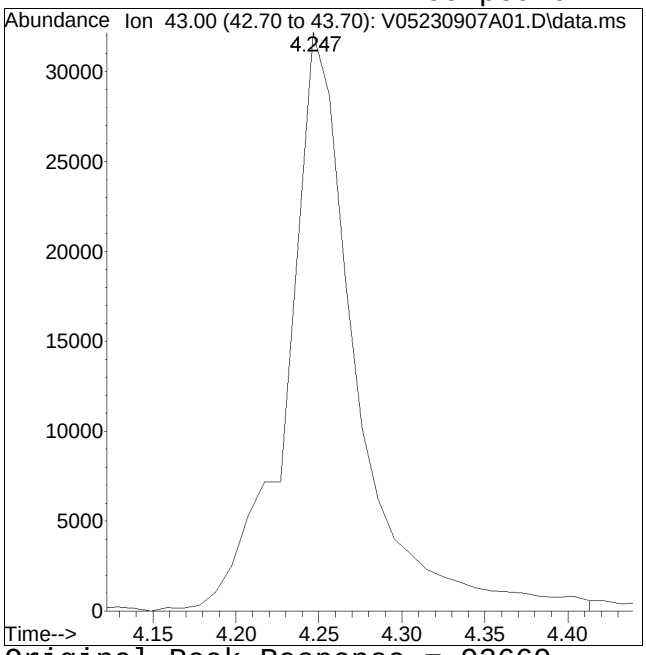
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE



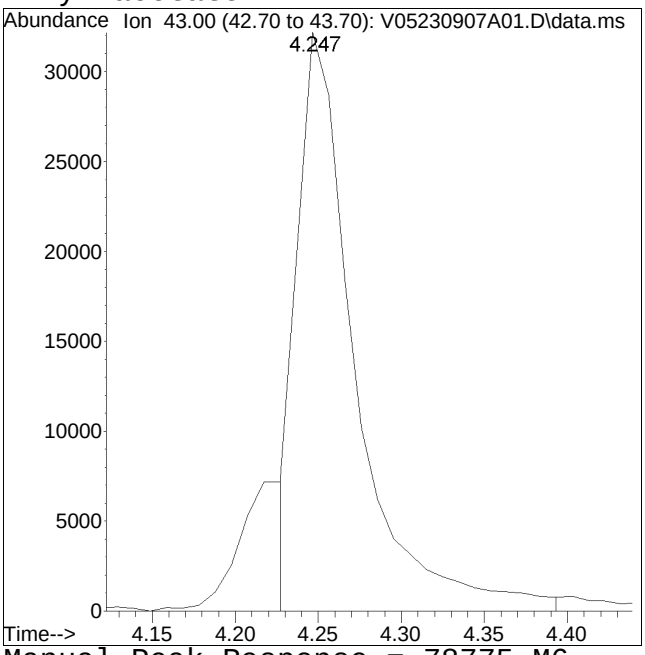
Manual Integration Report

Data Path	: K:\VOA105\2023\230907A\	QMethod	: V105_230808N_8260.m
Data File	: V05230907A01.D	Operator	: VOA105:PID
Date Inj'd	: 9/7/2023 7:28 am	Instrument	: VOA105
Sample	: WG1824710-2	Quant Date	: 9/7/2023 7:51 am

Compound #27: Vinyl acetate



Original Peak Response = 93669



Manual Peak Response = 78775 M6

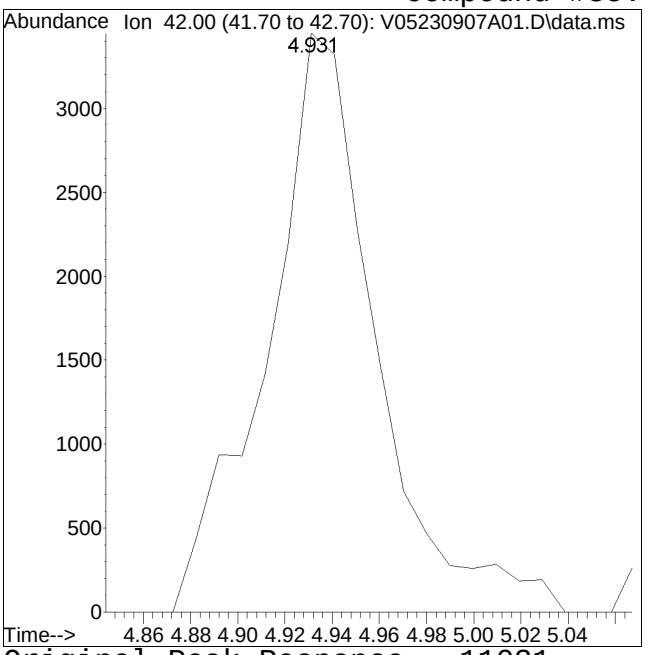
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

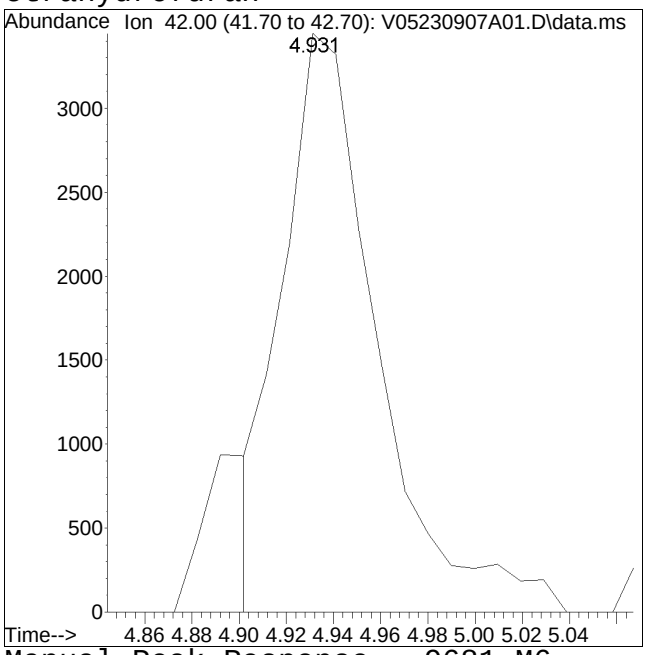
Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Date Inj'd : 9/7/2023 7:28 am
Sample : WG1824710-2

QMethod : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/7/2023 7:51 am

Compound #35: Tetrahydrofuran



Original Peak Response = 11031



Manual Peak Response = 9681 M6

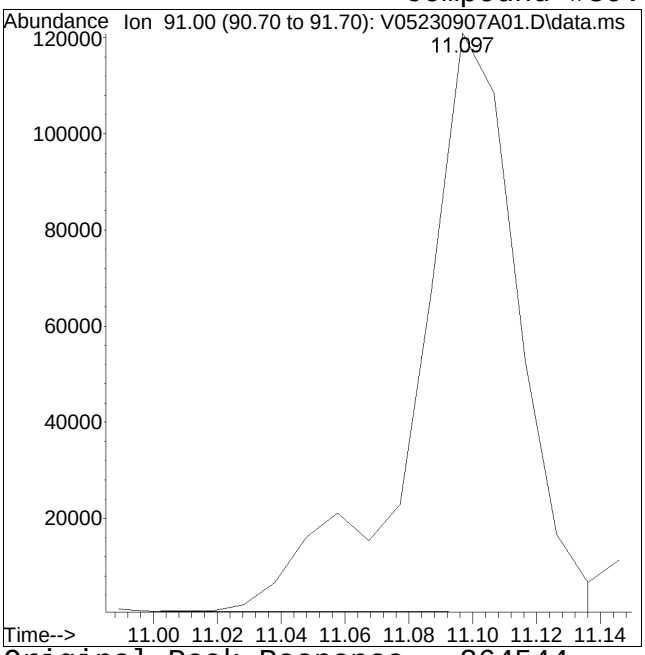
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

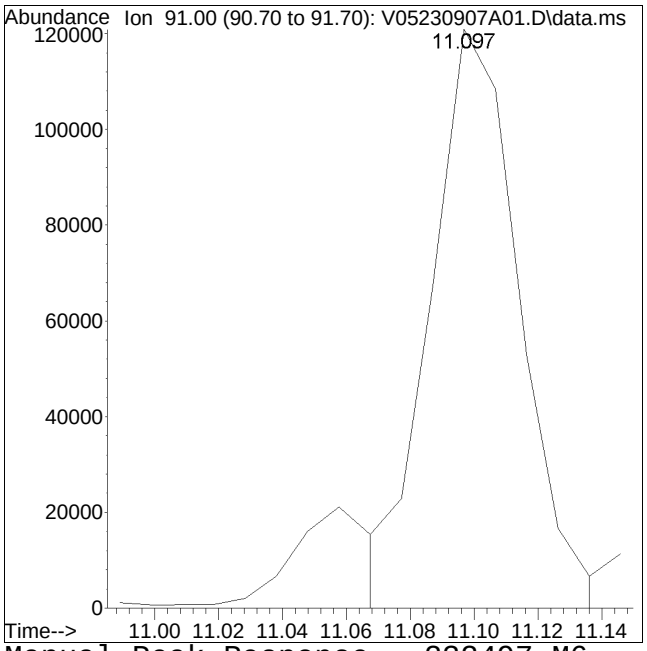
Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Date Inj'd : 9/7/2023 7:28 am
Sample : WG1824710-2

QMethod : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/7/2023 7:51 am

Compound #89: 2-Chlorotoluene



Original Peak Response = 264544



Manual Peak Response = 232497 M6

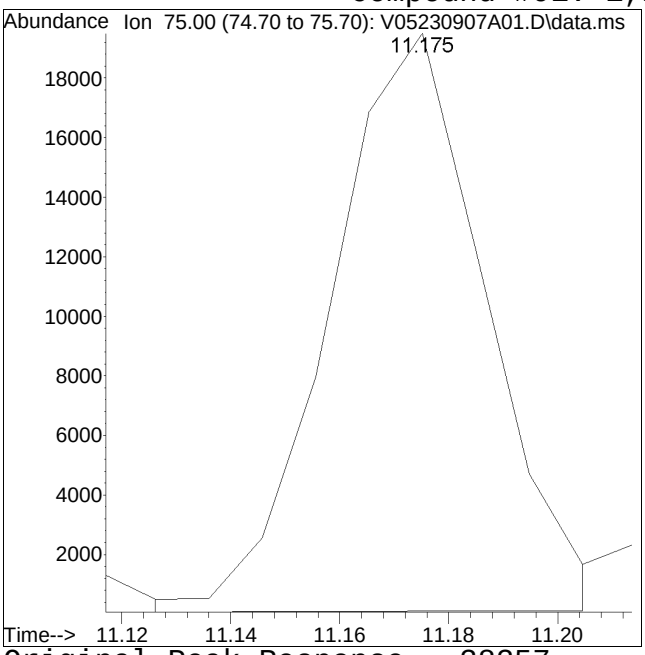
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

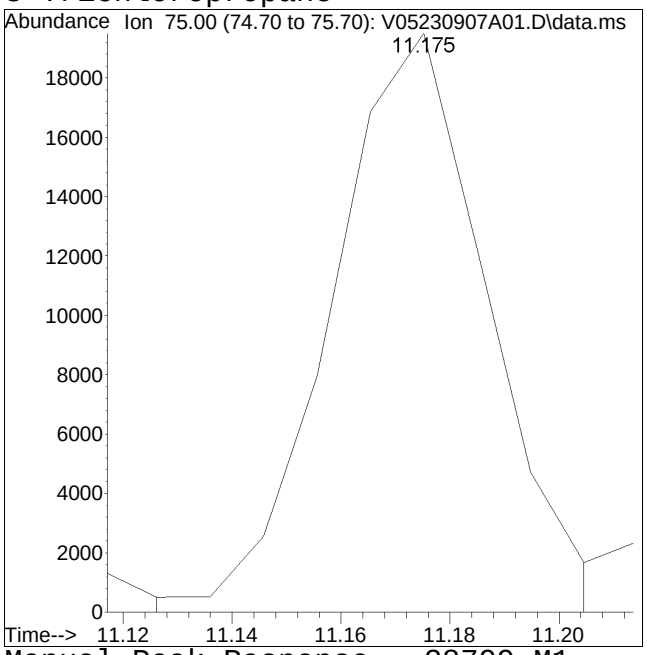
Manual Integration Report

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Date Inj'd : 9/7/2023 7:28 am
Sample : WG1824710-2

QMethod : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/7/2023 7:51 am

Compound #91: 1,2,3-Trichloropropane





Original Peak Response = 38357 Manual Peak Response = 38799 M1

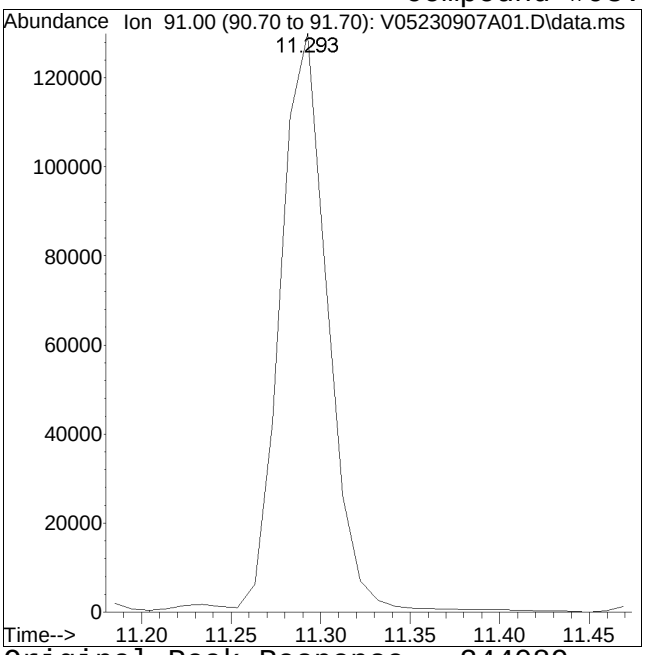
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

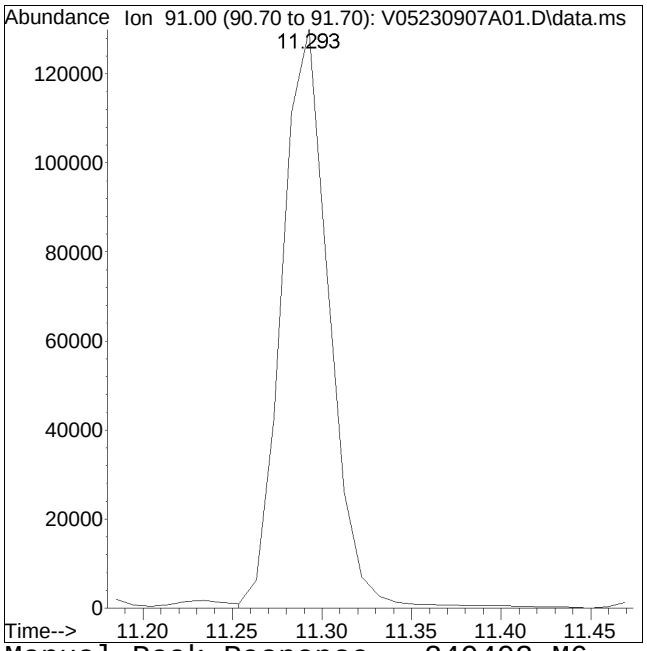
Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Date Inj'd : 9/7/2023 7:28 am
Sample : WG1824710-2

QMethod : V105_230808N_8260.m
Operator : VOA105:PID
Instrument : VOA105
Quant Date : 9/7/2023 7:51 am

Compound #93: 4-Chlorotoluene



Original Peak Response = 244089



Manual Peak Response = 240403 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A01.D
Acq On : 8 Sep 2023 8:56 am
Operator : ELAINE:PID
Sample : WG1825752-2
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 09:26:01 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	Fluorobenzene	1.000	1.000	0.0	87	0.00
2	TP	Dichlorodifluoromethane	0.290	0.304	-4.8	81	0.00
3	TP	Chloromethane	0.368	0.450	-22.3#	95	0.00
4	TC	Vinyl chloride	0.388	0.342	11.9	68	0.00
5	TP	Bromomethane	0.227	0.133	41.4#	47#	0.00
6	TP	Chloroethane	0.234	0.190	18.8	64	-0.01
7	TP	Trichlorofluoromethane	0.367	0.334	9.0	69	0.00
8	TP	Ethyl ether	0.122	0.104	14.8	68	0.00
10	TC	1,1-Dichloroethene	0.208	0.222	-6.7	83	0.00
11	TP	Carbon disulfide	0.644	0.756	-17.4	92	0.00
12	TP	Freon-113	0.215	0.251	-16.7	87	0.00
15	TP	Methylene chloride	0.251	0.275	-9.6	93	0.00
17	TP	Acetone	* 10.000	13.269	-32.7#	108	0.00
18	TP	trans-1,2-Dichloroethene	0.227	0.248	-9.3	86	0.00
19	TP	Methyl acetate	0.142	0.189	-33.1#	116	0.00
21	TP	Methyl tert-butyl ether	0.574	0.535	6.8	81	0.00
22	TP	tert-Butyl alcohol	0.014	0.019	-35.7#	116	-0.01
24	TP	Diisopropyl ether	0.934	1.176	-25.9#	105	0.00
25	TP	1,1-Dichloroethane	0.548	0.545	0.5	77	0.00
26	TP	Halothane	0.172	0.196	-14.0	88	0.00
27	TP	Acrylonitrile	0.071	0.079	-11.3	90	0.00
28	TP	Ethyl tert-butyl ether	0.876	0.839	4.2	83	0.00
29	TP	Vinyl acetate	0.347	0.564	-62.5#	149	0.00
30	TP	cis-1,2-Dichloroethene	0.261	0.277	-6.1	84	0.00
31	TP	2,2-Dichloropropane	0.379	0.374	1.3	80	0.00
33	TP	Bromochloromethane	0.111	0.130	-17.1	95	0.00
34	TP	Cyclohexane	0.582	0.594	-2.1	79	0.00
35	TC	Chloroform	0.420	0.451	-7.4	88	0.00
36	TP	Ethyl acetate	0.191	0.254	-33.0#	114	0.00
37	TP	Carbon tetrachloride	0.304	0.332	-9.2	86	0.00
38	TP	Tetrahydrofuran	0.058	0.085	-46.6#	119	-0.01
39	S	Dibromofluoromethane	0.282	0.291	-3.2	89	0.00
40	TP	1,1,1-Trichloroethane	0.375	0.392	-4.5	83	0.00
42	TP	2-Butanone	0.083	0.103	-24.1#	114	0.00
43	TP	1,1-Dichloropropene	0.314	0.327	-4.1	83	0.00
45	TP	Benzene	0.943	1.055	-11.9	92	0.00
46	TP	tert-Amyl methyl ether	0.588	0.593	-0.9	88	-0.01
47	S	1,2-Dichloroethane-d4	0.370	0.353	4.6	78	0.00
48	T	1,2-Dichloroethane	0.384	0.351	8.6	76	0.00

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A01.D
Acq On : 8 Sep 2023 8:56 am
Operator : ELAINE:PID
Sample : WG1825752-2
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 09:26:01 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
51	TP	Methyl cyclohexane	0.409	0.434	-6.1	87	0.00
52	TP	Trichloroethene	0.255	0.271	-6.3	86	0.00
54	TP	Dibromomethane	0.128	0.135	-5.5	87	0.00
55	TC	1,2-Dichloropropane	0.297	0.298	-0.3	82	0.00
58	TP	Bromodichloromethane	0.328	0.342	-4.3	86	0.00
61	TP	1,4-Dioxane	0.00107	0.00177#	-65.4#	138	0.00
62	TP	cis-1,3-Dichloropropene	0.380	0.396	-4.2	90	0.00
63	I	Chlorobenzene-d5	1.000	1.000	0.0	86	0.00
64	S	Toluene-d8	1.235	1.326	-7.4	90	0.00
65	TC	Toluene	0.671	0.788	-17.4	94	0.00
66	TP	4-Methyl-2-pentanone	0.081	0.079	2.5	83	0.00
67	TP	Tetrachloroethene	0.264	0.329	-24.6#	99	0.00
69	TP	trans-1,3-Dichloropropene	0.380	0.402	-5.8	89	0.00
71	TP	Ethyl methacrylate	0.261	0.226	13.4	71	0.00
72	TP	1,1,2-Trichloroethane	0.172	0.211	-22.7#	99	0.00
73	TP	Chlorodibromomethane	0.243	0.272	-11.9	93	0.00
74	TP	1,3-Dichloropropane	0.371	0.419	-12.9	95	0.00
75	TP	1,2-Dibromoethane	0.203	0.221	-8.9	90	0.00
77	TP	2-Hexanone	0.144	0.163	-13.2	100	0.00
78	TP	Chlorobenzene	0.729	0.843	-15.6	95	0.00
79	TC	Ethylbenzene	1.334	1.419	-6.4	84	0.00
80	TP	1,1,1,2-Tetrachloroethane	0.251	0.309	-23.1#	100	0.00
81	TP	p/m Xylene	0.517	0.573	-10.8	88	0.00
82	TP	o Xylene	0.516	0.552	-7.0	86	0.00
83	TP	Styrene	0.840	0.914	-8.8	87	0.00
84	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
85	TP	Bromoform	0.251	0.263	-4.8	105	0.00
87	TP	Isopropylbenzene	2.487	2.277	8.4	84	0.00
88	S	4-Bromofluorobenzene	0.924	0.745	19.4	80	0.00
89	TP	Bromobenzene	0.555	0.561	-1.1	96	0.00
90	TP	n-Propylbenzene	3.012	2.877	4.5	87	0.00
91	TP	1,4-Dichlorobutane	0.856	0.745	13.0	83	0.00
92	TP	1,1,2,2-Tetrachloroethane	0.404	0.462	-14.4	114	0.00
93	TP	4-Ethyltoluene	2.477	2.374	4.2	88	0.00
94	TP	2-Chlorotoluene	1.758	1.686	4.1	86	0.00
95	TP	1,3,5-Trimethylbenzene	2.106	2.009	4.6	88	0.00
96	TP	1,2,3-Trichloropropane	0.360	0.361	-0.3	96	0.00

Evaluate Continuing Calibration Report

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A01.D
Acq On : 8 Sep 2023 8:56 am
Operator : ELAINE:PID
Sample : WG1825752-2
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 09:26:01 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
97	TP	trans-1,4-Dichloro-2-butene	0.176	0.152	13.6	83	0.00
98	TP	4-Chlorotoluene	1.820	1.731	4.9	88	0.00
99	TP	tert-Butylbenzene	1.759	1.608	8.6	83	0.00
102	TP	1,2,4-Trimethylbenzene	2.072	1.975	4.7	87	0.00
103	TP	sec-Butylbenzene	2.633	2.465	6.4	85	0.00
104	TP	p-Isopropyltoluene	2.223	2.044	8.1	85	0.00
105	TP	1,3-Dichlorobenzene	1.126	1.192	-5.9	97	0.00
106	TP	1,4-Dichlorobenzene	1.122	1.205	-7.4	99	0.00
107	TP	p-Diethylbenzene	1.315	1.199	8.8	84	0.00
108	TP	n-Butylbenzene	1.914	1.867	2.5	88	0.00
109	TP	1,2-Dichlorobenzene	1.055	1.106	-4.8	98	0.00
110	TP	1,2,4,5-Tetramethylbenzene	1.994	1.646	17.5	77	0.00
111	TP	1,2-Dibromo-3-chloropropane	0.062	0.067	-8.1	99	0.00
112	TP	1,3,5-Trichlorobenzene	0.715	0.735	-2.8	97	0.00
113	TP	Hexachlorobutadiene	0.211	0.207	1.9	89	0.00
114	TP	1,2,4-Trichlorobenzene	0.617	0.594	3.7	92	0.00
115	TP	Naphthalene	1.522	1.235	18.9	80	0.00
116	TP	1,2,3-Trichlorobenzene	0.562	0.545	3.0	95	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 1 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A01.D
Acq On : 8 Sep 2023 8:56 am
Operator : ELAINE:PID
Sample : WG1825752-2
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 09:26:01 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.134	96	137394	10.000	ug/L	0.00
63) Chlorobenzene-d5	9.696	117	115233	10.000	ug/L	0.00
84) 1,4-Dichlorobenzene-d4	12.369	152	72288	10.000	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	5.314	113	40042	10.346	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.46%			
47) 1,2-Dichloroethane-d4	5.848	65	48510	9.530	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 95.30%			
64) Toluene-d8	7.843	98	152762	10.735	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.35%			
88) 4-Bromofluorobenzene	11.173	95	53841	8.061	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 80.61%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.655	85	41743	10.464	ug/L	98
3) Chloromethane	1.858	50	61819	12.224	ug/L	98
4) Vinyl chloride	1.930	62	46989	8.819	ug/L	97
5) Bromomethane	2.253	94	18287	5.865	ug/L	100
6) Chloroethane	2.370	64	26145	8.123	ug/L	90
7) Trichlorofluoromethane	2.517	101	45821	9.097	ug/L	99
8) Ethyl ether	2.826	74	14291	8.546	ug/L #	60
10) 1,1-Dichloroethene	3.021	96	30482	10.671	ug/L	97
11) Carbon disulfide	3.049	76	103857	11.743	ug/L	97
12) Freon-113	3.060	101	34504	11.669	ug/L	99
15) Methylene chloride	3.591	84	37787	10.953	ug/L #	70
17) Acetone	3.633	43	9740	13.269	ug/L	96
18) trans-1,2-Dichloroethene	3.744	96	34066	10.920	ug/L	97
19) Methyl acetate	3.758	43	26013	13.366	ug/L #	86
21) Methyl tert-butyl ether	3.853	73	73457	9.309	ug/L #	84
22) tert-Butyl alcohol	3.936	59	13077	70.365	ug/L #	51
24) Diisopropyl ether	4.217	45	161623	12.600	ug/L	96
25) 1,1-Dichloroethane	4.343	63	74891	9.954	ug/L	98
26) Halothane	4.395	117	26973	11.412	ug/L	99
27) Acrylonitrile	4.382	53	10857	11.154	ug/L	93
28) Ethyl tert-butyl ether	4.571	59	115283	9.579	ug/L	94
29) Vinyl acetate	4.579	43	77518	16.259	ug/L #	93
30) cis-1,2-Dichloroethene	4.866	96	38070	10.599	ug/L	97
31) 2,2-Dichloropropane	4.974	77	51435	9.887	ug/L	84
33) Bromochloromethane	5.063	128	17888	11.760	ug/L #	70

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A01.D
Acq On : 8 Sep 2023 8:56 am
Operator : ELAINE:PID
Sample : WG1825752-2
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 09:26:01 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
34) Cyclohexane	5.069	56	81620	10.202	ug/L		78
35) Chloroform	5.135	83	61949	10.723	ug/L		97
36) Ethyl acetate	5.247	43	34853	13.262	ug/L	#	92
37) Carbon tetrachloride	5.272	117	45655	10.941	ug/L		98
38) Tetrahydrofuran	5.289	42	11658	14.687	ug/L	#	76
40) 1,1,1-Trichloroethane	5.344	97	53841	10.451	ug/L		96
42) 2-Butanone	5.430	43	14137	12.359	ug/L	#	60
43) 1,1-Dichloropropene	5.464	75	44894	10.400	ug/L		97
45) Benzene	5.714	78	144971	11.184	ug/L		93
46) tert-Amyl methyl ether	5.828	73	81484	10.089	ug/L	#	85
48) 1,2-Dichloroethane	5.920	62	48195	9.142	ug/L		98
51) Methyl cyclohexane	6.310	83	59648	10.607	ug/L	#	80
52) Trichloroethene	6.312	95	37295	10.651	ug/L		98
54) Dibromomethane	6.755	93	18597	10.546	ug/L		95
55) 1,2-Dichloropropane	6.863	63	40911	10.026	ug/L	#	93
58) Bromodichloromethane	6.936	83	46989	10.412	ug/L		100
61) 1,4-Dioxane	7.147	88	12130	828.381	ug/L		88
62) cis-1,3-Dichloropropene	7.628	75	54429	10.419	ug/L		95
65) Toluene	7.901	92	90769	11.747	ug/L		96
66) 4-Methyl-2-pentanone	8.341	58	9070	9.663	ug/L	#	82
67) Tetrachloroethene	8.346	166	37881	12.463	ug/L		96
69) trans-1,3-Dichloropropene	8.382	75	46361	10.592	ug/L		91
71) Ethyl methacrylate	8.574	69	26100	8.670	ug/L		79
72) 1,1,2-Trichloroethane	8.572	83	24290	12.247	ug/L		95
73) Chlorodibromomethane	8.783	129	31358	11.217	ug/L		98
74) 1,3-Dichloropropane	8.894	76	48261	11.301	ug/L		100
75) 1,2-Dibromoethane	9.061	107	25438	10.896	ug/L		100
77) 2-Hexanone	9.348	43	18838	11.390	ug/L	#	90
78) Chlorobenzene	9.718	112	97099	11.552	ug/L		91
79) Ethylbenzene	9.757	91	163568	10.644	ug/L		98
80) 1,1,1,2-Tetrachloroethane	9.801	131	35585	12.283	ug/L		99
81) p/m Xylene	9.946	106	132122	22.156	ug/L		93
82) o Xylene	10.477	106	127211	21.408	ug/L		91
83) Styrene	10.544	104	210714	21.779	ug/L		90
85) Bromoform	10.561	173	18997	10.471	ug/L		100
87) Isopropylbenzene	10.856	105	164577	9.156	ug/L		100
89) Bromobenzene	11.284	156	40565	10.112	ug/L		99
90) n-Propylbenzene	11.329	91	207964	9.550	ug/L		97
91) 1,4-Dichlorobutane	11.343	55	53861	8.704	ug/L	#	90
92) 1,1,2,2-Tetrachloroethane	11.409	83	33406	11.438	ug/L		100
93) 4-Ethyltoluene	11.454	105	171628	9.585	ug/L		99

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A01.D
Acq On : 8 Sep 2023 8:56 am
Operator : ELAINE:PID
Sample : WG1825752-2
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 09:26:01 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
94) 2-Chlorotoluene	11.493	91	121909	9.593	ug/L		92
95) 1,3,5-Trimethylbenzene	11.551	105	145209	9.537	ug/L		98
96) 1,2,3-Trichloropropane	11.551	75	26106	10.030	ug/L		98
97) trans-1,4-Dichloro-2-b...	11.601	53	11019	8.675	ug/L	#	76
98) 4-Chlorotoluene	11.674	91	125109	9.508	ug/L		100
99) tert-Butylbenzene	11.891	119	116212	9.140	ug/L		95
102) 1,2,4-Trimethylbenzene	11.966	105	142739	9.530	ug/L		98
103) sec-Butylbenzene	12.077	105	178198	9.363	ug/L		99
104) p-Isopropyltoluene	12.230	119	147787	9.196	ug/L		97
105) 1,3-Dichlorobenzene	12.294	146	86171	10.590	ug/L		97
106) 1,4-Dichlorobenzene	12.386	146	87142	10.740	ug/L		97
107) p-Diethylbenzene	12.603	119	86641	9.113	ug/L		97
108) n-Butylbenzene	12.659	91	134990	9.759	ug/L		99
109) 1,2-Dichlorobenzene	12.806	146	79928	10.483	ug/L		97
110) 1,2,4,5-Tetramethylben...	13.390	119	118987	8.254	ug/L		98
111) 1,2-Dibromo-3-chloropr...	13.580	155	4823	10.781	ug/L		92
112) 1,3,5-Trichlorobenzene	13.613	180	53131	10.286	ug/L		97
113) Hexachlorobutadiene	14.186	225	14955	9.826	ug/L		95
114) 1,2,4-Trichlorobenzene	14.208	180	42960	9.635	ug/L		98
115) Naphthalene	14.506	128	89242	8.109	ug/L		100
116) 1,2,3-Trichlorobenzene	14.670	180	39367	9.688	ug/L		99

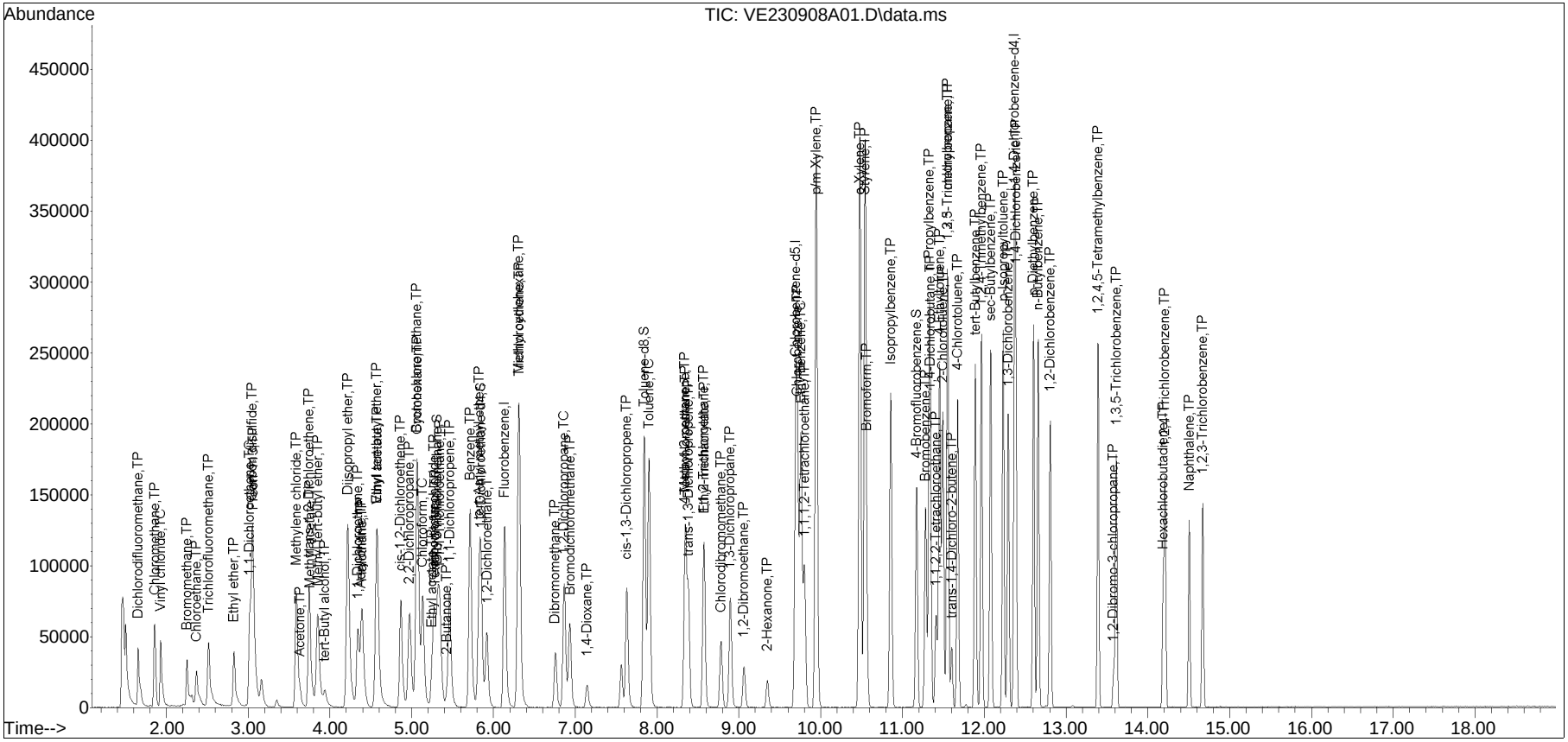
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A01.D
Acq On : 8 Sep 2023 8:56 am
Operator : ELAINE:PID
Sample : WG1825752-2
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 09:26:01 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve



Manual Integration Report

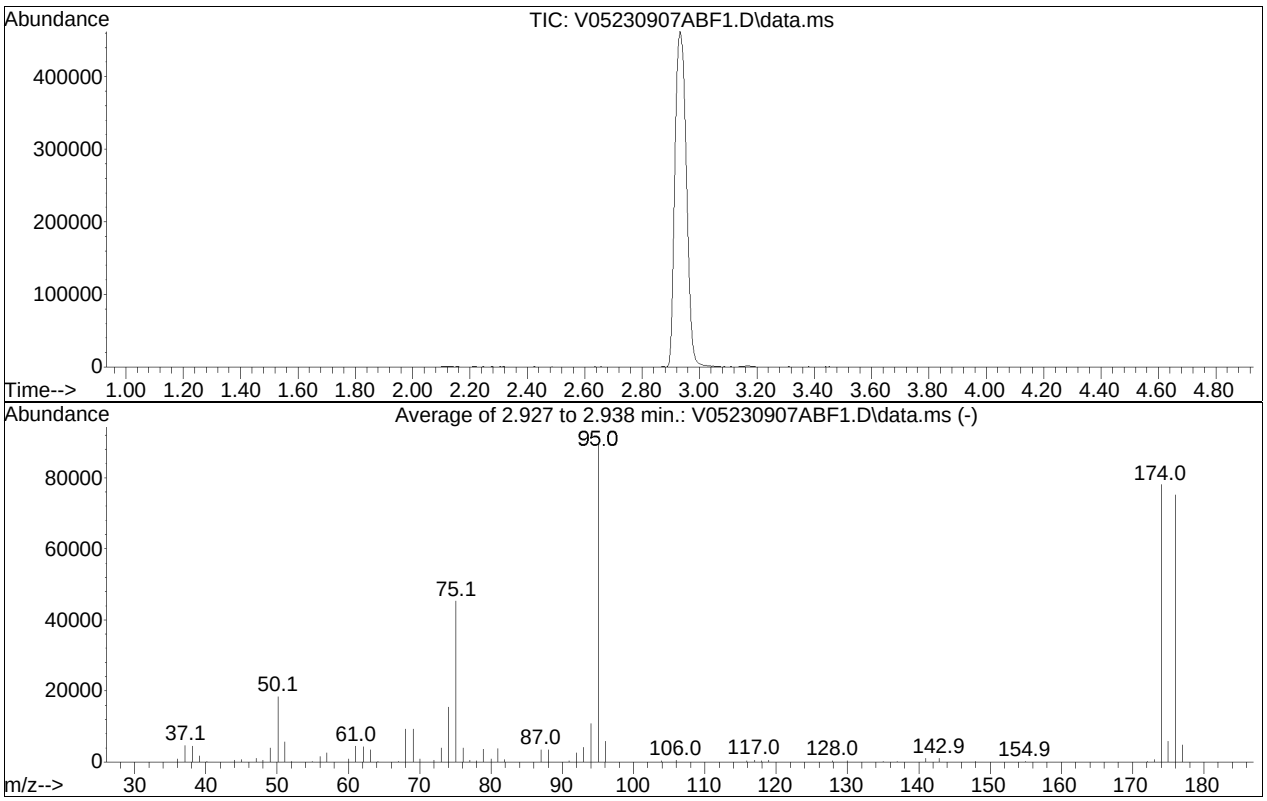
Data Path	: K:\Elaine\2023\230908A\	QMethod	: Elaine_230725N_8260.m
Data File	: VE230908A01.D	Operator	: ELAINE:PID
Date Inj'd	: 9/8/2023 8:56 am	Instrument	: Elaine
Sample	: WG1825752-2	Quant Date	: 9/8/2023 9:25 am

There are no manual integrations or false positives in this file.

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907ABF1.D
Acq On : 7 Sep 2023 7:14 am
Operator : VOA105:PID
Sample : WG1824710-1
Misc : WG1824710,ICAL20245
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Aug 09 12:54:55 2023



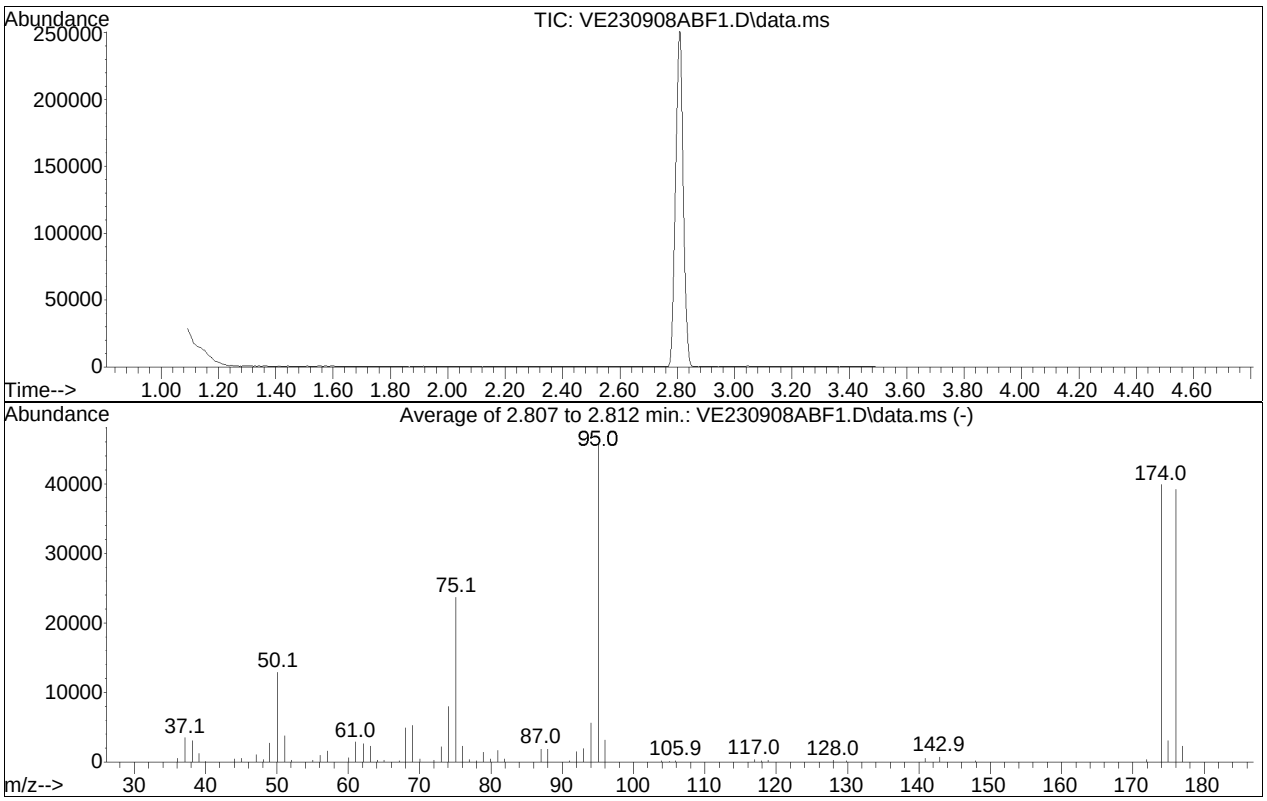
Spectrum Information: Average of 2.927 to 2.938 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	20.5	18421	PASS
75	95	30	60	50.5	45363	PASS
95	95	100	100	100.0	89885	PASS
96	95	5	9	6.6	5908	PASS
173	174	0.00	2	0.9	711	PASS
174	95	50	100	86.9	78083	PASS
175	174	5	9	7.6	5934	PASS
176	174	95	101	96.2	75133	PASS
177	176	5	9	6.5	4889	PASS

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908ABF1.D
Acq On : 8 Sep 2023 8:42 am
Operator : ELAINE:PID
Sample : WG1825752-1
Misc : WG1825752
ALS Vial : 1 Sample Multiplier: 1

Integration File: rteint.p

Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Title : VOLATILES BY GC/MS
Last Update : Wed Jul 26 08:20:35 2023



AutoFind: Scans 617, 618, 619; Background Corrected with Scan 601

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
50	95	15	40	28.1	12883	PASS
75	95	30	60	51.6	23696	PASS
95	95	100	100	100.0	45917	PASS
96	95	5	9	6.9	3150	PASS
173	174	0.00	2	0.0	0	PASS
174	95	50	100	86.9	39917	PASS
175	174	5	9	7.7	3074	PASS
176	174	95	101	98.2	39181	PASS
177	176	5	9	5.9	2308	PASS

Volatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A05.D
Acq On : 7 Sep 2023 9:09 am
Operator : VOA105:PID
Sample : WG1824710-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 07 10:13:09 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	5.753	96	228339	10.000 ug/L	0.00
Standard Area 1 = 255314			Recovery = 89.43%		
59) Chlorobenzene-d5	9.255	117	212380	10.000 ug/L	0.01
Standard Area 1 = 234811			Recovery = 90.45%		
79) 1,4-Dichlorobenzene-d4	12.008	152	128010	10.000 ug/L	0.00
Standard Area 1 = 143322			Recovery = 89.32%		
System Monitoring Compounds					
36) Dibromofluoromethane	4.961	113	78466	10.836 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 108.36%		
43) 1,2-Dichloroethane-d4	5.479	65	75363	10.724 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.24%		
60) Toluene-d8	7.415	98	249910	10.093 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.93%		
83) 4-Bromofluorobenzene	10.774	95	95094	9.492 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.92%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.361	85	108	N.D.	
3) Chloromethane	0.000		0	N.D.	
4) Vinyl chloride	0.000		0	N.D.	
5) Bromomethane	2.065	94	247	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
10) 1,1-Dichloroethene	0.000		0	N.D.	
11) Carbon disulfide	2.789	76	309	N.D.	
12) Freon-113	0.000		0	N.D.	
15) Methylene chloride	3.298	84	89	N.D.	
17) Acetone	0.000		0	N.D.	
18) trans-1,2-Dichloroethene	0.000		0	N.D.	
19) Methyl acetate	0.000		0	N.D.	
20) Methyl tert-butyl ether	0.000		0	N.D.	
23) 1,1-Dichloroethane	0.000		0	N.D.	
28) cis-1,2-Dichloroethene	0.000		0	N.D.	
30) Bromochloromethane	0.000		0	N.D.	
31) Cyclohexane	0.000		0	N.D.	
32) Chloroform	0.000		0	N.D.	
34) Carbon tetrachloride	0.000		0	N.D.	

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A05.D
Acq On : 7 Sep 2023 9:09 am
Operator : VOA105:PID
Sample : WG1824710-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 07 10:13:09 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
37) 1,1,1-Trichloroethane	0.000		0			N.D.
39) 2-Butanone	0.000		0			N.D.
41) Benzene	0.000		0			N.D.
44) 1,2-Dichloroethane	0.000		0			N.D.
47) Methyl cyclohexane	0.000		0			N.D.
48) Trichloroethene	0.000		0			N.D.
51) 1,2-Dichloropropane	0.000		0			N.D.
54) Bromodichloromethane	0.000		0			N.D.
57) 1,4-Dioxane	0.000		0			N.D.
58) cis-1,3-Dichloropropene	0.000		0			N.D.
61) Toluene	0.000		0			N.D.
62) 4-Methyl-2-pentanone	0.000		0			N.D.
63) Tetrachloroethene	0.000		0			N.D.
65) trans-1,3-Dichloropropene	0.000		0			N.D.
68) 1,1,2-Trichloroethane	0.000		0			N.D.
69) Chlorodibromomethane	0.000		0			N.D.
71) 1,2-Dibromoethane	0.000		0			N.D.
72) 2-Hexanone	0.000		0			N.D.
73) Chlorobenzene	0.000		0			N.D.
74) Ethylbenzene	9.245	91	111			N.D.
76) p/m Xylene	0.000		0			N.D.
77) o Xylene	0.000		0			N.D.
78) Styrene	0.000		0			N.D.
80) Bromoform	0.000		0			N.D.
82) Isopropylbenzene	0.000		0			N.D.
87) 1,1,2,2-Tetrachloroethane	0.000		0			N.D.
100) 1,3-Dichlorobenzene	12.018	146	227			N.D.
101) 1,4-Dichlorobenzene	12.018	146	227			N.D.
104) 1,2-Dichlorobenzene	0.000		0			N.D.
106) 1,2-Dibromo-3-chloropr...	0.000		0			N.D.
109) 1,2,4-Trichlorobenzene	0.000		0			N.D.
111) 1,2,3-Trichlorobenzene	0.000		0			N.D.

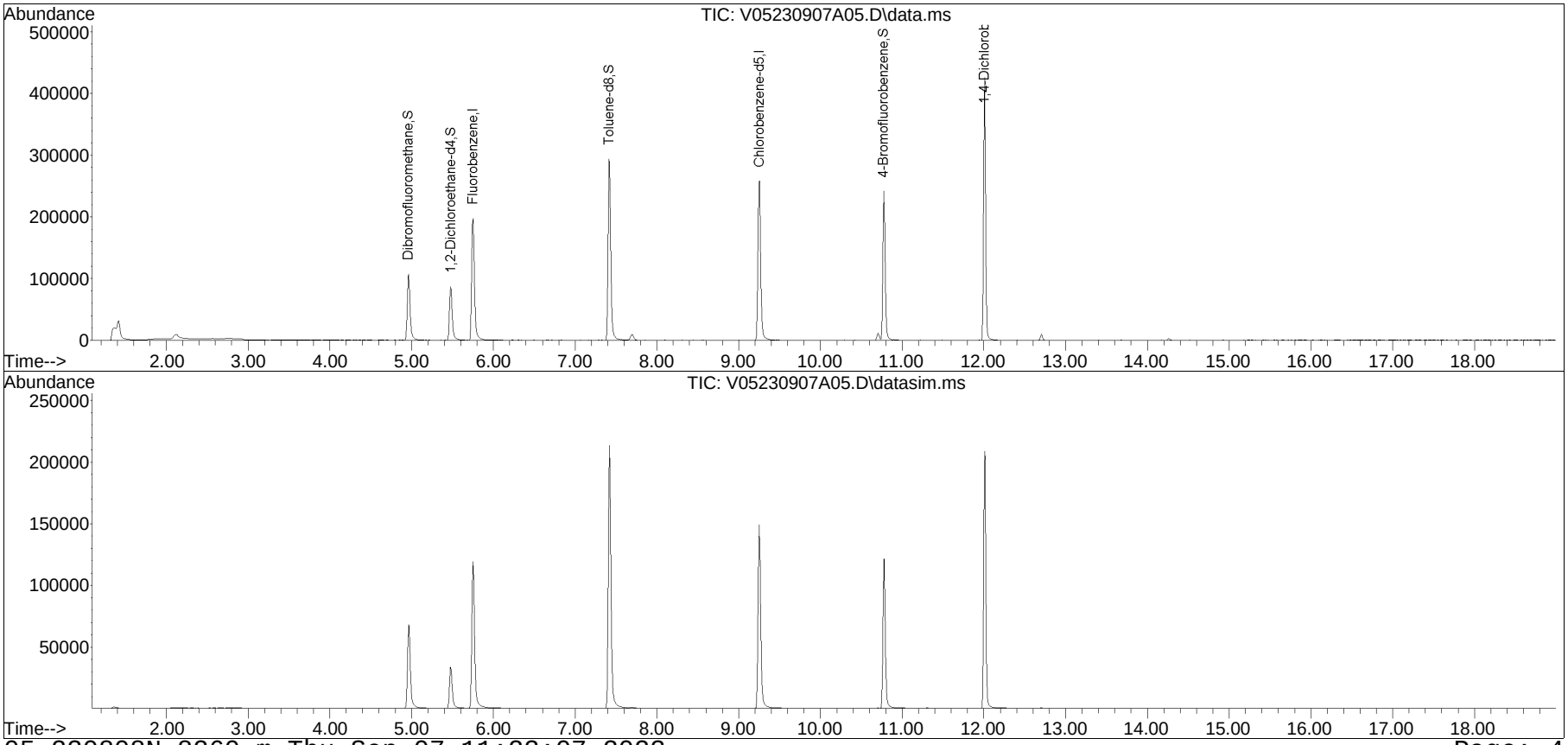
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A05.D
Acq On : 7 Sep 2023 9:09 am
Operator : VOA105:PID
Sample : WG1824710-5,31,10,10 (Sig #1); METHOD BLK (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 07 10:13:09 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•



Manual Integration Report

Data Path	: K:\VOA105\2023\230907A\	QMethod	: V105_230808N_8260.m
Data File	: V05230907A05.D	Operator	: VOA105:PID
Date Inj'd	: 9/7/2023 9:09 am	Instrument	: VOA105
Sample	: WG1824710-5,31,10,10	Quant Date	: 9/7/2023 10:13 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A05.D
Acq On : 8 Sep 2023 10:36 am
Operator : ELAINE:PID
Sample : WG1825752-5,31,10,10
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 11:03:23 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) Fluorobenzene	6.137	96	124072	10.000 ug/L	0.00
Standard Area 1 = 137394			Recovery = 90.30%		
63) Chlorobenzene-d5	9.698	117	107824	10.000 ug/L	0.00
Standard Area 1 = 115233			Recovery = 93.57%		
84) 1,4-Dichlorobenzene-d4	12.372	152	62508	10.000 ug/L	0.00
Standard Area 1 = 72288			Recovery = 86.47%		
System Monitoring Compounds					
39) Dibromofluoromethane	5.316	113	39280	11.238 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 112.38%		
47) 1,2-Dichloroethane-d4	5.851	65	44582	9.699 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 96.99%		
64) Toluene-d8	7.845	98	134412	10.095 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.95%		
88) 4-Bromofluorobenzene	11.173	95	46633	8.074 ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 80.74%		
Target Compounds					Qvalue
2) Dichlorodifluoromethane	1.485	85	186	N.D.	
3) Chloromethane	0.000		0	N.D.	
4) Vinyl chloride	0.000		0	N.D.	
5) Bromomethane	2.259	94	54	N.D.	
6) Chloroethane	0.000		0	N.D.	
7) Trichlorofluoromethane	0.000		0	N.D.	
10) 1,1-Dichloroethene	0.000		0	N.D.	
11) Carbon disulfide	3.057	76	528	N.D.	
12) Freon-113	0.000		0	N.D.	
15) Methylene chloride	0.000		0	N.D.	
17) Acetone	0.000		0	N.D.	d
18) trans-1,2-Dichloroethene	0.000		0	N.D.	
19) Methyl acetate	3.664	43	27	N.D.	
21) Methyl tert-butyl ether	0.000		0	N.D.	
25) 1,1-Dichloroethane	0.000		0	N.D.	
30) cis-1,2-Dichloroethene	0.000		0	N.D.	
33) Bromochloromethane	0.000		0	N.D.	
34) Cyclohexane	0.000		0	N.D.	
35) Chloroform	0.000		0	N.D.	
37) Carbon tetrachloride	0.000		0	N.D.	

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A05.D
Acq On : 8 Sep 2023 10:36 am
Operator : ELAINE:PID
Sample : WG1825752-5,31,10,10
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 11:03:23 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
40) 1,1,1-Trichloroethane	0.000		0		N.D.	
42) 2-Butanone	0.000		0		N.D.	
45) Benzene	0.000		0		N.D.	
48) 1,2-Dichloroethane	0.000		0		N.D.	
51) Methyl cyclohexane	0.000		0		N.D.	
52) Trichloroethene	0.000		0		N.D.	
55) 1,2-Dichloropropane	0.000		0		N.D.	
58) Bromodichloromethane	0.000		0		N.D.	
61) 1,4-Dioxane	0.000		0		N.D.	
62) cis-1,3-Dichloropropene	0.000		0		N.D.	
65) Toluene	0.000		0		N.D.	
66) 4-Methyl-2-pentanone	0.000		0		N.D.	
67) Tetrachloroethene	0.000		0		N.D.	
69) trans-1,3-Dichloropropene	0.000		0		N.D.	
72) 1,1,2-Trichloroethane	0.000		0		N.D.	
73) Chlorodibromomethane	0.000		0		N.D.	
75) 1,2-Dibromoethane	0.000		0		N.D.	
77) 2-Hexanone	0.000		0		N.D.	
78) Chlorobenzene	0.000		0		N.D.	
79) Ethylbenzene	9.946	91	161		N.D.	
81) p/m Xylene	0.000		0		N.D.	
82) o Xylene	0.000		0		N.D.	
83) Styrene	0.000		0		N.D.	
85) Bromoform	0.000		0		N.D.	
87) Isopropylbenzene	0.000		0		N.D.	
92) 1,1,2,2-Tetrachloroethane	0.000		0		N.D.	
105) 1,3-Dichlorobenzene	12.291	146	144		N.D.	
106) 1,4-Dichlorobenzene	12.389	146	191		N.D.	
109) 1,2-Dichlorobenzene	12.817	146	26		N.D.	
111) 1,2-Dibromo-3-chloropr...	0.000		0		N.D.	
114) 1,2,4-Trichlorobenzene	14.211	180	269		N.D.	
116) 1,2,3-Trichlorobenzene	14.670	180	193		N.D.	

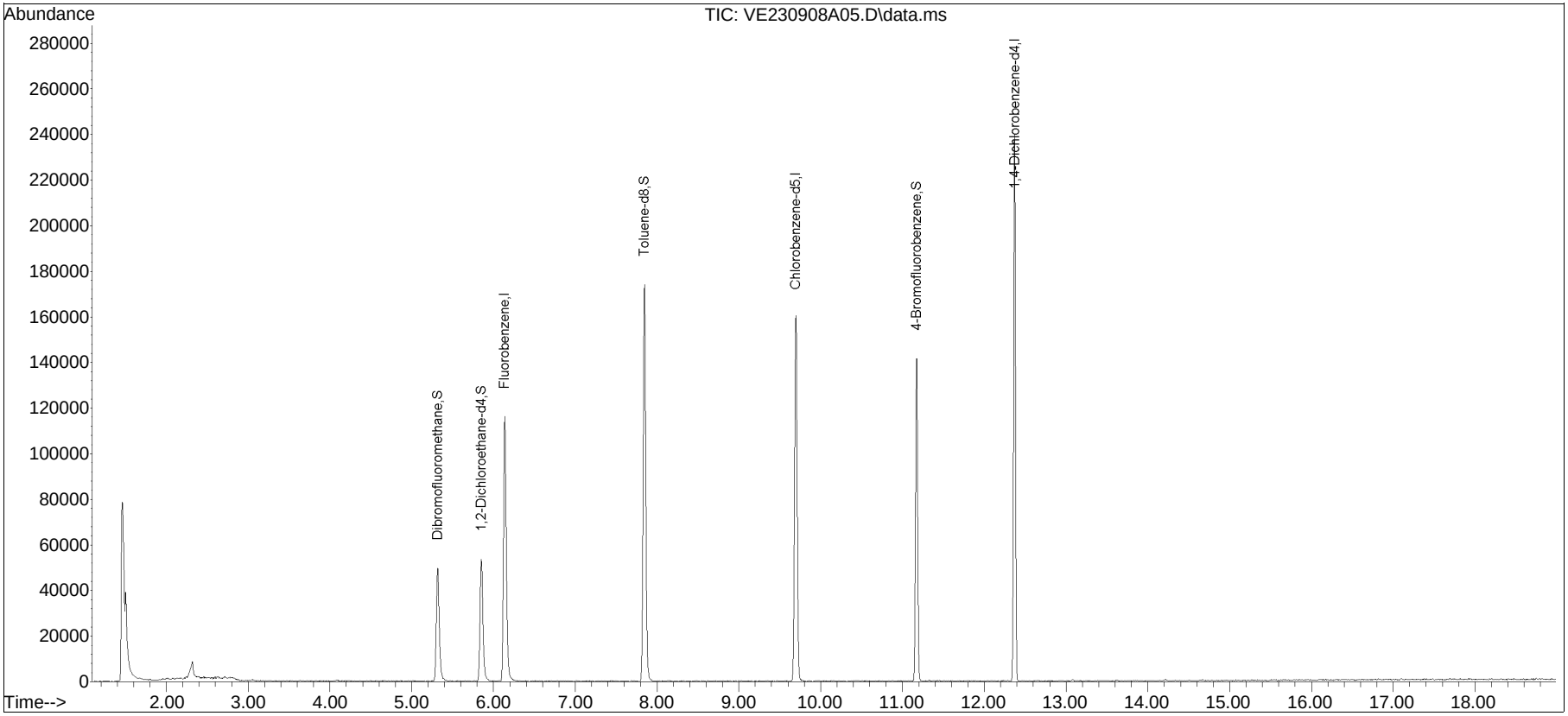
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A05.D
Acq On : 8 Sep 2023 10:36 am
Operator : ELAINE:PID
Sample : WG1825752-5,31,10,10
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 11:03:23 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve



Manual Integration Report

Data Path	: K:\Elaine\2023\230908A\	QMethod	: Elaine_230725N_8260.m
Data File	: VE230908A05.D	Operator	: ELAINE:PID
Date Inj'd	: 9/8/2023 10:36 am	Instrument	: Elaine
Sample	: WG1825752-5,31,10,10	Quant Date	: 9/8/2023 11:03 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A01.D
Acq On : 8 Sep 2023 8:56 am
Operator : ELAINE:PID
Sample : WG1825752-3,31,10,10
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 09:26:01 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.134	96	137394	10.000	ug/L	0.00
63) Chlorobenzene-d5	9.696	117	115233	10.000	ug/L	0.00
84) 1,4-Dichlorobenzene-d4	12.369	152	72288	10.000	ug/L	0.00
System Monitoring Compounds						
39) Dibromofluoromethane	5.314	113	40042	10.346	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.46%			
47) 1,2-Dichloroethane-d4	5.848	65	48510	9.530	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 95.30%			
64) Toluene-d8	7.843	98	152762	10.735	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 107.35%			
88) 4-Bromofluorobenzene	11.173	95	53841	8.061	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 80.61%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.655	85	41743	10.464	ug/L	98
3) Chloromethane	1.858	50	61819	12.224	ug/L	98
4) Vinyl chloride	1.930	62	46989	8.819	ug/L	97
5) Bromomethane	2.253	94	18287	5.865	ug/L	100
6) Chloroethane	2.370	64	26145	8.123	ug/L	90
7) Trichlorofluoromethane	2.517	101	45821	9.097	ug/L	99
10) 1,1-Dichloroethene	3.021	96	30482	10.671	ug/L	97
11) Carbon disulfide	3.049	76	103857	11.743	ug/L	97
12) Freon-113	3.060	101	34504	11.669	ug/L	99
15) Methylene chloride	3.591	84	37787	10.953	ug/L #	70
17) Acetone	3.633	43	9740	13.269	ug/L	96
18) trans-1,2-Dichloroethene	3.744	96	34066	10.920	ug/L	97
19) Methyl acetate	3.758	43	26013	13.366	ug/L #	86
21) Methyl tert-butyl ether	3.853	73	73457	9.309	ug/L #	84
25) 1,1-Dichloroethane	4.343	63	74891	9.954	ug/L	98
30) cis-1,2-Dichloroethene	4.866	96	38070	10.599	ug/L	97
33) Bromochloromethane	5.063	128	17888	11.760	ug/L #	70
34) Cyclohexane	5.069	56	81620	10.202	ug/L	78
35) Chloroform	5.135	83	61949	10.723	ug/L	97
37) Carbon tetrachloride	5.272	117	45655	10.941	ug/L	98
40) 1,1,1-Trichloroethane	5.344	97	53841	10.451	ug/L	96
42) 2-Butanone	5.430	43	14137	12.359	ug/L #	60
45) Benzene	5.714	78	144971	11.184	ug/L	93
48) 1,2-Dichloroethane	5.920	62	48195	9.142	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A01.D
Acq On : 8 Sep 2023 8:56 am
Operator : ELAINE:PID
Sample : WG1825752-3,31,10,10
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 09:26:01 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
51) Methyl cyclohexane	6.310	83	59648	10.607	ug/L	#	80
52) Trichloroethene	6.312	95	37295	10.651	ug/L		98
55) 1,2-Dichloropropane	6.863	63	40911	10.026	ug/L	#	93
58) Bromodichloromethane	6.936	83	46989	10.412	ug/L		100
61) 1,4-Dioxane	7.147	88	12130	828.381	ug/L		88
62) cis-1,3-Dichloropropene	7.628	75	54429	10.419	ug/L		95
65) Toluene	7.901	92	90769	11.747	ug/L		96
66) 4-Methyl-2-pentanone	8.341	58	9070	9.663	ug/L	#	82
67) Tetrachloroethene	8.346	166	37881	12.463	ug/L		96
69) trans-1,3-Dichloropropene	8.382	75	46361	10.592	ug/L		91
72) 1,1,2-Trichloroethane	8.572	83	24290	12.247	ug/L		95
73) Chlorodibromomethane	8.783	129	31358	11.217	ug/L		98
75) 1,2-Dibromoethane	9.061	107	25438	10.896	ug/L		100
77) 2-Hexanone	9.348	43	18838	11.390	ug/L	#	90
78) Chlorobenzene	9.718	112	97099	11.552	ug/L		91
79) Ethylbenzene	9.757	91	163568	10.644	ug/L		98
81) p/m Xylene	9.946	106	132122	22.156	ug/L		93
82) o Xylene	10.477	106	127211	21.408	ug/L		91
83) Styrene	10.544	104	210714	21.779	ug/L		90
85) Bromoform	10.561	173	18997	10.471	ug/L		100
87) Isopropylbenzene	10.856	105	164577	9.156	ug/L		100
92) 1,1,2,2-Tetrachloroethane	11.409	83	33406	11.438	ug/L		100
105) 1,3-Dichlorobenzene	12.294	146	86171	10.590	ug/L		97
106) 1,4-Dichlorobenzene	12.386	146	87142	10.740	ug/L		97
109) 1,2-Dichlorobenzene	12.806	146	79928	10.483	ug/L		97
111) 1,2-Dibromo-3-chloropr...	13.580	155	4823	10.781	ug/L		92
114) 1,2,4-Trichlorobenzene	14.208	180	42960	9.635	ug/L		98
116) 1,2,3-Trichlorobenzene	14.670	180	39367	9.688	ug/L		99

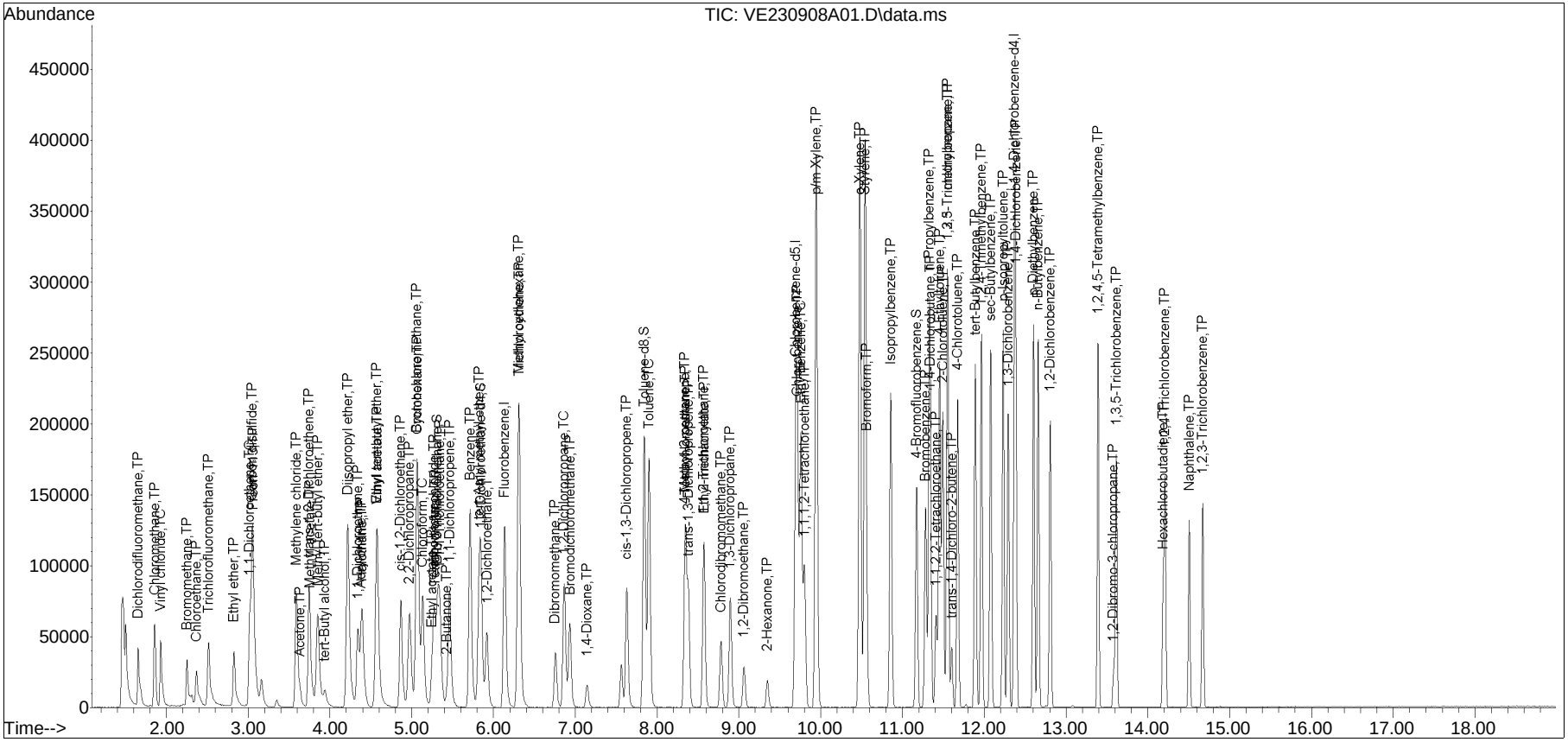
(#) = qualifier out of range (m) = manual integration (+) = signals summed

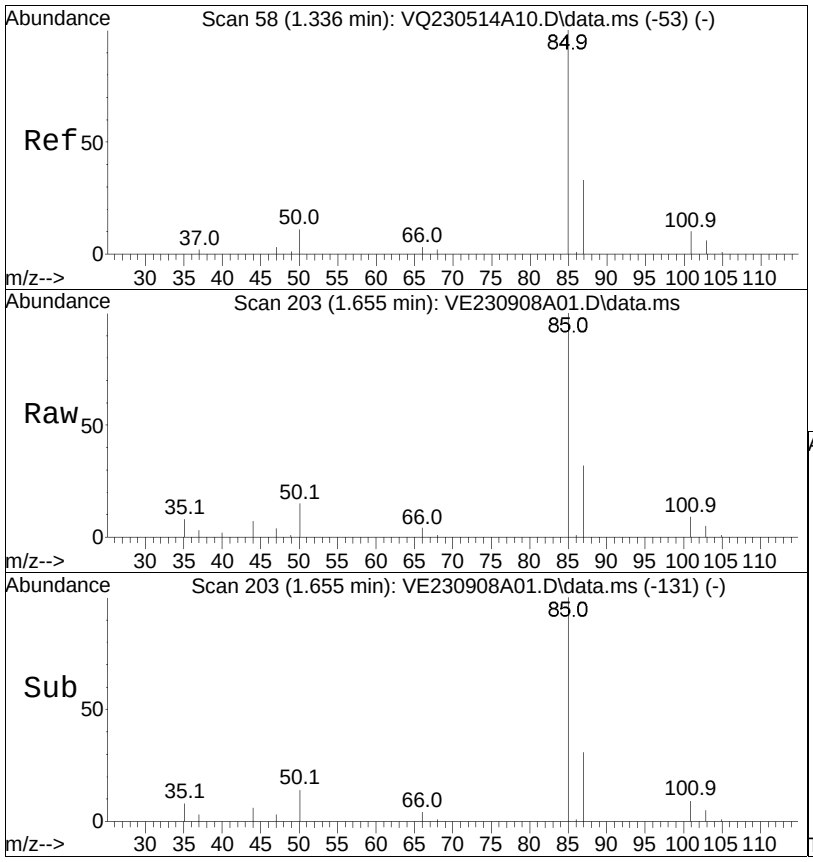
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A01.D
Acq On : 8 Sep 2023 8:56 am
Operator : ELAINE:PID
Sample : WG1825752-3,31,10,10
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 09:26:01 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

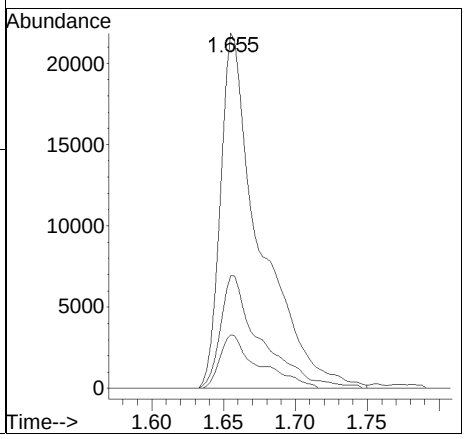


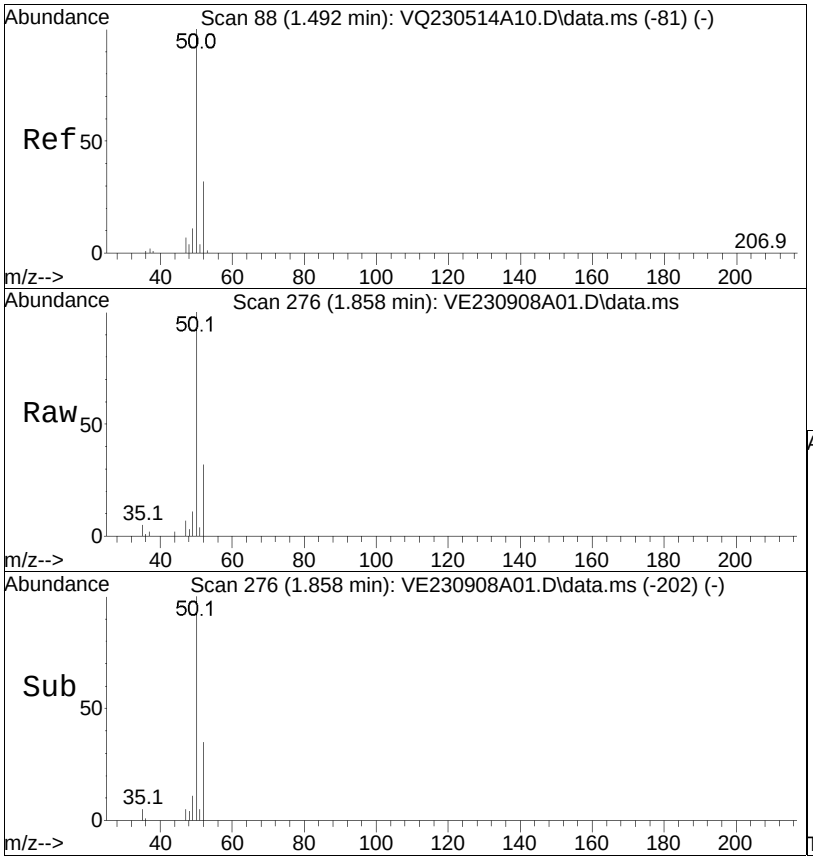


#2
Dichlorodifluoromethane
Concen: 10.46 ug/L
RT: 1.655 min Scan# 203
Delta R.T. 0.000 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 85 Resp: 41743

Ion	Ratio	Lower	Upper
85	100		
87	32.6	20.9	43.5
50	15.0	8.6	18.0

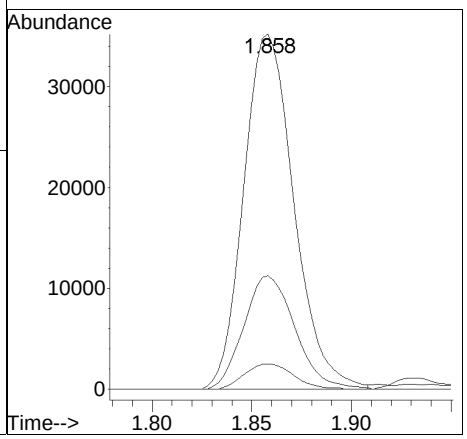


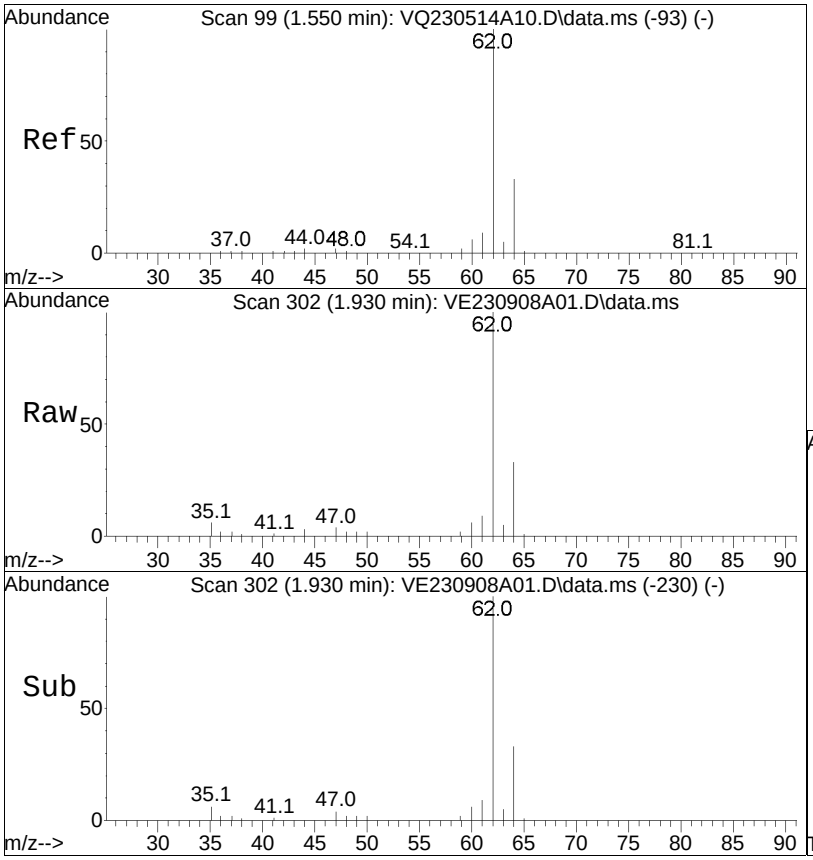


#3
Chloromethane
Concen: 12.22 ug/L
RT: 1.858 min Scan# 276
Delta R.T. 0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 50 Resp: 61819

Ion	Ratio	Lower	Upper
50	100		
52	32.7	11.5	51.5
47	7.1	0.0	28.2

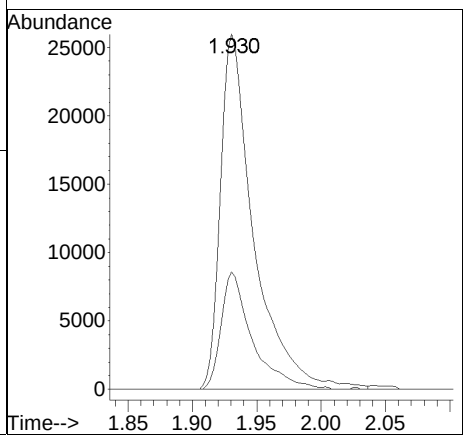


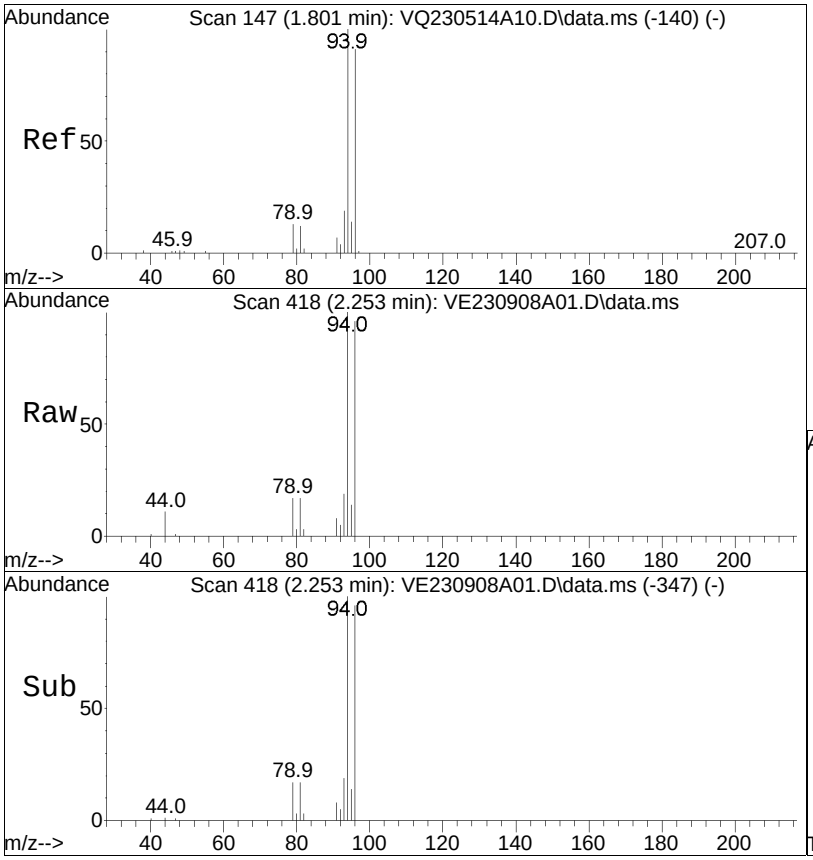


#4
Vinyl chloride
Concen: 8.82 ug/L
RT: 1.930 min Scan# 302
Delta R.T. 0.000 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 62 Resp: 46989

Ion	Ratio	Lower	Upper
62	100		
64	30.9	12.4	52.4

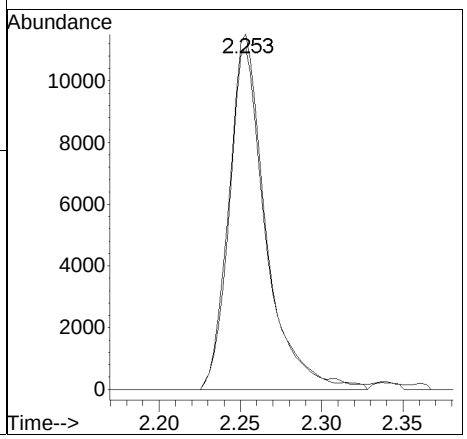


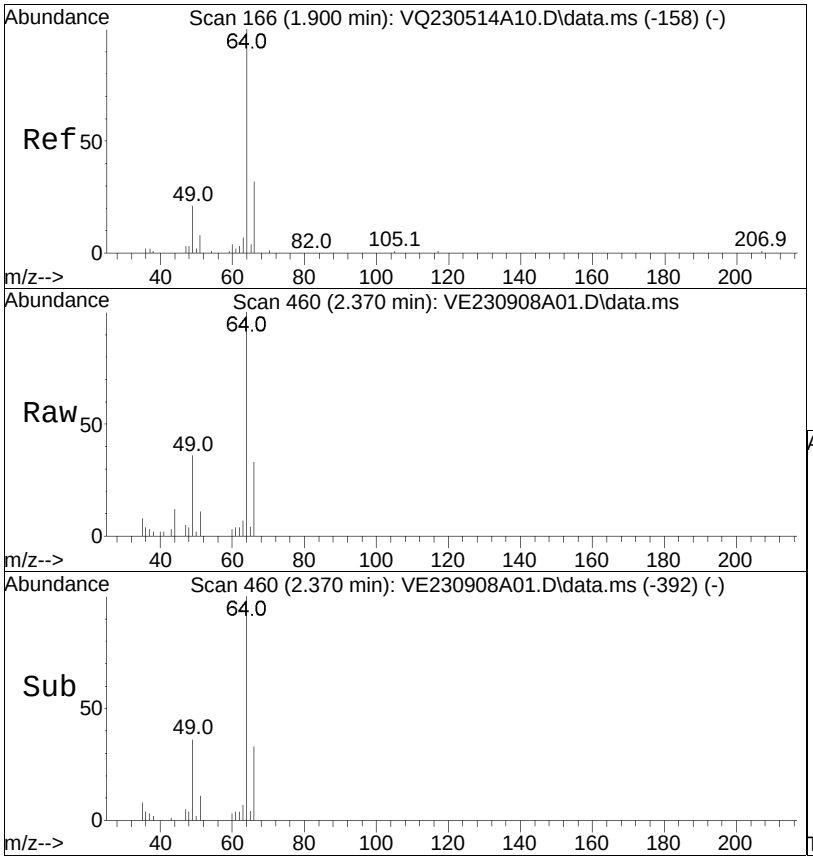


#5
Bromomethane
Concen: 5.86 ug/L
RT: 2.253 min Scan# 418
Delta R.T. -0.003 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 94 Resp: 18287

Ion	Ratio	Lower	Upper
94	100		
96	93.5	73.9	113.9

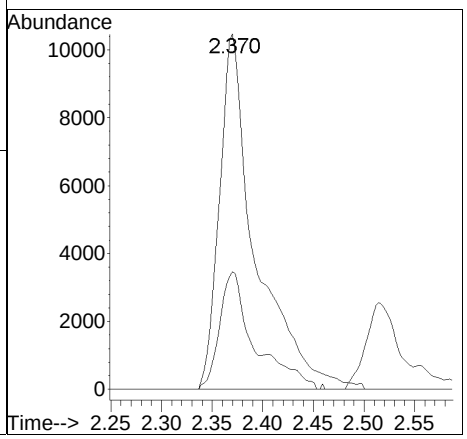


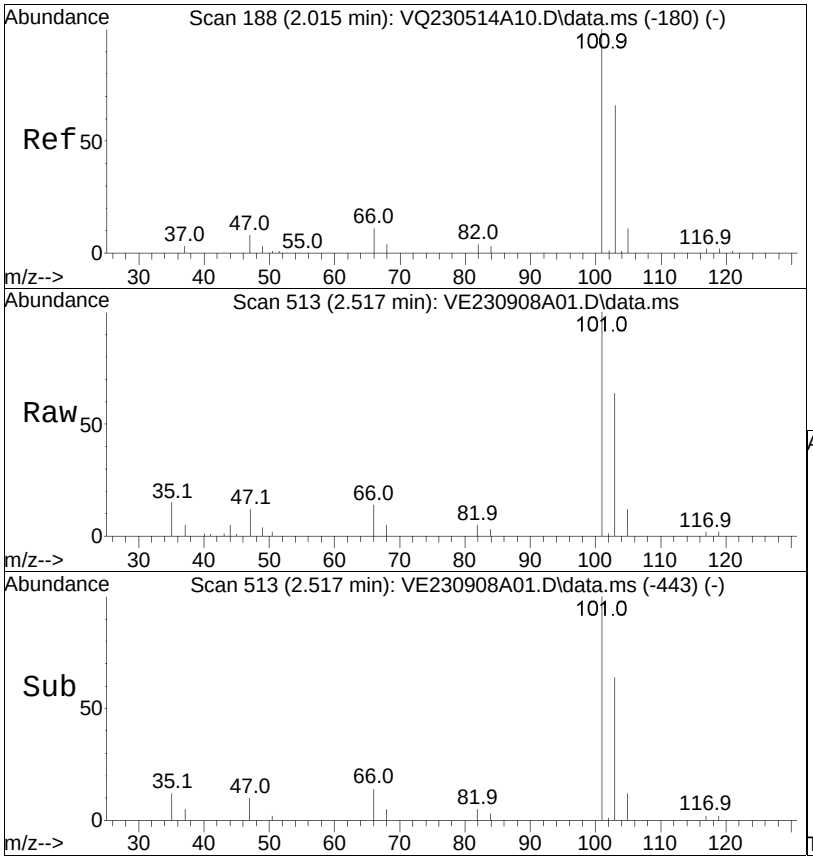


#6
Chloroethane
Concen: 8.12 ug/L
RT: 2.370 min Scan# 460
Delta R.T. -0.011 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 64 Resp: 26145

Ion	Ratio	Lower	Upper
64	100		
66	24.4	9.7	49.7

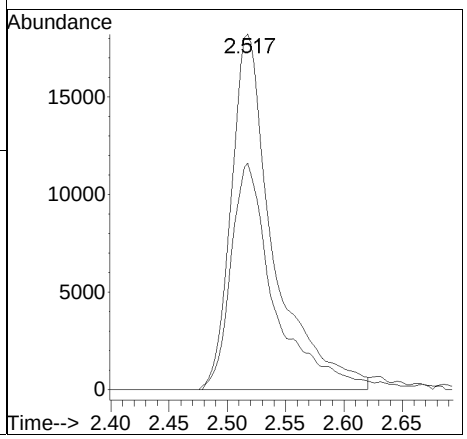


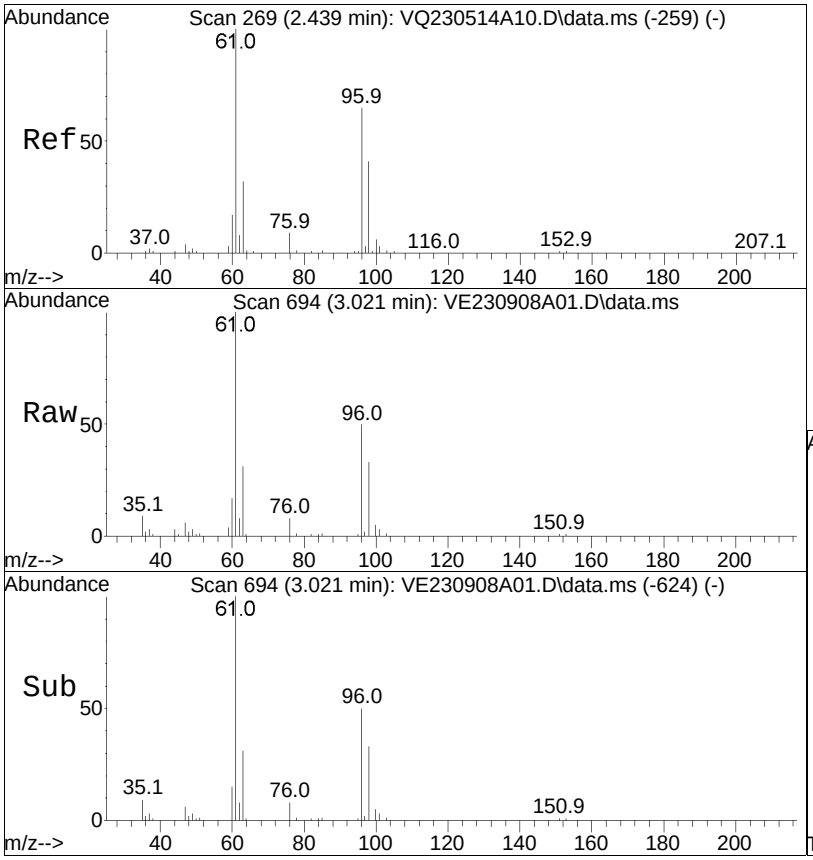


#7
Trichlorofluoromethane
Concen: 9.10 ug/L
RT: 2.517 min Scan# 513
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:101 Resp: 45821

Ion	Ratio	Lower	Upper
101	100		
103	65.7	52.2	78.2

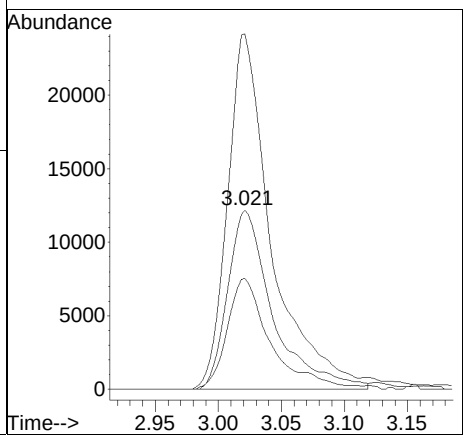


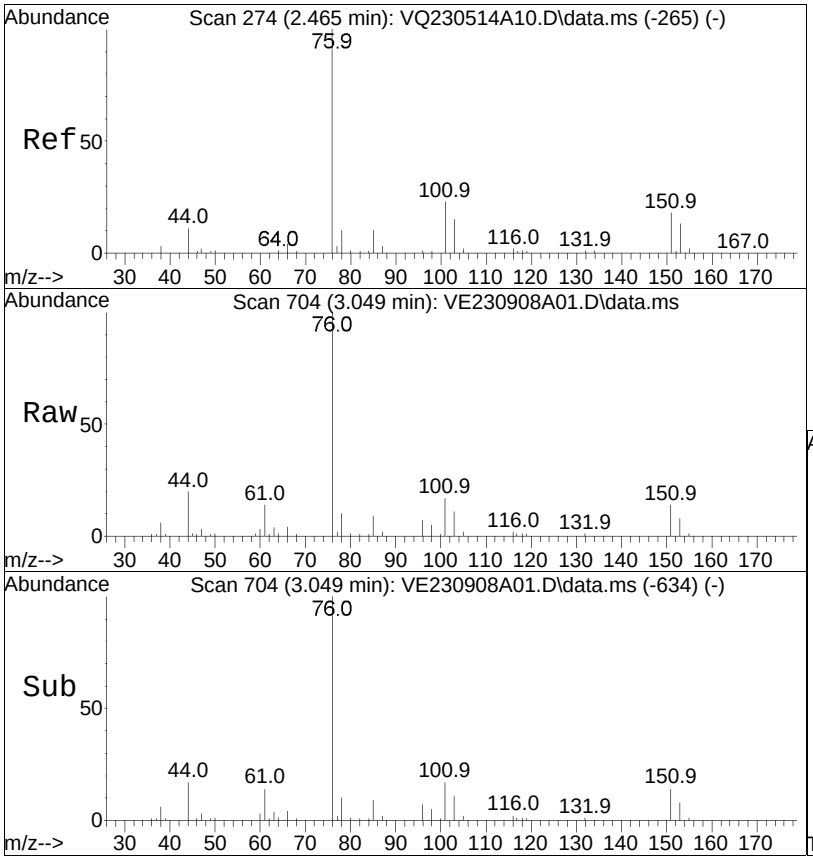


#10
1,1-Dichloroethene
Concen: 10.67 ug/L
RT: 3.021 min Scan# 694
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 96 Resp: 30482

Ion	Ratio	Lower	Upper
96	100		
61	192.0	149.7	224.5
63	59.0	46.8	70.2

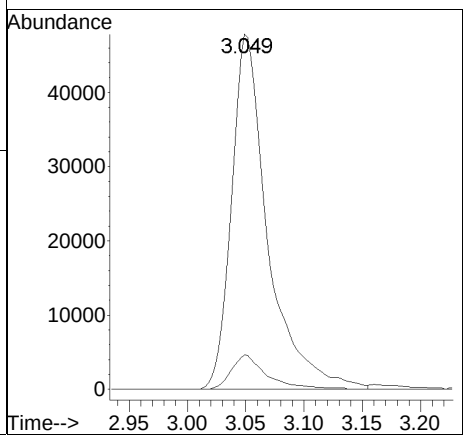


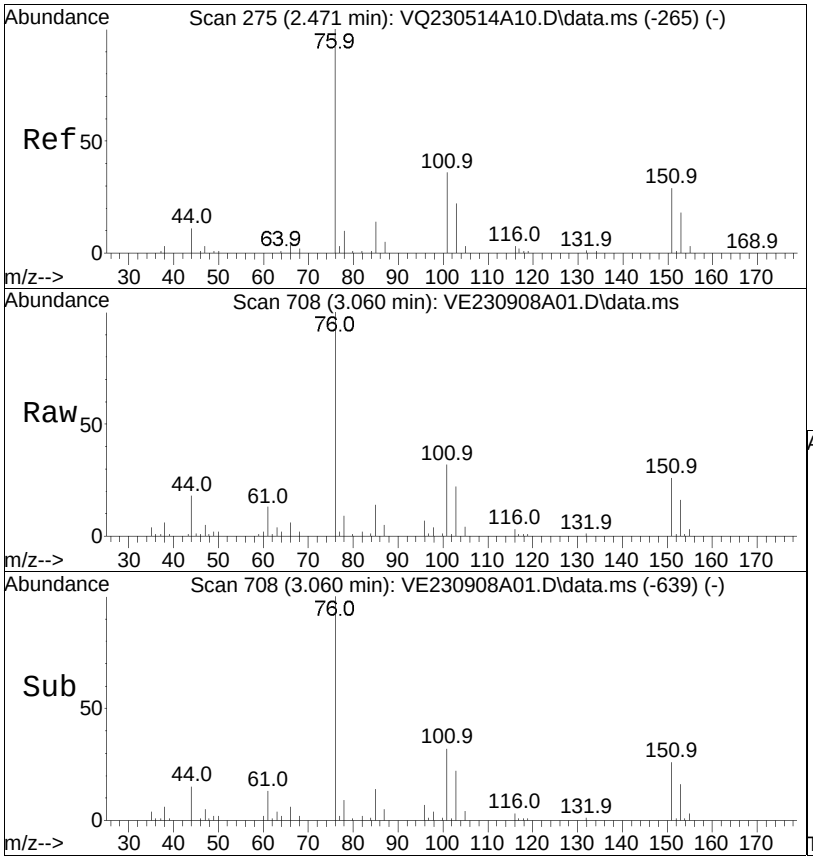


#11
Carbon disulfide
Concen: 11.74 ug/L
RT: 3.049 min Scan# 704
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 76 Resp: 103857

Ion	Ratio	Lower	Upper
76	100		
78	9.5	6.8	14.0

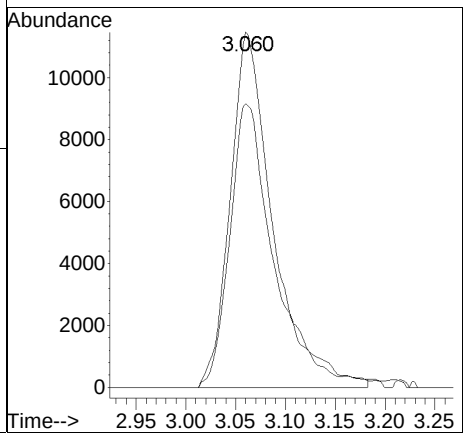


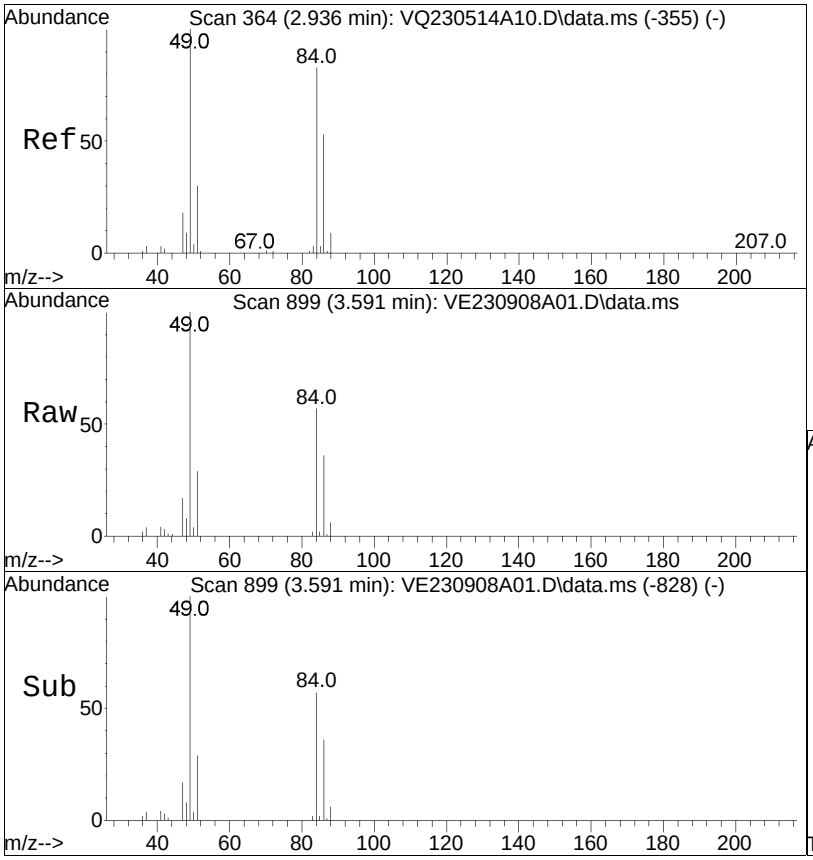


#12
Freon-113
Concen: 11.67 ug/L
RT: 3.060 min Scan# 708
Delta R.T. -0.008 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:101 Resp: 34504

Ion	Ratio	Lower	Upper
101	100		
151	80.2	63.6	95.4

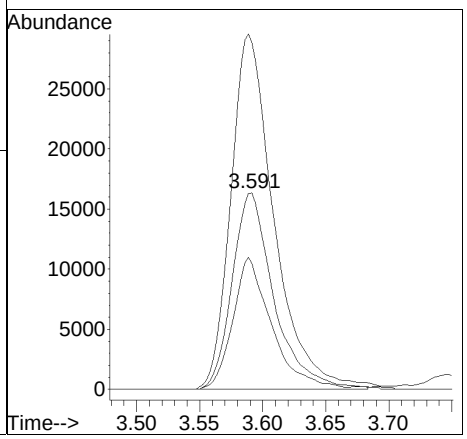


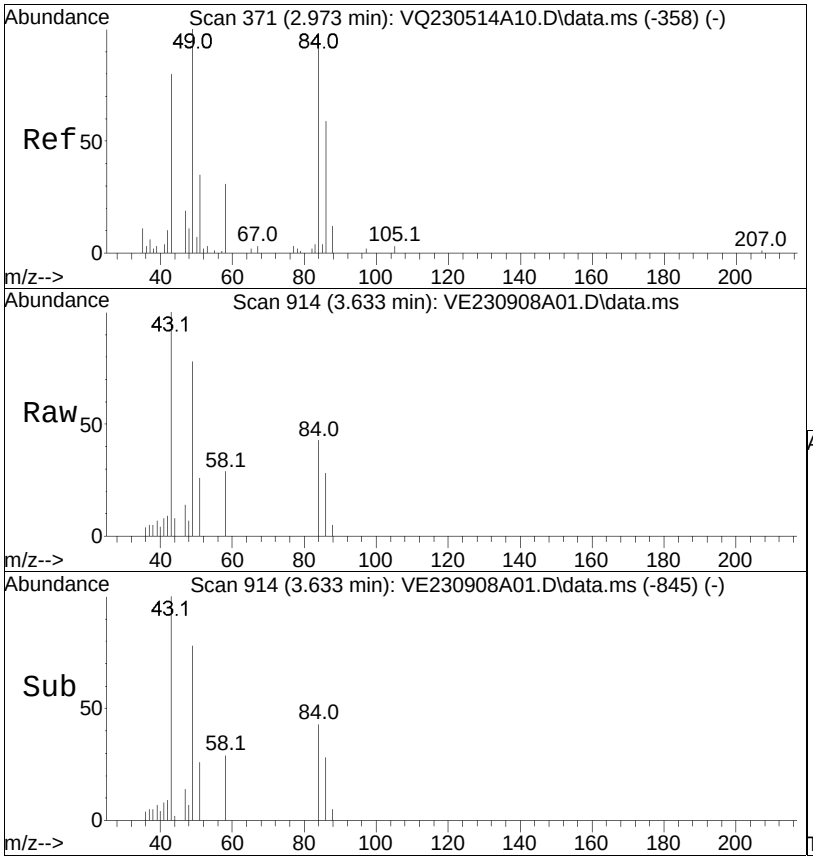


#15
Methylene chloride
Concen: 10.95 ug/L
RT: 3.591 min Scan# 899
Delta R.T. -0.003 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 84 Resp: 37787

Ion	Ratio	Lower	Upper
84	100		
86	62.5	41.0	85.2
49	187.1	88.1	183.1#

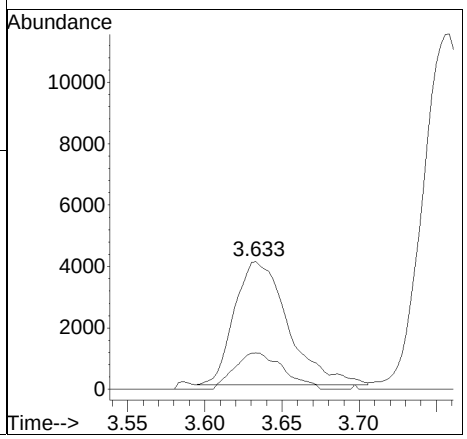


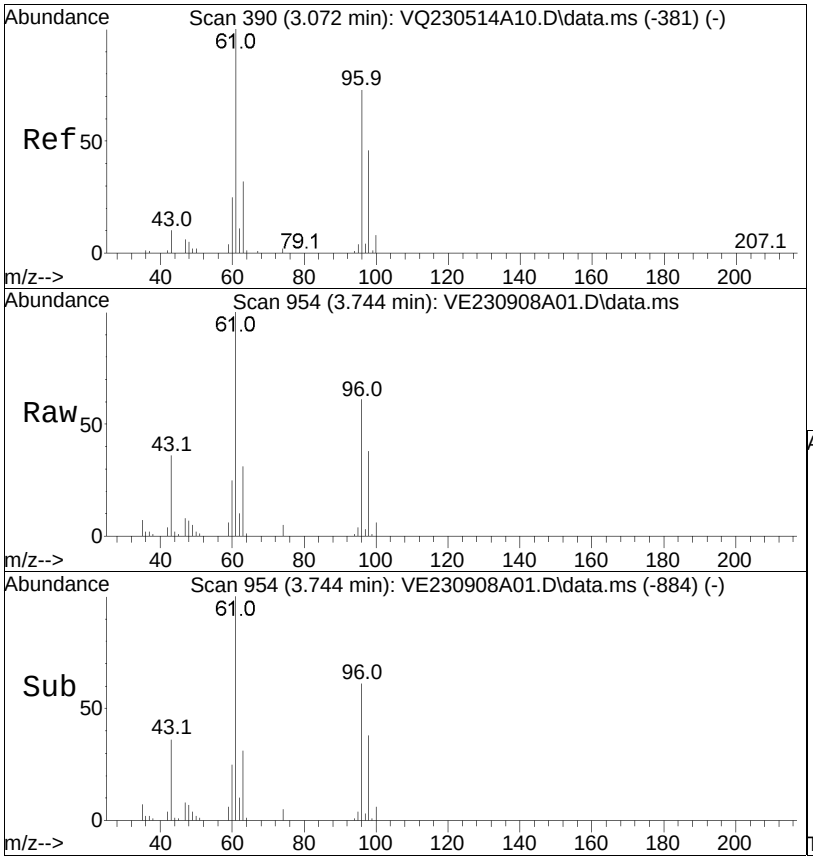


#17
Acetone
Concen: 13.27 ug/L
RT: 3.633 min Scan# 914
Delta R.T. -0.008 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 43 Resp: 9740

Ion	Ratio	Lower	Upper
43	100		
58	27.3	20.2	30.4

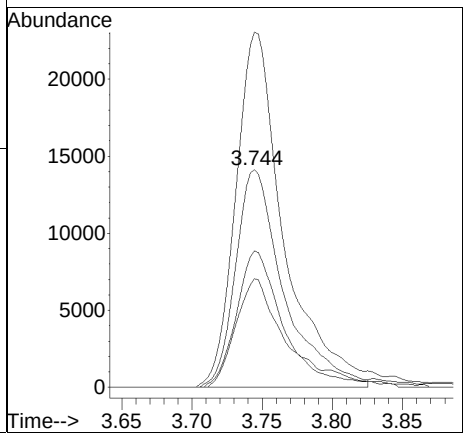


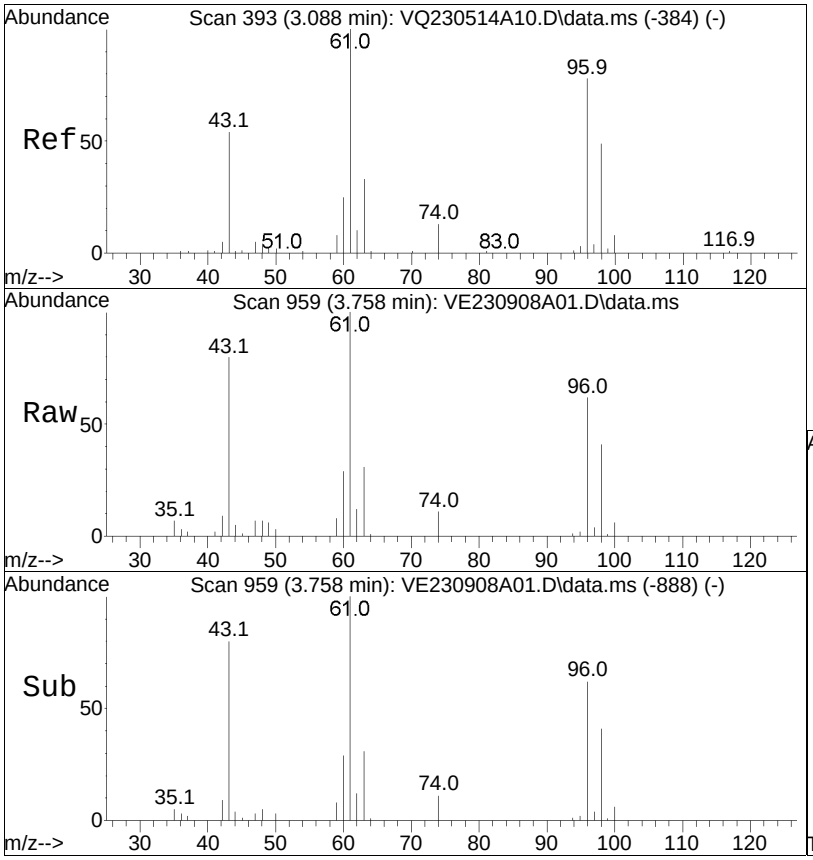


#18
trans-1,2-Dichloroethene
Concen: 10.92 ug/L
RT: 3.744 min Scan# 954
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 96 Resp: 34066

Ion	Ratio	Lower	Upper
96	100		
61	163.3	102.8	213.4
98	63.7	41.8	86.8
63	51.0	32.2	66.8

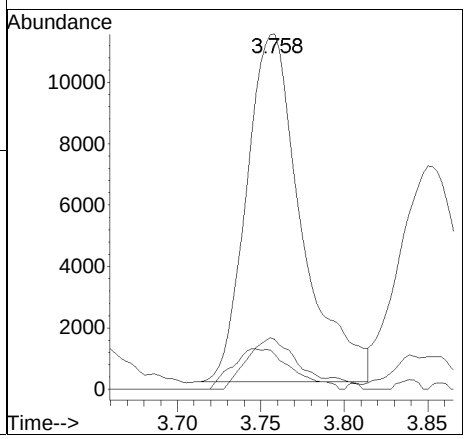


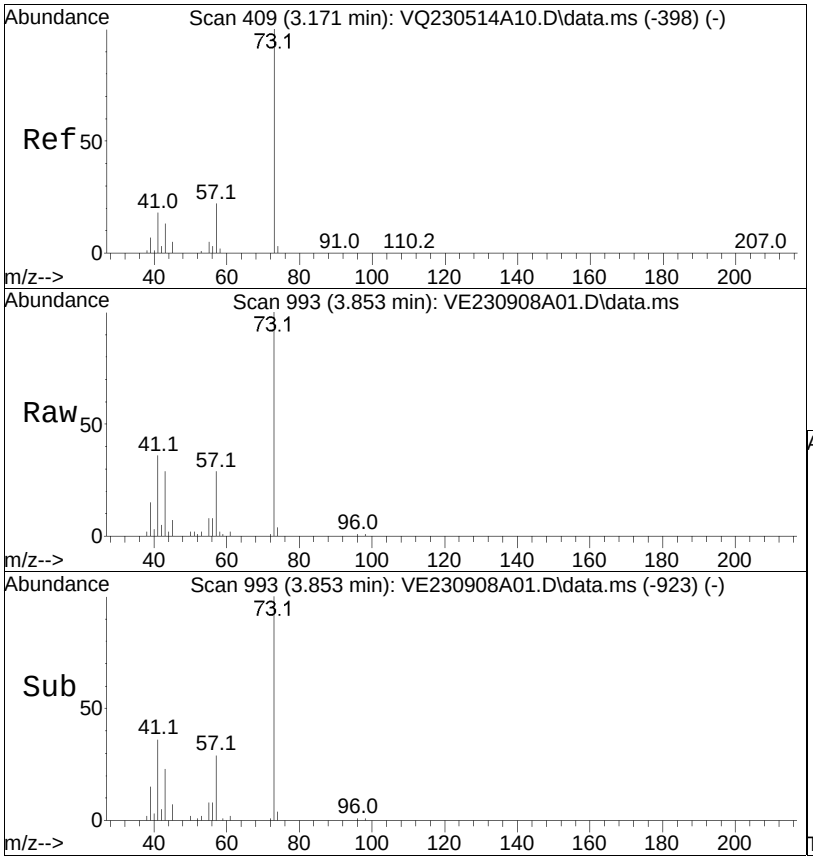


#19
Methyl acetate
Concen: 13.37 ug/L
RT: 3.758 min Scan# 959
Delta R.T. -0.003 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 43 Resp: 26013

Ion	Ratio	Lower	Upper
43	100		
74	13.4	16.6	24.8#
59	12.6	13.9	20.9#

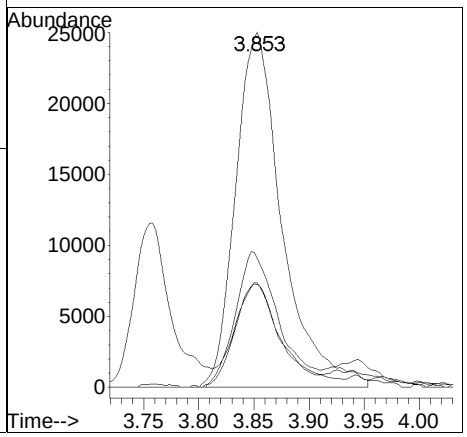


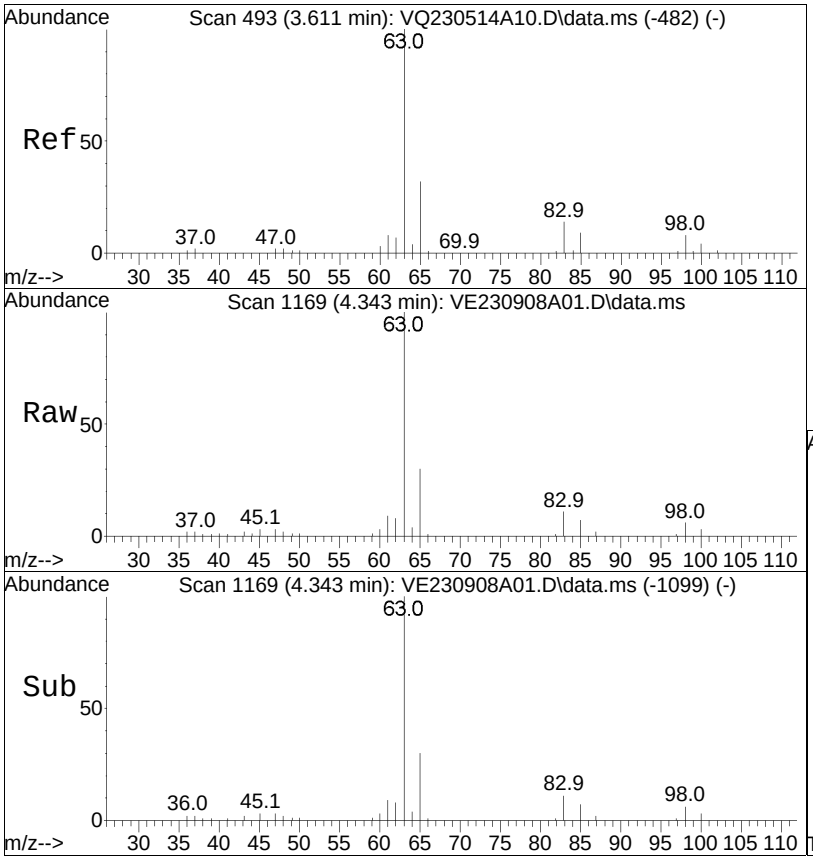


#21
Methyl tert-butyl ether
Concen: 9.31 ug/L
RT: 3.853 min Scan# 993
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 73 Resp: 73457

Ion	Ratio	Lower	Upper
73	100		
57	29.4	14.0	29.0#
43	22.8	13.6	28.2
41	36.0	15.0	31.2#

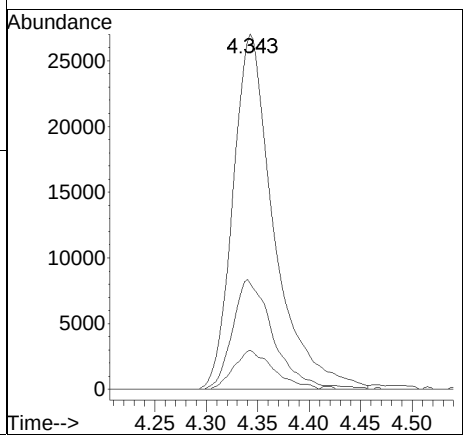


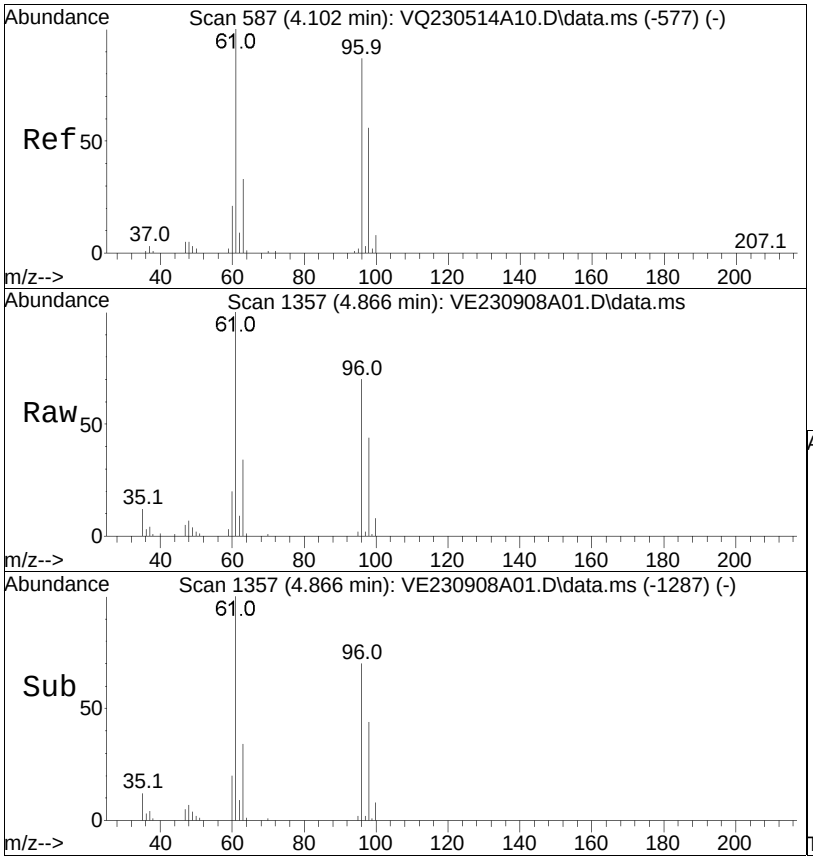


#25
1,1-Dichloroethane
Concen: 9.95 ug/L
RT: 4.343 min Scan# 1169
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 63 Resp: 74891

Ion	Ratio	Lower	Upper
63	100		
65	31.0	11.5	51.5
83	10.8	0.0	32.7

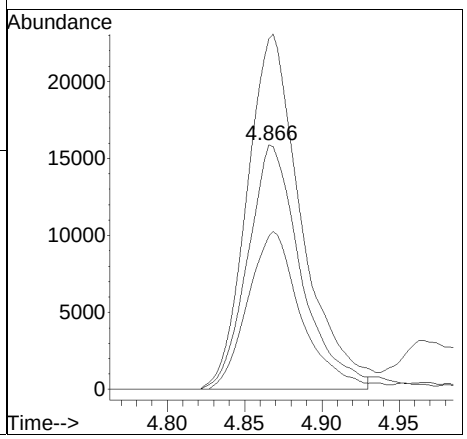


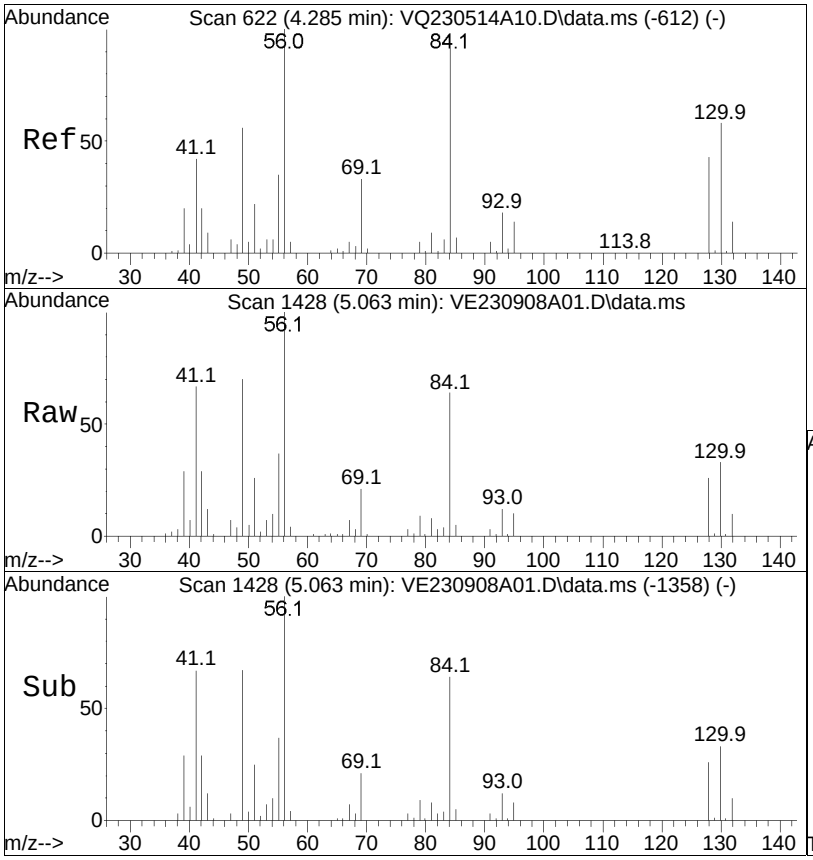


#30
cis-1,2-Dichloroethene
Concen: 10.60 ug/L
RT: 4.866 min Scan# 1357
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 96 Resp: 38070

Ion	Ratio	Lower	Upper
96	100		
61	149.3	115.3	172.9
98	65.4	51.8	77.8

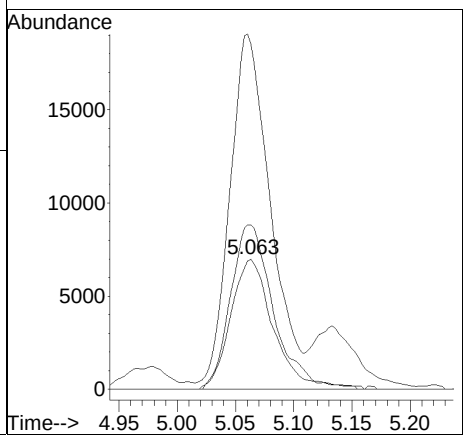


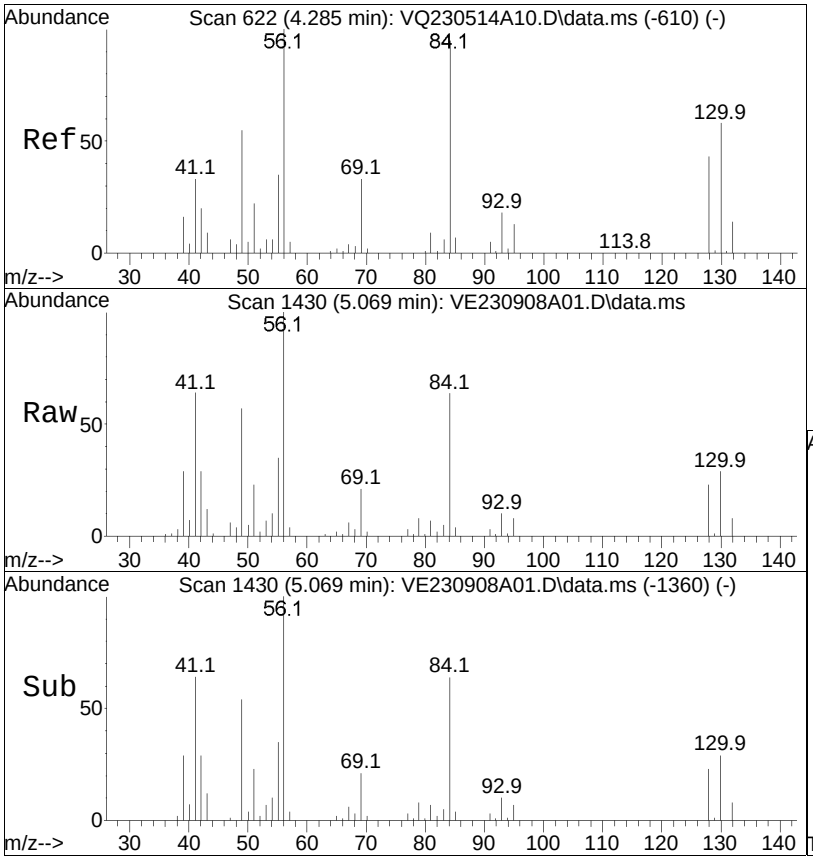


#33
Bromochloromethane
Concen: 11.76 ug/L
RT: 5.063 min Scan# 1428
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:128 Resp: 17888

Ion	Ratio	Lower	Upper
128	100		
49	247.8	143.3	214.9#
130	124.3	102.7	154.1

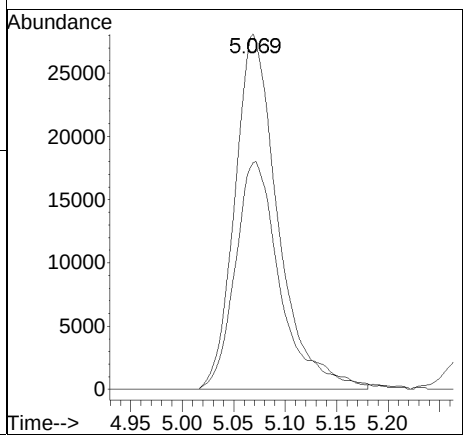


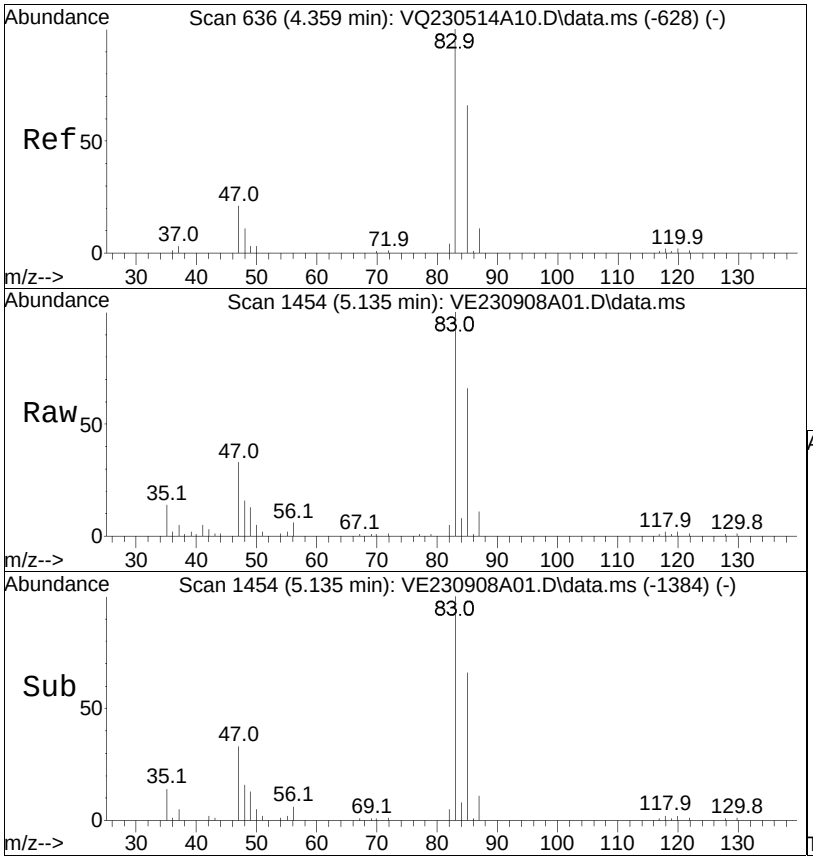


#34
Cyclohexane
Concen: 10.20 ug/L
RT: 5.069 min Scan# 1430
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 56 Resp: 81620

Ion	Ratio	Lower	Upper
56	100		
84	68.2	57.5	119.3

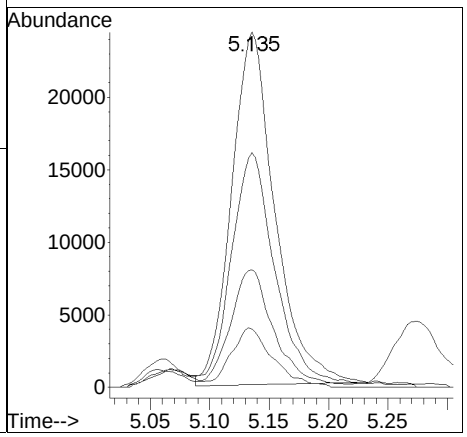


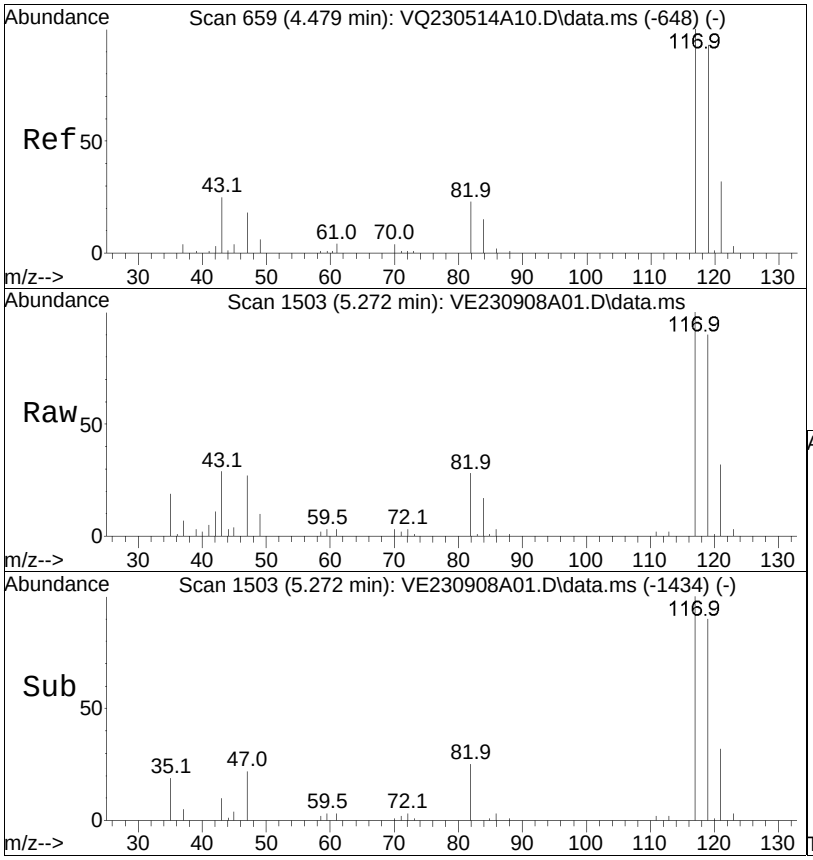


#35
Chloroform
Concen: 10.72 ug/L
RT: 5.135 min Scan# 1454
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 83 Resp: 61949

Ion	Ratio	Lower	Upper
83	100		
85	65.7	43.0	89.2
47	31.5	17.5	36.3
48	16.3	8.8	18.2

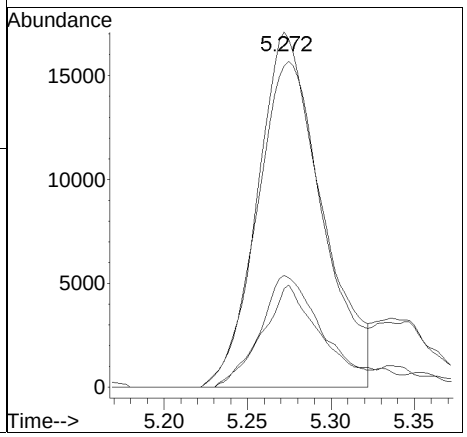


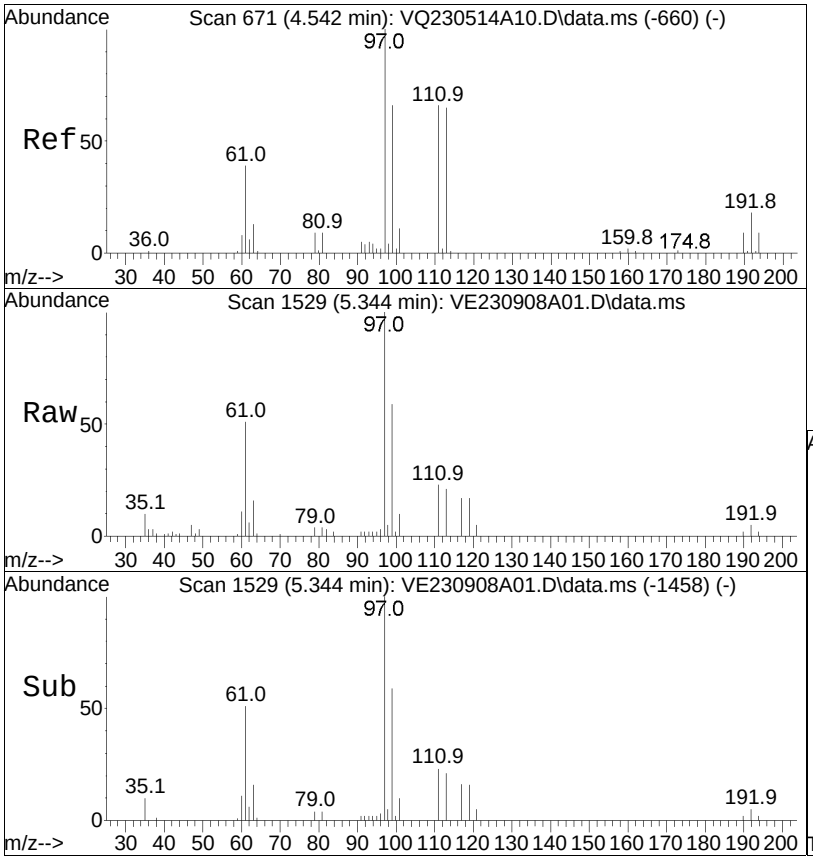


#37
Carbon tetrachloride
Concen: 10.94 ug/L
RT: 5.272 min Scan# 1503
Delta R.T. -0.008 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:117 Resp: 45655

Ion	Ratio	Lower	Upper
117	100		
119	95.1	63.2	131.2
121	31.1	20.3	42.3
82	26.7	18.1	37.7

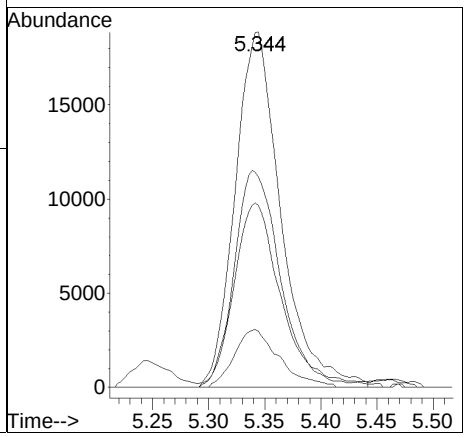


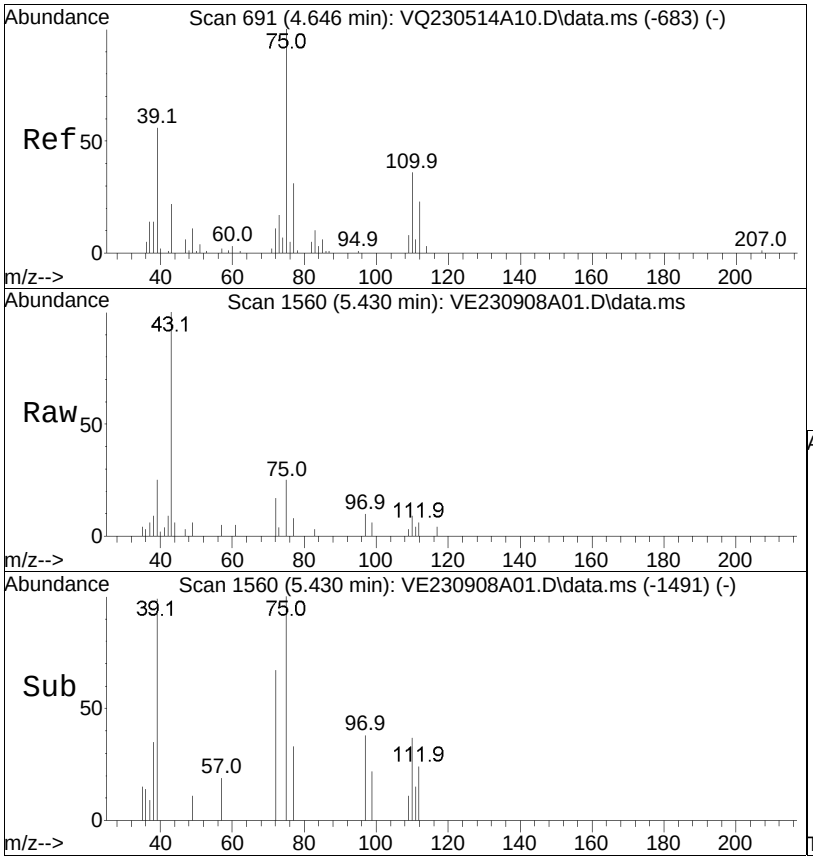


#40
1,1,1-Trichloroethane
Concen: 10.45 ug/L
RT: 5.344 min Scan# 1529
Delta R.T. -0.003 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 97 Resp: 53841

Ion	Ratio	Lower	Upper
97	100		
99	62.3	42.5	88.3
61	50.1	30.4	63.2
63	16.0	9.6	19.8

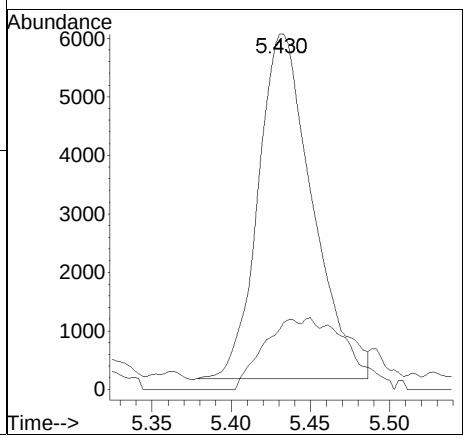


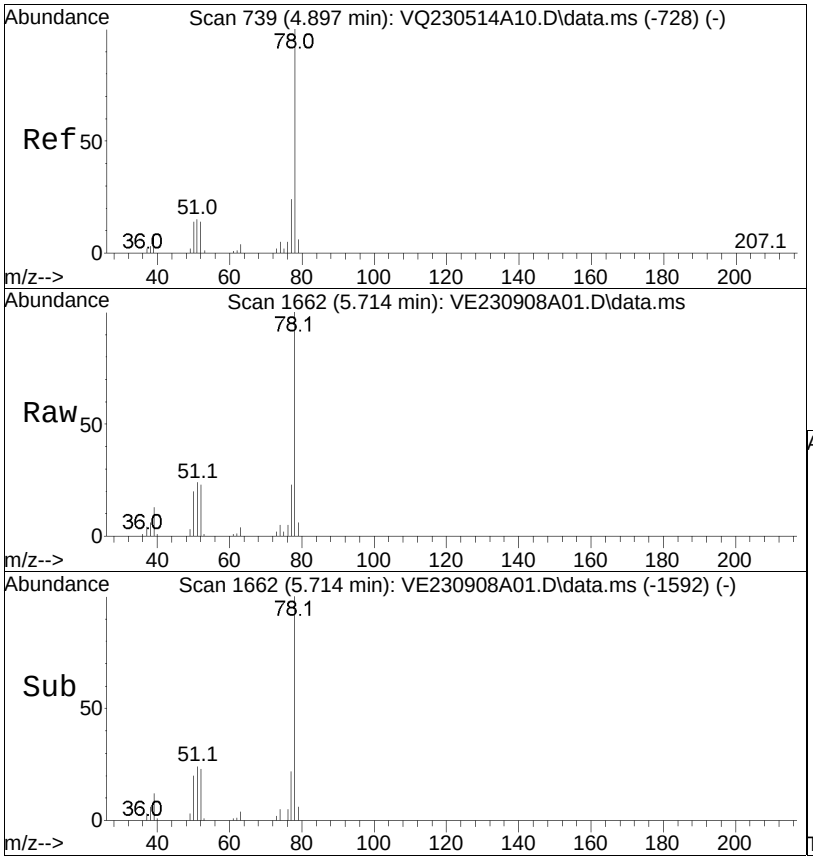


#42
2-Butanone
Concen: 12.36 ug/L
RT: 5.430 min Scan# 1560
Delta R.T. -0.008 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 43 Resp: 14137

Ion	Ratio	Lower	Upper
43	100		
72	14.4	31.2	46.8#

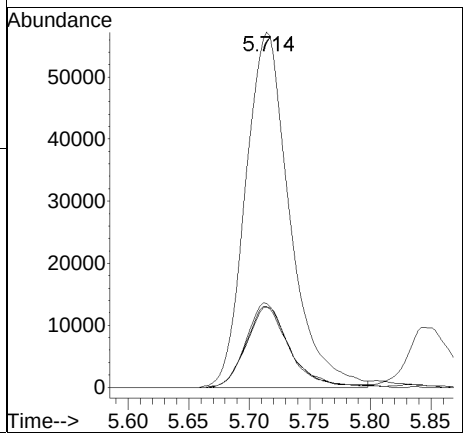


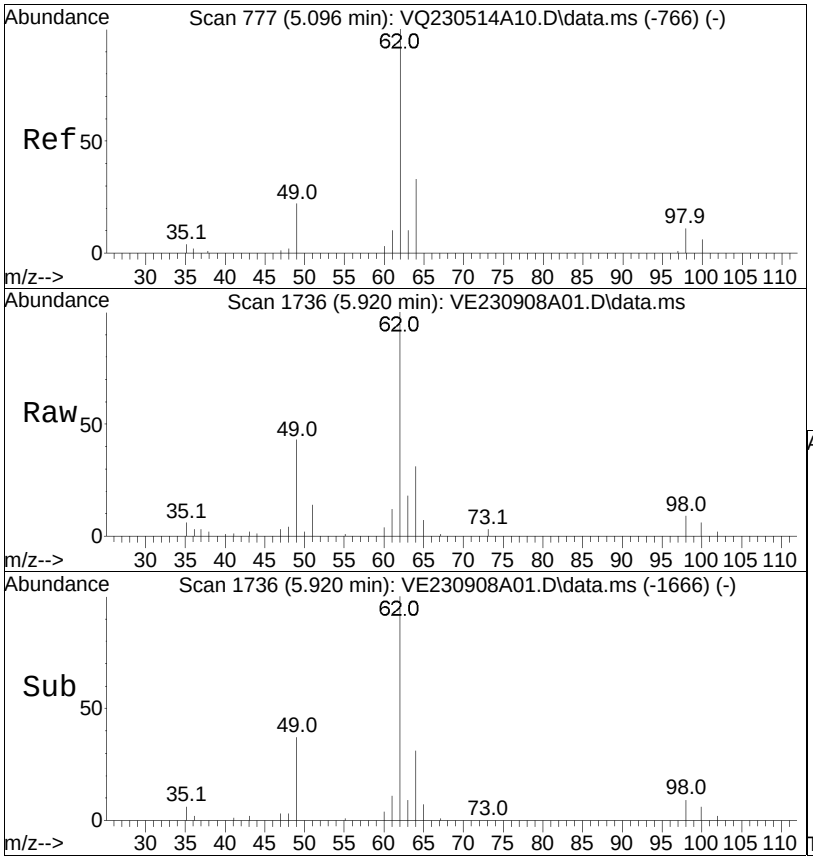


#45
Benzene
Concen: 11.18 ug/L
RT: 5.714 min Scan# 1662
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 78 Resp: 144971

Ion	Ratio	Lower	Upper
78	100		
77	22.9	15.9	33.1
51	23.0	12.3	25.5
52	22.0	11.3	23.5

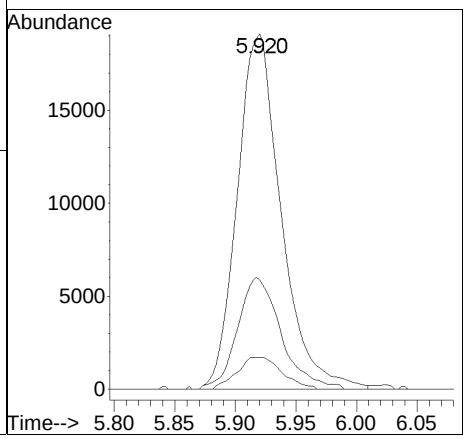


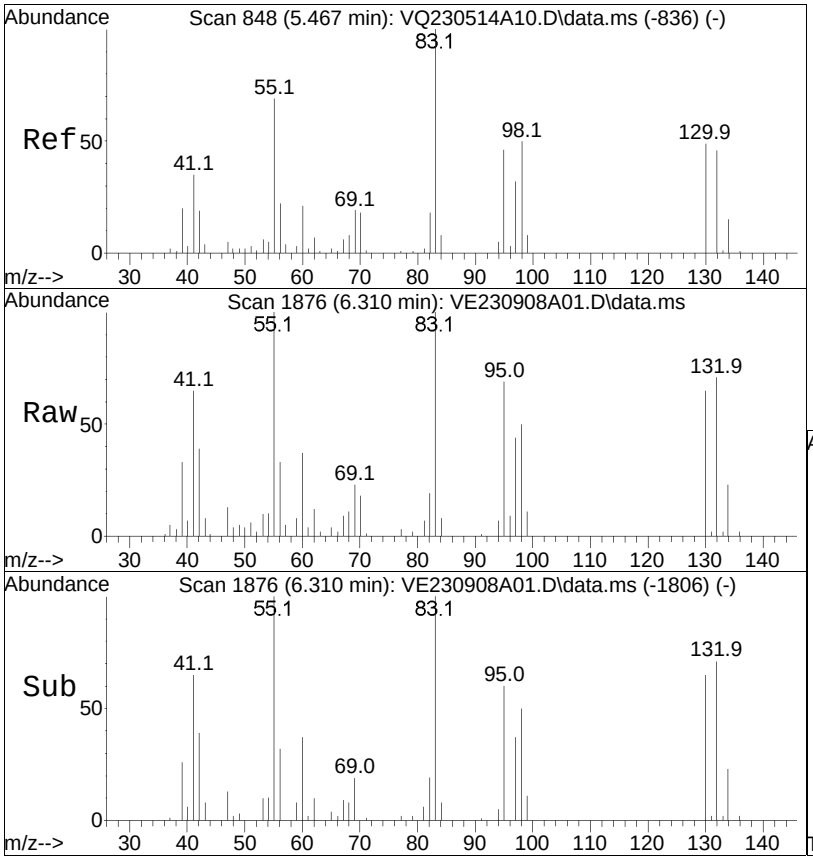


#48
1,2-Dichloroethane
Concen: 9.14 ug/L
RT: 5.920 min Scan# 1736
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 62 Resp: 48195

Ion	Ratio	Lower	Upper
62	100		
64	31.4	12.6	52.6
98	9.3	0.0	28.2

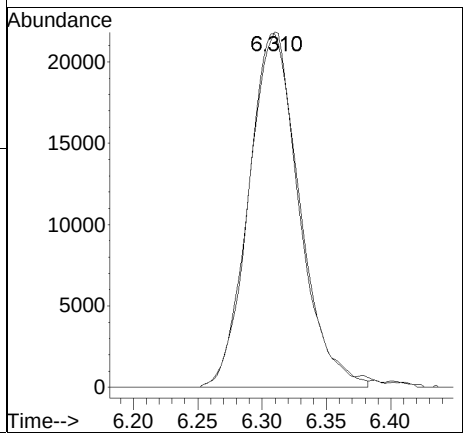


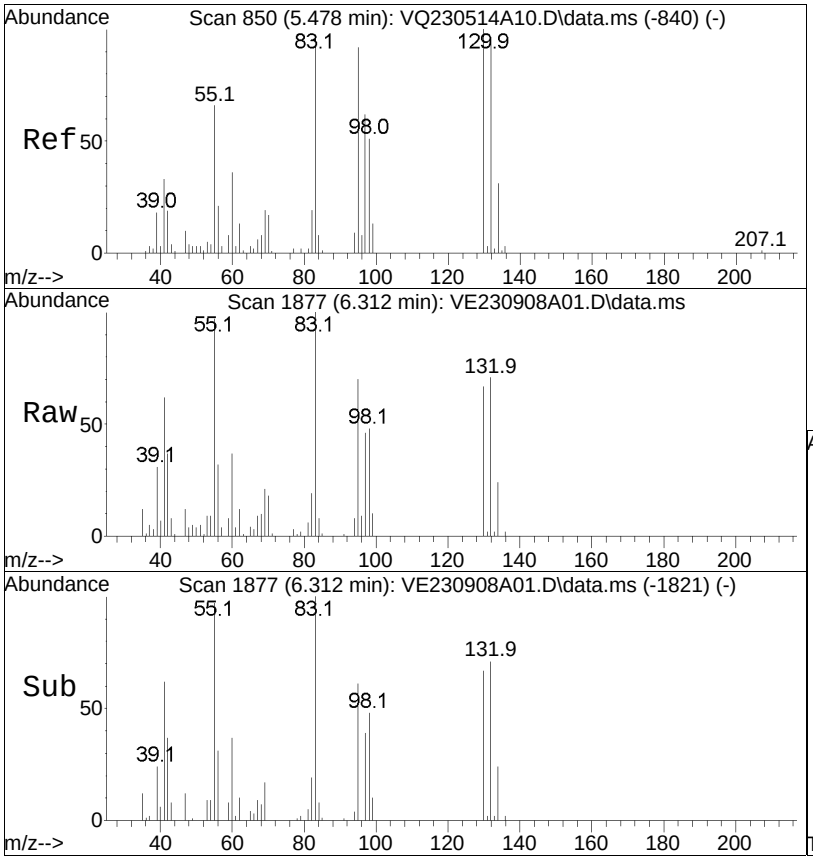


#51
Methyl cyclohexane
Concen: 10.61 ug/L
RT: 6.310 min Scan# 1876
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 83 Resp: 59648

Ion	Ratio	Lower	Upper
83	100		
55	99.1	65.0	97.6#

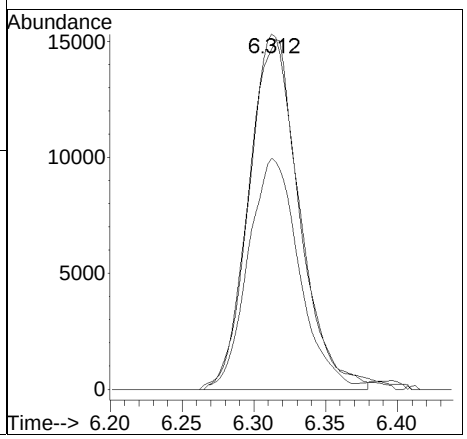


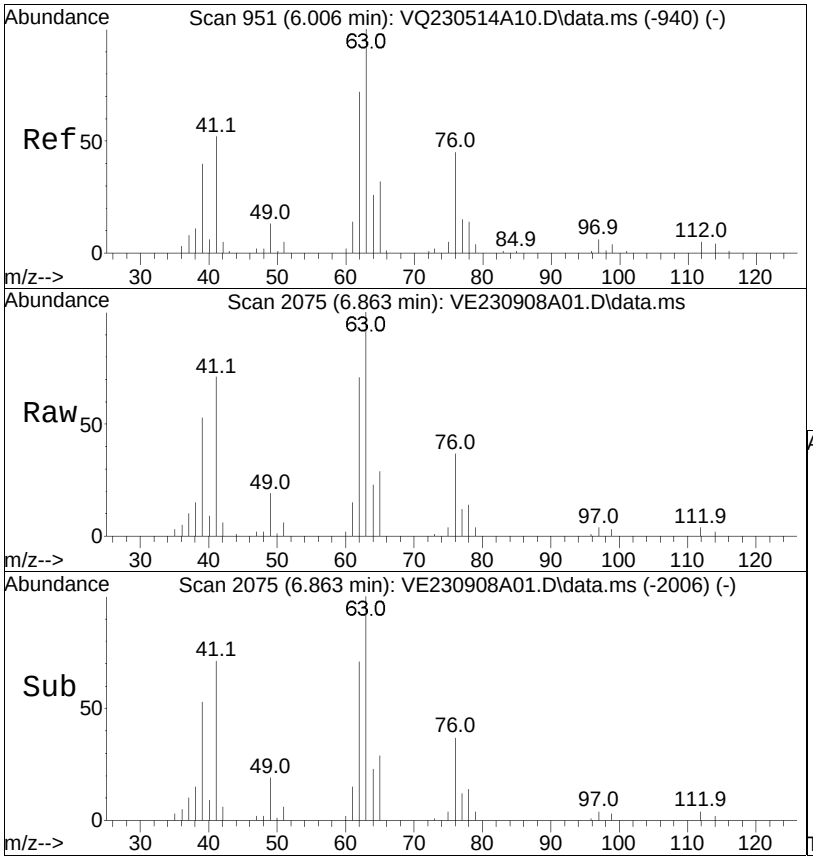


#52
Trichloroethene
Concen: 10.65 ug/L
RT: 6.312 min Scan# 1877
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 95 Resp: 37295

Ion	Ratio	Lower	Upper
95	100		
97	66.0	54.2	81.4
130	99.9	81.8	122.6

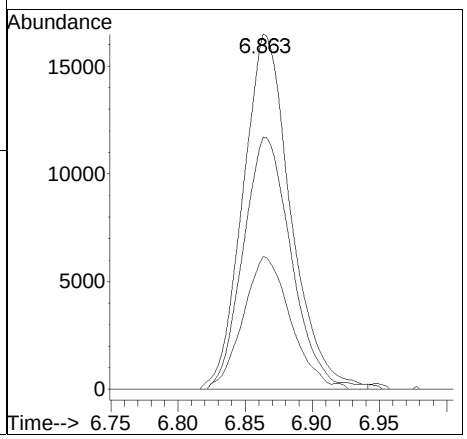


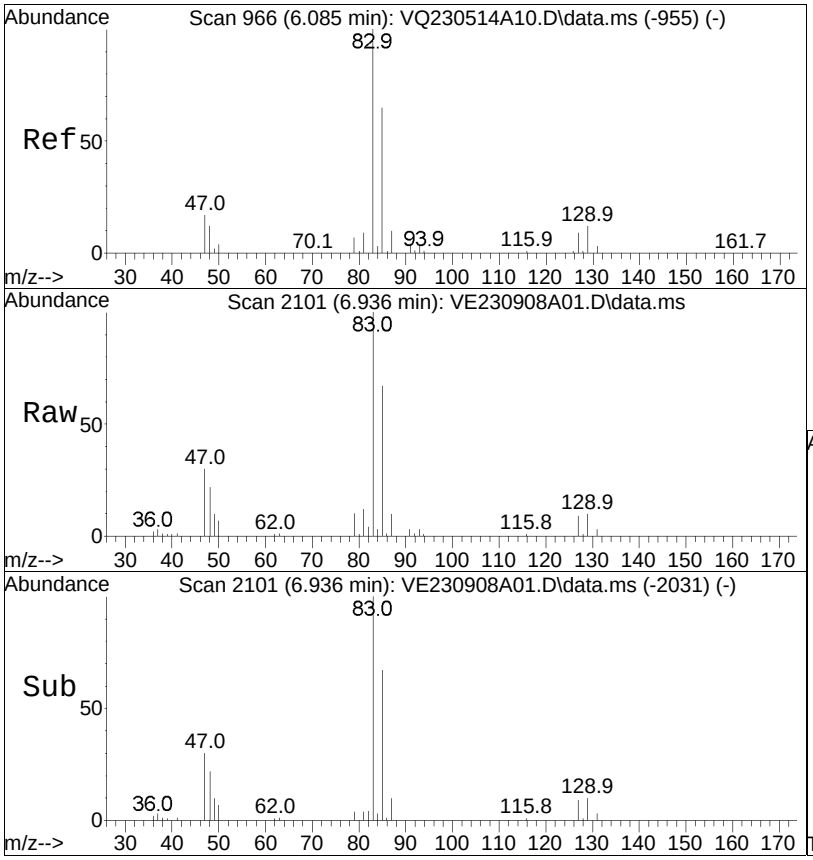


#55
1,2-Dichloropropane
Concen: 10.03 ug/L
RT: 6.863 min Scan# 2075
Delta R.T. -0.008 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 63 Resp: 40911

Ion	Ratio	Lower	Upper
63	100		
62	71.2	57.6	86.4
76	37.3	38.5	57.7#

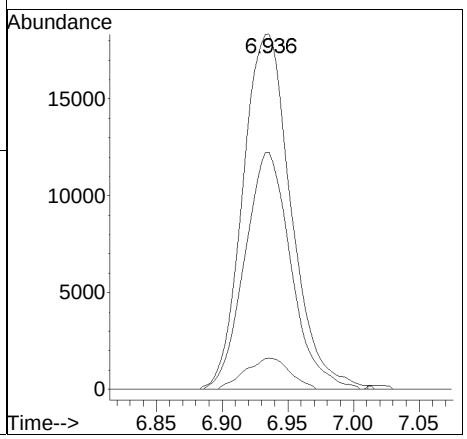


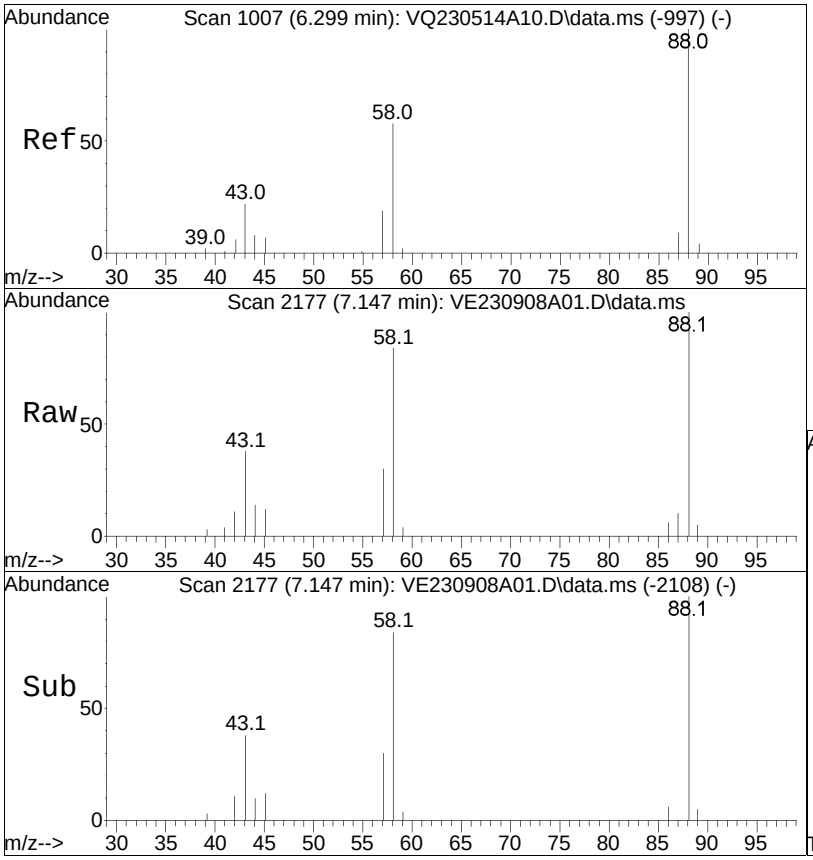


#58
Bromodichloromethane
Concen: 10.41 ug/L
RT: 6.936 min Scan# 2101
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 83 Resp: 46989

Ion	Ratio	Lower	Upper
83	100		
85	64.1	51.4	77.2
127	8.2	6.9	10.3

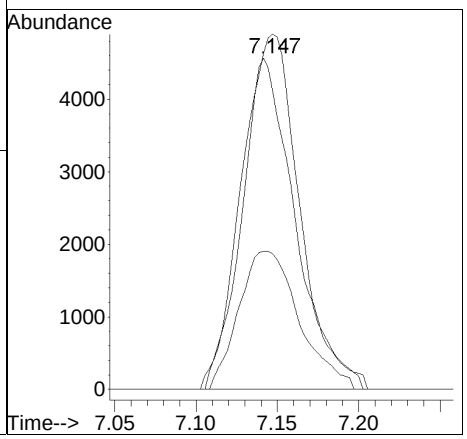


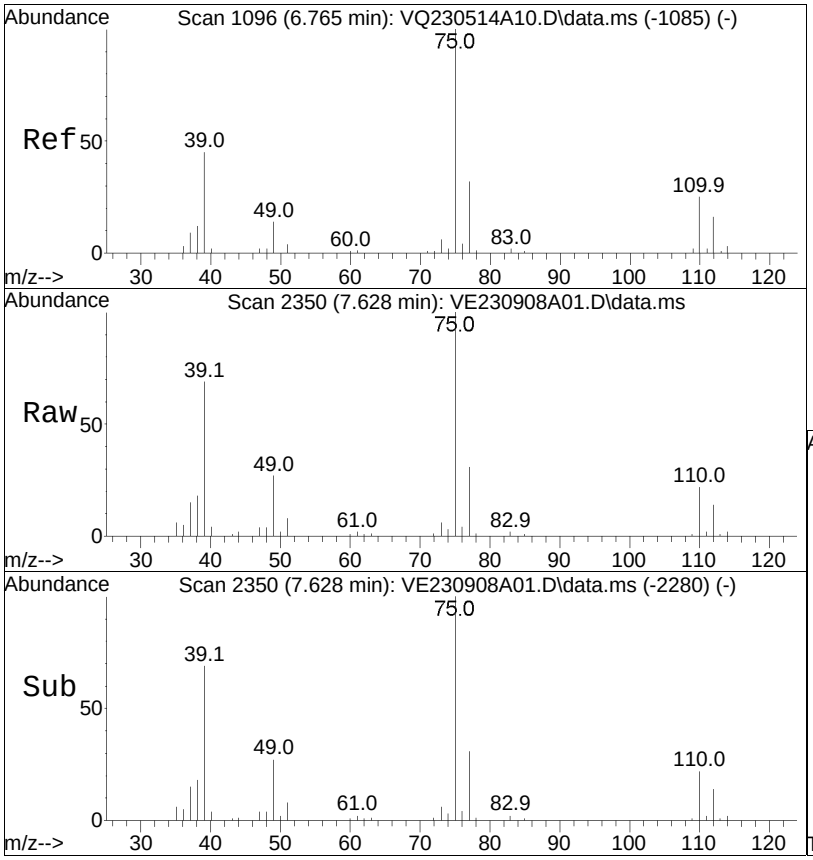


#61
1,4-Dioxane
Concen: 828.38 ug/L
RT: 7.147 min Scan# 2177
Delta R.T. -0.008 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 88 Resp: 12130

Ion	Ratio	Lower	Upper
88	100		
58	86.5	59.1	88.7
43	40.7	30.0	45.0

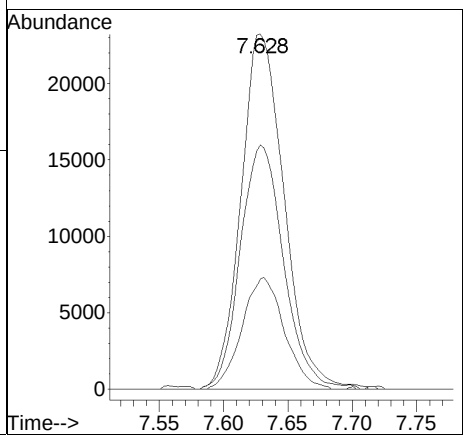


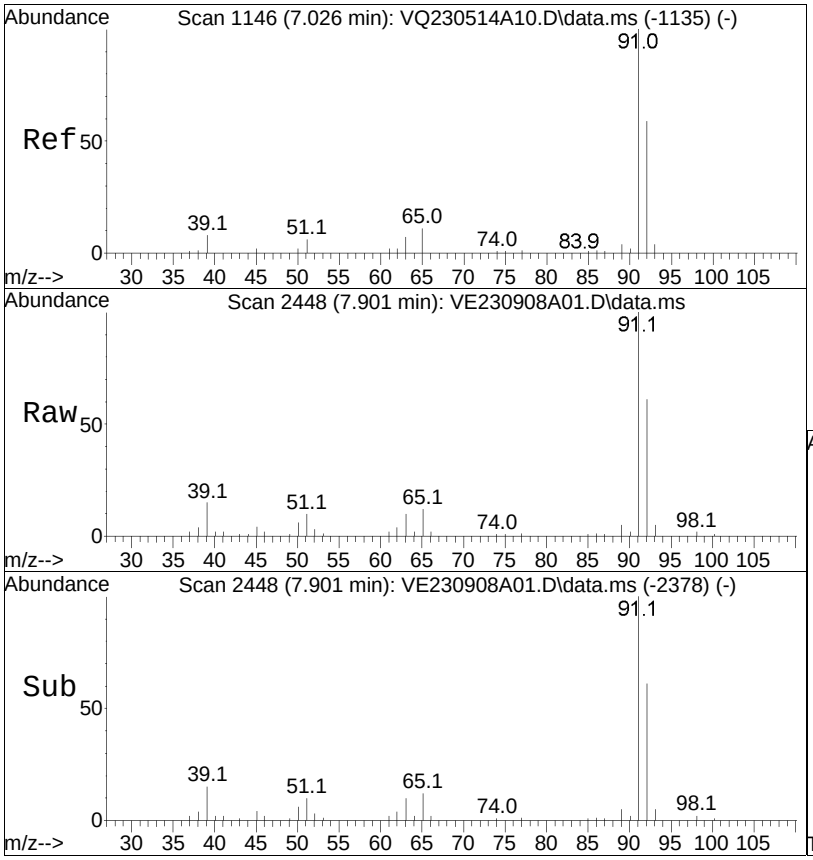


#62
cis-1,3-Dichloropropene
Concen: 10.42 ug/L
RT: 7.628 min Scan# 2350
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 75 Resp: 54429

Ion	Ratio	Lower	Upper
75	100		
77	30.9	25.0	37.6
39	69.1	50.6	75.8

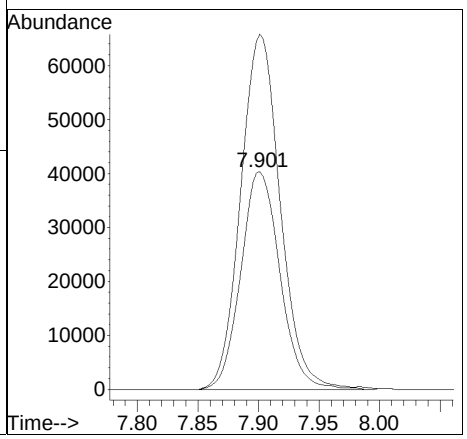


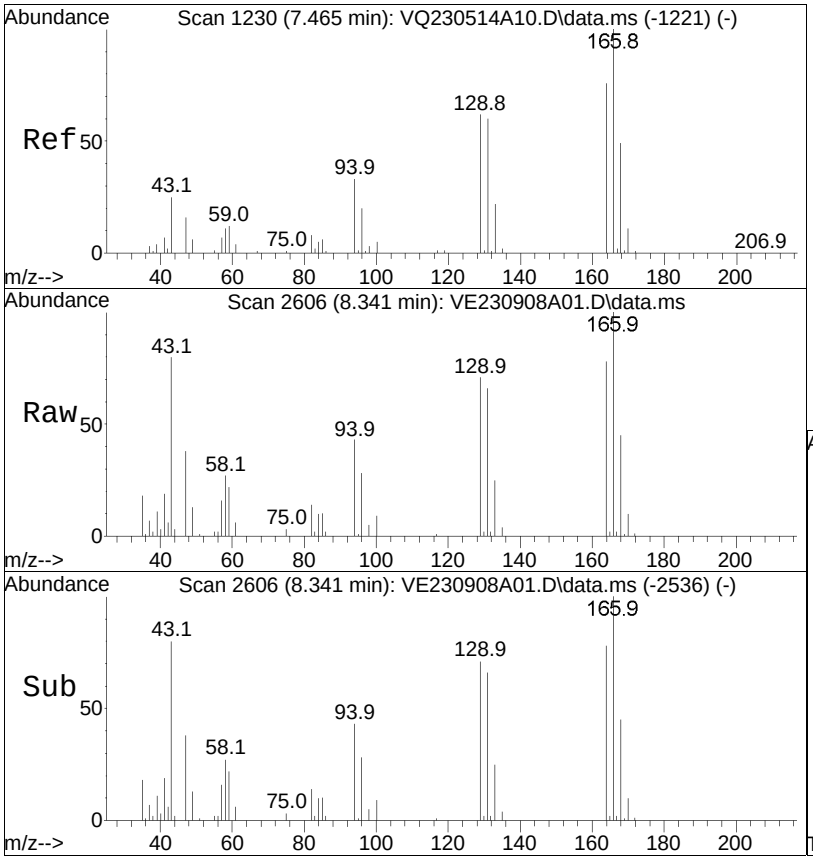


#65
Toluene
Concen: 11.75 ug/L
RT: 7.901 min Scan# 2448
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 92 Resp: 90769

Ion	Ratio	Lower	Upper
92	100		
91	164.6	135.9	203.9

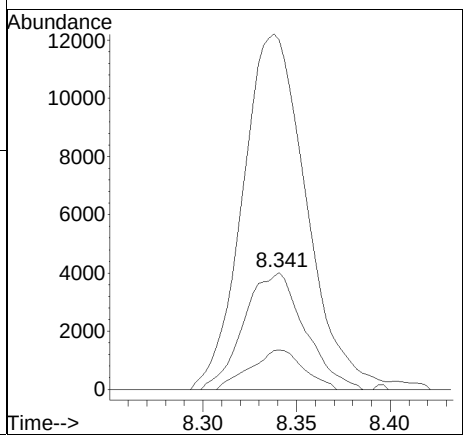


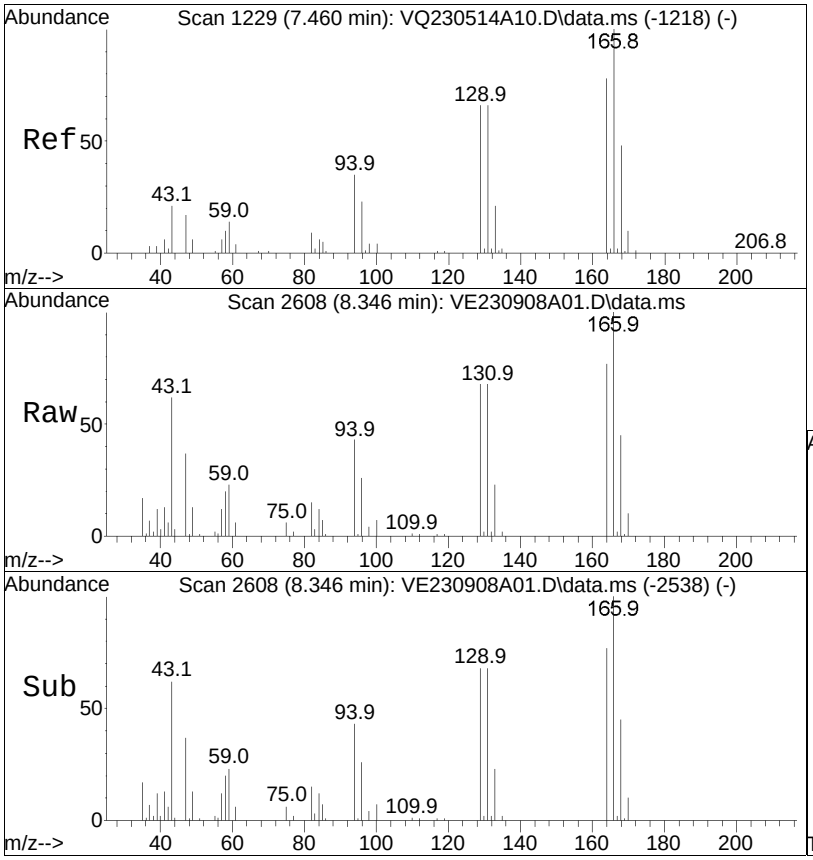


#66
4-Methyl-2-pentanone
Concen: 9.66 ug/L
RT: 8.341 min Scan# 2606
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 58 Resp: 9070

Ion	Ratio	Lower	Upper
58	100		
100	29.7	30.1	45.1#
43	319.4	226.7	340.1

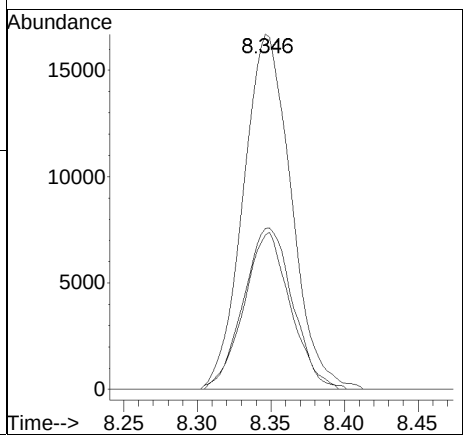


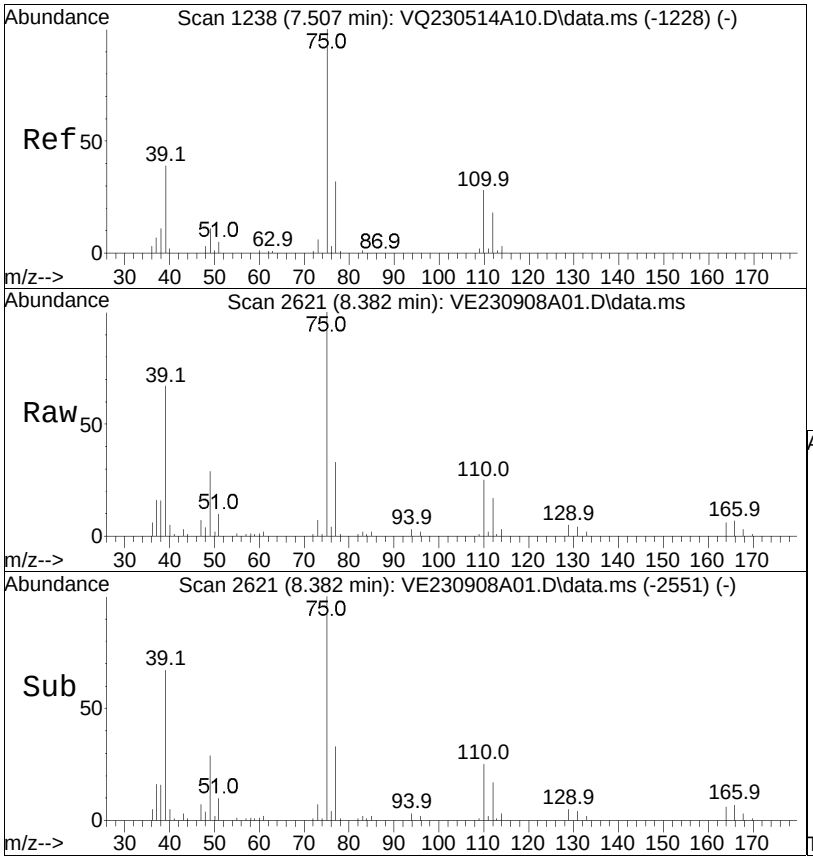


#67
Tetrachloroethene
Concen: 12.46 ug/L
RT: 8.346 min Scan# 2608
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:166 Resp: 37881

Ion	Ratio	Lower	Upper
166	100		
168	46.9	28.0	68.0
94	42.8	27.8	67.8

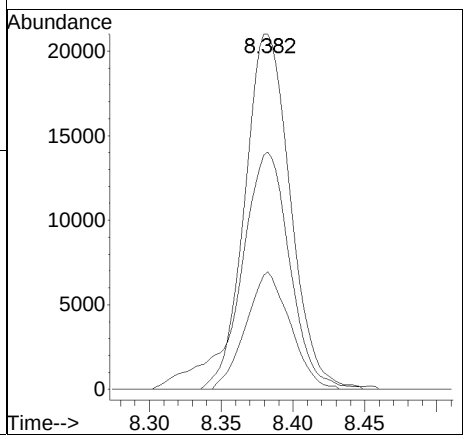


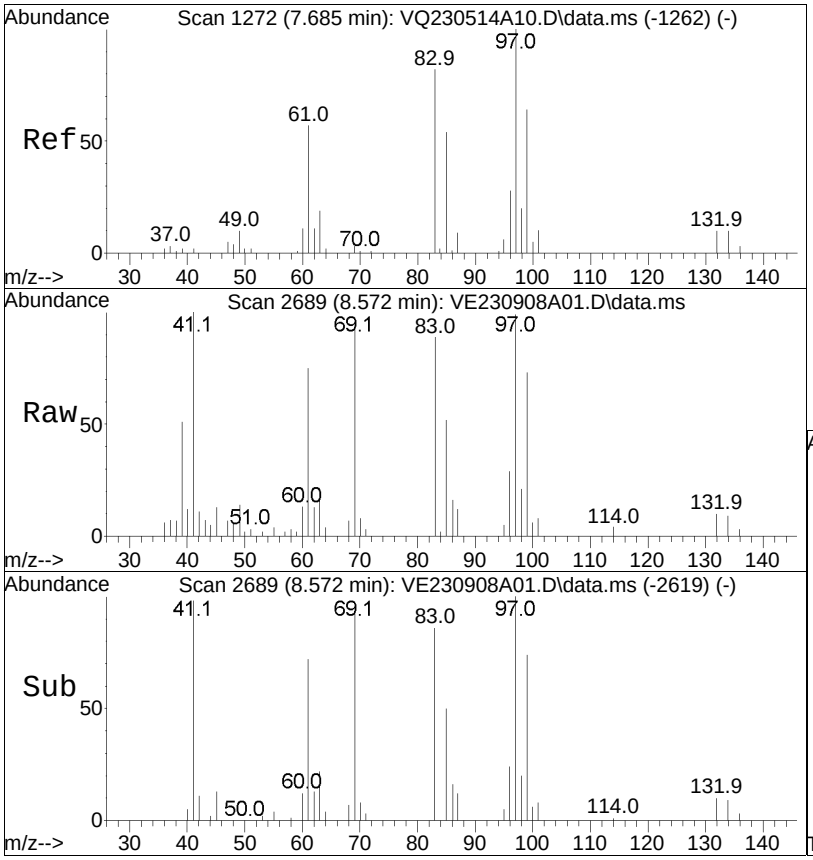


#69
trans-1,3-Dichloropropene
Concen: 10.59 ug/L
RT: 8.382 min Scan# 2621
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 75 Resp: 46361

Ion	Ratio	Lower	Upper
75	100		
77	32.1	11.4	51.4
39	74.2	44.3	84.3

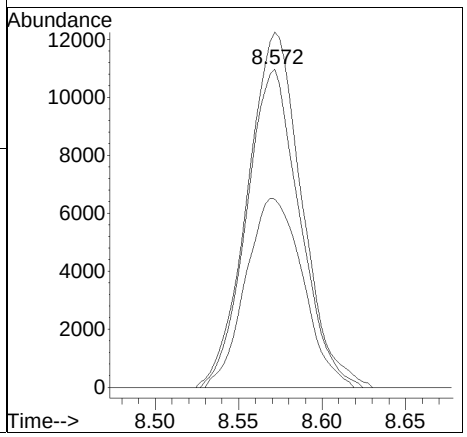


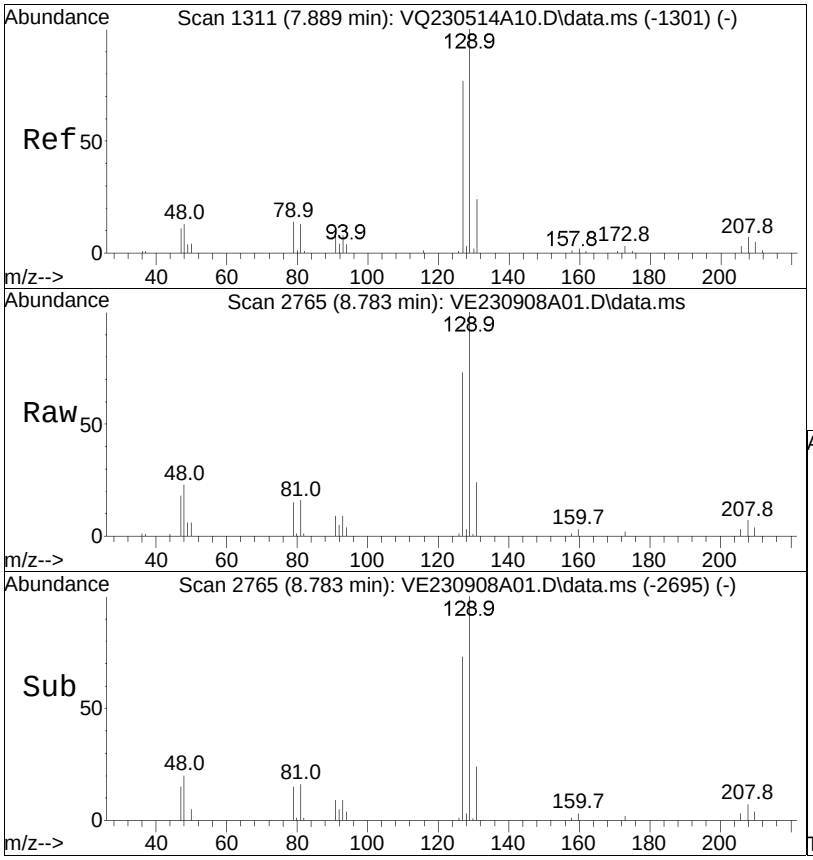


#72
1,1,2-Trichloroethane
Concen: 12.25 ug/L
RT: 8.572 min Scan# 2689
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 83 Resp: 24290

Ion	Ratio	Lower	Upper
83	100		
97	114.4	99.2	139.2
85	63.7	48.7	88.7

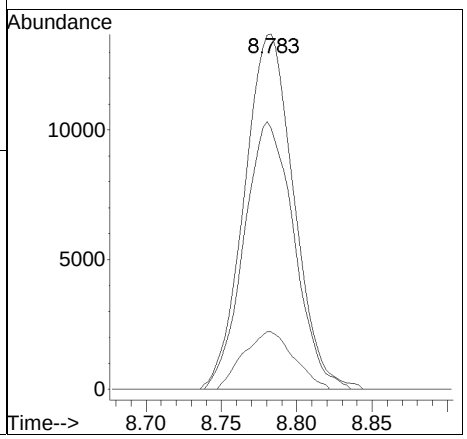


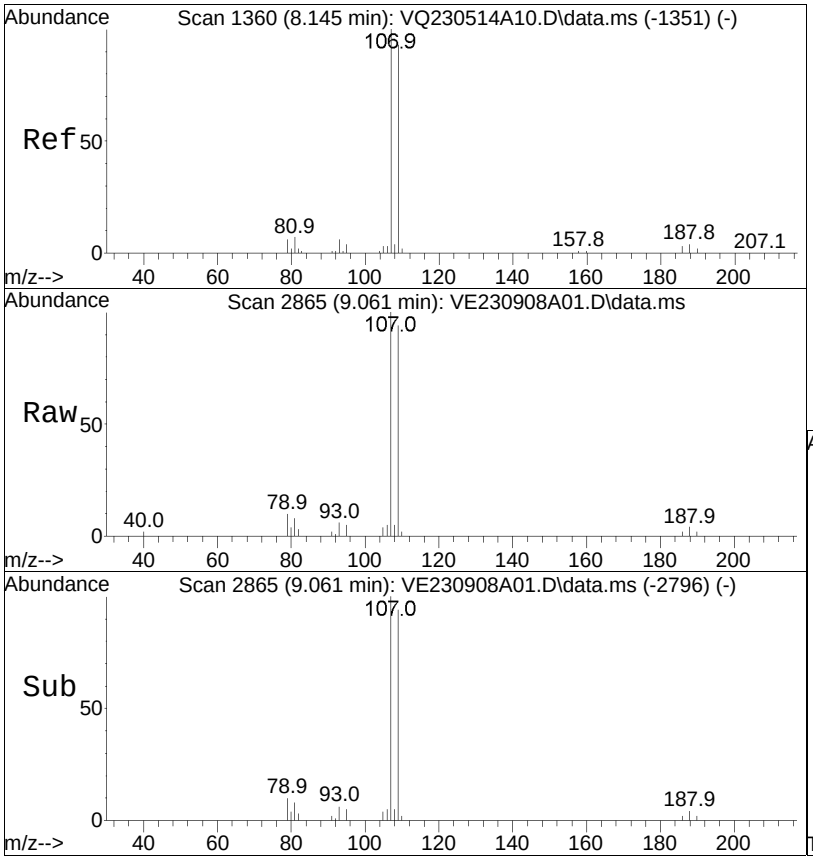


#73
Chlorodibromomethane
Concen: 11.22 ug/L
RT: 8.783 min Scan# 2765
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:129 Resp: 31358

Ion	Ratio	Lower	Upper
129	100		
81	16.6	0.0	36.2
127	76.5	58.0	98.0

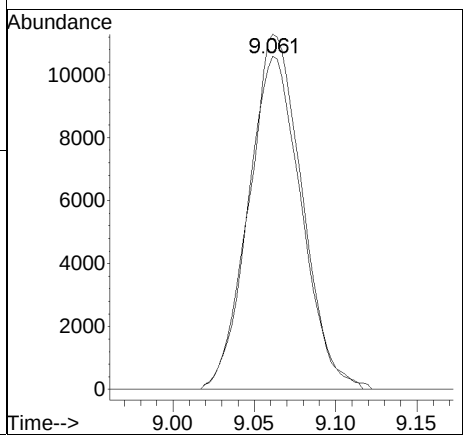


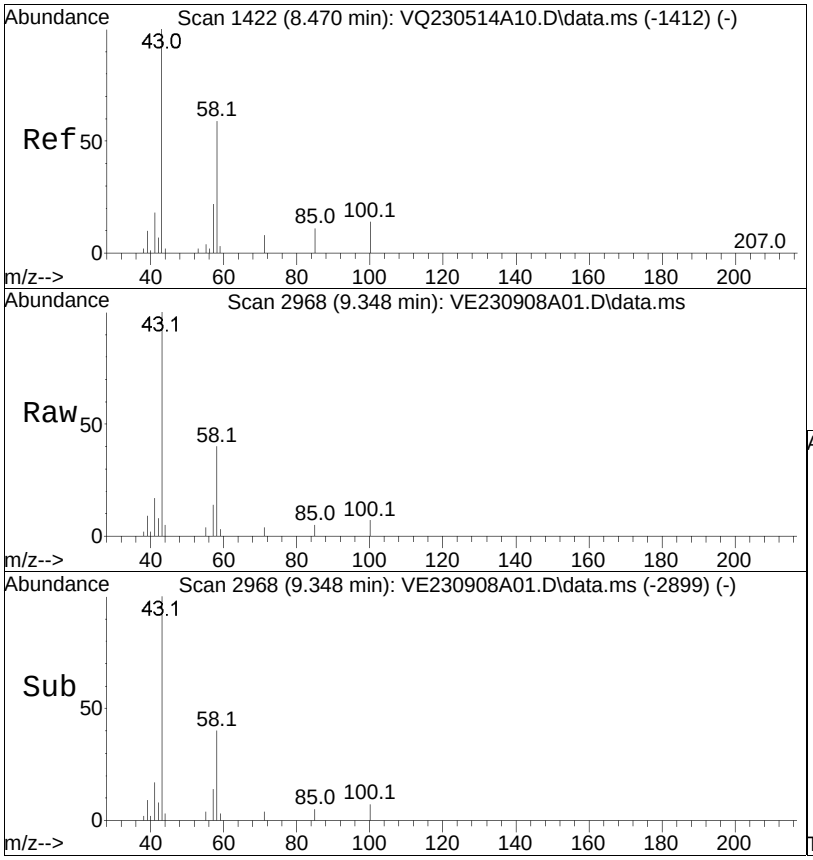


#75
1,2-Dibromoethane
Concen: 10.90 ug/L
RT: 9.061 min Scan# 2865
Delta R.T. -0.008 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:107 Resp: 25438

Ion	Ratio	Lower	Upper
107	100		
109	94.8	75.7	113.5

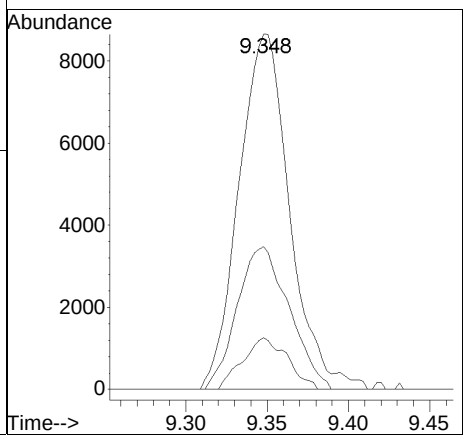


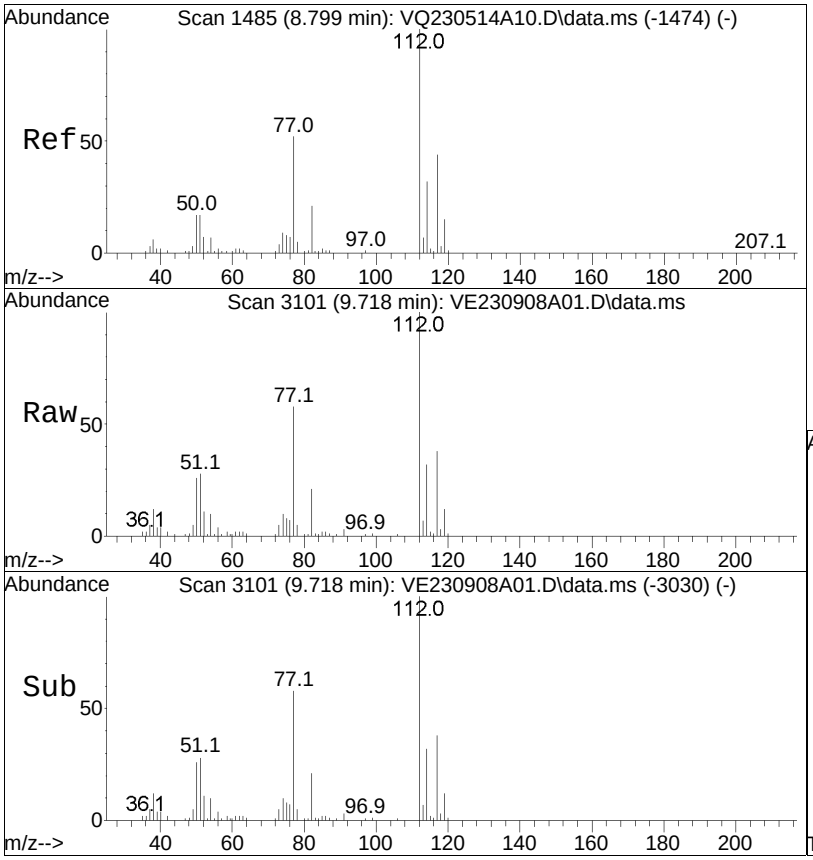


#77
2-Hexanone
Concen: 11.39 ug/L
RT: 9.348 min Scan# 2968
Delta R.T. -0.008 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 43 Resp: 18838

Ion	Ratio	Lower	Upper
43	100		
58	41.1	38.2	57.4
57	12.8	14.1	21.1#

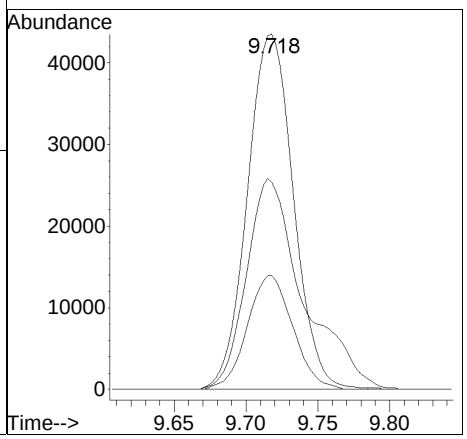


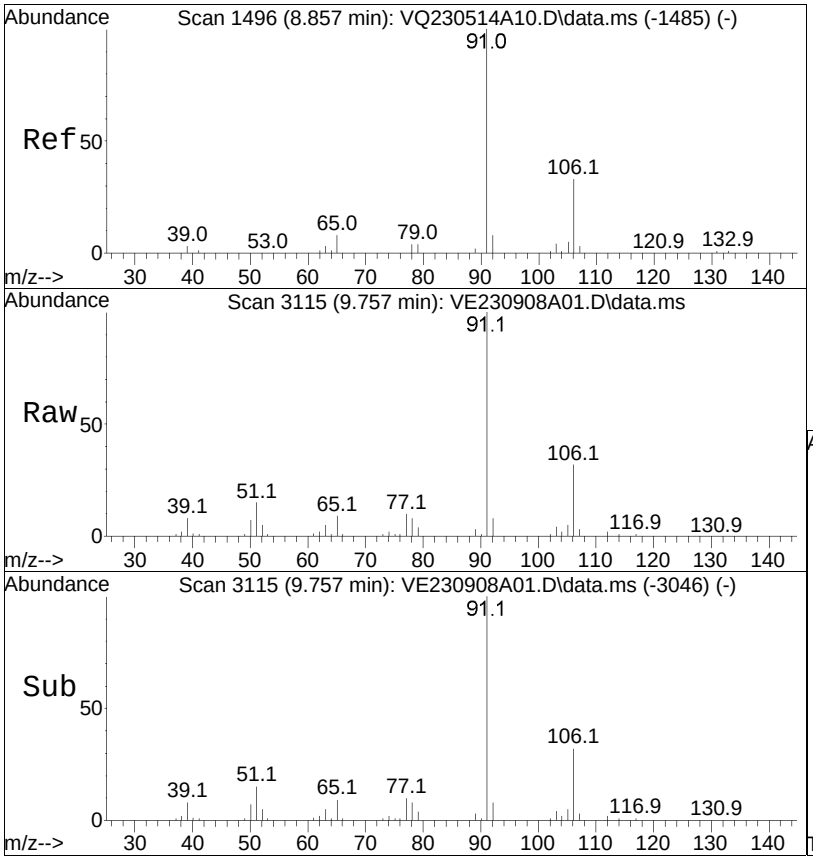


#78
Chlorobenzene
Concen: 11.55 ug/L
RT: 9.718 min Scan# 3101
Delta R.T. -0.003 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:112 Resp: 97099

Ion	Ratio	Lower	Upper
112	100		
77	73.4	50.7	76.1
114	31.6	25.6	38.4

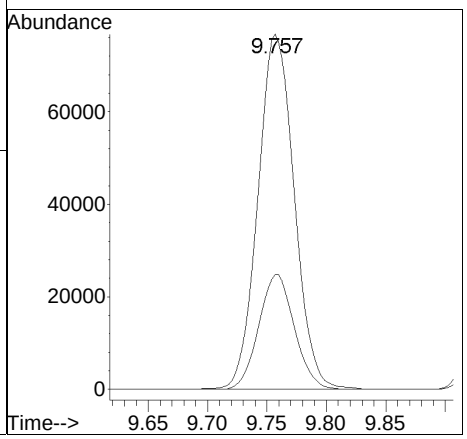


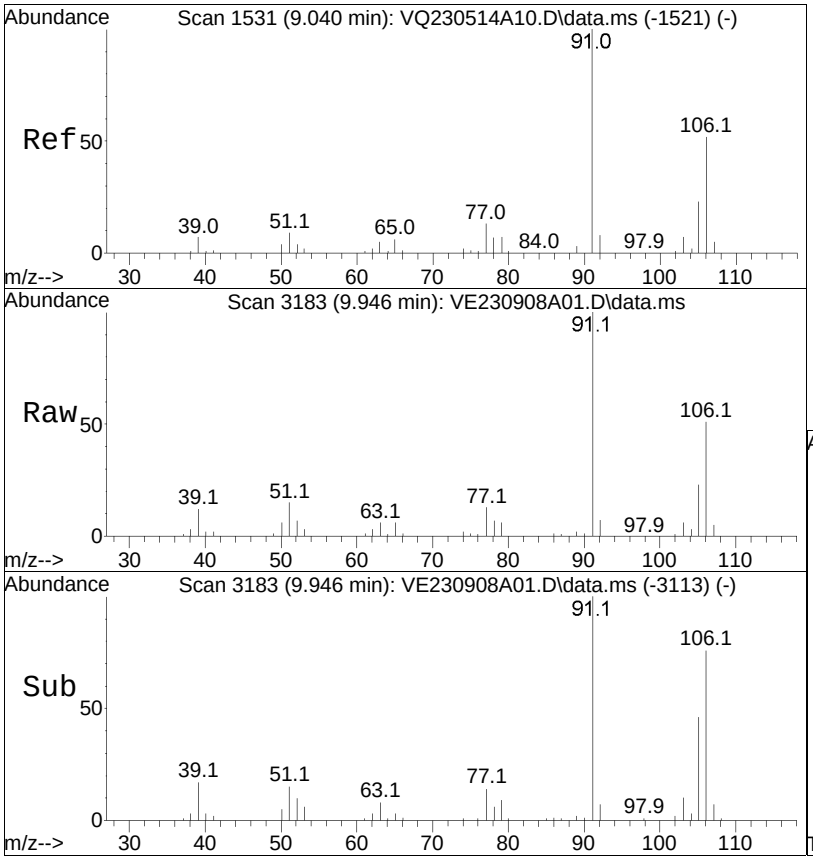


#79
Ethylbenzene
Concen: 10.64 ug/L
RT: 9.757 min Scan# 3115
Delta R.T. -0.008 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 91 Resp: 163568

Ion	Ratio	Lower	Upper
91	100		
106	31.6	24.6	36.8

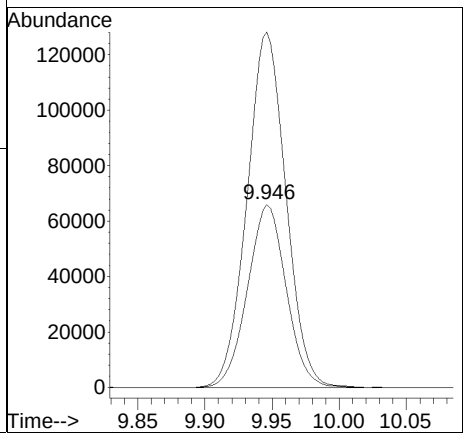


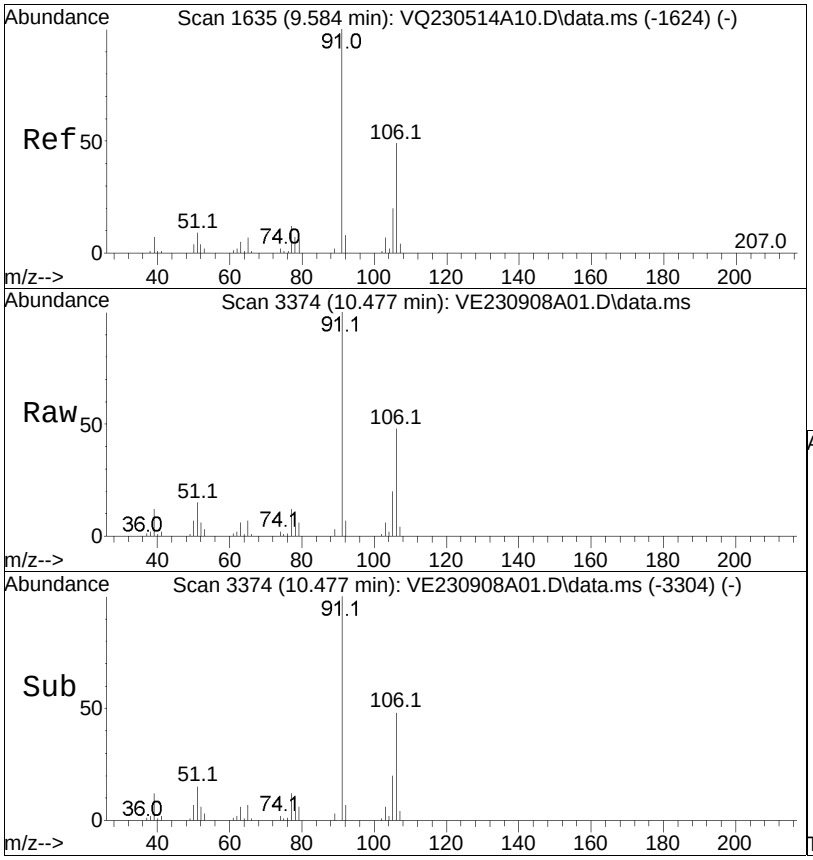


#81
p/m Xylene
Concen: 22.16 ug/L
RT: 9.946 min Scan# 3183
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:106 Resp: 132122

Ion	Ratio	Lower	Upper
106	100		
91	195.4	165.5	248.3

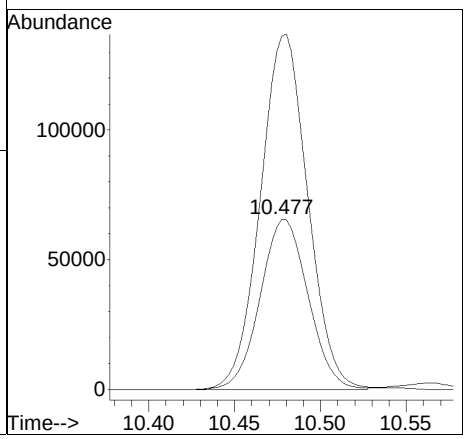


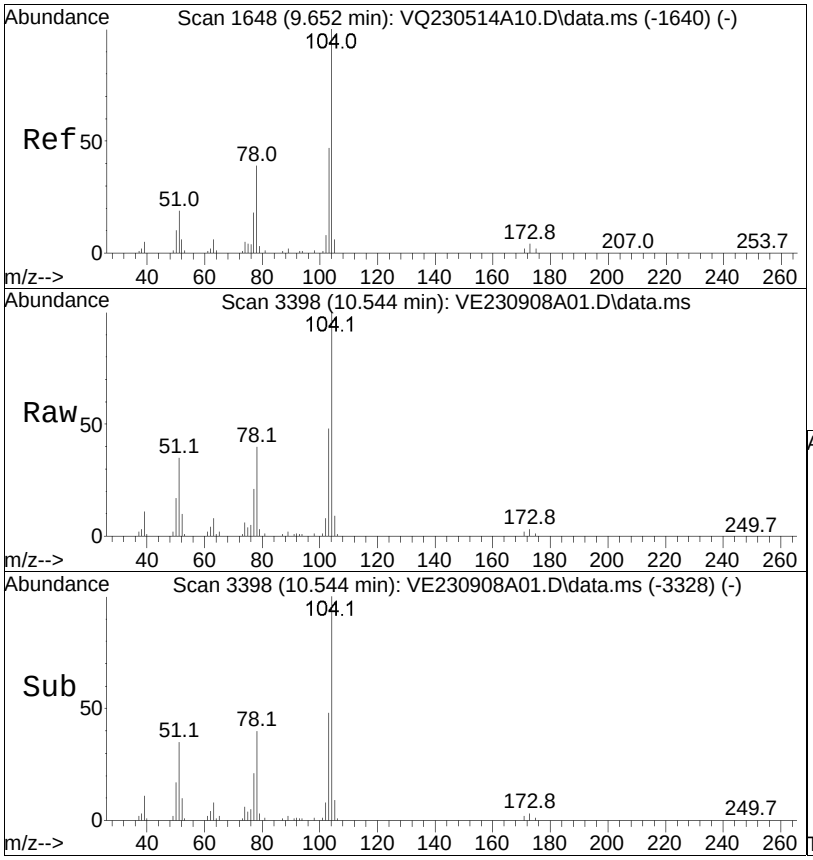


#82
o Xylene
Concen: 21.41 ug/L
RT: 10.477 min Scan# 3374
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:106 Resp: 127211

Ion	Ratio	Lower	Upper
106	100		
91	206.5	176.5	264.7

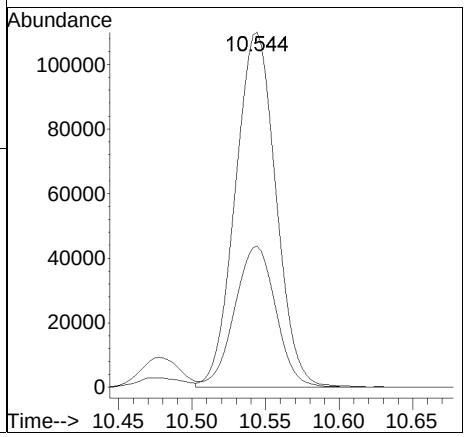


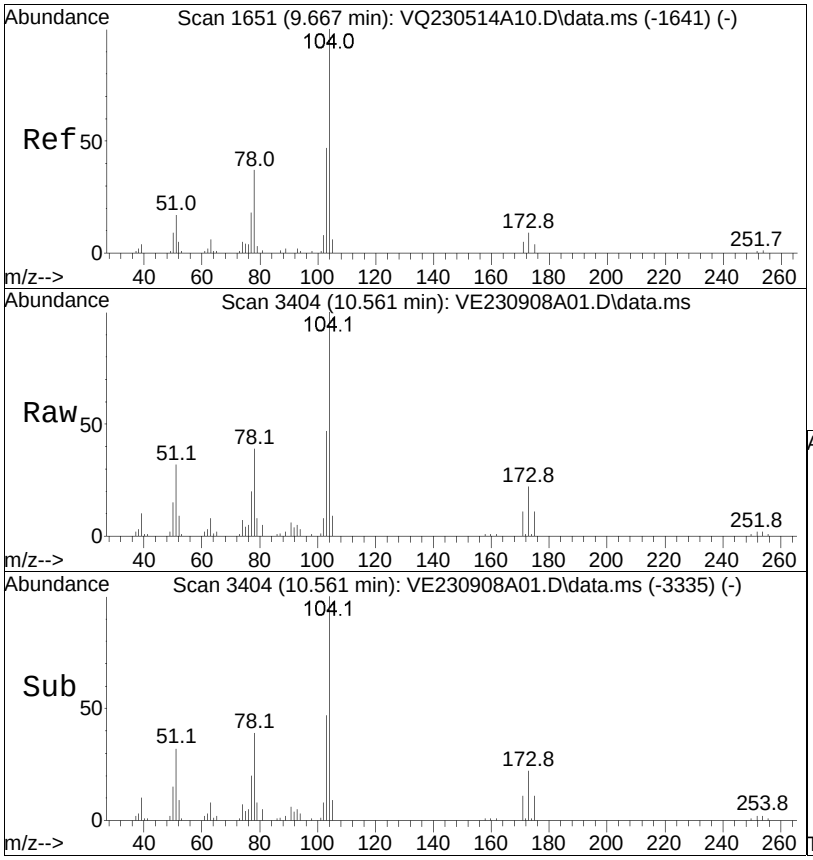


#83
Styrene
Concen: 21.78 ug/L
RT: 10.544 min Scan# 3398
Delta R.T. -0.006 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:104 Resp: 210714

Ion	Ratio	Lower	Upper
104	100		
78	40.4	37.5	56.3

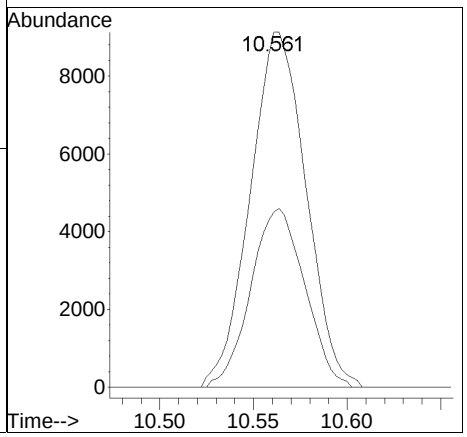


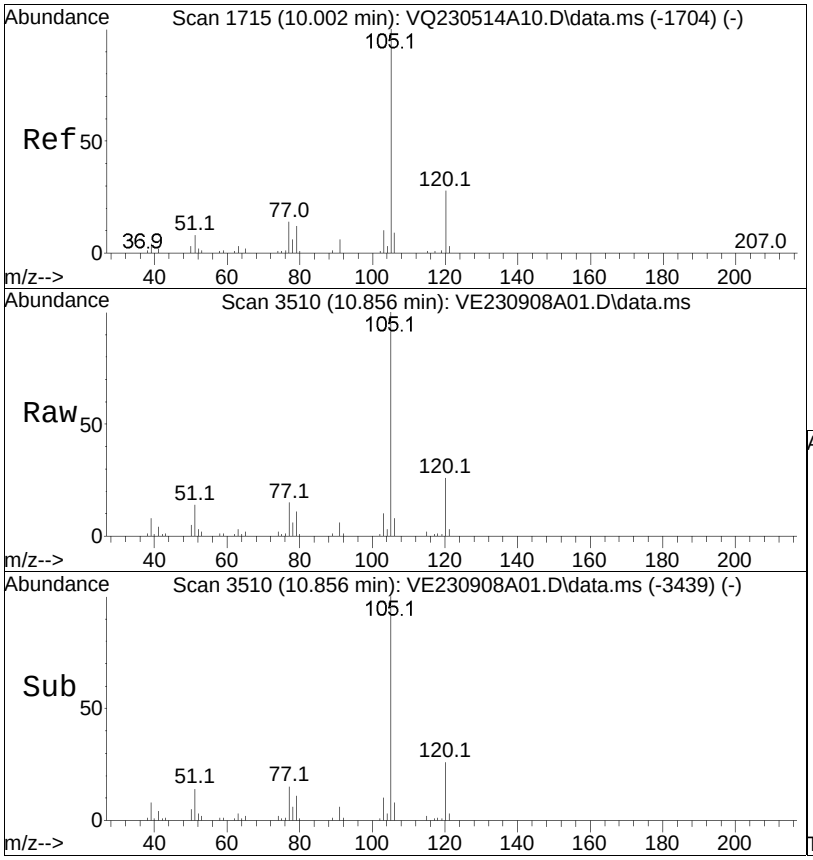


#85
Bromoform
Concen: 10.47 ug/L
RT: 10.561 min Scan# 3404
Delta R.T. -0.008 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:173 Resp: 18997

Ion	Ratio	Lower	Upper
173	100		
175	48.7	29.0	69.0

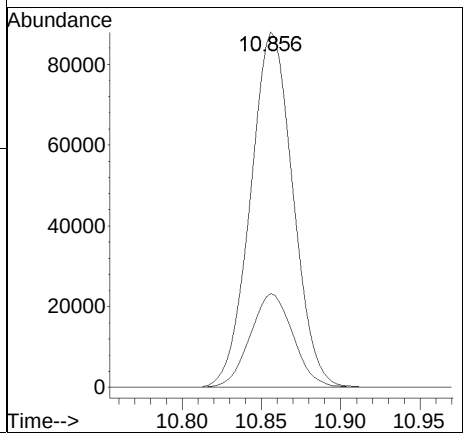


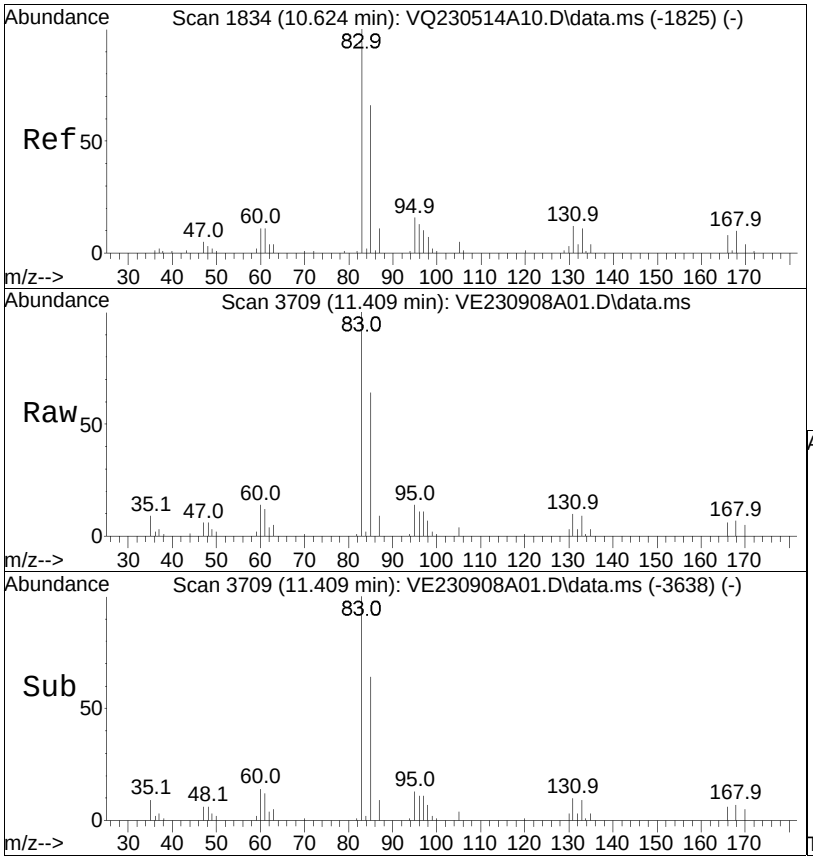


#87
Isopropylbenzene
Concen: 9.16 ug/L
RT: 10.856 min Scan# 3510
Delta R.T. -0.003 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:105 Resp: 164577

Ion	Ratio	Lower	Upper
105	100		
120	26.6	6.5	46.5

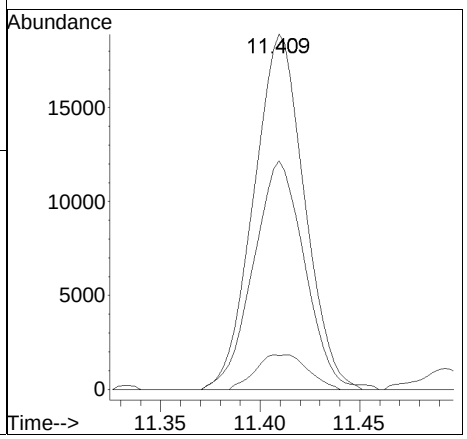


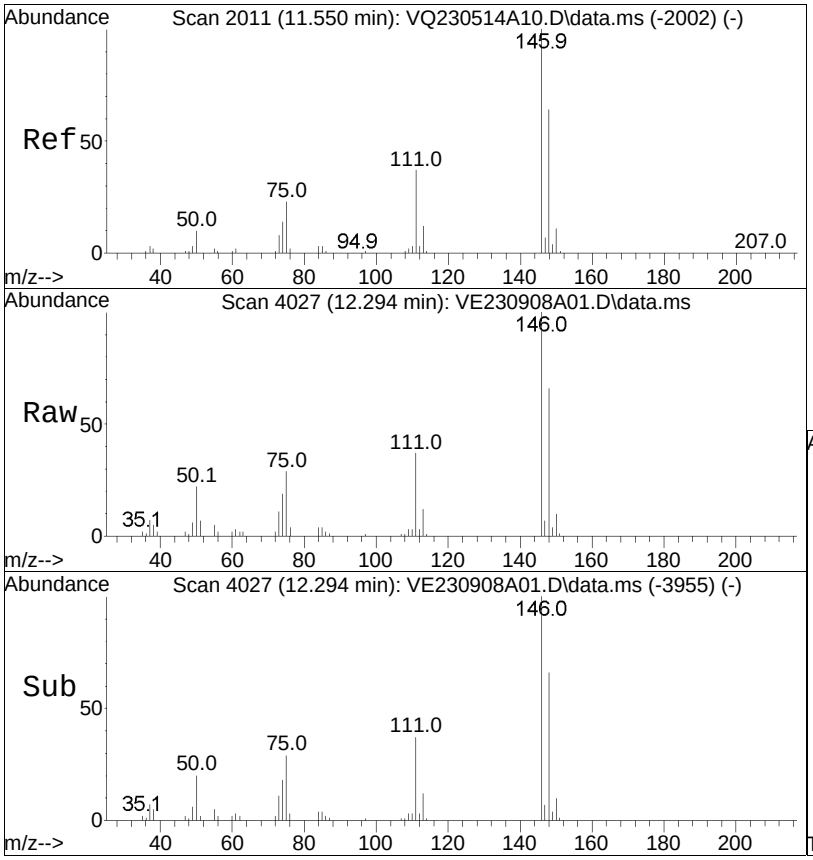


#92
1,1,2,2-Tetrachloroethane
Concen: 11.44 ug/L
RT: 11.409 min Scan# 3709
Delta R.T. -0.003 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion: 83 Resp: 33406

Ion	Ratio	Lower	Upper
83	100		
131	10.0	0.0	31.0
85	65.3	45.4	85.4

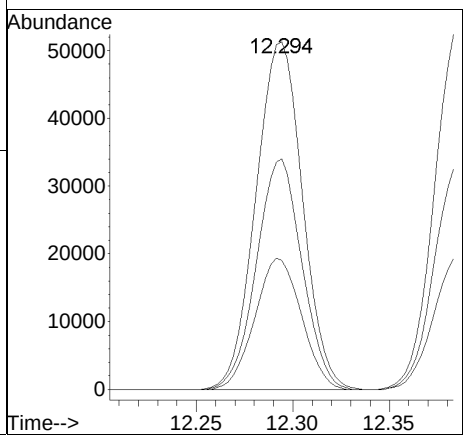


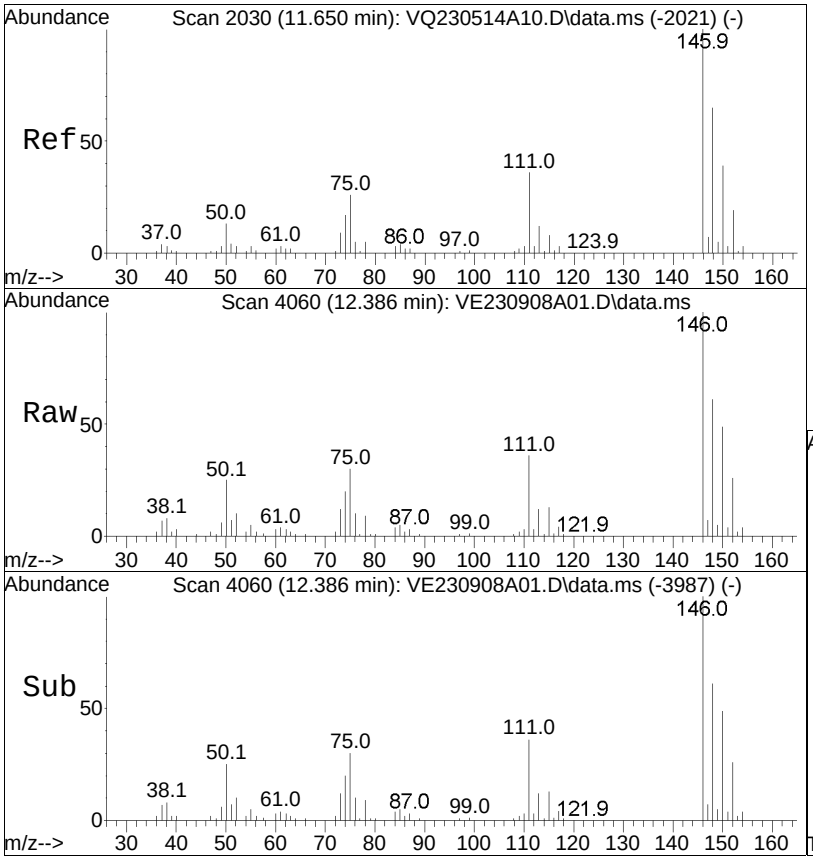


#105
1,3-Dichlorobenzene
Concen: 10.59 ug/L
RT: 12.294 min Scan# 4027
Delta R.T. 0.000 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:146 Resp: 86171

Ion	Ratio	Lower	Upper
146	100		
111	37.6	27.0	56.0
148	64.7	41.2	85.6

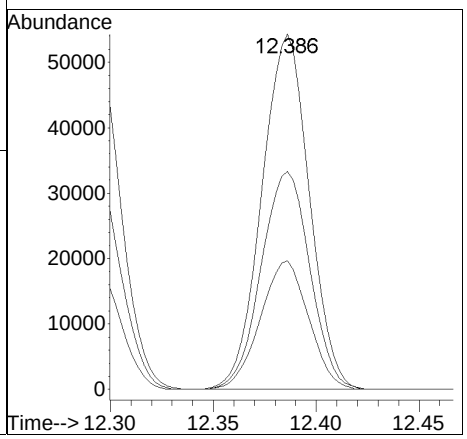


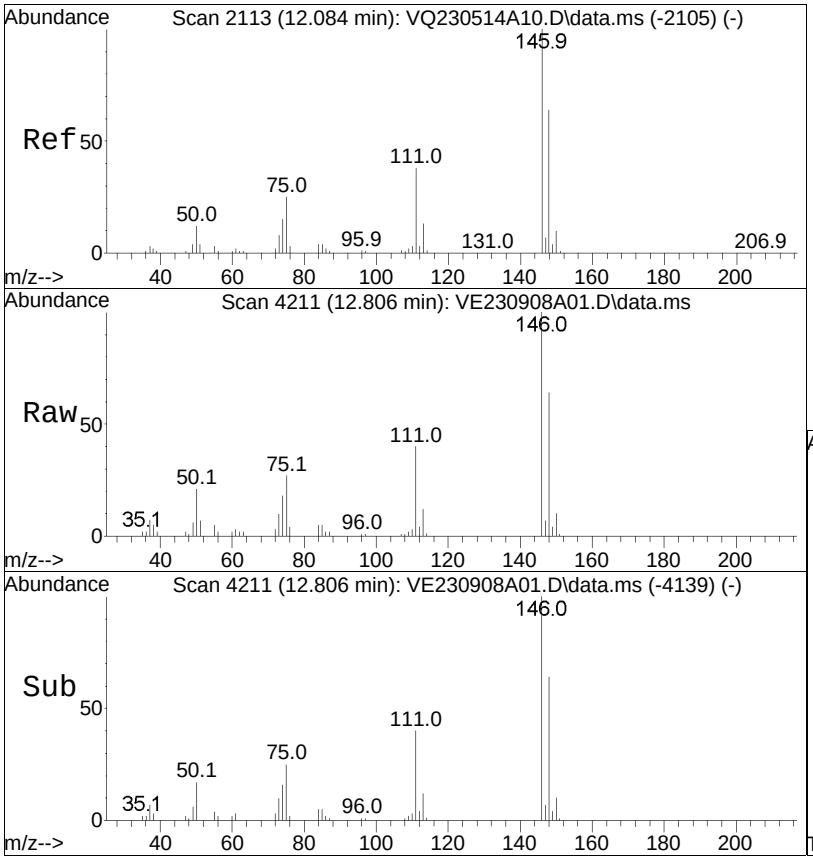


#106
1,4-Dichlorobenzene
Concen: 10.74 ug/L
RT: 12.386 min Scan# 4060
Delta R.T. 0.003 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:146 Resp: 87142

Ion	Ratio	Lower	Upper
146	100		
111	36.8	32.3	48.5
148	62.9	51.0	76.6

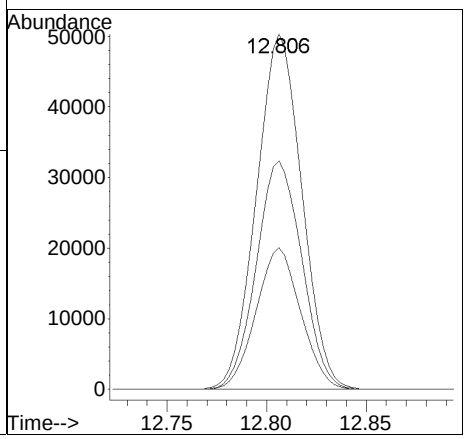


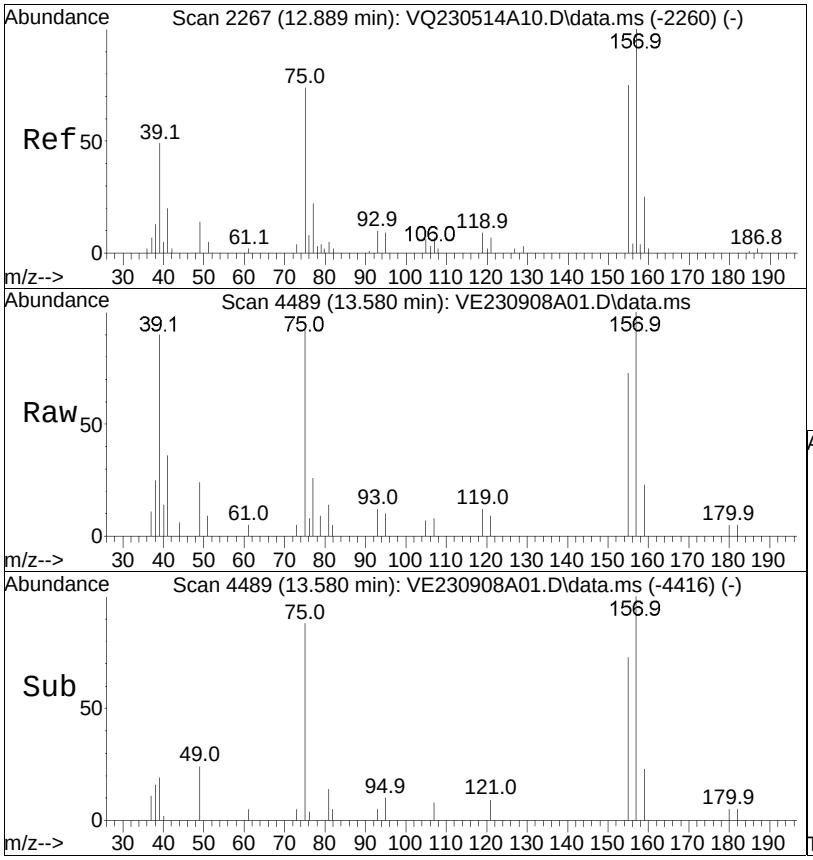


#109
1,2-Dichlorobenzene
Concen: 10.48 ug/L
RT: 12.806 min Scan# 4211
Delta R.T. 0.000 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:146 Resp: 79928

Ion	Ratio	Lower	Upper
146	100		
111	39.1	27.7	57.5
148	64.4	41.3	85.7

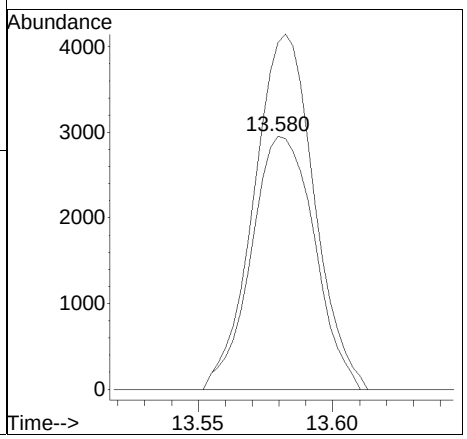


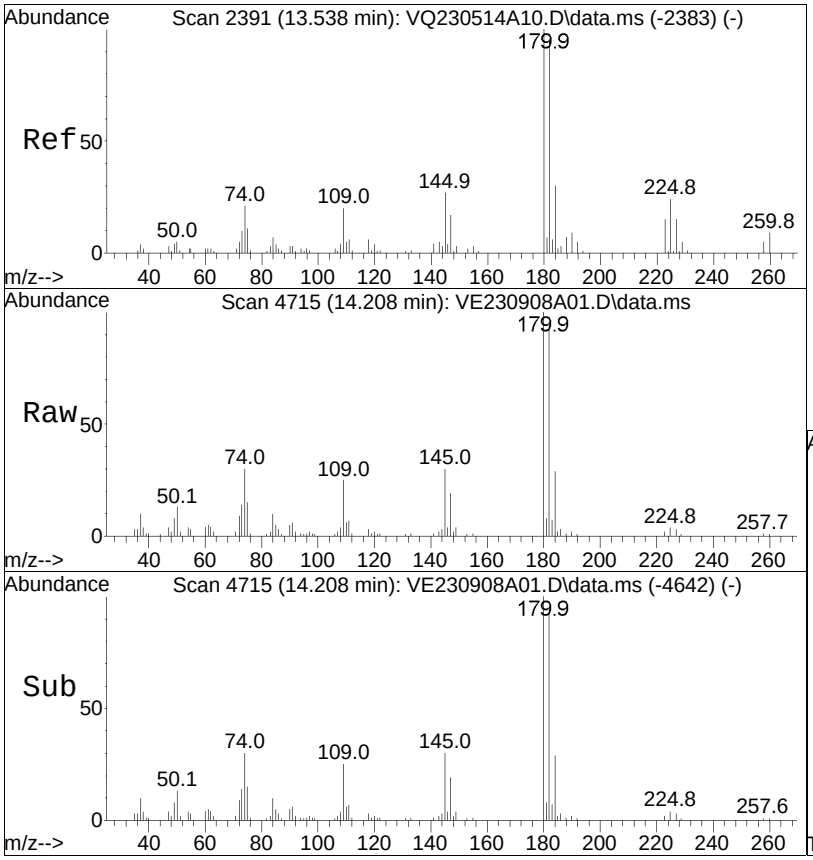


#111
1,2-Dibromo-3-chloropropane
Concen: 10.78 ug/L
RT: 13.580 min Scan# 4489
Delta R.T. 0.003 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:155 Resp: 4823

Ion	Ratio	Lower	Upper
155	100		
157	134.0	100.1	150.1

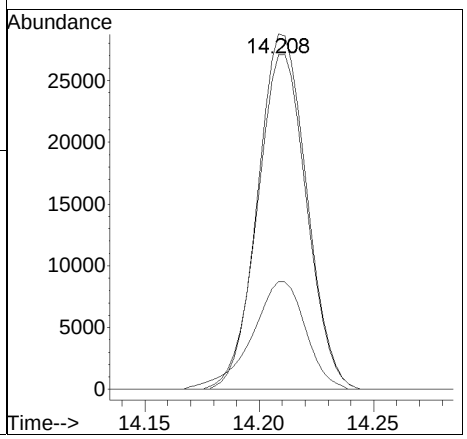


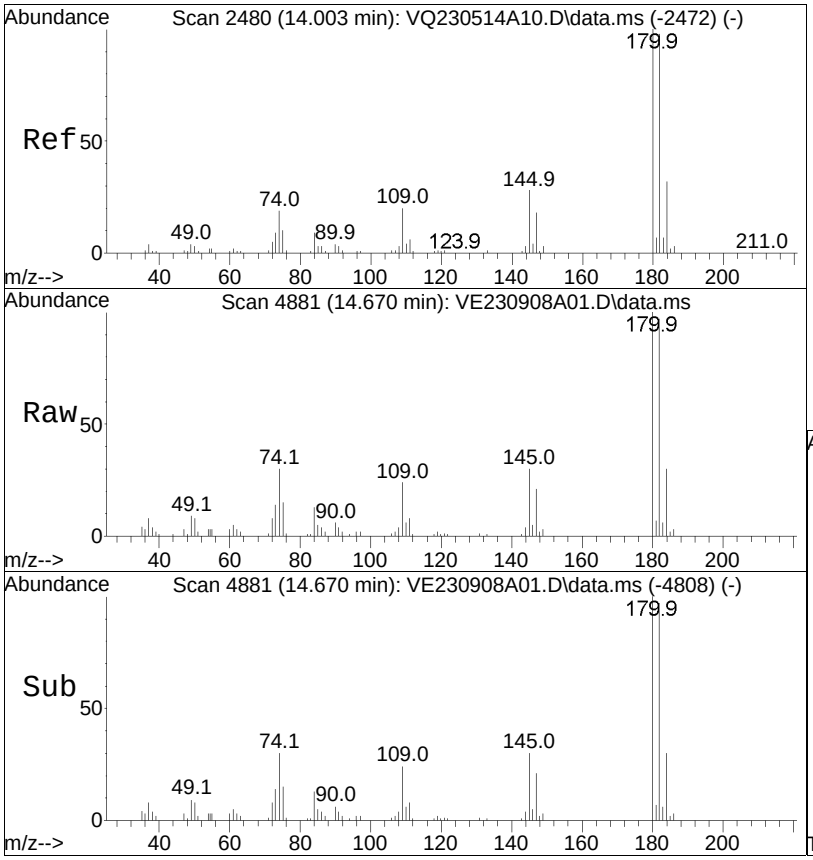


#114
1,2,4-Trichlorobenzene
Concen: 9.64 ug/L
RT: 14.208 min Scan# 4715
Delta R.T. 0.003 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:180 Resp: 42960

Ion	Ratio	Lower	Upper
180	100		
182	94.2	76.0	114.0
145	33.2	28.4	42.6

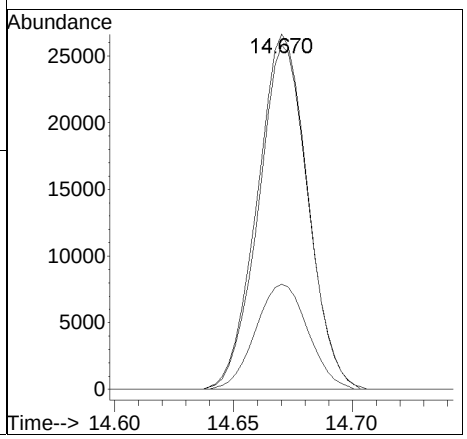




#116
1,2,3-Trichlorobenzene
Concen: 9.69 ug/L
RT: 14.670 min Scan# 4881
Delta R.T. 0.003 min
Lab File: VE230908A01.D
Acq: 8 Sep 2023 8:56 am

Tgt Ion:180 Resp: 39367

Ion	Ratio	Lower	Upper
180	100		
182	95.6	76.5	114.7
145	30.8	26.6	39.8



Manual Integration Report

Data Path	: K:\Elaine\2023\230908A\	QMethod	: Elaine_230725N_8260.m
Data File	: VE230908A01.D	Operator	: ELAINE:PID
Date Inj'd	: 9/8/2023 8:56 am	Instrument	: Elaine
Sample	: WG1825752-3,31,10,10	Quant Date	: 9/8/2023 9:25 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Acq On : 7 Sep 2023 7:28 am
Operator : VOA105:PID
Sample : WG1824710-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 07:52:09 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.743	96	255314	10.000	ug/L	-0.01
59) Chlorobenzene-d5	9.245	117	234811	10.000	ug/L	0.00
79) 1,4-Dichlorobenzene-d4	12.008	152	143322	10.000	ug/L	0.00
System Monitoring Compounds						
36) Dibromofluoromethane	4.961	113	83987	10.373	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.73%			
43) 1,2-Dichloroethane-d4	5.479	65	83707	10.653	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 106.53%			
60) Toluene-d8	7.415	98	278524	10.174	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 101.74%			
83) 4-Bromofluorobenzene	10.774	95	109195	9.735	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.35%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.527	85	82779	9.998	ug/L	98
3) Chloromethane	1.713	50	82926	10.453	ug/L	99
4) Vinyl chloride	1.772	62	88274	10.609	ug/L	95
5) Bromomethane	2.065	94	65672	10.216	ug/L	100
6) Chloroethane	2.163	64	71302	12.021	ug/L	96
7) Trichlorofluoromethane	2.300	101	126778	10.315	ug/L	100
10) 1,1-Dichloroethene	2.760	96	76537	10.379	ug/L	98
11) Carbon disulfide	2.789	76	251373	10.707	ug/L	100
12) Freon-113	2.789	101	85044	10.410	ug/L #	74
15) Methylene chloride	3.308	84	70134	10.330	ug/L	85
17) Acetone	3.366	43	9946	9.066	ug/L	98
18) trans-1,2-Dichloroethene	3.445	96	71609	10.592	ug/L	96
19) Methyl acetate	3.464	43	24140	9.650	ug/L	91
20) Methyl tert-butyl ether	3.542	73	115573	8.098	ug/L	93
23) 1,1-Dichloroethane	4.012	63	124655	10.562	ug/L	98
28) cis-1,2-Dichloroethene	4.520	96	79900	10.698	ug/L	94
30) Bromochloromethane	4.716	128	38741	11.131	ug/L	97
31) Cyclohexane	4.696	56	120061	10.330	ug/L	82
32) Chloroform	4.784	83	125335	10.639	ug/L	97
34) Carbon tetrachloride	4.902	117	102711	10.271	ug/L	99
37) 1,1,1-Trichloroethane	4.970	97	113542	10.783	ug/L	99
39) 2-Butanone	5.078	43	13793	8.697	ug/L #	79
41) Benzene	5.332	78	259471	10.550	ug/L	97
44) 1,2-Dichloroethane	5.547	62	82783	10.198	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Acq On : 7 Sep 2023 7:28 am
Operator : VOA105:PID
Sample : WG1824710-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 07:52:09 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
47)	Methyl cyclohexane	5.890	83	114968	9.765	ug/L		91
48)	Trichloroethene	5.919	95	74799	9.488	ug/L		90
51)	1,2-Dichloropropane	6.457	63	63151	10.132	ug/L	#	89
54)	Bromodichloromethane	6.535	83	89561	10.395	ug/L		99
57)	1,4-Dioxane	6.750	88	15884	523.562	ug/L		92
58)	cis-1,3-Dichloropropene	7.220	75	94832	9.863	ug/L		97
61)	Toluene	7.474	92	167404	10.582	ug/L		100
62)	4-Methyl-2-pentanone	7.914	58	10127	8.337	ug/L		91
63)	Tetrachloroethene	7.914	166	81876	10.870	ug/L		91
65)	trans-1,3-Dichloropropene	7.973	75	78450	10.074	ug/L		92
68)	1,1,2-Trichloroethane	8.149	83	40433	10.126	ug/L		98
69)	Chlorodibromomethane	8.354	129	64115	10.537	ug/L		100
71)	1,2-Dibromoethane	8.628	107	53826	9.980	ug/L		98
72)	2-Hexanone	8.922	43	16080	7.430	ug/L		96
73)	Chlorobenzene	9.265	112	197251	10.841	ug/L		87
74)	Ethylbenzene	9.304	91	327125	10.684	ug/L		93
76)	p/m Xylene	9.490	106	265185	22.131	ug/L		82
77)	o Xylene	10.039	106	253444	21.719	ug/L		83
78)	Styrene	10.107	104	414216	21.595	ug/L	#	85
80)	Bromoform	10.137	173	34943	8.910	ug/L		98
82)	Isopropylbenzene	10.431	105	338977	10.619	ug/L		95
87)	1,1,2,2-Tetrachloroethane	11.038	83	51024	9.781	ug/L		98
100)	1,3-Dichlorobenzene	11.929	146	172024	11.013	ug/L		97
101)	1,4-Dichlorobenzene	12.018	146	170585	10.743	ug/L		96
104)	1,2-Dichlorobenzene	12.449	146	152957	10.607	ug/L		96
106)	1,2-Dibromo-3-chloropr...	13.242	155	8265	9.258	ug/L		93
109)	1,2,4-Trichlorobenzene	13.869	180	92569	9.399	ug/L		98
111)	1,2,3-Trichlorobenzene	14.329	180	84748	9.480	ug/L		99

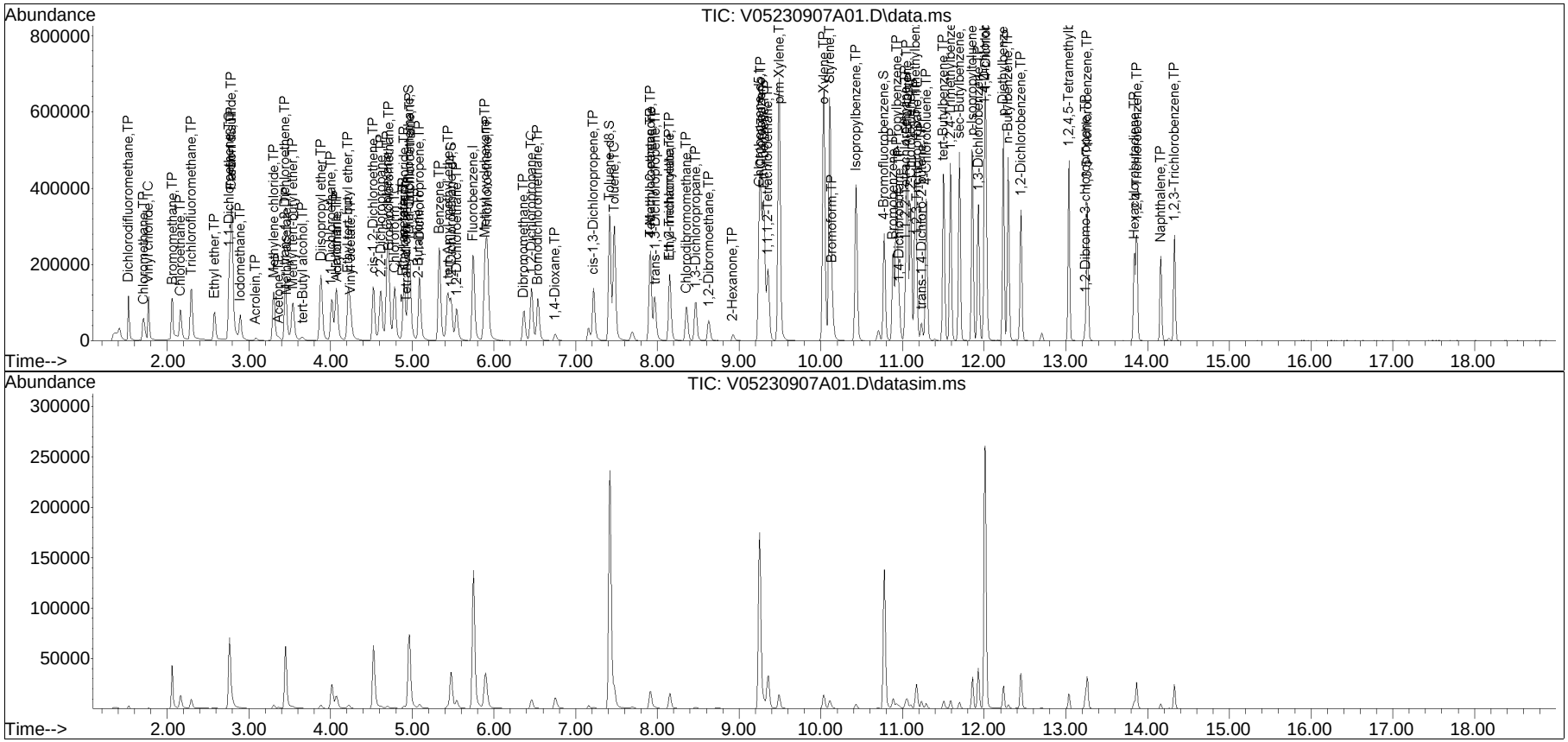
(#) = qualifier out of range (m) = manual integration (+) = signals summed

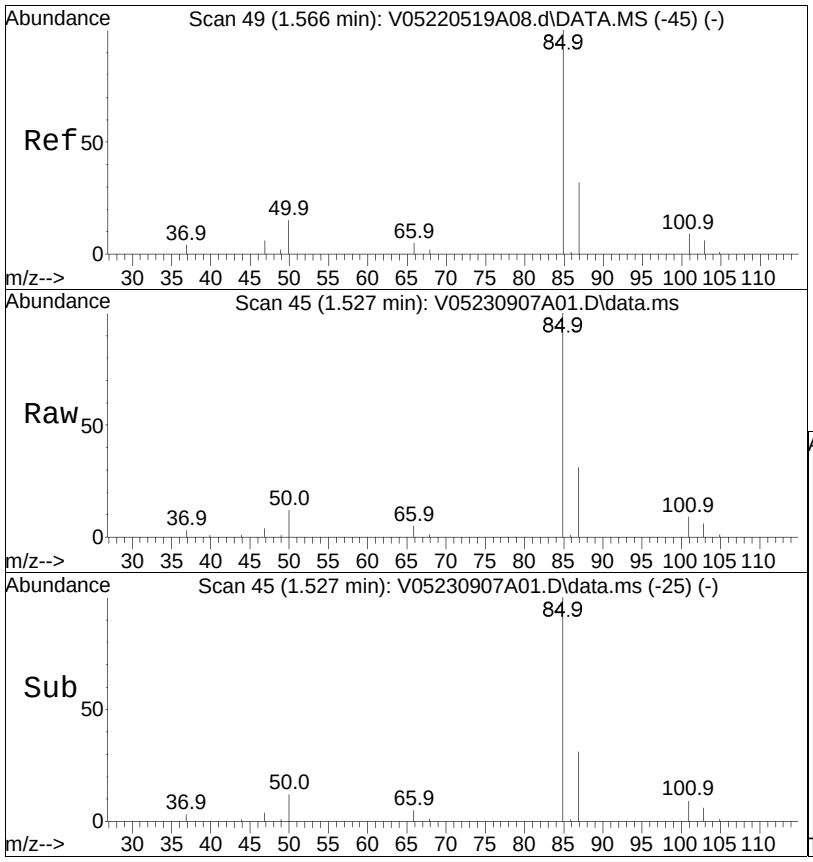
Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A01.D
Acq On : 7 Sep 2023 7:28 am
Operator : VOA105:PID
Sample : WG1824710-3,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 07 07:52:09 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

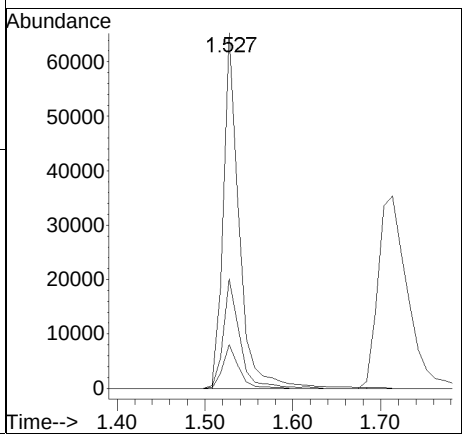


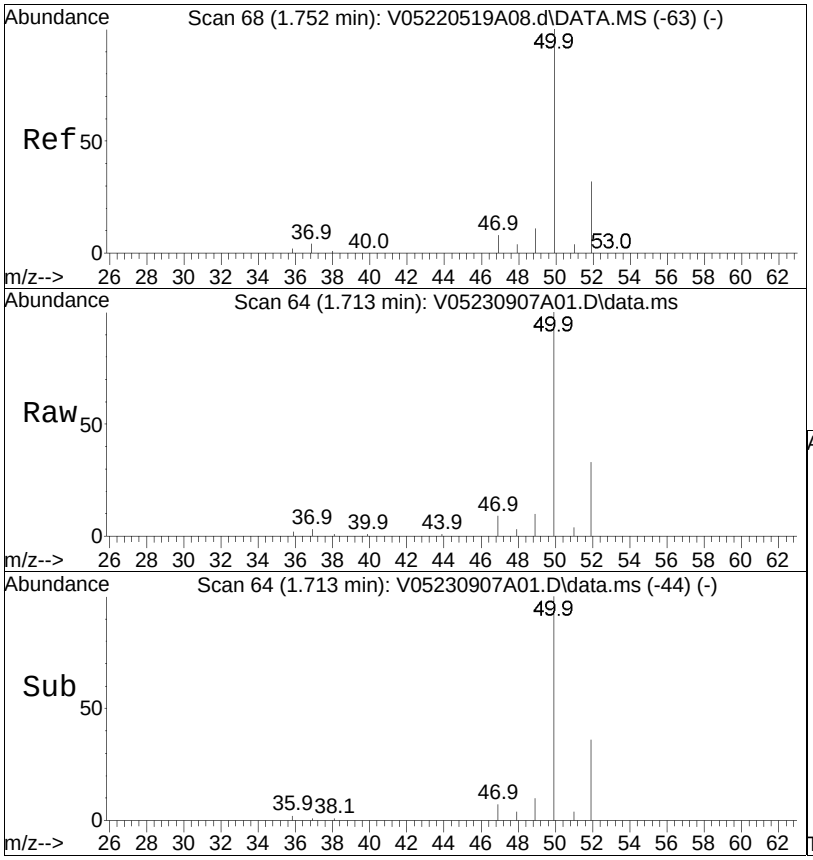


#2
Dichlorodifluoromethane
Concen: 10.00 ug/L
RT: 1.527 min Scan# 45
Delta R.T. -0.001 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 85 Resp: 82779

Ion	Ratio	Lower	Upper
85	100		
87	31.7	20.9	43.5
50	12.3	6.8	14.0

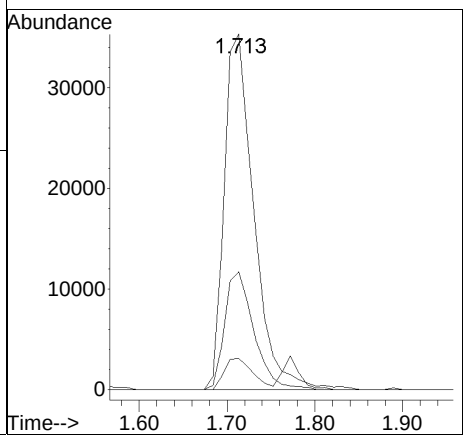


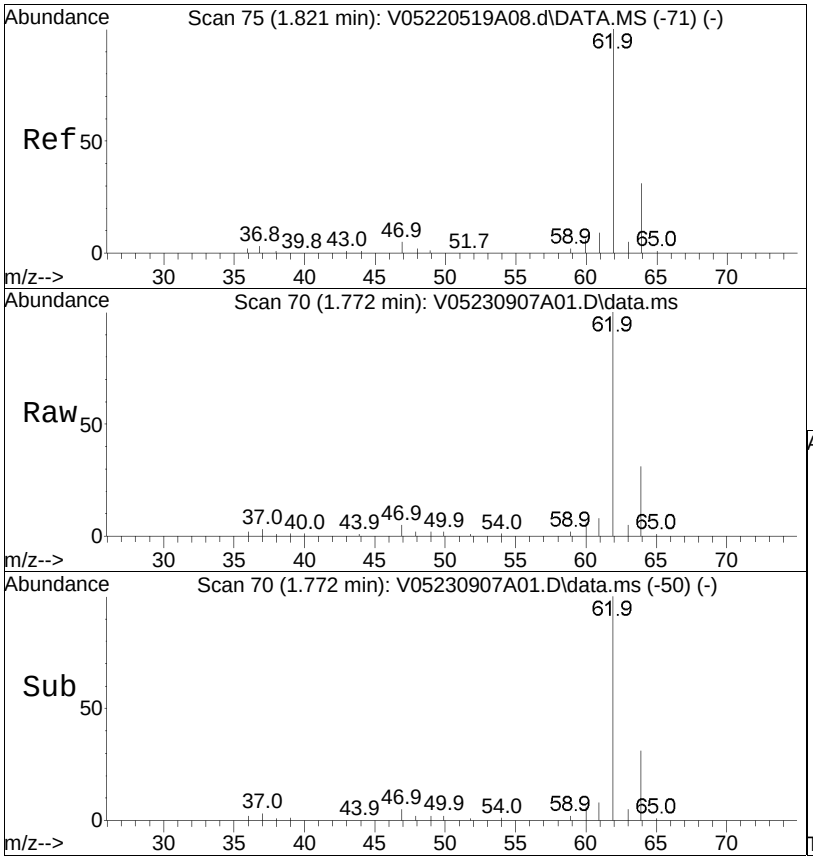


#3
Chloromethane
Concen: 10.45 ug/L
RT: 1.713 min Scan# 64
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 50 Resp: 82926

Ion	Ratio	Lower	Upper
50	100		
52	32.5	12.6	52.6
47	8.4	0.0	30.1

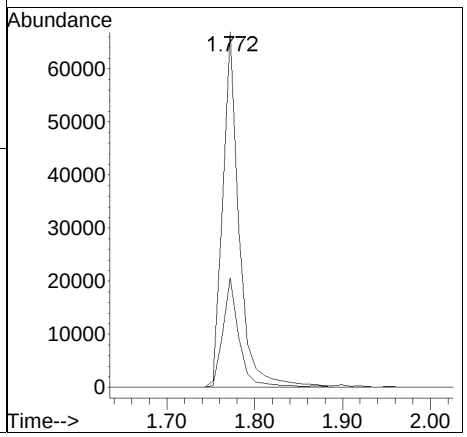


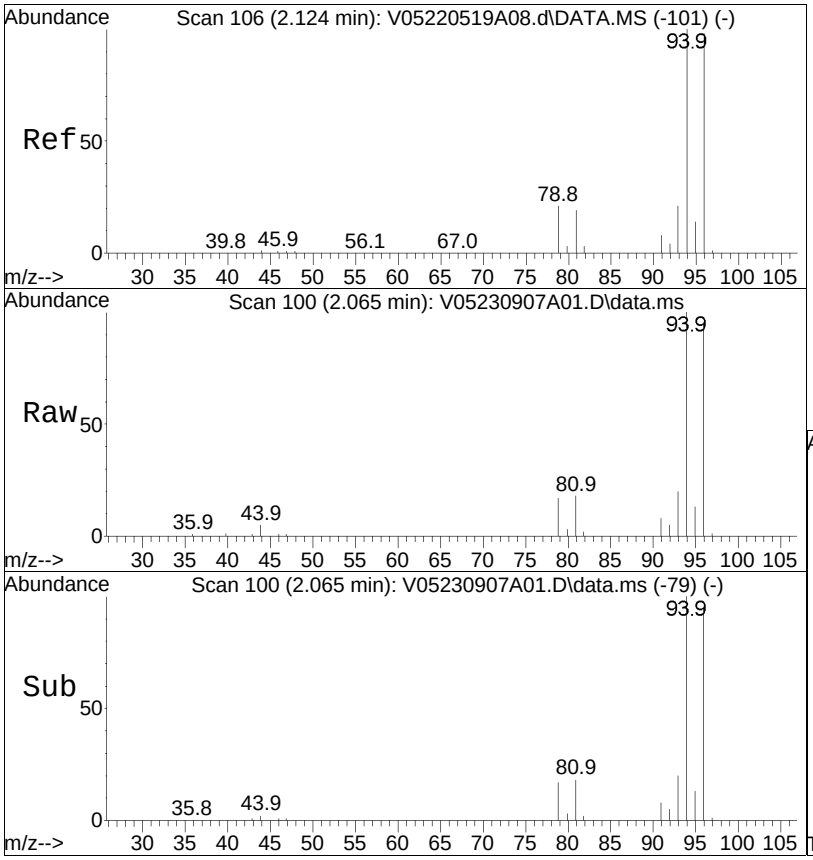


#4
Vinyl chloride
Concen: 10.61 ug/L
RT: 1.772 min Scan# 70
Delta R.T. -0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 62 Resp: 88274

Ion	Ratio	Lower	Upper
62	100		
64	30.5	13.5	53.5

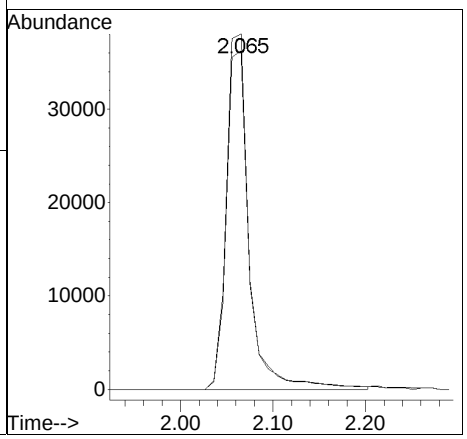


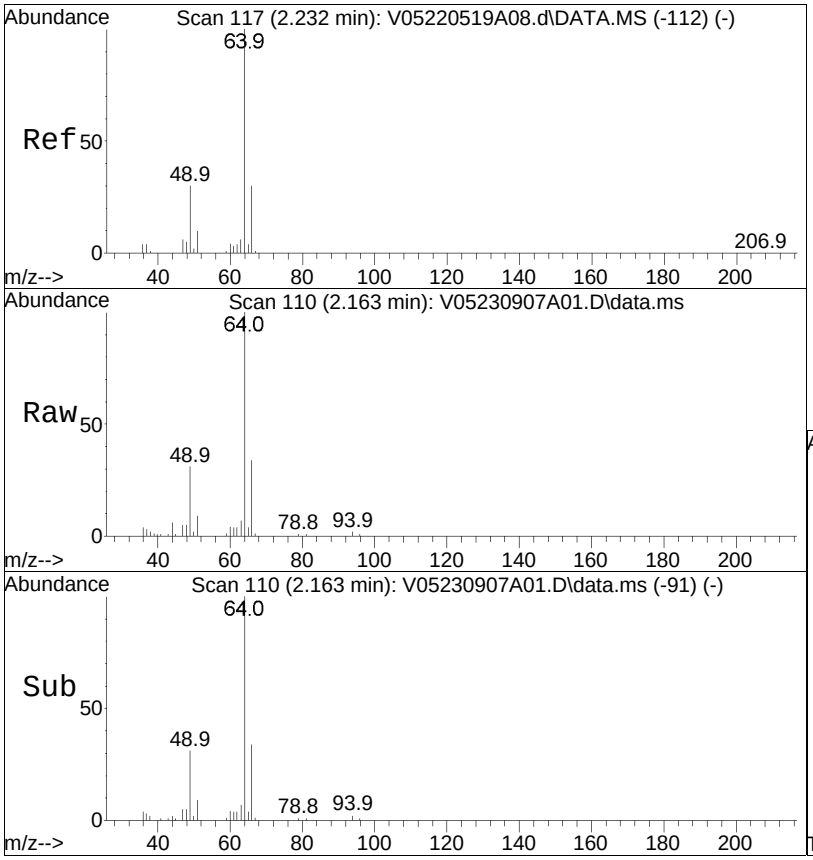


#5
Bromomethane
Concen: 10.22 ug/L
RT: 2.065 min Scan# 100
Delta R.T. 0.009 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 94 Resp: 65672

Ion	Ratio	Lower	Upper
94	100		
96	95.4	75.4	115.4

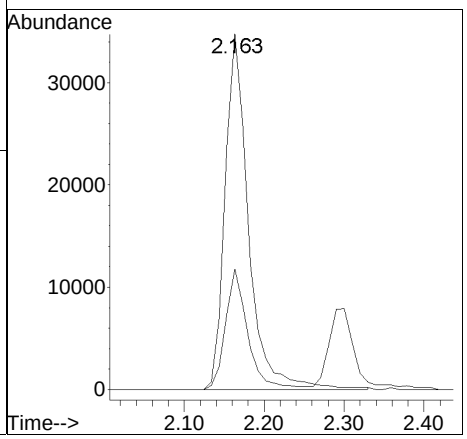


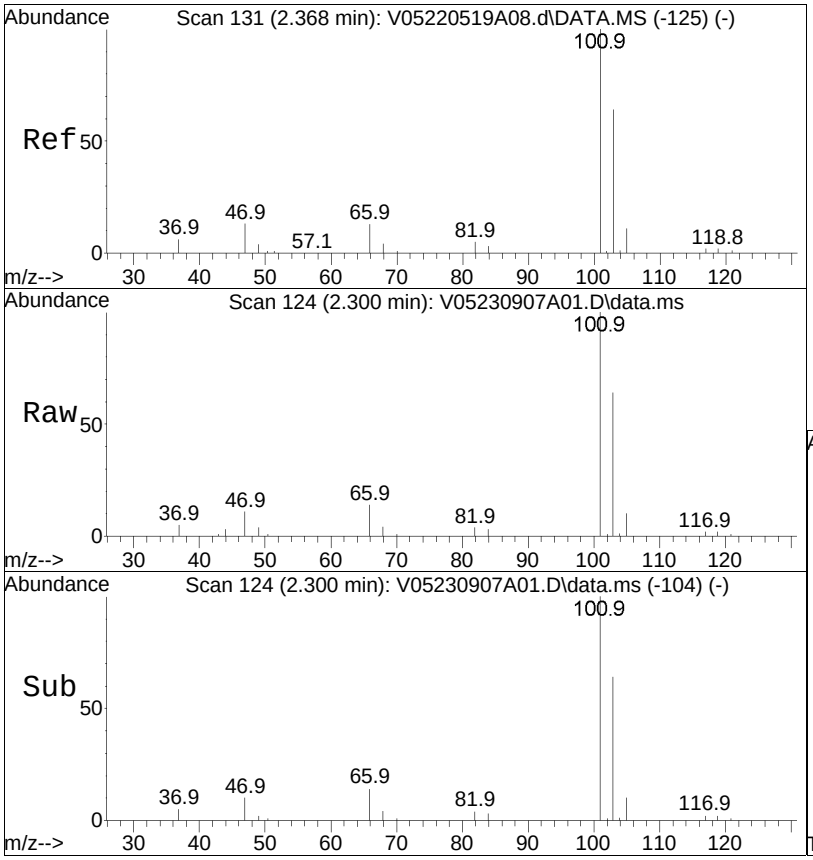


#6
Chloroethane
Concen: 12.02 ug/L
RT: 2.163 min Scan# 110
Delta R.T. -0.010 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 64 Resp: 71302

Ion	Ratio	Lower	Upper
64	100		
66	31.7	13.8	53.8

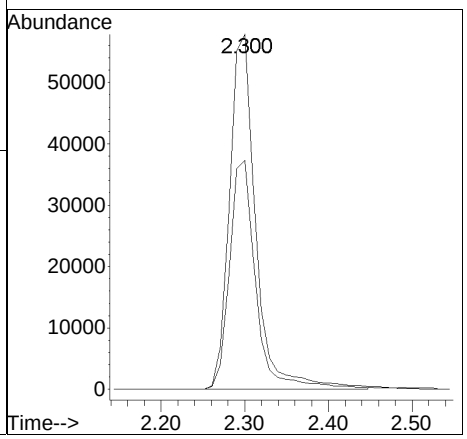


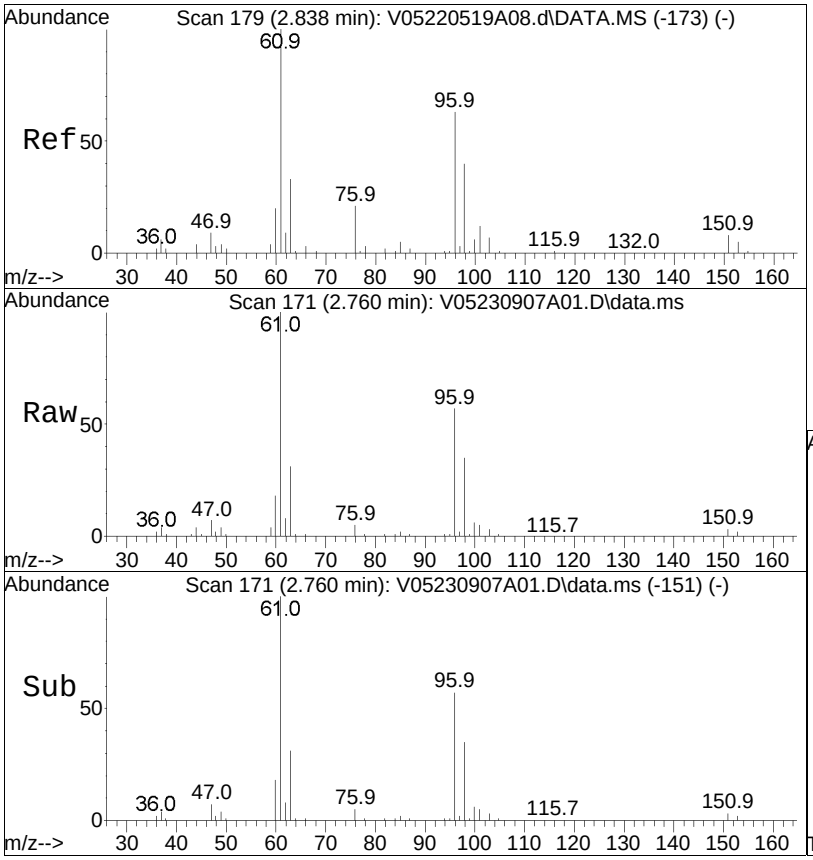


#7
Trichlorofluoromethane
Concen: 10.32 ug/L
RT: 2.300 min Scan# 124
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:101 Resp: 126778

Ion	Ratio	Lower	Upper
101	100		
103	64.9	51.8	77.6

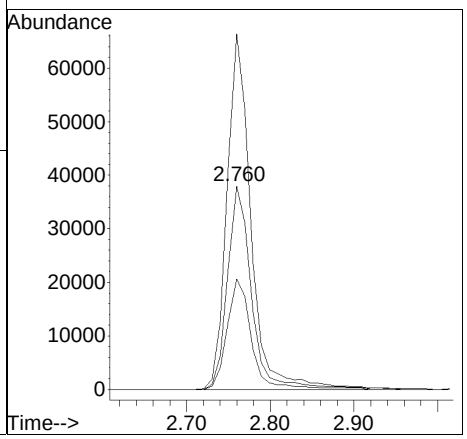


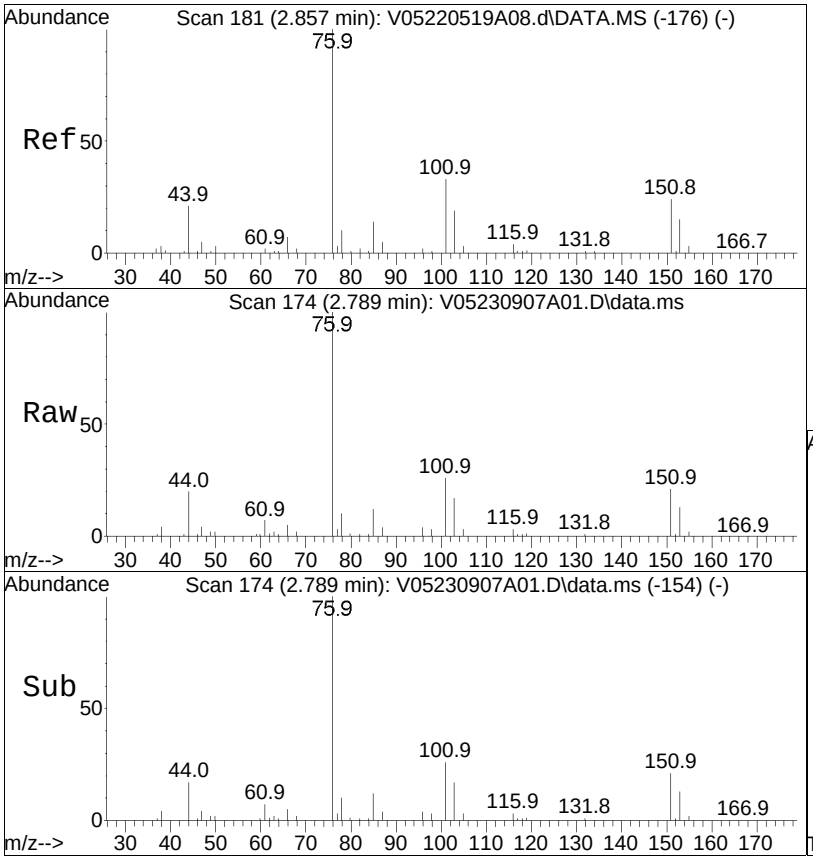


#10
1,1-Dichloroethene
Concen: 10.38 ug/L
RT: 2.760 min Scan# 171
Delta R.T. -0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 96 Resp: 76537

Ion	Ratio	Lower	Upper
96	100		
61	173.6	136.7	205.1
63	54.1	45.0	67.6

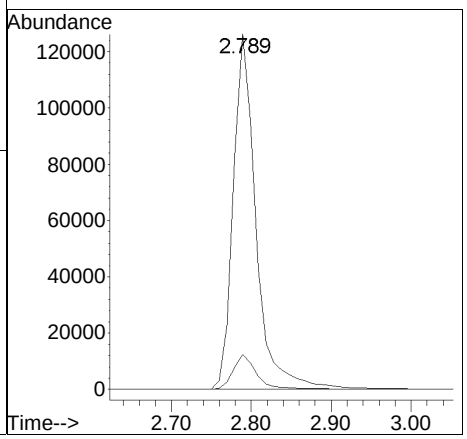


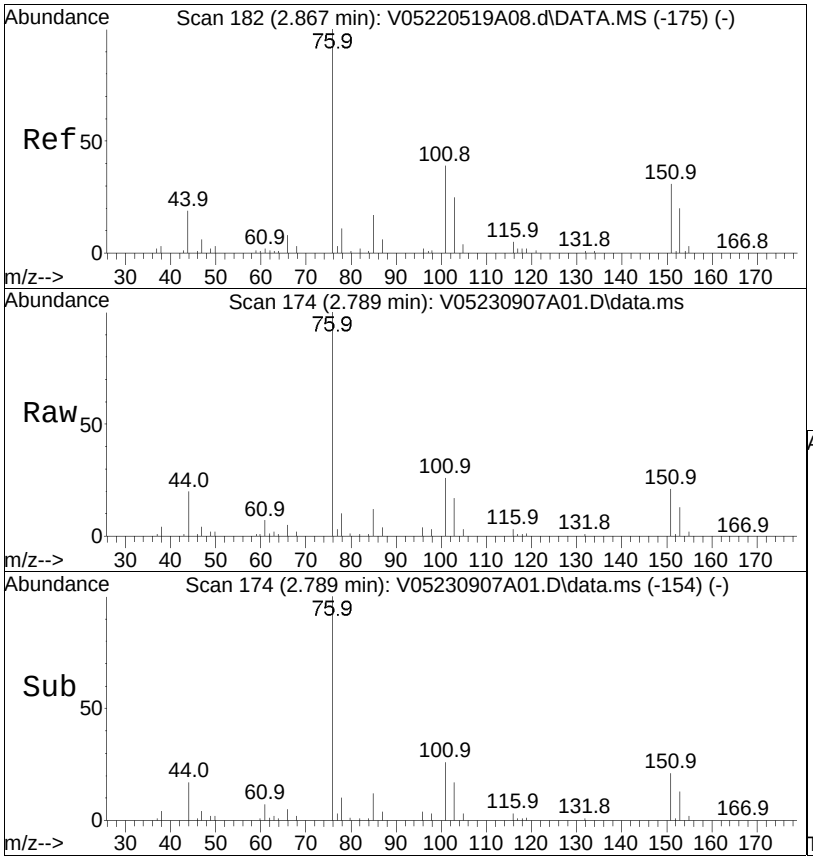


#11
Carbon disulfide
Concen: 10.71 ug/L
RT: 2.789 min Scan# 174
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 76 Resp: 251373

Ion	Ratio	Lower	Upper
76	100		
78	10.1	6.7	13.9

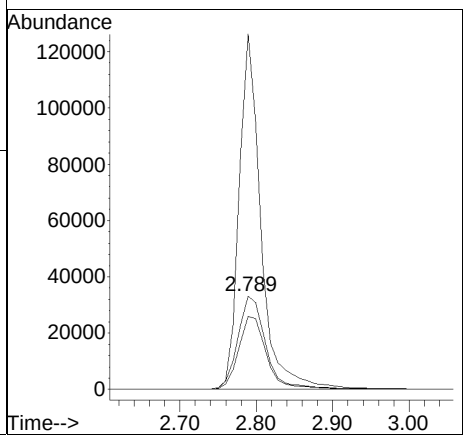


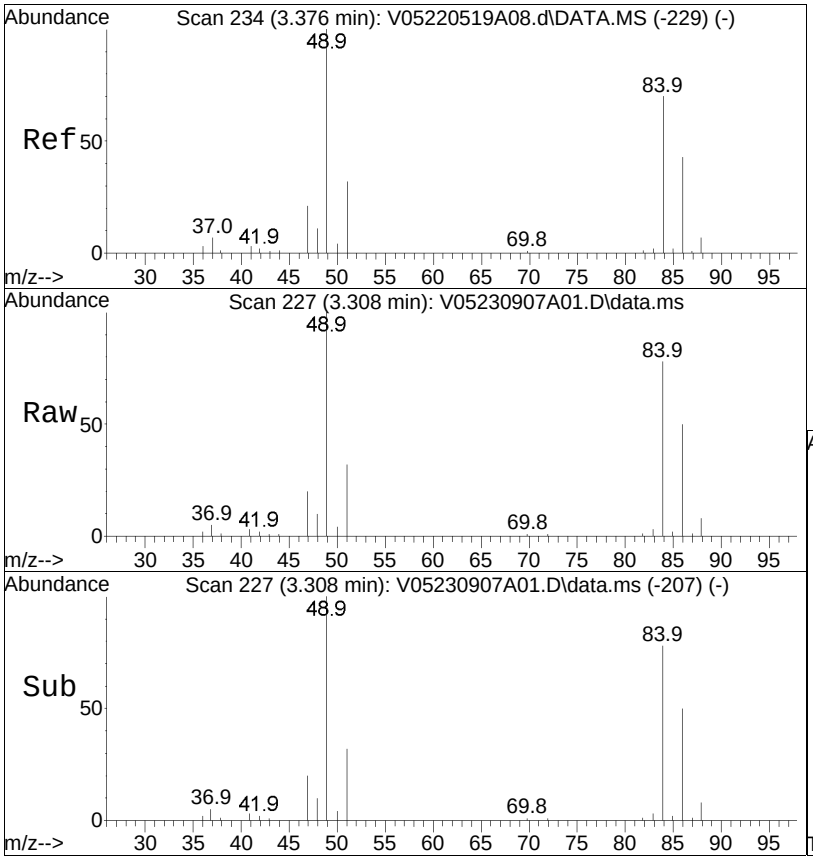


#12
Freon-113
Concen: 10.41 ug/L
RT: 2.789 min Scan# 174
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:101 Resp: 85044

Ion	Ratio	Lower	Upper
101	100		
151	78.5	65.0	97.6
76	295.6	190.0	285.0#

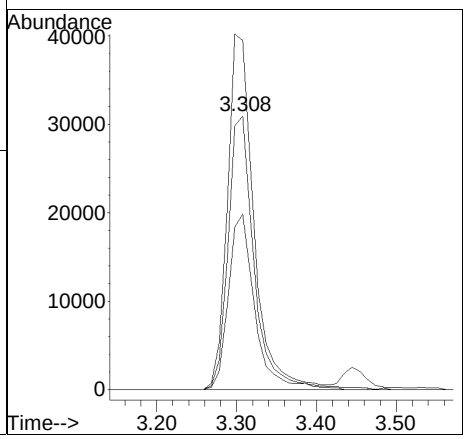


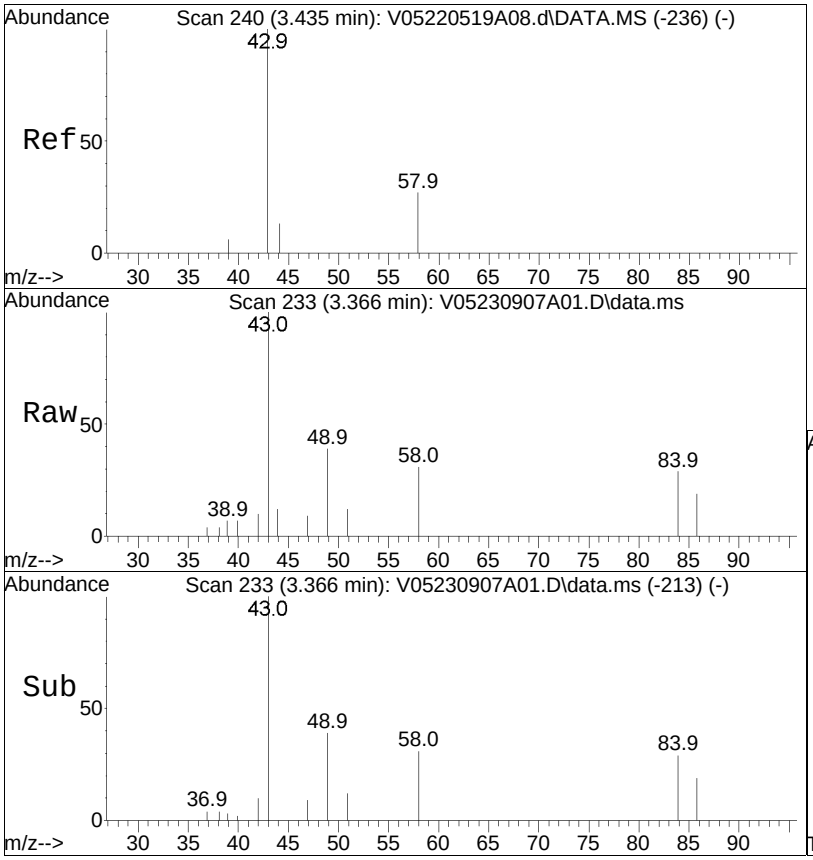


#15
Methylene chloride
Concen: 10.33 ug/L
RT: 3.308 min Scan# 227
Delta R.T. -0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 84 Resp: 70134

Ion	Ratio	Lower	Upper
84	100		
86	64.8	42.1	87.5
49	131.6	69.3	143.9

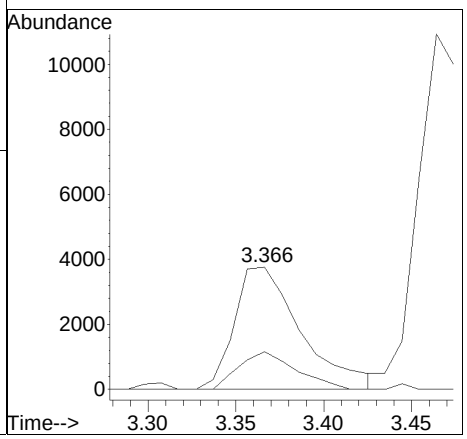


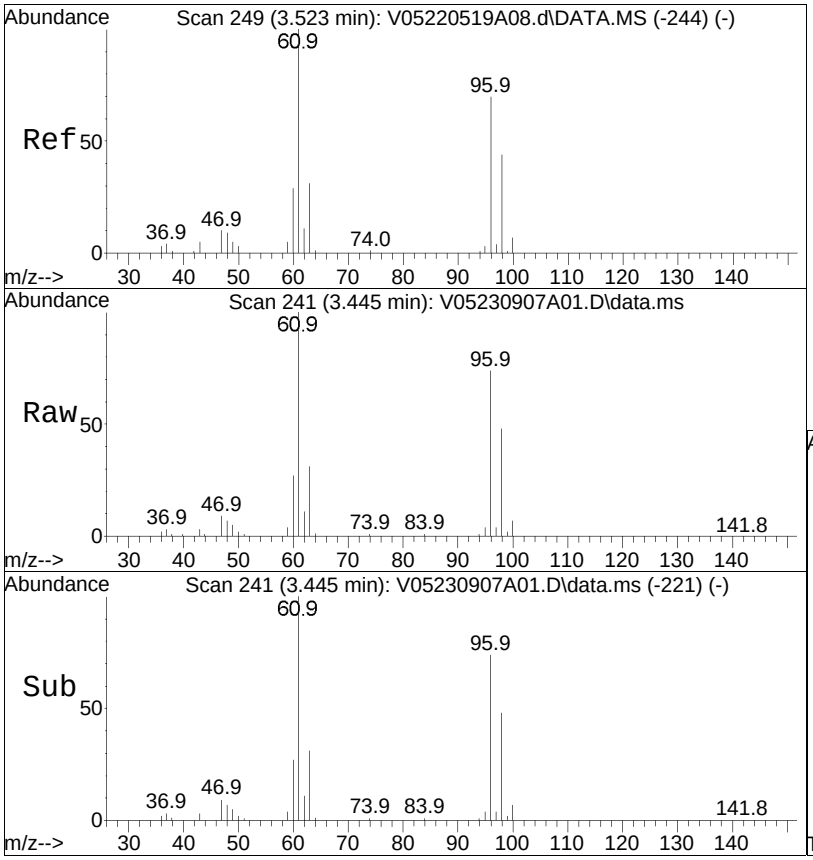


#17
Acetone
Concen: 9.07 ug/L
RT: 3.366 min Scan# 233
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 43 Resp: 9946

Ion	Ratio	Lower	Upper
43	100		
58	26.5	22.0	33.0

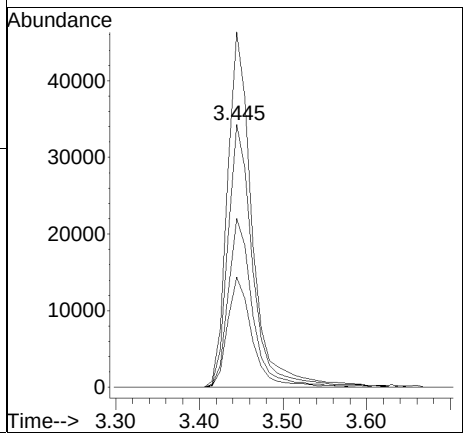


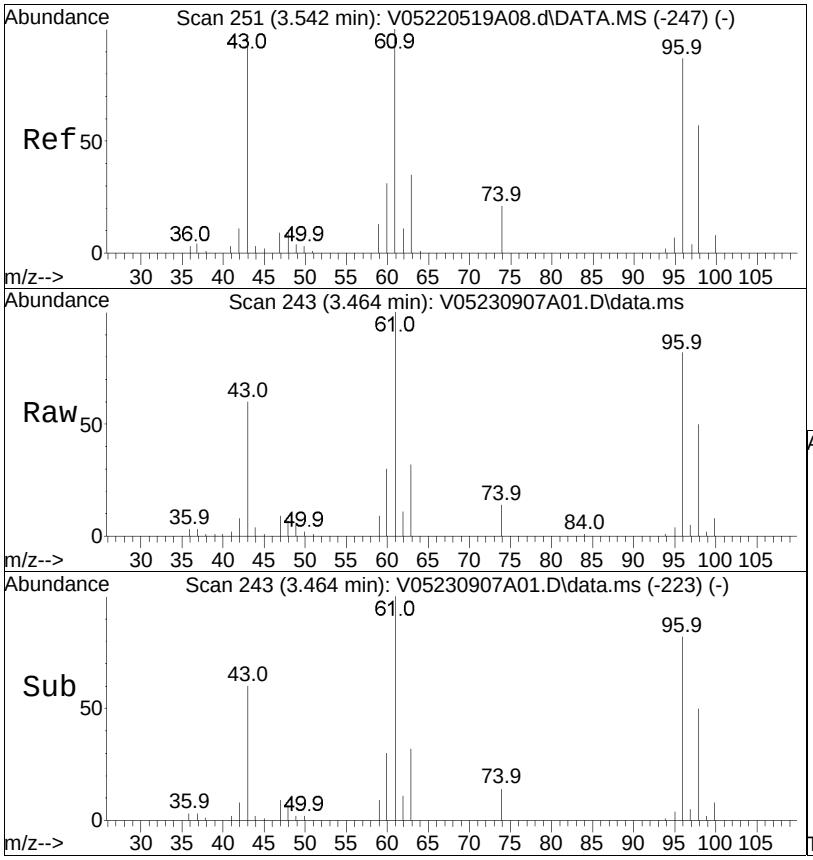


#18
trans-1,2-Dichloroethene
Concen: 10.59 ug/L
RT: 3.445 min Scan# 241
Delta R.T. -0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 96 Resp: 71609

Ion	Ratio	Lower	Upper
96	100		
61	134.7	91.7	190.5
98	63.0	41.1	85.5
63	41.9	29.4	61.0

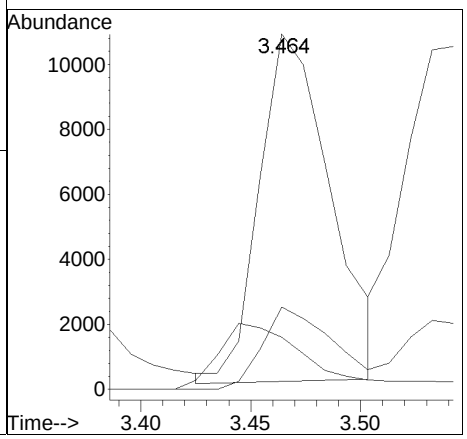


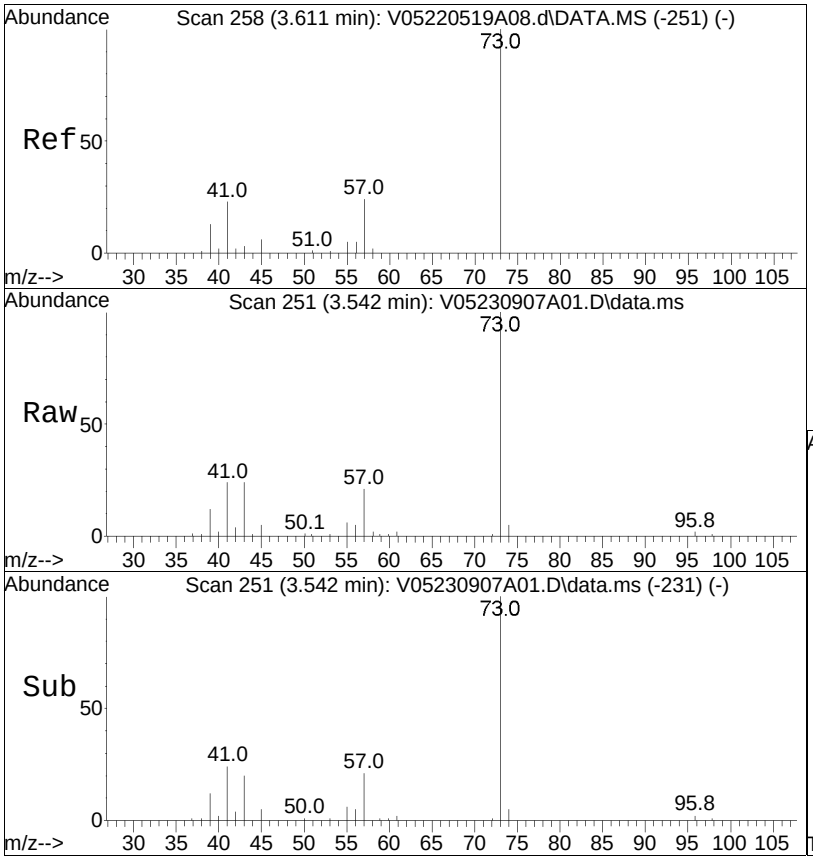


#19
Methyl acetate
Concen: 9.65 ug/L
RT: 3.464 min Scan# 243
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 43 Resp: 24140

Ion	Ratio	Lower	Upper
43	100		
74	23.6	23.1	34.7
59	25.3	23.9	35.9

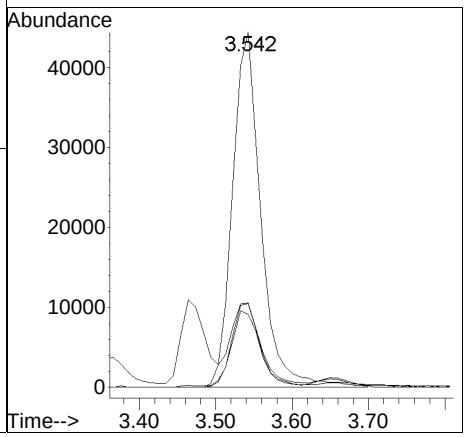


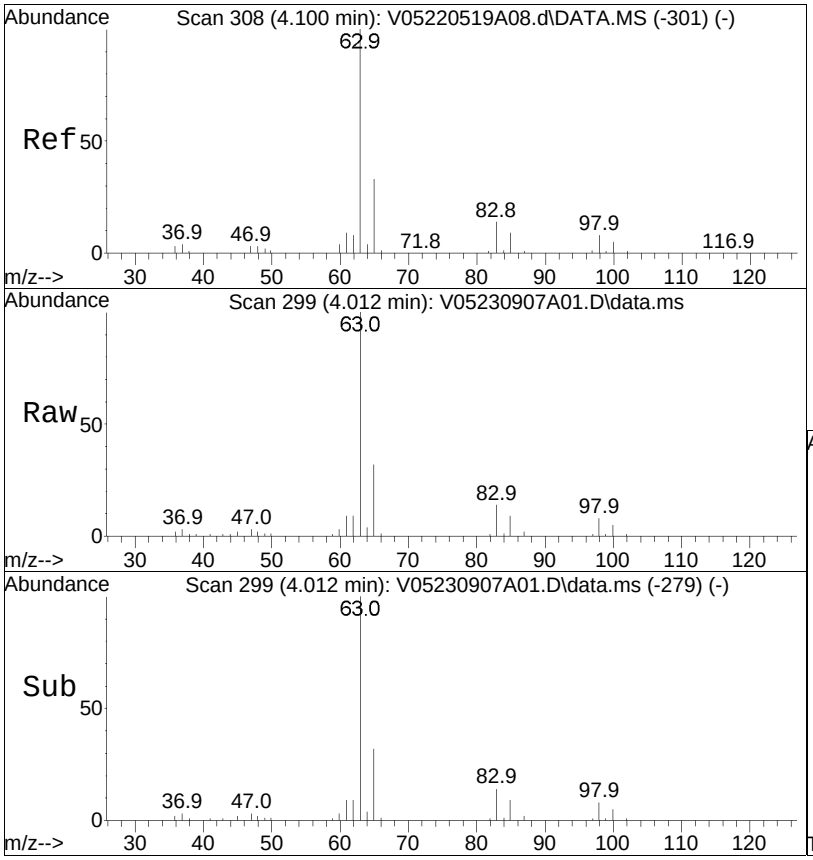


#20
Methyl tert-butyl ether
Concen: 8.10 ug/L
RT: 3.542 min Scan# 251
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 73 Resp: 115573

Ion	Ratio	Lower	Upper
73	100		
57	21.8	11.8	24.6
43	23.5	13.5	27.9
41	23.3	13.3	27.5

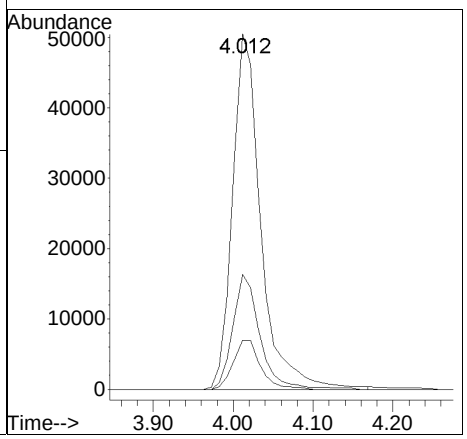


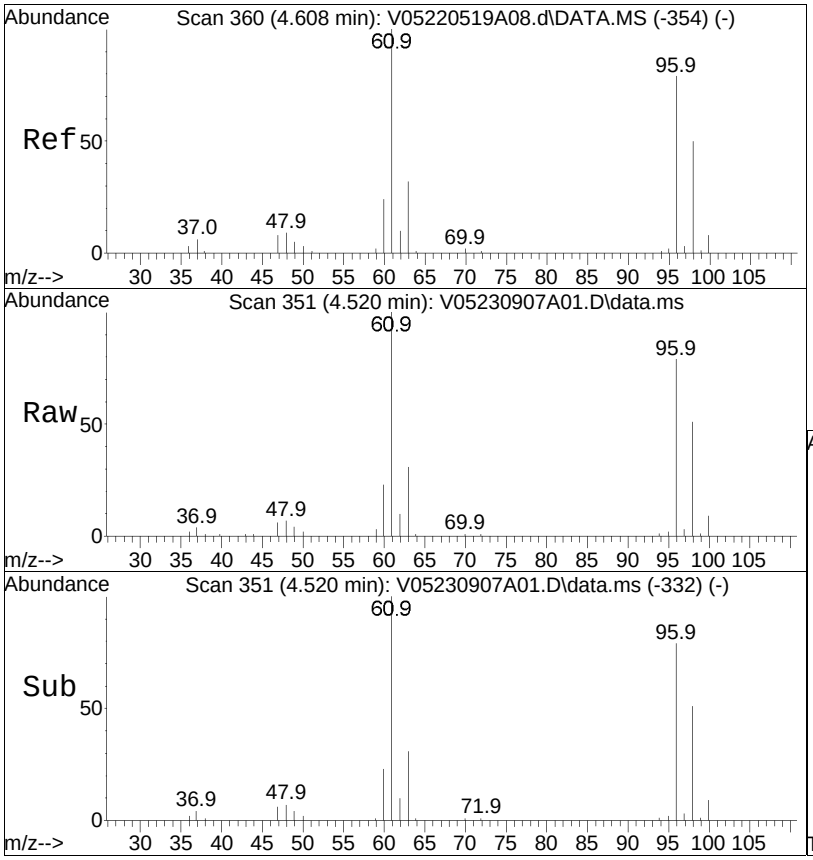


#23
1,1-Dichloroethane
Concen: 10.56 ug/L
RT: 4.012 min Scan# 299
Delta R.T. -0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 63 Resp: 124655

Ion	Ratio	Lower	Upper
63	100		
65	31.0	11.9	51.9
83	13.5	0.0	34.2

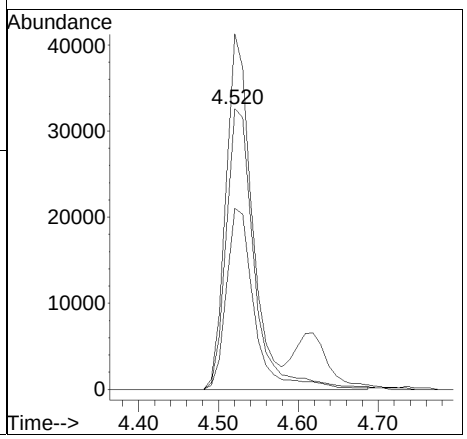


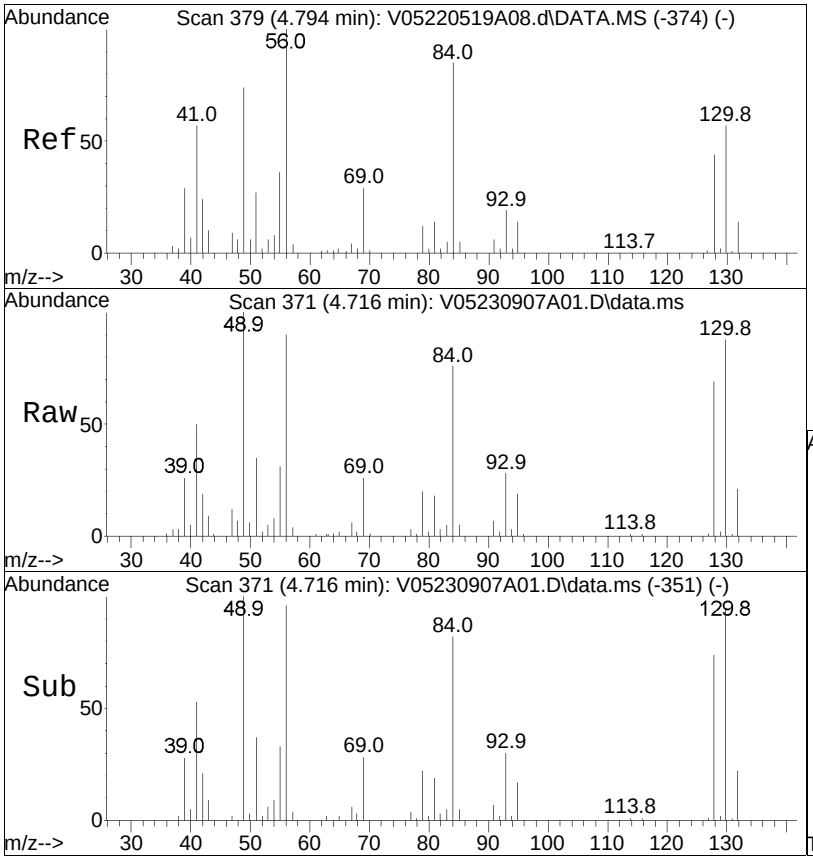


#28
cis-1,2-Dichloroethene
Concen: 10.70 ug/L
RT: 4.520 min Scan# 351
Delta R.T. -0.010 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 96 Resp: 79900

Ion	Ratio	Lower	Upper
96	100		
61	116.4	100.5	150.7
98	64.4	49.8	74.8

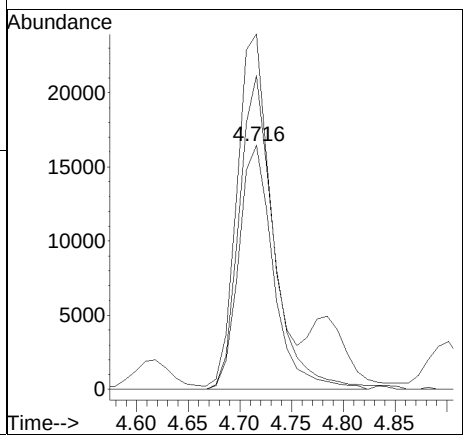


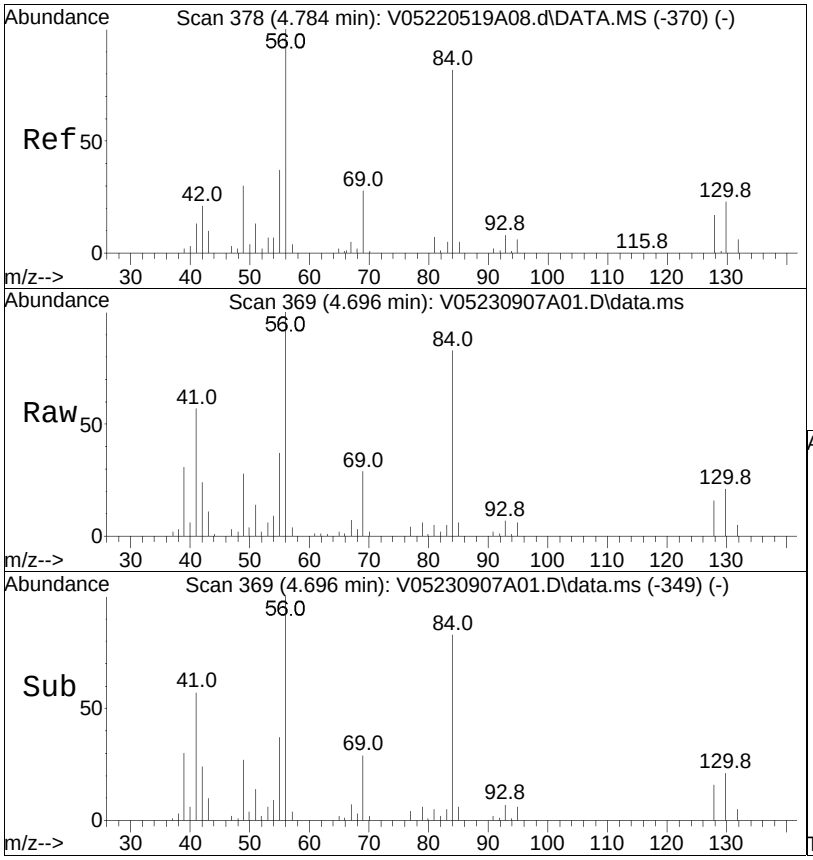


#30
Bromochloromethane
Concen: 11.13 ug/L
RT: 4.716 min Scan# 371
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:128 Resp: 38741

Ion	Ratio	Lower	Upper
128	100		
49	139.9	109.0	163.4
130	129.5	105.6	158.4

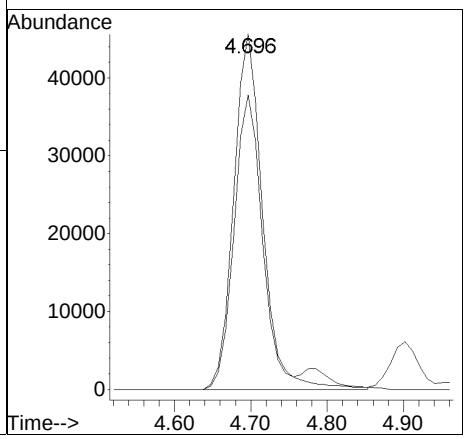


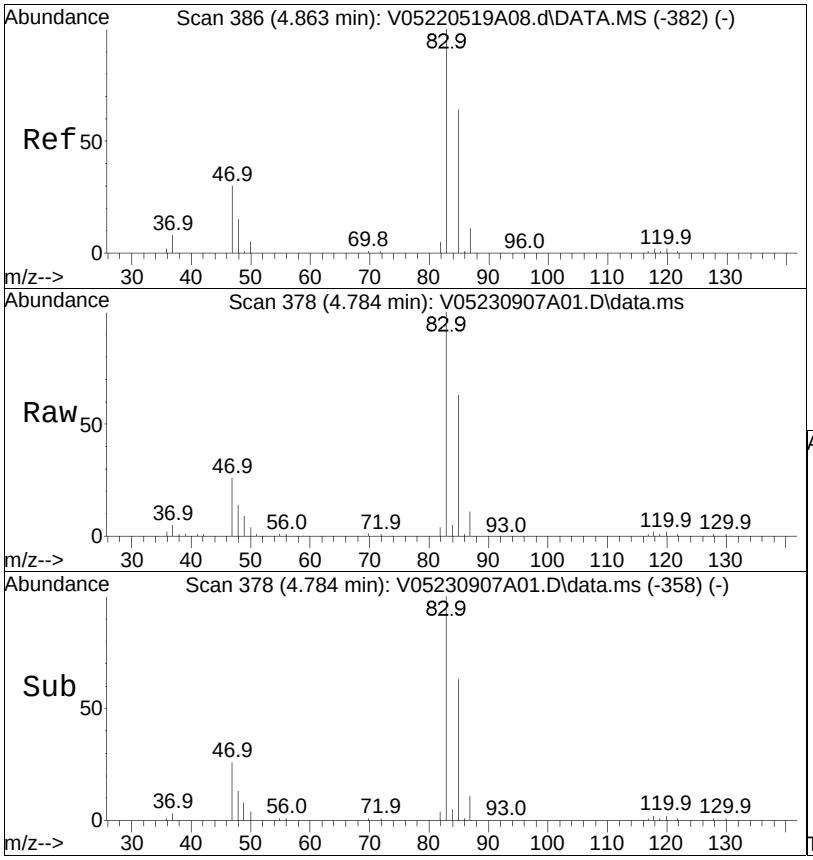


#31
Cyclohexane
Concen: 10.33 ug/L
RT: 4.696 min Scan# 369
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 56 Resp: 120061

Ion	Ratio	Lower	Upper
56	100		
84	80.9	64.4	133.8

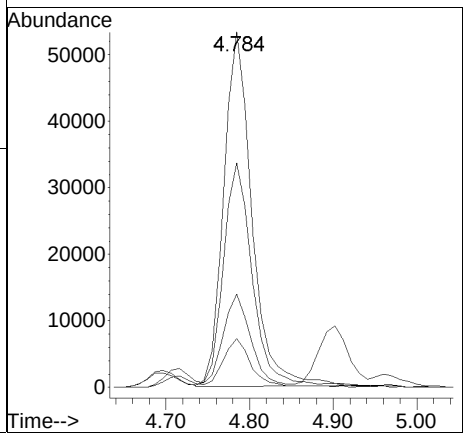


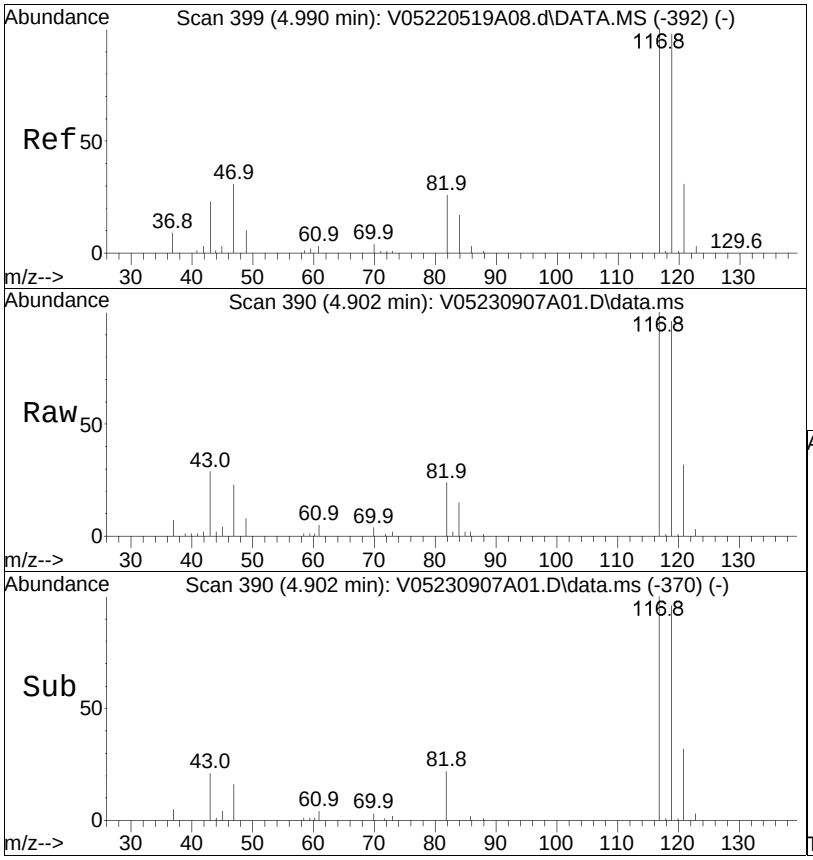


#32
Chloroform
Concen: 10.64 ug/L
RT: 4.784 min Scan# 378
Delta R.T. -0.001 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 83 Resp: 125335

Ion	Ratio	Lower	Upper
83	100		
85	64.8	42.8	89.0
47	23.7	13.7	28.4
48	12.8	6.9	14.3

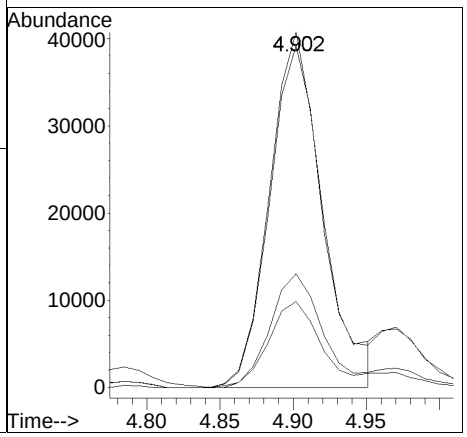


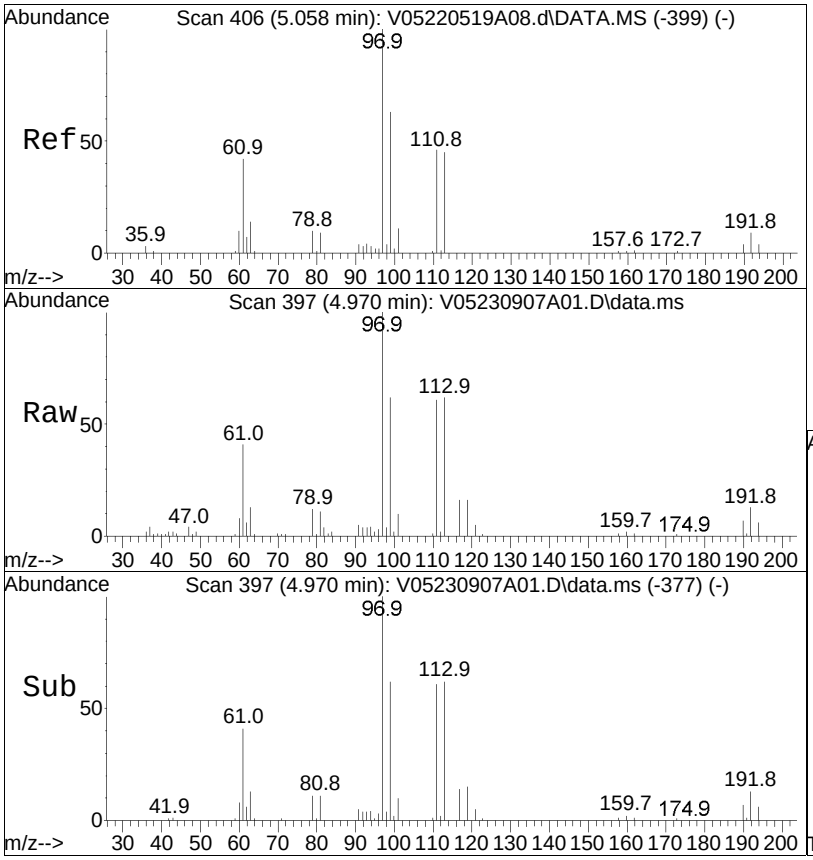


#34
Carbon tetrachloride
Concen: 10.27 ug/L
RT: 4.902 min Scan# 390
Delta R.T. -0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:117 Resp: 102711

Ion	Ratio	Lower	Upper
117	100		
119	96.8	63.6	132.2
121	31.8	19.8	41.0
82	23.7	15.9	32.9

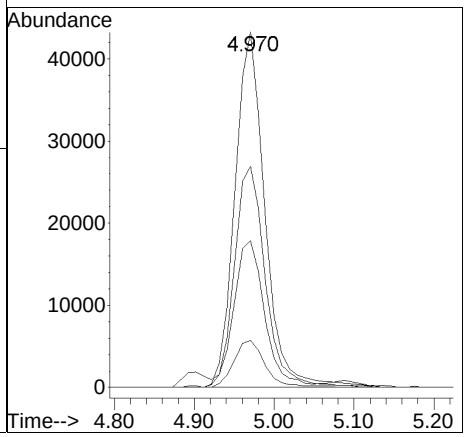


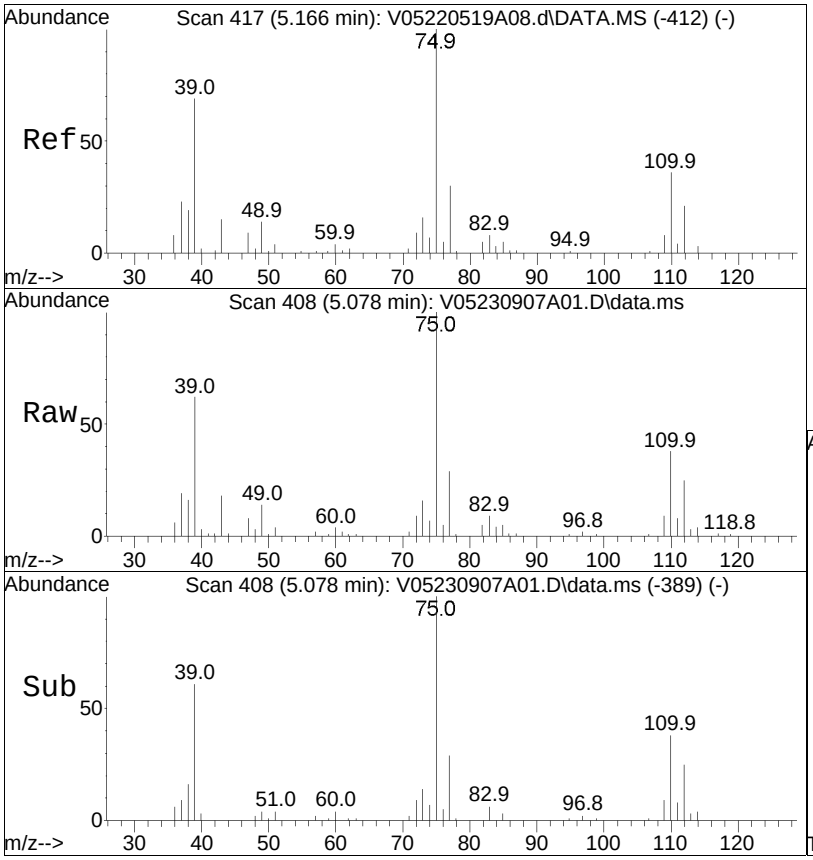


#37
1,1,1-Trichloroethane
Concen: 10.78 ug/L
RT: 4.970 min Scan# 397
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 97 Resp: 113542

Ion	Ratio	Lower	Upper
97	100		
99	64.2	41.7	86.5
61	41.4	26.1	54.3
63	13.8	8.5	17.6

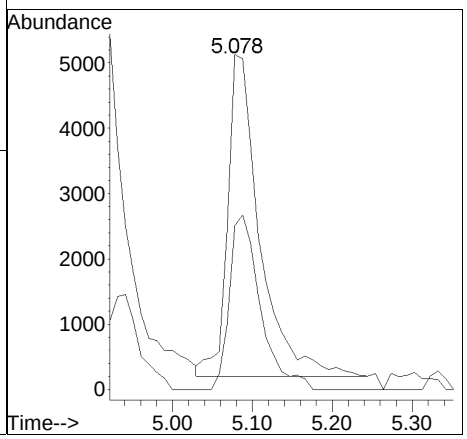


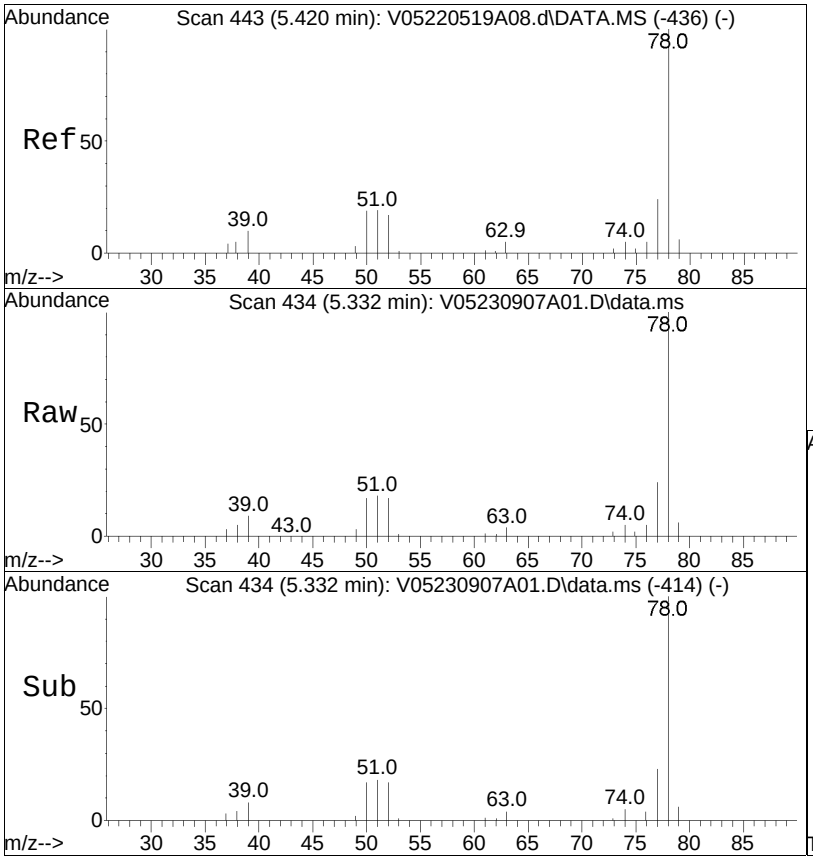


#39
2-Butanone
Concen: 8.70 ug/L
RT: 5.078 min Scan# 408
Delta R.T. -0.010 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 43 Resp: 13793

Ion	Ratio	Lower	Upper
43	100		
72	52.1	55.6	83.4#

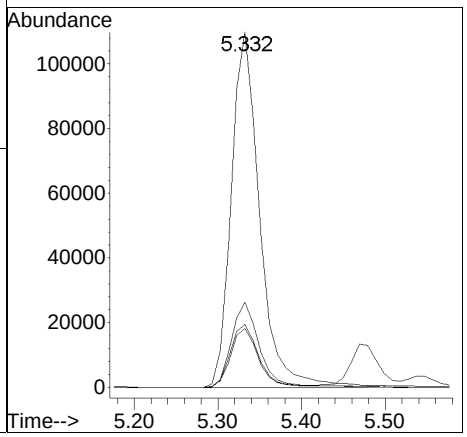


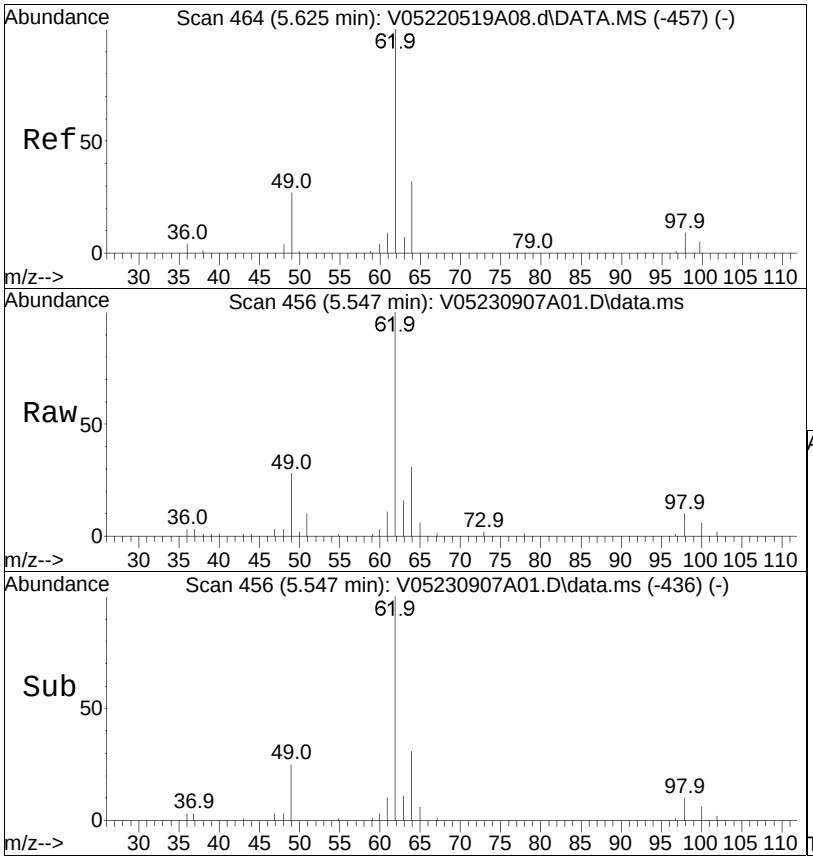


#41
Benzene
Concen: 10.55 ug/L
RT: 5.332 min Scan# 434
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 78 Resp: 259471

Ion	Ratio	Lower	Upper
78	100		
77	23.8	15.2	31.6
51	17.6	10.5	21.7
52	16.4	9.5	19.7

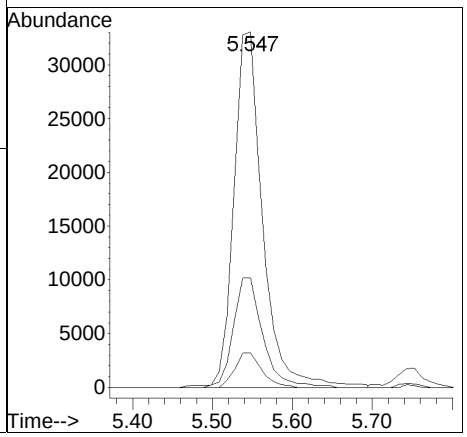


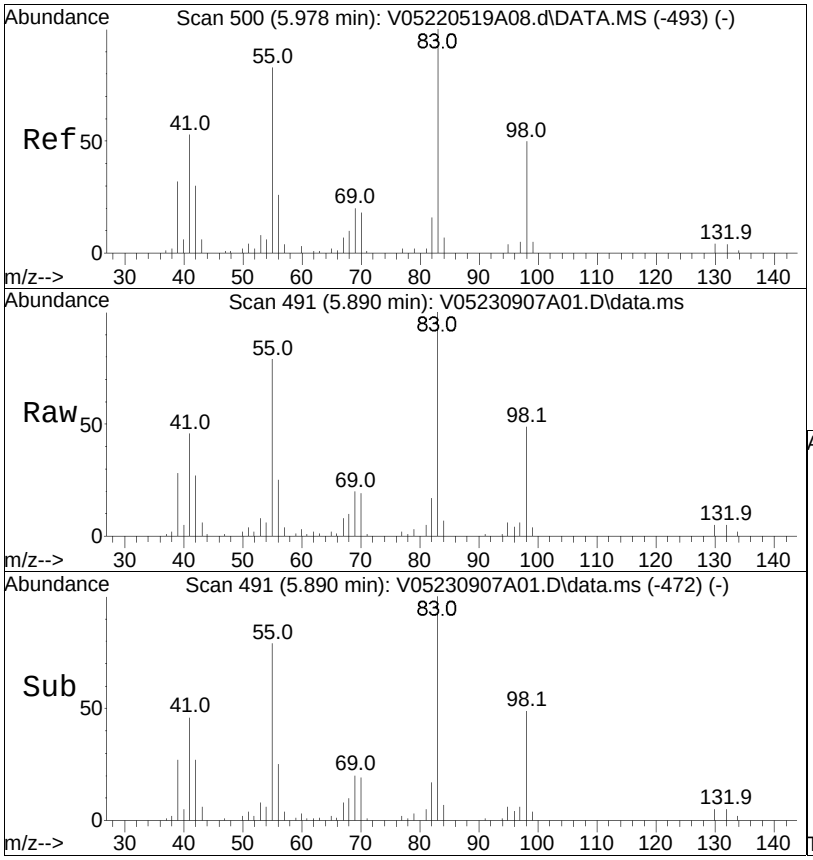


#44
1,2-Dichloroethane
Concen: 10.20 ug/L
RT: 5.547 min Scan# 456
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 62 Resp: 82783

Ion	Ratio	Lower	Upper
62	100		
64	32.0	13.2	53.2
98	9.2	0.0	27.8

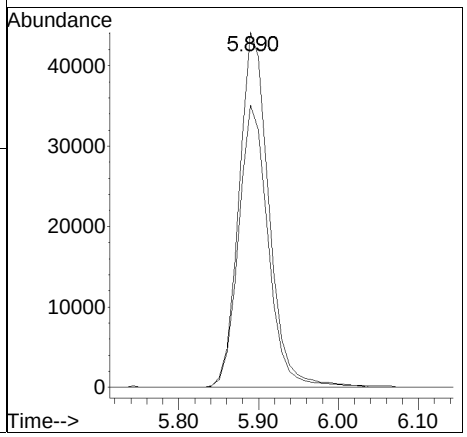


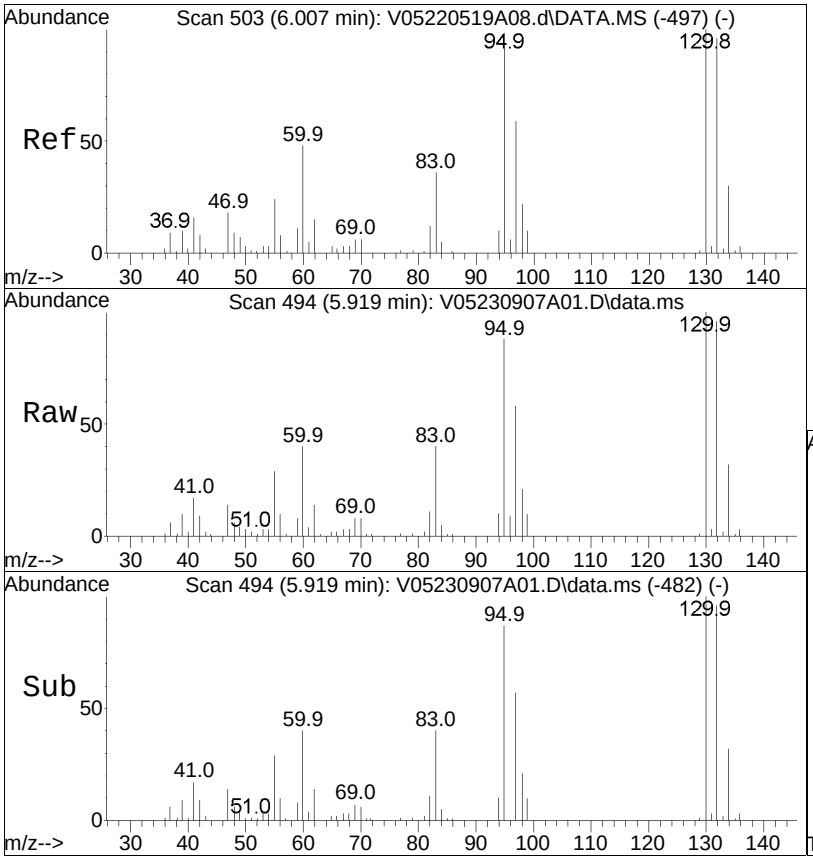


#47
Methyl cyclohexane
Concen: 9.77 ug/L
RT: 5.890 min Scan# 491
Delta R.T. -0.010 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 83 Resp: 114968

Ion	Ratio	Lower	Upper
83	100		
55	78.9	57.3	85.9

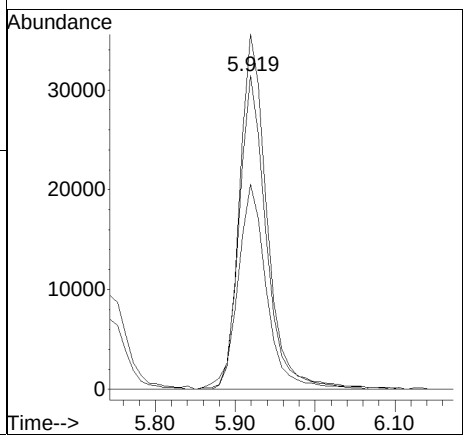


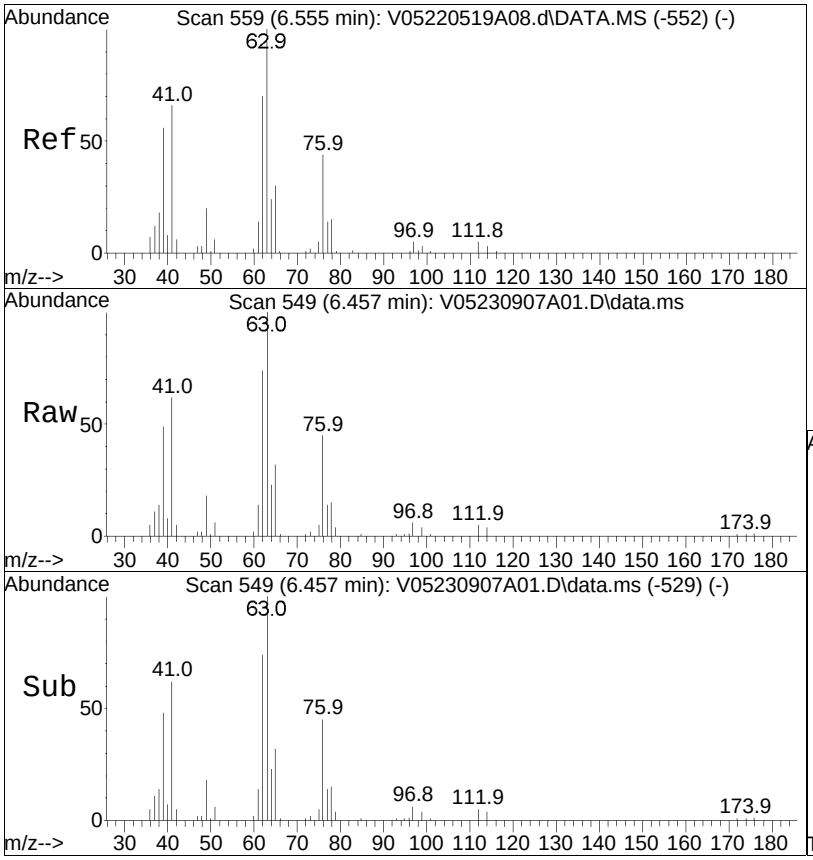


#48
Trichloroethene
Concen: 9.49 ug/L
RT: 5.919 min Scan# 494
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 95 Resp: 74799

Ion	Ratio	Lower	Upper
95	100		
97	69.1	56.1	84.1
130	113.8	77.7	116.5

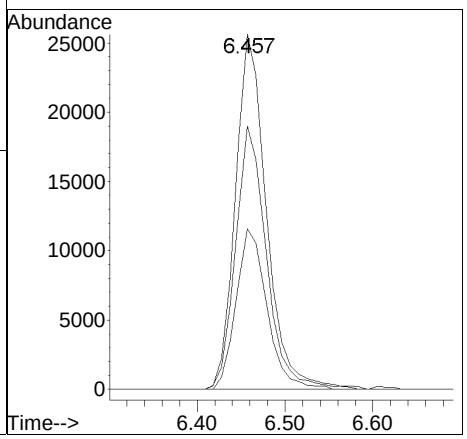


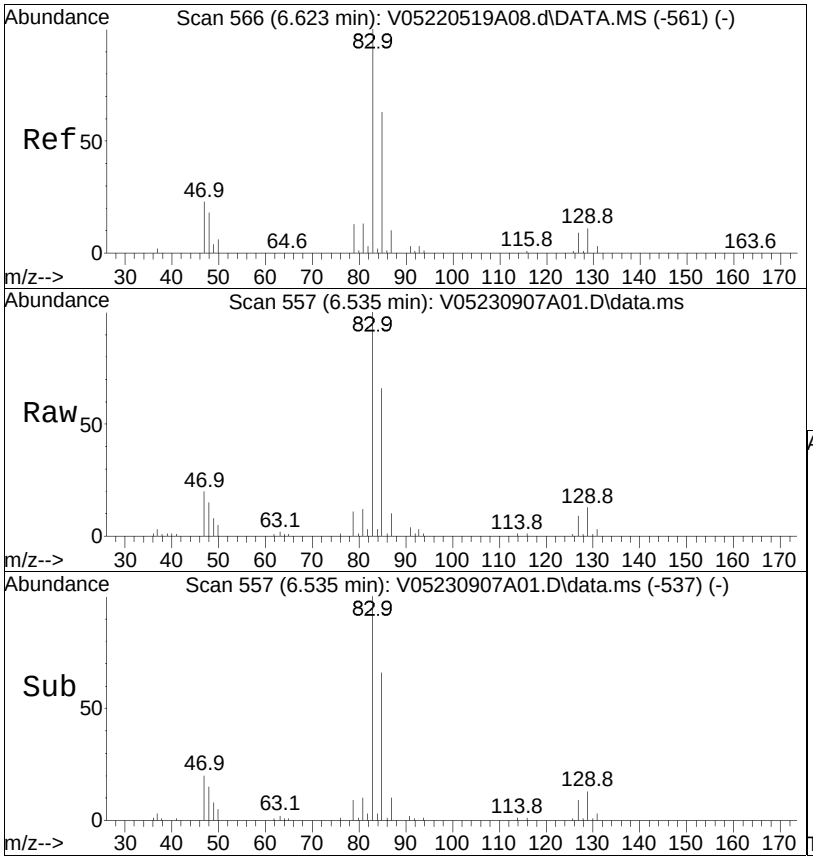


#51
1,2-Dichloropropane
Concen: 10.13 ug/L
RT: 6.457 min Scan# 549
Delta R.T. -0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 63 Resp: 63151

Ion	Ratio	Lower	Upper
63	100		
62	73.7	57.0	85.4
76	45.0	48.4	72.6#

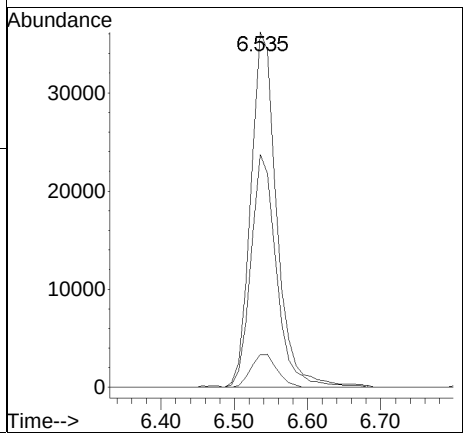


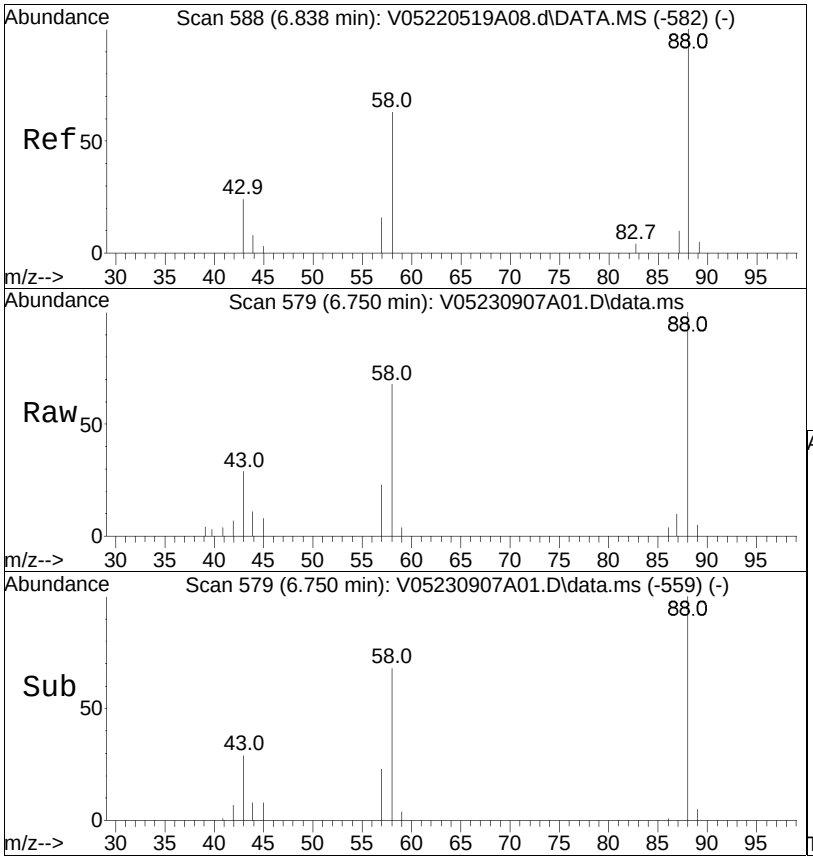


#54
Bromodichloromethane
Concen: 10.40 ug/L
RT: 6.535 min Scan# 557
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 83 Resp: 89561

Ion	Ratio	Lower	Upper
83	100		
85	64.8	51.0	76.6
127	9.4	6.7	10.1

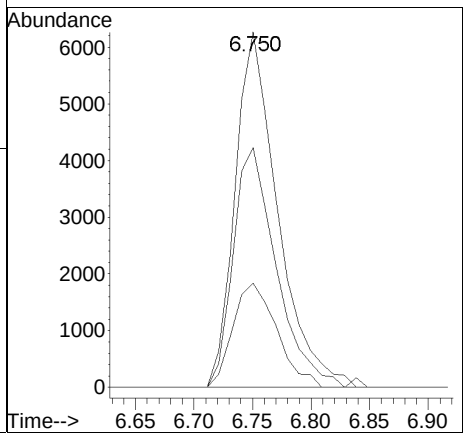


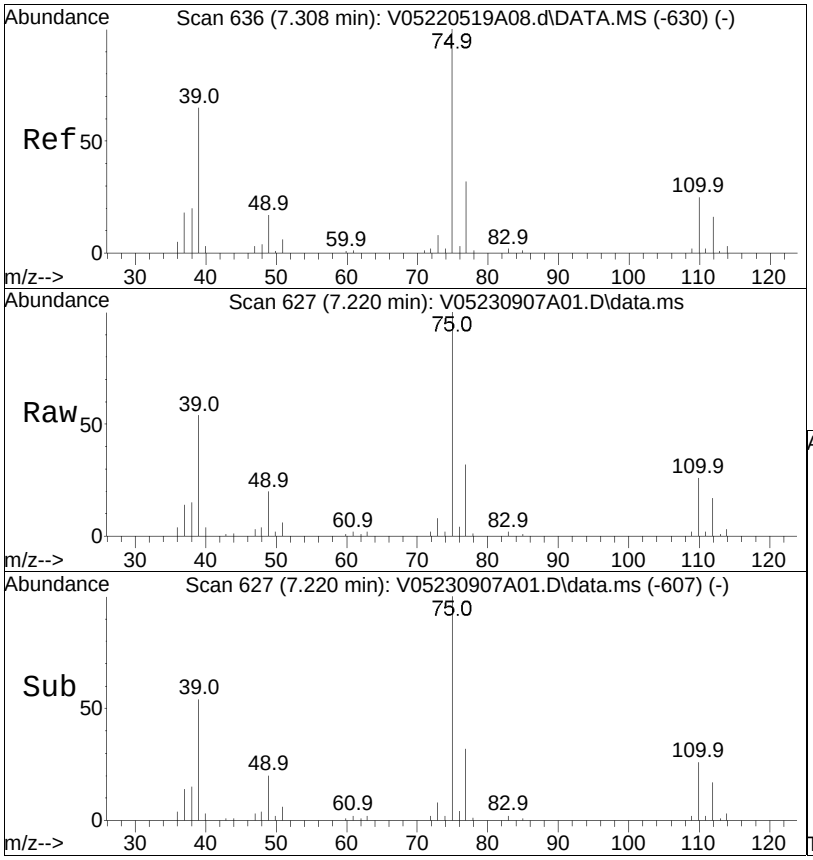


#57
1,4-Dioxane
Concen: 523.56 ug/L
RT: 6.750 min Scan# 579
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023   7:28 am

Tgt Ion: 88 Resp: 15884

Ion	Ratio	Lower	Upper
88	100		
58	68.6	50.6	75.8
43	30.2	20.5	30.7

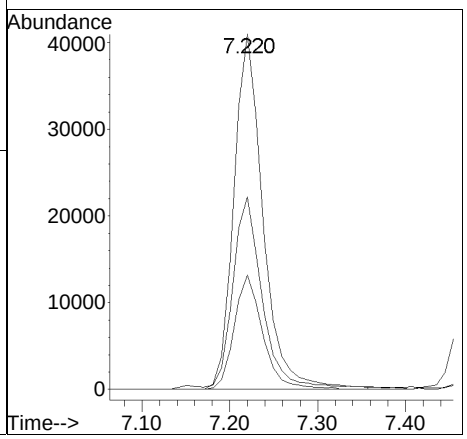


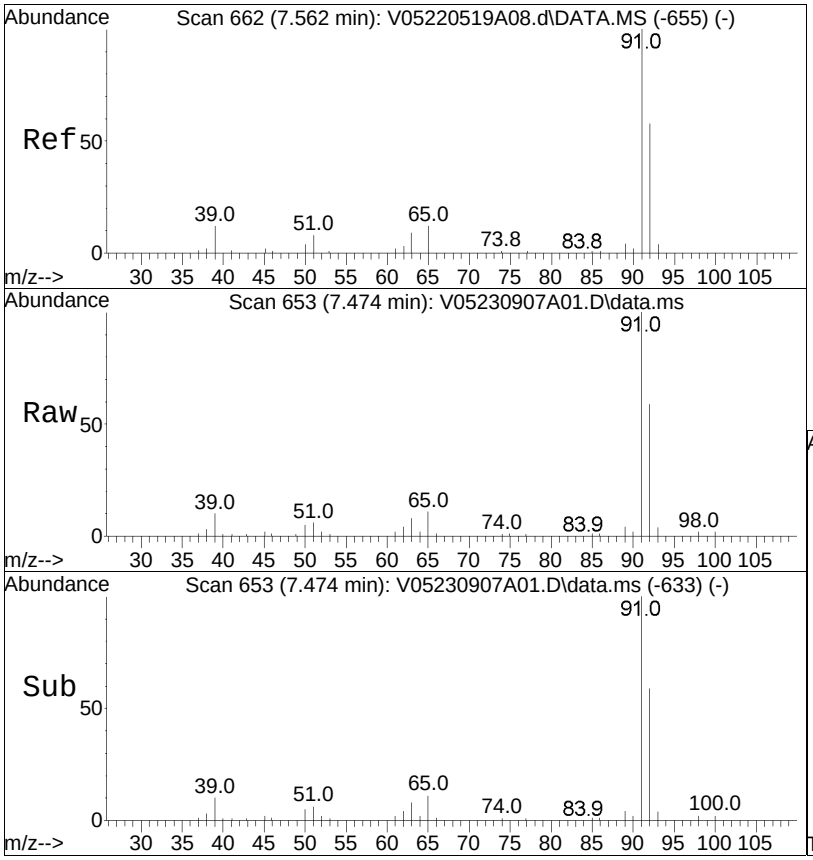


#58
cis-1,3-Dichloropropene
Concen: 9.86 ug/L
RT: 7.220 min Scan# 627
Delta R.T. -0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 75 Resp: 94832

Ion	Ratio	Lower	Upper
75	100		
77	31.5	25.5	38.3
39	53.4	40.4	60.6

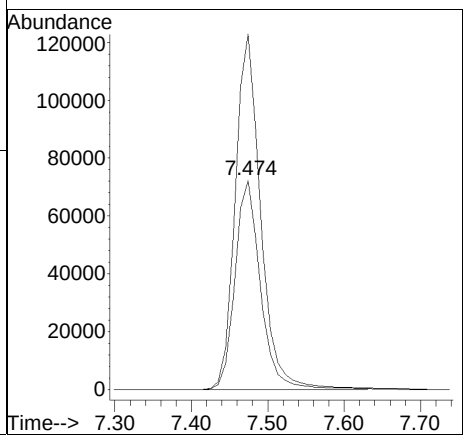


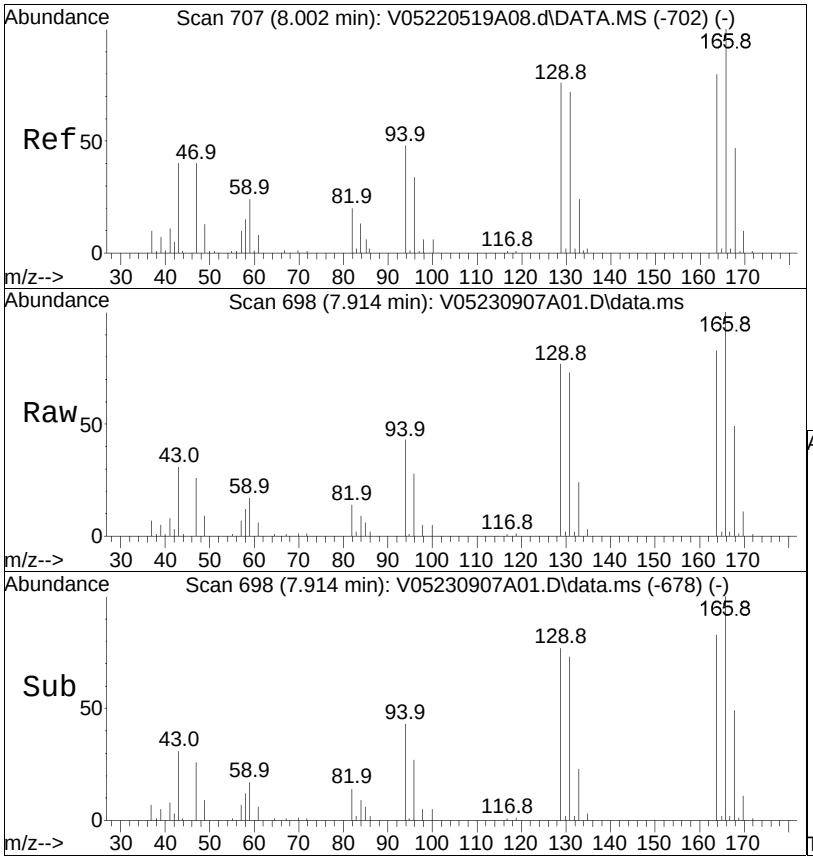


#61
Toluene
Concen: 10.58 ug/L
RT: 7.474 min Scan# 653
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 92 Resp: 167404

Ion	Ratio	Lower	Upper
92	100		
91	169.4	135.2	202.8

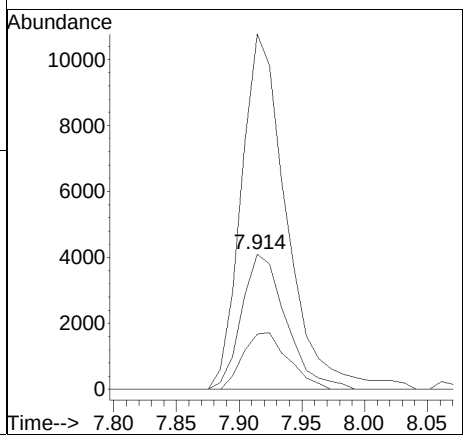


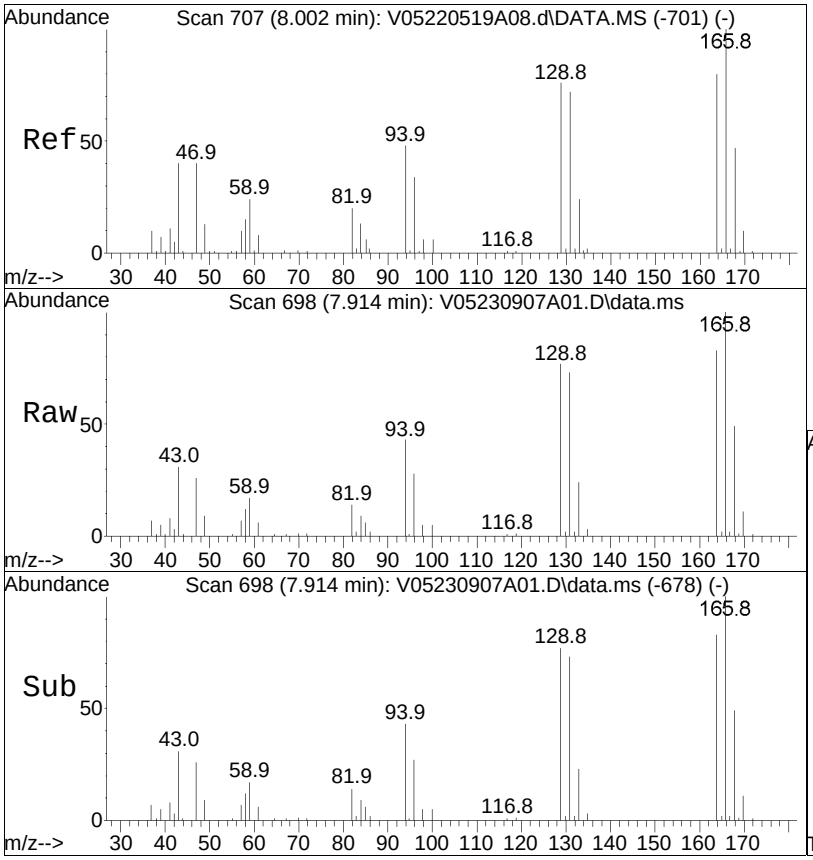


#62
4-Methyl-2-pentanone
Concen: 8.34 ug/L
RT: 7.914 min Scan# 698
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 58 Resp: 10127

Ion	Ratio	Lower	Upper
58	100		
100	42.9	38.9	58.3
43	270.3	204.2	306.2

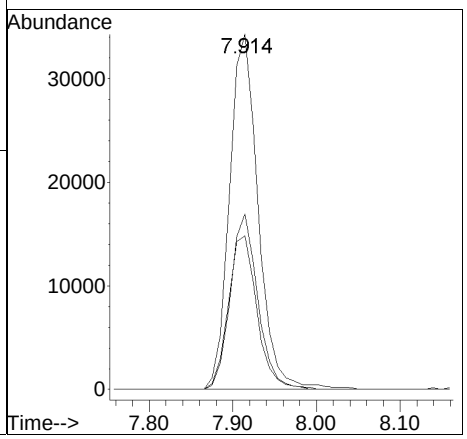


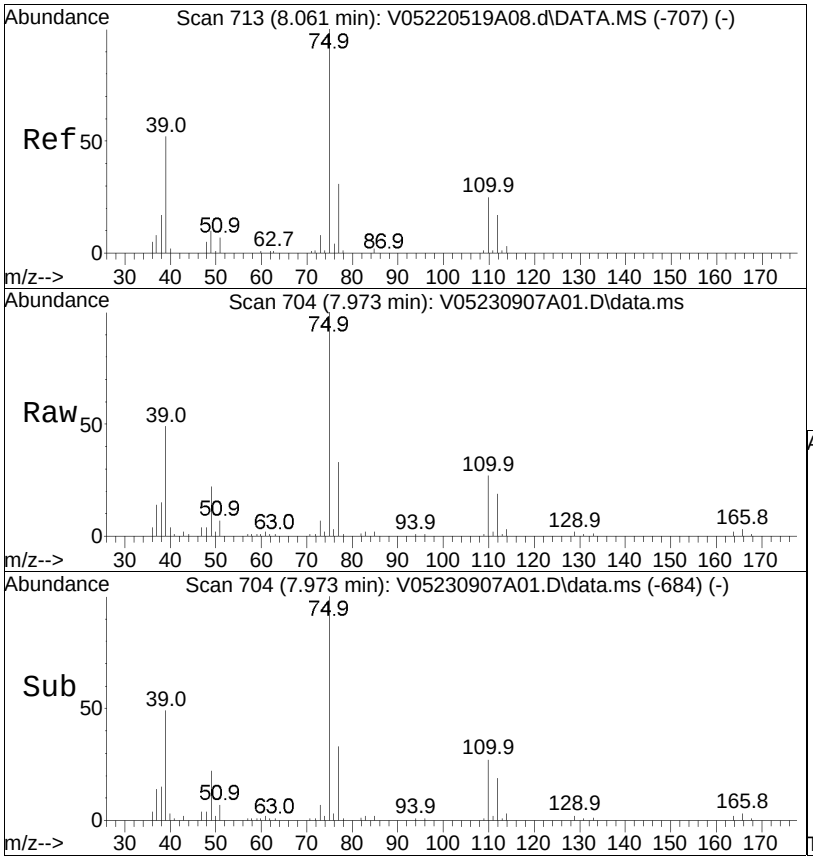


#63
Tetrachloroethene
Concen: 10.87 ug/L
RT: 7.914 min Scan# 698
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:166 Resp: 81876

Ion	Ratio	Lower	Upper
166	100		
168	47.3	30.2	70.2
94	43.1	32.5	72.5

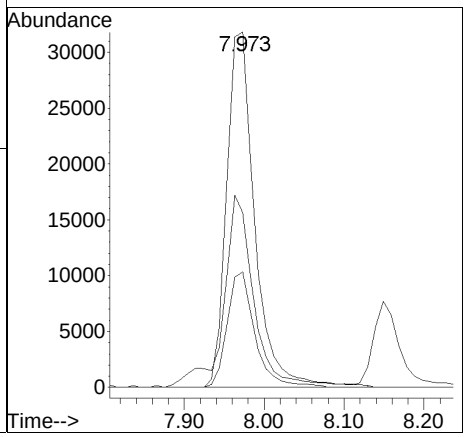


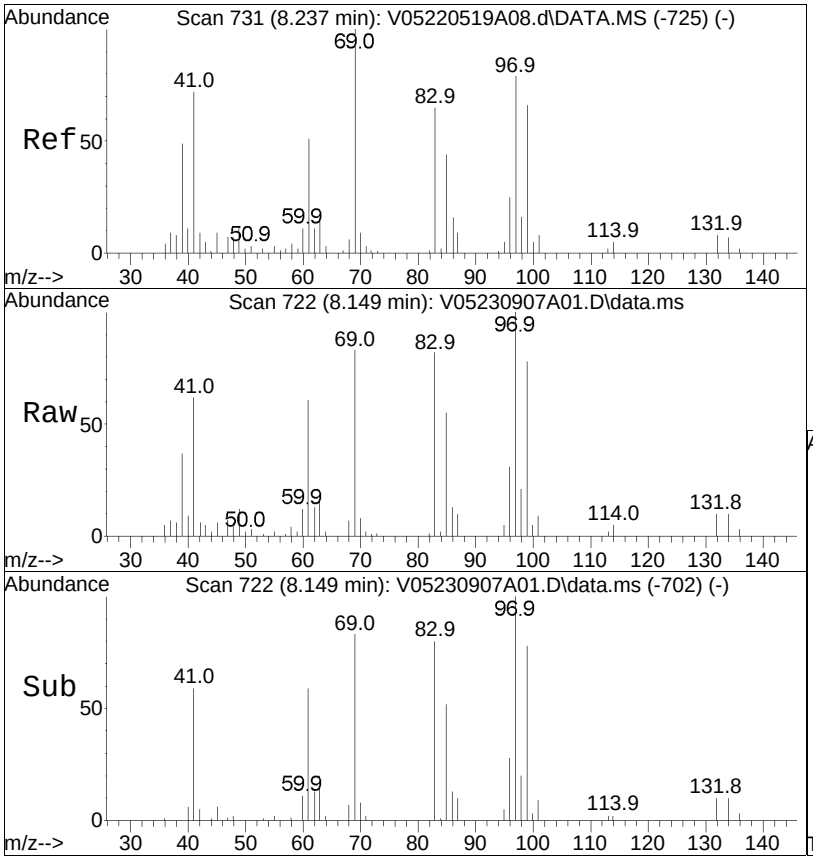


#65
trans-1,3-Dichloropropene
Concen: 10.07 ug/L
RT: 7.973 min Scan# 704
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 75 Resp: 78450

Ion	Ratio	Lower	Upper
75	100		
77	31.9	11.5	51.5
39	58.3	29.3	69.3

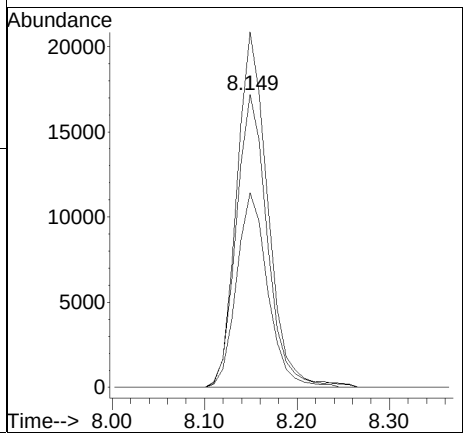


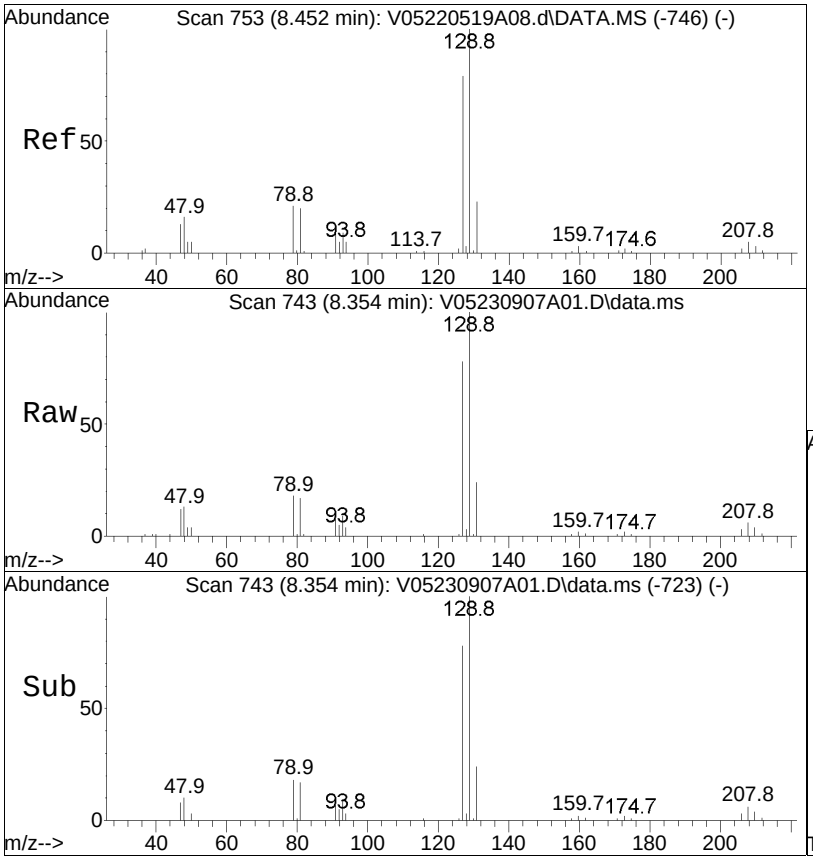


#68
1,1,2-Trichloroethane
Concen: 10.13 ug/L
RT: 8.149 min Scan# 722
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 83 Resp: 40433

Ion	Ratio	Lower	Upper
83	100		
97	120.1	102.2	142.2
85	66.4	47.5	87.5

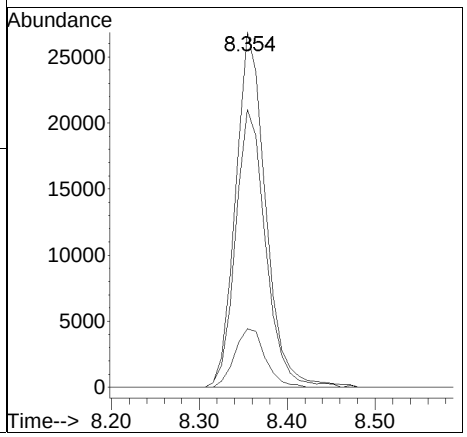


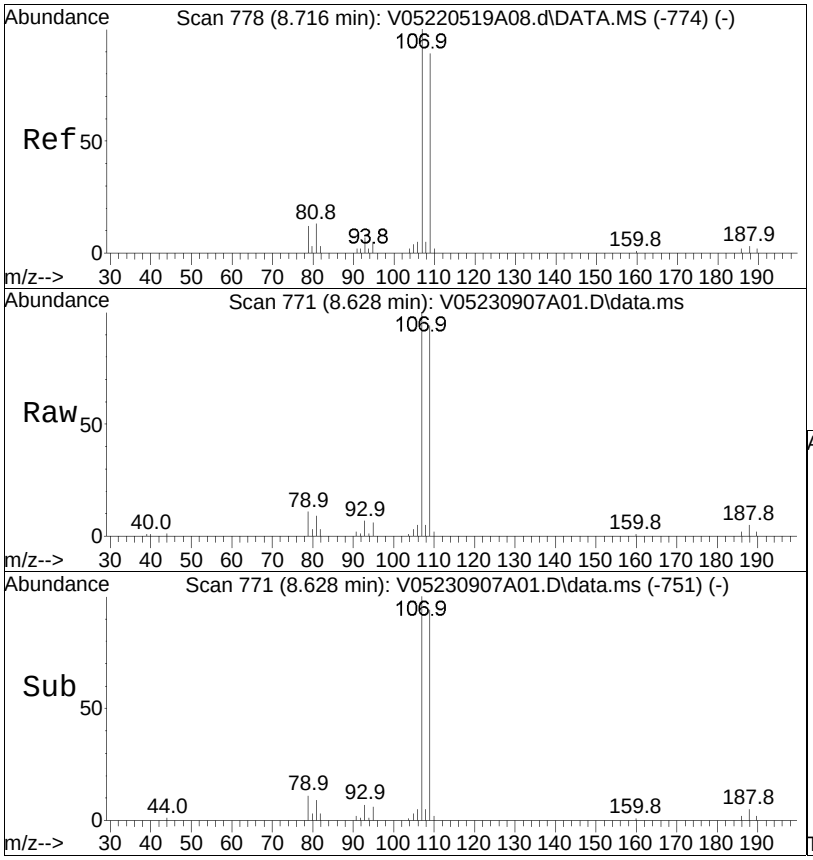


#69
Chlorodibromomethane
Concen: 10.54 ug/L
RT: 8.354 min Scan# 743
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:129 Resp: 64115

Ion	Ratio	Lower	Upper
129	100		
81	16.8	0.0	37.0
127	78.5	58.3	98.3

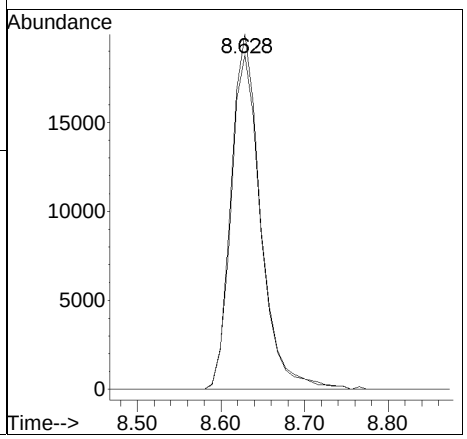


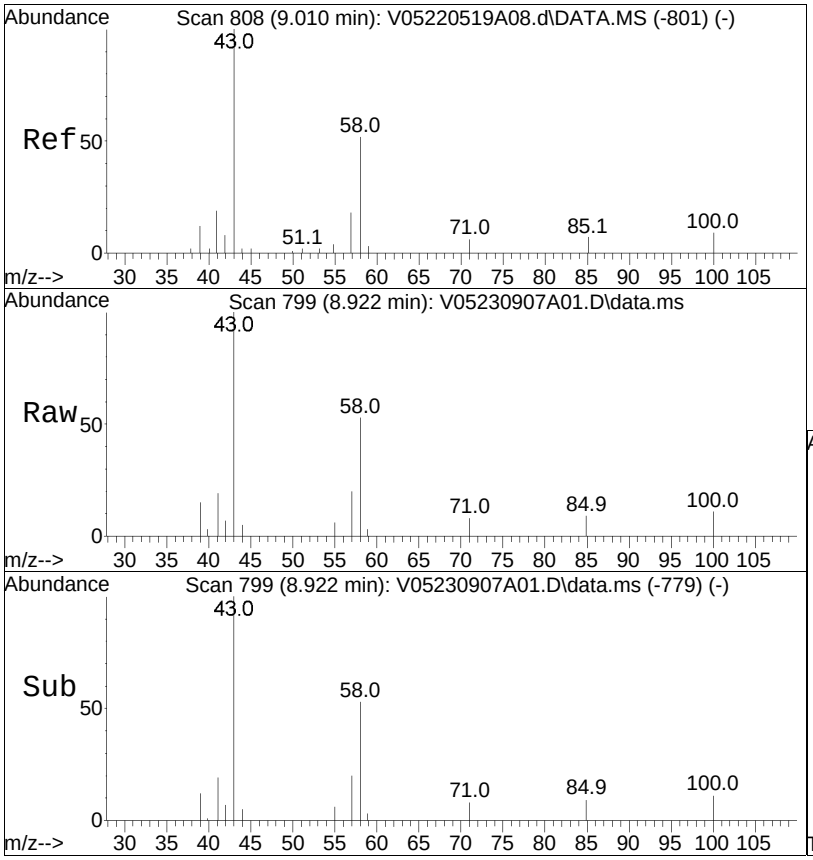


#71
1,2-Dibromoethane
Concen: 9.98 ug/L
RT: 8.628 min Scan# 771
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:107 Resp: 53826

Ion	Ratio	Lower	Upper
107	100		
109	95.6	75.0	112.6

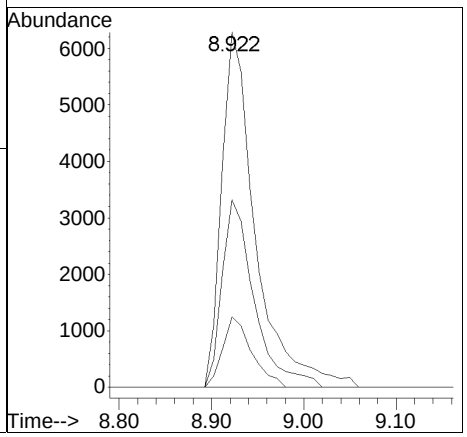


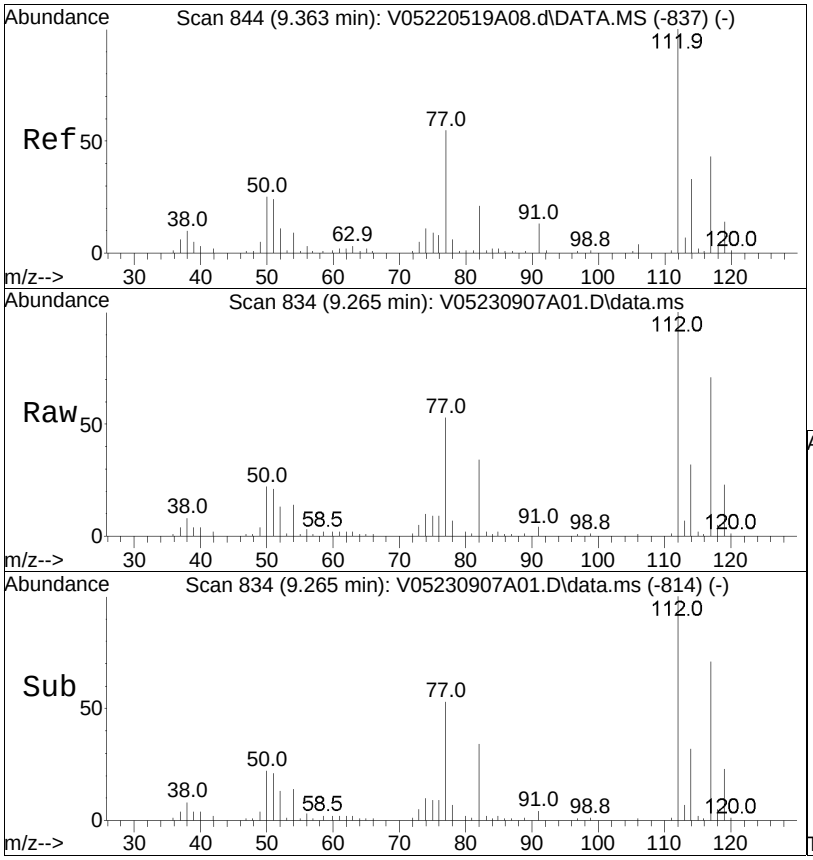


#72
2-Hexanone
Concen: 7.43 ug/L
RT: 8.922 min Scan# 799
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 43 Resp: 16080

Ion	Ratio	Lower	Upper
43	100		
58	50.2	42.3	63.5
57	17.1	15.6	23.4

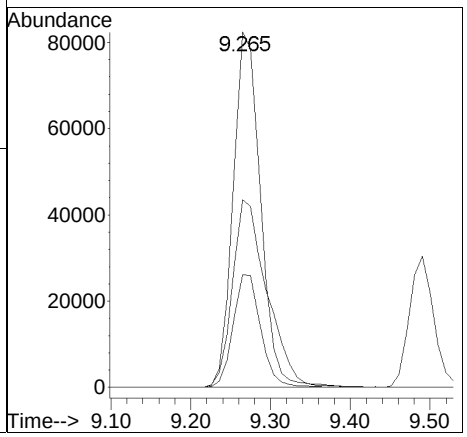


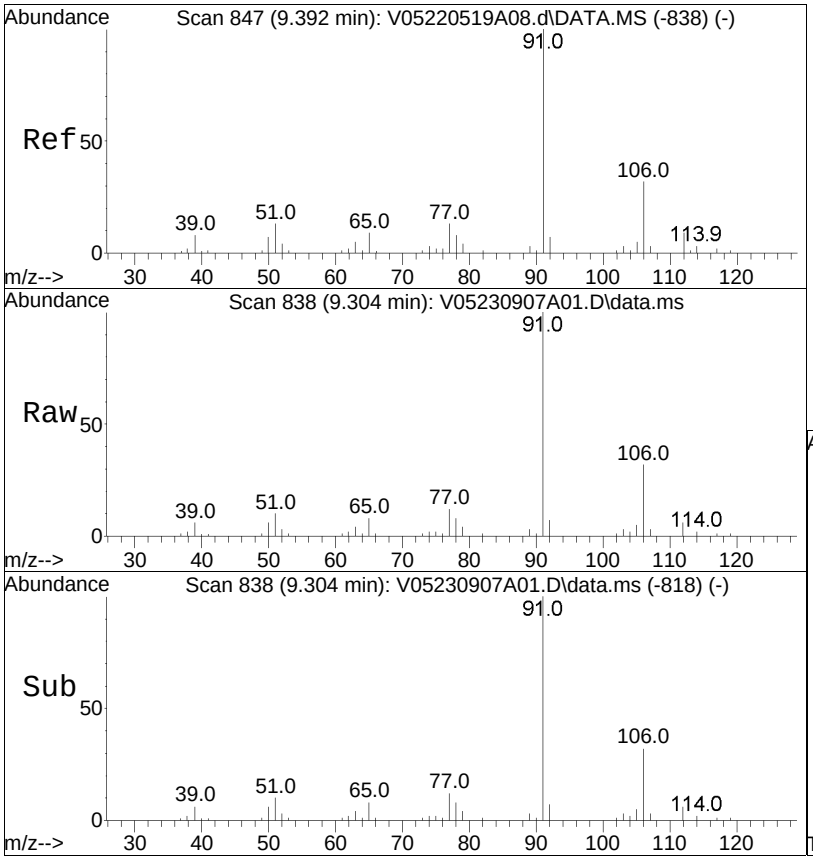


#73
Chlorobenzene
Concen: 10.84 ug/L
RT: 9.265 min Scan# 834
Delta R.T. -0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:112 Resp: 197251

Ion	Ratio	Lower	Upper
112	100		
77	66.5	66.1	99.1
114	31.9	25.4	38.0

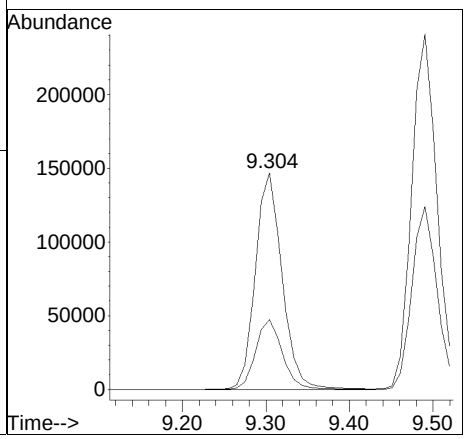


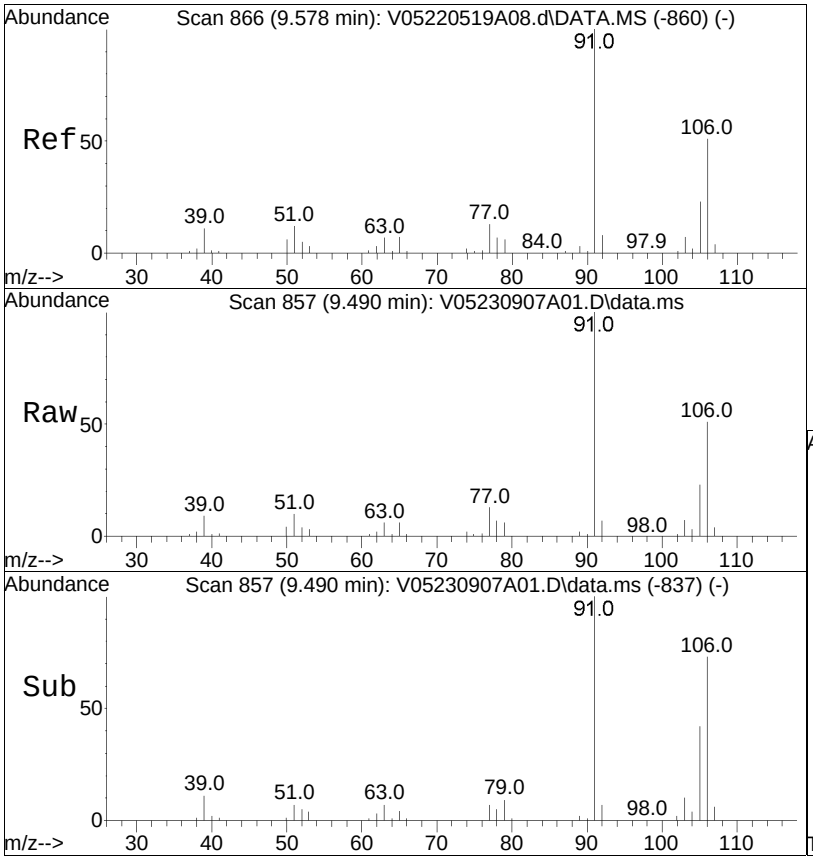


#74
Ethylbenzene
Concen: 10.68 ug/L
RT: 9.304 min Scan# 838
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 91 Resp: 327125

Ion	Ratio	Lower	Upper
91	100		
106	32.3	22.9	34.3

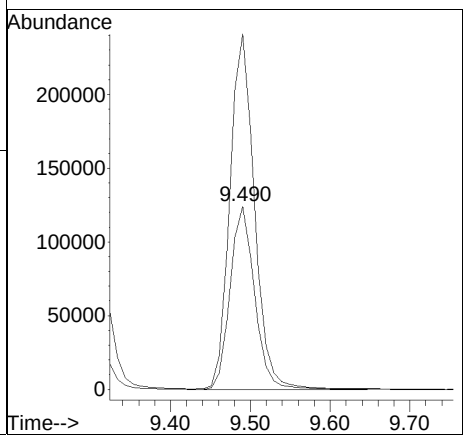


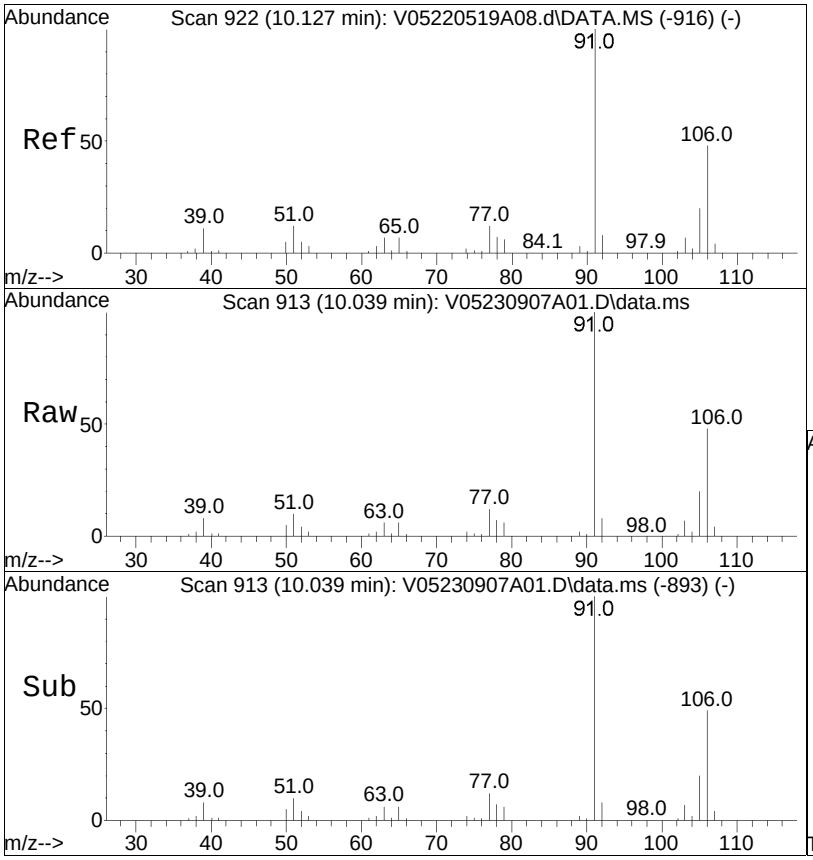


#76
p/m Xylene
Concen: 22.13 ug/L
RT: 9.490 min Scan# 857
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:106 Resp: 265185

Ion	Ratio	Lower	Upper
106	100		
91	193.1	177.2	265.8

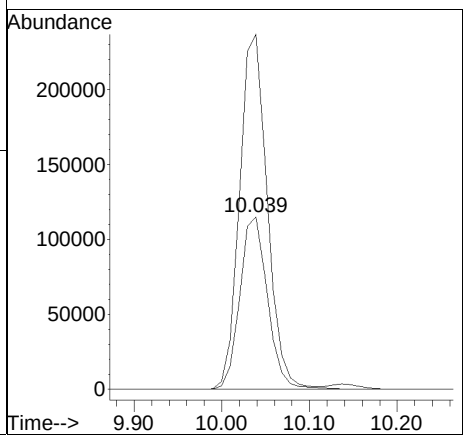


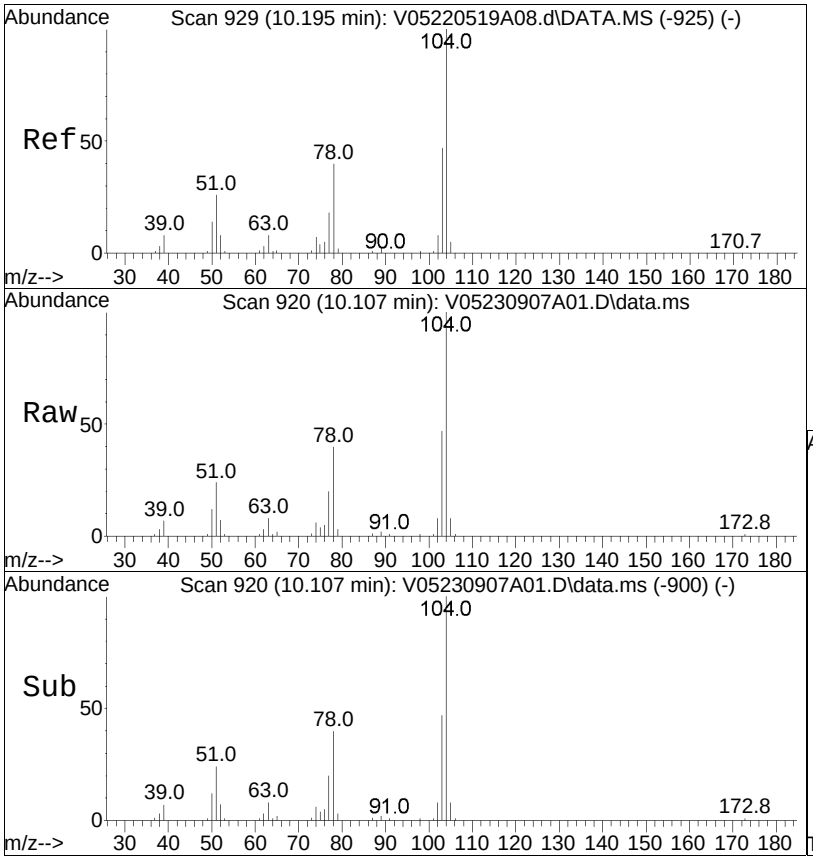


#77
o Xylene
Concen: 21.72 ug/L
RT: 10.039 min Scan# 913
Delta R.T. -0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:106 Resp: 253444

Ion	Ratio	Lower	Upper
106	100		
91	205.0	187.0	280.6

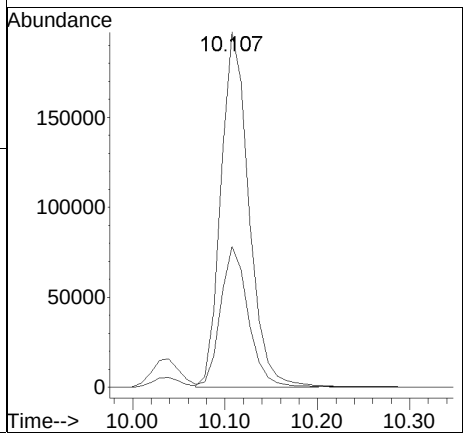


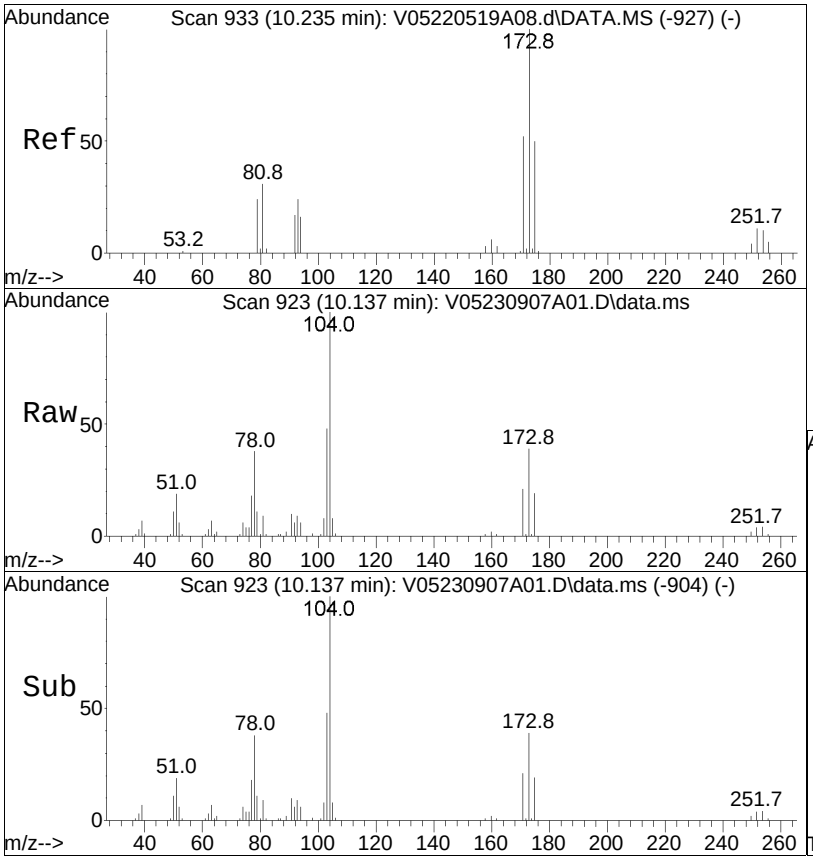


#78
Styrene
Concen: 21.60 ug/L
RT: 10.107 min Scan# 920
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:104 Resp: 414216

Ion	Ratio	Lower	Upper
104	100		
78	39.5	39.6	59.4#

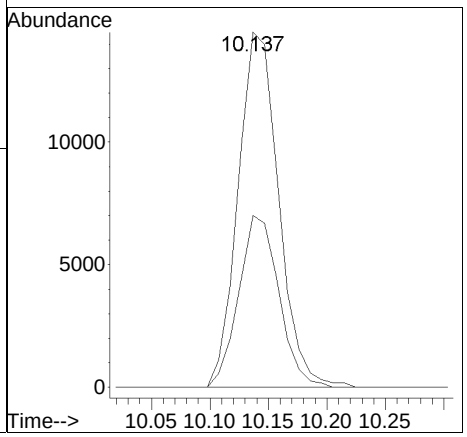


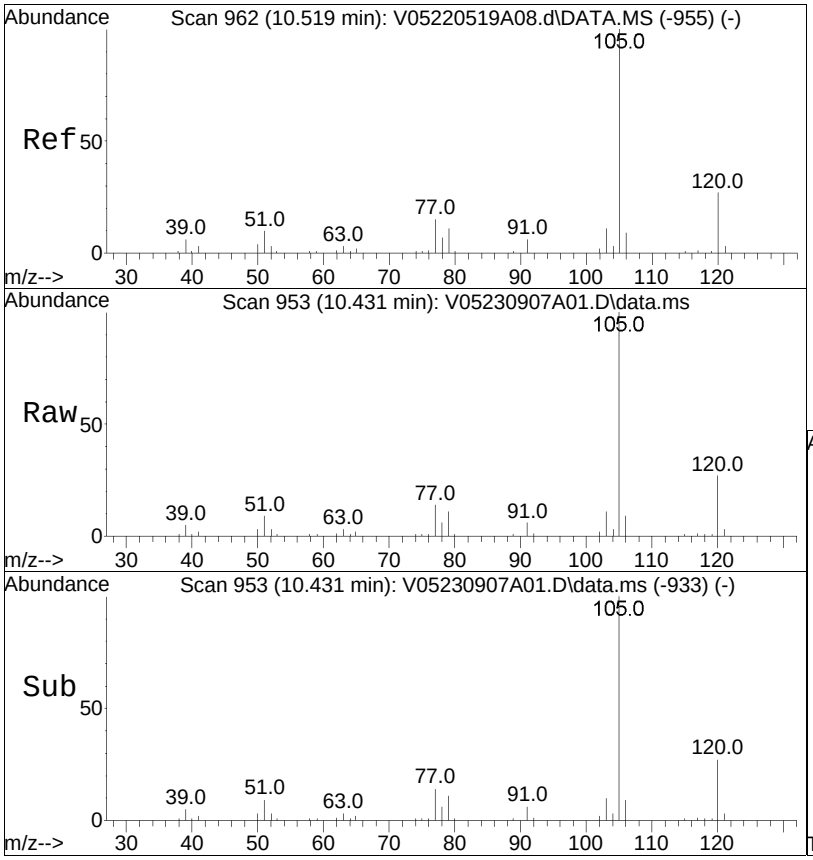


#80
Bromoform
Concen: 8.91 ug/L
RT: 10.137 min Scan# 923
Delta R.T. -0.010 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:173 Resp: 34943

Ion	Ratio	Lower	Upper
173	100		
175	47.9	26.6	66.6

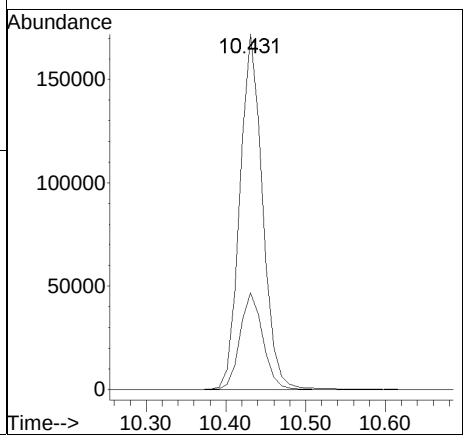


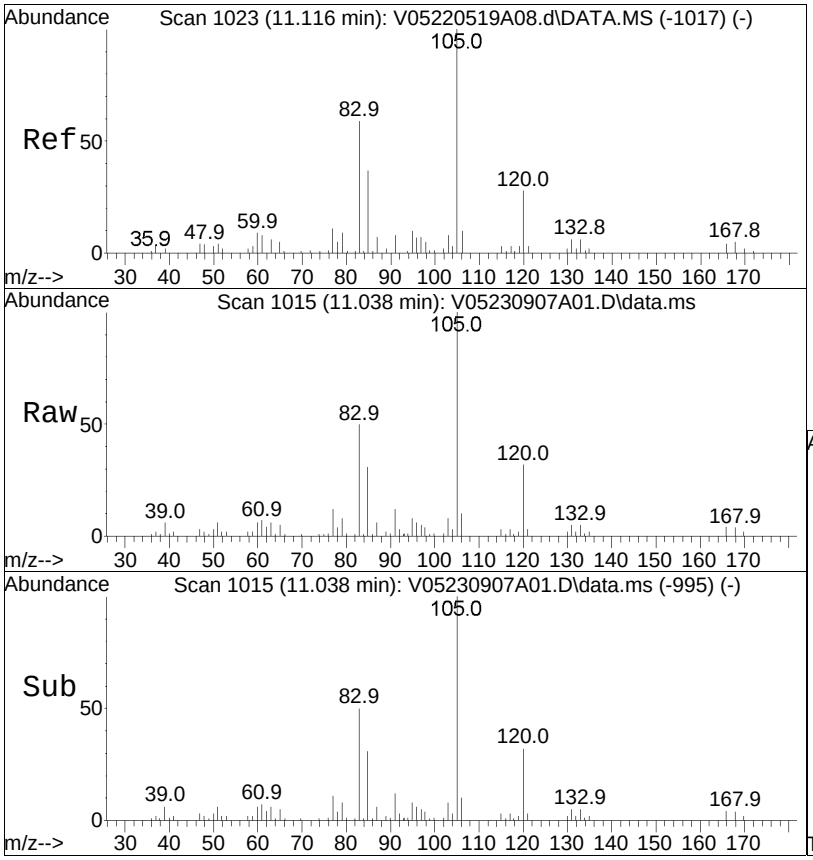


#82
Isopropylbenzene
Concen: 10.62 ug/L
RT: 10.431 min Scan# 953
Delta R.T. -0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:105 Resp: 338977

Ion	Ratio	Lower	Upper
105	100		
120	27.3	4.8	44.8

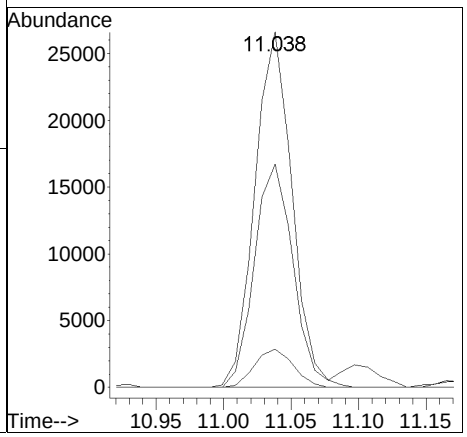


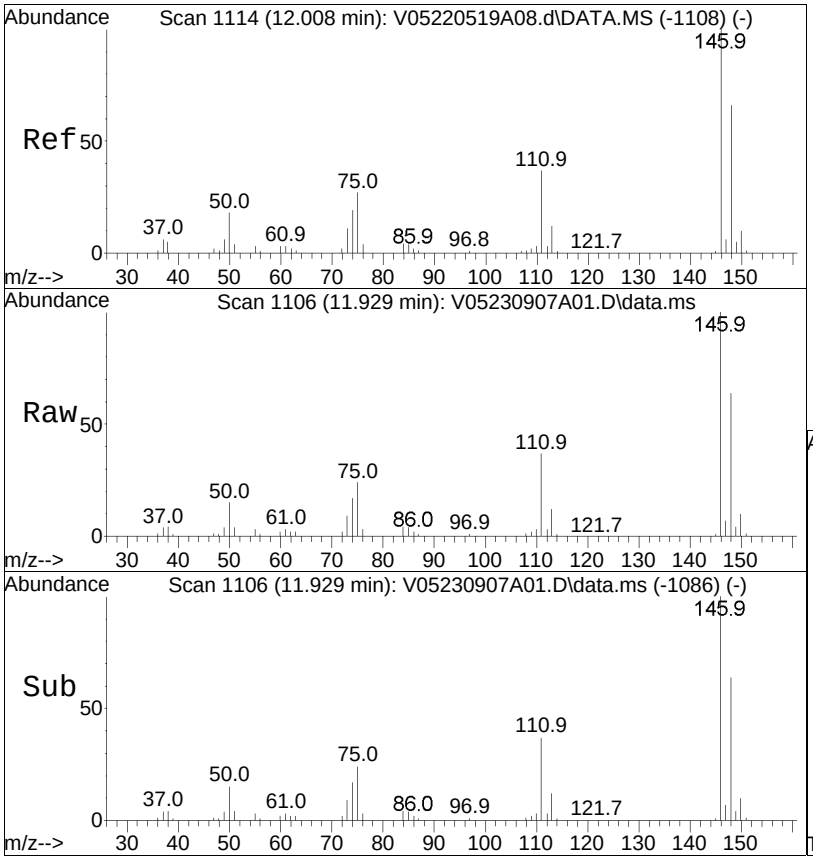


#87
1,1,2,2-Tetrachloroethane
Concen: 9.78 ug/L
RT: 11.038 min Scan# 1015
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion: 83 Resp: 51024

Ion	Ratio	Lower	Upper
83	100		
131	11.3	0.0	30.4
85	65.1	46.4	86.4

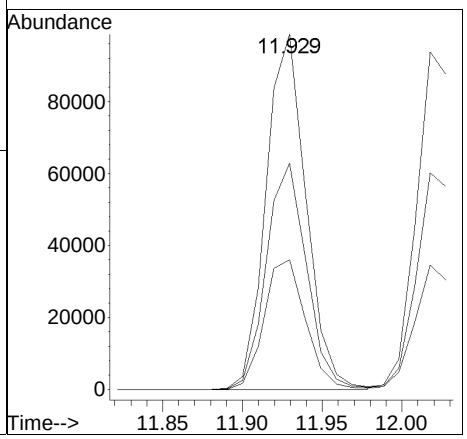


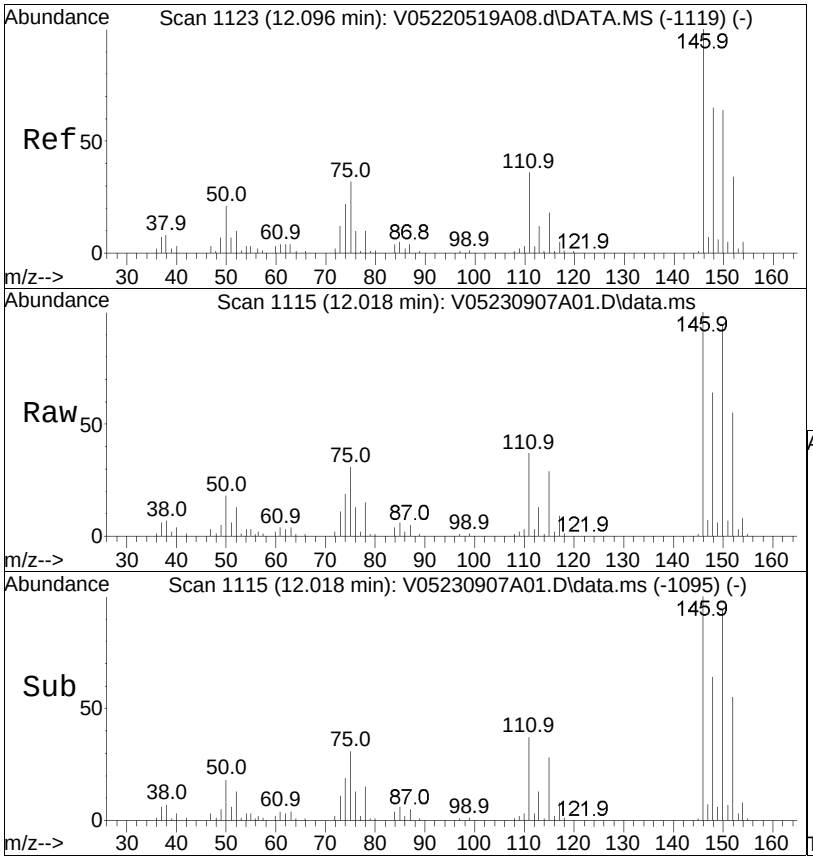


#100
1,3-Dichlorobenzene
Concen: 11.01 ug/L
RT: 11.929 min Scan# 1106
Delta R.T. -0.001 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:146 Resp: 172024

Ion	Ratio	Lower	Upper
146	100		
111	38.0	28.0	58.1
148	64.2	41.6	86.4

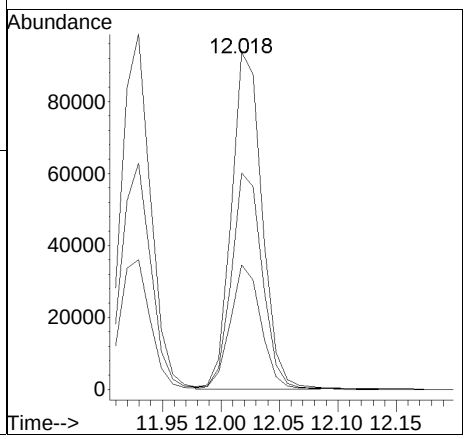


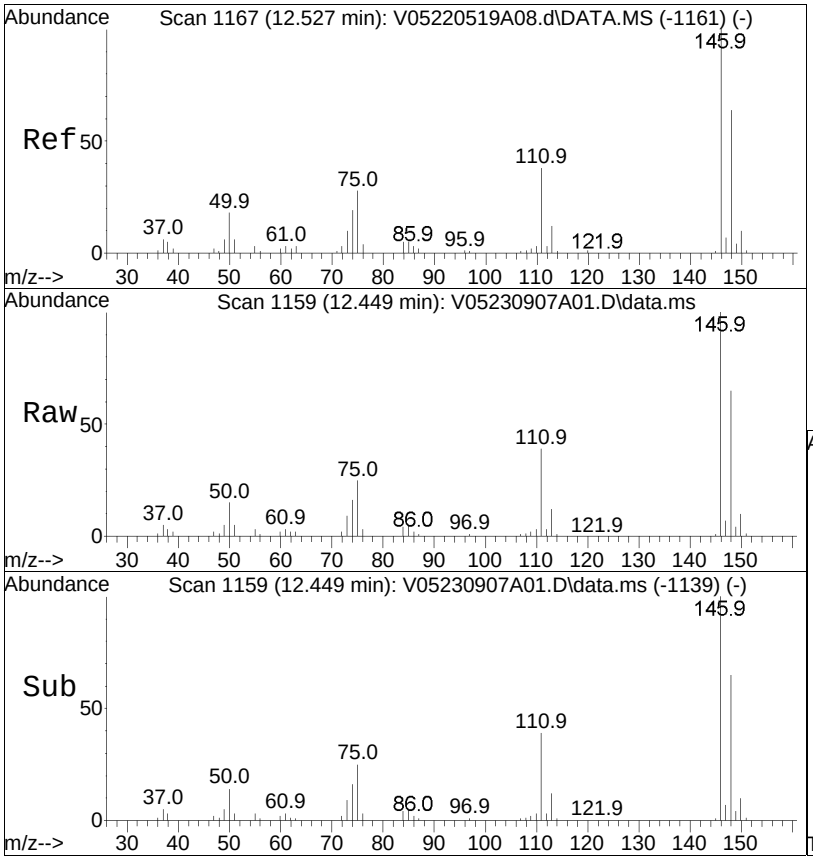


#101
1,4-Dichlorobenzene
Concen: 10.74 ug/L
RT: 12.018 min Scan# 1115
Delta R.T. -0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:146 Resp: 170585

Ion	Ratio	Lower	Upper
146	100		
111	37.4	33.8	50.6
148	65.3	51.0	76.6

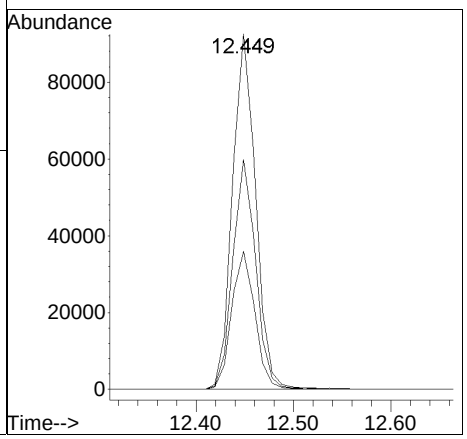


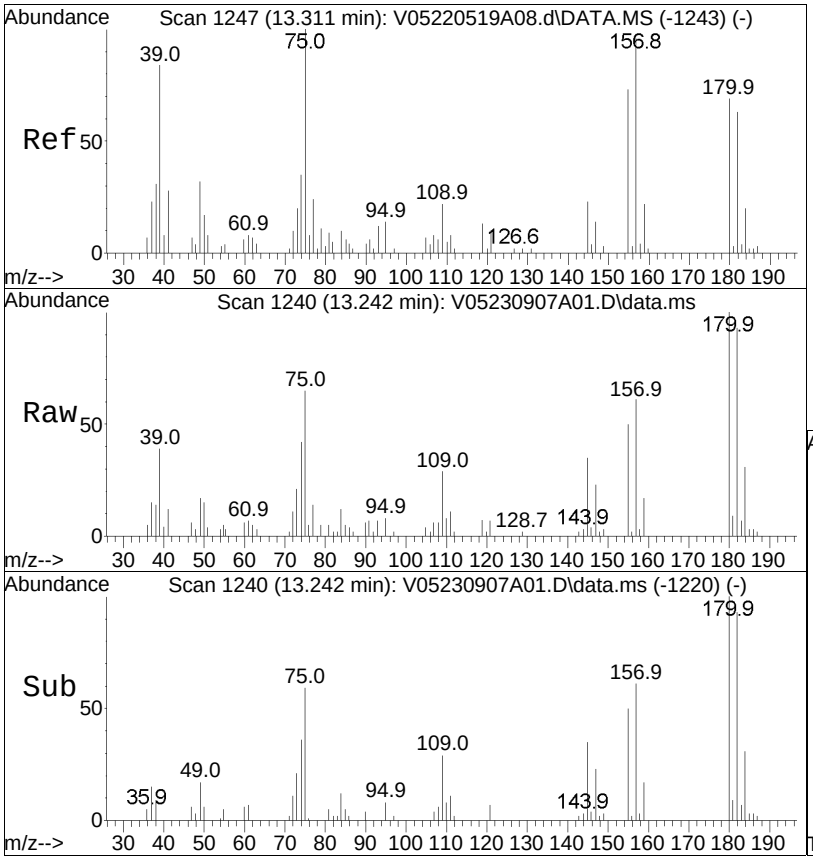


#104
1,2-Dichlorobenzene
Concen: 10.61 ug/L
RT: 12.449 min Scan# 1159
Delta R.T. -0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:146 Resp: 152957

Ion	Ratio	Lower	Upper
146	100		
111	39.1	29.1	60.5
148	64.0	41.7	86.7

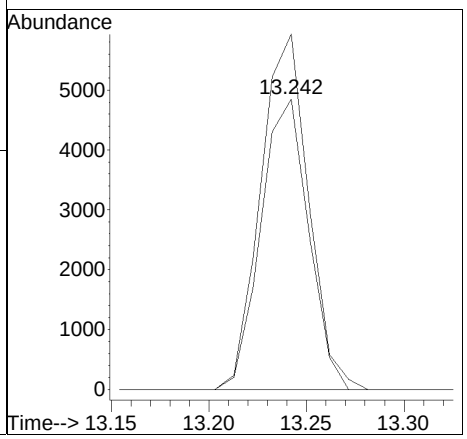


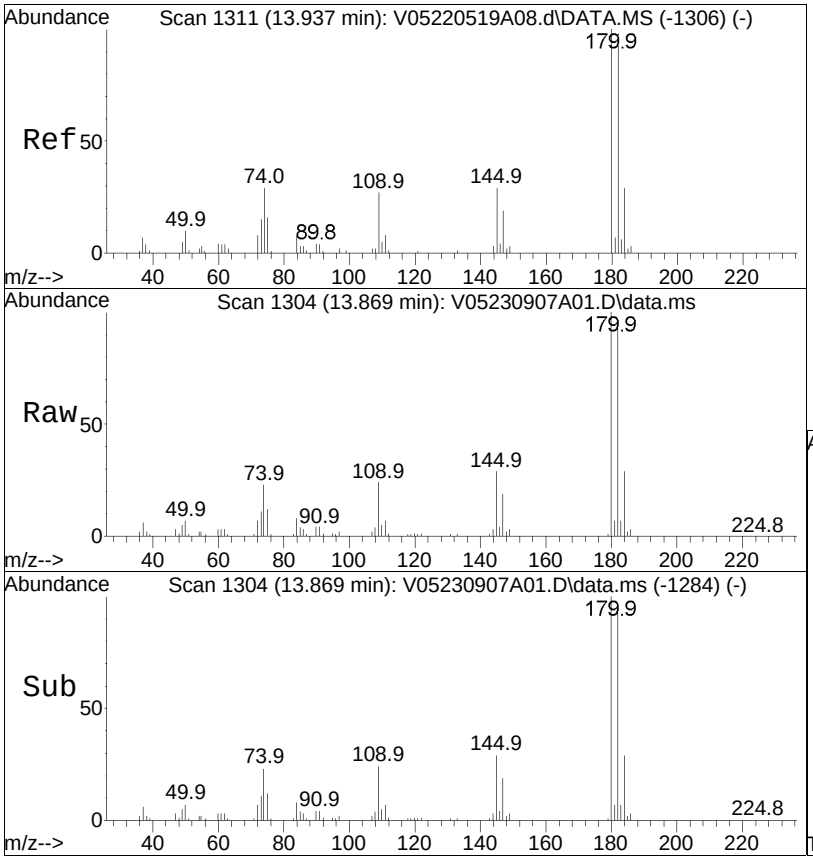


#106
1,2-Dibromo-3-chloropropane
Concen: 9.26 ug/L
RT: 13.242 min Scan# 1240
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:155 Resp: 8265

Ion	Ratio	Lower	Upper
155	100		
157	122.7	105.0	157.6

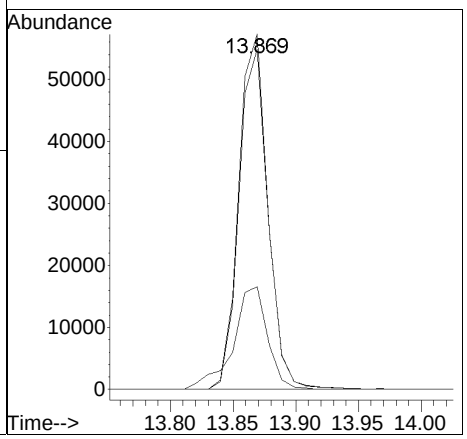


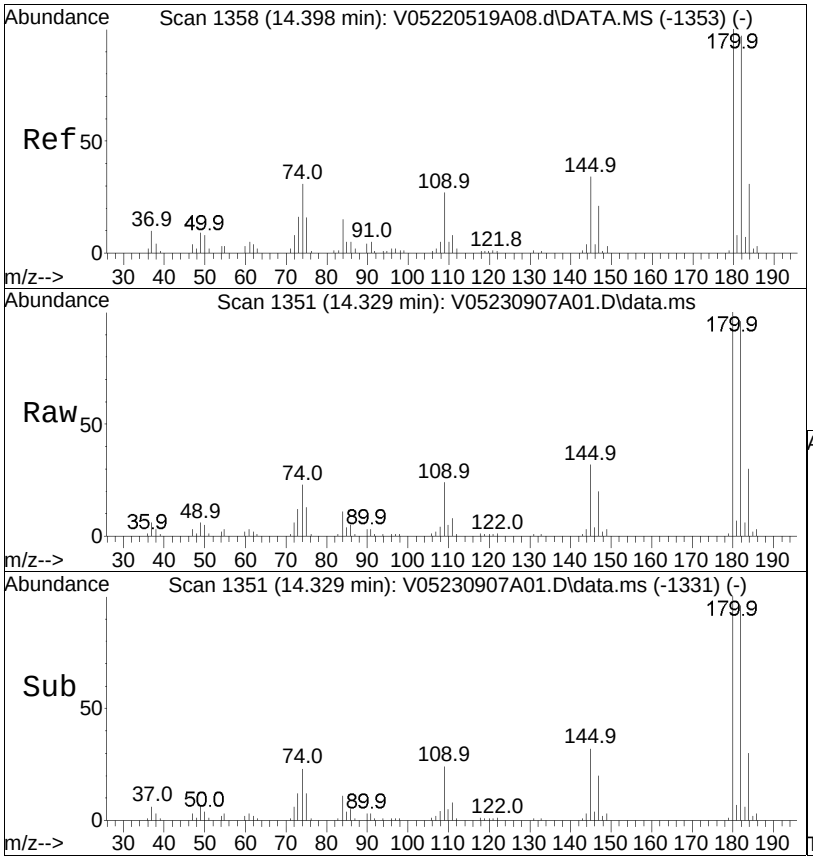


#109
1,2,4-Trichlorobenzene
Concen: 9.40 ug/L
RT: 13.869 min Scan# 1304
Delta R.T. 0.000 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:180 Resp: 92569

Ion	Ratio	Lower	Upper
180	100		
182	96.0	75.2	112.8
145	34.2	27.4	41.2

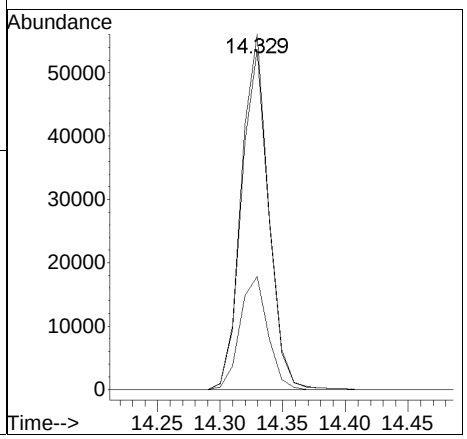




#111
1,2,3-Trichlorobenzene
Concen: 9.48 ug/L
RT: 14.329 min Scan# 1351
Delta R.T. -0.001 min
Lab File: V05230907A01.D
Acq: 7 Sep 2023 7:28 am

Tgt Ion:180 Resp: 84748

Ion	Ratio	Lower	Upper
180	100		
182	95.2	75.5	113.3
145	32.3	26.5	39.7



Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A02.D
Acq On : 8 Sep 2023 9:21 am
Operator : ELAINE:PID
Sample : WG1825752-4,31,10,10
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 10:10:24 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	6.137	96	138268	10.000	ug/L	0.00
Standard Area 1 = 137394			Recovery = 100.64%			
63) Chlorobenzene-d5	9.695	117	116868	10.000	ug/L	0.00
Standard Area 1 = 115233			Recovery = 101.42%			
84) 1,4-Dichlorobenzene-d4	12.369	152	71577	10.000	ug/L	0.00
Standard Area 1 = 72288			Recovery = 99.02%			
System Monitoring Compounds						
39) Dibromofluoromethane	5.316	113	40066	10.286	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.86%			
47) 1,2-Dichloroethane-d4	5.850	65	48548	9.477	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 94.77%			
64) Toluene-d8	7.843	98	150402	10.422	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.22%			
88) 4-Bromofluorobenzene	11.173	95	55031	8.321	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 83.21%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.655	85	38873	9.683	ug/L	98
3) Chloromethane	1.858	50	58997	11.592	ug/L	98
4) Vinyl chloride	1.930	62	44035	8.212	ug/L	98
5) Bromomethane	2.253	94	17391	5.542	ug/L	97
6) Chloroethane	2.367	64	23981M1	7.404	ug/L	
7) Trichlorofluoromethane	2.517	101	44099	8.699	ug/L	100
10) 1,1-Dichloroethene	3.021	96	29723	10.340	ug/L	97
11) Carbon disulfide	3.052	76	96273	10.817	ug/L	98
12) Freon-113	3.060	101	32420	10.895	ug/L	98
15) Methylene chloride	3.594	84	35374	10.189	ug/L #	67
17) Acetone	3.636	43	10823	14.829	ug/L	93
18) trans-1,2-Dichloroethene	3.750	96	32693	10.414	ug/L	97
19) Methyl acetate	3.758	43	26531	13.546	ug/L #	88
21) Methyl tert-butyl ether	3.853	73	74784	9.417	ug/L #	87
25) 1,1-Dichloroethane	4.345	63	72352	9.555	ug/L	96
30) cis-1,2-Dichloroethene	4.868	96	37625	10.409	ug/L	97
33) Bromochloromethane	5.063	128	16638	10.869	ug/L #	64
34) Cyclohexane	5.071	56	79718	9.901	ug/L	79
35) Chloroform	5.135	83	61215	10.529	ug/L	95
37) Carbon tetrachloride	5.277	117	45107	10.741	ug/L	97

Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A02.D
Acq On : 8 Sep 2023 9:21 am
Operator : ELAINE:PID
Sample : WG1825752-4,31,10,10
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 10:10:24 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\Elaine\2023\230908A\VE230908A01.D
Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
40) 1,1,1-Trichloroethane	5.344	97	52752	10.175	ug/L		96
42) 2-Butanone	5.439	43	14545	12.636	ug/L	#	58
45) Benzene	5.717	78	136635	10.475	ug/L		93
48) 1,2-Dichloroethane	5.920	62	46200	8.708	ug/L		98
51) Methyl cyclohexane	6.310	83	56249	9.939	ug/L	#	78
52) Trichloroethene	6.312	95	35231	9.998	ug/L		98
55) 1,2-Dichloropropane	6.866	63	38948	9.484	ug/L	#	94
58) Bromodichloromethane	6.936	83	46894	10.326	ug/L		100
61) 1,4-Dioxane	7.141	88	11908	808.080	ug/L		87
62) cis-1,3-Dichloropropene	7.631	75	52152	9.920	ug/L		92
65) Toluene	7.904	92	84435	10.774	ug/L		99
66) 4-Methyl-2-pentanone	8.338	58	9586	10.070	ug/L	#	77
67) Tetrachloroethene	8.349	166	35711	11.584	ug/L		96
69) trans-1,3-Dichloropropene	8.382	75	44842	10.102	ug/L		89
72) 1,1,2-Trichloroethane	8.571	83	23394	11.630	ug/L		97
73) Chlorodibromomethane	8.783	129	31099	10.969	ug/L		99
75) 1,2-Dibromoethane	9.061	107	25728	10.866	ug/L		100
77) 2-Hexanone	9.351	43	19560	11.661	ug/L		92
78) Chlorobenzene	9.718	112	92922	10.901	ug/L		98
79) Ethylbenzene	9.759	91	160895	10.323	ug/L		99
81) p/m Xylene	9.946	106	129389	21.394	ug/L		91
82) o Xylene	10.480	106	124789	20.706	ug/L		90
83) Styrene	10.544	104	210962	21.499	ug/L		90
85) Bromoform	10.564	173	19223	10.701	ug/L		99
87) Isopropylbenzene	10.858	105	159394	8.956	ug/L		99
92) 1,1,2,2-Tetrachloroethane	11.407	83	32297	11.168	ug/L		96
105) 1,3-Dichlorobenzene	12.291	146	87102	10.810	ug/L		96
106) 1,4-Dichlorobenzene	12.386	146	86247	10.735	ug/L		96
109) 1,2-Dichlorobenzene	12.806	146	79821	10.573	ug/L		97
111) 1,2-Dibromo-3-chloropr...	13.582	155	5325	12.022	ug/L		98
114) 1,2,4-Trichlorobenzene	14.211	180	44103	9.990	ug/L		98
116) 1,2,3-Trichlorobenzene	14.670	180	41536	10.323	ug/L		99

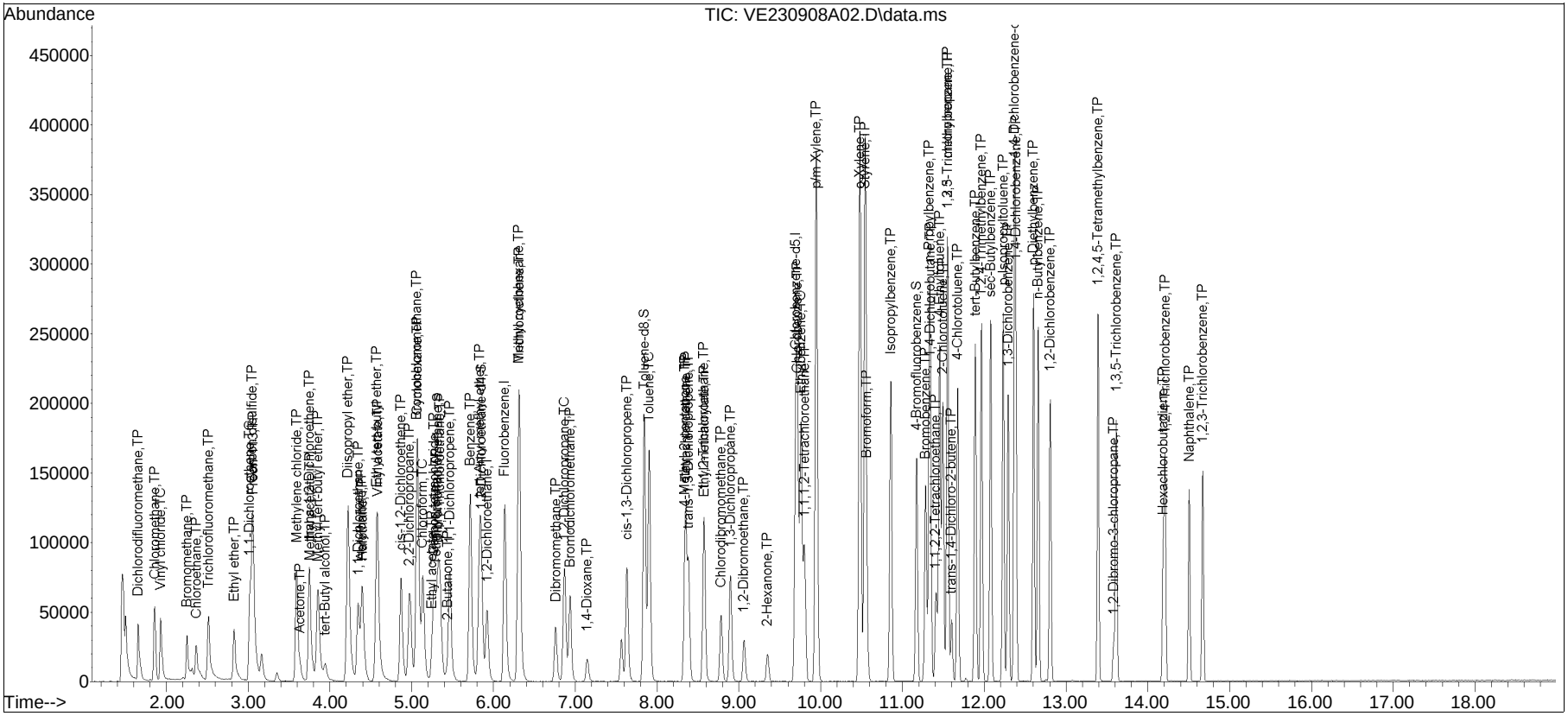
(#) = qualifier out of range (m) = manual integration (+) = signals summed

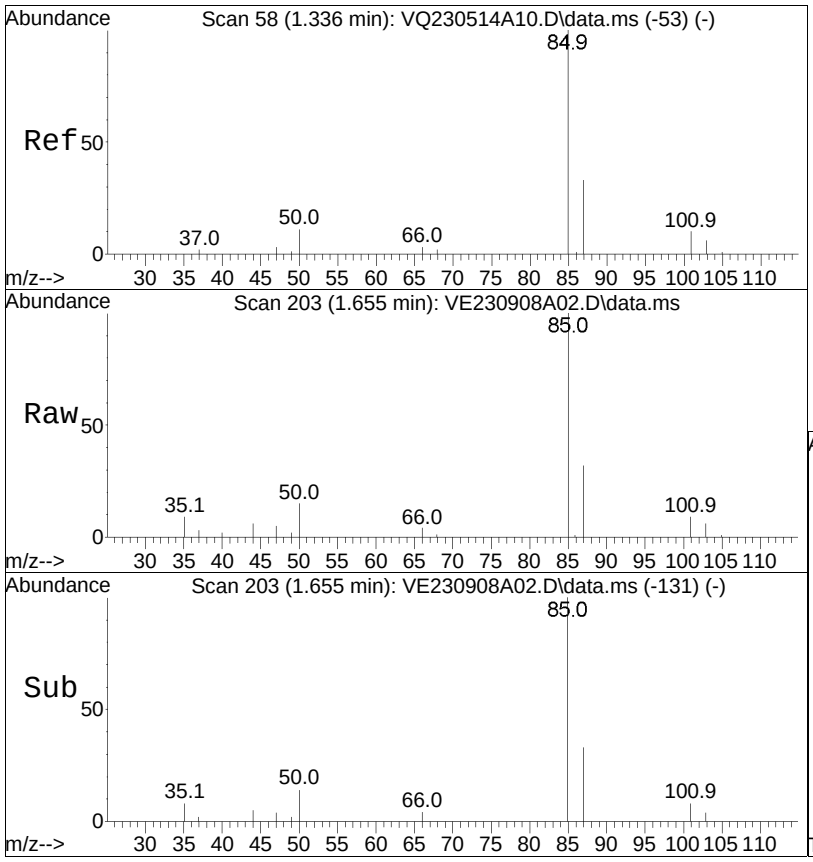
Quantitation Report (QT Reviewed)

Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A02.D
Acq On : 8 Sep 2023 9:21 am
Operator : ELAINE:PID
Sample : WG1825752-4,31,10,10
Misc : WG1825752,ICAL20198
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 08 10:10:24 2023
Quant Method : K:\Elaine\2023\230908A\Elaine_230725N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Jul 26 08:20:35 2023
Response via : Initial Calibration

Sub List : 8260-Curve-3 - Megamix plus Diox-IM, Acro, 2Ceve

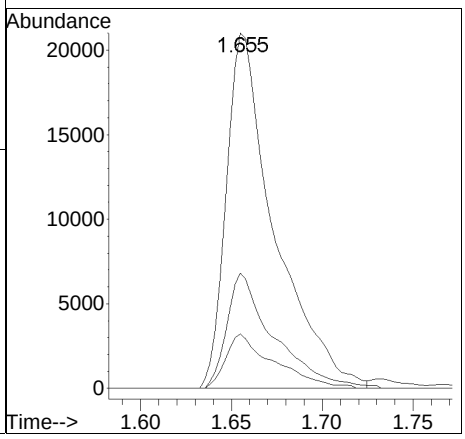


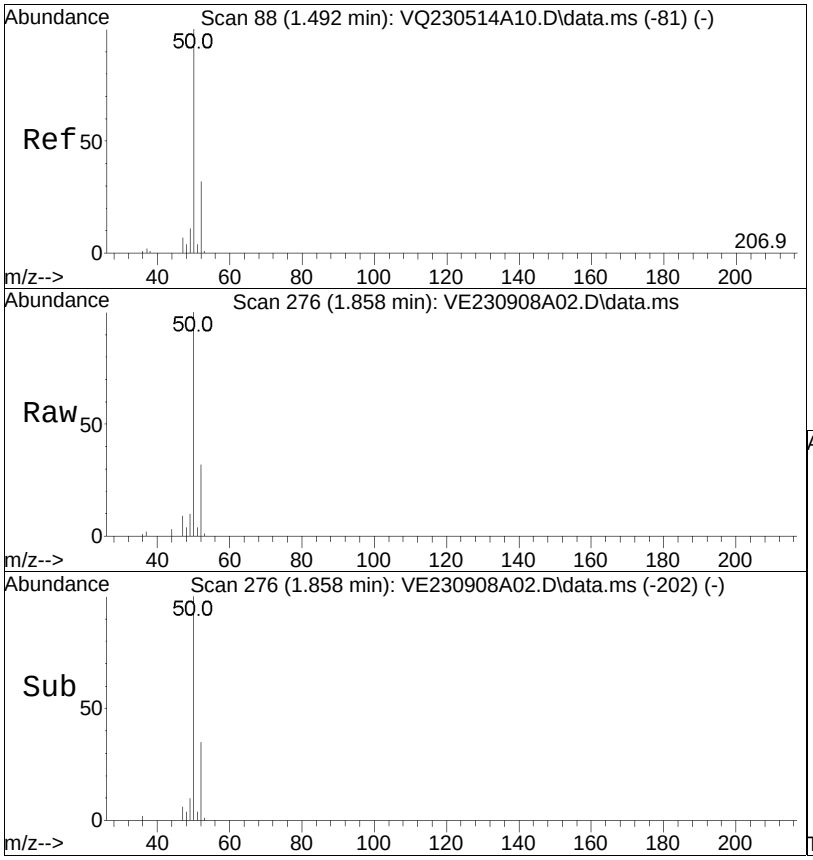


#2
Dichlorodifluoromethane
Concen: 9.68 ug/L
RT: 1.655 min Scan# 203
Delta R.T. -0.000 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 85 Resp: 38873

Ion	Ratio	Lower	Upper
85	100		
87	31.5	20.9	43.5
50	15.4	8.6	18.0

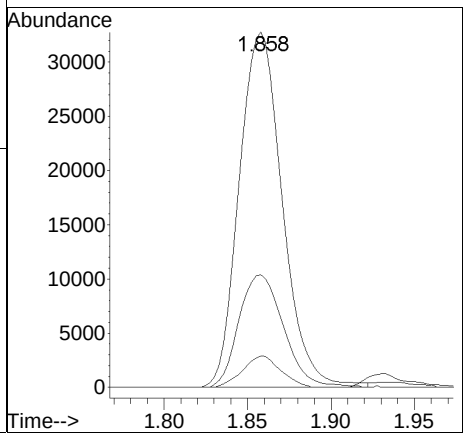


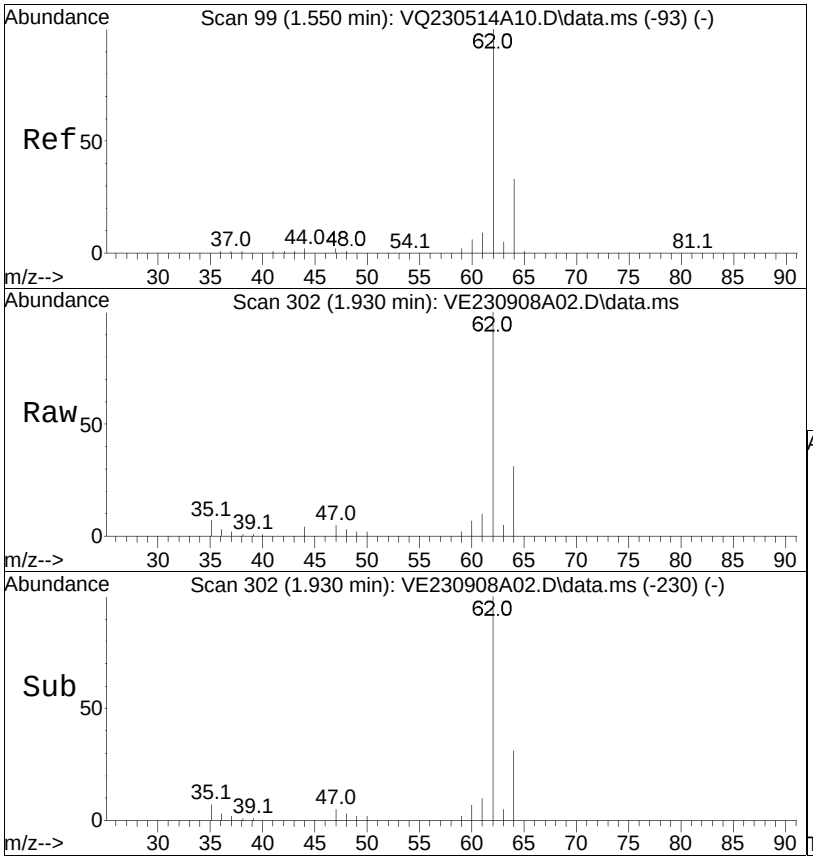


#3
Chloromethane
Concen: 11.59 ug/L
RT: 1.858 min Scan# 276
Delta R.T. 0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 50 Resp: 58997

Ion	Ratio	Lower	Upper
50	100		
52	32.8	11.5	51.5
47	7.8	0.0	28.2

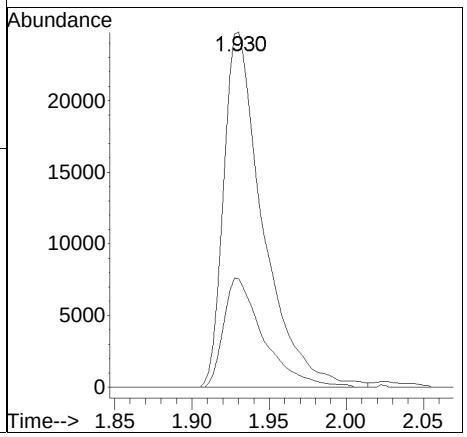


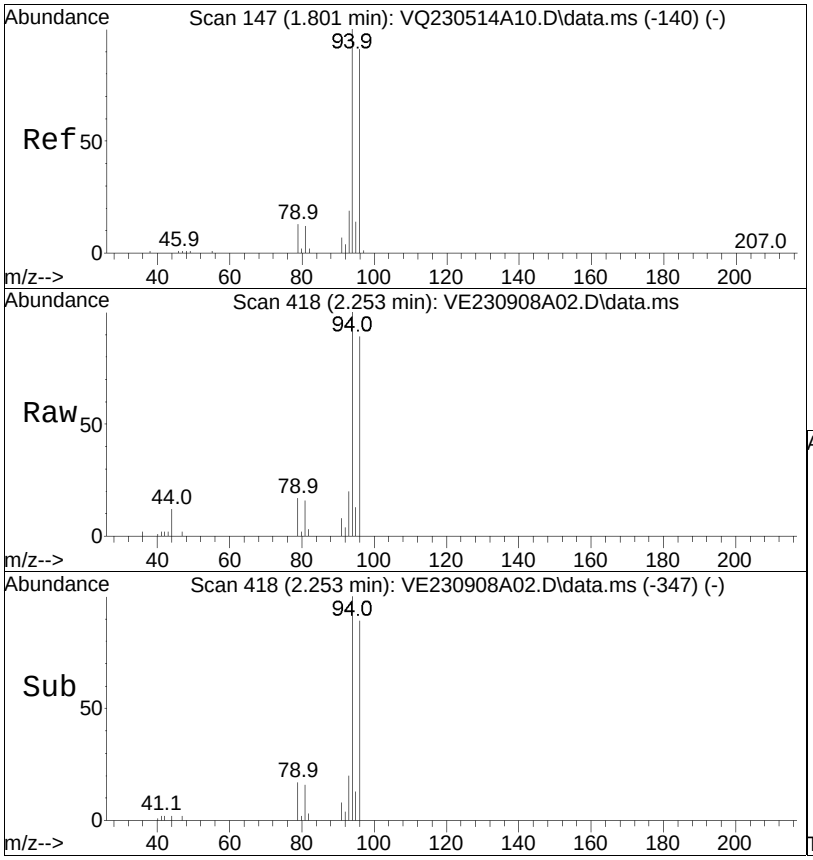


#4
Vinyl chloride
Concen: 8.21 ug/L
RT: 1.930 min Scan# 302
Delta R.T. -0.000 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 62 Resp: 44035

Ion	Ratio	Lower	Upper
62	100		
64	31.3	12.4	52.4

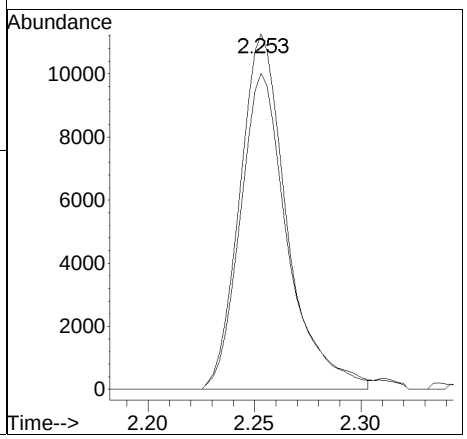


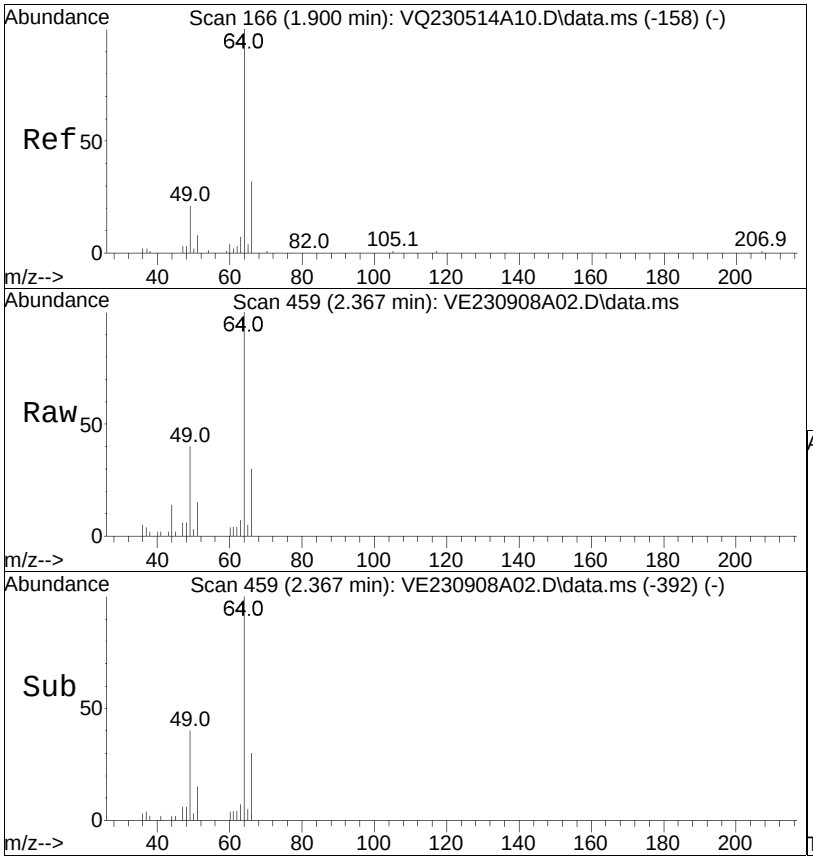


#5
Bromomethane
Concen: 5.54 ug/L
RT: 2.253 min Scan# 418
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 94 Resp: 17391

Ion	Ratio	Lower	Upper
94	100		
96	91.3	73.9	113.9

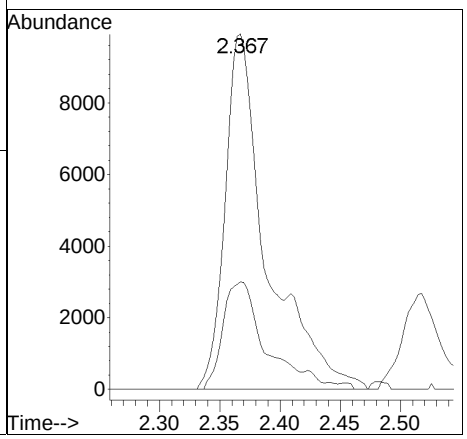


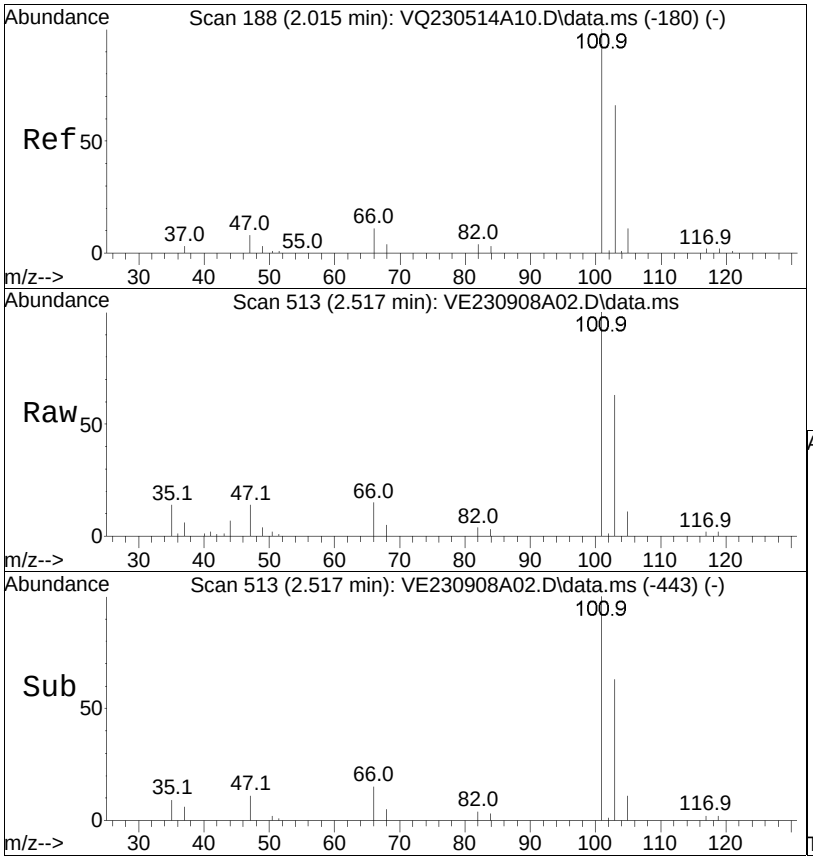


#6
Chloroethane
Concen: 7.40 ug/L M1
RT: 2.367 min Scan# 459
Delta R.T. -0.014 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 64 Resp: 23981

Ion	Ratio	Lower	Upper
64	100		
66	29.2	9.7	49.7

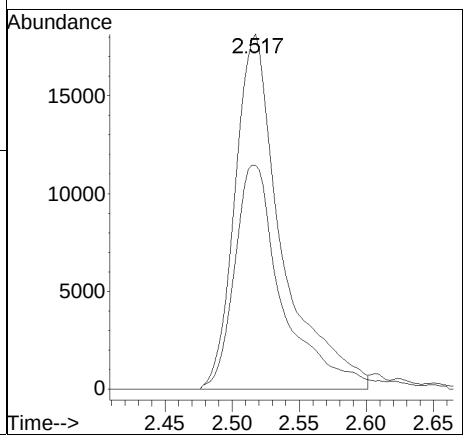


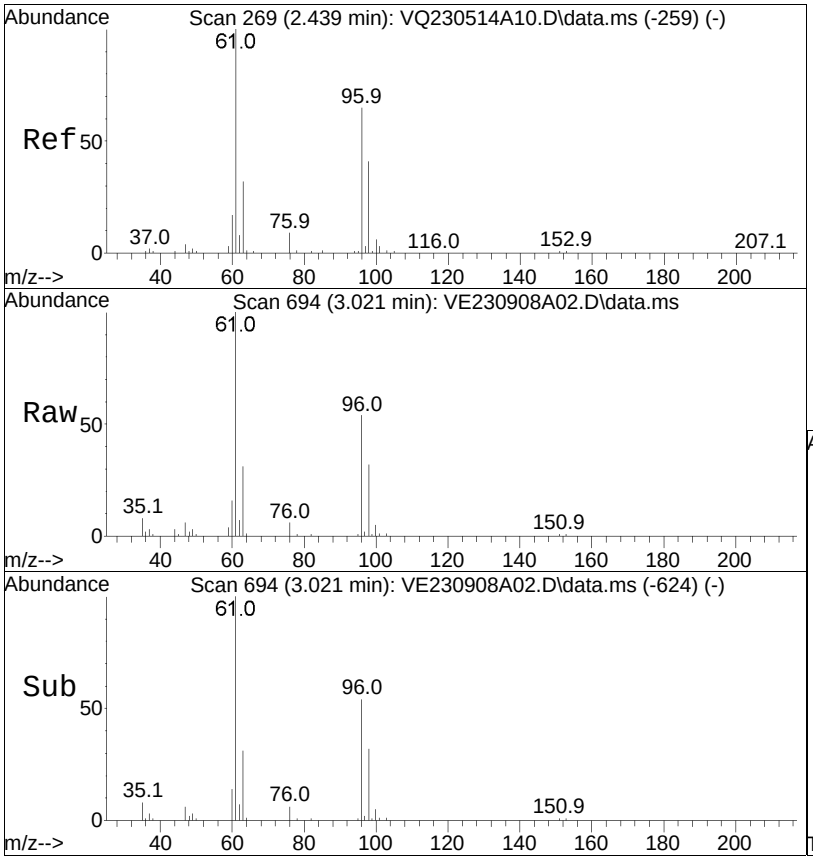


#7
Trichlorofluoromethane
Concen: 8.70 ug/L
RT: 2.517 min Scan# 513
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:101 Resp: 44099

Ion	Ratio	Lower	Upper
101	100		
103	65.1	52.2	78.2

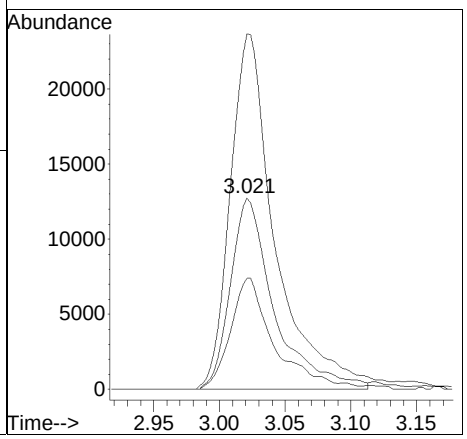


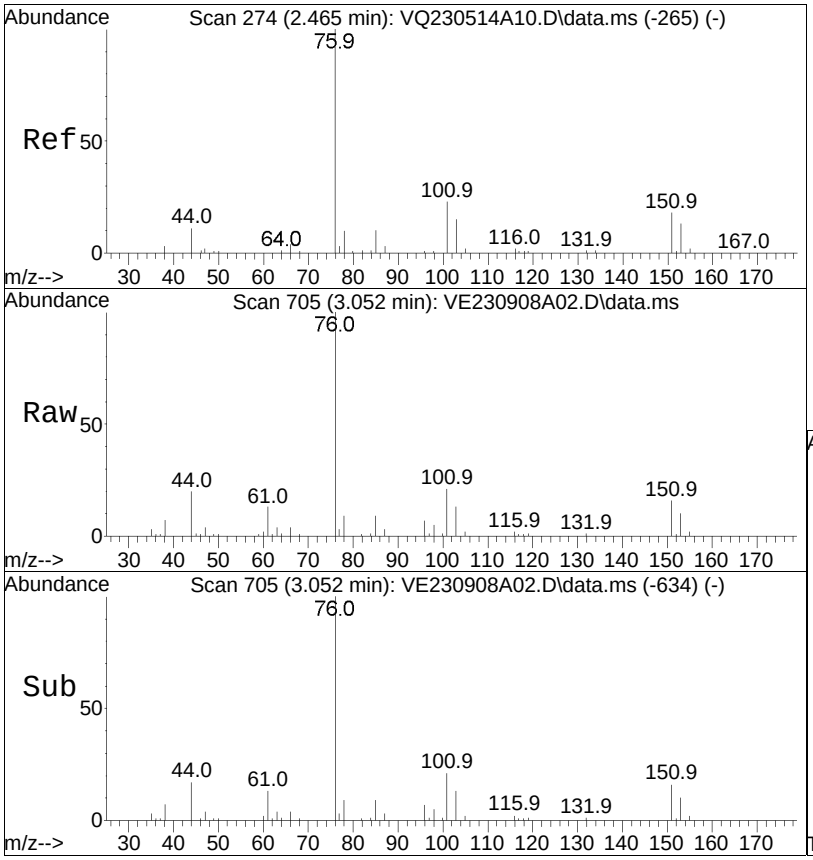


#10
1,1-Dichloroethene
Concen: 10.34 ug/L
RT: 3.021 min Scan# 694
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 96 Resp: 29723

Ion	Ratio	Lower	Upper
96	100		
61	191.2	149.7	224.5
63	56.9	46.8	70.2

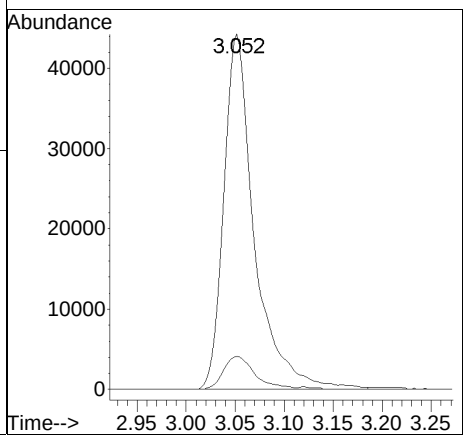


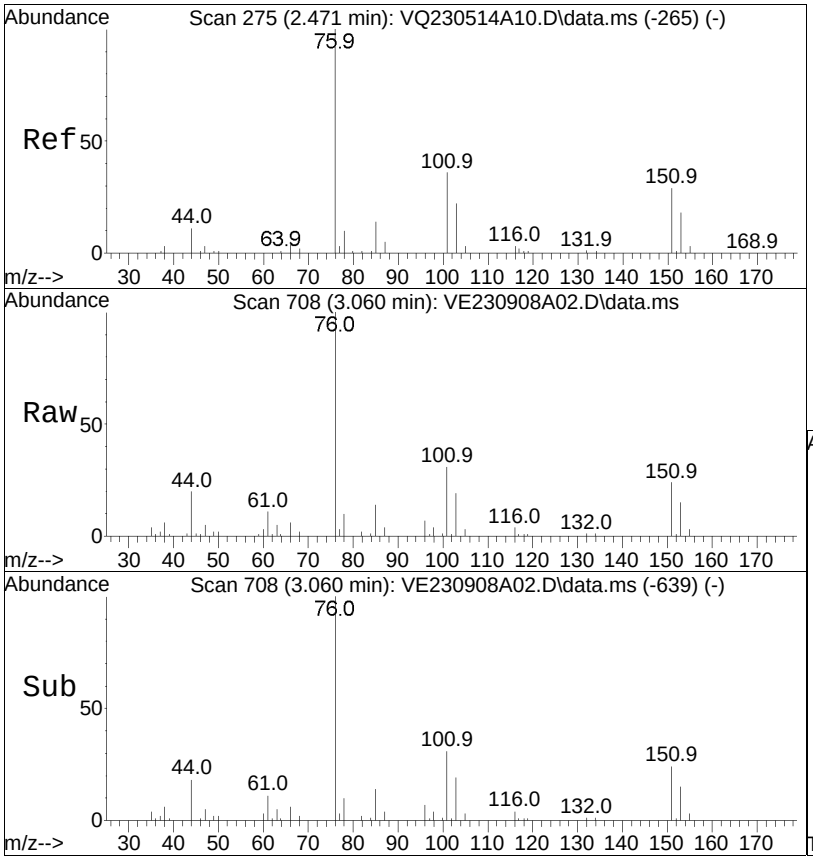


#11
Carbon disulfide
Concen: 10.82 ug/L
RT: 3.052 min Scan# 705
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 76 Resp: 96273

Ion	Ratio	Lower	Upper
76	100		
78	9.6	6.8	14.0

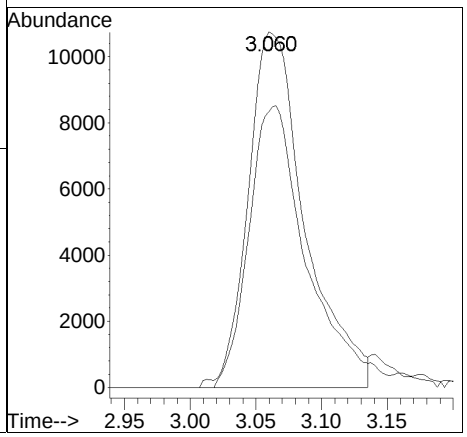


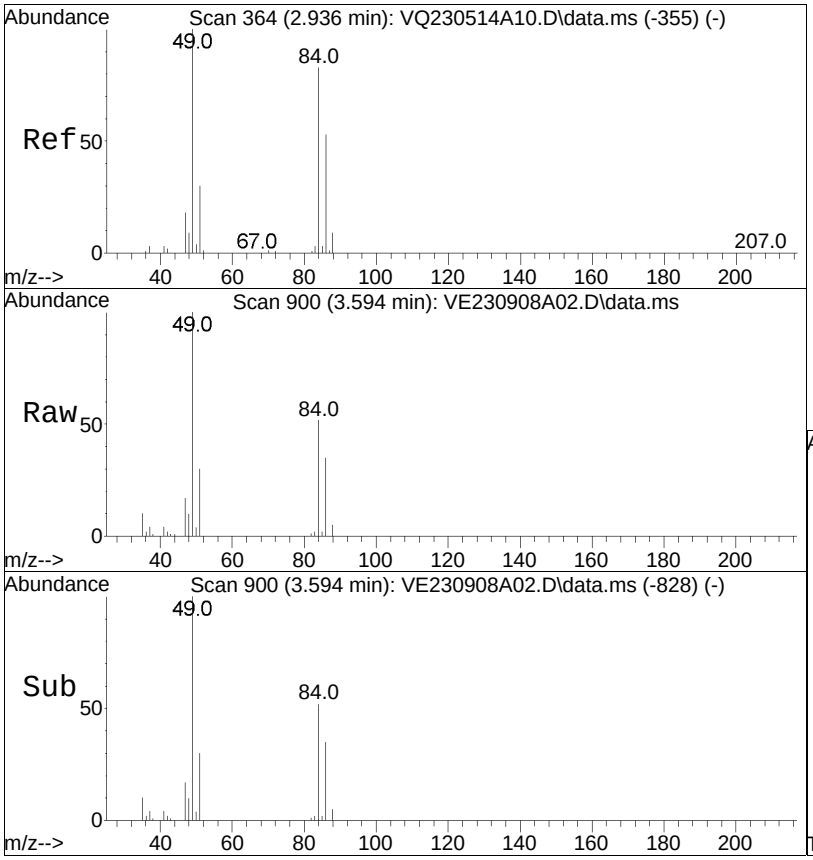


#12
Freon-113
Concen: 10.89 ug/L
RT: 3.060 min Scan# 708
Delta R.T. -0.008 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:101 Resp: 32420

Ion	Ratio	Lower	Upper
101	100		
151	80.9	63.6	95.4

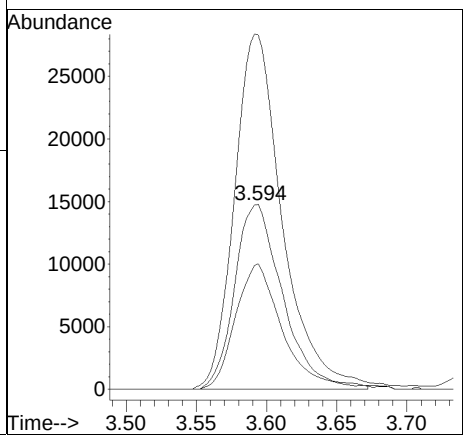


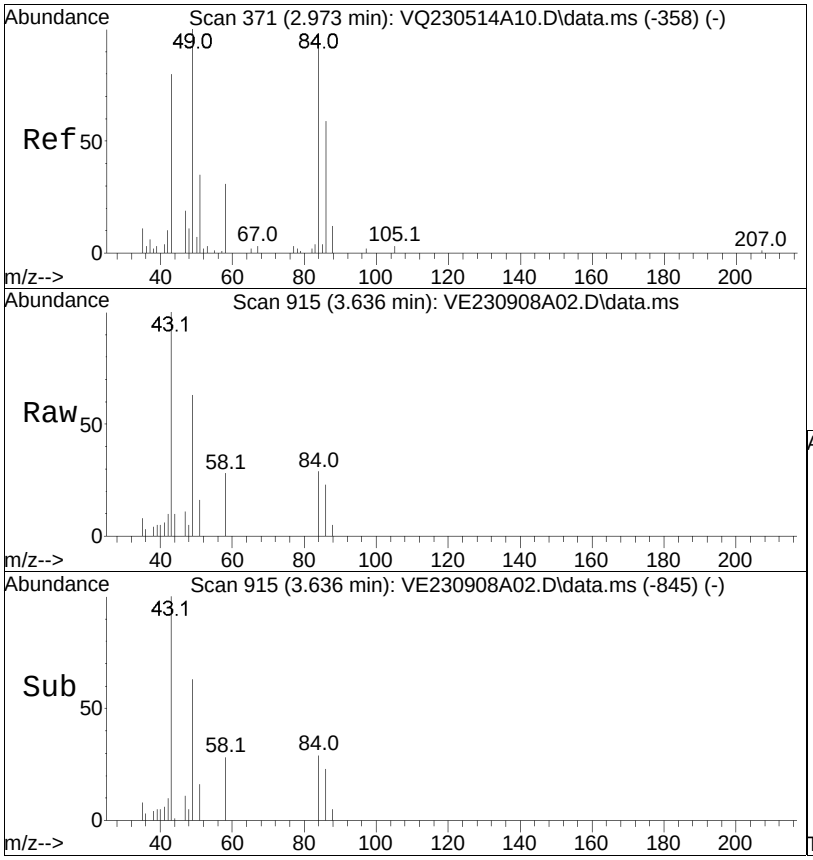


#15
Methylene chloride
Concen: 10.19 ug/L
RT: 3.594 min Scan# 900
Delta R.T. -0.000 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 84 Resp: 35374

Ion	Ratio	Lower	Upper
84	100		
86	65.6	41.0	85.2
49	192.2	88.1	183.1#

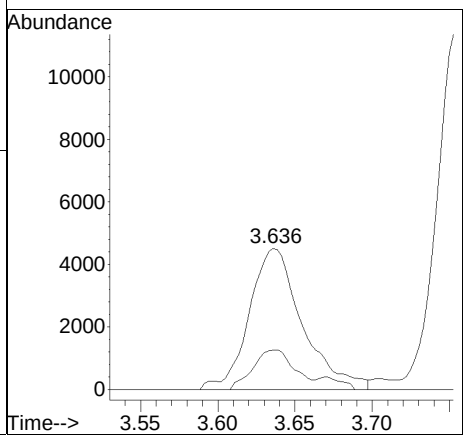


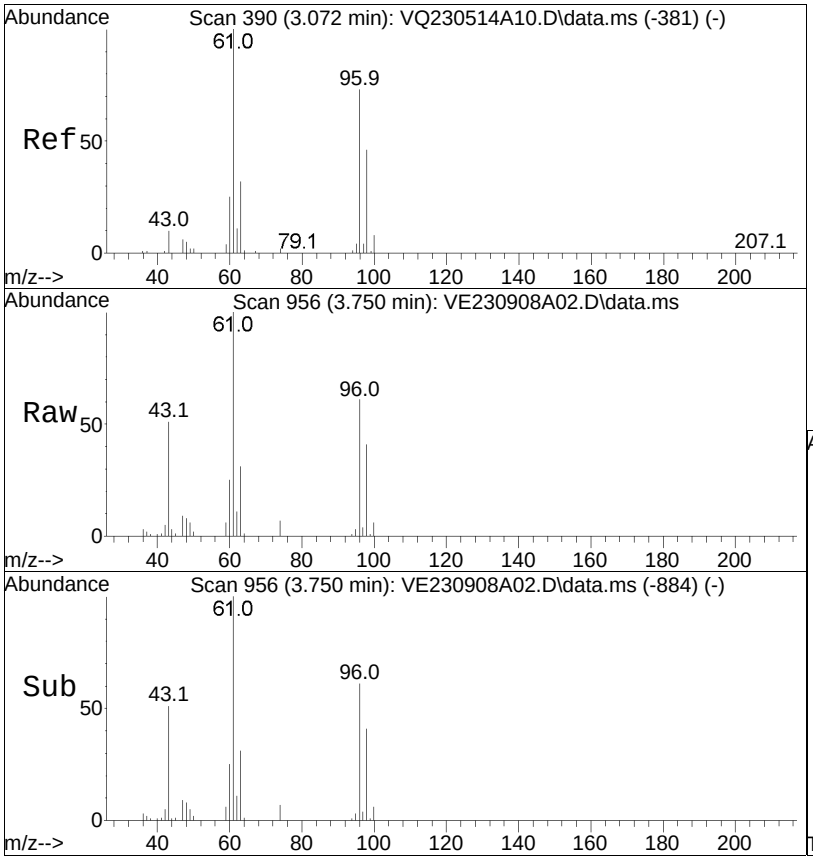


#17
Acetone
Concen: 14.83 ug/L
RT: 3.636 min Scan# 915
Delta R.T. -0.005 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 43 Resp: 10823

Ion	Ratio	Lower	Upper
43	100		
58	21.6	20.2	30.4

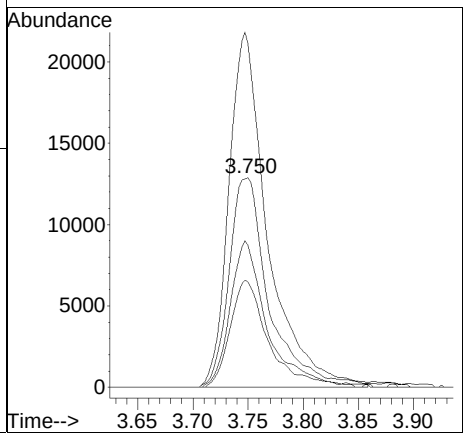


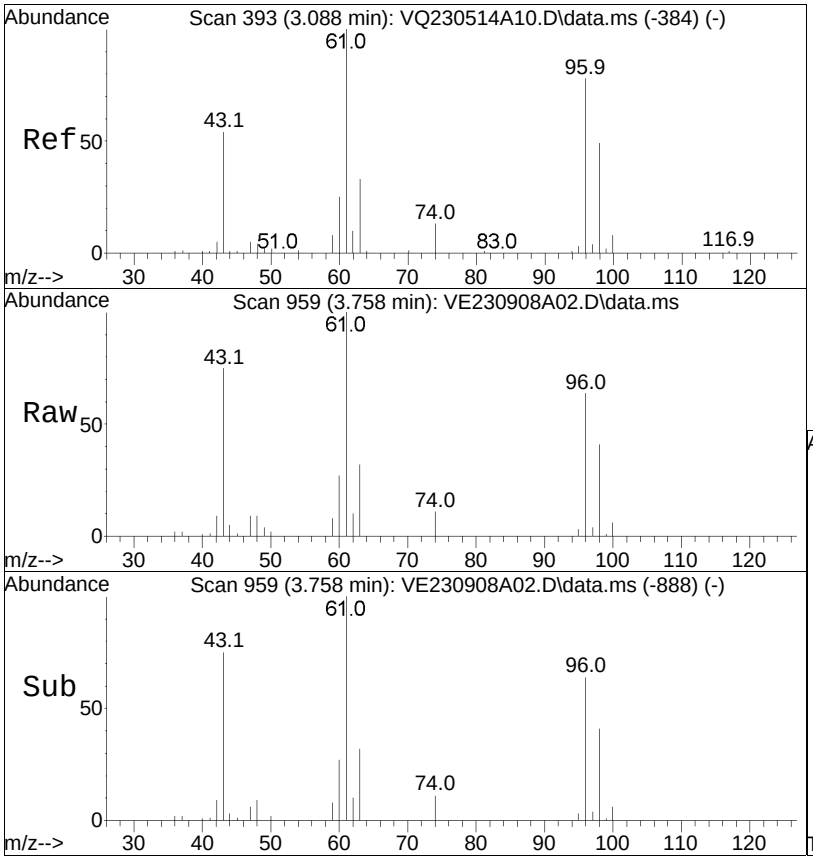


#18
trans-1,2-Dichloroethene
Concen: 10.41 ug/L
RT: 3.750 min Scan# 956
Delta R.T. -0.000 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 96 Resp: 32693

Ion	Ratio	Lower	Upper
96	100		
61	163.4	102.8	213.4
98	64.1	41.8	86.8
63	48.8	32.2	66.8

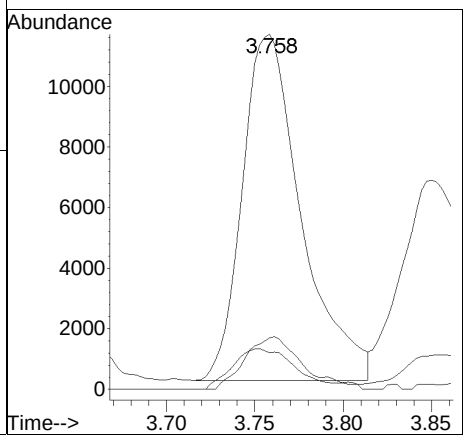


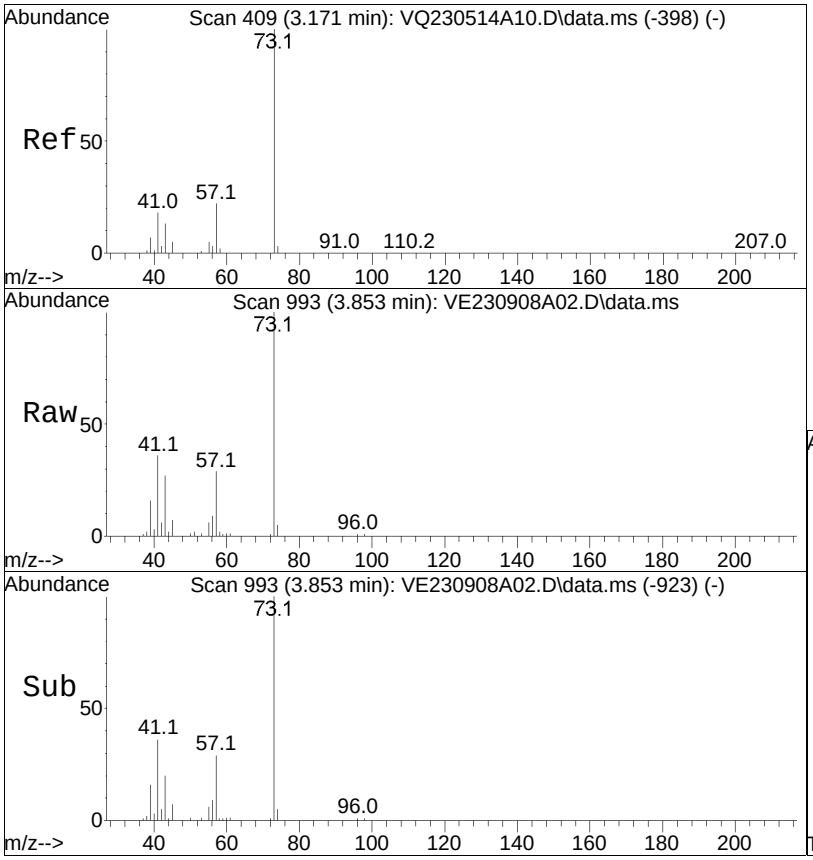


#19
Methyl acetate
Concen: 13.55 ug/L
RT: 3.758 min Scan# 959
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 43 Resp: 26531

Ion	Ratio	Lower	Upper
43	100		
74	14.7	16.6	24.8#
59	12.5	13.9	20.9#

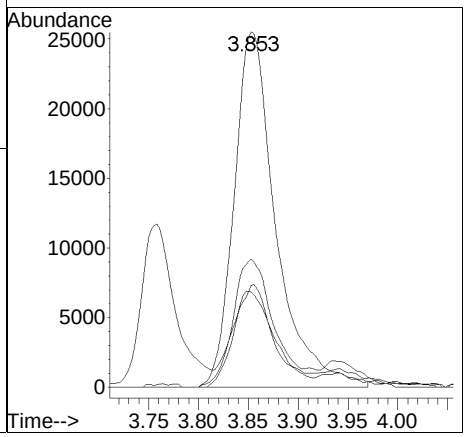


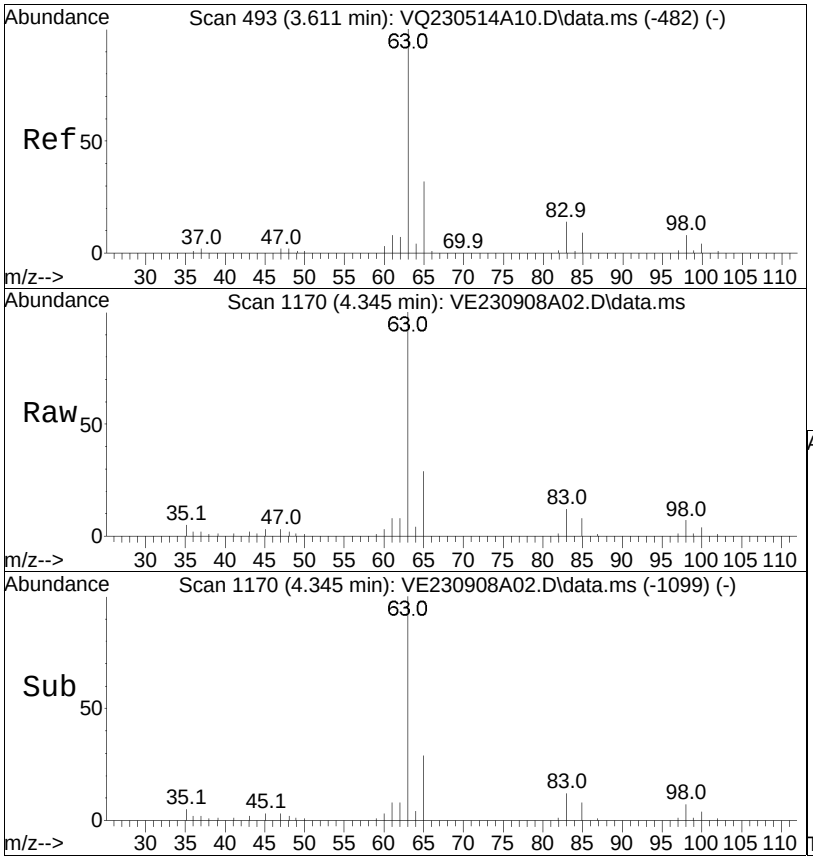


#21
Methyl tert-butyl ether
Concen: 9.42 ug/L
RT: 3.853 min Scan# 993
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 73 Resp: 74784

Ion	Ratio	Lower	Upper
73	100		
57	26.9	14.0	29.0
43	21.7	13.6	28.2
41	34.7	15.0	31.2#

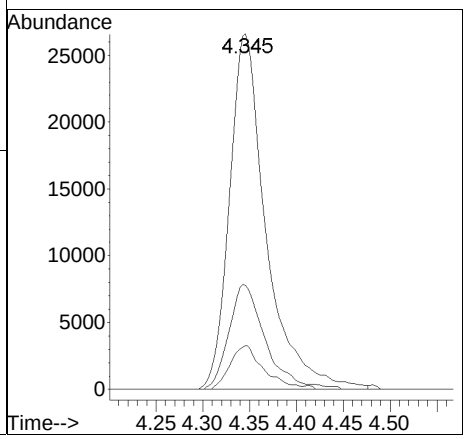


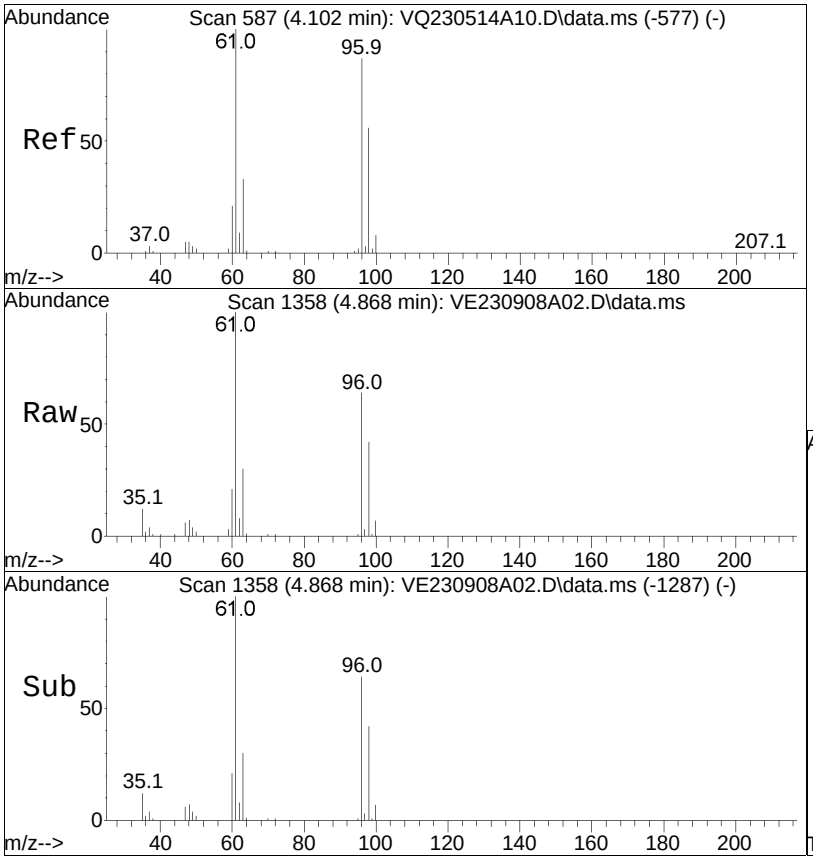


#25
1,1-Dichloroethane
Concen: 9.56 ug/L
RT: 4.345 min Scan# 1170
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 63 Resp: 72352

Ion	Ratio	Lower	Upper
63	100		
65	29.4	11.5	51.5
83	11.3	0.0	32.7

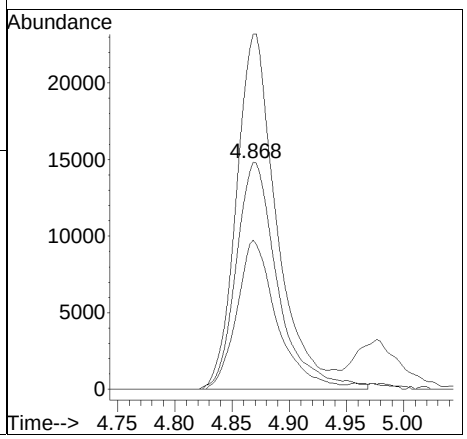


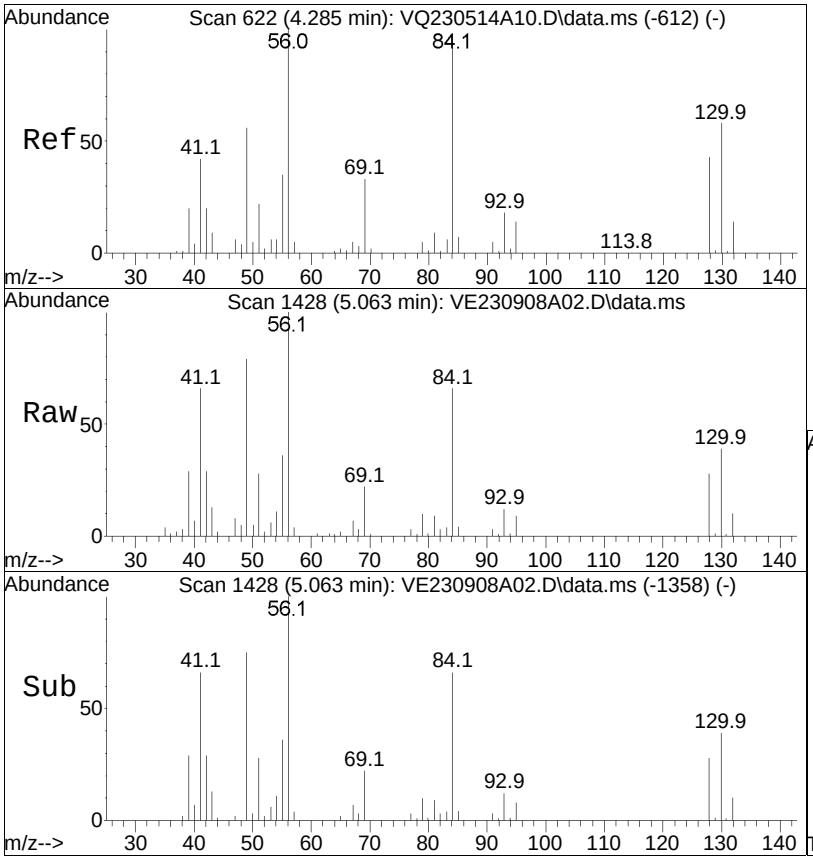


#30
cis-1,2-Dichloroethene
Concen: 10.41 ug/L
RT: 4.868 min Scan# 1358
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 96 Resp: 37625

Ion	Ratio	Lower	Upper
96	100		
61	149.2	115.3	172.9
98	63.3	51.8	77.8

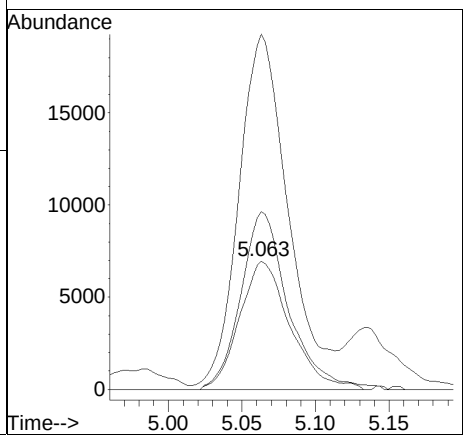


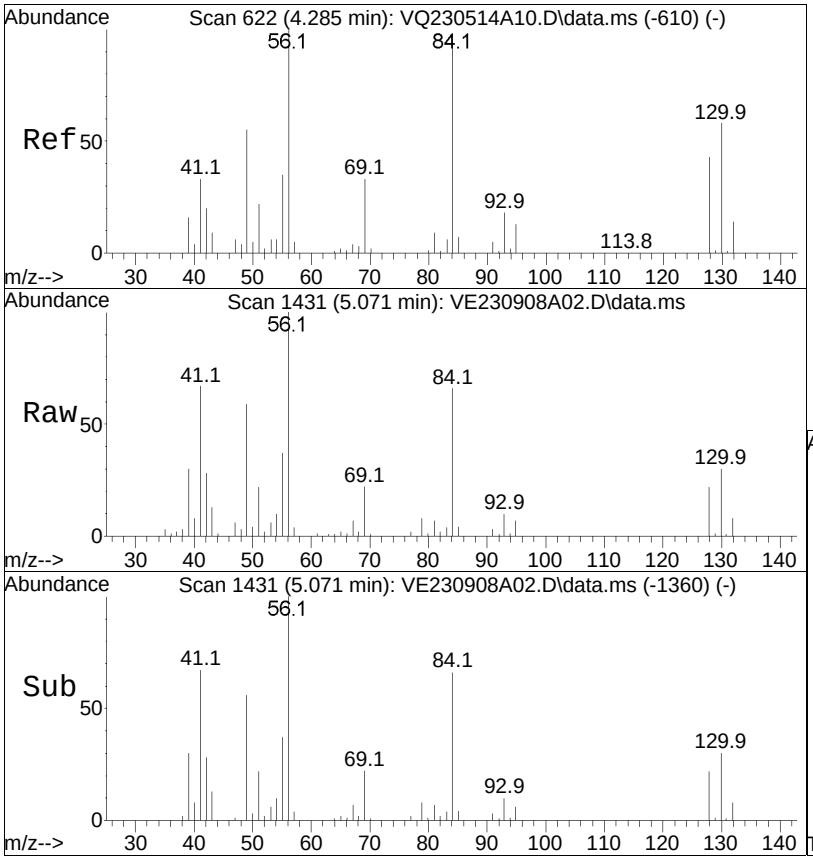


#33
Bromochloromethane
Concen: 10.87 ug/L
RT: 5.063 min Scan# 1428
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:128 Resp: 16638

Ion	Ratio	Lower	Upper
128	100		
49	265.5	143.3	214.9#
130	130.8	102.7	154.1

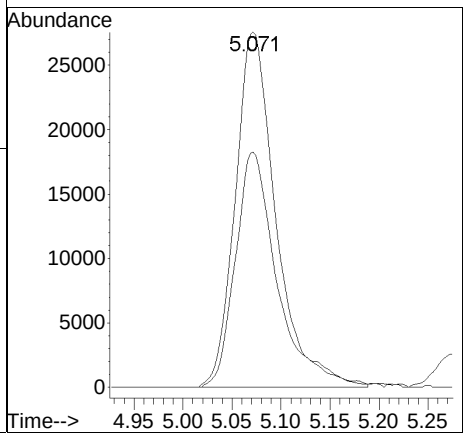


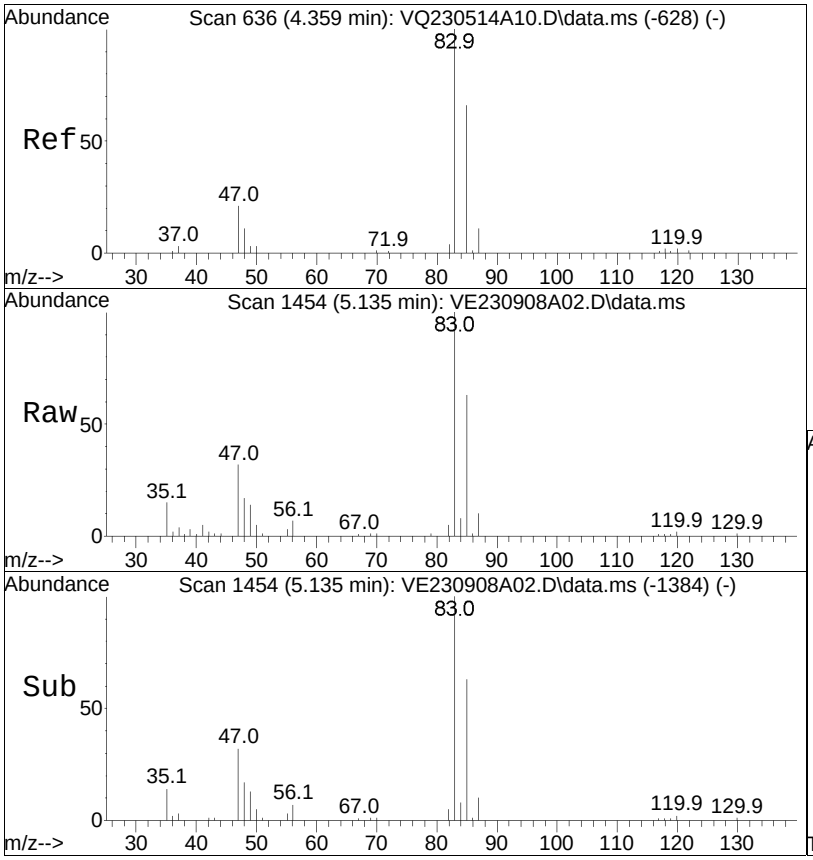


#34
Cyclohexane
Concen: 9.90 ug/L
RT: 5.071 min Scan# 1431
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 56 Resp: 79718

Ion	Ratio	Lower	Upper
56	100		
84	68.5	57.5	119.3

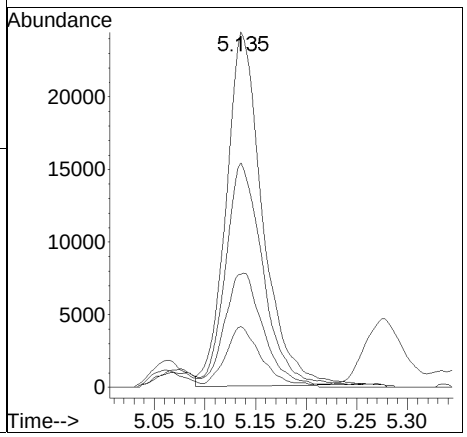


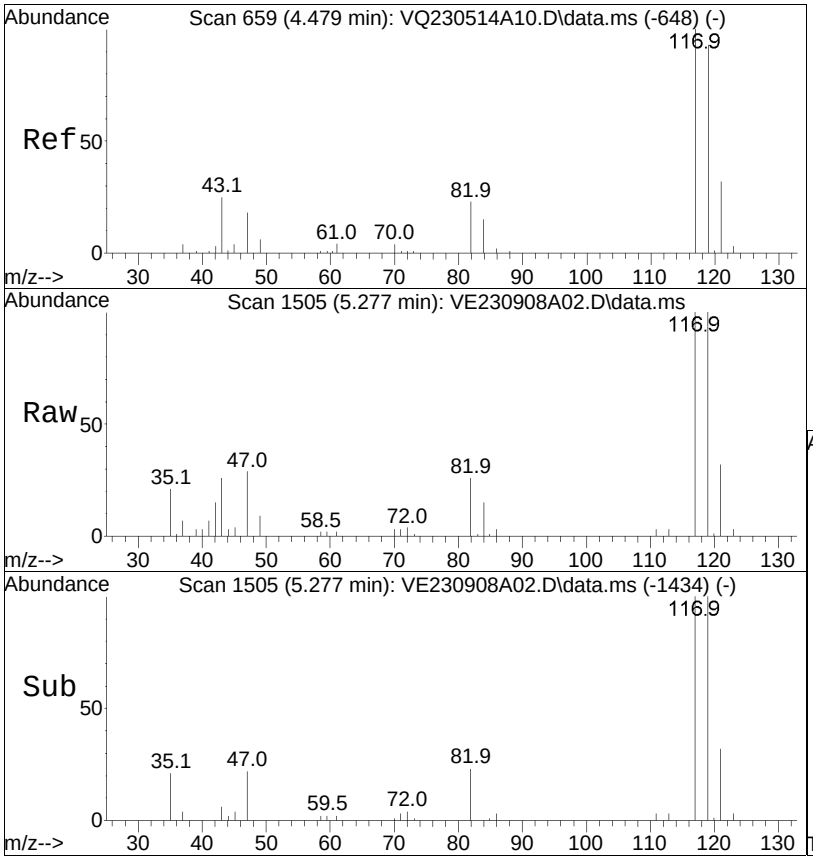


#35
Chloroform
Concen: 10.53 ug/L
RT: 5.135 min Scan# 1454
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 83 Resp: 61215

Ion	Ratio	Lower	Upper
83	100		
85	64.2	43.0	89.2
47	32.2	17.5	36.3
48	15.1	8.8	18.2

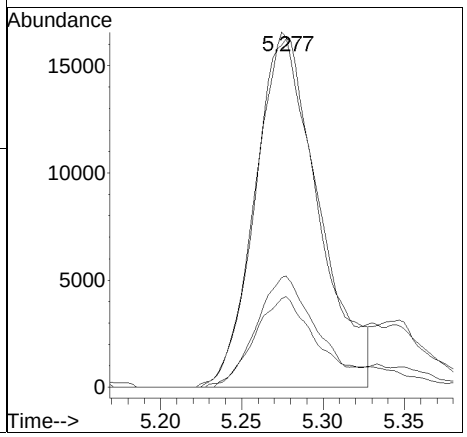


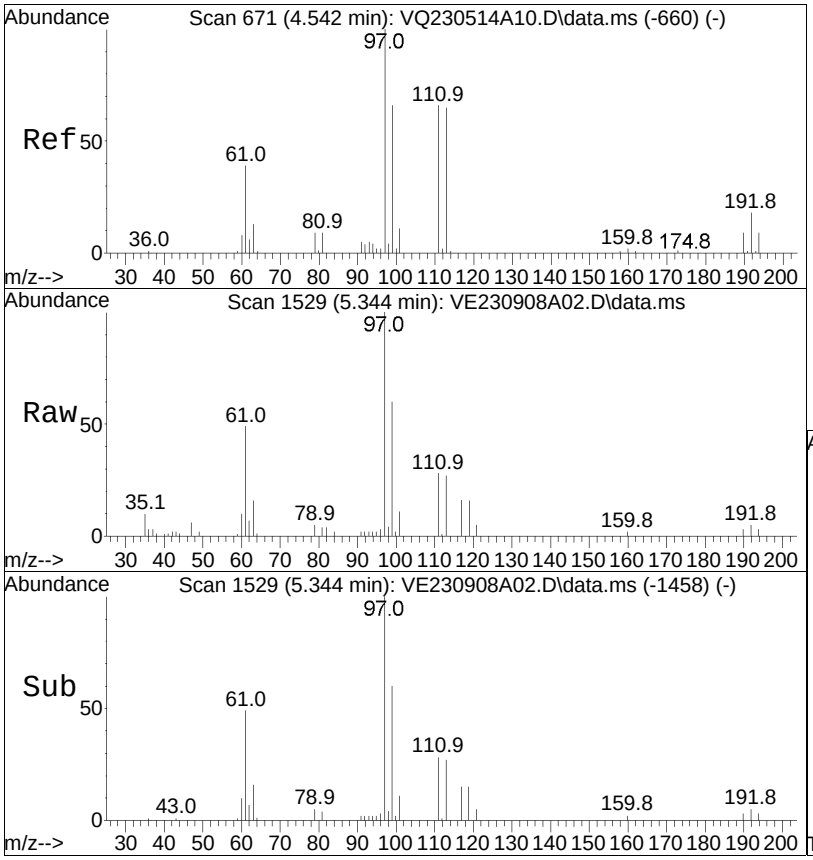


#37
Carbon tetrachloride
Concen: 10.74 ug/L
RT: 5.277 min Scan# 1505
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:117 Resp: 45107

Ion	Ratio	Lower	Upper
117	100		
119	95.2	63.2	131.2
121	29.1	20.3	42.3
82	25.2	18.1	37.7

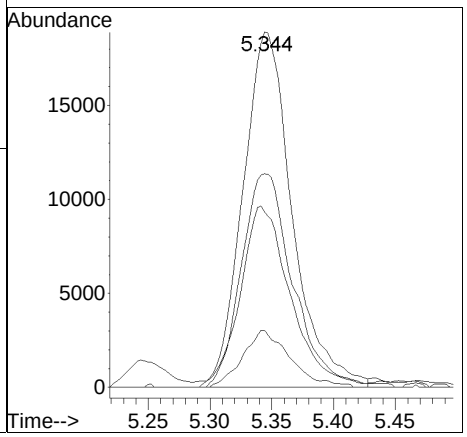


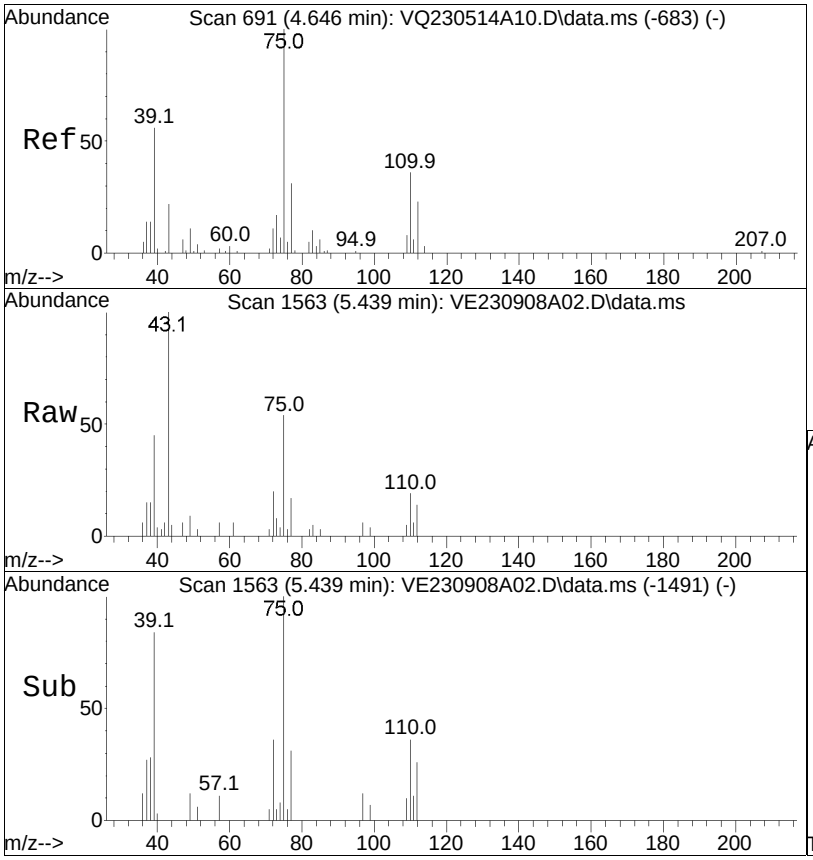


#40
1,1,1-Trichloroethane
Concen: 10.17 ug/L
RT: 5.344 min Scan# 1529
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 97 Resp: 52752

Ion	Ratio	Lower	Upper
97	100		
99	62.5	42.5	88.3
61	49.5	30.4	63.2
63	15.5	9.6	19.8

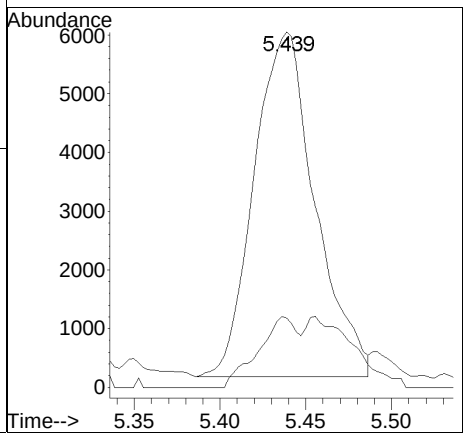


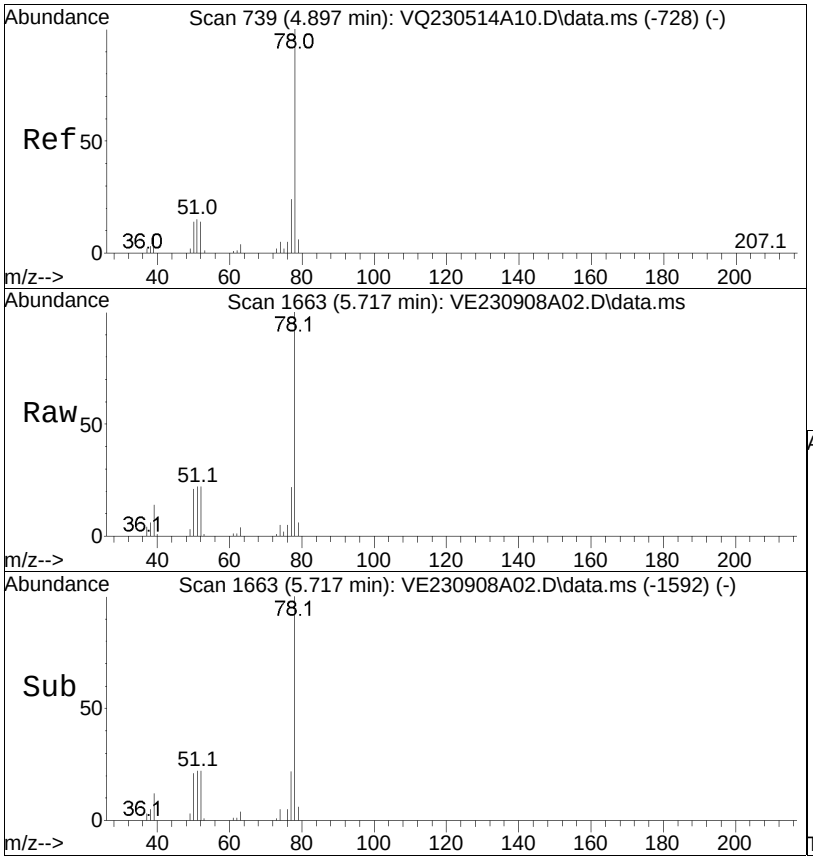


#42
2-Butanone
Concen: 12.64 ug/L
RT: 5.439 min Scan# 1563
Delta R.T. -0.000 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 43 Resp: 14545

Ion	Ratio	Lower	Upper
43	100		
72	13.3	31.2	46.8#

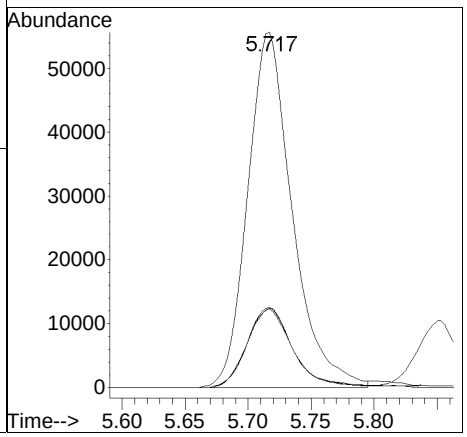


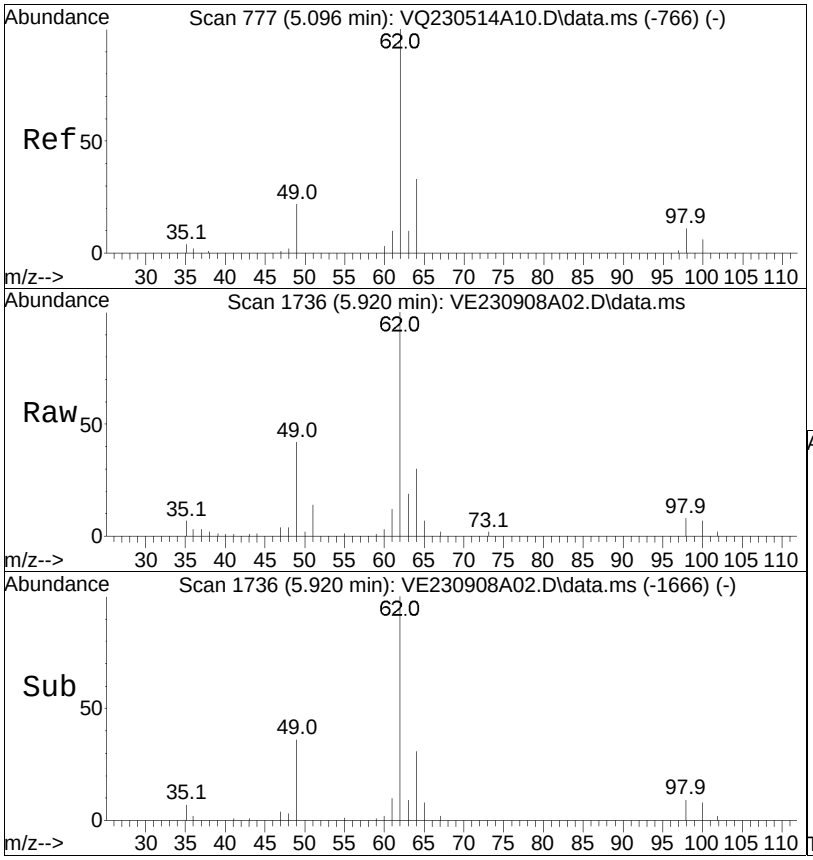


#45
Benzene
Concen: 10.47 ug/L
RT: 5.717 min Scan# 1663
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 78 Resp: 136635

Ion	Ratio	Lower	Upper
78	100		
77	23.1	15.9	33.1
51	23.1	12.3	25.5
52	22.5	11.3	23.5

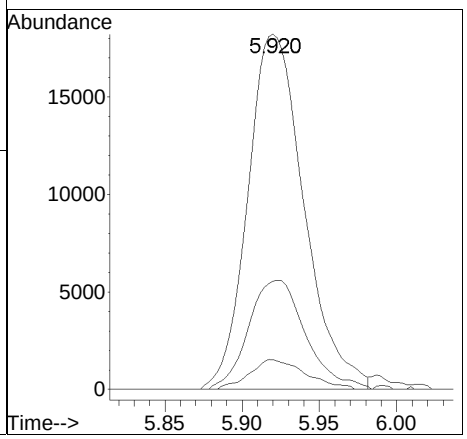


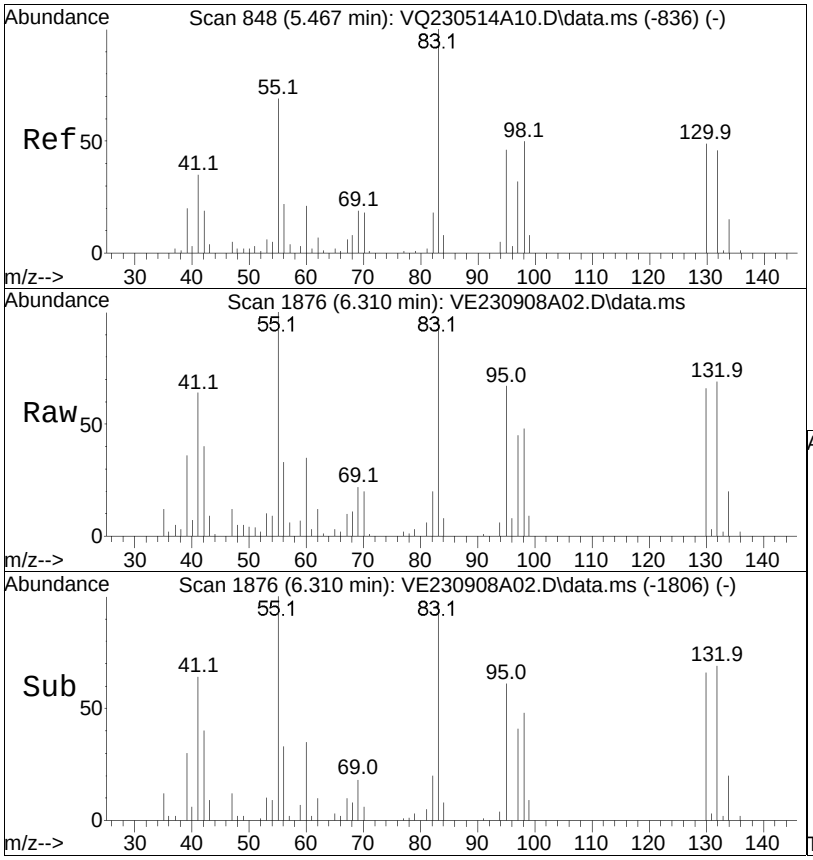


#48
1,2-Dichloroethane
Concen: 8.71 ug/L
RT: 5.920 min Scan# 1736
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 62 Resp: 46200

Ion	Ratio	Lower	Upper
62	100		
64	31.2	12.6	52.6
98	8.4	0.0	28.2

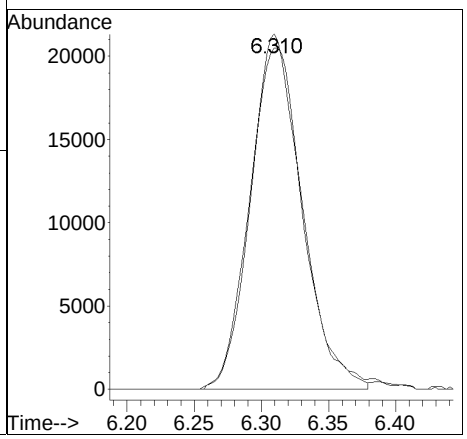


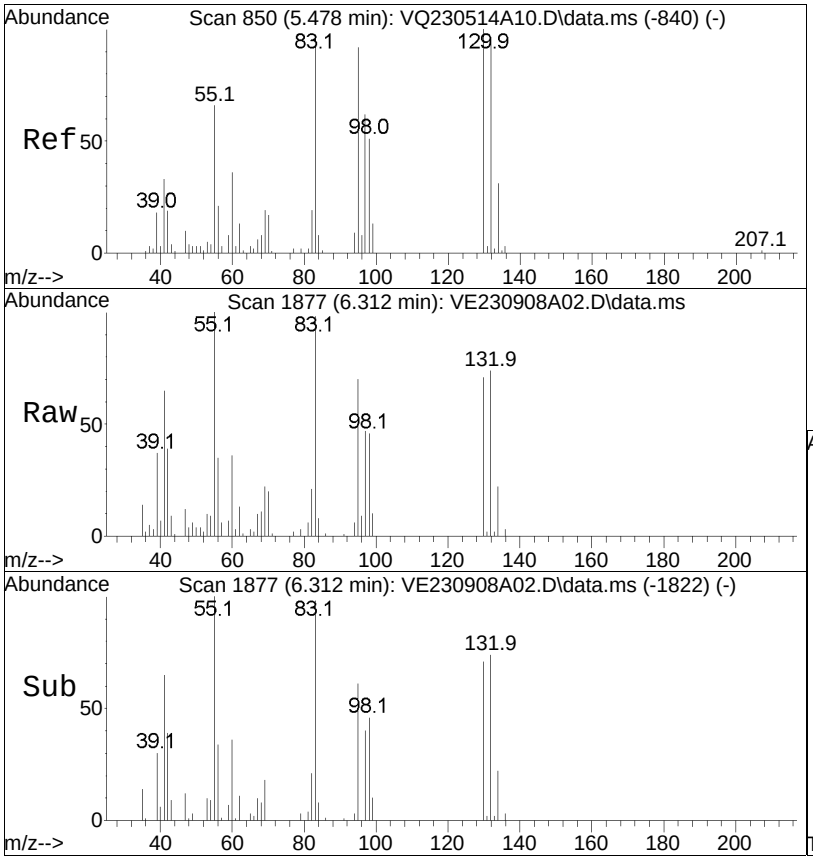


#51
Methyl cyclohexane
Concen: 9.94 ug/L
RT: 6.310 min Scan# 1876
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 83 Resp: 56249

Ion	Ratio	Lower	Upper
83	100		
55	101.1	65.0	97.6#

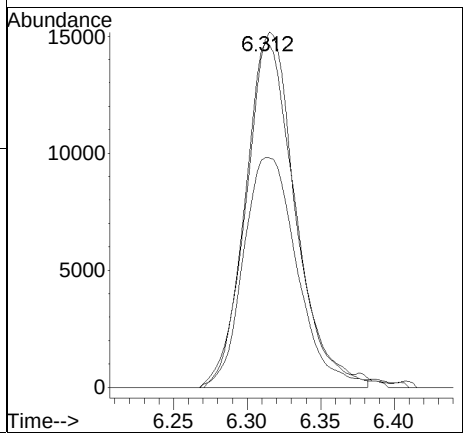


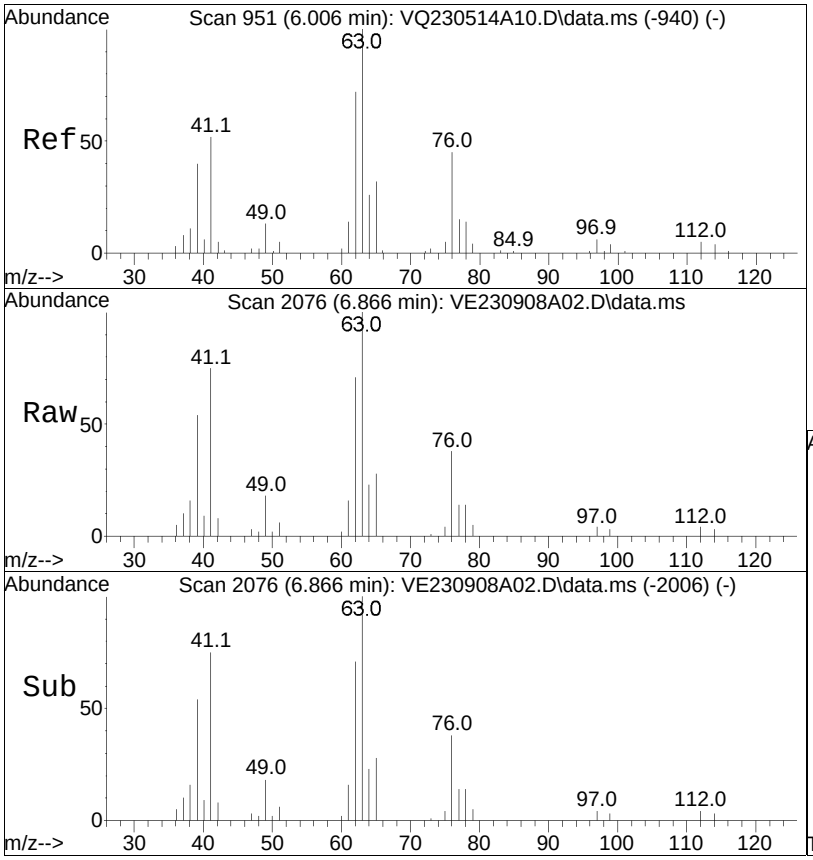


#52
Trichloroethene
Concen: 10.00 ug/L
RT: 6.312 min Scan# 1877
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 95 Resp: 35231

Ion	Ratio	Lower	Upper
95	100		
97	71.3	54.2	81.4
130	101.3	81.8	122.6

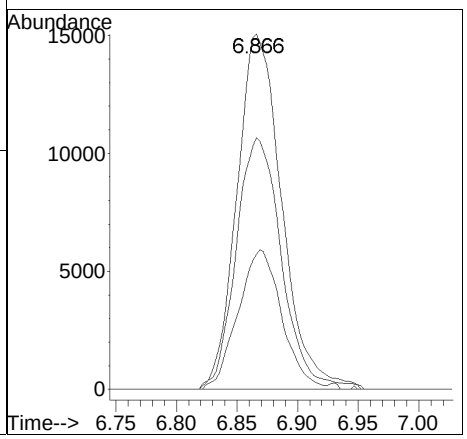


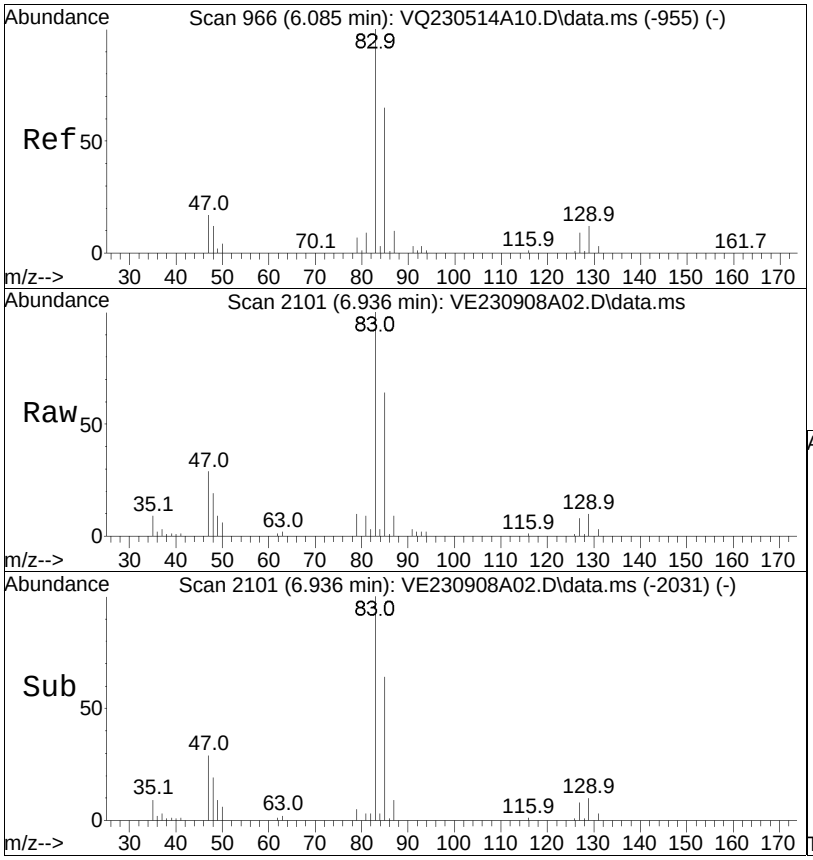


#55
1,2-Dichloropropane
Concen: 9.48 ug/L
RT: 6.866 min Scan# 2076
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 63 Resp: 38948

Ion	Ratio	Lower	Upper
63	100		
62	71.5	57.6	86.4
76	38.1	38.5	57.7#

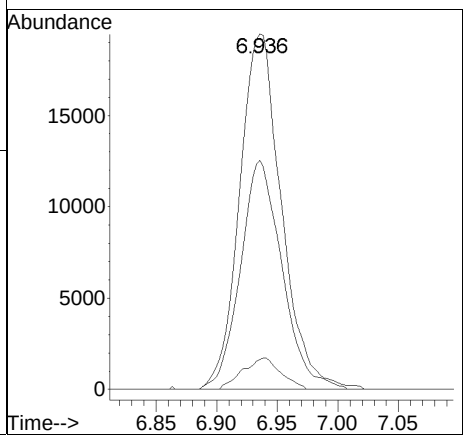


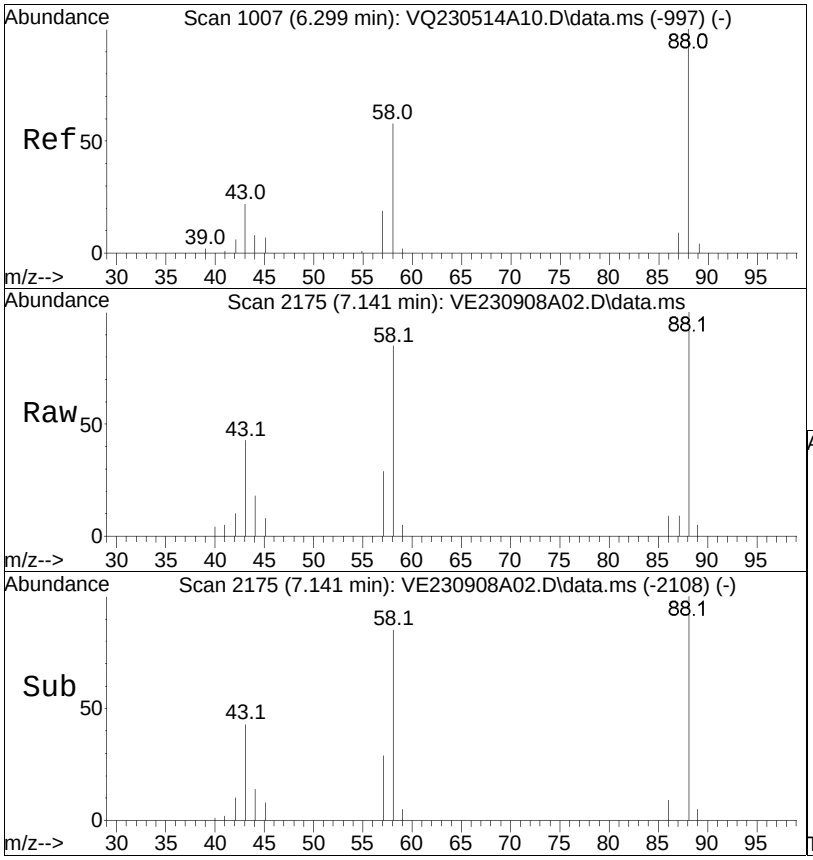


#58
Bromodichloromethane
Concen: 10.33 ug/L
RT: 6.936 min Scan# 2101
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 83 Resp: 46894

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.4	77.2
127	8.1	6.9	10.3

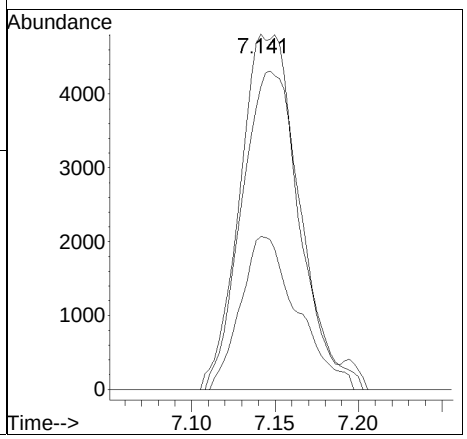


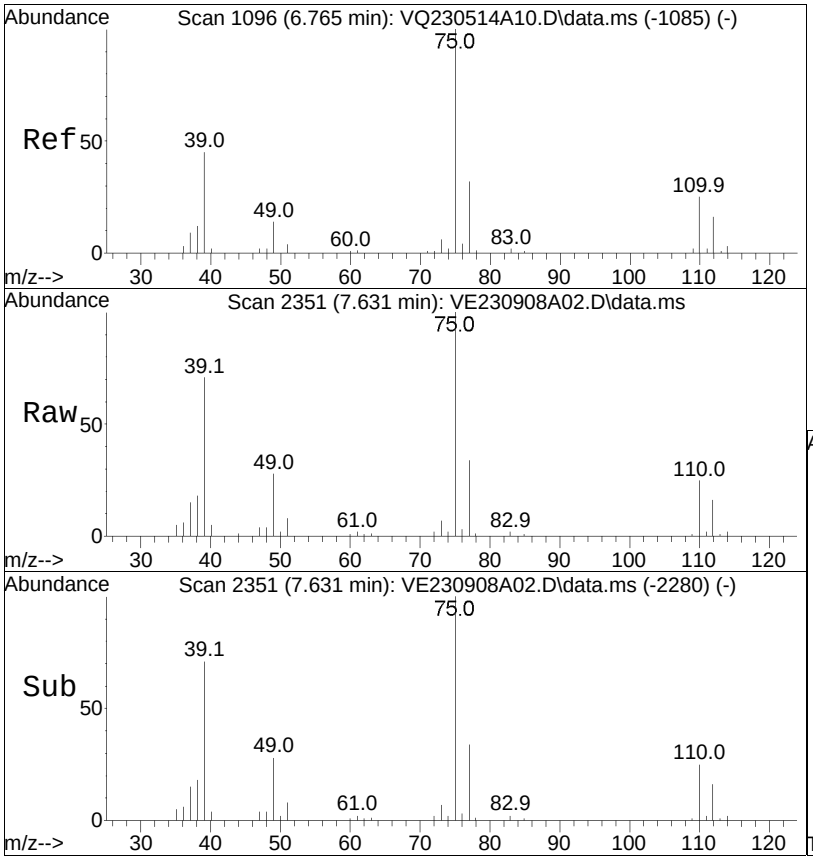


#61
1,4-Dioxane
Concen: 808.08 ug/L
RT: 7.141 min Scan# 2175
Delta R.T. -0.014 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 88 Resp: 11908

Ion	Ratio	Lower	Upper
88	100		
58	87.3	59.1	88.7
43	41.3	30.0	45.0

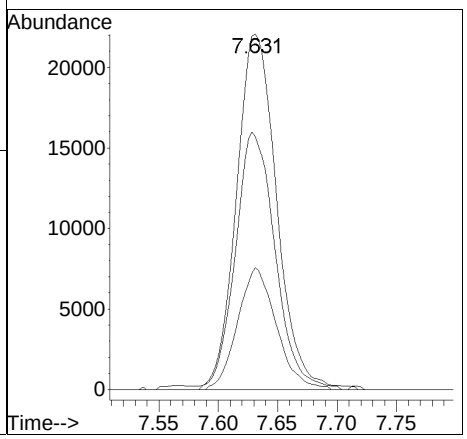


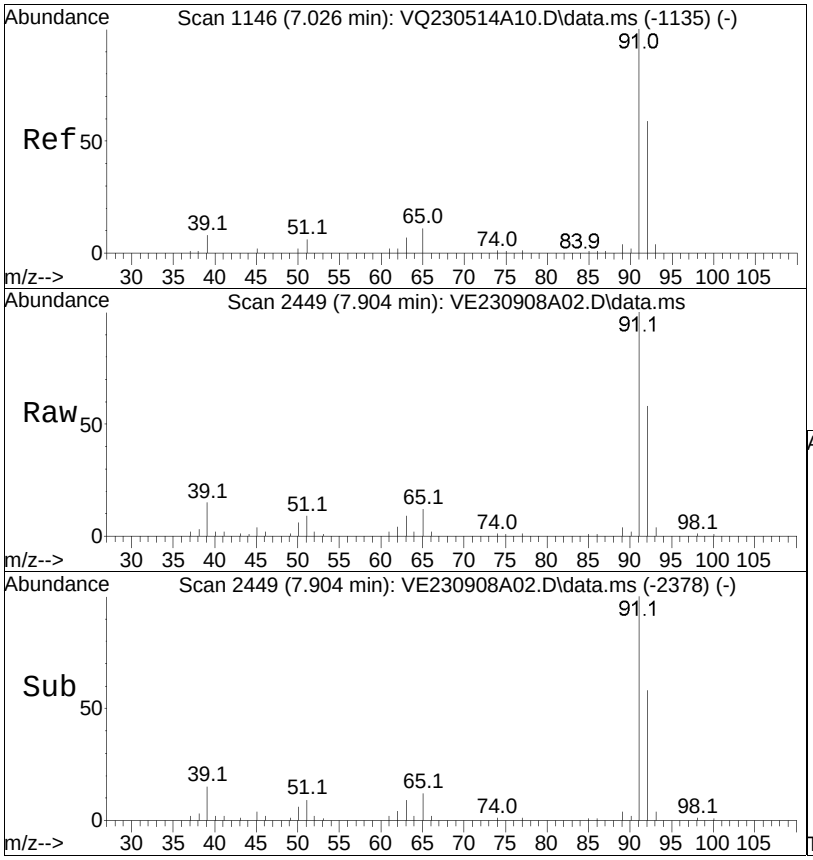


#62
cis-1,3-Dichloropropene
Concen: 9.92 ug/L
RT: 7.631 min Scan# 2351
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 75 Resp: 52152

Ion	Ratio	Lower	Upper
75	100		
77	32.8	25.0	37.6
39	71.5	50.6	75.8

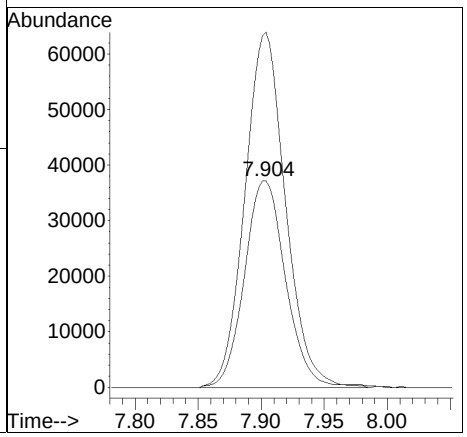


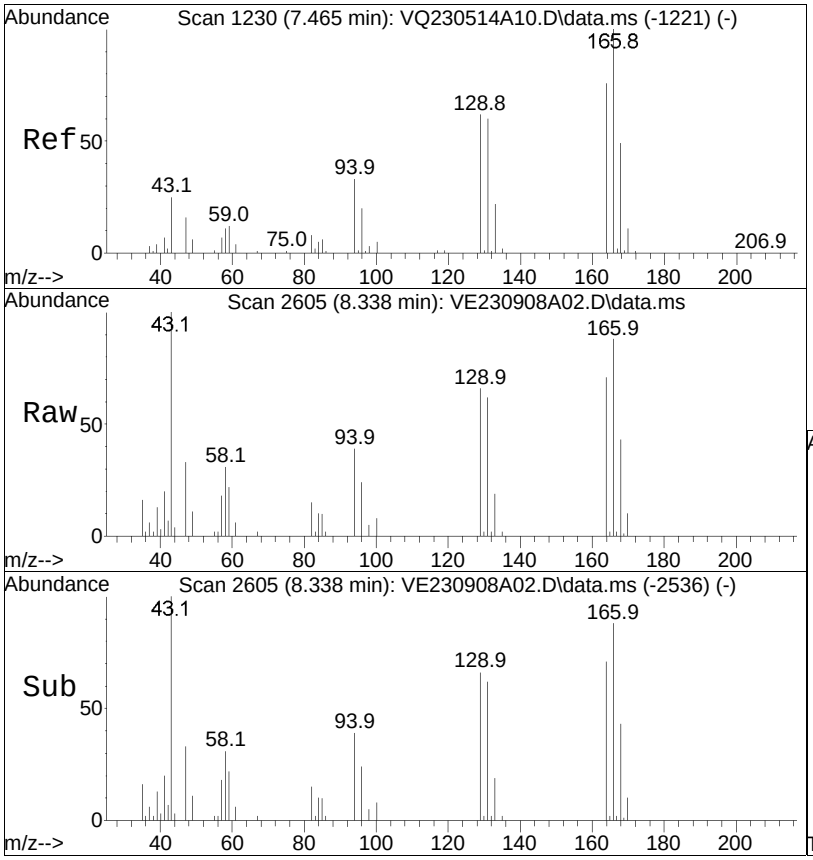


#65
Toluene
Concen: 10.77 ug/L
RT: 7.904 min Scan# 2449
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 92 Resp: 84435

Ion	Ratio	Lower	Upper
92	100		
91	169.0	135.9	203.9

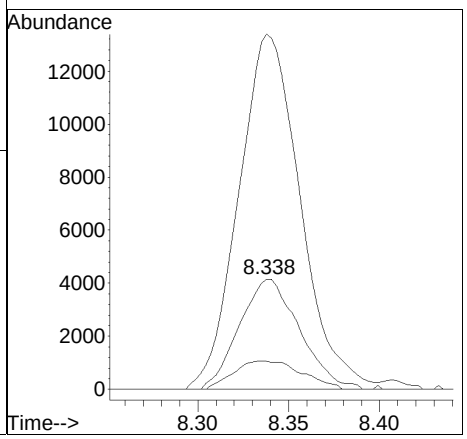


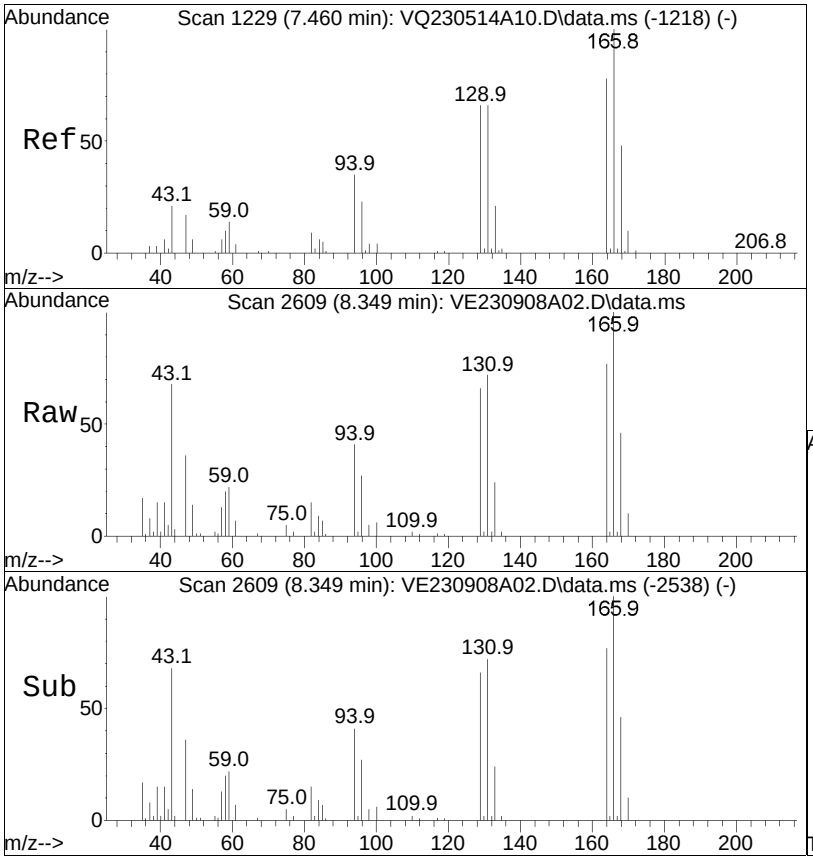


#66
4-Methyl-2-pentanone
Concen: 10.07 ug/L
RT: 8.338 min Scan# 2605
Delta R.T. -0.008 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 58 Resp: 9586

Ion	Ratio	Lower	Upper
58	100		
100	29.5	30.1	45.1#
43	328.7	226.7	340.1

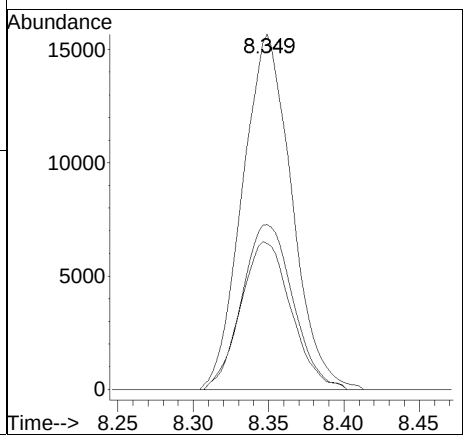


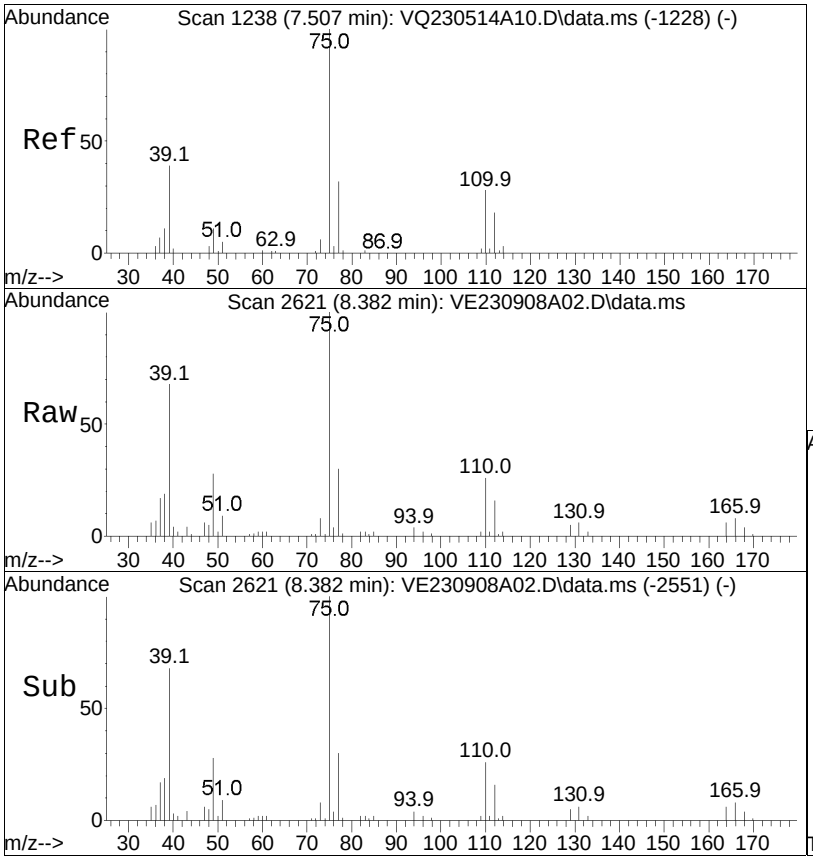


#67
Tetrachloroethene
Concen: 11.58 ug/L
RT: 8.349 min Scan# 2609
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:166 Resp: 35711

Ion	Ratio	Lower	Upper
166	100		
168	47.9	28.0	68.0
94	42.6	27.8	67.8

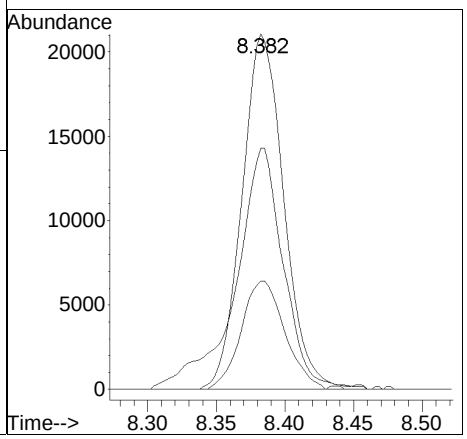


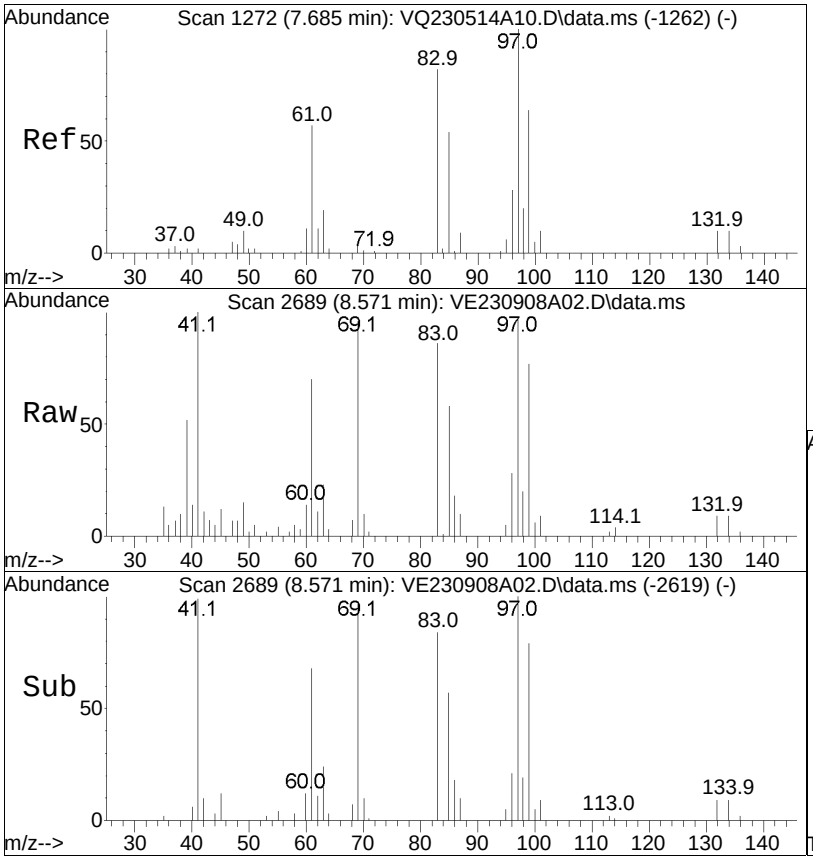


#69
trans-1,3-Dichloropropene
Concen: 10.10 ug/L
RT: 8.382 min Scan# 2621
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 75 Resp: 44842

Ion	Ratio	Lower	Upper
75	100		
77	31.7	11.4	51.4
39	77.3	44.3	84.3

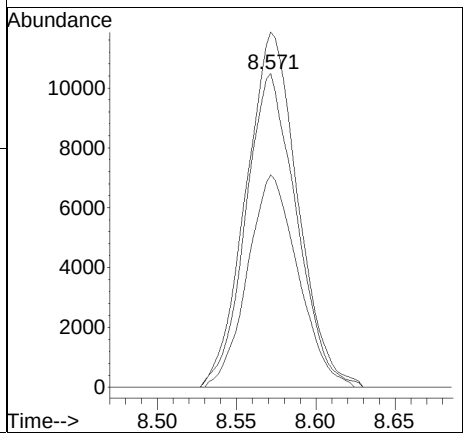


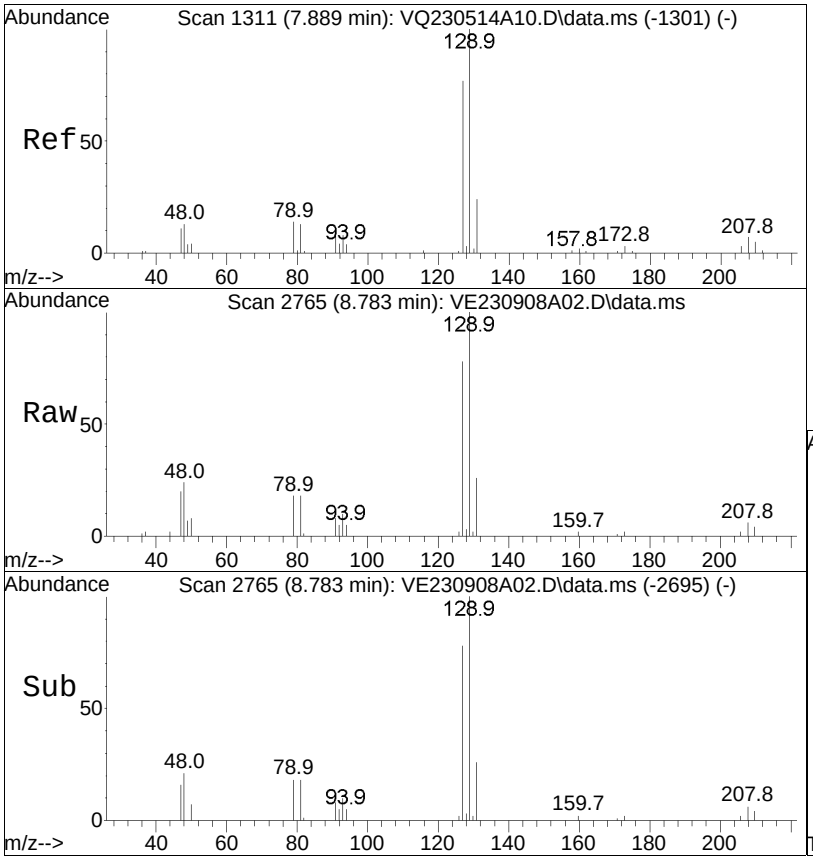


#72
1,1,2-Trichloroethane
Concen: 11.63 ug/L
RT: 8.571 min Scan# 2689
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 83 Resp: 23394

Ion	Ratio	Lower	Upper
83	100		
97	115.7	99.2	139.2
85	67.4	48.7	88.7

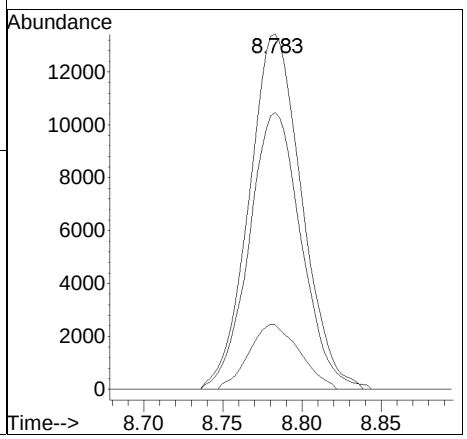


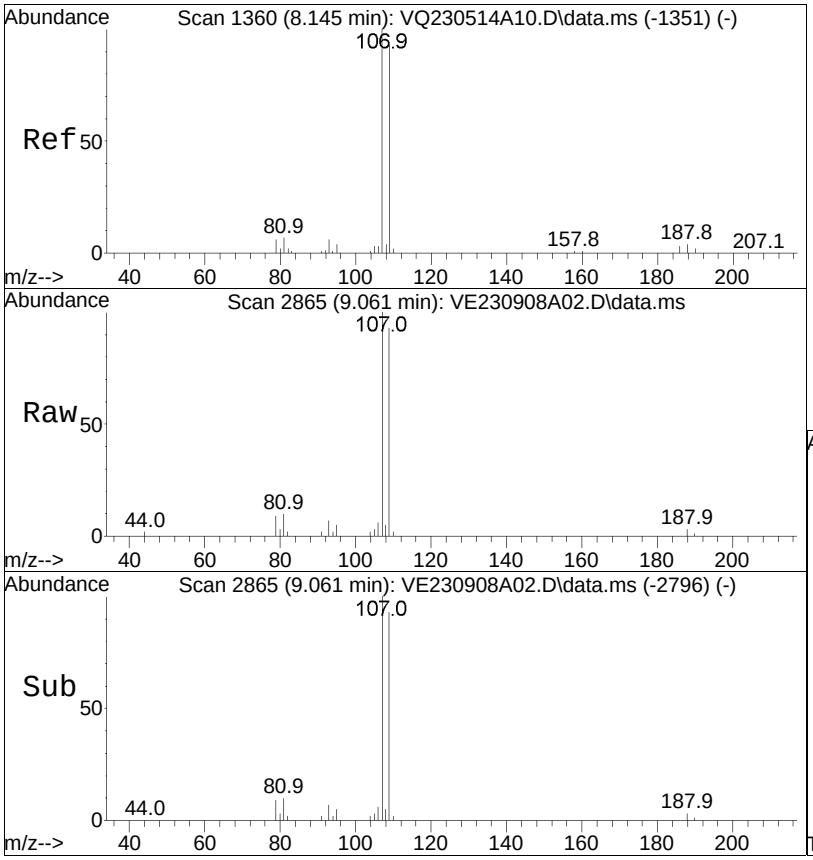


#73
Chlorodibromomethane
Concen: 10.97 ug/L
RT: 8.783 min Scan# 2765
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:129 Resp: 31099

Ion	Ratio	Lower	Upper
129	100		
81	17.7	0.0	36.2
127	77.5	58.0	98.0

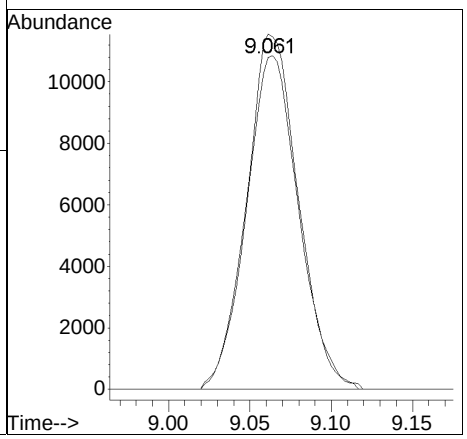


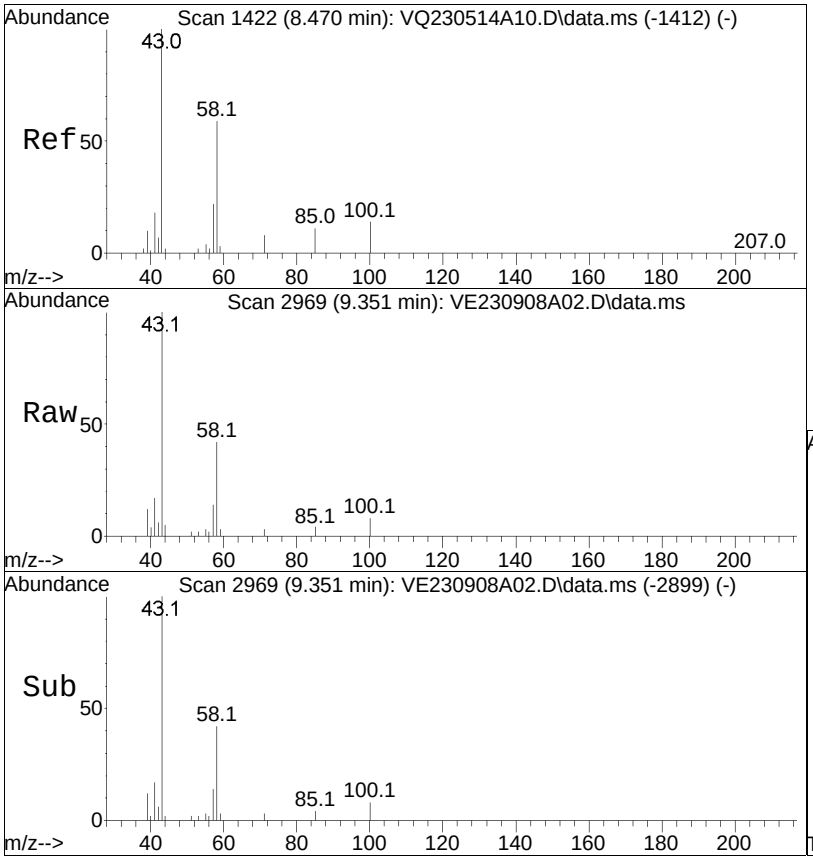


#75
1,2-Dibromoethane
Concen: 10.87 ug/L
RT: 9.061 min Scan# 2865
Delta R.T. -0.008 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:107 Resp: 25728

Ion	Ratio	Lower	Upper
107	100		
109	94.3	75.7	113.5

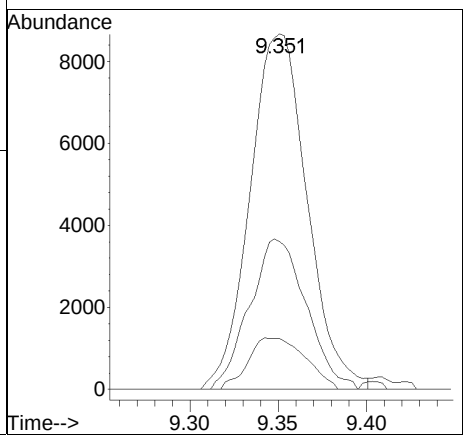


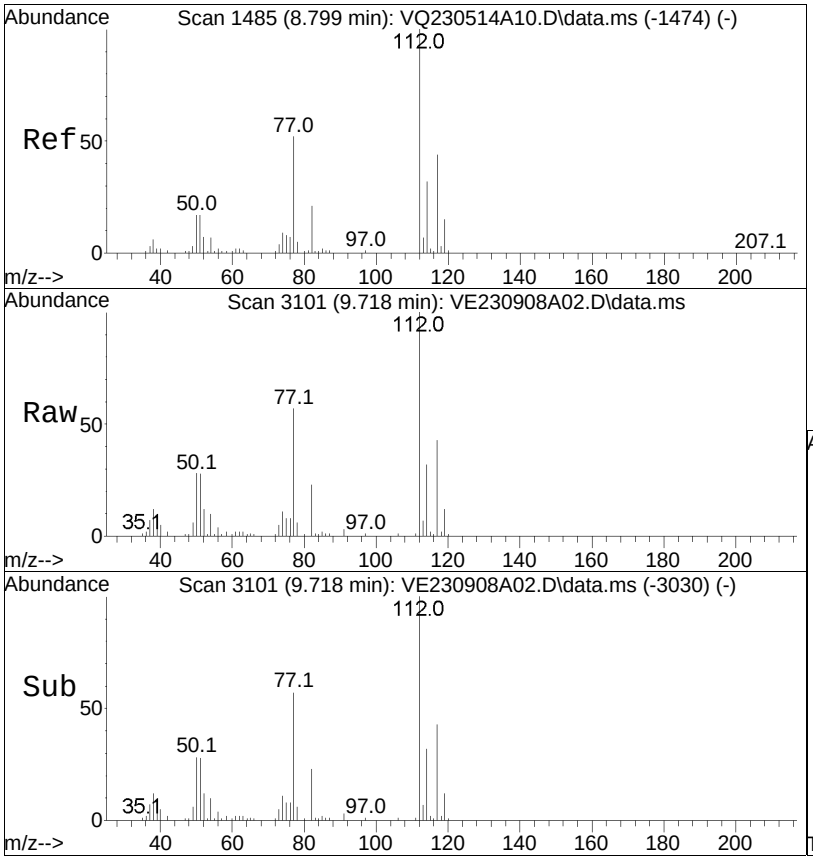


#77
2-Hexanone
Concen: 11.66 ug/L
RT: 9.351 min Scan# 2969
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 43 Resp: 19560

Ion	Ratio	Lower	Upper
43	100		
58	42.0	38.2	57.4
57	14.5	14.1	21.1

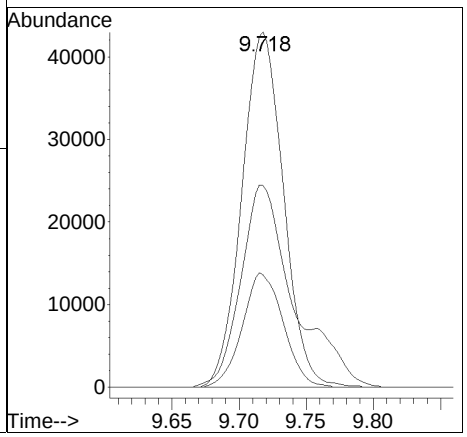


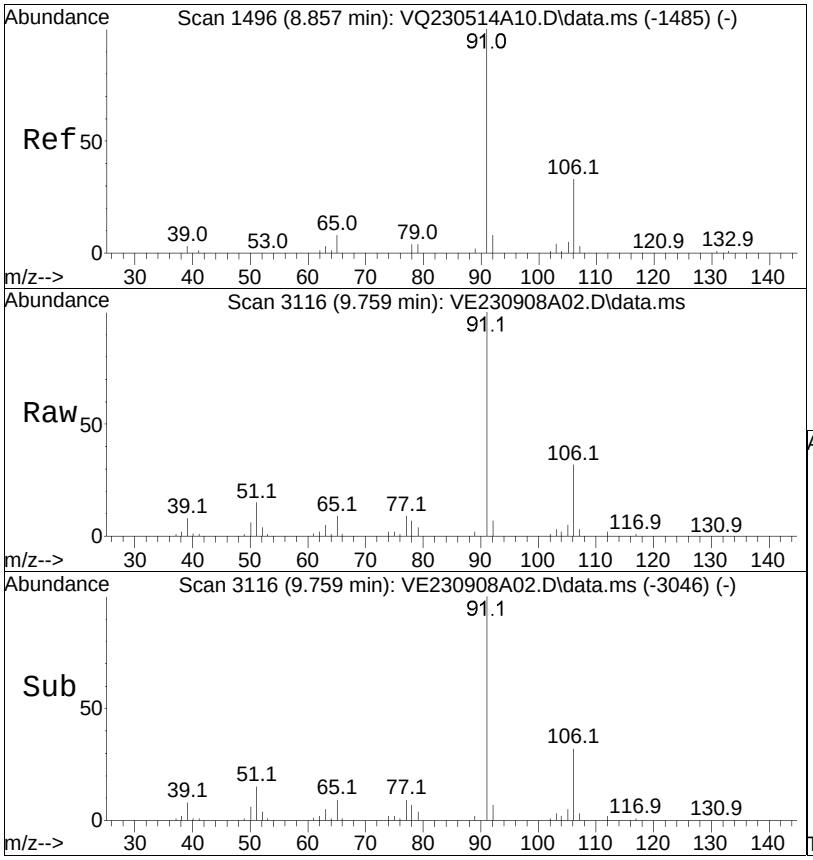


#78
Chlorobenzene
Concen: 10.90 ug/L
RT: 9.718 min Scan# 3101
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:112 Resp: 92922

Ion	Ratio	Lower	Upper
112	100		
77	61.5	50.7	76.1
114	31.7	25.6	38.4

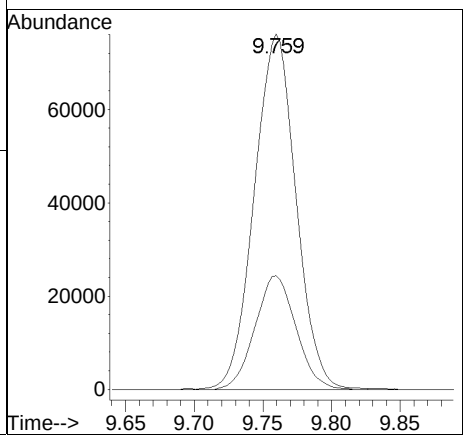


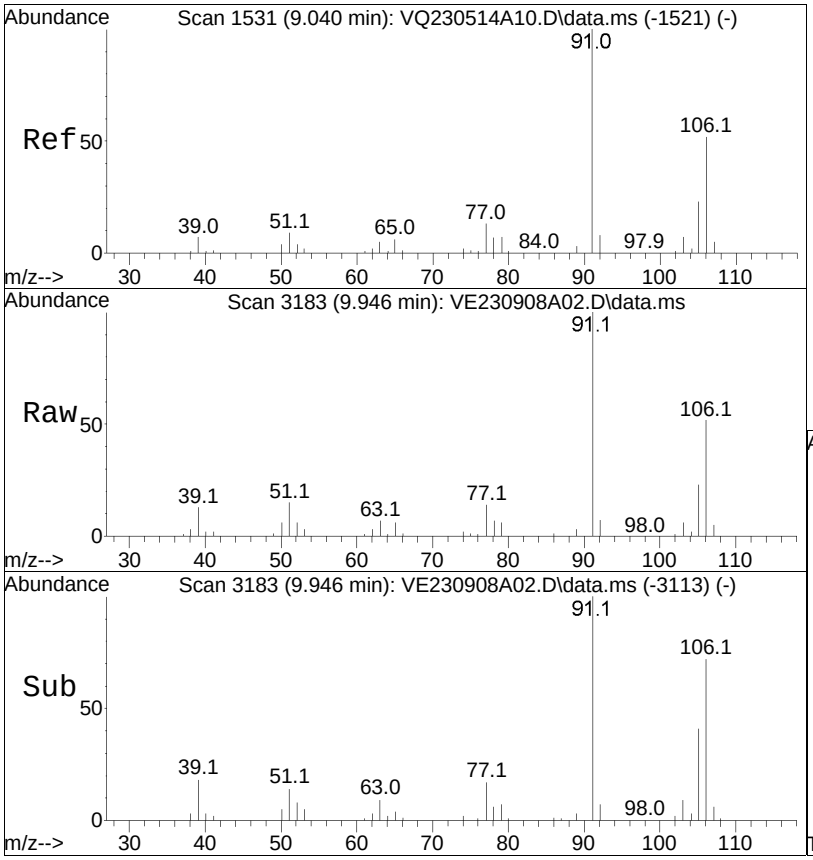


#79
Ethylbenzene
Concen: 10.32 ug/L
RT: 9.759 min Scan# 3116
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 91 Resp: 160895

Ion	Ratio	Lower	Upper
91	100		
106	31.4	24.6	36.8

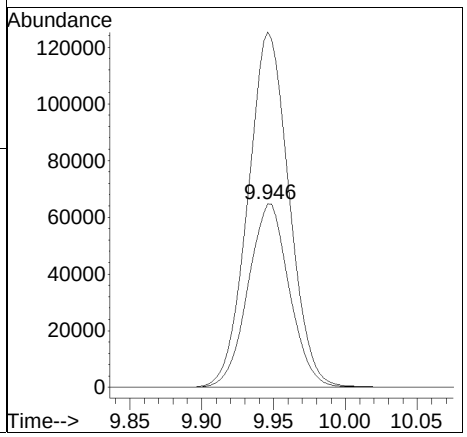


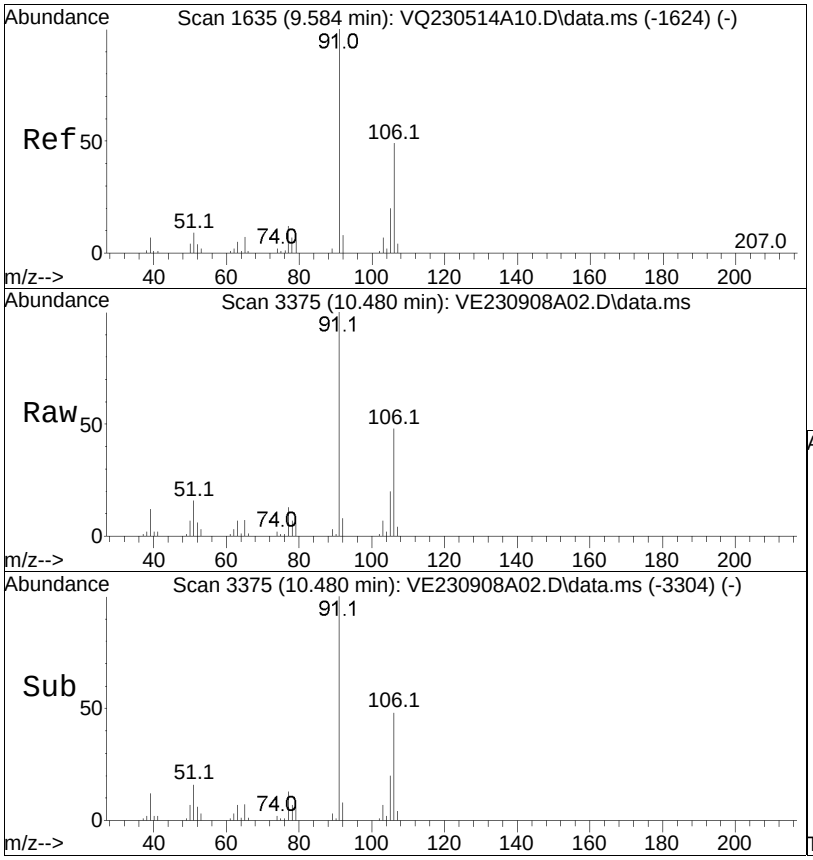


#81
p/m Xylene
Concen: 21.39 ug/L
RT: 9.946 min Scan# 3183
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:106 Resp: 129389

Ion	Ratio	Lower	Upper
106	100		
91	193.1	165.5	248.3

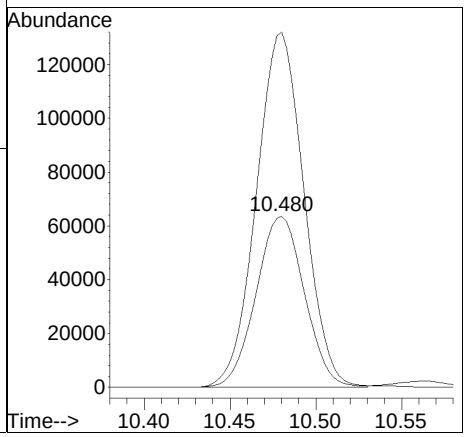


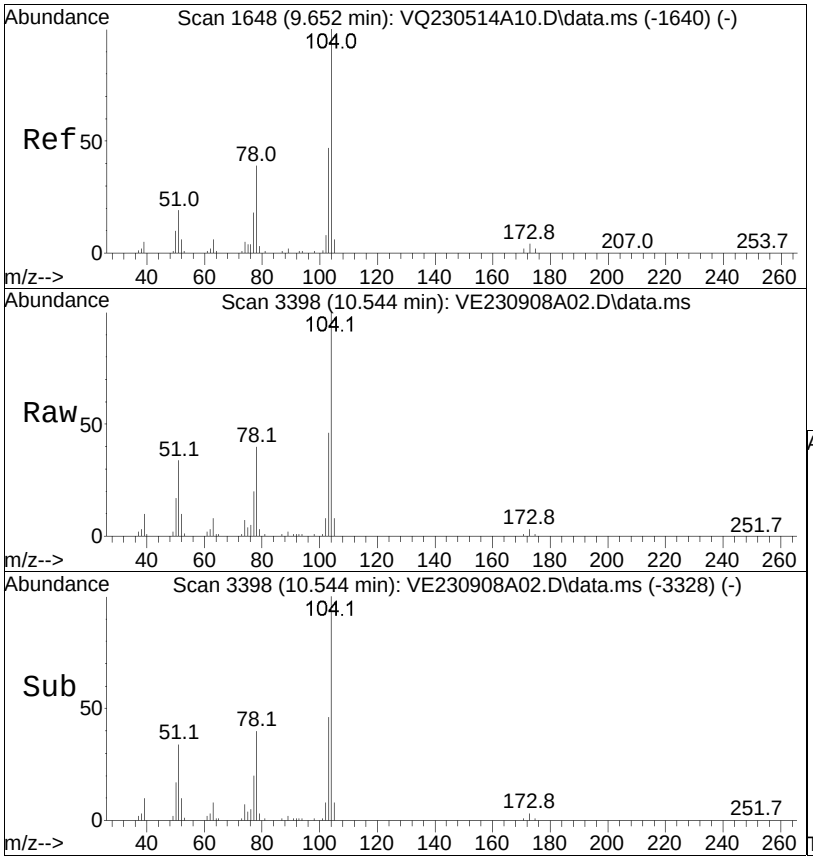


#82
o Xylene
Concen: 20.71 ug/L
RT: 10.480 min Scan# 3375
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:106 Resp: 124789

Ion	Ratio	Lower	Upper
106	100		
91	203.7	176.5	264.7

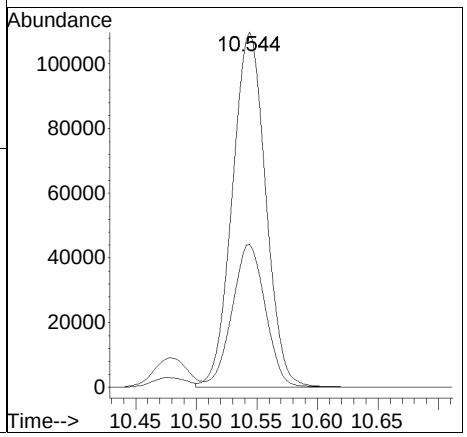


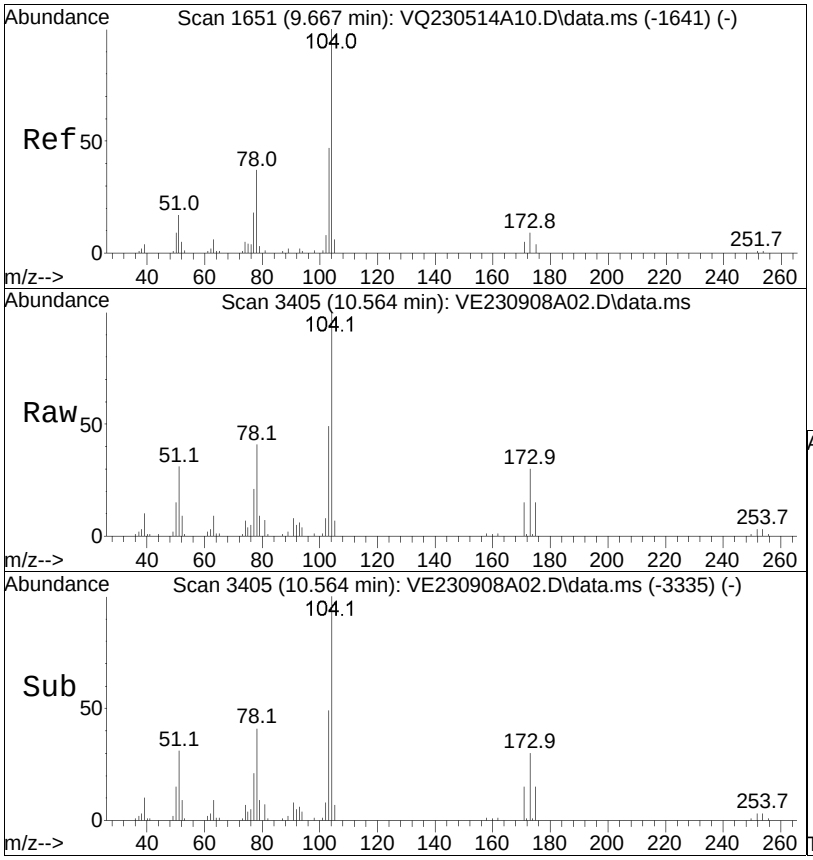


#83
Styrene
Concen: 21.50 ug/L
RT: 10.544 min Scan# 3398
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:104 Resp: 210962

Ion	Ratio	Lower	Upper
104	100		
78	40.0	37.5	56.3

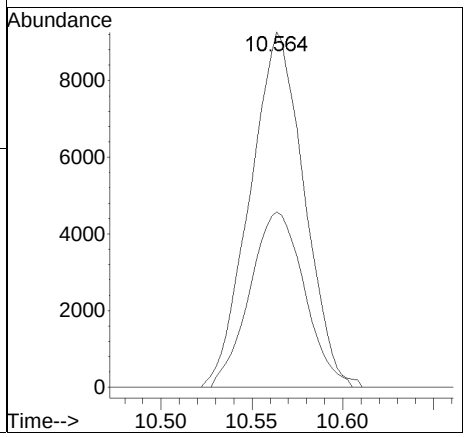


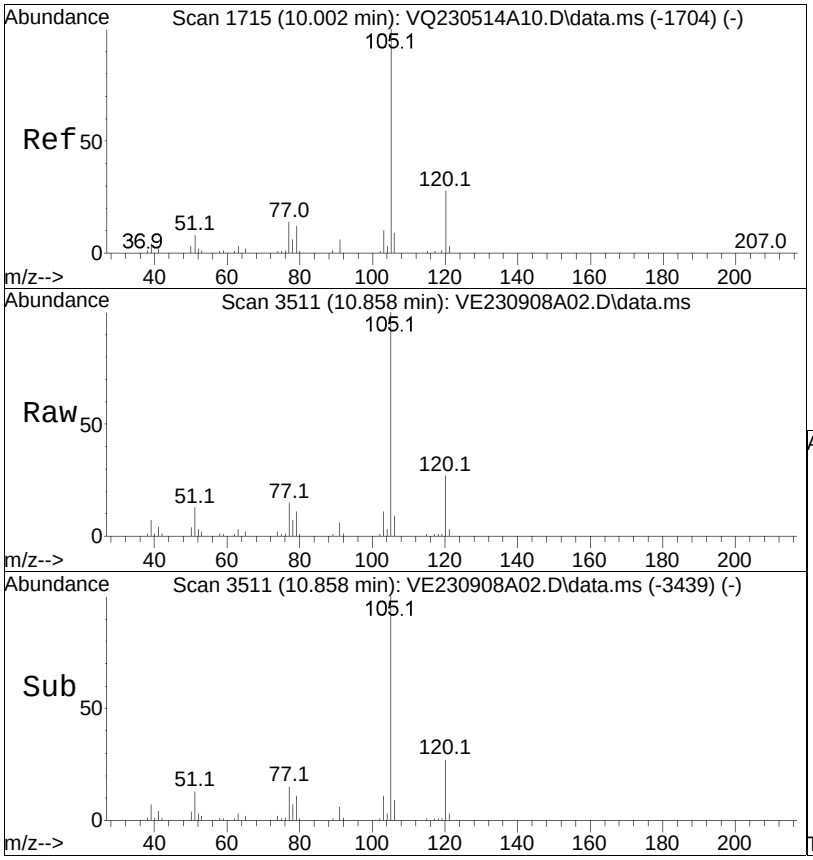


#85
Bromoform
Concen: 10.70 ug/L
RT: 10.564 min Scan# 3405
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:173 Resp: 19223

Ion	Ratio	Lower	Upper
173	100		
175	49.8	29.0	69.0

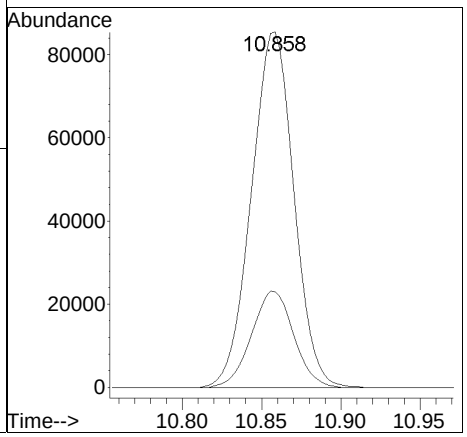


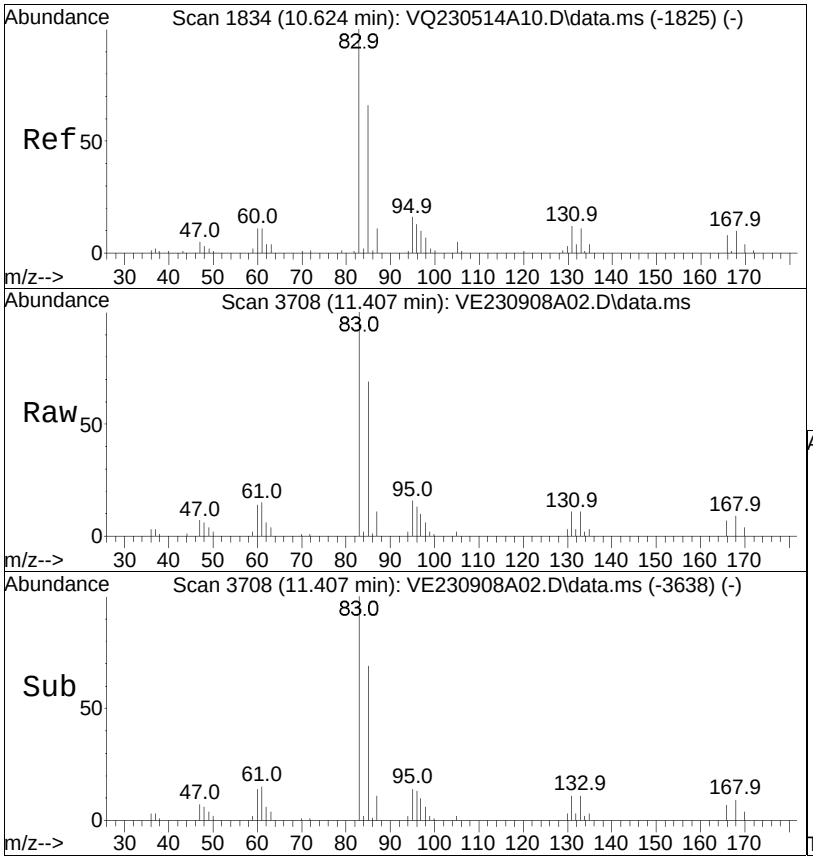


#87
Isopropylbenzene
Concen: 8.96 ug/L
RT: 10.858 min Scan# 3511
Delta R.T. -0.000 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:105 Resp: 159394

Ion	Ratio	Lower	Upper
105	100		
120	26.9	6.5	46.5

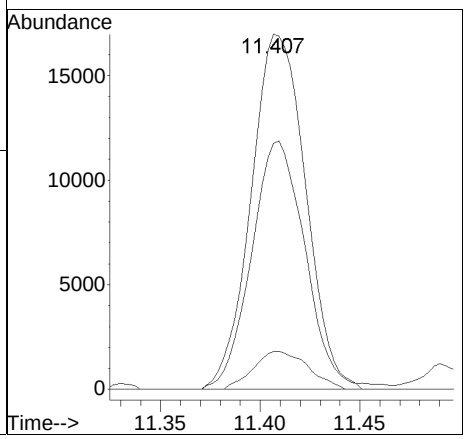


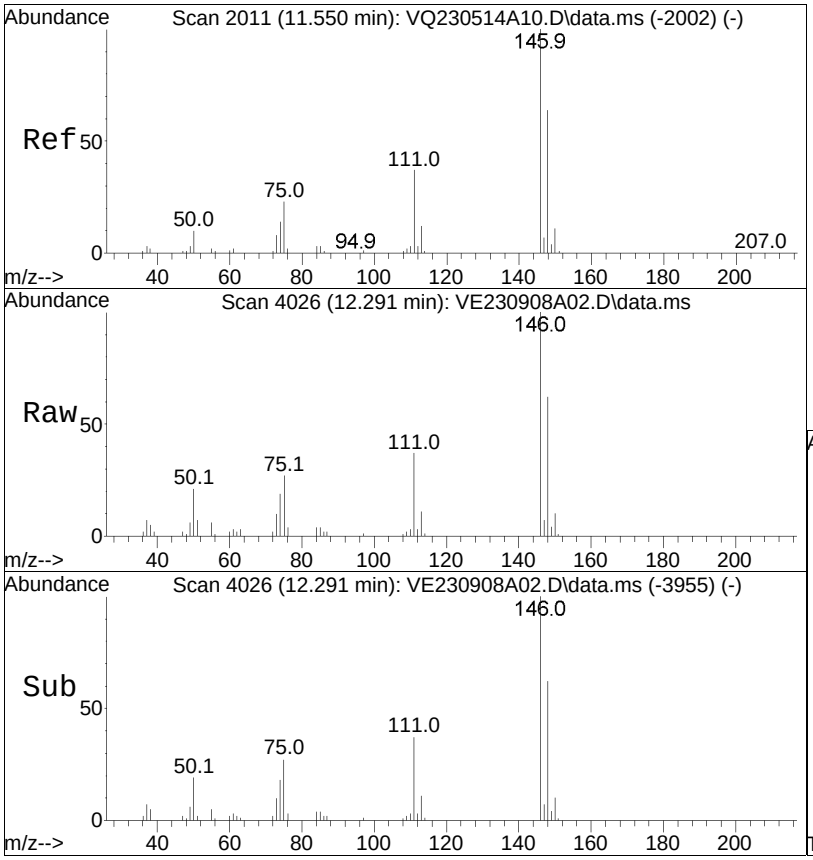


#92
1,1,2,2-Tetrachloroethane
Concen: 11.17 ug/L
RT: 11.407 min Scan# 3708
Delta R.T. -0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion: 83 Resp: 32297

Ion	Ratio	Lower	Upper
83	100		
131	10.8	0.0	31.0
85	69.2	45.4	85.4

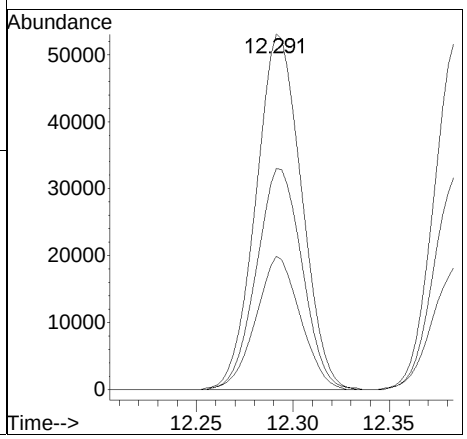


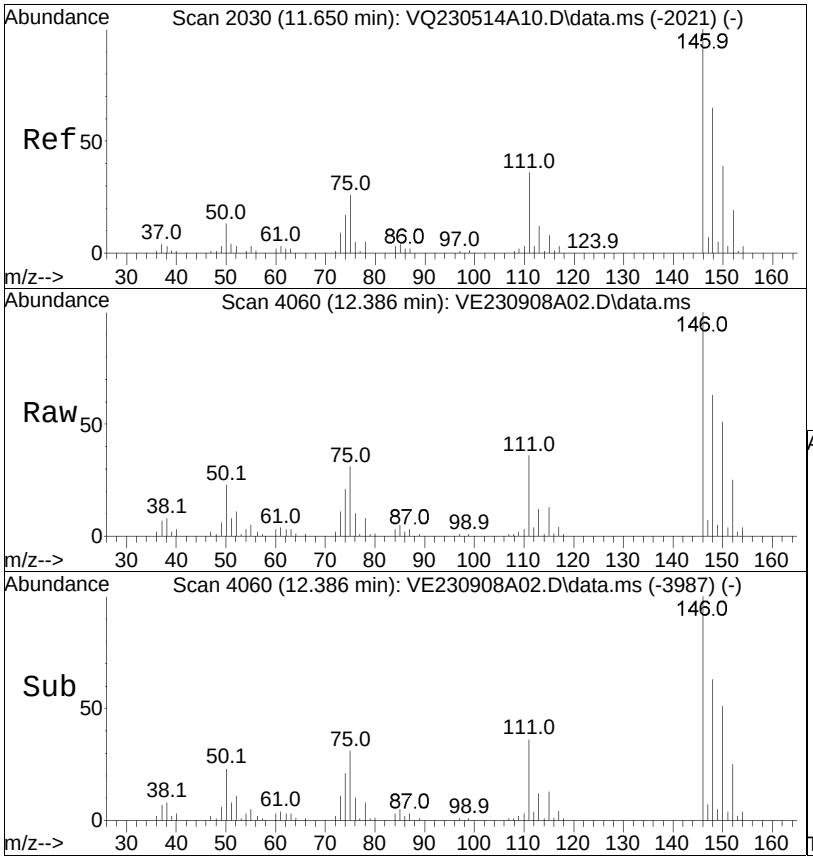


#105
1,3-Dichlorobenzene
Concen: 10.81 ug/L
RT: 12.291 min Scan# 4026
Delta R.T. -0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:146 Resp: 87102

Ion	Ratio	Lower	Upper
146	100		
111	36.5	27.0	56.0
148	62.2	41.2	85.6

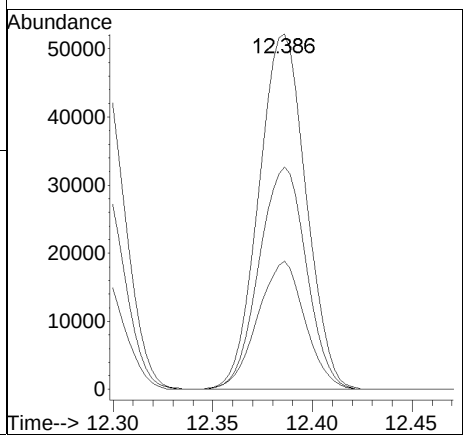


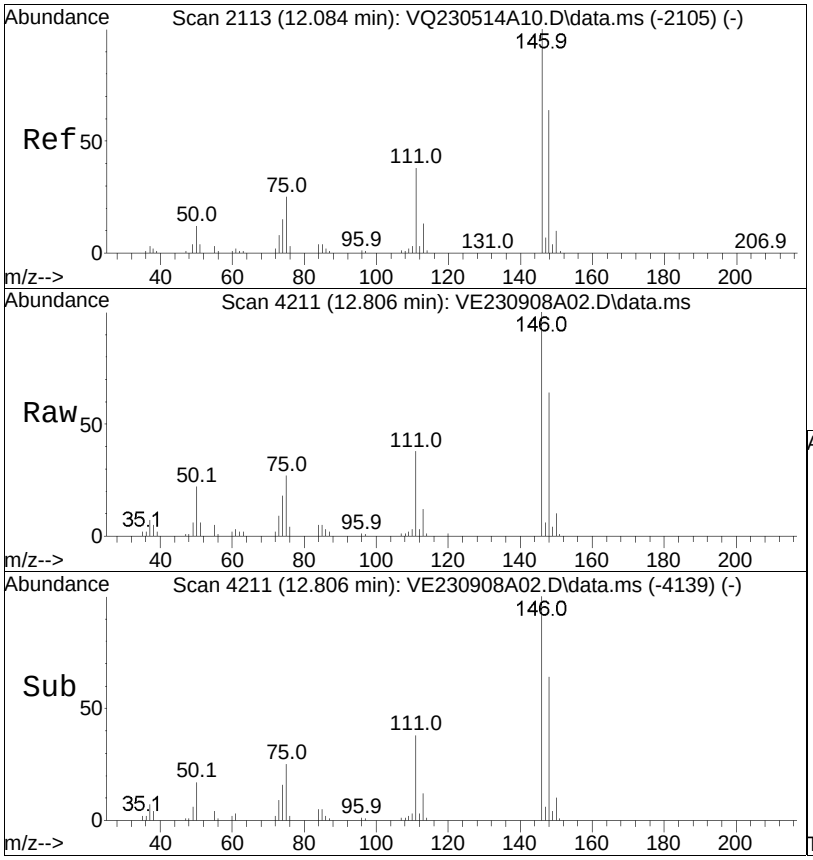


#106
1,4-Dichlorobenzene
Concen: 10.74 ug/L
RT: 12.386 min Scan# 4060
Delta R.T. 0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:146 Resp: 86247

Ion	Ratio	Lower	Upper
146	100		
111	36.1	32.3	48.5
148	62.6	51.0	76.6

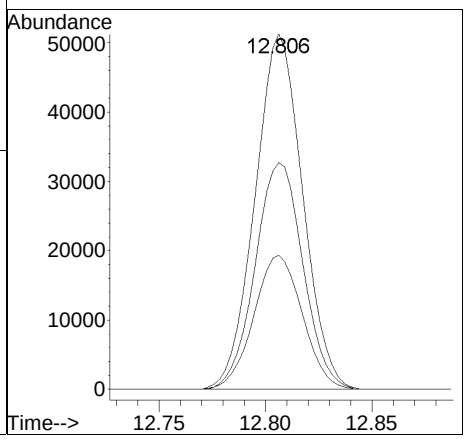


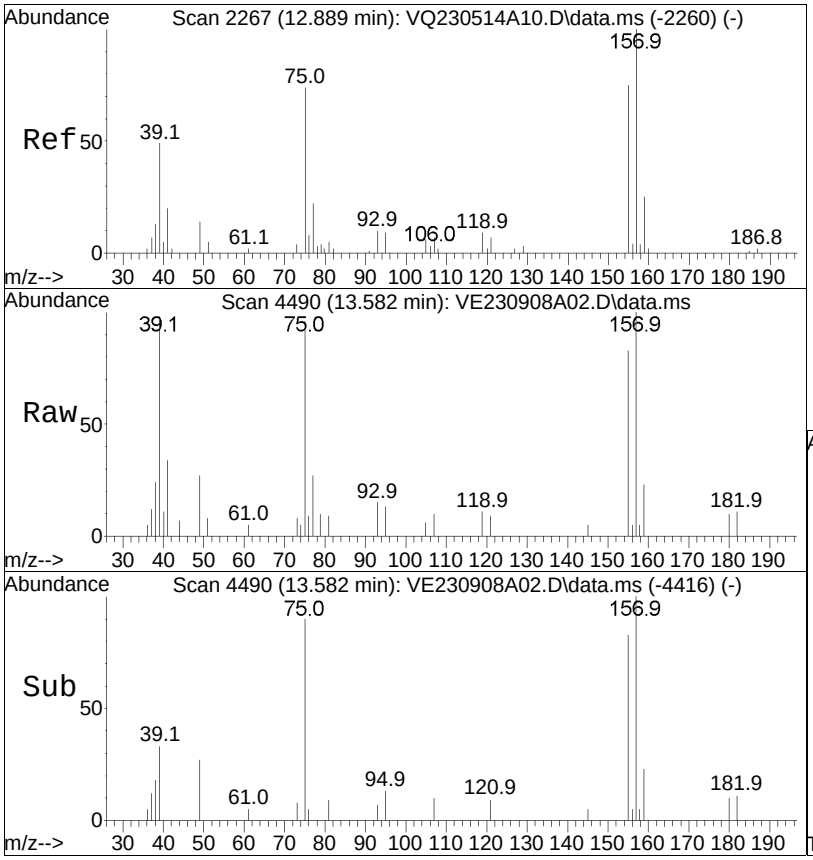


#109
1,2-Dichlorobenzene
Concen: 10.57 ug/L
RT: 12.806 min Scan# 4211
Delta R.T. -0.000 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:146 Resp: 79821

Ion	Ratio	Lower	Upper
146	100		
111	38.5	27.7	57.5
148	64.1	41.3	85.7

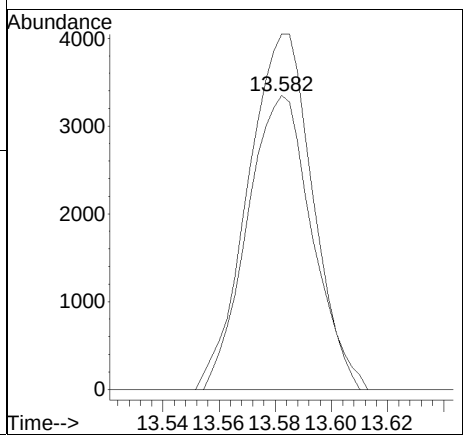


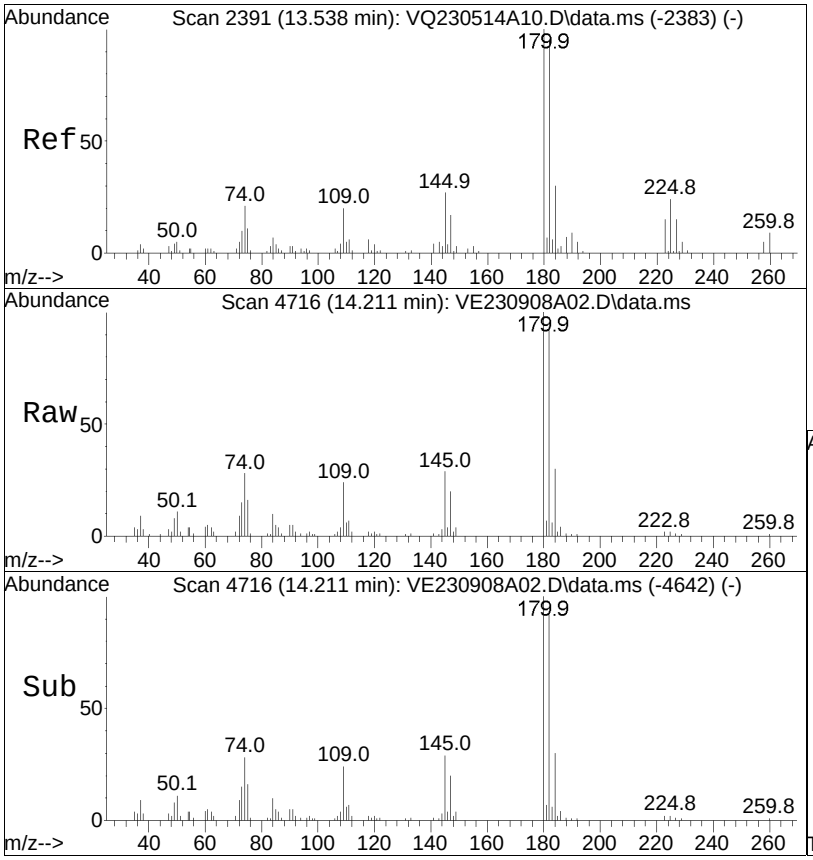


#111
1,2-Dibromo-3-chloropropane
Concen: 12.02 ug/L
RT: 13.582 min Scan# 4490
Delta R.T. 0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:155 Resp: 5325

Ion	Ratio	Lower	Upper
155	100		
157	122.5	100.1	150.1

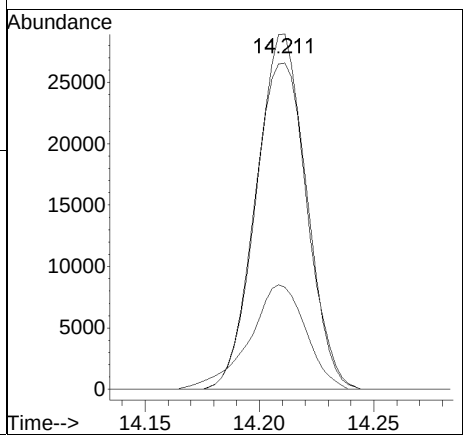


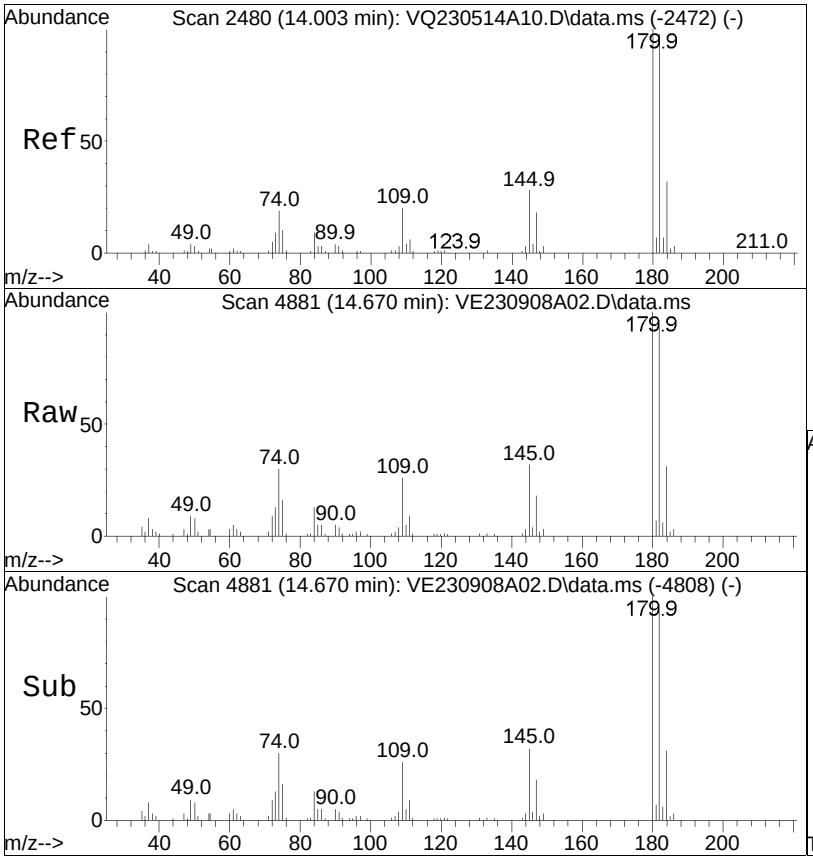


#114
1,2,4-Trichlorobenzene
Concen: 9.99 ug/L
RT: 14.211 min Scan# 4716
Delta R.T. 0.006 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:180 Resp: 44103

Ion	Ratio	Lower	Upper
180	100		
182	96.0	76.0	114.0
145	33.2	28.4	42.6

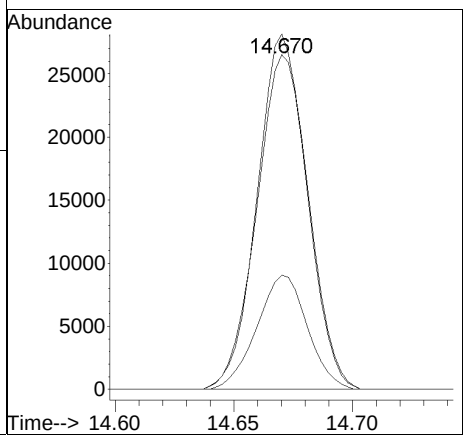




#116
1,2,3-Trichlorobenzene
Concen: 10.32 ug/L
RT: 14.670 min Scan# 4881
Delta R.T. 0.003 min
Lab File: VE230908A02.D
Acq: 8 Sep 2023 9:21 am

Tgt Ion:180 Resp: 41536

Ion	Ratio	Lower	Upper
180	100		
182	96.1	76.5	114.7
145	32.3	26.6	39.8

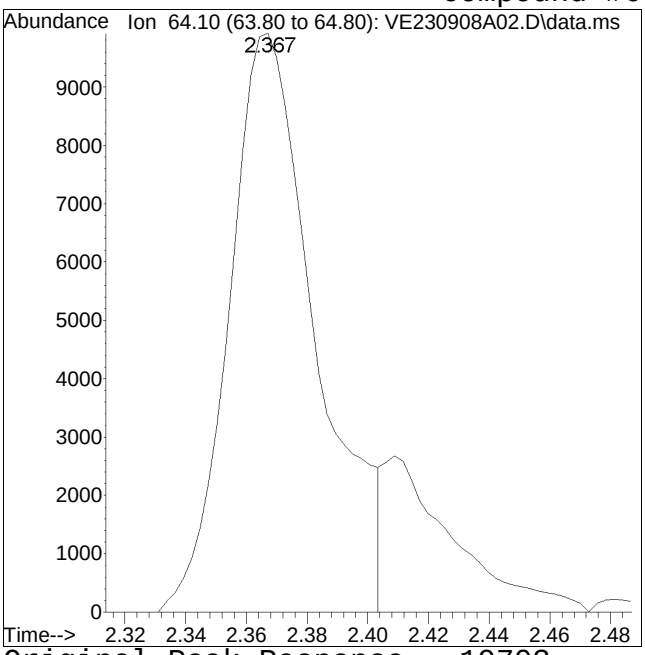


Manual Integration Report

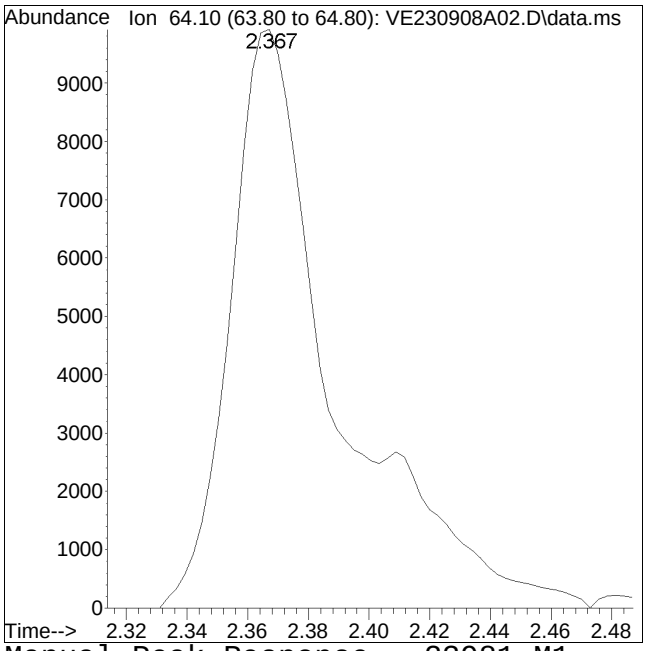
Data Path : K:\Elaine\2023\230908A\
Data File : VE230908A02.D
Date Inj'd : 9/8/2023 9:21 am
Sample : WG1825752-4,31,10,10

QMethod : Elaine_230725N_8260.m
Operator : ELAINE:PID
Instrument : Elaine
Quant Date : 9/8/2023 9:49 am

Compound #6: Chloroethane



Original Peak Response = 19703



Manual Peak Response = 23981 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A02.D
Acq On : 7 Sep 2023 7:53 am
Operator : VOA105:PID
Sample : WG1824710-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 07 08:27:18 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	255064	10.000	ug/L	0.00
Standard Area 1 = 255314			Recovery = 99.90%			
59) Chlorobenzene-d5	9.245	117	237887	10.000	ug/L	0.00
Standard Area 1 = 234811			Recovery = 101.31%			
79) 1,4-Dichlorobenzene-d4	12.008	152	143319	10.000	ug/L	0.00
Standard Area 1 = 143322			Recovery = 100.00%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.960	113	83223	10.289	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 102.89%			
43) 1,2-Dichloroethane-d4	5.479	65	82383	10.495	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 104.95%			
60) Toluene-d8	7.415	98	279239	10.068	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 100.68%			
83) 4-Bromofluorobenzene	10.774	95	109469	9.759	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 97.59%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.527	85	79988	9.670	ug/L	99
3) Chloromethane	1.713	50	83374	10.520	ug/L	98
4) Vinyl chloride	1.772	62	87333	10.506	ug/L	96
5) Bromomethane	2.065	94	63102	9.826	ug/L	98
6) Chloroethane	2.163	64	70231	11.852	ug/L	96
7) Trichlorofluoromethane	2.300	101	123553	10.063	ug/L	100
10) 1,1-Dichloroethene	2.760	96	76370	10.367	ug/L	99
11) Carbon disulfide	2.789	76	246362	10.504	ug/L	99
12) Freon-113	2.799	101	82894	10.156	ug/L #	73
15) Methylene chloride	3.308	84	70445	10.386	ug/L	85
17) Acetone	3.366	43	10313	9.410	ug/L	95
18) trans-1,2-Dichloroethene	3.444	96	70658	10.461	ug/L	97
19) Methyl acetate	3.464	43	24332	9.737	ug/L #	85
20) Methyl tert-butyl ether	3.542	73	118305	8.297	ug/L	93
23) 1,1-Dichloroethane	4.022	63	124090	10.524	ug/L	98
28) cis-1,2-Dichloroethene	4.530	96	79353	10.635	ug/L	93
30) Bromochloromethane	4.716	128	38709	11.133	ug/L	96
31) Cyclohexane	4.696	56	116460	10.030	ug/L	84
32) Chloroform	4.784	83	125024	10.623	ug/L	96
34) Carbon tetrachloride	4.902	117	100498	10.066	ug/L	99

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A02.D
Acq On : 7 Sep 2023 7:53 am
Operator : VOA105:PID
Sample : WG1824710-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 07 08:27:18 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 1,1,1-Trichloroethane	4.970	97	111983	10.646	ug/L		97
39) 2-Butanone	5.088	43	13776	8.695	ug/L	#	81
41) Benzene	5.332	78	258091	10.504	ug/L		97
44) 1,2-Dichloroethane	5.547	62	82135	10.128	ug/L		99
47) Methyl cyclohexane	5.899	83	113064	9.631	ug/L		91
48) Trichloroethene	5.919	95	76065	9.658	ug/L		90
51) 1,2-Dichloropropane	6.457	63	63826	10.250	ug/L	#	90
54) Bromodichloromethane	6.535	83	90629	10.530	ug/L		99
57) 1,4-Dioxane	6.750	88	16438	542.354	ug/L		92
58) cis-1,3-Dichloropropene	7.220	75	95852	9.979	ug/L		95
61) Toluene	7.474	92	168618	10.521	ug/L		99
62) 4-Methyl-2-pentanone	7.914	58	10080	8.191	ug/L		89
63) Tetrachloroethene	7.914	166	82162	10.767	ug/L		90
65) trans-1,3-Dichloropropene	7.973	75	78673	9.972	ug/L		92
68) 1,1,2-Trichloroethane	8.149	83	40376	9.981	ug/L		99
69) Chlorodibromomethane	8.354	129	64855	10.520	ug/L		98
71) 1,2-Dibromoethane	8.628	107	54530	9.979	ug/L		100
72) 2-Hexanone	8.922	43	16823	7.673	ug/L		94
73) Chlorobenzene	9.265	112	196980	10.686	ug/L		87
74) Ethylbenzene	9.304	91	325677	10.499	ug/L		93
76) p/m Xylene	9.490	106	259882	21.408	ug/L		83
77) o Xylene	10.039	106	247968	20.975	ug/L		83
78) Styrene	10.107	104	411409	21.171	ug/L	#	85
80) Bromoform	10.137	173	35849	9.132	ug/L		98
82) Isopropylbenzene	10.431	105	335368	10.506	ug/L		95
87) 1,1,2,2-Tetrachloroethane	11.038	83	52043	9.977	ug/L		98
100) 1,3-Dichlorobenzene	11.929	146	170890	10.940	ug/L		97
101) 1,4-Dichlorobenzene	12.018	146	170785	10.756	ug/L		95
104) 1,2-Dichlorobenzene	12.449	146	153020	10.611	ug/L		96
106) 1,2-Dibromo-3-chloropr...	13.242	155	8392	9.400	ug/L		96
109) 1,2,4-Trichlorobenzene	13.869	180	92723	9.414	ug/L		98
111) 1,2,3-Trichlorobenzene	14.329	180	84561	9.460	ug/L		98

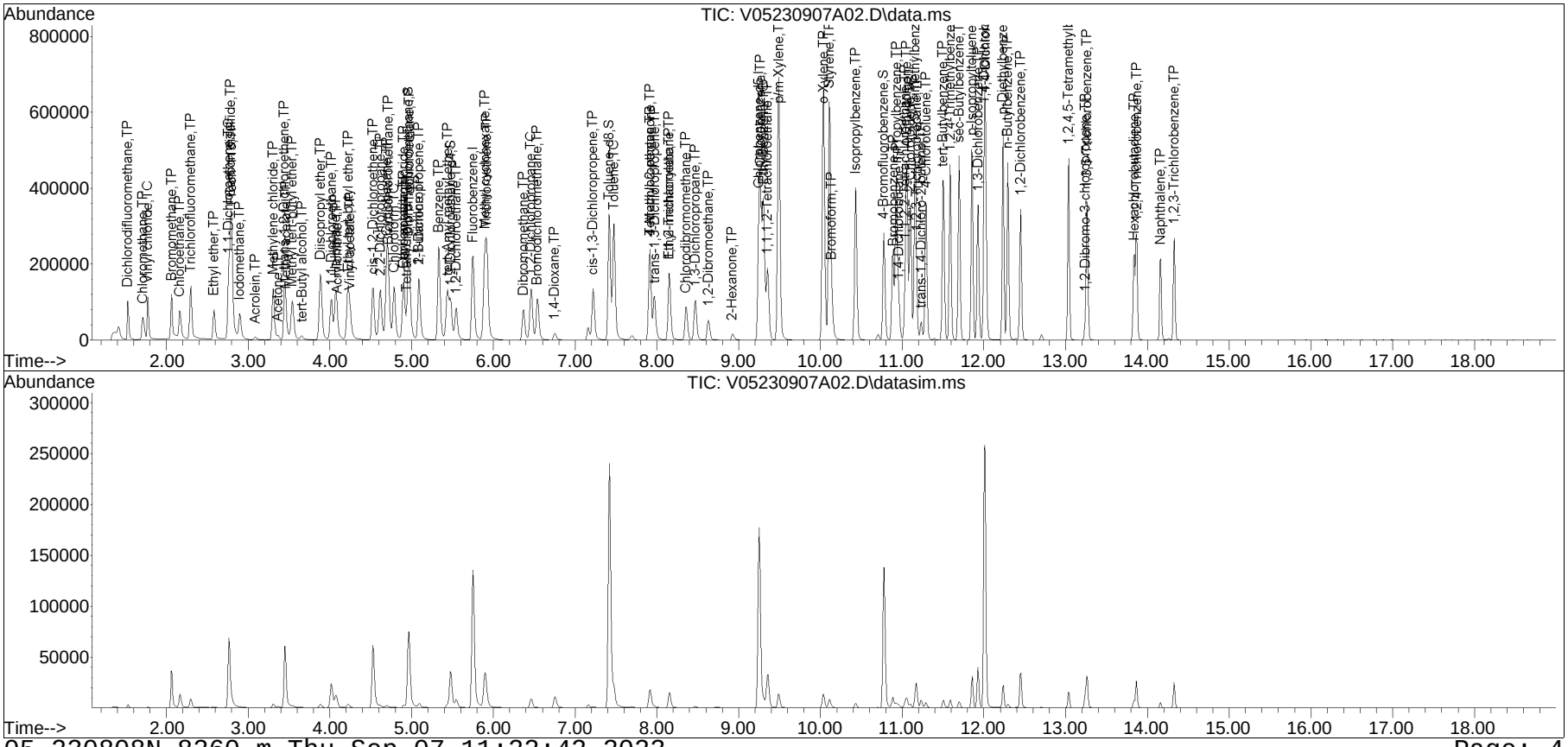
(#) = qualifier out of range (m) = manual integration (+) = signals summed

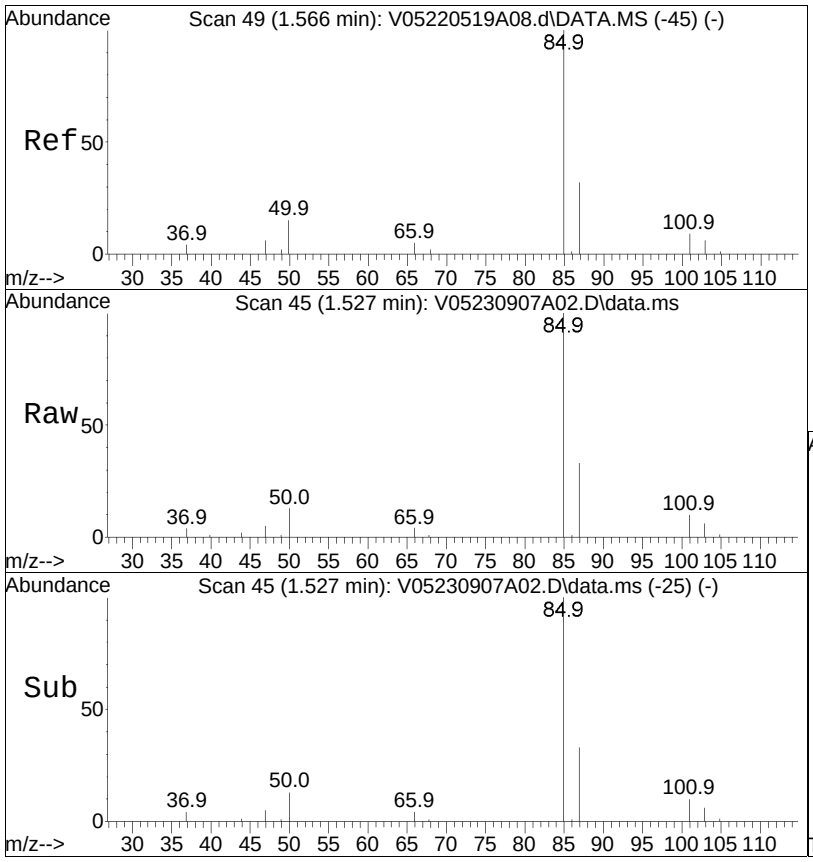
Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A02.D
Acq On : 7 Sep 2023 7:53 am
Operator : VOA105:PID
Sample : WG1824710-4,31,10,10 (Sig #1); 8260 CCAL (Sig #2)
Misc : WG1824710,ICAL20245 (Sig #1); WG,ICAL20245 (Sig #2)
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 07 08:27:18 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•

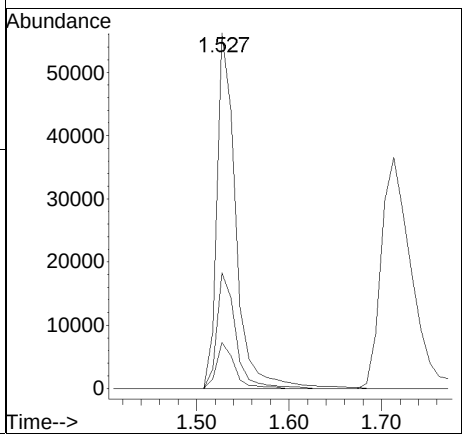


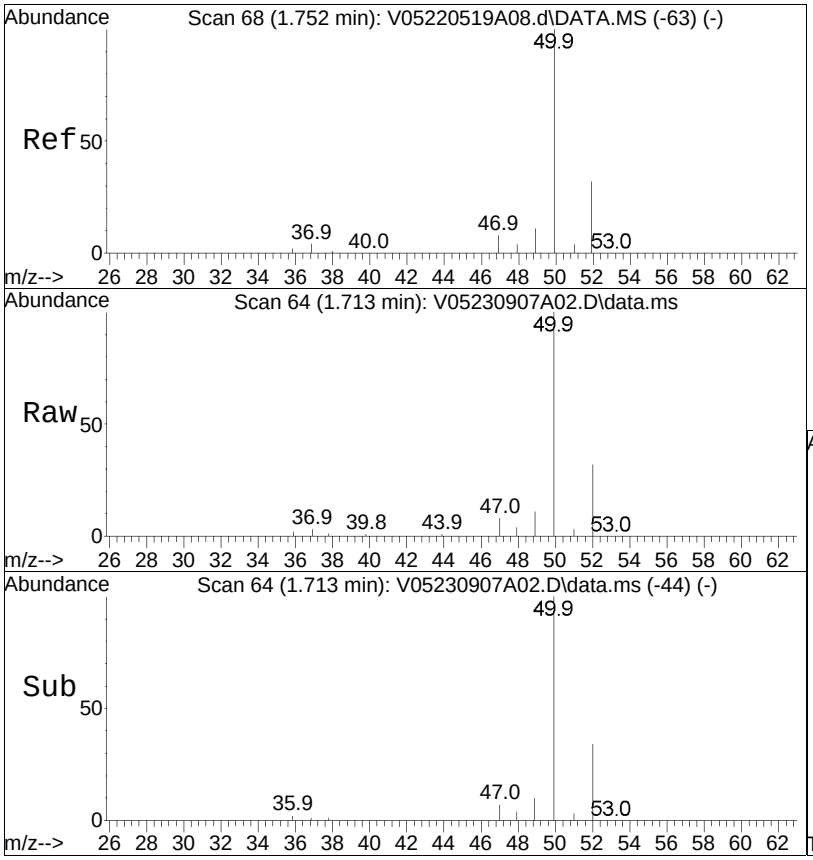


#2
Dichlorodifluoromethane
Concen: 9.67 ug/L
RT: 1.527 min Scan# 45
Delta R.T. -0.001 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 85 Resp: 79988

Ion	Ratio	Lower	Upper
85	100		
87	32.2	20.9	43.5
50	12.2	6.8	14.0

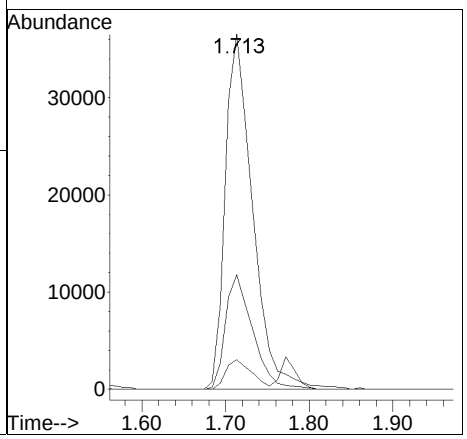


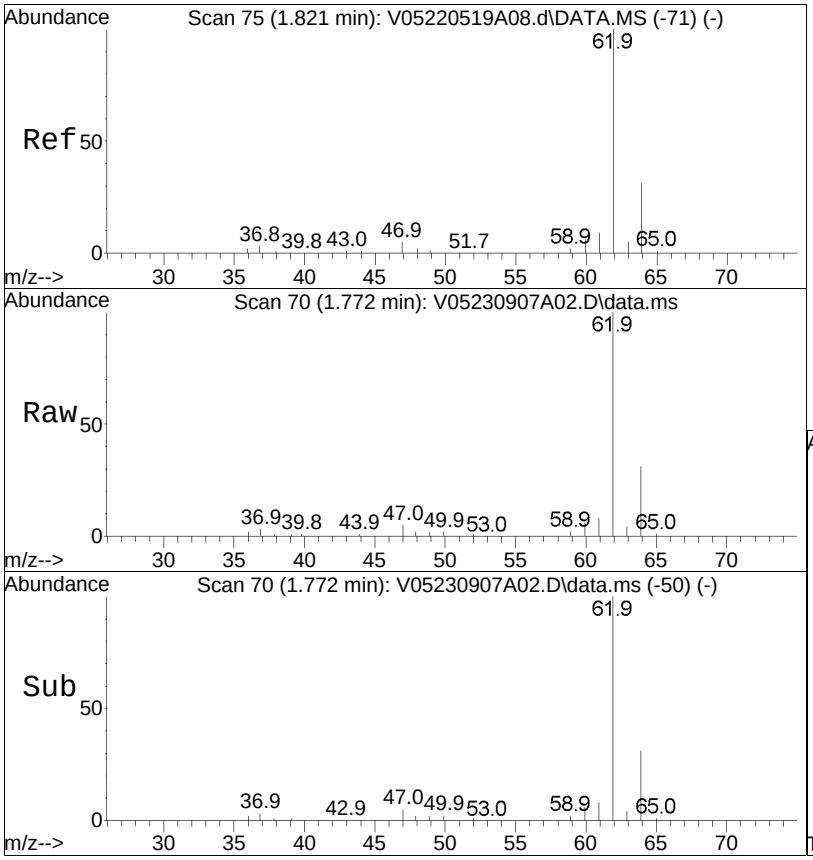


#3
Chloromethane
Concen: 10.52 ug/L
RT: 1.713 min Scan# 64
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 50 Resp: 83374

Ion	Ratio	Lower	Upper
50	100		
52	32.1	12.6	52.6
47	8.0	0.0	30.1

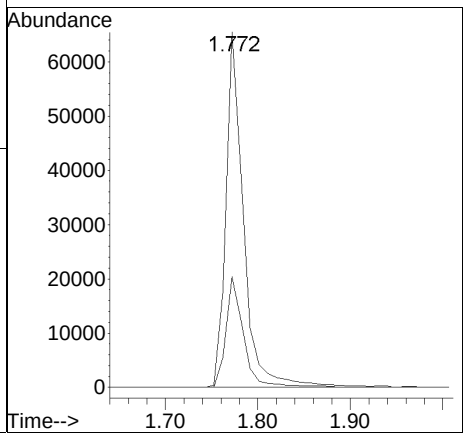


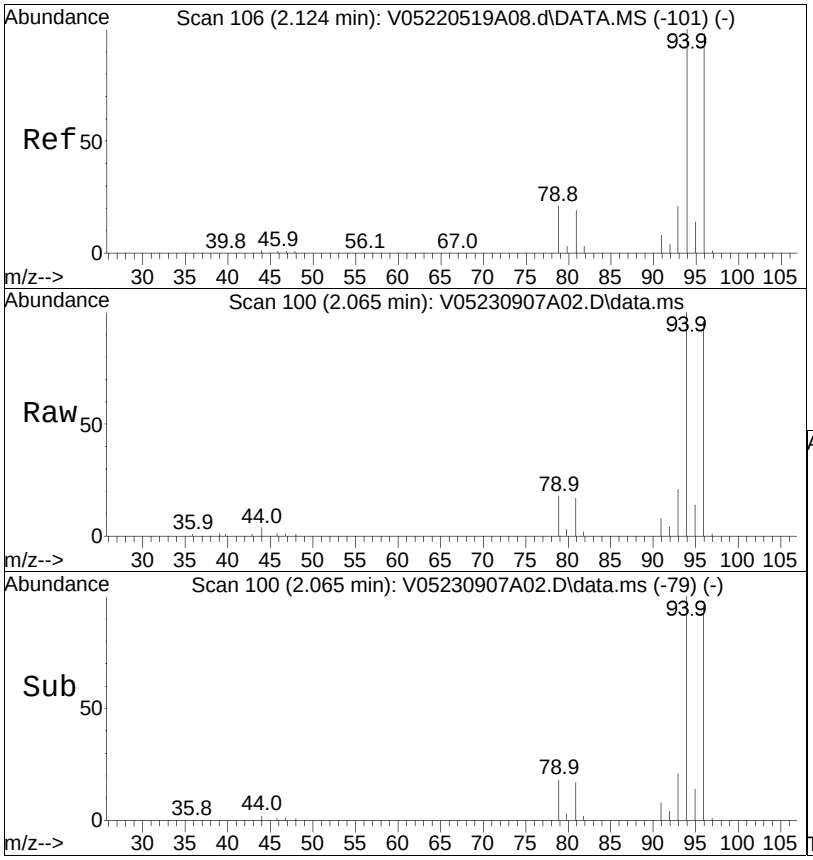


#4
Vinyl chloride
Concen: 10.51 ug/L
RT: 1.772 min Scan# 70
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 62 Resp: 87333

Ion	Ratio	Lower	Upper
62	100		
64	31.0	13.5	53.5

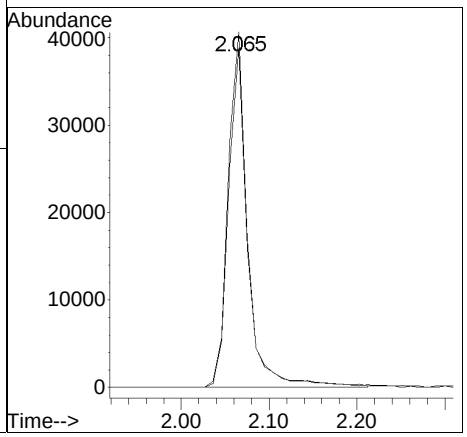


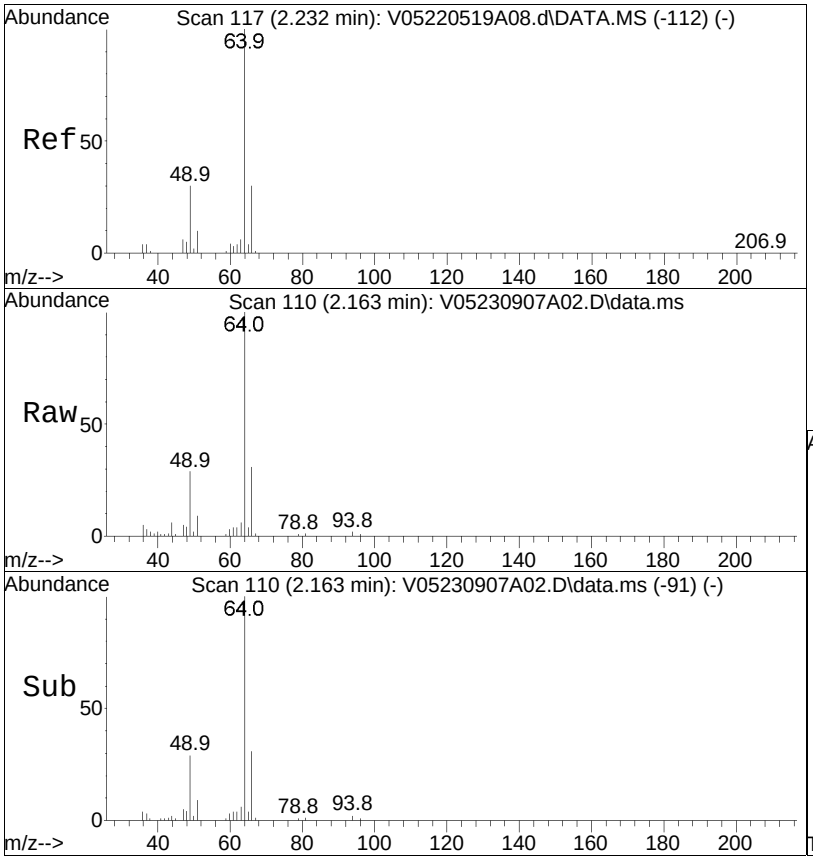


#5
Bromomethane
Concen: 9.83 ug/L
RT: 2.065 min Scan# 100
Delta R.T. 0.009 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 94 Resp: 63102

Ion	Ratio	Lower	Upper
94	100		
96	93.9	75.4	115.4

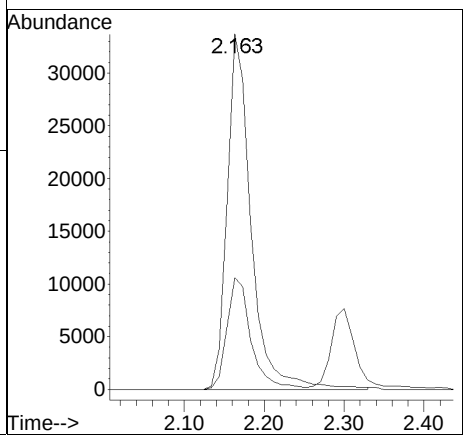


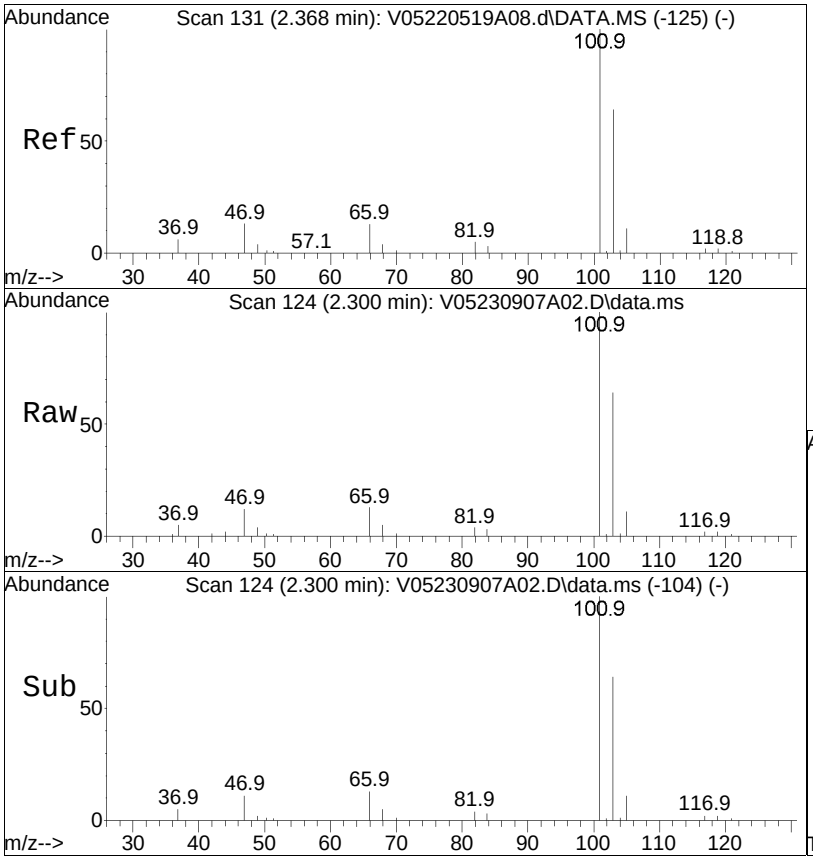


#6
Chloroethane
Concen: 11.85 ug/L
RT: 2.163 min Scan# 110
Delta R.T. -0.010 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 64 Resp: 70231

Ion	Ratio	Lower	Upper
64	100		
66	31.7	13.8	53.8

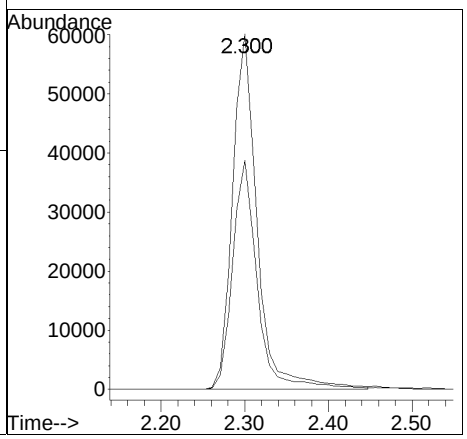


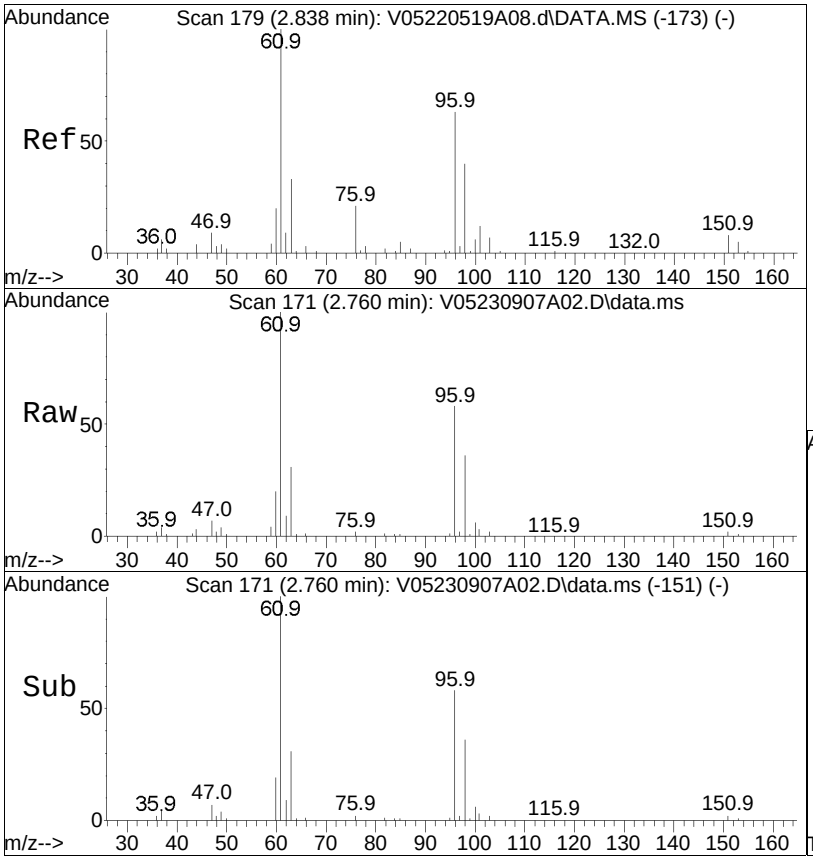


#7
Trichlorofluoromethane
Concen: 10.06 ug/L
RT: 2.300 min Scan# 124
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:101 Resp: 123553

Ion	Ratio	Lower	Upper
101	100		
103	64.7	51.8	77.6

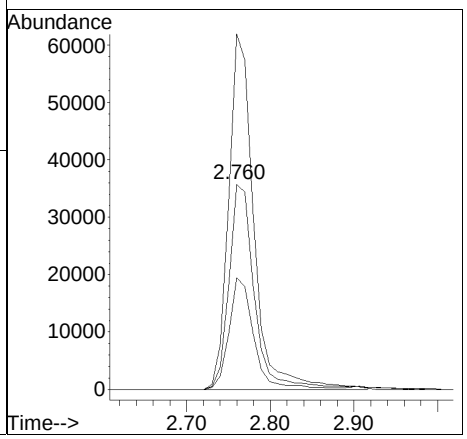


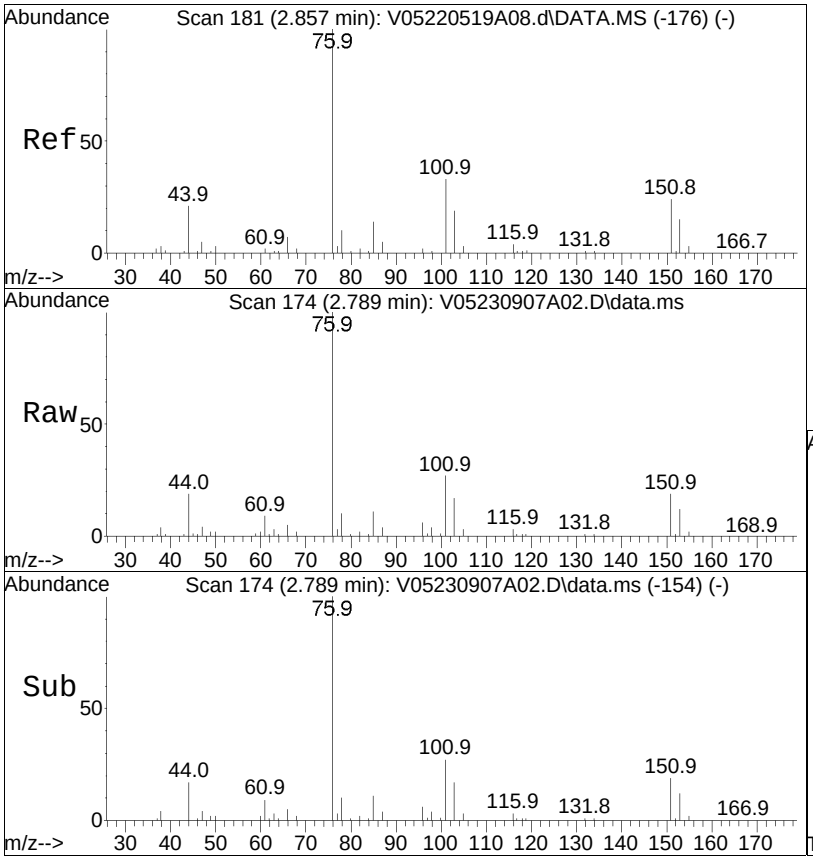


#10
1,1-Dichloroethene
Concen: 10.37 ug/L
RT: 2.760 min Scan# 171
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 96 Resp: 76370

Ion	Ratio	Lower	Upper
96	100		
61	170.4	136.7	205.1
63	52.9	45.0	67.6

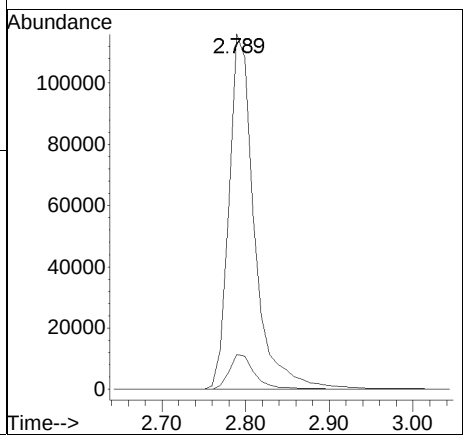


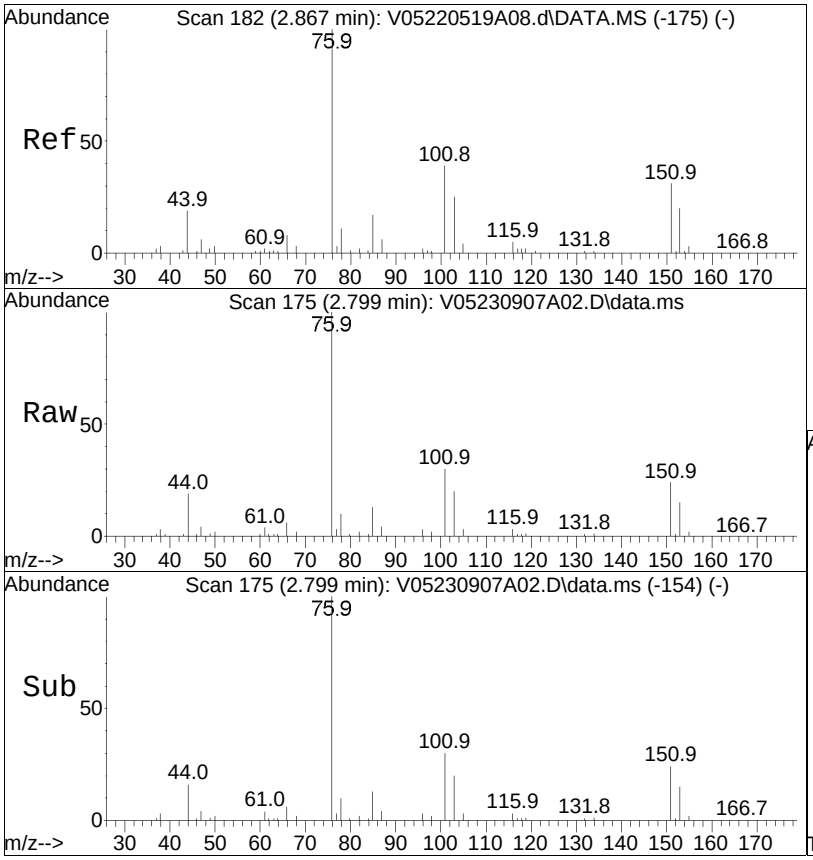


#11
Carbon disulfide
Concen: 10.50 ug/L
RT: 2.789 min Scan# 174
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 76 Resp: 246362

Ion	Ratio	Lower	Upper
76	100		
78	10.1	6.7	13.9

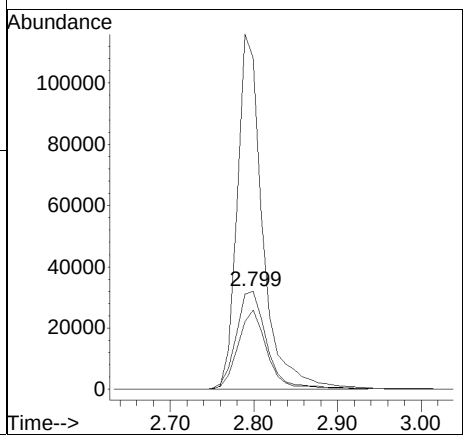


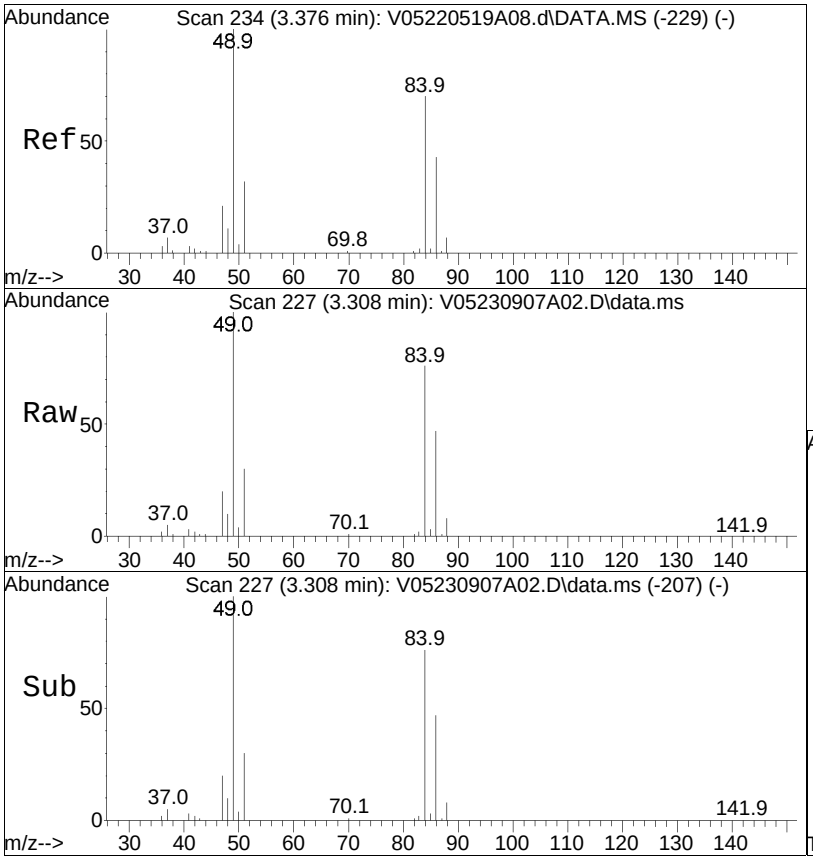


#12
Freon-113
Concen: 10.16 ug/L
RT: 2.799 min Scan# 175
Delta R.T. 0.010 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:101 Resp: 82894

Ion	Ratio	Lower	Upper
101	100		
151	77.4	65.0	97.6
76	297.2	190.0	285.0#

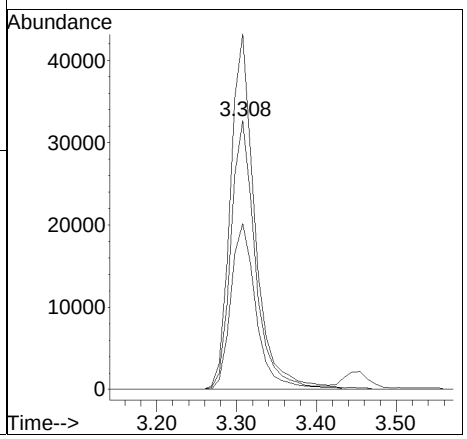


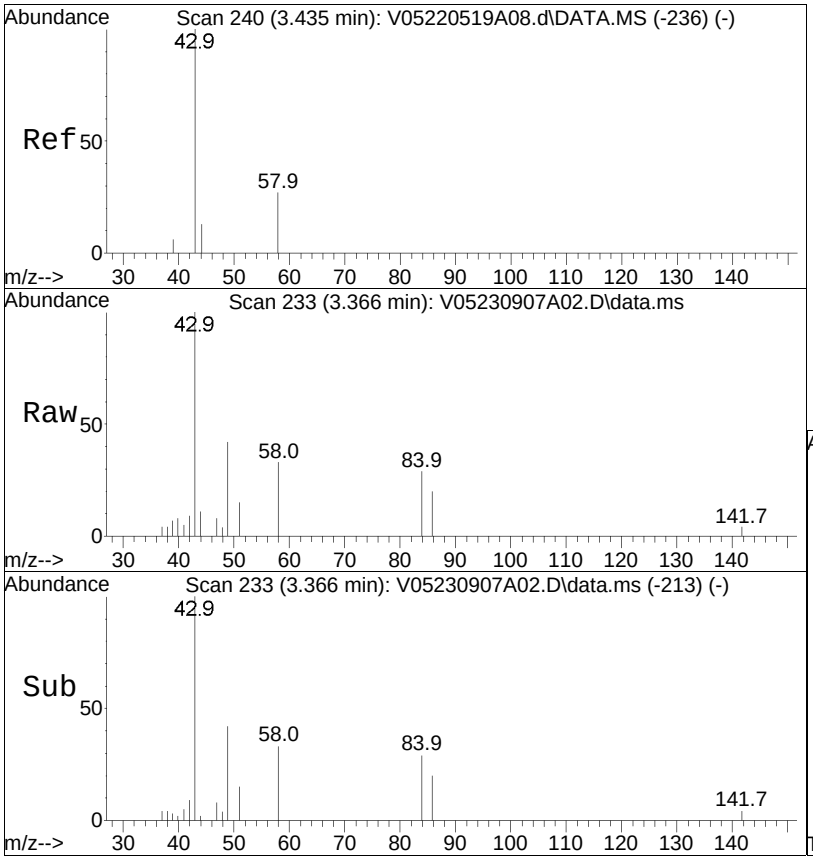


#15
Methylene chloride
Concen: 10.39 ug/L
RT: 3.308 min Scan# 227
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 84 Resp: 70445

Ion	Ratio	Lower	Upper
84	100		
86	63.3	42.1	87.5
49	131.1	69.3	143.9

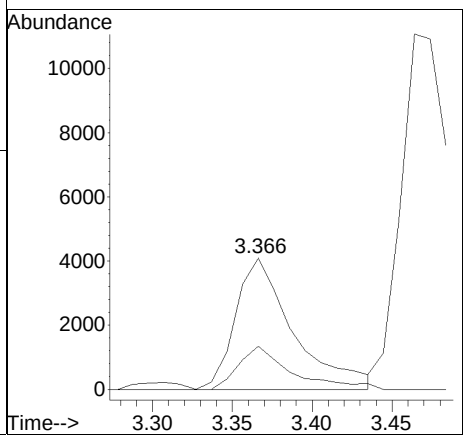


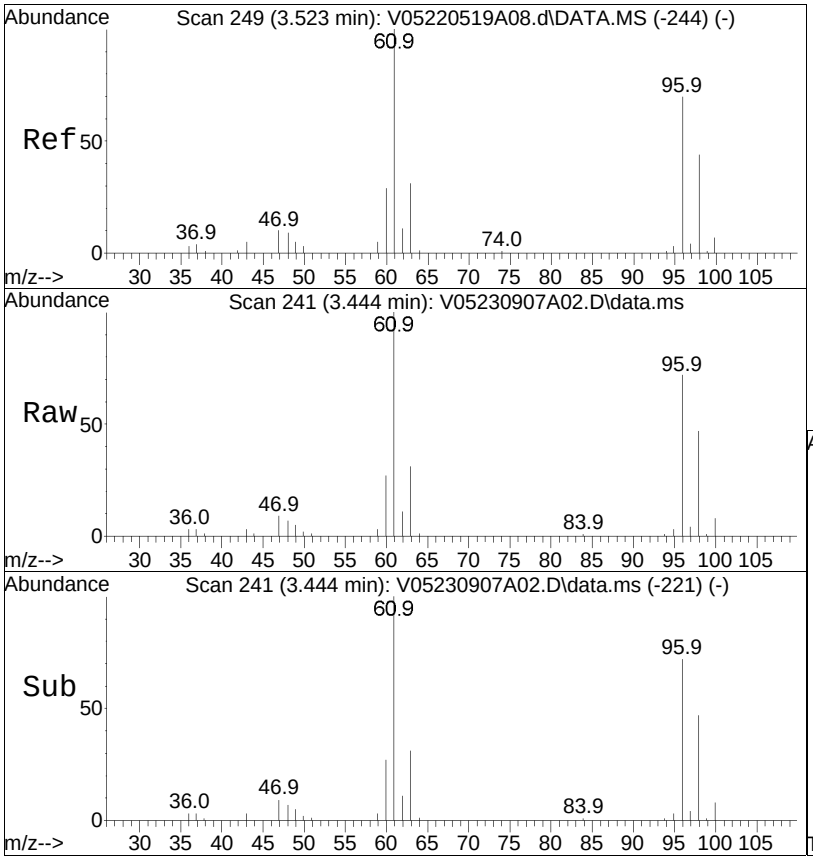


#17
Acetone
Concen: 9.41 ug/L
RT: 3.366 min Scan# 233
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 43 Resp: 10313

Ion	Ratio	Lower	Upper
43	100		
58	30.0	22.0	33.0

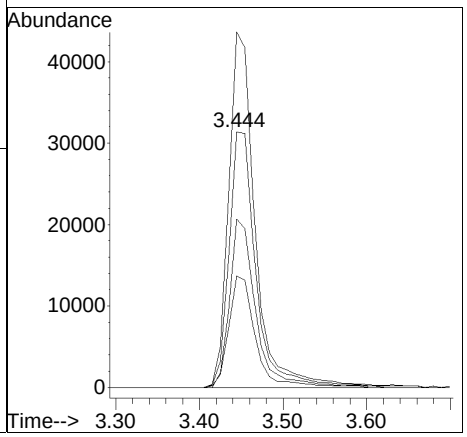


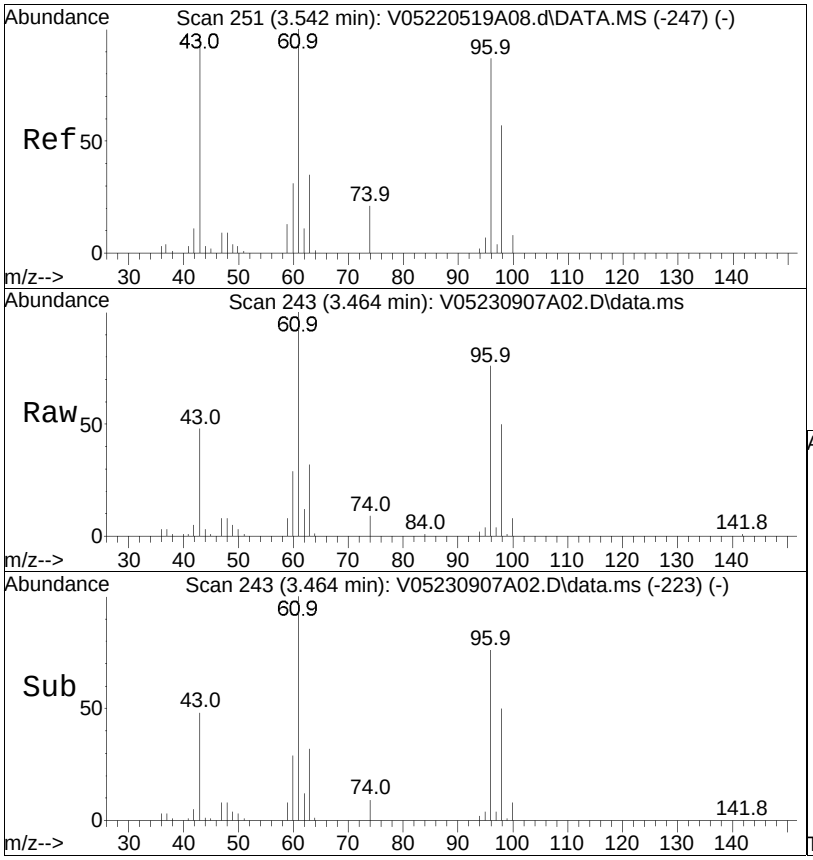


#18
trans-1,2-Dichloroethene
Concen: 10.46 ug/L
RT: 3.444 min Scan# 241
Delta R.T. -0.001 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 96 Resp: 70658

Ion	Ratio	Lower	Upper
96	100		
61	136.3	91.7	190.5
98	63.4	41.1	85.5
63	43.2	29.4	61.0

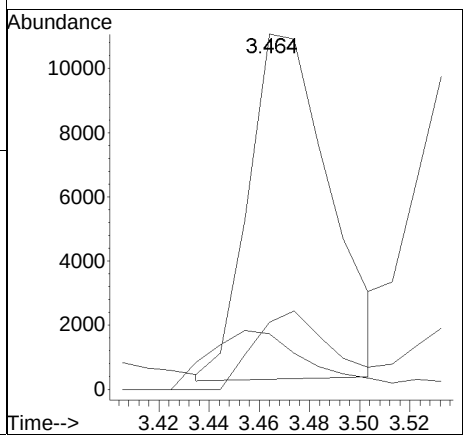


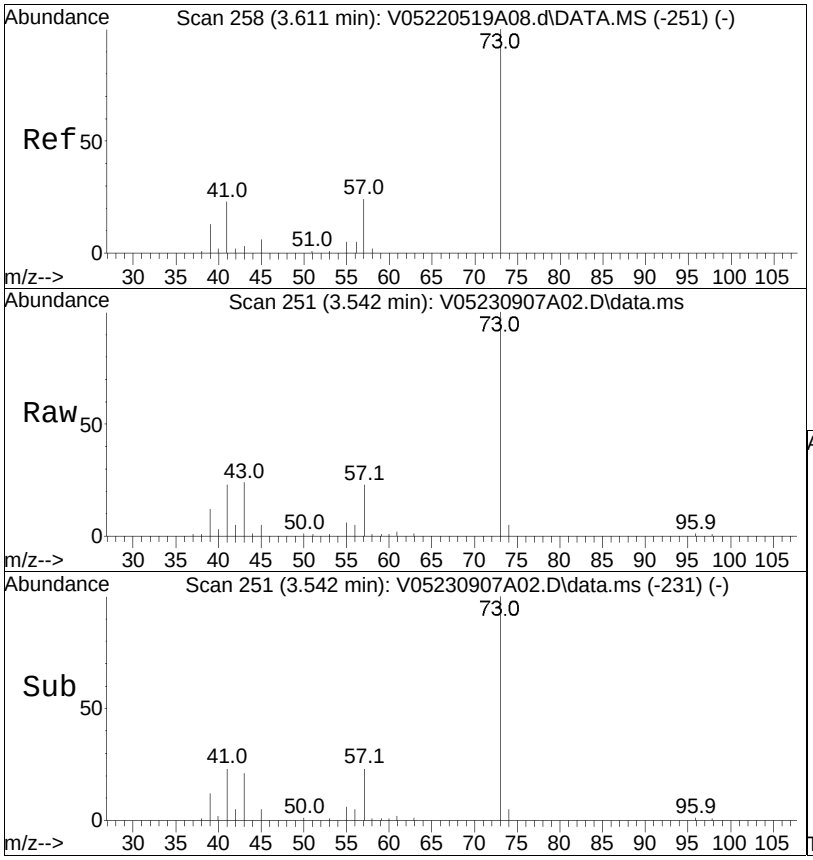


#19
Methyl acetate
Concen: 9.74 ug/L
RT: 3.464 min Scan# 243
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 43 Resp: 24332

Ion	Ratio	Lower	Upper
43	100		
74	21.6	23.1	34.7#
59	20.9	23.9	35.9#

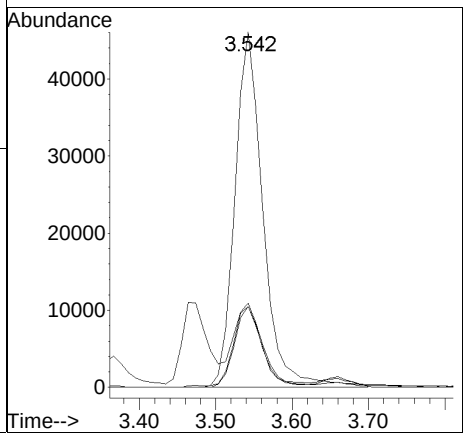


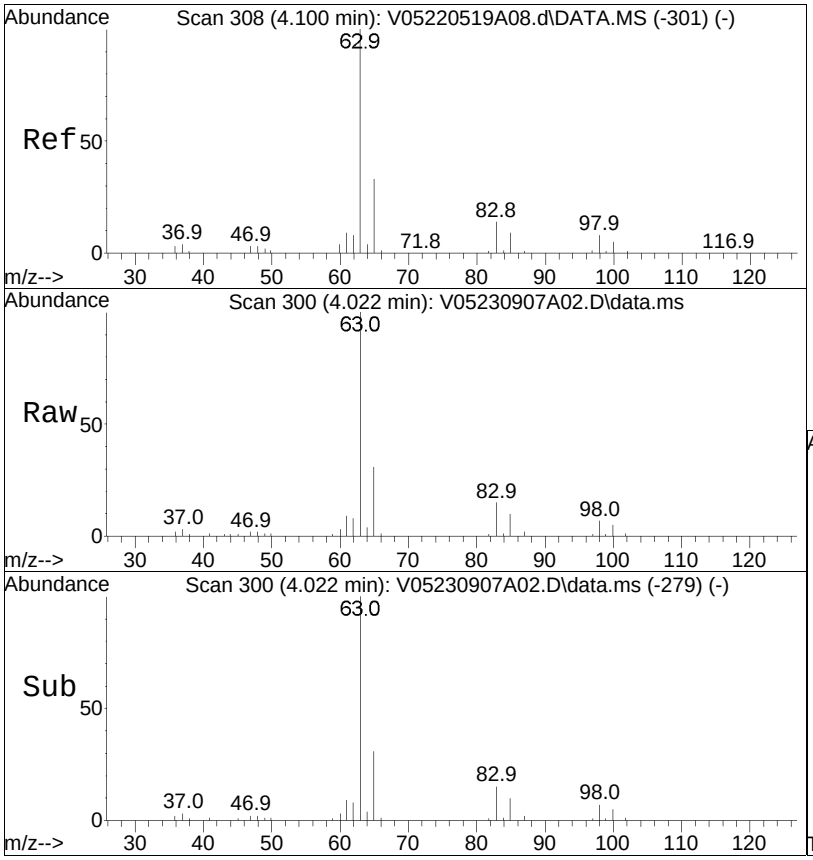


#20
Methyl tert-butyl ether
Concen: 8.30 ug/L
RT: 3.542 min Scan# 251
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 73 Resp: 118305

Ion	Ratio	Lower	Upper
73	100		
57	22.1	11.8	24.6
43	23.2	13.5	27.9
41	23.8	13.3	27.5

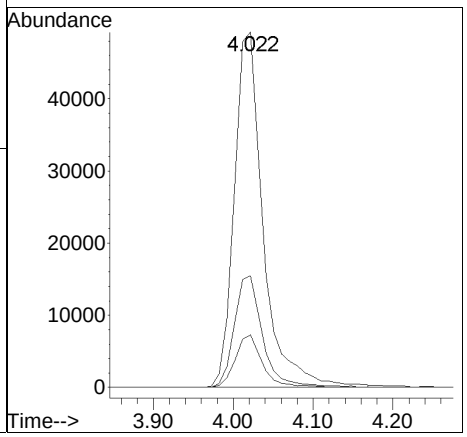


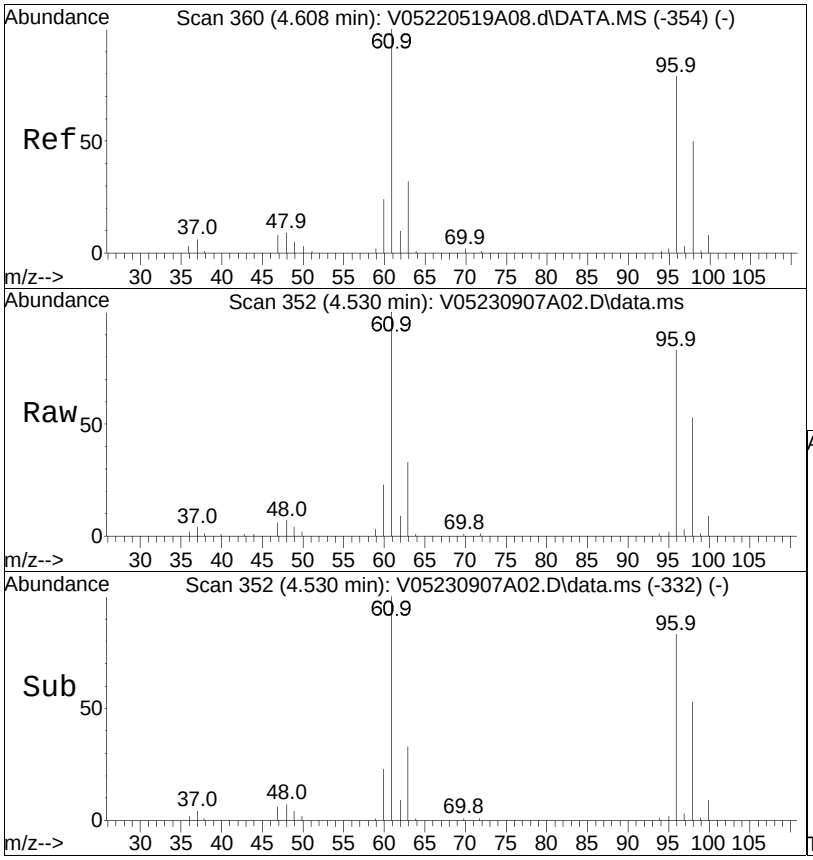


#23
1,1-Dichloroethane
Concen: 10.52 ug/L
RT: 4.022 min Scan# 300
Delta R.T. 0.010 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 63 Resp: 124090

Ion	Ratio	Lower	Upper
63	100		
65	30.6	11.9	51.9
83	13.9	0.0	34.2

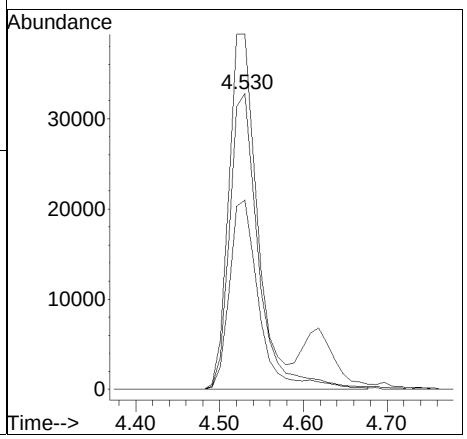


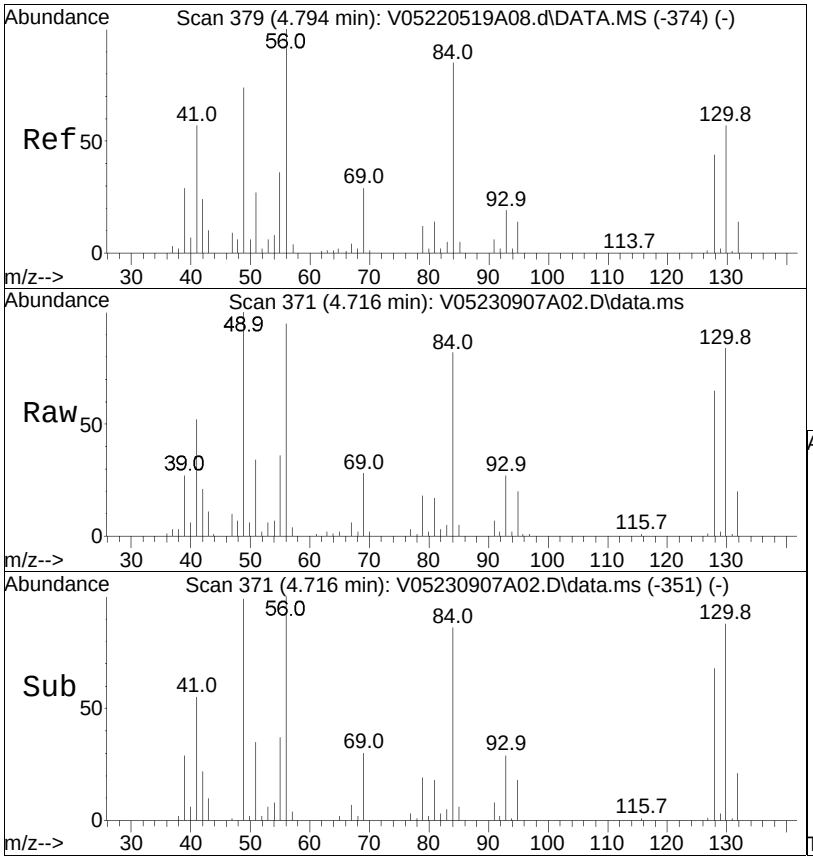


#28
cis-1,2-Dichloroethene
Concen: 10.63 ug/L
RT: 4.530 min Scan# 352
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 96 Resp: 79353

Ion	Ratio	Lower	Upper
96	100		
61	116.4	100.5	150.7
98	65.6	49.8	74.8

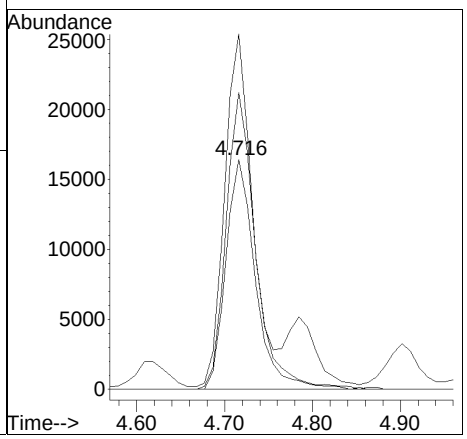


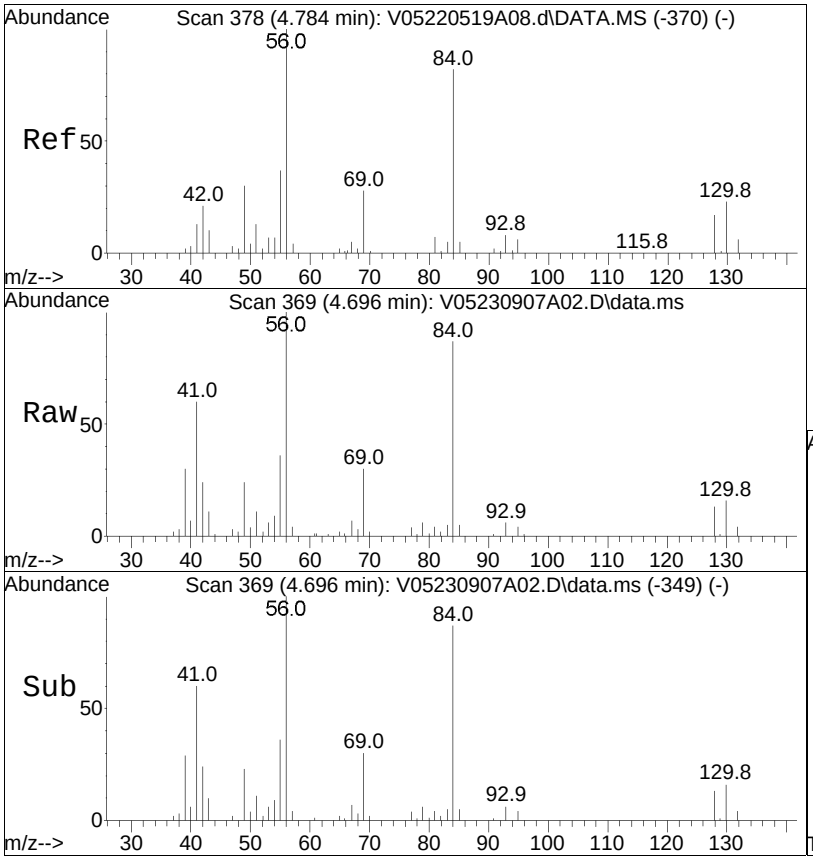


#30
Bromochloromethane
Concen: 11.13 ug/L
RT: 4.716 min Scan# 371
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:128 Resp: 38709

Ion	Ratio	Lower	Upper
128	100		
49	141.3	109.0	163.4
130	128.2	105.6	158.4

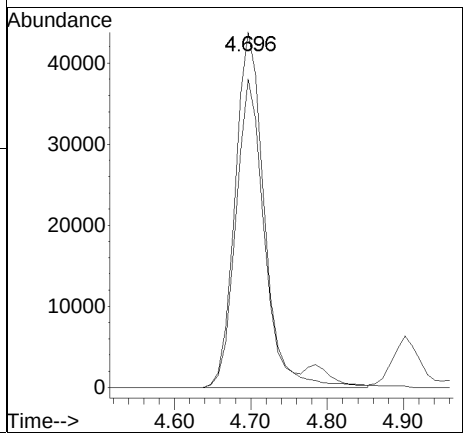


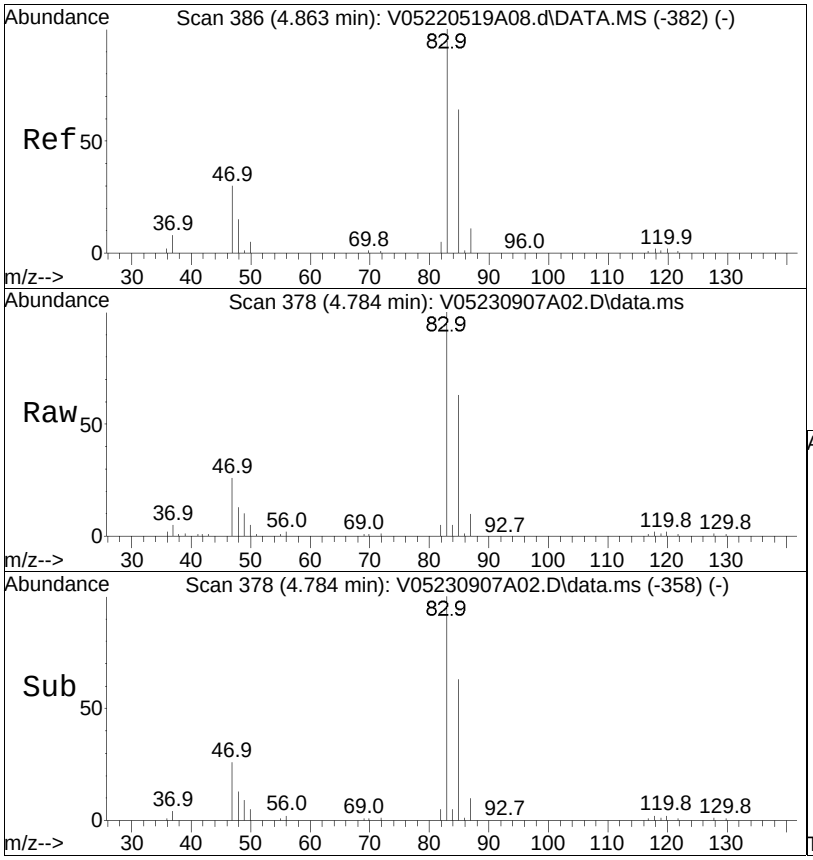


#31
Cyclohexane
Concen: 10.03 ug/L
RT: 4.696 min Scan# 369
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 56 Resp: 116460

Ion	Ratio	Lower	Upper
56	100		
84	83.2	64.4	133.8

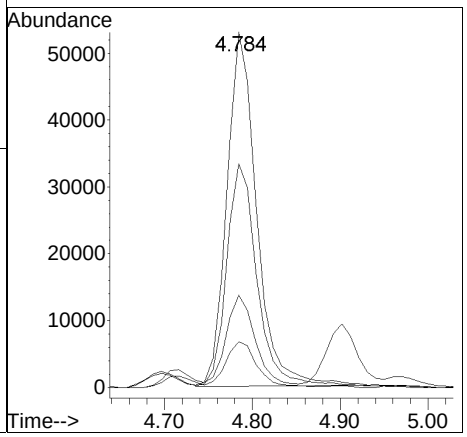


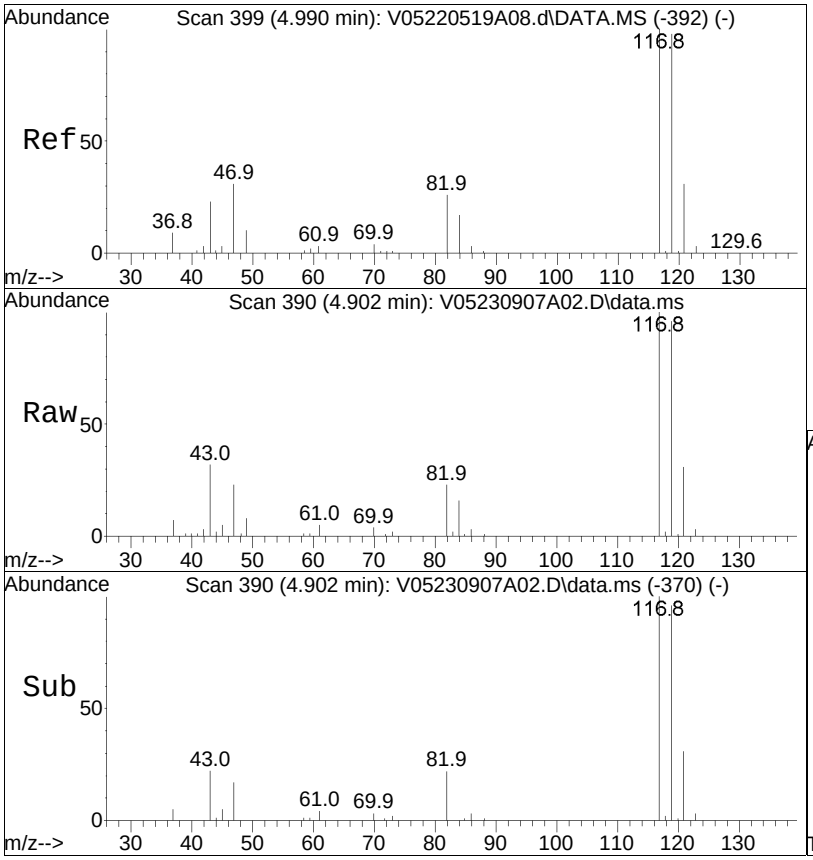


#32
Chloroform
Concen: 10.62 ug/L
RT: 4.784 min Scan# 378
Delta R.T. -0.001 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 83 Resp: 125024

Ion	Ratio	Lower	Upper
83	100		
85	64.3	42.8	89.0
47	23.7	13.7	28.4
48	13.7	6.9	14.3

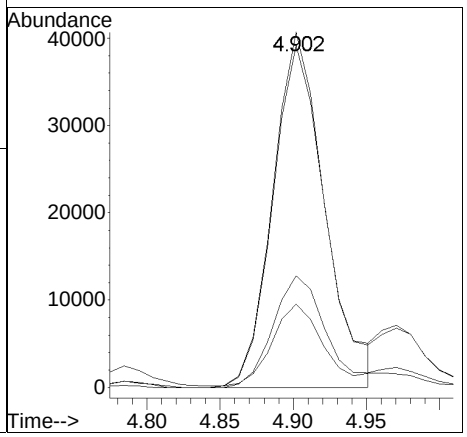


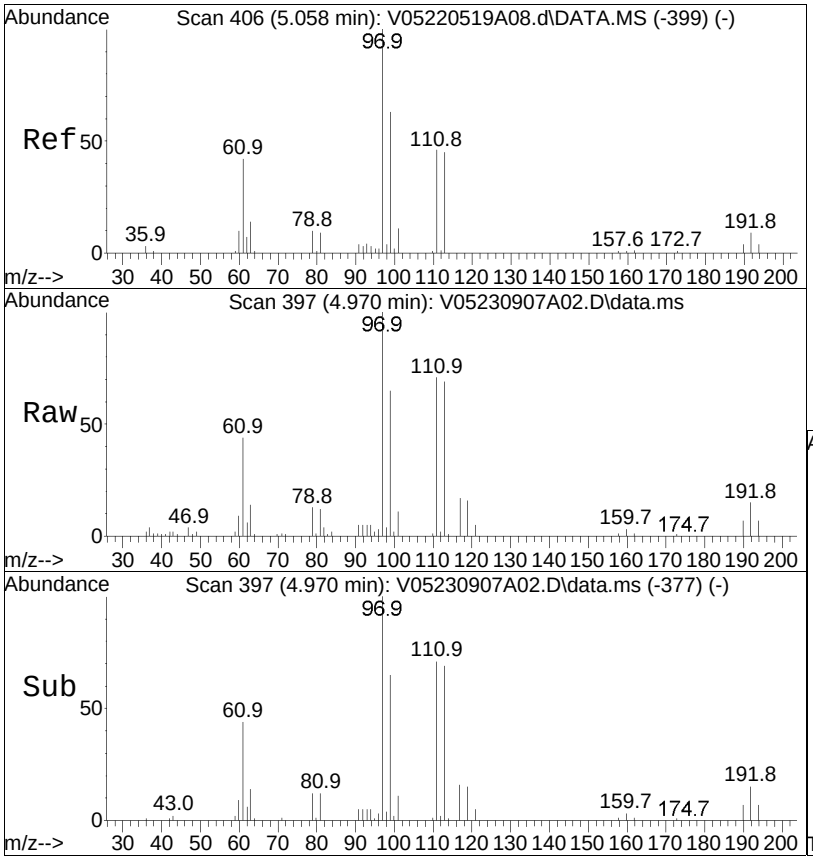


#34
Carbon tetrachloride
Concen: 10.07 ug/L
RT: 4.902 min Scan# 390
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:117 Resp: 100498

Ion	Ratio	Lower	Upper
117	100		
119	97.2	63.6	132.2
121	31.9	19.8	41.0
82	22.9	15.9	32.9

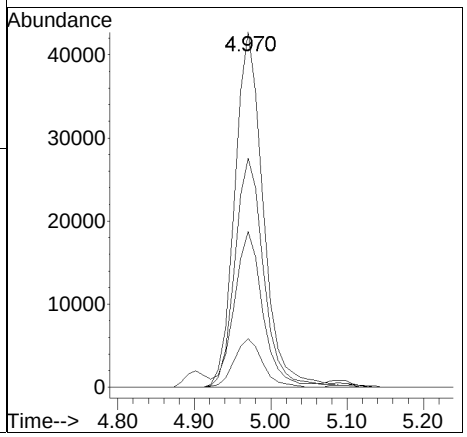


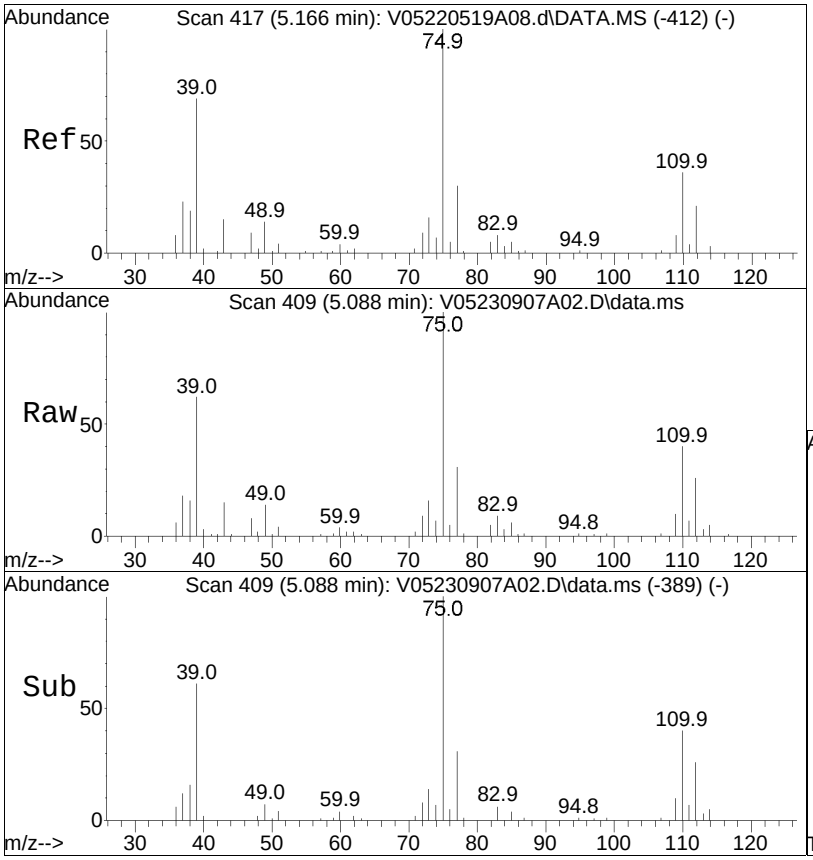


#37
1,1,1-Trichloroethane
Concen: 10.65 ug/L
RT: 4.970 min Scan# 397
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 97 Resp: 111983

Ion	Ratio	Lower	Upper
97	100		
99	65.2	41.7	86.5
61	43.1	26.1	54.3
63	13.7	8.5	17.6

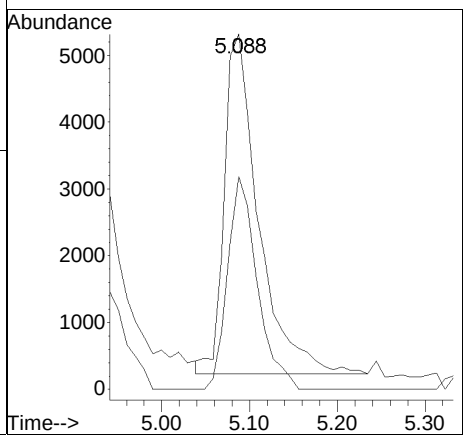


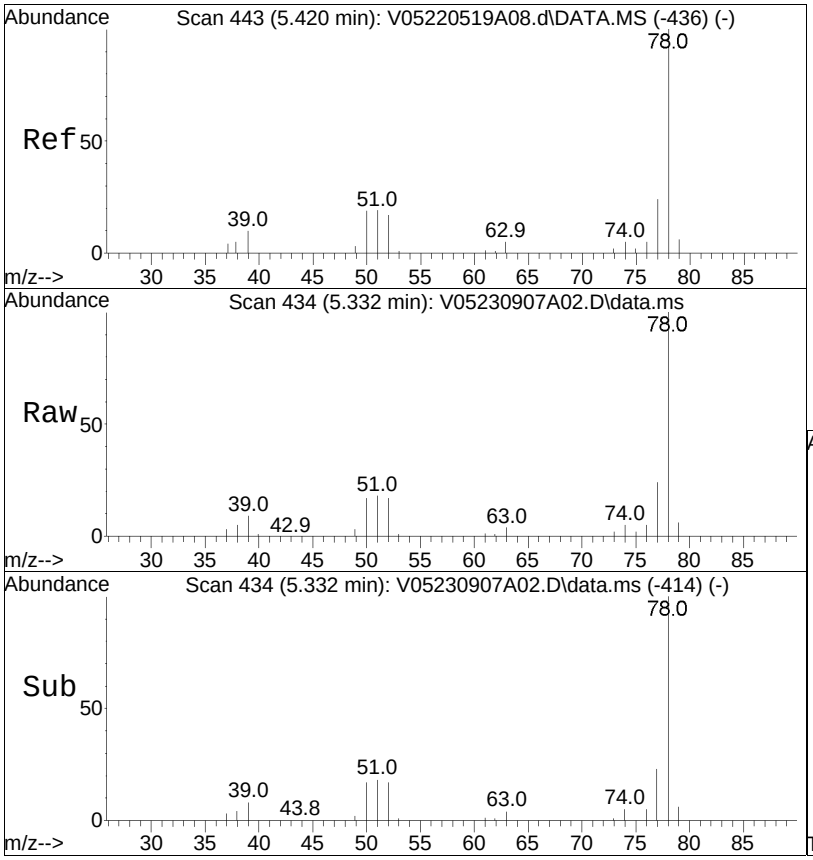


#39
2-Butanone
Concen: 8.70 ug/L
RT: 5.088 min Scan# 409
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 43 Resp: 13776

Ion	Ratio	Lower	Upper
43	100		
72	54.3	55.6	83.4#

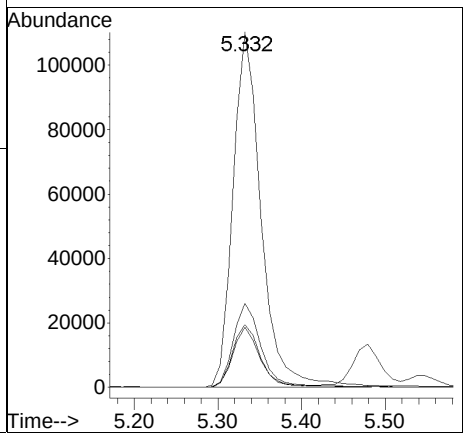


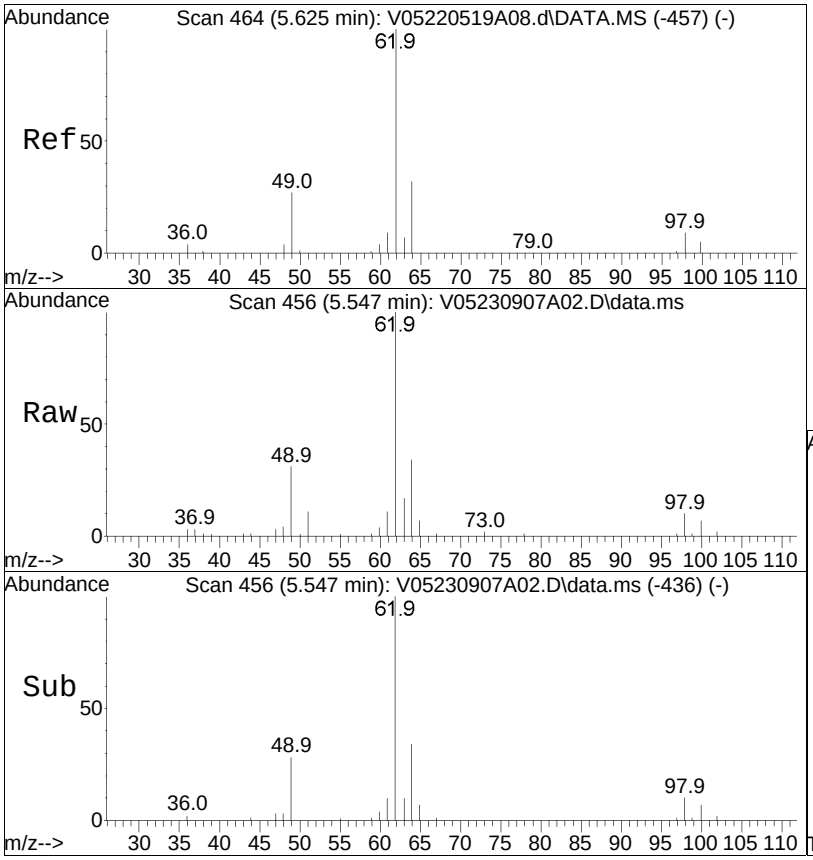


#41
Benzene
Concen: 10.50 ug/L
RT: 5.332 min Scan# 434
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 78 Resp: 258091

Ion	Ratio	Lower	Upper
78	100		
77	23.7	15.2	31.6
51	17.4	10.5	21.7
52	16.9	9.5	19.7

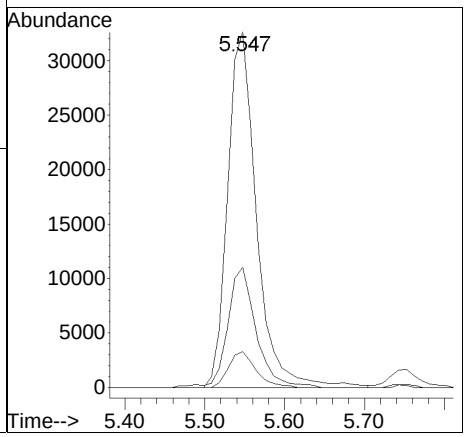


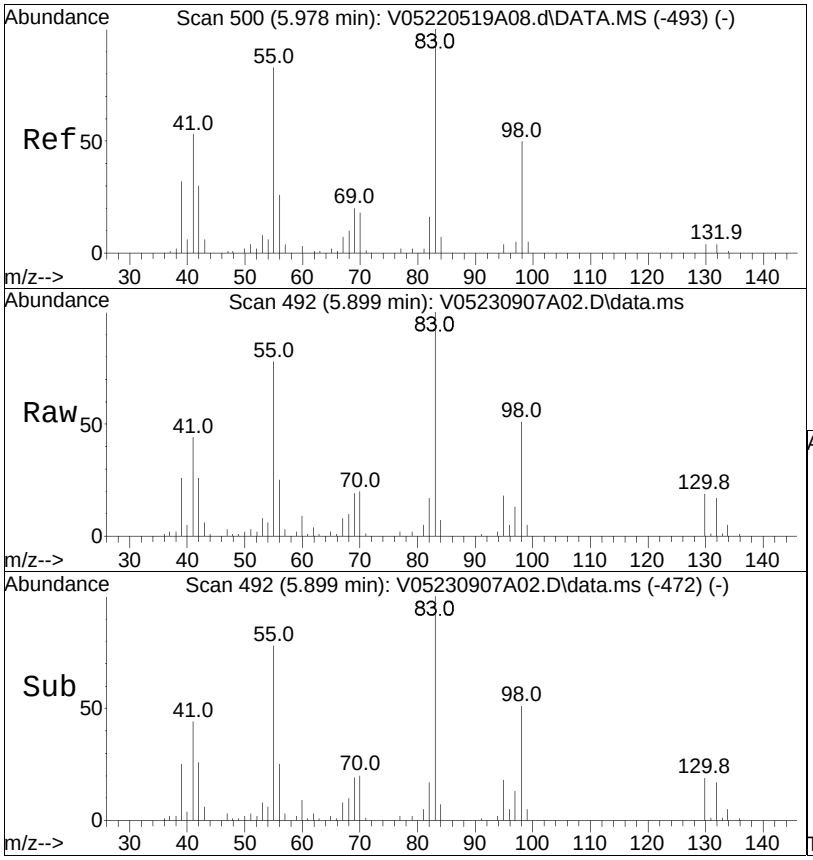


#44
1,2-Dichloroethane
Concen: 10.13 ug/L
RT: 5.547 min Scan# 456
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 62 Resp: 82135

Ion	Ratio	Lower	Upper
62	100		
64	33.1	13.2	53.2
98	9.5	0.0	27.8

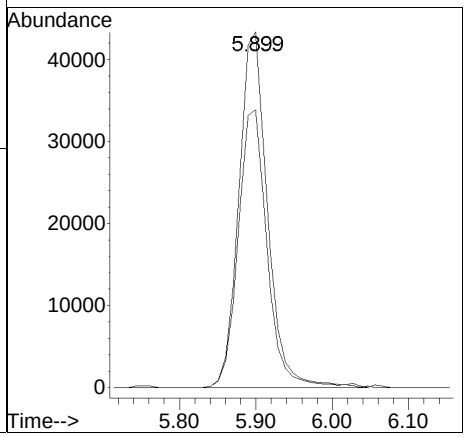


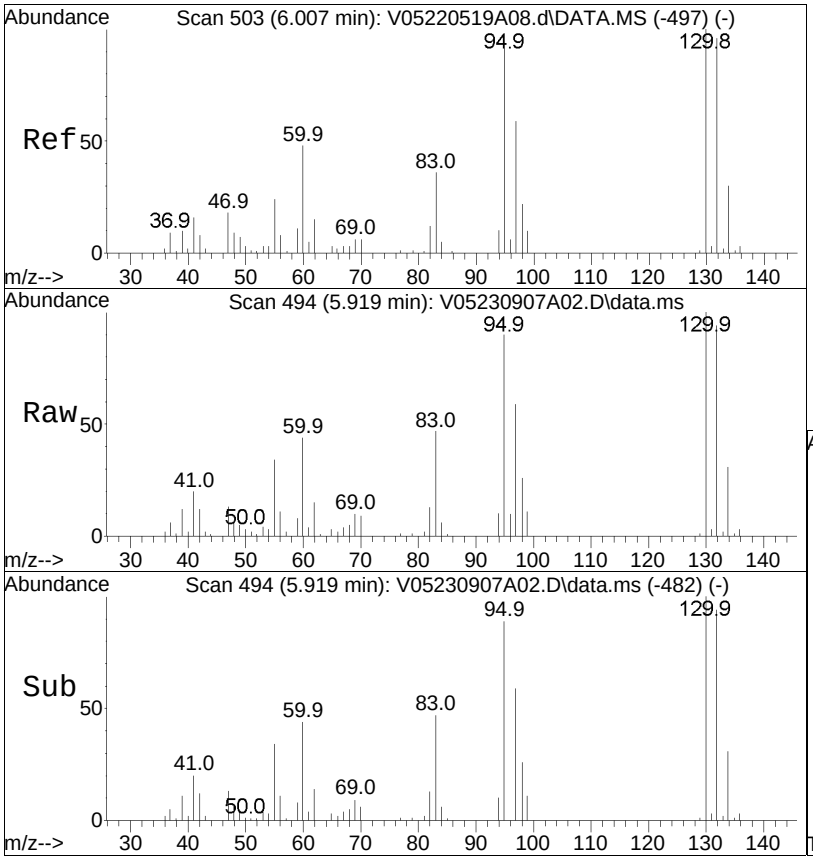


#47
Methyl cyclohexane
Concen: 9.63 ug/L
RT: 5.899 min Scan# 492
Delta R.T. -0.001 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 83 Resp: 113064

Ion	Ratio	Lower	Upper
83	100		
55	78.9	57.3	85.9

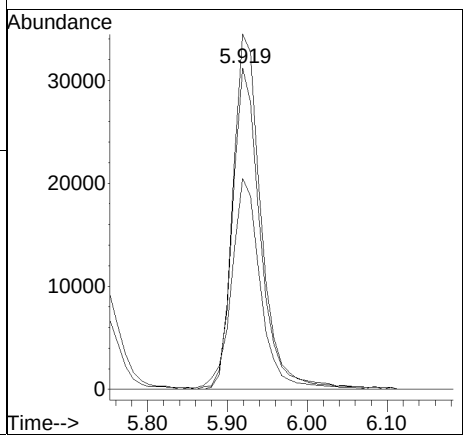


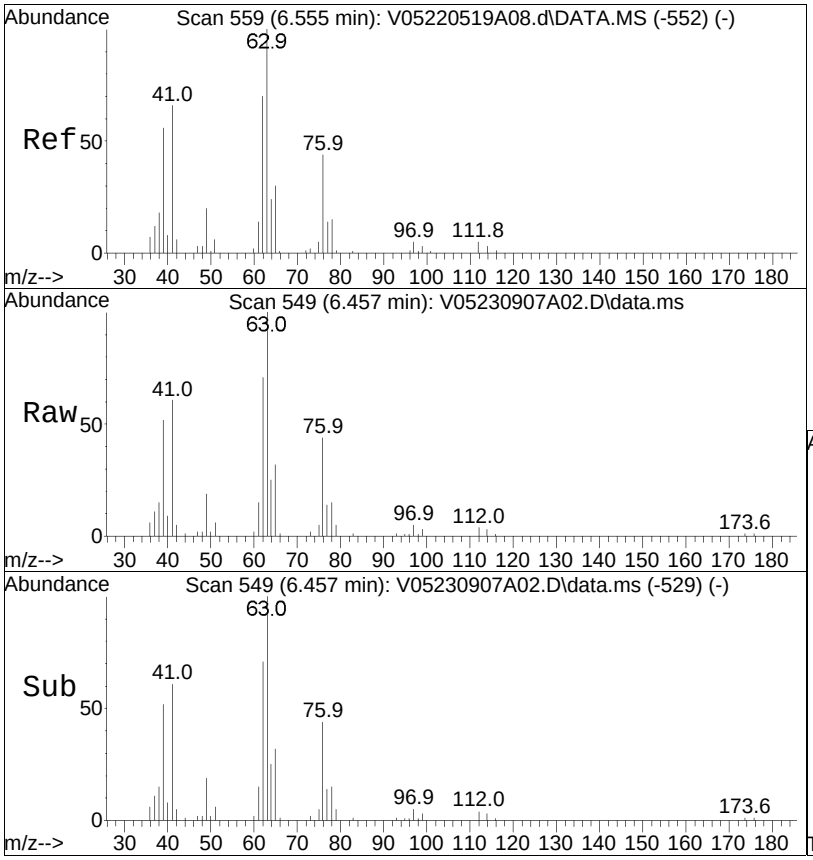


#48
Trichloroethene
Concen: 9.66 ug/L
RT: 5.919 min Scan# 494
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 95 Resp: 76065

Ion	Ratio	Lower	Upper
95	100		
97	68.4	56.1	84.1
130	111.8	77.7	116.5

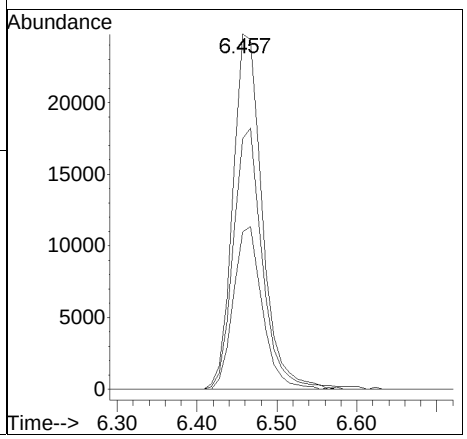


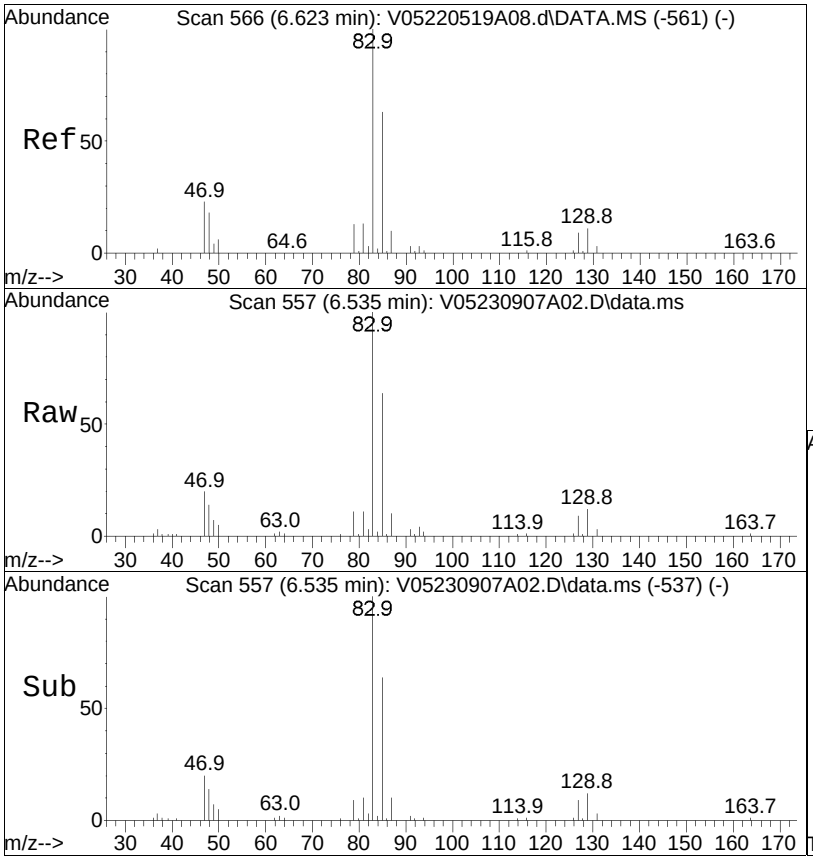


#51
1,2-Dichloropropane
Concen: 10.25 ug/L
RT: 6.457 min Scan# 549
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 63 Resp: 63826

Ion	Ratio	Lower	Upper
63	100		
62	72.3	57.0	85.4
76	45.0	48.4	72.6#

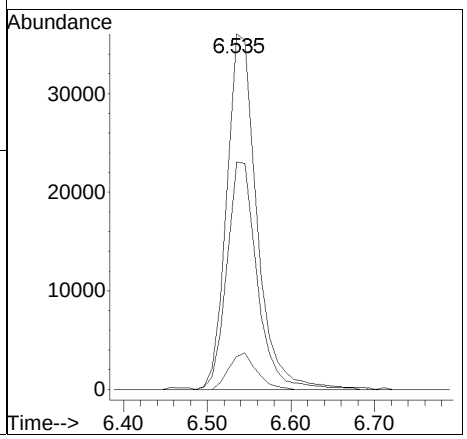


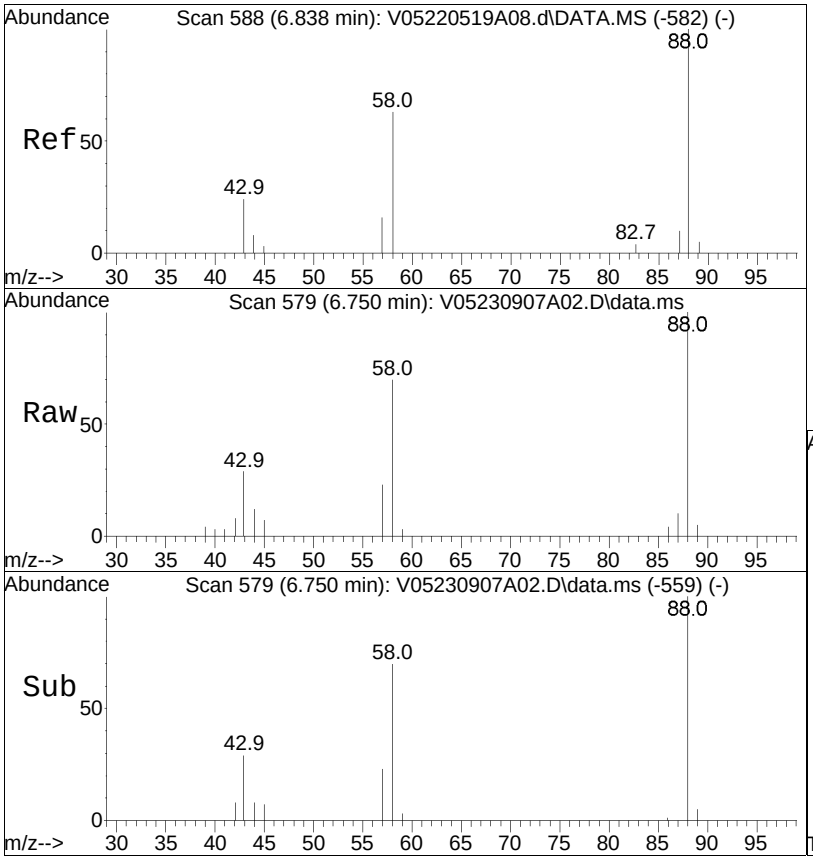


#54
Bromodichloromethane
Concen: 10.53 ug/L
RT: 6.535 min Scan# 557
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 83 Resp: 90629

Ion	Ratio	Lower	Upper
83	100		
85	64.3	51.0	76.6
127	9.4	6.7	10.1

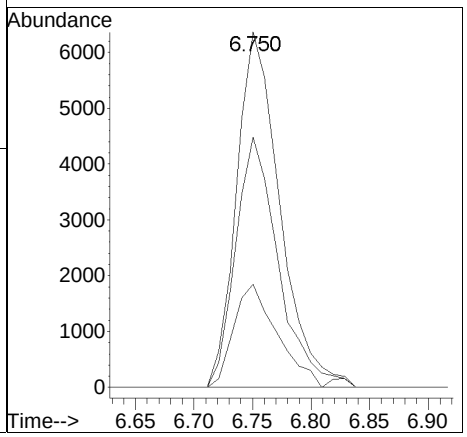


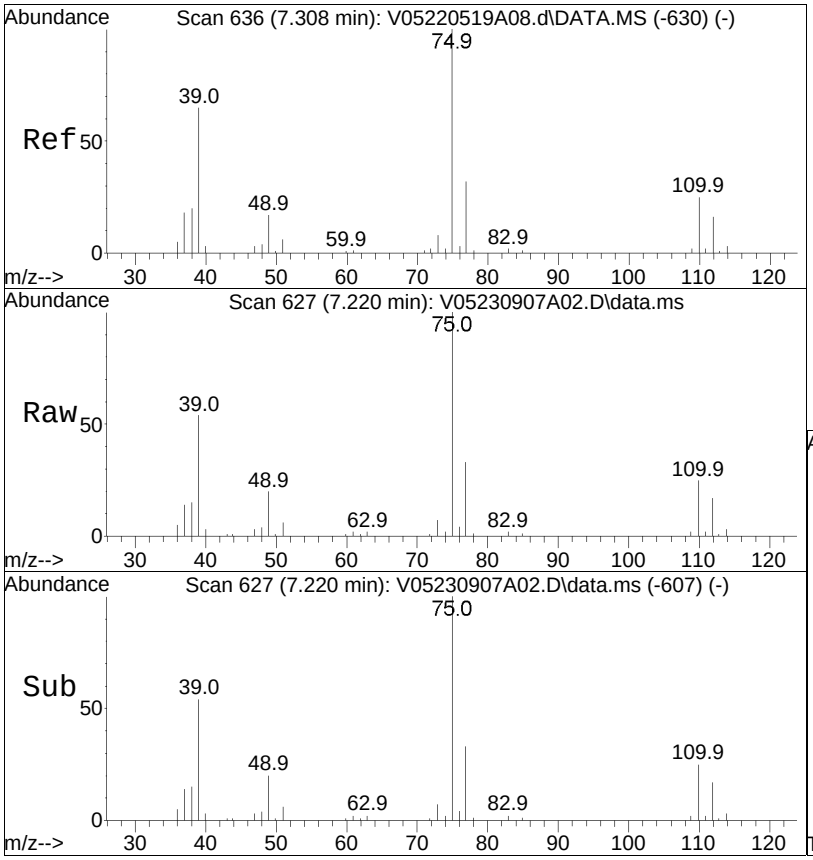


#57
1,4-Dioxane
Concen: 542.35 ug/L
RT: 6.750 min Scan# 579
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 88 Resp: 16438

Ion	Ratio	Lower	Upper
88	100		
58	69.5	50.6	75.8
43	30.2	20.5	30.7

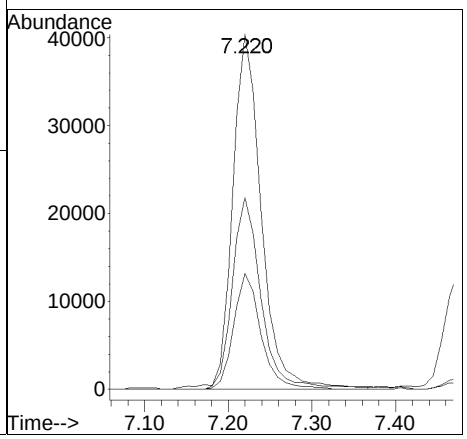


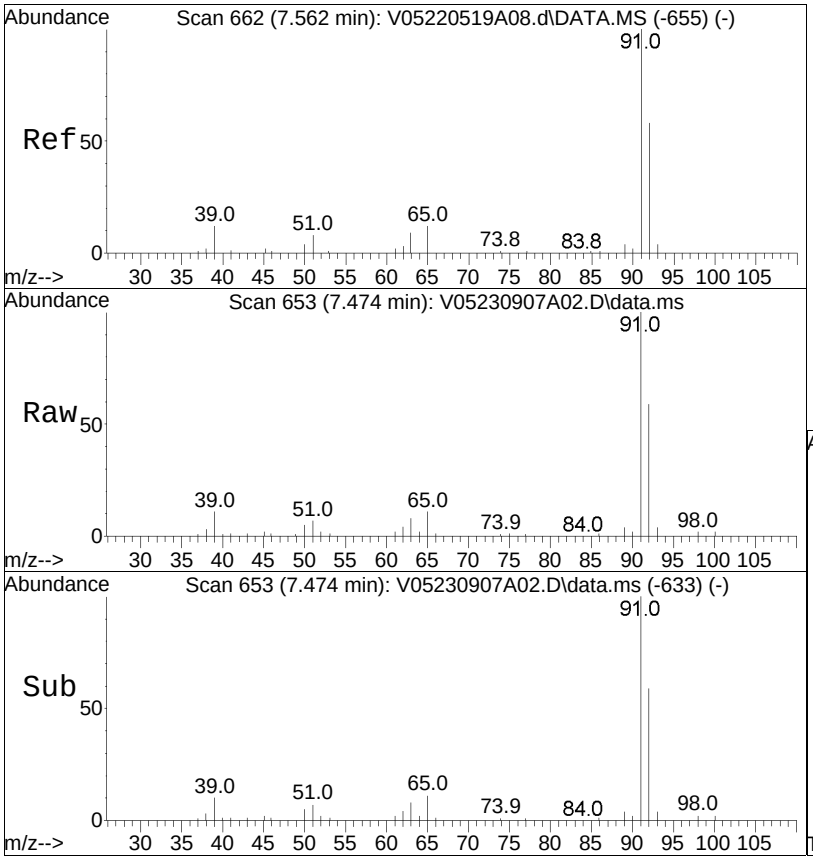


#58
cis-1,3-Dichloropropene
Concen: 9.98 ug/L
RT: 7.220 min Scan# 627
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 75 Resp: 95852

Ion	Ratio	Lower	Upper
75	100		
77	31.4	25.5	38.3
39	55.3	40.4	60.6

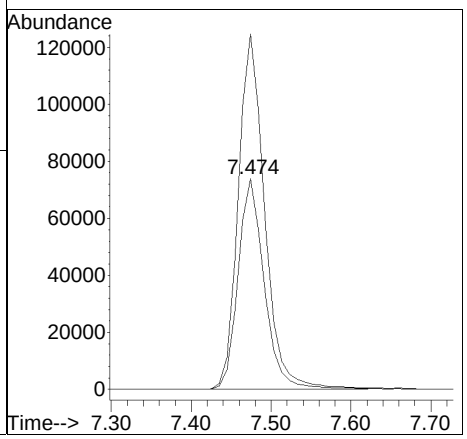


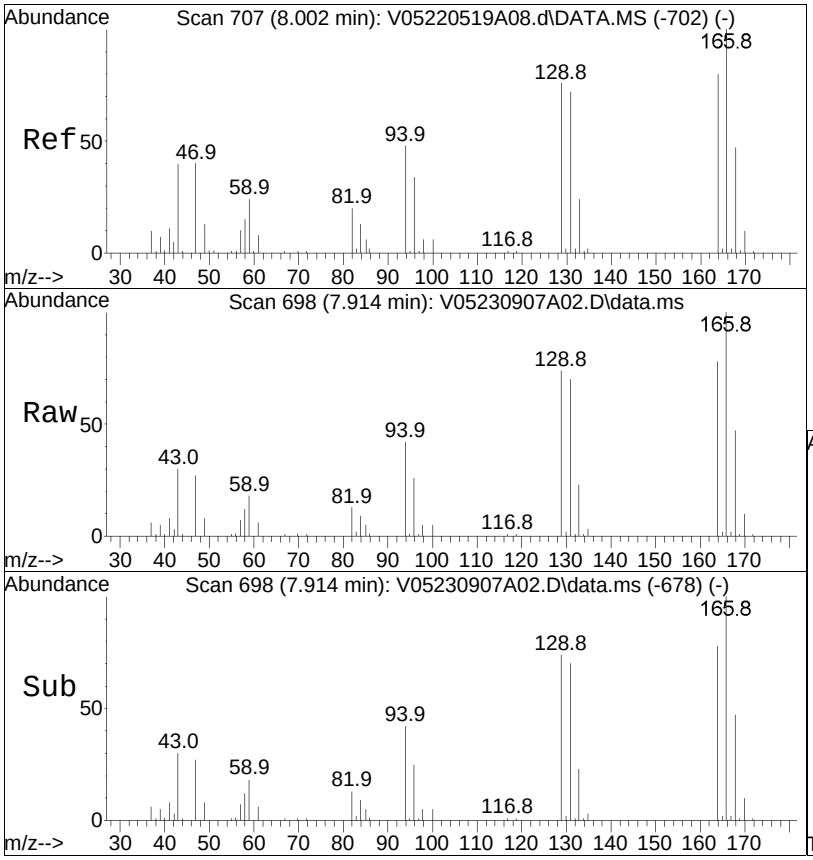


#61
Toluene
Concen: 10.52 ug/L
RT: 7.474 min Scan# 653
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 92 Resp: 168618

Ion	Ratio	Lower	Upper
92	100		
91	170.1	135.2	202.8

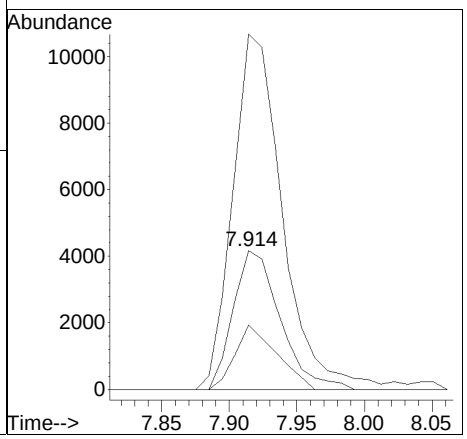


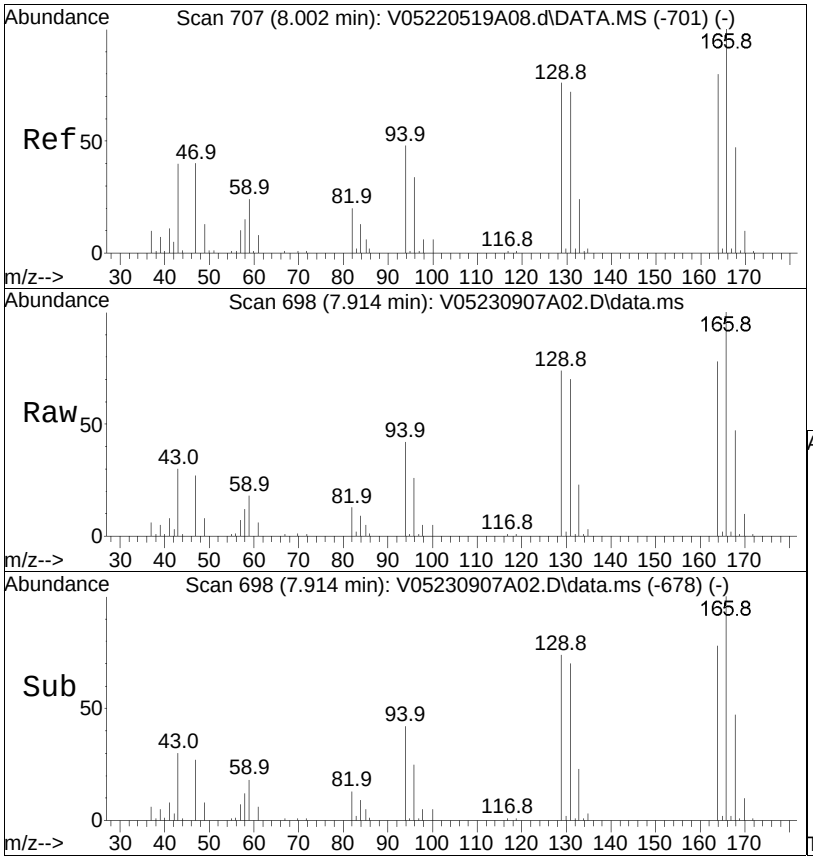


#62
4-Methyl-2-pentanone
Concen: 8.19 ug/L
RT: 7.914 min Scan# 698
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 58 Resp: 10080

Ion	Ratio	Lower	Upper
58	100		
100	41.1	38.9	58.3
43	275.1	204.2	306.2

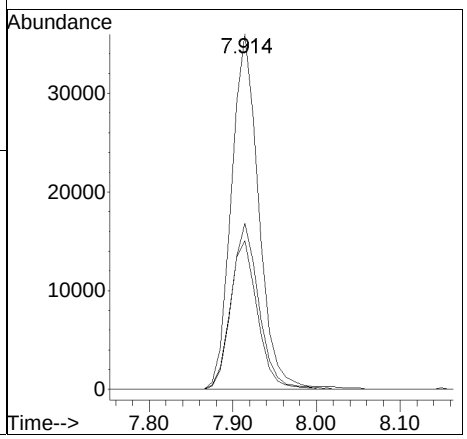


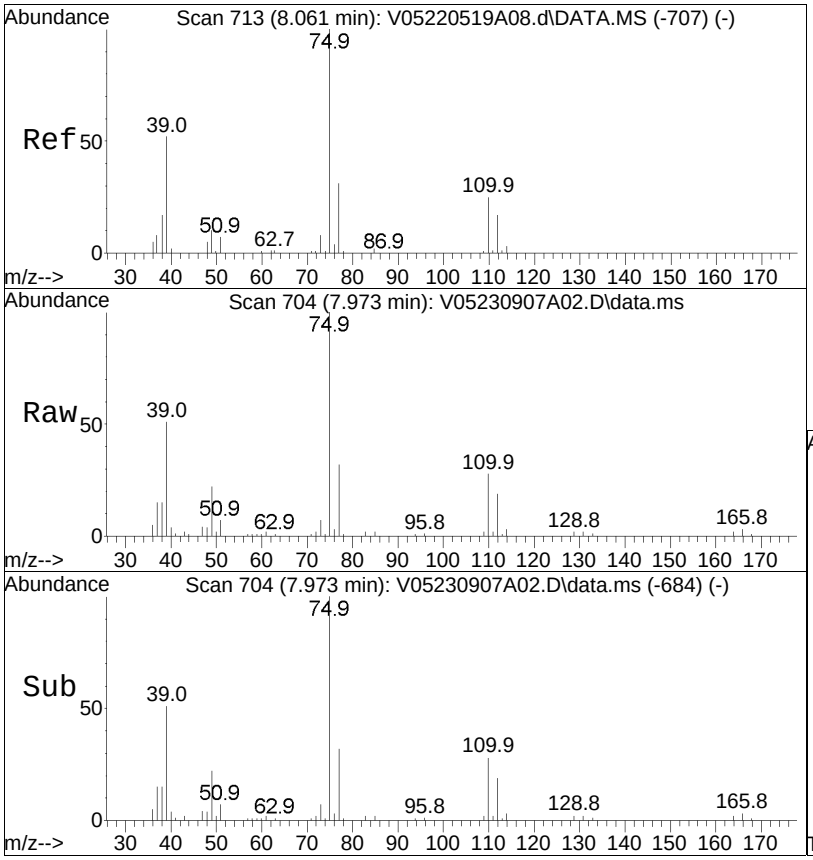


#63
Tetrachloroethene
Concen: 10.77 ug/L
RT: 7.914 min Scan# 698
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:166 Resp: 82162

Ion	Ratio	Lower	Upper
166	100		
168	46.6	30.2	70.2
94	42.0	32.5	72.5

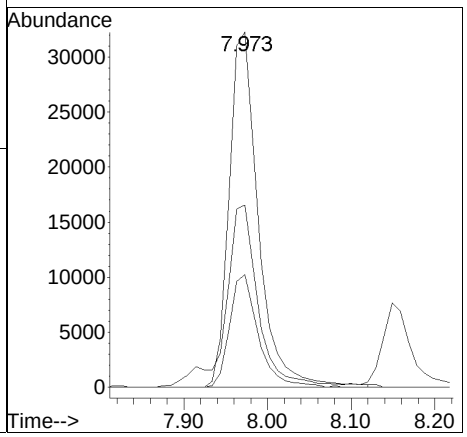


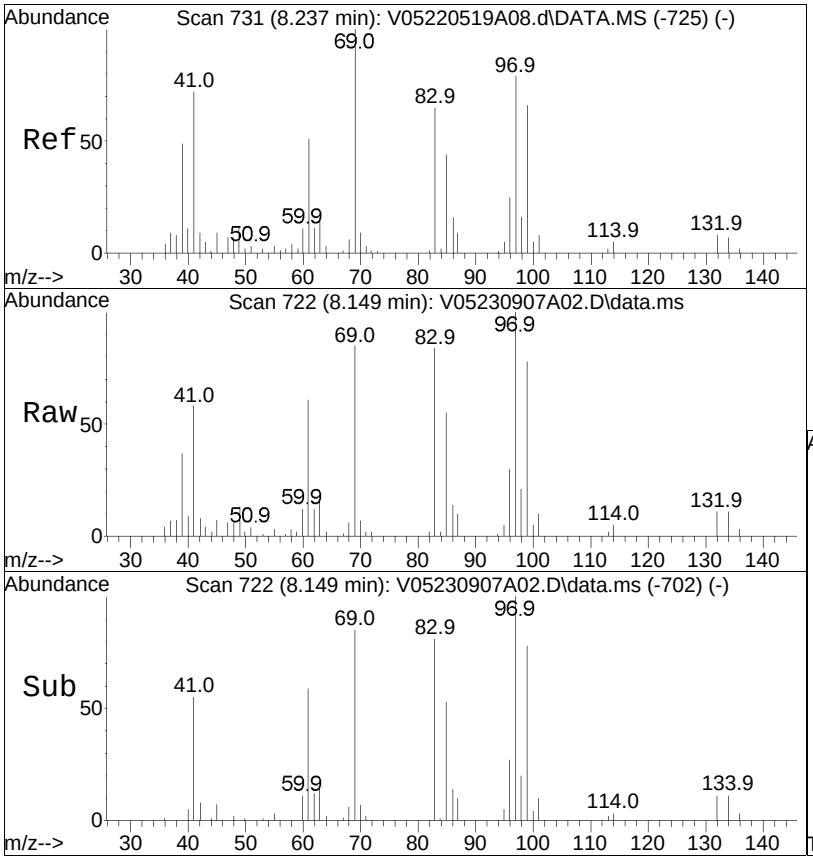


#65
trans-1,3-Dichloropropene
Concen: 9.97 ug/L
RT: 7.973 min Scan# 704
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 75 Resp: 78673

Ion	Ratio	Lower	Upper
75	100		
77	31.2	11.5	51.5
39	57.5	29.3	69.3

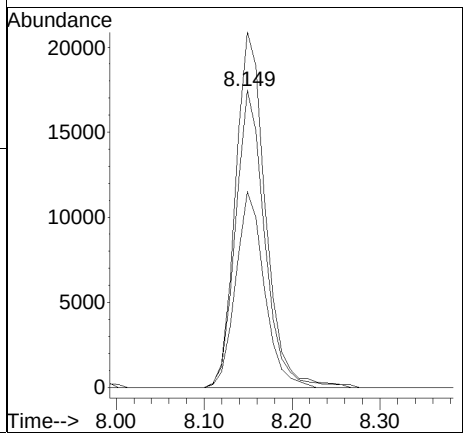


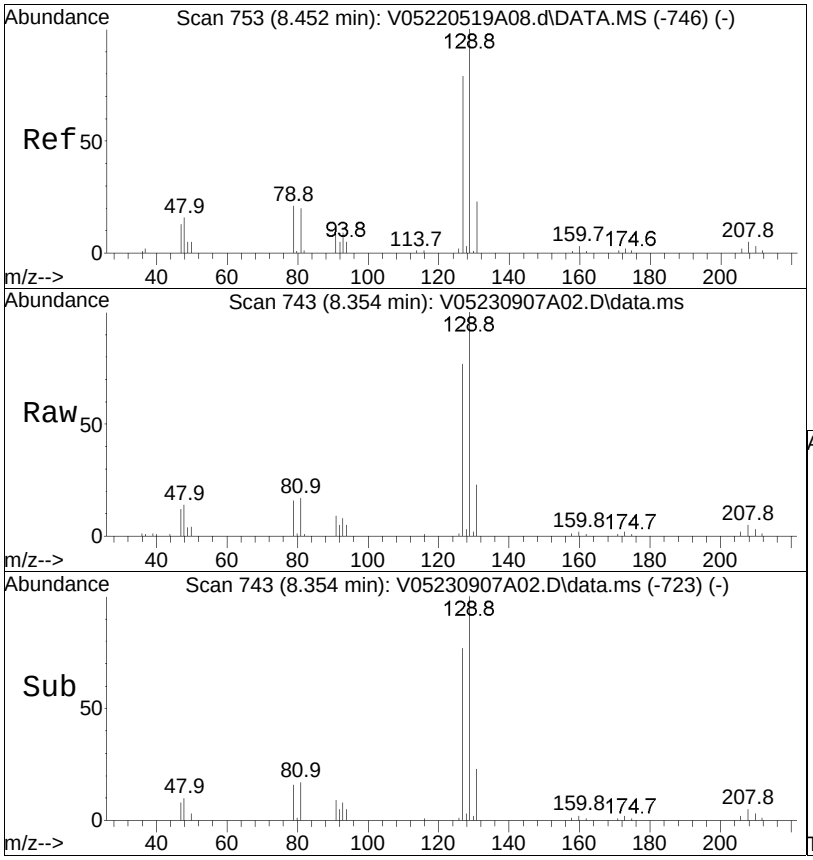


#68
1,1,2-Trichloroethane
Concen: 9.98 ug/L
RT: 8.149 min Scan# 722
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 83 Resp: 40376

Ion	Ratio	Lower	Upper
83	100		
97	122.4	102.2	142.2
85	64.7	47.5	87.5

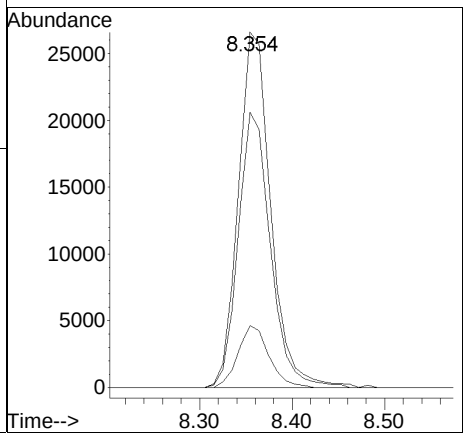


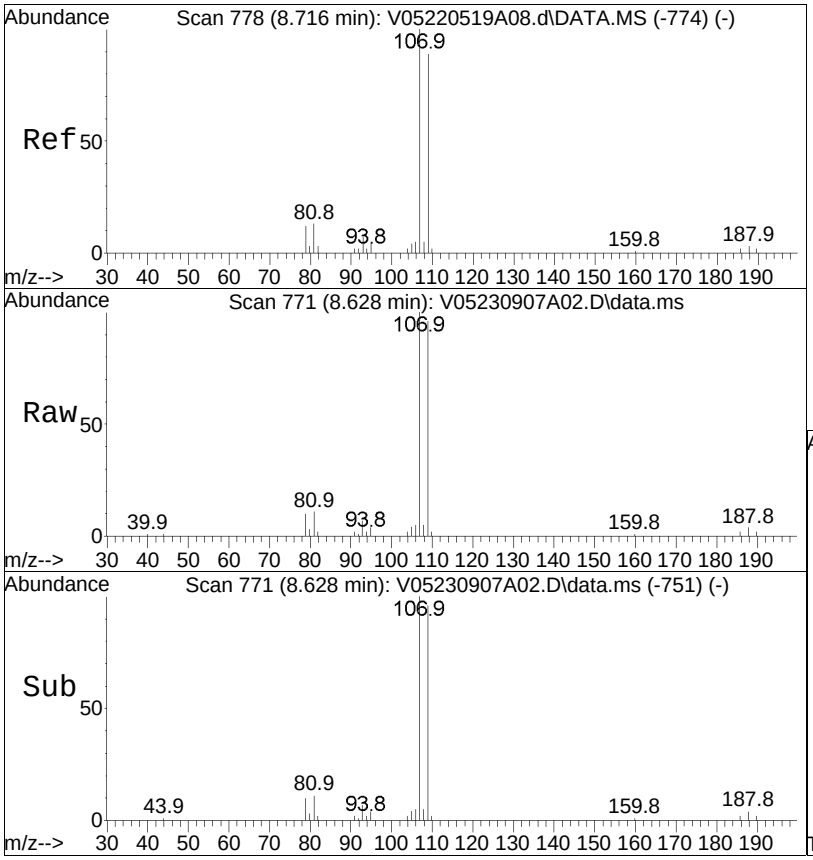


#69
Chlorodibromomethane
Concen: 10.52 ug/L
RT: 8.354 min Scan# 743
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:129 Resp: 64855

Ion	Ratio	Lower	Upper
129	100		
81	16.6	0.0	37.0
127	76.8	58.3	98.3

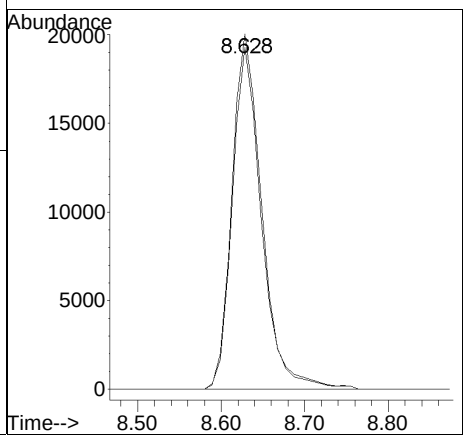


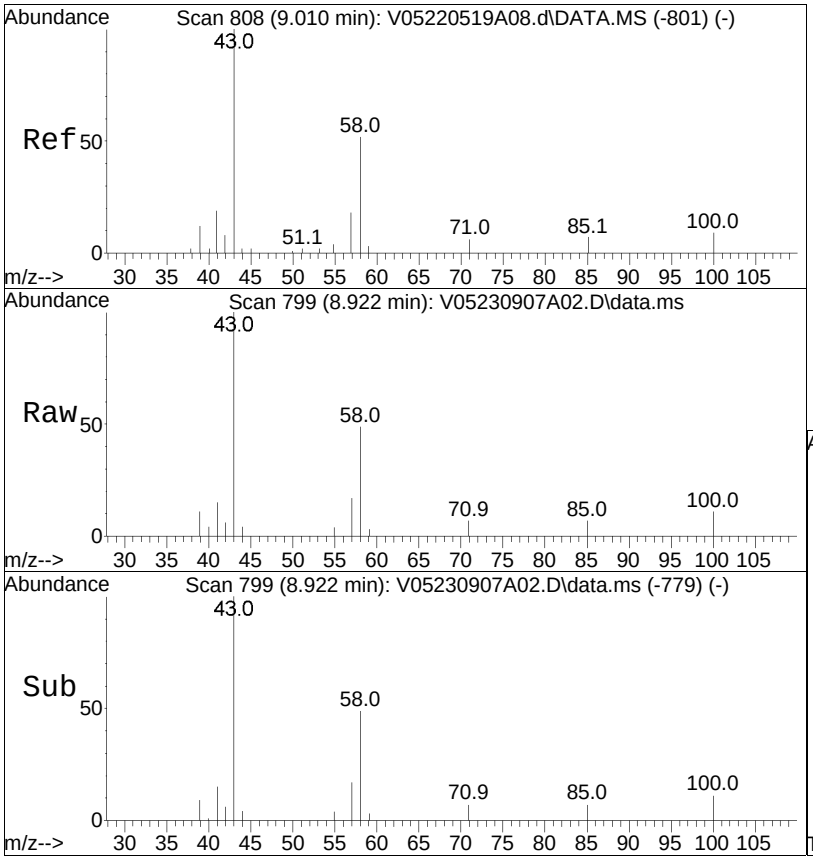


#71
1,2-Dibromoethane
Concen: 9.98 ug/L
RT: 8.628 min Scan# 771
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:107 Resp: 54530

Ion	Ratio	Lower	Upper
107	100		
109	94.0	75.0	112.6

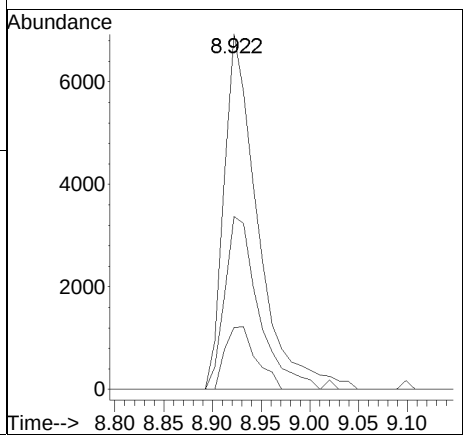


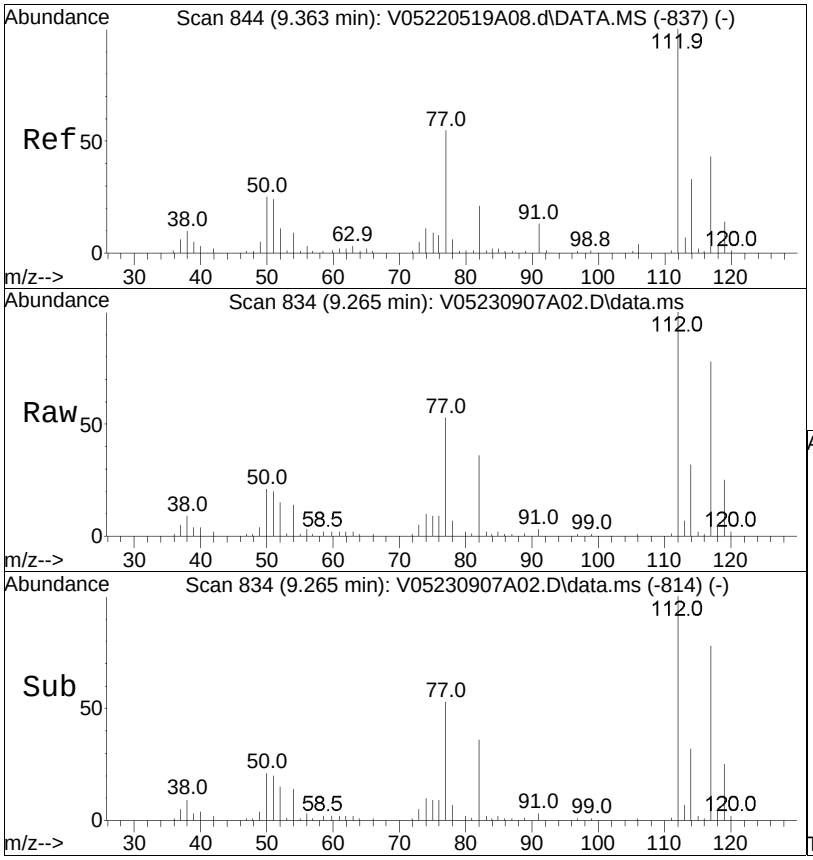


#72
2-Hexanone
Concen: 7.67 ug/L
RT: 8.922 min Scan# 799
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 43 Resp: 16823

Ion	Ratio	Lower	Upper
43	100		
58	49.4	42.3	63.5
57	16.2	15.6	23.4

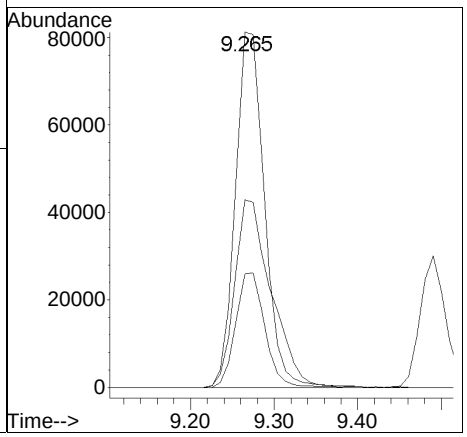


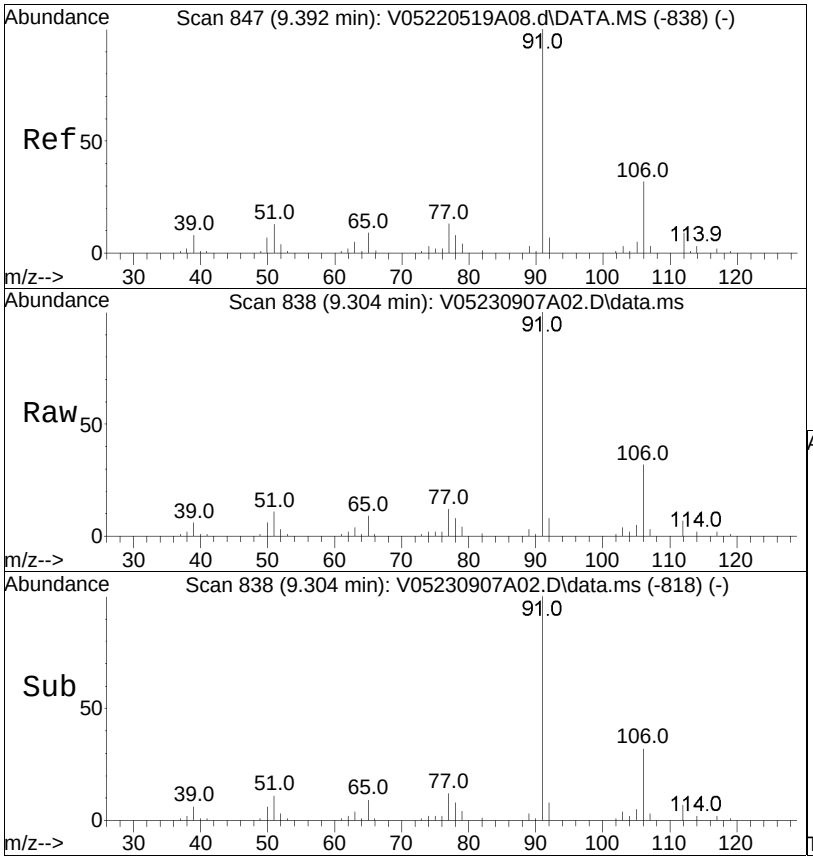


#73
Chlorobenzene
Concen: 10.69 ug/L
RT: 9.265 min Scan# 834
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:112 Resp: 196980

Ion	Ratio	Lower	Upper
112	100		
77	66.3	66.1	99.1
114	32.2	25.4	38.0

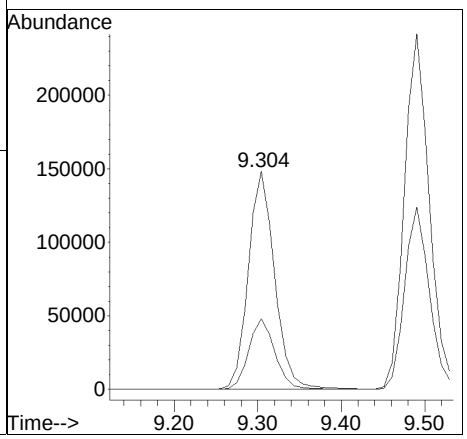


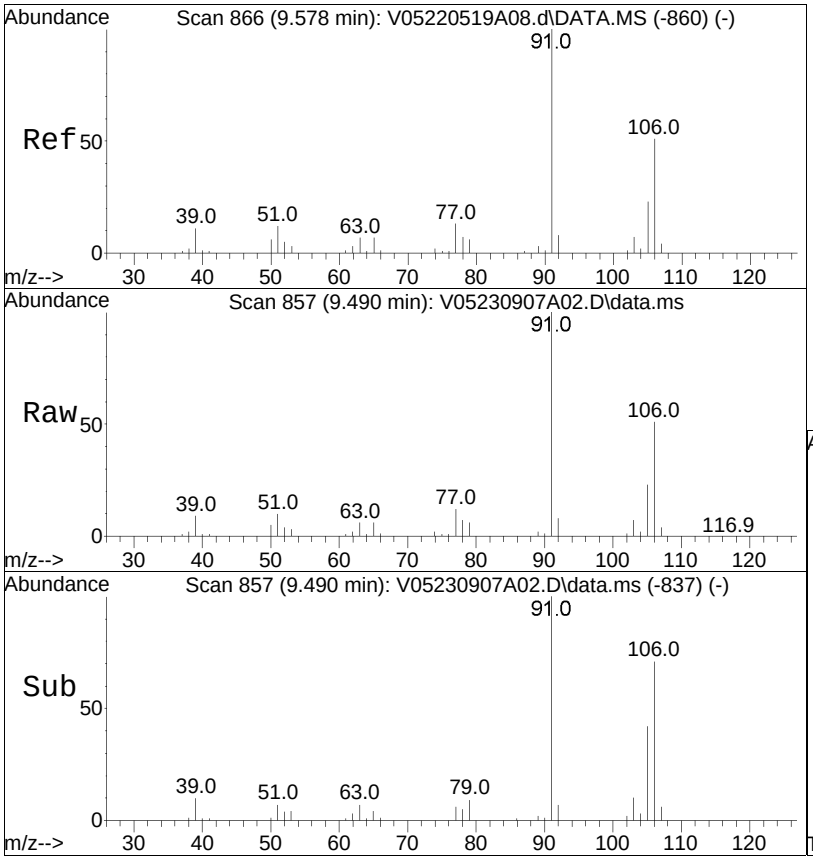


#74
Ethylbenzene
Concen: 10.50 ug/L
RT: 9.304 min Scan# 838
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 91 Resp: 325677

Ion	Ratio	Lower	Upper
91	100		
106	32.3	22.9	34.3

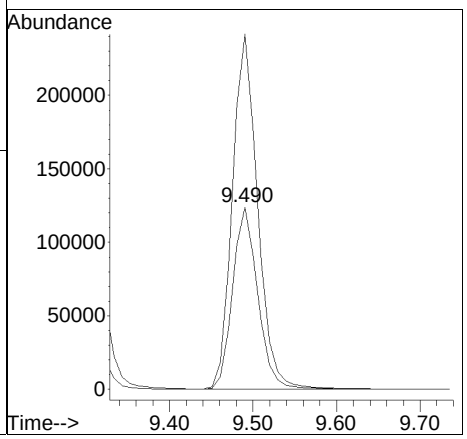


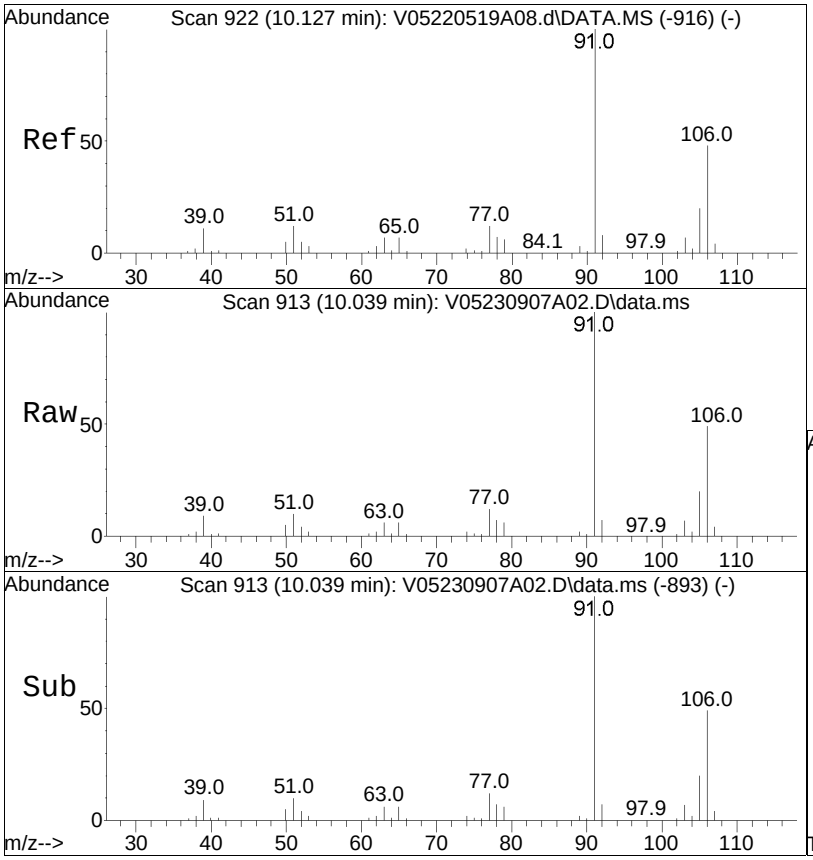


#76
p/m Xylene
Concen: 21.41 ug/L
RT: 9.490 min Scan# 857
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:106 Resp: 259882

Ion	Ratio	Lower	Upper
106	100		
91	194.1	177.2	265.8

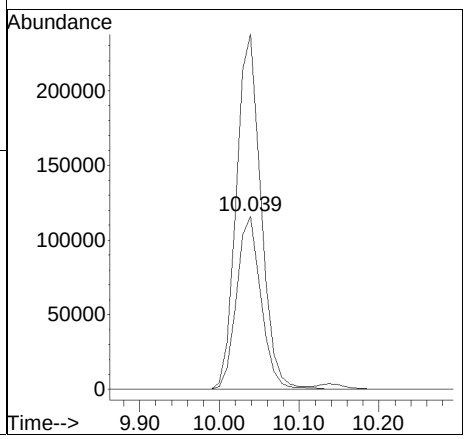


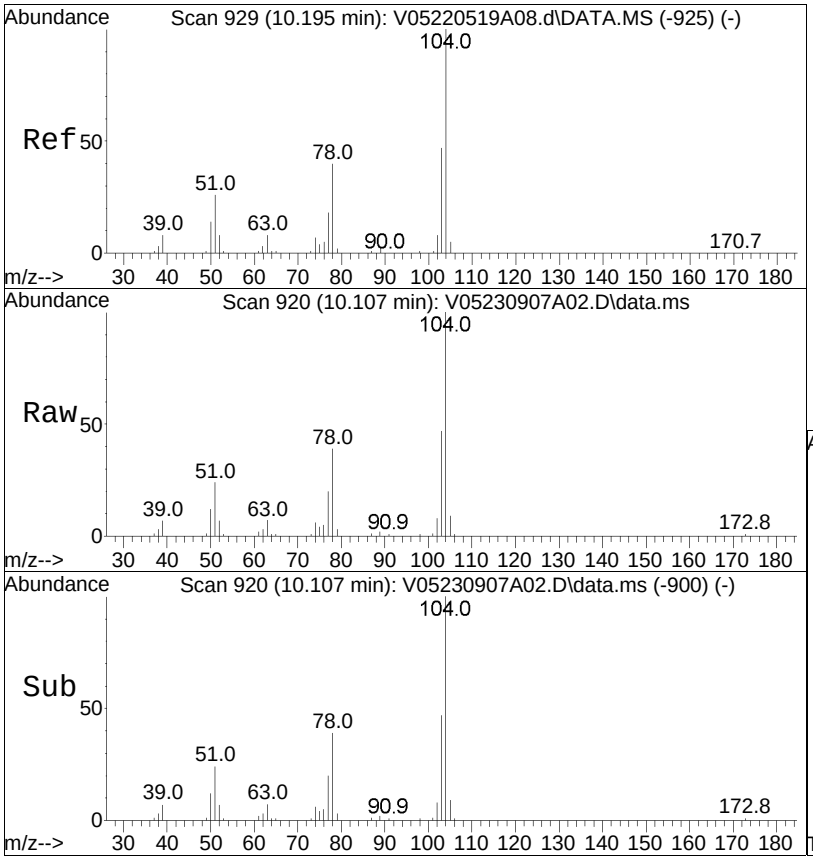


#77
o Xylene
Concen: 20.98 ug/L
RT: 10.039 min Scan# 913
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:106 Resp: 247968

Ion	Ratio	Lower	Upper
106	100		
91	205.6	187.0	280.6

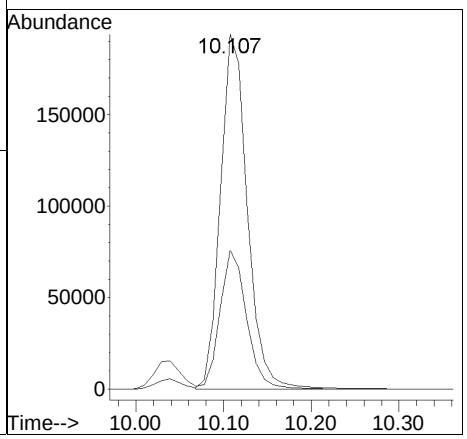


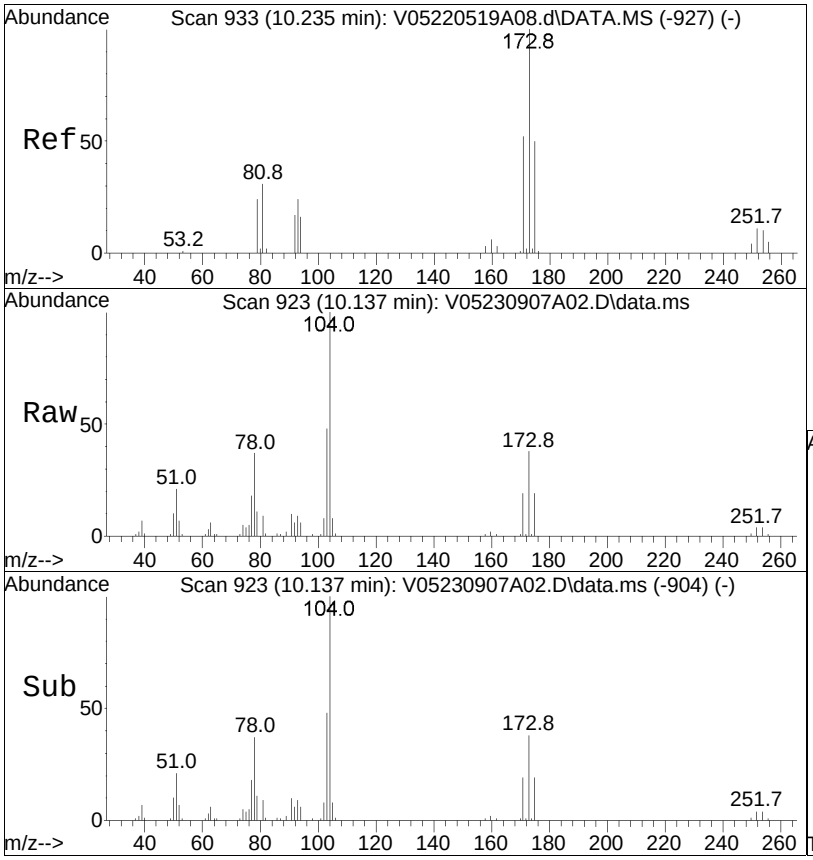


#78
Styrene
Concen: 21.17 ug/L
RT: 10.107 min Scan# 920
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:104 Resp: 411409

Ion	Ratio	Lower	Upper
104	100		
78	39.0	39.6	59.4#

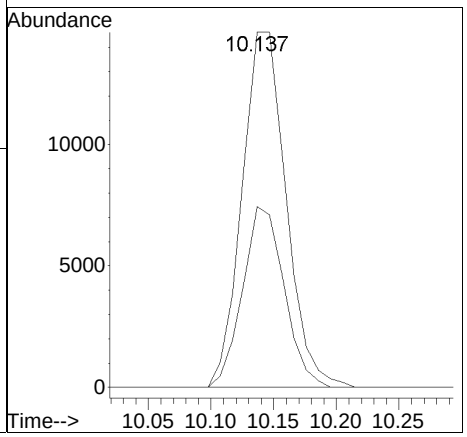


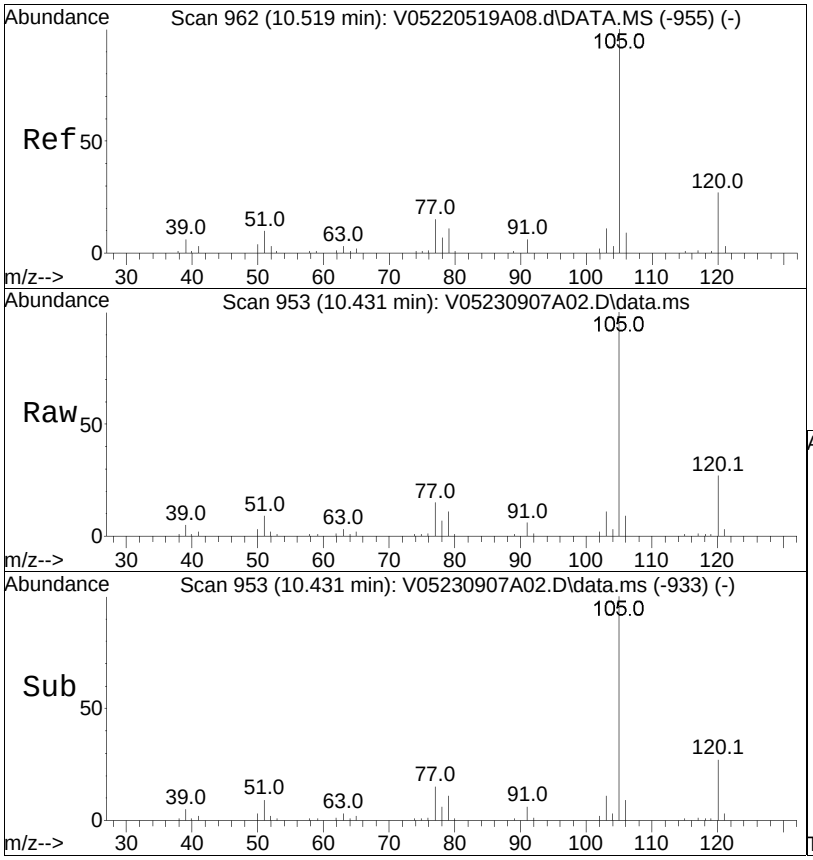


#80
Bromoform
Concen: 9.13 ug/L
RT: 10.137 min Scan# 923
Delta R.T. -0.010 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:173 Resp: 35849

Ion	Ratio	Lower	Upper
173	100		
175	48.0	26.6	66.6

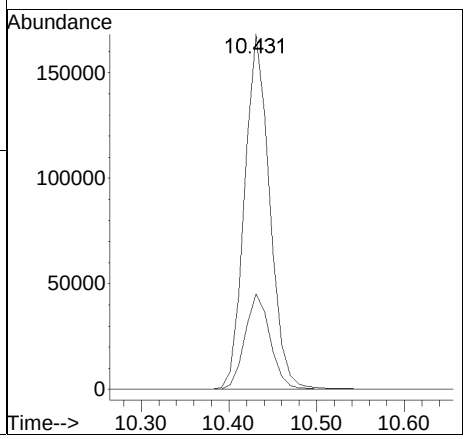


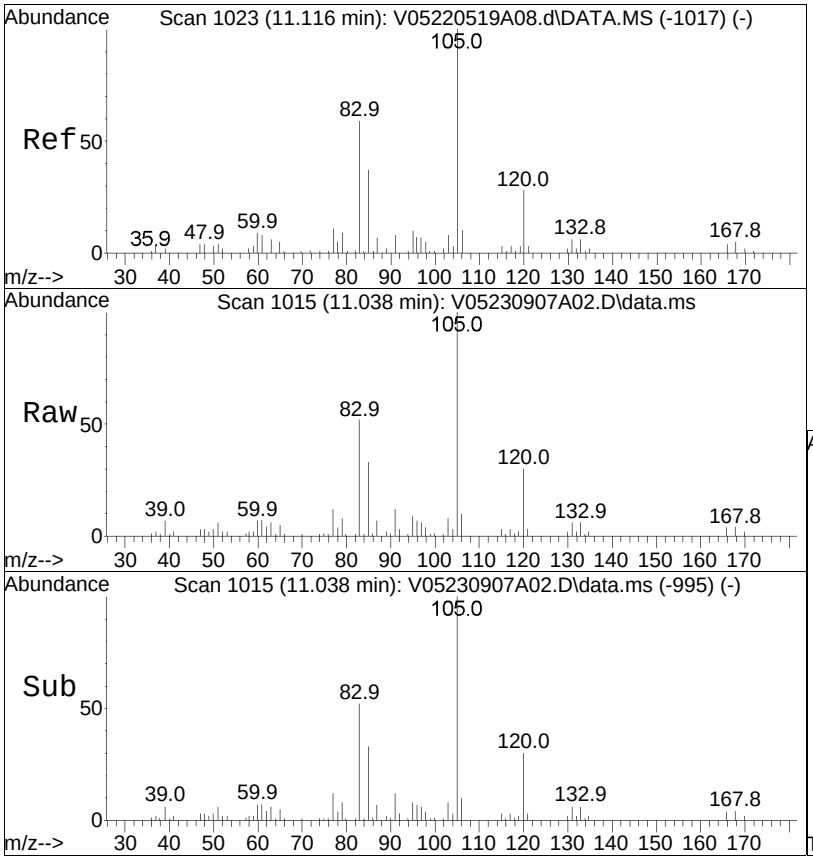


#82
Isopropylbenzene
Concen: 10.51 ug/L
RT: 10.431 min Scan# 953
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:105 Resp: 335368

Ion	Ratio	Lower	Upper
105	100		
120	27.1	4.8	44.8

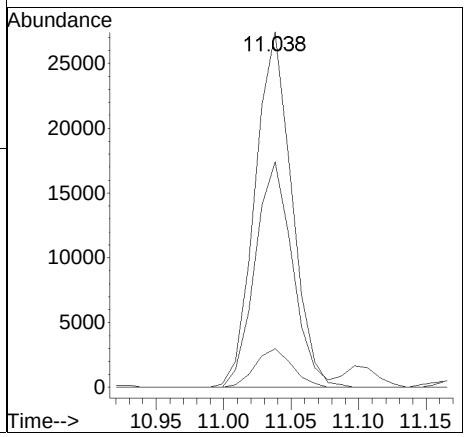


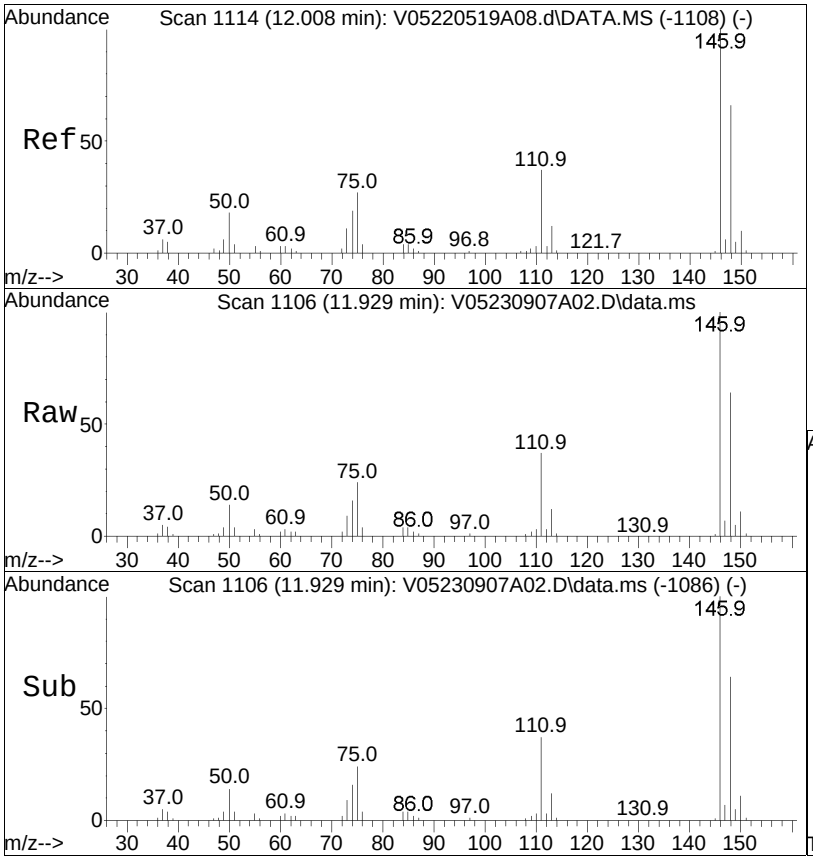


#87
1,1,2,2-Tetrachloroethane
Concen: 9.98 ug/L
RT: 11.038 min Scan# 1015
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion: 83 Resp: 52043

Ion	Ratio	Lower	Upper
83	100		
131	11.0	0.0	30.4
85	64.7	46.4	86.4

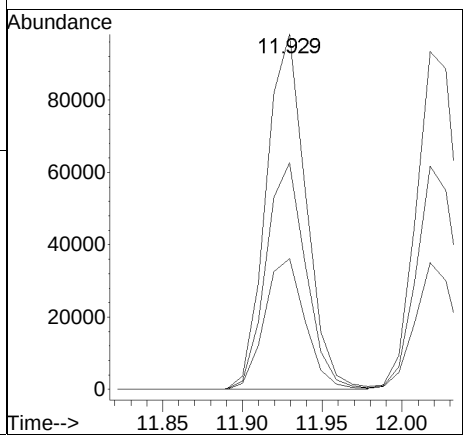


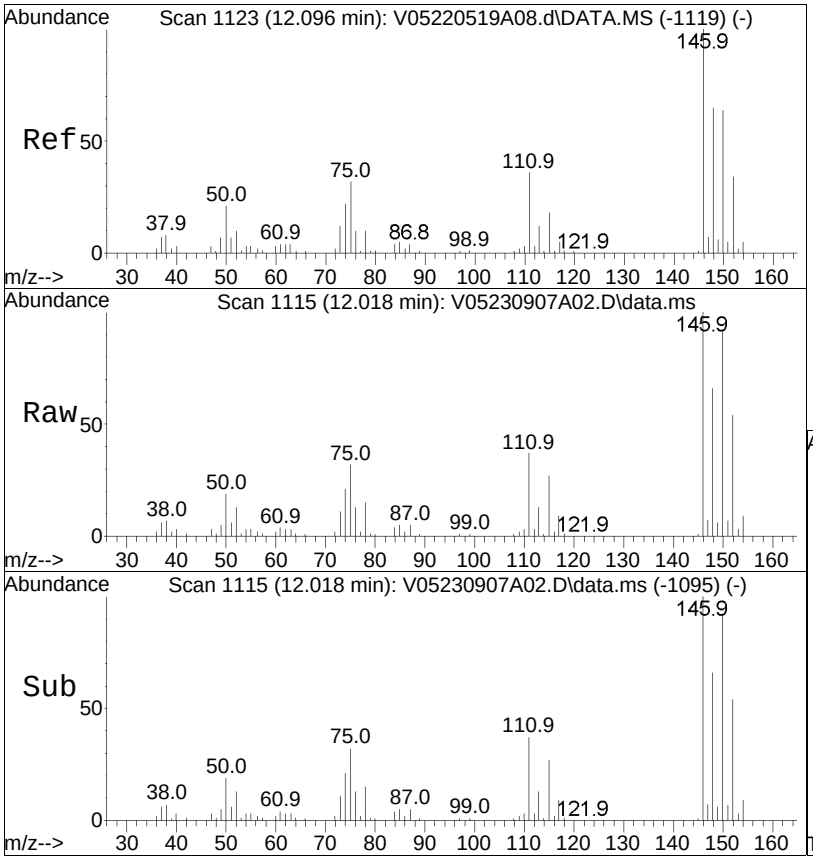


#100
1,3-Dichlorobenzene
Concen: 10.94 ug/L
RT: 11.929 min Scan# 1106
Delta R.T. -0.001 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:146 Resp: 170890

Ion	Ratio	Lower	Upper
146	100		
111	37.5	28.0	58.1
148	64.0	41.6	86.4

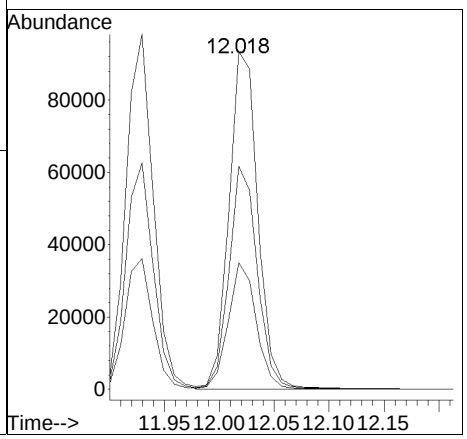


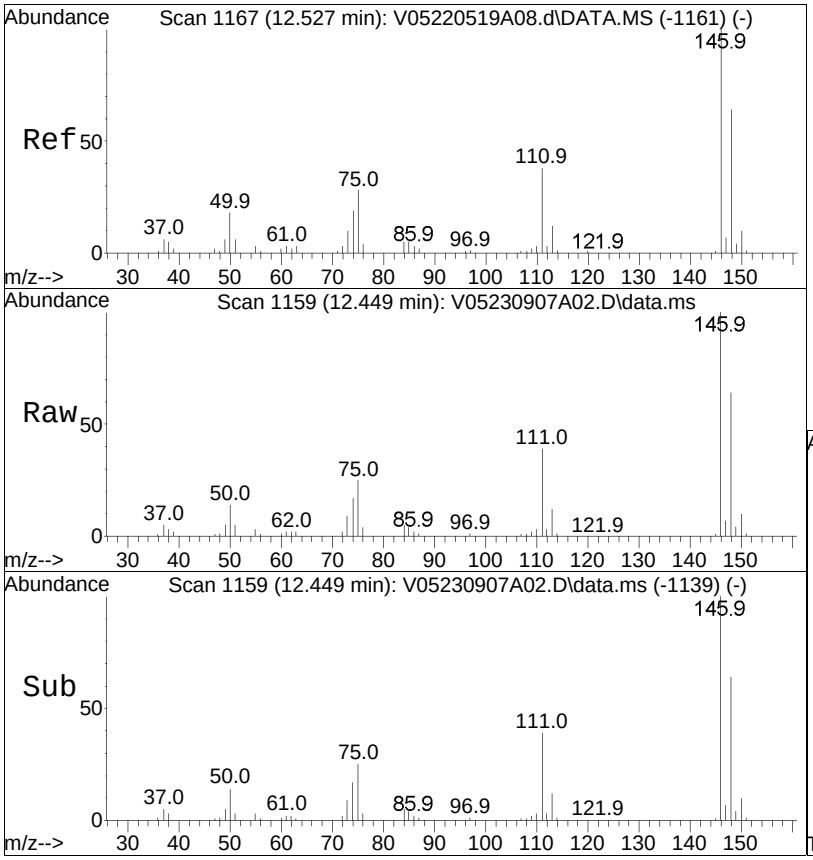


#101
1,4-Dichlorobenzene
Concen: 10.76 ug/L
RT: 12.018 min Scan# 1115
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:146 Resp: 170785

Ion	Ratio	Lower	Upper
146	100		
111	36.7	33.8	50.6
148	65.2	51.0	76.6

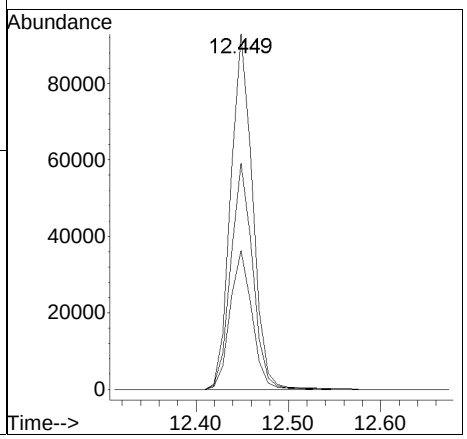


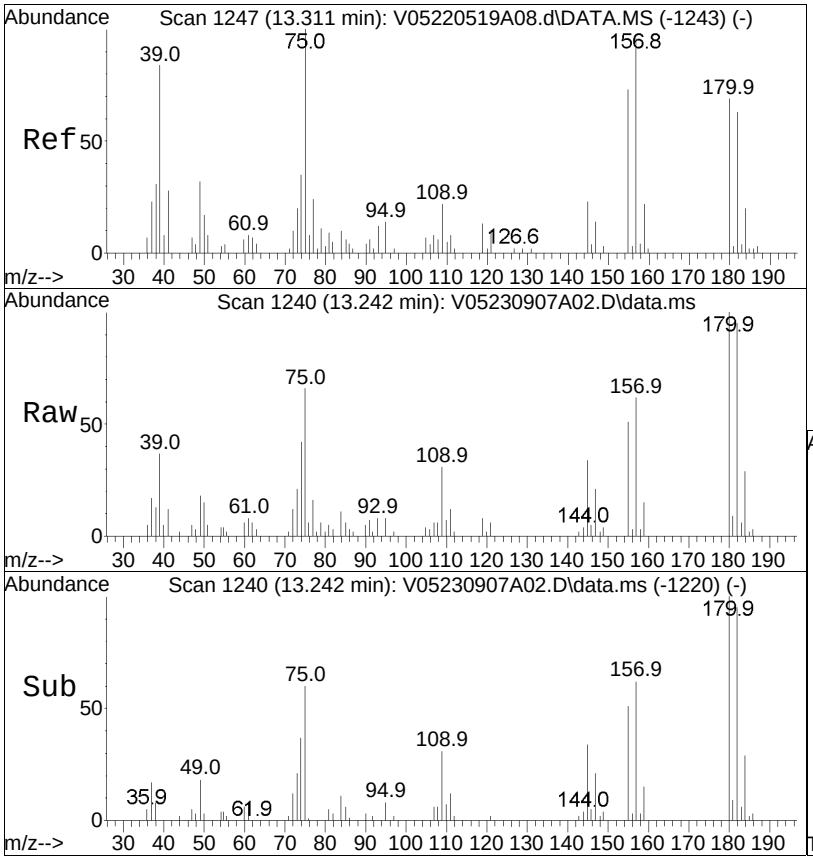


#104
1,2-Dichlorobenzene
Concen: 10.61 ug/L
RT: 12.449 min Scan# 1159
Delta R.T. -0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:146 Resp: 153020

Ion	Ratio	Lower	Upper
146	100		
111	39.1	29.1	60.5
148	63.5	41.7	86.7

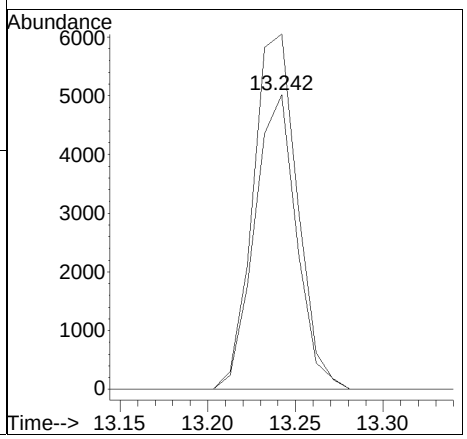


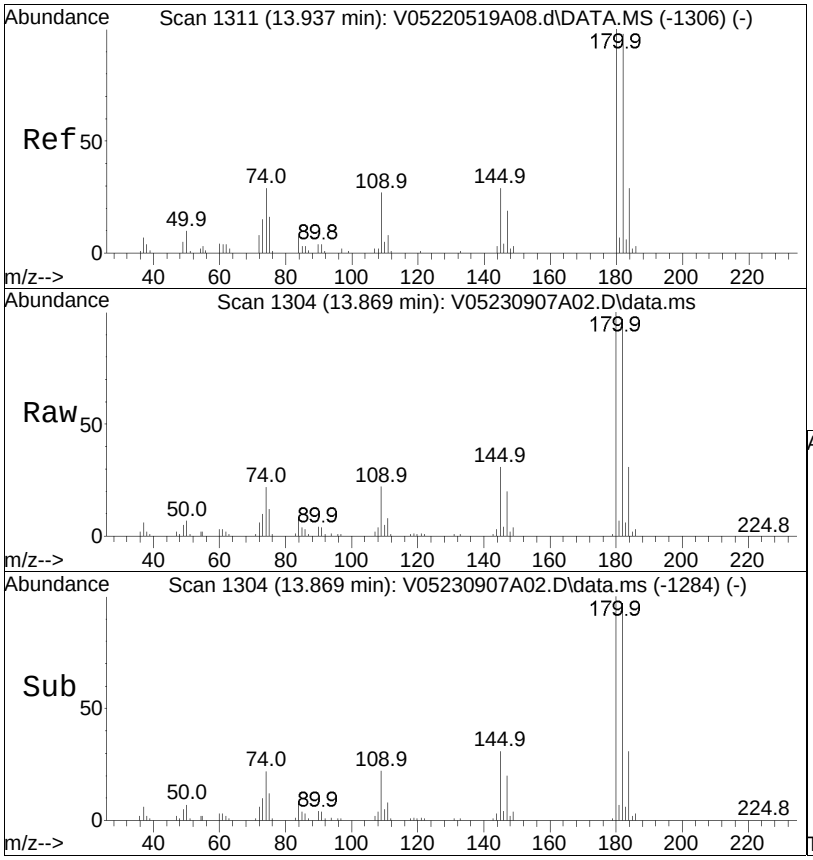


#106
1,2-Dibromo-3-chloropropane
Concen: 9.40 ug/L
RT: 13.242 min Scan# 1240
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:155 Resp: 8392

Ion	Ratio	Lower	Upper
155	100		
157	126.7	105.0	157.6

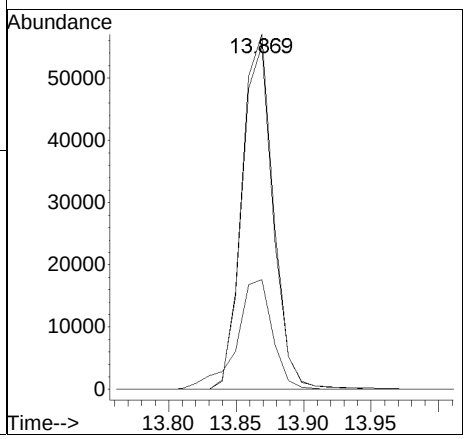


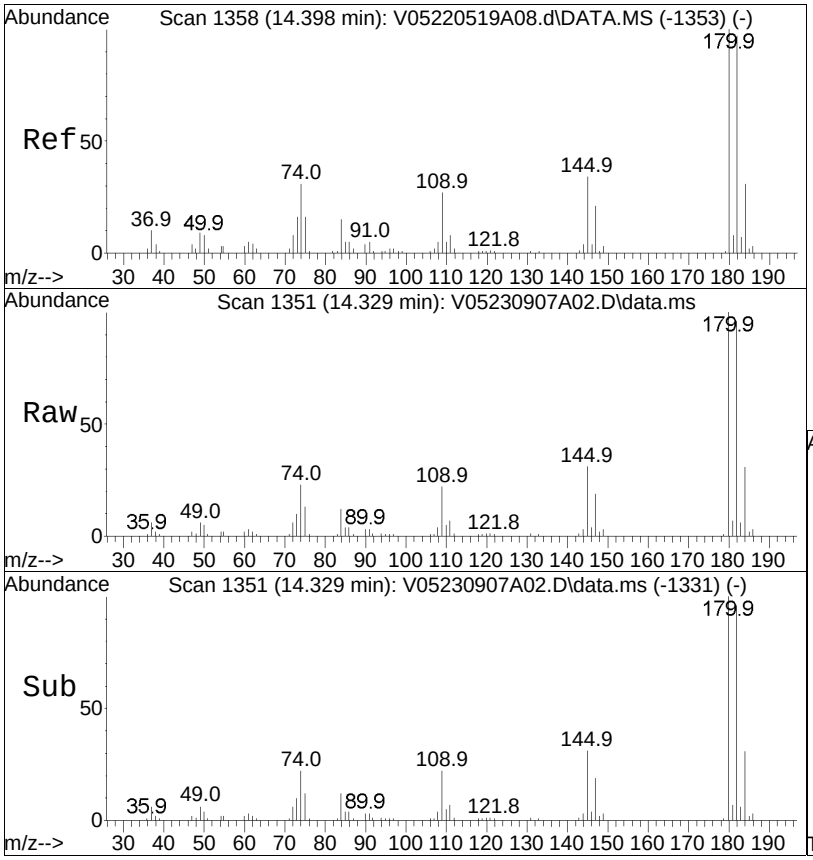


#109
1,2,4-Trichlorobenzene
Concen: 9.41 ug/L
RT: 13.869 min Scan# 1304
Delta R.T. 0.000 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:180 Resp: 92723

Ion	Ratio	Lower	Upper
180	100		
182	96.3	75.2	112.8
145	35.4	27.4	41.2

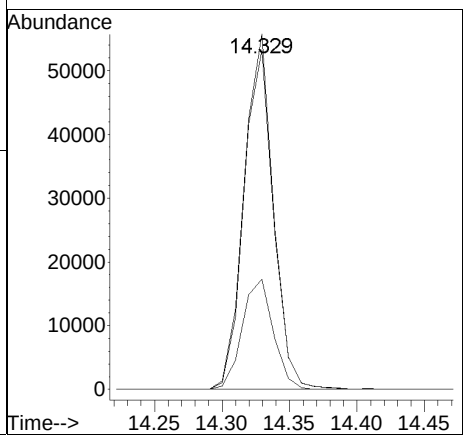




#111
1,2,3-Trichlorobenzene
Concen: 9.46 ug/L
RT: 14.329 min Scan# 1351
Delta R.T. -0.001 min
Lab File: V05230907A02.D
Acq: 7 Sep 2023 7:53 am

Tgt Ion:180 Resp: 84561

Ion	Ratio	Lower	Upper
180	100		
182	96.2	75.5	113.3
145	32.7	26.5	39.7



Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A27.D
Acq On : 7 Sep 2023 6:31 pm
Operator : VOA105:MJV
Sample : WG1824710-6,31,10,10,,a1
Misc : WG1824710,ICAL20245
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 08 05:15:00 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	247970	10.000	ug/L	0.00
Standard Area 1 = 255314			Recovery = 97.12%			
59) Chlorobenzene-d5	9.255	117	229985	10.000	ug/L	0.01
Standard Area 1 = 234811			Recovery = 97.94%			
79) 1,4-Dichlorobenzene-d4	12.008	152	141847	10.000	ug/L	0.00
Standard Area 1 = 143322			Recovery = 98.97%			
System Monitoring Compounds						
36) Dibromofluoromethane	4.961	113	81492	10.363	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.63%			
43) 1,2-Dichloroethane-d4	5.479	65	90570	11.868	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 118.68%			
60) Toluene-d8	7.416	98	278818	10.398	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 103.98%			
83) 4-Bromofluorobenzene	10.774	95	110303	9.936	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery = 99.36%			
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.528	85	94115	11.703	ug/L	98
3) Chloromethane	1.723	50	96926	12.580	ug/L	97
4) Vinyl chloride	1.772	62	115037	14.234	ug/L	96
5) Bromomethane	2.056	94	58282	9.335	ug/L	99
6) Chloroethane	2.154	64	72835	12.643	ug/L	98
7) Trichlorofluoromethane	2.290	101	170300	14.267	ug/L	100
10) 1,1-Dichloroethene	2.750	96	95921	13.393	ug/L	95
11) Carbon disulfide	2.779	76	297570	13.050	ug/L	100
12) Freon-113	2.789	101	104158	13.127	ug/L #	77
15) Methylene chloride	3.298	84	73366	11.126	ug/L	83
17) Acetone	3.366	43	17551	16.472	ug/L	93
18) trans-1,2-Dichloroethene	3.445	96	75348	11.475	ug/L	98
19) Methyl acetate	3.474	43	32384	13.329	ug/L #	85
20) Methyl tert-butyl ether	3.542	73	152479	11.000	ug/L	92
23) 1,1-Dichloroethane	4.012	63	133116	11.612	ug/L	99
28) cis-1,2-Dichloroethene	4.530	96	82395	11.359	ug/L	97
30) Bromochloromethane	4.716	128	38905	11.509	ug/L	92
31) Cyclohexane	4.697	56	138485	12.268	ug/L	82
32) Chloroform	4.785	83	132251	11.558	ug/L	97
34) Carbon tetrachloride	4.902	117	116470	11.932	ug/L	99

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A27.D
Acq On : 7 Sep 2023 6:31 pm
Operator : VOA105:MJV
Sample : WG1824710-6,31,10,10,,a1
Misc : WG1824710,ICAL20245
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 08 05:15:00 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 1,1,1-Trichloroethane	4.970	97	124963	12.220	ug/L		97
39) 2-Butanone	5.088	43	22060	14.322	ug/L	#	71
41) Benzene	5.332	78	278186	11.646	ug/L		96
44) 1,2-Dichloroethane	5.547	62	95677	12.135	ug/L		98
47) Methyl cyclohexane	5.900	83	129233	11.121	ug/L		88
48) Trichloroethene	5.919	95	83223	10.869	ug/L		91
51) 1,2-Dichloropropane	6.467	63	71220	11.765	ug/L	#	89
54) Bromodichloromethane	6.545	83	98617	11.785	ug/L		99
57) 1,4-Dioxane	6.750	88	28820	978.087	ug/L	#	92
58) cis-1,3-Dichloropropene	7.220	75	98782	10.578	ug/L		93
61) Toluene	7.474	92	180380	11.641	ug/L		98
62) 4-Methyl-2-pentanone	7.924	58	17445	14.664	ug/L		90
63) Tetrachloroethene	7.914	166	89710	12.160	ug/L		93
65) trans-1,3-Dichloropropene	7.973	75	91325	11.973	ug/L		88
68) 1,1,2-Trichloroethane	8.149	83	50035	12.794	ug/L		97
69) Chlorodibromomethane	8.355	129	73996	12.416	ug/L		100
71) 1,2-Dibromoethane	8.628	107	65615	12.421	ug/L		98
72) 2-Hexanone	8.922	43	29700	14.011	ug/L		93
73) Chlorobenzene	9.275	112	209360	11.748	ug/L		89
74) Ethylbenzene	9.304	91	355437	11.852	ug/L		94
76) p/m Xylene	9.490	106	283199	24.130	ug/L		84
77) o Xylene	10.039	106	270495	23.667	ug/L		83
78) Styrene	10.107	104	444514	23.661	ug/L		86
80) Bromoform	10.147	173	44152	11.273	ug/L		95
82) Isopropylbenzene	10.431	105	366997	11.616	ug/L		94
87) 1,1,2,2-Tetrachloroethane	11.038	83	73759	14.286	ug/L		98
100) 1,3-Dichlorobenzene	11.930	146	178615	11.553	ug/L		97
101) 1,4-Dichlorobenzene	12.027	146	181338	11.539	ug/L		97
104) 1,2-Dichlorobenzene	12.449	146	165876	11.622	ug/L		96
106) 1,2-Dibromo-3-chloropr...	13.242	155	11986	13.565	ug/L		96
109) 1,2,4-Trichlorobenzene	13.869	180	100050	10.264	ug/L		99
111) 1,2,3-Trichlorobenzene	14.330	180	94421	10.672	ug/L		98

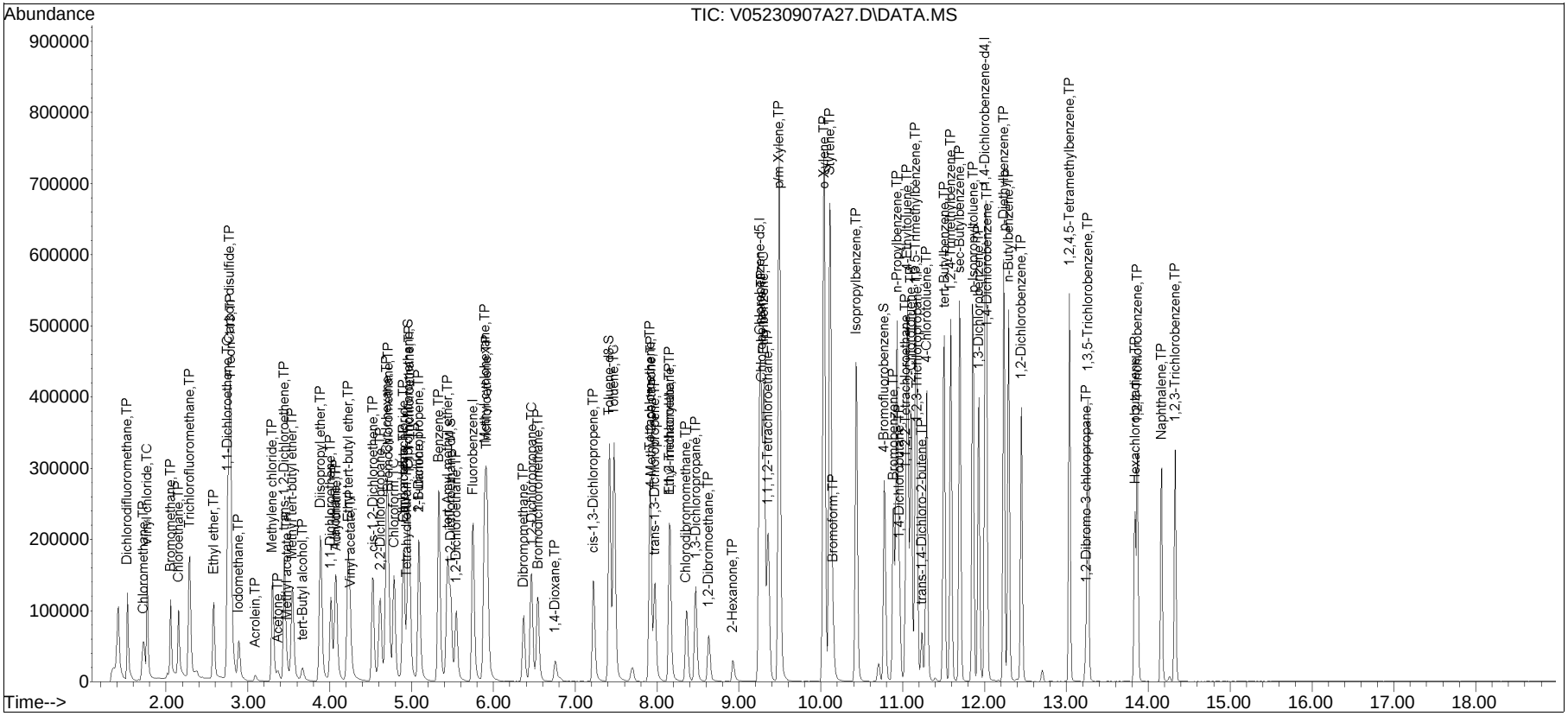
(#) = qualifier out of range (m) = manual integration (+) = signals summed

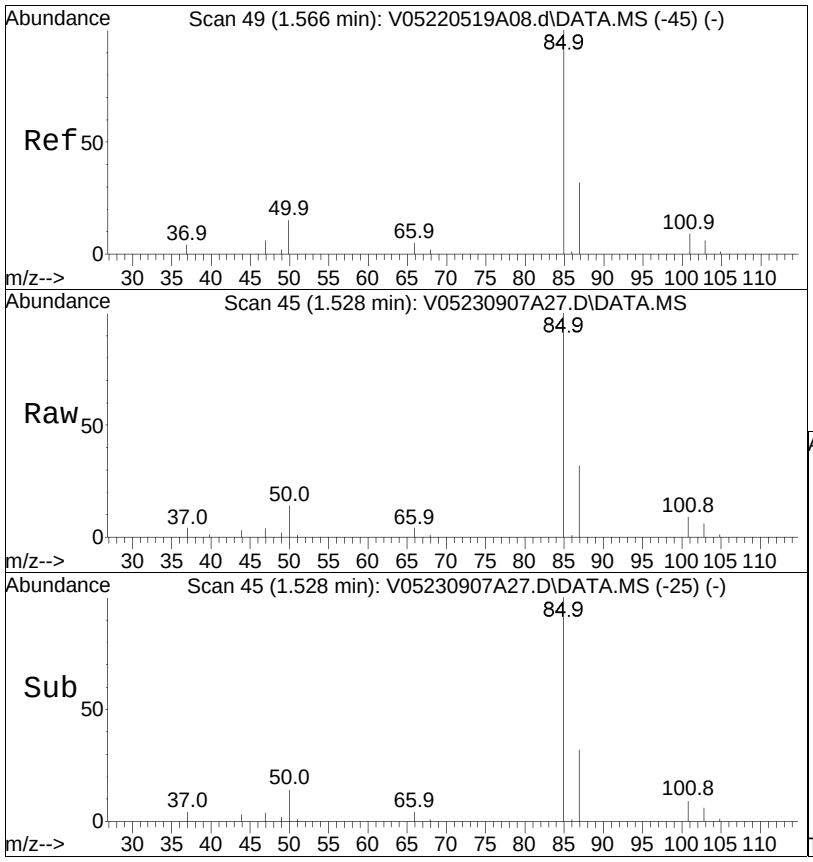
Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A27.D
Acq On : 7 Sep 2023 6:31 pm
Operator : VOA105:MJV
Sample : WG1824710-6,31,10,10,,a1
Misc : WG1824710,ICAL20245
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 08 05:15:00 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•

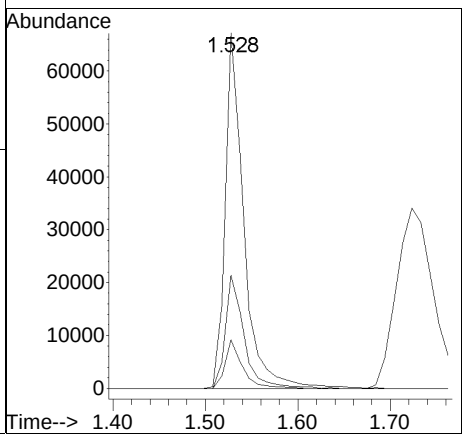


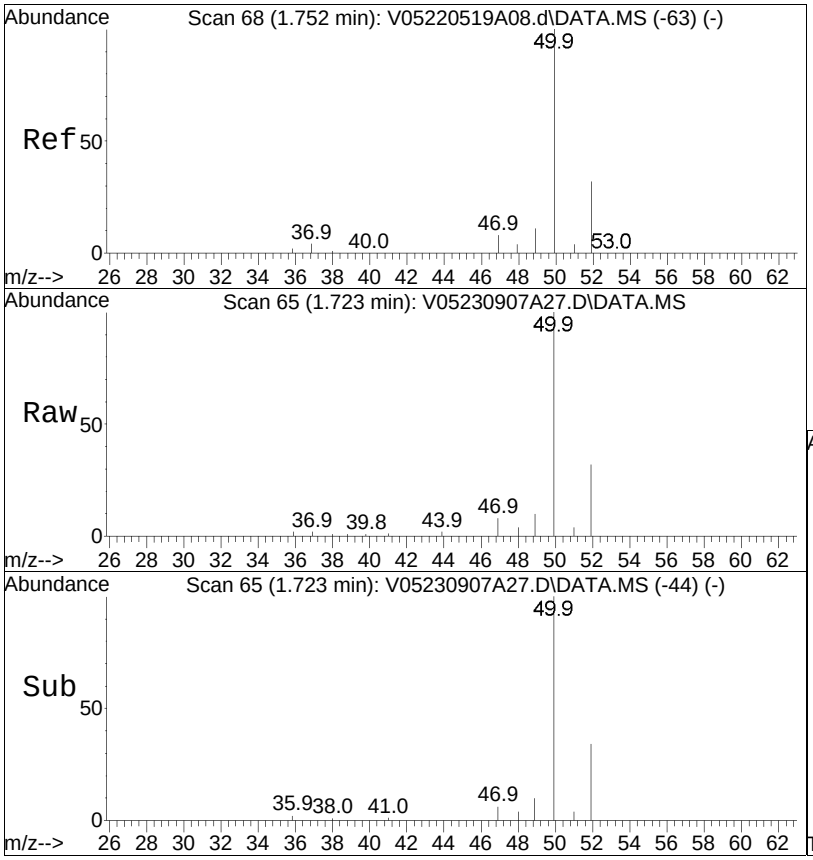


#2
Dichlorodifluoromethane
Concen: 11.70 ug/L
RT: 1.528 min Scan# 45
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 85 Resp: 94115

Ion	Ratio	Lower	Upper
85	100		
87	31.9	20.9	43.5
50	12.8	6.8	14.0

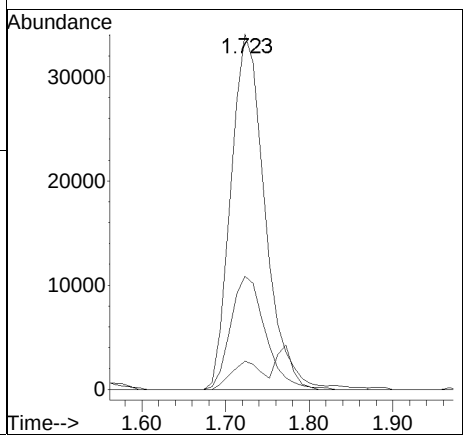


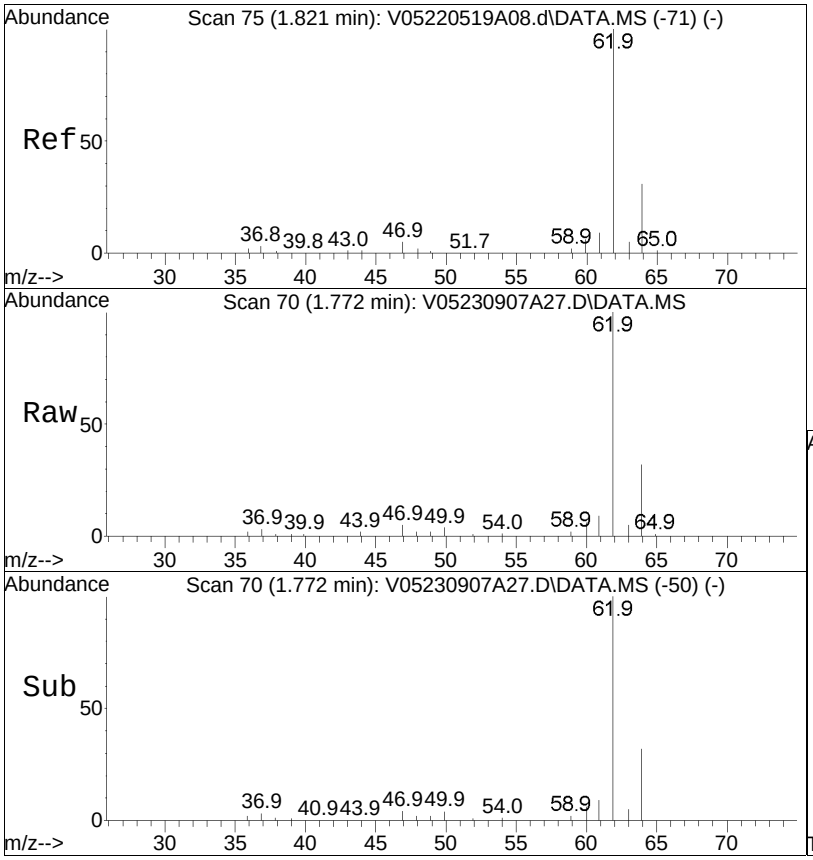


#3
Chloromethane
Concen: 12.58 ug/L
RT: 1.723 min Scan# 65
Delta R.T. 0.010 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 50 Resp: 96926

Ion	Ratio	Lower	Upper
50	100		
52	32.1	12.6	52.6
47	7.1	0.0	30.1

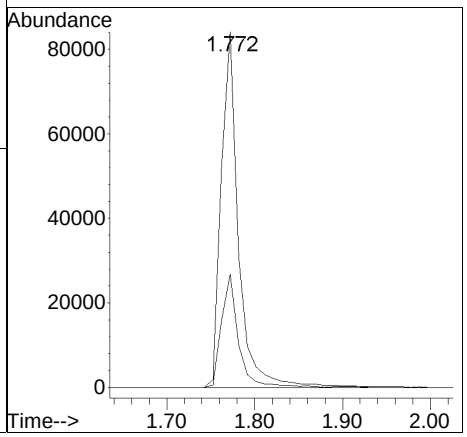


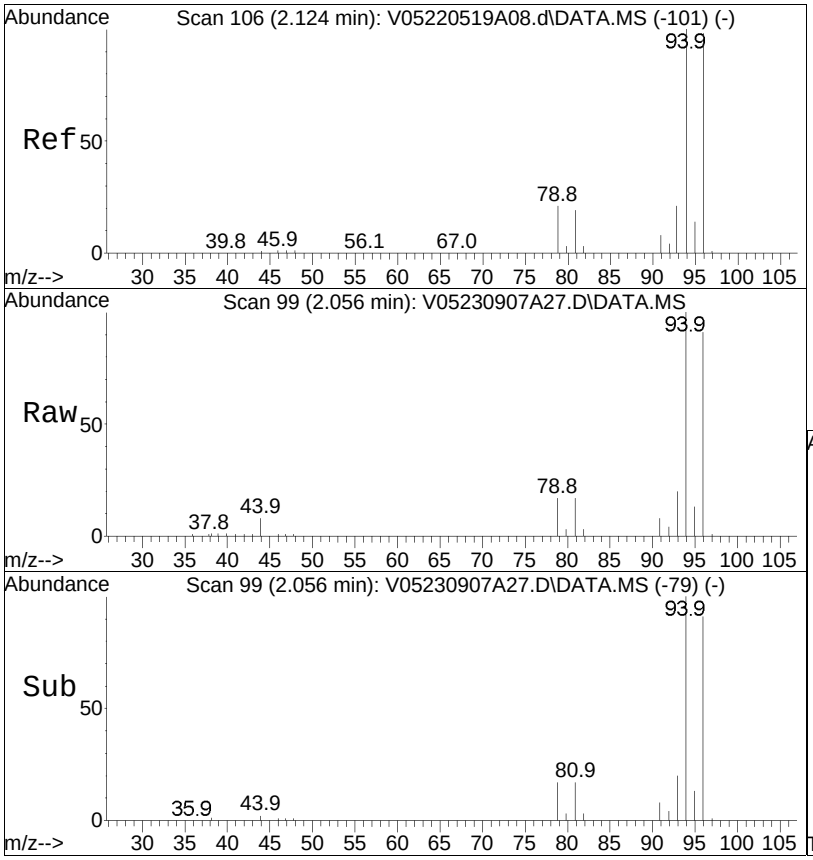


#4
Vinyl chloride
Concen: 14.23 ug/L
RT: 1.772 min Scan# 70
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 62 Resp: 115037

Ion	Ratio	Lower	Upper
62	100		
64	31.2	13.5	53.5

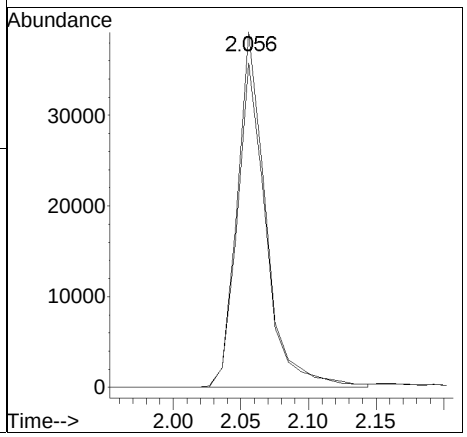


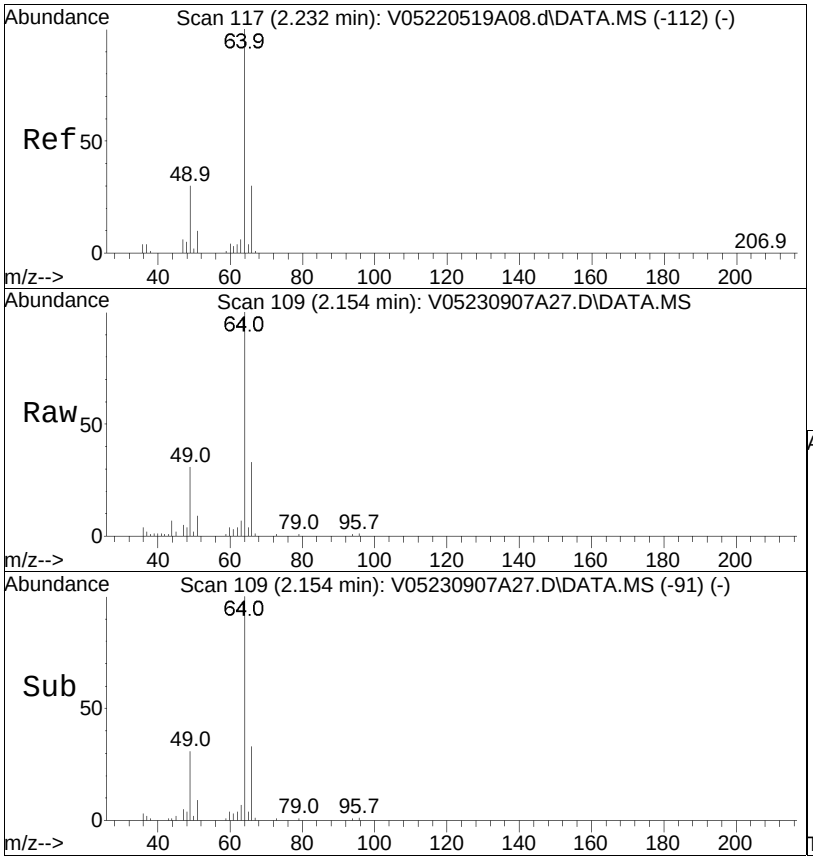


#5
Bromomethane
Concen: 9.33 ug/L
RT: 2.056 min Scan# 99
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 94 Resp: 58282

Ion	Ratio	Lower	Upper
94	100		
96	94.0	75.4	115.4

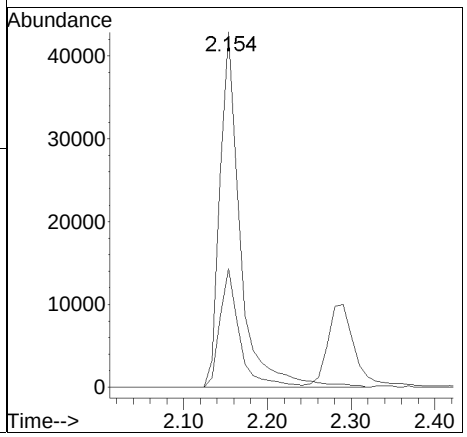


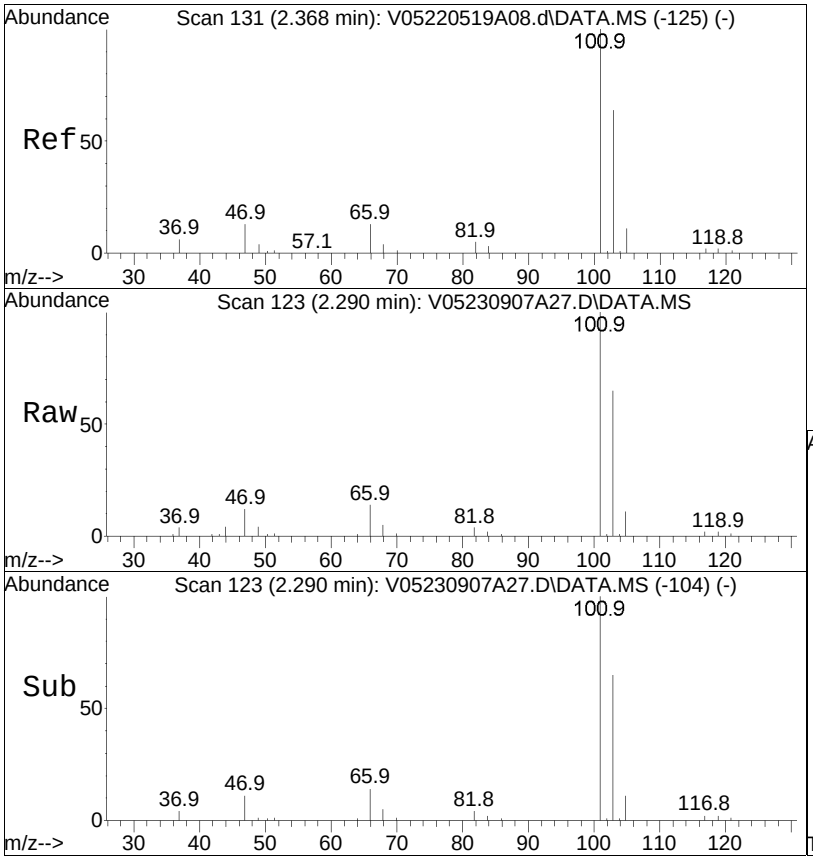


#6
Chloroethane
Concen: 12.64 ug/L
RT: 2.154 min Scan# 109
Delta R.T. -0.019 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 64 Resp: 72835

Ion	Ratio	Lower	Upper
64	100		
66	32.4	13.8	53.8

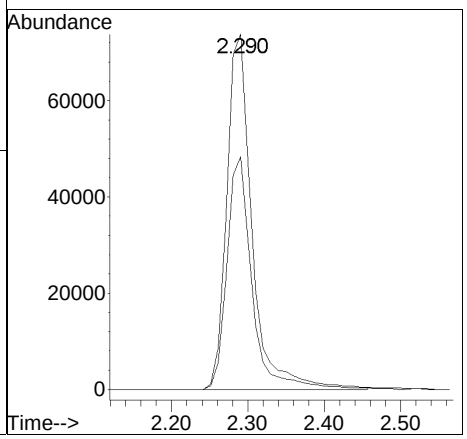


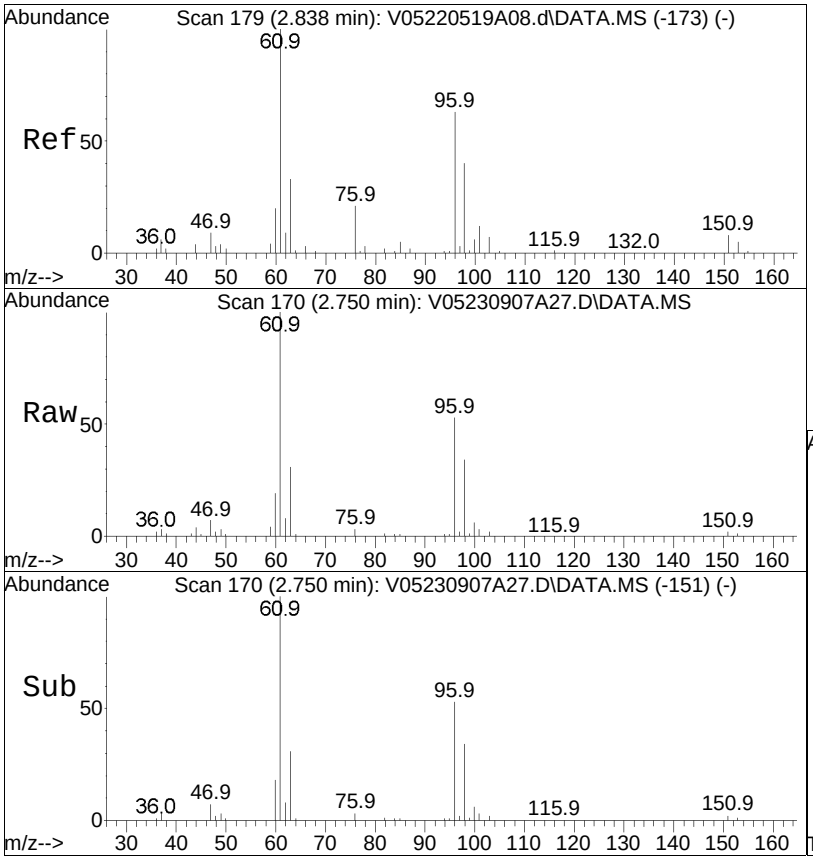


#7
Trichlorofluoromethane
Concen: 14.27 ug/L
RT: 2.290 min Scan# 123
Delta R.T. -0.010 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:101 Resp: 170300

Ion	Ratio	Lower	Upper
101	100		
103	64.8	51.8	77.6

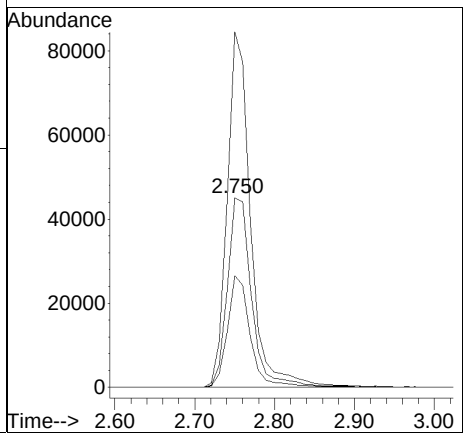


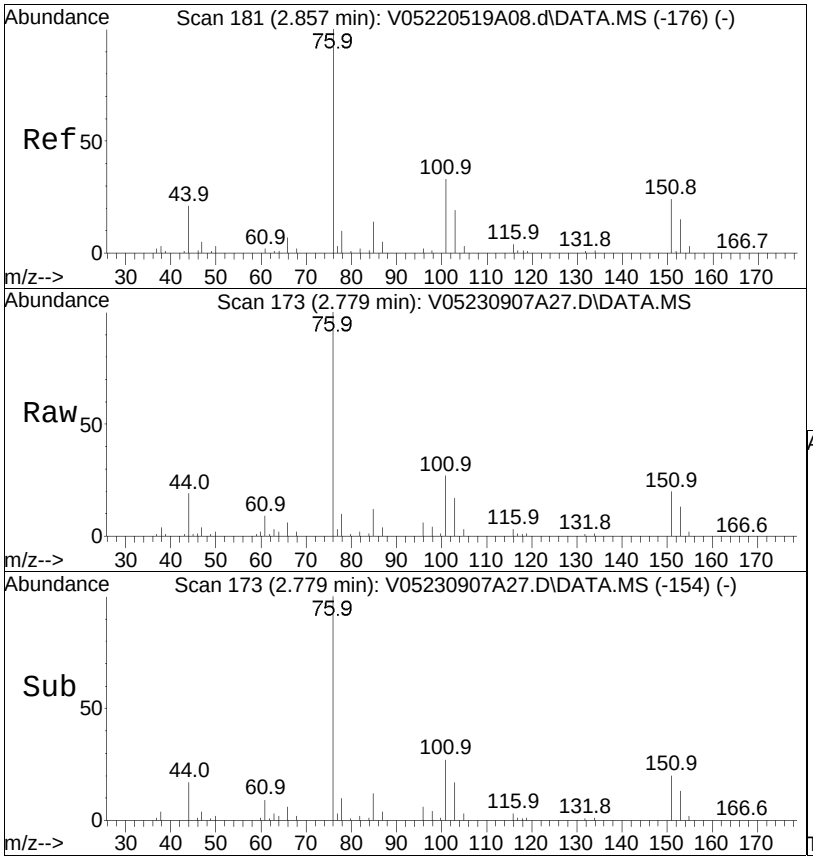


#10
1,1-Dichloroethene
Concen: 13.39 ug/L
RT: 2.750 min Scan# 170
Delta R.T. -0.010 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 96 Resp: 95921

Ion	Ratio	Lower	Upper
96	100		
61	179.6	136.7	205.1
63	55.0	45.0	67.6

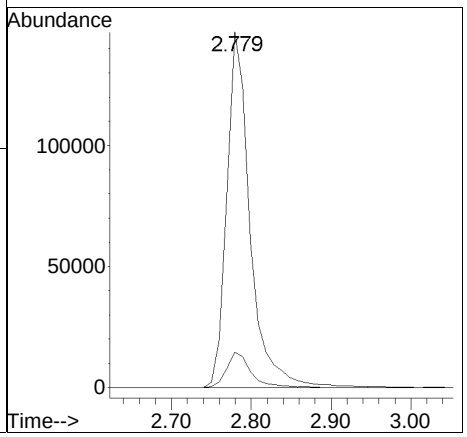


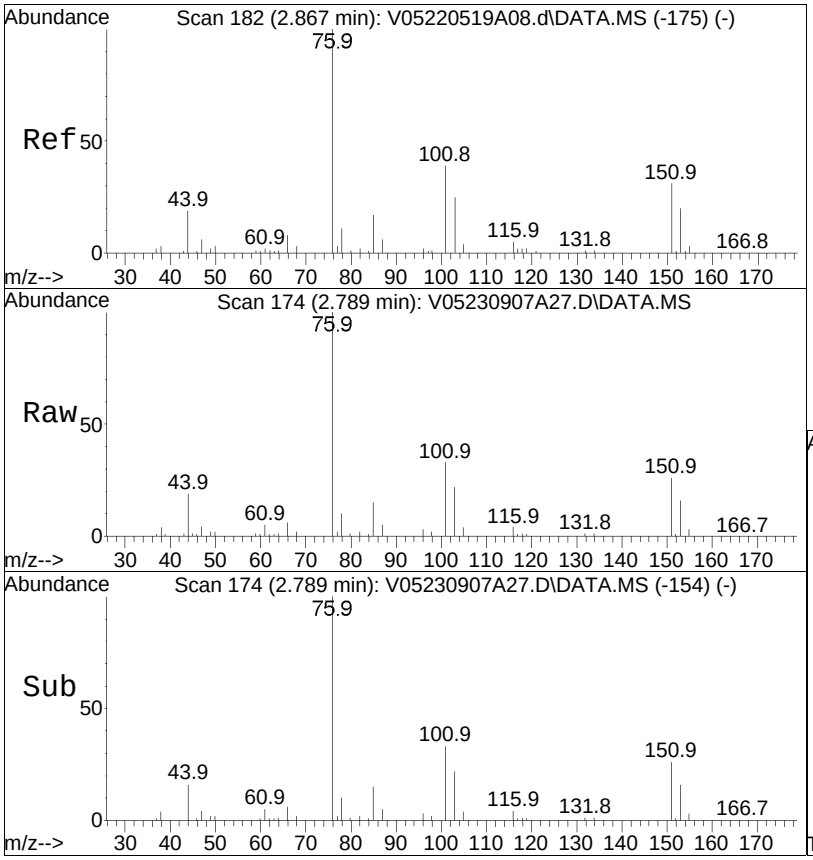


#11
Carbon disulfide
Concen: 13.05 ug/L
RT: 2.779 min Scan# 173
Delta R.T. -0.010 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 76 Resp: 297570

Ion	Ratio	Lower	Upper
76	100		
78	10.3	6.7	13.9

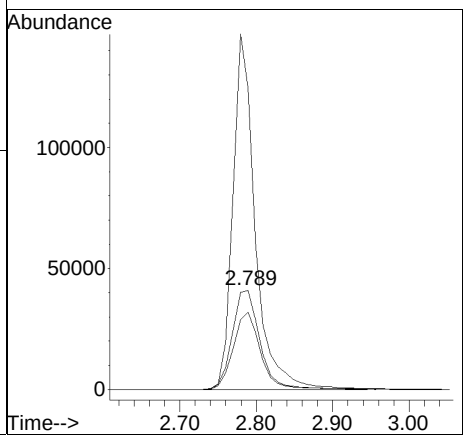


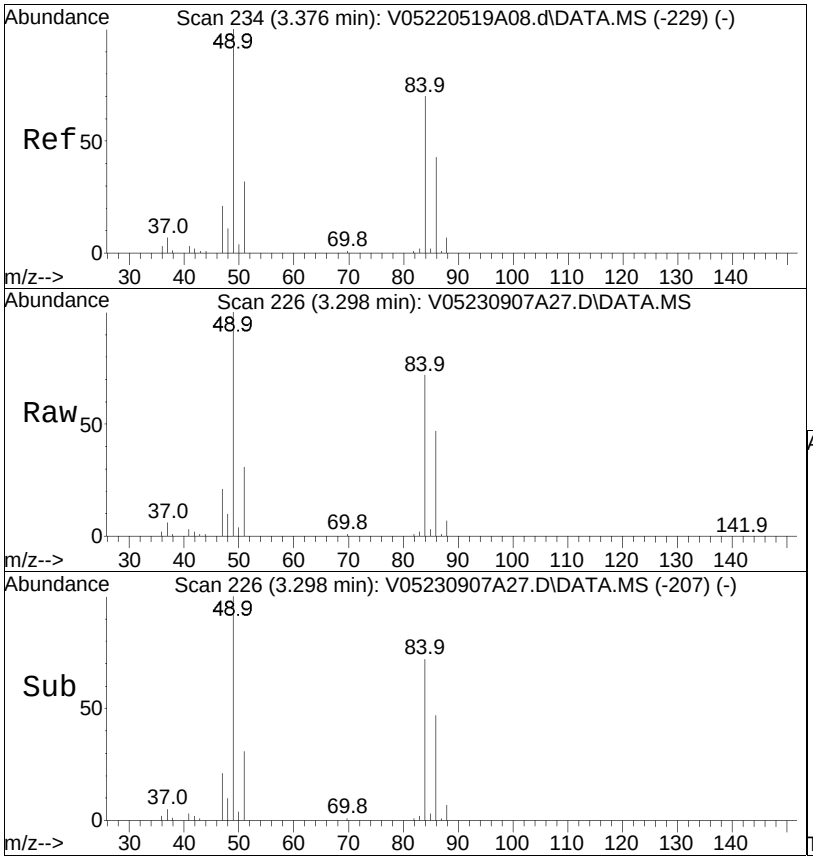


#12
Freon-113
Concen: 13.13 ug/L
RT: 2.789 min Scan# 174
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:101 Resp: 104158

Ion	Ratio	Lower	Upper
101	100		
151	76.3	65.0	97.6
76	285.7	190.0	285.0#

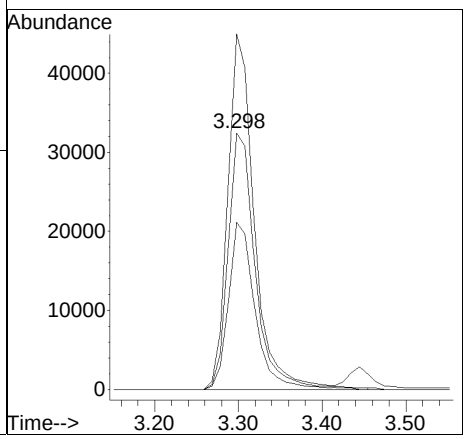


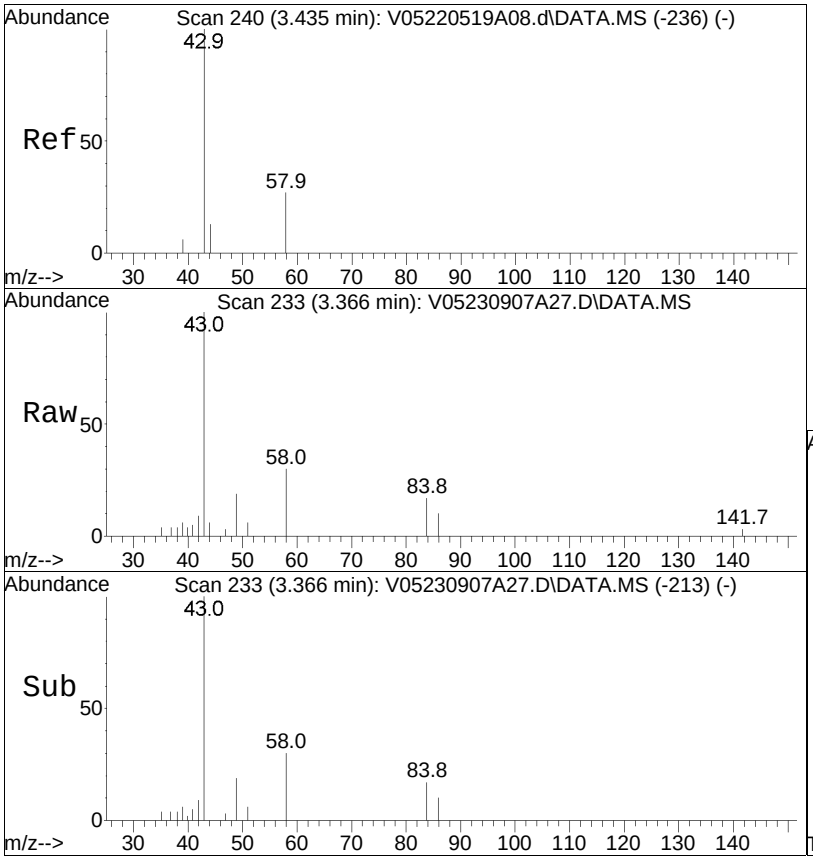


#15
Methylene chloride
Concen: 11.13 ug/L
RT: 3.298 min Scan# 226
Delta R.T. -0.010 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 84 Resp: 73366

Ion	Ratio	Lower	Upper
84	100		
86	64.0	42.1	87.5
49	134.6	69.3	143.9

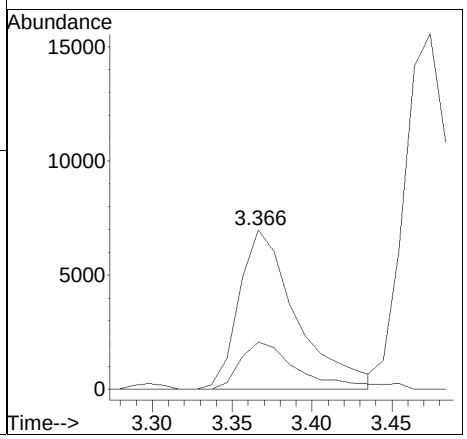


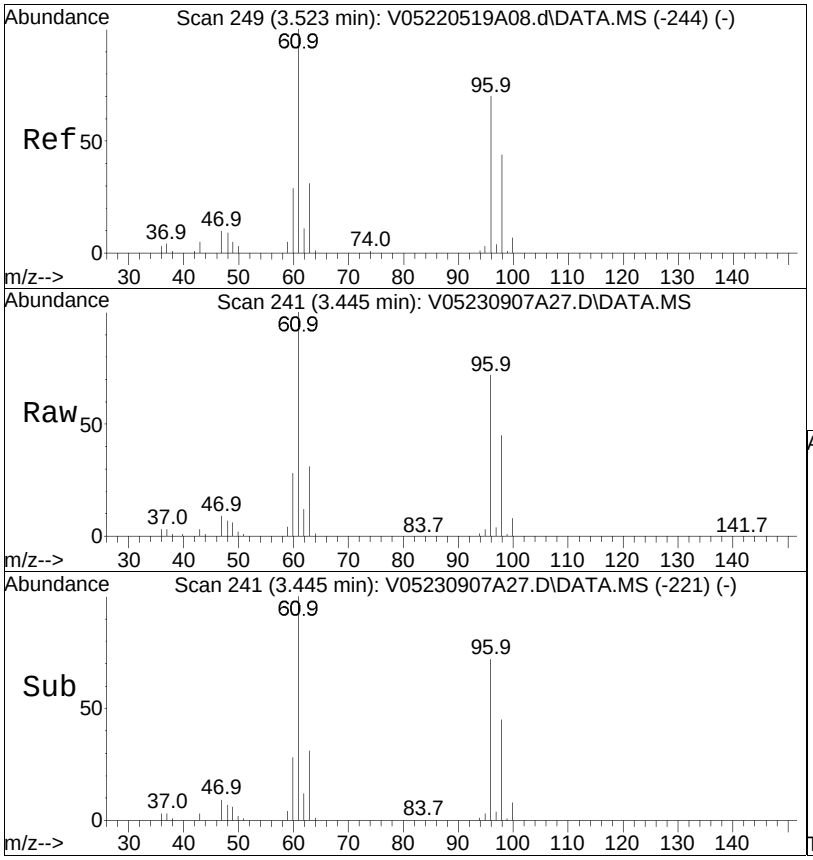


#17
Acetone
Concen: 16.47 ug/L
RT: 3.366 min Scan# 233
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 43 Resp: 17551

Ion	Ratio	Lower	Upper
43	100		
58	30.9	22.0	33.0

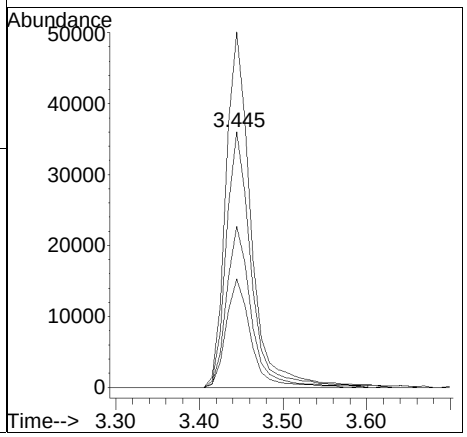


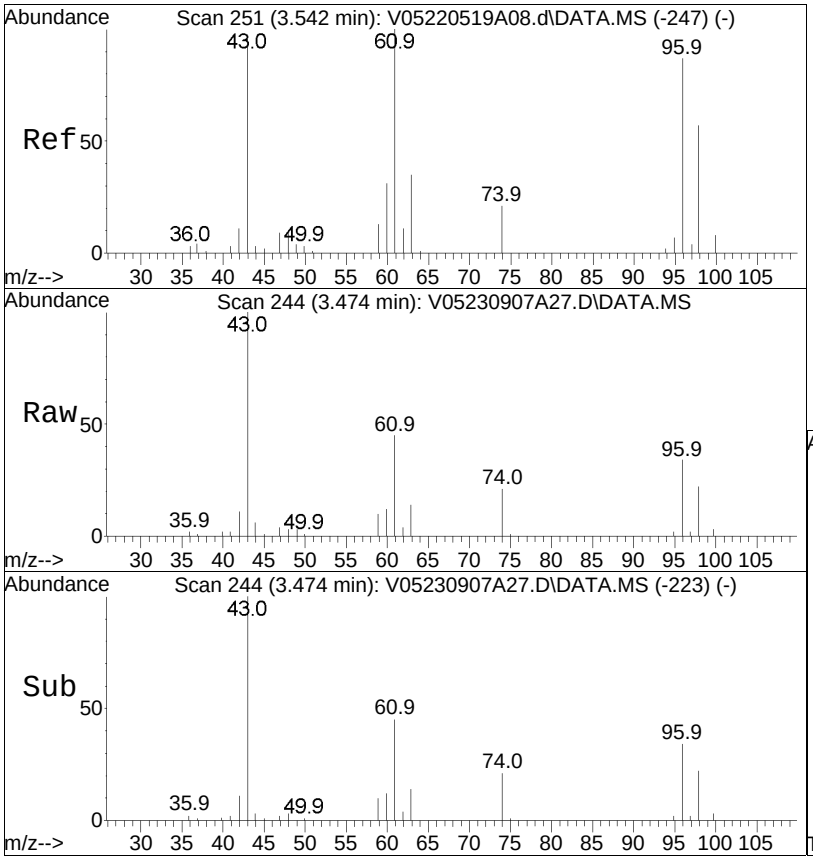


#18
trans-1,2-Dichloroethene
Concen: 11.47 ug/L
RT: 3.445 min Scan# 241
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 96 Resp: 75348

Ion	Ratio	Lower	Upper
96	100		
61	139.3	91.7	190.5
98	62.6	41.1	85.5
63	42.0	29.4	61.0

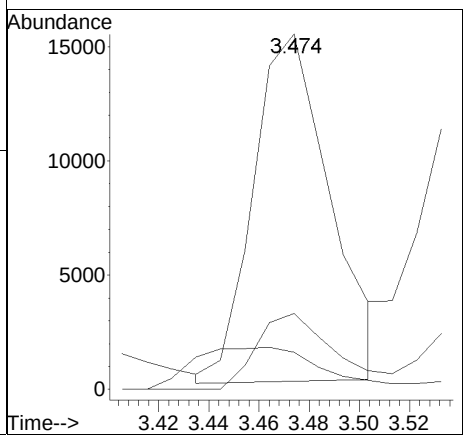


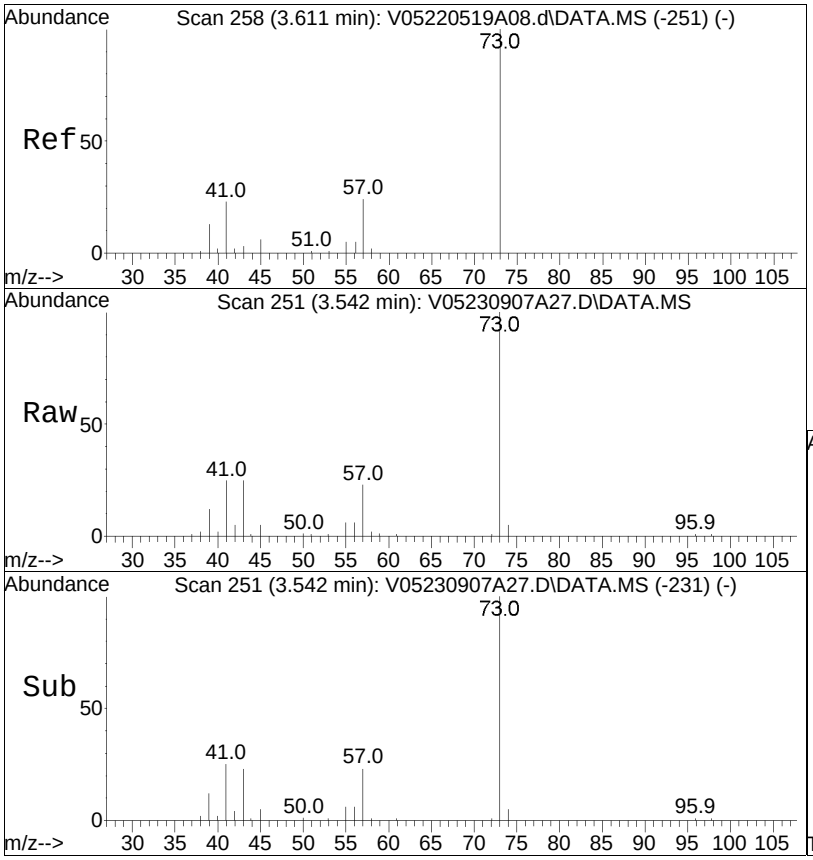


#19
Methyl acetate
Concen: 13.33 ug/L
RT: 3.474 min Scan# 244
Delta R.T. 0.010 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 43 Resp: 32384

Ion	Ratio	Lower	Upper
43	100		
74	22.6	23.1	34.7#
59	20.1	23.9	35.9#

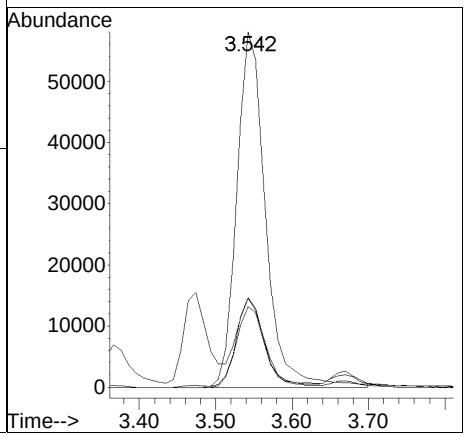


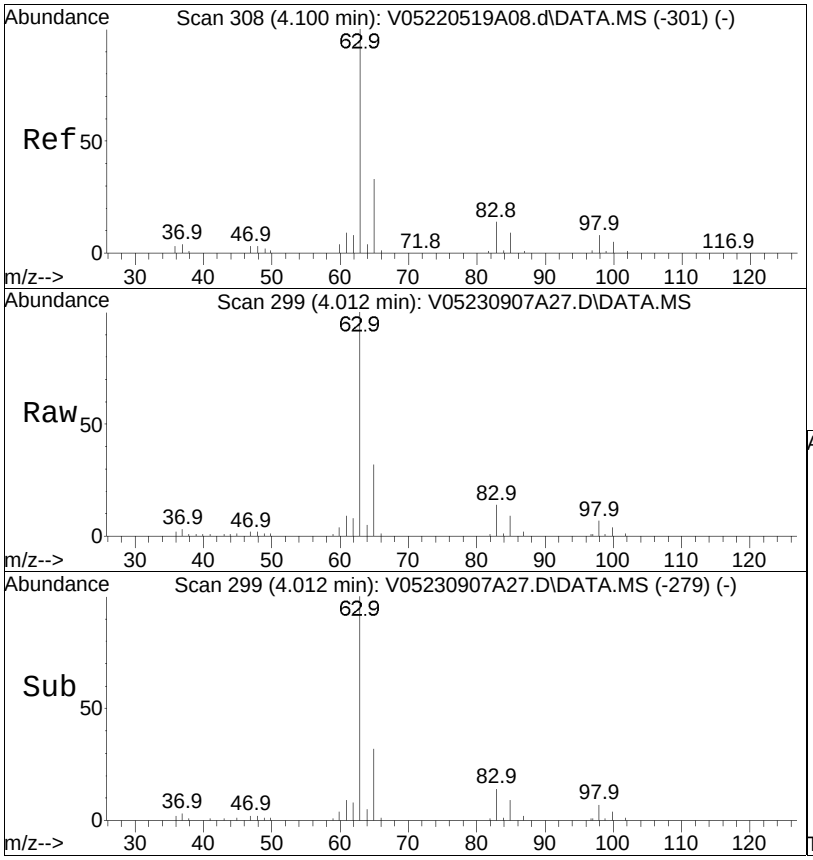


#20
Methyl tert-butyl ether
Concen: 11.00 ug/L
RT: 3.542 min Scan# 251
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 73 Resp: 152479

Ion	Ratio	Lower	Upper
73	100		
57	22.6	11.8	24.6
43	23.1	13.5	27.9
41	24.0	13.3	27.5

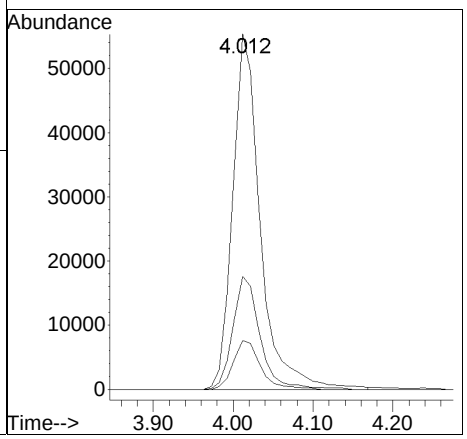


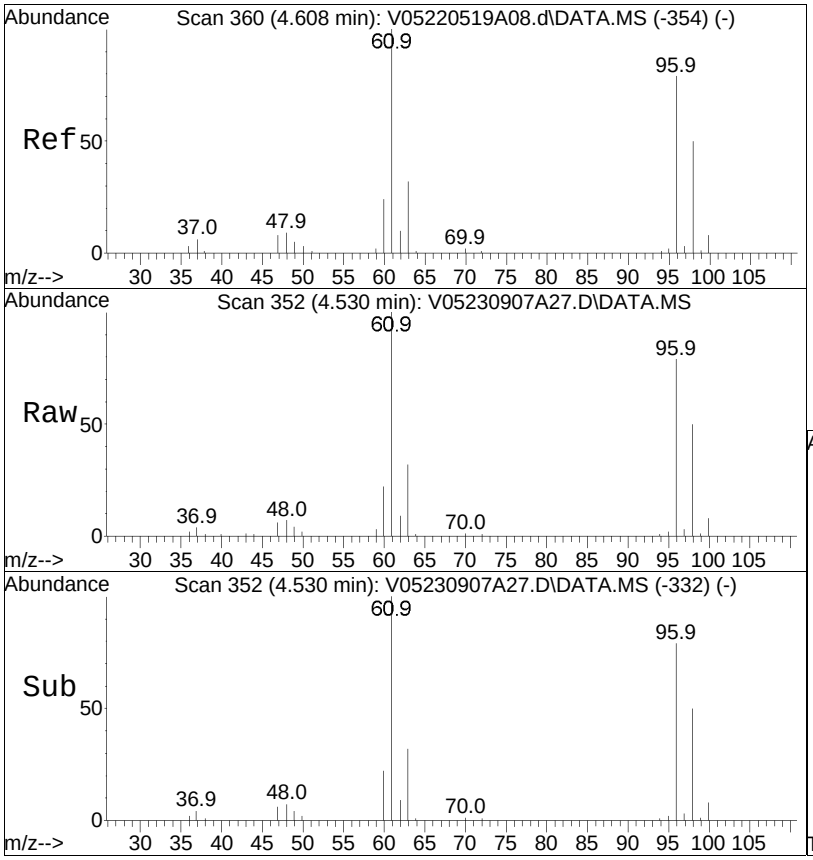


#23
1,1-Dichloroethane
Concen: 11.61 ug/L
RT: 4.012 min Scan# 299
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 63 Resp: 133116

Ion	Ratio	Lower	Upper
63	100		
65	31.3	11.9	51.9
83	13.6	0.0	34.2

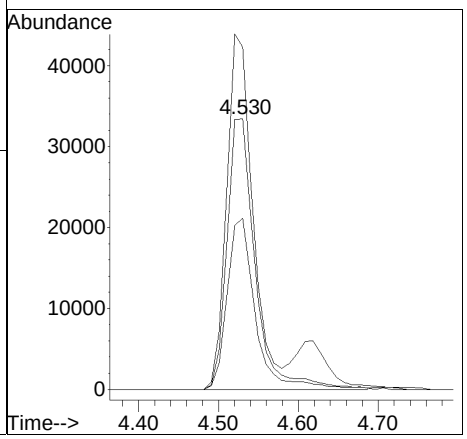


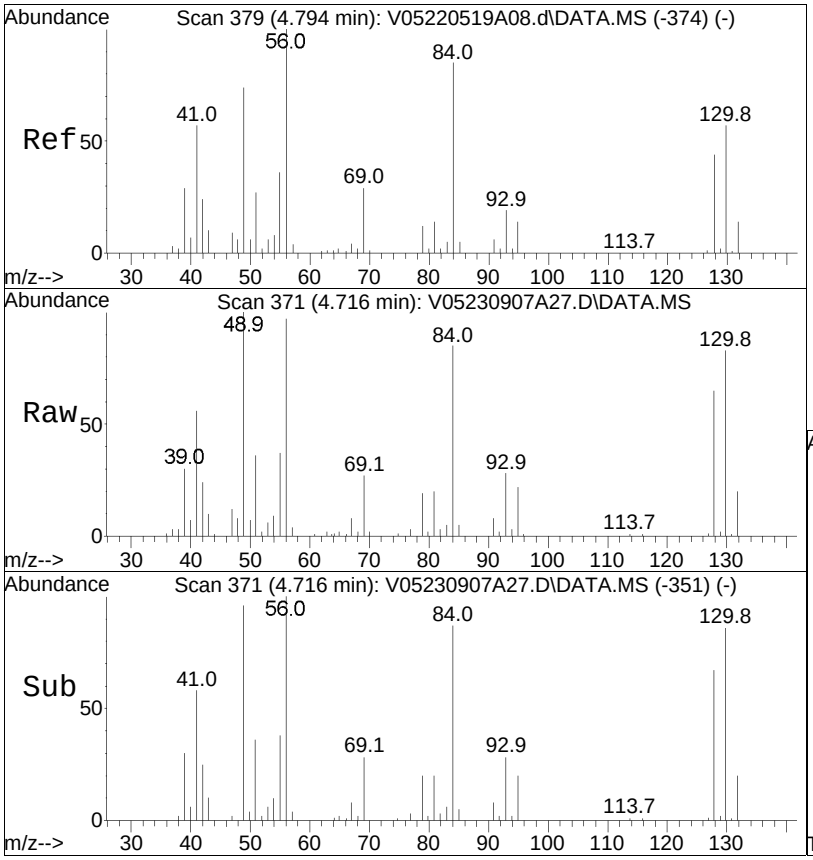


#28
cis-1,2-Dichloroethene
Concen: 11.36 ug/L
RT: 4.530 min Scan# 352
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 96 Resp: 82395

Ion	Ratio	Lower	Upper
96	100		
61	120.8	100.5	150.7
98	63.4	49.8	74.8

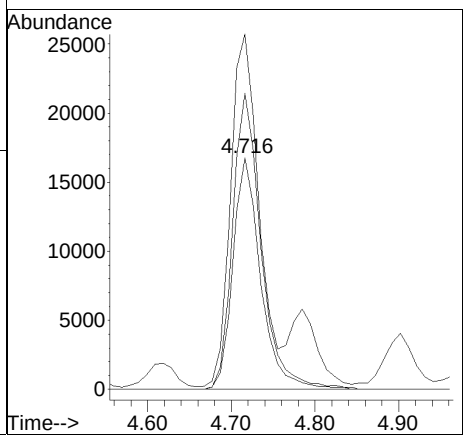


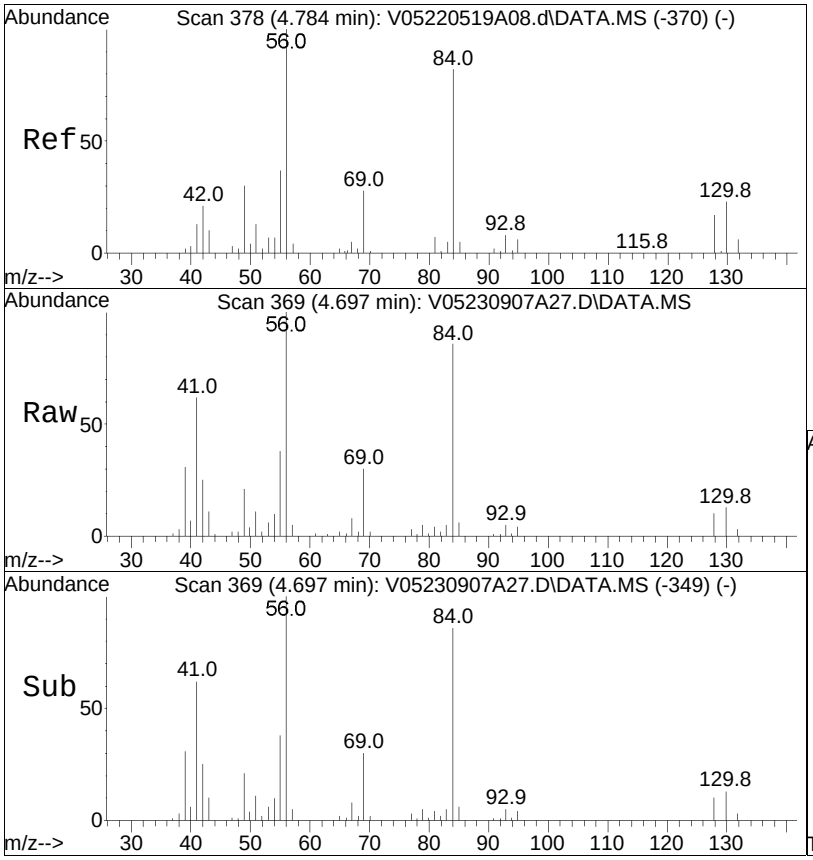


#30
Bromochloromethane
Concen: 11.51 ug/L
RT: 4.716 min Scan# 371
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:128 Resp: 38905

Ion	Ratio	Lower	Upper
128	100		
49	152.6	109.0	163.4
130	130.2	105.6	158.4

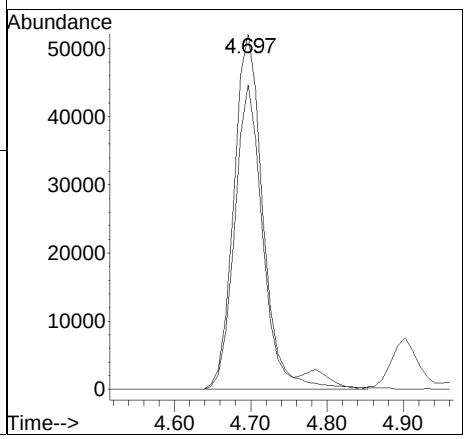


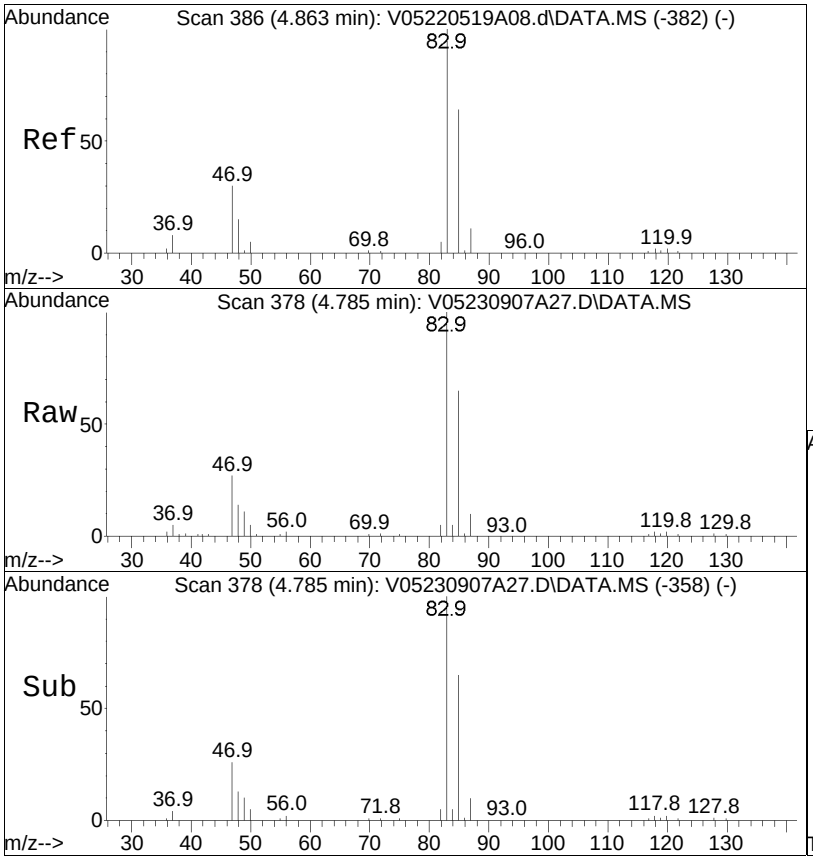


#31
Cyclohexane
Concen: 12.27 ug/L
RT: 4.697 min Scan# 369
Delta R.T. 0.001 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 56 Resp: 138485

Ion	Ratio	Lower	Upper
56	100		
84	80.9	64.4	133.8

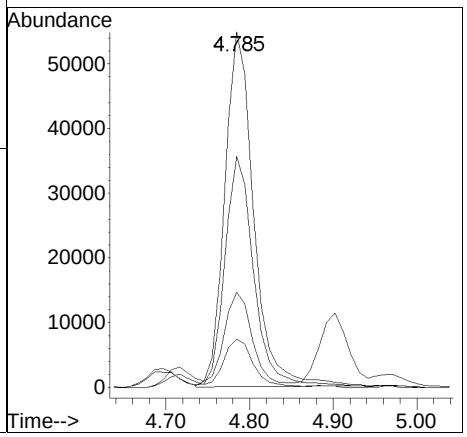


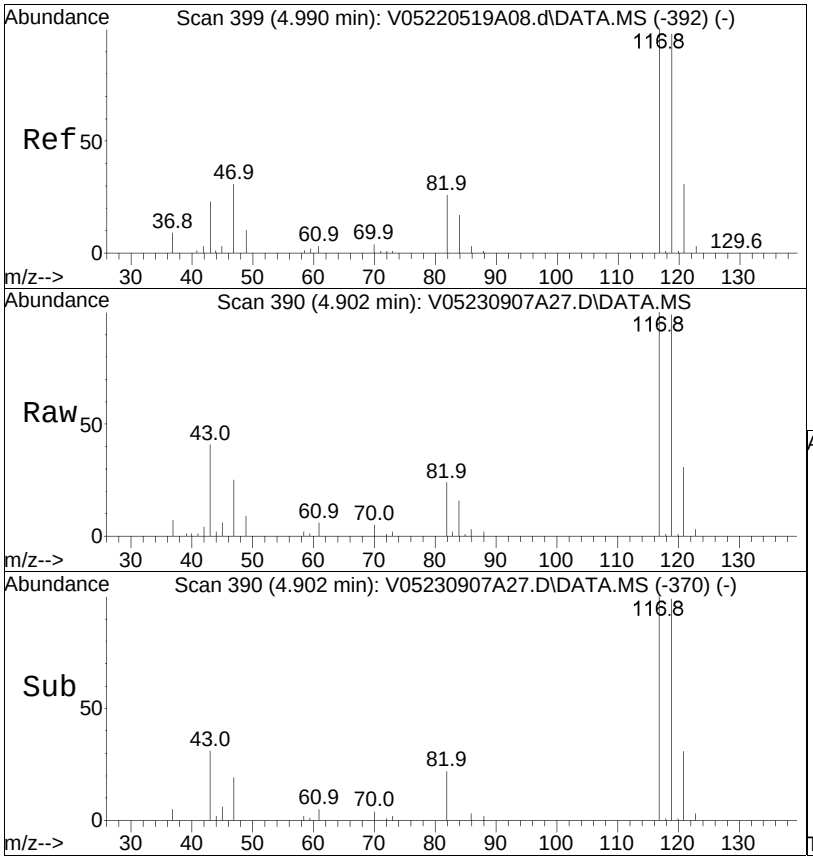


#32
Chloroform
Concen: 11.56 ug/L
RT: 4.785 min Scan# 378
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 83 Resp: 132251

Ion	Ratio	Lower	Upper
83	100		
85	65.0	42.8	89.0
47	24.0	13.7	28.4
48	13.9	6.9	14.3

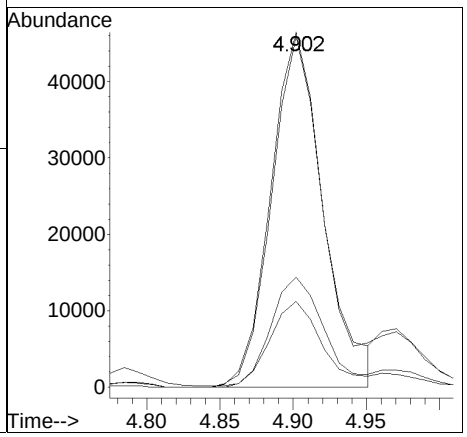


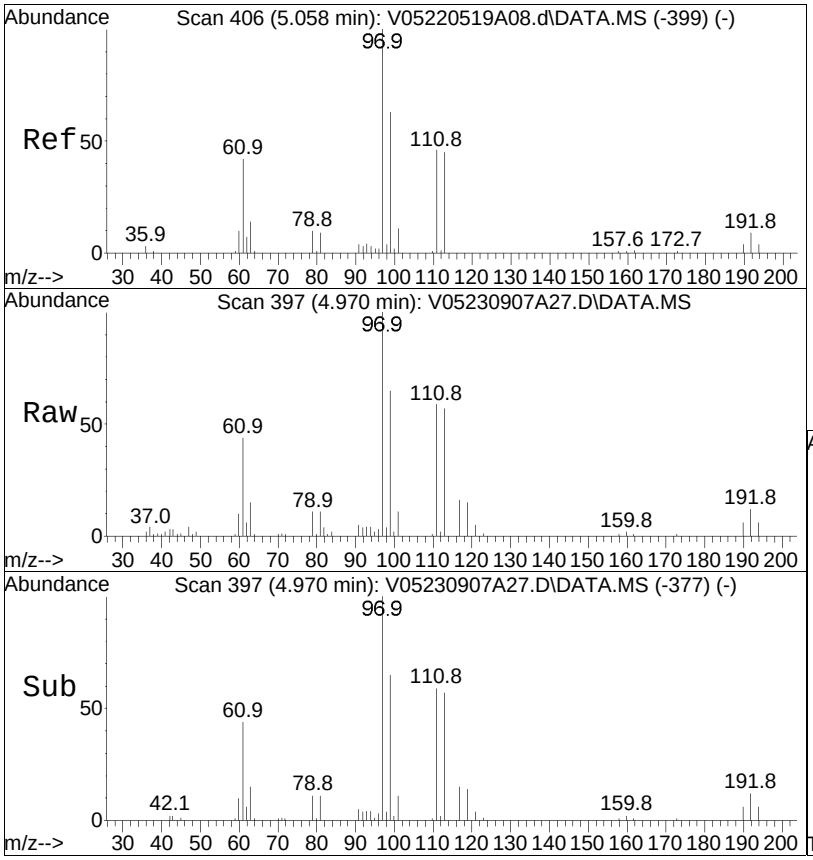


#34
Carbon tetrachloride
Concen: 11.93 ug/L
RT: 4.902 min Scan# 390
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:117 Resp: 116470

Ion	Ratio	Lower	Upper
117	100		
119	96.8	63.6	132.2
121	31.5	19.8	41.0
82	23.5	15.9	32.9

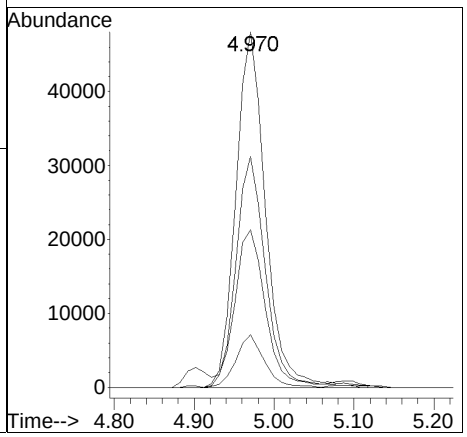


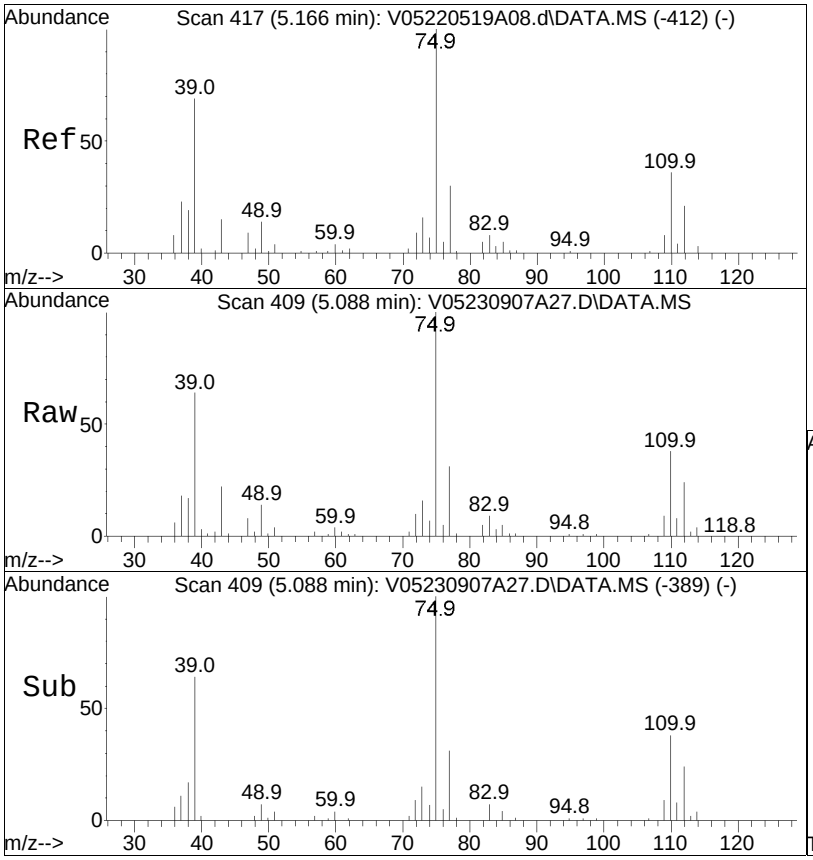


#37
1,1,1-Trichloroethane
Concen: 12.22 ug/L
RT: 4.970 min Scan# 397
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 97 Resp: 124963

Ion	Ratio	Lower	Upper
97	100		
99	64.7	41.7	86.5
61	45.0	26.1	54.3
63	14.1	8.5	17.6

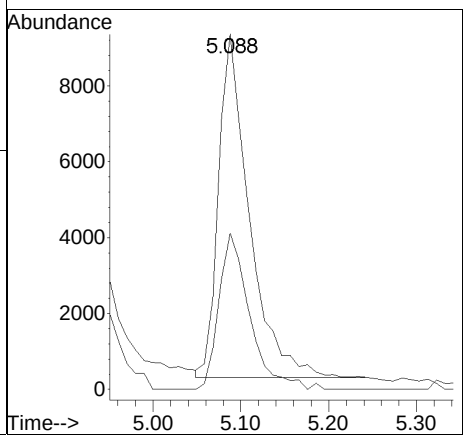


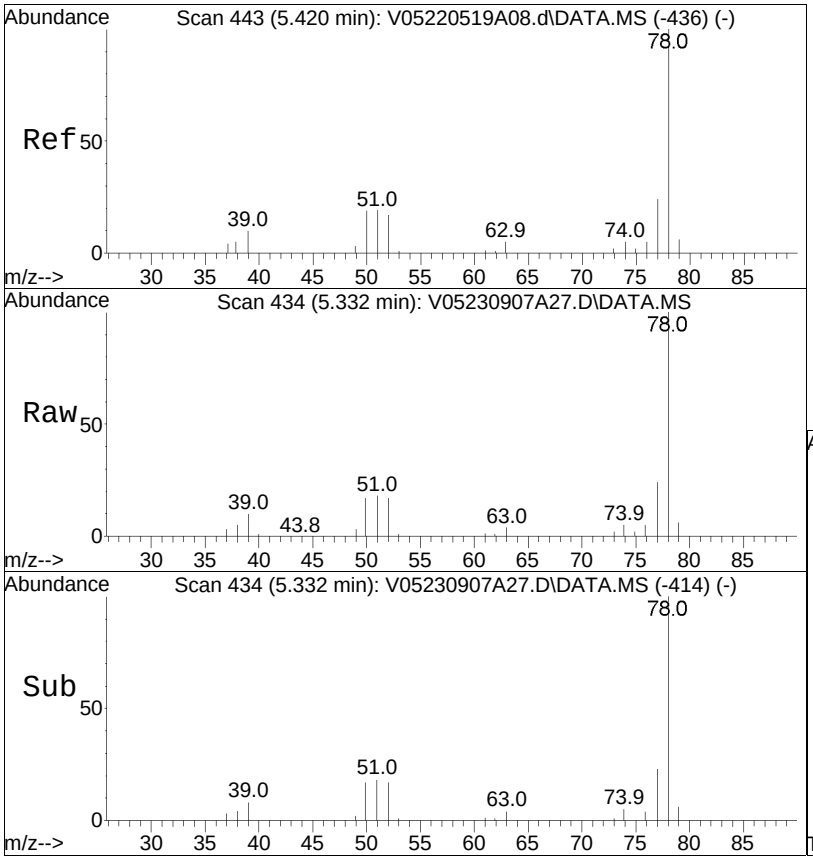


#39
2-Butanone
Concen: 14.32 ug/L
RT: 5.088 min Scan# 409
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 43 Resp: 22060

Ion	Ratio	Lower	Upper
43	100		
72	45.7	55.6	83.4#

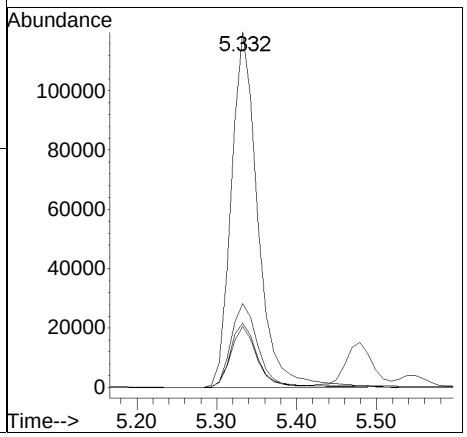


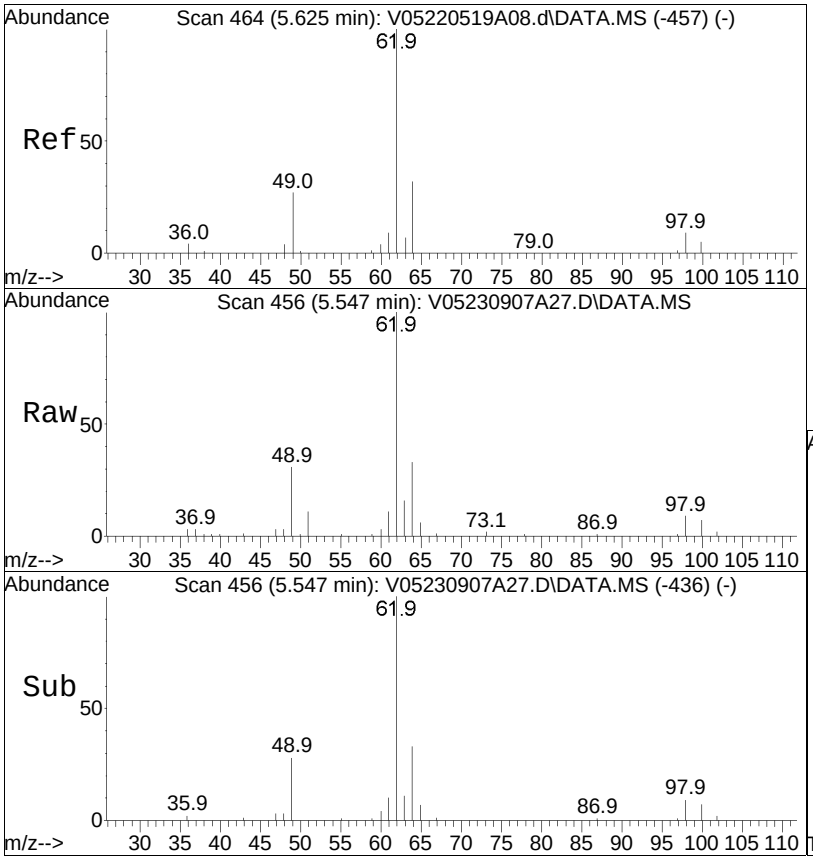


#41
Benzene
Concen: 11.65 ug/L
RT: 5.332 min Scan# 434
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 78 Resp: 278186

Ion	Ratio	Lower	Upper
78	100		
77	24.2	15.2	31.6
51	18.2	10.5	21.7
52	17.5	9.5	19.7

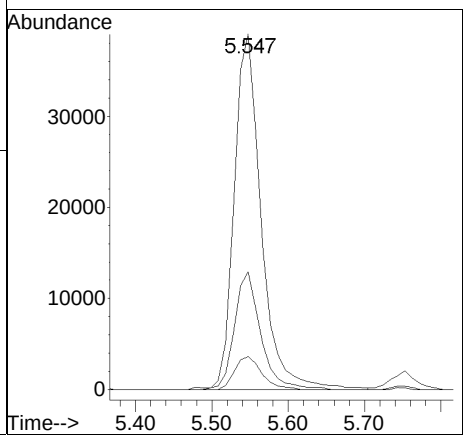


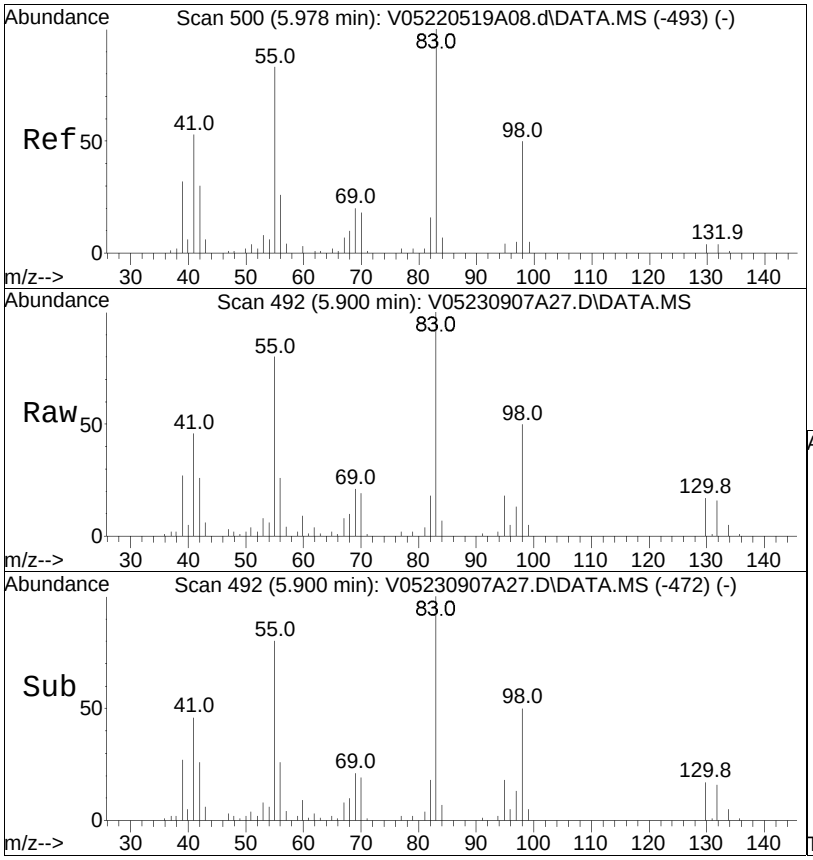


#44
1,2-Dichloroethane
Concen: 12.14 ug/L
RT: 5.547 min Scan# 456
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 62 Resp: 95677

Ion	Ratio	Lower	Upper
62	100		
64	32.3	13.2	53.2
98	9.2	0.0	27.8

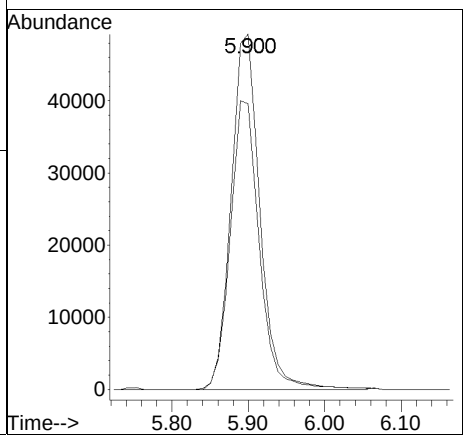


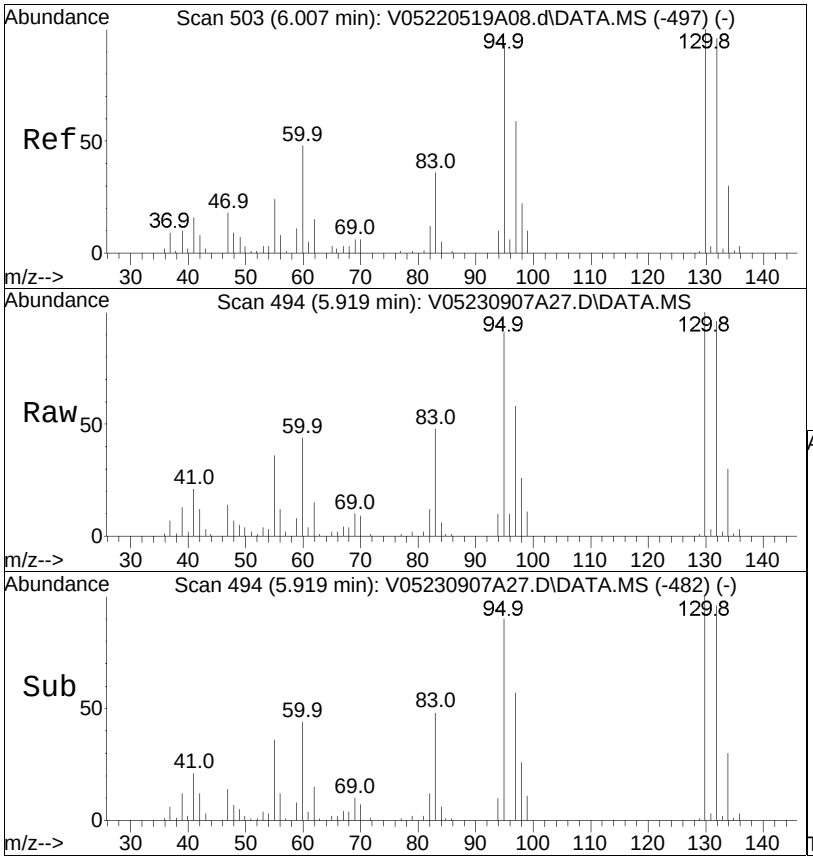


#47
Methyl cyclohexane
Concen: 11.12 ug/L
RT: 5.900 min Scan# 492
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 83 Resp: 129233

Ion	Ratio	Lower	Upper
83	100		
55	81.8	57.3	85.9

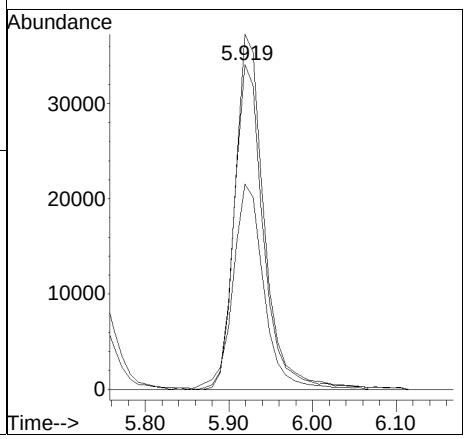


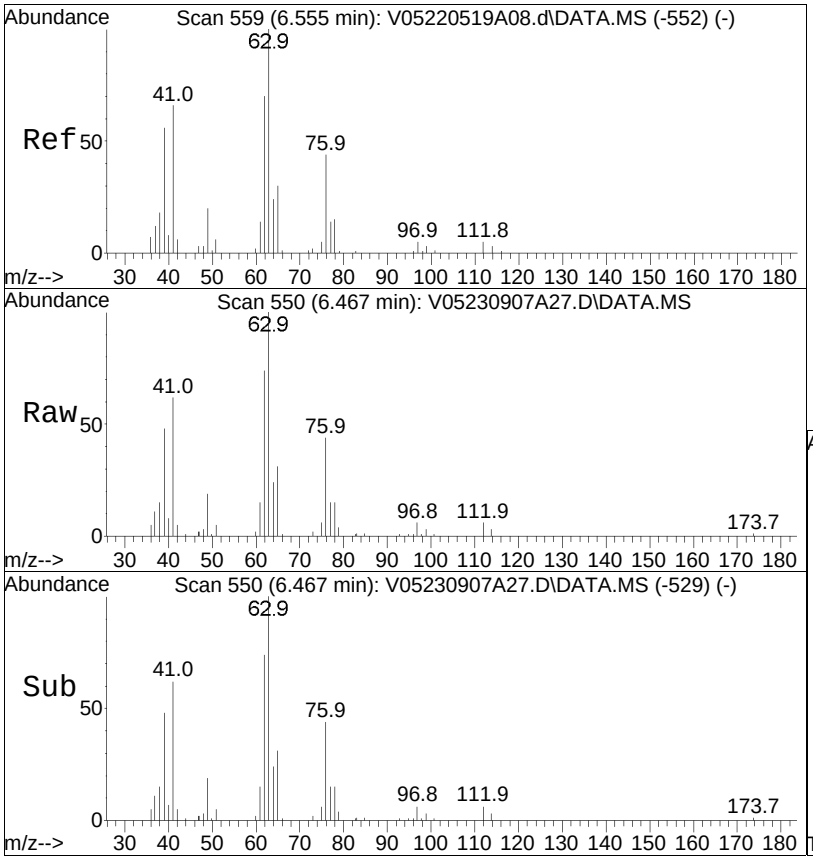


#48
Trichloroethene
Concen: 10.87 ug/L
RT: 5.919 min Scan# 494
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 95 Resp: 83223

Ion	Ratio	Lower	Upper
95	100		
97	66.9	56.1	84.1
130	108.8	77.7	116.5

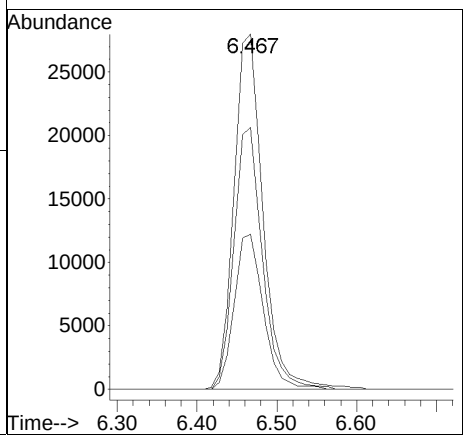


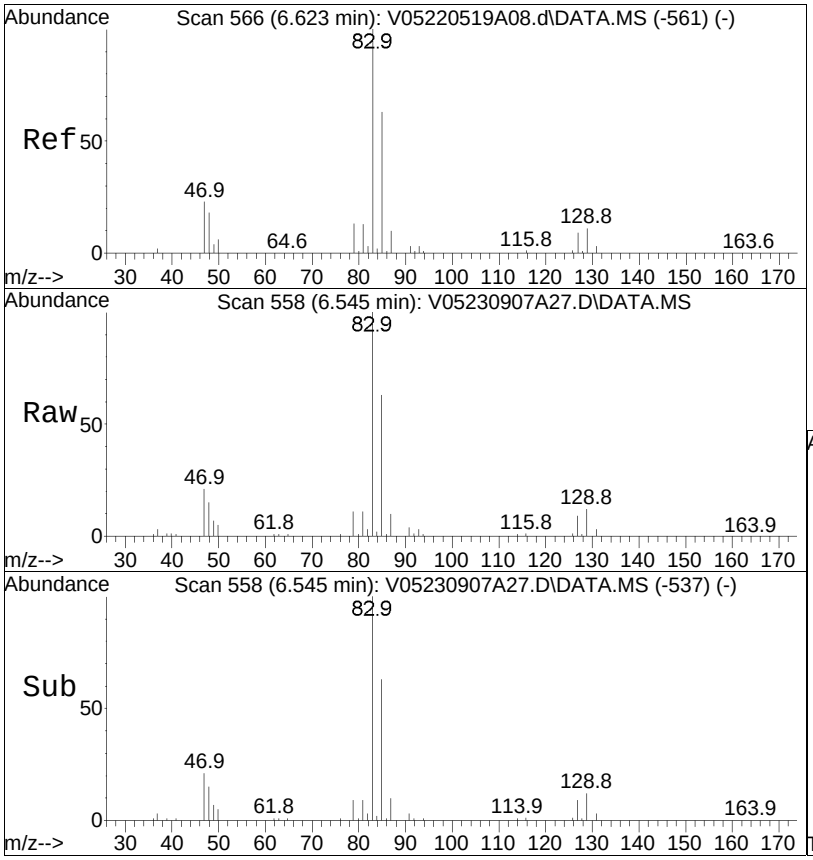


#51
1,2-Dichloropropane
Concen: 11.76 ug/L
RT: 6.467 min Scan# 550
Delta R.T. 0.010 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 63 Resp: 71220

Ion	Ratio	Lower	Upper
63	100		
62	72.2	57.0	85.4
76	43.6	48.4	72.6#

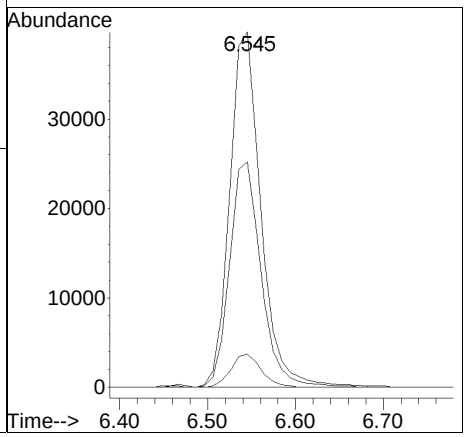


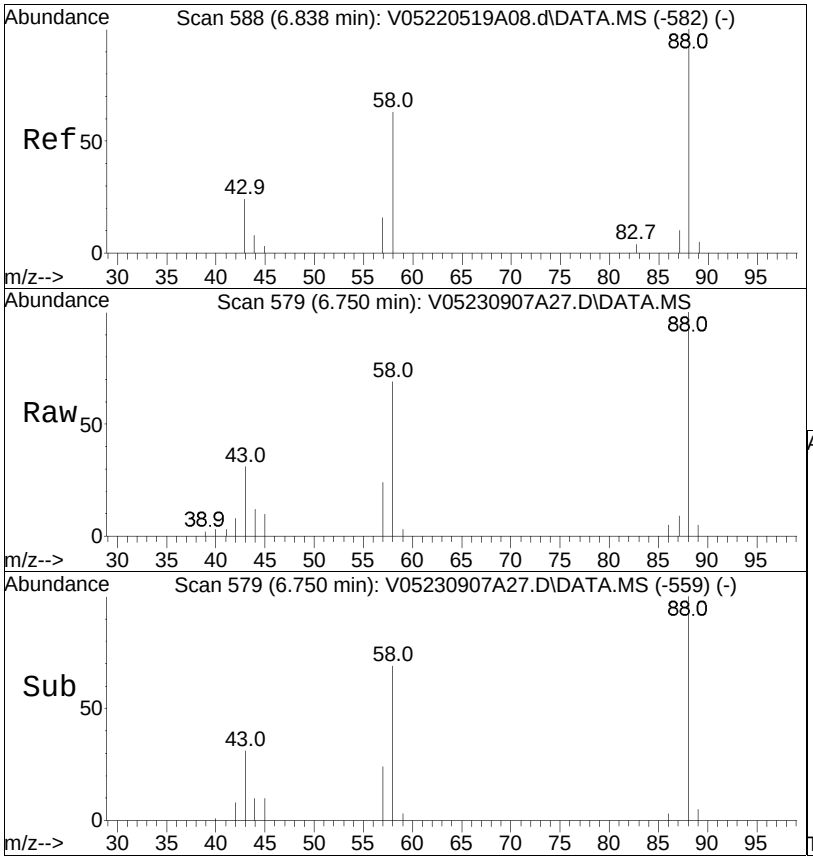


#54
Bromodichloromethane
Concen: 11.79 ug/L
RT: 6.545 min Scan# 558
Delta R.T. 0.010 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 83 Resp: 98617

Ion	Ratio	Lower	Upper
83	100		
85	64.1	51.0	76.6
127	9.2	6.7	10.1

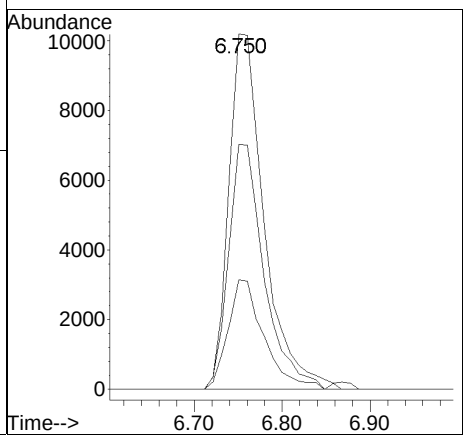


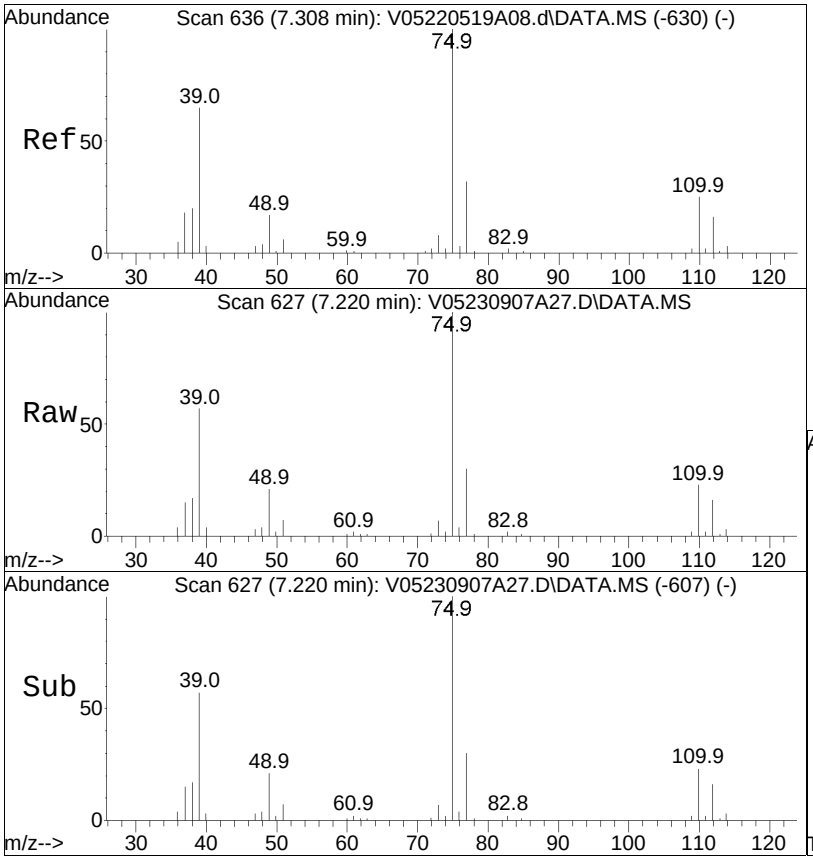


#57
1,4-Dioxane
Concen: 978.09 ug/L
RT: 6.750 min Scan# 579
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 88 Resp: 28820

Ion	Ratio	Lower	Upper
88	100		
58	69.0	50.6	75.8
43	31.2	20.5	30.7#

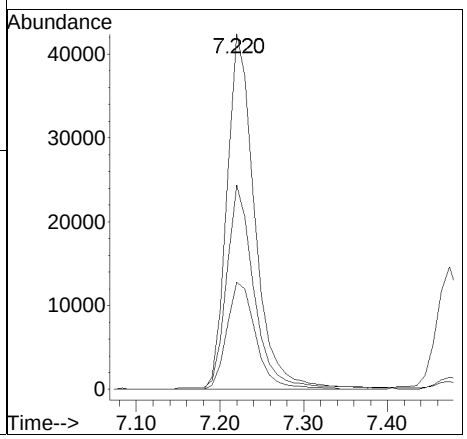


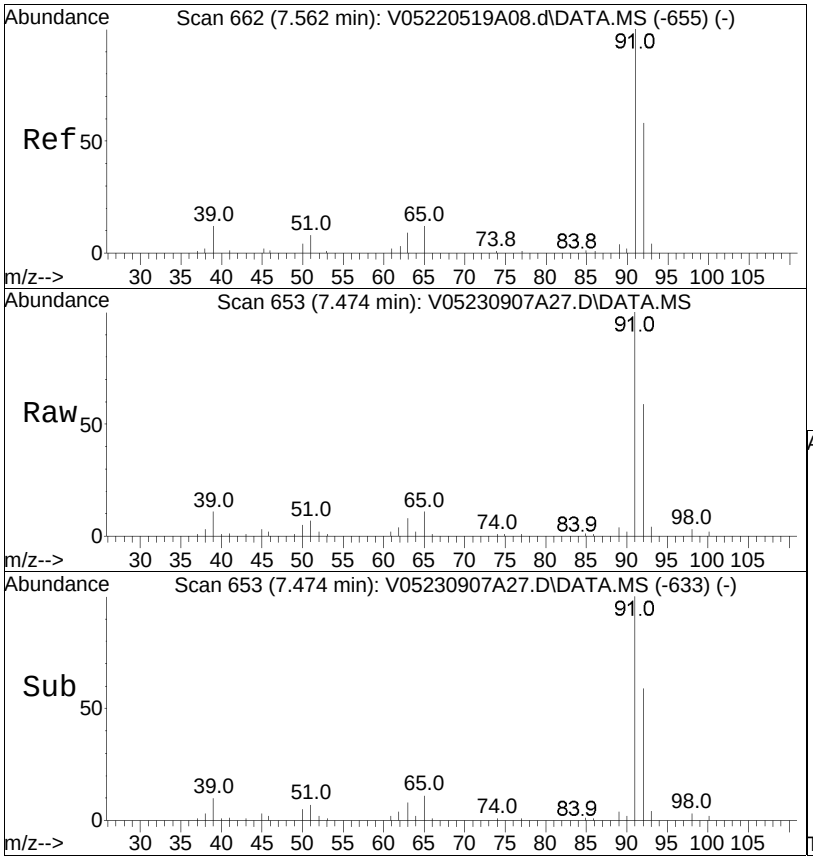


#58
cis-1,3-Dichloropropene
Concen: 10.58 ug/L
RT: 7.220 min Scan# 627
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 75 Resp: 98782

Ion	Ratio	Lower	Upper
75	100		
77	31.5	25.5	38.3
39	57.7	40.4	60.6

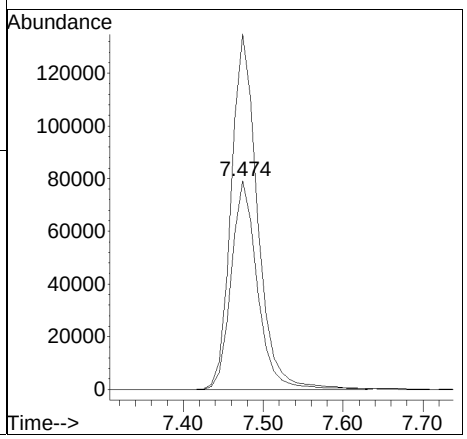


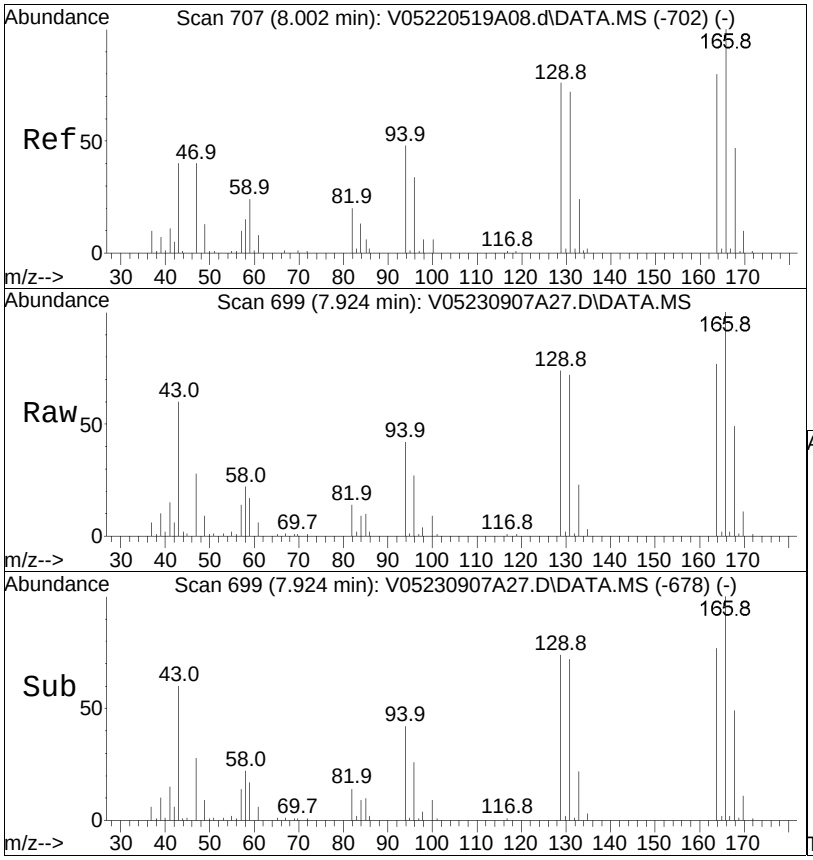


#61
Toluene
Concen: 11.64 ug/L
RT: 7.474 min Scan# 653
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 92 Resp: 180380

Ion	Ratio	Lower	Upper
92	100		
91	171.9	135.2	202.8

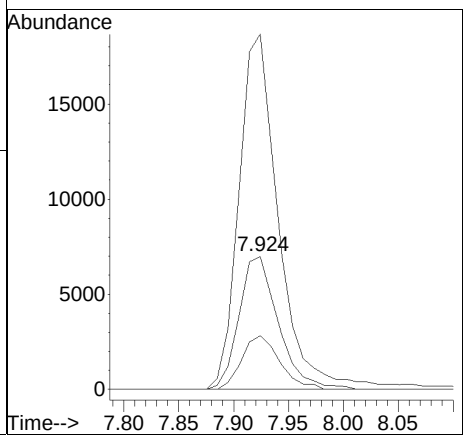


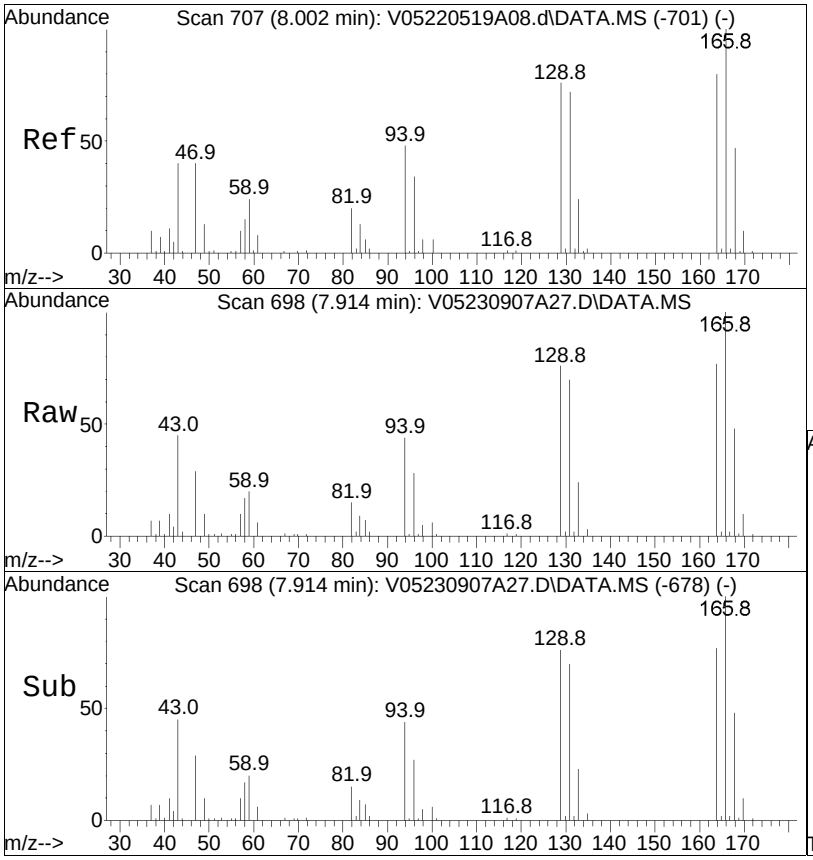


#62
4-Methyl-2-pentanone
Concen: 14.66 ug/L
RT: 7.924 min Scan# 699
Delta R.T. 0.010 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 58 Resp: 17445

Ion	Ratio	Lower	Upper
58	100		
100	39.1	38.9	58.3
43	271.1	204.2	306.2

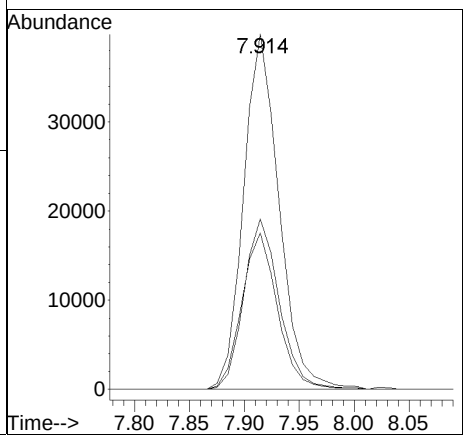


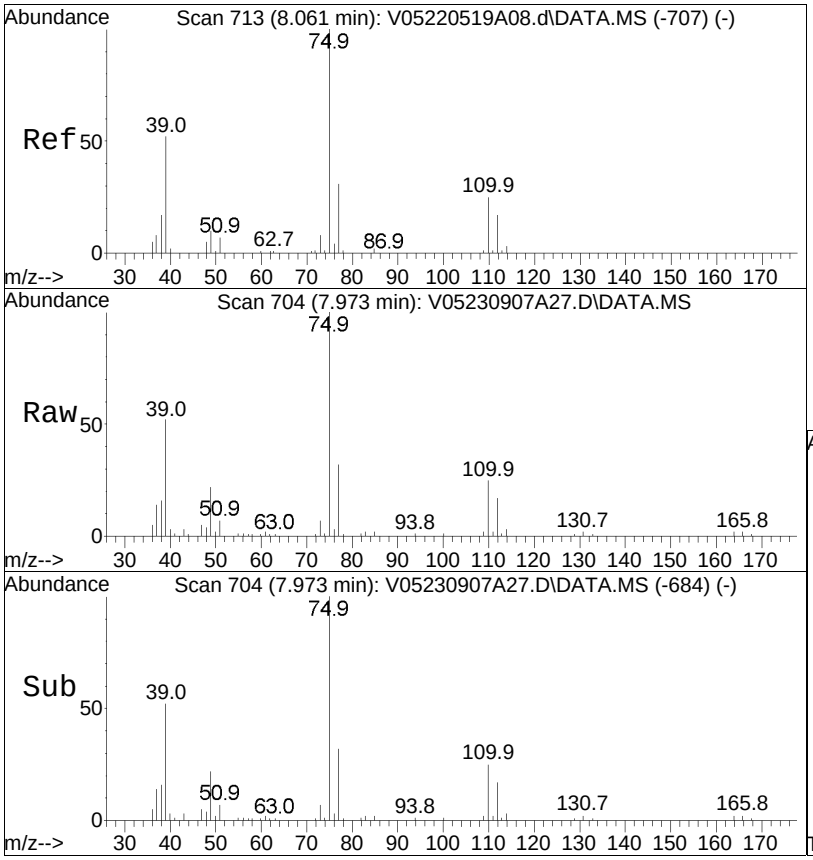


#63
Tetrachloroethene
Concen: 12.16 ug/L
RT: 7.914 min Scan# 698
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:166 Resp: 89710

Ion	Ratio	Lower	Upper
166	100		
168	48.1	30.2	70.2
94	44.3	32.5	72.5

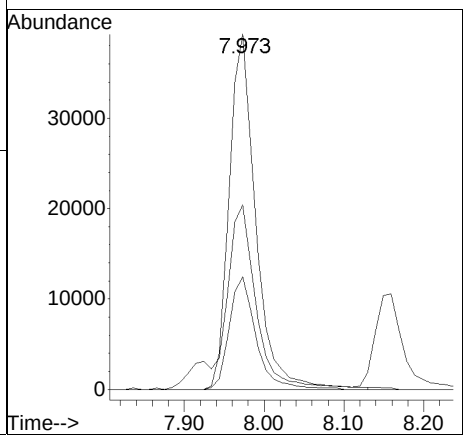


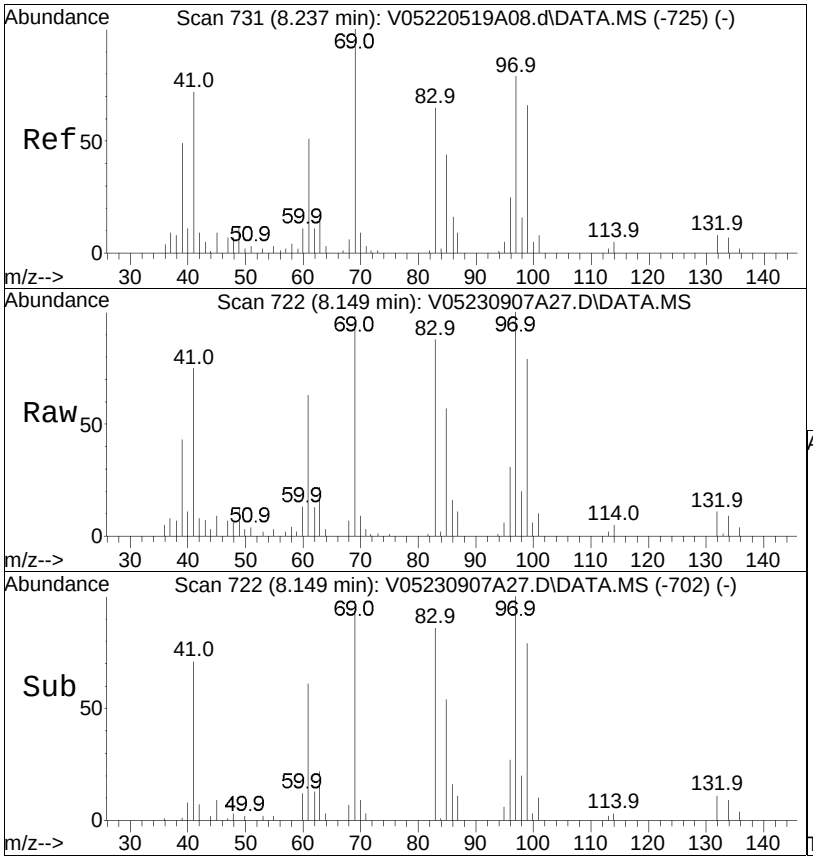


#65
trans-1,3-Dichloropropene
Concen: 11.97 ug/L
RT: 7.973 min Scan# 704
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 75 Resp: 91325

Ion	Ratio	Lower	Upper
75	100		
77	31.8	11.5	51.5
39	62.1	29.3	69.3

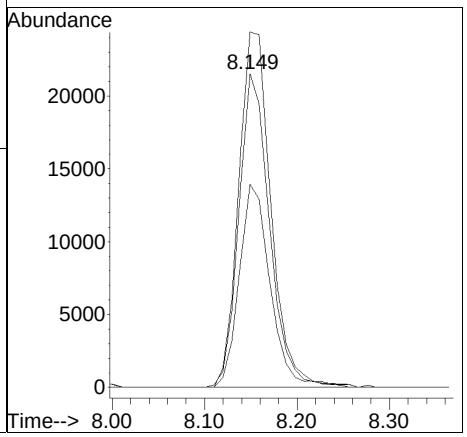


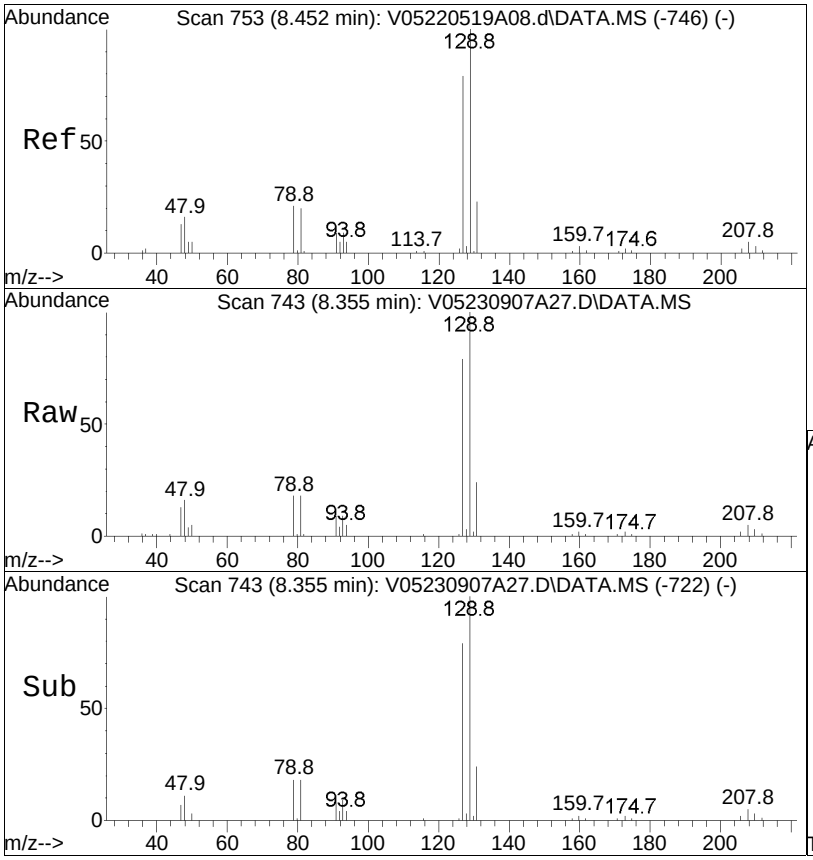


#68
1,1,2-Trichloroethane
Concen: 12.79 ug/L
RT: 8.149 min Scan# 722
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 83 Resp: 50035

Ion	Ratio	Lower	Upper
83	100		
97	118.9	102.2	142.2
85	64.8	47.5	87.5

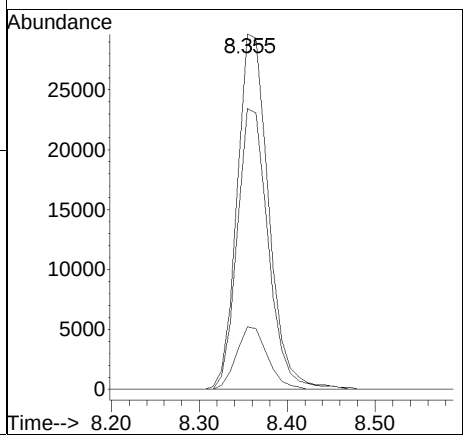


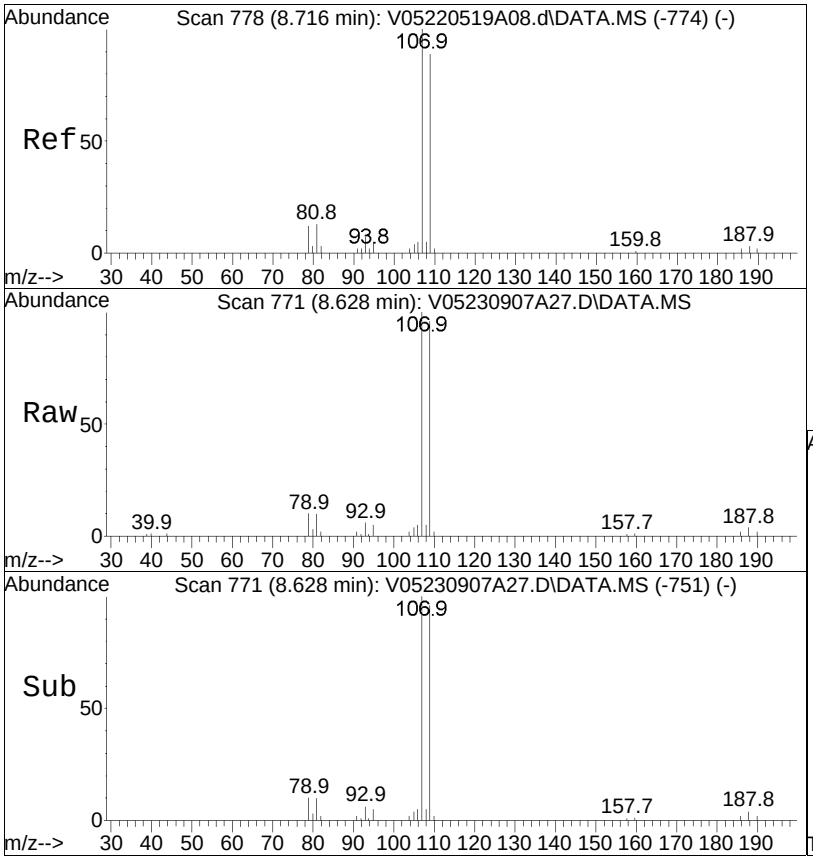


#69
Chlorodibromomethane
Concen: 12.42 ug/L
RT: 8.355 min Scan# 743
Delta R.T. 0.001 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:129 Resp: 73996

Ion	Ratio	Lower	Upper
129	100		
81	17.4	0.0	37.0
127	78.0	58.3	98.3

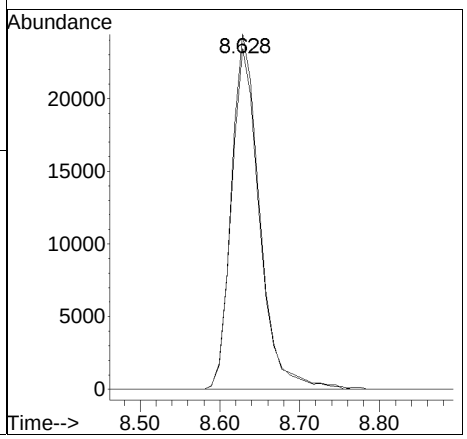


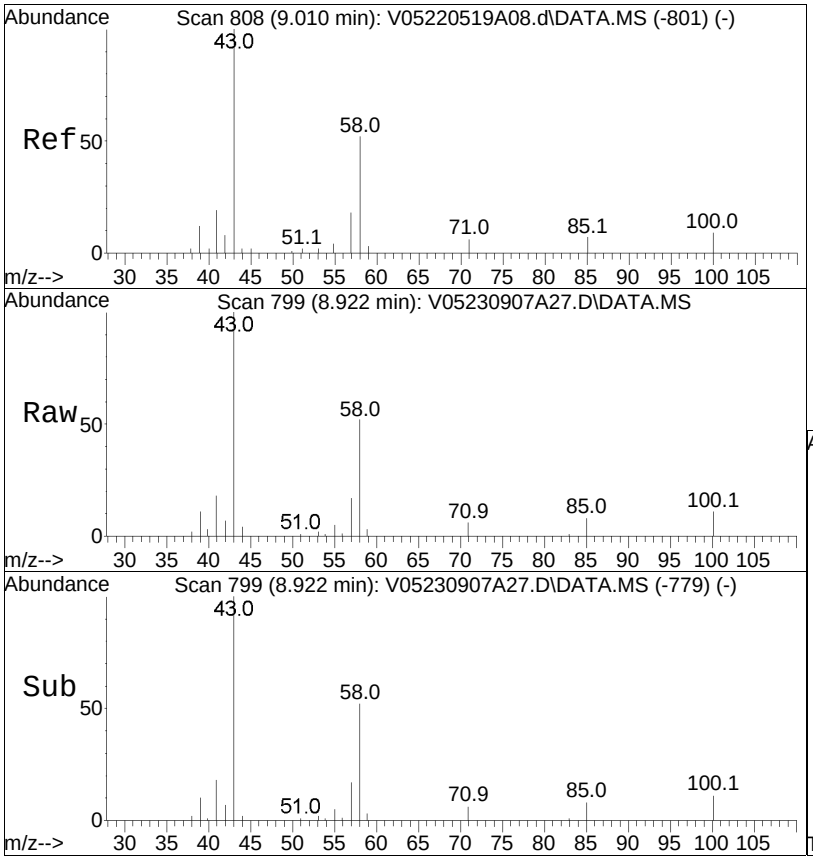


#71
1,2-Dibromoethane
Concen: 12.42 ug/L
RT: 8.628 min Scan# 771
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:107 Resp: 65615

Ion	Ratio	Lower	Upper
107	100		
109	95.6	75.0	112.6

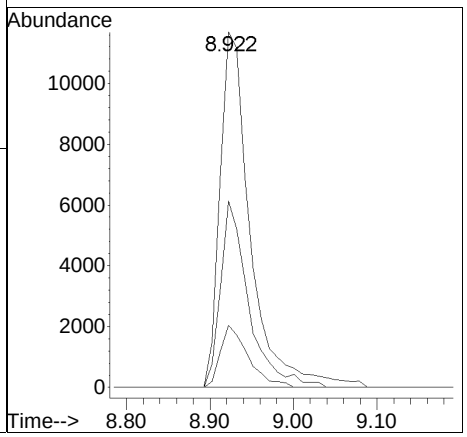


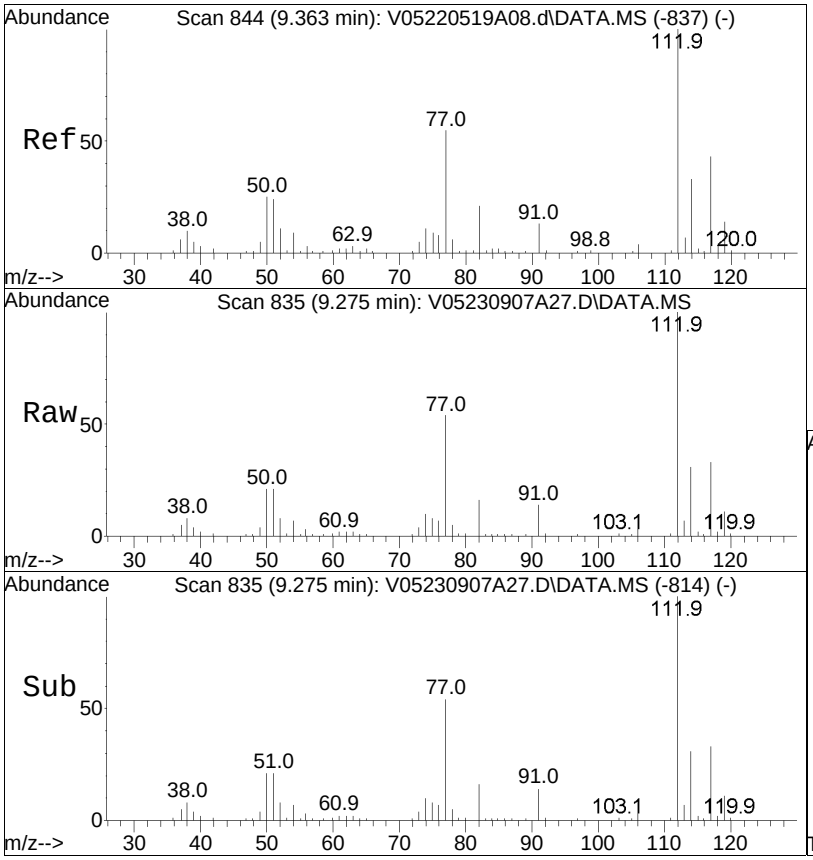


#72
2-Hexanone
Concen: 14.01 ug/L
RT: 8.922 min Scan# 799
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 43 Resp: 29700

Ion	Ratio	Lower	Upper
43	100		
58	48.5	42.3	63.5
57	16.1	15.6	23.4

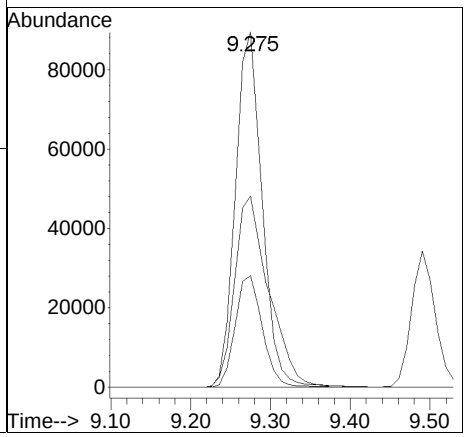


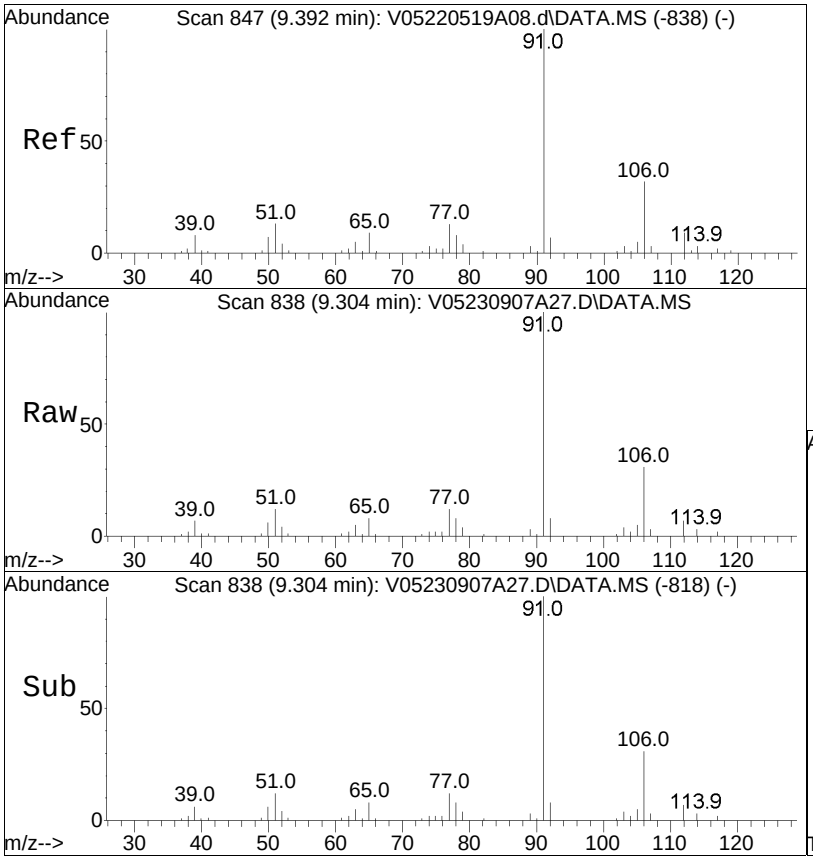


#73
Chlorobenzene
Concen: 11.75 ug/L
RT: 9.275 min Scan# 835
Delta R.T. 0.010 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:112 Resp: 209360

Ion	Ratio	Lower	Upper
112	100		
77	68.8	66.1	99.1
114	32.0	25.4	38.0

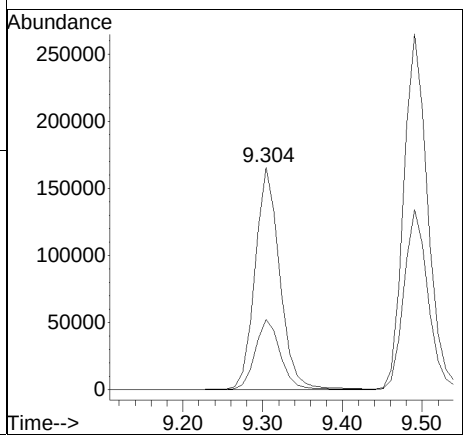


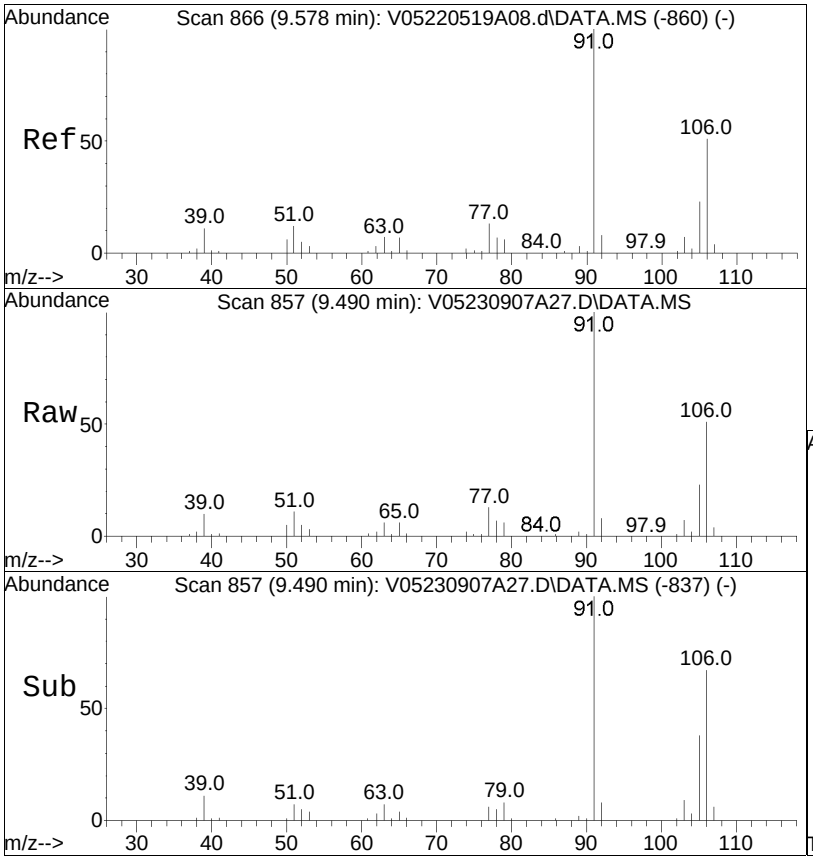


#74
Ethylbenzene
Concen: 11.85 ug/L
RT: 9.304 min Scan# 838
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 91 Resp: 355437

Ion	Ratio	Lower	Upper
91	100		
106	31.9	22.9	34.3

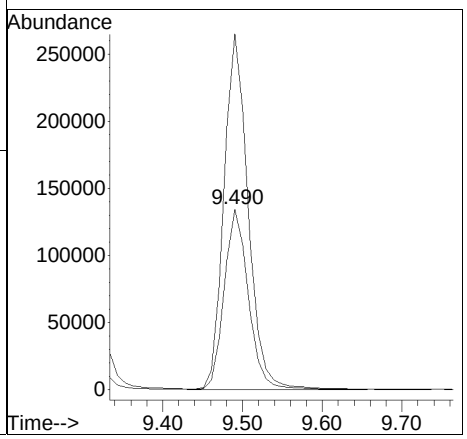


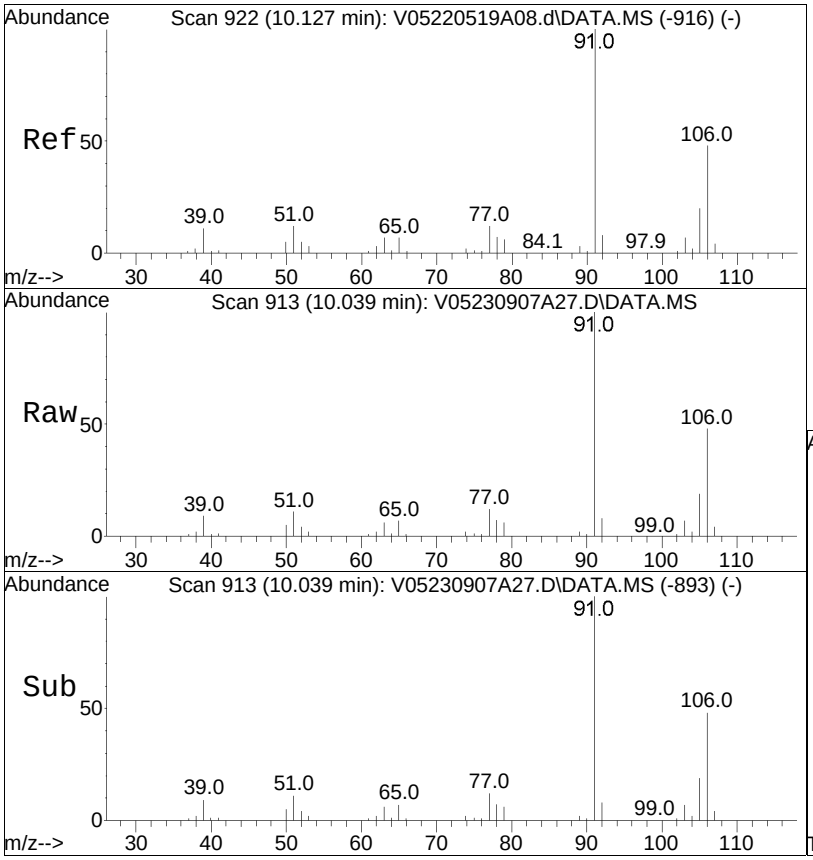


#76
p/m Xylene
Concen: 24.13 ug/L
RT: 9.490 min Scan# 857
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:106 Resp: 283199

Ion	Ratio	Lower	Upper
106	100		
91	195.9	177.2	265.8

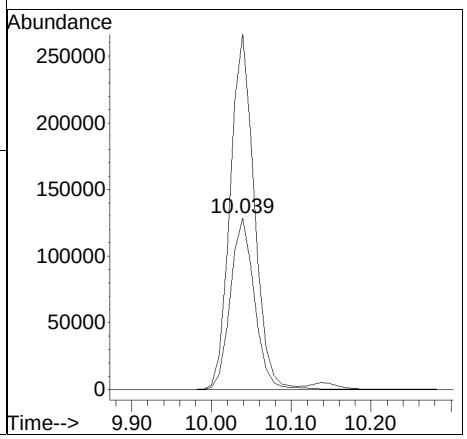


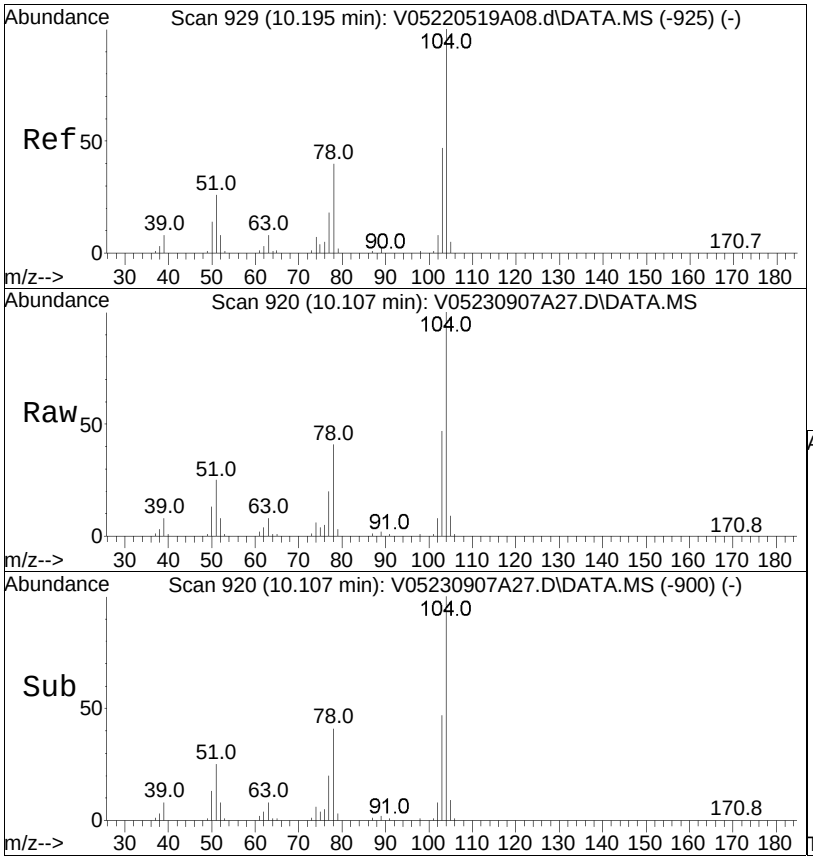


#77
o Xylene
Concen: 23.67 ug/L
RT: 10.039 min Scan# 913
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:106 Resp: 270495

Ion	Ratio	Lower	Upper
106	100		
91	206.2	187.0	280.6

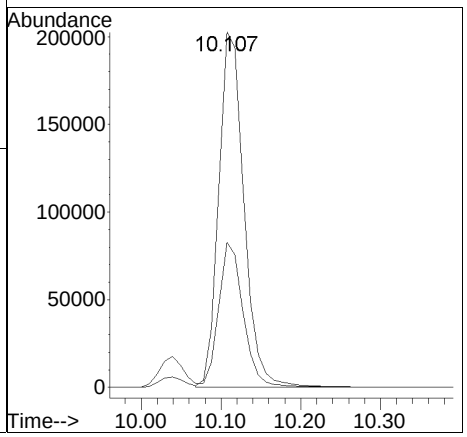


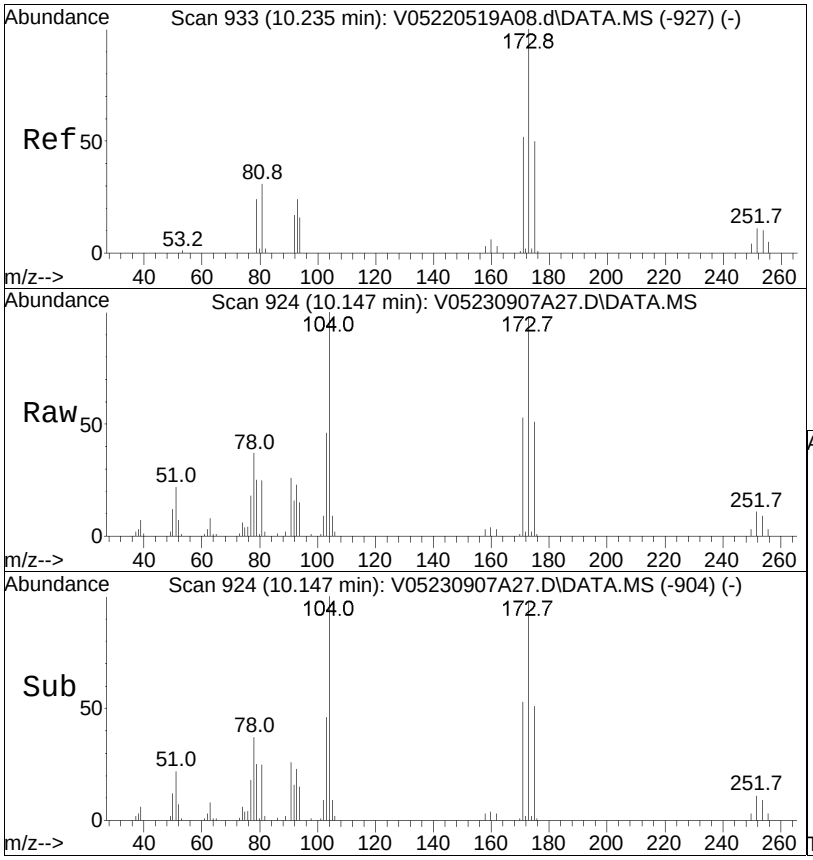


#78
Styrene
Concen: 23.66 ug/L
RT: 10.107 min Scan# 920
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:104 Resp: 444514

Ion	Ratio	Lower	Upper
104	100		
78	40.2	39.6	59.4

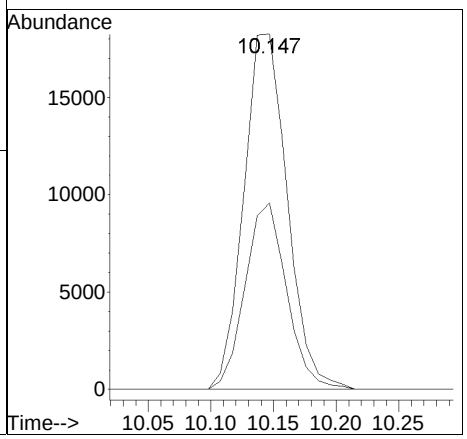


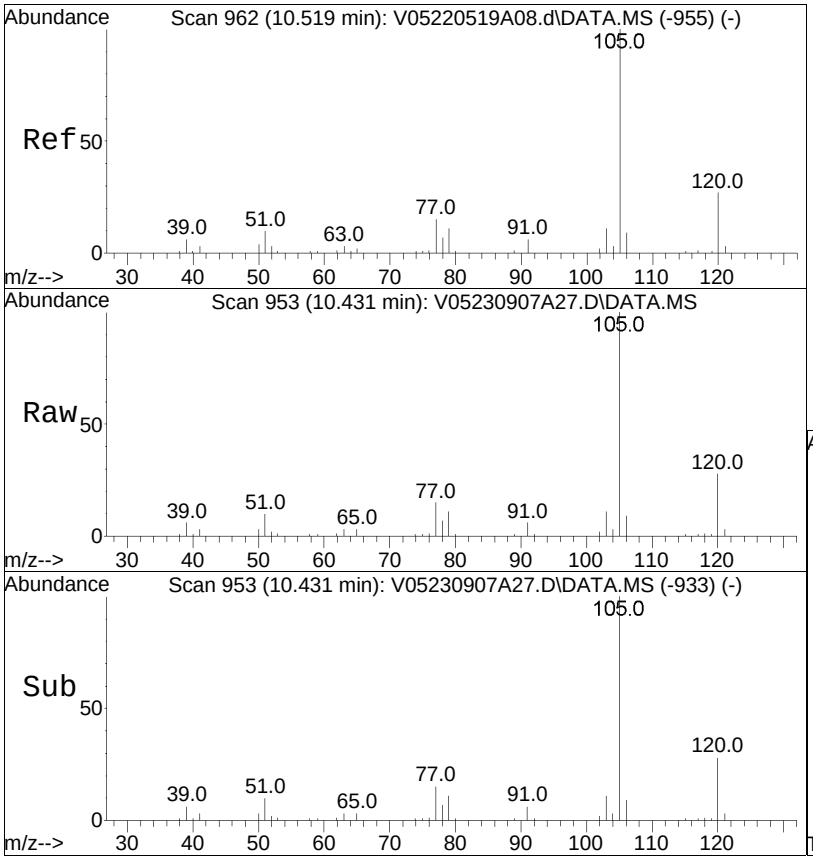


#80
Bromoform
Concen: 11.27 ug/L
RT: 10.147 min Scan# 924
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:173 Resp: 44152

Ion	Ratio	Lower	Upper
173	100		
175	50.1	26.6	66.6

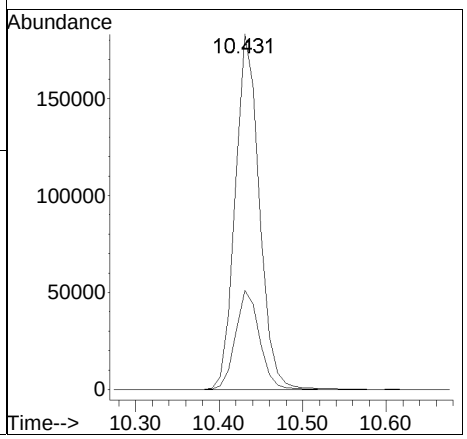


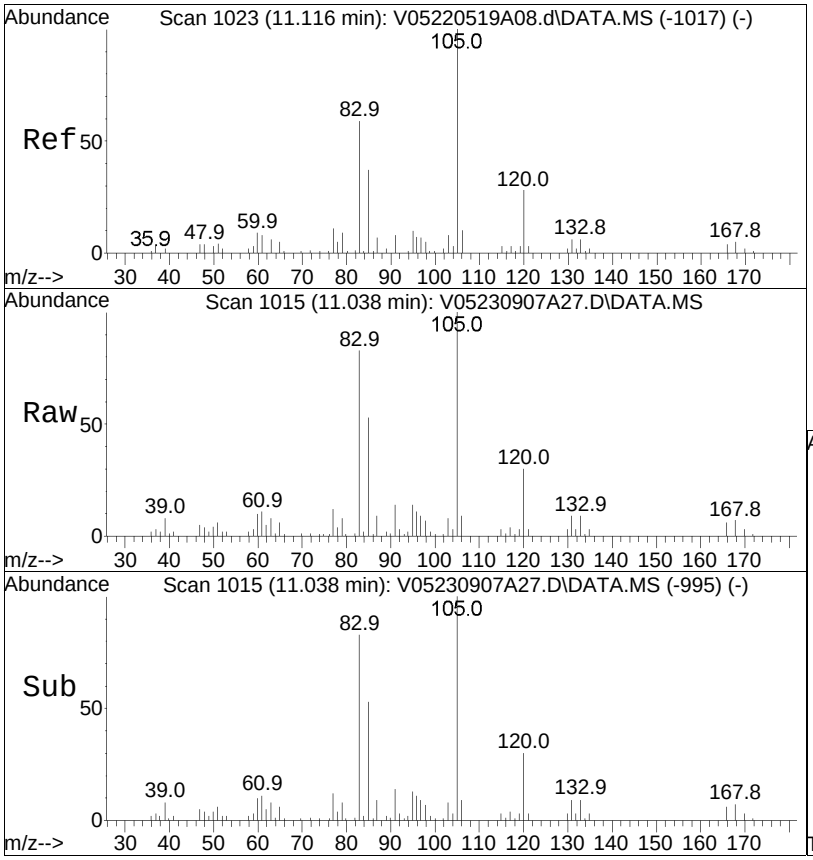


#82
Isopropylbenzene
Concen: 11.62 ug/L
RT: 10.431 min Scan# 953
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:105 Resp: 366997

Ion	Ratio	Lower	Upper
105	100		
120	27.7	4.8	44.8

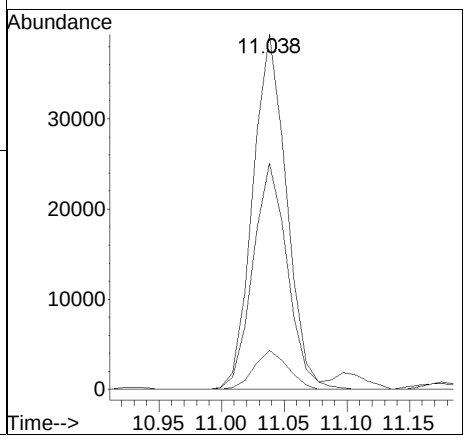


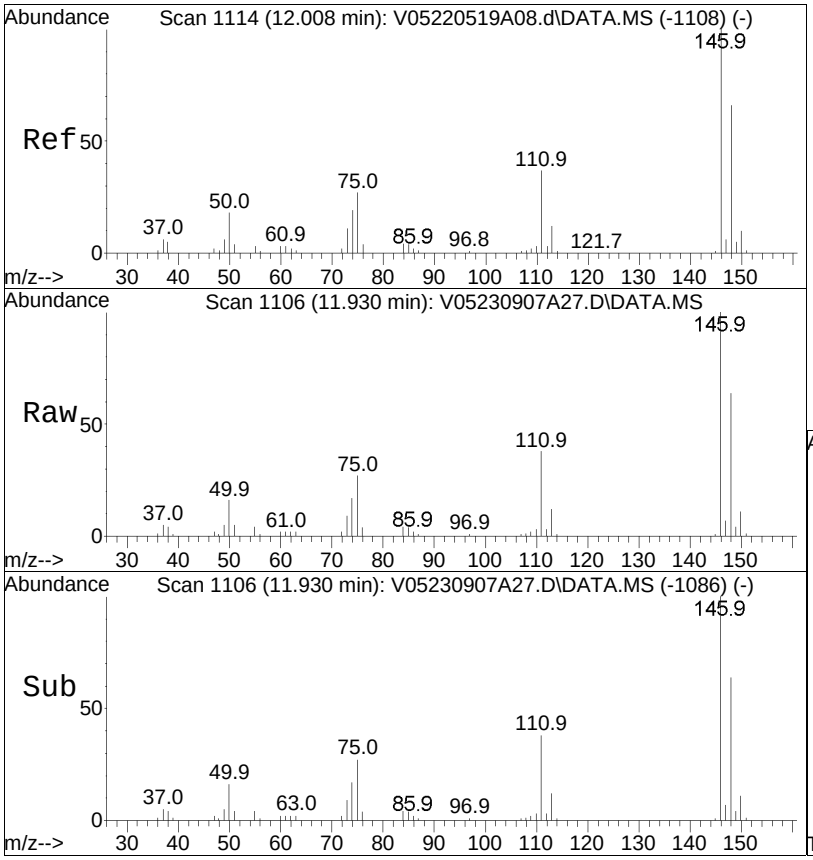


#87
1,1,2,2-Tetrachloroethane
Concen: 14.29 ug/L
RT: 11.038 min Scan# 1015
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion: 83 Resp: 73759

Ion	Ratio	Lower	Upper
83	100		
131	11.1	0.0	30.4
85	64.7	46.4	86.4

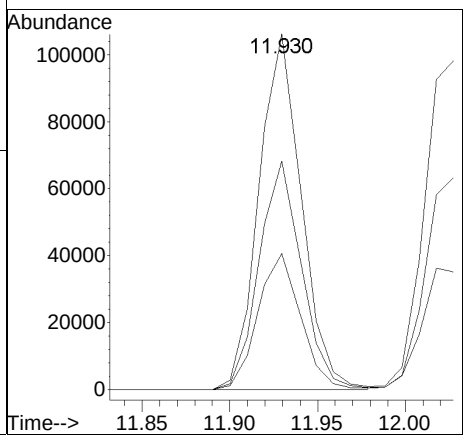


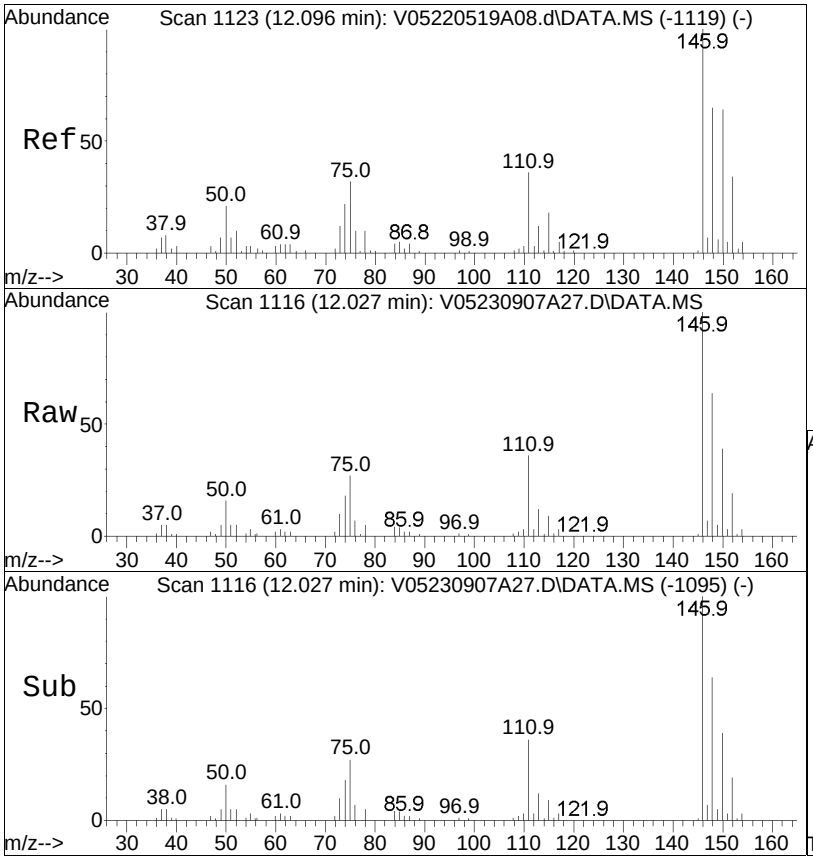


#100
1,3-Dichlorobenzene
Concen: 11.55 ug/L
RT: 11.930 min Scan# 1106
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:146 Resp: 178615

Ion	Ratio	Lower	Upper
146	100		
111	38.4	28.0	58.1
148	64.2	41.6	86.4

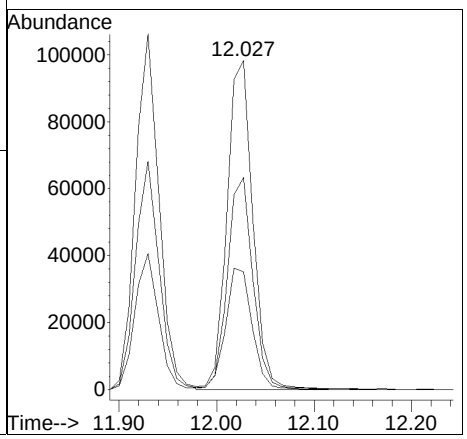


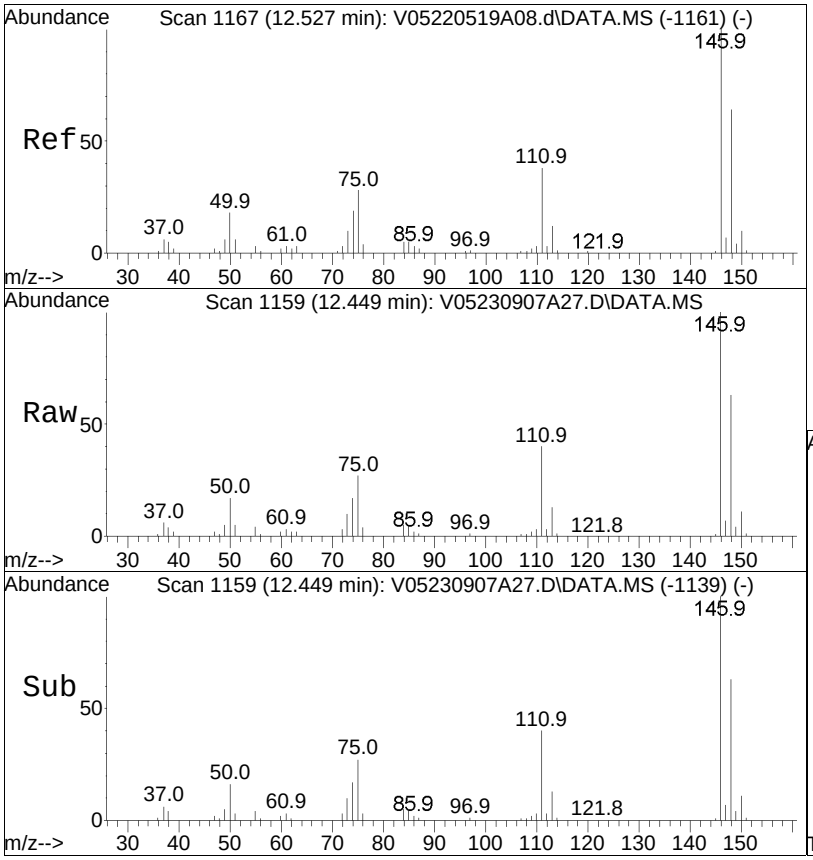


#101
1,4-Dichlorobenzene
Concen: 11.54 ug/L
RT: 12.027 min Scan# 1116
Delta R.T. 0.009 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:146 Resp: 181338

Ion	Ratio	Lower	Upper
146	100		
111	37.9	33.8	50.6
148	63.8	51.0	76.6

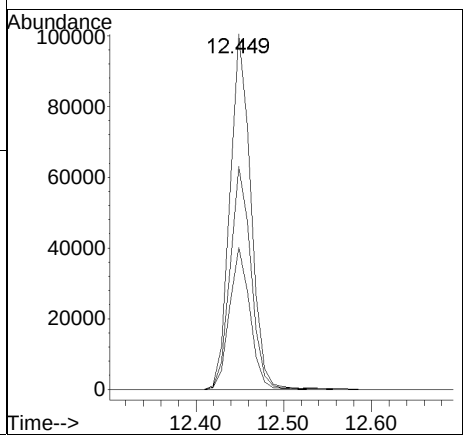


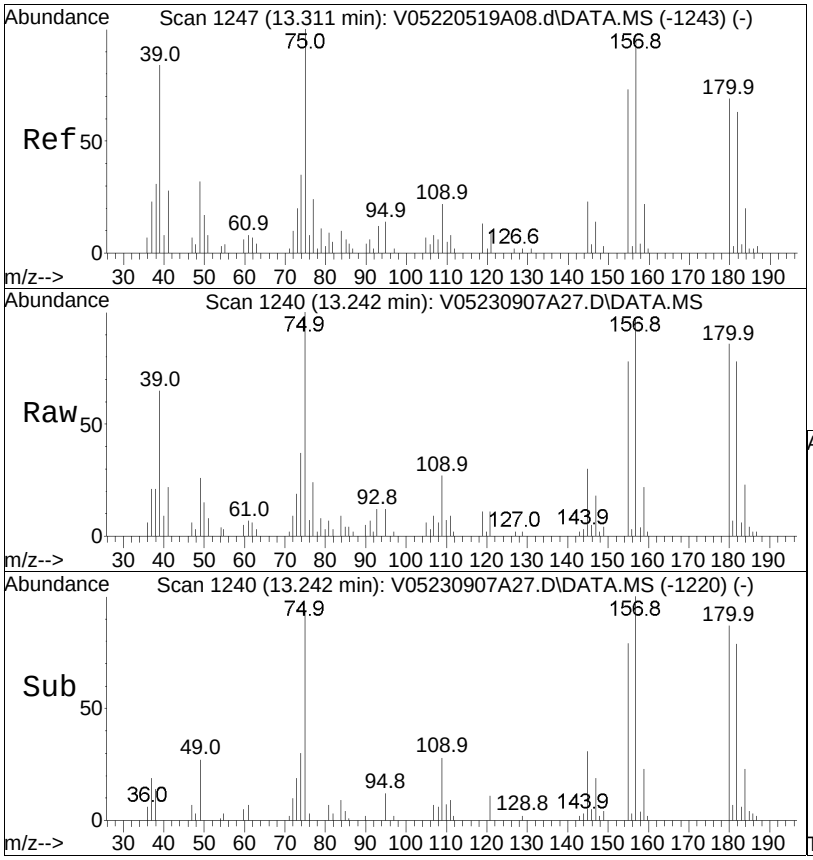


#104
1,2-Dichlorobenzene
Concen: 11.62 ug/L
RT: 12.449 min Scan# 1159
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:146 Resp: 165876

Ion	Ratio	Lower	Upper
146	100		
111	39.4	29.1	60.5
148	62.8	41.7	86.7

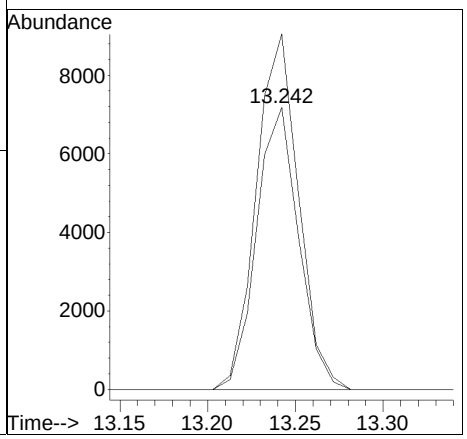


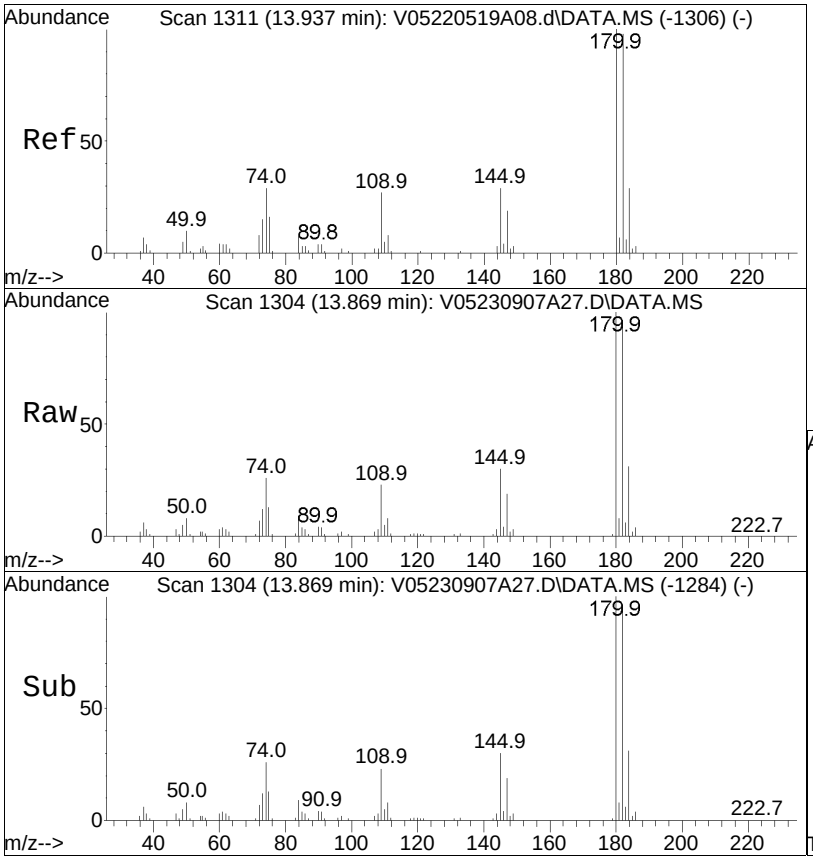


#106
1,2-Dibromo-3-chloropropane
Concen: 13.57 ug/L
RT: 13.242 min Scan# 1240
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:155 Resp: 11986

Ion	Ratio	Lower	Upper
155	100		
157	126.6	105.0	157.6

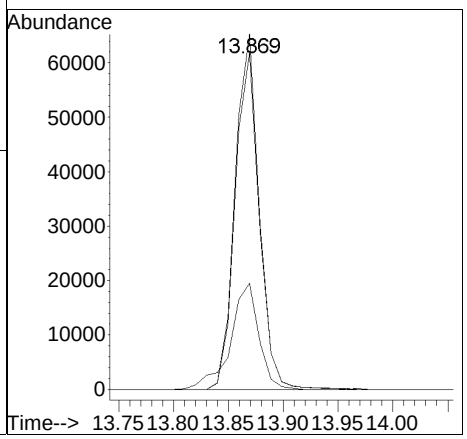


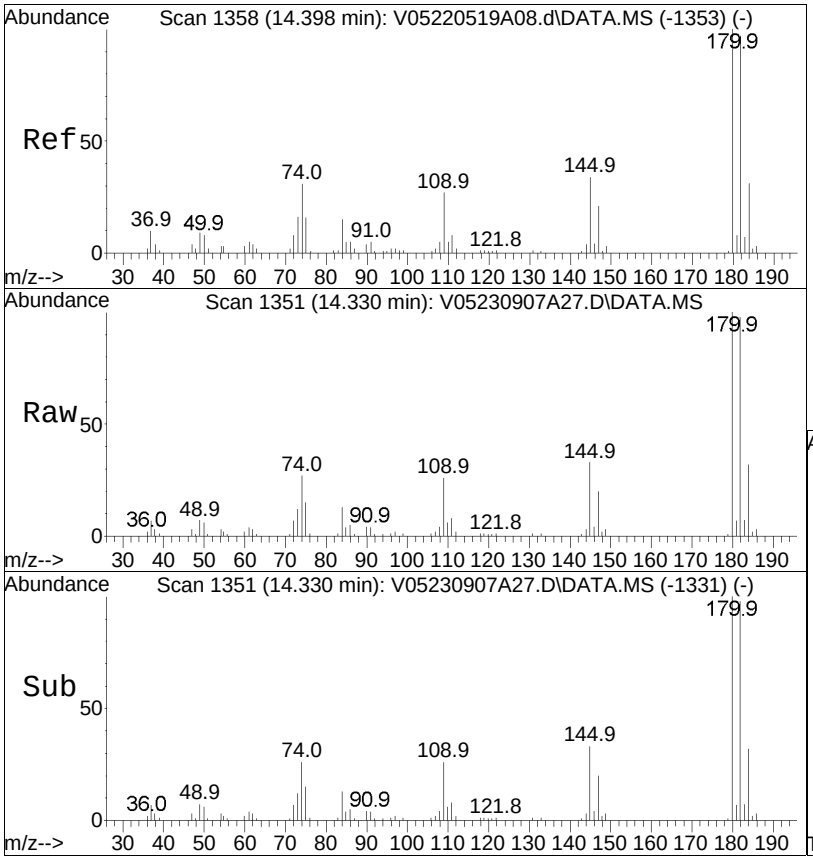


#109
1,2,4-Trichlorobenzene
Concen: 10.26 ug/L
RT: 13.869 min Scan# 1304
Delta R.T. 0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:180 Resp: 100050

Ion	Ratio	Lower	Upper
180	100		
182	94.9	75.2	112.8
145	35.1	27.4	41.2

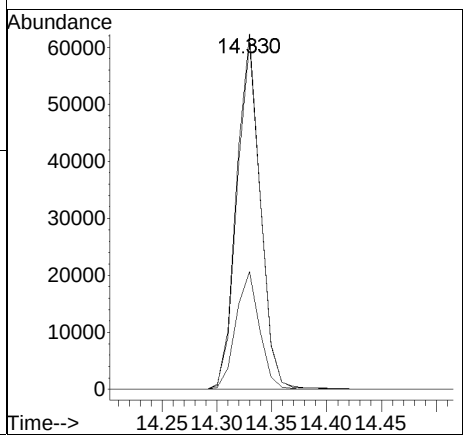




#111
1,2,3-Trichlorobenzene
Concen: 10.67 ug/L
RT: 14.330 min Scan# 1351
Delta R.T. -0.000 min
Lab File: V05230907A27.D
Acq: 7 Sep 2023 6:31 pm

Tgt Ion:180 Resp: 94421

Ion	Ratio	Lower	Upper
180	100		
182	96.3	75.5	113.3
145	32.8	26.5	39.7



Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A28.D
Acq On : 7 Sep 2023 6:57 pm
Operator : VOA105:MJV
Sample : WG1824710-7,31,10,10,,a2
Misc : WG1824710,ICAL20245
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 08 05:15:55 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) Fluorobenzene	5.753	96	252165	10.000	ug/L	0.00
Standard Area 1 = 255314			Recovery =	98.77%		
59) Chlorobenzene-d5	9.255	117	233253	10.000	ug/L	0.01
Standard Area 1 = 234811			Recovery =	99.34%		
79) 1,4-Dichlorobenzene-d4	12.008	152	142909	10.000	ug/L	0.00
Standard Area 1 = 143322			Recovery =	99.71%		
System Monitoring Compounds						
36) Dibromofluoromethane	4.960	113	80654	10.086	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	100.86%		
43) 1,2-Dichloroethane-d4	5.479	65	90817	11.702	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	117.02%		
60) Toluene-d8	7.415	98	281165	10.339	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	103.39%		
83) 4-Bromofluorobenzene	10.773	95	109689	9.807	ug/L	0.00
Spiked Amount 10.000	Range 70 - 130		Recovery =	98.07%		
Target Compounds						Qvalue
2) Dichlorodifluoromethane	1.527	85	96828	11.841	ug/L	97
3) Chloromethane	1.723	50	98728	12.600	ug/L	98
4) Vinyl chloride	1.772	62	119197	14.504	ug/L	96
5) Bromomethane	2.056	94	63233	9.959	ug/L	99
6) Chloroethane	2.153	64	74325	12.687	ug/L	94
7) Trichlorofluoromethane	2.290	101	174671	14.390	ug/L	100
10) 1,1-Dichloroethene	2.760	96	100526	13.803	ug/L	95
11) Carbon disulfide	2.779	76	315364	13.600	ug/L	99
12) Freon-113	2.789	101	110435	13.686	ug/L #	77
15) Methylene chloride	3.298	84	74529	11.115	ug/L	82
17) Acetone	3.366	43	18028	16.638	ug/L	94
18) trans-1,2-Dichloroethene	3.444	96	76728	11.490	ug/L	99
19) Methyl acetate	3.474	43	32590	13.191	ug/L #	84
20) Methyl tert-butyl ether	3.542	73	155691	11.045	ug/L	92
23) 1,1-Dichloroethane	4.012	63	138815	11.908	ug/L	98
28) cis-1,2-Dichloroethene	4.530	96	85069	11.532	ug/L	96
30) Bromochloromethane	4.716	128	40507	11.784	ug/L	92
31) Cyclohexane	4.696	56	141973	12.368	ug/L	82
32) Chloroform	4.784	83	137694	11.834	ug/L	97
34) Carbon tetrachloride	4.902	117	120879	12.170	ug/L	98

Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A28.D
Acq On : 7 Sep 2023 6:57 pm
Operator : VOA105:MJV
Sample : WG1824710-7,31,10,10,,a2
Misc : WG1824710,ICAL20245
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 08 05:15:55 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - K:\VOA105\2023\230907A\V05230907A01.D
Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
37) 1,1,1-Trichloroethane	4.970	97	129266	12.430	ug/L		97
39) 2-Butanone	5.088	43	22842	14.583	ug/L	#	67
41) Benzene	5.332	78	287477	11.835	ug/L		97
44) 1,2-Dichloroethane	5.547	62	97943	12.216	ug/L		98
47) Methyl cyclohexane	5.899	83	132732	11.221	ug/L		88
48) Trichloroethene	5.919	95	85658	11.001	ug/L		92
51) 1,2-Dichloropropane	6.467	63	72866	11.836	ug/L	#	89
54) Bromodichloromethane	6.545	83	101563	11.936	ug/L		100
57) 1,4-Dioxane	6.750	88	29262	976.567	ug/L	#	89
58) cis-1,3-Dichloropropene	7.220	75	102465	10.790	ug/L		94
61) Toluene	7.474	92	187983	11.962	ug/L		98
62) 4-Methyl-2-pentanone	7.924	58	17646	14.625	ug/L		88
63) Tetrachloroethene	7.914	166	91756	12.263	ug/L		93
65) trans-1,3-Dichloropropene	7.973	75	93180	12.045	ug/L		89
68) 1,1,2-Trichloroethane	8.149	83	50476	12.725	ug/L		98
69) Chlorodibromomethane	8.364	129	76555	12.665	ug/L		98
71) 1,2-Dibromoethane	8.628	107	68034	12.698	ug/L		100
72) 2-Hexanone	8.922	43	30271	14.080	ug/L		93
73) Chlorobenzene	9.275	112	217805	12.050	ug/L		87
74) Ethylbenzene	9.304	91	366880	12.062	ug/L		93
76) p/m Xylene	9.490	106	290508	24.406	ug/L		84
77) o Xylene	10.039	106	278173	23.998	ug/L		83
78) Styrene	10.107	104	455023	23.881	ug/L		86
80) Bromoform	10.147	173	45053	11.412	ug/L		96
82) Isopropylbenzene	10.431	105	377533	11.861	ug/L		95
87) 1,1,2,2-Tetrachloroethane	11.038	83	74837	14.387	ug/L		98
100) 1,3-Dichlorobenzene	11.929	146	185094	11.884	ug/L		97
101) 1,4-Dichlorobenzene	12.027	146	186349	11.769	ug/L		97
104) 1,2-Dichlorobenzene	12.449	146	166497	11.579	ug/L		97
106) 1,2-Dibromo-3-chloropr...	13.242	155	11681	13.122	ug/L		99
109) 1,2,4-Trichlorobenzene	13.869	180	102445	10.431	ug/L		99
111) 1,2,3-Trichlorobenzene	14.329	180	97536	10.942	ug/L		99

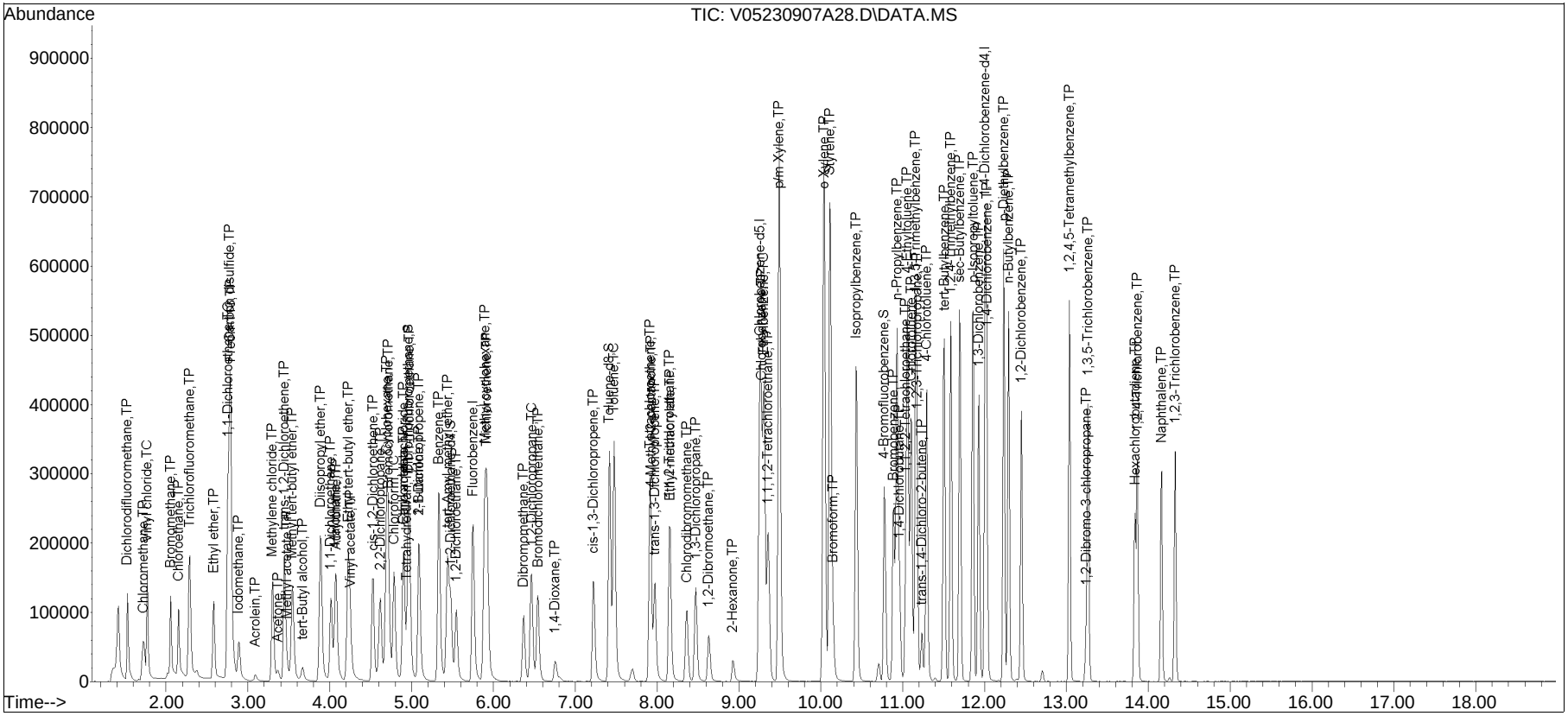
(#) = qualifier out of range (m) = manual integration (+) = signals summed

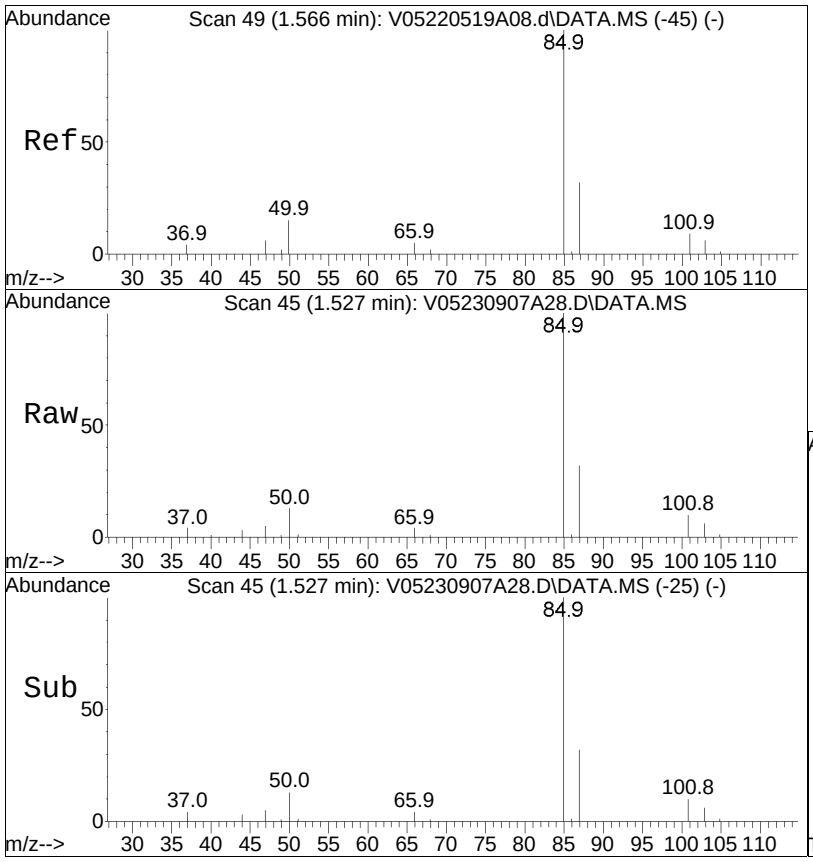
Quantitation Report (QT Reviewed)

Data Path : K:\VOA105\2023\230907A\
Data File : V05230907A28.D
Acq On : 7 Sep 2023 6:57 pm
Operator : VOA105:MJV
Sample : WG1824710-7,31,10,10,,a2
Misc : WG1824710,ICAL20245
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 08 05:15:55 2023
Quant Method : K:\VOA105\2023\230907A\V105_230808N_8260.m
Quant Title : VOLATILES BY GC/MS
QLast Update : Wed Aug 09 12:54:55 2023
Response via : Initial Calibration

Sub List : 8260-Curve-2CEVE - Megamix+Diox-2CEVE01.D•

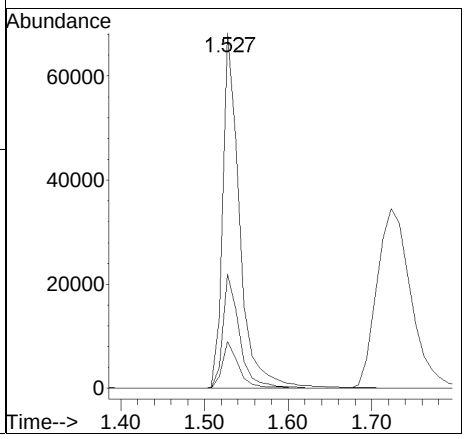


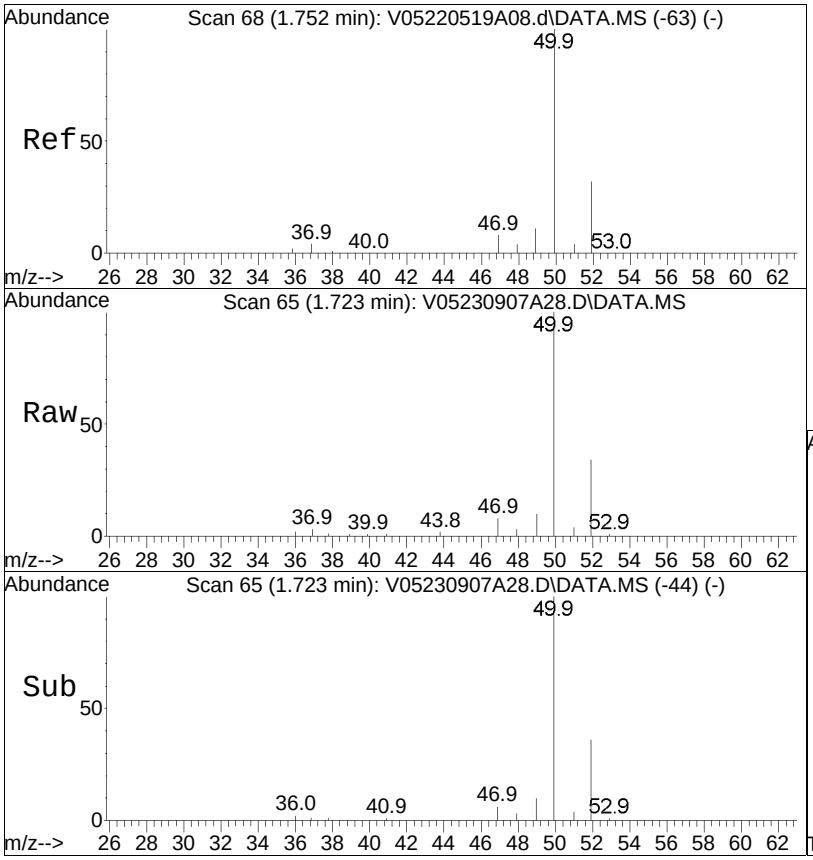


#2
Dichlorodifluoromethane
Concen: 11.84 ug/L
RT: 1.527 min Scan# 45
Delta R.T. -0.001 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 85 Resp: 96828

Ion	Ratio	Lower	Upper
85	100		
87	31.4	20.9	43.5
50	12.8	6.8	14.0

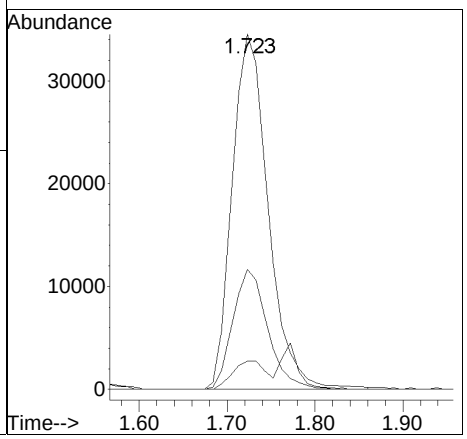


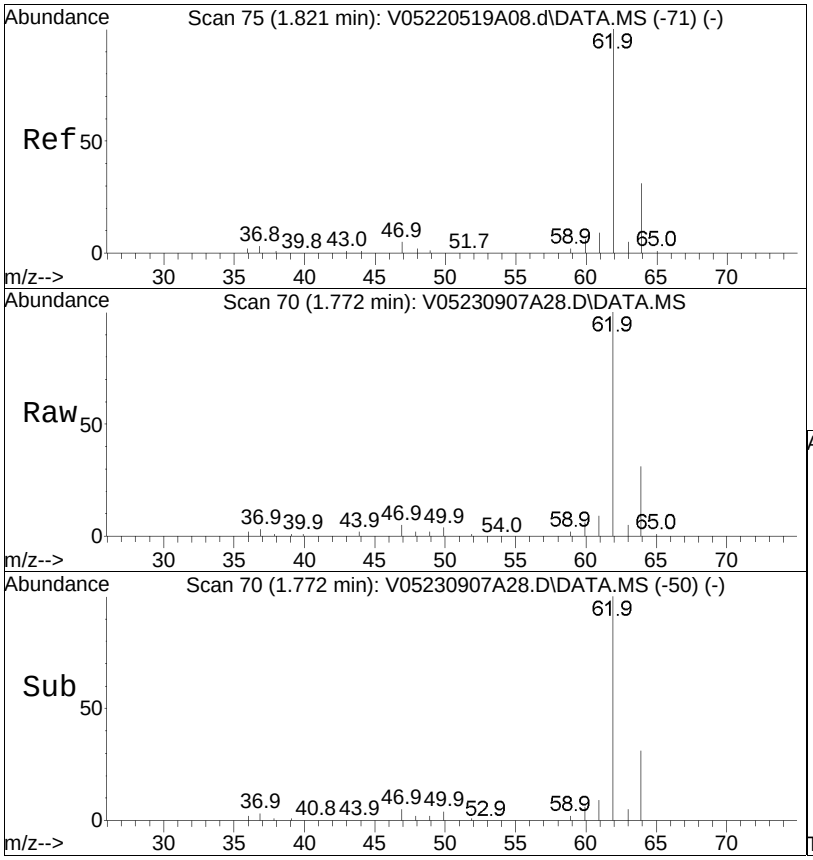


#3
Chloromethane
Concen: 12.60 ug/L
RT: 1.723 min Scan# 65
Delta R.T. 0.010 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 50 Resp: 98728

Ion	Ratio	Lower	Upper
50	100		
52	32.6	12.6	52.6
47	7.5	0.0	30.1

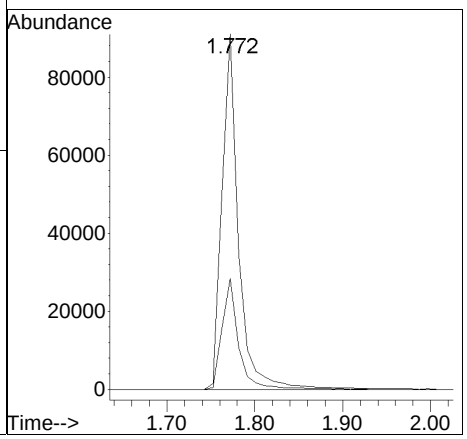


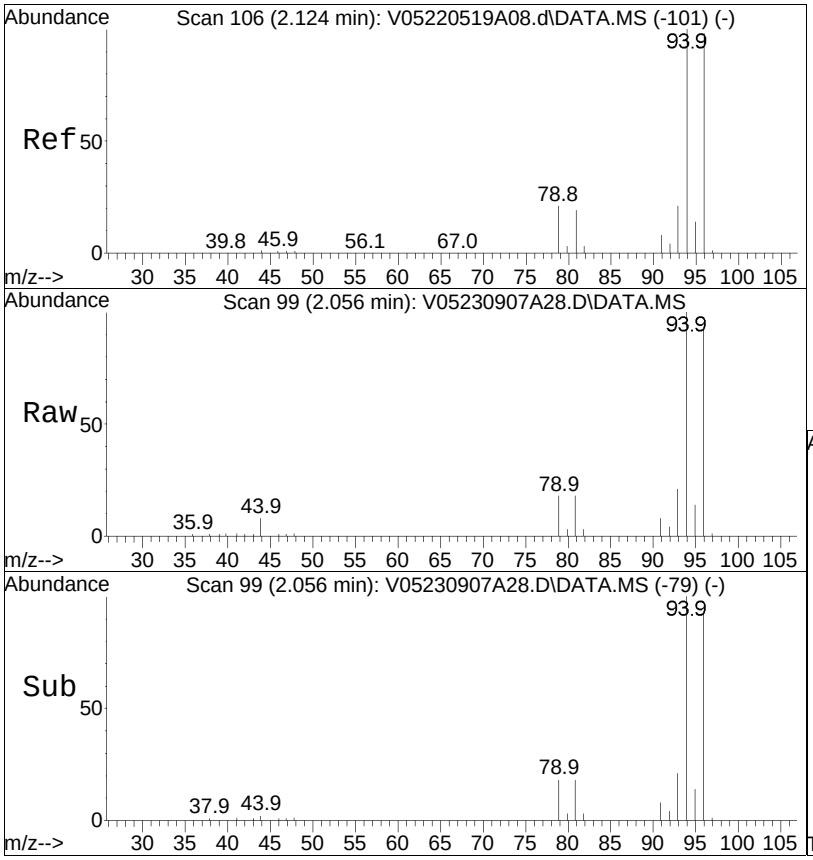


#4
Vinyl chloride
Concen: 14.50 ug/L
RT: 1.772 min Scan# 70
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 62 Resp: 119197

Ion	Ratio	Lower	Upper
62	100		
64	31.4	13.5	53.5

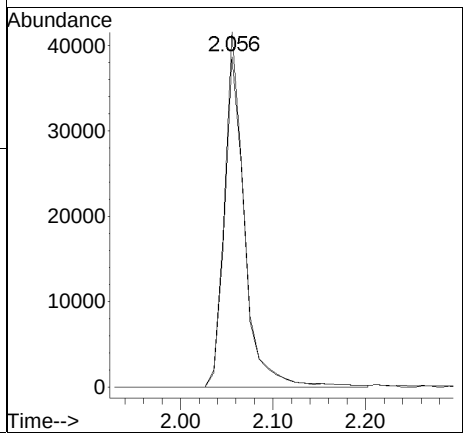


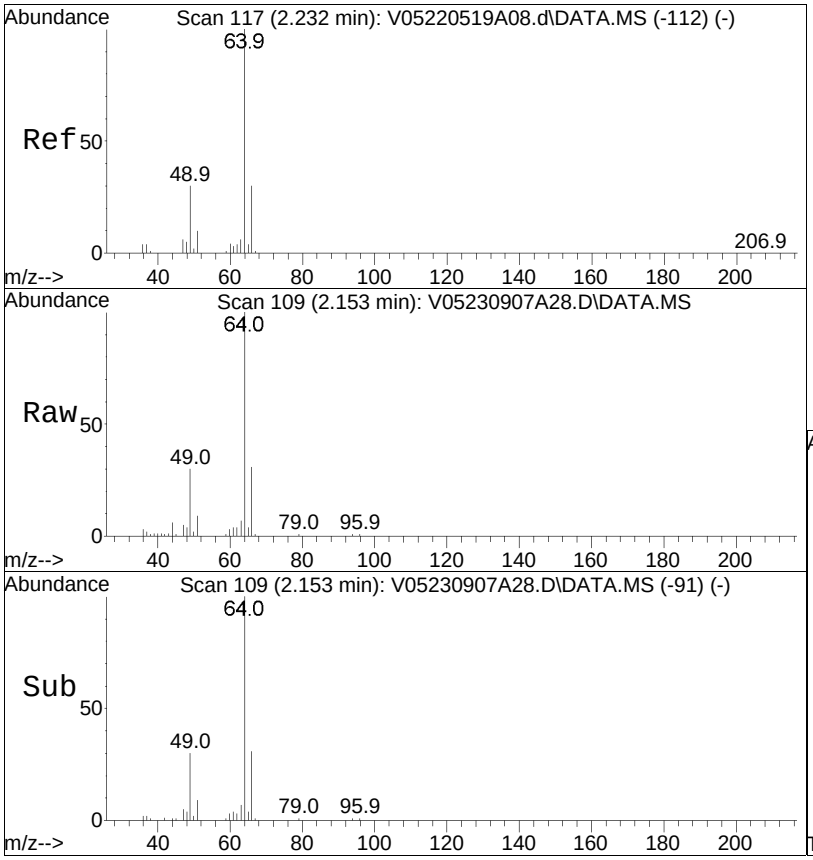


#5
Bromomethane
Concen: 9.96 ug/L
RT: 2.056 min Scan# 99
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 94 Resp: 63233

Ion	Ratio	Lower	Upper
94	100		
96	94.5	75.4	115.4

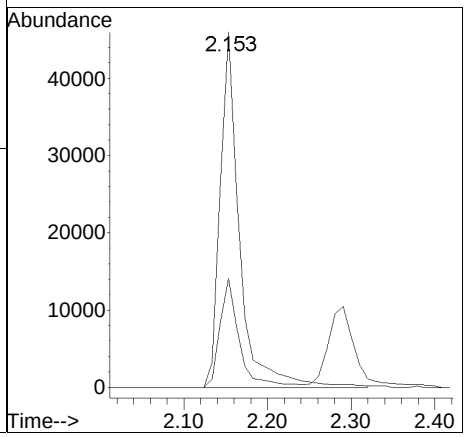


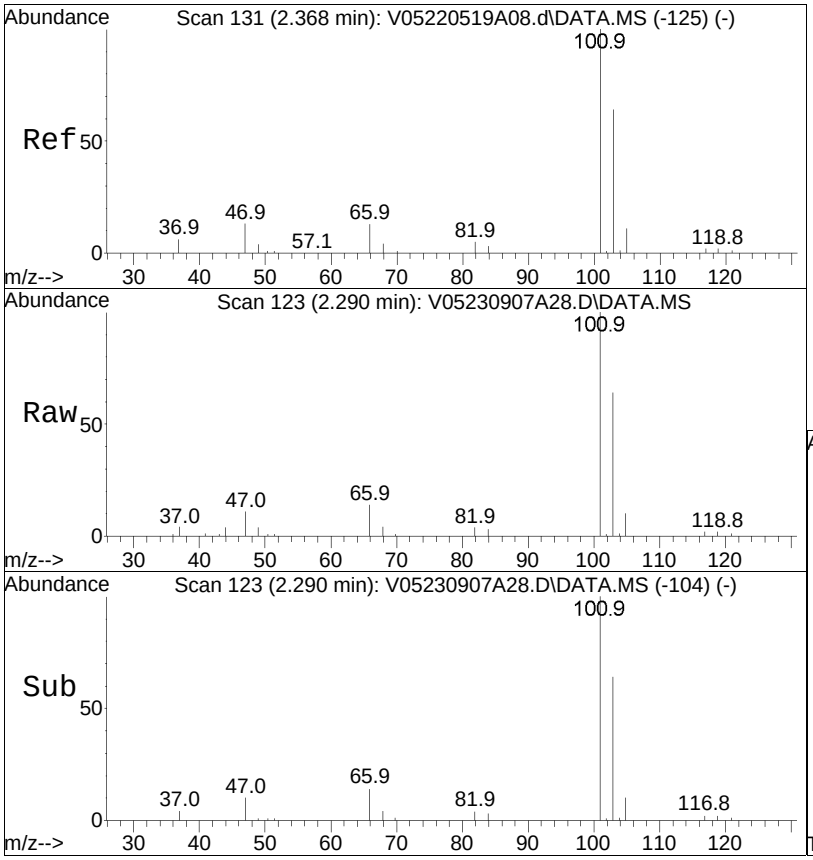


#6
Chloroethane
Concen: 12.69 ug/L
RT: 2.153 min Scan# 109
Delta R.T. -0.020 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 64 Resp: 74325

Ion	Ratio	Lower	Upper
64	100		
66	30.6	13.8	53.8

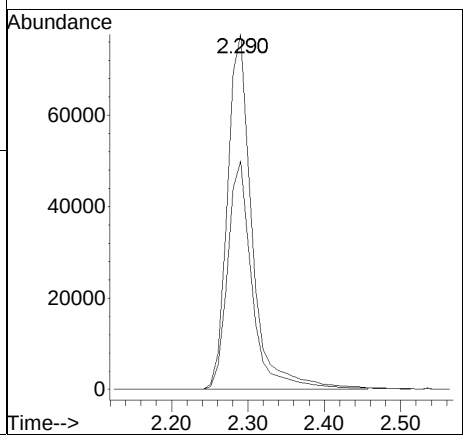


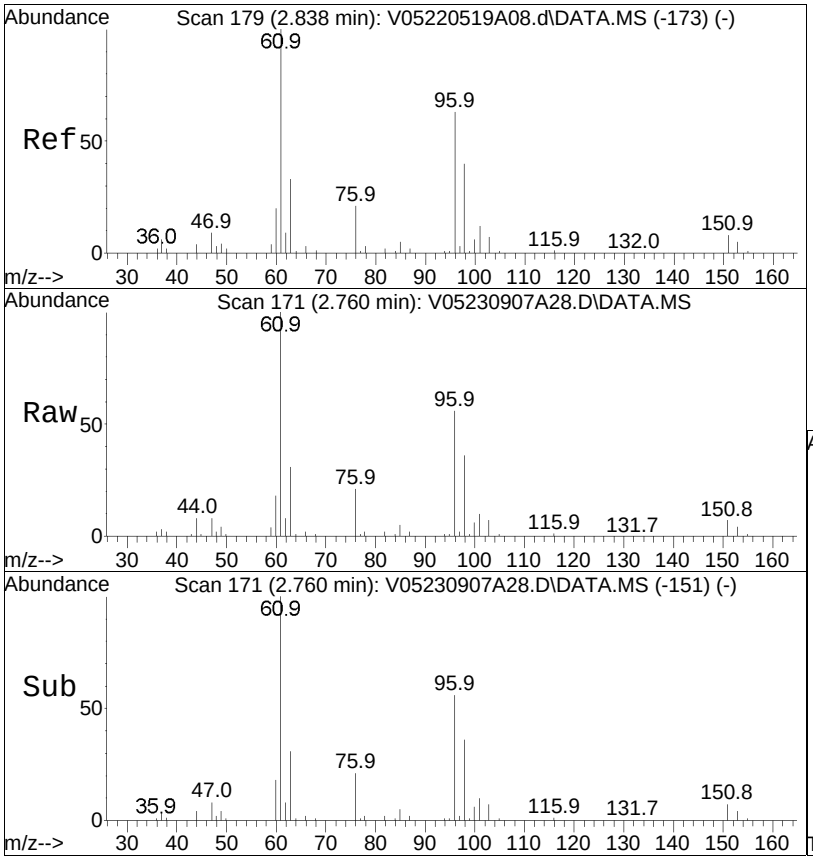


#7
Trichlorofluoromethane
Concen: 14.39 ug/L
RT: 2.290 min Scan# 123
Delta R.T. -0.010 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:101 Resp: 174671

Ion	Ratio	Lower	Upper
101	100		
103	64.3	51.8	77.6

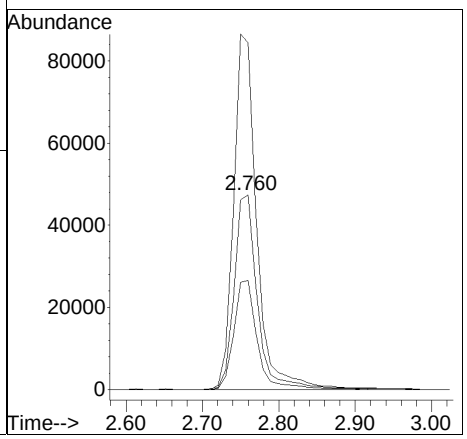


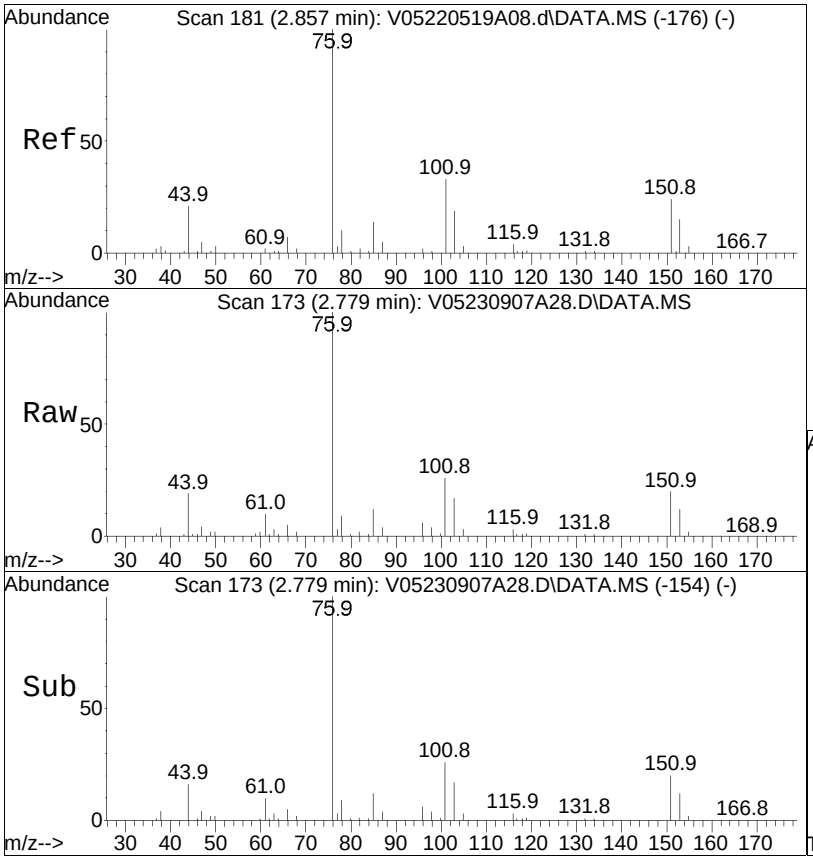


#10
1,1-Dichloroethene
Concen: 13.80 ug/L
RT: 2.760 min Scan# 171
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 96 Resp: 100526

Ion	Ratio	Lower	Upper
96	100		
61	180.3	136.7	205.1
63	56.4	45.0	67.6

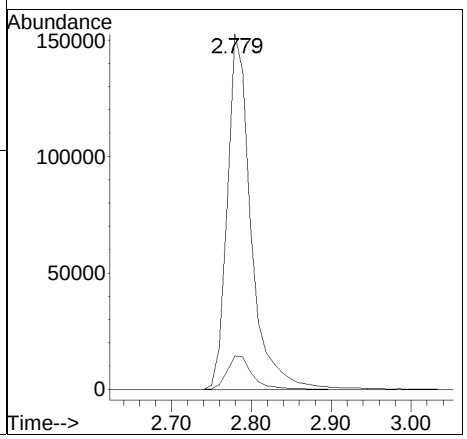


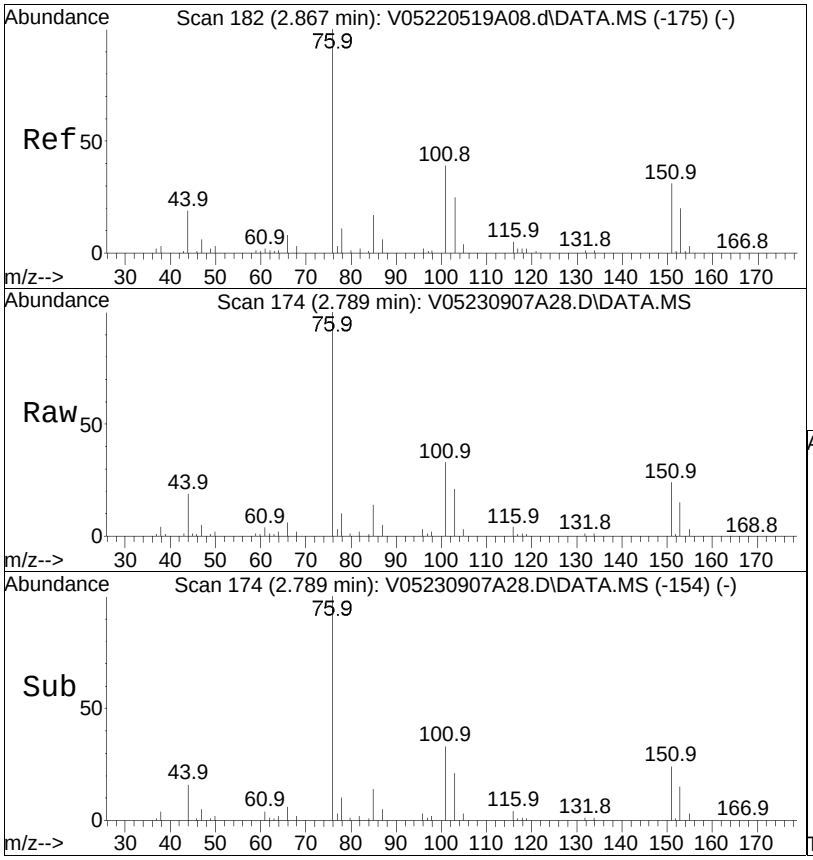


#11
Carbon disulfide
Concen: 13.60 ug/L
RT: 2.779 min Scan# 173
Delta R.T. -0.010 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 76 Resp: 315364

Ion	Ratio	Lower	Upper
76	100		
78	10.1	6.7	13.9

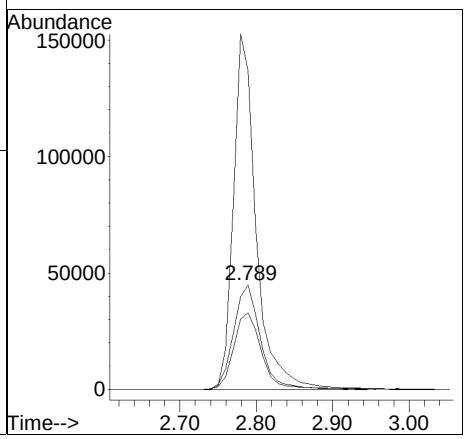


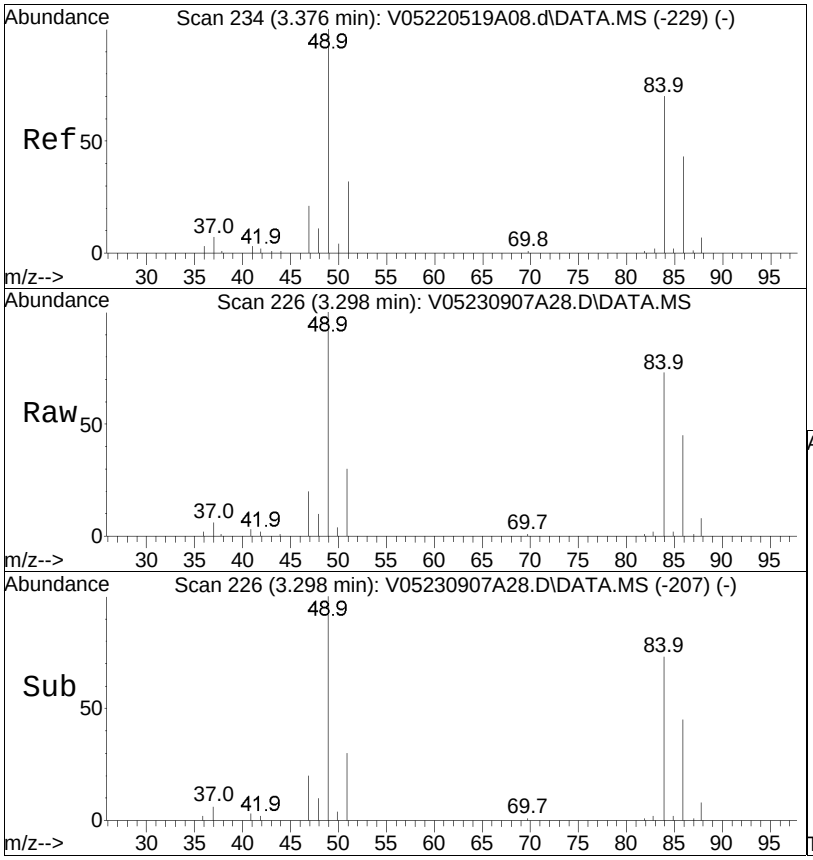


#12
Freon-113
Concen: 13.69 ug/L
RT: 2.789 min Scan# 174
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:101 Resp: 110435

Ion	Ratio	Lower	Upper
101	100		
151	75.7	65.0	97.6
76	285.6	190.0	285.0#

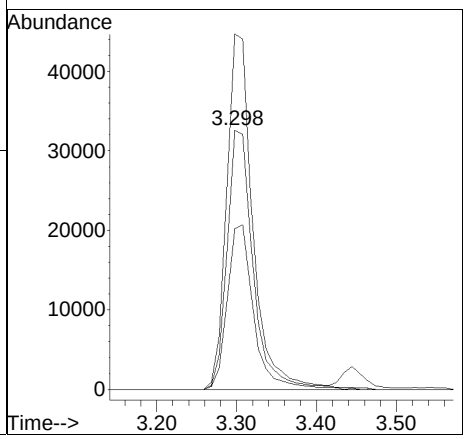


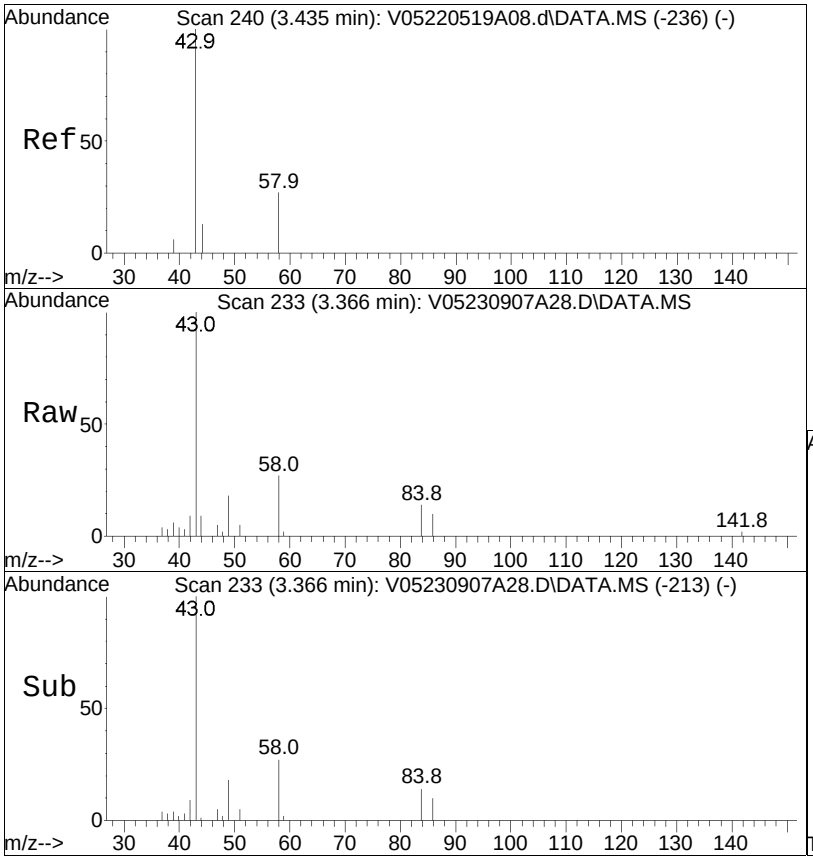


#15
Methylene chloride
Concen: 11.11 ug/L
RT: 3.298 min Scan# 226
Delta R.T. -0.010 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 84 Resp: 74529

Ion	Ratio	Lower	Upper
84	100		
86	63.8	42.1	87.5
49	136.3	69.3	143.9

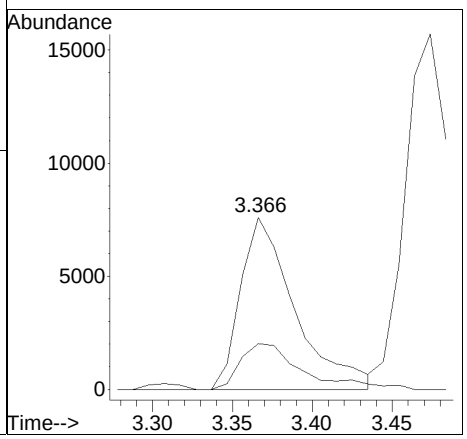


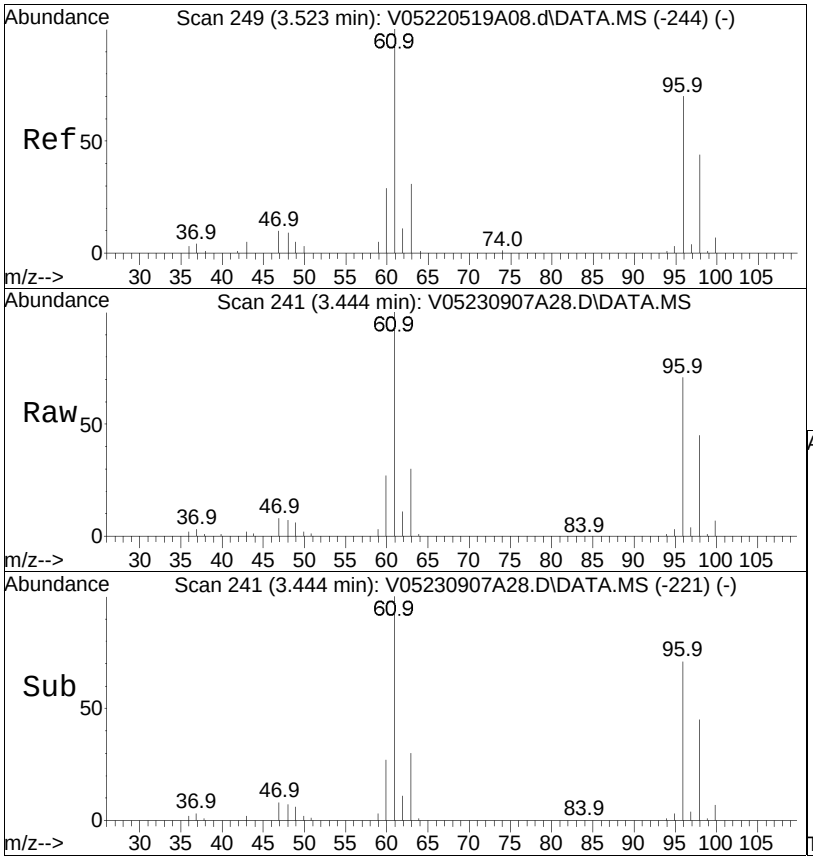


#17
Acetone
Concen: 16.64 ug/L
RT: 3.366 min Scan# 233
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 43 Resp: 18028

Ion	Ratio	Lower	Upper
43	100		
58	30.5	22.0	33.0

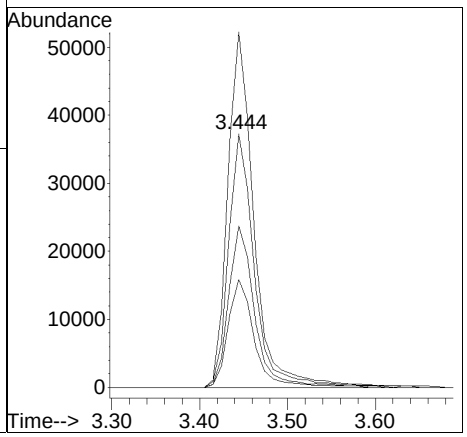


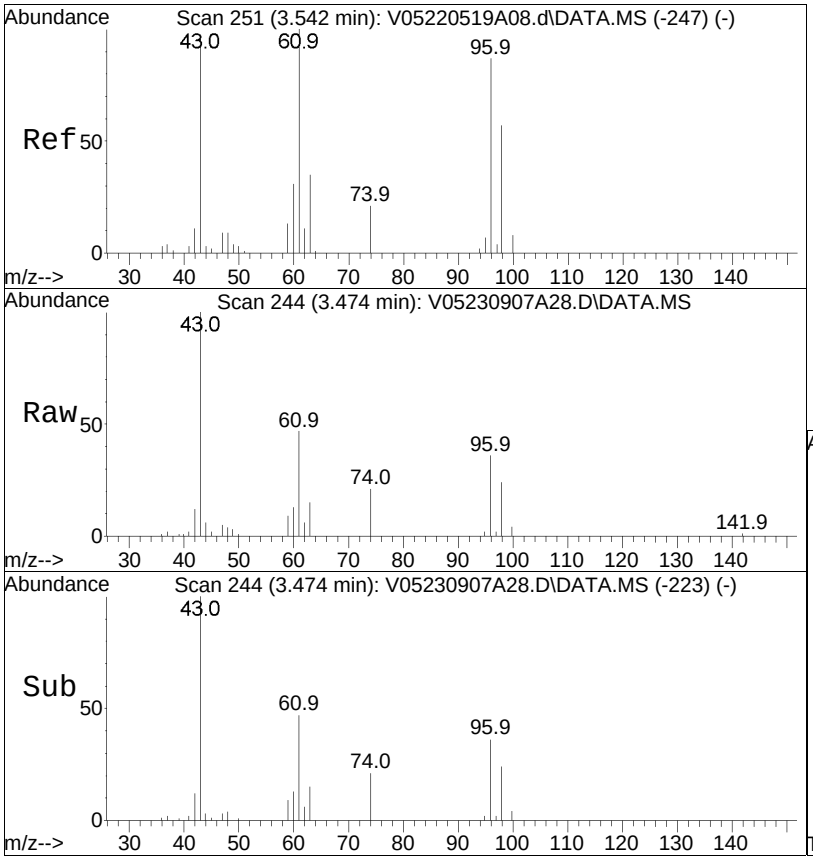


#18
trans-1,2-Dichloroethene
Concen: 11.49 ug/L
RT: 3.444 min Scan# 241
Delta R.T. -0.001 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 96 Resp: 76728

Ion	Ratio	Lower	Upper
96	100		
61	141.2	91.7	190.5
98	64.2	41.1	85.5
63	43.2	29.4	61.0

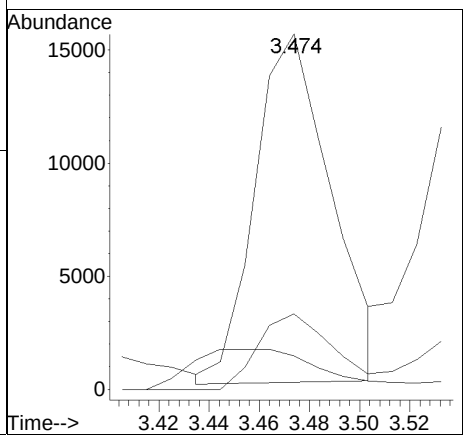


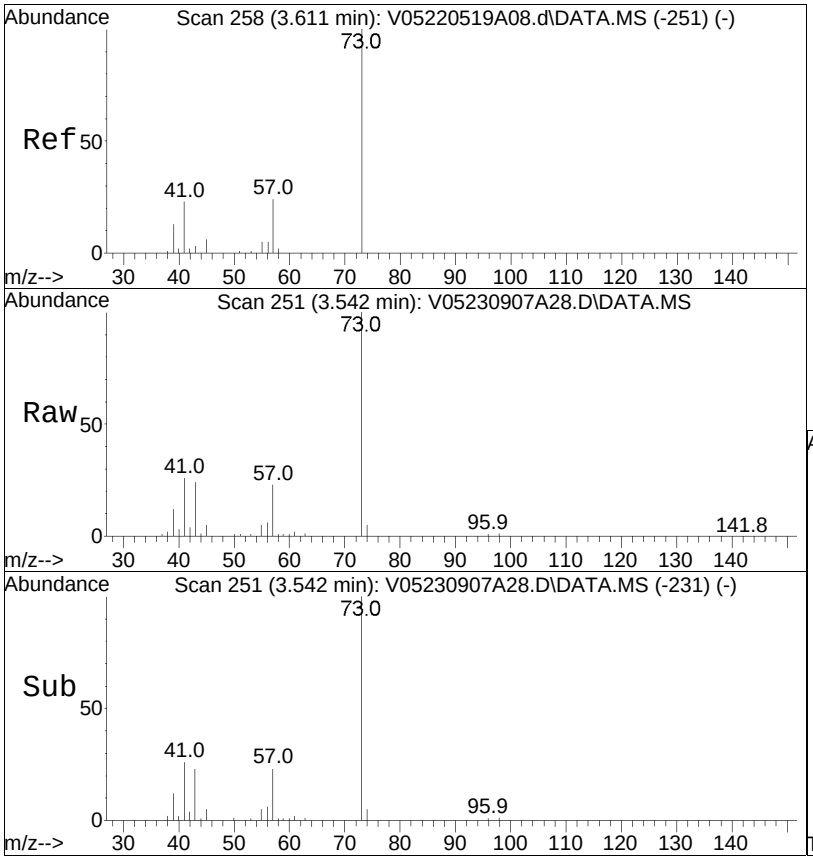


#19
Methyl acetate
Concen: 13.19 ug/L
RT: 3.474 min Scan# 244
Delta R.T. 0.010 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 43 Resp: 32590

Ion	Ratio	Lower	Upper
43	100		
74	21.2	23.1	34.7#
59	20.0	23.9	35.9#

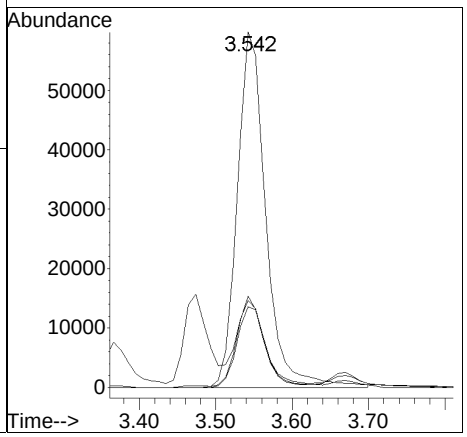


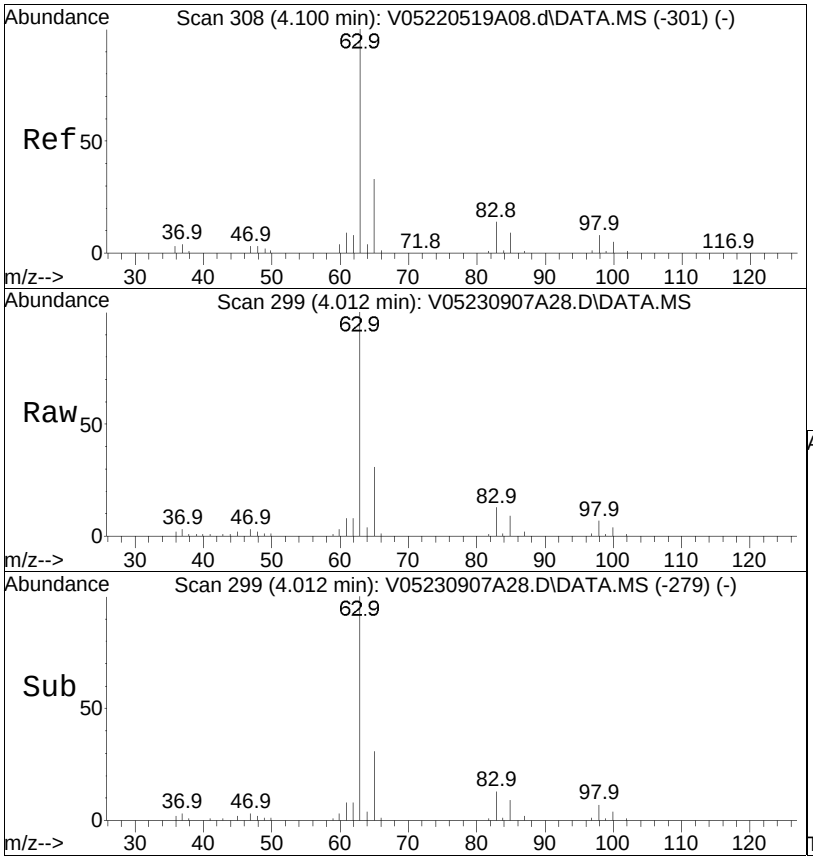


#20
Methyl tert-butyl ether
Concen: 11.04 ug/L
RT: 3.542 min Scan# 251
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 73 Resp: 155691

Ion	Ratio	Lower	Upper
73	100		
57	22.7	11.8	24.6
43	23.1	13.5	27.9
41	24.0	13.3	27.5

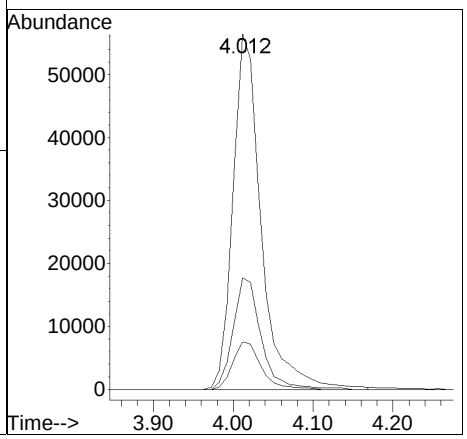


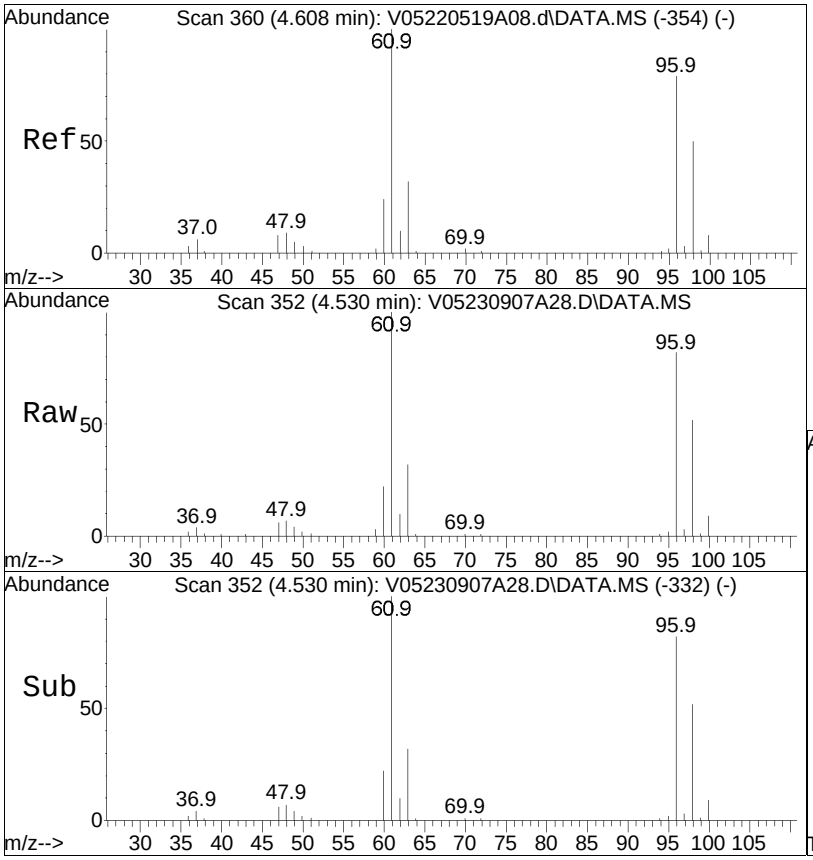


#23
1,1-Dichloroethane
Concen: 11.91 ug/L
RT: 4.012 min Scan# 299
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 63 Resp: 138815

Ion	Ratio	Lower	Upper
63	100		
65	31.0	11.9	51.9
83	13.4	0.0	34.2

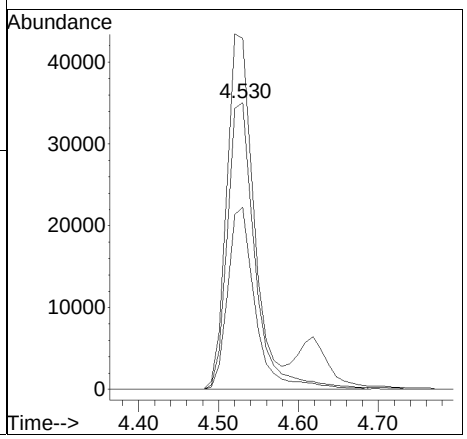


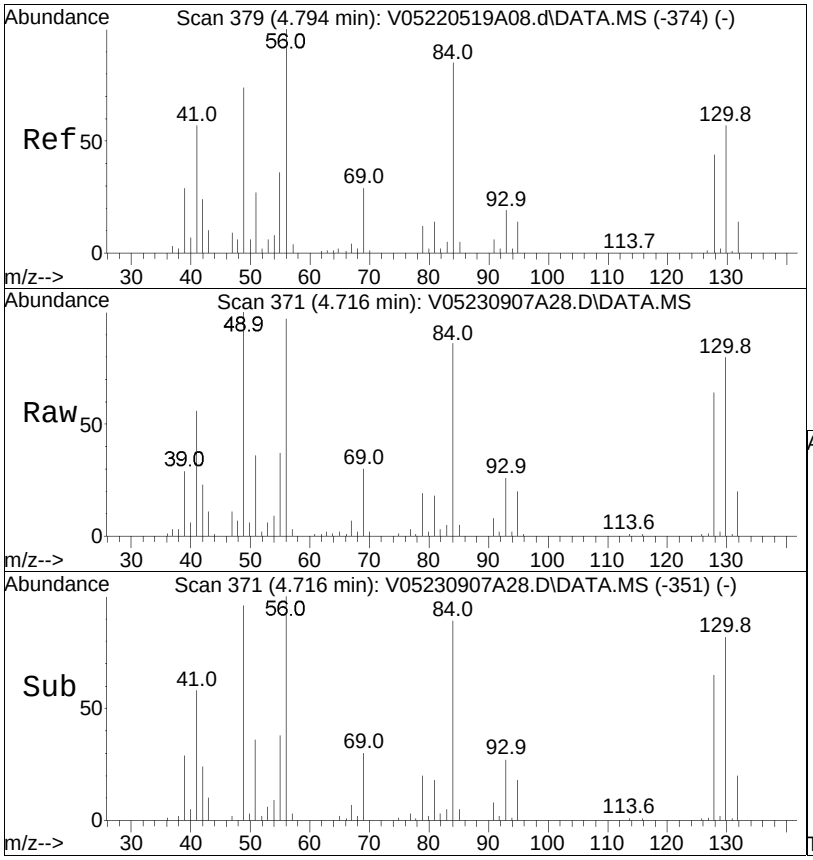


#28
cis-1,2-Dichloroethene
Concen: 11.53 ug/L
RT: 4.530 min Scan# 352
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 96 Resp: 85069

Ion	Ratio	Lower	Upper
96	100		
61	119.7	100.5	150.7
98	63.3	49.8	74.8

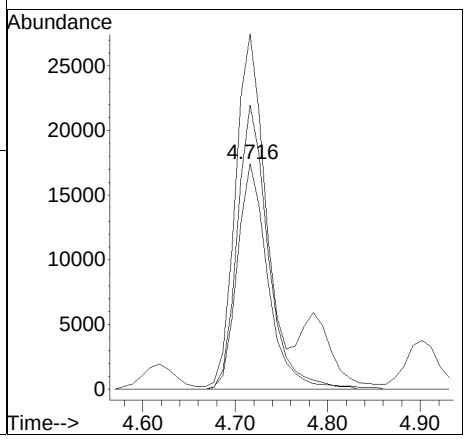


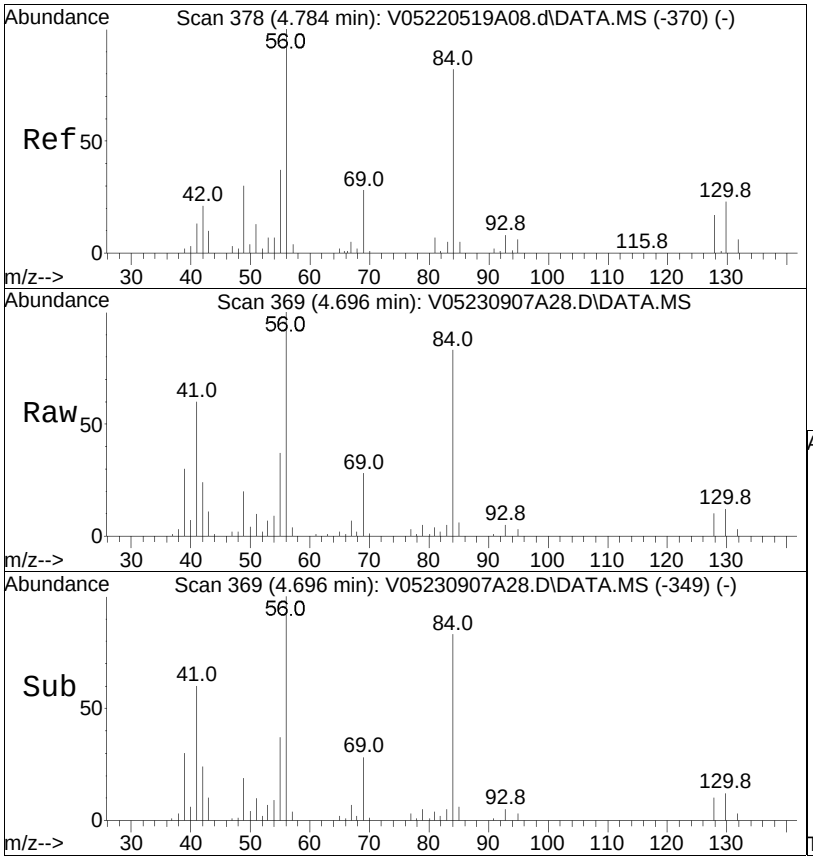


#30
Bromochloromethane
Concen: 11.78 ug/L
RT: 4.716 min Scan# 371
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:128 Resp: 40507

Ion	Ratio	Lower	Upper
128	100		
49	151.2	109.0	163.4
130	127.1	105.6	158.4

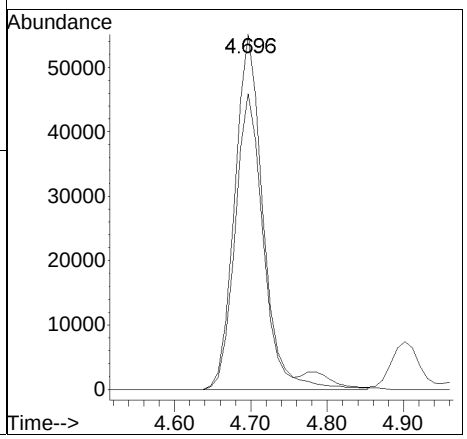


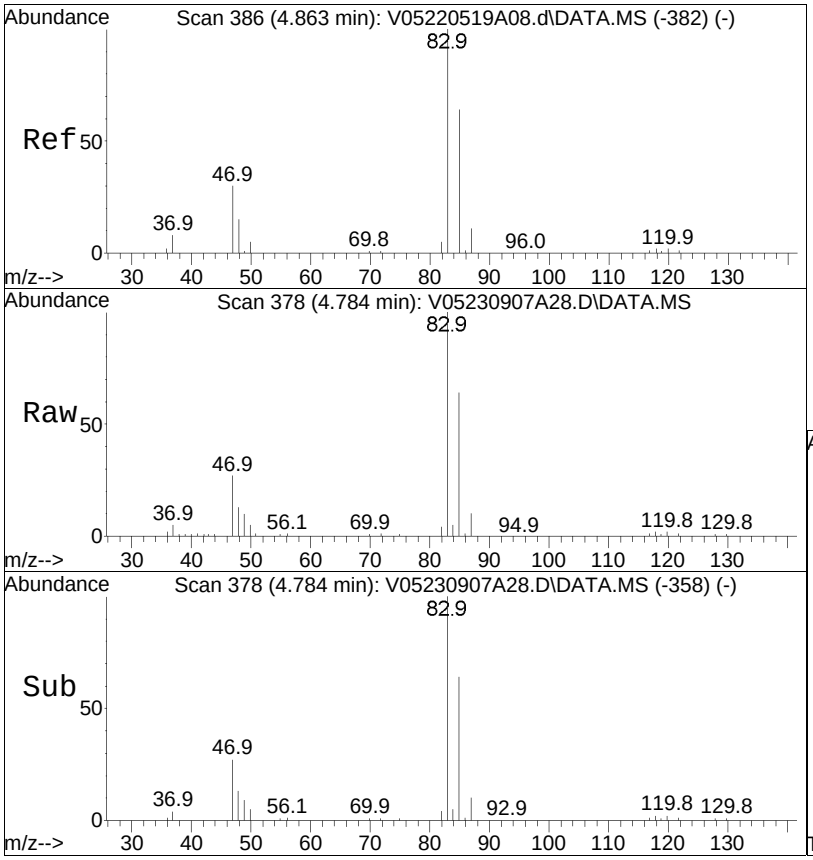


#31
Cyclohexane
Concen: 12.37 ug/L
RT: 4.696 min Scan# 369
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 56 Resp: 141973

Ion	Ratio	Lower	Upper
56	100		
84	81.1	64.4	133.8

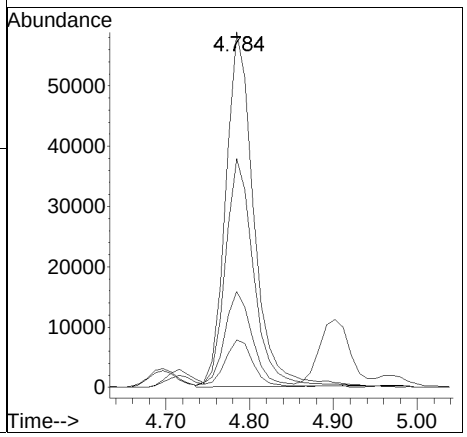


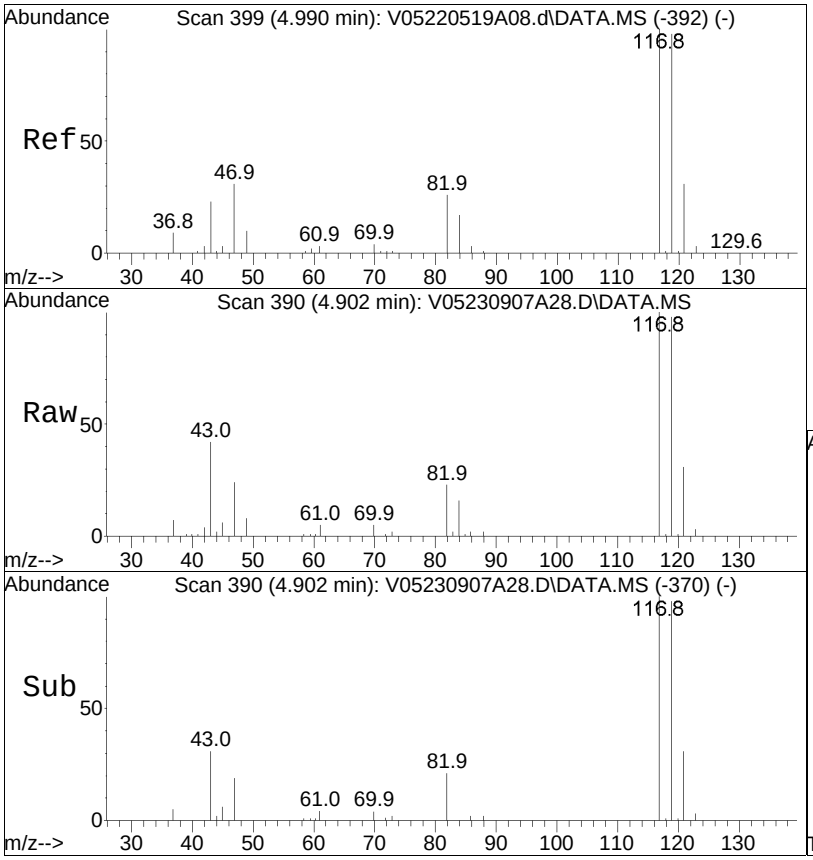


#32
Chloroform
Concen: 11.83 ug/L
RT: 4.784 min Scan# 378
Delta R.T. -0.001 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 83 Resp: 137694

Ion	Ratio	Lower	Upper
83	100		
85	65.1	42.8	89.0
47	24.7	13.7	28.4
48	13.8	6.9	14.3

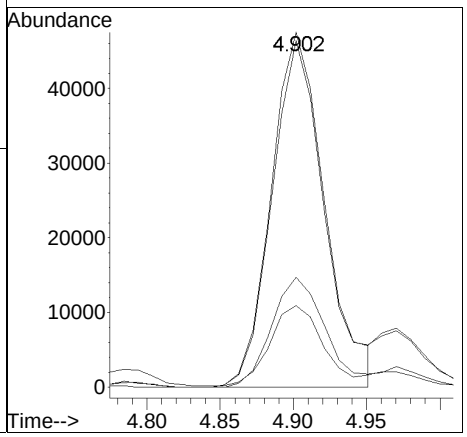


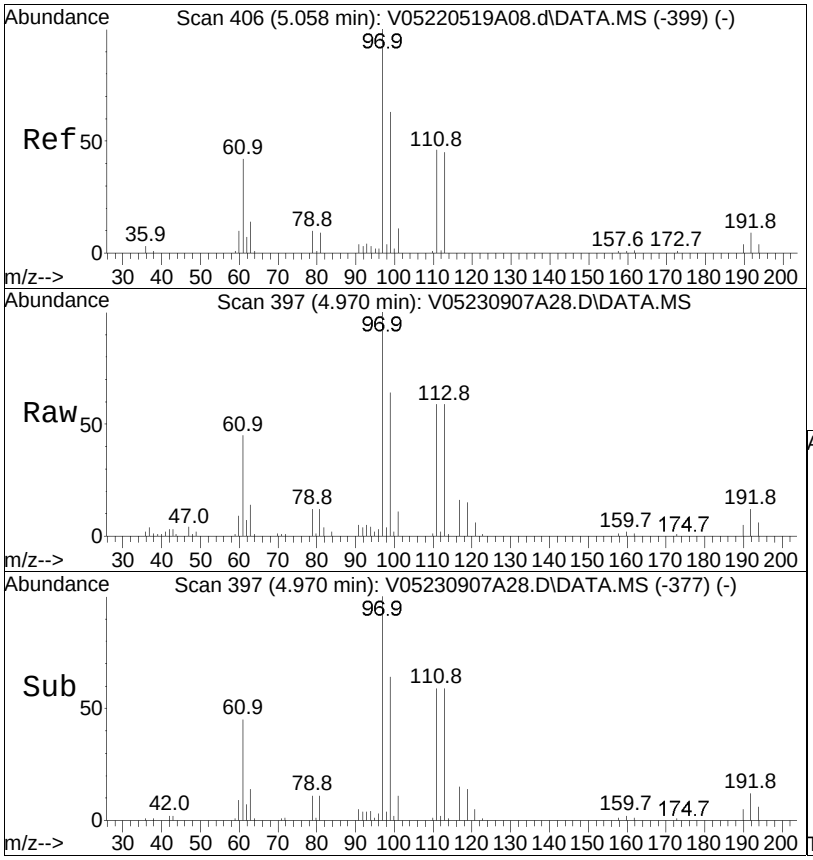


#34
Carbon tetrachloride
Concen: 12.17 ug/L
RT: 4.902 min Scan# 390
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:117 Resp: 120879

Ion	Ratio	Lower	Upper
117	100		
119	95.8	63.6	132.2
121	31.3	19.8	41.0
82	22.6	15.9	32.9

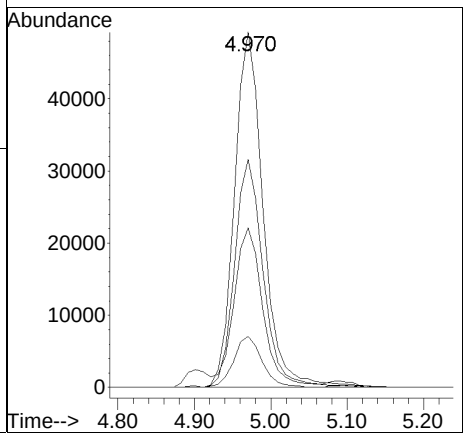


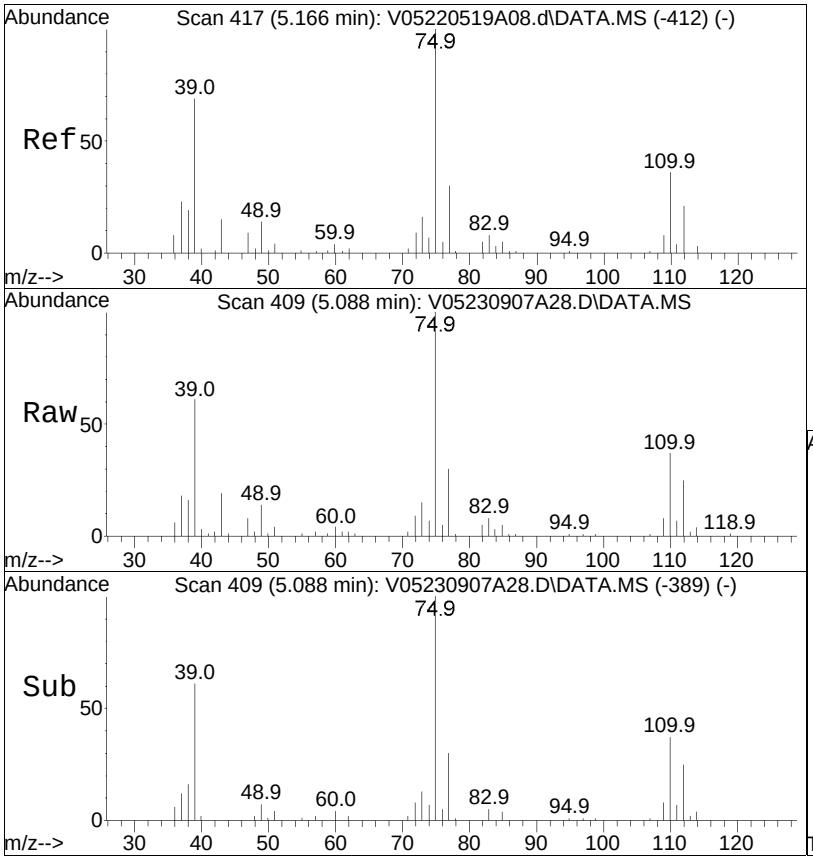


#37
1,1,1-Trichloroethane
Concen: 12.43 ug/L
RT: 4.970 min Scan# 397
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 97 Resp: 129266

Ion	Ratio	Lower	Upper
97	100		
99	63.8	41.7	86.5
61	44.3	26.1	54.3
63	14.2	8.5	17.6

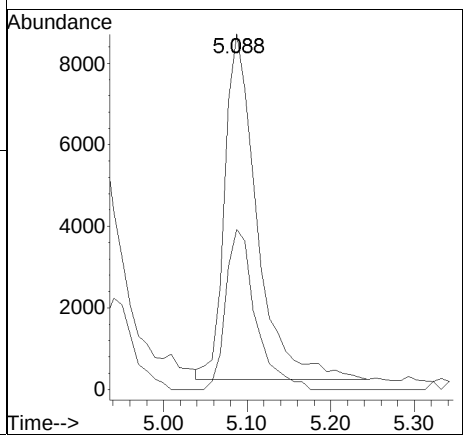


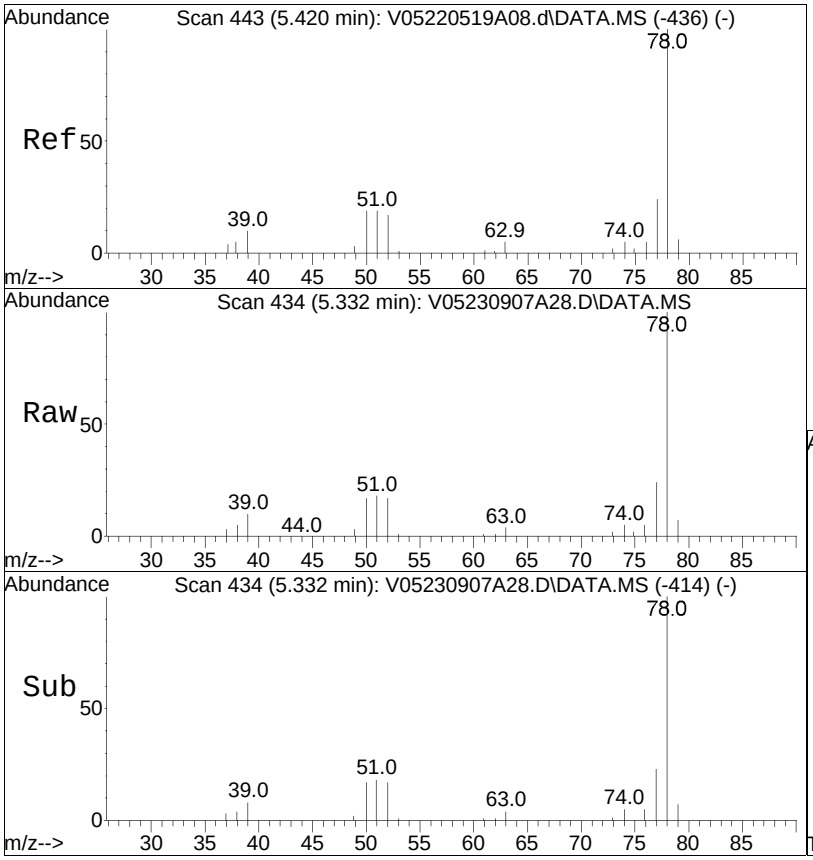


#39
2-Butanone
Concen: 14.58 ug/L
RT: 5.088 min Scan# 409
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 43 Resp: 22842

Ion	Ratio	Lower	Upper
43	100		
72	42.8	55.6	83.4#

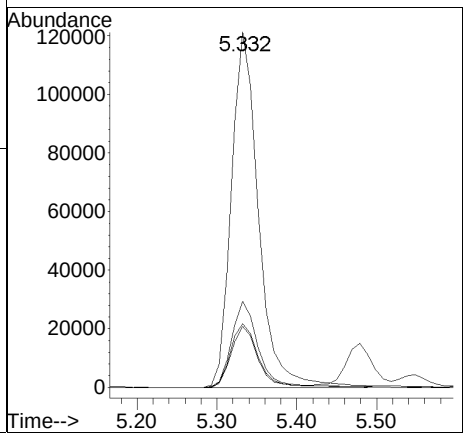


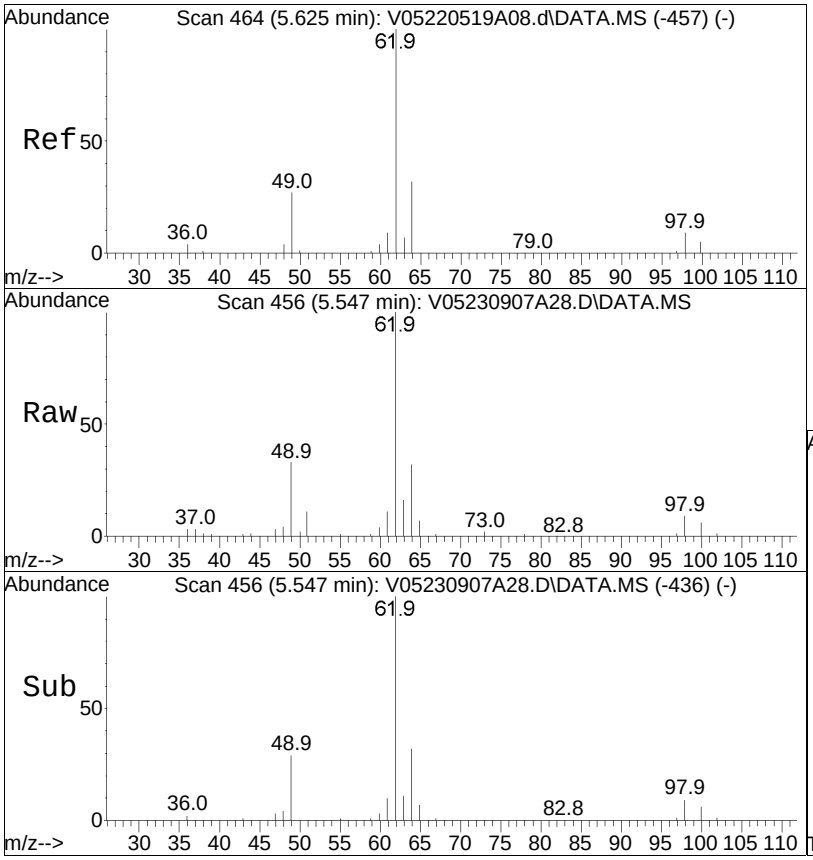


#41
Benzene
Concen: 11.83 ug/L
RT: 5.332 min Scan# 434
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 78 Resp: 287477

Ion	Ratio	Lower	Upper
78	100		
77	23.8	15.2	31.6
51	17.9	10.5	21.7
52	17.4	9.5	19.7

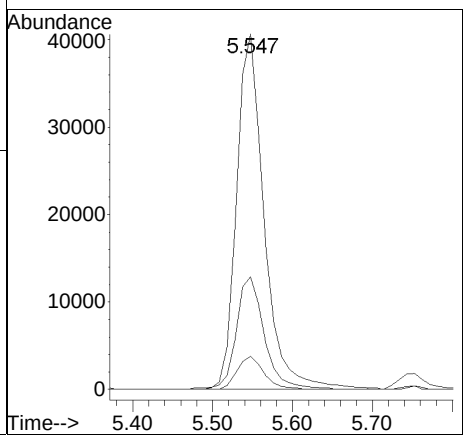


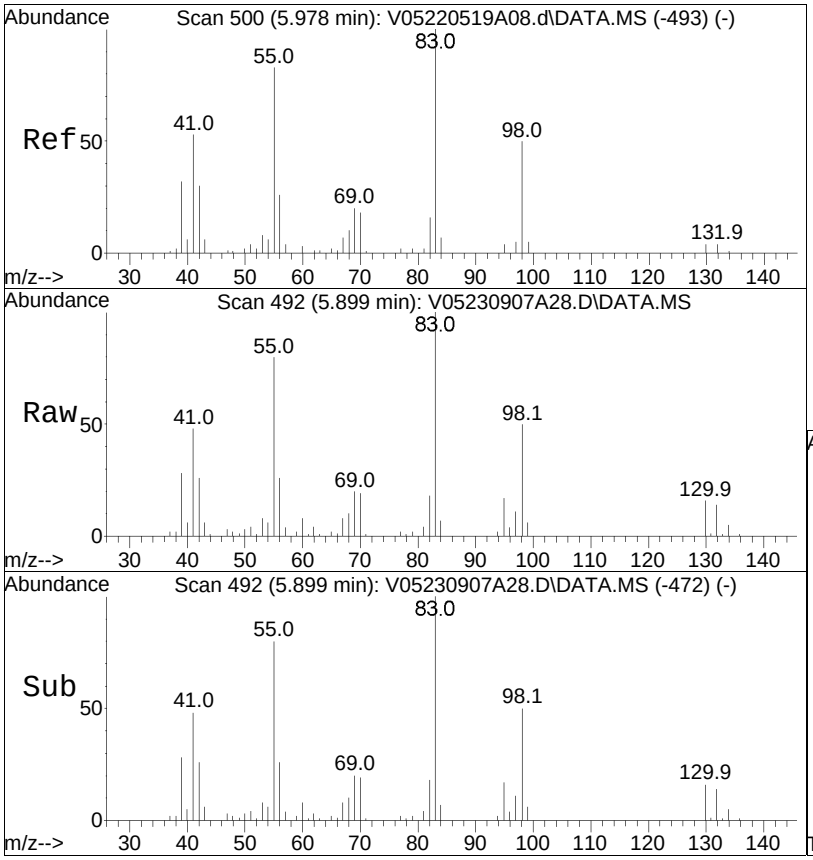


#44
1,2-Dichloroethane
Concen: 12.22 ug/L
RT: 5.547 min Scan# 456
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 62 Resp: 97943

Ion	Ratio	Lower	Upper
62	100		
64	32.2	13.2	53.2
98	9.0	0.0	27.8

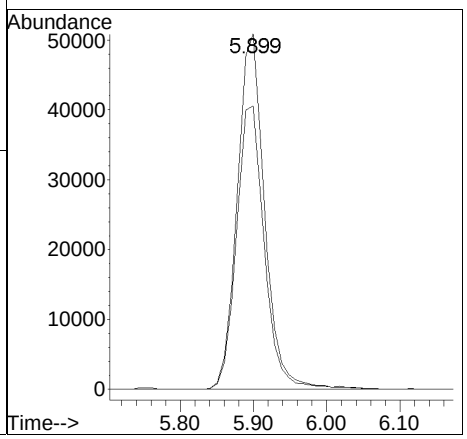


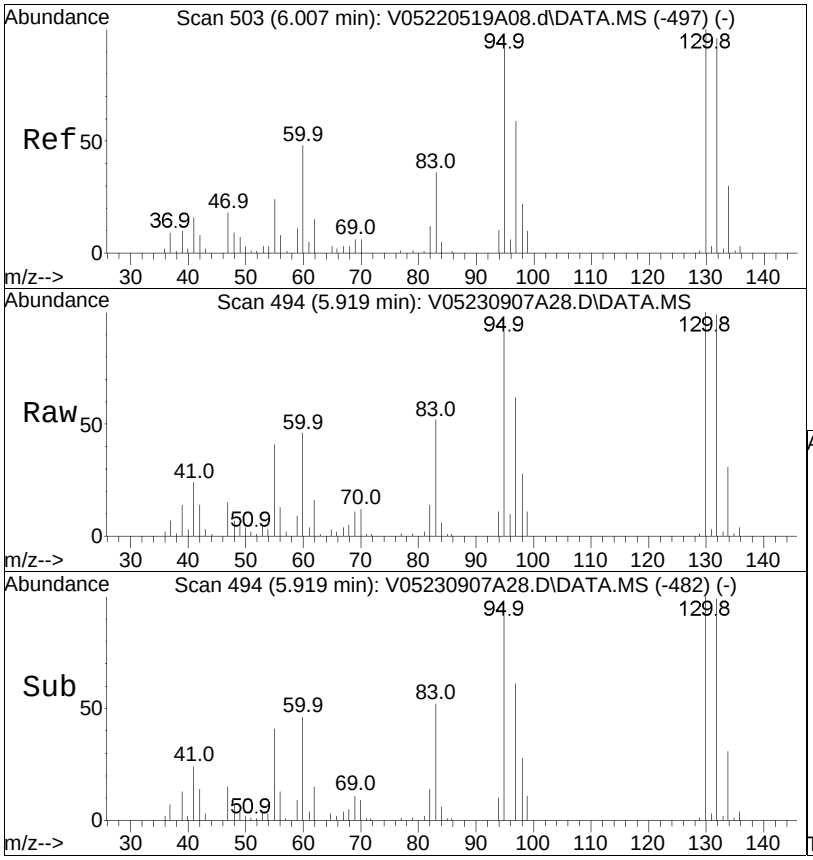


#47
Methyl cyclohexane
Concen: 11.22 ug/L
RT: 5.899 min Scan# 492
Delta R.T. -0.001 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 83 Resp: 132732

Ion	Ratio	Lower	Upper
83	100		
55	81.4	57.3	85.9

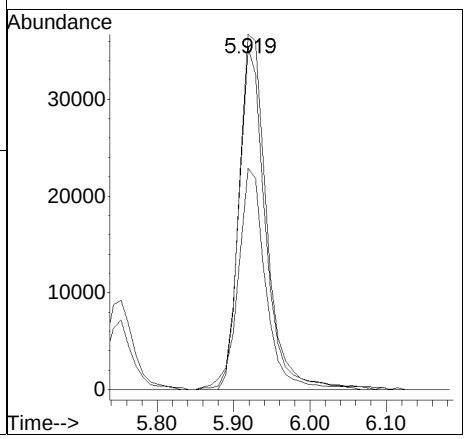


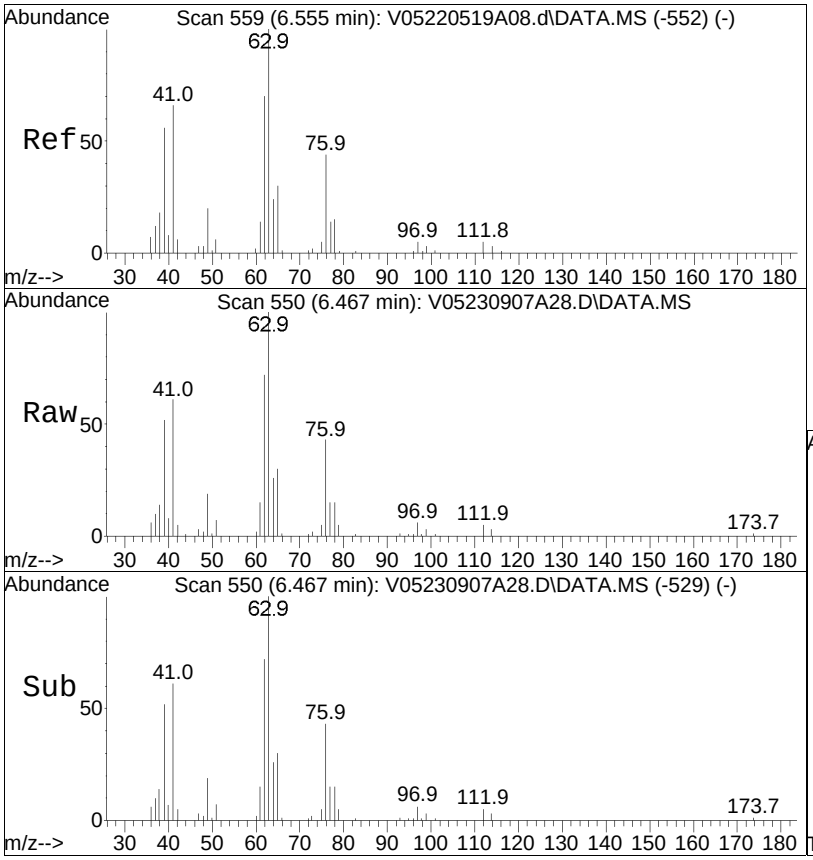


#48
Trichloroethene
Concen: 11.00 ug/L
RT: 5.919 min Scan# 494
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 95 Resp: 85658

Ion	Ratio	Lower	Upper
95	100		
97	66.9	56.1	84.1
130	107.6	77.7	116.5

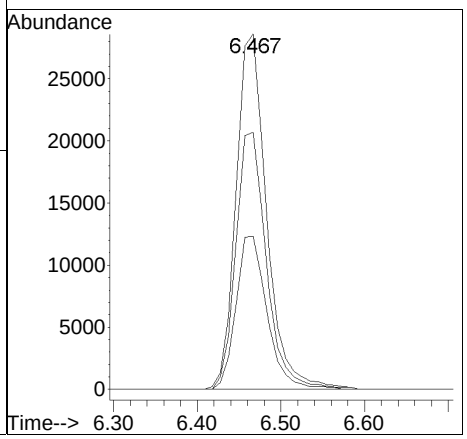


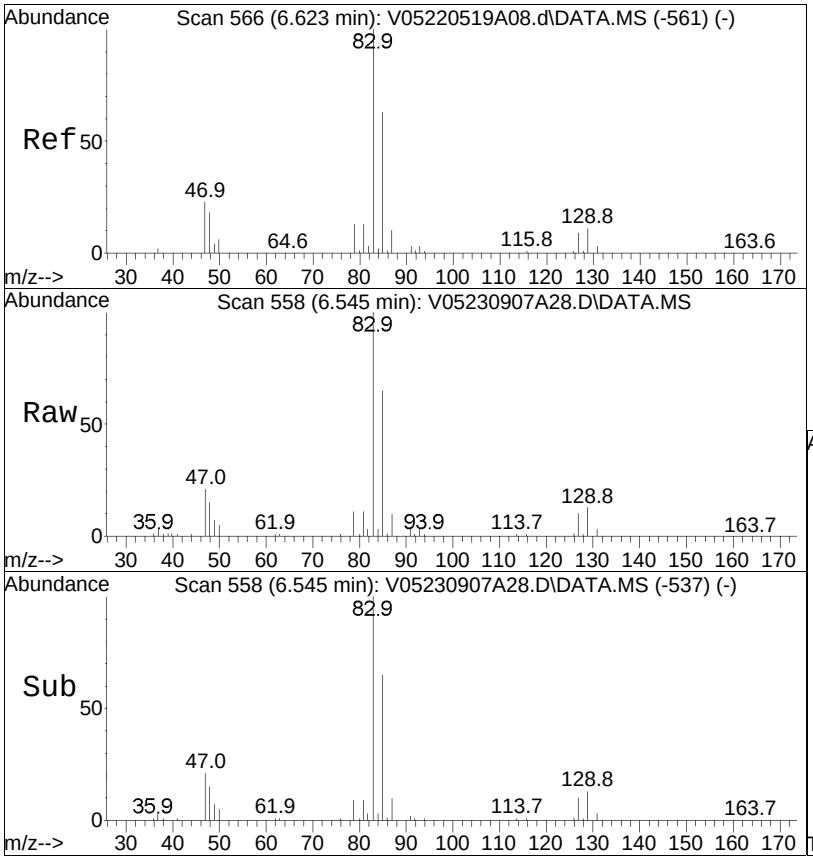


#51
1,2-Dichloropropane
Concen: 11.84 ug/L
RT: 6.467 min Scan# 550
Delta R.T. 0.010 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 63 Resp: 72866

Ion	Ratio	Lower	Upper
63	100		
62	72.4	57.0	85.4
76	43.8	48.4	72.6#

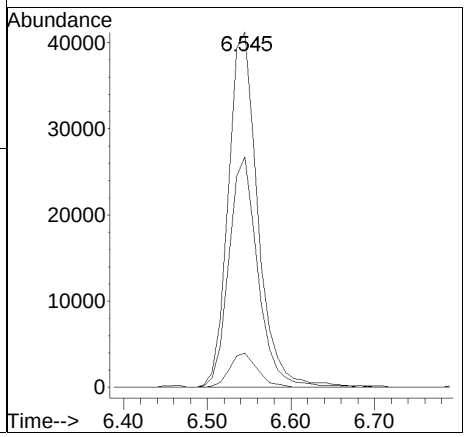


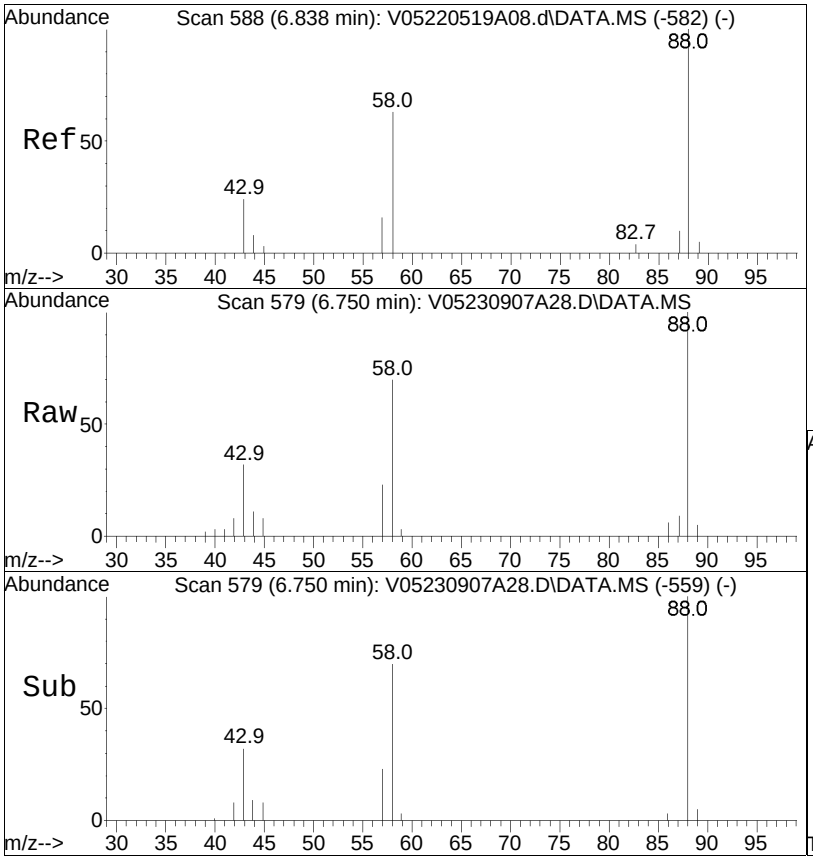


#54
Bromodichloromethane
Concen: 11.94 ug/L
RT: 6.545 min Scan# 558
Delta R.T. 0.010 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 83 Resp: 101563

Ion	Ratio	Lower	Upper
83	100		
85	64.0	51.0	76.6
127	9.2	6.7	10.1

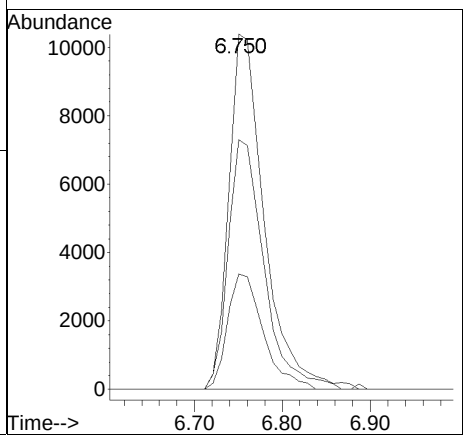


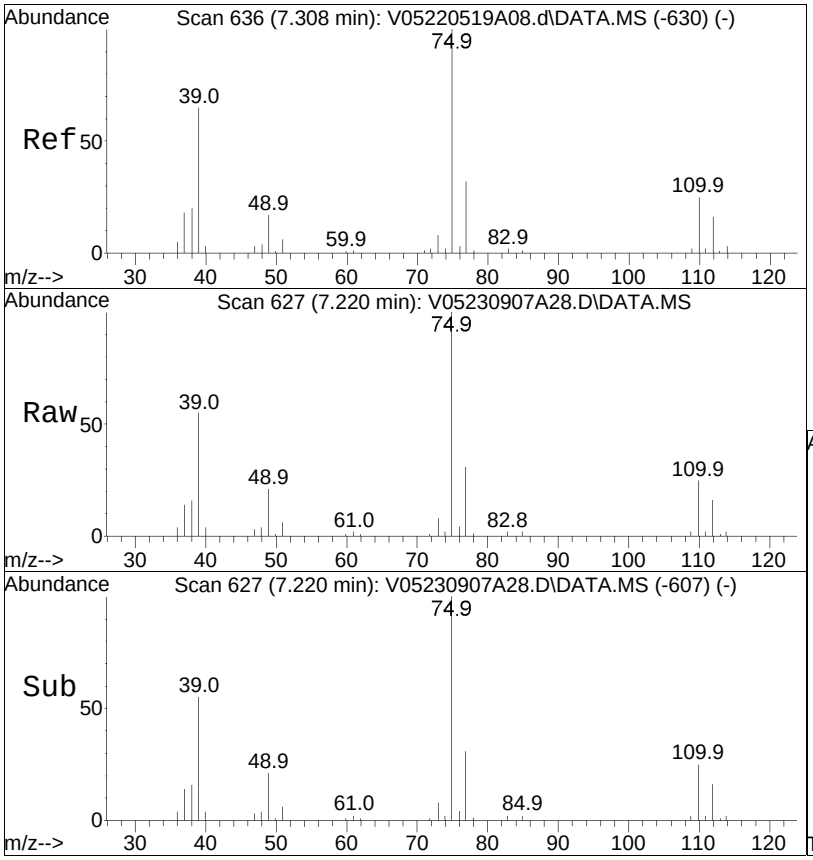


#57
1,4-Dioxane
Concen: 976.57 ug/L
RT: 6.750 min Scan# 579
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 88 Resp: 29262

Ion	Ratio	Lower	Upper
88	100		
58	70.9	50.6	75.8
43	32.8	20.5	30.7#

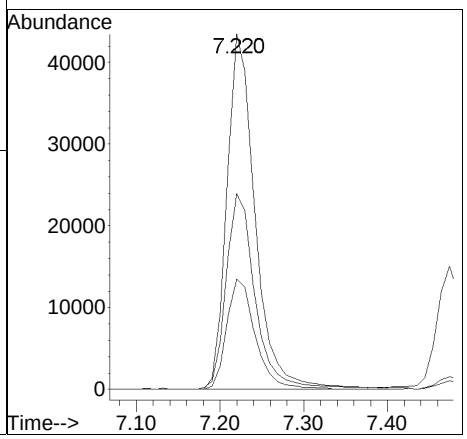


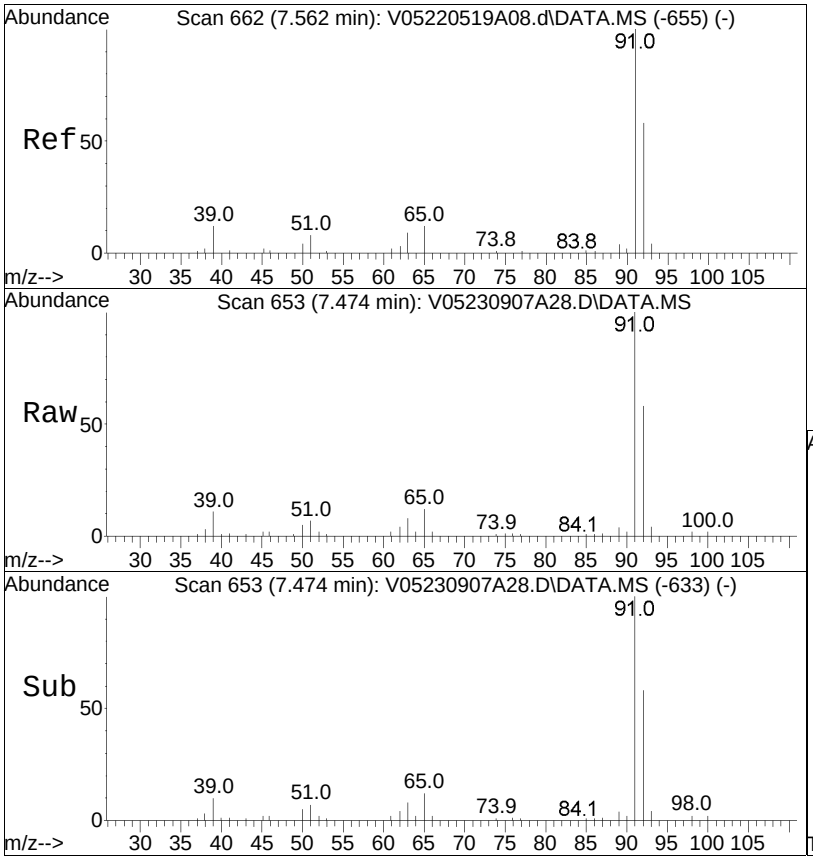


#58
cis-1,3-Dichloropropene
Concen: 10.79 ug/L
RT: 7.220 min Scan# 627
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 75 Resp: 102465

Ion	Ratio	Lower	Upper
75	100		
77	31.5	25.5	38.3
39	56.9	40.4	60.6

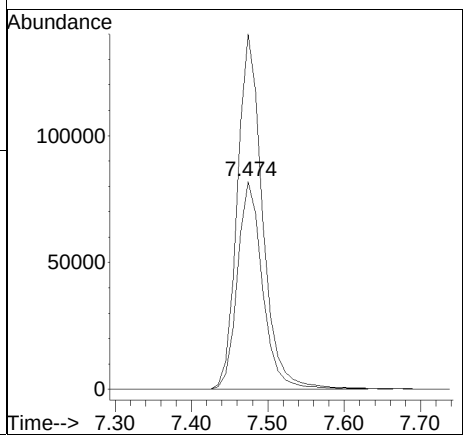


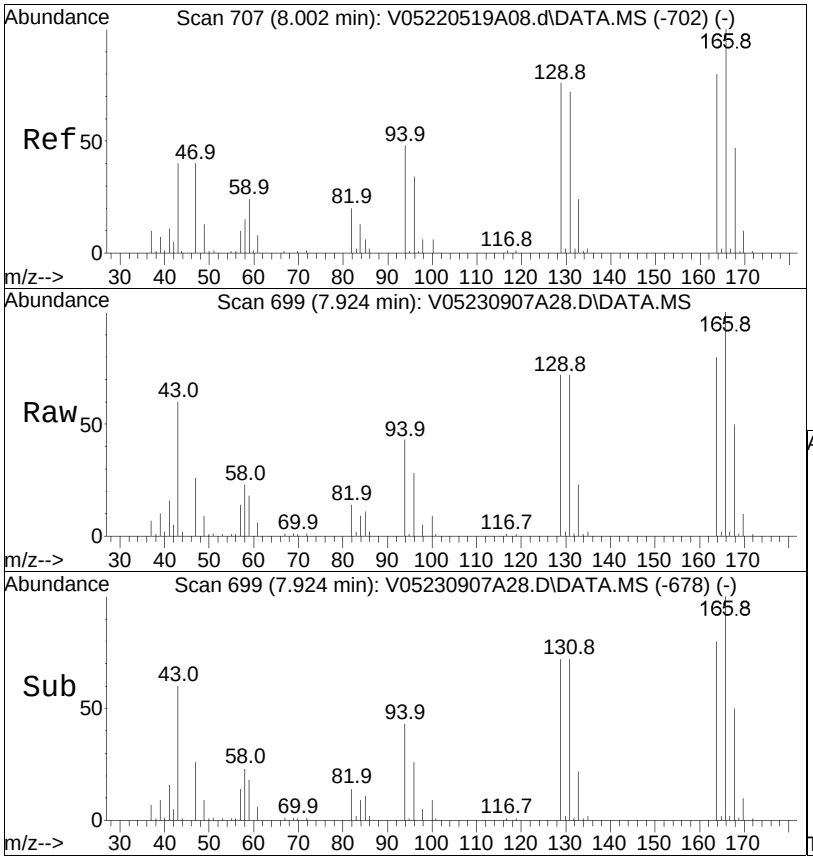


#61
Toluene
Concen: 11.96 ug/L
RT: 7.474 min Scan# 653
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 92 Resp: 187983

Ion	Ratio	Lower	Upper
92	100		
91	171.2	135.2	202.8

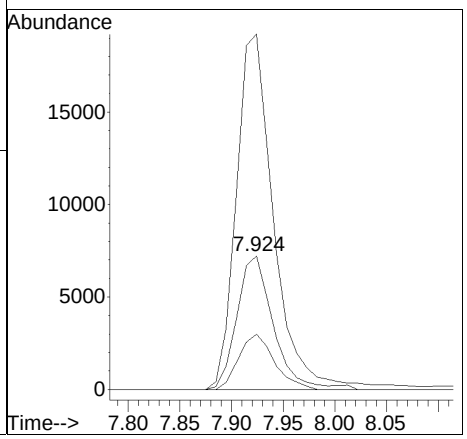


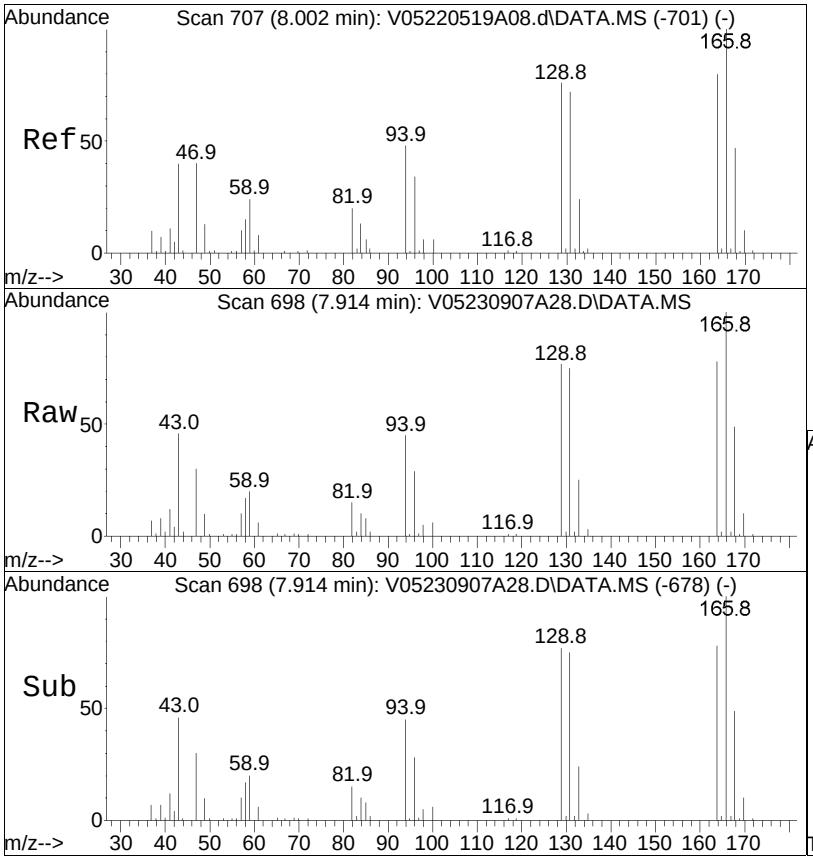


#62
4-Methyl-2-pentanone
Concen: 14.62 ug/L
RT: 7.924 min Scan# 699
Delta R.T. 0.010 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 58 Resp: 17646

Ion	Ratio	Lower	Upper
58	100		
100	40.5	38.9	58.3
43	275.7	204.2	306.2

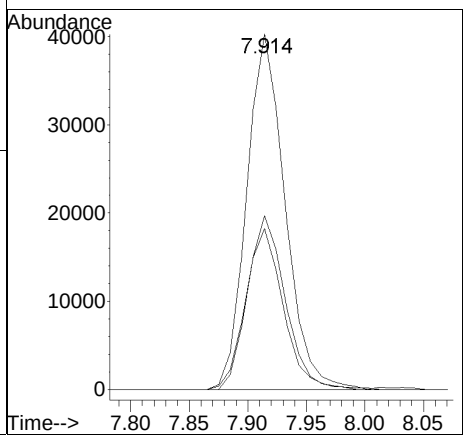


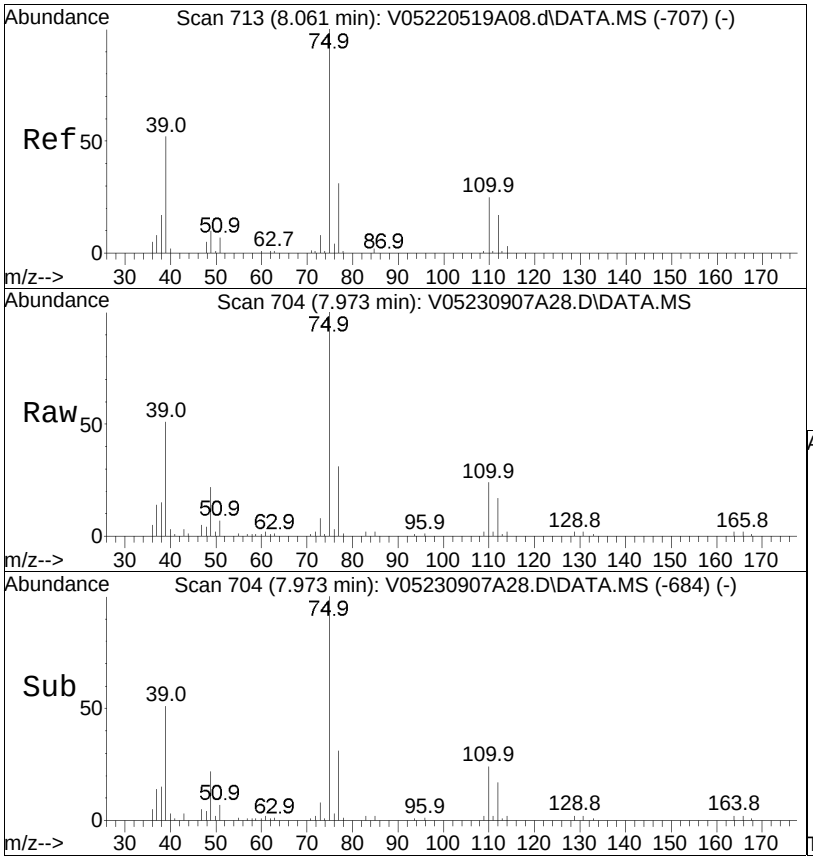


#63
Tetrachloroethene
Concen: 12.26 ug/L
RT: 7.914 min Scan# 698
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:166 Resp: 91756

Ion	Ratio	Lower	Upper
166	100		
168	48.0	30.2	70.2
94	44.6	32.5	72.5

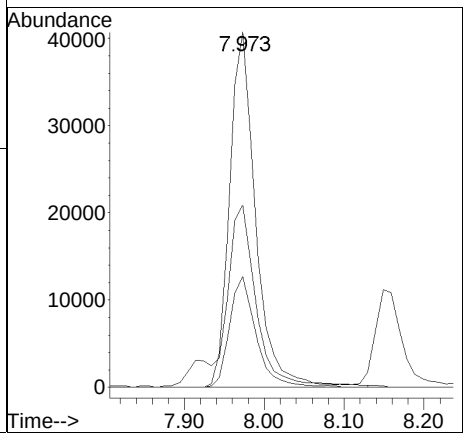


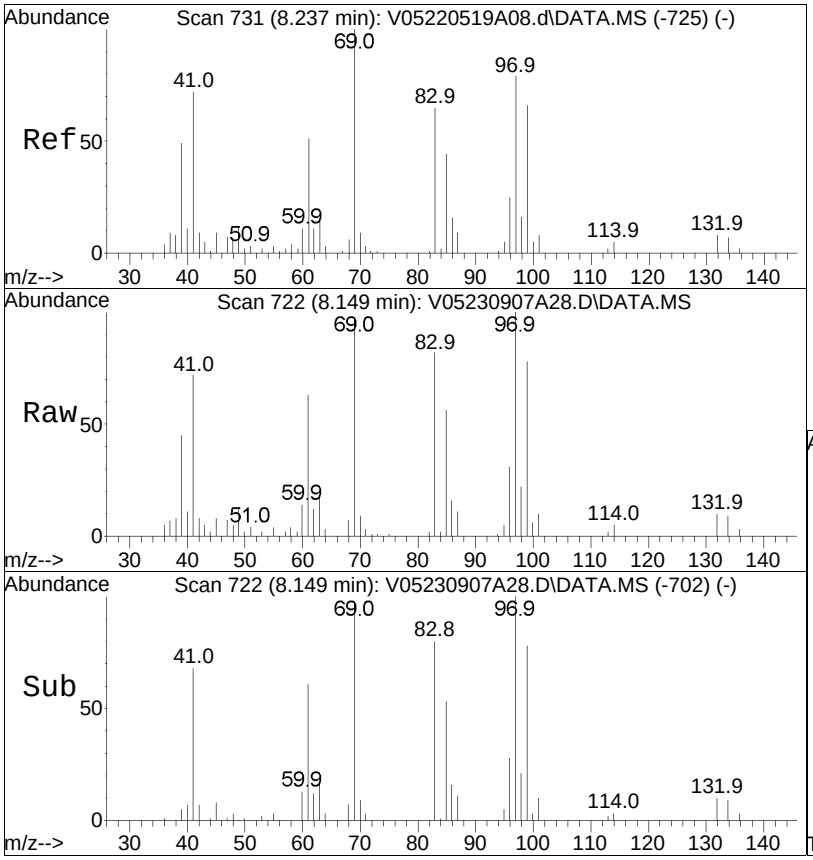


#65
trans-1,3-Dichloropropene
Concen: 12.05 ug/L
RT: 7.973 min Scan# 704
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 75 Resp: 93180

Ion	Ratio	Lower	Upper
75	100		
77	31.7	11.5	51.5
39	61.5	29.3	69.3

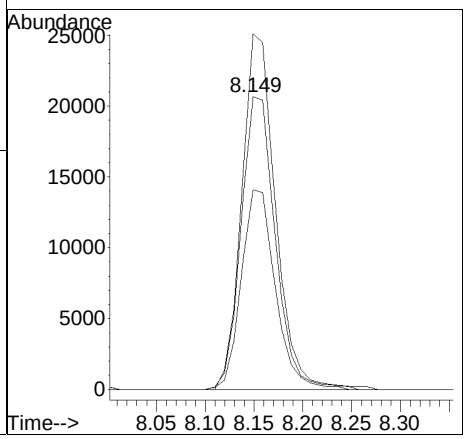


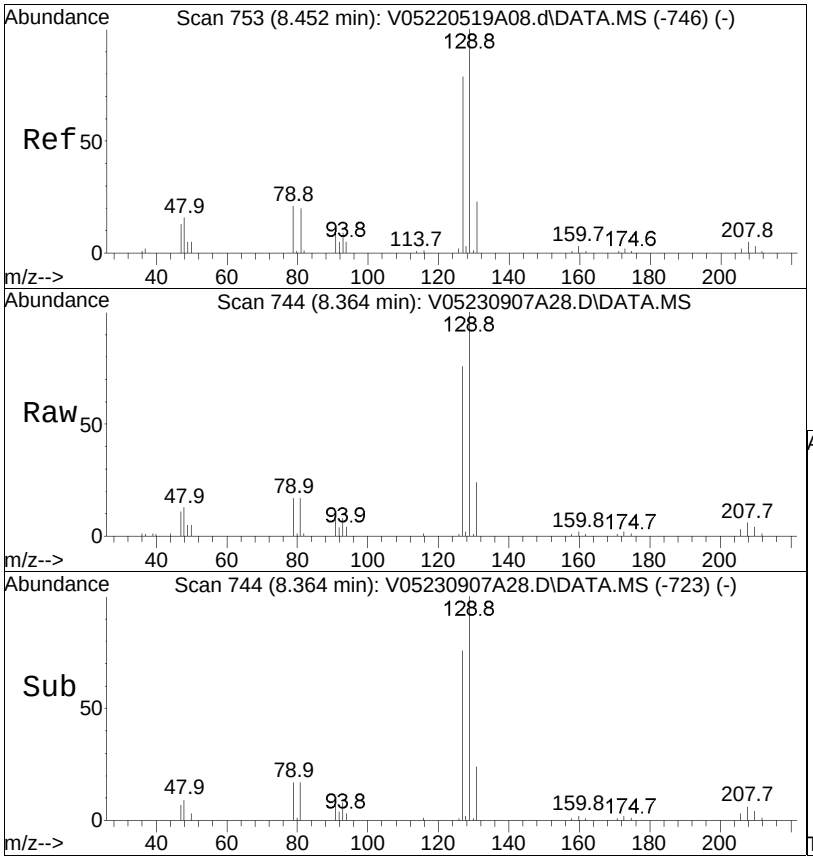


#68
1,1,2-Trichloroethane
Concen: 12.73 ug/L
RT: 8.149 min Scan# 722
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 83 Resp: 50476

Ion	Ratio	Lower	Upper
83	100		
97	119.6	102.2	142.2
85	67.7	47.5	87.5

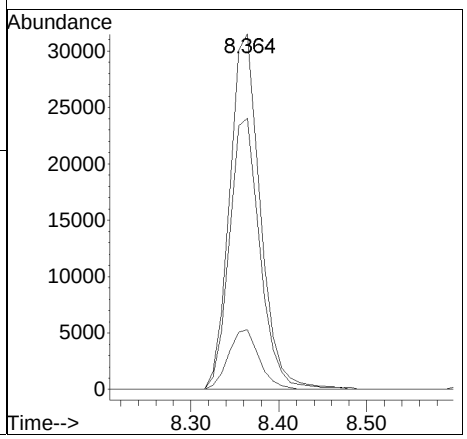


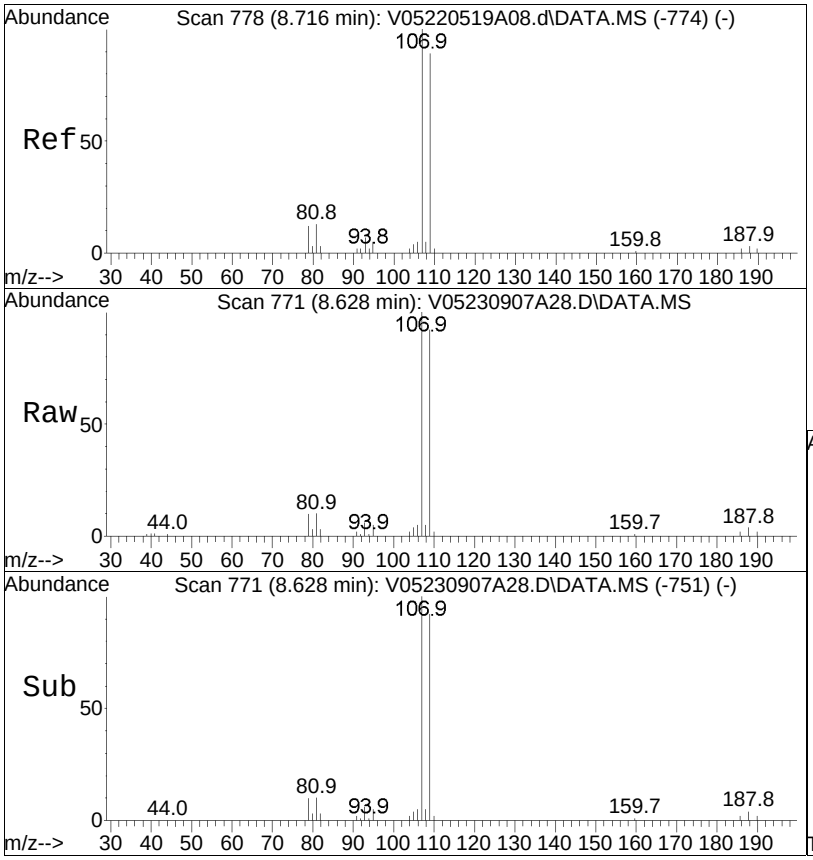


#69
Chlorodibromomethane
Concen: 12.67 ug/L
RT: 8.364 min Scan# 744
Delta R.T. 0.010 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:129 Resp: 76555

Ion	Ratio	Lower	Upper
129	100		
81	16.9	0.0	37.0
127	76.3	58.3	98.3

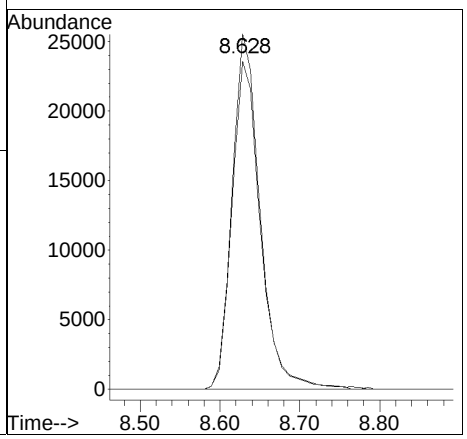


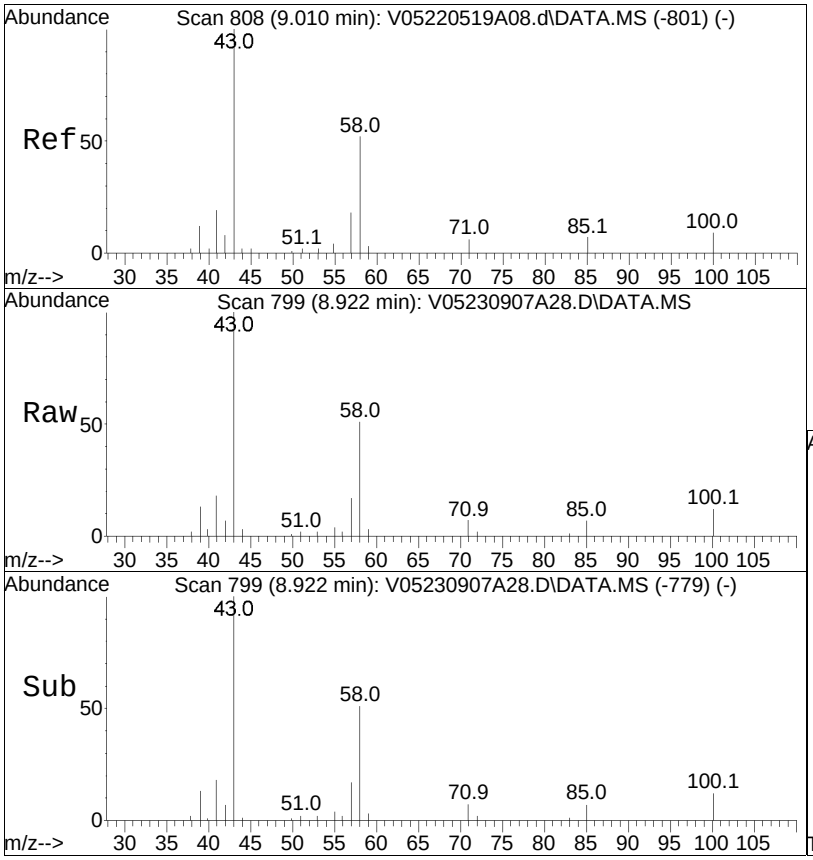


#71
1,2-Dibromoethane
Concen: 12.70 ug/L
RT: 8.628 min Scan# 771
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:107 Resp: 68034

Ion	Ratio	Lower	Upper
107	100		
109	94.0	75.0	112.6

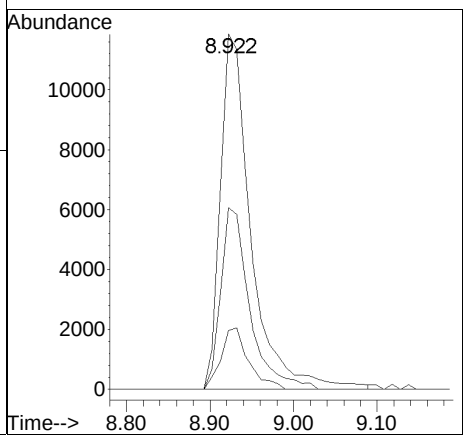


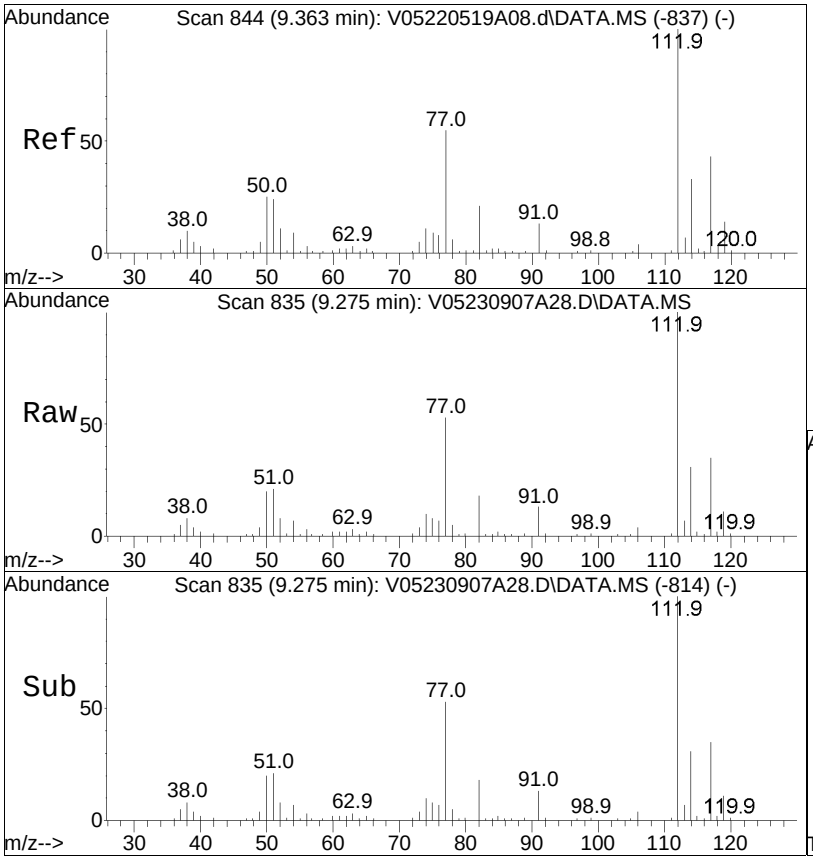


#72
2-Hexanone
Concen: 14.08 ug/L
RT: 8.922 min Scan# 799
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 43 Resp: 30271

Ion	Ratio	Lower	Upper
43	100		
58	48.3	42.3	63.5
57	15.6	15.6	23.4

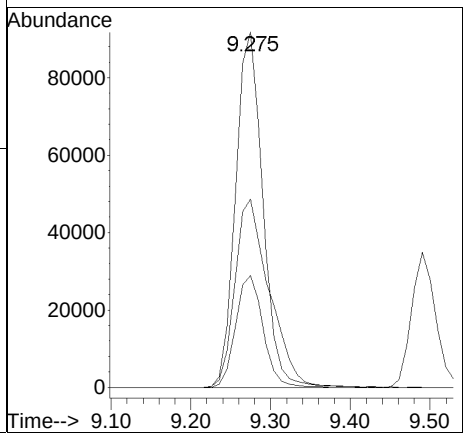


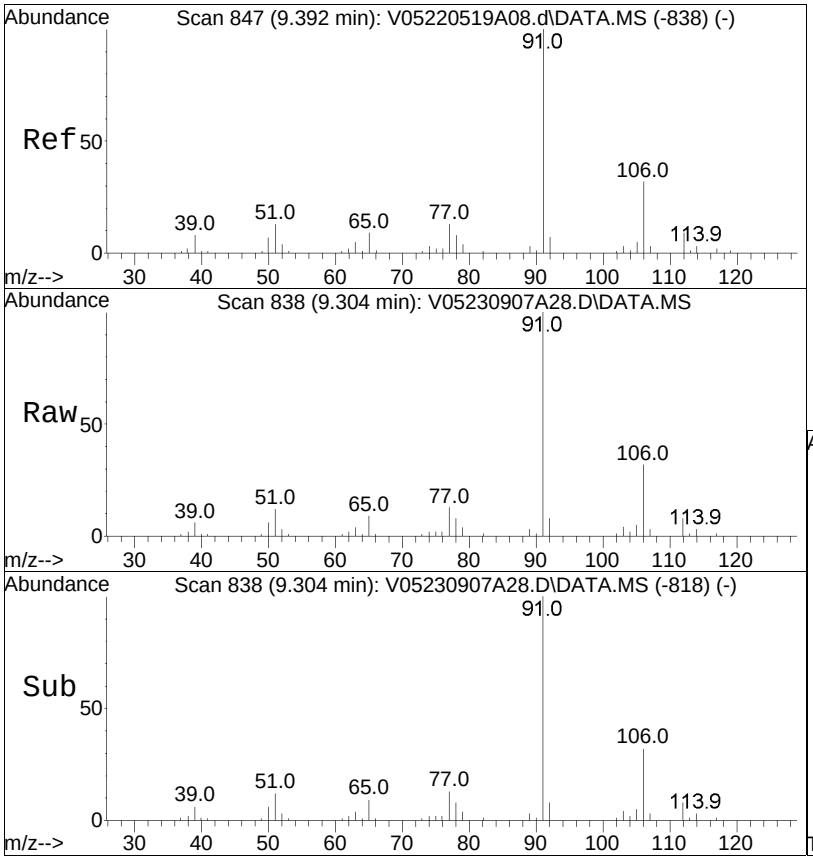


#73
Chlorobenzene
Concen: 12.05 ug/L
RT: 9.275 min Scan# 835
Delta R.T. 0.010 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:112 Resp: 217805

Ion	Ratio	Lower	Upper
112	100		
77	66.9	66.1	99.1
114	31.7	25.4	38.0

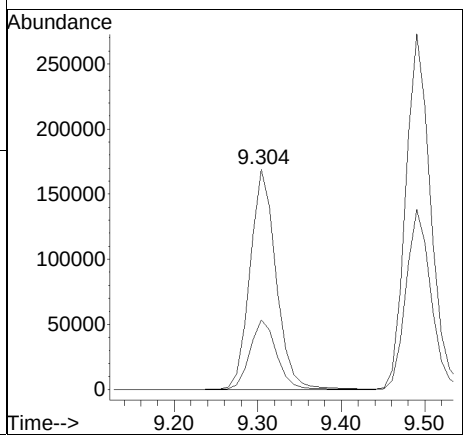


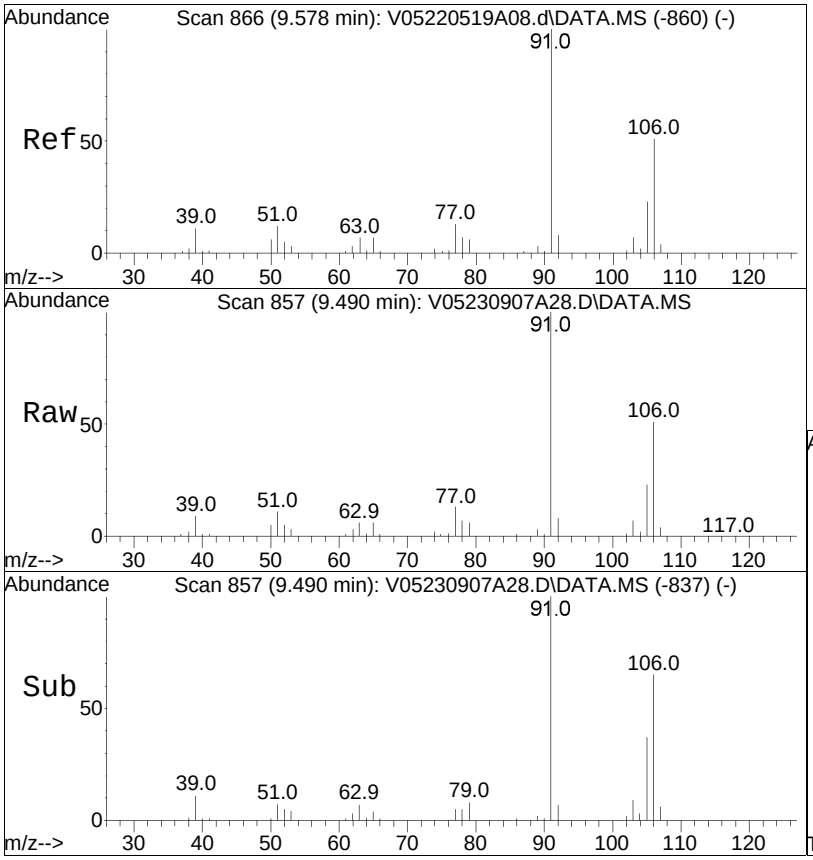


#74
Ethylbenzene
Concen: 12.06 ug/L
RT: 9.304 min Scan# 838
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 91 Resp: 366880

Ion	Ratio	Lower	Upper
91	100		
106	32.1	22.9	34.3

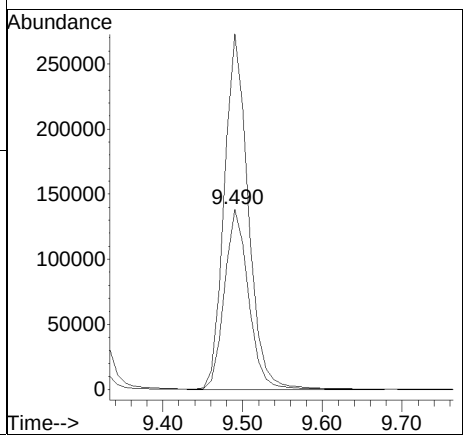


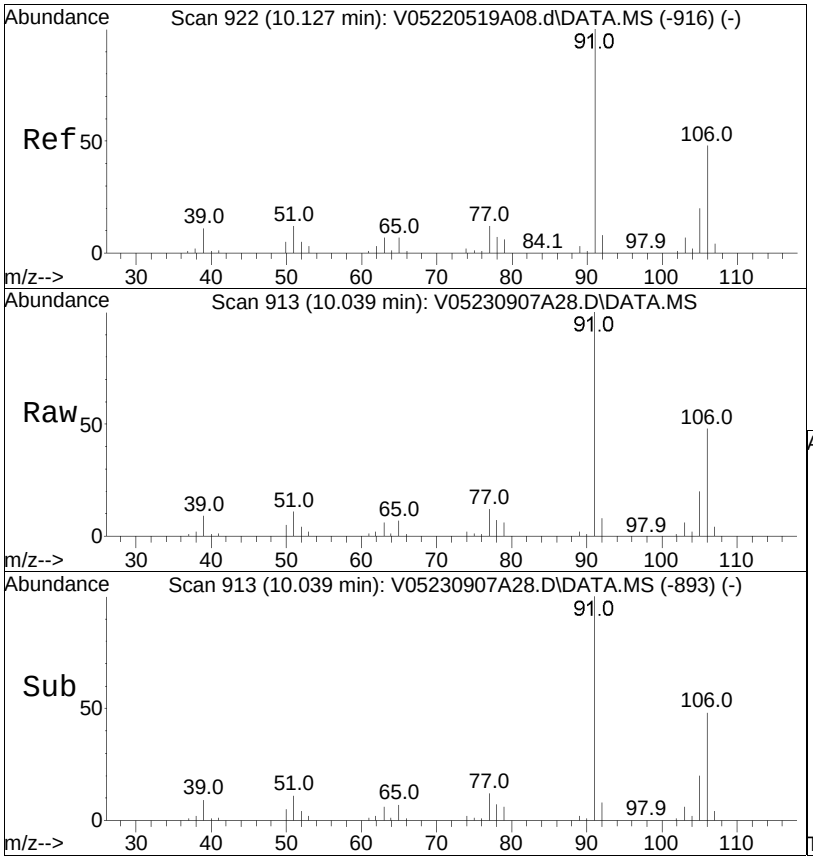


#76
p/m Xylene
Concen: 24.41 ug/L
RT: 9.490 min Scan# 857
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:106 Resp: 290508

Ion	Ratio	Lower	Upper
106	100		
91	195.2	177.2	265.8

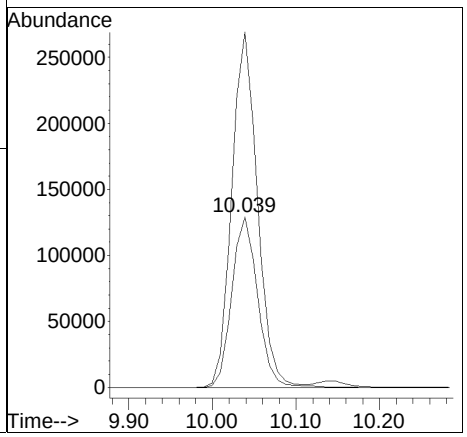


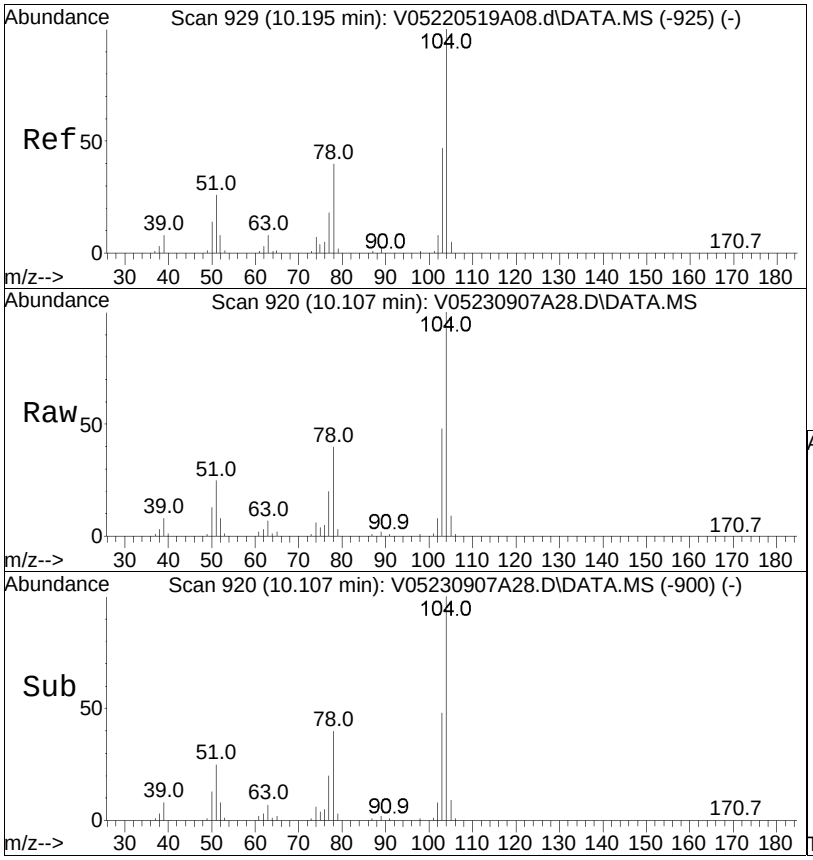


#77
o Xylene
Concen: 24.00 ug/L
RT: 10.039 min Scan# 913
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:106 Resp: 278173

Ion	Ratio	Lower	Upper
106	100		
91	205.5	187.0	280.6

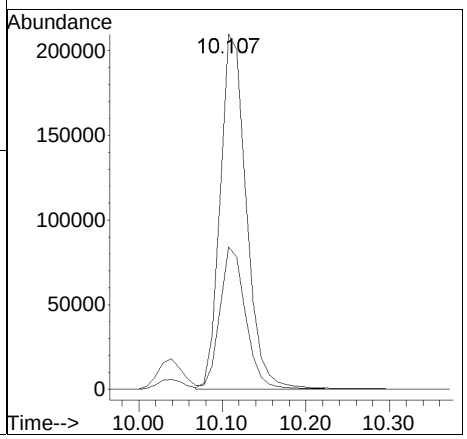


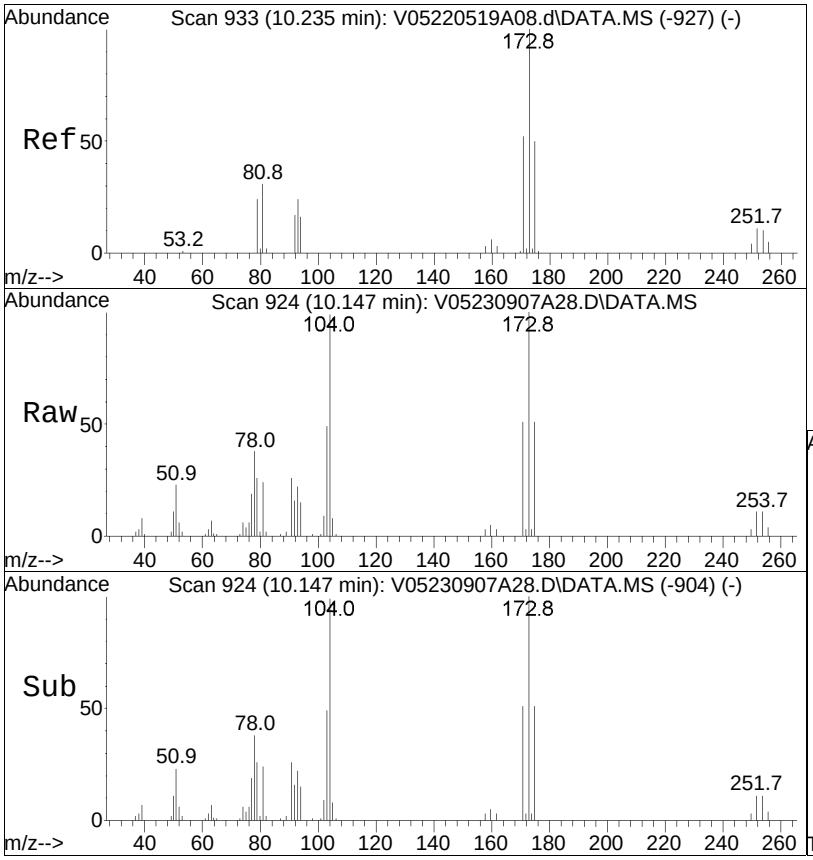


#78
Styrene
Concen: 23.88 ug/L
RT: 10.107 min Scan# 920
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:104 Resp: 455023

Ion	Ratio	Lower	Upper
104	100		
78	39.8	39.6	59.4

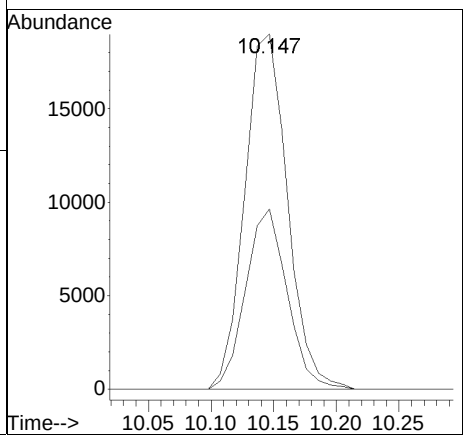


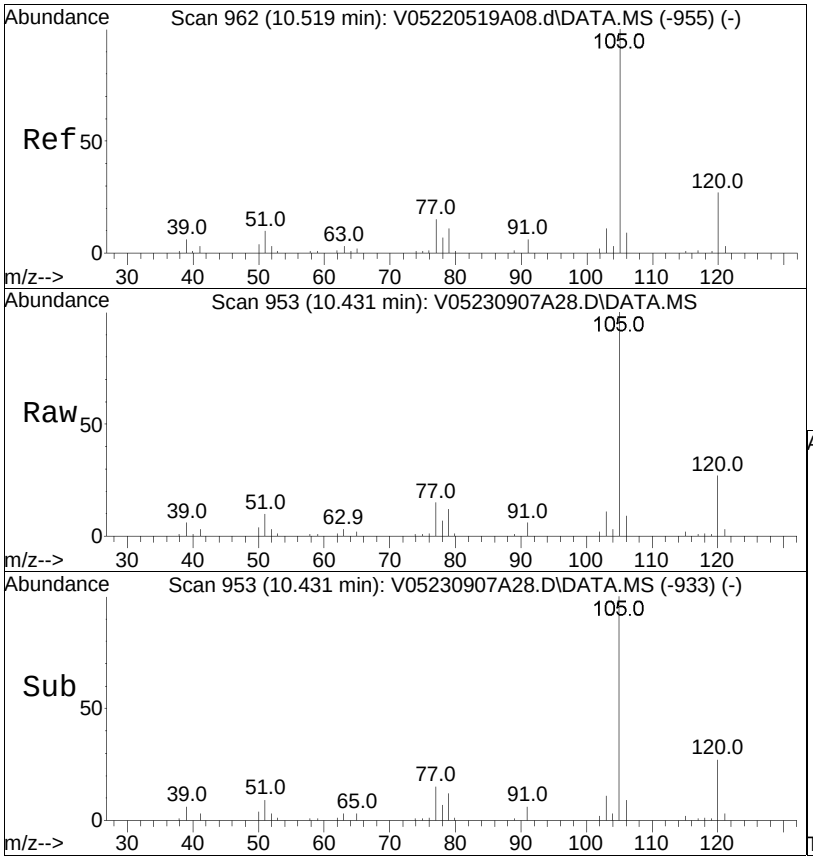


#80
Bromoform
Concen: 11.41 ug/L
RT: 10.147 min Scan# 924
Delta R.T. -0.001 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:173 Resp: 45053

Ion	Ratio	Lower	Upper
173	100		
175	49.4	26.6	66.6

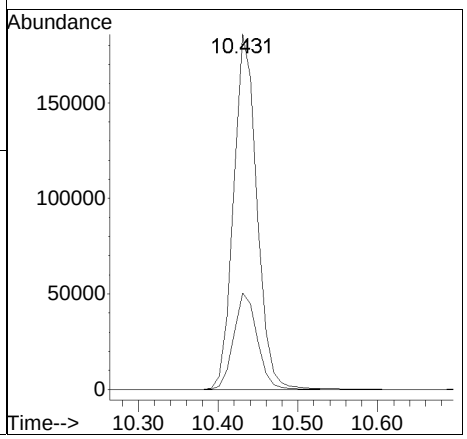


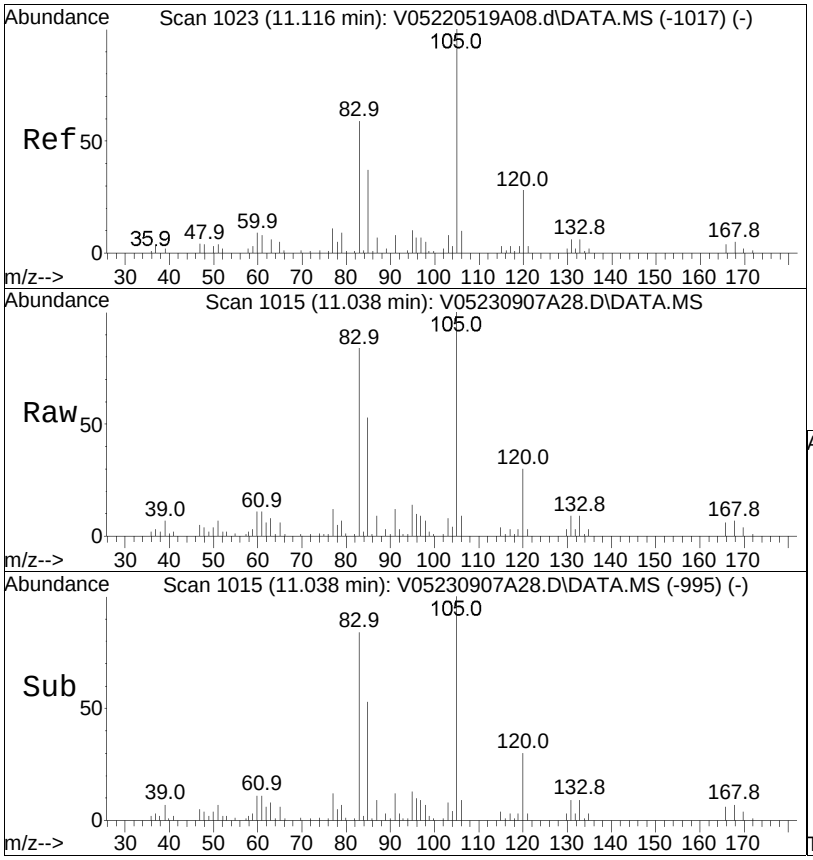


#82
Isopropylbenzene
Concen: 11.86 ug/L
RT: 10.431 min Scan# 953
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:105 Resp: 377533

Ion	Ratio	Lower	Upper
105	100		
120	27.3	4.8	44.8

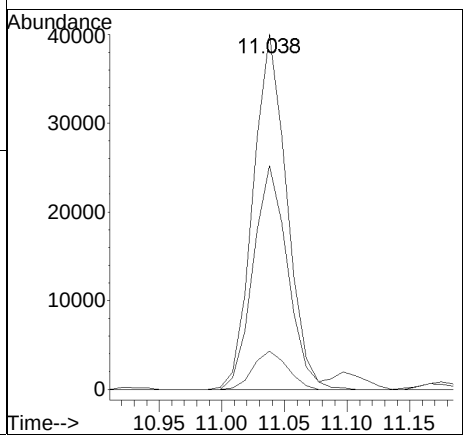


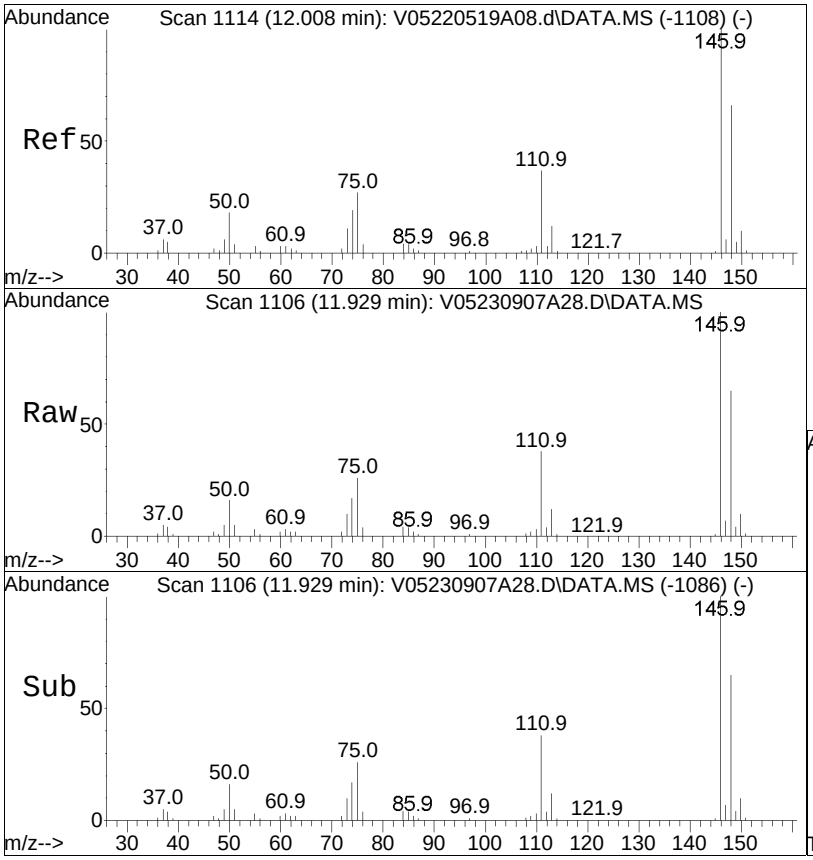


#87
1,1,2,2-Tetrachloroethane
Concen: 14.39 ug/L
RT: 11.038 min Scan# 1015
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion: 83 Resp: 74837

Ion	Ratio	Lower	Upper
83	100		
131	11.0	0.0	30.4
85	65.2	46.4	86.4

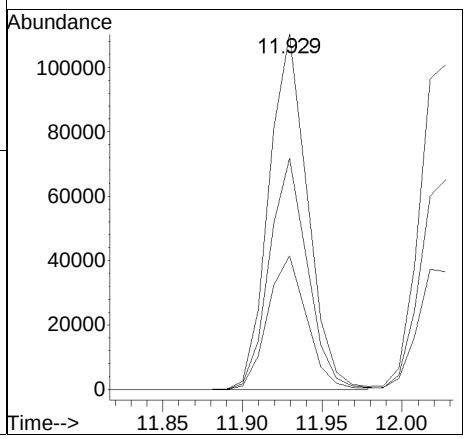


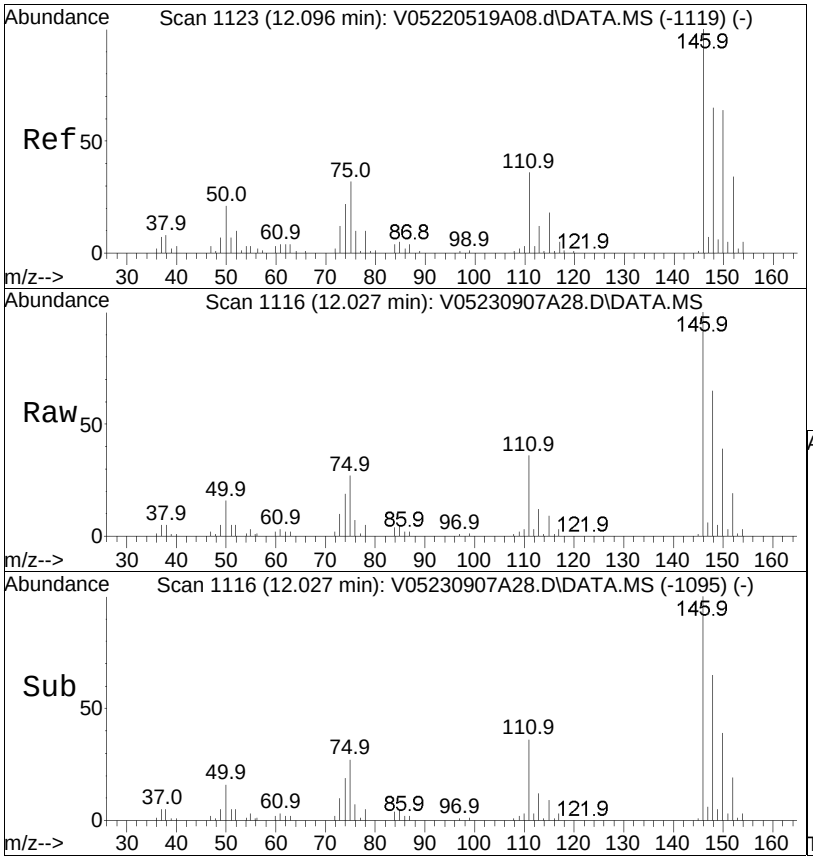


#100
1,3-Dichlorobenzene
Concen: 11.88 ug/L
RT: 11.929 min Scan# 1106
Delta R.T. -0.001 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:146 Resp: 185094

Ion	Ratio	Lower	Upper
146	100		
111	38.0	28.0	58.1
148	64.4	41.6	86.4

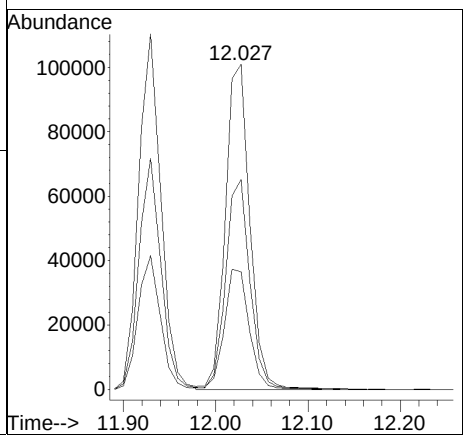


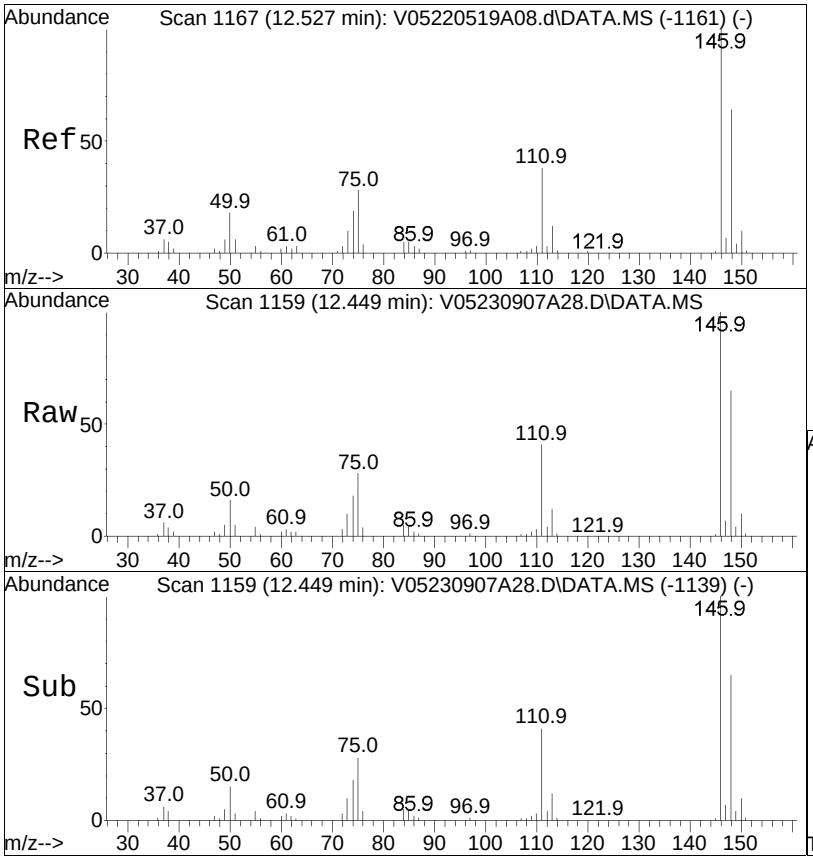


#101
1,4-Dichlorobenzene
Concen: 11.77 ug/L
RT: 12.027 min Scan# 1116
Delta R.T. 0.009 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:146 Resp: 186349

Ion	Ratio	Lower	Upper
146	100		
111	37.7	33.8	50.6
148	63.8	51.0	76.6

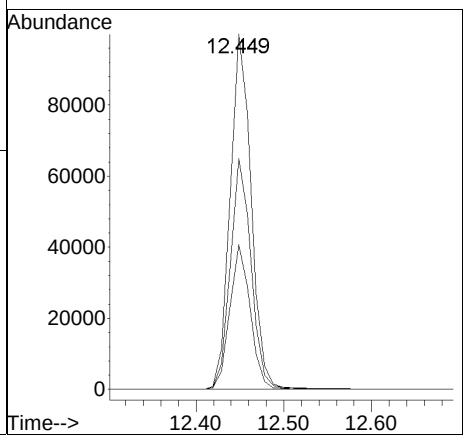


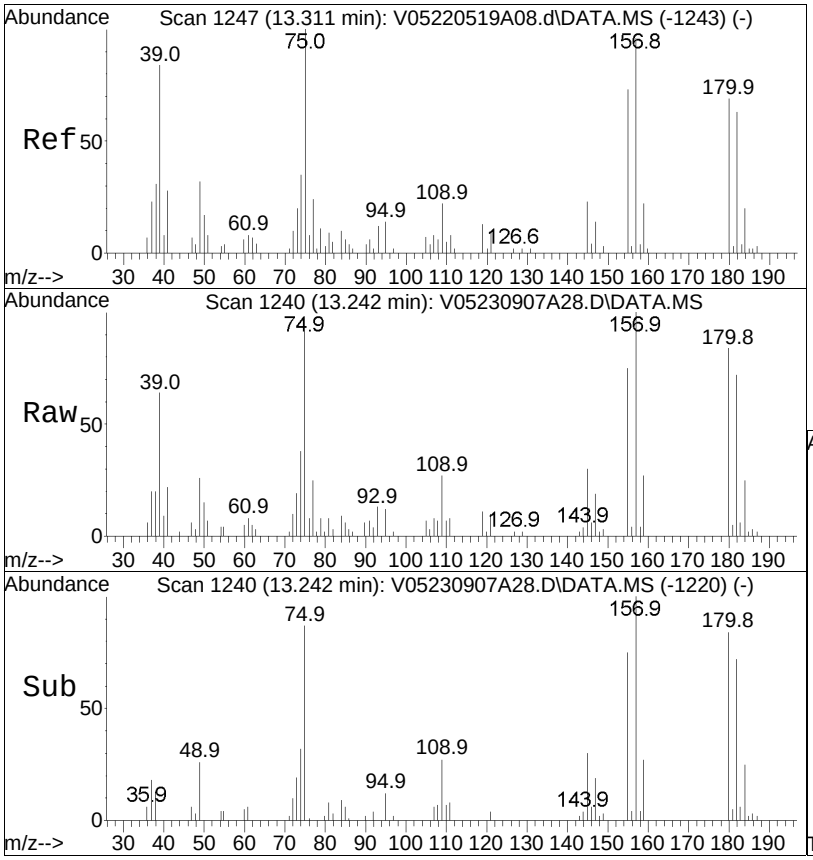


#104
1,2-Dichlorobenzene
Concen: 11.58 ug/L
RT: 12.449 min Scan# 1159
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:146 Resp: 166497

Ion	Ratio	Lower	Upper
146	100		
111	39.7	29.1	60.5
148	64.3	41.7	86.7

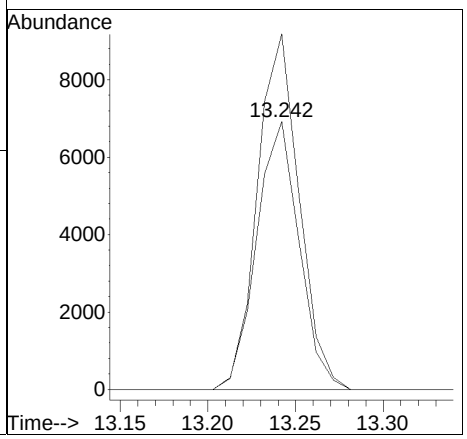


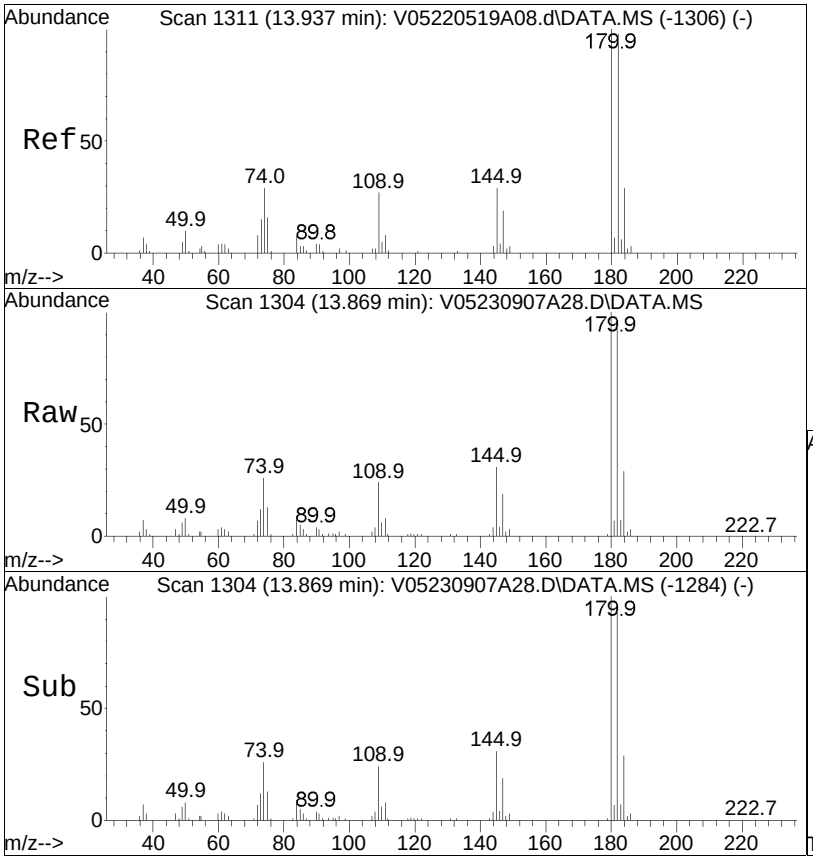


#106
1,2-Dibromo-3-chloropropane
Concen: 13.12 ug/L
RT: 13.242 min Scan# 1240
Delta R.T. 0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:155 Resp: 11681

Ion	Ratio	Lower	Upper
155	100		
157	129.9	105.0	157.6

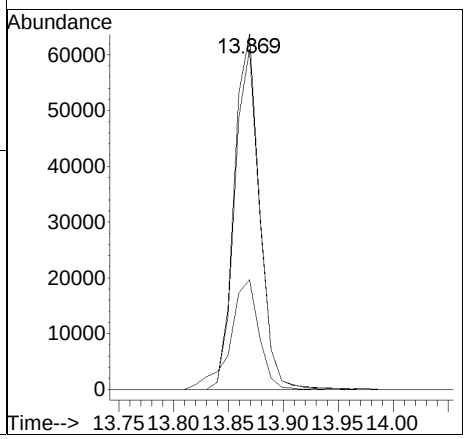


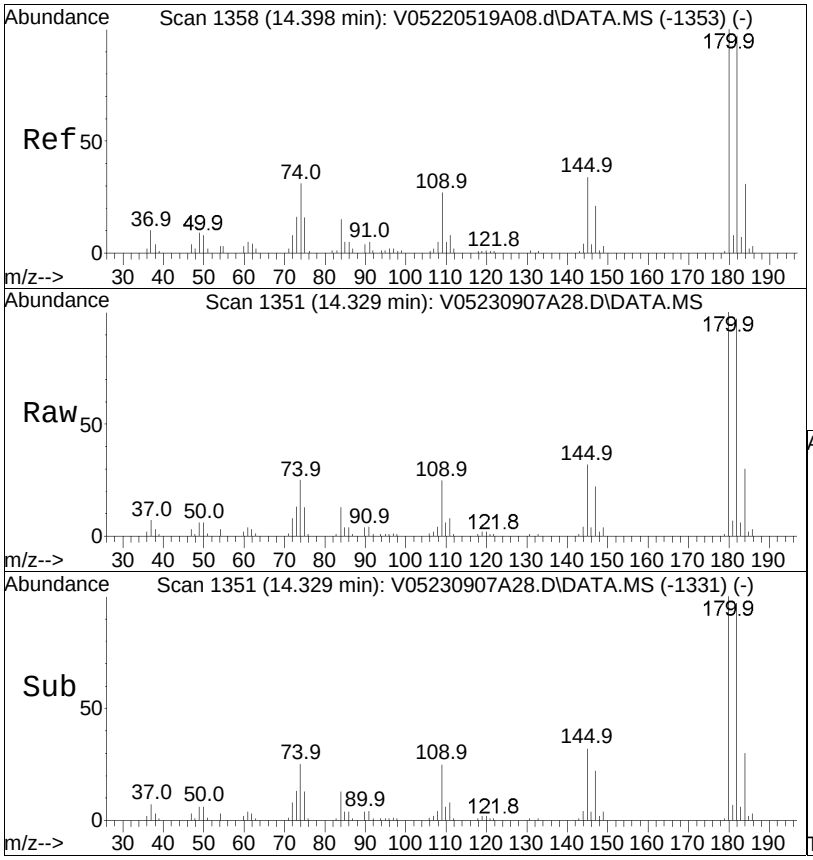


#109
1,2,4-Trichlorobenzene
Concen: 10.43 ug/L
RT: 13.869 min Scan# 1304
Delta R.T. -0.000 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:180 Resp: 102445

Ion	Ratio	Lower	Upper
180	100		
182	94.8	75.2	112.8
145	35.1	27.4	41.2

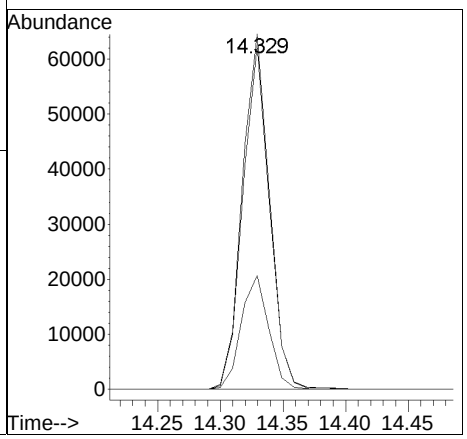




#111
1,2,3-Trichlorobenzene
Concen: 10.94 ug/L
RT: 14.329 min Scan# 1351
Delta R.T. -0.001 min
Lab File: V05230907A28.D
Acq: 7 Sep 2023 6:57 pm

Tgt Ion:180 Resp: 97536

Ion	Ratio	Lower	Upper
180	100		
182	94.9	75.5	113.3
145	32.5	26.5	39.7



Calculation of Volatile Organic Compounds

Aqueous Concentration Formula: Amt * DF * Uf * (1/Vo)

Where:
DF = Dilution Factor
Vo = Sample Volume Purged (mL)
Uf = ng Unit Correction Factor (mL)

Soil Concentration Formula: Amt * DF * (1/Wt)

Where:
DF = Dilution Factor
Wt = Weight of Sample (g)

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 13 2023, 01:07 pm

Work Group: WG1824710 for Department: 31 GC/MS - Volatiles

Created: 07-SEP-23 Due: Operator: mjv

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2350269-04	MW-4D	S	NYTCL-8260-R2	WATER	DONE	U	0912	0913	S0	Vial-B
L2350269-07	MW-7S	S	NYTCL-8260-R2	WATER	DONE	U	0911	0913	S0	Vial-B
L2350269-08	MW-8S	S	NYTCL-8260-R2	WATER	DONE	U	0911	0913	S0	Vial-B
L2350269-09	DUP	S	NYTCL-8260-R2	WATER	DONE	U	0911	0913	S0	Vial-B
L2350269-11	EQUIPMENT BLANK	S	NYTCL-8260-R2	WATER	DONE	U	0912	0913	S0	Vial-B
L2350269-12	TRIP BLANK	S	NYTCL-8260-R2	WATER	DONE	U	0912	0913	S0	Vial-B
L2351643-04	MW-106B	S	NYTCL-8260	WATER	DONE	U	0920	0907	1A	Vial-B
L2351643-05	MW-105B	S	NYTCL-8260	WATER	DONE	U	0920	0907	1A	Vial-B
L2351643-06	MW-104B	S	NYTCL-8260	WATER	DONE	U	0920	0907	1A	Vial-B
WG1824710-1	MS BFB Tune Standard	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1824710-1	MS BFB Tune Standard	S	NYTCL-8260	WATER	DONE	U				
WG1824710-2	Continuing Calibrati	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1824710-2	Continuing Calibrati	S	NYTCL-8260	WATER	DONE	U				
WG1824710-3	Laboratory Control S	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1824710-3	Laboratory Control S	S	NYTCL-8260	WATER	DONE	U				
WG1824710-4	LCS Duplicate	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1824710-4	LCS Duplicate	S	NYTCL-8260	WATER	DONE	U				
WG1824710-5	Laboratory Method Bl	S	NYTCL-8260	WATER	DONE	U				
WG1824710-5	Laboratory Method Bl	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1824710-6	Matrix Spike	S	NYTCL-8260	WATER	DONE	U				
WG1824710-6	Matrix Spike	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1824710-7	Matrix Spike Duplica	S	NYTCL-8260	WATER	DONE	U				
WG1824710-7	Matrix Spike Duplica	S	NYTCL-8260-R2	WATER	DACQ	U				

Comments:

WG1824710-4	WG1824710-3
WG1824710-6	L2350269-08
WG1824710-7	L2350269-08

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 13 2023, 01:07 pm

Work Group: WG1825752 for Department: 31 GC/MS - Volatiles

Created: 10-SEP-23 Due: Operator: PID

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2350269-01	MW-1S	S	NYTCL-8260-R2	WATER	DONE	U	0911	0913	S0	Vial-B
L2350269-02	MW-2S	S	NYTCL-8260-R2	WATER	DONE	U	0911	0913	S0	Vial-B
L2350269-03	MW-3S	S	NYTCL-8260-R2	WATER	DONE	U	0911	0913	S0	Vial-B
L2350269-05	MW-5S	S	NYTCL-8260-R2	WATER	DONE	U	0912	0913	S0	Vial-B
L2350269-06	MW-6D	S	NYTCL-8260-R2	WATER	DONE	U	0911	0913	S0	Vial-B
L2350285-05	COND-01	S	NYCP51-8260	WATER	DONE	U	0912	0913	S0	Vial-B
L2350285-06	COND-02	S	NYCP51-8260	WATER	DONE	U	0912	0913	S0	Vial-B
L2350285-07	TRIP BLANK	S	NYCP51-8260	WATER	DONE	U	0912	0913	S0	Vial-B
WG1825752-1	MS BFB Tune Standard	S	NYTCL-8260-R2	WATER	DONE	U				
WG1825752-1	MS BFB Tune Standard	S	NYCP51-8260	WATER	DONE	U				
WG1825752-2	Continuing Calibrati	S	NYCP51-8260	WATER	DONE	U				
WG1825752-2	Continuing Calibrati	S	NYTCL-8260-R2	WATER	DONE	U				
WG1825752-3	Laboratory Control S	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1825752-3	Laboratory Control S	S	NYCP51-8260	WATER	DONE	U				
WG1825752-4	LCS Duplicate	S	NYCP51-8260	WATER	DONE	U				
WG1825752-4	LCS Duplicate	S	NYTCL-8260-R2	WATER	DACQ	U				
WG1825752-5	Laboratory Method Bl	S	NYCP51-8260	WATER	DONE	U				
WG1825752-5	Laboratory Method Bl	S	NYTCL-8260-R2	WATER	DACQ	U				

Comments:

WG1825752-4 WG1825752-3

				Method	
Inst:	Elaine	BFB:	V9822	GC:	8260_LUMIN
Initials:	TMS	IS/SS:	V9825	Autosampler:	8260water10mL
Date:	**07/25/23**	ICAL:	V9826A,V9820	Concentrator:	8260water10mL
Run:	**N**	ICV:	V9809,V9795,V9796,V9827,V9828,V9797	QC:	Seq:

Vial	DATA FILE	SAMPLE	
1	VE230725NBF1	BFB TUNE	
1	VE230725N01	BLK	
2	VE230725N02	BLK	
3	VE230725N03	BLK	
4	VE230725N04	I8260STD0.19PPB	
5	VE230725N05	I8260STD0.19PPB	
6	VE230725N06	I8260STD0.5PPB	
7	VE230725N07	I8260STD0.5PPB	
8	VE230725N08	I8260STD2PPB	
9	VE230725N09	I8260STD2PPB	
10	VE230725N10	I8260STD10PPB	
11	VE230725N11	I8260STD30PPB	
12	VE230725N12	I8260STD80PPB	
13	VE230725N13	I8260STD120PPB	
14	VE230725N14	I8260STD200PPB	
15	VE230725N15	BLK	
16	VE230725N16	BLK	
17	VE230725N17	BLK	
18	VE230725N18	BLK	
19	VE230725N19	C8260STD10PPB	
20	VE230725N20	C8260STD10PPB	
21	VE230725N21	BLK	
22	VE230725N22	BLK	
23	VE230725N23	METHOD BLK	
24	VE230725N24	MDL 2PPB	
25	VE230725N25	MDL 2PPB	
26	VE230725N26	BLK	

Method

Inst: VOA105 BFB: V9822 GC: 8260

Initials: KJD IS/SS: V9825 Autosampler: 8260water10ml

Date: **08/08/23** ICAL: V9826C, V9851 Concentrator: 8260

Run: **N** ICV: V9809, V9845, V9847, V9827, V9828, V9846 QC:_____ Seq:_____

Vial	Data File	Sample	
1	V05230808NBFB1	BFB	
1	V05230808NBFB2	BFB	
1	V05230808NBFB3	BFB	
1	V05230808NBFB4	BFB 19:20	
1	V05230808N01	BLK	
2	V05230808N02	BLK	
3	V05230808N03	BLK	
4	V05230808N04	I8260STD0.19PPB	
5	V05230808N05	I8260STD0.19PPB	
6	V05230808N06	I8260STD0.5PPB	
7	V05230808N07	I8260STD0.5PPB	
8	V05230808N08	I8260STD2.0PPB	
9	V05230808N09	I8260STD2.0PPB	
10	V05230808N10	I8260STD10PPB	
11	V05230808N11	I8260STD30PPB	
12	V05230808N12	I8260STD80PPB	
13	V05230808N13	I8260STD120PPB	
14	V05230808N14	I8260STD200PPB	
15	V05230808N15	BLK	
16	V05230808N16	BLK	
17	V05230808N17	BLK	
18	V05230808N18	BLK	
19	V05230808N19	BLK	
20	V05230808N20	C8260STD10PPB	
21	V05230808N21	C8260STD10PPB	
22	V05230808N22	BLK	
23	V05230808N23	MDL BLK	
24	V05230808N24	MDL 0.5PPB	
25	V05230808N25	MDL 0.5PPB	
26	V05230808N26	BLK	

Method

Inst: VOA105 BFB: V9883 GC: 8260

Initials: PID IS/SS: V9913 Autosampler: 8260water10ml

Date: **09/07/23** ICAL: V9901A,V9917 Concentrator: 8260

Run: **A** QC:_____ Seq:_____

Vial	Data File	Sample			
1	V05230907ABF1	BFB TUNE 07:14			
1	V05230907A01	8260 CCAL LCS			
2	V05230907A02	8260 CCAL LCSD			
3	V05230907A03	8260 CCAL			
4	V05230907A04	BLK			
5	V05230907A05	METHOD BLK			
6	V05230907A06	I2351643-04,31,10,10,,a,r1a	NY/MTBE		pH<2
7	V05230907A07	I2351643-05,31,10,10,,a,r1a	NY/MTBE		pH<2
8	V05230907A08	I2351643-06,31,10,10,,a,r1a	NY/MTBE		pH<2
9	V05230907A09	DSTD			
10	V05230907A10	I2350212-01,31,10,10,,a	ME8260	TB	pH<2
11	V05230907A11	I2350212-02,31,10,10,,a	ME8260		pH<2
12	V05230907A12	I2350212-03,31,10,10,,a	ME8260		pH<2
13	V05230907A13	I2350212-04,31,10,10,,a	ME8260		pH<2
14	V05230907A14	I2350212-05,31,10,10,,a	ME8260		pH<2
15	V05230907A15	I2350212-06,31,10,10,,a	ME8260		pH<2
16	V05230907A16	I2350269-04,31,10,10,,a	NY/R2		pH<2
17	V05230907A17	I2350269-07,31,10,10,,a	NY/R2		pH<2
18	V05230907A18	I2350269-08,31,10,10,,a	NY/R2		pH<2
19	V05230907A19	I2350269-09,31,10,10,,a	NY/R2		pH<2
20	V05230907A20	I2350269-11,31,10,10,,a	NY/R2		pH<2
21	V05230907A21	I2350269-12,31,10,10,,a	NY/R2	TB	pH<2
22	V05230907A22	I2349882-02,31,10,10,,a	8260CURVE/IM		pH<2
23	V05230907A23	I2349882-01,31,10,10,,a	8260CURVE/IM		pH>2
24	V05230907A24	I2350249-01d,31,0.2,10,,a	8260		pH<2
25	V05230907A25	I2350212-03MS,31,10,10,,a1	ME8260		pH<2
26	V05230907A26	I2350212-03MSD,31,10,10,,a2	ME8260		pH<2
27	V05230907A27	I2350269-08MS,31,10,10,,a1	NY/R2		pH<2
28	V05230907A28	I2350269-08MSD,31,10,10,,a2	NY/R2		pH<2
29	V05230907A29	HSTD			
30	V05230907A30	BLK			
31	V05230907A31	BLK			

Method

Inst: Elaine BFB: V9883 GC: 8260_LUMIN

Initials: PID IS/SS: V9913 Autosampler: 8260water10mL

Date: **09/08/23** ICAL: V9901A,V9917 Concentrator: 8260water10mL

Run: **A** QC: _____ Seq: _____

Vial	DATA FILE	SAMPLE		
1	VE230908ABF1	BFB TUNE 08:42		
1	VE230908A01	8260 CCAL LCS		
2	VE230908A02	8260 CCAL LCSD		
3	VE230908A03	8260 CCAL		
4	VE230908A04	BLK		
5	VE230908A05	METHOD BLK		
6	VE230908A06	I2350384-01,31,10,10,,a	PA/SHORT	**pH<2**
7	VE230908A07	I2350269-01,31,10,10,,a	NY/R2	**pH<2**
8	VE230908A08	I2350269-02,31,10,10,,a	NY/R2	**pH<2**
9	VE230908A09	I2350269-03,31,10,10,,a	NY/R2	**pH<2**
10	VE230908A10	I2350269-05,31,10,10,,a	NY/R2	**pH<2**
11	VE230908A11	I2350269-06,31,10,10,,a	NY/R2	**pH<2**
12	VE230908A12	I2350285-05,31,10,10,,a	NYSTARS	**pH<2**
13	VE230908A13	I2350285-06,31,10,10,,a	NYSTARS	**pH<2**
14	VE230908A14	I2350285-07,31,10,10,,a	NYSTARS TB	**pH<2**
15	VE230908A15	I2348262-06,31,10,10,,a	NJ/15	**pH<2**
16	VE230908A16	I2348262-08,31,10,10,,a	NJ/15	**pH<2**
17	VE230908A17	I2348262-14,31,10,10,,a	NJ/15	**pH<2**
18	VE230908A18	I2350725-01,31,10,10,,a	NJ/15/TBA	**pH<2**
19	VE230908A19	I2350725-02,31,10,10,,a	NJ/15/TBA	**pH<2**
20	VE230908A20	I2350725-03,31,10,10,,a	NJ/15/TBA	**pH<2**
21	VE230908A21	I2350249-05,31,10,10,,a	8260	**pH<2**
22	VE230908A22	I2350249-06,31,10,10,,a	8260	**pH<2**
23	VE230908A23	L2350249-02d,31,0.2,10,,A	8260	**pH<2**
24	VE230908A24	L2350249-03d,31,1.0,10,,A	8260	**pH<2**
25	VE230908A25	L2350249-04d,31,1.0,10,,A	8260	**pH<2**
26	VE230908A26	L2350249-04DUP,31,1.0,10,,A	NJQC	**pH<2**
27	VE230908A27	L2350249-04MS,31,1.0,10,,A	NJQC	**pH<2**
28	VE230908A28	HSTD		
29	VE230908A29	BLK		
30	VE230908A30	BLK		

Semivolatiles Data- Method 8270

Semivolatiles QC Summary

Laboratory Control Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1822188-2 **Analysis Date** : 08/31/23 11:54	**File ID**	: 822188-2
LCSD Sample ID	: WG1822188-3 **Analysis Date** : 08/31/23 12:17	**File ID**	: 822188-3

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Bis(2-chloroethyl)ether	18	12.	65	18	13.	70	7	40-140	30
3,3'-Dichlorobenzidine	18	7.5	41	18	7.9	43	5	40-140	30
2,4-Dinitrotoluene	18	16.	91	18	17.	92	1	48-143	30
2,6-Dinitrotoluene	18	16.	89	18	19.	104	16	40-140	30
4-Chlorophenyl phenyl ether	18	15.	82	18	16.	90	9	40-140	30
4-Bromophenyl phenyl ether	18	16.	91	18	17.	96	5	40-140	30
Bis(2-chloroisopropyl)ether	18	11.	63	18	13.	70	11	40-140	30
Bis(2-chloroethoxy)methane	18	13.	71	18	14.	74	4	40-140	30
Hexachlorocyclopentadiene	18	14.	78	18	16.	89	13	40-140	30
Isophorone	18	13.	70	18	14.	76	8	40-140	30
Nitrobenzene	18	13.	71	18	14.	80	12	40-140	30
NDPA/DPA	18	14.	80	18	15.	85	6	40-140	30
n-Nitrosodi-n-propylamine	18	14.	74	18	15.	84	13	29-132	30
Bis(2-ethylhexyl)phthalate	18	16.	90	18	19.	105	15	40-140	30
Butyl benzyl phthalate	18	16.	88	18	17.	96	9	40-140	30
Di-n-butylphthalate	18	15.	84	18	16.	90	7	40-140	30
Di-n-octylphthalate	18	16.	86	18	18.	98	13	40-140	30
Diethyl phthalate	18	14.	79	18	15.	81	3	40-140	30
Dimethyl phthalate	18	15.	82	18	15.	82	0	40-140	30
Biphenyl	18	12.	65	18	13.	74	13	40-140	30
4-Chloroaniline	18	11.	61	18	9.8	54	12	40-140	30
2-Nitroaniline	18	17.	92	18	17.	94	2	52-143	30
3-Nitroaniline	18	11.	62	18	12.	64	3	25-145	30
4-Nitroaniline	18	13.	70	18	13.	73	4	51-143	30
Dibenzofuran	18	15.	84	18	16.	90	7	40-140	30
1,2,4,5-Tetrachlorobenzene	18	13.	71	18	15.	83	16	2-134	30

Laboratory Control Sample Summary
Form 3
Semivolatiles

Client : Alpha Geoscience **Lab Number** : L2350269
Project Name : HUNTINGTON READY MIX **Project Number** : 20116
Matrix (Level) : WATER (LOW)
LCS Sample ID : WG1822188-2 **Analysis Date** : 08/31/23 11:54 **File ID** : 822188-2
LCSD Sample ID : WG1822188-3 **Analysis Date** : 08/31/23 12:17 **File ID** : 822188-3

	Laboratory Control Sample				Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R		True (ug/l)	Found (ug/l)	%R		RPD	Recovery Limits	RPD Limit
Acetophenone	18	9.9	55		18	11.	60		9	39-129	30
2,4,6-Trichlorophenol	18	19.	103		18	20.	109		6	30-130	30
p-Chloro-m-cresol	18	17.	92		18	18.	96		4	23-97	30
2-Chlorophenol	18	13.	70		18	14.	80		13	27-123	30
2,4-Dichlorophenol	18	16.	86		18	18.	98		13	30-130	30
2,4-Dimethylphenol	18	14.	75		18	15.	82		9	30-130	30
2-Nitrophenol	18	14.	78		18	16.	89		13	30-130	30
4-Nitrophenol	18	16.	87	Q	18	15.	84	Q	4	10-80	30
2,4-Dinitrophenol	18	19.	106		18	19.	107		1	20-130	30
4,6-Dinitro-o-cresol	18	19.	105		18	20.	108		3	20-164	30
Phenol	18	9.8	54		18	10.	56		4	12-110	30
2-Methylphenol	18	12.	68		18	14.	76		11	30-130	30
3-Methylphenol/4-Methylphenol	18	13.	73		18	13.	73		0	30-130	30
2,4,5-Trichlorophenol	18	20.	113		18	21.	116		3	30-130	30
Carbazole	18	16.	87		18	16.	88		1	55-144	30
Atrazine	18	17.	93		18	17.	94		1	40-140	30
Benzaldehyde	18	11.	60		18	12.	68		13	40-140	30
Caprolactam	18	7.2	40		18	7.0	38		5	10-130	30
2,3,4,6-Tetrachlorophenol	18	19.	104		18	20.	108		4	40-140	30

Laboratory Control Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1823488-2 **Analysis Date** : 09/05/23 23:11	**File ID**	: 823488-2
LCSD Sample ID	: WG1823488-3 **Analysis Date** : 09/05/23 23:33	**File ID**	: 823488-3

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Bis(2-chloroethyl)ether	18	9.4	52	18	11.	63	19	40-140	30
3,3'-Dichlorobenzidine	18	10.	57	18	10.	57	0	40-140	30
2,4-Dinitrotoluene	18	12.	64	18	14.	76	17	48-143	30
2,6-Dinitrotoluene	18	13.	73	18	15.	85	15	40-140	30
4-Chlorophenyl phenyl ether	18	12.	66	18	14.	76	14	40-140	30
4-Bromophenyl phenyl ether	18	14.	77	18	15.	83	8	40-140	30
Bis(2-chloroisopropyl)ether	18	9.3	51	18	11.	62	19	40-140	30
Bis(2-chloroethoxy)methane	18	10.	58	18	12.	66	13	40-140	30
Hexachlorocyclopentadiene	18	12.	66	18	14.	78	17	40-140	30
Isophorone	18	10.	57	18	12.	66	15	40-140	30
Nitrobenzene	18	11.	58	18	12.	67	14	40-140	30
NDPA/DPA	18	11.	62	18	13.	72	15	40-140	30
n-Nitrosodi-n-propylamine	18	11.	60	18	13.	70	15	29-132	30
Bis(2-ethylhexyl)phthalate	18	14.	78	18	17.	94	19	40-140	30
Butyl benzyl phthalate	18	13.	74	18	16.	85	14	40-140	30
Di-n-butylphthalate	18	12.	69	18	14.	76	10	40-140	30
Di-n-octylphthalate	18	13.	72	18	16.	89	21	40-140	30
Diethyl phthalate	18	12.	67	18	14.	75	11	40-140	30
Dimethyl phthalate	18	14.	75	18	15.	83	10	40-140	30
Biphenyl	18	10.	55	18	11.	61	10	40-140	30
4-Chloroaniline	18	14.	79	18	14.	78	1	40-140	30
2-Nitroaniline	18	13.	74	18	15.	83	11	52-143	30
3-Nitroaniline	18	12.	64	18	13.	70	9	25-145	30
4-Nitroaniline	18	12.	64	18	14.	75	16	51-143	30
Dibenzofuran	18	12.	67	18	14.	75	11	40-140	30
1,2,4,5-Tetrachlorobenzene	18	11.	62	18	12.	69	11	2-134	30

Laboratory Control Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1823488-2 **Analysis Date** : 09/05/23 23:11	**File ID**	: 823488-2
LCSD Sample ID	: WG1823488-3 **Analysis Date** : 09/05/23 23:33	**File ID**	: 823488-3

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Acetophenone	18	8.1	45	18	9.4	52	14	39-129	30
2,4,6-Trichlorophenol	18	15.	85	18	18.	100	16	30-130	30
p-Chloro-m-cresol	18	14.	74	18	16.	91	21	23-97	30
2-Chlorophenol	18	10.	57	18	12.	67	16	27-123	30
2,4-Dichlorophenol	18	13.	74	18	16.	88	17	30-130	30
2,4-Dimethylphenol	18	12.	64	18	14.	78	20	30-130	30
2-Nitrophenol	18	12.	64	18	14.	76	17	30-130	30
4-Nitrophenol	18	14.	75	18	15.	83 Q	10	10-80	30
2,4-Dinitrophenol	18	16.	86	18	17.	94	9	20-130	30
4,6-Dinitro-o-cresol	18	15.	83	18	18.	97	16	20-164	30
Phenol	18	7.8	43	18	10.	55	24	12-110	30
2-Methylphenol	18	11.	59	18	13.	70	17	30-130	30
3-Methylphenol/4-Methylphenol	18	12.	67	18	14.	77	14	30-130	30
2,4,5-Trichlorophenol	18	17.	96	18	19.	105	9	30-130	30
Carbazole	18	12.	66	18	13.	74	11	55-144	30
Atrazine	18	14.	75	18	16.	86	14	40-140	30
Benzaldehyde	18	9.8	54	18	11.	60	11	40-140	30
Caprolactam	18	5.5	30	18	6.1	33	10	10-130	30
2,3,4,6-Tetrachlorophenol	18	15.	83	18	17.	96	15	40-140	30

Matrix Spike Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2350269-08	**Analysis Date**	: 08/31/23 16:01
Matrix Spike	: WG1822188-4	**MS Analysis Date**	: 08/31/23 16:23
Matrix Spike Dup	: WG1822188-5	**MSD Analysis Date**	: 08/31/23 16:46

		Matrix Spike Sample				Matrix Spike Duplicate						
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R		Spike Added (ug/l)	Spike Conc. (ug/l)	%R		RPD	Recovery Limits	RPD Limit
Bis(2-chloroethyl)ether	ND	18.2	12.	66		18.2	7.5	41		46 Q	40-140	30
3,3'-Dichlorobenzidine	ND	18.2	ND	0	Q	18.2	ND	0	Q	NC	40-140	30
2,4-Dinitrotoluene	ND	18.2	16.	88		18.2	10.	55		46 Q	48-143	30
2,6-Dinitrotoluene	ND	18.2	18.	99		18.2	12.	66		40 Q	40-140	30
4-Chlorophenyl phenyl ether	ND	18.2	16.	88		18.2	10.	55		46 Q	40-140	30
4-Bromophenyl phenyl ether	ND	18.2	17.	94		18.2	11.	61		43 Q	40-140	30
Bis(2-chloroisopropyl)ether	ND	18.2	13.	72		18.2	7.6	42		52 Q	40-140	30
Bis(2-chloroethoxy)methane	ND	18.2	14.	77		18.2	8.2	45		52 Q	40-140	30
Hexachlorocyclopentadiene	ND	18.2	18.J	99		18.2	11.J	61		48 Q	40-140	30
Isophorone	ND	18.2	14.	77		18.2	8.3	46		51 Q	40-140	30
Nitrobenzene	ND	18.2	15.	83		18.2	9.1	50		49 Q	40-140	30
NDPA/DPA	ND	18.2	14.	77		18.2	9.1	50		42 Q	40-140	30
n-Nitrosodi-n-propylamine	ND	18.2	15.	83		18.2	8.8	48		52 Q	29-132	30
Bis(2-ethylhexyl)phthalate	ND	18.2	18.	99		18.2	11.	61		48 Q	40-140	30
Butyl benzyl phthalate	ND	18.2	17.	94		18.2	11.	61		43 Q	40-140	30
Di-n-butylphthalate	ND	18.2	16.	88		18.2	10.	55		46 Q	40-140	30
Di-n-octylphthalate	ND	18.2	17.	94		18.2	11.	61		43 Q	40-140	30
Diethyl phthalate	ND	18.2	15.	83		18.2	9.9	54		41 Q	40-140	30
Dimethyl phthalate	ND	18.2	16.	88		18.2	10.	55		46 Q	40-140	30
Biphenyl	ND	18.2	13.	72		18.2	8.0	44		48 Q	40-140	30
4-Chloroaniline	ND	18.2	7.0	39	Q	18.2	ND	0	Q	NC	40-140	30
2-Nitroaniline	ND	18.2	17.	94		18.2	11.	61		43 Q	52-143	30

Matrix Spike Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2350269-08	**Analysis Date**	: 08/31/23 16:01
Matrix Spike	: WG1822188-4	**MS Analysis Date**	: 08/31/23 16:23
Matrix Spike Dup	: WG1822188-5	**MSD Analysis Date**	: 08/31/23 16:46

		Matrix Spike Sample				Matrix Spike Duplicate							
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R		Spike Added (ug/l)	Spike Conc. (ug/l)	%R		RPD		Recovery Limits	RPD Limit
3-Nitroaniline	ND	18.2	12.	66		18.2	2.5J	14	Q	131	Q	25-145	30
4-Nitroaniline	ND	18.2	12.	66		18.2	7.9	43	Q	41	Q	51-143	30
Dibenzofuran	ND	18.2	16.	88		18.2	9.9	54		47	Q	40-140	30
1,2,4,5-Tetrachlorobenzene	ND	18.2	14.	77		18.2	8.6J	47		48	Q	2-134	30
Acetophenone	ND	18.2	11.	61		18.2	6.8	37	Q	47	Q	39-129	30
2,4,6-Trichlorophenol	ND	18.2	20.	110		18.2	13.	72		42	Q	30-130	30
p-Chloro-m-cresol	ND	18.2	17.	94		18.2	11.	61		43	Q	23-97	30
2-Chlorophenol	ND	18.2	14.	77		18.2	7.7	42		58	Q	27-123	30
2,4-Dichlorophenol	ND	18.2	17.	94		18.2	9.8	54		54	Q	30-130	30
2,4-Dimethylphenol	ND	18.2	11.	61		18.2	7.5	41		38	Q	30-130	30
2-Nitrophenol	ND	18.2	16.	88		18.2	9.8J	54		48	Q	30-130	30
4-Nitrophenol	ND	18.2	17.	94	Q	18.2	12.	66		34	Q	10-80	30
2,4-Dinitrophenol	ND	18.2	23.	130		18.2	15.J	83		42	Q	20-130	30
4,6-Dinitro-o-cresol	ND	18.2	20.	110		18.2	14.	77		35	Q	20-164	30
Phenol	ND	18.2	10.	55		18.2	6.2	34		47	Q	12-110	30
2-Methylphenol	ND	18.2	13.	72		18.2	8.0	44		48	Q	30-130	30
3-Methylphenol/4-Methylphenol	ND	18.2	14.	77		18.2	8.4	46		50	Q	30-130	30
2,4,5-Trichlorophenol	ND	18.2	22.	120		18.2	14.	77		44	Q	30-130	30
Carbazole	ND	18.2	16.	88		18.2	10.	55		46	Q	55-144	30
Atrazine	ND	18.2	18.	99		18.2	14.	77		25		40-140	30
Benzaldehyde	ND	18.2	12.	66		18.2	7.4	41		47	Q	40-140	30
Caprolactam	ND	18.2	8.3J	46		18.2	ND	0	Q	NC		10-130	30

Matrix Spike Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2350269-08	**Analysis Date**	: 08/31/23 16:01
Matrix Spike	: WG1822188-4	**MS Analysis Date**	: 08/31/23 16:23
Matrix Spike Dup	: WG1822188-5	**MSD Analysis Date**	: 08/31/23 16:46

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
2,3,4,6-Tetrachlorophenol	ND	18.2	20.	110	18.2	13.	72	42 Q	40-140	30

Surrogate Recovery Summary
Form 2
Semivolatiles

Client: Alpha Geoscience
Project Name: HUNTINGTON READY MIX

Lab Number: L2350269
Project Number: 20116
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
MW-1S (L2350269-01)	61	48	71	84	101	70	0
MW-2S (L2350269-02)	70	53	75	93	124*	89	1
MW-3S (L2350269-03)	65	52	78	91	123*	89	1
MW-4D (L2350269-04)	59	47	64	64	68	63	0
MW-5S (L2350269-05)	65	55	75	72	71	73	0
MW-6D (L2350269-06)	28	21	84	96	84	89	0
MW-7S (L2350269-07)	76	64	84	95	119	85	0
MW-8S (L2350269-08)	14*	15	66	82	59	83	1
DUP (L2350269-09)	61	53	68	77	102	62	0
EQUIPMENT BLANK (L2350269-11)	59	47	67	84	118	78	0
WG1822188-1BLANK	65	49	66	77	108	80	0
WG1822188-2LCS	64	58	76	88	124*	86	1
WG1822188-3LCSD	66	56	73	93	113	87	0
MW-8SMS	71	57	81	99	125*	87	1
MW-8SMSD	42	33	47	58	77	56	0
WG1823488-1BLANK	59	44	68	81	101	80	0
WG1823488-2LCS	50	40	56	64	92	62	0
WG1823488-3LCSD	55	50	60	71	96	65	0

QC LIMITS

(21-120)	2FP = 2-FLUOROPHENOL
(10-120)	PHL = PHENOL-D6
(23-120)	NBZ = NITROBENZENE-D5
(15-120)	FBP = 2-FLUOROBIPHENYL
(10-120)	TBP = 2,4,6-TRIBROMOPHENOL
(41-149)	TPH = 4-TERPHENYL-D14

*** Values outside of QC limits**

Method Blank Summary
Form 4
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: WG1822188-1	**Lab File ID**	: 822188-1
Instrument ID	: DAKOTA	**Extraction Date**	: 08/30/23
Matrix	: WATER	**Analysis Date**	: 08/31/23 11:32
Level	: LOW		

Client Sample No.	Lab Sample ID	Analysis Date
WG1822188-2LCS	WG1822188-2	08/31/23 11:54
WG1822188-3LCSD	WG1822188-3	08/31/23 12:17
MW-2S	L2350269-02	08/31/23 14:31
MW-3S	L2350269-03	08/31/23 14:54
MW-6D	L2350269-06	08/31/23 15:16
MW-7S	L2350269-07	08/31/23 15:38
MW-8S	L2350269-08	08/31/23 16:01
MW-8SMS	WG1822188-4	08/31/23 16:23
MW-8SMSD	WG1822188-5	08/31/23 16:46
DUP	L2350269-09	08/31/23 17:08
MW-1S	L2350269-01	09/01/23 13:45
MW-5S	L2350269-05	09/06/23 06:36
MW-4D	L2350269-04	09/06/23 07:00

Method Blank Summary
Form 4
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: WG1823488-1	**Lab File ID**	: 823488-1
Instrument ID	: DAKOTA	**Extraction Date**	: 09/05/23
Matrix	: WATER	**Analysis Date**	: 09/05/23 22:48
Level	: LOW		

Client Sample No.	Lab Sample ID	Analysis Date
WG1823488-2LCS	WG1823488-2	09/05/23 23:11
WG1823488-3LCSD	WG1823488-3	09/05/23 23:33
EQUIPMENT BLANK	L2350269-11	09/06/23 17:22

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 04/13/23 01:15
Tune Standard	: R1685730-34	**Tune File ID**	: Tune1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	44.7
68	Less than 2.0% of mass 69	0 (0)1
69		100
70	Less than 2.0% of mass 69	0.2 (.5)1
127	10.0 - 80.0% of Base Peak	53.9
197	Less than 2.0% of mass 198	0
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	7.2
275	10.0 - 60.0% of Base Peak	25.7
365	Greater than 1.0% of mass 198	3
441	Present, but less than 24% of mass 442	16.8
442	Base Peak, or >50% of mass 198	85.1
443	15.0 - 24.0% of mass 442	16.5 (19.3)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
ABNL10	R1685730-2	ABNL10	04/13/23 01:37
ABNL9	R1685730-11	ABNL9	04/13/23 02:00
ABNL8	R1685730-8	ABNL8	04/13/23 02:23
ABNL7	R1685730-9	ABNL7	04/13/23 02:45
ABNL6	R1685730-7	ABNL6	04/13/23 03:08
ABNL5	R1685730-5	ABNL5	04/13/23 03:31
ABNL4	R1685730-6	ABNL4	04/13/23 03:54
ABNL3	R1685730-4	ABNL3	04/13/23 04:16
ABNL2	R1685730-3	ABNL2	04/13/23 04:39
ABNL1	R1685730-1	ABNL1	04/13/23 05:02
AP9L10	R1685730-21	AP9L10	04/13/23 05:25
AP9L9	R1685730-30	AP9L9	04/13/23 05:47
AP9L8	R1685730-29	AP9L8	04/13/23 06:10
AP9L7	R1685730-28	AP9L7	04/13/23 06:33
AP9L6	R1685730-26	AP9L6	04/13/23 06:55
AP9L5	R1685730-27	AP9L5	04/13/23 07:18
AP9L4	R1685730-25	AP9L4	04/13/23 07:41
AP9L3	R1685730-24	AP9L3	04/13/23 08:04
AP9L2	R1685730-23	AP9L2	04/13/23 08:27
AP9L1	R1685730-22	AP9L1	04/13/23 08:50
ABN ICV Quant Report	R1685730-31	ABNICV	04/13/23 09:12
AP9 ICV Quant Report	R1685730-33	AP9ICV	04/13/23 09:35

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 04/13/23 10:50
Tune Standard	: R1685730-35	**Tune File ID**	: Tune2_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	42.3
68	Less than 2.0% of mass 69	0.3 (.6)1
69		100
70	Less than 2.0% of mass 69	0.2 (.5)1
127	10.0 - 80.0% of Base Peak	52.3
197	Less than 2.0% of mass 198	0
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	6.9
275	10.0 - 60.0% of Base Peak	27.5
365	Greater than 1.0% of mass 198	3.5
441	Present, but less than 24% of mass 442	16.7
442	Base Peak, or >50% of mass 198	89.9
443	15.0 - 24.0% of mass 442	17.1 (19)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
ADPL10	R1685730-13	ADPL10	04/13/23 11:12
ADPL9	R1685730-19	ADPL9	04/13/23 11:35
ADPL8	R1685730-20	ADPL8	04/13/23 11:58
ADPL7	R1685730-18	ADPL7	04/13/23 12:20
ADPL6	R1685730-17	ADPL6	04/13/23 12:43
ADPL5	R1685730-16	ADPL5	04/13/23 13:06
ADPL4	R1685730-15	ADPL4	04/13/23 13:29
ADPL3	R1685730-14	ADPL3	04/13/23 13:52
ADPL2	R1685730-12	ADPL2	04/13/23 14:14
ADPL1	R1685730-10	ADPL1	04/13/23 14:37
ADP ICV Quant Report	R1685730-32	ADPICV	04/13/23 15:00

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 08/31/23 09:50
Tune Standard	: WG1822460-1	**Tune File ID**	: DEG0831a_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	38
68	Less than 2.0% of mass 69	0.5 (1.1)1
69		100
70	Less than 2.0% of mass 69	0.1 (.3)1
127	10.0 - 80.0% of Base Peak	49.9
197	Less than 2.0% of mass 198	0
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	6.7
275	10.0 - 60.0% of Base Peak	26.8
365	Greater than 1.0% of mass 198	3.6
441	Present, but less than 24% of mass 442	18.2
442	Base Peak, or >50% of mass 198	86.3
443	15.0 - 24.0% of mass 442	16.2 (18.7)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1822460-6TFACTOR-B	WG1822460-6	DEG0831A	08/31/23 09:50
WG1822460-7TFACTOR-P	WG1822460-7	DEG0831A	08/31/23 09:50
WG1822460-3CCAL	WG1822460-3	ABN0831	08/31/23 10:12
WG1822460-4CCAL	WG1822460-4	AP90831	08/31/23 10:35
WG1822460-5CCAL	WG1822460-5	ADP0831	08/31/23 10:57
WG1822188-1BLANK	WG1822188-1	822188-1	08/31/23 11:32
WG1822188-2LCS	WG1822188-2	822188-2	08/31/23 11:54
WG1822188-3LCSD	WG1822188-3	822188-3	08/31/23 12:17
MW-2S	L2350269-02	50269-02	08/31/23 14:31
MW-3S	L2350269-03	50269-03	08/31/23 14:54
MW-6D	L2350269-06	50269-06	08/31/23 15:16
MW-7S	L2350269-07	50269-07	08/31/23 15:38
MW-8S	L2350269-08	50269-08	08/31/23 16:01
WG1822188-4MS	WG1822188-4	822188-4	08/31/23 16:23
WG1822188-5MSD	WG1822188-5	822188-5	08/31/23 16:46
DUP	L2350269-09	50269-09	08/31/23 17:08

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 09/01/23 06:17
Tune Standard	: WG1822785-1	**Tune File ID**	: DEG0901_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	40
68	Less than 2.0% of mass 69	0.7 (1.4)1
69		100
70	Less than 2.0% of mass 69	0.2 (.5)1
127	10.0 - 80.0% of Base Peak	48.8
197	Less than 2.0% of mass 198	0
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	7.1
275	10.0 - 60.0% of Base Peak	27.5
365	Greater than 1.0% of mass 198	3.8
441	Present, but less than 24% of mass 442	18
442	Base Peak, or >50% of mass 198	87.3
443	15.0 - 24.0% of mass 442	16.3 (18.7)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1822785-6TFACTOR-B	WG1822785-6	DEG0901	09/01/23 06:17
WG1822785-7TFACTOR-P	WG1822785-7	DEG0901	09/01/23 06:17
WG1822785-3CCAL	WG1822785-3	ABN0901	09/01/23 06:40
WG1822785-4CCAL	WG1822785-4	AP90901	09/01/23 07:02
WG1822785-5CCAL	WG1822785-5	ADP0901	09/01/23 07:24
MW-1S	L2350269-01	50269-01	09/01/23 13:45

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 09/05/23 20:09
Tune Standard	: WG1823113-1	**Tune File ID**	: DEG0905n_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	40.2
68	Less than 2.0% of mass 69	0 (0)1
69		100
70	Less than 2.0% of mass 69	0.1 (.2)1
127	10.0 - 80.0% of Base Peak	49.4
197	Less than 2.0% of mass 198	0
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	6.7
275	10.0 - 60.0% of Base Peak	26.9
365	Greater than 1.0% of mass 198	3.8
441	Present, but less than 24% of mass 442	17.8
442	Base Peak, or >50% of mass 198	92.3
443	15.0 - 24.0% of mass 442	17.6 (19)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1823113-6TFACTOR-P	WG1823113-6	DEG0905N	09/05/23 20:09
WG1823113-7TFACTOR-B	WG1823113-7	DEG0905N	09/05/23 20:09
WG1823113-3CCAL	WG1823113-3	ABN0905N	09/05/23 20:32
WG1823113-4CCAL	WG1823113-4	AP90905N	09/05/23 20:55
WG1823113-5CCAL	WG1823113-5	ADP0905N	09/05/23 21:18
WG1823488-1BLANK	WG1823488-1	823488-1	09/05/23 22:48
WG1823488-2LCS	WG1823488-2	823488-2	09/05/23 23:11
WG1823488-3LCSD	WG1823488-3	823488-3	09/05/23 23:33

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 09/06/23 09:53
Tune Standard	: WG1824168-1	**Tune File ID**	: DEG0906_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	40.4
68	Less than 2.0% of mass 69	0.6 (1.3)1
69		100
70	Less than 2.0% of mass 69	0.2 (.5)1
127	10.0 - 80.0% of Base Peak	49.3
197	Less than 2.0% of mass 198	0
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	6.6
275	10.0 - 60.0% of Base Peak	26.5
365	Greater than 1.0% of mass 198	3.3
441	Present, but less than 24% of mass 442	18.6
442	Base Peak, or >50% of mass 198	85.1
443	15.0 - 24.0% of mass 442	16.9 (19.8)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1824168-6TFACTOR-B	WG1824168-6	DEG0906	09/06/23 09:53
WG1824168-7TFACTOR-P	WG1824168-7	DEG0906	09/06/23 09:53
WG1824168-3CCAL	WG1824168-3	ABN0906	09/06/23 10:19
WG1824168-4CCAL	WG1824168-4	AP90906	09/06/23 10:41
WG1824168-5CCAL	WG1824168-5	ADP0906	09/06/23 11:04
EQUIPMENT BLANK	L2350269-11	50269-11	09/06/23 17:22

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV106	**Analysis Date**	: 09/02/23 11:50
Tune Standard	: R1737141-35	**Tune File ID**	: Tune1_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	39.7
68	Less than 2.0% of mass 69	0.7 (1.6)1
69		100
70	Less than 2.0% of mass 69	0.2 (.5)1
127	10.0 - 80.0% of Base Peak	52.7
197	Less than 2.0% of mass 198	0.2
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 60.0% of Base Peak	24.2
365	Greater than 1.0% of mass 198	3
441	Present, but less than 24% of mass 442	16.4
442	Base Peak, or >50% of mass 198	74.7
443	15.0 - 24.0% of mass 442	14.3 (19.1)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
ABNL10	R1737141-2	ABNL10	09/02/23 12:13
ABNL9	R1737141-10	ABNL9	09/02/23 12:37
ABNL8	R1737141-9	ABNL8	09/02/23 13:01
ABNL7	R1737141-8	ABNL7	09/02/23 13:24
ABNL6	R1737141-7	ABNL6	09/02/23 13:48
ABNL5	R1737141-6	ABNL5	09/02/23 14:12
ABNL4	R1737141-5	ABNL4	09/02/23 14:36
ABNL3	R1737141-4	ABNL3	09/02/23 14:59
ABNL2	R1737141-3	ABNL2	09/02/23 15:23
ABNL1	R1737141-1	ABNL1	09/02/23 15:47
AP9L10	R1737141-22	AP9L10	09/02/23 16:10
AP9L9	R1737141-30	AP9L9	09/02/23 16:34
AP9L8	R1737141-29	AP9L8	09/02/23 16:58
AP9L7	R1737141-28	AP9L7	09/02/23 17:21
AP9L6	R1737141-27	AP9L6	09/02/23 17:45
AP9L5	R1737141-26	AP9L5	09/02/23 18:09
AP9L4	R1737141-25	AP9L4	09/02/23 18:32
AP9L3	R1737141-24	AP9L3	09/02/23 18:56
AP9L2	R1737141-23	AP9L2	09/02/23 19:20
AP9L1	R1737141-21	AP9L1	09/02/23 19:43
ABN ICV Quant Report	R1737141-31	ABNICV	09/02/23 20:07
AP9 ICV Quant Report	R1737141-33	AP9ICV	09/02/23 20:31

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV106	**Analysis Date**	: 09/02/23 20:54
Tune Standard	: R1737141-34	**Tune File ID**	: Tune2_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	36.3
68	Less than 2.0% of mass 69	0.3 (.8)1
69		100
70	Less than 2.0% of mass 69	0.2 (.5)1
127	10.0 - 80.0% of Base Peak	52.5
197	Less than 2.0% of mass 198	0.4
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	6.5
275	10.0 - 60.0% of Base Peak	24.7
365	Greater than 1.0% of mass 198	3.1
441	Present, but less than 24% of mass 442	16.2
442	Base Peak, or >50% of mass 198	79.3
443	15.0 - 24.0% of mass 442	14.7 (18.6)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
ADPL10	R1737141-11	ADPL10	09/02/23 21:18
ADPL9	R1737141-20	ADPL9	09/02/23 21:42
ADPL8	R1737141-19	ADPL8	09/02/23 22:05
ADPL7	R1737141-18	ADPL7	09/02/23 22:29
ADPL6	R1737141-16	ADPL6	09/02/23 22:53
ADPL5	R1737141-17	ADPL5	09/02/23 23:17
ADPL4	R1737141-14	ADPL4	09/02/23 23:40
ADPL3	R1737141-15	ADPL3	09/03/23 00:04
ADPL2	R1737141-12	ADPL2	09/03/23 00:28
ADPL1	R1737141-13	ADPL1	09/03/23 00:52
ADP ICV Quant Report	R1737141-32	ADPICV	09/03/23 01:15

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV106	**Analysis Date**	: 09/05/23 20:40
Tune Standard	: WG1823865-1	**Tune File ID**	: DEG0905_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	38.8
68	Less than 2.0% of mass 69	0.6 (1.5)1
69		100
70	Less than 2.0% of mass 69	0.2 (.5)1
127	10.0 - 80.0% of Base Peak	53.7
197	Less than 2.0% of mass 198	0.2
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 60.0% of Base Peak	24.1
365	Greater than 1.0% of mass 198	3.2
441	Present, but less than 24% of mass 442	16.1
442	Base Peak, or >50% of mass 198	76.1
443	15.0 - 24.0% of mass 442	14 (18.4)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1823865-6TFACTOR-P	WG1823865-6	DEG0905	09/05/23 20:40
WG1823865-7TFACTOR-B	WG1823865-7	DEG0905	09/05/23 20:40
WG1823865-3CCAL	WG1823865-3	ABN0905	09/05/23 21:04
WG1823865-5CCAL	WG1823865-5	ADP0905	09/05/23 21:52
WG1823865-4CCAL	WG1823865-4	AP90905A	09/05/23 22:16
MW-5S	L2350269-05	50269-05	09/06/23 06:36
MW-4D	L2350269-04	50269-04	09/06/23 07:00

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 08/31/23 10:12:00
Sample No	: WG1822460-3	**Lab File ID**	: ABN0831

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
	Area	RT	Area	RT	Area	RT
WG1822460-3	14463	3.67	50867	4.93	33572	6.61
Upper Limit	28926	4.17	101734	5.43	67144	7.11
Lower Limit	7232	3.17	25434	4.43	16786	6.11
Sample ID						
WG1822460-4 CCAL	16508	3.67	55735	4.93	35012	6.61
WG1822460-5 CCAL	17146	3.67	-	-	37775	6.61
WG1822188-1 BLANK	17353	3.67	56688	4.93	34939	6.61
WG1822188-2 LCS	16221	3.67	55769	4.92	34638	6.61
WG1822188-3 LCSD	16589	3.67	55310	4.93	35357	6.61
MW-2S	15579	3.67	54534	4.93	35340	6.61
MW-3S	16640	3.67	58848	4.93	36515	6.61
MW-6D	15860	3.67	57765	4.93	35957	6.61
MW-7S	15442	3.67	55055	4.92	35675	6.61
MW-8S	15750	3.67	55394	4.93	35387	6.61
MW-8S MS	15793	3.67	53504	4.92	34718	6.61
MW-8S MSD	17009	3.67	57715	4.92	36211	6.61
DUP	15178	3.67	58105	4.92	38771	6.61

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT

RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 08/31/23 10:12:00
Sample No	: WG1822460-3	**Lab File ID**	: ABN0831

	Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area	RT	Area	RT	Area	RT
WG1822460-3	80682	8.00	88271	10.51	110283	11.86
Upper Limit	161364	8.50	176542	11.01	220566	12.36
Lower Limit	40341	7.50	44136	10.01	55142	11.36
Sample ID						
WG1822460-4 CCAL	85225	8.00	-	-	-	-
WG1822460-5 CCAL	96848	8.00	-	-	-	-
WG1822188-1 BLANK	81050	8.00	88018	10.51	108272	11.87
WG1822188-2 LCS	79883	8.00	84586	10.51	106418	11.87
WG1822188-3 LCSD	77713	8.00	77820	10.51	97234	11.87
MW-2S	81967	8.00	88728	10.51	113132	11.86
MW-3S	85742	8.00	91723	10.51	118152	11.86
MW-6D	88208	8.00	89516	10.51	114276	11.86
MW-7S	84129	8.00	92470	10.51	117452	11.86
MW-8S	81155	8.00	88548	10.51	115258	11.86
MW-8S MS	81698	8.00	83177	10.51	104400	11.86
MW-8S MSD	87792	8.00	94612	10.51	119062	11.86
DUP	96512	8.00	95846	10.51	105839	11.87

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT

RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 09/01/23 06:40:00
Sample No	: WG1822785-3	**Lab File ID**	: ABN0901

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
	Area	RT	Area	RT	Area	RT
WG1822785-3	15428	3.65	54627	4.91	36931	6.59
Upper Limit	30856	4.15	109254	5.41	73862	7.09
Lower Limit	7714	3.15	27314	4.41	18466	6.09
Sample ID						
WG1822785-4 CCAL	18596	3.65	66803	4.91	43020	6.59
WG1822785-5 CCAL	16426	3.65	-	-	36794	6.58
MW-1S	16788	3.65	56859	4.91	35865	6.59

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 09/01/23 06:40:00
Sample No	: WG1822785-3	**Lab File ID**	: ABN0901

	Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area	RT	Area	RT	Area	RT
WG1822785-3	86683	7.98	95165	10.48	119587	11.83
Upper Limit	173366	8.48	190330	10.98	239174	12.33
Lower Limit	43342	7.48	47583	9.98	59794	11.33
Sample ID						
WG1822785-4 CCAL	105762	7.98	-	-	-	-
WG1822785-5 CCAL	90565	7.98	-	-	-	-
MW-1S	81387	7.98	81883	10.48	105526	11.83

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 09/05/23 20:32:00
Sample No	: WG1823113-3	**Lab File ID**	: ABN0905N

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
	Area	RT	Area	RT	Area	RT
WG1823113-3	14403	3.46	49518	4.73	33908	6.41
Upper Limit	28806	3.96	99036	5.23	67816	6.91
Lower Limit	7202	2.96	24759	4.23	16954	5.91
Sample ID						
WG1823113-4 CCAL	14263	3.46	47445	4.73	30377	6.41
WG1823113-5 CCAL	14772	3.46	-	-	31769	6.41
WG1823488-1 BLANK	15089	3.46	51786	4.73	33433	6.41
WG1823488-2 LCS	15245	3.46	51450	4.73	33531	6.41
WG1823488-3 LCSD	13871	3.46	48687	4.73	31755	6.41

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 09/05/23 20:32:00
Sample No	: WG1823113-3	**Lab File ID**	: ABN0905N

	Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area	RT	Area	RT	Area	RT
WG1823113-3	83627	7.79	91716	10.28	117565	11.60
Upper Limit	167254	8.29	183432	10.78	235130	12.10
Lower Limit	41814	7.29	45858	9.78	58783	11.10
Sample ID						
WG1823113-4 CCAL	78300	7.79	-	-	-	-
WG1823113-5 CCAL	76421	7.79	-	-	-	-
WG1823488-1 BLANK	80687	7.79	89845	10.28	113614	11.60
WG1823488-2 LCS	80060	7.79	89117	10.28	111161	11.60
WG1823488-3 LCSD	77941	7.79	84952	10.28	105407	11.60

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV106	**Analysis Date**	: 09/05/23 21:04:00
Sample No	: WG1823865-3	**Lab File ID**	: ABN0905

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
	Area	RT	Area	RT	Area	RT
WG1823865-3	42087	6.28	153350	7.72	85310	9.48
Upper Limit	84174	6.78	306700	8.22	170620	9.98
Lower Limit	21044	5.78	76675	7.22	42655	8.98
Sample ID						
WG1823865-5 CCAL	38953	6.28	-	-	81272	9.48
WG1823865-4 CCAL	39853	6.28	150081	7.72	81052	9.48
MW-5S	45567	6.28	181815	7.72	100792	9.48
MW-4D	47595	6.28	185962	7.72	103046	9.48

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV106	**Analysis Date**	: 09/05/23 21:04:00
Sample No	: WG1823865-3	**Lab File ID**	: ABN0905

	Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area	RT	Area	RT	Area	RT
WG1823865-3	160190	10.91	145804	13.52	162944	14.97
Upper Limit	320380	11.41	291608	14.02	325888	15.47
Lower Limit	80095	10.41	72902	13.02	81472	14.47
Sample ID						
WG1823865-5 CCAL	162279	10.90	-	-	-	-
WG1823865-4 CCAL	164576	10.90	-	-	-	-
MW-5S	208258	10.90	183924	13.52	205273	14.97
MW-4D	206177	10.90	184671	13.52	212761	14.97

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 09/06/23 10:19:00
Sample No	: WG1824168-3	**Lab File ID**	: ABN0906

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
	Area	RT	Area	RT	Area	RT
WG1824168-3	16731	3.45	58788	4.72	38225	6.39
Upper Limit	33462	3.95	117576	5.22	76450	6.89
Lower Limit	8366	2.95	29394	4.22	19113	5.89
Sample ID						
WG1824168-4 CCAL	15278	3.45	54182	4.72	36903	6.39
WG1824168-5 CCAL	16353	3.45	-	-	37358	6.39
EQUIPMENT BLANK	16002	3.45	53236	4.72	34299	6.40

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: DAKOTA	**Analysis Date**	: 09/06/23 10:19:00
Sample No	: WG1824168-3	**Lab File ID**	: ABN0906

	Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area	RT	Area	RT	Area	RT
WG1824168-3	88761	7.78	93649	10.27	114119	11.59
Upper Limit	177522	8.28	187298	10.77	228238	12.09
Lower Limit	44381	7.28	46825	9.77	57060	11.09
Sample ID						
WG1824168-4 CCAL	92510	7.78	-	-	-	-
WG1824168-5 CCAL	92849	7.78	-	-	-	-
EQUIPMENT BLANK	79987	7.78	78544	10.27	95082	11.59

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Date Created: 03/07/23
Created By: Jason Hebert
File: PM14021-1
Page: 1

ABN Extractables - EPA 8270E (WATER)

Holding Time: 7 days
Container/Sample Preservation: 2 - Amber 1000ml unpreserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Acenaphthene	83-32-9	2	1.06	ug/l	37-111	30	37-111	30	30			
Benzidine	92-87-5	20	8.14	ug/l	10-75	30	10-75	30	30			
1,2,4-Trichlorobenzene	120-82-1	5	0.581	ug/l	39-98	30	39-98	30	30			
Hexachlorobenzene	118-74-1	2	0.69	ug/l	40-140	30	40-140	30	30			
Bis(2-chloroethyl)ether	111-44-4	2	0.884	ug/l	40-140	30	40-140	30	30			
2-Chloronaphthalene	91-58-7	2	0.538	ug/l	40-140	30	40-140	30	30			
1,2-Dichlorobenzene	95-50-1	2	0.636	ug/l	40-140	30	40-140	30	30			
1,3-Dichlorobenzene	541-73-1	2	0.642	ug/l	40-140	30	40-140	30	30			
1,4-Dichlorobenzene	106-46-7	2	0.463	ug/l	36-97	30	36-97	30	30			
3,3'-Dichlorobenzidine	91-94-1	5	0.854	ug/l	40-140	30	40-140	30	30			
2,4-Dinitrotoluene	121-14-2	5	0.382	ug/l	48-143	30	48-143	30	30			
2,6-Dinitrotoluene	606-20-2	5	0.368	ug/l	40-140	30	40-140	30	30			
Azobenzene	122-66-7	2	0.81	ug/l	40-140	30	40-140	30	30			
Fluoranthene	206-44-0	2	0.653	ug/l	40-140	30	40-140	30	30			
4-Chlorophenyl phenyl ether	7005-72-3	2	0.795	ug/l	40-140	30	40-140	30	30			
4-Bromophenyl phenyl ether	101-55-3	2	0.632	ug/l	40-140	30	40-140	30	30			
Bis(2-chloroisopropyl)ether	108-60-1	2	1.75	ug/l	40-140	30	40-140	30	30			
Bis(2-chloroethoxy)methane	111-91-1	5	1.49	ug/l	40-140	30	40-140	30	30			
Hexachlorobutadiene	87-68-3	2	0.6	ug/l	40-140	30	40-140	30	30			
Hexachlorocyclopentadiene	77-47-4	20	0.606	ug/l	40-140	30	40-140	30	30			
Hexachloroethane	67-72-1	2	0.44	ug/l	40-140	30	40-140	30	30			
Isophorone	78-59-1	5	0.657	ug/l	40-140	30	40-140	30	30			
Naphthalene	91-20-3	2	0.669	ug/l	40-140	30	40-140	30	30			
Nitrobenzene	98-95-3	2	0.656	ug/l	40-140	30	40-140	30	30			
NitrosoDiPhenylAmine(NDPA)/DPA	86-30-6	2	0.65	ug/l	40-140	30	40-140	30	30			
n-Nitrosodi-n-propylamine	621-64-7	5	0.771	ug/l	29-132	30	29-132	30	30			
Bis(2-Ethylhexyl)phthalate	117-81-7	3	1.51	ug/l	40-140	30	40-140	30	30			
Butyl benzyl phthalate	85-68-7	5	2.18	ug/l	40-140	30	40-140	30	30			
Di-n-butylphthalate	84-74-2	5	0.58	ug/l	40-140	30	40-140	30	30			
Di-n-octylphthalate	117-84-0	5	2.39	ug/l	40-140	30	40-140	30	30			
Diethyl phthalate	84-66-2	5	4.3	ug/l	40-140	30	40-140	30	30			
Dimethyl phthalate	131-11-3	5	4.44	ug/l	40-140	30	40-140	30	30			
Benzo(a)anthracene	56-55-3	2	0.767	ug/l	40-140	30	40-140	30	30			
Benzo(a)pyrene	50-32-8	2	0.447	ug/l	40-140	30	40-140	30	30			
Benzo(b)fluoranthene	205-99-2	2	0.814	ug/l	40-140	30	40-140	30	30			
Benzo(k)fluoranthene	207-08-9	2	0.816	ug/l	40-140	30	40-140	30	30			
Chrysene	218-01-9	2	0.828	ug/l	40-140	30	40-140	30	30			
Acenaphthylene	208-96-8	2	0.59	ug/l	45-123	30	45-123	30	30			
Anthracene	120-12-7	2	0.79	ug/l	40-140	30	40-140	30	30			
Benzo(ghi)perylene	191-24-2	2	0.77	ug/l	40-140	30	40-140	30	30			
Fluorene	86-73-7	2	1.05	ug/l	40-140	30	40-140	30	30			
Phenanthrene	85-01-8	2	0.992	ug/l	40-140	30	40-140	30	30			

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. ***(Soil/Solids only)***
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

ABN Extractables - EPA 8270E (WATER)

Holding Time: 7 days
Container/Sample Preservation: 2 - Amber 1000ml unpreserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dibenzo(a,h)anthracene	53-70-3	2	0.452	ug/l	40-140	30	40-140	30	30			
Indeno(1,2,3-cd)Pyrene	193-39-5	2	0.943	ug/l	40-140	30	40-140	30	30			
Pyrene	129-00-0	2	0.704	ug/l	26-127	30	26-127	30	30			
Biphenyl	92-52-4	2	0.635	ug/l	40-140	30	40-140	30	30			
Aniline	62-53-3	2	0.482	ug/l	40-140	30	40-140	30	30			
4-Chloroaniline	106-47-8	5	0.647	ug/l	40-140	30	40-140	30	30			
1-Methylnaphthalene	90-12-0	2	0.595	ug/l	41-103	30	41-103	30	30			
2-Nitroaniline	88-74-4	5	0.519	ug/l	52-143	30	52-143	30	30			
3-Nitroaniline	99-09-2	5	0.574	ug/l	25-145	30	25-145	30	30			
4-Nitroaniline	100-01-6	5	0.581	ug/l	51-143	30	51-143	30	30			
Dibenzofuran	132-64-9	2	0.823	ug/l	40-140	30	40-140	30	30			
2-Methylnaphthalene	91-57-6	2	0.677	ug/l	40-140	30	40-140	30	30			
n-Nitrosodimethylamine	62-75-9	2	0.524	ug/l	22-74	30	22-74	30	30			
2,4,6-Trichlorophenol	88-06-2	5	0.494	ug/l	30-130	30	30-130	30	30			
P-Chloro-M-Cresol	59-50-7	2	0.406	ug/l	23-97	30	23-97	30	30			
2-Chlorophenol	95-57-8	2	0.405	ug/l	27-123	30	27-123	30	30			
2,4-Dichlorophenol	120-83-2	5	0.527	ug/l	30-130	30	30-130	30	30			
2,4-Dimethylphenol	105-67-9	5	1.1	ug/l	30-130	30	30-130	30	30			
2-Nitrophenol	88-75-5	10	0.463	ug/l	30-130	30	30-130	30	30			
4-Nitrophenol	100-02-7	10	1.14	ug/l	10-80	30	10-80	30	30			
2,4-Dinitrophenol	51-28-5	20	3.55	ug/l	20-130	30	20-130	30	30			
4,6-Dinitro-o-cresol	534-52-1	10	5.42	ug/l	20-164	30	20-164	30	30			
Pentachlorophenol	87-86-5	10	1.95	ug/l	9-103	30	9-103	30	30			
Phenol	108-95-2	5	1.3	ug/l	12-110	30	12-110	30	30			
2-Methylphenol	95-48-7	5	1.1	ug/l	30-130	30	30-130	30	30			
3-Methylphenol/4-Methylphenol	106-44-5	5	0.55	ug/l	30-130	30	30-130	30	30			
2,4,5-Trichlorophenol	95-95-4	5	0.381	ug/l	30-130	30	30-130	30	30			
Benzoic Acid	65-85-0	50	12.9	ug/l	10-164	30	10-164	30	30			
Benzyl Alcohol	100-51-6	2	0.698	ug/l	26-116	30	26-116	30	30			
Carbazole	86-74-8	2	0.759	ug/l	55-144	30	55-144	30	30			
Pyridine	110-86-1	3.5	0.905	ug/l	10-66	30	10-66	30	30			
2-Fluorophenol	*367-12-4*									*21-120*		
Phenol-d6	*13127-88-3*									*10-120*		
Nitrobenzene-d5	*4165-60-0*									*23-120*		
2-Fluorobiphenyl	*321-60-8*									*15-120*		
2,4,6-Tribromophenol	*118-79-6*									*10-120*		
4-Terphenyl-d14	*1718-51-0*									*41-149*		

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Date Created: 03/07/23
Created By: Jason Hebert
File: PM14022-1
Page: 1

ABN Extractables - EPA 8270E (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - Glass 250ml/8oz unpreserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Acenaphthene	83-32-9	133.6	17.3012	ug/kg	31-137	50	31-137	50	50			
Benzidine	92-87-5	551.1	181.028	ug/kg	10-66	50	10-66	50	50			
1,2,4-Trichlorobenzene	120-82-1	167	19.1048	ug/kg	38-107	50	38-107	50	50			
Hexachlorobenzene	118-74-1	100.2	18.704	ug/kg	40-140	50	40-140	50	50			
Bis(2-chloroethyl)ether	111-44-4	150.3	22.6452	ug/kg	40-140	50	40-140	50	50			
2-Chloronaphthalene	91-58-7	167	16.5664	ug/kg	40-140	50	40-140	50	50			
1,2-Dichlorobenzene	95-50-1	167	29.9932	ug/kg	40-140	50	40-140	50	50			
1,3-Dichlorobenzene	541-73-1	167	28.724	ug/kg	40-140	50	40-140	50	50			
1,4-Dichlorobenzene	106-46-7	167	29.1582	ug/kg	28-104	50	28-104	50	50			
3,3'-Dichlorobenzidine	91-94-1	167	44.422	ug/kg	40-140	50	40-140	50	50			
2,4-Dinitrotoluene	121-14-2	167	33.4	ug/kg	40-132	50	40-132	50	50			
2,6-Dinitrotoluene	606-20-2	167	28.6572	ug/kg	40-140	50	40-140	50	50			
Azobenzene	122-66-7	167	16.032	ug/kg	40-140	50	40-140	50	50			
Fluoranthene	206-44-0	100.2	19.1716	ug/kg	40-140	50	40-140	50	50			
4-Chlorophenyl phenyl ether	7005-72-3	167	17.869	ug/kg	40-140	50	40-140	50	50			
4-Bromophenyl phenyl ether	101-55-3	167	25.4842	ug/kg	40-140	50	40-140	50	50			
Bis(2-chloroisopropyl)ether	108-60-1	200.4	28.5236	ug/kg	40-140	50	40-140	50	50			
Bis(2-chloroethoxy)methane	111-91-1	180.36	16.7334	ug/kg	40-117	50	40-117	50	50			
Hexachlorobutadiene	87-68-3	167	24.4488	ug/kg	40-140	50	40-140	50	50			
Hexachlorocyclopentadiene	77-47-4	477.62	151.302	ug/kg	40-140	50	40-140	50	50			
Hexachloroethane	67-72-1	133.6	27.0206	ug/kg	40-140	50	40-140	50	50			
Isophorone	78-59-1	150.3	21.6766	ug/kg	40-140	50	40-140	50	50			
Naphthalene	91-20-3	167	20.3406	ug/kg	40-140	50	40-140	50	50			
Nitrobenzene	98-95-3	150.3	24.716	ug/kg	40-140	50	40-140	50	50			
NitrosoDiPhenylAmine(NDPA)/DPA	86-30-6	133.6	19.0046	ug/kg	36-157	50	36-157	50	50			
n-Nitrosodi-n-propylamine	621-64-7	167	25.7848	ug/kg	32-121	50	32-121	50	50			
Bis(2-Ethylhexyl)phthalate	117-81-7	167	57.782	ug/kg	40-140	50	40-140	50	50			
Butyl benzyl phthalate	85-68-7	167	42.084	ug/kg	40-140	50	40-140	50	50			
Di-n-butylphthalate	84-74-2	167	31.6632	ug/kg	40-140	50	40-140	50	50			
Di-n-octylphthalate	117-84-0	167	56.78	ug/kg	40-140	50	40-140	50	50			
Diethyl phthalate	84-66-2	167	15.4642	ug/kg	40-140	50	40-140	50	50			
Dimethyl phthalate	131-11-3	167	35.07	ug/kg	40-140	50	40-140	50	50			
Benzo(a)anthracene	56-55-3	100.2	18.8042	ug/kg	40-140	50	40-140	50	50			
Benzo(a)pyrene	50-32-8	133.6	40.748	ug/kg	40-140	50	40-140	50	50			
Benzo(b)fluoranthene	205-99-2	100.2	28.1228	ug/kg	40-140	50	40-140	50	50			
Benzo(k)fluoranthene	207-08-9	100.2	26.72	ug/kg	40-140	50	40-140	50	50			
Chrysene	218-01-9	100.2	17.368	ug/kg	40-140	50	40-140	50	50			
Acenaphthylene	208-96-8	133.6	25.7848	ug/kg	40-140	50	40-140	50	50			
Anthracene	120-12-7	100.2	32.565	ug/kg	40-140	50	40-140	50	50			
Benzo(ghi)perylene	191-24-2	133.6	19.6392	ug/kg	40-140	50	40-140	50	50			
Fluorene	86-73-7	167	16.2324	ug/kg	40-140	50	40-140	50	50			
Phenanthrene	85-01-8	100.2	20.3072	ug/kg	40-140	50	40-140	50	50			

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. ***(Soil/Solids only)***
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

ABN Extractables - EPA 8270E (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - Glass 250ml/8oz unpreserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Dibenzo(a,h)anthracene	53-70-3	100.2	19.3052	ug/kg	40-140	50	40-140	50	50			
Indeno(1,2,3-cd)Pyrene	193-39-5	133.6	23.2798	ug/kg	40-140	50	40-140	50	50			
Pyrene	129-00-0	100.2	16.5998	ug/kg	35-142	50	35-142	50	50			
Biphenyl	92-52-4	380.76	21.71	ug/kg	37-127	50	37-127	50	50			
Aniline	62-53-3	200.4	78.824	ug/kg	40-140	50	40-140	50	50			
4-Chloroaniline	106-47-8	167	30.394	ug/kg	40-140	50	40-140	50	50			
1-Methylnaphthalene	90-12-0	167	19.372	ug/kg	26-130	50	26-130	50	50			
2-Nitroaniline	88-74-4	167	32.1976	ug/kg	47-134	50	47-134	50	50			
3-Nitroaniline	99-09-2	167	31.4962	ug/kg	26-129	50	26-129	50	50			
4-Nitroaniline	100-01-6	167	69.138	ug/kg	41-125	50	41-125	50	50			
Dibenzofuran	132-64-9	167	15.7982	ug/kg	40-140	50	40-140	50	50			
2-Methylnaphthalene	91-57-6	200.4	20.1736	ug/kg	40-140	50	40-140	50	50			
n-Nitrosodimethylamine	62-75-9	334	32.064	ug/kg	22-100	50	22-100	50	50			
2,4,6-Trichlorophenol	88-06-2	100.2	31.6632	ug/kg	30-130	50	30-130	50	50			
P-Chloro-M-Cresol	59-50-7	167	24.883	ug/kg	26-103	50	26-103	50	50			
2-Chlorophenol	95-57-8	167	19.7394	ug/kg	25-102	50	25-102	50	50			
2,4-Dichlorophenol	120-83-2	150.3	26.8536	ug/kg	30-130	50	30-130	50	50			
2,4-Dimethylphenol	105-67-9	167	55.11	ug/kg	30-130	50	30-130	50	50			
2-Nitrophenol	88-75-5	360.72	62.792	ug/kg	30-130	50	30-130	50	50			
4-Nitrophenol	100-02-7	233.8	68.136	ug/kg	11-114	50	11-114	50	50			
2,4-Dinitrophenol	51-28-5	801.6	77.822	ug/kg	4-130	50	4-130	50	50			
4,6-Dinitro-o-cresol	534-52-1	434.2	80.16	ug/kg	10-130	50	10-130	50	50			
Pentachlorophenol	87-86-5	133.6	36.74	ug/kg	17-109	50	17-109	50	50			
Phenol	108-95-2	167	25.217	ug/kg	26-90	50	26-90	50	50			
2-Methylphenol	95-48-7	167	25.885	ug/kg	30-130.	50	30-130.	50	50			
3-Methylphenol/4-Methylphenol	106-44-5	240.48	26.1522	ug/kg	30-130	50	30-130	50	50			
2,4,5-Trichlorophenol	95-95-4	167	31.9972	ug/kg	30-130	50	30-130	50	50			
Benzoic Acid	65-85-0	541.08	169.004	ug/kg	10-110	50	10-110	50	50			
Benzyl Alcohol	100-51-6	167	51.102	ug/kg	40-140	50	40-140	50	50			
Carbazole	86-74-8	167	16.2324	ug/kg	54-128	50	54-128	50	50			
Pyridine	110-86-1	180.36	63.46	ug/kg	10-93	50	10-93	50	50			
2-Fluorophenol	*367-12-4*									*25-120*		
Phenol-d6	*13127-88-3*									*10-120*		
Nitrobenzene-d5	*4165-60-0*									*23-120*		
2-Fluorobiphenyl	*321-60-8*									*30-120*		
2,4,6-Tribromophenol	*118-79-6*									*10-136*		
4-Terphenyl-d14	*1718-51-0*									*18-120*		

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Semivolatile Sample Data

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 13:45
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-01	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 13:45
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-01	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	0.77	5.0	0.57	J
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 13:45
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-01	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 14:31
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-02	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 14:31
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-02	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 14:31
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-02	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 14:54
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-03	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 14:54
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-03	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 14:54
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-03	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 07:00
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-04	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: SV106
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 07:00
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-04	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: SV106
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 07:00
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-04	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: SV106
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 06:36
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-05	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: SV106
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 06:36
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-05	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: SV106
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 06:36
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-05	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: SV106
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:16
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-06	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:16
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-06	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:16
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-06	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:38
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-07	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:38
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-07	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:38
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-07	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 16:01
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-08	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 16:01
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-08	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 16:01
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-08	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 17:08
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-09	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 17:08
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-09	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	0.92	5.0	0.57	J
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 17:08
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-09	**Analyst**	: JG
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 17:22
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-11	**Analyst**	: SZ
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 17:22
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-11	**Analyst**	: SZ
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 17:22
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 50269-11	**Analyst**	: SZ
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822188-1	**Date Collected**	: NA
Client ID	: WG1822188-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/31/23 11:32
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 822188-1	**Analyst**	: SZ
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822188-1	**Date Collected**	: NA
Client ID	: WG1822188-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/31/23 11:32
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 822188-1	**Analyst**	: SZ
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822188-1	**Date Collected**	: NA
Client ID	: WG1822188-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/31/23 11:32
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 822188-1	**Analyst**	: SZ
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823488-1	**Date Collected**	: NA
Client ID	: WG1823488-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/05/23 22:48
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 823488-1	**Analyst**	: SZ
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
111-44-4	Bis(2-chloroethyl)ether	ND	2.0	0.50	U
91-94-1	3,3'-Dichlorobenzidine	ND	5.0	1.6	U
121-14-2	2,4-Dinitrotoluene	ND	5.0	1.2	U
606-20-2	2,6-Dinitrotoluene	ND	5.0	0.93	U
7005-72-3	4-Chlorophenyl phenyl ether	ND	2.0	0.49	U
101-55-3	4-Bromophenyl phenyl ether	ND	2.0	0.38	U
108-60-1	Bis(2-chloroisopropyl)ether	ND	2.0	0.53	U
111-91-1	Bis(2-chloroethoxy)methane	ND	5.0	0.50	U
77-47-4	Hexachlorocyclopentadiene	ND	20	0.69	U
78-59-1	Isophorone	ND	5.0	1.2	U
98-95-3	Nitrobenzene	ND	2.0	0.77	U
86-30-6	NDPA/DPA	ND	2.0	0.42	U
621-64-7	n-Nitrosodi-n-propylamine	ND	5.0	0.64	U
117-81-7	Bis(2-ethylhexyl)phthalate	ND	3.0	1.5	U
85-68-7	Butyl benzyl phthalate	ND	5.0	1.2	U
84-74-2	Di-n-butylphthalate	ND	5.0	0.39	U
117-84-0	Di-n-octylphthalate	ND	5.0	1.3	U
84-66-2	Diethyl phthalate	ND	5.0	0.38	U
131-11-3	Dimethyl phthalate	ND	5.0	1.8	U
92-52-4	Biphenyl	ND	2.0	0.46	U
106-47-8	4-Chloroaniline	ND	5.0	1.1	U
88-74-4	2-Nitroaniline	ND	5.0	0.50	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823488-1	**Date Collected**	: NA
Client ID	: WG1823488-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/05/23 22:48
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 823488-1	**Analyst**	: SZ
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
99-09-2	3-Nitroaniline	ND	5.0	0.81	U
100-01-6	4-Nitroaniline	ND	5.0	0.80	U
132-64-9	Dibenzofuran	ND	2.0	0.50	U
95-94-3	1,2,4,5-Tetrachlorobenzene	ND	10	0.44	U
98-86-2	Acetophenone	ND	5.0	0.53	U
88-06-2	2,4,6-Trichlorophenol	ND	5.0	0.61	U
59-50-7	p-Chloro-m-cresol	ND	2.0	0.35	U
95-57-8	2-Chlorophenol	ND	2.0	0.48	U
120-83-2	2,4-Dichlorophenol	ND	5.0	0.41	U
105-67-9	2,4-Dimethylphenol	ND	5.0	1.8	U
88-75-5	2-Nitrophenol	ND	10	0.85	U
100-02-7	4-Nitrophenol	ND	10	0.67	U
51-28-5	2,4-Dinitrophenol	ND	20	6.6	U
534-52-1	4,6-Dinitro-o-cresol	ND	10	1.8	U
108-95-2	Phenol	ND	5.0	0.57	U
95-48-7	2-Methylphenol	ND	5.0	0.49	U
108-39-4/106-44-5	3-Methylphenol/4-Methylphenol	ND	5.0	0.48	U
95-95-4	2,4,5-Trichlorophenol	ND	5.0	0.77	U
86-74-8	Carbazole	ND	2.0	0.49	U
1912-24-9	Atrazine	ND	10	0.76	U
100-52-7	Benzaldehyde	ND	5.0	0.53	U
105-60-2	Caprolactam	ND	10	3.3	U

Results Summary
Form 1
Semivolatile Organics by GC/MS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823488-1	**Date Collected**	: NA
Client ID	: WG1823488-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/05/23 22:48
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8270E	**Dilution Factor**	: 1
Lab File ID	: 823488-1	**Analyst**	: SZ
Sample Amount	: 275 ml	**Instrument ID**	: DAKOTA
Extraction Method	: EPA 3510C	**GC Column**	: RTX5-MS
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
58-90-2	2,3,4,6-Tetrachlorophenol	ND	5.0	0.84	U

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-02.D
Acq On : 31 Aug 2023 2:31 pm
Operator : Dakota:jg
Sample : L2350269-02,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 12 11:52:31 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 14:50:33 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.669	152	15579	4.000	ug/ml		0.00
Standard Area 1 = 14463			Recovery = 107.72%				
27) IS2_1,4-Dichlorobenzen...	3.669	152	15579	4.000	ug/ml		0.00
Standard Area 3 = 16508			Recovery = 94.37%				
34) IS1_Naphthalene-d8	4.927	136	54534	4.000	ug/ml	#	0.00
Standard Area 1 = 50867			Recovery = 107.21%				
54) IS2_Naphthalene-d8	4.927	136	54534	4.000	ug/ml	#	0.00
Standard Area 3 = 55735			Recovery = 97.85%				
62) IS1_Acenaphthene-d10	6.606	164	35340	4.000	ug/ml		0.00
Standard Area 1 = 33572			Recovery = 105.27%				
82) IS2_Acenaphthene-d10	6.606	164	35340	4.000	ug/ml		0.00
Standard Area 3 = 35012			Recovery = 100.94%				
85) IS3_Acenaphthene-d10	6.606	164	35340	4.000	ug/ml		0.00
Standard Area 2 = 37775			Recovery = 93.55%				
87) IS1_Phenanthrene-d10	8.001	188	81967	4.000	ug/ml		0.00
Standard Area 1 = 80682			Recovery = 101.59%				
99) IS3_Phenanthrene-d10	8.001	188	81967	4.000	ug/ml		0.00
Standard Area 2 = 96848			Recovery = 84.63%				
103) IS1_Chrysene-d12	10.506	240	88728	4.000	ug/ml	#	0.00
Standard Area 1 = 88271			Recovery = 100.52%				
112) IS1_Perylene-d12	11.862	264	113132	4.000	ug/ml		0.00
Standard Area 1 = 110283			Recovery = 102.58%				
System Monitoring Compounds							
4) 2-Fluorophenol	2.270	112	13986	3.477	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 69.54%				
7) Phenol-d6	3.398	99	13598	2.638	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 52.76%				
19) Nitrobenzene-d5	4.240	82	9315	1.885	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 75.40%				
45) 2-Fluorobiphenyl	6.009	172	24826	2.314	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 92.56%				
78) 2,4,6-Tribromophenol	7.358	330	12732	6.224	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 124.48%#				
95) 4-Terphenyl-d14	9.571	244	44752	2.234	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 89.36%				

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-02.D
Acq On : 31 Aug 2023 2:31 pm
Operator : Dakota:jg
Sample : L2350269-02,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 12 11:52:31 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 14:50:33 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Target Compounds						Qvalue
6) 2-Chlorophenol	0.000		0	N.D.		
8) Phenol	0.000		0	N.D.		
9) Bis(2-chloroethyl)ether	0.000		0	N.D.		
14) Bis(2-chloroisopropyl)...	0.000		0	N.D.		
15) 2-Methylphenol	0.000		0	N.D.		
17) n-Nitrosodi-n-propylamine	0.000		0	N.D.	d	
18) 3-Methylphenol/4-Methy...	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.		
21) Isophorone	0.000		0	N.D.		
22) 2-Nitrophenol	0.000		0	N.D.		
23) 2,4-Dimethylphenol	0.000		0	N.D.		
24) Bis(2-chloroethoxy)met...	0.000		0	N.D.		
25) 2,4-Dichlorophenol	0.000		0	N.D.		
28) Benzaldehyde	0.000		0	N.D.		
29) Acetophenone	0.000		0	N.D.		
37) 4-Chloroaniline	0.000		0	N.D.		
39) p-Chloro-m-cresol	0.000		0	N.D.		
42) Hexachlorocyclopentadiene	0.000		0	N.D.		
43) 2,4,6-Trichlorophenol	0.000		0	N.D.		
44) 2,4,5-Trichlorophenol	0.000		0	N.D.		
47) 2-Nitroaniline	0.000		0	N.D.		
50) Dimethyl phthalate	0.000		0	N.D.	d	
52) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
59) Caprolactam	0.000		0	N.D.		
60) 1,2,4,5-Tetrachloroben...	0.000		0	N.D.		
61) Biphenyl	0.000		0	N.D.		
63) 3-Nitroaniline	0.000		0	N.D.		
65) 2,4-Dinitrophenol	0.000		0	N.D.		
66) Dibenzofuran	0.000		0	N.D.		
67) 2,4-Dinitrotoluene	0.000		0	N.D.	d	
68) 4-Nitrophenol	0.000		0	N.D.		
70) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
71) Diethyl phthalate	0.000		0	N.D.		
73) 4-Chlorophenyl phenyl ...	0.000		0	N.D.		
74) 4-Nitroaniline	0.000		0	N.D.		
75) 4,6-Dinitro-o-cresol	0.000		0	N.D.		

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-02.D
Acq On : 31 Aug 2023 2:31 pm
Operator : Dakota:jg
Sample : L2350269-02,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 12 11:52:31 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 14:50:33 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76)	NDPA/DPA	0.000		0	N.D.		
79)	4-Bromophenyl phenyl e...	0.000		0	N.D.		
86)	Atrazine	0.000		0	N.D.		
90)	Carbazole	0.000		0	N.D.		
91)	Di-n-butylphthalate	0.000		0	N.D.		
96)	Butyl benzyl phthalate	0.000		0	N.D.		
105)	3,3'-Dichlorobenzidine	0.000		0	N.D.		
107)	Bis(2-ethylhexyl)phtha...	0.000		0	N.D.		
108)	Di-n-octylphthalate	0.000		0	N.D.	d	

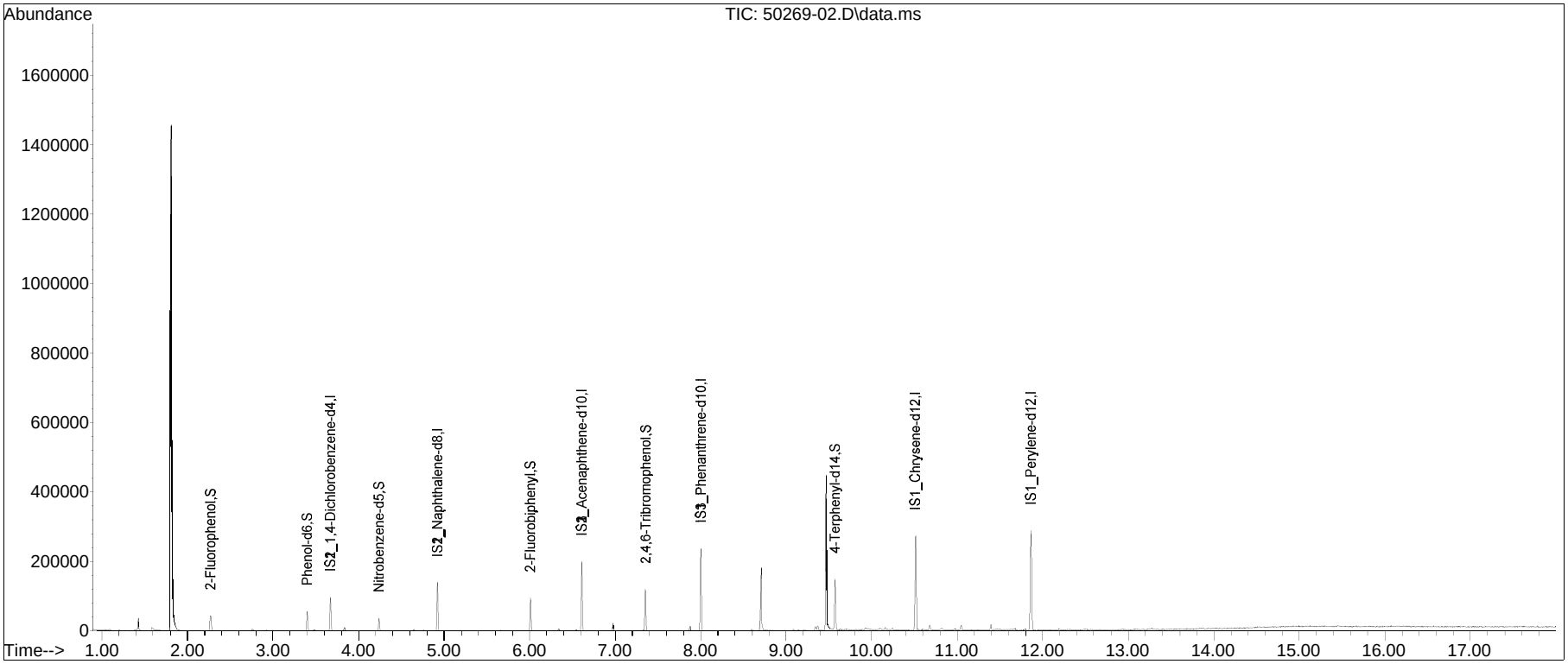
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-02.D
Acq On : 31 Aug 2023 2:31 pm
Operator : Dakota:jg
Sample : L2350269-02,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 12 11:52:31 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 14:50:33 2023
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MAP90831.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230831lvi\	QMethod	: FS230412LVIDakota.m
Data File	: 50269-02.D	Operator	: Dakota:jg
Date Inj'd	: 8/31/2023 2:31 pm	Instrument	: Dakota
Sample	: L2350269-02,32,,gmr	Quant Date	: 8/31/2023 2:50 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-03.D
Acq On : 31 Aug 2023 2:54 pm
Operator : Dakota:jg
Sample : L2350269-03,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 12 11:52:47 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 15:12:46 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.669	152	16640	4.000	ug/ml		0.00
Standard Area 1 = 14463			Recovery = 115.05%				
27) IS2_1,4-Dichlorobenzen...	3.669	152	16640	4.000	ug/ml		0.00
Standard Area 3 = 16508			Recovery = 100.80%				
34) IS1_Naphthalene-d8	4.927	136	58848	4.000	ug/ml	#	0.00
Standard Area 1 = 50867			Recovery = 115.69%				
54) IS2_Naphthalene-d8	4.927	136	58848	4.000	ug/ml	#	0.00
Standard Area 3 = 55735			Recovery = 105.59%				
62) IS1_Acenaphthene-d10	6.606	164	36515	4.000	ug/ml		0.00
Standard Area 1 = 33572			Recovery = 108.77%				
82) IS2_Acenaphthene-d10	6.606	164	36515	4.000	ug/ml		0.00
Standard Area 3 = 35012			Recovery = 104.29%				
85) IS3_Acenaphthene-d10	6.606	164	36515	4.000	ug/ml		0.00
Standard Area 2 = 37775			Recovery = 96.66%				
87) IS1_Phenanthrene-d10	8.001	188	85742	4.000	ug/ml		0.00
Standard Area 1 = 80682			Recovery = 106.27%				
99) IS3_Phenanthrene-d10	8.001	188	85742	4.000	ug/ml		0.00
Standard Area 2 = 96848			Recovery = 88.53%				
103) IS1_Chrysene-d12	10.506	240	91723	4.000	ug/ml		0.00
Standard Area 1 = 88271			Recovery = 103.91%				
112) IS1_Perylene-d12	11.862	264	118152	4.000	ug/ml		0.00
Standard Area 1 = 110283			Recovery = 107.14%				
System Monitoring Compounds							
4) 2-Fluorophenol	2.270	112	13899	3.235	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 64.70%				
7) Phenol-d6	3.398	99	14252	2.588	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 51.76%				
19) Nitrobenzene-d5	4.240	82	10312	1.954	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 78.16%				
45) 2-Fluorobiphenyl	6.009	172	26288	2.271	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 90.84%				
78) 2,4,6-Tribromophenol	7.358	330	13046	6.172	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 123.44%#				
95) 4-Terphenyl-d14	9.571	244	46430	2.215	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 88.60%				

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-03.D
Acq On : 31 Aug 2023 2:54 pm
Operator : Dakota:jg
Sample : L2350269-03,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 12 11:52:47 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 15:12:46 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Target Compounds						Qvalue
6) 2-Chlorophenol	0.000		0	N.D.		
8) Phenol	0.000		0	N.D.		
9) Bis(2-chloroethyl)ether	0.000		0	N.D.		
14) Bis(2-chloroisopropyl)...	0.000		0	N.D.		
15) 2-Methylphenol	0.000		0	N.D.		
17) n-Nitrosodi-n-propylamine	0.000		0	N.D.	d	
18) 3-Methylphenol/4-Methy...	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.		
21) Isophorone	0.000		0	N.D.		
22) 2-Nitrophenol	0.000		0	N.D.		
23) 2,4-Dimethylphenol	0.000		0	N.D.		
24) Bis(2-chloroethoxy)met...	0.000		0	N.D.		
25) 2,4-Dichlorophenol	0.000		0	N.D.		
28) Benzaldehyde	0.000		0	N.D.		
29) Acetophenone	0.000		0	N.D.		
37) 4-Chloroaniline	0.000		0	N.D.		
39) p-Chloro-m-cresol	0.000		0	N.D.		
42) Hexachlorocyclopentadiene	0.000		0	N.D.		
43) 2,4,6-Trichlorophenol	0.000		0	N.D.		
44) 2,4,5-Trichlorophenol	0.000		0	N.D.		
47) 2-Nitroaniline	0.000		0	N.D.		
50) Dimethyl phthalate	0.000		0	N.D.	d	
52) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
59) Caprolactam	0.000		0	N.D.		
60) 1,2,4,5-Tetrachloroben...	0.000		0	N.D.		
61) Biphenyl	0.000		0	N.D.		
63) 3-Nitroaniline	0.000		0	N.D.		
65) 2,4-Dinitrophenol	0.000		0	N.D.		
66) Dibenzofuran	0.000		0	N.D.		
67) 2,4-Dinitrotoluene	0.000		0	N.D.	d	
68) 4-Nitrophenol	0.000		0	N.D.		
70) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
71) Diethyl phthalate	0.000		0	N.D.		
73) 4-Chlorophenyl phenyl ...	0.000		0	N.D.		
74) 4-Nitroaniline	0.000		0	N.D.		
75) 4,6-Dinitro-o-cresol	0.000		0	N.D.		

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-03.D
Acq On : 31 Aug 2023 2:54 pm
Operator : Dakota:jg
Sample : L2350269-03,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 12 11:52:47 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 15:12:46 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) NDPA/DPA	0.000		0		N.D.	
79) 4-Bromophenyl phenyl e...	0.000		0		N.D.	
86) Atrazine	0.000		0		N.D.	
90) Carbazole	0.000		0		N.D.	
91) Di-n-butylphthalate	0.000		0		N.D.	d
96) Butyl benzyl phthalate	0.000		0		N.D.	
105) 3,3'-Dichlorobenzidine	0.000		0		N.D.	
107) Bis(2-ethylhexyl)phtha...	0.000		0		N.D.	
108) Di-n-octylphthalate	0.000		0		N.D.	d

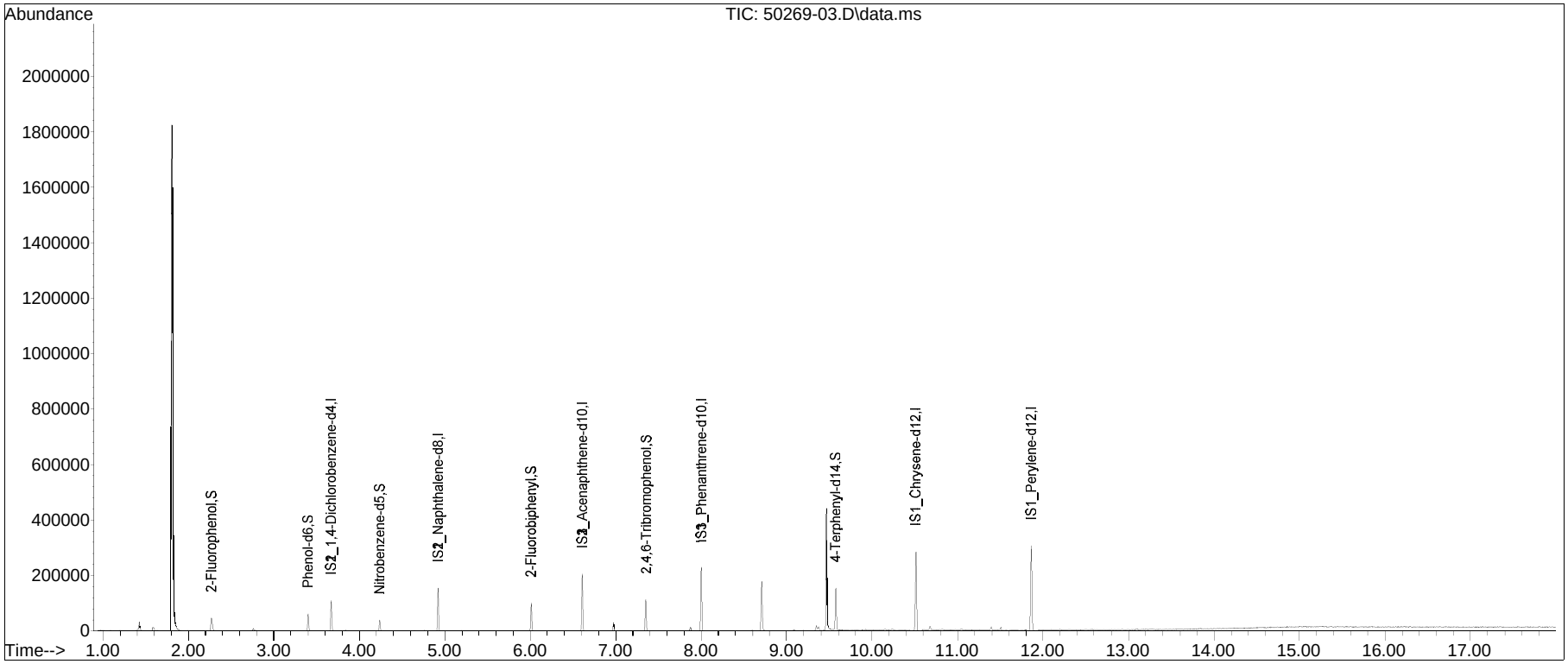
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-03.D
Acq On : 31 Aug 2023 2:54 pm
Operator : Dakota:jg
Sample : L2350269-03,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 12 11:52:47 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 15:12:46 2023
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MAP90831.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230831lvi\	QMethod	: FS230412LVIDakota.m
Data File	: 50269-03.D	Operator	: Dakota:jg
Date Inj'd	: 8/31/2023 2:54 pm	Instrument	: Dakota
Sample	: L2350269-03,32,,gmr	Quant Date	: 8/31/2023 3:12 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-06.D
Acq On : 31 Aug 2023 3:16 pm
Operator : Dakota:jg
Sample : L2350269-06,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 12 11:53:05 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 15:35:01 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.669	152	15860	4.000	ug/ml		0.00
Standard Area 1 = 14463			Recovery = 109.66%				
27) IS2_1,4-Dichlorobenzen...	3.669	152	15860	4.000	ug/ml		0.00
Standard Area 3 = 16508			Recovery = 96.07%				
34) IS1_Naphthalene-d8	4.927	136	57765	4.000	ug/ml	#	0.00
Standard Area 1 = 50867			Recovery = 113.56%				
54) IS2_Naphthalene-d8	4.927	136	57765	4.000	ug/ml	#	0.00
Standard Area 3 = 55735			Recovery = 103.64%				
62) IS1_Acenaphthene-d10	6.606	164	35957	4.000	ug/ml		0.00
Standard Area 1 = 33572			Recovery = 107.10%				
82) IS2_Acenaphthene-d10	6.606	164	35957	4.000	ug/ml		0.00
Standard Area 3 = 35012			Recovery = 102.70%				
85) IS3_Acenaphthene-d10	6.606	164	35957	4.000	ug/ml		0.00
Standard Area 2 = 37775			Recovery = 95.19%				
87) IS1_Phenanthrene-d10	7.998	188	88208	4.000	ug/ml		0.00
Standard Area 1 = 80682			Recovery = 109.33%				
99) IS3_Phenanthrene-d10	7.998	188	88208	4.000	ug/ml		0.00
Standard Area 2 = 96848			Recovery = 91.08%				
103) IS1_Chrysene-d12	10.507	240	89516	4.000	ug/ml		0.00
Standard Area 1 = 88271			Recovery = 101.41%				
112) IS1_Perylene-d12	11.862	264	114276	4.000	ug/ml		0.00
Standard Area 1 = 110283			Recovery = 103.62%				
System Monitoring Compounds							
4) 2-Fluorophenol	2.270	112	5690	1.389	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 27.78%				
7) Phenol-d6	3.398	99	5441	1.037	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 20.74%				
19) Nitrobenzene-d5	4.241	82	10610	2.109	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 84.36%				
45) 2-Fluorobiphenyl	6.009	172	27238	2.397	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 95.88%				
78) 2,4,6-Tribromophenol	7.358	330	8785	4.221	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 84.42%				
95) 4-Terphenyl-d14	9.571	244	47746	2.214	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 88.56%				

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-06.D
Acq On : 31 Aug 2023 3:16 pm
Operator : Dakota:jg
Sample : L2350269-06,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 12 11:53:05 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 15:35:01 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Target Compounds						Qvalue
6) 2-Chlorophenol	0.000		0	N.D.	d	
8) Phenol	0.000		0	N.D.		
9) Bis(2-chloroethyl)ether	0.000		0	N.D.		
14) Bis(2-chloroisopropyl)...	0.000		0	N.D.		
15) 2-Methylphenol	0.000		0	N.D.		
17) n-Nitrosodi-n-propylamine	0.000		0	N.D.	d	
18) 3-Methylphenol/4-Methy...	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.		
21) Isophorone	0.000		0	N.D.		
22) 2-Nitrophenol	0.000		0	N.D.		
23) 2,4-Dimethylphenol	0.000		0	N.D.		
24) Bis(2-chloroethoxy)met...	0.000		0	N.D.		
25) 2,4-Dichlorophenol	0.000		0	N.D.		
28) Benzaldehyde	0.000		0	N.D.		
29) Acetophenone	0.000		0	N.D.		
37) 4-Chloroaniline	0.000		0	N.D.		
39) p-Chloro-m-cresol	0.000		0	N.D.		
42) Hexachlorocyclopentadiene	0.000		0	N.D.		
43) 2,4,6-Trichlorophenol	0.000		0	N.D.		
44) 2,4,5-Trichlorophenol	0.000		0	N.D.		
47) 2-Nitroaniline	0.000		0	N.D.		
50) Dimethyl phthalate	0.000		0	N.D.	d	
52) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
59) Caprolactam	0.000		0	N.D.		
60) 1,2,4,5-Tetrachloroben...	0.000		0	N.D.		
61) Biphenyl	0.000		0	N.D.		
63) 3-Nitroaniline	0.000		0	N.D.		
65) 2,4-Dinitrophenol	0.000		0	N.D.		
66) Dibenzofuran	0.000		0	N.D.		
67) 2,4-Dinitrotoluene	0.000		0	N.D.	d	
68) 4-Nitrophenol	0.000		0	N.D.		
70) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
71) Diethyl phthalate	0.000		0	N.D.		
73) 4-Chlorophenyl phenyl ...	0.000		0	N.D.		
74) 4-Nitroaniline	0.000		0	N.D.		
75) 4,6-Dinitro-o-cresol	0.000		0	N.D.		

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-06.D
Acq On : 31 Aug 2023 3:16 pm
Operator : Dakota:jg
Sample : L2350269-06,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 12 11:53:05 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 15:35:01 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) NDPA/DPA	0.000		0		N.D.	
79) 4-Bromophenyl phenyl e...	0.000		0		N.D.	
86) Atrazine	0.000		0		N.D.	
90) Carbazole	0.000		0		N.D.	
91) Di-n-butylphthalate	0.000		0		N.D.	d
96) Butyl benzyl phthalate	0.000		0		N.D.	
105) 3,3'-Dichlorobenzidine	0.000		0		N.D.	
107) Bis(2-ethylhexyl)phtha...	0.000		0		N.D.	d
108) Di-n-octylphthalate	0.000		0		N.D.	d

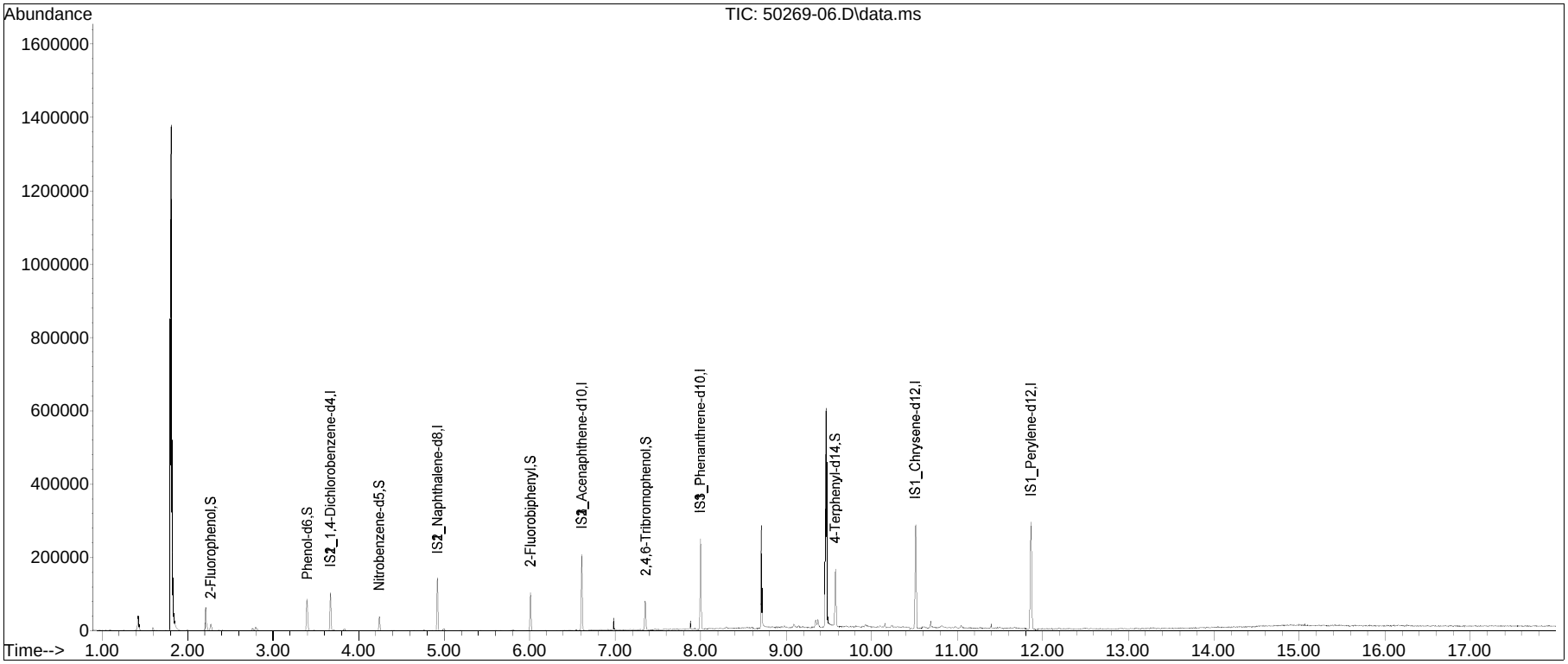
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-06.D
Acq On : 31 Aug 2023 3:16 pm
Operator : Dakota:jg
Sample : L2350269-06,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 12 11:53:05 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 15:35:01 2023
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MAP90831.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230831lvi\	QMethod	: FS230412LVIDakota.m
Data File	: 50269-06.D	Operator	: Dakota:jg
Date Inj'd	: 8/31/2023 3:16 pm	Instrument	: Dakota
Sample	: L2350269-06,32,,gmr	Quant Date	: 8/31/2023 3:35 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-07.D
Acq On : 31 Aug 2023 3:38 pm
Operator : Dakota:jg
Sample : L2350269-07,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 12 11:53:19 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 15:57:53 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.669	152	15442	4.000	ug/ml		0.00
Standard Area 1 = 14463			Recovery = 106.77%				
27) IS2_1,4-Dichlorobenzen...	3.669	152	15442	4.000	ug/ml		0.00
Standard Area 3 = 16508			Recovery = 93.54%				
34) IS1_Naphthalene-d8	4.924	136	55055	4.000	ug/ml	#	0.00
Standard Area 1 = 50867			Recovery = 108.23%				
54) IS2_Naphthalene-d8	4.924	136	55055	4.000	ug/ml	#	0.00
Standard Area 3 = 55735			Recovery = 98.78%				
62) IS1_Acenaphthene-d10	6.606	164	35675	4.000	ug/ml		0.00
Standard Area 1 = 33572			Recovery = 106.26%				
82) IS2_Acenaphthene-d10	6.606	164	35675	4.000	ug/ml		0.00
Standard Area 3 = 35012			Recovery = 101.89%				
85) IS3_Acenaphthene-d10	6.606	164	35675	4.000	ug/ml		0.00
Standard Area 2 = 37775			Recovery = 94.44%				
87) IS1_Phenanthrene-d10	7.998	188	84129	4.000	ug/ml		0.00
Standard Area 1 = 80682			Recovery = 104.27%				
99) IS3_Phenanthrene-d10	7.998	188	84129	4.000	ug/ml		0.00
Standard Area 2 = 96848			Recovery = 86.87%				
103) IS1_Chrysene-d12	10.507	240	92470	4.000	ug/ml		0.00
Standard Area 1 = 88271			Recovery = 104.76%				
112) IS1_Perylene-d12	11.862	264	117452	4.000	ug/ml		0.00
Standard Area 1 = 110283			Recovery = 106.50%				
System Monitoring Compounds							
4) 2-Fluorophenol	2.270	112	15108	3.789	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 75.78%				
7) Phenol-d6	3.395	99	16316	3.193	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 63.86%				
19) Nitrobenzene-d5	4.241	82	10267	2.096	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 83.84%				
45) 2-Fluorobiphenyl	6.009	172	25734	2.376	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 95.04%				
78) 2,4,6-Tribromophenol	7.358	330	12255	5.934	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 118.68%#				
95) 4-Terphenyl-d14	9.571	244	43656	2.123	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 84.92%				

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-07.D
Acq On : 31 Aug 2023 3:38 pm
Operator : Dakota:jg
Sample : L2350269-07,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 12 11:53:19 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 15:57:53 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Target Compounds						Qvalue
6) 2-Chlorophenol	0.000		0	N.D.		
8) Phenol	0.000		0	N.D.		
9) Bis(2-chloroethyl)ether	0.000		0	N.D.		
14) Bis(2-chloroisopropyl)...	0.000		0	N.D.		
15) 2-Methylphenol	0.000		0	N.D.		
17) n-Nitrosodi-n-propylamine	0.000		0	N.D.	d	
18) 3-Methylphenol/4-Methy...	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.		
21) Isophorone	0.000		0	N.D.		
22) 2-Nitrophenol	0.000		0	N.D.		
23) 2,4-Dimethylphenol	0.000		0	N.D.		
24) Bis(2-chloroethoxy)met...	0.000		0	N.D.		
25) 2,4-Dichlorophenol	0.000		0	N.D.		
28) Benzaldehyde	0.000		0	N.D.		
29) Acetophenone	0.000		0	N.D.		
37) 4-Chloroaniline	0.000		0	N.D.		
39) p-Chloro-m-cresol	0.000		0	N.D.		
42) Hexachlorocyclopentadiene	0.000		0	N.D.		
43) 2,4,6-Trichlorophenol	0.000		0	N.D.		
44) 2,4,5-Trichlorophenol	0.000		0	N.D.		
47) 2-Nitroaniline	0.000		0	N.D.		
50) Dimethyl phthalate	0.000		0	N.D.	d	
52) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
59) Caprolactam	0.000		0	N.D.		
60) 1,2,4,5-Tetrachloroben...	0.000		0	N.D.		
61) Biphenyl	0.000		0	N.D.		
63) 3-Nitroaniline	0.000		0	N.D.		
65) 2,4-Dinitrophenol	0.000		0	N.D.		
66) Dibenzofuran	0.000		0	N.D.		
67) 2,4-Dinitrotoluene	0.000		0	N.D.	d	
68) 4-Nitrophenol	0.000		0	N.D.		
70) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
71) Diethyl phthalate	0.000		0	N.D.		
73) 4-Chlorophenyl phenyl ...	0.000		0	N.D.		
74) 4-Nitroaniline	0.000		0	N.D.		
75) 4,6-Dinitro-o-cresol	0.000		0	N.D.		

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-07.D
Acq On : 31 Aug 2023 3:38 pm
Operator : Dakota:jg
Sample : L2350269-07,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 12 11:53:19 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 15:57:53 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) NDPA/DPA	0.000		0		N.D.	
79) 4-Bromophenyl phenyl e...	0.000		0		N.D.	
86) Atrazine	0.000		0		N.D.	
90) Carbazole	0.000		0		N.D.	
91) Di-n-butylphthalate	0.000		0		N.D.	
96) Butyl benzyl phthalate	0.000		0		N.D.	
105) 3,3'-Dichlorobenzidine	0.000		0		N.D.	
107) Bis(2-ethylhexyl)phtha...	0.000		0		N.D.	
108) Di-n-octylphthalate	0.000		0		N.D.	d

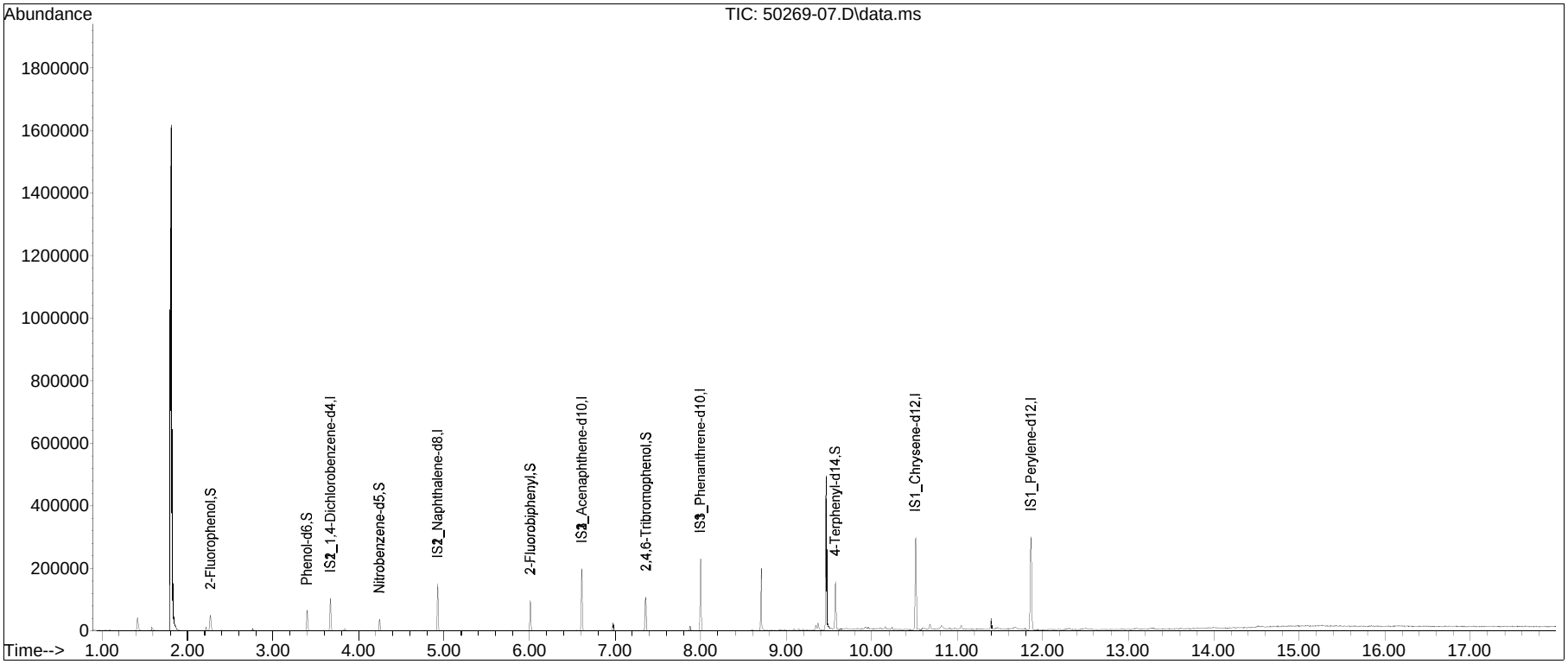
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-07.D
Acq On : 31 Aug 2023 3:38 pm
Operator : Dakota:jg
Sample : L2350269-07,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 12 11:53:19 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 15:57:53 2023
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MAP90831.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230831lvi\	QMethod	: FS230412LVIDakota.m
Data File	: 50269-07.D	Operator	: Dakota:jg
Date Inj'd	: 8/31/2023 3:38 pm	Instrument	: Dakota
Sample	: L2350269-07,32,,gmr	Quant Date	: 8/31/2023 3:57 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-08.D
Acq On : 31 Aug 2023 4:01 pm
Operator : Dakota:jg
Sample : L2350269-08,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 12 11:53:32 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 16:20:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.669	152	15750	4.000	ug/ml		0.00
Standard Area 1 = 14463			Recovery = 108.90%				
27) IS2_1,4-Dichlorobenzen...	3.669	152	15750	4.000	ug/ml		0.00
Standard Area 3 = 16508			Recovery = 95.41%				
34) IS1_Naphthalene-d8	4.927	136	55394	4.000	ug/ml	#	0.00
Standard Area 1 = 50867			Recovery = 108.90%				
54) IS2_Naphthalene-d8	4.927	136	55394	4.000	ug/ml	#	0.00
Standard Area 3 = 55735			Recovery = 99.39%				
62) IS1_Acenaphthene-d10	6.606	164	35387	4.000	ug/ml		0.00
Standard Area 1 = 33572			Recovery = 105.41%				
82) IS2_Acenaphthene-d10	6.606	164	35387	4.000	ug/ml		0.00
Standard Area 3 = 35012			Recovery = 101.07%				
85) IS3_Acenaphthene-d10	6.606	164	35387	4.000	ug/ml		0.00
Standard Area 2 = 37775			Recovery = 93.68%				
87) IS1_Phenanthrene-d10	7.998	188	81155	4.000	ug/ml		0.00
Standard Area 1 = 80682			Recovery = 100.59%				
99) IS3_Phenanthrene-d10	7.998	188	81155	4.000	ug/ml		0.00
Standard Area 2 = 96848			Recovery = 83.80%				
103) IS1_Chrysene-d12	10.507	240	88548	4.000	ug/ml		0.00
Standard Area 1 = 88271			Recovery = 100.31%				
112) IS1_Perylene-d12	11.862	264	115258	4.000	ug/ml		0.00
Standard Area 1 = 110283			Recovery = 104.51%				
System Monitoring Compounds							
4) 2-Fluorophenol	2.273	112	2945	0.724	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 14.48%#				
7) Phenol-d6	3.401	99	3791	0.727	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 14.54%#				
19) Nitrobenzene-d5	4.241	82	8242	1.650	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 66.00%				
45) 2-Fluorobiphenyl	6.009	172	22358	2.052	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 82.08%				
78) 2,4,6-Tribromophenol	7.358	330	6038	2.948	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 58.96%				
95) 4-Terphenyl-d14	9.571	244	41090	2.071	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 82.84%				

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-08.D
Acq On : 31 Aug 2023 4:01 pm
Operator : Dakota:jg
Sample : L2350269-08,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 12 11:53:32 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 16:20:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Target Compounds						Qvalue
6) 2-Chlorophenol	0.000		0	N.D.		
8) Phenol	0.000		0	N.D.		
9) Bis(2-chloroethyl)ether	0.000		0	N.D.		
14) Bis(2-chloroisopropyl)...	0.000		0	N.D.		
15) 2-Methylphenol	0.000		0	N.D.		
17) n-Nitrosodi-n-propylamine	0.000		0	N.D.	d	
18) 3-Methylphenol/4-Methy...	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.		
21) Isophorone	0.000		0	N.D.		
22) 2-Nitrophenol	0.000		0	N.D.		
23) 2,4-Dimethylphenol	0.000		0	N.D.		
24) Bis(2-chloroethoxy)met...	0.000		0	N.D.		
25) 2,4-Dichlorophenol	0.000		0	N.D.		
28) Benzaldehyde	0.000		0	N.D.		
29) Acetophenone	0.000		0	N.D.		
37) 4-Chloroaniline	0.000		0	N.D.		
39) p-Chloro-m-cresol	0.000		0	N.D.		
42) Hexachlorocyclopentadiene	0.000		0	N.D.		
43) 2,4,6-Trichlorophenol	0.000		0	N.D.		
44) 2,4,5-Trichlorophenol	0.000		0	N.D.		
47) 2-Nitroaniline	0.000		0	N.D.		
50) Dimethyl phthalate	0.000		0	N.D.	d	
52) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
59) Caprolactam	0.000		0	N.D.		
60) 1,2,4,5-Tetrachloroben...	0.000		0	N.D.		
61) Biphenyl	0.000		0	N.D.		
63) 3-Nitroaniline	0.000		0	N.D.		
65) 2,4-Dinitrophenol	0.000		0	N.D.		
66) Dibenzofuran	0.000		0	N.D.		
67) 2,4-Dinitrotoluene	0.000		0	N.D.	d	
68) 4-Nitrophenol	0.000		0	N.D.		
70) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
71) Diethyl phthalate	0.000		0	N.D.		
73) 4-Chlorophenyl phenyl ...	0.000		0	N.D.		
74) 4-Nitroaniline	0.000		0	N.D.		
75) 4,6-Dinitro-o-cresol	0.000		0	N.D.		

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-08.D
Acq On : 31 Aug 2023 4:01 pm
Operator : Dakota:jg
Sample : L2350269-08,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 12 11:53:32 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 16:20:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76)	NDPA/DPA	0.000		0	N.D.		
79)	4-Bromophenyl phenyl e...	0.000		0	N.D.		
86)	Atrazine	0.000		0	N.D.		
90)	Carbazole	0.000		0	N.D.		
91)	Di-n-butylphthalate	0.000		0	N.D.	d	
96)	Butyl benzyl phthalate	0.000		0	N.D.		
105)	3,3'-Dichlorobenzidine	0.000		0	N.D.		
107)	Bis(2-ethylhexyl)phtha...	0.000		0	N.D.		
108)	Di-n-octylphthalate	0.000		0	N.D.	d	

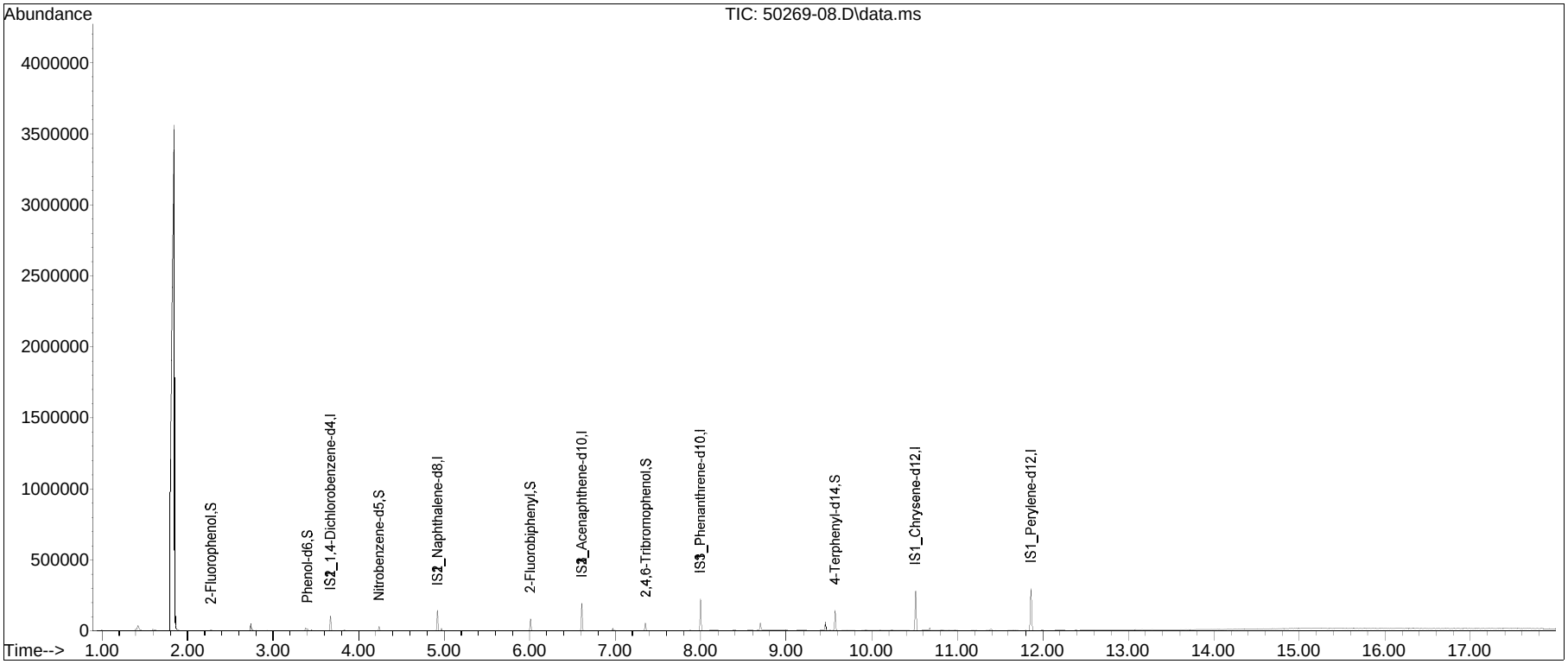
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-08.D
Acq On : 31 Aug 2023 4:01 pm
Operator : Dakota:jg
Sample : L2350269-08,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 12 11:53:32 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 16:20:12 2023
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MAP90831.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230831lvi\	QMethod	: FS230412LVIDakota.m
Data File	: 50269-08.D	Operator	: Dakota:jg
Date Inj'd	: 8/31/2023 4:01 pm	Instrument	: Dakota
Sample	: L2350269-08,32,,gmr	Quant Date	: 8/31/2023 4:20 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-09.D
Acq On : 31 Aug 2023 5:08 pm
Operator : Dakota:jg
Sample : L2350269-09,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 12 11:54:04 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 17:27:21 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.666	152	15178	4.000	ug/ml		0.00
Standard Area 1 = 14463			Recovery = 104.94%				
27) IS2_1,4-Dichlorobenzen...	3.666	152	15178	4.000	ug/ml		0.00
Standard Area 3 = 16508			Recovery = 91.94%				
34) IS1_Naphthalene-d8	4.924	136	58105	4.000	ug/ml	#	0.00
Standard Area 1 = 50867			Recovery = 114.23%				
54) IS2_Naphthalene-d8	4.924	136	58105	4.000	ug/ml	#	0.00
Standard Area 3 = 55735			Recovery = 104.25%				
62) IS1_Acenaphthene-d10	6.609	164	38771	4.000	ug/ml		0.00
Standard Area 1 = 33572			Recovery = 115.49%				
82) IS2_Acenaphthene-d10	6.609	164	38771	4.000	ug/ml		0.00
Standard Area 3 = 35012			Recovery = 110.74%				
85) IS3_Acenaphthene-d10	6.609	164	38771	4.000	ug/ml		0.00
Standard Area 2 = 37775			Recovery = 102.64%				
87) IS1_Phenanthrene-d10	7.998	188	96512	4.000	ug/ml		0.00
Standard Area 1 = 80682			Recovery = 119.62%				
99) IS3_Phenanthrene-d10	7.998	188	96512	4.000	ug/ml		0.00
Standard Area 2 = 96848			Recovery = 99.65%				
103) IS1_Chrysene-d12	10.507	240	95846	4.000	ug/ml		0.00
Standard Area 1 = 88271			Recovery = 108.58%				
112) IS1_Perylene-d12	11.865	264	105839	4.000	ug/ml		0.00
Standard Area 1 = 110283			Recovery = 95.97%				
System Monitoring Compounds							
4) 2-Fluorophenol	2.273	112	12047	3.074	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 61.48%				
7) Phenol-d6	3.401	99	13316	2.651	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 53.02%				
19) Nitrobenzene-d5	4.241	82	8218	1.707	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 68.28%				
45) 2-Fluorobiphenyl	6.009	172	22130	1.936	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 77.44%				
78) 2,4,6-Tribromophenol	7.358	330	11434	5.095	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 101.90%				
95) 4-Terphenyl-d14	9.571	244	36650	1.554	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 62.16%				

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-09.D
Acq On : 31 Aug 2023 5:08 pm
Operator : Dakota:jg
Sample : L2350269-09,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 12 11:54:04 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 17:27:21 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Target Compounds						Qvalue
6) 2-Chlorophenol	0.000		0	N.D.		
8) Phenol	3.417	94	1480	0.253	ug/ml#	38
9) Bis(2-chloroethyl)ether	0.000		0	N.D.		
14) Bis(2-chloroisopropyl)...	0.000		0	N.D.	d	
15) 2-Methylphenol	0.000		0	N.D.		
17) n-Nitrosodi-n-propylamine	0.000		0	N.D.	d	
18) 3-Methylphenol/4-Methy...	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.		
21) Isophorone	0.000		0	N.D.		
22) 2-Nitrophenol	0.000		0	N.D.		
23) 2,4-Dimethylphenol	0.000		0	N.D.		
24) Bis(2-chloroethoxy)met...	0.000		0	N.D.		
25) 2,4-Dichlorophenol	0.000		0	N.D.		
28) Benzaldehyde	0.000		0	N.D.		
29) Acetophenone	0.000		0	N.D.		
37) 4-Chloroaniline	0.000		0	N.D.		
39) p-Chloro-m-cresol	0.000		0	N.D.		
42) Hexachlorocyclopentadiene	0.000		0	N.D.		
43) 2,4,6-Trichlorophenol	0.000		0	N.D.		
44) 2,4,5-Trichlorophenol	0.000		0	N.D.		
47) 2-Nitroaniline	0.000		0	N.D.		
50) Dimethyl phthalate	0.000		0	N.D.	d	
52) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
59) Caprolactam	0.000		0	N.D.		
60) 1,2,4,5-Tetrachloroben...	0.000		0	N.D.		
61) Biphenyl	0.000		0	N.D.		
63) 3-Nitroaniline	0.000		0	N.D.		
65) 2,4-Dinitrophenol	0.000		0	N.D.		
66) Dibenzofuran	0.000		0	N.D.		
67) 2,4-Dinitrotoluene	0.000		0	N.D.	d	
68) 4-Nitrophenol	0.000		0	N.D.		
70) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
71) Diethyl phthalate	0.000		0	N.D.	d	
73) 4-Chlorophenyl phenyl ...	0.000		0	N.D.		
74) 4-Nitroaniline	0.000		0	N.D.		
75) 4,6-Dinitro-o-cresol	0.000		0	N.D.		

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-09.D
Acq On : 31 Aug 2023 5:08 pm
Operator : Dakota:jg
Sample : L2350269-09,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 12 11:54:04 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 17:27:21 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) NDPA/DPA	0.000		0	N.D.	d	
79) 4-Bromophenyl phenyl e...	0.000		0	N.D.		
86) Atrazine	0.000		0	N.D.		
90) Carbazole	0.000		0	N.D.	d	
91) Di-n-butylphthalate	0.000		0	N.D.	d	
96) Butyl benzyl phthalate	0.000		0	N.D.	d	
105) 3,3'-Dichlorobenzidine	0.000		0	N.D.	d	
107) Bis(2-ethylhexyl)phtha...	0.000		0	N.D.	d	
108) Di-n-octylphthalate	0.000		0	N.D.	d	

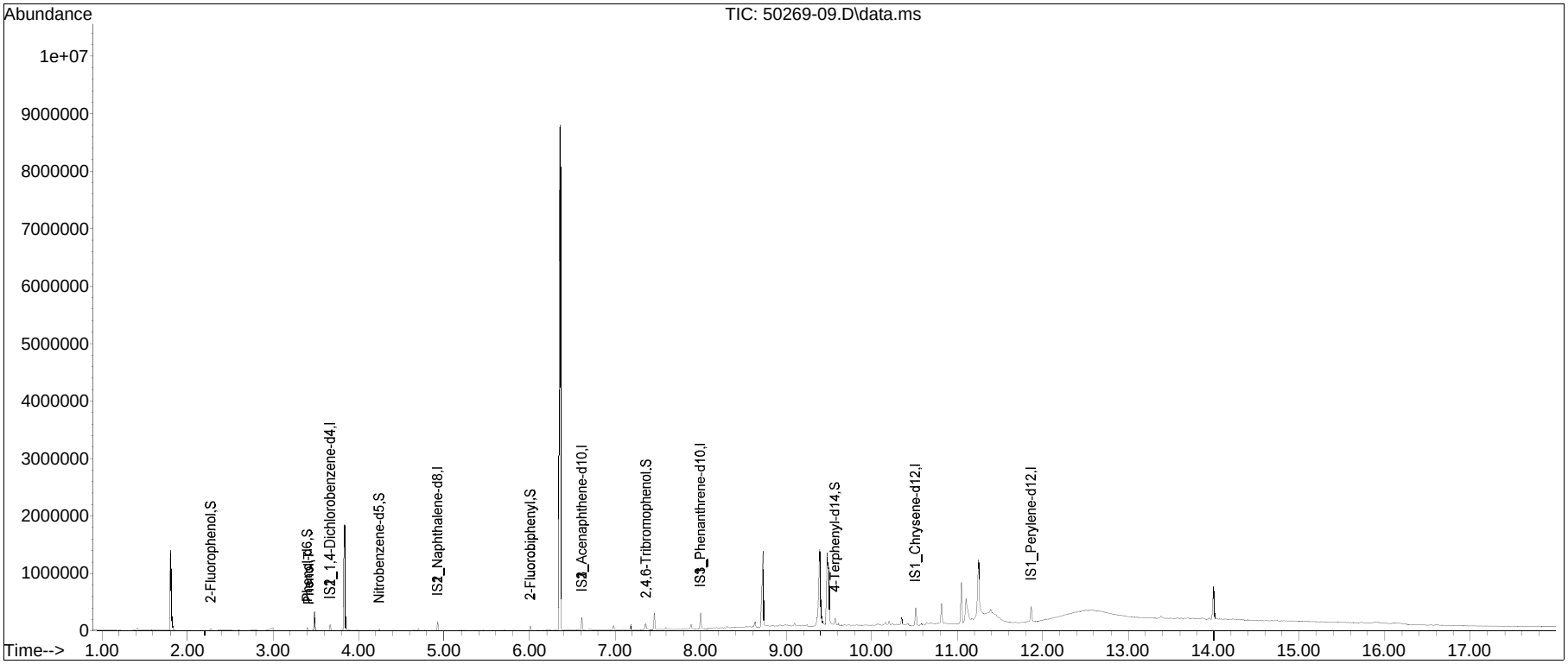
(#) = qualifier out of range (m) = manual integration (+) = signals summed

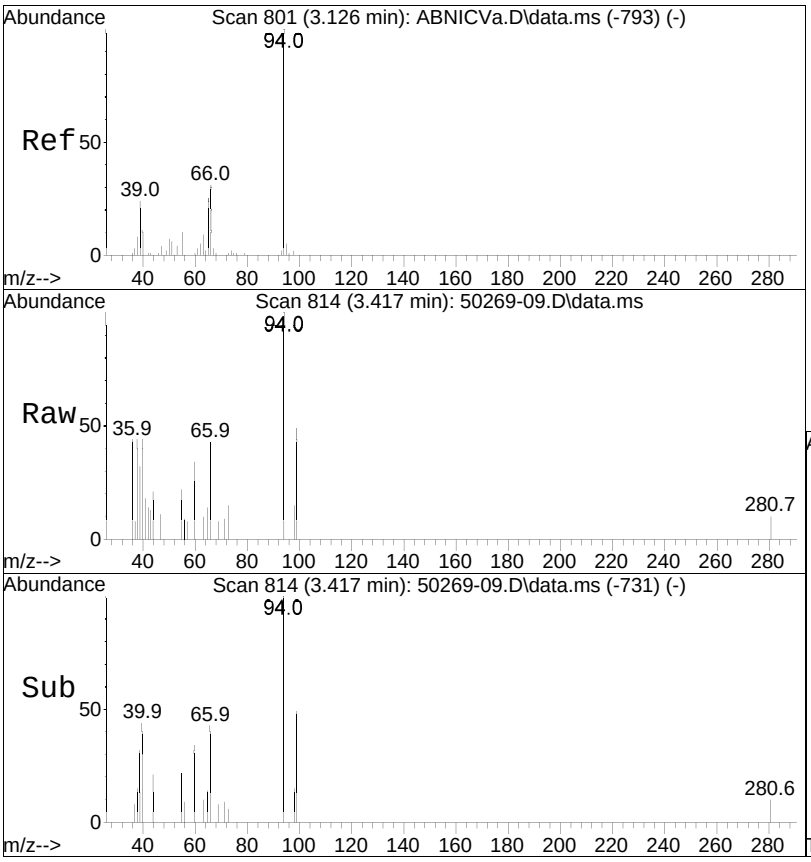
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 50269-09.D
Acq On : 31 Aug 2023 5:08 pm
Operator : Dakota:jg
Sample : L2350269-09,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 12 11:54:04 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 17:27:21 2023
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MAP90831.D•

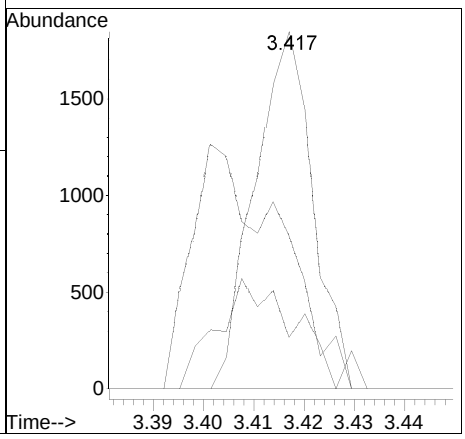




#8
Phenol
Concen: 0.25 ug/ml
RT: 3.417 min Scan# 814
Delta R.T. 0.009 min
Lab File: 50269-09.D
Acq: 31 Aug 2023 5:08 pm

Tgt Ion: 94 Resp: 1480

Ion	Ratio	Lower	Upper
94	100		
65	42.8	26.0	39.0#
66	103.4	33.8	50.8#



Manual Integration Report

Data Path	: I:\8270\Dakota\230831lvi\	QMethod	: FS230412LVIDakota.m
Data File	: 50269-09.D	Operator	: Dakota:jg
Date Inj'd	: 8/31/2023 5:08 pm	Instrument	: Dakota
Sample	: L2350269-09,32,,gmr	Quant Date	: 8/31/2023 5:27 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230901lvi\
Data File : 50269-01.D
Acq On : 1 Sep 2023 1:45 pm
Operator : Dakota:jg
Sample : L2350269-01,32,,gmr
Misc : WG1822785,WG1822188,ical19934
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 12 14:50:49 2023
Quant Method : I:\8270\dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 18:10:01 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230901lvi\ABN0901.D
: 2 - I:\8270\dakota\230901lvi\ADP0901.D
: 3 - I:\8270\dakota\230901lvi\AP90901.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.650	152	16788	4.000	ug/ml		0.00
Standard Area 1 = 15428			Recovery = 108.82%				
27) IS2_1,4-Dichlorobenzen...	3.650	152	16788	4.000	ug/ml		0.00
Standard Area 3 = 18596			Recovery = 90.28%				
34) IS1_Naphthalene-d8	4.909	136	56859	4.000	ug/ml	#	0.00
Standard Area 1 = 54627			Recovery = 104.09%				
54) IS2_Naphthalene-d8	4.909	136	56859	4.000	ug/ml	#	0.00
Standard Area 3 = 66803			Recovery = 85.11%				
62) IS1_Acenaphthene-d10	6.587	164	35865	4.000	ug/ml		0.00
Standard Area 1 = 36931			Recovery = 97.11%				
82) IS2_Acenaphthene-d10	6.587	164	35865	4.000	ug/ml		0.00
Standard Area 3 = 43020			Recovery = 83.37%				
85) IS3_Acenaphthene-d10	6.587	164	35865	4.000	ug/ml		0.00
Standard Area 2 = 36794			Recovery = 97.48%				
87) IS1_Phenanthrene-d10	7.980	188	81387	4.000	ug/ml	#	0.00
Standard Area 1 = 86683			Recovery = 93.89%				
99) IS3_Phenanthrene-d10	7.980	188	81387	4.000	ug/ml	#	0.00
Standard Area 2 = 90565			Recovery = 89.87%				
103) IS1_Chrysene-d12	10.482	240	81883	4.000	ug/ml		0.00
Standard Area 1 = 95165			Recovery = 86.04%				
112) IS1_Perylene-d12	11.834	264	105526	4.000	ug/ml		0.00
Standard Area 1 = 119587			Recovery = 88.24%				
System Monitoring Compounds							
4) 2-Fluorophenol	2.254	112	13183	3.041	ug/ml		0.01
Spiked Amount 5.000	Range 15 - 110		Recovery = 60.82%				
7) Phenol-d6	3.383	99	13386	2.410	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 48.20%				
19) Nitrobenzene-d5	4.225	82	9466	1.778	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 71.12%				
45) 2-Fluorobiphenyl	5.990	172	23368	2.089	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 83.56%				
78) 2,4,6-Tribromophenol	7.336	330	10436	5.027	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 100.54%				
95) 4-Terphenyl-d14	9.549	244	34883	1.753	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 70.12%				

Data Path : I:\8270\Dakota\230901lvi\
Data File : 50269-01.D
Acq On : 1 Sep 2023 1:45 pm
Operator : Dakota:jg
Sample : L2350269-01,32,,gmr
Misc : WG1822785,WG1822188,ical19934
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 12 14:50:49 2023
Quant Method : I:\8270\dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 18:10:01 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230901lvi\ABN0901.D
: 2 - I:\8270\dakota\230901lvi\ADP0901.D
: 3 - I:\8270\dakota\230901lvi\AP90901.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Target Compounds						Qvalue
6) 2-Chlorophenol	0.000		0	N.D.		
8) Phenol	3.395	94	1366	0.212	ug/ml#	32
9) Bis(2-chloroethyl)ether	0.000		0	N.D.		
14) Bis(2-chloroisopropyl)...	0.000		0	N.D.		
15) 2-Methylphenol	0.000		0	N.D.		
17) n-Nitrosodi-n-propylamine	0.000		0	N.D.	d	
18) 3-Methylphenol/4-Methy...	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.		
21) Isophorone	0.000		0	N.D.		
22) 2-Nitrophenol	0.000		0	N.D.		
23) 2,4-Dimethylphenol	0.000		0	N.D.		
24) Bis(2-chloroethoxy)met...	0.000		0	N.D.		
25) 2,4-Dichlorophenol	0.000		0	N.D.		
28) Benzaldehyde	0.000		0	N.D.		
29) Acetophenone	0.000		0	N.D.		
37) 4-Chloroaniline	0.000		0	N.D.		
39) p-Chloro-m-cresol	0.000		0	N.D.		
42) Hexachlorocyclopentadiene	0.000		0	N.D.		
43) 2,4,6-Trichlorophenol	0.000		0	N.D.		
44) 2,4,5-Trichlorophenol	0.000		0	N.D.		
47) 2-Nitroaniline	0.000		0	N.D.		
50) Dimethyl phthalate	0.000		0	N.D.	d	
52) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
59) Caprolactam	0.000		0	N.D.		
60) 1,2,4,5-Tetrachloroben...	0.000		0	N.D.		
61) Biphenyl	0.000		0	N.D.		
63) 3-Nitroaniline	0.000		0	N.D.		
65) 2,4-Dinitrophenol	0.000		0	N.D.		
66) Dibenzofuran	0.000		0	N.D.		
67) 2,4-Dinitrotoluene	0.000		0	N.D.	d	
68) 4-Nitrophenol	0.000		0	N.D.		
70) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
71) Diethyl phthalate	0.000		0	N.D.	d	
73) 4-Chlorophenyl phenyl ...	0.000		0	N.D.		
74) 4-Nitroaniline	0.000		0	N.D.		
75) 4,6-Dinitro-o-cresol	0.000		0	N.D.		

Data Path : I:\8270\Dakota\230901lvi\
Data File : 50269-01.D
Acq On : 1 Sep 2023 1:45 pm
Operator : Dakota:jg
Sample : L2350269-01,32,,gmr
Misc : WG1822785,WG1822188,ical19934
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 12 14:50:49 2023
Quant Method : I:\8270\dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 18:10:01 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230901lvi\ABN0901.D
: 2 - I:\8270\dakota\230901lvi\ADP0901.D
: 3 - I:\8270\dakota\230901lvi\AP90901.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) NDPA/DPA	0.000		0	N.D.	d	
79) 4-Bromophenyl phenyl e...	0.000		0	N.D.		
86) Atrazine	0.000		0	N.D.		
90) Carbazole	0.000		0	N.D.	d	
91) Di-n-butylphthalate	0.000		0	N.D.	d	
96) Butyl benzyl phthalate	0.000		0	N.D.	d	
105) 3,3'-Dichlorobenzidine	0.000		0	N.D.		
107) Bis(2-ethylhexyl)phtha...	0.000		0	N.D.	d	
108) Di-n-octylphthalate	0.000		0	N.D.	d	

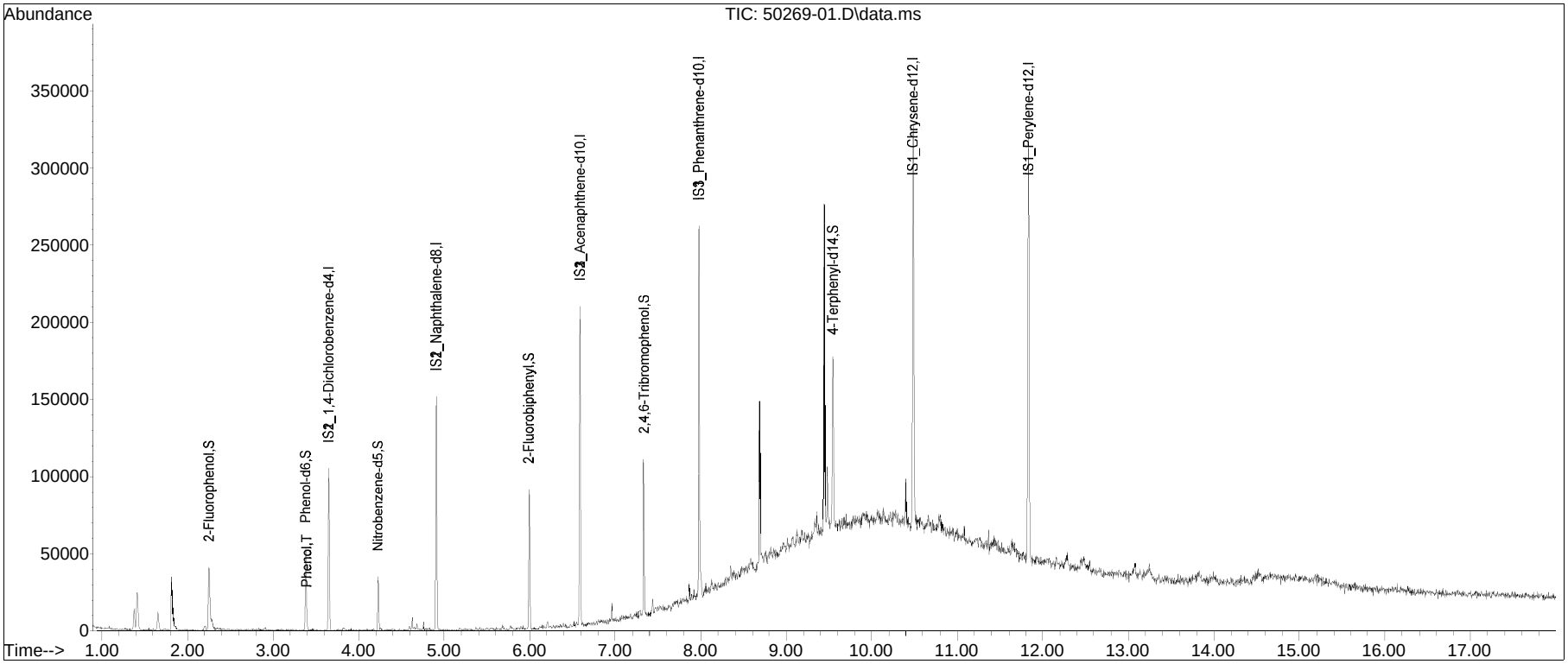
(#) = qualifier out of range (m) = manual integration (+) = signals summed

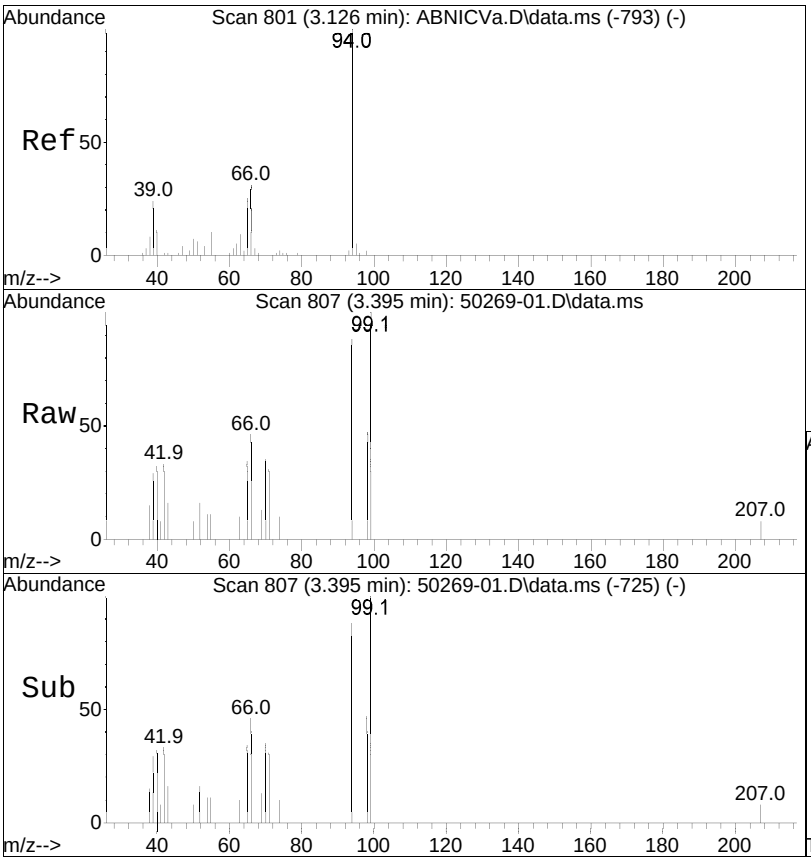
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230901lvi\
Data File : 50269-01.D
Acq On : 1 Sep 2023 1:45 pm
Operator : Dakota:jg
Sample : L2350269-01,32,,gmr
Misc : WG1822785,WG1822188,ical19934
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 12 14:50:49 2023
Quant Method : I:\8270\dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 18:10:01 2023
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MAP90901.D•

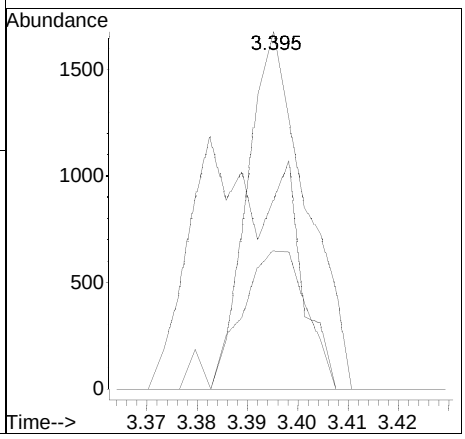




#8
Phenol
Concen: 0.21 ug/ml
RT: 3.395 min Scan# 807
Delta R.T. 0.006 min
Lab File: 50269-01.D
Acq: 1 Sep 2023 1:45 pm

Tgt Ion: 94 Resp: 1366

Ion	Ratio	Lower	Upper
94	100		
65	44.5	26.0	39.0#
66	108.1	33.8	50.8#



Manual Integration Report

Data Path	: I:\8270\Dakota\230901lvi\	QMethod	: FS230412LVIDakota.m
Data File	: 50269-01.D	Operator	: Dakota:jg
Date Inj'd	: 9/1/2023 1:45 pm	Instrument	: Dakota
Sample	: L2350269-01,32,,gmr	Quant Date	: 9/5/2023 2:44 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230905lvi\
Data File : 50269-05.D
Acq On : 6 Sep 2023 6:36 am
Operator : SV106:jg
Sample : L2350269-05,32,,ASK
Misc : WG1823865,WG1822188,ical20337
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 12 14:14:45 2023
Quant Method : I:\8270\sv106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 06:56:53 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\sv106\230905lvi\ABN0905.D
: 2 - I:\8270\sv106\230905lvi\ADP0905.D
: 3 - I:\8270\sv106\230905lvi\AP90905a.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS1_1,4-Dichlorobenzen...	6.281	152	45567	4.000	ug/ml	0.00
Standard Area 1 = 42087			Recovery = 108.27%			
27) IS2_1,4-Dichlorobenzen...	6.281	152	45567	4.000	ug/ml	0.00
Standard Area 3 = 39853			Recovery = 114.34%			
34) IS1_Naphthalene-d8	7.716	136	181815	4.000	ug/ml	0.00
Standard Area 1 = 153350			Recovery = 118.56%			
54) IS2_Naphthalene-d8	7.716	136	181815	4.000	ug/ml	0.00
Standard Area 3 = 150081			Recovery = 121.14%			
62) IS1_Acenaphthene-d10	9.475	164	100792	4.000	ug/ml	0.00
Standard Area 1 = 85310			Recovery = 118.15%			
82) IS2_Acenaphthene-d10	9.475	164	100792	4.000	ug/ml	0.00
Standard Area 3 = 81052			Recovery = 124.35%			
85) IS3_Acenaphthene-d10	9.475	164	100792	4.000	ug/ml	0.00
Standard Area 2 = 81272			Recovery = 124.02%			
87) IS1_Phenanthrene-d10	10.904	188	208258	4.000	ug/ml	0.00
Standard Area 1 = 160190			Recovery = 130.01%			
99) IS3_Phenanthrene-d10	10.904	188	208258	4.000	ug/ml	0.00
Standard Area 2 = 162279			Recovery = 128.33%			
103) IS1_Chrysene-d12	13.522	240	183924	4.000	ug/ml	0.00
Standard Area 1 = 145804			Recovery = 126.14%			
112) IS1_Perylene-d12	14.974	264	205273	4.000	ug/ml	0.00
Standard Area 1 = 162944			Recovery = 125.98%			
System Monitoring Compounds						
4) 2-Fluorophenol	4.252	112	40997	3.226	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 64.52%			
7) Phenol-d6	5.916	99	45041	2.751	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 55.02%			
19) Nitrobenzene-d5	6.945	82	27927	1.881	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 75.24%			
45) 2-Fluorobiphenyl	8.839	172	62207	1.792	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 71.68%			
78) 2,4,6-Tribromophenol	10.239	330	16415	3.549	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 70.98%			
95) 4-Terphenyl-d14	12.486	244	83534	1.829	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 73.16%			

Data Path : I:\8270\SV106\230905lvi\
Data File : 50269-05.D
Acq On : 6 Sep 2023 6:36 am
Operator : SV106:jg
Sample : L2350269-05,32,,ASK
Misc : WG1823865,WG1822188,ical20337
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 12 14:14:45 2023
Quant Method : I:\8270\sv106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 06:56:53 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\sv106\230905lvi\ABN0905.D
: 2 - I:\8270\sv106\230905lvi\ADP0905.D
: 3 - I:\8270\sv106\230905lvi\AP90905a.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Target Compounds						Qvalue
6) 2-Chlorophenol	0.000		0	N.D.		
8) Phenol	0.000		0	N.D.		
9) Bis(2-chloroethyl)ether	0.000		0	N.D.		
14) Bis(2-chloroisopropyl)...	0.000		0	N.D.		
15) 2-Methylphenol	0.000		0	N.D.		
17) n-Nitrosodi-n-propylamine	0.000		0	N.D.	d	
18) 3-Methylphenol/4-Methy...	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.		
21) Isophorone	0.000		0	N.D.		
22) 2-Nitrophenol	0.000		0	N.D.		
23) 2,4-Dimethylphenol	0.000		0	N.D.		
24) Bis(2-chloroethoxy)met...	0.000		0	N.D.		
25) 2,4-Dichlorophenol	0.000		0	N.D.		
28) Benzaldehyde	0.000		0	N.D.		
29) Acetophenone	0.000		0	N.D.		
37) 4-Chloroaniline	0.000		0	N.D.		
39) p-Chloro-m-cresol	0.000		0	N.D.		
42) Hexachlorocyclopentadiene	0.000		0	N.D.		
43) 2,4,6-Trichlorophenol	0.000		0	N.D.		
44) 2,4,5-Trichlorophenol	0.000		0	N.D.		
47) 2-Nitroaniline	0.000		0	N.D.		
50) Dimethyl phthalate	0.000		0	N.D.	d	
52) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
59) Caprolactam	0.000		0	N.D.	d	
60) 1,2,4,5-Tetrachloroben...	0.000		0	N.D.		
61) Biphenyl	0.000		0	N.D.		
63) 3-Nitroaniline	0.000		0	N.D.		
65) 2,4-Dinitrophenol	0.000		0	N.D.		
66) Dibenzofuran	0.000		0	N.D.		
67) 2,4-Dinitrotoluene	0.000		0	N.D.	d	
68) 4-Nitrophenol	0.000		0	N.D.		
70) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
71) Diethyl phthalate	0.000		0	N.D.		
73) 4-Chlorophenyl phenyl ...	0.000		0	N.D.		
74) 4-Nitroaniline	0.000		0	N.D.		
75) 4,6-Dinitro-o-cresol	0.000		0	N.D.		

Data Path : I:\8270\SV106\230905lvi\
Data File : 50269-05.D
Acq On : 6 Sep 2023 6:36 am
Operator : SV106:jg
Sample : L2350269-05,32,,ASK
Misc : WG1823865,WG1822188,ical20337
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 12 14:14:45 2023
Quant Method : I:\8270\sv106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 06:56:53 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\sv106\230905lvi\ABN0905.D
: 2 - I:\8270\sv106\230905lvi\ADP0905.D
: 3 - I:\8270\sv106\230905lvi\AP90905a.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76) NDPA/DPA	0.000		0	N.D.	d	
79) 4-Bromophenyl phenyl e...	0.000		0	N.D.		
86) Atrazine	0.000		0	N.D.		
90) Carbazole	0.000		0	N.D.		
91) Di-n-butylphthalate	0.000		0	N.D.	d	
96) Butyl benzyl phthalate	0.000		0	N.D.		
105) 3,3'-Dichlorobenzidine	0.000		0	N.D.		
107) Bis(2-ethylhexyl)phtha...	0.000		0	N.D.	d	
108) Di-n-octylphthalate	0.000		0	N.D.	d	

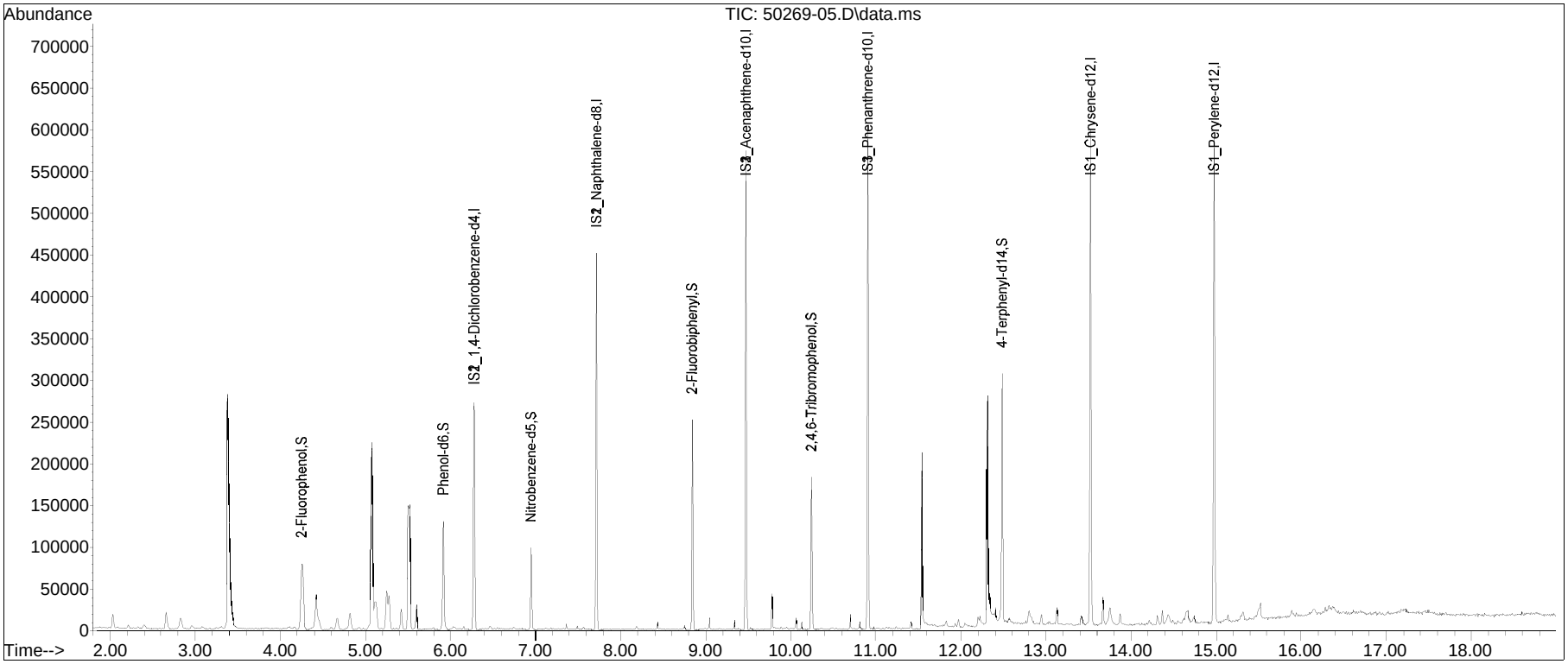
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230905lvi\
Data File : 50269-05.D
Acq On : 6 Sep 2023 6:36 am
Operator : SV106:jg
Sample : L2350269-05,32,,ASK
Misc : WG1823865,WG1822188,ical20337
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 12 14:14:45 2023
Quant Method : I:\8270\sv106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 06:56:53 2023
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MA90905a.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230905lvi\	QMethod	: FS230902SV106.m
Data File	: 50269-05.D	Operator	: SV106:jg
Date Inj'd	: 9/6/2023 6:36 am	Instrument	: SV 106
Sample	: L2350269-05,32,,ASK	Quant Date	: 9/6/2023 6:56 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230905lvi\
Data File : 50269-04.D
Acq On : 6 Sep 2023 7:00 am
Operator : SV106:jg
Sample : L2350269-04,32,,ASK
Misc : WG1823865,WG1822188,ical20337
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 12 14:14:17 2023
Quant Method : I:\8270\sv106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 07:31:08 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\sv106\230905lvi\ABN0905.D
: 2 - I:\8270\sv106\230905lvi\ADP0905.D
: 3 - I:\8270\sv106\230905lvi\AP90905a.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	6.281	152	47595	4.000	ug/ml		0.00
Standard Area 1 = 42087			Recovery = 113.09%				
27) IS2_1,4-Dichlorobenzen...	6.281	152	47595	4.000	ug/ml		0.00
Standard Area 3 = 39853			Recovery = 119.43%				
34) IS1_Naphthalene-d8	7.716	136	185962	4.000	ug/ml		0.00
Standard Area 1 = 153350			Recovery = 121.27%				
54) IS2_Naphthalene-d8	7.716	136	185962	4.000	ug/ml		0.00
Standard Area 3 = 150081			Recovery = 123.91%				
62) IS1_Acenaphthene-d10	9.475	164	103046	4.000	ug/ml		0.00
Standard Area 1 = 85310			Recovery = 120.79%				
82) IS2_Acenaphthene-d10	9.475	164	103046	4.000	ug/ml		0.00
Standard Area 3 = 81052			Recovery = 127.14%				
85) IS3_Acenaphthene-d10	9.475	164	103046	4.000	ug/ml		0.00
Standard Area 2 = 81272			Recovery = 126.79%				
87) IS1_Phenanthrene-d10	10.904	188	206177	4.000	ug/ml	#	0.00
Standard Area 1 = 160190			Recovery = 128.71%				
99) IS3_Phenanthrene-d10	10.904	188	206177	4.000	ug/ml	#	0.00
Standard Area 2 = 162279			Recovery = 127.05%				
103) IS1_Chrysene-d12	13.521	240	184671	4.000	ug/ml		0.00
Standard Area 1 = 145804			Recovery = 126.66%				
112) IS1_Perylene-d12	14.968	264	212761	4.000	ug/ml		0.00
Standard Area 1 = 162944			Recovery = 130.57%				
System Monitoring Compounds							
4) 2-Fluorophenol	4.257	112	39015	2.939	ug/ml		0.01
Spiked Amount 5.000	Range 15 - 110		Recovery = 58.78%				
7) Phenol-d6	5.916	99	40127	2.347	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 46.94%				
19) Nitrobenzene-d5	6.945	82	24896	1.606	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 64.24%				
45) 2-Fluorobiphenyl	8.839	172	56789	1.600	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 64.00%				
78) 2,4,6-Tribromophenol	10.239	330	15995	3.383	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 67.66%				
95) 4-Terphenyl-d14	12.486	244	71468	1.580	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 63.20%				

Data Path : I:\8270\SV106\230905lvi\
Data File : 50269-04.D
Acq On : 6 Sep 2023 7:00 am
Operator : SV106:jg
Sample : L2350269-04,32,,ASK
Misc : WG1823865,WG1822188,ical20337
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 12 14:14:17 2023
Quant Method : I:\8270\sv106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 07:31:08 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\sv106\230905lvi\ABN0905.D
: 2 - I:\8270\sv106\230905lvi\ADP0905.D
: 3 - I:\8270\sv106\230905lvi\AP90905a.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Target Compounds						Qvalue
6) 2-Chlorophenol	0.000		0	N.D.		
8) Phenol	0.000		0	N.D.		
9) Bis(2-chloroethyl)ether	0.000		0	N.D.		
14) Bis(2-chloroisopropyl)...	0.000		0	N.D.		
15) 2-Methylphenol	0.000		0	N.D.		
17) n-Nitrosodi-n-propylamine	0.000		0	N.D.	d	
18) 3-Methylphenol/4-Methy...	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.		
21) Isophorone	0.000		0	N.D.		
22) 2-Nitrophenol	0.000		0	N.D.		
23) 2,4-Dimethylphenol	0.000		0	N.D.		
24) Bis(2-chloroethoxy)met...	0.000		0	N.D.		
25) 2,4-Dichlorophenol	0.000		0	N.D.		
28) Benzaldehyde	0.000		0	N.D.		
29) Acetophenone	0.000		0	N.D.		
37) 4-Chloroaniline	0.000		0	N.D.		
39) p-Chloro-m-cresol	0.000		0	N.D.		
42) Hexachlorocyclopentadiene	0.000		0	N.D.		
43) 2,4,6-Trichlorophenol	0.000		0	N.D.		
44) 2,4,5-Trichlorophenol	0.000		0	N.D.		
47) 2-Nitroaniline	0.000		0	N.D.		
50) Dimethyl phthalate	0.000		0	N.D.	d	
52) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
59) Caprolactam	0.000		0	N.D.	d	
60) 1,2,4,5-Tetrachloroben...	0.000		0	N.D.		
61) Biphenyl	0.000		0	N.D.		
63) 3-Nitroaniline	0.000		0	N.D.		
65) 2,4-Dinitrophenol	0.000		0	N.D.		
66) Dibenzofuran	0.000		0	N.D.		
67) 2,4-Dinitrotoluene	0.000		0	N.D.	d	
68) 4-Nitrophenol	0.000		0	N.D.	d	
70) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
71) Diethyl phthalate	0.000		0	N.D.		
73) 4-Chlorophenyl phenyl ...	0.000		0	N.D.		
74) 4-Nitroaniline	0.000		0	N.D.		
75) 4,6-Dinitro-o-cresol	0.000		0	N.D.		

Data Path : I:\8270\SV106\230905lvi\
Data File : 50269-04.D
Acq On : 6 Sep 2023 7:00 am
Operator : SV106:jg
Sample : L2350269-04,32,,ASK
Misc : WG1823865,WG1822188,ical20337
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 12 14:14:17 2023
Quant Method : I:\8270\sv106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 07:31:08 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\sv106\230905lvi\ABN0905.D
: 2 - I:\8270\sv106\230905lvi\ADP0905.D
: 3 - I:\8270\sv106\230905lvi\AP90905a.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76)	NDPA/DPA	0.000		0	N.D.	d	
79)	4-Bromophenyl phenyl e...	0.000		0	N.D.		
86)	Atrazine	0.000		0	N.D.		
90)	Carbazole	0.000		0	N.D.		
91)	Di-n-butylphthalate	0.000		0	N.D.	d	
96)	Butyl benzyl phthalate	0.000		0	N.D.		
105)	3,3'-Dichlorobenzidine	0.000		0	N.D.		
107)	Bis(2-ethylhexyl)phtha...	0.000		0	N.D.	d	
108)	Di-n-octylphthalate	0.000		0	N.D.	d	

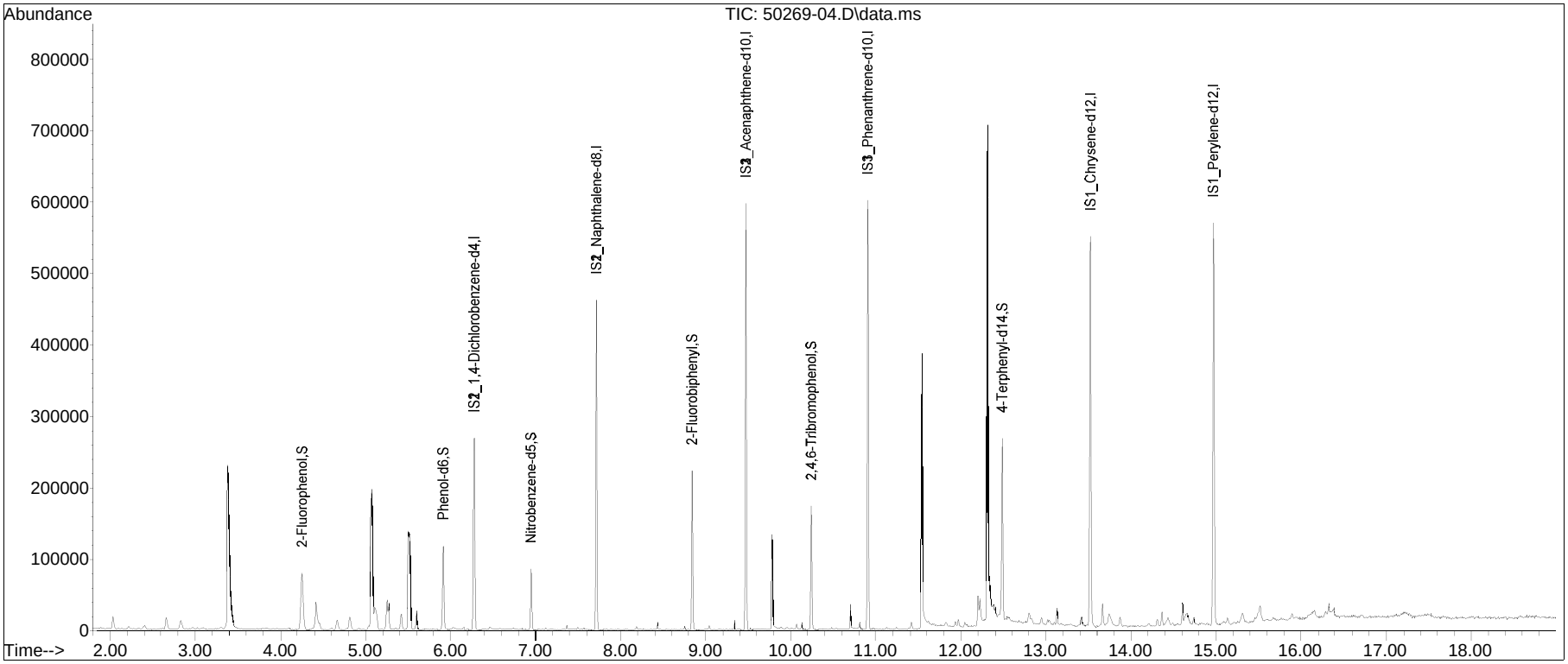
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230905lvi\
Data File : 50269-04.D
Acq On : 6 Sep 2023 7:00 am
Operator : SV106:jg
Sample : L2350269-04,32,,ASK
Misc : WG1823865,WG1822188,ical20337
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 12 14:14:17 2023
Quant Method : I:\8270\sv106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 07:31:08 2023
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MA90905a.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230905lvi\	QMethod	: FS230902SV106.m
Data File	: 50269-04.D	Operator	: SV106:jg
Date Inj'd	: 9/6/2023 7:00 am	Instrument	: SV 106
Sample	: L2350269-04,32,,ASK	Quant Date	: 9/6/2023 7:31 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230906lvi\
Data File : 50269-11.D
Acq On : 6 Sep 2023 5:22 pm
Operator : Dakota:sz
Sample : L2350269-11,32,,gmr
Misc : WG1824168,WG1823488,ical19934
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 13 09:57:09 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 17:41:21 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230906lvi\ABN0906.D
: 2 - I:\8270\dakota\230906lvi\ADP0906.D
: 3 - I:\8270\dakota\230906lvi\AP90906.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.453	152	16002	4.000	ug/ml		0.00
Standard Area 1 = 16731			Recovery = 95.64%				
27) IS2_1,4-Dichlorobenzen...	3.453	152	16002	4.000	ug/ml		0.00
Standard Area 3 = 15278			Recovery = 104.74%				
34) IS1_Naphthalene-d8	4.722	136	53236	4.000	ug/ml	#	0.00
Standard Area 1 = 58788			Recovery = 90.56%				
54) IS2_Naphthalene-d8	4.722	136	53236	4.000	ug/ml	#	0.00
Standard Area 3 = 54182			Recovery = 98.25%				
62) IS1_Acenaphthene-d10	6.397	164	34299	4.000	ug/ml		0.00
Standard Area 1 = 38225			Recovery = 89.73%				
82) IS2_Acenaphthene-d10	6.397	164	34299	4.000	ug/ml		0.00
Standard Area 3 = 36903			Recovery = 92.94%				
85) IS3_Acenaphthene-d10	6.397	164	34299	4.000	ug/ml		0.00
Standard Area 2 = 37358			Recovery = 91.81%				
87) IS1_Phenanthrene-d10	7.780	188	79987	4.000	ug/ml		0.00
Standard Area 1 = 88761			Recovery = 90.12%				
99) IS3_Phenanthrene-d10	7.780	188	79987	4.000	ug/ml		0.00
Standard Area 2 = 92849			Recovery = 86.15%				
103) IS1_Chrysene-d12	10.269	240	78544	4.000	ug/ml		0.00
Standard Area 1 = 93649			Recovery = 83.87%				
112) IS1_Perylene-d12	11.594	264	95082	4.000	ug/ml		0.00
Standard Area 1 = 114119			Recovery = 83.32%				
System Monitoring Compounds							
4) 2-Fluorophenol	1.980	112	12175	2.947	ug/ml		0.02
Spiked Amount 5.000	Range 15 - 110		Recovery = 58.94%				
7) Phenol-d6	3.199	99	12539	2.368	ug/ml		0.01
Spiked Amount 5.000	Range 15 - 110		Recovery = 47.36%				
19) Nitrobenzene-d5	4.035	82	8514	1.677	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 67.08%				
45) 2-Fluorobiphenyl	5.809	172	21869	2.088	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 83.52%				
78) 2,4,6-Tribromophenol	7.146	330	11744	5.915	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 118.30%#				
95) 4-Terphenyl-d14	9.350	244	37887	1.938	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 77.52%				

Data Path : I:\8270\Dakota\230906lvi\
Data File : 50269-11.D
Acq On : 6 Sep 2023 5:22 pm
Operator : Dakota:sz
Sample : L2350269-11,32,,gmr
Misc : WG1824168,WG1823488,ical19934
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 13 09:57:09 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 17:41:21 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230906lvi\ABN0906.D
: 2 - I:\8270\dakota\230906lvi\ADP0906.D
: 3 - I:\8270\dakota\230906lvi\AP90906.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Target Compounds						Qvalue
6) 2-Chlorophenol	0.000		0	N.D.		
8) Phenol	0.000		0	N.D.		
9) Bis(2-chloroethyl)ether	0.000		0	N.D.		
14) Bis(2-chloroisopropyl)...	0.000		0	N.D.		
15) 2-Methylphenol	0.000		0	N.D.		
17) n-Nitrosodi-n-propylamine	0.000		0	N.D.	d	
18) 3-Methylphenol/4-Methy...	0.000		0	N.D.		
20) Nitrobenzene	0.000		0	N.D.	d	
21) Isophorone	0.000		0	N.D.		
22) 2-Nitrophenol	0.000		0	N.D.		
23) 2,4-Dimethylphenol	0.000		0	N.D.		
24) Bis(2-chloroethoxy)met...	0.000		0	N.D.		
25) 2,4-Dichlorophenol	0.000		0	N.D.		
28) Benzaldehyde	0.000		0	N.D.		
29) Acetophenone	0.000		0	N.D.	d	
37) 4-Chloroaniline	0.000		0	N.D.		
39) p-Chloro-m-cresol	0.000		0	N.D.		
42) Hexachlorocyclopentadiene	0.000		0	N.D.		
43) 2,4,6-Trichlorophenol	0.000		0	N.D.		
44) 2,4,5-Trichlorophenol	0.000		0	N.D.		
47) 2-Nitroaniline	0.000		0	N.D.		
50) Dimethyl phthalate	0.000		0	N.D.	d	
52) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
59) Caprolactam	0.000		0	N.D.		
60) 1,2,4,5-Tetrachloroben...	0.000		0	N.D.		
61) Biphenyl	0.000		0	N.D.		
63) 3-Nitroaniline	0.000		0	N.D.		
65) 2,4-Dinitrophenol	0.000		0	N.D.		
66) Dibenzofuran	0.000		0	N.D.		
67) 2,4-Dinitrotoluene	0.000		0	N.D.	d	
68) 4-Nitrophenol	0.000		0	N.D.		
70) 2,3,4,6-Tetrachlorophenol	0.000		0	N.D.		
71) Diethyl phthalate	0.000		0	N.D.		
73) 4-Chlorophenyl phenyl ...	0.000		0	N.D.		
74) 4-Nitroaniline	0.000		0	N.D.		
75) 4,6-Dinitro-o-cresol	0.000		0	N.D.		

Data Path : I:\8270\Dakota\230906lvi\
Data File : 50269-11.D
Acq On : 6 Sep 2023 5:22 pm
Operator : Dakota:sz
Sample : L2350269-11,32,,gmr
Misc : WG1824168,WG1823488,ical19934
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 13 09:57:09 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 17:41:21 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230906lvi\ABN0906.D
: 2 - I:\8270\dakota\230906lvi\ADP0906.D
: 3 - I:\8270\dakota\230906lvi\AP90906.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76)	NDPA/DPA	0.000		0	N.D.		
79)	4-Bromophenyl phenyl e...	0.000		0	N.D.		
86)	Atrazine	0.000		0	N.D.		
90)	Carbazole	0.000		0	N.D.		
91)	Di-n-butylphthalate	0.000		0	N.D.	d	
96)	Butyl benzyl phthalate	0.000		0	N.D.	d	
105)	3,3'-Dichlorobenzidine	0.000		0	N.D.		
107)	Bis(2-ethylhexyl)phtha...	10.490	149	5104	0.371	ug/ml#	84
108)	Di-n-octylphthalate	0.000		0	N.D.	d	

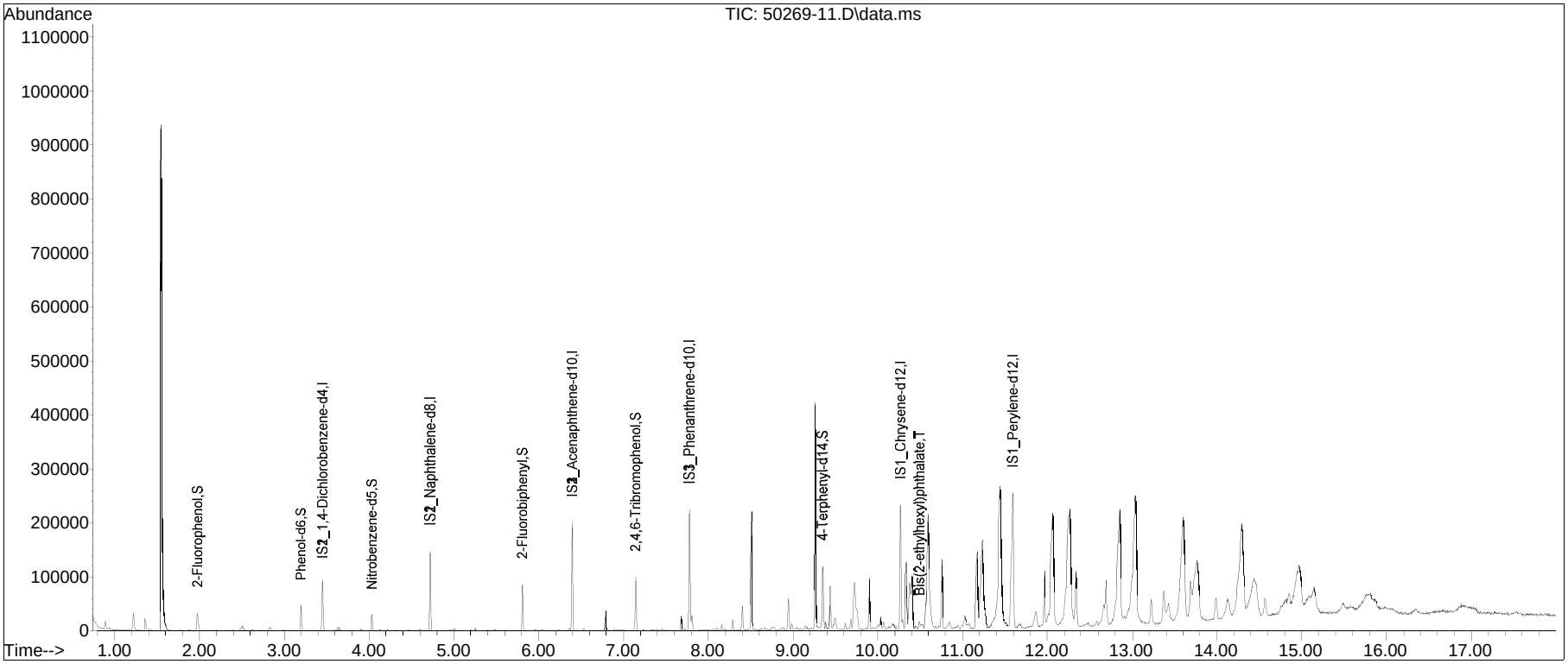
(#) = qualifier out of range (m) = manual integration (+) = signals summed

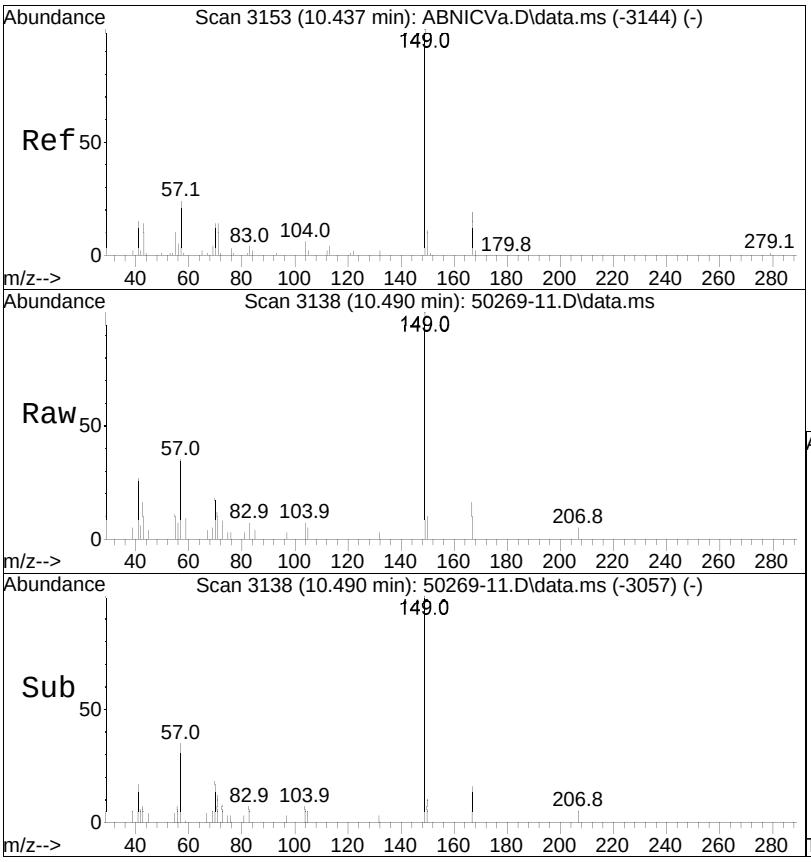
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230906lvi\
Data File : 50269-11.D
Acq On : 6 Sep 2023 5:22 pm
Operator : Dakota:sz
Sample : L2350269-11,32,,gmr
Misc : WG1824168,WG1823488,ical19934
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 13 09:57:09 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 17:41:21 2023
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MAP90906.D•

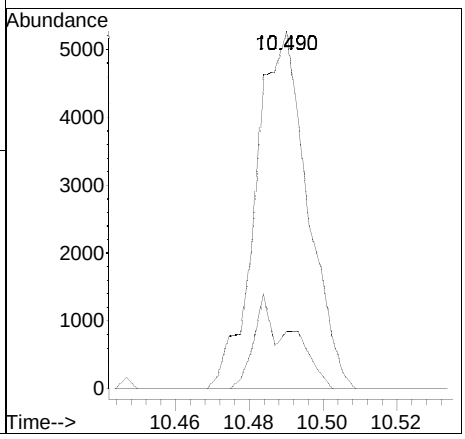




#107
Bis(2-ethylhexyl)phthalate
Concen: 0.37 ug/ml
RT: 10.490 min Scan# 3138
Delta R.T. 0.003 min
Lab File: 50269-11.D
Acq: 6 Sep 2023 5:22 pm

Tgt Ion:149 Resp: 5104

Ion	Ratio	Lower	Upper
149	100		
167	18.8	22.1	33.1#
279	0.0	3.0	4.4#



Manual Integration Report

Data Path	: I:\8270\Dakota\230906lvi\	QMethod	: FS230412LVIDakota.m
Data File	: 50269-11.D	Operator	: Dakota:sz
Date Inj'd	: 9/6/2023 5:22 pm	Instrument	: Dakota
Sample	: L2350269-11,32,,gmr	Quant Date	: 9/6/2023 5:41 pm

There are no manual integrations or false positives in this file.

Semivolatiles Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: DAKOTA**	**Ical Ref**	**: ICAL19934**
Calibration dates	**: 04/13/23 01:37 04/13/23 14:37**		

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
1)	I	IS1_1,4-Dichlorobenzene-d4	----------ISTD----------											
2)	t	N-Nitrosodimethylamine		0.548	0.717	0.739	0.740	0.728	0.733	0.742	0.803	0.841	*L	0.9975
3)	t	Pyridine		0.548	0.958	1.071	1.249	0.932	1.065	1.192	1.240	1.294	*L	0.9955
4)	S	2-Fluorophenol	0.933	0.866	0.977	1.070	1.041	1.032	1.052	1.068	1.139	1.150	1.033	8.47
5)	T	Aniline	1.890	1.522	1.638	1.827	1.811	1.793	1.800	1.795	1.882	1.944	1.790	6.95
6)	t	2-Chlorophenol	1.032	1.123	1.072	1.267	1.215	1.225	1.215	1.252	1.265	1.288	1.195	7.41
7)	S	Phenol-d6	1.112	1.228	1.214	1.354	1.302	1.344	1.325	1.415	1.437	1.505	1.324	8.80
8)	T	Phenol	1.395	1.468	1.430	1.646	1.600	1.496	1.508	1.551	1.616	1.676	1.539	6.14
9)	T	bis(2-Chloroethyl)ether	0.895	1.148	1.079	1.150	1.122	1.013	1.029	1.060	1.058	1.109	1.066	7.16
10)	T	1,3-Dichlorobenzene	1.458	1.394	1.455	1.463	1.451	1.401	1.393	1.413	1.456	1.469	1.435	2.14
11)	T	1,4-Dichlorobenzene	1.505	1.417	1.477	1.489	1.493	1.371	1.421	1.412	1.462	1.470	1.452	3.01
12)	T	1,2-Dichlorobenzene	1.419	1.442	1.380	1.471	1.429	1.406	1.362	1.369	1.391	1.389	1.406	2.46
13)	t	Benzyl alcohol	0.774	0.890	0.931	0.918	0.976	0.959	0.915	0.967	0.992	1.044	0.936	7.71
14)	T	bis(2-chloroisopropyl)ether	1.732	1.783	1.706	1.958	1.860	1.769	1.714	1.784	1.742	1.796	1.785	4.26
15)	T	2-Methylphenol	0.768	1.072	1.002	1.041	1.013	1.034	1.015	1.040	1.070	1.107	1.016	9.14
16)	T	Hexachloroethane	0.661	0.565	0.498	0.546	0.555	0.528	0.532	0.532	0.543	0.548	0.551	7.75
17)	T	n-Nitrosodi-n-propylamine	0.570	0.835	0.767	0.893	0.849	0.806	0.839	0.855	0.862	0.903	0.818	11.68
18)	T	3-Methylphenol/4-Methylphenol	0.768	0.849	1.066	1.122	1.143	1.064	1.063	1.107	1.138	1.176	1.050	12.75
19)	S	Nitrobenzene-d5	1.334	1.159	1.236	1.354	1.273	1.246	1.238	1.249	1.269	1.329	1.269	4.56
20)	T	Nitrobenzene	1.162	1.276	1.152	1.279	1.307	1.197	1.186	1.251	1.236	1.288	1.234	4.51
21)	T	Isophorone	1.951	1.920	2.057	2.350	2.279	2.171	2.207	2.240	2.264	2.389	2.183	7.31
22)	T	2-Nitrophenol	0.460	0.456	0.547	0.584	0.549	0.617	0.599	0.618	0.661	0.676	0.577	13.06
23)	T	2,4-Dimethylphenol	1.026	1.047	1.051	1.178	1.146	1.121	1.087	1.115	1.133	1.198	1.110	5.15
24)	T	bis(2-Chloroethoxy)methane	1.542	1.401	1.426	1.489	1.398	1.385	1.364	1.358	1.367	1.430	1.416	4.17
25)	T	2,4-Dichlorophenol	0.949	0.937	0.945	1.098	1.080	0.990	1.068	1.094	1.112	1.163	1.044	7.77
26)	T	1,2,4-Trichlorobenzene	1.294	1.381	1.197	1.360	1.280	1.304	1.221	1.221	1.236	1.269	1.276	4.76
27)	I	IS2_1,4-Dichlorobenzene-d4	----------ISTD----------											
28)	T	Benzaldehyde	1.153	0.824	0.990	0.991	1.037	1.136	1.126	1.113	1.082	1.008	1.046	9.48
29)	T	Acetophenone	1.813	1.661	1.714	1.792	1.850	1.967	1.918	1.977	1.881	1.740	1.831	5.84
30)	T	m-Toluidine	0.472	0.864	1.395	1.607	1.633	1.864	1.863	1.871	1.818	1.689	*L	0.9975
31)	T	2-Chloroaniline	1.585	1.504	1.624	1.727	1.680	1.836	1.816	1.828	1.736	1.598	1.693	6.78
32)	I	IS3_1,4-Dichlorobenzene-d4	----------ISTD----------											
33)	T	n-Decane	1.438	1.152	1.216	1.252	1.221	1.272	1.155	1.198	1.219	1.190	1.231	6.63
34)	I	IS1_Naphthalene-d8	----------ISTD----------											
35)	T	Naphthalene	1.018	0.994	0.965	0.975	0.990	0.956	0.955	0.963	0.945	0.949	0.971	2.40
36)	T	Benzoic Acid					0.080	0.130	0.171	0.189	0.228	0.243	*L	0.9968

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: DAKOTA**	**Ical Ref**	**: ICAL19934**
Calibration dates	**: 04/13/23 01:37 04/13/23 14:37**		

Calibration Files

L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D

L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
37)	T	4-Chloroaniline	0.092	0.110	0.118	0.124	0.116	0.108	0.114	0.123	0.118	0.123	0.115	8.30
38)	T	Hexachlorobutadiene	0.207	0.179	0.215	0.194	0.200	0.194	0.197	0.199	0.196	0.195	0.198	4.77
39)	T	p-Chloro-m-cresol	0.223	0.182	0.240	0.256	0.261	0.257	0.266	0.277	0.281	0.293	0.254	12.65
40)	T	2-Methylnaphthalene	0.571	0.609	0.587	0.649	0.667	0.619	0.642	0.651	0.649	0.668	0.631	5.29
41)	T	1-Methylnaphthalene	0.228	0.185	0.212	0.217	0.231	0.222	0.211	0.226	0.222	0.229	0.218	6.15
42)	T	Hexachlorocyclopentadiene	0.218	0.216	0.219	0.254	0.237	0.240	0.249	0.249	0.251	0.258	0.239	6.77
43)	T	2,4,6-Trichlorophenol		0.128	0.188	0.201	0.222	0.214	0.228	0.231	0.237	0.251	*L	0.9985
44)	T	2,4,5-Trichlorophenol		0.164	0.198	0.228	0.241	0.242	0.241	0.259	0.261	0.268	0.234	14.32
45)	S	2-Fluorobiphenyl	0.836	0.721	0.803	0.796	0.821	0.782	0.778	0.781	0.768	0.784	0.787	3.97
46)	T	2-Chloronaphthalene	0.707	0.647	0.685	0.706	0.709	0.684	0.693	0.706	0.686	0.699	0.692	2.67
47)	T	2-Nitroaniline	0.142	0.175	0.177	0.199	0.211	0.202	0.214	0.218	0.225	0.238	0.200	14.09
48)	T	1,4-Dinitrobenzene			0.072	0.080	0.095	0.094	0.092	0.104	0.101	0.109	0.093	13.08
49)	T	1,3-Dinitrobenzene				0.104	0.097	0.099	0.109	0.115	0.115	0.122	0.109	8.38
50)	T	Dimethyl phthalate	0.742	0.733	0.762	0.842	0.871	0.817	0.809	0.845	0.815	0.854	0.809	5.95
51)	T	Acenaphthylene	0.967	0.966	0.975	1.090	1.124	1.061	1.068	1.087	1.060	1.096	1.049	5.58
52)	T	2,6-Dinitrotoluene	0.132	0.173	0.131	0.165	0.177	0.174	0.168	0.184	0.176	0.192	0.167	12.21
53)	T	1,2-Dinitrobenzene			0.049	0.064	0.069	0.067	0.064	0.067	0.070	0.073	0.065	11.19
54)	I	IS2_Naphthalene-d8	----------ISTD----------											
55)	T	a-Terpineol	0.271	0.269	0.269	0.258	0.282	0.291	0.278	0.292	0.289	0.266	0.277	4.21
56)	T	3-Chloroaniline	0.096	0.121	0.150	0.133	0.145	0.158	0.149	0.148	0.144	0.133	0.138	13.05
57)	T	2,6-Dichlorophenol	0.193	0.251	0.259	0.263	0.274	0.294	0.305	0.314	0.316	0.292	0.276	13.50
58)	T	1-chloro-2-nitrobenzene	0.162	0.134	0.138	0.152	0.149	0.156	0.151	0.155	0.151	0.139	0.149	6.10
59)	T	Caprolactam				0.114	0.134	0.150	0.161	0.164	0.161	0.157	0.149	12.30
60)	T	1,2,4,5-Tetrachlorobenzene	0.440	0.404	0.388	0.397	0.400	0.419	0.403	0.409	0.396	0.365	0.402	4.86
61)	T	Biphenyl	0.913	0.868	0.913	0.891	0.899	0.944	0.936	0.927	0.895	0.824	0.901	3.93
62)	I	IS1_Acenaphthene-d10	----------ISTD----------											
63)	T	3-Nitroaniline	0.255	0.255	0.315	0.319	0.315	0.338	0.332	0.346	0.355	0.353	0.318	11.46
64)	T	Acenaphthene	1.114	1.114	1.030	1.121	1.116	1.078	1.064	1.075	1.109	1.072	1.089	2.76
65)	T	2,4-Dinitrophenol					0.138	0.155	0.160	0.174	0.197	0.202	*L	0.9974
66)	T	Dibenzofuran	1.784	1.750	1.693	1.854	1.765	1.728	1.685	1.710	1.723	1.681	1.737	3.07
67)	T	2,4-Dinitrotoluene	0.318	0.352	0.345	0.381	0.389	0.413	0.411	0.429	0.445	0.434	0.392	10.84
68)	T	4-Nitrophenol				0.230	0.258	0.255	0.260	0.282	0.289	0.285	*L	0.9994
69)	T	2,3,5,6-Tetrachlorophenol			0.263	0.332	0.338	0.348	0.356	0.375	0.397	0.389	*L	0.9993
70)	T	2,3,4,6-Tetrachlorophenol			0.285	0.328	0.357	0.355	0.361	0.377	0.389	0.385	*L	0.9997
71)	T	Diethyl phthalate	1.487	1.484	1.390	1.484	1.457	1.469	1.452	1.473	1.493	1.474	1.466	2.03
72)	T	Fluorene	1.429	1.361	1.373	1.403	1.440	1.408	1.371	1.407	1.419	1.393	1.400	1.85

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: DAKOTA**	**Ical Ref**	**: ICAL19934**
Calibration dates	**: 04/13/23 01:37 04/13/23 14:37**		

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD	
73)	T	4-Chlorophenyl-phenylether	0.652	0.753	0.696	0.687	0.698	0.664	0.657	0.673	0.666	0.659	0.681	4.44	
74)	T	4-Nitroaniline	0.240	0.253	0.283	0.321	0.331	0.329	0.340	0.349	0.357	0.357	0.316	13.50	
75)	T	4,6-Dinitro-o-cresol				0.170	0.179	0.205	0.212	0.229	0.250	0.248		*L 0.9987	
76)	T	NDPA/DPA	1.256	1.121	1.143	1.219	1.197	1.219	1.180	1.204	1.221	1.187	1.195	3.31	
77)	T	Azobenzene	1.103	1.257	1.199	1.316	1.306	1.310	1.261	1.282	1.281	1.240	1.256	5.13	
78)	S	2,4,6-Tribromophenol		0.179	0.210	0.240	0.229	0.230	0.233	0.246	0.257	0.259	0.232	10.80	
79)	T	4-Bromophenyl-phenylether	0.324	0.395	0.454	0.464	0.422	0.429	0.417	0.431	0.458	0.457	0.425	9.86	
80)	T	Hexachlorobenzene	0.543	0.499	0.530	0.560	0.544	0.507	0.522	0.533	0.543	0.538	0.532	3.46	
81)	T	Pentachlorophenol				0.246	0.251	0.261	0.297	0.315	0.346	0.349		*L 0.9981	
82)	I	IS2_Acenaphthene-d10	----------ISTD----------												
83)	T	Dichloran			0.169	0.179	0.163	0.181	0.211	0.231	0.233	0.232		*L 0.9977	
84)	T	Pentachloronitrobenzene	0.219	0.221	0.165	0.175	0.190	0.205	0.206	0.225	0.217	0.209	0.203	9.97	
85)	I	IS3_Acenaphthene-d10	----------ISTD----------												
86)	T	Atrazine	0.362	0.313	0.346	0.320	0.327	0.375	0.391	0.357	0.403	0.439	0.363	10.98	
87)	I	IS1_Phenanthrene-d10	----------ISTD----------												
88)	T	Phenanthrene	1.058	1.104	1.057	1.019	1.046	0.997	1.017	1.022	1.002	0.979	1.030	3.56	
89)	T	Anthracene	1.013	0.995	0.965	0.988	1.028	0.988	1.011	1.012	0.996	0.982	0.998	1.85	
90)	T	Carbazole	0.873	0.949	0.893	0.912	0.977	0.950	0.980	0.978	0.954	0.939	0.941	3.92	
91)	T	Di-n-butylphthalate	1.074	1.038	1.046	1.095	1.115	1.076	1.150	1.151	1.178	1.155	1.108	4.45	
92)	T	Fluoranthene	1.160	1.162	1.153	1.217	1.252	1.182	1.229	1.230	1.255	1.237	1.208	3.29	
93)	T	Benzidine				0.711	0.748	0.676	0.827	0.837	0.873	0.869	0.791	10.00	
94)	T	Pyrene	1.206	1.319	1.272	1.268	1.349	1.256	1.277	1.290	1.273	1.258	1.277	3.00	
95)	S	4-Terphenyl-d14	0.976	0.954	0.960	0.979	1.026	0.964	0.985	0.979	0.980	0.974	0.978	2.01	
96)	T	Butyl benzyl phthalate	0.411	0.426	0.461	0.496	0.497	0.487	0.533	0.534	0.592	0.599	0.504	12.46	
97)	I	IS2_Phenanthrene-d10	----------ISTD----------												
98)	T	Diphenamid	0.492	0.457	0.445	0.464	0.475	0.521	0.542	0.559	0.543	0.515	0.501	8.02	
99)	I	IS3_Phenanthrene-d10	----------ISTD----------												
100)	T	n-Octadecane	0.381	0.394	0.346	0.362	0.387	0.402	0.411	0.387	0.396	0.390	0.386	4.90	
101)	T	Parathion			0.083	0.077	0.086	0.096	0.107	0.097	0.123	0.128		*Q 0.9983	
102)	T	3,3'-Dimethylbenzidine		0.198	0.425	0.486	0.524	0.652	0.721	0.688	0.859	0.856		*Q 0.9978	
103)	I	IS1_Chrysene-d12	----------ISTD----------												
104)	T	Benzo[a]anthracene	1.244	1.246	1.228	1.206	1.255	1.254	1.245	1.279	1.307	1.274	1.254	2.23	
105)	T	3,3'-Dichlorobenzidine	0.464	0.433	0.404	0.442	0.464	0.477	0.501	0.529	0.553	0.554	0.482	10.61	
106)	T	Chrysene	1.204	1.121	1.194	1.193	1.225	1.203	1.174	1.208	1.178	1.143	1.184	2.66	
107)	T	bis(2-Ethylhexyl)phthalate	0.621	0.587	0.619	0.671	0.694	0.708	0.744	0.769	0.805	0.785	0.700	10.79	
108)	T	Di-n-octylphthalate			1.020	1.118	1.110	1.207	1.317	1.381	1.521	1.493	1.271	14.64	

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: DAKOTA**	**Ical Ref**	**: ICAL19934**
Calibration dates	**: 04/13/23 01:37 04/13/23 14:37**		

Calibration Files

L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
109)	T	Benzo(b)fluoranthene	1.270	1.437	1.229	1.327	1.308	1.327	1.424	1.438	1.454	1.394	1.361	5.80
110)	T	Benzo(k)fluoranthene	1.230	1.156	1.246	1.300	1.322	1.347	1.303	1.394	1.356	1.335	1.299	5.41
111)	T	Benzo(a)pyrene	1.077	1.099	1.122	1.128	1.148	1.194	1.241	1.287	1.275	1.257	1.183	6.58
112)	I	IS1_Perylene-d12	----------ISTD----------											
113)	T	Indeno(1,2,3-cd)pyrene	1.010	0.946	0.999	0.997	0.998	1.063	1.092	1.153	1.182	1.164	1.060	7.86
114)	T	Dibenzo[a,h]anthracene	1.050	1.040	1.065	1.091	1.140	1.095	1.143	1.176	1.158	1.154	1.111	4.42
115)	T	Benzo(g,h,i)perylene	1.137	1.014	1.057	1.073	1.163	1.107	1.170	1.182	1.155	1.157	1.122	5.01

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: SV106**	**Ical Ref**	**: ICAL20337**
Calibration dates	**: 09/02/23 12:13 09/03/23 00:52**		

Calibration Files

L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
1)	I	IS1_1,4-Dichlorobenzene-d4	----------ISTD----------											
2)	t	N-Nitrosodimethylamine		0.648	0.703	0.681	0.660	0.622	0.719	0.685	0.676	0.702	0.677	4.47
3)	t	Pyridine	1.054	1.120	1.163	1.116	1.175	1.061	1.236	1.233	1.179	1.168	1.151	5.45
4)	S	2-Fluorophenol	1.088	1.096	1.126	1.083	1.108	0.995	1.181	1.182	1.146	1.151	1.116	4.99
5)	T	Aniline	1.838	1.833	1.964	1.902	1.868	1.720	2.000	1.918	1.903	1.985	1.893	4.42
6)	t	2-Chlorophenol	1.219	1.195	1.332	1.275	1.232	1.185	1.371	1.300	1.302	1.333	1.274	5.01
7)	S	Phenol-d6	1.324	1.450	1.447	1.418	1.415	1.329	1.552	1.459	1.466	1.513	1.437	4.96
8)	T	Phenol	1.574	1.402	1.560	1.504	1.542	1.373	1.603	1.551	1.523	1.579	1.521	5.01
9)	T	bis(2-Chloroethyl)ether	1.344	1.167	1.223	1.216	1.205	1.114	1.275	1.221	1.206	1.247	1.222	5.00
10)	T	1,3-Dichlorobenzene	1.513	1.406	1.544	1.452	1.452	1.343	1.510	1.469	1.451	1.468	1.461	3.91
11)	T	1,4-Dichlorobenzene	1.759	1.418	1.531	1.494	1.463	1.344	1.561	1.490	1.474	1.497	1.503	7.18
12)	T	1,2-Dichlorobenzene	1.543	1.424	1.464	1.456	1.374	1.288	1.496	1.422	1.403	1.441	1.431	4.84
13)	t	Benzyl alcohol	1.065	0.893	1.101	1.048	1.048	0.989	1.167	1.122	1.117	1.185	1.074	8.05
14)	T	bis(2-chloroisopropyl)ether	1.769	1.838	1.890	1.806	1.800	1.644	1.898	1.820	1.744	1.786	1.800	4.06
15)	T	2-Methylphenol	1.062	1.118	1.139	1.150	1.104	1.017	1.221	1.184	1.167	1.215	1.138	5.70
16)	T	Hexachloroethane	0.590	0.574	0.631	0.572	0.572	0.535	0.613	0.589	0.585	0.600	0.586	4.46
17)	T	n-Nitrosodi-n-propylamine	0.970	0.903	0.936	0.894	0.893	0.833	0.981	0.922	0.925	0.978	0.923	4.98
18)	T	3-Methylphenol/4-Methylphenol	1.065	1.100	1.213	1.221	1.177	1.092	1.292	1.238	1.227	1.309	1.193	7.02
19)	S	Nitrobenzene-d5	1.349	1.280	1.290	1.189	1.281	1.160	1.381	1.348	1.345	1.407	1.303	6.12
20)	T	Nitrobenzene	1.173	1.318	1.243	1.244	1.278	1.189	1.396	1.359	1.350	1.396	1.295	6.30
21)	T	Isophorone	2.439	2.405	2.498	2.425	2.467	2.235	2.627	2.531	2.491	2.660	2.478	4.81
22)	T	2-Nitrophenol	0.473	0.461	0.464	0.461	0.482	0.467	0.596	0.573	0.581	0.621	0.518	12.71
23)	T	2,4-Dimethylphenol	1.263	1.209	1.251	1.250	1.287	1.202	1.384	1.328	1.310	1.324	1.281	4.45
24)	T	bis(2-Chloroethoxy)methane	1.673	1.453	1.571	1.543	1.508	1.418	1.628	1.583	1.526	1.621	1.552	5.12
25)	T	2,4-Dichlorophenol	0.973	0.961	1.024	1.067	1.090	1.018	1.186	1.141	1.104	1.192	1.076	7.62
26)	T	1,2,4-Trichlorobenzene	1.228	1.215	1.287	1.261	1.240	1.103	1.291	1.244	1.212	1.268	1.235	4.36
27)	I	IS2_1,4-Dichlorobenzene-d4	----------ISTD----------											
28)	T	Benzaldehyde			1.071	0.918	0.885	1.299	0.926	0.801	0.740	0.787	0.928	19.58
29)	T	Acetophenone	2.251	1.920	1.957	1.826	1.903	2.587	1.898	1.810	1.883	1.906	1.994	12.10
30)	T	m-Toluidine			1.492	1.442	1.434	2.182	1.574	1.433	1.382	1.459	1.550	16.86
31)	T	2-Chloroaniline	1.889	1.484	1.696	1.521	1.557	2.203	1.625	1.546	1.579	1.606	1.670	13.12
32)	I	IS3_1,4-Dichlorobenzene-d4	----------ISTD----------											
33)	T	n-Decane	1.354	1.422	1.378	1.307	1.338	1.336	1.316	1.338	1.318	1.363	1.347	2.55
34)	I	IS1_Naphthalene-d8	----------ISTD----------											
35)	T	Naphthalene	1.046	0.979	1.049	1.016	0.962	0.894	1.038	1.026	1.019	1.055	1.008	4.98
36)	T	Benzoic Acid					0.154	0.161	0.230	0.246	0.255	0.273	*L	0.9982

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: SV106**	**Ical Ref**	**: ICAL20337**
Calibration dates	**: 09/02/23 12:13 09/03/23 00:52**		

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD	
37)	T	4-Chloroaniline	0.147	0.112	0.132	0.134	0.127	0.119	0.142	0.136	0.133	0.138	0.132	7.98	
38)	T	Hexachlorobutadiene	0.233	0.210	0.211	0.200	0.208	0.180	0.206	0.206	0.199	0.203	0.206	6.37	
39)	T	p-Chloro-m-cresol	0.257	0.259	0.292	0.275	0.293	0.268	0.314	0.315	0.312	0.330	0.291	8.87	
40)	T	2-Methylnaphthalene	0.631	0.635	0.683	0.650	0.622	0.571	0.661	0.653	0.641	0.673	0.642	4.86	
41)	T	1-Methylnaphthalene	0.217	0.243	0.253	0.253	0.232	0.218	0.251	0.249	0.240	0.251	0.241	5.70	
42)	T	Hexachlorocyclopentadiene	0.212	0.203	0.213	0.219	0.221	0.195	0.234	0.230	0.232	0.234	0.219	6.17	
43)	T	2,4,6-Trichlorophenol	0.195	0.184	0.205	0.202	0.204	0.182	0.227	0.222	0.223	0.242	0.209	9.27	
44)	T	2,4,5-Trichlorophenol	0.230	0.191	0.222	0.220	0.220	0.196	0.243	0.241	0.240	0.241	0.224	8.26	
45)	S	2-Fluorobiphenyl	0.835	0.731	0.799	0.785	0.737	0.676	0.772	0.771	0.748	0.781	0.764	5.70	
46)	T	2-Chloronaphthalene	0.685	0.640	0.719	0.682	0.665	0.597	0.684	0.674	0.658	0.687	0.669	4.89	
47)	T	2-Nitroaniline			0.158	0.153	0.162	0.156	0.192	0.195	0.197	0.208		*L	0.9975
48)	T	1,4-Dinitrobenzene				0.069	0.069	0.061	0.083	0.085	0.089	0.096		*L	0.9958
49)	T	1,3-Dinitrobenzene				0.080	0.076	0.076	0.094	0.099	0.107	0.112		*L	0.9969
50)	T	Dimethyl phthalate	0.828	0.719	0.845	0.777	0.777	0.710	0.808	0.810	0.779	0.821	0.787	5.69	
51)	T	Acenaphthylene	1.110	1.006	1.125	1.073	1.054	0.948	1.112	1.118	1.083	1.140	1.077	5.59	
52)	T	2,6-Dinitrotoluene			0.129	0.136	0.133	0.126	0.159	0.161	0.159	0.167		*L	0.9978
53)	T	1,2-Dinitrobenzene				0.055	0.058	0.056	0.069	0.069	0.067	0.070	0.063	10.66	
54)	I	IS2_Naphthalene-d8	----------ISTD----------												
55)	T	a-Terpineol	0.327	0.276	0.274	0.267	0.267	0.376	0.273	0.268	0.284	0.275	0.289	12.23	
56)	T	3-Chloroaniline	0.150	0.143	0.153	0.145	0.145	0.202	0.148	0.139	0.140	0.138	0.150	12.50	
57)	T	2,6-Dichlorophenol	0.269	0.249	0.244	0.254	0.263	0.378	0.272	0.270	0.285	0.282	0.277	13.72	
58)	T	1-chloro-2-nitrobenzene	0.125	0.121	0.128	0.116	0.115	0.174	0.128	0.130	0.139	0.135	0.131	13.00	
59)	T	Caprolactam	0.122	0.140	0.132	0.129	0.135	0.199	0.150	0.148	0.160	0.152	0.147	14.87	
60)	T	1,2,4,5-Tetrachlorobenzene	0.383	0.370	0.337	0.334	0.319	0.446	0.323	0.316	0.332	0.321	0.348	11.76	
61)	T	Biphenyl	0.951	0.858	0.839	0.798	0.794	1.117	0.800	0.785	0.813	0.802	0.856	12.19	
62)	I	IS1_Acenaphthene-d10	----------ISTD----------												
63)	T	3-Nitroaniline		0.218	0.276	0.261	0.272	0.262	0.330	0.312	0.313	0.331	0.286	13.35	
64)	T	Acenaphthene	1.245	1.152	1.174	1.130	1.082	0.999	1.158	1.107	1.095	1.164	1.131	5.82	
65)	T	2,4-Dinitrophenol				0.094	0.110	0.108	0.137	0.138	0.155	0.165		*L	0.9965
66)	T	Dibenzofuran	1.692	1.754	1.791	1.672	1.656	1.509	1.750	1.672	1.669	1.738	1.690	4.63	
67)	T	2,4-Dinitrotoluene			0.309	0.306	0.304	0.304	0.380	0.371	0.389	0.411		*L	0.9969
68)	T	4-Nitrophenol			0.234	0.230	0.243	0.226	0.283	0.277	0.285	0.309		*L	0.9963
69)	T	2,3,5,6-Tetrachlorophenol	0.295	0.260	0.324	0.326	0.326	0.298	0.359	0.347	0.349	0.367	0.325	10.18	
70)	T	2,3,4,6-Tetrachlorophenol	0.349	0.297	0.356	0.307	0.333	0.306	0.369	0.347	0.344	0.363	0.337	7.51	
71)	T	Diethyl phthalate	1.394	1.403	1.479	1.414	1.390	1.303	1.459	1.395	1.423	1.488	1.415	3.78	
72)	T	Fluorene	1.342	1.330	1.403	1.298	1.306	1.208	1.405	1.344	1.329	1.388	1.336	4.38	

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: SV106**	**Ical Ref**	**: ICAL20337**
Calibration dates	**: 09/02/23 12:13 09/03/23 00:52**		

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
73)	T	4-Chlorophenyl-phenylether	0.686	0.675	0.667	0.641	0.614	0.566	0.645	0.624	0.610	0.646	0.637	5.59
74)	T	4-Nitroaniline	0.230	0.257	0.293	0.286	0.295	0.277	0.303	0.303	0.316	0.329	0.289	9.99
75)	T	4,6-Dinitro-o-cresol				0.126	0.148	0.131	0.181	0.183	0.203	0.221	*L	0.9946
76)	T	NDPA/DPA	1.117	1.080	1.188	1.110	1.101	1.034	1.182	1.135	1.121	1.169	1.124	4.24
77)	T	Azobenzene	1.389	1.345	1.370	1.263	1.289	1.195	1.348	1.320	1.300	1.373	1.319	4.51
78)	S	2,4,6-Tribromophenol	0.157	0.167	0.185	0.176	0.170	0.170	0.197	0.198	0.201	0.215	0.184	10.14
79)	T	4-Bromophenyl-phenylether	0.407	0.386	0.399	0.346	0.357	0.332	0.375	0.367	0.362	0.379	0.371	6.24
80)	T	Hexachlorobenzene	0.509	0.443	0.462	0.418	0.409	0.375	0.431	0.415	0.415	0.440	0.432	8.29
81)	T	Pentachlorophenol			0.215	0.223	0.221	0.215	0.270	0.262	0.269	0.292	*L	0.9965
82)	I	IS2_Acenaphthene-d10	----------ISTD----------											
83)	T	Dichloran				0.106	0.112	0.170	0.134	0.139	0.168	0.161	*L	0.9968
84)	T	Pentachloronitrobenzene			0.127	0.121	0.141	0.221	0.165	0.165	0.183	0.177	*L	0.9980
85)	I	IS3_Acenaphthene-d10	----------ISTD----------											
86)	T	Atrazine	0.349	0.348	0.329	0.319	0.327	0.341	0.343	0.344	0.374	0.371	0.345	5.15
87)	I	IS1_Phenanthrene-d10	----------ISTD----------											
88)	T	Phenanthrene	1.156	1.108	1.102	1.068	1.103	0.974	1.096	1.069	1.087	1.130	1.089	4.45
89)	T	Anthracene	1.094	1.003	1.131	1.087	1.102	0.980	1.115	1.078	1.107	1.145	1.084	4.88
90)	T	Carbazole	0.877	0.956	1.011	1.020	0.994	0.914	1.023	1.006	1.049	1.058	0.991	5.86
91)	T	Di-n-butylphthalate	1.197	1.122	1.237	1.231	1.251	1.163	1.356	1.316	1.384	1.431	1.269	7.89
92)	T	Fluoranthene	1.161	1.071	1.171	1.161	1.161	1.044	1.213	1.191	1.219	1.254	1.165	5.52
93)	T	Benzidine	0.656	0.641	0.750	0.762	0.786	0.704	0.850	0.847	0.869	0.832	0.770	10.67
94)	T	Pyrene	1.204	1.183	1.265	1.248	1.228	1.103	1.271	1.240	1.272	1.315	1.233	4.79
95)	S	4-Terphenyl-d14	0.837	0.839	0.902	0.885	0.864	0.794	0.919	0.883	0.905	0.945	0.877	5.09
96)	T	Butyl benzyl phthalate			0.406	0.510	0.497	0.523	0.495	0.587	0.583	0.631	0.641	0.541	13.94
97)	I	IS2_Phenanthrene-d10	----------ISTD----------											
98)	T	Diphenamid	0.469	0.442	0.454	0.474	0.474	0.699	0.509	0.489	0.531	0.539	0.508	14.56
99)	I	IS3_Phenanthrene-d10	----------ISTD----------											
100)	T	n-Octadecane	0.468	0.466	0.443	0.422	0.457	0.467	0.456	0.469	0.466	0.483	0.460	3.67
101)	T	Parathion	0.091	0.089	0.084	0.078	0.085	0.085	0.093	0.101	0.112	0.120	0.094	14.22
102)	T	3,3'-Dimethylbenzidine				0.389	0.505	0.540	0.594	0.659	0.717	0.744	0.780	*L	0.9978
103)	I	IS1_Chrysene-d12	----------ISTD----------											
104)	T	Benzo[a]anthracene	1.463	1.326	1.375	1.250	1.283	1.188	1.340	1.321	1.331	1.377	1.326	5.66
105)	T	3,3'-Dichlorobenzidine	0.428	0.404	0.475	0.442	0.471	0.439	0.510	0.506	0.516	0.525	0.472	8.89
106)	T	Chrysene	1.392	1.242	1.284	1.202	1.205	1.095	1.258	1.210	1.203	1.216	1.231	6.11
107)	T	bis(2-Ethylhexyl)phthalate	0.726	0.750	0.902	0.872	0.879	0.827	0.990	0.965	0.973	1.003	0.889	11.02
108)	T	Di-n-octylphthalate	1.204	1.244	1.446	1.403	1.484	1.405	1.693	1.661	1.718	1.736	1.499	12.98

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: SV106**	**Ical Ref**	**: ICAL20337**
Calibration dates	**: 09/02/23 12:13 09/03/23 00:52**		

Calibration Files

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L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
109)	T	Benzo(b)fluoranthene	1.277	1.135	1.311	1.217	1.346	1.123	1.379	1.315	1.304	1.254	1.266	6.73
110)	T	Benzo(k)fluoranthene	1.284	1.239	1.215	1.255	1.110	1.160	1.226	1.219	1.186	1.245	1.214	4.15
111)	T	Benzo(a)pyrene	1.056	0.984	1.138	1.086	1.070	0.993	1.161	1.123	1.116	1.108	1.083	5.43
112)	I	IS1_Perylene-d12	----------ISTD----------											
113)	T	Indeno(1,2,3-cd)pyrene	0.916	0.838	0.921	0.920	0.887	0.832	0.993	0.979	1.058	1.000	0.935	7.81
114)	T	Dibenzo[a,h]anthracene	0.899	0.918	0.990	0.974	0.975	0.921	1.091	1.064	1.090	1.073	0.999	7.49
115)	T	Benzo(g,h,i)perylene	0.969	0.962	1.043	0.994	0.967	0.906	1.065	1.022	1.042	0.945	0.991	5.09

Response Factor Report Dakota

Method Path : I:\8270\Dakota\230412lviical\
Method File : FS230412LVIDakota.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Wed Apr 19 14:34:59 2023
Response Via : Initial Calibration

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
1)	I	IS1_1,4-Dichlorobenzene-d4	ISTD											
2)	t	N-Nitrosodimethylamine		0.548	0.717	0.739	0.740	0.728	0.733	0.742	0.803	0.841	*L	0.9975
3)	t	Pyridine		0.548	0.958	1.071	1.249	0.932	1.065	1.192	1.240	1.294	*L	0.9955
4)	S	2-Fluorophenol	0.933	0.866	0.977	1.070	1.041	1.032	1.052	1.068	1.139	1.150	1.033	8.47
5)	T	Aniline	1.890	1.522	1.638	1.827	1.811	1.793	1.800	1.795	1.882	1.944	1.790	6.95
6)	t	2-Chlorophenol	1.032	1.123	1.072	1.267	1.215	1.225	1.215	1.252	1.265	1.288	1.195	7.41
7)	S	Phenol-d6	1.112	1.228	1.214	1.354	1.302	1.344	1.325	1.415	1.437	1.505	1.324	8.80
8)	T	Phenol	1.395	1.468	1.430	1.646	1.600	1.496	1.508	1.551	1.616	1.676	1.539	6.14
9)	T	bis(2-Chloroethyl)ether	0.895	1.148	1.079	1.150	1.122	1.013	1.029	1.060	1.058	1.109	1.066	7.16
10)	T	1,3-Dichlorobenzene	1.458	1.394	1.455	1.463	1.451	1.401	1.393	1.413	1.456	1.469	1.435	2.14
11)	T	1,4-Dichlorobenzene	1.505	1.417	1.477	1.489	1.493	1.371	1.421	1.412	1.462	1.470	1.452	3.01
12)	T	1,2-Dichlorobenzene	1.419	1.442	1.380	1.471	1.429	1.406	1.362	1.369	1.391	1.389	1.406	2.46
13)	t	Benzyl alcohol	0.774	0.890	0.931	0.918	0.976	0.959	0.915	0.967	0.992	1.044	0.936	7.71
14)	T	bis(2-chloroisopropyl)ether	1.732	1.783	1.706	1.958	1.860	1.769	1.714	1.784	1.742	1.796	1.785	4.26
15)	T	2-Methylphenol	0.768	1.072	1.002	1.041	1.013	1.034	1.015	1.040	1.070	1.107	1.016	9.14
16)	T	Hexachloroethane	0.661	0.565	0.498	0.546	0.555	0.528	0.532	0.532	0.543	0.548	0.551	7.75
17)	T	n-Nitrosodi-n-propylamine	0.570	0.835	0.767	0.893	0.849	0.806	0.839	0.855	0.862	0.903	0.818	11.68
18)	T	3-Methylphenol/4-Methylphenol	0.768	0.849	1.066	1.122	1.143	1.064	1.063	1.107	1.138	1.176	1.050	12.75
19)	S	Nitrobenzene-d5	1.334	1.159	1.236	1.354	1.273	1.246	1.238	1.249	1.269	1.329	1.269	4.56
20)	T	Nitrobenzene	1.162	1.276	1.152	1.279	1.307	1.197	1.186	1.251	1.236	1.288	1.234	4.51
21)	T	Isophorone	1.951	1.920	2.057	2.350	2.279	2.171	2.207	2.240	2.264	2.389	2.183	7.31
22)	T	2-Nitrophenol	0.460	0.456	0.547	0.584	0.549	0.617	0.599	0.618	0.661	0.676	0.577	13.06
23)	T	2,4-Dimethylphenol	1.026	1.047	1.051	1.178	1.146	1.121	1.087	1.115	1.133	1.198	1.110	5.15
24)	T	bis(2-Chloroethoxy)methane	1.542	1.401	1.426	1.489	1.398	1.385	1.364	1.358	1.367	1.430	1.416	4.17
25)	T	2,4-Dichlorophenol	0.949	0.937	0.945	1.098	1.080	0.990	1.068	1.094	1.112	1.163	1.044	7.77
26)	T	1,2,4-Trichlorobenzene	1.294	1.381	1.197	1.360	1.280	1.304	1.221	1.221	1.236	1.269	1.276	4.76
27)	I	IS2_1,4-Dichlorobenzene-d4	ISTD											
28)	T	Benzaldehyde	1.153	0.824	0.990	0.991	1.037	1.136	1.126	1.113	1.082	1.008	1.046	9.48
29)	T	Acetophenone	1.813	1.661	1.714	1.792	1.850	1.967	1.918	1.977	1.881	1.740	1.831	5.84
30)	T	m-Toluidine	0.472	0.864	1.395	1.607	1.633	1.864	1.863	1.871	1.818	1.689	*L	0.9975
31)	T	2-Chloroaniline	1.585	1.504	1.624	1.727	1.680	1.836	1.816	1.828	1.736	1.598	1.693	6.78
32)	I	IS3_1,4-Dichlorobenzene-d4	ISTD											
33)	T	n-Decane	1.438	1.152	1.216	1.252	1.221	1.272	1.155	1.198	1.219	1.190	1.231	6.63
34)	I	IS1_Naphthalene-d8	ISTD											
35)	T	Naphthalene	1.018	0.994	0.965	0.975	0.990	0.956	0.955	0.963	0.945	0.949	0.971	2.40
36)	T	Benzoic Acid					0.080	0.130	0.171	0.189	0.228	0.243	*L	0.9968
37)	T	4-Chloroaniline	0.092	0.110	0.118	0.124	0.116	0.108	0.114	0.123	0.118	0.123	0.115	8.30
38)	T	Hexachlorobutadiene	0.207	0.179	0.215	0.194	0.200	0.194	0.197	0.199	0.196	0.195	0.198	4.77
39)	T	p-Chloro-m-cresol	0.223	0.182	0.240	0.256	0.261	0.257	0.266	0.277	0.281	0.293	0.254	12.65
40)	T	2-Methylnaphthalene	0.571	0.609	0.587	0.649	0.667	0.619	0.642	0.651	0.649	0.668	0.631	5.29
41)	T	1-Methylnaphthalene	0.228	0.185	0.212	0.217	0.231	0.222	0.211	0.226	0.222	0.229	0.218	6.15
42)	T	Hexachlorocyclopentadiene	0.218	0.216	0.219	0.254	0.237	0.240	0.249	0.249	0.251	0.258	0.239	6.77
43)	T	2,4,6-Trichlorophenol		0.128	0.188	0.201	0.222	0.214	0.228	0.231	0.237	0.251	*L	0.9985
44)	T	2,4,5-Trichlorophenol		0.164	0.198	0.228	0.241	0.242	0.241	0.259	0.261	0.268	0.234	14.32
45)	S	2-Fluorobiphenyl	0.836	0.721	0.803	0.796	0.821	0.782	0.778	0.781	0.768	0.784	0.787	3.97

Response Factor Report Dakota

Method Path : I:\8270\Dakota\230412lviical\
Method File : FS230412LVIDakota.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Wed Apr 19 14:34:59 2023
Response Via : Initial Calibration

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
46)	T	2-Chloronaphthalene	0.707	0.647	0.685	0.706	0.709	0.684	0.693	0.706	0.686	0.699	0.692	2.67
47)	T	2-Nitroaniline	0.142	0.175	0.177	0.199	0.211	0.202	0.214	0.218	0.225	0.238	0.200	14.09
48)	T	1,4-Dinitrobenzene			0.072	0.080	0.095	0.094	0.092	0.104	0.101	0.109	0.093	13.08
49)	T	1,3-Dinitrobenzene				0.104	0.097	0.099	0.109	0.115	0.115	0.122	0.109	8.38
50)	T	Dimethyl phthalate	0.742	0.733	0.762	0.842	0.871	0.817	0.809	0.845	0.815	0.854	0.809	5.95
51)	T	Acenaphthylene	0.967	0.966	0.975	1.090	1.124	1.061	1.068	1.087	1.060	1.096	1.049	5.58
52)	T	2,6-Dinitrotoluene	0.132	0.173	0.131	0.165	0.177	0.174	0.168	0.184	0.176	0.192	0.167	12.21
53)	T	1,2-Dinitrobenzene			0.049	0.064	0.069	0.067	0.064	0.067	0.070	0.073	0.065	11.19
54)	I	IS2_Naphthalene-d8	----------ISTD----------											
55)	T	a-Terpineol	0.271	0.269	0.269	0.258	0.282	0.291	0.278	0.292	0.289	0.266	0.277	4.21
56)	T	3-Chloroaniline	0.096	0.121	0.150	0.133	0.145	0.158	0.149	0.148	0.144	0.133	0.138	13.05
57)	T	2,6-Dichlorophenol	0.193	0.251	0.259	0.263	0.274	0.294	0.305	0.314	0.316	0.292	0.276	13.50
58)	T	1-chloro-2-nitrobenzene	0.162	0.134	0.138	0.152	0.149	0.156	0.151	0.155	0.151	0.139	0.149	6.10
59)	T	Caprolactam				0.114	0.134	0.150	0.161	0.164	0.161	0.157	0.149	12.30
60)	T	1,2,4,5-Tetrachlorobenzene	0.440	0.404	0.388	0.397	0.400	0.419	0.403	0.409	0.396	0.365	0.402	4.86
61)	T	Biphenyl	0.913	0.868	0.913	0.891	0.899	0.944	0.936	0.927	0.895	0.824	0.901	3.93
62)	I	IS1_Acenaphthene-d10	----------ISTD----------											
63)	T	3-Nitroaniline	0.255	0.255	0.315	0.319	0.315	0.338	0.332	0.346	0.355	0.353	0.318	11.46
64)	T	Acenaphthene	1.114	1.114	1.030	1.121	1.116	1.078	1.064	1.075	1.109	1.072	1.089	2.76
65)	T	2,4-Dinitrophenol					0.138	0.155	0.160	0.174	0.197	0.202	*L	0.9974
66)	T	Dibenzofuran	1.784	1.750	1.693	1.854	1.765	1.728	1.685	1.710	1.723	1.681	1.737	3.07
67)	T	2,4-Dinitrotoluene	0.318	0.352	0.345	0.381	0.389	0.413	0.411	0.429	0.445	0.434	0.392	10.84
68)	T	4-Nitrophenol				0.230	0.258	0.255	0.260	0.282	0.289	0.285	*L	0.9994
69)	T	2,3,5,6-Tetrachlorophenol			0.263	0.332	0.338	0.348	0.356	0.375	0.397	0.389	*L	0.9993
70)	T	2,3,4,6-Tetrachlorophenol			0.285	0.328	0.357	0.355	0.361	0.377	0.389	0.385	*L	0.9997
71)	T	Diethyl phthalate	1.487	1.484	1.390	1.484	1.457	1.469	1.452	1.473	1.493	1.474	1.466	2.03
72)	T	Fluorene	1.429	1.361	1.373	1.403	1.440	1.408	1.371	1.407	1.419	1.393	1.400	1.85
73)	T	4-Chlorophenyl-phenylether	0.652	0.753	0.696	0.687	0.698	0.664	0.657	0.673	0.666	0.659	0.681	4.44
74)	T	4-Nitroaniline	0.240	0.253	0.283	0.321	0.331	0.329	0.340	0.349	0.357	0.357	0.316	13.50
75)	T	4,6-Dinitro-o-cresol				0.170	0.179	0.205	0.212	0.229	0.250	0.248	*L	0.9987
76)	T	NDPA/DPA	1.256	1.121	1.143	1.219	1.197	1.219	1.180	1.204	1.221	1.187	1.195	3.31
77)	T	Azobenzene	1.103	1.257	1.199	1.316	1.306	1.310	1.261	1.282	1.281	1.240	1.256	5.13
78)	S	2,4,6-Tribromophenol		0.179	0.210	0.240	0.229	0.230	0.233	0.246	0.257	0.259	0.232	10.80
79)	T	4-Bromophenyl-phenylether	0.324	0.395	0.454	0.464	0.422	0.429	0.417	0.431	0.458	0.457	0.425	9.86
80)	T	Hexachlorobenzene	0.543	0.499	0.530	0.560	0.544	0.507	0.522	0.533	0.543	0.538	0.532	3.46
81)	T	Pentachlorophenol				0.246	0.251	0.261	0.297	0.315	0.346	0.349	*L	0.9981
82)	I	IS2_Acenaphthene-d10	----------ISTD----------											
83)	T	Dichloran			0.169	0.179	0.163	0.181	0.211	0.231	0.233	0.232	*L	0.9977
84)	T	Pentachloronitrobenzene	0.219	0.221	0.165	0.175	0.190	0.205	0.206	0.225	0.217	0.209	0.203	9.97
85)	I	IS3_Acenaphthene-d10	----------ISTD----------											
86)	T	Atrazine	0.362	0.313	0.346	0.320	0.327	0.375	0.391	0.357	0.403	0.439	0.363	10.98
87)	I	IS1_Phenanthrene-d10	----------ISTD----------											
88)	T	Phenanthrene	1.058	1.104	1.057	1.019	1.046	0.997	1.017	1.022	1.002	0.979	1.030	3.56
89)	T	Anthracene	1.013	0.995	0.965	0.988	1.028	0.988	1.011	1.012	0.996	0.982	0.998	1.85
90)	T	Carbazole	0.873	0.949	0.893	0.912	0.977	0.950	0.980	0.978	0.954	0.939	0.941	3.92

Response Factor Report Dakota

Method Path : I:\8270\Dakota\230412lviical\
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Last Update : Wed Apr 19 14:34:59 2023
Response Via : Initial Calibration

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L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

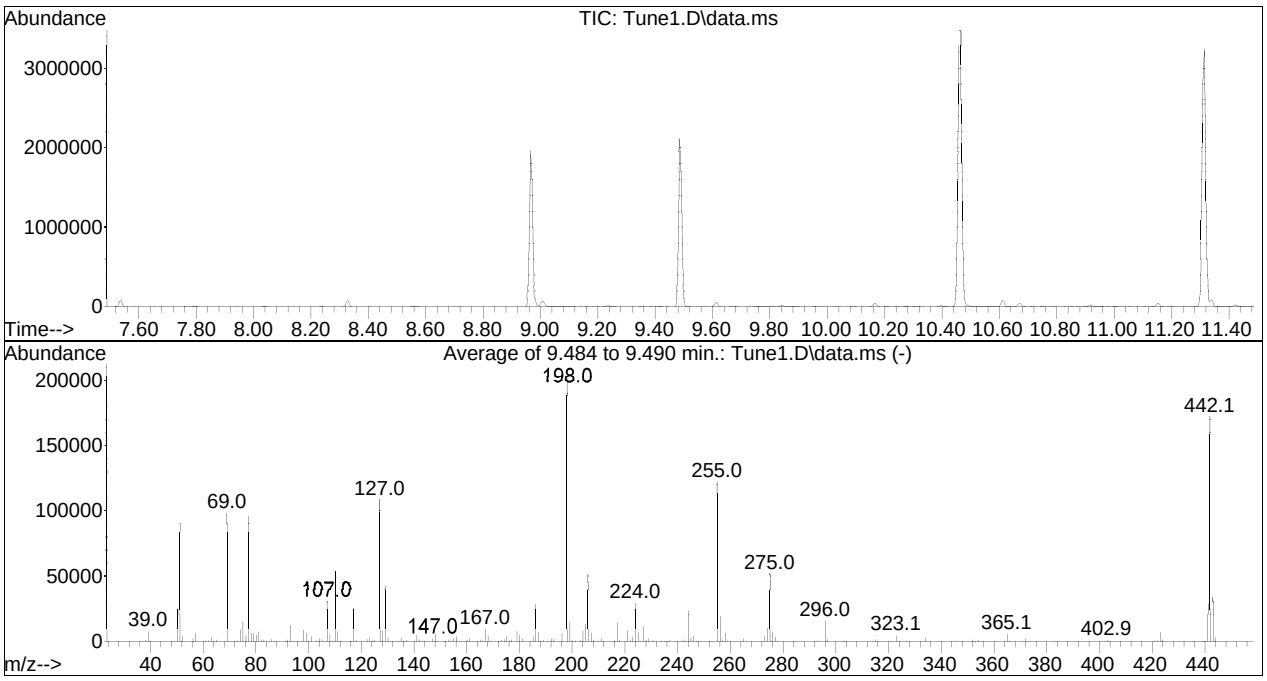
		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
91)	T	Di-n-butylphthalate	1.074	1.038	1.046	1.095	1.115	1.076	1.150	1.151	1.178	1.155	1.108	4.45
92)	T	Fluoranthene	1.160	1.162	1.153	1.217	1.252	1.182	1.229	1.230	1.255	1.237	1.208	3.29
93)	T	Benzidine				0.711	0.748	0.676	0.827	0.837	0.873	0.869	0.791	10.00
94)	T	Pyrene	1.206	1.319	1.272	1.268	1.349	1.256	1.277	1.290	1.273	1.258	1.277	3.00
95)	S	4-Terphenyl-d14	0.976	0.954	0.960	0.979	1.026	0.964	0.985	0.979	0.980	0.974	0.978	2.01
96)	T	Butyl benzyl phthalate	0.411	0.426	0.461	0.496	0.497	0.487	0.533	0.534	0.592	0.599	0.504	12.46
97)	I	IS2_Phenanthrene-d10	ISTD											
98)	T	Diphenamid	0.492	0.457	0.445	0.464	0.475	0.521	0.542	0.559	0.543	0.515	0.501	8.02
99)	I	IS3_Phenanthrene-d10	ISTD											
100)	T	n-Octadecane	0.381	0.394	0.346	0.362	0.387	0.402	0.411	0.387	0.396	0.390	0.386	4.90
101)	T	Parathion			0.083	0.077	0.086	0.096	0.107	0.097	0.123	0.128	*Q	0.9983
102)	T	3,3'-Dimethylbenzidine		0.198	0.425	0.486	0.524	0.652	0.721	0.688	0.859	0.856	*Q	0.9978
103)	I	IS1_Chrysene-d12	ISTD											
104)	T	Benzo[a]anthracene	1.244	1.246	1.228	1.206	1.255	1.254	1.245	1.279	1.307	1.274	1.254	2.23
105)	T	3,3'-Dichlorobenzidine	0.464	0.433	0.404	0.442	0.464	0.477	0.501	0.529	0.553	0.554	0.482	10.61
106)	T	Chrysene	1.204	1.121	1.194	1.193	1.225	1.203	1.174	1.208	1.178	1.143	1.184	2.66
107)	T	bis(2-Ethylhexyl)phthalate	0.621	0.587	0.619	0.671	0.694	0.708	0.744	0.769	0.805	0.785	0.700	10.79
108)	T	Di-n-octylphthalate				1.020	1.118	1.110	1.207	1.317	1.381	1.521	1.493	1.271	14.64
109)	T	Benzo(b)fluoranthene	1.270	1.437	1.229	1.327	1.308	1.327	1.424	1.438	1.454	1.394	1.361	5.80
110)	T	Benzo(k)fluoranthene	1.230	1.156	1.246	1.300	1.322	1.347	1.303	1.394	1.356	1.335	1.299	5.41
111)	T	Benzo(a)pyrene	1.077	1.099	1.122	1.128	1.148	1.194	1.241	1.287	1.275	1.257	1.183	6.58
112)	I	IS1_Perylene-d12	ISTD											
113)	T	Indeno(1,2,3-cd)pyrene	1.010	0.946	0.999	0.997	0.998	1.063	1.092	1.153	1.182	1.164	1.060	7.86
114)	T	Dibenzo[a,h]anthracene	1.050	1.040	1.065	1.091	1.140	1.095	1.143	1.176	1.158	1.154	1.111	4.42
115)	T	Benzo(g,h,i)perylene	1.137	1.014	1.057	1.073	1.163	1.107	1.170	1.182	1.155	1.157	1.122	5.01

(#) = Out of Range

Data Path : I:\8270\Dakota\230412lviical\
Data File : Tune1.D
Acq On : 13 Apr 2023 1:15 am
Operator : Dakota:jg
Sample : Tune1
Misc : WG1768668,,
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Wed Apr 19 14:34:59 2023



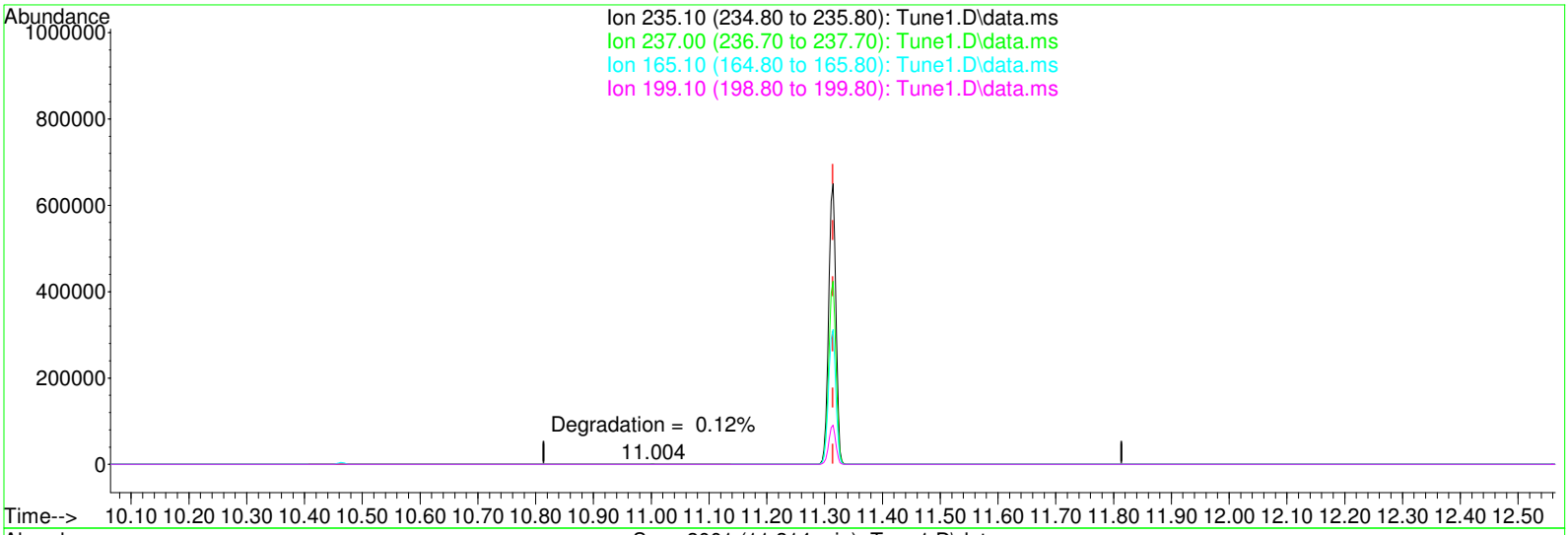
Spectrum Information: Average of 9.484 to 9.490 min.

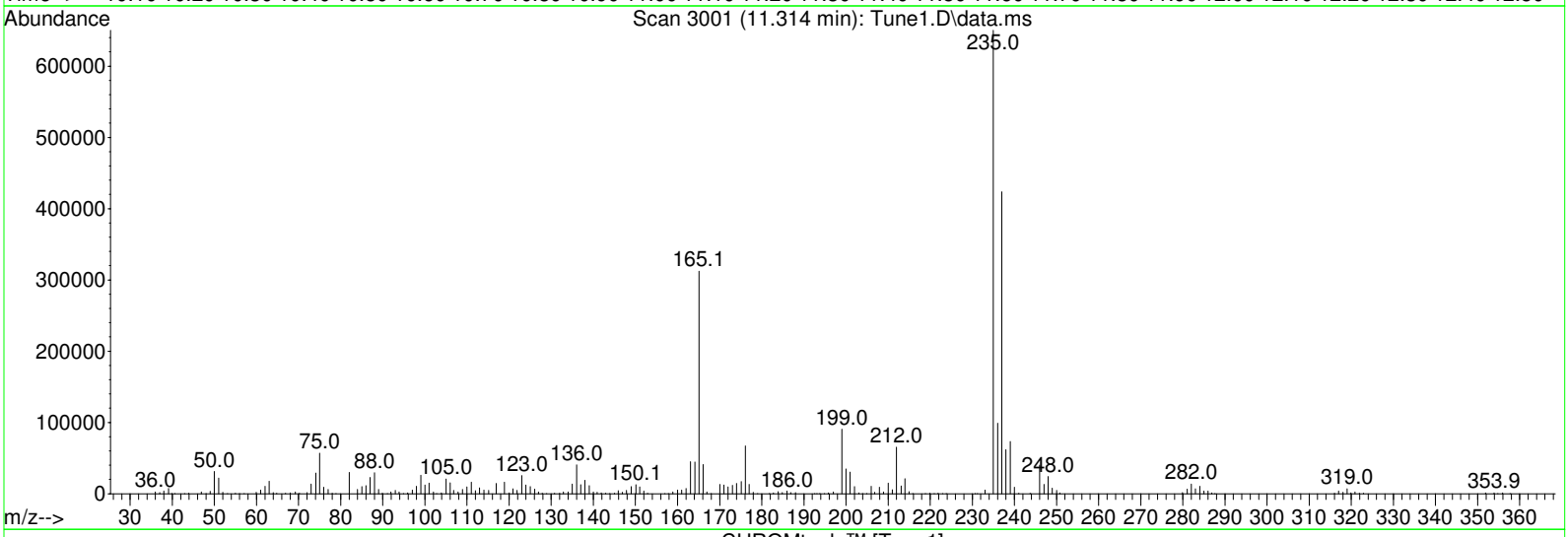
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	44.7	90429	PASS
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	98333	PASS
70	69	0.00	2	0.5	465	PASS
127	198	10	80	53.9	108907	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	202133	PASS
199	198	5	9	7.2	14558	PASS
275	198	10	60	25.7	51920	PASS
365	198	1	100	3.0	6051	PASS
441	442	0.01	24	16.8	28952	PASS
442	198	50	100	85.1	172077	PASS
443	442	15	24	19.3	33259	PASS

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230412lviical\
Data File : Tune1.D
Acq On : 13 Apr 2023 1:15 am
Operator : Dakota:jg
Sample : Tune1
Misc : WG1768668,,
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Apr 13 01:34:45 2023
Quant Method : I:\8270\Dakota\230412lviical\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Apr 13 01:34:58 2023
Response via : Initial Calibration





CHROMtools™ [Tune1]

(6) DDT (T)

11.314min (+ 0.000) 93.83

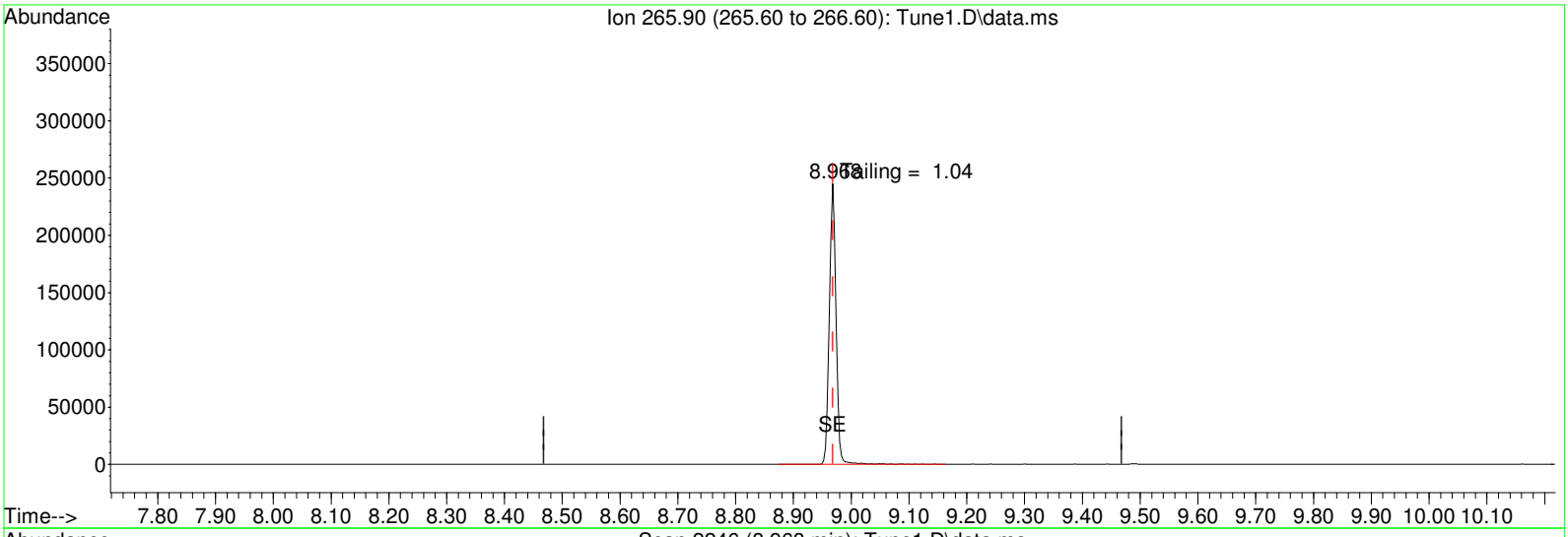
response 571934

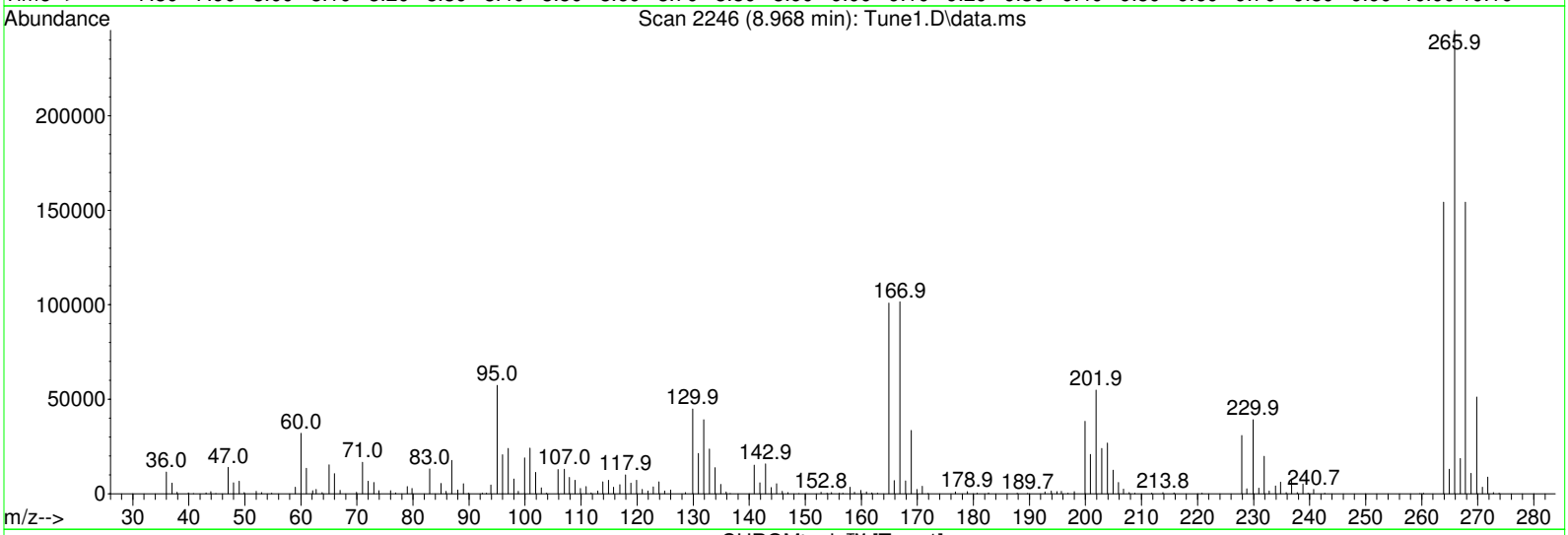
Ion	Exp%	Act%
235.10	100.00	100.00
237.00	63.40	64.97
165.10	50.50	47.89
199.10	15.30	13.56

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230412lviical\
Data File : Tune1.D
Acq On : 13 Apr 2023 1:15 am
Operator : Dakota:jg
Sample : Tune1
Misc : WG1768668,,
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Apr 13 01:34:45 2023
Quant Method : I:\8270\Dakota\230412lviical\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Apr 13 01:34:58 2023
Response via : Initial Calibration





CHROMtools™ [Tune1]

(1) Pentachlorophenol (T)

8.968min (-0.000) 93.29

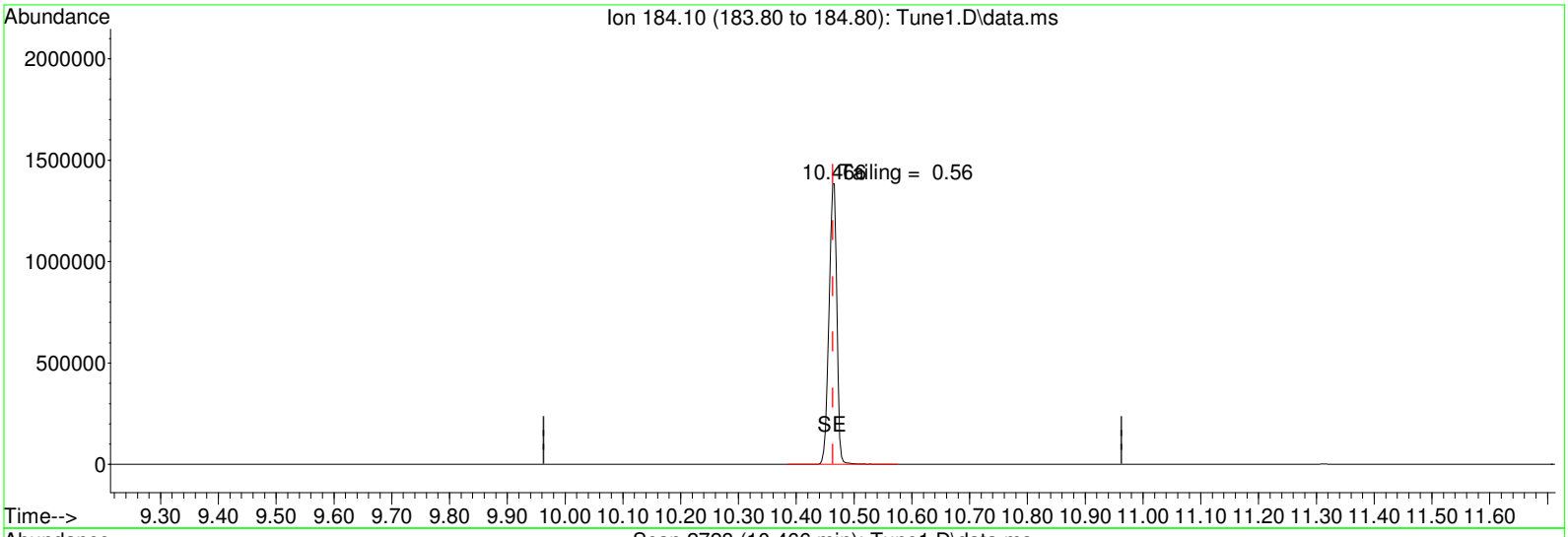
response 195937

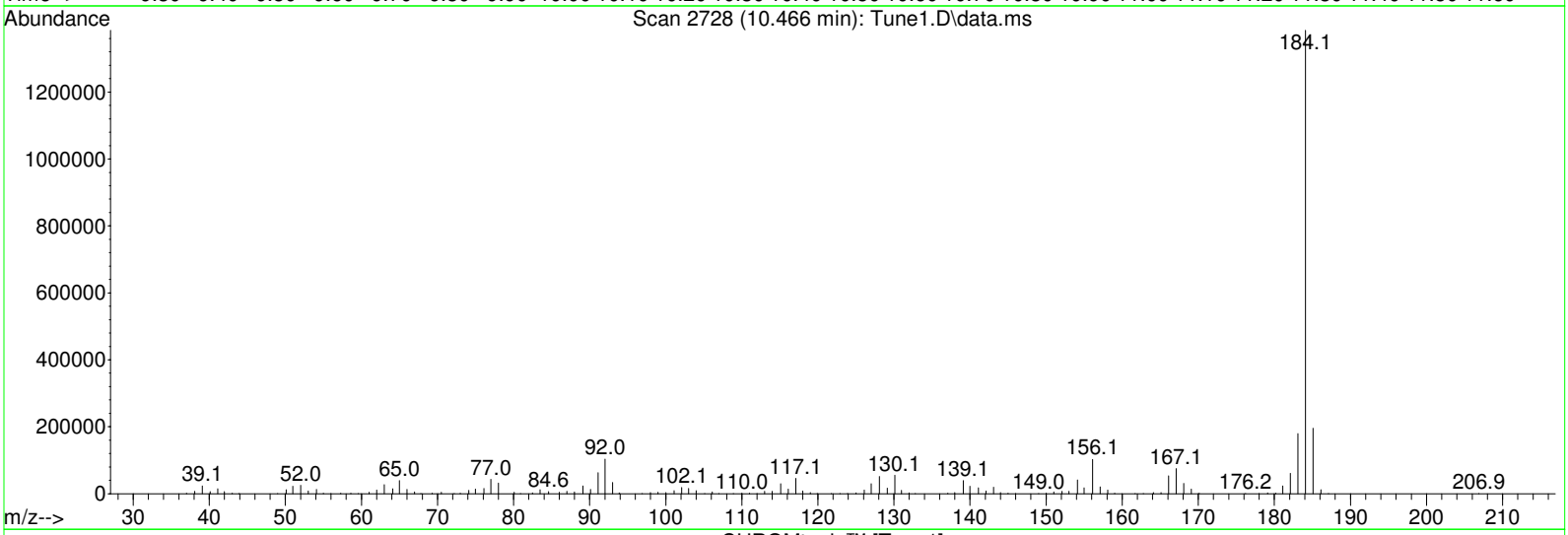
Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230412lviical\
Data File : Tune1.D
Acq On : 13 Apr 2023 1:15 am
Operator : Dakota:jg
Sample : Tune1
Misc : WG1768668,,
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Apr 13 01:34:45 2023
Quant Method : I:\8270\Dakota\230412lviical\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Apr 13 01:34:58 2023
Response via : Initial Calibration





CHROMtools™ [Tune1]

(3) Benzidine (T)

10.466min (+ 0.003) 127.51

response 1298068

Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL10.D
Acq On : 13 Apr 2023 1:37 am
Operator : Dakota:jg
Sample : IL1,32,,ABNL50 Lot# 10029
Misc : WG1768668,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 09:53:45 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	4.762	152	17502	4.000 ug/ml	0.00
Standard Area 1 = 17859			Recovery = 98.00%		
34) IS1_Naphthalene-d8	5.999	136	66961	4.000 ug/ml	0.00
Standard Area 1 = 68179			Recovery = 98.21%		
62) IS1_Acenaphthene-d10	7.706	164	40223	4.000 ug/ml	0.00
Standard Area 1 = 39516			Recovery = 101.79%		
87) IS1_Phenanthrene-d10	9.132	188	93586	4.000 ug/ml	# 0.00
Standard Area 1 = 92463			Recovery = 101.21%		
103) IS1_Chrysene-d12	11.774	240	99695	4.000 ug/ml	0.00
Standard Area 1 = 97366			Recovery = 102.39%		
112) IS1_Perylene-d12	13.232	264	120637	4.000 ug/ml	0.00
Standard Area 1 = 122891			Recovery = 98.17%		
System Monitoring Compounds					
4) 2-Fluorophenol	3.491	112	251610	55.675 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 1113.50%#		
7) Phenol-d6	4.442	99	329279	56.859 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 1137.18%#		
19) Nitrobenzene-d5	5.306	82	290684	52.361 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 2094.44%#		
45) 2-Fluorobiphenyl	7.069	172	656381	49.826 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 1993.04%#		
78) 2,4,6-Tribromophenol	8.470	330	130401	56.006 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 1120.12%#		
95) 4-Terphenyl-d14	10.711	244	1139675	49.820 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 1992.80%#		
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	2.102	74	183896	52.159 ug/ml#	78
3) Pyridine	2.139	79	283135	52.109 ug/ml#	63
5) Aniline	4.445	93	425355	54.301 ug/ml#	52
6) 2-Chlorophenol	4.560	128	281677	53.859 ug/ml#	88
8) Phenol	4.455	94	366645	54.459 ug/ml#	50
9) Bis(2-chloroethyl)ether	4.526	93	242678	52.015 ug/ml	96
10) 1,3-Dichlorobenzene	4.706	146	321375	51.173 ug/ml	96
11) 1,4-Dichlorobenzene	4.781	146	321671	50.640 ug/ml	96
12) 1,2-Dichlorobenzene	4.927	146	303922	49.407 ug/ml	95
13) Benzyl alcohol	4.918	79	228301	55.719 ug/ml	98
14) Bis(2-chloroisopropyl)...	5.061	45	392902	50.319 ug/ml#	59

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL10.D
Acq On : 13 Apr 2023 1:37 am
Operator : Dakota:jg
Sample : IL1,32,,ABNL50 Lot# 10029
Misc : WG1768668,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 09:53:45 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	5.045	108	242120	54.455	ug/ml	99
16) Hexachloroethane	5.257	117	119881	49.743	ug/ml#	69
17) n-Nitrosodi-n-propylamine	5.185	70	197649	55.232	ug/ml#	90
18) 3-Methylphenol/4-Methy...	5.201	108	257213	56.010	ug/ml	100
20) Nitrobenzene	5.325	77	281802	52.210	ug/ml	100
21) Isophorone	5.567	82	522709	54.732	ug/ml	95
22) 2-Nitrophenol	5.639	139	147983	58.655	ug/ml	89
23) 2,4-Dimethylphenol	5.713	107	262098	53.955	ug/ml	96
24) Bis(2-chloroethoxy)met...	5.800	93	312787	50.484	ug/ml#	97
25) 2,4-Dichlorophenol	5.878	162	254385	55.709	ug/ml#	94
26) 1,2,4-Trichlorobenzene	5.956	180	277571	49.703	ug/ml	96
35) Naphthalene	6.021	128	794223	48.857	ug/ml	99
36) Benzoic Acid	5.841	105	203313	49.810	ug/ml	96
37) 4-Chloroaniline	6.089	65	103248	53.807	ug/ml	75
38) Hexachlorobutadiene	6.170	225	163408	49.411	ug/ml	98
39) p-Chloro-m-cresol	6.584	107	245136	57.742	ug/ml	93
40) 2-Methylnaphthalene	6.699	142	559020	52.921	ug/ml	95
41) 1-Methylnaphthalene	6.792	115	191918	52.487	ug/ml	96
42) Hexachlorocyclopentadiene	6.870	237	216177	54.038	ug/ml	99
43) 2,4,6-Trichlorophenol	6.985	196	210508	59.599	ug/ml	99
44) 2,4,5-Trichlorophenol	7.013	196	224362	57.390	ug/ml	99
46) 2-Chloronaphthalene	7.168	162	584721	50.454	ug/ml	94
47) 2-Nitroaniline	7.277	138	198803	59.350	ug/ml	84
48) 1,4-Dinitrobenzene	7.407	168	90974	58.153	ug/ml	91
49) 1,3-Dinitrobenzene	7.485	168	102211	56.032	ug/ml#	1
50) Dimethyl phthalate	7.479	163	714451	52.752	ug/ml#	97
51) Acenaphthylene	7.566	152	917045	52.204	ug/ml	98
52) 2,6-Dinitrotoluene	7.522	165	160652	57.456	ug/ml#	80
53) 1,2-Dinitrobenzene	7.566	168	60966	55.782	ug/ml#	1
63) 3-Nitroaniline	7.678	138	177556	55.469	ug/ml#	90
64) Acenaphthene	7.737	154	538781	49.189	ug/ml	89
65) 2,4-Dinitrophenol	7.777	184	101636	51.130	ug/ml#	87
66) Dibenzofuran	7.905	168	845026	48.372	ug/ml	96
67) 2,4-Dinitrotoluene	7.908	165	218363	55.422	ug/ml	95
68) 4-Nitrophenol	7.864	65	143398	49.898	ug/ml#	84
69) 2,3,5,6-Tetrachlorophenol	7.992	232	195745	50.054	ug/ml	98
70) 2,3,4,6-Tetrachlorophenol	8.035	232	193447	49.995	ug/ml	97
71) Diethyl phthalate	8.169	149	740955	50.253	ug/ml	99
72) Fluorene	8.237	166	700452	49.739	ug/ml	93
73) 4-Chlorophenyl phenyl ...	8.250	204	331521	48.436	ug/ml	89

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL10.D
Acq On : 13 Apr 2023 1:37 am
Operator : Dakota:jg
Sample : IL1,32,,ABNL50 Lot# 10029
Misc : WG1768668,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 09:53:45 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74)	4-Nitroaniline	8.268	138	179335	56.426	ug/ml	82
75)	4,6-Dinitro-o-cresol	8.302	198	124878	50.366	ug/ml#	64
76)	NDPA/DPA	8.368	169	596588	49.661	ug/ml	92
77)	Azobenzene	8.402	77	623349	49.371	ug/ml	99
79)	4-Bromophenyl phenyl e...	8.719	248	229939M3	53.799	ug/ml	
80)	Hexachlorobenzene	8.775	284	270733	50.612	ug/ml#	82
81)	Pentachlorophenol	8.968	266	175238	50.780	ug/ml	99
88)	Phenanthrene	9.160	178	1145757	47.534	ug/ml	98
89)	Anthracene	9.207	178	1148288	49.184	ug/ml	97
90)	Carbazole	9.375	167	1099010	49.932	ug/ml	96
91)	Di-n-butylphthalate	9.757	149	1351130	52.134	ug/ml	98
92)	Fluoranthene	10.310	202	1447225	51.212	ug/ml#	92
93)	Benzidine	10.463	184	1016248	56.062	ug/ml#	95
94)	Pyrene	10.528	202	1471561	49.260	ug/ml	98
96)	Butyl benzyl phthalate	11.236	149	700294	59.439	ug/ml	87
104)	Benzo(a)anthracene	11.765	228	1588135	50.820	ug/ml	97
105)	3,3'-Dichlorobenzidine	11.762	252	690276	57.458	ug/ml#	97
106)	Chrysene	11.802	228	1424209	48.250	ug/ml	97
107)	Bis(2-ethylhexyl)phtha...	11.871	149	977987	56.024	ug/ml#	90
108)	Di-n-octylphthalate	12.548	149	1861023	58.748	ug/ml#	75
109)	Benzo(b)fluoranthene	12.871	252	1736596	51.200	ug/ml#	93
110)	Benzo(k)fluoranthene	12.902	252	1664154	51.404	ug/ml#	93
111)	Benzo(a)pyrene	13.185	252	1566201	53.119	ug/ml#	93
113)	Indeno(1,2,3-cd)pyrene	14.199	276	1755373M6	54.892	ug/mL	
114)	Dibenzo(a,h)anthracene	14.217	278	1740697	51.937	ug/ml#	89
115)	Benzo(ghi)perylene	14.419	276	1744009	51.558	ug/ml#	86

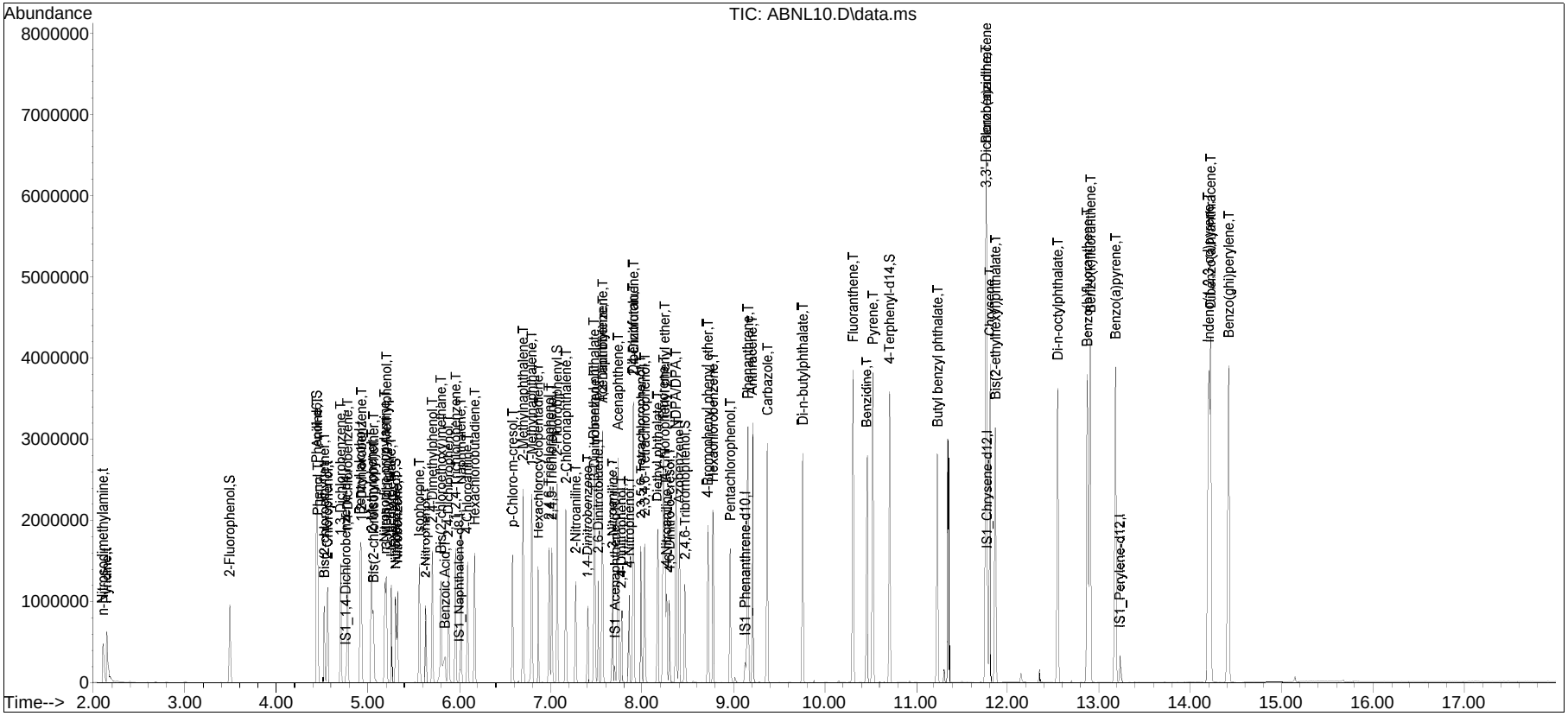
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL10.D
Acq On : 13 Apr 2023 1:37 am
Operator : Dakota:jg
Sample : IL1,32,,ABNL50 Lot# 10029
Misc : WG1768668,,
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Apr 15 09:53:45 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

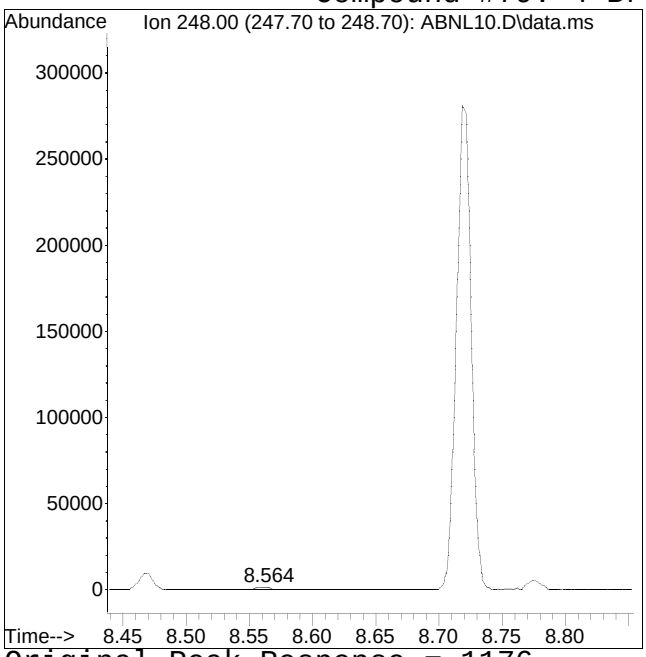
Sub List : ABNical - ABN ical sublistviical\ABNL6.D•

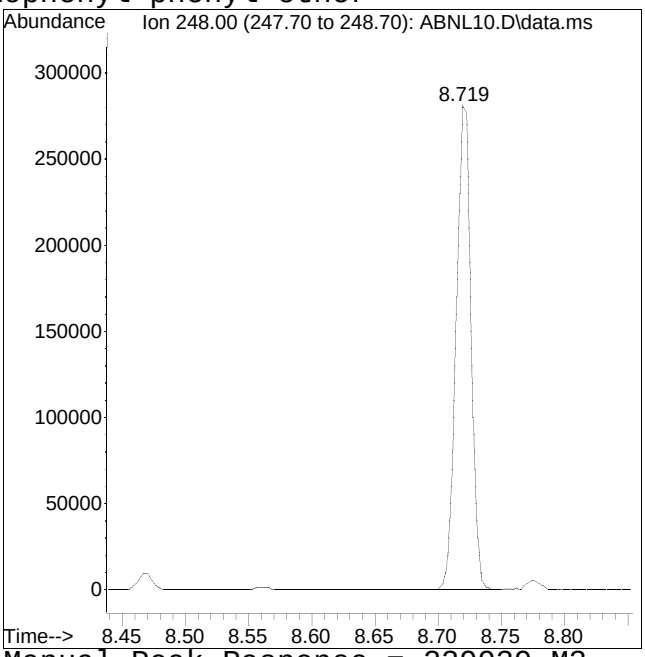


Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL10.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 1:37 am Instrument : Dakota
Sample : IL1,32,,ABNL50 Lot# 10029 Quant Date : 4/15/2023 9:54 am

Compound #79: 4-Bromophenyl phenyl ether



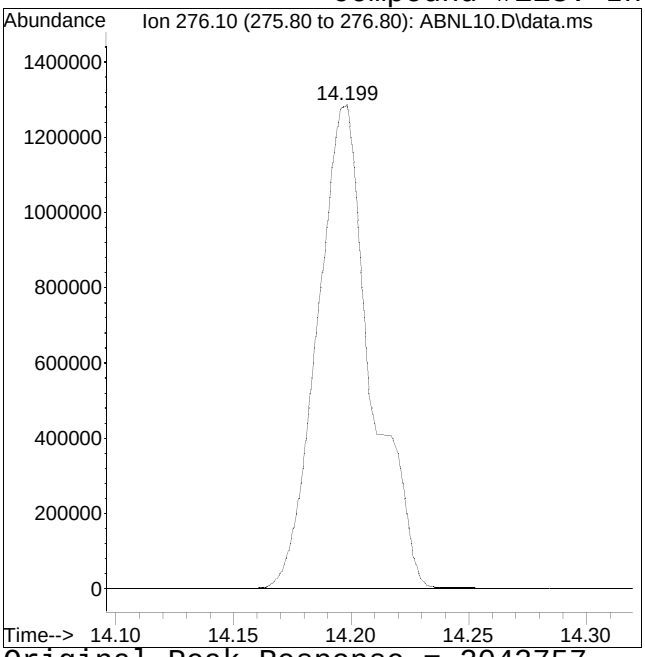


Original Peak Response = 1176 Manual Peak Response = 229939 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

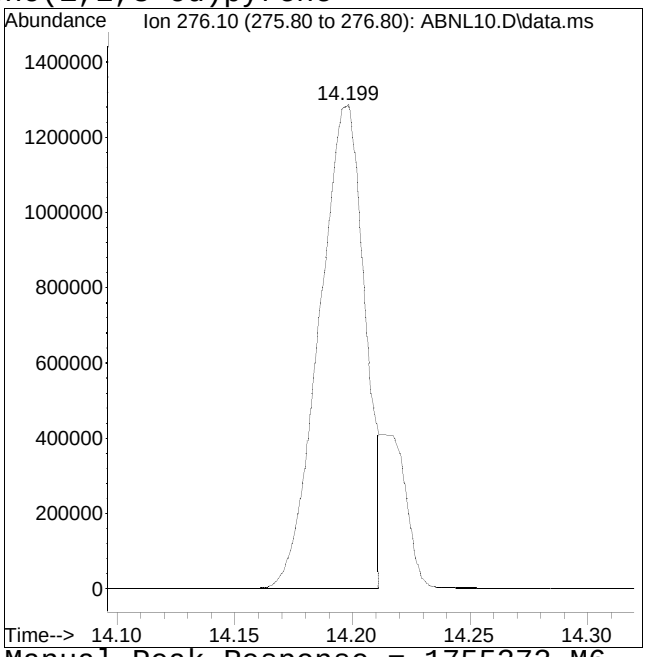
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL10.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 1:37 am Instrument : Dakota
Sample : IL1,32,,ABNL50 Lot# 10029 Quant Date : 4/15/2023 9:54 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 2043757



Manual Peak Response = 1755373 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL9.D
Acq On : 13 Apr 2023 2:00 am
Operator : Dakota:jg
Sample : IL2,32,,ABNL35 Lot# 10030
Misc : WG1768668,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 09:56:47 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	4.766	152	18577	4.000 ug/ml	0.00
Standard Area 1 = 17859			Recovery = 104.02%		
34) IS1_Naphthalene-d8	6.003	136	69408	4.000 ug/ml #	0.00
Standard Area 1 = 68179			Recovery = 101.80%		
62) IS1_Acenaphthene-d10	7.703	164	38883	4.000 ug/ml	0.00
Standard Area 1 = 39516			Recovery = 98.40%		
87) IS1_Phenanthrene-d10	9.133	188	90805	4.000 ug/ml #	0.00
Standard Area 1 = 92463			Recovery = 98.21%		
103) IS1_Chrysene-d12	11.771	240	96756	4.000 ug/ml	0.00
Standard Area 1 = 97366			Recovery = 99.37%		
112) IS1_Perylene-d12	13.229	264	120628	4.000 ug/ml	0.00
Standard Area 1 = 122891			Recovery = 98.16%		
System Monitoring Compounds					
4) 2-Fluorophenol	3.491	112	185070	38.581 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 771.62%#		
7) Phenol-d6	4.442	99	233611	38.005 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 760.10%#		
19) Nitrobenzene-d5	5.306	82	206352	35.020 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 1400.80%#		
45) 2-Fluorobiphenyl	7.069	172	466260	34.146 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 1365.84%#		
78) 2,4,6-Tribromophenol	8.467	330	87607	38.923 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 778.46%#		
95) 4-Terphenyl-d14	10.711	244	778953	35.094 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 1403.76%#		
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	2.108	74	130490	34.929 ug/ml#	80
3) Pyridine	2.142	79	201605	35.051 ug/ml#	61
5) Aniline	4.446	93	305948	36.797 ug/ml#	52
6) 2-Chlorophenol	4.561	128	205640	37.045 ug/ml#	88
8) Phenol	4.455	94	262723	36.765 ug/ml#	49
9) Bis(2-chloroethyl)ether	4.526	93	171912	34.715 ug/ml	97
10) 1,3-Dichlorobenzene	4.707	146	236611	35.496 ug/ml	96
11) 1,4-Dichlorobenzene	4.781	146	237568	35.236 ug/ml	96
12) 1,2-Dichlorobenzene	4.927	146	226080	34.626 ug/ml	96
13) Benzyl alcohol	4.915	79	161210	37.068 ug/ml	99
14) Bis(2-chloroisopropyl)...	5.058	45	283211	34.172 ug/ml#	59

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL9.D
Acq On : 13 Apr 2023 2:00 am
Operator : Dakota:jg
Sample : IL2,32,,ABNL35 Lot# 10030
Misc : WG1768668,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 09:56:47 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	5.042	108	173914	36.851	ug/ml	99
16) Hexachloroethane	5.257	117	88271	34.507	ug/ml#	70
17) n-Nitrosodi-n-propylamine	5.182	70	140131	36.893	ug/ml#	89
18) 3-Methylphenol/4-Methy...	5.198	108	185008	37.956	ug/ml	99
20) Nitrobenzene	5.325	77	200982	35.082	ug/ml	100
21) Isophorone	5.564	82	367956	36.299	ug/ml	95
22) 2-Nitrophenol	5.639	139	107420	40.114	ug/ml	89
23) 2,4-Dimethylphenol	5.710	107	184184	35.722	ug/ml	97
24) Bis(2-chloroethoxy)met...	5.798	93	222226	33.792	ug/ml#	98
25) 2,4-Dichlorophenol	5.875	162	180781	37.299	ug/ml	95
26) 1,2,4-Trichlorobenzene	5.956	180	200865	33.886	ug/ml	97
35) Naphthalene	6.021	128	573859	34.056	ug/ml	98
36) Benzoic Acid	5.825	105	138710	35.363	ug/ml	96
37) 4-Chloroaniline	6.090	65	71398	35.897	ug/ml#	70
38) Hexachlorobutadiene	6.170	225	118769	34.647	ug/ml	99
39) p-Chloro-m-cresol	6.581	107	170524	38.751	ug/ml	92
40) 2-Methylnaphthalene	6.699	142	394081	35.992	ug/ml	95
41) 1-Methylnaphthalene	6.792	115	134877	35.586	ug/ml	96
42) Hexachlorocyclopentadiene	6.870	237	152386	36.749	ug/ml	99
43) 2,4,6-Trichlorophenol	6.985	196	143799	39.277	ug/ml	99
44) 2,4,5-Trichlorophenol	7.013	196	158542	39.124	ug/ml	99
46) 2-Chloronaphthalene	7.165	162	416910	34.706	ug/ml	94
47) 2-Nitroaniline	7.274	138	136679	39.365	ug/ml	84
48) 1,4-Dinitrobenzene	7.404	168	61416	37.874	ug/ml	91
49) 1,3-Dinitrobenzene	7.482	168	70109	37.079	ug/ml#	1
50) Dimethyl phthalate	7.476	163	495137	35.270	ug/ml#	98
51) Acenaphthylene	7.563	152	643511	35.341	ug/ml	99
52) 2,6-Dinitrotoluene	7.519	165	106853	36.868	ug/ml#	81
53) 1,2-Dinitrobenzene	7.563	168	42533	37.544	ug/ml#	1
63) 3-Nitroaniline	7.675	138	120719	39.012	ug/ml#	93
64) Acenaphthene	7.737	154	377346	35.638	ug/ml	90
65) 2,4-Dinitrophenol	7.774	184	66915	35.224	ug/ml	88
66) Dibenzofuran	7.905	168	586141	34.709	ug/ml	95
67) 2,4-Dinitrotoluene	7.905	165	151543	39.788	ug/ml	93
68) 4-Nitrophenol	7.858	65	98307	35.516	ug/ml#	84
69) 2,3,5,6-Tetrachlorophenol	7.992	232	135044	35.832	ug/ml	99
70) 2,3,4,6-Tetrachlorophenol	8.032	232	132412	35.487	ug/ml	96
71) Diethyl phthalate	8.166	149	508074	35.646	ug/ml	99
72) Fluorene	8.234	166	482662	35.455	ug/ml	92
73) 4-Chlorophenyl phenyl ...	8.250	204	226706	34.264	ug/ml	90

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL9.D
Acq On : 13 Apr 2023 2:00 am
Operator : Dakota:jg
Sample : IL2,32,,ABNL35 Lot# 10030
Misc : WG1768668,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 09:56:47 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74)	4-Nitroaniline	8.265	138	121622	39.586	ug/ml	83
75)	4,6-Dinitro-o-cresol	8.300	198	85018	35.718	ug/ml#	64
76)	NDPA/DPA	8.368	169	415382	35.769	ug/ml	94
77)	Azobenzene	8.402	77	435927	35.716	ug/ml	99
79)	4-Bromophenyl phenyl e...	8.719	248	155978	37.752	ug/ml#	82
80)	Hexachlorobenzene	8.775	284	184752	35.728	ug/ml#	82
81)	Pentachlorophenol	8.965	266	117655	35.534	ug/ml	99
88)	Phenanthrene	9.157	178	796275	34.047	ug/ml	99
89)	Anthracene	9.207	178	791418	34.937	ug/ml	98
90)	Carbazole	9.372	167	757972	35.492	ug/ml	97
91)	Di-n-butylphthalate	9.754	149	935631	37.207	ug/ml	98
92)	Fluoranthene	10.307	202	997543	36.381	ug/ml#	92
93)	Benzidine	10.460	184	693502	39.429	ug/ml#	94
94)	Pyrene	10.525	202	1011370	34.892	ug/ml	98
96)	Butyl benzyl phthalate	11.234	149	470441	41.152	ug/ml	88
104)	Benzo(a)anthracene	11.762	228	1106261	36.475	ug/ml	98
105)	3,3'-Dichlorobenzidine	11.759	252	468370	40.171	ug/ml#	96
106)	Chrysene	11.799	228	997646	34.826	ug/ml	98
107)	Bis(2-ethylhexyl)phtha...	11.868	149	681879	40.248	ug/ml#	89
108)	Di-n-octylphthalate	12.545	149	1287614	41.882	ug/ml#	75
109)	Benzo(b)fluoranthene	12.868	252	1231279	37.405	ug/ml#	94
110)	Benzo(k)fluoranthene	12.896	252	1148047	36.539	ug/ml#	94
111)	Benzo(a)pyrene	13.179	252	1079721	37.732	ug/ml#	93
113)	Indeno(1,2,3-cd)pyrene	14.193	276	1247620M6	39.017	ug/mL	
114)	Dibenzo(a,h)anthracene	14.211	278	1222529	36.479	ug/ml#	89
115)	Benzo(ghi)perylene	14.410	276	1218884	36.037	ug/ml#	86

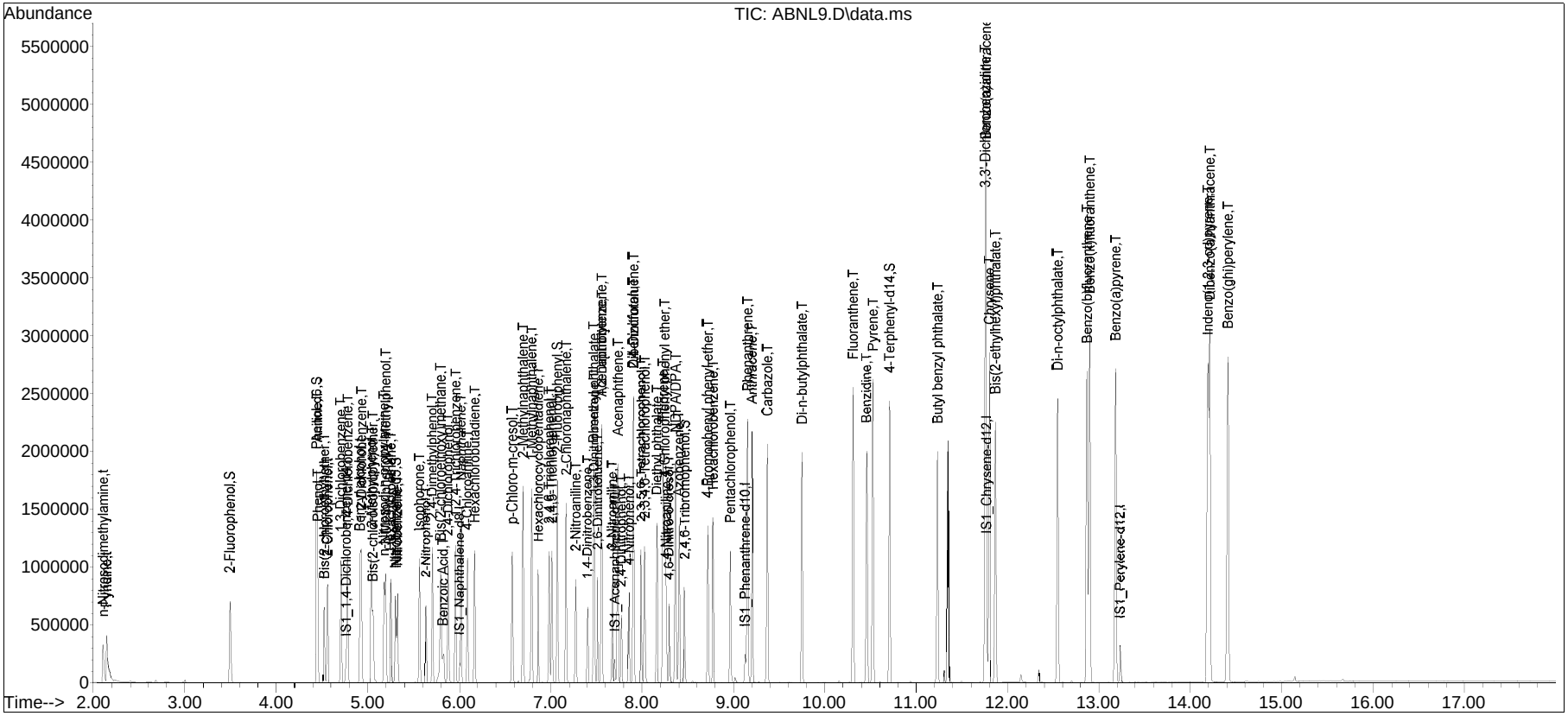
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL9.D
Acq On : 13 Apr 2023 2:00 am
Operator : Dakota:jg
Sample : IL2,32,,ABNL35 Lot# 10030
Misc : WG1768668,,
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Apr 15 09:56:47 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

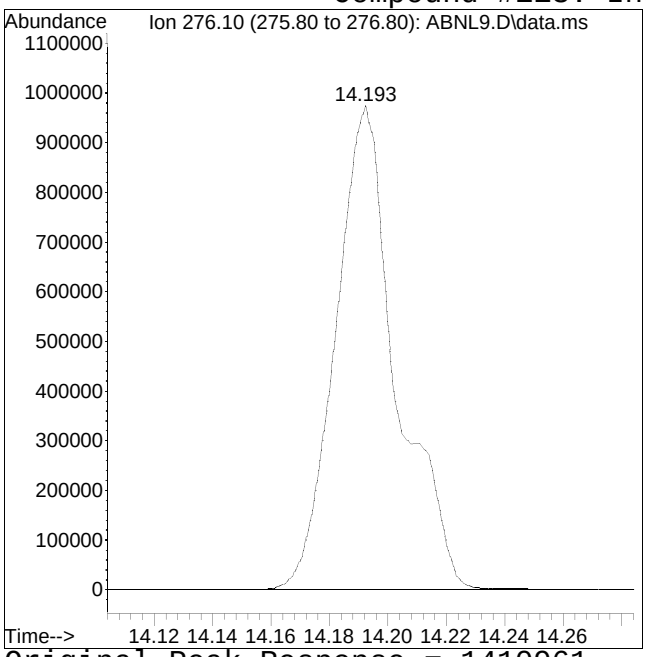
Sub List : ABNical - ABN ical sublistviical\ABNL6.D•



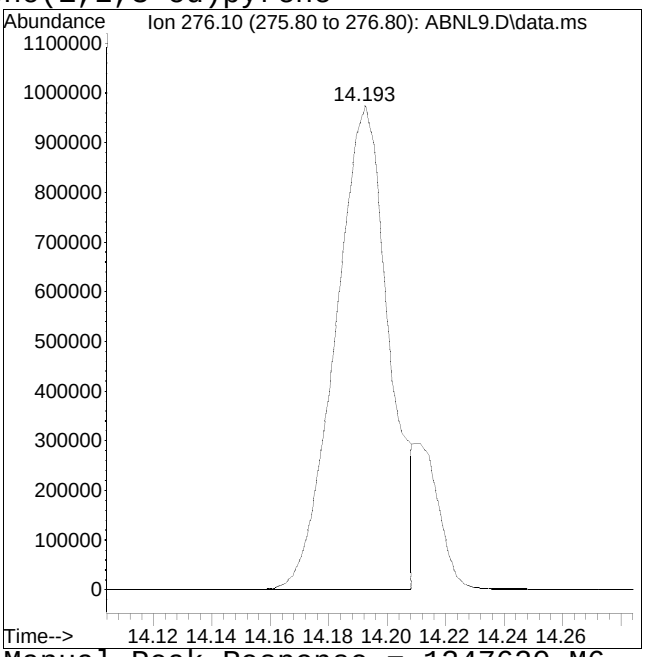
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL9.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 2:00 am Instrument : Dakota
Sample : IL2,32,,ABNL35 Lot# 10030 Quant Date : 4/15/2023 9:57 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 1410961



Manual Peak Response = 1247620 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL8.D
Acq On : 13 Apr 2023 2:23 am
Operator : Dakota:jg
Sample : IL3,32,,ABNL15 Lot# 10031
Misc : WG1768668,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 19 12:18:30 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS1_1,4-Dichlorobenzen...	4.763	152	18103	4.000	ug/ml	# 0.00
Standard Area 1 = 17859			Recovery = 101.37%			
34) IS1_Naphthalene-d8	6.000	136	66959	4.000	ug/ml	# 0.00
Standard Area 1 = 68179			Recovery = 98.21%			
62) IS1_Acenaphthene-d10	7.703	164	39504	4.000	ug/ml	0.00
Standard Area 1 = 39516			Recovery = 99.97%			
87) IS1_Phenanthrene-d10	9.133	188	89366	4.000	ug/ml	0.00
Standard Area 1 = 92463			Recovery = 96.65%			
103) IS1_Chrysene-d12	11.768	240	93365	4.000	ug/ml	0.00
Standard Area 1 = 97366			Recovery = 95.89%			
112) IS1_Perylene-d12	13.229	264	117992	4.000	ug/ml	0.00
Standard Area 1 = 122891			Recovery = 96.01%			
System Monitoring Compounds						
4) 2-Fluorophenol	3.491	112	72524	15.515	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 310.30%#			
7) Phenol-d6	4.439	99	96050	16.035	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 320.70%#			
19) Nitrobenzene-d5	5.303	82	84820	14.772	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 590.88%#			
45) 2-Fluorobiphenyl	7.069	172	196183	14.893	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 595.72%#			
78) 2,4,6-Tribromophenol	8.464	330	36473	15.950	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 319.00%#			
95) 4-Terphenyl-d14	10.708	244	328016	15.016	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 600.64%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	2.108	74	50353	13.939	ug/ml	79
3) Pyridine	2.155	79	80952	14.610	ug/ml#	64
5) Aniline	4.446	93	121864	15.041	ug/ml#	51
6) 2-Chlorophenol	4.557	128	84970	15.708	ug/ml#	87
8) Phenol	4.452	94	105280	15.119	ug/ml#	49
9) Bis(2-chloroethyl)ether	4.523	93	71948	14.909	ug/ml	95
10) 1,3-Dichlorobenzene	4.707	146	95942	14.770	ug/ml	95
11) 1,4-Dichlorobenzene	4.781	146	95883	14.594	ug/ml	96
12) 1,2-Dichlorobenzene	4.927	146	92935	14.606	ug/ml	95
13) Benzyl alcohol	4.915	79	65627	15.485	ug/ml	99
14) Bis(2-chloroisopropyl)...	5.061	45	121124	14.998	ug/ml#	62

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL8.D
Acq On : 13 Apr 2023 2:23 am
Operator : Dakota:jg
Sample : IL3,32,,ABNL15 Lot# 10031
Misc : WG1768668,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 19 12:18:30 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	5.042	108	70630	15.358	ug/ml	99
16) Hexachloroethane	5.257	117	36119	14.489	ug/ml#	68
17) n-Nitrosodi-n-propylamine	5.182	70	58025	15.677	ug/ml#	89
18) 3-Methylphenol/4-Methy...	5.198	108	75158	15.823	ug/ml	97
20) Nitrobenzene	5.322	77	84892	15.206	ug/ml	97
21) Isophorone	5.564	82	152034	15.391	ug/ml	95
22) 2-Nitrophenol	5.639	139	41973	16.084	ug/ml	91
23) 2,4-Dimethylphenol	5.710	107	75700	15.066	ug/ml	97
24) Bis(2-chloroethoxy)met...	5.798	93	92178	14.384	ug/ml	98
25) 2,4-Dichlorophenol	5.875	162	74292	15.729	ug/ml	94
26) 1,2,4-Trichlorobenzene	5.956	180	82871	14.347	ug/ml	95
35) Naphthalene	6.018	128	241893	14.880	ug/ml	100
36) Benzoic Acid	5.794	105	47497	14.892	ug/ml	95
37) 4-Chloroaniline	6.087	65	30913	16.110	ug/ml	77
38) Hexachlorobutadiene	6.167	225	50041	15.132	ug/ml	97
39) p-Chloro-m-cresol	6.581	107	69570	16.388	ug/ml	93
40) 2-Methylnaphthalene	6.699	142	163517	15.480	ug/ml	95
41) 1-Methylnaphthalene	6.792	115	56721	15.513	ug/ml	94
42) Hexachlorocyclopentadiene	6.870	237	62618	15.653	ug/ml	99
43) 2,4,6-Trichlorophenol	6.982	196	57941	16.405	ug/ml	97
44) 2,4,5-Trichlorophenol	7.013	196	65070	16.645	ug/ml	98
46) 2-Chloronaphthalene	7.165	162	177307	15.300	ug/ml	94
47) 2-Nitroaniline	7.271	138	54664	16.320	ug/ml	88
48) 1,4-Dinitrobenzene	7.401	168	26066	16.662	ug/ml	88
49) 1,3-Dinitrobenzene	7.476	168	28830	15.805	ug/ml#	1
50) Dimethyl phthalate	7.473	163	212246	15.672	ug/ml#	97
51) Acenaphthylene	7.560	152	273056	15.545	ug/ml	98
52) 2,6-Dinitrotoluene	7.513	165	46288	16.555	ug/ml#	81
53) 1,2-Dinitrobenzene	7.560	168	16737	15.314	ug/ml#	1
63) 3-Nitroaniline	7.669	138	51253	16.303	ug/ml#	91
64) Acenaphthene	7.734	154	159313	14.809	ug/ml	88
65) 2,4-Dinitrophenol	7.771	184	25775	14.134	ug/ml#	88
66) Dibenzofuran	7.902	168	253369	14.768	ug/ml	95
67) 2,4-Dinitrotoluene	7.902	165	63576	16.430	ug/ml	94
68) 4-Nitrophenol	7.855	65	41721	15.095	ug/ml#	88
69) 2,3,5,6-Tetrachlorophenol	7.992	232	55507	14.725	ug/ml	100
70) 2,3,4,6-Tetrachlorophenol	8.032	232	55912	14.923	ug/ml	98
71) Diethyl phthalate	8.163	149	218199	15.068	ug/ml	98
72) Fluorene	8.234	166	208468	15.073	ug/ml	93
73) 4-Chlorophenyl phenyl ...	8.250	204	99737	14.837	ug/ml	89

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL8.D
Acq On : 13 Apr 2023 2:23 am
Operator : Dakota:jg
Sample : IL3,32,,ABNL15 Lot# 10031
Misc : WG1768668,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 19 12:18:30 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74)	4-Nitroaniline	8.259	138	51751	16.579	ug/ml	82
75)	4,6-Dinitro-o-cresol	8.293	198	33921	14.534	ug/ml#	65
76)	NDPA/DPA	8.365	169	178356	15.117	ug/ml	95
77)	Azobenzene	8.399	77	189894	15.314	ug/ml	97
79)	4-Bromophenyl phenyl e...	8.719	248	63779	15.194	ug/ml#	83
80)	Hexachlorobenzene	8.772	284	78943	15.026	ug/ml#	80
81)	Pentachlorophenol	8.965	266	46628	14.391	ug/ml	99
88)	Phenanthrene	9.154	178	342592	14.884	ug/ml	100
89)	Anthracene	9.204	178	339191	15.214	ug/ml	99
90)	Carbazole	9.369	167	327710	15.592	ug/ml	98
91)	Di-n-butylphthalate	9.754	149	385617	15.582	ug/ml	99
92)	Fluoranthene	10.307	202	412316	15.279	ug/ml#	92
93)	Benzidine	10.457	184	280426	16.201	ug/ml#	94
94)	Pyrene	10.522	202	432339	15.156	ug/ml	99
96)	Butyl benzyl phthalate	11.230	149	178912	15.903	ug/ml#	87
104)	Benzo(a)anthracene	11.759	228	447751	15.299	ug/ml	99
105)	3,3'-Dichlorobenzidine	11.756	252	185156	16.457	ug/ml#	97
106)	Chrysene	11.793	228	423082	15.305	ug/ml	99
107)	Bis(2-ethylhexyl)phtha...	11.868	149	269360	16.476	ug/ml#	89
108)	Di-n-octylphthalate	12.542	149	483437	16.296	ug/ml#	75
109)	Benzo(b)fluoranthene	12.862	252	503393	15.848	ug/ml#	94
110)	Benzo(k)fluoranthene	12.890	252	488102	16.099	ug/ml#	94
111)	Benzo(a)pyrene	13.176	252	450774	16.325	ug/ml#	94
113)	Indeno(1,2,3-cd)pyrene	14.186	276	510088M6	16.308	ug/mL	
114)	Dibenzo(a,h)anthracene	14.205	278	520182	15.869	ug/ml#	90
115)	Benzo(ghi)perylene	14.404	276	523022	15.809	ug/ml#	87

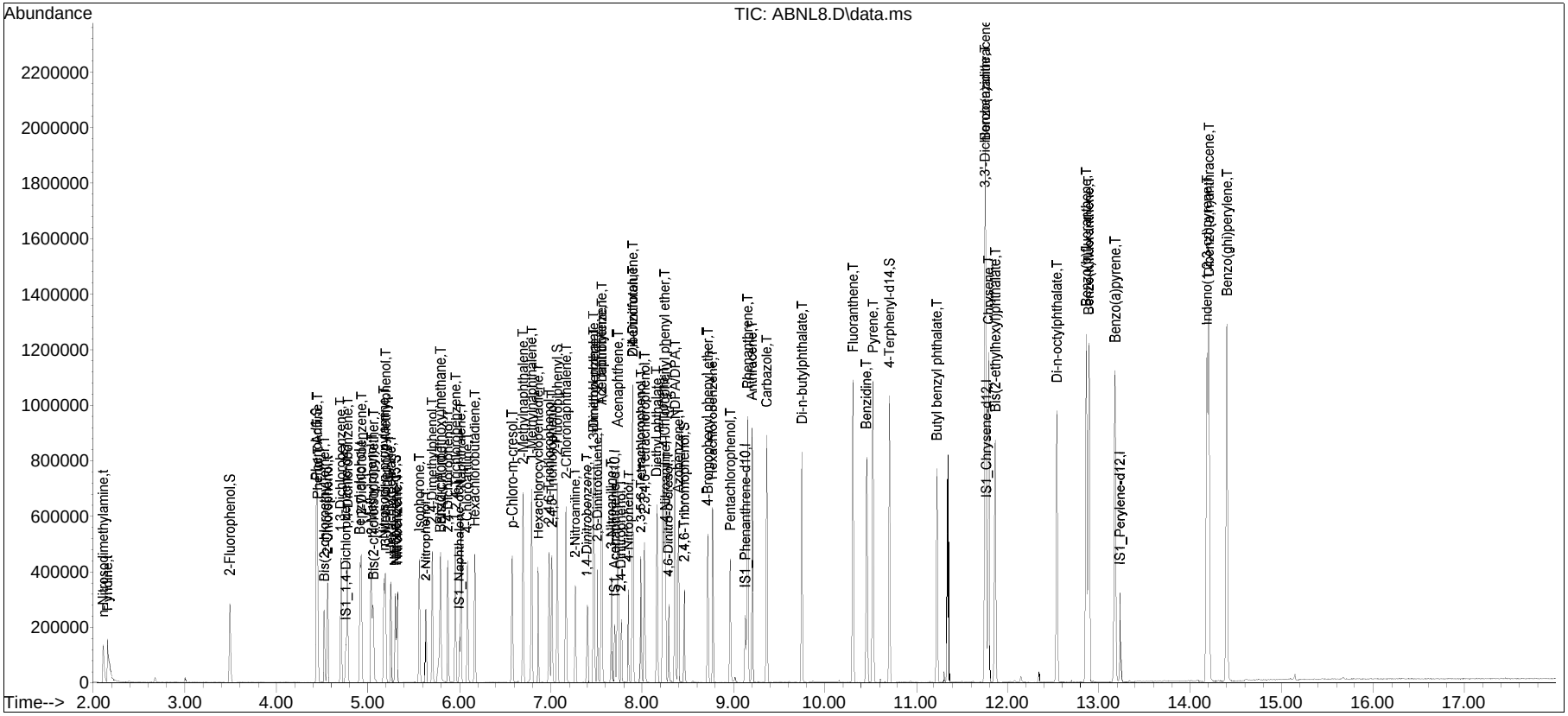
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL8.D
Acq On : 13 Apr 2023 2:23 am
Operator : Dakota:jg
Sample : IL3,32,,ABNL15 Lot# 10031
Misc : WG1768668,,
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Apr 19 12:18:30 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

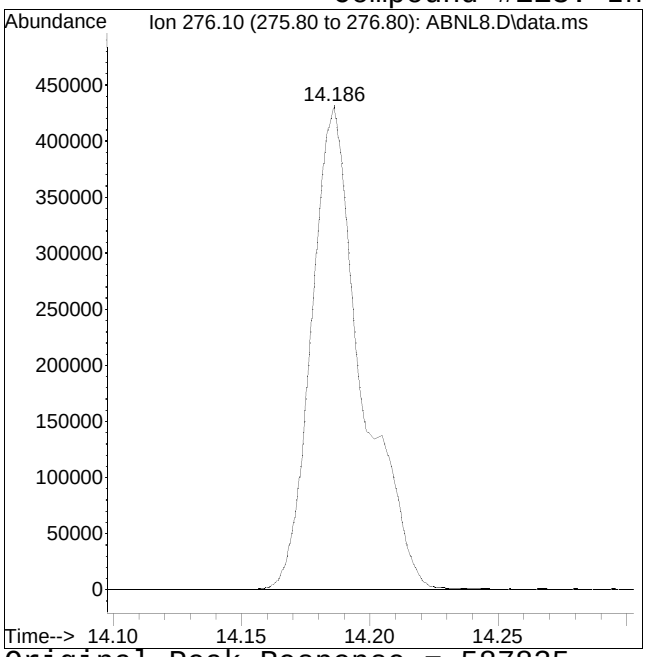
Sub List : ABNical - ABN ical sublistviical\ABNL6.D•



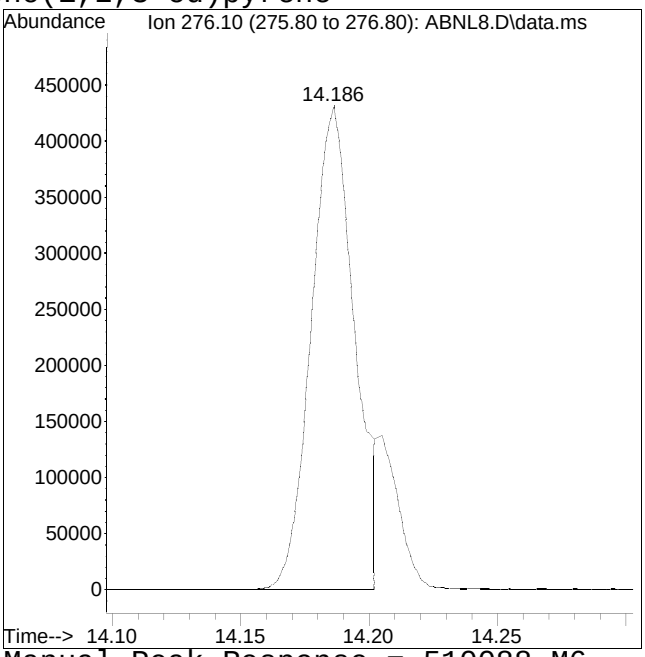
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL8.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 2:23 am Instrument : Dakota
Sample : IL3,32,,ABNL15 Lot# 10031 Quant Date : 4/15/2023 9:57 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 587835



Manual Peak Response = 510088 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL7.D
Acq On : 13 Apr 2023 2:45 am
Operator : Dakota:jg
Sample : IL4,32,,ABNL10 Lot# 10032
Misc : WG1768668,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 19 12:17:11 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	4.762	152	18403	4.000 ug/ml	0.00
Standard Area 1 = 17859			Recovery = 103.05%		
34) IS1_Naphthalene-d8	5.999	136	68265	4.000 ug/ml	# 0.00
Standard Area 1 = 68179			Recovery = 100.13%		
62) IS1_Acenaphthene-d10	7.703	164	39829	4.000 ug/ml	0.00
Standard Area 1 = 39516			Recovery = 100.79%		
87) IS1_Phenanthrene-d10	9.132	188	87692	4.000 ug/ml	# 0.00
Standard Area 1 = 92463			Recovery = 94.84%		
103) IS1_Chrysene-d12	11.765	240	95567	4.000 ug/ml	0.00
Standard Area 1 = 97366			Recovery = 98.15%		
112) IS1_Perylene-d12	13.229	264	117980	4.000 ug/ml	0.00
Standard Area 1 = 122891			Recovery = 96.00%		
System Monitoring Compounds					
4) 2-Fluorophenol	3.491	112	48418	10.189 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 203.78%#		
7) Phenol-d6	4.439	99	60948	10.009 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 200.18%#		
19) Nitrobenzene-d5	5.303	82	56945	9.755 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 390.20%#		
45) 2-Fluorobiphenyl	7.066	172	132720	9.882 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 395.28%#		
78) 2,4,6-Tribromophenol	8.464	330	23233	10.077 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 201.54%#		
95) 4-Terphenyl-d14	10.708	244	215833	10.069 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 402.76%#		
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	2.111	74	33724	9.245 ug/ml#	78
3) Pyridine	2.161	79	49009	8.816 ug/ml#	64
5) Aniline	4.445	93	82836	10.057 ug/ml#	56
6) 2-Chlorophenol	4.557	128	55891	10.164 ug/ml#	86
8) Phenol	4.452	94	69369	9.799 ug/ml#	51
9) Bis(2-chloroethyl)ether	4.523	93	47326	9.647 ug/ml	95
10) 1,3-Dichlorobenzene	4.707	146	64105	9.708 ug/ml	96
11) 1,4-Dichlorobenzene	4.781	146	65370	9.787 ug/ml	96
12) 1,2-Dichlorobenzene	4.927	146	62679	9.691 ug/ml	95
13) Benzyl alcohol	4.915	79	42089	9.769 ug/ml	97
14) Bis(2-chloroisopropyl)...	5.061	45	78839	9.603 ug/ml#	62

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL7.D
Acq On : 13 Apr 2023 2:45 am
Operator : Dakota:jg
Sample : IL4,32,,ABNL10 Lot# 10032
Misc : WG1768668,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 19 12:17:11 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	5.042	108	46684	9.986	ug/ml	98
16) Hexachloroethane	5.254	117	24495	9.666	ug/ml#	68
17) n-Nitrosodi-n-propylamine	5.182	70	38586	10.255	ug/ml#	90
18) 3-Methylphenol/4-Methy...	5.194	108	48904	10.128	ug/ml	97
20) Nitrobenzene	5.322	77	54578	9.617	ug/ml	98
21) Isophorone	5.564	82	101542	10.112	ug/ml	94
22) 2-Nitrophenol	5.639	139	27542	10.382	ug/ml#	87
23) 2,4-Dimethylphenol	5.710	107	49990	9.787	ug/ml	94
24) Bis(2-chloroethoxy)met...	5.797	93	62777	9.636	ug/ml#	98
25) 2,4-Dichlorophenol	5.875	162	49128	10.232	ug/ml#	94
26) 1,2,4-Trichlorobenzene	5.956	180	56166	9.565	ug/ml	96
35) Naphthalene	6.018	128	163008	9.836	ug/ml	99
36) Benzoic Acid	5.785	105	29148M1	9.896	ug/ml	
37) 4-Chloroaniline	6.087	65	19500	9.968	ug/ml#	70
38) Hexachlorobutadiene	6.167	225	33591	9.963	ug/ml	96
39) p-Chloro-m-cresol	6.581	107	45465	10.505	ug/ml	91
40) 2-Methylnaphthalene	6.699	142	109533	10.171	ug/ml	95
41) 1-Methylnaphthalene	6.792	115	36060	9.674	ug/ml	88
42) Hexachlorocyclopentadiene	6.870	237	42434	10.405	ug/ml	97
43) 2,4,6-Trichlorophenol	6.982	196	38910	10.806	ug/ml	99
44) 2,4,5-Trichlorophenol	7.013	196	41160	10.327	ug/ml	97
46) 2-Chloronaphthalene	7.165	162	118302	10.013	ug/ml	94
47) 2-Nitroaniline	7.274	138	36499	10.688	ug/ml	85
48) 1,4-Dinitrobenzene	7.401	168	15760	9.882	ug/ml	93
49) 1,3-Dinitrobenzene	7.479	168	18687	10.049	ug/ml#	1
50) Dimethyl phthalate	7.473	163	138029	9.997	ug/ml#	97
51) Acenaphthylene	7.560	152	182251	10.177	ug/ml	99
52) 2,6-Dinitrotoluene	7.513	165	28707	10.071	ug/ml#	83
53) 1,2-Dinitrobenzene	7.557	168	10940	9.819	ug/ml#	1
63) 3-Nitroaniline	7.672	138	33030	10.421	ug/ml#	90
64) Acenaphthene	7.734	154	105920	9.766	ug/ml	90
65) 2,4-Dinitrophenol	7.771	184	15905	9.138	ug/ml#	85
66) Dibenzofuran	7.902	168	167778	9.699	ug/ml	95
67) 2,4-Dinitrotoluene	7.902	165	40957	10.498	ug/ml	95
68) 4-Nitrophenol	7.855	65	25883	9.460	ug/ml#	87
69) 2,3,5,6-Tetrachlorophenol	7.989	232	35440	9.465	ug/ml	99
70) 2,3,4,6-Tetrachlorophenol	8.032	232	35932	9.620	ug/ml	96
71) Diethyl phthalate	8.160	149	144549	9.900	ug/ml	97
72) Fluorene	8.231	166	136547	9.792	ug/ml	92
73) 4-Chlorophenyl phenyl ...	8.250	204	65420	9.653	ug/ml#	88

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL7.D
Acq On : 13 Apr 2023 2:45 am
Operator : Dakota:jg
Sample : IL4,32,,ABNL10 Lot# 10032
Misc : WG1768668,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 19 12:17:11 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74)	4-Nitroaniline	8.256	138	33843	10.754	ug/ml	84
75)	4,6-Dinitro-o-cresol	8.293	198	21085	9.281	ug/ml#	67
76)	NDPA/DPA	8.365	169	117501	9.878	ug/ml	94
77)	Azobenzene	8.399	77	125609	10.047	ug/ml	98
79)	4-Bromophenyl phenyl e...	8.716	248	41482	9.802	ug/ml#	80
80)	Hexachlorobenzene	8.772	284	52011	9.819	ug/ml#	80
81)	Pentachlorophenol	8.965	266	29569	9.374	ug/ml	99
88)	Phenanthrene	9.154	178	222986	9.873	ug/ml	100
89)	Anthracene	9.204	178	221568	10.128	ug/ml	99
90)	Carbazole	9.369	167	214888	10.419	ug/ml	99
91)	Di-n-butylphthalate	9.754	149	252108	10.382	ug/ml	99
92)	Fluoranthene	10.307	202	269480	10.177	ug/ml#	93
93)	Benzidine	10.453	184	181304	10.674	ug/ml#	95
94)	Pyrene	10.522	202	279914	10.000	ug/ml	99
96)	Butyl benzyl phthalate	11.230	149	116954	10.594	ug/ml#	87
104)	Benzo(a)anthracene	11.756	228	297508	9.931	ug/ml	100
105)	3,3'-Dichlorobenzidine	11.753	252	119655	10.390	ug/ml#	96
106)	Chrysene	11.793	228	280443	9.911	ug/ml	99
107)	Bis(2-ethylhexyl)phtha...	11.864	149	177758	10.623	ug/ml#	89
108)	Di-n-octylphthalate	12.542	149	314687	10.363	ug/ml#	74
109)	Benzo(b)fluoranthene	12.859	252	340292	10.466	ug/ml#	94
110)	Benzo(k)fluoranthene	12.887	252	311286	10.031	ug/ml#	94
111)	Benzo(a)pyrene	13.173	252	296558	10.492	ug/ml#	94
113)	Indeno(1,2,3-cd)pyrene	14.183	276	322046M6	10.297	ug/mL	
114)	Dibenzo(a,h)anthracene	14.202	278	337055	10.283	ug/ml#	90
115)	Benzo(ghi)perylene	14.401	276	345021	10.430	ug/ml#	86

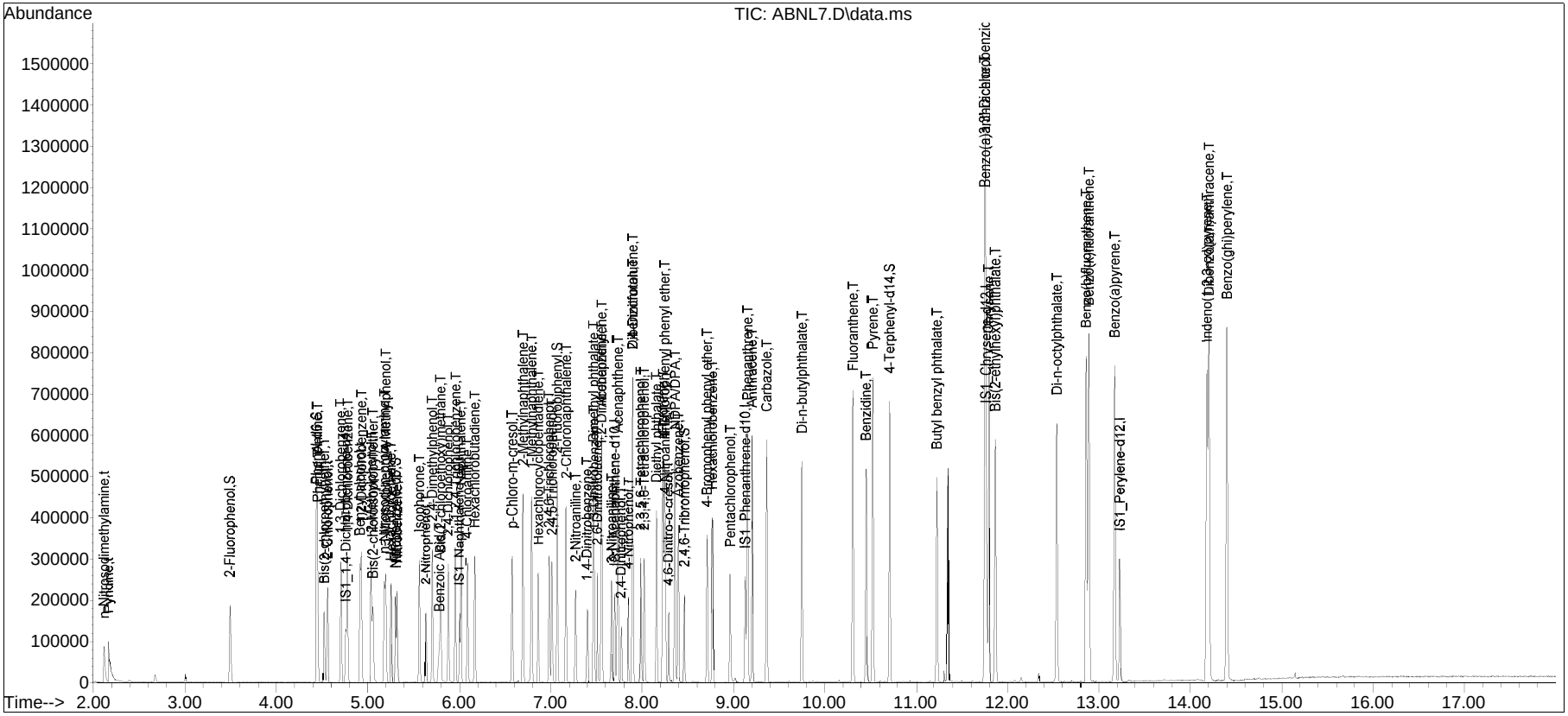
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL7.D
Acq On : 13 Apr 2023 2:45 am
Operator : Dakota:jg
Sample : IL4,32,,ABNL10 Lot# 10032
Misc : WG1768668,,
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Apr 19 12:17:11 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

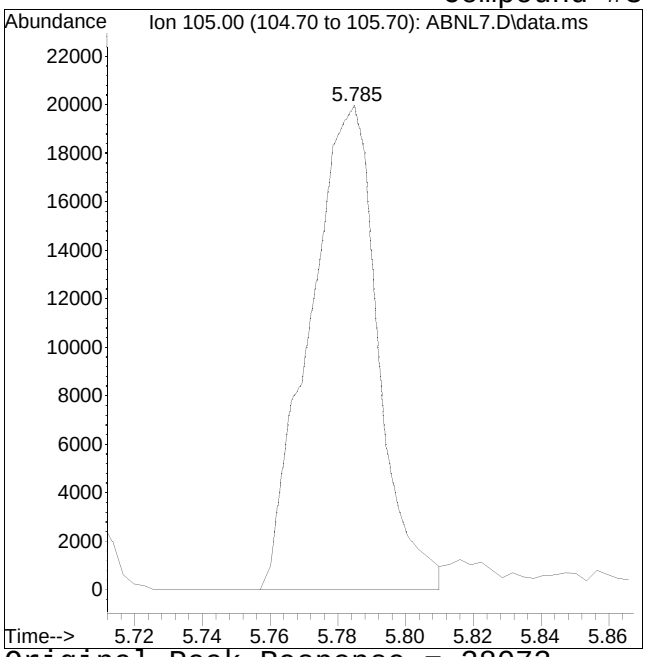
Sub List : ABNical - ABN ical sublistviical\ABNL6.D•

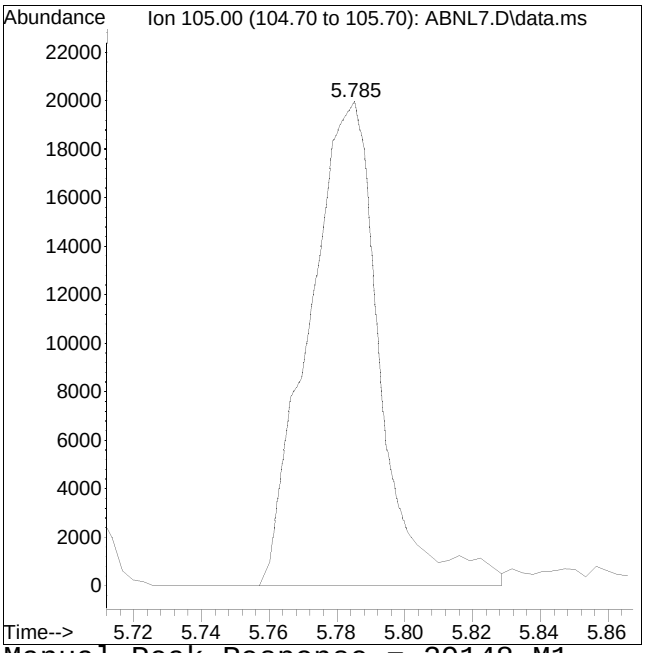


Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL7.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 2:45 am Instrument : Dakota
Sample : IL4,32,,ABNL10 Lot# 10032 Quant Date : 4/15/2023 9:56 am

Compound #36: Benzoic Acid



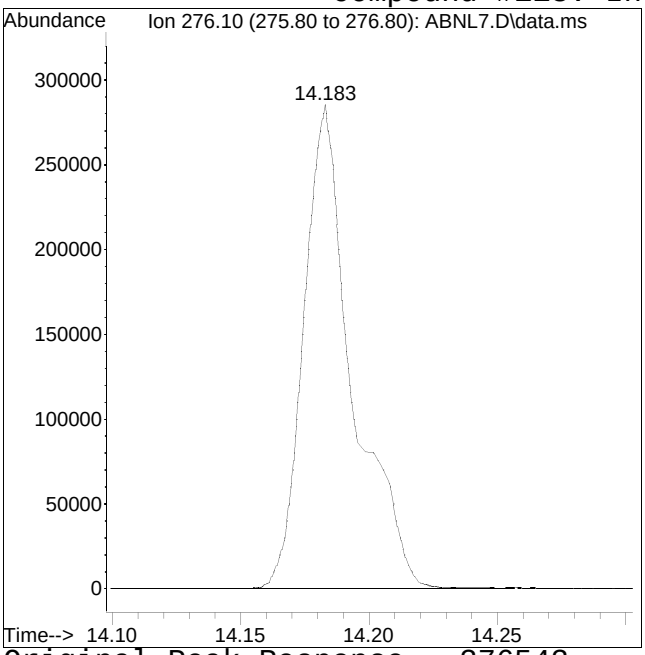


Original Peak Response = 28073 Manual Peak Response = 29148 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

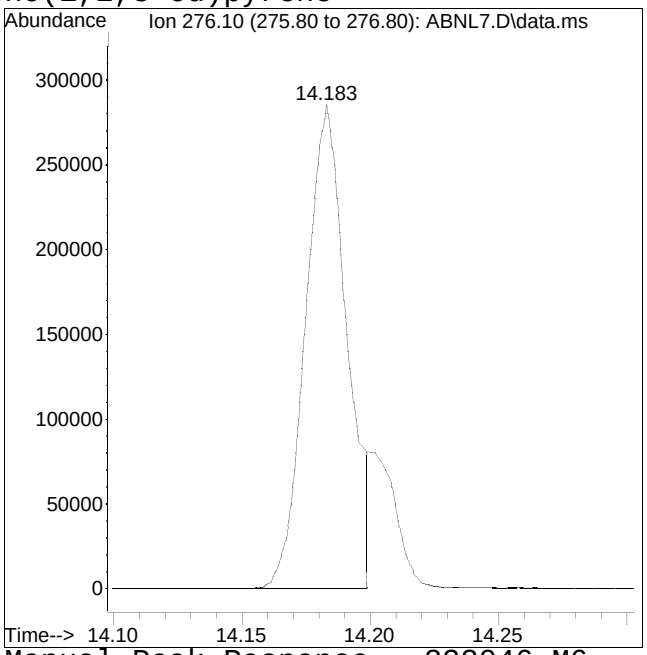
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL7.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 2:45 am Instrument : Dakota
Sample : IL4,32,,ABNL10 Lot# 10032 Quant Date : 4/15/2023 9:56 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 376543



Manual Peak Response = 322046 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL6.D
Acq On : 13 Apr 2023 3:08 am
Operator : Dakota:jg
Sample : IL5,32,,ABNL5 Lot# 10033
Misc : WG1768668,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 19 12:16:08 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	4.766	152	17859	4.000 ug/ml	0.00
Standard Area 1 = 17859			Recovery = 100.00%		
34) IS1_Naphthalene-d8	6.000	136	68179	4.000 ug/ml	# 0.00
Standard Area 1 = 68179			Recovery = 100.00%		
62) IS1_Acenaphthene-d10	7.703	164	39516	4.000 ug/ml	0.00
Standard Area 1 = 39516			Recovery = 100.00%		
87) IS1_Phenanthrene-d10	9.133	188	92463	4.000 ug/ml	0.00
Standard Area 1 = 92463			Recovery = 100.00%		
103) IS1_Chrysene-d12	11.765	240	97366	4.000 ug/ml	0.00
Standard Area 1 = 97366			Recovery = 100.00%		
112) IS1_Perylene-d12	13.229	264	122891	4.000 ug/ml	0.00
Standard Area 1 = 122891			Recovery = 100.00%		
System Monitoring Compounds					
4) 2-Fluorophenol	3.491	112	23027	4.993 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 99.86%		
7) Phenol-d6	4.439	99	30001	5.077 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 101.54%		
19) Nitrobenzene-d5	5.303	82	27822	4.911 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 196.44%#		
45) 2-Fluorobiphenyl	7.066	172	66686	4.972 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 198.88%#		
78) 2,4,6-Tribromophenol	8.464	330	11349	4.962 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 99.24%		
95) 4-Terphenyl-d14	10.708	244	111401	4.929 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 197.16%#		
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	2.114	74	16254	4.682 ug/ml#	82
3) Pyridine	2.177	79	20800	4.016 ug/ml#	70
5) Aniline	4.446	93	40022	5.007 ug/ml#	56
6) 2-Chlorophenol	4.557	128	27336	5.122 ug/ml#	88
8) Phenol	4.452	94	33404	4.862 ug/ml#	50
9) Bis(2-chloroethyl)ether	4.526	93	22613	4.750 ug/ml	99
10) 1,3-Dichlorobenzene	4.707	146	31286	4.882 ug/ml	97
11) 1,4-Dichlorobenzene	4.781	146	30613	4.723 ug/ml	95
12) 1,2-Dichlorobenzene	4.927	146	31383	5.000 ug/ml	94
13) Benzyl alcohol	4.915	79	21413	5.122 ug/ml	97
14) Bis(2-chloroisopropyl)...	5.061	45	39485	4.956 ug/ml#	61

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL6.D
Acq On : 13 Apr 2023 3:08 am
Operator : Dakota:jg
Sample : IL5,32,,ABNL5 Lot# 10033
Misc : WG1768668,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 19 12:16:08 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	5.042	108	23091	5.090	ug/ml	98
16) Hexachloroethane	5.257	117	11792	4.795	ug/ml#	66
17) n-Nitrosodi-n-propylamine	5.182	70	17994	4.928	ug/ml#	90
18) 3-Methylphenol/4-Methy...	5.198	108	23753	5.069	ug/ml	97
20) Nitrobenzene	5.322	77	26726	4.853	ug/ml	99
21) Isophorone	5.564	82	48462	4.973	ug/ml	96
22) 2-Nitrophenol	5.639	139	13778	5.352	ug/ml#	87
23) 2,4-Dimethylphenol	5.707	107	25015	5.047	ug/ml	99
24) Bis(2-chloroethoxy)met...	5.798	93	30921	4.891	ug/ml#	97
25) 2,4-Dichlorophenol	5.875	162	22103	4.744	ug/ml	95
26) 1,2,4-Trichlorobenzene	5.953	180	29111	5.109	ug/ml	97
35) Naphthalene	6.018	128	81511	4.925	ug/ml	99
36) Benzoic Acid	5.773	105	11073M1	4.997	ug/ml	
37) 4-Chloroaniline	6.087	65	9213	4.715	ug/ml#	63
38) Hexachlorobutadiene	6.170	225	16542	4.913	ug/ml	99
39) p-Chloro-m-cresol	6.581	107	21879	5.062	ug/ml	92
40) 2-Methylnaphthalene	6.699	142	52737	4.903	ug/ml	92
41) 1-Methylnaphthalene	6.789	115	18915	5.081	ug/ml	98
42) Hexachlorocyclopentadiene	6.870	237	20459	5.023	ug/ml	98
43) 2,4,6-Trichlorophenol	6.982	196	18214	5.065	ug/ml	96
44) 2,4,5-Trichlorophenol	7.013	196	20597	5.174	ug/ml	98
46) 2-Chloronaphthalene	7.165	162	58317	4.942	ug/ml	95
47) 2-Nitroaniline	7.271	138	17202	5.044	ug/ml	84
48) 1,4-Dinitrobenzene	7.401	168	8034	5.044	ug/ml	96
49) 1,3-Dinitrobenzene	7.476	168	8464	4.557	ug/ml#	1
50) Dimethyl phthalate	7.470	163	69657	5.051	ug/ml#	98
51) Acenaphthylene	7.560	152	90442	5.057	ug/ml	99
52) 2,6-Dinitrotoluene	7.513	165	14788	5.194	ug/ml#	80
53) 1,2-Dinitrobenzene	7.557	168	5695	5.118	ug/ml#	1
63) 3-Nitroaniline	7.669	138	16719	5.316	ug/ml#	89
64) Acenaphthene	7.731	154	53252	4.949	ug/ml	88
65) 2,4-Dinitrophenol	7.771	184	7643	5.074	ug/ml	87
66) Dibenzofuran	7.902	168	85371	4.974	ug/ml	95
67) 2,4-Dinitrotoluene	7.902	165	20398	5.270	ug/ml	96
68) 4-Nitrophenol	7.855	65	12586	4.864	ug/ml#	83
69) 2,3,5,6-Tetrachlorophenol	7.992	232	17196	4.825	ug/ml	99
70) 2,3,4,6-Tetrachlorophenol	8.032	232	17525	4.881	ug/ml	96
71) Diethyl phthalate	8.160	149	72574	5.010	ug/ml	99
72) Fluorene	8.231	166	69526	5.025	ug/ml	93
73) 4-Chlorophenyl phenyl ...	8.247	204	32802	4.878	ug/ml	89

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL6.D
Acq On : 13 Apr 2023 3:08 am
Operator : Dakota:jg
Sample : IL5,32,,ABNL5 Lot# 10033
Misc : WG1768668,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 19 12:16:08 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74)	4-Nitroaniline	8.256	138	16250	5.204	ug/ml#	83
75)	4,6-Dinitro-o-cresol	8.290	198	10137	4.928	ug/ml#	70
76)	NDPA/DPA	8.365	169	60190	5.100	ug/ml	95
77)	Azobenzene	8.399	77	64729	5.218	ug/ml	98
79)	4-Bromophenyl phenyl e...	8.719	248	21182	5.045	ug/ml#	81
80)	Hexachlorobenzene	8.772	284	25022	4.761	ug/ml#	83
81)	Pentachlorophenol	8.965	266	12907	4.611	ug/ml	99
88)	Phenanthrene	9.154	178	115232	4.839	ug/ml	100
89)	Anthracene	9.204	178	114189	4.950	ug/ml	100
90)	Carbazole	9.369	167	109855	5.052	ug/ml	99
91)	Di-n-butylphthalate	9.751	149	124335	4.856	ug/ml	98
92)	Fluoranthene	10.307	202	136602	4.893	ug/ml#	93
93)	Benzidine	10.453	184	78135	4.363	ug/ml#	95
94)	Pyrene	10.522	202	145199	4.920	ug/ml	99
96)	Butyl benzyl phthalate	11.230	149	56285	4.835	ug/ml	89
104)	Benzo(a)anthracene	11.756	228	152649	5.002	ug/ml	99
105)	3,3'-Dichlorobenzidine	11.753	252	57995	4.943	ug/ml#	98
106)	Chrysene	11.793	228	146404	5.079	ug/ml	99
107)	Bis(2-ethylhexyl)phtha...	11.865	149	86180	5.055	ug/ml#	88
108)	Di-n-octylphthalate	12.542	149	146934	4.749	ug/ml#	75
109)	Benzo(b)fluoranthene	12.859	252	161539	4.877	ug/ml#	94
110)	Benzo(k)fluoranthene	12.887	252	163928	5.185	ug/ml#	94
111)	Benzo(a)pyrene	13.173	252	145378	5.049	ug/ml#	94
113)	Indeno(1,2,3-cd)pyrene	14.180	276	163311M6	5.013	ug/mL	
114)	Dibenzo(a,h)anthracene	14.202	278	168266	4.928	ug/ml#	90
115)	Benzo(ghi)perylene	14.398	276	170112	4.937	ug/ml#	86

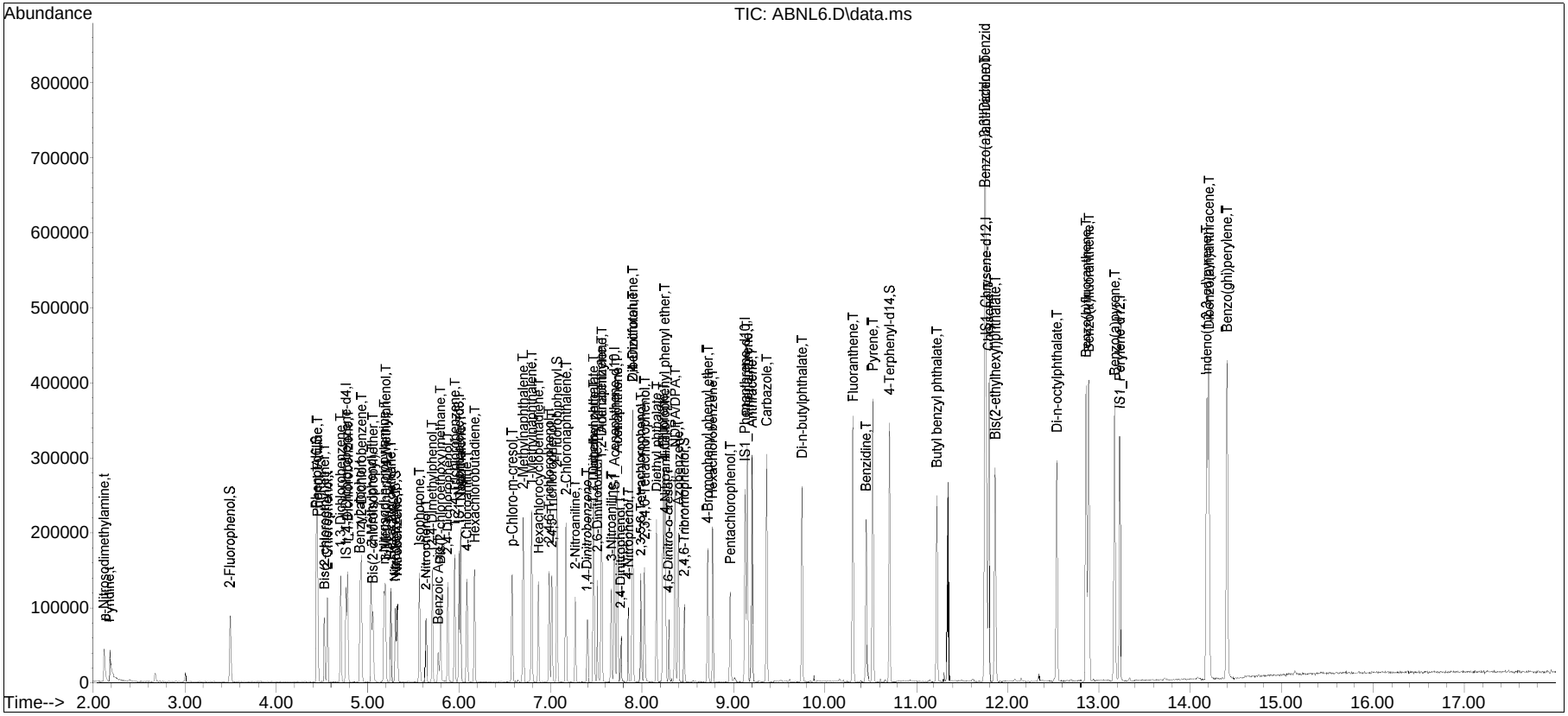
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL6.D
Acq On : 13 Apr 2023 3:08 am
Operator : Dakota:jg
Sample : IL5,32,,ABNL5 Lot# 10033
Misc : WG1768668,,
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Apr 19 12:16:08 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublistviical\ABNL6.D•

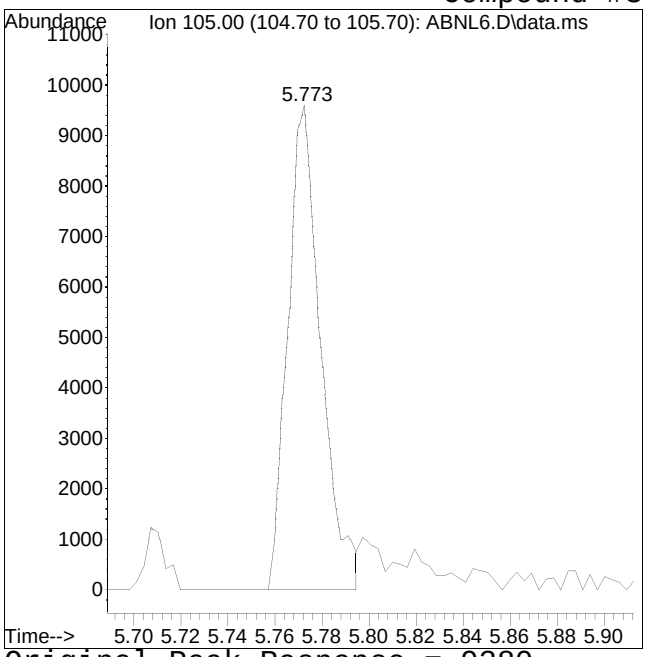


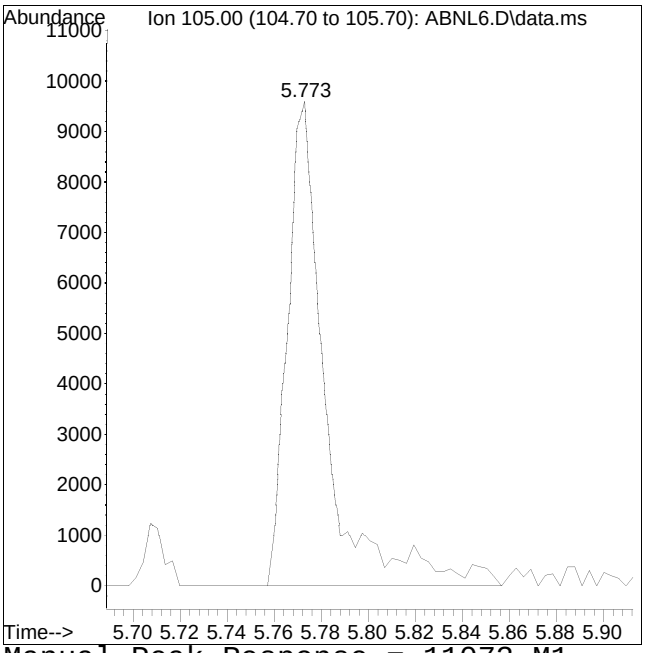
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQ
Data File : ABNL6.D
Date Inj'd : 4/13/2023 3:08 am
Sample : IL5,32,,ABNL5 Lot# 10033

Method : FS230412LVIDakota.m
Operator : Dakota:jg
Instrument : Dakota
Quant Date : 4/15/2023 9:56 am

Compound #36: Benzoic Acid





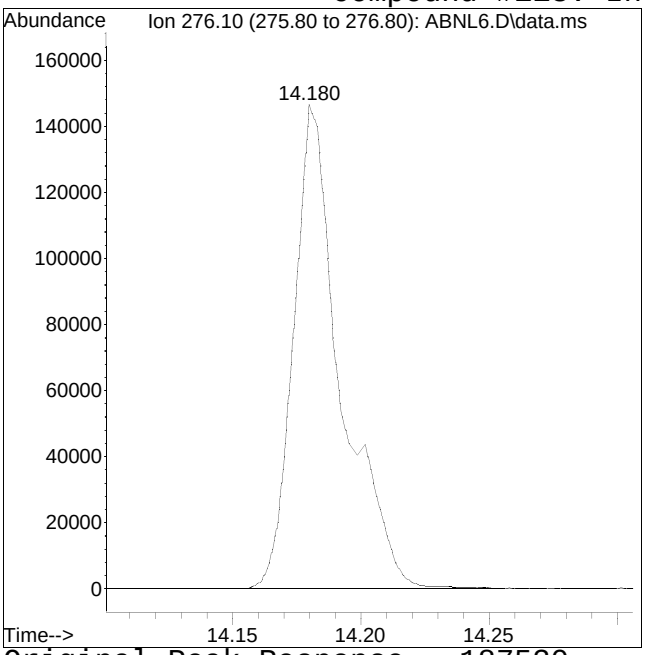
Original Peak Response = 9380 Manual Peak Response = 11073 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

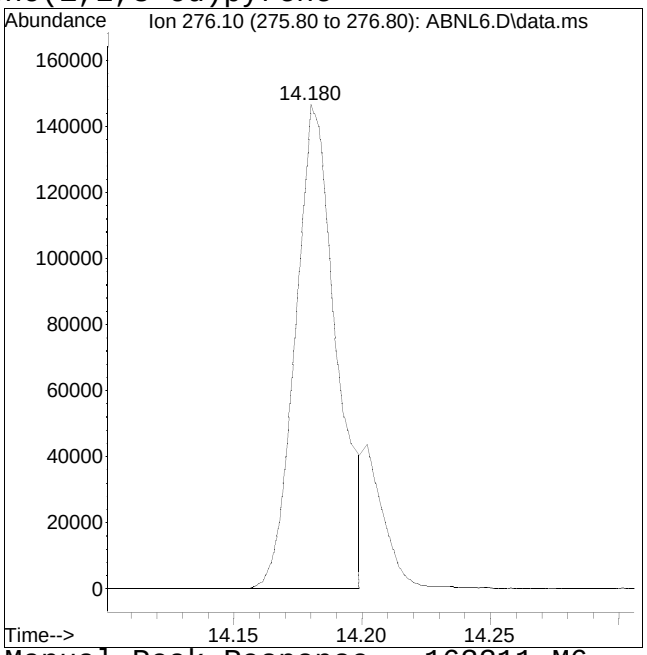
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL6.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 3:08 am Instrument : Dakota
Sample : IL5,32,,ABNL5 Lot# 10033 Quant Date : 4/15/2023 9:56 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 187530



Manual Peak Response = 163311 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL5.D
Acq On : 13 Apr 2023 3:31 am
Operator : Dakota:jg
Sample : IL6,32,,ABNL3 Lot# 10034
Misc : WG1768668,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 09:55:37 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	4.762	152	17019	4.000 ug/ml	0.00
Standard Area 1 = 17859			Recovery = 95.30%		
34) IS1_Naphthalene-d8	5.999	136	66023	4.000 ug/ml	0.00
Standard Area 1 = 68179			Recovery = 96.84%		
62) IS1_Acenaphthene-d10	7.700	164	39774	4.000 ug/ml	0.00
Standard Area 1 = 39516			Recovery = 100.65%		
87) IS1_Phenanthrene-d10	9.132	188	91253	4.000 ug/ml #	0.00
Standard Area 1 = 92463			Recovery = 98.69%		
103) IS1_Chrysene-d12	11.765	240	98590	4.000 ug/ml	0.00
Standard Area 1 = 97366			Recovery = 101.26%		
112) IS1_Perylene-d12	13.226	264	116615	4.000 ug/ml	0.00
Standard Area 1 = 122891			Recovery = 94.89%		
System Monitoring Compounds					
4) 2-Fluorophenol	3.494	112	13287	3.024 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 60.48%		
7) Phenol-d6	4.439	99	16615	2.950 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 59.00%		
19) Nitrobenzene-d5	5.303	82	16244	3.009 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 120.36%		
45) 2-Fluorobiphenyl	7.066	172	40629	3.128 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 125.12%		
78) 2,4,6-Tribromophenol	8.467	330	6845	2.973 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 59.46%		
95) 4-Terphenyl-d14	10.708	244	70252	3.150 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 126.00%		
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	2.117	74	9445	2.925 ug/ml#	88
3) Pyridine	2.198	79	15945M1	3.286 ug/ml	
5) Aniline	4.445	93	23111	3.034 ug/ml#	53
6) 2-Chlorophenol	4.557	128	15510	3.050 ug/ml#	87
8) Phenol	4.449	94	20428	3.120 ug/ml#	53
9) Bis(2-chloroethyl)ether	4.526	93	14322	3.157 ug/ml	96
10) 1,3-Dichlorobenzene	4.706	146	18519	3.032 ug/ml	96
11) 1,4-Dichlorobenzene	4.781	146	19052	3.084 ug/ml	97
12) 1,2-Dichlorobenzene	4.927	146	18237	3.049 ug/ml	95
13) Benzyl alcohol	4.915	79	12457	3.127 ug/ml	98
14) Bis(2-chloroisopropyl)...	5.061	45	23743	3.127 ug/ml#	71

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL5.D
Acq On : 13 Apr 2023 3:31 am
Operator : Dakota:jg
Sample : IL6,32,,ABNL3 Lot# 10034
Misc : WG1768668,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 09:55:37 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	5.042	108	12930	2.991	ug/ml	95
16) Hexachloroethane	5.257	117	7086	3.024	ug/ml#	67
17) n-Nitrosodi-n-propylamine	5.185	70	10833	3.113	ug/ml	95
18) 3-Methylphenol/4-Methy...	5.198	108	14593	3.268	ug/ml	99
20) Nitrobenzene	5.322	77	16689	3.180	ug/ml	97
21) Isophorone	5.564	82	29096	3.133	ug/ml	95
22) 2-Nitrophenol	5.639	139	7003	2.855	ug/ml#	91
23) 2,4-Dimethylphenol	5.710	107	14630	3.097	ug/ml	94
24) Bis(2-chloroethoxy)met...	5.797	93	17840	2.961	ug/ml#	96
25) 2,4-Dichlorophenol	5.875	162	13785	3.105	ug/ml#	93
26) 1,2,4-Trichlorobenzene	5.956	180	16344	3.010	ug/ml	95
35) Naphthalene	6.018	128	49038	3.059	ug/ml	99
36) Benzoic Acid	5.766	105	3955	3.035	ug/ml	87
37) 4-Chloroaniline	6.086	65	5737	3.032	ug/ml#	67
38) Hexachlorobutadiene	6.170	225	9897	3.035	ug/ml	97
39) p-Chloro-m-cresol	6.581	107	12926	3.088	ug/ml#	97
40) 2-Methylnaphthalene	6.699	142	33012	3.170	ug/ml	98
41) 1-Methylnaphthalene	6.792	115	11422	3.168	ug/ml	94
42) Hexachlorocyclopentadiene	6.870	237	11719	2.971	ug/ml	97
43) 2,4,6-Trichlorophenol	6.985	196	10972	3.151	ug/ml	93
44) 2,4,5-Trichlorophenol	7.013	196	11923	3.093	ug/ml	98
46) 2-Chloronaphthalene	7.165	162	35124	3.074	ug/ml	96
47) 2-Nitroaniline	7.271	138	10454	3.165	ug/ml#	82
48) 1,4-Dinitrobenzene	7.404	168	4717	3.058	ug/ml	99
49) 1,3-Dinitrobenzene	7.479	168	4817	2.678	ug/ml#	1
50) Dimethyl phthalate	7.470	163	43149	3.231	ug/ml#	95
51) Acenaphthylene	7.560	152	55661	3.214	ug/ml	99
52) 2,6-Dinitrotoluene	7.513	165	8743	3.171	ug/ml#	80
53) 1,2-Dinitrobenzene	7.557	168	3432	3.185	ug/ml#	1
63) 3-Nitroaniline	7.668	138	9393	2.968	ug/ml#	99
64) Acenaphthene	7.731	154	33296	3.074	ug/ml	93
65) 2,4-Dinitrophenol	7.771	184	4120	3.301	ug/ml#	82
66) Dibenzofuran	7.902	168	52645	3.048	ug/ml	92
67) 2,4-Dinitrotoluene	7.902	165	11596	2.976	ug/ml	96
68) 4-Nitrophenol	7.852	65	7689	3.127	ug/ml#	90
69) 2,3,5,6-Tetrachlorophenol	7.992	232	10068	2.967	ug/ml	99
70) 2,3,4,6-Tetrachlorophenol	8.032	232	10658	3.067	ug/ml	99
71) Diethyl phthalate	8.160	149	43456	2.981	ug/ml	99
72) Fluorene	8.231	166	42957	3.085	ug/ml	95
73) 4-Chlorophenyl phenyl ...	8.250	204	20812	3.075	ug/ml#	86

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL5.D
Acq On : 13 Apr 2023 3:31 am
Operator : Dakota:jg
Sample : IL6,32,,ABNL3 Lot# 10034
Misc : WG1768668,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 09:55:37 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74) 4-Nitroaniline	8.256	138	9888	3.146	ug/ml#	86
75) 4,6-Dinitro-o-cresol	8.293	198	5353	2.982	ug/ml#	72
76) NDPA/DPA	8.362	169	35722	3.007	ug/ml	92
77) Azobenzene	8.399	77	38964	3.121	ug/ml	96
79) 4-Bromophenyl phenyl e...	8.719	248	12582	2.977	ug/ml#	84
80) Hexachlorobenzene	8.772	284	16239	3.070	ug/ml#	83
81) Pentachlorophenol	8.965	266	7497	3.029	ug/ml	96
88) Phenanthrene	9.154	178	71614	3.047	ug/ml	100
89) Anthracene	9.204	178	70388	3.092	ug/ml	98
90) Carbazole	9.369	167	66898	3.117	ug/ml	98
91) Di-n-butylphthalate	9.754	149	76339	3.021	ug/ml	99
92) Fluoranthene	10.304	202	85682	3.110	ug/ml#	93
93) Benzidine	10.453	184	51189	2.896	ug/ml#	96
94) Pyrene	10.522	202	92350	3.170	ug/ml	99
96) Butyl benzyl phthalate	11.230	149	33998	2.959	ug/ml#	86
104) Benzo(a)anthracene	11.756	228	92827	3.004	ug/ml	100
105) 3,3'-Dichlorobenzidine	11.749	252	34274	2.885	ug/ml#	96
106) Chrysene	11.790	228	90562	3.103	ug/ml	99
107) Bis(2-ethylhexyl)phtha...	11.864	149	51290	2.971	ug/ml#	91
108) Di-n-octylphthalate	12.539	149	82086	2.620	ug/ml#	76
109) Benzo(b)fluoranthene	12.859	252	96736	2.884	ug/ml#	95
110) Benzo(k)fluoranthene	12.887	252	97728	3.053	ug/ml#	92
111) Benzo(a)pyrene	13.170	252	84875	2.911	ug/ml#	95
113) Indeno(1,2,3-cd)pyrene	14.180	276	87251M6	2.823	ug/mL	
114) Dibenzo(a,h)anthracene	14.199	278	99729	3.078	ug/ml#	90
115) Benzo(ghi)perylene	14.394	276	101734	3.111	ug/ml#	87

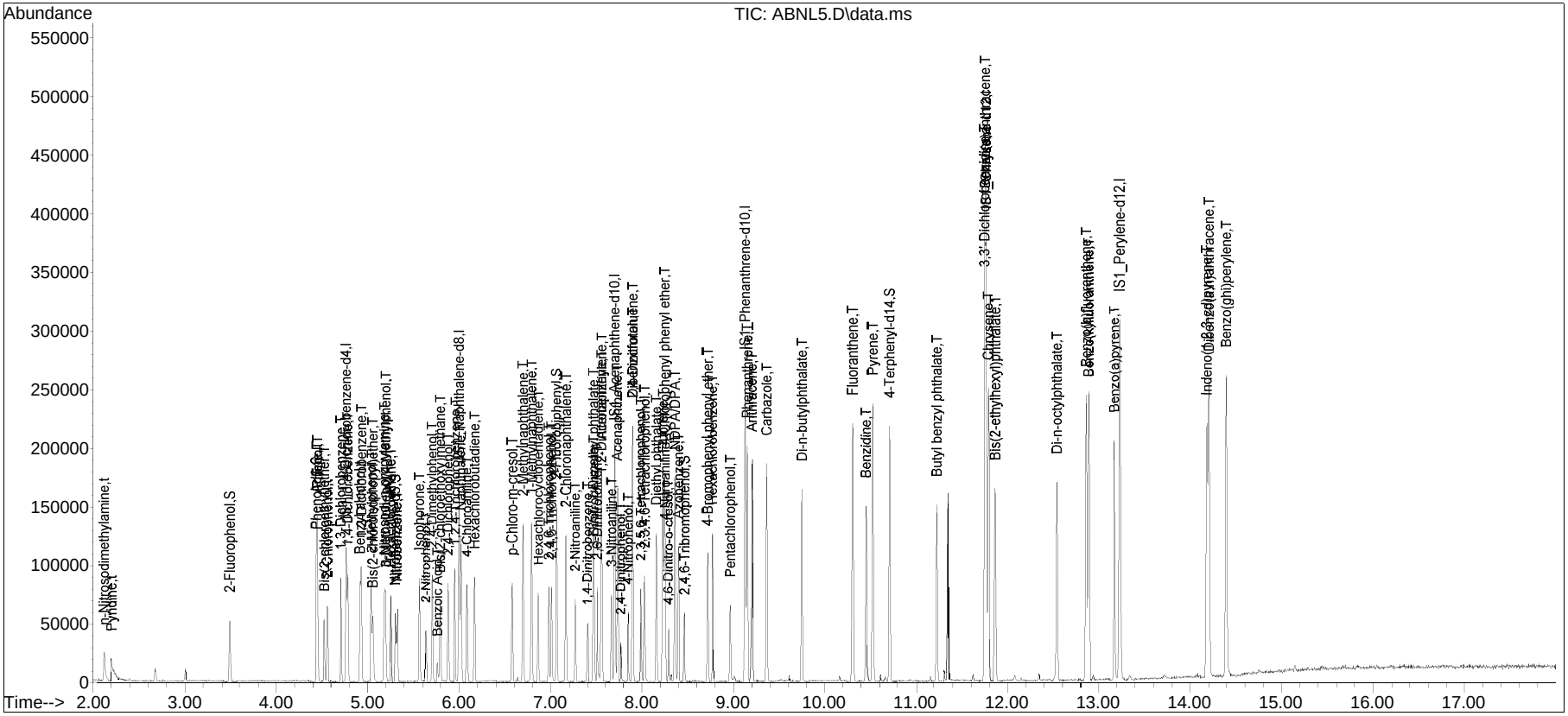
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL5.D
Acq On : 13 Apr 2023 3:31 am
Operator : Dakota:jg
Sample : IL6,32,,ABNL3 Lot# 10034
Misc : WG1768668,,
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Apr 15 09:55:37 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

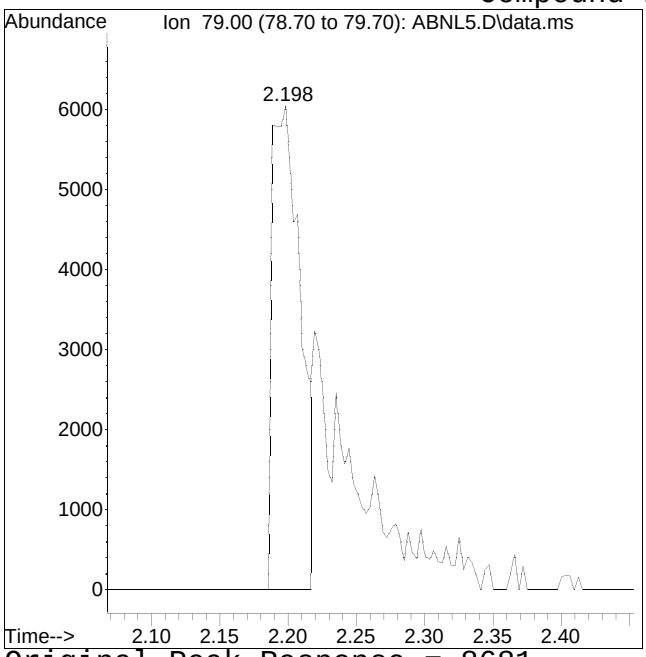
Sub List : ABNical - ABN ical sublistviical\ABNL6.D•



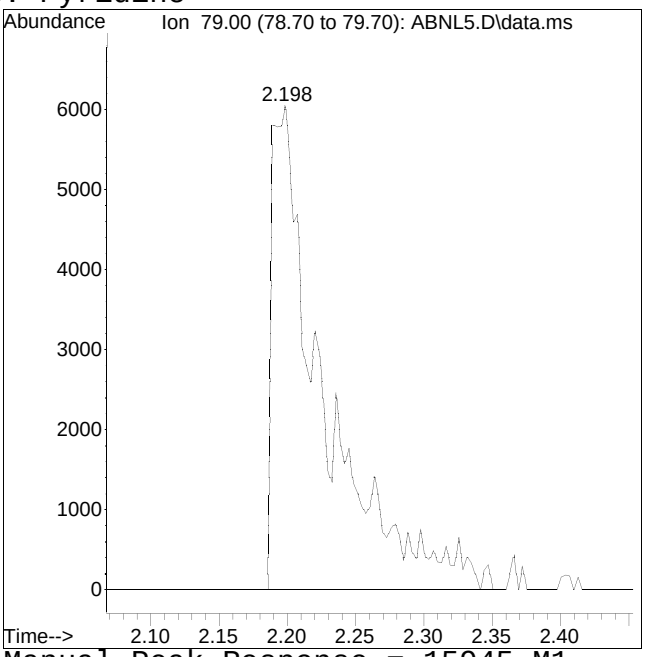
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQ
Data File : ABNL5.D
Date Inj'd : 4/13/2023 3:31 am
Sample : IL6,32,,ABNL3 Lot# 10034
Method : FS230412LVIDakota.m
Operator : Dakota:jg
Instrument : Dakota
Quant Date : 4/15/2023 9:56 am

Compound #3: Pyridine



Original Peak Response = 8681



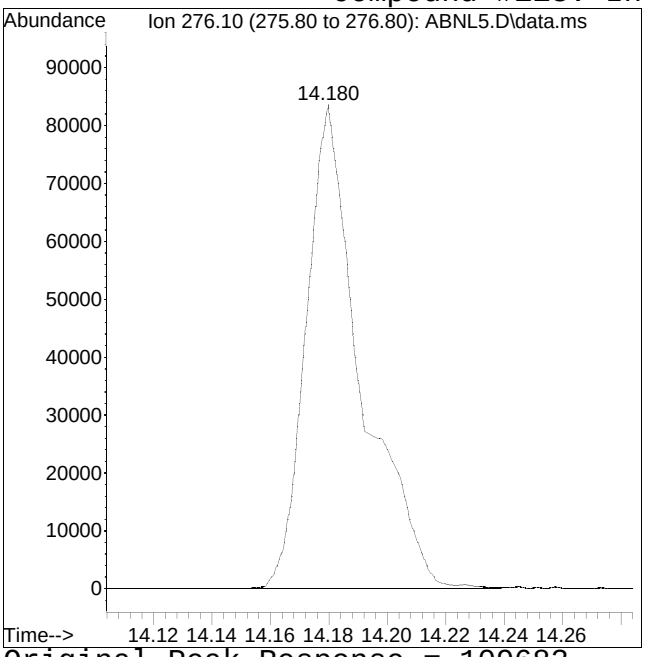
Manual Peak Response = 15945 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

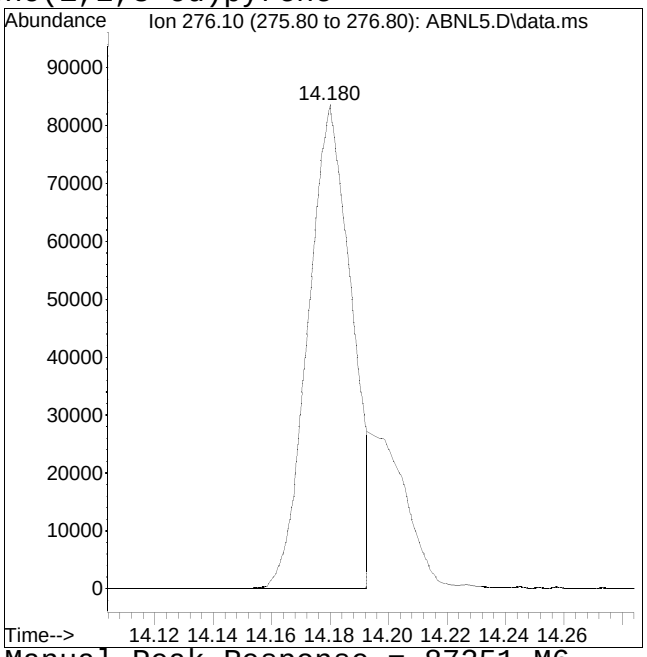
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL5.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 3:31 am Instrument : Dakota
Sample : IL6,32,,ABNL3 Lot# 10034 Quant Date : 4/15/2023 9:56 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 109683



Manual Peak Response = 87251 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL4.D
Acq On : 13 Apr 2023 3:54 am
Operator : Dakota:jg
Sample : IL7,32,,ABNL2 Lot# 10035
Misc : WG1768668,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 09:55:15 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	4.765	152	17173	4.000 ug/ml	0.00
Standard Area 1 = 17859			Recovery = 96.16%		
34) IS1_Naphthalene-d8	5.999	136	68257	4.000 ug/ml #	0.00
Standard Area 1 = 68179			Recovery = 100.11%		
62) IS1_Acenaphthene-d10	7.703	164	40086	4.000 ug/ml	0.00
Standard Area 1 = 39516			Recovery = 101.44%		
87) IS1_Phenanthrene-d10	9.132	188	94034	4.000 ug/ml	0.00
Standard Area 1 = 92463			Recovery = 101.70%		
103) IS1_Chrysene-d12	11.765	240	101022	4.000 ug/ml	0.00
Standard Area 1 = 97366			Recovery = 103.75%		
112) IS1_Perylene-d12	13.226	264	122083	4.000 ug/ml	0.00
Standard Area 1 = 122891			Recovery = 99.34%		
System Monitoring Compounds					
4) 2-Fluorophenol	3.494	112	9191	2.073 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 41.46%		
7) Phenol-d6	4.439	99	11628	2.046 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 40.92%		
19) Nitrobenzene-d5	5.306	82	11626	2.134 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 85.36%		
45) 2-Fluorobiphenyl	7.065	172	27176	2.024 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 80.96%		
78) 2,4,6-Tribromophenol	8.461	330	4803	2.070 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 41.40%		
95) 4-Terphenyl-d14	10.705	244	46018	2.002 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 80.08%		
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	2.123	74	6345	2.007 ug/ml	83
3) Pyridine	2.207	79	9200M3	2.001 ug/ml	
5) Aniline	4.448	93	15688	2.041 ug/ml#	51
6) 2-Chlorophenol	4.560	128	10883	2.121 ug/ml#	85
8) Phenol	4.451	94	14131	2.139 ug/ml#	53
9) Bis(2-chloroethyl)ether	4.526	93	9876	2.157 ug/ml	93
10) 1,3-Dichlorobenzene	4.706	146	12561	2.038 ug/ml	97
11) 1,4-Dichlorobenzene	4.781	146	12785	2.051 ug/ml	94
12) 1,2-Dichlorobenzene	4.927	146	12634	2.093 ug/ml	94
13) Benzyl alcohol	4.915	79	7879	1.960 ug/ml	95
14) Bis(2-chloroisopropyl)...	5.061	45	16816	2.195 ug/ml#	74

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL4.D
Acq On : 13 Apr 2023 3:54 am
Operator : Dakota:jg
Sample : IL7,32,,ABNL2 Lot# 10035
Misc : WG1768668,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 09:55:15 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	5.042	108	8942	2.050	ug/ml	97
16) Hexachloroethane	5.256	117	4687	1.982	ug/ml#	60
17) n-Nitrosodi-n-propylamine	5.185	70	7665	2.183	ug/ml#	84
18) 3-Methylphenol/4-Methy...	5.197	108	9630	2.137	ug/ml#	98
20) Nitrobenzene	5.322	77	10982	2.074	ug/ml	97
21) Isophorone	5.564	82	20177	2.153	ug/ml#	94
22) 2-Nitrophenol	5.639	139	5018	2.027	ug/ml	90
23) 2,4-Dimethylphenol	5.710	107	10117	2.123	ug/ml	97
24) Bis(2-chloroethoxy)met...	5.797	93	12788	2.104	ug/ml#	94
25) 2,4-Dichlorophenol	5.875	162	9425	2.104	ug/ml	95
26) 1,2,4-Trichlorobenzene	5.953	180	11677	2.131	ug/ml	97
35) Naphthalene	6.018	128	33267	2.008	ug/ml	98
36) Benzoic Acid	5.772	105	840	2.112	ug/ml	88
37) 4-Chloroaniline	6.089	65	4232	2.164	ug/ml	84
38) Hexachlorobutadiene	6.167	225	6608	1.960	ug/ml	97
39) p-Chloro-m-cresol	6.580	107	8730	2.017	ug/ml	92
40) 2-Methylnaphthalene	6.699	142	22140	2.056	ug/ml	94
41) 1-Methylnaphthalene	6.789	115	7397	1.985	ug/ml	90
42) Hexachlorocyclopentadiene	6.870	237	8663	2.124	ug/ml	94
43) 2,4,6-Trichlorophenol	6.985	196	6859	1.905	ug/ml	94
44) 2,4,5-Trichlorophenol	7.009	196	7790	1.955	ug/ml	96
46) 2-Chloronaphthalene	7.165	162	24091	2.039	ug/ml	95
47) 2-Nitroaniline	7.270	138	6805	1.993	ug/ml	83
48) 1,4-Dinitrobenzene	7.401	168	2743	1.720	ug/ml	87
49) 1,3-Dinitrobenzene	7.476	168	3560	1.915	ug/ml#	1
50) Dimethyl phthalate	7.469	163	28722	2.080	ug/ml#	98
51) Acenaphthylene	7.560	152	37211	2.078	ug/ml	99
52) 2,6-Dinitrotoluene	7.513	165	5616	1.970	ug/ml	88
53) 1,2-Dinitrobenzene	7.553	168	2173	1.950	ug/ml#	1
63) 3-Nitroaniline	7.668	138	6399	2.006	ug/ml#	88
64) Acenaphthene	7.734	154	22459	2.057	ug/ml	90
65) 2,4-Dinitrophenol	7.771	184	2005	2.243	ug/ml	94
66) Dibenzofuran	7.901	168	37160	2.134	ug/ml	90
67) 2,4-Dinitrotoluene	7.901	165	7636	1.945	ug/ml	95
68) 4-Nitrophenol	7.852	65	4607	2.040	ug/ml	86
69) 2,3,5,6-Tetrachlorophenol	7.992	232	6649	2.076	ug/ml	97
70) 2,3,4,6-Tetrachlorophenol	8.032	232	6573M3	1.992	ug/ml	
71) Diethyl phthalate	8.159	149	29745	2.024	ug/ml	98
72) Fluorene	8.231	166	28122	2.004	ug/ml	89
73) 4-Chlorophenyl phenyl ...	8.246	204	13764	2.018	ug/ml	91

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL4.D
Acq On : 13 Apr 2023 3:54 am
Operator : Dakota:jg
Sample : IL7,32,,ABNL2 Lot# 10035
Misc : WG1768668,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 09:55:15 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74) 4-Nitroaniline	8.253	138	6442	2.034	ug/ml	86
75) 4,6-Dinitro-o-cresol	8.293	198	3408	2.191	ug/ml#	68
76) NDPA/DPA	8.361	169	24432	2.041	ug/ml	94
77) Azobenzene	8.399	77	26376	2.096	ug/ml	96
79) 4-Bromophenyl phenyl e...	8.716	248	9300	2.183	ug/ml#	81
80) Hexachlorobenzene	8.772	284	11220	2.105	ug/ml#	79
81) Pentachlorophenol	8.964	266	4940	2.281	ug/ml	94
88) Phenanthrene	9.154	178	47888	1.977	ug/ml	99
89) Anthracene	9.201	178	46461	1.981	ug/ml	98
90) Carbazole	9.368	167	42889	1.939	ug/ml	94
91) Di-n-butylphthalate	9.751	149	51476	1.977	ug/ml	98
92) Fluoranthene	10.304	202	57234	2.016	ug/ml#	93
93) Benzidine	10.453	184	33430	1.835	ug/ml#	94
94) Pyrene	10.522	202	59598	1.986	ug/ml	99
96) Butyl benzyl phthalate	11.230	149	23319	1.970	ug/ml#	85
104) Benzo(a)anthracene	11.755	228	60915	1.924	ug/ml	99
105) 3,3'-Dichlorobenzidine	11.752	252	22318	1.833	ug/ml#	96
106) Chrysene	11.790	228	60250	2.014	ug/ml	99
107) Bis(2-ethylhexyl)phtha...	11.864	149	33901	1.917	ug/ml#	92
108) Di-n-octylphthalate	12.542	149	56488	1.760	ug/ml#	76
109) Benzo(b)fluoranthene	12.859	252	67053	1.951	ug/ml#	95
110) Benzo(k)fluoranthene	12.884	252	65666	2.002	ug/ml#	95
111) Benzo(a)pyrene	13.170	252	56994	1.908	ug/ml#	93
113) Indeno(1,2,3-cd)pyrene	14.180	276	60863M6	1.881	ug/mL	
114) Dibenzo(a,h)anthracene	14.198	278	66626	1.964	ug/ml#	90
115) Benzo(ghi)perylene	14.397	276	65497	1.913	ug/ml#	87

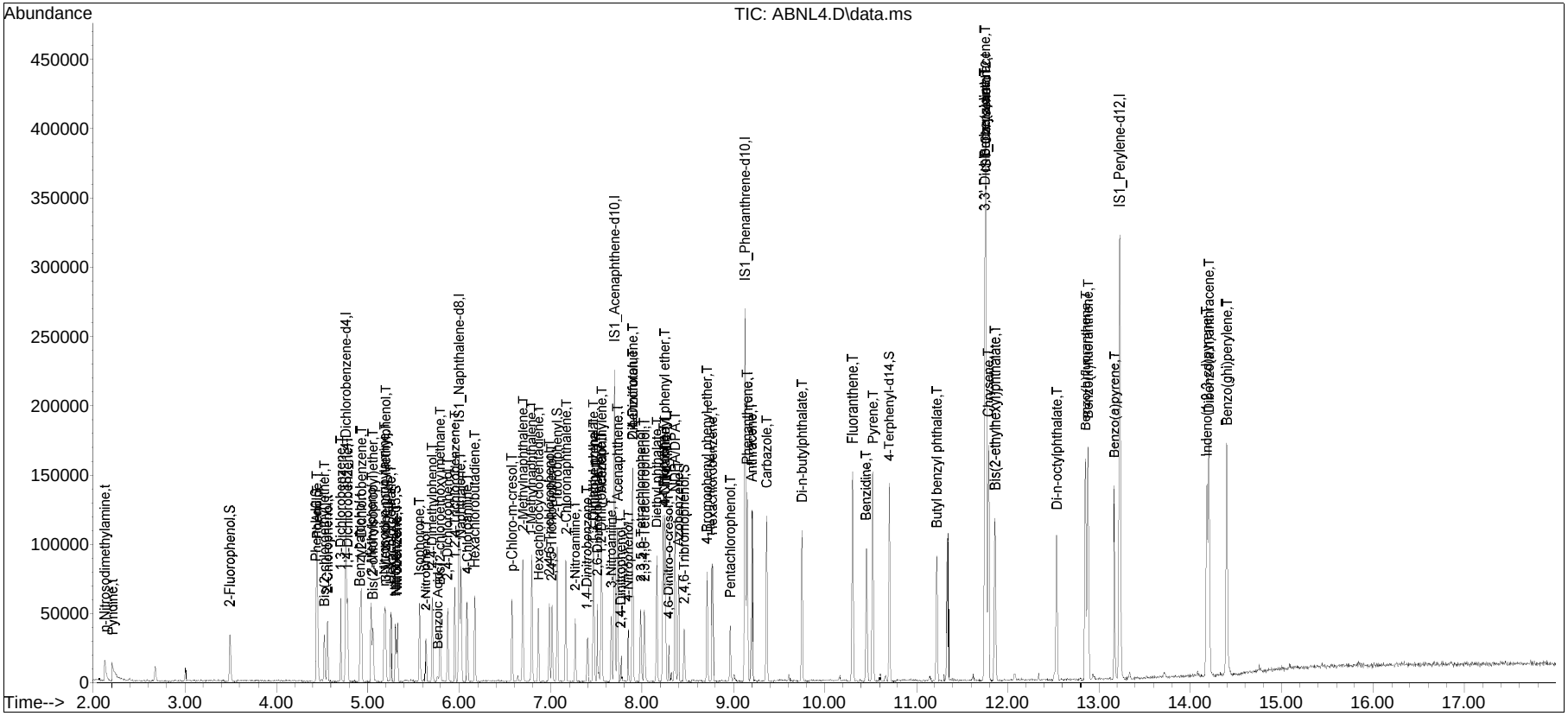
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL4.D
Acq On : 13 Apr 2023 3:54 am
Operator : Dakota:jg
Sample : IL7,32,,ABNL2 Lot# 10035
Misc : WG1768668,,
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Apr 15 09:55:15 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

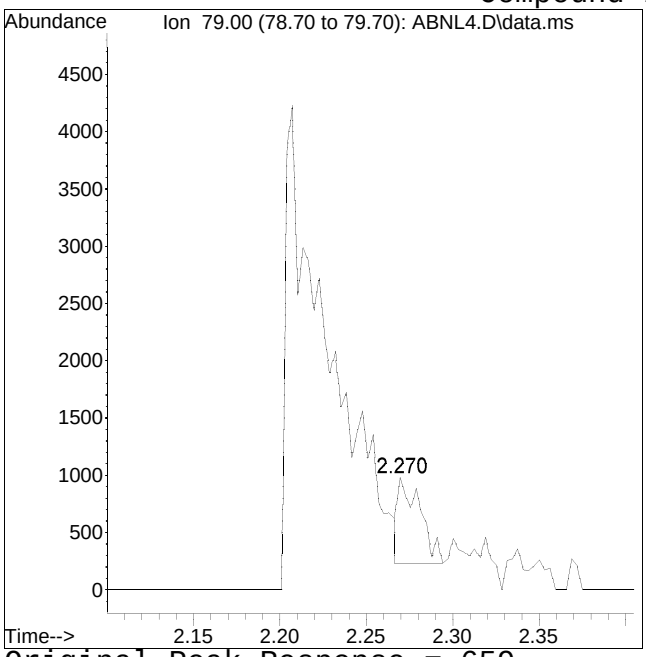
Sub List : ABNical - ABN ical sublistviical\ABNL6.D•



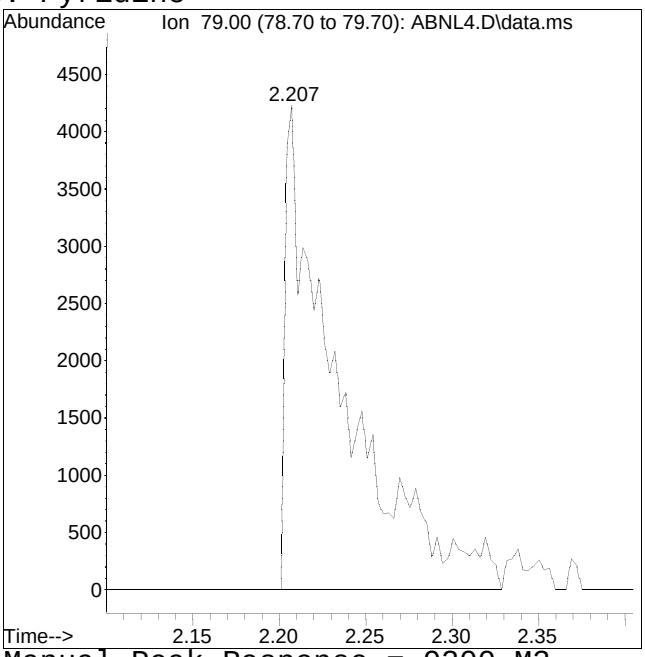
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQ
Data File : ABNL4.D
Date Inj'd : 4/13/2023 3:54 am
Sample : IL7,32,,ABNL2 Lot# 10035
Method : FS230412LVIDakota.m
Operator : Dakota:jg
Instrument : Dakota
Quant Date : 4/15/2023 9:55 am

Compound #3: Pyridine



Original Peak Response = 659



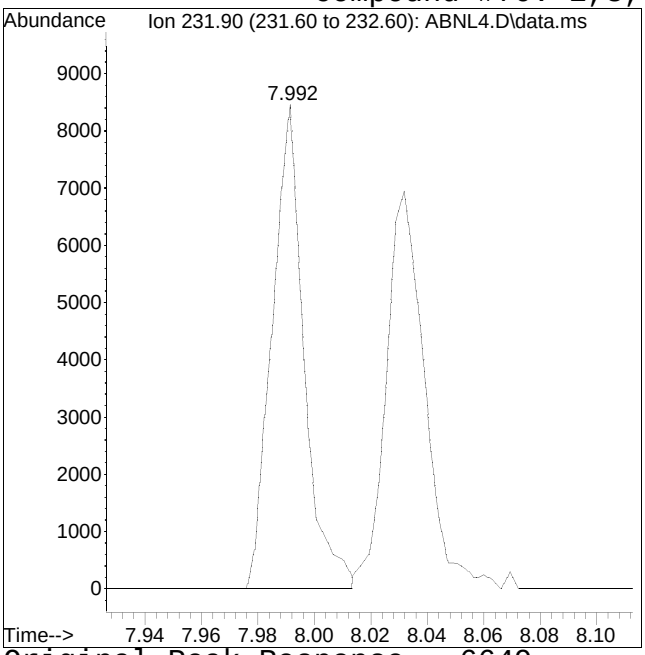
Manual Peak Response = 9200 M3

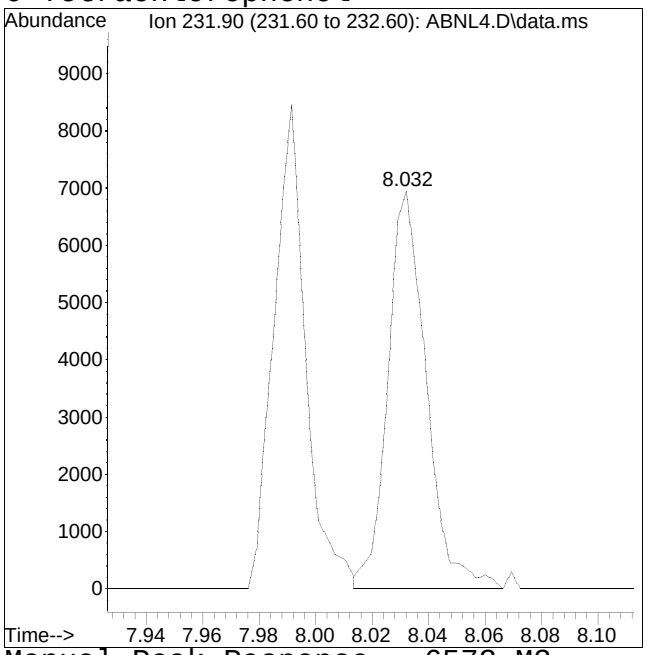
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL4.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 3:54 am Instrument : Dakota
Sample : IL7,32,,ABNL2 Lot# 10035 Quant Date : 4/15/2023 9:55 am

Compound #70: 2,3,4,6-Tetrachlorophenol





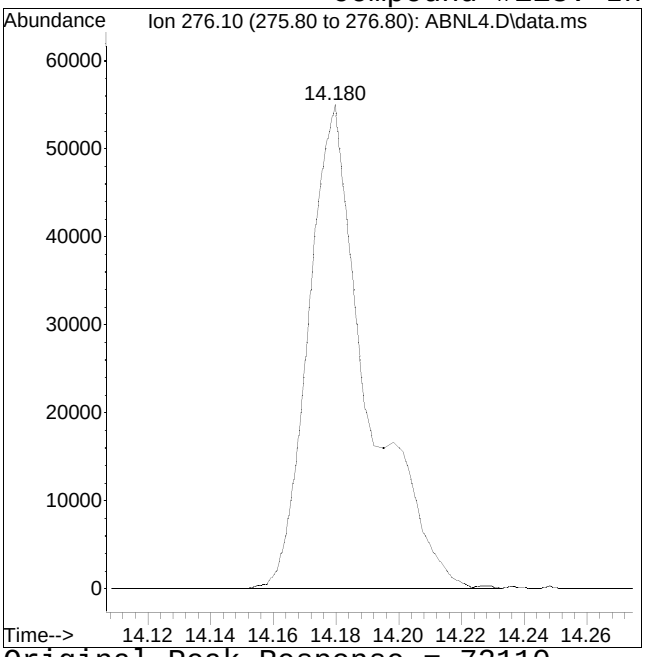
Original Peak Response = 6649 Manual Peak Response = 6573 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

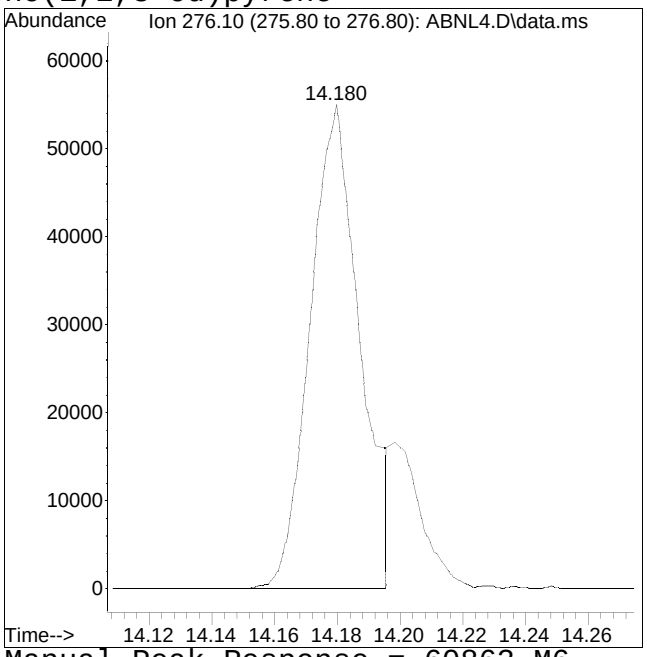
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL4.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 3:54 am Instrument : Dakota
Sample : IL7,32,,ABNL2 Lot# 10035 Quant Date : 4/15/2023 9:55 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 72110



Manual Peak Response = 60863 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL3.D
Acq On : 13 Apr 2023 4:16 am
Operator : Dakota:jg
Sample : IL8,32,,ABNL1 Lot# 10036
Misc : WG1768668,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 09:54:52 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	4.762	152	18612	4.000 ug/ml	0.00
Standard Area 1 = 17859			Recovery = 104.22%		
34) IS1_Naphthalene-d8	5.999	136	70310	4.000 ug/ml #	0.00
Standard Area 1 = 68179			Recovery = 103.13%		
62) IS1_Acenaphthene-d10	7.703	164	39721	4.000 ug/ml	0.00
Standard Area 1 = 39516			Recovery = 100.52%		
87) IS1_Phenanthrene-d10	9.129	188	86192	4.000 ug/ml #	0.00
Standard Area 1 = 92463			Recovery = 93.22%		
103) IS1_Chrysene-d12	11.762	240	88450	4.000 ug/ml	0.00
Standard Area 1 = 97366			Recovery = 90.84%		
112) IS1_Perylene-d12	13.229	264	106851	4.000 ug/ml	0.00
Standard Area 1 = 122891			Recovery = 86.95%		
System Monitoring Compounds					
4) 2-Fluorophenol	3.491	112	4548	0.946 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 18.92%		
7) Phenol-d6	4.439	99	5650	0.917 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 18.34%		
19) Nitrobenzene-d5	5.306	82	5751	0.974 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 38.96%		
45) 2-Fluorobiphenyl	7.069	172	14111	1.020 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 40.80%		
78) 2,4,6-Tribromophenol	8.464	330	2086	0.907 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 18.14%		
95) 4-Terphenyl-d14	10.705	244	20696	0.982 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 39.28%		
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	2.130	74	3335	1.065 ug/ml#	67
3) Pyridine	2.235	79	4459M1	1.052 ug/ml	
5) Aniline	4.448	93	7623	0.915 ug/ml#	47
6) 2-Chlorophenol	4.560	128	4989	0.897 ug/ml	89
8) Phenol	4.452	94	6655	0.930 ug/ml#	46
9) Bis(2-chloroethyl)ether	4.529	93	5021	1.012 ug/ml	98
10) 1,3-Dichlorobenzene	4.709	146	6769	1.014 ug/ml	98
11) 1,4-Dichlorobenzene	4.781	146	6873	1.017 ug/ml	97
12) 1,2-Dichlorobenzene	4.930	146	6422	0.982 ug/ml	92
13) Benzyl alcohol	4.918	79	4330	0.994 ug/ml	90
14) Bis(2-chloroisopropyl)...	5.064	45	7939	0.956 ug/ml#	94

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL3.D
Acq On : 13 Apr 2023 4:16 am
Operator : Dakota:jg
Sample : IL8,32,,ABNL1 Lot# 10036
Misc : WG1768668,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 09:54:52 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	5.042	108	4662	0.986	ug/ml	100
16) Hexachloroethane	5.257	117	2316	0.904	ug/ml#	60
17) n-Nitrosodi-n-propylamine	5.185	70	3569	0.938	ug/ml#	84
18) 3-Methylphenol/4-Methy...	5.197	108	4958	1.015	ug/ml#	94
20) Nitrobenzene	5.328	77	5361	0.934	ug/ml	96
21) Isophorone	5.567	82	9569	0.942	ug/ml	96
22) 2-Nitrophenol	5.636	139	2543	0.948	ug/ml	90
23) 2,4-Dimethylphenol	5.710	107	4889	0.946	ug/ml	93
24) Bis(2-chloroethoxy)met...	5.797	93	6633	1.007	ug/ml#	90
25) 2,4-Dichlorophenol	5.875	162	4397	0.905	ug/ml#	91
26) 1,2,4-Trichlorobenzene	5.956	180	5571	0.938	ug/ml	92
35) Naphthalene	6.021	128	16959	0.994	ug/ml	98
36) Benzoic Acid	0.000		0	N.D.		
37) 4-Chloroaniline	6.086	65	2068	1.026	ug/ml	83
38) Hexachlorobutadiene	6.167	225	3787	1.091	ug/ml	95
39) p-Chloro-m-cresol	6.577	107	4218	0.946	ug/ml	96
40) 2-Methylnaphthalene	6.699	142	10314	0.930	ug/ml	91
41) 1-Methylnaphthalene	6.789	115	3733	0.972	ug/ml	93
42) Hexachlorocyclopentadiene	6.867	237	3843	0.915	ug/ml#	97
43) 2,4,6-Trichlorophenol	6.982	196	3303	0.891	ug/ml	99
44) 2,4,5-Trichlorophenol	7.013	196	3478	0.847	ug/ml	98
46) 2-Chloronaphthalene	7.165	162	12043	0.990	ug/ml	93
47) 2-Nitroaniline	7.274	138	3117	0.886	ug/ml#	83
48) 1,4-Dinitrobenzene	7.401	168	1261	0.768	ug/ml	90
49) 1,3-Dinitrobenzene	7.479	168	993	0.518	ug/ml#	1
50) Dimethyl phthalate	7.469	163	13397	0.942	ug/ml#	96
51) Acenaphthylene	7.560	152	17140	0.929	ug/ml	97
52) 2,6-Dinitrotoluene	7.513	165	2300	0.783	ug/ml	94
53) 1,2-Dinitrobenzene	7.557	168	859	0.749	ug/ml#	1
63) 3-Nitroaniline	7.668	138	3131	0.990	ug/ml#	85
64) Acenaphthene	7.731	154	10228	0.946	ug/ml#	81
65) 2,4-Dinitrophenol	7.777	184	676	1.592	ug/ml#	25
66) Dibenzofuran	7.902	168	16807	0.974	ug/ml	96
67) 2,4-Dinitrotoluene	7.902	165	3429	0.881	ug/ml	96
68) 4-Nitrophenol	7.852	65	1742	1.054	ug/ml#	74
69) 2,3,5,6-Tetrachlorophenol	7.989	232	2612	1.055	ug/ml	95
70) 2,3,4,6-Tetrachlorophenol	8.032	232	2833	1.035	ug/ml	98
71) Diethyl phthalate	8.159	149	13807	0.948	ug/ml	96
72) Fluorene	8.231	166	13632	0.980	ug/ml	96
73) 4-Chlorophenyl phenyl ...	8.247	204	6915	1.023	ug/ml	93

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL3.D
Acq On : 13 Apr 2023 4:16 am
Operator : Dakota:jg
Sample : IL8,32,,ABNL1 Lot# 10036
Misc : WG1768668,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 09:54:52 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74)	4-Nitroaniline	8.253	138	2806	0.894	ug/ml	87
75)	4,6-Dinitro-o-cresol	8.290	198	1466	1.424	ug/ml#	59
76)	NDPA/DPA	8.365	169	11348	0.957	ug/ml#	90
77)	Azobenzene	8.399	77	11909	0.955	ug/ml	97
79)	4-Bromophenyl phenyl e...	8.716	248	4509	1.068	ug/ml#	81
80)	Hexachlorobenzene	8.772	284	5264	0.997	ug/ml#	82
81)	Pentachlorophenol	8.964	266	1832	1.398	ug/ml#	87
88)	Phenanthrene	9.154	178	22766	1.026	ug/ml	98
89)	Anthracene	9.204	178	20800	0.967	ug/ml	94
90)	Carbazole	9.369	167	19250	0.950	ug/ml	99
91)	Di-n-butylphthalate	9.751	149	22535	0.944	ug/ml	97
92)	Fluoranthene	10.304	202	24847	0.955	ug/ml#	92
93)	Benzidine	10.453	184	13832	0.829	ug/ml	97
94)	Pyrene	10.522	202	27413	0.996	ug/ml	98
96)	Butyl benzyl phthalate	11.230	149	9926	0.915	ug/ml#	83
104)	Benzo(a)anthracene	11.752	228	27145	0.979	ug/ml	97
105)	3,3'-Dichlorobenzidine	11.752	252	8941	0.839	ug/ml	90
106)	Chrysene	11.790	228	26401	1.008	ug/ml	97
107)	Bis(2-ethylhexyl)phtha...	11.864	149	13685	0.884	ug/ml#	91
108)	Di-n-octylphthalate	12.539	149	22555	0.803	ug/ml#	77
109)	Benzo(b)fluoranthene	12.859	252	27186	0.903	ug/ml#	92
110)	Benzo(k)fluoranthene	12.887	252	27561	0.960	ug/ml#	95
111)	Benzo(a)pyrene	13.170	252	24809	0.948	ug/ml#	87
113)	Indeno(1,2,3-cd)pyrene	14.180	276	26684M3	0.942	ug/mL	
114)	Dibenzo(a,h)anthracene	14.199	278	28447	0.958	ug/ml#	91
115)	Benzo(ghi)perylene	14.397	276	28247	0.943	ug/ml#	88

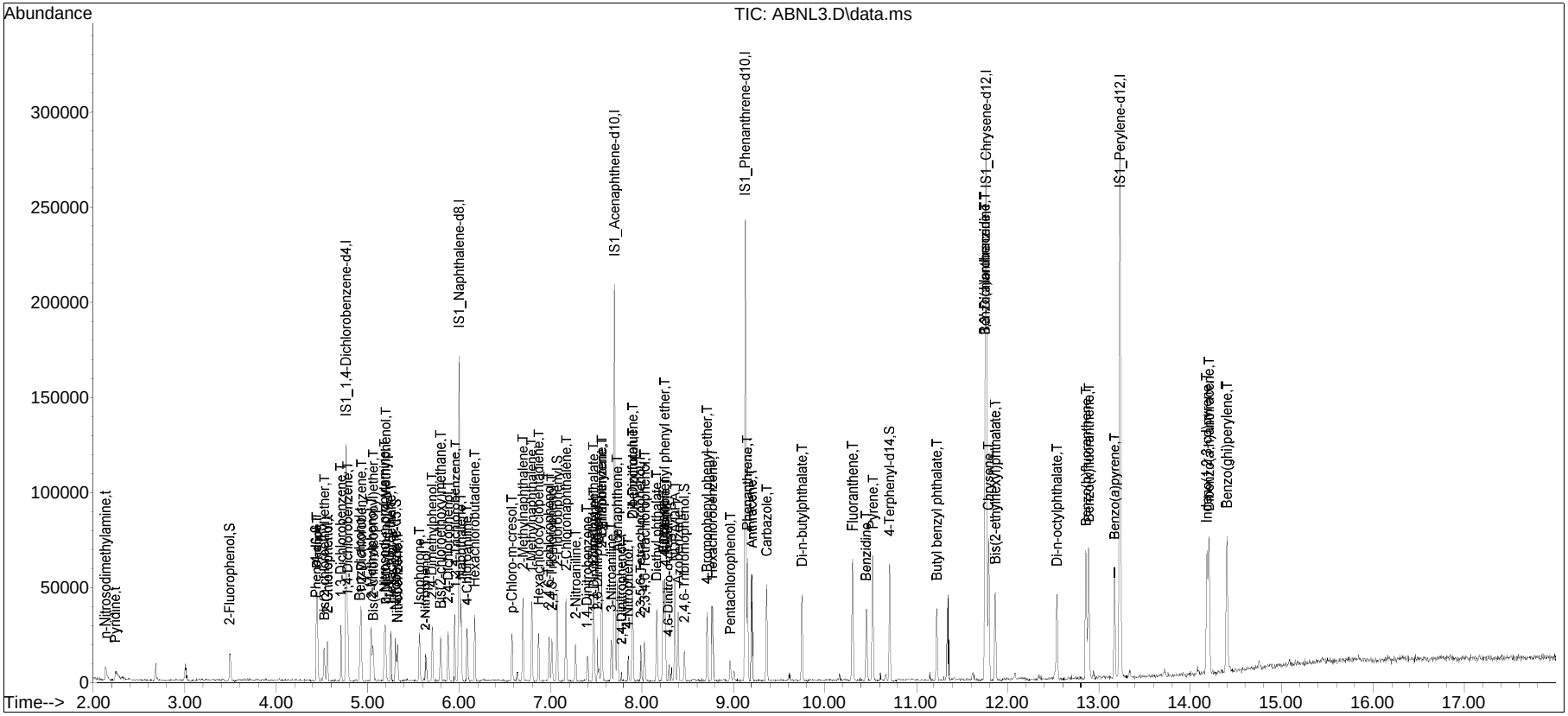
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL3.D
Acq On : 13 Apr 2023 4:16 am
Operator : Dakota:jg
Sample : IL8,32,,ABNL1 Lot# 10036
Misc : WG1768668,,
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Apr 15 09:54:52 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

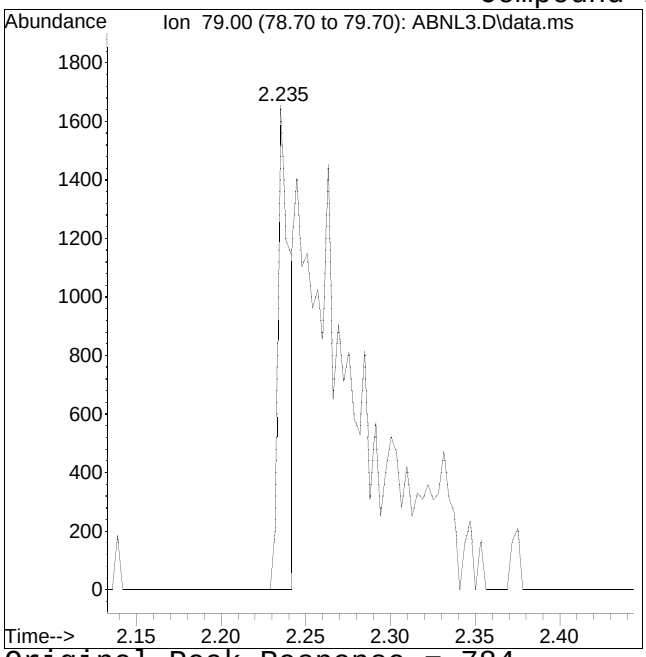
Sub List : ABNical - ABN ical sublistviical\ABNL6.D•



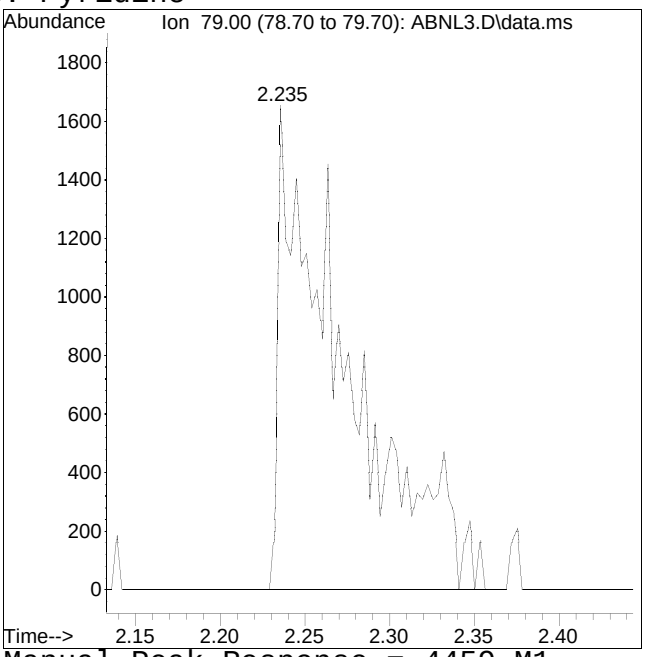
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL3.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 4:16 am Instrument : Dakota
Sample : IL8,32,,ABNL1 Lot# 10036 Quant Date : 4/15/2023 9:55 am

Compound #3: Pyridine



Original Peak Response = 784



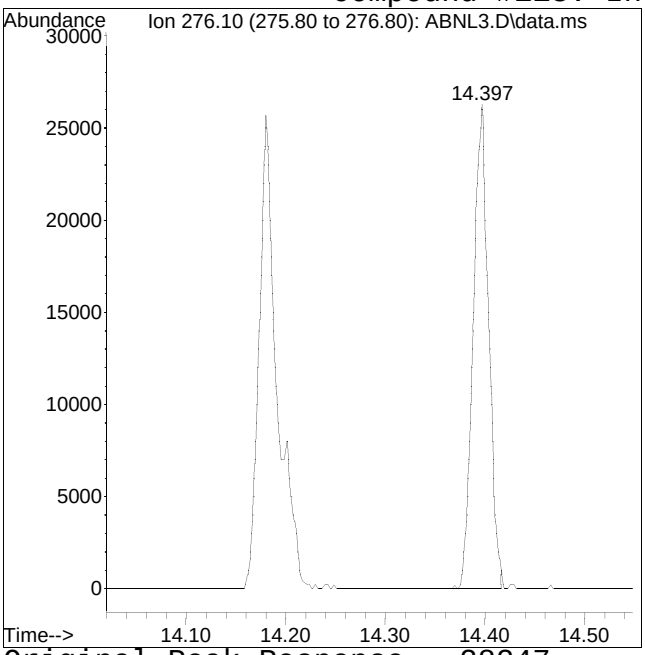
Manual Peak Response = 4459 M1

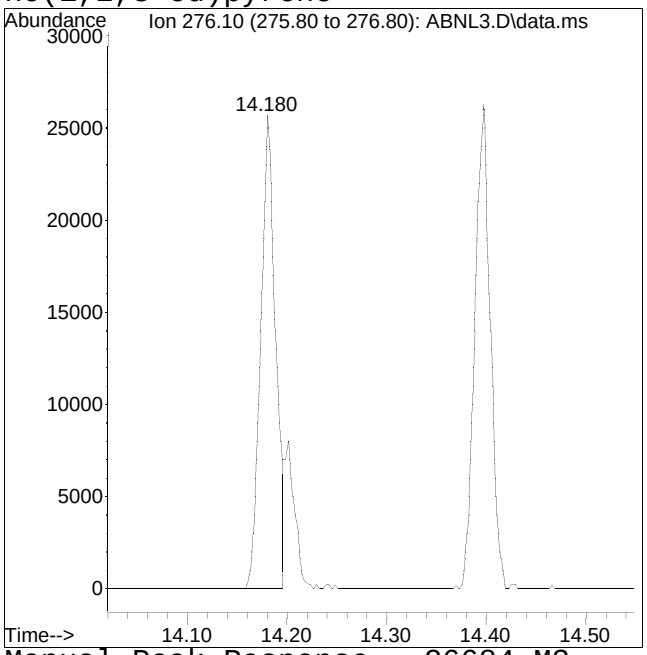
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL3.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 4:16 am Instrument : Dakota
Sample : IL8,32,,ABNL1 Lot# 10036 Quant Date : 4/15/2023 9:55 am

Compound #113: Indeno(1,2,3-cd)pyrene





Original Peak Response = 28247 Manual Peak Response = 26684 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL2.D
Acq On : 13 Apr 2023 4:39 am
Operator : Dakota:jg
Sample : IL9,32,,ABNL0.4 Lot# 10037
Misc : WG1768668,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 09:54:31 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	4.762	152	17013	4.000 ug/ml	0.00
Standard Area 1 = 17859			Recovery = 95.26%		
34) IS1_Naphthalene-d8	5.999	136	63186	4.000 ug/ml	# 0.00
Standard Area 1 = 68179			Recovery = 92.68%		
62) IS1_Acenaphthene-d10	7.699	164	35730	4.000 ug/ml	0.00
Standard Area 1 = 39516			Recovery = 90.42%		
87) IS1_Phenanthrene-d10	9.132	188	82294	4.000 ug/ml	# 0.00
Standard Area 1 = 92463			Recovery = 89.00%		
103) IS1_Chrysene-d12	11.765	240	90073	4.000 ug/ml	0.00
Standard Area 1 = 97366			Recovery = 92.51%		
112) IS1_Perylene-d12	13.229	264	114199	4.000 ug/ml	0.00
Standard Area 1 = 122891			Recovery = 92.93%		
System Monitoring Compounds					
4) 2-Fluorophenol	3.500	112	1473	0.335 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 6.70%#		
7) Phenol-d6	4.442	99	2089	0.371 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 7.42%#		
19) Nitrobenzene-d5	5.306	82	1972	0.365 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 14.60%#		
45) 2-Fluorobiphenyl	7.065	172	4553	0.366 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 14.64%#		
78) 2,4,6-Tribromophenol	8.467	330	638	0.308 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 6.16%#		
95) 4-Terphenyl-d14	10.705	244	7854	0.390 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 15.60%#		
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	2.142	74	932	0.450 ug/ml#	79
3) Pyridine	2.291	79	933M1	0.460 ug/ml	
5) Aniline	4.448	93	2589	0.340 ug/ml#	51
6) 2-Chlorophenol	4.560	128	1910	0.376 ug/ml#	86
8) Phenol	4.452	94	2498	0.382 ug/ml#	61
9) Bis(2-chloroethyl)ether	4.529	93	1953	0.431 ug/ml#	78
10) 1,3-Dichlorobenzene	4.706	146	2372	0.389 ug/ml	87
11) 1,4-Dichlorobenzene	4.781	146	2411	0.390 ug/ml	91
12) 1,2-Dichlorobenzene	4.924	146	2454M3	0.410 ug/ml	
13) Benzyl alcohol	4.924	79	1514	0.380 ug/ml#	81
14) Bis(2-chloroisopropyl)...	5.064	45	3034	0.400 ug/ml#	59

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL2.D
Acq On : 13 Apr 2023 4:39 am
Operator : Dakota:jg
Sample : IL9,32,,ABNL0.4 Lot# 10037
Misc : WG1768668,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 09:54:31 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	5.042	108	1823	0.422	ug/ml#	82
16) Hexachloroethane	5.257	117	961	0.410	ug/ml#	55
17) n-Nitrosodi-n-propylamine	5.188	70	1421	0.409	ug/ml#	59
18) 3-Methylphenol/4-Methy...	5.197	108	1445	0.324	ug/ml#	89
20) Nitrobenzene	5.325	77	2171	0.414	ug/ml#	83
21) Isophorone	5.574	82	3266	0.352	ug/ml#	65
22) 2-Nitrophenol	5.636	139	775	0.316	ug/ml#	31
23) 2,4-Dimethylphenol	5.710	107	1782	0.377	ug/ml	95
24) Bis(2-chloroethoxy)met...	5.797	93	2384	0.396	ug/ml#	85
25) 2,4-Dichlorophenol	5.878	162	1594	0.359	ug/ml	94
26) 1,2,4-Trichlorobenzene	5.956	180	2350	0.433	ug/ml#	89
35) Naphthalene	6.018	128	6282	0.410	ug/ml	98
36) Benzoic Acid	0.000		0	N.D.		
37) 4-Chloroaniline	6.090	65	695	0.384	ug/ml	78
38) Hexachlorobutadiene	6.167	225	1130	0.362	ug/ml#	86
39) p-Chloro-m-cresol	6.581	107	1152	0.288	ug/ml#	68
40) 2-Methylnaphthalene	6.696	142	3845	0.386	ug/ml	94
41) 1-Methylnaphthalene	6.792	115	1172M3	0.340	ug/ml	
42) Hexachlorocyclopentadiene	6.867	237	1363	0.361	ug/ml#	91
43) 2,4,6-Trichlorophenol	6.985	196	807	0.242	ug/ml#	57
44) 2,4,5-Trichlorophenol	7.013	196	1035	0.281	ug/ml#	83
46) 2-Chloronaphthalene	7.165	162	4090	0.374	ug/ml#	92
47) 2-Nitroaniline	7.271	138	1106	0.350	ug/ml#	80
48) 1,4-Dinitrobenzene	7.398	168	372M2	0.252	ug/ml	
49) 1,3-Dinitrobenzene	7.476	168	465M2	0.270	ug/ml	
50) Dimethyl phthalate	7.470	163	4629	0.362	ug/ml#	77
51) Acenaphthylene	7.560	152	6102	0.368	ug/ml	94
52) 2,6-Dinitrotoluene	7.510	165	1092	0.414	ug/ml#	80
53) 1,2-Dinitrobenzene	7.553	168	198M2	0.192	ug/ml	
63) 3-Nitroaniline	7.672	138	911	0.320	ug/ml#	72
64) Acenaphthene	7.734	154	3981	0.409	ug/ml#	81
65) 2,4-Dinitrophenol	0.000		0	N.D.		
66) Dibenzofuran	7.902	168	6254	0.403	ug/ml	96
67) 2,4-Dinitrotoluene	7.902	165	1259	0.360	ug/ml#	91
68) 4-Nitrophenol	7.852	65	589	0.674	ug/ml#	64
69) 2,3,5,6-Tetrachlorophenol	7.992	232	657	0.571	ug/ml#	66
70) 2,3,4,6-Tetrachlorophenol	8.032	232	771	0.521	ug/ml#	18
71) Diethyl phthalate	8.156	149	5301	0.405	ug/ml#	94
72) Fluorene	8.231	166	4864	0.389	ug/ml	84
73) 4-Chlorophenyl phenyl ...	8.247	204	2692	0.443	ug/ml#	84

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL2.D
Acq On : 13 Apr 2023 4:39 am
Operator : Dakota:jg
Sample : IL9,32,,ABNL0.4 Lot# 10037
Misc : WG1768668,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 09:54:31 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74)	4-Nitroaniline	8.259	138	904	0.320	ug/ml	95
75)	4,6-Dinitro-o-cresol	8.296	198	193M2	0.921	ug/ml	
76)	NDPA/DPA	8.362	169	4006	0.375	ug/ml	91
77)	Azobenzene	8.399	77	4490	0.400	ug/ml	97
79)	4-Bromophenyl phenyl e...	8.719	248	1411	0.372	ug/ml#	77
80)	Hexachlorobenzene	8.772	284	1783	0.375	ug/ml#	80
81)	Pentachlorophenol	8.968	266	336M2	0.977	ug/ml	
88)	Phenanthrene	9.151	178	9089	0.429	ug/ml	99
89)	Anthracene	9.204	178	8188	0.399	ug/ml	97
90)	Carbazole	9.369	167	7812	0.404	ug/ml	96
91)	Di-n-butylphthalate	9.751	149	8540	0.375	ug/ml#	91
92)	Fluoranthene	10.304	202	9565	0.385	ug/ml#	91
93)	Benzidine	10.453	184	5414	0.340	ug/ml#	84
94)	Pyrene	10.522	202	10858	0.413	ug/ml	97
96)	Butyl benzyl phthalate	11.227	149	3506	0.338	ug/ml	97
104)	Benzo(a)anthracene	11.756	228	11226	0.398	ug/ml	95
105)	3,3'-Dichlorobenzidine	11.756	252	3901	0.359	ug/ml#	89
106)	Chrysene	11.793	228	10100	0.379	ug/ml	96
107)	Bis(2-ethylhexyl)phtha...	11.864	149	5291	0.335	ug/ml#	90
108)	Di-n-octylphthalate	12.542	149	8749	0.306	ug/ml#	75
109)	Benzo(b)fluoranthene	12.859	252	12939	0.422	ug/ml#	93
110)	Benzo(k)fluoranthene	12.884	252	10412	0.356	ug/ml	92
111)	Benzo(a)pyrene	13.170	252	9901	0.372	ug/ml	95
113)	Indeno(1,2,3-cd)pyrene	14.180	276	10804M6	0.357	ug/mL	
114)	Dibenzo(a,h)anthracene	14.202	278	11876	0.374	ug/ml#	93
115)	Benzo(ghi)perylene	14.394	276	11584	0.362	ug/ml#	84

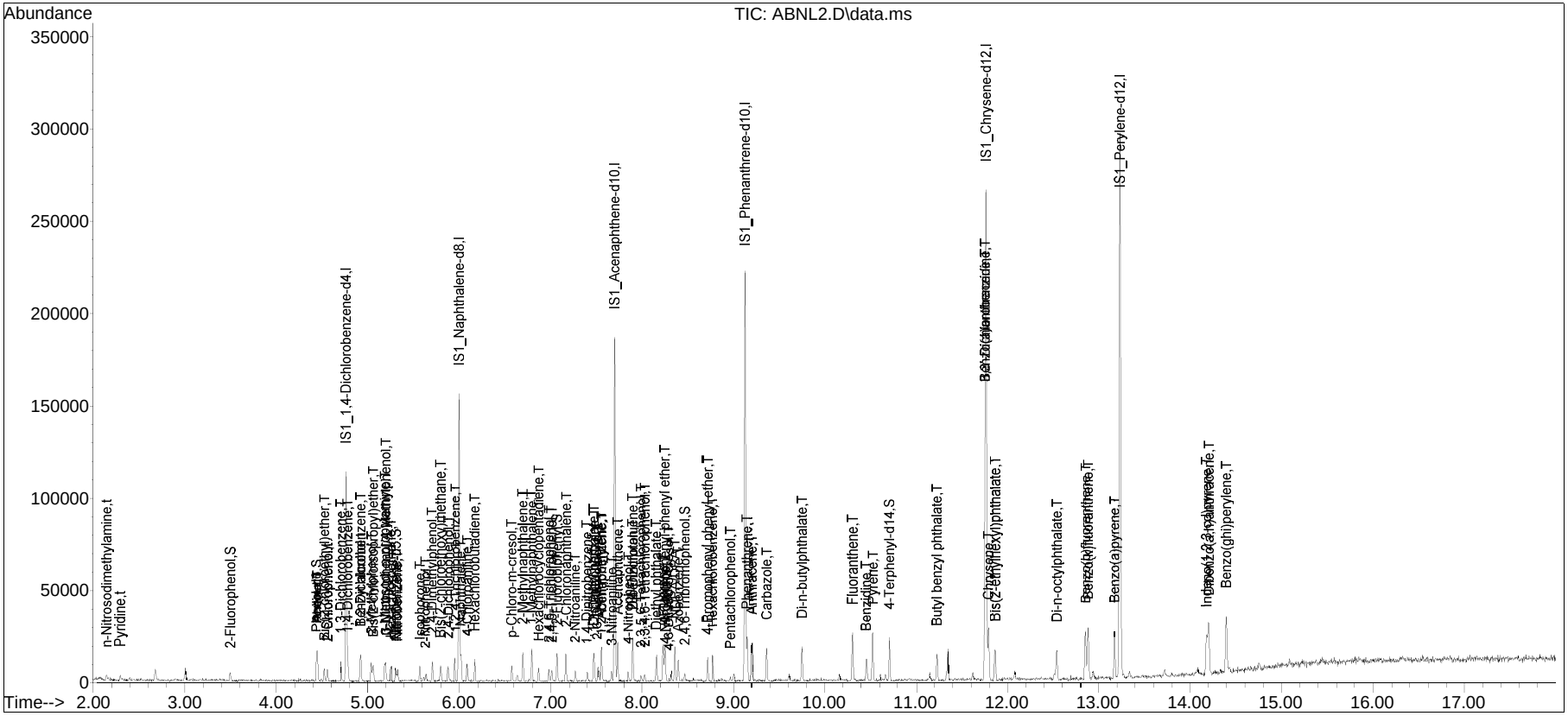
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL2.D
Acq On : 13 Apr 2023 4:39 am
Operator : Dakota:jg
Sample : IL9,32,,ABNL0.4 Lot# 10037
Misc : WG1768668,,
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Apr 15 09:54:31 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

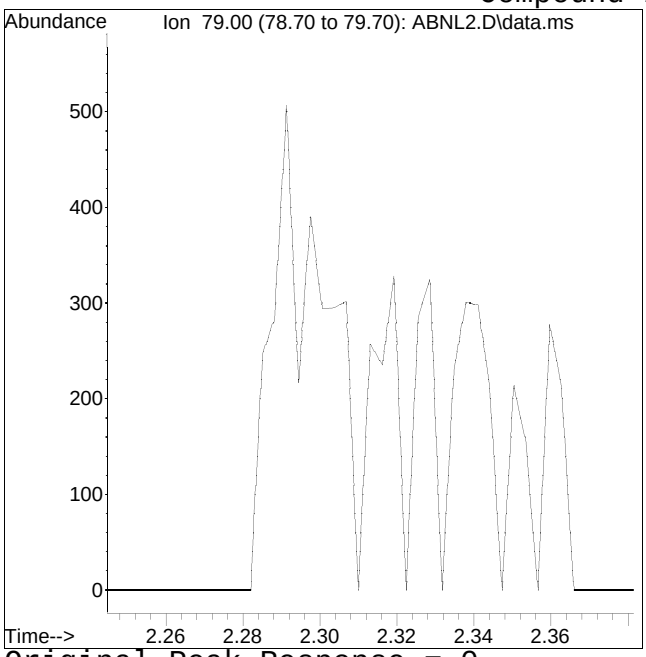
Sub List : ABNical - ABN ical sublistviical\ABNL6.D•



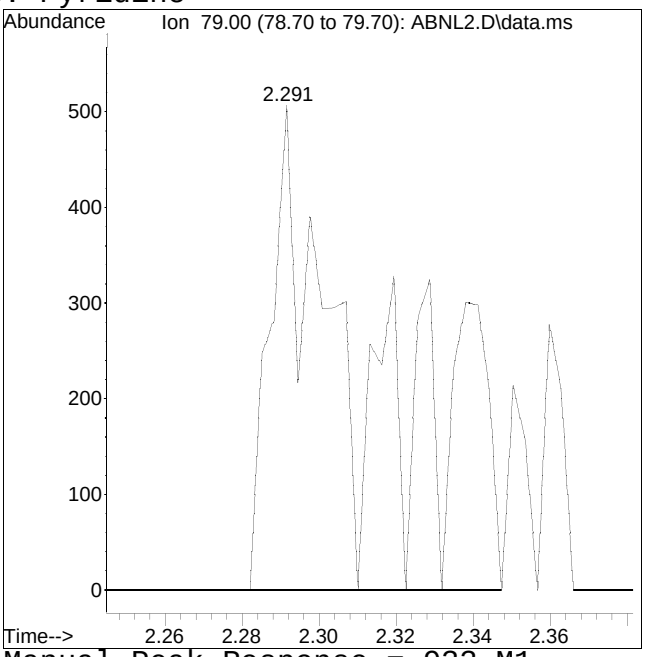
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL2.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 4:39 am Instrument : Dakota
Sample : IL9,32,,ABNL0.4 Lot# 10037Quant Date : 4/15/2023 9:55 am

Compound #3: Pyridine



Original Peak Response = 0



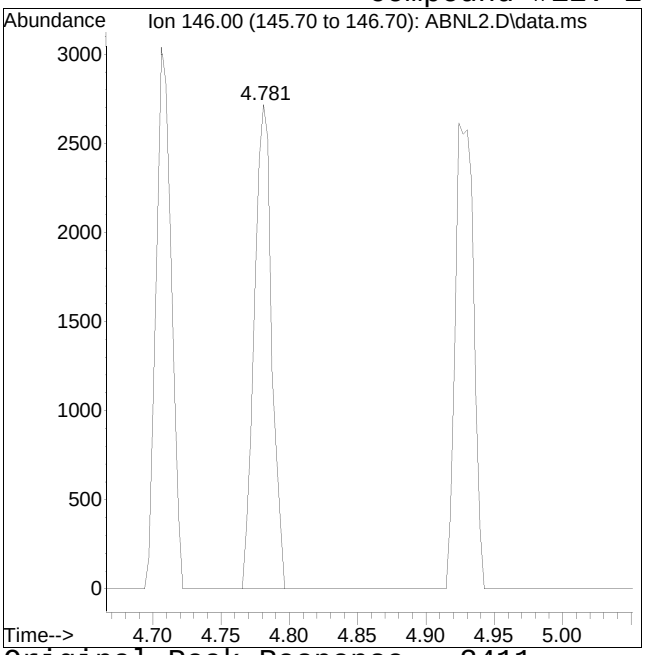
Manual Peak Response = 933 M1

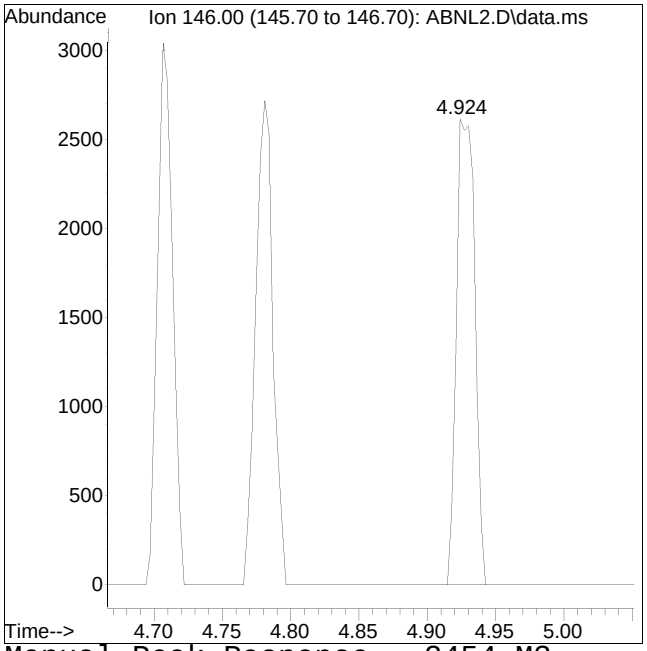
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL2.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 4:39 am Instrument : Dakota
Sample : IL9,32,,ABNL0.4 Lot# 10037Quant Date : 4/15/2023 9:55 am

Compound #12: 1,2-Dichlorobenzene





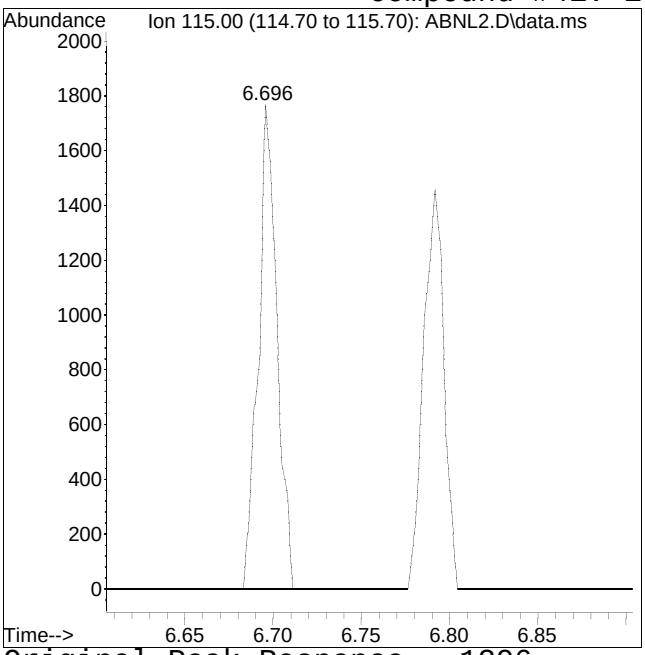
Original Peak Response = 2411 Manual Peak Response = 2454 M3

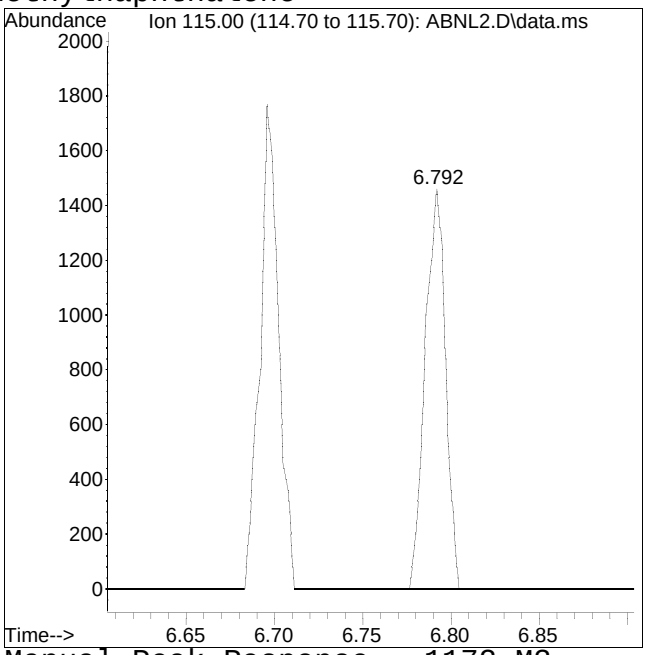
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL2.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 4:39 am Instrument : Dakota
Sample : IL9,32,,ABNL0.4 Lot# 10037Quant Date : 4/15/2023 9:55 am

Compound #41: 1-Methylnaphthalene



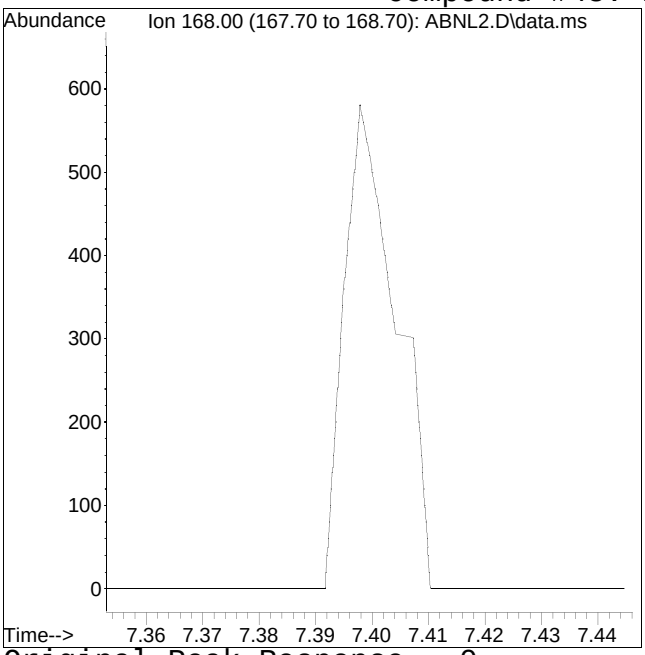


Original Peak Response = 1296 Manual Peak Response = 1172 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

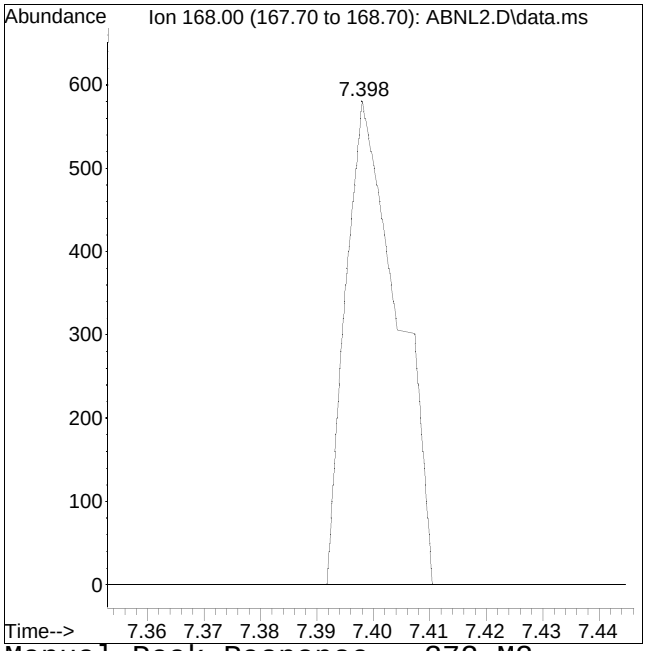
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL2.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 4:39 am Instrument : Dakota
Sample : IL9,32,,ABNL0.4 Lot# 10037Quant Date : 4/15/2023 9:55 am

Compound #48: 1,4-Dinitrobenzene



Original Peak Response = 0



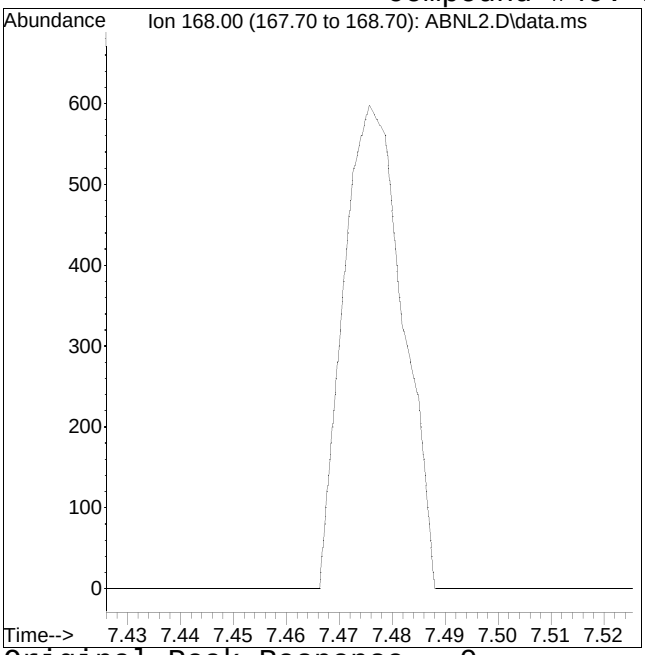
Manual Peak Response = 372 M2

M2 = Peak not found by automatic integration algorithm.

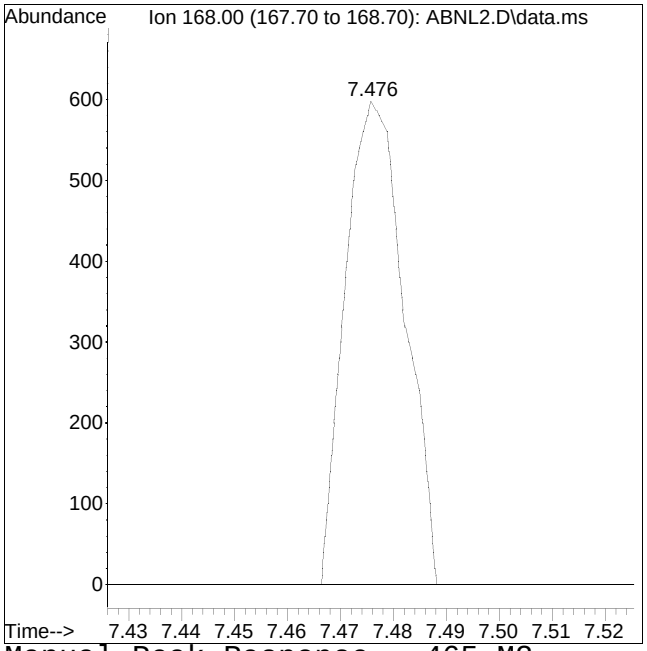
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL2.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 4:39 am Instrument : Dakota
Sample : IL9,32,,ABNL0.4 Lot# 10037Quant Date : 4/15/2023 9:55 am

Compound #49: 1,3-Dinitrobenzene



Original Peak Response = 0



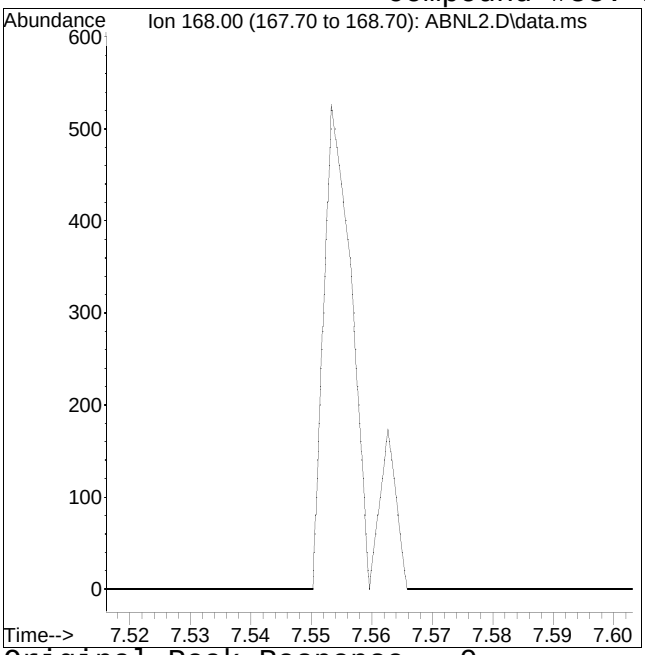
Manual Peak Response = 465 M2

M2 = Peak not found by automatic integration algorithm.

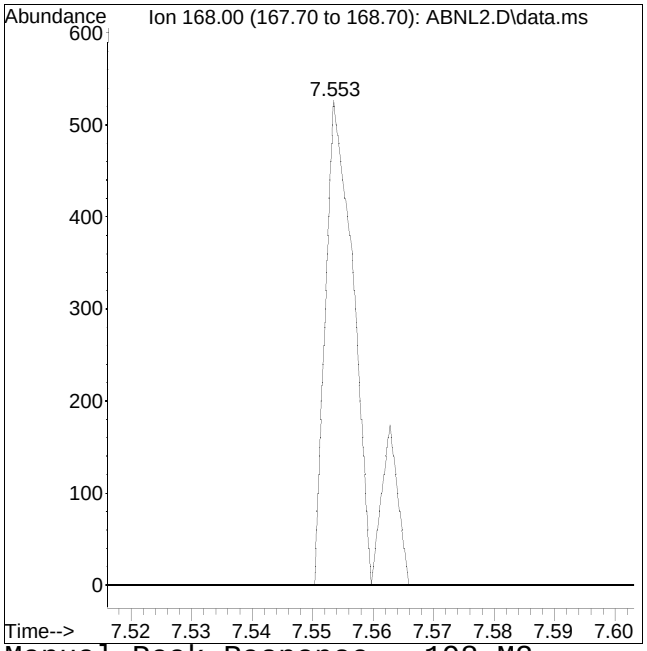
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL2.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 4:39 am Instrument : Dakota
Sample : IL9,32,,ABNL0.4 Lot# 10037Quant Date : 4/15/2023 9:55 am

Compound #53: 1,2-Dinitrobenzene



Original Peak Response = 0



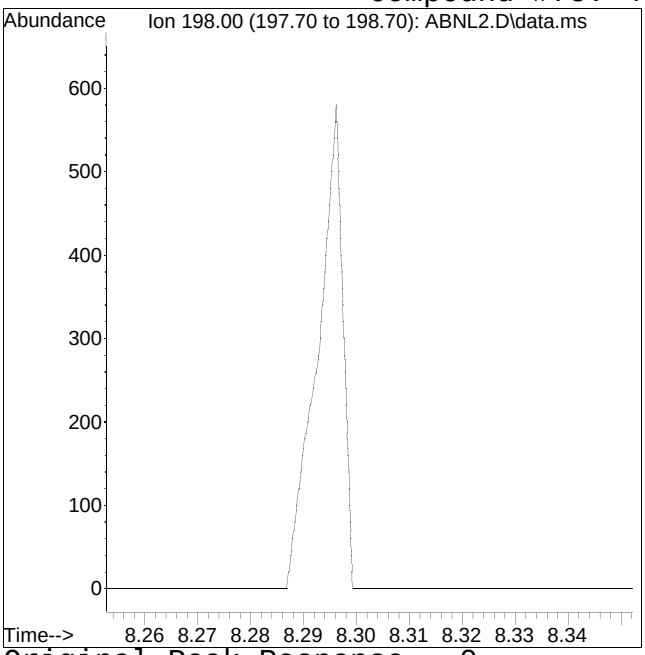
Manual Peak Response = 198 M2

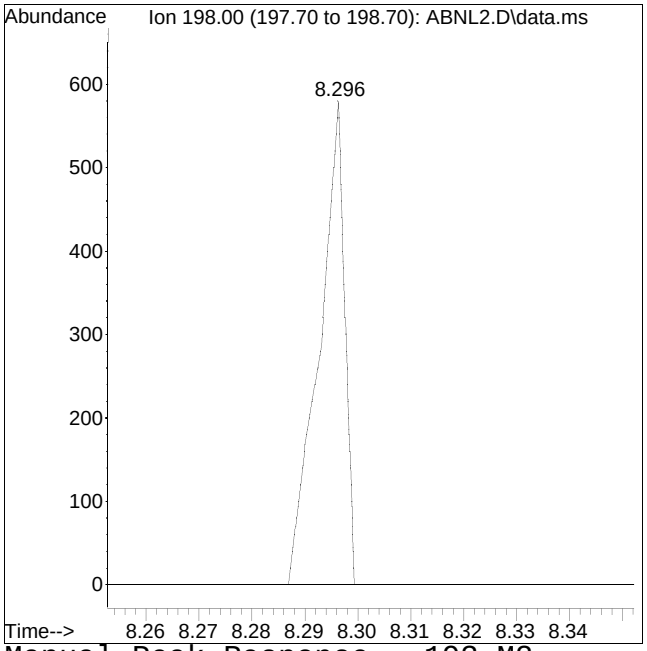
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL2.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 4:39 am Instrument : Dakota
Sample : IL9,32,,ABNL0.4 Lot# 10037Quant Date : 4/15/2023 9:55 am

Compound #75: 4,6-Dinitro-o-cresol



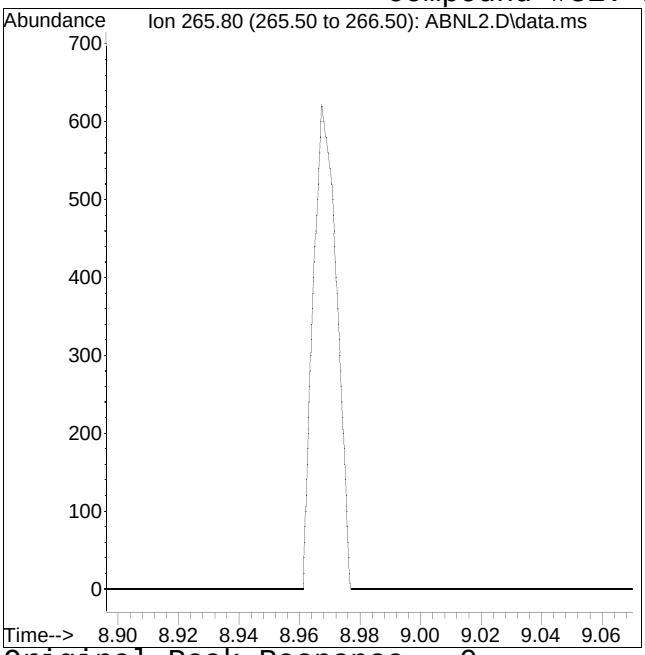


Original Peak Response = 0 Manual Peak Response = 193 M2
M2 = Peak not found by automatic integration algorithm.

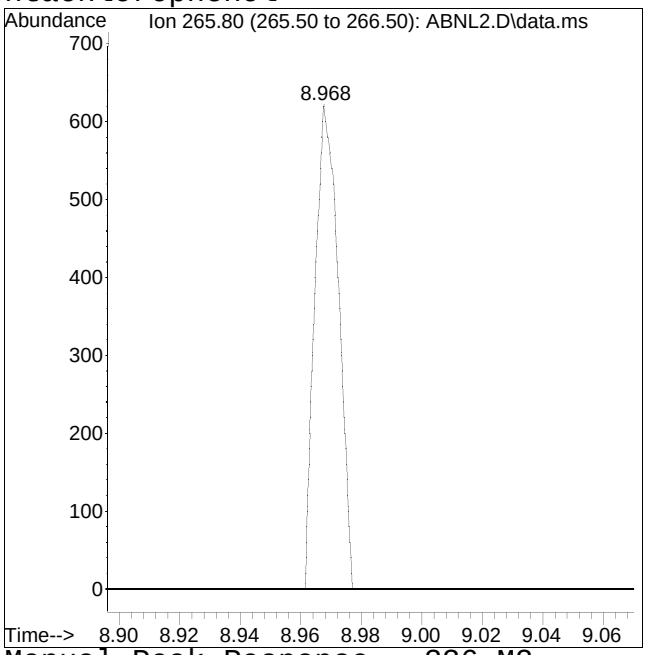
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL2.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 4:39 am Instrument : Dakota
Sample : IL9,32,,ABNL0.4 Lot# 10037Quant Date : 4/15/2023 9:55 am

Compound #81: Pentachlorophenol



Original Peak Response = 0



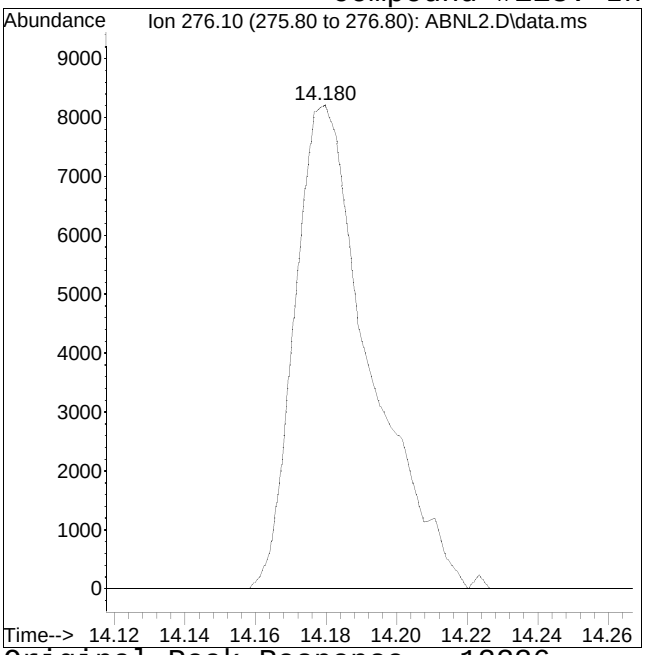
Manual Peak Response = 336 M2

M2 = Peak not found by automatic integration algorithm.

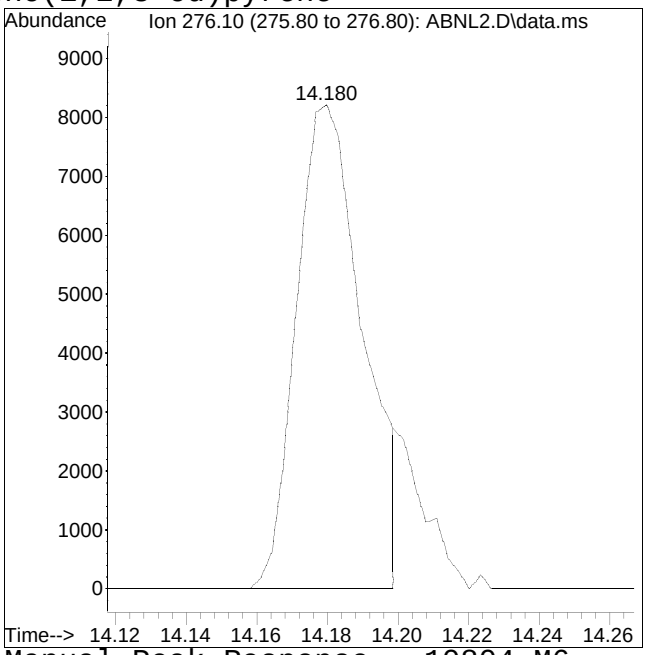
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL2.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 4:39 am Instrument : Dakota
Sample : IL9,32,,ABNL0.4 Lot# 10037Quant Date : 4/15/2023 9:55 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 12236



Manual Peak Response = 10804 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL1.D
Acq On : 13 Apr 2023 5:02 am
Operator : Dakota:jg
Sample : IL10,32,,ABNL0.2 Lot# 10038
Misc : WG1768668,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 19 12:09:35 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	4.763	152	18496	4.000 ug/ml	0.00
Standard Area 1 = 17859			Recovery =	103.57%	
34) IS1_Naphthalene-d8	6.000	136	69939	4.000 ug/ml	# 0.00
Standard Area 1 = 68179			Recovery =	102.58%	
62) IS1_Acenaphthene-d10	7.700	164	38787	4.000 ug/ml	0.00
Standard Area 1 = 39516			Recovery =	98.16%	
87) IS1_Phenanthrene-d10	9.132	188	85691	4.000 ug/ml	0.00
Standard Area 1 = 92463			Recovery =	92.68%	
103) IS1_Chrysene-d12	11.765	240	84087	4.000 ug/ml	0.00
Standard Area 1 = 97366			Recovery =	86.36%	
112) IS1_Perylene-d12	13.226	264	104264	4.000 ug/ml	0.00
Standard Area 1 = 122891			Recovery =	84.84%	
System Monitoring Compounds					
4) 2-Fluorophenol	3.498	112	863	0.181 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery =	3.62%#	
7) Phenol-d6	4.442	99	1028	0.168 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery =	3.36%#	
19) Nitrobenzene-d5	5.310	82	1234	0.210 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery =	8.40%#	
45) 2-Fluorobiphenyl	7.066	172	2923	0.212 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery =	8.48%#	
78) 2,4,6-Tribromophenol	0.000	330	0	0.000 ug/ml	
Spiked Amount 5.000	Range 15 - 110		Recovery =	0.00%#	
95) 4-Terphenyl-d14	10.708	244	4180	0.200 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery =	8.00%#	
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	2.149	74	414M2	0.290 ug/ml	
3) Pyridine	0.000		0	N.D.	
5) Aniline	4.452	93	1748	0.211 ug/ml#	61
6) 2-Chlorophenol	4.560	128	954	0.173 ug/ml#	30
8) Phenol	4.455	94	1290	0.181 ug/ml#	37
9) Bis(2-chloroethyl)ether	4.532	93	828	0.168 ug/ml#	70
10) 1,3-Dichlorobenzene	4.713	146	1348M3	0.203 ug/ml	
11) 1,4-Dichlorobenzene	4.781	146	1392	0.207 ug/ml	95
12) 1,2-Dichlorobenzene	4.933	146	1312M3	0.202 ug/ml	
13) Benzyl alcohol	4.924	79	716	0.165 ug/ml	92
14) Bis(2-chloroisopropyl)...	5.055	45	1602	0.194 ug/ml#	72

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL1.D
Acq On : 13 Apr 2023 5:02 am
Operator : Dakota:jg
Sample : IL10,32,,ABNL0.2 Lot# 10038
Misc : WG1768668,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 19 12:09:35 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	5.039	108	710	0.151	ug/ml#	73
16) Hexachloroethane	5.254	117	611	0.240	ug/ml#	61
17) n-Nitrosodi-n-propylamine	0.000		0	N.D.	d	
18) 3-Methylphenol/4-Methy...	5.198	108	710	0.146	ug/ml#	48
20) Nitrobenzene	5.325	77	1075	0.188	ug/ml#	39
21) Isophorone	5.574	82	1804	0.179	ug/ml#	65
22) 2-Nitrophenol	5.639	139	425M2	0.159	ug/ml	
23) 2,4-Dimethylphenol	5.710	107	949	0.185	ug/ml	91
24) Bis(2-chloroethoxy)met...	5.797	93	1426	0.218	ug/ml#	50
25) 2,4-Dichlorophenol	5.878	162	878	0.182	ug/ml#	25
26) 1,2,4-Trichlorobenzene	5.953	180	1197	0.203	ug/ml#	81
35) Naphthalene	6.018	128	3560	0.210	ug/ml#	58
36) Benzoic Acid	0.000		0	N.D.		
37) 4-Chloroaniline	6.087	65	323M2	0.161	ug/ml	
38) Hexachlorobutadiene	6.167	225	723	0.209	ug/ml#	18
39) p-Chloro-m-cresol	6.587	107	780	0.176	ug/ml#	84
40) 2-Methylnaphthalene	6.699	142	1996	0.181	ug/ml#	85
41) 1-Methylnaphthalene	6.792	115	799	0.209	ug/ml	83
42) Hexachlorocyclopentadiene	6.870	237	761	0.182	ug/ml#	88
43) 2,4,6-Trichlorophenol	6.988	196	474M2	0.128	ug/ml	
44) 2,4,5-Trichlorophenol	7.016	196	409M2	0.100	ug/ml	
46) 2-Chloronaphthalene	7.165	162	2471	0.204	ug/ml	96
47) 2-Nitroaniline	7.277	138	497M2	0.142	ug/ml	
48) 1,4-Dinitrobenzene	7.401	168	214M2	0.131	ug/ml	
49) 1,3-Dinitrobenzene	7.476	168	222M2	0.117	ug/ml	
50) Dimethyl phthalate	7.470	163	2596	0.184	ug/ml#	77
51) Acenaphthylene	7.563	152	3380	0.184	ug/ml	93
52) 2,6-Dinitrotoluene	7.516	165	460M3	0.158	ug/ml	
53) 1,2-Dinitrobenzene	7.563	168	102M2	0.089	ug/ml	
63) 3-Nitroaniline	7.665	138	494M2	0.160	ug/ml	
64) Acenaphthene	7.734	154	2160	0.205	ug/ml	90
65) 2,4-Dinitrophenol	0.000		0	N.D.		
66) Dibenzofuran	7.902	168	3459	0.205	ug/ml	100
67) 2,4-Dinitrotoluene	7.899	165	616M3	0.162	ug/ml	
68) 4-Nitrophenol	7.855	65	275M3	0.544	ug/ml	
69) 2,3,5,6-Tetrachlorophenol	7.998	232	293M2	0.461	ug/ml	
70) 2,3,4,6-Tetrachlorophenol	8.032	232	332M2	0.386	ug/ml	
71) Diethyl phthalate	8.157	149	2884	0.203	ug/ml#	61
72) Fluorene	8.231	166	2772	0.204	ug/ml#	90
73) 4-Chlorophenyl phenyl ...	8.247	204	1265	0.192	ug/ml#	77

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL1.D
Acq On : 13 Apr 2023 5:02 am
Operator : Dakota:jg
Sample : IL10,32,,ABNL0.2 Lot# 10038
Misc : WG1768668,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 19 12:09:35 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74)	4-Nitroaniline	8.256	138	465M2	0.152	ug/ml	
75)	4,6-Dinitro-o-cresol	0.000		0	N.D.		
76)	NDPA/DPA	8.362	169	2436	0.210	ug/ml	95
77)	Azobenzene	8.399	77	2139	0.176	ug/ml#	89
79)	4-Bromophenyl phenyl e...	8.716	248	628	0.152	ug/ml	93
80)	Hexachlorobenzene	8.769	284	1053	0.204	ug/ml#	33
81)	Pentachlorophenol	0.000		0	N.D.		
88)	Phenanthrene	9.154	178	4535	0.205	ug/ml	96
89)	Anthracene	9.201	178	4342	0.203	ug/ml	98
90)	Carbazole	9.369	167	3741	0.186	ug/ml#	85
91)	Di-n-butylphthalate	9.751	149	4603	0.194	ug/ml#	79
92)	Fluoranthene	10.304	202	4969M3	0.192	ug/ml	
93)	Benzidine	10.453	184	1737	0.105	ug/ml#	68
94)	Pyrene	10.519	202	5166M3	0.189	ug/ml	
96)	Butyl benzyl phthalate	11.230	149	1762	0.163	ug/ml#	88
104)	Benzo(a)anthracene	11.756	228	5229	0.198	ug/ml	94
105)	3,3'-Dichlorobenzidine	11.750	252	1951	0.193	ug/ml#	87
106)	Chrysene	11.790	228	5061	0.203	ug/ml	94
107)	Bis(2-ethylhexyl)phtha...	11.865	149	2612	0.177	ug/ml#	52
108)	Di-n-octylphthalate	12.539	149	4309	0.161	ug/ml#	82
109)	Benzo(b)fluoranthene	12.853	252	5338	0.187	ug/ml	95
110)	Benzo(k)fluoranthene	12.884	252	5171M3	0.189	ug/ml	
111)	Benzo(a)pyrene	13.170	252	4529	0.182	ug/ml	98
113)	Indeno(1,2,3-cd)pyrene	14.183	276	5264M3	0.190	ug/mL	
114)	Dibenzo(a,h)anthracene	14.199	278	5473	0.189	ug/ml#	94
115)	Benzo(ghi)perylene	14.398	276	5929	0.203	ug/ml#	89

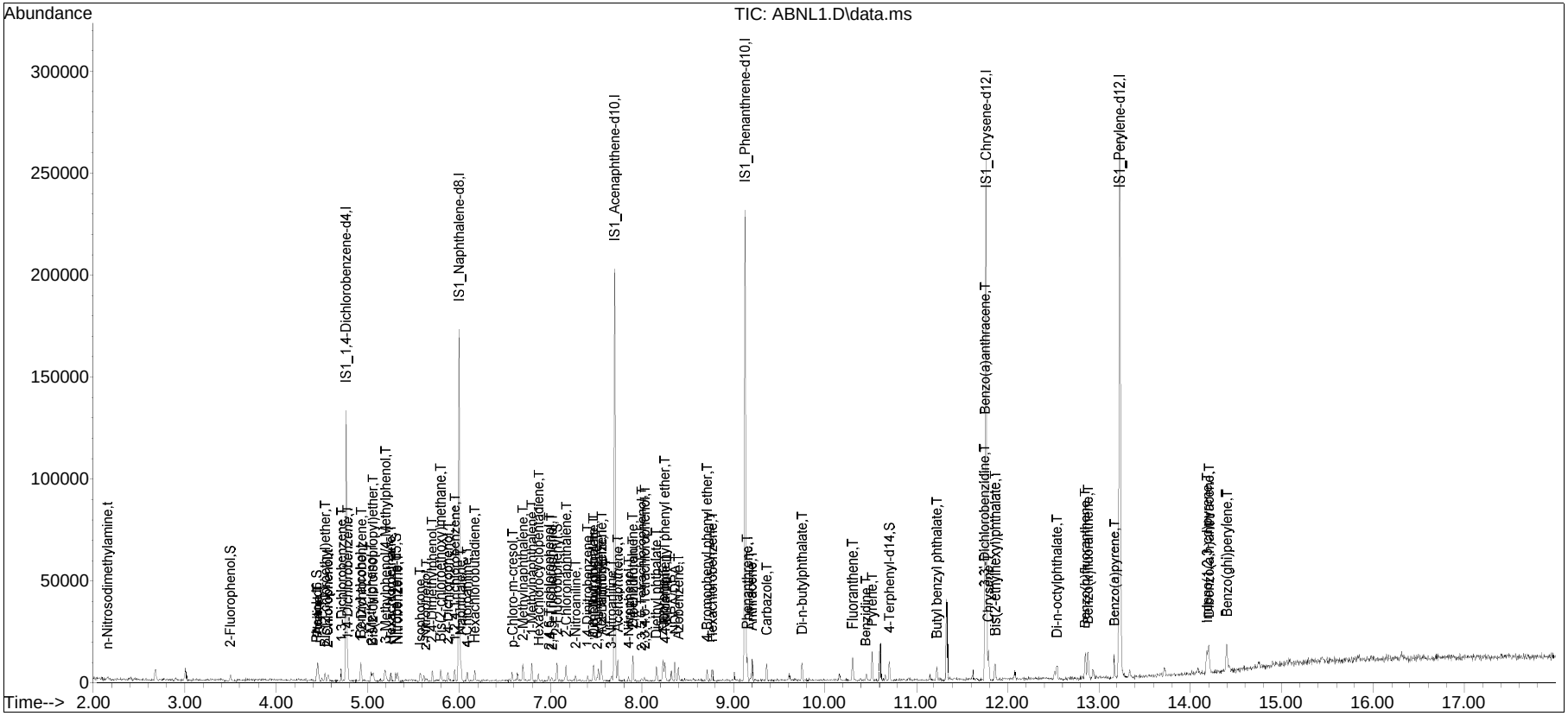
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNL1.D
Acq On : 13 Apr 2023 5:02 am
Operator : Dakota:jg
Sample : IL10,32,,ABNL0.2 Lot# 10038
Misc : WG1768668,,
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Apr 19 12:09:35 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 09:49:34 2023
Response via : Initial Calibration

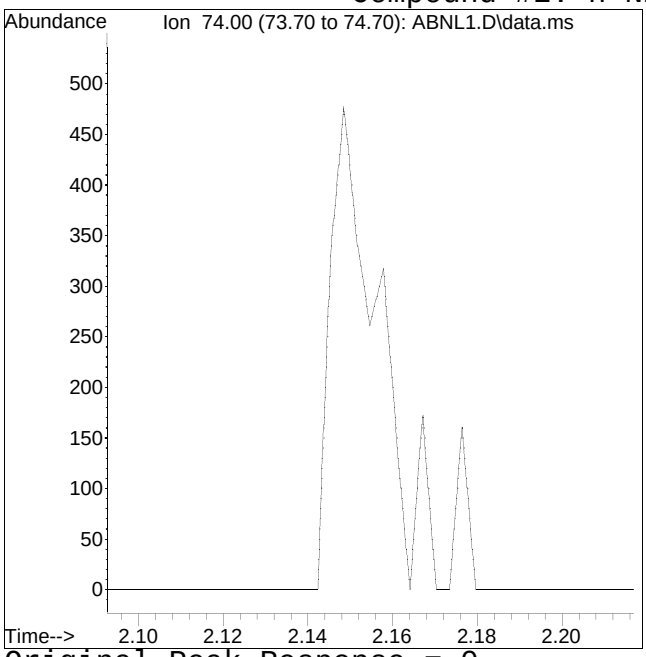
Sub List : ABNical - ABN ical sublistviical\ABNL6.D•



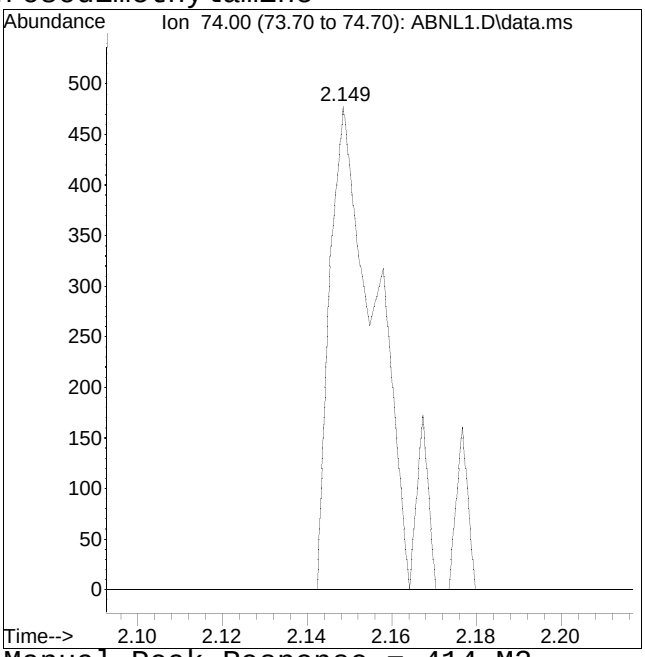
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #2: n-Nitrosodimethylamine



Original Peak Response = 0



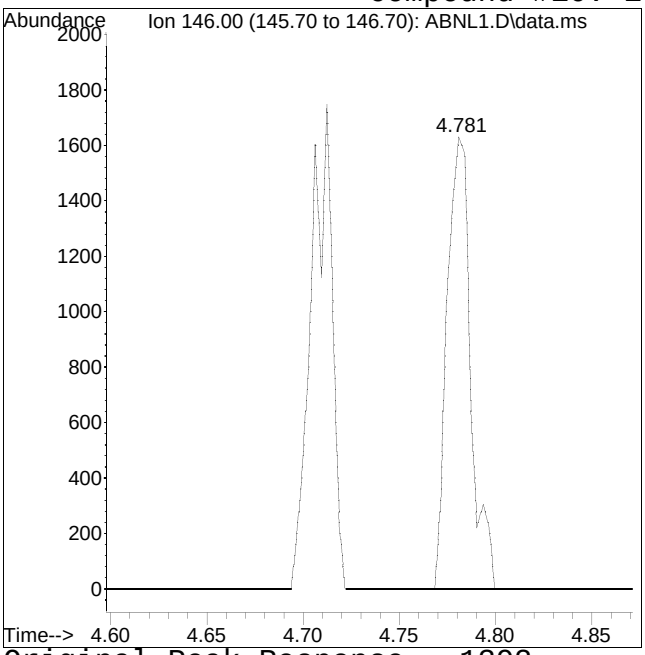
Manual Peak Response = 414 M2

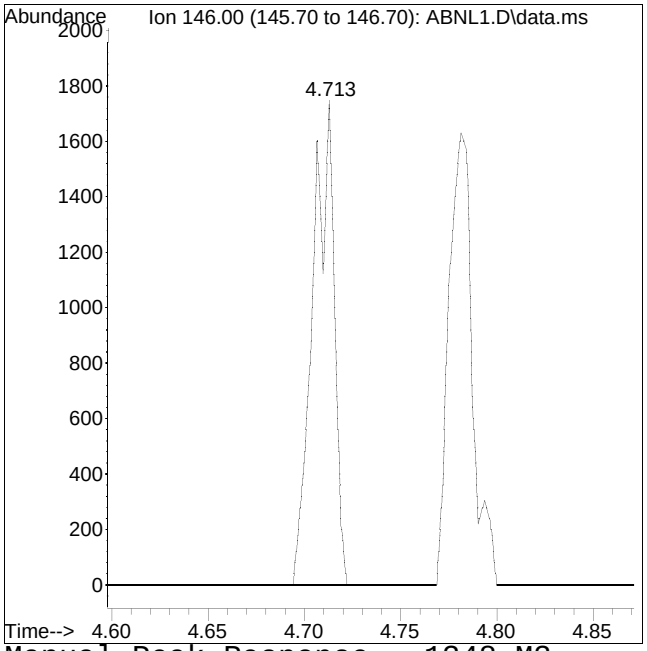
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #10: 1,3-Dichlorobenzene



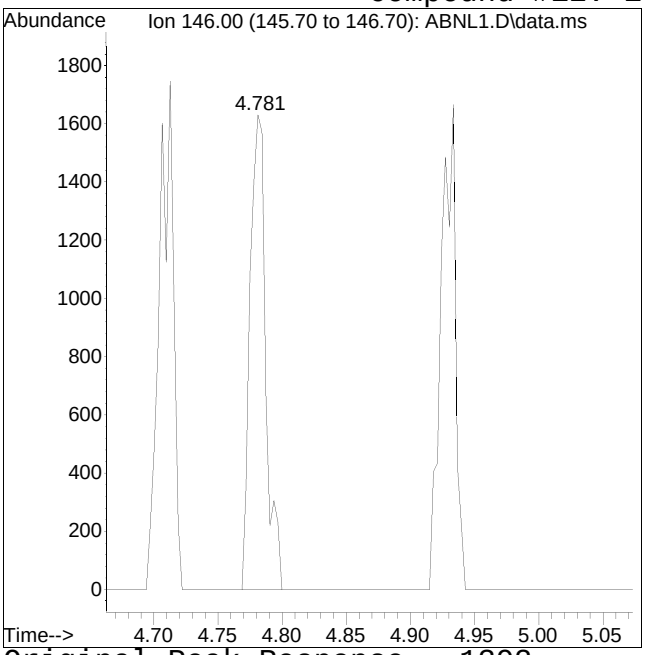


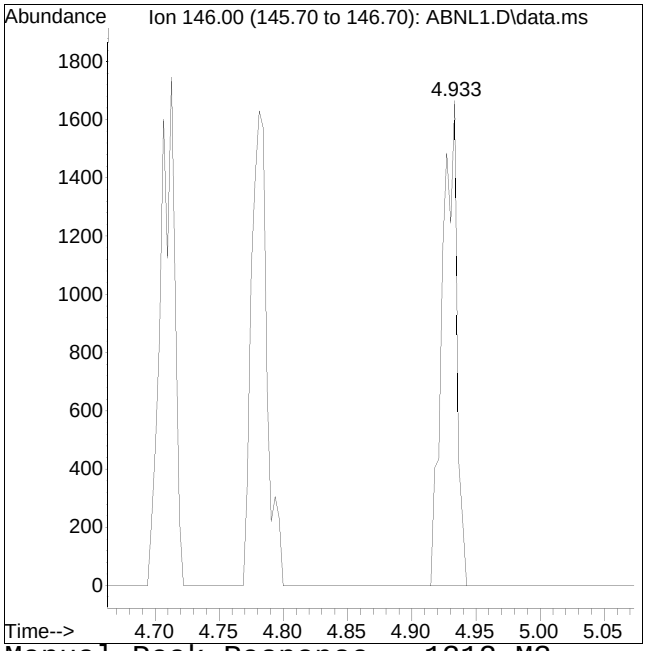
Original Peak Response = 1392 Manual Peak Response = 1348 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #12: 1,2-Dichlorobenzene



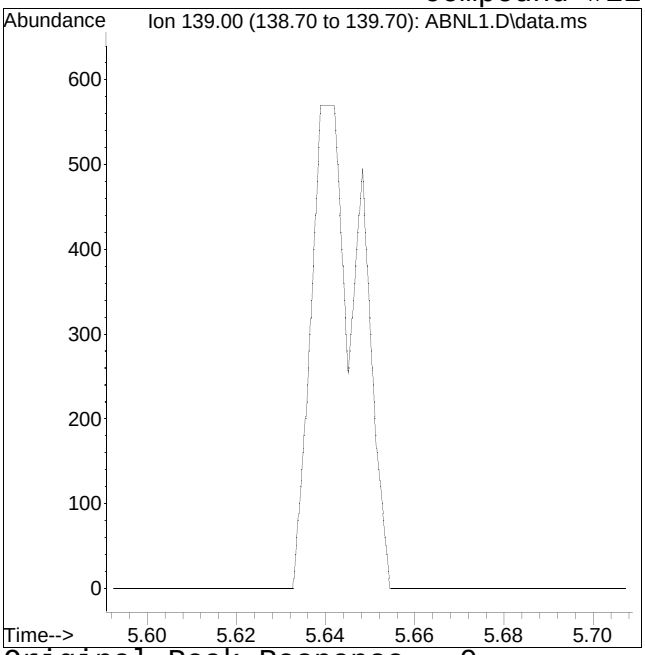


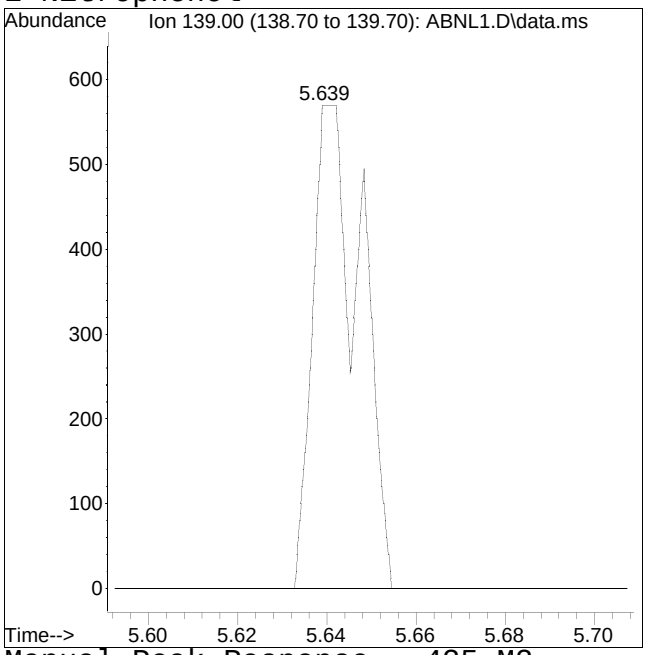
Original Peak Response = 1392 Manual Peak Response = 1312 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #22: 2-Nitrophenol



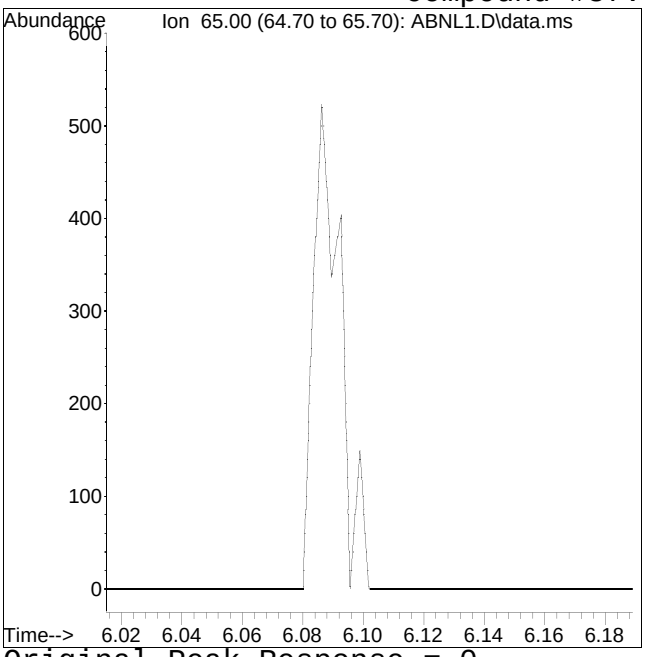


Original Peak Response = 0 Manual Peak Response = 425 M2
M2 = Peak not found by automatic integration algorithm.

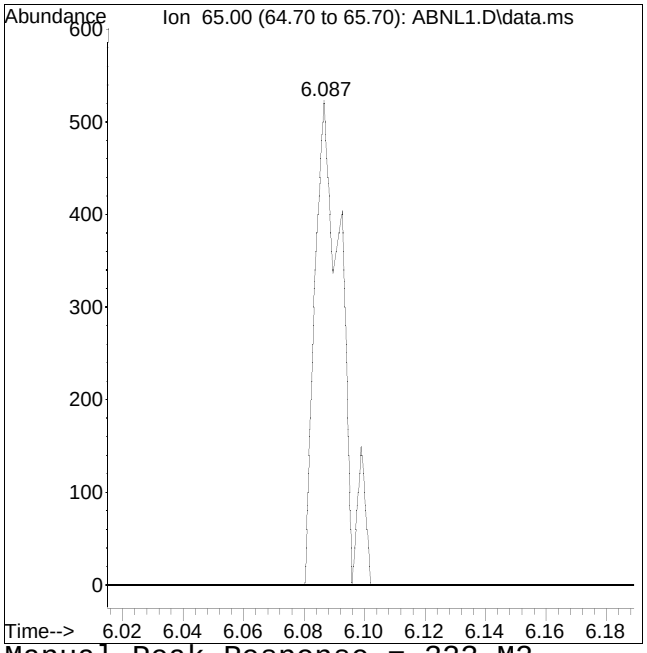
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #37: 4-Chloroaniline



Original Peak Response = 0



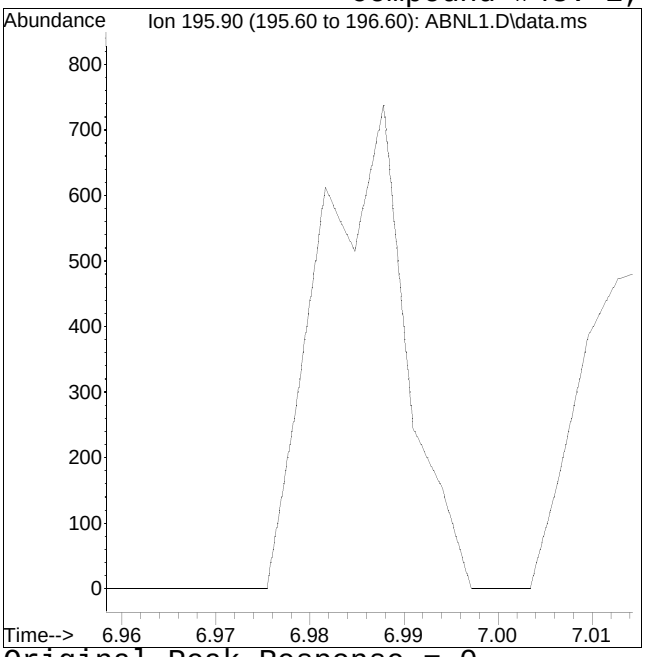
Manual Peak Response = 323 M2

M2 = Peak not found by automatic integration algorithm.

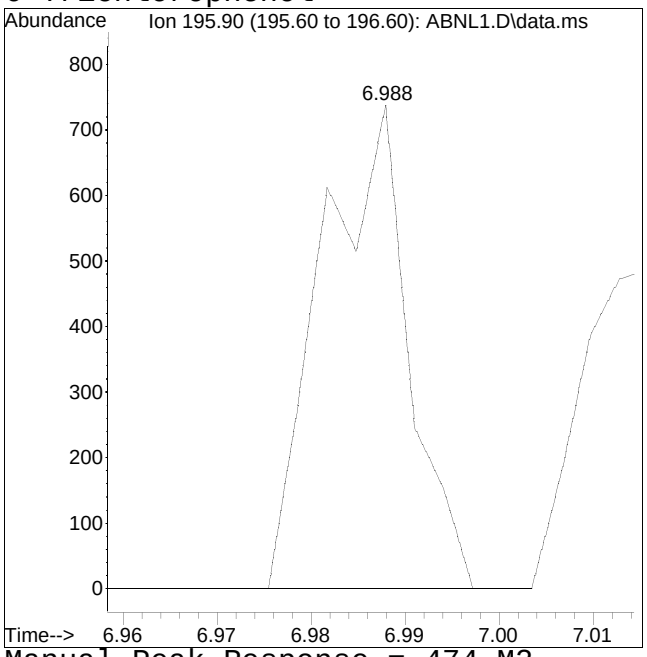
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #43: 2,4,6-Trichlorophenol



Original Peak Response = 0



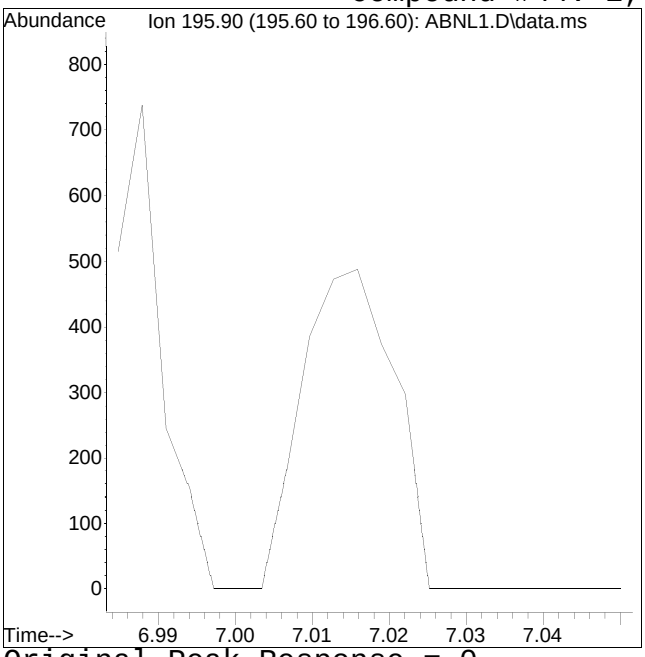
Manual Peak Response = 474 M2

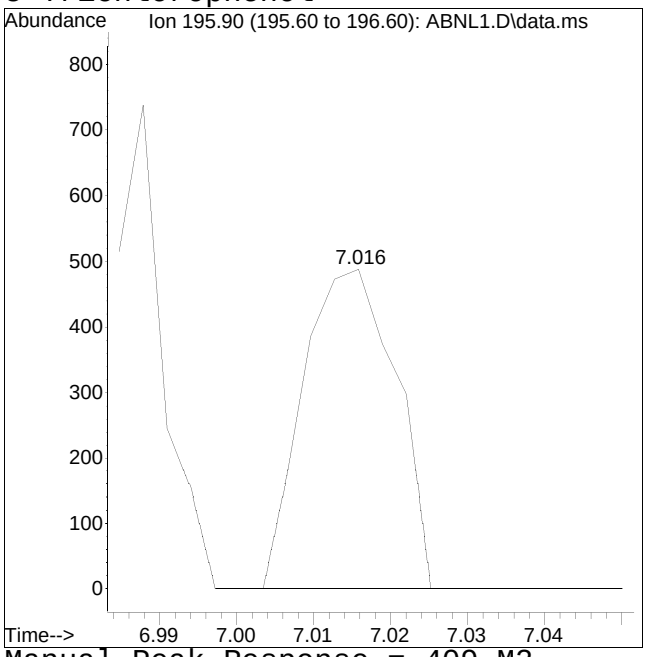
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #44: 2,4,5-Trichlorophenol



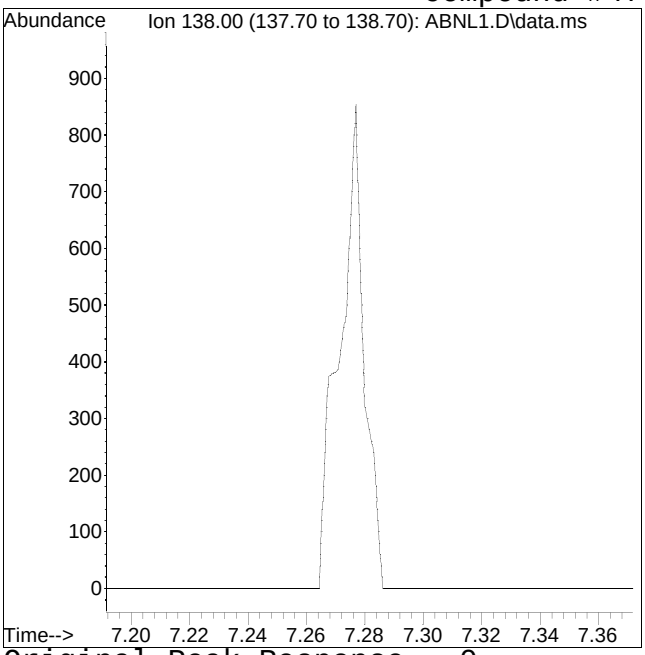


Original Peak Response = 0 Manual Peak Response = 409 M2
M2 = Peak not found by automatic integration algorithm.

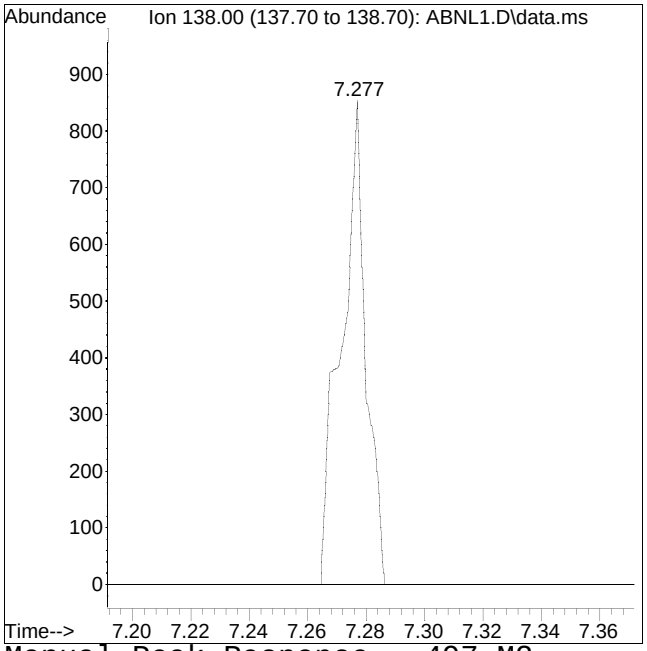
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #47: 2-Nitroaniline



Original Peak Response = 0



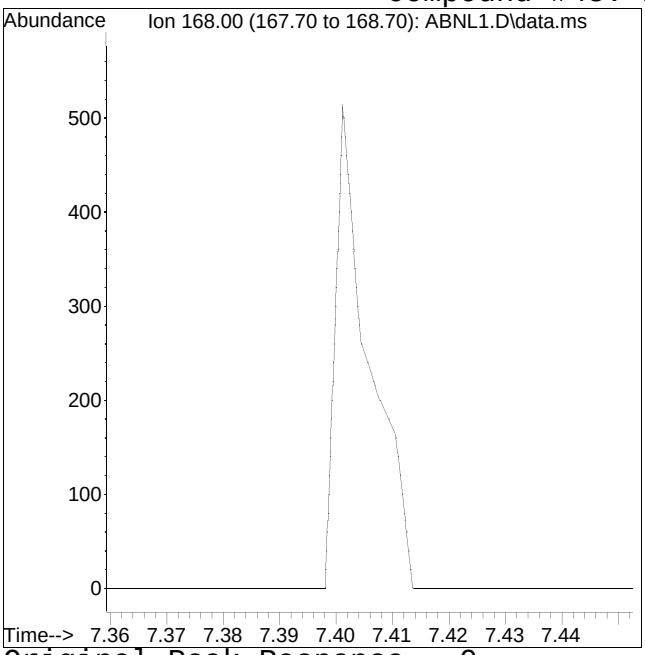
Manual Peak Response = 497 M2

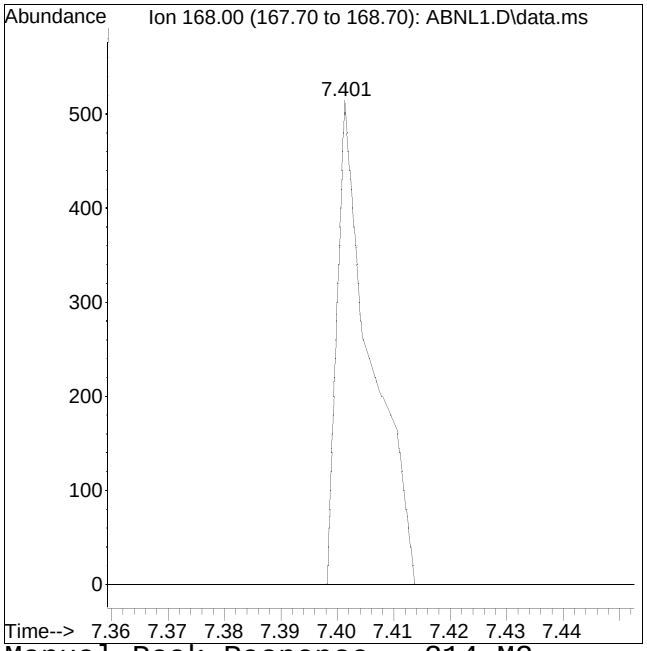
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #48: 1,4-Dinitrobenzene



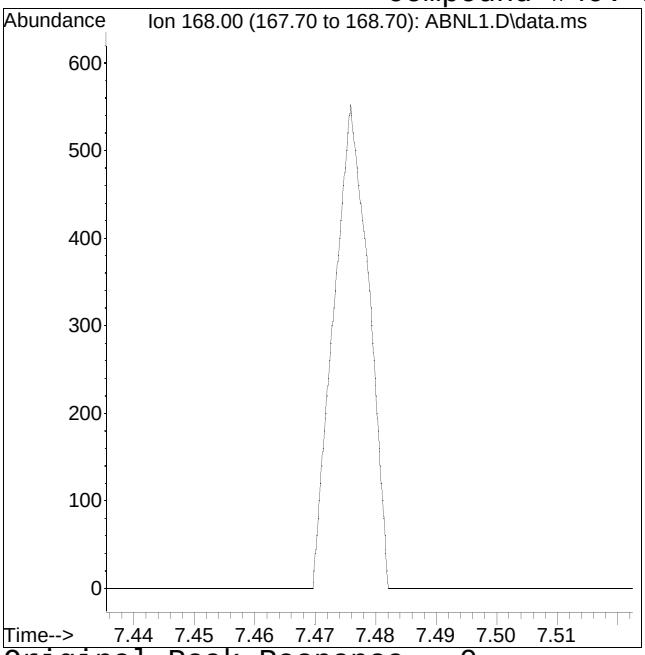


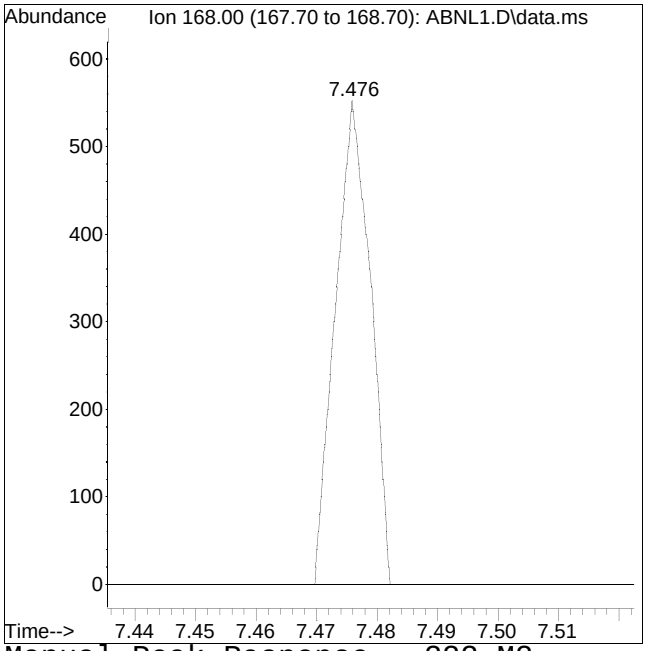
Original Peak Response = 0 Manual Peak Response = 214 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #49: 1,3-Dinitrobenzene



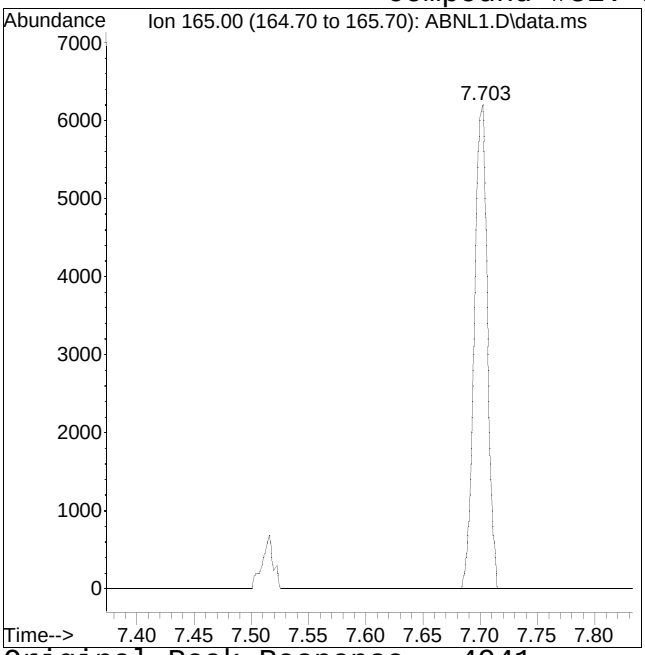


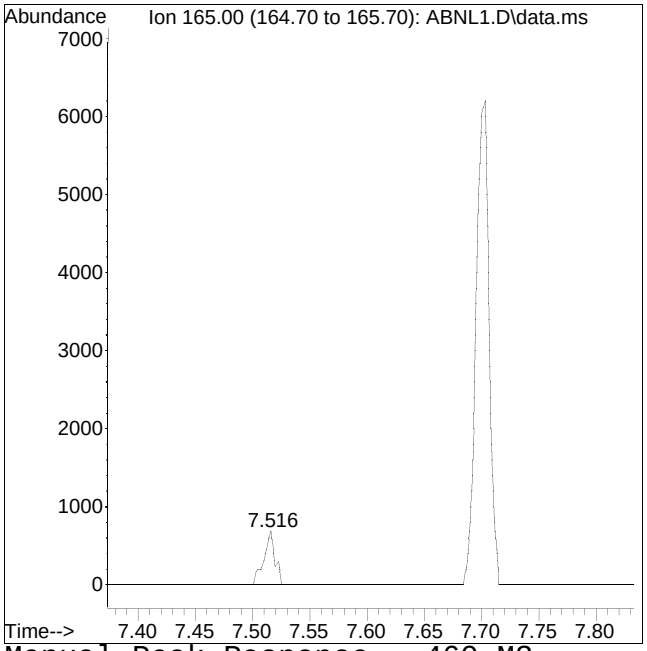
Original Peak Response = 0 Manual Peak Response = 222 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #52: 2,6-Dinitrotoluene





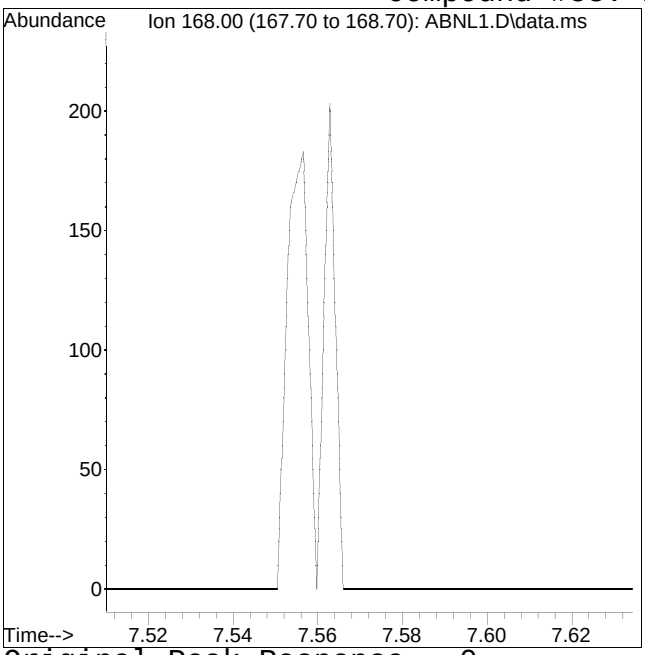
Original Peak Response = 4941 Manual Peak Response = 460 M3

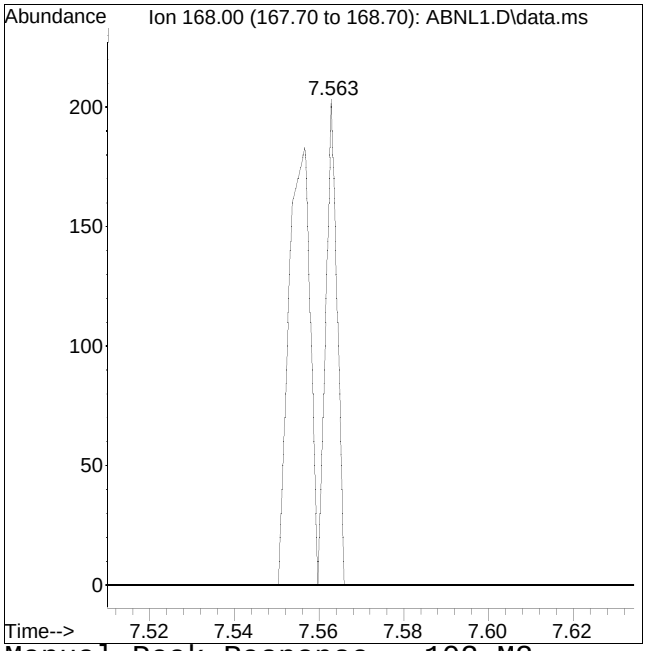
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #53: 1,2-Dinitrobenzene



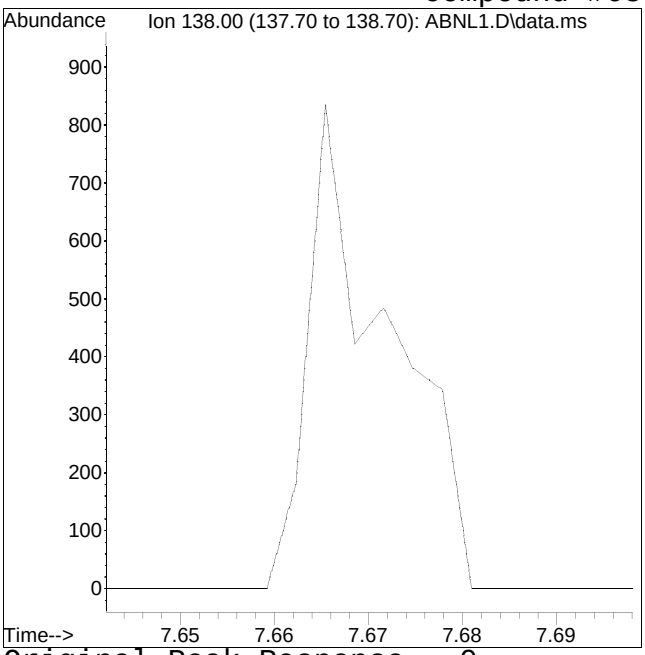


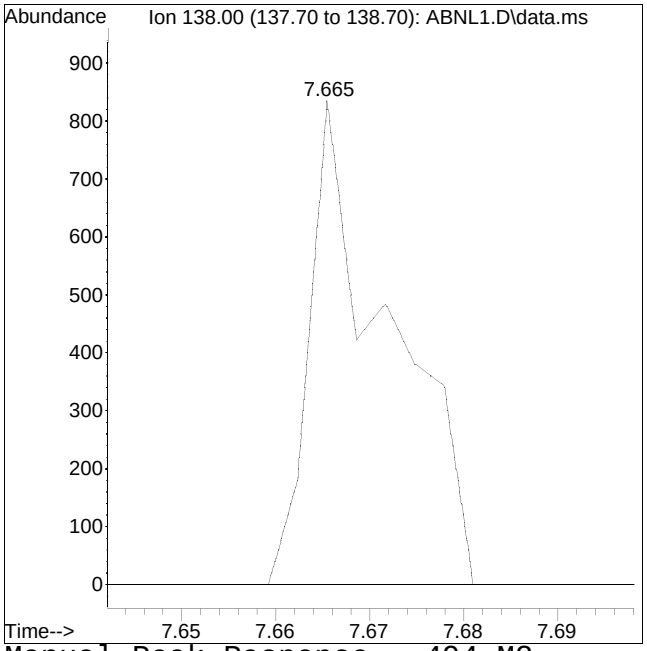
Original Peak Response = 0 Manual Peak Response = 102 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #63: 3-Nitroaniline



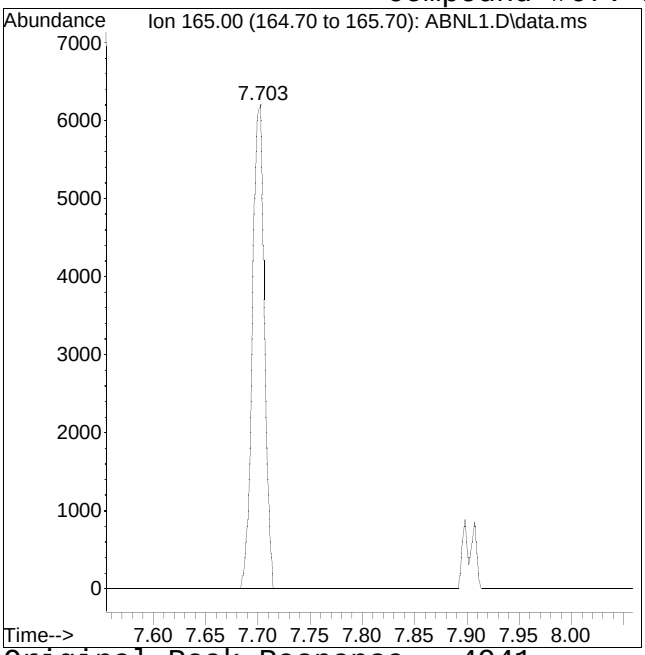


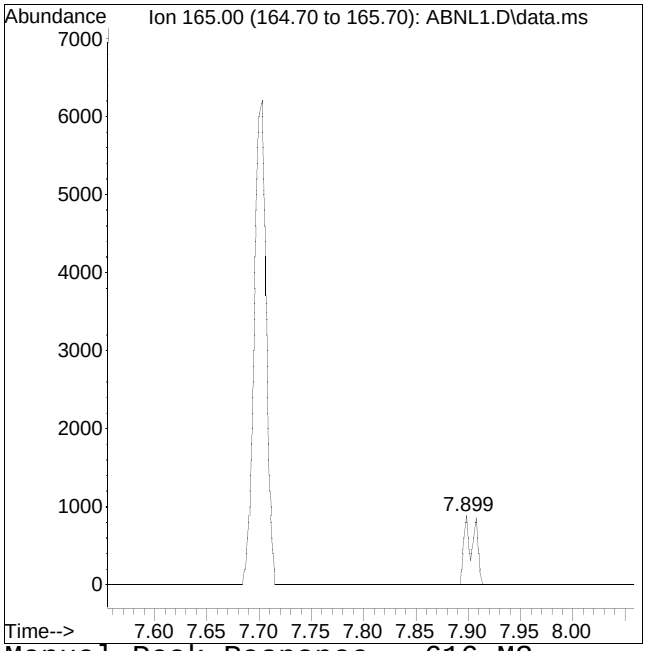
Original Peak Response = 0 Manual Peak Response = 494 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #67: 2,4-Dinitrotoluene





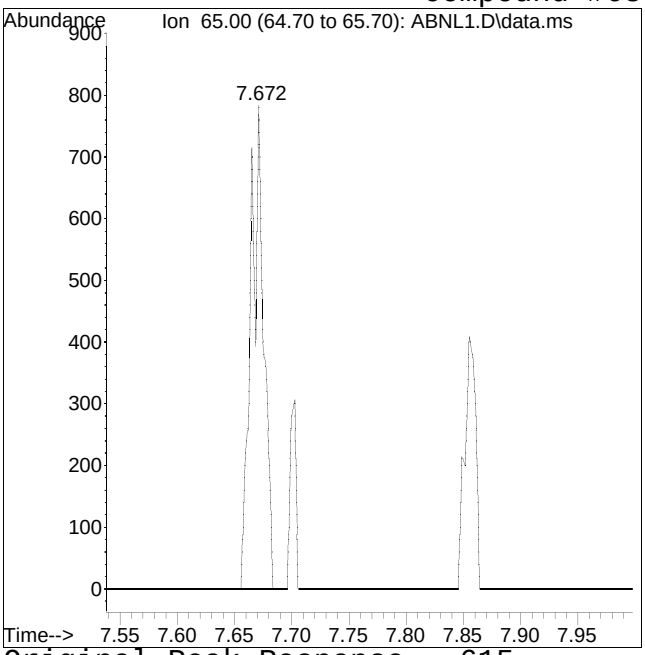
Original Peak Response = 4941 Manual Peak Response = 616 M3

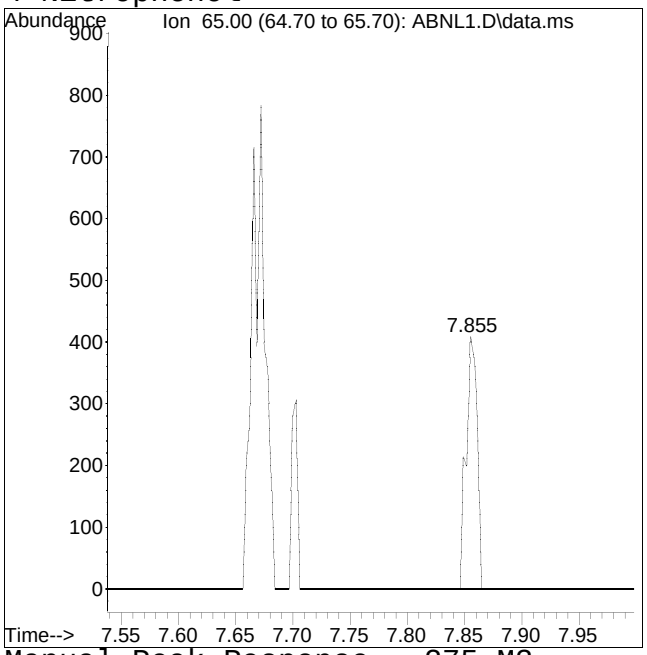
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #68: 4-Nitrophenol





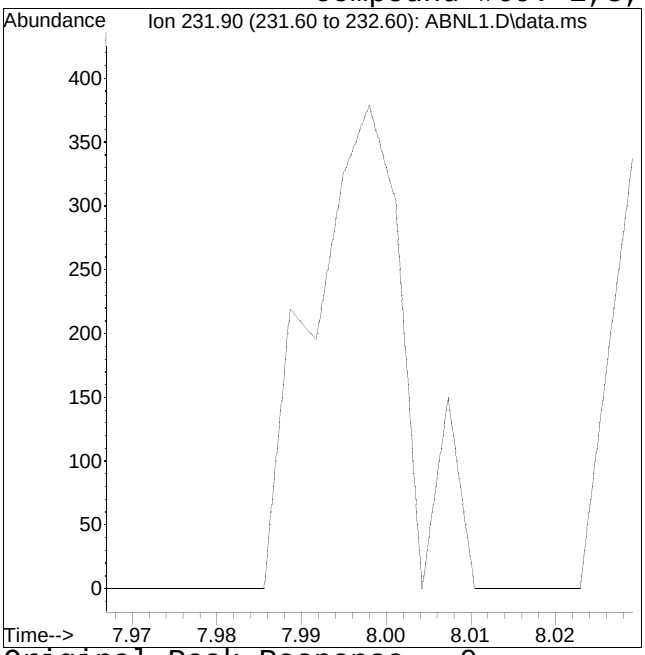
Original Peak Response = 615 Manual Peak Response = 275 M3

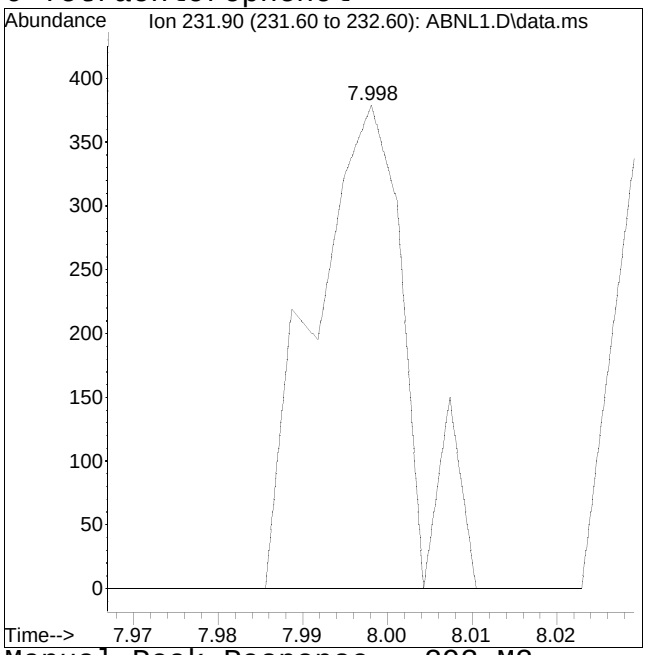
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #69: 2,3,5,6-Tetrachlorophenol



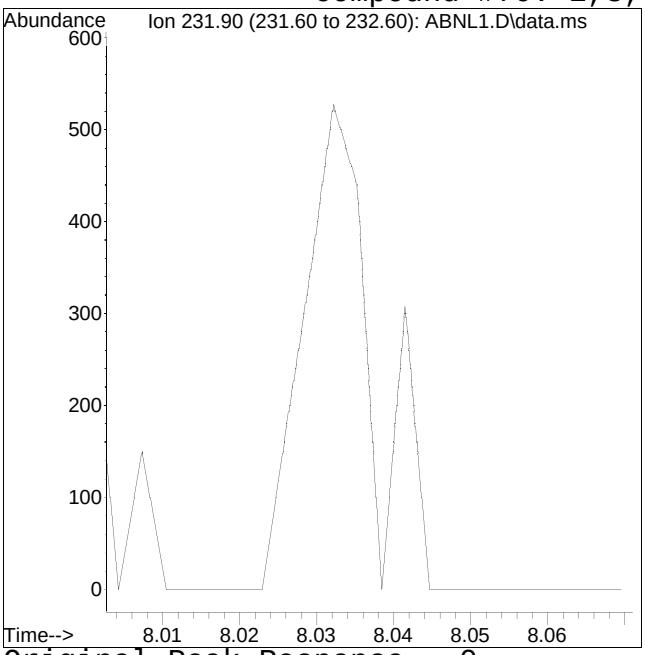


Original Peak Response = 0 Manual Peak Response = 293 M2
M2 = Peak not found by automatic integration algorithm.

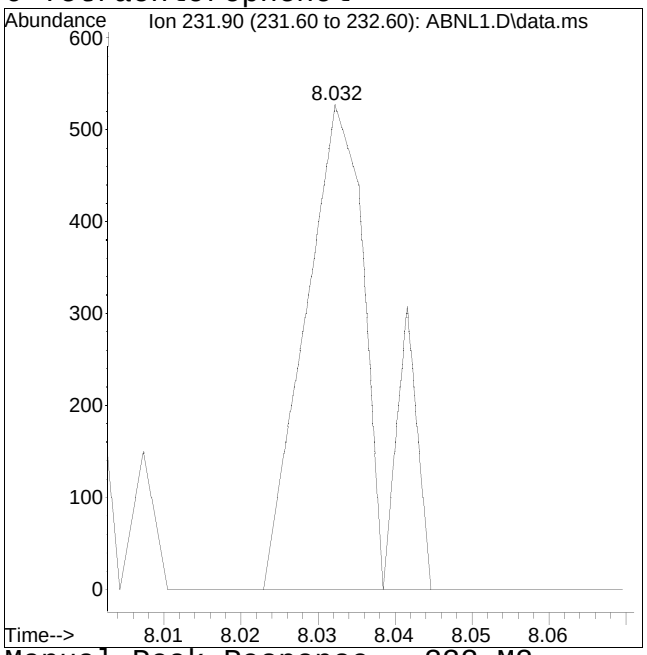
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #70: 2,3,4,6-Tetrachlorophenol



Original Peak Response = 0

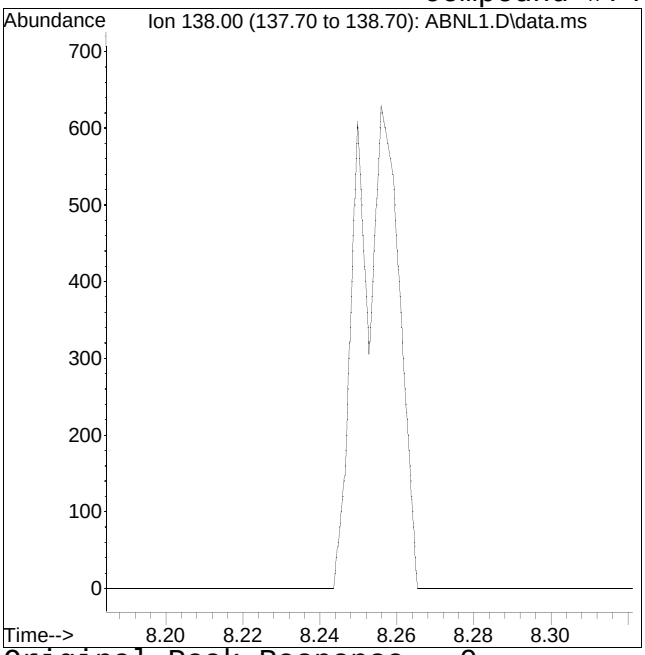


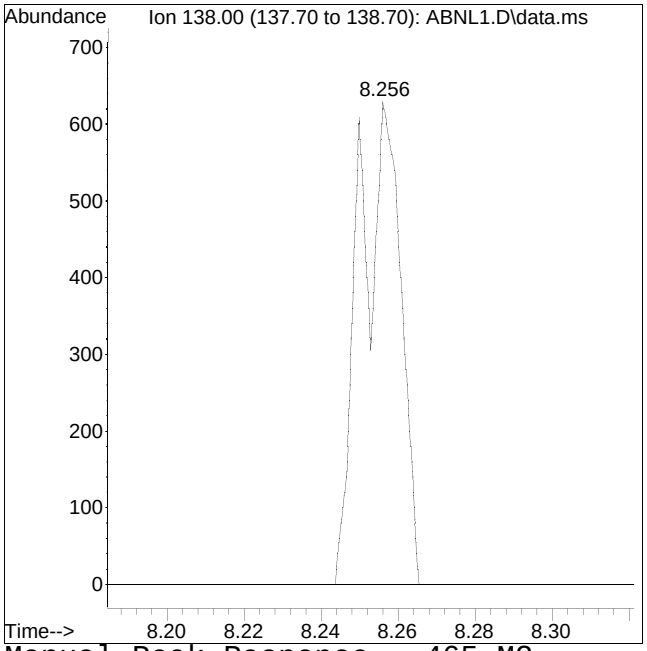
Manual Peak Response = 332 M2

M2 = Peak not found by automatic integration algorithm.

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #74: 4-Nitroaniline



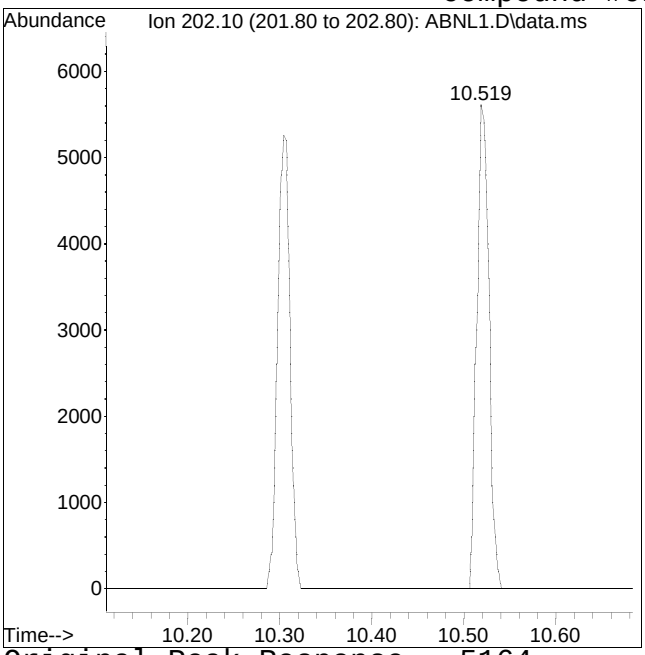


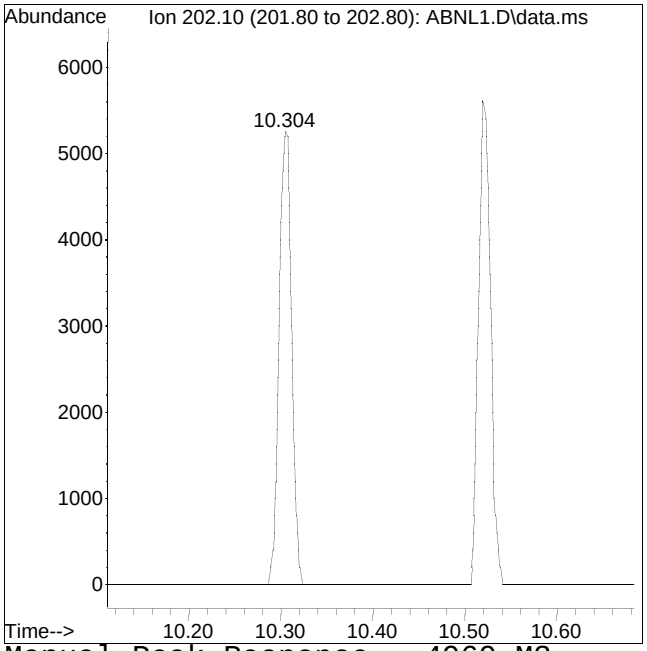
Original Peak Response = 0 Manual Peak Response = 465 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #92: Fluoranthene



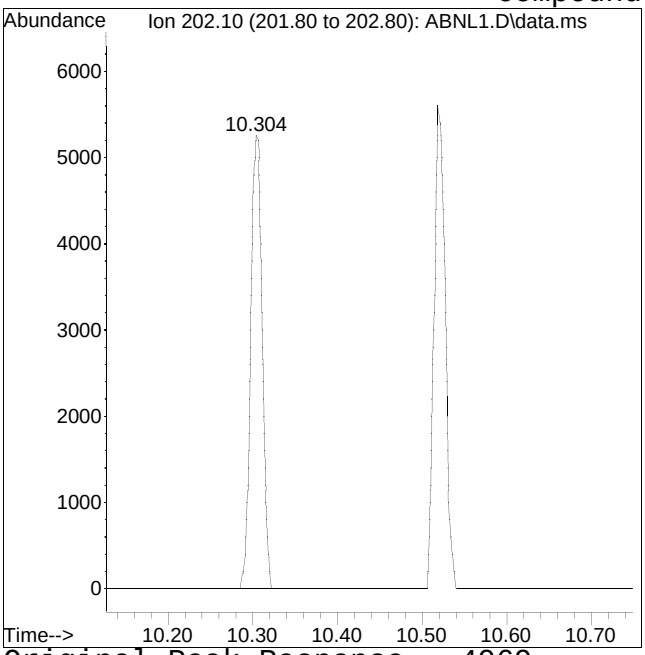


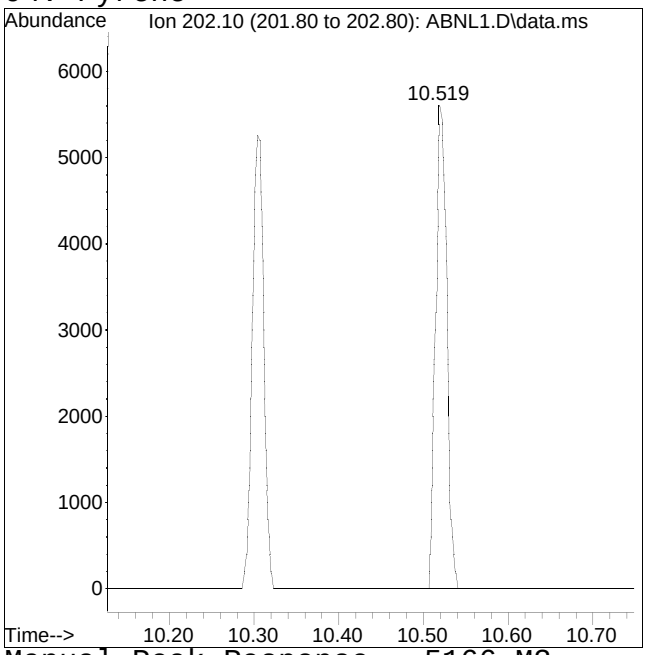
Original Peak Response = 5164 Manual Peak Response = 4969 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #94: Pyrene





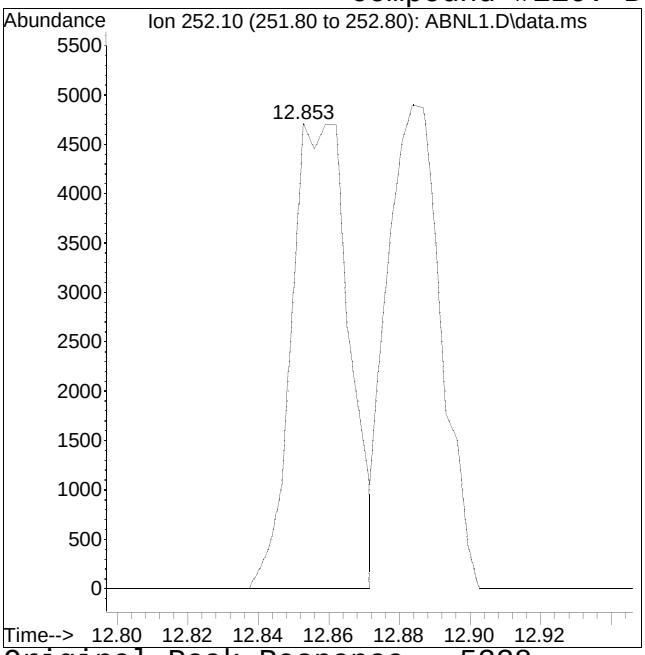
Original Peak Response = 4969 Manual Peak Response = 5166 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

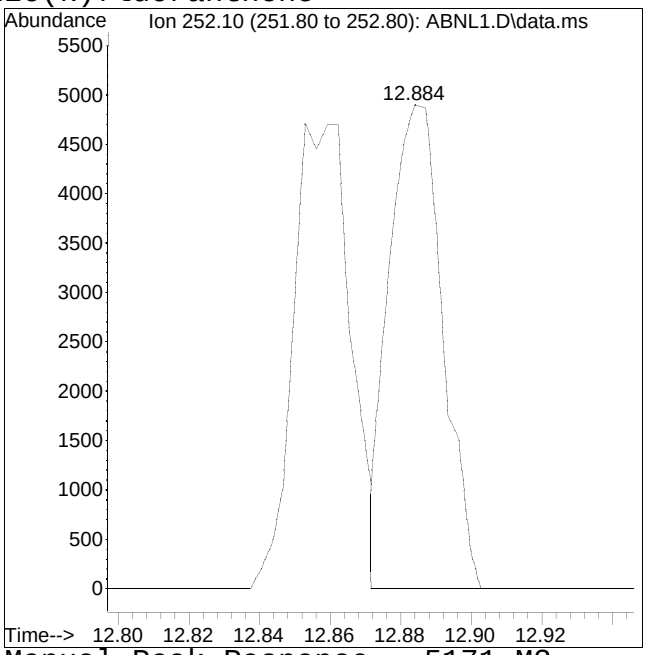
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #110: Benzo(k)fluoranthene



Original Peak Response = 5338



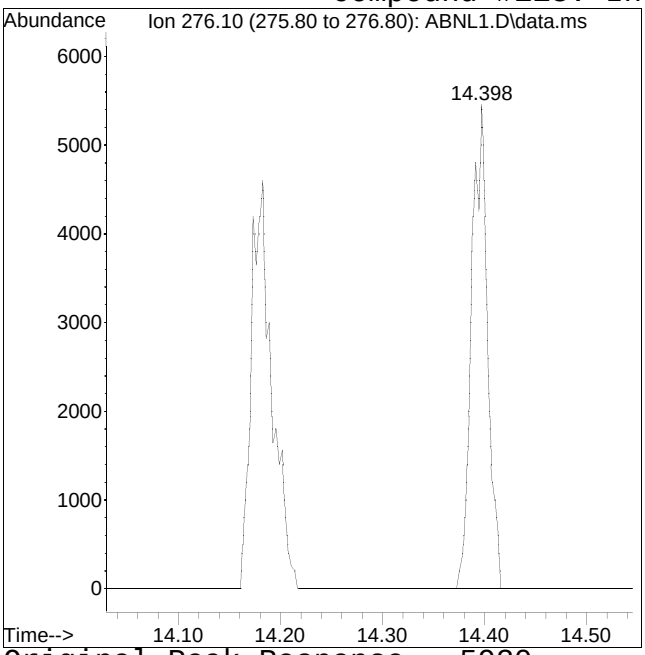
Manual Peak Response = 5171 M3

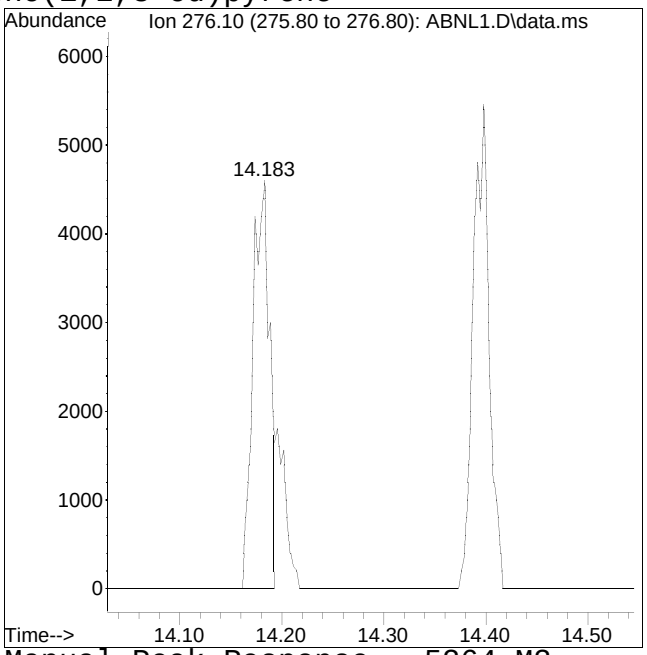
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 5:02 am Instrument : Dakota
Sample : IL10,32,,ABNL0.2 Lot# 1003Quant Date : 4/15/2023 9:52 am

Compound #113: Indeno(1,2,3-cd)pyrene





Original Peak Response = 5930 Manual Peak Response = 5264 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L10.D
Acq On : 13 Apr 2023 5:25 am
Operator : Dakota:jg
Sample : IL1,32,,AP9L50 Lot# 9984
Misc : WG1768668,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 15 10:08:17 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
27) IS2_1,4-Dichlorobenzen...	4.763	152	20369	4.000	ug/ml	0.00
Standard Area 1 = 16494			Recovery =	123.49%		
54) IS2_Naphthalene-d8	6.000	136	77381	4.000	ug/ml	# 0.00
Standard Area 1 = 64517			Recovery =	119.94%		
82) IS2_Acenaphthene-d10	7.700	164	44592	4.000	ug/ml	0.00
Standard Area 1 = 35809			Recovery =	124.53%		
97) IS2_Phenanthrene-d10	9.133	188	104068	4.000	ug/ml	# 0.00
Standard Area 1 = 78618			Recovery =	132.37%		
System Monitoring Compounds						
Target Compounds						Qvalue
28) Benzaldehyde	4.327	105	256624	48.177	ug/ml	95
29) Acetophenone	5.163	105	443018	47.504	ug/ml#	80
30) m-Toluidine	5.244	106	429991	47.506	ug/ml	93
31) 2-Chloroaniline	5.605	127	406767	47.170	ug/ml#	92
55) a-Terpineol	6.059	59	257628	48.148	ug/ml#	82
56) 3-Chloroaniline	6.071	65	128510	48.249	ug/ml	97
57) 2,6-Dichlorophenol	6.099	162	282820	52.971	ug/ml#	86
58) 1-chloro-2-nitrobenzene	6.351	111	134538	46.771	ug/ml#	1
59) Caprolactam	6.404	55	151948	52.842	ug/ml#	78
60) 1,2,4,5-Tetrachloroben...	6.867	216	352699	45.354	ug/ml	97
61) Biphenyl	7.159	154	796693	45.709	ug/ml	96
83) Dichloran	8.831	206	129248	50.261	ug/ml#	65
84) Pentachloronitrobenzene	8.980	237	116537	51.428	ug/ml#	81
98) Diphenamid	10.037	167	670064	51.363	ug/ml#	81

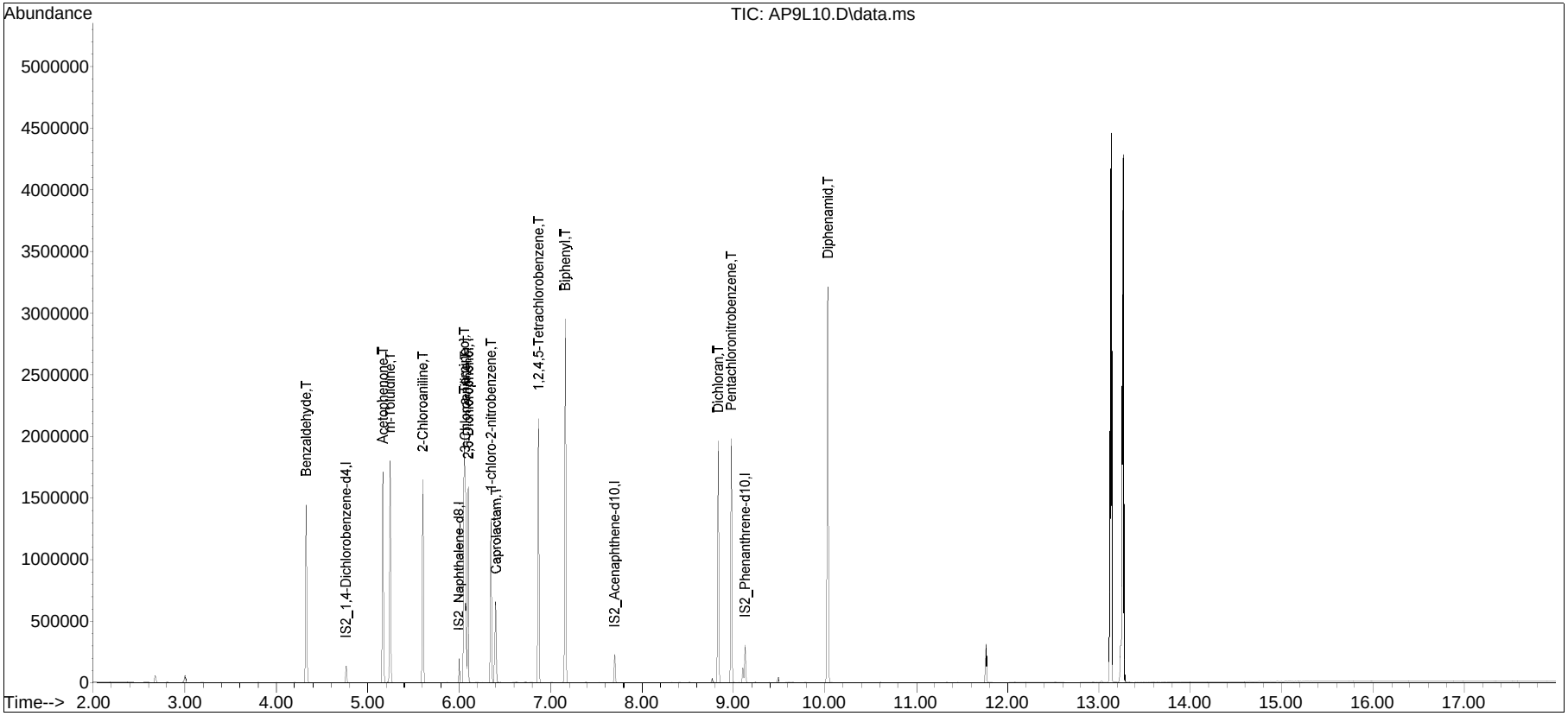
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L10.D
Acq On : 13 Apr 2023 5:25 am
Operator : Dakota:jg
Sample : IL1,32,,AP9L50 Lot# 9984
Misc : WG1768668,,
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Apr 15 10:08:17 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistviical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: AP9L10.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 5:25 am	Instrument	: Dakota
Sample	: IL1,32,,AP9L50 Lot# 9984	Quant Date	: 4/15/2023 10:08 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L9.D
Acq On : 13 Apr 2023 5:47 am
Operator : Dakota:jg
Sample : IL2,32,,AP9L35 Lot# 9933
Misc : WG1768668,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 15 10:10:45 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
27) IS2_1,4-Dichlorobenzen...	4.765	152	19667	4.000	ug/ml	0.00
Standard Area 1 = 16494			Recovery =	119.24%		
54) IS2_Naphthalene-d8	5.999	136	72564	4.000	ug/ml	# 0.00
Standard Area 1 = 64517			Recovery =	112.47%		
82) IS2_Acenaphthene-d10	7.700	164	39589	4.000	ug/ml	0.00
Standard Area 1 = 35809			Recovery =	110.56%		
97) IS2_Phenanthrene-d10	9.132	188	88273	4.000	ug/ml	0.00
Standard Area 1 = 78618			Recovery =	112.28%		
System Monitoring Compounds						
Target Compounds						Qvalue
28) Benzaldehyde	4.327	105	186242	36.212	ug/ml	96
29) Acetophenone	5.163	105	323739	35.953	ug/ml#	81
30) m-Toluidine	5.244	106	312814	35.833	ug/ml	92
31) 2-Chloroaniline	5.605	127	298761	35.882	ug/ml#	92
55) a-Terpineol	6.055	59	183373	36.546	ug/ml#	82
56) 3-Chloroaniline	6.071	65	91294	36.552	ug/ml	93
57) 2,6-Dichlorophenol	6.096	162	200453	40.036	ug/ml#	87
58) 1-chloro-2-nitrobenzene	6.351	111	96020	35.597	ug/ml#	1
59) Caprolactam	6.394	55	102291	37.934	ug/ml#	76
60) 1,2,4,5-Tetrachloroben...	6.867	216	251188	34.445	ug/ml	97
61) Biphenyl	7.159	154	568520	34.783	ug/ml	97
83) Dichloran	8.828	206	80814	35.547	ug/ml#	65
84) Pentachloronitrobenzene	8.980	237	75207	37.383	ug/ml#	81
98) Diphenamid	10.034	167	419600	37.919	ug/ml#	81

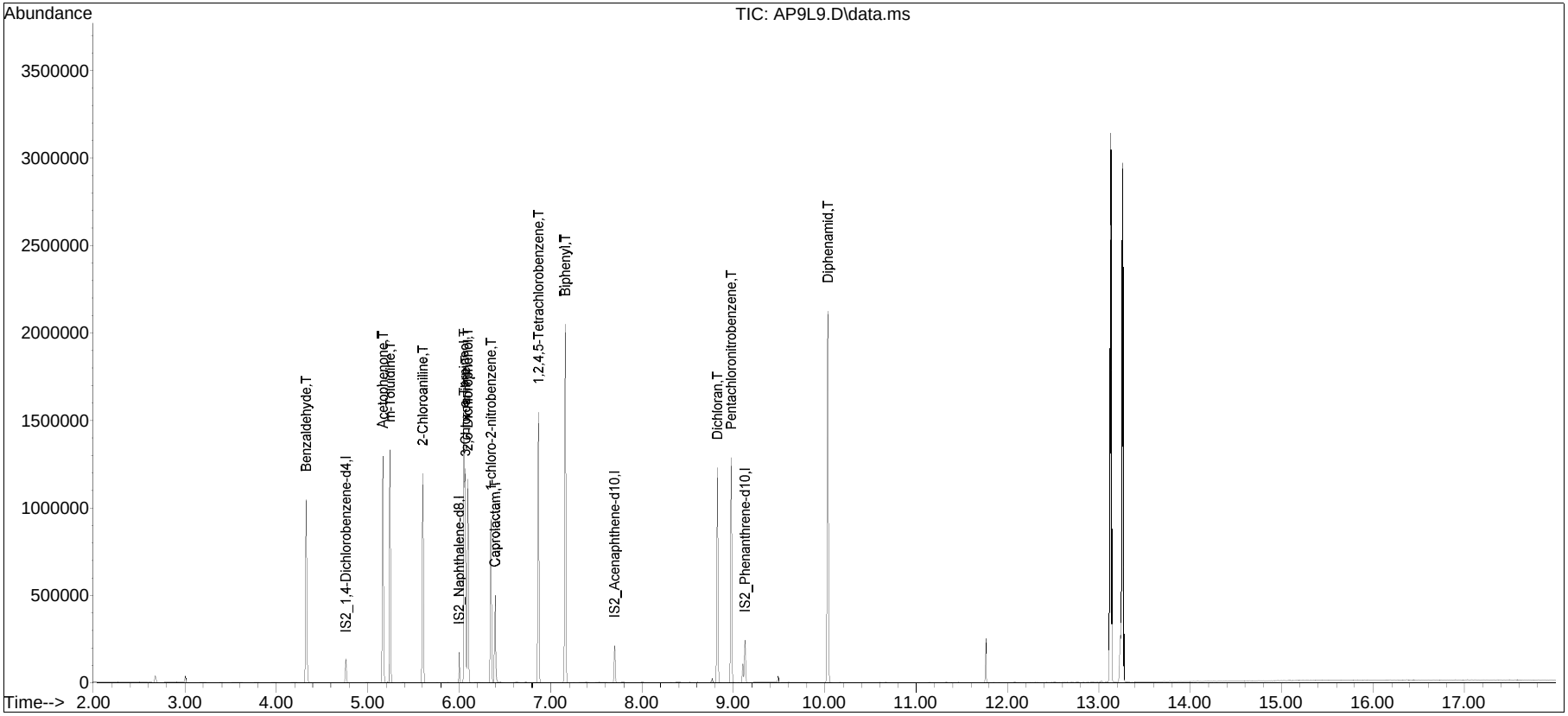
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L9.D
Acq On : 13 Apr 2023 5:47 am
Operator : Dakota:jg
Sample : IL2,32,,AP9L35 Lot# 9933
Misc : WG1768668,,
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Apr 15 10:10:45 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistviical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: AP9L9.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 5:47 am	Instrument	: Dakota
Sample	: IL2,32,,AP9L35 Lot# 9933	Quant Date	: 4/15/2023 10:11 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L8.D
Acq On : 13 Apr 2023 6:10 am
Operator : Dakota:jg
Sample : IL3,32,,AP9L15 Lot# 9934
Misc : WG1768668,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 15 10:10:27 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
27) IS2_1,4-Dichlorobenzen...	4.762	152	17715	4.000	ug/ml	0.00
Standard Area 1 = 16494			Recovery =	107.40%		
54) IS2_Naphthalene-d8	5.999	136	69429	4.000	ug/ml	0.00
Standard Area 1 = 64517			Recovery =	107.61%		
82) IS2_Acenaphthene-d10	7.703	164	38436	4.000	ug/ml	0.00
Standard Area 1 = 35809			Recovery =	107.34%		
97) IS2_Phenanthrene-d10	9.129	188	91324	4.000	ug/ml	0.00
Standard Area 1 = 78618			Recovery =	116.16%		
System Monitoring Compounds						
Target Compounds						Qvalue
28) Benzaldehyde	4.327	105	73935	15.960	ug/ml	95
29) Acetophenone	5.163	105	131339	16.193	ug/ml#	79
30) m-Toluidine	5.244	106	124317	15.898	ug/ml	95
31) 2-Chloroaniline	5.605	127	121465	16.196	ug/ml#	91
55) a-Terpineol	6.052	59	76050	15.841	ug/ml#	85
56) 3-Chloroaniline	6.068	65	38443	16.087	ug/ml	97
57) 2,6-Dichlorophenol	6.096	162	81746	17.064	ug/ml#	86
58) 1-chloro-2-nitrobenzene	6.351	111	40407	15.656	ug/ml#	1
59) Caprolactam	6.388	55	42582	16.505	ug/ml#	76
60) 1,2,4,5-Tetrachloroben...	6.866	216	106405	15.250	ug/ml#	95
61) Biphenyl	7.156	154	241316	15.431	ug/ml	97
83) Dichloran	8.828	206	33240	15.351	ug/ml#	66
84) Pentachloronitrobenzene	8.980	237	32438	16.608	ug/ml#	80
98) Diphenamid	10.031	167	191288	16.709	ug/ml#	81

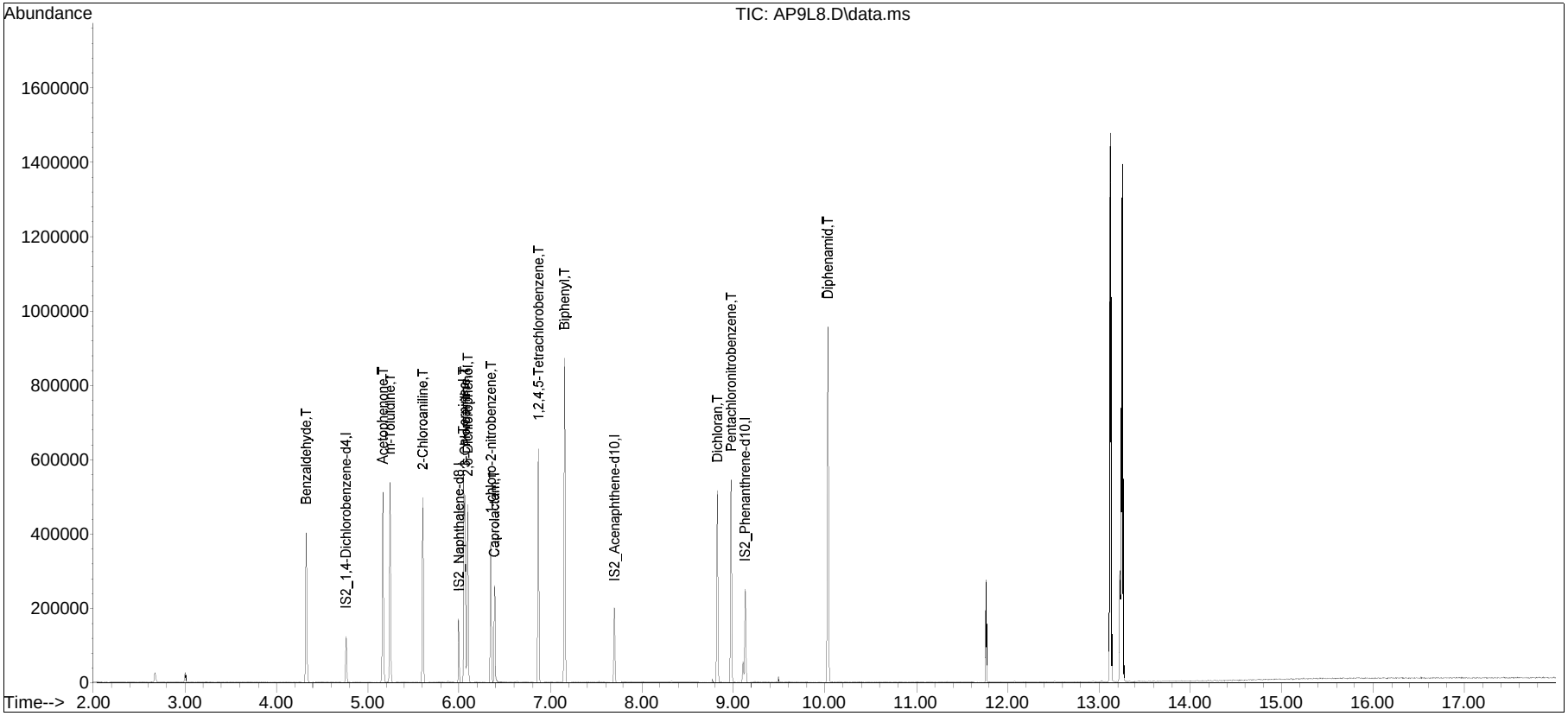
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L8.D
Acq On : 13 Apr 2023 6:10 am
Operator : Dakota:jg
Sample : IL3,32,,AP9L15 Lot# 9934
Misc : WG1768668,,
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Apr 15 10:10:27 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistviical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: AP9L8.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 6:10 am	Instrument	: Dakota
Sample	: IL3,32,,AP9L15 Lot# 9934	Quant Date	: 4/15/2023 10:10 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L7.D
Acq On : 13 Apr 2023 6:33 am
Operator : Dakota:jg
Sample : IL4,32,,AP9L10 Lot# 9935
Misc : WG1768668,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 15 10:10:04 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
27) IS2_1,4-Dichlorobenzen...	4.762	152	18323	4.000	ug/ml	0.00
Standard Area 1 = 16494			Recovery =	111.09%		
54) IS2_Naphthalene-d8	5.999	136	70843	4.000	ug/ml	# 0.00
Standard Area 1 = 64517			Recovery =	109.81%		
82) IS2_Acenaphthene-d10	7.703	164	39780	4.000	ug/ml	0.00
Standard Area 1 = 35809			Recovery =	111.09%		
97) IS2_Phenanthrene-d10	9.129	188	91452	4.000	ug/ml	# 0.00
Standard Area 1 = 78618			Recovery =	116.32%		
System Monitoring Compounds						
Target Compounds						Qvalue
28) Benzaldehyde	4.330	105	51562	10.761	ug/ml	92
29) Acetophenone	5.163	105	87843	10.471	ug/ml#	80
30) m-Toluidine	5.244	106	85349	10.606	ug/ml	90
31) 2-Chloroaniline	5.605	127	83190	10.724	ug/ml#	90
55) a-Terpineol	6.052	59	49246	10.053	ug/ml#	81
56) 3-Chloroaniline	6.068	65	26362	10.811	ug/ml	98
57) 2,6-Dichlorophenol	6.096	162	54027	11.053	ug/ml#	87
58) 1-chloro-2-nitrobenzene	6.348	111	26664	10.125	ug/ml#	1
59) Caprolactam	6.385	55	28476	10.817	ug/ml#	79
60) 1,2,4,5-Tetrachloroben...	6.867	216	71378	10.026	ug/ml	98
61) Biphenyl	7.156	154	165731	10.386	ug/ml	97
83) Dichloran	8.828	206	20991	9.563	ug/ml#	68
84) Pentachloronitrobenzene	8.980	237	20458	10.120	ug/ml#	85
98) Diphenamid	10.031	167	124017	10.818	ug/ml#	81

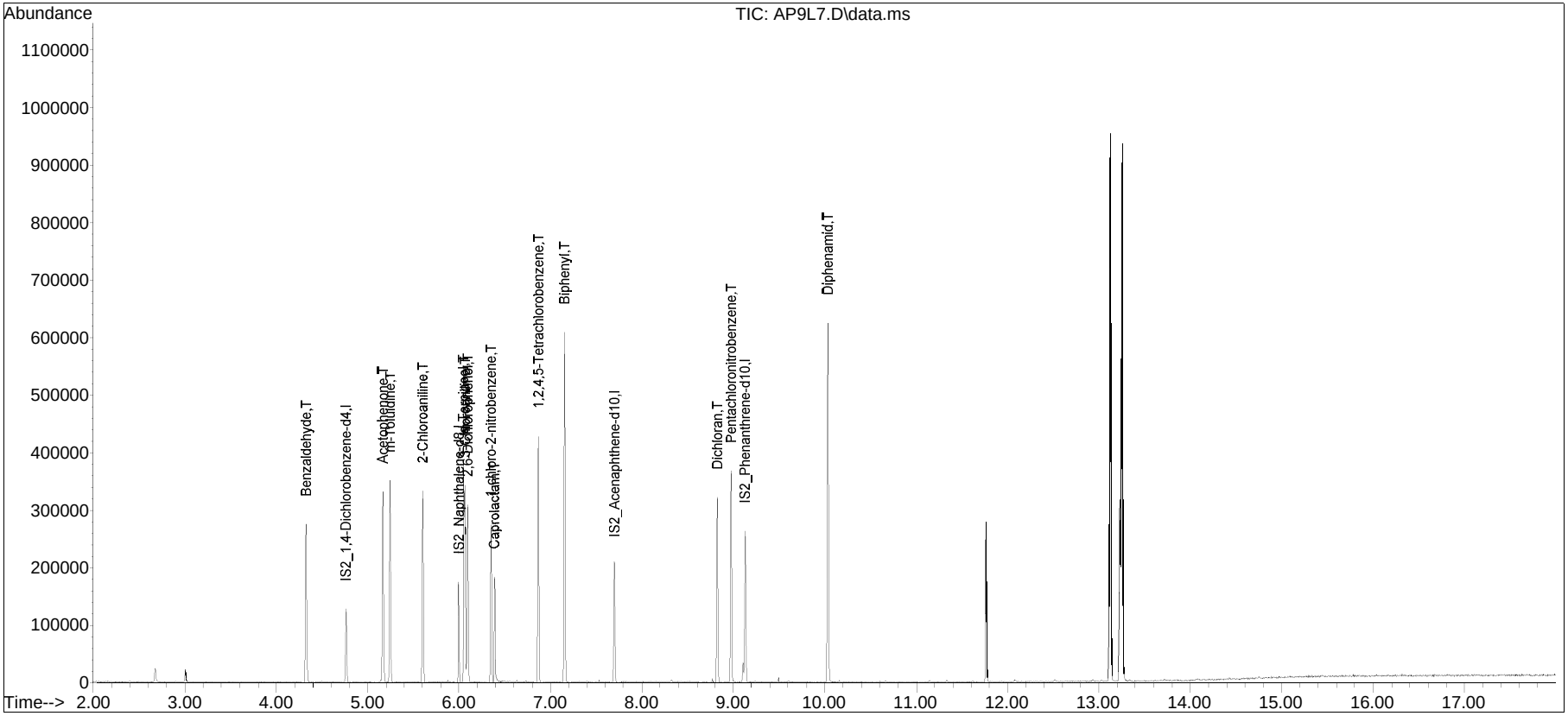
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L7.D
Acq On : 13 Apr 2023 6:33 am
Operator : Dakota:jg
Sample : IL4,32,,AP9L10 Lot# 9935
Misc : WG1768668,,
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Apr 15 10:10:04 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistviical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: AP9L7.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 6:33 am	Instrument	: Dakota
Sample	: IL4,32,,AP9L10 Lot# 9935	Quant Date	: 4/15/2023 10:10 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L6.D
Acq On : 13 Apr 2023 6:55 am
Operator : Dakota:jg
Sample : IL5,32,,AP9L5 Lot# 9978
Misc : WG1768668,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 15 10:09:46 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
27) IS2_1,4-Dichlorobenzen...	4.762	152	16494	4.000	ug/ml	0.00
Standard Area 1 = 16494			Recovery =	100.00%		
54) IS2_Naphthalene-d8	5.999	136	64517	4.000	ug/ml	# 0.00
Standard Area 1 = 64517			Recovery =	100.00%		
82) IS2_Acenaphthene-d10	7.703	164	35809	4.000	ug/ml	0.00
Standard Area 1 = 35809			Recovery =	100.00%		
97) IS2_Phenanthrene-d10	9.132	188	78618	4.000	ug/ml	# 0.00
Standard Area 1 = 78618			Recovery =	100.00%		
System Monitoring Compounds						
Target Compounds						Qvalue
28) Benzaldehyde	4.330	105	23418	5.429	ug/ml	95
29) Acetophenone	5.163	105	40562	5.371	ug/ml#	81
30) m-Toluidine	5.247	106	38433	5.385	ug/ml	94
31) 2-Chloroaniline	5.605	127	37861	5.422	ug/ml#	93
55) a-Terpineol	6.052	59	23459	5.258	ug/ml#	85
56) 3-Chloroaniline	6.068	65	12728	5.732	ug/ml	95
57) 2,6-Dichlorophenol	6.096	162	23692	5.322	ug/ml#	86
58) 1-chloro-2-nitrobenzene	6.351	111	12589	5.249	ug/ml#	1
59) Caprolactam	6.382	55	12094	5.044	ug/ml#	81
60) 1,2,4,5-Tetrachloroben...	6.866	216	33821	5.216	ug/ml	96
61) Biphenyl	7.156	154	76163	5.241	ug/ml	95
83) Dichloran	8.828	206	8123	4.399	ug/ml#	66
84) Pentachloronitrobenzene	8.977	237	9161	5.034	ug/ml#	80
98) Diphenamid	10.031	167	51178	5.193	ug/ml#	79

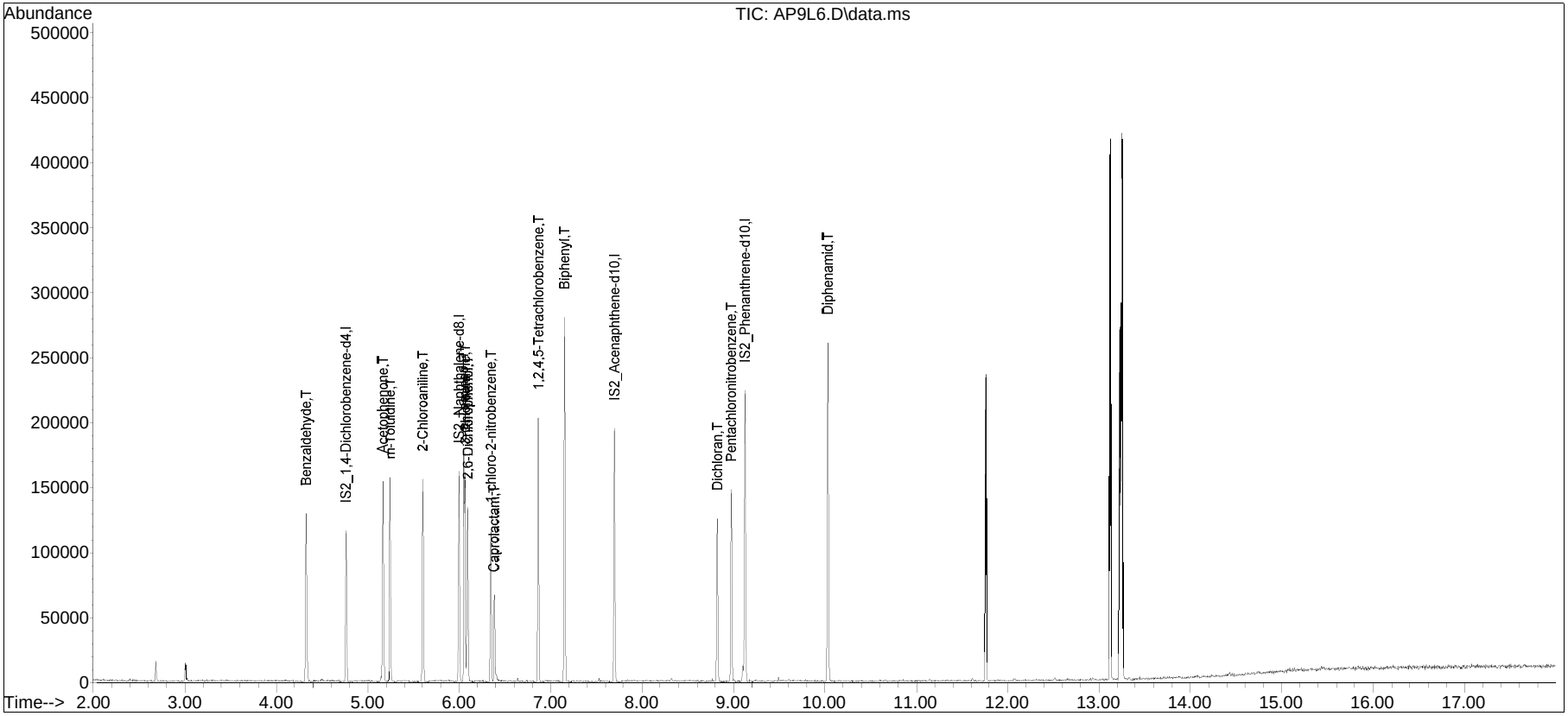
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L6.D
Acq On : 13 Apr 2023 6:55 am
Operator : Dakota:jg
Sample : IL5,32,,AP9L5 Lot# 9978
Misc : WG1768668,,
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Apr 15 10:09:46 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistviical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: AP9L6.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 6:55 am	Instrument	: Dakota
Sample	: IL5,32,,AP9L5 Lot# 9978	Quant Date	: 4/15/2023 10:10 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L5.D
Acq On : 13 Apr 2023 7:18 am
Operator : Dakota:jg
Sample : IL6,32,,AP9L3 Lot# 9937
Misc : WG1768668,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 15 10:09:29 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
27) IS2_1,4-Dichlorobenzen...	4.762	152	19831	4.000	ug/ml		0.00
Standard Area 1 = 16494			Recovery =	120.23%			
54) IS2_Naphthalene-d8	5.999	136	75793	4.000	ug/ml	#	0.00
Standard Area 1 = 64517			Recovery =	117.48%			
82) IS2_Acenaphthene-d10	7.699	164	41399	4.000	ug/ml		0.00
Standard Area 1 = 35809			Recovery =	115.61%			
97) IS2_Phenanthrene-d10	9.132	188	93025	4.000	ug/ml	#	0.00
Standard Area 1 = 78618			Recovery =	118.33%			
System Monitoring Compounds							
Target Compounds							Qvalue
28) Benzaldehyde	4.330	105	15428	2.975	ug/ml		99
29) Acetophenone	5.163	105	27512	3.030	ug/ml	#	81
30) m-Toluidine	5.244	106	24285	2.905	ug/ml		95
31) 2-Chloroaniline	5.605	127	24994	2.977	ug/ml	#	91
55) a-Terpineol	6.052	59	16052	3.063	ug/ml	#	86
56) 3-Chloroaniline	6.068	65	8258	3.165	ug/ml		96
57) 2,6-Dichlorophenol	6.093	162	15551	2.974	ug/ml	#	84
58) 1-chloro-2-nitrobenzene	6.351	111	8476	3.008	ug/ml	#	1
59) Caprolactam	6.385	55	7609	2.702	ug/ml	#	78
60) 1,2,4,5-Tetrachloroben...	6.866	216	22738	2.985	ug/ml		97
61) Biphenyl	7.156	154	51131	2.995	ug/ml		96
83) Dichloran	8.828	206	5075	2.610	ug/ml	#	74
84) Pentachloronitrobenzene	8.980	237	5902	2.805	ug/ml	#	82
98) Diphenamid	10.031	167	33171	2.845	ug/ml	#	81

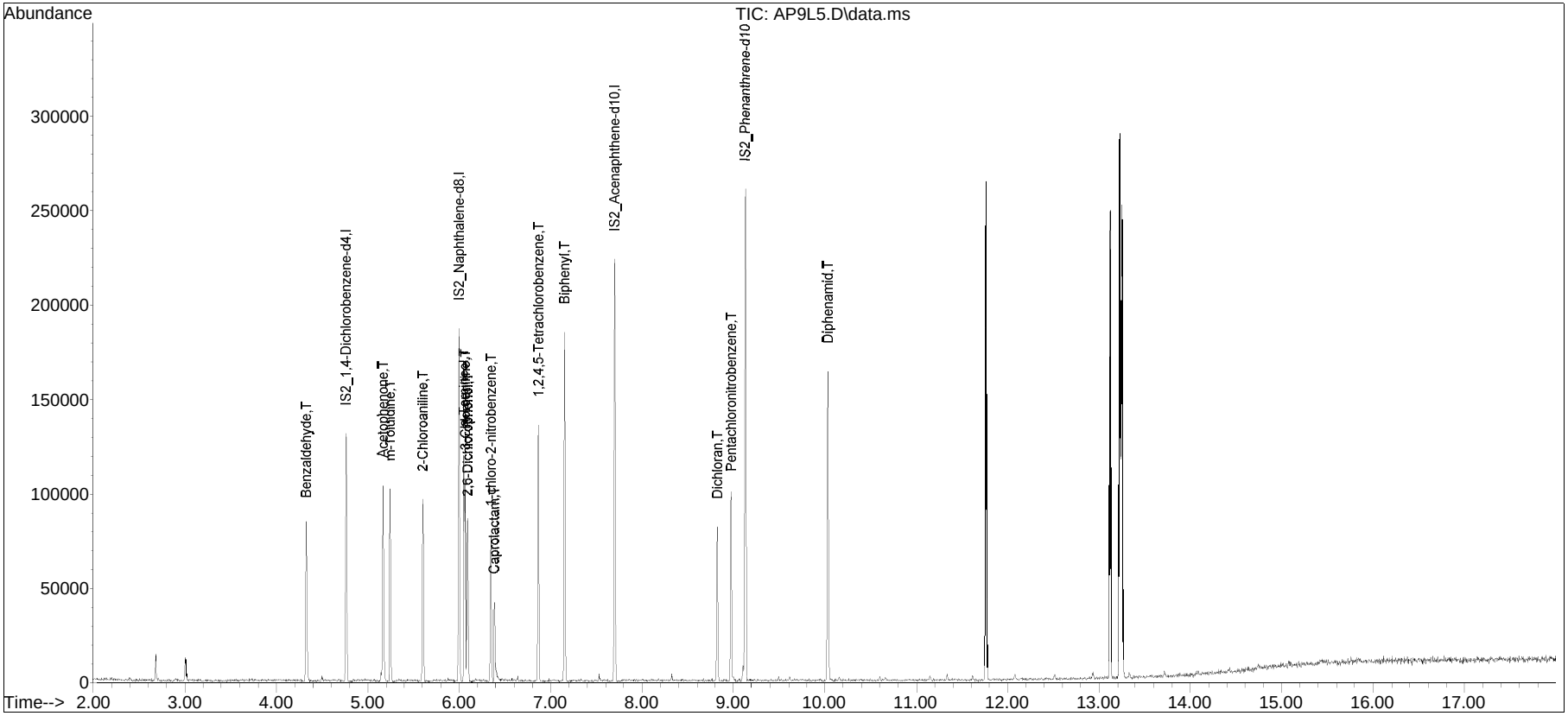
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L5.D
Acq On : 13 Apr 2023 7:18 am
Operator : Dakota:jg
Sample : IL6,32,,AP9L3 Lot# 9937
Misc : WG1768668,,
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Apr 15 10:09:29 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistviical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: AP9L5.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 7:18 am	Instrument	: Dakota
Sample	: IL6,32,,AP9L3 Lot# 9937	Quant Date	: 4/15/2023 10:10 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L4.D
Acq On : 13 Apr 2023 7:41 am
Operator : Dakota:jg
Sample : IL7,32,,AP9L2 Lot# 9938
Misc : WG1768668,,
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 15 10:09:08 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
27) IS2_1,4-Dichlorobenzen...	4.762	152	17284	4.000	ug/ml	0.00
Standard Area 1 = 16494			Recovery =	104.79%		
54) IS2_Naphthalene-d8	5.999	136	66617	4.000	ug/ml	# 0.00
Standard Area 1 = 64517			Recovery =	103.25%		
82) IS2_Acenaphthene-d10	7.699	164	37582	4.000	ug/ml	0.00
Standard Area 1 = 35809			Recovery =	104.95%		
97) IS2_Phenanthrene-d10	9.132	188	82148	4.000	ug/ml	# 0.00
Standard Area 1 = 78618			Recovery =	104.49%		
System Monitoring Compounds						
Target Compounds						Qvalue
28) Benzaldehyde	4.333	105	8566	1.895	ug/ml	98
29) Acetophenone	5.166	105	15484	1.957	ug/ml#	83
30) m-Toluidine	5.244	106	13890	1.961	ug/ml	93
31) 2-Chloroaniline	5.605	127	14924	2.040	ug/ml#	91
55) a-Terpineol	6.052	59	8593	1.865	ug/ml#	77
56) 3-Chloroaniline	6.068	65	4439	1.936	ug/ml	90
57) 2,6-Dichlorophenol	6.096	162	8758	1.905	ug/ml#	83
58) 1-chloro-2-nitrobenzene	6.351	111	5052	2.040	ug/ml#	1
59) Caprolactam	6.385	55	3802	1.536	ug/ml#	83
60) 1,2,4,5-Tetrachloroben...	6.866	216	13234	1.977	ug/ml	93
61) Biphenyl	7.156	154	29665	1.977	ug/ml	97
83) Dichloran	8.828	206	3357	2.039	ug/ml#	63
84) Pentachloronitrobenzene	8.980	237	3292	1.724	ug/ml#	83
98) Diphenamid	10.031	167	19071	1.852	ug/ml	85

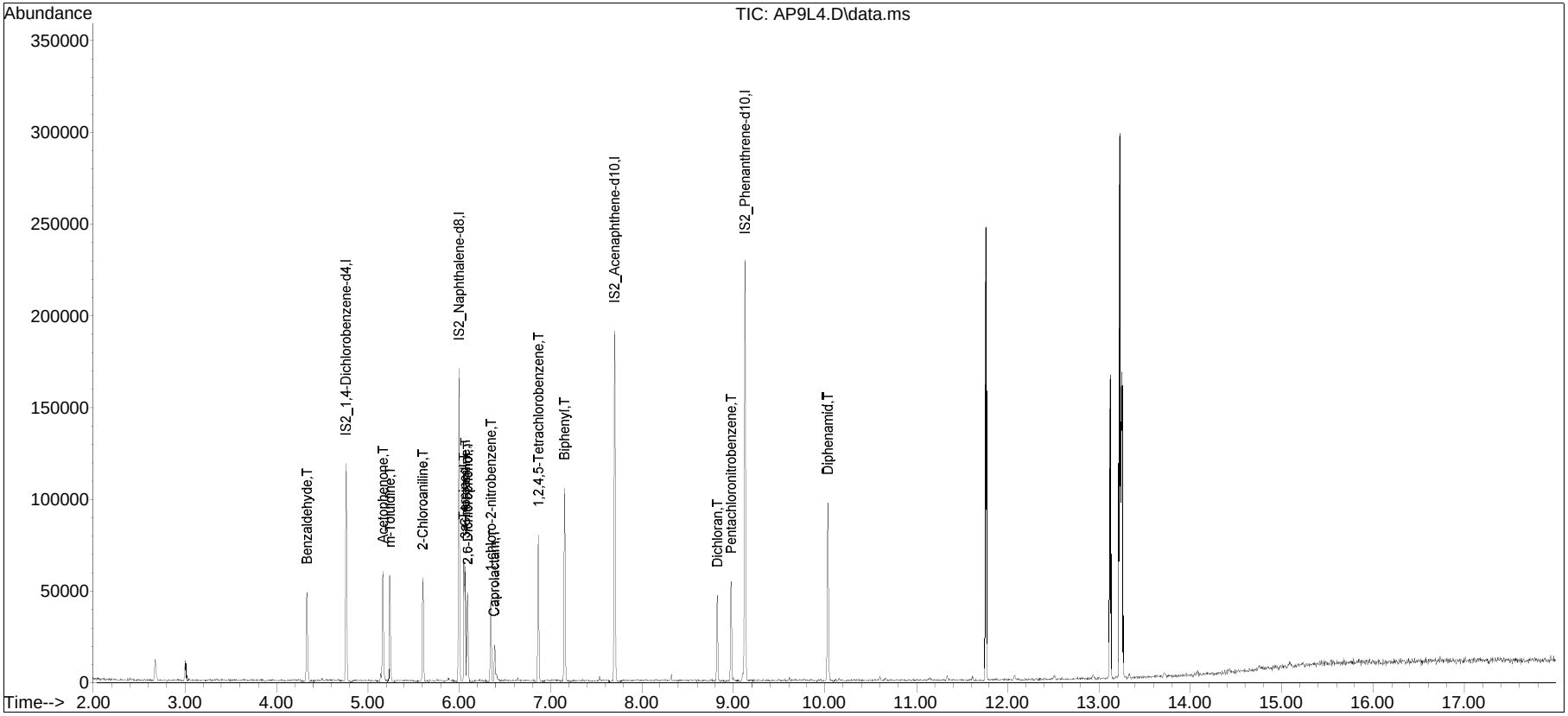
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L4.D
Acq On : 13 Apr 2023 7:41 am
Operator : Dakota:jg
Sample : IL7,32,,AP9L2 Lot# 9938
Misc : WG1768668,,
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Apr 15 10:09:08 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistviical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: AP9L4.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 7:41 am	Instrument	: Dakota
Sample	: IL7,32,,AP9L2 Lot# 9938	Quant Date	: 4/15/2023 10:09 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L3.D
Acq On : 13 Apr 2023 8:04 am
Operator : Dakota:jg
Sample : IL8,32,,AP9L1 Lot# 9939
Misc : WG1768668,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 15 10:08:51 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
27) IS2_1,4-Dichlorobenzen...	4.762	152	20603	4.000	ug/ml		0.00
Standard Area 1 = 16494			Recovery =	124.91%			
54) IS2_Naphthalene-d8	5.999	136	75308	4.000	ug/ml	#	0.00
Standard Area 1 = 64517			Recovery =	116.73%			
82) IS2_Acenaphthene-d10	7.699	164	40760	4.000	ug/ml		0.00
Standard Area 1 = 35809			Recovery =	113.83%			
97) IS2_Phenanthrene-d10	9.132	188	88337	4.000	ug/ml		0.00
Standard Area 1 = 78618			Recovery =	112.36%			
System Monitoring Compounds							
Target Compounds							Qvalue
28) Benzaldehyde	4.333	105	5099	0.946	ug/ml		98
29) Acetophenone	5.166	105	8830	0.936	ug/ml	#	81
30) m-Toluidine	5.247	106	7185	0.941	ug/ml		93
31) 2-Chloroaniline	5.605	127	8363	0.959	ug/ml	#	91
55) a-Terpineol	6.055	59	5064	0.972	ug/ml		95
56) 3-Chloroaniline	6.065	65	2824	1.089	ug/ml		89
57) 2,6-Dichlorophenol	6.096	162	4869	0.937	ug/ml	#	84
58) 1-chloro-2-nitrobenzene	6.351	111	2593	0.926	ug/ml	#	1
59) Caprolactam	6.397	55	1739	0.621	ug/ml	#	82
60) 1,2,4,5-Tetrachloroben...	6.863	216	7296	0.964	ug/ml	#	97
61) Biphenyl	7.156	154	17188	1.013	ug/ml		97
83) Dichloran	8.828	206	1722	1.230	ug/ml	#	58
84) Pentachloronitrobenzene	8.983	237	1684	0.813	ug/ml	#	75
98) Diphenamid	10.031	167	9829	0.888	ug/ml	#	78

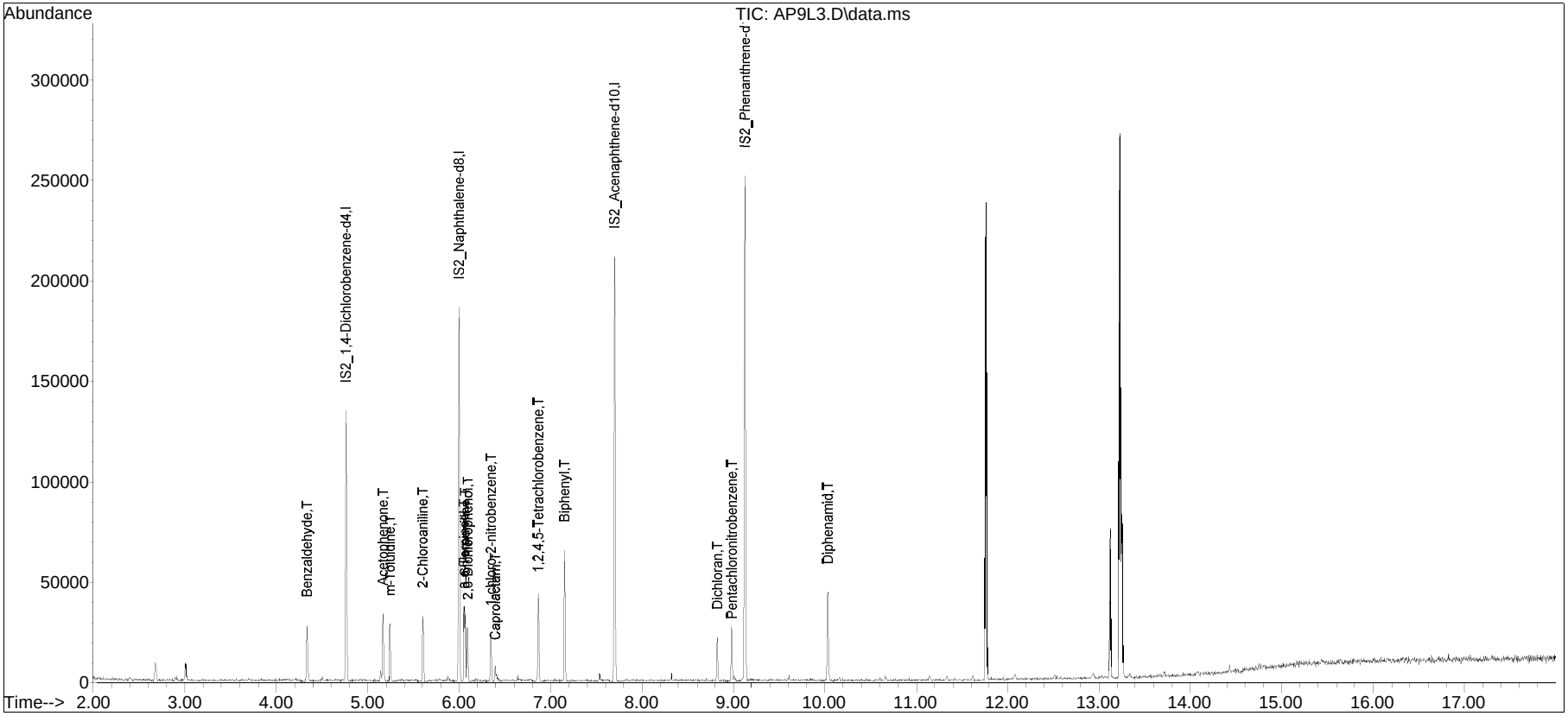
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L3.D
Acq On : 13 Apr 2023 8:04 am
Operator : Dakota:jg
Sample : IL8,32,,AP9L1 Lot# 9939
Misc : WG1768668,,
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Apr 15 10:08:51 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistviical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: AP9L3.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 8:04 am	Instrument	: Dakota
Sample	: IL8,32,,AP9L1 Lot# 9939	Quant Date	: 4/15/2023 10:09 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L2.D
Acq On : 13 Apr 2023 8:27 am
Operator : Dakota:jg
Sample : IL9,32,,AP9L0.4 Lot# 9940
Misc : WG1768668,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 10:08:34 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
27) IS2_1,4-Dichlorobenzen...	4.762	152	19570	4.000	ug/ml		0.00
Standard Area 1 = 16494			Recovery =	118.65%			
54) IS2_Naphthalene-d8	5.999	136	69823	4.000	ug/ml	#	0.00
Standard Area 1 = 64517			Recovery =	108.22%			
82) IS2_Acenaphthene-d10	7.700	164	37674	4.000	ug/ml		0.00
Standard Area 1 = 35809			Recovery =	105.21%			
97) IS2_Phenanthrene-d10	9.129	188	88670	4.000	ug/ml		0.00
Standard Area 1 = 78618			Recovery =	112.79%			
System Monitoring Compounds							
Target Compounds							Qvalue
28) Benzaldehyde	4.340	105	1613	0.315	ug/ml		84
29) Acetophenone	5.167	105	3251	0.363	ug/ml	#	72
30) m-Toluidine	5.247	106	1690	0.352	ug/ml	#	90
31) 2-Chloroaniline	5.605	127	2943	0.355	ug/ml	#	87
55) a-Terpineol	6.052	59	1880	0.389	ug/ml	#	79
56) 3-Chloroaniline	6.071	65	844	0.351	ug/ml		79
57) 2,6-Dichlorophenol	6.096	162	1755	0.364	ug/ml	#	80
58) 1-chloro-2-nitrobenzene	6.351	111	934	0.360	ug/ml	#	1
59) Caprolactam	0.000		0	N.D.			
60) 1,2,4,5-Tetrachloroben...	6.867	216	2822	0.402	ug/ml		96
61) Biphenyl	7.156	154	6058	0.385	ug/ml		94
83) Dichloran	8.828	206	520	0.742	ug/ml	#	72
84) Pentachloronitrobenzene	8.977	237	834	0.436	ug/ml	#	7
98) Diphenamid	10.031	167	4052	0.365	ug/ml	#	74

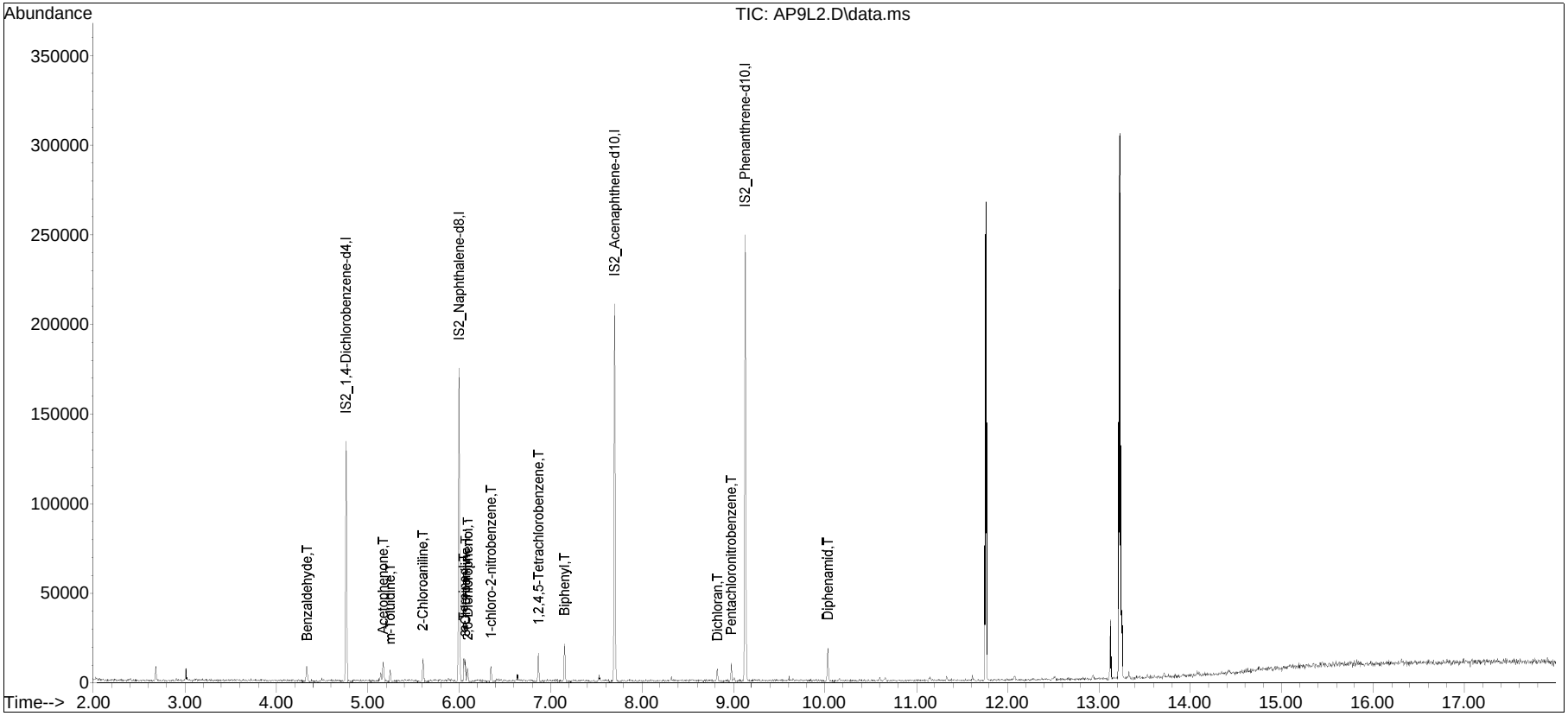
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L2.D
Acq On : 13 Apr 2023 8:27 am
Operator : Dakota:jg
Sample : IL9,32,,AP9L0.4 Lot# 9940
Misc : WG1768668,,
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Apr 15 10:08:34 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistviical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: AP9L2.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 8:27 am	Instrument	: Dakota
Sample	: IL9,32,,AP9L0.4 Lot# 9940	Quant Date	: 4/15/2023 10:09 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L1.D
Acq On : 13 Apr 2023 8:50 am
Operator : Dakota:jg
Sample : IL10,32,,AP9L0.2 Lot# 9941
Misc : WG1768668,,
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 15 10:07:53 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
27) IS2_1,4-Dichlorobenzen...	4.766	152	17414	4.000	ug/ml		0.00
Standard Area 1 = 16494			Recovery =	105.58%			
54) IS2_Naphthalene-d8	5.999	136	67205	4.000	ug/ml	#	0.00
Standard Area 1 = 64517			Recovery =	104.17%			
82) IS2_Acenaphthene-d10	7.700	164	37051	4.000	ug/ml		0.00
Standard Area 1 = 35809			Recovery =	103.47%			
97) IS2_Phenanthrene-d10	9.129	188	90793	4.000	ug/ml		0.00
Standard Area 1 = 78618			Recovery =	115.49%			
System Monitoring Compounds							
Target Compounds							Qvalue
28) Benzaldehyde	4.343	105	1004	0.220	ug/ml	#	62
29) Acetophenone	5.170	105	1579	0.198	ug/ml	#	39
30) m-Toluidine	5.250	106	411M2	0.212	ug/ml		
31) 2-Chloroaniline	5.608	127	1380	0.187	ug/ml	#	42
55) a-Terpineol	6.052	59	911	0.196	ug/ml	#	72
56) 3-Chloroaniline	6.071	65	324M2	0.140	ug/ml		
57) 2,6-Dichlorophenol	6.096	162	647	0.140	ug/ml	#	15
58) 1-chloro-2-nitrobenzene	6.348	111	546	0.219	ug/ml	#	1
59) Caprolactam	0.000		0	N.D.			
60) 1,2,4,5-Tetrachloroben...	6.867	216	1477	0.219	ug/ml	#	82
61) Biphenyl	7.156	154	3068	0.203	ug/ml		98
83) Dichloran	8.828	206	392M2	0.687	ug/ml		
84) Pentachloronitrobenzene	8.980	237	406M2	0.216	ug/ml		
98) Diphenamid	10.031	167	2235	0.196	ug/ml	#	76

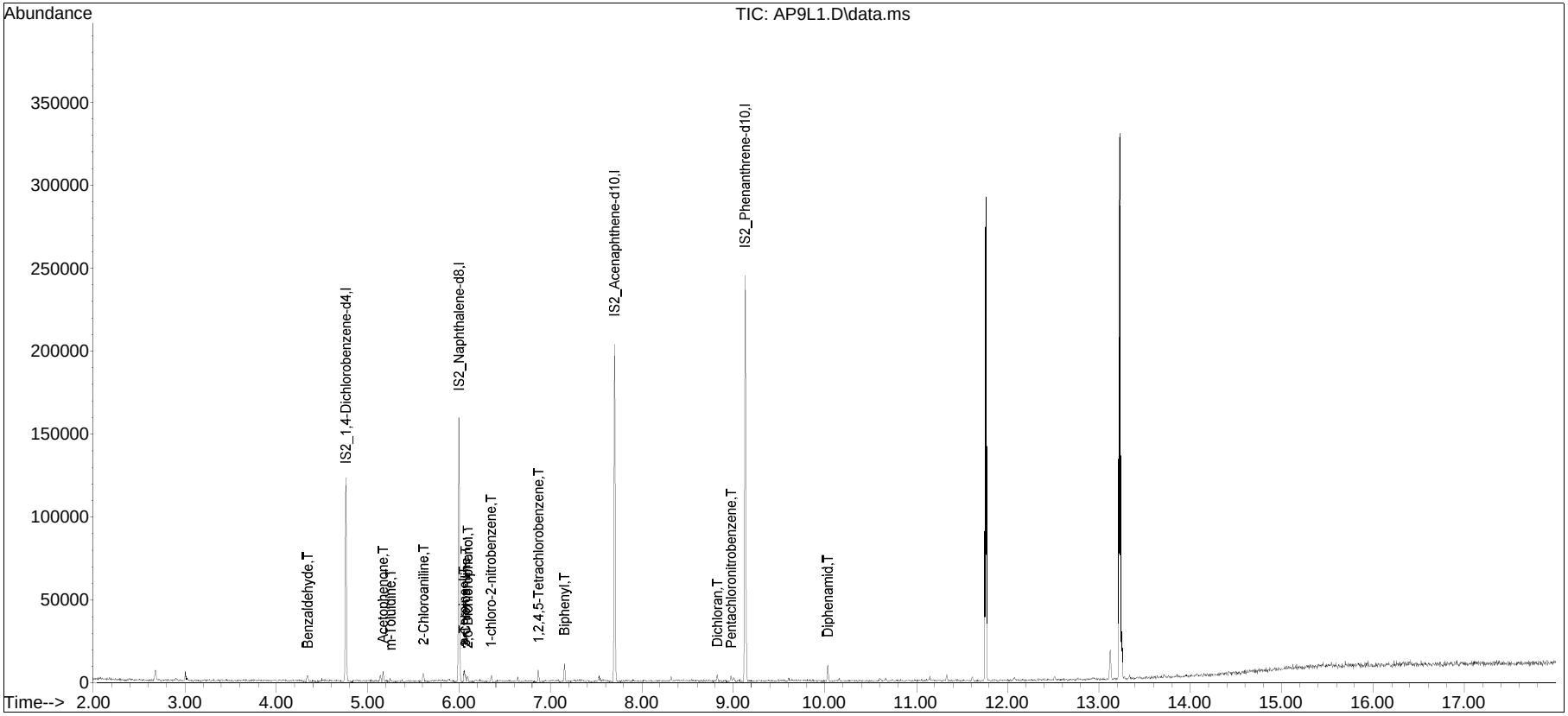
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9L1.D
Acq On : 13 Apr 2023 8:50 am
Operator : Dakota:jg
Sample : IL10,32,,AP9L0.2 Lot# 9941
Misc : WG1768668,,
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Apr 15 10:07:53 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:07:46 2023
Response via : Initial Calibration

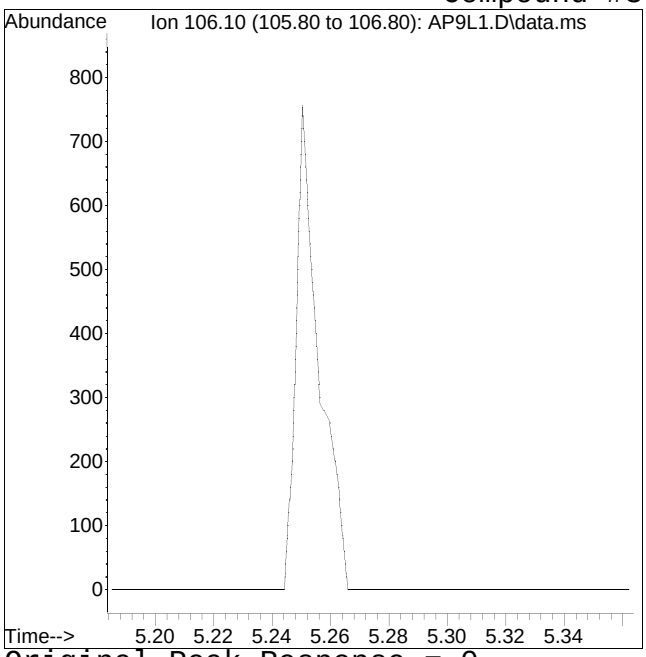
Sub List : AP9ical - AP9 ical sublistviical\AP9L6.D•



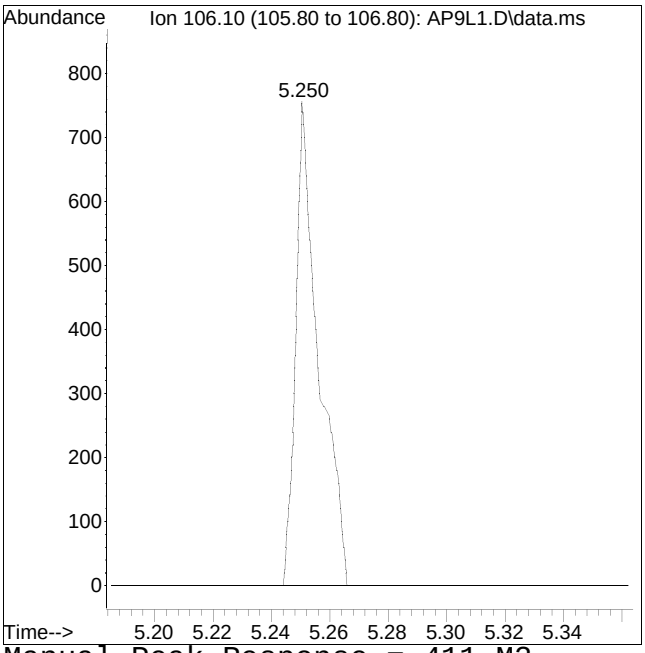
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : AP9L1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 8:50 am Instrument : Dakota
Sample : IL10,32,,AP9L0.2 Lot# 9941Quant Date : 4/15/2023 10:08 am

Compound #30: m-Toluidine



Original Peak Response = 0



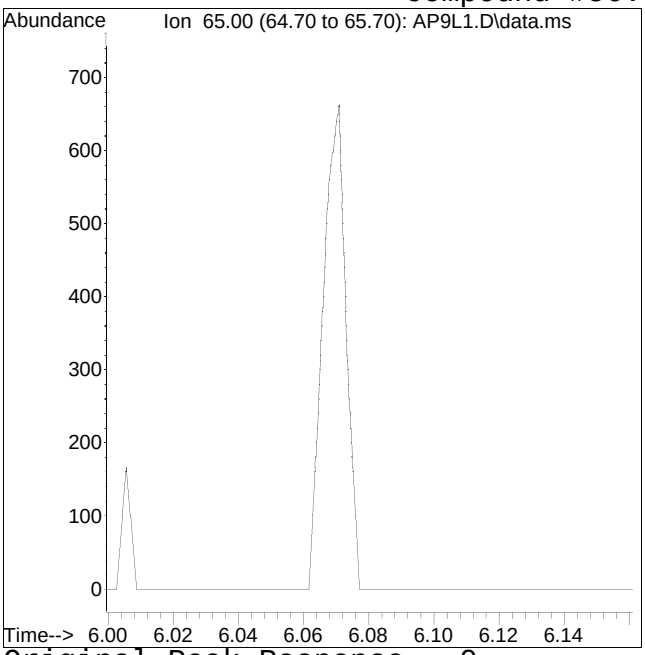
Manual Peak Response = 411 M2

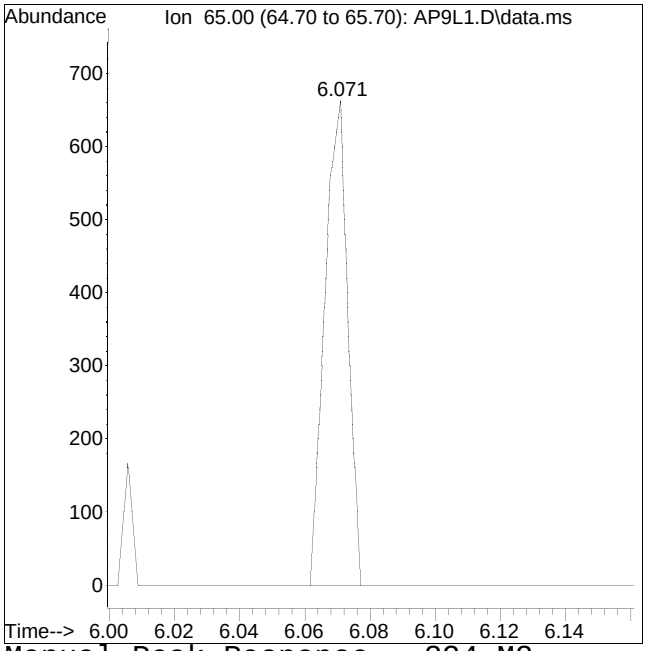
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : AP9L1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 8:50 am Instrument : Dakota
Sample : IL10,32,,AP9L0.2 Lot# 9941Quant Date : 4/15/2023 10:08 am

Compound #56: 3-Chloroaniline



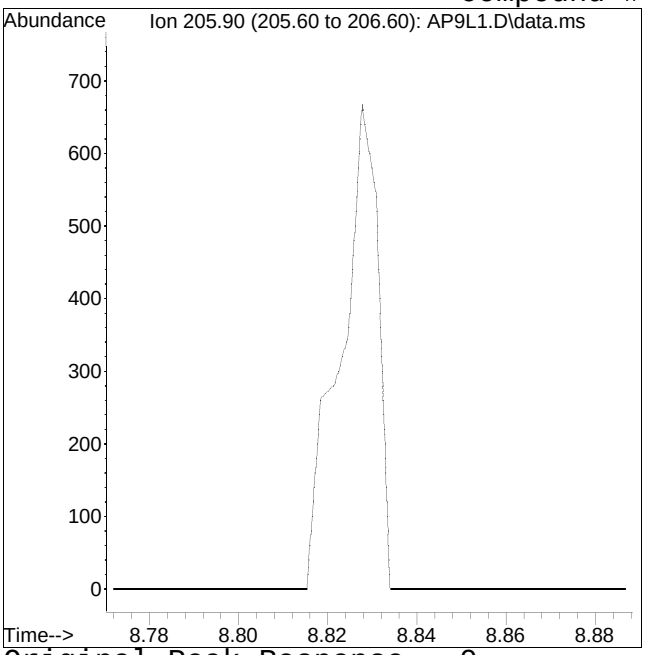


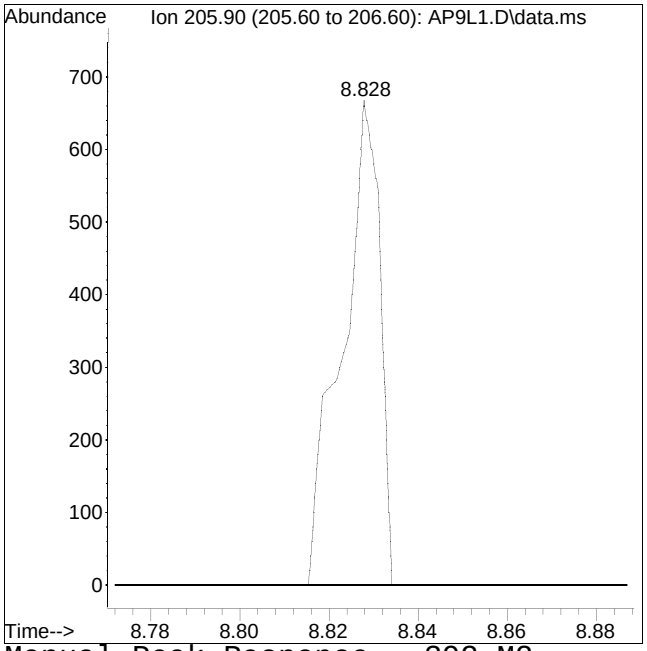
Original Peak Response = 0 Manual Peak Response = 324 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : AP9L1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 8:50 am Instrument : Dakota
Sample : IL10,32,,AP9L0.2 Lot# 9941Quant Date : 4/15/2023 10:08 am

Compound #83: Dichloran



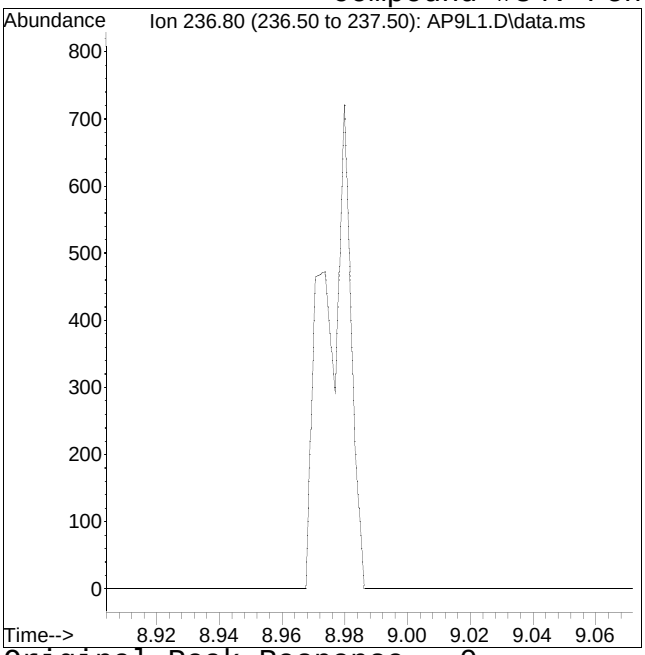


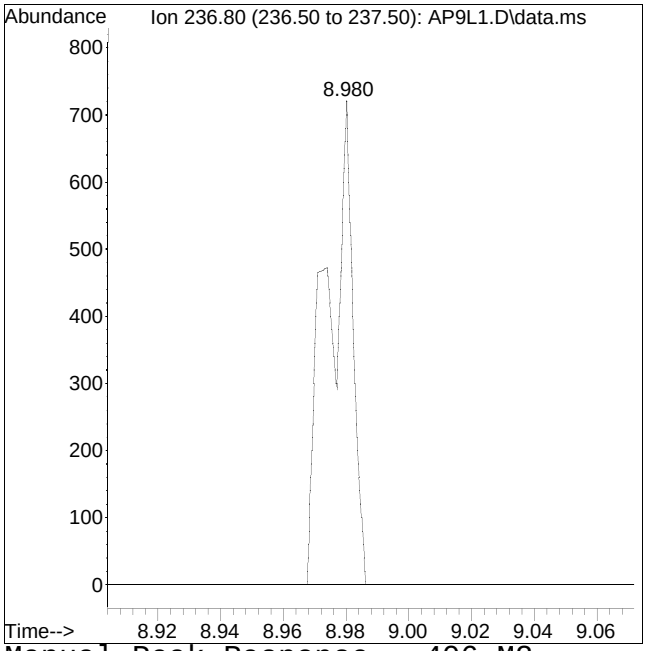
Original Peak Response = 0 Manual Peak Response = 392 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : AP9L1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 8:50 am Instrument : Dakota
Sample : IL10,32,,AP9L0.2 Lot# 9941Quant Date : 4/15/2023 10:08 am

Compound #84: Pentachloronitrobenzene





Original Peak Response = 0 Manual Peak Response = 406 M2
M2 = Peak not found by automatic integration algorithm.

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNICV.D
Acq On : 13 Apr 2023 9:12 am
Operator : Dakota:jg
Sample : CQICV1,32,,ABNICV Lot# 1004
Misc : WG1768668,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 19 14:35:36 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Apr 19 14:36:07 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	IS1_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	91	0.00
2	t	n-Nitrosodimethylamine	*	5.000	4.763	4.7	93	0.00
3	t	Pyridine	*	5.000	4.298	14.0	98	0.00
4	S	2-Fluorophenol		1.033	1.079	-4.5	96	0.00
5	T	Aniline		1.790	1.733	3.2	88	0.00
6	t	2-Chlorophenol		1.195	1.179	1.3	88	0.00
7	S	Phenol-d6		1.324	1.359	-2.6	92	0.00
8	T	Phenol		1.539	1.515	1.6	92	0.00
9	T	Bis(2-chloroethyl)ether		1.066	1.046	1.9	94	0.00
10	T	1,3-Dichlorobenzene		1.435	1.395	2.8	91	0.00
11	T	1,4-Dichlorobenzene		1.452	1.400	3.6	93	0.00
12	T	1,2-Dichlorobenzene		1.406	1.376	2.1	89	0.00
13	t	Benzyl alcohol		0.936	0.881	5.9	84	0.00
14	T	Bis(2-chloroisopropyl)ether		1.785	1.730	3.1	89	0.00
15	T	2-Methylphenol		1.016	0.977	3.8	86	0.00
16	T	Hexachloroethane		0.551	0.548	0.5	95	0.00
17	T	n-Nitrosodi-n-propylamine		0.818	0.804	1.7	91	0.00
18	T	3-Methylphenol/4-Methylphen		1.050	1.062	-1.1	91	0.00
19	S	Nitrobenzene-d5		1.269	1.186	6.5	87	0.00
20	T	Nitrobenzene		1.234	1.231	0.2	94	0.00
21	T	Isophorone		2.183	2.102	3.7	88	0.00
22	T	2-Nitrophenol		0.577	0.548	5.0	81	0.00
23	T	2,4-Dimethylphenol		1.110	1.063	4.2	87	0.00
24	T	Bis(2-chloroethoxy)methane		1.416	1.358	4.1	90	0.00
25	T	2,4-Dichlorophenol		1.044	1.006	3.6	93	0.00
26	T	1,2,4-Trichlorobenzene		1.276	1.246	2.4	87	0.00
34	I	IS1_Naphthalene-d8		1.000	1.000	0.0	90	0.00
35	T	Naphthalene		0.971	0.968	0.3	91	0.00
36	T	Benzoic Acid	*	5.000	4.081	18.4	58	0.00
37	T	4-Chloroaniline		0.115	0.115	0.0	96	0.00
38	T	Hexachlorobutadiene		0.198	0.187	5.6	87	0.00
39	T	p-Chloro-m-cresol		0.254	0.252	0.8	88	0.00
40	T	2-Methylnaphthalene		0.631	0.653	-3.5	95	0.00
41	T	1-Methylnaphthalene		0.218	0.211	3.2	85	0.00
42	T	Hexachlorocyclopentadiene		0.239	0.237	0.8	88	0.00
43	T	2,4,6-Trichlorophenol	*	5.000	4.490	10.2	87	0.00
44	T	2,4,5-Trichlorophenol		0.234	0.237	-1.3	88	0.00
45	S	2-Fluorobiphenyl		0.787	0.770	2.2	88	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNICV.D
Acq On : 13 Apr 2023 9:12 am
Operator : Dakota:jg
Sample : CQICV1,32,,ABNICV Lot# 1004
Misc : WG1768668,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 19 14:35:36 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Apr 19 14:36:07 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
46	T	2-Chloronaphthalene		0.692	0.688	0.6	90	0.00
47	T	2-Nitroaniline		0.200	0.200	0.0	89	0.00
48	T	1,4-Dinitrobenzene		0.093	0.085	8.6	80	0.00
49	T	1,3-Dinitrobenzene		0.109	0.095	12.8	86	0.00
50	T	Dimethyl phthalate		0.809	0.817	-1.0	90	0.00
51	T	Acenaphthylene		1.049	1.154	-10.0	98	0.00
52	T	2,6-Dinitrotoluene		0.167	0.154	7.8	80	0.00
53	T	1,2-Dinitrobenzene		0.065	0.063	3.1	85	0.00
62	I	IS1_Acenaphthene-d10		1.000	1.000	0.0	90	0.00
63	T	3-Nitroaniline		0.318	0.335	-5.3	89	0.00
64	T	Acenaphthene		1.089	1.072	1.6	89	0.00
65	T	2,4-Dinitrophenol	*	5.000	4.252	15.0	70	0.00
66	T	Dibenzofuran		1.737	1.784	-2.7	93	0.00
67	T	2,4-Dinitrotoluene		0.392	0.374	4.6	81	0.00
68	T	4-Nitrophenol	*	5.000	4.635	7.3	85	0.00
69	T	2,3,5,6-Tetrachlorophenol	*	5.000	4.527	9.5	84	0.00
70	T	2,3,4,6-Tetrachlorophenol	*	5.000	4.552	9.0	83	0.00
71	T	Diethyl phthalate		1.466	1.418	3.3	87	0.00
72	T	Fluorene		1.400	1.386	1.0	88	0.00
73	T	4-Chlorophenyl phenyl ether		0.681	0.649	4.7	88	0.00
74	T	4-Nitroaniline		0.316	0.330	-4.4	90	0.00
75	T	4,6-Dinitro-o-cresol	*	5.000	4.642	7.2	84	0.00
76	T	NDPA/DPA		1.195	1.194	0.1	88	0.00
77	T	Azobenzene		1.256	1.283	-2.1	88	0.00
78	S	2,4,6-Tribromophenol		0.232	0.229	1.3	90	0.00
79	T	4-Bromophenyl phenyl ether		0.425	0.404	4.9	85	0.00
80	T	Hexachlorobenzene		0.532	0.524	1.5	93	0.00
81	T	Pentachlorophenol	*	5.000	4.488	10.2	87	0.00
87	I	IS1_Phenanthrene-d10		1.000	1.000	0.0	90	0.00
88	T	Phenanthrene		1.030	0.972	5.6	88	0.00
89	T	Anthracene		0.998	0.983	1.5	89	0.00
90	T	Carbazole		0.941	0.933	0.9	88	0.00
91	T	Di-n-butylphthalate		1.108	1.004	9.4	84	0.00
92	T	Fluoranthene		1.208	1.192	1.3	91	0.00
93	T	Benzidine		0.791	0.733	7.3	97	0.00
94	T	Pyrene		1.277	1.259	1.4	90	0.00
95	S	4-Terphenyl-d14		0.978	0.978	0.0	91	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNICV.D
Acq On : 13 Apr 2023 9:12 am
Operator : Dakota:jg
Sample : CQICV1,32,,ABNICV Lot# 1004
Misc : WG1768668,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 19 14:35:36 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Apr 19 14:36:07 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96	T	Butyl benzyl phthalate	0.504	0.439	12.9	81	0.00
103	I	IS1_Chrysene-d12	1.000	1.000	0.0	91	0.00
104	T	Benzo(a)anthracene	1.254	1.254	0.0	91	0.00
105	T	3,3'-Dichlorobenzidine	0.482	0.481	0.2	92	0.00
106	T	Chrysene	1.184	1.214	-2.5	92	0.00
107	T	Bis(2-ethylhexyl)phthalate	0.700	0.661	5.6	85	0.00
108	T	Di-n-octylphthalate	1.271	1.086	14.6	82	0.00
109	T	Benzo(b)fluoranthene	1.361	1.383	-1.6	95	0.00
110	T	Benzo(k)fluoranthene	1.299	1.317	-1.4	89	0.00
111	T	Benzo(a)pyrene	1.183	1.268	-7.2	97	0.00
112	I	IS1_Perylene-d12	1.000	1.000	0.0	89	0.00
113	T	Indeno(1,2,3-cd)pyrene	1.060	1.076	-1.5	90	0.00
114	T	Dibenzo(a,h)anthracene	1.111	1.120	-0.8	91	0.00
115	T	Benzo(ghi)perylene	1.122	1.122	0.0	90	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNICV.D
Acq On : 13 Apr 2023 9:12 am
Operator : Dakota:jg
Sample : CQICV1,32,,ABNICV Lot# 1004
Misc : WG1768668,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 19 14:35:36 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Apr 19 14:36:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS1_1,4-Dichlorobenzen...	4.762	152	16311	4.000	ug/ml	0.00
Standard Area 1 = 17859			Recovery = 91.33%			
34) IS1_Naphthalene-d8	5.999	136	61125	4.000	ug/ml	# 0.00
Standard Area 1 = 68179			Recovery = 89.65%			
62) IS1_Acenaphthene-d10	7.703	164	35471	4.000	ug/ml	0.00
Standard Area 1 = 39516			Recovery = 89.76%			
87) IS1_Phenanthrene-d10	9.132	188	83073	4.000	ug/ml	0.00
Standard Area 1 = 92463			Recovery = 89.84%			
103) IS1_Chrysene-d12	11.762	240	88544	4.000	ug/ml	0.00
Standard Area 1 = 97366			Recovery = 90.94%			
112) IS1_Perylene-d12	13.226	264	109101	4.000	ug/ml	0.00
Standard Area 1 = 122891			Recovery = 88.78%			
System Monitoring Compounds						
4) 2-Fluorophenol	3.494	112	21992	5.222	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 104.44%			
7) Phenol-d6	4.436	99	27701	5.133	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 102.66%			
19) Nitrobenzene-d5	5.303	82	24173	4.672	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 186.88%#			
45) 2-Fluorobiphenyl	7.065	172	58830	4.892	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 195.68%#			
78) 2,4,6-Tribromophenol	8.464	330	10163	4.950	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 99.00%			
95) 4-Terphenyl-d14	10.705	244	101585	5.003	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 200.12%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	2.120	74	15113	4.763	ug/ml	81
3) Pyridine	2.179	79	20436	4.298	ug/ml#	57
5) Aniline	4.445	93	35337	4.840	ug/ml#	50
6) 2-Chlorophenol	4.560	128	24040	4.932	ug/ml#	86
8) Phenol	4.452	94	30879	4.921	ug/ml#	49
9) Bis(2-chloroethyl)ether	4.526	93	21317	4.903	ug/ml	93
10) 1,3-Dichlorobenzene	4.706	146	28442	4.860	ug/ml	95
11) 1,4-Dichlorobenzene	4.778	146	28554	4.823	ug/ml	96
12) 1,2-Dichlorobenzene	4.927	146	28057	4.894	ug/ml	97
13) Benzyl alcohol	4.915	79	17961	4.704	ug/ml	96
14) Bis(2-chloroisopropyl)...	5.061	45	35279	4.848	ug/ml#	59

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNICV.D
Acq On : 13 Apr 2023 9:12 am
Operator : Dakota:jg
Sample : CQICV1,32,,ABNICV Lot# 1004
Misc : WG1768668,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 19 14:35:36 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Apr 19 14:36:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	5.042	108	19929	4.809	ug/ml	96
16) Hexachloroethane	5.253	117	11178	4.977	ug/ml#	75
17) n-Nitrosodi-n-propylamine	5.182	70	16393	4.915	ug/ml#	89
18) 3-Methylphenol/4-Methy...	5.194	108	21656	5.060	ug/ml	97
20) Nitrobenzene	5.322	77	25104	4.991	ug/ml	96
21) Isophorone	5.564	82	42862	4.816	ug/ml	95
22) 2-Nitrophenol	5.639	139	11171	4.751	ug/ml#	87
23) 2,4-Dimethylphenol	5.707	107	21676	4.788	ug/ml	95
24) Bis(2-chloroethoxy)met...	5.794	93	27694	4.796	ug/ml#	95
25) 2,4-Dichlorophenol	5.875	162	20503	4.818	ug/ml	94
26) 1,2,4-Trichlorobenzene	5.953	180	25404	4.881	ug/ml	96
35) Naphthalene	6.018	128	73973	4.985	ug/ml	99
36) Benzoic Acid	5.772	105	6433	4.081	ug/ml#	86
37) 4-Chloroaniline	6.086	65	8818	5.034	ug/ml#	69
38) Hexachlorobutadiene	6.167	225	14309	4.740	ug/ml	97
39) p-Chloro-m-cresol	6.581	107	19253	4.968	ug/ml	93
40) 2-Methylnaphthalene	6.699	142	49891	5.174	ug/ml	97
41) 1-Methylnaphthalene	6.792	115	16124	4.831	ug/ml	93
42) Hexachlorocyclopentadiene	6.866	237	18095	4.955	ug/ml	96
43) 2,4,6-Trichlorophenol	6.981	196	15756	4.490	ug/ml	99
44) 2,4,5-Trichlorophenol	7.009	196	18096	5.071	ug/ml	98
46) 2-Chloronaphthalene	7.162	162	52548	4.967	ug/ml	93
47) 2-Nitroaniline	7.271	138	15281	4.997	ug/ml#	80
48) 1,4-Dinitrobenzene	7.398	168	6461	4.524	ug/ml	95
49) 1,3-Dinitrobenzene	7.476	168	7254	4.356	ug/ml#	1
50) Dimethyl phthalate	7.469	163	62389	5.046	ug/ml#	98
51) Acenaphthylene	7.560	152	88202	5.500	ug/ml	98
52) 2,6-Dinitrotoluene	7.513	165	11757	4.606	ug/ml#	84
53) 1,2-Dinitrobenzene	7.556	168	4826	4.837	ug/ml#	1
63) 3-Nitroaniline	7.668	138	14873	5.269	ug/ml#	88
64) Acenaphthene	7.731	154	47529	4.921	ug/ml	89
65) 2,4-Dinitrophenol	7.768	184	5384	4.252	ug/ml	87
66) Dibenzofuran	7.901	168	79080	5.133	ug/ml	92
67) 2,4-Dinitrotoluene	7.898	165	16570	4.769	ug/ml	95
68) 4-Nitrophenol	7.852	65	10713	4.635	ug/ml#	84
69) 2,3,5,6-Tetrachlorophenol	7.989	232	14401	4.527	ug/ml	98
70) 2,3,4,6-Tetrachlorophenol	8.032	232	14604	4.552	ug/ml	91
71) Diethyl phthalate	8.159	149	62883	4.836	ug/ml	98
72) Fluorene	8.231	166	61434	4.947	ug/ml	91
73) 4-Chlorophenyl phenyl ...	8.246	204	28778	4.768	ug/ml	89

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNICV.D
Acq On : 13 Apr 2023 9:12 am
Operator : Dakota:jg
Sample : CQICV1,32,,ABNICV Lot# 1004
Misc : WG1768668,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 19 14:35:36 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Apr 19 14:36:07 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74)	4-Nitroaniline	8.253	138	14631	5.220	ug/ml	84
75)	4,6-Dinitro-o-cresol	8.290	198	8465	4.642	ug/ml#	69
76)	NDPA/DPA	8.361	169	52962	4.999	ug/ml	93
77)	Azobenzene	8.396	77	56883	5.109	ug/ml	97
79)	4-Bromophenyl phenyl e...	8.716	248	17932	4.758	ug/ml#	83
80)	Hexachlorobenzene	8.772	284	23251	4.929	ug/ml#	81
81)	Pentachlorophenol	8.961	266	11206	4.488	ug/ml	97
88)	Phenanthrene	9.151	178	100944	4.718	ug/ml	99
89)	Anthracene	9.201	178	102029	4.923	ug/ml	100
90)	Carbazole	9.365	167	96873	4.958	ug/ml	98
91)	Di-n-butylphthalate	9.751	149	104207	4.530	ug/ml	99
92)	Fluoranthene	10.304	202	123795	4.935	ug/ml#	92
93)	Benzidine	10.453	184	76157	4.633	ug/ml#	95
94)	Pyrene	10.519	202	130773	4.932	ug/ml	100
96)	Butyl benzyl phthalate	11.227	149	45581	4.358	ug/ml	89
104)	Benzo(a)anthracene	11.752	228	138788	5.000	ug/ml	99
105)	3,3'-Dichlorobenzidine	11.749	252	53199	4.986	ug/ml#	96
106)	Chrysene	11.790	228	134337	5.124	ug/ml	98
107)	Bis(2-ethylhexyl)phtha...	11.864	149	73206	4.722	ug/ml#	88
108)	Di-n-octylphthalate	12.539	149	120150	4.271	ug/ml#	76
109)	Benzo(b)fluoranthene	12.856	252	153078	5.082	ug/ml#	95
110)	Benzo(k)fluoranthene	12.884	252	145817	5.071	ug/ml#	94
111)	Benzo(a)pyrene	13.170	252	140341	5.359	ug/ml#	95
113)	Indeno(1,2,3-cd)pyrene	14.180	276	146722M6	5.073	ug/mL	
114)	Dibenzo(a,h)anthracene	14.199	278	152789	5.041	ug/ml#	90
115)	Benzo(ghi)perylene	14.397	276	153056	5.003	ug/ml#	86

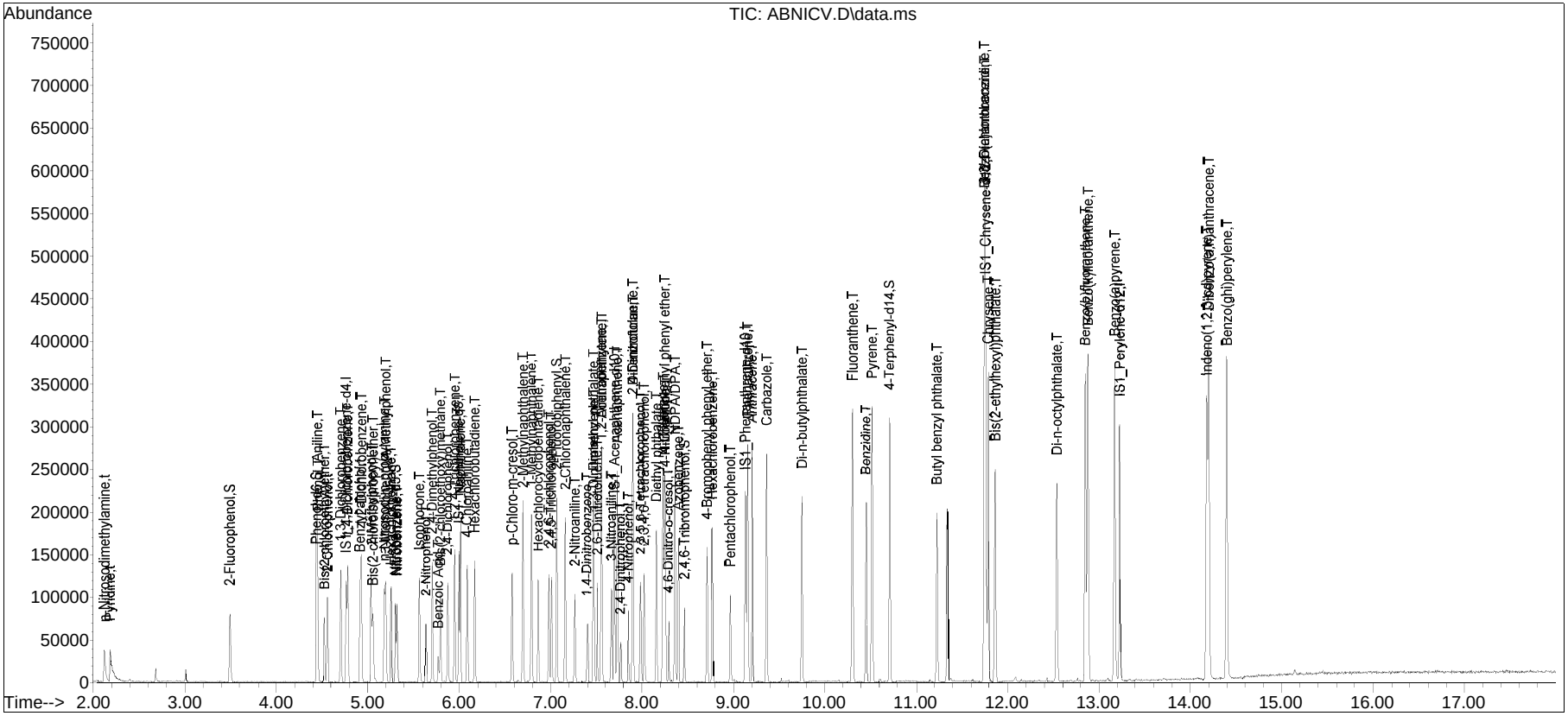
(#) = qualifier out of range (m) = manual integration (+) = signals summed

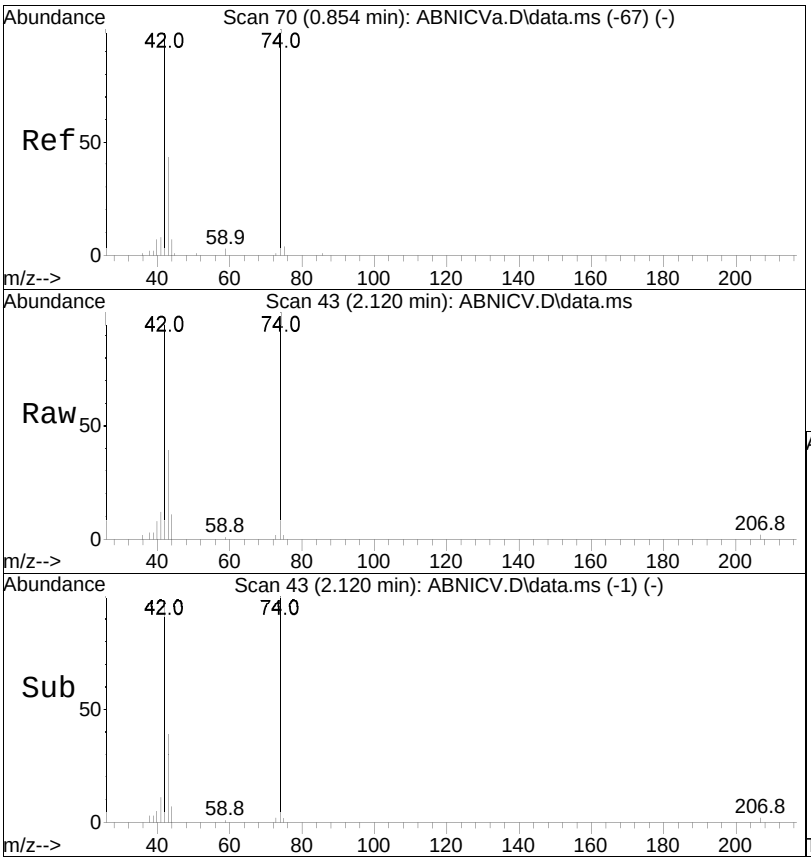
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ABNICV.D
Acq On : 13 Apr 2023 9:12 am
Operator : Dakota:jg
Sample : CQICV1,32,,ABNICV Lot# 1004
Misc : WG1768668,,
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Apr 19 14:35:36 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Apr 19 14:36:07 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublistviical\ABNL6.D•

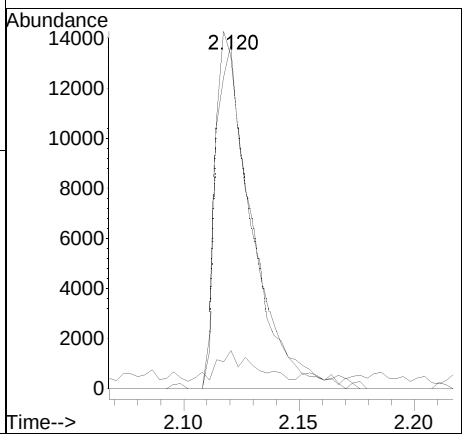


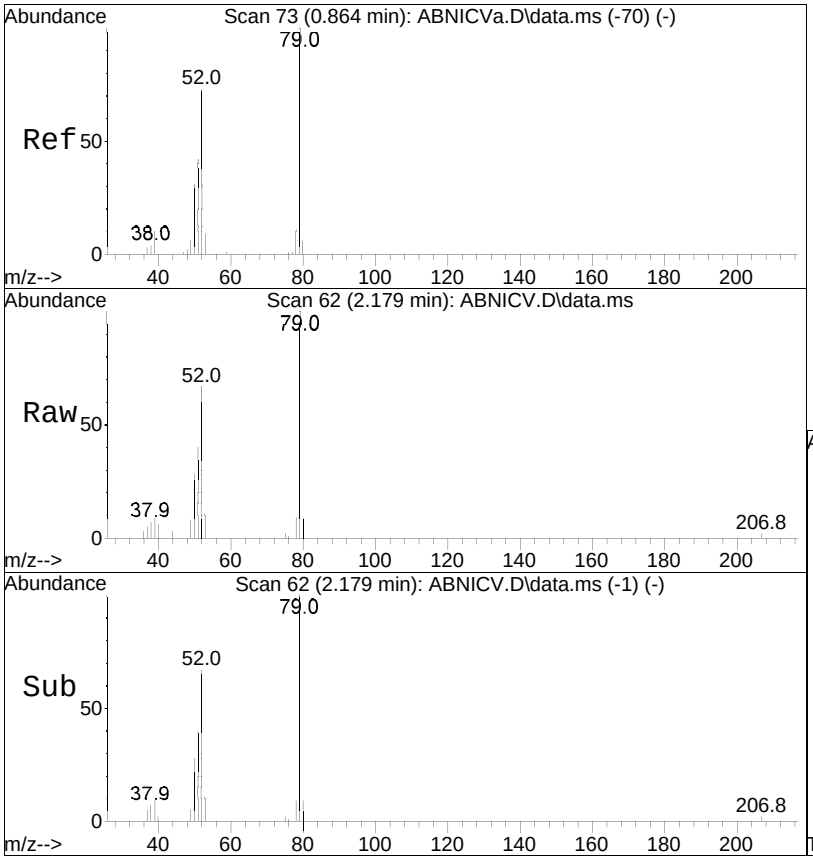


#2
n-Nitrosodimethylamine
Concen: 4.76 ug/ml
RT: 2.120 min Scan# 43
Delta R.T. 0.006 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 74 Resp: 15113

Ion	Ratio	Lower	Upper
74	100		
42	101.9	100.0	150.0
44	8.9	6.7	10.1

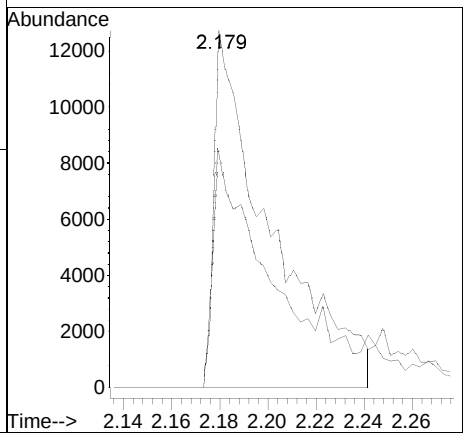


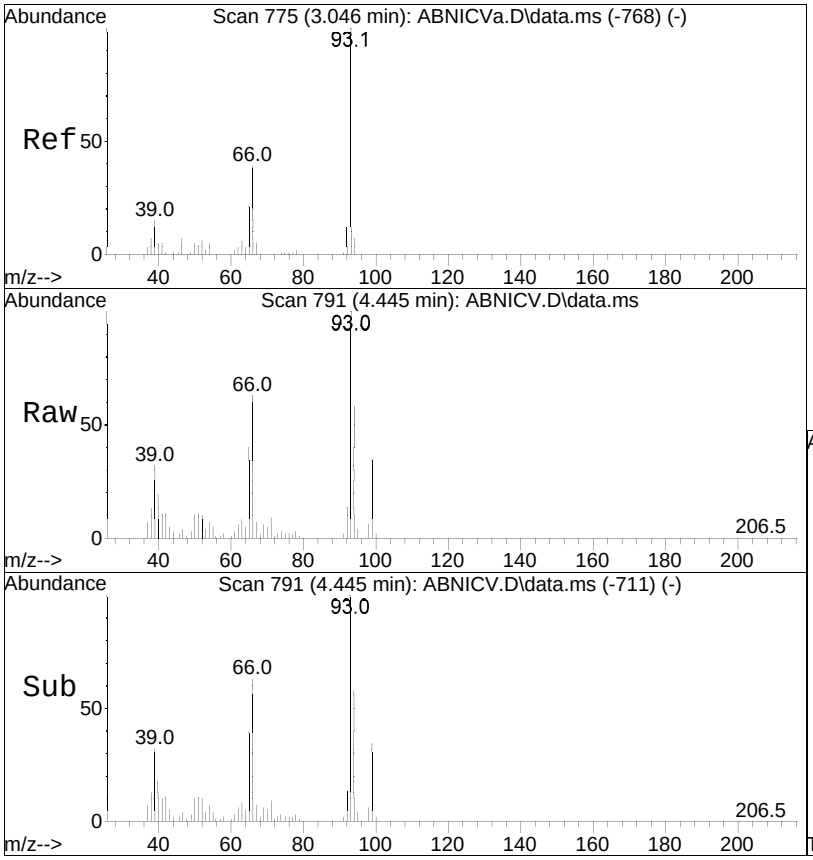


#3
Pyridine
Concen: 4.30 ug/ml
RT: 2.179 min Scan# 62
Delta R.T. 0.002 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 79 Resp: 20436

Ion	Ratio	Lower	Upper
79	100		
52	69.0	93.1	139.7#

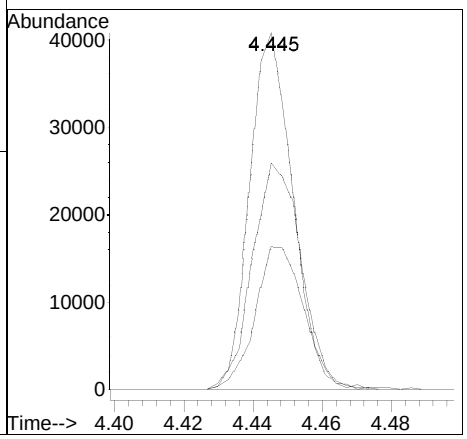


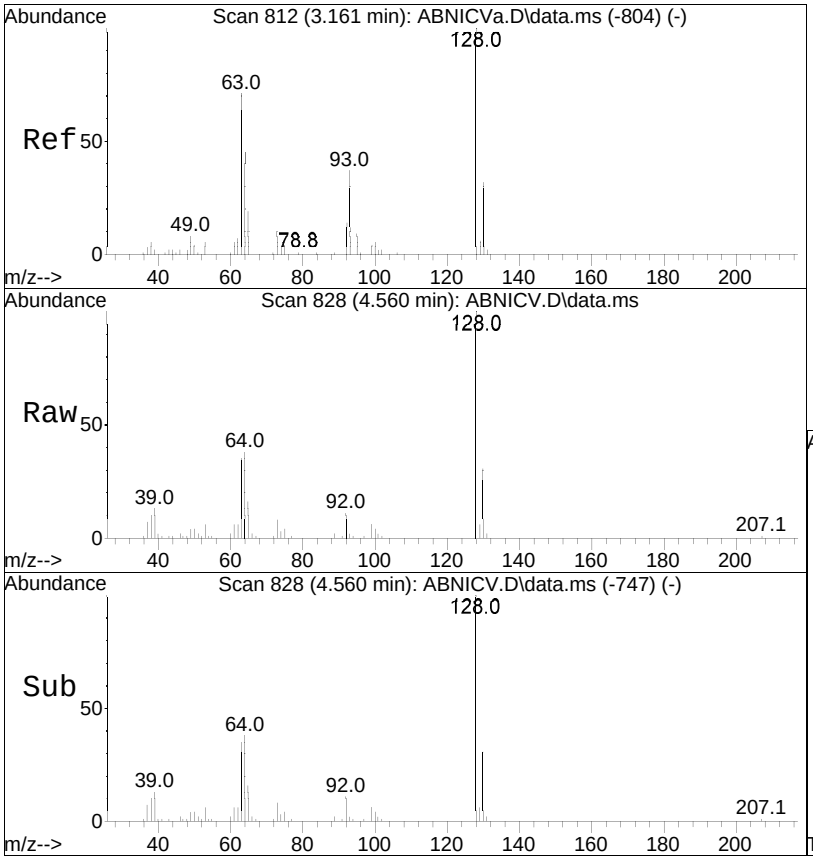


#5
Aniline
Concen: 4.84 ug/ml
RT: 4.445 min Scan# 791
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 93 Resp: 35337

Ion	Ratio	Lower	Upper
93	100		
66	71.9	32.6	49.0#
65	45.3	17.6	26.4#

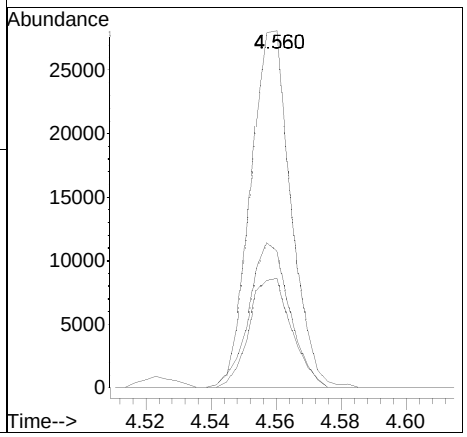


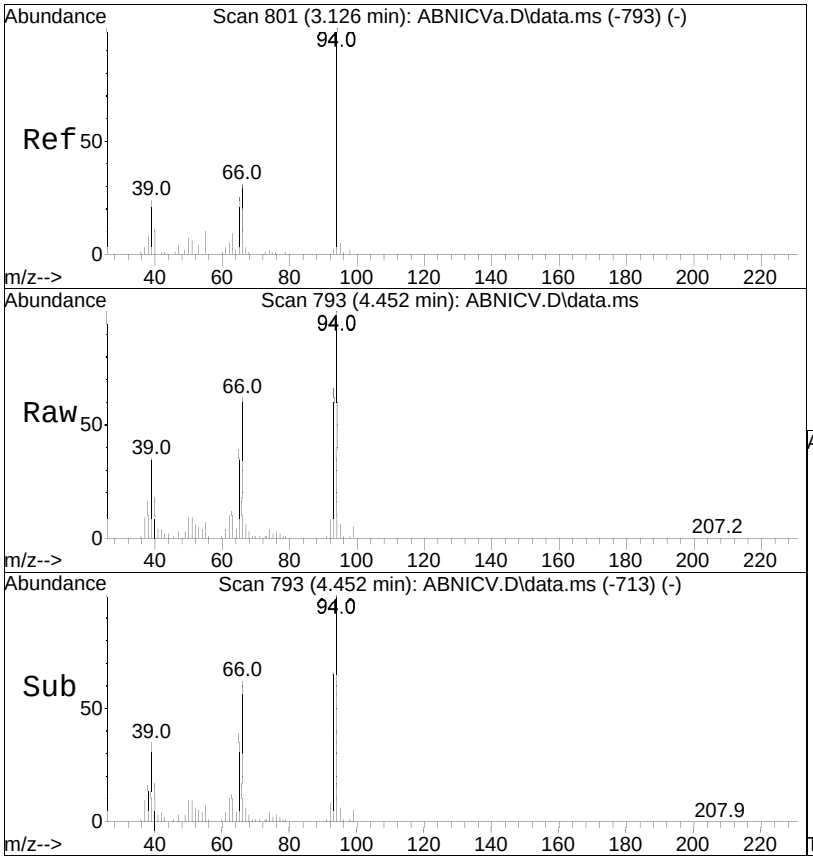


#6
2-Chlorophenol
Concen: 4.93 ug/ml
RT: 4.560 min Scan# 828
Delta R.T. 0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:128 Resp: 24040

Ion	Ratio	Lower	Upper
128	100		
64	41.0	45.1	67.7#
130	32.4	26.2	39.4

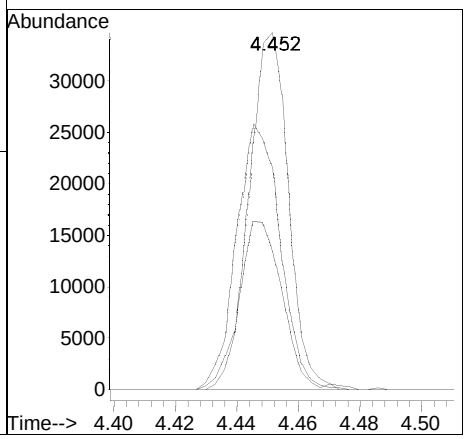


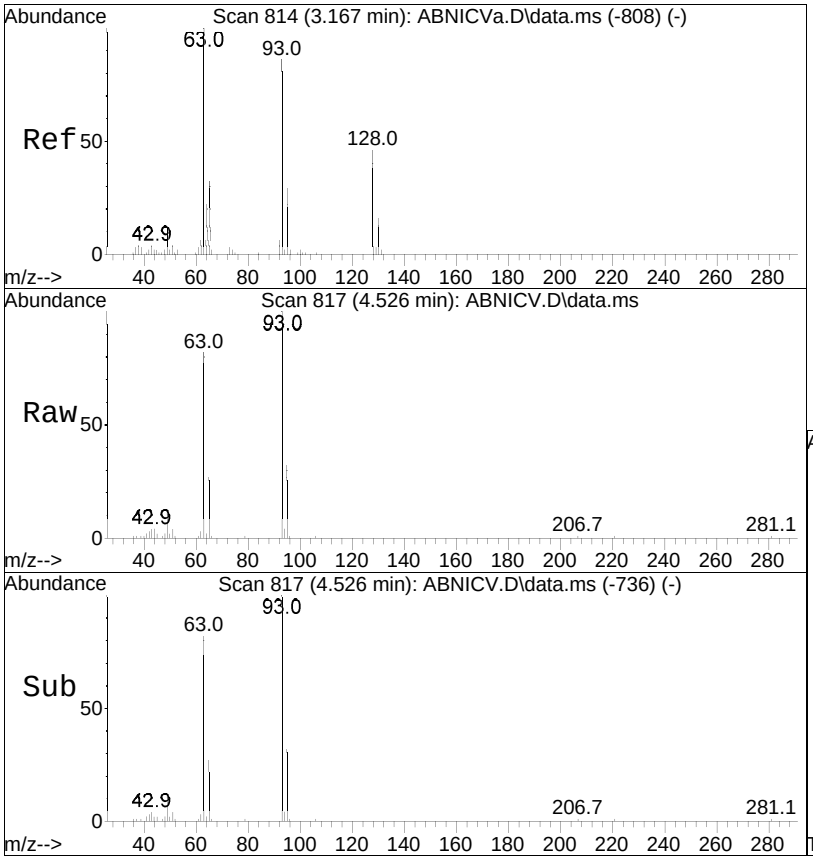


#8
Phenol
Concen: 4.92 ug/ml
RT: 4.452 min Scan# 793
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 94 Resp: 30879

Ion	Ratio	Lower	Upper
94	100		
65	51.8	26.0	39.0#
66	82.3	33.8	50.8#

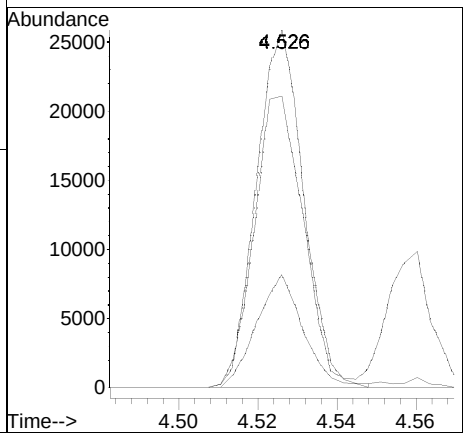


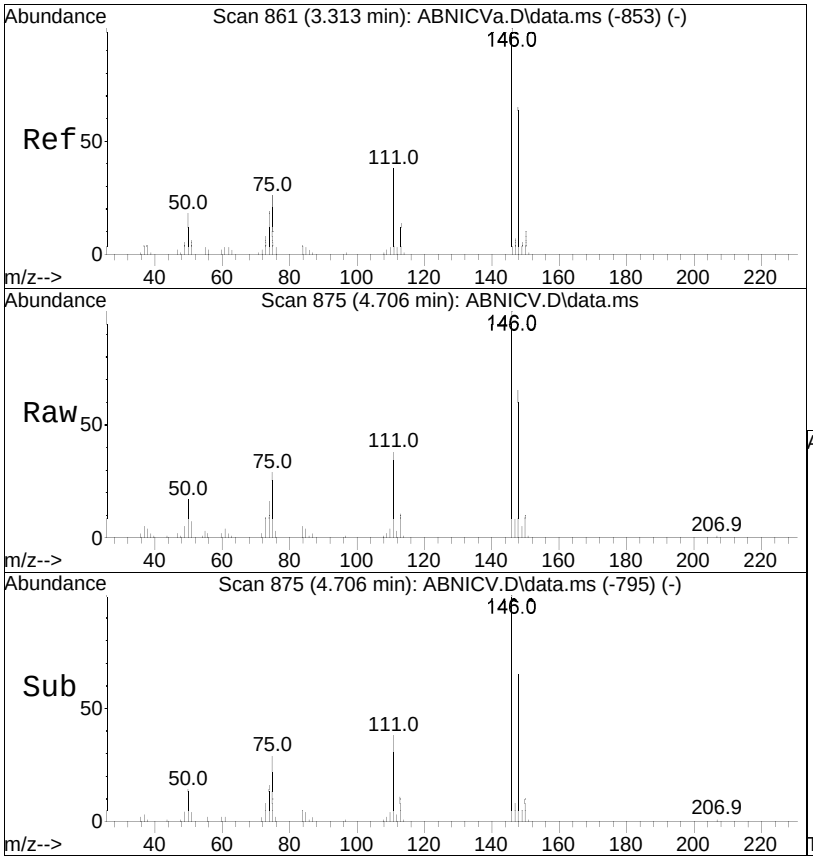


#9
Bis(2-chloroethyl)ether
Concen: 4.90 ug/ml
RT: 4.526 min Scan# 817
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 93 Resp: 21317

Ion	Ratio	Lower	Upper
93	100		
63	85.3	74.6	111.8
95	31.3	25.9	38.9

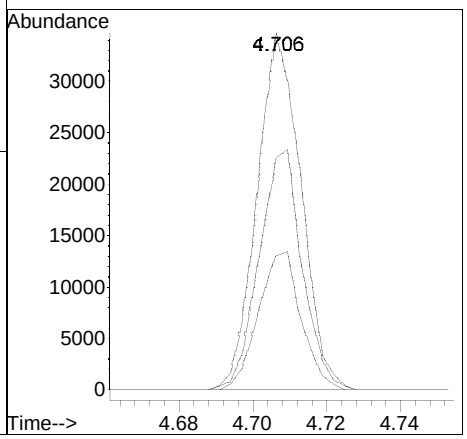


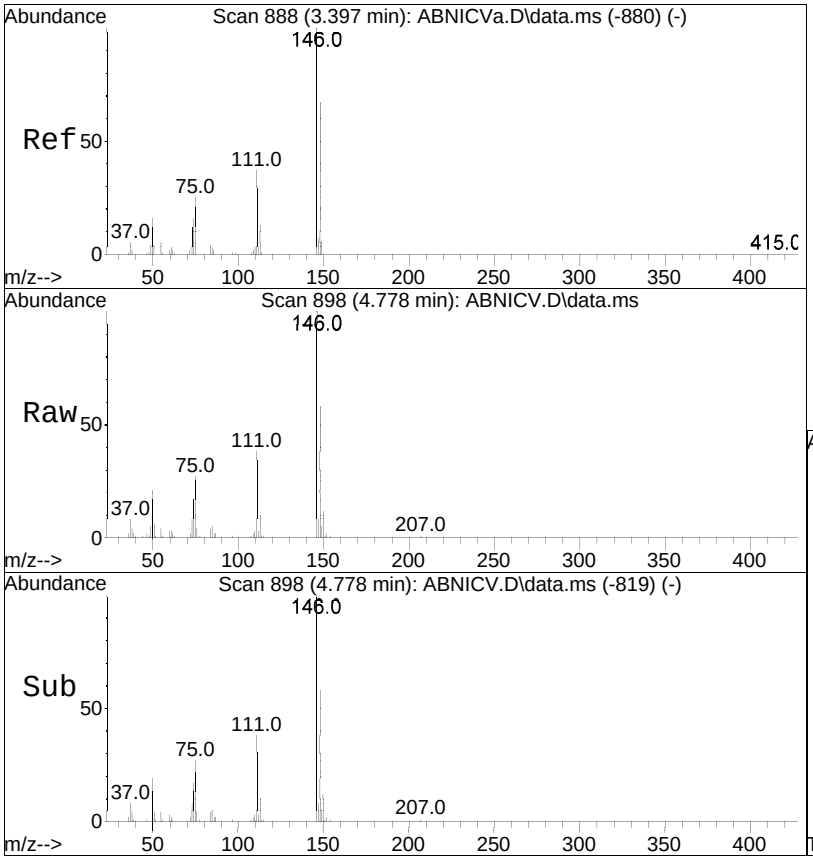


#10
1,3-Dichlorobenzene
Concen: 4.86 ug/ml
RT: 4.706 min Scan# 875
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:146 Resp: 28442

Ion	Ratio	Lower	Upper
146	100		
111	37.8	34.3	51.5
148	66.2	50.8	76.2

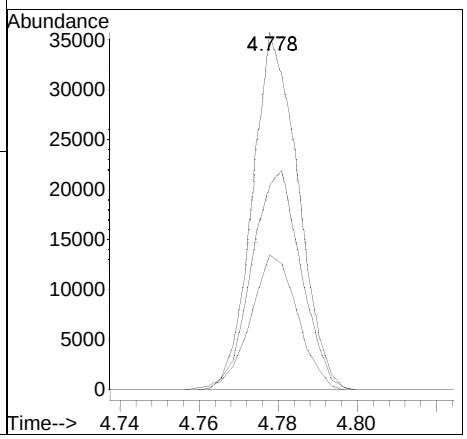


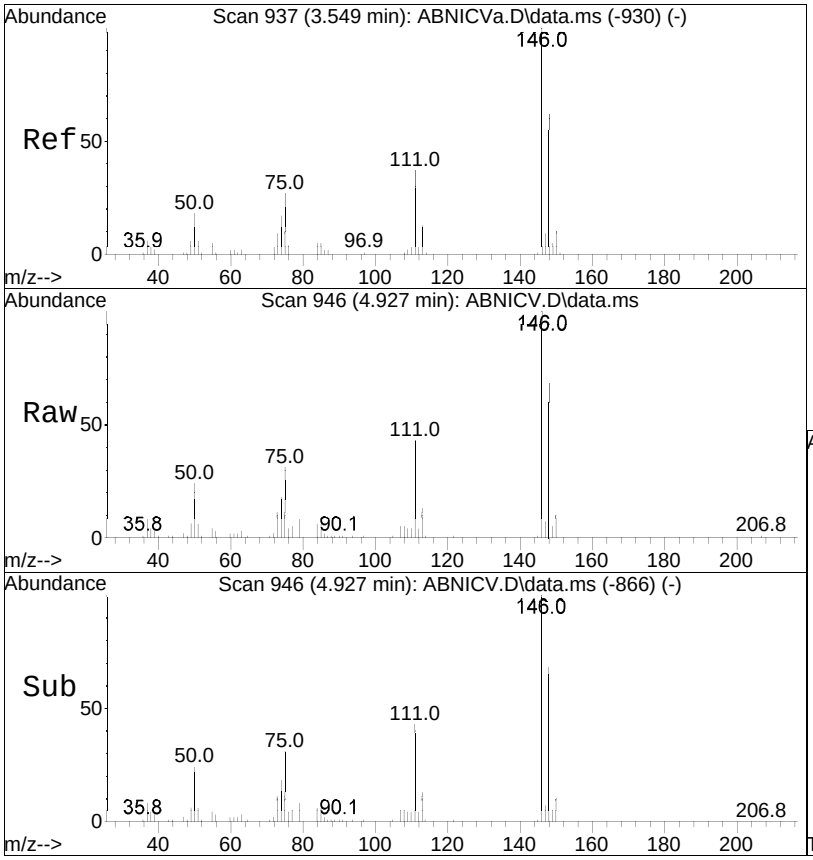


#11
1,4-Dichlorobenzene
Concen: 4.82 ug/ml
RT: 4.778 min Scan# 898
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:146 Resp: 28554

Ion	Ratio	Lower	Upper
146	100		
148	66.5	50.7	76.1
111	39.1	33.4	50.0

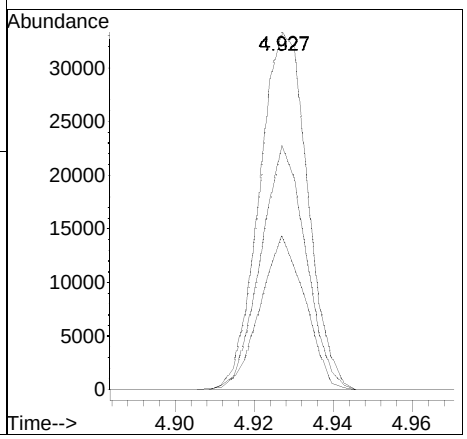


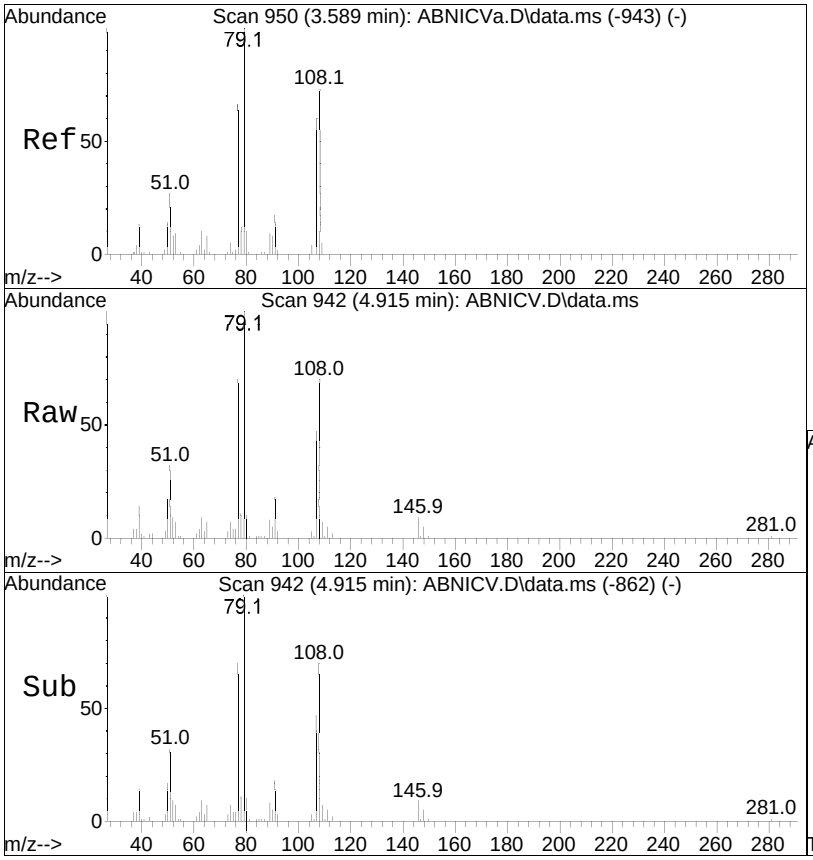


#12
1,2-Dichlorobenzene
Concen: 4.89 ug/ml
RT: 4.927 min Scan# 946
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:146 Resp: 28057

Ion	Ratio	Lower	Upper
146	100		
111	40.2	34.6	52.0
148	64.0	50.2	75.4

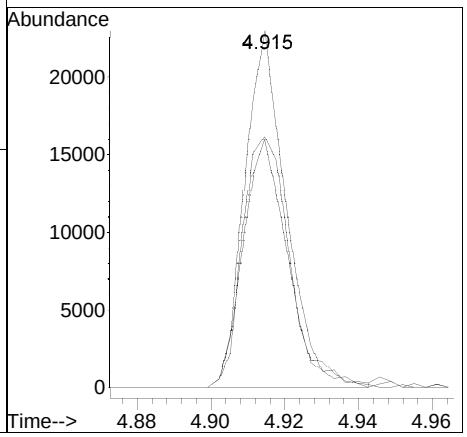


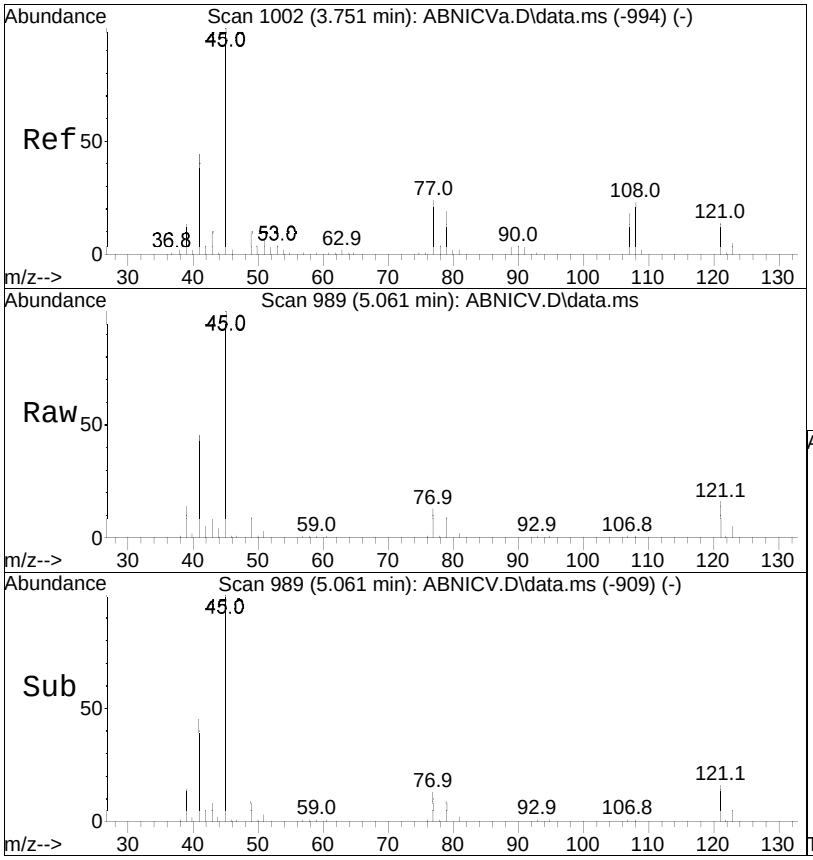


#13
Benzyl alcohol
Concen: 4.70 ug/ml
RT: 4.915 min Scan# 942
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 79 Resp: 17961

Ion	Ratio	Lower	Upper
79	100		
77	74.3	54.9	82.3
108	79.5	63.1	94.7

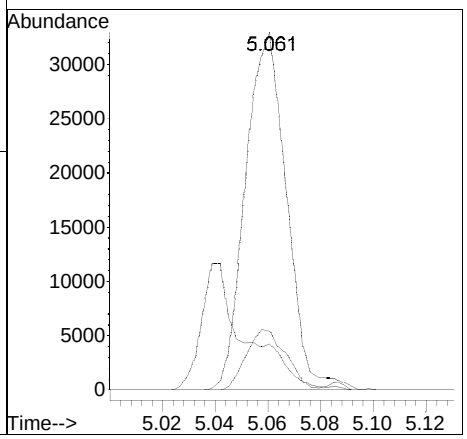


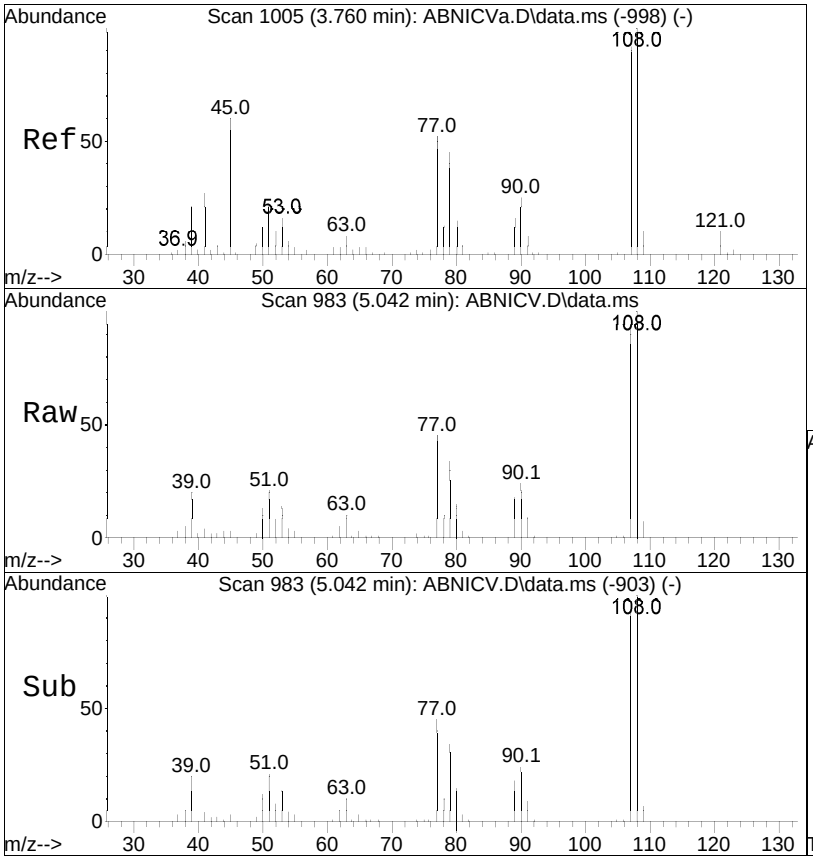


#14
Bis(2-chloroisopropyl)ether
Concen: 4.85 ug/ml
RT: 5.061 min Scan# 989
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 45 Resp: 35279

Ion	Ratio	Lower	Upper
45	100		
121	17.0	9.8	14.6#
77	38.1	6.1	9.1#

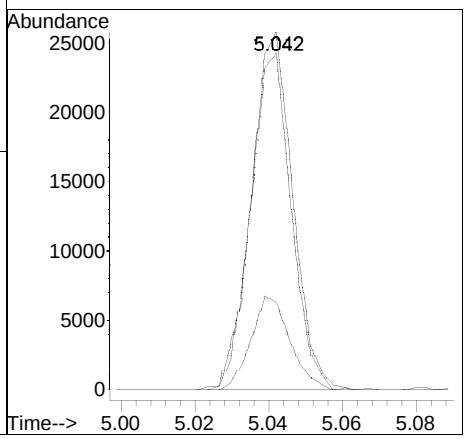


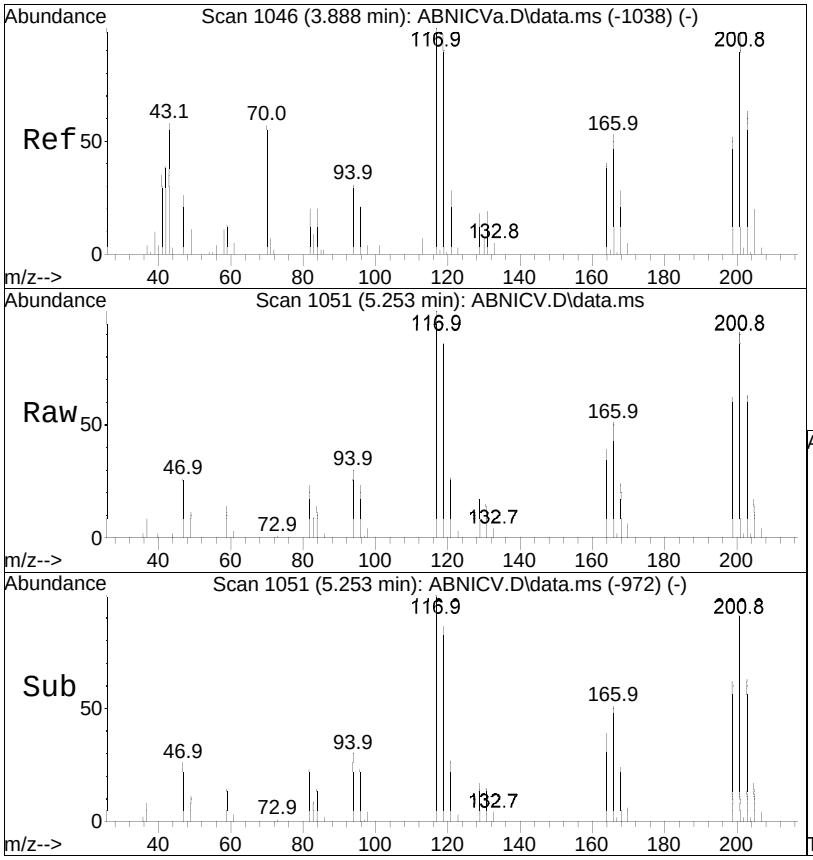


#15
2-Methylphenol
Concen: 4.81 ug/ml
RT: 5.042 min Scan# 983
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:108 Resp: 19929

Ion	Ratio	Lower	Upper
108	100		
107	92.4	70.7	106.1
90	24.9	18.7	28.1

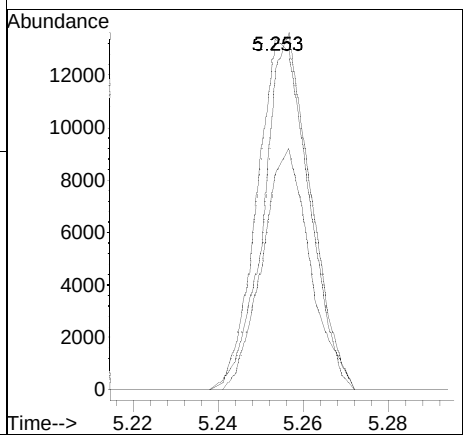


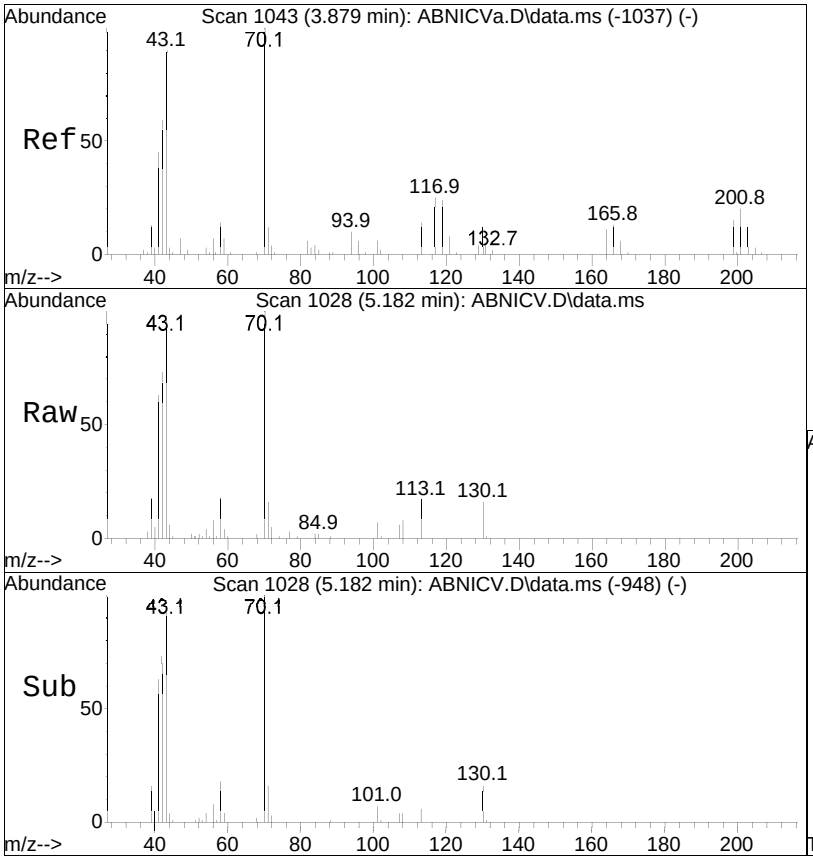


#16
Hexachloroethane
Concen: 4.98 ug/ml
RT: 5.253 min Scan# 1051
Delta R.T. -0.004 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:117 Resp: 11178

Ion	Ratio	Lower	Upper
117	100		
201	93.3	58.6	87.8#
199	64.5	36.9	55.3#

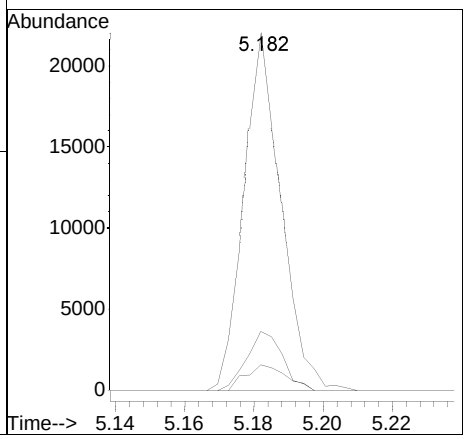


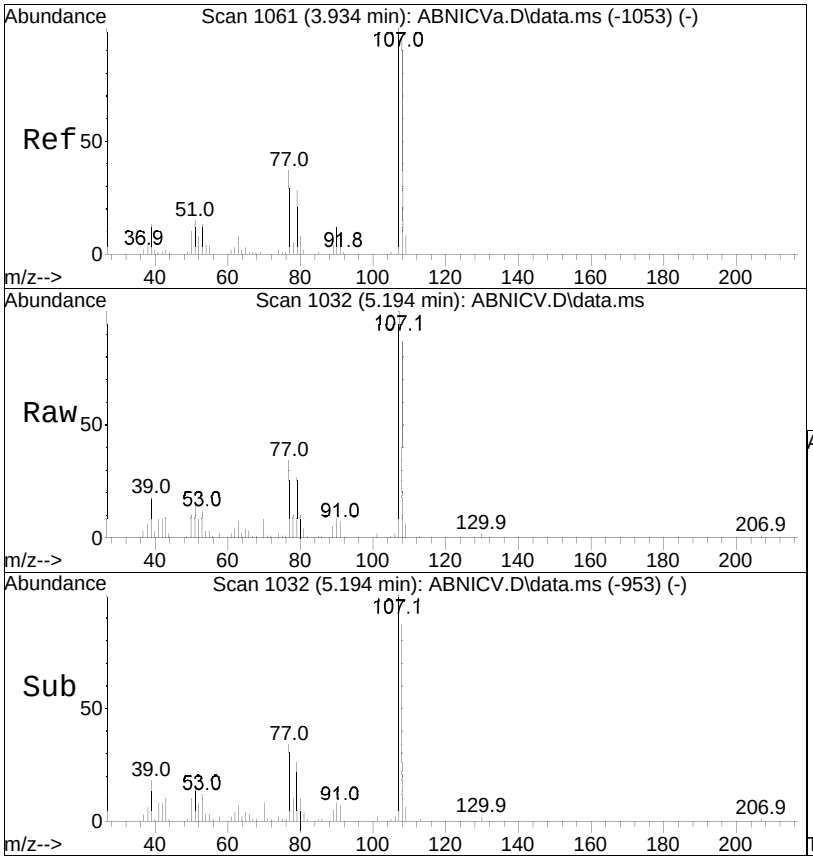


#17
n-Nitrosodi-n-propylamine
Concen: 4.92 ug/ml
RT: 5.182 min Scan# 1028
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 70 Resp: 16393

Ion	Ratio	Lower	Upper
70	100		
130	16.0	18.2	27.4#
101	7.9	7.8	11.8

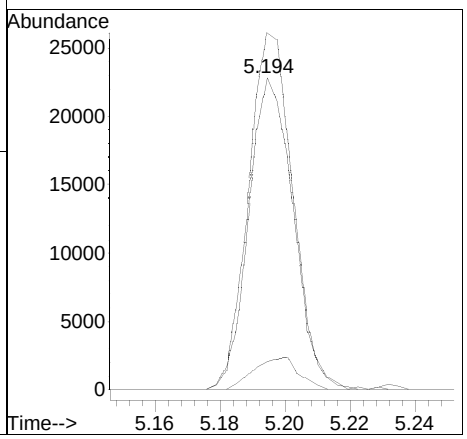


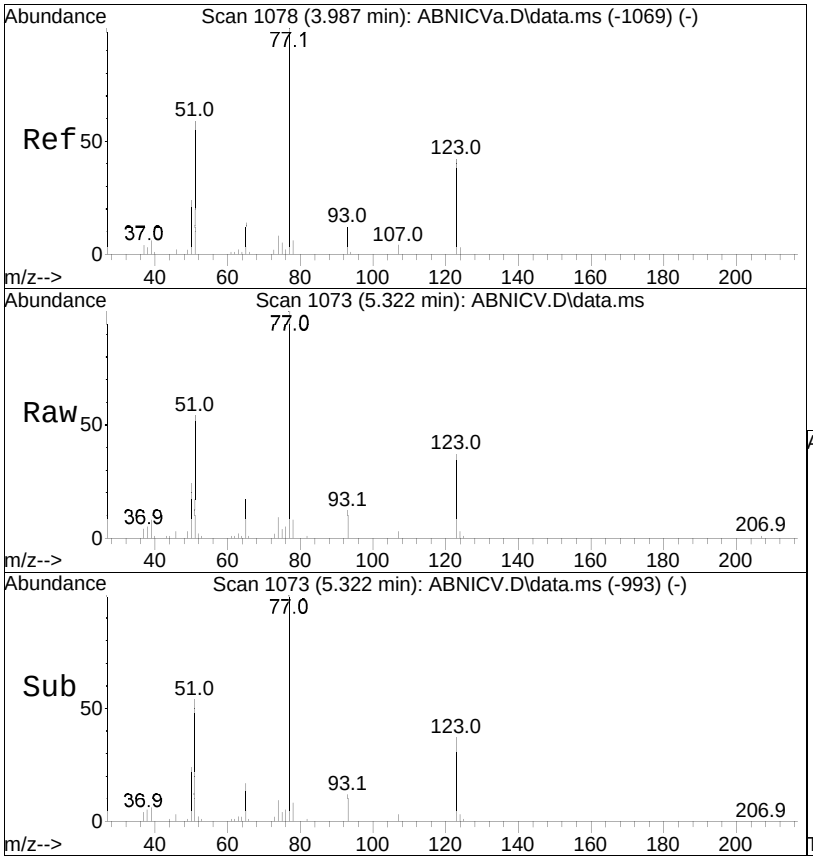


#18
3-Methylphenol/4-Methylphenol
Concen: 5.06 ug/ml
RT: 5.194 min Scan# 1032
Delta R.T. -0.004 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:108 Resp: 21656

Ion	Ratio	Lower	Upper
108	100		
107	113.7	88.6	132.8
90	10.3	8.8	13.2

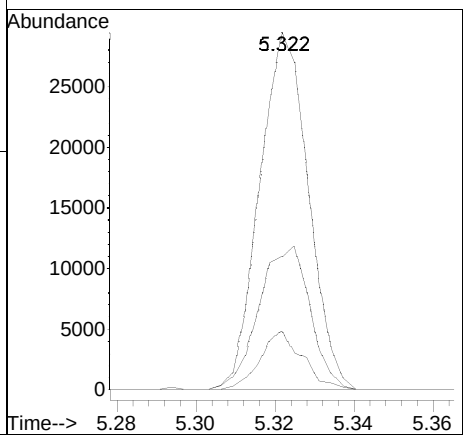


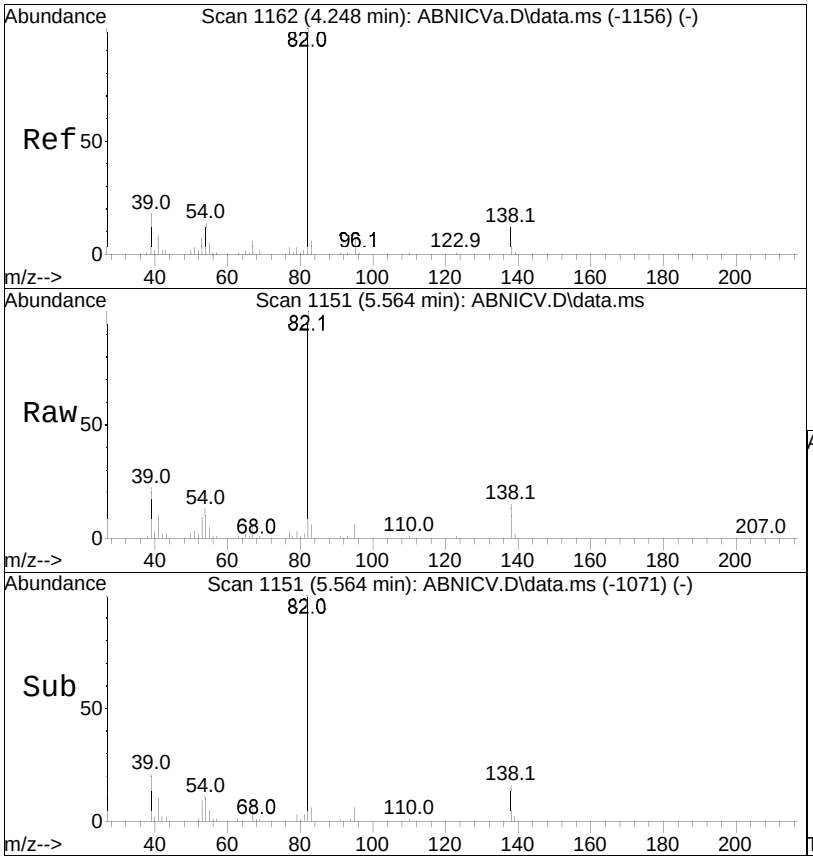


#20
Nitrobenzene
Concen: 4.99 ug/ml
RT: 5.322 min Scan# 1073
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 77 Resp: 25104

Ion	Ratio	Lower	Upper
77	100		
123	42.1	36.3	54.5
65	14.3	11.6	17.4

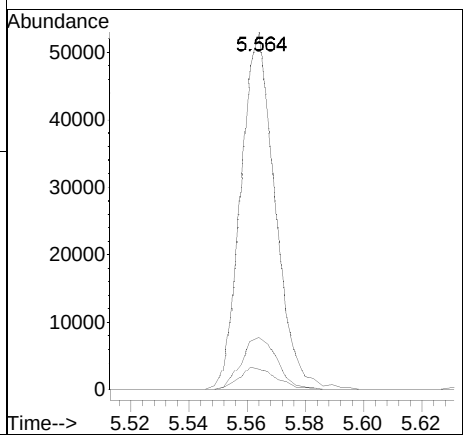


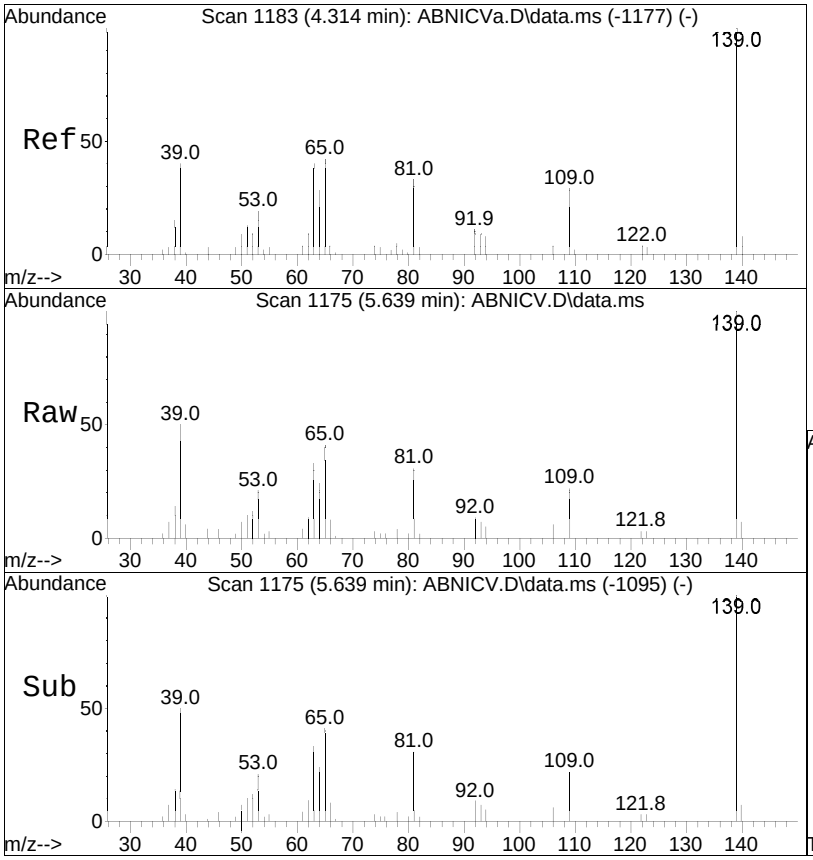


#21
Isophorone
Concen: 4.82 ug/ml
RT: 5.564 min Scan# 1151
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 82 Resp: 42862

Ion	Ratio	Lower	Upper
82	100		
138	15.4	14.7	22.1
95	6.7	5.2	7.8

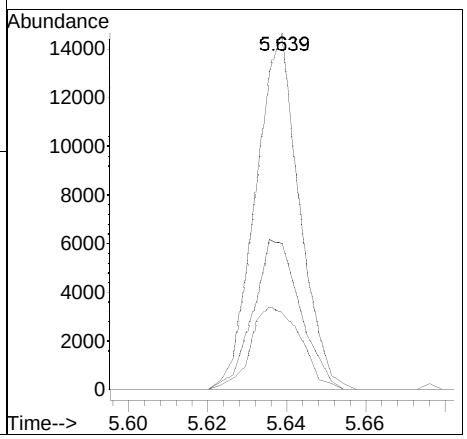


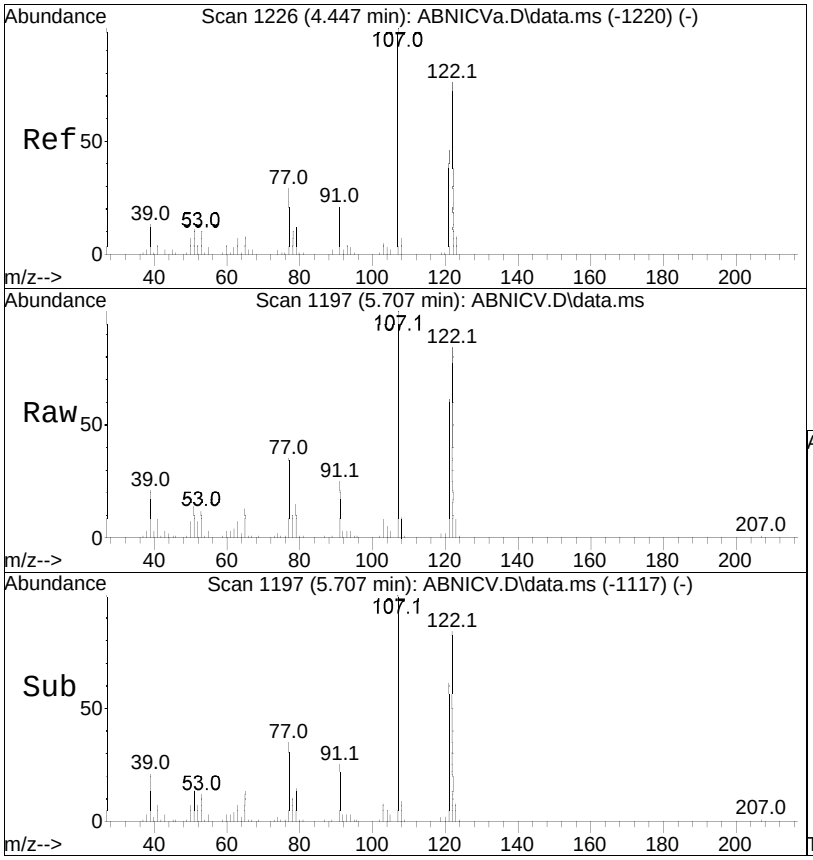


#22
2-Nitrophenol
Concen: 4.75 ug/ml
RT: 5.639 min Scan# 1175
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:139 Resp: 11171

Ion	Ratio	Lower	Upper
139	100		
109	26.6	19.4	29.0
65	45.2	46.1	69.1#

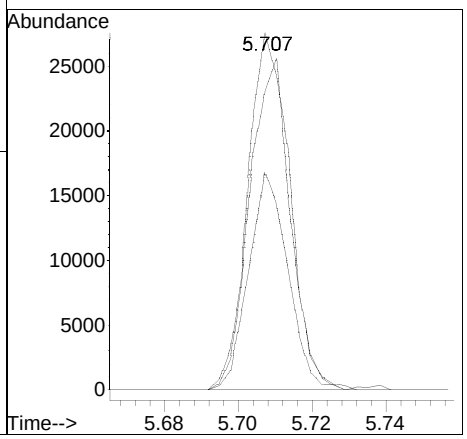


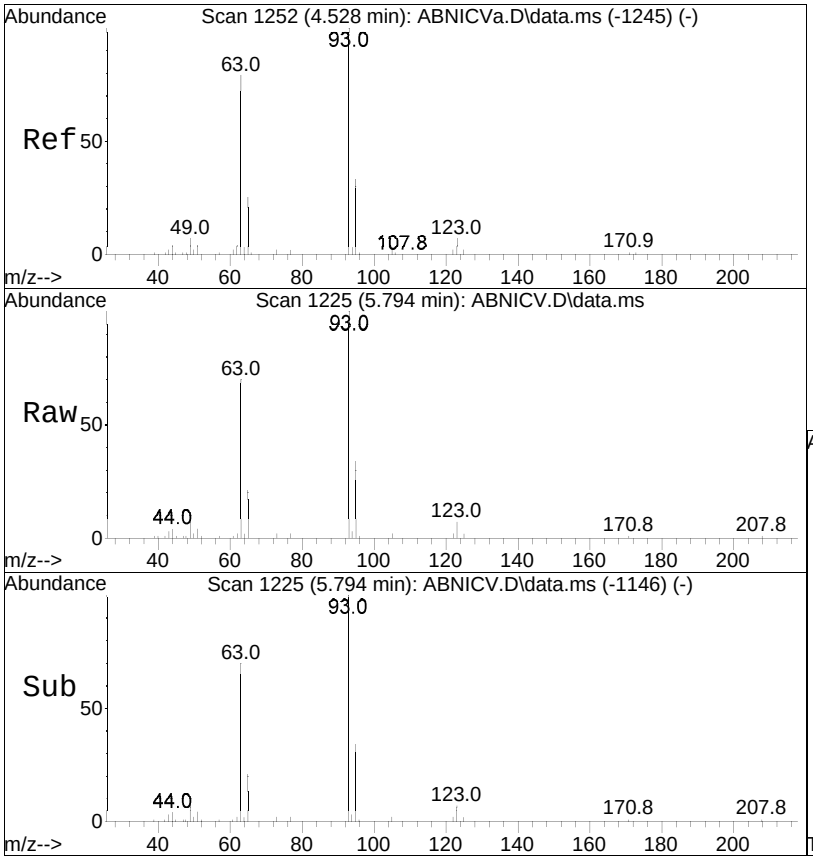


#23
2,4-Dimethylphenol
Concen: 4.79 ug/ml
RT: 5.707 min Scan# 1197
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:107 Resp: 21676

Ion	Ratio	Lower	Upper
107	100		
121	56.9	40.0	60.0
122	90.0	70.2	105.4

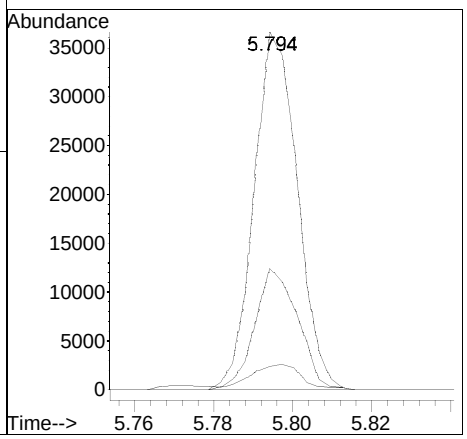


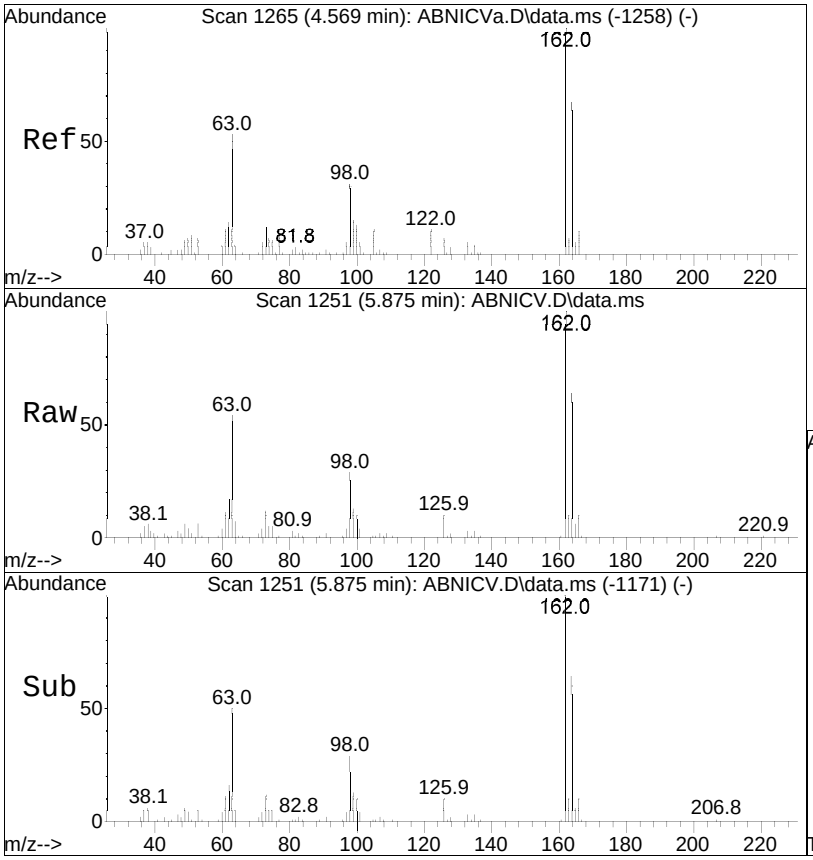


#24
Bis(2-chloroethoxy)methane
Concen: 4.80 ug/ml
RT: 5.794 min Scan# 1225
Delta R.T. -0.004 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 93 Resp: 27694

Ion	Ratio	Lower	Upper
93	100		
95	33.7	25.8	38.8
123	8.4	10.1	15.1#

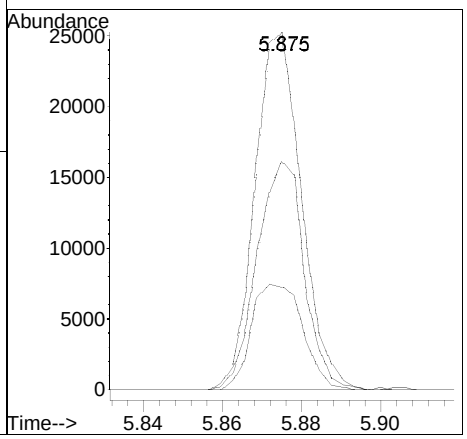


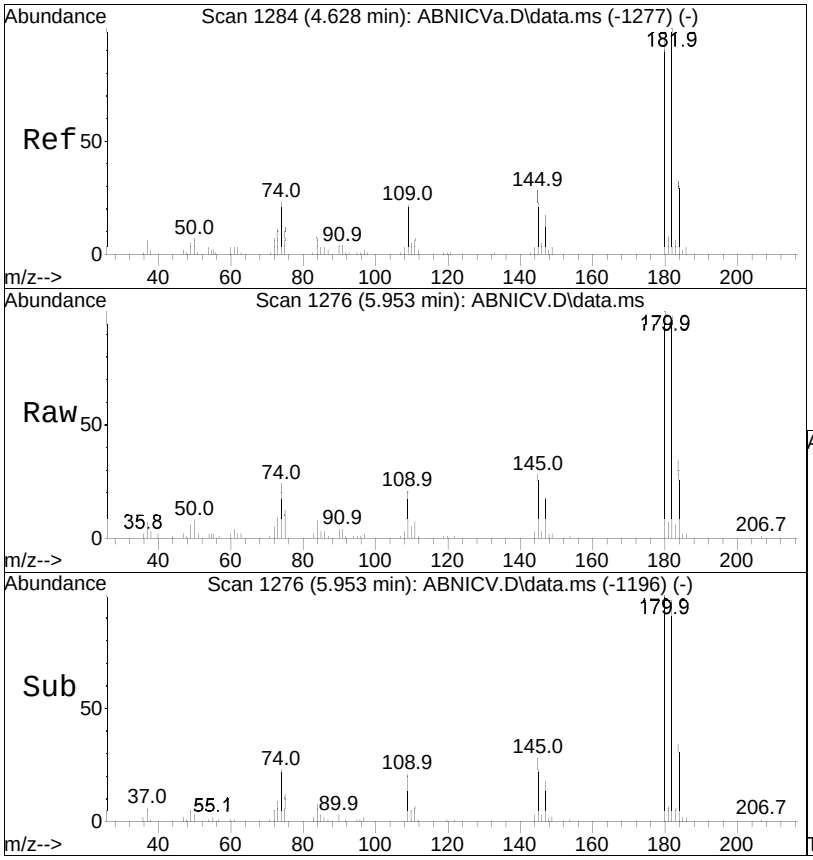


#25
2,4-Dichlorophenol
Concen: 4.82 ug/ml
RT: 5.875 min Scan# 1251
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:162 Resp: 20503

Ion	Ratio	Lower	Upper
162	100		
164	65.2	51.0	76.4
98	32.9	32.2	48.2

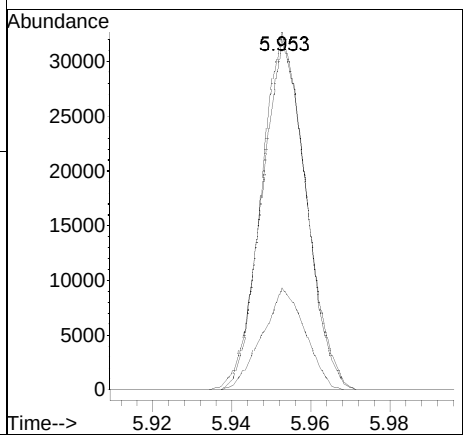


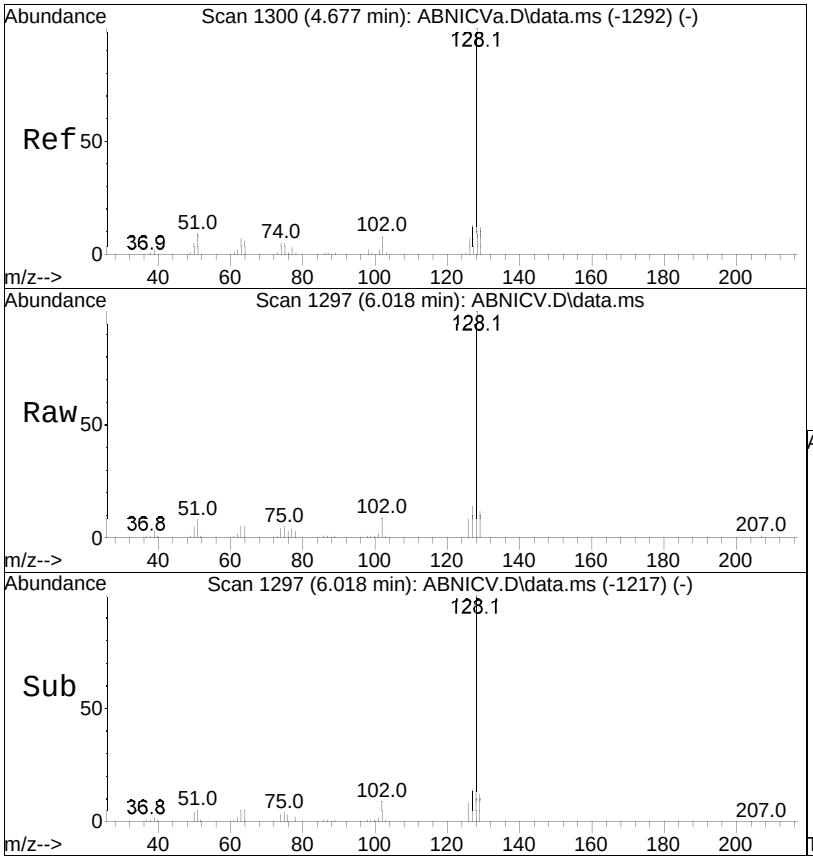


#26
1,2,4-Trichlorobenzene
Concen: 4.88 ug/ml
RT: 5.953 min Scan# 1276
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:180 Resp: 25404

Ion	Ratio	Lower	Upper
180	100		
182	97.3	76.0	114.0
145	27.6	25.7	38.5

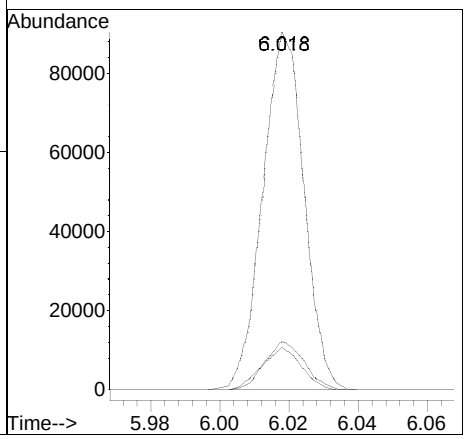


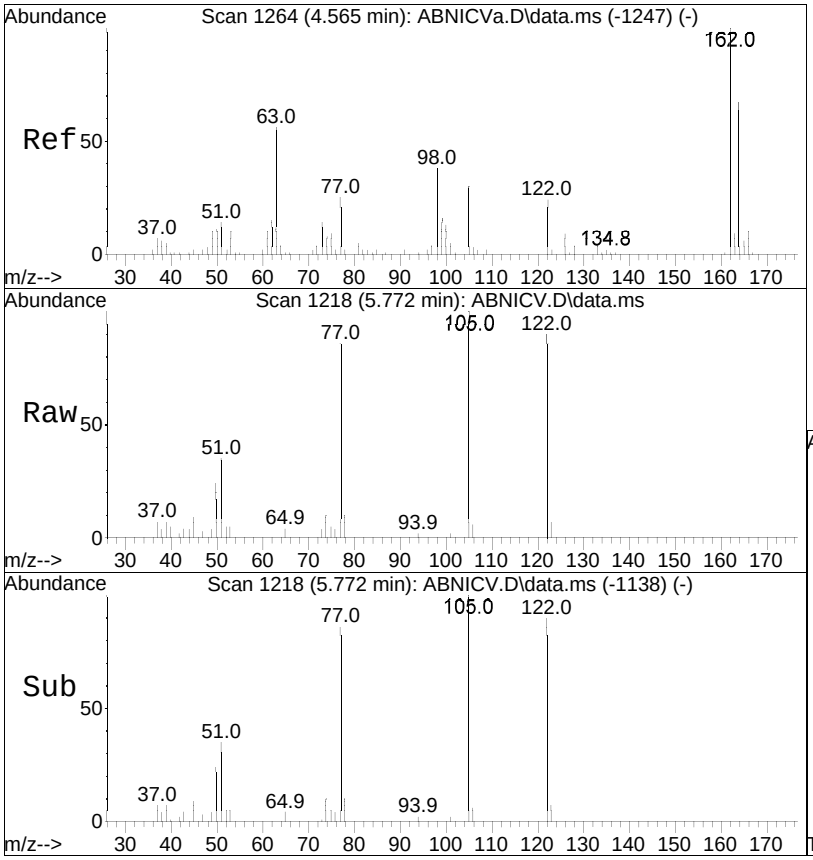


#35
Naphthalene
Concen: 4.98 ug/ml
RT: 6.018 min Scan# 1297
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:128 Resp: 73973

Ion	Ratio	Lower	Upper
128	100		
129	11.0	8.7	13.1
127	13.5	10.3	15.5

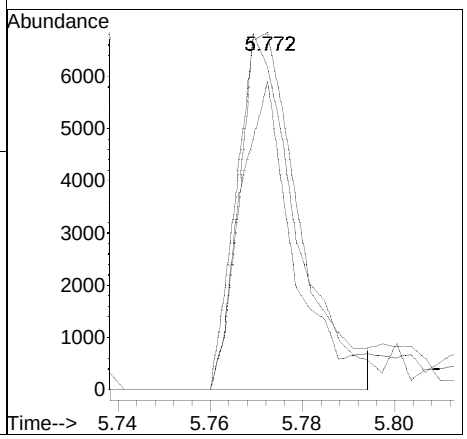


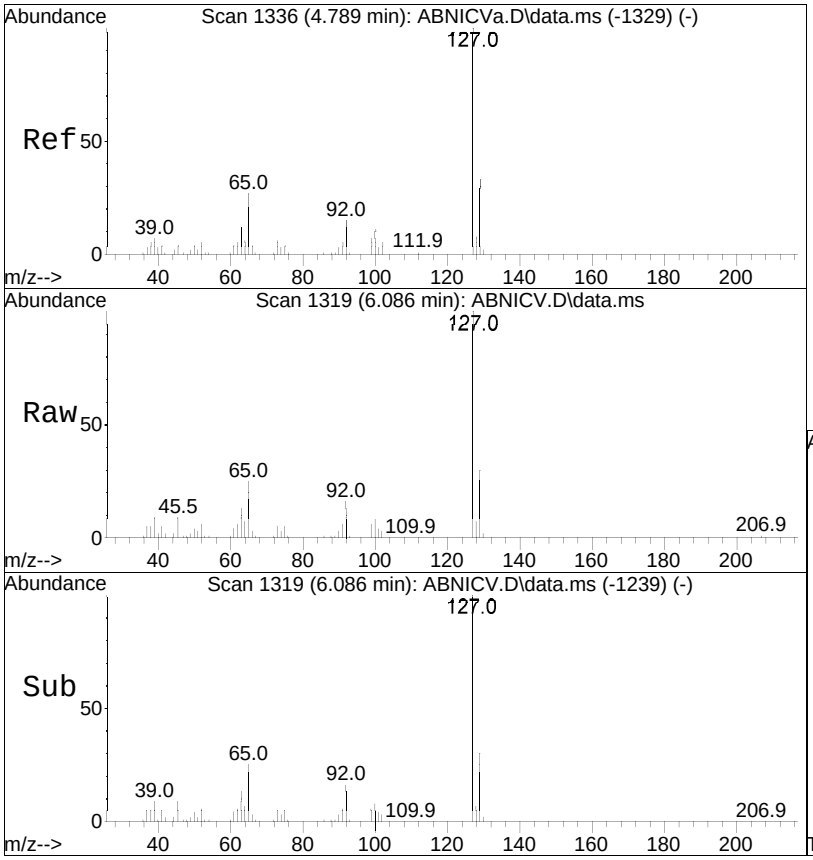


#36
Benzoic Acid
Concen: 4.08 ug/ml
RT: 5.772 min Scan# 1218
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:105 Resp: 6433

Ion	Ratio	Lower	Upper
105	100		
122	97.0	59.9	89.9#
77	76.3	60.1	90.1

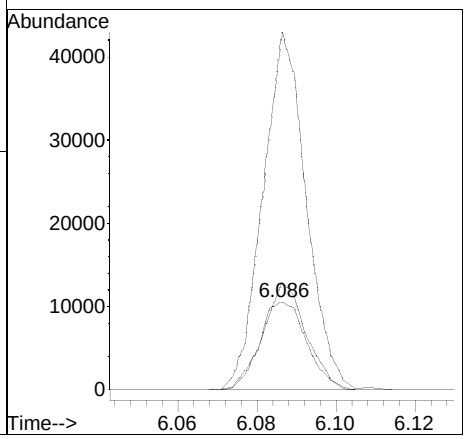


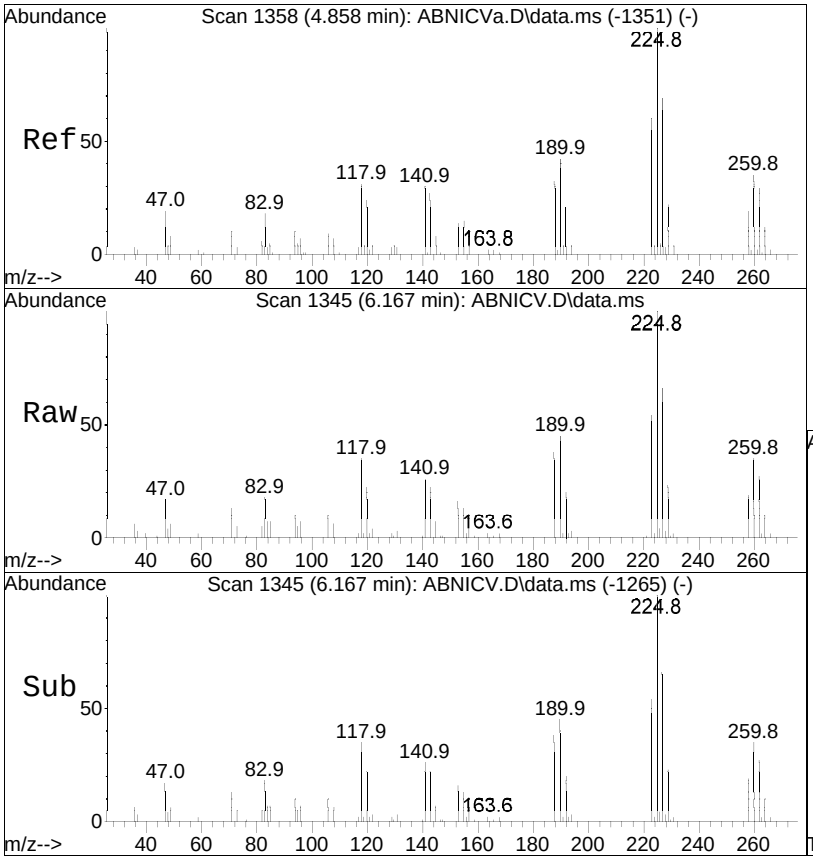


#37
4-Chloroaniline
Concen: 5.03 ug/ml
RT: 6.086 min Scan# 1319
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 65 Resp: 8818

Ion	Ratio	Lower	Upper
65	100		
127	368.8	237.6	356.4#
129	108.8	76.3	114.5

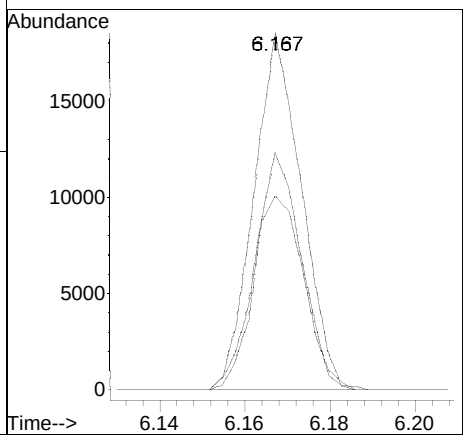


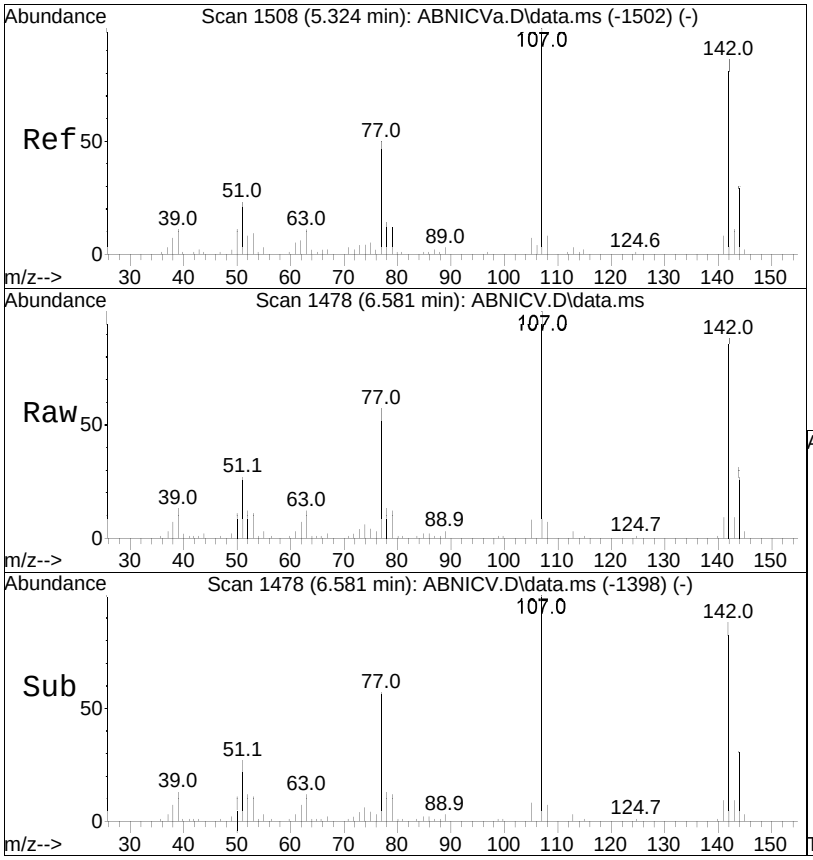


#38
Hexachlorobutadiene
Concen: 4.74 ug/ml
RT: 6.167 min Scan# 1345
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:225 Resp: 14309

Ion	Ratio	Lower	Upper
225	100		
223	57.8	50.3	75.5
227	65.3	52.2	78.2

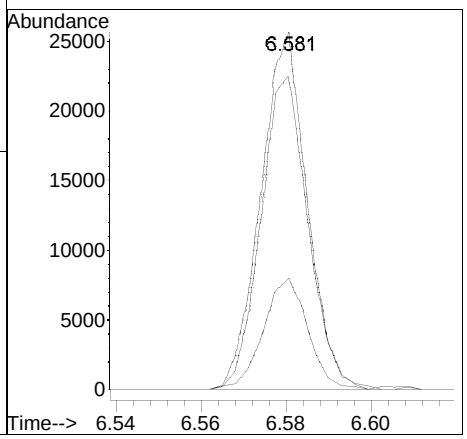


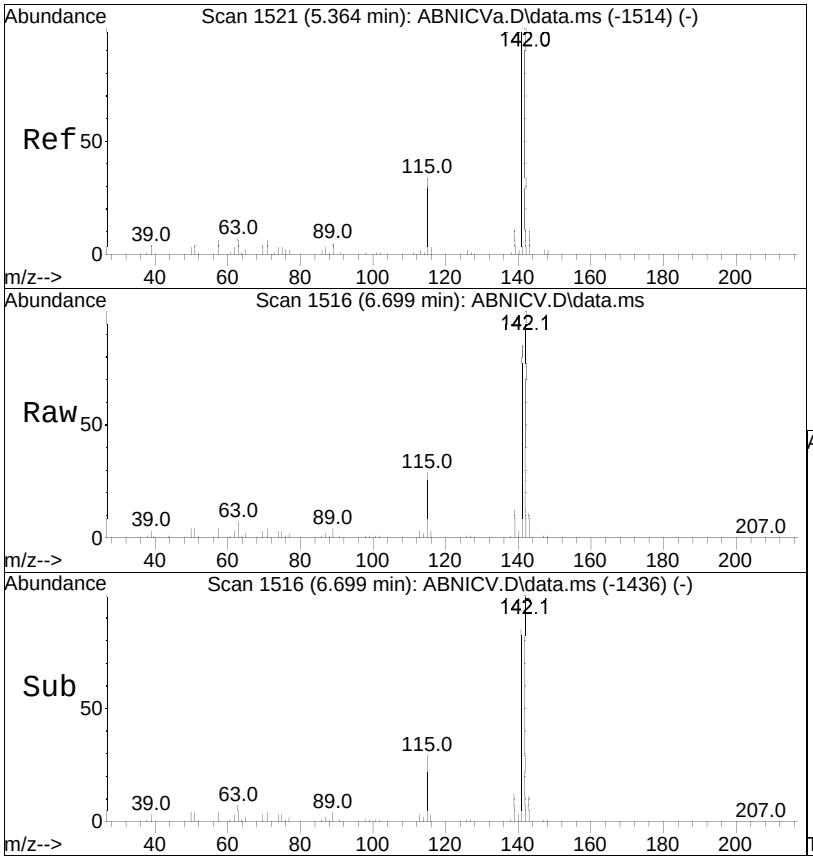


#39
p-Chloro-m-cresol
Concen: 4.97 ug/ml
RT: 6.581 min Scan# 1478
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:107 Resp: 19253

Ion	Ratio	Lower	Upper
107	100		
144	30.0	20.9	31.3
142	88.9	66.1	99.1

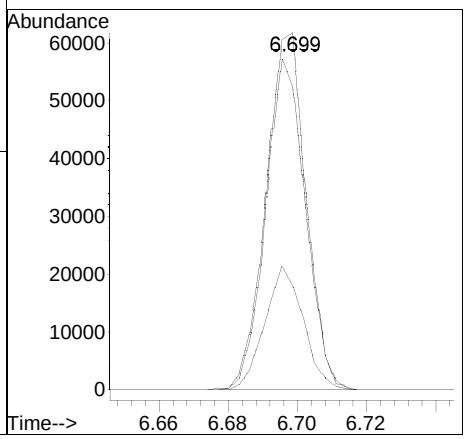


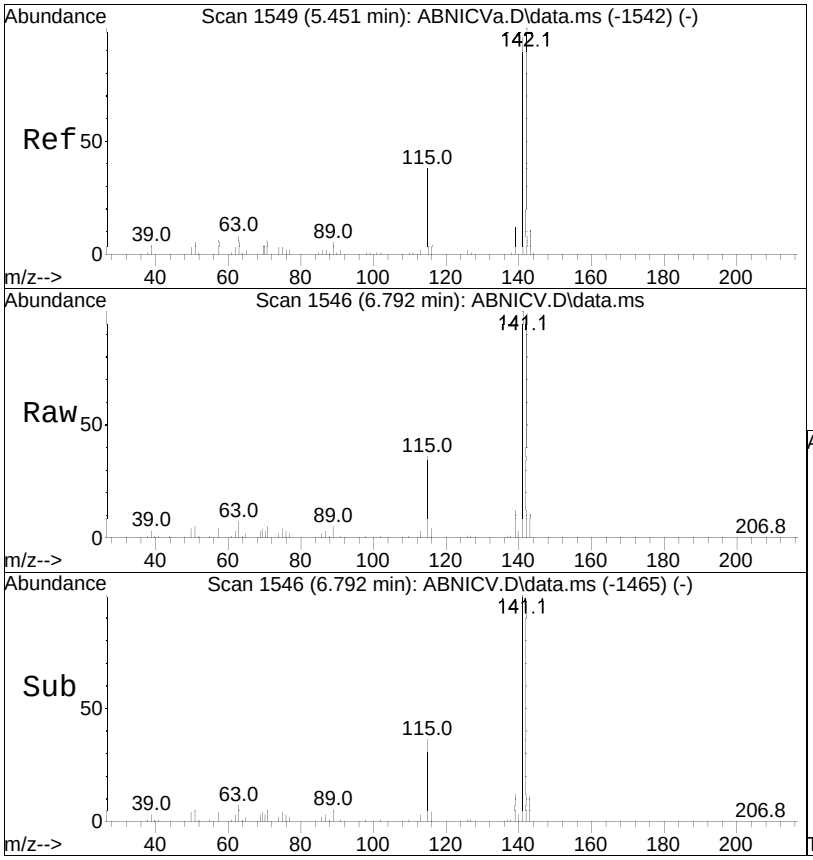


#40
2-Methylnaphthalene
Concen: 5.17 ug/ml
RT: 6.699 min Scan# 1516
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:142 Resp: 49891

Ion	Ratio	Lower	Upper
142	100		
141	91.1	69.6	104.4
115	33.0	26.6	40.0

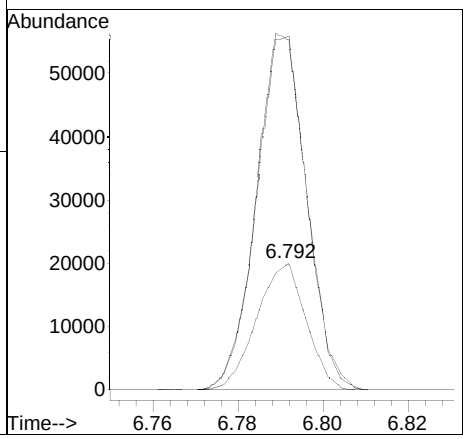


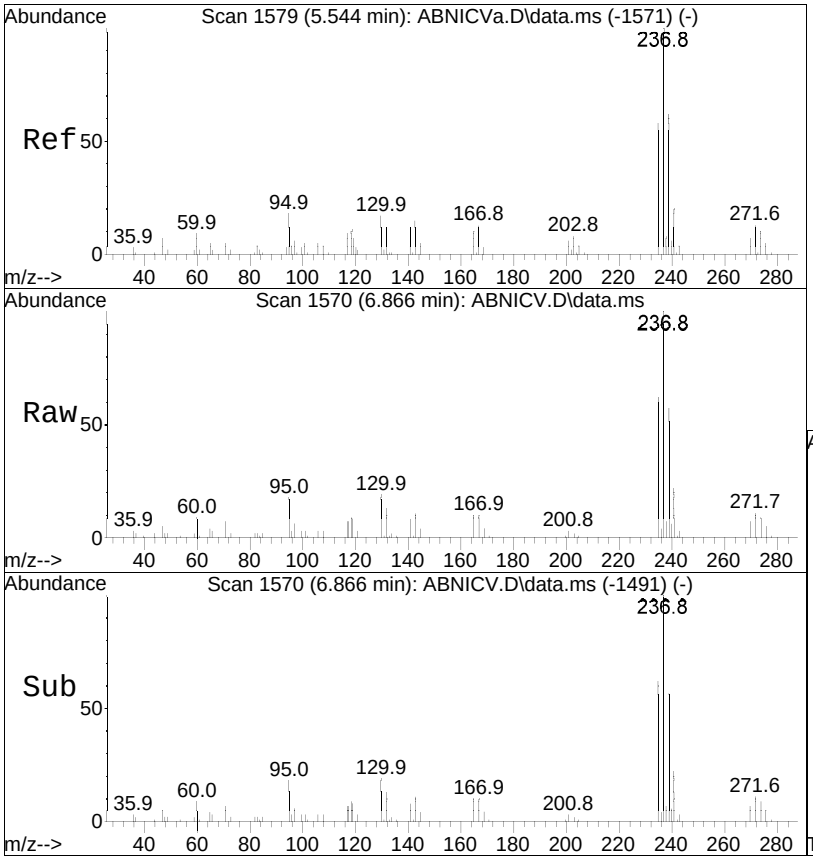


#41
1-Methylnaphthalene
Concen: 4.83 ug/ml
RT: 6.792 min Scan# 1546
Delta R.T. 0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:115 Resp: 16124

Ion	Ratio	Lower	Upper
115	100		
141	282.7	207.8	311.6
142	285.9	226.8	340.2

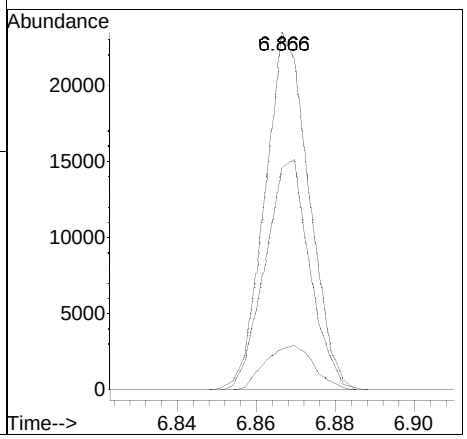


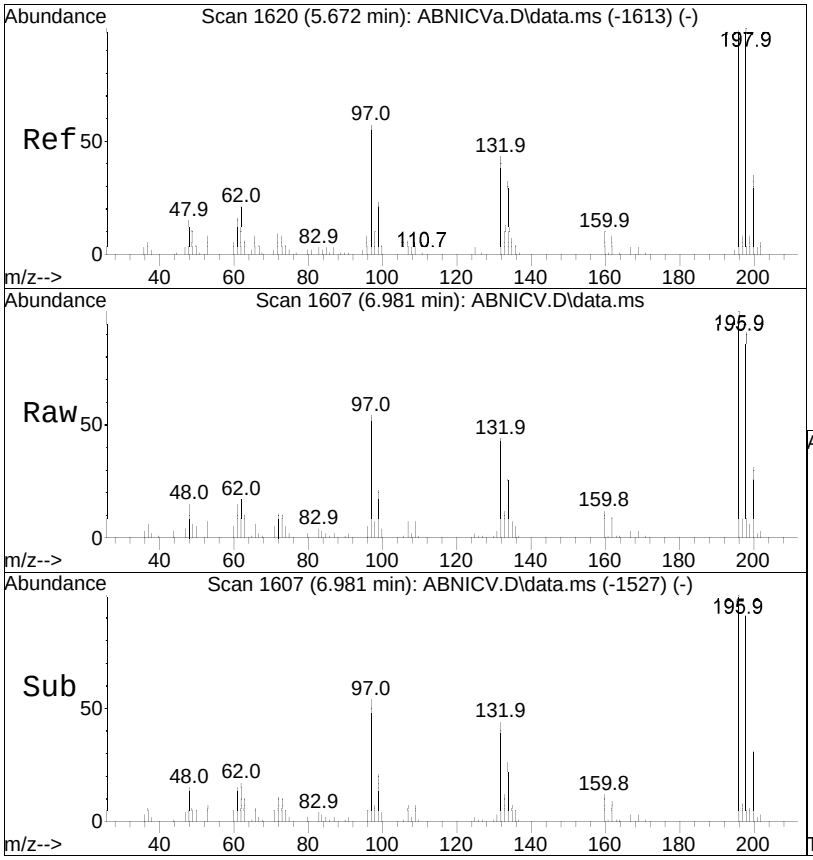


#42
Hexachlorocyclopentadiene
Concen: 4.96 ug/ml
RT: 6.866 min Scan# 1570
Delta R.T. -0.004 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:237 Resp: 18095

Ion	Ratio	Lower	Upper
237	100		
235	65.4	49.7	74.5
272	13.8	9.8	14.6

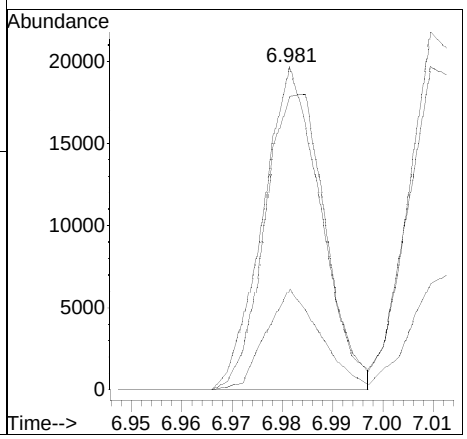


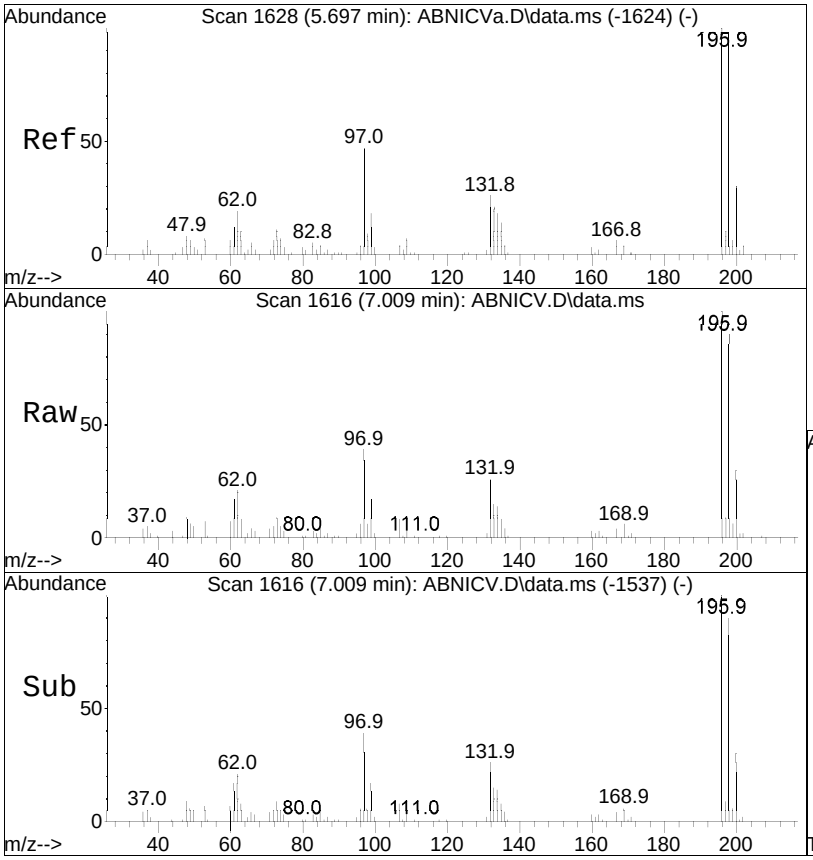


#43
2,4,6-Trichlorophenol
Concen: 4.49 ug/ml
RT: 6.981 min Scan# 1607
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:196 Resp: 15756

Ion	Ratio	Lower	Upper
196	100		
198	96.1	77.5	116.3
200	29.5	23.8	35.6

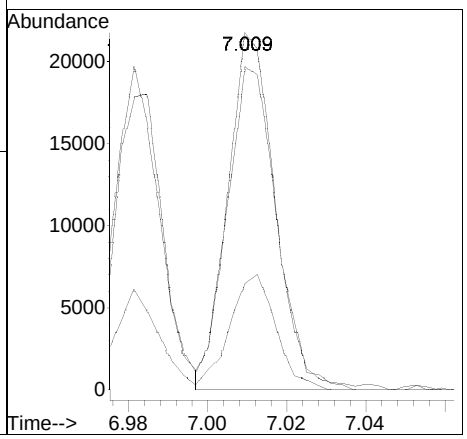


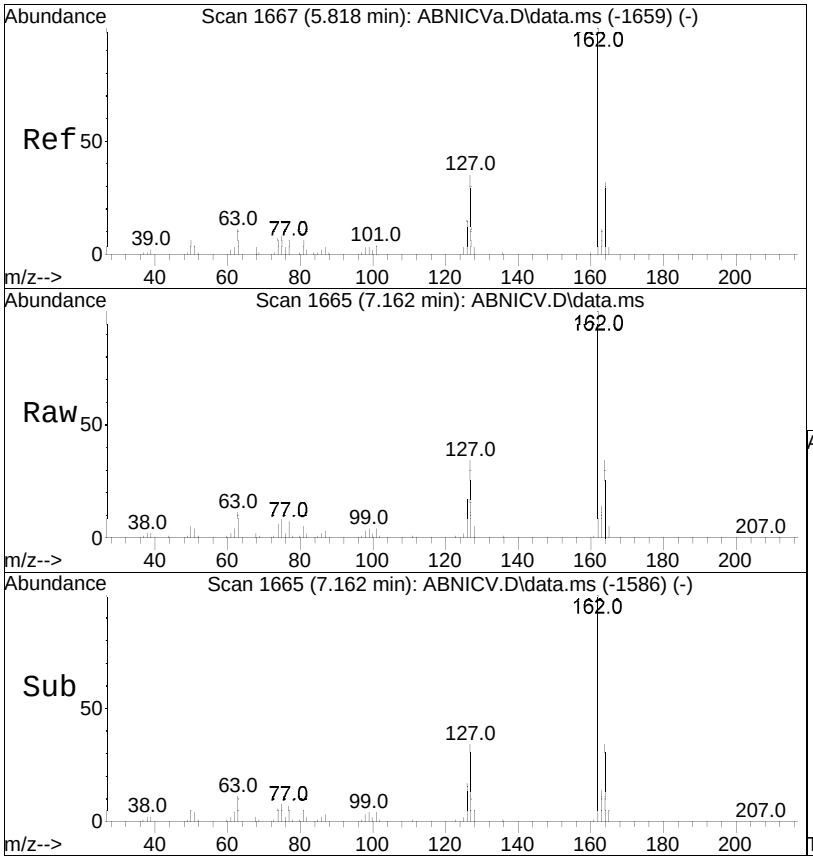


#44
2,4,5-Trichlorophenol
Concen: 5.07 ug/ml
RT: 7.009 min Scan# 1616
Delta R.T. -0.004 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:196 Resp: 18096

Ion	Ratio	Lower	Upper
196	100		
200	31.7	25.4	38.0
198	95.1	78.0	117.0

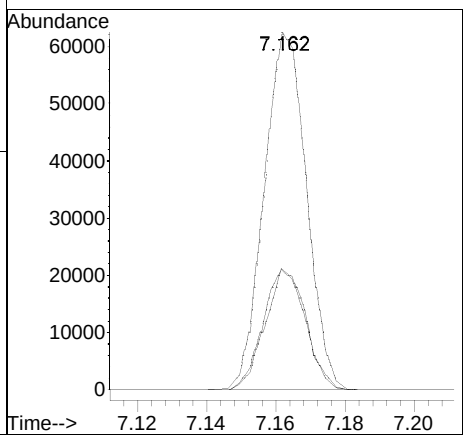


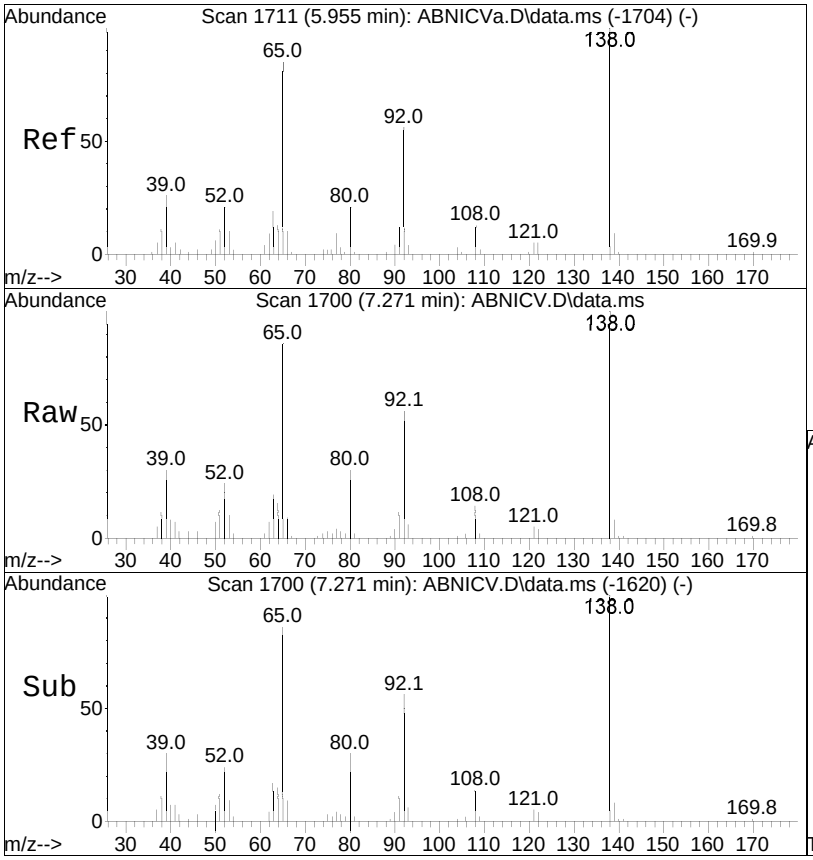


#46
2-Chloronaphthalene
Concen: 4.97 ug/ml
RT: 7.162 min Scan# 1665
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:162 Resp: 52548

Ion	Ratio	Lower	Upper
162	100		
127	33.7	32.2	48.4
164	32.9	25.7	38.5

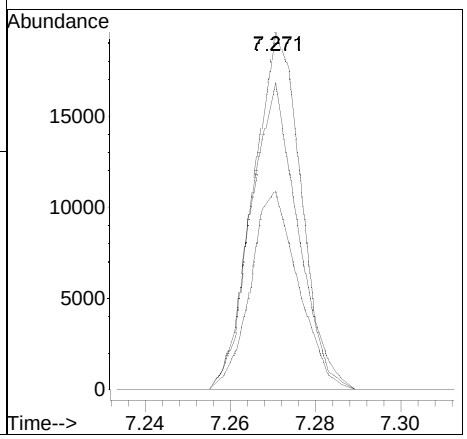


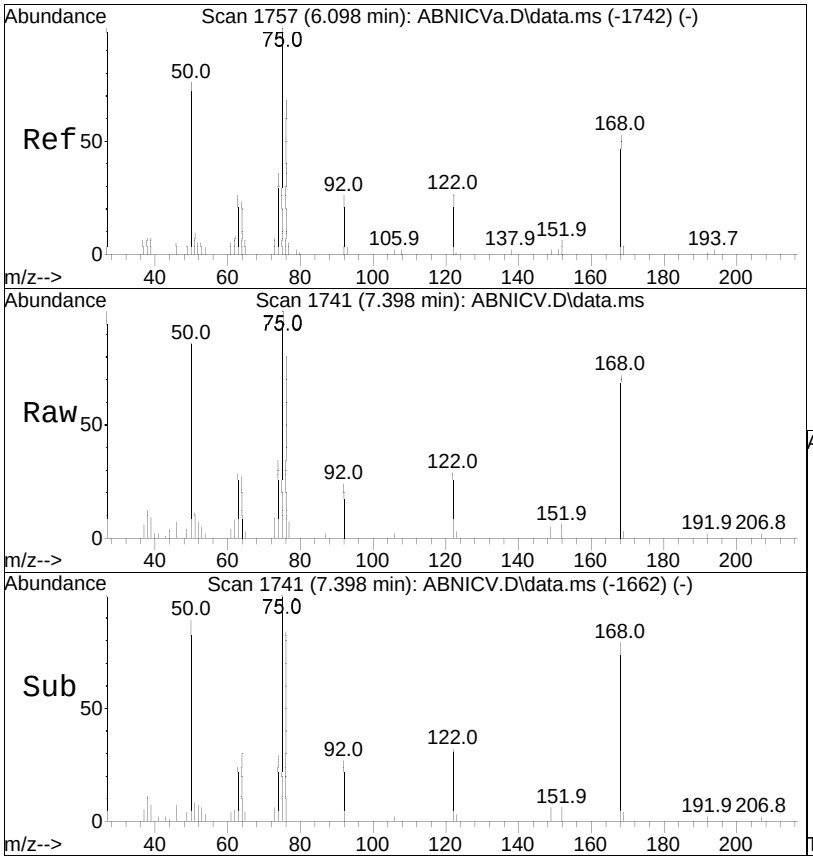


#47
2-Nitroaniline
Concen: 5.00 ug/ml
RT: 7.271 min Scan# 1700
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:138 Resp: 15281

Ion	Ratio	Lower	Upper
138	100		
92	55.3	53.5	80.3
65	83.1	86.3	129.5#

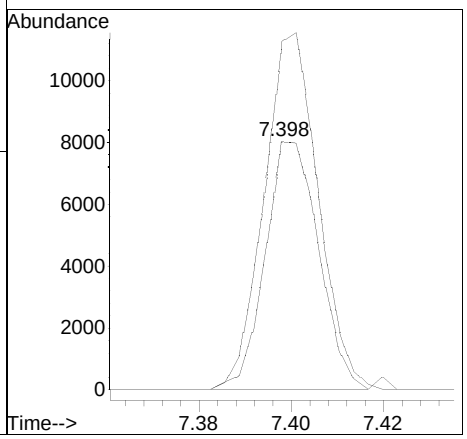


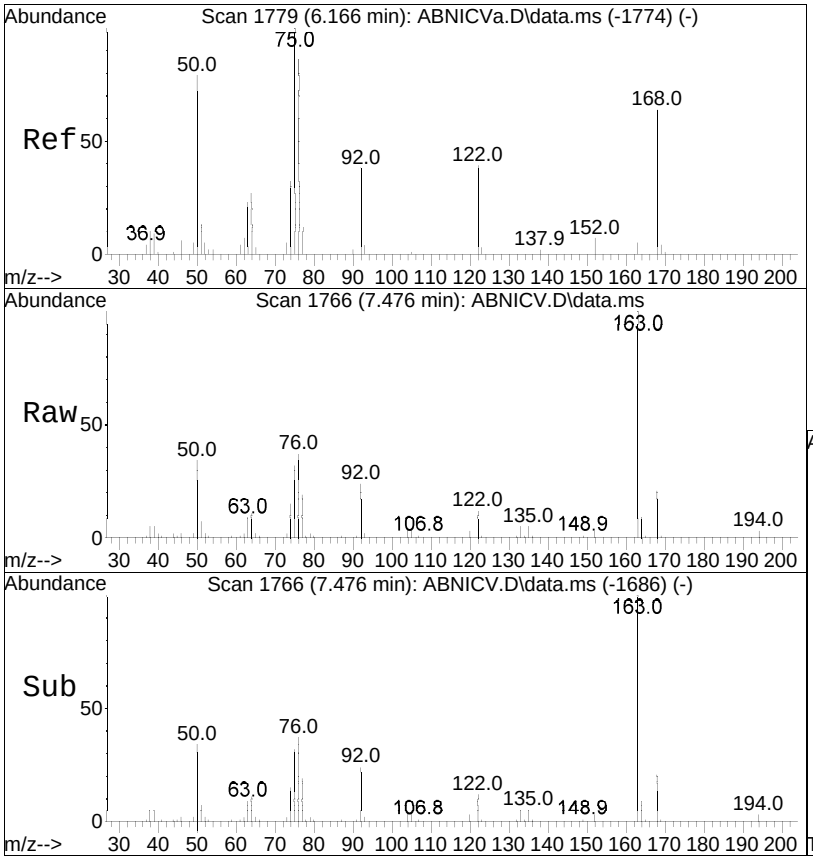


#48
1,4-Dinitrobenzene
Concen: 4.52 ug/ml
RT: 7.398 min Scan# 1741
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:168 Resp: 6461

Ion	Ratio	Lower	Upper
168	100		
75	145.4	121.8	182.8

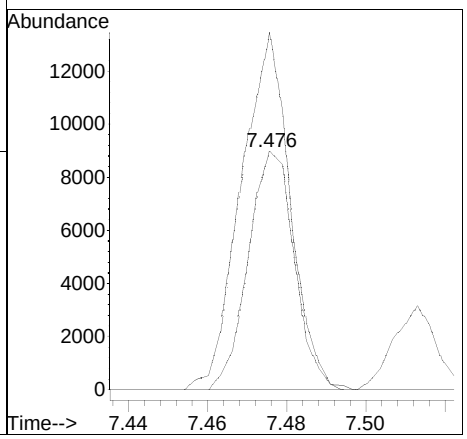


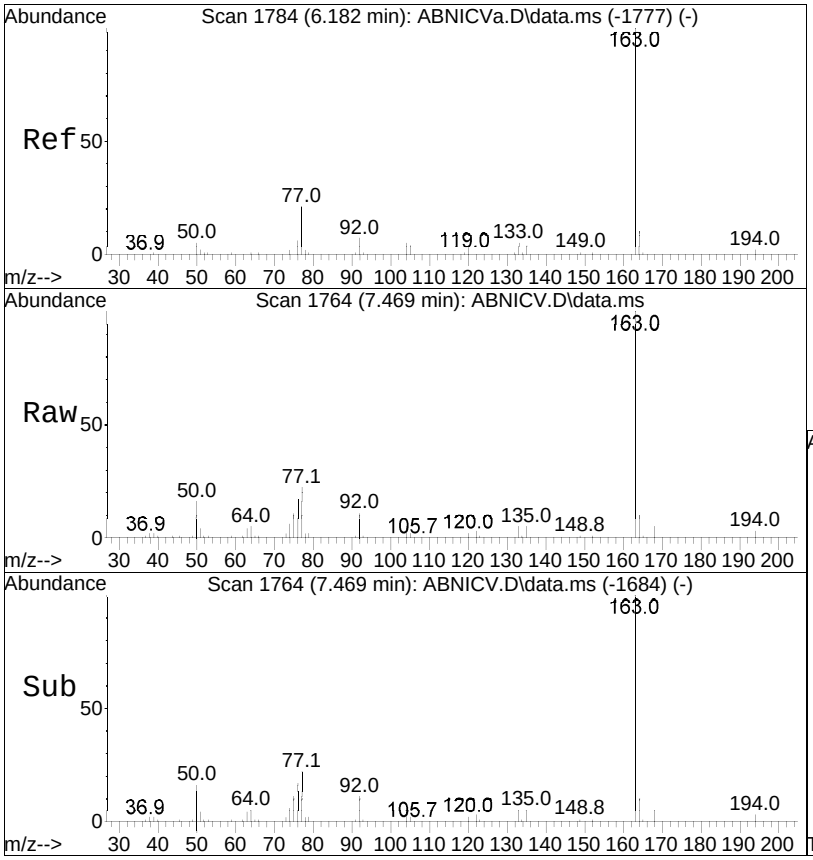


#49
1,3-Dinitrobenzene
Concen: 4.36 ug/ml
RT: 7.476 min Scan# 1766
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:168 Resp: 7254

Ion	Ratio	Lower	Upper
168	100		
75	158.4	22.7	34.1#

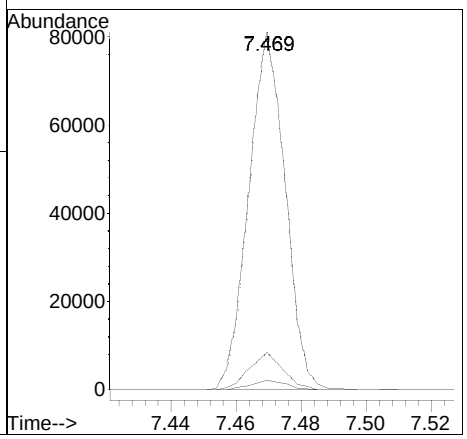


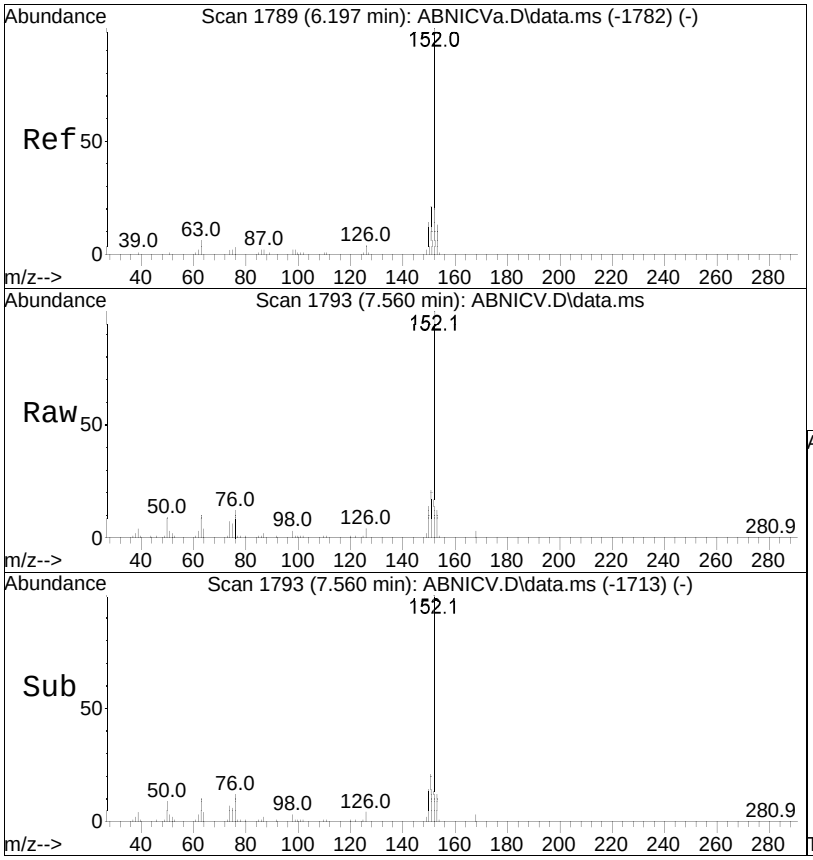


#50
Dimethyl phthalate
Concen: 5.05 ug/ml
RT: 7.469 min Scan# 1764
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:163 Resp: 62389

Ion	Ratio	Lower	Upper
163	100		
194	2.5	3.5	5.3#
164	9.8	7.9	11.9

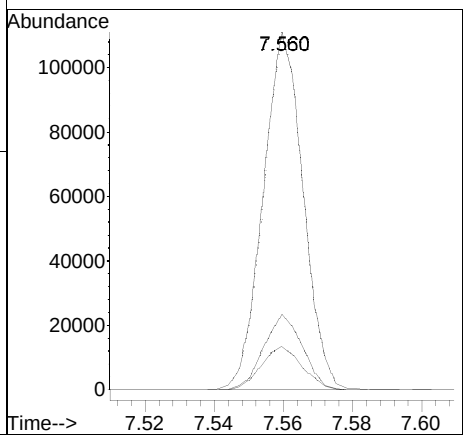


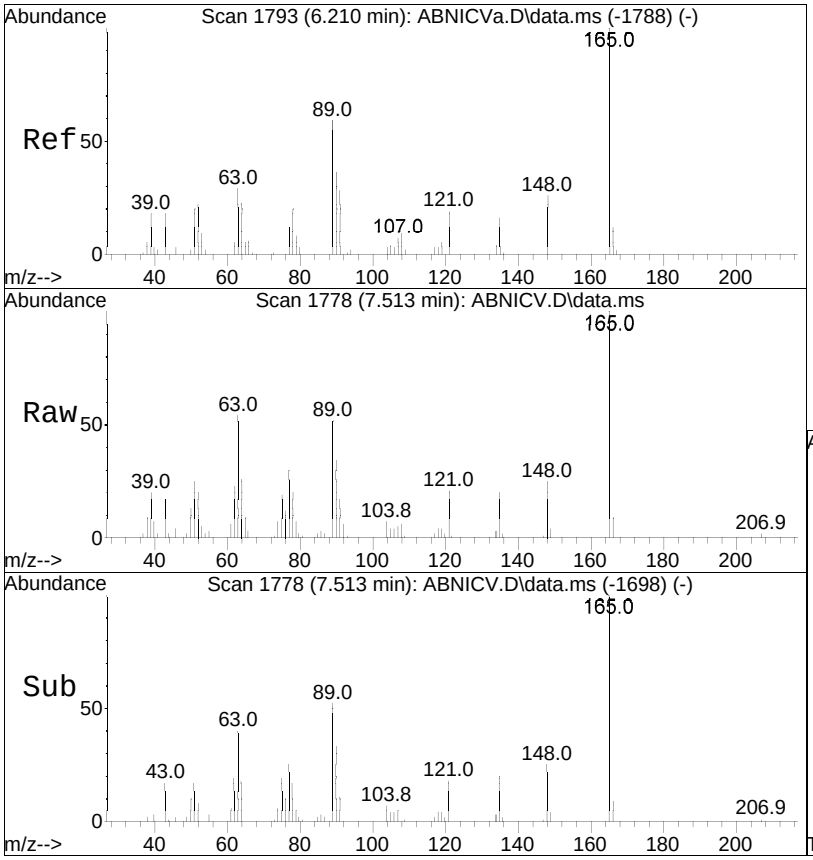


#51
Acenaphthylene
Concen: 5.50 ug/ml
RT: 7.560 min Scan# 1793
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:152 Resp: 88202

Ion	Ratio	Lower	Upper
152	100		
151	20.6	15.8	23.6
153	12.5	10.5	15.7

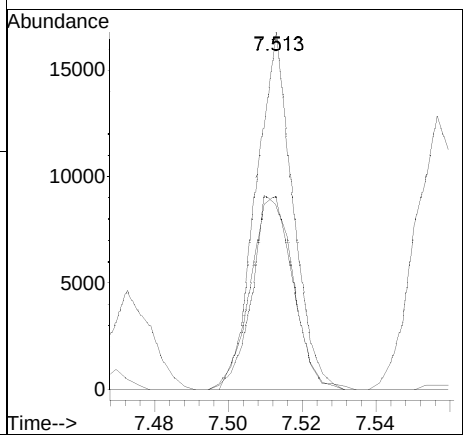


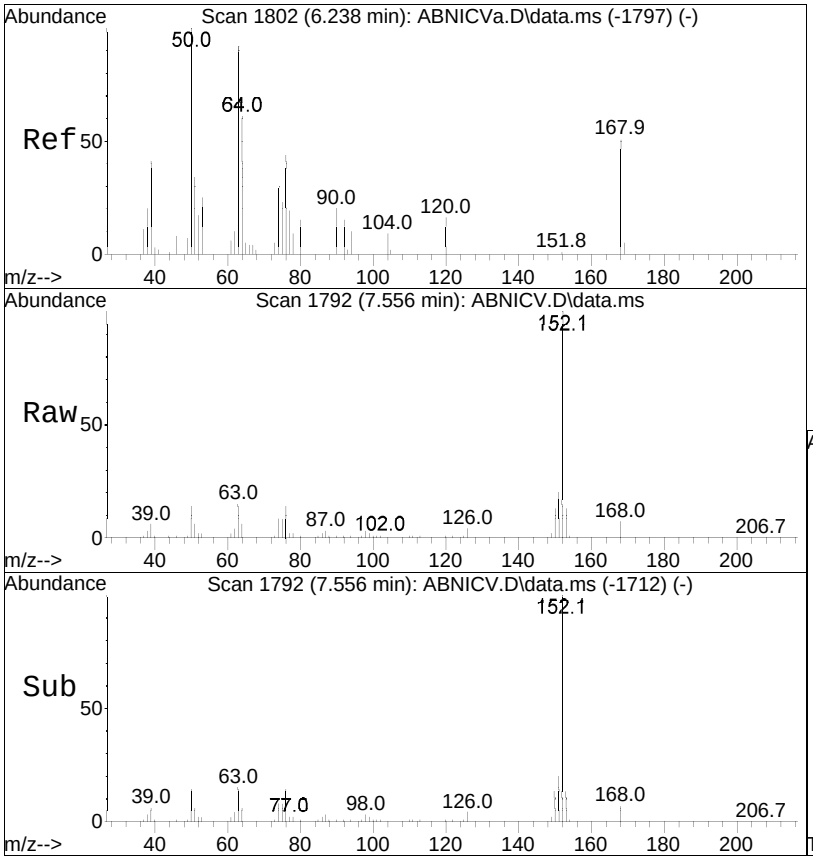


#52
2,6-Dinitrotoluene
Concen: 4.61 ug/ml
RT: 7.513 min Scan# 1778
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:165 Resp: 11757

Ion	Ratio	Lower	Upper
165	100		
89	59.9	54.2	81.2
63	61.7	64.2	96.2#

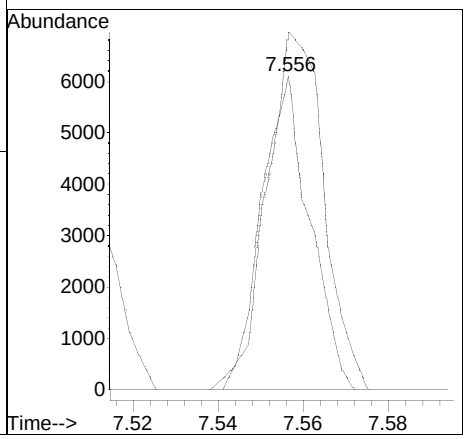


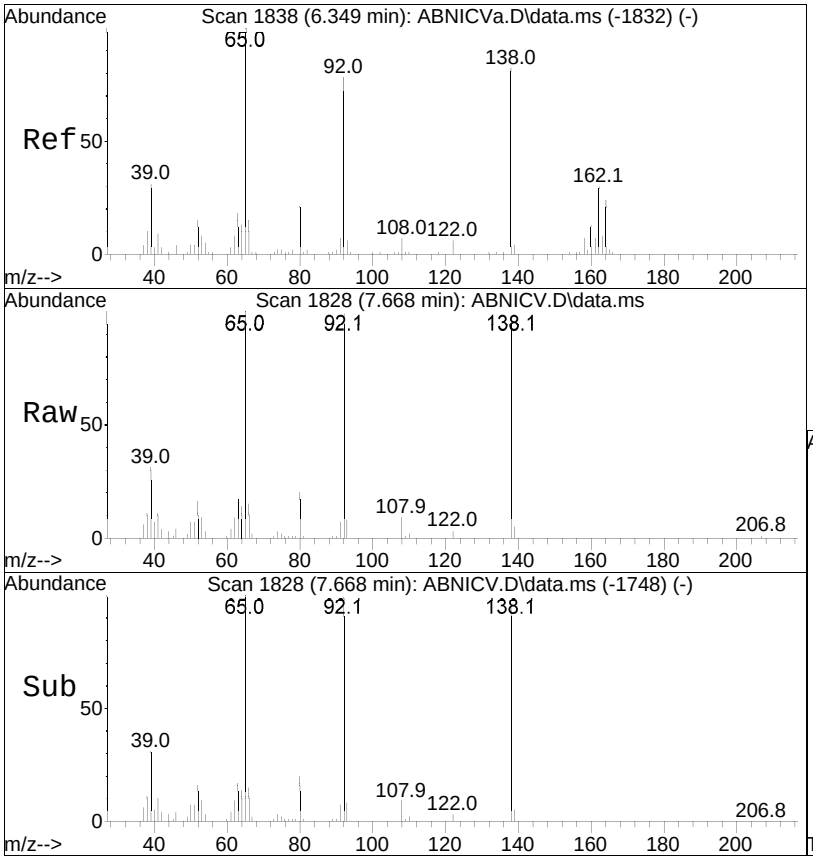


#53
1,2-Dinitrobenzene
Concen: 4.84 ug/ml
RT: 7.556 min Scan# 1792
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:168 Resp: 4826

Ion	Ratio	Lower	Upper
168	100		
75	132.0	30.9	46.3#

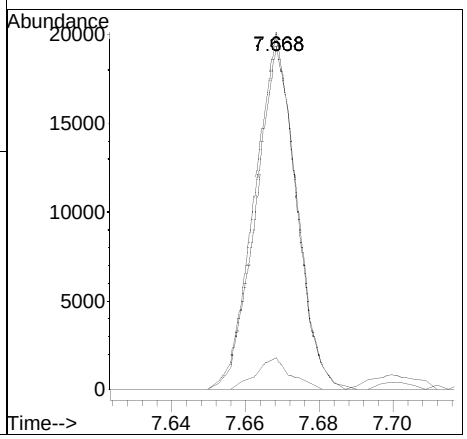


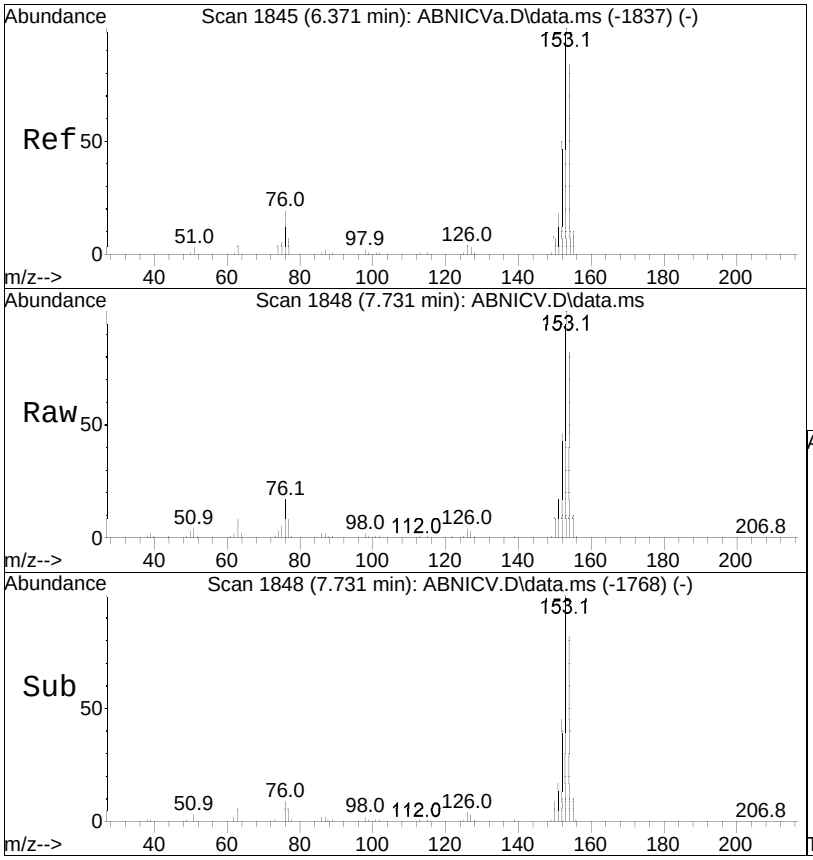


#63
3-Nitroaniline
Concen: 5.27 ug/ml
RT: 7.668 min Scan# 1828
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:138 Resp: 14873

Ion	Ratio	Lower	Upper
138	100		
92	103.8	93.4	140.2
108	7.8	9.5	14.3#

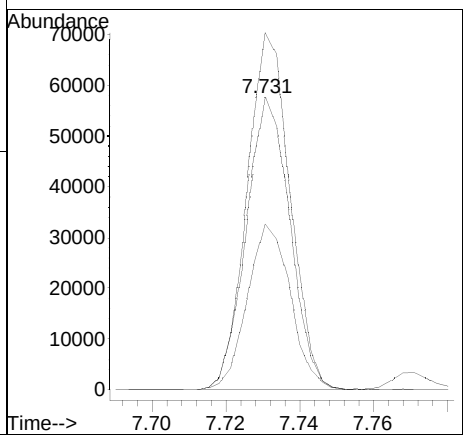


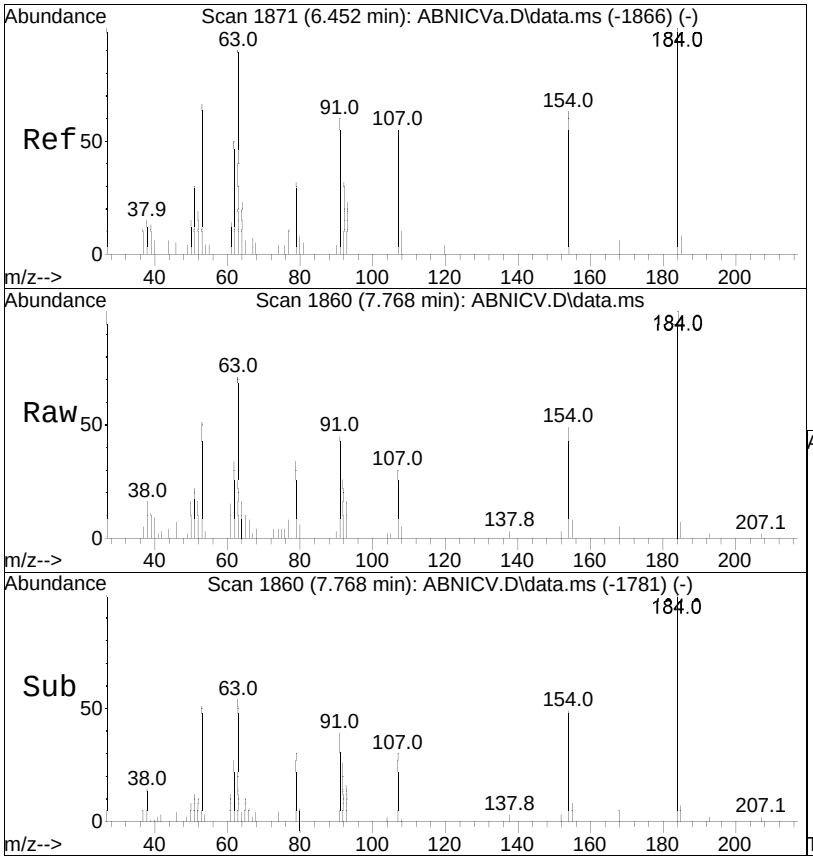


#64
Acenaphthene
Concen: 4.92 ug/ml
RT: 7.731 min Scan# 1848
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:154 Resp: 47529

Ion	Ratio	Lower	Upper
154	100		
153	120.2	85.3	127.9
152	56.2	41.4	62.0

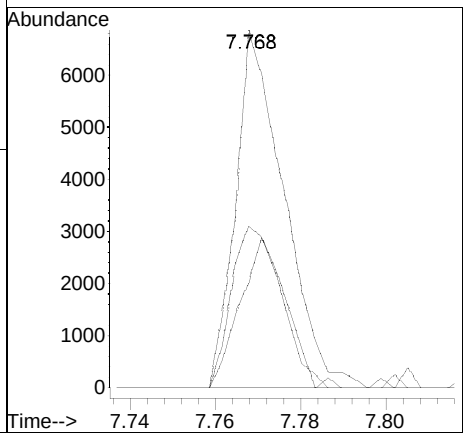


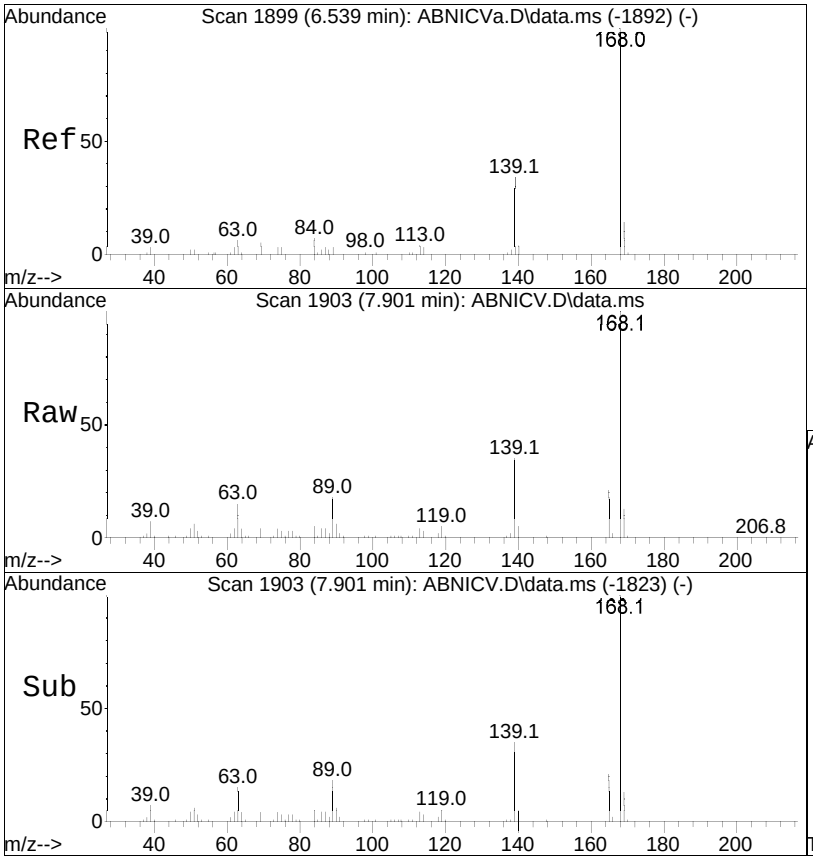


#65
2,4-Dinitrophenol
Concen: 4.25 ug/ml
RT: 7.768 min Scan# 1860
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:184 Resp: 5384

Ion	Ratio	Lower	Upper
184	100		
107	38.5	37.7	56.5
91	48.3	46.3	69.5

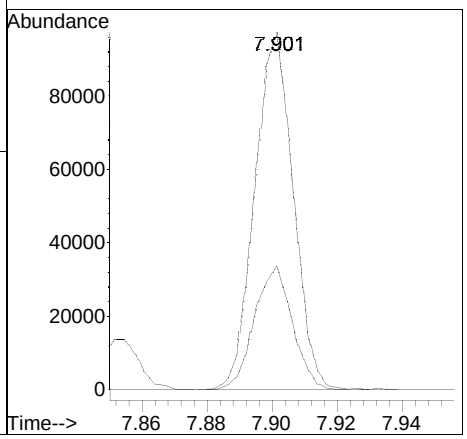


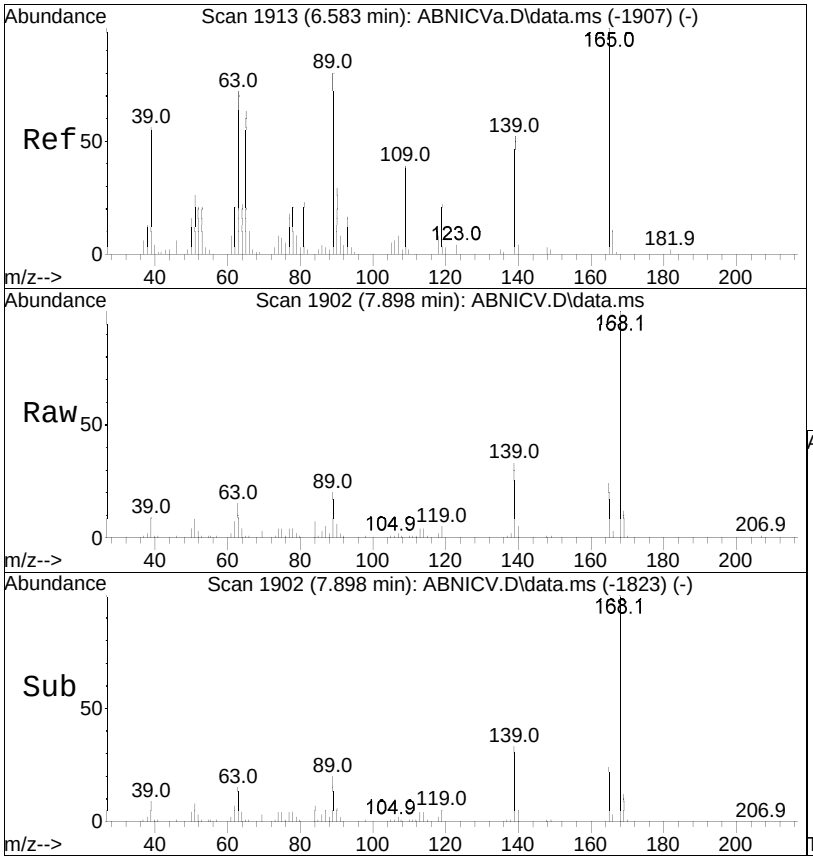


#66
Dibenzofuran
Concen: 5.13 ug/ml
RT: 7.901 min Scan# 1903
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:168 Resp: 79080

Ion	Ratio	Lower	Upper
168	100		
139	34.4	31.4	47.2

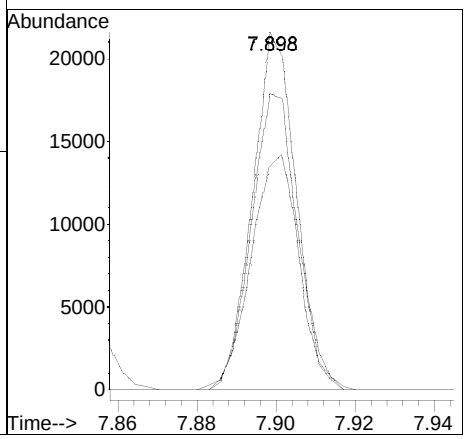


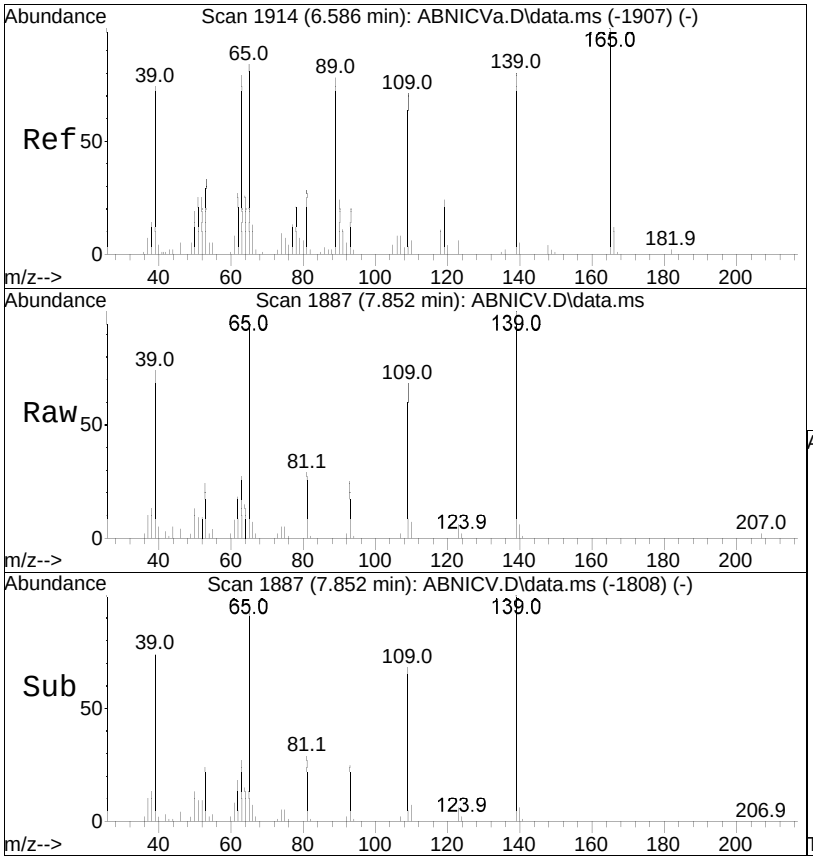


#67
2,4-Dinitrotoluene
Concen: 4.77 ug/ml
RT: 7.898 min Scan# 1902
Delta R.T. -0.004 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:165 Resp: 16570

Ion	Ratio	Lower	Upper
165	100		
89	86.4	72.0	108.0
63	71.9	52.7	79.1

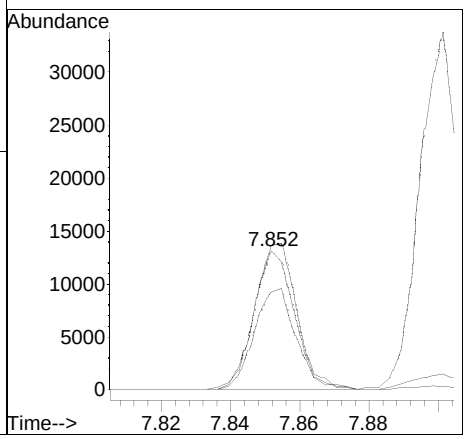


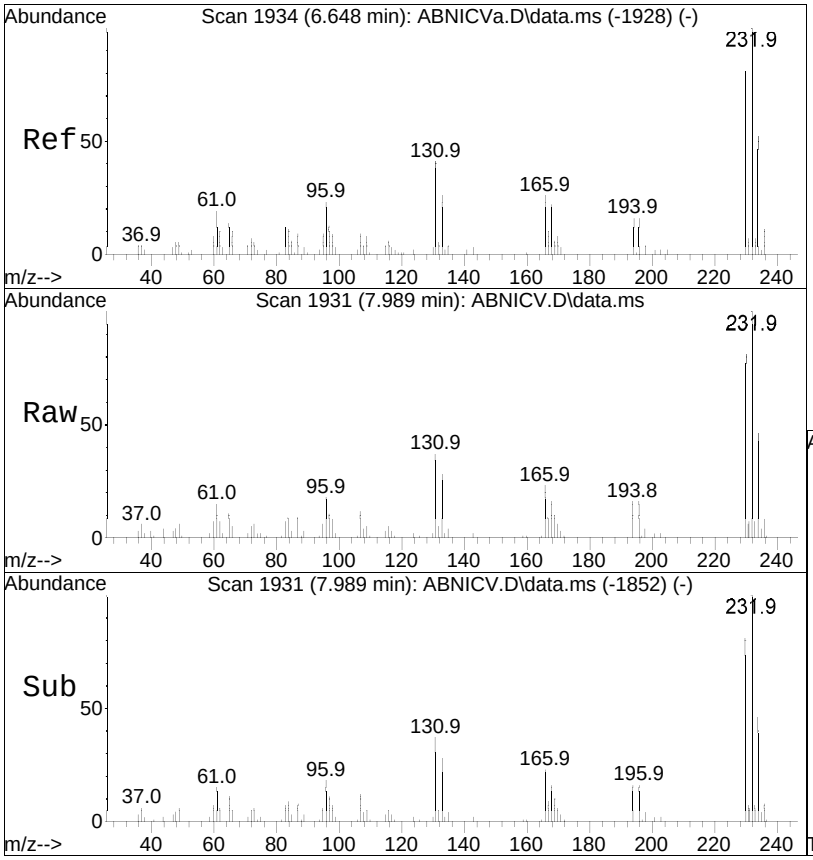


#68
4-Nitrophenol
Concen: 4.63 ug/ml
RT: 7.852 min Scan# 1887
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 65 Resp: 10713

Ion	Ratio	Lower	Upper
65	100		
109	74.8	47.4	71.2#
139	108.4	76.6	115.0

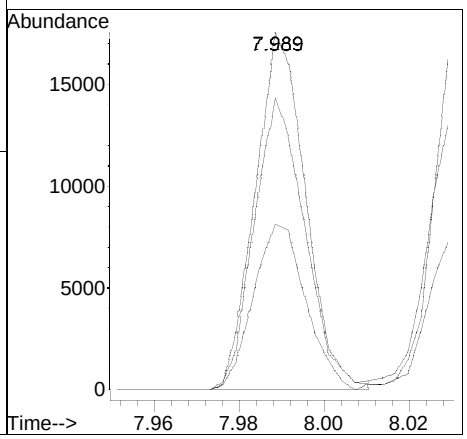


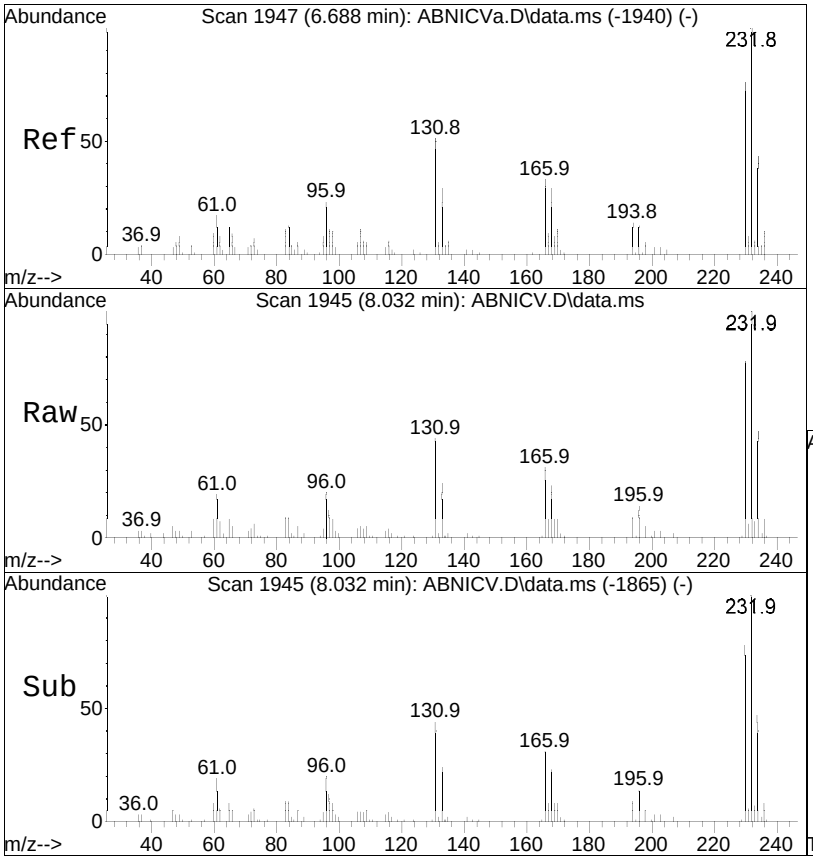


#69
2,3,5,6-Tetrachlorophenol
Concen: 4.53 ug/ml
RT: 7.989 min Scan# 1931
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:232 Resp: 14401

Ion	Ratio	Lower	Upper
232	100		
230	82.8	64.2	96.4
234	48.3	38.1	57.1

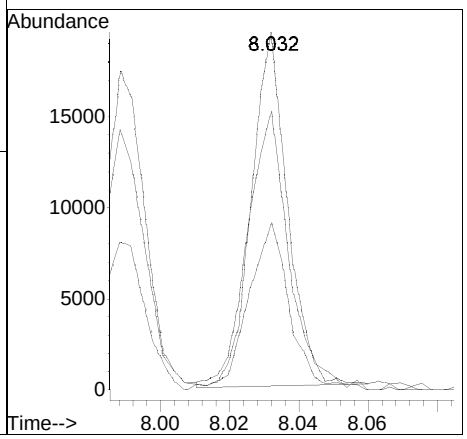


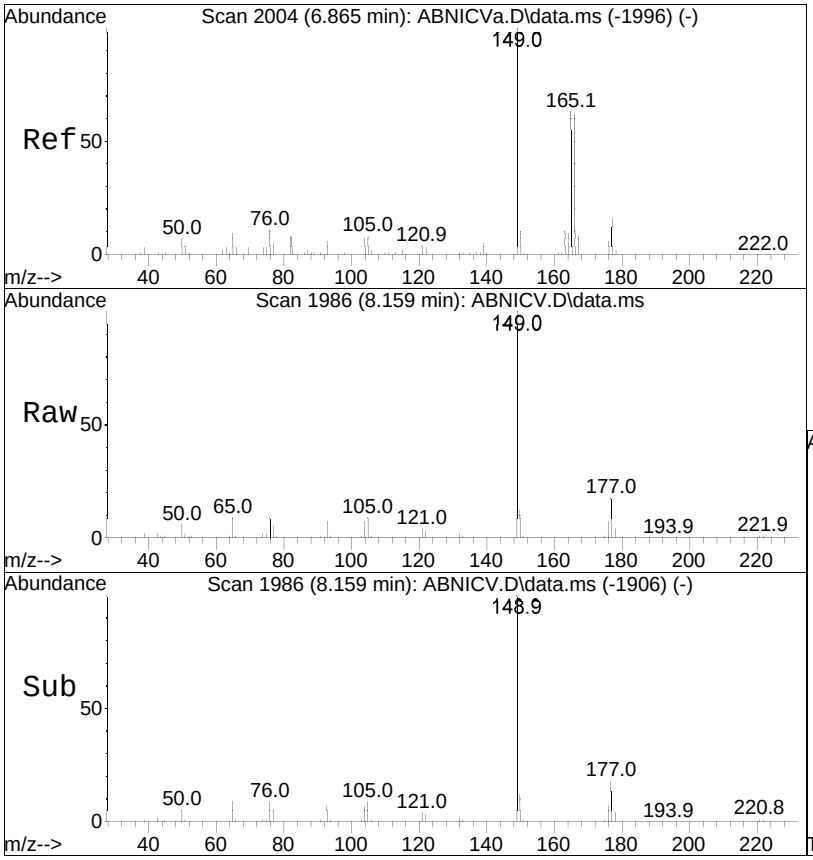


#70
2,3,4,6-Tetrachlorophenol
Concen: 4.55 ug/ml
RT: 8.032 min Scan# 1945
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:232 Resp: 14604

Ion	Ratio	Lower	Upper
232	100		
230	84.2	61.8	92.8
234	52.4	36.2	54.2

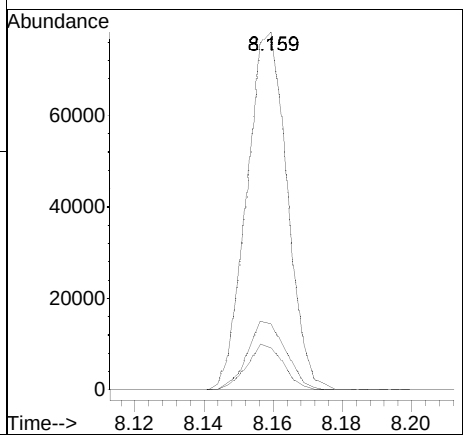


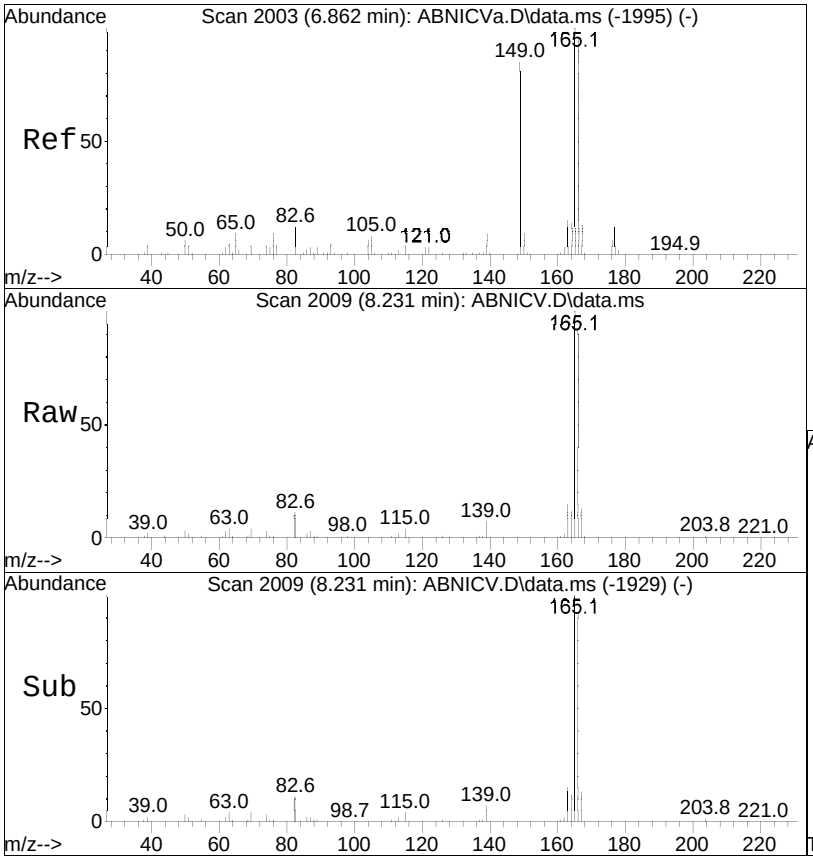


#71
Diethyl phthalate
Concen: 4.84 ug/ml
RT: 8.159 min Scan# 1986
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:149 Resp: 62883

Ion	Ratio	Lower	Upper
149	100		
177	18.5	16.1	24.1
150	11.8	9.4	14.2

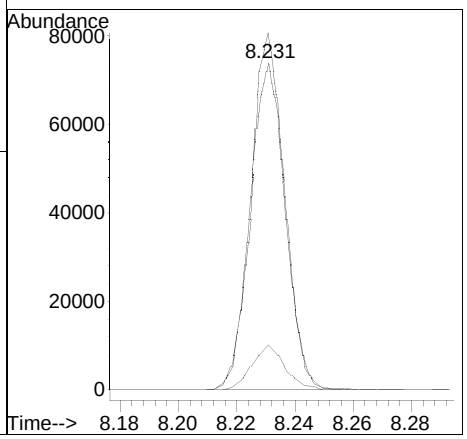


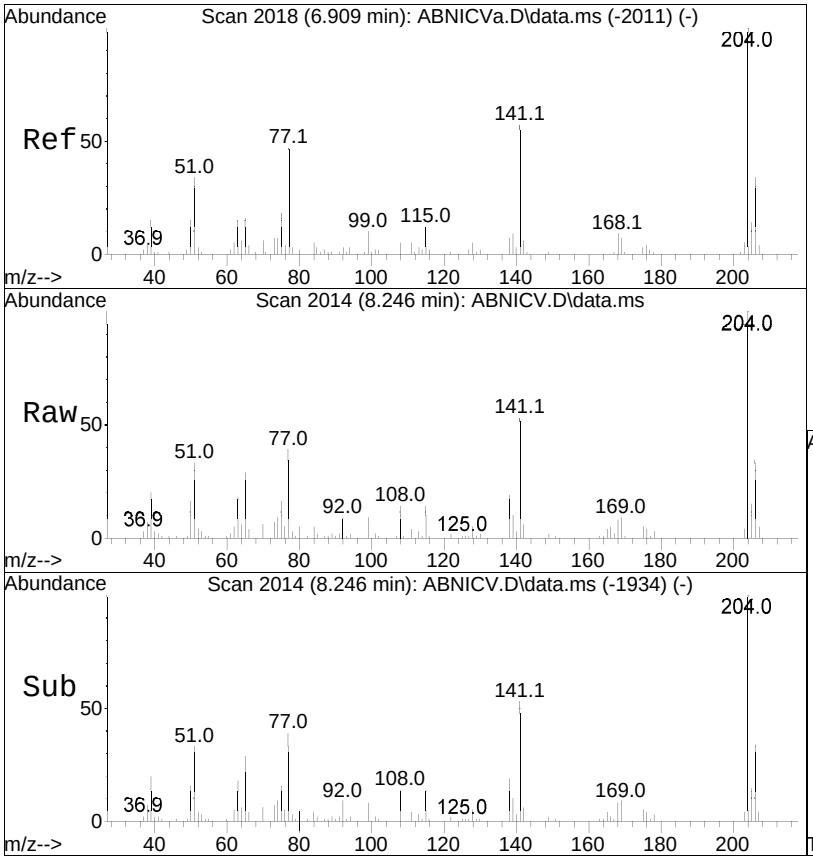


#72
Fluorene
Concen: 4.95 ug/ml
RT: 8.231 min Scan# 2009
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:166 Resp: 61434

Ion	Ratio	Lower	Upper
166	100		
165	105.0	76.2	114.2
167	13.0	10.6	15.8

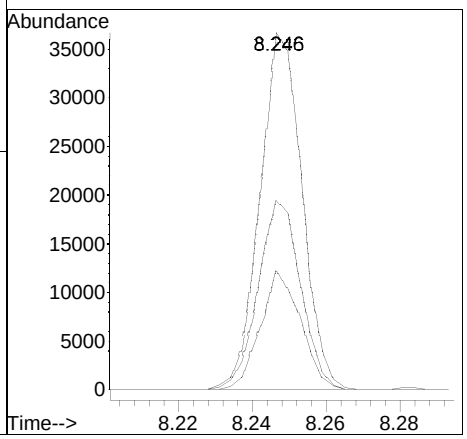


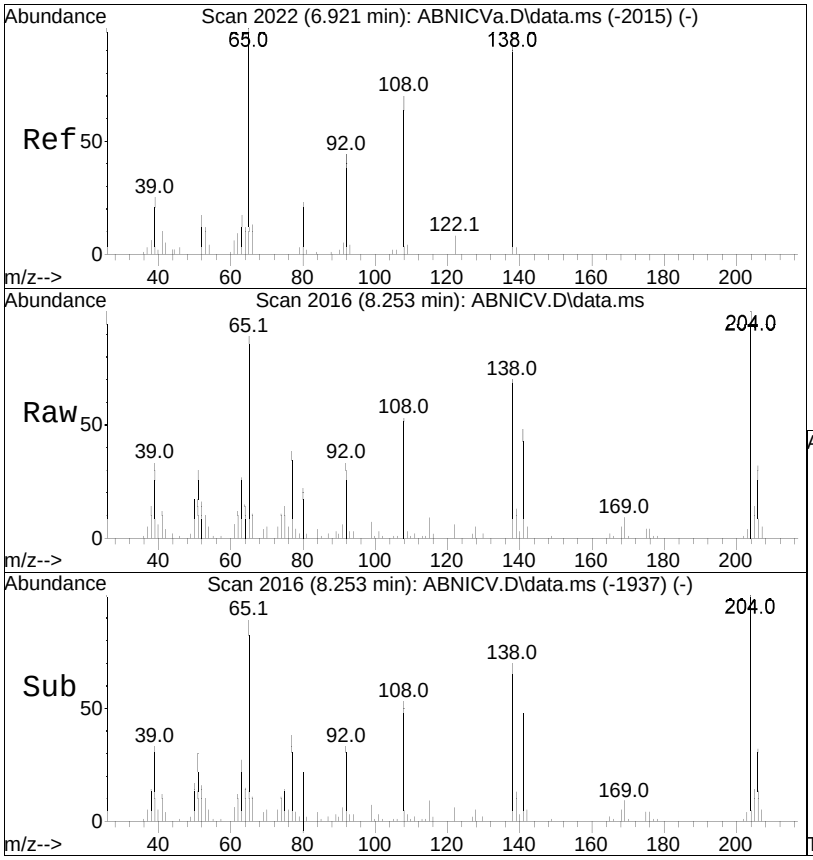


#73
4-Chlorophenyl phenyl ether
Concen: 4.77 ug/ml
RT: 8.246 min Scan# 2014
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:204 Resp: 28778

Ion	Ratio	Lower	Upper
204	100		
206	32.1	25.8	38.6
141	53.7	53.6	80.4

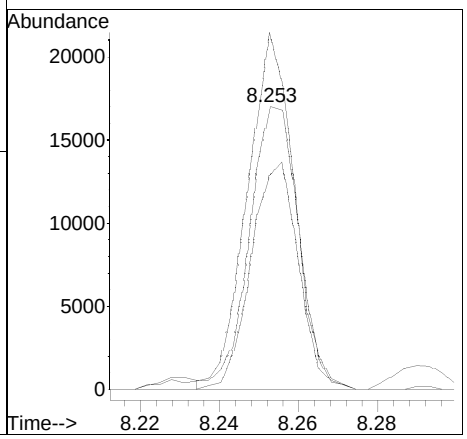


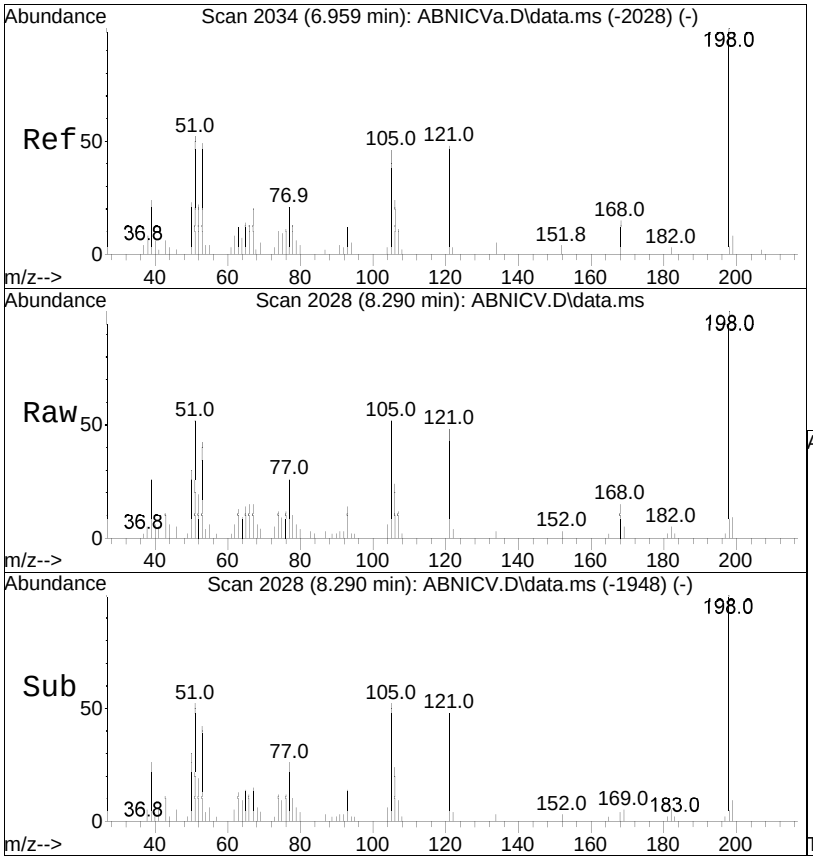


#74
4-Nitroaniline
Concen: 5.22 ug/ml
RT: 8.253 min Scan# 2016
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:138 Resp: 14631

Ion	Ratio	Lower	Upper
138	100		
108	77.4	52.1	78.1
65	123.2	115.0	172.6

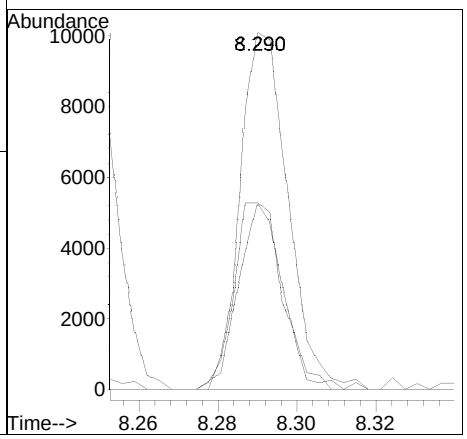


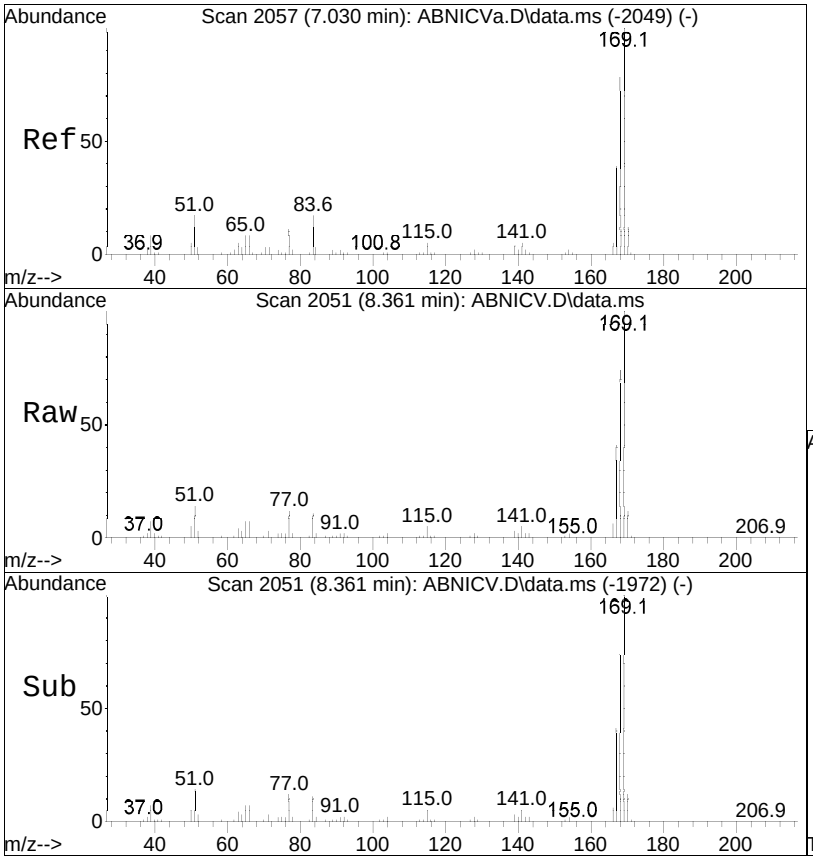


#75
4,6-Dinitro-o-cresol
Concen: 4.64 ug/ml
RT: 8.290 min Scan# 2028
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:198 Resp: 8465

Ion	Ratio	Lower	Upper
198	100		
51	53.0	76.0	114.0#
105	48.4	45.6	68.4

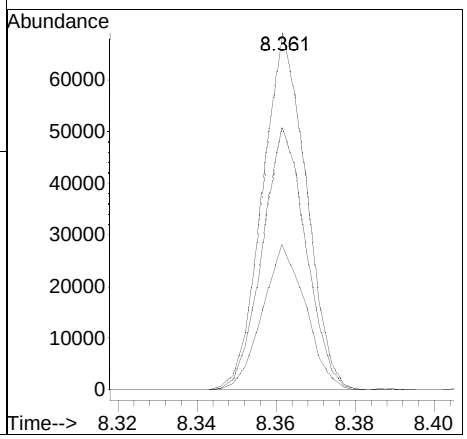


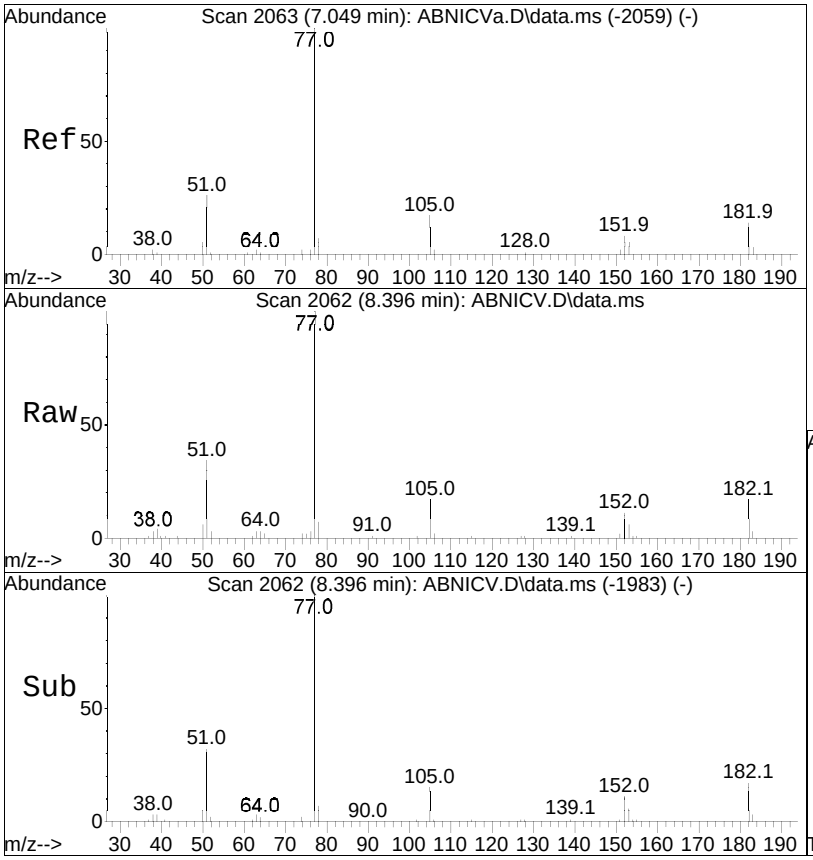


#76
NDPA/DPA
Concen: 5.00 ug/ml
RT: 8.361 min Scan# 2051
Delta R.T. -0.004 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:169 Resp: 52962

Ion	Ratio	Lower	Upper
169	100		
168	73.2	54.0	81.0
167	40.2	28.6	42.8

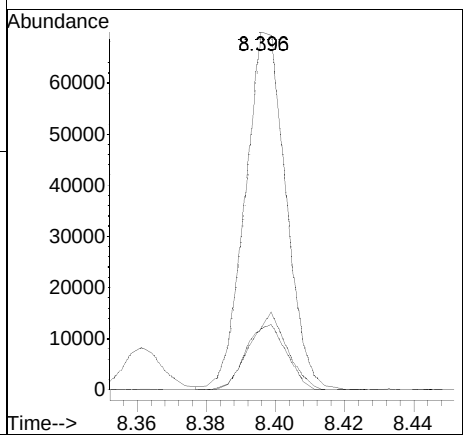


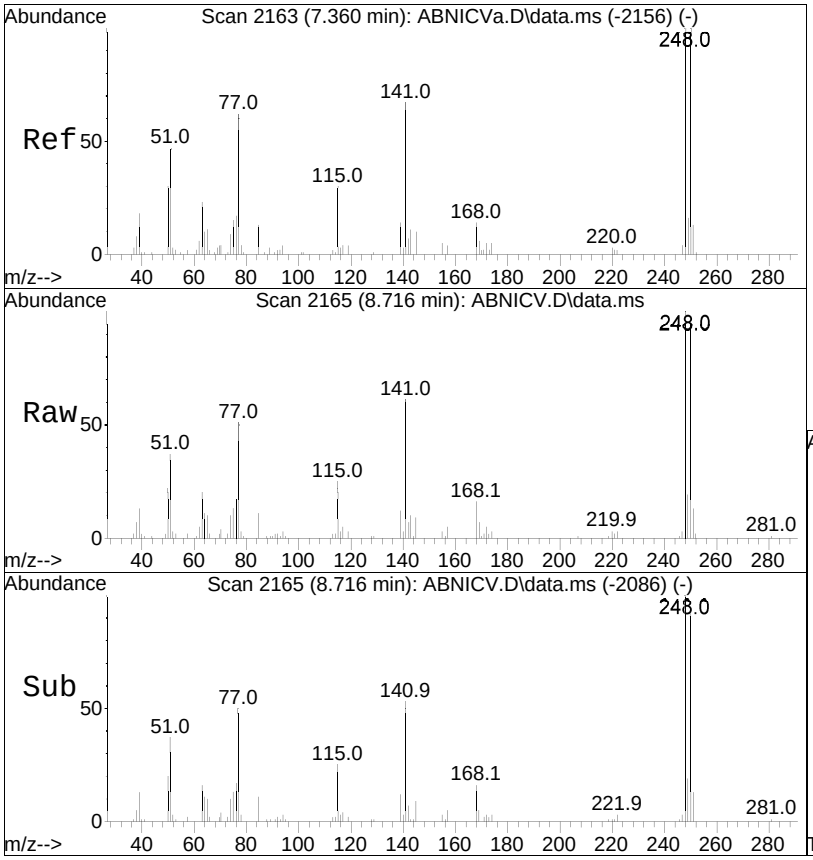


#77
Azobenzene
Concen: 5.11 ug/ml
RT: 8.396 min Scan# 2062
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion: 77 Resp: 56883

Ion	Ratio	Lower	Upper
77	100		
182	20.2	17.4	26.2
105	18.5	15.4	23.2

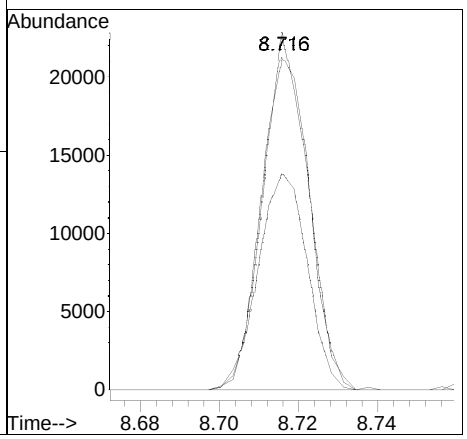


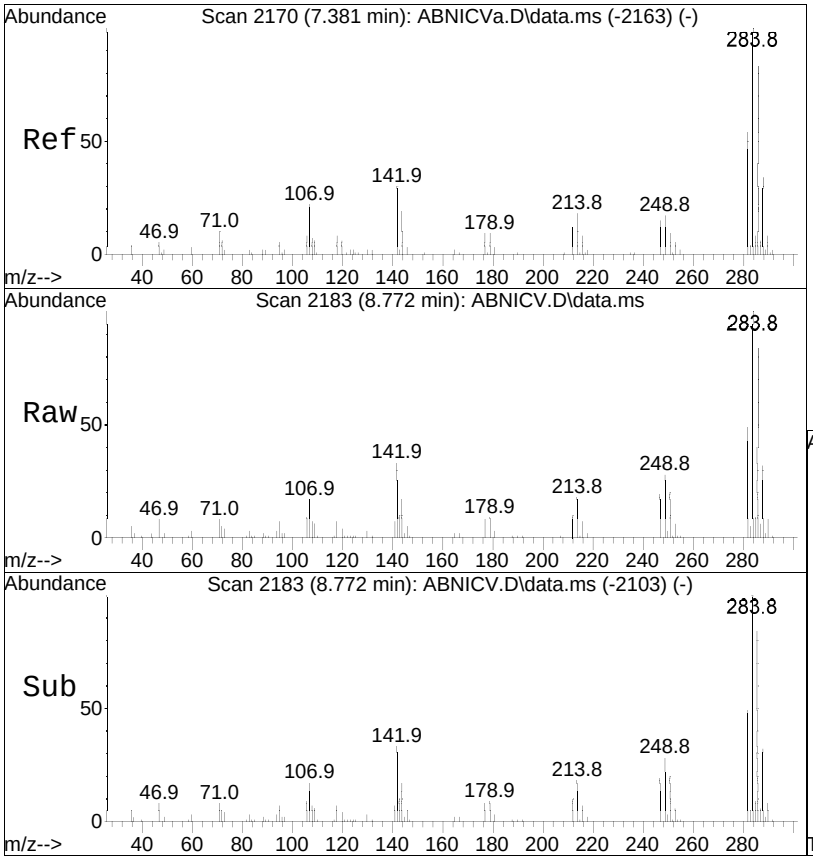


#79
4-Bromophenyl phenyl ether
Concen: 4.76 ug/ml
RT: 8.716 min Scan# 2165
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:248 Resp: 17932

Ion	Ratio	Lower	Upper
248	100		
141	66.2	76.6	114.8#
250	100.6	77.3	115.9

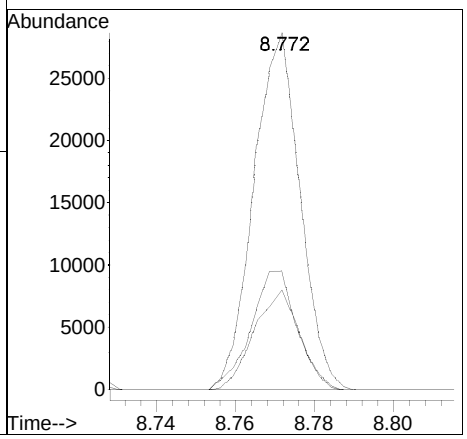


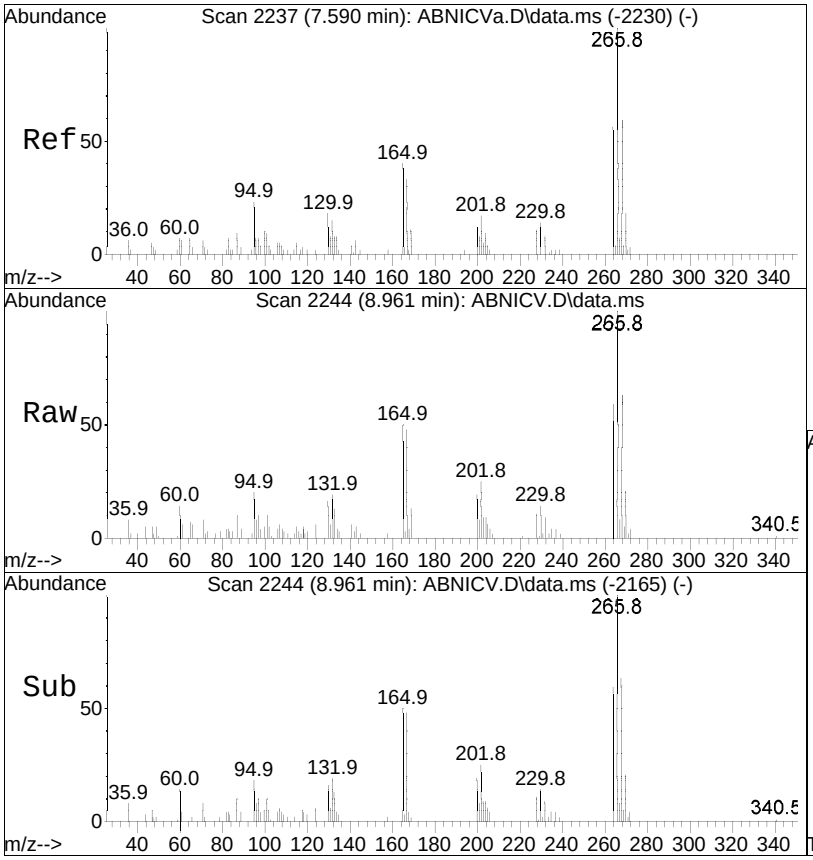


#80
Hexachlorobenzene
Concen: 4.93 ug/ml
RT: 8.772 min Scan# 2183
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:284 Resp: 23251

Ion	Ratio	Lower	Upper
284	100		
142	33.2	41.9	62.9#
249	27.8	24.1	36.1

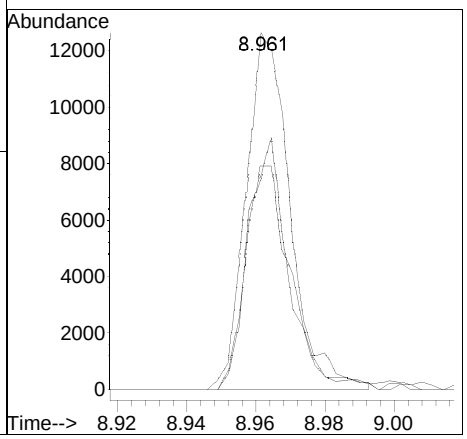


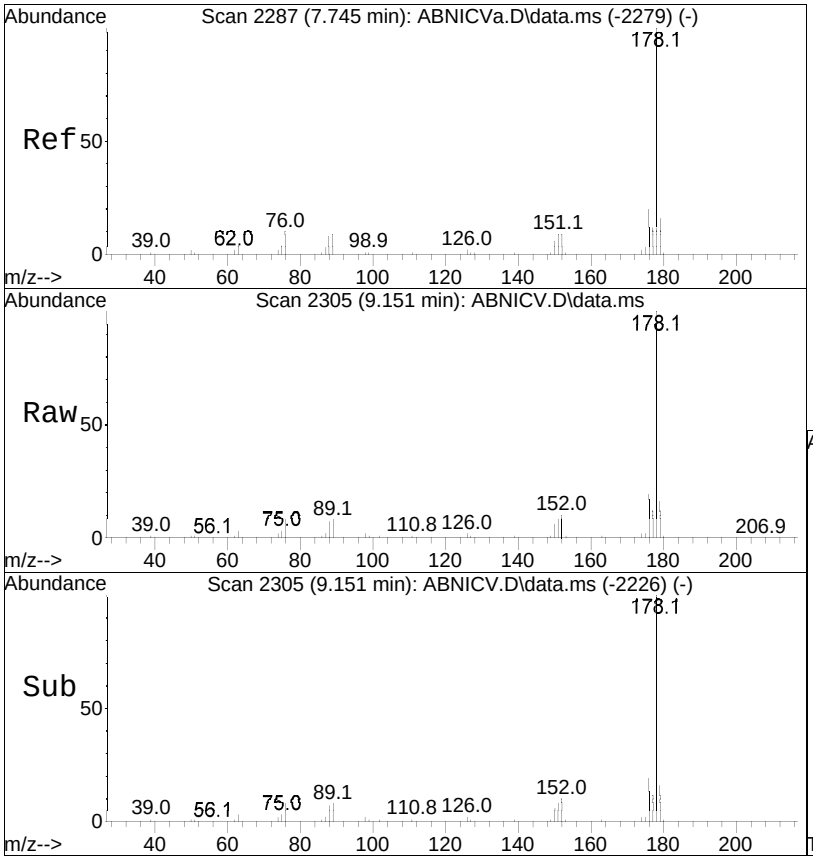


#81
Pentachlorophenol
Concen: 4.49 ug/ml
RT: 8.961 min Scan# 2244
Delta R.T. -0.004 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:266 Resp: 11206

Ion	Ratio	Lower	Upper
266	100		
264	65.1	49.7	74.5
268	64.4	50.5	75.7

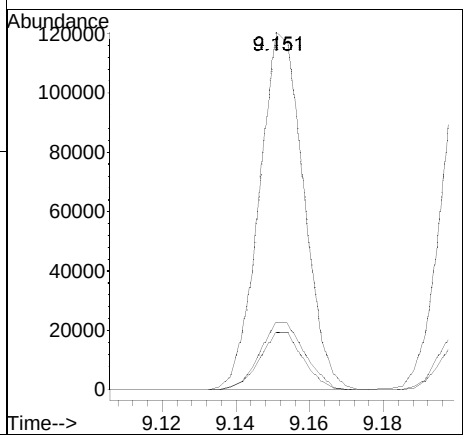


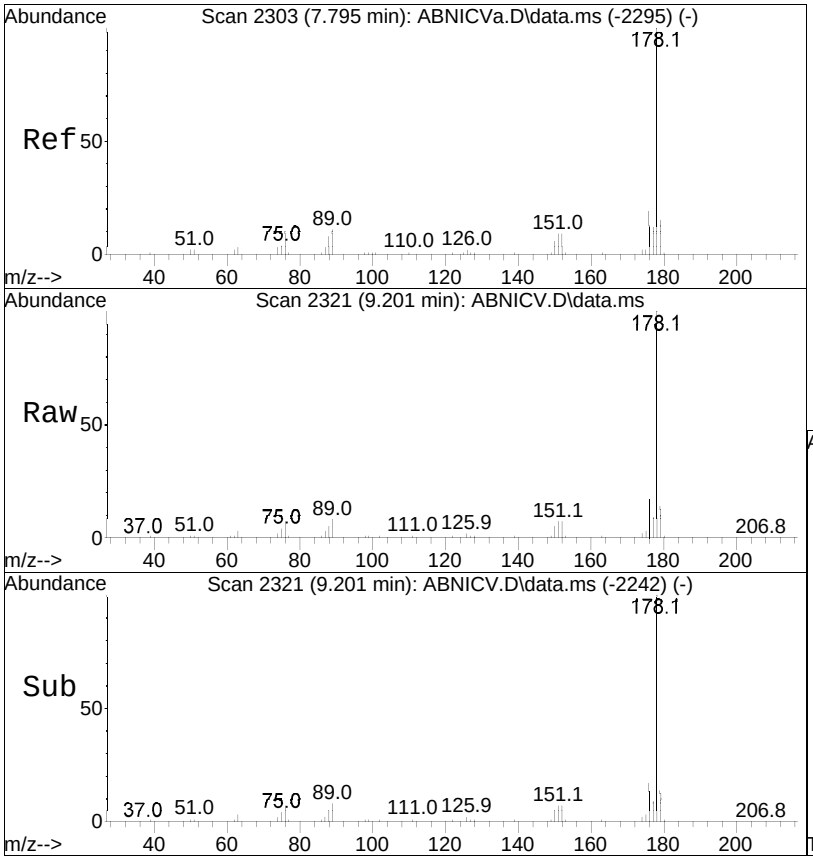


#88
Phenanthrene
Concen: 4.72 ug/ml
RT: 9.151 min Scan# 2305
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:178 Resp: 100944

Ion	Ratio	Lower	Upper
178	100		
179	15.7	12.2	18.2
176	19.1	15.4	23.2

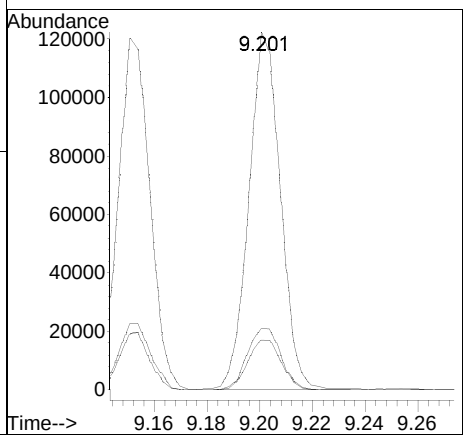


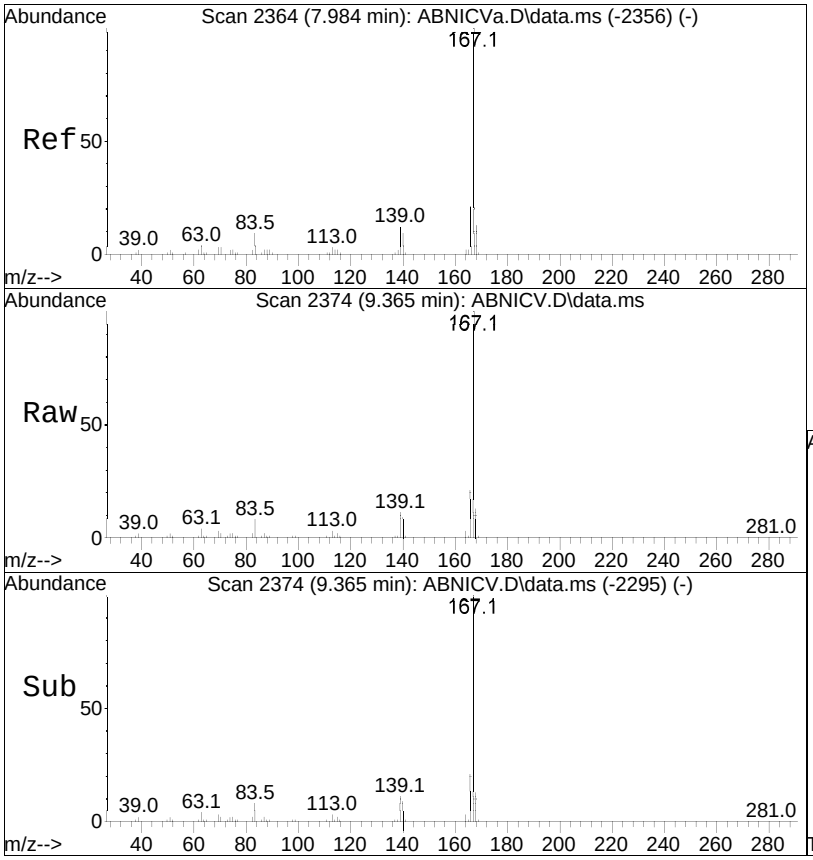


#89
Anthracene
Concen: 4.92 ug/ml
RT: 9.201 min Scan# 2321
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:178 Resp: 102029

Ion	Ratio	Lower	Upper
178	100		
179	14.7	12.0	18.0
176	18.3	14.6	22.0

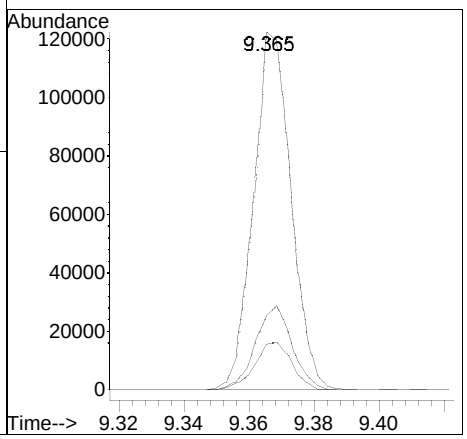


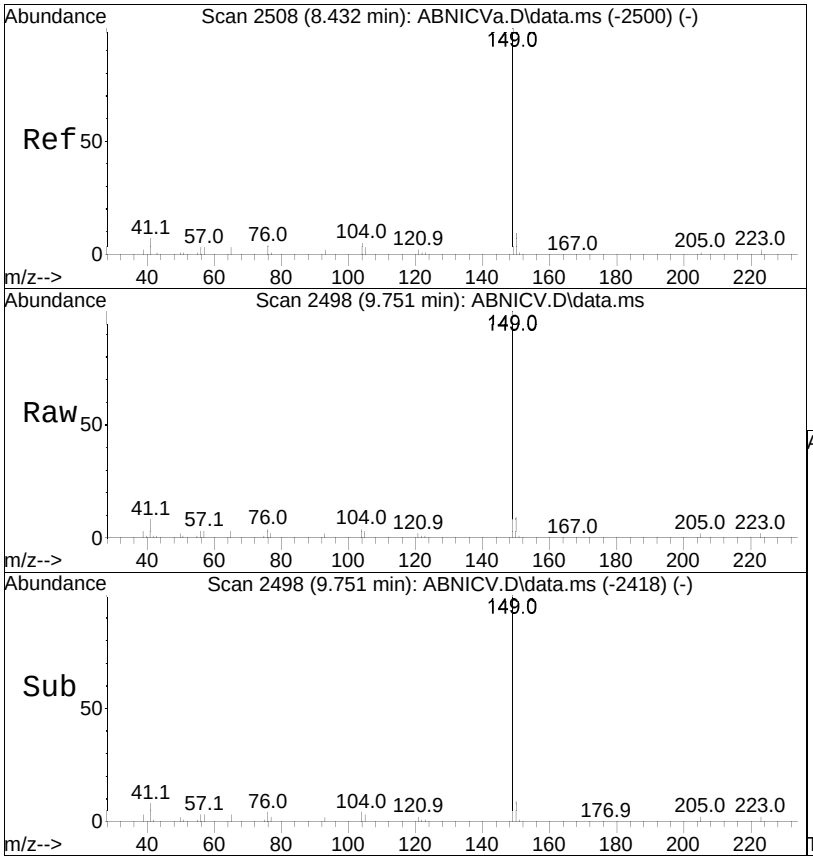


#90
Carbazole
Concen: 4.96 ug/ml
RT: 9.365 min Scan# 2374
Delta R.T. -0.004 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:167 Resp: 96873

Ion	Ratio	Lower	Upper
167	100		
168	13.4	10.6	15.8
166	23.1	17.4	26.0

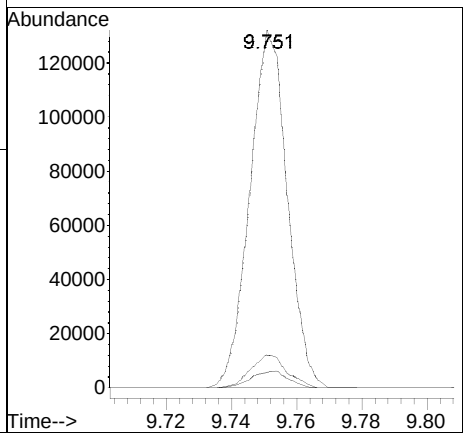


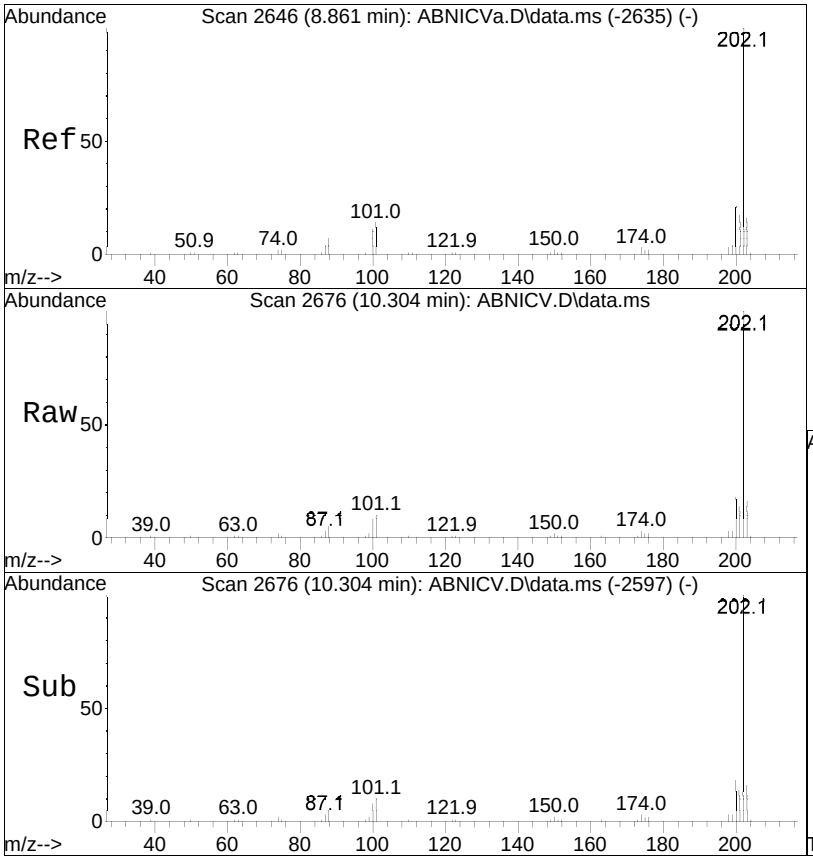


#91
Di-n-butylphthalate
Concen: 4.53 ug/ml
RT: 9.751 min Scan# 2498
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:149 Resp: 104207

Ion	Ratio	Lower	Upper
149	100		
150	9.0	7.0	10.6
104	4.7	4.5	6.7

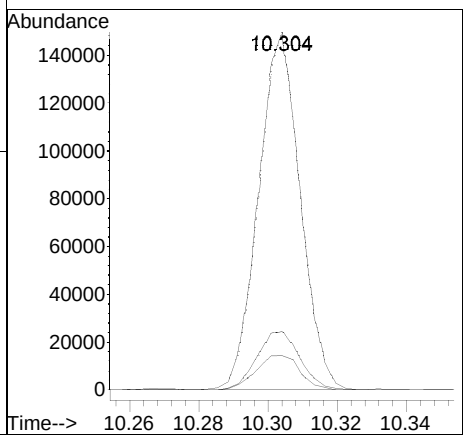


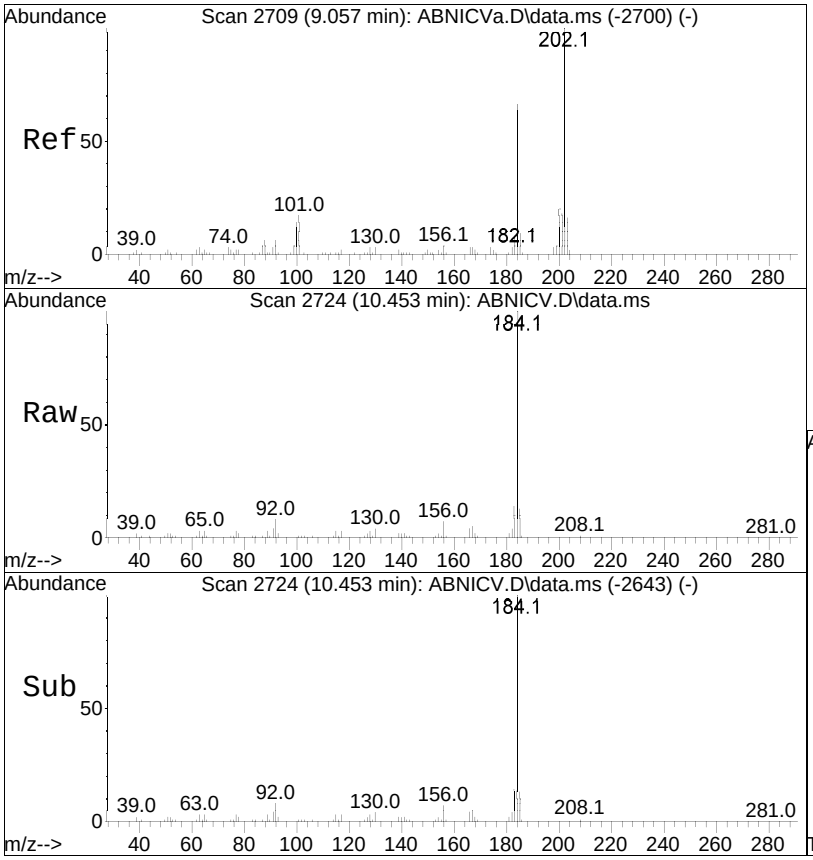


#92
Fluoranthene
Concen: 4.94 ug/ml
RT: 10.304 min Scan# 2676
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:202 Resp: 123795

Ion	Ratio	Lower	Upper
202	100		
101	10.3	13.5	20.3#
203	17.0	13.6	20.4

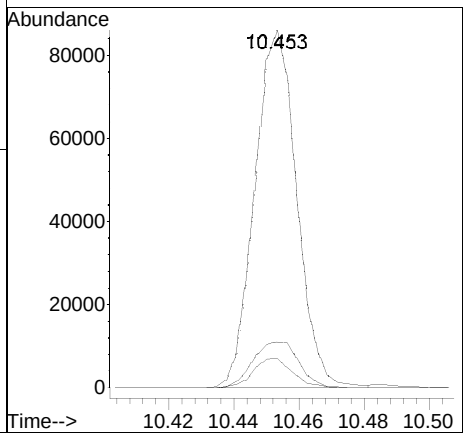


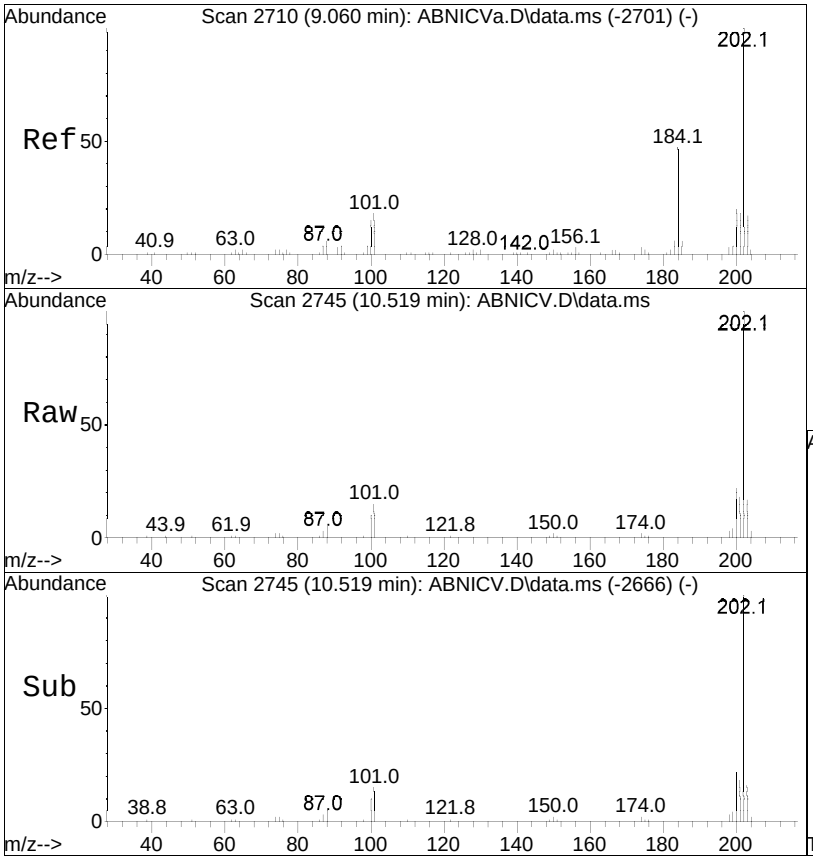


#93
Benzidine
Concen: 4.63 ug/ml
RT: 10.453 min Scan# 2724
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:184 Resp: 76157

Ion	Ratio	Lower	Upper
184	100		
92	7.8	9.1	13.7#
185	14.1	11.1	16.7

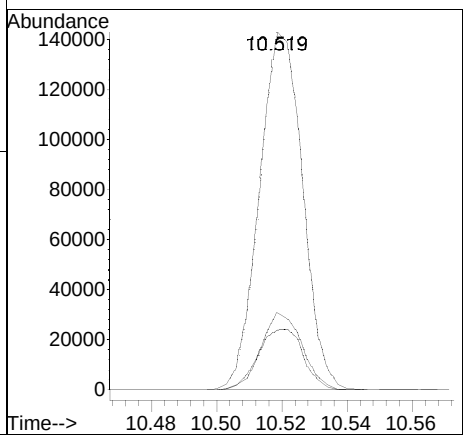


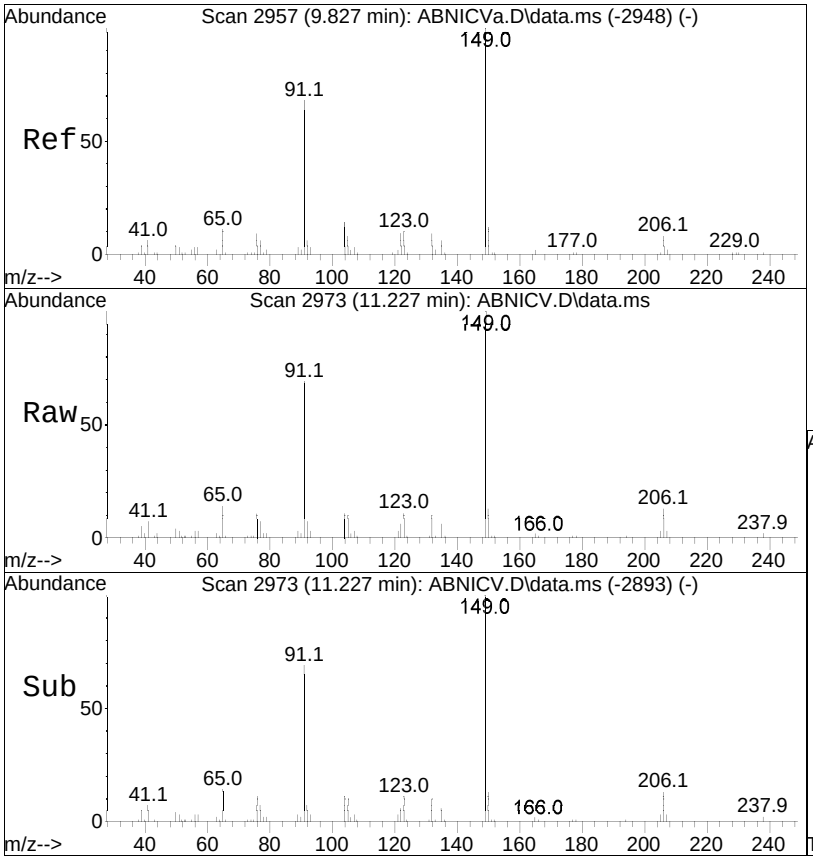


#94
Pyrene
Concen: 4.93 ug/ml
RT: 10.519 min Scan# 2745
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:202 Resp: 130773

Ion	Ratio	Lower	Upper
202	100		
200	20.8	16.7	25.1
203	17.5	14.2	21.4

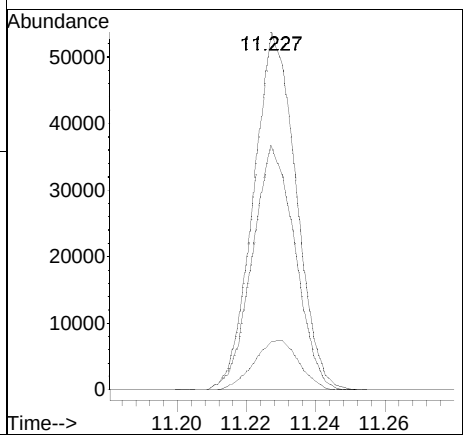


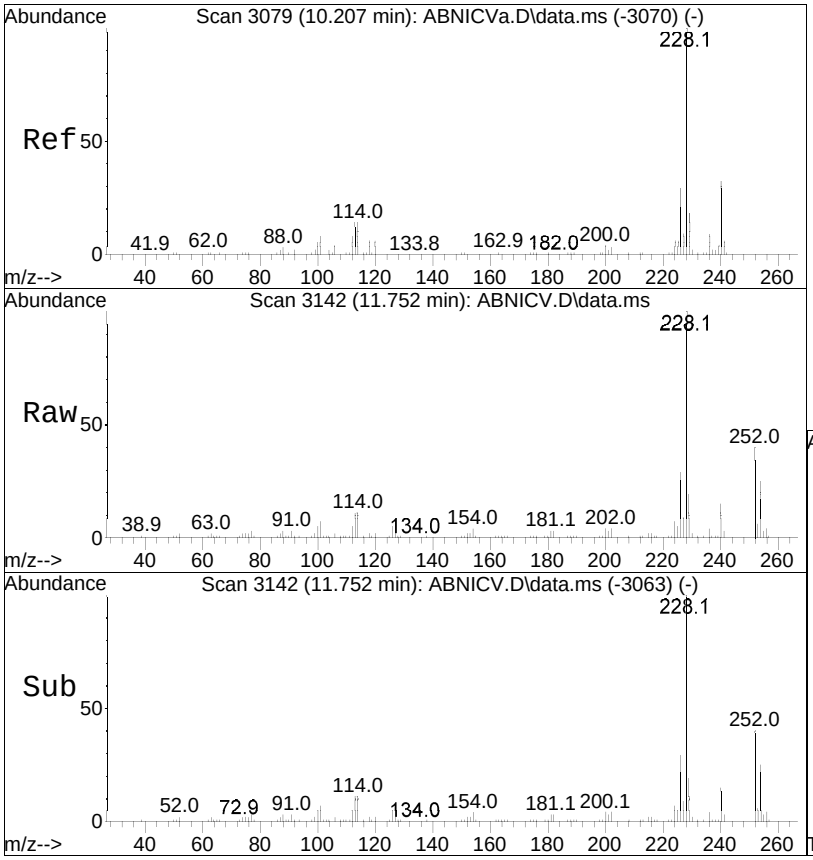


#96
Butyl benzyl phthalate
Concen: 4.36 ug/ml
RT: 11.227 min Scan# 2973
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:149 Resp: 45581

Ion	Ratio	Lower	Upper
149	100		
91	68.7	63.3	94.9
206	14.8	13.9	20.9

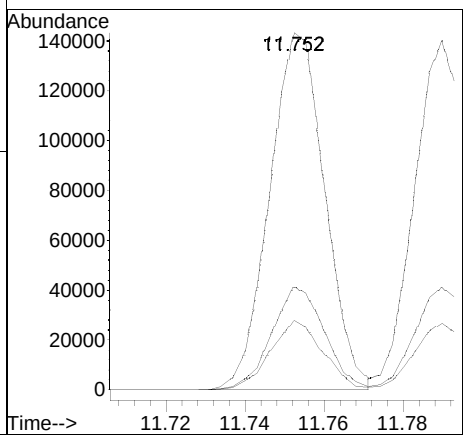


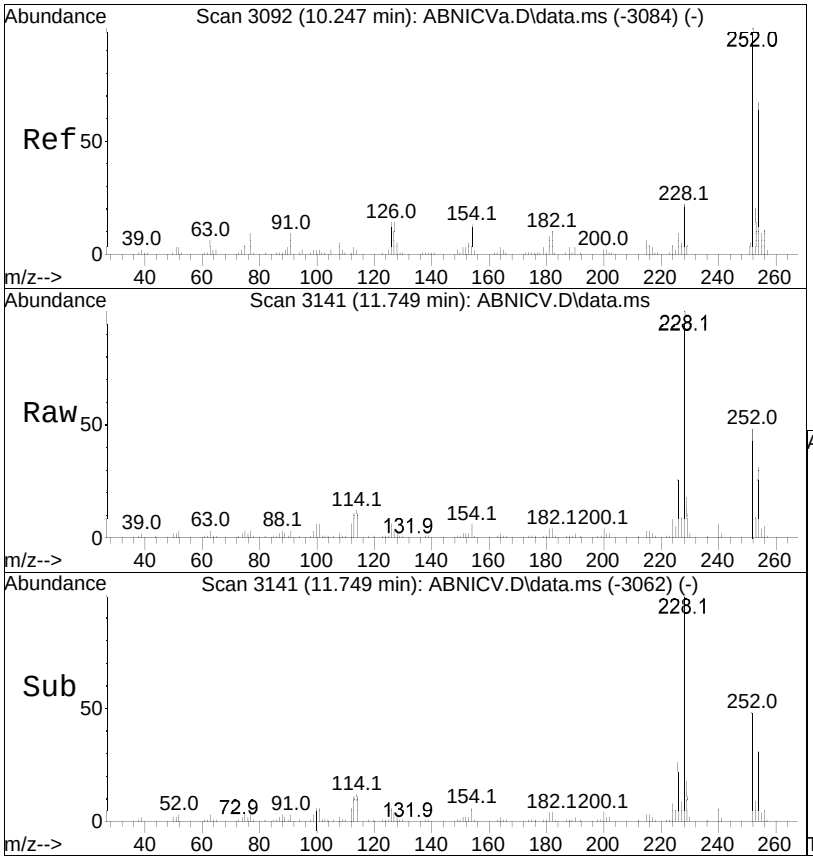


#104
Benzo(a)anthracene
Concen: 5.00 ug/ml
RT: 11.752 min Scan# 3142
Delta R.T. -0.004 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:228 Resp: 138788

Ion	Ratio	Lower	Upper
228	100		
226	27.8	22.2	33.4
229	18.6	15.6	23.4

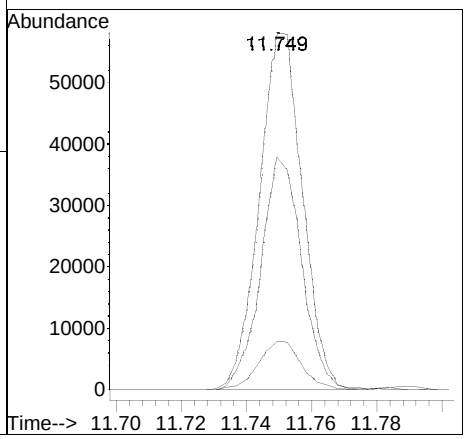


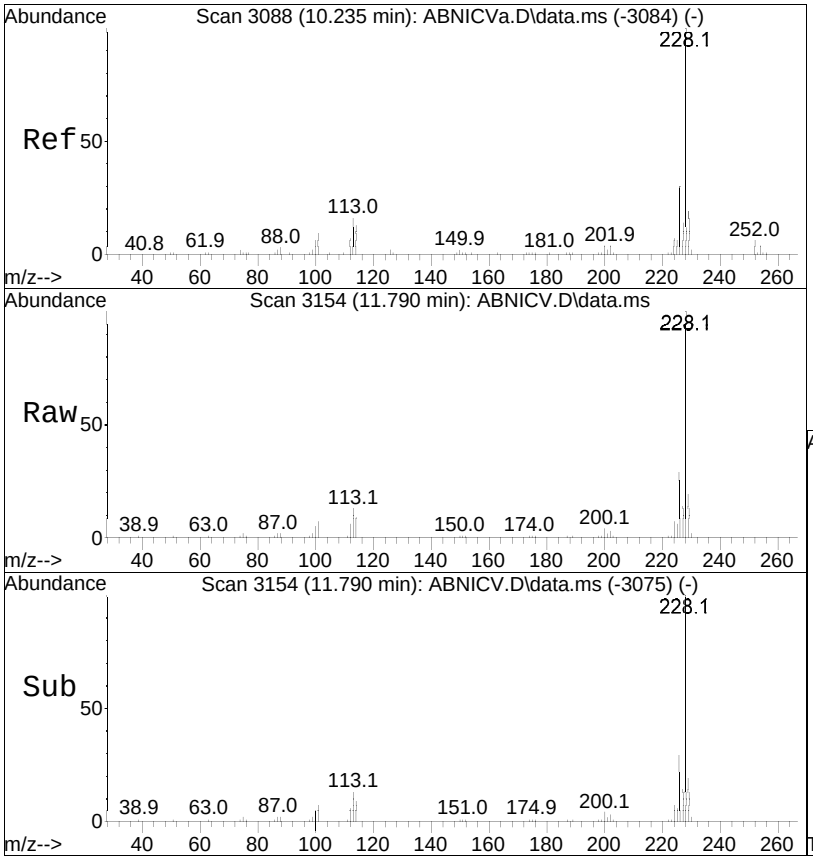


#105
3,3'-Dichlorobenzidine
Concen: 4.99 ug/ml
RT: 11.749 min Scan# 3141
Delta R.T. -0.004 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:252 Resp: 53199

Ion	Ratio	Lower	Upper
252	100		
126	13.6	14.5	21.7#
254	62.0	51.2	76.8

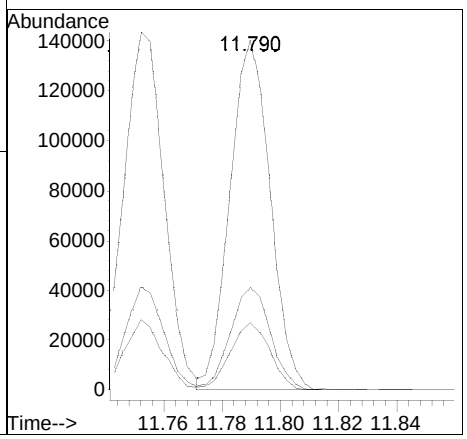


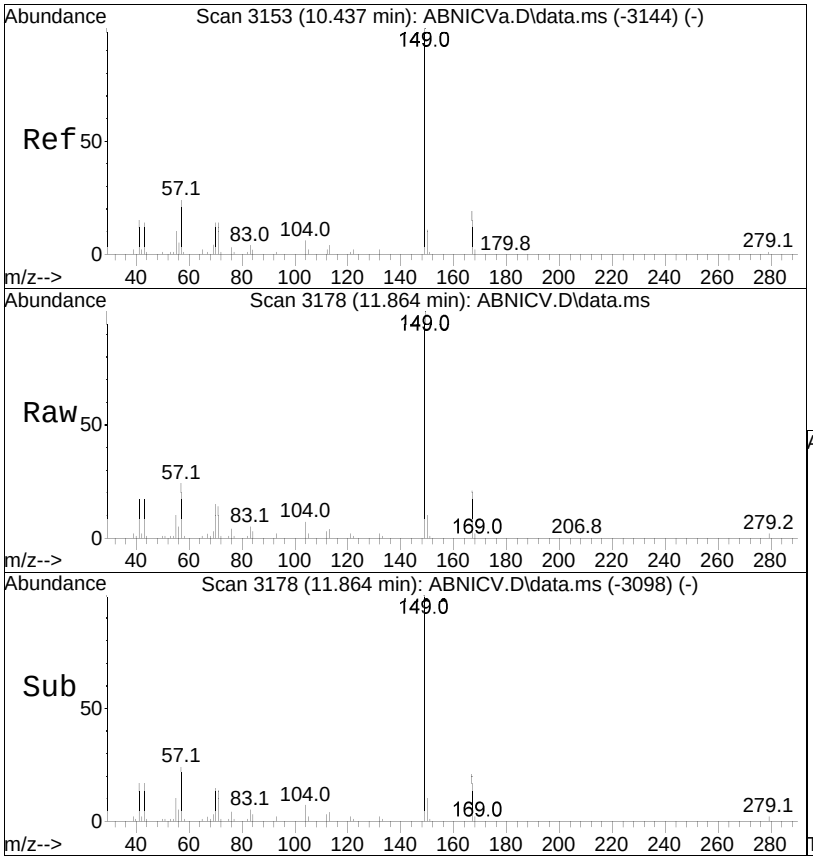


#106
Chrysene
Concen: 5.12 ug/ml
RT: 11.790 min Scan# 3154
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:228 Resp: 134337

Ion	Ratio	Lower	Upper
228	100		
226	29.1	24.0	36.0
229	18.9	15.8	23.8

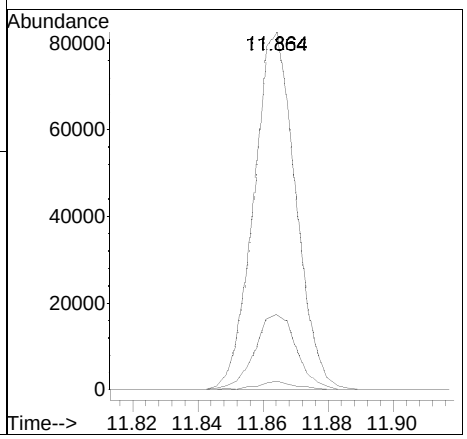


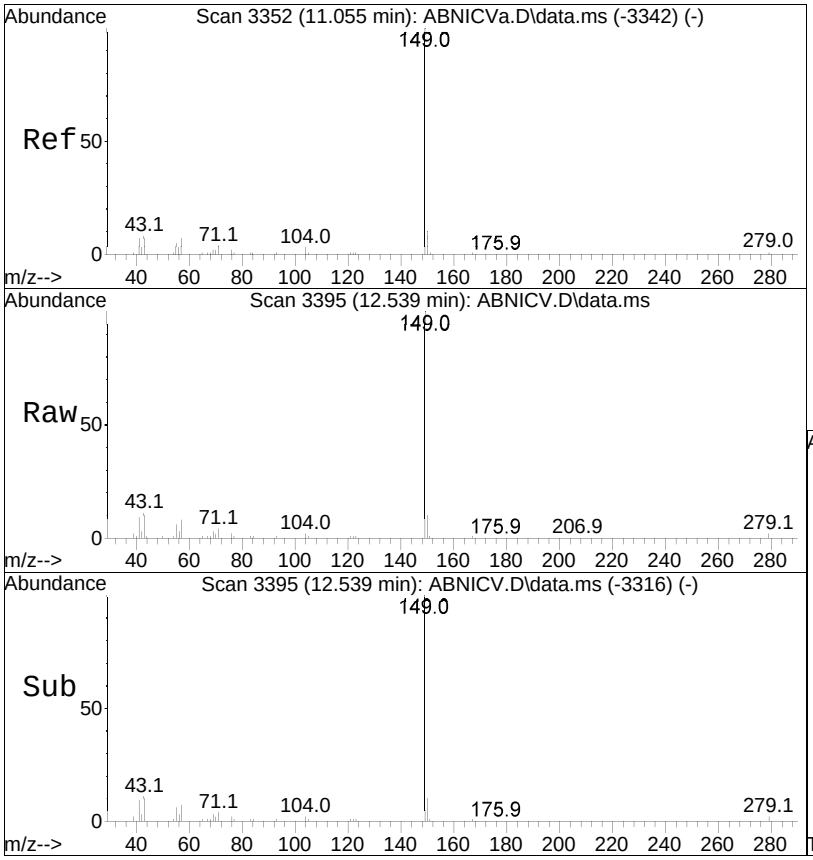


#107
Bis(2-ethylhexyl)phthalate
Concen: 4.72 ug/ml
RT: 11.864 min Scan# 3178
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:149 Resp: 73206

Ion	Ratio	Lower	Upper
149	100		
167	21.0	22.1	33.1#
279	1.8	3.0	4.4#

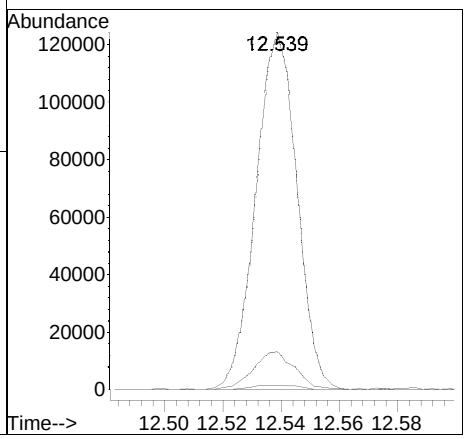


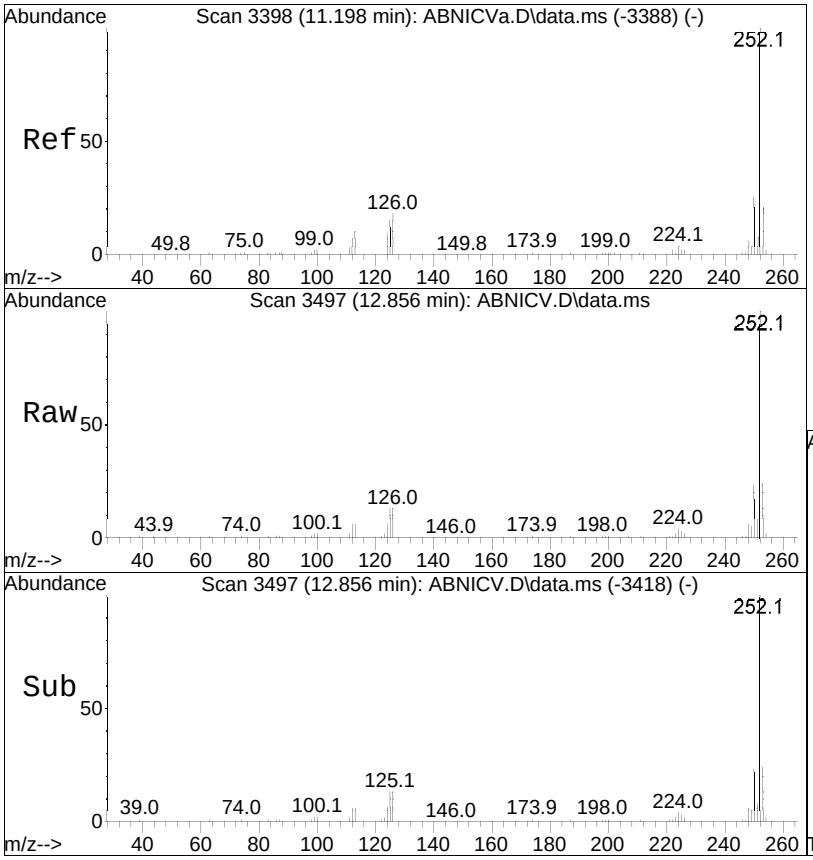


#108
Di-n-octylphthalate
Concen: 4.27 ug/ml
RT: 12.539 min Scan# 3395
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:149 Resp: 120150

Ion	Ratio	Lower	Upper
149	100		
43	10.9	18.8	28.2#
167	1.2	1.3	1.9#

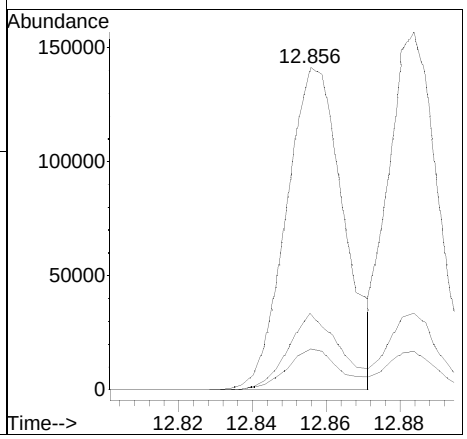


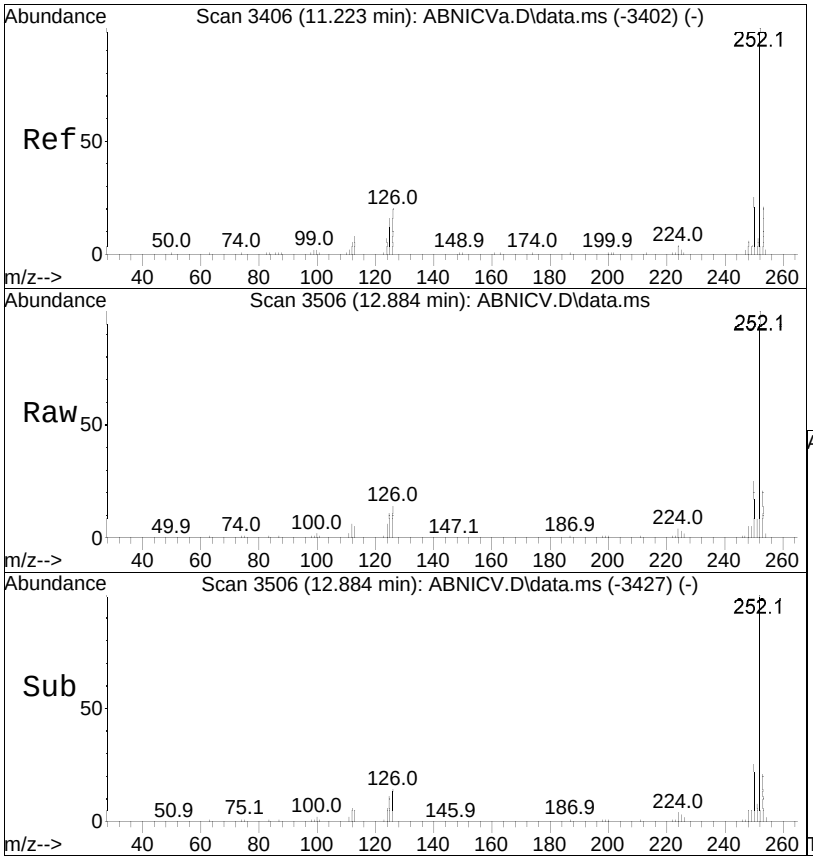


#109
Benzo(b)fluoranthene
Concen: 5.08 ug/ml
RT: 12.856 min Scan# 3497
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:252 Resp: 153078

Ion	Ratio	Lower	Upper
252	100		
125	12.0	13.3	19.9#
253	21.7	17.1	25.7

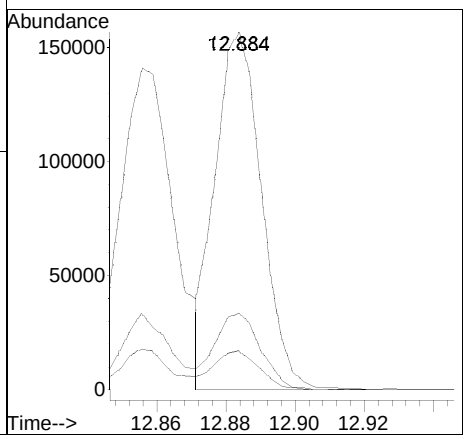


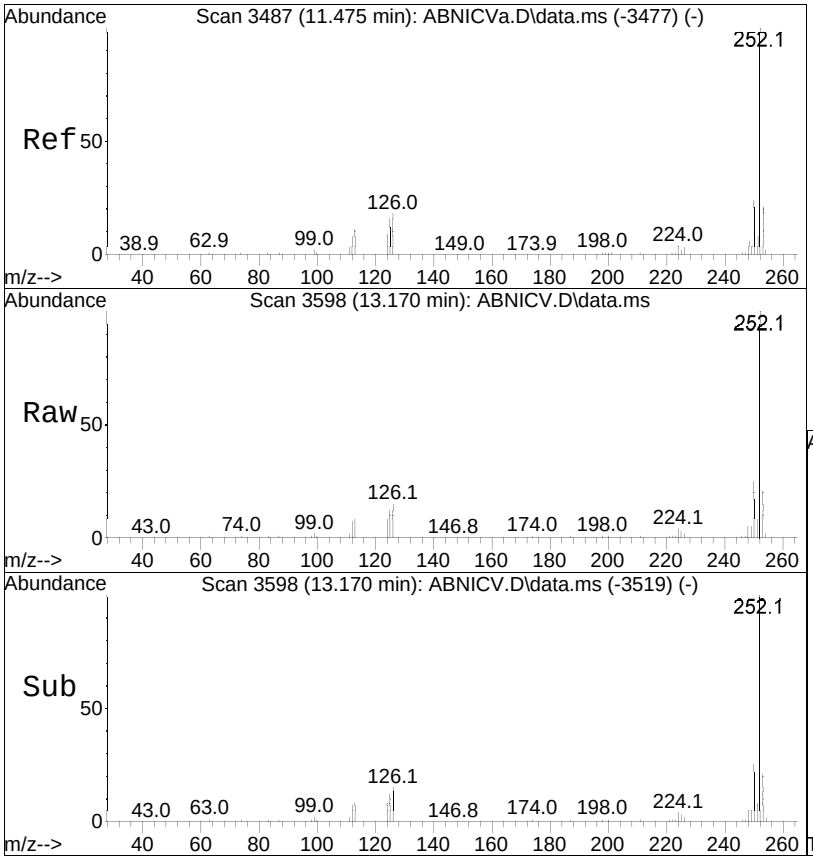


#110
Benzo(k)fluoranthene
Concen: 5.07 ug/ml
RT: 12.884 min Scan# 3506
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:252 Resp: 145817

Ion	Ratio	Lower	Upper
252	100		
125	10.8	13.0	19.6#
253	21.1	16.8	25.2

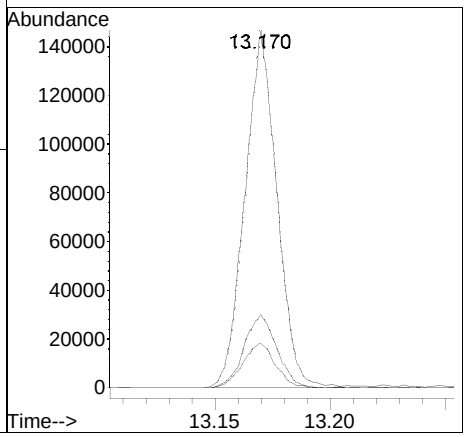


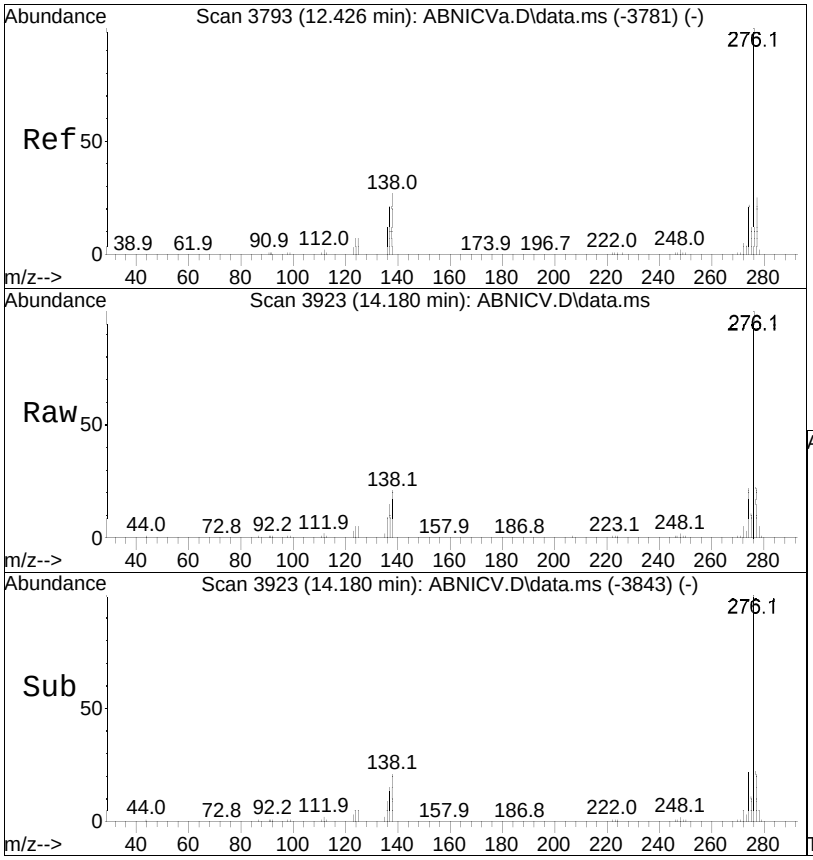


#111
Benzo(a)pyrene
Concen: 5.36 ug/ml
RT: 13.170 min Scan# 3598
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:252 Resp: 140341

Ion	Ratio	Lower	Upper
252	100		
125	12.8	14.2	21.2#
253	21.0	16.9	25.3

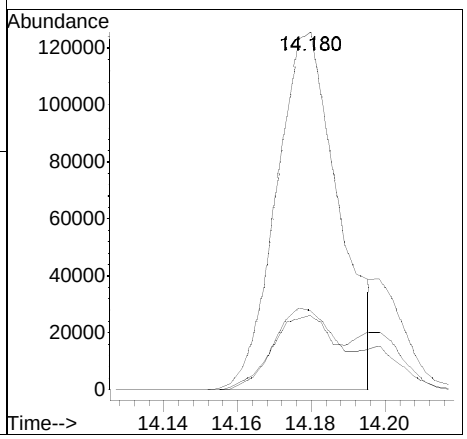


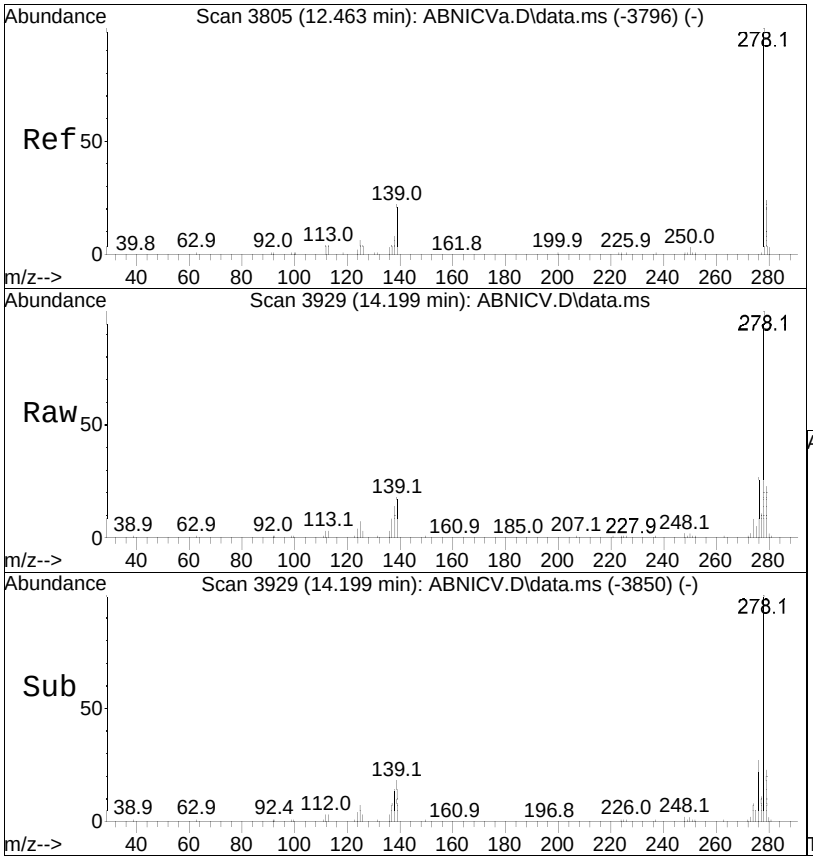


#113
Indeno(1,2,3-cd)pyrene
Concen: 5.07 ug/mL M6
RT: 14.180 min Scan# 3923
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:276 Resp: 146722

Ion	Ratio	Lower	Upper
276	100		
138	21.1	25.1	37.7#
277	23.7	18.6	28.0

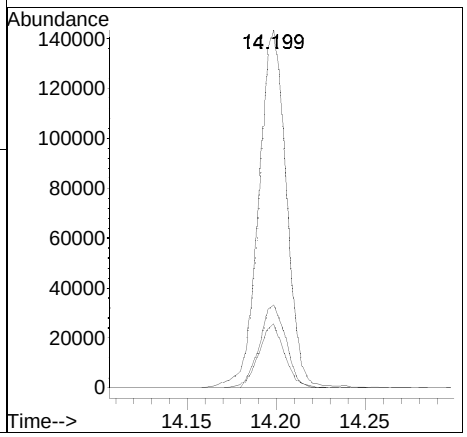


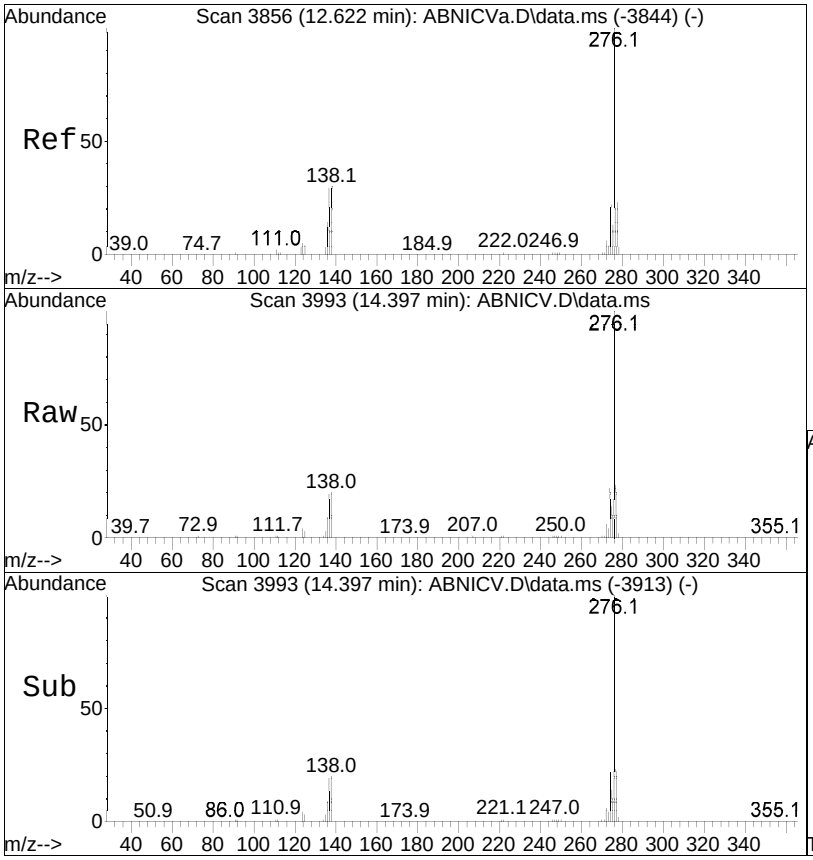


#114
Dibenzo(a,h)anthracene
Concen: 5.04 ug/ml
RT: 14.199 min Scan# 3929
Delta R.T. -0.003 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:278 Resp: 152789

Ion	Ratio	Lower	Upper
278	100		
139	16.6	20.8	31.2#
279	22.5	18.3	27.5

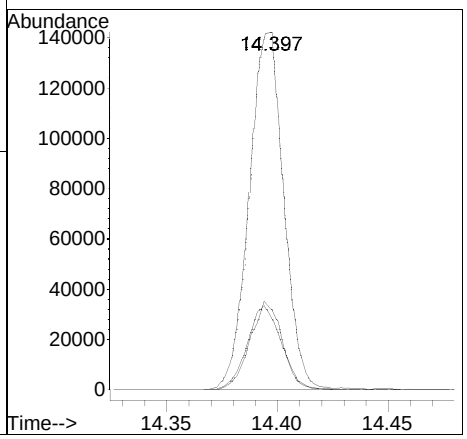




#115
Benzo(ghi)perylene
Concen: 5.00 ug/ml
RT: 14.397 min Scan# 3993
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 13 Apr 2023 9:12 am

Tgt Ion:276 Resp: 153056

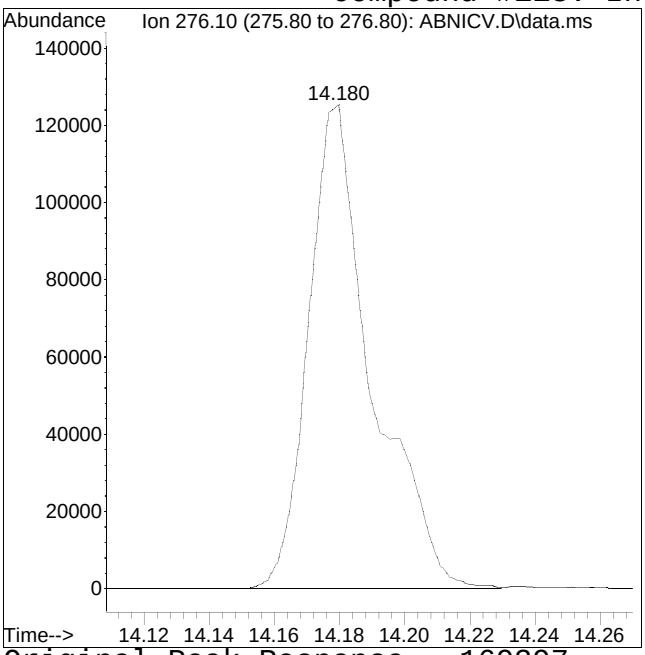
Ion	Ratio	Lower	Upper
276	100		
138	23.4	29.2	43.8#
277	23.3	18.8	28.2



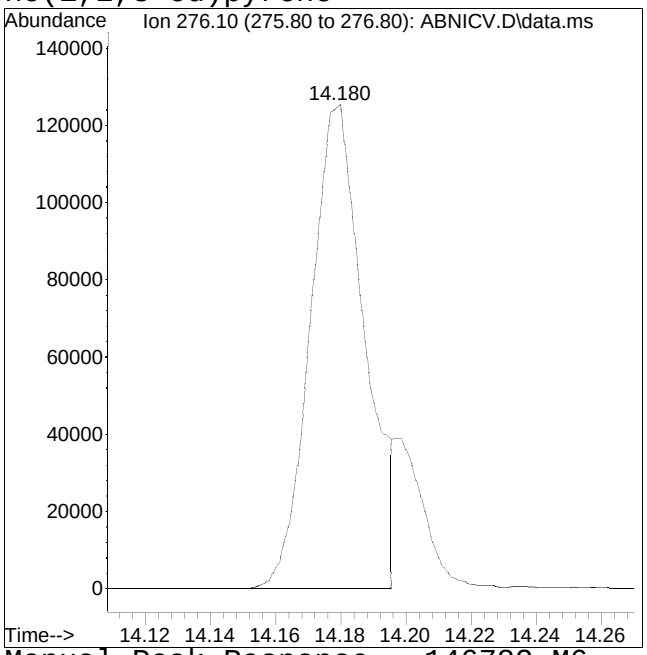
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ABNICV.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 9:12 am Instrument : Dakota
Sample : CQICV1,32,,ABNICV Lot# 100Quant Date : 4/19/2023 2:36 pm

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 169397



Manual Peak Response = 146722 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9ICV.D
Acq On : 13 Apr 2023 9:35 am
Operator : Dakota:jg
Sample : CQICV2,32,,AP9ICV Lot# 1009
Misc : WG1768668,,
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 19 13:48:28 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Apr 19 13:48:57 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
27	I	IS2_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	97	0.00
28	T	Benzaldehyde		1.046	0.983	6.0	84	0.00
29	T	Acetophenone		1.831	1.654	9.7	82	0.00
30	T	m-Toluidine	*	5.000	4.519	9.6	81	0.00
31	T	2-Chloroaniline		1.693	1.595	5.8	84	0.00
54	I	IS2_Naphthalene-d8		1.000	1.000	0.0	92	0.00
55	T	a-Terpineol		0.277	0.267	3.6	84	0.00
56	T	3-Chloroaniline		0.138	0.131	5.1	77	0.00
57	T	2,6-Dichlorophenol		0.276	0.268	2.9	84	0.00
58	T	1-chloro-2-nitrobenzene		0.149	0.138	7.4	81	0.00
59	T	Caprolactam		0.149	0.126	15.4	77	0.00
60	T	1,2,4,5-Tetrachlorobenzene		0.402	0.380	5.5	83	0.00
61	T	Biphenyl		0.901	0.858	4.8	84	0.00
82	I	IS2_Acenaphthene-d10		1.000	1.000	0.0	88	0.00
83	T	Dichloran	*	5.000	4.247	15.1	85	0.00
84	T	Pentachloronitrobenzene		0.203	0.175	13.8	75	0.00
97	I	IS2_Phenanthrene-d10		1.000	1.000	0.0	89	0.00
98	T	Diphenamid		0.501	0.485	3.2	82	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9ICV.D
Acq On : 13 Apr 2023 9:35 am
Operator : Dakota:jg
Sample : CQICV2,32,,AP9ICV Lot# 1009
Misc : WG1768668,,
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 19 13:48:28 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Apr 19 13:48:57 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
27) IS2_1,4-Dichlorobenzen...	4.762	152	16015	4.000	ug/ml		0.00
Standard Area 1 = 16494			Recovery =	97.10%			
54) IS2_Naphthalene-d8	5.999	136	59348	4.000	ug/ml	#	0.00
Standard Area 1 = 64517			Recovery =	91.99%			
82) IS2_Acenaphthene-d10	7.700	164	31596	4.000	ug/ml		0.00
Standard Area 1 = 35809			Recovery =	88.23%			
97) IS2_Phenanthrene-d10	9.129	188	69655	4.000	ug/ml		0.00
Standard Area 1 = 78618			Recovery =	88.60%			
System Monitoring Compounds							
Target Compounds							Qvalue
28) Benzaldehyde	4.330	105	19688	4.701	ug/ml		95
29) Acetophenone	5.163	105	33118	4.517	ug/ml	#	81
30) m-Toluidine	5.244	106	31135	4.519	ug/ml		95
31) 2-Chloroaniline	5.605	127	31934	4.710	ug/ml	#	91
55) a-Terpineol	6.052	59	19815	4.828	ug/ml		89
56) 3-Chloroaniline	6.068	65	9744	4.770	ug/ml		98
57) 2,6-Dichlorophenol	6.093	162	19917	4.864	ug/ml	#	85
58) 1-chloro-2-nitrobenzene	6.348	111	10256	4.649	ug/ml	#	1
59) Caprolactam	6.385	55	9322	4.227	ug/ml	#	75
60) 1,2,4,5-Tetrachloroben...	6.867	216	28223	4.732	ug/ml	#	95
61) Biphenyl	7.156	154	63642	4.761	ug/ml		96
83) Dichloran	8.825	206	6888	4.247	ug/ml	#	70
84) Pentachloronitrobenzene	8.977	237	6910	4.304	ug/ml	#	85
98) Diphenamid	10.031	167	42207	4.834	ug/ml	#	79

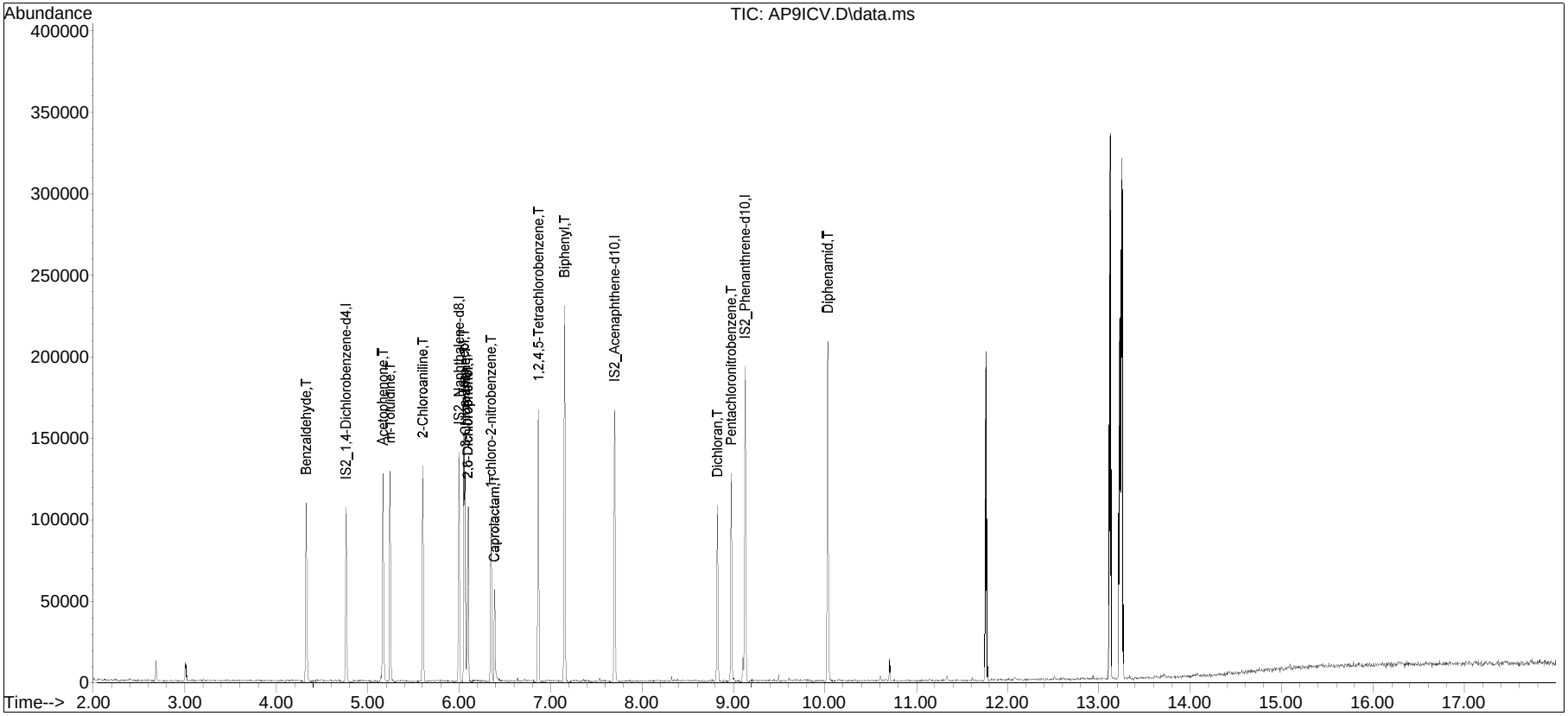
(#) = qualifier out of range (m) = manual integration (+) = signals summed

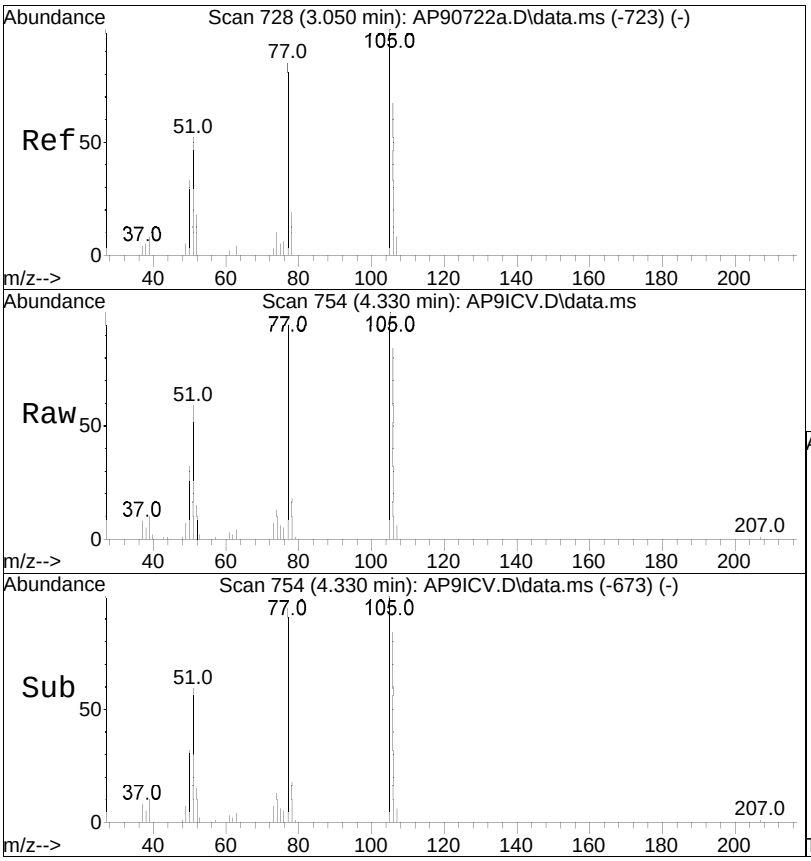
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : AP9ICV.D
Acq On : 13 Apr 2023 9:35 am
Operator : Dakota:jg
Sample : CQICV2,32,,AP9ICV Lot# 1009
Misc : WG1768668,,
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Apr 19 13:48:28 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Apr 19 13:48:57 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistviical\AP9L6.D•

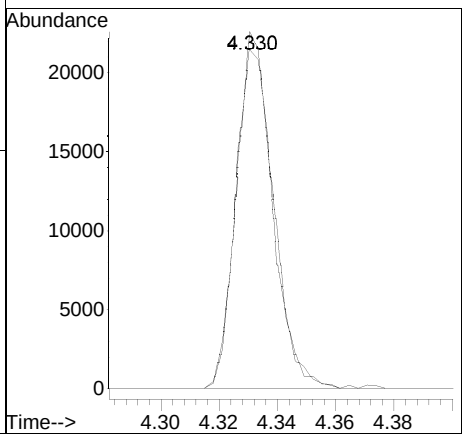


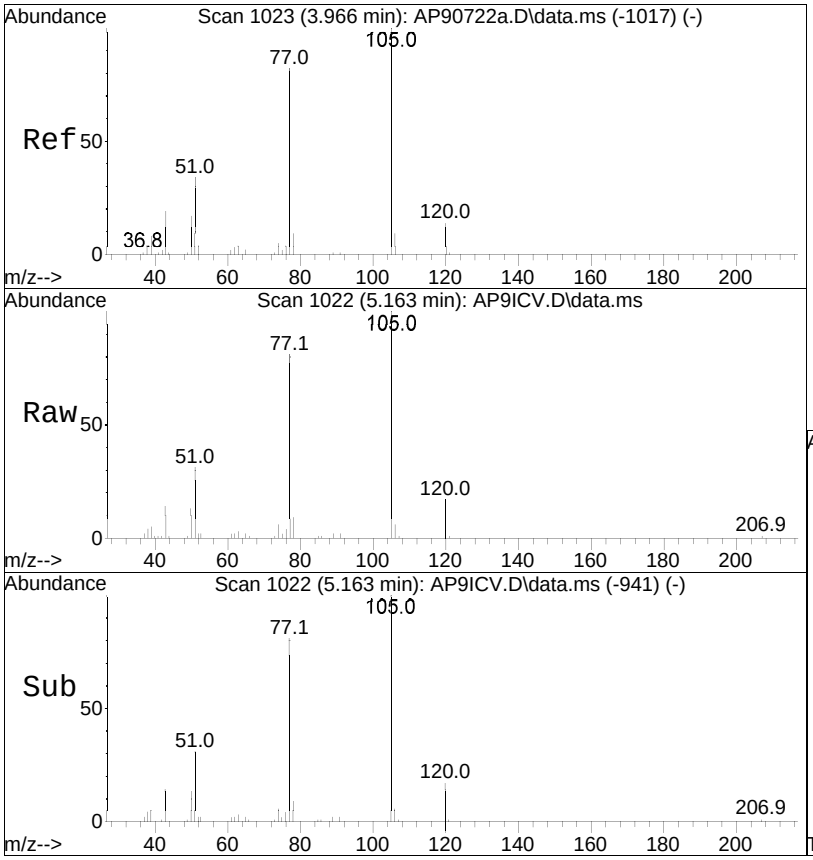


#28
Benzaldehyde
Concen: 4.70 ug/ml
RT: 4.330 min Scan# 754
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion:105 Resp: 19688

Ion	Ratio	Lower	Upper
105	100		
77	98.0	82.2	123.4

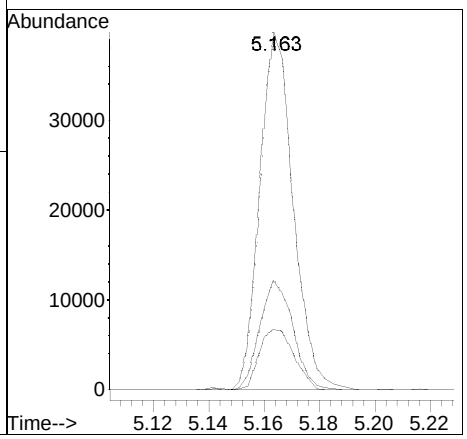


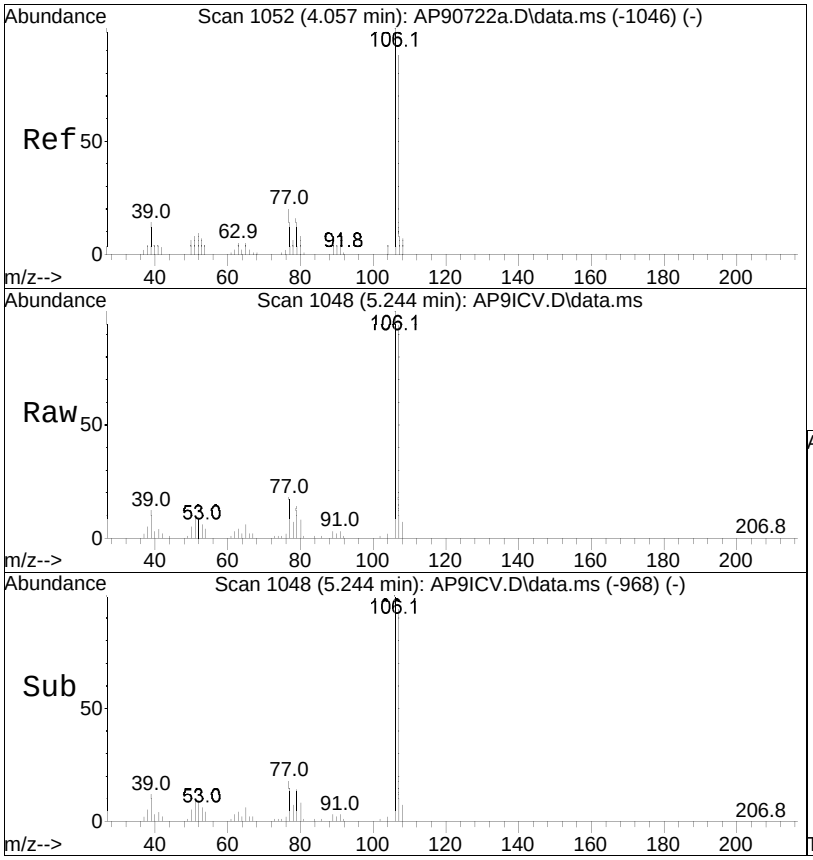


#29
Acetophenone
Concen: 4.52 ug/ml
RT: 5.163 min Scan# 1022
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion:105 Resp: 33118

Ion	Ratio	Lower	Upper
105	100		
120	17.7	20.5	30.7#
51	30.5	34.9	52.3#

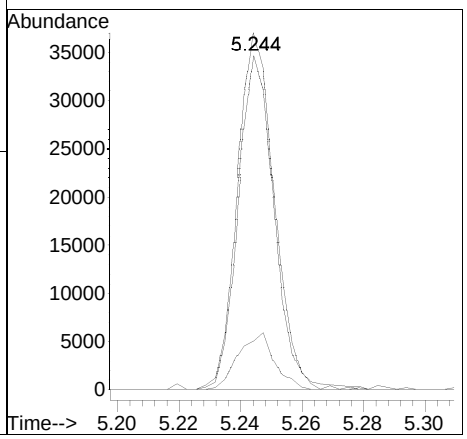


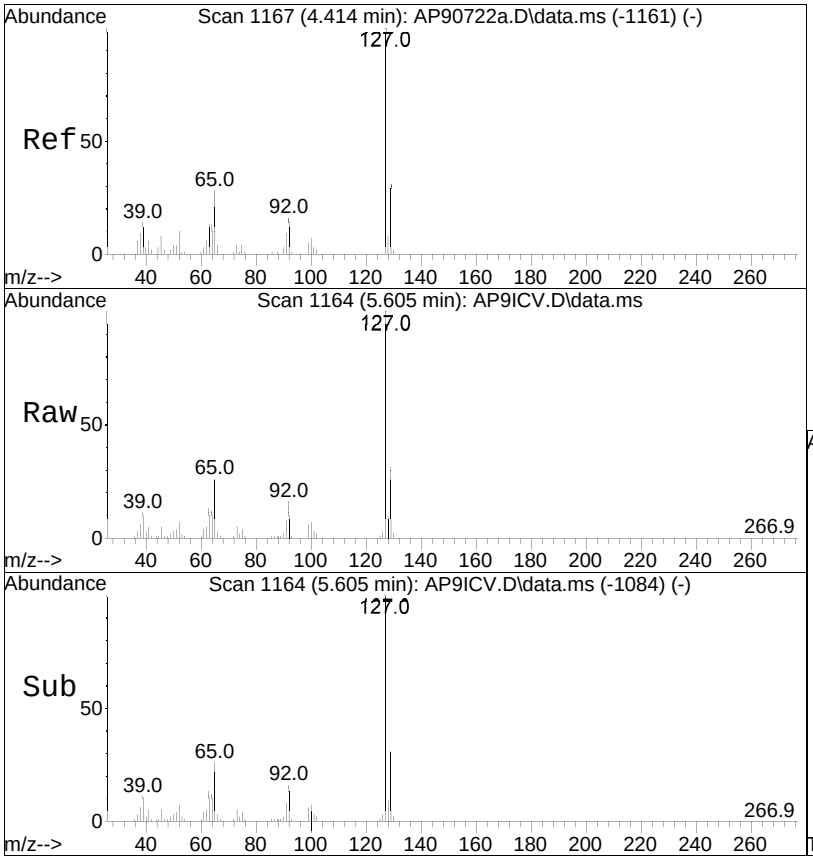


#30
m-Toluidine
Concen: 4.52 ug/ml
RT: 5.244 min Scan# 1048
Delta R.T. -0.003 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion:106 Resp: 31135

Ion	Ratio	Lower	Upper
106	100		
107	89.5	75.7	113.5
79	15.5	11.8	17.8

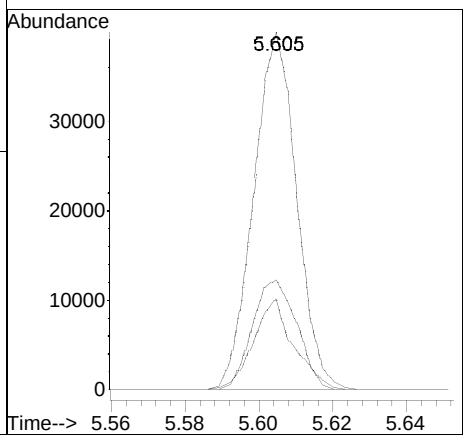


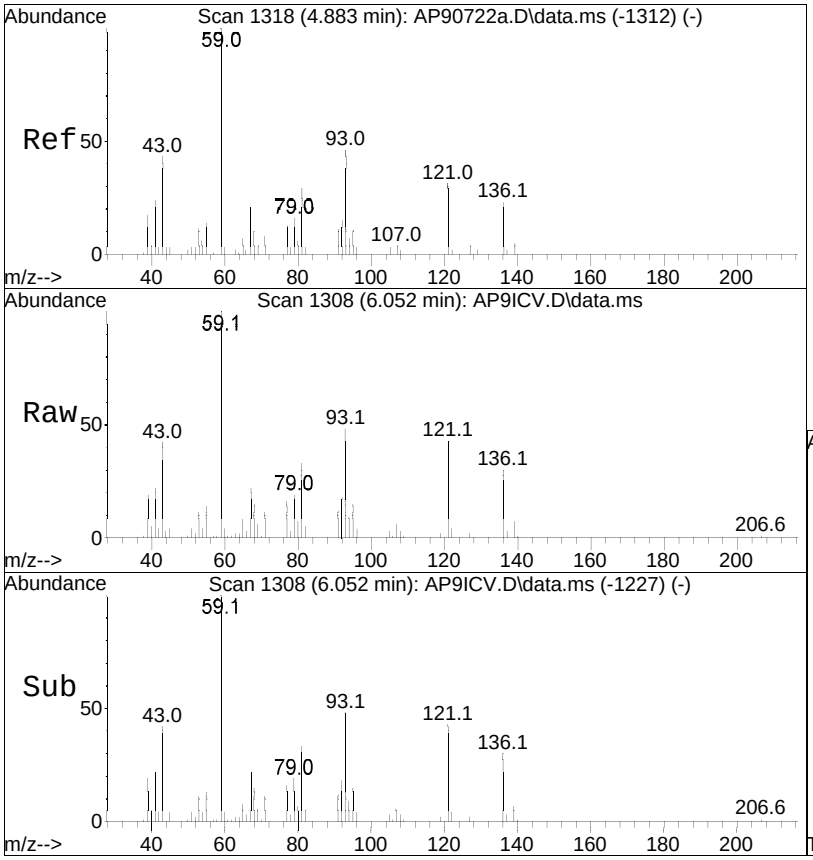


#31
2-Chloroaniline
Concen: 4.71 ug/ml
RT: 5.605 min Scan# 1164
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion:127 Resp: 31934

Ion	Ratio	Lower	Upper
127	100		
129	32.2	25.9	38.9
65	23.4	26.3	39.5#

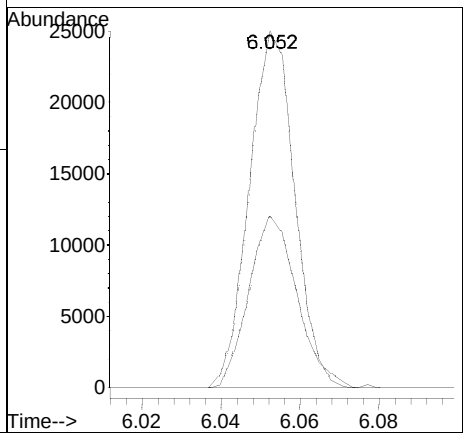


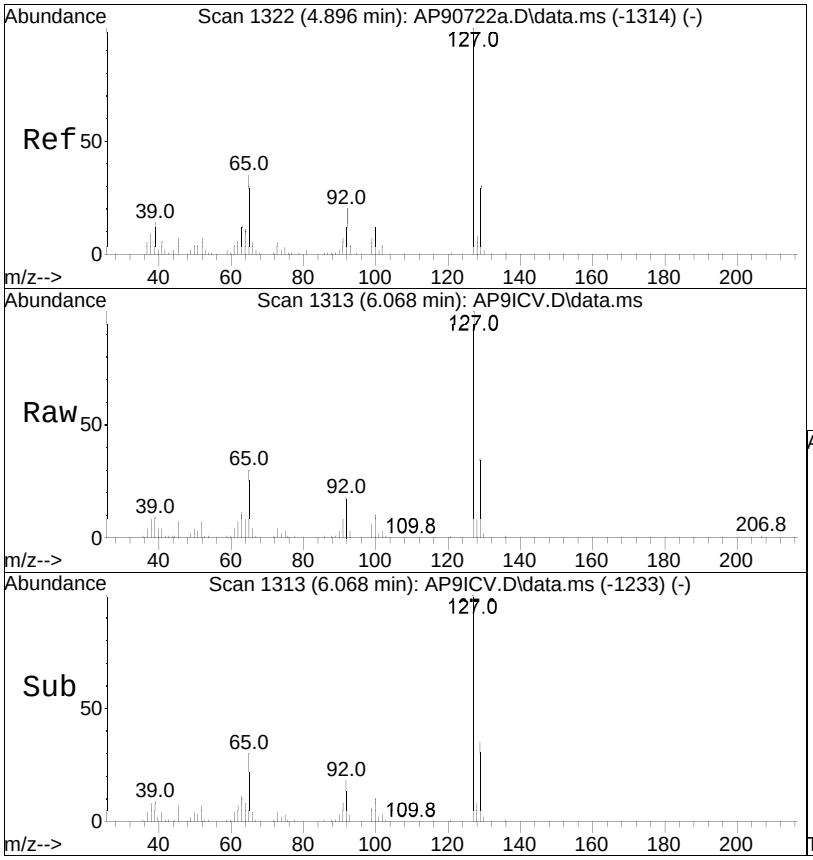


#55
a-Terpineol
Concen: 4.83 ug/ml
RT: 6.052 min Scan# 1308
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion: 59 Resp: 19815

Ion	Ratio	Lower	Upper
59	100		
93	51.7	35.6	53.4

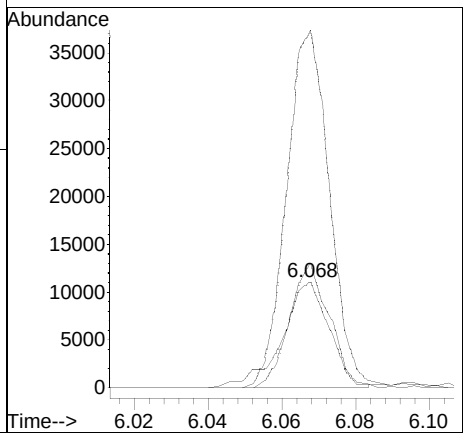


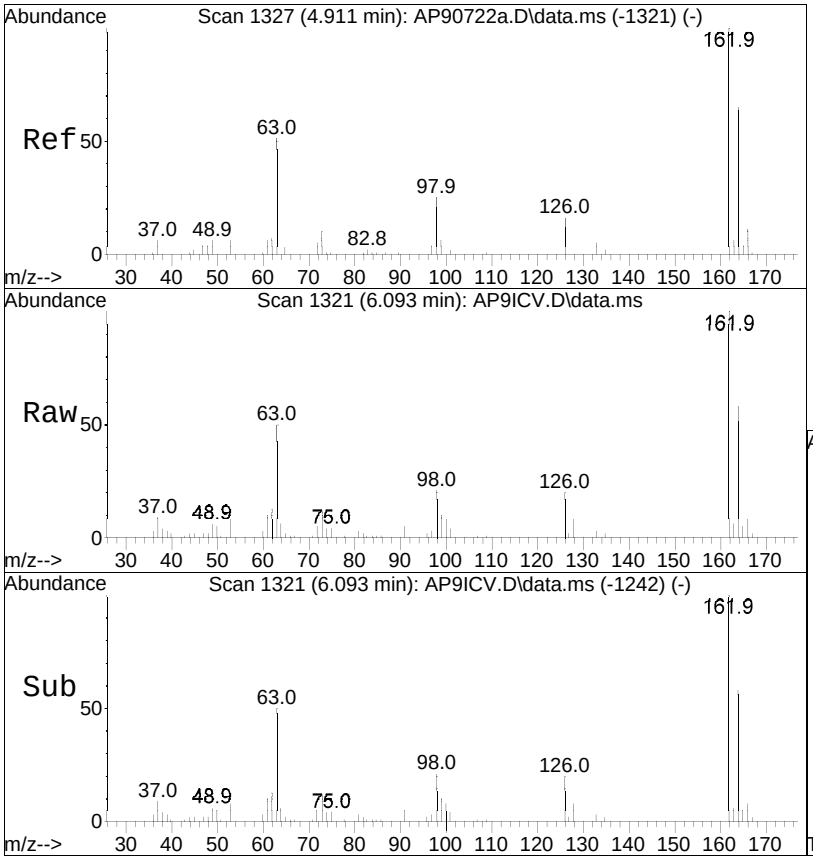


#56
3-Chloroaniline
Concen: 4.77 ug/ml
RT: 6.068 min Scan# 1313
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion: 65 Resp: 9744

Ion	Ratio	Lower	Upper
65	100		
127	307.5	243.2	364.8
129	100.2	78.8	118.2

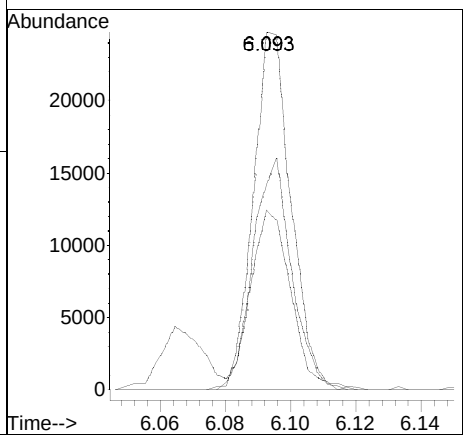


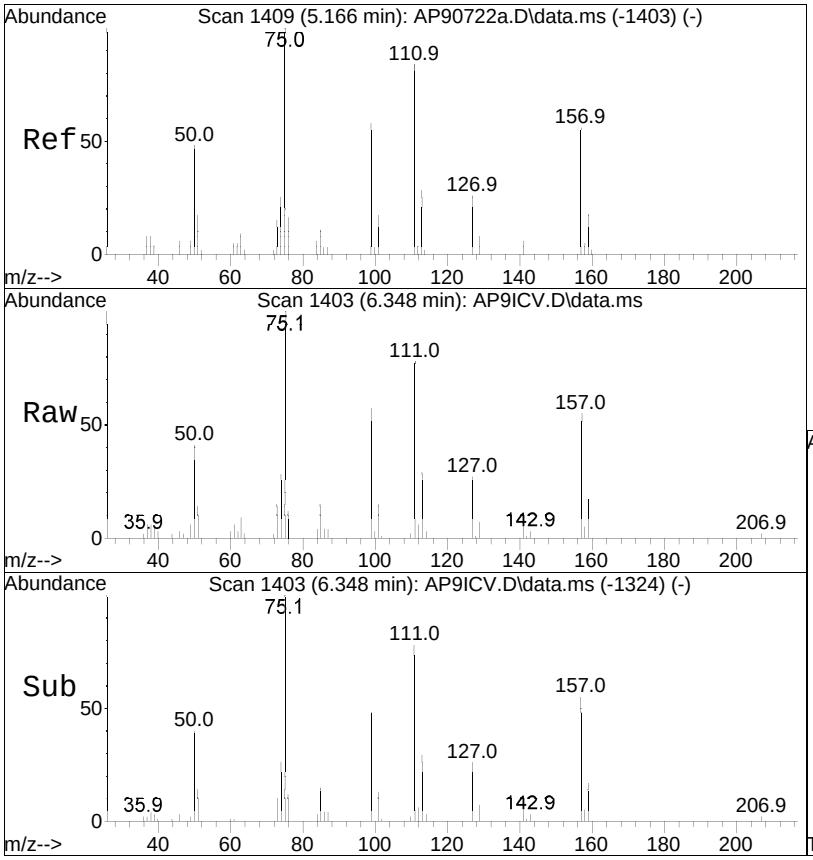


#57
2,6-Dichlorophenol
Concen: 4.86 ug/ml
RT: 6.093 min Scan# 1321
Delta R.T. -0.003 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion:162 Resp: 19917

Ion	Ratio	Lower	Upper
162	100		
164	65.9	51.1	76.7
63	53.4	60.8	91.2#

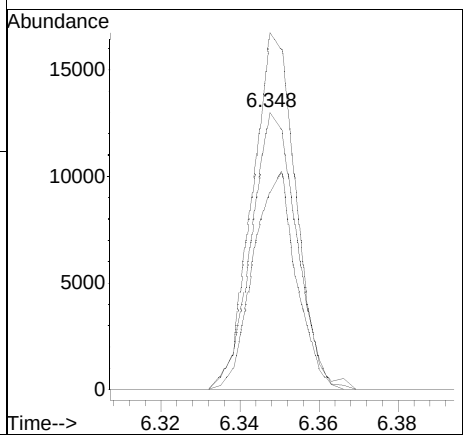


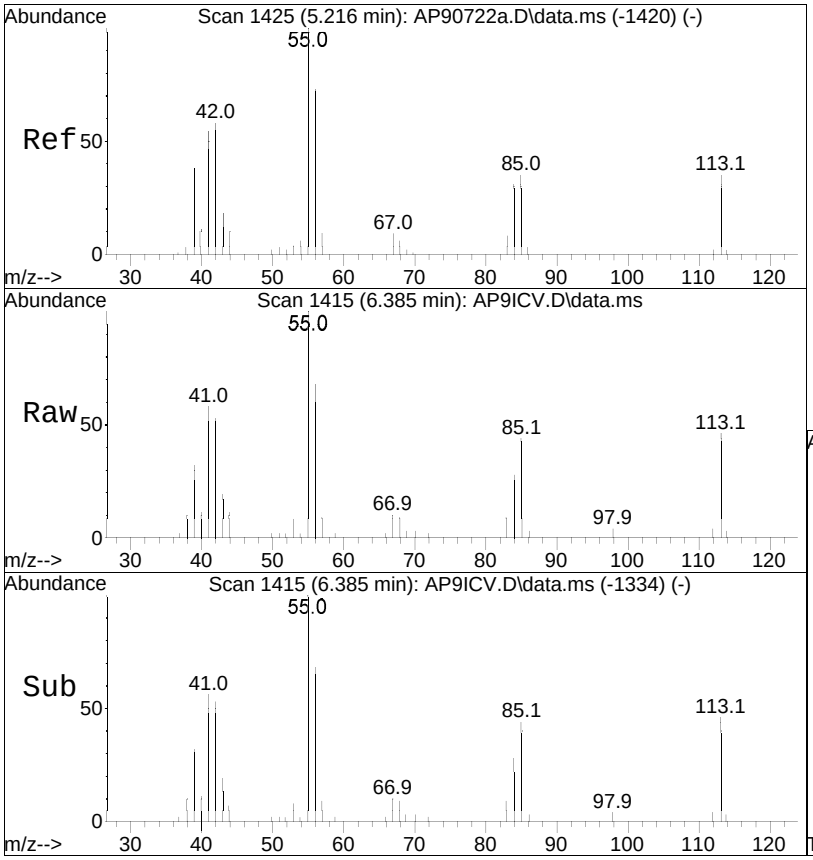


#58
1-chloro-2-nitrobenzene
Concen: 4.65 ug/ml
RT: 6.348 min Scan# 1403
Delta R.T. -0.003 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion:111 Resp: 10256

Ion	Ratio	Lower	Upper
111	100		
157	75.0	0.0	0.0#
75	124.8	28.2	42.2#

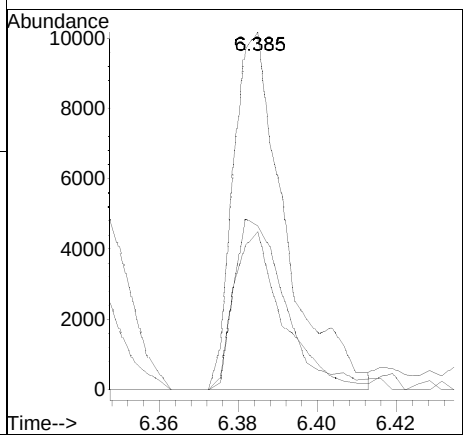


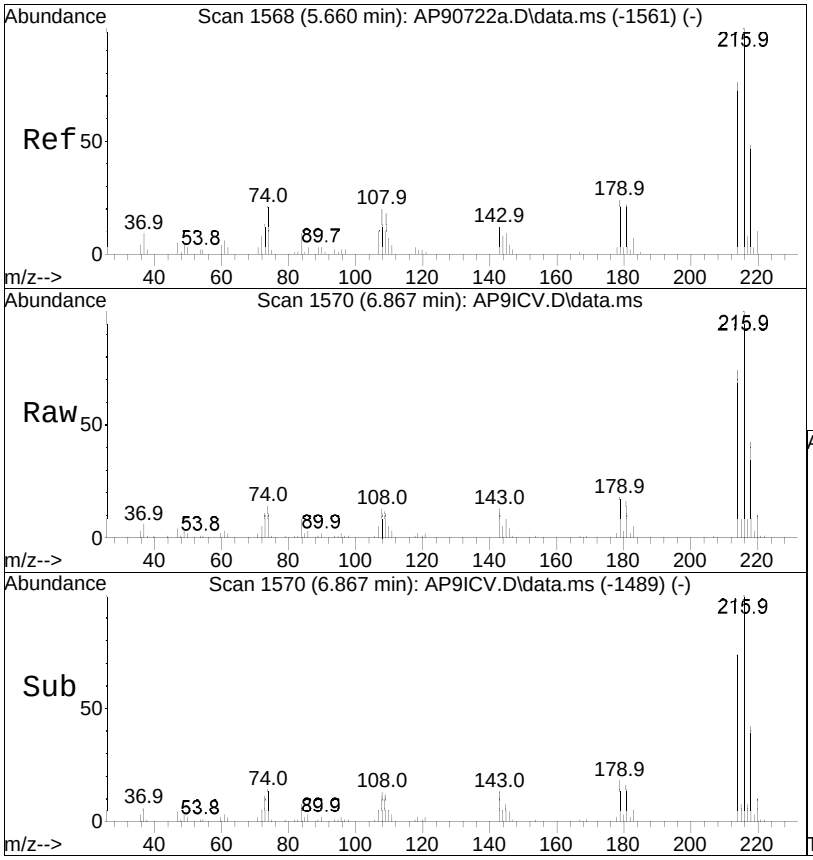


#59
Caprolactam
Concen: 4.23 ug/ml
RT: 6.385 min Scan# 1415
Delta R.T. 0.003 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion: 55 Resp: 9322

Ion	Ratio	Lower	Upper
55	100		
85	42.2	19.8	29.6#
113	48.3	29.6	44.4#

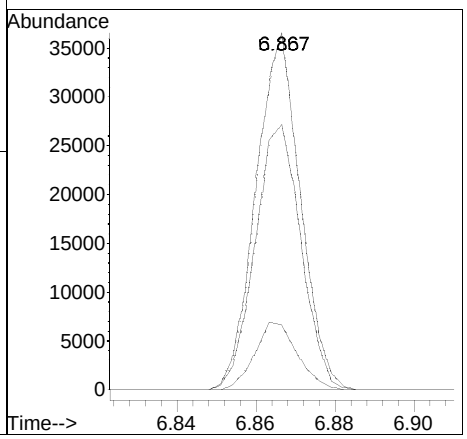


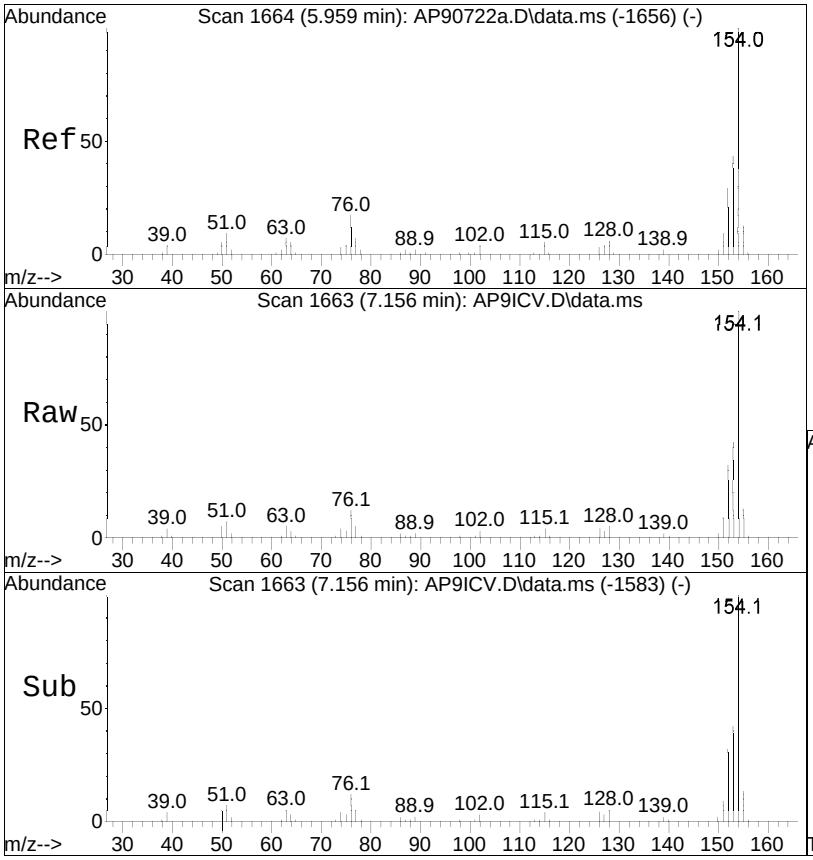


#60
1,2,4,5-Tetrachlorobenzene
Concen: 4.73 ug/ml
RT: 6.867 min Scan# 1570
Delta R.T. 0.001 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion:216 Resp: 28223

Ion	Ratio	Lower	Upper
216	100		
214	76.9	63.7	95.5
179	18.3	19.0	28.6#

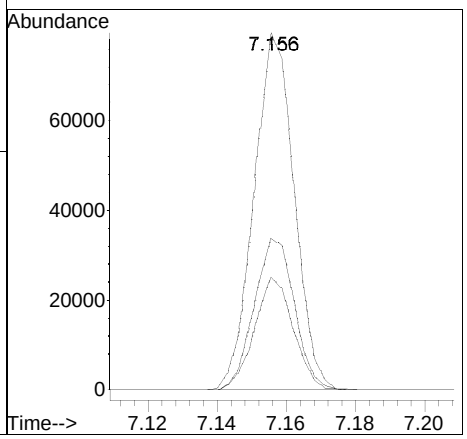


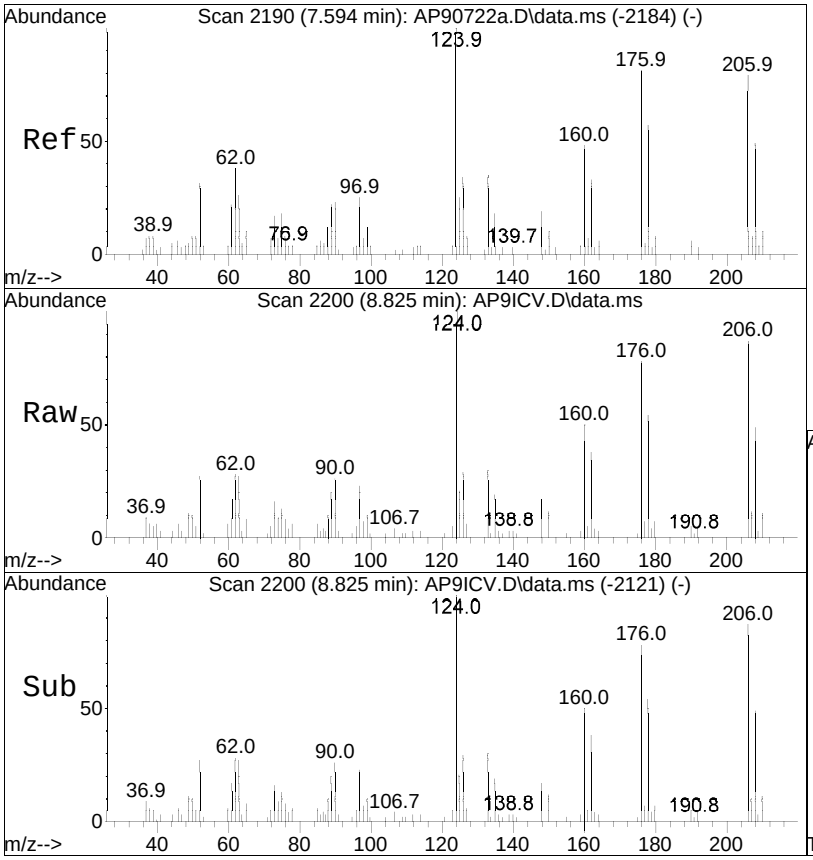


#61
Biphenyl
Concen: 4.76 ug/ml
RT: 7.156 min Scan# 1663
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion:154 Resp: 63642

Ion	Ratio	Lower	Upper
154	100		
153	42.5	32.3	48.5
152	30.5	22.5	33.7

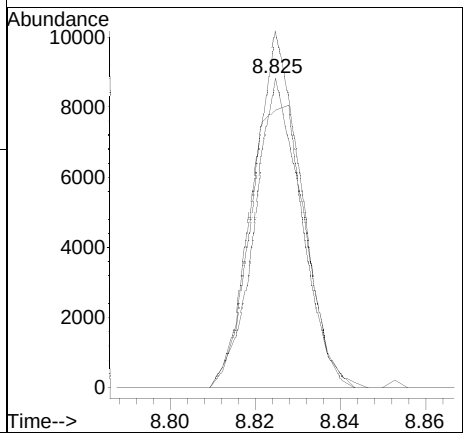


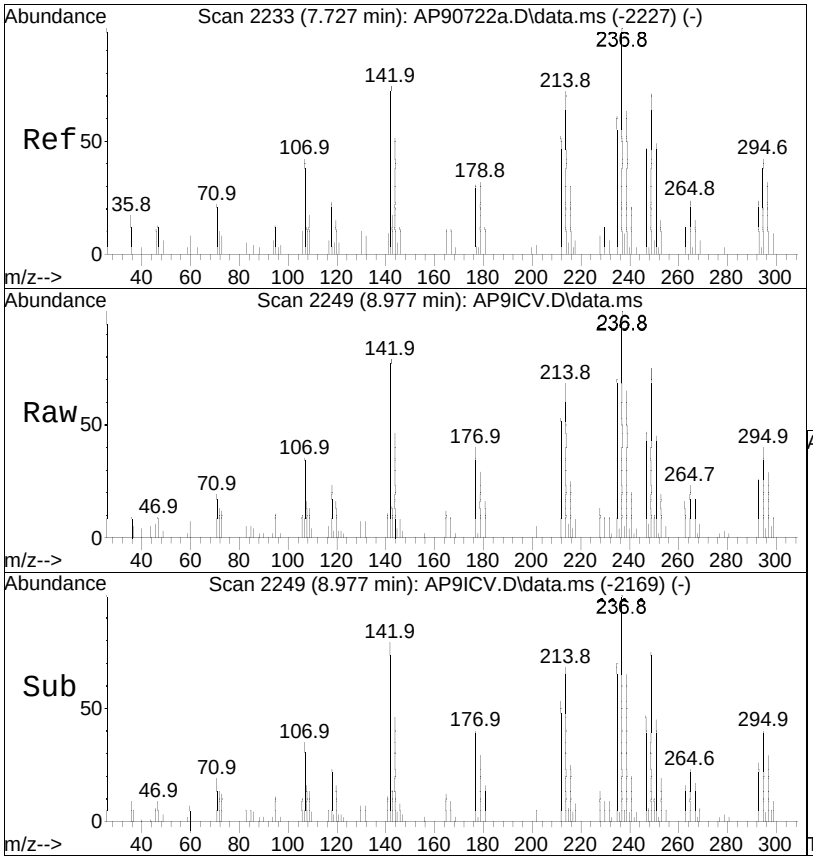


#83
Dichloran
Concen: 4.25 ug/ml
RT: 8.825 min Scan# 2200
Delta R.T. -0.003 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion:206 Resp: 6888

Ion	Ratio	Lower	Upper
206	100		
176	103.3	104.6	157.0#
124	116.0	130.5	195.7#

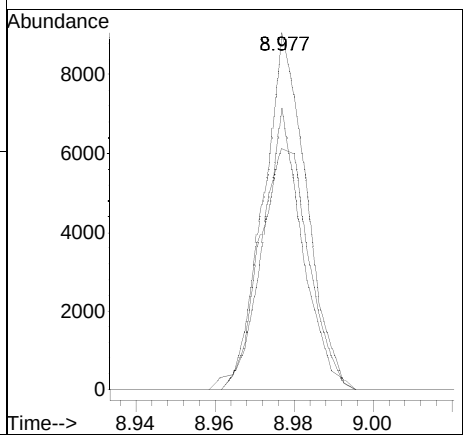


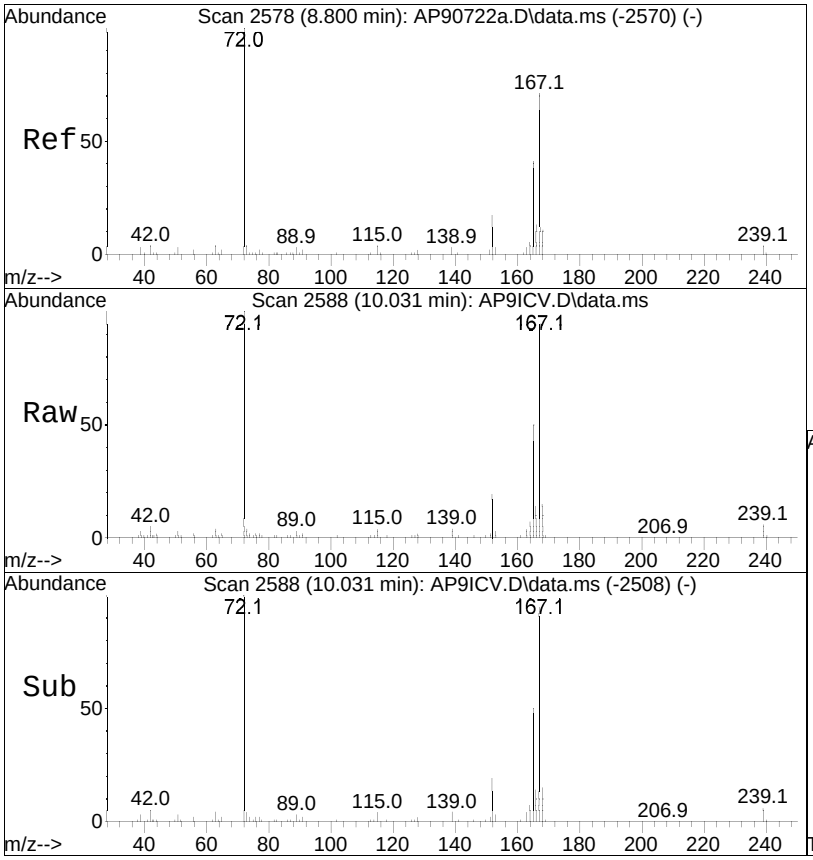


#84
Pentachloronitrobenzene
Concen: 4.30 ug/ml
RT: 8.977 min Scan# 2249
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion:237 Resp: 6910

Ion	Ratio	Lower	Upper
237	100		
142	73.5	77.0	115.4#
214	75.5	58.2	87.4

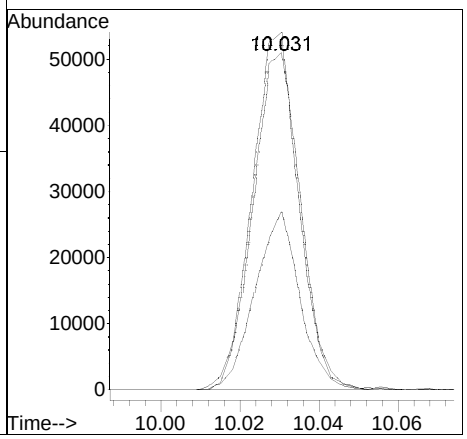




#98
Diphenamid
Concen: 4.83 ug/ml
RT: 10.031 min Scan# 2588
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 13 Apr 2023 9:35 am

Tgt Ion:167 Resp: 42207

Ion	Ratio	Lower	Upper
167	100		
72	103.6	109.7	164.5#
165	50.4	41.8	62.6



Manual Integration Report

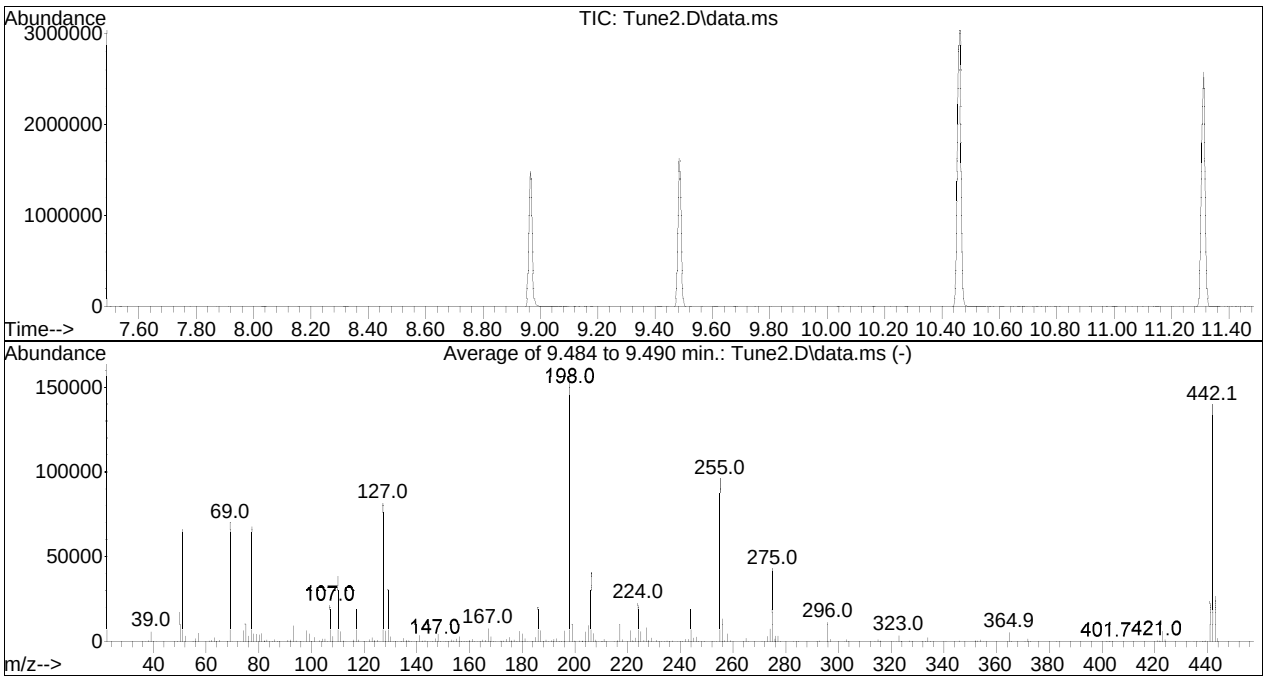
Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: AP9ICV.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 9:35 am	Instrument	: Dakota
Sample	: CQICV2,32,,AP9ICV Lot# 100	Quant Date	: 4/19/2023 1:48 pm

There are no manual integrations or false positives in this file.

Data Path : I:\8270\Dakota\230412lviical\
Data File : Tune2.D
Acq On : 13 Apr 2023 10:50 am
Operator : Dakota:jg
Sample : Tune2
Misc : WG1768668,,
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Wed Apr 19 14:34:59 2023



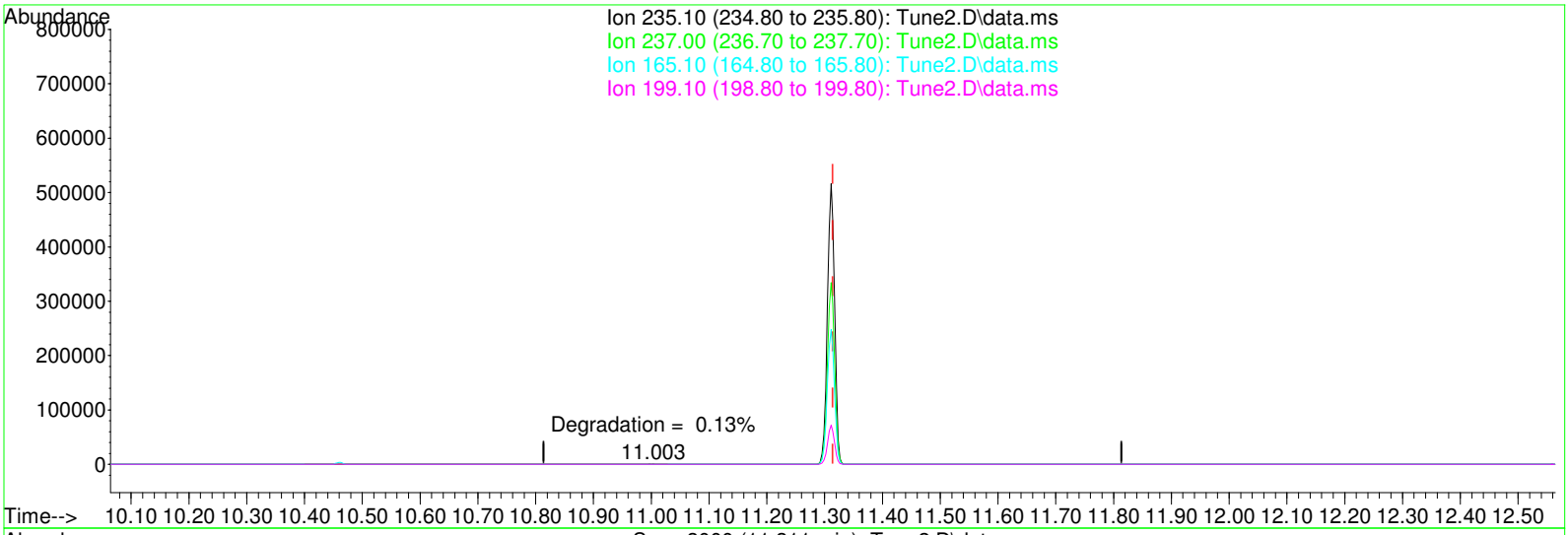
Spectrum Information: Average of 9.484 to 9.490 min.

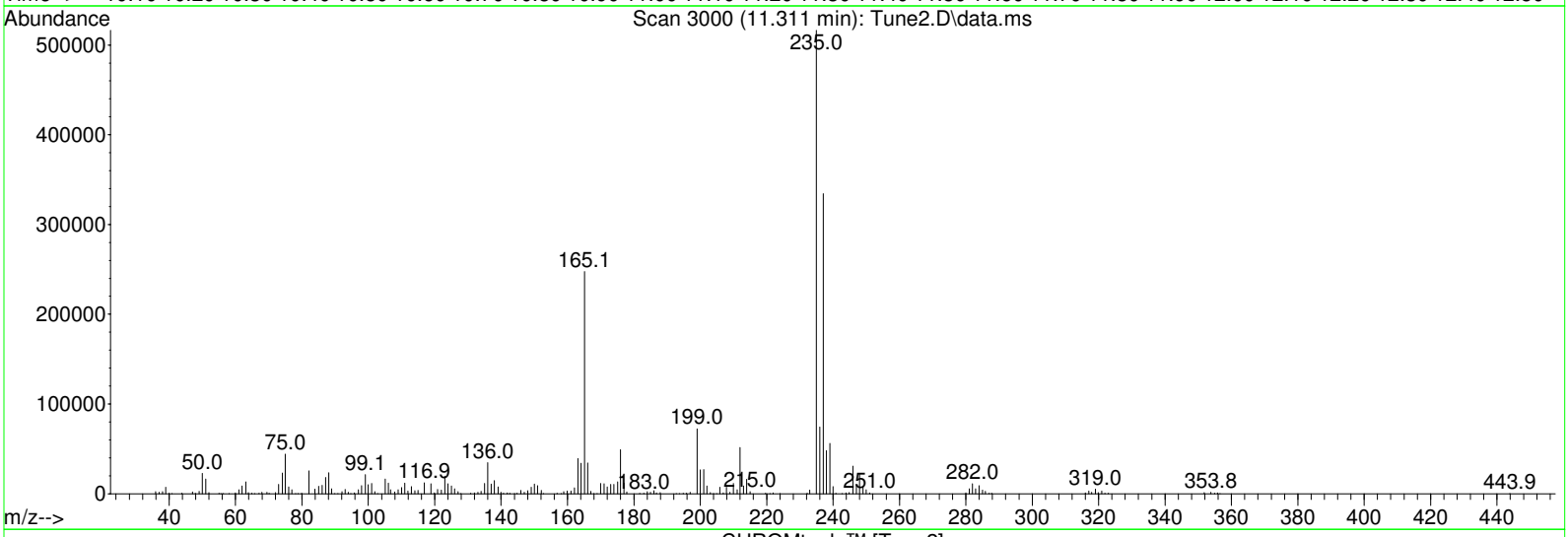
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	42.3	65880	PASS
68	69	0.00	2	0.6	444	PASS
69	69	100	100	100.0	70008	PASS
70	69	0.00	2	0.5	335	PASS
127	198	10	80	52.3	81379	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	155637	PASS
199	198	5	9	6.9	10702	PASS
275	198	10	60	27.5	42760	PASS
365	198	1	100	3.5	5438	PASS
441	442	0.01	24	16.7	23347	PASS
442	198	50	100	89.9	139869	PASS
443	442	15	24	19.0	26579	PASS

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230412lviical\
Data File : Tune2.D
Acq On : 13 Apr 2023 10:50 am
Operator : Dakota:jg
Sample : Tune2
Misc : WG1768668,,
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Apr 15 10:12:49 2023
Quant Method : I:\8270\Dakota\230412lviical\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Apr 13 01:34:58 2023
Response via : Initial Calibration





CHROMtools™ [Tune2]

(6) DDT (T)

11.311min (-0.003) 73.85

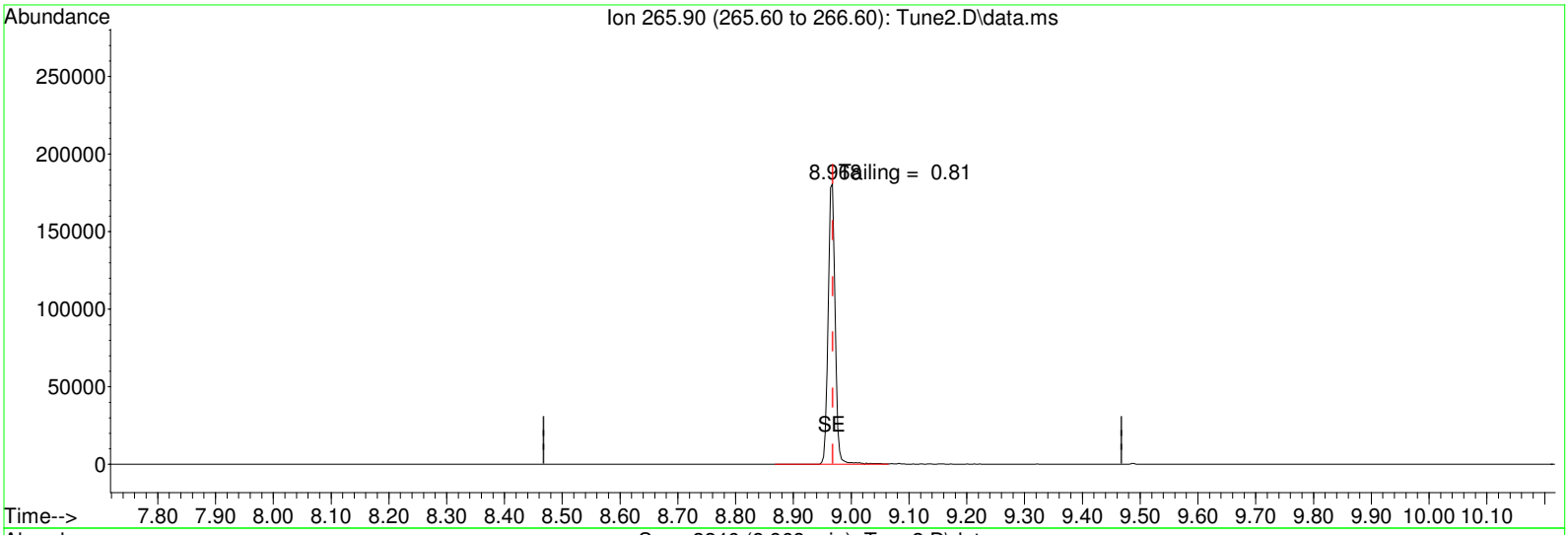
response 450173

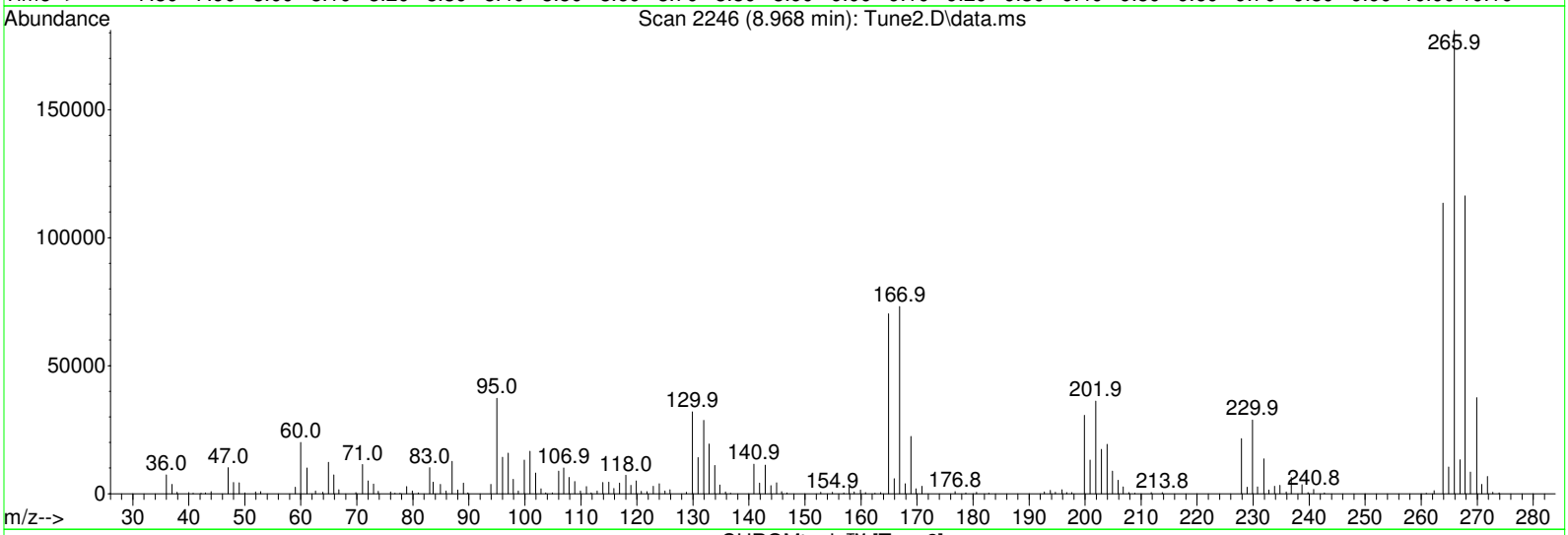
Ion	Exp%	Act%
235.10	100.00	100.00
237.00	63.40	64.99
165.10	50.50	48.05
199.10	15.30	13.54

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230412lviical\
Data File : Tune2.D
Acq On : 13 Apr 2023 10:50 am
Operator : Dakota:jg
Sample : Tune2
Misc : WG1768668,,
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Apr 15 10:12:49 2023
Quant Method : I:\8270\Dakota\230412lviical\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Apr 13 01:34:58 2023
Response via : Initial Calibration





CHROMtools™ [Tune2]

(1) Pentachlorophenol (T)

8.968min (-0.000) 71.87

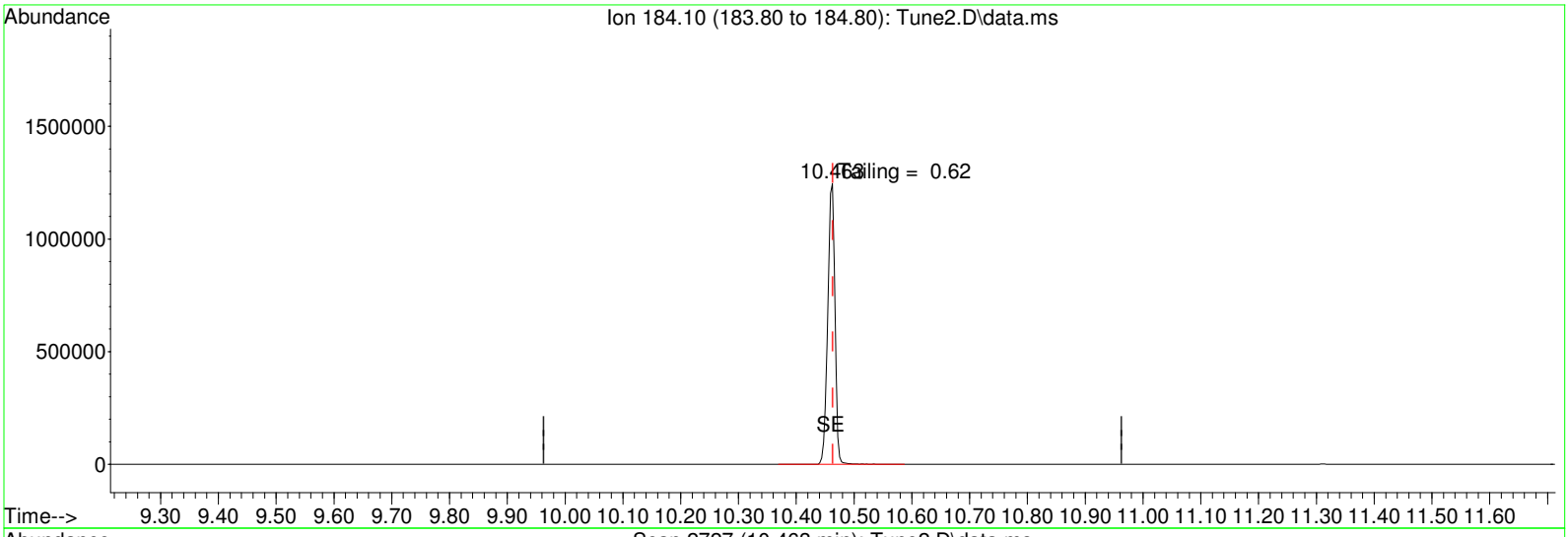
response 150944

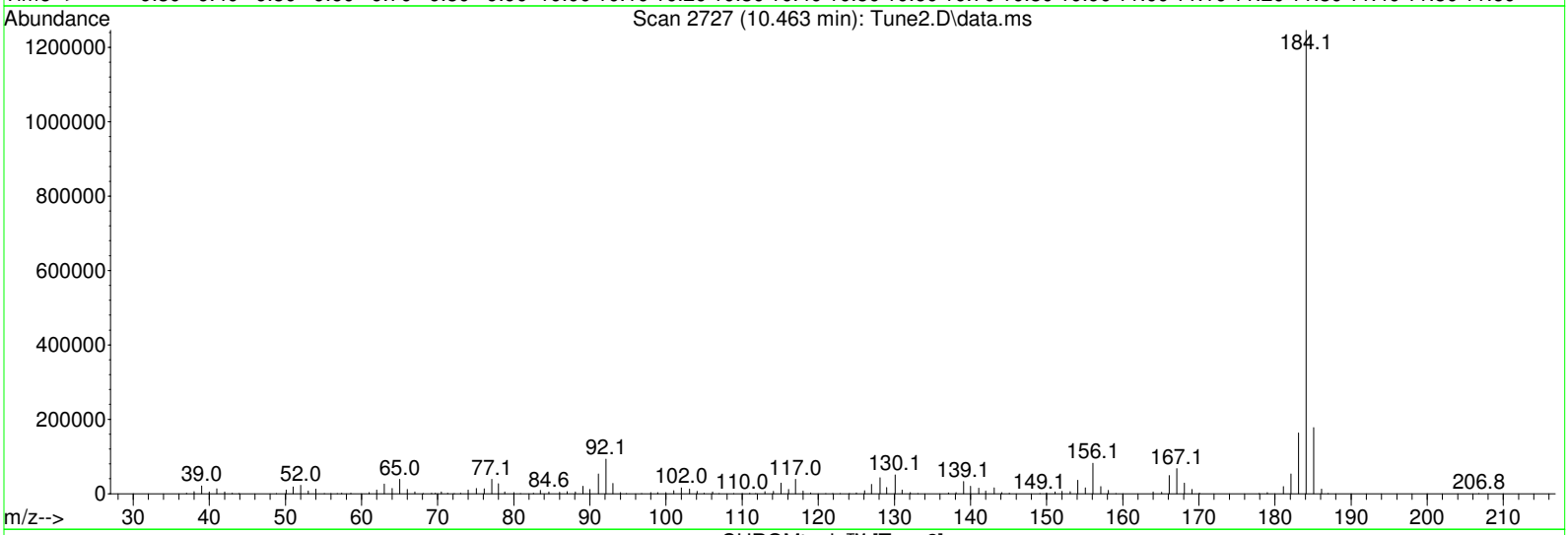
Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230412lviical\
Data File : Tune2.D
Acq On : 13 Apr 2023 10:50 am
Operator : Dakota:jg
Sample : Tune2
Misc : WG1768668,,
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Apr 15 10:12:49 2023
Quant Method : I:\8270\Dakota\230412lviical\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Apr 13 01:34:58 2023
Response via : Initial Calibration





CHROMtools™ [Tune2]

(3) Benzidine (T)

10.463min (-0.000) 105.48

response 1073838

Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL10.D
Acq On : 13 Apr 2023 11:12 am
Operator : Dakota:jg
Sample : IL1,32,,ADPL50 Lot# 9952
Misc : WG1768668,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 15 10:02:47 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	4.762	152	17861	4.000	ug/ml	0.00
Standard Area 1 = 18600			Recovery =	96.03%		
85) IS3_Acenaphthene-d10	7.700	164	38984	4.000	ug/ml	0.00
Standard Area 1 = 39128			Recovery =	99.63%		
99) IS3_Phenanthrene-d10	9.132	188	92656	4.000	ug/ml	0.00
Standard Area 1 = 89637			Recovery =	103.37%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	4.651	57	265592	67.917	ug/ml#	33
86) Atrazine	8.902	200	213909	60.435	ug/ml	93
100) n-Octadecane	9.101	57	451671	50.557	ug/ml#	1
101) Parathion	9.913	109	148153	49.525	ug/ml	93
102) 3,3'-Dimethylbenzidine	11.199	212	991803	49.084	ug/ml	98

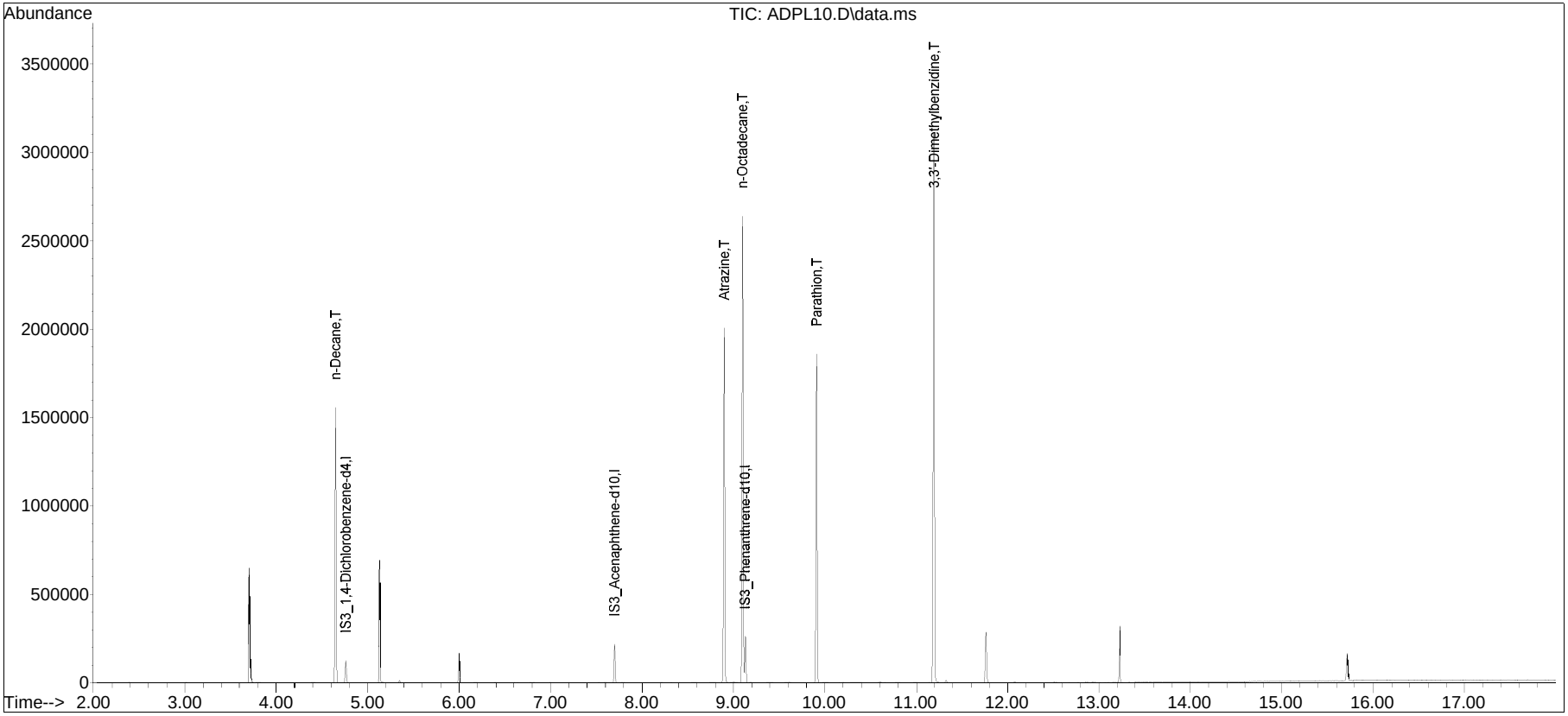
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL10.D
Acq On : 13 Apr 2023 11:12 am
Operator : Dakota:jg
Sample : IL1,32,,ADPL50 Lot# 9952
Misc : WG1768668,,
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Apr 15 10:02:47 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistviical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: ADPL10.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 11:12 am	Instrument	: Dakota
Sample	: IL1,32,,ADPL50 Lot# 9952	Quant Date	: 4/15/2023 10:03 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL9.D
Acq On : 13 Apr 2023 11:35 am
Operator : Dakota:jg
Sample : IL2,32,,ADPL35 Lot# 9969
Misc : WG1768668,,
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 15 10:05:28 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	4.762	152	18118	4.000	ug/ml	0.00
Standard Area 1 = 18600			Recovery =	97.41%		
85) IS3_Acenaphthene-d10	7.699	164	39699	4.000	ug/ml	0.00
Standard Area 1 = 39128			Recovery =	101.46%		
99) IS3_Phenanthrene-d10	9.129	188	88755	4.000	ug/ml #	0.00
Standard Area 1 = 89637			Recovery =	99.02%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	4.650	57	193313	48.733	ug/ml#	34
86) Atrazine	8.902	200	139959	38.830	ug/ml	93
100) n-Octadecane	9.101	57	307387	35.919	ug/ml#	1
101) Parathion	9.912	109	95767	35.993	ug/ml	94
102) 3,3'-Dimethylbenzidine	11.196	212	667038	36.644	ug/ml	98

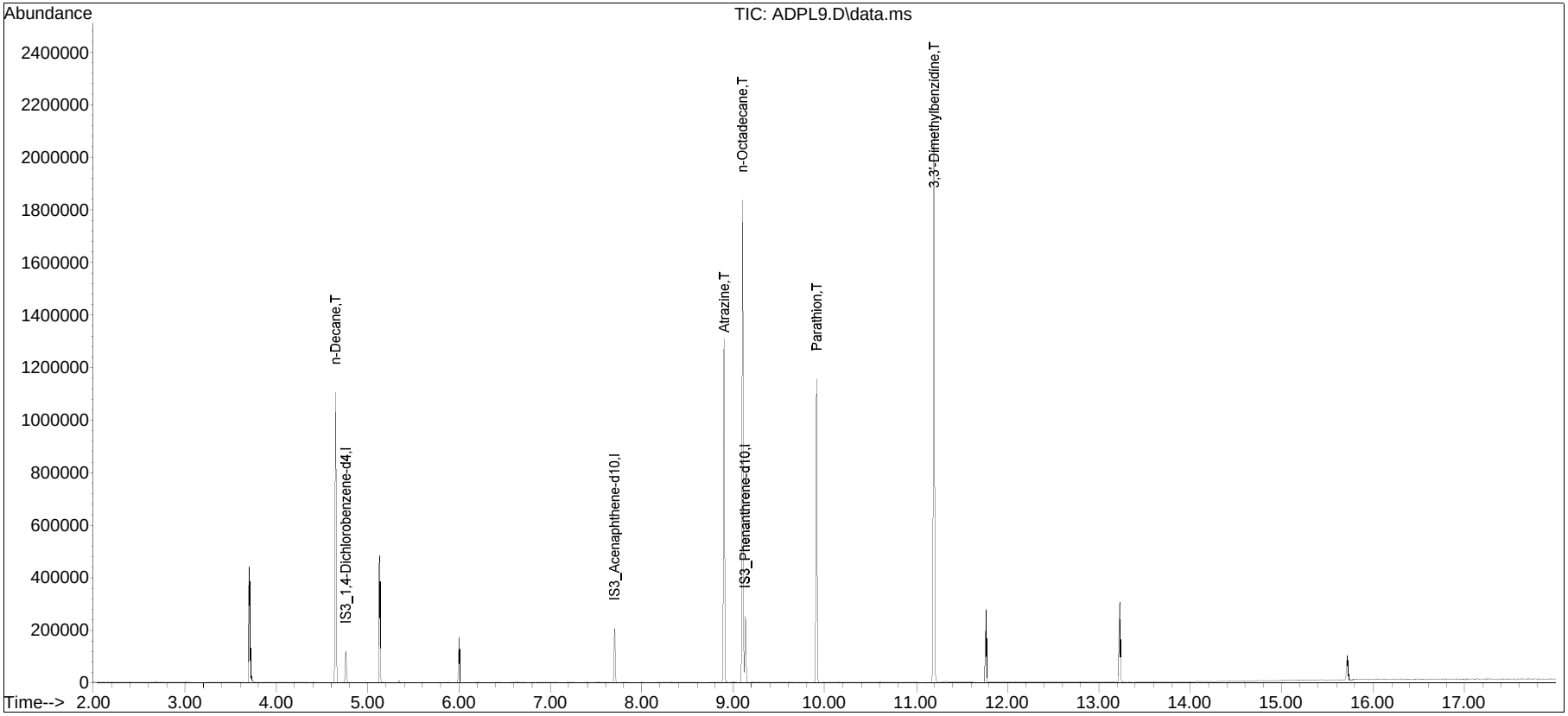
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL9.D
Acq On : 13 Apr 2023 11:35 am
Operator : Dakota:jg
Sample : IL2,32,,ADPL35 Lot# 9969
Misc : WG1768668,,
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Apr 15 10:05:28 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistviical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: ADPL9.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 11:35 am	Instrument	: Dakota
Sample	: IL2,32,,ADPL35 Lot# 9969	Quant Date	: 4/15/2023 10:06 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL8.D
Acq On : 13 Apr 2023 11:58 am
Operator : Dakota:jg
Sample : IL3,32,,ADPL15 Lot# 9970
Misc : WG1768668,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 15 10:05:10 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	4.762	152	20021	4.000	ug/ml	0.00
Standard Area 1 = 18600			Recovery =	107.64%		
85) IS3_Acenaphthene-d10	7.699	164	40134	4.000	ug/ml	0.00
Standard Area 1 = 39128			Recovery =	102.57%		
99) IS3_Phenanthrene-d10	9.129	188	88102	4.000	ug/ml	0.00
Standard Area 1 = 89637			Recovery =	98.29%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	4.654	57	89952	20.521	ug/ml#	33
86) Atrazine	8.896	200	53700	14.737	ug/ml	93
100) n-Octadecane	9.101	57	127884	15.054	ug/ml#	1
101) Parathion	9.909	109	32104	13.996	ug/ml	91
102) 3,3'-Dimethylbenzidine	11.193	212	227215	14.335	ug/ml	98

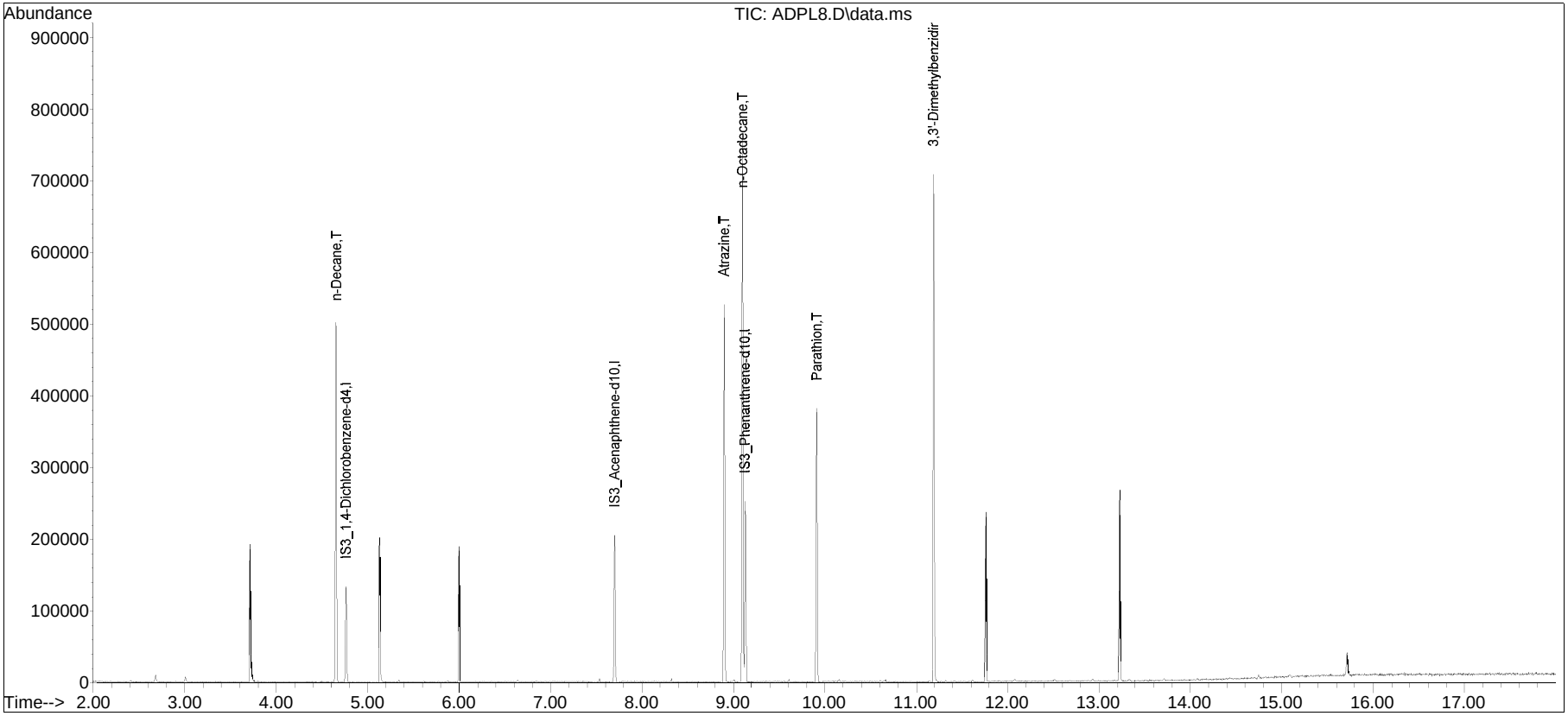
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL8.D
Acq On : 13 Apr 2023 11:58 am
Operator : Dakota:jg
Sample : IL3,32,,ADPL15 Lot# 9970
Misc : WG1768668,,
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Apr 15 10:05:10 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistviical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: ADPL8.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 11:58 am	Instrument	: Dakota
Sample	: IL3,32,,ADPL15 Lot# 9970	Quant Date	: 4/15/2023 10:05 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL7.D
Acq On : 13 Apr 2023 12:20 pm
Operator : Dakota:jg
Sample : IL4,32,,ADPL10 Lot# 9971
Misc : WG1768668,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 15 10:04:40 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	4.762	152	21060	4.000	ug/ml	0.00
Standard Area 1 = 18600			Recovery =	113.23%		
85) IS3_Acenaphthene-d10	7.699	164	44509	4.000	ug/ml	0.00
Standard Area 1 = 39128			Recovery =	113.75%		
99) IS3_Phenanthrene-d10	9.129	188	105753	4.000	ug/ml	0.00
Standard Area 1 = 89637			Recovery =	117.98%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	4.650	57	60821	13.191	ug/ml#	33
86) Atrazine	8.896	200	43510	10.767	ug/ml	92
100) n-Octadecane	9.101	57	108684	10.659	ug/ml#	1
101) Parathion	9.909	109	28358	10.588	ug/ml	95
102) 3,3'-Dimethylbenzidine	11.193	212	190635	10.348	ug/ml	98

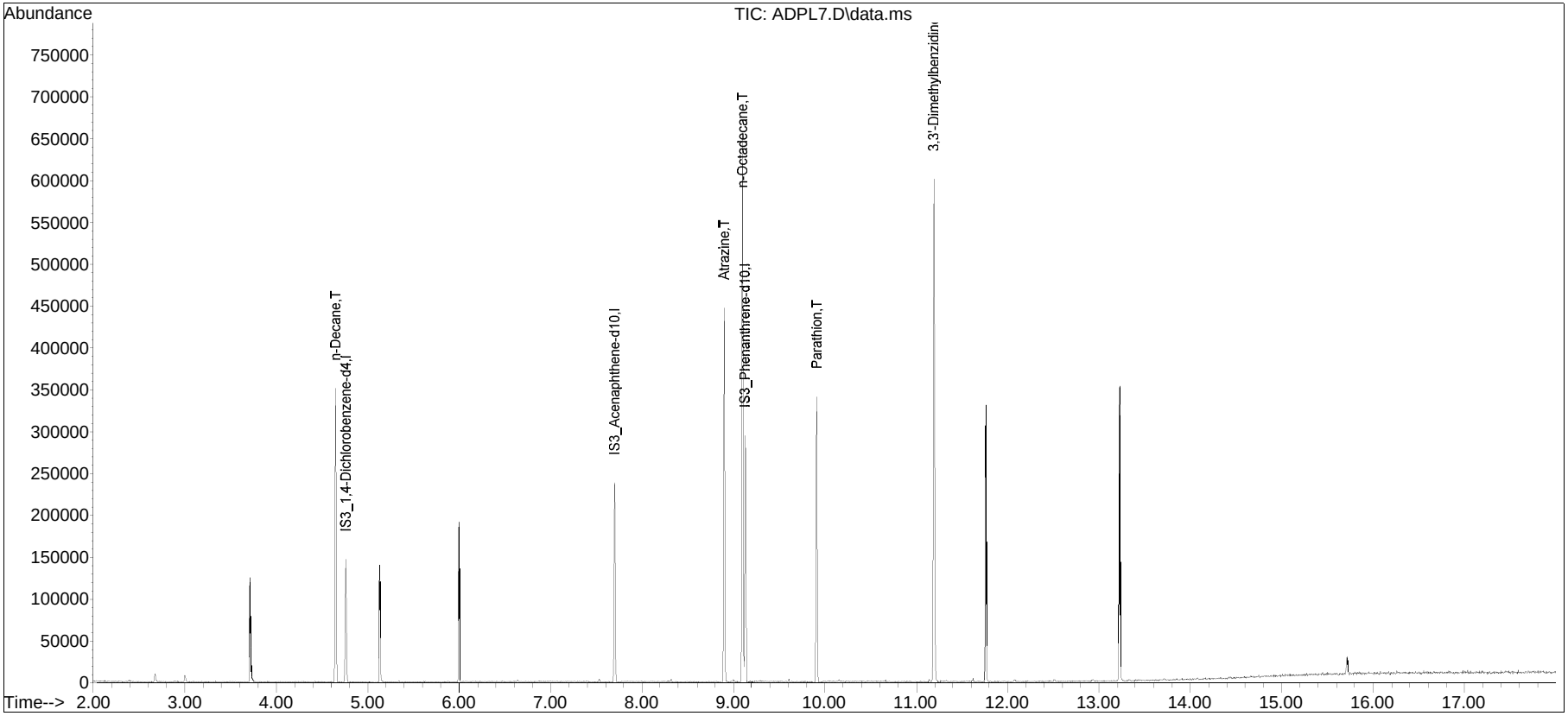
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL7.D
Acq On : 13 Apr 2023 12:20 pm
Operator : Dakota:jg
Sample : IL4,32,,ADPL10 Lot# 9971
Misc : WG1768668,,
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Apr 15 10:04:40 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistviical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: ADPL7.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 12:20 pm	Instrument	: Dakota
Sample	: IL4,32,,ADPL10 Lot# 9971	Quant Date	: 4/15/2023 10:05 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL6.D
Acq On : 13 Apr 2023 12:43 pm
Operator : Dakota:jg
Sample : IL5,32,,ADPL5 Lot# 9972
Misc : WG1768668,,
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 15 10:04:19 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	4.765	152	18600	4.000	ug/ml	0.00
Standard Area 1 = 18600			Recovery =	100.00%		
85) IS3_Acenaphthene-d10	7.699	164	39128	4.000	ug/ml	0.00
Standard Area 1 = 39128			Recovery =	100.00%		
99) IS3_Phenanthrene-d10	9.132	188	89637	4.000	ug/ml	0.00
Standard Area 1 = 89637			Recovery =	100.00%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	4.650	57	29581	7.264	ug/ml#	33
86) Atrazine	8.896	200	18333	5.161	ug/ml	92
100) n-Octadecane	9.101	57	45038	5.211	ug/ml#	1
101) Parathion	9.909	109	10752	5.048	ug/ml	93
102) 3,3'-Dimethylbenzidine	11.193	212	73000	5.016	ug/ml	99

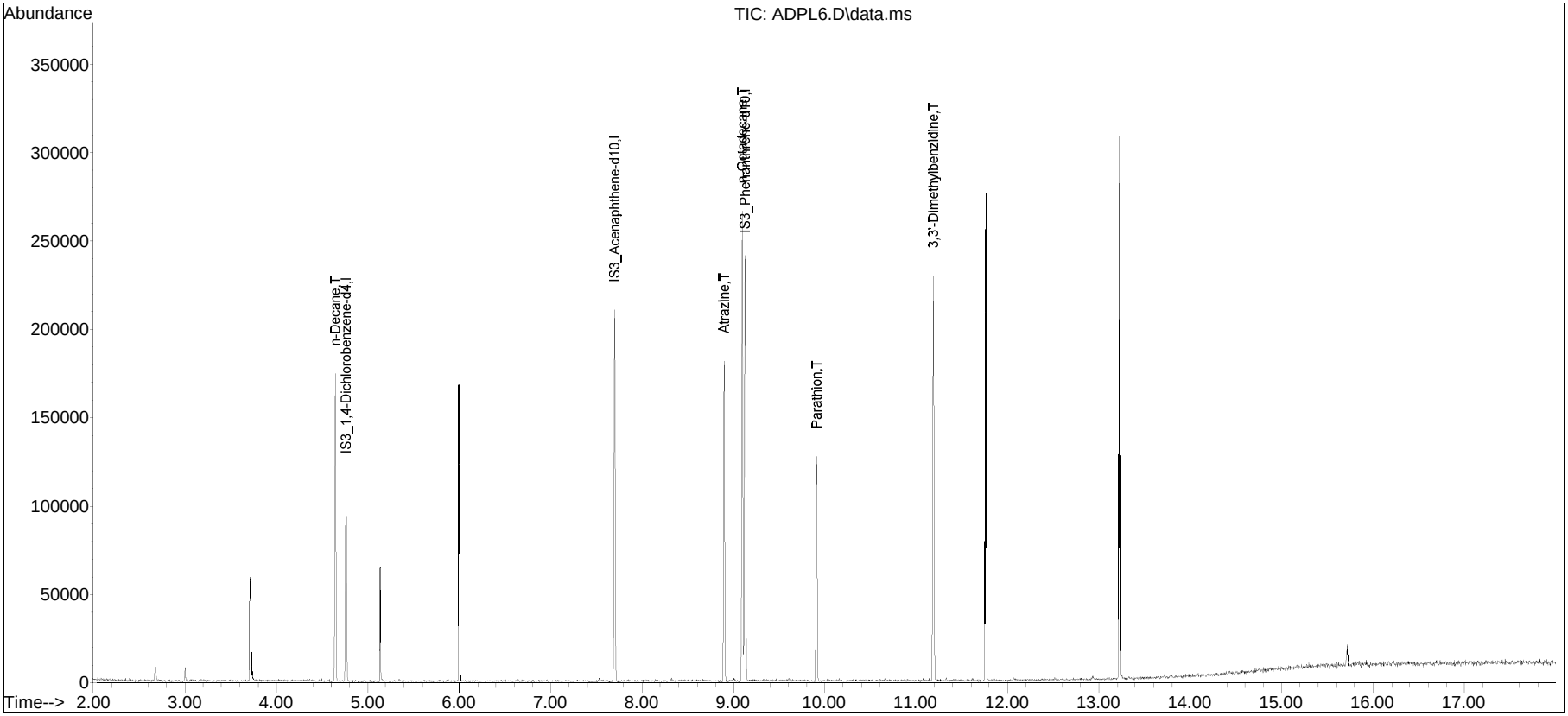
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL6.D
Acq On : 13 Apr 2023 12:43 pm
Operator : Dakota:jg
Sample : IL5,32,,ADPL5 Lot# 9972
Misc : WG1768668,,
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Apr 15 10:04:19 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistviical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: ADPL6.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 12:43 pm	Instrument	: Dakota
Sample	: IL5,32,,ADPL5 Lot# 9972	Quant Date	: 4/15/2023 10:04 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL5.D
Acq On : 13 Apr 2023 1:06 pm
Operator : Dakota:jg
Sample : IL6,32,,ADPL3 Lot# 9973
Misc : WG1768668,,
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Apr 15 10:04:02 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	4.762	152	23416	4.000	ug/ml	0.00
Standard Area 1 = 18600			Recovery =	125.89%		
85) IS3_Acenaphthene-d10	7.699	164	46211	4.000	ug/ml	0.00
Standard Area 1 = 39128			Recovery =	118.10%		
99) IS3_Phenanthrene-d10	9.129	188	100852	4.000	ug/ml #	0.00
Standard Area 1 = 89637			Recovery =	112.51%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	4.650	57	21441	4.182	ug/ml#	32
86) Atrazine	8.893	200	11324	2.699	ug/ml	93
100) n-Octadecane	9.101	57	29273	3.010	ug/ml#	1
101) Parathion	9.909	109	6523	2.877	ug/ml	97
102) 3,3'-Dimethylbenzidine	11.190	212	39666	2.645	ug/ml	98

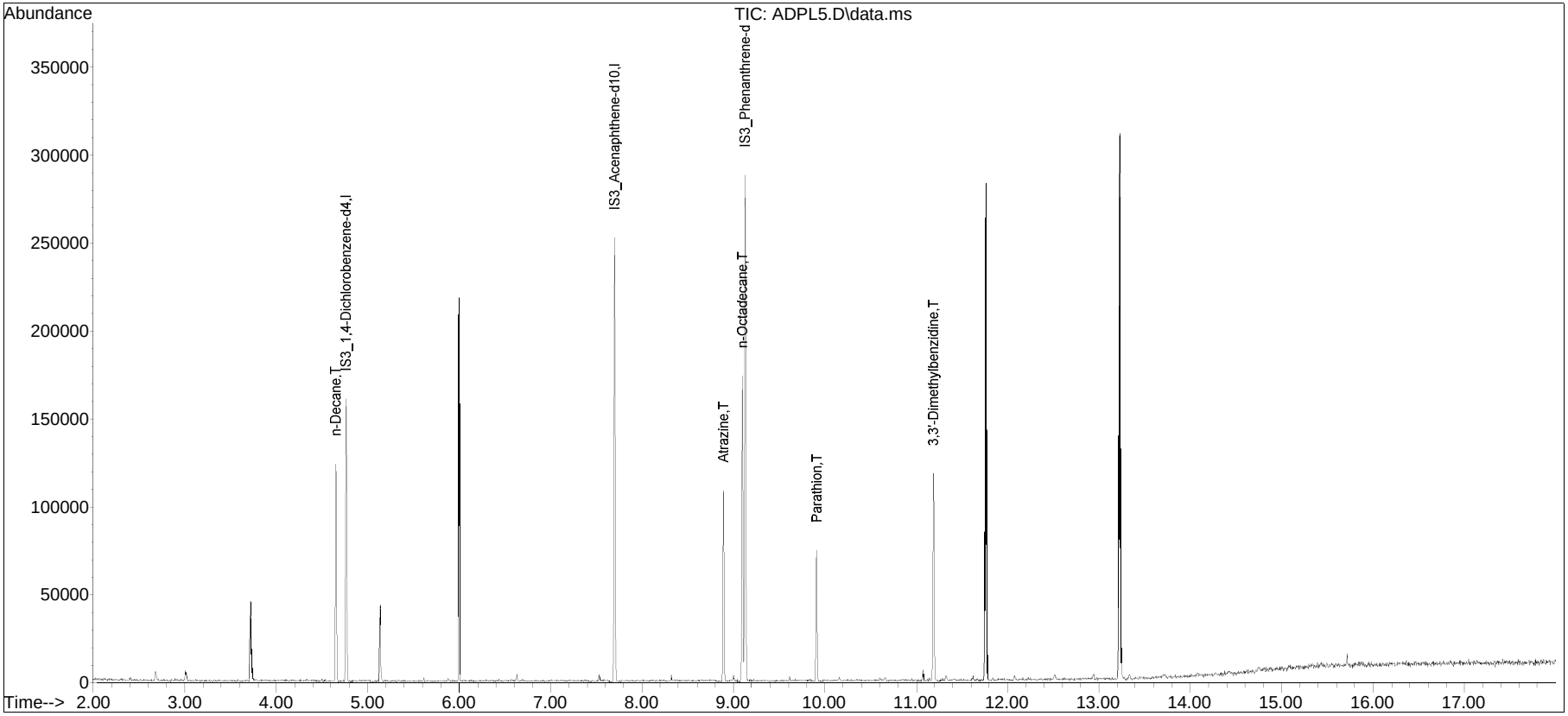
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL5.D
Acq On : 13 Apr 2023 1:06 pm
Operator : Dakota:jg
Sample : IL6,32,,ADPL3 Lot# 9973
Misc : WG1768668,,
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Apr 15 10:04:02 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistviical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: ADPL5.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 1:06 pm	Instrument	: Dakota
Sample	: IL6,32,,ADPL3 Lot# 9973	Quant Date	: 4/15/2023 10:04 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL4.D
Acq On : 13 Apr 2023 1:29 pm
Operator : Dakota:jg
Sample : IL7,32,,ADPL2 Lot# 9974
Misc : WG1768668,,
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Apr 15 10:03:44 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	4.762	152	19497	4.000	ug/ml	0.00
Standard Area 1 = 18600			Recovery =	104.82%		
85) IS3_Acenaphthene-d10	7.700	164	38583	4.000	ug/ml	0.00
Standard Area 1 = 39128			Recovery =	98.61%		
99) IS3_Phenanthrene-d10	9.129	188	87580	4.000	ug/ml	0.00
Standard Area 1 = 89637			Recovery =	97.71%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	4.651	57	12205	2.859	ug/ml#	34
86) Atrazine	8.896	200	6180	1.764	ug/ml	93
100) n-Octadecane	9.101	57	15871	1.879	ug/ml#	1
101) Parathion	9.909	109	3378	1.829	ug/ml	87
102) 3,3'-Dimethylbenzidine	11.190	212	21282	1.782	ug/ml	99

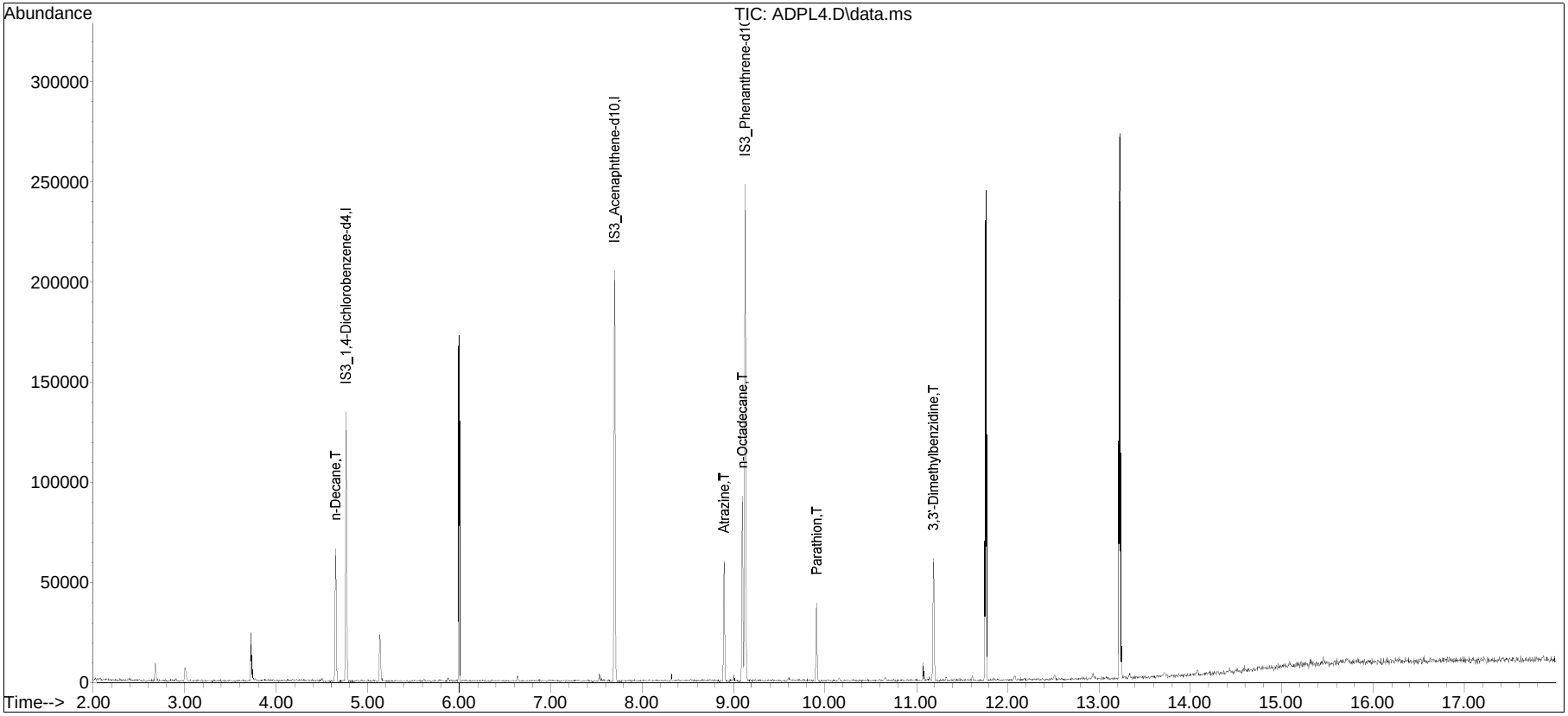
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL4.D
Acq On : 13 Apr 2023 1:29 pm
Operator : Dakota:jg
Sample : IL7,32,,ADPL2 Lot# 9974
Misc : WG1768668,,
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Apr 15 10:03:44 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistviical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: ADPL4.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 1:29 pm	Instrument	: Dakota
Sample	: IL7,32,,ADPL2 Lot# 9974	Quant Date	: 4/15/2023 10:04 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL3.D
Acq On : 13 Apr 2023 1:52 pm
Operator : Dakota:jg
Sample : IL8,32,,ADPL1 Lot# 9975
Misc : WG1768668,,
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Apr 15 10:03:26 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	4.765	152	20216	4.000	ug/ml	0.00
Standard Area 1 = 18600			Recovery =	108.69%		
85) IS3_Acenaphthene-d10	7.699	164	42522	4.000	ug/ml	0.00
Standard Area 1 = 39128			Recovery =	108.67%		
99) IS3_Phenanthrene-d10	9.129	188	100437	4.000	ug/ml	0.00
Standard Area 1 = 89637			Recovery =	112.05%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	4.650	57	6148	1.389	ug/ml#	30
86) Atrazine	8.896	200	3676	0.952	ug/ml	95
100) n-Octadecane	9.101	57	8697	0.898	ug/ml#	1
101) Parathion	9.909	109	2085	1.106	ug/ml	97
102) 3,3'-Dimethylbenzidine	11.193	212	10673	0.990	ug/ml	98

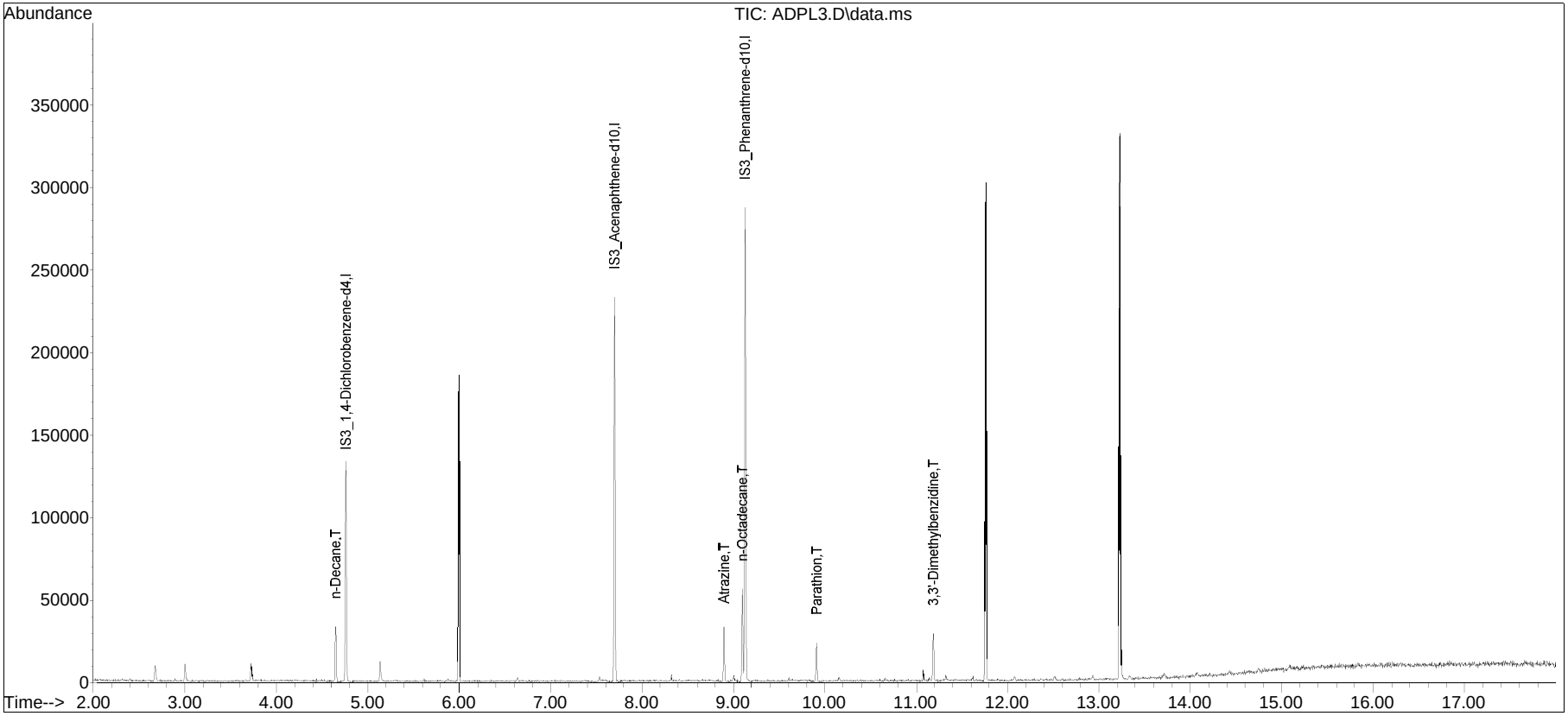
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL3.D
Acq On : 13 Apr 2023 1:52 pm
Operator : Dakota:jg
Sample : IL8,32,,ADPL1 Lot# 9975
Misc : WG1768668,,
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Apr 15 10:03:26 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistviical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: ADPL3.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 1:52 pm	Instrument	: Dakota
Sample	: IL8,32,,ADPL1 Lot# 9975	Quant Date	: 4/15/2023 10:03 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL2.D
Acq On : 13 Apr 2023 2:14 pm
Operator : Dakota:jg
Sample : IL9,32,,ADPL0.4 Lot# 9976
Misc : WG1768668,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 15 10:03:07 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	4.762	152	18591	4.000	ug/ml	0.00
Standard Area 1 = 18600			Recovery =	99.95%		
85) IS3_Acenaphthene-d10	7.699	164	38002	4.000	ug/ml	0.00
Standard Area 1 = 39128			Recovery =	97.12%		
99) IS3_Phenanthrene-d10	9.129	188	88774	4.000	ug/ml	0.00
Standard Area 1 = 89637			Recovery =	99.04%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	4.654	57	2142	0.526	ug/ml#	21
86) Atrazine	8.896	200	1188	0.344	ug/ml#	33
100) n-Octadecane	9.101	57	3498	0.409	ug/ml#	1
101) Parathion	9.906	109	857	0.651	ug/ml#	71
102) 3,3'-Dimethylbenzidine	11.193	212	1762	0.486	ug/ml#	62

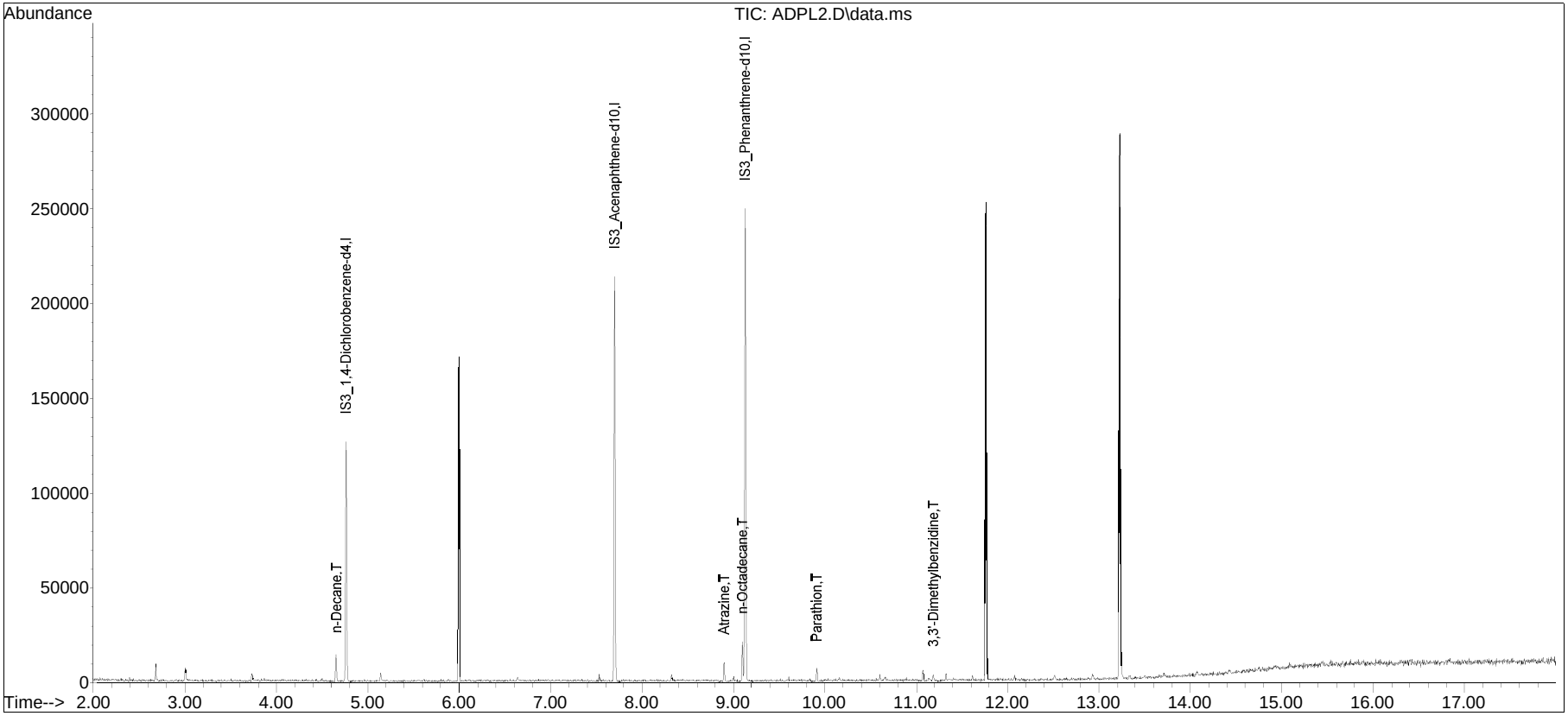
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL2.D
Acq On : 13 Apr 2023 2:14 pm
Operator : Dakota:jg
Sample : IL9,32,,ADPL0.4 Lot# 9976
Misc : WG1768668,,
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Apr 15 10:03:07 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistviical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: ADPL2.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 2:14 pm	Instrument	: Dakota
Sample	: IL9,32,,ADPL0.4 Lot# 9976	Quant Date	: 4/15/2023 10:03 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL1.D
Acq On : 13 Apr 2023 2:37 pm
Operator : Dakota:jg
Sample : IL10,32,,ADPL0.2 Lot# 9977
Misc : WG1768668,,
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Apr 15 10:02:29 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	4.762	152	19658	4.000	ug/ml	0.00
Standard Area 1 = 18600			Recovery =	105.69%		
85) IS3_Acenaphthene-d10	7.700	164	40090	4.000	ug/ml	0.00
Standard Area 1 = 39128			Recovery =	102.46%		
99) IS3_Phenanthrene-d10	9.129	188	87279	4.000	ug/ml	# 0.00
Standard Area 1 = 89637			Recovery =	97.37%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	4.651	57	1413	0.328	ug/ml	# 35
86) Atrazine	8.896	200	725	0.199	ug/ml	# 33
100) n-Octadecane	9.098	57	1663	0.198	ug/ml	# 1
101) Parathion	9.909	109	393M2	0.439	ug/ml	
102) 3,3'-Dimethylbenzidine	0.000		0	N.D.		

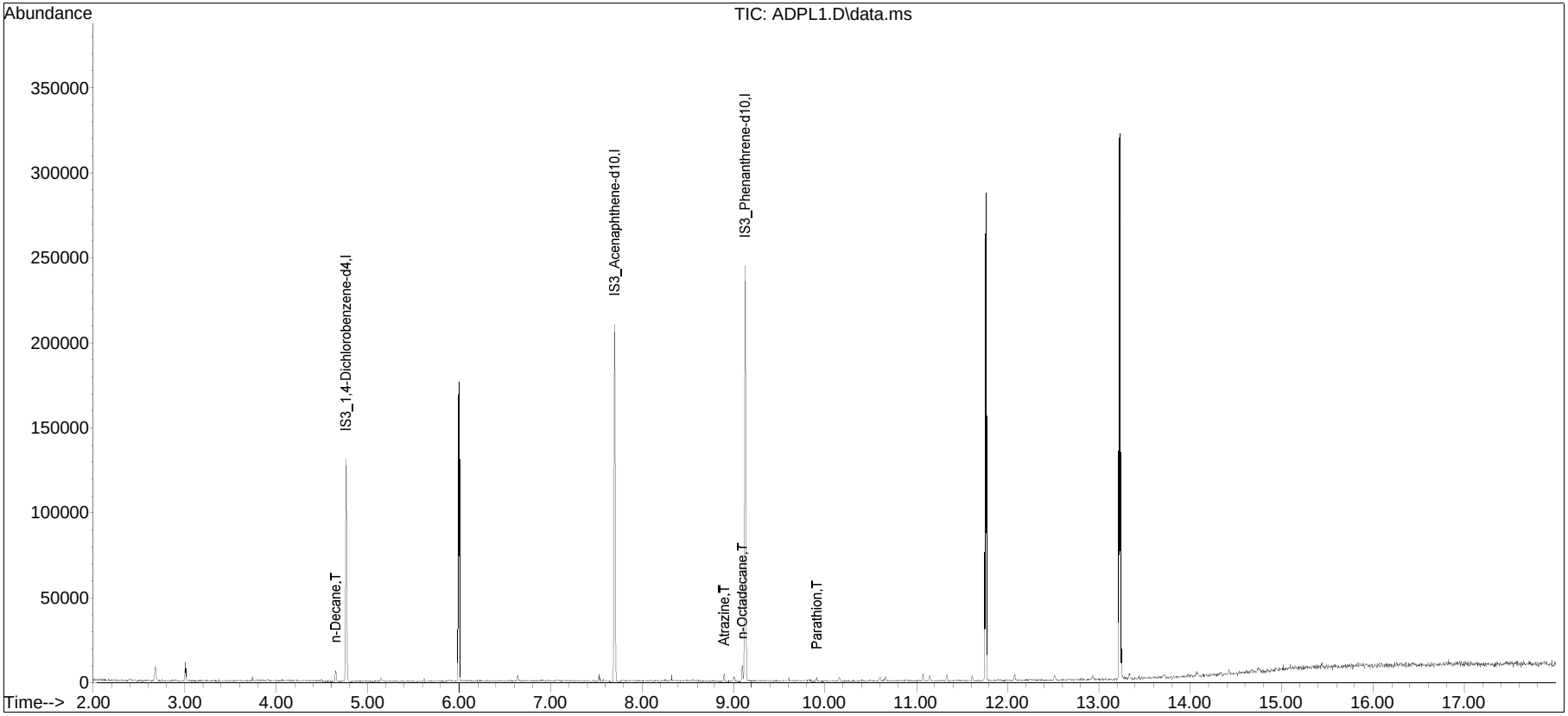
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPL1.D
Acq On : 13 Apr 2023 2:37 pm
Operator : Dakota:jg
Sample : IL10,32,,ADPL0.2 Lot# 9977
Misc : WG1768668,,
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Apr 15 10:02:29 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Apr 15 10:02:12 2023
Response via : Initial Calibration

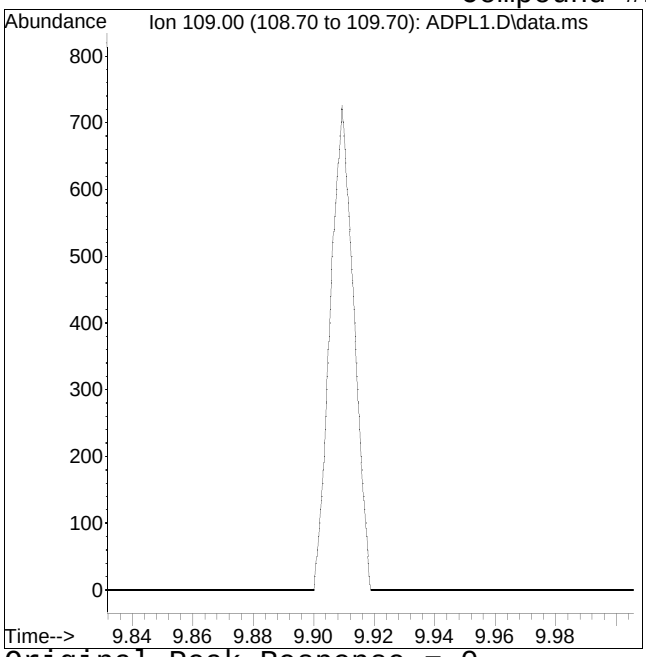
Sub List : ADPical_REV2 - ADP sublistviical\ADPL6.D•



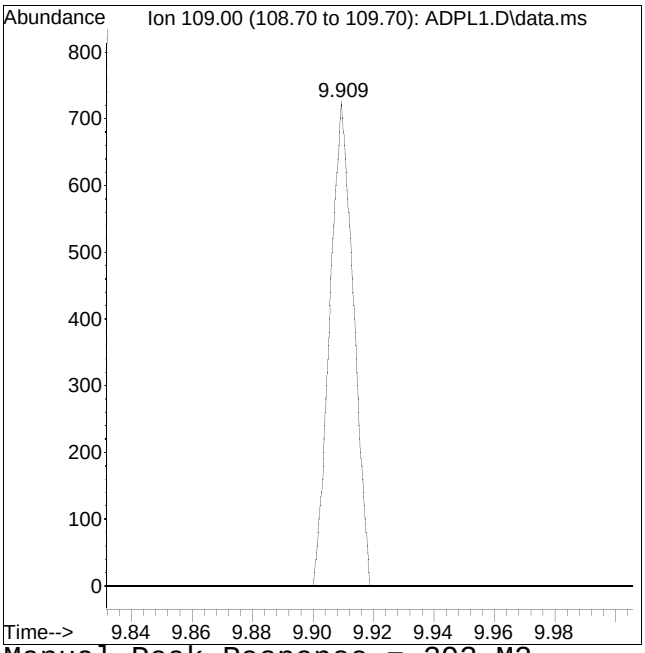
Manual Integration Report

Data Path : I:\8270\Dakota\230412lviicQMethod : FS230412LVIDakota.m
Data File : ADPL1.D Operator : Dakota:jg
Date Inj'd : 4/13/2023 2:37 pm Instrument : Dakota
Sample : IL10,32,,ADPL0.2 Lot# 9977Quant Date : 4/15/2023 10:03 am

Compound #101: Parathion



Original Peak Response = 0



Manual Peak Response = 393 M2

M2 = Peak not found by automatic integration algorithm.

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPICV.D
Acq On : 13 Apr 2023 3:00 pm
Operator : Dakota:jg
Sample : CQICV3,32,,ADPICV Lot# 10010
Misc : WG1768668,,
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Apr 19 13:48:11 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Apr 19 13:48:40 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
32	I	IS3_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	93	0.00
33	T	n-Decane		1.231	1.260	-2.4	92	0.00
85	I	IS3_Acenaphthene-d10		1.000	1.000	0.0	92	0.00
86	T	Atrazine		0.363	0.348	4.1	85	0.00
99	I	IS3_Phenanthrene-d10		1.000	1.000	0.0	88	0.00
100	T	n-Octadecane		0.386	0.382	1.0	84	0.00
101	T	Parathion	*	5.000	4.962	0.8	87	0.00
102	T	3,3'-Dimethylbenzidine	*	5.000	4.947	1.1	87	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPICV.D
Acq On : 13 Apr 2023 3:00 pm
Operator : Dakota:jg
Sample : CQICV3,32,,ADPICV Lot# 10010
Misc : WG1768668,,
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Apr 19 13:48:11 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Apr 19 13:48:40 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\Dakota\230412lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	4.763	152	17353	4.000	ug/ml	0.00
Standard Area 1 = 18600			Recovery =	93.30%		
85) IS3_Acenaphthene-d10	7.700	164	35968	4.000	ug/ml	0.00
Standard Area 1 = 39128			Recovery =	91.92%		
99) IS3_Phenanthrene-d10	9.129	188	79146	4.000	ug/ml	0.00
Standard Area 1 = 89637			Recovery =	88.30%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	4.651	57	27326	5.115	ug/ml#	34
86) Atrazine	8.896	200	15637	4.788	ug/ml	93
100) n-Octadecane	9.101	57	37748	4.946	ug/ml#	1
101) Parathion	9.910	109	9318	4.962	ug/ml	93
102) 3,3'-Dimethylbenzidine	11.193	212	63468	4.947	ug/ml	98

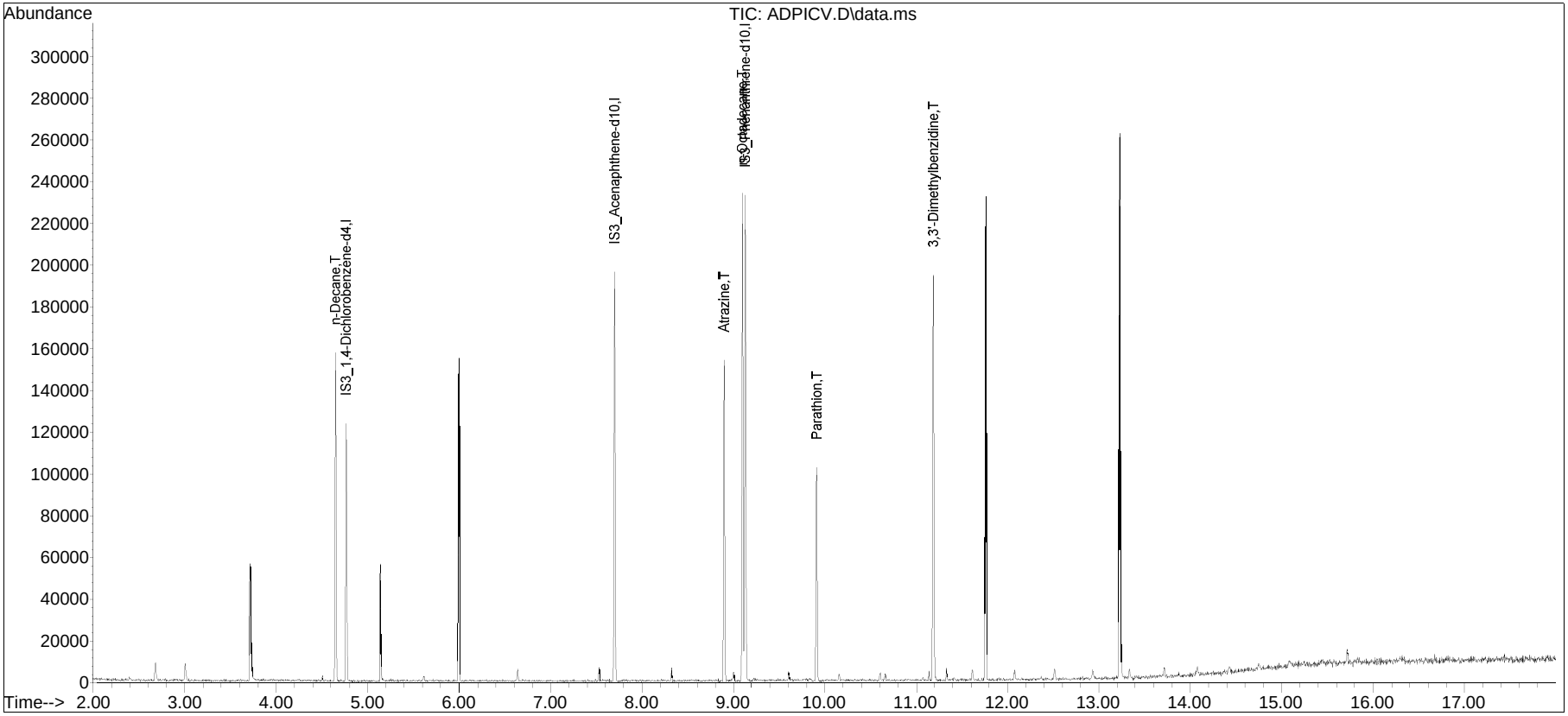
(#) = qualifier out of range (m) = manual integration (+) = signals summed

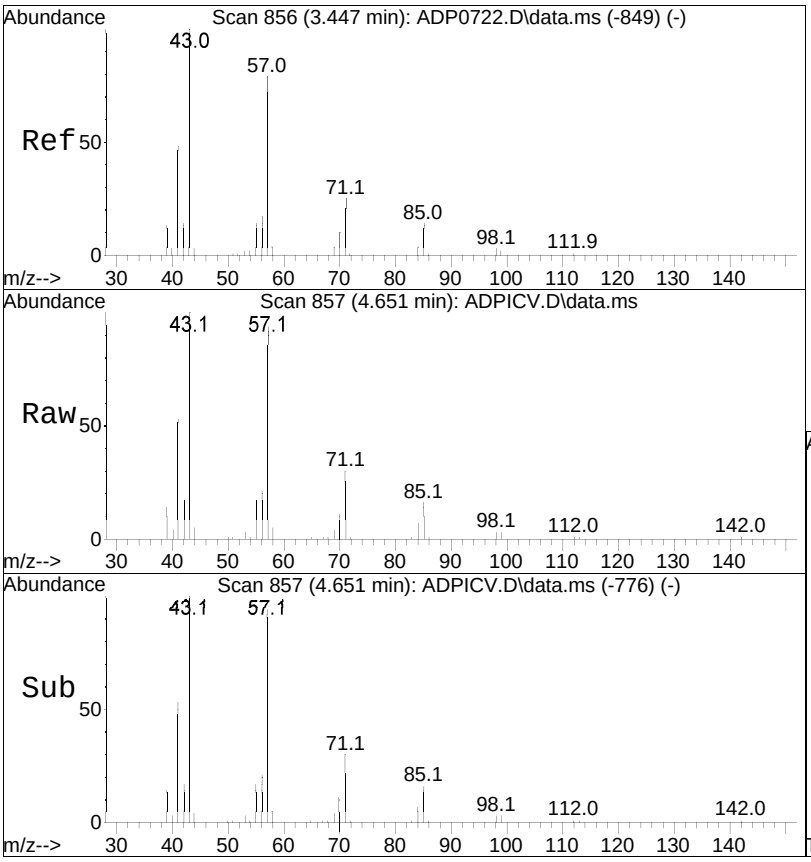
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230412lviical\
Data File : ADPICV.D
Acq On : 13 Apr 2023 3:00 pm
Operator : Dakota:jg
Sample : CQICV3,32,,ADPICV Lot# 10010
Misc : WG1768668,,
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Apr 19 13:48:11 2023
Quant Method : I:\8270\Dakota\230412lviical\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Apr 19 13:48:40 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistviical\ADPL6.D•

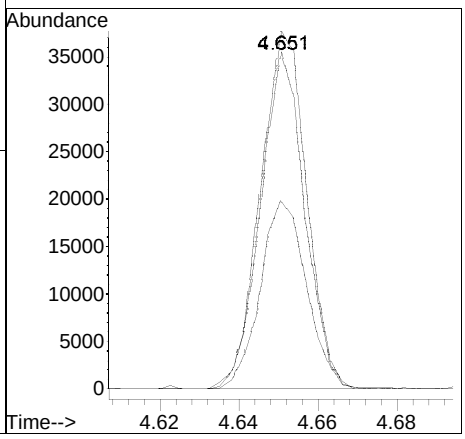


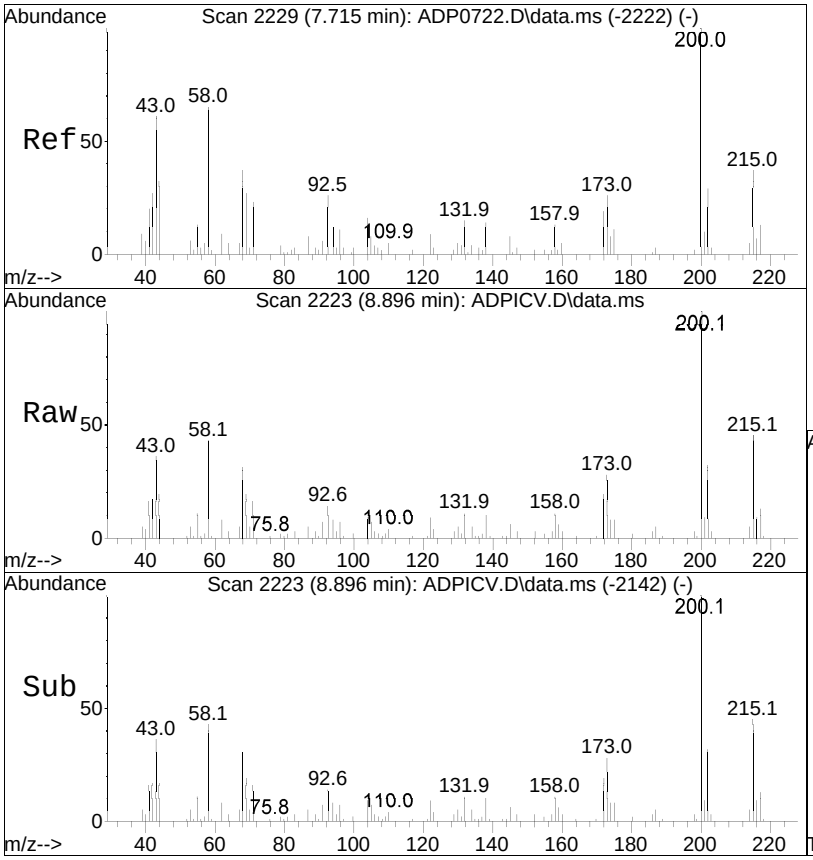


#33
n-Decane
Concen: 5.12 ug/ml
RT: 4.651 min Scan# 857
Delta R.T. 0.001 min
Lab File: ADPICV.D
Acq: 13 Apr 2023 3:00 pm

Tgt Ion: 57 Resp: 27326

Ion	Ratio	Lower	Upper
57	100		
43	111.7	0.2	0.2#
41	58.8	0.2	0.2#

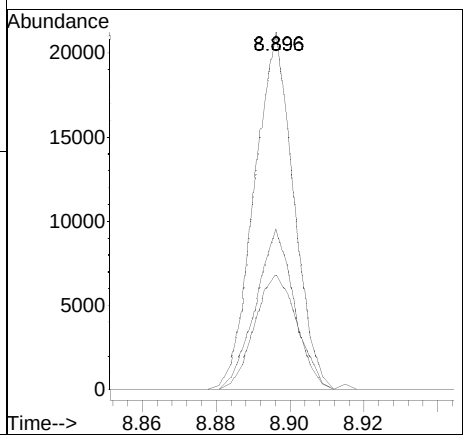


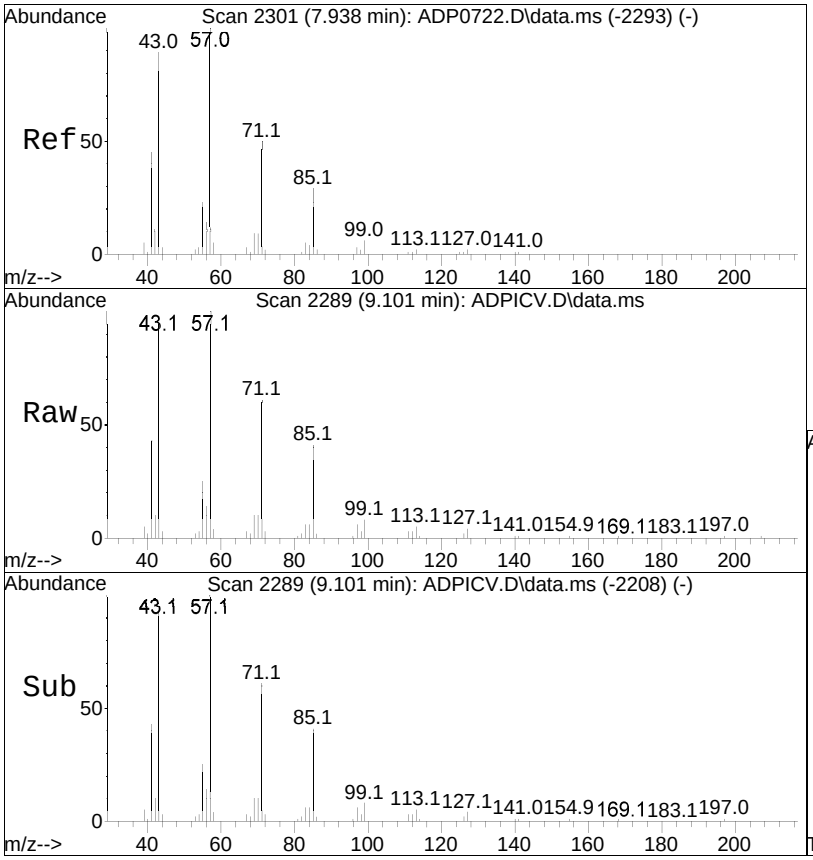


#86
Atrazine
Concen: 4.79 ug/ml
RT: 8.896 min Scan# 2223
Delta R.T. 0.000 min
Lab File: ADPICV.D
Acq: 13 Apr 2023 3:00 pm

Tgt Ion:200 Resp: 15637

Ion	Ratio	Lower	Upper
200	100		
202	34.6	25.8	38.6
215	44.3	40.2	60.4

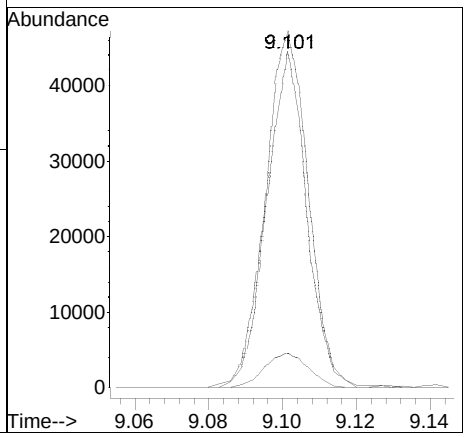


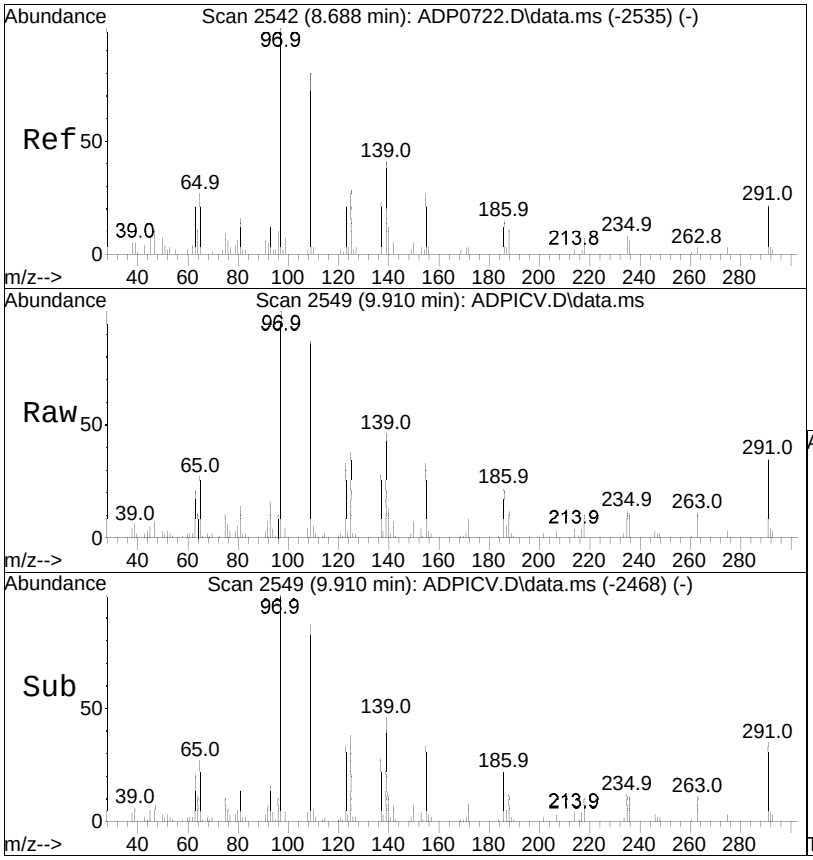


#100
n-Octadecane
Concen: 4.95 ug/ml
RT: 9.101 min Scan# 2289
Delta R.T. 0.000 min
Lab File: ADPICV.D
Acq: 13 Apr 2023 3:00 pm

Tgt Ion: 57 Resp: 37748

Ion	Ratio	Lower	Upper
57	100		
43	87.9	9.0	13.6#
70	9.9	0.2	0.2#

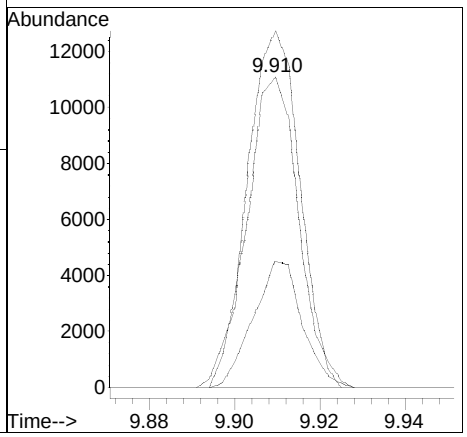


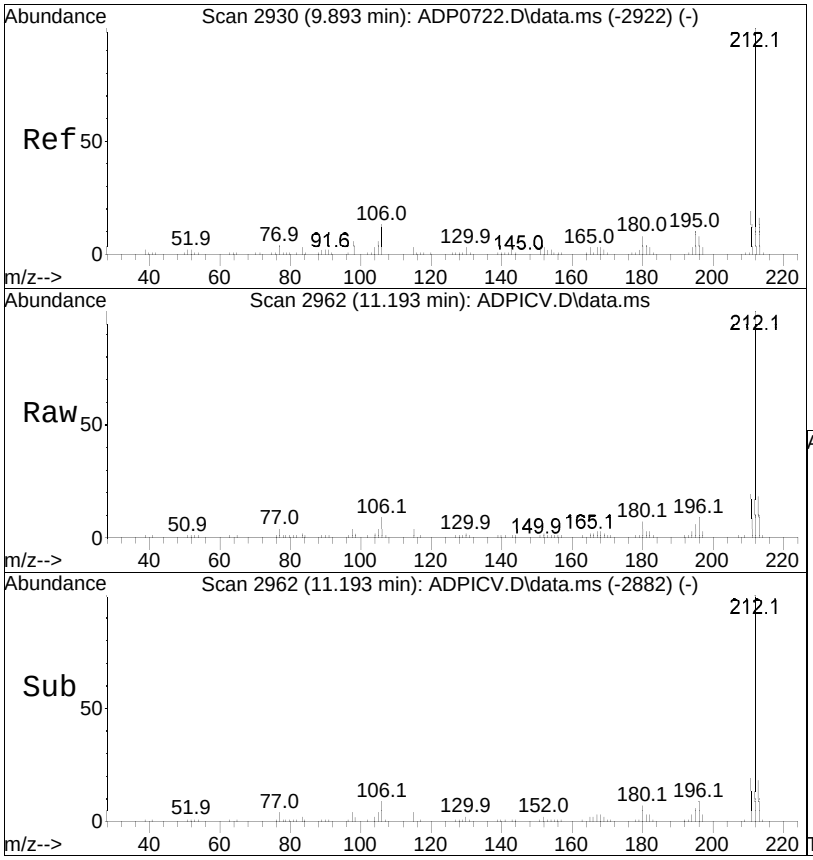


#101
Parathion
Concen: 4.96 ug/ml
RT: 9.910 min Scan# 2549
Delta R.T. 0.001 min
Lab File: ADPICV.D
Acq: 13 Apr 2023 3:00 pm

Tgt Ion:109 Resp: 9318

Ion	Ratio	Lower	Upper
109	100		
97	117.5	87.4	131.2
291	38.9	34.2	51.2

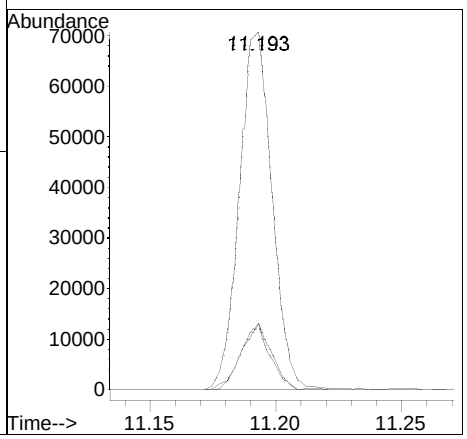




#102
3,3'-Dimethylbenzidine
Concen: 4.95 ug/ml
RT: 11.193 min Scan# 2962
Delta R.T. 0.000 min
Lab File: ADPICV.D
Acq: 13 Apr 2023 3:00 pm

Tgt Ion:212 Resp: 63468

Ion	Ratio	Lower	Upper
212	100		
211	17.3	12.9	19.3
213	16.4	13.2	19.8



Manual Integration Report

Data Path	: I:\8270\Dakota\230412lviic	QMethod	: FS230412LVIDakota.m
Data File	: ADPICV.D	Operator	: Dakota:jg
Date Inj'd	: 4/13/2023 3:00 pm	Instrument	: Dakota
Sample	: CQICV3,32,,ADPICV Lot# 100	Quant Date	: 4/19/2023 1:48 pm

There are no manual integrations or false positives in this file.

Response Factor Report SV 106

Method Path : I:\8270\SV106\230902lviical\
Method File : FS230902SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Sep 05 11:32:08 2023
Response Via : Initial Calibration

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
1)	I	IS1_1,4-Dichlorobenzene-d4	ISTD											
2)	t	N-Nitrosodimethylamine		0.648	0.703	0.681	0.660	0.622	0.719	0.685	0.676	0.702	0.677	4.47
3)	t	Pyridine	1.054	1.120	1.163	1.116	1.175	1.061	1.236	1.233	1.179	1.168	1.151	5.45
4)	S	2-Fluorophenol	1.088	1.096	1.126	1.083	1.108	0.995	1.181	1.182	1.146	1.151	1.116	4.99
5)	T	Aniline	1.838	1.833	1.964	1.902	1.868	1.720	2.000	1.918	1.903	1.985	1.893	4.42
6)	t	2-Chlorophenol	1.219	1.195	1.332	1.275	1.232	1.185	1.371	1.300	1.302	1.333	1.274	5.01
7)	S	Phenol-d6	1.324	1.450	1.447	1.418	1.415	1.329	1.552	1.459	1.466	1.513	1.437	4.96
8)	T	Phenol	1.574	1.402	1.560	1.504	1.542	1.373	1.603	1.551	1.523	1.579	1.521	5.01
9)	T	bis(2-Chloroethyl)ether	1.344	1.167	1.223	1.216	1.205	1.114	1.275	1.221	1.206	1.247	1.222	5.00
10)	T	1,3-Dichlorobenzene	1.513	1.406	1.544	1.452	1.452	1.343	1.510	1.469	1.451	1.468	1.461	3.91
11)	T	1,4-Dichlorobenzene	1.759	1.418	1.531	1.494	1.463	1.344	1.561	1.490	1.474	1.497	1.503	7.18
12)	T	1,2-Dichlorobenzene	1.543	1.424	1.464	1.456	1.374	1.288	1.496	1.422	1.403	1.441	1.431	4.84
13)	t	Benzyl alcohol	1.065	0.893	1.101	1.048	1.048	0.989	1.167	1.122	1.117	1.185	1.074	8.05
14)	T	bis(2-chloroisopropyl)ether	1.769	1.838	1.890	1.806	1.800	1.644	1.898	1.820	1.744	1.786	1.800	4.06
15)	T	2-Methylphenol	1.062	1.118	1.139	1.150	1.104	1.017	1.221	1.184	1.167	1.215	1.138	5.70
16)	T	Hexachloroethane	0.590	0.574	0.631	0.572	0.572	0.535	0.613	0.589	0.585	0.600	0.586	4.46
17)	T	n-Nitrosodi-n-propylamine	0.970	0.903	0.936	0.894	0.893	0.833	0.981	0.922	0.925	0.978	0.923	4.98
18)	T	3-Methylphenol/4-Methylphenol	1.065	1.100	1.213	1.221	1.177	1.092	1.292	1.238	1.227	1.309	1.193	7.02
19)	S	Nitrobenzene-d5	1.349	1.280	1.290	1.189	1.281	1.160	1.381	1.348	1.345	1.407	1.303	6.12
20)	T	Nitrobenzene	1.173	1.318	1.243	1.244	1.278	1.189	1.396	1.359	1.350	1.396	1.295	6.30
21)	T	Isophorone	2.439	2.405	2.498	2.425	2.467	2.235	2.627	2.531	2.491	2.660	2.478	4.81
22)	T	2-Nitrophenol	0.473	0.461	0.464	0.461	0.482	0.467	0.596	0.573	0.581	0.621	0.518	12.71
23)	T	2,4-Dimethylphenol	1.263	1.209	1.251	1.250	1.287	1.202	1.384	1.328	1.310	1.324	1.281	4.45
24)	T	bis(2-Chloroethoxy)methane	1.673	1.453	1.571	1.543	1.508	1.418	1.628	1.583	1.526	1.621	1.552	5.12
25)	T	2,4-Dichlorophenol	0.973	0.961	1.024	1.067	1.090	1.018	1.186	1.141	1.104	1.192	1.076	7.62
26)	T	1,2,4-Trichlorobenzene	1.228	1.215	1.287	1.261	1.240	1.103	1.291	1.244	1.212	1.268	1.235	4.36
27)	I	IS2_1,4-Dichlorobenzene-d4	ISTD											
28)	T	Benzaldehyde			1.071	0.918	0.885	1.299	0.926	0.801	0.740	0.787	0.928	19.58
29)	T	Acetophenone	2.251	1.920	1.957	1.826	1.903	2.587	1.898	1.810	1.883	1.906	1.994	12.10
30)	T	m-Toluidine			1.492	1.442	1.434	2.182	1.574	1.433	1.382	1.459	1.550	16.86
31)	T	2-Chloroaniline	1.889	1.484	1.696	1.521	1.557	2.203	1.625	1.546	1.579	1.606	1.670	13.12
32)	I	IS3_1,4-Dichlorobenzene-d4	ISTD											
33)	T	n-Decane	1.354	1.422	1.378	1.307	1.338	1.336	1.316	1.338	1.318	1.363	1.347	2.55
34)	I	IS1_Naphthalene-d8	ISTD											
35)	T	Naphthalene	1.046	0.979	1.049	1.016	0.962	0.894	1.038	1.026	1.019	1.055	1.008	4.98
36)	T	Benzoic Acid					0.154	0.161	0.230	0.246	0.255	0.273	*L	0.9982
37)	T	4-Chloroaniline	0.147	0.112	0.132	0.134	0.127	0.119	0.142	0.136	0.133	0.138	0.132	7.98
38)	T	Hexachlorobutadiene	0.233	0.210	0.211	0.200	0.208	0.180	0.206	0.206	0.199	0.203	0.206	6.37
39)	T	p-Chloro-m-cresol	0.257	0.259	0.292	0.275	0.293	0.268	0.314	0.315	0.312	0.330	0.291	8.87
40)	T	2-Methylnaphthalene	0.631	0.635	0.683	0.650	0.622	0.571	0.661	0.653	0.641	0.673	0.642	4.86
41)	T	1-Methylnaphthalene	0.217	0.243	0.253	0.253	0.232	0.218	0.251	0.249	0.240	0.251	0.241	5.70
42)	T	Hexachlorocyclopentadiene	0.212	0.203	0.213	0.219	0.221	0.195	0.234	0.230	0.232	0.234	0.219	6.17
43)	T	2,4,6-Trichlorophenol	0.195	0.184	0.205	0.202	0.204	0.182	0.227	0.222	0.223	0.242	0.209	9.27
44)	T	2,4,5-Trichlorophenol	0.230	0.191	0.222	0.220	0.220	0.196	0.243	0.241	0.240	0.241	0.224	8.26
45)	S	2-Fluorobiphenyl	0.835	0.731	0.799	0.785	0.737	0.676	0.772	0.771	0.748	0.781	0.764	5.70

Response Factor Report SV 106

Method Path : I:\8270\SV106\230902lviical\
Method File : FS230902SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Sep 05 11:32:08 2023
Response Via : Initial Calibration

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
46)	T	2-Chloronaphthalene	0.685	0.640	0.719	0.682	0.665	0.597	0.684	0.674	0.658	0.687	0.669	4.89
47)	T	2-Nitroaniline			0.158	0.153	0.162	0.156	0.192	0.195	0.197	0.208	*L	0.9975
48)	T	1,4-Dinitrobenzene				0.069	0.069	0.061	0.083	0.085	0.089	0.096	*L	0.9958
49)	T	1,3-Dinitrobenzene				0.080	0.076	0.076	0.094	0.099	0.107	0.112	*L	0.9969
50)	T	Dimethyl phthalate	0.828	0.719	0.845	0.777	0.777	0.710	0.808	0.810	0.779	0.821	0.787	5.69
51)	T	Acenaphthylene	1.110	1.006	1.125	1.073	1.054	0.948	1.112	1.118	1.083	1.140	1.077	5.59
52)	T	2,6-Dinitrotoluene			0.129	0.136	0.133	0.126	0.159	0.161	0.159	0.167	*L	0.9978
53)	T	1,2-Dinitrobenzene				0.055	0.058	0.056	0.069	0.069	0.067	0.070	0.063	10.66
54)	I	IS2_Naphthalene-d8	----------ISTD----------											
55)	T	a-Terpineol	0.327	0.276	0.274	0.267	0.267	0.376	0.273	0.268	0.284	0.275	0.289	12.23
56)	T	3-Chloroaniline	0.150	0.143	0.153	0.145	0.145	0.202	0.148	0.139	0.140	0.138	0.150	12.50
57)	T	2,6-Dichlorophenol	0.269	0.249	0.244	0.254	0.263	0.378	0.272	0.270	0.285	0.282	0.277	13.72
58)	T	1-chloro-2-nitrobenzene	0.125	0.121	0.128	0.116	0.115	0.174	0.128	0.130	0.139	0.135	0.131	13.00
59)	T	Caprolactam	0.122	0.140	0.132	0.129	0.135	0.199	0.150	0.148	0.160	0.152	0.147	14.87
60)	T	1,2,4,5-Tetrachlorobenzene	0.383	0.370	0.337	0.334	0.319	0.446	0.323	0.316	0.332	0.321	0.348	11.76
61)	T	Biphenyl	0.951	0.858	0.839	0.798	0.794	1.117	0.800	0.785	0.813	0.802	0.856	12.19
62)	I	IS1_Acenaphthene-d10	----------ISTD----------											
63)	T	3-Nitroaniline		0.218	0.276	0.261	0.272	0.262	0.330	0.312	0.313	0.331	0.286	13.35
64)	T	Acenaphthene	1.245	1.152	1.174	1.130	1.082	0.999	1.158	1.107	1.095	1.164	1.131	5.82
65)	T	2,4-Dinitrophenol				0.094	0.110	0.108	0.137	0.138	0.155	0.165	*L	0.9965
66)	T	Dibenzofuran	1.692	1.754	1.791	1.672	1.656	1.509	1.750	1.672	1.669	1.738	1.690	4.63
67)	T	2,4-Dinitrotoluene			0.309	0.306	0.304	0.304	0.380	0.371	0.389	0.411	*L	0.9969
68)	T	4-Nitrophenol			0.234	0.230	0.243	0.226	0.283	0.277	0.285	0.309	*L	0.9963
69)	T	2,3,5,6-Tetrachlorophenol	0.295	0.260	0.324	0.326	0.326	0.298	0.359	0.347	0.349	0.367	0.325	10.18
70)	T	2,3,4,6-Tetrachlorophenol	0.349	0.297	0.356	0.307	0.333	0.306	0.369	0.347	0.344	0.363	0.337	7.51
71)	T	Diethyl phthalate	1.394	1.403	1.479	1.414	1.390	1.303	1.459	1.395	1.423	1.488	1.415	3.78
72)	T	Fluorene	1.342	1.330	1.403	1.298	1.306	1.208	1.405	1.344	1.329	1.388	1.336	4.38
73)	T	4-Chlorophenyl-phenylether	0.686	0.675	0.667	0.641	0.614	0.566	0.645	0.624	0.610	0.646	0.637	5.59
74)	T	4-Nitroaniline	0.230	0.257	0.293	0.286	0.295	0.277	0.303	0.303	0.316	0.329	0.289	9.99
75)	T	4,6-Dinitro-o-cresol				0.126	0.148	0.131	0.181	0.183	0.203	0.221	*L	0.9946
76)	T	NDPA/DPA	1.117	1.080	1.188	1.110	1.101	1.034	1.182	1.135	1.121	1.169	1.124	4.24
77)	T	Azobenzene	1.389	1.345	1.370	1.263	1.289	1.195	1.348	1.320	1.300	1.373	1.319	4.51
78)	S	2,4,6-Tribromophenol	0.157	0.167	0.185	0.176	0.170	0.170	0.197	0.198	0.201	0.215	0.184	10.14
79)	T	4-Bromophenyl-phenylether	0.407	0.386	0.399	0.346	0.357	0.332	0.375	0.367	0.362	0.379	0.371	6.24
80)	T	Hexachlorobenzene	0.509	0.443	0.462	0.418	0.409	0.375	0.431	0.415	0.415	0.440	0.432	8.29
81)	T	Pentachlorophenol			0.215	0.223	0.221	0.215	0.270	0.262	0.269	0.292	*L	0.9965
82)	I	IS2_Acenaphthene-d10	----------ISTD----------											
83)	T	Dichloran				0.106	0.112	0.170	0.134	0.139	0.168	0.161	*L	0.9968
84)	T	Pentachloronitrobenzene			0.127	0.121	0.141	0.221	0.165	0.165	0.183	0.177	*L	0.9980
85)	I	IS3_Acenaphthene-d10	----------ISTD----------											
86)	T	Atrazine	0.349	0.348	0.329	0.319	0.327	0.341	0.343	0.344	0.374	0.371	0.345	5.15
87)	I	IS1_Phenanthrene-d10	----------ISTD----------											
88)	T	Phenanthrene	1.156	1.108	1.102	1.068	1.103	0.974	1.096	1.069	1.087	1.130	1.089	4.45
89)	T	Anthracene	1.094	1.003	1.131	1.087	1.102	0.980	1.115	1.078	1.107	1.145	1.084	4.88
90)	T	Carbazole	0.877	0.956	1.011	1.020	0.994	0.914	1.023	1.006	1.049	1.058	0.991	5.86

Response Factor Report SV 106

Method Path : I:\8270\SV106\230902lviical\
Method File : FS230902SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Sep 05 11:32:08 2023
Response Via : Initial Calibration

Calibration Files
L1 =AP9L1.D L2 =AP9L2.D L3 =AP9L3.D L4 =AP9L4.D L5 =AP9L5.D L6 =AP9L6.D L7 =AP9L7.D
L8 =AP9L8.D L9 =AP9L9.D L10 =AP9L10.D

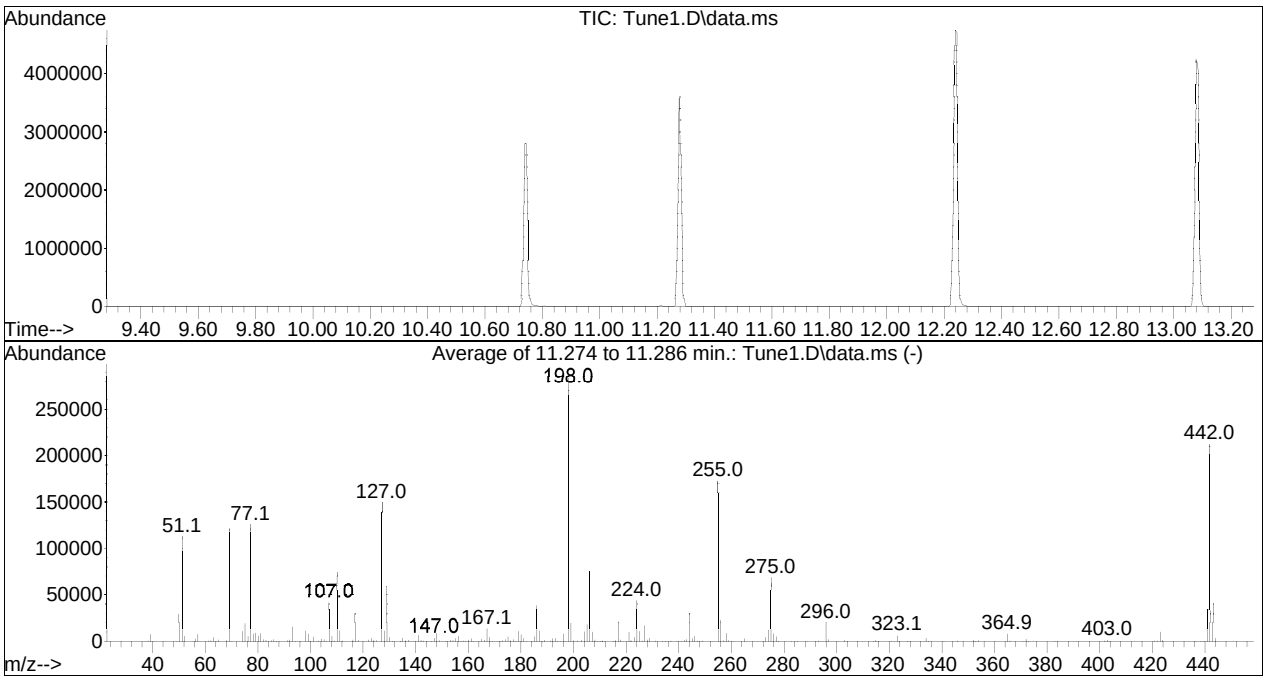
		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
91)	T	Di-n-butylphthalate	1.197	1.122	1.237	1.231	1.251	1.163	1.356	1.316	1.384	1.431	1.269	7.89
92)	T	Fluoranthene	1.161	1.071	1.171	1.161	1.161	1.044	1.213	1.191	1.219	1.254	1.165	5.52
93)	T	Benzidine	0.656	0.641	0.750	0.762	0.786	0.704	0.850	0.847	0.869	0.832	0.770	10.67
94)	T	Pyrene	1.204	1.183	1.265	1.248	1.228	1.103	1.271	1.240	1.272	1.315	1.233	4.79
95)	S	4-Terphenyl-d14	0.837	0.839	0.902	0.885	0.864	0.794	0.919	0.883	0.905	0.945	0.877	5.09
96)	T	Butyl benzyl phthalate		0.406	0.510	0.497	0.523	0.495	0.587	0.583	0.631	0.641	0.541	13.94
97)	I	IS2_Phenanthrene-d10	----------ISTD----------											
98)	T	Diphenamid	0.469	0.442	0.454	0.474	0.474	0.699	0.509	0.489	0.531	0.539	0.508	14.56
99)	I	IS3_Phenanthrene-d10	----------ISTD----------											
100)	T	n-Octadecane	0.468	0.466	0.443	0.422	0.457	0.467	0.456	0.469	0.466	0.483	0.460	3.67
101)	T	Parathion	0.091	0.089	0.084	0.078	0.085	0.085	0.093	0.101	0.112	0.120	0.094	14.22
102)	T	3,3'-Dimethylbenzidine			0.389	0.505	0.540	0.594	0.659	0.717	0.744	0.780	*L	0.9978
103)	I	IS1_Chrysene-d12	----------ISTD----------											
104)	T	Benzo[a]anthracene	1.463	1.326	1.375	1.250	1.283	1.188	1.340	1.321	1.331	1.377	1.326	5.66
105)	T	3,3'-Dichlorobenzidine	0.428	0.404	0.475	0.442	0.471	0.439	0.510	0.506	0.516	0.525	0.472	8.89
106)	T	Chrysene	1.392	1.242	1.284	1.202	1.205	1.095	1.258	1.210	1.203	1.216	1.231	6.11
107)	T	bis(2-Ethylhexyl)phthalate	0.726	0.750	0.902	0.872	0.879	0.827	0.990	0.965	0.973	1.003	0.889	11.02
108)	T	Di-n-octylphthalate	1.204	1.244	1.446	1.403	1.484	1.405	1.693	1.661	1.718	1.736	1.499	12.98
109)	T	Benzo(b)fluoranthene	1.277	1.135	1.311	1.217	1.346	1.123	1.379	1.315	1.304	1.254	1.266	6.73
110)	T	Benzo(k)fluoranthene	1.284	1.239	1.215	1.255	1.110	1.160	1.226	1.219	1.186	1.245	1.214	4.15
111)	T	Benzo(a)pyrene	1.056	0.984	1.138	1.086	1.070	0.993	1.161	1.123	1.116	1.108	1.083	5.43
112)	I	IS1_Perylene-d12	----------ISTD----------											
113)	T	Indeno(1,2,3-cd)pyrene	0.916	0.838	0.921	0.920	0.887	0.832	0.993	0.979	1.058	1.000	0.935	7.81
114)	T	Dibenzo[a,h]anthracene	0.899	0.918	0.990	0.974	0.975	0.921	1.091	1.064	1.090	1.073	0.999	7.49
115)	T	Benzo(g,h,i)perylene	0.969	0.962	1.043	0.994	0.967	0.906	1.065	1.022	1.042	0.945	0.991	5.09

(#) = Out of Range

Data Path : I:\8270\SV106\230902lviical\
Data File : Tune1.D
Acq On : 2 Sep 2023 11:50 am
Operator : SV106:ljg
Sample : Tune1
Misc : WG1823680,,ical
ALS Vial : 141 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Sep 05 11:32:08 2023



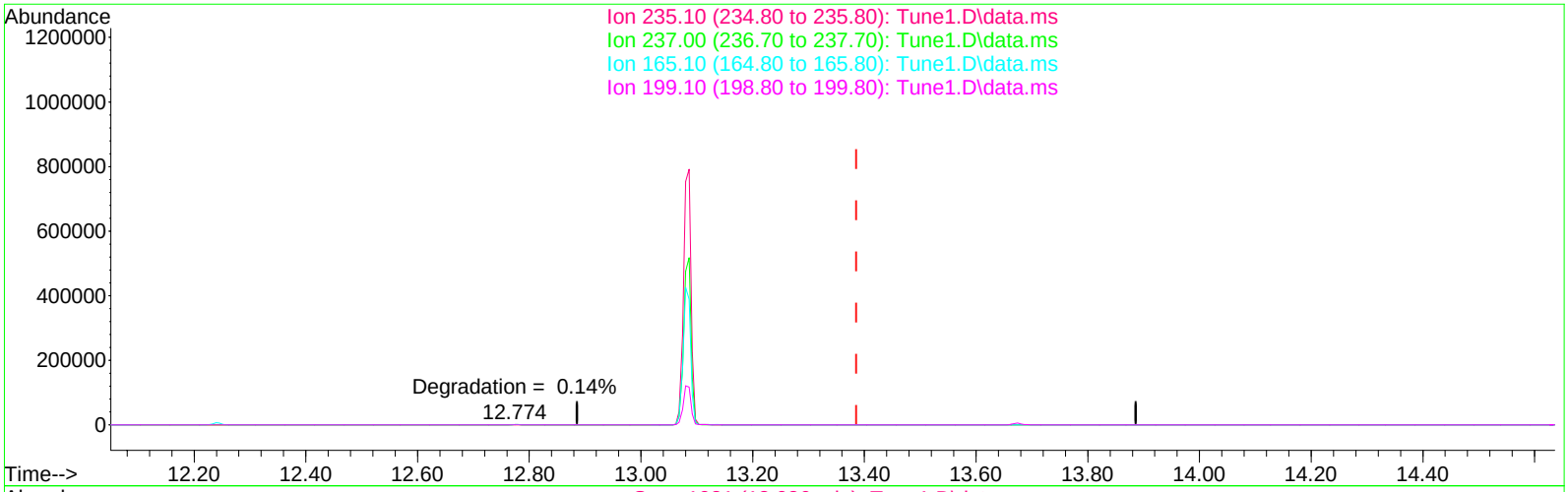
Spectrum Information: Average of 11.274 to 11.286 min.

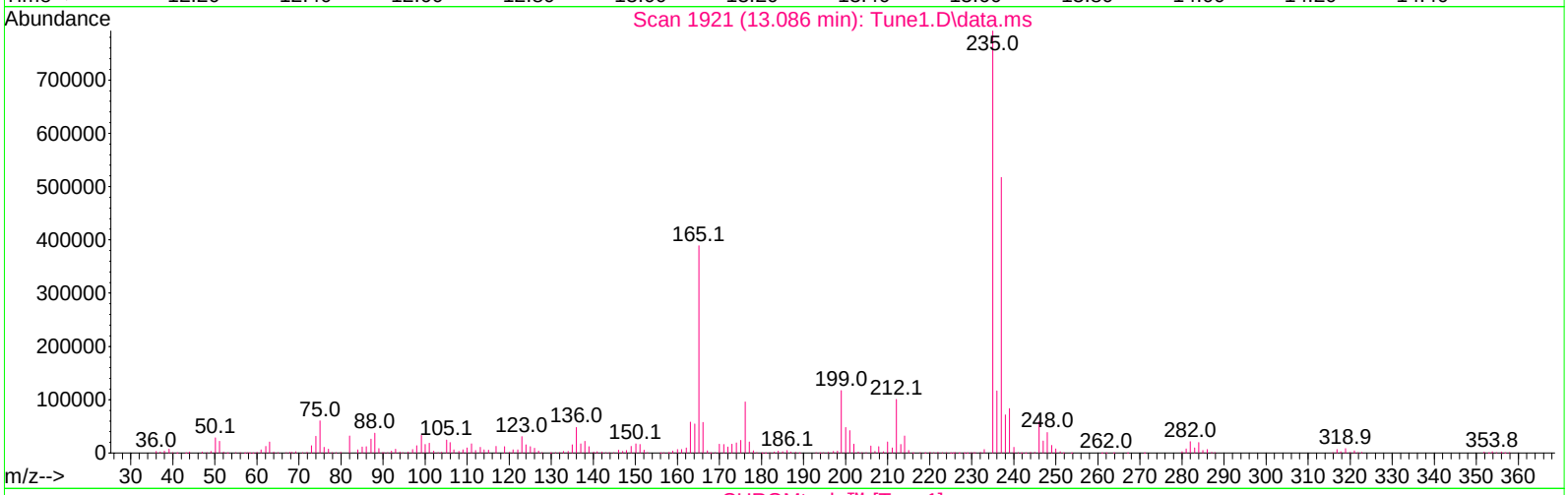
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	39.7	112760	PASS
68	69	0.00	2	1.6	1925	PASS
69	69	100	100	100.0	121213	PASS
70	69	0.00	2	0.5	616	PASS
127	198	10	80	52.7	149675	PASS
197	198	0.00	2	0.2	633	PASS
198	198	100	100	100.0	283861	PASS
199	198	5	9	6.8	19178	PASS
275	198	10	60	24.2	68664	PASS
365	198	1	100	3.0	8390	PASS
441	442	0.01	24	16.4	34864	PASS
442	198	50	100	74.7	212125	PASS
443	442	15	24	19.1	40595	PASS

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\230902lviical\
Data File : Tune1.D
Acq On : 2 Sep 2023 11:50 am
Operator : SV106:ljg
Sample : Tune1
Misc : WG1823680,,ical
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Sep 03 14:45:04 2023
Quant Method : I:\8270\SV106\230902lviical\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 23 13:06:27 2023
Response via : Initial Calibration





CHROMtools™ [Tune1]

(6) DDT (T)

13.086min (-0.300) 122.15

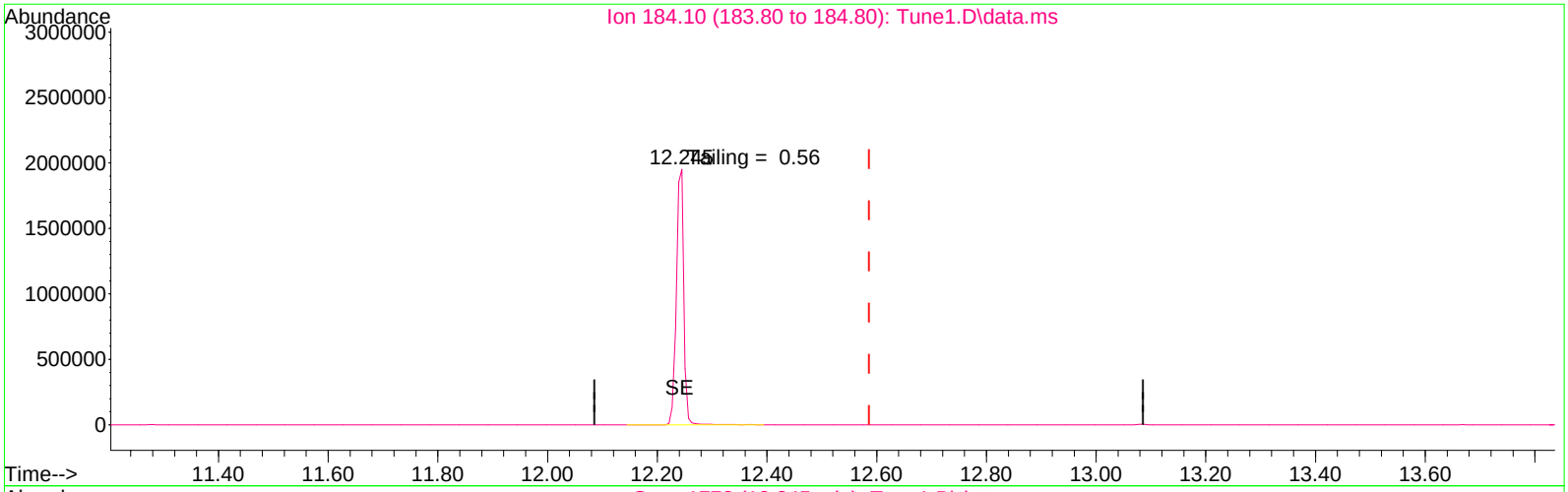
response 744589

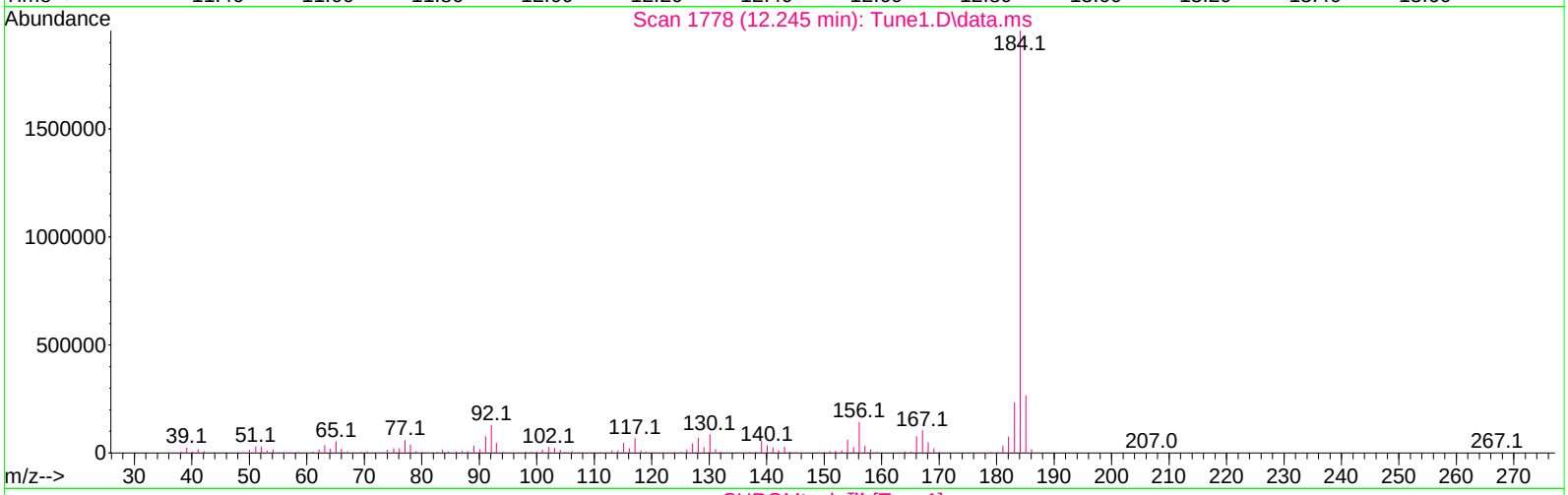
Ion	Exp%	Act%
235.10	100.00	100.00
237.00	63.00	63.88
165.10	54.80	53.07
199.10	16.50	15.68

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\230902lviical\
Data File : Tune1.D
Acq On : 2 Sep 2023 11:50 am
Operator : SV106:ljg
Sample : Tune1
Misc : WG1823680,,ical
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Sep 03 14:45:04 2023
Quant Method : I:\8270\SV106\230902lviical\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 23 13:06:27 2023
Response via : Initial Calibration





CHROMtools™ [Tune1]

(3) Benzidine (T)

12.245min (-0.341) 181.43

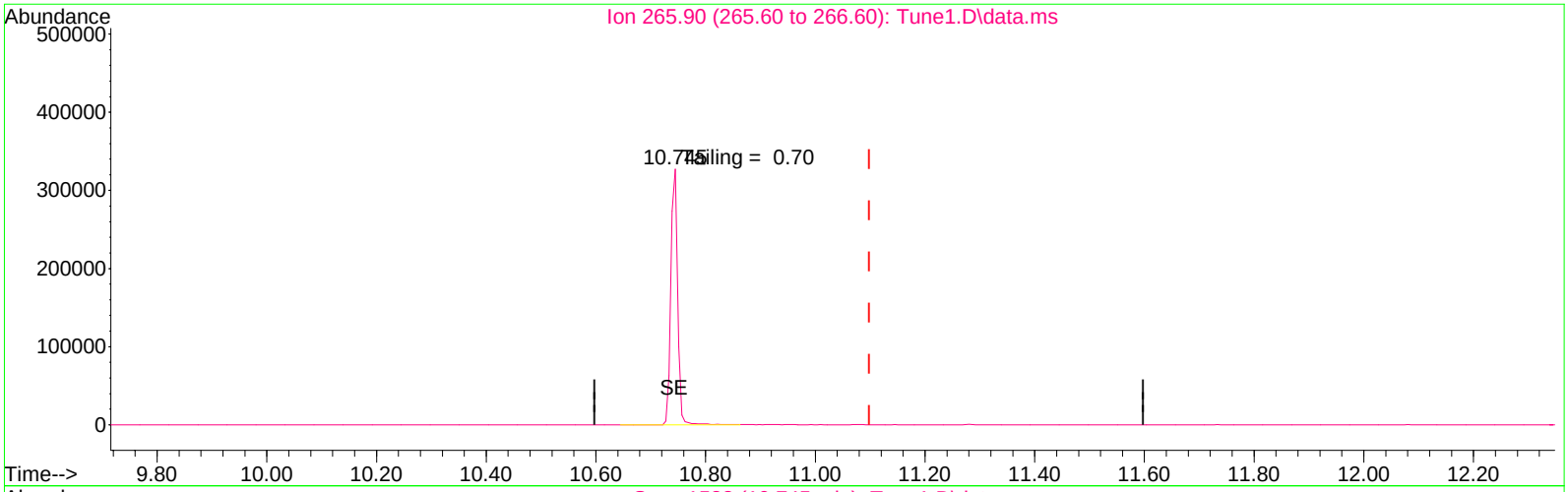
response 1846923

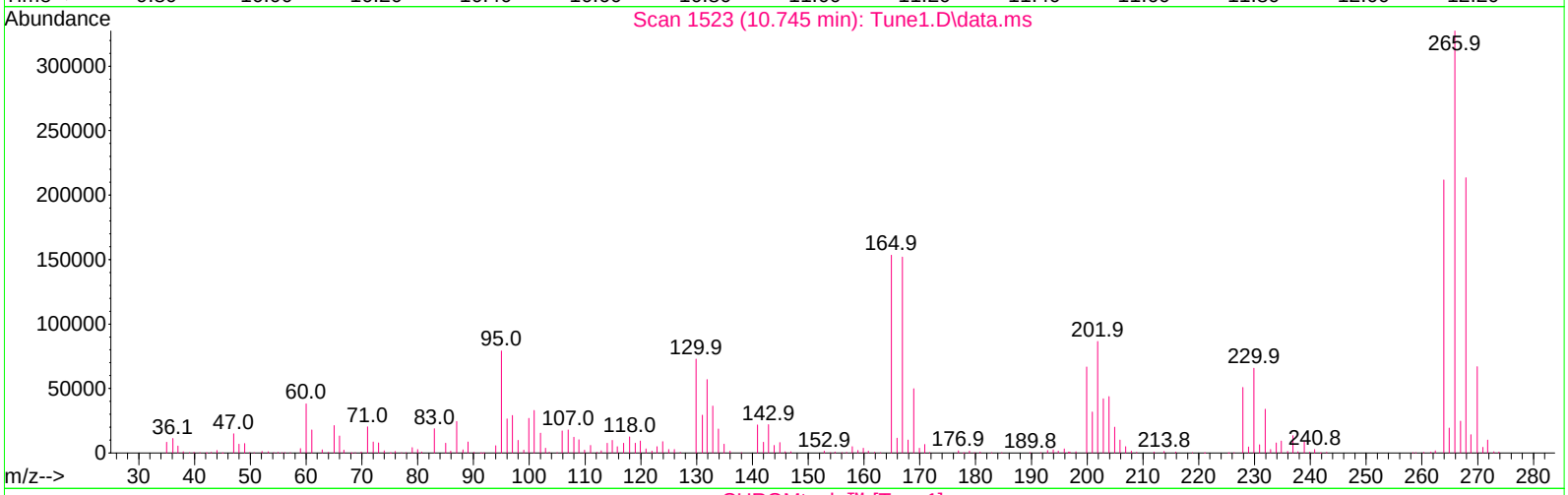
Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\230902lviical\
Data File : Tune1.D
Acq On : 2 Sep 2023 11:50 am
Operator : SV106:ljg
Sample : Tune1
Misc : WG1823680,,ical
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Sep 03 14:45:04 2023
Quant Method : I:\8270\SV106\230902lviical\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 23 13:06:27 2023
Response via : Initial Calibration





CHROMtools™ [Tune1]

(1) Pentachlorophenol (T)

10.745min (-0.353) 133.78

response 280989

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL10.D
Acq On : 2 Sep 2023 12:13 pm
Operator : SV106:ljg
Sample : IL1,32,,ABNL50 Lot# 10162
Misc : WG1823680,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 11:14:10 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:02 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	6.281	152	68839	4.000 ug/ml	0.00
Standard Area 1 = 43113			Recovery = 159.67%		
34) IS1_Naphthalene-d8	7.722	136	262268	4.000 ug/ml	0.00
Standard Area 1 = 167432			Recovery = 156.64%		
62) IS1_Acenaphthene-d10	9.480	164	148566	4.000 ug/ml	0.00
Standard Area 1 = 93119			Recovery = 159.54%		
87) IS1_Phenanthrene-d10	10.910	188	285170	4.000 ug/ml	# 0.00
Standard Area 1 = 179535			Recovery = 158.84%		
103) IS1_Chrysene-d12	13.533	240	273026	4.000 ug/ml	0.01
Standard Area 1 = 164850			Recovery = 165.62%		
112) IS1_Perylene-d12	14.980	264	267180	4.000 ug/ml	0.00
Standard Area 1 = 183060			Recovery = 145.95%		
System Monitoring Compounds					
4) 2-Fluorophenol	4.245	112	990128	51.573 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 1031.46%#		
7) Phenol-d6	5.928	99	1301506	52.624 ug/ml	0.02
Spiked Amount 5.000	Range 15 - 110		Recovery = 1052.48%#		
19) Nitrobenzene-d5	6.951	82	1210482	53.980 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 2159.20%#		
45) 2-Fluorobiphenyl	8.845	172	2560644	51.146 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 2045.84%#		
78) 2,4,6-Tribromophenol	10.251	330	399615	58.623 ug/ml	0.01
Spiked Amount 5.000	Range 15 - 110		Recovery = 1172.46%#		
95) 4-Terphenyl-d14	12.492	244	3367848	53.845 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 2153.80%#		
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	1.922	74	603921	51.811 ug/ml#	66
3) Pyridine	1.957	79	1005360	50.773 ug/ml#	64
5) Aniline	5.863	93	1708073	52.427 ug/ml	96
6) 2-Chlorophenol	6.016	128	1146669	52.294 ug/ml	92
8) Phenol	5.945	94	1358986	51.918 ug/ml	97
9) Bis(2-chloroethyl)ether	6.004	93	1073071	51.035 ug/ml#	84
10) 1,3-Dichlorobenzene	6.198	146	1263232	50.244 ug/ml	99
11) 1,4-Dichlorobenzene	6.298	146	1287924	49.790 ug/ml	100
12) 1,2-Dichlorobenzene	6.481	146	1239785	50.336 ug/ml	99
13) Benzyl alcohol	6.504	79	1019693	55.191 ug/ml	96
14) Bis(2-chloroisopropyl)...	6.687	45	1536644	49.619 ug/ml#	47

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL10.D
Acq On : 2 Sep 2023 12:13 pm
Operator : SV106:ljg
Sample : IL1,32,,ABNL50 Lot# 10162
Misc : WG1823680,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 11:14:10 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:02 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	6.681	108	1045292	53.388	ug/ml	99
16) Hexachloroethane	6.875	117	516337	51.203	ug/ml#	79
17) n-Nitrosodi-n-propylamine	6.839	70	841242	52.943	ug/ml	94
18) 3-Methylphenol/4-Methy...	6.875	108	1126431	54.845	ug/ml	100
20) Nitrobenzene	6.975	77	1201622	53.928	ug/ml	99
21) Isophorone	7.263	82	2289281	53.684	ug/ml	94
22) 2-Nitrophenol	7.328	139	534264	59.953	ug/ml#	92
23) 2,4-Dimethylphenol	7.439	107	1139601	51.698	ug/ml	97
24) Bis(2-chloroethoxy)met...	7.534	93	1394799	52.208	ug/ml#	98
25) 2,4-Dichlorophenol	7.598	162	1025952	55.423	ug/ml	97
26) 1,2,4-Trichlorobenzene	7.675	180	1091335	51.348	ug/ml	99
35) Naphthalene	7.739	128	3457795	52.299	ug/ml	100
36) Benzoic Acid	7.651	105	895566	51.199	ug/ml	99
37) 4-Chloroaniline	7.828	65	453951	52.439	ug/ml	87
38) Hexachlorobutadiene	7.910	225	664388	49.278	ug/ml	99
39) p-Chloro-m-cresol	8.363	107	1081340	56.580	ug/ml	93
40) 2-Methylnaphthalene	8.457	142	2207672	52.446	ug/ml	96
41) 1-Methylnaphthalene	8.551	115	823747	52.181	ug/ml	84
42) Hexachlorocyclopentadiene	8.633	237	767643	53.394	ug/ml	99
43) 2,4,6-Trichlorophenol	8.757	196	792184	57.925	ug/ml	97
44) 2,4,5-Trichlorophenol	8.786	196	789186	53.650	ug/ml	99
46) 2-Chloronaphthalene	8.939	162	2252799	51.350	ug/ml	99
47) 2-Nitroaniline	9.057	138	682887	51.590	ug/ml	92
48) 1,4-Dinitrobenzene	9.192	168	314761	52.007	ug/ml	87
49) 1,3-Dinitrobenzene	9.269	168	365590	51.534	ug/ml#	1
50) Dimethyl phthalate	9.275	163	2691227	52.128	ug/ml#	98
51) Acenaphthylene	9.339	152	3738373	52.943	ug/ml	99
52) 2,6-Dinitrotoluene	9.310	165	546122	51.245	ug/ml#	87
53) 1,2-Dinitrobenzene	9.357	168	228450	54.994	ug/ml#	1
63) 3-Nitroaniline	9.469	138	615589	57.925	ug/ml	98
64) Acenaphthene	9.516	154	2162049	51.489	ug/ml	94
65) 2,4-Dinitrophenol	9.563	184	306118	52.013	ug/ml	94
66) Dibenzofuran	9.686	168	3227444	51.411	ug/ml#	72
67) 2,4-Dinitrotoluene	9.698	165	764169	51.892	ug/ml	98
68) 4-Nitrophenol	9.663	65	574258	52.392	ug/ml#	28
69) 2,3,5,6-Tetrachlorophenol	9.775	232	681155	56.436	ug/ml	99
70) 2,3,4,6-Tetrachlorophenol	9.816	232	674873	53.886	ug/ml	97
71) Diethyl phthalate	9.963	149	2763567	52.586	ug/ml	99
72) Fluorene	10.016	166	2577636	51.966	ug/ml	96
73) 4-Chlorophenyl phenyl ...	10.039	204	1199217	50.665	ug/ml	98

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL10.D
Acq On : 2 Sep 2023 12:13 pm
Operator : SV106:ljg
Sample : IL1,32,,ABNL50 Lot# 10162
Misc : WG1823680,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 11:14:10 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:02 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74) 4-Nitroaniline	10.069	138	611018	56.961	ug/ml#	86
75) 4,6-Dinitro-o-cresol	10.092	198	410076	52.494	ug/ml#	77
76) NDPA/DPA	10.157	169	2171776	52.037	ug/ml	98
77) Azobenzene	10.192	77	2550386	52.052	ug/ml	98
79) 4-Bromophenyl phenyl e...	10.504	248	703040	51.038	ug/ml	93
80) Hexachlorobenzene	10.557	284	816721	50.938	ug/ml#	88
81) Pentachlorophenol	10.745	266	541382	52.276	ug/ml	99
88) Phenanthrene	10.939	178	4029150	51.880	ug/ml	99
89) Anthracene	10.986	178	4080478	52.789	ug/ml	100
90) Carbazole	11.157	167	3771487	53.395	ug/ml	100
91) Di-n-butylphthalate	11.551	149	5101143	56.394	ug/ml	99
92) Fluoranthene	12.086	202	4470293	53.842	ug/ml#	93
93) Benzidine	12.245	184	2964861	54.041	ug/ml#	95
94) Pyrene	12.298	202	4688025	53.330	ug/ml	99
96) Butyl benzyl phthalate	13.016	149	2284615	59.188	ug/ml	92
104) Benzo(a)anthracene	13.521	228	4701148	51.960	ug/ml	99
105) 3,3'-Dichlorobenzidine	13.527	252	1793030	55.688	ug/ml#	97
106) Chrysene	13.563	228	4148905	49.392	ug/ml	99
107) Bis(2-ethylhexyl)phtha...	13.651	149	3423593	56.443	ug/ml#	91
108) Di-n-octylphthalate	14.327	149	5924592	57.898	ug/ml#	72
109) Benzo(b)fluoranthene	14.621	252	4280897	49.528	ug/ml#	95
110) Benzo(k)fluoranthene	14.651	252	4247583M3	51.267	ug/ml	
111) Benzo(a)pyrene	14.933	252	3780405	51.122	ug/ml#	94
113) Indeno(1,2,3-cd)pyrene	15.951	276	3340791M6	53.517	ug/mL	
114) Dibenzo(a,h)anthracene	15.974	278	3584378	53.691	ug/ml#	90
115) Benzo(ghi)perylene	16.186	276	3154914	47.640	ug/ml#	88

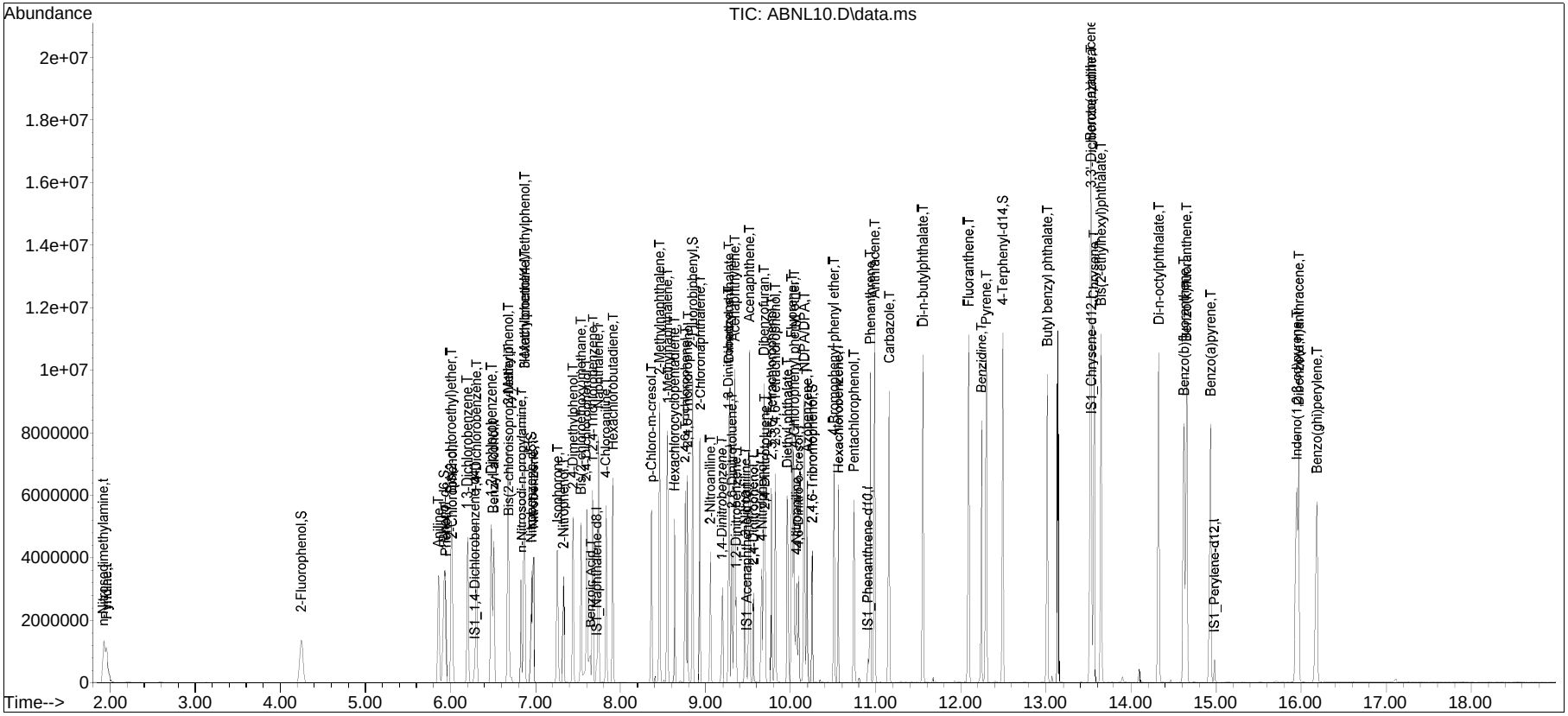
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL10.D
Acq On : 2 Sep 2023 12:13 pm
Operator : SV106:ljg
Sample : IL1,32,,ABNL50 Lot# 10162
Misc : WG1823680,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 11:14:10 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:02 2023
Response via : Initial Calibration

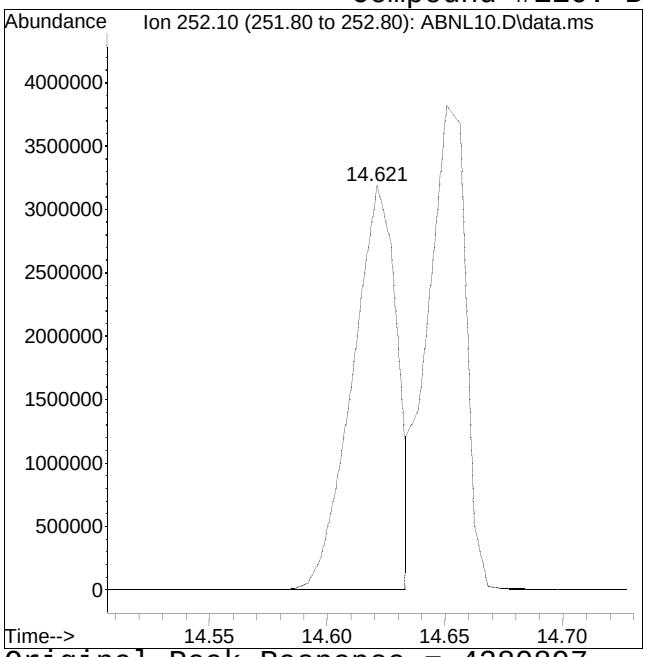
Sub List : ABNical - ABN ical sublistiical\ABNL6.D•

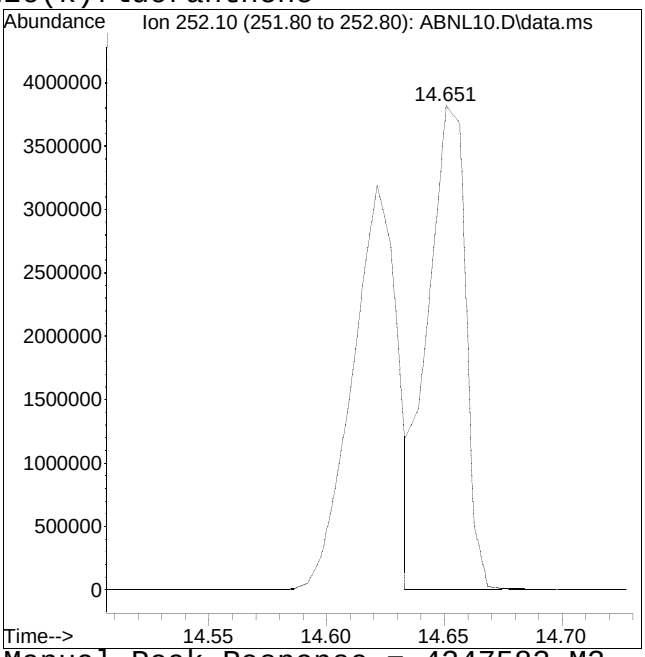


Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL10.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 12:13 pm Instrument : SV 106
Sample : IL1,32,,ABNL50 Lot# 10162 Quant Date : 9/5/2023 11:14 am

Compound #110: Benzo(k)fluoranthene



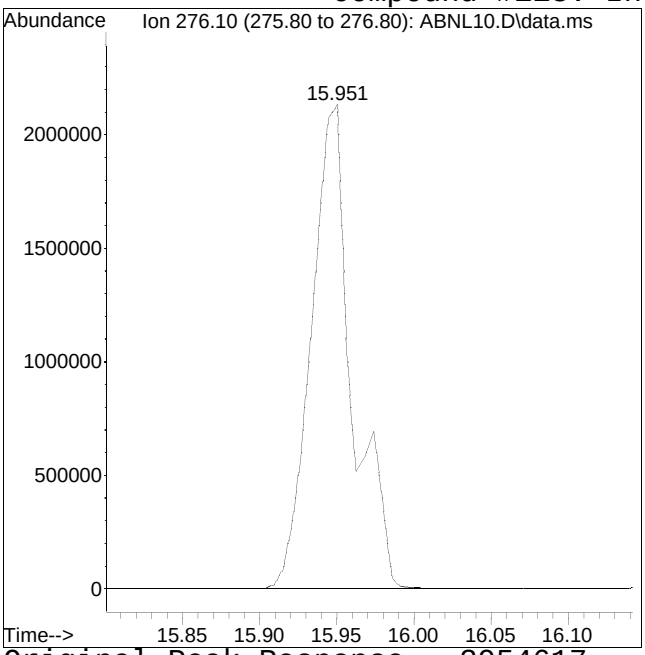


Original Peak Response = 4280897 Manual Peak Response = 4247583 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

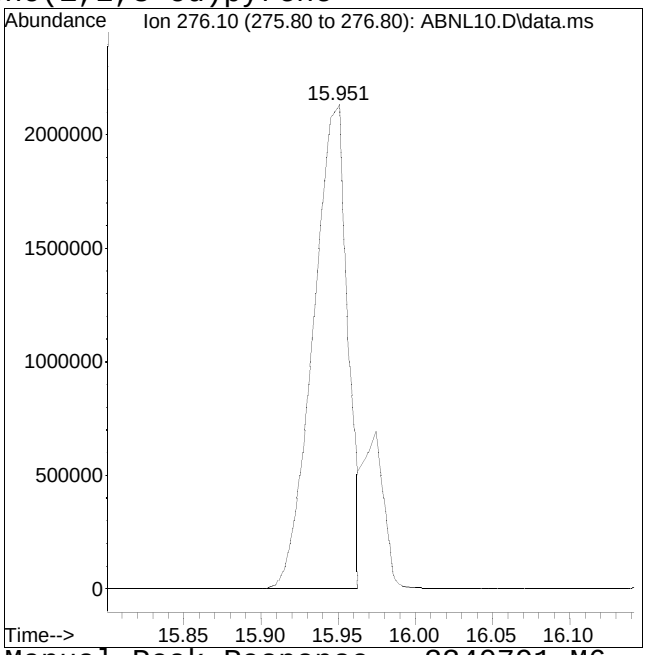
Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL10.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 12:13 pm Instrument : SV 106
Sample : IL1,32,,ABNL50 Lot# 10162 Quant Date : 9/5/2023 11:14 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 3954617



Manual Peak Response = 3340791 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL9.D
Acq On : 2 Sep 2023 12:37 pm
Operator : SV106:ljg
Sample : IL2,32,,ABNL35 Lot# 10163
Misc : WG1823680,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 11:15:21 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS1_1,4-Dichlorobenzen...	6.281	152	44310	4.000	ug/ml	0.00
Standard Area 1 = 43113			Recovery = 102.78%			
34) IS1_Naphthalene-d8	7.716	136	165823	4.000	ug/ml	# 0.00
Standard Area 1 = 167432			Recovery = 99.04%			
62) IS1_Acenaphthene-d10	9.475	164	94213	4.000	ug/ml	0.00
Standard Area 1 = 93119			Recovery = 101.17%			
87) IS1_Phenanthrene-d10	10.910	188	176438	4.000	ug/ml	# 0.00
Standard Area 1 = 179535			Recovery = 98.27%			
103) IS1_Chrysene-d12	13.527	240	170931	4.000	ug/ml	0.00
Standard Area 1 = 164850			Recovery = 103.69%			
112) IS1_Perylene-d12	14.974	264	175453	4.000	ug/ml	0.00
Standard Area 1 = 183060			Recovery = 95.84%			
System Monitoring Compounds						
4) 2-Fluorophenol	4.246	112	444458	35.966	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 719.32%#			
7) Phenol-d6	5.916	99	568211	35.693	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 713.86%#			
19) Nitrobenzene-d5	6.945	82	521667	36.141	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 1445.64%#			
45) 2-Fluorobiphenyl	8.845	172	1085958	34.306	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 1372.24%#			
78) 2,4,6-Tribromophenol	10.245	330	165921	38.383	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 767.66%#			
95) 4-Terphenyl-d14	12.486	244	1397533	36.113	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 1444.52%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	1.922	74	262053	34.927	ug/ml#	69
3) Pyridine	1.952	79	457209	35.872	ug/ml#	66
5) Aniline	5.863	93	737916	35.188	ug/ml	96
6) 2-Chlorophenol	6.010	128	504651	35.755	ug/ml	92
8) Phenol	5.934	94	590305	35.036	ug/ml	98
9) Bis(2-chloroethyl)ether	5.998	93	467675	34.555	ug/ml#	83
10) 1,3-Dichlorobenzene	6.198	146	562485	34.757	ug/ml	99
11) 1,4-Dichlorobenzene	6.298	146	571566	34.328	ug/ml	99
12) 1,2-Dichlorobenzene	6.481	146	543876	34.305	ug/ml	99
13) Benzyl alcohol	6.498	79	433112	36.419	ug/ml	96
14) Bis(2-chloroisopropyl)...	6.681	45	676298	33.927	ug/ml#	48

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL9.D
Acq On : 2 Sep 2023 12:37 pm
Operator : SV106:ljg
Sample : IL2,32,,ABNL35 Lot# 10163
Misc : WG1823680,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 11:15:21 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	6.675	108	452418	35.899	ug/ml	100
16) Hexachloroethane	6.875	117	226635	34.916	ug/ml#	78
17) n-Nitrosodi-n-propylamine	6.828	70	358459	35.048	ug/ml	93
18) 3-Methylphenol/4-Methy...	6.869	108	475622	35.977	ug/ml	99
20) Nitrobenzene	6.969	77	523518	36.502	ug/ml	99
21) Isophorone	7.251	82	965958	35.191	ug/ml	95
22) 2-Nitrophenol	7.328	139	225197	39.260	ug/ml#	92
23) 2,4-Dimethylphenol	7.440	107	507914	35.797	ug/ml	97
24) Bis(2-chloroethoxy)met...	7.528	93	591617	34.403	ug/ml	98
25) 2,4-Dichlorophenol	7.592	162	427993	35.920	ug/ml	97
26) 1,2,4-Trichlorobenzene	7.675	180	469966	34.353	ug/ml	99
35) Naphthalene	7.739	128	1478375	35.366	ug/ml	100
36) Benzoic Acid	7.598	105	369659	33.986	ug/ml	97
37) 4-Chloroaniline	7.828	65	193316	35.319	ug/ml	87
38) Hexachlorobutadiene	7.910	225	289211	33.927	ug/ml	99
39) p-Chloro-m-cresol	8.357	107	452756	37.469	ug/ml	95
40) 2-Methylnaphthalene	8.457	142	929772	34.934	ug/ml	95
41) 1-Methylnaphthalene	8.551	115	348693	34.935	ug/ml	84
42) Hexachlorocyclopentadiene	8.634	237	337235	37.099	ug/ml	99
43) 2,4,6-Trichlorophenol	8.757	196	324217	37.495	ug/ml	98
44) 2,4,5-Trichlorophenol	8.786	196	347593	37.374	ug/ml	98
46) 2-Chloronaphthalene	8.934	162	955203	34.436	ug/ml	99
47) 2-Nitroaniline	9.051	138	286465	34.381	ug/ml	93
48) 1,4-Dinitrobenzene	9.186	168	129466	34.144	ug/ml	88
49) 1,3-Dinitrobenzene	9.263	168	154922	34.846	ug/ml#	1
50) Dimethyl phthalate	9.263	163	1130294	34.627	ug/ml#	98
51) Acenaphthylene	9.334	152	1572037	35.212	ug/ml	100
52) 2,6-Dinitrotoluene	9.304	165	230216	34.295	ug/ml#	86
53) 1,2-Dinitrobenzene	9.345	168	97015	36.937	ug/ml#	1
63) 3-Nitroaniline	9.457	138	258423	38.346	ug/ml	98
64) Acenaphthene	9.510	154	902858	33.906	ug/ml	92
65) 2,4-Dinitrophenol	9.557	184	127640	34.584	ug/ml	94
66) Dibenzofuran	9.681	168	1375479	34.551	ug/ml	100
67) 2,4-Dinitrotoluene	9.692	165	320470	34.478	ug/ml	97
68) 4-Nitrophenol	9.651	65	234839	33.942	ug/ml#	89
69) 2,3,5,6-Tetrachlorophenol	9.769	232	287702	37.589	ug/ml	99
70) 2,3,4,6-Tetrachlorophenol	9.816	232	283683	35.719	ug/ml	97
71) Diethyl phthalate	9.957	149	1172963	35.196	ug/ml	99
72) Fluorene	10.010	166	1095787	34.836	ug/ml	97
73) 4-Chlorophenyl phenyl ...	10.033	204	502474	33.476	ug/ml	97

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL9.D
Acq On : 2 Sep 2023 12:37 pm
Operator : SV106:ljg
Sample : IL2,32,,ABNL35 Lot# 10163
Misc : WG1823680,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 11:15:21 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:14 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74) 4-Nitroaniline	10.051	138	260303	38.266	ug/ml#	85
75) 4,6-Dinitro-o-cresol	10.081	198	167531	34.234	ug/ml#	71
76) NDPA/DPA	10.151	169	924194	34.919	ug/ml	98
77) Azobenzene	10.186	77	1071348	34.480	ug/ml	98
79) 4-Bromophenyl phenyl e...	10.504	248	298584	34.181	ug/ml	93
80) Hexachlorobenzene	10.551	284	341847	33.621	ug/ml#	87
81) Pentachlorophenol	10.745	266	221765	33.927	ug/ml	99
88) Phenanthrene	10.933	178	1678854	34.939	ug/ml	100
89) Anthracene	10.980	178	1709466	35.744	ug/ml	100
90) Carbazole	11.151	167	1619102	37.049	ug/ml	100
91) Di-n-butylphthalate	11.545	149	2136624	38.178	ug/ml	99
92) Fluoranthene	12.080	202	1881345	36.624	ug/ml#	93
93) Benzidine	12.239	184	1341131	39.509	ug/ml#	95
94) Pyrene	12.292	202	1963796	36.107	ug/ml	100
96) Butyl benzyl phthalate	13.010	149	973935	40.782	ug/ml	91
104) Benzo(a)anthracene	13.516	228	1991361	35.156	ug/ml	100
105) 3,3'-Dichlorobenzidine	13.521	252	772420	38.319	ug/ml#	98
106) Chrysene	13.551	228	1798650	34.202	ug/ml	99
107) Bis(2-ethylhexyl)phtha...	13.645	149	1454534	38.303	ug/ml#	92
108) Di-n-octylphthalate	14.321	149	2568823	40.098	ug/ml#	72
109) Benzo(b)fluoranthene	14.616	252	1950128	36.038	ug/ml#	95
110) Benzo(k)fluoranthene	14.645	252	1773297	34.187	ug/ml#	94
111) Benzo(a)pyrene	14.921	252	1668845	36.047	ug/ml#	94
113) Indeno(1,2,3-cd)pyrene	15.939	276	1624846M6	39.637	ug/mL	
114) Dibenzo(a,h)anthracene	15.962	278	1673407	38.171	ug/ml#	91
115) Benzo(ghi)perylene	16.174	276	1599602	36.782	ug/ml#	88

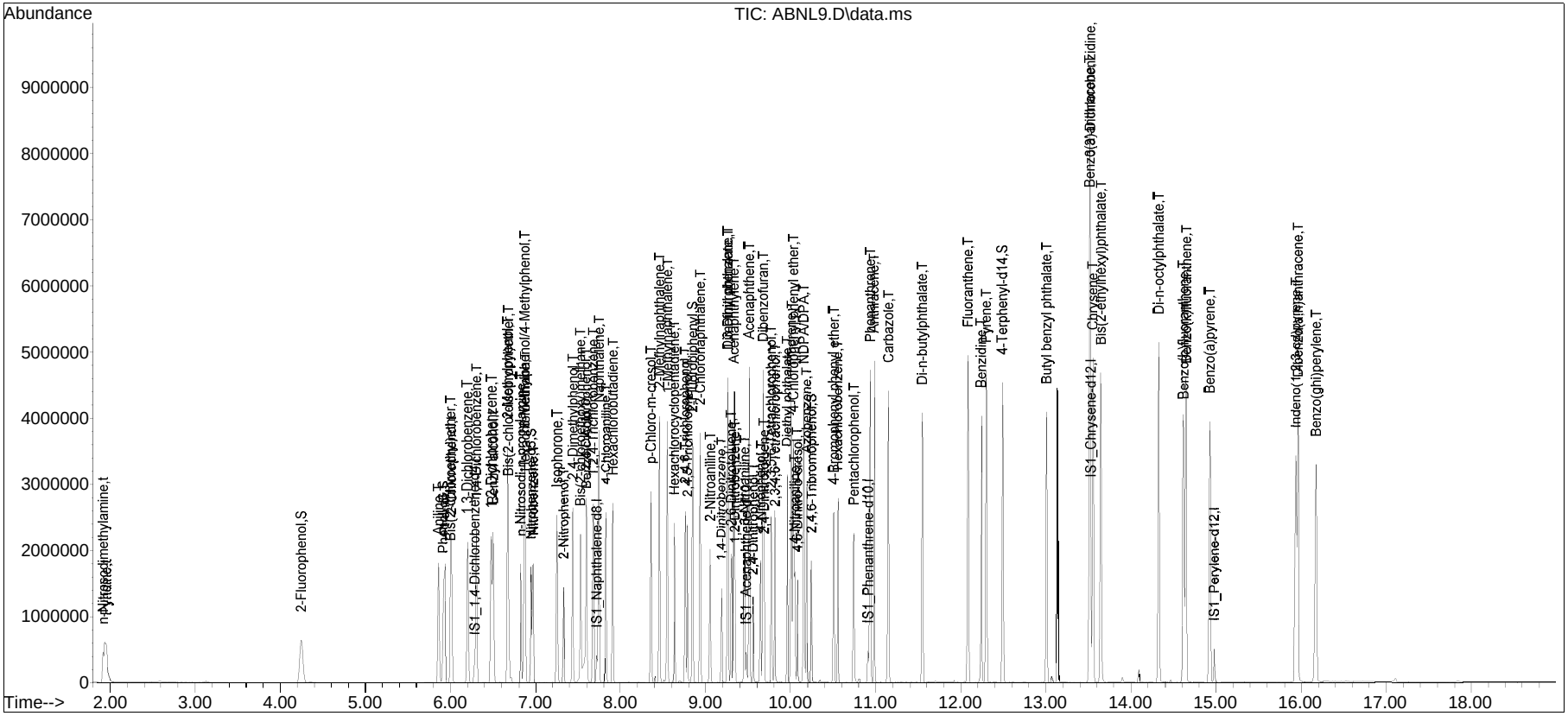
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL9.D
Acq On : 2 Sep 2023 12:37 pm
Operator : SV106:ljg
Sample : IL2,32,,ABNL35 Lot# 10163
Misc : WG1823680,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 11:15:21 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:14 2023
Response via : Initial Calibration

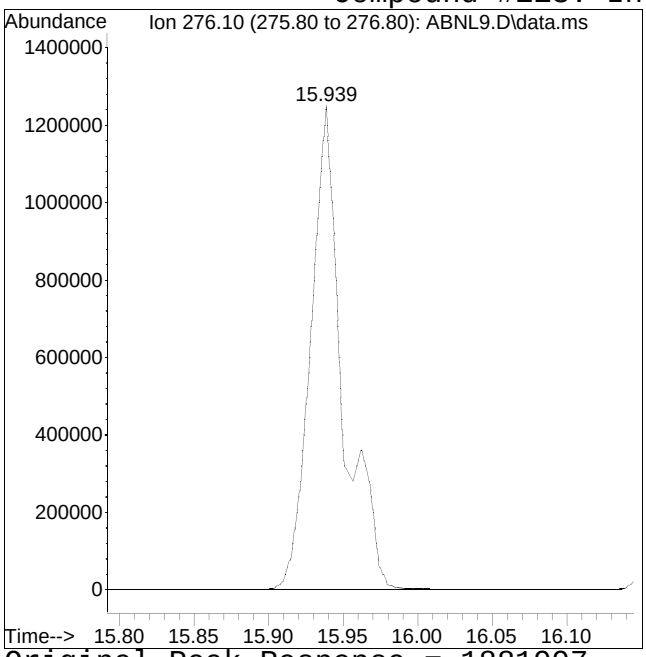
Sub List : ABNical - ABN ical sublistiical\ABNL6.D•



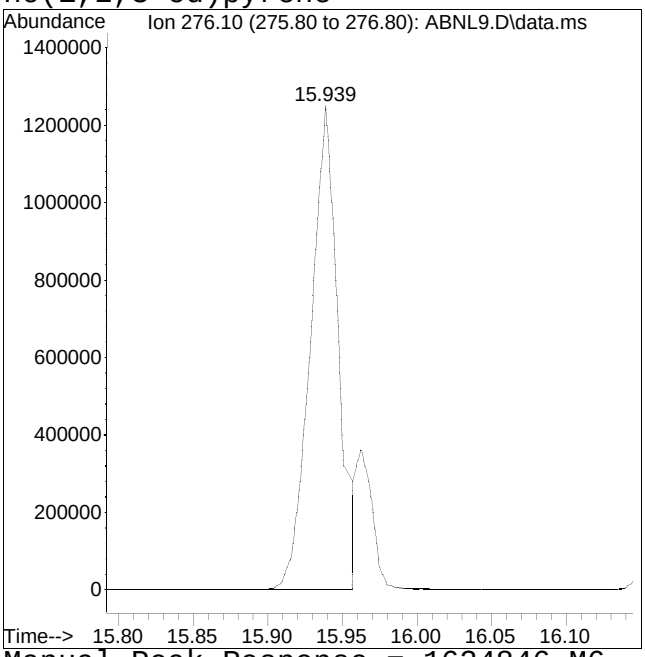
Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL9.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 12:37 pm Instrument : SV 106
Sample : IL2,32,,ABNL35 Lot# 10163 Quant Date : 9/5/2023 11:15 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 1881997



Manual Peak Response = 1624846 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL8.D
Acq On : 2 Sep 2023 1:01 pm
Operator : SV106:ljg
Sample : IL3,32,,ABNL15 Lot# 10164
Misc : WG1823680,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 11:15:12 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:05 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS1_1,4-Dichlorobenzen...	6.281	152	39387	4.000	ug/ml	# 0.00
Standard Area 1 = 43113			Recovery = 91.36%			
34) IS1_Naphthalene-d8	7.716	136	148209	4.000	ug/ml	0.00
Standard Area 1 = 167432			Recovery = 88.52%			
62) IS1_Acenaphthene-d10	9.475	164	84980	4.000	ug/ml	0.00
Standard Area 1 = 93119			Recovery = 91.26%			
87) IS1_Phenanthrene-d10	10.904	188	162165	4.000	ug/ml	# 0.00
Standard Area 1 = 179535			Recovery = 90.33%			
103) IS1_Chrysene-d12	13.521	240	149815	4.000	ug/ml	0.00
Standard Area 1 = 164850			Recovery = 90.88%			
112) IS1_Perylene-d12	14.968	264	161040	4.000	ug/ml	0.00
Standard Area 1 = 183060			Recovery = 87.97%			
System Monitoring Compounds						
4) 2-Fluorophenol	4.251	112	174595	15.894	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 317.88%#			
7) Phenol-d6	5.910	99	215466	15.226	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 304.52%#			
19) Nitrobenzene-d5	6.945	82	199124	15.520	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 620.80%#			
45) 2-Fluorobiphenyl	8.839	172	428605	15.149	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 605.96%#			
78) 2,4,6-Tribromophenol	10.245	330	63089	16.180	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 323.60%#			
95) 4-Terphenyl-d14	12.486	244	537088	15.100	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 604.00%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	1.922	74	101211	15.176	ug/ml#	68
3) Pyridine	1.952	79	182078	16.071	ug/ml#	65
5) Aniline	5.863	93	283242	15.195	ug/ml	96
6) 2-Chlorophenol	6.010	128	191941	15.299	ug/ml	93
8) Phenol	5.928	94	229092	15.297	ug/ml	96
9) Bis(2-chloroethyl)ether	5.998	93	180311	14.988	ug/ml#	83
10) 1,3-Dichlorobenzene	6.198	146	217035	15.087	ug/ml	99
11) 1,4-Dichlorobenzene	6.298	146	220147	14.875	ug/ml	100
12) 1,2-Dichlorobenzene	6.481	146	210026	14.903	ug/ml	99
13) Benzyl alcohol	6.498	79	165647	15.670	ug/ml	96
14) Bis(2-chloroisopropyl)...	6.681	45	268862	15.173	ug/ml#	51

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL8.D
Acq On : 2 Sep 2023 1:01 pm
Operator : SV106:ljg
Sample : IL3,32,,ABNL15 Lot# 10164
Misc : WG1823680,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 11:15:12 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:05 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	6.675	108	174868	15.610	ug/ml	98
16) Hexachloroethane	6.875	117	87032	15.084	ug/ml#	78
17) n-Nitrosodi-n-propylamine	6.822	70	136228	14.984	ug/ml	93
18) 3-Methylphenol/4-Methy...	6.863	108	182861	15.561	ug/ml	99
20) Nitrobenzene	6.963	77	200792	15.750	ug/ml	97
21) Isophorone	7.251	82	373793	15.320	ug/ml	95
22) 2-Nitrophenol	7.328	139	84641	16.600	ug/ml#	91
23) 2,4-Dimethylphenol	7.434	107	196134	15.551	ug/ml	97
24) Bis(2-chloroethoxy)met...	7.528	93	233863	15.299	ug/ml	99
25) 2,4-Dichlorophenol	7.592	162	168513	15.910	ug/ml	98
26) 1,2,4-Trichlorobenzene	7.675	180	183763	15.111	ug/ml	98
35) Naphthalene	7.739	128	570099	15.259	ug/ml	99
36) Benzoic Acid	7.557	105	136543	14.994	ug/ml	98
37) 4-Chloroaniline	7.822	65	75700	15.474	ug/ml	88
38) Hexachlorobutadiene	7.910	225	114489	15.027	ug/ml	98
39) p-Chloro-m-cresol	8.357	107	174800	16.185	ug/ml	94
40) 2-Methylnaphthalene	8.457	142	363087	15.264	ug/ml	95
41) 1-Methylnaphthalene	8.551	115	138136	15.484	ug/ml	83
42) Hexachlorocyclopentadiene	8.634	237	127554	15.700	ug/ml	98
43) 2,4,6-Trichlorophenol	8.757	196	123184	15.939	ug/ml	99
44) 2,4,5-Trichlorophenol	8.781	196	134180	16.142	ug/ml	97
46) 2-Chloronaphthalene	8.934	162	374768	15.117	ug/ml	99
47) 2-Nitroaniline	9.051	138	108579	14.842	ug/ml	93
48) 1,4-Dinitrobenzene	9.181	168	47498	14.540	ug/ml	90
49) 1,3-Dinitrobenzene	9.257	168	54984	14.397	ug/ml#	1
50) Dimethyl phthalate	9.257	163	450072	15.427	ug/ml#	98
51) Acenaphthylene	9.333	152	621329	15.571	ug/ml	99
52) 2,6-Dinitrotoluene	9.298	165	89361	15.112	ug/ml#	85
53) 1,2-Dinitrobenzene	9.339	168	38566	16.429	ug/ml#	1
63) 3-Nitroaniline	9.451	138	99446	16.359	ug/ml	97
64) Acenaphthene	9.504	154	352685	14.684	ug/ml	93
65) 2,4-Dinitrophenol	9.551	184	44061	13.929	ug/ml	96
66) Dibenzofuran	9.681	168	532862	14.839	ug/ml	98
67) 2,4-Dinitrotoluene	9.686	165	118257	14.385	ug/ml	95
68) 4-Nitrophenol	9.645	65	88187	14.388	ug/ml#	87
69) 2,3,5,6-Tetrachlorophenol	9.769	232	110628	16.024	ug/ml	98
70) 2,3,4,6-Tetrachlorophenol	9.810	232	110706	15.454	ug/ml	97
71) Diethyl phthalate	9.951	149	444677	14.793	ug/ml	99
72) Fluorene	10.010	166	428382	15.098	ug/ml	97
73) 4-Chlorophenyl phenyl ...	10.033	204	198916	14.692	ug/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL8.D
Acq On : 2 Sep 2023 1:01 pm
Operator : SV106:ljg
Sample : IL3,32,,ABNL15 Lot# 10164
Misc : WG1823680,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 11:15:12 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:05 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
74)	4-Nitroaniline	10.039	138	96505	15.728	ug/ml	#	84
75)	4,6-Dinitro-o-cresol	10.075	198	58329	13.932	ug/ml	#	72
76)	NDPA/DPA	10.151	169	361547	15.145	ug/ml		98
77)	Azobenzene	10.180	77	420644	15.009	ug/ml		98
79)	4-Bromophenyl phenyl e...	10.498	248	116954	14.843	ug/ml		92
80)	Hexachlorobenzene	10.545	284	132100	14.404	ug/ml	#	88
81)	Pentachlorophenol	10.739	266	83555	14.433	ug/ml		98
88)	Phenanthrene	10.928	178	650045	14.719	ug/ml		99
89)	Anthracene	10.980	178	655793	14.919	ug/ml		99
90)	Carbazole	11.145	167	611710	15.229	ug/ml		100
91)	Di-n-butylphthalate	11.545	149	800541	15.563	ug/ml		99
92)	Fluoranthene	12.080	202	724443	15.344	ug/ml	#	93
93)	Benzidine	12.233	184	515181	16.513	ug/ml	#	95
94)	Pyrene	12.292	202	753957	15.083	ug/ml		100
96)	Butyl benzyl phthalate	13.010	149	354416	16.147	ug/ml		90
104)	Benzo(a)anthracene	13.510	228	742019	14.946	ug/ml		100
105)	3,3'-Dichlorobenzidine	13.516	252	284024	16.076	ug/ml	#	98
106)	Chrysene	13.551	228	679622	14.745	ug/ml		99
107)	Bis(2-ethylhexyl)phtha...	13.645	149	541988	16.284	ug/ml	#	91
108)	Di-n-octylphthalate	14.321	149	932898	16.614	ug/ml	#	73
109)	Benzo(b)fluoranthene	14.610	252	738969	15.581	ug/ml	#	95
110)	Benzo(k)fluoranthene	14.633	252	684561	15.058	ug/ml	#	94
111)	Benzo(a)pyrene	14.915	252	630908	15.548	ug/ml	#	94
113)	Indeno(1,2,3-cd)pyrene	15.927	276	591376M6	15.717	ug/mL		
114)	Dibenzo(a,h)anthracene	15.957	278	642310	15.963	ug/ml	#	91
115)	Benzo(ghi)perylene	16.162	276	617081	15.460	ug/ml	#	88

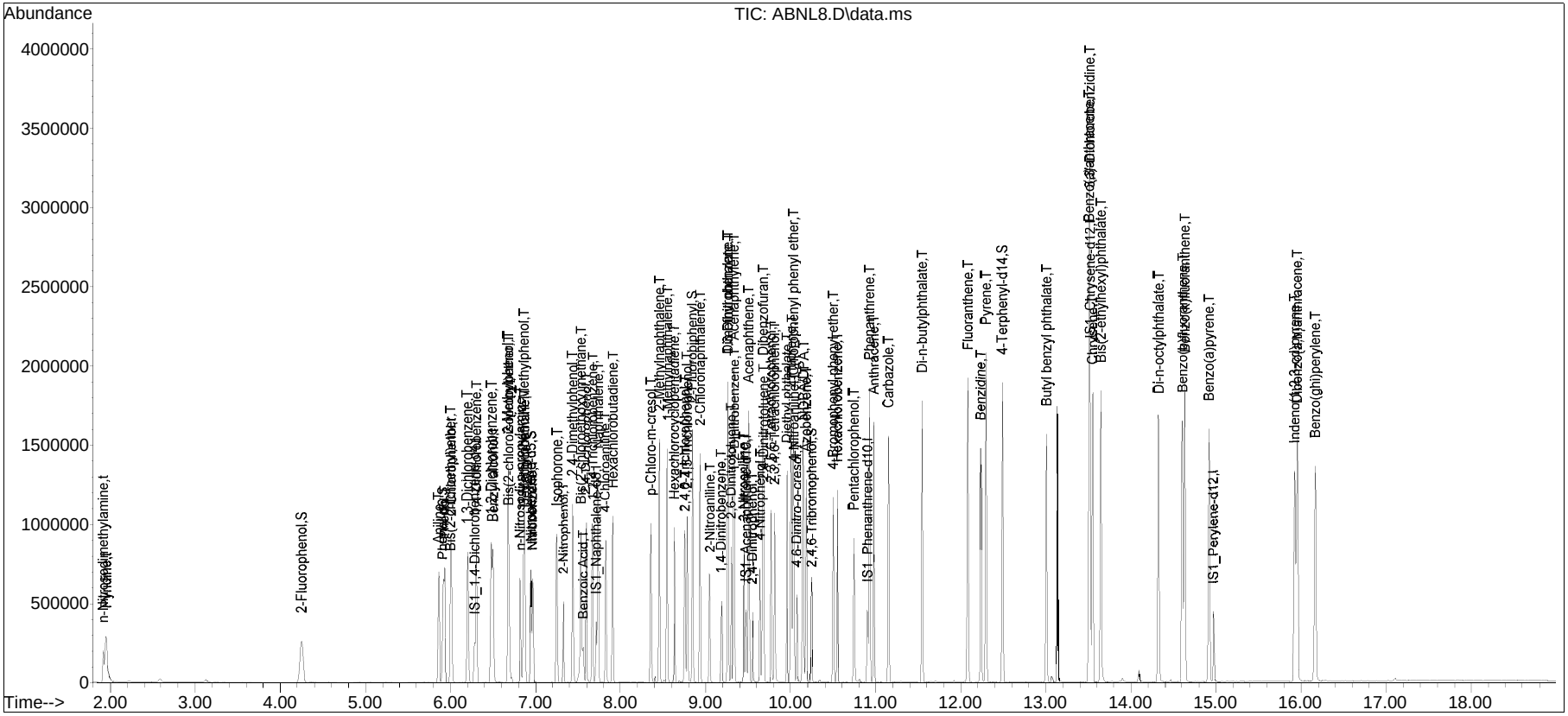
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL8.D
Acq On : 2 Sep 2023 1:01 pm
Operator : SV106:ljg
Sample : IL3,32,,ABNL15 Lot# 10164
Misc : WG1823680,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 11:15:12 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:05 2023
Response via : Initial Calibration

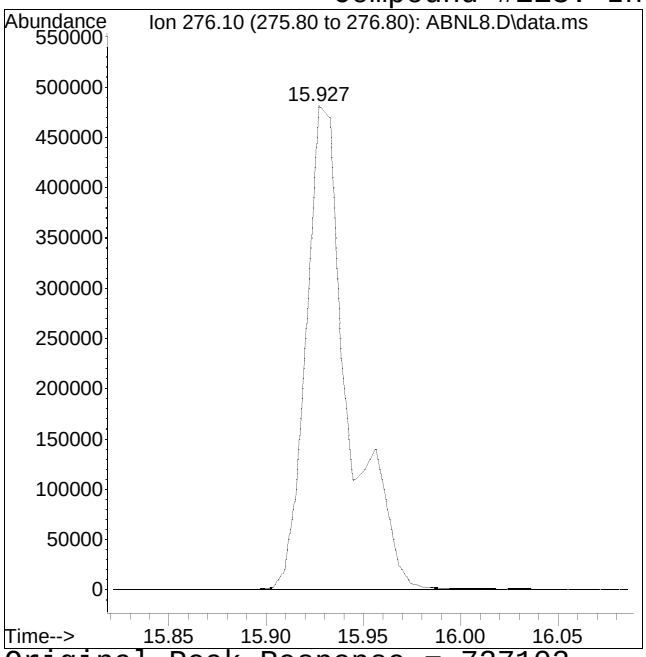
Sub List : ABNical - ABN ical sublistiical\ABNL6.D•



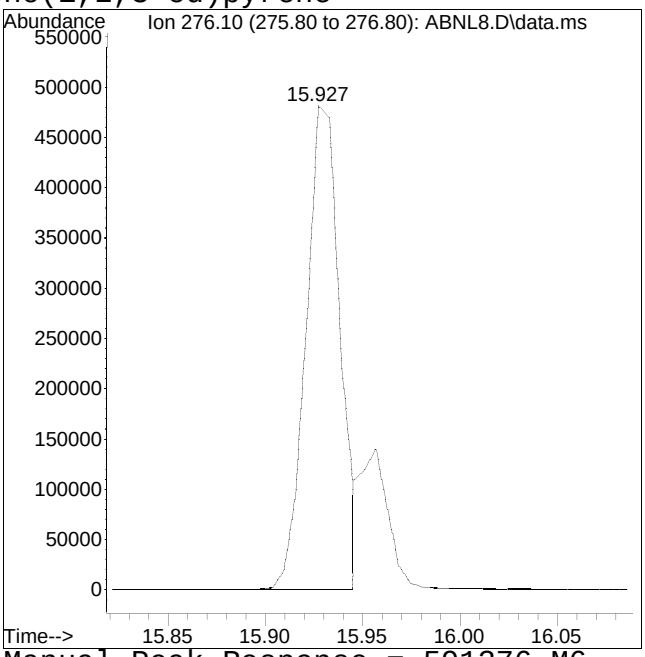
Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL8.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 1:01 pm Instrument : SV 106
Sample : IL3,32,,ABNL15 Lot# 10164 Quant Date : 9/5/2023 11:15 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 727102



Manual Peak Response = 591376 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL7.D
Acq On : 2 Sep 2023 1:24 pm
Operator : SV106:ljg
Sample : IL4,32,,ABNL10 Lot# 10165
Misc : WG1823680,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 05 11:15:03 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:56 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS1_1,4-Dichlorobenzen...	6.281	152	41700	4.000	ug/ml	# 0.00
Standard Area 1 = 43113			Recovery = 96.72%			
34) IS1_Naphthalene-d8	7.716	136	161337	4.000	ug/ml	0.00
Standard Area 1 = 167432			Recovery = 96.36%			
62) IS1_Acenaphthene-d10	9.474	164	89903	4.000	ug/ml	0.00
Standard Area 1 = 93119			Recovery = 96.55%			
87) IS1_Phenanthrene-d10	10.904	188	174498	4.000	ug/ml	# 0.00
Standard Area 1 = 179535			Recovery = 97.19%			
103) IS1_Chrysene-d12	13.521	240	162336	4.000	ug/ml	0.00
Standard Area 1 = 164850			Recovery = 98.47%			
112) IS1_Perylene-d12	14.974	264	174651	4.000	ug/ml	0.00
Standard Area 1 = 183060			Recovery = 95.41%			
System Monitoring Compounds						
4) 2-Fluorophenol	4.245	112	123162	10.590	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 211.80%#			
7) Phenol-d6	5.910	99	161769	10.798	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 215.96%#			
19) Nitrobenzene-d5	6.945	82	143925	10.595	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 423.80%#			
45) 2-Fluorobiphenyl	8.839	172	311557	10.116	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 404.64%#			
78) 2,4,6-Tribromophenol	10.245	330	44207	10.717	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 214.34%#			
95) 4-Terphenyl-d14	12.486	244	400865	10.474	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 418.96%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	1.922	74	74968	10.617	ug/ml#	67
3) Pyridine	1.951	79	128851	10.742	ug/ml#	63
5) Aniline	5.863	93	208544	10.567	ug/ml	97
6) 2-Chlorophenol	6.010	128	142959	10.763	ug/ml	91
8) Phenol	5.928	94	167078	10.537	ug/ml	97
9) Bis(2-chloroethyl)ether	6.004	93	132959	10.439	ug/ml#	82
10) 1,3-Dichlorobenzene	6.198	146	157458	10.339	ug/ml	99
11) 1,4-Dichlorobenzene	6.298	146	162727	10.385	ug/ml	99
12) 1,2-Dichlorobenzene	6.481	146	155990	10.455	ug/ml	99
13) Benzyl alcohol	6.498	79	121672	10.871	ug/ml	96
14) Bis(2-chloroisopropyl)...	6.681	45	197828	10.545	ug/ml#	50

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL7.D
Acq On : 2 Sep 2023 1:24 pm
Operator : SV106:ljg
Sample : IL4,32,,ABNL10 Lot# 10165
Misc : WG1823680,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 05 11:15:03 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:56 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	6.675	108	127300	10.733	ug/ml	99
16) Hexachloroethane	6.875	117	63885	10.458	ug/ml#	76
17) n-Nitrosodi-n-propylamine	6.822	70	102240	10.622	ug/ml	93
18) 3-Methylphenol/4-Methy...	6.863	108	134672	10.825	ug/ml	99
20) Nitrobenzene	6.963	77	145538	10.783	ug/ml	97
21) Isophorone	7.251	82	273843	10.601	ug/ml	95
22) 2-Nitrophenol	7.328	139	62103	11.505	ug/ml#	90
23) 2,4-Dimethylphenol	7.433	107	144296	10.806	ug/ml	97
24) Bis(2-chloroethoxy)met...	7.528	93	169754	10.489	ug/ml	100
25) 2,4-Dichlorophenol	7.592	162	123592	11.022	ug/ml	97
26) 1,2,4-Trichlorobenzene	7.675	180	134570	10.452	ug/ml	97
35) Naphthalene	7.739	128	418782	10.297	ug/ml	99
36) Benzoic Acid	7.545	105	92921	9.980	ug/ml	99
37) 4-Chloroaniline	7.822	65	57438	10.786	ug/ml	94
38) Hexachlorobutadiene	7.910	225	83134	10.023	ug/ml	99
39) p-Chloro-m-cresol	8.357	107	126763	10.782	ug/ml	96
40) 2-Methylnaphthalene	8.457	142	266409	10.288	ug/ml	95
41) 1-Methylnaphthalene	8.551	115	101148	10.416	ug/ml	84
42) Hexachlorocyclopentadiene	8.633	237	94250	10.657	ug/ml	97
43) 2,4,6-Trichlorophenol	8.757	196	91456	10.871	ug/ml	97
44) 2,4,5-Trichlorophenol	8.780	196	97811	10.809	ug/ml	98
46) 2-Chloronaphthalene	8.933	162	275685	10.215	ug/ml	100
47) 2-Nitroaniline	9.051	138	77457	9.883	ug/ml	92
48) 1,4-Dinitrobenzene	9.180	168	33349	9.695	ug/ml	89
49) 1,3-Dinitrobenzene	9.257	168	37868	9.450	ug/ml#	1
50) Dimethyl phthalate	9.257	163	325946	10.263	ug/ml#	98
51) Acenaphthylene	9.333	152	448549	10.326	ug/ml	99
52) 2,6-Dinitrotoluene	9.298	165	64069	10.085	ug/ml#	87
53) 1,2-Dinitrobenzene	9.339	168	27698	10.839	ug/ml#	1
63) 3-Nitroaniline	9.451	138	74243	11.545	ug/ml	100
64) Acenaphthene	9.504	154	260245	10.242	ug/ml	94
65) 2,4-Dinitrophenol	9.551	184	30743	9.569	ug/ml	96
66) Dibenzofuran	9.674	168	393373	10.355	ug/ml	98
67) 2,4-Dinitrotoluene	9.686	165	85374	9.967	ug/ml	94
68) 4-Nitrophenol	9.645	65	63553	9.941	ug/ml#	87
69) 2,3,5,6-Tetrachlorophenol	9.769	232	80603	11.036	ug/ml	99
70) 2,3,4,6-Tetrachlorophenol	9.810	232	82879	10.936	ug/ml	99
71) Diethyl phthalate	9.951	149	327950	10.312	ug/ml	99
72) Fluorene	10.010	166	315894	10.524	ug/ml	95
73) 4-Chlorophenyl phenyl ...	10.033	204	144872	10.114	ug/ml	98

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL7.D
Acq On : 2 Sep 2023 1:24 pm
Operator : SV106:ljg
Sample : IL4,32,,ABNL10 Lot# 10165
Misc : WG1823680,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 05 11:15:03 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:56 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
74)	4-Nitroaniline	10.039	138	68144	10.498	ug/ml	#	86
75)	4,6-Dinitro-o-cresol	10.074	198	40596	9.566	ug/ml	#	71
76)	NDPA/DPA	10.151	169	265685	10.520	ug/ml		98
77)	Azobenzene	10.180	77	303000	10.219	ug/ml		96
79)	4-Bromophenyl phenyl e...	10.498	248	84255	10.108	ug/ml		92
80)	Hexachlorobenzene	10.545	284	96977	9.995	ug/ml	#	88
81)	Pentachlorophenol	10.739	266	60646	10.043	ug/ml		99
88)	Phenanthrene	10.927	178	478235	10.063	ug/ml		99
89)	Anthracene	10.980	178	486527	10.286	ug/ml		99
90)	Carbazole	11.145	167	446072	10.321	ug/ml		99
91)	Di-n-butylphthalate	11.545	149	591522	10.687	ug/ml		99
92)	Fluoranthene	12.080	202	529102	10.415	ug/ml	#	93
93)	Benzidine	12.233	184	370696	11.042	ug/ml	#	95
94)	Pyrene	12.292	202	554586	10.310	ug/ml		99
96)	Butyl benzyl phthalate	13.010	149	256123	10.844	ug/ml		93
104)	Benzo(a)anthracene	13.509	228	543832	10.109	ug/ml		100
105)	3,3'-Dichlorobenzidine	13.515	252	206821	10.803	ug/ml		97
106)	Chrysene	13.545	228	510603	10.223	ug/ml		99
107)	Bis(2-ethylhexyl)phtha...	13.645	149	401933	11.145	ug/ml	#	91
108)	Di-n-octylphthalate	14.321	149	686886	11.290	ug/ml	#	73
109)	Benzo(b)fluoranthene	14.609	252	559732	10.891	ug/ml	#	95
110)	Benzo(k)fluoranthene	14.633	252	497557	10.100	ug/ml	#	93
111)	Benzo(a)pyrene	14.915	252	471038	10.713	ug/ml	#	94
113)	Indeno(1,2,3-cd)pyrene	15.927	276	433661M6	10.627	ug/mL		
114)	Dibenzo(a,h)anthracene	15.956	278	476349	10.916	ug/ml	#	92
115)	Benzo(ghi)perylene	16.162	276	464857	10.738	ug/ml	#	88

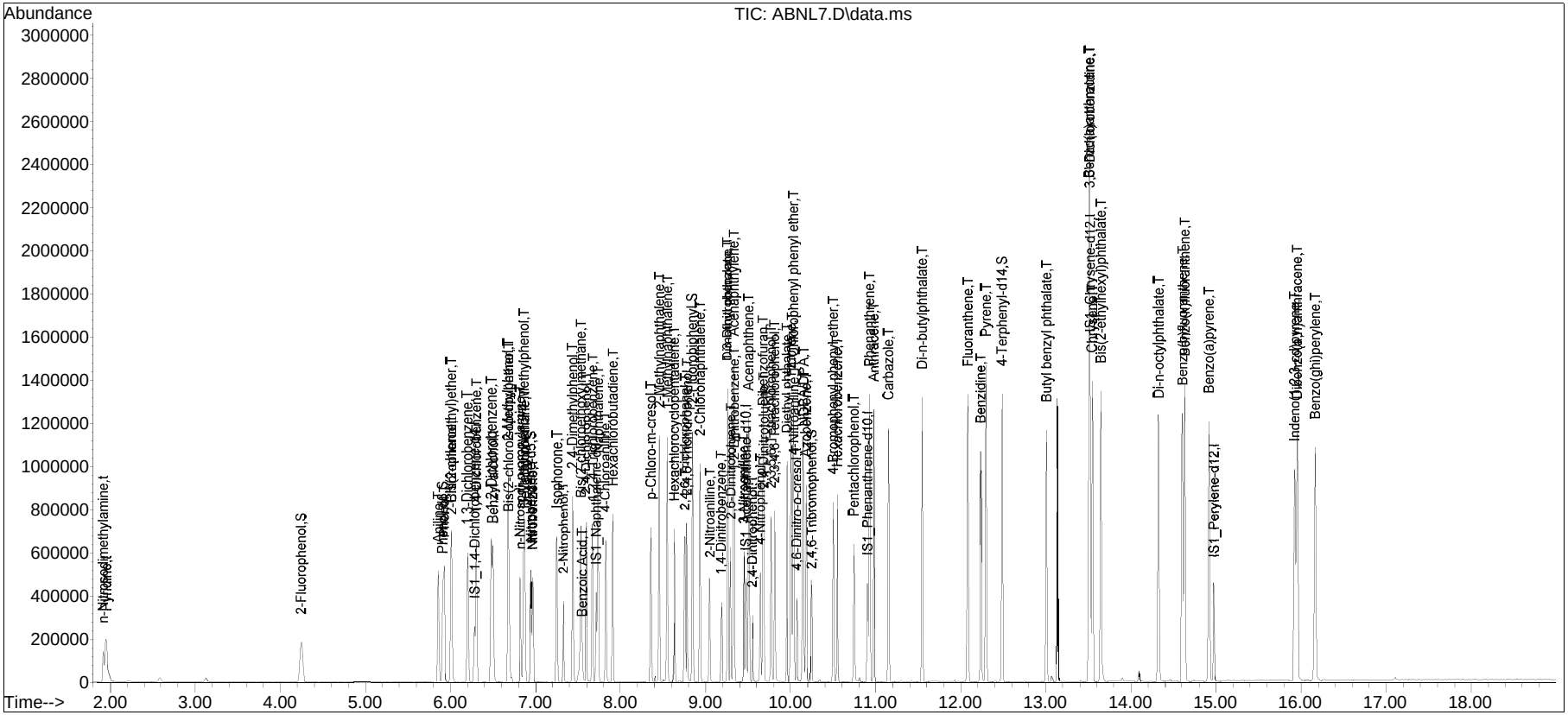
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL7.D
Acq On : 2 Sep 2023 1:24 pm
Operator : SV106:ljg
Sample : IL4,32,,ABNL10 Lot# 10165
Misc : WG1823680,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 05 11:15:03 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:56 2023
Response via : Initial Calibration

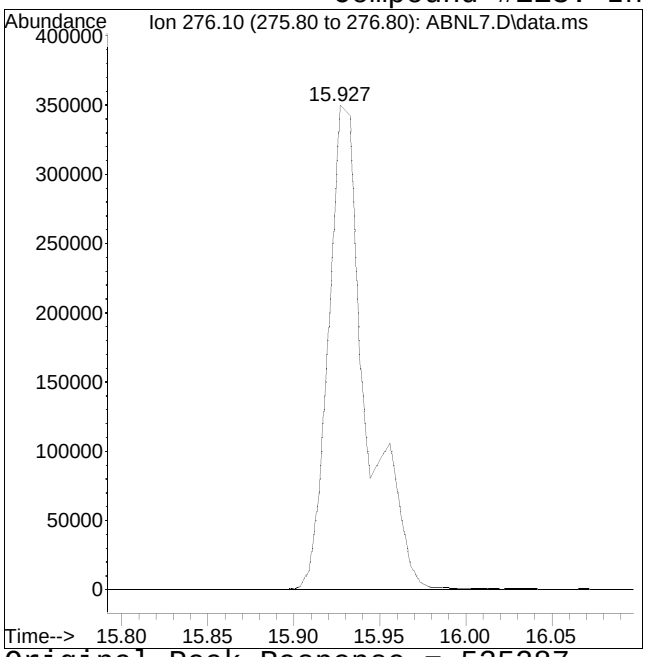
Sub List : ABNical - ABN ical sublistiical\ABNL6.D•



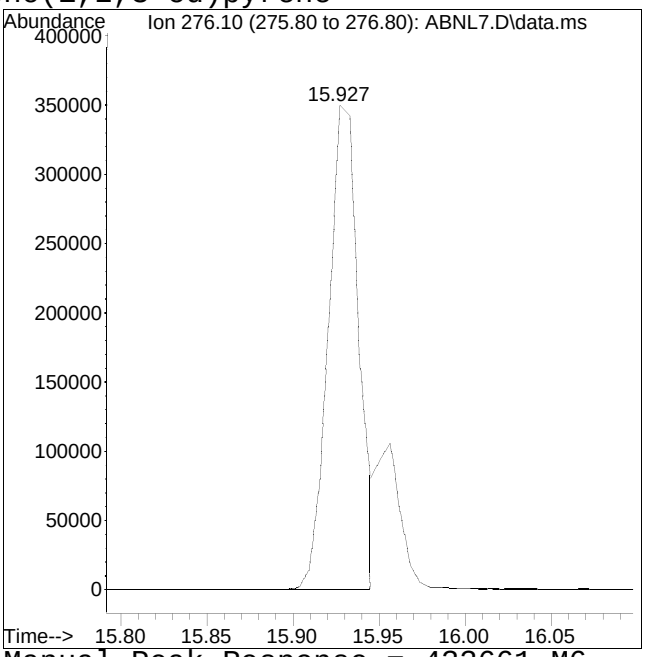
Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL7.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 1:24 pm Instrument : SV 106
Sample : IL4,32,,ABNL10 Lot# 10165 Quant Date : 9/5/2023 11:14 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 535287



Manual Peak Response = 433661 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL6.D
Acq On : 2 Sep 2023 1:48 pm
Operator : SV106:ljg
Sample : IL5,32,,ABNL5 Lot# 10166
Misc : WG1823680,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 05 11:14:53 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:47 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS1_1,4-Dichlorobenzen...	6.281	152	43113	4.000	ug/ml	0.00
Standard Area 1 = 43113			Recovery = 100.00%			
34) IS1_Naphthalene-d8	7.716	136	167432	4.000	ug/ml	# 0.00
Standard Area 1 = 167432			Recovery = 100.00%			
62) IS1_Acenaphthene-d10	9.475	164	93119	4.000	ug/ml	0.00
Standard Area 1 = 93119			Recovery = 100.00%			
87) IS1_Phenanthrene-d10	10.904	188	179535	4.000	ug/ml	# 0.00
Standard Area 1 = 179535			Recovery = 100.00%			
103) IS1_Chrysene-d12	13.521	240	164850	4.000	ug/ml	0.00
Standard Area 1 = 164850			Recovery = 100.00%			
112) IS1_Perylene-d12	14.974	264	183060	4.000	ug/ml	0.00
Standard Area 1 = 183060			Recovery = 100.00%			
System Monitoring Compounds						
4) 2-Fluorophenol	4.251	112	53608	4.459	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 89.18%			
7) Phenol-d6	5.910	99	71612	4.623	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 92.46%			
19) Nitrobenzene-d5	6.945	82	62518	4.451	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 178.04%#			
45) 2-Fluorobiphenyl	8.839	172	141447	4.425	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 177.00%#			
78) 2,4,6-Tribromophenol	10.239	330	19770	4.627	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 92.54%			
95) 4-Terphenyl-d14	12.486	244	178232	4.526	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 181.04%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	1.928	74	33503	4.589	ug/ml#	67
3) Pyridine	1.969	79	57189	4.612	ug/ml#	62
5) Aniline	5.863	93	92709	4.544	ug/ml	97
6) 2-Chlorophenol	6.010	128	63839	4.649	ug/ml	91
8) Phenol	5.928	94	73966	4.512	ug/ml	96
9) Bis(2-chloroethyl)ether	6.004	93	60009	4.557	ug/ml#	83
10) 1,3-Dichlorobenzene	6.204	146	72377	4.597	ug/ml	98
11) 1,4-Dichlorobenzene	6.298	146	72405	4.469	ug/ml	98
12) 1,2-Dichlorobenzene	6.481	146	69434	4.501	ug/ml	97
13) Benzyl alcohol	6.498	79	53318	4.608	ug/ml	96
14) Bis(2-chloroisopropyl)...	6.687	45	88610	4.569	ug/ml#	51

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL6.D
Acq On : 2 Sep 2023 1:48 pm
Operator : SV106:ljg
Sample : IL5,32,,ABNL5 Lot# 10166
Misc : WG1823680,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 05 11:14:53 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:47 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	6.675	108	54813	4.470	ug/ml	98
16) Hexachloroethane	6.875	117	28814	4.562	ug/ml#	77
17) n-Nitrosodi-n-propylamine	6.822	70	44872	4.509	ug/ml	94
18) 3-Methylphenol/4-Methy...	6.863	108	58848	4.575	ug/ml	99
20) Nitrobenzene	6.963	77	64097	4.593	ug/ml	97
21) Isophorone	7.251	82	120453	4.510	ug/ml#	94
22) 2-Nitrophenol	7.328	139	25159	4.508	ug/ml#	90
23) 2,4-Dimethylphenol	7.434	107	64792	4.693	ug/ml	97
24) Bis(2-chloroethoxy)met...	7.528	93	76418	4.567	ug/ml	99
25) 2,4-Dichlorophenol	7.592	162	54845	4.731	ug/ml	97
26) 1,2,4-Trichlorobenzene	7.669	180	59450	4.466	ug/ml	97
35) Naphthalene	7.734	128	187039	4.431	ug/ml	99
36) Benzoic Acid	7.516	105	33776	4.546	ug/ml	93
37) 4-Chloroaniline	7.822	65	24945	4.514	ug/ml	86
38) Hexachlorobutadiene	7.910	225	37693	4.379	ug/ml	98
39) p-Chloro-m-cresol	8.357	107	56099	4.598	ug/ml	93
40) 2-Methylnaphthalene	8.457	142	119552	4.449	ug/ml	96
41) 1-Methylnaphthalene	8.551	115	45679	4.533	ug/ml	82
42) Hexachlorocyclopentadiene	8.634	237	40891	4.455	ug/ml	98
43) 2,4,6-Trichlorophenol	8.757	196	38187	4.374	ug/ml	99
44) 2,4,5-Trichlorophenol	8.781	196	41020	4.368	ug/ml	98
46) 2-Chloronaphthalene	8.934	162	124860	4.458	ug/ml	97
47) 2-Nitroaniline	9.045	138	32626	4.282	ug/ml	91
48) 1,4-Dinitrobenzene	9.181	168	12802	4.147	ug/ml	95
49) 1,3-Dinitrobenzene	9.257	168	15942	4.386	ug/ml#	1
50) Dimethyl phthalate	9.257	163	148549	4.507	ug/ml#	99
51) Acenaphthylene	9.334	152	198341	4.400	ug/ml	98
52) 2,6-Dinitrotoluene	9.298	165	26360	4.231	ug/ml	90
53) 1,2-Dinitrobenzene	9.334	168	11736	4.425	ug/ml#	1
63) 3-Nitroaniline	9.451	138	30446	4.571	ug/ml	96
64) Acenaphthene	9.504	154	116239	4.416	ug/ml	92
65) 2,4-Dinitrophenol	9.551	184	12622	4.471	ug/ml	97
66) Dibenzofuran	9.675	168	175680	4.465	ug/ml	100
67) 2,4-Dinitrotoluene	9.681	165	35384	4.273	ug/ml	89
68) 4-Nitrophenol	9.645	65	26288	4.234	ug/ml#	85
69) 2,3,5,6-Tetrachlorophenol	9.769	232	34630	4.578	ug/ml	98
70) 2,3,4,6-Tetrachlorophenol	9.810	232	35669	4.544	ug/ml	98
71) Diethyl phthalate	9.951	149	151630	4.603	ug/ml	99
72) Fluorene	10.010	166	140666	4.524	ug/ml	95
73) 4-Chlorophenyl phenyl ...	10.033	204	65856	4.439	ug/ml	97

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL6.D
Acq On : 2 Sep 2023 1:48 pm
Operator : SV106:ljg
Sample : IL5,32,,ABNL5 Lot# 10166
Misc : WG1823680,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 05 11:14:53 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:47 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74) 4-Nitroaniline	10.039	138	32248	4.796	ug/ml#	85
75) 4,6-Dinitro-o-cresol	10.075	198	15208	4.206	ug/ml#	75
76) NDPA/DPA	10.145	169	120374	4.602	ug/ml	98
77) Azobenzene	10.181	77	139074	4.529	ug/ml	96
79) 4-Bromophenyl phenyl e...	10.498	248	38590	4.470	ug/ml	93
80) Hexachlorobenzene	10.545	284	43698	4.348	ug/ml#	88
81) Pentachlorophenol	10.739	266	25004	4.268	ug/ml	99
88) Phenanthrene	10.928	178	218498	4.469	ug/ml	100
89) Anthracene	10.975	178	220032	4.521	ug/ml	99
90) Carbazole	11.145	167	205218	4.615	ug/ml	100
91) Di-n-butylphthalate	11.545	149	260903	4.581	ug/ml	99
92) Fluoranthene	12.080	202	234340M3	4.483	ug/ml	
93) Benzidine	12.233	184	157906	4.572	ug/ml#	95
94) Pyrene	12.292	202	247443	4.471	ug/ml	100
96) Butyl benzyl phthalate	13.010	149	111041	4.569	ug/ml	89
104) Benzo(a)anthracene	13.510	228	244840	4.482	ug/ml	99
105) 3,3'-Dichlorobenzidine	13.516	252	90428	4.651	ug/ml	98
106) Chrysene	13.545	228	225709	4.450	ug/ml	100
107) Bis(2-ethylhexyl)phtha...	13.645	149	170515	4.656	ug/ml#	91
108) Di-n-octylphthalate	14.316	149	289524	4.686	ug/ml#	73
109) Benzo(b)fluoranthene	14.604	252	231440	4.435	ug/ml#	91
110) Benzo(k)fluoranthene	14.633	252	238988	4.777	ug/ml#	92
111) Benzo(a)pyrene	14.915	252	204531	4.581	ug/ml#	94
113) Indeno(1,2,3-cd)pyrene	15.927	276	190430M6	4.452	ug/mL	
114) Dibenzo(a,h)anthracene	15.957	278	210642	4.605	ug/ml#	91
115) Benzo(ghi)perylene	16.162	276	207270	4.568	ug/ml#	87

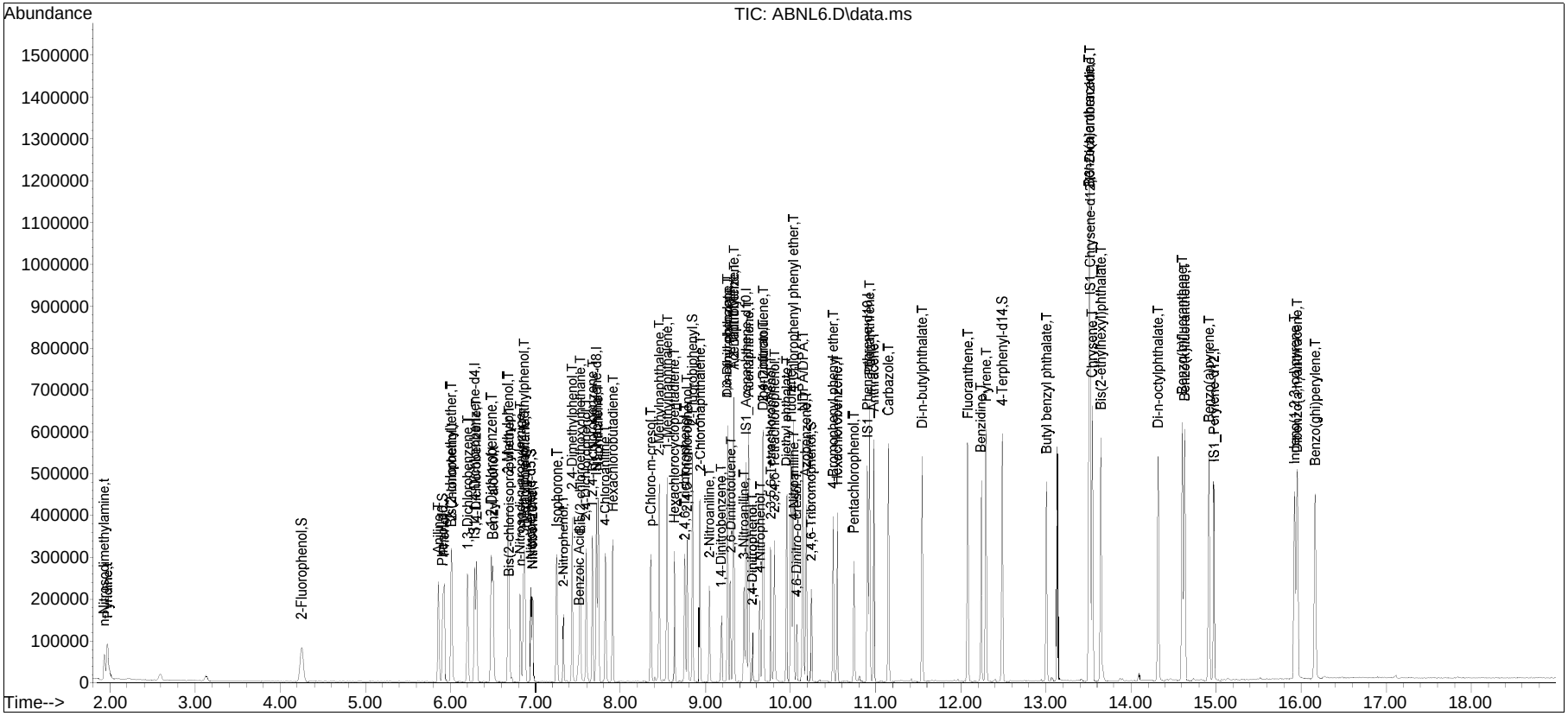
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL6.D
Acq On : 2 Sep 2023 1:48 pm
Operator : SV106:ljg
Sample : IL5,32,,ABNL5 Lot# 10166
Misc : WG1823680,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 05 11:14:53 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:47 2023
Response via : Initial Calibration

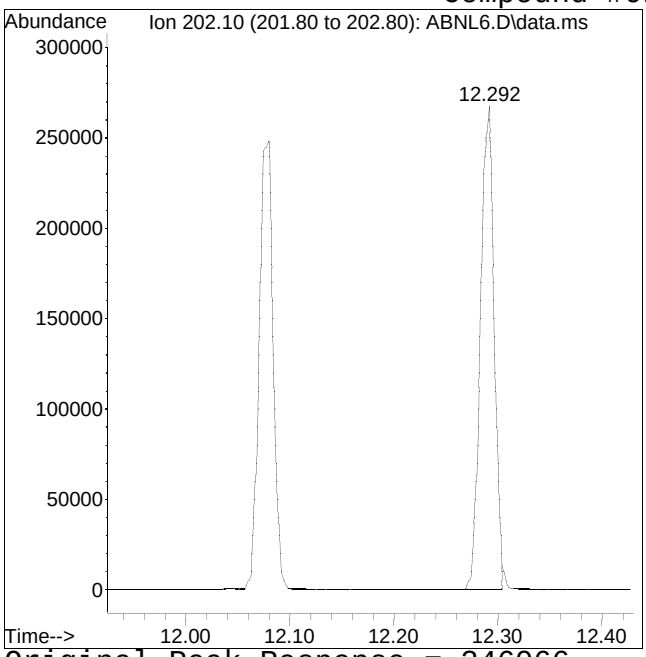
Sub List : ABNical - ABN ical sublistiical\ABNL6.D•

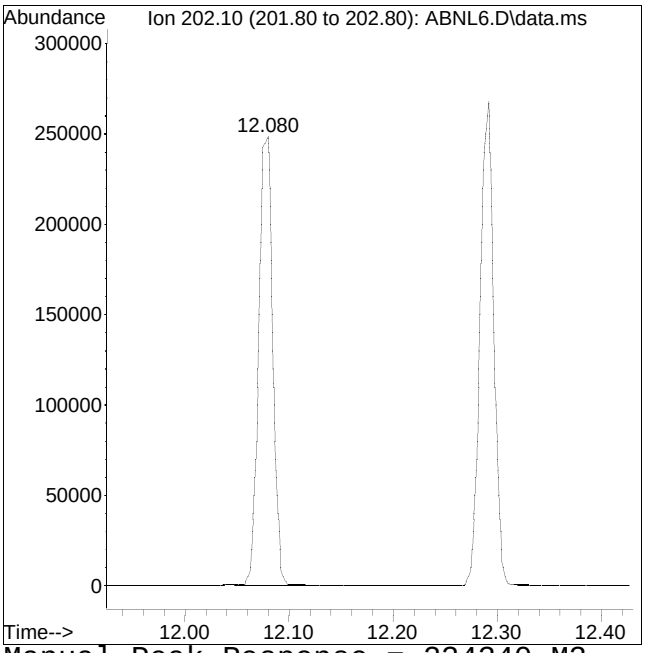


Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL6.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 1:48 pm Instrument : SV 106
Sample : IL5,32,,ABNL5 Lot# 10166 Quant Date : 9/5/2023 11:14 am

Compound #92: Fluoranthene



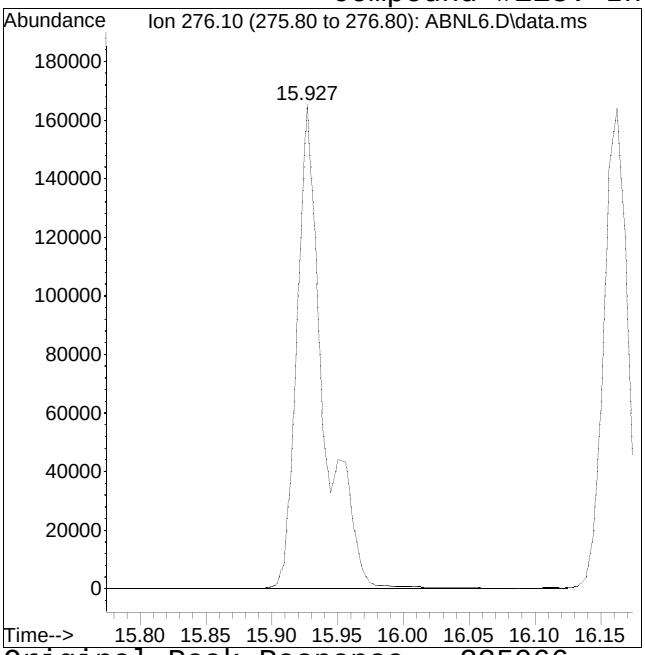


Original Peak Response = 246066 Manual Peak Response = 234340 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

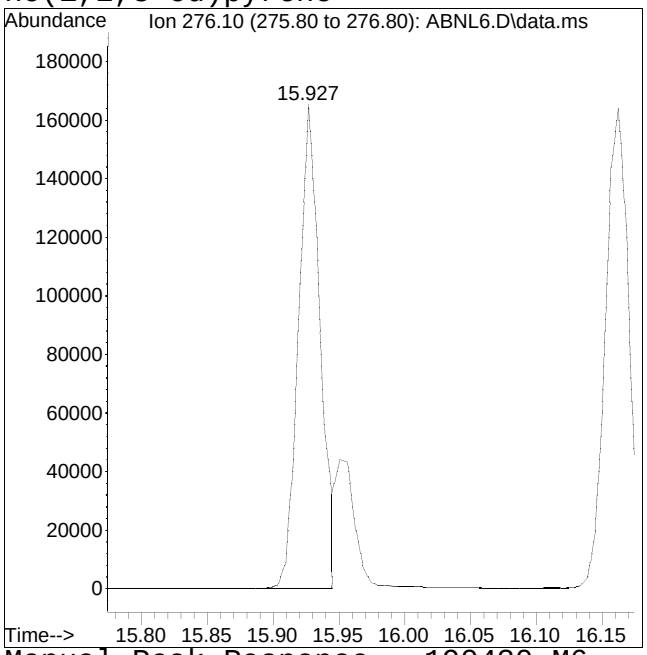
Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL6.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 1:48 pm Instrument : SV 106
Sample : IL5,32,,ABNL5 Lot# 10166 Quant Date : 9/5/2023 11:14 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 235066



Manual Peak Response = 190430 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL5.D
Acq On : 2 Sep 2023 2:12 pm
Operator : SV106:ljg
Sample : IL6,32,,ABNL3 Lot# 10167
Misc : WG1823680,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 05 11:14:44 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:38 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	6.281	152	42312	4.000 ug/ml	0.00
Standard Area 1 = 43113			Recovery = 98.14%		
34) IS1_Naphthalene-d8	7.716	136	163033	4.000 ug/ml	# 0.00
Standard Area 1 = 167432			Recovery = 97.37%		
62) IS1_Acenaphthene-d10	9.474	164	91995	4.000 ug/ml	0.00
Standard Area 1 = 93119			Recovery = 98.79%		
87) IS1_Phenanthrene-d10	10.904	188	172155	4.000 ug/ml	# 0.00
Standard Area 1 = 179535			Recovery = 95.89%		
103) IS1_Chrysene-d12	13.521	240	159415	4.000 ug/ml	0.00
Standard Area 1 = 164850			Recovery = 96.70%		
112) IS1_Perylene-d12	14.974	264	176549	4.000 ug/ml	0.00
Standard Area 1 = 183060			Recovery = 96.44%		
System Monitoring Compounds					
4) 2-Fluorophenol	4.251	112	35149	2.979 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 59.58%		
7) Phenol-d6	5.910	99	44889	2.953 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 59.06%		
19) Nitrobenzene-d5	6.945	82	40659	2.950 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 118.00%		
45) 2-Fluorobiphenyl	8.839	172	90087	2.895 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 115.80%		
78) 2,4,6-Tribromophenol	10.239	330	11696	2.771 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 55.42%		
95) 4-Terphenyl-d14	12.486	244	111515	2.953 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 118.12%		
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	1.928	74	20951	2.924 ug/ml#	67
3) Pyridine	1.963	79	37299	3.065 ug/ml#	63
5) Aniline	5.863	93	59281	2.960 ug/ml	96
6) 2-Chlorophenol	6.010	128	39096	2.901 ug/ml	93
8) Phenol	5.928	94	48918	3.040 ug/ml	97
9) Bis(2-chloroethyl)ether	6.004	93	38247	2.959 ug/ml#	82
10) 1,3-Dichlorobenzene	6.198	146	46086	2.982 ug/ml	99
11) 1,4-Dichlorobenzene	6.298	146	46418	2.920 ug/ml	98
12) 1,2-Dichlorobenzene	6.481	146	43602	2.880 ug/ml	95
13) Benzyl alcohol	6.498	79	33271	2.930 ug/ml	97
14) Bis(2-chloroisopropyl)...	6.681	45	57122	3.001 ug/ml#	50

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL5.D
Acq On : 2 Sep 2023 2:12 pm
Operator : SV106:ljg
Sample : IL6,32,,ABNL3 Lot# 10167
Misc : WG1823680,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 05 11:14:44 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:38 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	6.675	108	35025	2.910	ug/ml	97
16) Hexachloroethane	6.875	117	18148	2.928	ug/ml#	72
17) n-Nitrosodi-n-propylamine	6.828	70	28326	2.900	ug/ml	93
18) 3-Methylphenol/4-Methy...	6.863	108	37365	2.960	ug/ml	99
20) Nitrobenzene	6.969	77	40568	2.962	ug/ml	93
21) Isophorone	7.251	82	78289	2.987	ug/ml	94
22) 2-Nitrophenol	7.328	139	15290	2.791	ug/ml#	94
23) 2,4-Dimethylphenol	7.433	107	40833	3.014	ug/ml	95
24) Bis(2-chloroethoxy)met...	7.528	93	47869	2.915	ug/ml	100
25) 2,4-Dichlorophenol	7.592	162	34591	3.040	ug/ml	96
26) 1,2,4-Trichlorobenzene	7.669	180	39338	3.011	ug/ml	98
35) Naphthalene	7.733	128	117635	2.862	ug/ml	98
36) Benzoic Acid	7.510	105	18831	3.294	ug/ml	95
37) 4-Chloroaniline	7.822	65	15556	2.891	ug/ml	83
38) Hexachlorobutadiene	7.910	225	25384	3.029	ug/ml	96
39) p-Chloro-m-cresol	8.357	107	35828	3.016	ug/ml	91
40) 2-Methylnaphthalene	8.457	142	76003	2.905	ug/ml	93
41) 1-Methylnaphthalene	8.551	115	28405	2.895	ug/ml	88
42) Hexachlorocyclopentadiene	8.633	237	27055	3.027	ug/ml	97
43) 2,4,6-Trichlorophenol	8.757	196	24955	2.935	ug/ml	99
44) 2,4,5-Trichlorophenol	8.780	196	26918	2.944	ug/ml	98
46) 2-Chloronaphthalene	8.933	162	81364	2.983	ug/ml	98
47) 2-Nitroaniline	9.045	138	19795	2.839	ug/ml	93
48) 1,4-Dinitrobenzene	9.180	168	8473	3.104	ug/ml	86
49) 1,3-Dinitrobenzene	9.257	168	9349	3.011	ug/ml#	1
50) Dimethyl phthalate	9.257	163	95028	2.961	ug/ml#	98
51) Acenaphthylene	9.333	152	128879	2.936	ug/ml	99
52) 2,6-Dinitrotoluene	9.298	165	16235	2.818	ug/ml	88
53) 1,2-Dinitrobenzene	9.333	168	7128	2.760	ug/ml#	1
63) 3-Nitroaniline	9.451	138	18738	2.847	ug/ml	93
64) Acenaphthene	9.504	154	74645	2.871	ug/ml	92
65) 2,4-Dinitrophenol	9.551	184	7566	3.154	ug/ml	98
66) Dibenzofuran	9.674	168	114249	2.939	ug/ml	100
67) 2,4-Dinitrotoluene	9.680	165	20985	2.755	ug/ml	87
68) 4-Nitrophenol	9.645	65	16769	2.890	ug/ml#	87
69) 2,3,5,6-Tetrachlorophenol	9.769	232	22472	3.007	ug/ml	96
70) 2,3,4,6-Tetrachlorophenol	9.810	232	22951	2.959	ug/ml	95
71) Diethyl phthalate	9.951	149	95911	2.947	ug/ml	99
72) Fluorene	10.010	166	90139	2.935	ug/ml	96
73) 4-Chlorophenyl phenyl ...	10.033	204	42347	2.889	ug/ml	96

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL5.D
Acq On : 2 Sep 2023 2:12 pm
Operator : SV106:ljg
Sample : IL6,32,,ABNL3 Lot# 10167
Misc : WG1823680,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 05 11:14:44 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:38 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74) 4-Nitroaniline	10.039	138	20367	3.066	ug/ml#	83
75) 4,6-Dinitro-o-cresol	10.074	198	10188	3.229	ug/ml#	72
76) NDPA/DPA	10.145	169	75993	2.941	ug/ml	98
77) Azobenzene	10.180	77	88902	2.930	ug/ml	97
79) 4-Bromophenyl phenyl e...	10.498	248	24656	2.891	ug/ml	92
80) Hexachlorobenzene	10.545	284	28195	2.840	ug/ml	90
81) Pentachlorophenol	10.739	266	15254	2.807	ug/ml	98
88) Phenanthrene	10.927	178	142426	3.038	ug/ml	99
89) Anthracene	10.974	178	142235	3.048	ug/ml	100
90) Carbazole	11.145	167	128305	3.009	ug/ml	99
91) Di-n-butylphthalate	11.545	149	161574	2.959	ug/ml	99
92) Fluoranthene	12.080	202	149907	2.991	ug/ml#	93
93) Benzidine	12.233	184	101497	3.064	ug/ml#	94
94) Pyrene	12.292	202	158597	2.989	ug/ml	100
96) Butyl benzyl phthalate	13.009	149	67560	2.899	ug/ml	90
104) Benzo(a)anthracene	13.509	228	153452	2.905	ug/ml	98
105) 3,3'-Dichlorobenzidine	13.515	252	56312	2.995	ug/ml	97
106) Chrysene	13.545	228	144070	2.937	ug/ml	98
107) Bis(2-ethylhexyl)phtha...	13.645	149	105128	2.968	ug/ml#	90
108) Di-n-octylphthalate	14.321	149	177441	2.970	ug/ml#	73
109) Benzo(b)fluoranthene	14.604	252	160940	3.189	ug/ml#	91
110) Benzo(k)fluoranthene	14.633	252	132771	2.745	ug/ml#	92
111) Benzo(a)pyrene	14.915	252	127901	2.962	ug/ml#	96
113) Indeno(1,2,3-cd)pyrene	15.927	276	117399M6	2.846	ug/mL	
114) Dibenzo(a,h)anthracene	15.950	278	129117	2.927	ug/ml#	92
115) Benzo(ghi)perylene	16.162	276	128102	2.927	ug/ml#	88

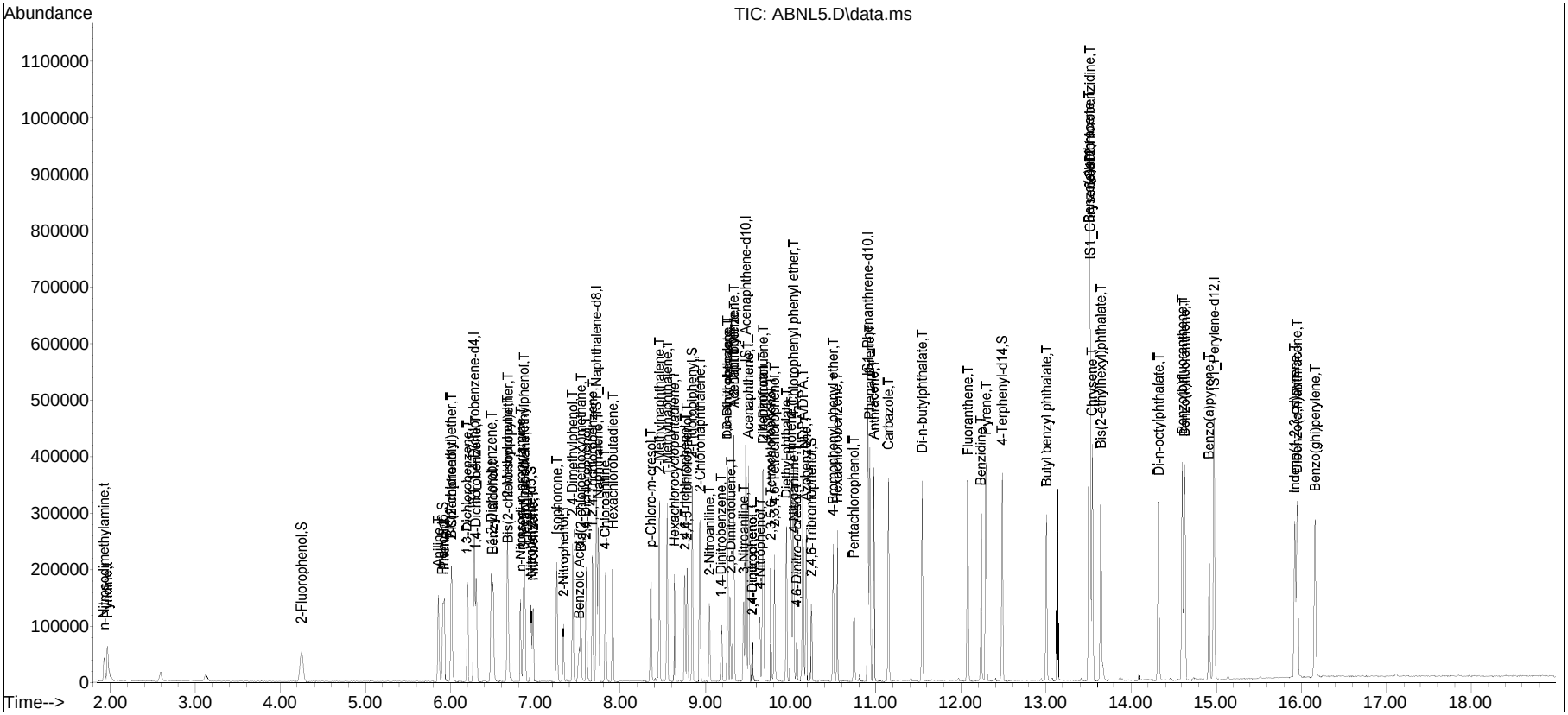
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL5.D
Acq On : 2 Sep 2023 2:12 pm
Operator : SV106:ljg
Sample : IL6,32,,ABNL3 Lot# 10167
Misc : WG1823680,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 05 11:14:44 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:38 2023
Response via : Initial Calibration

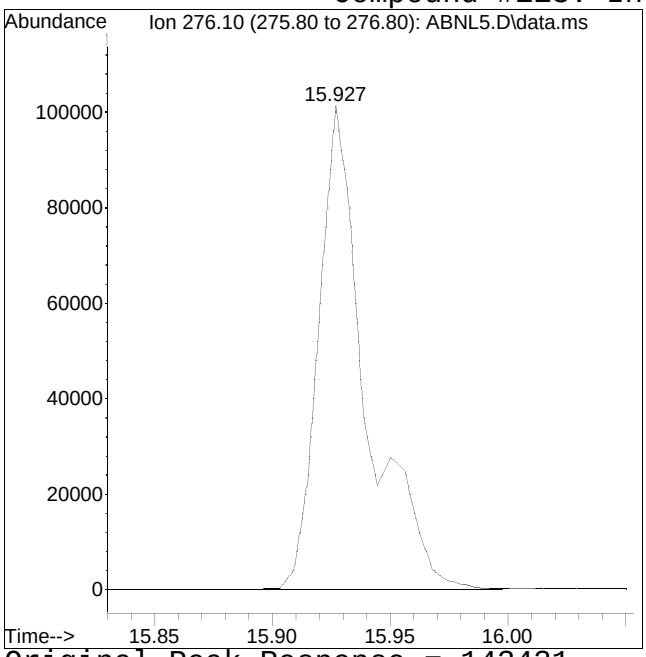
Sub List : ABNical - ABN ical sublistiical\ABNL6.D•



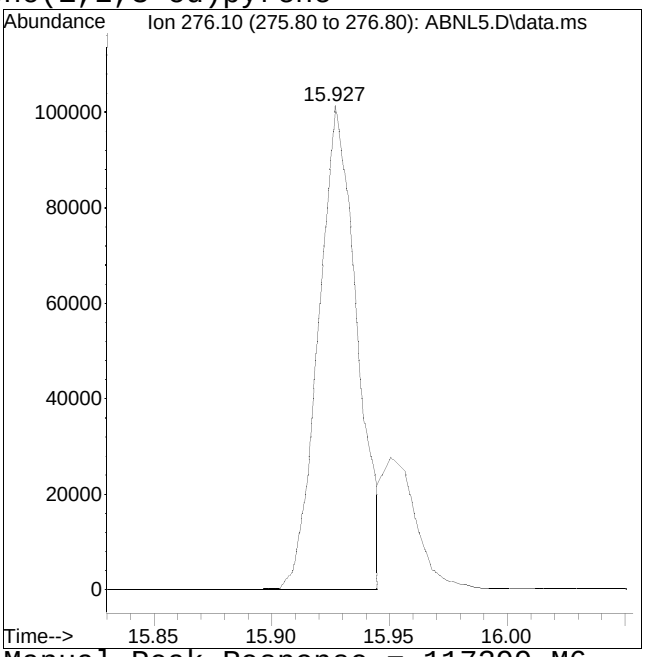
Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL5.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 2:12 pm Instrument : SV 106
Sample : IL6,32,,ABNL3 Lot# 10167 Quant Date : 9/5/2023 11:14 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 143431



Manual Peak Response = 117399 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL4.D
Acq On : 2 Sep 2023 2:36 pm
Operator : SV106:ljg
Sample : IL7,32,,ABNL2 Lot# 10168
Misc : WG1823680,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 05 11:14:35 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:29 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	6.281	152	41731	4.000 ug/ml	0.00
Standard Area 1 = 43113			Recovery = 96.79%		
34) IS1_Naphthalene-d8	7.716	136	156948	4.000 ug/ml	0.00
Standard Area 1 = 167432			Recovery = 93.74%		
62) IS1_Acenaphthene-d10	9.475	164	89480	4.000 ug/ml	0.00
Standard Area 1 = 93119			Recovery = 96.09%		
87) IS1_Phenanthrene-d10	10.904	188	167482	4.000 ug/ml	# 0.00
Standard Area 1 = 179535			Recovery = 93.29%		
103) IS1_Chrysene-d12	13.521	240	155774	4.000 ug/ml	0.00
Standard Area 1 = 164850			Recovery = 94.49%		
112) IS1_Perylene-d12	14.968	264	171492	4.000 ug/ml	0.00
Standard Area 1 = 183060			Recovery = 93.68%		
System Monitoring Compounds					
4) 2-Fluorophenol	4.251	112	22606	1.942 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 38.84%		
7) Phenol-d6	5.910	99	29585	1.973 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 39.46%		
19) Nitrobenzene-d5	6.945	82	24814	1.825 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 73.00%		
45) 2-Fluorobiphenyl	8.839	172	61588	2.056 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 82.24%		
78) 2,4,6-Tribromophenol	10.239	330	7852	1.912 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 38.24%		
95) 4-Terphenyl-d14	12.486	244	74145	2.018 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 80.72%		
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	1.928	74	14209	2.011 ug/ml#	61
3) Pyridine	1.969	79	23287	1.940 ug/ml#	66
5) Aniline	5.863	93	39683	2.009 ug/ml	97
6) 2-Chlorophenol	6.010	128	26598	2.001 ug/ml	93
8) Phenol	5.928	94	31378	1.977 ug/ml	95
9) Bis(2-chloroethyl)ether	6.004	93	25366	1.990 ug/ml#	83
10) 1,3-Dichlorobenzene	6.198	146	30304	1.988 ug/ml	97
11) 1,4-Dichlorobenzene	6.298	146	31173	1.988 ug/ml	99
12) 1,2-Dichlorobenzene	6.481	146	30377	2.034 ug/ml	98
13) Benzyl alcohol	6.498	79	21876	1.953 ug/ml	97
14) Bis(2-chloroisopropyl)...	6.681	45	37678	2.007 ug/ml#	49

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL4.D
Acq On : 2 Sep 2023 2:36 pm
Operator : SV106:ljg
Sample : IL7,32,,ABNL2 Lot# 10168
Misc : WG1823680,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 05 11:14:35 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:29 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	6.675	108	23996	2.022	ug/ml	96
16) Hexachloroethane	6.875	117	11936	1.953	ug/ml#	70
17) n-Nitrosodi-n-propylamine	6.828	70	18660	1.937	ug/ml	96
18) 3-Methylphenol/4-Methy...	6.863	108	25484	2.047	ug/ml	99
20) Nitrobenzene	6.969	77	25949	1.921	ug/ml	97
21) Isophorone	7.251	82	50603	1.957	ug/ml	93
22) 2-Nitrophenol	7.328	139	9618	1.780	ug/ml#	93
23) 2,4-Dimethylphenol	7.434	107	26087	1.952	ug/ml	99
24) Bis(2-chloroethoxy)met...	7.528	93	32196	1.988	ug/ml#	97
25) 2,4-Dichlorophenol	7.592	162	22263	1.984	ug/ml	98
26) 1,2,4-Trichlorobenzene	7.669	180	26311	2.042	ug/ml	97
35) Naphthalene	7.734	128	79750	2.016	ug/ml	99
36) Benzoic Acid	7.504	105	10556	2.594	ug/ml	94
37) 4-Chloroaniline	7.822	65	10481	2.023	ug/ml	91
38) Hexachlorobutadiene	7.910	225	15713	1.947	ug/ml	97
39) p-Chloro-m-cresol	8.357	107	21570	1.886	ug/ml	96
40) 2-Methylnaphthalene	8.457	142	51001	2.025	ug/ml	97
41) 1-Methylnaphthalene	8.551	115	19850	2.101	ug/ml	78
42) Hexachlorocyclopentadiene	8.633	237	17160	1.995	ug/ml	99
43) 2,4,6-Trichlorophenol	8.757	196	15813	1.932	ug/ml	97
44) 2,4,5-Trichlorophenol	8.781	196	17246	1.959	ug/ml	97
46) 2-Chloronaphthalene	8.933	162	53487	2.037	ug/ml	97
47) 2-Nitroaniline	9.045	138	11982	1.954	ug/ml	95
48) 1,4-Dinitrobenzene	9.180	168	5424	2.363	ug/ml	86
49) 1,3-Dinitrobenzene	9.257	168	6256	2.376	ug/ml#	1
50) Dimethyl phthalate	9.257	163	60987	1.974	ug/ml#	98
51) Acenaphthylene	9.333	152	84227	1.993	ug/ml	98
52) 2,6-Dinitrotoluene	9.298	165	10643	2.042	ug/ml#	84
53) 1,2-Dinitrobenzene	9.333	168	4278	1.721	ug/ml#	1
63) 3-Nitroaniline	9.451	138	11690	1.826	ug/ml#	93
64) Acenaphthene	9.504	154	50539	1.998	ug/ml	96
65) 2,4-Dinitrophenol	9.551	184	4196	2.281	ug/ml	94
66) Dibenzofuran	9.675	168	74795	1.978	ug/ml	99
67) 2,4-Dinitrotoluene	9.686	165	13678	2.003	ug/ml	91
68) 4-Nitrophenol	9.639	65	10308	1.988	ug/ml#	86
69) 2,3,5,6-Tetrachlorophenol	9.769	232	14570	2.004	ug/ml	95
70) 2,3,4,6-Tetrachlorophenol	9.810	232	13746	1.822	ug/ml	97
71) Diethyl phthalate	9.951	149	63276	1.999	ug/ml	99
72) Fluorene	10.010	166	58093	1.945	ug/ml	92
73) 4-Chlorophenyl phenyl ...	10.033	204	28693	2.013	ug/ml	98

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL4.D
Acq On : 2 Sep 2023 2:36 pm
Operator : SV106:ljg
Sample : IL7,32,,ABNL2 Lot# 10168
Misc : WG1823680,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 05 11:14:35 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:29 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74)	4-Nitroaniline	10.033	138	12792	1.980	ug/ml	88
75)	4,6-Dinitro-o-cresol	10.075	198	5623	2.338	ug/ml#	80
76)	NDPA/DPA	10.145	169	49643	1.975	ug/ml	98
77)	Azobenzene	10.180	77	56522	1.915	ug/ml	97
79)	4-Bromophenyl phenyl e...	10.498	248	15475	1.865	ug/ml	93
80)	Hexachlorobenzene	10.545	284	18699	1.936	ug/ml#	83
81)	Pentachlorophenol	10.739	266	9959	2.032	ug/ml	96
88)	Phenanthrene	10.927	178	89441	1.961	ug/ml	98
89)	Anthracene	10.974	178	91008	2.005	ug/ml	99
90)	Carbazole	11.145	167	85377	2.058	ug/ml	99
91)	Di-n-butylphthalate	11.545	149	103077	1.940	ug/ml	99
92)	Fluoranthene	12.080	202	97191	1.993	ug/ml#	92
93)	Benzidine	12.233	184	63784	1.980	ug/ml#	94
94)	Pyrene	12.292	202	104549	2.025	ug/ml	100
96)	Butyl benzyl phthalate	13.010	149	41652	1.837	ug/ml	90
104)	Benzo(a)anthracene	13.510	228	97396	1.887	ug/ml	100
105)	3,3'-Dichlorobenzidine	13.515	252	34464	1.876	ug/ml	99
106)	Chrysene	13.545	228	93631	1.954	ug/ml	99
107)	Bis(2-ethylhexyl)phtha...	13.645	149	67902	1.962	ug/ml#	90
108)	Di-n-octylphthalate	14.315	149	109282	1.872	ug/ml#	74
109)	Benzo(b)fluoranthene	14.604	252	94824	1.923	ug/ml#	95
110)	Benzo(k)fluoranthene	14.627	252	97734	2.068	ug/ml#	95
111)	Benzo(a)pyrene	14.915	252	84576	2.005	ug/ml#	95
113)	Indeno(1,2,3-cd)pyrene	15.927	276	78921M6	1.970	ug/mL	
114)	Dibenzo(a,h)anthracene	15.951	278	83553	1.950	ug/ml#	91
115)	Benzo(ghi)perylene	16.162	276	85228	2.005	ug/ml#	89

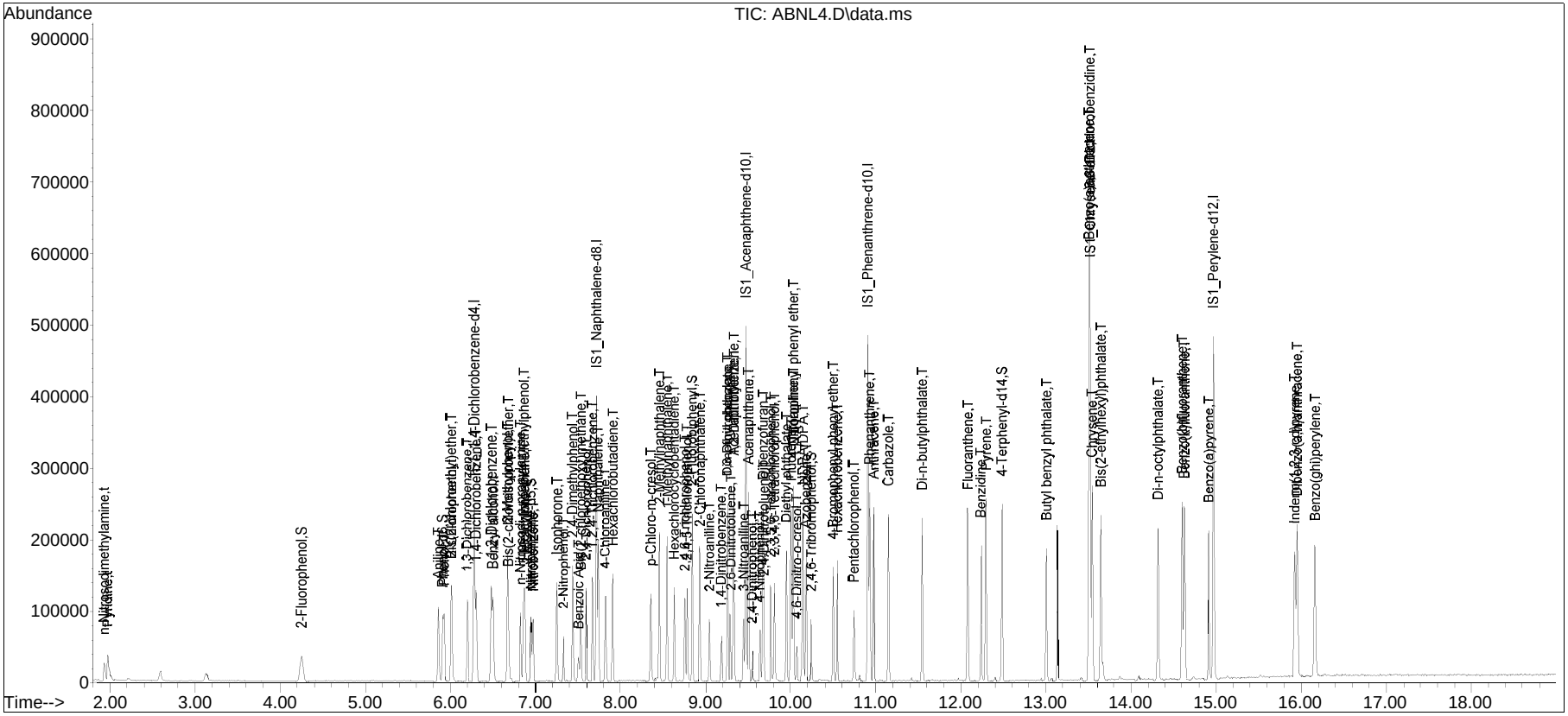
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL4.D
Acq On : 2 Sep 2023 2:36 pm
Operator : SV106:ljg
Sample : IL7,32,,ABNL2 Lot# 10168
Misc : WG1823680,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 05 11:14:35 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:29 2023
Response via : Initial Calibration

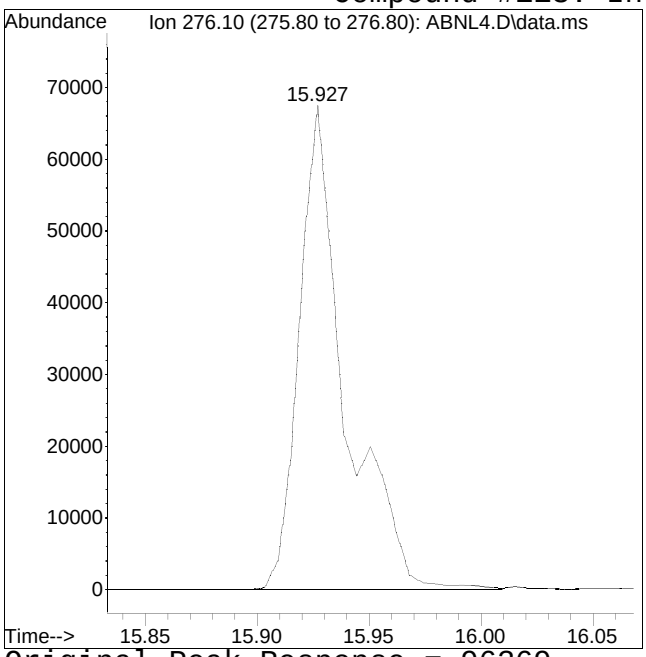
Sub List : ABNical - ABN ical sublistiical\ABNL6.D•



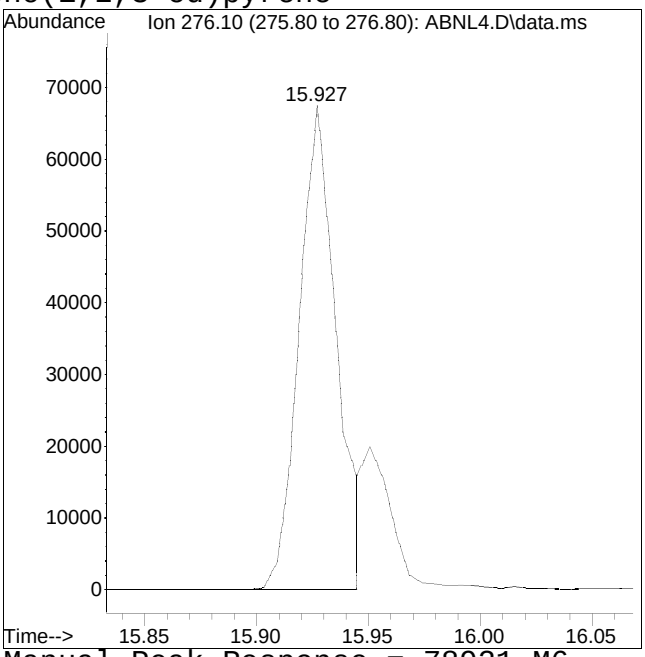
Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL4.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 2:36 pm Instrument : SV 106
Sample : IL7,32,,ABNL2 Lot# 10168 Quant Date : 9/5/2023 11:14 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 96369



Manual Peak Response = 78921 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL3.D
Acq On : 2 Sep 2023 2:59 pm
Operator : SV106:ljg
Sample : IL8,32,,ABNL1 Lot# 10169
Misc : WG1823680,,ical
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 05 11:14:26 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:20 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS1_1,4-Dichlorobenzen...	6.281	152	60782	4.000	ug/ml	0.00
Standard Area 1 = 43113			Recovery = 140.98%			
34) IS1_Naphthalene-d8	7.716	136	227051	4.000	ug/ml	0.00
Standard Area 1 = 167432			Recovery = 135.61%			
62) IS1_Acenaphthene-d10	9.475	164	128574	4.000	ug/ml	0.00
Standard Area 1 = 93119			Recovery = 138.07%			
87) IS1_Phenanthrene-d10	10.904	188	254702	4.000	ug/ml	0.00
Standard Area 1 = 179535			Recovery = 141.87%			
103) IS1_Chrysene-d12	13.515	240	228188	4.000	ug/ml	0.00
Standard Area 1 = 164850			Recovery = 138.42%			
112) IS1_Perylene-d12	14.968	264	250944	4.000	ug/ml	0.00
Standard Area 1 = 183060			Recovery = 137.08%			
System Monitoring Compounds						
4) 2-Fluorophenol	4.251	112	17106	1.009	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 20.18%			
7) Phenol-d6	5.910	99	21987	1.007	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 20.14%			
19) Nitrobenzene-d5	6.945	82	19597	0.990	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 39.60%			
45) 2-Fluorobiphenyl	8.839	172	45354	1.046	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 41.84%			
78) 2,4,6-Tribromophenol	10.239	330	5949	1.008	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 20.16%			
95) 4-Terphenyl-d14	12.486	244	57410	1.028	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 41.12%			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	1.934	74	10678	1.038	ug/ml#	68
3) Pyridine	1.981	79	17672	1.011	ug/ml#	67
5) Aniline	5.863	93	29848	1.038	ug/ml	98
6) 2-Chlorophenol	6.010	128	20234	1.045	ug/ml	90
8) Phenol	5.928	94	23707	1.026	ug/ml	100
9) Bis(2-chloroethyl)ether	6.004	93	18583	1.001	ug/ml#	79
10) 1,3-Dichlorobenzene	6.204	146	23465	1.057	ug/ml	98
11) 1,4-Dichlorobenzene	6.298	146	23262	1.018	ug/ml	97
12) 1,2-Dichlorobenzene	6.481	146	22252	1.023	ug/ml	98
13) Benzyl alcohol	6.498	79	16725	1.025	ug/ml	97
14) Bis(2-chloroisopropyl)...	6.681	45	28716	1.050	ug/ml#	52

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL3.D
Acq On : 2 Sep 2023 2:59 pm
Operator : SV106:ljg
Sample : IL8,32,,ABNL1 Lot# 10169
Misc : WG1823680,,ical
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 05 11:14:26 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:20 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	6.675	108	17307	1.001	ug/ml	96
16) Hexachloroethane	6.875	117	9587	1.077	ug/ml#	79
17) n-Nitrosodi-n-propylamine	6.828	70	14218	1.013	ug/ml	95
18) 3-Methylphenol/4-Methy...	6.863	108	18429	1.016	ug/ml	98
20) Nitrobenzene	6.969	77	18887	0.960	ug/ml	99
21) Isophorone	7.251	82	37965	1.008	ug/ml	97
22) 2-Nitrophenol	7.328	139	7055	0.897	ug/ml#	93
23) 2,4-Dimethylphenol	7.434	107	19008	0.977	ug/ml	96
24) Bis(2-chloroethoxy)met...	7.528	93	23868	1.012	ug/ml	97
25) 2,4-Dichlorophenol	7.592	162	15562	0.952	ug/ml	97
26) 1,2,4-Trichlorobenzene	7.669	180	19564	1.043	ug/ml	98
35) Naphthalene	7.734	128	59541	1.040	ug/ml	100
36) Benzoic Acid	7.498	105	6568	2.037	ug/ml	96
37) 4-Chloroaniline	7.822	65	7471	0.997	ug/ml	83
38) Hexachlorobutadiene	7.910	225	11962	1.025	ug/ml	98
39) p-Chloro-m-cresol	8.357	107	16586	1.002	ug/ml	96
40) 2-Methylnaphthalene	8.457	142	38762	1.064	ug/ml	95
41) 1-Methylnaphthalene	8.551	115	14355	1.050	ug/ml	84
42) Hexachlorocyclopentadiene	8.633	237	12084	0.971	ug/ml	99
43) 2,4,6-Trichlorophenol	8.751	196	11663	0.985	ug/ml	95
44) 2,4,5-Trichlorophenol	8.781	196	12573	0.987	ug/ml	99
46) 2-Chloronaphthalene	8.933	162	40801	1.074	ug/ml	98
47) 2-Nitroaniline	9.045	138	8942	1.228	ug/ml	91
48) 1,4-Dinitrobenzene	9.180	168	3566	1.560	ug/ml	98
49) 1,3-Dinitrobenzene	9.257	168	4125	1.589	ug/ml#	1
50) Dimethyl phthalate	9.257	163	47966	1.073	ug/ml#	97
51) Acenaphthylene	9.333	152	63845	1.044	ug/ml	99
52) 2,6-Dinitrotoluene	9.298	165	7320	1.173	ug/ml	92
53) 1,2-Dinitrobenzene	9.333	168	2921	0.812	ug/ml#	1
63) 3-Nitroaniline	9.451	138	8868	0.964	ug/ml	85
64) Acenaphthene	9.504	154	37746	1.039	ug/ml	91
65) 2,4-Dinitrophenol	9.551	184	3067	1.712	ug/ml	97
66) Dibenzofuran	9.675	168	57559	1.059	ug/ml	100
67) 2,4-Dinitrotoluene	9.680	165	9939	1.247	ug/ml	89
68) 4-Nitrophenol	9.639	65	7513	1.225	ug/ml#	89
69) 2,3,5,6-Tetrachlorophenol	9.769	232	10416	0.997	ug/ml	96
70) 2,3,4,6-Tetrachlorophenol	9.810	232	11432	1.055	ug/ml	97
71) Diethyl phthalate	9.951	149	47550	1.045	ug/ml	99
72) Fluorene	10.010	166	45094	1.050	ug/ml	96
73) 4-Chlorophenyl phenyl ...	10.033	204	21448	1.047	ug/ml	97

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL3.D
Acq On : 2 Sep 2023 2:59 pm
Operator : SV106:ljg
Sample : IL8,32,,ABNL1 Lot# 10169
Misc : WG1823680,,ical
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 05 11:14:26 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:20 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74) 4-Nitroaniline	10.033	138	9418	1.014	ug/ml#	85
75) 4,6-Dinitro-o-cresol	10.075	198	4154	1.770	ug/ml#	78
76) NDPA/DPA	10.145	169	38179	1.057	ug/ml	99
77) Azobenzene	10.180	77	44047	1.039	ug/ml	97
79) 4-Bromophenyl phenyl e...	10.498	248	12814	1.075	ug/ml	92
80) Hexachlorobenzene	10.545	284	14861	1.071	ug/ml	88
81) Pentachlorophenol	10.739	266	6908	1.213	ug/ml	98
88) Phenanthrene	10.927	178	70145	1.011	ug/ml	98
89) Anthracene	10.974	178	72033	1.043	ug/ml	99
90) Carbazole	11.145	167	64397	1.021	ug/ml	99
91) Di-n-butylphthalate	11.545	149	78746	0.975	ug/ml	99
92) Fluoranthene	12.074	202	74583	1.006	ug/ml#	92
93) Benzidine	12.233	184	47749	0.974	ug/ml#	95
94) Pyrene	12.286	202	80555	1.026	ug/ml	99
96) Butyl benzyl phthalate	13.010	149	32482	0.942	ug/ml	89
104) Benzo(a)anthracene	13.510	228	78416	1.037	ug/ml	96
105) 3,3'-Dichlorobenzidine	13.515	252	27099	1.007	ug/ml	97
106) Chrysene	13.545	228	73260	1.044	ug/ml	98
107) Bis(2-ethylhexyl)phtha...	13.645	149	51430	1.015	ug/ml#	94
108) Di-n-octylphthalate	14.315	149	82467	0.964	ug/ml#	74
109) Benzo(b)fluoranthene	14.604	252	74815	1.036	ug/ml#	96
110) Benzo(k)fluoranthene	14.627	252	69325M3	1.001	ug/ml	
111) Benzo(a)pyrene	14.910	252	64941	1.051	ug/ml#	96
113) Indeno(1,2,3-cd)pyrene	15.927	276	57776M6	0.985	ug/mL	
114) Dibenzo(a,h)anthracene	15.951	278	62111	0.991	ug/ml#	92
115) Benzo(ghi)perylene	16.157	276	65436	1.052	ug/ml#	87

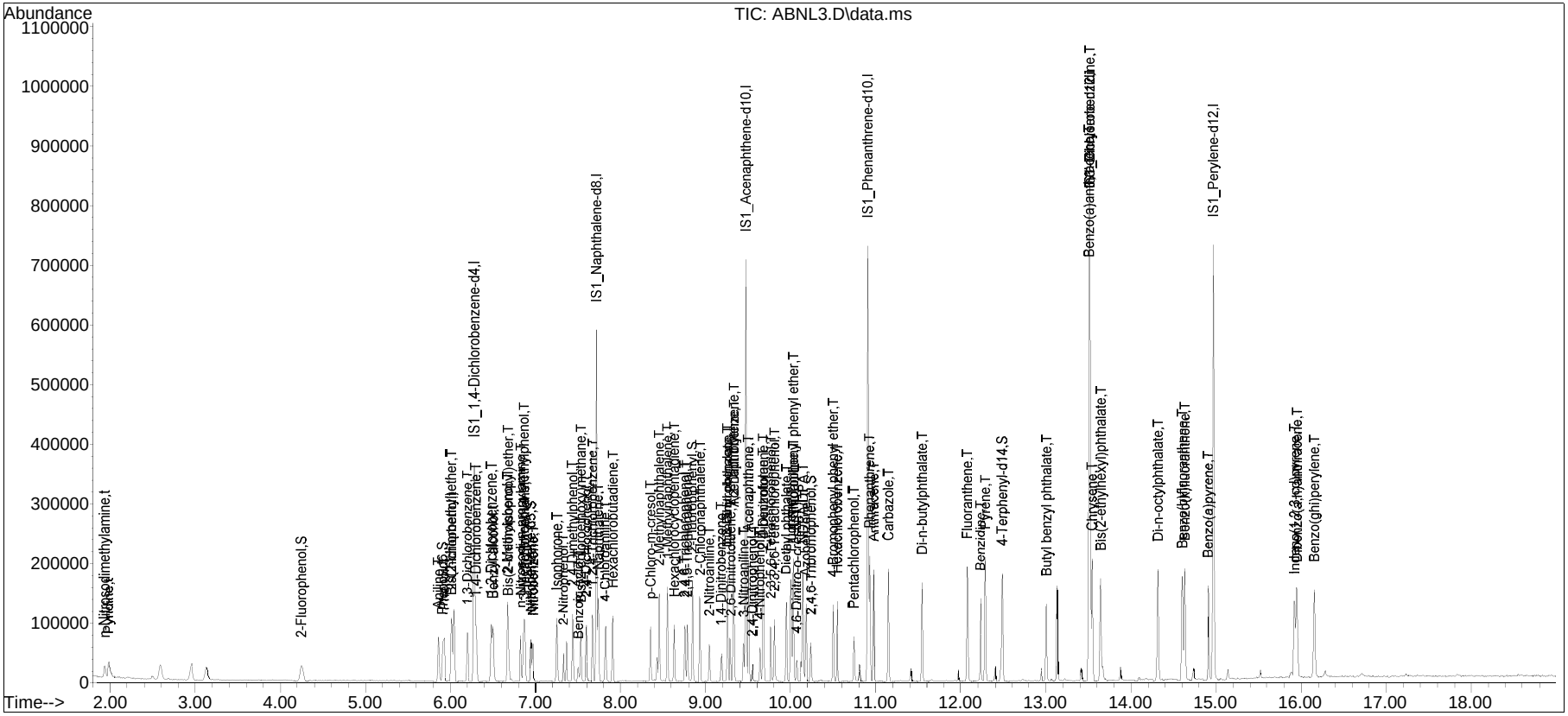
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL3.D
Acq On : 2 Sep 2023 2:59 pm
Operator : SV106:ljg
Sample : IL8,32,,ABNL1 Lot# 10169
Misc : WG1823680,,ical
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Sep 05 11:14:26 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:20 2023
Response via : Initial Calibration

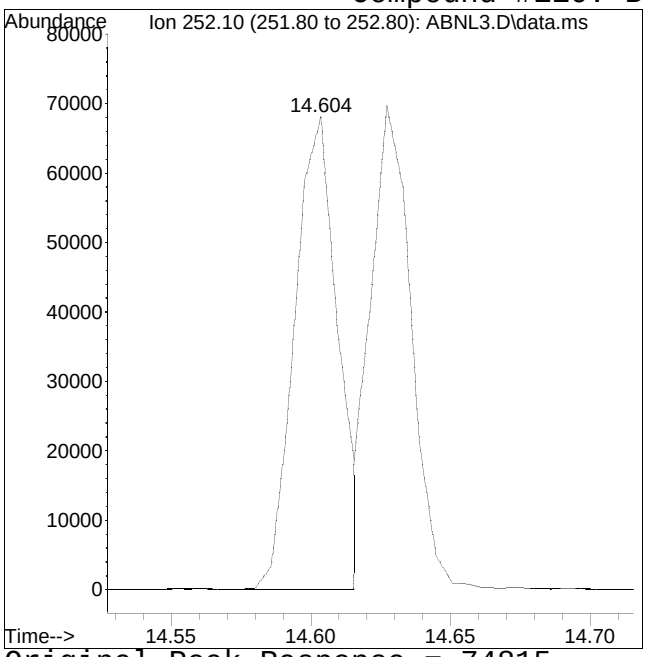
Sub List : ABNical - ABN ical sublistiical\ABNL6.D•

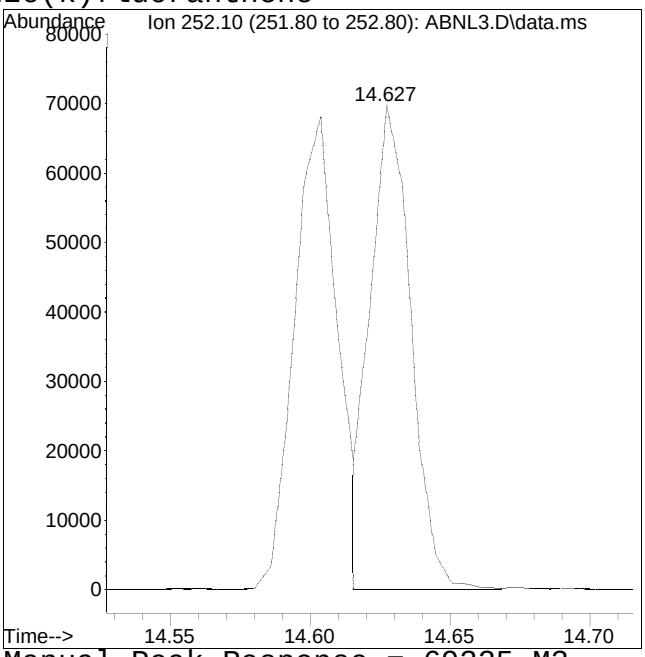


Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL3.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 2:59 pm Instrument : SV 106
Sample : IL8,32,,ABNL1 Lot# 10169 Quant Date : 9/5/2023 11:14 am

Compound #110: Benzo(k)fluoranthene



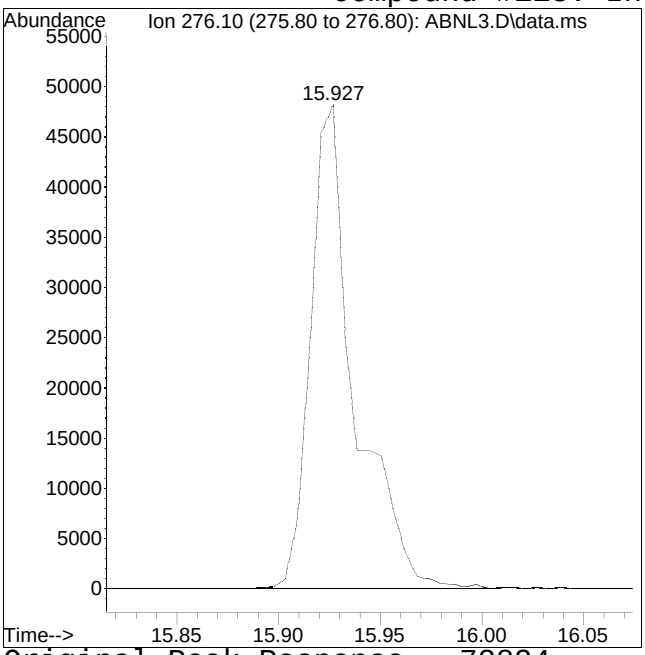


Original Peak Response = 74815 Manual Peak Response = 69325 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

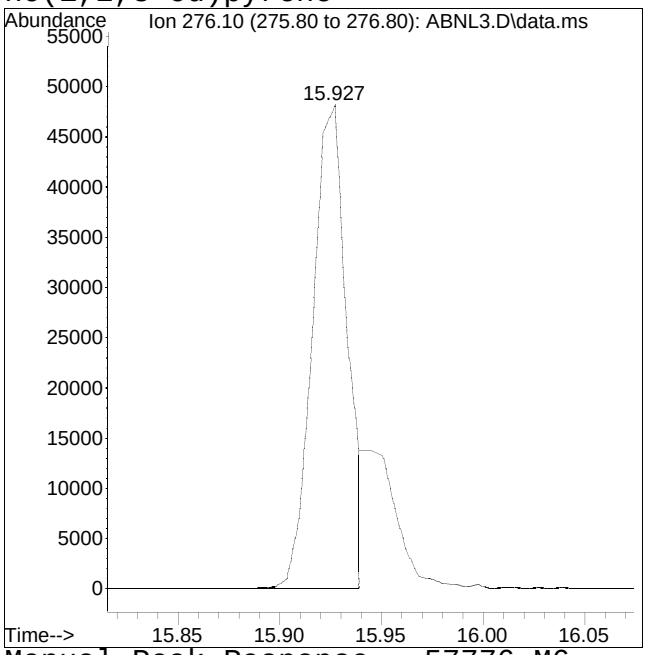
Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL3.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 2:59 pm Instrument : SV 106
Sample : IL8,32,,ABNL1 Lot# 10169 Quant Date : 9/5/2023 11:14 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 72824



Manual Peak Response = 57776 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL2.D
Acq On : 2 Sep 2023 3:23 pm
Operator : SV106:ljg
Sample : IL9,32,,ABNL0.4 Lot# 10170
Misc : WG1823680,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 05 11:14:18 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) IS1_1,4-Dichlorobenzen...	6.281	152	39844	4.000	ug/ml	0.00
Standard Area 1 = 43113			Recovery = 92.42%			
34) IS1_Naphthalene-d8	7.716	136	154749	4.000	ug/ml	0.00
Standard Area 1 = 167432			Recovery = 92.42%			
62) IS1_Acenaphthene-d10	9.475	164	82617	4.000	ug/ml	0.00
Standard Area 1 = 93119			Recovery = 88.72%			
87) IS1_Phenanthrene-d10	10.904	188	167849	4.000	ug/ml	# 0.00
Standard Area 1 = 179535			Recovery = 93.49%			
103) IS1_Chrysene-d12	13.515	240	145971	4.000	ug/ml	0.00
Standard Area 1 = 164850			Recovery = 88.55%			
112) IS1_Perylene-d12	14.968	264	163619	4.000	ug/ml	0.00
Standard Area 1 = 183060			Recovery = 89.38%			
System Monitoring Compounds						
4) 2-Fluorophenol	4.257	112	4367	0.393	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 7.86%#			
7) Phenol-d6	5.916	99	5777	0.404	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 8.08%#			
19) Nitrobenzene-d5	6.945	82	5100	0.393	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 15.72%#			
45) 2-Fluorobiphenyl	8.839	172	11308	0.383	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 15.32%#			
78) 2,4,6-Tribromophenol	10.239	330	1383	0.365	ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 7.30%#			
95) 4-Terphenyl-d14	12.486	244	14090	0.383	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 15.32%#			
Target Compounds						Qvalue
2) n-Nitrosodimethylamine	1.940	74	2582	0.383	ug/ml#	69
3) Pyridine	1.993	79	4462	0.389	ug/ml#	58
5) Aniline	5.863	93	7302	0.387	ug/ml	97
6) 2-Chlorophenol	6.010	128	4760	0.375	ug/ml	96
8) Phenol	5.928	94	5587	0.369	ug/ml	95
9) Bis(2-chloroethyl)ether	6.004	93	4651	0.382	ug/ml#	75
10) 1,3-Dichlorobenzene	6.204	146	5601	0.385	ug/ml	88
11) 1,4-Dichlorobenzene	6.298	146	5651M3	0.377	ug/ml	
12) 1,2-Dichlorobenzene	6.481	146	5675	0.398	ug/ml	95
13) Benzyl alcohol	6.498	79	3558	0.333	ug/ml	90
14) Bis(2-chloroisopropyl)...	6.687	45	7323	0.409	ug/ml#	58

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL2.D
Acq On : 2 Sep 2023 3:23 pm
Operator : SV106:ljg
Sample : IL9,32,,ABNL0.4 Lot# 10170
Misc : WG1823680,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 05 11:14:18 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	6.675	108	4455	0.393	ug/ml#	93
16) Hexachloroethane	6.875	117	2286	0.392	ug/ml#	69
17) n-Nitrosodi-n-propylamine	6.828	70	3596	0.391	ug/ml#	87
18) 3-Methylphenol/4-Methy...	6.863	108	4384	0.369	ug/ml	93
20) Nitrobenzene	6.969	77	5251	0.407	ug/ml	93
21) Isophorone	7.251	82	9582	0.388	ug/ml	96
22) 2-Nitrophenol	7.328	139	1836	0.356	ug/ml#	95
23) 2,4-Dimethylphenol	7.434	107	4816	0.377	ug/ml	98
24) Bis(2-chloroethoxy)met...	7.528	93	5788	0.374	ug/ml	91
25) 2,4-Dichlorophenol	7.592	162	3831	0.358	ug/ml	91
26) 1,2,4-Trichlorobenzene	7.675	180	4840	0.393	ug/ml	91
35) Naphthalene	7.734	128	15151	0.388	ug/ml	99
36) Benzoic Acid	0.000		0	N.D.		
37) 4-Chloroaniline	7.828	65	1726	0.338	ug/ml#	57
38) Hexachlorobutadiene	7.910	225	3254	0.409	ug/ml	94
39) p-Chloro-m-cresol	8.357	107	4005	0.355	ug/ml	93
40) 2-Methylnaphthalene	8.457	142	9830	0.396	ug/ml	97
41) 1-Methylnaphthalene	8.551	115	3759	0.404	ug/ml	75
42) Hexachlorocyclopentadiene	8.633	237	3137	0.370	ug/ml#	92
43) 2,4,6-Trichlorophenol	8.757	196	2850	0.353	ug/ml	98
44) 2,4,5-Trichlorophenol	8.781	196	2962	0.341	ug/ml	98
46) 2-Chloronaphthalene	8.933	162	9911	0.383	ug/ml	96
47) 2-Nitroaniline	9.045	138	2051	0.715	ug/ml	94
48) 1,4-Dinitrobenzene	9.180	168	970	1.158	ug/ml#	76
49) 1,3-Dinitrobenzene	9.257	168	873	1.134	ug/ml#	1
50) Dimethyl phthalate	9.257	163	11124	0.365	ug/ml#	90
51) Acenaphthylene	9.333	152	15566	0.374	ug/ml	97
52) 2,6-Dinitrotoluene	9.298	165	1470	0.618	ug/ml	97
53) 1,2-Dinitrobenzene	9.339	168	661	0.270	ug/ml#	1
63) 3-Nitroaniline	9.451	138	1797	0.304	ug/ml#	61
64) Acenaphthene	9.504	154	9516	0.408	ug/ml	94
65) 2,4-Dinitrophenol	9.551	184	534	1.283	ug/ml#	25
66) Dibenzofuran	9.675	168	14489	0.415	ug/ml	99
67) 2,4-Dinitrotoluene	9.686	165	1920	0.707	ug/ml#	65
68) 4-Nitrophenol	9.639	65	1417	0.670	ug/ml#	79
69) 2,3,5,6-Tetrachlorophenol	9.769	232	2145	0.320	ug/ml	96
70) 2,3,4,6-Tetrachlorophenol	9.810	232	2456	0.353	ug/ml	93
71) Diethyl phthalate	9.945	149	11593	0.397	ug/ml	97
72) Fluorene	10.010	166	10989	0.398	ug/ml	97
73) 4-Chlorophenyl phenyl ...	10.033	204	5577	0.424	ug/ml	97

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL2.D
Acq On : 2 Sep 2023 3:23 pm
Operator : SV106:ljg
Sample : IL9,32,,ABNL0.4 Lot# 10170
Misc : WG1823680,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 05 11:14:18 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74) 4-Nitroaniline	10.039	138	2120	0.355	ug/ml#	84
75) 4,6-Dinitro-o-cresol	10.075	198	699	1.327	ug/ml#	1
76) NDPA/DPA	10.145	169	8919	0.384	ug/ml	93
77) Azobenzene	10.180	77	11113	0.408	ug/ml	94
79) 4-Bromophenyl phenyl e...	10.498	248	3185	0.416	ug/ml	88
80) Hexachlorobenzene	10.545	284	3664	0.411	ug/ml#	80
81) Pentachlorophenol	10.739	266	1227	0.660	ug/ml#	83
88) Phenanthrene	10.927	178	18603	0.407	ug/ml	98
89) Anthracene	10.974	178	16832	0.370	ug/ml	96
90) Carbazole	11.145	167	16047	0.386	ug/ml	97
91) Di-n-butylphthalate	11.545	149	18827	0.354	ug/ml#	97
92) Fluoranthene	12.074	202	17982M3	0.368	ug/ml	
93) Benzidine	12.233	184	10765	0.333	ug/ml#	94
94) Pyrene	12.292	202	19858	0.384	ug/ml	98
96) Butyl benzyl phthalate	13.010	149	6807	0.300	ug/ml	96
104) Benzo(a)anthracene	13.510	228	19349	0.400	ug/ml	97
105) 3,3'-Dichlorobenzidine	13.515	252	5903	0.343	ug/ml#	97
106) Chrysene	13.545	228	18127	0.404	ug/ml	98
107) Bis(2-ethylhexyl)phtha...	13.645	149	10941	0.337	ug/ml#	93
108) Di-n-octylphthalate	14.315	149	18156	0.332	ug/ml#	76
109) Benzo(b)fluoranthene	14.604	252	16564	0.358	ug/ml	96
110) Benzo(k)fluoranthene	14.627	252	18087M3	0.408	ug/ml	
111) Benzo(a)pyrene	14.910	252	14370	0.363	ug/ml	97
113) Indeno(1,2,3-cd)pyrene	15.927	276	13711M6	0.359	ug/mL	
114) Dibenzo(a,h)anthracene	15.951	278	15021	0.367	ug/ml	98
115) Benzo(ghi)perylene	16.156	276	15738	0.388	ug/ml#	89

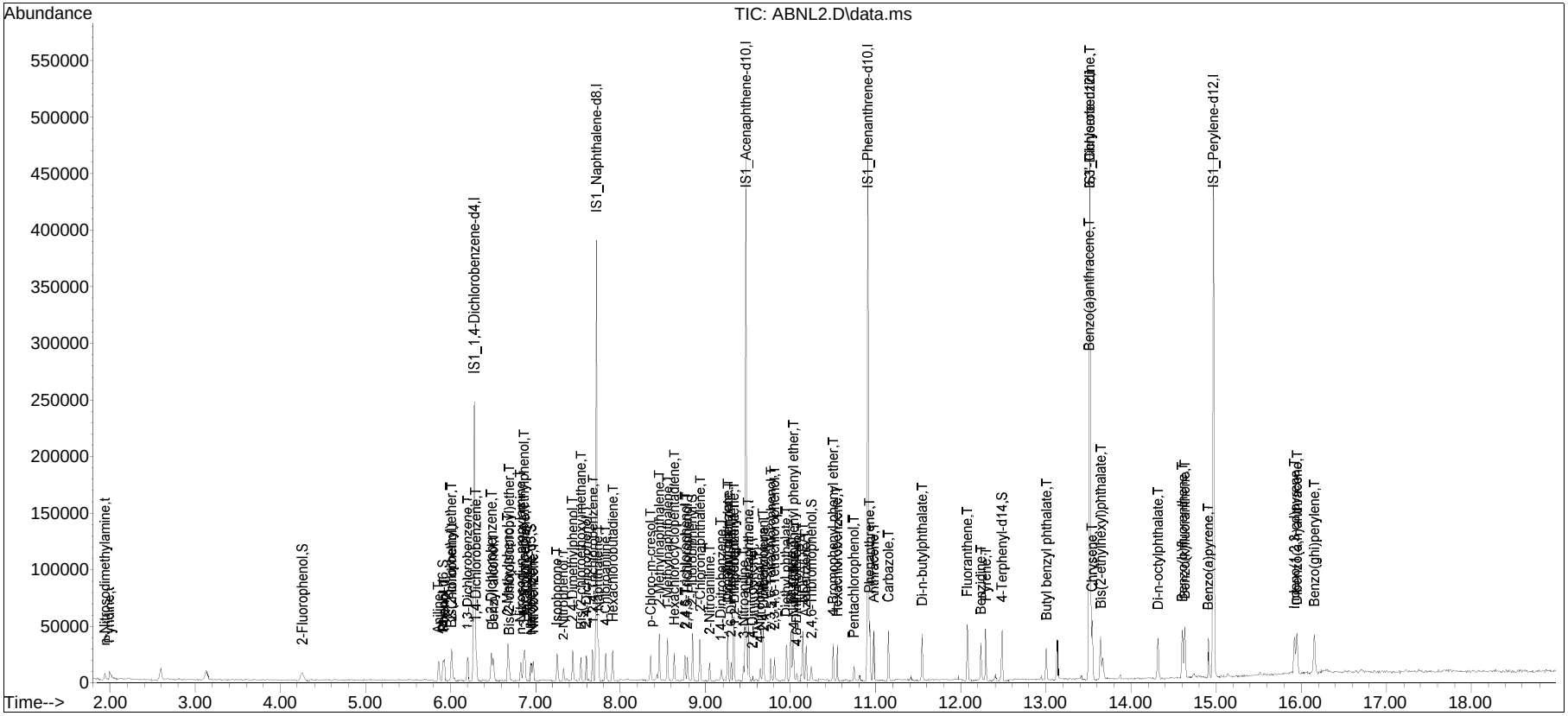
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL2.D
Acq On : 2 Sep 2023 3:23 pm
Operator : SV106:ljg
Sample : IL9,32,,ABNL0.4 Lot# 10170
Misc : WG1823680,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 05 11:14:18 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:14:12 2023
Response via : Initial Calibration

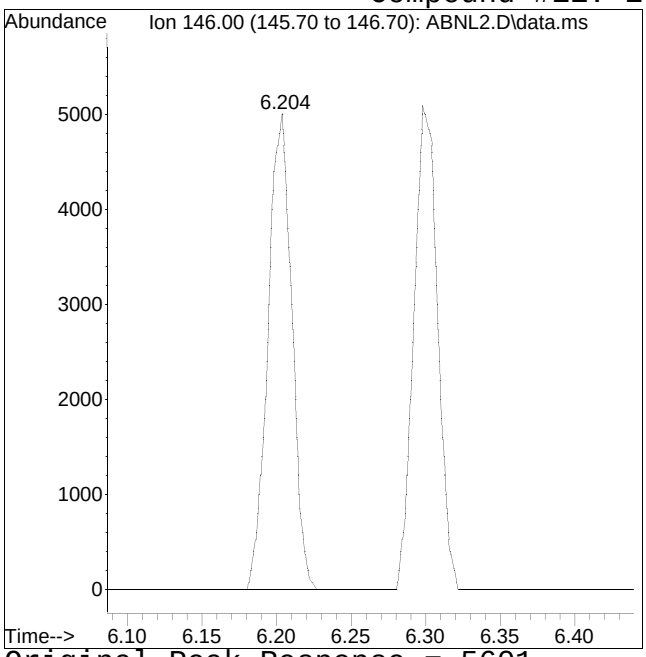
Sub List : ABNical - ABN ical sublistiical\ABNL6.D•

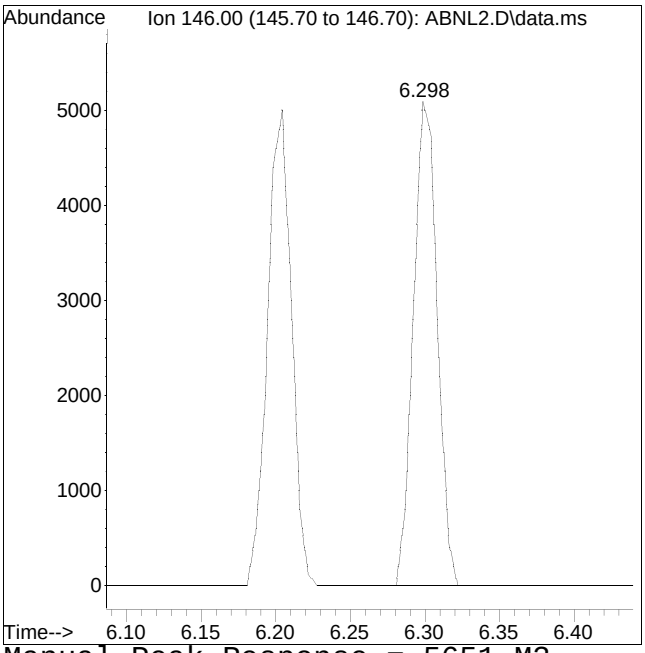


Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL2.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 3:23 pm Instrument : SV 106
Sample : IL9,32,,ABNL0.4 Lot# 10170Quant Date : 9/5/2023 11:14 am

Compound #11: 1,4-Dichlorobenzene





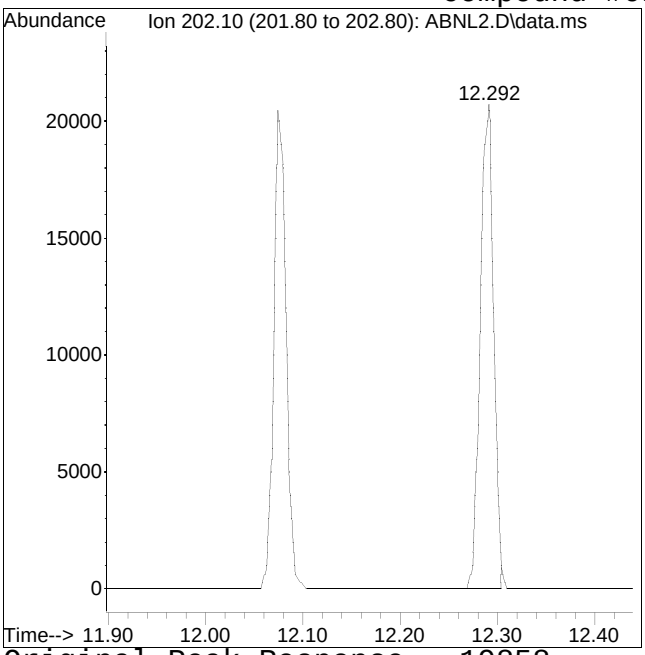
Original Peak Response = 5601 Manual Peak Response = 5651 M3

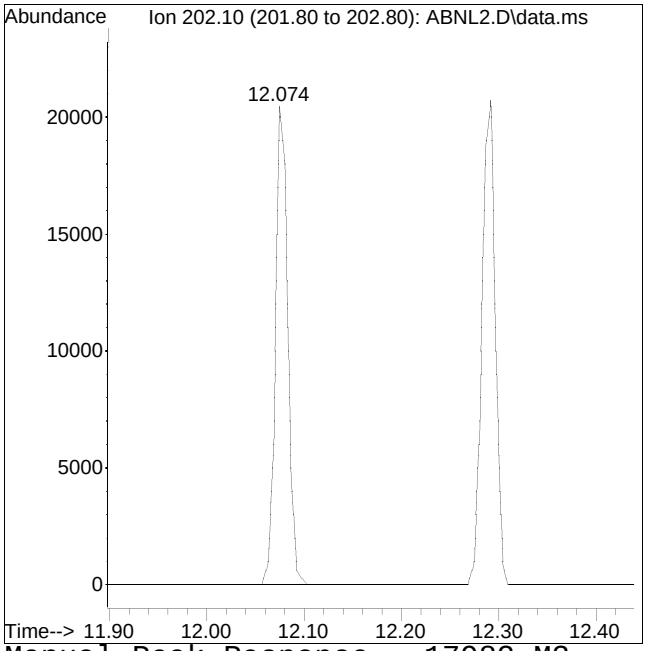
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL2.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 3:23 pm Instrument : SV 106
Sample : IL9,32,,ABNL0.4 Lot# 10170Quant Date : 9/5/2023 11:14 am

Compound #92: Fluoranthene



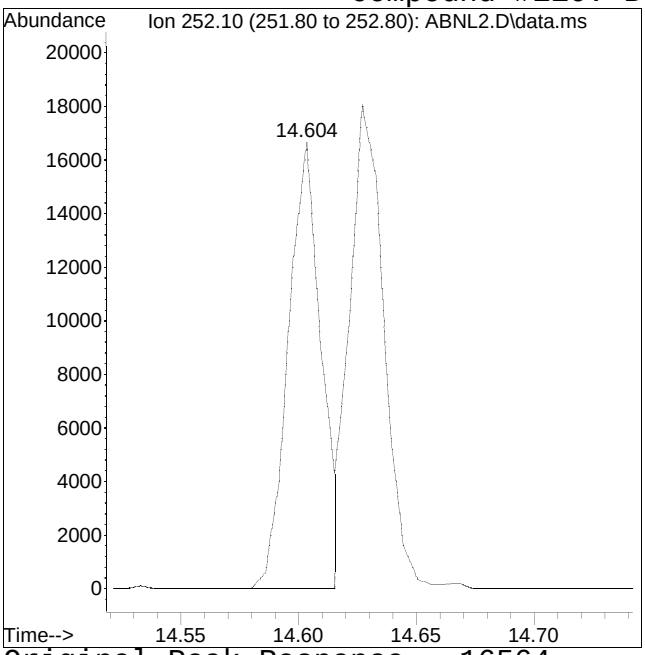


Original Peak Response = 19858 Manual Peak Response = 17982 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

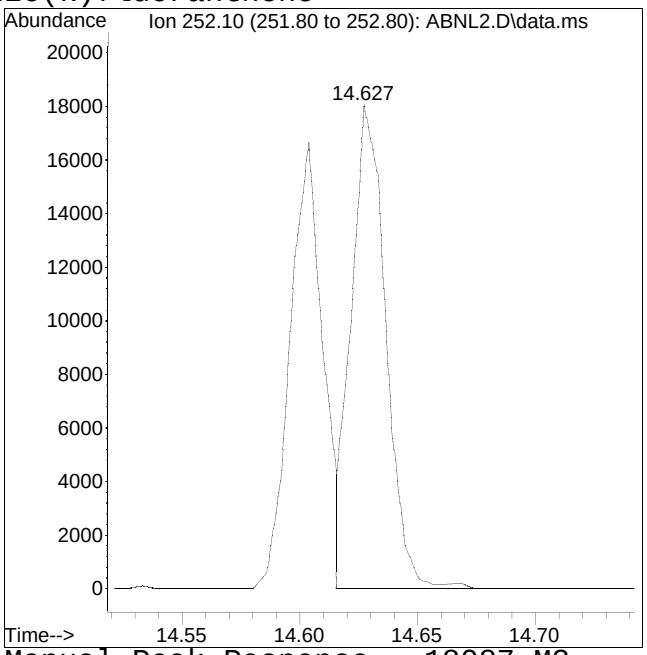
Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL2.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 3:23 pm Instrument : SV 106
Sample : IL9,32,,ABNL0.4 Lot# 10170Quant Date : 9/5/2023 11:14 am

Compound #110: Benzo(k)fluoranthene



Original Peak Response = 16564



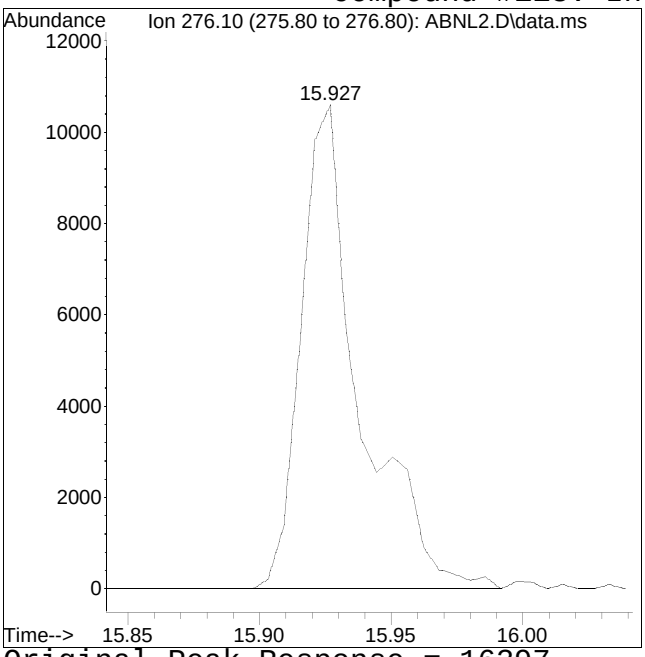
Manual Peak Response = 18087 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

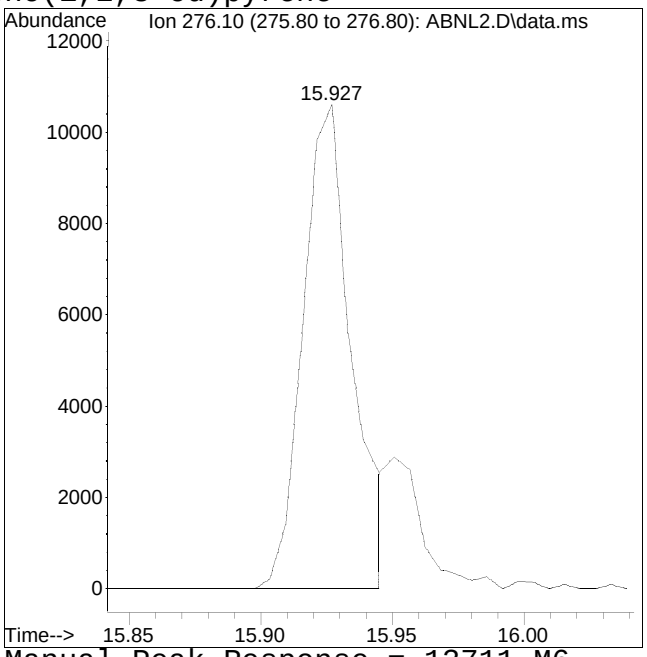
Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL2.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 3:23 pm Instrument : SV 106
Sample : IL9,32,,ABNL0.4 Lot# 10170Quant Date : 9/5/2023 11:14 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 16397



Manual Peak Response = 13711 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL1.D
Acq On : 2 Sep 2023 3:47 pm
Operator : SV106:ljg
Sample : IL10,32,,ABNL0.2 Lot# 10171
Misc : WG1823680,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 05 11:13:59 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:13:54 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	6.281	152	47115	4.000 ug/ml	0.00
Standard Area 1 = 43113			Recovery = 109.28%		
34) IS1_Naphthalene-d8	7.716	136	177047	4.000 ug/ml	# 0.00
Standard Area 1 = 167432			Recovery = 105.74%		
62) IS1_Acenaphthene-d10	9.475	164	97401	4.000 ug/ml	0.00
Standard Area 1 = 93119			Recovery = 104.60%		
87) IS1_Phenanthrene-d10	10.904	188	193756	4.000 ug/ml	# 0.00
Standard Area 1 = 179535			Recovery = 107.92%		
103) IS1_Chrysene-d12	13.515	240	168051	4.000 ug/ml	0.00
Standard Area 1 = 164850			Recovery = 101.94%		
112) IS1_Perylene-d12	14.968	264	186728	4.000 ug/ml	0.00
Standard Area 1 = 183060			Recovery = 102.00%		
System Monitoring Compounds					
4) 2-Fluorophenol	4.245	112	2562	0.195 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 3.90%#		
7) Phenol-d6	5.910	99	3120	0.184 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 3.68%#		
19) Nitrobenzene-d5	6.945	82	3178	0.207 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 8.28%#		
45) 2-Fluorobiphenyl	8.839	172	7396	0.219 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 8.76%#		
78) 2,4,6-Tribromophenol	10.239	330	764	0.171 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 3.42%#		
95) 4-Terphenyl-d14	12.486	244	8108	0.191 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 7.64%#		
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	0.000		0	N.D. d	
3) Pyridine	2.010	79	2483	0.183 ug/ml#	68
5) Aniline	5.869	93	4329	0.194 ug/ml	95
6) 2-Chlorophenol	6.016	128	2871	0.191 ug/ml#	88
8) Phenol	5.928	94	3708	0.207 ug/ml	94
9) Bis(2-chloroethyl)ether	6.004	93	3165	0.220 ug/ml	93
10) 1,3-Dichlorobenzene	6.198	146	3564	0.207 ug/ml	96
11) 1,4-Dichlorobenzene	6.304	146	4143	0.234 ug/ml	94
12) 1,2-Dichlorobenzene	6.481	146	3635	0.216 ug/ml	96
13) Benzyl alcohol	6.498	79	2509	0.198 ug/ml	97
14) Bis(2-chloroisopropyl)...	6.686	45	4168	0.197 ug/ml#	45

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL1.D
Acq On : 2 Sep 2023 3:47 pm
Operator : SV106:ljg
Sample : IL10,32,,ABNL0.2 Lot# 10171
Misc : WG1823680,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 05 11:13:59 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:13:54 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	6.675	108	2502	0.187	ug/ml	91
16) Hexachloroethane	6.875	117	1389	0.201	ug/ml#	74
17) n-Nitrosodi-n-propylamine	6.828	70	2285	0.210	ug/ml#	59
18) 3-Methylphenol/4-Methy...	6.863	108	2508	0.178	ug/ml#	96
20) Nitrobenzene	6.969	77	2763	0.181	ug/ml#	81
21) Isophorone	7.257	82	5745	0.197	ug/ml#	91
22) 2-Nitrophenol	7.328	139	1114	0.183	ug/ml#	84
23) 2,4-Dimethylphenol	7.433	107	2976	0.197	ug/ml	89
24) Bis(2-chloroethoxy)met...	7.528	93	3940	0.215	ug/ml#	89
25) 2,4-Dichlorophenol	7.592	162	2293	0.181	ug/ml#	88
26) 1,2,4-Trichlorobenzene	7.675	180	2894	0.199	ug/ml#	83
35) Naphthalene	7.739	128	9259	0.207	ug/ml#	95
36) Benzoic Acid	0.000		0	N.D.		
37) 4-Chloroaniline	7.822	65	1300	0.222	ug/ml	94
38) Hexachlorobutadiene	7.910	225	2065	0.227	ug/ml	90
39) p-Chloro-m-cresol	8.357	107	2277	0.176	ug/ml	96
40) 2-Methylnaphthalene	8.457	142	5588M3	0.197	ug/ml	
41) 1-Methylnaphthalene	8.551	115	1925	0.181	ug/ml	99
42) Hexachlorocyclopentadiene	8.633	237	1877	0.193	ug/ml#	83
43) 2,4,6-Trichlorophenol	8.757	196	1723	0.187	ug/ml	86
44) 2,4,5-Trichlorophenol	8.786	196	2040M3	0.205	ug/ml	
46) 2-Chloronaphthalene	8.933	162	6063	0.205	ug/ml	99
47) 2-Nitroaniline	9.051	138	1074	0.574	ug/ml#	81
48) 1,4-Dinitrobenzene	9.180	168	574	1.029	ug/ml	98
49) 1,3-Dinitrobenzene	9.251	168	729	1.079	ug/ml#	1
50) Dimethyl phthalate	9.257	163	7331	0.210	ug/ml#	94
51) Acenaphthylene	9.333	152	9825	0.206	ug/ml	97
52) 2,6-Dinitrotoluene	9.292	165	830	0.500	ug/ml	94
53) 1,2-Dinitrobenzene	9.339	168	464M3	0.165	ug/ml	
63) 3-Nitroaniline	9.451	138	942	0.135	ug/ml#	77
64) Acenaphthene	9.504	154	6065	0.220	ug/ml	95
65) 2,4-Dinitrophenol	0.000		0	N.D.		
66) Dibenzofuran	9.674	168	8240	0.200	ug/ml	96
67) 2,4-Dinitrotoluene	9.680	165	1115	0.589	ug/ml#	61
68) 4-Nitrophenol	9.645	65	904	0.564	ug/ml#	83
69) 2,3,5,6-Tetrachlorophenol	9.769	232	1439	0.182	ug/ml	96
70) 2,3,4,6-Tetrachlorophenol	9.810	232	1700M3	0.207	ug/ml	
71) Diethyl phthalate	9.951	149	6790	0.197	ug/ml#	97
72) Fluorene	10.010	166	6534	0.201	ug/ml	92
73) 4-Chlorophenyl phenyl ...	10.033	204	3339	0.215	ug/ml	93

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL1.D
Acq On : 2 Sep 2023 3:47 pm
Operator : SV106:ljg
Sample : IL10,32,,ABNL0.2 Lot# 10171
Misc : WG1823680,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 05 11:13:59 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:13:54 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
74)	4-Nitroaniline	10.039	138	1118	0.159	ug/ml#	88
75)	4,6-Dinitro-o-cresol	10.074	198	349M2	1.236	ug/ml	
76)	NDPA/DPA	10.145	169	5441	0.199	ug/ml	93
77)	Azobenzene	10.180	77	6764	0.211	ug/ml	98
79)	4-Bromophenyl phenyl e...	10.498	248	1983	0.220	ug/ml#	87
80)	Hexachlorobenzene	10.545	284	2477	0.236	ug/ml#	89
81)	Pentachlorophenol	10.739	266	637	0.542	ug/ml#	19
88)	Phenanthrene	10.927	178	11198M3	0.212	ug/ml	
89)	Anthracene	10.974	178	10597	0.202	ug/ml	95
90)	Carbazole	11.145	167	8499	0.177	ug/ml#	95
91)	Di-n-butylphthalate	11.545	149	11599	0.189	ug/ml#	98
92)	Fluoranthene	12.074	202	11243M3	0.199	ug/ml	
93)	Benzidine	12.233	184	6351	0.170	ug/ml#	85
94)	Pyrene	12.286	202	11668	0.195	ug/ml	98
96)	Butyl benzyl phthalate	13.010	149	4140	0.158	ug/ml	97
104)	Benzo(a)anthracene	13.510	228	12297	0.221	ug/ml	97
105)	3,3'-Dichlorobenzidine	13.515	252	3600	0.182	ug/ml#	93
106)	Chrysene	13.545	228	11695	0.226	ug/ml	97
107)	Bis(2-ethylhexyl)phtha...	13.645	149	6101	0.163	ug/ml#	96
108)	Di-n-octylphthalate	14.315	149	10113	0.161	ug/ml#	77
109)	Benzo(b)fluoranthene	14.604	252	10734	0.202	ug/ml#	92
110)	Benzo(k)fluoranthene	14.627	252	10791	0.212	ug/ml#	93
111)	Benzo(a)pyrene	14.915	252	8872	0.195	ug/ml	99
113)	Indeno(1,2,3-cd)pyrene	15.927	276	8556M1	0.196	ug/mL	
114)	Dibenzo(a,h)anthracene	15.951	278	8390	0.180	ug/ml	93
115)	Benzo(ghi)perylene	16.156	276	9050	0.196	ug/ml	93

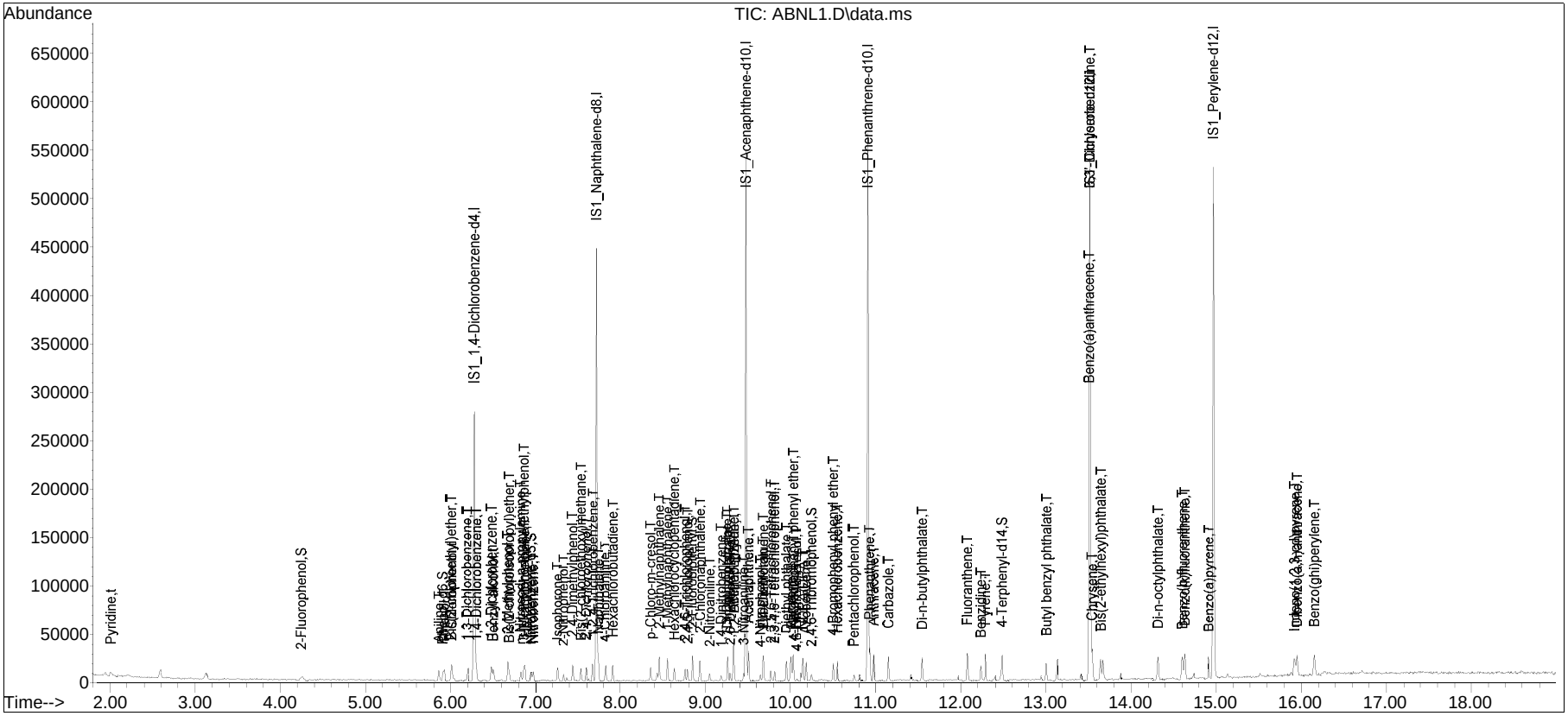
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNL1.D
Acq On : 2 Sep 2023 3:47 pm
Operator : SV106:ljg
Sample : IL10,32,,ABNL0.2 Lot# 10171
Misc : WG1823680,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 05 11:13:59 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:13:54 2023
Response via : Initial Calibration

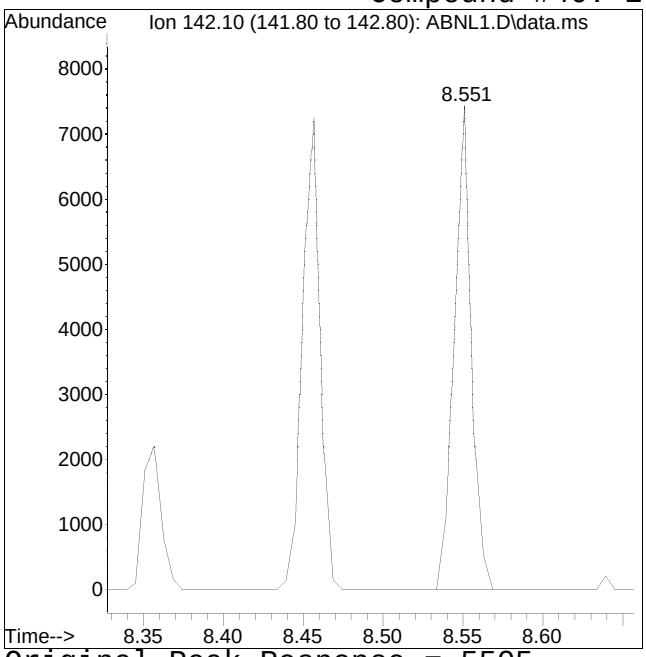
Sub List : ABNical - ABN ical sublistiical\ABNL6.D•

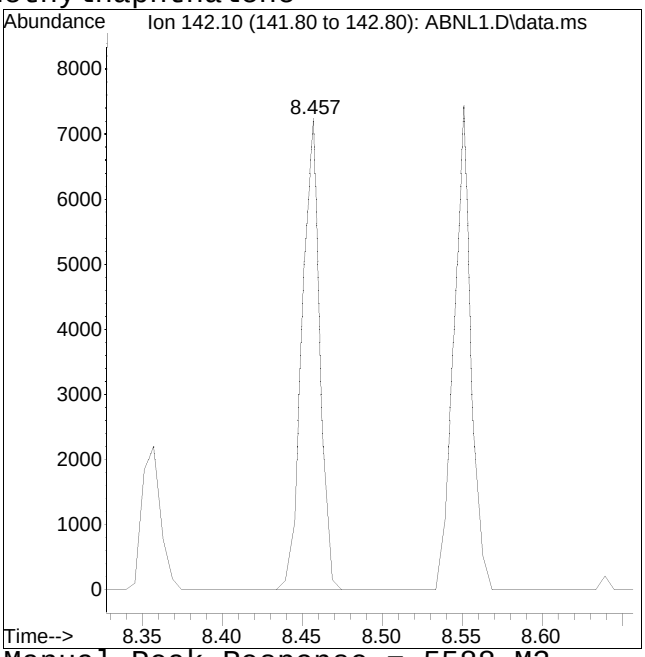


Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 3:47 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.2 Lot# 1017Quant Date : 9/5/2023 11:13 am

Compound #40: 2-Methylnaphthalene





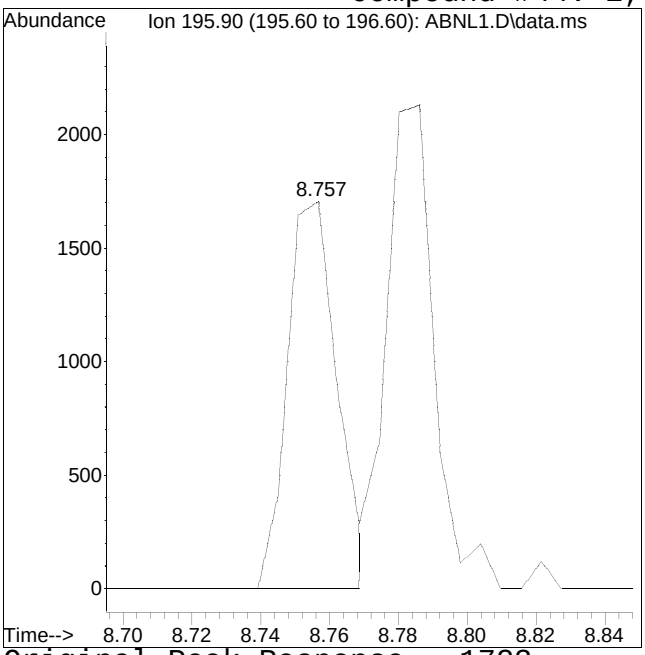
Original Peak Response = 5505 Manual Peak Response = 5588 M3

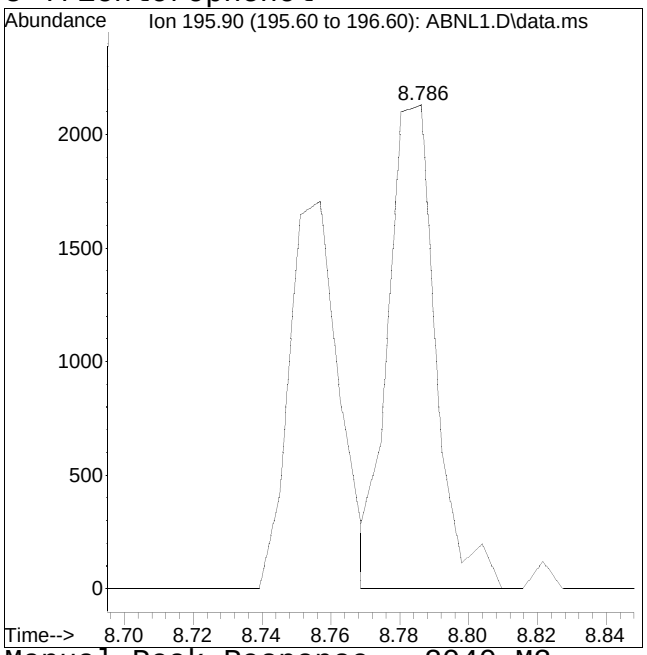
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 3:47 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.2 Lot# 1017Quant Date : 9/5/2023 11:13 am

Compound #44: 2,4,5-Trichlorophenol





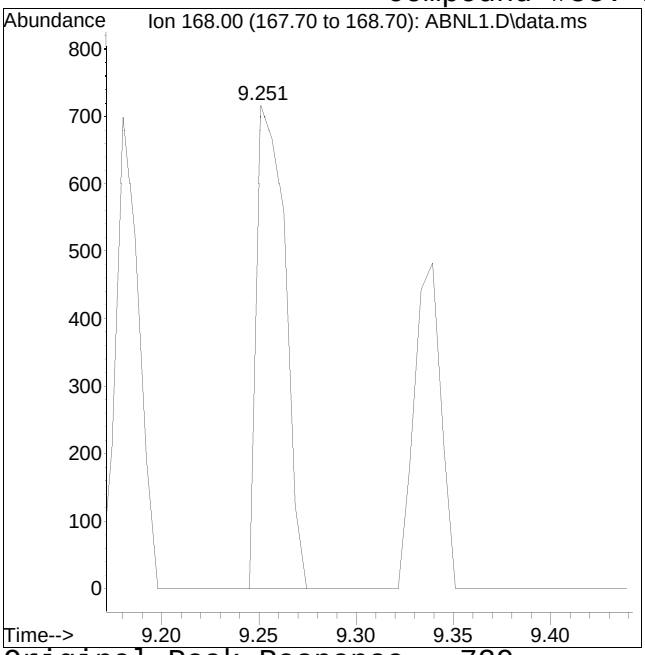
Original Peak Response = 1723 Manual Peak Response = 2040 M3

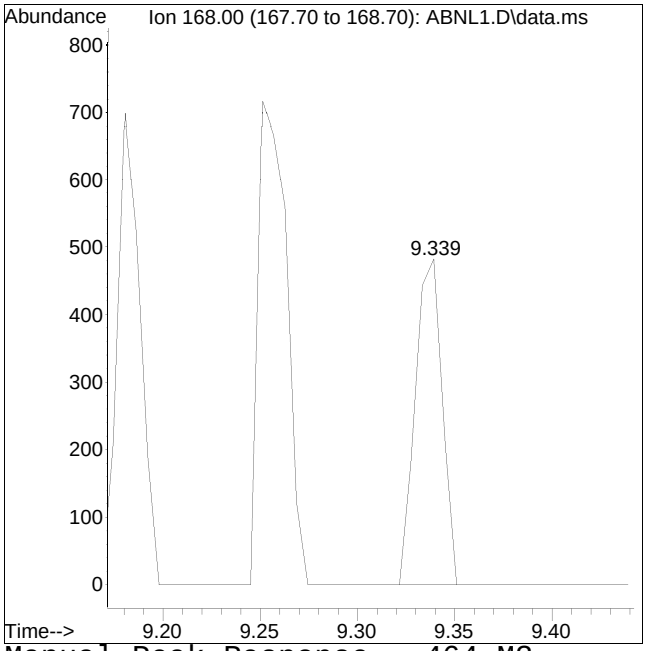
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 3:47 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.2 Lot# 1017Quant Date : 9/5/2023 11:13 am

Compound #53: 1,2-Dinitrobenzene





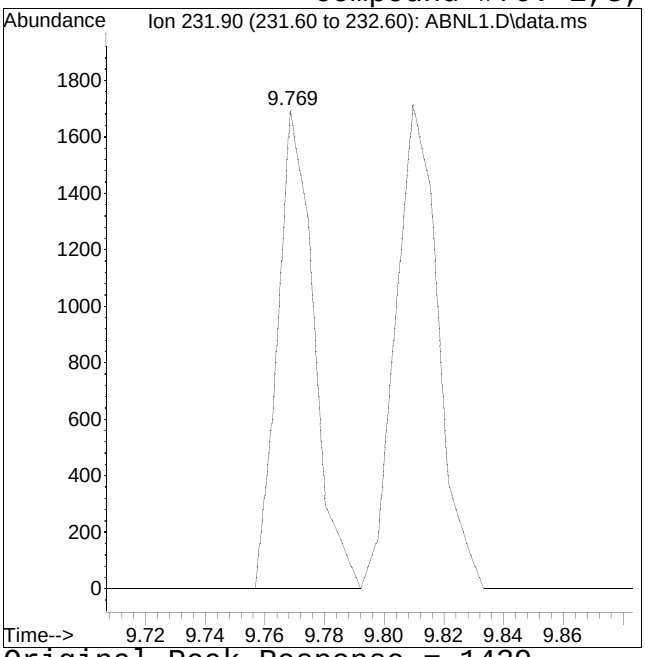
Original Peak Response = 729 Manual Peak Response = 464 M3

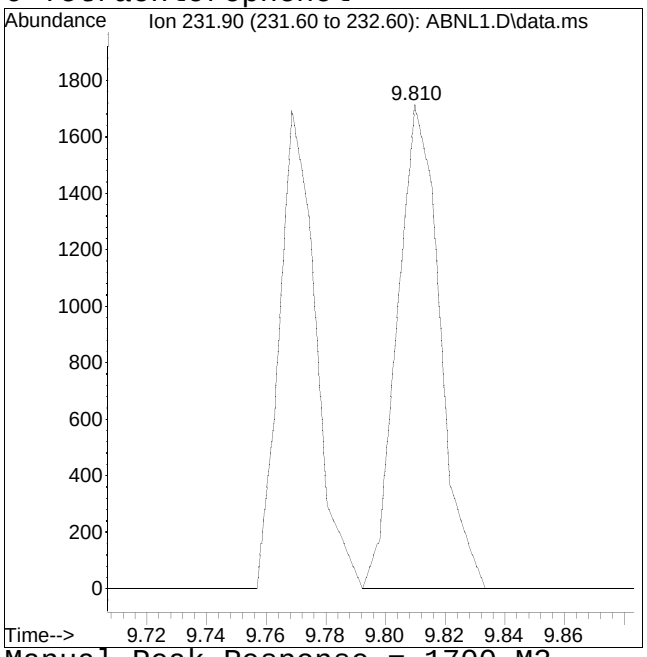
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 3:47 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.2 Lot# 1017Quant Date : 9/5/2023 11:13 am

Compound #70: 2,3,4,6-Tetrachlorophenol





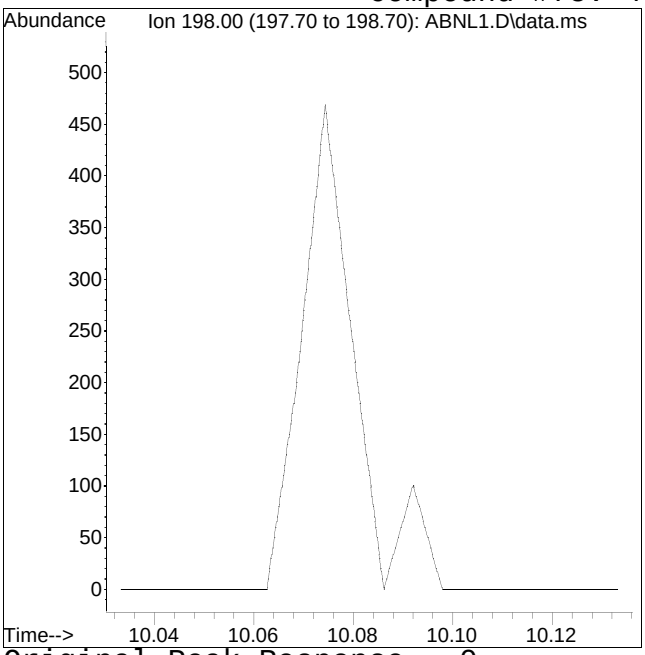
Original Peak Response = 1439 Manual Peak Response = 1700 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

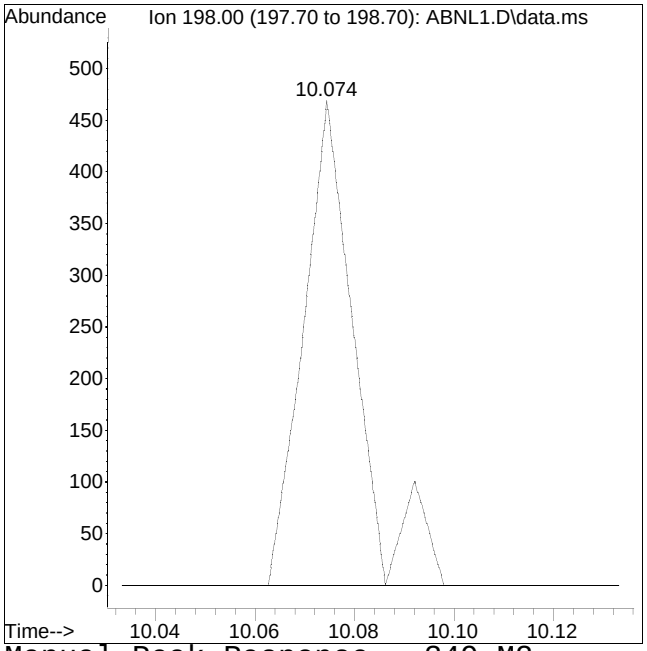
Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 3:47 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.2 Lot# 1017Quant Date : 9/5/2023 11:13 am

Compound #75: 4,6-Dinitro-o-cresol



Original Peak Response = 0



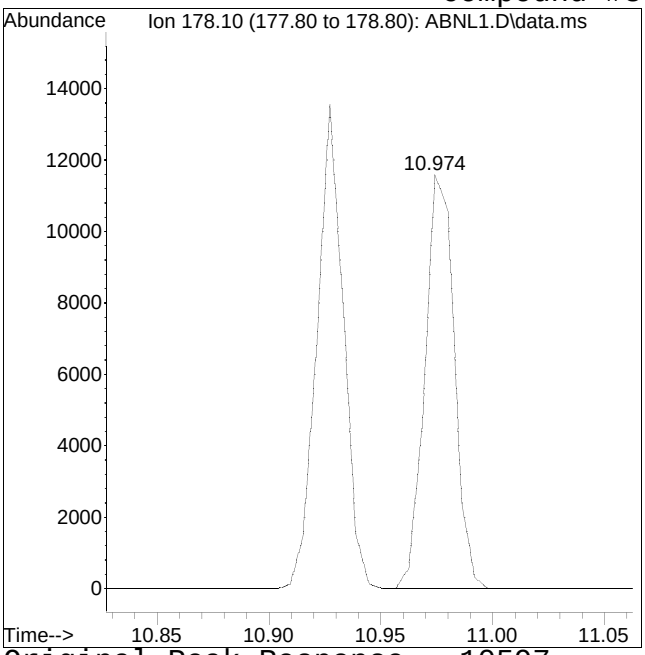
Manual Peak Response = 349 M2

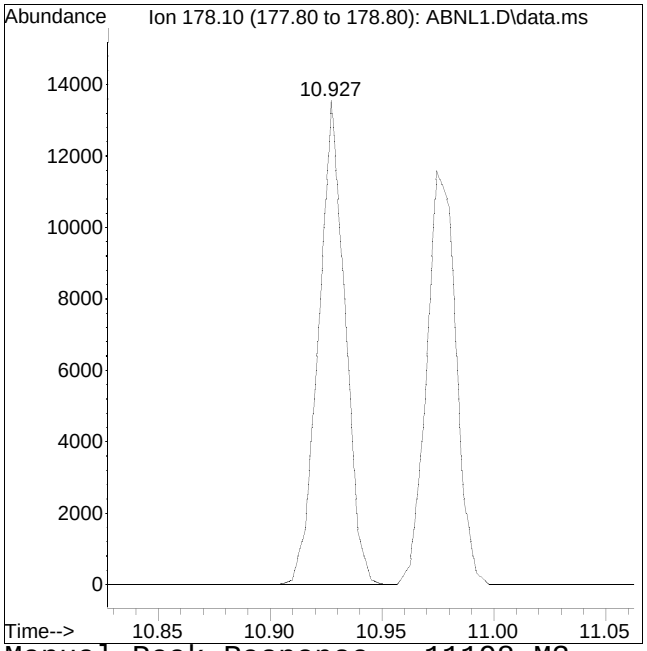
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 3:47 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.2 Lot# 1017Quant Date : 9/5/2023 11:13 am

Compound #88: Phenanthrene



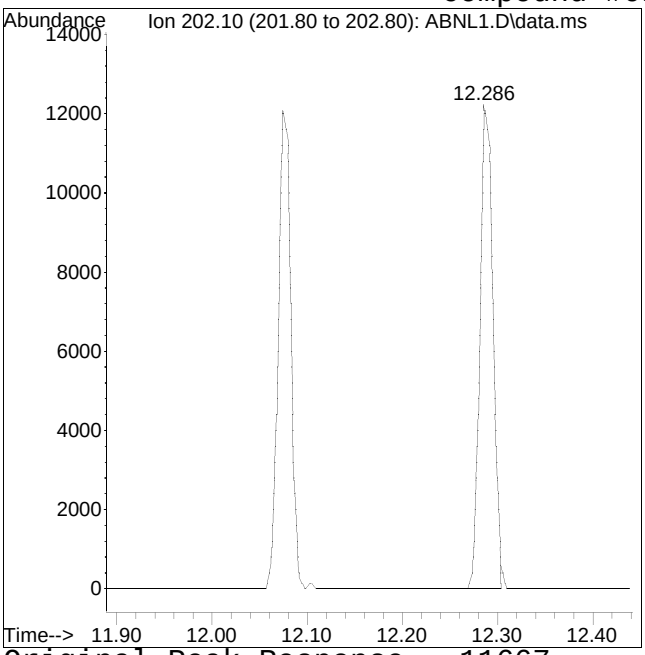


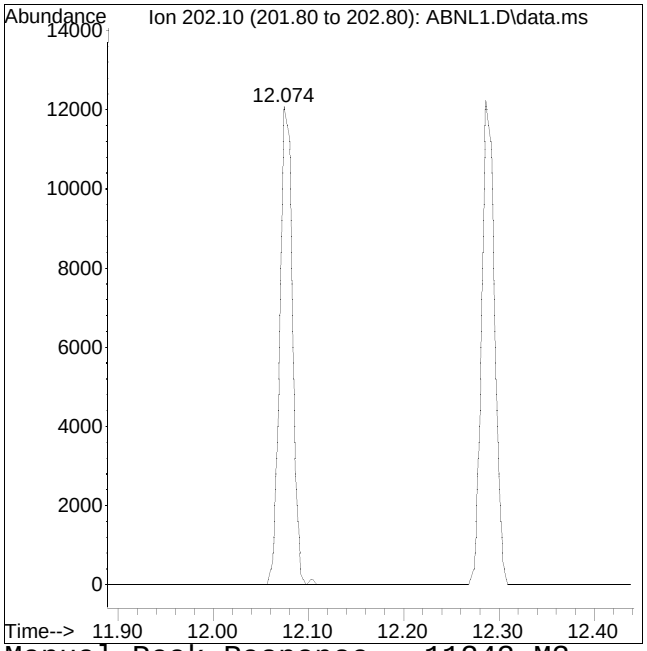
Original Peak Response = 10597 Manual Peak Response = 11198 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 3:47 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.2 Lot# 1017Quant Date : 9/5/2023 11:13 am

Compound #92: Fluoranthene



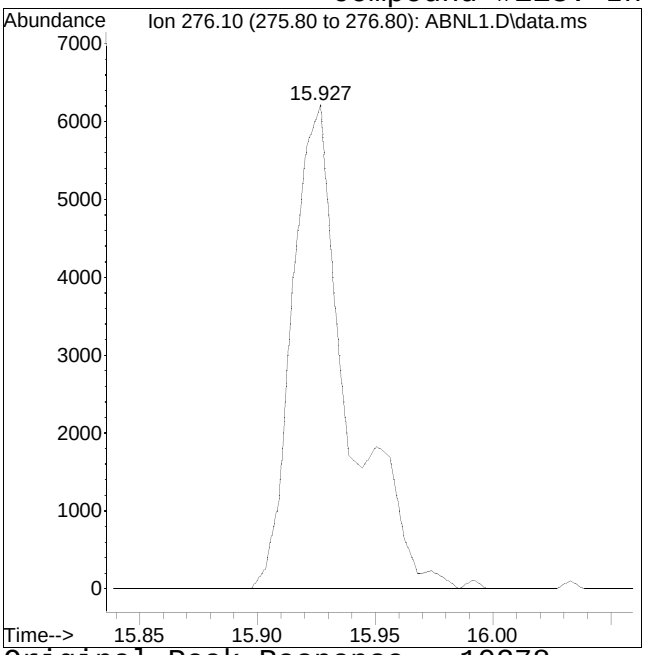


Original Peak Response = 11667 Manual Peak Response = 11243 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

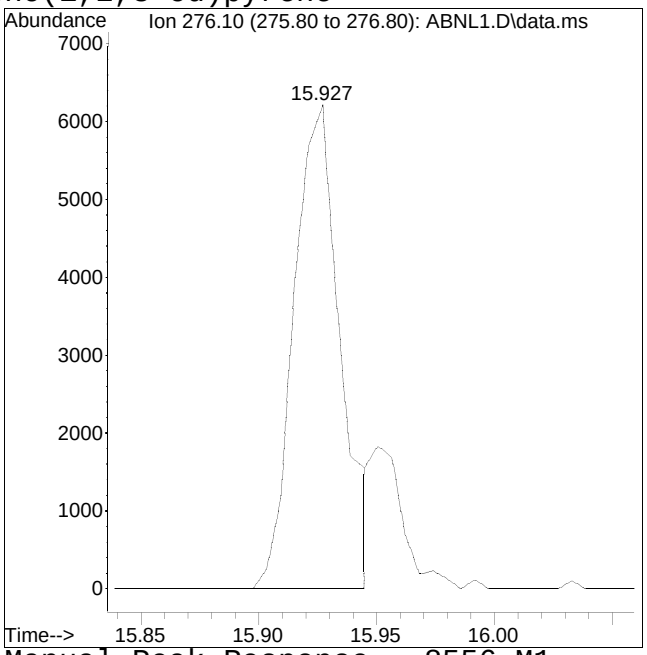
Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNL1.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 3:47 pm Instrument : SV 106
Sample : IL10,32,,ABNL0.2 Lot# 1017Quant Date : 9/5/2023 11:13 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 10278



Manual Peak Response = 8556 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L10.D
Acq On : 2 Sep 2023 4:10 pm
Operator : SV106:ljg
Sample : IL1,32,,AP9L50 Lot# 10078
Misc : WG1823680,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 05 11:17:39 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:17:30 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
27) IS2_1,4-Dichlorobenzen...	6.281	152	45275	4.000	ug/ml		0.00
Standard Area 1 = 44570			Recovery =	101.58%			
54) IS2_Naphthalene-d8	7.716	136	176312	4.000	ug/ml		0.00
Standard Area 1 = 169751			Recovery =	103.87%			
82) IS2_Acenaphthene-d10	9.474	164	97512	4.000	ug/ml		0.00
Standard Area 1 = 90319			Recovery =	107.96%			
97) IS2_Phenanthrene-d10	10.904	188	187379	4.000	ug/ml	#	0.00
Standard Area 1 = 182619			Recovery =	102.61%			
System Monitoring Compounds							
Target Compounds							Qvalue
28) Benzaldehyde	5.686	105	445512	49.797	ug/ml		96
29) Acetophenone	6.786	105	1078851	47.799	ug/ml	#	79
30) m-Toluidine	6.886	106	825985	47.087	ug/ml		96
31) 2-Chloroaniline	7.292	127	908829	48.068	ug/ml	#	93
55) a-Terpineol	7.798	59	606728	47.676	ug/ml	#	76
56) 3-Chloroaniline	7.810	65	304126	45.877	ug/ml		87
57) 2,6-Dichlorophenol	7.833	162	621902	51.006	ug/ml	#	89
58) 1-chloro-2-nitrobenzene	8.098	111	297021	51.418	ug/ml	#	1
59) Caprolactam	8.163	55	335868	51.965	ug/ml	#	69
60) 1,2,4,5-Tetrachloroben...	8.633	216	707897	46.163	ug/ml		99
61) Biphenyl	8.933	154	1766718	46.834	ug/ml		100
83) Dichloran	10.610	206	195928	49.484	ug/ml		88
84) Pentachloronitrobenzene	10.757	237	215251	49.570	ug/ml	#	83
98) Diphenamid	11.821	167	1261499	53.005	ug/ml		85

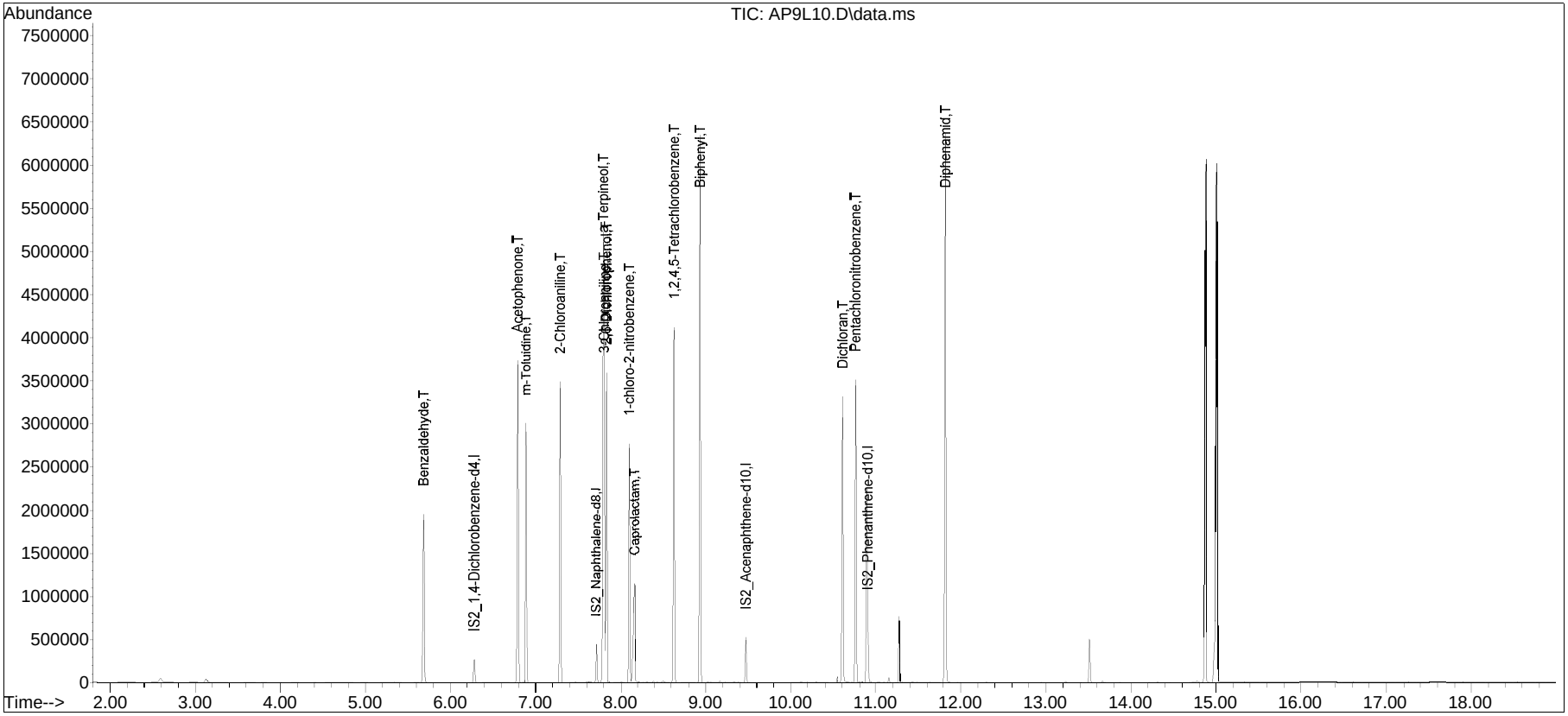
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L10.D
Acq On : 2 Sep 2023 4:10 pm
Operator : SV106:ljg
Sample : IL1,32,,AP9L50 Lot# 10078
Misc : WG1823680,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 05 11:17:39 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:17:30 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistiical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: AP9L10.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 4:10 pm	Instrument	: SV 106
Sample	: IL1,32,,AP9L50 Lot# 10078	Quant Date	: 9/5/2023 11:17 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L9.D
Acq On : 2 Sep 2023 4:34 pm
Operator : SV106:ljg
Sample : IL2,32,,AP9L35 Lot# 10080
Misc : WG1823680,,ical
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 05 11:19:04 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:18:55 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
27) IS2_1,4-Dichlorobenzen...	6.281	152	48158	4.000	ug/ml		0.00
Standard Area 1 = 44570			Recovery =	108.05%			
54) IS2_Naphthalene-d8	7.716	136	180345	4.000	ug/ml		0.00
Standard Area 1 = 169751			Recovery =	106.24%			
82) IS2_Acenaphthene-d10	9.475	164	99510	4.000	ug/ml		0.00
Standard Area 1 = 90319			Recovery =	110.18%			
97) IS2_Phenanthrene-d10	10.904	188	196438	4.000	ug/ml	#	0.00
Standard Area 1 = 182619			Recovery =	107.57%			
System Monitoring Compounds							
Target Compounds							Qvalue
28) Benzaldehyde	5.687	105	311762	32.529	ug/ml		96
29) Acetophenone	6.787	105	793417	33.048	ug/ml	#	79
30) m-Toluidine	6.887	106	582470	31.217	ug/ml		96
31) 2-Chloroaniline	7.292	127	665233	33.078	ug/ml		94
55) a-Terpineol	7.798	59	447990	34.415	ug/ml	#	77
56) 3-Chloroaniline	7.804	65	221394	32.650	ug/ml		88
57) 2,6-Dichlorophenol	7.834	162	450078	36.088	ug/ml		91
58) 1-chloro-2-nitrobenzene	8.098	111	218958	37.056	ug/ml	#	1
59) Caprolactam	8.157	55	252480	38.190	ug/ml	#	70
60) 1,2,4,5-Tetrachloroben...	8.633	216	524192	33.419	ug/ml		98
61) Biphenyl	8.933	154	1283400	33.261	ug/ml		99
83) Dichloran	10.610	206	146137	36.436	ug/ml	#	84
84) Pentachloronitrobenzene	10.757	237	159013	35.970	ug/ml	#	83
98) Diphenamid	11.821	167	913041	36.595	ug/ml		85

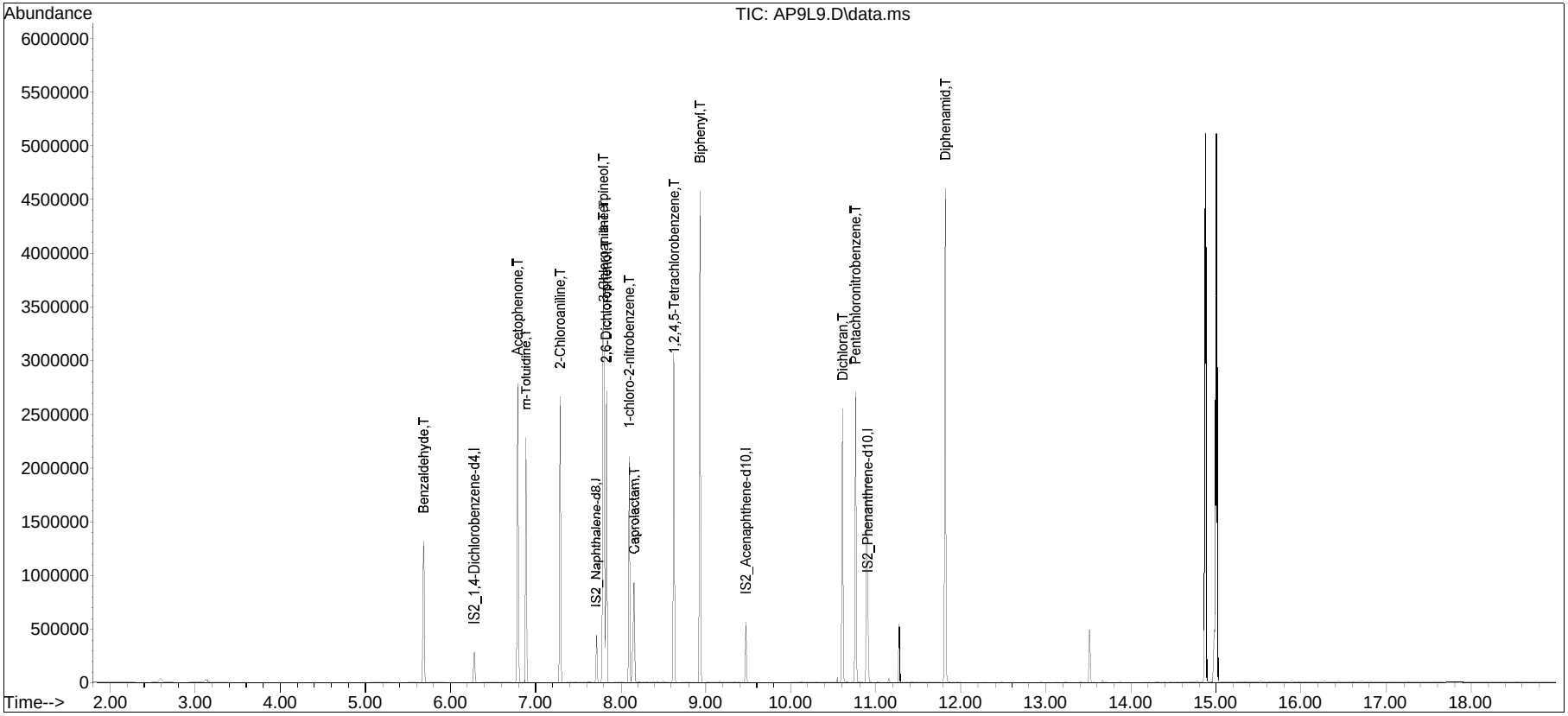
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L9.D
Acq On : 2 Sep 2023 4:34 pm
Operator : SV106:ljg
Sample : IL2,32,,AP9L35 Lot# 10080
Misc : WG1823680,,ical
ALS Vial : 12 Sample Multiplier: 1

Quant Time: Sep 05 11:19:04 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:18:55 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistiical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: AP9L9.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 4:34 pm	Instrument	: SV 106
Sample	: IL2,32,,AP9L35 Lot# 10080	Quant Date	: 9/5/2023 11:18 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L8.D
Acq On : 2 Sep 2023 4:58 pm
Operator : SV106:ljg
Sample : IL3,32,,AP9L15 Lot# 10081
Misc : WG1823680,,ical
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 05 11:18:52 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:18:44 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
27) IS2_1,4-Dichlorobenzen...	6.281	152	47695	4.000	ug/ml		0.00
Standard Area 1 = 44570			Recovery =	107.01%			
54) IS2_Naphthalene-d8	7.716	136	180394	4.000	ug/ml		0.00
Standard Area 1 = 169751			Recovery =	106.27%			
82) IS2_Acenaphthene-d10	9.474	164	100461	4.000	ug/ml		0.00
Standard Area 1 = 90319			Recovery =	111.23%			
97) IS2_Phenanthrene-d10	10.904	188	197228	4.000	ug/ml	#	0.00
Standard Area 1 = 182619			Recovery =	108.00%			
System Monitoring Compounds							
Target Compounds							Qvalue
28) Benzaldehyde	5.686	105	143247	14.728	ug/ml		97
29) Acetophenone	6.786	105	323729	13.615	ug/ml	#	80
30) m-Toluidine	6.886	106	256365	13.873	ug/ml		95
31) 2-Chloroaniline	7.292	127	276428	13.878	ug/ml		94
55) a-Terpineol	7.792	59	181511	13.940	ug/ml	#	77
56) 3-Chloroaniline	7.804	65	93871	13.840	ug/ml		87
57) 2,6-Dichlorophenol	7.833	162	182547	14.633	ug/ml	#	90
58) 1-chloro-2-nitrobenzene	8.098	111	88077	14.902	ug/ml	#	1
59) Caprolactam	8.139	55	99856	15.100	ug/ml	#	71
60) 1,2,4,5-Tetrachloroben...	8.627	216	213797	13.627	ug/ml		99
61) Biphenyl	8.933	154	530868	13.754	ug/ml		99
83) Dichloran	10.610	206	52291	13.559	ug/ml		88
84) Pentachloronitrobenzene	10.757	237	62096	14.105	ug/ml	#	81
98) Diphenamid	11.821	167	361777	14.442	ug/ml		85

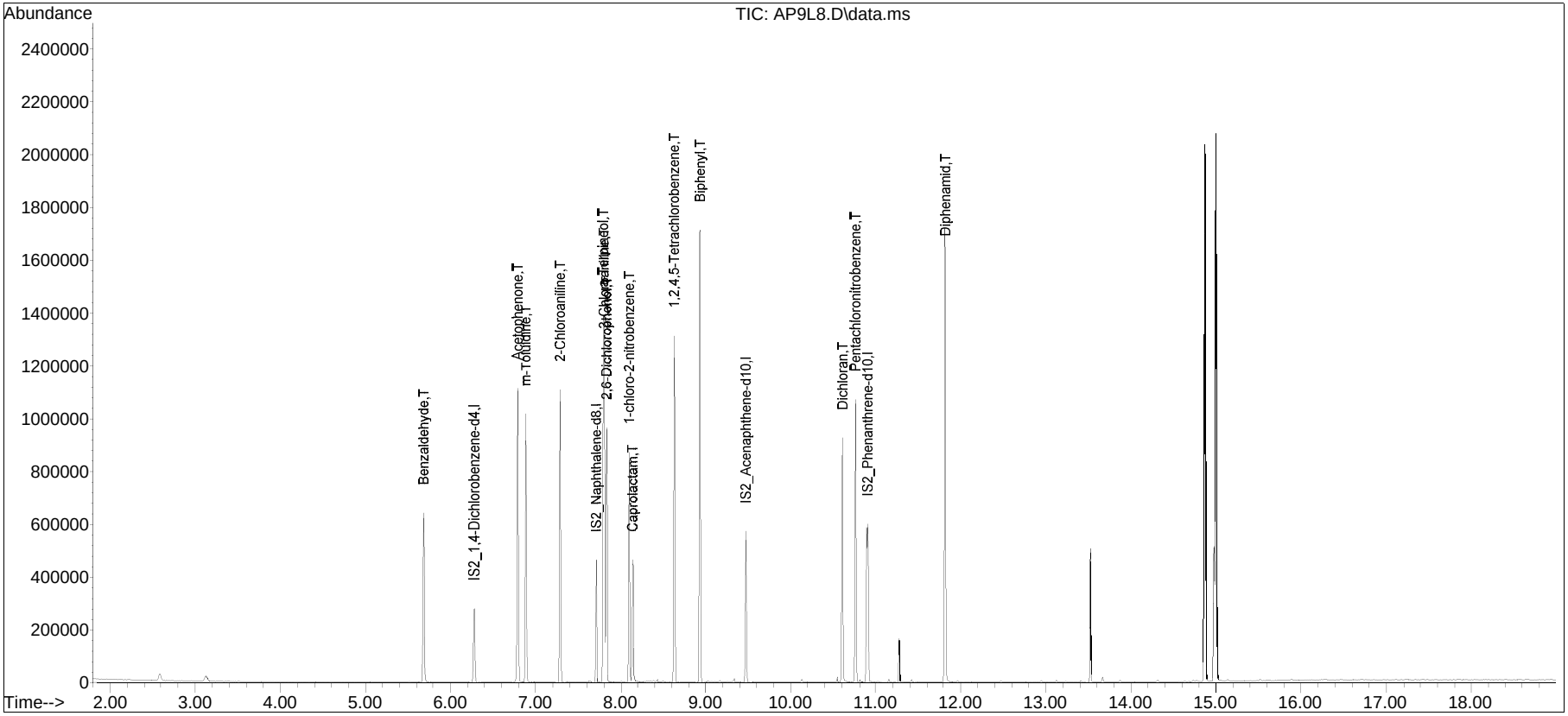
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L8.D
Acq On : 2 Sep 2023 4:58 pm
Operator : SV106:ljg
Sample : IL3,32,,AP9L15 Lot# 10081
Misc : WG1823680,,ical
ALS Vial : 13 Sample Multiplier: 1

Quant Time: Sep 05 11:18:52 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:18:44 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistiical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: AP9L8.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 4:58 pm	Instrument	: SV 106
Sample	: IL3,32,,AP9L15 Lot# 10081	Quant Date	: 9/5/2023 11:18 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L7.D
Acq On : 2 Sep 2023 5:21 pm
Operator : SV106:ljg
Sample : IL4,32,,AP9L10 Lot# 10082
Misc : WG1823680,,ical
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 05 11:18:42 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:18:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
27) IS2_1,4-Dichlorobenzen...	6.281	152	43599	4.000	ug/ml	0.00
Standard Area 1 = 44570			Recovery = 97.82%			
54) IS2_Naphthalene-d8	7.716	136	168106	4.000	ug/ml	0.00
Standard Area 1 = 169751			Recovery = 99.03%			
82) IS2_Acenaphthene-d10	9.475	164	91653	4.000	ug/ml	0.00
Standard Area 1 = 90319			Recovery = 101.48%			
97) IS2_Phenanthrene-d10	10.904	188	184426	4.000	ug/ml	0.00
Standard Area 1 = 182619			Recovery = 100.99%			
System Monitoring Compounds						
Target Compounds						Qvalue
28) Benzaldehyde	5.687	105	100921	11.196	ug/ml	97
29) Acetophenone	6.787	105	206878	9.518	ug/ml#	80
30) m-Toluidine	6.887	106	171545	10.155	ug/ml	97
31) 2-Chloroaniline	7.292	127	177077	9.726	ug/ml#	94
55) a-Terpineol	7.792	59	114841	9.465	ug/ml#	77
56) 3-Chloroaniline	7.804	65	62140	9.831	ug/ml	86
57) 2,6-Dichlorophenol	7.828	162	114456	9.845	ug/ml#	90
58) 1-chloro-2-nitrobenzene	8.098	111	53867	9.780	ug/ml#	1
59) Caprolactam	8.139	55	63110	10.241	ug/ml#	68
60) 1,2,4,5-Tetrachloroben...	8.628	216	135641	9.277	ug/ml	99
61) Biphenyl	8.928	154	336317	9.351	ug/ml	100
83) Dichloran	10.610	206	30724	9.087	ug/ml	90
84) Pentachloronitrobenzene	10.757	237	37798	9.515	ug/ml#	85
98) Diphenamid	11.816	167	234771	10.022	ug/ml#	82

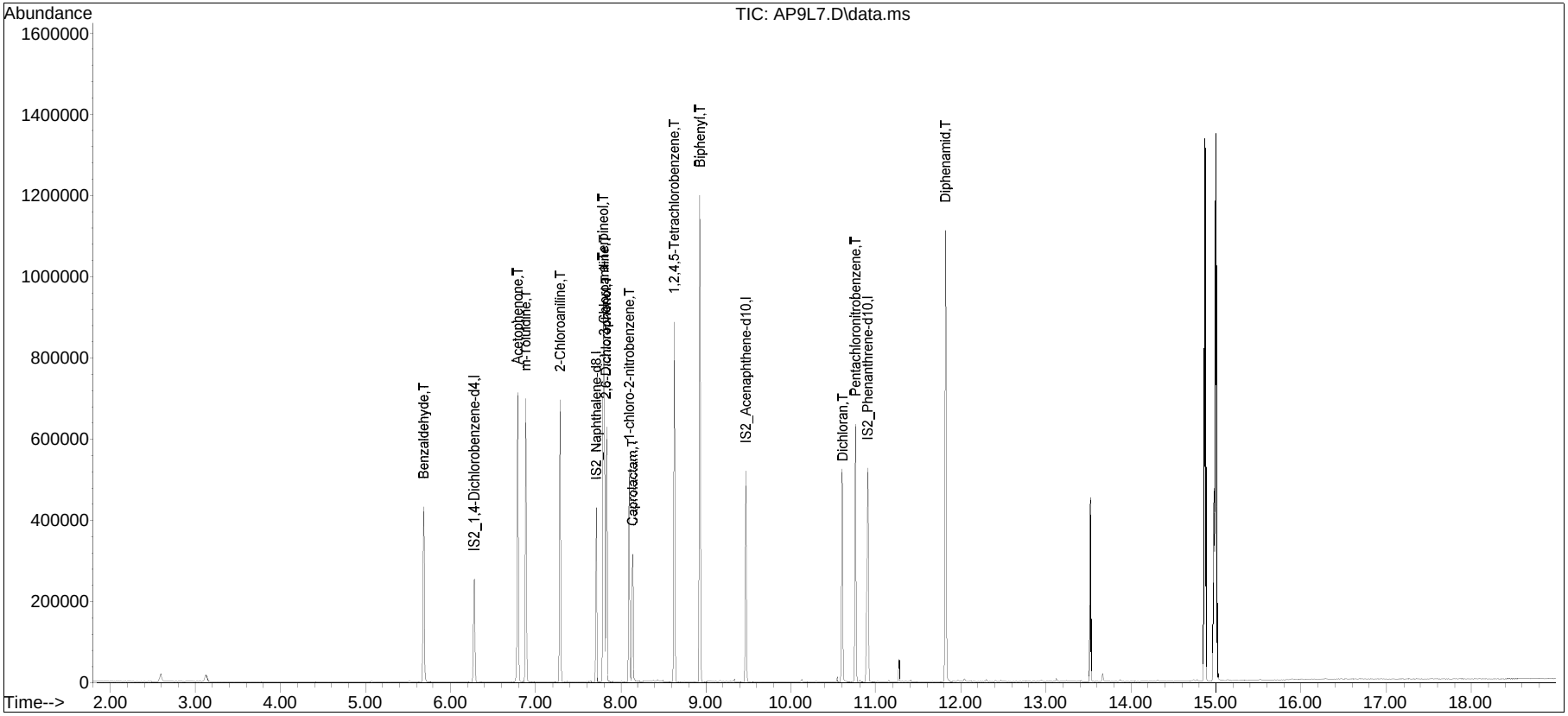
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L7.D
Acq On : 2 Sep 2023 5:21 pm
Operator : SV106:ljg
Sample : IL4,32,,AP9L10 Lot# 10082
Misc : WG1823680,,ical
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 05 11:18:42 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:18:34 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistiical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: AP9L7.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 5:21 pm	Instrument	: SV 106
Sample	: IL4,32,,AP9L10 Lot# 10082	Quant Date	: 9/5/2023 11:18 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L6.D
Acq On : 2 Sep 2023 5:45 pm
Operator : SV106:ljg
Sample : IL5,32,,AP9L5 Lot# 10083
Misc : WG1823680,,ical
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 05 11:18:31 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:18:23 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
27) IS2_1,4-Dichlorobenzen...	6.281	152	44570	4.000	ug/ml		0.00
Standard Area 1 = 44570			Recovery =	100.00%			
54) IS2_Naphthalene-d8	7.716	136	169751	4.000	ug/ml		0.00
Standard Area 1 = 169751			Recovery =	100.00%			
82) IS2_Acenaphthene-d10	9.475	164	90319	4.000	ug/ml		0.00
Standard Area 1 = 90319			Recovery =	100.00%			
97) IS2_Phenanthrene-d10	10.904	188	182619	4.000	ug/ml	#	0.00
Standard Area 1 = 182619			Recovery =	100.00%			
System Monitoring Compounds							
Target Compounds							Qvalue
28) Benzaldehyde	5.687	105	72359	7.650	ug/ml		100
29) Acetophenone	6.787	105	144135	6.487	ug/ml	#	79
30) m-Toluidine	6.887	106	121548	7.039	ug/ml		97
31) 2-Chloroaniline	7.292	127	122731	6.594	ug/ml	#	93
55) a-Terpineol	7.792	59	79745	6.508	ug/ml	#	76
56) 3-Chloroaniline	7.804	65	42863	6.716	ug/ml		87
57) 2,6-Dichlorophenol	7.828	162	80147	6.827	ug/ml	#	89
58) 1-chloro-2-nitrobenzene	8.098	111	37011	6.655	ug/ml	#	1
59) Caprolactam	8.134	55	42186	6.779	ug/ml	#	66
60) 1,2,4,5-Tetrachloroben...	8.628	216	94610	6.408	ug/ml		99
61) Biphenyl	8.928	154	237100	6.528	ug/ml		100
83) Dichloran	10.610	206	19227	6.135	ug/ml		90
84) Pentachloronitrobenzene	10.757	237	24999	6.488	ug/ml	#	85
98) Diphenamid	11.816	167	159499	6.876	ug/ml		85

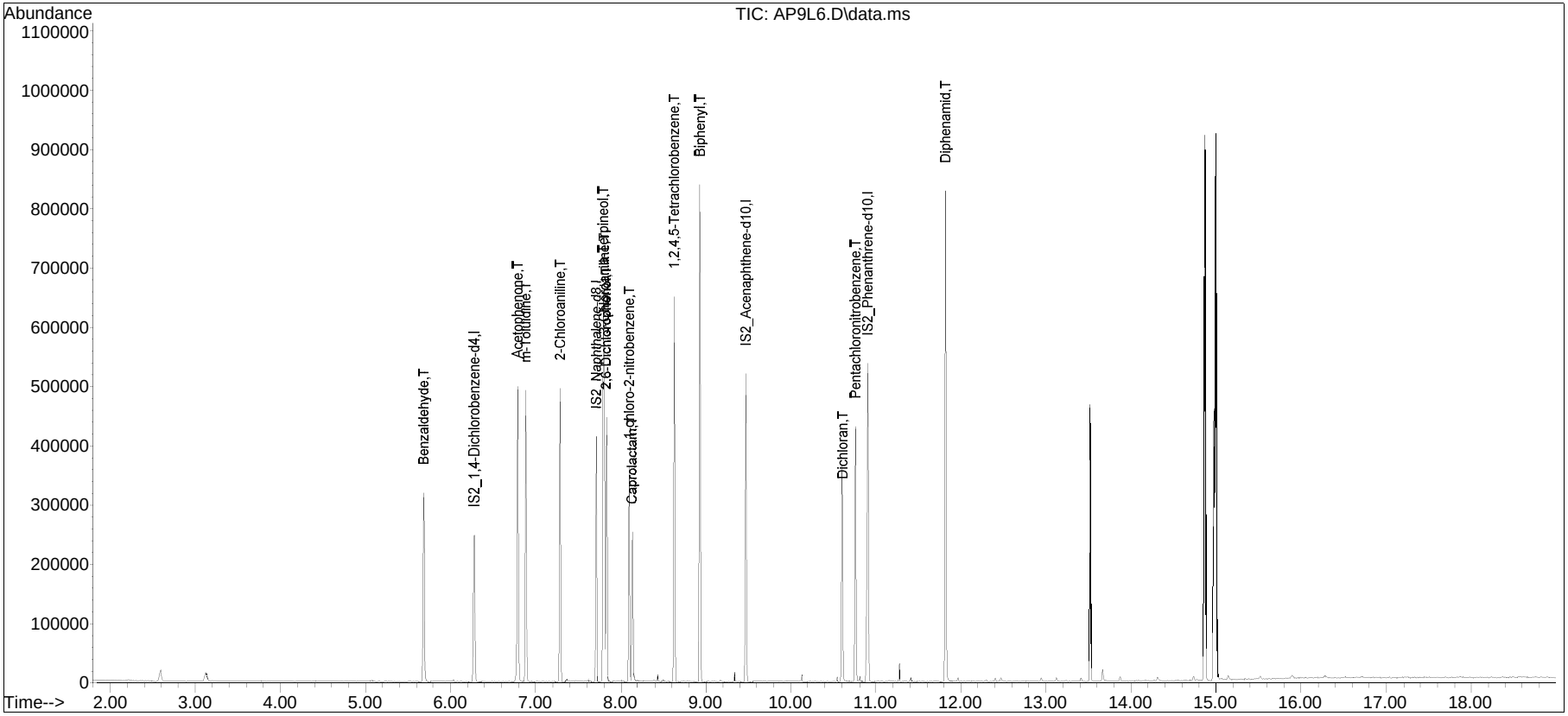
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L6.D
Acq On : 2 Sep 2023 5:45 pm
Operator : SV106:ljg
Sample : IL5,32,,AP9L5 Lot# 10083
Misc : WG1823680,,ical
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 05 11:18:31 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:18:23 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistiical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: AP9L6.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 5:45 pm	Instrument	: SV 106
Sample	: IL5,32,,AP9L5 Lot# 10083	Quant Date	: 9/5/2023 11:18 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L5.D
Acq On : 2 Sep 2023 6:09 pm
Operator : SV106:ljg
Sample : IL6,32,,AP9L3 Lot# 10084
Misc : WG1823680,,ical
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 05 11:18:20 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:18:12 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
27) IS2_1,4-Dichlorobenzen...	6.281	152	41203	4.000	ug/ml	0.00
Standard Area 1 = 44570			Recovery = 92.45%			
54) IS2_Naphthalene-d8	7.716	136	158379	4.000	ug/ml	# 0.00
Standard Area 1 = 169751			Recovery = 93.30%			
82) IS2_Acenaphthene-d10	9.475	164	85579	4.000	ug/ml	0.00
Standard Area 1 = 90319			Recovery = 94.75%			
97) IS2_Phenanthrene-d10	10.904	188	172049	4.000	ug/ml	# 0.00
Standard Area 1 = 182619			Recovery = 94.21%			
System Monitoring Compounds						
Target Compounds						Qvalue
28) Benzaldehyde	5.692	105	27335	2.726	ug/ml	98
29) Acetophenone	6.786	105	58796	2.862	ug/ml#	81
30) m-Toluidine	6.886	106	44327	2.777	ug/ml	96
31) 2-Chloroaniline	7.292	127	48104	2.796	ug/ml#	92
55) a-Terpineol	7.792	59	31750	2.777	ug/ml#	78
56) 3-Chloroaniline	7.804	65	17277	2.901	ug/ml	82
57) 2,6-Dichlorophenol	7.828	162	31233	2.852	ug/ml#	87
58) 1-chloro-2-nitrobenzene	8.098	111	13654	2.631	ug/ml#	1
59) Caprolactam	8.128	55	16002	2.756	ug/ml#	64
60) 1,2,4,5-Tetrachloroben...	8.627	216	37844	2.747	ug/ml	98
61) Biphenyl	8.927	154	94300	2.783	ug/ml	98
83) Dichloran	10.604	206	7164	3.018	ug/ml	86
84) Pentachloronitrobenzene	10.757	237	9045	2.670	ug/ml#	84
98) Diphenamid	11.816	167	61174	2.799	ug/ml	85

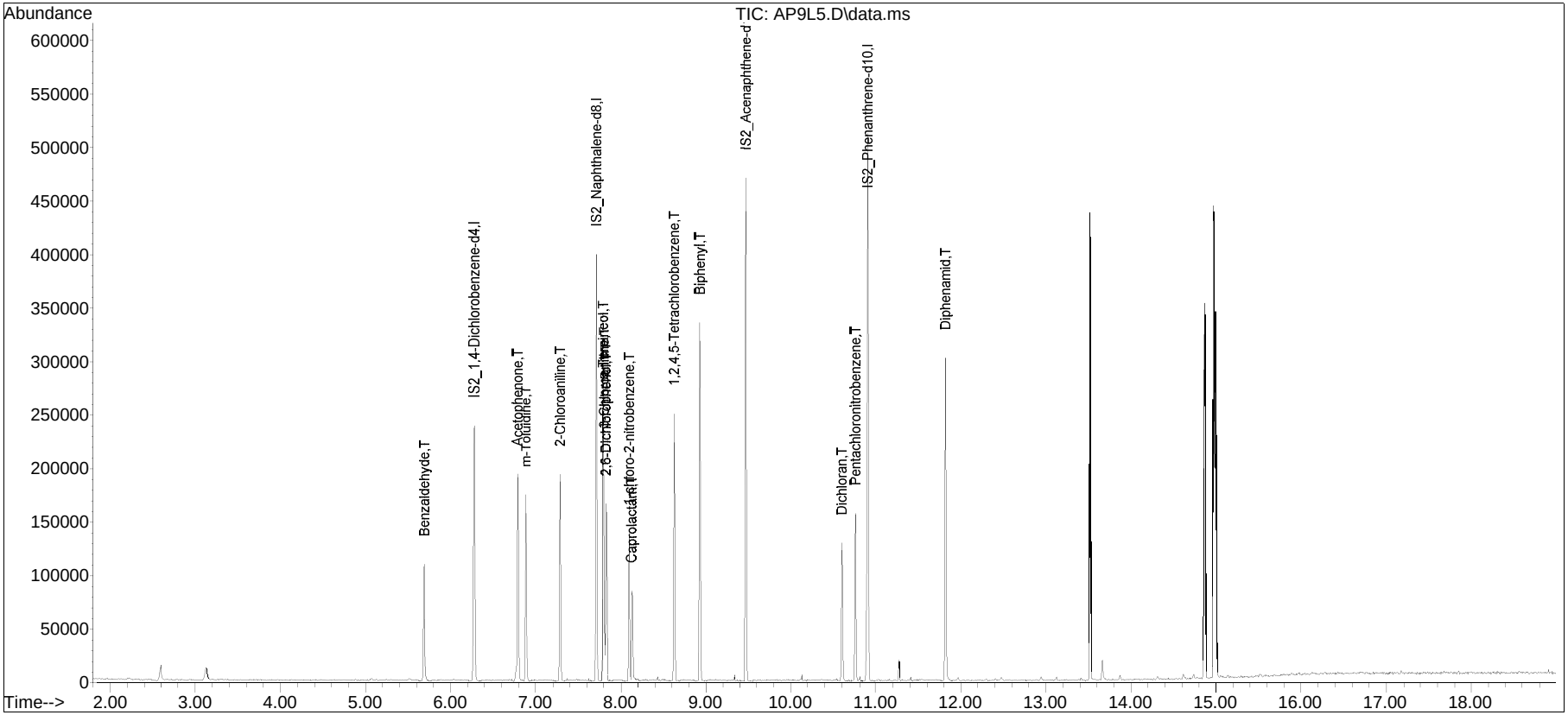
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L5.D
Acq On : 2 Sep 2023 6:09 pm
Operator : SV106:ljg
Sample : IL6,32,,AP9L3 Lot# 10084
Misc : WG1823680,,ical
ALS Vial : 16 Sample Multiplier: 1

Quant Time: Sep 05 11:18:20 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:18:12 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistiical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: AP9L5.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 6:09 pm	Instrument	: SV 106
Sample	: IL6,32,,AP9L3 Lot# 10084	Quant Date	: 9/5/2023 11:18 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L4.D
Acq On : 2 Sep 2023 6:32 pm
Operator : SV106:ljg
Sample : IL7,32,,AP9L2 Lot# 10085
Misc : WG1823680,,ical
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 05 11:18:10 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:18:02 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
27) IS2_1,4-Dichlorobenzen...	6.281	152	44171	4.000	ug/ml	0.00
Standard Area 1 = 44570			Recovery = 99.10%			
54) IS2_Naphthalene-d8	7.716	136	164873	4.000	ug/ml	# 0.00
Standard Area 1 = 169751			Recovery = 97.13%			
82) IS2_Acenaphthene-d10	9.475	164	90708	4.000	ug/ml	0.00
Standard Area 1 = 90319			Recovery = 100.43%			
97) IS2_Phenanthrene-d10	10.904	188	180073	4.000	ug/ml	# 0.00
Standard Area 1 = 182619			Recovery = 98.61%			
System Monitoring Compounds						
Target Compounds						Qvalue
28) Benzaldehyde	5.693	105	20272	1.677	ug/ml	96
29) Acetophenone	6.787	105	40328	1.831	ug/ml#	81
30) m-Toluidine	6.887	106	31837	1.860	ug/ml	96
31) 2-Chloroaniline	7.292	127	33601	1.822	ug/ml	94
55) a-Terpineol	7.792	59	21980	1.847	ug/ml#	76
56) 3-Chloroaniline	7.804	65	11981	1.933	ug/ml	85
57) 2,6-Dichlorophenol	7.828	162	20969	1.839	ug/ml	91
58) 1-chloro-2-nitrobenzene	8.098	111	9531	1.764	ug/ml#	1
59) Caprolactam	8.128	55	10668	1.765	ug/ml#	65
60) 1,2,4,5-Tetrachloroben...	8.628	216	27496	1.917	ug/ml	99
61) Biphenyl	8.928	154	65768	1.864	ug/ml	97
83) Dichloran	10.604	206	4819	2.280	ug/ml	91
84) Pentachloronitrobenzene	10.757	237	5491	1.663	ug/ml#	83
98) Diphenamid	11.816	167	42653	1.865	ug/ml	85

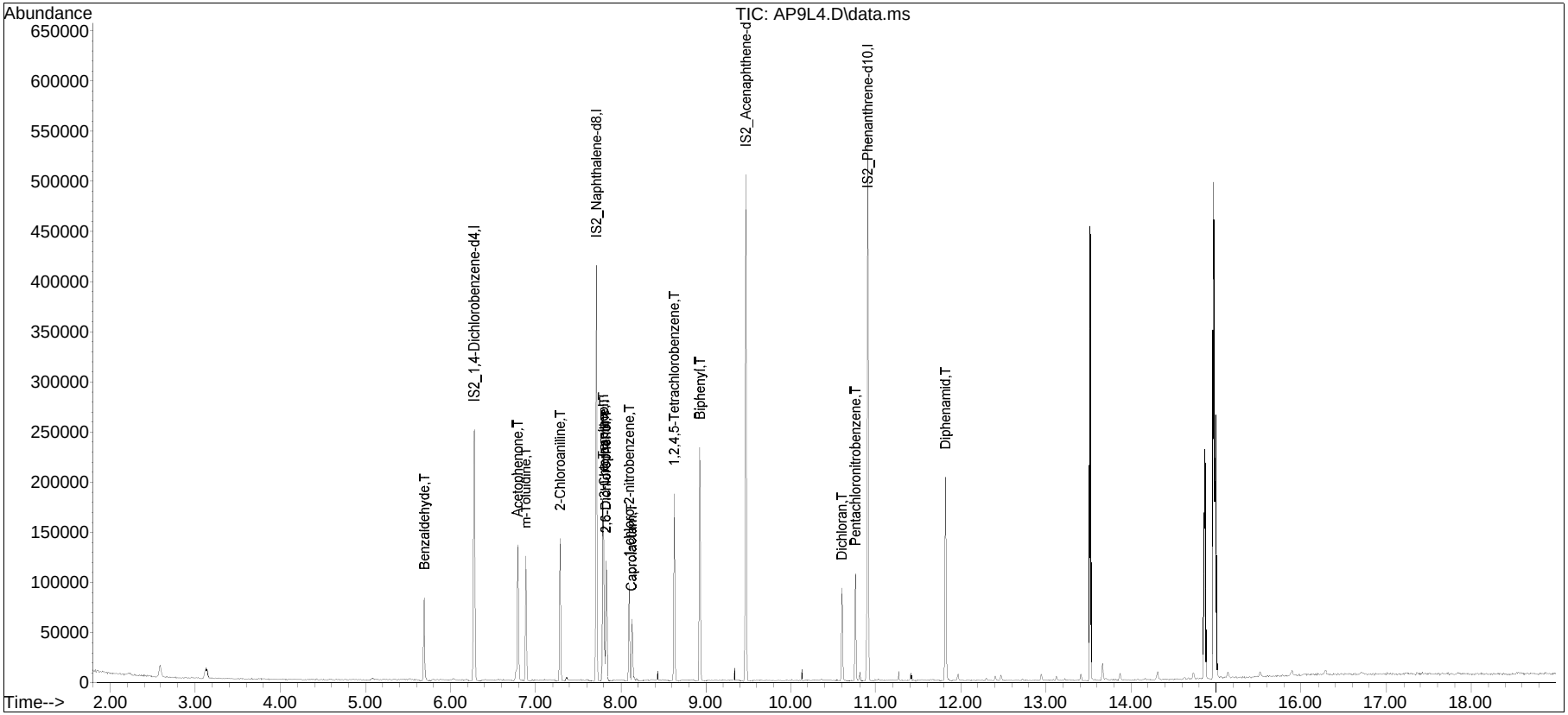
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L4.D
Acq On : 2 Sep 2023 6:32 pm
Operator : SV106:ljg
Sample : IL7,32,,AP9L2 Lot# 10085
Misc : WG1823680,,ical
ALS Vial : 17 Sample Multiplier: 1

Quant Time: Sep 05 11:18:10 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:18:02 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistiical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: AP9L4.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 6:32 pm	Instrument	: SV 106
Sample	: IL7,32,,AP9L2 Lot# 10085	Quant Date	: 9/5/2023 11:18 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L3.D
Acq On : 2 Sep 2023 6:56 pm
Operator : SV106:ljg
Sample : IL8,32,,AP9L1 Lot# 10086
Misc : WG1823680,,ical
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 05 11:18:00 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:17:52 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
27) IS2_1,4-Dichlorobenzen...	6.281	152	42889	4.000	ug/ml	0.00
Standard Area 1 = 44570			Recovery =	96.23%		
54) IS2_Naphthalene-d8	7.716	136	159944	4.000	ug/ml	0.00
Standard Area 1 = 169751			Recovery =	94.22%		
82) IS2_Acenaphthene-d10	9.475	164	87457	4.000	ug/ml	0.00
Standard Area 1 = 90319			Recovery =	96.83%		
97) IS2_Phenanthrene-d10	10.904	188	177883	4.000	ug/ml	0.00
Standard Area 1 = 182619			Recovery =	97.41%		
System Monitoring Compounds						
Target Compounds						Qvalue
28) Benzaldehyde	5.692	105	11486	0.696	ug/ml	92
29) Acetophenone	6.786	105	20985	0.981	ug/ml#	79
30) m-Toluidine	6.886	106	15994	0.962	ug/ml	95
31) 2-Chloroaniline	7.292	127	18188	1.015	ug/ml#	92
55) a-Terpineol	7.792	59	10937	0.947	ug/ml#	72
56) 3-Chloroaniline	7.804	65	6126	1.019	ug/ml	87
57) 2,6-Dichlorophenol	7.833	162	9769	0.883	ug/ml	89
58) 1-chloro-2-nitrobenzene	8.098	111	5106	0.974	ug/ml#	1
59) Caprolactam	8.133	55	5276	0.900	ug/ml#	75
60) 1,2,4,5-Tetrachloroben...	8.627	216	13460	0.968	ug/ml	95
61) Biphenyl	8.927	154	33563	0.981	ug/ml	99
83) Dichloran	10.604	206	2435	1.670	ug/ml	83
84) Pentachloronitrobenzene	10.757	237	2768	1.018	ug/ml	93
98) Diphenamid	11.816	167	20195	0.894	ug/ml	85

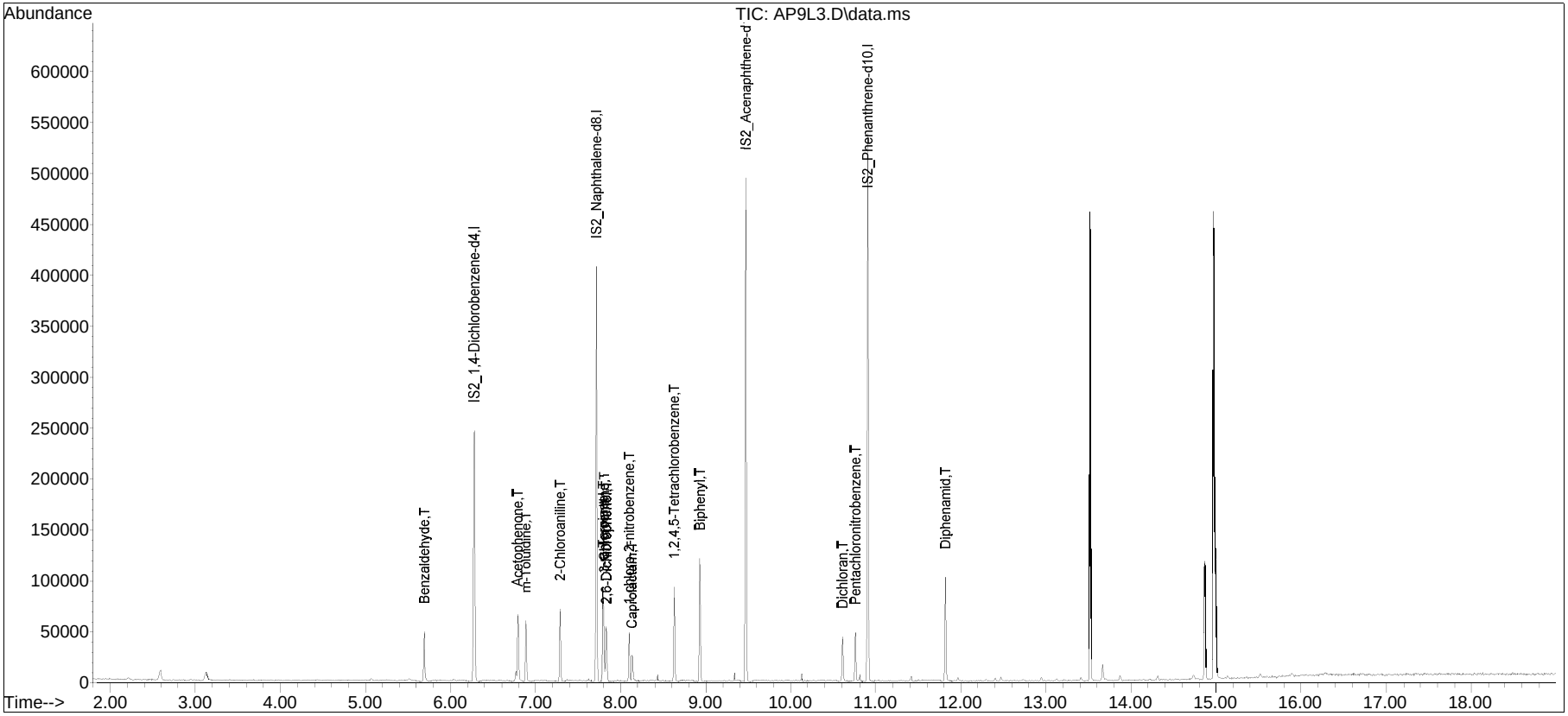
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L3.D
Acq On : 2 Sep 2023 6:56 pm
Operator : SV106:ljg
Sample : IL8,32,,AP9L1 Lot# 10086
Misc : WG1823680,,ical
ALS Vial : 18 Sample Multiplier: 1

Quant Time: Sep 05 11:18:00 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:17:52 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistiical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: AP9L3.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 6:56 pm	Instrument	: SV 106
Sample	: IL8,32,,AP9L1 Lot# 10086	Quant Date	: 9/5/2023 11:17 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L2.D
Acq On : 2 Sep 2023 7:20 pm
Operator : SV106:ljg
Sample : IL9,32,,AP9L0.4 Lot# 10087
Misc : WG1823680,,ical
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 05 11:17:50 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:17:42 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
27) IS2_1,4-Dichlorobenzen...	6.281	152	46458	4.000 ug/ml	0.00
Standard Area 1 = 44570			Recovery =	104.24%	
54) IS2_Naphthalene-d8	7.716	136	173297	4.000 ug/ml	0.00
Standard Area 1 = 169751			Recovery =	102.09%	
82) IS2_Acenaphthene-d10	9.475	164	94227	4.000 ug/ml	0.00
Standard Area 1 = 90319			Recovery =	104.33%	
97) IS2_Phenanthrene-d10	10.904	188	187803	4.000 ug/ml	# 0.00
Standard Area 1 = 182619			Recovery =	102.84%	
System Monitoring Compounds					
Target Compounds					Qvalue
28) Benzaldehyde	5.693	105	4843	Below Cal	97
29) Acetophenone	6.793	105	8920	0.385 ug/ml#	88
30) m-Toluidine	6.887	106	5638	0.313 ug/ml#	91
31) 2-Chloroaniline	7.293	127	6893	0.355 ug/ml	95
55) a-Terpineol	7.793	59	4789	0.383 ug/ml#	71
56) 3-Chloroaniline	7.804	65	2472	0.379 ug/ml	87
57) 2,6-Dichlorophenol	7.834	162	4310	0.360 ug/ml	91
58) 1-chloro-2-nitrobenzene	8.098	111	2094	0.369 ug/ml#	1
59) Caprolactam	8.134	55	2420	0.381 ug/ml#	89
60) 1,2,4,5-Tetrachloroben...	8.628	216	6404	0.425 ug/ml#	97
61) Biphenyl	8.928	154	14877	0.401 ug/ml	99
83) Dichloran	10.604	206	866	1.220 ug/ml	88
84) Pentachloronitrobenzene	10.751	237	1326	0.626 ug/ml#	76
98) Diphenamid	11.816	167	8310	0.348 ug/ml	86

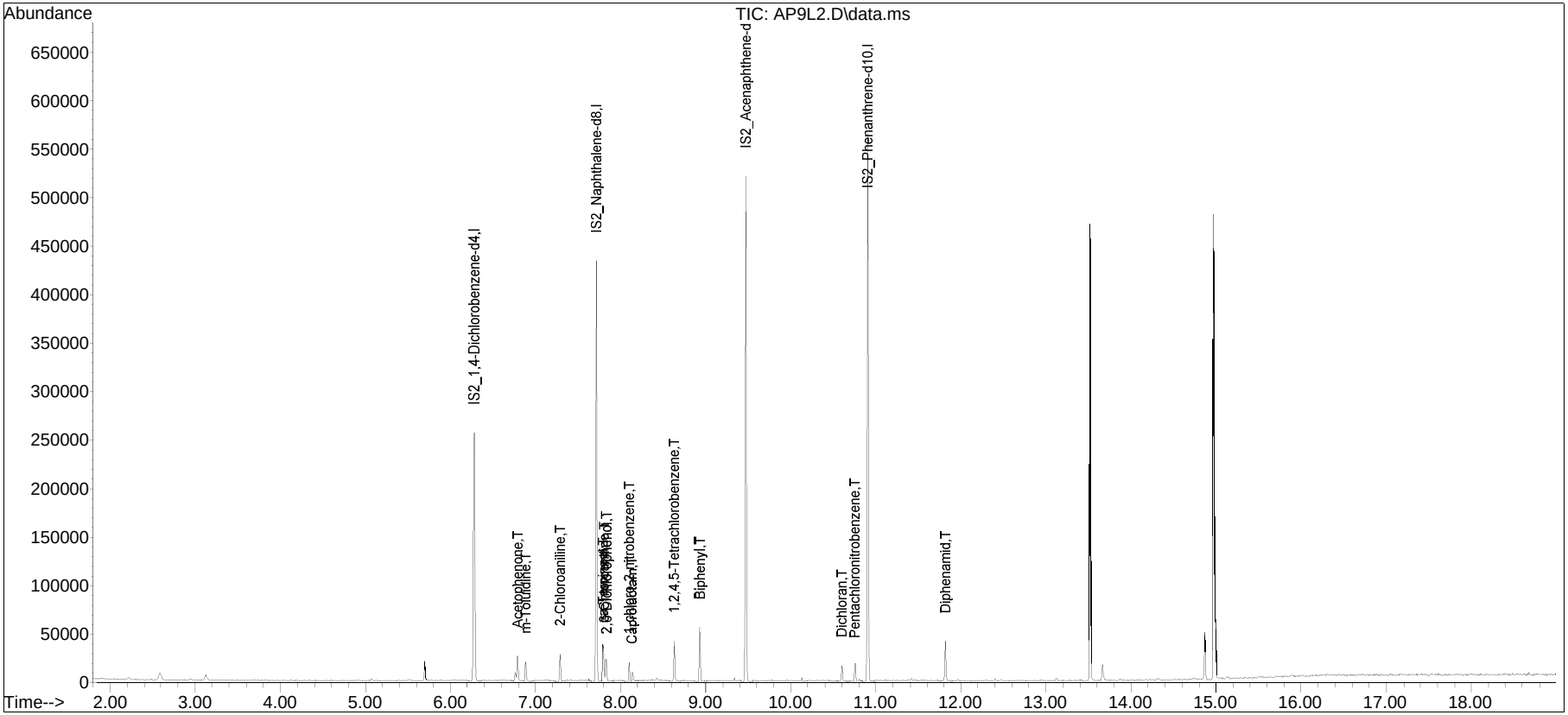
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L2.D
Acq On : 2 Sep 2023 7:20 pm
Operator : SV106:ljg
Sample : IL9,32,,AP9L0.4 Lot# 10087
Misc : WG1823680,,ical
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 05 11:17:50 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:17:42 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistiical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: AP9L2.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 7:20 pm	Instrument	: SV 106
Sample	: IL9,32,,AP9L0.4 Lot# 10087	Quant Date	: 9/5/2023 11:17 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L1.D
Acq On : 2 Sep 2023 7:43 pm
Operator : SV106:ljg
Sample : IL10,32,,AP9L0.2 Lot# 10088
Misc : WG1823680,,ical
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 05 11:17:27 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:17:20 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
27) IS2_1,4-Dichlorobenzen...	6.281	152	44285	4.000 ug/ml	0.00
Standard Area 1 = 44570			Recovery = 99.36%		
54) IS2_Naphthalene-d8	7.716	136	171660	4.000 ug/ml	# 0.00
Standard Area 1 = 169751			Recovery = 101.12%		
82) IS2_Acenaphthene-d10	9.474	164	96872	4.000 ug/ml	0.00
Standard Area 1 = 90319			Recovery = 107.26%		
97) IS2_Phenanthrene-d10	10.904	188	185184	4.000 ug/ml	# 0.00
Standard Area 1 = 182619			Recovery = 101.40%		
System Monitoring Compounds					
Target Compounds					Qvalue
28) Benzaldehyde	5.698	105	2451	Below Cal	90
29) Acetophenone	6.792	105	4984	0.226 ug/ml#	75
30) m-Toluidine	6.892	106	1613	0.094 ug/ml#	93
31) 2-Chloroaniline	7.292	127	4182	0.226 ug/ml#	91
55) a-Terpineol	7.792	59	2805	0.226 ug/ml#	82
56) 3-Chloroaniline	7.804	65	1291	0.200 ug/ml	96
57) 2,6-Dichlorophenol	7.827	162	2305	0.194 ug/ml#	89
58) 1-chloro-2-nitrobenzene	8.098	111	1074	0.191 ug/ml#	1
59) Caprolactam	8.145	55	1044	0.166 ug/ml#	43
60) 1,2,4,5-Tetrachloroben...	8.627	216	3284	0.220 ug/ml#	92
61) Biphenyl	8.933	154	8165	0.222 ug/ml	94
83) Dichloran	10.604	206	610	1.150 ug/ml#	76
84) Pentachloronitrobenzene	10.757	237	661	0.464 ug/ml#	7
98) Diphenamid	11.815	167	4345	0.185 ug/ml	91

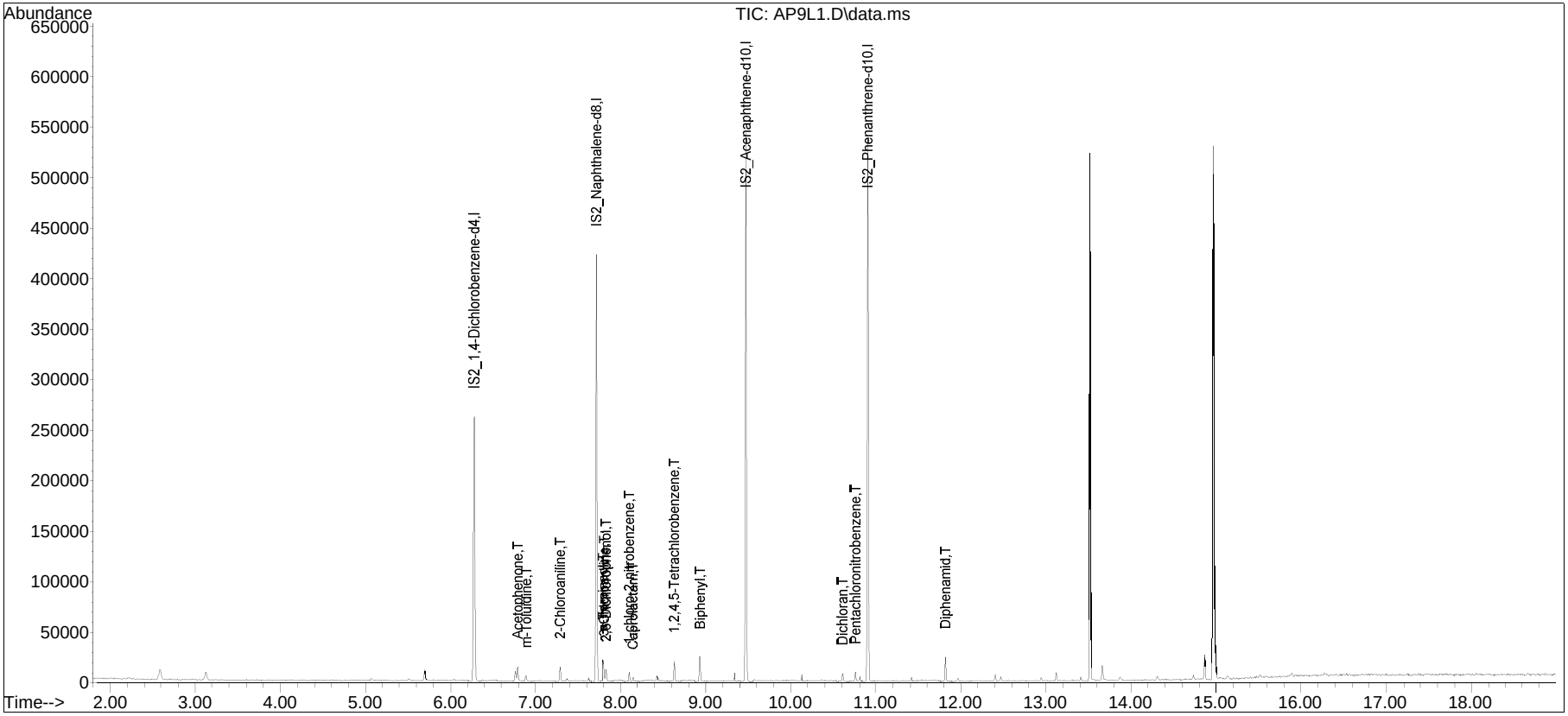
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9L1.D
Acq On : 2 Sep 2023 7:43 pm
Operator : SV106:ljg
Sample : IL10,32,,AP9L0.2 Lot# 10088
Misc : WG1823680,,ical
ALS Vial : 20 Sample Multiplier: 1

Quant Time: Sep 05 11:17:27 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:17:20 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistiical\AP9L6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: AP9L1.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 7:43 pm	Instrument	: SV 106
Sample	: IL10,32,,AP9L0.2 Lot# 1008	Quant Date	: 9/5/2023 11:17 am

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNICV.D
Acq On : 2 Sep 2023 8:07 pm
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10210
Misc : WG1823680,,ical
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 05 11:13:51 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:13:45 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	IS1_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	109	0.00
2	t	n-Nitrosodimethylamine		0.677	0.686	-1.3	120	0.00
3	t	Pyridine		1.151	1.016	11.7	104	-0.01
4	S	2-Fluorophenol		1.116	1.138	-2.0	125	0.00
5	T	Aniline		1.893	1.792	5.3	114	0.00
6	t	2-Chlorophenol		1.274	1.237	2.9	114	0.00
7	S	Phenol-d6		1.437	1.418	1.3	116	0.00
8	T	Phenol		1.521	1.471	3.3	117	0.00
9	T	Bis(2-chloroethyl)ether		1.222	1.168	4.4	114	0.00
10	T	1,3-Dichlorobenzene		1.461	1.465	-0.3	119	0.00
11	T	1,4-Dichlorobenzene		1.503	1.510	-0.5	122	0.00
12	T	1,2-Dichlorobenzene		1.431	1.405	1.8	119	0.00
13	t	Benzyl alcohol		1.074	1.043	2.9	115	0.00
14	T	Bis(2-chloroisopropyl)ether		1.800	1.721	4.4	114	0.00
15	T	2-Methylphenol		1.138	1.098	3.5	118	0.00
16	T	Hexachloroethane		0.586	0.563	3.9	115	0.00
17	T	n-Nitrosodi-n-propylamine		0.923	0.896	2.9	117	0.00
18	T	3-Methylphenol/4-Methylphen		1.193	1.158	2.9	116	0.00
19	S	Nitrobenzene-d5		1.303	1.150	11.7	108	0.00
20	T	Nitrobenzene		1.295	1.223	5.6	112	0.00
21	T	Isophorone		2.478	2.372	4.3	116	0.00
22	T	2-Nitrophenol		0.518	0.470	9.3	110	0.00
23	T	2,4-Dimethylphenol		1.281	1.287	-0.5	117	0.00
24	T	Bis(2-chloroethoxy)methane		1.552	1.543	0.6	119	0.00
25	T	2,4-Dichlorophenol		1.076	1.060	1.5	114	0.00
26	T	1,2,4-Trichlorobenzene		1.235	1.233	0.2	122	0.00
34	I	IS1_Naphthalene-d8		1.000	1.000	0.0	106	0.00
35	T	Naphthalene		1.008	1.003	0.5	119	0.00
36	T	Benzoic Acid	*	5.000	4.512	9.8	105	0.00
37	T	4-Chloroaniline		0.132	0.132	0.0	117	0.00
38	T	Hexachlorobutadiene		0.206	0.202	1.9	119	0.00
39	T	p-Chloro-m-cresol		0.291	0.287	1.4	113	0.00
40	T	2-Methylnaphthalene		0.642	0.654	-1.9	121	0.00
41	T	1-Methylnaphthalene		0.241	0.243	-0.8	118	0.00
42	T	Hexachlorocyclopentadiene		0.219	0.219	0.0	119	0.00
43	T	2,4,6-Trichlorophenol		0.209	0.204	2.4	118	0.00
44	T	2,4,5-Trichlorophenol		0.224	0.225	-0.4	122	0.00
45	S	2-Fluorobiphenyl		0.764	0.759	0.7	119	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNICV.D
Acq On : 2 Sep 2023 8:07 pm
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10210
Misc : WG1823680,,ical
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 05 11:13:51 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:13:45 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
46	T	2-Chloronaphthalene		0.669	0.664	0.7	118	0.00
47	T	2-Nitroaniline	*	5.000	4.450	11.0	110	0.00
48	T	1,4-Dinitrobenzene	*	5.000	4.315	13.7	111	0.00
49	T	1,3-Dinitrobenzene	*	5.000	4.536	9.3	110	0.00
50	T	Dimethyl phthalate		0.787	0.763	3.0	114	0.00
51	T	Acenaphthylene		1.077	1.084	-0.6	121	0.00
52	T	2,6-Dinitrotoluene	*	5.000	4.585	8.3	116	0.00
53	T	1,2-Dinitrobenzene		0.063	0.057	9.5	108	0.00
62	I	IS1_Acenaphthene-d10		1.000	1.000	0.0	107	0.00
63	T	3-Nitroaniline		0.286	0.285	0.3	117	0.00
64	T	Acenaphthene		1.131	1.054	6.8	113	0.00
65	T	2,4-Dinitrophenol	*	5.000	4.123	17.5	96	0.00
66	T	Dibenzofuran		1.690	1.661	1.7	118	0.00
67	T	2,4-Dinitrotoluene	*	5.000	4.548	9.0	115	0.00
68	T	4-Nitrophenol	*	5.000	4.502	10.0	115	0.00
69	T	2,3,5,6-Tetrachlorophenol		0.325	0.312	4.0	113	0.00
70	T	2,3,4,6-Tetrachlorophenol		0.337	0.315	6.5	110	0.00
71	T	Diethyl phthalate		1.415	1.404	0.8	116	0.00
72	T	Fluorene		1.336	1.290	3.4	115	0.00
73	T	4-Chlorophenyl phenyl ether		0.637	0.611	4.1	116	0.00
74	T	4-Nitroaniline		0.289	0.275	4.8	107	0.00
75	T	4,6-Dinitro-o-cresol	*	5.000	4.436	11.3	116	0.00
76	T	NDPA/DPA		1.124	1.096	2.5	114	0.00
77	T	Azobenzene		1.319	1.346	-2.0	121	0.00
78	S	2,4,6-Tribromophenol		0.184	0.186	-1.1	117	0.00
79	T	4-Bromophenyl phenyl ether		0.371	0.373	-0.5	121	0.00
80	T	Hexachlorobenzene		0.432	0.409	5.3	117	0.00
81	T	Pentachlorophenol	*	5.000	4.617	7.7	117	0.00
87	I	IS1_Phenanthrene-d10		1.000	1.000	0.0	110	0.00
88	T	Phenanthrene		1.089	1.012	7.1	114	0.00
89	T	Anthracene		1.084	1.035	4.5	116	0.00
90	T	Carbazole		0.991	0.958	3.3	115	0.00
91	T	Di-n-butylphthalate		1.269	1.180	7.0	112	0.00
92	T	Fluoranthene		1.165	1.095	6.0	115	0.00
93	T	Benzidine		0.770	0.774	-0.5	121	0.00
94	T	Pyrene		1.233	1.186	3.8	118	0.00
95	S	4-Terphenyl-d14		0.877	0.879	-0.2	122	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNICV.D
Acq On : 2 Sep 2023 8:07 pm
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10210
Misc : WG1823680,,ical
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 05 11:13:51 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:13:45 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96	T	Butyl benzyl phthalate	0.541	0.476	12.0	106	0.00
103	I	IS1_Chrysene-d12	1.000	1.000	0.0	109	0.00
104	T	Benzo(a)anthracene	1.326	1.261	4.9	115	0.00
105	T	3,3'-Dichlorobenzidine	0.472	0.464	1.7	115	0.00
106	T	Chrysene	1.231	1.198	2.7	119	0.00
107	T	Bis(2-ethylhexyl)phthalate	0.889	0.854	3.9	112	0.00
108	T	Di-n-octylphthalate	1.499	1.450	3.3	112	0.00
109	T	Benzo(b)fluoranthene	1.266	1.192	5.8	115	0.00
110	T	Benzo(k)fluoranthene	1.214	1.192	1.8	112	0.00
111	T	Benzo(a)pyrene	1.083	1.132	-4.5	124	0.00
112	I	IS1_Perylene-d12	1.000	1.000	0.0	107	0.00
113	T	Indeno(1,2,3-cd)pyrene	0.935	0.923	1.3	119	0.00
114	T	Dibenzo(a,h)anthracene	0.999	0.980	1.9	114	0.00
115	T	Benzo(ghi)perylene	0.991	0.963	2.8	114	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNICV.D
Acq On : 2 Sep 2023 8:07 pm
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10210
Misc : WG1823680,,ical
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 05 11:13:51 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:13:45 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
Internal Standards					
1) IS1_1,4-Dichlorobenzen...	6.281	152	46988	4.000 ug/ml	0.00
Standard Area 1 = 43113			Recovery = 108.99%		
34) IS1_Naphthalene-d8	7.716	136	177178	4.000 ug/ml	0.00
Standard Area 1 = 167432			Recovery = 105.82%		
62) IS1_Acenaphthene-d10	9.475	164	100060	4.000 ug/ml	0.00
Standard Area 1 = 93119			Recovery = 107.45%		
87) IS1_Phenanthrene-d10	10.904	188	197265	4.000 ug/ml	# 0.00
Standard Area 1 = 179535			Recovery = 109.88%		
103) IS1_Chrysene-d12	13.515	240	179289	4.000 ug/ml	0.00
Standard Area 1 = 164850			Recovery = 108.76%		
112) IS1_Perylene-d12	14.968	264	196553	4.000 ug/ml	0.00
Standard Area 1 = 183060			Recovery = 107.37%		
System Monitoring Compounds					
4) 2-Fluorophenol	4.245	112	66842	5.101 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 102.02%		
7) Phenol-d6	5.910	99	83259	4.932 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 98.64%		
19) Nitrobenzene-d5	6.945	82	67573	4.415 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 176.60%#		
45) 2-Fluorobiphenyl	8.839	172	168148	4.972 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 198.88%#		
78) 2,4,6-Tribromophenol	10.239	330	23209	5.055 ug/ml	0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 101.10%		
95) 4-Terphenyl-d14	12.486	244	216638	5.007 ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 200.28%#		
Target Compounds					Qvalue
2) n-Nitrosodimethylamine	1.928	74	40295	5.065 ug/ml#	68
3) Pyridine	1.957	79	59684	4.416 ug/ml#	64
5) Aniline	5.863	93	105271	4.734 ug/ml	97
6) 2-Chlorophenol	6.010	128	72678	4.856 ug/ml	92
8) Phenol	5.928	94	86378	4.835 ug/ml	96
9) Bis(2-chloroethyl)ether	6.004	93	68605	4.780 ug/ml#	82
10) 1,3-Dichlorobenzene	6.198	146	86058	5.015 ug/ml	99
11) 1,4-Dichlorobenzene	6.298	146	88690	5.023 ug/ml	97
12) 1,2-Dichlorobenzene	6.481	146	82512	4.908 ug/ml	99
13) Benzyl alcohol	6.498	79	61266	4.858 ug/ml	97
14) Bis(2-chloroisopropyl)...	6.681	45	101104	4.783 ug/ml#	48

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNICV.D
Acq On : 2 Sep 2023 8:07 pm
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10210
Misc : WG1823680,,ical
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 05 11:13:51 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:13:45 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2-Methylphenol	6.675	108	64492	4.826	ug/ml	99
16) Hexachloroethane	6.875	117	33051	4.802	ug/ml#	76
17) n-Nitrosodi-n-propylamine	6.822	70	52624	4.852	ug/ml	94
18) 3-Methylphenol/4-Methy...	6.863	108	68011	4.851	ug/ml	99
20) Nitrobenzene	6.963	77	71851	4.724	ug/ml	96
21) Isophorone	7.251	82	139339	4.787	ug/ml	95
22) 2-Nitrophenol	7.328	139	27634	4.543	ug/ml#	93
23) 2,4-Dimethylphenol	7.433	107	75608	5.025	ug/ml	95
24) Bis(2-chloroethoxy)met...	7.528	93	90611	4.969	ug/ml	98
25) 2,4-Dichlorophenol	7.592	162	62268	4.928	ug/ml	97
26) 1,2,4-Trichlorobenzene	7.669	180	72447	4.994	ug/ml	99
35) Naphthalene	7.733	128	222032	4.971	ug/ml	99
36) Benzoic Acid	7.522	105	35323	4.512	ug/ml	96
37) 4-Chloroaniline	7.822	65	29251	5.002	ug/ml	90
38) Hexachlorobutadiene	7.910	225	44756	4.914	ug/ml	99
39) p-Chloro-m-cresol	8.357	107	63643	4.929	ug/ml	94
40) 2-Methylnaphthalene	8.457	142	144820	5.093	ug/ml	95
41) 1-Methylnaphthalene	8.551	115	53738	5.039	ug/ml	81
42) Hexachlorocyclopentadiene	8.633	237	48573	5.001	ug/ml	99
43) 2,4,6-Trichlorophenol	8.751	196	45102	4.882	ug/ml	99
44) 2,4,5-Trichlorophenol	8.780	196	49849	5.016	ug/ml	94
46) 2-Chloronaphthalene	8.933	162	147157	4.965	ug/ml	100
47) 2-Nitroaniline	9.045	138	36042	4.450	ug/ml	92
48) 1,4-Dinitrobenzene	9.180	168	14246	4.315	ug/ml	93
49) 1,3-Dinitrobenzene	9.257	168	17604	4.536	ug/ml#	1
50) Dimethyl phthalate	9.257	163	169013	4.846	ug/ml#	99
51) Acenaphthylene	9.333	152	240120	5.034	ug/ml	100
52) 2,6-Dinitrotoluene	9.298	165	30463	4.585	ug/ml#	84
53) 1,2-Dinitrobenzene	9.333	168	12690	4.522	ug/ml#	1
63) 3-Nitroaniline	9.451	138	35610	4.975	ug/ml	100
64) Acenaphthene	9.504	154	131783	4.660	ug/ml	93
65) 2,4-Dinitrophenol	9.551	184	12153	4.123	ug/ml	95
66) Dibenzofuran	9.675	168	207762	4.914	ug/ml	100
67) 2,4-Dinitrotoluene	9.680	165	40776	4.548	ug/ml	96
68) 4-Nitrophenol	9.639	65	30240	4.502	ug/ml#	86
69) 2,3,5,6-Tetrachlorophenol	9.769	232	39034	4.802	ug/ml	98
70) 2,3,4,6-Tetrachlorophenol	9.810	232	39370	4.667	ug/ml	94
71) Diethyl phthalate	9.951	149	175591	4.961	ug/ml	99
72) Fluorene	10.010	166	161349	4.830	ug/ml	93
73) 4-Chlorophenyl phenyl ...	10.033	204	76376	4.791	ug/ml	97

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNICV.D
Acq On : 2 Sep 2023 8:07 pm
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10210
Misc : WG1823680,,ical
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 05 11:13:51 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:13:45 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ABNL6.D
Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
74)	4-Nitroaniline	10.033	138	34455	4.769	ug/ml	#	85
75)	4,6-Dinitro-o-cresol	10.075	198	17576	4.436	ug/ml	#	74
76)	NDPA/DPA	10.145	169	137047	4.876	ug/ml		95
77)	Azobenzene	10.180	77	168401	5.103	ug/ml		98
79)	4-Bromophenyl phenyl e...	10.498	248	46603	5.023	ug/ml		89
80)	Hexachlorobenzene	10.545	284	51213	4.742	ug/ml		90
81)	Pentachlorophenol	10.739	266	29323	4.617	ug/ml		98
88)	Phenanthrene	10.927	178	249661	4.647	ug/ml		100
89)	Anthracene	10.974	178	255236	4.773	ug/ml		99
90)	Carbazole	11.145	167	236335	4.837	ug/ml		99
91)	Di-n-butylphthalate	11.545	149	290986	4.650	ug/ml		99
92)	Fluoranthene	12.074	202	270091	4.703	ug/ml	#	92
93)	Benzidine	12.233	184	190778	5.027	ug/ml	#	95
94)	Pyrene	12.286	202	292413	4.809	ug/ml		98
96)	Butyl benzyl phthalate	13.010	149	117354	4.395	ug/ml		93
104)	Benzo(a)anthracene	13.510	228	282690	4.758	ug/ml		100
105)	3,3'-Dichlorobenzidine	13.515	252	103983	4.918	ug/ml	#	98
106)	Chrysene	13.545	228	268550	4.869	ug/ml		100
107)	Bis(2-ethylhexyl)phtha...	13.645	149	191400	4.805	ug/ml	#	92
108)	Di-n-octylphthalate	14.315	149	325055	4.837	ug/ml	#	73
109)	Benzo(b)fluoranthene	14.604	252	267047	4.705	ug/ml	#	95
110)	Benzo(k)fluoranthene	14.627	252	267153	4.910	ug/ml	#	94
111)	Benzo(a)pyrene	14.909	252	253755	5.226	ug/ml	#	94
113)	Indeno(1,2,3-cd)pyrene	15.927	276	226891M6	4.941	ug/mL		
114)	Dibenzo(a,h)anthracene	15.951	278	240753	4.902	ug/ml	#	91
115)	Benzo(ghi)perylene	16.156	276	236559	4.856	ug/ml	#	88

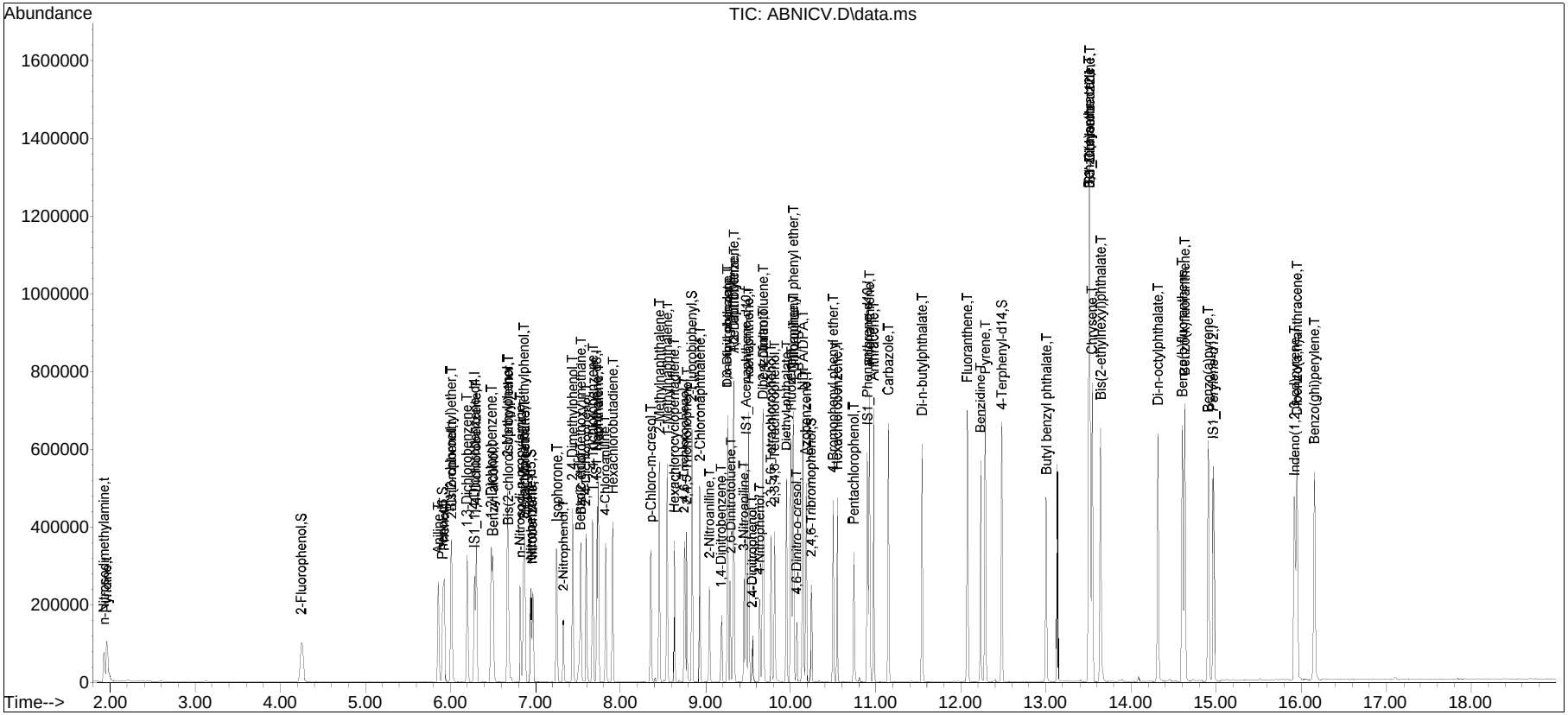
(#) = qualifier out of range (m) = manual integration (+) = signals summed

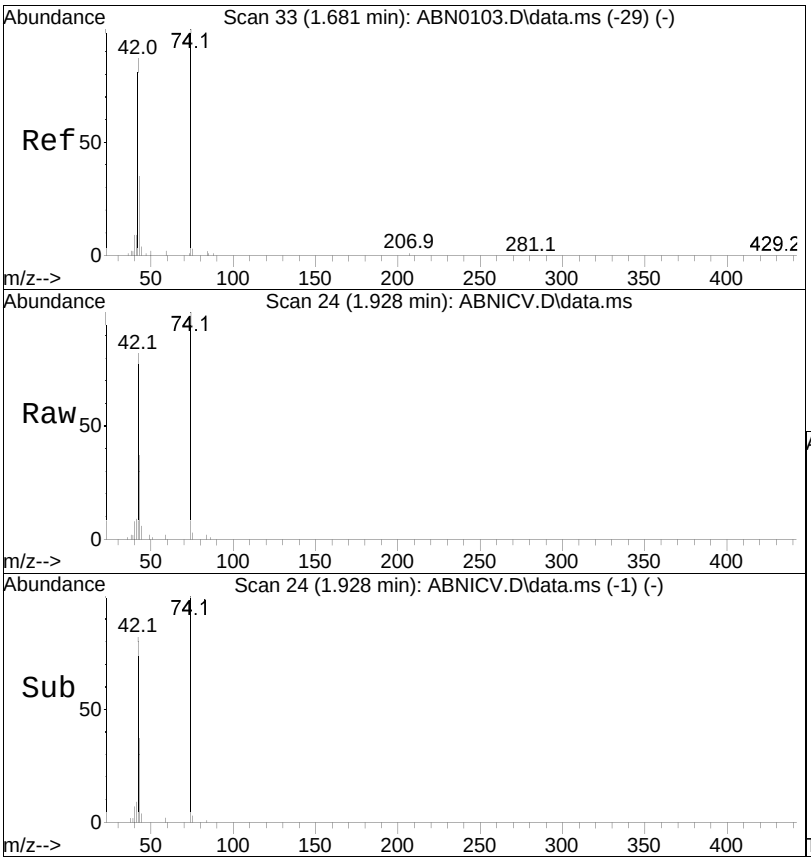
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ABNICV.D
Acq On : 2 Sep 2023 8:07 pm
Operator : SV106:ljg
Sample : CQICV1,32,,ABNICV Lot# 10210
Misc : WG1823680,,ical
ALS Vial : 21 Sample Multiplier: 1

Quant Time: Sep 05 11:13:51 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:13:45 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublistiical\ABNL6.D•

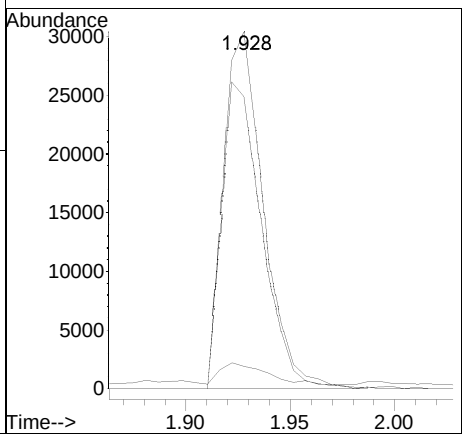


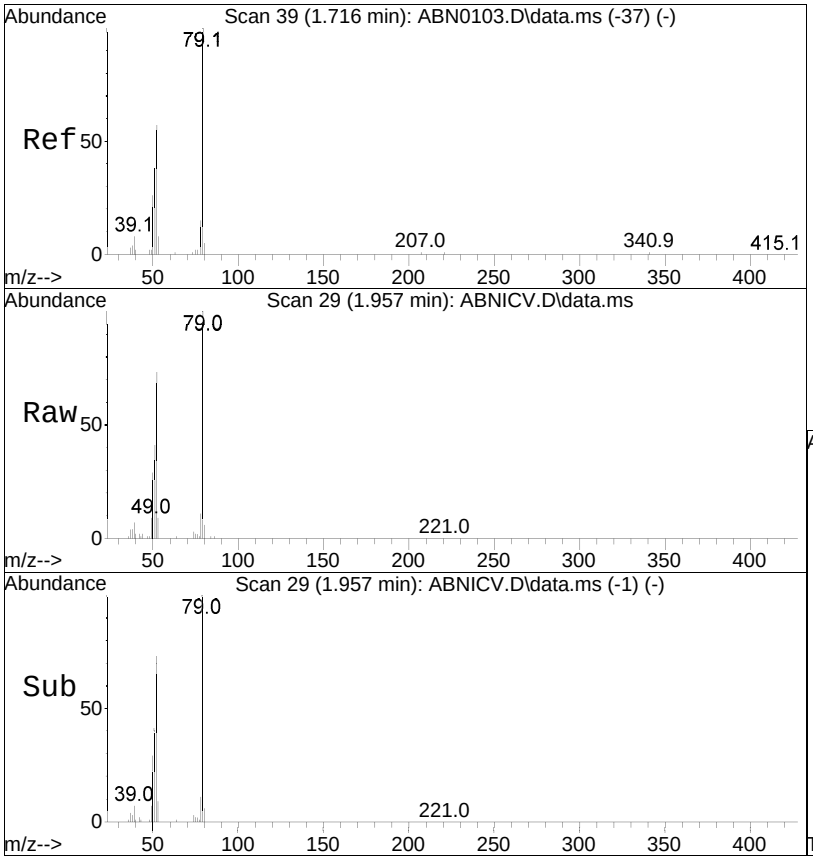


#2
n-Nitrosodimethylamine
Concen: 5.06 ug/ml
RT: 1.928 min Scan# 24
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 74 Resp: 40295

Ion	Ratio	Lower	Upper
74	100		
42	85.9	100.0	150.0#
44	7.0	6.7	10.1

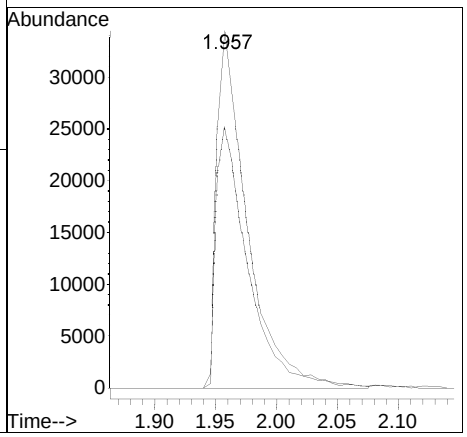


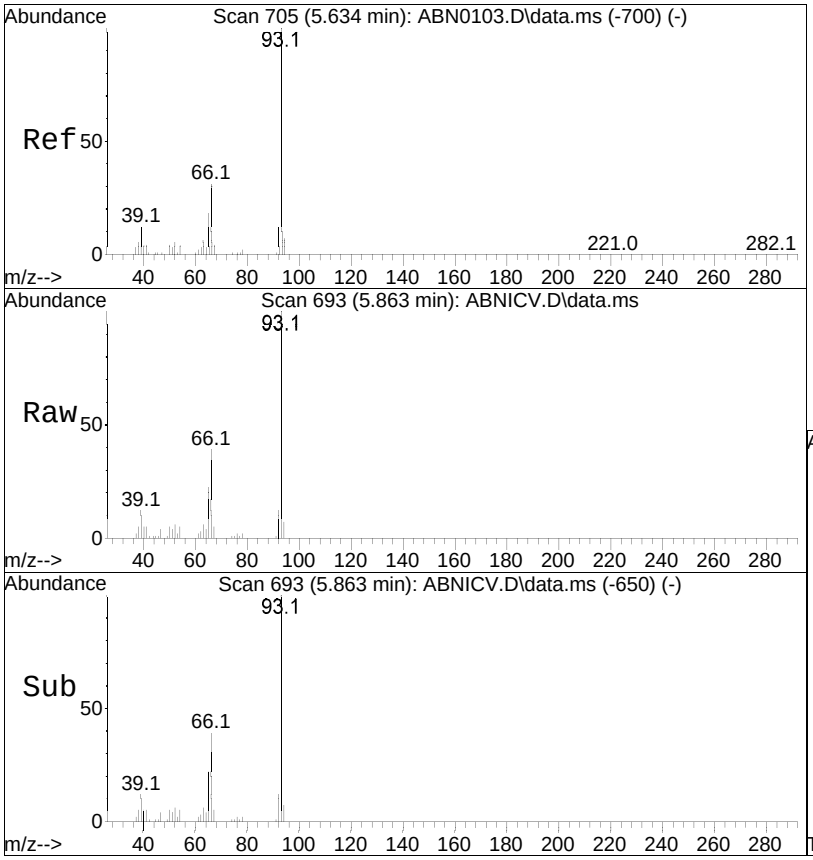


#3
Pyridine
Concen: 4.42 ug/ml
RT: 1.957 min Scan# 29
Delta R.T. -0.012 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 79 Resp: 59684

Ion	Ratio	Lower	Upper
79	100		
52	77.5	93.1	139.7#

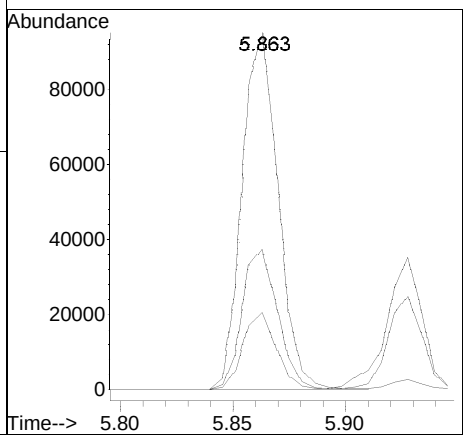


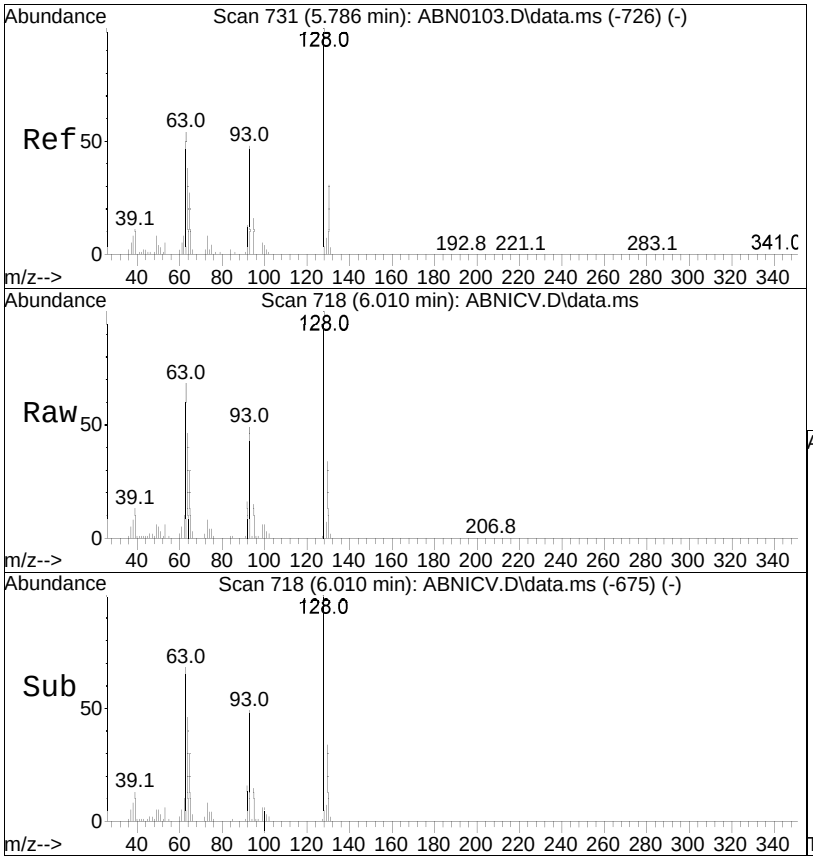


#5
Aniline
Concen: 4.73 ug/ml
RT: 5.863 min Scan# 693
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 93 Resp: 105271

Ion	Ratio	Lower	Upper
93	100		
66	39.1	32.6	49.0
65	20.4	17.6	26.4

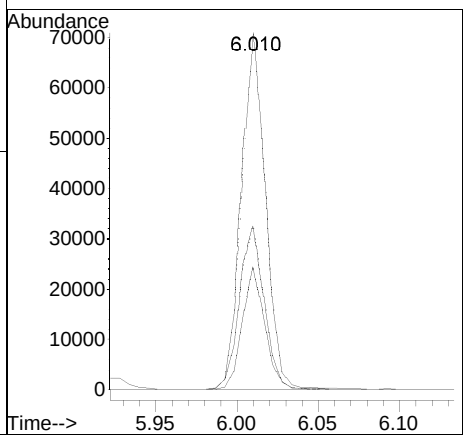


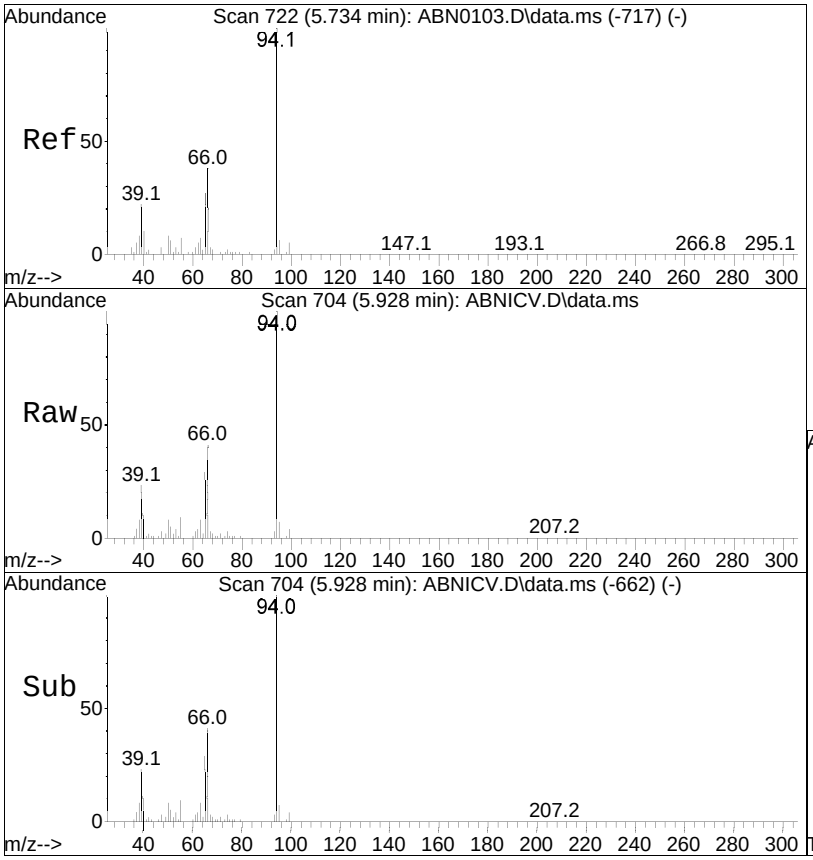


#6
2-Chlorophenol
Concen: 4.86 ug/ml
RT: 6.010 min Scan# 718
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:128 Resp: 72678

Ion	Ratio	Lower	Upper
128	100		
64	47.4	45.1	67.7
130	32.3	26.2	39.4

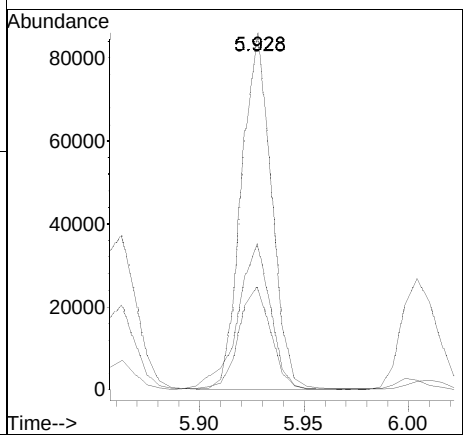


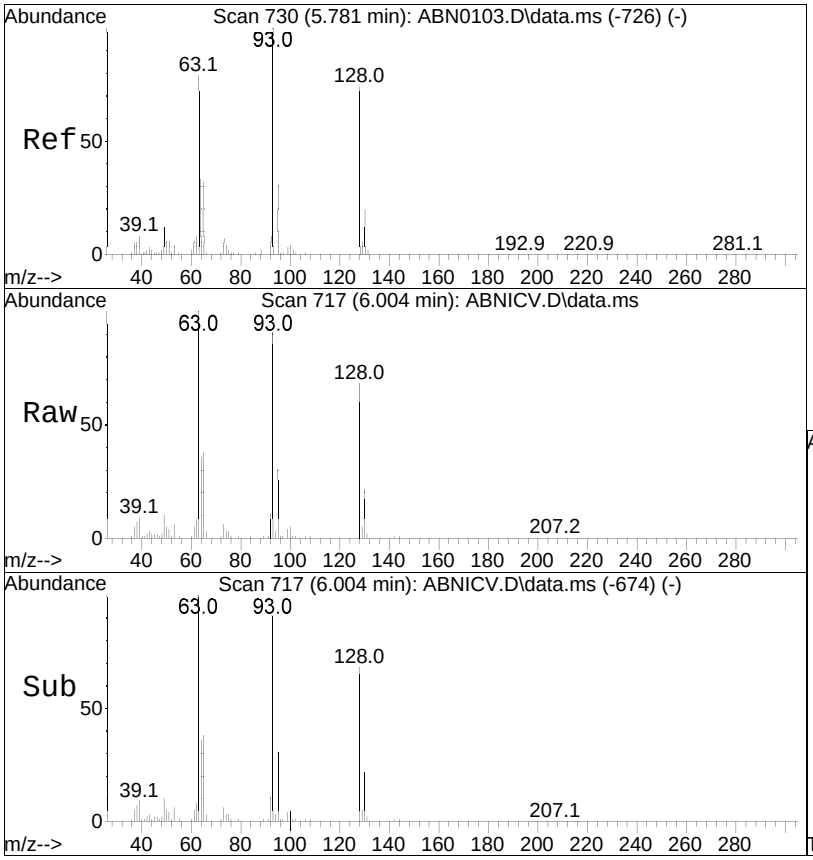


#8
Phenol
Concen: 4.83 ug/ml
RT: 5.928 min Scan# 704
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 94 Resp: 86378

Ion	Ratio	Lower	Upper
94	100		
65	30.8	26.0	39.0
66	45.1	33.8	50.8

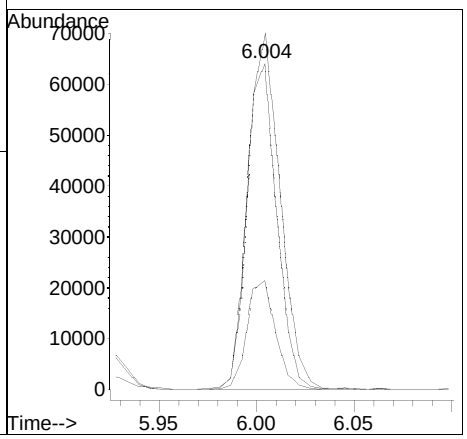


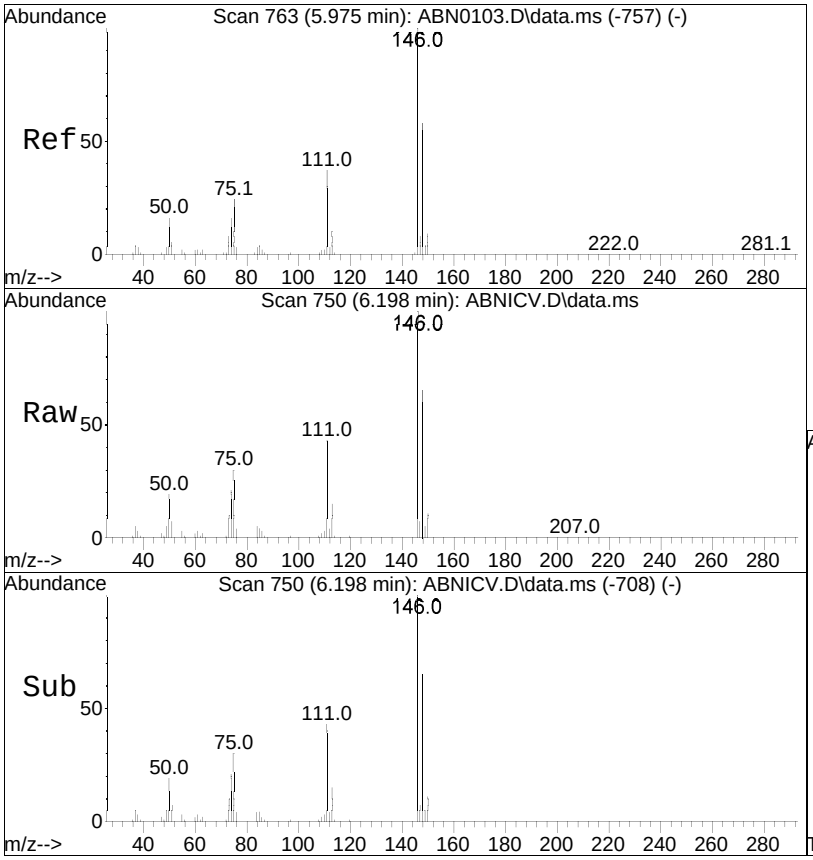


#9
Bis(2-chloroethyl)ether
Concen: 4.78 ug/ml
RT: 6.004 min Scan# 717
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 93 Resp: 68605

Ion	Ratio	Lower	Upper
93	100		
63	115.7	74.6	111.8#
95	32.0	25.9	38.9

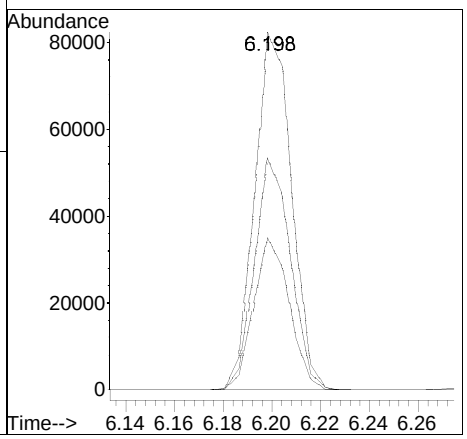


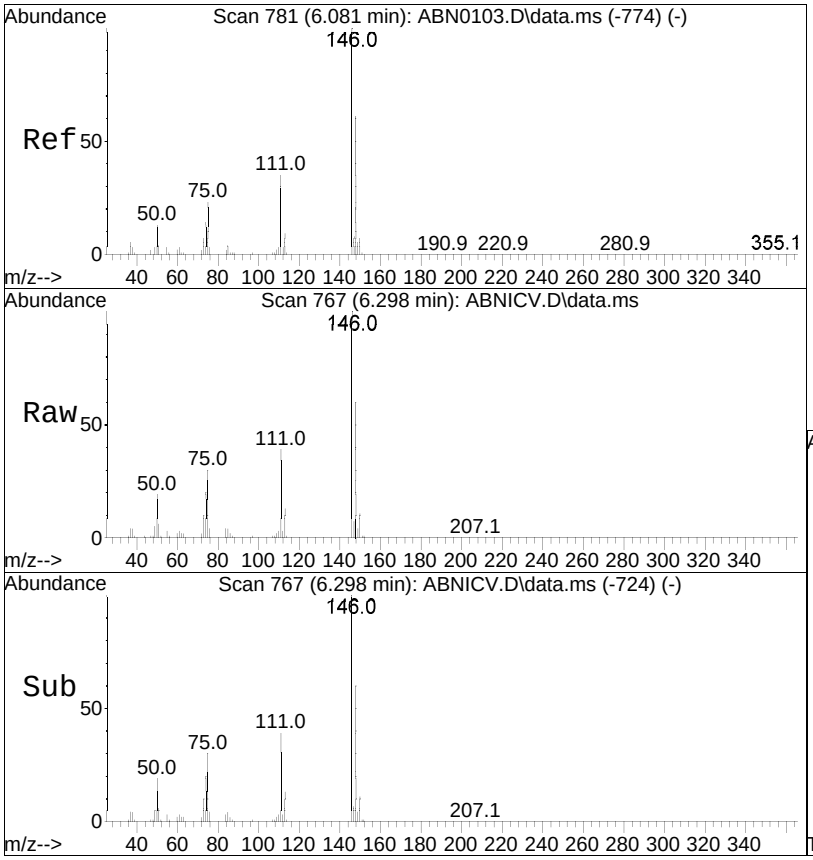


#10
1,3-Dichlorobenzene
Concen: 5.01 ug/ml
RT: 6.198 min Scan# 750
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:146 Resp: 86058

Ion	Ratio	Lower	Upper
146	100		
111	41.2	34.3	51.5
148	63.5	50.8	76.2

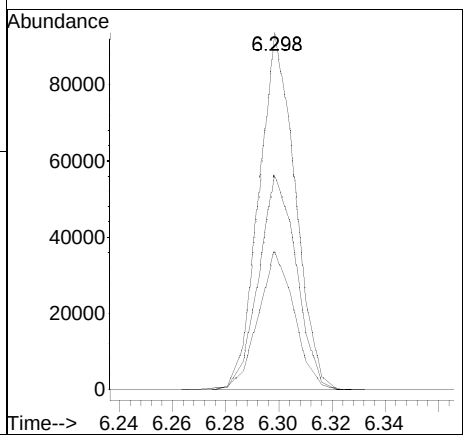


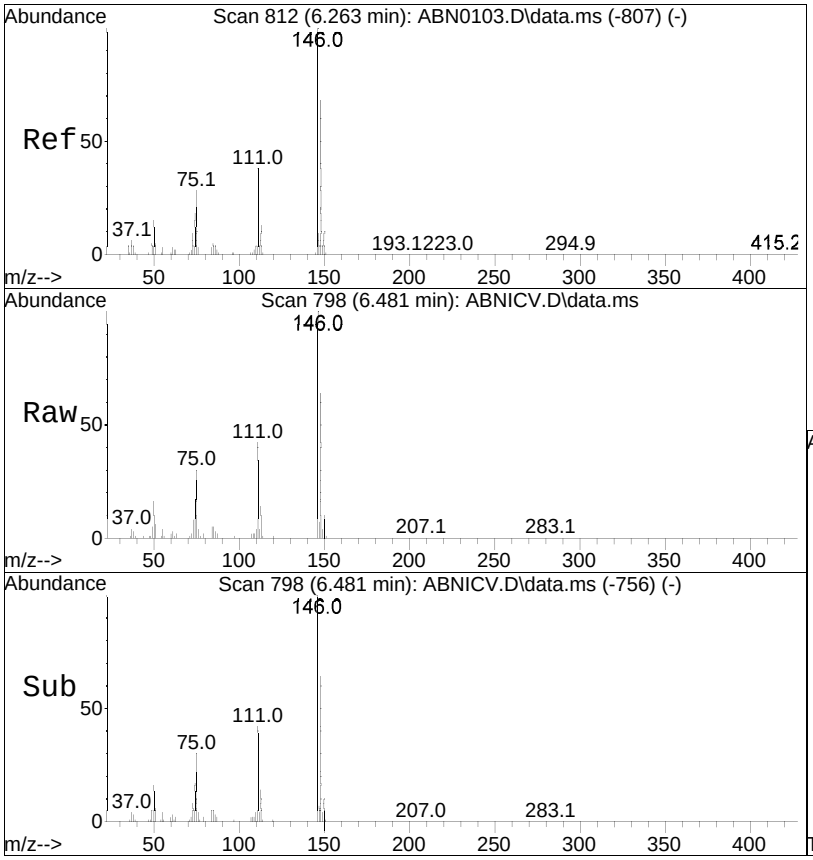


#11
1,4-Dichlorobenzene
Concen: 5.02 ug/ml
RT: 6.298 min Scan# 767
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:146 Resp: 88690

Ion	Ratio	Lower	Upper
146	100		
148	62.2	50.7	76.1
111	38.9	33.4	50.0

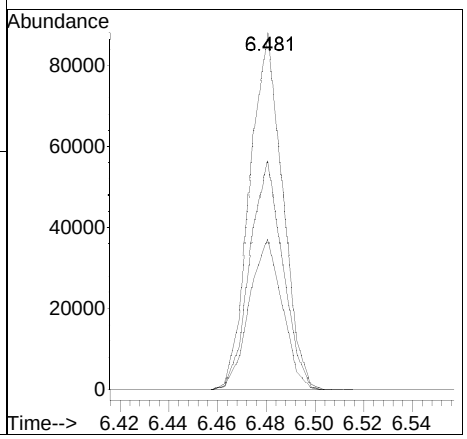


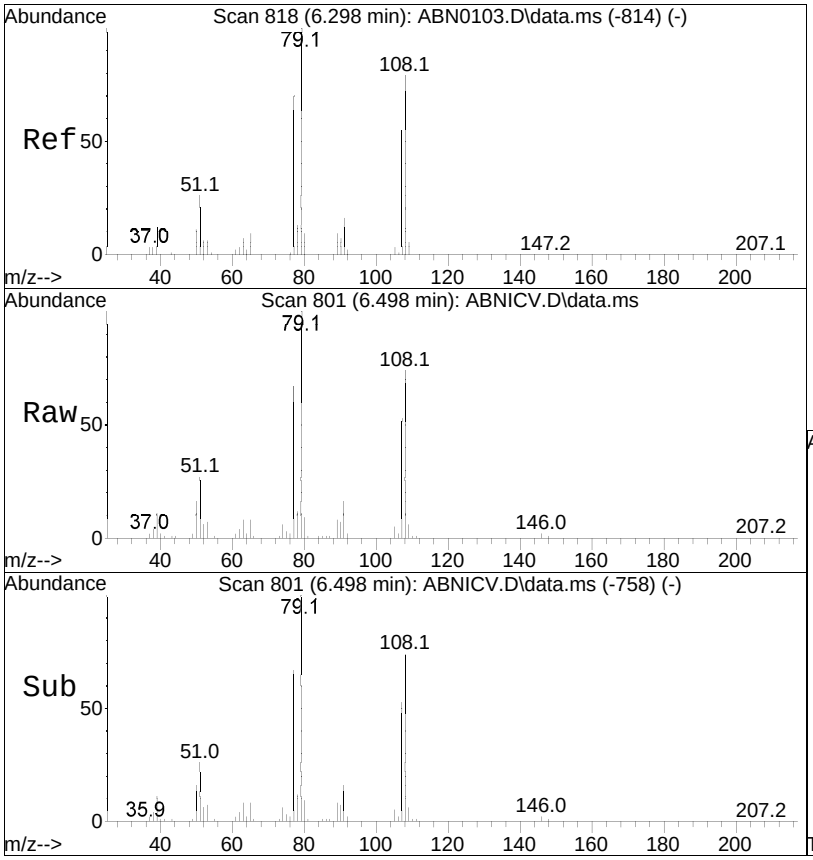


#12
1,2-Dichlorobenzene
Concen: 4.91 ug/ml
RT: 6.481 min Scan# 798
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:146 Resp: 82512

Ion	Ratio	Lower	Upper
146	100		
111	42.8	34.6	52.0
148	64.3	50.2	75.4

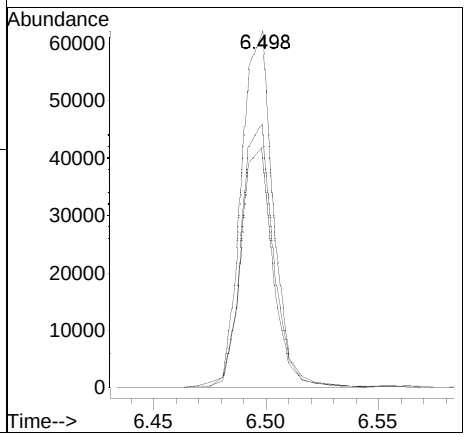


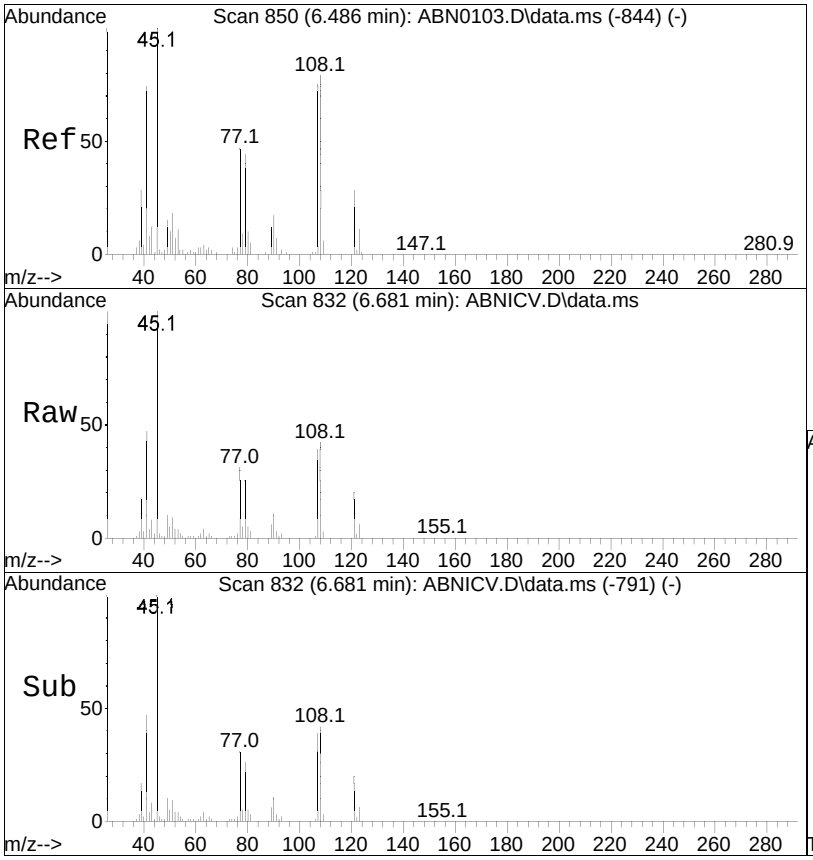


#13
Benzyl alcohol
Concen: 4.86 ug/ml
RT: 6.498 min Scan# 801
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 79 Resp: 61266

Ion	Ratio	Lower	Upper
79	100		
77	67.8	54.9	82.3
108	75.0	63.1	94.7

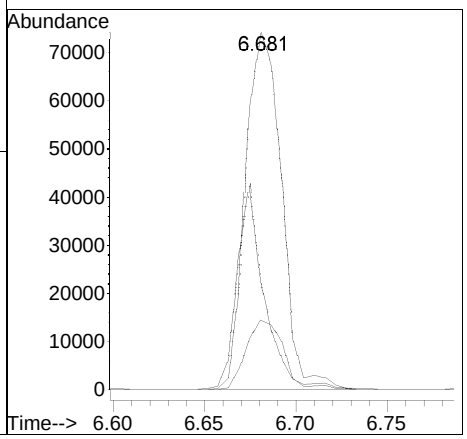


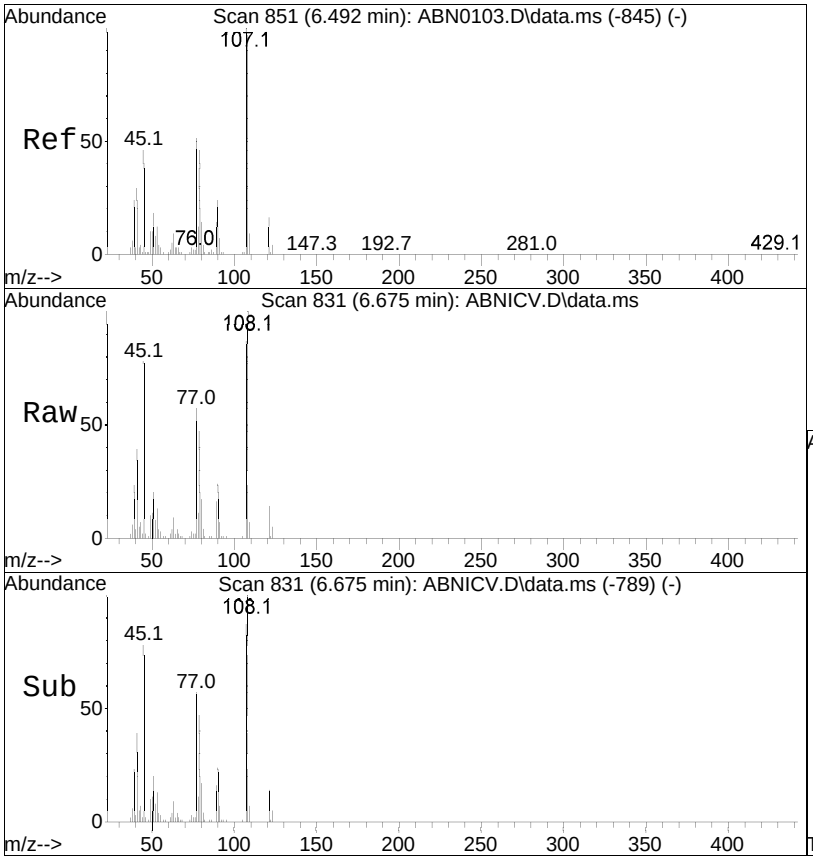


#14
Bis(2-chloroisopropyl)ether
Concen: 4.78 ug/ml
RT: 6.681 min Scan# 832
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 45 Resp: 101104

Ion	Ratio	Lower	Upper
45	100		
121	20.2	9.8	14.6#
77	43.5	6.1	9.1#

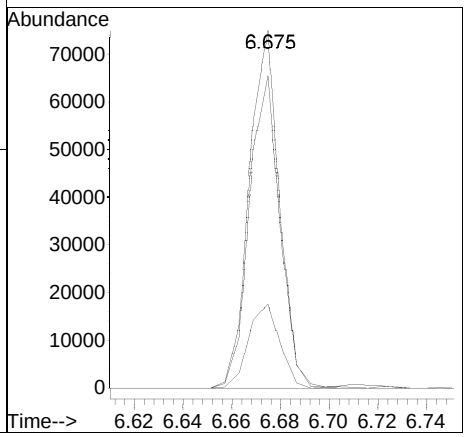


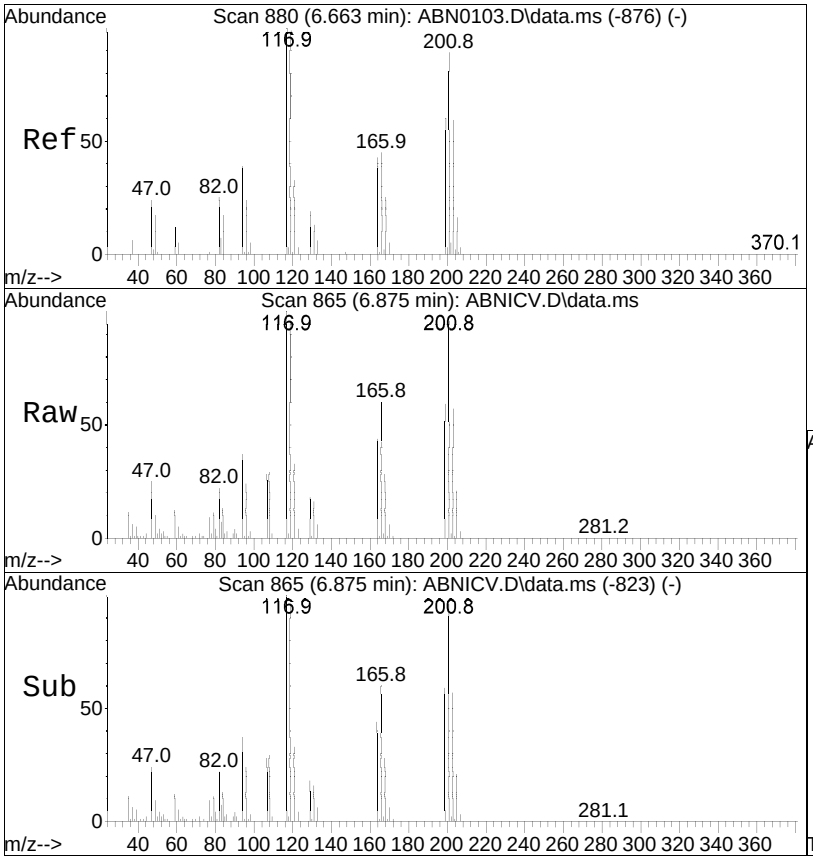


#15
2-Methylphenol
Concen: 4.83 ug/ml
RT: 6.675 min Scan# 831
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:108 Resp: 64492

Ion	Ratio	Lower	Upper
108	100		
107	88.6	70.7	106.1
90	24.4	18.7	28.1

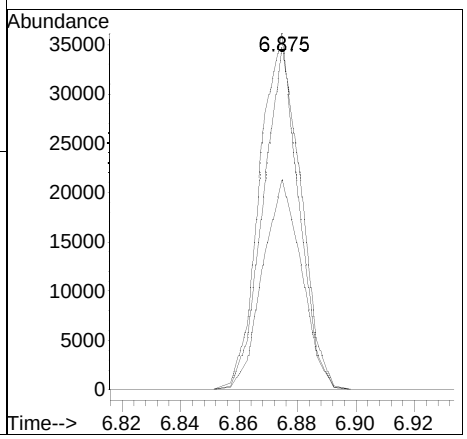


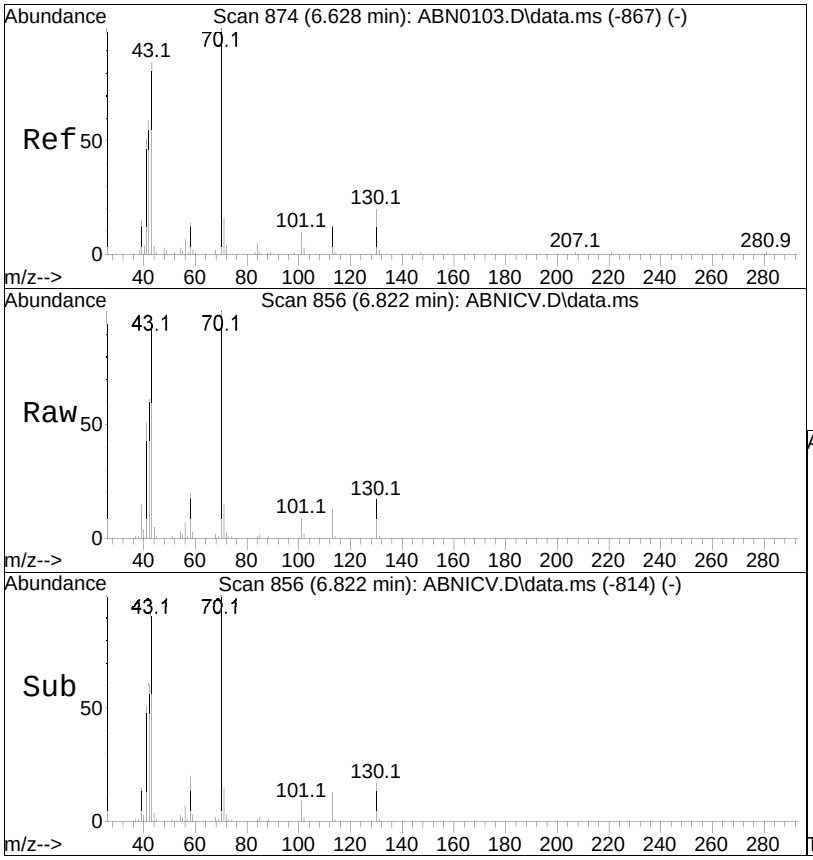


#16
Hexachloroethane
Concen: 4.80 ug/ml
RT: 6.875 min Scan# 865
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:117 Resp: 33051

Ion	Ratio	Lower	Upper
117	100		
201	94.7	58.6	87.8#
199	59.7	36.9	55.3#

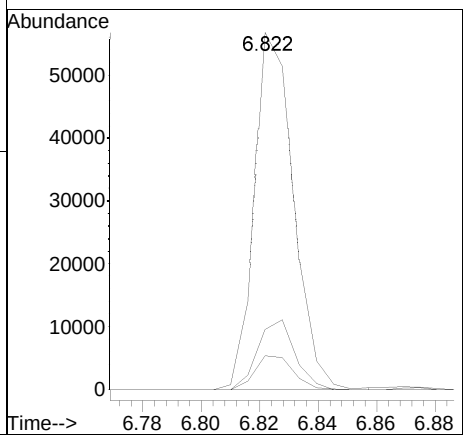


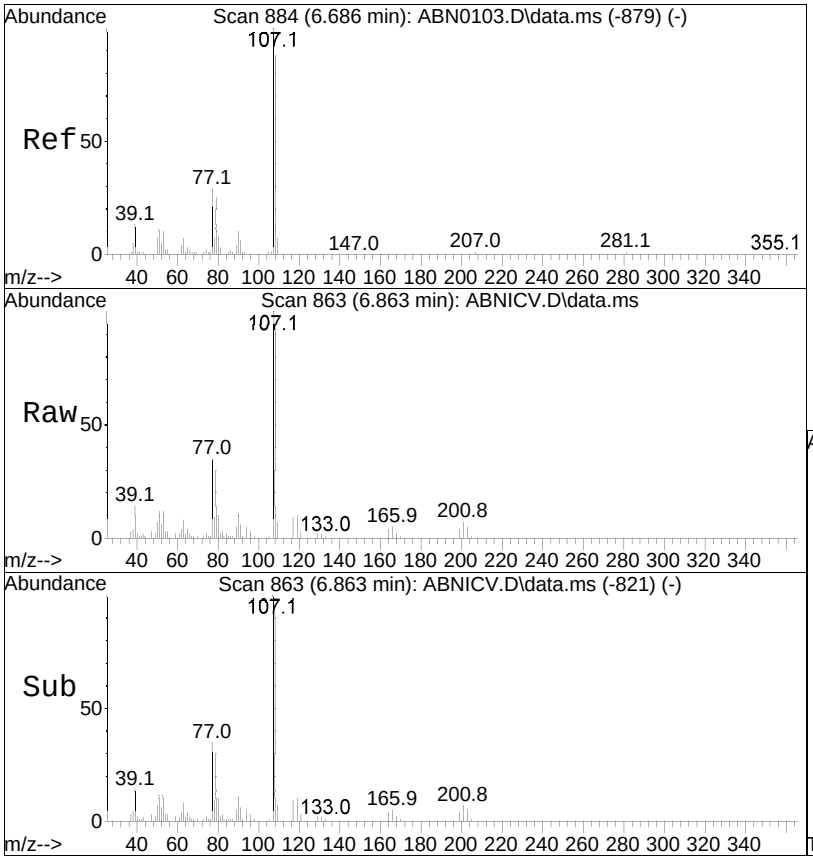


#17
n-Nitrosodi-n-propylamine
Concen: 4.85 ug/ml
RT: 6.822 min Scan# 856
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 70 Resp: 52624

Ion	Ratio	Lower	Upper
70	100		
130	18.6	18.2	27.4
101	9.4	7.8	11.8

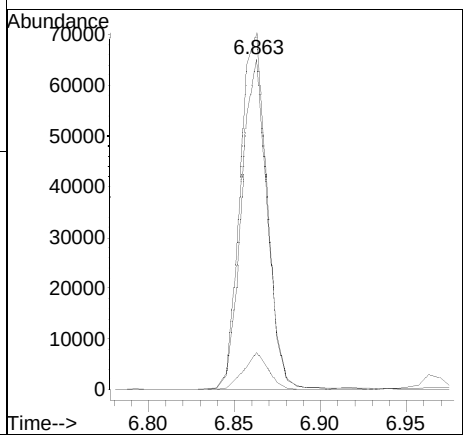


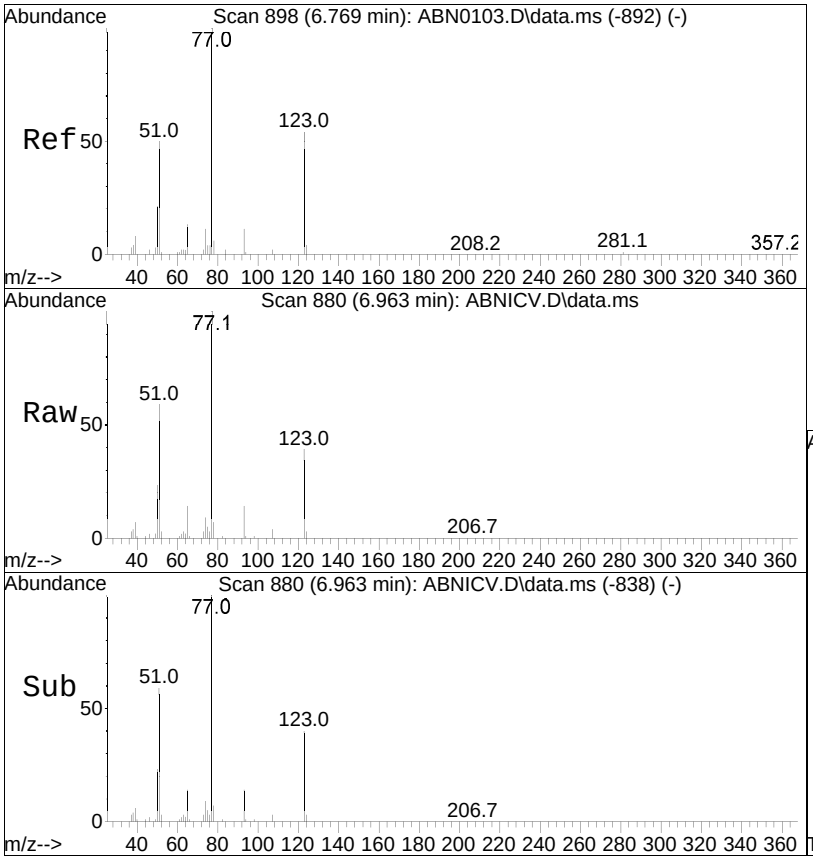


#18
3-Methylphenol/4-Methylphenol
Concen: 4.85 ug/ml
RT: 6.863 min Scan# 863
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:108 Resp: 68011

Ion	Ratio	Lower	Upper
108	100		
107	111.8	88.6	132.8
90	10.6	8.8	13.2

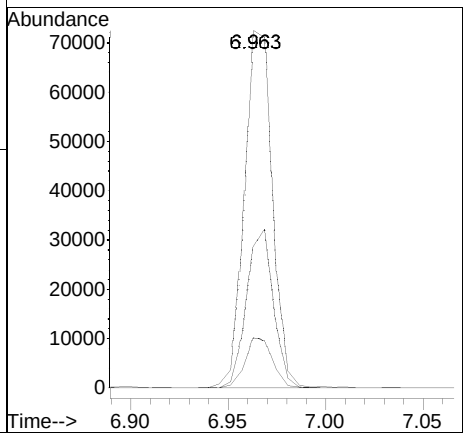


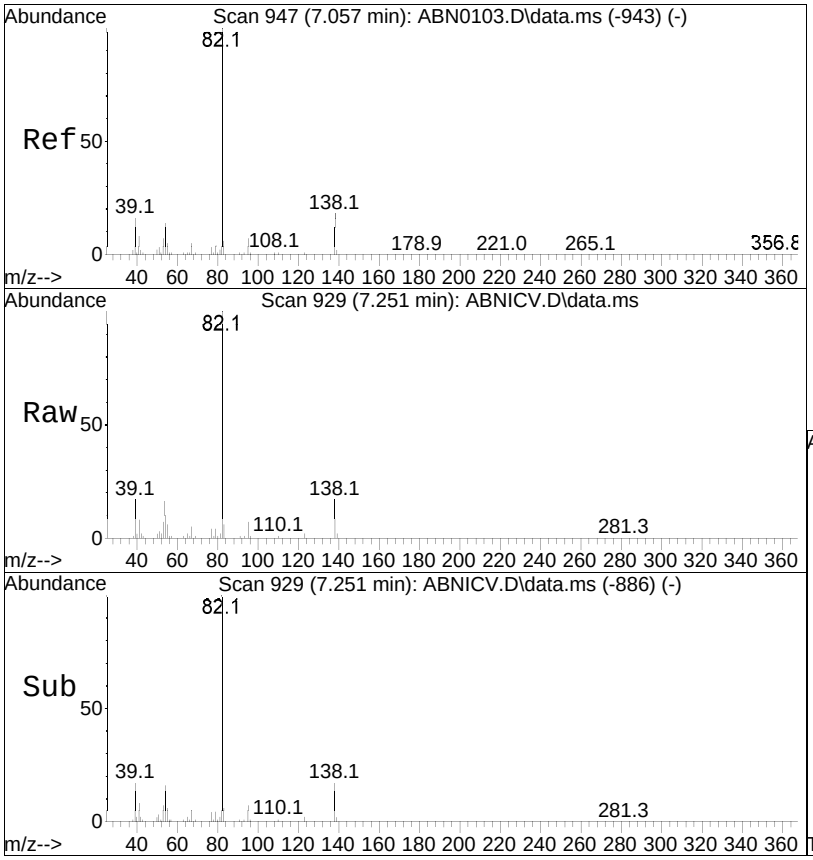


#20
Nitrobenzene
Concen: 4.72 ug/ml
RT: 6.963 min Scan# 880
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 77 Resp: 71851

Ion	Ratio	Lower	Upper
77	100		
123	42.5	36.3	54.5
65	14.0	11.6	17.4

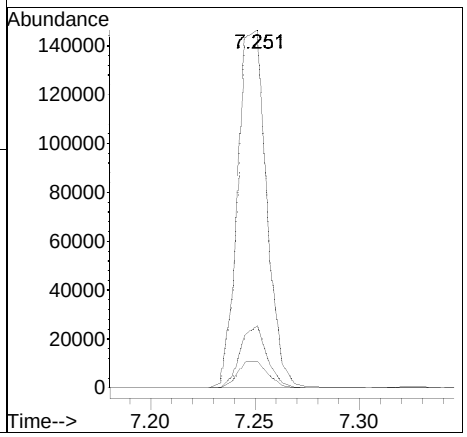


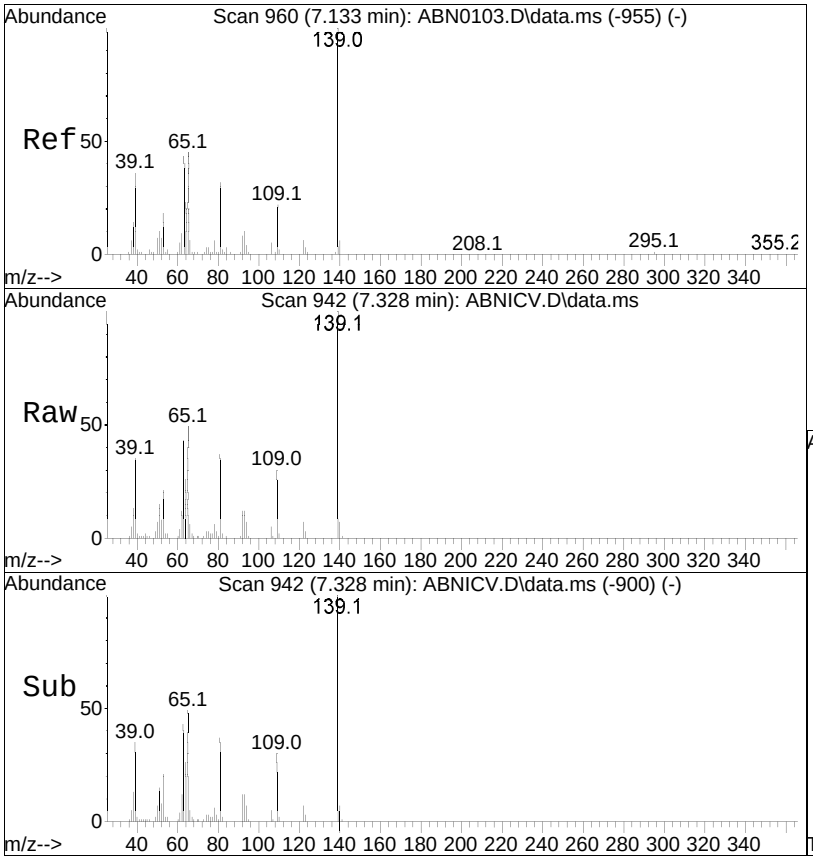


#21
Isophorone
Concen: 4.79 ug/ml
RT: 7.251 min Scan# 929
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 82 Resp: 139339

Ion	Ratio	Lower	Upper
82	100		
138	16.1	14.7	22.1
95	7.7	5.2	7.8

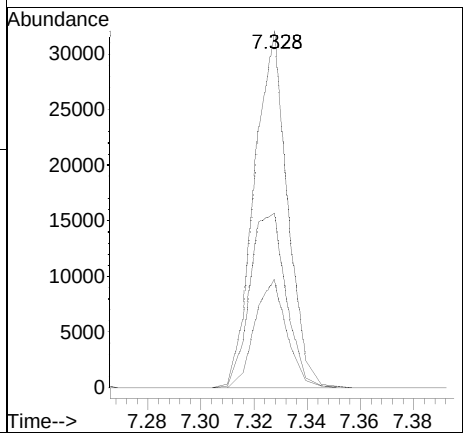


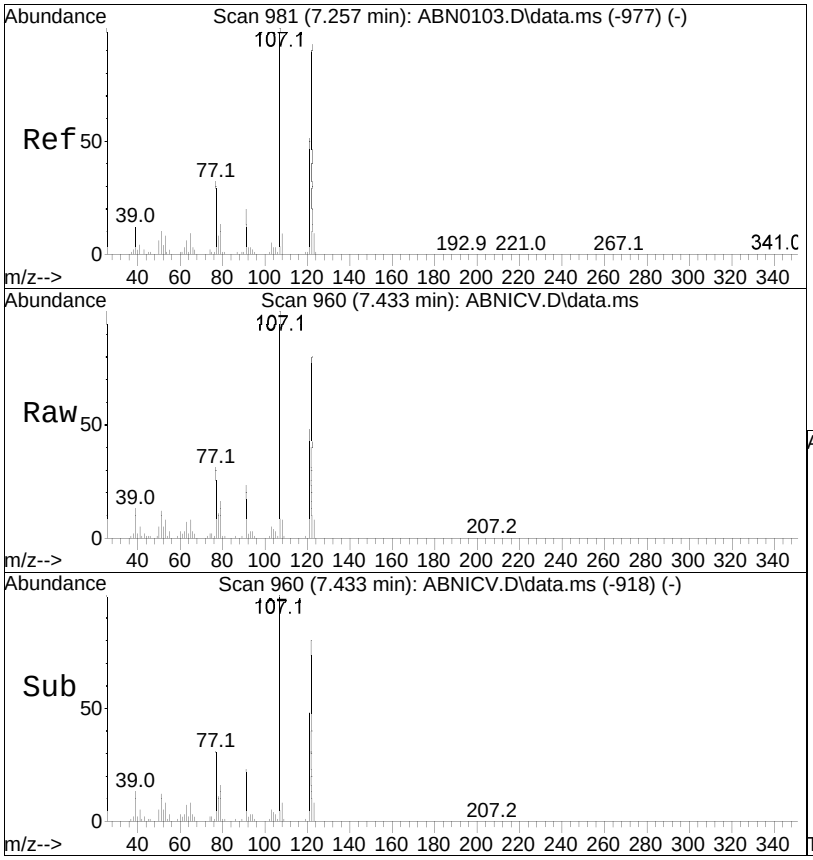


#22
2-Nitrophenol
Concen: 4.54 ug/ml
RT: 7.328 min Scan# 942
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:139 Resp: 27634

Ion	Ratio	Lower	Upper
139	100		
109	29.6	19.4	29.0#
65	53.6	46.1	69.1

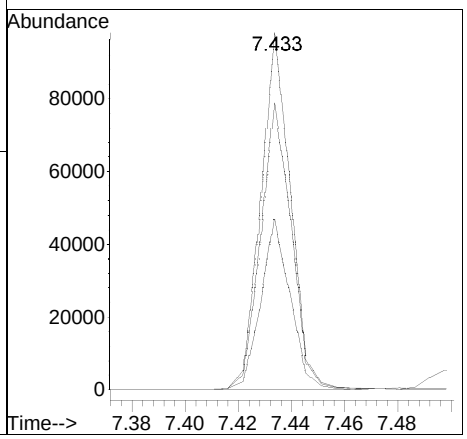


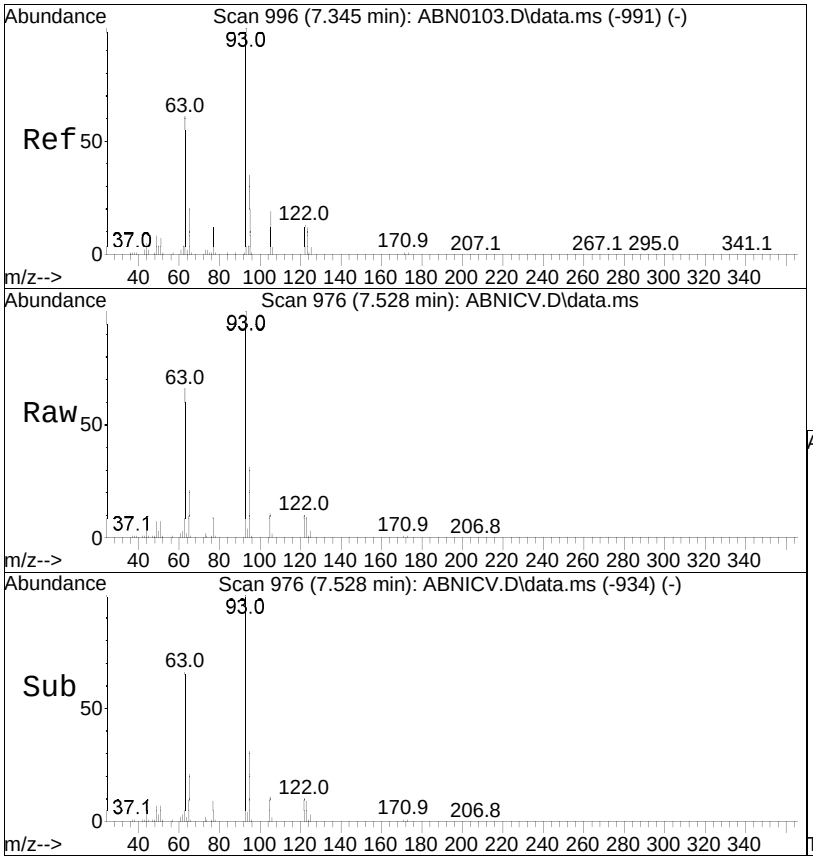


#23
2,4-Dimethylphenol
Concen: 5.03 ug/ml
RT: 7.433 min Scan# 960
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:107 Resp: 75608

Ion	Ratio	Lower	Upper
107	100		
121	47.5	40.0	60.0
122	82.7	70.2	105.4

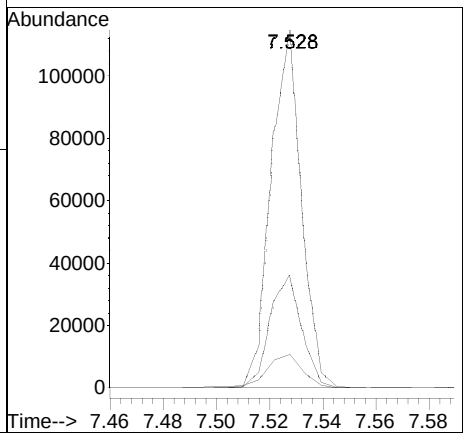


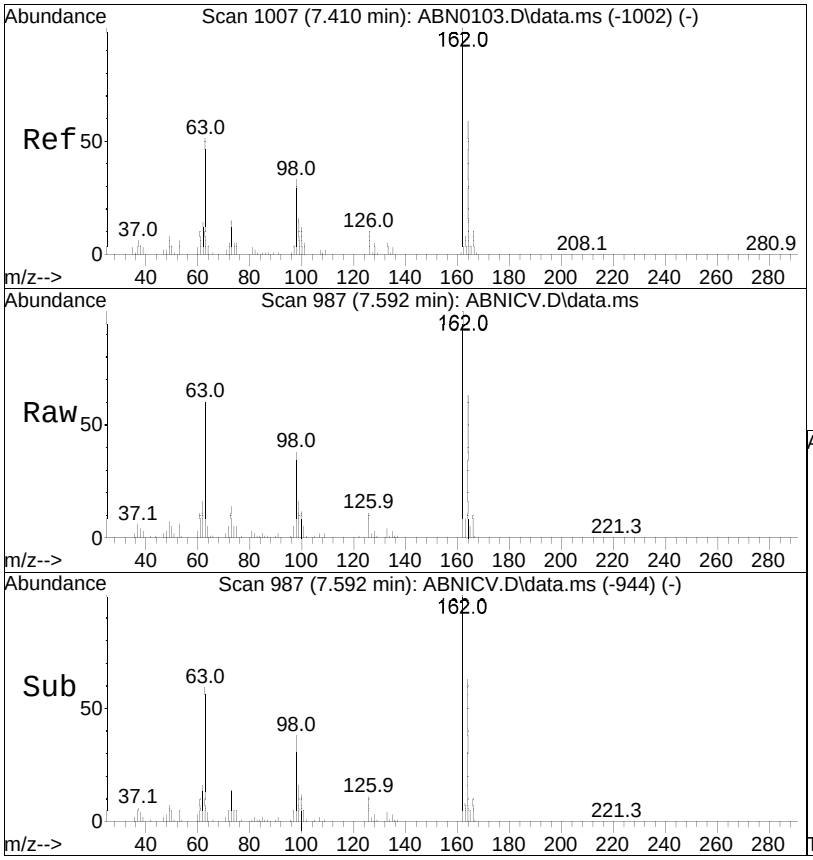


#24
Bis(2-chloroethoxy)methane
Concen: 4.97 ug/ml
RT: 7.528 min Scan# 976
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 93 Resp: 90611

Ion	Ratio	Lower	Upper
93	100		
95	33.0	25.8	38.8
123	11.4	10.1	15.1

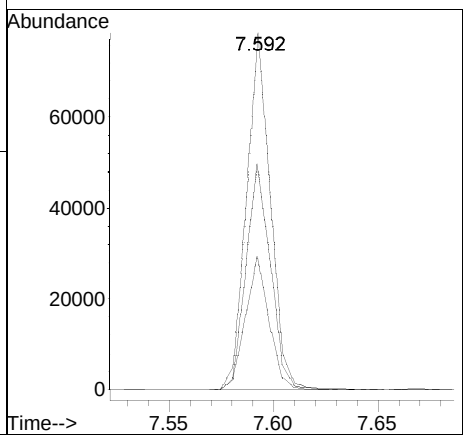


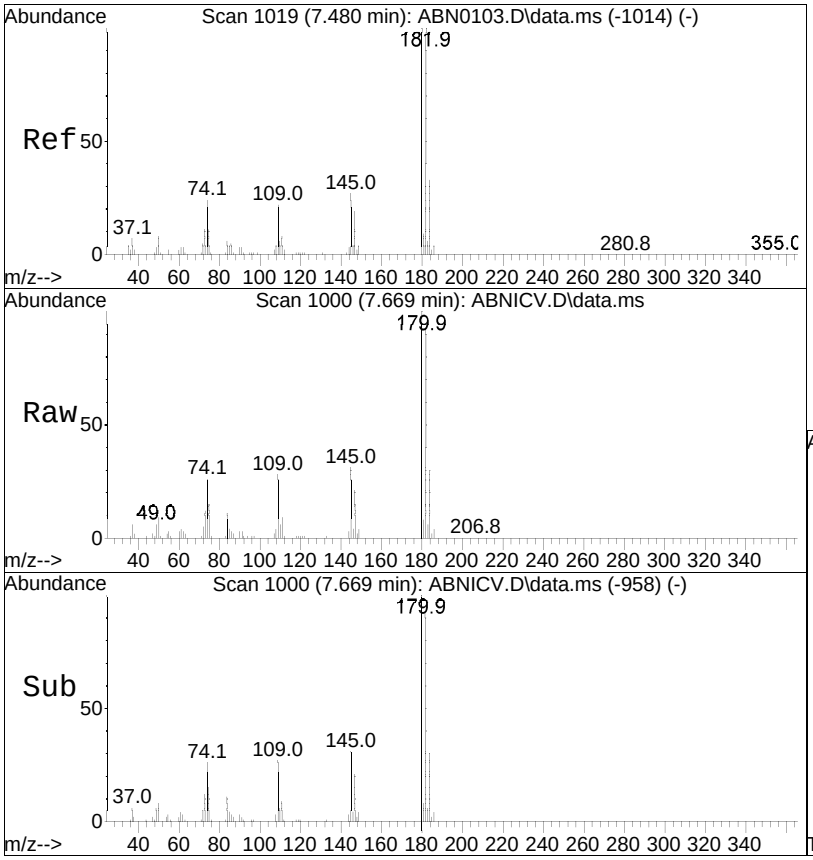


#25
2,4-Dichlorophenol
Concen: 4.93 ug/ml
RT: 7.592 min Scan# 987
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:162 Resp: 62268

Ion	Ratio	Lower	Upper
162	100		
164	64.9	51.0	76.4
98	37.1	32.2	48.2

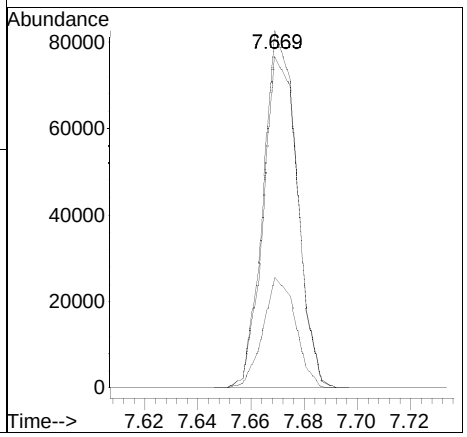


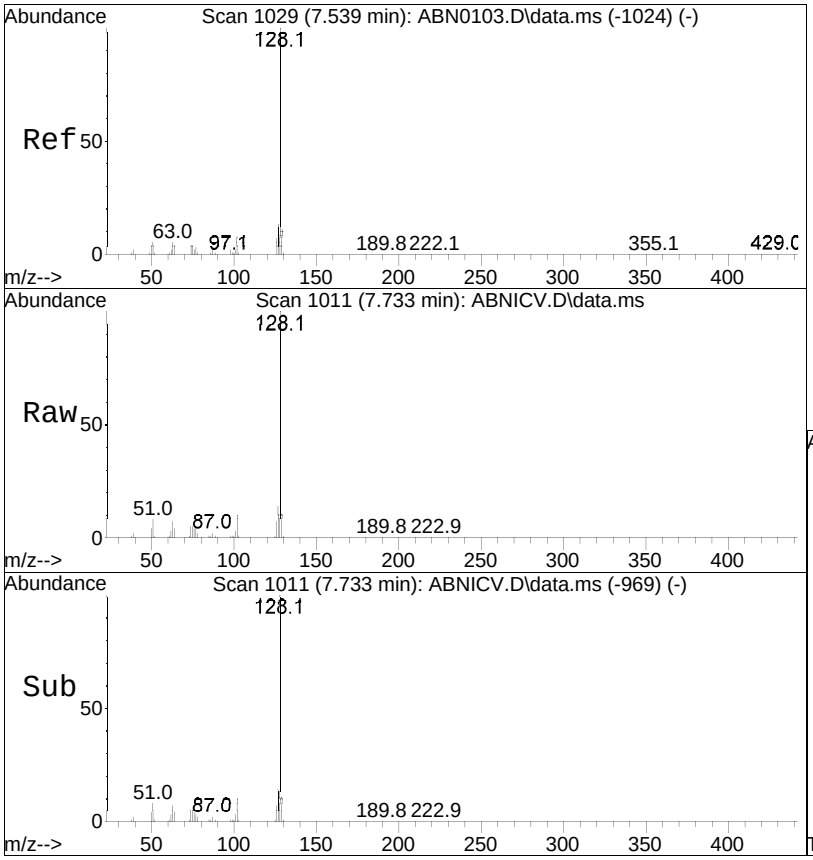


#26
1,2,4-Trichlorobenzene
Concen: 4.99 ug/ml
RT: 7.669 min Scan# 1000
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:180 Resp: 72447

Ion	Ratio	Lower	Upper
180	100		
182	95.2	76.0	114.0
145	30.2	25.7	38.5

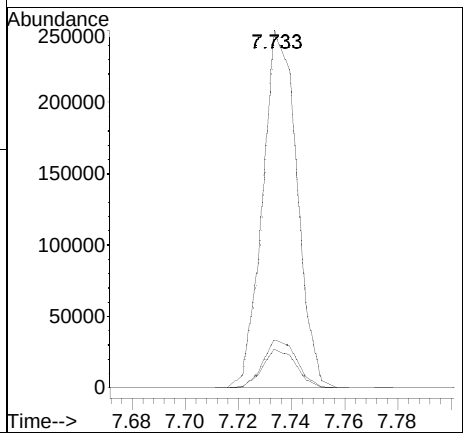


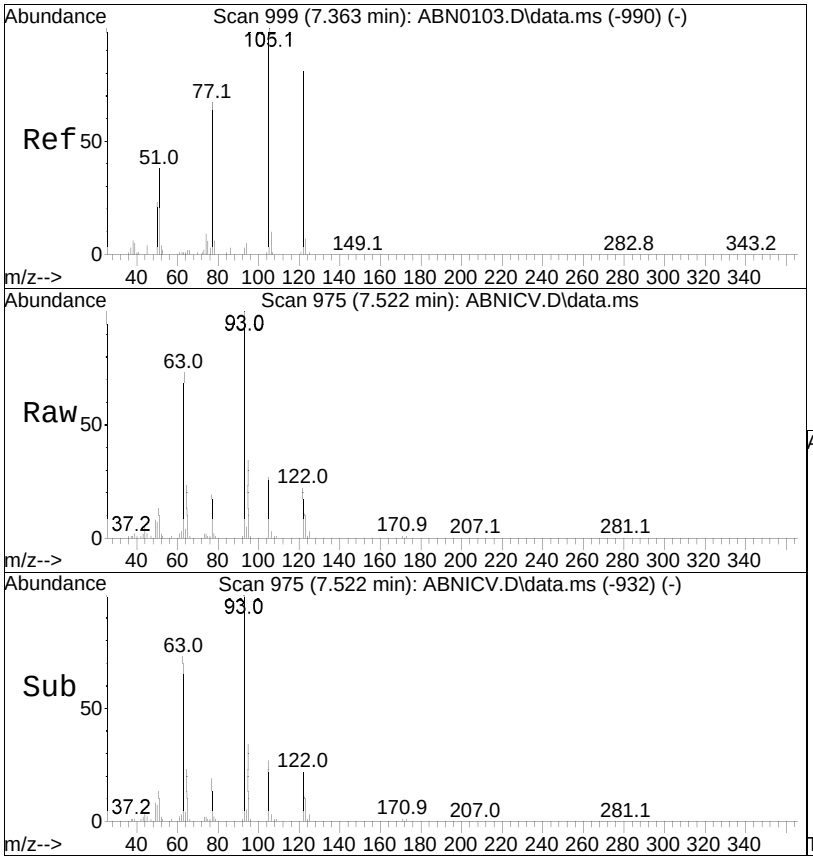


#35
Naphthalene
Concen: 4.97 ug/ml
RT: 7.733 min Scan# 1011
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:128 Resp: 222032

Ion	Ratio	Lower	Upper
128	100		
129	10.7	8.7	13.1
127	13.3	10.3	15.5

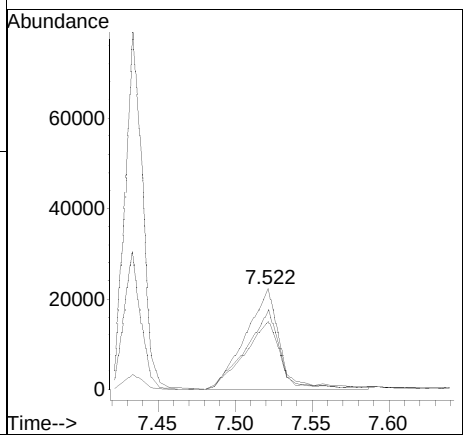


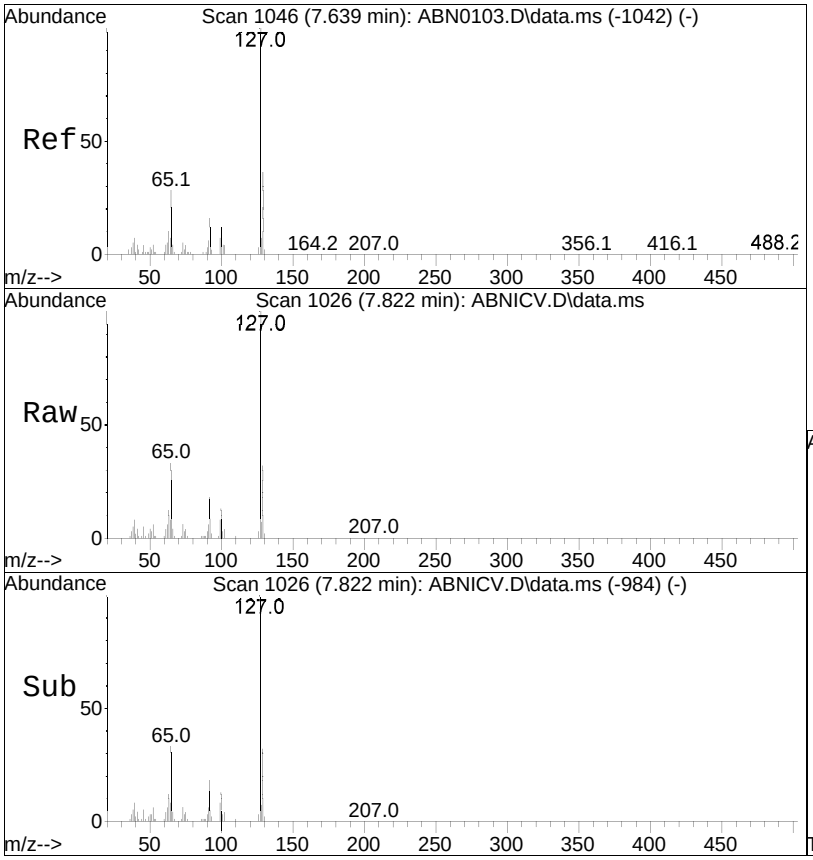


#36
Benzoic Acid
Concen: 4.51 ug/ml
RT: 7.522 min Scan# 975
Delta R.T. 0.006 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:105 Resp: 35323

Ion	Ratio	Lower	Upper
105	100		
122	77.3	59.9	89.9
77	70.6	60.1	90.1

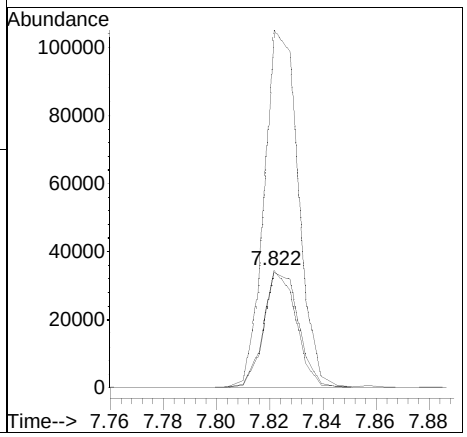


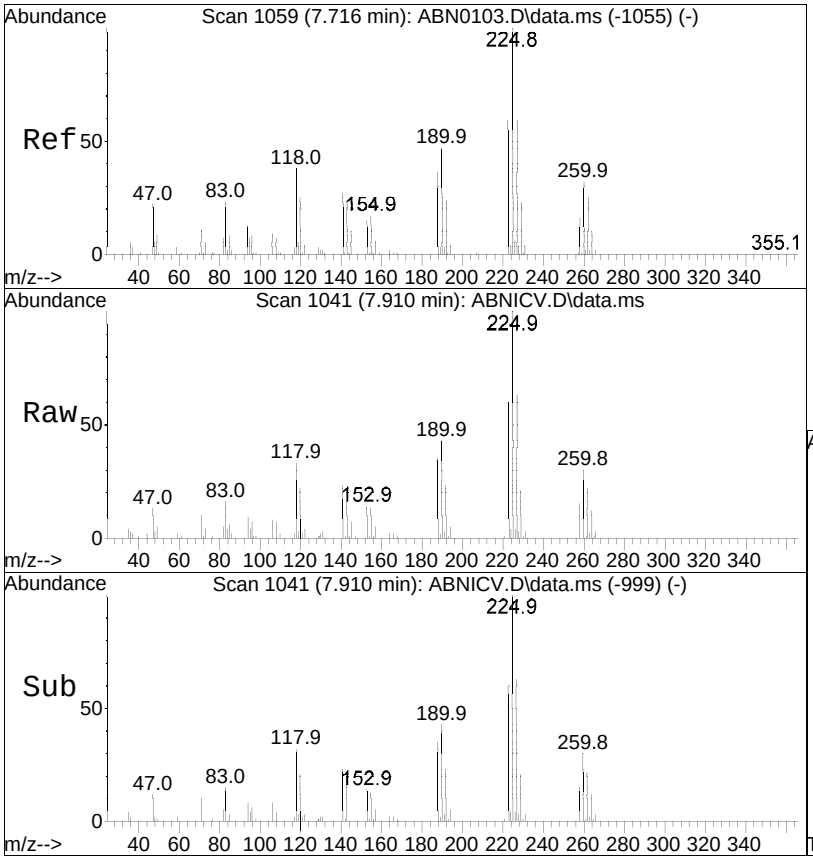


#37
4-Chloroaniline
Concen: 5.00 ug/ml
RT: 7.822 min Scan# 1026
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 65 Resp: 29251

Ion	Ratio	Lower	Upper
65	100		
127	318.2	237.6	356.4
129	104.1	76.3	114.5

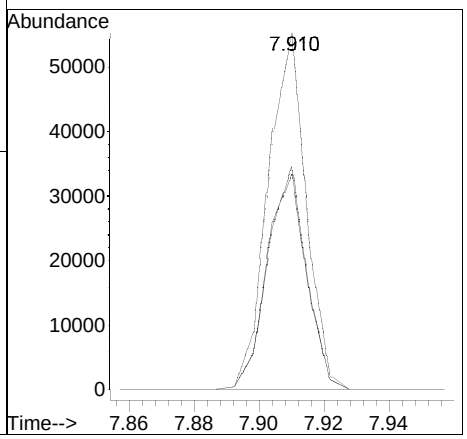


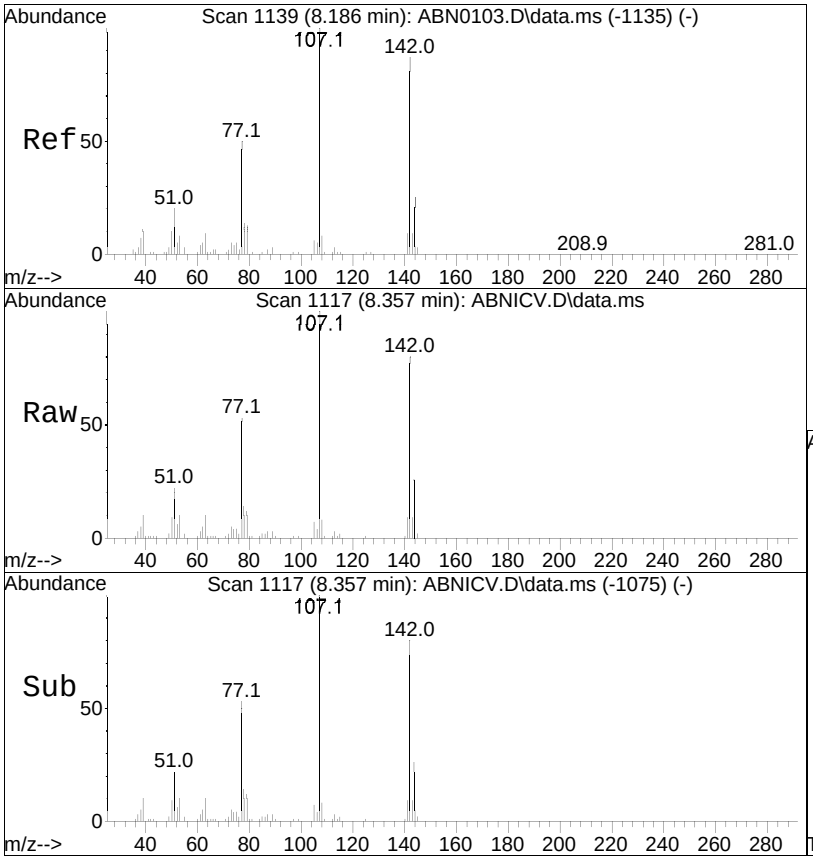


#38
Hexachlorobutadiene
Concen: 4.91 ug/ml
RT: 7.910 min Scan# 1041
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:225 Resp: 44756

Ion	Ratio	Lower	Upper
225	100		
223	63.3	50.3	75.5
227	63.8	52.2	78.2

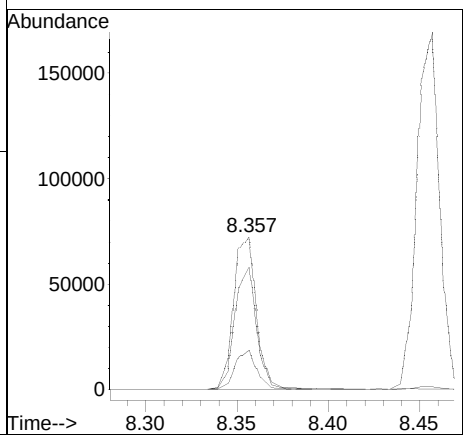


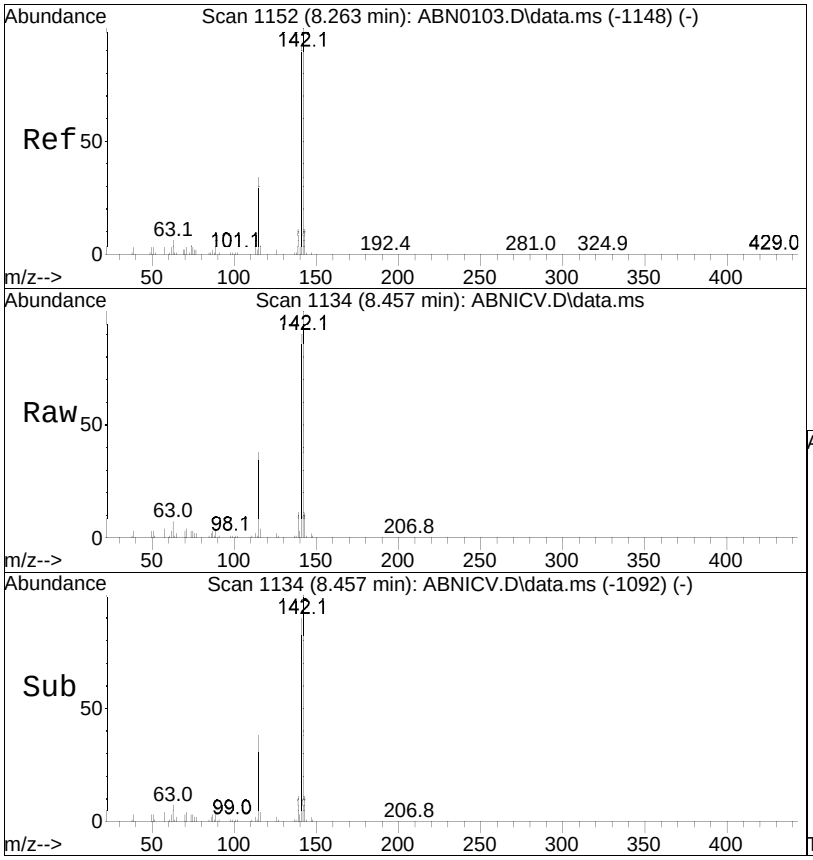


#39
p-Chloro-m-cresol
Concen: 4.93 ug/ml
RT: 8.357 min Scan# 1117
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:107 Resp: 63643

Ion	Ratio	Lower	Upper
107	100		
144	24.2	20.9	31.3
142	76.3	66.1	99.1

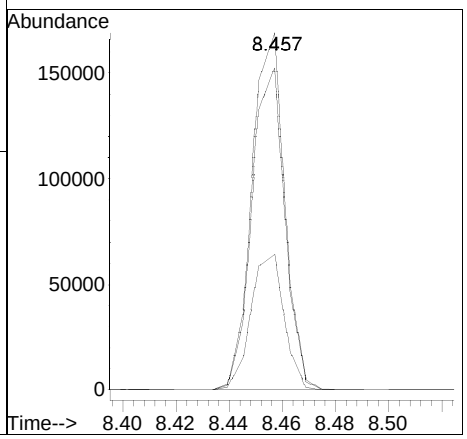


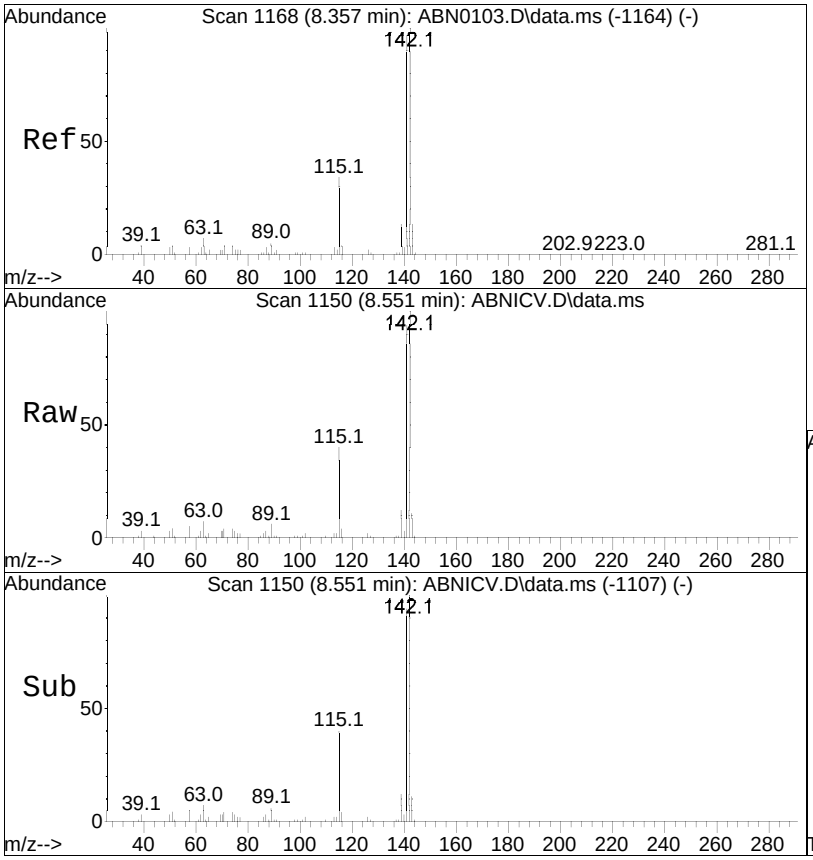


#40
2-Methylnaphthalene
Concen: 5.09 ug/ml
RT: 8.457 min Scan# 1134
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:142 Resp: 144820

Ion	Ratio	Lower	Upper
142	100		
141	90.4	69.6	104.4
115	38.7	26.6	40.0

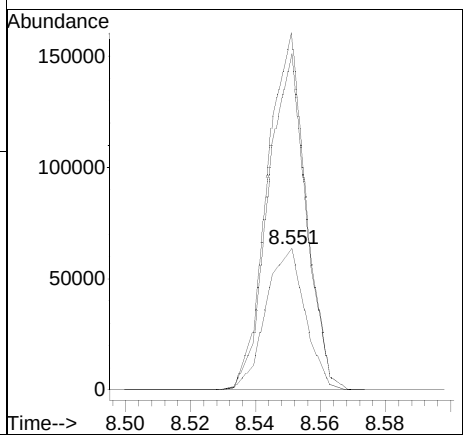


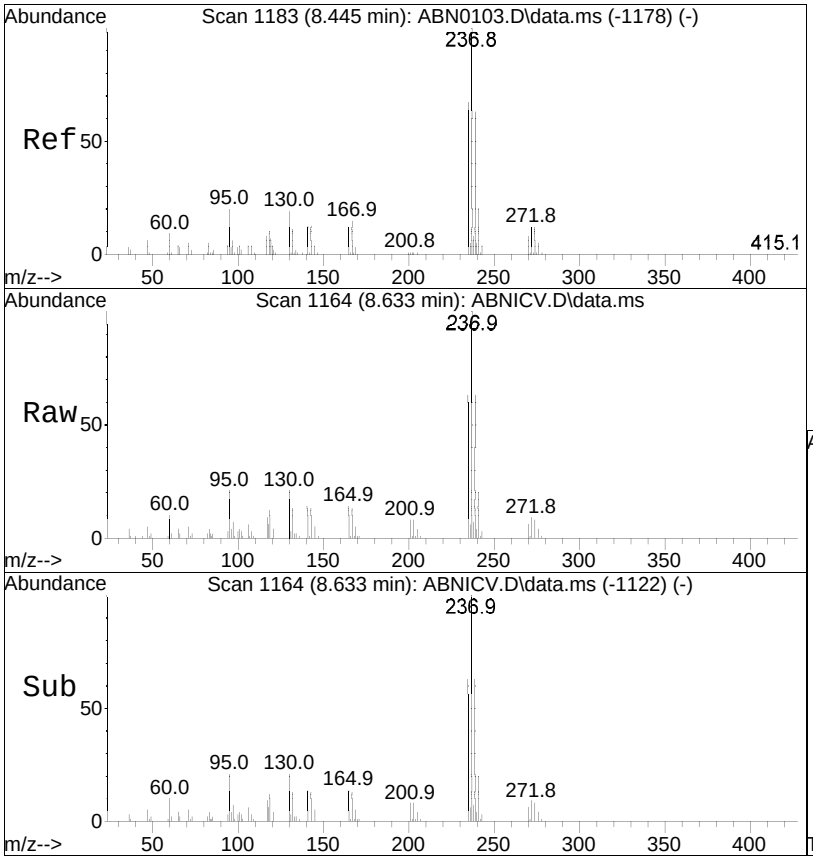


#41
1-Methylnaphthalene
Concen: 5.04 ug/ml
RT: 8.551 min Scan# 1150
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:115 Resp: 53738

Ion	Ratio	Lower	Upper
115	100		
141	227.4	207.8	311.6
142	246.8	226.8	340.2

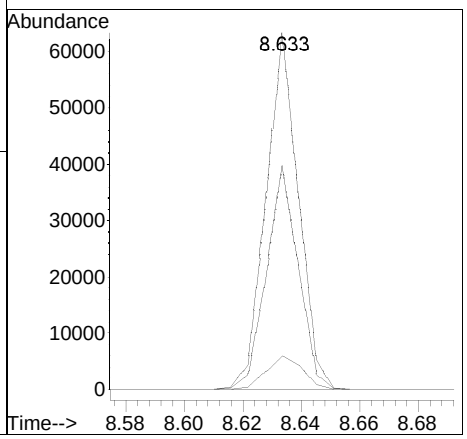


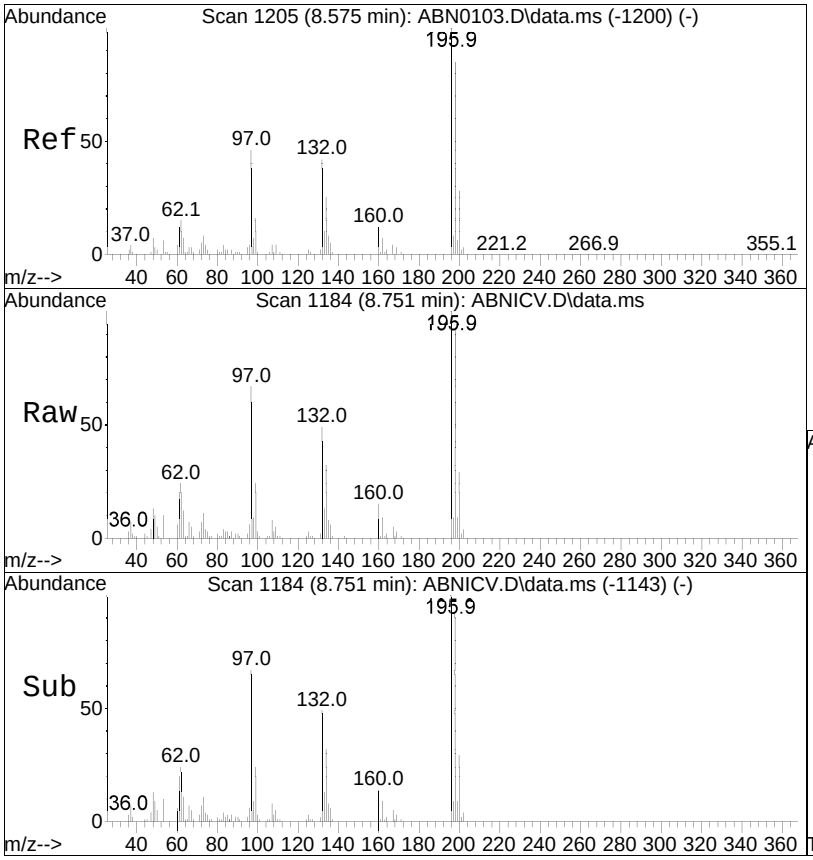


#42
Hexachlorocyclopentadiene
Concen: 5.00 ug/ml
RT: 8.633 min Scan# 1164
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:237 Resp: 48573

Ion	Ratio	Lower	Upper
237	100		
235	61.6	49.7	74.5
272	10.6	9.8	14.6

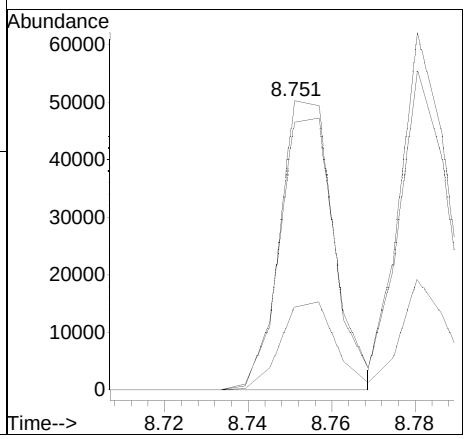


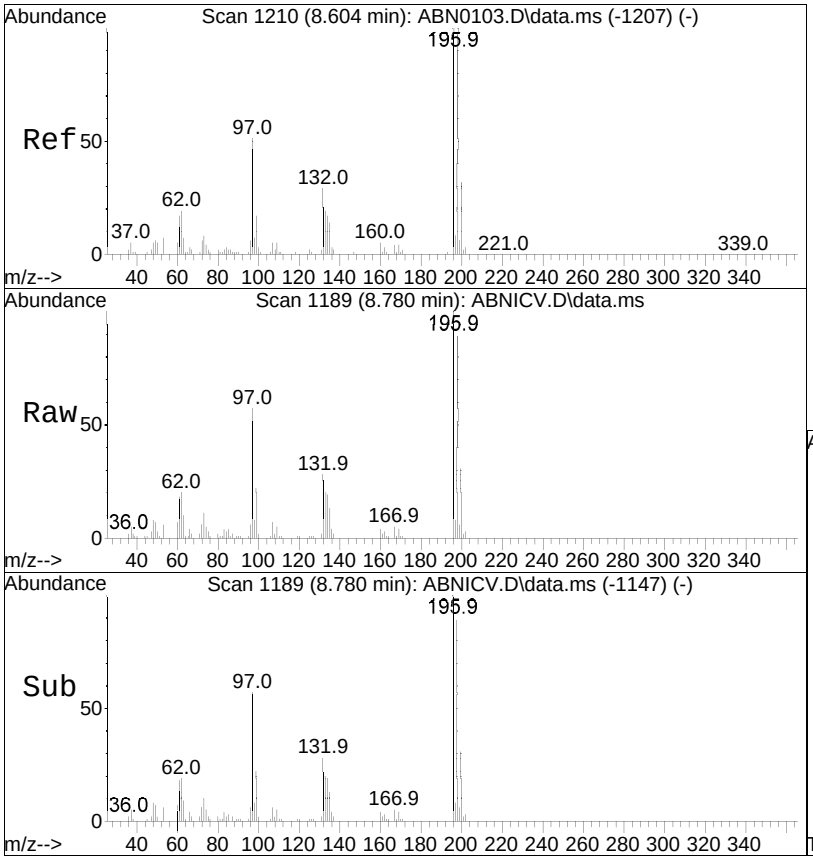


#43
2,4,6-Trichlorophenol
Concen: 4.88 ug/ml
RT: 8.751 min Scan# 1184
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:196 Resp: 45102

Ion	Ratio	Lower	Upper
196	100		
198	96.7	77.5	116.3
200	31.2	23.8	35.6

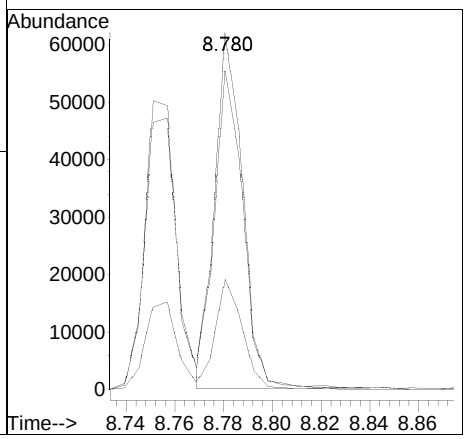


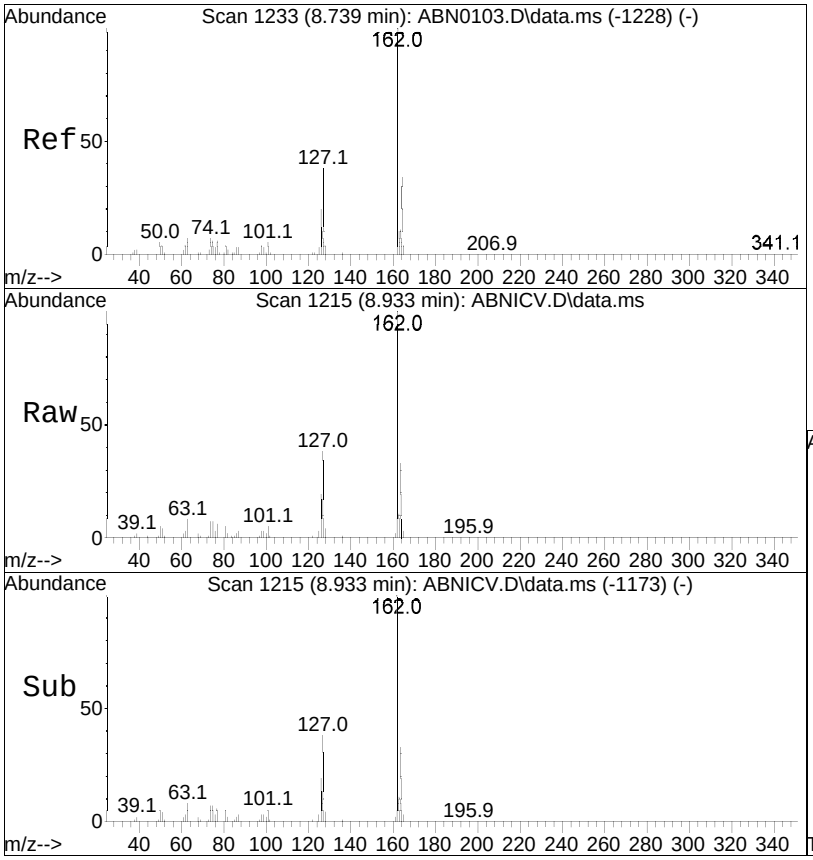


#44
2,4,5-Trichlorophenol
Concen: 5.02 ug/ml
RT: 8.780 min Scan# 1189
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:196 Resp: 49849

Ion	Ratio	Lower	Upper
196	100		
200	30.2	25.4	38.0
198	90.2	78.0	117.0

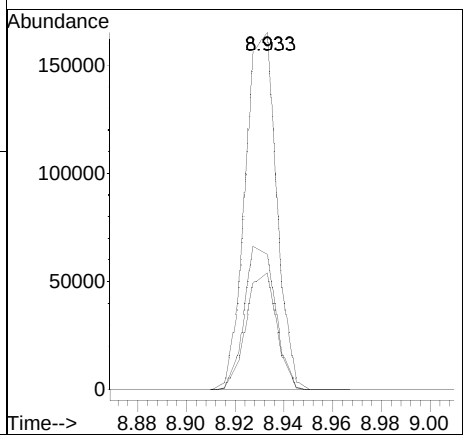


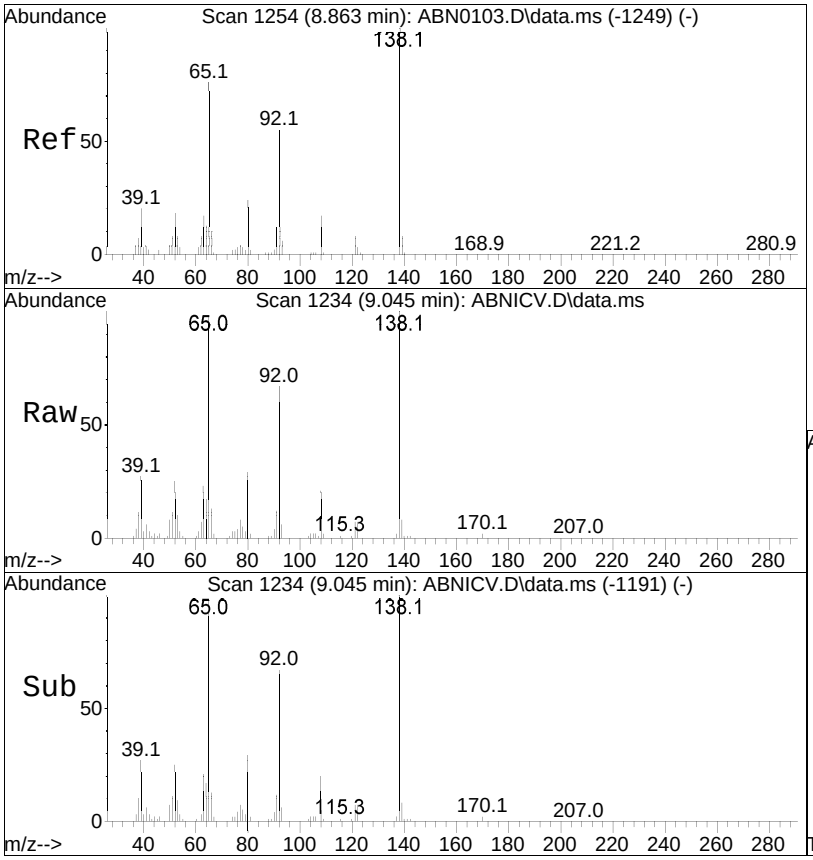


#46
2-Chloronaphthalene
Concen: 4.97 ug/ml
RT: 8.933 min Scan# 1215
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:162 Resp: 147157

Ion	Ratio	Lower	Upper
162	100		
127	39.9	32.2	48.4
164	32.2	25.7	38.5

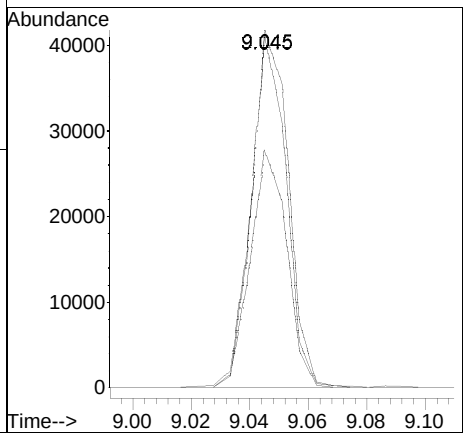


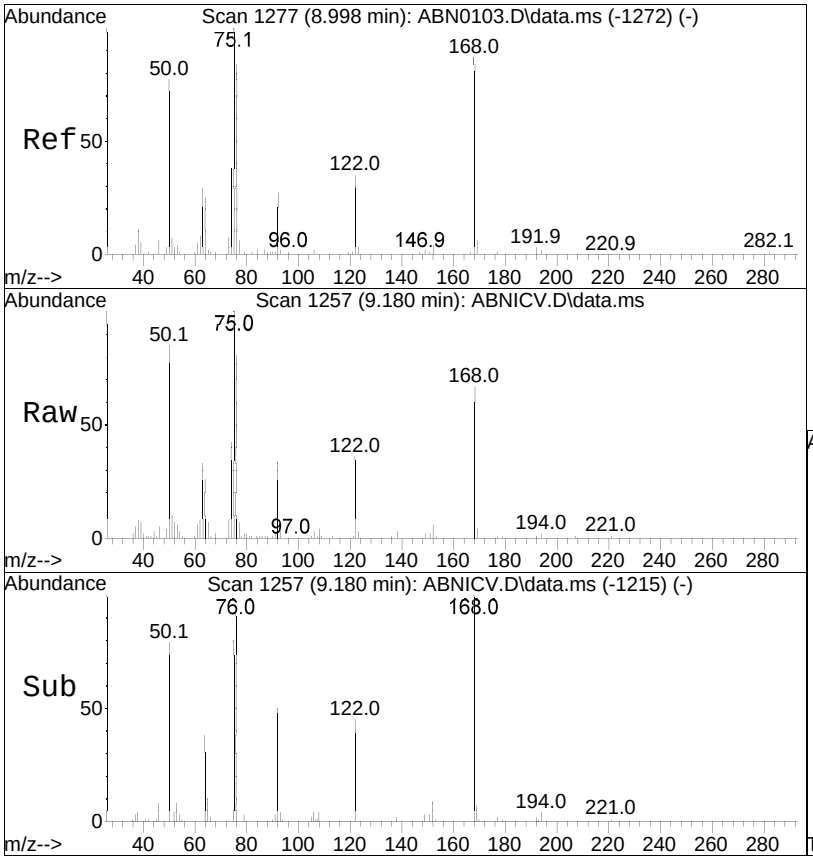


#47
2-Nitroaniline
Concen: 4.45 ug/ml
RT: 9.045 min Scan# 1234
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:138 Resp: 36042

Ion	Ratio	Lower	Upper
138	100		
92	66.3	53.5	80.3
65	94.5	86.3	129.5

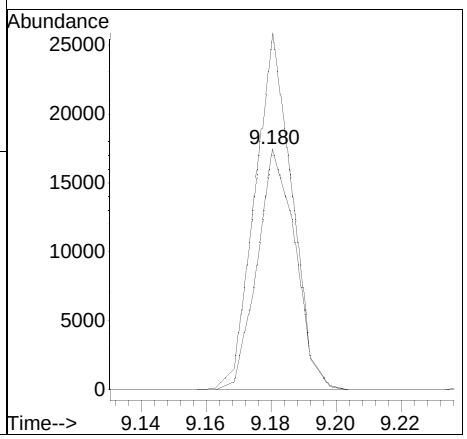


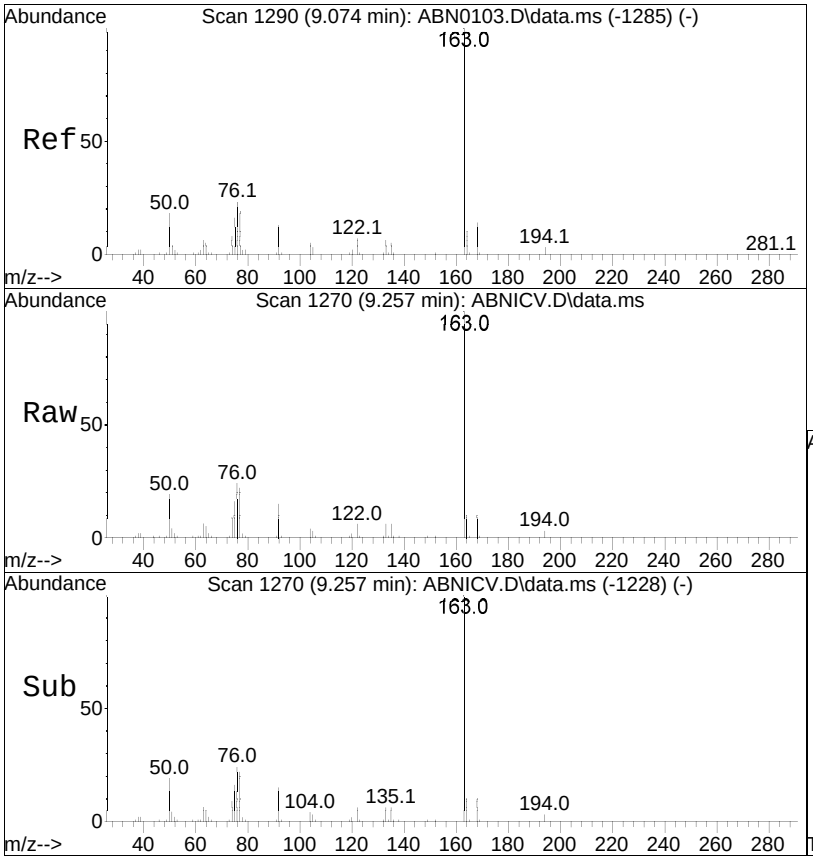


#48
1,4-Dinitrobenzene
Concen: 4.32 ug/ml
RT: 9.180 min Scan# 1257
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:168 Resp: 14246

Ion	Ratio	Lower	Upper
168	100		
75	143.2	121.8	182.8

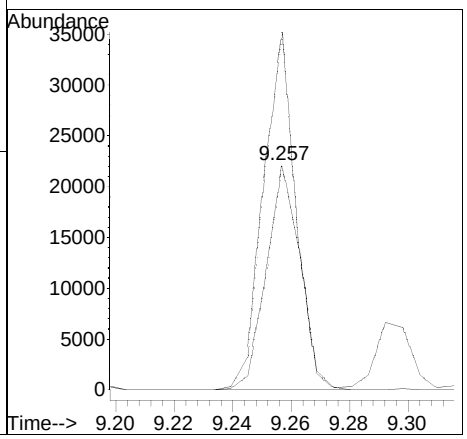


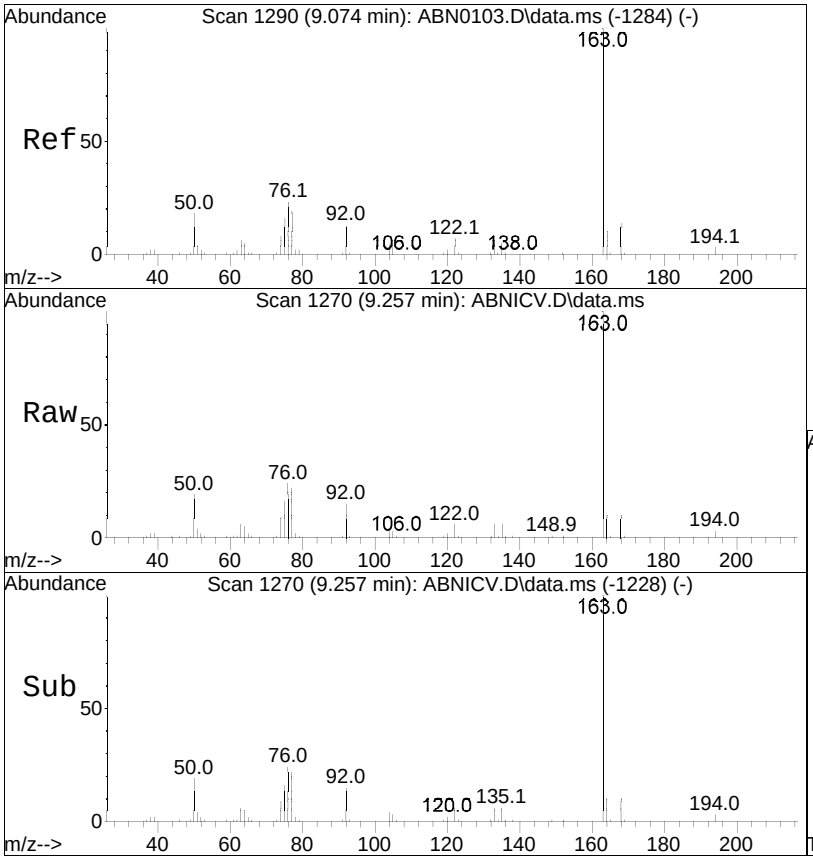


#49
1,3-Dinitrobenzene
Concen: 4.54 ug/ml
RT: 9.257 min Scan# 1270
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:168 Resp: 17604

Ion	Ratio	Lower	Upper
168	100		
75	151.2	22.7	34.1#

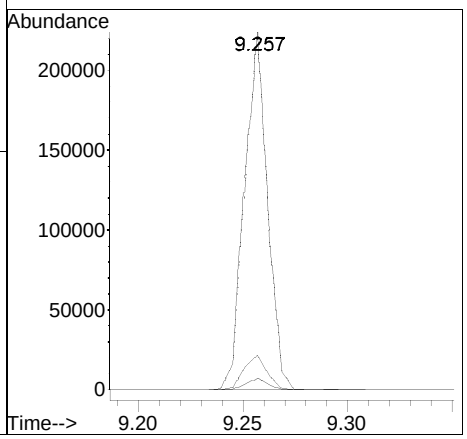


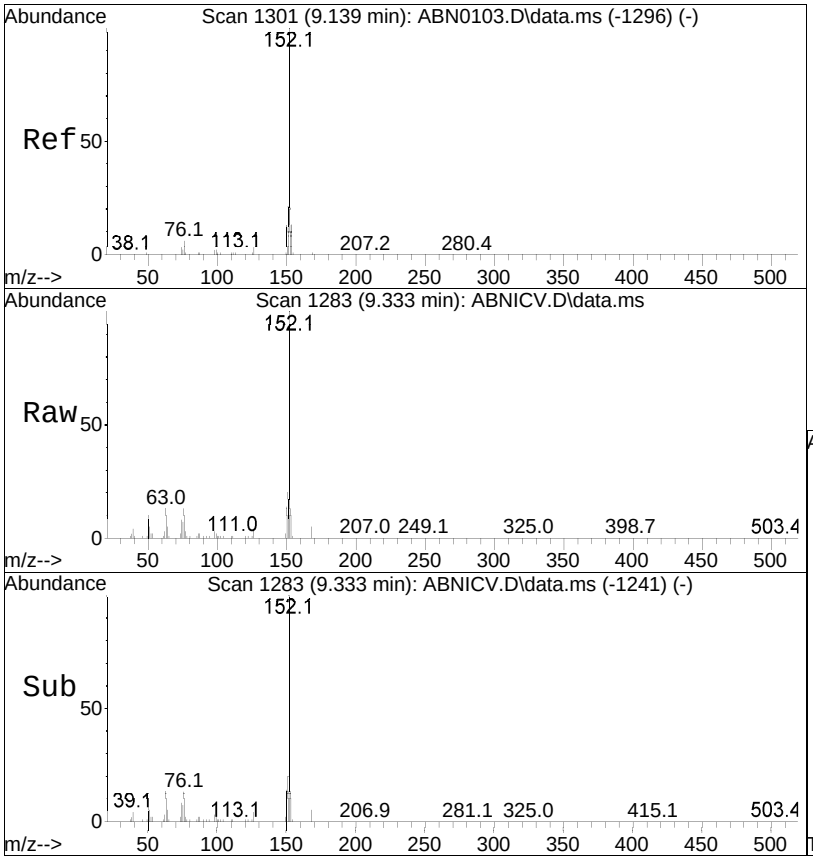


#50
Dimethyl phthalate
Concen: 4.85 ug/ml
RT: 9.257 min Scan# 1270
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:163 Resp: 169013

Ion	Ratio	Lower	Upper
163	100		
194	3.2	3.5	5.3#
164	9.9	7.9	11.9

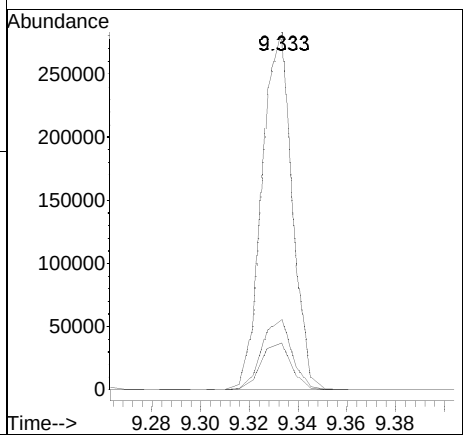


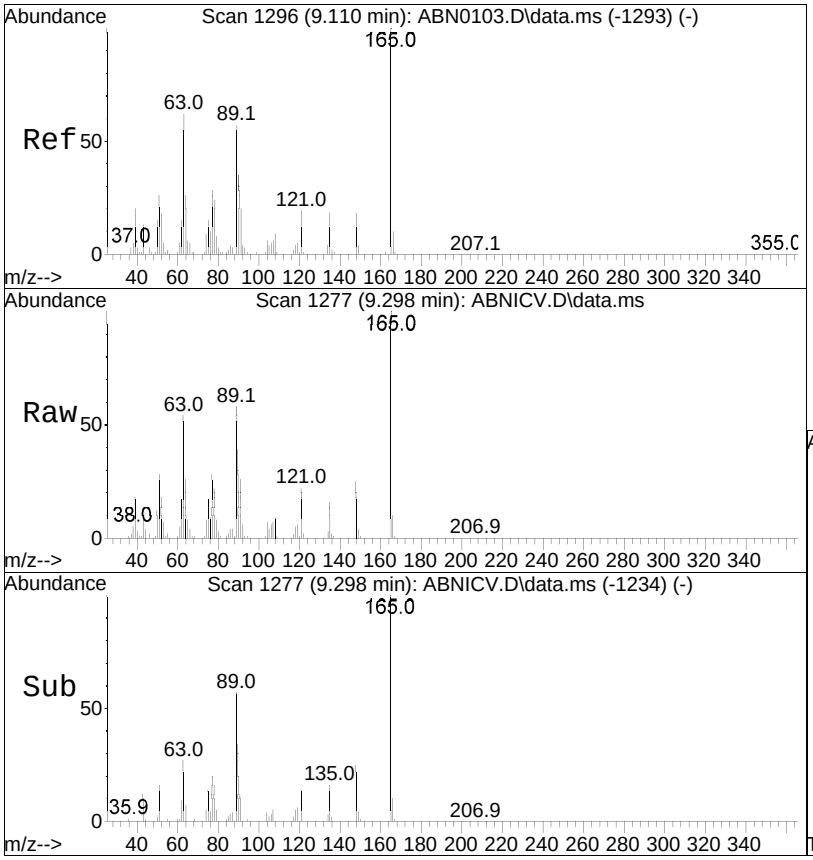


#51
Acenaphthylene
Concen: 5.03 ug/ml
RT: 9.333 min Scan# 1283
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:152 Resp: 240120

Ion	Ratio	Lower	Upper
152	100		
151	19.9	15.8	23.6
153	13.3	10.5	15.7

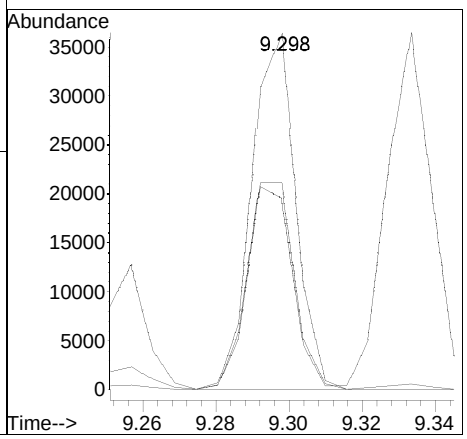


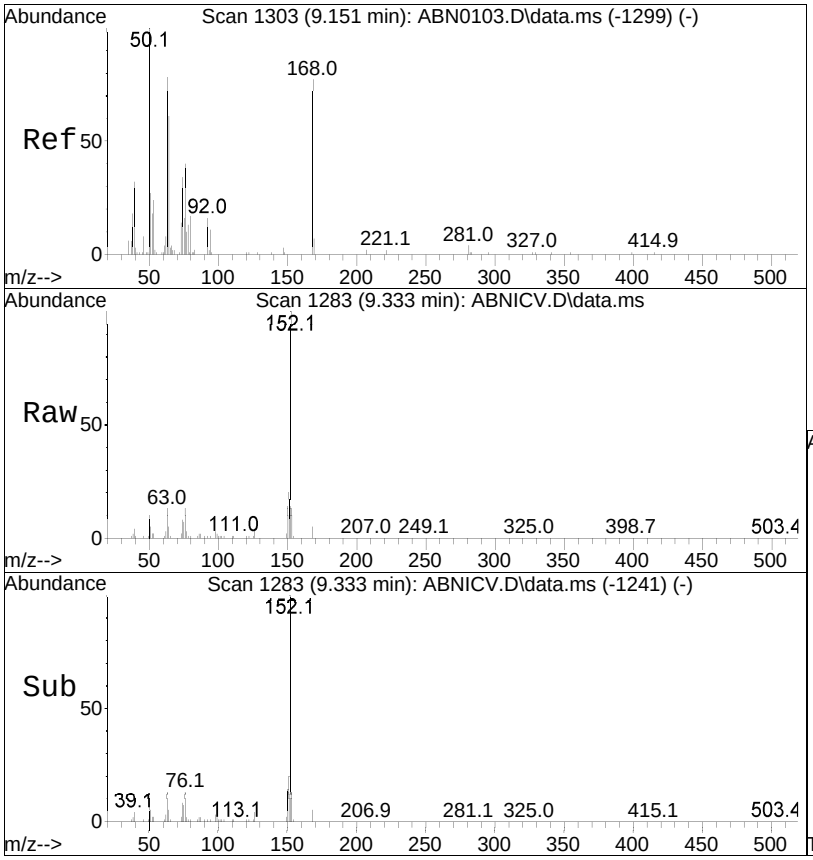


#52
2,6-Dinitrotoluene
Concen: 4.58 ug/ml
RT: 9.298 min Scan# 1277
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:165 Resp: 30463

Ion	Ratio	Lower	Upper
165	100		
89	62.8	54.2	81.2
63	59.0	64.2	96.2#

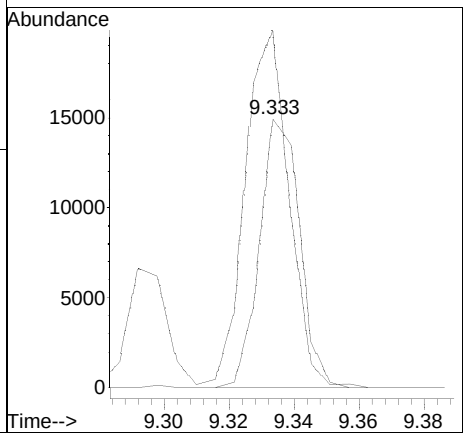


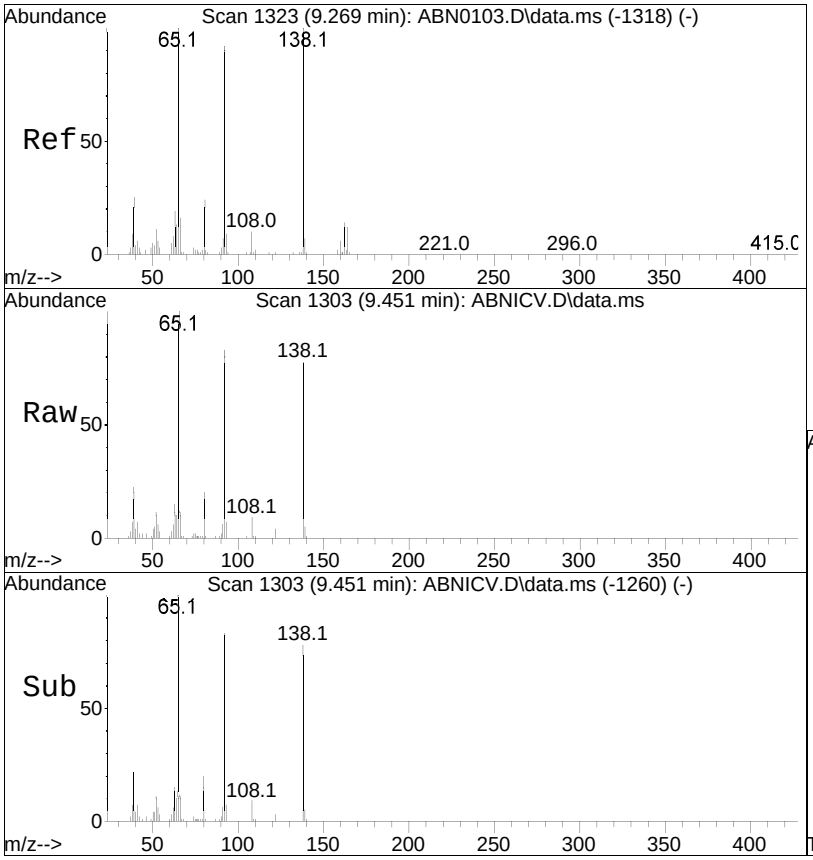


#53
1,2-Dinitrobenzene
Concen: 4.52 ug/ml
RT: 9.333 min Scan# 1283
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:168 Resp: 12690

Ion	Ratio	Lower	Upper
168	100		
75	145.5	30.9	46.3#

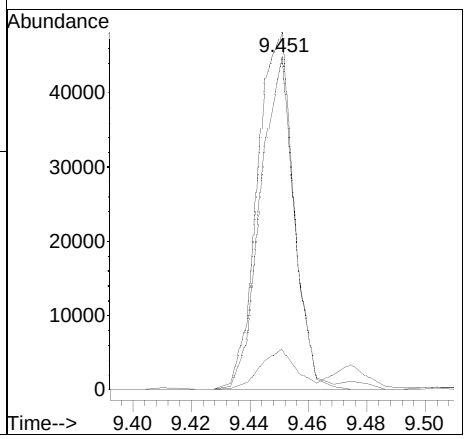


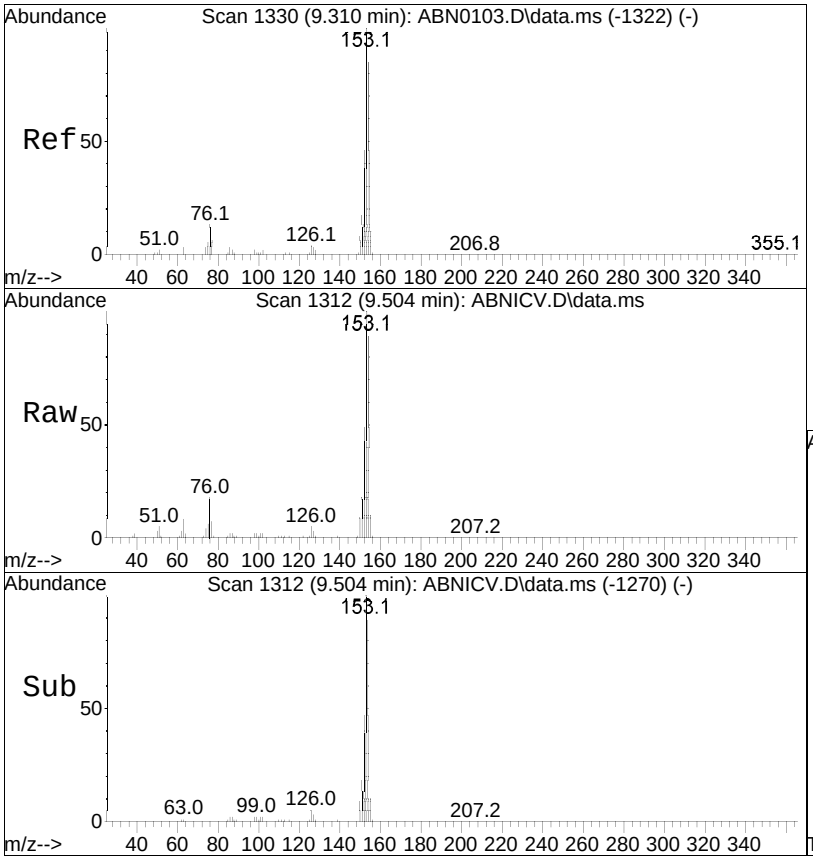


#63
3-Nitroaniline
Concen: 4.98 ug/ml
RT: 9.451 min Scan# 1303
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:138 Resp: 35610

Ion	Ratio	Lower	Upper
138	100		
92	116.8	93.4	140.2
108	13.3	9.5	14.3

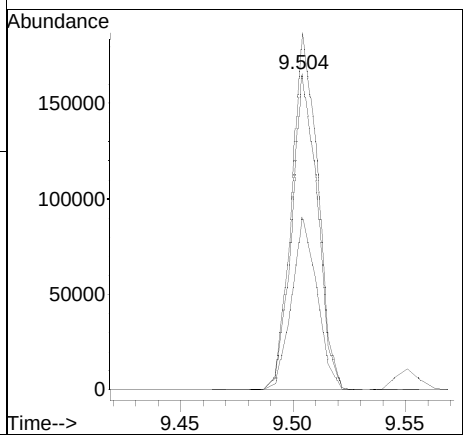


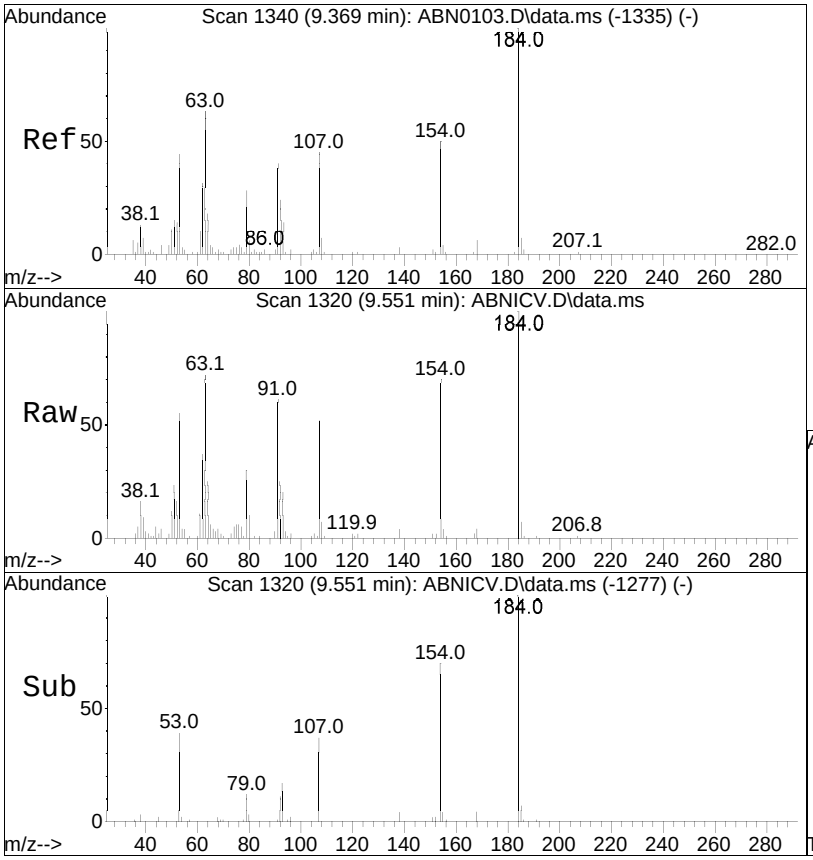


#64
Acenaphthene
Concen: 4.66 ug/ml
RT: 9.504 min Scan# 1312
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:154 Resp: 131783

Ion	Ratio	Lower	Upper
154	100		
153	114.8	85.3	127.9
152	54.3	41.4	62.0

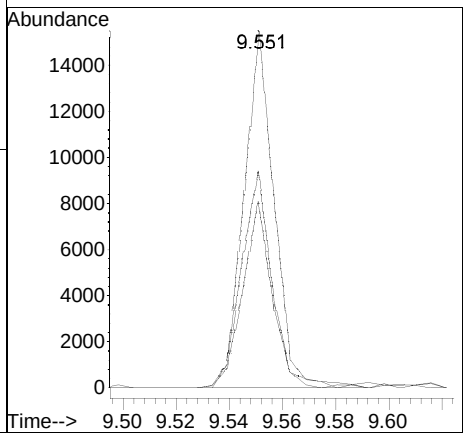


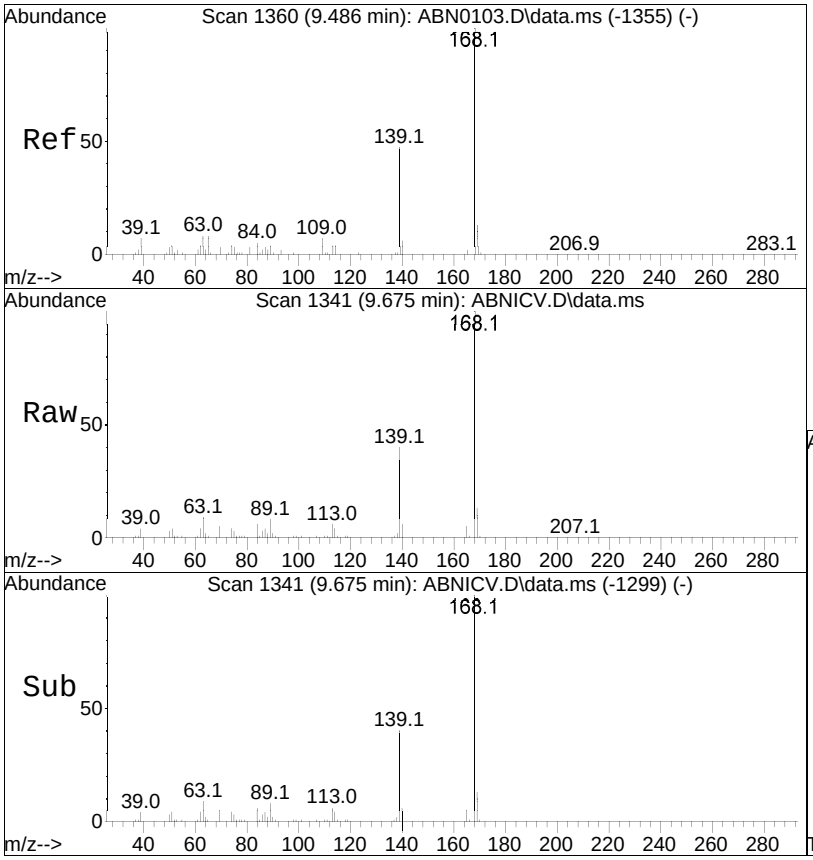


#65
2,4-Dinitrophenol
Concen: 4.12 ug/ml
RT: 9.551 min Scan# 1320
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:184 Resp: 12153

Ion	Ratio	Lower	Upper
184	100		
107	50.5	37.7	56.5
91	61.5	46.3	69.5

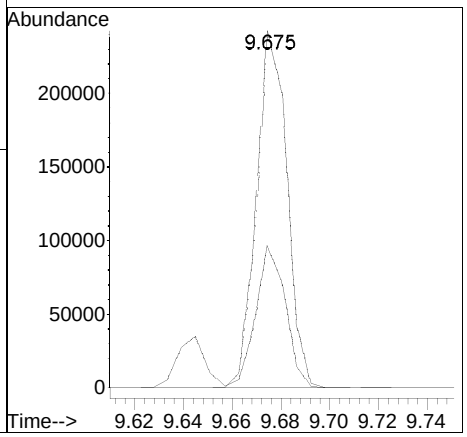


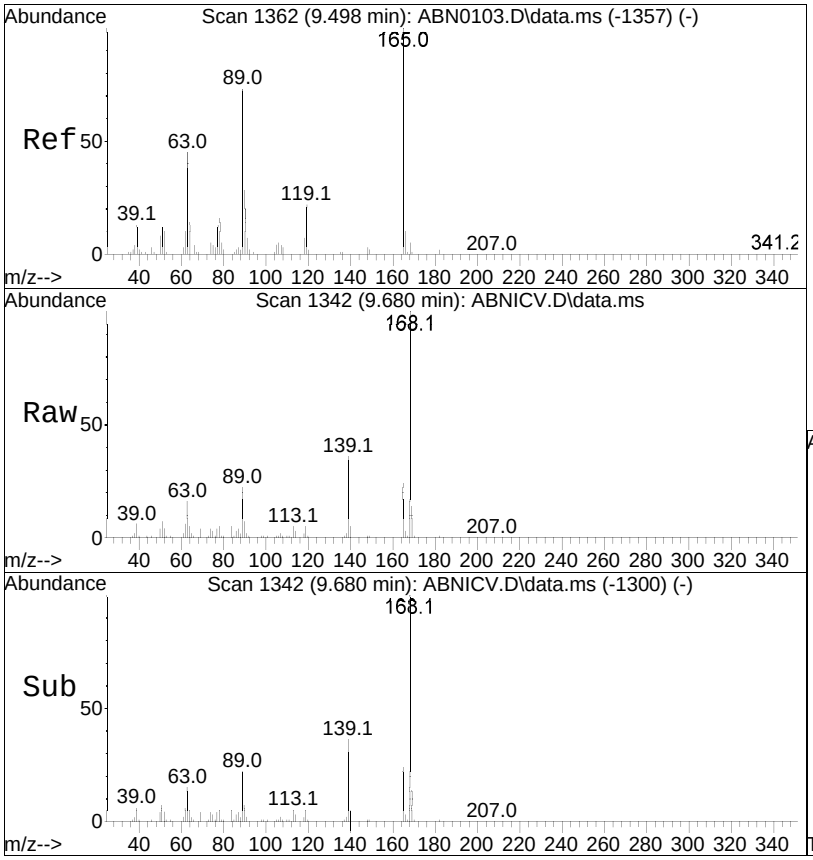


#66
Dibenzofuran
Concen: 4.91 ug/ml
RT: 9.675 min Scan# 1341
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:168 Resp: 207762

Ion	Ratio	Lower	Upper
168	100		
139	39.1	31.4	47.2

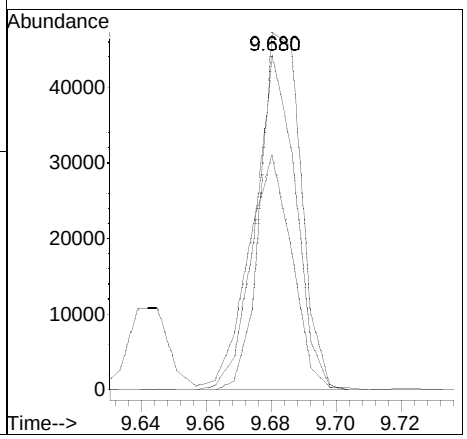


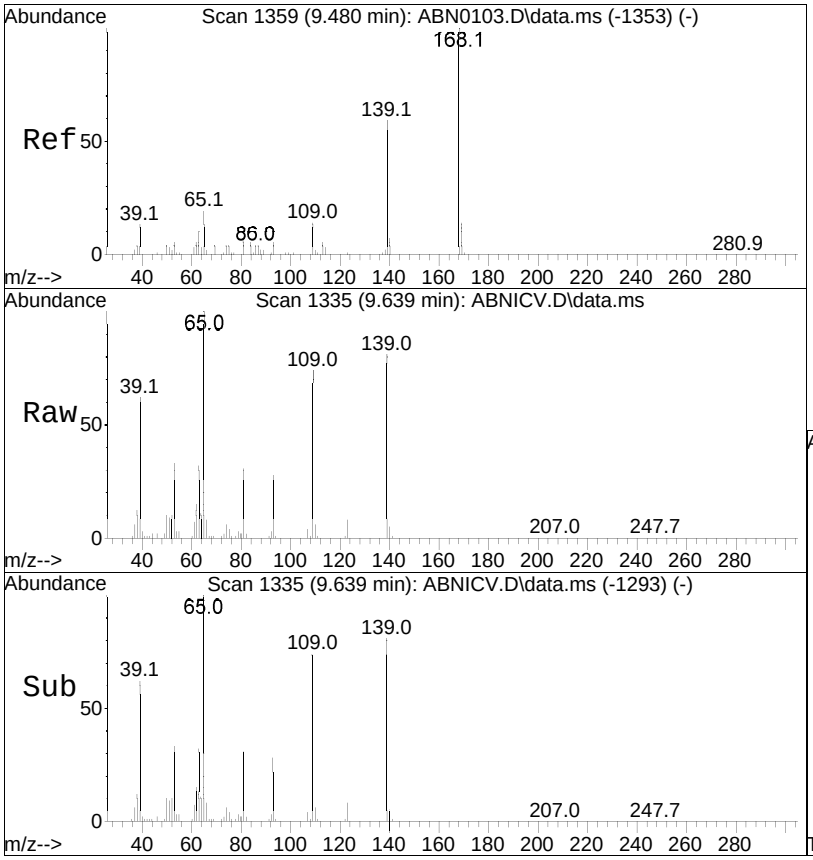


#67
2,4-Dinitrotoluene
Concen: 4.55 ug/ml
RT: 9.680 min Scan# 1342
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:165 Resp: 40776

Ion	Ratio	Lower	Upper
165	100		
89	92.1	72.0	108.0
63	71.9	52.7	79.1

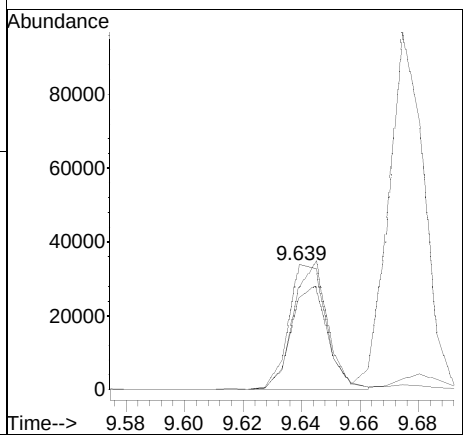


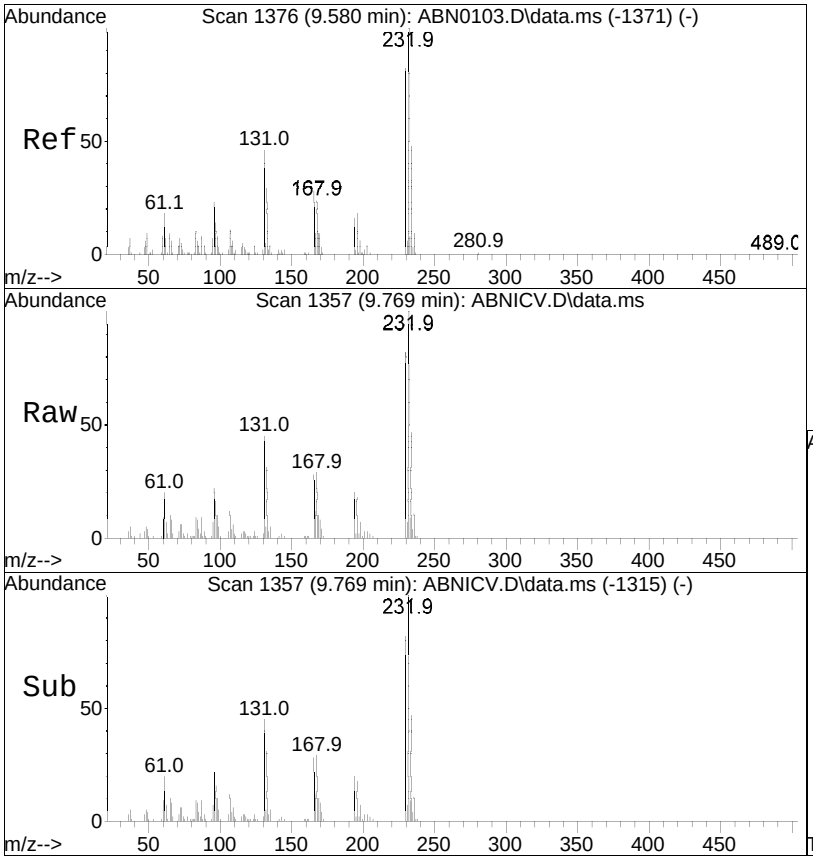


#68
4-Nitrophenol
Concen: 4.50 ug/ml
RT: 9.639 min Scan# 1335
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 65 Resp: 30240

Ion	Ratio	Lower	Upper
65	100		
109	82.3	47.4	71.2#
139	92.7	76.6	115.0

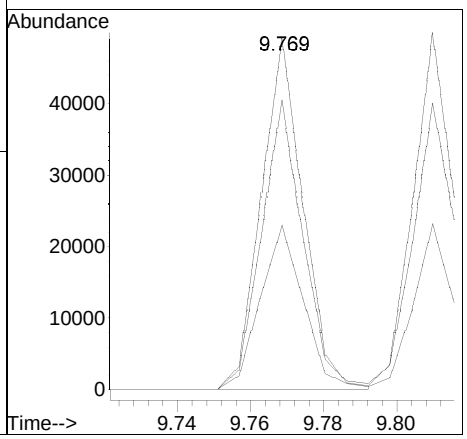


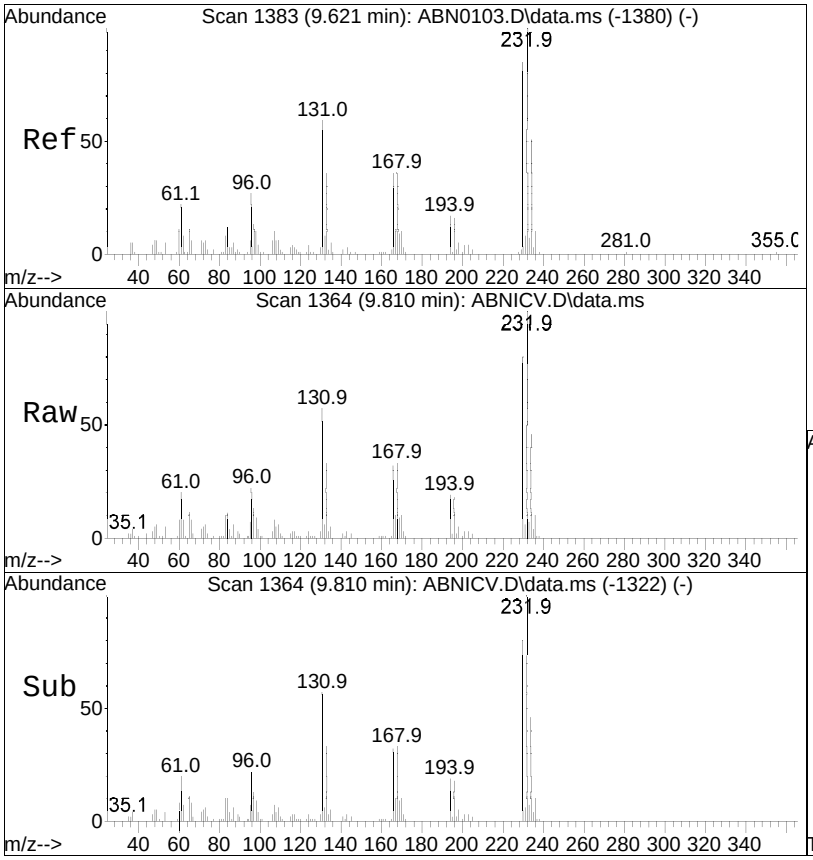


#69
2,3,5,6-Tetrachlorophenol
Concen: 4.80 ug/ml
RT: 9.769 min Scan# 1357
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:232 Resp: 39034

Ion	Ratio	Lower	Upper
232	100		
230	82.4	64.2	96.4
234	48.5	38.1	57.1

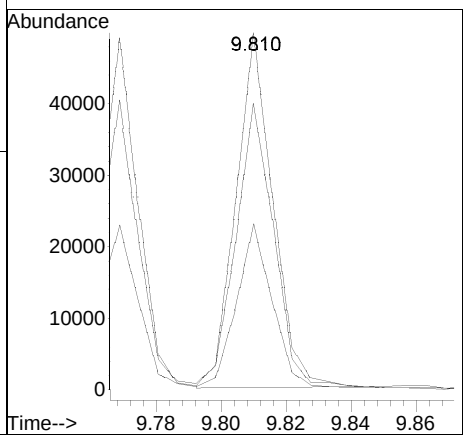


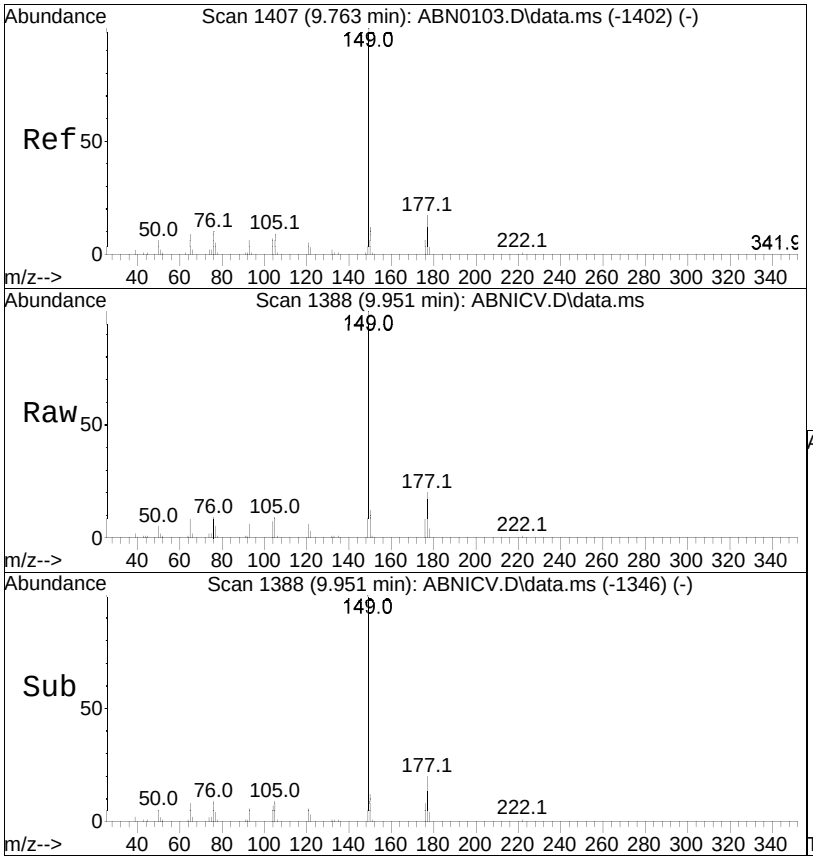


#70
2,3,4,6-Tetrachlorophenol
Concen: 4.67 ug/ml
RT: 9.810 min Scan# 1364
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:232 Resp: 39370

Ion	Ratio	Lower	Upper
232	100		
230	84.6	61.8	92.8
234	46.7	36.2	54.2

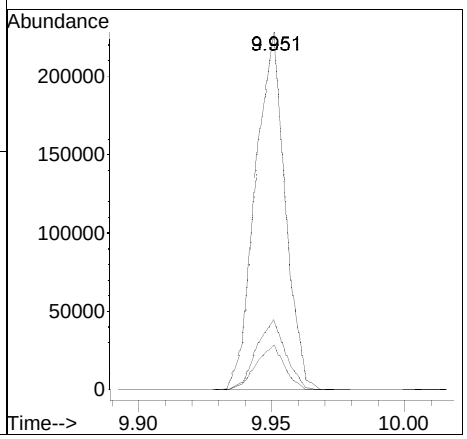


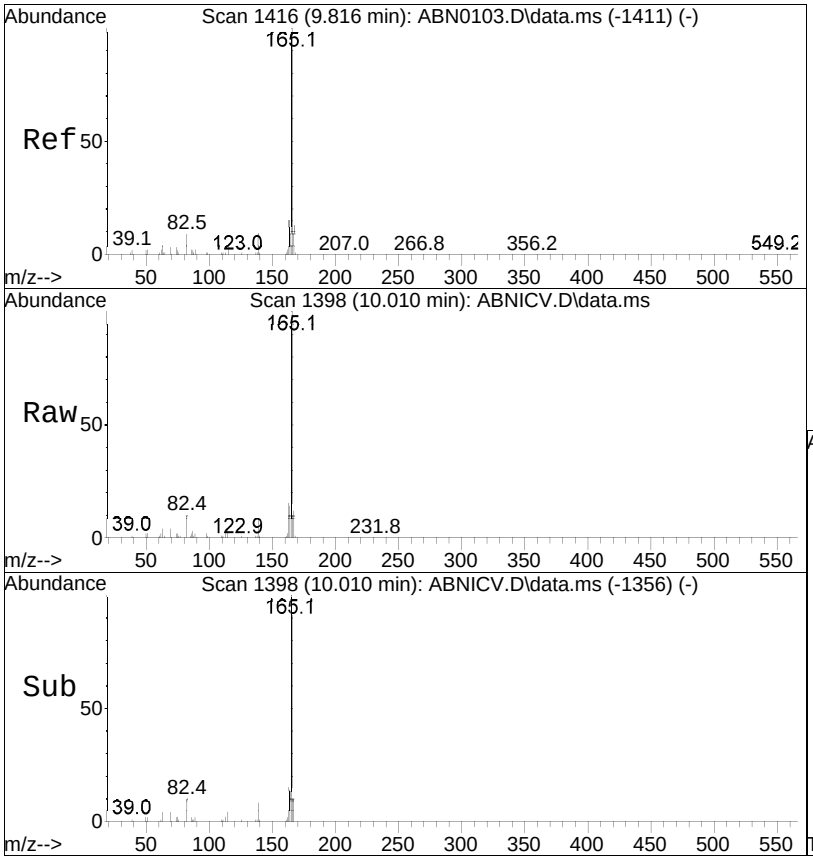


#71
Diethyl phthalate
Concen: 4.96 ug/ml
RT: 9.951 min Scan# 1388
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:149 Resp: 175591

Ion	Ratio	Lower	Upper
149	100		
177	19.6	16.1	24.1
150	12.2	9.4	14.2

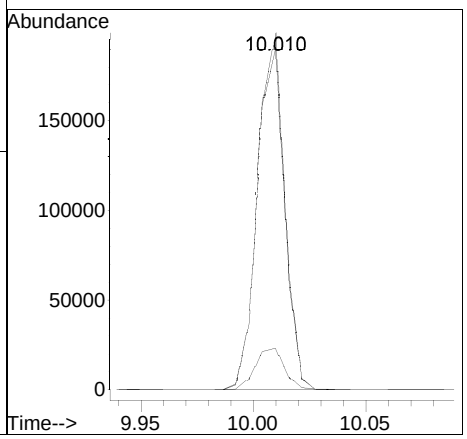


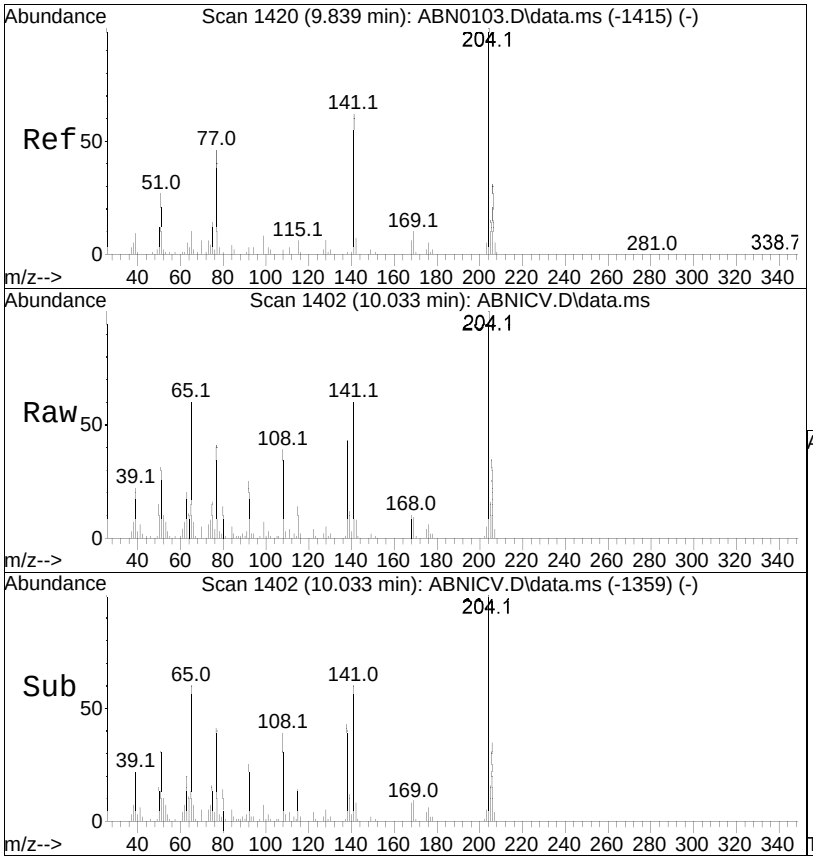


#72
Fluorene
Concen: 4.83 ug/ml
RT: 10.010 min Scan# 1398
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:166 Resp: 161349

Ion	Ratio	Lower	Upper
166	100		
165	103.1	76.2	114.2
167	13.2	10.6	15.8

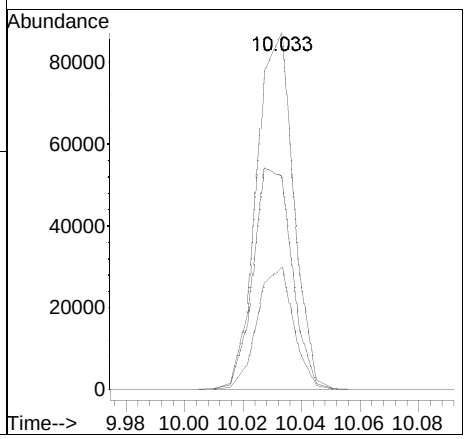


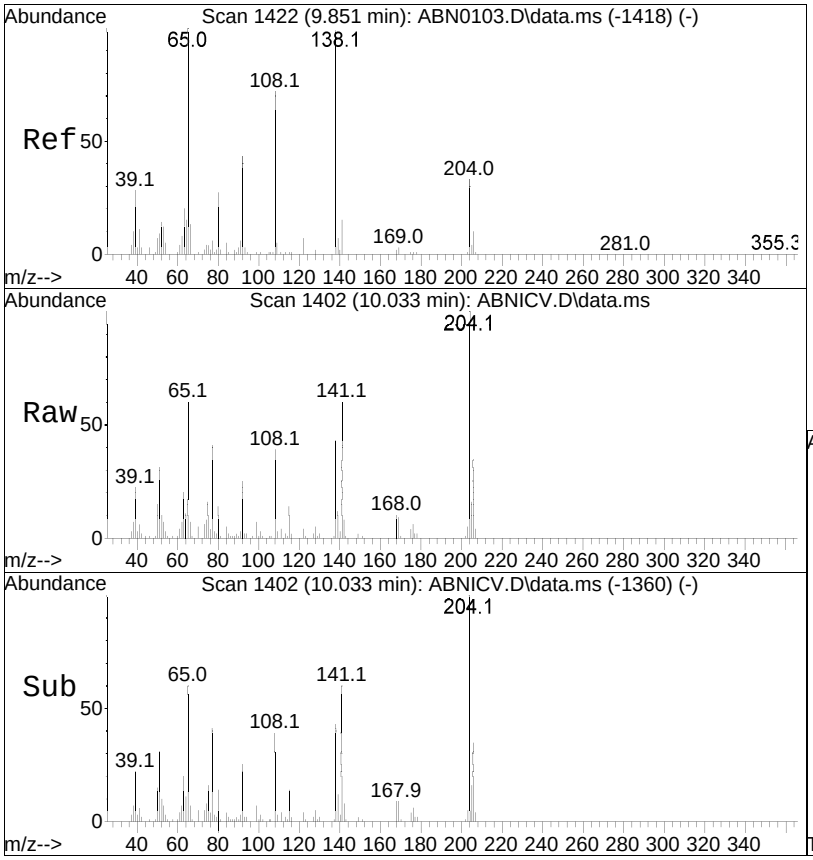


#73
4-Chlorophenyl phenyl ether
Concen: 4.79 ug/ml
RT: 10.033 min Scan# 1402
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:204 Resp: 76376

Ion	Ratio	Lower	Upper
204	100		
206	33.8	25.8	38.6
141	64.7	53.6	80.4

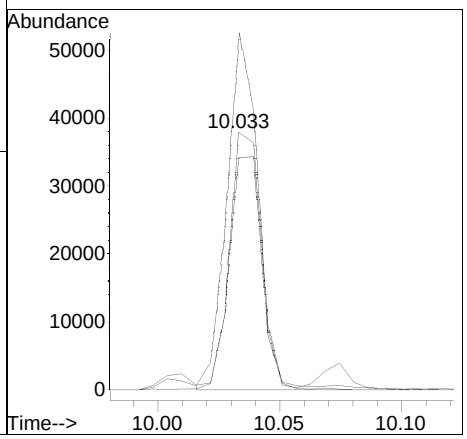


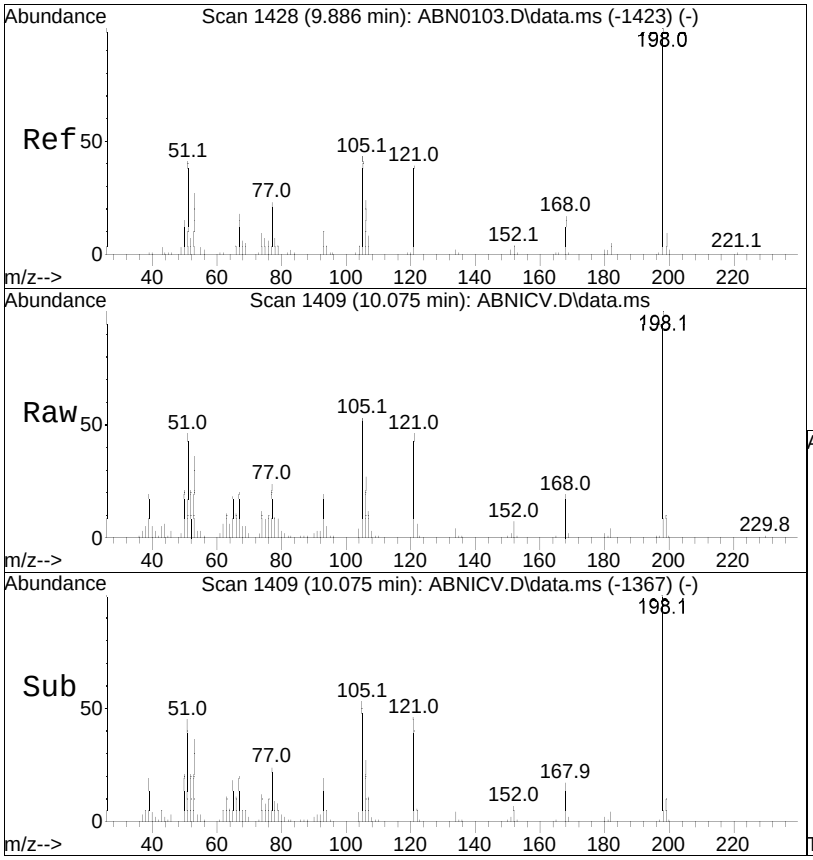


#74
4-Nitroaniline
Concen: 4.77 ug/ml
RT: 10.033 min Scan# 1402
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:138 Resp: 34455

Ion	Ratio	Lower	Upper
138	100		
108	93.1	52.1	78.1#
65	137.0	115.0	172.6

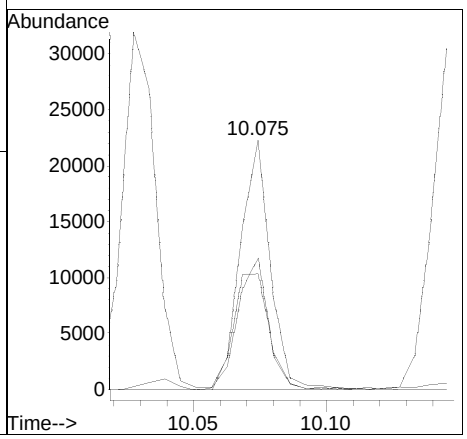


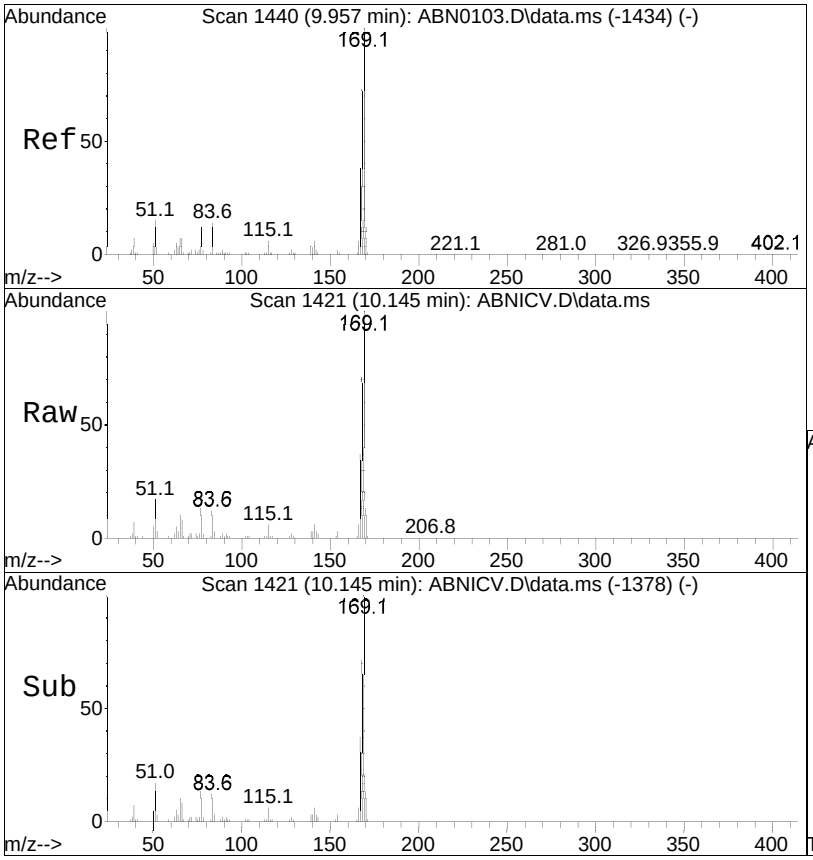


#75
4,6-Dinitro-o-cresol
Concen: 4.44 ug/ml
RT: 10.075 min Scan# 1409
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:198 Resp: 17576

Ion	Ratio	Lower	Upper
198	100		
51	57.2	76.0	114.0#
105	54.0	45.6	68.4

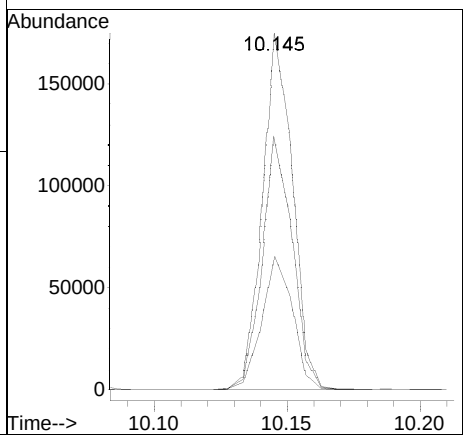


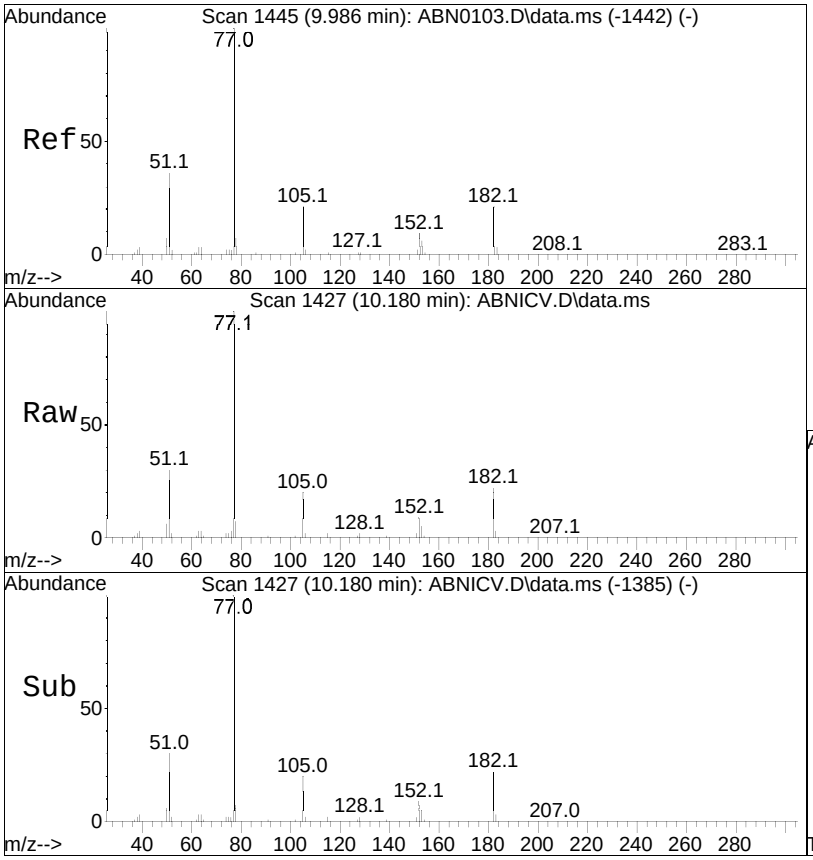


#76
NDPA/DPA
Concen: 4.88 ug/ml
RT: 10.145 min Scan# 1421
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:169 Resp: 137047

Ion	Ratio	Lower	Upper
169	100		
168	71.0	54.0	81.0
167	38.6	28.6	42.8

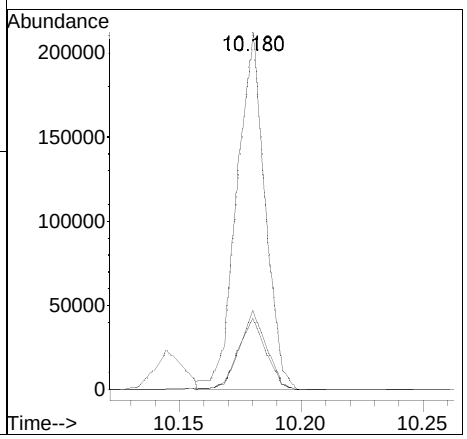


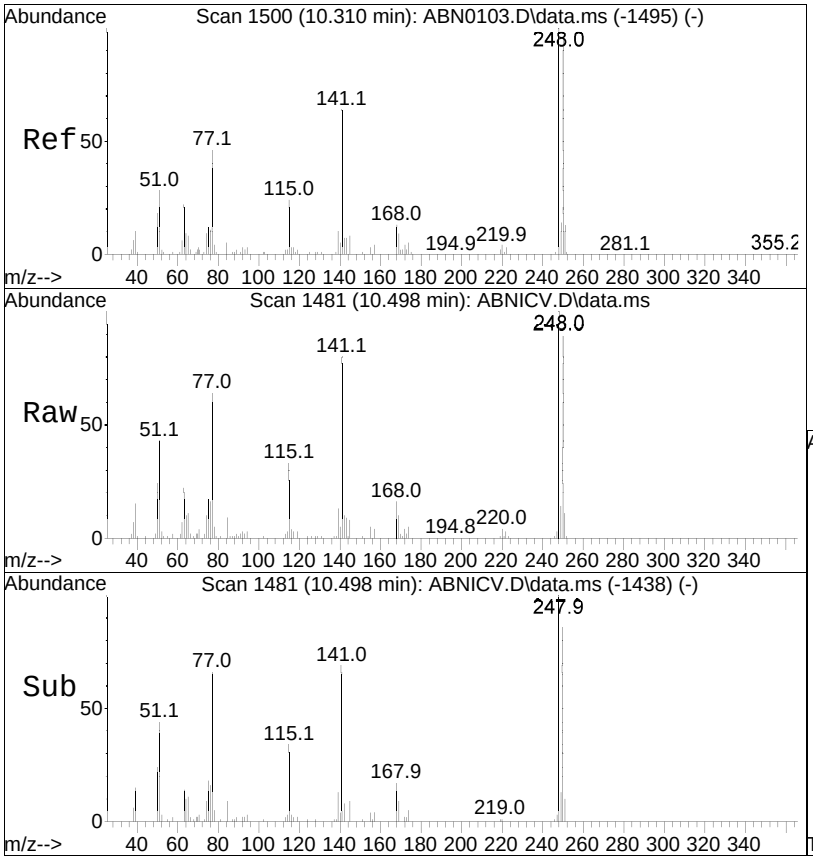


#77
Azobenzene
Concen: 5.10 ug/ml
RT: 10.180 min Scan# 1427
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion: 77 Resp: 168401

Ion	Ratio	Lower	Upper
77	100		
182	22.0	17.4	26.2
105	20.9	15.4	23.2

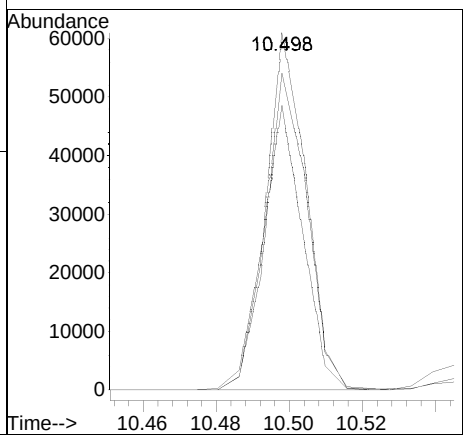


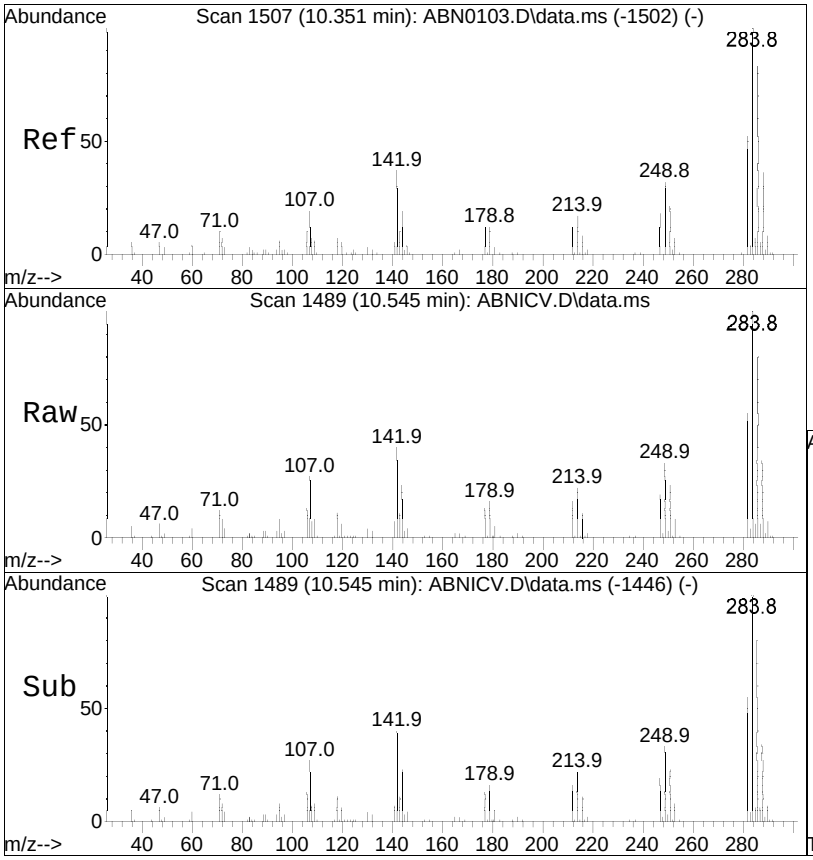


#79
4-Bromophenyl phenyl ether
Concen: 5.02 ug/ml
RT: 10.498 min Scan# 1481
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:248 Resp: 46603

Ion	Ratio	Lower	Upper
248	100		
141	79.7	76.6	114.8
250	91.2	77.3	115.9

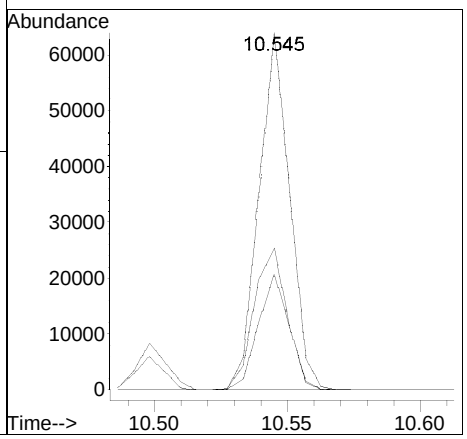


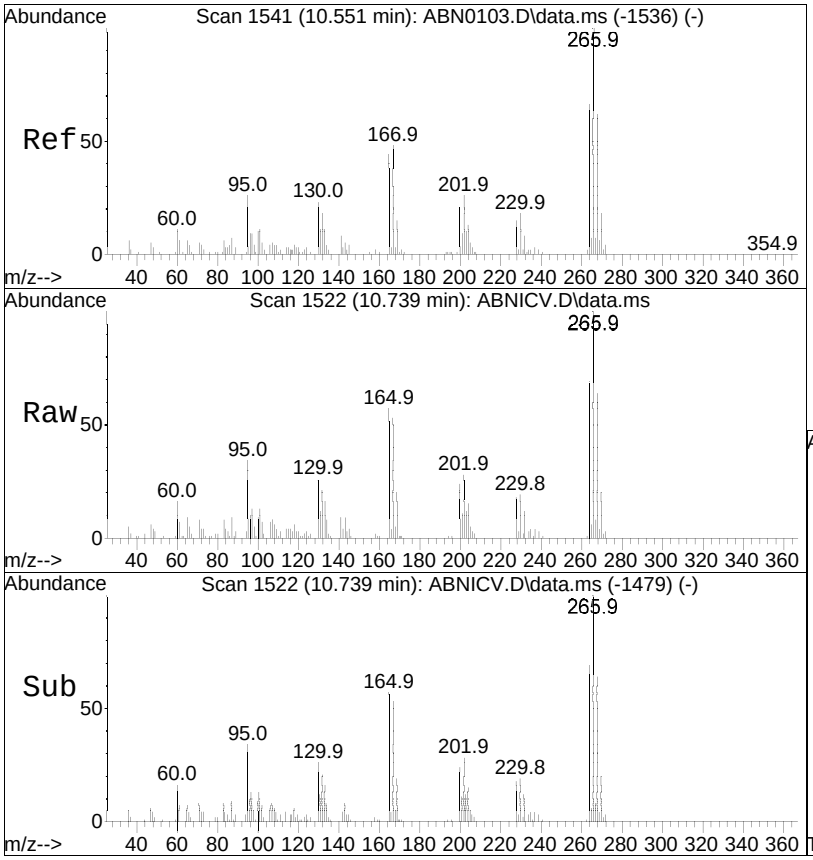


#80
Hexachlorobenzene
Concen: 4.74 ug/ml
RT: 10.545 min Scan# 1489
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:284 Resp: 51213

Ion	Ratio	Lower	Upper
284	100		
142	42.9	41.9	62.9
249	32.7	24.1	36.1

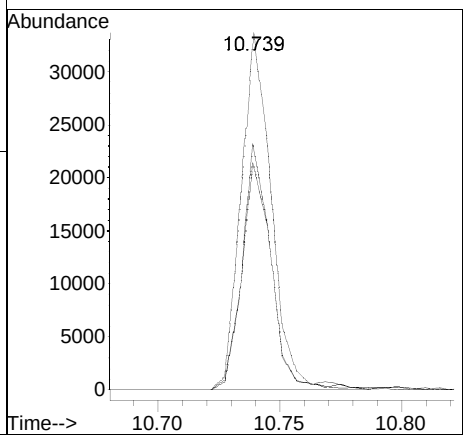


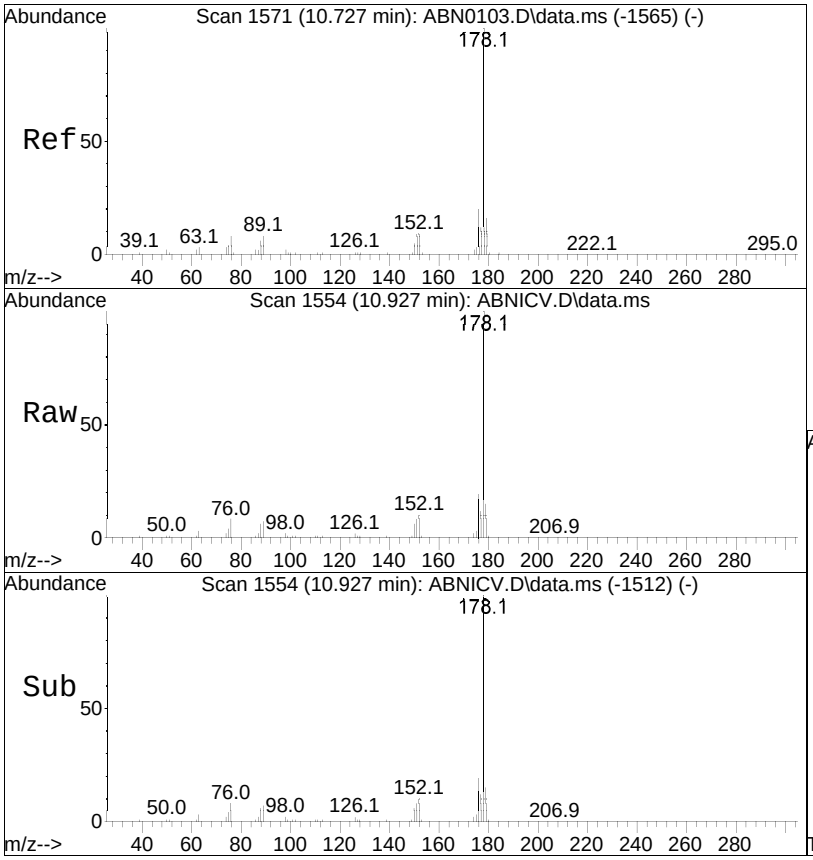


#81
Pentachlorophenol
Concen: 4.62 ug/ml
RT: 10.739 min Scan# 1522
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:266 Resp: 29323

Ion	Ratio	Lower	Upper
266	100		
264	64.6	49.7	74.5
268	62.9	50.5	75.7

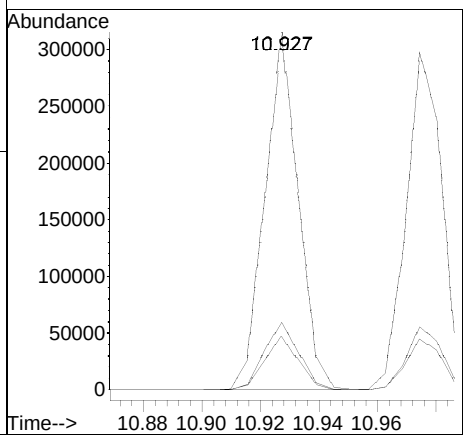


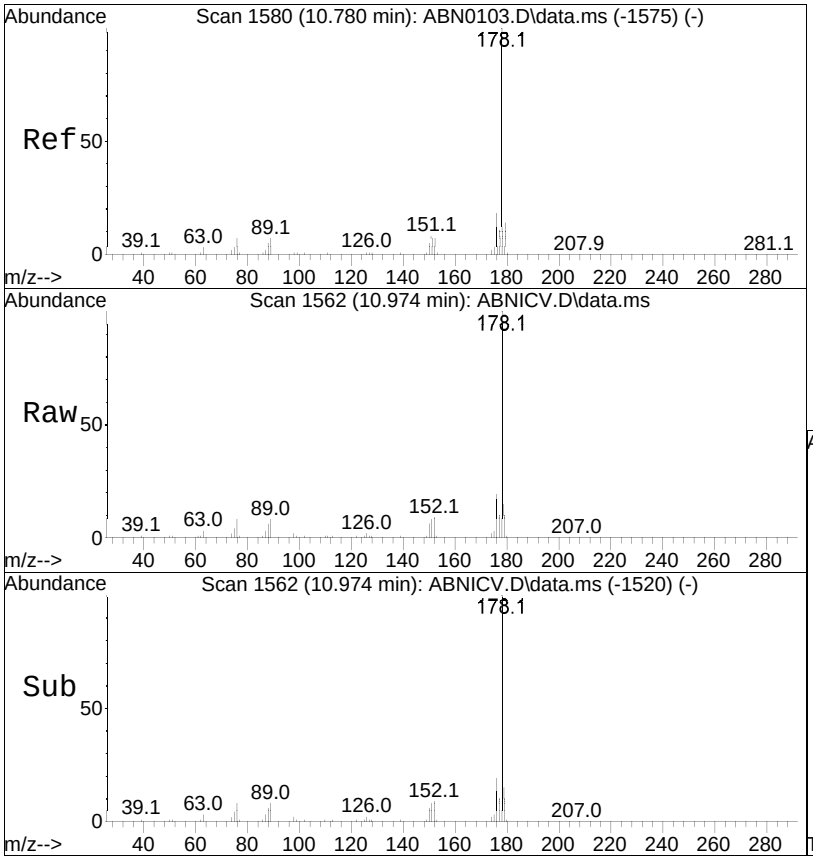


#88
Phenanthrene
Concen: 4.65 ug/ml
RT: 10.927 min Scan# 1554
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:178 Resp: 249661

Ion	Ratio	Lower	Upper
178	100		
179	15.3	12.2	18.2
176	19.5	15.4	23.2

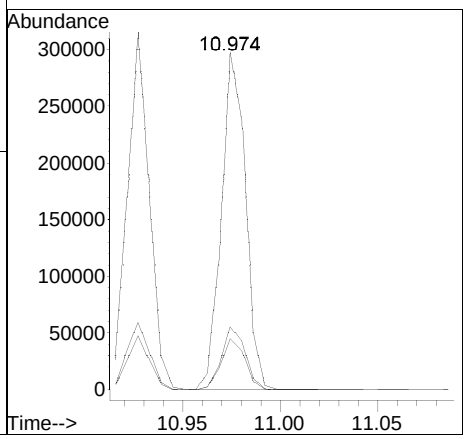


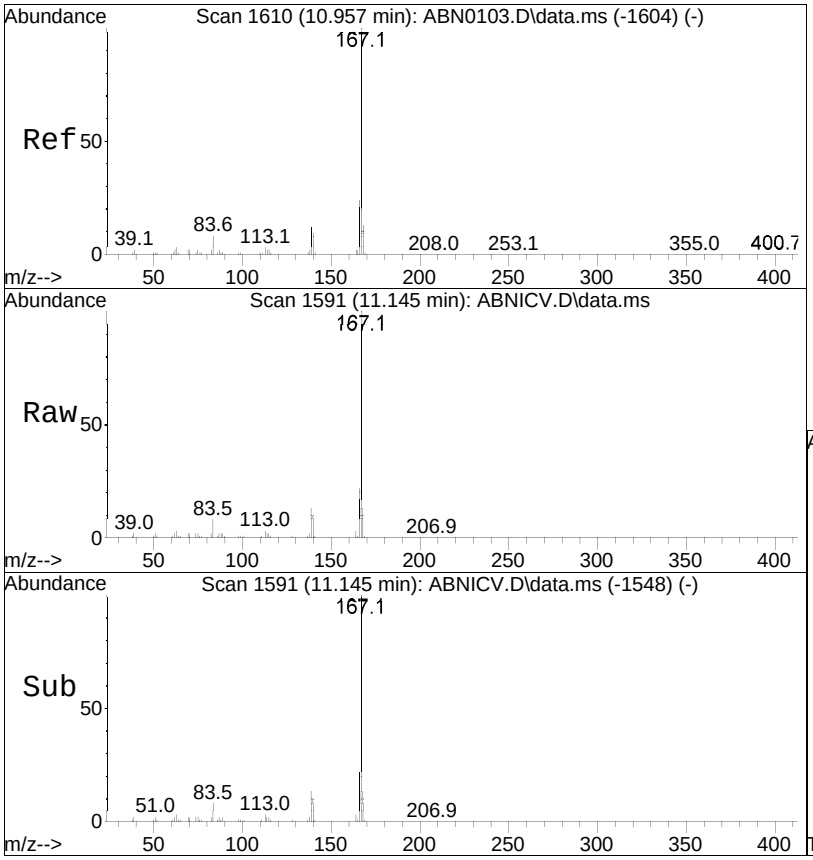


#89
Anthracene
Concen: 4.77 ug/ml
RT: 10.974 min Scan# 1562
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:178 Resp: 255236

Ion	Ratio	Lower	Upper
178	100		
179	15.2	12.0	18.0
176	18.6	14.6	22.0

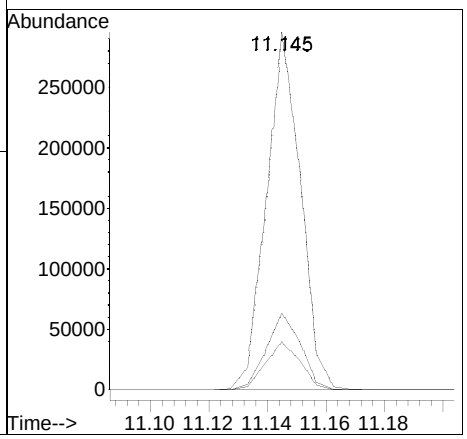


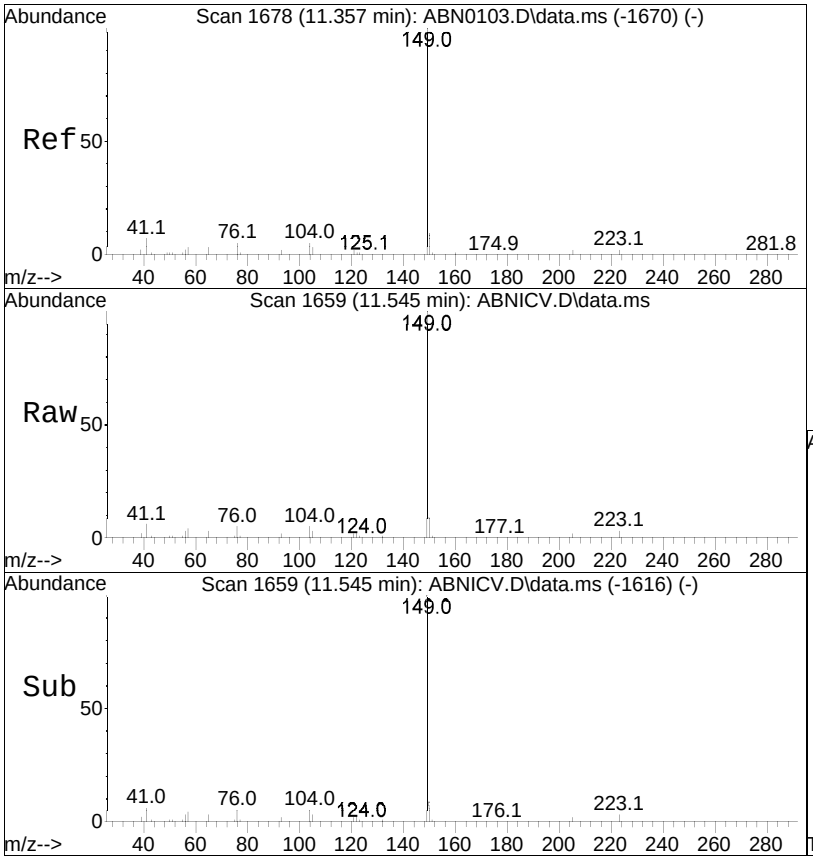


#90
Carbazole
Concen: 4.84 ug/ml
RT: 11.145 min Scan# 1591
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:167 Resp: 236335

Ion	Ratio	Lower	Upper
167	100		
168	13.8	10.6	15.8
166	21.8	17.4	26.0

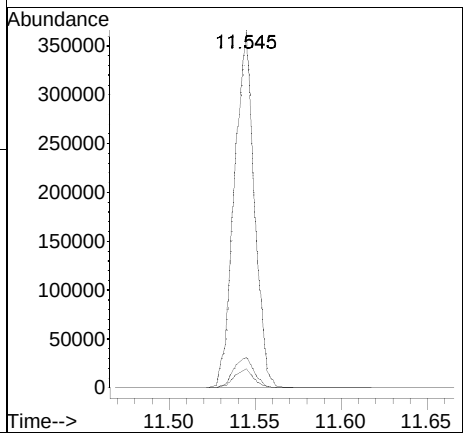


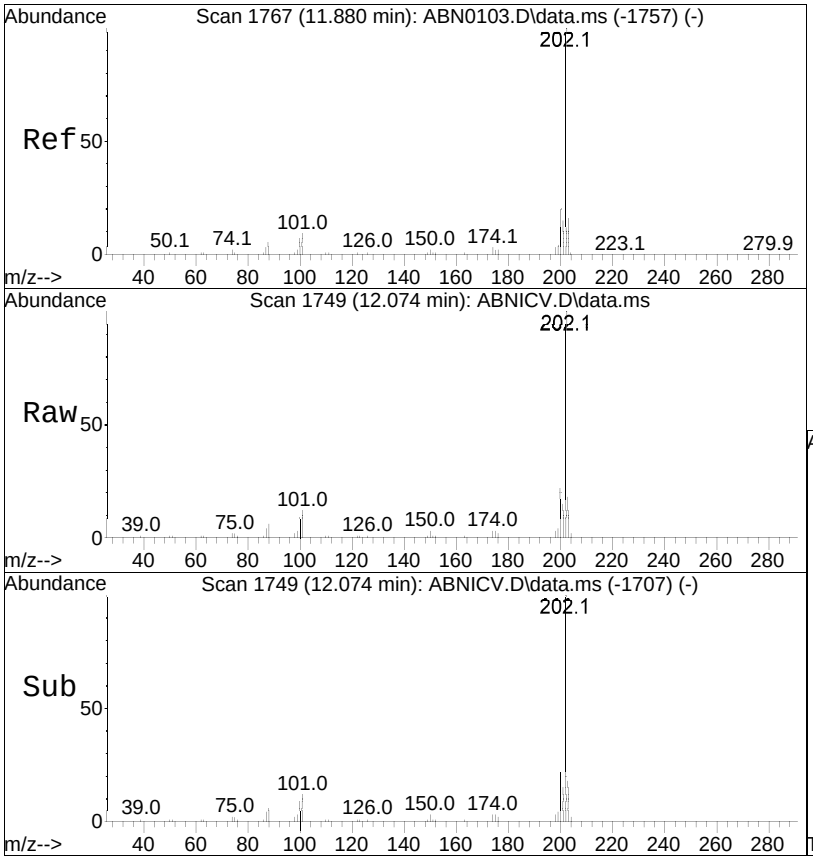


#91
Di-n-butylphthalate
Concen: 4.65 ug/ml
RT: 11.545 min Scan# 1659
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:149 Resp: 290986

Ion	Ratio	Lower	Upper
149	100		
150	9.0	7.0	10.6
104	5.4	4.5	6.7

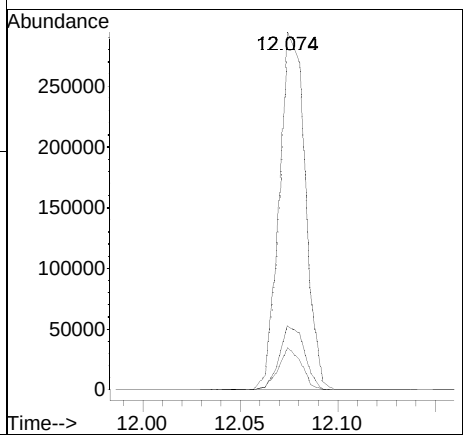


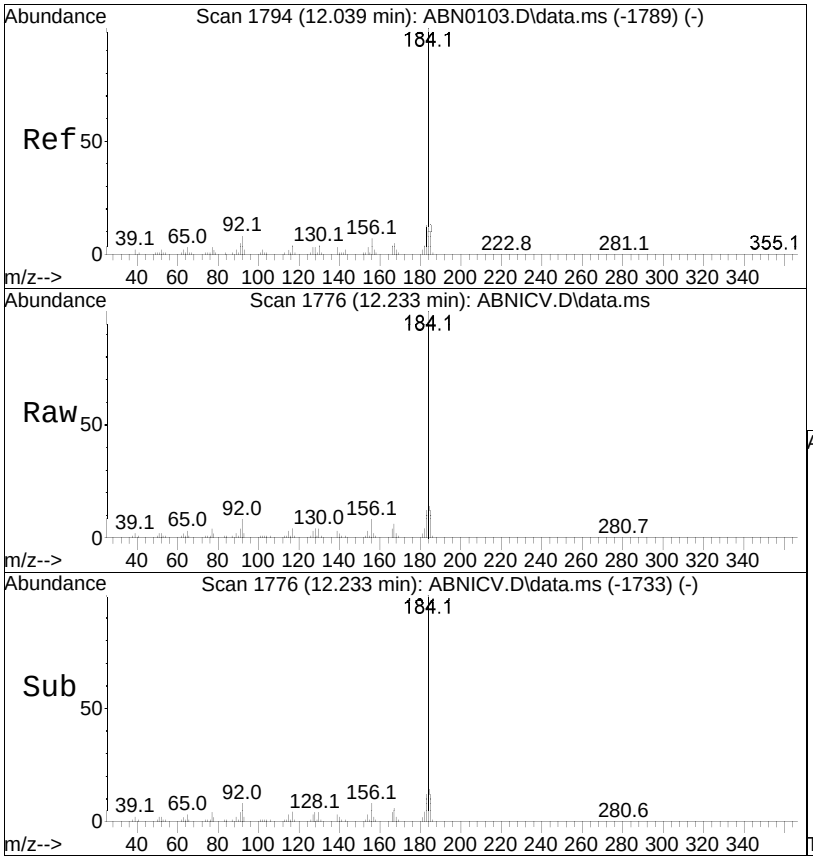


#92
Fluoranthene
Concen: 4.70 ug/ml
RT: 12.074 min Scan# 1749
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:202 Resp: 270091

Ion	Ratio	Lower	Upper
202	100		
101	10.8	13.5	20.3#
203	17.6	13.6	20.4

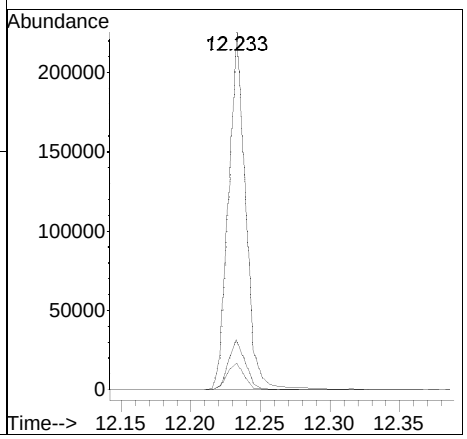


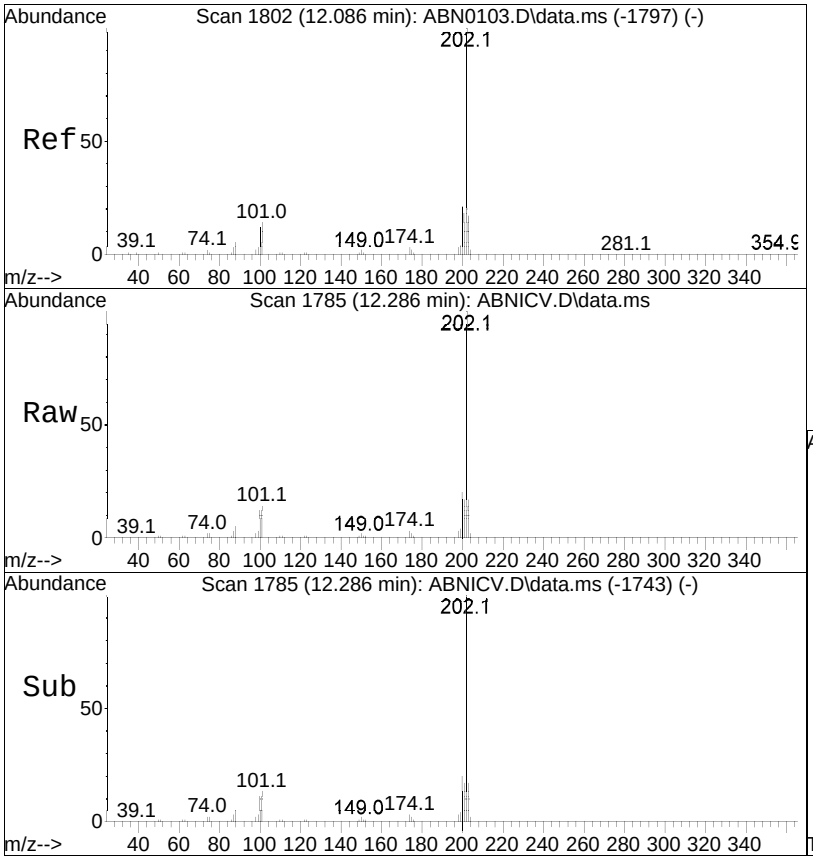


#93
Benzidine
Concen: 5.03 ug/ml
RT: 12.233 min Scan# 1776
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:184 Resp: 190778

Ion	Ratio	Lower	Upper
184	100		
92	7.8	9.1	13.7#
185	14.4	11.1	16.7

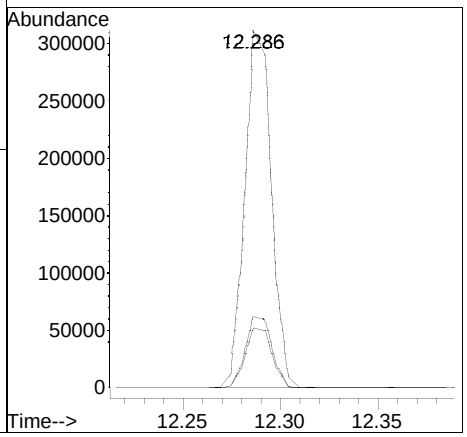


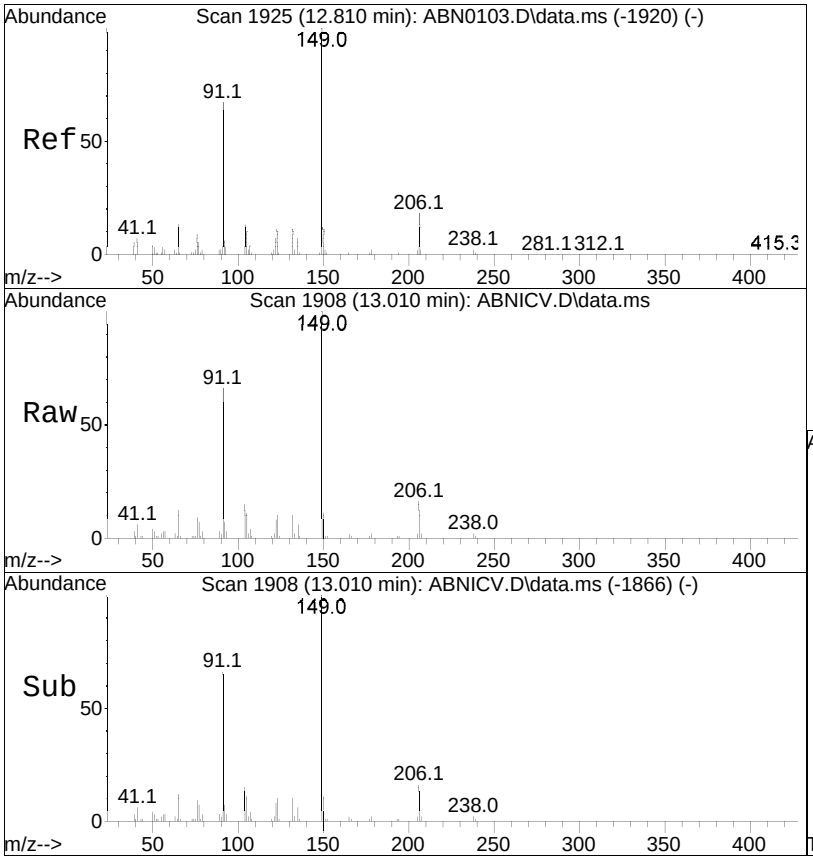


#94
Pyrene
Concen: 4.81 ug/ml
RT: 12.286 min Scan# 1785
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:202 Resp: 292413

Ion	Ratio	Lower	Upper
202	100		
200	20.2	16.7	25.1
203	17.1	14.2	21.4

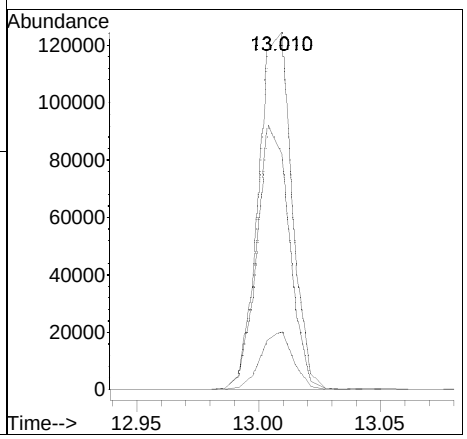


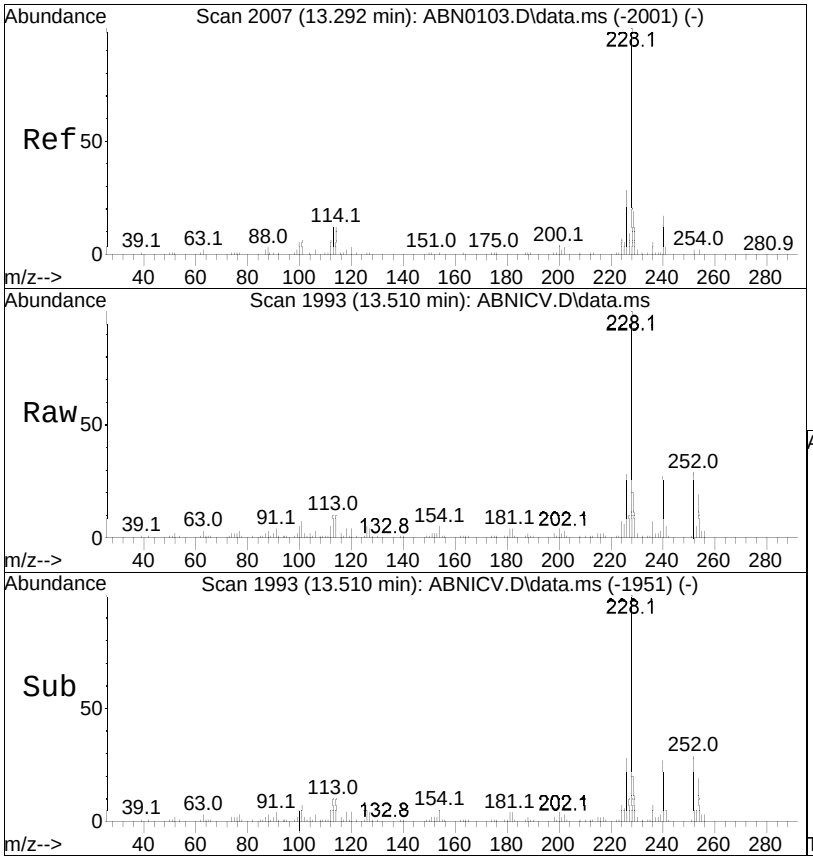


#96
Butyl benzyl phthalate
Concen: 4.40 ug/ml
RT: 13.010 min Scan# 1908
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:149 Resp: 117354

Ion	Ratio	Lower	Upper
149	100		
91	72.2	63.3	94.9
206	15.8	13.9	20.9

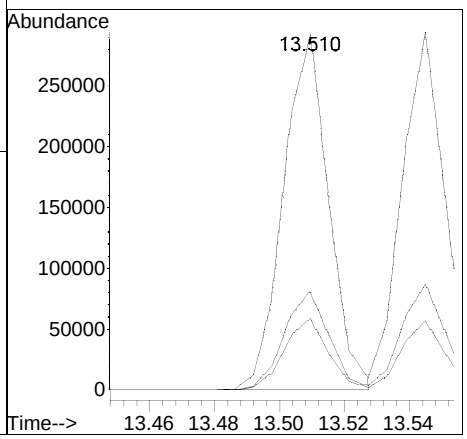


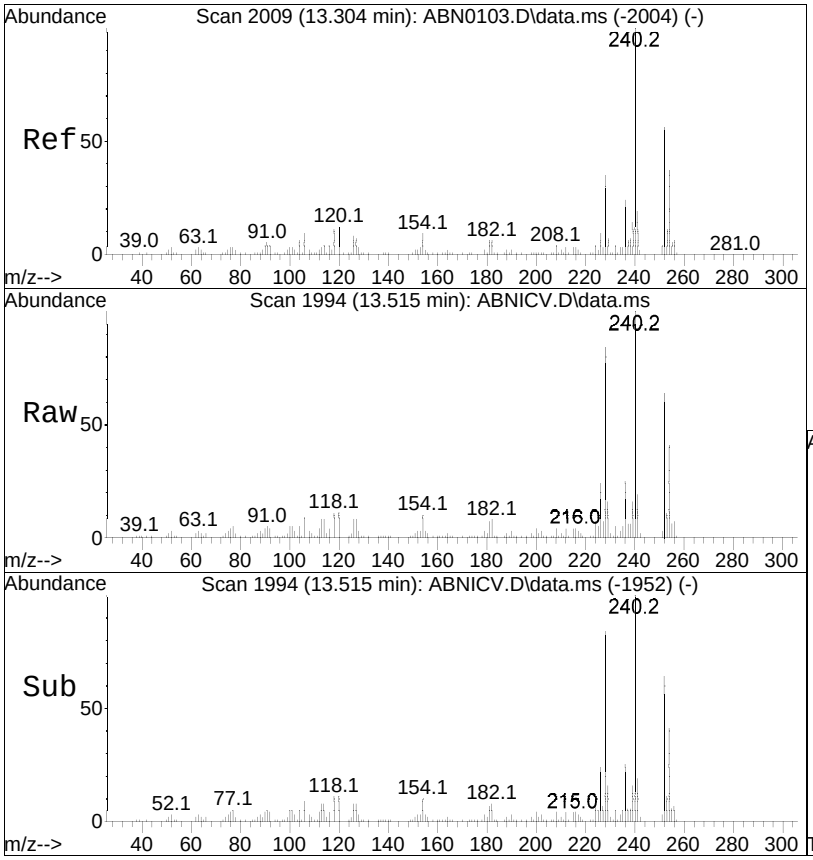


#104
Benzo(a)anthracene
Concen: 4.76 ug/ml
RT: 13.510 min Scan# 1993
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:228 Resp: 282690

Ion	Ratio	Lower	Upper
228	100		
226	27.7	22.2	33.4
229	19.8	15.6	23.4

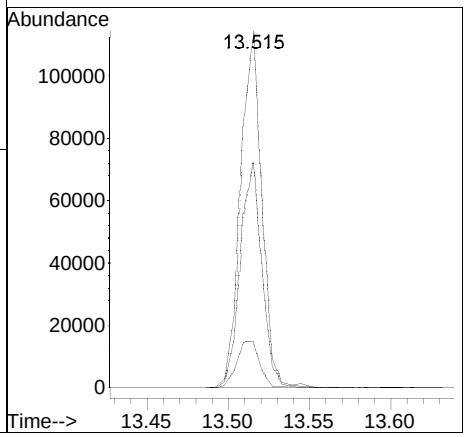


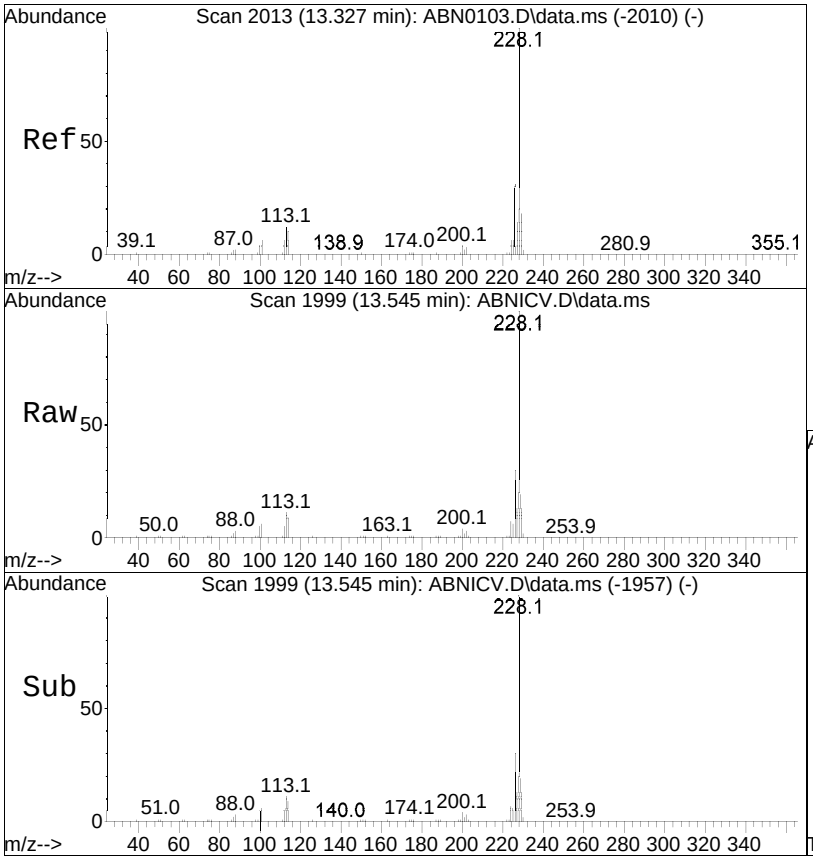


#105
3,3'-Dichlorobenzidine
Concen: 4.92 ug/ml
RT: 13.515 min Scan# 1994
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:252 Resp: 103983

Ion	Ratio	Lower	Upper
252	100		
126	14.4	14.5	21.7#
254	64.1	51.2	76.8

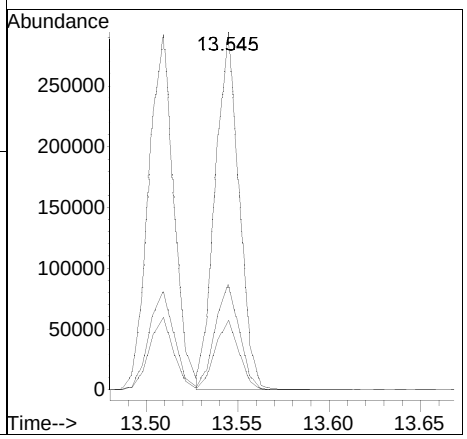


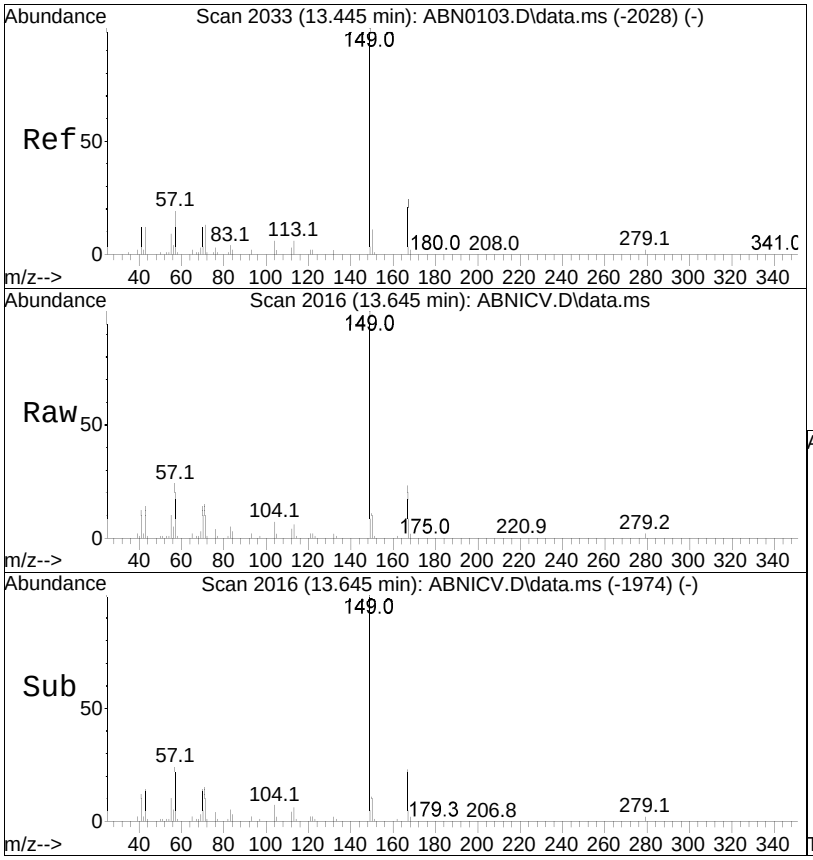


#106
Chrysene
Concen: 4.87 ug/ml
RT: 13.545 min Scan# 1999
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:228 Resp: 268550

Ion	Ratio	Lower	Upper
228	100		
226	29.9	24.0	36.0
229	19.4	15.8	23.8

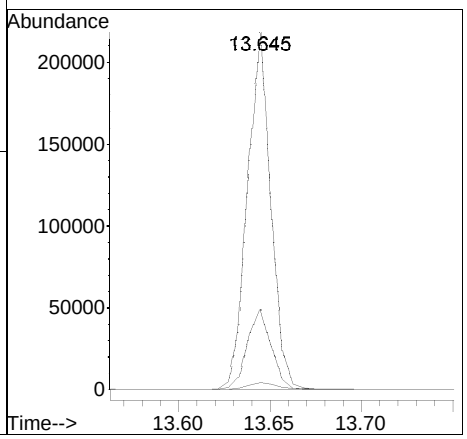


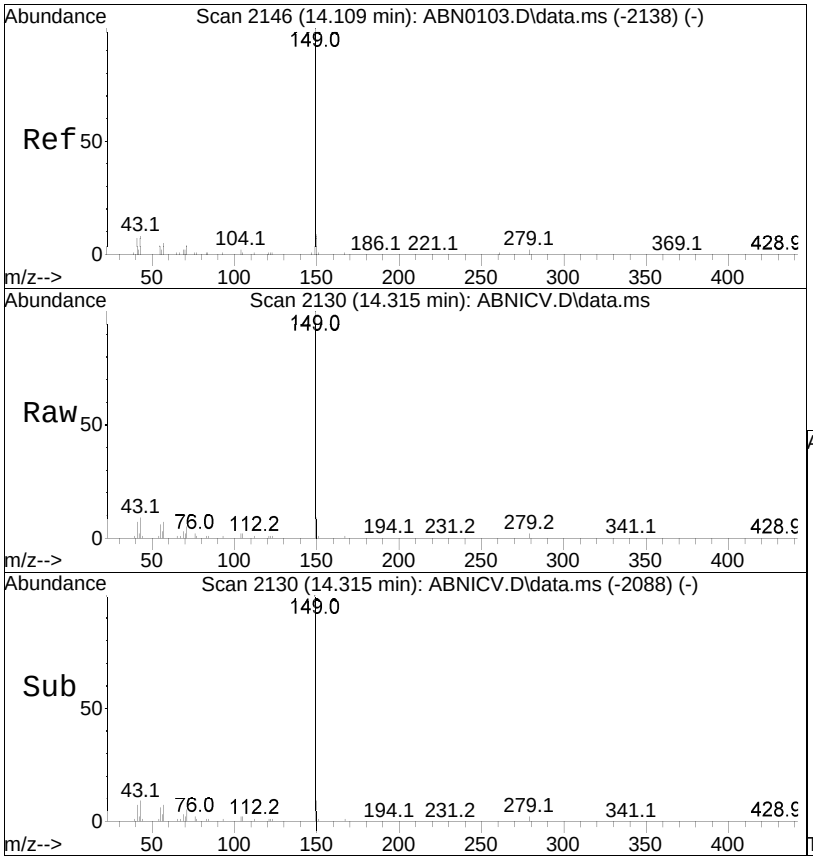


#107
Bis(2-ethylhexyl)phthalate
Concen: 4.81 ug/ml
RT: 13.645 min Scan# 2016
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:149 Resp: 191400

Ion	Ratio	Lower	Upper
149	100		
167	23.1	22.1	33.1
279	2.3	3.0	4.4#

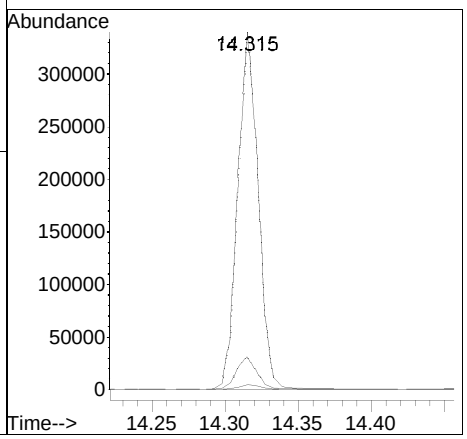


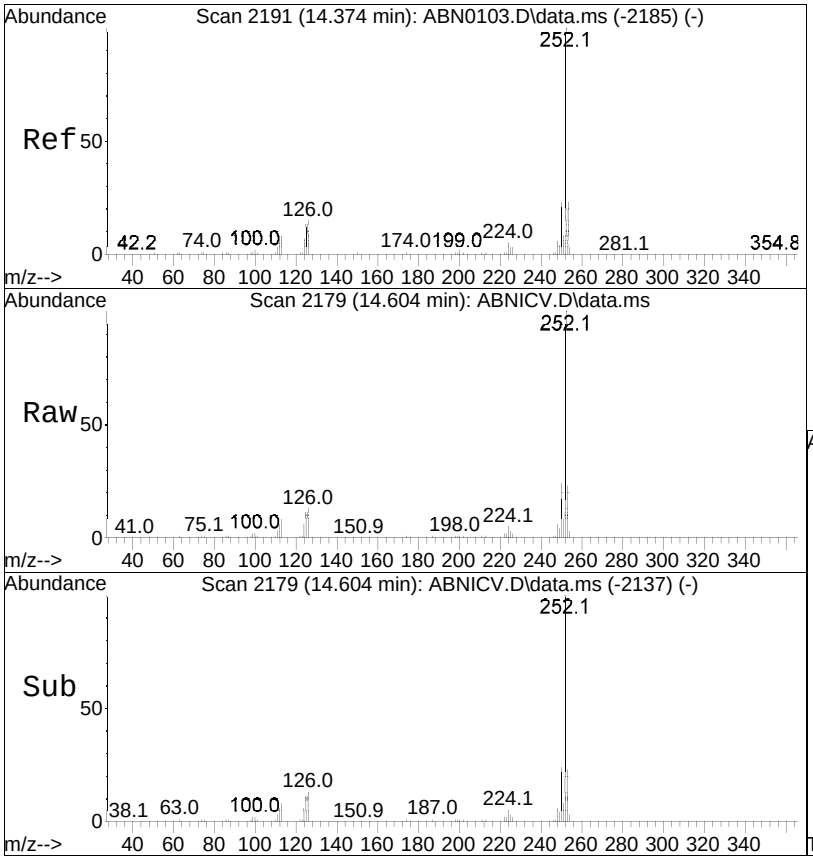


#108
Di-n-octylphthalate
Concen: 4.84 ug/ml
RT: 14.315 min Scan# 2130
Delta R.T. -0.001 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:149 Resp: 325055

Ion	Ratio	Lower	Upper
149	100		
43	9.5	18.8	28.2#
167	1.3	1.3	1.9#

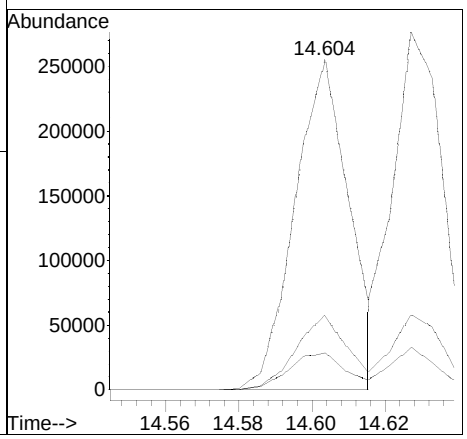


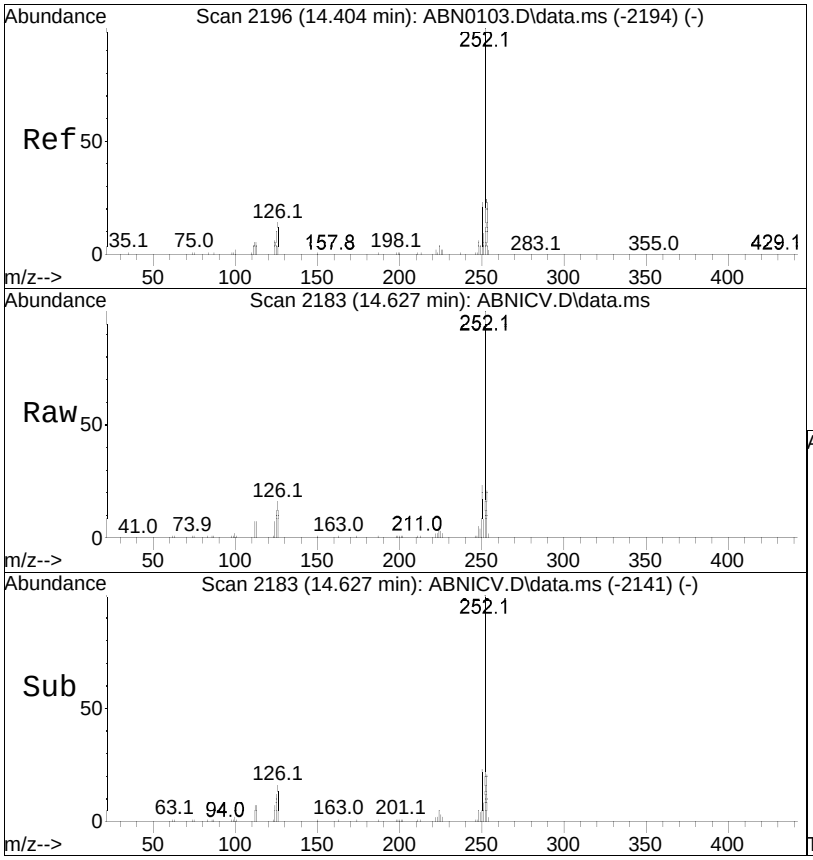


#109
Benzo(b)fluoranthene
Concen: 4.70 ug/ml
RT: 14.604 min Scan# 2179
Delta R.T. -0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:252 Resp: 267047

Ion	Ratio	Lower	Upper
252	100		
125	12.0	13.3	19.9#
253	21.8	17.1	25.7

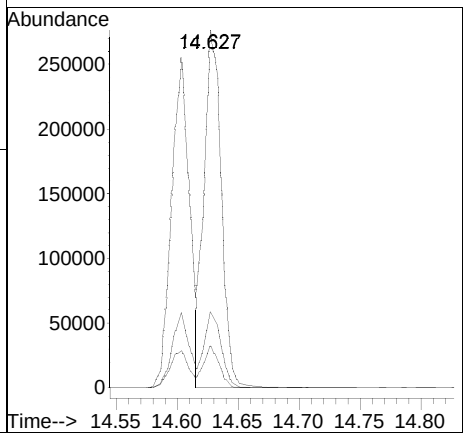


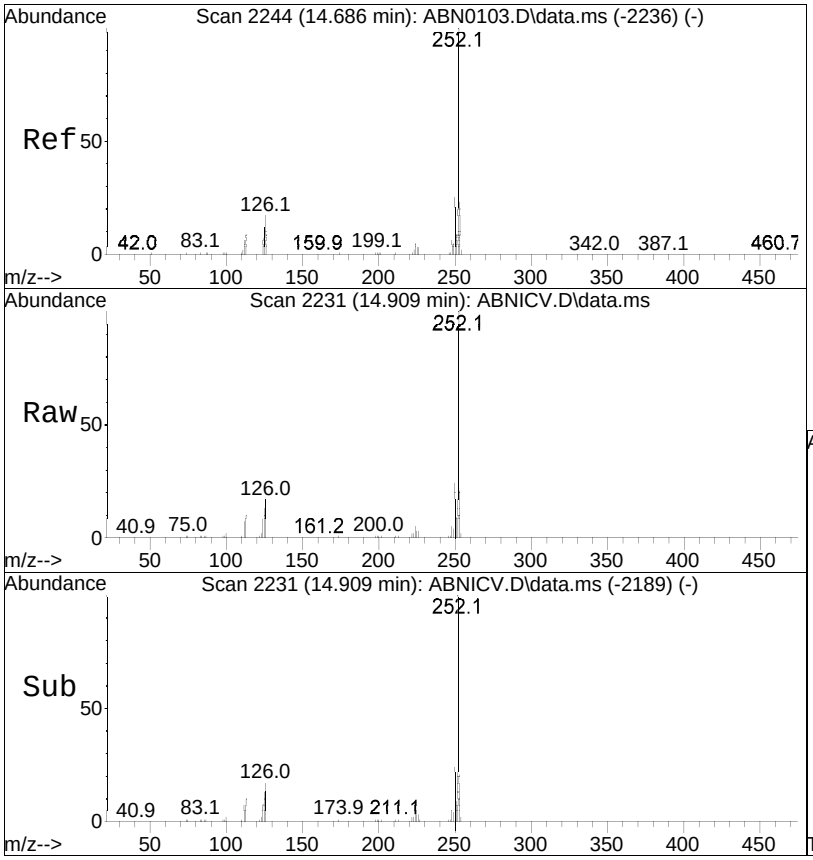


#110
Benzo(k)fluoranthene
Concen: 4.91 ug/ml
RT: 14.627 min Scan# 2183
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:252 Resp: 267153

Ion	Ratio	Lower	Upper
252	100		
125	10.7	13.0	19.6#
253	21.1	16.8	25.2

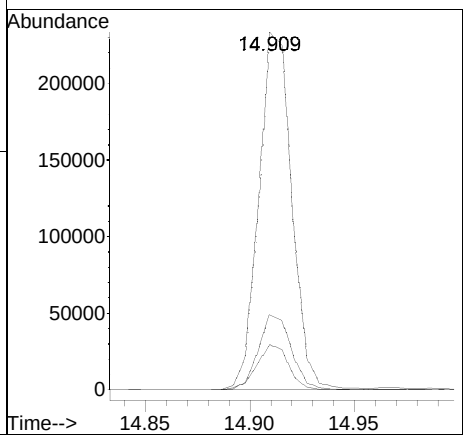


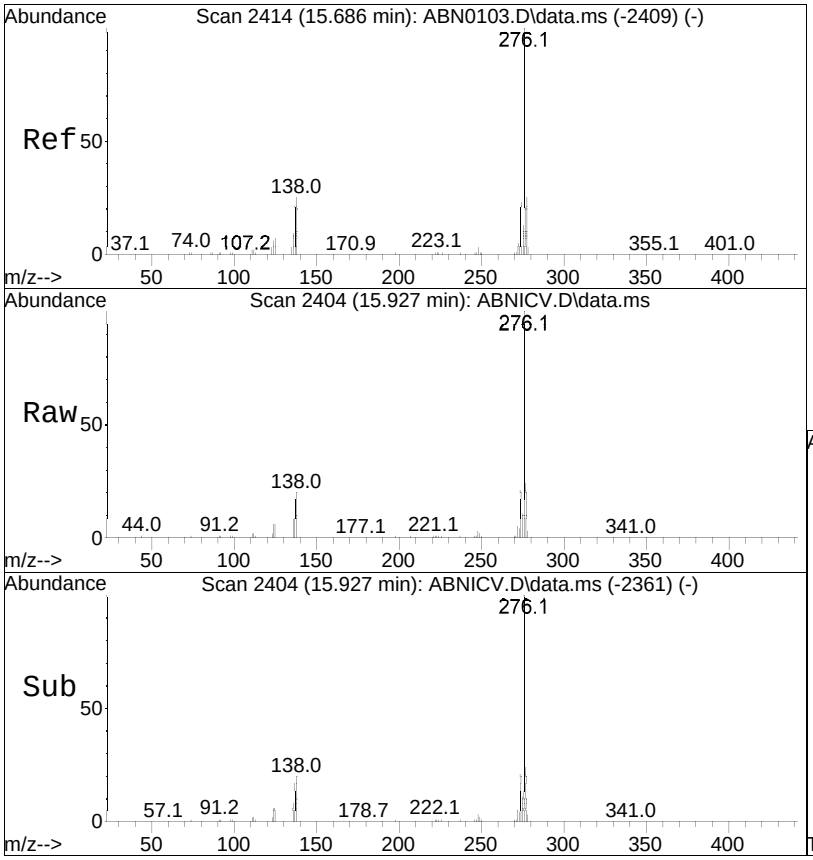


#111
Benzo(a)pyrene
Concen: 5.23 ug/ml
RT: 14.909 min Scan# 2231
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:252 Resp: 253755

Ion	Ratio	Lower	Upper
252	100		
125	12.4	14.2	21.2#
253	21.1	16.9	25.3

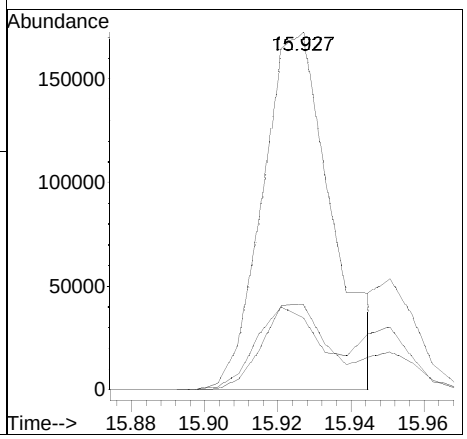


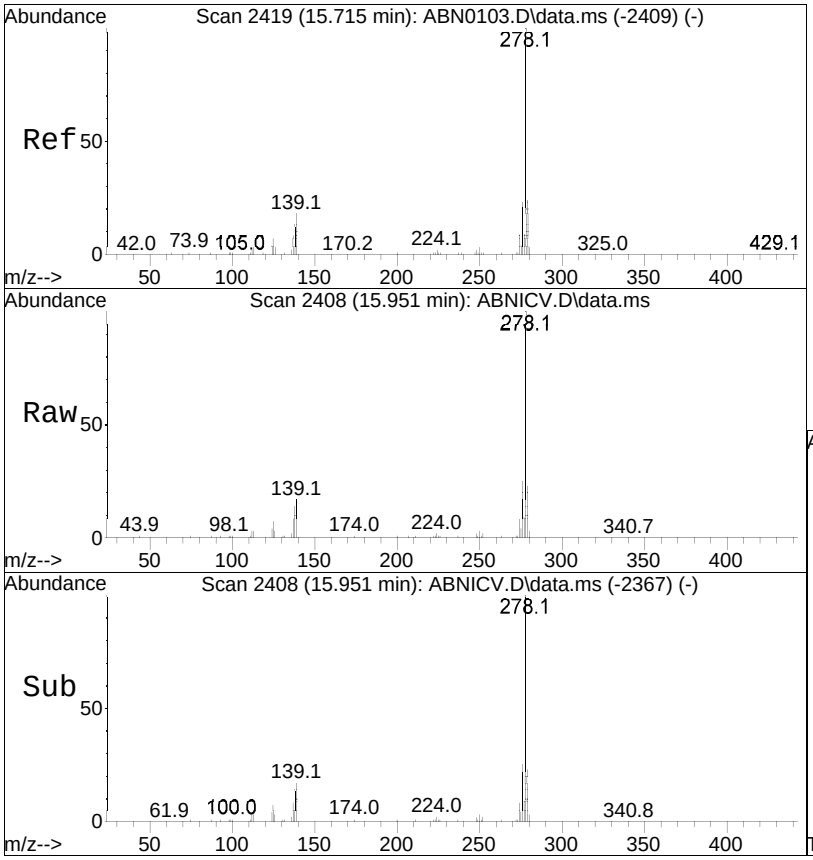


#113
Indeno(1,2,3-cd)pyrene
Concen: 4.94 ug/mL M6
RT: 15.927 min Scan# 2404
Delta R.T. 0.000 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:276 Resp: 226891

Ion	Ratio	Lower	Upper
276	100		
138	22.9	25.1	37.7#
277	31.2	18.6	28.0#

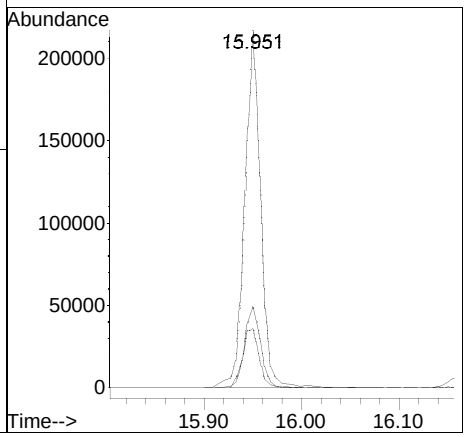


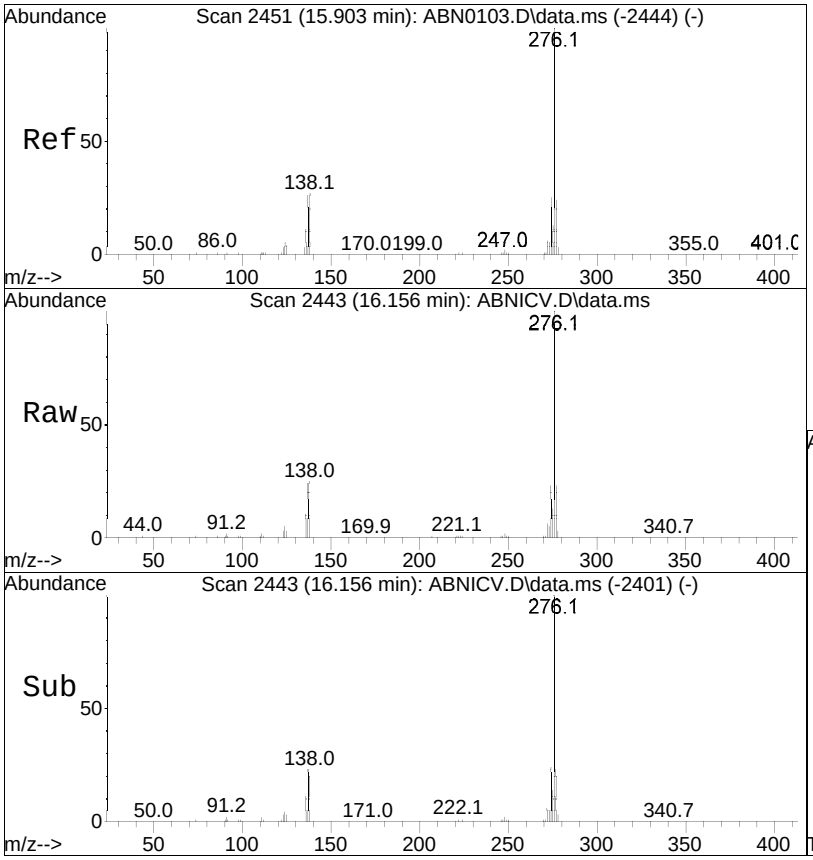


#114
Dibenzo(a,h)anthracene
Concen: 4.90 ug/ml
RT: 15.951 min Scan# 2408
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:278 Resp: 240753

Ion	Ratio	Lower	Upper
278	100		
139	17.4	20.8	31.2#
279	23.4	18.3	27.5

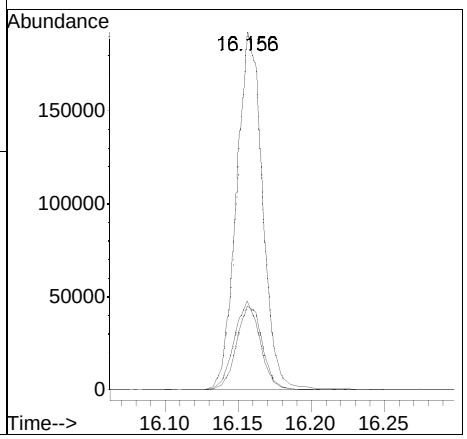




#115
Benzo(ghi)perylene
Concen: 4.86 ug/ml
RT: 16.156 min Scan# 2443
Delta R.T. -0.006 min
Lab File: ABNICV.D
Acq: 2 Sep 2023 8:07 pm

Tgt Ion:276 Resp: 236559

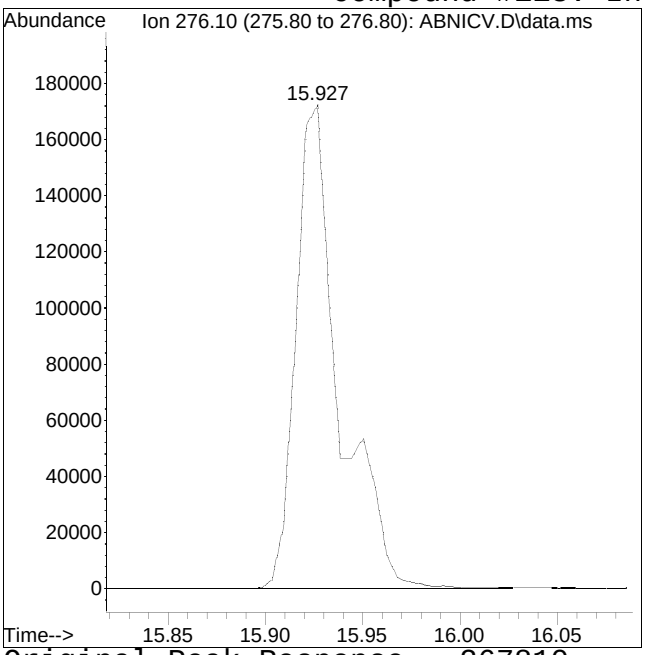
Ion	Ratio	Lower	Upper
276	100		
138	24.9	29.2	43.8#
277	23.7	18.8	28.2



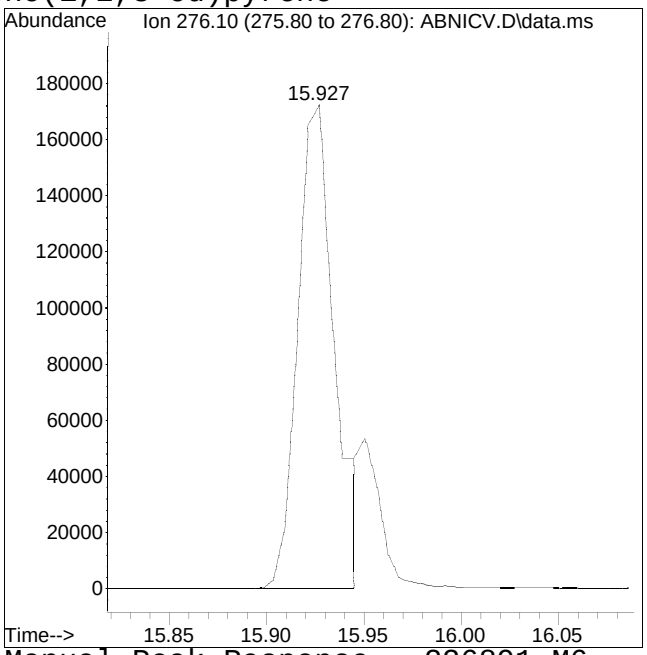
Manual Integration Report

Data Path : I:\8270\SV106\230902lviicaQMethod : FS230902SV106.m
Data File : ABNICV.D Operator : SV106:ljg
Date Inj'd : 9/2/2023 8:07 pm Instrument : SV 106
Sample : CQICV1,32,,ABNICV Lot# 102Quant Date : 9/5/2023 11:13 am

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 267810



Manual Peak Response = 226891 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9ICV.D
Acq On : 2 Sep 2023 8:31 pm
Operator : SV106:ljg
Sample : CQICV2,32,,AP9ICV Lot# 10098
Misc : WG1823680,,ical
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 05 11:17:18 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:17:10 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
27	I	IS2_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	103	0.00
28	T	Benzaldehyde		5.000	5.700	-14.0	79	0.00
29	T	Acetophenone		1.994	1.814	9.0	72	0.00
30	T	m-Toluidine		1.550	1.612	-4.0	76	0.00
31	T	2-Chloroaniline		1.670	1.554	6.9	73	0.00
54	I	IS2_Naphthalene-d8		1.000	1.000	0.0	101	0.00
55	T	a-Terpineol		0.289	0.277	4.2	75	0.00
56	T	3-Chloroaniline		0.150	0.143	4.7	71	0.00
57	T	2,6-Dichlorophenol		0.277	0.266	4.0	71	0.00
58	T	1-chloro-2-nitrobenzene		0.131	0.127	3.1	74	0.00
59	T	Caprolactam		0.147	0.140	4.8	71	0.00
60	T	1,2,4,5-Tetrachlorobenzene		0.348	0.327	6.0	74	0.00
61	T	Biphenyl		0.856	0.815	4.8	74	0.00
82	I	IS2_Acenaphthene-d10		1.000	1.000	0.0	101	0.00
83	T	Dichloran	*	5.000	4.468	10.6	68	0.00
84	T	Pentachloronitrobenzene	*	5.000	4.843	3.1	74	0.00
97	I	IS2_Phenanthrene-d10		1.000	1.000	0.0	99	0.00
98	T	Diphenamid		0.508	0.497	2.2	71	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9ICV.D
Acq On : 2 Sep 2023 8:31 pm
Operator : SV106:ljg
Sample : CQICV2,32,,AP9ICV Lot# 10098
Misc : WG1823680,,ical
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 05 11:17:18 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:17:10 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\AP9L6.D
Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
27) IS2_1,4-Dichlorobenzen...	6.281	152	45998	4.000	ug/ml		0.00
Standard Area 1 = 44570			Recovery =	103.20%			
54) IS2_Naphthalene-d8	7.716	136	171902	4.000	ug/ml		0.00
Standard Area 1 = 169751			Recovery =	101.27%			
82) IS2_Acenaphthene-d10	9.475	164	91465	4.000	ug/ml		0.00
Standard Area 1 = 90319			Recovery =	101.27%			
97) IS2_Phenanthrene-d10	10.904	188	181296	4.000	ug/ml	#	0.00
Standard Area 1 = 182619			Recovery =	99.28%			
System Monitoring Compounds							
Target Compounds							Qvalue
28) Benzaldehyde	5.687	105	57187	5.700	ug/ml		95
29) Acetophenone	6.787	105	104323	4.549	ug/ml	#	82
30) m-Toluidine	6.887	106	92668	5.200	ug/ml		95
31) 2-Chloroaniline	7.292	127	89358	4.652	ug/ml	#	94
55) a-Terpineol	7.792	59	59544	4.799	ug/ml	#	77
56) 3-Chloroaniline	7.804	65	30638	4.740	ug/ml		91
57) 2,6-Dichlorophenol	7.828	162	57232	4.814	ug/ml		91
58) 1-chloro-2-nitrobenzene	8.098	111	27211	4.831	ug/ml	#	1
59) Caprolactam	8.133	55	30067	4.771	ug/ml	#	72
60) 1,2,4,5-Tetrachloroben...	8.628	216	70230	4.697	ug/ml		99
61) Biphenyl	8.928	154	175098	4.761	ug/ml		100
83) Dichloran	10.604	206	13152	4.468	ug/ml		87
84) Pentachloronitrobenzene	10.757	237	18573	4.843	ug/ml	#	80
98) Diphenamid	11.816	167	112554	4.888	ug/ml	#	83

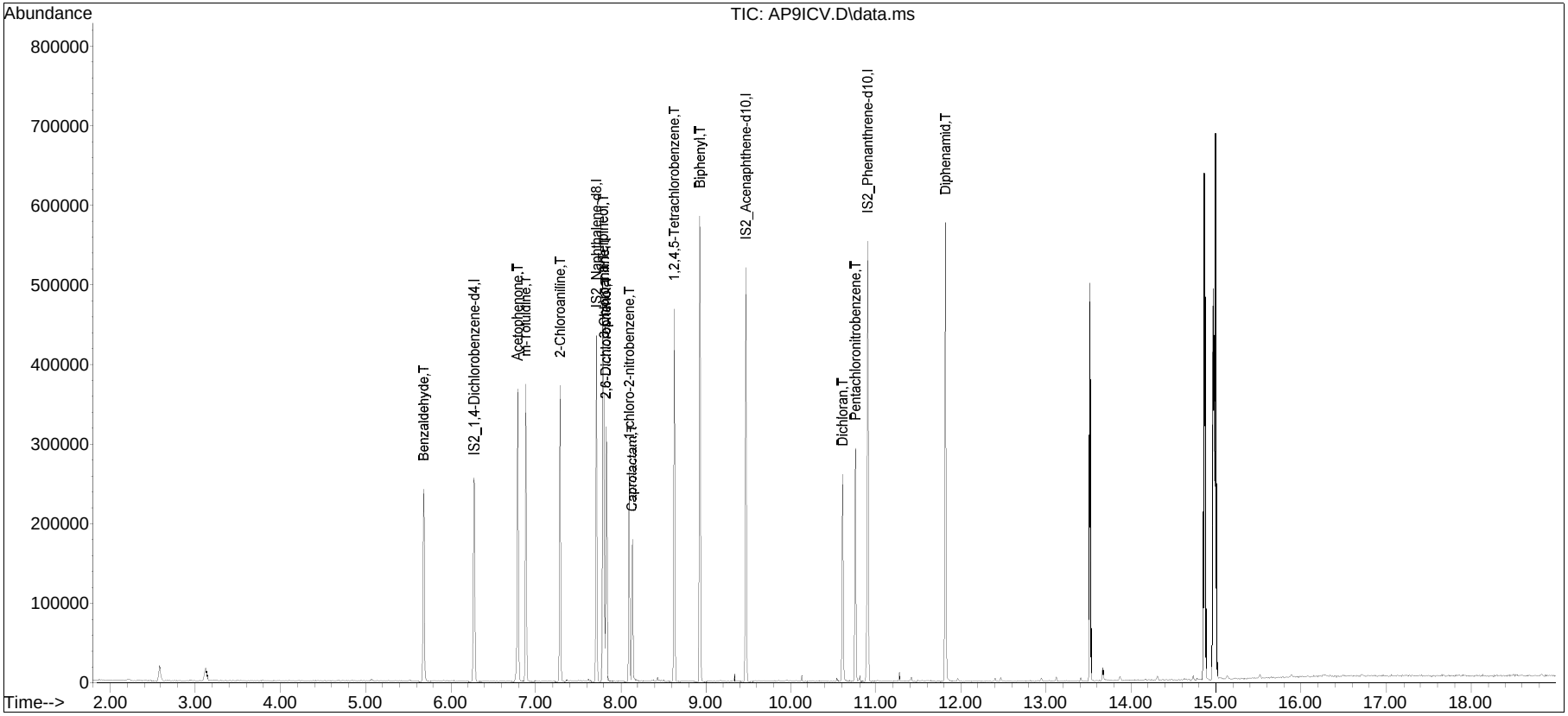
(#) = qualifier out of range (m) = manual integration (+) = signals summed

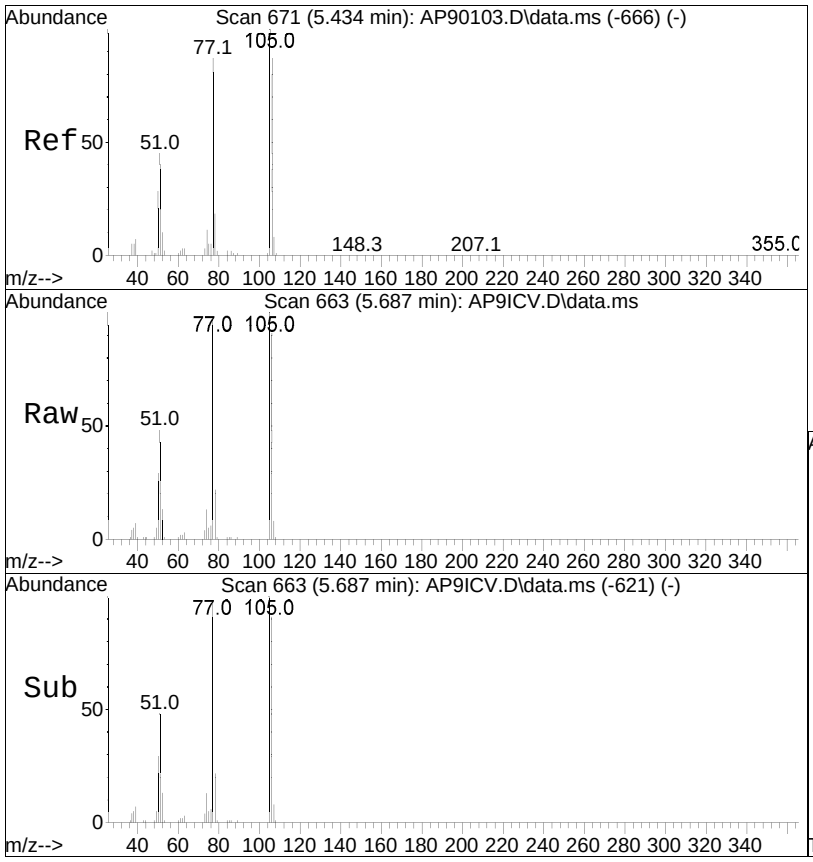
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : AP9ICV.D
Acq On : 2 Sep 2023 8:31 pm
Operator : SV106:ljg
Sample : CQICV2,32,,AP9ICV Lot# 10098
Misc : WG1823680,,ical
ALS Vial : 22 Sample Multiplier: 1

Quant Time: Sep 05 11:17:18 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:17:10 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublistiical\AP9L6.D•

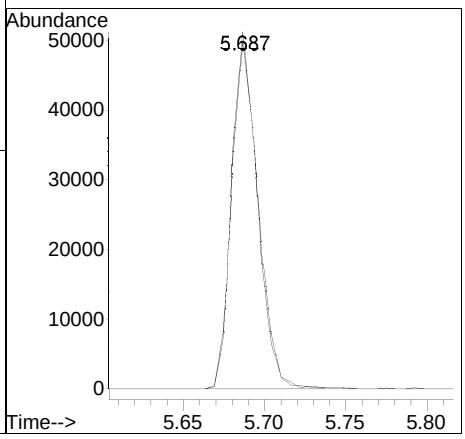


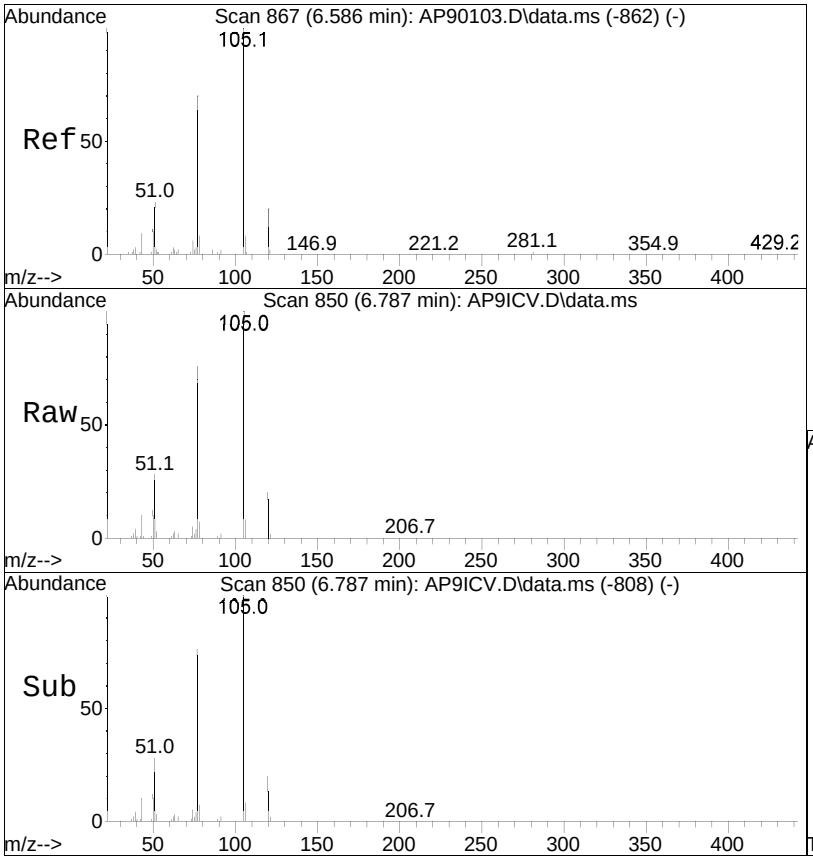


#28
Benzaldehyde
Concen: 5.70 ug/ml
RT: 5.687 min Scan# 663
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion:105 Resp: 57187

Ion	Ratio	Lower	Upper
105	100		
77	97.4	82.2	123.4

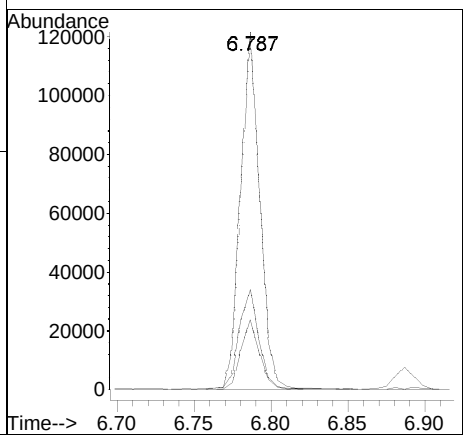


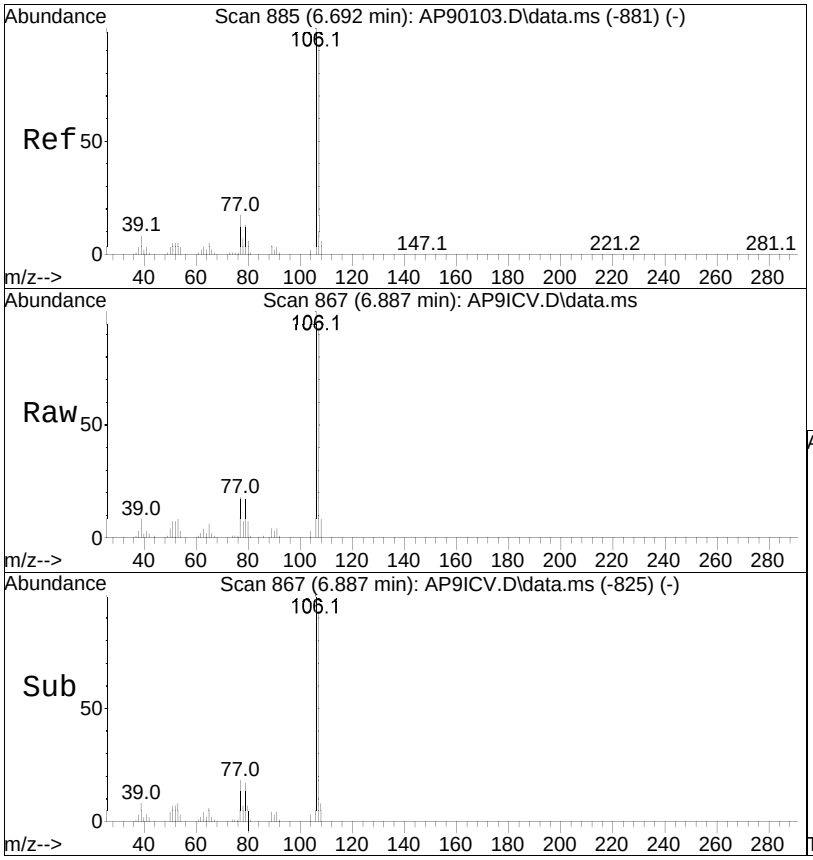


#29
Acetophenone
Concen: 4.55 ug/ml
RT: 6.787 min Scan# 850
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion:105 Resp: 104323

Ion	Ratio	Lower	Upper
105	100		
120	19.2	20.5	30.7#
51	29.6	34.9	52.3#

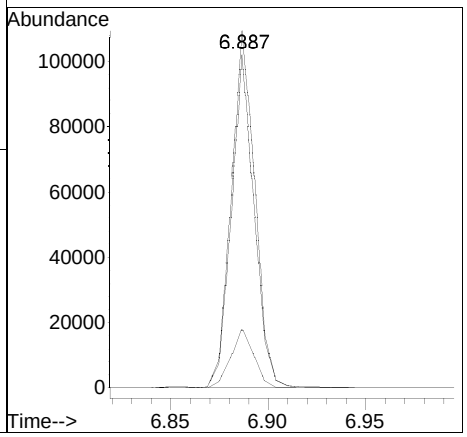


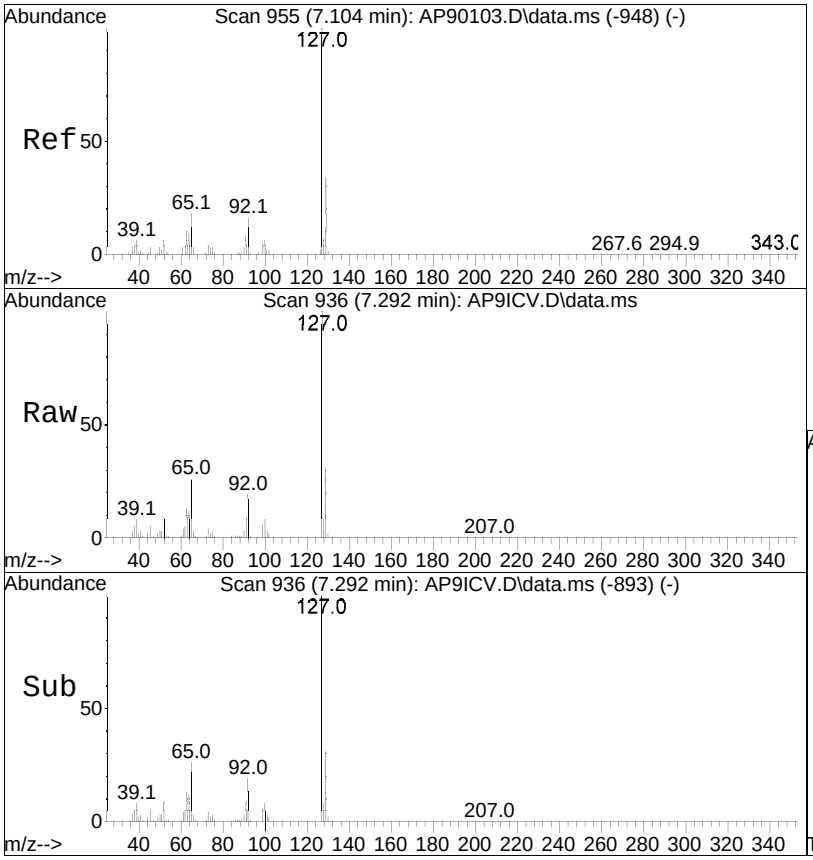


#30
m-Toluidine
Concen: 5.20 ug/ml
RT: 6.887 min Scan# 867
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion:106 Resp: 92668

Ion	Ratio	Lower	Upper
106	100		
107	89.6	75.7	113.5
79	15.9	11.8	17.8

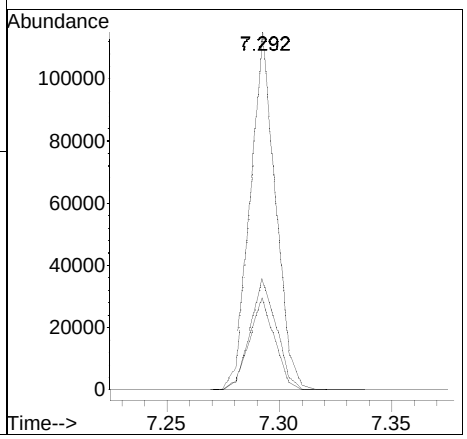


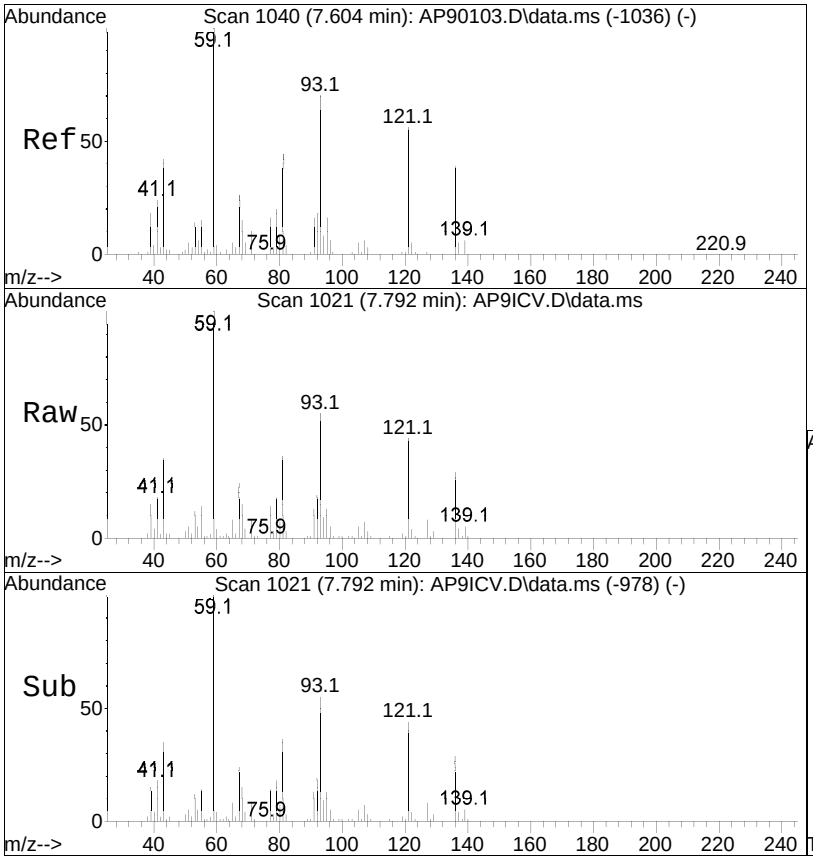


#31
2-Chloroaniline
Concen: 4.65 ug/ml
RT: 7.292 min Scan# 936
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion:127 Resp: 89358

Ion	Ratio	Lower	Upper
127	100		
129	32.5	25.9	38.9
65	26.2	26.3	39.5#

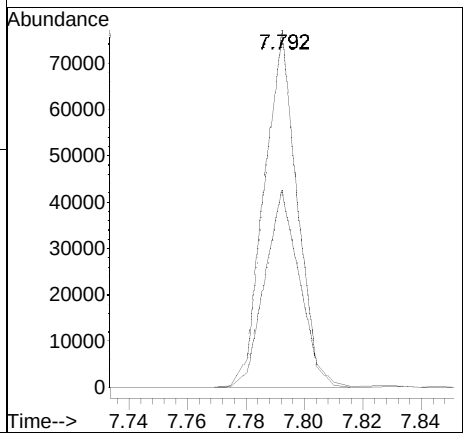


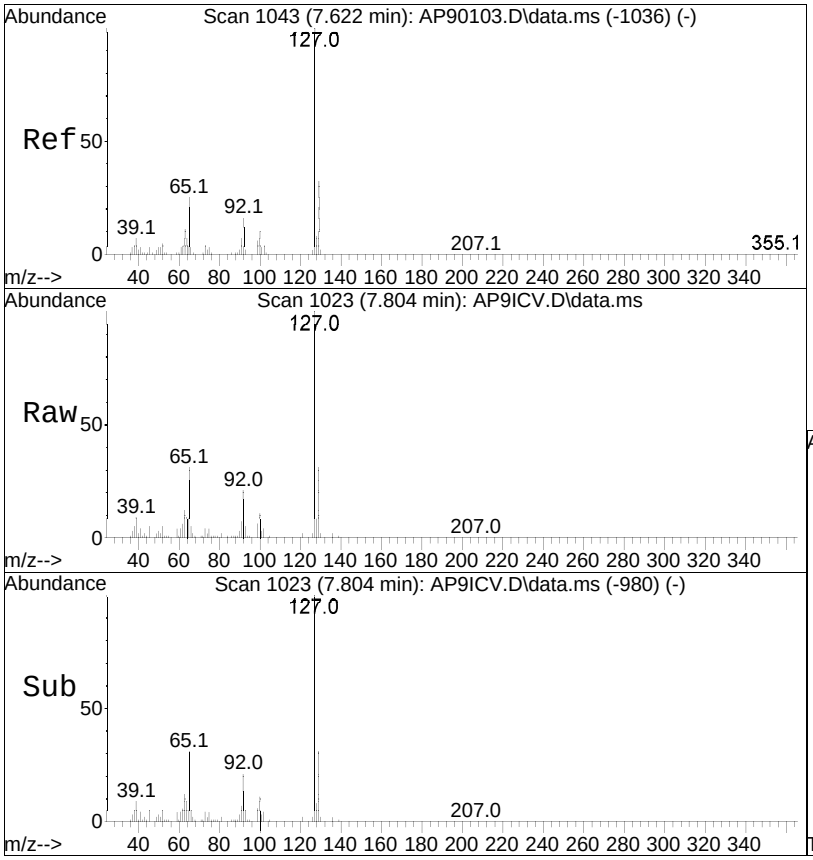


#55
a-Terpineol
Concen: 4.80 ug/ml
RT: 7.792 min Scan# 1021
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion: 59 Resp: 59544

Ion	Ratio	Lower	Upper
59	100		
93	59.2	35.6	53.4#

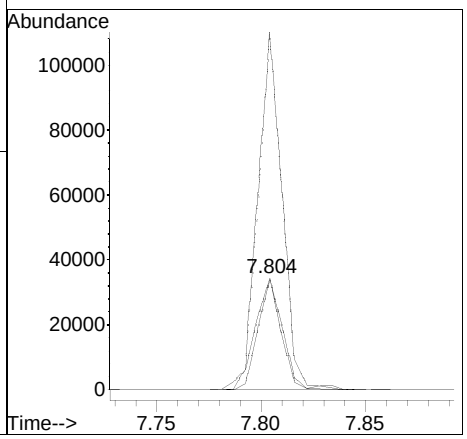


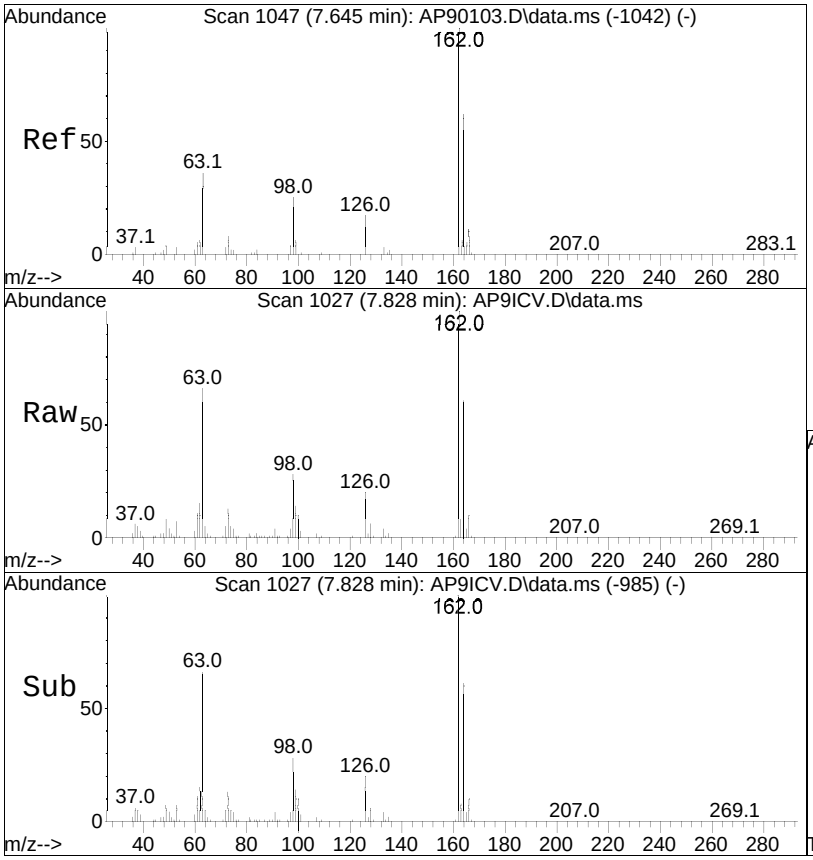


#56
3-Chloroaniline
Concen: 4.74 ug/ml
RT: 7.804 min Scan# 1023
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion: 65 Resp: 30638

Ion	Ratio	Lower	Upper
65	100		
127	284.6	243.2	364.8
129	90.8	78.8	118.2

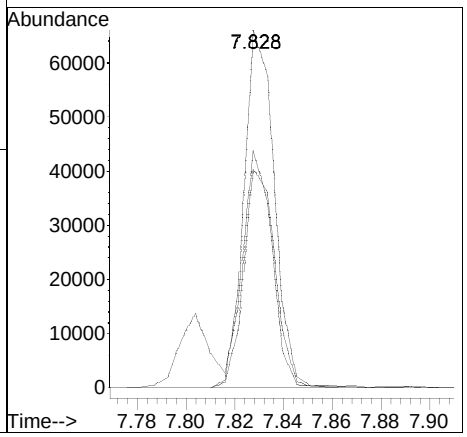


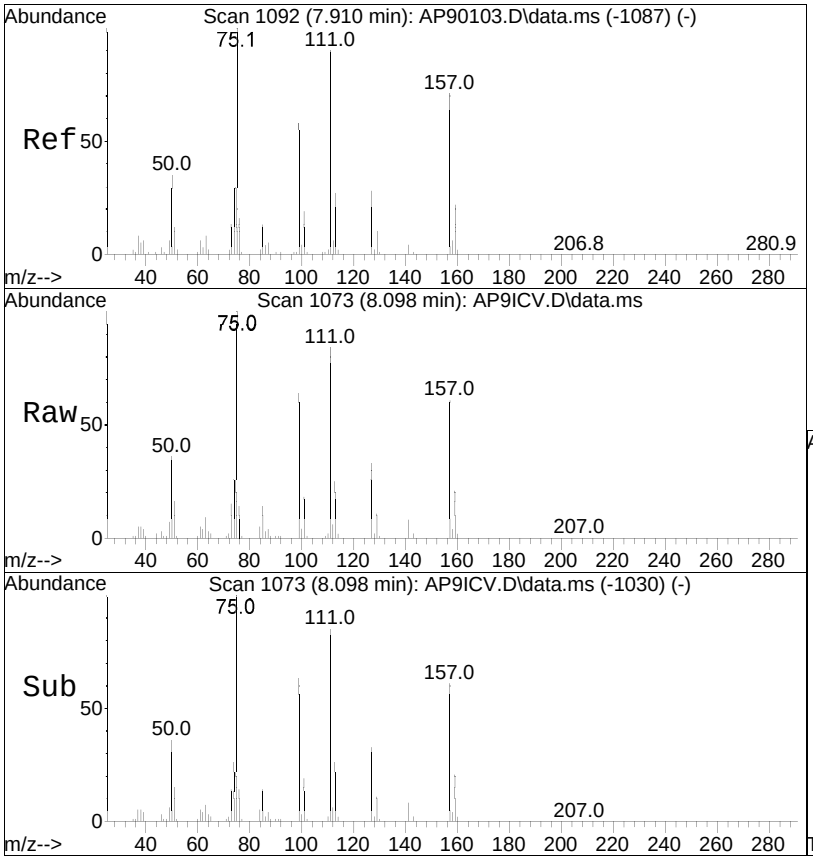


#57
2,6-Dichlorophenol
Concen: 4.81 ug/ml
RT: 7.828 min Scan# 1027
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion:162 Resp: 57232

Ion	Ratio	Lower	Upper
162	100		
164	62.5	51.1	76.7
63	63.3	60.8	91.2

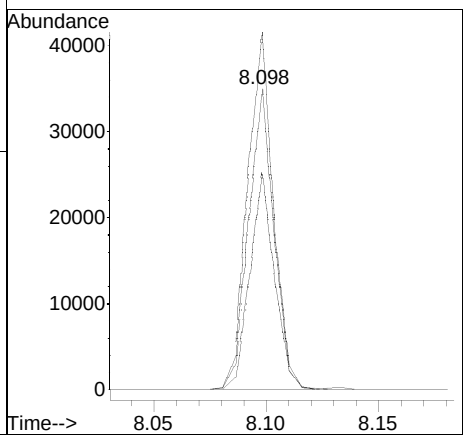


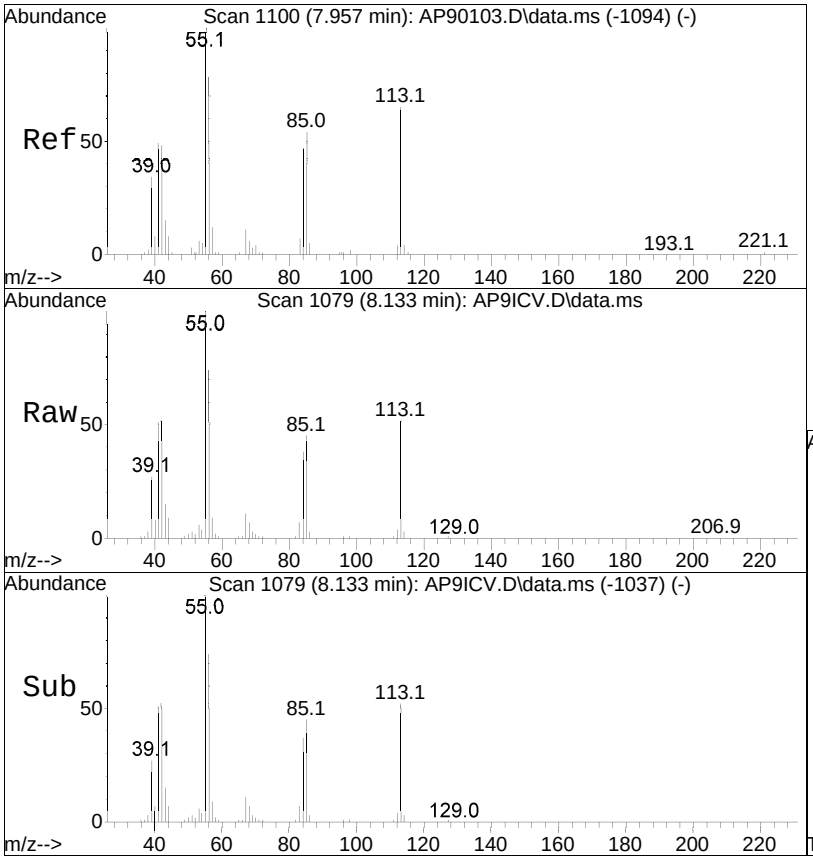


#58
1-chloro-2-nitrobenzene
Concen: 4.83 ug/ml
RT: 8.098 min Scan# 1073
Delta R.T. 0.000 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion:111 Resp: 27211

Ion	Ratio	Lower	Upper
111	100		
157	69.6	0.0	0.0#
75	119.9	28.2	42.2#

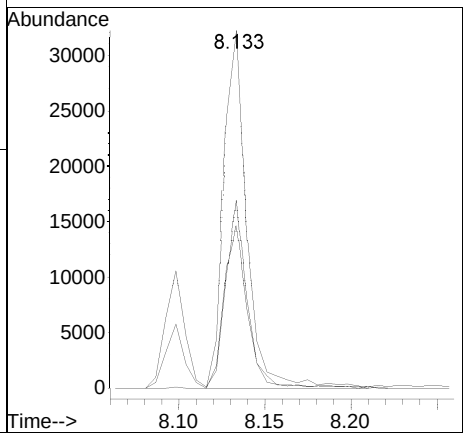


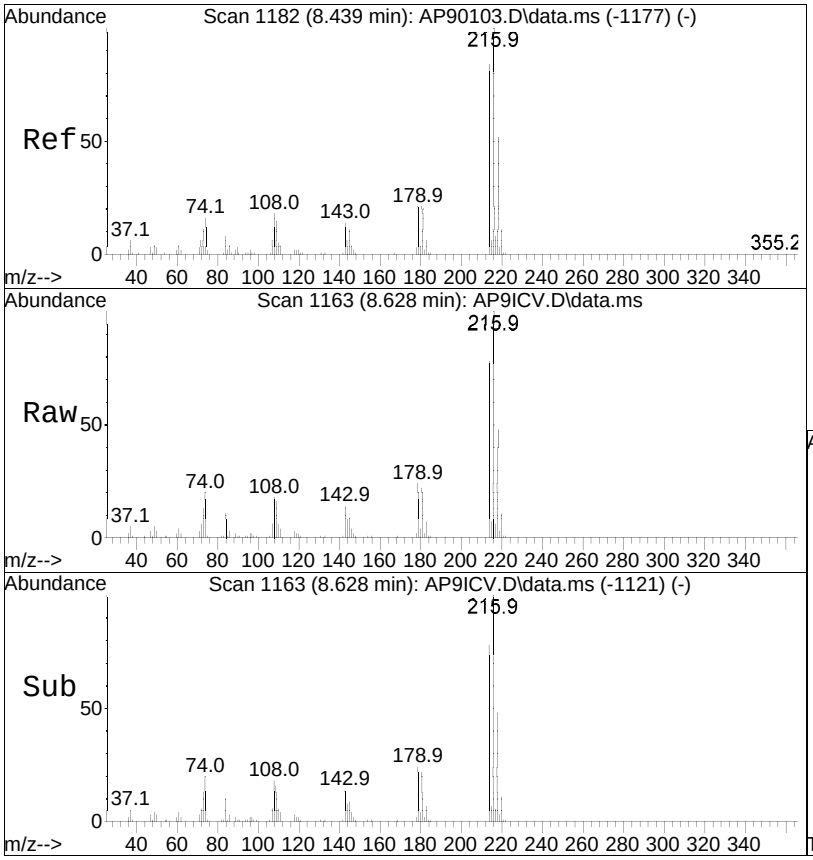


#59
Caprolactam
Concen: 4.77 ug/ml
RT: 8.133 min Scan# 1079
Delta R.T. -0.001 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion: 55 Resp: 30067

Ion	Ratio	Lower	Upper
55	100		
85	46.3	19.8	29.6#
113	47.2	29.6	44.4#

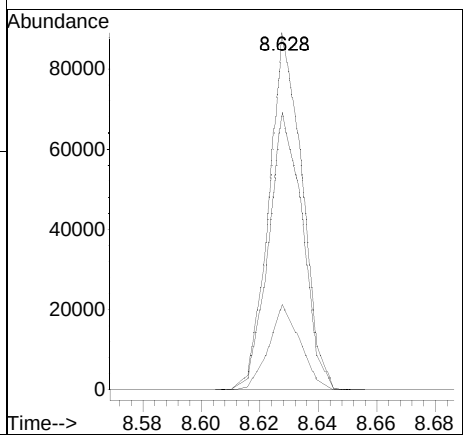


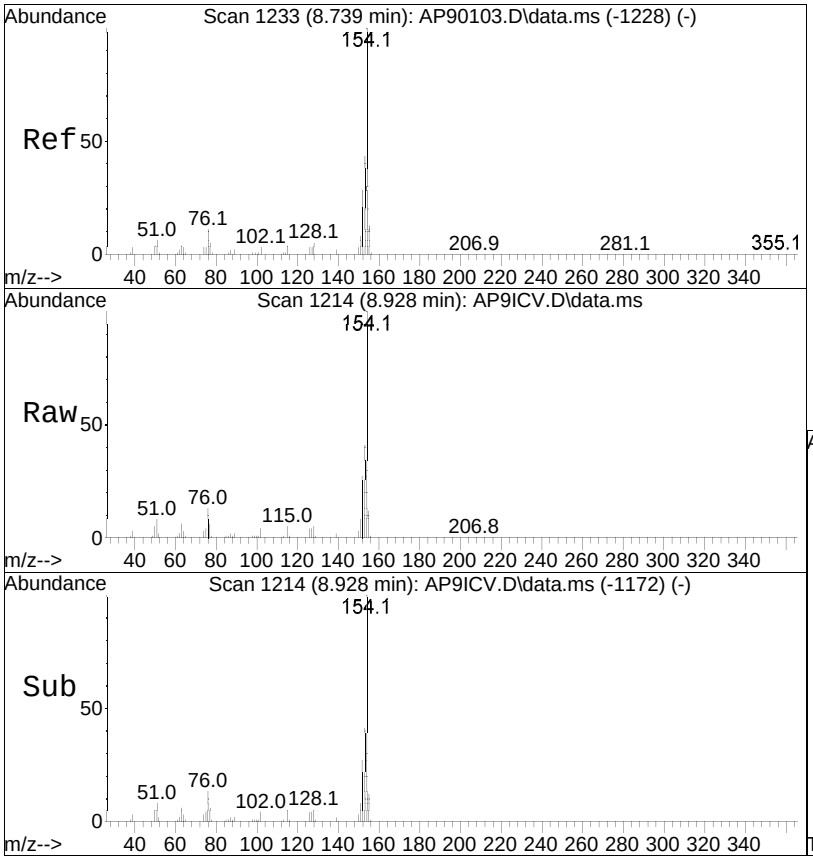


#60
1,2,4,5-Tetrachlorobenzene
Concen: 4.70 ug/ml
RT: 8.628 min Scan# 1163
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion:216 Resp: 70230

Ion	Ratio	Lower	Upper
216	100		
214	79.7	63.7	95.5
179	22.8	19.0	28.6

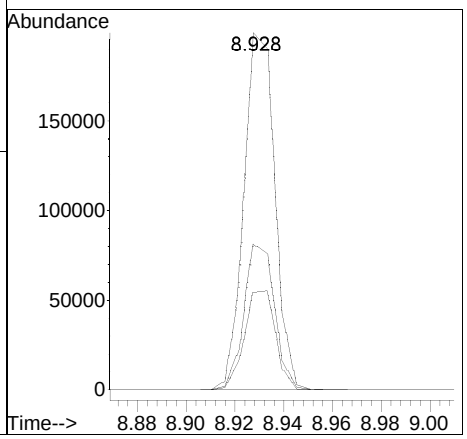


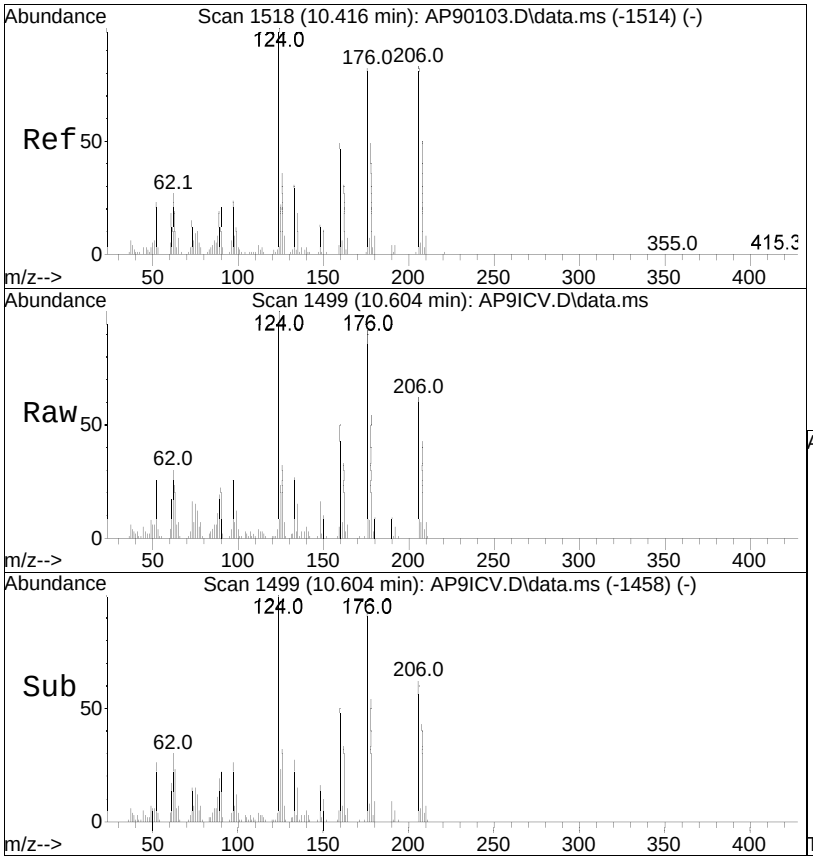


#61
Biphenyl
Concen: 4.76 ug/ml
RT: 8.928 min Scan# 1214
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion:154 Resp: 175098

Ion	Ratio	Lower	Upper
154	100		
153	40.3	32.3	48.5
152	28.0	22.5	33.7

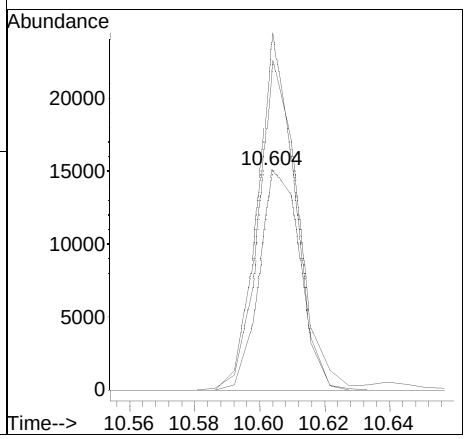


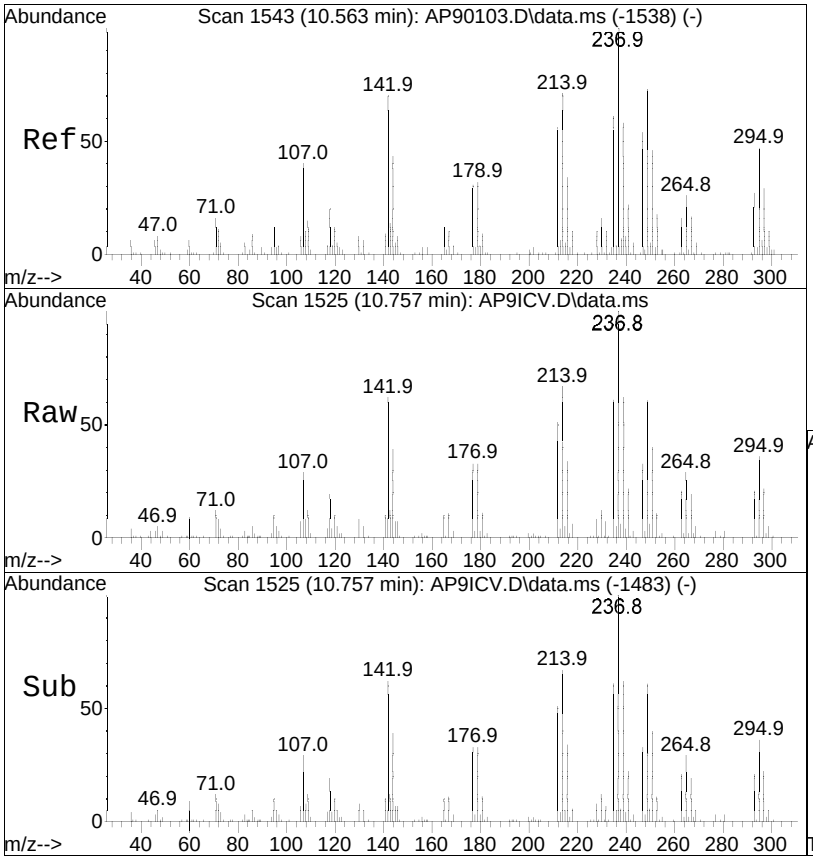


#83
Dichloran
Concen: 4.47 ug/ml
RT: 10.604 min Scan# 1499
Delta R.T. -0.006 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion:206 Resp: 13152

Ion	Ratio	Lower	Upper
206	100		
176	145.2	104.6	157.0
124	145.5	130.5	195.7

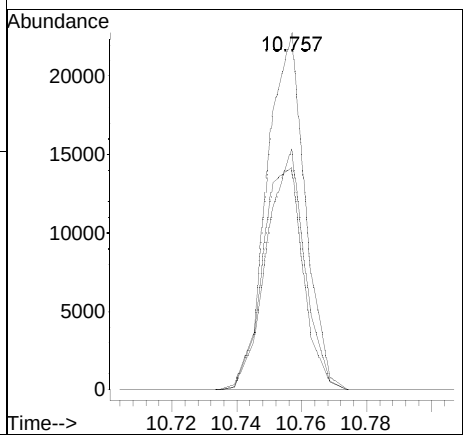


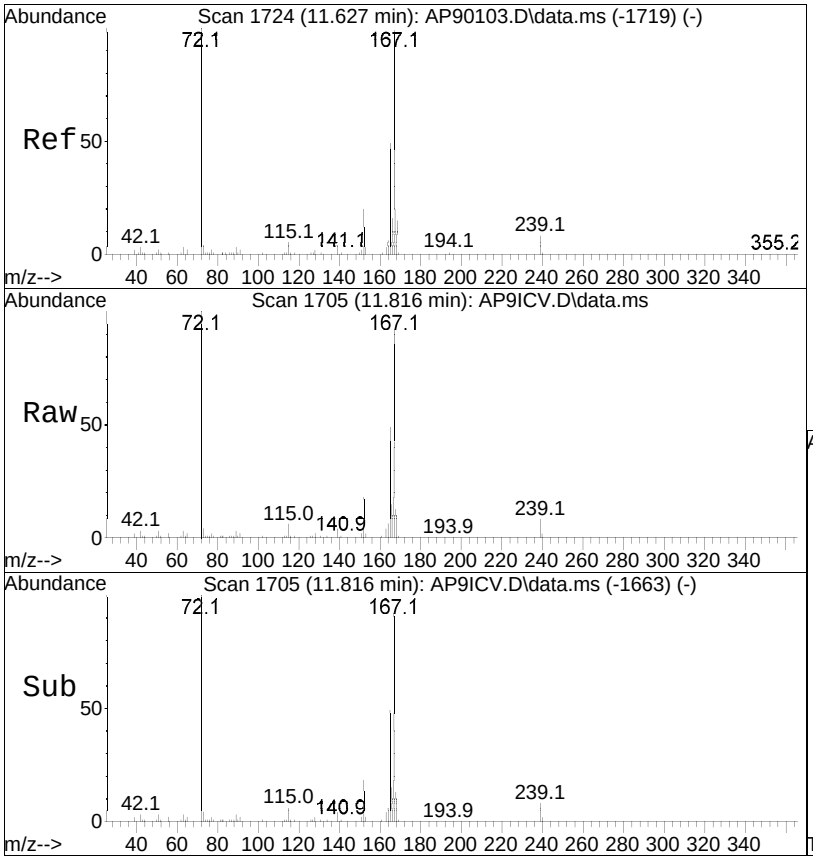


#84
Pentachloronitrobenzene
Concen: 4.84 ug/ml
RT: 10.757 min Scan# 1525
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion:237 Resp: 18573

Ion	Ratio	Lower	Upper
237	100		
142	66.2	77.0	115.4#
214	67.1	58.2	87.4

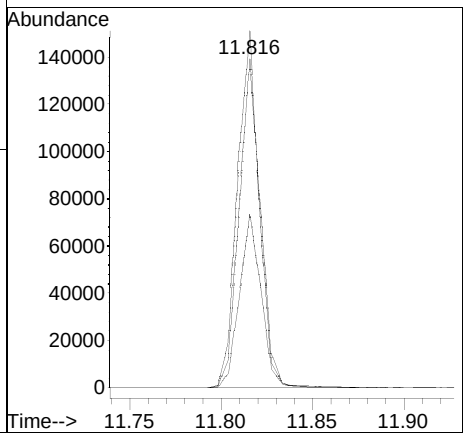




#98
Diphenamid
Concen: 4.89 ug/ml
RT: 11.816 min Scan# 1705
Delta R.T. -0.000 min
Lab File: AP9ICV.D
Acq: 2 Sep 2023 8:31 pm

Tgt Ion:167 Resp: 112554

Ion	Ratio	Lower	Upper
167	100		
72	109.3	109.7	164.5#
165	53.7	41.8	62.6



Manual Integration Report

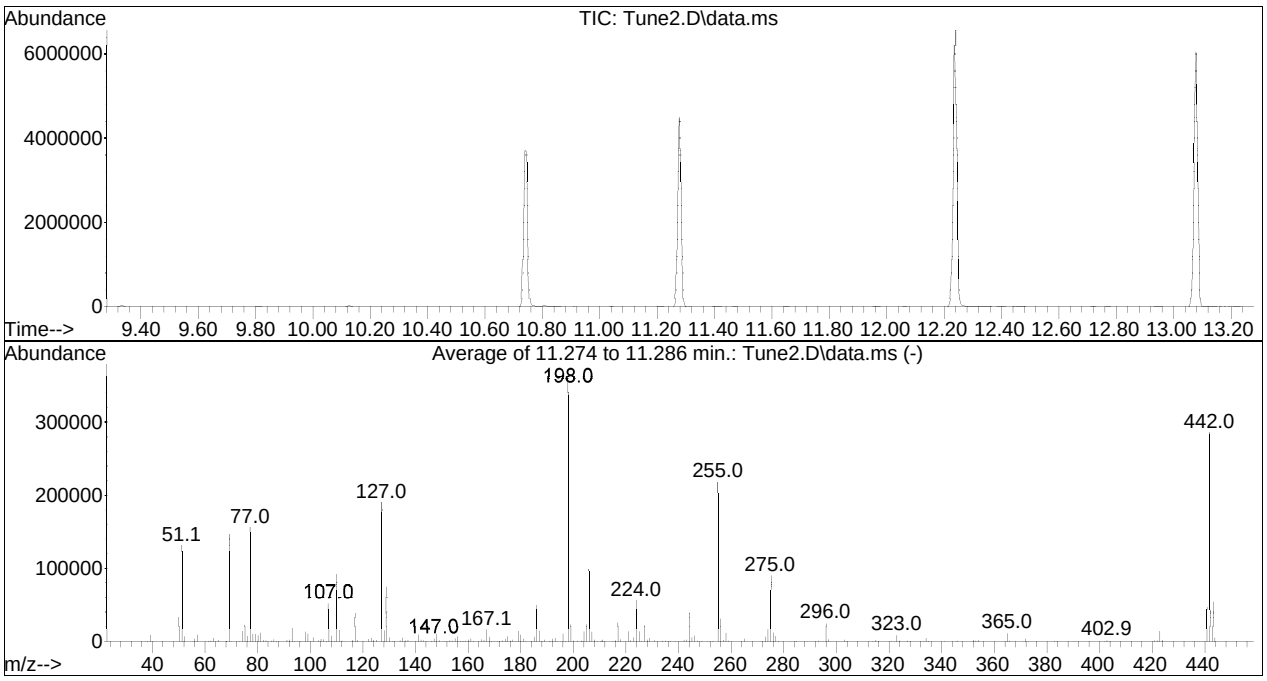
Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: AP9ICV.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 8:31 pm	Instrument	: SV 106
Sample	: CQICV2,32,,AP9ICV Lot# 100	Quant Date	: 9/5/2023 11:17 am

There are no manual integrations or false positives in this file.

Data Path : I:\8270\SV106\230902lviical\
Data File : Tune2.D
Acq On : 2 Sep 2023 8:54 pm
Operator : SV106:ljg
Sample : Tune2
Misc : WG1823680,,ical
ALS Vial : 141 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Sep 05 11:32:08 2023



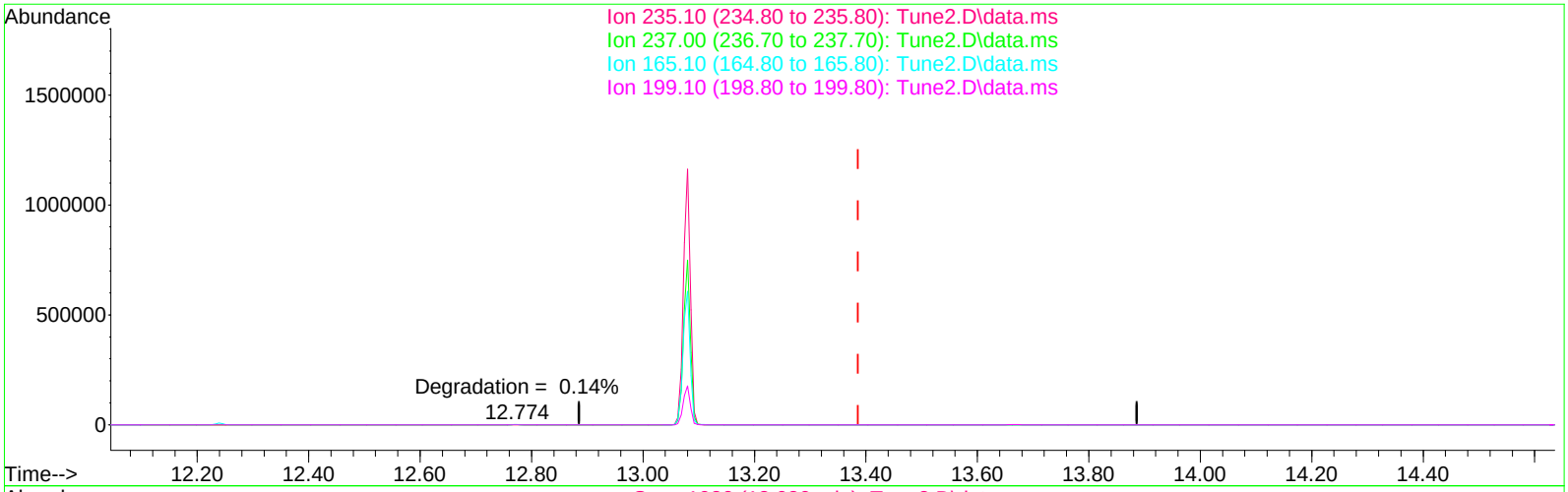
Spectrum Information: Average of 11.274 to 11.286 min.

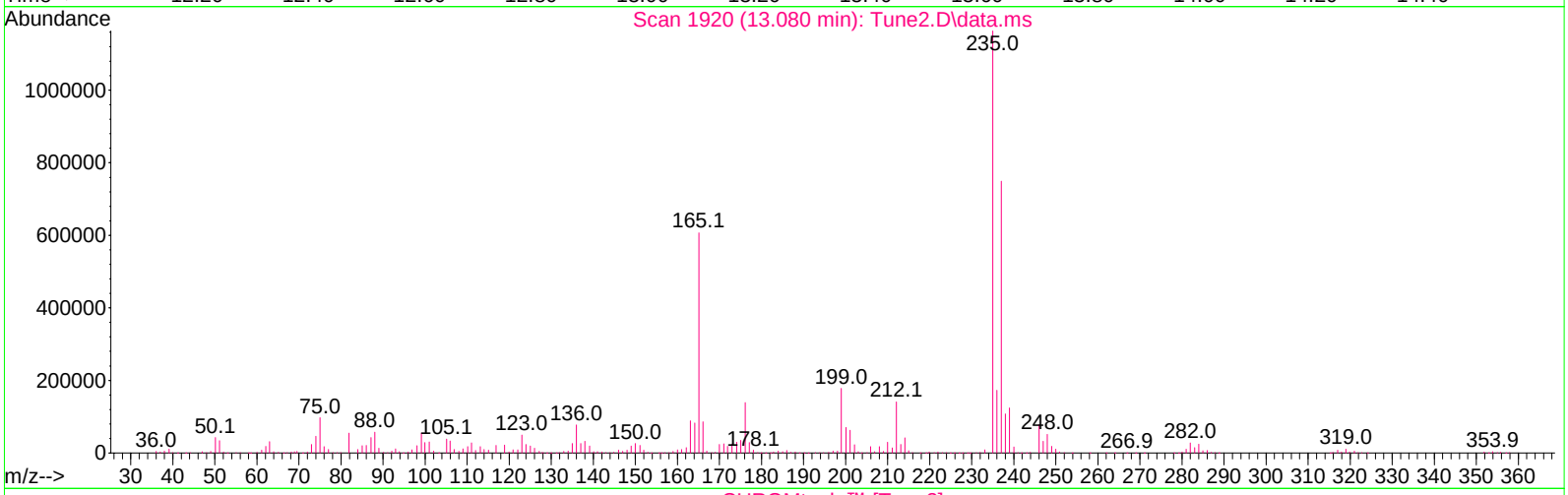
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	36.3	131080	PASS
68	69	0.00	2	0.8	1201	PASS
69	69	100	100	100.0	146037	PASS
70	69	0.00	2	0.5	756	PASS
127	198	10	80	52.5	189427	PASS
197	198	0.00	2	0.4	1377	PASS
198	198	100	100	100.0	360875	PASS
199	198	5	9	6.5	23397	PASS
275	198	10	60	24.7	89293	PASS
365	198	1	100	3.1	11054	PASS
441	442	0.01	24	16.2	46221	PASS
442	198	50	100	79.3	286059	PASS
443	442	15	24	18.6	53192	PASS

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\230902lviical\
Data File : Tune2.D
Acq On : 2 Sep 2023 8:54 pm
Operator : SV106:ljg
Sample : Tune2
Misc : WG1823680,,ical
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Sep 03 14:44:47 2023
Quant Method : I:\8270\SV106\230902lviical\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 23 13:06:27 2023
Response via : Initial Calibration





CHROMtools™ [Tune2]

(6) DDT (T)

13.080min (-0.306) 166.16

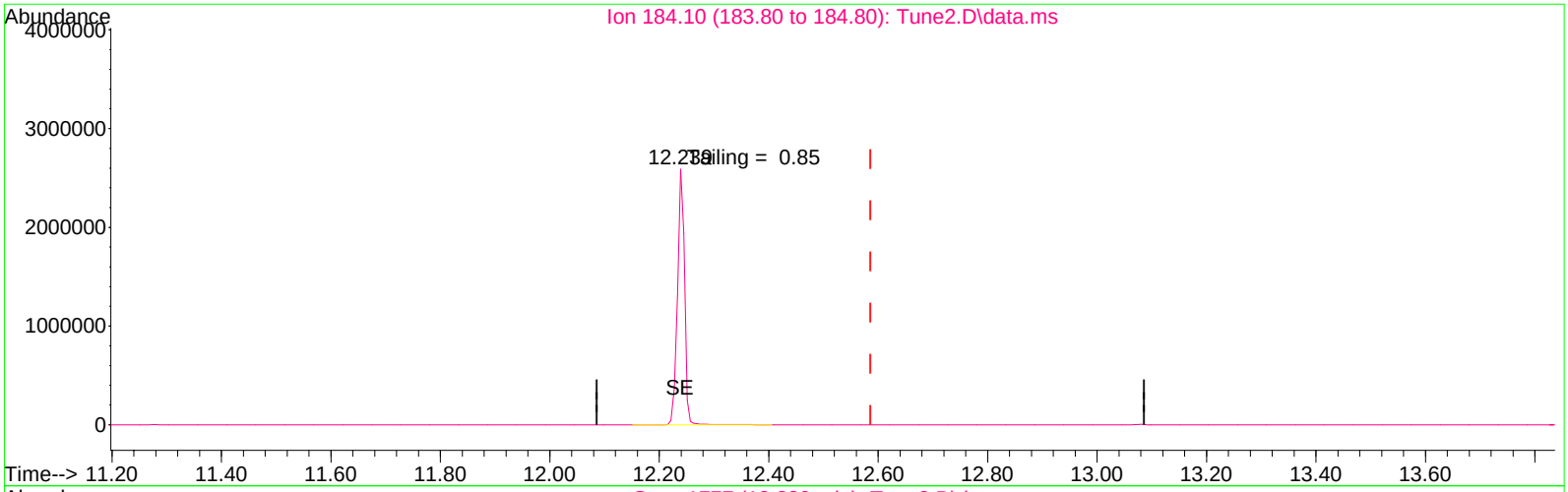
response 1012841

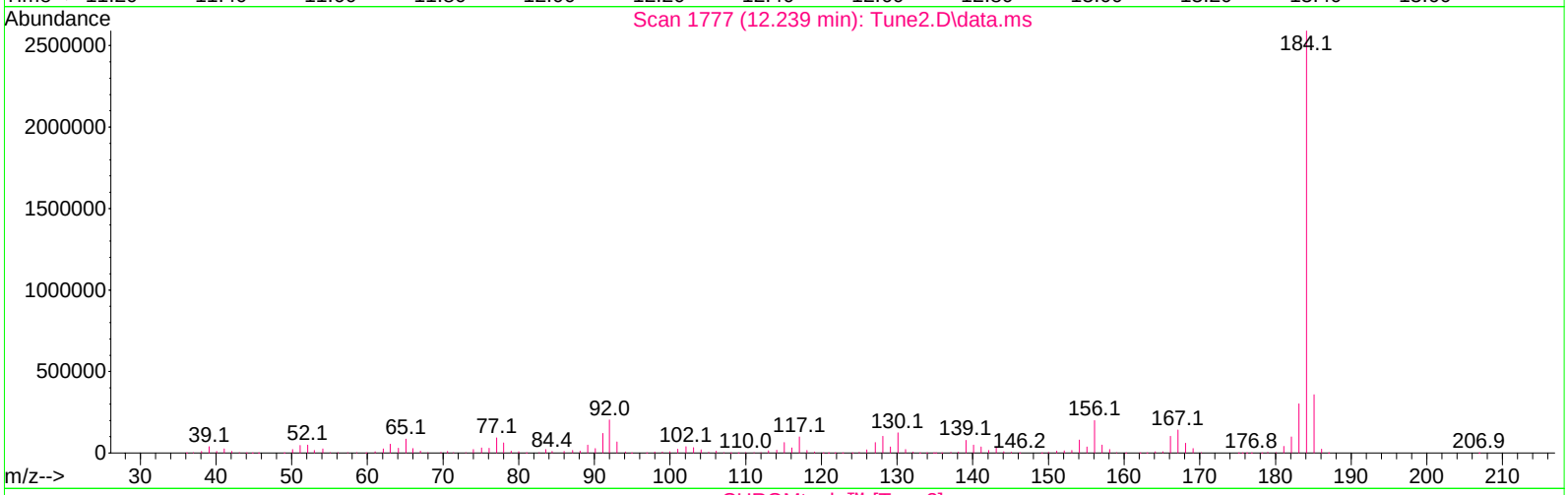
Ion	Exp%	Act%
235.10	100.00	100.00
237.00	63.00	63.71
165.10	54.80	52.99
199.10	16.50	15.43

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\230902lviical\
Data File : Tune2.D
Acq On : 2 Sep 2023 8:54 pm
Operator : SV106:ljg
Sample : Tune2
Misc : WG1823680,,ical
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Sep 03 14:44:47 2023
Quant Method : I:\8270\SV106\230902lviical\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 23 13:06:27 2023
Response via : Initial Calibration





CHROMtools™ [Tune2]

(3) Benzidine (T)

12.239min (-0.347) 229.25

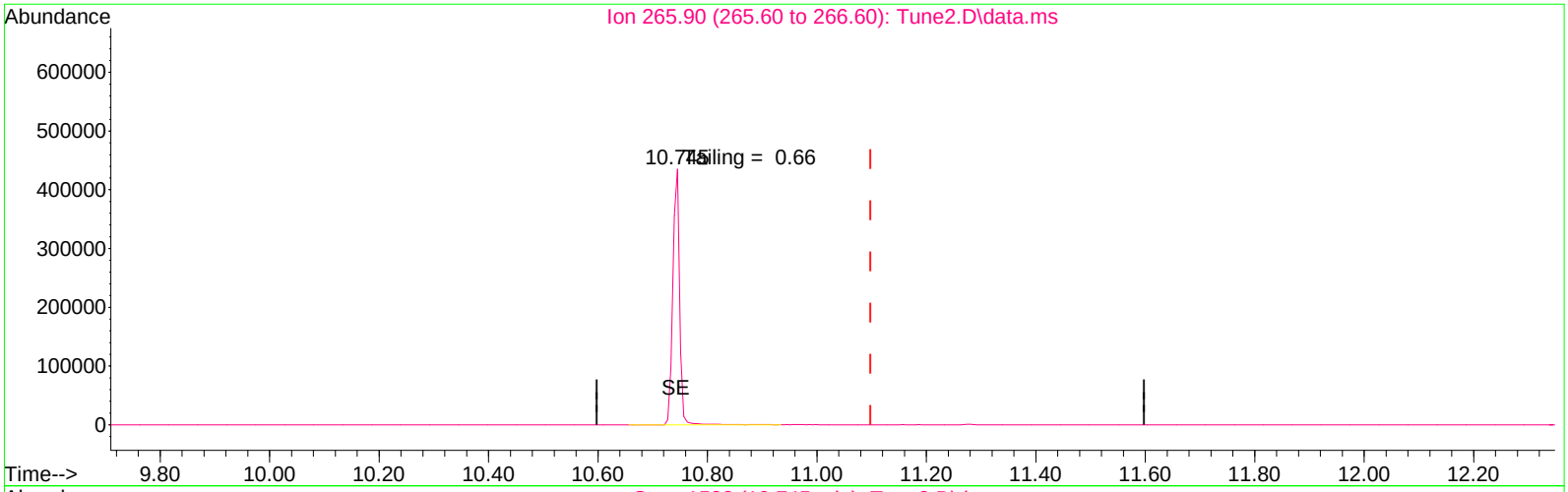
response 2333766

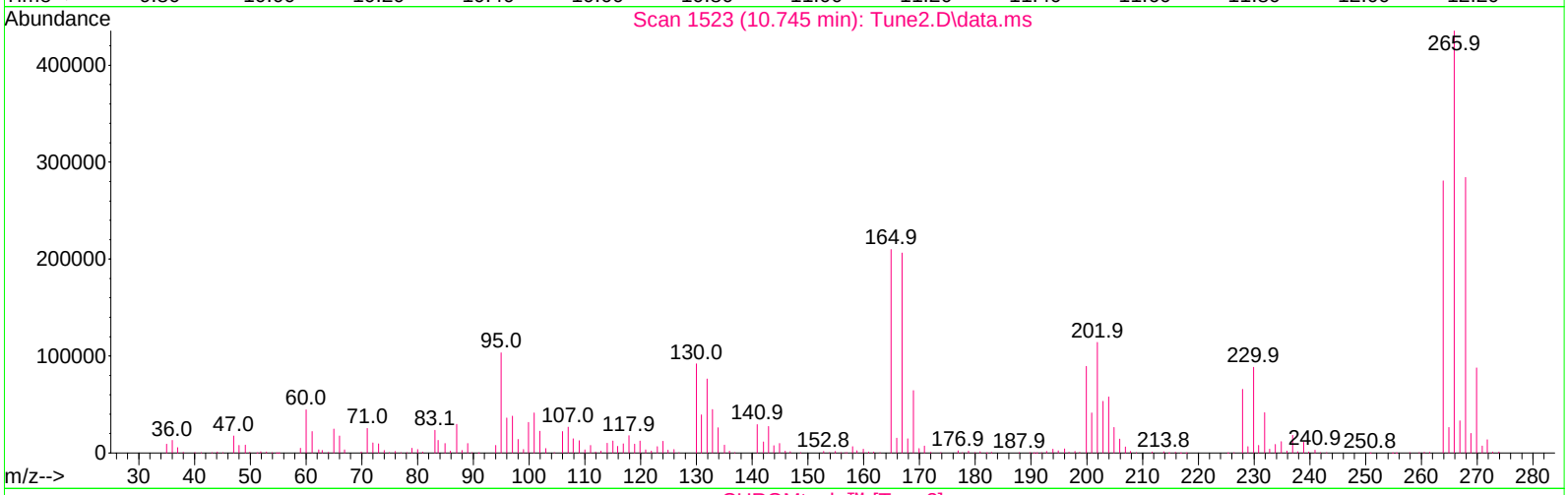
Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\230902lviical\
Data File : Tune2.D
Acq On : 2 Sep 2023 8:54 pm
Operator : SV106:ljg
Sample : Tune2
Misc : WG1823680,,ical
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Sep 03 14:44:47 2023
Quant Method : I:\8270\SV106\230902lviical\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 23 13:06:27 2023
Response via : Initial Calibration





CHROMtools™ [Tune2]

(1) Pentachlorophenol (T)

10.745min (-0.353) 177.76

response 373352

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL10.D
Acq On : 2 Sep 2023 9:18 pm
Operator : SV106:ljg
Sample : IL1,32,,ADPL50 Lot# 10079
Misc : WG1823680,,ical
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 05 11:15:51 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:43 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	6.281	152	44178	4.000	ug/ml	0.00
Standard Area 1 = 45289			Recovery =	97.55%		
85) IS3_Acenaphthene-d10	9.475	164	93077	4.000	ug/ml	0.00
Standard Area 1 = 91334			Recovery =	101.91%		
99) IS3_Phenanthrene-d10	10.904	188	182189	4.000	ug/ml	# 0.00
Standard Area 1 = 180632			Recovery =	100.86%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	6.181	57	752648	50.588	ug/ml#	45
86) Atrazine	10.698	200	432139	53.882	ug/ml	93
100) n-Octadecane	10.898	57	1100463	52.552	ug/ml#	1
101) Parathion	11.698	109	274170	64.113	ug/ml#	91
102) 3,3'-Dimethylbenzidine	12.969	212	1777191	51.657	ug/ml	99

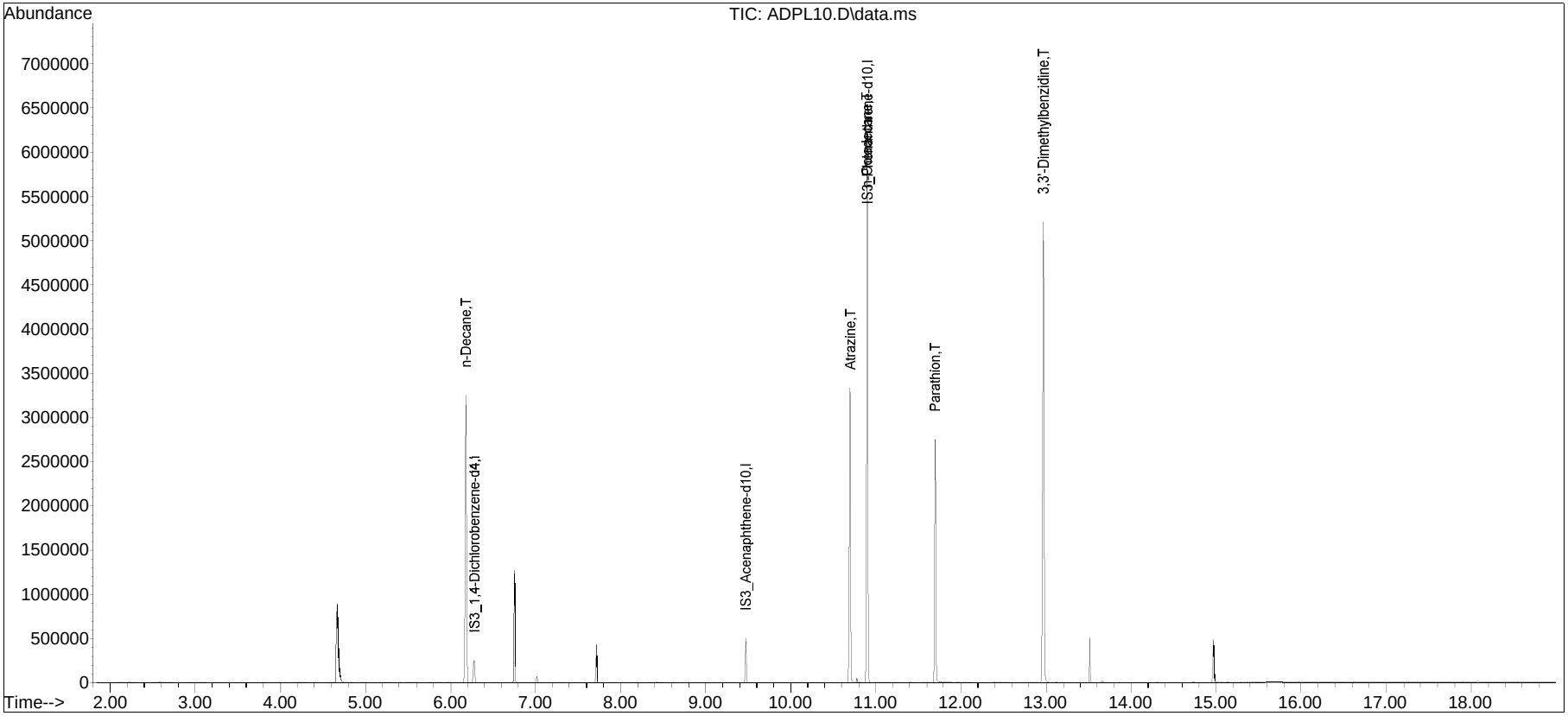
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL10.D
Acq On : 2 Sep 2023 9:18 pm
Operator : SV106:ljg
Sample : IL1,32,,ADPL50 Lot# 10079
Misc : WG1823680,,ical
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 05 11:15:51 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:43 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistiical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: ADPL10.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 9:18 pm	Instrument	: SV 106
Sample	: IL1,32,,ADPL50 Lot# 10079	Quant Date	: 9/5/2023 11:15 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL9.D
Acq On : 2 Sep 2023 9:42 pm
Operator : SV106:ljg
Sample : IL2,32,,ADPL35 Lot# 10089
Misc : WG1823680,,ical
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 05 11:17:08 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:17:00 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
32) IS3_1,4-Dichlorobenzen...	6.281	152	44516	4.000	ug/ml		0.00
Standard Area 1 = 45289			Recovery =	98.29%			
85) IS3_Acenaphthene-d10	9.475	164	91267	4.000	ug/ml		0.00
Standard Area 1 = 91334			Recovery =	99.93%			
99) IS3_Phenanthrene-d10	10.904	188	186854	4.000	ug/ml	#	0.00
Standard Area 1 = 180632			Recovery =	103.44%			
System Monitoring Compounds							
Target Compounds							Qvalue
33) n-Decane	6.181	57	513347	34.242	ug/ml	#	45
86) Atrazine	10.692	200	298706	37.983	ug/ml		93
100) n-Octadecane	10.898	57	761864	35.474	ug/ml	#	1
101) Parathion	11.698	109	182830	41.687	ug/ml	#	91
102) 3,3'-Dimethylbenzidine	12.968	212	1216157	34.698	ug/ml		99

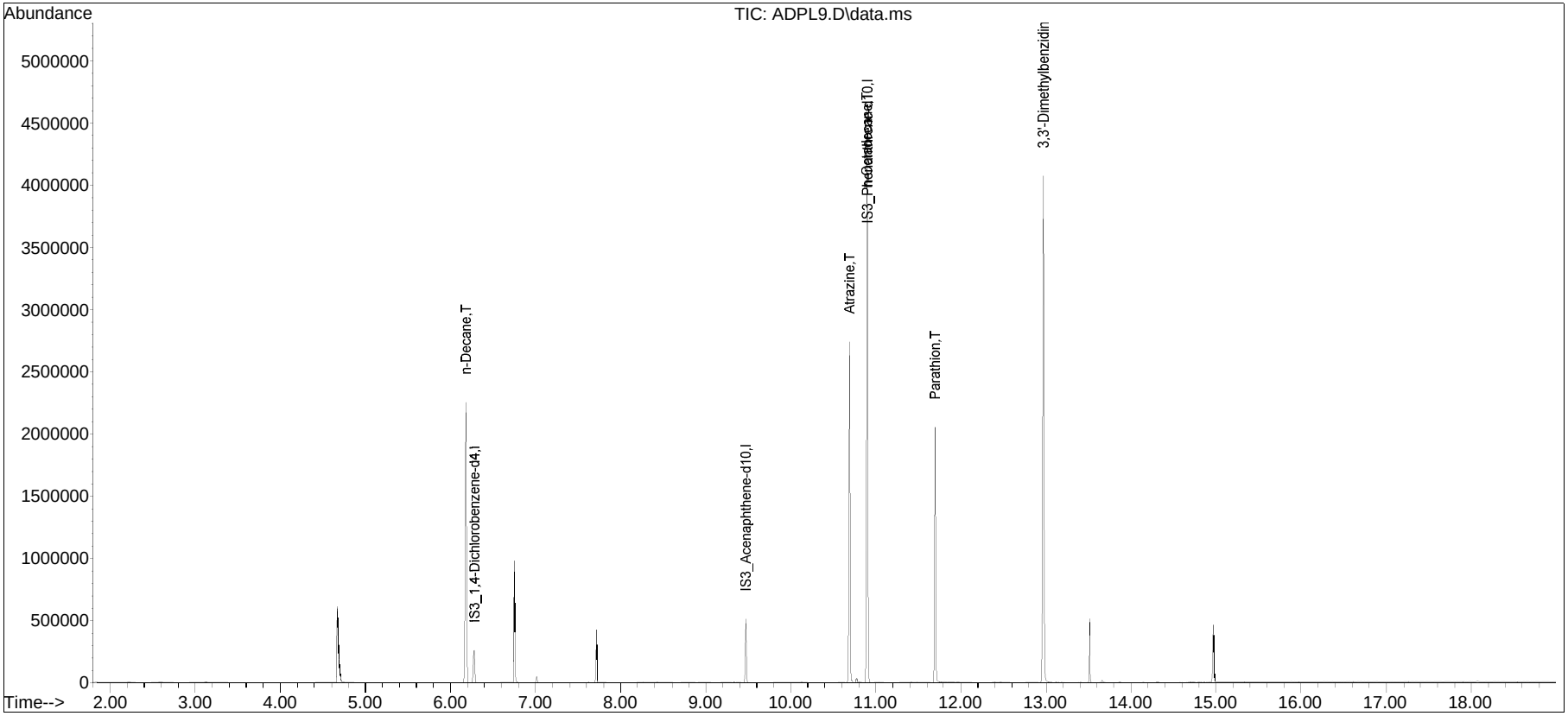
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL9.D
Acq On : 2 Sep 2023 9:42 pm
Operator : SV106:ljg
Sample : IL2,32,,ADPL35 Lot# 10089
Misc : WG1823680,,ical
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 05 11:17:08 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:17:00 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistiical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: ADPL9.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 9:42 pm	Instrument	: SV 106
Sample	: IL2,32,,ADPL35 Lot# 10089	Quant Date	: 9/5/2023 11:17 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL8.D
Acq On : 2 Sep 2023 10:05 pm
Operator : SV106:ljg
Sample : IL3,32,,ADPL15 Lot# 10090
Misc : WG1823680,,ical
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 05 11:16:58 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:16:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	6.281	152	44182	4.000	ug/ml	0.00
Standard Area 1 = 45289			Recovery = 97.56%			
85) IS3_Acenaphthene-d10	9.475	164	92814	4.000	ug/ml	0.00
Standard Area 1 = 91334			Recovery = 101.62%			
99) IS3_Phenanthrene-d10	10.904	188	178276	4.000	ug/ml	# 0.00
Standard Area 1 = 180632			Recovery = 98.70%			
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	6.181	57	221691	14.899	ug/ml	# 45
86) Atrazine	10.692	200	119695	14.967	ug/ml	94
100) n-Octadecane	10.898	57	313713	15.310	ug/ml	# 1
101) Parathion	11.698	109	67318	16.088	ug/ml	# 92
102) 3,3'-Dimethylbenzidine	12.969	212	479316	14.741	ug/ml	99

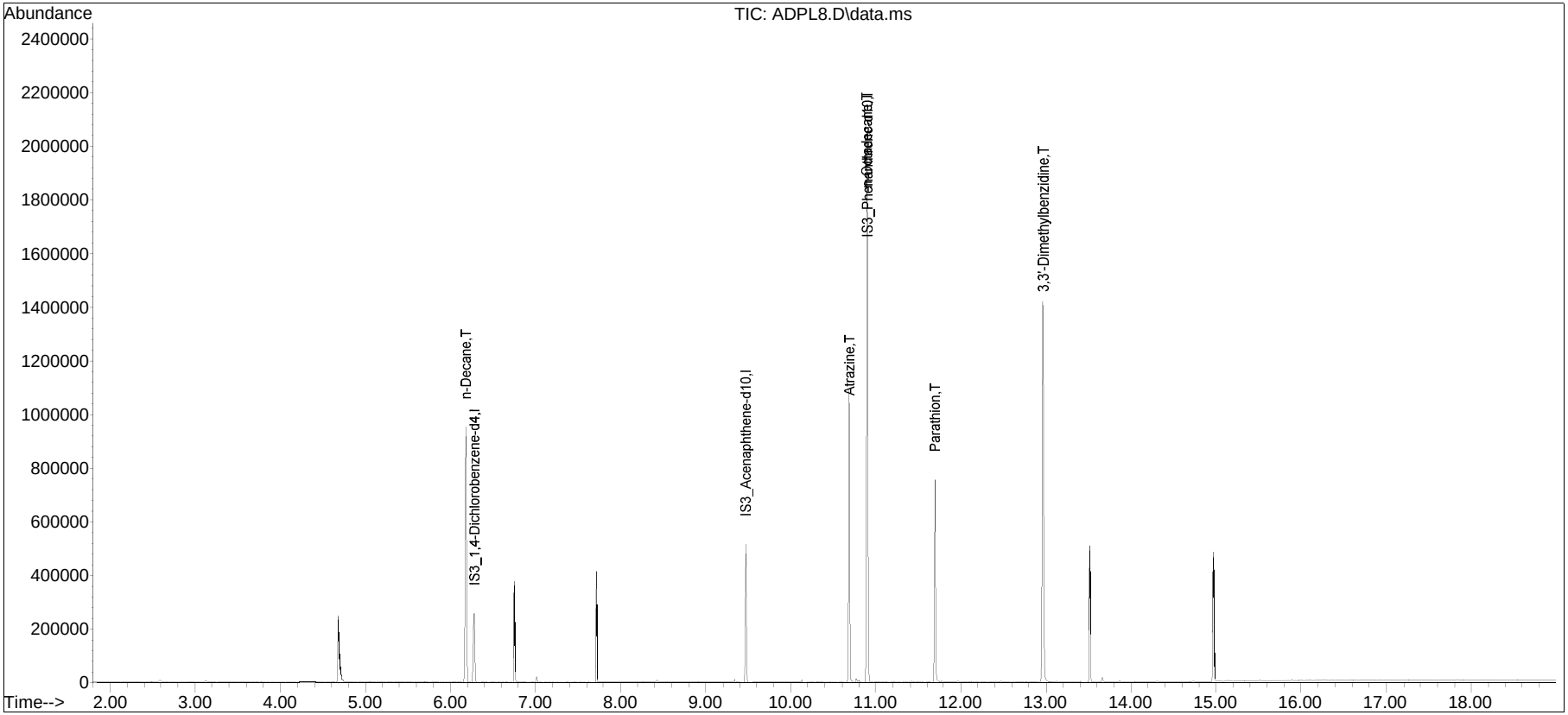
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL8.D
Acq On : 2 Sep 2023 10:05 pm
Operator : SV106:ljg
Sample : IL3,32,,ADPL15 Lot# 10090
Misc : WG1823680,,ical
ALS Vial : 25 Sample Multiplier: 1

Quant Time: Sep 05 11:16:58 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:16:50 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistiical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: ADPL8.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 10:05 pm	Instrument	: SV 106
Sample	: IL3,32,,ADPL15 Lot# 10090	Quant Date	: 9/5/2023 11:16 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL7.D
Acq On : 2 Sep 2023 10:29 pm
Operator : SV106:ljg
Sample : IL4,32,,ADPL10 Lot# 10091
Misc : WG1823680,,ical
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 05 11:16:47 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:16:40 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	6.281	152	45363	4.000	ug/ml	0.00
Standard Area 1 = 45289			Recovery =	100.16%		
85) IS3_Acenaphthene-d10	9.475	164	95670	4.000	ug/ml	0.00
Standard Area 1 = 91334			Recovery =	104.75%		
99) IS3_Phenanthrene-d10	10.904	188	190020	4.000	ug/ml	# 0.00
Standard Area 1 = 180632			Recovery =	105.20%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	6.181	57	149227	9.768	ug/ml#	45
86) Atrazine	10.686	200	82035	9.951	ug/ml	93
100) n-Octadecane	10.898	57	216661	9.920	ug/ml#	1
101) Parathion	11.698	109	44256	9.923	ug/ml#	91
102) 3,3'-Dimethylbenzidine	12.963	212	312930	9.299	ug/ml	99

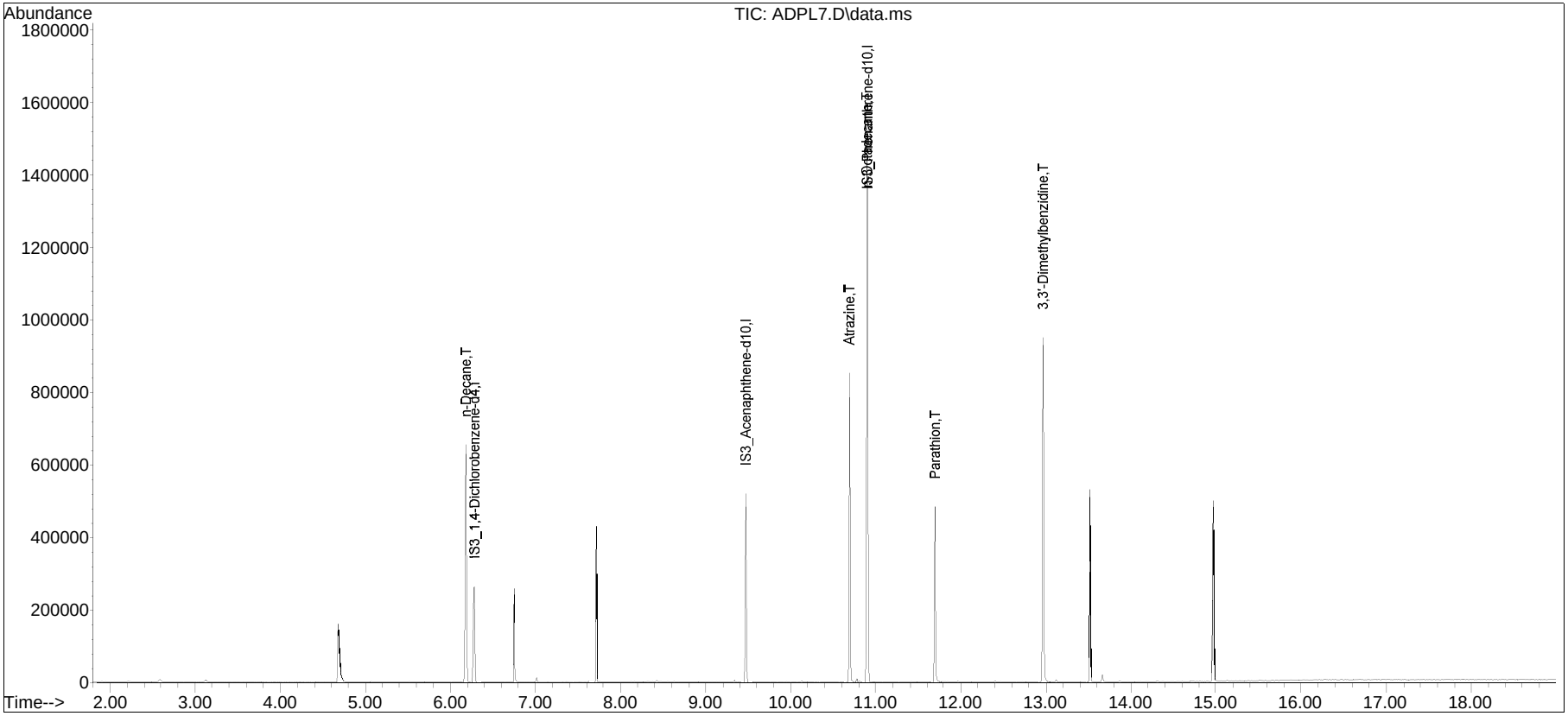
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL7.D
Acq On : 2 Sep 2023 10:29 pm
Operator : SV106:ljg
Sample : IL4,32,,ADPL10 Lot# 10091
Misc : WG1823680,,ical
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 05 11:16:47 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:16:40 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistiical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: ADPL7.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 10:29 pm	Instrument	: SV 106
Sample	: IL4,32,,ADPL10 Lot# 10091	Quant Date	: 9/5/2023 11:16 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL6.D
Acq On : 2 Sep 2023 10:53 pm
Operator : SV106:ljg
Sample : IL5,32,,ADPL5 Lot# 10092
Misc : WG1823680,,ical
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 05 11:16:38 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:16:31 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	6.281	152	45289	4.000	ug/ml	0.00
Standard Area 1 = 45289			Recovery =	100.00%		
85) IS3_Acenaphthene-d10	9.475	164	91334	4.000	ug/ml	0.00
Standard Area 1 = 91334			Recovery =	100.00%		
99) IS3_Phenanthrene-d10	10.904	188	180632	4.000	ug/ml	0.00
Standard Area 1 = 180632			Recovery =	100.00%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	6.181	57	75644	4.960	ug/ml#	44
86) Atrazine	10.686	200	38986	4.954	ug/ml	92
100) n-Octadecane	10.898	57	105370	5.075	ug/ml#	1
101) Parathion	11.698	109	19294	4.551	ug/ml#	87
102) 3,3'-Dimethylbenzidine	12.963	212	134158	4.575	ug/ml	99

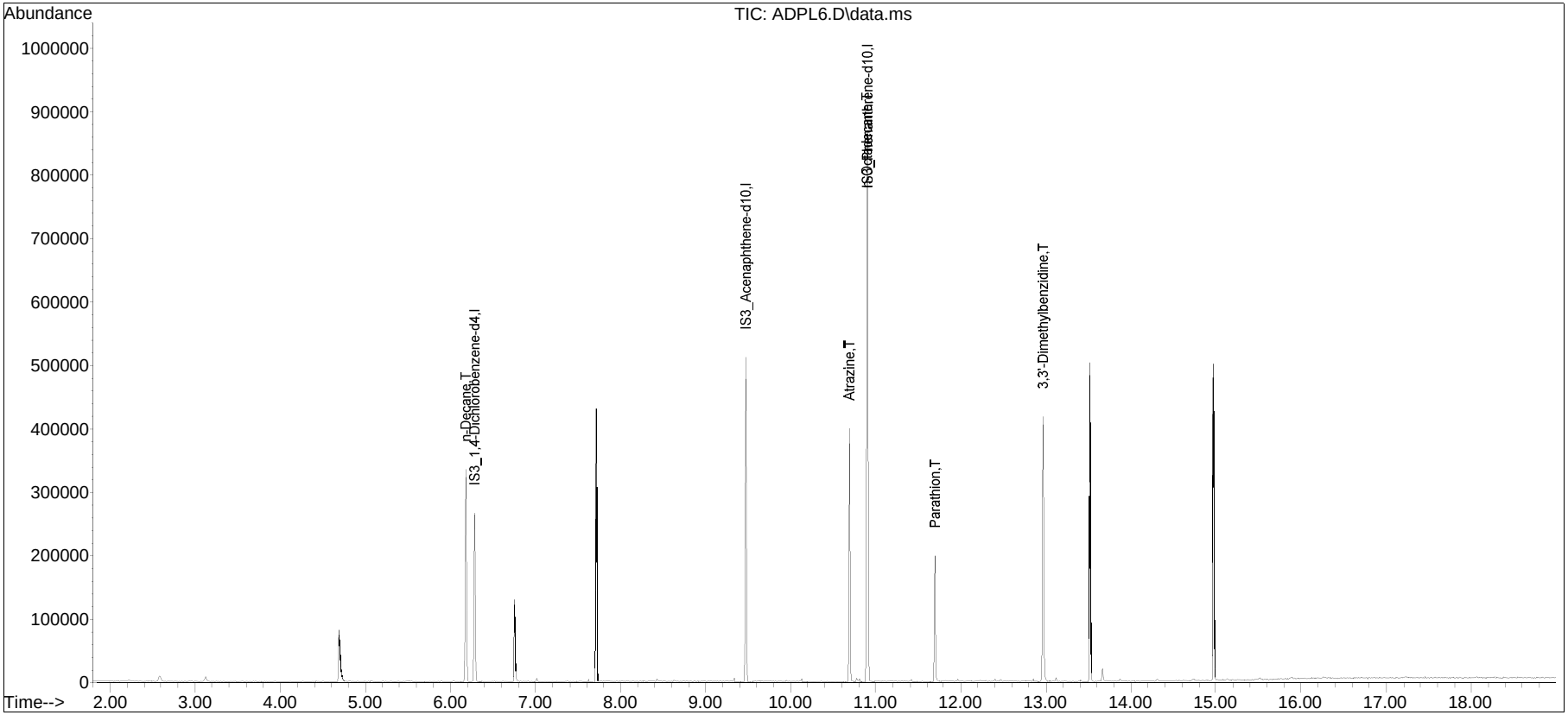
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL6.D
Acq On : 2 Sep 2023 10:53 pm
Operator : SV106:ljg
Sample : IL5,32,,ADPL5 Lot# 10092
Misc : WG1823680,,ical
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 05 11:16:38 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:16:31 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistiical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: ADPL6.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 10:53 pm	Instrument	: SV 106
Sample	: IL5,32,,ADPL5 Lot# 10092	Quant Date	: 9/5/2023 11:16 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL5.D
Acq On : 2 Sep 2023 11:17 pm
Operator : SV106:ljg
Sample : IL6,32,,ADPL3 Lot# 10093
Misc : WG1823680,,ical
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 05 11:16:29 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:16:22 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	6.281	152	45928	4.000	ug/ml	0.00
Standard Area 1 = 45289			Recovery =	101.41%		
85) IS3_Acenaphthene-d10	9.475	164	94608	4.000	ug/ml	0.00
Standard Area 1 = 91334			Recovery =	103.58%		
99) IS3_Phenanthrene-d10	10.904	188	186857	4.000	ug/ml	# 0.00
Standard Area 1 = 180632			Recovery =	103.45%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	6.181	57	46099	2.980	ug/ml#	44
86) Atrazine	10.686	200	23187	2.844	ug/ml	90
100) n-Octadecane	10.898	57	64086	2.984	ug/ml#	1
101) Parathion	11.698	109	11888	2.711	ug/ml#	88
102) 3,3'-Dimethylbenzidine	12.963	212	75658	2.810	ug/ml	98

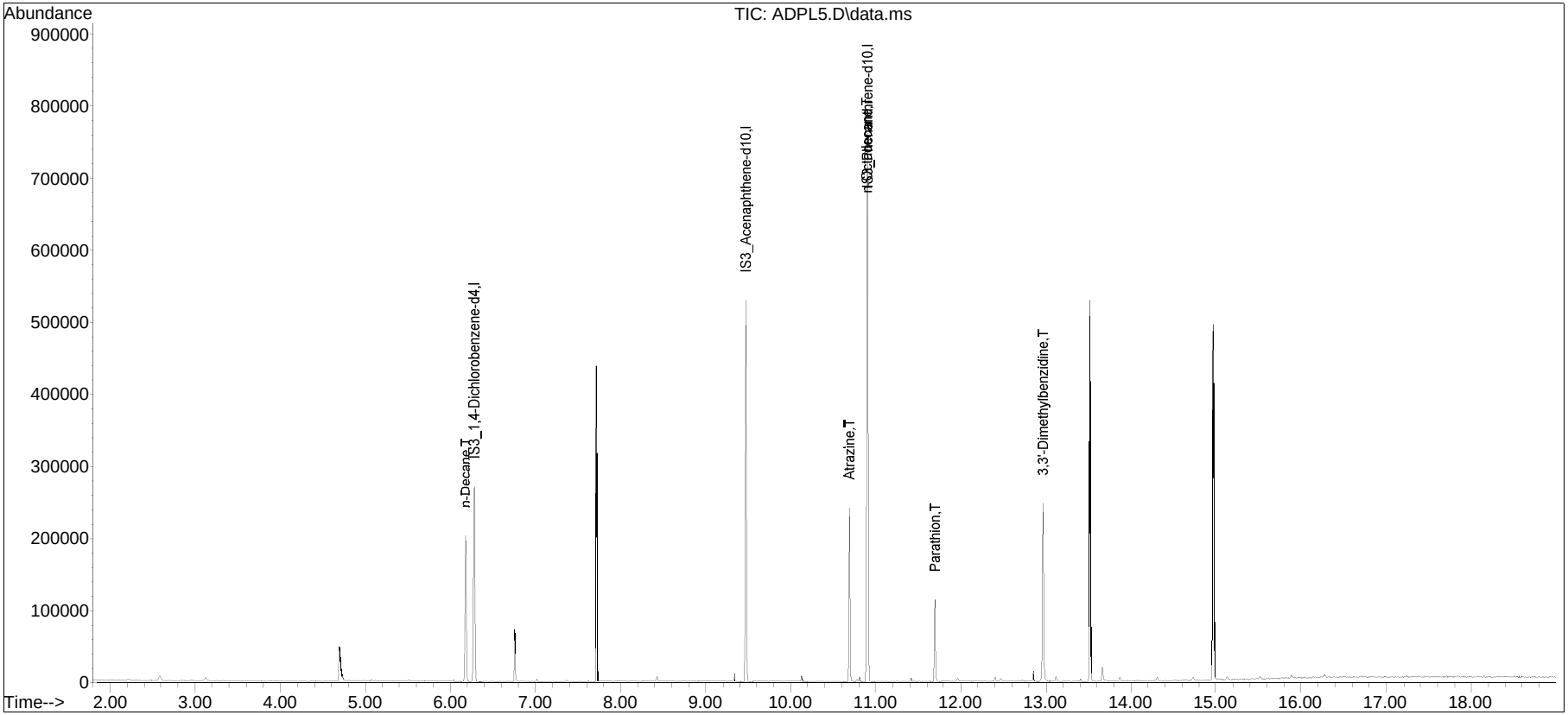
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL5.D
Acq On : 2 Sep 2023 11:17 pm
Operator : SV106:ljg
Sample : IL6,32,,ADPL3 Lot# 10093
Misc : WG1823680,,ical
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 05 11:16:29 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:16:22 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistiical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: ADPL5.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 11:17 pm	Instrument	: SV 106
Sample	: IL6,32,,ADPL3 Lot# 10093	Quant Date	: 9/5/2023 11:16 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL4.D
Acq On : 2 Sep 2023 11:40 pm
Operator : SV106:ljg
Sample : IL7,32,,ADPL2 Lot# 10094
Misc : WG1823680,,ical
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 05 11:16:19 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:16:13 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	6.281	152	46329	4.000	ug/ml	0.00
Standard Area 1 = 45289			Recovery =	102.30%		
85) IS3_Acenaphthene-d10	9.475	164	94241	4.000	ug/ml	0.00
Standard Area 1 = 91334			Recovery =	103.18%		
99) IS3_Phenanthrene-d10	10.904	188	191370	4.000	ug/ml	# 0.00
Standard Area 1 = 180632			Recovery =	105.94%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	6.181	57	30285	1.941	ug/ml#	44
86) Atrazine	10.686	200	15030	1.851	ug/ml	96
100) n-Octadecane	10.898	57	40381	1.836	ug/ml#	1
101) Parathion	11.698	109	7445	1.657	ug/ml#	88
102) 3,3'-Dimethylbenzidine	12.963	212	48368	2.016	ug/ml	98

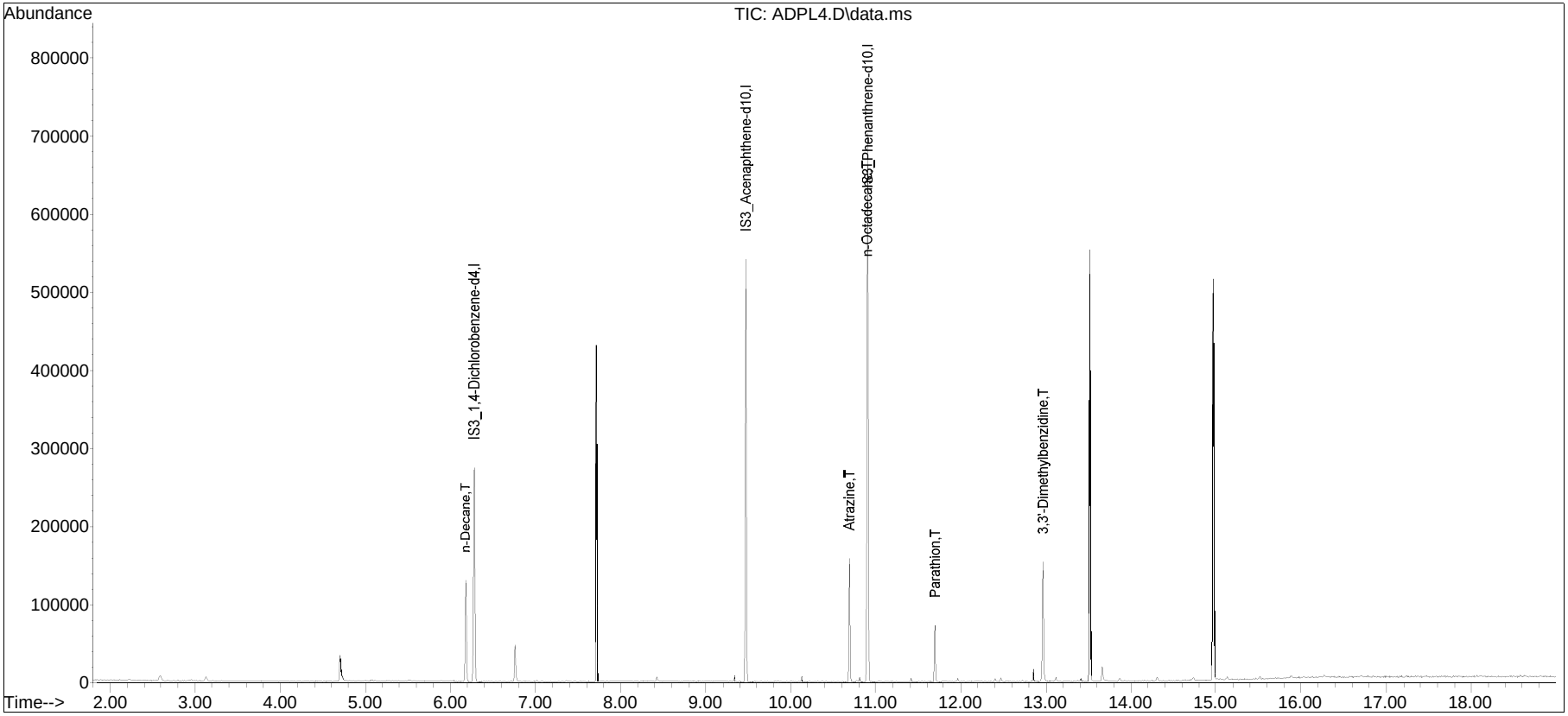
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL4.D
Acq On : 2 Sep 2023 11:40 pm
Operator : SV106:ljg
Sample : IL7,32,,ADPL2 Lot# 10094
Misc : WG1823680,,ical
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 05 11:16:19 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:16:13 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistiical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: ADPL4.D	Operator	: SV106:ljg
Date Inj'd	: 9/2/2023 11:40 pm	Instrument	: SV 106
Sample	: IL7,32,,ADPL2 Lot# 10094	Quant Date	: 9/5/2023 11:16 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL3.D
Acq On : 3 Sep 2023 12:04 am
Operator : SV106:ljg
Sample : IL8,32,,ADPL1 Lot# 10095
Misc : WG1823680,,ical
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 05 11:16:10 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:16:03 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	6.281	152	47341	4.000	ug/ml	0.00
Standard Area 1 = 45289			Recovery =	104.53%		
85) IS3_Acenaphthene-d10	9.475	164	93544	4.000	ug/ml	0.00
Standard Area 1 = 91334			Recovery =	102.42%		
99) IS3_Phenanthrene-d10	10.904	188	191607	4.000	ug/ml	0.00
Standard Area 1 = 180632			Recovery =	106.08%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	6.181	57	16304	1.023	ug/ml#	44
86) Atrazine	10.686	200	7705	0.956	ug/ml	92
100) n-Octadecane	10.898	57	21215	0.963	ug/ml#	1
101) Parathion	11.698	109	4036	0.897	ug/ml#	80
102) 3,3'-Dimethylbenzidine	12.963	212	18633	1.203	ug/ml	98

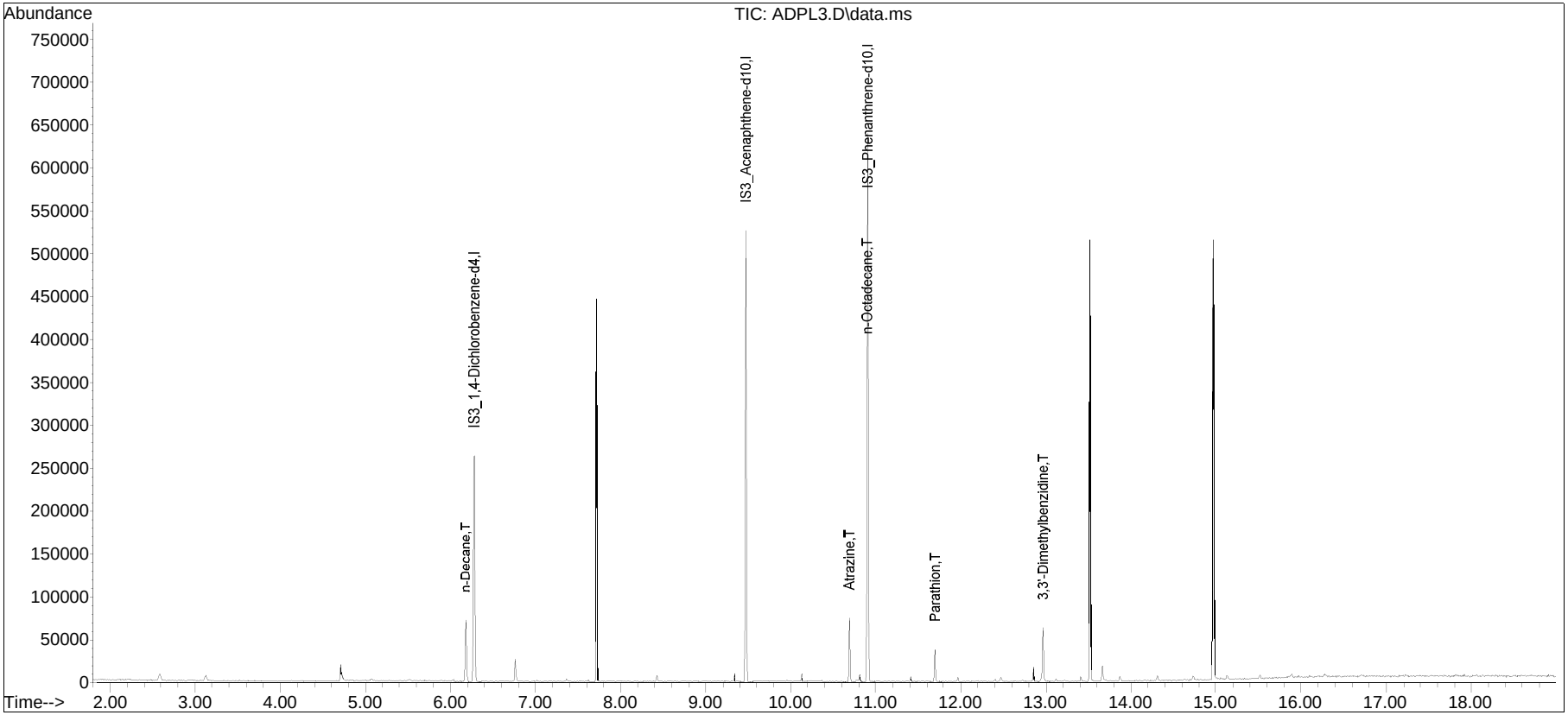
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL3.D
Acq On : 3 Sep 2023 12:04 am
Operator : SV106:ljg
Sample : IL8,32,,ADPL1 Lot# 10095
Misc : WG1823680,,ical
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 05 11:16:10 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:16:03 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistiical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: ADPL3.D	Operator	: SV106:ljg
Date Inj'd	: 9/3/2023 12:04 am	Instrument	: SV 106
Sample	: IL8,32,,ADPL1 Lot# 10095	Quant Date	: 9/5/2023 11:16 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL2.D
Acq On : 3 Sep 2023 12:28 am
Operator : SV106:ljg
Sample : IL9,32,,ADPL0.4 Lot# 10096
Misc : WG1823680,,ical
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Sep 05 11:16:00 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:53 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
32) IS3_1,4-Dichlorobenzen...	6.281	152	45582	4.000	ug/ml		0.00
Standard Area 1 = 45289			Recovery =	100.65%			
85) IS3_Acenaphthene-d10	9.475	164	97797	4.000	ug/ml		0.00
Standard Area 1 = 91334			Recovery =	107.08%			
99) IS3_Phenanthrene-d10	10.904	188	190089	4.000	ug/ml	#	0.00
Standard Area 1 = 180632			Recovery =	105.24%			
System Monitoring Compounds							
Target Compounds							Qvalue
33) n-Decane	6.181	57	6484	0.422	ug/ml	#	41
86) Atrazine	10.686	200	3408	0.404	ug/ml	#	83
100) n-Octadecane	10.898	57	8858	0.405	ug/ml	#	1
101) Parathion	11.692	109	1694	0.380	ug/ml	#	86
102) 3,3'-Dimethylbenzidine	12.963	212	4267	0.812	ug/ml		96

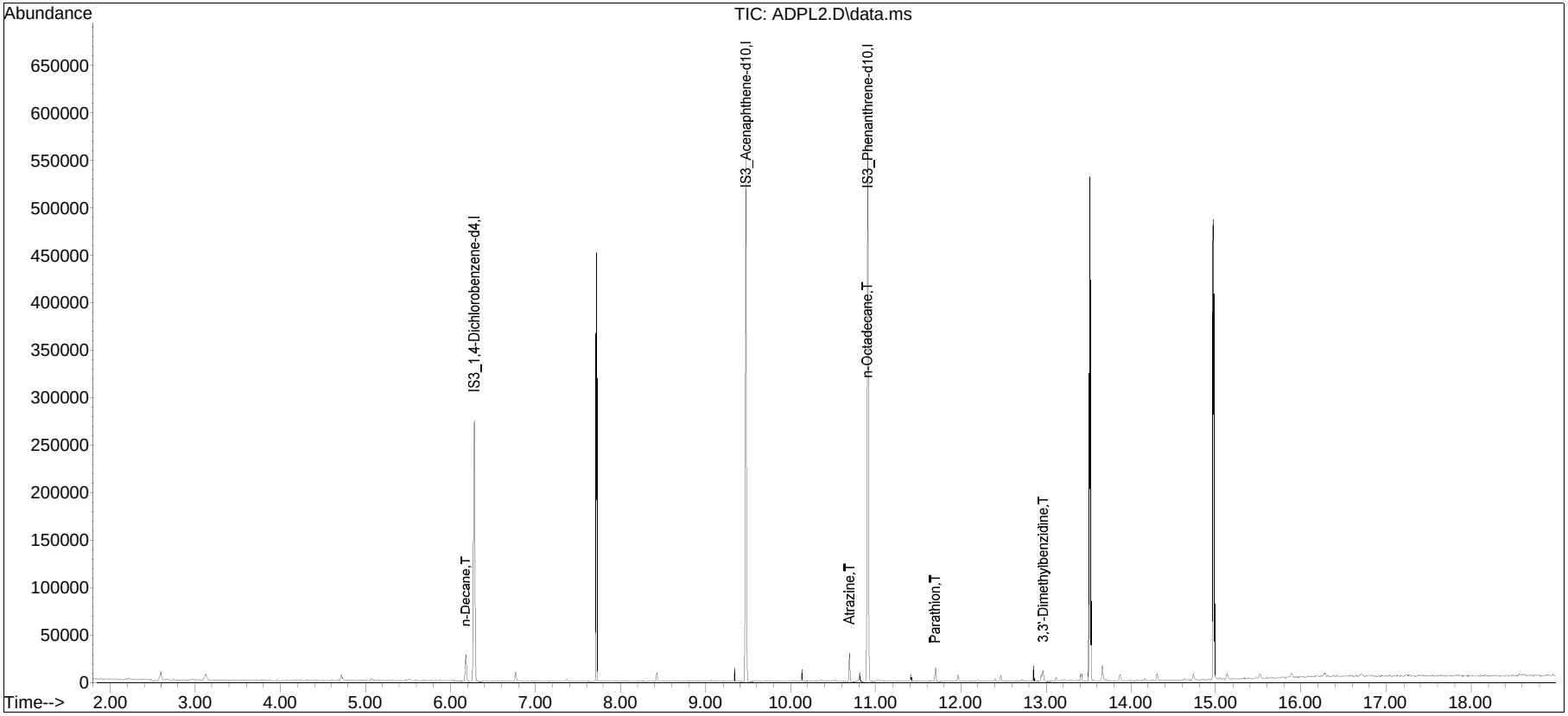
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL2.D
Acq On : 3 Sep 2023 12:28 am
Operator : SV106:ljg
Sample : IL9,32,,ADPL0.4 Lot# 10096
Misc : WG1823680,,ical
ALS Vial : 31 Sample Multiplier: 1

Quant Time: Sep 05 11:16:00 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:53 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistiical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: ADPL2.D	Operator	: SV106:ljg
Date Inj'd	: 9/3/2023 12:28 am	Instrument	: SV 106
Sample	: IL9,32,,ADPL0.4 Lot# 10096	Quant Date	: 9/5/2023 11:15 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL1.D
Acq On : 3 Sep 2023 12:52 am
Operator : SV106:ljg
Sample : IL10,32,,ADPL0.2 Lot# 10097
Misc : WG1823680,,ical
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 05 11:15:40 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:33 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	6.281	152	48149	4.000	ug/ml	0.00
Standard Area 1 = 45289			Recovery =	106.31%		
85) IS3_Acenaphthene-d10	9.475	164	90114	4.000	ug/ml	0.00
Standard Area 1 = 91334			Recovery =	98.66%		
99) IS3_Phenanthrene-d10	10.904	188	184126	4.000	ug/ml	# 0.00
Standard Area 1 = 180632			Recovery =	101.93%		
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	6.181	57	3260	0.201	ug/ml#	40
86) Atrazine	10.686	200	1573	0.203	ug/ml#	77
100) n-Octadecane	10.898	57	4310	0.204	ug/ml#	1
101) Parathion	11.692	109	841	0.195	ug/ml#	68
102) 3,3'-Dimethylbenzidine	12.957	212	638	0.713	ug/ml#	62

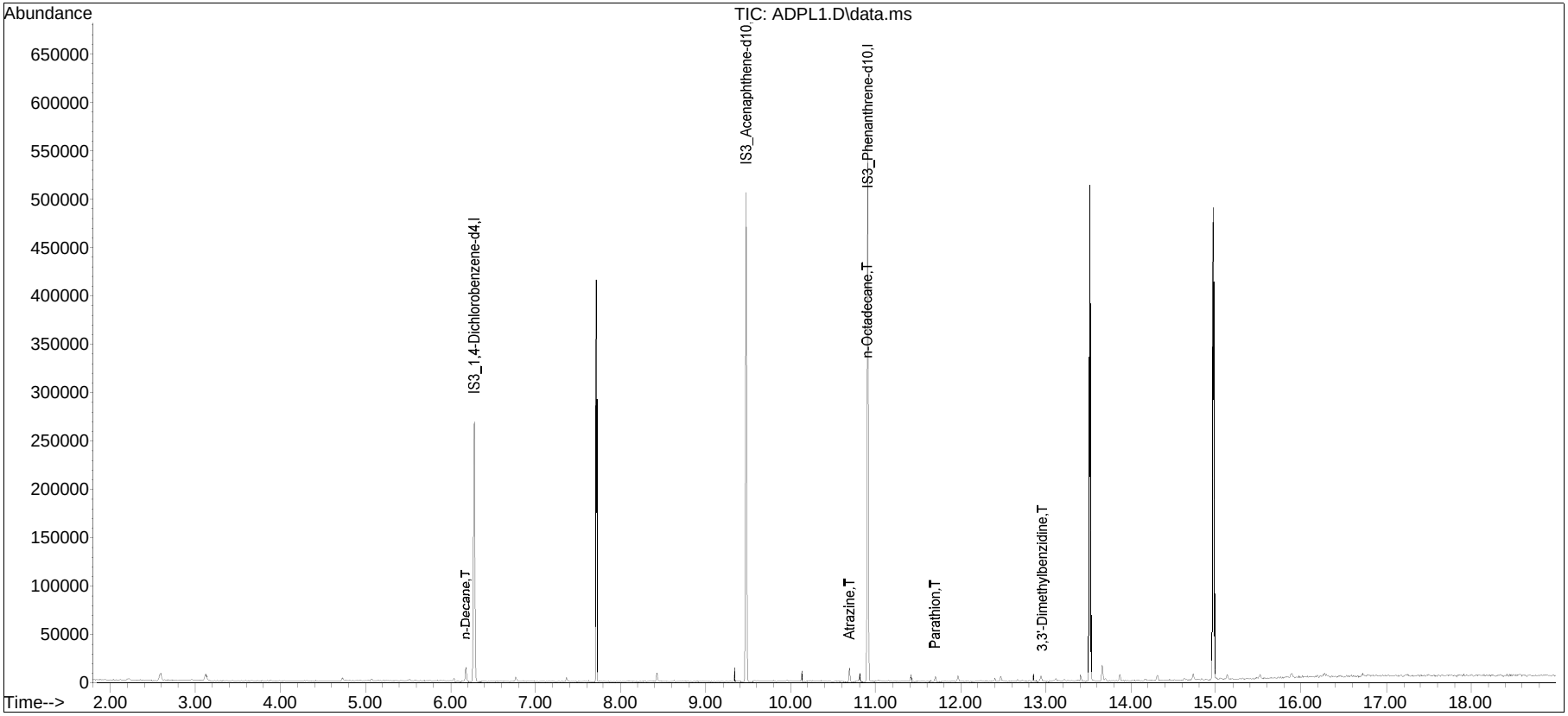
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPL1.D
Acq On : 3 Sep 2023 12:52 am
Operator : SV106:ljg
Sample : IL10,32,,ADPL0.2 Lot# 10097
Misc : WG1823680,,ical
ALS Vial : 32 Sample Multiplier: 1

Quant Time: Sep 05 11:15:40 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:33 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistiical\ADPL6.D•



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: ADPL1.D	Operator	: SV106:ljg
Date Inj'd	: 9/3/2023 12:52 am	Instrument	: SV 106
Sample	: IL10,32,,ADPL0.2 Lot# 1009	Quant Date	: 9/5/2023 11:15 am

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPICV.D
Acq On : 3 Sep 2023 1:15 am
Operator : SV106:ljg
Sample : CQICV3,32,,ADPICV Lot# 10099
Misc : WG1823680,,ical
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 05 11:15:31 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:23 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
32	I	IS3_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	90	0.00
33	T	n-Decane		1.347	1.461	-8.5	99	0.00
85	I	IS3_Acenaphthene-d10		1.000	1.000	0.0	92	0.00
86	T	Atrazine		0.345	0.376	-9.0	101	0.00
99	I	IS3_Phenanthrene-d10		1.000	1.000	0.0	93	0.00
100	T	n-Octadecane		0.460	0.508	-10.4	101	0.00
101	T	Parathion		0.094	0.092	2.1	100	0.00
102	T	3,3'-Dimethylbenzidine	*	5.000	4.910	1.8	101	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPICV.D
Acq On : 3 Sep 2023 1:15 am
Operator : SV106:ljg
Sample : CQICV3,32,,ADPICV Lot# 10099
Misc : WG1823680,,ical
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 05 11:15:31 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:23 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\SV106\230902lviical\ADPL6.D
Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	6.281	152	40906	4.000	ug/ml	0.00
Standard Area 1 = 45289			Recovery = 90.32%			
85) IS3_Acenaphthene-d10	9.475	164	83699	4.000	ug/ml	0.00
Standard Area 1 = 91334			Recovery = 91.64%			
99) IS3_Phenanthrene-d10	10.904	188	168291	4.000	ug/ml	# 0.00
Standard Area 1 = 180632			Recovery = 93.17%			
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	6.181	57	74725	5.424	ug/ml#	44
86) Atrazine	10.686	200	39360	5.458	ug/ml	92
100) n-Octadecane	10.898	57	106826	5.523	ug/ml#	1
101) Parathion	11.698	109	19365	4.902	ug/ml#	87
102) 3,3'-Dimethylbenzidine	12.963	212	135784	4.910	ug/ml	98

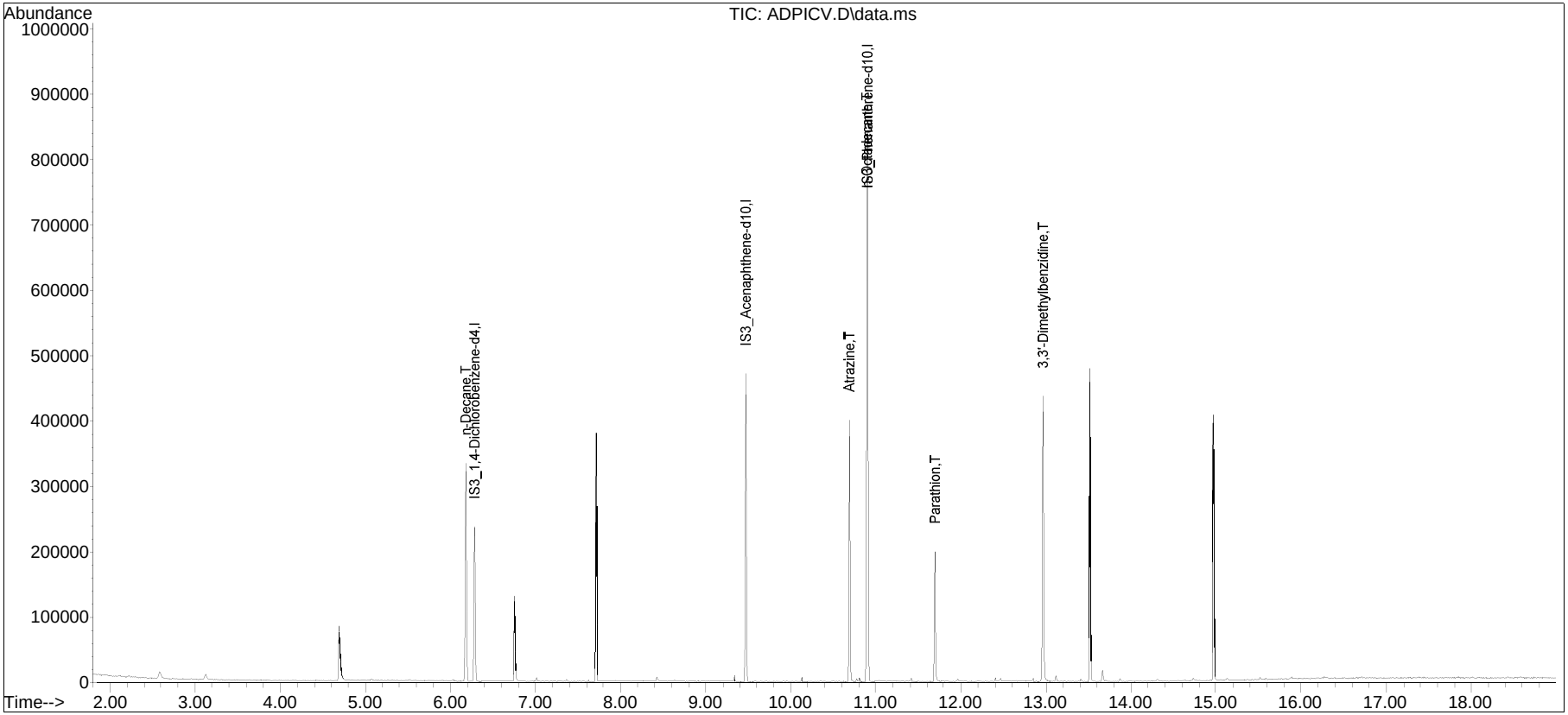
(#) = qualifier out of range (m) = manual integration (+) = signals summed

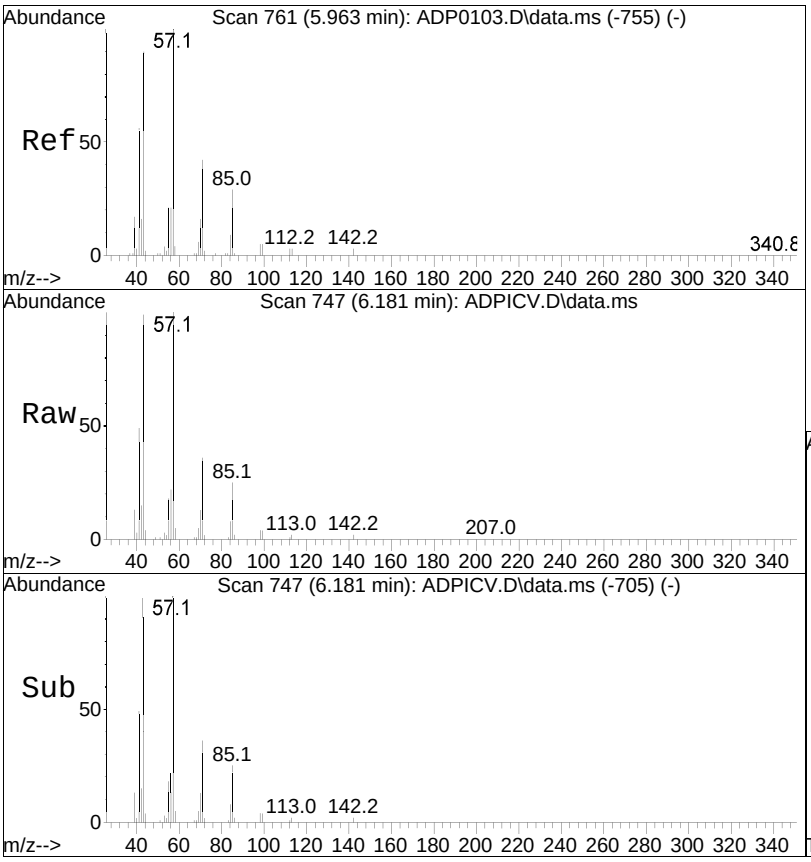
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230902lviical\
Data File : ADPICV.D
Acq On : 3 Sep 2023 1:15 am
Operator : SV106:ljg
Sample : CQICV3,32,,ADPICV Lot# 10099
Misc : WG1823680,,ical
ALS Vial : 33 Sample Multiplier: 1

Quant Time: Sep 05 11:15:31 2023
Quant Method : I:\8270\SV106\230902lviical\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:15:23 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublistiical\ADPL6.D•

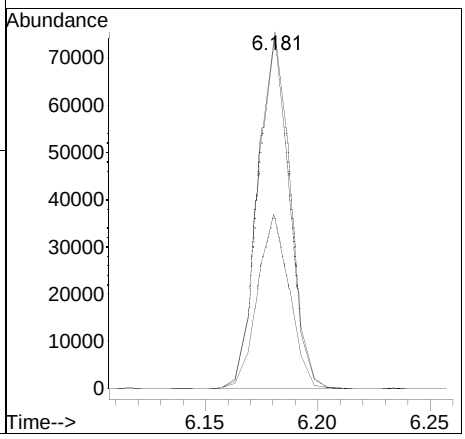


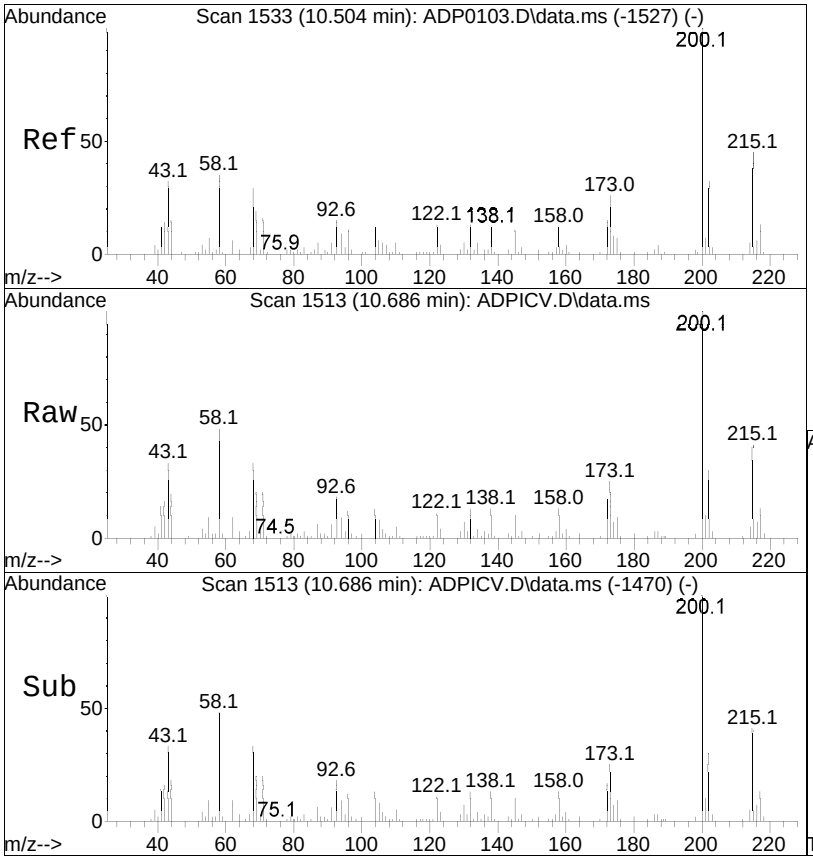


#33
n-Decane
Concen: 5.42 ug/ml
RT: 6.181 min Scan# 747
Delta R.T. -0.000 min
Lab File: ADPICV.D
Acq: 3 Sep 2023 1:15 am

Tgt Ion: 57 Resp: 74725

Ion	Ratio	Lower	Upper
57	100		
43	96.2	0.2	0.2#
41	48.6	0.2	0.2#

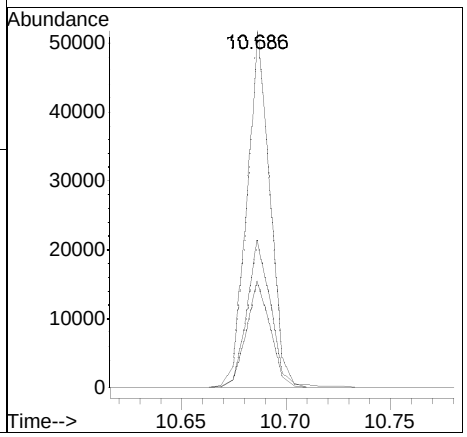


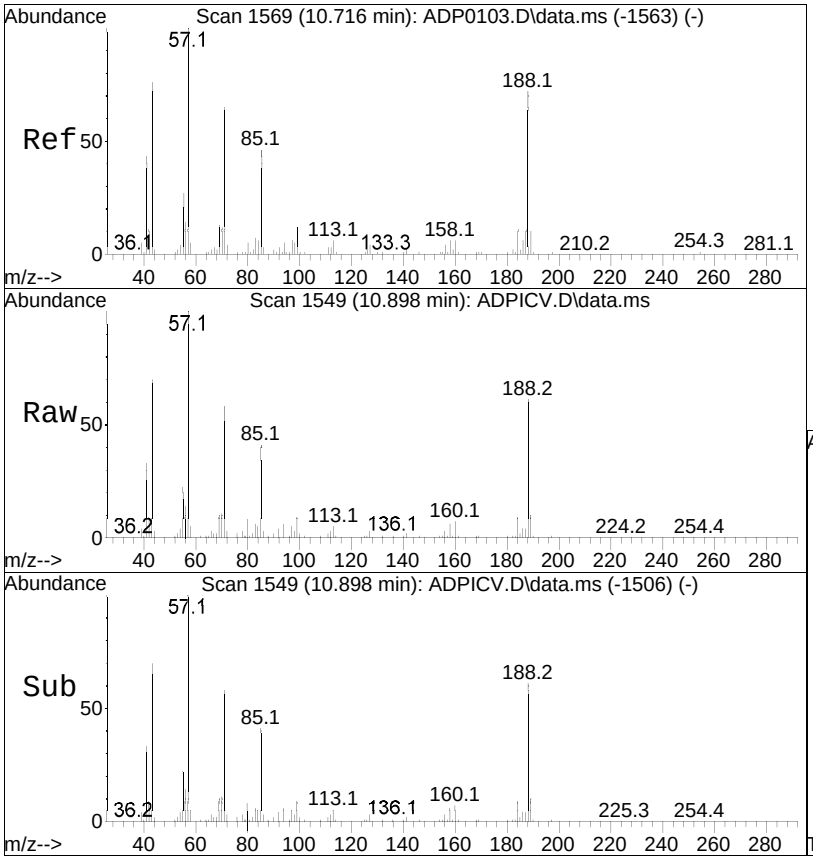


#86
Atrazine
Concen: 5.46 ug/ml
RT: 10.686 min Scan# 1513
Delta R.T. 0.000 min
Lab File: ADPICV.D
Acq: 3 Sep 2023 1:15 am

Tgt Ion:200 Resp: 39360

Ion	Ratio	Lower	Upper
200	100		
202	31.1	25.8	38.6
215	42.4	40.2	60.4

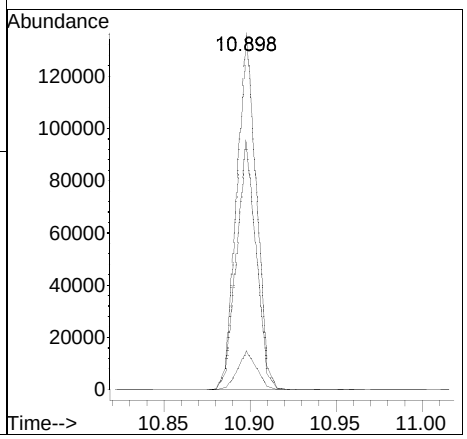


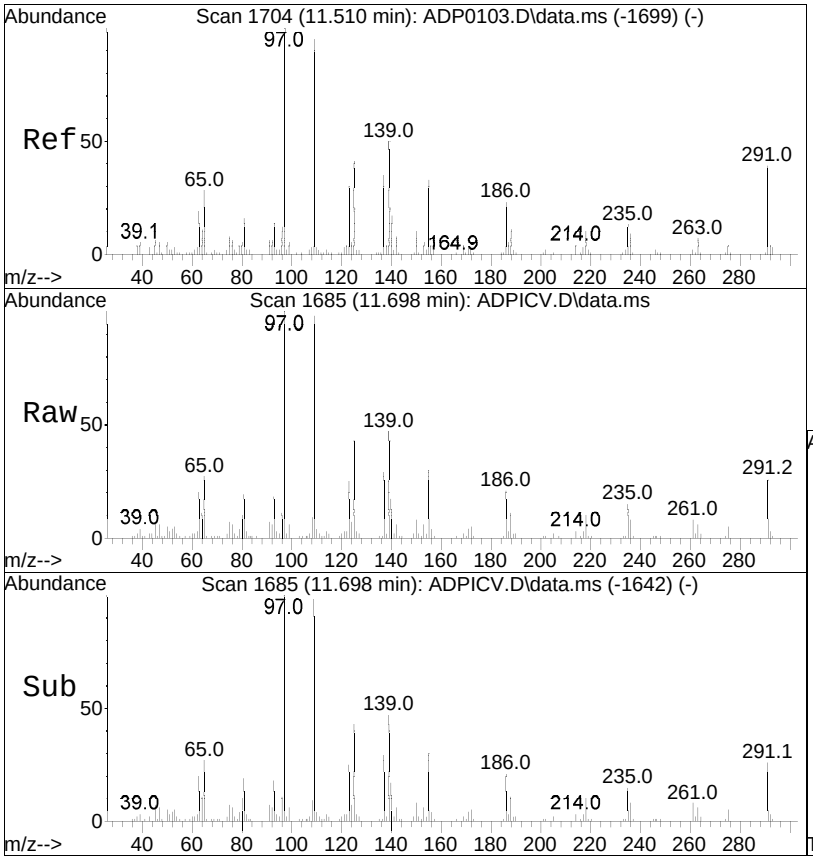


#100
n-Octadecane
Concen: 5.52 ug/ml
RT: 10.898 min Scan# 1549
Delta R.T. 0.000 min
Lab File: ADPICV.D
Acq: 3 Sep 2023 1:15 am

Tgt Ion: 57 Resp: 106826

Ion	Ratio	Lower	Upper
57	100		
43	69.9	9.0	13.6#
70	10.7	0.2	0.2#

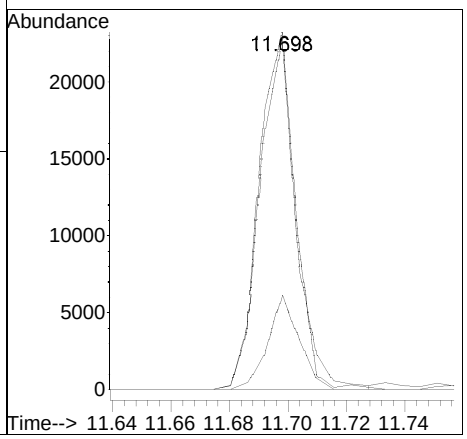


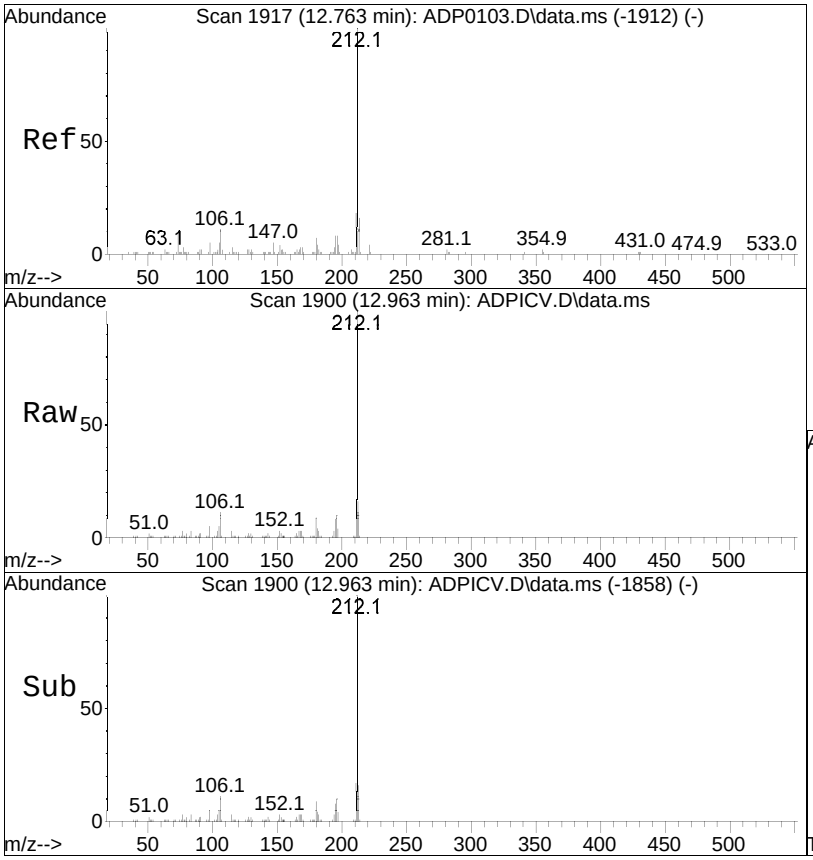


#101
Parathion
Concen: 4.90 ug/ml
RT: 11.698 min Scan# 1685
Delta R.T. 0.000 min
Lab File: ADPICV.D
Acq: 3 Sep 2023 1:15 am

Tgt Ion:109 Resp: 19365

Ion	Ratio	Lower	Upper
109	100		
97	102.7	87.4	131.2
291	23.6	34.2	51.2#

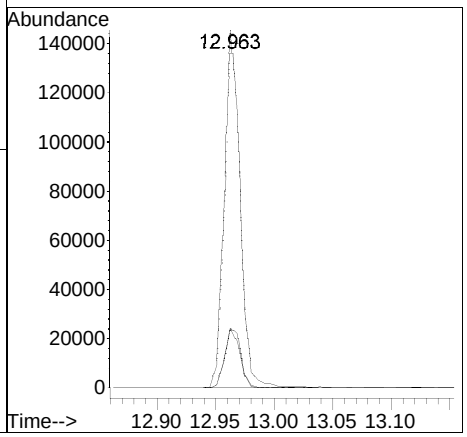




#102
3,3'-Dimethylbenzidine
Concen: 4.91 ug/ml
RT: 12.963 min Scan# 1900
Delta R.T. -0.000 min
Lab File: ADPICV.D
Acq: 3 Sep 2023 1:15 am

Tgt Ion:212 Resp: 135784

Ion	Ratio	Lower	Upper
212	100		
211	17.1	12.9	19.3
213	16.2	13.2	19.8



Manual Integration Report

Data Path	: I:\8270\SV106\230902lviica	QMethod	: FS230902SV106.m
Data File	: ADPICV.D	Operator	: SV106:ljg
Date Inj'd	: 9/3/2023 1:15 am	Instrument	: SV 106
Sample	: CQICV3,32,,ADPICV Lot# 100	Quant Date	: 9/5/2023 11:15 am

There are no manual integrations or false positives in this file.

Evaluate Relative Error Report SV 106

Method Path : I:\8270\SV106\230902lviical\
Method File : FS230902SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Sep 05 11:32:08 2023

	COMPOUND	CalFit	Units	TrueMid	MidConc	%RE	TrueLow	LowConc	%RE
36 T	Benzoic Acid	L	ug/ml	5.0	4.546	-9.1	3.00	3.294	9.8
47 T	2-Nitroaniline	L	ug/ml	5.0	4.282	-14.4	1.00	1.228	22.8
48 T	1,4-Dinitrobenzene	L	ug/ml	5.0	4.147	-17.1	2.00	2.363	18.1
49 T	1,3-Dinitrobenzene	L	ug/ml	5.0	4.386	-12.3	2.00	2.376	18.8
52 T	2,6-Dinitrotoluene	L	ug/ml	5.0	4.231	-15.4	1.00	1.173	17.3
65 T	2,4-Dinitrophenol	L	ug/ml	5.0	4.471	-10.6	2.00	2.281	14.1
67 T	2,4-Dinitrotoluene	L	ug/ml	5.0	4.273	-14.5	1.00	1.247	24.7
68 T	4-Nitrophenol	L	ug/ml	5.0	4.234	-15.3	1.00	1.225	22.5
75 T	4,6-Dinitro-o-cresol	L	ug/ml	5.0	4.206	-15.9	2.00	2.338	16.9
81 T	Pentachlorophenol	L	ug/ml	5.0	4.268	-14.6	1.00	1.213	21.3
83 T	Dichloran	L	ug/ml	5.0	6.135	22.7	2.00	2.280	14.0
84 T	Pentachloronitrobenzene	L	ug/ml	5.0	6.488	29.8	1.00	1.018	1.8
102 T	3,3'-Dimethylbenzidine	L	ug/ml	5.0	4.575	-8.5	1.00	1.203	20.3

Calibration Correlation Report

	COMPOUND	CalFit	CoefOfDet	QuadTerm	LinTerm	Constant
36 T	Benzoic Acid	Linear	0.998169	0.000000	0.27548	-0.111375
47 T	2-Nitroaniline	Linear	0.997526	0.000000	0.203679	-0.023159
48 T	1,4-Dinitrobenzene	Linear	0.995811	0.000000	0.0939153	-0.0209123
49 T	1,3-Dinitrobenzene	Linear	0.996932	0.000000	0.110183	-0.0255947
52 T	2,6-Dinitrotoluene	Linear	0.997769	0.000000	0.163769	-0.0157845
65 T	2,4-Dinitrophenol	Linear	0.996488	0.000000	0.161957	-0.0454718
67 T	2,4-Dinitrotoluene	Linear	0.996859	0.000000	0.400144	-0.0474648
68 T	4-Nitrophenol	Linear	0.996297	0.000000	0.297605	-0.0327127
75 T	4,6-Dinitro-o-cresol	Linear	0.994623	0.000000	0.215119	-0.0628999
81 T	Pentachlorophenol	Linear	0.996515	0.000000	0.281246	-0.0315754
83 T	Dichloran	Linear	0.996757	0.000000	0.165763	-0.0413709
84 T	Pentachloronitrobenzene	Linear	0.997968	0.000000	0.179252	-0.0139776
102 T	3,3'-Dimethylbenzidine	Linear	0.997837	0.000000	0.765644	-0.133055

Continuing Calibration

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: DAKOTA	**Calibration Date**	: 08/31/23 10:12		
Lab File ID	: ABN0831	**Init. Calib. Date(s)**	: 04/13/23	04/13/23	
Sample No	: WG1822460-3	**Init. Calib. Times**	: 01:37	14:37	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	81	0
n-Nitrosodimethylamine	5	4.311	-	13.8	20	74	0
Pyridine	5	3.789	-	24.2*	20	76	0
2-Fluorophenol	1.033	0.96	-	7.1	20	75	0
Aniline	1.79	1.505	-	15.9	20	68	0
2-Chlorophenol	1.195	1.097	-	8.2	20	73	0
Phenol-d6	1.324	1.183	-	10.6	20	71	0
Phenol	1.539	1.243	-	19.2	20	67	0
Bis(2-chloroethyl)ether	1.066	0.896	-	15.9	20	72	0
1,3-Dichlorobenzene	1.435	1.369	-	4.6	20	79	0
1,4-Dichlorobenzene	1.452	1.364	-	6.1	20	81	0
1,2-Dichlorobenzene	1.406	1.309	-	6.9	20	75	0
Benzyl alcohol	0.936	0.863	-	7.8	20	73	0
Bis(2-chloroisopropyl)ethe	1.785	1.495	-	16.2	20	68	0
2-Methylphenol	1.016	0.933	-	8.2	20	73	0
Hexachloroethane	0.551	0.54	-	2	20	83	0
n-Nitrosodi-n-propylamine	0.818	0.744	-	9	20	75	0
3-Methylphenol/4-Methylphe	1.05	0.983	-	6.4	20	75	0
Nitrobenzene-d5	1.269	1.189	-	6.3	20	77	0
Nitrobenzene	1.234	1.159	-	6.1	20	78	0
Isophorone	2.183	1.956	-	10.4	20	73	0
2-Nitrophenol	0.577	0.596	-	-3.3	20	78	0
2,4-Dimethylphenol	1.11	1.051	-	5.3	20	76	0
Bis(2-chloroethoxy)methane	1.416	1.215	-	14.2	20	71	0
2,4-Dichlorophenol	1.044	1.101	-	-5.5	20	90	0
1,2,4-Trichlorobenzene	1.276	1.393	-	-9.2	20	87	0
IS1_Naphthalene-d8	1	1	-	0	20	75	0
Naphthalene	0.971	0.89	-	8.3	20	69	0
Benzoic Acid	5	6.421	-	-28.4*	20	115	0
4-Chloroaniline	0.115	0.111	-	3.5	20	77	0
Hexachlorobutadiene	0.198	0.231	-	-16.7	20	89	0
p-Chloro-m-cresol	0.254	0.272	-	-7.1	20	79	0
2-Methylnaphthalene	0.631	0.626	-	0.8	20	75	0
1-Methylnaphthalene	0.218	0.22	-	-0.9	20	74	0
Hexachlorocyclopentadiene	0.239	0.306	-	-28*	20	95	0
2,4,6-Trichlorophenol	5	6.047	-	-20.9*	20	98	0
2,4,5-Trichlorophenol	0.234	0.302	-	-29.1*	20	93	0
2-Fluorobiphenyl	0.787	0.855	-	-8.6	20	81	0
2-Chloronaphthalene	0.692	0.725	-	-4.8	20	79	0
2-Nitroaniline	0.2	0.227	-	-13.5	20	84	0
1,4-Dinitrobenzene	0.093	0.099	-	-6.5	20	78	0
1,3-Dinitrobenzene	0.109	0.116	-	-6.4	20	87	0
Dimethyl phthalate	0.809	0.907	-	-12.1	20	83	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: DAKOTA	**Calibration Date**	: 08/31/23 10:12		
Lab File ID	: ABN0831	**Init. Calib. Date(s)**	: 04/13/23	04/13/23	
Sample No	: WG1822460-3	**Init. Calib. Times**	: 01:37	14:37	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.049	1.16	-	-10.6	20	82	0
2,6-Dinitrotoluene	0.167	0.188	-	-12.6	20	81	0
1,2-Dinitrobenzene	0.065	0.074	-	-13.8	20	83	0
IS1_Acenaphthene-d10	1	1	-	0	20	85	0
3-Nitroaniline	0.318	0.294	-	7.5	20	74	0
Acenaphthene	1.089	0.961	-	11.8	20	76	0
2,4-Dinitrophenol	5	6.23	-	-24.6*	20	111	0
Dibenzofuran	1.737	1.689	-	2.8	20	83	0
2,4-Dinitrotoluene	0.392	0.408	-	-4.1	20	84	0
4-Nitrophenol	5	5.261	-	-5.2	20	93	0
2,3,5,6-Tetrachlorophenol	5	5.81	-	-16.2	20	104	0
2,3,4,6-Tetrachlorophenol	5	5.621	-	-12.4	20	99	0
Diethyl phthalate	1.466	1.37	-	6.5	20	79	0
Fluorene	1.4	1.32	-	5.7	20	80	0
4-Chlorophenyl phenyl ethe	0.681	0.681	-	0	20	87	0
4-Nitroaniline	0.316	0.298	-	5.7	20	77	0
4,6-Dinitro-o-cresol	5	6.055	-	-21.1*	20	108	0
NDPA/DPA	1.195	1.086	-	9.1	20	76	0
Azobenzene	1.256	1.189	-	5.3	20	77	0
2,4,6-Tribromophenol	0.232	0.323	-	-39.2*	20	119	0
4-Bromophenyl phenyl ether	0.425	0.457	-	-7.5	20	91	0
Hexachlorobenzene	0.532	0.582	-	-9.4	20	98	0
Pentachlorophenol	5	6.378	-	-27.6*	20	125	0
IS1_Phenanthrene-d10	1	1	-	0	20	87	0
Phenanthrene	1.03	0.886	-	14	20	78	0
Anthracene	0.998	0.908	-	9	20	80	0
Carbazole	0.941	0.857	-	8.9	20	79	0
Di-n-butylphthalate	1.108	1.006	-	9.2	20	82	0
Fluoranthene	1.208	1.128	-	6.6	20	83	0
Benzidine	0.791	0.779	-	1.5	20	101	0
Pyrene	1.277	1.249	-	2.2	20	87	0
4-Terphenyl-d14	0.978	0.988	-	-1	20	89	0
Butyl benzyl phthalate	0.504	0.467	-	7.3	20	84	0
IS1_Chrysene-d12	1	1	-	0	20	91	0
Benzo(a)anthracene	1.254	1.157	-	7.7	20	84	0
3,3'-Dichlorobenzidine	0.482	0.49	-	-1.7	20	93	0
Chrysene	1.184	1.126	-	4.9	20	85	0
Bis(2-ethylhexyl)phthalate	0.7	0.66	-	5.7	20	85	0
Di-n-octylphthalate	1.271	1.142	-	10.1	20	86	0
Benzo(b)fluoranthene	1.361	1.376	-	-1.1	20	94	0
Benzo(k)fluoranthene	1.299	1.212	-	6.7	20	82	0
Benzo(a)pyrene	1.183	1.207	-	-2	20	92	0
IS1_Perylene-d12	1	1	-	0	20	90	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: DAKOTA		**Calibration Date**	: 08/31/23 10:12	
Lab File ID	: ABN0831		**Init. Calib. Date(s)**	: 04/13/23	04/13/23
Sample No	: WG1822460-3		**Init. Calib. Times**	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	1.06	0.942	-	11.1	20	79	0
Dibenzo(a,h)anthracene	1.111	0.985	-	11.3	20	81	0
Benzo(ghi)perylene	1.122	1.088	-	3	20	88	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: DAKOTA		**Calibration Date**	: 08/31/23 10:35	
Lab File ID	: AP90831		**Init. Calib. Date(s)**	: 04/13/23	04/13/23
Sample No	: WG1822460-4		**Init. Calib. Times**	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS2_1,4-Dichlorobenzene-d4	1	1	-	0	20	100	0
Benzaldehyde	1.046	0.645	-	38.3*	20	57	0
Acetophenone	1.831	1.38	-	24.6*	20	70	0
m-Toluidine	5	3.302	-	34*	20	60	0
2-Chloroaniline	1.693	1.311	-	22.6*	20	71	0
IS2_Naphthalene-d8	1	1	-	0	20	86	0
a-Terpineol	0.277	0.252	-	9	20	75	0
3-Chloroaniline	0.138	0.129	-	6.5	20	71	0
2,6-Dichlorophenol	0.276	0.303	-	-9.8	20	89	0
1-chloro-2-nitrobenzene	0.149	0.129	-	13.4	20	71	0
Caprolactam	0.149	0.13	-	12.8	20	75	0
1,2,4,5-Tetrachlorobenzene	0.402	0.407	-	-1.2	20	84	0
Biphenyl	0.901	0.783	-	13.1	20	72	0
IS2_Acenaphthene-d10	1	1	-	0	20	98	0
Dichloran	5	4.343	-	13.1	20	96	0
Pentachloronitrobenzene	0.203	0.194	-	4.4	20	93	0
IS2_Phenanthrene-d10	1	1	-	0	20	108	0
Diphenamid	0.501	0.38	-	24.2*	20	79	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: DAKOTA		**Calibration Date**	: 08/31/23 10:57	
Lab File ID	: ADP0831		**Init. Calib. Date(s)**	: 04/13/23	04/13/23
Sample No	: WG1822460-5		**Init. Calib. Times**	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS3_1,4-Dichlorobenzene-d4	1	1	-	0	20	92	0
n-Decane	1.231	0.969	-	21.3*	20	70	0
IS3_Acenaphthene-d10	1	1	-	0	20	97	0
Atrazine	0.363	0.385	-	-6.1	20	99	0
IS3_Phenanthrene-d10	1	1	-	0	20	108	0
n-Octadecane	0.386	0.264	-	31.6*	20	71	0
Parathion	5	4.396	-	12.1	20	93	0
3,3'-Dimethylbenzidine	5	4.555	-	8.9	20	97	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: DAKOTA	**Calibration Date**	: 09/01/23 06:40		
Lab File ID	: ABN0901	**Init. Calib. Date(s)**	: 04/13/23	04/13/23	
Sample No	: WG1822785-3	**Init. Calib. Times**	: 01:37	14:37	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	86	0
n-Nitrosodimethylamine	5	4.103	-	17.9	20	75	0
Pyridine	5	4.083	-	18.3	20	88	0
2-Fluorophenol	1.033	1.016	-	1.6	20	85	0
Aniline	1.79	1.5	-	16.2	20	72	0
2-Chlorophenol	1.195	1.105	-	7.5	20	78	0
Phenol-d6	1.324	1.203	-	9.1	20	77	0
Phenol	1.539	1.245	-	19.1	20	72	0
Bis(2-chloroethyl)ether	1.066	0.961	-	9.8	20	82	0
1,3-Dichlorobenzene	1.435	1.362	-	5.1	20	84	0
1,4-Dichlorobenzene	1.452	1.42	-	2.2	20	89	0
1,2-Dichlorobenzene	1.406	1.361	-	3.2	20	84	0
Benzyl alcohol	0.936	0.912	-	2.6	20	82	0
Bis(2-chloroisopropyl)ethe	1.785	1.552	-	13.1	20	76	0
2-Methylphenol	1.016	0.922	-	9.3	20	77	0
Hexachloroethane	0.551	0.577	-	-4.7	20	94	0
n-Nitrosodi-n-propylamine	0.818	0.818	-	0	20	88	0
3-Methylphenol/4-Methylphe	1.05	0.947	-	9.8	20	77	0
Nitrobenzene-d5	1.269	1.214	-	4.3	20	84	0
Nitrobenzene	1.234	1.153	-	6.6	20	83	0
Isophorone	2.183	2.045	-	6.3	20	81	0
2-Nitrophenol	0.577	0.587	-	-1.7	20	82	0
2,4-Dimethylphenol	1.11	1.134	-	-2.2	20	87	0
Bis(2-chloroethoxy)methane	1.416	1.291	-	8.8	20	81	0
2,4-Dichlorophenol	1.044	1.167	-	-11.8	20	102	0
1,2,4-Trichlorobenzene	1.276	1.419	-	-11.2	20	94	0
IS1_Naphthalene-d8	1	1	-	0	20	80	0
Naphthalene	0.971	0.901	-	7.2	20	75	0
Benzoic Acid	5	5.676	-	-13.5	20	100	0
4-Chloroaniline	0.115	0.115	-	0	20	85	0
Hexachlorobutadiene	0.198	0.228	-	-15.2	20	94	0
p-Chloro-m-cresol	0.254	0.266	-	-4.7	20	83	0
2-Methylnaphthalene	0.631	0.667	-	-5.7	20	86	0
1-Methylnaphthalene	0.218	0.214	-	1.8	20	77	0
Hexachlorocyclopentadiene	0.239	0.324	-	-35.6*	20	108	0
2,4,6-Trichlorophenol	5	6.199	-	-24*	20	108	0
2,4,5-Trichlorophenol	0.234	0.298	-	-27.4*	20	99	0
2-Fluorobiphenyl	0.787	0.891	-	-13.2	20	91	0
2-Chloronaphthalene	0.692	0.756	-	-9.2	20	89	0
2-Nitroaniline	0.2	0.203	-	-1.5	20	81	0
1,4-Dinitrobenzene	0.093	0.099	-	-6.5	20	84	0
1,3-Dinitrobenzene	0.109	0.107	-	1.8	20	87	0
Dimethyl phthalate	0.809	0.914	-	-13	20	90	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: DAKOTA	**Calibration Date**	: 09/01/23 06:40		
Lab File ID	: ABN0901	**Init. Calib. Date(s)**	: 04/13/23	04/13/23	
Sample No	: WG1822785-3	**Init. Calib. Times**	: 01:37	14:37	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.049	1.151	-	-9.7	20	87	0
2,6-Dinitrotoluene	0.167	0.187	-	-12	20	86	0
1,2-Dinitrobenzene	0.065	0.073	-	-12.3	20	87	0
IS1_Acenaphthene-d10	1	1	-	0	20	93	0
3-Nitroaniline	0.318	0.288	-	9.4	20	80	0
Acenaphthene	1.089	0.96	-	11.8	20	83	0
2,4-Dinitrophenol	5	5.914	-	-18.3	20	114	0
Dibenzofuran	1.737	1.644	-	5.4	20	89	0
2,4-Dinitrotoluene	0.392	0.374	-	4.6	20	85	0
4-Nitrophenol	5	4.979	-	0.4	20	96	0
2,3,5,6-Tetrachlorophenol	5	5.614	-	-12.3	20	110	0
2,3,4,6-Tetrachlorophenol	5	5.794	-	-15.9	20	112	0
Diethyl phthalate	1.466	1.368	-	6.7	20	87	0
Fluorene	1.4	1.248	-	10.9	20	83	0
4-Chlorophenyl phenyl ethe	0.681	0.668	-	1.9	20	94	0
4-Nitroaniline	0.316	0.299	-	5.4	20	85	0
4,6-Dinitro-o-cresol	5	6.06	-	-21.2*	20	119	0
NDPA/DPA	1.195	1.092	-	8.6	20	84	0
Azobenzene	1.256	1.159	-	7.7	20	83	0
2,4,6-Tribromophenol	0.232	0.324	-	-39.7*	20	132	0
4-Bromophenyl phenyl ether	0.425	0.441	-	-3.8	20	96	0
Hexachlorobenzene	0.532	0.59	-	-10.9	20	109	0
Pentachlorophenol	5	6.15	-	-23*	20	132	0
IS1_Phenanthrene-d10	1	1	-	0	20	94	0
Phenanthrene	1.03	0.915	-	11.2	20	86	0
Anthracene	0.998	0.931	-	6.7	20	88	0
Carbazole	0.941	0.86	-	8.6	20	85	0
Di-n-butylphthalate	1.108	1.027	-	7.3	20	90	0
Fluoranthene	1.208	1.16	-	4	20	92	0
Benzidine	0.791	0.767	-	3	20	106	0
Pyrene	1.277	1.251	-	2	20	93	0
4-Terphenyl-d14	0.978	0.978	-	0	20	95	0
Butyl benzyl phthalate	0.504	0.474	-	6	20	91	0
IS1_Chrysene-d12	1	1	-	0	20	98	0
Benzo(a)anthracene	1.254	1.156	-	7.8	20	90	0
3,3'-Dichlorobenzidine	0.482	0.487	-	-1	20	100	0
Chrysene	1.184	1.113	-	6	20	90	0
Bis(2-ethylhexyl)phthalate	0.7	0.656	-	6.3	20	91	0
Di-n-octylphthalate	1.271	1.145	-	9.9	20	93	0
Benzo(b)fluoranthene	1.361	1.287	-	5.4	20	95	0
Benzo(k)fluoranthene	1.299	1.263	-	2.8	20	92	0
Benzo(a)pyrene	1.183	1.191	-	-0.7	20	97	0
IS1_Perylene-d12	1	1	-	0	20	97	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: DAKOTA		**Calibration Date**	: 09/01/23 06:40	
Lab File ID	: ABN0901		**Init. Calib. Date(s)**	: 04/13/23	04/13/23
Sample No	: WG1822785-3		**Init. Calib. Times**	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	1.06	0.945	-	10.8	20	86	0
Dibenzo(a,h)anthracene	1.111	0.991	-	10.8	20	88	0
Benzo(ghi)perylene	1.122	1.06	-	5.5	20	93	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: DAKOTA		**Calibration Date**	: 09/01/23 07:02	
Lab File ID	: AP90901		**Init. Calib. Date(s)**	: 04/13/23	04/13/23
Sample No	: WG1822785-4		**Init. Calib. Times**	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS2_1,4-Dichlorobenzene-d4	1	1	-	0	20	113	0
Benzaldehyde	1.046	0.655	-	37.4*	20	65	0
Acetophenone	1.831	1.409	-	23*	20	81	0
m-Toluidine	5	3.317	-	33.7*	20	68	0
2-Chloroaniline	1.693	1.291	-	23.7*	20	79	0
IS2_Naphthalene-d8	1	1	-	0	20	104	0
a-Terpineol	0.277	0.236	-	14.8	20	84	0
3-Chloroaniline	0.138	0.125	-	9.4	20	82	0
2,6-Dichlorophenol	0.276	0.305	-	-10.5	20	108	0
1-chloro-2-nitrobenzene	0.149	0.123	-	17.4	20	82	0
Caprolactam	0.149	0.132	-	11.4	20	91	0
1,2,4,5-Tetrachlorobenzene	0.402	0.428	-	-6.5	20	106	0
Biphenyl	0.901	0.787	-	12.7	20	86	0
IS2_Acenaphthene-d10	1	1	-	0	20	120	0
Dichloran	5	4.461	-	10.8	20	122	0
Pentachloronitrobenzene	0.203	0.205	-	-1	20	120	0
IS2_Phenanthrene-d10	1	1	-	0	20	135	0
Diphenamid	0.501	0.397	-	20.8*	20	103	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: DAKOTA		**Calibration Date**	: 09/01/23 07:24	
Lab File ID	: ADP0901		**Init. Calib. Date(s)**	: 04/13/23	04/13/23
Sample No	: WG1822785-5		**Init. Calib. Times**	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS3_1,4-Dichlorobenzene-d4	1	1	-	0	20	88	0
n-Decane	1.231	1.025	-	16.7	20	71	0
IS3_Acenaphthene-d10	1	1	-	0	20	94	0
Atrazine	0.363	0.363	-	0	20	91	0
IS3_Phenanthrene-d10	1	1	-	0	20	101	0
n-Octadecane	0.386	0.286	-	25.9*	20	72	0
Parathion	5	4.094	-	18.1	20	80	0
3,3'-Dimethylbenzidine	5	4.543	-	9.1	20	91	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: DAKOTA	**Calibration Date**	: 09/05/23 20:32		
Lab File ID	: ABN0905N	**Init. Calib. Date(s)**	: 04/13/23	04/13/23	
Sample No	: WG1823113-3	**Init. Calib. Times**	: 01:37	14:37	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	81	0
n-Nitrosodimethylamine	5	4.225	-	15.5	20	72	0
Pyridine	5	4.12	-	17.6	20	83	0
2-Fluorophenol	1.033	1.017	-	1.5	20	80	0
Aniline	1.79	1.472	-	17.8	20	66	0
2-Chlorophenol	1.195	1.069	-	10.5	20	70	0
Phenol-d6	1.324	1.158	-	12.5	20	70	0
Phenol	1.539	1.211	-	21.3*	20	65	0
Bis(2-chloroethyl)ether	1.066	0.884	-	17.1	20	70	0
1,3-Dichlorobenzene	1.435	1.316	-	8.3	20	76	0
1,4-Dichlorobenzene	1.452	1.328	-	8.5	20	78	0
1,2-Dichlorobenzene	1.406	1.313	-	6.6	20	75	0
Benzyl alcohol	0.936	0.841	-	10.1	20	71	0
Bis(2-chloroisopropyl)ethe	1.785	1.478	-	17.2	20	67	0
2-Methylphenol	1.016	0.877	-	13.7	20	68	0
Hexachloroethane	0.551	0.551	-	0	20	84	0
n-Nitrosodi-n-propylamine	0.818	0.769	-	6	20	77	0
3-Methylphenol/4-Methylphe	1.05	0.957	-	8.9	20	73	0
Nitrobenzene-d5	1.269	1.197	-	5.7	20	77	0
Nitrobenzene	1.234	1.153	-	6.6	20	78	0
Isophorone	2.183	1.922	-	12	20	71	0
2-Nitrophenol	0.577	0.598	-	-3.6	20	78	0
2,4-Dimethylphenol	1.11	0.983	-	11.4	20	71	0
Bis(2-chloroethoxy)methane	1.416	1.218	-	14	20	71	0
2,4-Dichlorophenol	1.044	1.076	-	-3.1	20	88	0
1,2,4-Trichlorobenzene	1.276	1.351	-	-5.9	20	84	0
IS1_Naphthalene-d8	1	1	-	0	20	73	0
Naphthalene	0.971	0.893	-	8	20	68	0
Benzoic Acid	5	7.288	-	-45.8*	20	135	0
4-Chloroaniline	0.115	0.113	-	1.7	20	76	0
Hexachlorobutadiene	0.198	0.233	-	-17.7	20	87	0
p-Chloro-m-cresol	0.254	0.259	-	-2	20	73	0
2-Methylnaphthalene	0.631	0.637	-	-1	20	75	0
1-Methylnaphthalene	0.218	0.218	-	0	20	71	0
Hexachlorocyclopentadiene	0.239	0.303	-	-26.8*	20	92	0
2,4,6-Trichlorophenol	5	6.087	-	-21.7*	20	96	0
2,4,5-Trichlorophenol	0.234	0.3	-	-28.2*	20	90	0
2-Fluorobiphenyl	0.787	0.841	-	-6.9	20	78	0
2-Chloronaphthalene	0.692	0.726	-	-4.9	20	77	0
2-Nitroaniline	0.2	0.218	-	-9	20	79	0
1,4-Dinitrobenzene	0.093	0.103	-	-10.8	20	79	0
1,3-Dinitrobenzene	0.109	0.12	-	-10.1	20	88	0
Dimethyl phthalate	0.809	0.916	-	-13.2	20	81	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: DAKOTA	**Calibration Date**	: 09/05/23 20:32		
Lab File ID	: ABN0905N	**Init. Calib. Date(s)**	: 04/13/23	04/13/23	
Sample No	: WG1823113-3	**Init. Calib. Times**	: 01:37	14:37	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.049	1.175	-	-12	20	80	0
2,6-Dinitrotoluene	0.167	0.187	-	-12	20	78	0
1,2-Dinitrobenzene	0.065	0.067	-	-3.1	20	73	0
IS1_Acenaphthene-d10	1	1	-	0	20	86	0
3-Nitroaniline	0.318	0.304	-	4.4	20	77	0
Acenaphthene	1.089	0.936	-	14	20	75	0
2,4-Dinitrophenol	5	5.898	-	-18	20	104	0
Dibenzofuran	1.737	1.597	-	8.1	20	79	0
2,4-Dinitrotoluene	0.392	0.381	-	2.8	20	79	0
4-Nitrophenol	5	5.529	-	-10.6	20	99	0
2,3,5,6-Tetrachlorophenol	5	5.841	-	-16.8	20	105	0
2,3,4,6-Tetrachlorophenol	5	5.792	-	-15.8	20	103	0
Diethyl phthalate	1.466	1.326	-	9.5	20	77	0
Fluorene	1.4	1.288	-	8	20	79	0
4-Chlorophenyl phenyl ethe	0.681	0.637	-	6.5	20	82	0
4-Nitroaniline	0.316	0.306	-	3.2	20	80	0
4,6-Dinitro-o-cresol	5	6.169	-	-23.4*	20	112	0
NDPA/DPA	1.195	1.053	-	11.9	20	74	0
Azobenzene	1.256	1.15	-	8.4	20	75	0
2,4,6-Tribromophenol	0.232	0.33	-	-42.2*	20	123	0
4-Bromophenyl phenyl ether	0.425	0.447	-	-5.2	20	90	0
Hexachlorobenzene	0.532	0.583	-	-9.6	20	99	0
Pentachlorophenol	5	6.39	-	-27.8*	20	127	0
IS1_Phenanthrene-d10	1	1	-	0	20	90	0
Phenanthrene	1.03	0.876	-	15	20	79	0
Anthracene	0.998	0.88	-	11.8	20	81	0
Carbazole	0.941	0.85	-	9.7	20	81	0
Di-n-butylphthalate	1.108	0.988	-	10.8	20	83	0
Fluoranthene	1.208	1.102	-	8.8	20	84	0
Benzidine	0.791	0.747	-	5.6	20	100	0
Pyrene	1.277	1.205	-	5.6	20	87	0
4-Terphenyl-d14	0.978	0.921	-	5.8	20	86	0
Butyl benzyl phthalate	0.504	0.461	-	8.5	20	86	0
IS1_Chrysene-d12	1	1	-	0	20	94	0
Benzo(a)anthracene	1.254	1.139	-	9.2	20	86	0
3,3'-Dichlorobenzidine	0.482	0.482	-	0	20	95	0
Chrysene	1.184	1.064	-	10.1	20	83	0
Bis(2-ethylhexyl)phthalate	0.7	0.665	-	5	20	88	0
Di-n-octylphthalate	1.271	1.119	-	12	20	87	0
Benzo(b)fluoranthene	1.361	1.294	-	4.9	20	92	0
Benzo(k)fluoranthene	1.299	1.179	-	9.2	20	82	0
Benzo(a)pyrene	1.183	1.171	-	1	20	92	0
IS1_Perylene-d12	1	1	-	0	20	96	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: DAKOTA		**Calibration Date**	: 09/05/23 20:32	
Lab File ID	: ABN0905N		**Init. Calib. Date(s)**	: 04/13/23	04/13/23
Sample No	: WG1823113-3		**Init. Calib. Times**	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	1.06	0.889	-	16.1	20	80	0
Dibenzo(a,h)anthracene	1.111	0.943	-	15.1	20	82	0
Benzo(ghi)perylene	1.122	0.996	-	11.2	20	86	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: DAKOTA	**Calibration Date**	: 09/05/23 20:55		
Lab File ID	: AP90905N	**Init. Calib. Date(s)**	: 04/13/23	04/13/23	
Sample No	: WG1823113-4	**Init. Calib. Times**	: 01:37	14:37	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS2_1,4-Dichlorobenzene-d4	1	1	-	0	20	86	0
Benzaldehyde	1.046	0.803	-	23.2*	20	61	0
Acetophenone	1.831	1.444	-	21.1*	20	63	0
m-Toluidine	5	3.804	-	23.9*	20	60	0
2-Chloroaniline	1.693	1.321	-	22*	20	62	0
IS2_Naphthalene-d8	1	1	-	0	20	74	0
a-Terpineol	0.277	0.265	-	4.3	20	67	0
3-Chloroaniline	0.138	0.144	-	-4.3	20	67	0
2,6-Dichlorophenol	0.276	0.329	-	-19.2	20	82	0
1-chloro-2-nitrobenzene	0.149	0.139	-	6.7	20	65	0
Caprolactam	0.149	0.144	-	3.4	20	71	0
1,2,4,5-Tetrachlorobenzene	0.402	0.43	-	-7	20	75	0
Biphenyl	0.901	0.847	-	6	20	66	0
IS2_Acenaphthene-d10	1	1	-	0	20	85	0
Dichloran	5	4.712	-	5.8	20	92	0
Pentachloronitrobenzene	0.203	0.233	-	-14.8	20	97	0
IS2_Phenanthrene-d10	1	1	-	0	20	100	0
Diphenamid	0.501	0.401	-	20	20	77	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: SV106	**Calibration Date**	: 09/05/23 21:04		
Lab File ID	: ABN0905	**Init. Calib. Date(s)**	: 09/02/23	09/03/23	
Sample No	: WG1823865-3	**Init. Calib. Times**	: 12:13	00:52	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	98	0
n-Nitrosodimethylamine	0.677	0.621	-	8.3	20	97	0
Pyridine	1.151	1.087	-	5.6	20	100	0
2-Fluorophenol	1.116	0.984	-	11.8	20	97	0
Aniline	1.893	1.625	-	14.2	20	92	0
2-Chlorophenol	1.274	1.082	-	15.1	20	89	0
Phenol-d6	1.437	1.147	-	20.2*	20	84	0
Phenol	1.521	1.293	-	15	20	92	0
Bis(2-chloroethyl)ether	1.222	1.048	-	14.2	20	92	0
1,3-Dichlorobenzene	1.461	1.268	-	13.2	20	92	0
1,4-Dichlorobenzene	1.503	1.314	-	12.6	20	95	0
1,2-Dichlorobenzene	1.431	1.238	-	13.5	20	94	0
Benzyl alcohol	1.074	0.896	-	16.6	20	88	0
Bis(2-chloroisopropyl)ethe	1.8	1.53	-	15	20	91	0
2-Methylphenol	1.138	0.956	-	16	20	92	0
Hexachloroethane	0.586	0.503	-	14.2	20	92	0
n-Nitrosodi-n-propylamine	0.923	0.763	-	17.3	20	89	0
3-Methylphenol/4-Methylphe	1.193	1.006	-	15.7	20	90	0
Nitrobenzene-d5	1.303	1.05	-	19.4	20	88	0
Nitrobenzene	1.295	1.089	-	15.9	20	89	0
Isophorone	2.478	2.031	-	18	20	89	0
2-Nitrophenol	0.518	0.434	-	16.2	20	91	0
2,4-Dimethylphenol	1.281	1.01	-	21.2*	20	82	0
Bis(2-chloroethoxy)methane	1.552	1.296	-	16.5	20	89	0
2,4-Dichlorophenol	1.076	0.869	-	19.2	20	83	0
1,2,4-Trichlorobenzene	1.235	1.059	-	14.3	20	94	0
IS1_Naphthalene-d8	1	1	-	0	20	92	0
Naphthalene	1.008	0.887	-	12	20	91	0
Benzoic Acid	5	4.166	-	16.7	20	80	0
4-Chloroaniline	0.132	0.112	-	15.2	20	86	0
Hexachlorobutadiene	0.206	0.184	-	10.7	20	93	0
p-Chloro-m-cresol	0.291	0.248	-	14.8	20	85	0
2-Methylnaphthalene	0.642	0.566	-	11.8	20	91	0
1-Methylnaphthalene	0.241	0.222	-	7.9	20	93	0
Hexachlorocyclopentadiene	0.219	0.195	-	11	20	92	0
2,4,6-Trichlorophenol	0.209	0.175	-	16.3	20	88	0
2,4,5-Trichlorophenol	0.224	0.19	-	15.2	20	89	0
2-Fluorobiphenyl	0.764	0.644	-	15.7	20	87	0
2-Chloronaphthalene	0.669	0.58	-	13.3	20	89	0
2-Nitroaniline	5	3.957	-	20.9*	20	84	0
1,4-Dinitrobenzene	5	4.159	-	16.8	20	92	0
1,3-Dinitrobenzene	5	4.112	-	17.8	20	84	0
Dimethyl phthalate	0.787	0.67	-	14.9	20	86	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: SV106	**Calibration Date**	: 09/05/23 21:04		
Lab File ID	: ABN0905	**Init. Calib. Date(s)**	: 09/02/23	09/03/23	
Sample No	: WG1823865-3	**Init. Calib. Times**	: 12:13	00:52	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.077	0.93	-	13.6	20	90	0
2,6-Dinitrotoluene	5	3.97	-	20.6*	20	85	0
1,2-Dinitrobenzene	0.063	0.053	-	15.9	20	86	0
IS1_Acenaphthene-d10	1	1	-	0	20	92	0
3-Nitroaniline	0.286	0.248	-	13.3	20	87	0
Acenaphthene	1.131	0.987	-	12.7	20	91	0
2,4-Dinitrophenol	5	4.116	-	17.7	20	82	0
Dibenzofuran	1.69	1.48	-	12.4	20	90	0
2,4-Dinitrotoluene	5	4.081	-	18.4	20	87	0
4-Nitrophenol	5	3.886	-	22.3*	20	83	0
2,3,5,6-Tetrachlorophenol	0.325	0.259	-	20.3*	20	80	0
2,3,4,6-Tetrachlorophenol	0.337	0.279	-	17.2	20	83	0
Diethyl phthalate	1.415	1.222	-	13.6	20	86	0
Fluorene	1.336	1.175	-	12.1	20	89	0
4-Chlorophenyl phenyl ethe	0.637	0.547	-	14.1	20	89	0
4-Nitroaniline	0.289	0.244	-	15.6	20	81	0
4,6-Dinitro-o-cresol	5	4.452	-	11	20	99	0
NDPA/DPA	1.124	0.949	-	15.6	20	84	0
Azobenzene	1.319	1.13	-	14.3	20	87	0
2,4,6-Tribromophenol	0.184	0.153	-	16.8	20	82	0
4-Bromophenyl phenyl ether	0.371	0.318	-	14.3	20	88	0
Hexachlorobenzene	0.432	0.358	-	17.1	20	87	0
Pentachlorophenol	5	4.039	-	19.2	20	86	0
IS1_Phenanthrene-d10	1	1	-	0	20	89	0
Phenanthrene	1.089	0.942	-	13.5	20	86	0
Anthracene	1.084	0.976	-	10	20	89	0
Carbazole	0.991	0.882	-	11	20	86	0
Di-n-butylphthalate	1.269	1.077	-	15.1	20	83	0
Fluoranthene	1.165	1.002	-	14	20	86	0
Benzidine	0.77	0.624	-	19	20	79	0
Pyrene	1.233	1.088	-	11.8	20	88	0
4-Terphenyl-d14	0.877	0.758	-	13.6	20	85	0
Butyl benzyl phthalate	0.541	0.452	-	16.5	20	81	0
IS1_Chrysene-d12	1	1	-	0	20	88	0
Benzo(a)anthracene	1.326	1.133	-	14.6	20	84	0
3,3'-Dichlorobenzidine	0.472	0.4	-	15.3	20	81	0
Chrysene	1.231	1.066	-	13.4	20	86	0
Bis(2-ethylhexyl)phthalate	0.889	0.752	-	15.4	20	80	0
Di-n-octylphthalate	1.499	1.25	-	16.6	20	79	0
Benzo(b)fluoranthene	1.266	1.102	-	13	20	87	0
Benzo(k)fluoranthene	1.214	1.098	-	9.6	20	84	0
Benzo(a)pyrene	1.083	0.953	-	12	20	85	0
IS1_Perylene-d12	1	1	-	0	20	89	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: SV106		**Calibration Date**	: 09/05/23 21:04	
Lab File ID	: ABN0905		**Init. Calib. Date(s)**	: 09/02/23	09/03/23
Sample No	: WG1823865-3		**Init. Calib. Times**	: 12:13	00:52
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	0.935	0.833	-	10.9	20	89	0
Dibenzo(a,h)anthracene	0.999	0.885	-	11.4	20	86	0
Benzo(ghi)perylene	0.991	0.886	-	10.6	20	87	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: DAKOTA		**Calibration Date**	: 09/05/23 21:18	
Lab File ID	: ADP0905N		**Init. Calib. Date(s)**	: 04/13/23	04/13/23
Sample No	: WG1823113-5		**Init. Calib. Times**	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS3_1,4-Dichlorobenzene-d4	1	1	-	0	20	79	0
n-Decane	1.231	1.114	-	9.5	20	70	0
IS3_Acenaphthene-d10	1	1	-	0	20	81	0
Atrazine	0.363	0.409	-	-12.7	20	89	0
IS3_Phenanthrene-d10	1	1	-	0	20	85	0
n-Octadecane	0.386	0.323	-	16.3	20	69	0
Parathion	5	4.994	-	0.1	20	84	0
3,3'-Dimethylbenzidine	5	5.075	-	-1.5	20	86	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: SV106		**Calibration Date**	: 09/05/23 21:52	
Lab File ID	: ADP0905		**Init. Calib. Date(s)**	: 09/02/23	09/03/23
Sample No	: WG1823865-5		**Init. Calib. Times**	: 12:13	00:52
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS3_1,4-Dichlorobenzene-d4	1	1	-	0	20	86	0
n-Decane	1.347	1.44	-	-6.9	20	93	0
IS3_Acenaphthene-d10	1	1	-	0	20	89	0
Atrazine	0.345	0.343	-	0.6	20	89	0
IS3_Phenanthrene-d10	1	1	-	0	20	90	0
n-Octadecane	0.46	0.459	-	0.2	20	88	0
Parathion	0.094	0.091	-	3.2	20	96	0
3,3'-Dimethylbenzidine	5	4.634	-	7.3	20	91	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: SV106	**Calibration Date**	: 09/05/23 22:16		
Lab File ID	: AP90905A	**Init. Calib. Date(s)**	: 09/02/23	09/03/23	
Sample No	: WG1823865-4	**Init. Calib. Times**	: 12:13	00:52	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS2_1,4-Dichlorobenzene-d4	1	1	-	0	20	89	0
Benzaldehyde	0.928	1.021	-	-10	20	70	0
Acetophenone	1.994	1.903	-	4.6	20	66	0
m-Toluidine	1.55	1.618	-	-4.4	20	66	0
2-Chloroaniline	1.67	1.603	-	4	20	65	0
IS2_Naphthalene-d8	1	1	-	0	20	88	0
a-Terpineol	0.289	0.278	-	3.8	20	65	0
3-Chloroaniline	0.15	0.148	-	1.3	20	65	0
2,6-Dichlorophenol	0.277	0.267	-	3.6	20	62	0
1-chloro-2-nitrobenzene	0.131	0.129	-	1.5	20	65	0
Caprolactam	0.147	0.138	-	6.1	20	61	0
1,2,4,5-Tetrachlorobenzene	0.348	0.331	-	4.9	20	66	0
Biphenyl	0.856	0.816	-	4.7	20	65	0
IS2_Acenaphthene-d10	1	1	-	0	20	90	0
Dichloran	5	4.87	-	2.6	20	68	0
Pentachloronitrobenzene	5	4.904	-	1.9	20	67	0
IS2_Phenanthrene-d10	1	1	-	0	20	90	0
Diphenamid	0.508	0.482	-	5.1	20	62	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: DAKOTA	**Calibration Date**	: 09/06/23 10:19		
Lab File ID	: ABN0906	**Init. Calib. Date(s)**	: 04/13/23	04/13/23	
Sample No	: WG1824168-3	**Init. Calib. Times**	: 01:37	14:37	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS1_1,4-Dichlorobenzene-d4	1	1	-	0	20	94	0
n-Nitrosodimethylamine	5	4.154	-	16.9	20	83	0
Pyridine	5	4.53	-	9.4	20	107	0
2-Fluorophenol	1.033	1.037	-	-0.4	20	94	0
Aniline	1.79	1.534	-	14.3	20	80	0
2-Chlorophenol	1.195	1.081	-	9.5	20	83	0
Phenol-d6	1.324	1.232	-	6.9	20	86	0
Phenol	1.539	1.282	-	16.7	20	80	0
Bis(2-chloroethyl)ether	1.066	0.939	-	11.9	20	87	0
1,3-Dichlorobenzene	1.435	1.372	-	4.4	20	92	0
1,4-Dichlorobenzene	1.452	1.435	-	1.2	20	98	0
1,2-Dichlorobenzene	1.406	1.364	-	3	20	91	0
Benzyl alcohol	0.936	0.916	-	2.1	20	89	0
Bis(2-chloroisopropyl)ethe	1.785	1.521	-	14.8	20	81	0
2-Methylphenol	1.016	0.93	-	8.5	20	84	0
Hexachloroethane	0.551	0.56	-	-1.6	20	99	0
n-Nitrosodi-n-propylamine	0.818	0.782	-	4.4	20	91	0
3-Methylphenol/4-Methylphe	1.05	0.976	-	7	20	86	0
Nitrobenzene-d5	1.269	1.226	-	3.4	20	92	0
Nitrobenzene	1.234	1.178	-	4.5	20	92	0
Isophorone	2.183	1.971	-	9.7	20	85	0
2-Nitrophenol	0.577	0.554	-	4	20	84	0
2,4-Dimethylphenol	1.11	1.064	-	4.1	20	89	0
Bis(2-chloroethoxy)methane	1.416	1.285	-	9.3	20	87	0
2,4-Dichlorophenol	1.044	1.104	-	-5.7	20	104	0
1,2,4-Trichlorobenzene	1.276	1.377	-	-7.9	20	99	0
IS1_Naphthalene-d8	1	1	-	0	20	86	0
Naphthalene	0.971	0.881	-	9.3	20	79	0
Benzoic Acid	5	6.194	-	-23.9*	20	125	0
4-Chloroaniline	0.115	0.117	-	-1.7	20	94	0
Hexachlorobutadiene	0.198	0.245	-	-23.7*	20	109	0
p-Chloro-m-cresol	0.254	0.266	-	-4.7	20	89	0
2-Methylnaphthalene	0.631	0.63	-	0.2	20	88	0
1-Methylnaphthalene	0.218	0.219	-	-0.5	20	85	0
Hexachlorocyclopentadiene	0.239	0.318	-	-33.1*	20	114	0
2,4,6-Trichlorophenol	5	5.943	-	-18.9	20	112	0
2,4,5-Trichlorophenol	0.234	0.295	-	-26.1*	20	105	0
2-Fluorobiphenyl	0.787	0.849	-	-7.9	20	94	0
2-Chloronaphthalene	0.692	0.712	-	-2.9	20	90	0
2-Nitroaniline	0.2	0.208	-	-4	20	89	0
1,4-Dinitrobenzene	0.093	0.099	-	-6.5	20	91	0
1,3-Dinitrobenzene	0.109	0.113	-	-3.7	20	98	0
Dimethyl phthalate	0.809	0.894	-	-10.5	20	94	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: DAKOTA	**Calibration Date**	: 09/06/23 10:19		
Lab File ID	: ABN0906	**Init. Calib. Date(s)**	: 04/13/23	04/13/23	
Sample No	: WG1824168-3	**Init. Calib. Times**	: 01:37	14:37	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Acenaphthylene	1.049	1.159	-	-10.5	20	94	0
2,6-Dinitrotoluene	0.167	0.179	-	-7.2	20	89	0
1,2-Dinitrobenzene	0.065	0.068	-	-4.6	20	88	0
IS1_Acenaphthene-d10	1	1	-	0	20	97	0
3-Nitroaniline	0.318	0.309	-	2.8	20	88	0
Acenaphthene	1.089	0.969	-	11	20	87	0
2,4-Dinitrophenol	5	5.78	-	-15.6	20	115	0
Dibenzofuran	1.737	1.714	-	1.3	20	96	0
2,4-Dinitrotoluene	0.392	0.373	-	4.8	20	87	0
4-Nitrophenol	5	5.133	-	-2.7	20	103	0
2,3,5,6-Tetrachlorophenol	5	5.819	-	-16.4	20	118	0
2,3,4,6-Tetrachlorophenol	5	5.881	-	-17.6	20	118	0
Diethyl phthalate	1.466	1.409	-	3.9	20	93	0
Fluorene	1.4	1.272	-	9.1	20	87	0
4-Chlorophenyl phenyl ethe	0.681	0.668	-	1.9	20	97	0
4-Nitroaniline	0.316	0.296	-	6.3	20	87	0
4,6-Dinitro-o-cresol	5	5.976	-	-19.5	20	122	0
NDPA/DPA	1.195	1.104	-	7.6	20	88	0
Azobenzene	1.256	1.214	-	3.3	20	90	0
2,4,6-Tribromophenol	0.232	0.327	-	-40.9*	20	138	0
4-Bromophenyl phenyl ether	0.425	0.459	-	-8	20	104	0
Hexachlorobenzene	0.532	0.615	-	-15.6	20	118	0
Pentachlorophenol	5	6.275	-	-25.5*	20	140	0
IS1_Phenanthrene-d10	1	1	-	0	20	96	0
Phenanthrene	1.03	0.891	-	13.5	20	86	0
Anthracene	0.998	0.92	-	7.8	20	89	0
Carbazole	0.941	0.87	-	7.5	20	88	0
Di-n-butylphthalate	1.108	1.046	-	5.6	20	93	0
Fluoranthene	1.208	1.138	-	5.8	20	92	0
Benzidine	0.791	0.758	-	4.2	20	108	0
Pyrene	1.277	1.206	-	5.6	20	92	0
4-Terphenyl-d14	0.978	0.938	-	4.1	20	93	0
Butyl benzyl phthalate	0.504	0.461	-	8.5	20	91	0
IS1_Chrysene-d12	1	1	-	0	20	96	0
Benzo(a)anthracene	1.254	1.153	-	8.1	20	88	0
3,3'-Dichlorobenzidine	0.482	0.485	-	-0.6	20	98	0
Chrysene	1.184	1.082	-	8.6	20	86	0
Bis(2-ethylhexyl)phthalate	0.7	0.696	-	0.6	20	95	0
Di-n-octylphthalate	1.271	1.193	-	6.1	20	95	0
Benzo(b)fluoranthene	1.361	1.294	-	4.9	20	94	0
Benzo(k)fluoranthene	1.299	1.166	-	10.2	20	83	0
Benzo(a)pyrene	1.183	1.156	-	2.3	20	93	0
IS1_Perylene-d12	1	1	-	0	20	93	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: DAKOTA		**Calibration Date**	: 09/06/23 10:19	
Lab File ID	: ABN0906		**Init. Calib. Date(s)**	: 04/13/23	04/13/23
Sample No	: WG1824168-3		**Init. Calib. Times**	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
Indeno(1,2,3-cd)pyrene	1.06	0.922	-	13	20	81	0
Dibenzo(a,h)anthracene	1.111	0.97	-	12.7	20	82	0
Benzo(ghi)perylene	1.122	1.049	-	6.5	20	88	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: DAKOTA	**Calibration Date**	: 09/06/23 10:41		
Lab File ID	: AP90906	**Init. Calib. Date(s)**	: 04/13/23	04/13/23	
Sample No	: WG1824168-4	**Init. Calib. Times**	: 01:37	14:37	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS2_1,4-Dichlorobenzene-d4	1	1	-	0	20	93	0
Benzaldehyde	1.046	0.673	-	35.7*	20	55	0
Acetophenone	1.831	1.523	-	16.8	20	72	0
m-Toluidine	5	3.34	-	33.2*	20	56	0
2-Chloroaniline	1.693	1.382	-	18.4	20	70	0
IS2_Naphthalene-d8	1	1	-	0	20	84	0
a-Terpineol	0.277	0.255	-	7.9	20	74	0
3-Chloroaniline	0.138	0.13	-	5.8	20	69	0
2,6-Dichlorophenol	0.276	0.305	-	-10.5	20	87	0
1-chloro-2-nitrobenzene	0.149	0.137	-	8.1	20	74	0
Caprolactam	0.149	0.147	-	1.3	20	82	0
1,2,4,5-Tetrachlorobenzene	0.402	0.418	-	-4	20	84	0
Biphenyl	0.901	0.858	-	4.8	20	76	0
IS2_Acenaphthene-d10	1	1	-	0	20	103	0
Dichloran	5	4.432	-	11.4	20	104	0
Pentachloronitrobenzene	0.203	0.212	-	-4.4	20	107	0
IS2_Phenanthrene-d10	1	1	-	0	20	118	0
Diphenamid	0.501	0.4	-	20.2*	20	90	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: DAKOTA		**Calibration Date**	: 09/06/23 11:04	
Lab File ID	: ADP0906		**Init. Calib. Date(s)**	: 04/13/23	04/13/23
Sample No	: WG1824168-5		**Init. Calib. Times**	: 01:37	14:37
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
IS3_1,4-Dichlorobenzene-d4	1	1	-	0	20	88	0
n-Decane	1.231	0.996	-	19.1	20	69	0
IS3_Acenaphthene-d10	1	1	-	0	20	95	0
Atrazine	0.363	0.369	-	-1.7	20	94	0
IS3_Phenanthrene-d10	1	1	-	0	20	104	0
n-Octadecane	0.386	0.296	-	23.3*	20	76	0
Parathion	5	4.598	-	8	20	94	0
3,3'-Dimethylbenzidine	5	4.611	-	7.8	20	94	0

*** Value outside of QC limits.**

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230831lvi\
Data File : ABN0831.D
Acq On : 31 Aug 2023 10:12 am
Operator : Dakota:ljg
Sample : WG1822460-3,32,,ABN 10210 gmr0812B
Misc : WG1822460,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Aug 31 11:20:56 2023
Quant Method : I:\8270\Dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:19:44 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	IS1_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	81	0.00
2	t	n-Nitrosodimethylamine	*	5.000	4.311	13.8	74	0.00
3	t	Pyridine	*	5.000	3.789	24.2#	76	0.00
4	S	2-Fluorophenol		1.033	0.960	7.1	75	0.00
5	T	Aniline		1.790	1.505	15.9	68	0.00
6	t	2-Chlorophenol		1.195	1.097	8.2	73	0.00
7	S	Phenol-d6		1.324	1.183	10.6	71	0.00
8	T	Phenol		1.539	1.243	19.2	67	0.00
9	T	Bis(2-chloroethyl)ether		1.066	0.896	15.9	72	0.00
10	T	1,3-Dichlorobenzene		1.435	1.369	4.6	79	0.00
11	T	1,4-Dichlorobenzene		1.452	1.364	6.1	81	0.00
12	T	1,2-Dichlorobenzene		1.406	1.309	6.9	75	0.00
13	t	Benzyl alcohol		0.936	0.863	7.8	73	0.00
14	T	Bis(2-chloroisopropyl)ether		1.785	1.495	16.2	68	0.00
15	T	2-Methylphenol		1.016	0.933	8.2	73	0.00
16	T	Hexachloroethane		0.551	0.540	2.0	83	0.00
17	T	n-Nitrosodi-n-propylamine		0.818	0.744	9.0	75	0.00
18	T	3-Methylphenol/4-Methylphen		1.050	0.983	6.4	75	0.00
19	S	Nitrobenzene-d5		1.269	1.189	6.3	77	0.00
20	T	Nitrobenzene		1.234	1.159	6.1	78	0.00
21	T	Isophorone		2.183	1.956	10.4	73	0.00
22	T	2-Nitrophenol		0.577	0.596	-3.3	78	0.00
23	T	2,4-Dimethylphenol		1.110	1.051	5.3	76	0.00
24	T	Bis(2-chloroethoxy)methane		1.416	1.215	14.2	71	0.00
25	T	2,4-Dichlorophenol		1.044	1.101	-5.5	90	0.00
26	T	1,2,4-Trichlorobenzene		1.276	1.393	-9.2	87	0.00
34	I	IS1_Naphthalene-d8		1.000	1.000	0.0	75	0.00
35	T	Naphthalene		0.971	0.890	8.3	69	0.00
36	T	Benzoic Acid	*	5.000	6.421	-28.4#	115	0.00
37	T	4-Chloroaniline		0.115	0.111	3.5	77	0.00
38	T	Hexachlorobutadiene		0.198	0.231	-16.7	89	0.00
39	T	p-Chloro-m-cresol		0.254	0.272	-7.1	79	0.00
40	T	2-Methylnaphthalene		0.631	0.626	0.8	75	0.00
41	T	1-Methylnaphthalene		0.218	0.220	-0.9	74	0.00
42	T	Hexachlorocyclopentadiene		0.239	0.306	-28.0#	95	0.00
43	T	2,4,6-Trichlorophenol	*	5.000	6.047	-20.9#	98	0.00
44	T	2,4,5-Trichlorophenol		0.234	0.302	-29.1#	93	0.00
45	S	2-Fluorobiphenyl		0.787	0.855	-8.6	81	0.00

Data Path : I:\8270\Dakota\230831lvi\
Data File : ABN0831.D
Acq On : 31 Aug 2023 10:12 am
Operator : Dakota:ljg
Sample : WG1822460-3,32,,ABN 10210 gmr0812B
Misc : WG1822460,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Aug 31 11:20:56 2023
Quant Method : I:\8270\Dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:19:44 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
46	T	2-Chloronaphthalene		0.692	0.725	-4.8	79	0.00
47	T	2-Nitroaniline		0.200	0.227	-13.5	84	0.00
48	T	1,4-Dinitrobenzene		0.093	0.099	-6.5	78	0.00
49	T	1,3-Dinitrobenzene		0.109	0.116	-6.4	87	0.00
50	T	Dimethyl phthalate		0.809	0.907	-12.1	83	0.00
51	T	Acenaphthylene		1.049	1.160	-10.6	82	0.00
52	T	2,6-Dinitrotoluene		0.167	0.188	-12.6	81	0.00
53	T	1,2-Dinitrobenzene		0.065	0.074	-13.8	83	0.00
62	I	IS1_Acenaphthene-d10		1.000	1.000	0.0	85	0.00
63	T	3-Nitroaniline		0.318	0.294	7.5	74	0.00
64	T	Acenaphthene		1.089	0.961	11.8	76	0.00
65	T	2,4-Dinitrophenol	*	5.000	6.230	-24.6#	111	0.00
66	T	Dibenzofuran		1.737	1.689	2.8	83	0.00
67	T	2,4-Dinitrotoluene		0.392	0.408	-4.1	84	0.00
68	T	4-Nitrophenol	*	5.000	5.261	-5.2	93	0.00
69	T	2,3,5,6-Tetrachlorophenol	*	5.000	5.810	-16.2	104	0.00
70	T	2,3,4,6-Tetrachlorophenol	*	5.000	5.621	-12.4	99	0.00
71	T	Diethyl phthalate		1.466	1.370	6.5	79	0.00
72	T	Fluorene		1.400	1.320	5.7	80	0.00
73	T	4-Chlorophenyl phenyl ether		0.681	0.681	0.0	87	0.00
74	T	4-Nitroaniline		0.316	0.298	5.7	77	0.00
75	T	4,6-Dinitro-o-cresol	*	5.000	6.055	-21.1#	108	0.00
76	T	NDPA/DPA		1.195	1.086	9.1	76	0.00
77	T	Azobenzene		1.256	1.189	5.3	77	0.00
78	S	2,4,6-Tribromophenol		0.232	0.323	-39.2#	119	0.00
79	T	4-Bromophenyl phenyl ether		0.425	0.457	-7.5	91	0.00
80	T	Hexachlorobenzene		0.532	0.582	-9.4	98	0.00
81	T	Pentachlorophenol	*	5.000	6.378	-27.6#	125	0.00
87	I	IS1_Phenanthrene-d10		1.000	1.000	0.0	87	0.00
88	T	Phenanthrene		1.030	0.886	14.0	78	0.00
89	T	Anthracene		0.998	0.908	9.0	80	0.00
90	T	Carbazole		0.941	0.857	8.9	79	0.00
91	T	Di-n-butylphthalate		1.108	1.006	9.2	82	0.00
92	T	Fluoranthene		1.208	1.128	6.6	83	0.00
93	T	Benzidine		0.791	0.779	1.5	101	0.00
94	T	Pyrene		1.277	1.249	2.2	87	0.00
95	S	4-Terphenyl-d14		0.978	0.988	-1.0	89	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230831lvi\
Data File : ABN0831.D
Acq On : 31 Aug 2023 10:12 am
Operator : Dakota:ljg
Sample : WG1822460-3,32,,ABN 10210 gmr0812B
Misc : WG1822460,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Aug 31 11:20:56 2023
Quant Method : I:\8270\Dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:19:44 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96	T	Butyl benzyl phthalate	0.504	0.467	7.3	84	0.00
103	I	IS1_Chrysene-d12	1.000	1.000	0.0	91	0.00
104	T	Benzo(a)anthracene	1.254	1.157	7.7	84	0.00
105	T	3,3'-Dichlorobenzidine	0.482	0.490	-1.7	93	0.00
106	T	Chrysene	1.184	1.126	4.9	85	0.00
107	T	Bis(2-ethylhexyl)phthalate	0.700	0.660	5.7	85	0.00
108	T	Di-n-octylphthalate	1.271	1.142	10.1	86	0.00
109	T	Benzo(b)fluoranthene	1.361	1.376	-1.1	94	0.00
110	T	Benzo(k)fluoranthene	1.299	1.212	6.7	82	0.00
111	T	Benzo(a)pyrene	1.183	1.207	-2.0	92	0.00
112	I	IS1_Perylene-d12	1.000	1.000	0.0	90	0.00
113	T	Indeno(1,2,3-cd)pyrene	1.060	0.942	11.1	79	0.00
114	T	Dibenzo(a,h)anthracene	1.111	0.985	11.3	81	0.00
115	T	Benzo(ghi)perylene	1.122	1.088	3.0	88	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : ABN0831.D
Acq On : 31 Aug 2023 10:12 am
Operator : Dakota:ljg
Sample : WG1822460-3,32,,ABN 10210 gmr0812B
Misc : WG1822460,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Aug 31 11:20:56 2023
Quant Method : I:\8270\Dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:19:44 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
	Internal Standards							
1)	IS1_1,4-Dichlorobenzen...	3.669	152	14463	4.000	ug/ml		0.00
34)	IS1_Naphthalene-d8	4.927	136	50867	4.000	ug/ml	#	0.00
62)	IS1_Acenaphthene-d10	6.609	164	33572	4.000	ug/ml		0.00
87)	IS1_Phenanthrene-d10	8.001	188	80682	4.000	ug/ml		0.00
103)	IS1_Chrysene-d12	10.510	240	88271	4.000	ug/ml		0.00
112)	IS1_Perylene-d12	11.862	264	110283	4.000	ug/ml		0.00
	System Monitoring Compounds							
4)	2-Fluorophenol	2.264	112	17362	4.649	ug/ml		0.00
	Spiked Amount 5.000	Range 15 - 110		Recovery = 92.98%				
7)	Phenol-d6	3.395	99	21387	4.469	ug/ml		0.00
	Spiked Amount 5.000	Range 15 - 110		Recovery = 89.38%				
19)	Nitrobenzene-d5	4.241	82	21504	4.687	ug/ml		0.00
	Spiked Amount 2.500	Range 30 - 130		Recovery = 187.48%#				
45)	2-Fluorobiphenyl	6.012	172	54336	5.430	ug/ml		0.00
	Spiked Amount 2.500	Range 30 - 130		Recovery = 217.20%#				
78)	2,4,6-Tribromophenol	7.361	330	13542	6.968	ug/ml		0.00
	Spiked Amount 5.000	Range 15 - 110		Recovery = 139.36%#				
95)	4-Terphenyl-d14	9.571	244	99649	5.053	ug/ml		0.00
	Spiked Amount 2.500	Range 30 - 130		Recovery = 202.12%#				
	Target Compounds							Qvalue
2)	n-Nitrosodimethylamine	1.033	74	12081	4.311	ug/ml		80
3)	Pyridine	1.055	79	15824	3.789	ug/ml#		57
5)	Aniline	3.342	93	27204	4.203	ug/ml		98
6)	2-Chlorophenol	3.454	128	19838	4.590	ug/ml		90
8)	Phenol	3.408	94	22467	4.038	ug/ml		94
9)	Bis(2-chloroethyl)ether	3.454	93	16191	4.200	ug/ml#		69
10)	1,3-Dichlorobenzene	3.603	146	24746	4.768	ug/ml		95
11)	1,4-Dichlorobenzene	3.684	146	24662	4.698	ug/ml		96
12)	1,2-Dichlorobenzene	3.833	146	23674	4.657	ug/ml		94
13)	Benzyl alcohol	3.861	79	15609	4.610	ug/ml		94
14)	Bis(2-chloroisopropyl)...	4.020	45	27022	4.188	ug/ml#		57
15)	2-Methylphenol	4.020	108	16866	4.590	ug/ml		99
16)	Hexachloroethane	4.163	117	9771	4.906	ug/ml#		61
17)	n-Nitrosodi-n-propylamine	4.144	70	13447	4.547	ug/ml#		89
18)	3-Methylphenol/4-Methy...	4.188	108	17769	4.682	ug/ml		97
20)	Nitrobenzene	4.256	77	20953	4.698	ug/ml		91
21)	Isophorone	4.514	82	35366	4.481	ug/ml#		91
22)	2-Nitrophenol	4.576	139	10774	5.168	ug/ml		89

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : ABN0831.D
Acq On : 31 Aug 2023 10:12 am
Operator : Dakota:ljg
Sample : WG1822460-3,32,,ABN 10210 gmr0812B
Misc : WG1822460,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Aug 31 11:20:56 2023
Quant Method : I:\8270\Dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:19:44 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) 2,4-Dimethylphenol	4.701	107	18999	4.733	ug/ml	97
24) Bis(2-chloroethoxy)met...	4.781	93	21959	4.289	ug/ml#	95
25) 2,4-Dichlorophenol	4.828	162	19896	5.273	ug/ml#	93
26) 1,2,4-Trichlorobenzene	4.890	180	25184	5.457	ug/ml#	93
35) Naphthalene	4.946	128	56570	4.581	ug/ml	99
36) Benzoic Acid	4.794	105	12689	6.421	ug/ml	94
37) 4-Chloroaniline	5.046	65	7085	4.860	ug/ml#	76
38) Hexachlorobutadiene	5.114	225	14703	5.853	ug/ml	97
39) p-Chloro-m-cresol	5.571	107	17292	5.362	ug/ml	93
40) 2-Methylnaphthalene	5.627	142	39805	4.961	ug/ml	96
41) 1-Methylnaphthalene	5.714	115	13997	5.039	ug/ml	94
42) Hexachlorocyclopentadiene	5.804	237	19482	6.411	ug/ml	100
43) 2,4,6-Trichlorophenol	5.928	196	17927M3	6.047	ug/ml	
44) 2,4,5-Trichlorophenol	5.956	196	19227	6.474	ug/ml	96
46) 2-Chloronaphthalene	6.081	162	46069	5.233	ug/ml#	92
47) 2-Nitroaniline	6.214	138	14433	5.672	ug/ml#	80
48) 1,4-Dinitrobenzene	6.351	168	6269	5.275	ug/ml	93
49) 1,3-Dinitrobenzene	6.426	168	7396	5.337	ug/ml#	1
50) Dimethyl phthalate	6.435	163	57671	5.605	ug/ml#	97
51) Acenaphthylene	6.466	152	73784	5.529	ug/ml	97
52) 2,6-Dinitrotoluene	6.466	165	11979	5.640	ug/ml	88
53) 1,2-Dinitrobenzene	6.497	168	4721	5.686	ug/ml	95
63) 3-Nitroaniline	6.609	138	12331	4.615	ug/ml	95
64) Acenaphthene	6.637	154	40348	4.413	ug/ml	88
65) 2,4-Dinitrophenol	6.708	184	8460	6.230	ug/ml#	82
66) Dibenzofuran	6.805	168	70893	4.862	ug/ml	90
67) 2,4-Dinitrotoluene	6.839	165	17108	5.202	ug/ml#	87
68) 4-Nitrophenol	6.833	65	11654	5.261	ug/ml#	87
69) 2,3,5,6-Tetrachlorophenol	6.907	232	17848	5.810	ug/ml	98
70) 2,3,4,6-Tetrachlorophenol	6.948	232	17293	5.621	ug/ml	97
71) Diethyl phthalate	7.119	149	57491	4.672	ug/ml	98
72) Fluorene	7.128	166	55386	4.712	ug/ml	96
73) 4-Chlorophenyl phenyl ...	7.171	204	28585	5.004	ug/ml#	82
74) 4-Nitroaniline	7.181	138	12491	4.709	ug/ml#	84
75) 4,6-Dinitro-o-cresol	7.218	198	10984	6.055	ug/ml#	63
76) NDPA/DPA	7.290	169	45572	4.545	ug/ml#	90
77) Azobenzene	7.314	77	49910	4.736	ug/ml#	94
79) 4-Bromophenyl phenyl e...	7.625	248	19177	5.376	ug/ml#	77
80) Hexachlorobenzene	7.650	284	24429	5.472	ug/ml#	77
81) Pentachlorophenol	7.855	266	16144	6.378	ug/ml	99
88) Phenanthrene	8.020	178	89374	4.301	ug/ml	98

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : ABN0831.D
Acq On : 31 Aug 2023 10:12 am
Operator : Dakota:ljg
Sample : WG1822460-3,32,,ABN 10210 gmr0812B
Misc : WG1822460,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Aug 31 11:20:56 2023
Quant Method : I:\8270\Dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:19:44 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
89)	Anthracene	8.070	178	91557	4.549	ug/ml	98
90)	Carbazole	8.253	167	86477	4.557	ug/ml	99
91)	Di-n-butylphthalate	8.688	149	101478	4.542	ug/ml	99
92)	Fluoranthene	9.145	202	113726	4.668	ug/ml#	91
93)	Benzidine	9.329	184	78541	4.920	ug/ml#	93
94)	Pyrene	9.344	202	125936	4.890	ug/ml	100
96)	Butyl benzyl phthalate	10.096	149	47126	4.640	ug/ml#	86
104)	Benzo(a)anthracene	10.500	228	127693	4.615	ug/ml	100
105)	3,3'-Dichlorobenzidine	10.534	252	54099	5.086	ug/ml#	95
106)	Chrysene	10.531	228	124260	4.755	ug/ml	97
107)	Bis(2-ethylhexyl)phtha...	10.712	149	72845	4.713	ug/ml#	88
108)	Di-n-octylphthalate	11.343	149	125980	4.492	ug/ml#	73
109)	Benzo(b)fluoranthene	11.523	252	151872M3	5.057	ug/ml	
110)	Benzo(k)fluoranthene	11.545	252	133770	4.667	ug/ml#	92
111)	Benzo(a)pyrene	11.809	252	133170	5.101	ug/ml#	91
113)	Indeno(1,2,3-cd)pyrene	12.772	276	129809	4.440	ug/mL#	88
114)	Dibenzo(a,h)anthracene	12.806	278	135734	4.430	ug/ml#	88
115)	Benzo(ghi)perylene	12.974	276	150033	4.852	ug/ml#	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : ABN0831.D
Acq On : 31 Aug 2023 10:12 am
Operator : Dakota:ljg
Sample : WG1822460-3,32,,ABN 10210 gmr0812B
Misc : WG1822460,,ical19934
ALS Vial : 96 Sample Multiplier: 1

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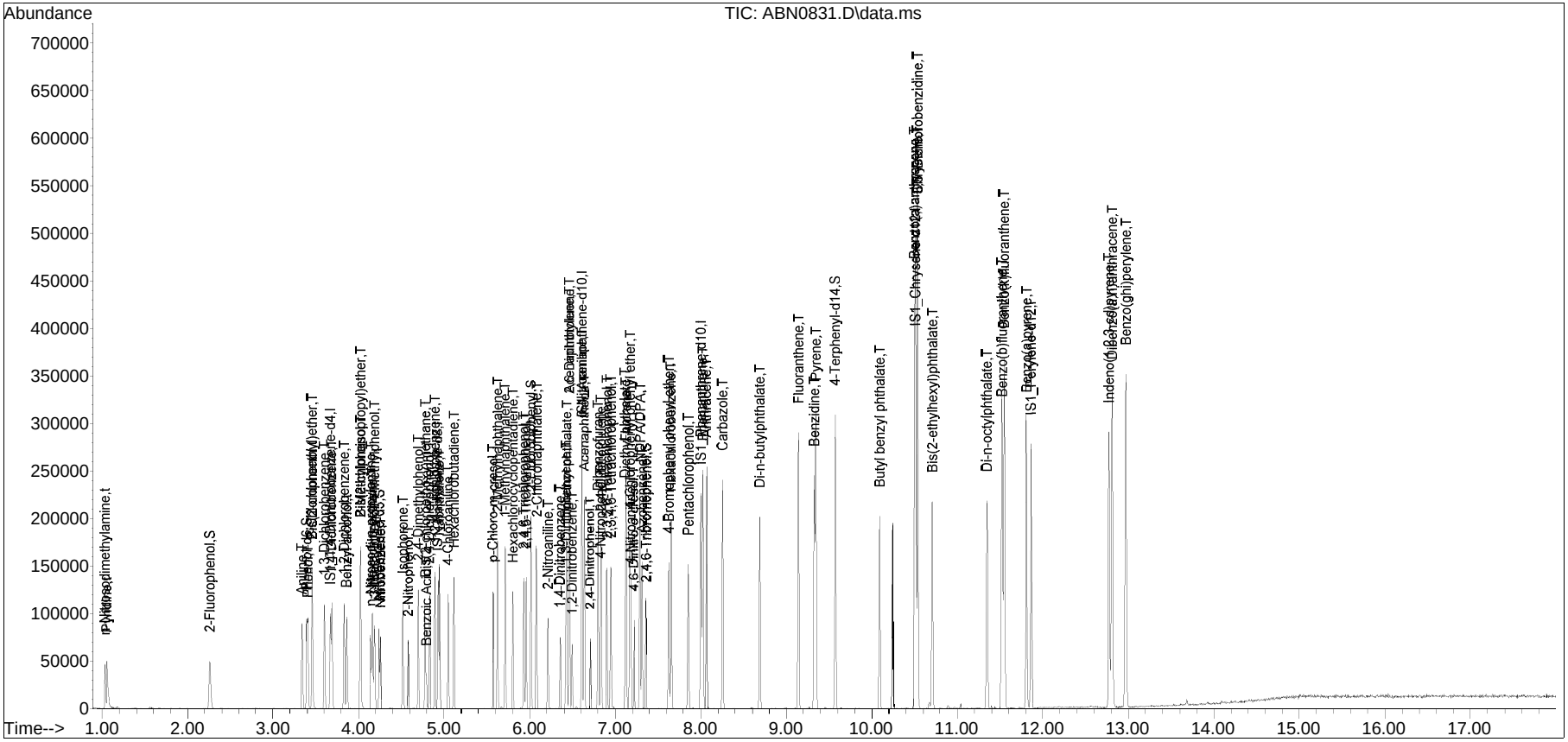
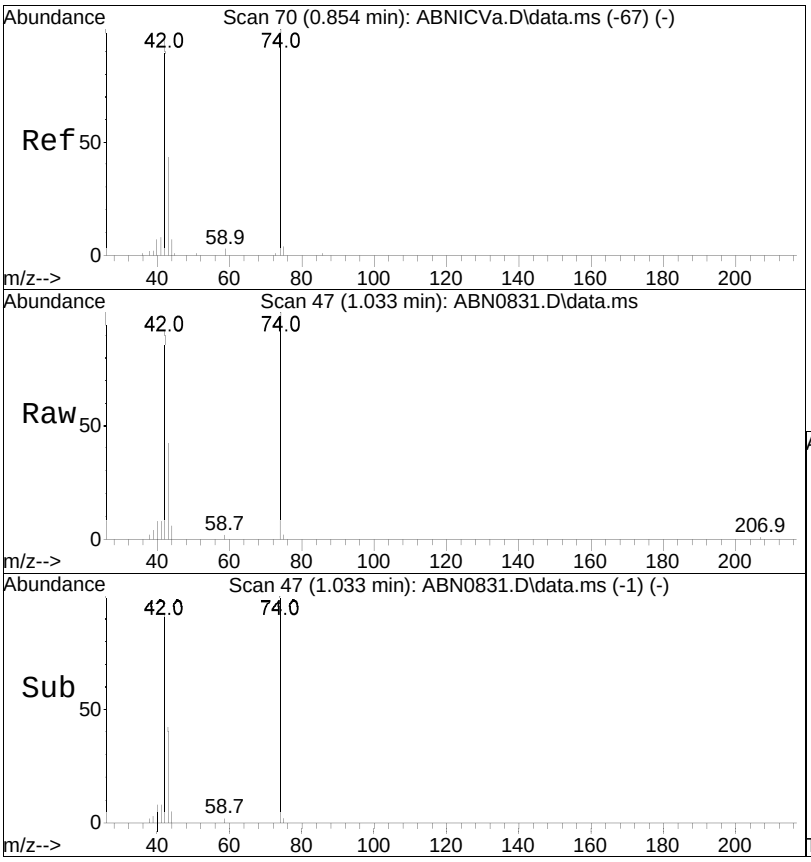
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:19:44 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

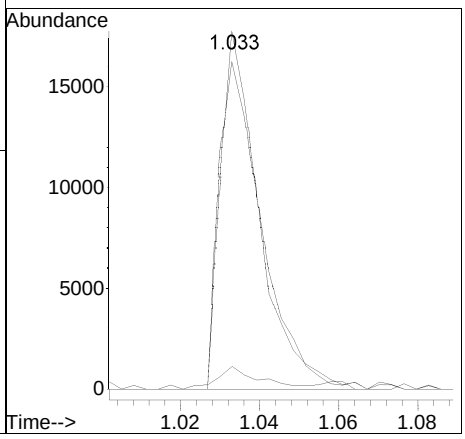


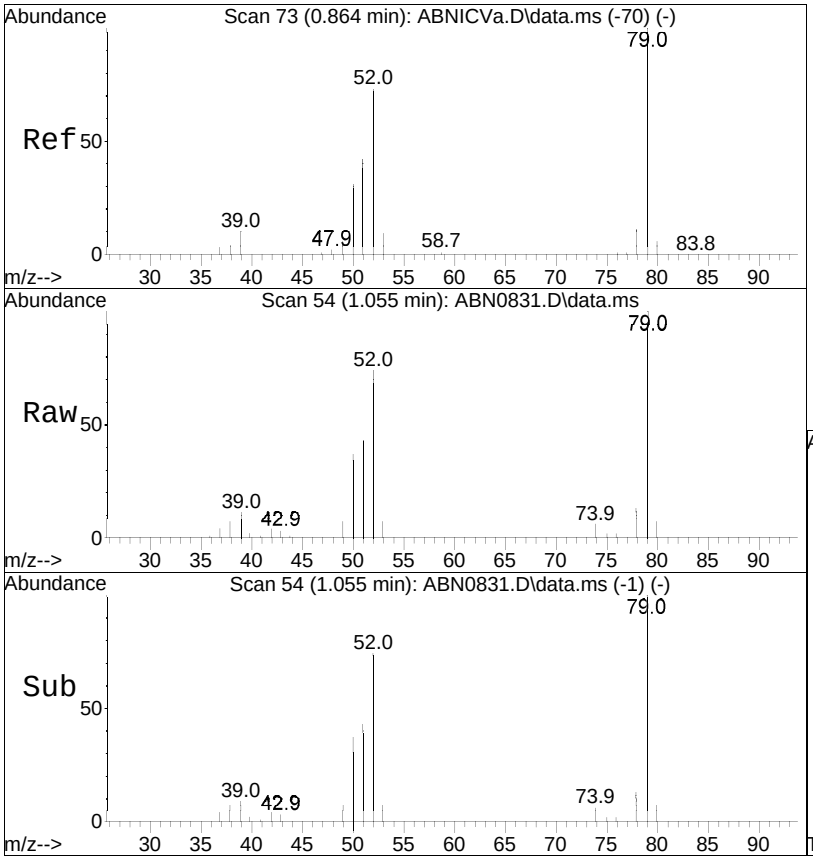


#2
n-Nitrosodimethylamine
Concen: 4.31 ug/ml
RT: 1.033 min Scan# 47
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 74 Resp: 12081

Ion	Ratio	Lower	Upper
74	100		
42	100.5	100.0	150.0
44	6.8	6.7	10.1

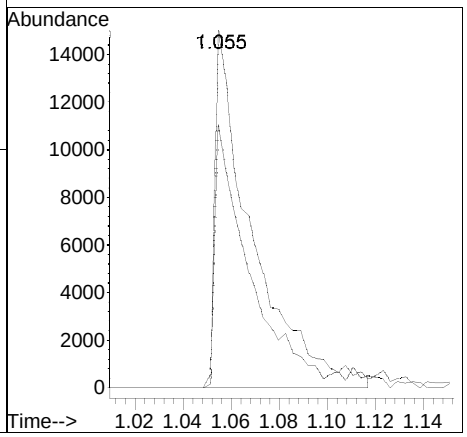


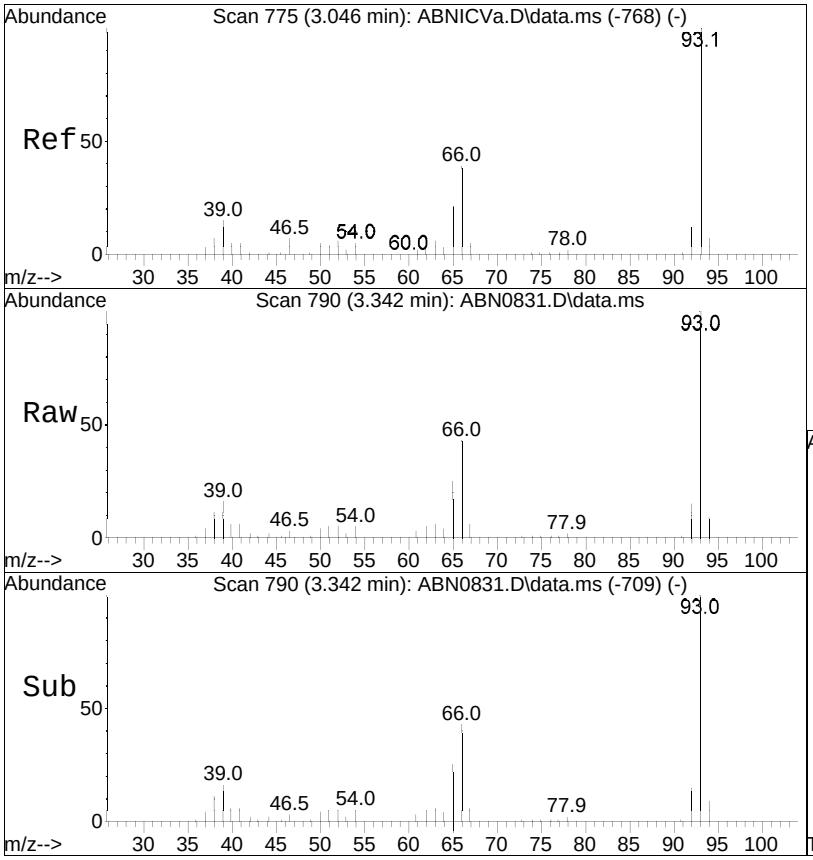


#3
Pyridine
Concen: 3.79 ug/ml
RT: 1.055 min Scan# 54
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 79 Resp: 15824

Ion	Ratio	Lower	Upper
79	100		
52	69.6	93.1	139.7#

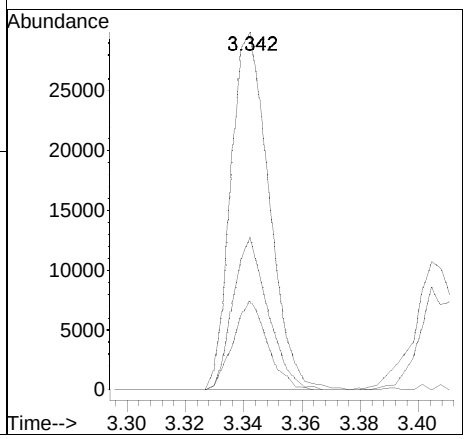


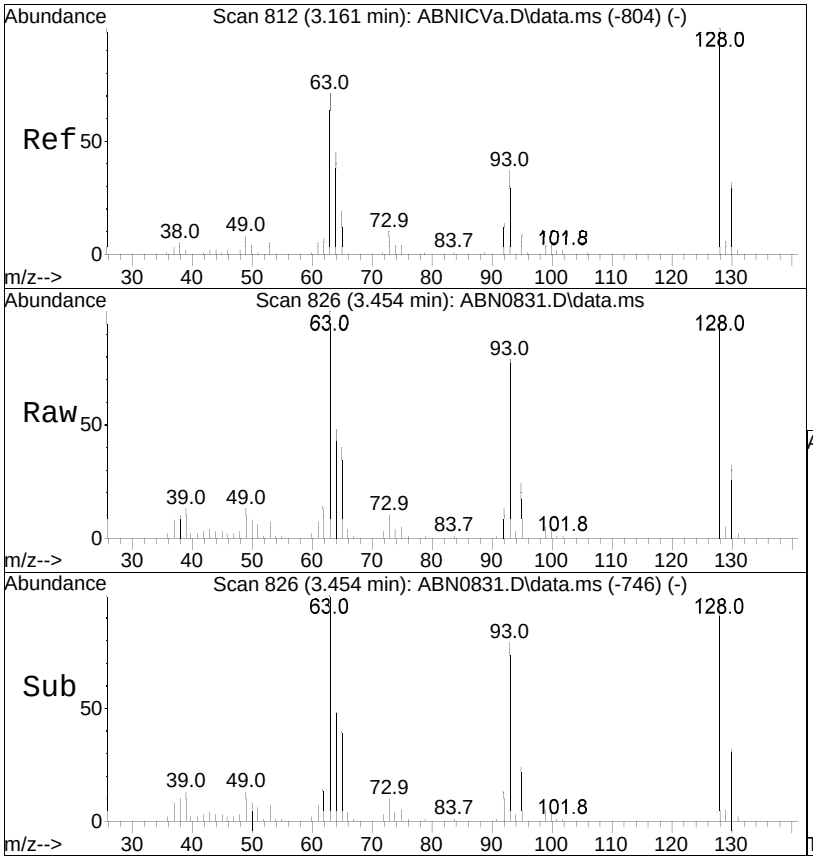


#5
Aniline
Concen: 4.20 ug/ml
RT: 3.342 min Scan# 790
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 93 Resp: 27204

Ion	Ratio	Lower	Upper
93	100		
66	39.2	32.6	49.0
65	22.5	17.6	26.4

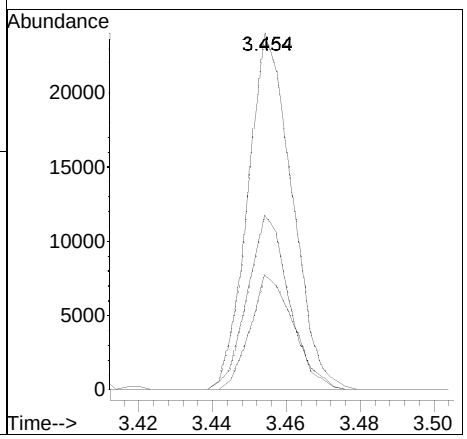


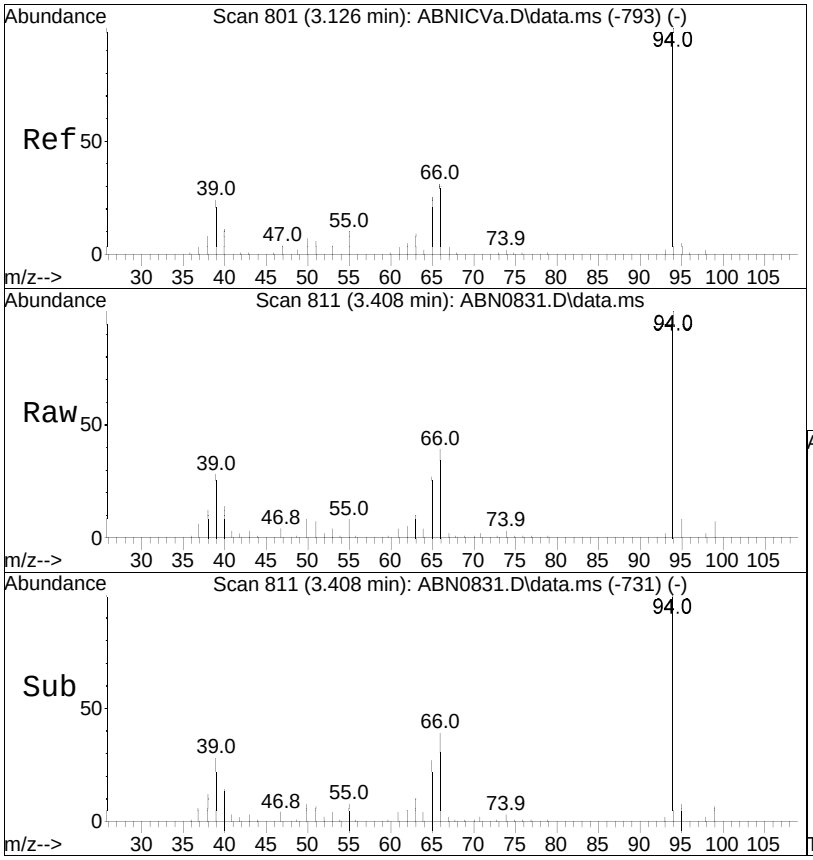


#6
2-Chlorophenol
Concen: 4.59 ug/ml
RT: 3.454 min Scan# 826
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:128 Resp: 19838

Ion	Ratio	Lower	Upper
128	100		
64	46.3	45.1	67.7
130	31.5	26.2	39.4

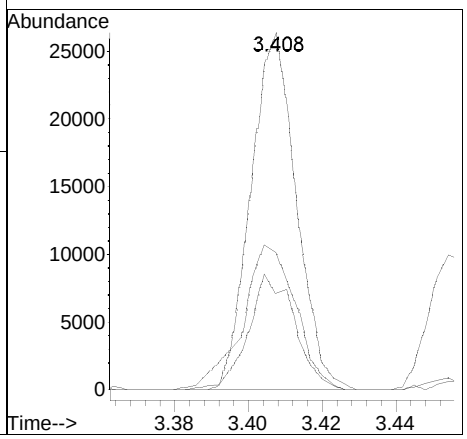


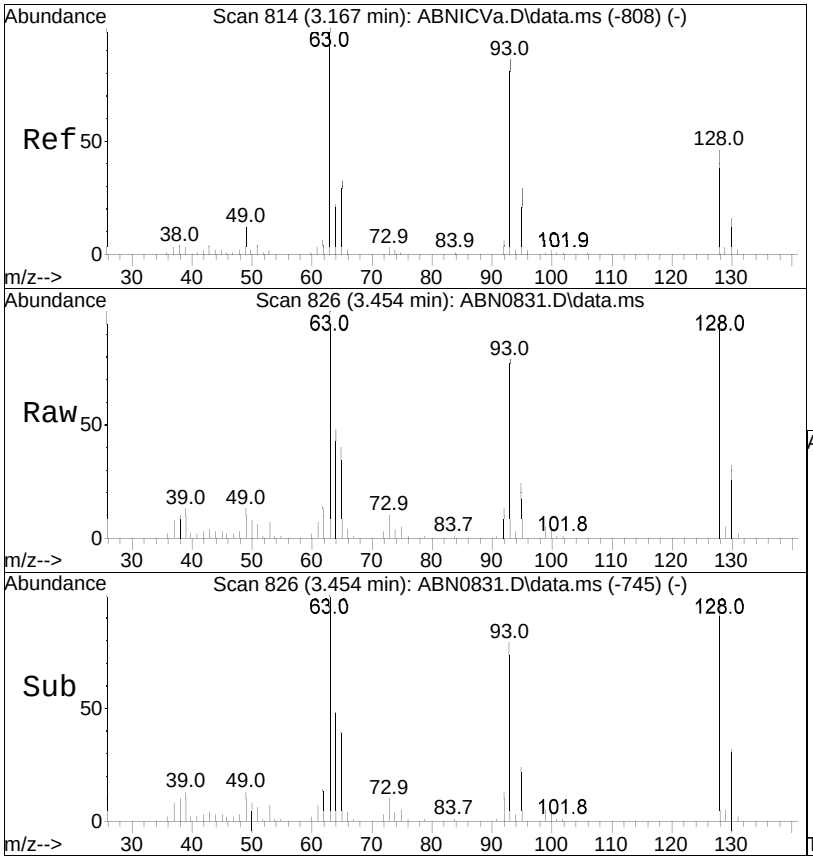


#8
Phenol
Concen: 4.04 ug/ml
RT: 3.408 min Scan# 811
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 94 Resp: 22467

Ion	Ratio	Lower	Upper
94	100		
65	33.4	26.0	39.0
66	47.7	33.8	50.8

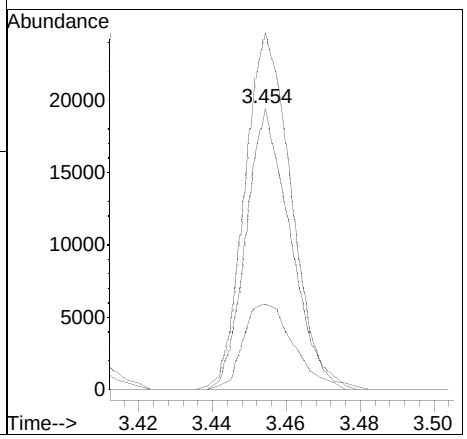


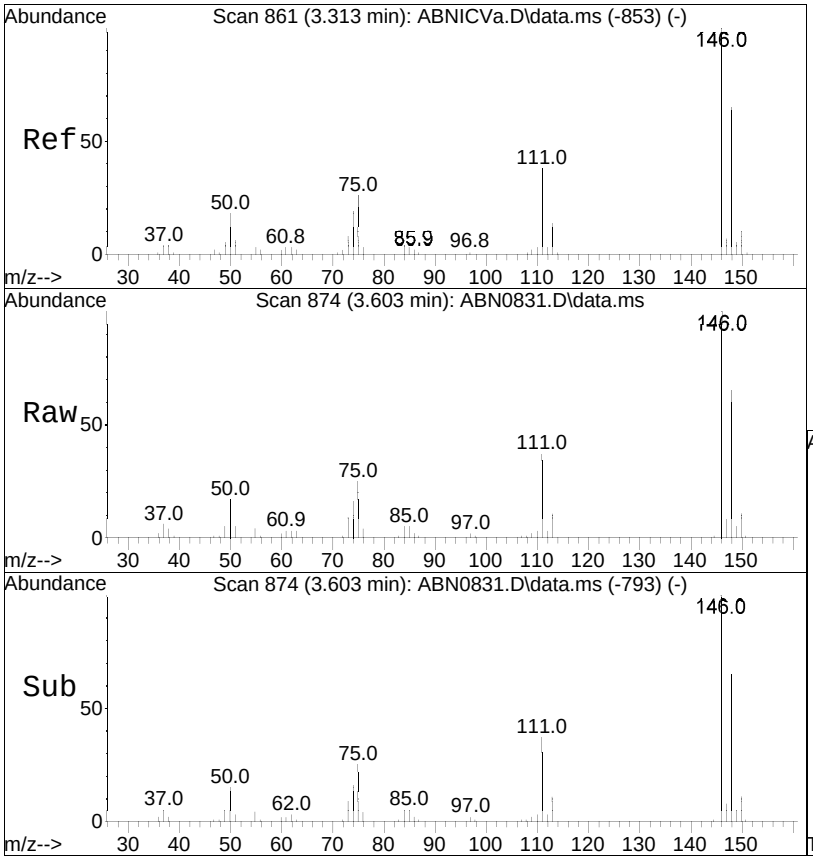


#9
Bis(2-chloroethyl)ether
Concen: 4.20 ug/ml
RT: 3.454 min Scan# 826
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 93 Resp: 16191

Ion	Ratio	Lower	Upper
93	100		
63	132.0	74.6	111.8#
95	34.3	25.9	38.9

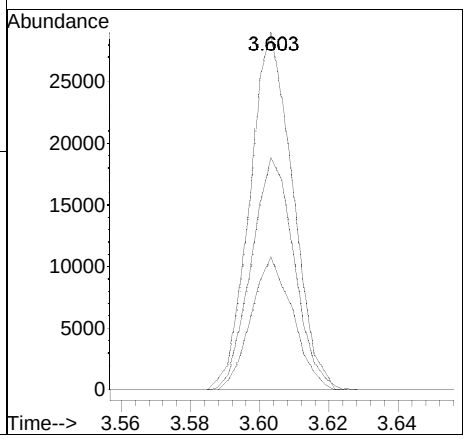


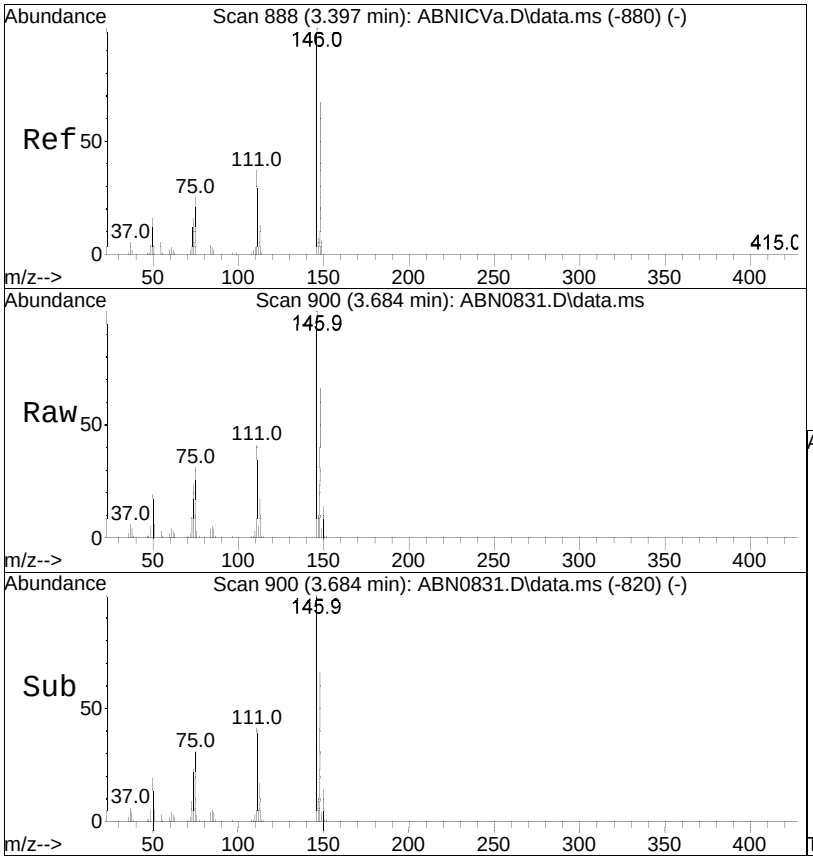


#10
1,3-Dichlorobenzene
Concen: 4.77 ug/ml
RT: 3.603 min Scan# 874
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:146 Resp: 24746

Ion	Ratio	Lower	Upper
146	100		
111	36.3	34.3	51.5
148	65.1	50.8	76.2

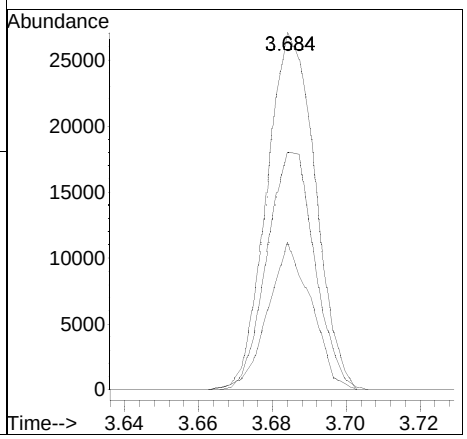


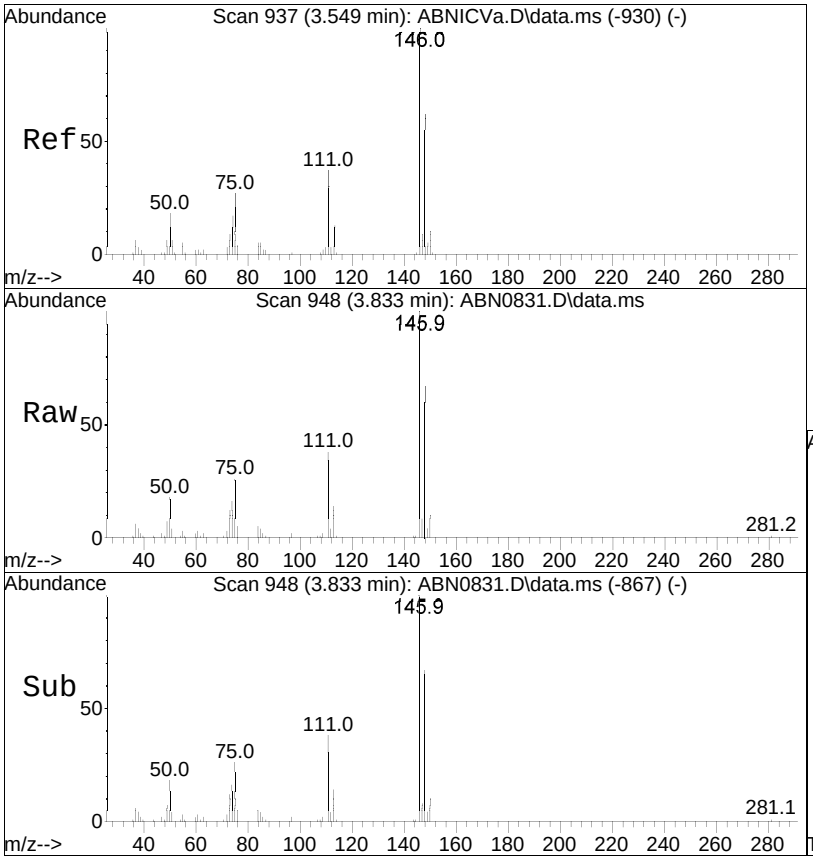


#11
1,4-Dichlorobenzene
Concen: 4.70 ug/ml
RT: 3.684 min Scan# 900
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:146 Resp: 24662

Ion	Ratio	Lower	Upper
146	100		
148	65.7	50.7	76.1
111	37.4	33.4	50.0

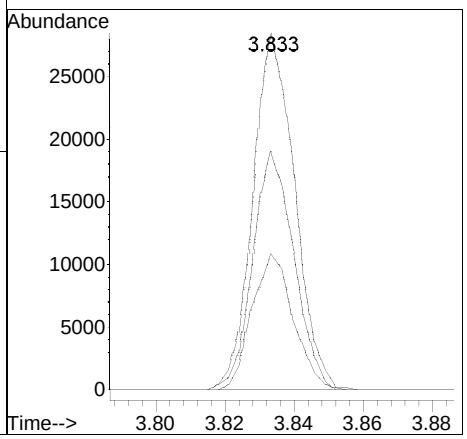


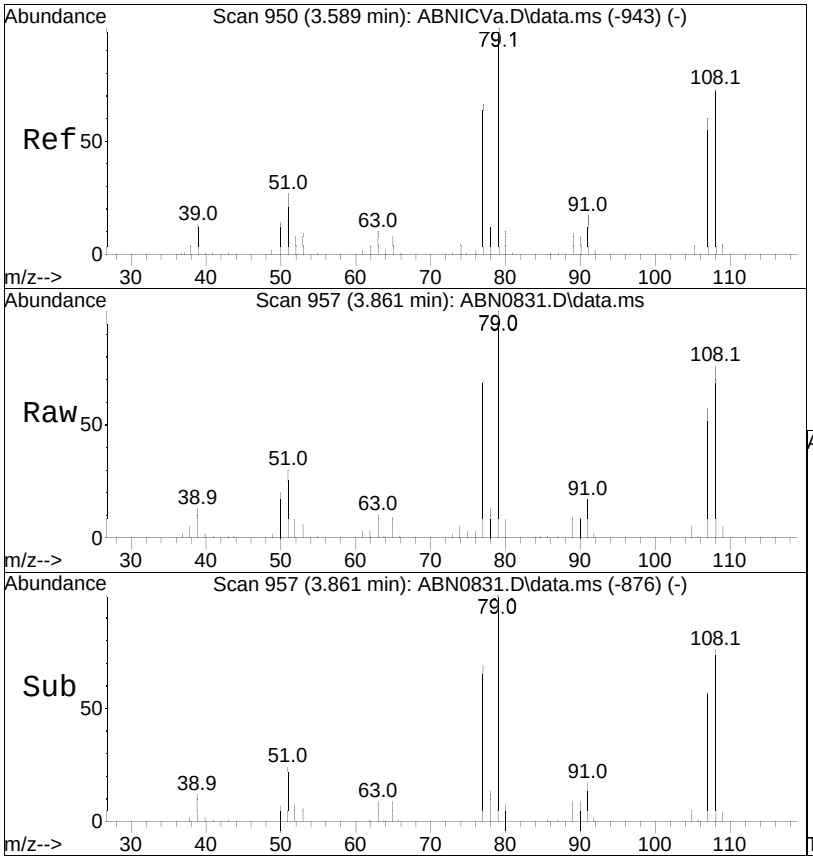


#12
1,2-Dichlorobenzene
Concen: 4.66 ug/ml
RT: 3.833 min Scan# 948
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:146 Resp: 23674

Ion	Ratio	Lower	Upper
146	100		
111	37.9	34.6	52.0
148	66.0	50.2	75.4

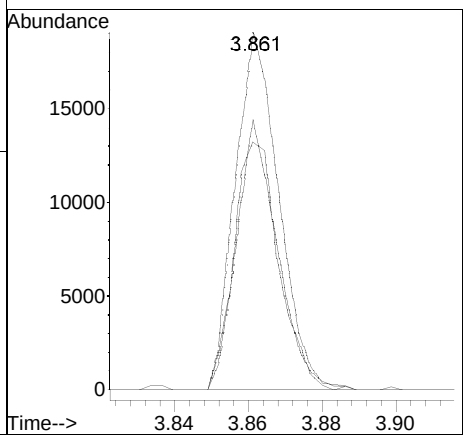


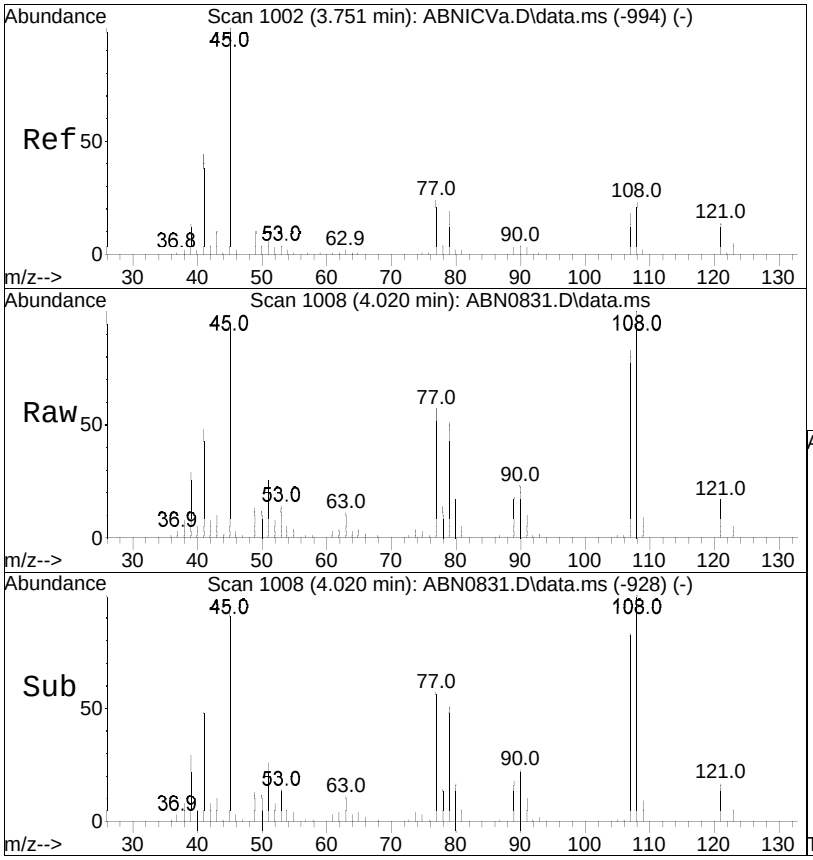


#13
Benzyl alcohol
Concen: 4.61 ug/ml
RT: 3.861 min Scan# 957
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 79 Resp: 15609

Ion	Ratio	Lower	Upper
79	100		
77	70.5	54.9	82.3
108	71.1	63.1	94.7

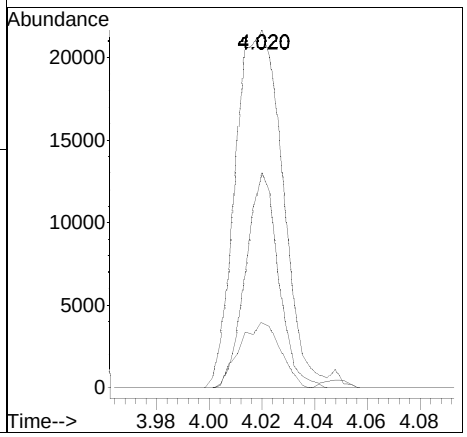


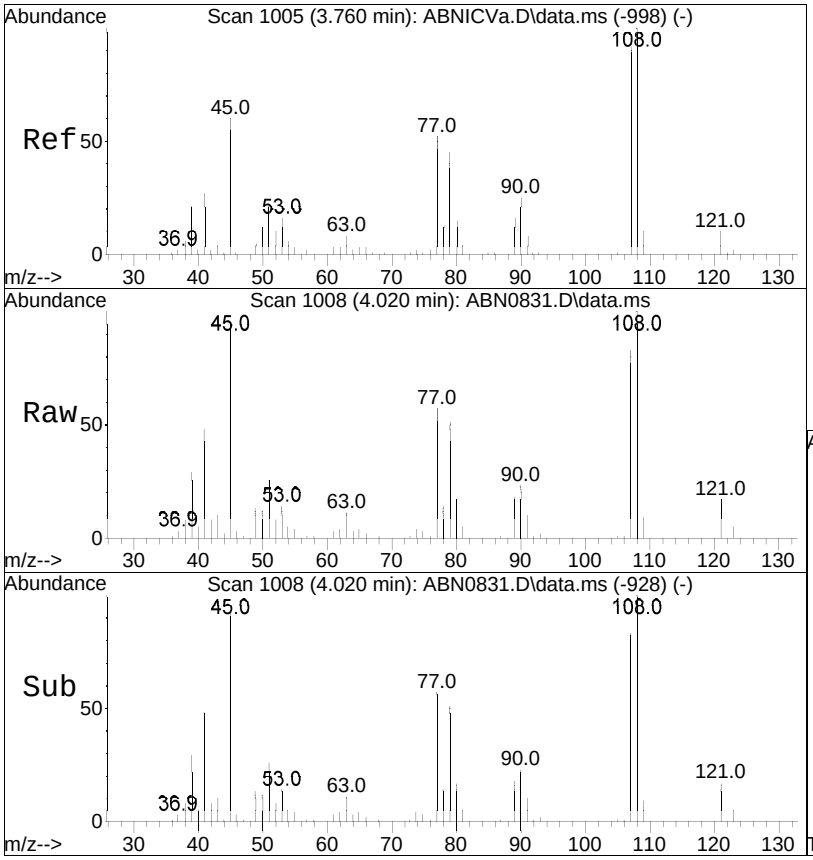


#14
Bis(2-chloroisopropyl)ether
Concen: 4.19 ug/ml
RT: 4.020 min Scan# 1008
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 45 Resp: 27022

Ion	Ratio	Lower	Upper
45	100		
121	15.9	9.8	14.6#
77	41.7	6.1	9.1#

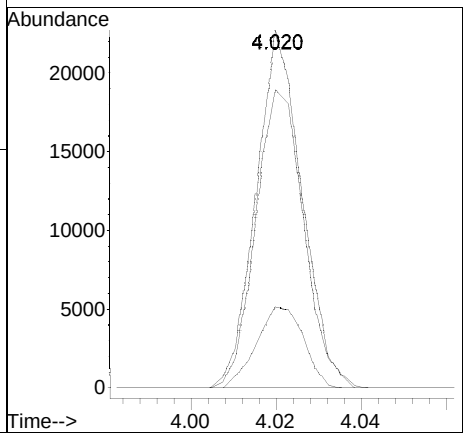


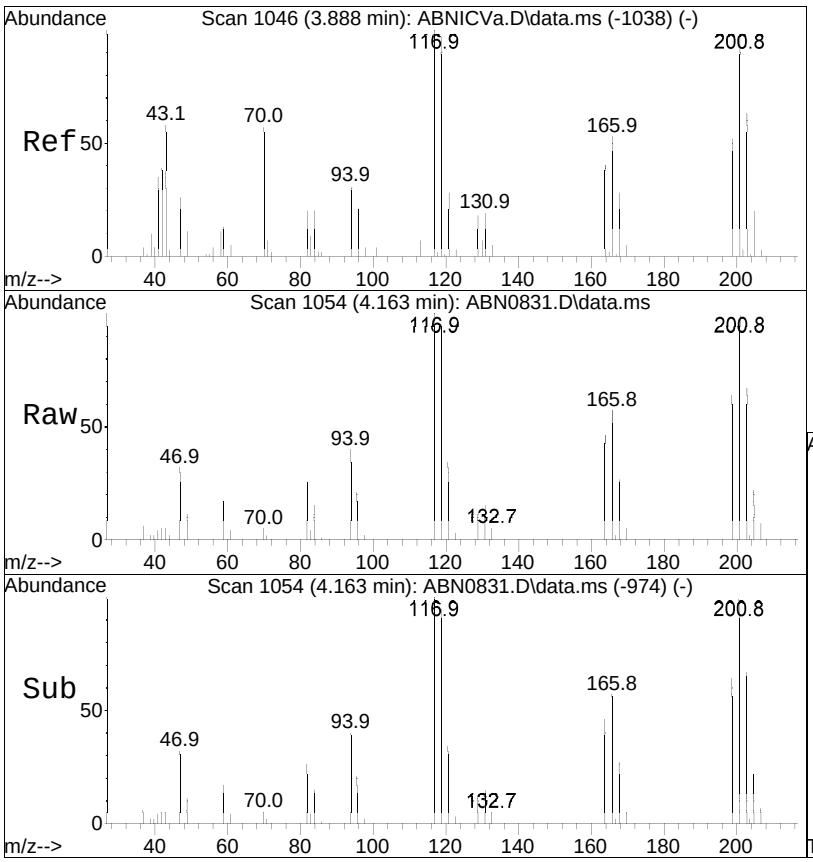


#15
2-Methylphenol
Concen: 4.59 ug/ml
RT: 4.020 min Scan# 1008
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:108 Resp: 16866

Ion	Ratio	Lower	Upper
108	100		
107	87.5	70.7	106.1
90	23.4	18.7	28.1

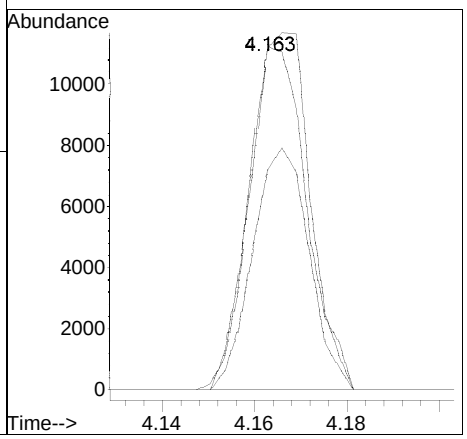


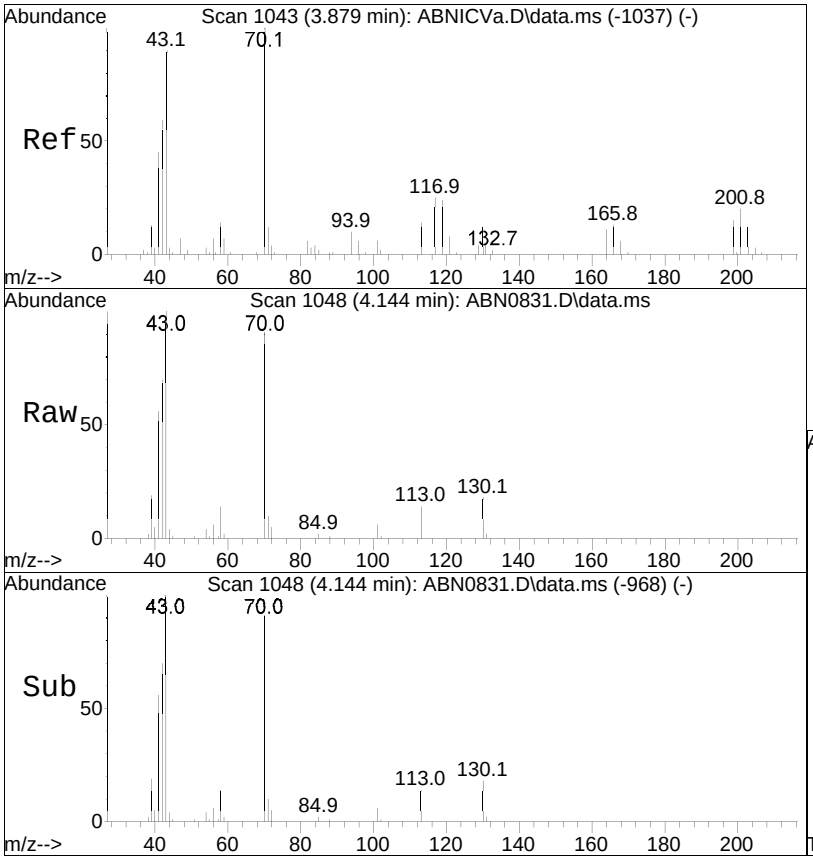


#16
Hexachloroethane
Concen: 4.91 ug/ml
RT: 4.163 min Scan# 1054
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:117 Resp: 9771

Ion	Ratio	Lower	Upper
117	100		
201	108.1	58.6	87.8#
199	68.6	36.9	55.3#

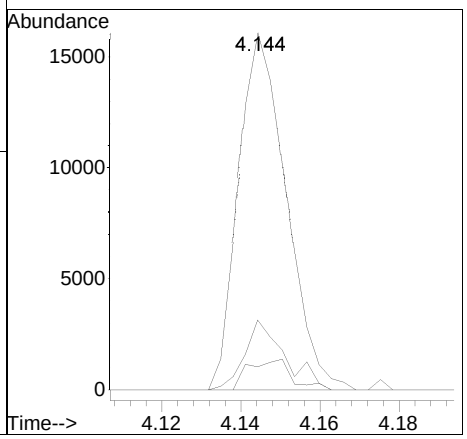


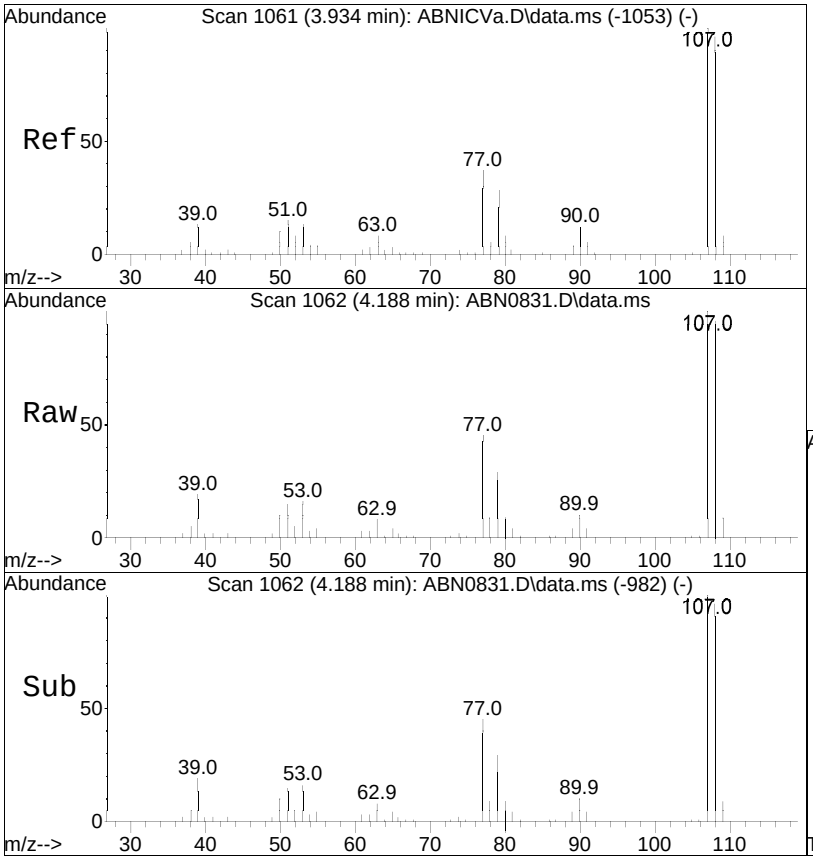


#17
n-Nitrosodi-n-propylamine
Concen: 4.55 ug/ml
RT: 4.144 min Scan# 1048
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 70 Resp: 13447

Ion	Ratio	Lower	Upper
70	100		
130	16.4	18.2	27.4#
101	7.7	7.8	11.8#

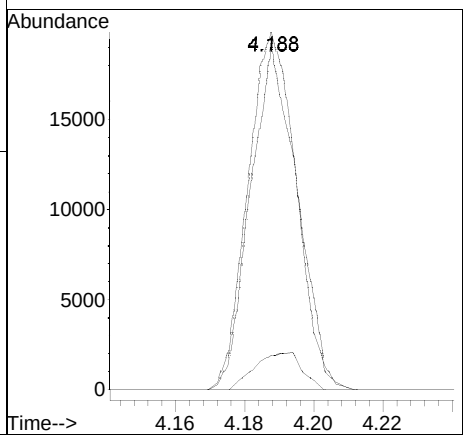


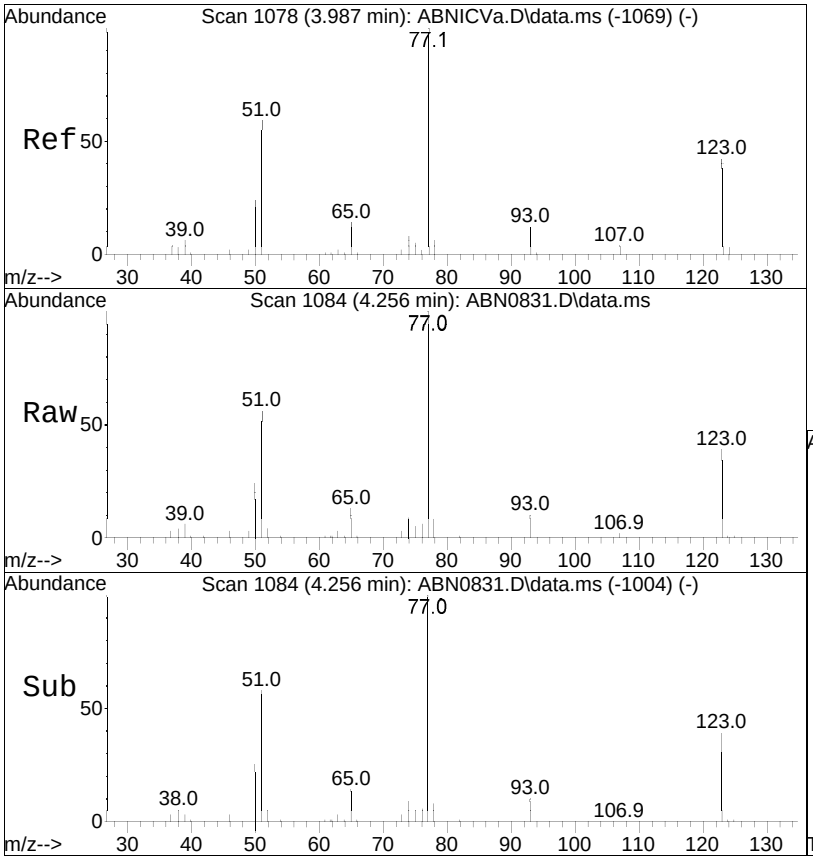


#18
3-Methylphenol/4-Methylphenol
Concen: 4.68 ug/ml
RT: 4.188 min Scan# 1062
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:108 Resp: 17769

Ion	Ratio	Lower	Upper
108	100		
107	107.6	88.6	132.8
90	11.0	8.8	13.2

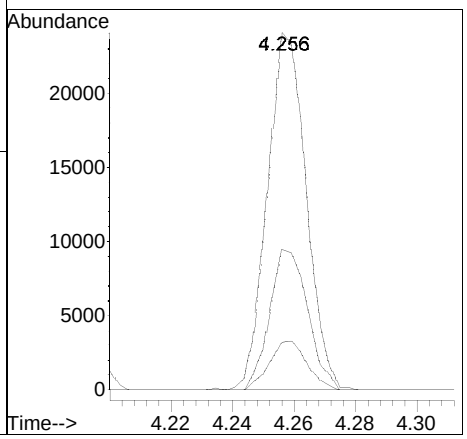


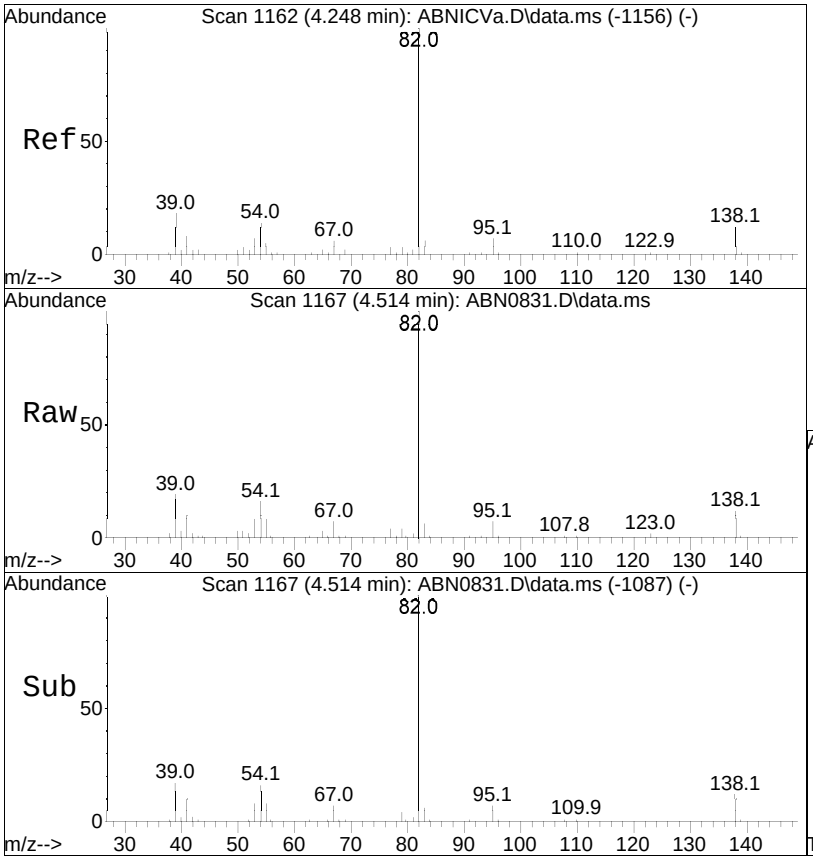


#20
Nitrobenzene
Concen: 4.70 ug/ml
RT: 4.256 min Scan# 1084
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 77 Resp: 20953

Ion	Ratio	Lower	Upper
77	100		
123	38.5	36.3	54.5
65	13.3	11.6	17.4

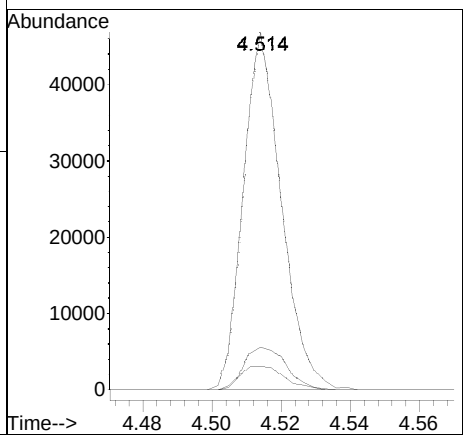


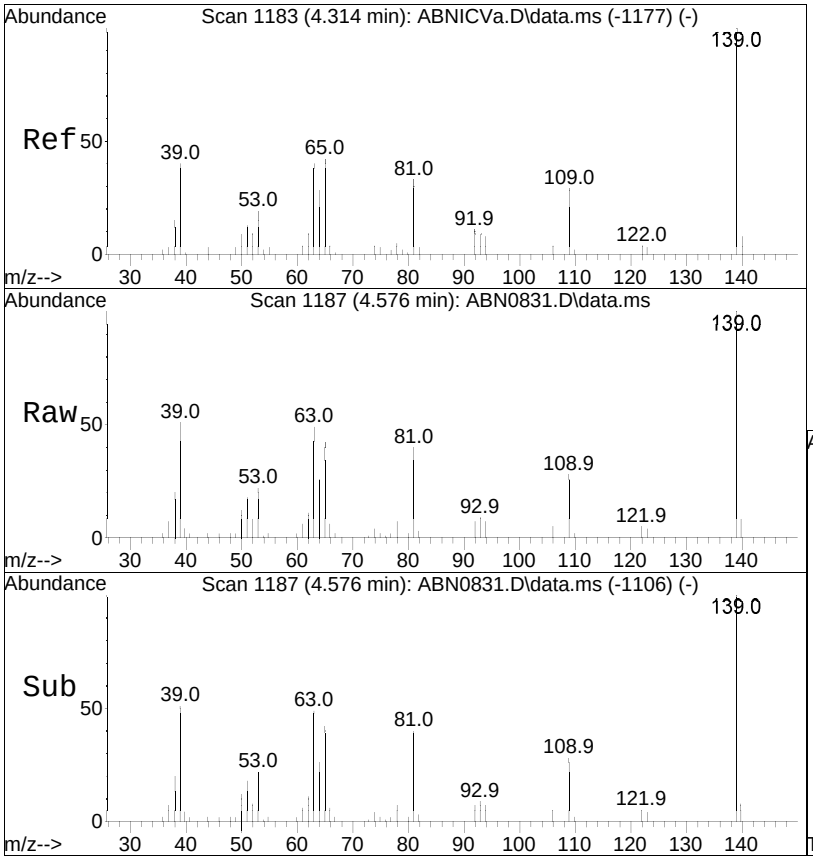


#21
Isophorone
Concen: 4.48 ug/ml
RT: 4.514 min Scan# 1167
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 82 Resp: 35366

Ion	Ratio	Lower	Upper
82	100		
138	13.6	14.7	22.1#
95	7.8	5.2	7.8#

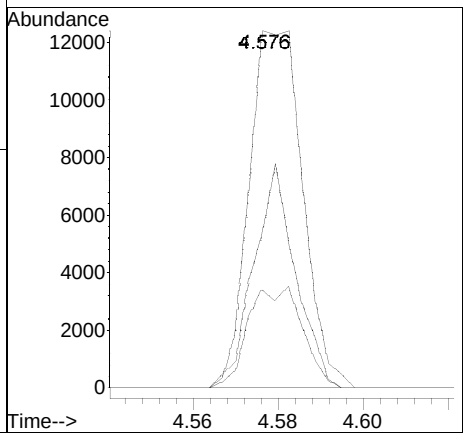


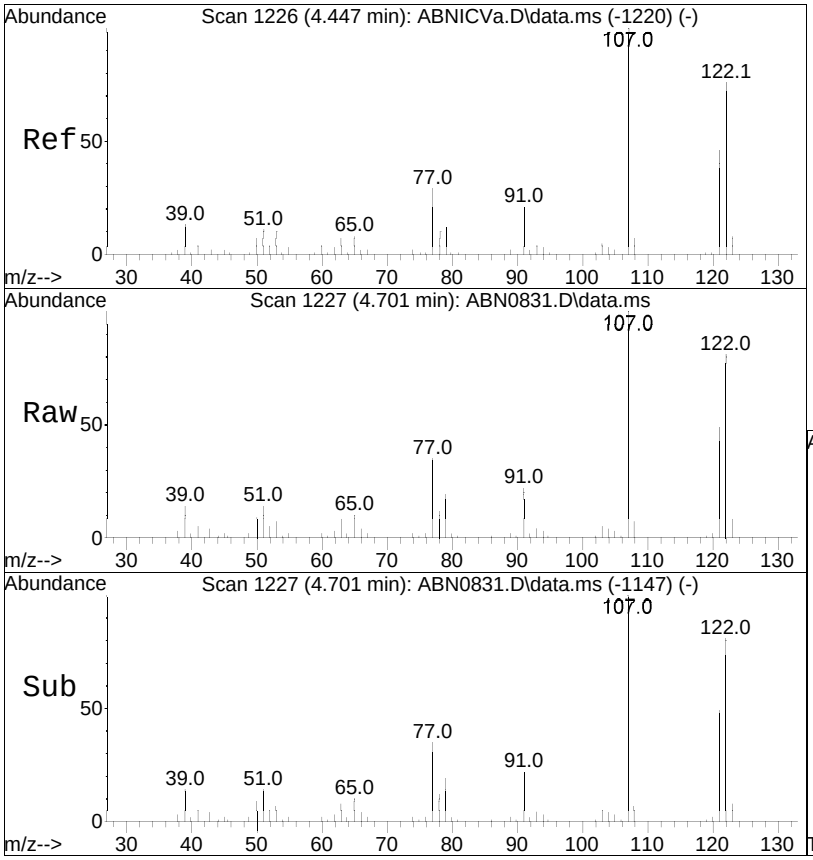


#22
2-Nitrophenol
Concen: 5.17 ug/ml
RT: 4.576 min Scan# 1187
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:139 Resp: 10774

Ion	Ratio	Lower	Upper
139	100		
109	28.7	19.4	29.0
65	48.8	46.1	69.1

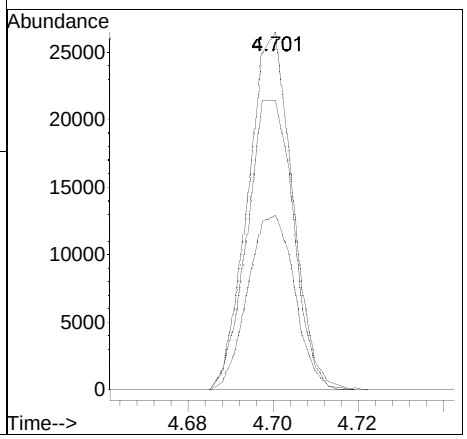


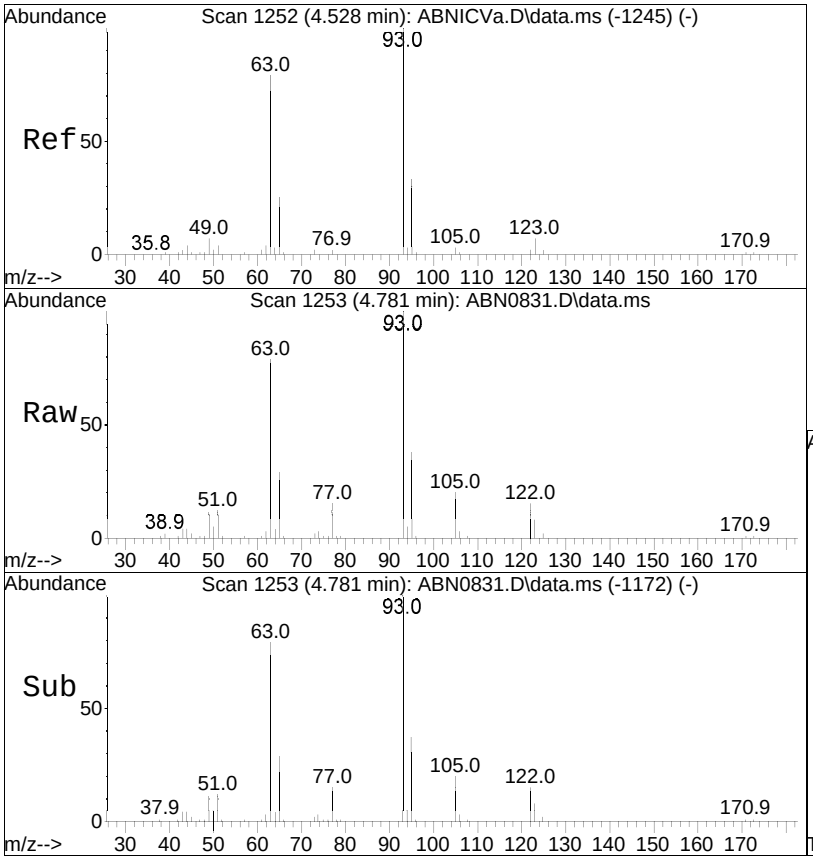


#23
2,4-Dimethylphenol
Concen: 4.73 ug/ml
RT: 4.701 min Scan# 1227
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:107 Resp: 18999

Ion	Ratio	Lower	Upper
107	100		
121	51.9	40.0	60.0
122	84.8	70.2	105.4

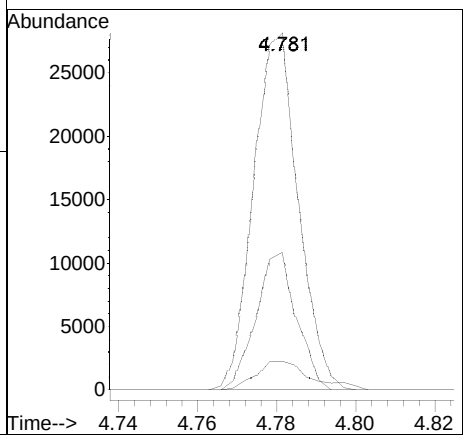


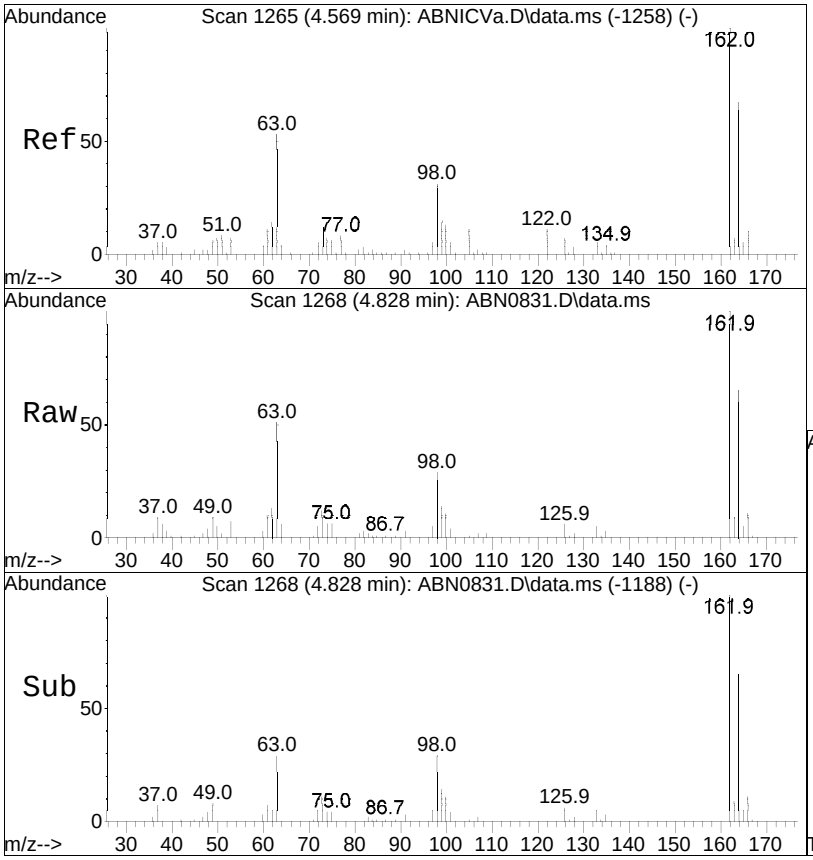


#24
Bis(2-chloroethoxy)methane
Concen: 4.29 ug/ml
RT: 4.781 min Scan# 1253
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 93 Resp: 21959

Ion	Ratio	Lower	Upper
93	100		
95	34.9	25.8	38.8
123	9.9	10.1	15.1#

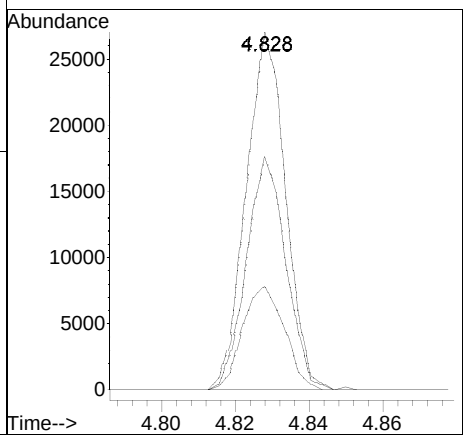


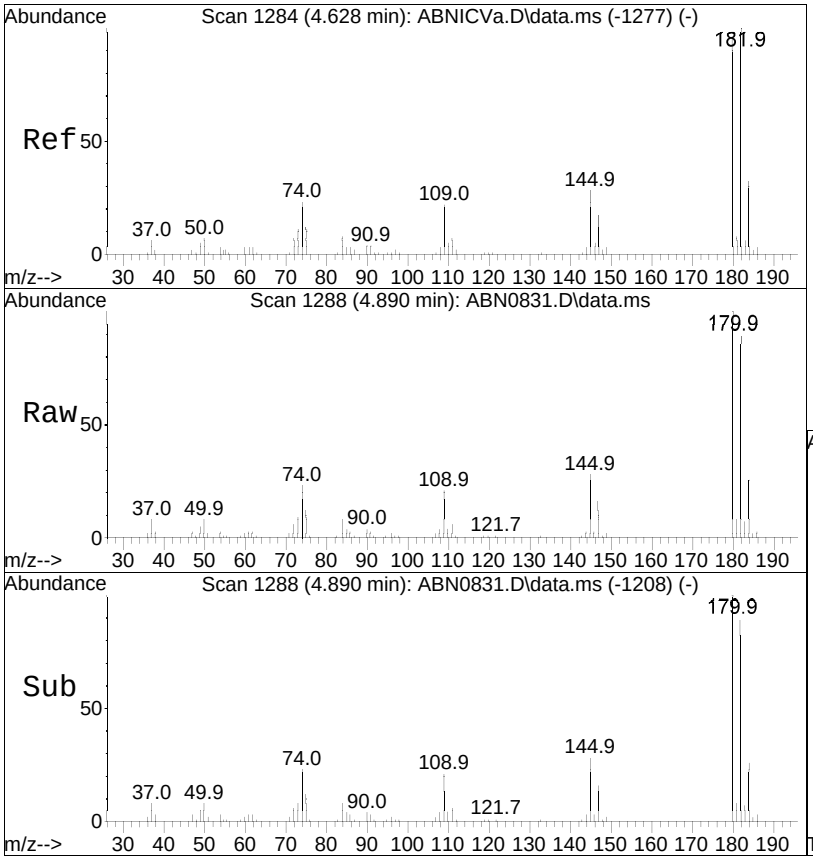


#25
2,4-Dichlorophenol
Concen: 5.27 ug/ml
RT: 4.828 min Scan# 1268
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:162 Resp: 19896

Ion	Ratio	Lower	Upper
162	100		
164	65.2	51.0	76.4
98	30.7	32.2	48.2#

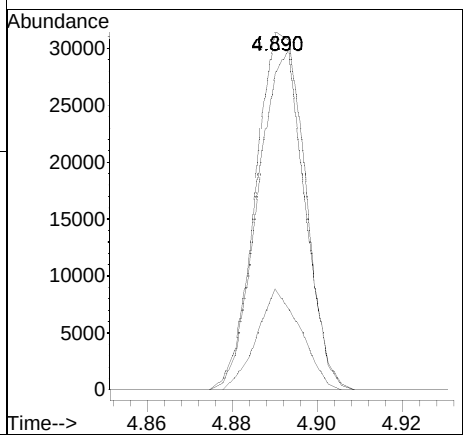


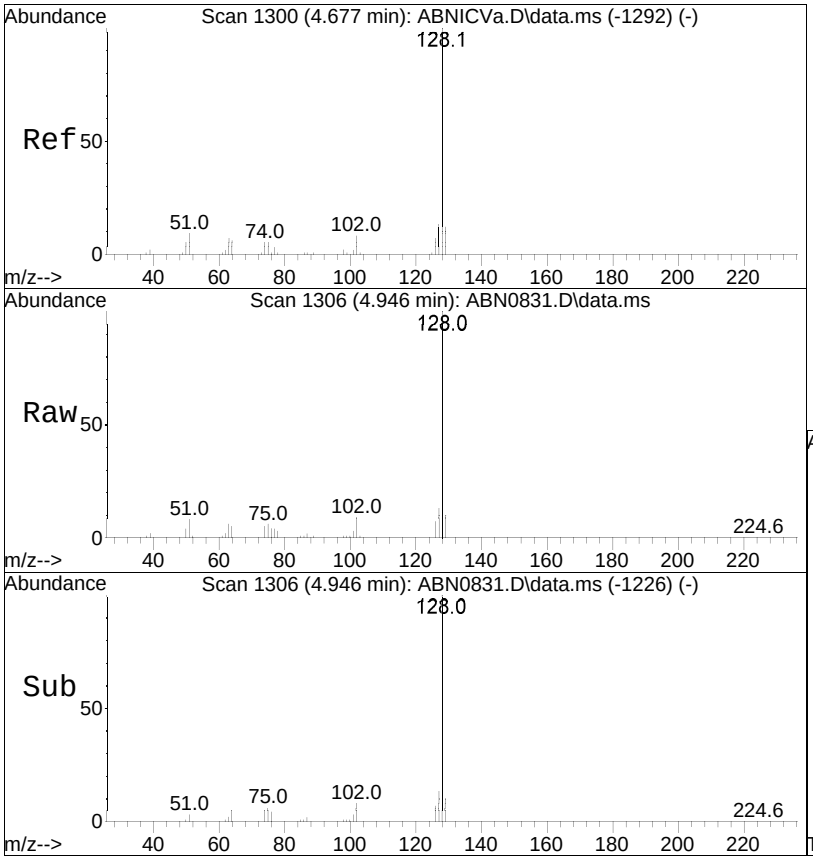


#26
1,2,4-Trichlorobenzene
Concen: 5.46 ug/ml
RT: 4.890 min Scan# 1288
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:180 Resp: 25184

Ion	Ratio	Lower	Upper
180	100		
182	90.4	76.0	114.0
145	25.2	25.7	38.5#

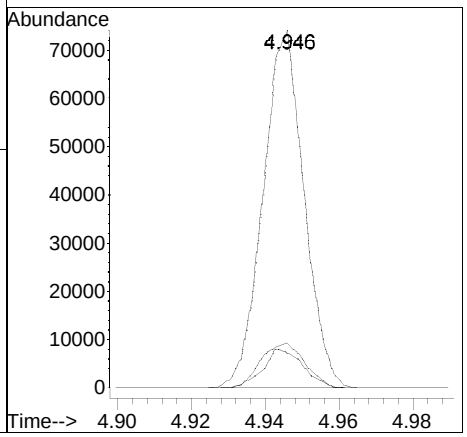


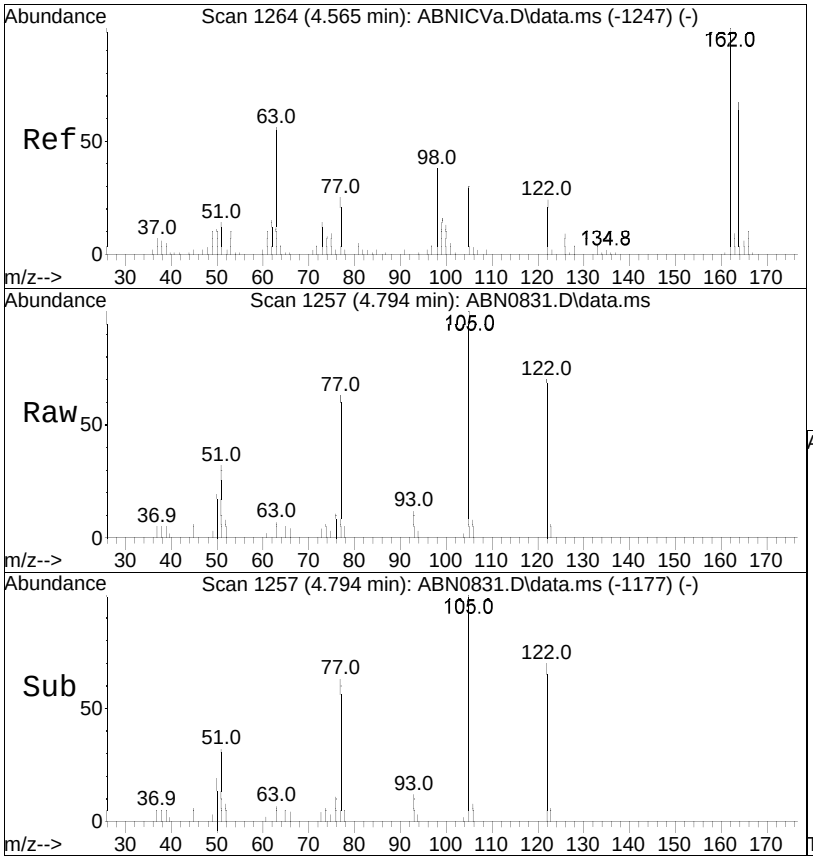


#35
Naphthalene
Concen: 4.58 ug/ml
RT: 4.946 min Scan# 1306
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:128 Resp: 56570

Ion	Ratio	Lower	Upper
128	100		
129	10.7	8.7	13.1
127	13.6	10.3	15.5

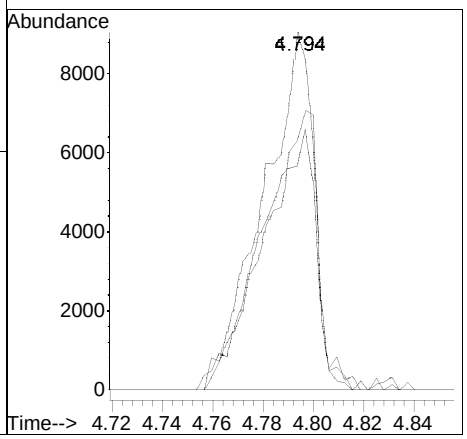


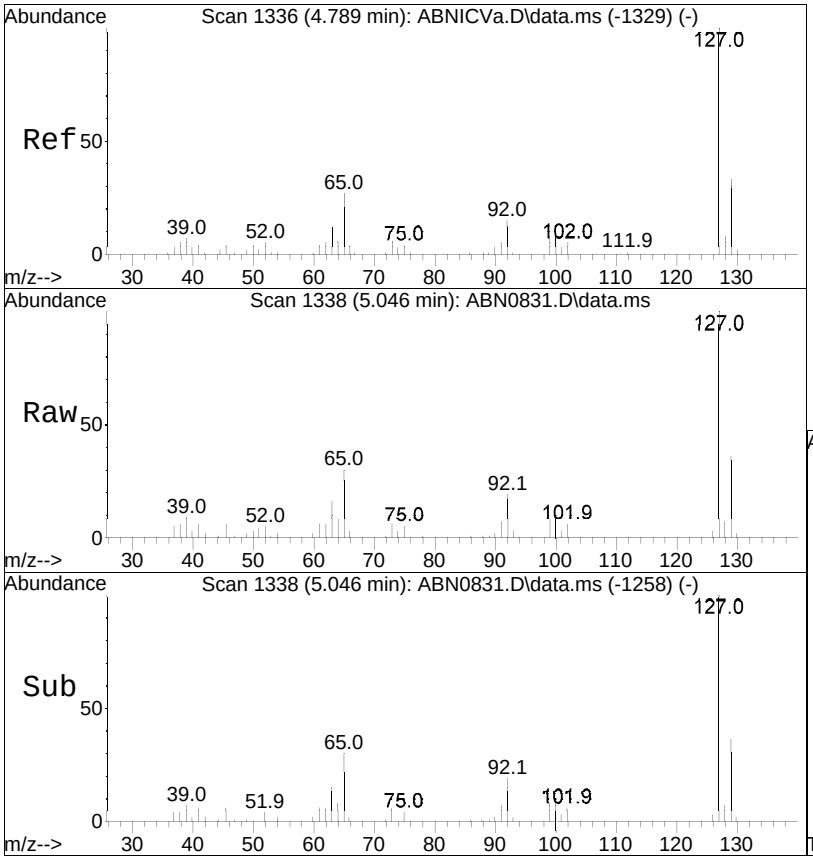


#36
Benzoic Acid
Concen: 6.42 ug/ml
RT: 4.794 min Scan# 1257
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:105 Resp: 12689

Ion	Ratio	Lower	Upper
105	100		
122	81.4	59.9	89.9
77	78.7	60.1	90.1

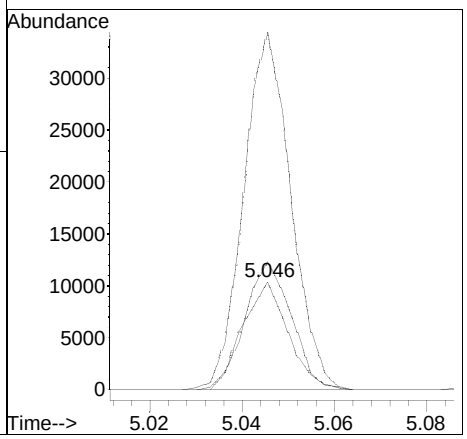


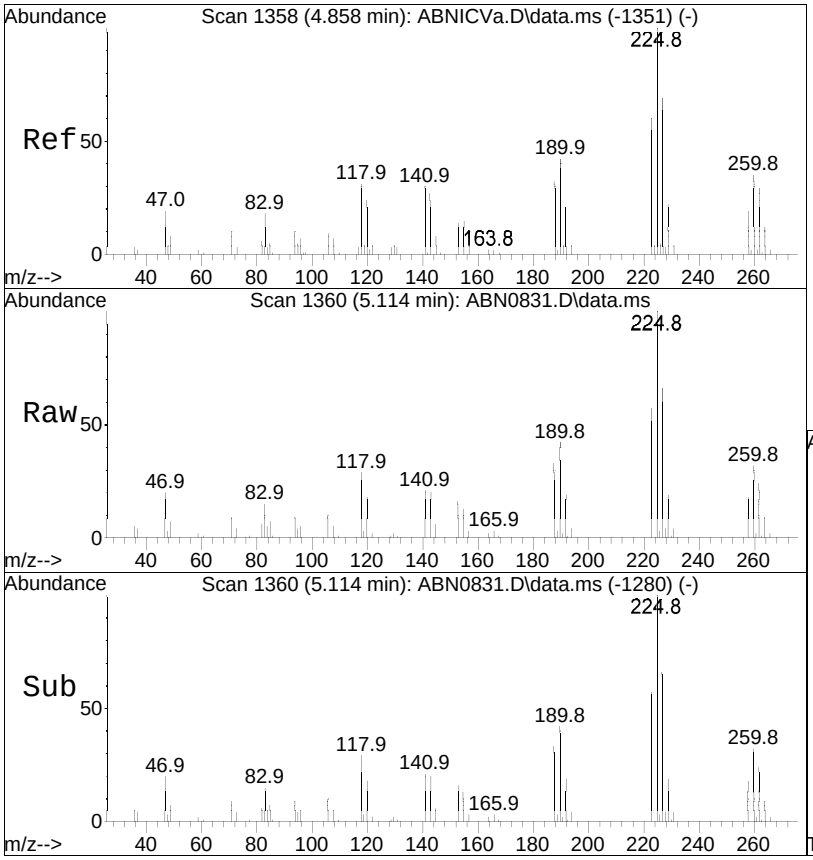


#37
4-Chloroaniline
Concen: 4.86 ug/ml
RT: 5.046 min Scan# 1338
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 65 Resp: 7085

Ion	Ratio	Lower	Upper
65	100		
127	341.8	237.6	356.4
129	121.7	76.3	114.5#

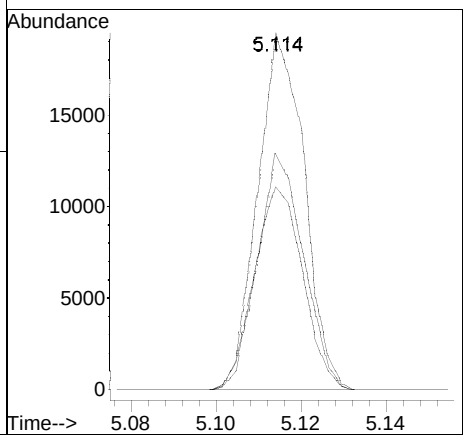


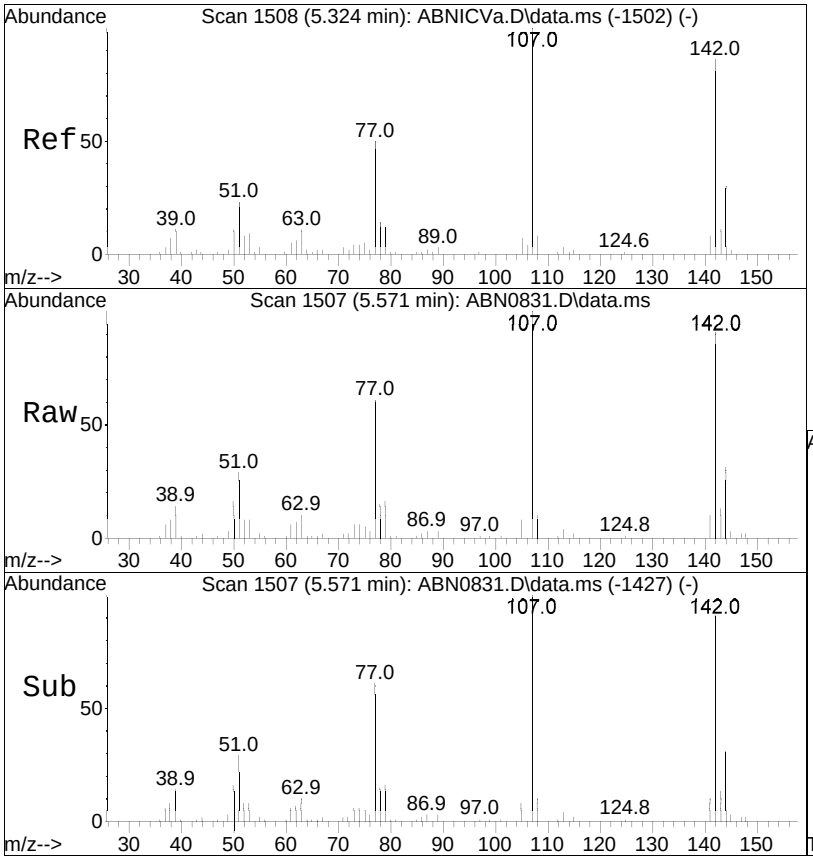


#38
Hexachlorobutadiene
Concen: 5.85 ug/ml
RT: 5.114 min Scan# 1360
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:225 Resp: 14703

Ion	Ratio	Lower	Upper
225	100		
223	59.1	50.3	75.5
227	65.9	52.2	78.2

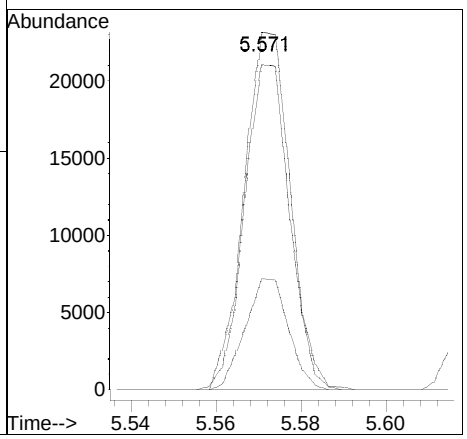


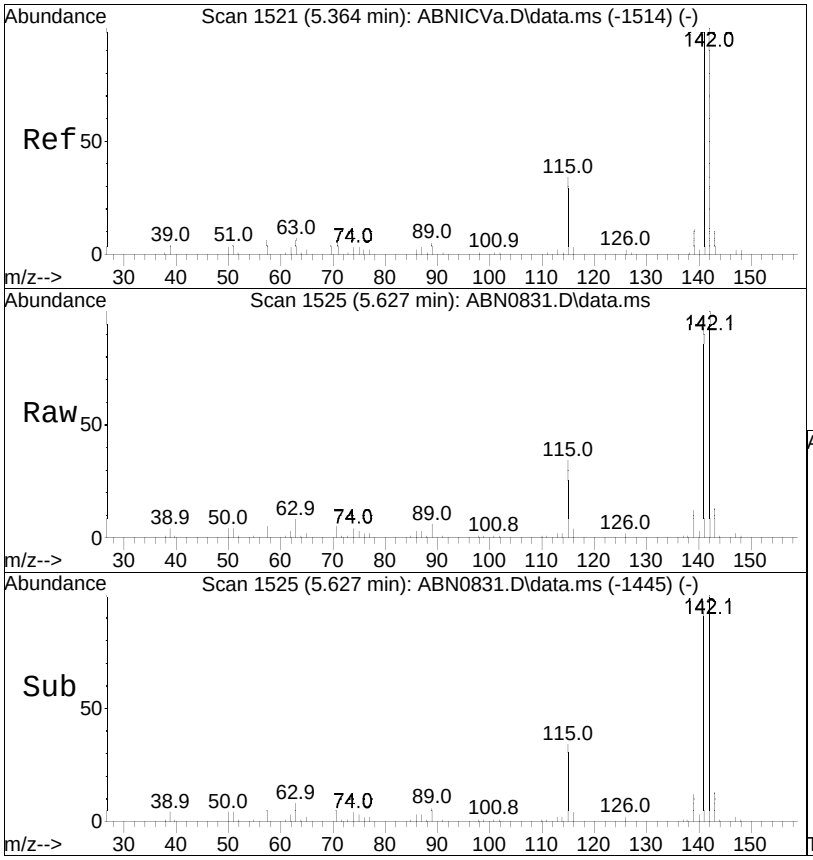


#39
p-Chloro-m-cresol
Concen: 5.36 ug/ml
RT: 5.571 min Scan# 1507
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:107 Resp: 17292

Ion	Ratio	Lower	Upper
107	100		
144	29.3	20.9	31.3
142	88.6	66.1	99.1

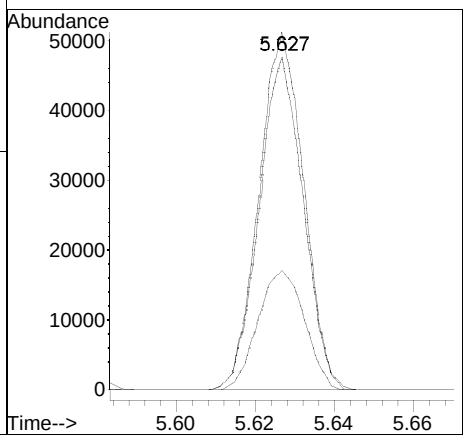


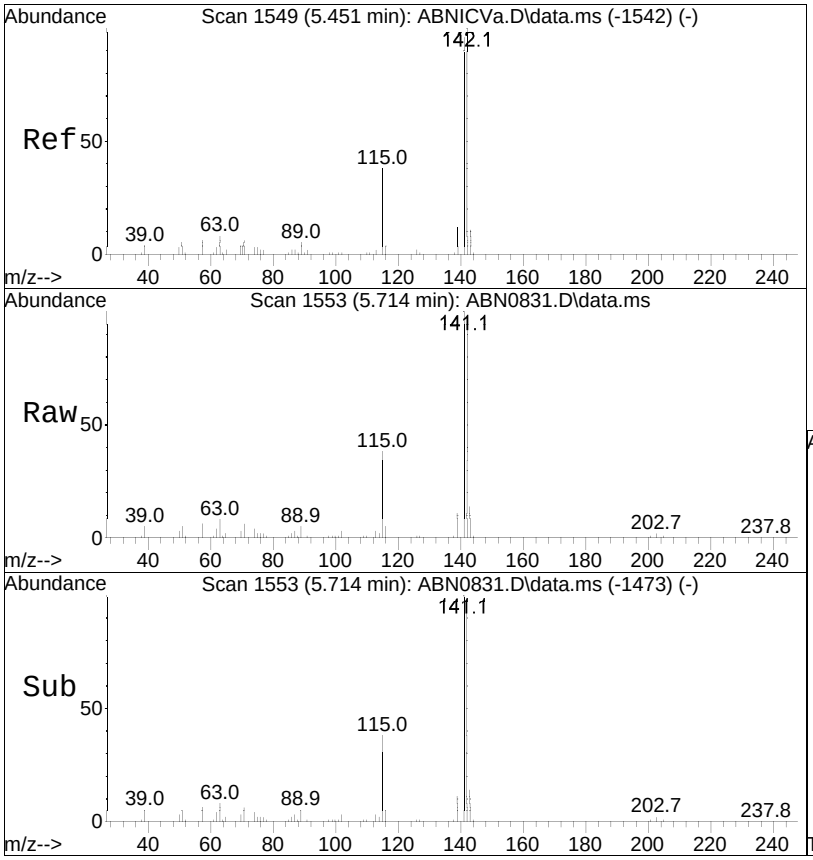


#40
2-Methylnaphthalene
Concen: 4.96 ug/ml
RT: 5.627 min Scan# 1525
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:142 Resp: 39805

Ion	Ratio	Lower	Upper
142	100		
141	91.5	69.6	104.4
115	35.0	26.6	40.0

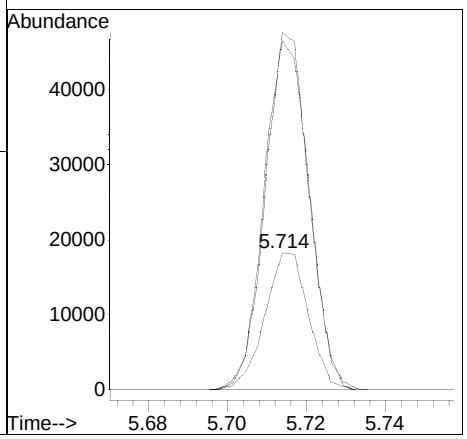


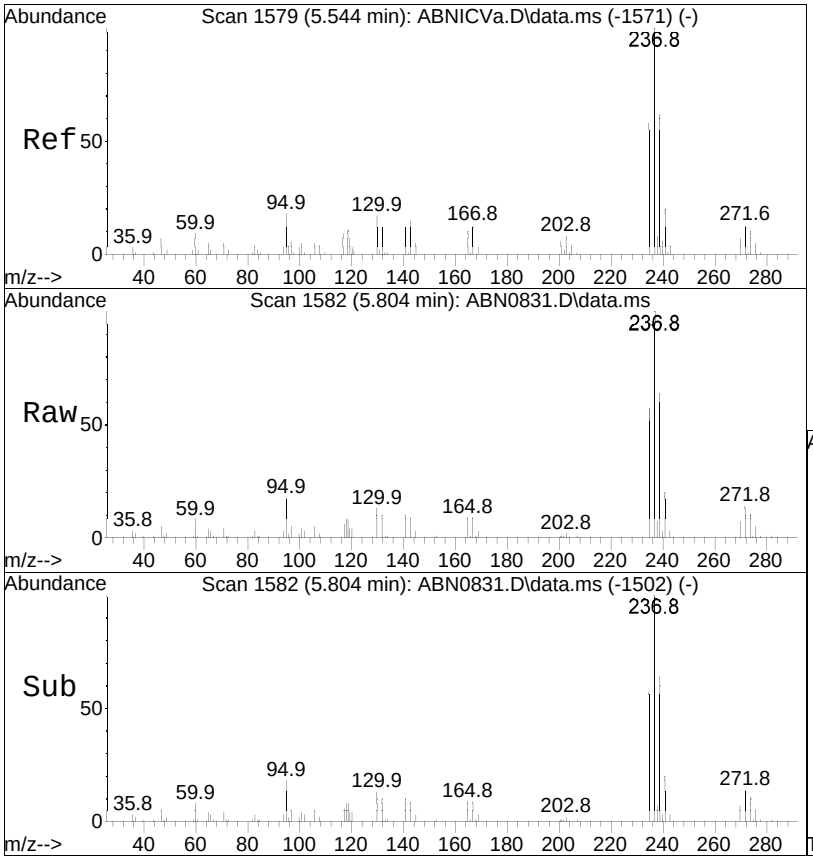


#41
1-Methylnaphthalene
Concen: 5.04 ug/ml
RT: 5.714 min Scan# 1553
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:115 Resp: 13997

Ion	Ratio	Lower	Upper
115	100		
141	259.4	207.8	311.6
142	262.9	226.8	340.2

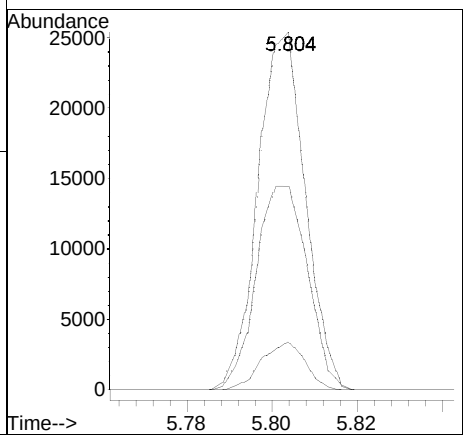


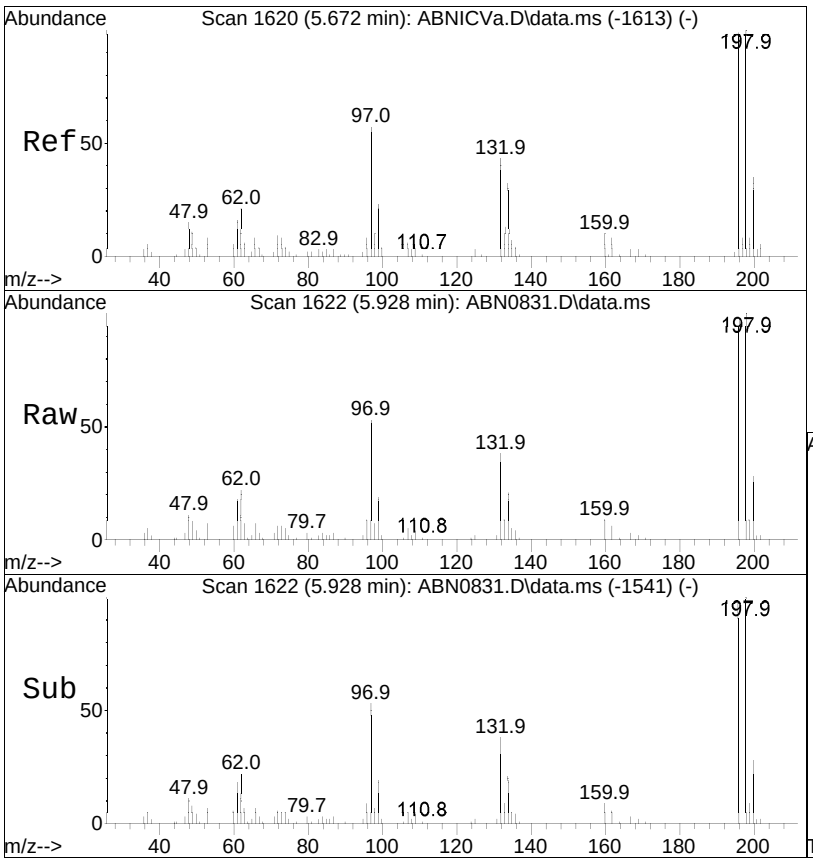


#42
Hexachlorocyclopentadiene
Concen: 6.41 ug/ml
RT: 5.804 min Scan# 1582
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:237 Resp: 19482

Ion	Ratio	Lower	Upper
237	100		
235	62.0	49.7	74.5
272	12.5	9.8	14.6

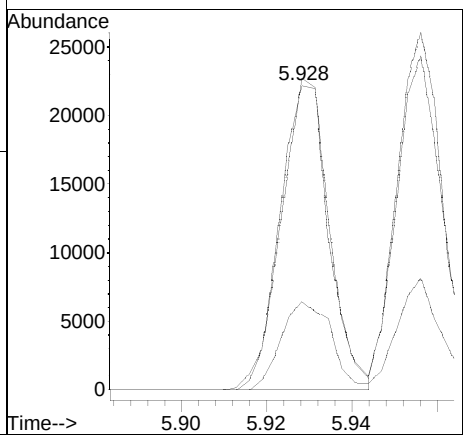


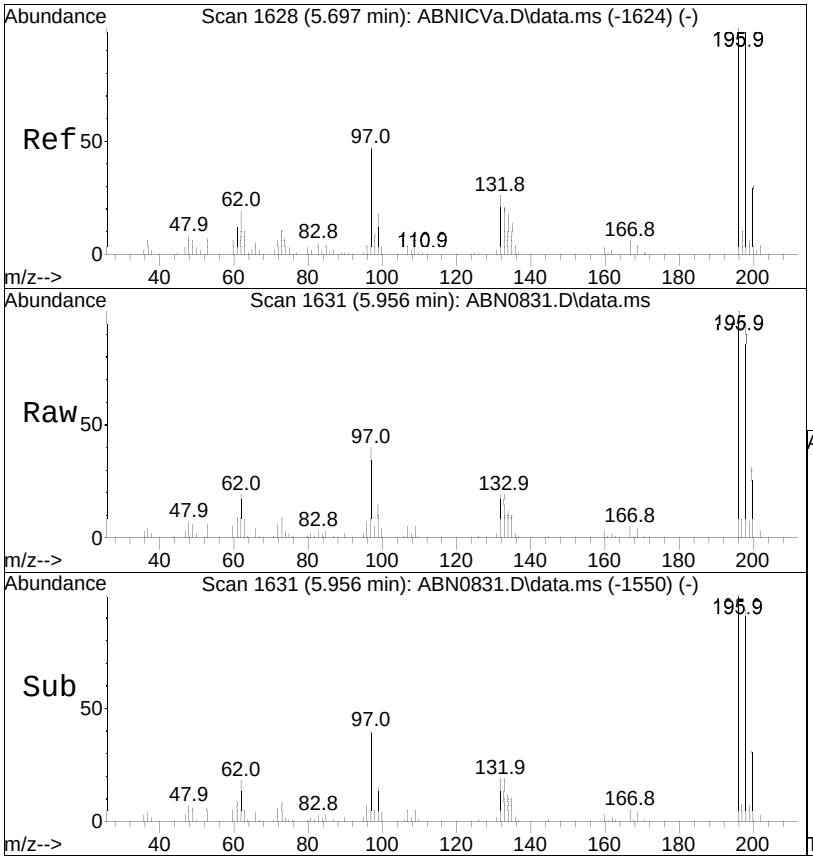


#43
2,4,6-Trichlorophenol
Concen: 6.05 ug/ml M3
RT: 5.928 min Scan# 1622
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:196 Resp: 17927

Ion	Ratio	Lower	Upper
196	100		
198	97.5	77.5	116.3
200	29.6	23.8	35.6

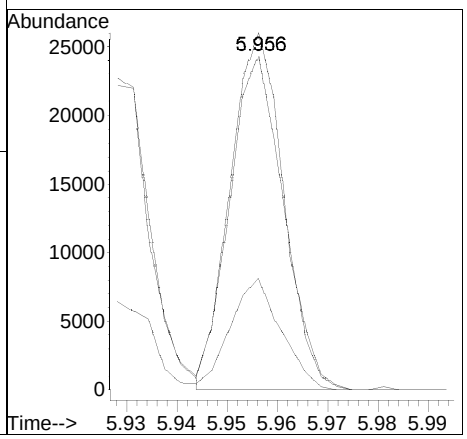


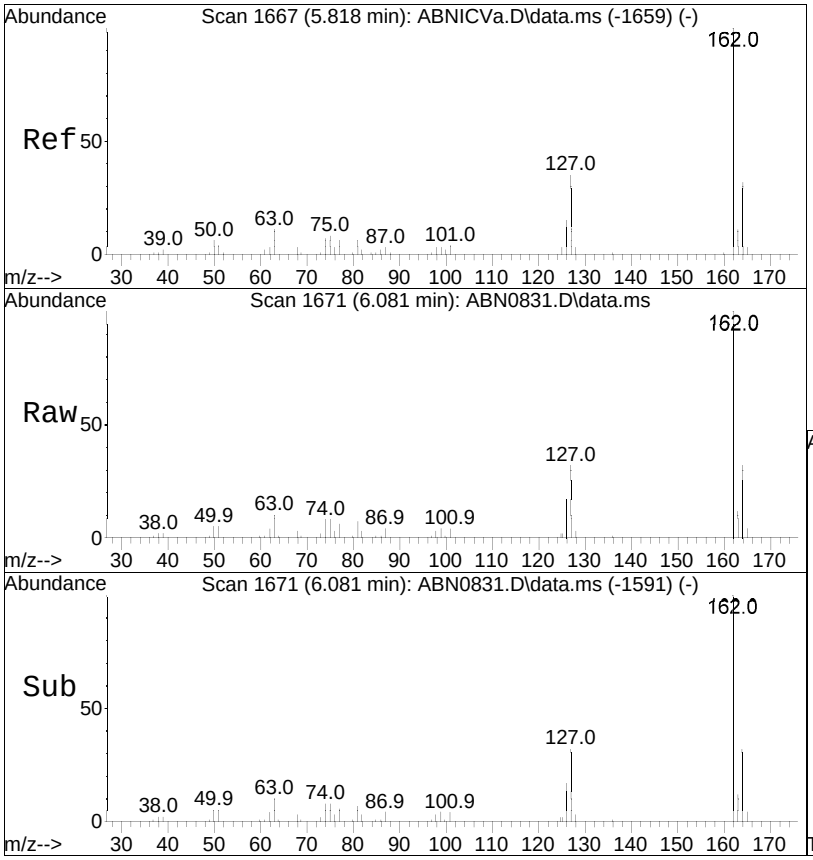


#44
2,4,5-Trichlorophenol
Concen: 6.47 ug/ml
RT: 5.956 min Scan# 1631
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:196 Resp: 19227

Ion	Ratio	Lower	Upper
196	100		
200	29.4	25.4	38.0
198	93.3	78.0	117.0

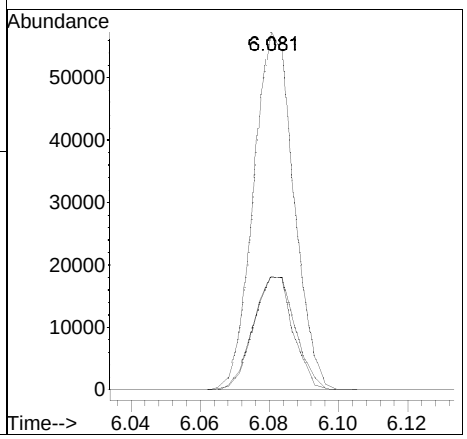


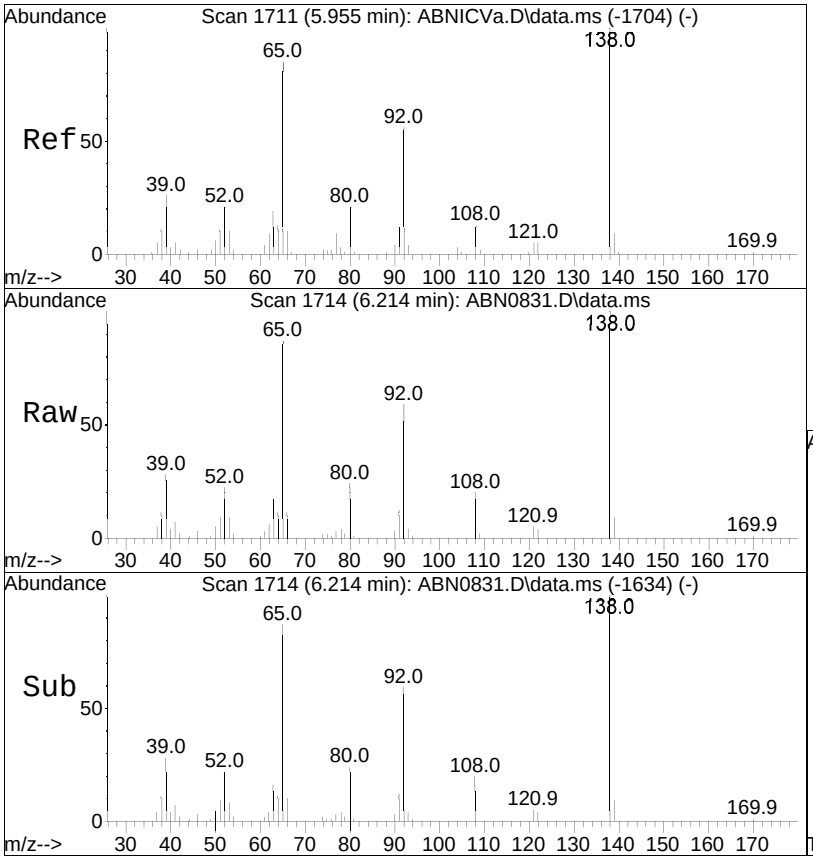


#46
2-Chloronaphthalene
Concen: 5.23 ug/ml
RT: 6.081 min Scan# 1671
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:162 Resp: 46069

Ion	Ratio	Lower	Upper
162	100		
127	31.5	32.2	48.4#
164	32.7	25.7	38.5

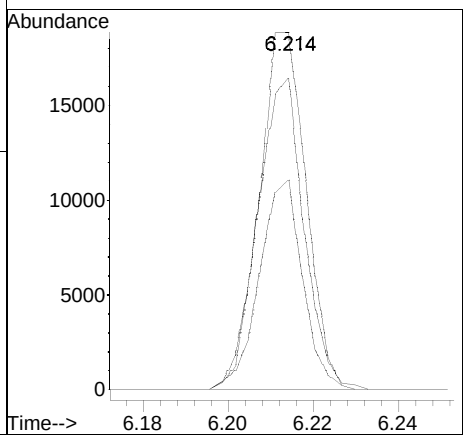


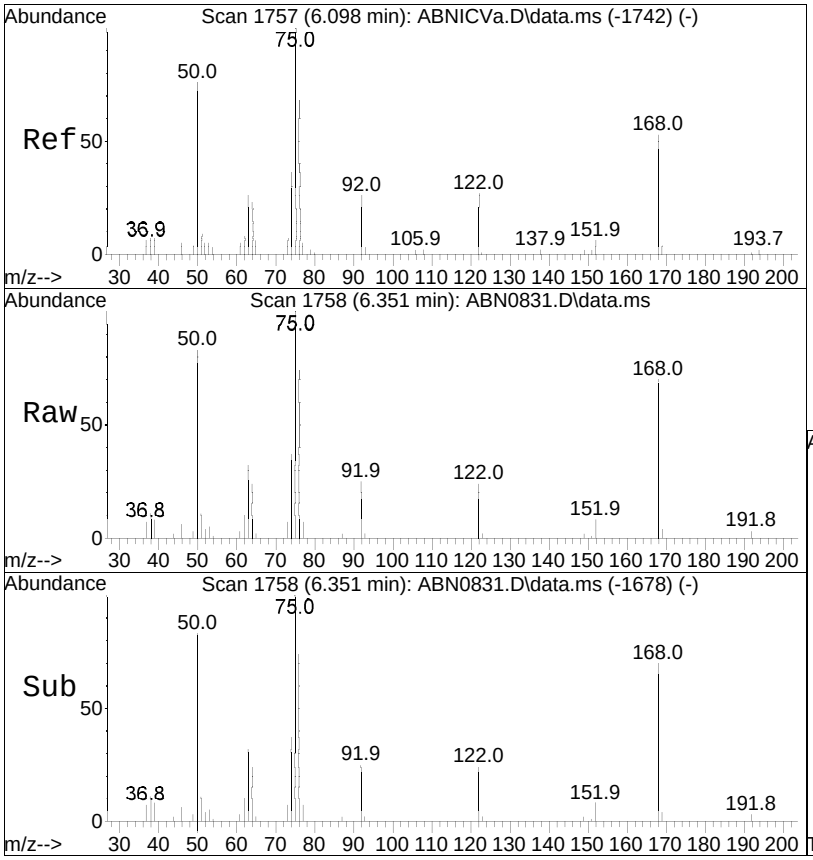


#47
2-Nitroaniline
Concen: 5.67 ug/ml
RT: 6.214 min Scan# 1714
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:138 Resp: 14433

Ion	Ratio	Lower	Upper
138	100		
92	53.8	53.5	80.3
65	85.0	86.3	129.5#

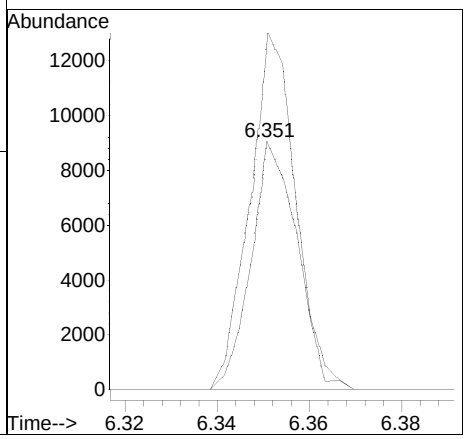


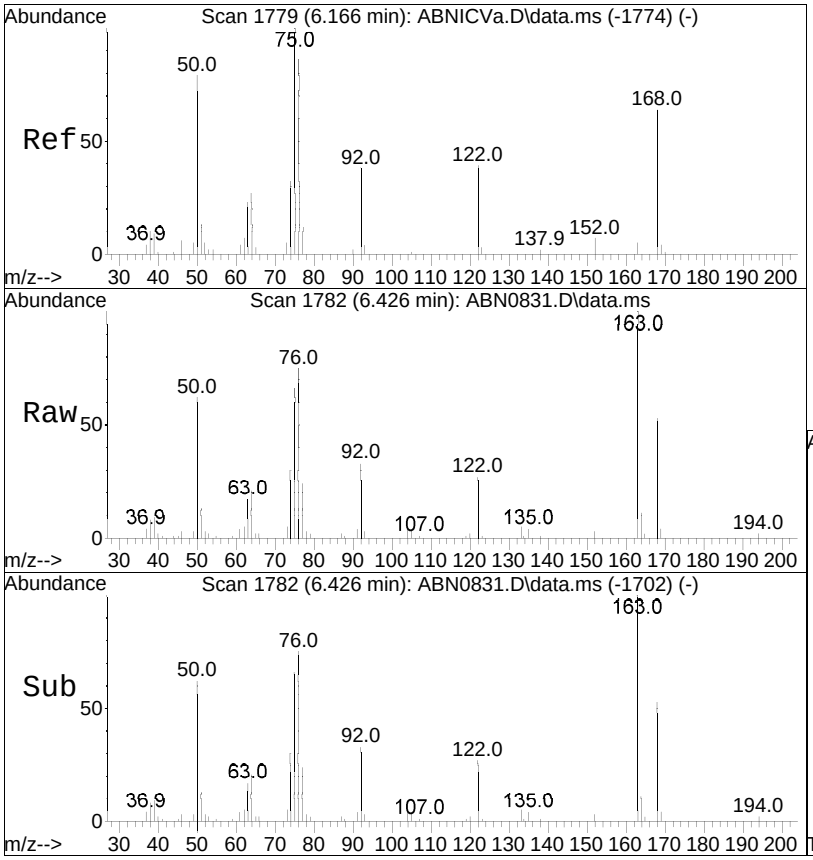


#48
1,4-Dinitrobenzene
Concen: 5.28 ug/ml
RT: 6.351 min Scan# 1758
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:168 Resp: 6269

Ion	Ratio	Lower	Upper
168	100		
75	143.5	121.8	182.8

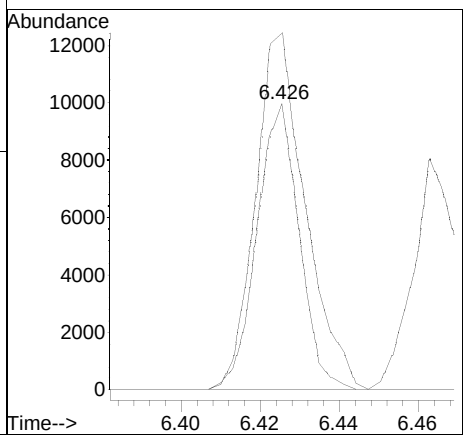


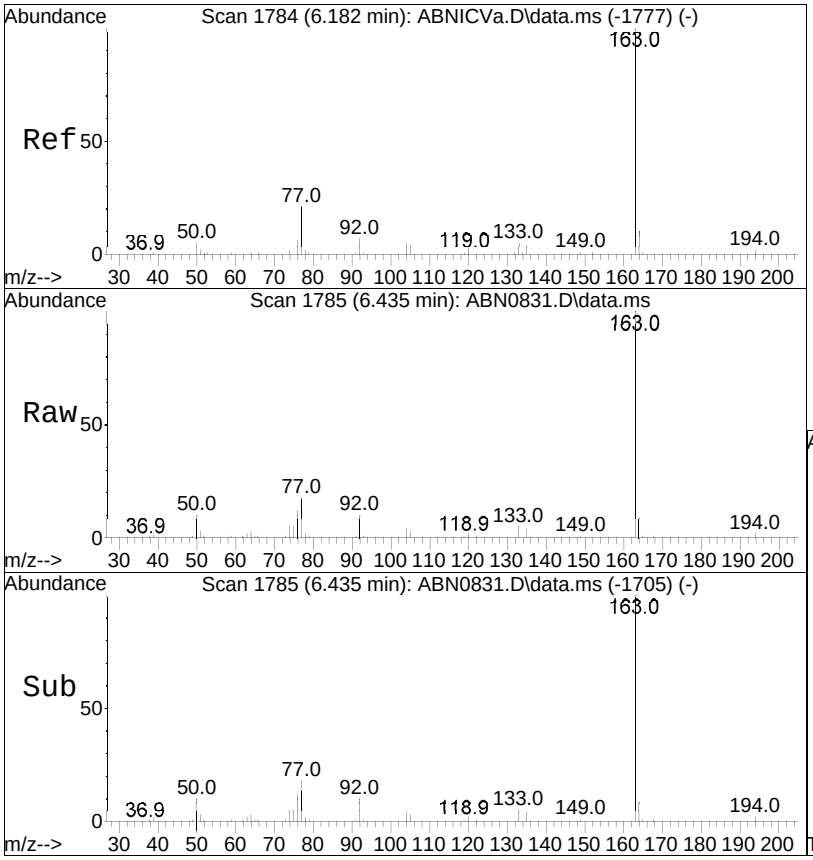


#49
1,3-Dinitrobenzene
Concen: 5.34 ug/ml
RT: 6.426 min Scan# 1782
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:168 Resp: 7396

Ion	Ratio	Lower	Upper
168	100		
75	146.8	22.7	34.1#

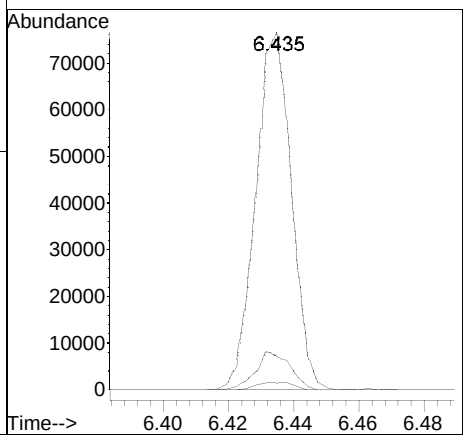


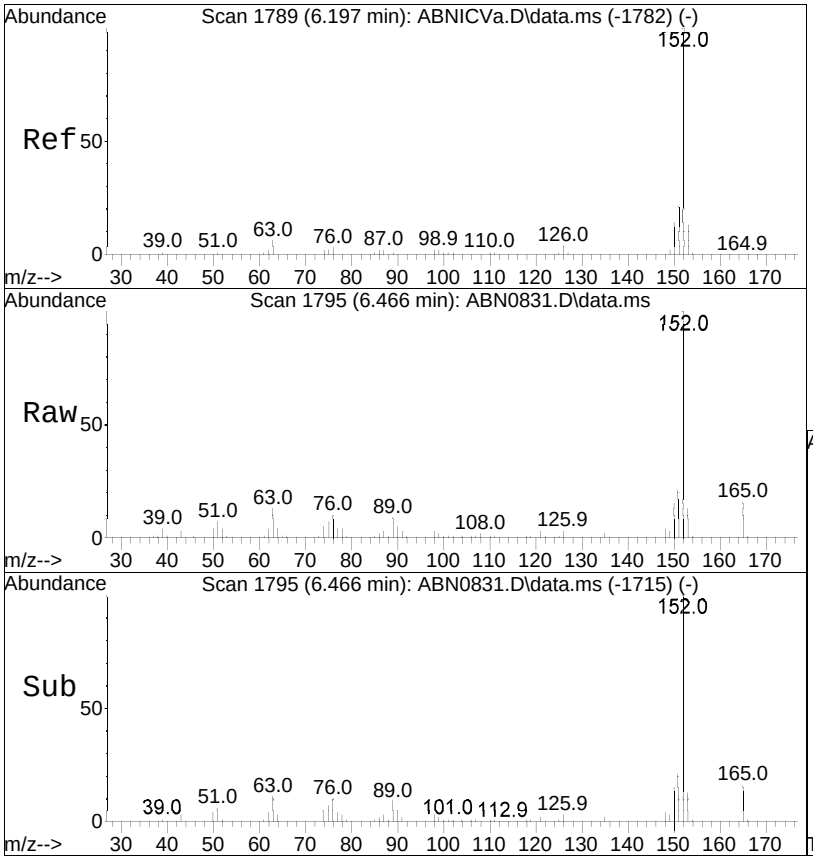


#50
Dimethyl phthalate
Concen: 5.61 ug/ml
RT: 6.435 min Scan# 1785
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:163 Resp: 57671

Ion	Ratio	Lower	Upper
163	100		
194	2.1	3.5	5.3#
164	10.4	7.9	11.9

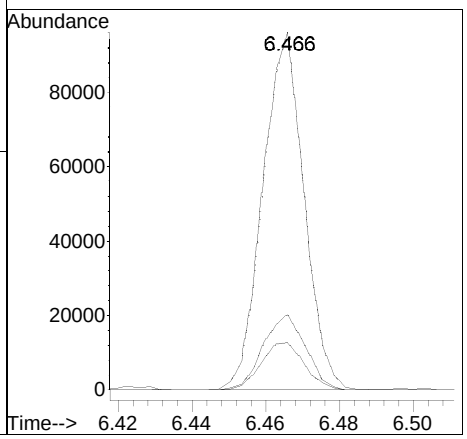


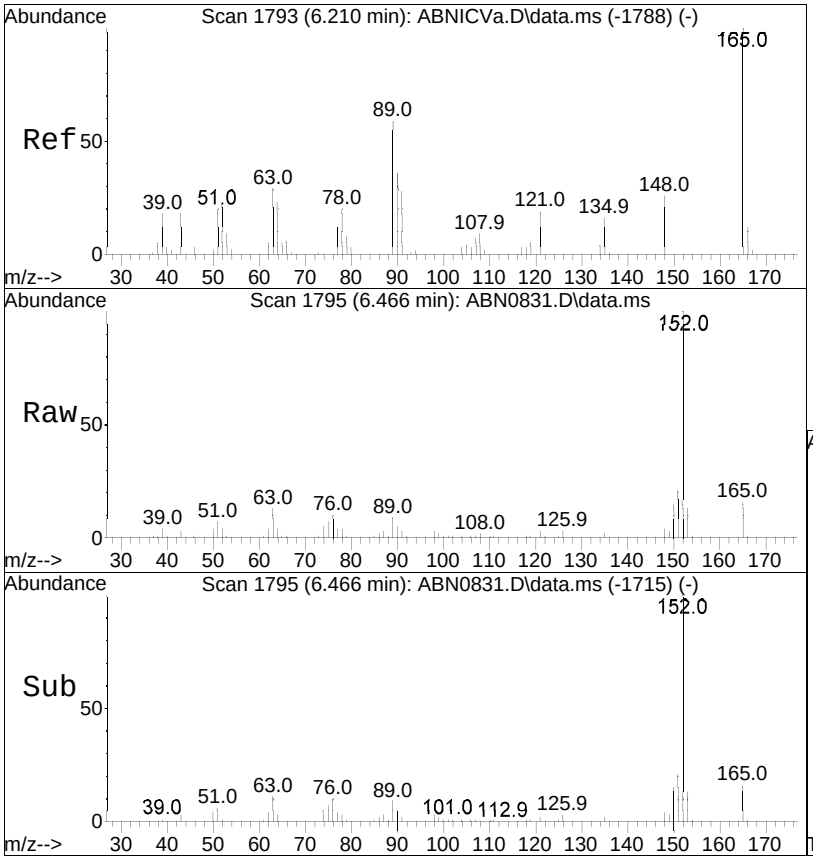


#51
Acenaphthylene
Concen: 5.53 ug/ml
RT: 6.466 min Scan# 1795
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:152 Resp: 73784

Ion	Ratio	Lower	Upper
152	100		
151	21.7	15.8	23.6
153	14.0	10.5	15.7

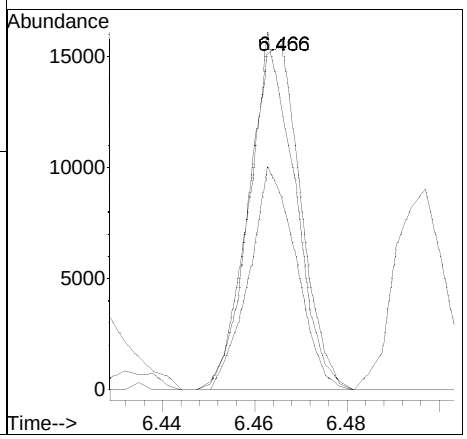


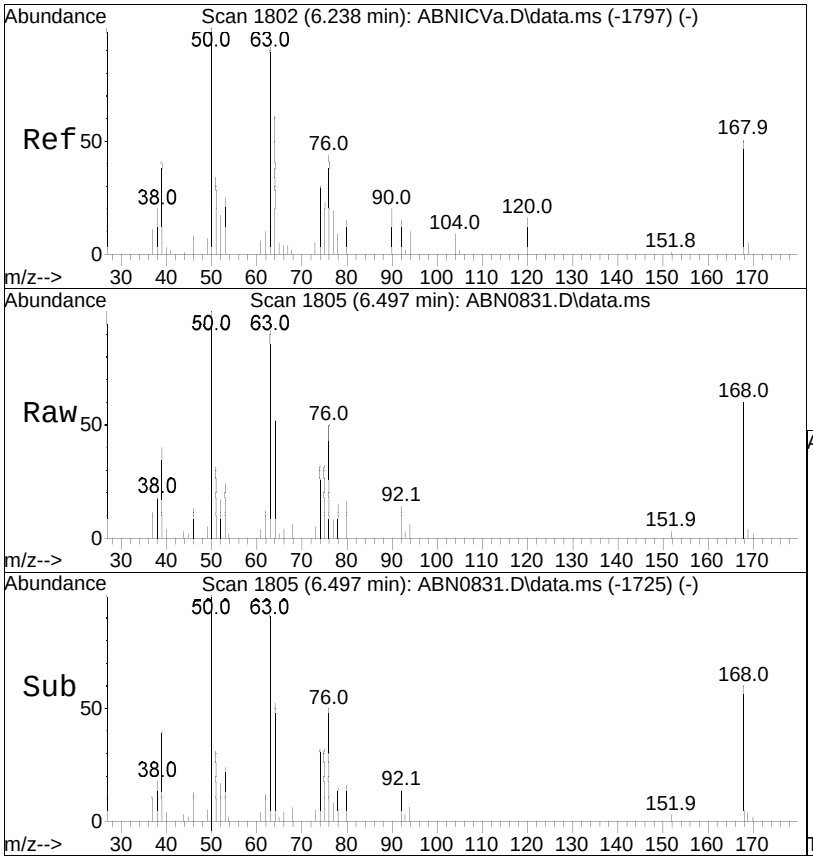


#52
2,6-Dinitrotoluene
Concen: 5.64 ug/ml
RT: 6.466 min Scan# 1795
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:165 Resp: 11979

Ion	Ratio	Lower	Upper
165	100		
89	59.5	54.2	81.2
63	92.3	64.2	96.2

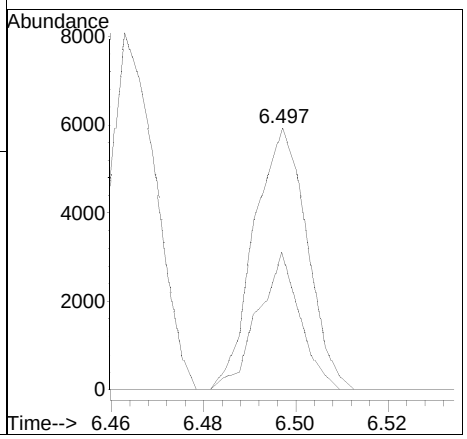


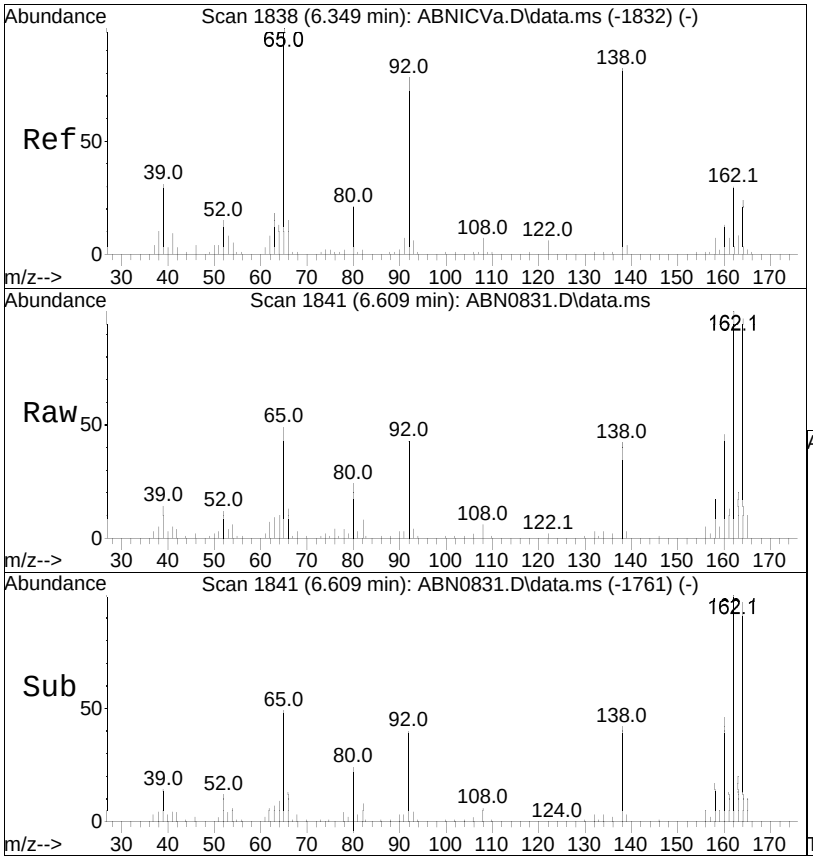


#53
1,2-Dinitrobenzene
Concen: 5.69 ug/ml
RT: 6.497 min Scan# 1805
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:168 Resp: 4721

Ion	Ratio	Lower	Upper
168	100		
75	41.8	30.9	46.3

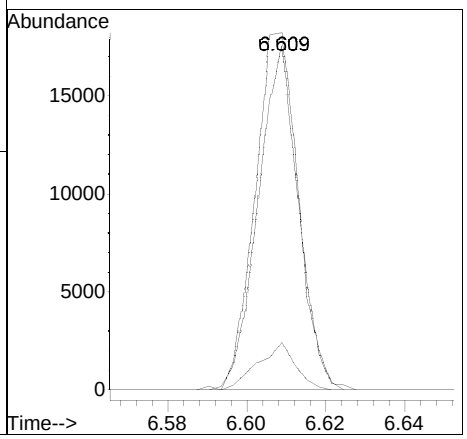


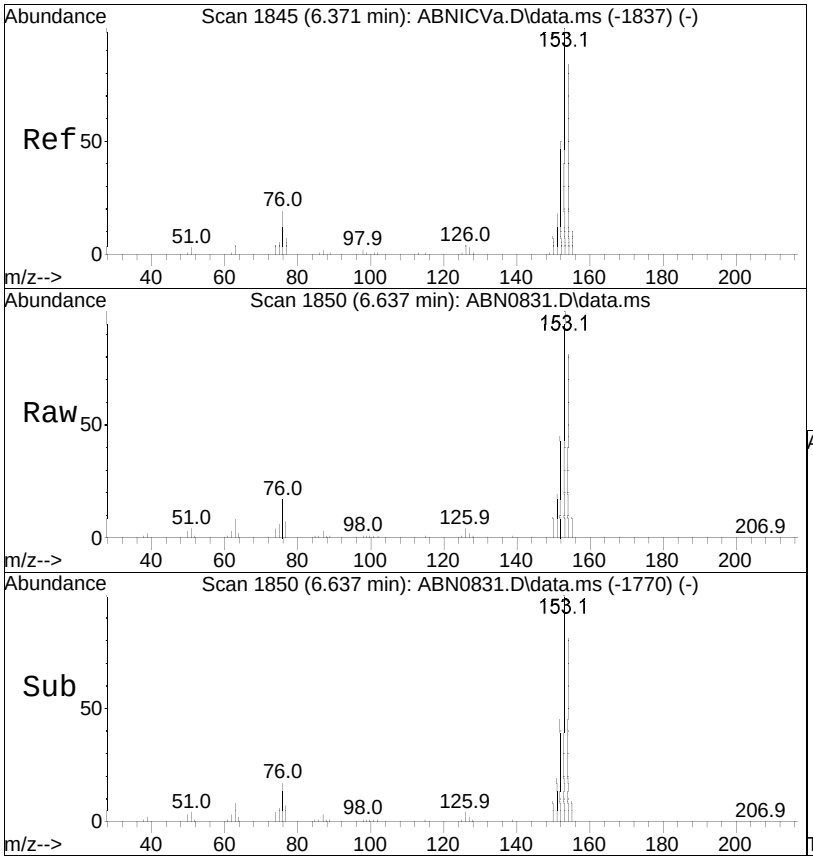


#63
3-Nitroaniline
Concen: 4.62 ug/ml
RT: 6.609 min Scan# 1841
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:138 Resp: 12331

Ion	Ratio	Lower	Upper
138	100		
92	111.1	93.4	140.2
108	12.9	9.5	14.3

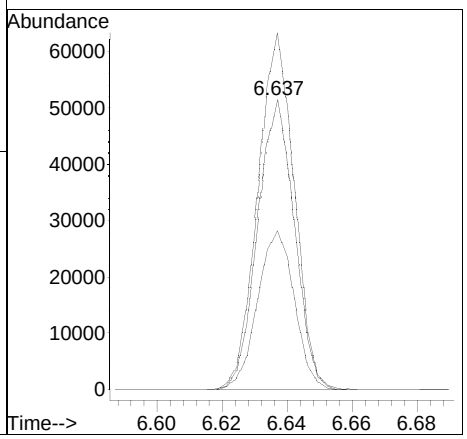


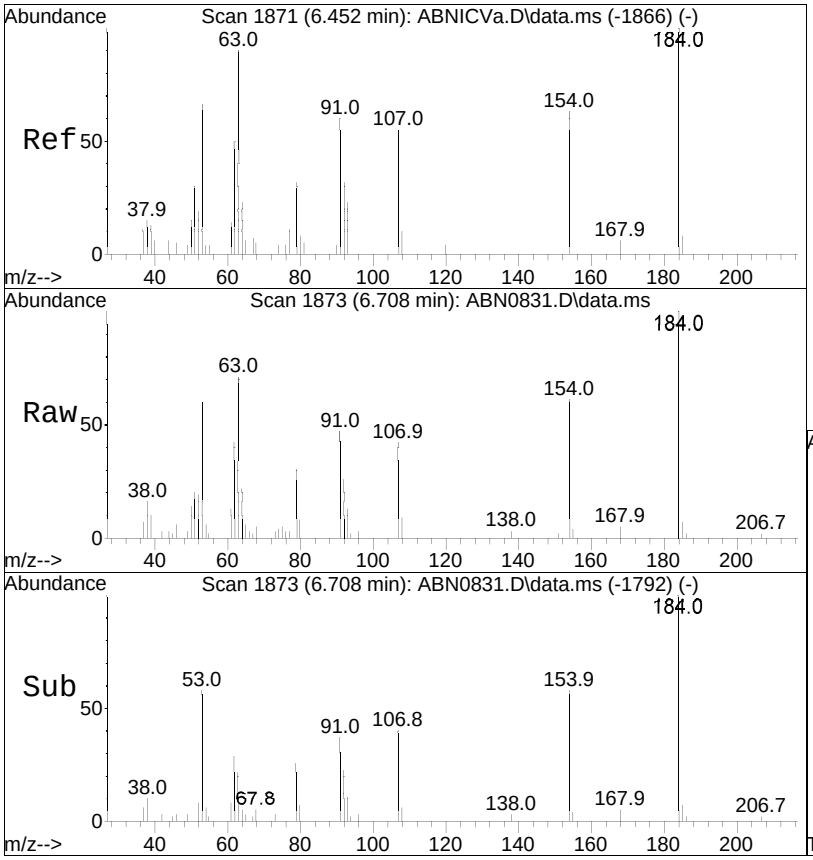


#64
Acenaphthene
Concen: 4.41 ug/ml
RT: 6.637 min Scan# 1850
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:154 Resp: 40348

Ion	Ratio	Lower	Upper
154	100		
153	122.0	85.3	127.9
152	55.2	41.4	62.0

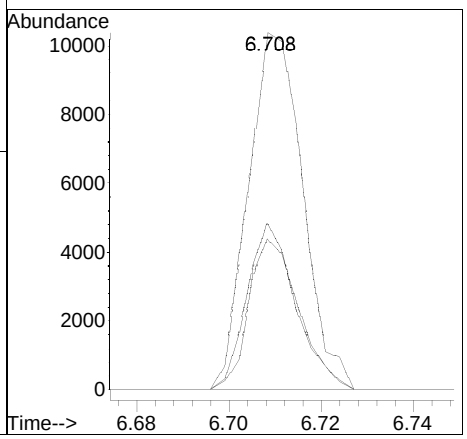


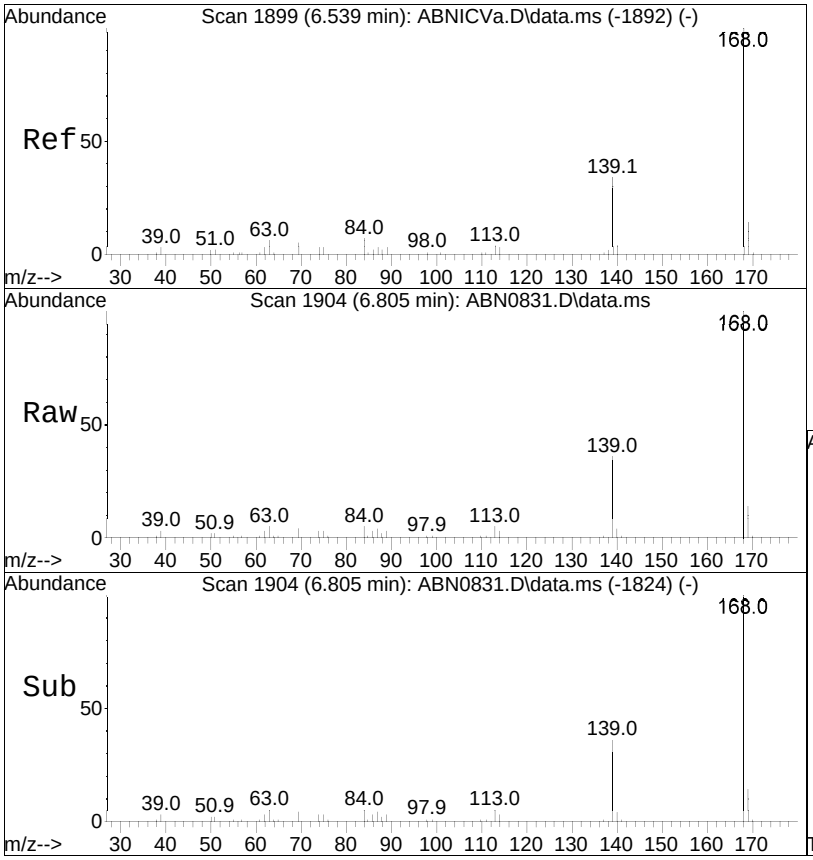


#65
2,4-Dinitrophenol
Concen: 6.23 ug/ml
RT: 6.708 min Scan# 1873
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:184 Resp: 8460

Ion	Ratio	Lower	Upper
184	100		
107	38.9	37.7	56.5
91	41.7	46.3	69.5#

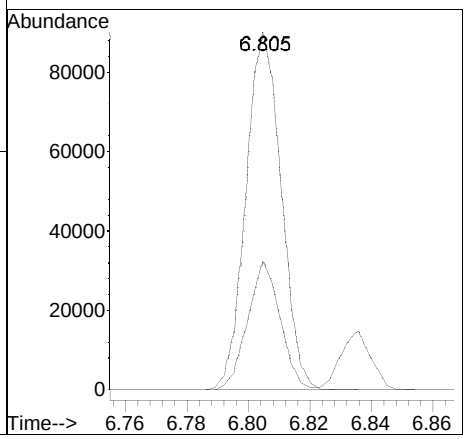


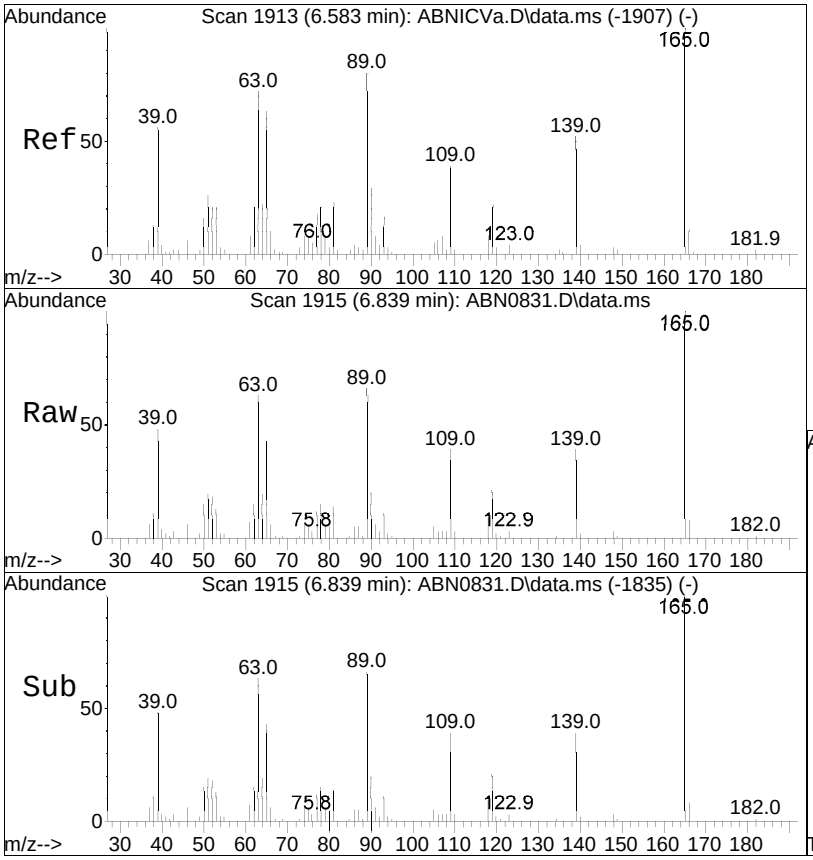


#66
Dibenzofuran
Concen: 4.86 ug/ml
RT: 6.805 min Scan# 1904
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:168 Resp: 70893

Ion	Ratio	Lower	Upper
168	100		
139	33.4	31.4	47.2

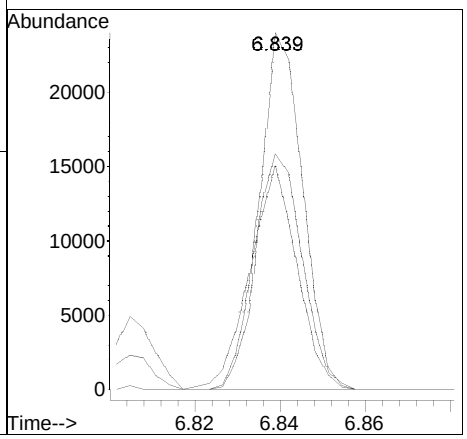


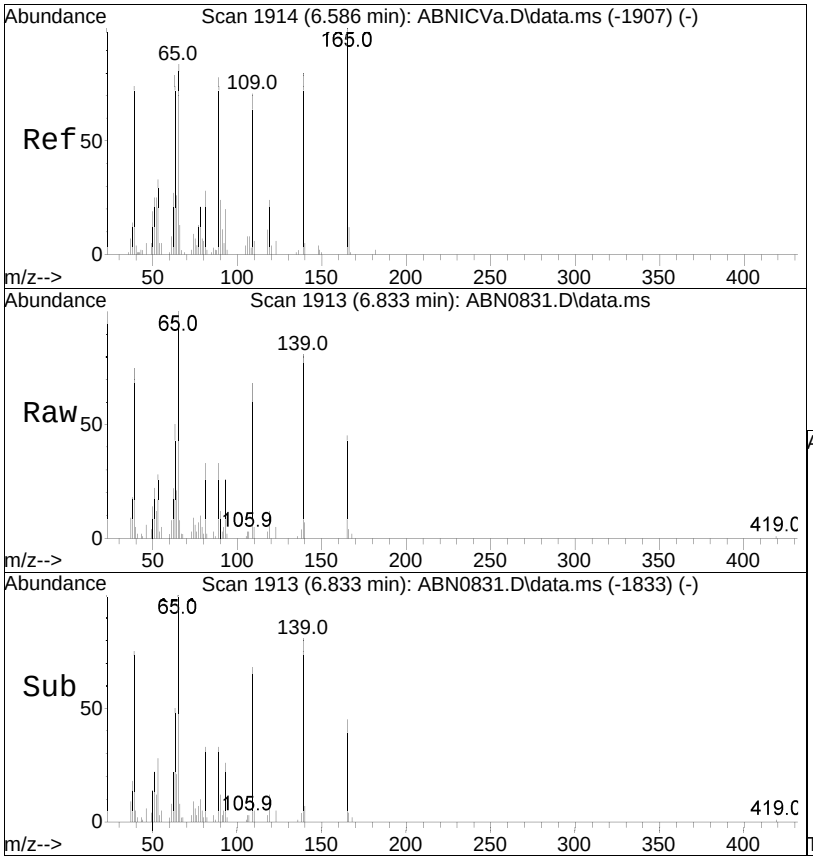


#67
2,4-Dinitrotoluene
Concen: 5.20 ug/ml
RT: 6.839 min Scan# 1915
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:165 Resp: 17108

Ion	Ratio	Lower	Upper
165	100		
89	70.4	72.0	108.0#
63	67.6	52.7	79.1

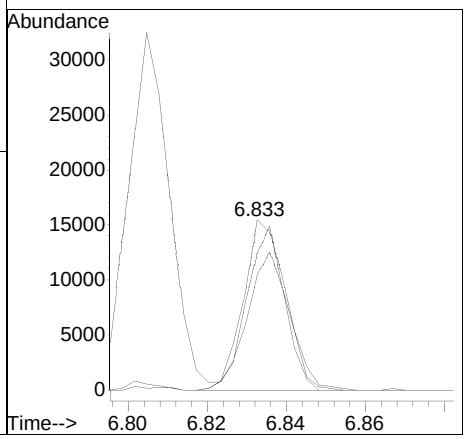


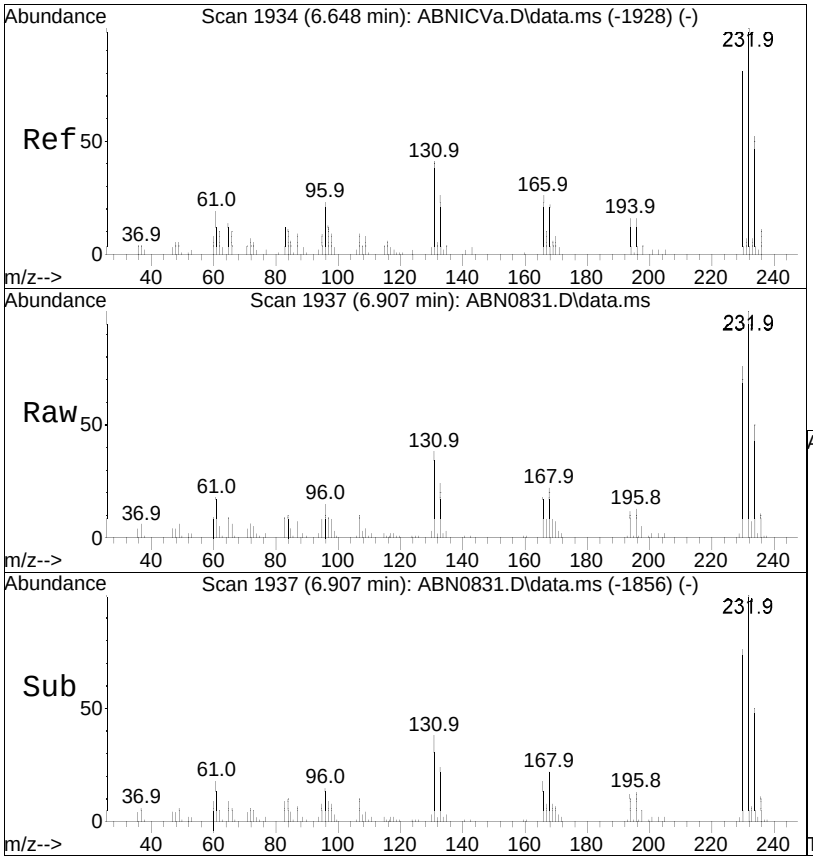


#68
4-Nitrophenol
Concen: 5.26 ug/ml
RT: 6.833 min Scan# 1913
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 65 Resp: 11654

Ion	Ratio	Lower	Upper
65	100		
109	74.7	47.4	71.2#
139	87.7	76.6	115.0

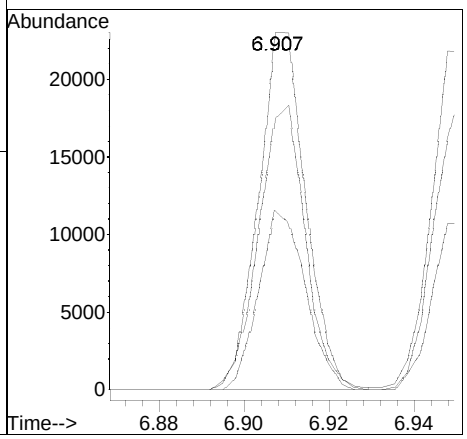


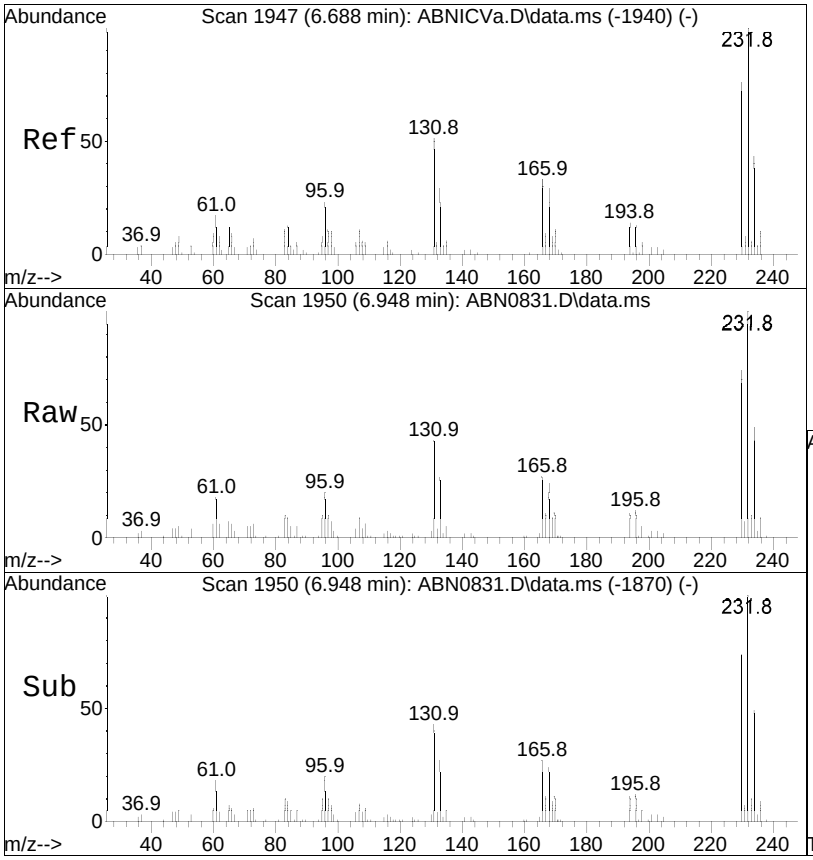


#69
2,3,5,6-Tetrachlorophenol
Concen: 5.81 ug/ml
RT: 6.907 min Scan# 1937
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:232 Resp: 17848

Ion	Ratio	Lower	Upper
232	100		
230	78.6	64.2	96.4
234	49.7	38.1	57.1

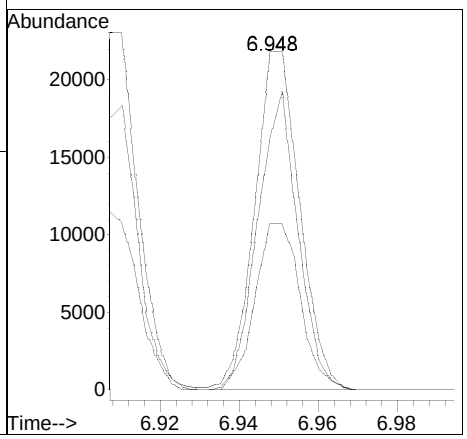


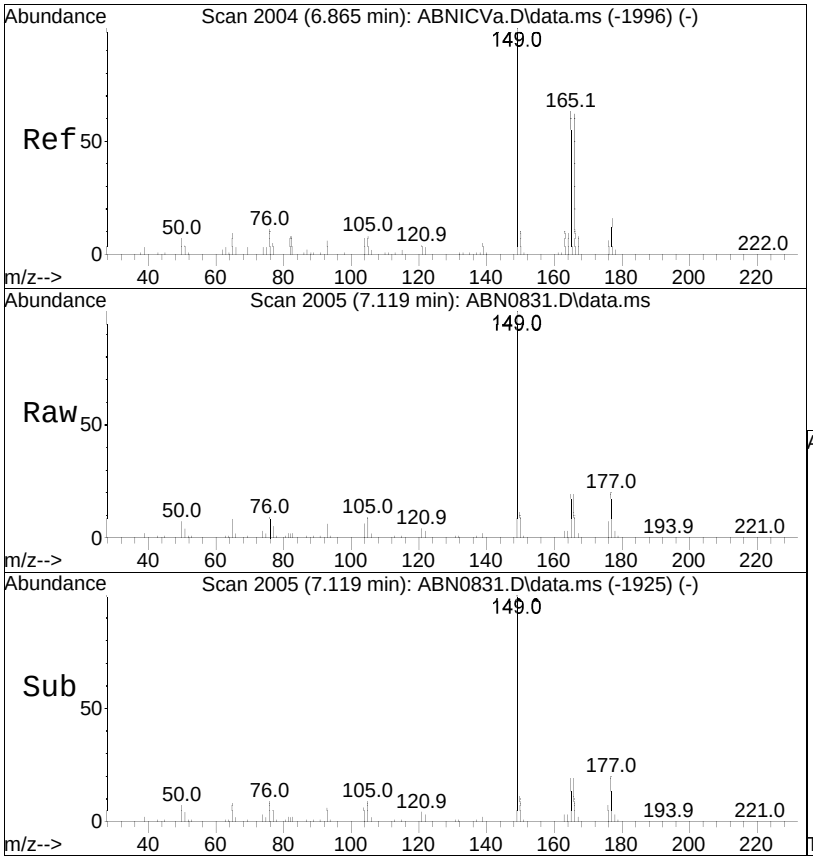


#70
2,3,4,6-Tetrachlorophenol
Concen: 5.62 ug/ml
RT: 6.948 min Scan# 1950
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:232 Resp: 17293

Ion	Ratio	Lower	Upper
232	100		
230	78.7	61.8	92.8
234	49.2	36.2	54.2

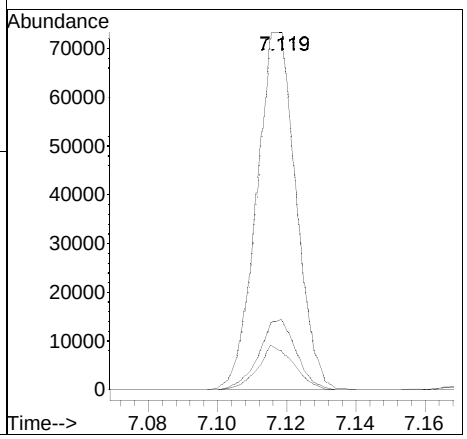


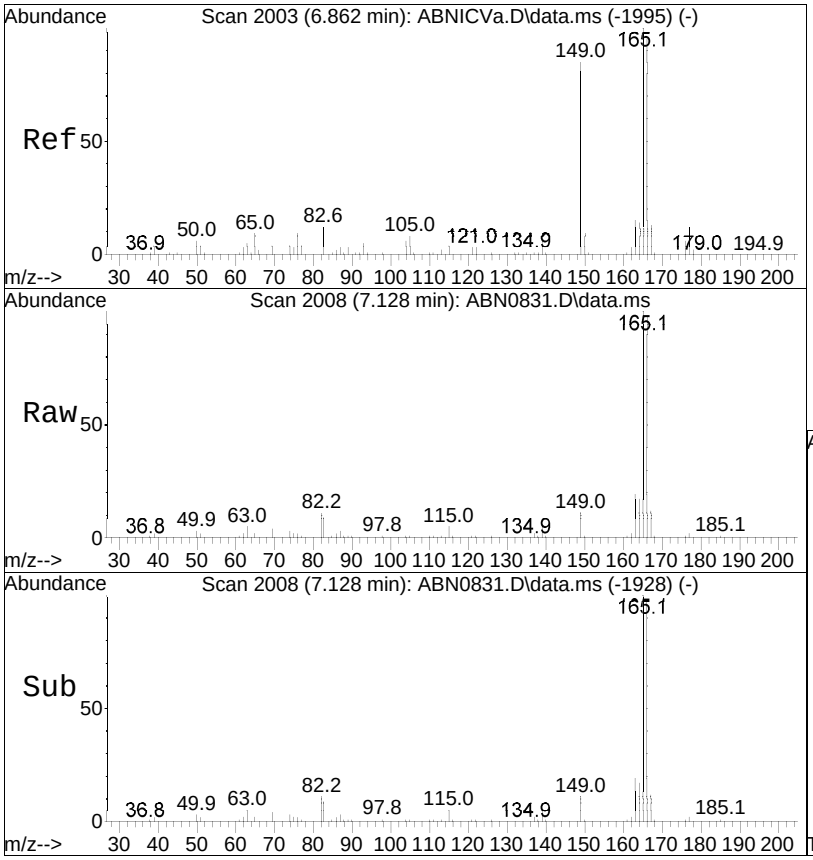


#71
Diethyl phthalate
Concen: 4.67 ug/ml
RT: 7.119 min Scan# 2005
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:149 Resp: 57491

Ion	Ratio	Lower	Upper
149	100		
177	18.8	16.1	24.1
150	11.5	9.4	14.2

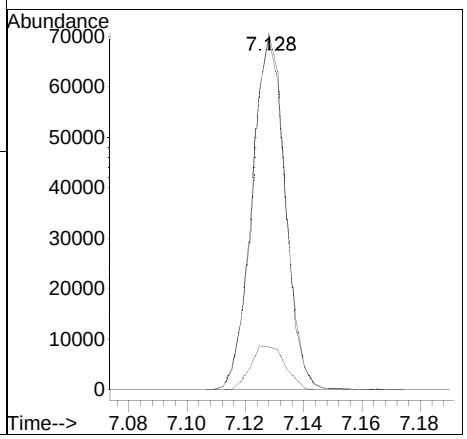


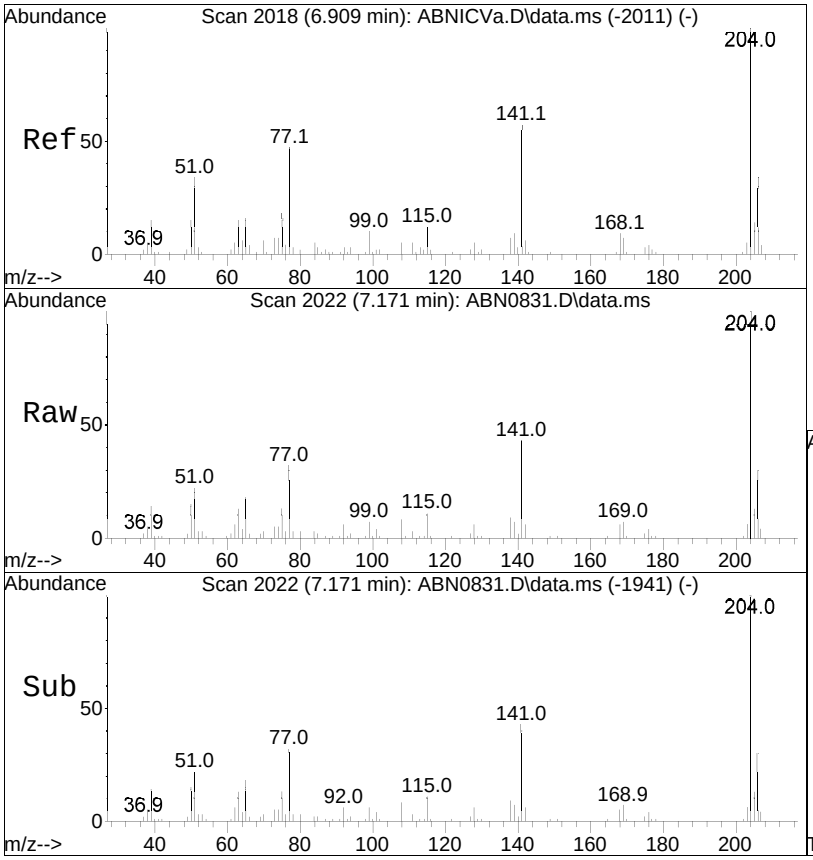


#72
Fluorene
Concen: 4.71 ug/ml
RT: 7.128 min Scan# 2008
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:166 Resp: 55386

Ion	Ratio	Lower	Upper
166	100		
165	99.7	76.2	114.2
167	13.0	10.6	15.8

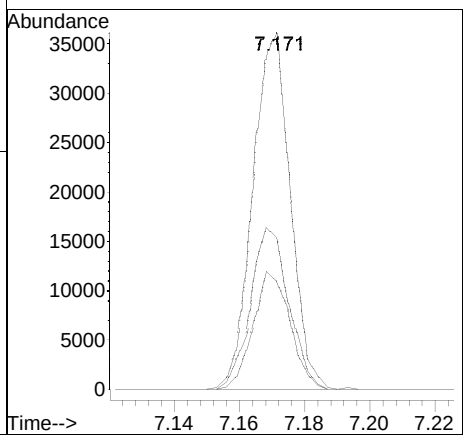


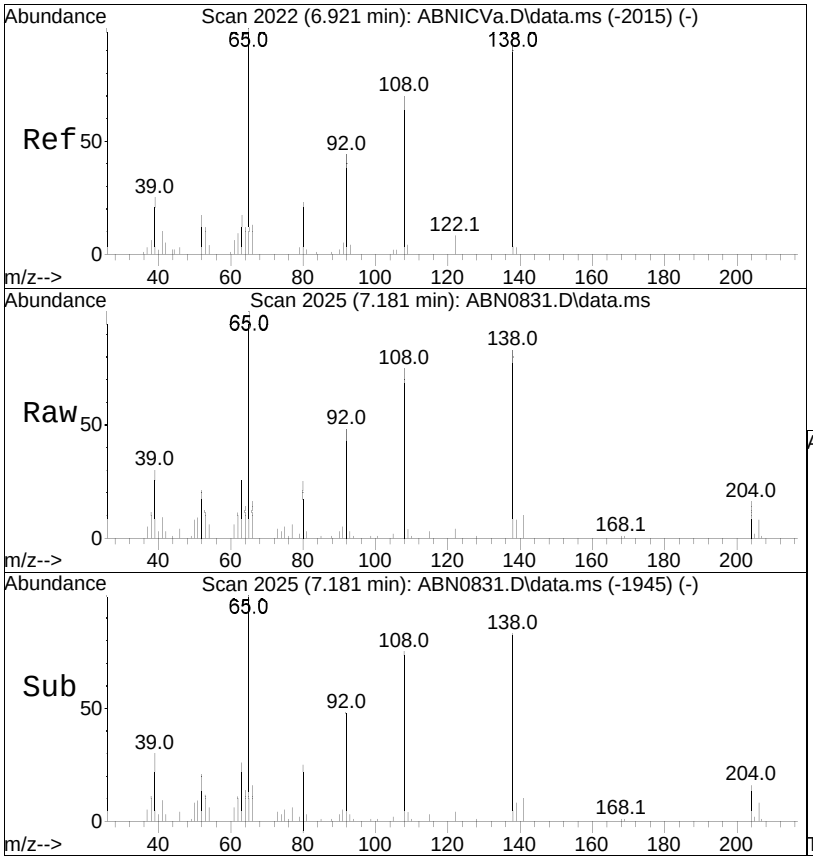


#73
4-Chlorophenyl phenyl ether
Concen: 5.00 ug/ml
RT: 7.171 min Scan# 2022
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:204 Resp: 28585

Ion	Ratio	Lower	Upper
204	100		
206	32.7	25.8	38.6
141	46.4	53.6	80.4#

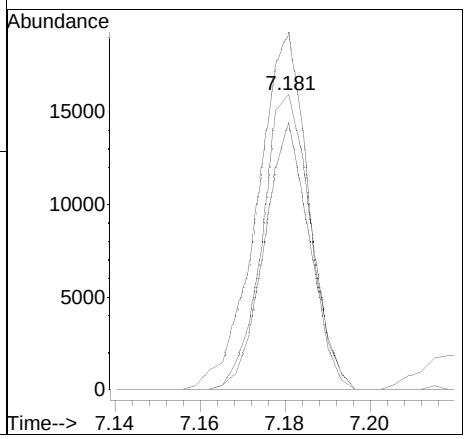


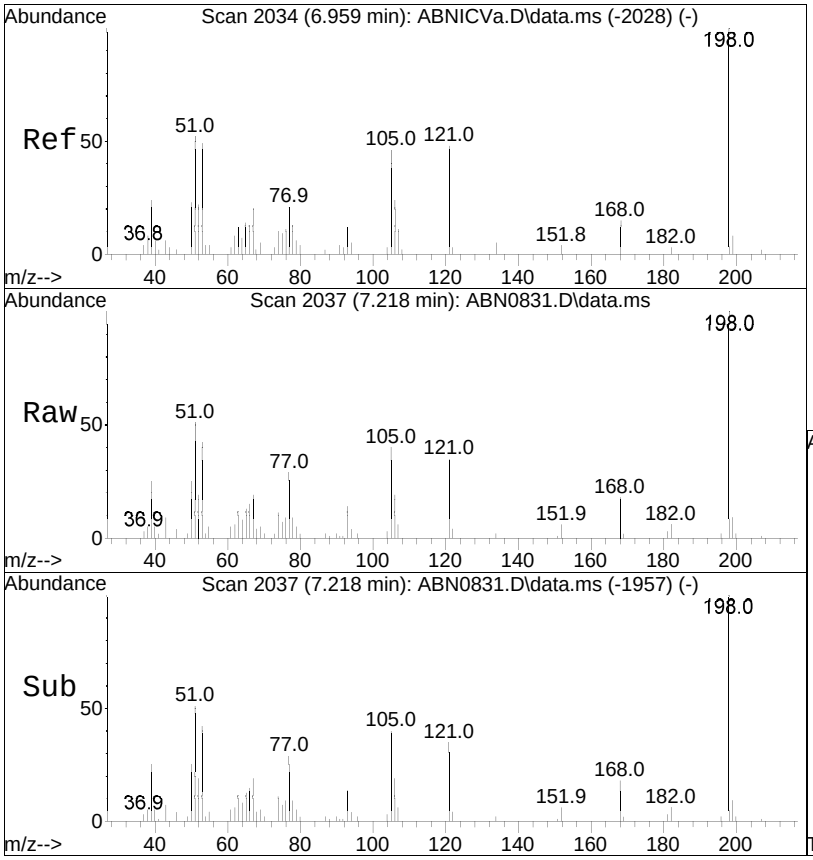


#74
4-Nitroaniline
Concen: 4.71 ug/ml
RT: 7.181 min Scan# 2025
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:138 Resp: 12491

Ion	Ratio	Lower	Upper
138	100		
108	84.8	52.1	78.1#
65	129.0	115.0	172.6

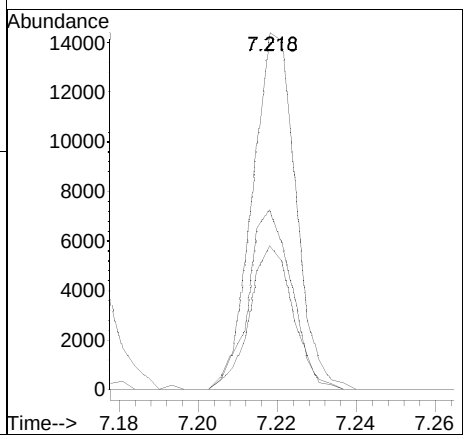


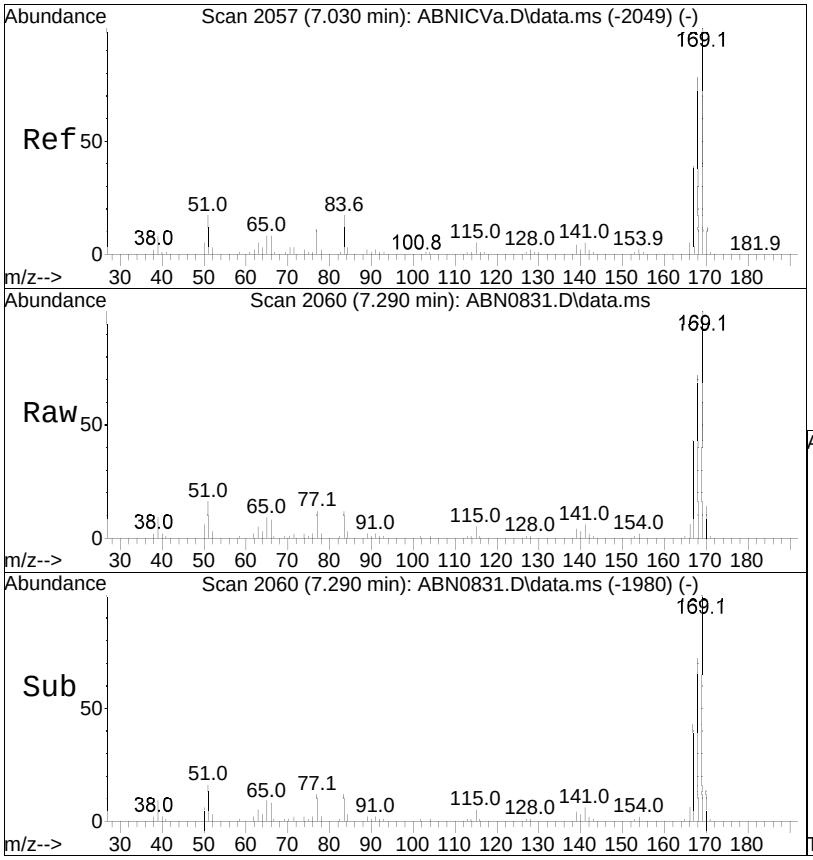


#75
4,6-Dinitro-o-cresol
Concen: 6.05 ug/ml
RT: 7.218 min Scan# 2037
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:198 Resp: 10984

Ion	Ratio	Lower	Upper
198	100		
51	50.3	76.0	114.0#
105	40.4	45.6	68.4#

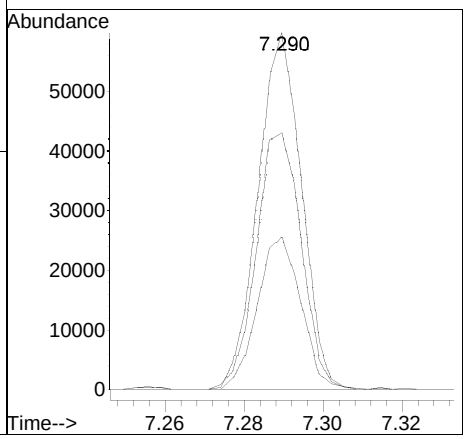


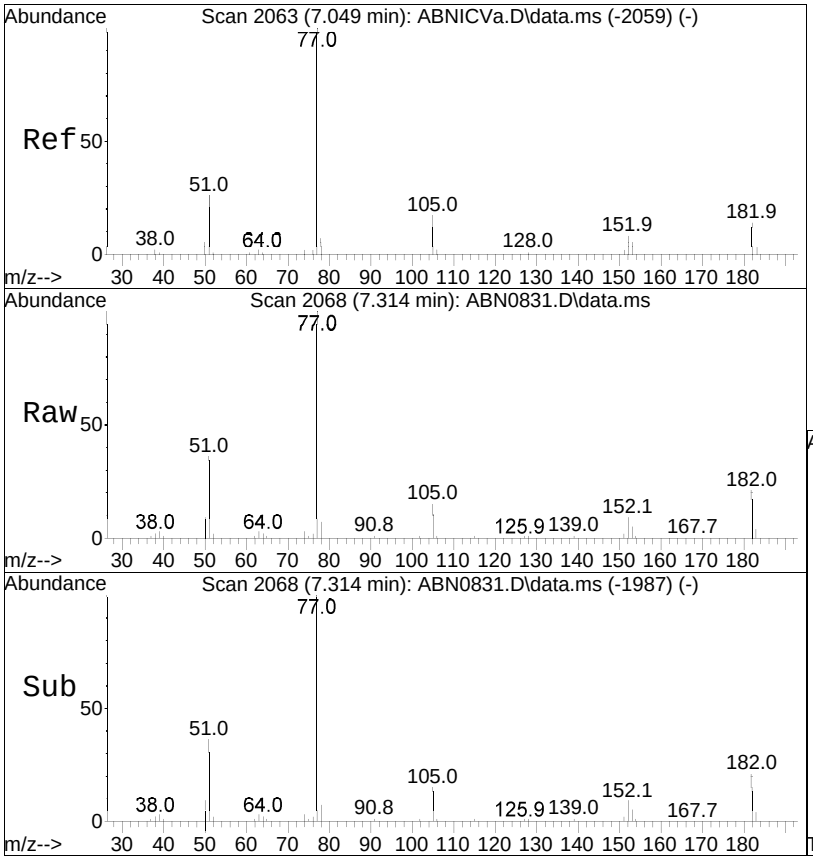


#76
NDPA/DPA
Concen: 4.55 ug/ml
RT: 7.290 min Scan# 2060
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:169 Resp: 45572

Ion	Ratio	Lower	Upper
169	100		
168	74.6	54.0	81.0
167	43.1	28.6	42.8#

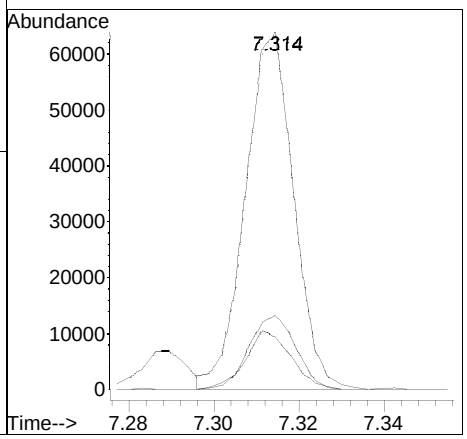


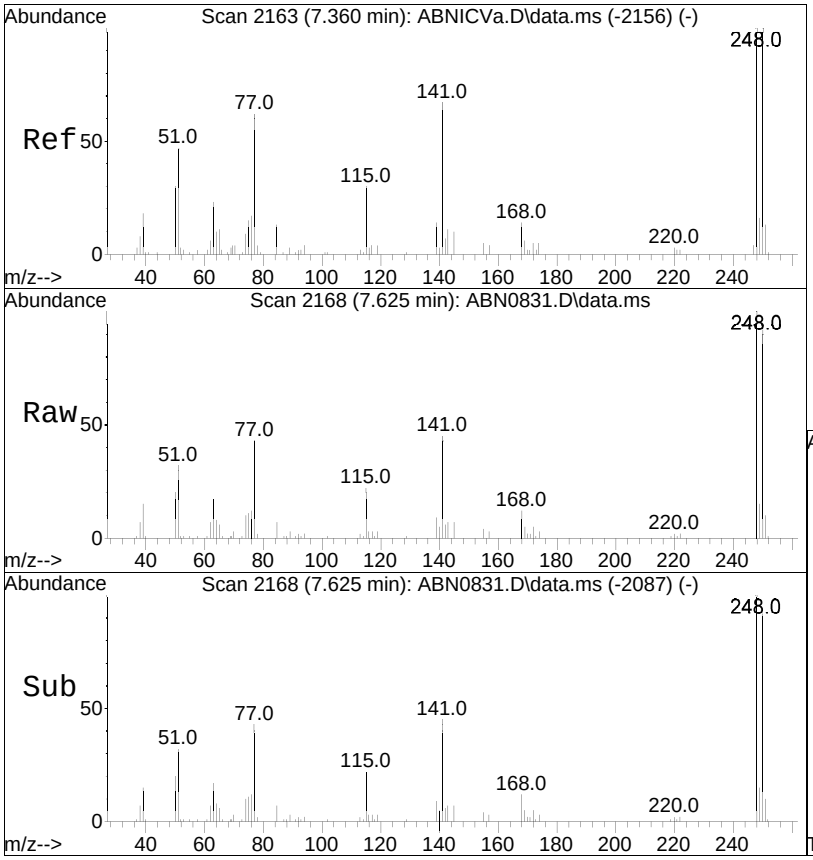


#77
Azobenzene
Concen: 4.74 ug/ml
RT: 7.314 min Scan# 2068
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion: 77 Resp: 49910

Ion	Ratio	Lower	Upper
77	100		
182	20.4	17.4	26.2
105	15.4	15.4	23.2#

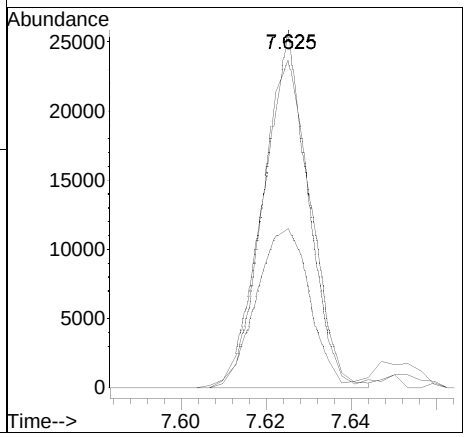


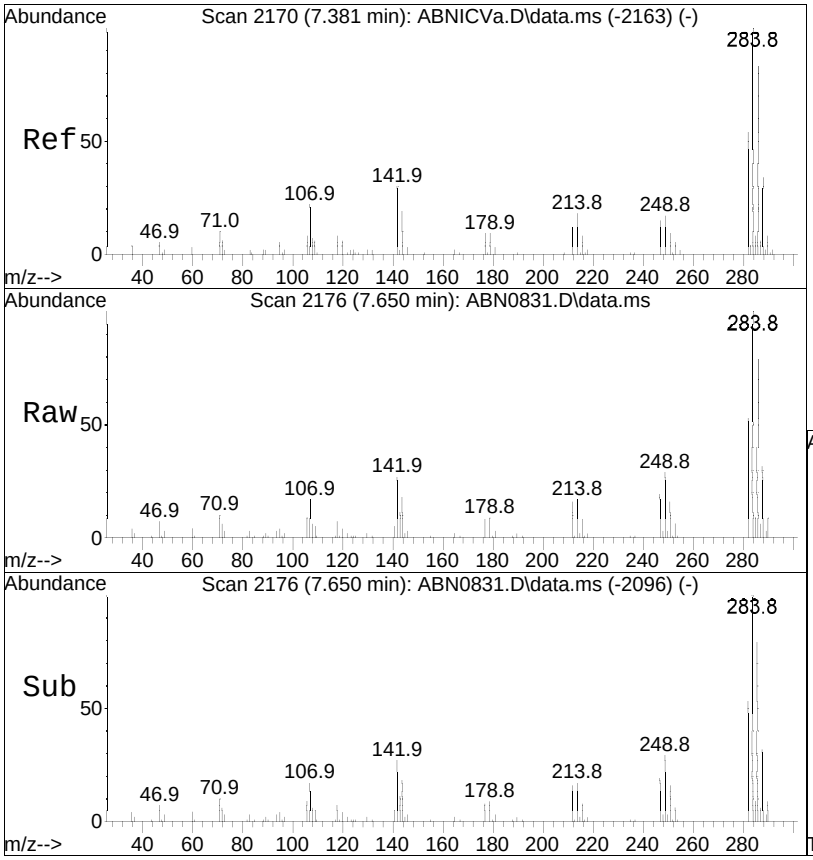


#79
4-Bromophenyl phenyl ether
Concen: 5.38 ug/ml
RT: 7.625 min Scan# 2168
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:248 Resp: 19177

Ion	Ratio	Lower	Upper
248	100		
141	52.3	76.6	114.8#
250	95.4	77.3	115.9

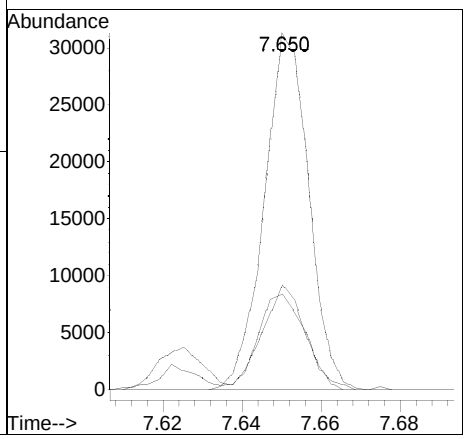


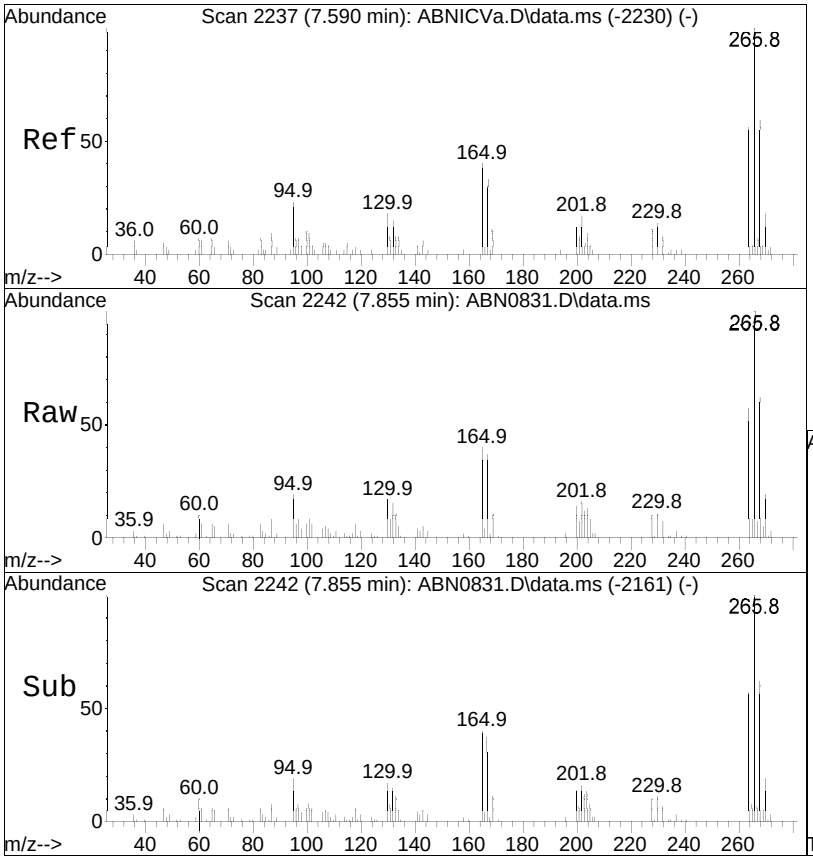


#80
Hexachlorobenzene
Concen: 5.47 ug/ml
RT: 7.650 min Scan# 2176
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:284 Resp: 24429

Ion	Ratio	Lower	Upper
284	100		
142	28.9	41.9	62.9#
249	28.1	24.1	36.1

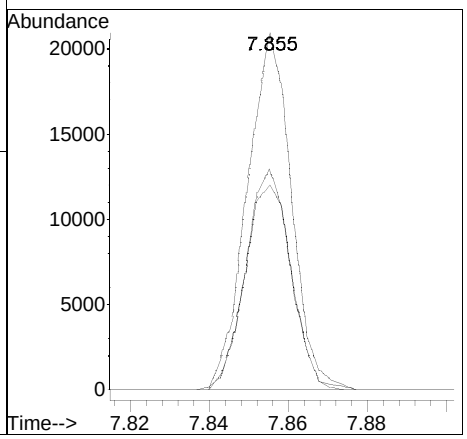


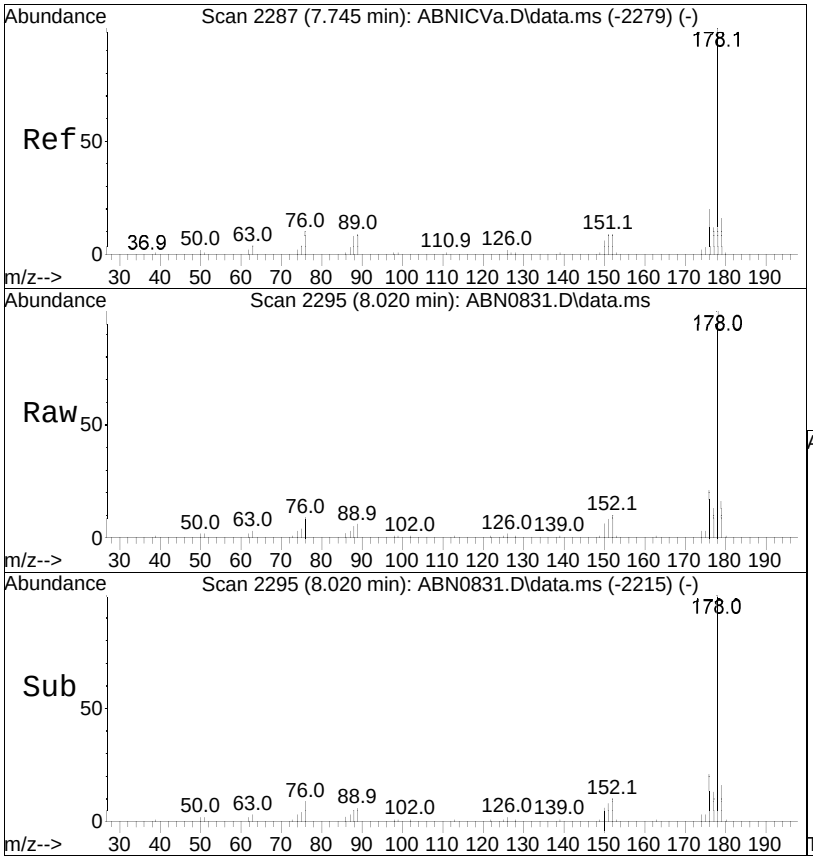


#81
Pentachlorophenol
Concen: 6.38 ug/ml
RT: 7.855 min Scan# 2242
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:266 Resp: 16144

Ion	Ratio	Lower	Upper
266	100		
264	61.6	49.7	74.5
268	62.6	50.5	75.7

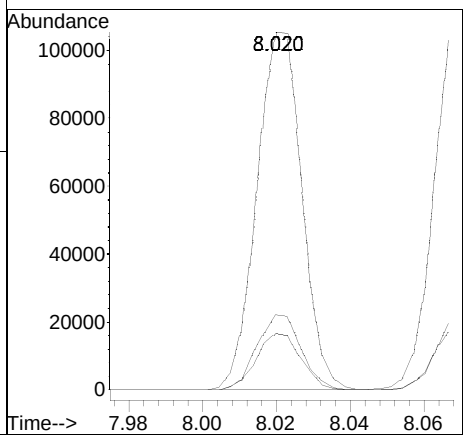


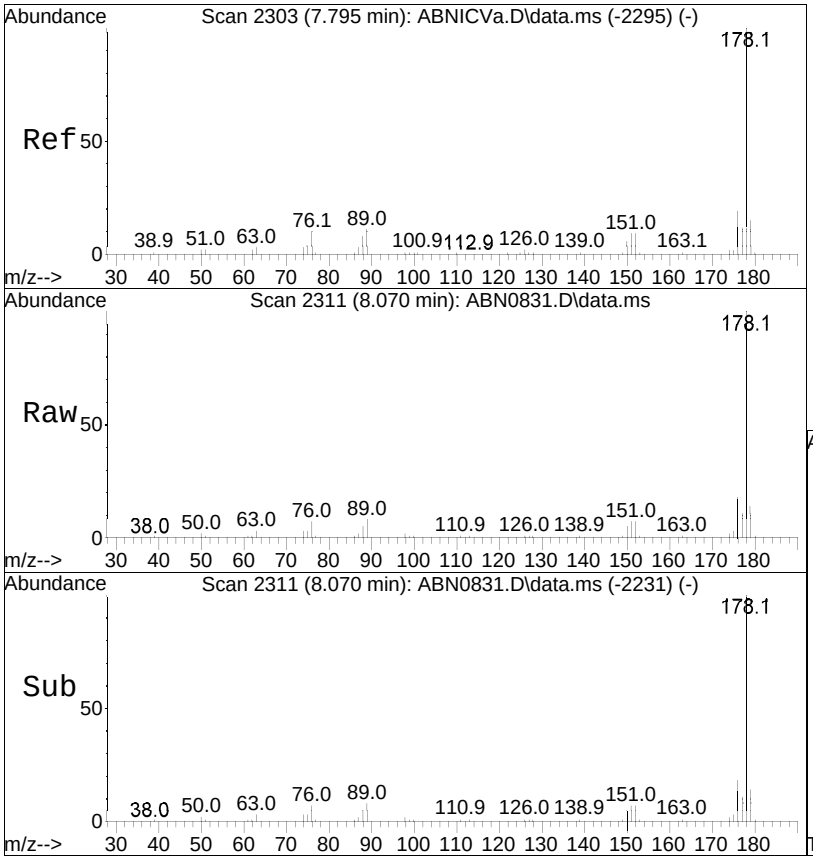


#88
Phenanthrene
Concen: 4.30 ug/ml
RT: 8.020 min Scan# 2295
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:178 Resp: 89374

Ion	Ratio	Lower	Upper
178	100		
179	15.6	12.2	18.2
176	20.6	15.4	23.2

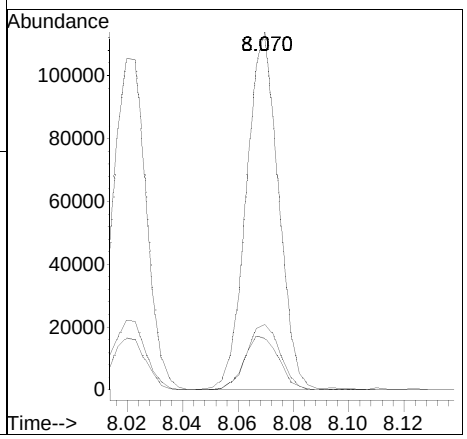


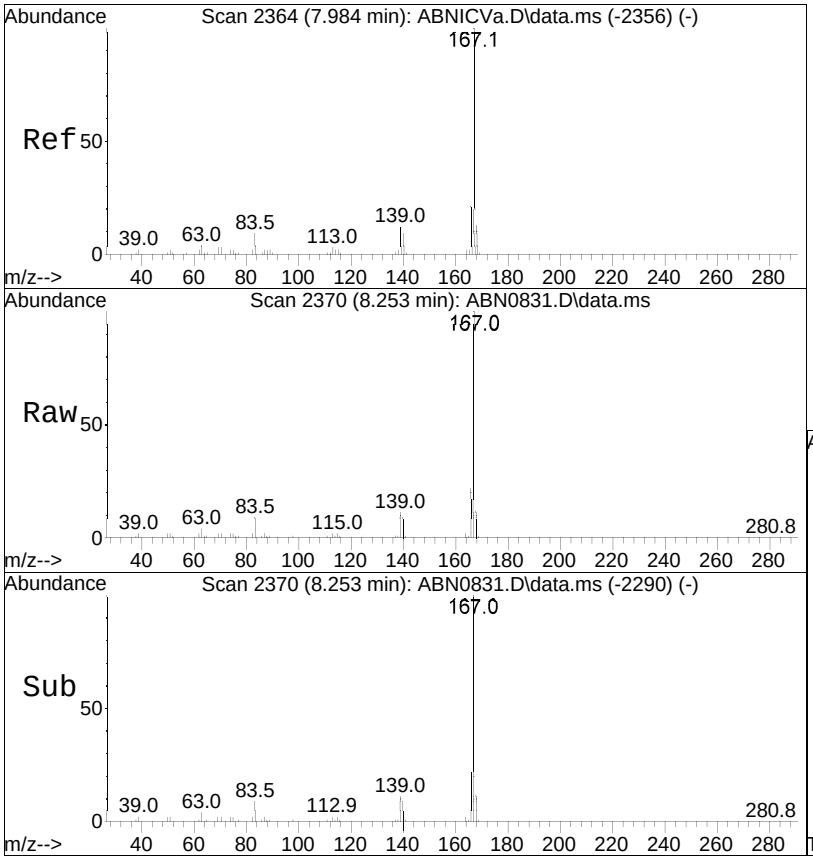


#89
Anthracene
Concen: 4.55 ug/ml
RT: 8.070 min Scan# 2311
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:178 Resp: 91557

Ion	Ratio	Lower	Upper
178	100		
179	16.1	12.0	18.0
176	19.2	14.6	22.0

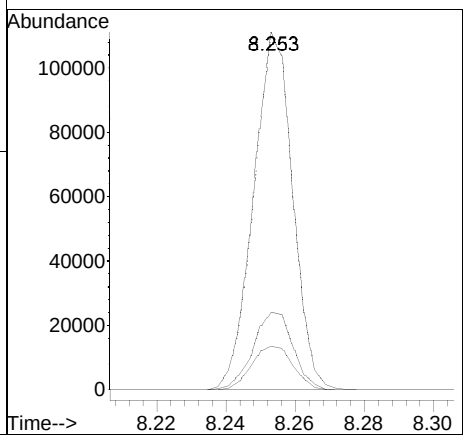


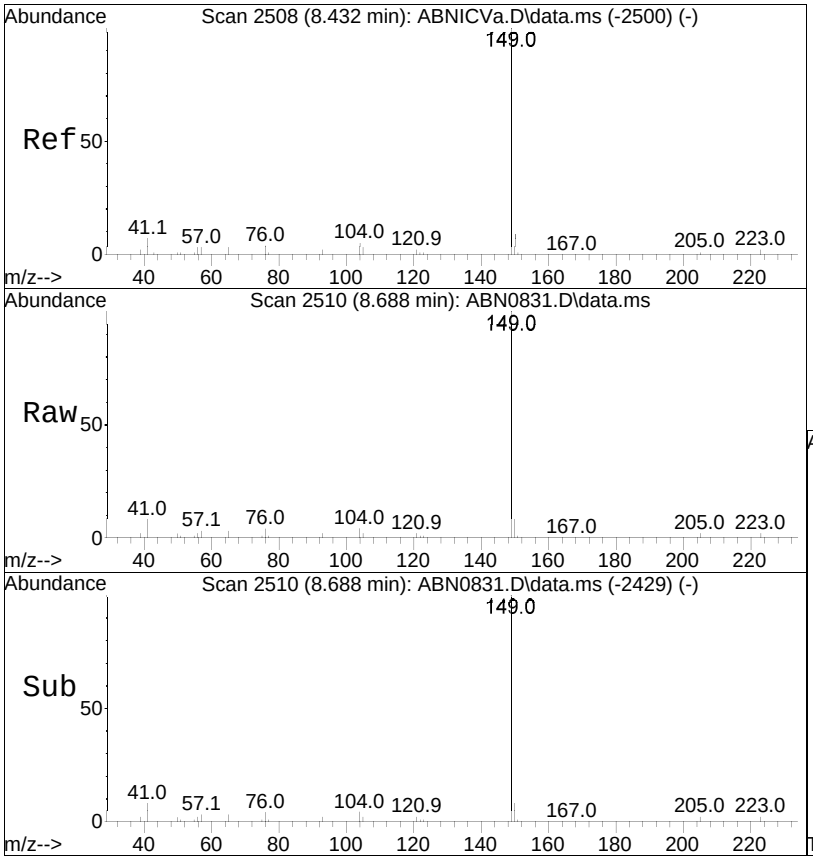


#90
Carbazole
Concen: 4.56 ug/ml
RT: 8.253 min Scan# 2370
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:167 Resp: 86477

Ion	Ratio	Lower	Upper
167	100		
168	13.1	10.6	15.8
166	22.3	17.4	26.0

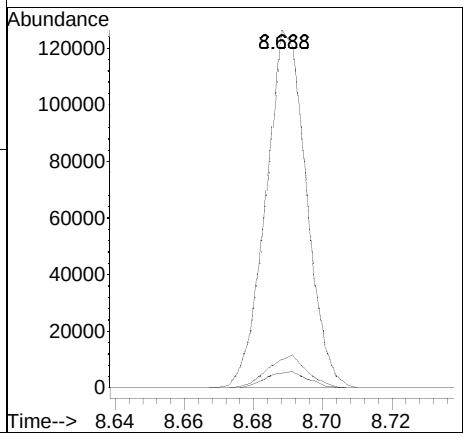


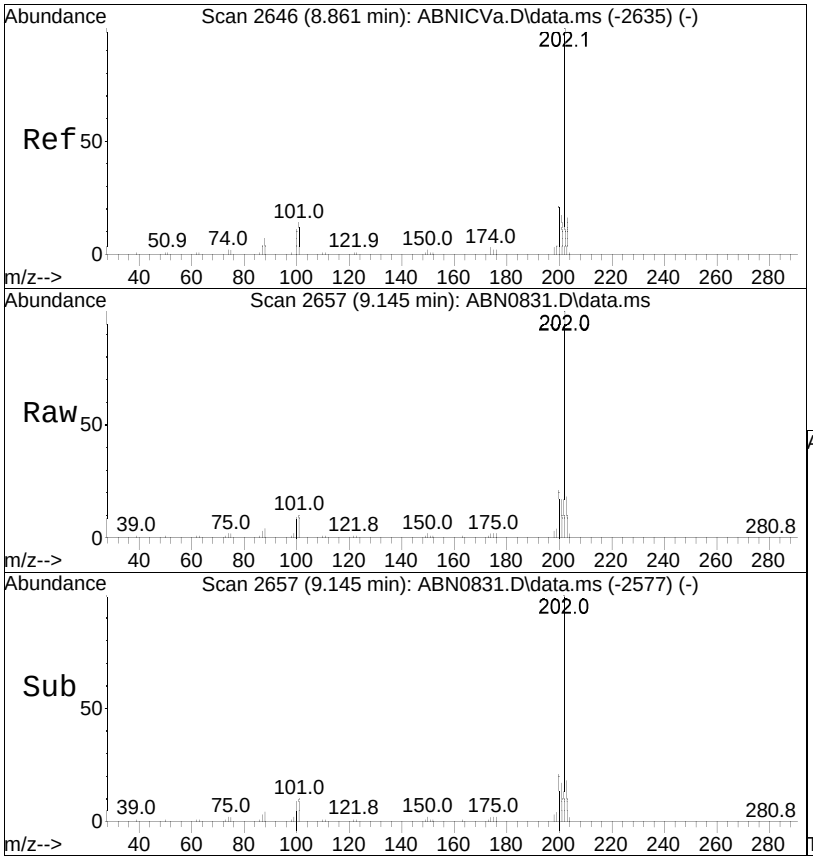


#91
Di-n-butylphthalate
Concen: 4.54 ug/ml
RT: 8.688 min Scan# 2510
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:149 Resp: 101478

Ion	Ratio	Lower	Upper
149	100		
150	9.0	7.0	10.6
104	4.8	4.5	6.7

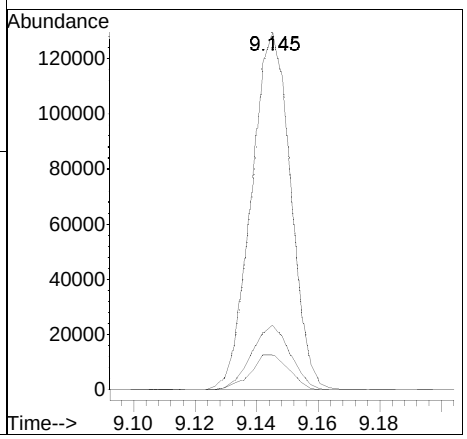


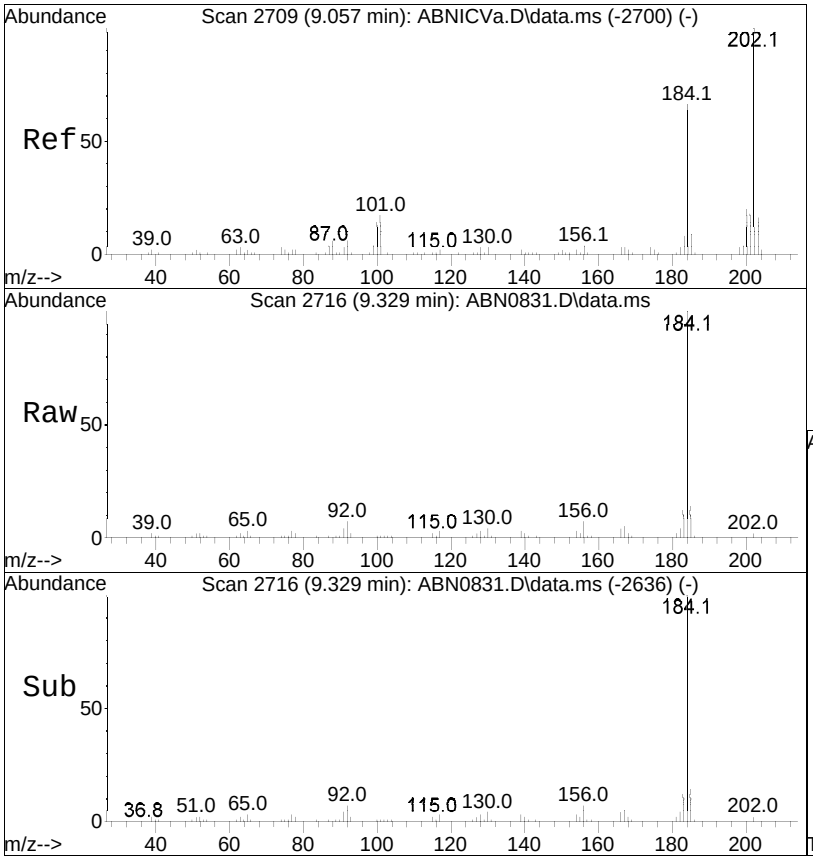


#92
Fluoranthene
Concen: 4.67 ug/ml
RT: 9.145 min Scan# 2657
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:202 Resp: 113726

Ion	Ratio	Lower	Upper
202	100		
101	9.7	13.5	20.3#
203	18.0	13.6	20.4

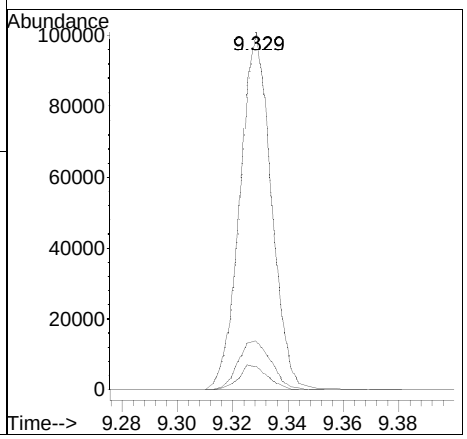


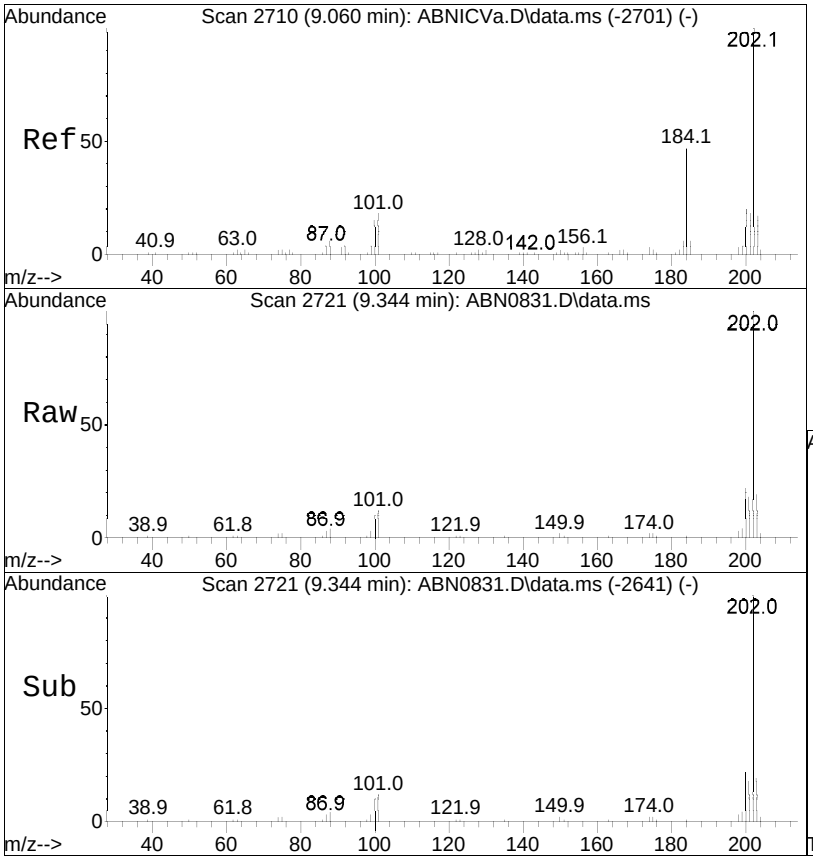


#93
Benzidine
Concen: 4.92 ug/ml
RT: 9.329 min Scan# 2716
Delta R.T. -0.001 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:184 Resp: 78541

Ion	Ratio	Lower	Upper
184	100		
92	6.5	9.1	13.7#
185	14.7	11.1	16.7

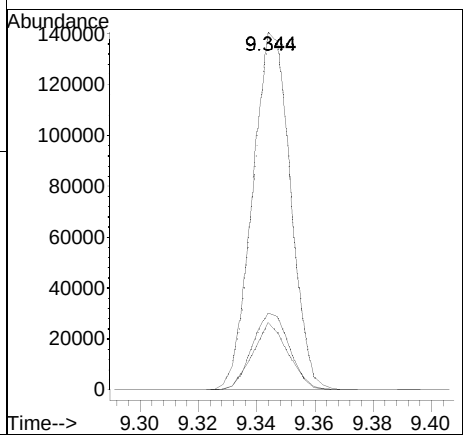


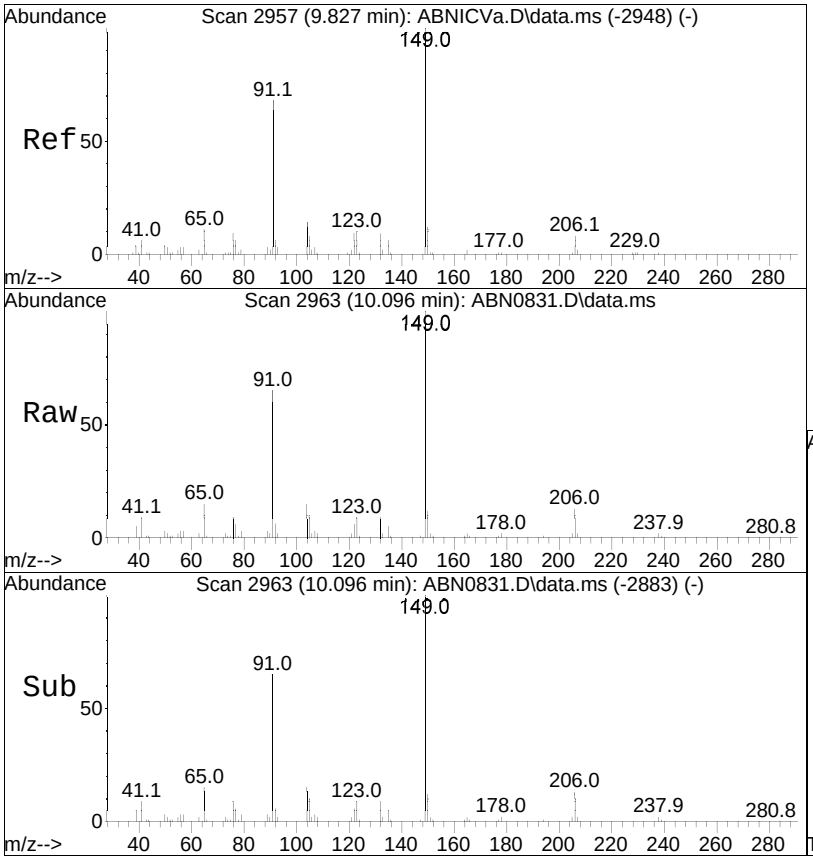


#94
Pyrene
Concen: 4.89 ug/ml
RT: 9.344 min Scan# 2721
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:202 Resp: 125936

Ion	Ratio	Lower	Upper
202	100		
200	21.1	16.7	25.1
203	18.0	14.2	21.4

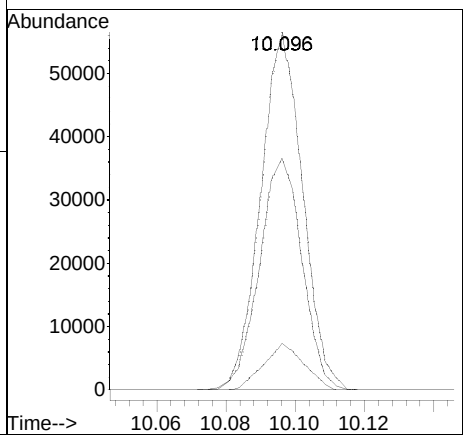


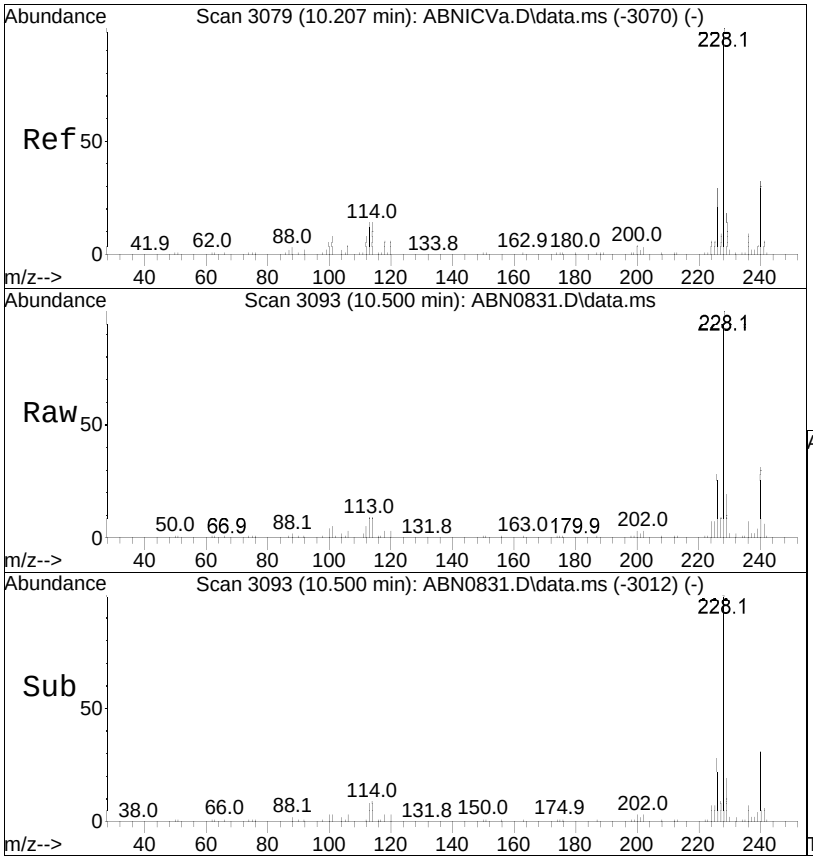


#96
Butyl benzyl phthalate
Concen: 4.64 ug/ml
RT: 10.096 min Scan# 2963
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:149 Resp: 47126

Ion	Ratio	Lower	Upper
149	100		
91	66.0	63.3	94.9
206	12.7	13.9	20.9#

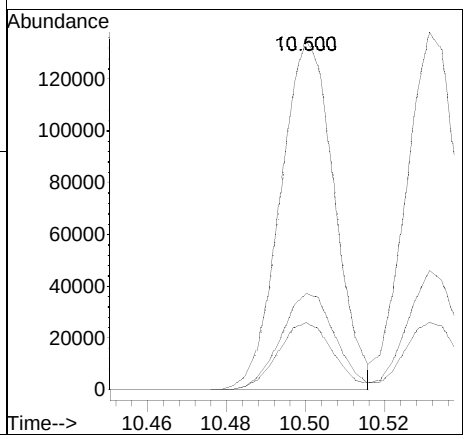


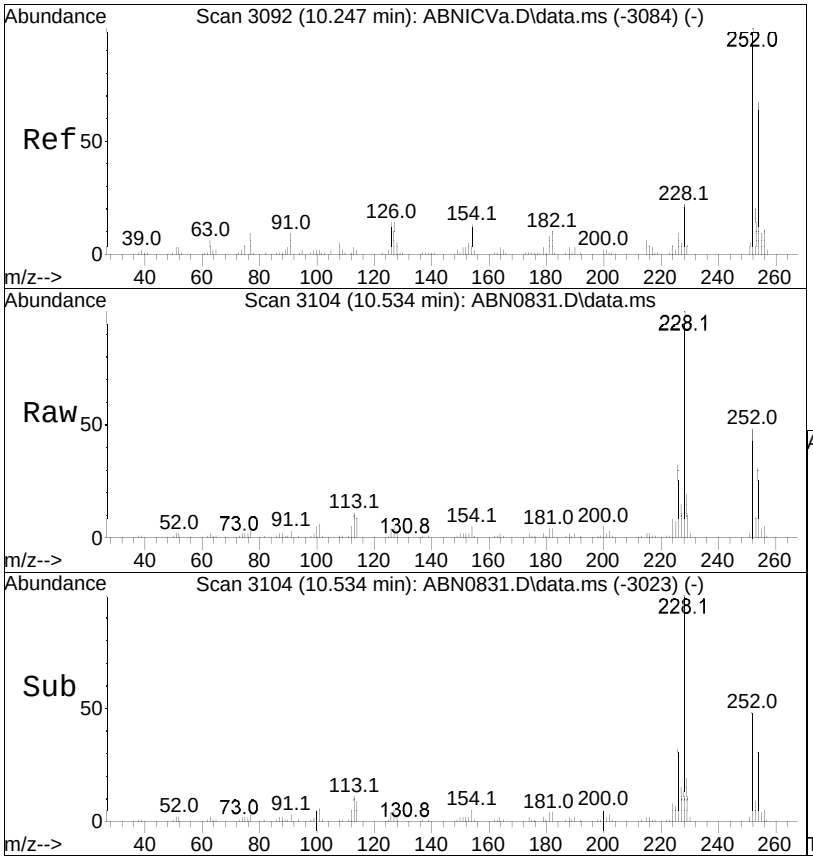


#104
Benzo(a)anthracene
Concen: 4.61 ug/ml
RT: 10.500 min Scan# 3093
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:228 Resp: 127693

Ion	Ratio	Lower	Upper
228	100		
226	27.9	22.2	33.4
229	19.8	15.6	23.4

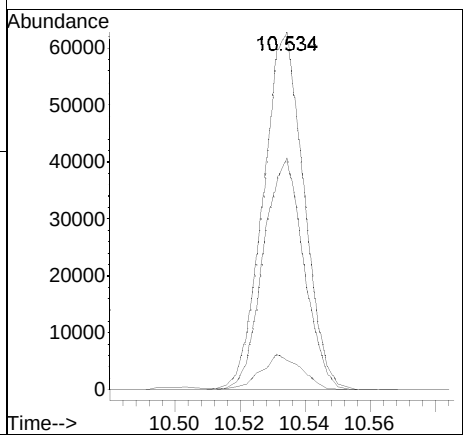


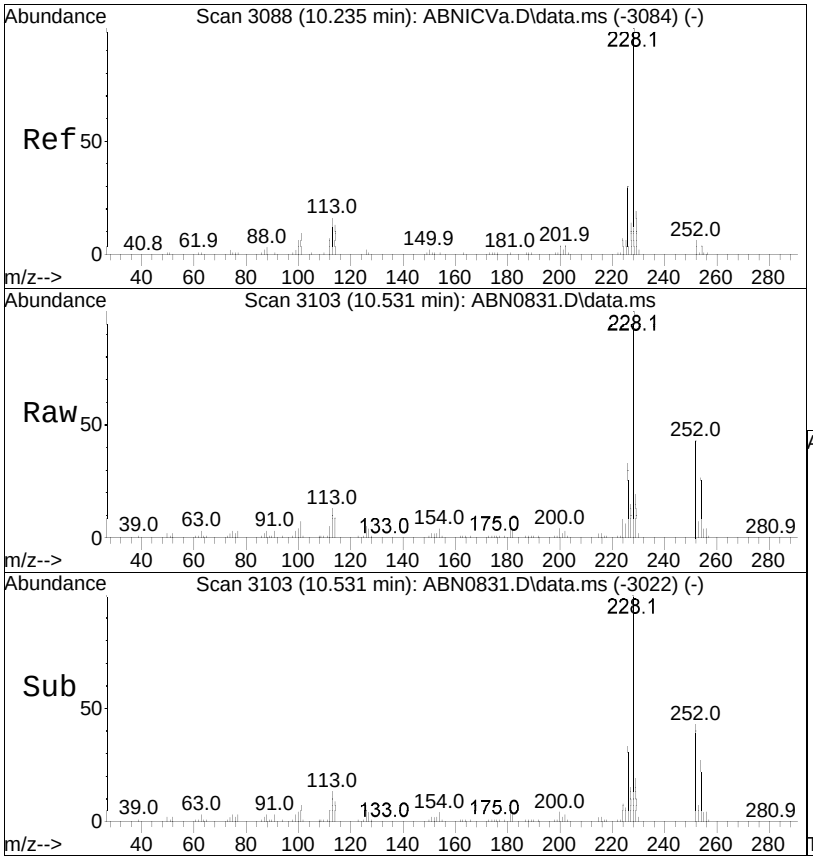


#105
3,3'-Dichlorobenzidine
Concen: 5.09 ug/ml
RT: 10.534 min Scan# 3104
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:252 Resp: 54099

Ion	Ratio	Lower	Upper
252	100		
126	9.9	14.5	21.7#
254	64.6	51.2	76.8

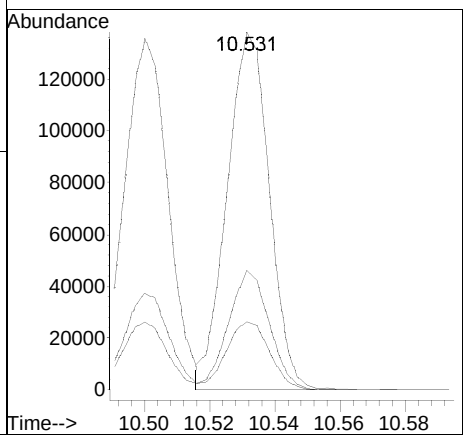


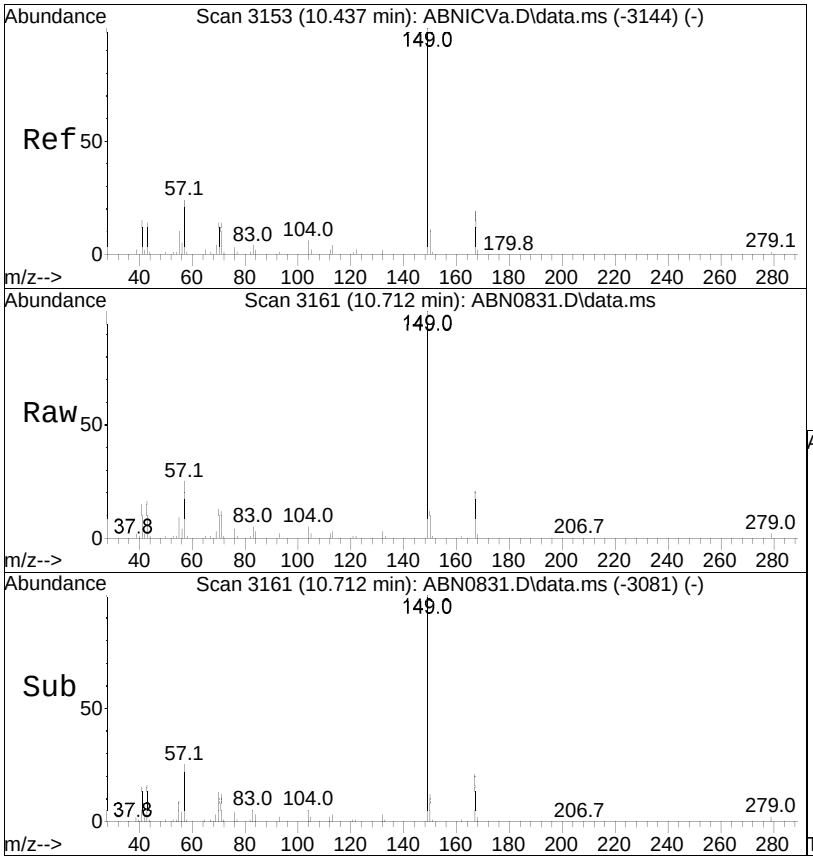


#106
Chrysene
Concen: 4.75 ug/ml
RT: 10.531 min Scan# 3103
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:228 Resp: 124260

Ion	Ratio	Lower	Upper
228	100		
226	32.3	24.0	36.0
229	19.5	15.8	23.8

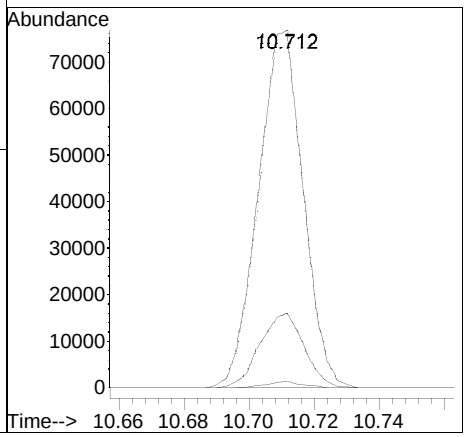


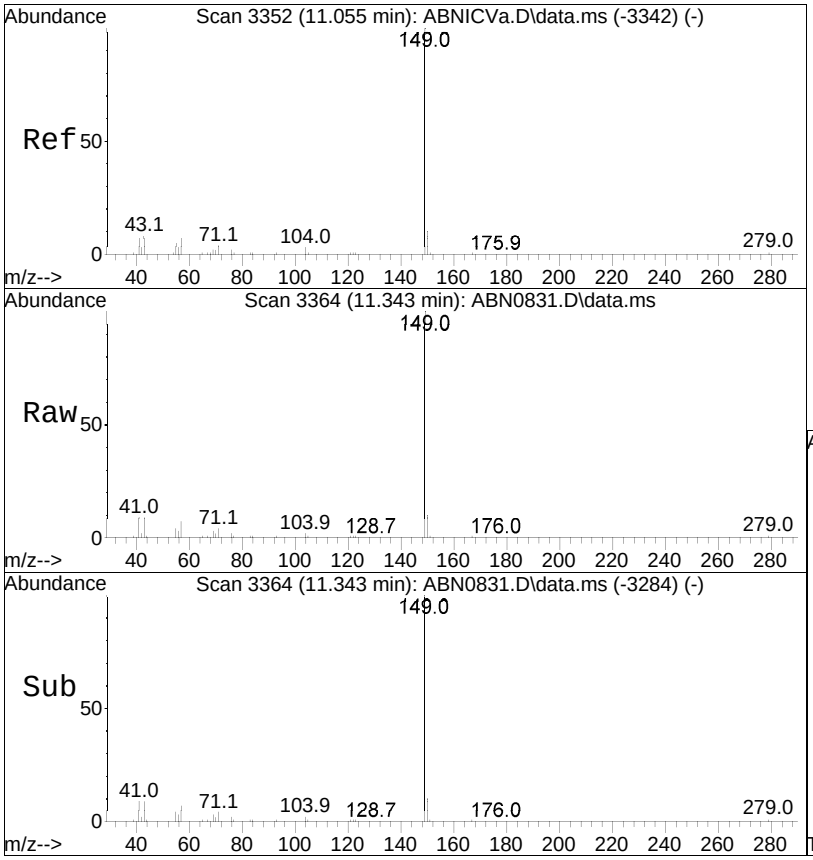


#107
Bis(2-ethylhexyl)phthalate
Concen: 4.71 ug/ml
RT: 10.712 min Scan# 3161
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:149 Resp: 72845

Ion	Ratio	Lower	Upper
149	100		
167	20.7	22.1	33.1#
279	1.5	3.0	4.4#

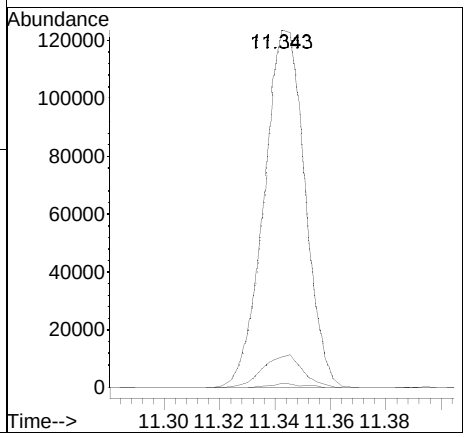


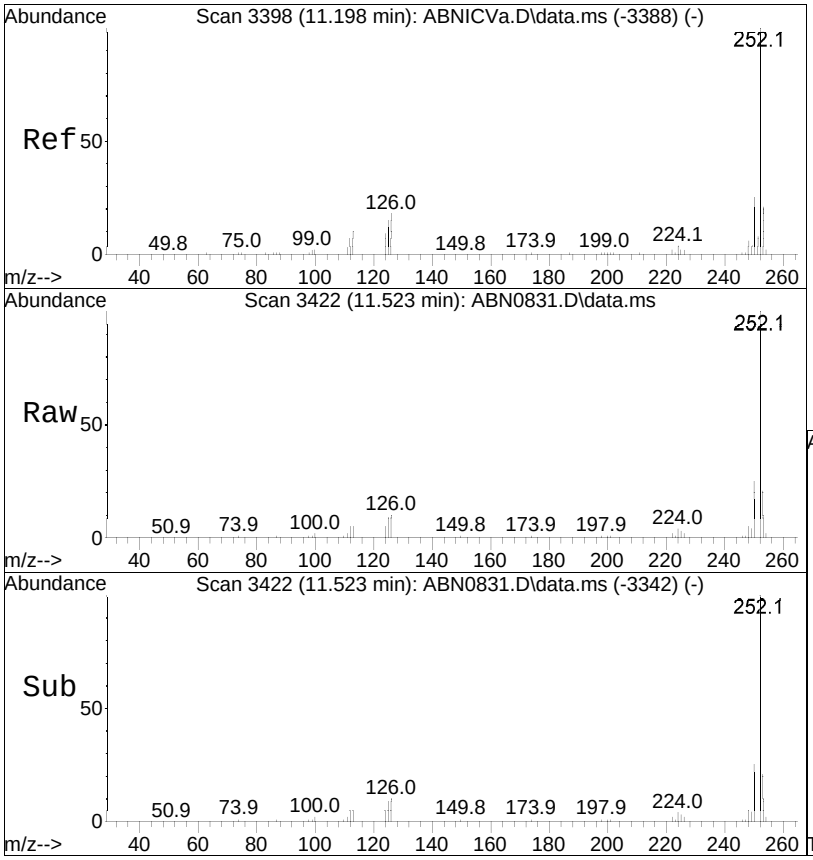


#108
Di-n-octylphthalate
Concen: 4.49 ug/ml
RT: 11.343 min Scan# 3364
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:149 Resp: 125980

Ion	Ratio	Lower	Upper
149	100		
43	9.2	18.8	28.2#
167	1.1	1.3	1.9#

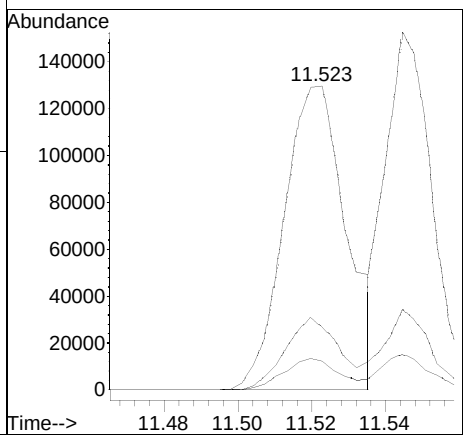


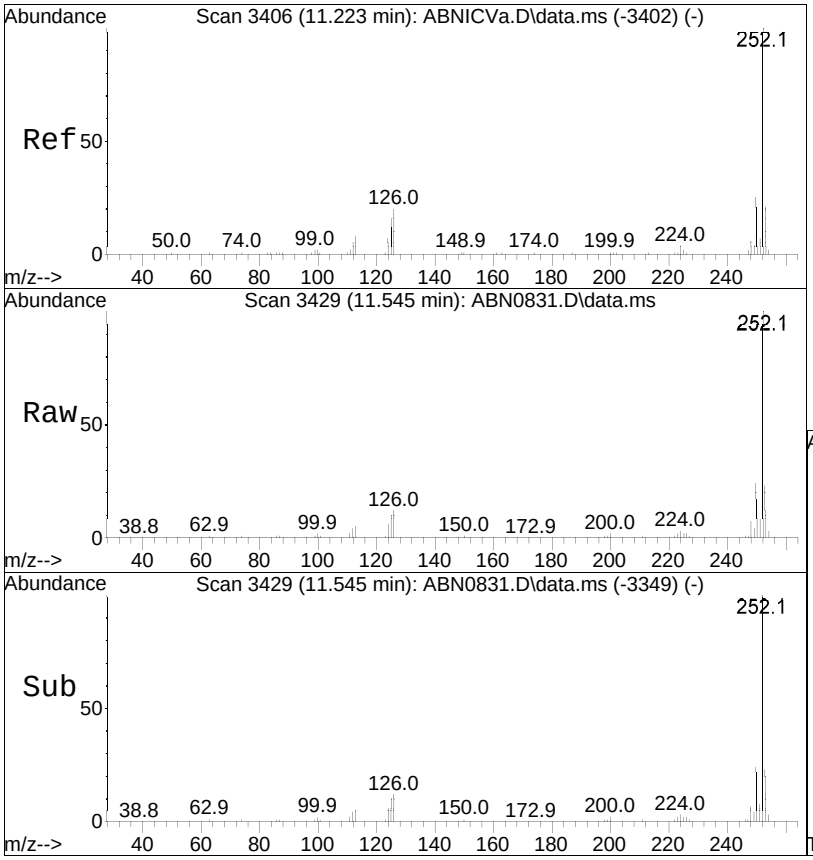


#109
Benzo(b)fluoranthene
Concen: 5.06 ug/ml M3
RT: 11.523 min Scan# 3422
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:252 Resp: 151872

Ion	Ratio	Lower	Upper
252	100		
125	9.1	13.3	19.9#
253	20.4	17.1	25.7

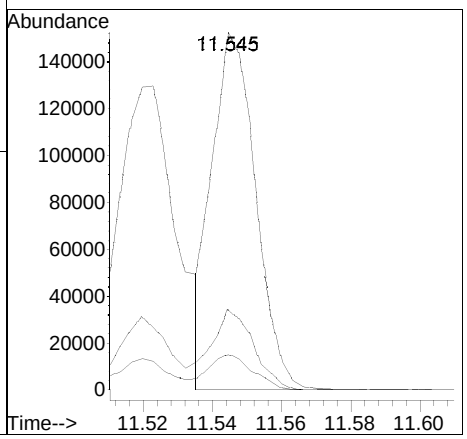


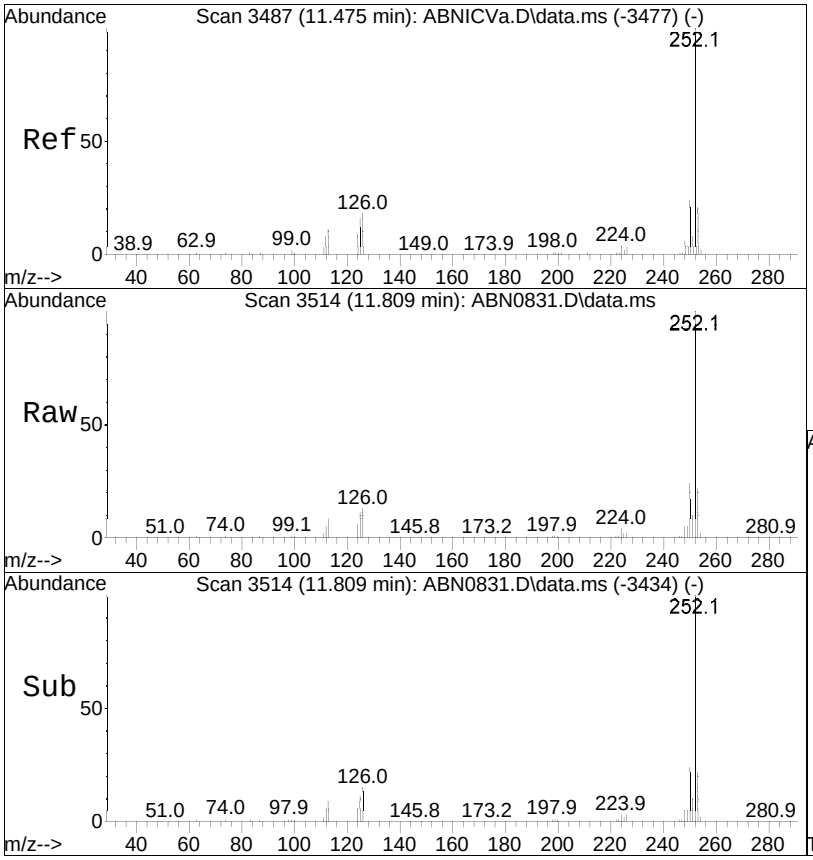


#110
Benzo(k)fluoranthene
Concen: 4.67 ug/ml
RT: 11.545 min Scan# 3429
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:252 Resp: 133770

Ion	Ratio	Lower	Upper
252	100		
125	10.4	13.0	19.6#
253	22.6	16.8	25.2

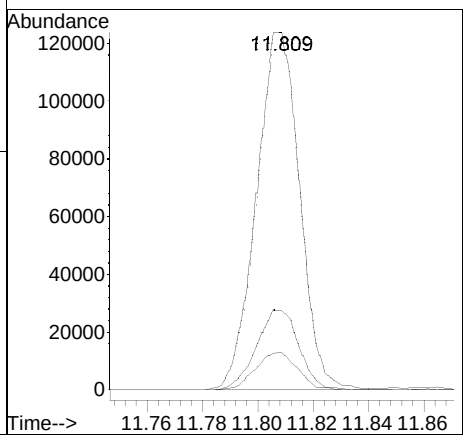


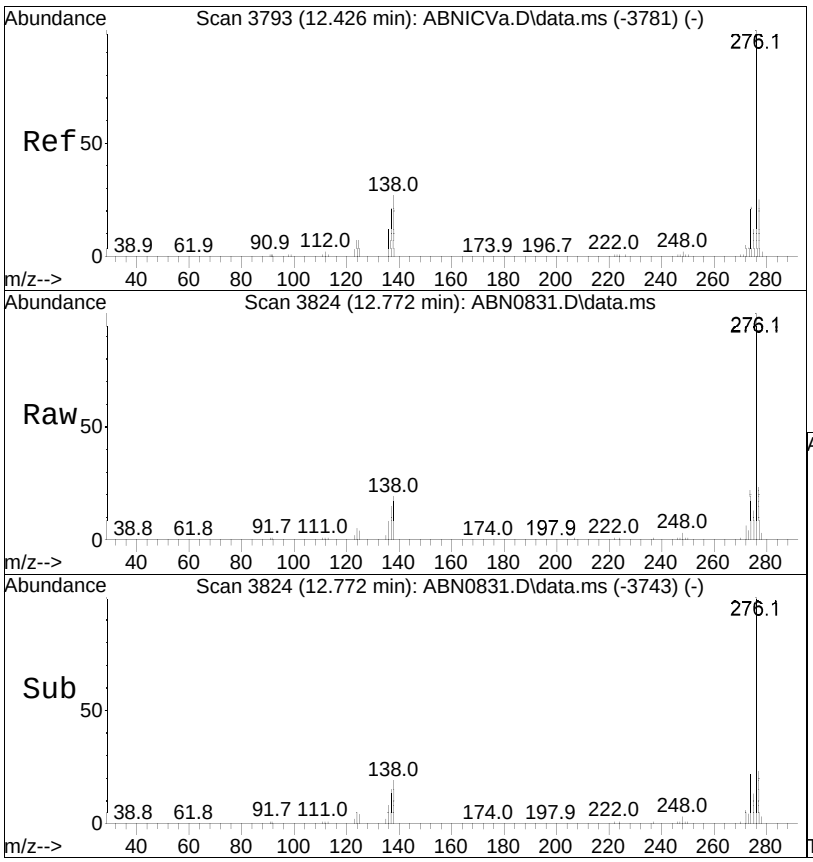


#111
Benzo(a)pyrene
Concen: 5.10 ug/ml
RT: 11.809 min Scan# 3514
Delta R.T. -0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:252 Resp: 133170

Ion	Ratio	Lower	Upper
252	100		
125	10.4	14.2	21.2#
253	22.1	16.9	25.3

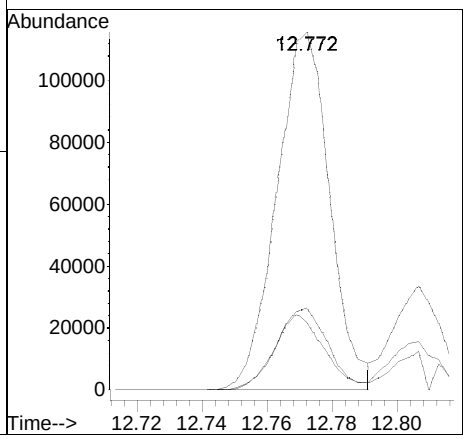


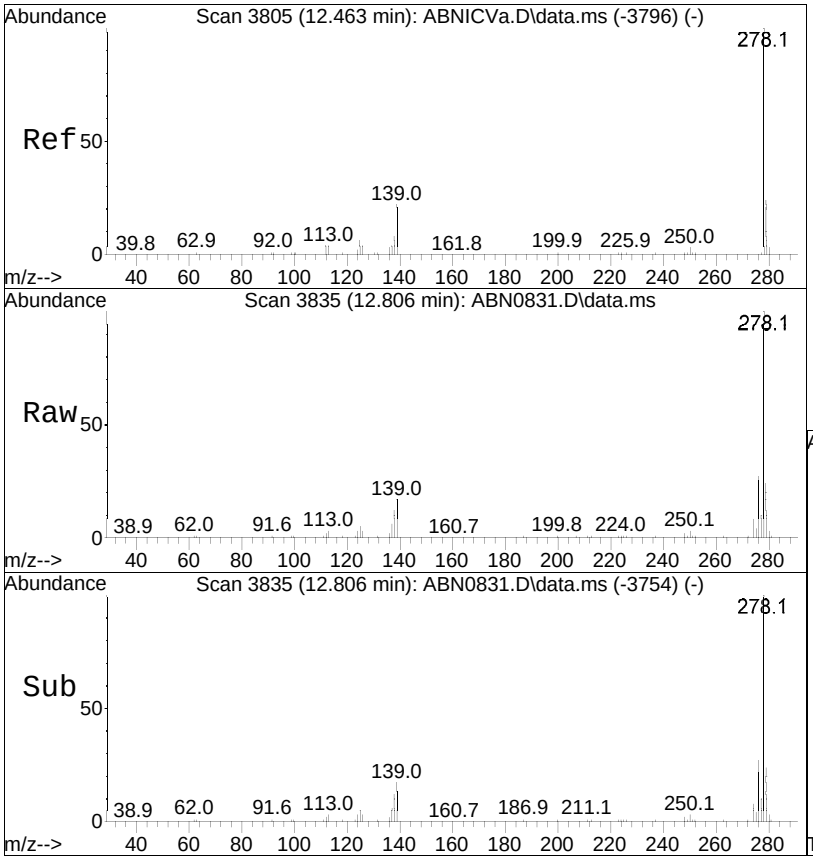


#113
Indeno(1,2,3-cd)pyrene
Concen: 4.44 ug/mL
RT: 12.772 min Scan# 3824
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:276 Resp: 129809

Ion	Ratio	Lower	Upper
276	100		
138	20.3	25.1	37.7#
277	22.7	18.6	28.0

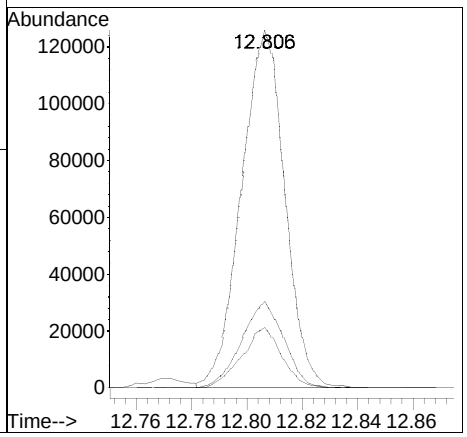


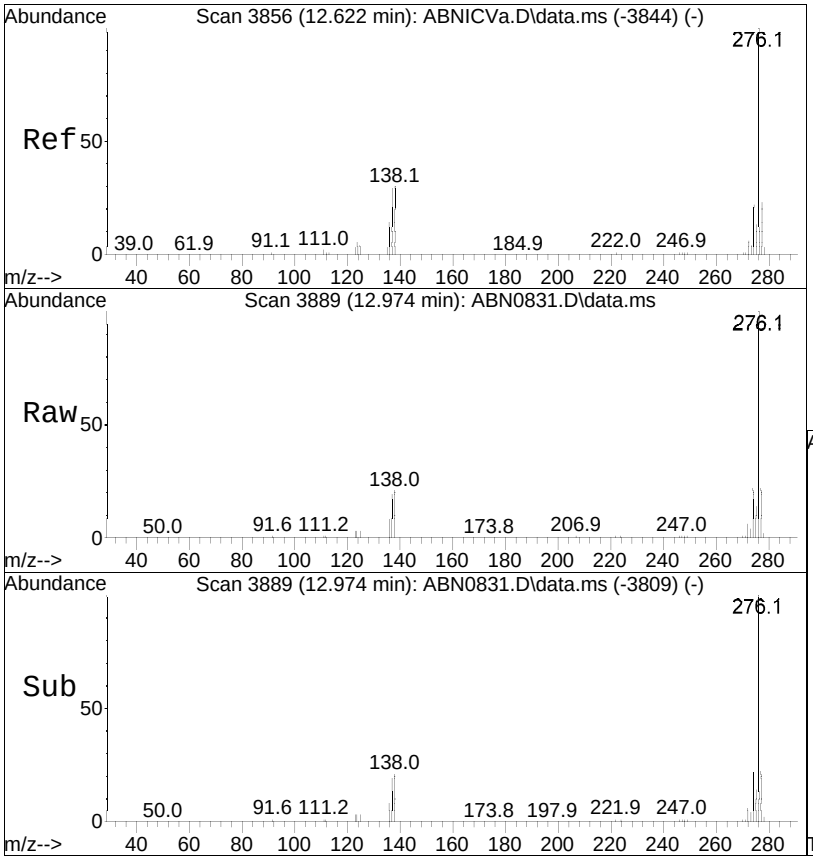


#114
Dibenzo(a,h)anthracene
Concen: 4.43 ug/ml
RT: 12.806 min Scan# 3835
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:278 Resp: 135734

Ion	Ratio	Lower	Upper
278	100		
139	15.8	20.8	31.2#
279	24.0	18.3	27.5

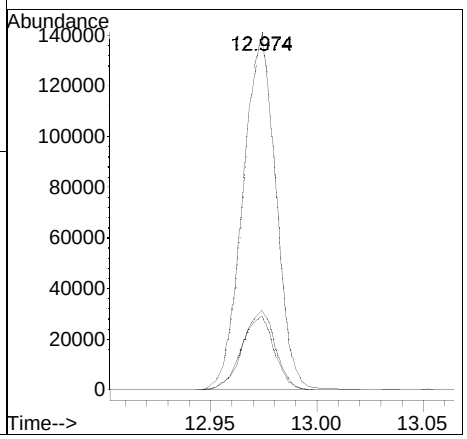




#115
Benzo(ghi)perylene
Concen: 4.85 ug/ml
RT: 12.974 min Scan# 3889
Delta R.T. 0.000 min
Lab File: ABN0831.D
Acq: 31 Aug 2023 10:12 am

Tgt Ion:276 Resp: 150033

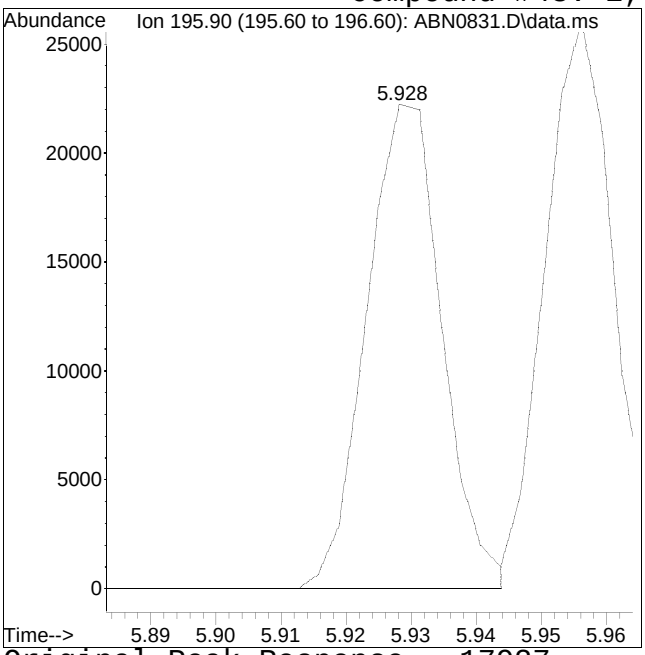
Ion	Ratio	Lower	Upper
276	100		
138	20.6	29.2	43.8#
277	22.4	18.8	28.2



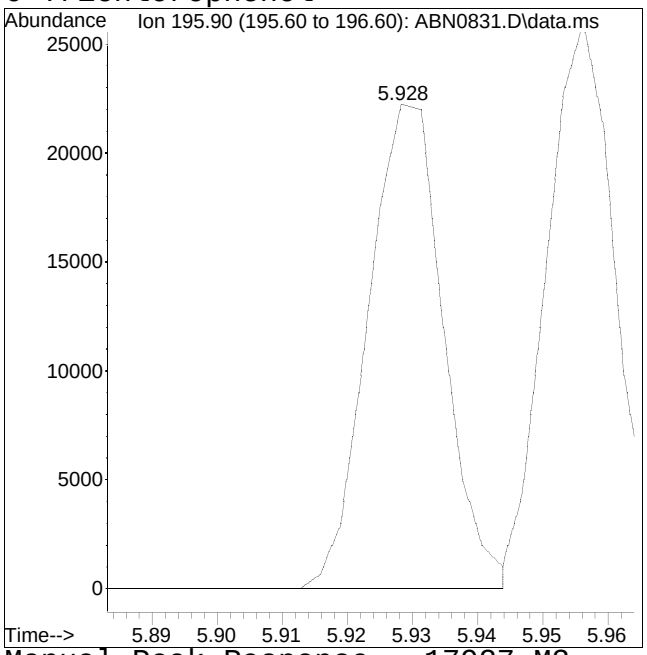
Manual Integration Report

Data Path : I:\8270\Dakota\230831lvi\ QMethod : FS230412LVIDakota.m
Data File : ABN0831.D Operator : Dakota:ljg
Date Inj'd : 8/31/2023 10:12 am Instrument : Dakota
Sample : WG1822460-3,32,,ABN 10210 Quant Date : 8/31/2023 11:20 am

Compound #43: 2,4,6-Trichlorophenol



Original Peak Response = 17927



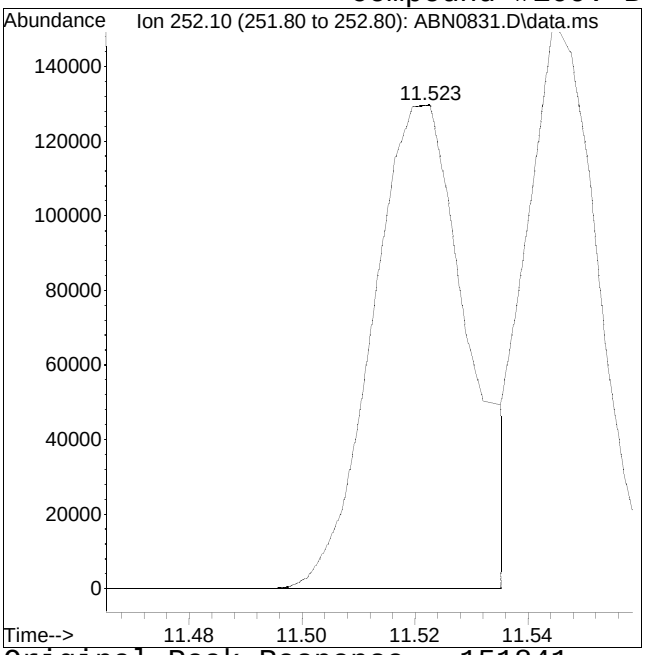
Manual Peak Response = 17927 M3

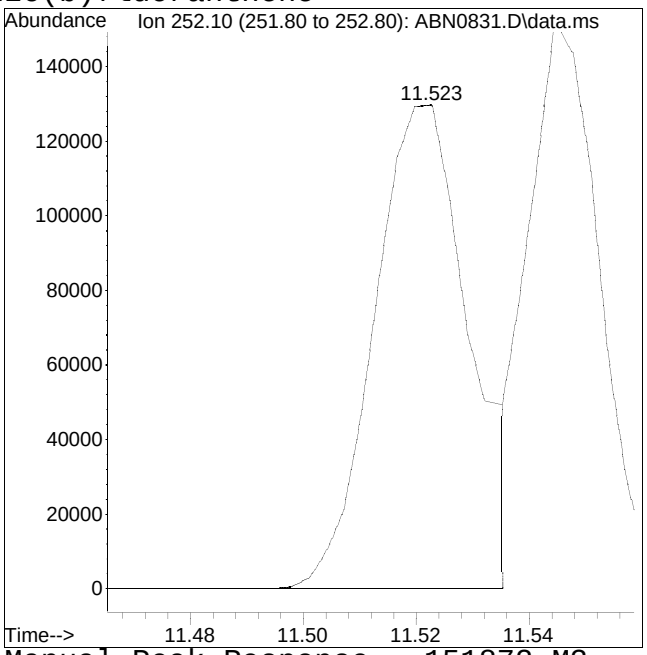
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\Dakota\230831lvi\ QMethod : FS230412LVIDakota.m
Data File : ABN0831.D Operator : Dakota:ljg
Date Inj'd : 8/31/2023 10:12 am Instrument : Dakota
Sample : WG1822460-3,32,,ABN 10210 Quant Date : 8/31/2023 11:20 am

Compound #109: Benzo(b)fluoranthene





Original Peak Response = 151841 Manual Peak Response = 151872 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230831lvi\
Data File : AP90831.D
Acq On : 31 Aug 2023 10:35 am
Operator : Dakota:ljg
Sample : WG1822460-4,32,,AP9 10166 gmr0805B
Misc : WG1822460,,ical19934
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Aug 31 11:20:34 2023
Quant Method : I:\8270\Dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:19:44 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
27	I	IS2_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	100	0.00
28	T	Benzaldehyde		1.046	0.645	38.3#	57	0.00
29	T	Acetophenone		1.831	1.380	24.6#	70	0.00
30	T	m-Toluidine	*	5.000	3.302	34.0#	60	0.00
31	T	2-Chloroaniline		1.693	1.311	22.6#	71	0.00
54	I	IS2_Naphthalene-d8		1.000	1.000	0.0	86	0.00
55	T	a-Terpineol		0.277	0.252	9.0	75	0.00
56	T	3-Chloroaniline		0.138	0.129	6.5	71	0.00
57	T	2,6-Dichlorophenol		0.276	0.303	-9.8	89	0.00
58	T	1-chloro-2-nitrobenzene		0.149	0.129	13.4	71	0.00
59	T	Caprolactam		0.149	0.130	12.8	75	0.00
60	T	1,2,4,5-Tetrachlorobenzene		0.402	0.407	-1.2	84	0.00
61	T	Biphenyl		0.901	0.783	13.1	72	0.00
82	I	IS2_Acenaphthene-d10		1.000	1.000	0.0	98	0.00
83	T	Dichloran	*	5.000	4.343	13.1	96	0.00
84	T	Pentachloronitrobenzene		0.203	0.194	4.4	93	0.00
97	I	IS2_Phenanthrene-d10		1.000	1.000	0.0	108	0.00
98	T	Diphenamid		0.501	0.380	24.2#	79	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : AP90831.D
Acq On : 31 Aug 2023 10:35 am
Operator : Dakota:ljg
Sample : WG1822460-4,32,,AP9 10166 gmr0805B
Misc : WG1822460,,ical19934
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Aug 31 11:20:34 2023
Quant Method : I:\8270\Dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:19:44 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
27) IS2_1,4-Dichlorobenzen...	3.669	152	16508	4.000	ug/ml		0.00
54) IS2_Naphthalene-d8	4.927	136	55735	4.000	ug/ml	#	0.00
82) IS2_Acenaphthene-d10	6.606	164	35012	4.000	ug/ml		0.00
97) IS2_Phenanthrene-d10	7.998	188	85225	4.000	ug/ml		0.00
System Monitoring Compounds							
Target Compounds							Qvalue
28) Benzaldehyde	3.209	105	13312	3.084	ug/ml		99
29) Acetophenone	4.107	105	28468	3.767	ug/ml	#	79
30) m-Toluidine	4.194	106	23137	3.302	ug/ml		90
31) 2-Chloroaniline	4.551	127	27060	3.872	ug/ml		94
55) a-Terpineol	5.018	59	17527	4.548	ug/ml		89
56) 3-Chloroaniline	5.024	65	8993	4.688	ug/ml		85
57) 2,6-Dichlorophenol	5.045	162	21137	5.496	ug/ml	#	85
58) 1-chloro-2-nitrobenzene	5.297	111	8981	4.335	ug/ml	#	1
59) Caprolactam	5.341	55	9091	4.389	ug/ml	#	80
60) 1,2,4,5-Tetrachloroben...	5.795	216	28323	5.057	ug/ml	#	95
61) Biphenyl	6.093	154	54522	4.343	ug/ml		95
83) Dichloran	7.731	206	7827	4.343	ug/ml	#	58
84) Pentachloronitrobenzene	7.865	237	8479	4.766	ug/ml	#	81
98) Diphenamid	8.934	167	40457	3.787	ug/ml	#	80

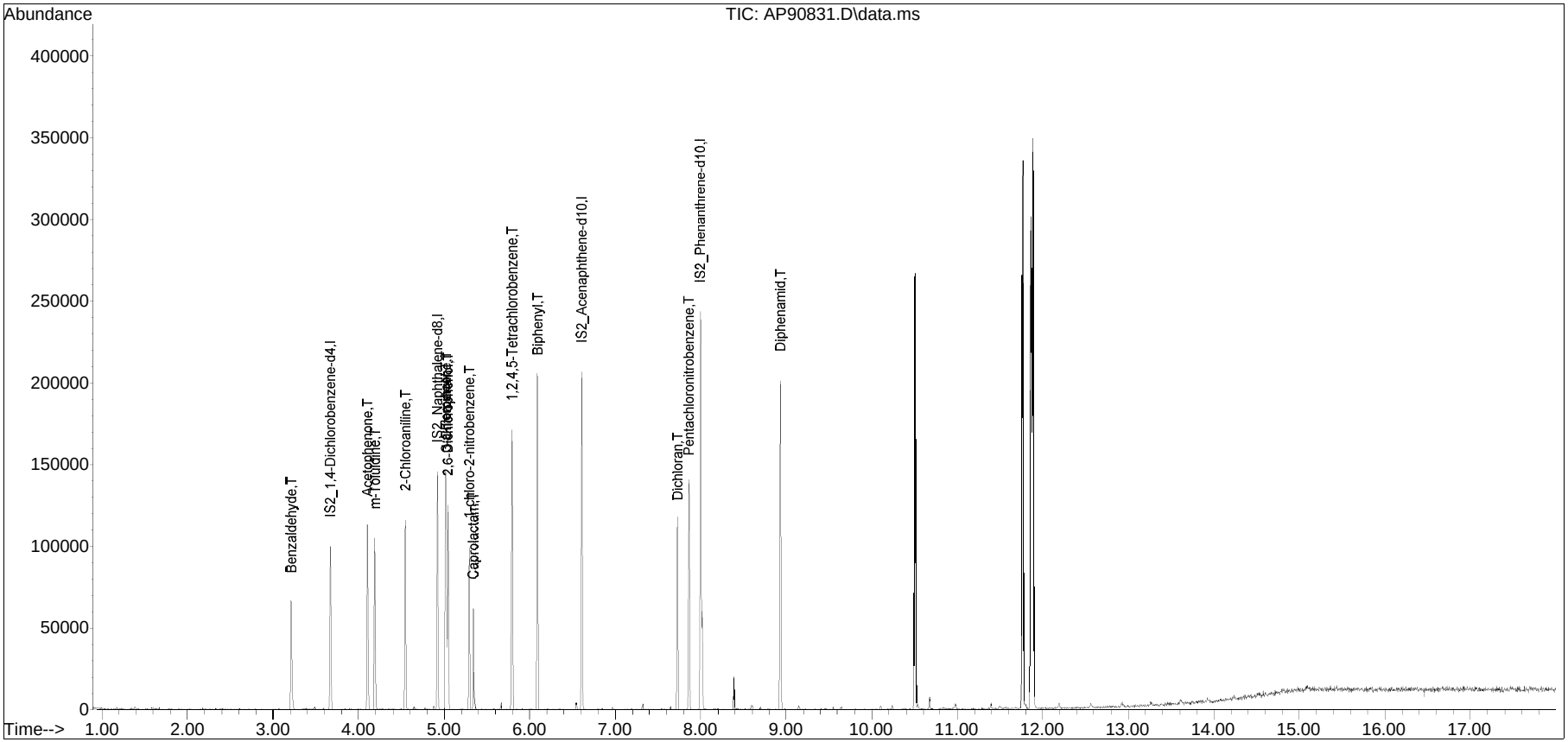
(#) = qualifier out of range (m) = manual integration (+) = signals summed

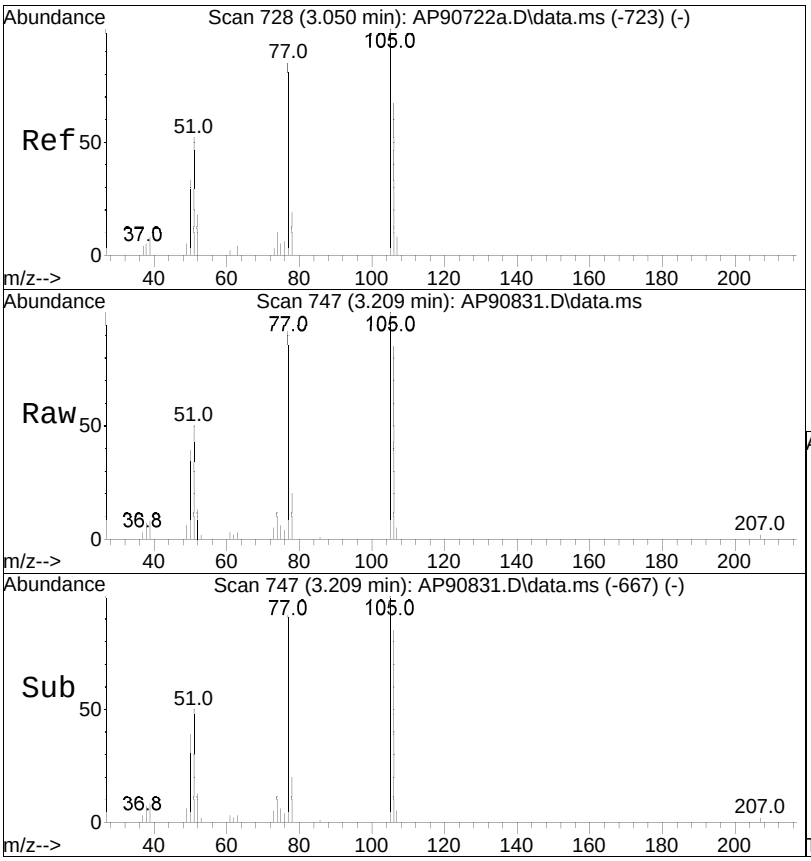
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : AP90831.D
Acq On : 31 Aug 2023 10:35 am
Operator : Dakota:ljg
Sample : WG1822460-4,32,,AP9 10166 gmr0805B
Misc : WG1822460,,ical19934
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Aug 31 11:20:34 2023
Quant Method : I:\8270\Dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:19:44 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublist

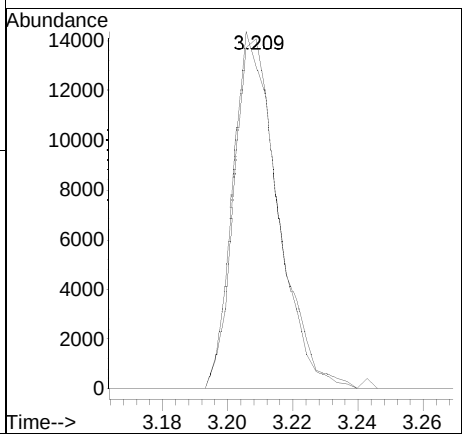


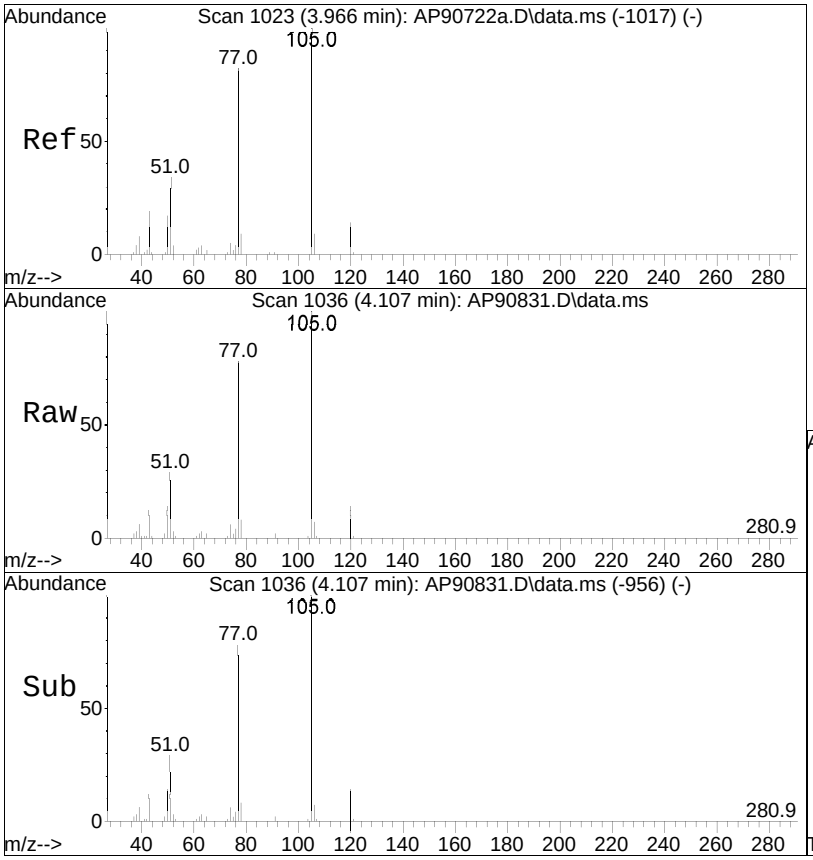


#28
Benzaldehyde
Concen: 3.08 ug/ml
RT: 3.209 min Scan# 747
Delta R.T. -0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion:105 Resp: 13312

Ion	Ratio	Lower	Upper
105	100		
77	103.6	82.2	123.4

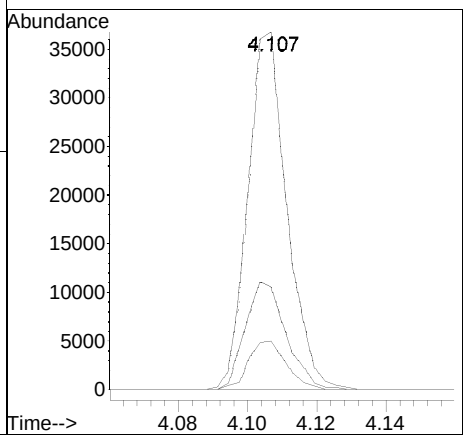


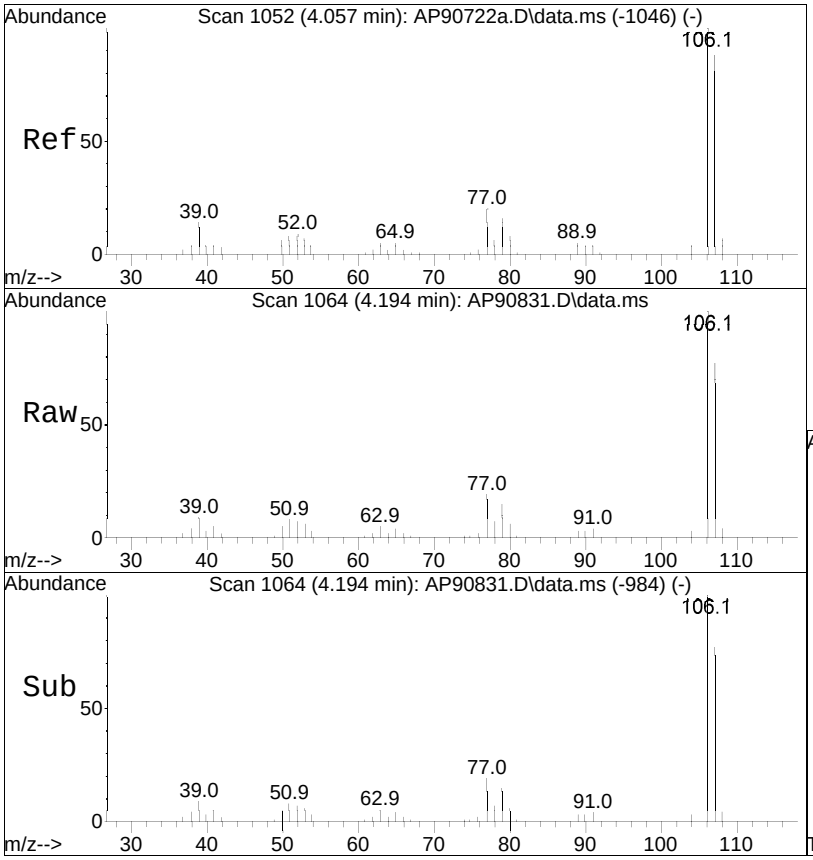


#29
Acetophenone
Concen: 3.77 ug/ml
RT: 4.107 min Scan# 1036
Delta R.T. -0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion:105 Resp: 28468

Ion	Ratio	Lower	Upper
105	100		
120	13.3	20.5	30.7#
51	31.6	34.9	52.3#

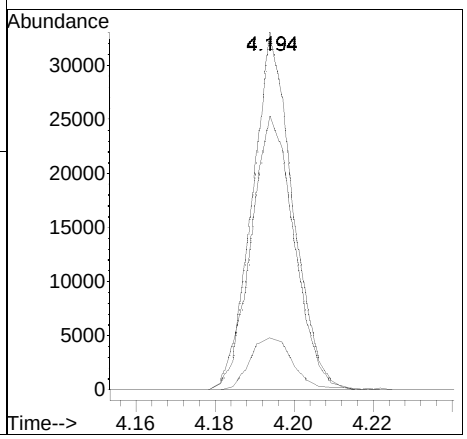


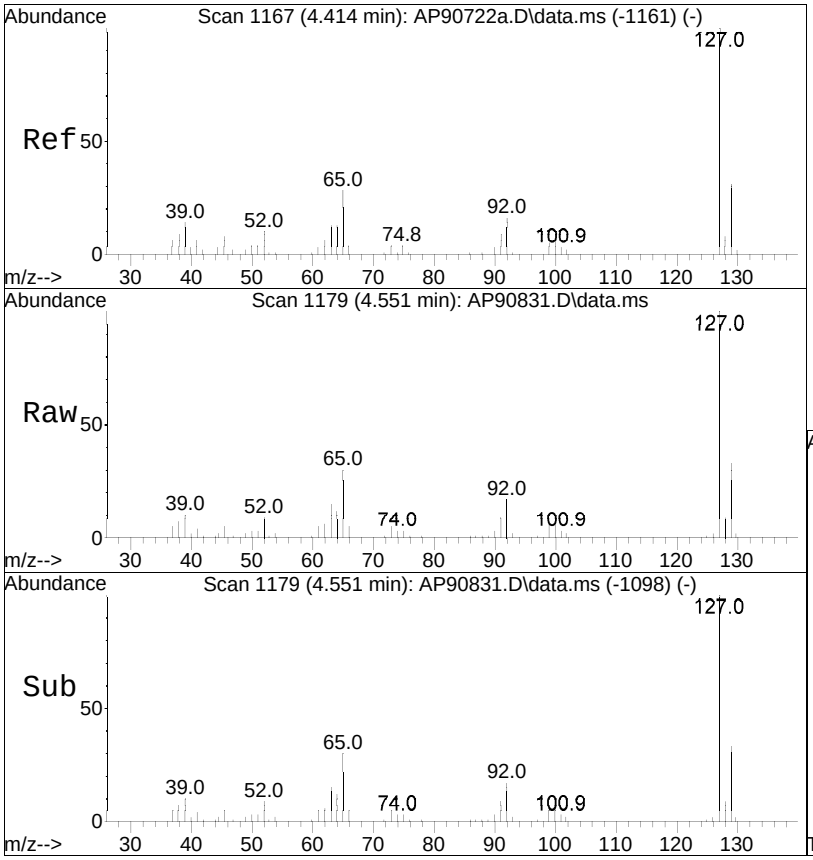


#30
m-Toluidine
Concen: 3.30 ug/ml
RT: 4.194 min Scan# 1064
Delta R.T. -0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion:106 Resp: 23137

Ion	Ratio	Lower	Upper
106	100		
107	83.4	75.7	113.5
79	15.8	11.8	17.8

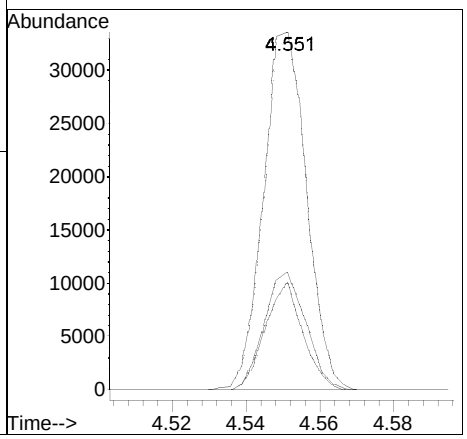


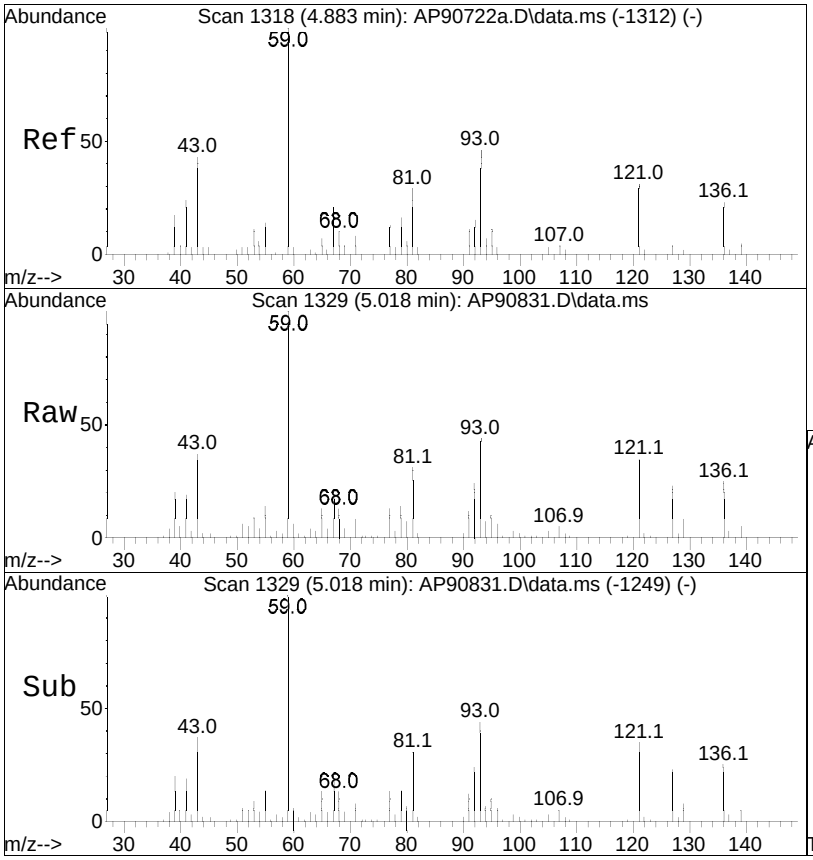


#31
2-Chloroaniline
Concen: 3.87 ug/ml
RT: 4.551 min Scan# 1179
Delta R.T. 0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion:127 Resp: 27060

Ion	Ratio	Lower	Upper
127	100		
129	31.9	25.9	38.9
65	26.4	26.3	39.5

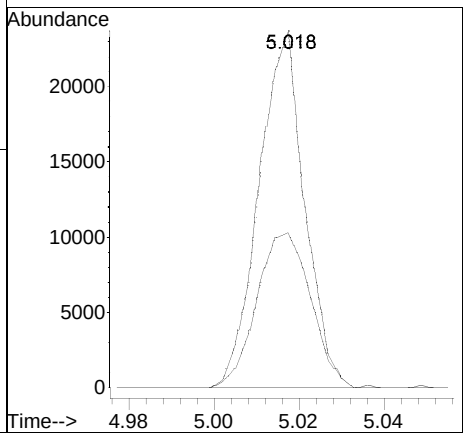


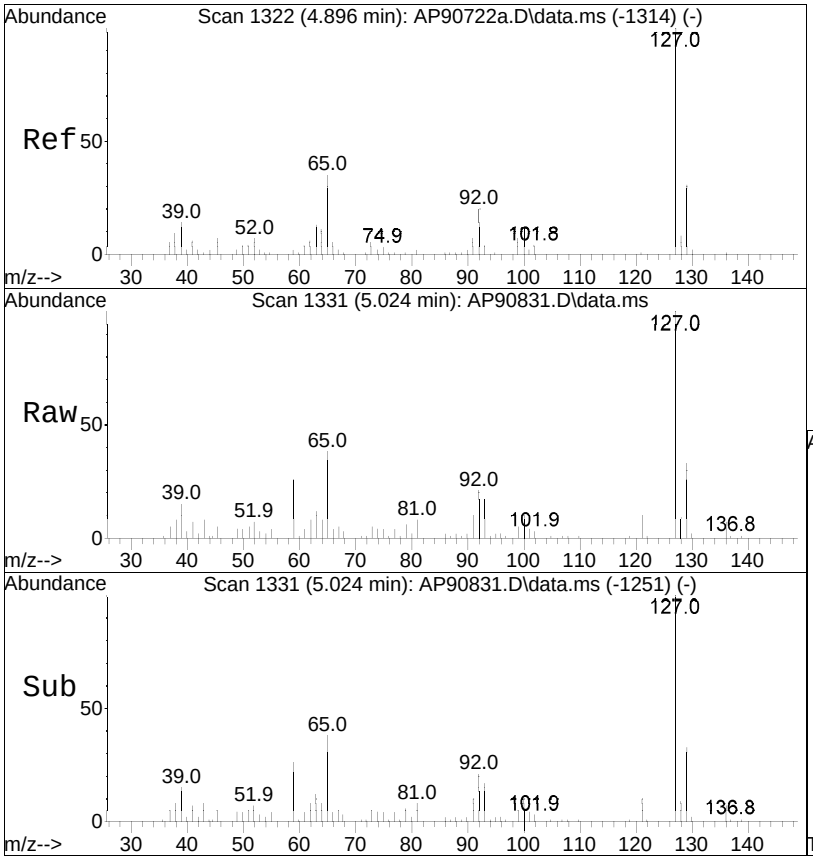


#55
a-Terpineol
Concen: 4.55 ug/ml
RT: 5.018 min Scan# 1329
Delta R.T. -0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion: 59 Resp: 17527

Ion	Ratio	Lower	Upper
59	100		
93	51.8	35.6	53.4

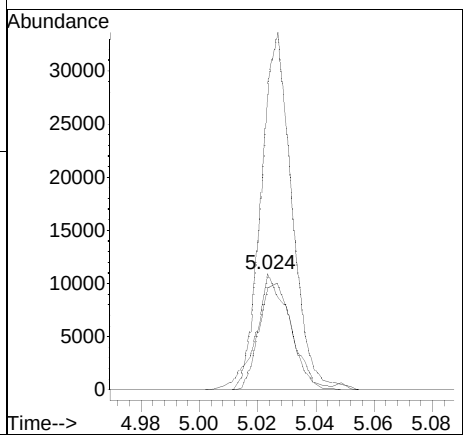


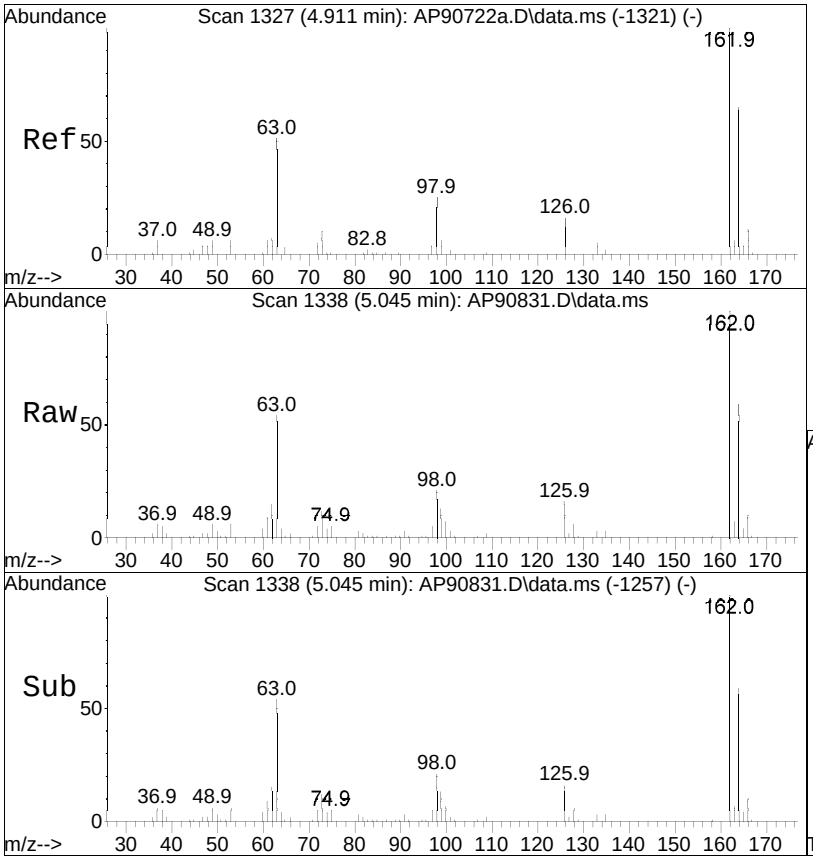


#56
3-Chloroaniline
Concen: 4.69 ug/ml
RT: 5.024 min Scan# 1331
Delta R.T. -0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion: 65 Resp: 8993

Ion	Ratio	Lower	Upper
65	100		
127	271.9	243.2	364.8
129	89.3	78.8	118.2

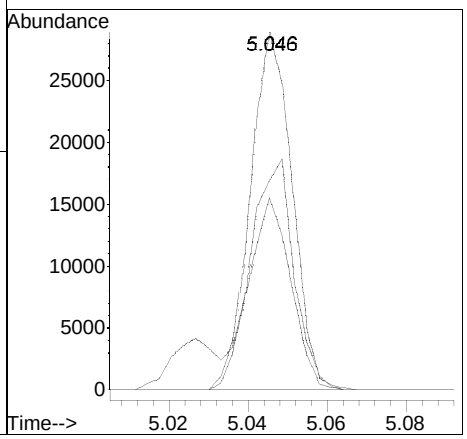


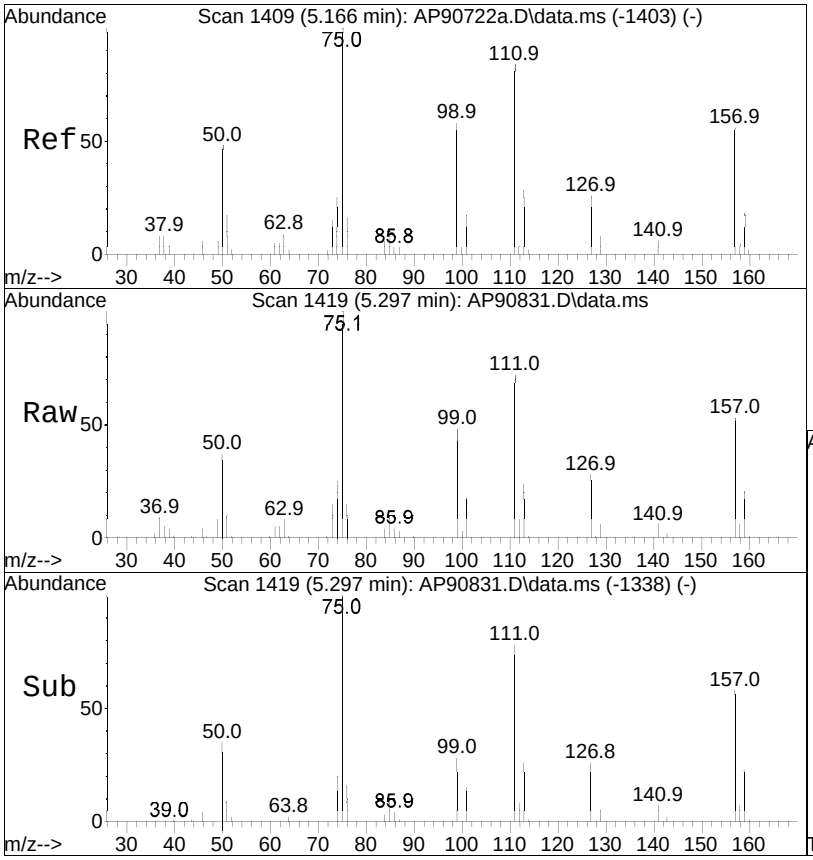


#57
2,6-Dichlorophenol
Concen: 5.50 ug/ml
RT: 5.045 min Scan# 1338
Delta R.T. 0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion:162 Resp: 21137

Ion	Ratio	Lower	Upper
162	100		
164	66.4	51.1	76.7
63	54.3	60.8	91.2#

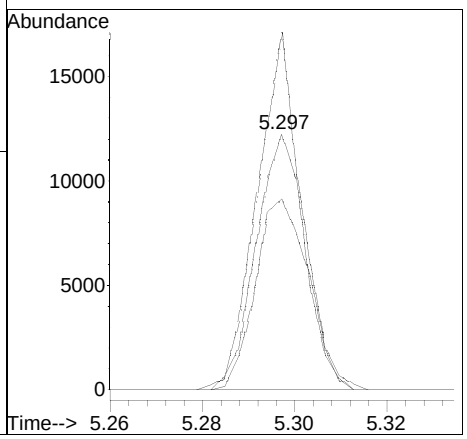


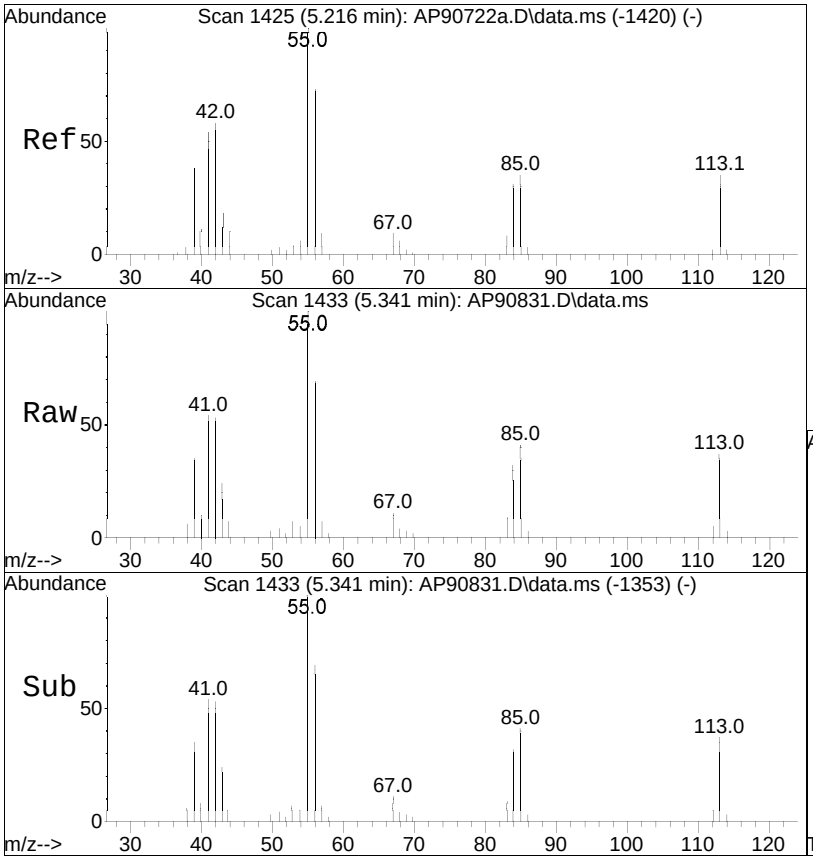


#58
1-chloro-2-nitrobenzene
Concen: 4.33 ug/ml
RT: 5.297 min Scan# 1419
Delta R.T. 0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion:111 Resp: 8981

Ion	Ratio	Lower	Upper
111	100		
157	80.7	0.0	0.0#
75	127.1	28.2	42.2#

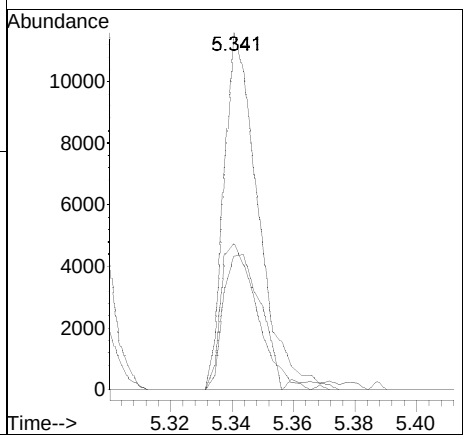


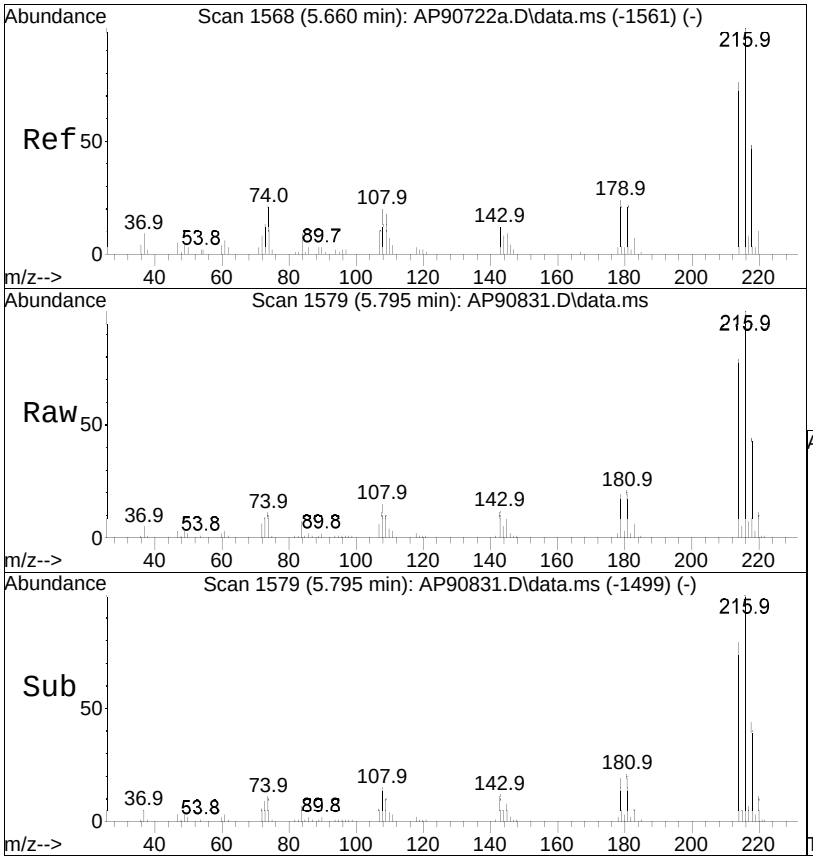


#59
Caprolactam
Concen: 4.39 ug/ml
RT: 5.341 min Scan# 1433
Delta R.T. -0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion: 55 Resp: 9091

Ion	Ratio	Lower	Upper
55	100		
85	43.2	19.8	29.6#
113	42.0	29.6	44.4

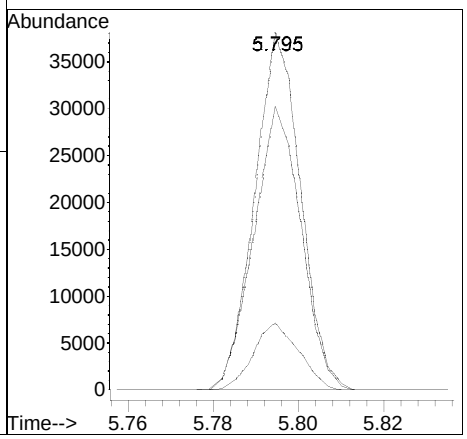


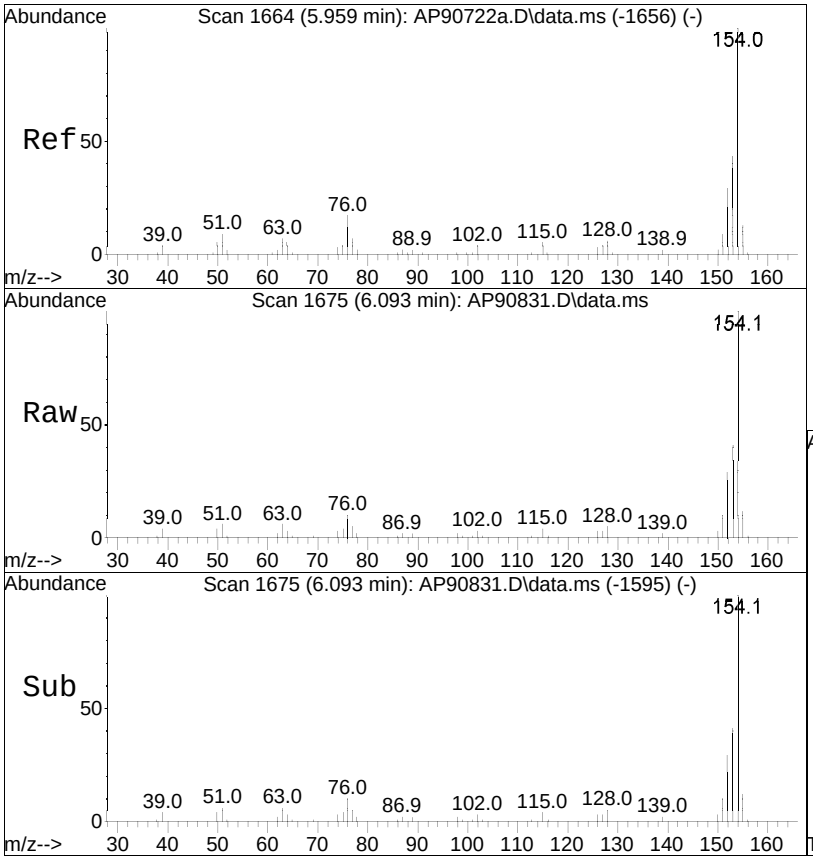


#60
1,2,4,5-Tetrachlorobenzene
Concen: 5.06 ug/ml
RT: 5.795 min Scan# 1579
Delta R.T. -0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion:216 Resp: 28323

Ion	Ratio	Lower	Upper
216	100		
214	82.0	63.7	95.5
179	18.7	19.0	28.6#

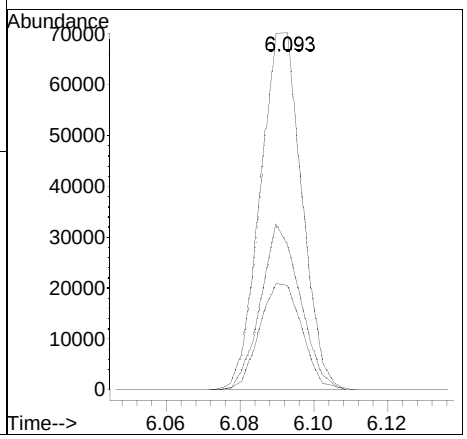


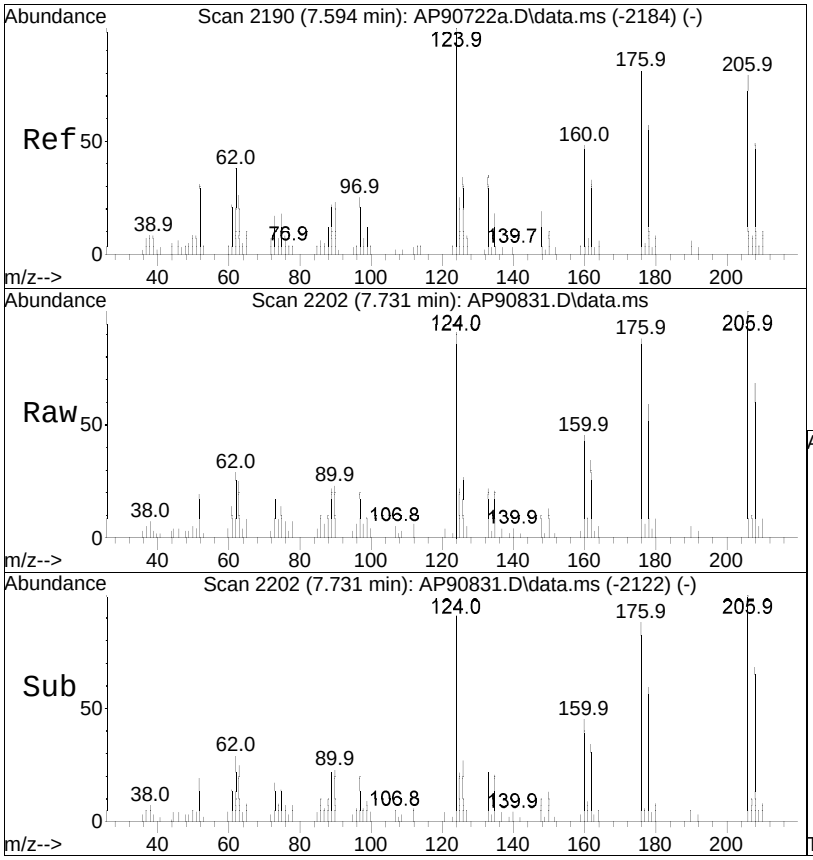


#61
Biphenyl
Concen: 4.34 ug/ml
RT: 6.093 min Scan# 1675
Delta R.T. -0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion:154 Resp: 54522

Ion	Ratio	Lower	Upper
154	100		
153	44.2	32.3	48.5
152	30.6	22.5	33.7

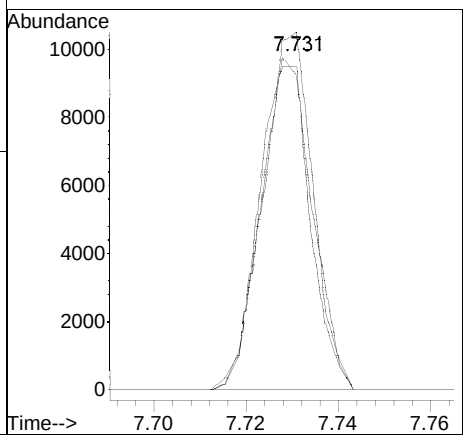


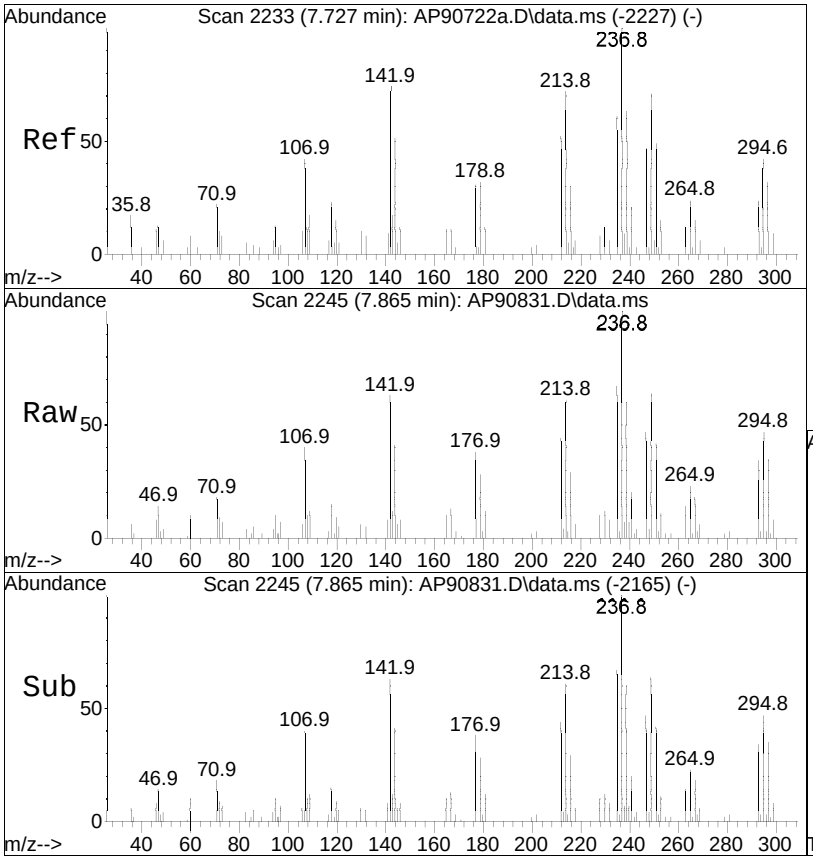


#83
Dichloran
Concen: 4.34 ug/ml
RT: 7.731 min Scan# 2202
Delta R.T. -0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion:206 Resp: 7827

Ion	Ratio	Lower	Upper
206	100		
176	95.6	104.6	157.0#
124	94.1	130.5	195.7#

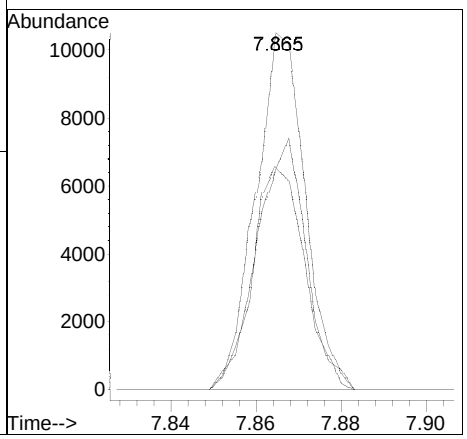


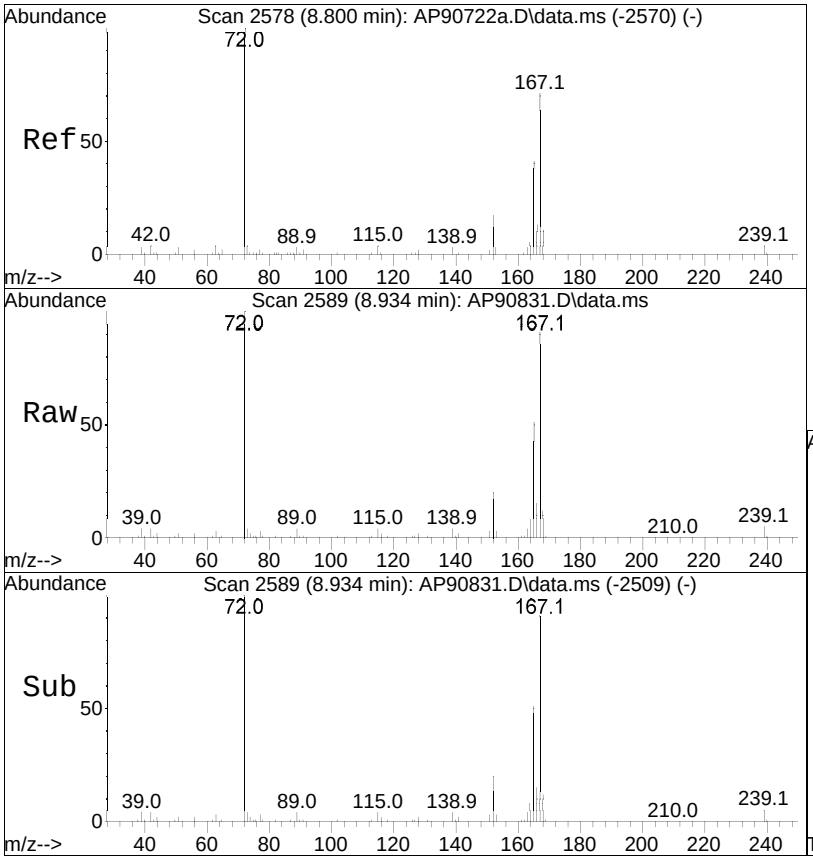


#84
Pentachloronitrobenzene
Concen: 4.77 ug/ml
RT: 7.865 min Scan# 2245
Delta R.T. -0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion:237 Resp: 8479

Ion	Ratio	Lower	Upper
237	100		
142	65.8	77.0	115.4#
214	70.7	58.2	87.4

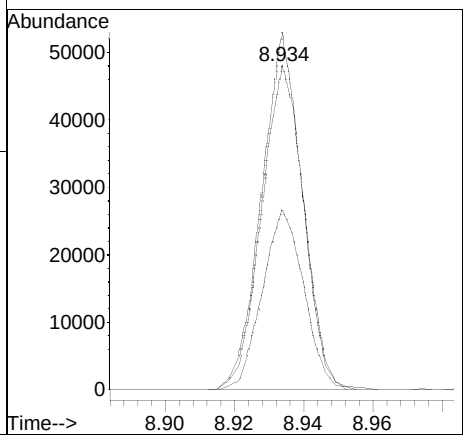




#98
Diphenamid
Concen: 3.79 ug/ml
RT: 8.934 min Scan# 2589
Delta R.T. -0.000 min
Lab File: AP90831.D
Acq: 31 Aug 2023 10:35 am

Tgt Ion:167 Resp: 40457

Ion	Ratio	Lower	Upper
167	100		
72	105.2	109.7	164.5#
165	54.9	41.8	62.6



Manual Integration Report

Data Path	: I:\8270\Dakota\230831lvi\	QMethod	: FS230412LVIDakota.m
Data File	: AP90831.D	Operator	: Dakota:ljg
Date Inj'd	: 8/31/2023 10:35 am	Instrument	: Dakota
Sample	: WG1822460-4,32,,AP9 10166	Quant Date	: 8/31/2023 11:20 am

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230831lvi\
Data File : ADP0831.D
Acq On : 31 Aug 2023 10:57 am
Operator : Dakota:ljg
Sample : WG1822460-5,32,,ADP 10092 gmr0805B
Misc : WG1822460,,ical19934
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Aug 31 11:20:10 2023
Quant Method : I:\8270\Dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:19:44 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
32	I	IS3_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	92	0.00
33	T	n-Decane		1.231	0.969	21.3#	70	0.00
85	I	IS3_Acenaphthene-d10		1.000	1.000	0.0	97	0.00
86	T	Atrazine		0.363	0.385	-6.1	99	0.00
99	I	IS3_Phenanthrene-d10		1.000	1.000	0.0	108	0.00
100	T	n-Octadecane		0.386	0.264	31.6#	71	0.00
101	T	Parathion	*	5.000	4.396	12.1	93	0.00
102	T	3,3'-Dimethylbenzidine	*	5.000	4.555	8.9	97	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : ADP0831.D
Acq On : 31 Aug 2023 10:57 am
Operator : Dakota:ljg
Sample : WG1822460-5,32,,ADP 10092 gmr0805B
Misc : WG1822460,,ical19934
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Aug 31 11:20:10 2023
Quant Method : I:\8270\Dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:19:44 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
	Internal Standards						
32)	IS3_1,4-Dichlorobenzen...	3.669	152	17146	4.000	ug/ml	-0.01
85)	IS3_Acenaphthene-d10	6.606	164	37775	4.000	ug/ml	-0.01
99)	IS3_Phenanthrene-d10	8.001	188	96848	4.000	ug/ml	-0.01
	System Monitoring Compounds						
	Target Compounds						Qvalue
33)	n-Decane	3.594	57	20773	3.936	ug/ml#	33
86)	Atrazine	7.843	200	18186	5.302	ug/ml#	90
100)	n-Octadecane	8.070	57	31998	3.427	ug/ml#	1
101)	Parathion	8.822	109	9995	4.396	ug/ml	86
102)	3,3'-Dimethylbenzidine	10.034	212	70856	4.555	ug/ml	97

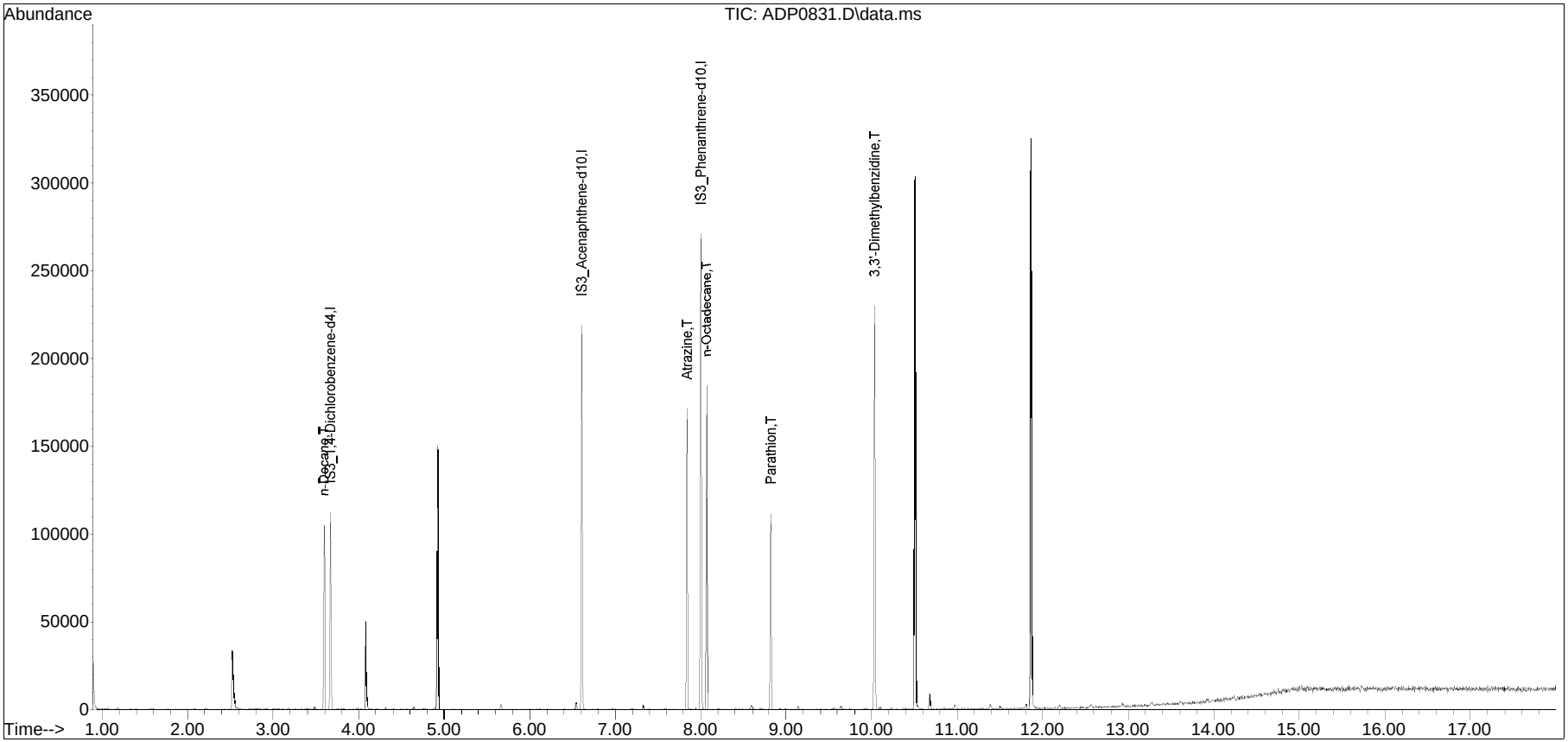
(#) = qualifier out of range (m) = manual integration (+) = signals summed

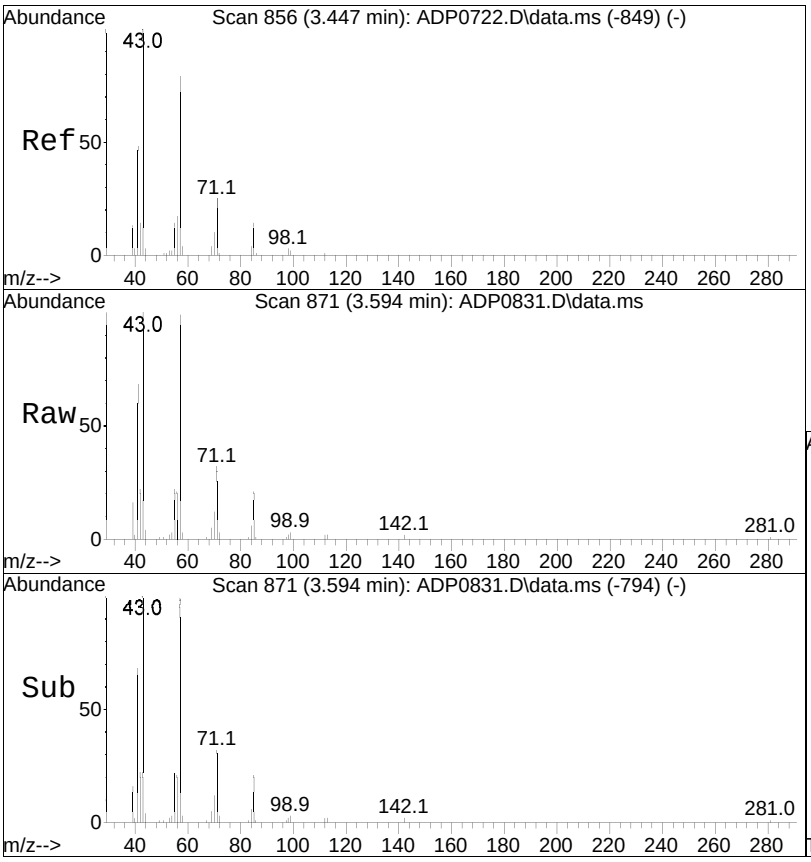
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : ADP0831.D
Acq On : 31 Aug 2023 10:57 am
Operator : Dakota:ljg
Sample : WG1822460-5,32,,ADP 10092 gmr0805B
Misc : WG1822460,,ical19934
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Aug 31 11:20:10 2023
Quant Method : I:\8270\Dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:19:44 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublist

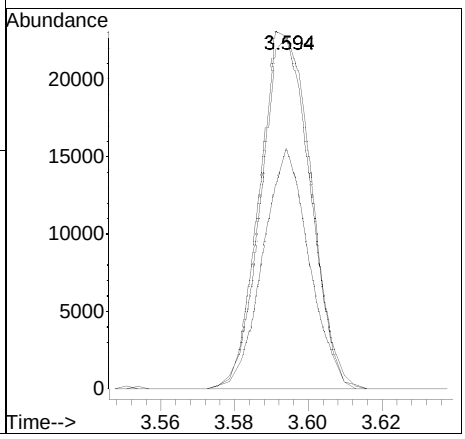


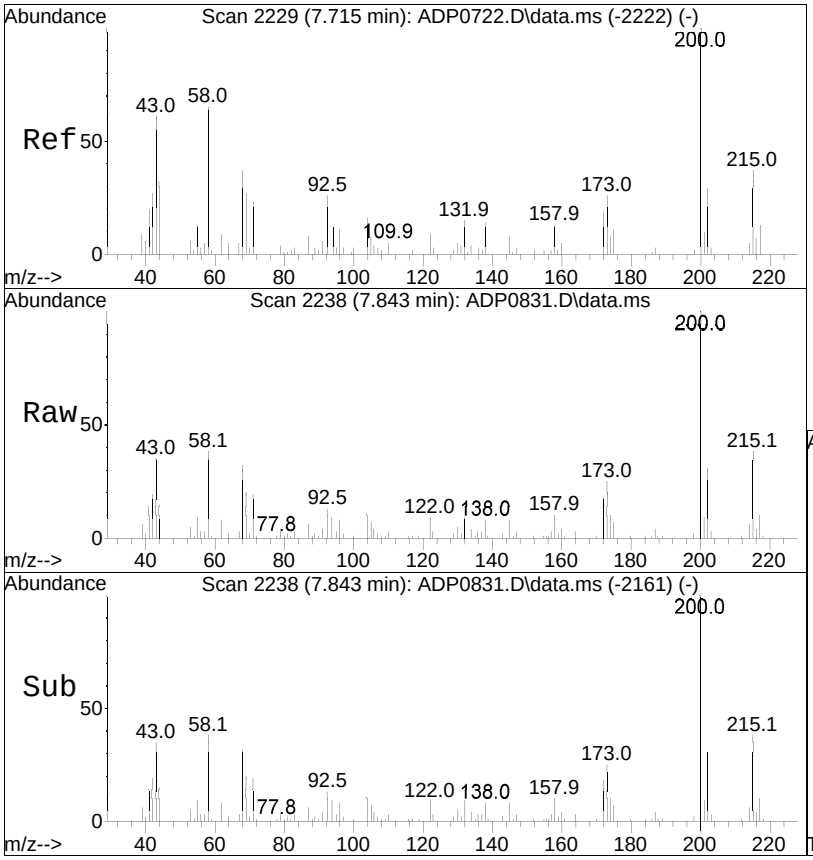


#33
n-Decane
Concen: 3.94 ug/ml
RT: 3.594 min Scan# 871
Delta R.T. -0.012 min
Lab File: ADP0831.D
Acq: 31 Aug 2023 10:57 am

Tgt Ion: 57 Resp: 20773

Ion	Ratio	Lower	Upper
57	100		
43	106.7	0.2	0.2#
41	64.9	0.2	0.2#

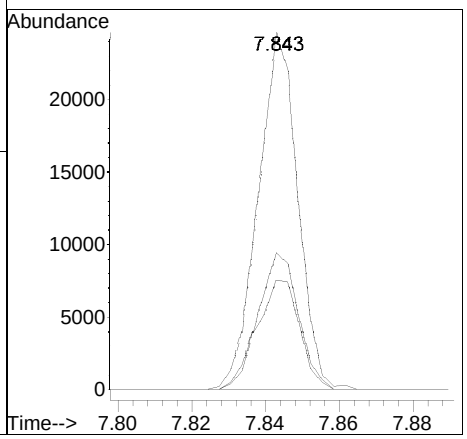


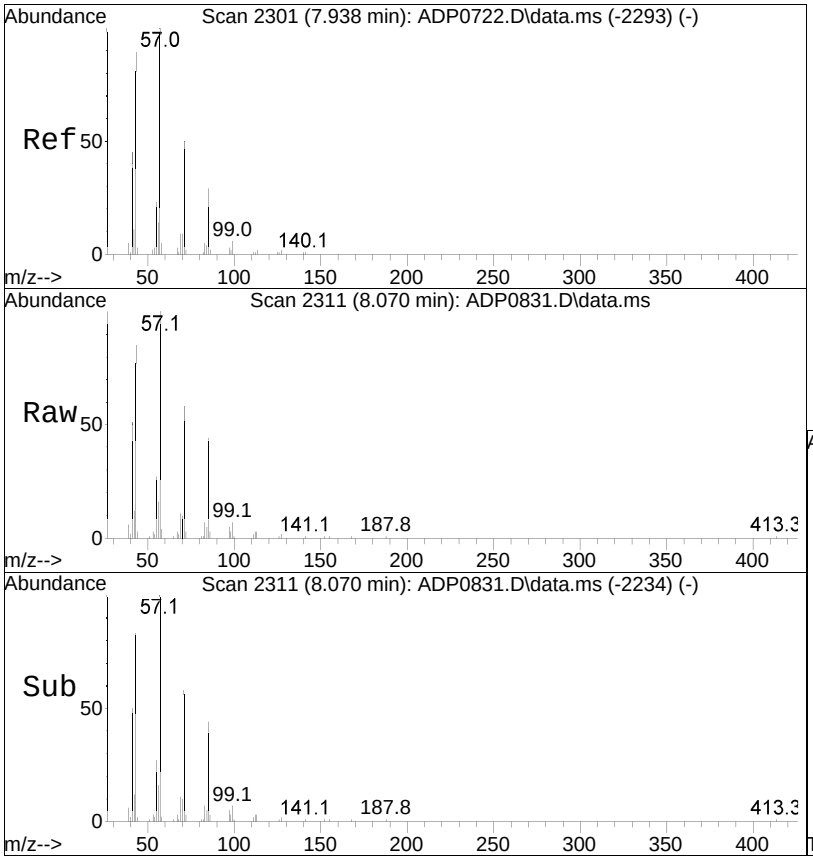


#86
Atrazine
Concen: 5.30 ug/ml
RT: 7.843 min Scan# 2238
Delta R.T. -0.012 min
Lab File: ADP0831.D
Acq: 31 Aug 2023 10:57 am

Tgt Ion:200 Resp: 18186

Ion	Ratio	Lower	Upper
200	100		
202	33.0	25.8	38.6
215	39.5	40.2	60.4#

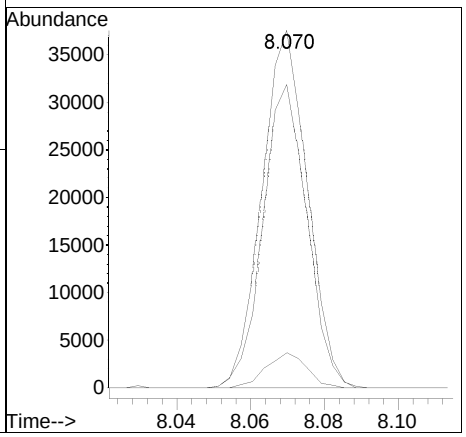


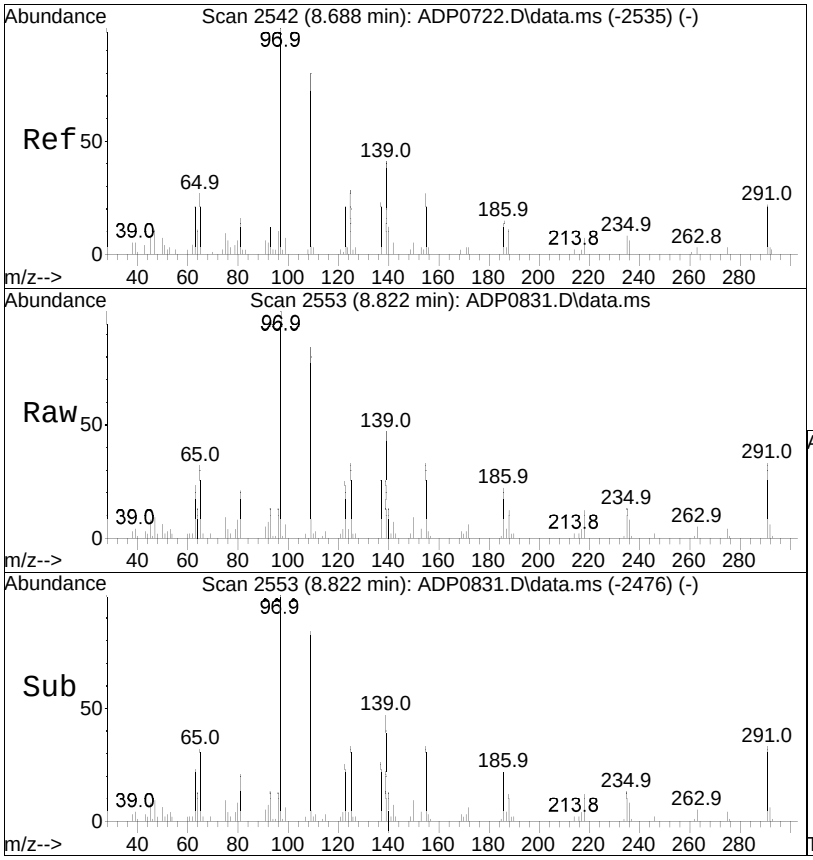


#100
n-Octadecane
Concen: 3.43 ug/ml
RT: 8.070 min Scan# 2311
Delta R.T. -0.012 min
Lab File: ADP0831.D
Acq: 31 Aug 2023 10:57 am

Tgt Ion: 57 Resp: 31998

Ion	Ratio	Lower	Upper
57	100		
43	82.2	9.0	13.6#
70	8.8	0.2	0.2#

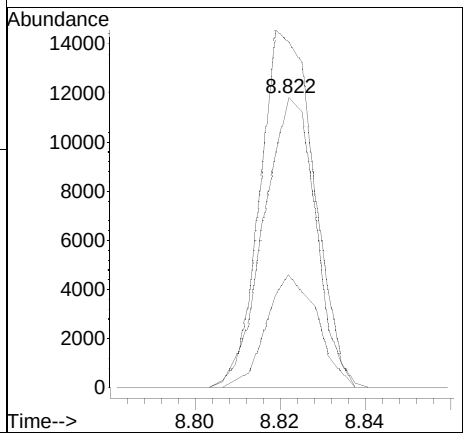


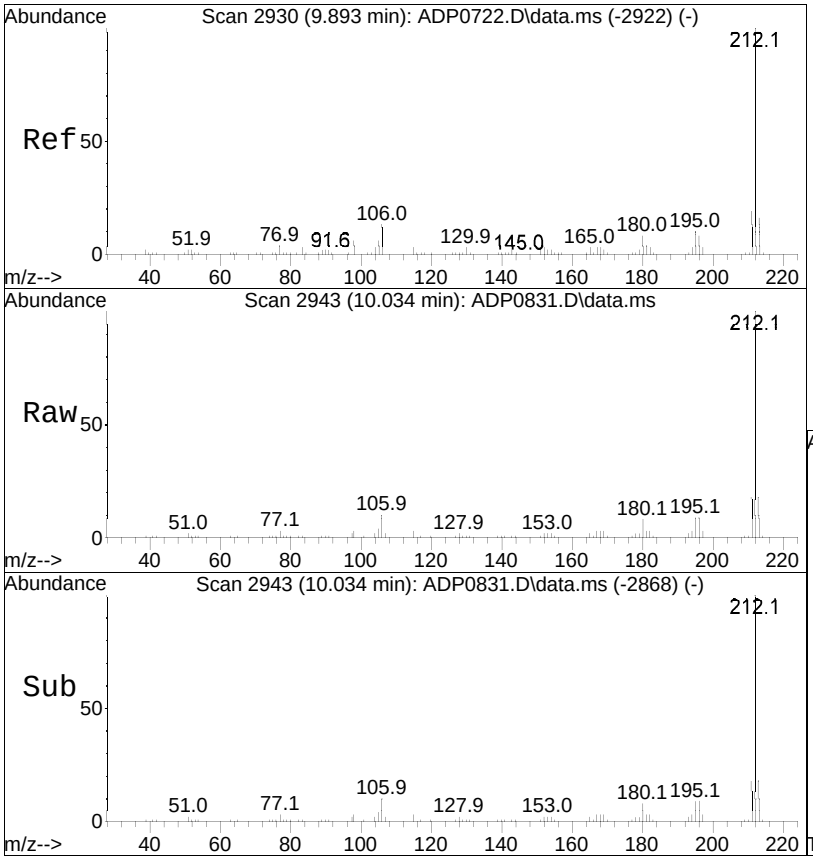


#101
Parathion
Concen: 4.40 ug/ml
RT: 8.822 min Scan# 2553
Delta R.T. -0.012 min
Lab File: ADP0831.D
Acq: 31 Aug 2023 10:57 am

Tgt Ion:109 Resp: 9995

Ion	Ratio	Lower	Upper
109	100		
97	127.4	87.4	131.2
291	38.2	34.2	51.2

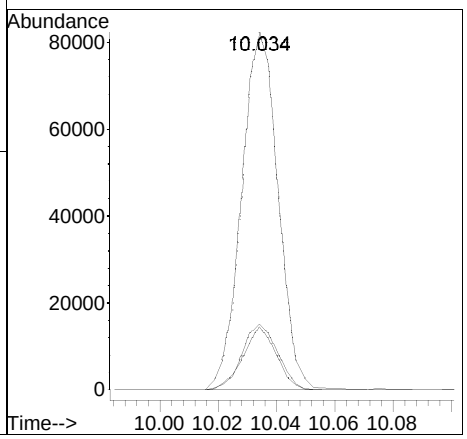




#102
3,3'-Dimethylbenzidine
Concen: 4.55 ug/ml
RT: 10.034 min Scan# 2943
Delta R.T. -0.016 min
Lab File: ADP0831.D
Acq: 31 Aug 2023 10:57 am

Tgt Ion:212 Resp: 70856

Ion	Ratio	Lower	Upper
212	100		
211	18.1	12.9	19.3
213	16.2	13.2	19.8



Manual Integration Report

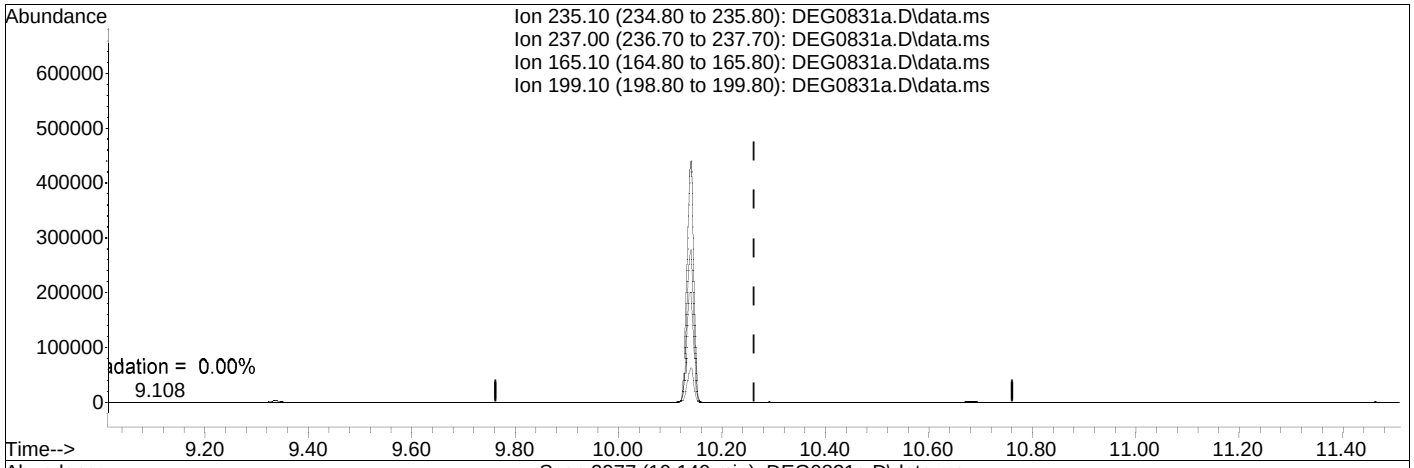
Data Path	: I:\8270\Dakota\230831lvi\	QMethod	: FS230412LVIDakota.m
Data File	: ADP0831.D	Operator	: Dakota:ljg
Date Inj'd	: 8/31/2023 10:57 am	Instrument	: Dakota
Sample	: WG1822460-5,32,,ADP 10092	Quant Date	: 8/31/2023 11:19 am

There are no manual integrations or false positives in this file.

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230831lvi\
Data File : DEG0831a.D
Acq On : 31 Aug 2023 9:50 am
Operator : Dakota:ljg
Sample : WG1822460-2,32,,Dakota Degdftpp
Misc : WG1822460,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Aug 31 10:12:15 2023
Quant Method : I:\8270\Dakota\230831lvi\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 30 01:12:04 2023
Response via : Initial Calibration



CHROMtools [WG1822460-2,32,,Dakota Degdftpp]

(6) DDT (T)

10.140min (-0.122) 60.25

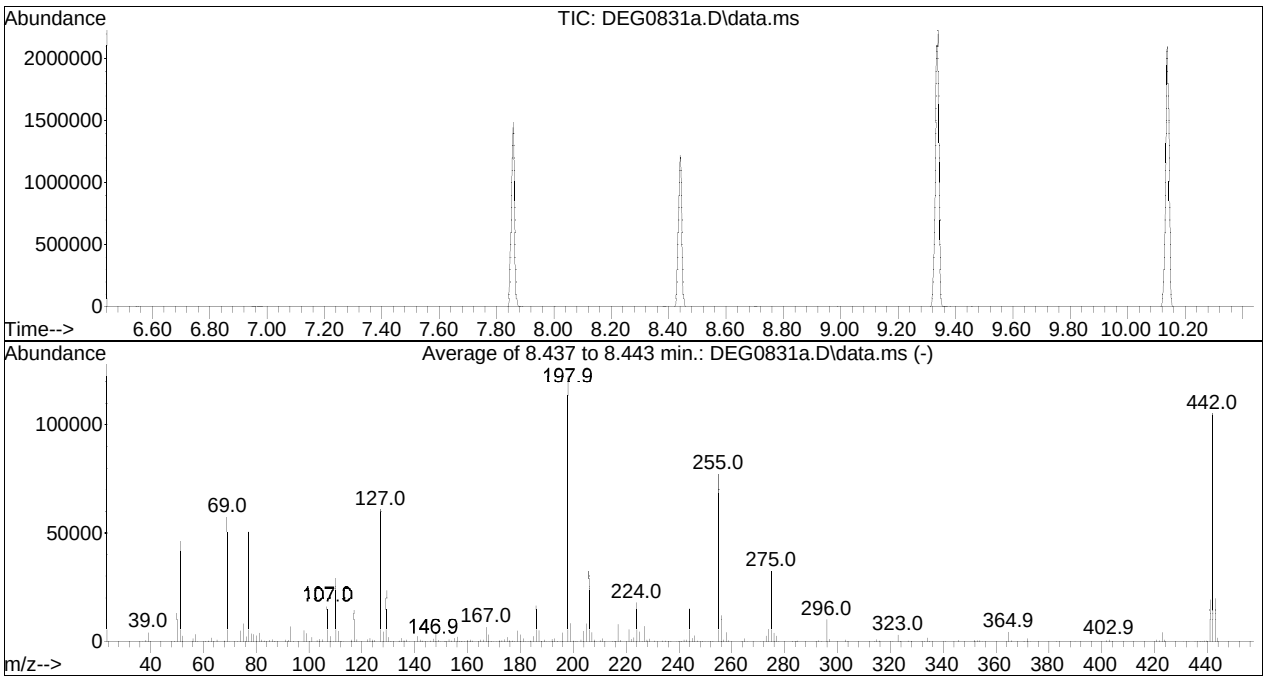
response 367269

Ion	Exp%	Act%
235.10	100.00	100.00
237.00	64.90	64.68
165.10	46.10	46.34
199.10	13.20	14.39

Data Path : I:\8270\Dakota\230831lvi\
Data File : DEG0831a.D
Acq On : 31 Aug 2023 9:50 am
Operator : Dakota:ljg
Sample : WG1822460-1,32,,Dakota Degdftpp
Misc : WG1822460,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270\Dakota\230831lvi\FS230412LVIDakota.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Thu Aug 31 14:28:02 2023



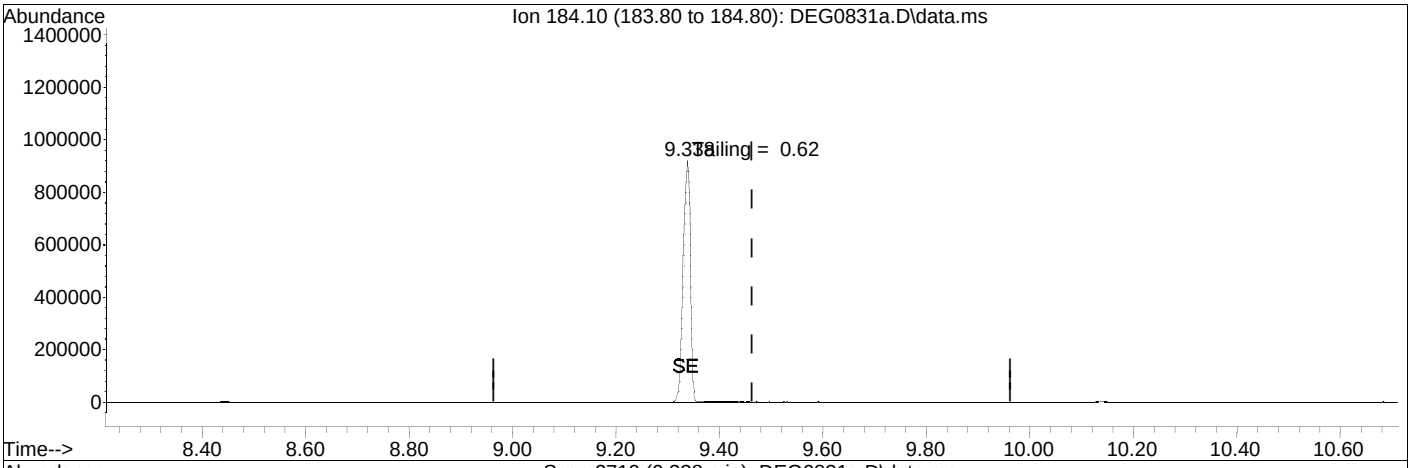
AutoFind: Scans 2429, 2430, 2431; Background Corrected with Scan 2421

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	38.0	46275	PASS
68	69	0.00	2	1.1	613	PASS
69	69	100	100	100.0	57195	PASS
70	69	0.00	2	0.3	157	PASS
127	198	10	80	49.9	60765	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	121763	PASS
199	198	5	9	6.7	8121	PASS
275	198	10	60	26.8	32579	PASS
365	198	1	100	3.6	4373	PASS
441	442	0.01	24	18.2	19099	PASS
442	198	50	100	86.3	105115	PASS
443	442	15	24	18.7	19700	PASS

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230831lvi\
Data File : DEG0831a.D
Acq On : 31 Aug 2023 9:50 am
Operator : Dakota:ljg
Sample : WG1822460-6,32,,Dakota Degdftpp
Misc : WG1822460,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Aug 31 10:12:15 2023
Quant Method : I:\8270\Dakota\230831lvi\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 30 01:12:04 2023
Response via : Initial Calibration



CHROMtools [WG1822460-6,32,,Dakota Degdftpp]

(3) Benzidine (T)

9.338min (-0.125) 80.64

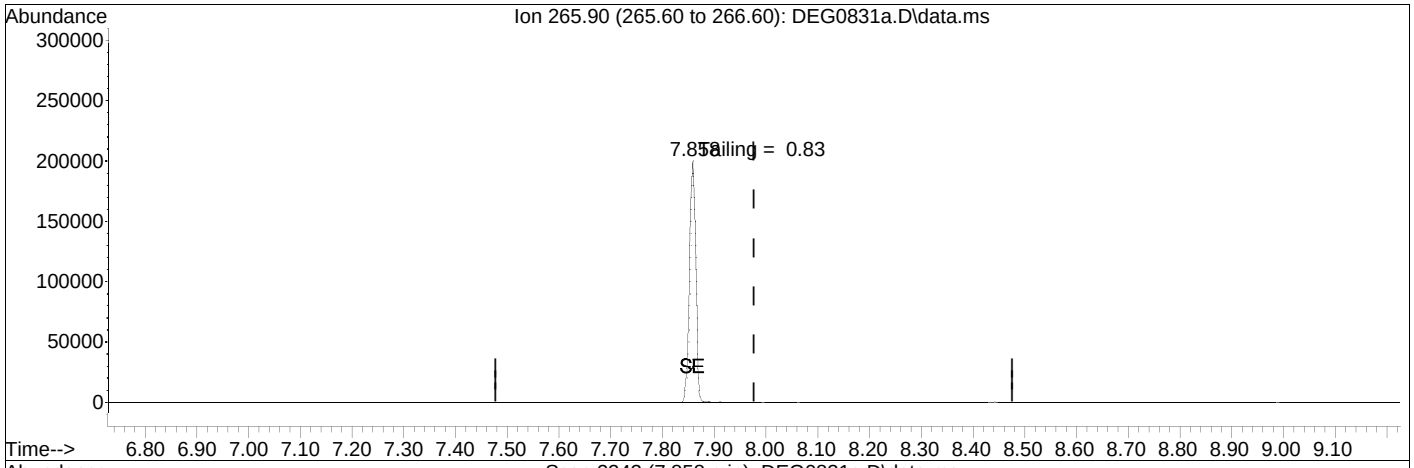
response 820967

Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230831lvi\
Data File : DEG0831a.D
Acq On : 31 Aug 2023 9:50 am
Operator : Dakota:ljg
Sample : WG1822460-7,32,,Dakota Degdftpp
Misc : WG1822460,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Aug 31 10:12:15 2023
Quant Method : I:\8270\Dakota\230831lvi\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 30 01:12:04 2023
Response via : Initial Calibration



CHROMtools™ [WG1822460-7,32,,Dakota Degdftpp]

(1) Pentachlorophenol (T)

7.858min (-0.119) 73.31

response 153967

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230901lvi\
Data File : ABN0901.D
Acq On : 1 Sep 2023 6:40 am
Operator : Dakota:cmm
Sample : WG1822785-3,32,,ABN 10210 gmr0812B
Misc : WG1822785,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 01 07:59:38 2023
Quant Method : I:\8270\Dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 07:58:12 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	IS1_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	86	0.00
2	t	n-Nitrosodimethylamine	*	5.000	4.103	17.9	75	0.00
3	t	Pyridine	*	5.000	4.083	18.3	88	0.00
4	S	2-Fluorophenol		1.033	1.016	1.6	85	0.00
5	T	Aniline		1.790	1.500	16.2	72	0.00
6	t	2-Chlorophenol		1.195	1.105	7.5	78	0.00
7	S	Phenol-d6		1.324	1.203	9.1	77	0.00
8	T	Phenol		1.539	1.245	19.1	72	0.00
9	T	Bis(2-chloroethyl)ether		1.066	0.961	9.8	82	0.00
10	T	1,3-Dichlorobenzene		1.435	1.362	5.1	84	0.00
11	T	1,4-Dichlorobenzene		1.452	1.420	2.2	89	0.00
12	T	1,2-Dichlorobenzene		1.406	1.361	3.2	84	0.00
13	t	Benzyl alcohol		0.936	0.912	2.6	82	0.00
14	T	Bis(2-chloroisopropyl)ether		1.785	1.552	13.1	76	0.00
15	T	2-Methylphenol		1.016	0.922	9.3	77	0.00
16	T	Hexachloroethane		0.551	0.577	-4.7	94	0.00
17	T	n-Nitrosodi-n-propylamine		0.818	0.818	0.0	88	0.00
18	T	3-Methylphenol/4-Methylphen		1.050	0.947	9.8	77	0.00
19	S	Nitrobenzene-d5		1.269	1.214	4.3	84	0.00
20	T	Nitrobenzene		1.234	1.153	6.6	83	0.00
21	T	Isophorone		2.183	2.045	6.3	81	0.00
22	T	2-Nitrophenol		0.577	0.587	-1.7	82	0.00
23	T	2,4-Dimethylphenol		1.110	1.134	-2.2	87	0.00
24	T	Bis(2-chloroethoxy)methane		1.416	1.291	8.8	81	0.00
25	T	2,4-Dichlorophenol		1.044	1.167	-11.8	102	0.00
26	T	1,2,4-Trichlorobenzene		1.276	1.419	-11.2	94	0.00
34	I	IS1_Naphthalene-d8		1.000	1.000	0.0	80	0.00
35	T	Naphthalene		0.971	0.901	7.2	75	0.00
36	T	Benzoic Acid	*	5.000	5.676	-13.5	100	0.00
37	T	4-Chloroaniline		0.115	0.115	0.0	85	0.00
38	T	Hexachlorobutadiene		0.198	0.228	-15.2	94	0.00
39	T	p-Chloro-m-cresol		0.254	0.266	-4.7	83	0.00
40	T	2-Methylnaphthalene		0.631	0.667	-5.7	86	0.00
41	T	1-Methylnaphthalene		0.218	0.214	1.8	77	0.00
42	T	Hexachlorocyclopentadiene		0.239	0.324	-35.6#	108	0.00
43	T	2,4,6-Trichlorophenol	*	5.000	6.199	-24.0#	108	0.00
44	T	2,4,5-Trichlorophenol		0.234	0.298	-27.4#	99	0.00
45	S	2-Fluorobiphenyl		0.787	0.891	-13.2	91	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230901lvi\
Data File : ABN0901.D
Acq On : 1 Sep 2023 6:40 am
Operator : Dakota:cmm
Sample : WG1822785-3,32,,ABN 10210 gmr0812B
Misc : WG1822785,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 01 07:59:38 2023
Quant Method : I:\8270\Dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 07:58:12 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
46	T	2-Chloronaphthalene		0.692	0.756	-9.2	89	0.00
47	T	2-Nitroaniline		0.200	0.203	-1.5	81	0.00
48	T	1,4-Dinitrobenzene		0.093	0.099	-6.5	84	0.00
49	T	1,3-Dinitrobenzene		0.109	0.107	1.8	87	0.00
50	T	Dimethyl phthalate		0.809	0.914	-13.0	90	0.00
51	T	Acenaphthylene		1.049	1.151	-9.7	87	0.00
52	T	2,6-Dinitrotoluene		0.167	0.187	-12.0	86	0.00
53	T	1,2-Dinitrobenzene		0.065	0.073	-12.3	87	0.00
62	I	IS1_Acenaphthene-d10		1.000	1.000	0.0	93	0.00
63	T	3-Nitroaniline		0.318	0.288	9.4	80	0.00
64	T	Acenaphthene		1.089	0.960	11.8	83	0.00
65	T	2,4-Dinitrophenol	*	5.000	5.914	-18.3	114	0.00
66	T	Dibenzofuran		1.737	1.644	5.4	89	0.00
67	T	2,4-Dinitrotoluene		0.392	0.374	4.6	85	0.00
68	T	4-Nitrophenol	*	5.000	4.979	0.4	96	0.00
69	T	2,3,5,6-Tetrachlorophenol	*	5.000	5.614	-12.3	110	0.00
70	T	2,3,4,6-Tetrachlorophenol	*	5.000	5.794	-15.9	112	0.00
71	T	Diethyl phthalate		1.466	1.368	6.7	87	0.00
72	T	Fluorene		1.400	1.248	10.9	83	0.00
73	T	4-Chlorophenyl phenyl ether		0.681	0.668	1.9	94	0.00
74	T	4-Nitroaniline		0.316	0.299	5.4	85	0.00
75	T	4,6-Dinitro-o-cresol	*	5.000	6.060	-21.2#	119	0.00
76	T	NDPA/DPA		1.195	1.092	8.6	84	0.00
77	T	Azobenzene		1.256	1.159	7.7	83	0.00
78	S	2,4,6-Tribromophenol		0.232	0.324	-39.7#	132	0.00
79	T	4-Bromophenyl phenyl ether		0.425	0.441	-3.8	96	0.00
80	T	Hexachlorobenzene		0.532	0.590	-10.9	109	0.00
81	T	Pentachlorophenol	*	5.000	6.150	-23.0#	132	0.00
87	I	IS1_Phenanthrene-d10		1.000	1.000	0.0	94	0.00
88	T	Phenanthrene		1.030	0.915	11.2	86	0.00
89	T	Anthracene		0.998	0.931	6.7	88	0.00
90	T	Carbazole		0.941	0.860	8.6	85	0.00
91	T	Di-n-butylphthalate		1.108	1.027	7.3	90	0.00
92	T	Fluoranthene		1.208	1.160	4.0	92	0.00
93	T	Benzidine		0.791	0.767	3.0	106	0.00
94	T	Pyrene		1.277	1.251	2.0	93	0.00
95	S	4-Terphenyl-d14		0.978	0.978	0.0	95	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230901lvi\
Data File : ABN0901.D
Acq On : 1 Sep 2023 6:40 am
Operator : Dakota:cmm
Sample : WG1822785-3,32,,ABN 10210 gmr0812B
Misc : WG1822785,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 01 07:59:38 2023
Quant Method : I:\8270\Dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 07:58:12 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96	T	Butyl benzyl phthalate	0.504	0.474	6.0	91	0.00
103	I	IS1_Chrysene-d12	1.000	1.000	0.0	98	0.00
104	T	Benzo(a)anthracene	1.254	1.156	7.8	90	0.00
105	T	3,3'-Dichlorobenzidine	0.482	0.487	-1.0	100	0.00
106	T	Chrysene	1.184	1.113	6.0	90	0.00
107	T	Bis(2-ethylhexyl)phthalate	0.700	0.656	6.3	91	0.00
108	T	Di-n-octylphthalate	1.271	1.145	9.9	93	0.00
109	T	Benzo(b)fluoranthene	1.361	1.287	5.4	95	0.00
110	T	Benzo(k)fluoranthene	1.299	1.263	2.8	92	0.00
111	T	Benzo(a)pyrene	1.183	1.191	-0.7	97	0.00
112	I	IS1_Perylene-d12	1.000	1.000	0.0	97	0.00
113	T	Indeno(1,2,3-cd)pyrene	1.060	0.945	10.8	86	0.00
114	T	Dibenzo(a,h)anthracene	1.111	0.991	10.8	88	0.00
115	T	Benzo(ghi)perylene	1.122	1.060	5.5	93	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230901lvi\
Data File : ABN0901.D
Acq On : 1 Sep 2023 6:40 am
Operator : Dakota:cmm
Sample : WG1822785-3,32,,ABN 10210 gmr0812B
Misc : WG1822785,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 01 07:59:38 2023
Quant Method : I:\8270\Dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 07:58:12 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.650	152	15428	4.000	ug/ml		0.00
34) IS1_Naphthalene-d8	4.909	136	54627	4.000	ug/ml	#	0.00
62) IS1_Acenaphthene-d10	6.587	164	36931	4.000	ug/ml		0.00
87) IS1_Phenanthrene-d10	7.980	188	86683	4.000	ug/ml		0.00
103) IS1_Chrysene-d12	10.482	240	95165	4.000	ug/ml		0.00
112) IS1_Perylene-d12	11.834	264	119587	4.000	ug/ml		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	2.242	112	19593	4.918	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 98.36%				
7) Phenol-d6	3.376	99	23195	4.544	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 90.88%				
19) Nitrobenzene-d5	4.222	82	23416	4.785	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 191.40%#				
45) 2-Fluorobiphenyl	5.993	172	60853	5.662	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 226.48%#				
78) 2,4,6-Tribromophenol	7.339	330	14937	6.987	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 139.74%#				
95) 4-Terphenyl-d14	9.549	244	106020	5.004	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 200.16%#				
Target Compounds							Qvalue
2) n-Nitrosodimethylamine	1.021	74	12238	4.103	ug/ml		90
3) Pyridine	1.036	79	18294	4.083	ug/ml	#	64
5) Aniline	3.324	93	28922	4.189	ug/ml		95
6) 2-Chlorophenol	3.436	128	21310	4.622	ug/ml		91
8) Phenol	3.389	94	24013	4.046	ug/ml		93
9) Bis(2-chloroethyl)ether	3.436	93	18540	4.508	ug/ml	#	71
10) 1,3-Dichlorobenzene	3.585	146	26266	4.745	ug/ml		97
11) 1,4-Dichlorobenzene	3.666	146	27387	4.891	ug/ml		96
12) 1,2-Dichlorobenzene	3.818	146	26251	4.841	ug/ml		94
13) Benzyl alcohol	3.843	79	17590	4.870	ug/ml		94
14) Bis(2-chloroisopropyl)...	4.001	45	29928	4.348	ug/ml	#	57
15) 2-Methylphenol	4.004	108	17774	4.535	ug/ml		96
16) Hexachloroethane	4.147	117	11124	5.236	ug/ml	#	58
17) n-Nitrosodi-n-propylamine	4.129	70	15781	5.003	ug/ml	#	83
18) 3-Methylphenol/4-Methy...	4.172	108	18262	4.511	ug/ml		90
20) Nitrobenzene	4.241	77	22232	4.673	ug/ml		96
21) Isophorone	4.495	82	39429	4.684	ug/ml	#	92
22) 2-Nitrophenol	4.564	139	11327	5.093	ug/ml		90

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230901lvi\
Data File : ABN0901.D
Acq On : 1 Sep 2023 6:40 am
Operator : Dakota:cmm
Sample : WG1822785-3,32,,ABN 10210 gmr0812B
Misc : WG1822785,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 01 07:59:38 2023
Quant Method : I:\8270\Dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 07:58:12 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) 2,4-Dimethylphenol	4.682	107	21861	5.105	ug/ml	94
24) Bis(2-chloroethoxy)met...	4.763	93	24893	4.558	ug/ml#	95
25) 2,4-Dichlorophenol	4.812	162	22507	5.591	ug/ml#	92
26) 1,2,4-Trichlorobenzene	4.875	180	27371	5.560	ug/ml	97
35) Naphthalene	4.927	128	61534	4.640	ug/ml	99
36) Benzoic Acid	4.784	105	11118	5.676	ug/ml	95
37) 4-Chloroaniline	5.027	65	7844	5.011	ug/ml	77
38) Hexachlorobutadiene	5.098	225	15552	5.764	ug/ml	97
39) p-Chloro-m-cresol	5.555	107	18196	5.254	ug/ml	92
40) 2-Methylnaphthalene	5.608	142	45522	5.283	ug/ml	97
41) 1-Methylnaphthalene	5.698	115	14634	4.906	ug/ml	96
42) Hexachlorocyclopentadiene	5.785	237	22107	6.774	ug/ml	98
43) 2,4,6-Trichlorophenol	5.910	196	19758M3	6.199	ug/ml	
44) 2,4,5-Trichlorophenol	5.938	196	20380	6.390	ug/ml	97
46) 2-Chloronaphthalene	6.062	162	51623	5.460	ug/ml#	91
47) 2-Nitroaniline	6.192	138	13872	5.076	ug/ml	89
48) 1,4-Dinitrobenzene	6.335	168	6726	5.270	ug/ml	96
49) 1,3-Dinitrobenzene	6.407	168	7335	4.929	ug/ml#	1
50) Dimethyl phthalate	6.416	163	62388	5.647	ug/ml#	96
51) Acenaphthylene	6.444	152	78583	5.483	ug/ml	98
52) 2,6-Dinitrotoluene	6.447	165	12768	5.597	ug/ml	87
53) 1,2-Dinitrobenzene	6.478	168	4954	5.556	ug/ml#	84
63) 3-Nitroaniline	6.590	138	13302	4.526	ug/ml	92
64) Acenaphthene	6.615	154	44302	4.405	ug/ml	90
65) 2,4-Dinitrophenol	6.693	184	8715	5.914	ug/ml	88
66) Dibenzofuran	6.786	168	75915	4.733	ug/ml	90
67) 2,4-Dinitrotoluene	6.820	165	17264	4.772	ug/ml	91
68) 4-Nitrophenol	6.817	65	12070	4.979	ug/ml#	90
69) 2,3,5,6-Tetrachlorophenol	6.889	232	18924	5.614	ug/ml	98
70) 2,3,4,6-Tetrachlorophenol	6.932	232	19643	5.794	ug/ml	98
71) Diethyl phthalate	7.097	149	63130	4.663	ug/ml	98
72) Fluorene	7.109	166	57609	4.455	ug/ml	90
73) 4-Chlorophenyl phenyl ...	7.150	204	30850	4.909	ug/ml#	85
74) 4-Nitroaniline	7.162	138	13795	4.727	ug/ml#	79
75) 4,6-Dinitro-o-cresol	7.199	198	12095	6.060	ug/ml#	62
76) NDPA/DPA	7.271	169	50425	4.572	ug/ml	92
77) Azobenzene	7.293	77	53494	4.615	ug/ml	94
79) 4-Bromophenyl phenyl e...	7.603	248	20381	5.194	ug/ml#	79
80) Hexachlorobenzene	7.631	284	27222	5.543	ug/ml#	76
81) Pentachlorophenol	7.833	266	17024	6.150	ug/ml	98
88) Phenanthrene	8.001	178	99122	4.440	ug/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230901lvi\
Data File : ABN0901.D
Acq On : 1 Sep 2023 6:40 am
Operator : Dakota:cmm
Sample : WG1822785-3,32,,ABN 10210 gmr0812B
Misc : WG1822785,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 01 07:59:38 2023
Quant Method : I:\8270\Dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 07:58:12 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
89)	Anthracene	8.048	178	100859	4.664	ug/ml	99
90)	Carbazole	8.231	167	93150	4.569	ug/ml	97
91)	Di-n-butylphthalate	8.670	149	111302	4.637	ug/ml	98
92)	Fluoranthene	9.120	202	125687	4.802	ug/ml#	91
93)	Benzidine	9.307	184	83077	4.844	ug/ml#	94
94)	Pyrene	9.322	202	135592	4.900	ug/ml	99
96)	Butyl benzyl phthalate	10.074	149	51389	4.709	ug/ml#	83
104)	Benzo(a)anthracene	10.475	228	137479M3	4.609	ug/ml	
105)	3,3'-Dichlorobenzidine	10.506	252	57881	5.047	ug/ml#	95
106)	Chrysene	10.506	228	132349	4.697	ug/ml	98
107)	Bis(2-ethylhexyl)phtha...	10.684	149	78011	4.682	ug/ml#	87
108)	Di-n-octylphthalate	11.315	149	136219	4.505	ug/ml#	72
109)	Benzo(b)fluoranthene	11.492	252	153118M3	4.729	ug/ml	
110)	Benzo(k)fluoranthene	11.517	252	150214	4.861	ug/ml#	92
111)	Benzo(a)pyrene	11.778	252	141679	5.034	ug/ml#	93
113)	Indeno(1,2,3-cd)pyrene	12.738	276	141255M3	4.456	ug/mL	
114)	Dibenzo(a,h)anthracene	12.772	278	148064	4.457	ug/ml#	87
115)	Benzo(ghi)perylene	12.940	276	158488	4.727	ug/ml#	83

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230901lvi\
Data File : ABN0901.D
Acq On : 1 Sep 2023 6:40 am
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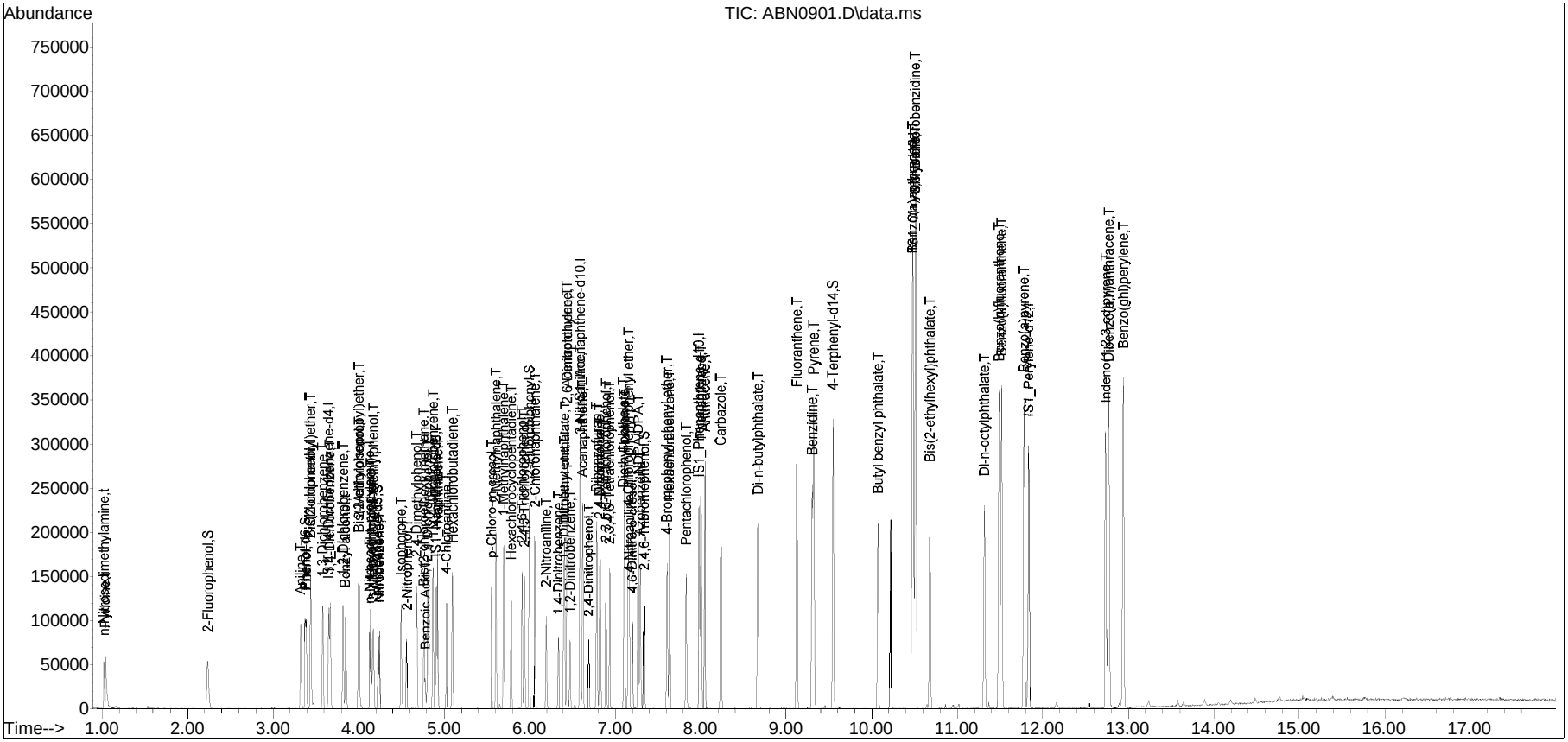
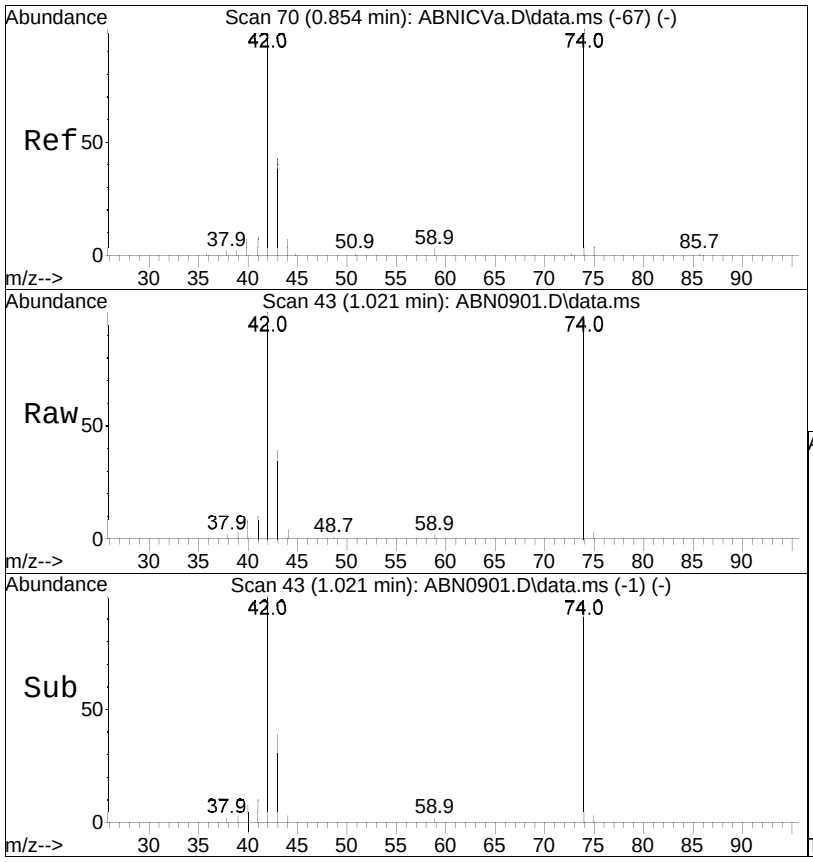
Sub List : ABNical - ABN ical sublist

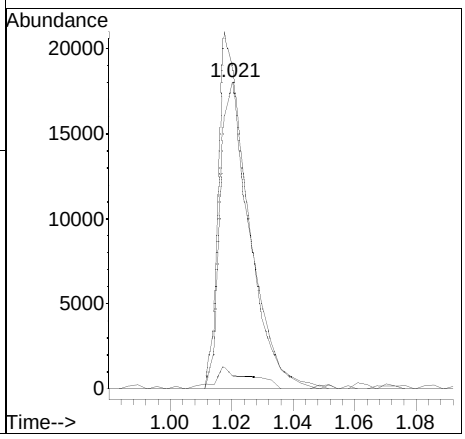


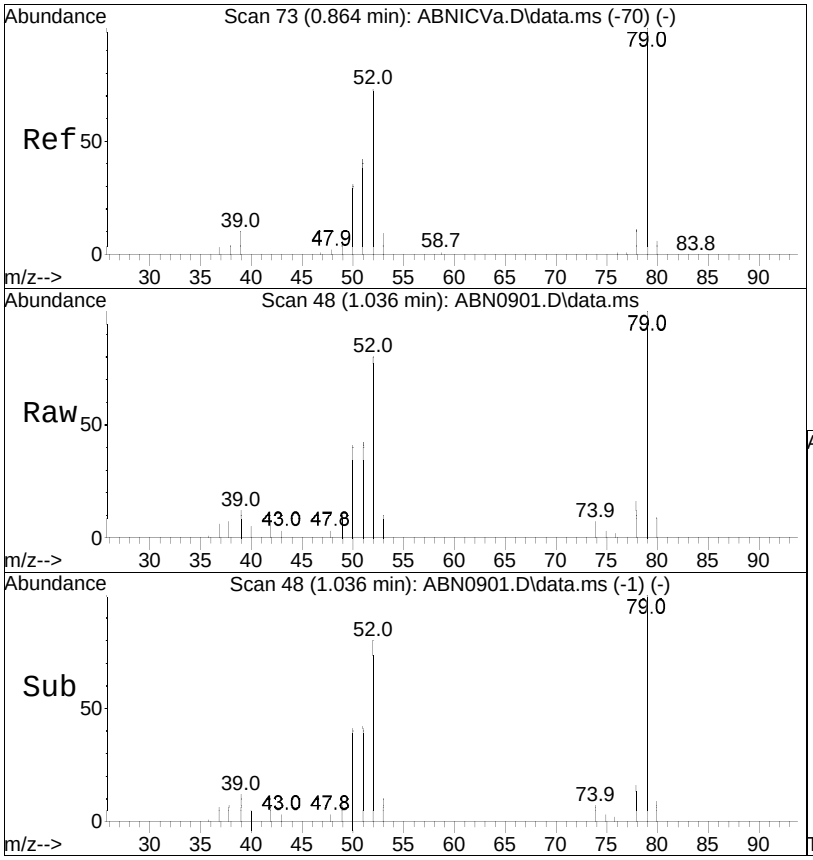


#2
n-Nitrosodimethylamine
Concen: 4.10 ug/ml
RT: 1.021 min Scan# 43
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 74 Resp: 12238

Ion	Ratio	Lower	Upper
74	100		
42	112.8	100.0	150.0
44	8.4	6.7	10.1

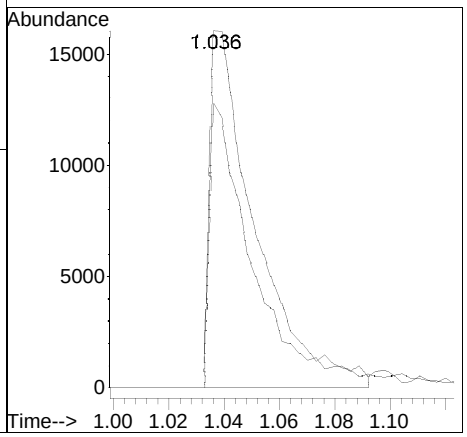


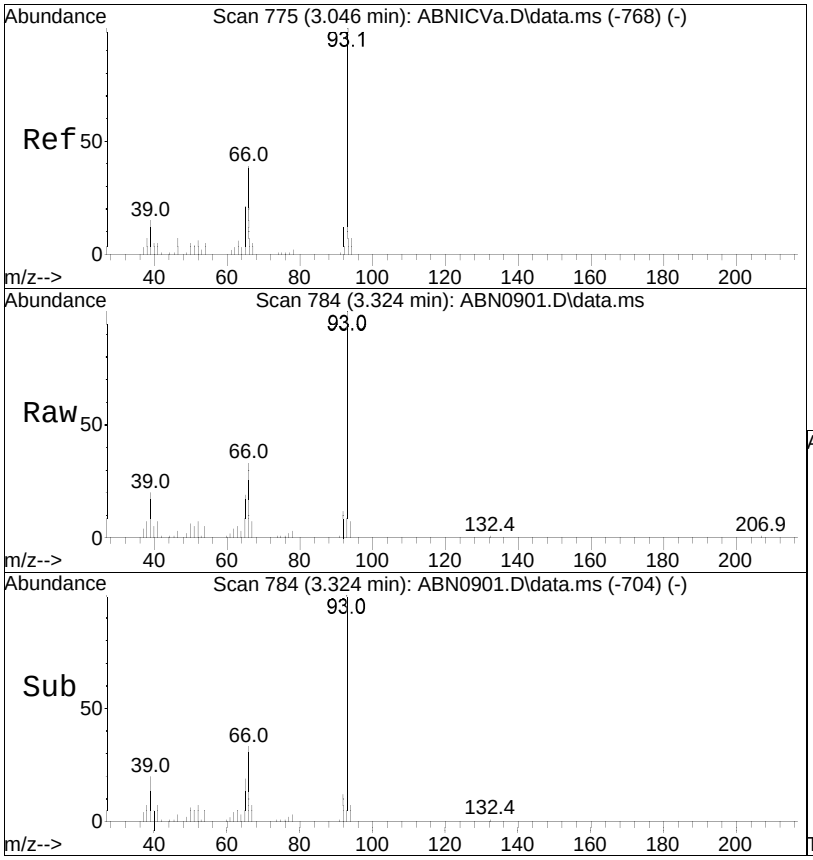


#3
Pyridine
Concen: 4.08 ug/ml
RT: 1.036 min Scan# 48
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 79 Resp: 18294

Ion	Ratio	Lower	Upper
79	100		
52	77.2	93.1	139.7#

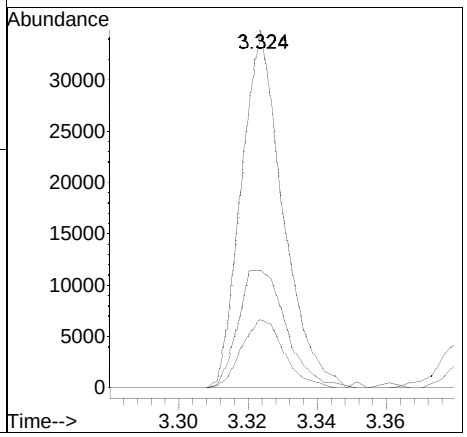


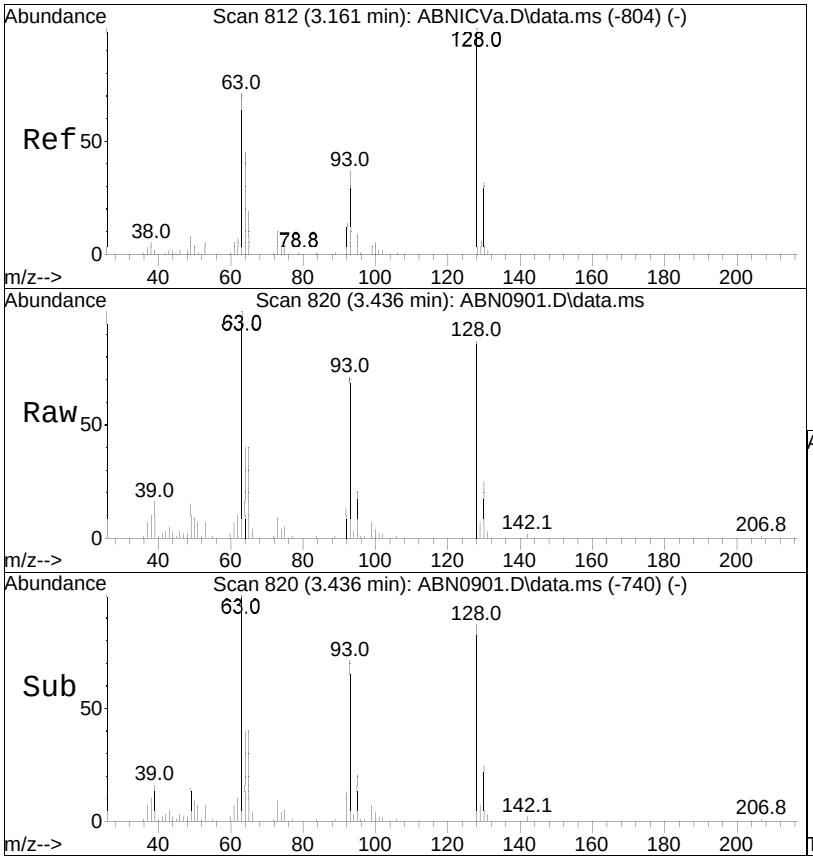


#5
Aniline
Concen: 4.19 ug/ml
RT: 3.324 min Scan# 784
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 93 Resp: 28922

Ion	Ratio	Lower	Upper
93	100		
66	37.8	32.6	49.0
65	19.6	17.6	26.4

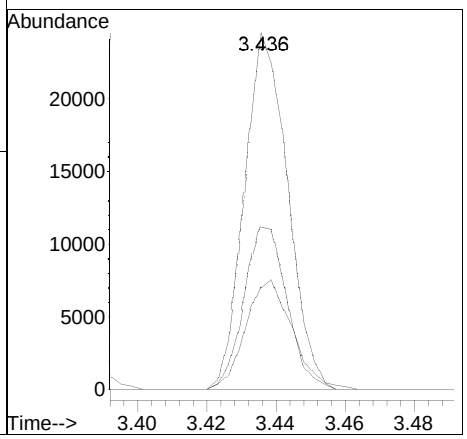


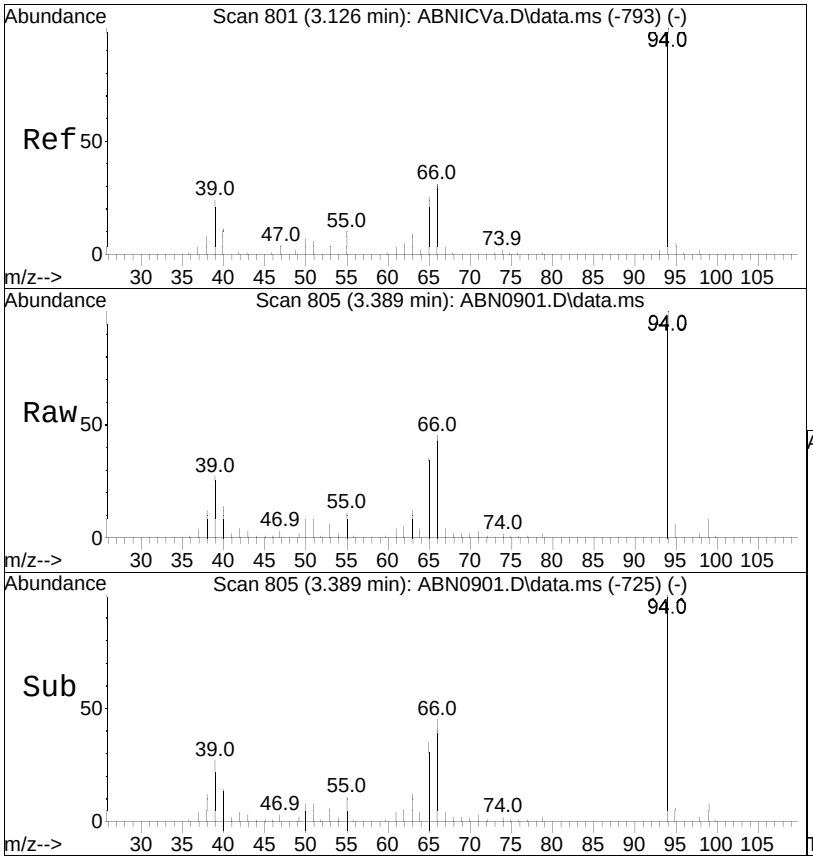


#6
2-Chlorophenol
Concen: 4.62 ug/ml
RT: 3.436 min Scan# 820
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:128 Resp: 21310

Ion	Ratio	Lower	Upper
128	100		
64	46.2	45.1	67.7
130	32.1	26.2	39.4

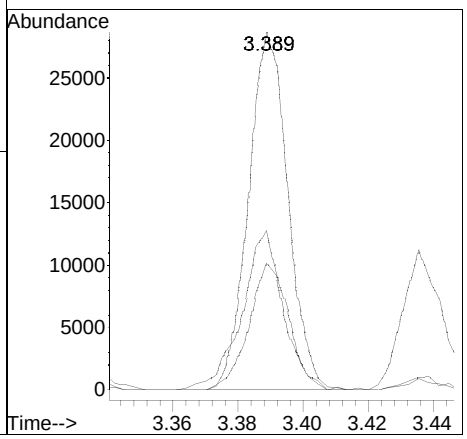


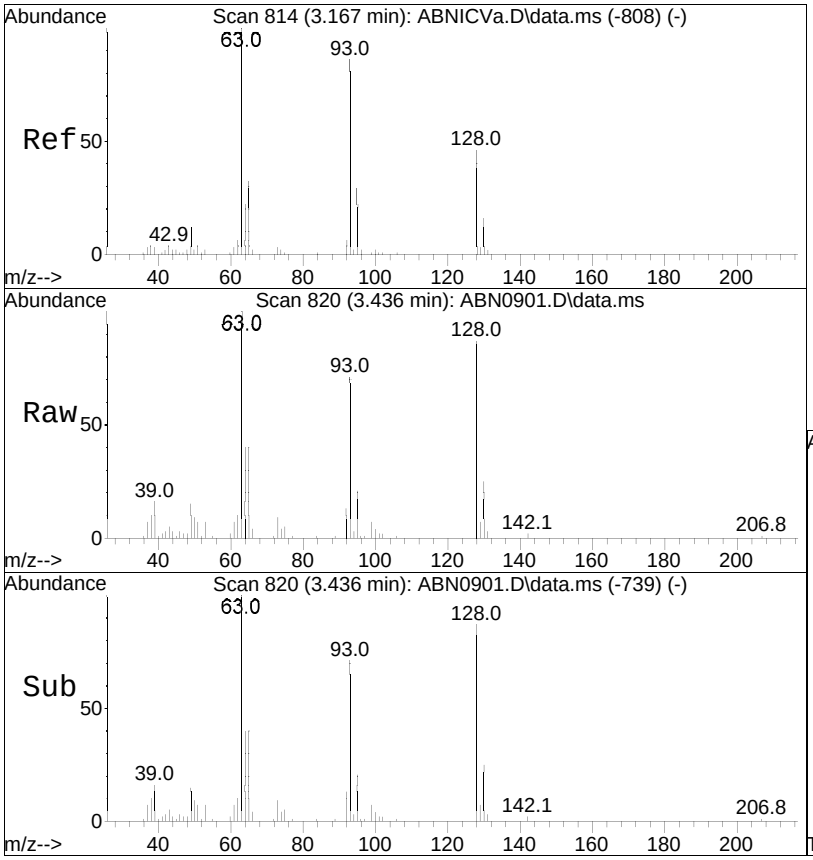


#8
Phenol
Concen: 4.05 ug/ml
RT: 3.389 min Scan# 805
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 94 Resp: 24013

Ion	Ratio	Lower	Upper
94	100		
65	34.6	26.0	39.0
66	48.1	33.8	50.8

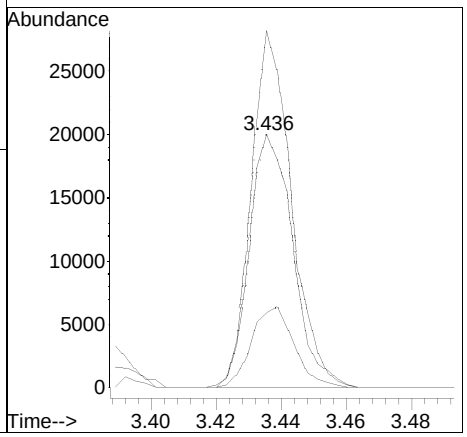


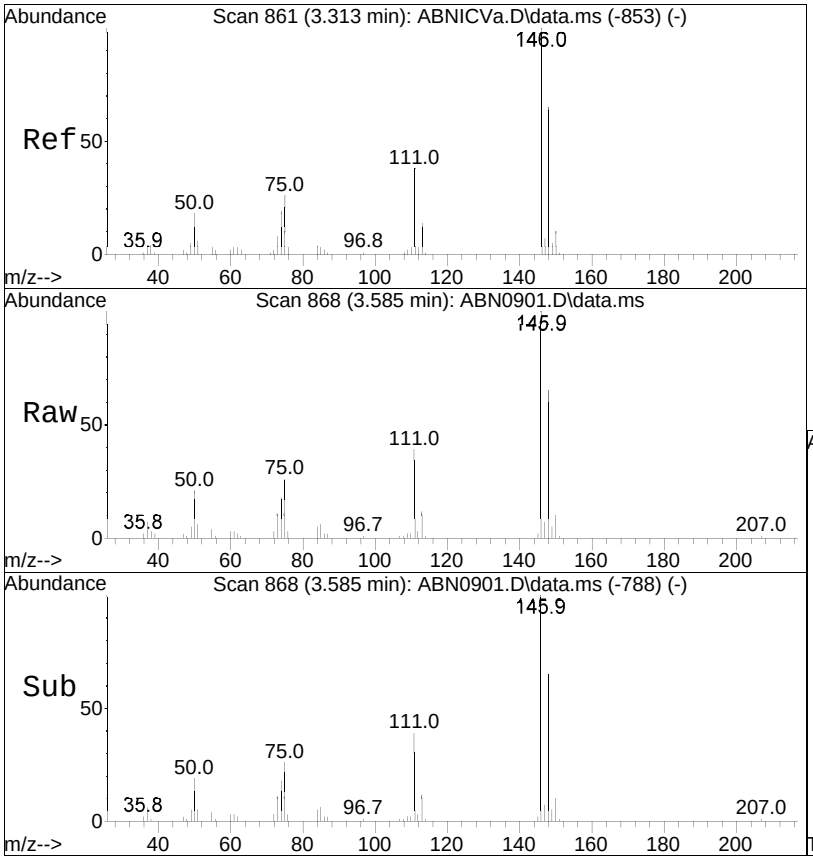


#9
Bis(2-chloroethyl)ether
Concen: 4.51 ug/ml
RT: 3.436 min Scan# 820
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 93 Resp: 18540

Ion	Ratio	Lower	Upper
93	100		
63	129.9	74.6	111.8#
95	31.3	25.9	38.9

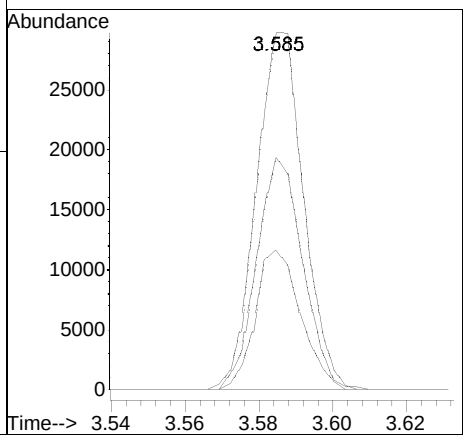


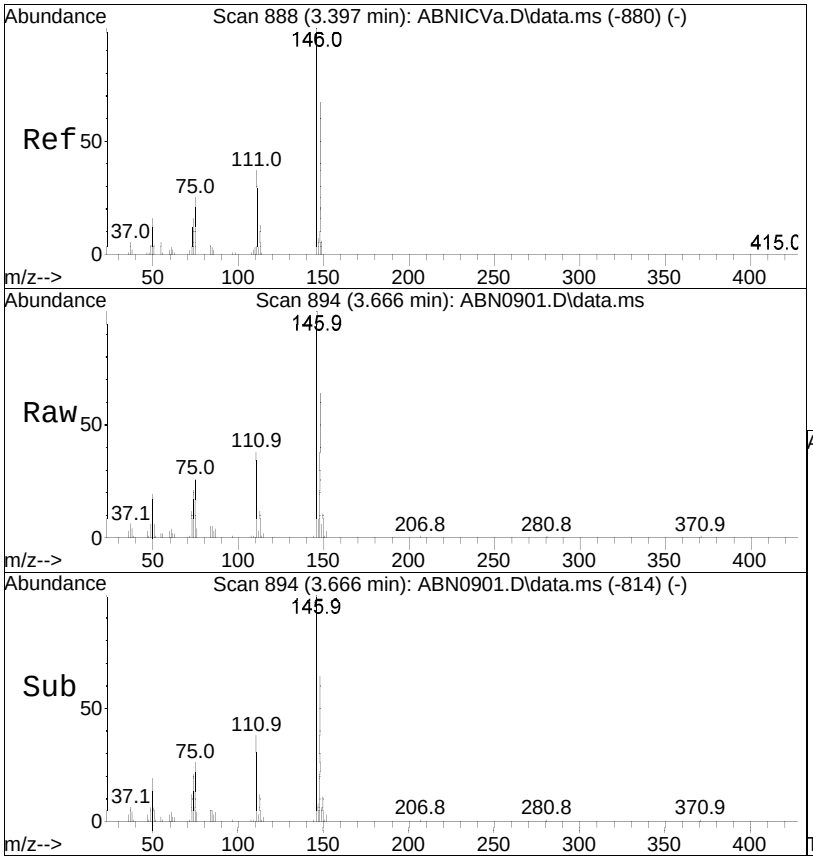


#10
1,3-Dichlorobenzene
Concen: 4.74 ug/ml
RT: 3.585 min Scan# 868
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:146 Resp: 26266

Ion	Ratio	Lower	Upper
146	100		
111	37.7	34.3	51.5
148	63.5	50.8	76.2

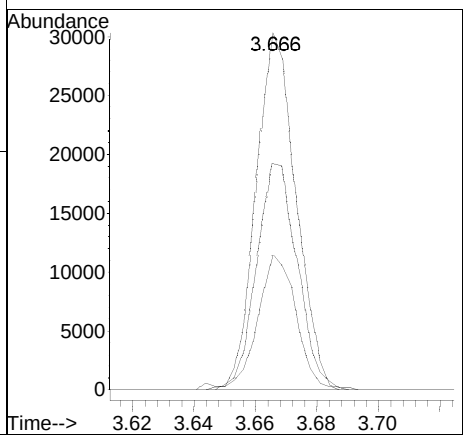


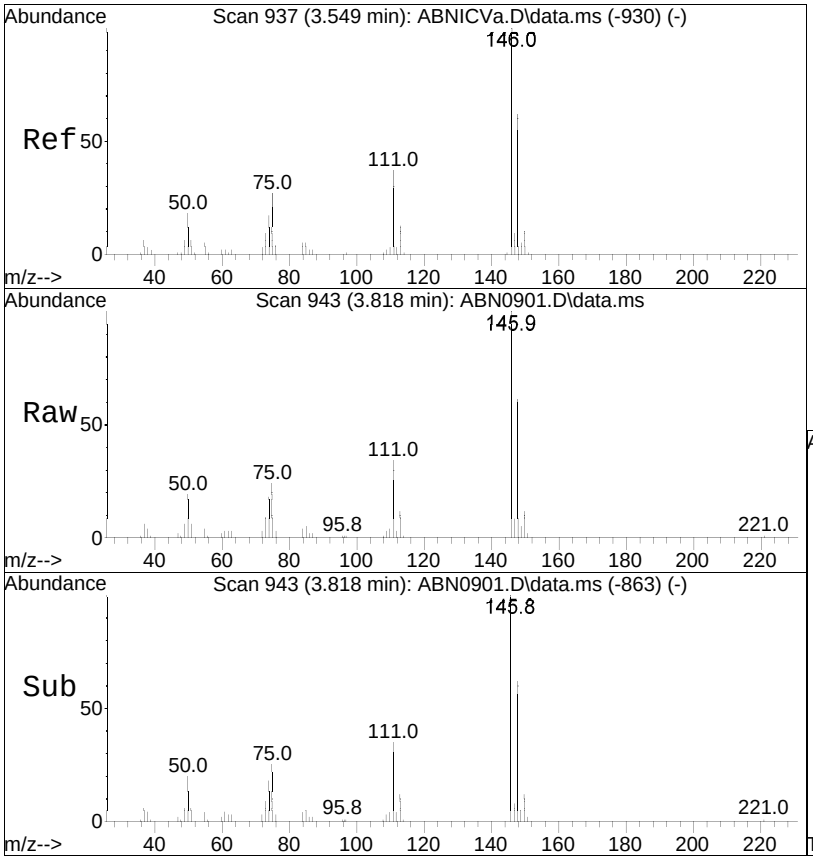


#11
1,4-Dichlorobenzene
Concen: 4.89 ug/ml
RT: 3.666 min Scan# 894
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:146 Resp: 27387

Ion	Ratio	Lower	Upper
146	100		
148	64.5	50.7	76.1
111	36.5	33.4	50.0

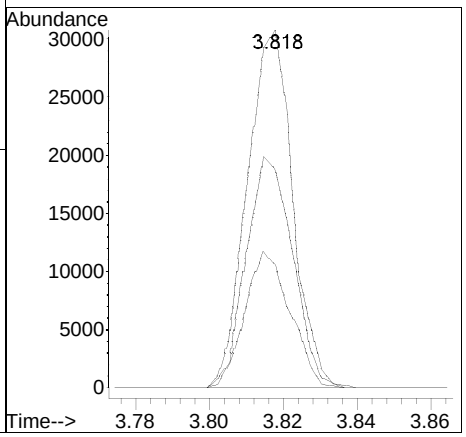


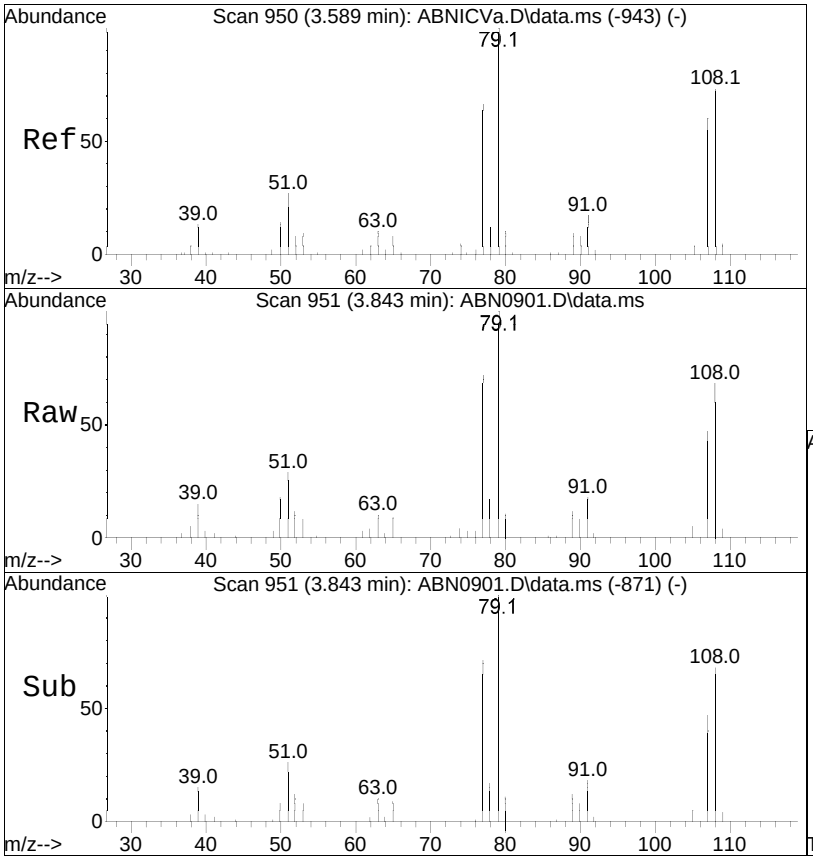


#12
1,2-Dichlorobenzene
Concen: 4.84 ug/ml
RT: 3.818 min Scan# 943
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:146 Resp: 26251

Ion	Ratio	Lower	Upper
146	100		
111	38.1	34.6	52.0
148	66.0	50.2	75.4

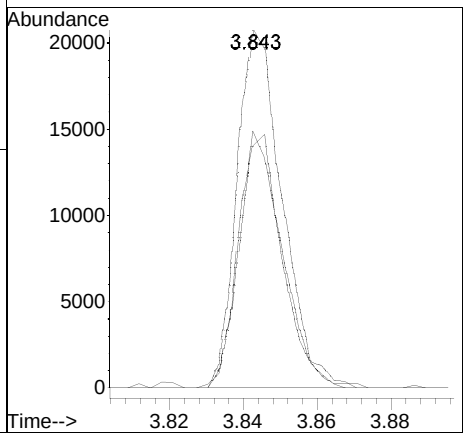


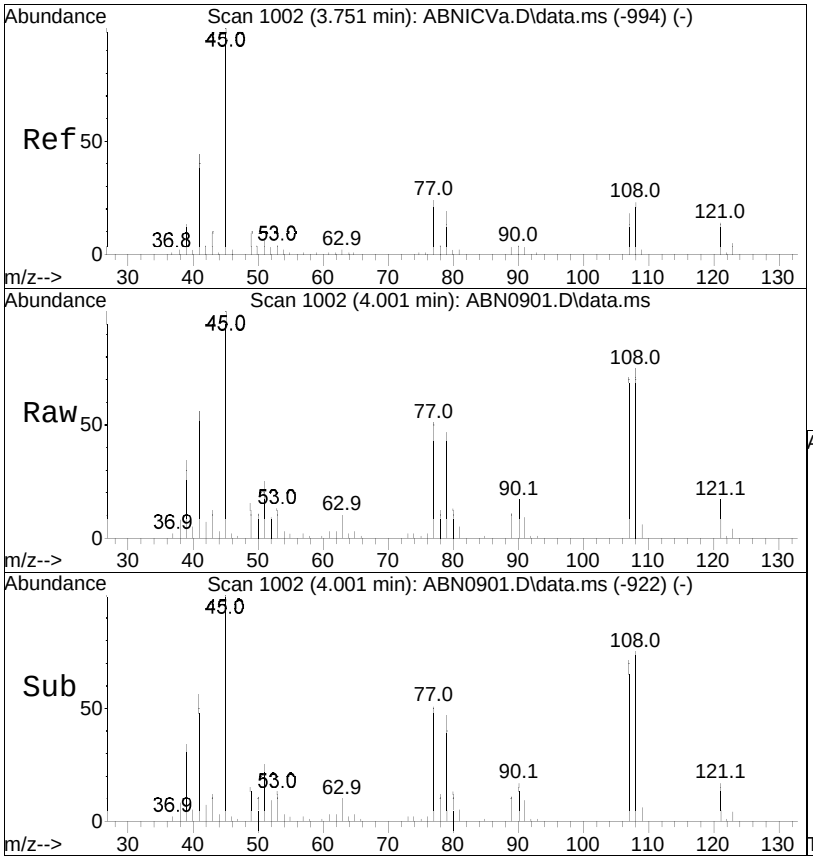


#13
Benzyl alcohol
Concen: 4.87 ug/ml
RT: 3.843 min Scan# 951
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 79 Resp: 17590

Ion	Ratio	Lower	Upper
79	100		
77	68.2	54.9	82.3
108	69.3	63.1	94.7

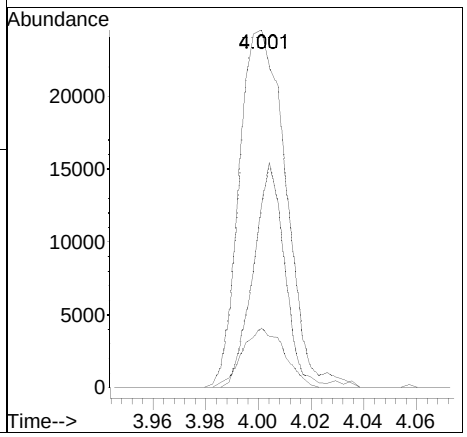


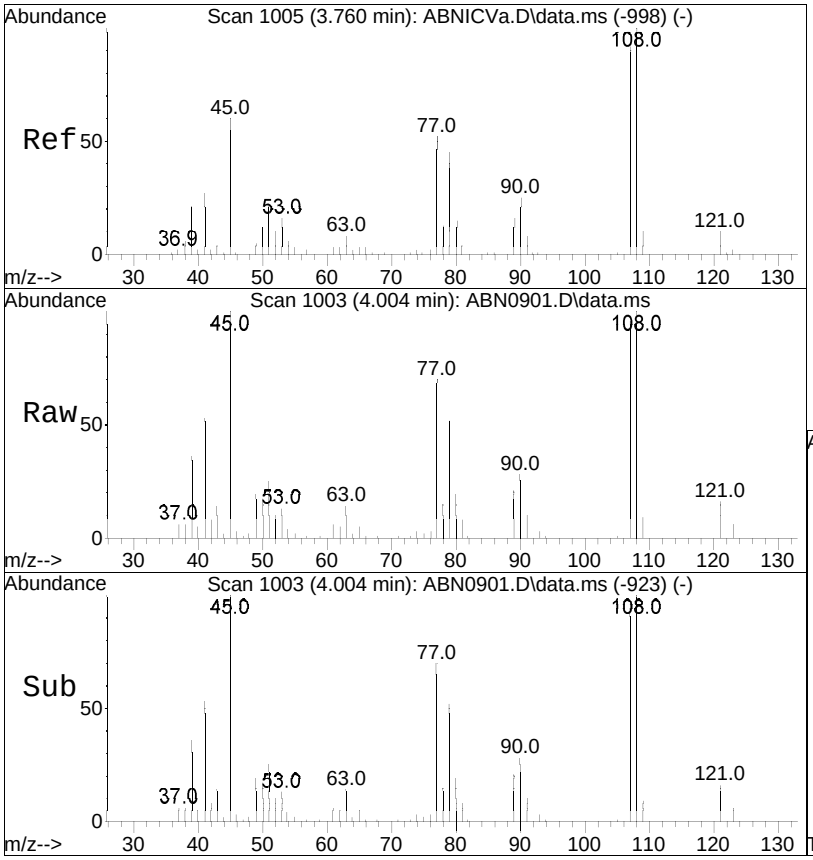


#14
Bis(2-chloroisopropyl)ether
Concen: 4.35 ug/ml
RT: 4.001 min Scan# 1002
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 45 Resp: 29928

Ion	Ratio	Lower	Upper
45	100		
121	15.2	9.8	14.6#
77	42.4	6.1	9.1#

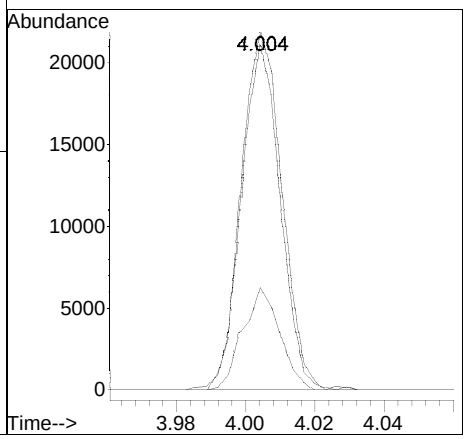


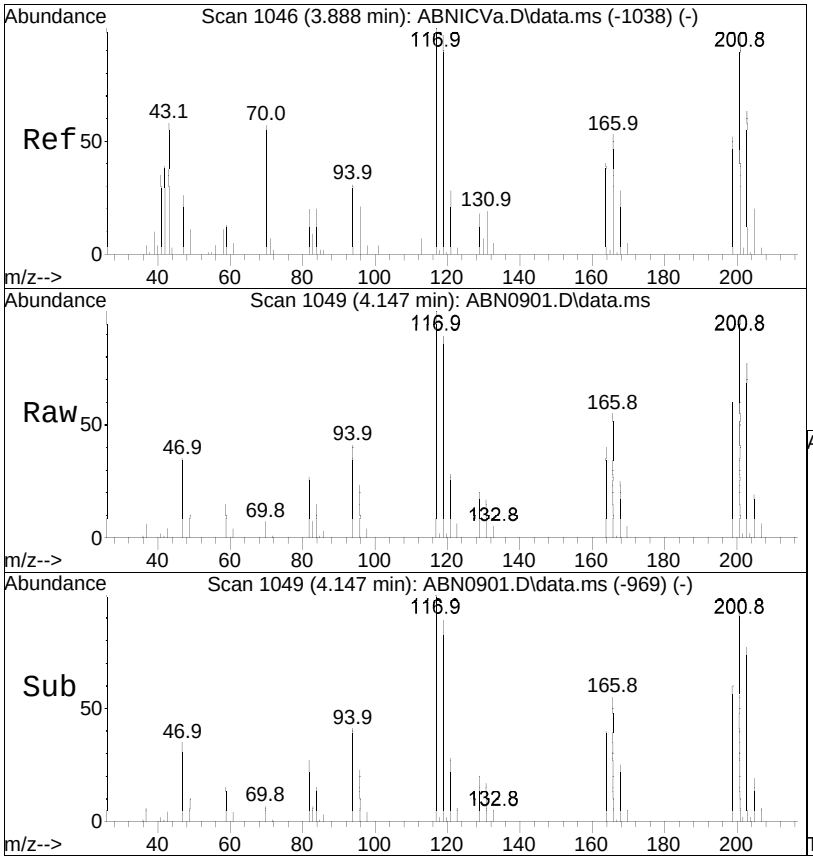


#15
2-Methylphenol
Concen: 4.53 ug/ml
RT: 4.004 min Scan# 1003
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:108 Resp: 17774

Ion	Ratio	Lower	Upper
108	100		
107	91.8	70.7	106.1
90	26.1	18.7	28.1

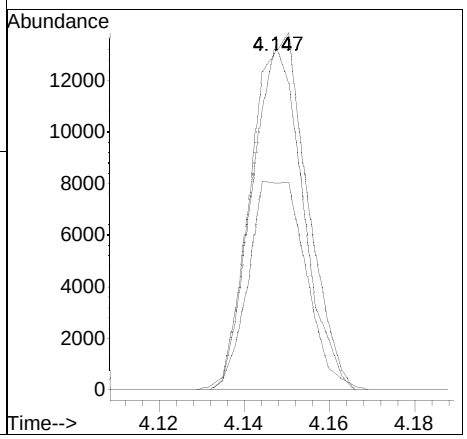


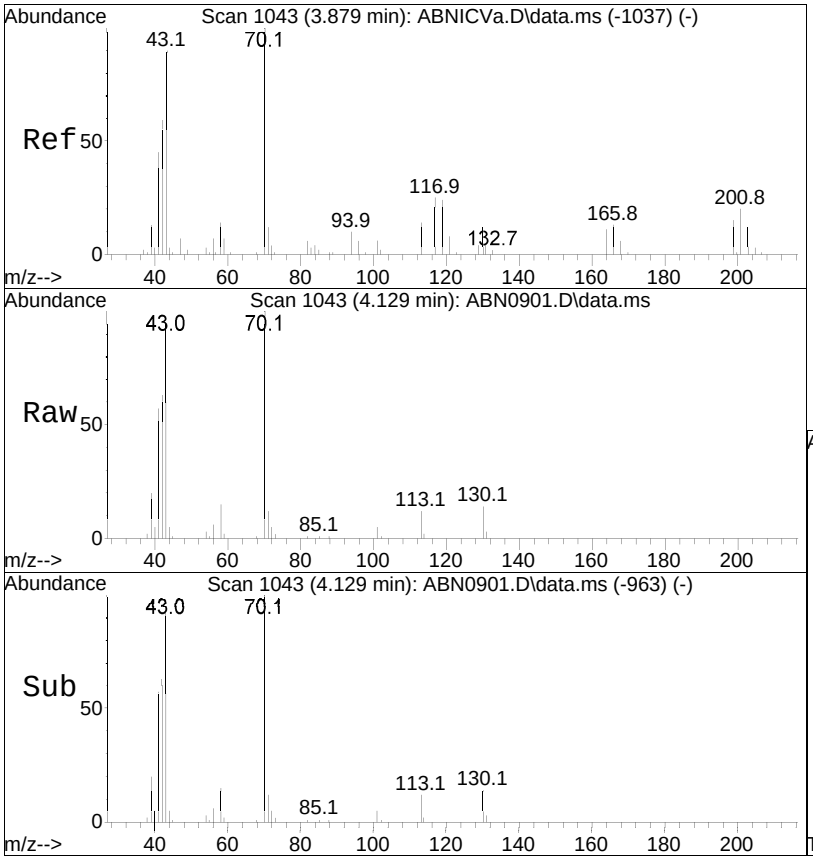


#16
Hexachloroethane
Concen: 5.24 ug/ml
RT: 4.147 min Scan# 1049
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:117 Resp: 11124

Ion	Ratio	Lower	Upper
117	100		
201	113.7	58.6	87.8#
199	67.6	36.9	55.3#

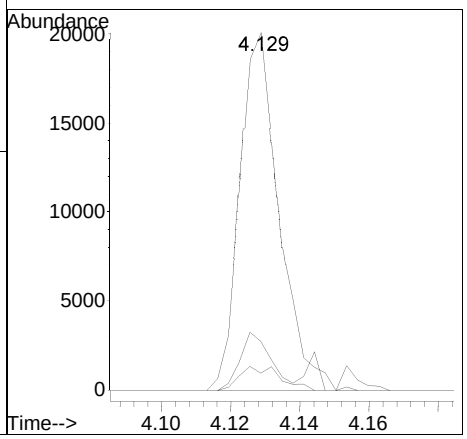


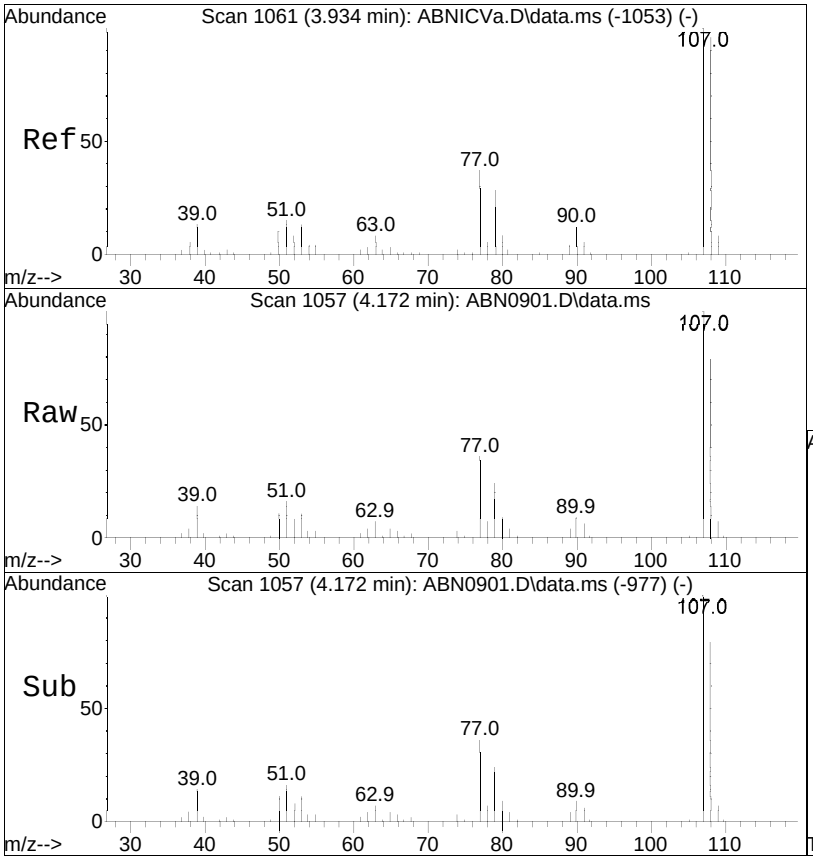


#17
n-Nitrosodi-n-propylamine
Concen: 5.00 ug/ml
RT: 4.129 min Scan# 1043
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 70 Resp: 15781

Ion	Ratio	Lower	Upper
70	100		
130	12.8	18.2	27.4#
101	6.9	7.8	11.8#

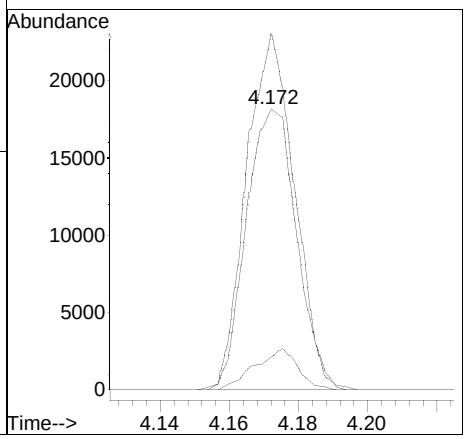


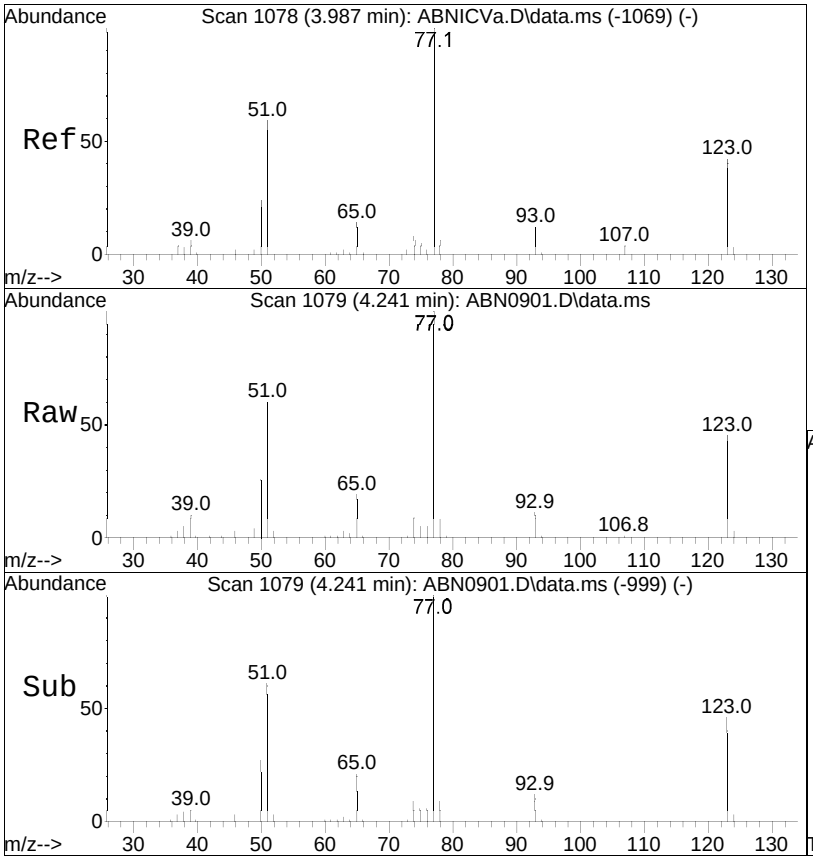


#18
3-Methylphenol/4-Methylphenol
Concen: 4.51 ug/ml
RT: 4.172 min Scan# 1057
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:108 Resp: 18262

Ion	Ratio	Lower	Upper
108	100		
107	121.4	88.6	132.8
90	12.6	8.8	13.2

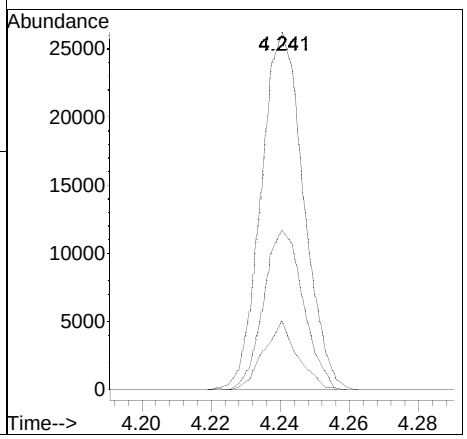


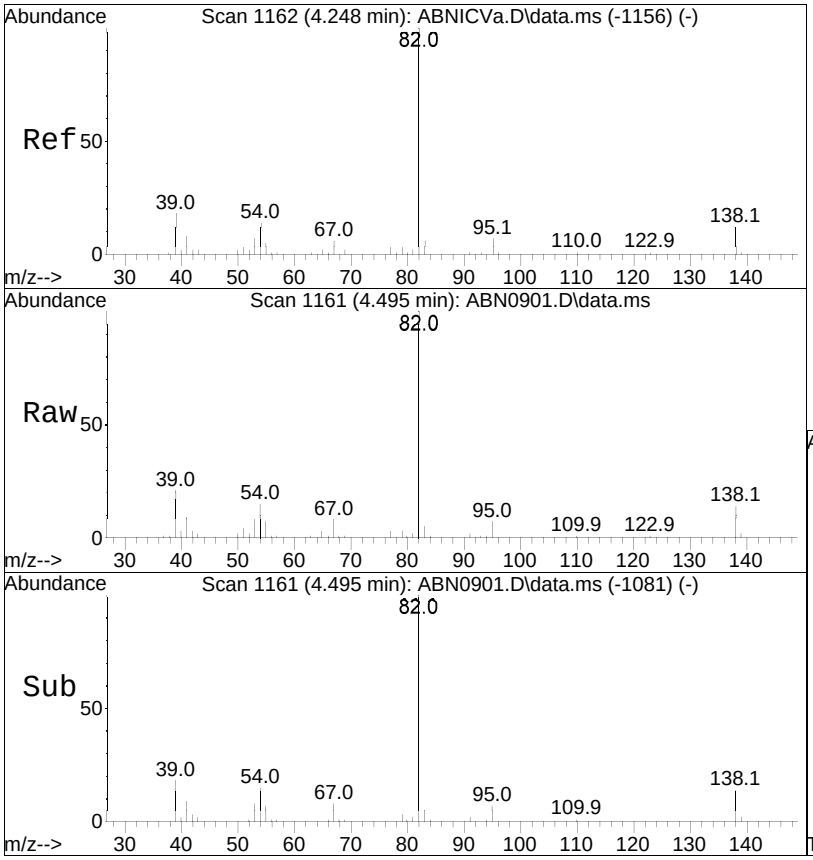


#20
Nitrobenzene
Concen: 4.67 ug/ml
RT: 4.241 min Scan# 1079
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 77 Resp: 22232

Ion	Ratio	Lower	Upper
77	100		
123	42.2	36.3	54.5
65	15.6	11.6	17.4

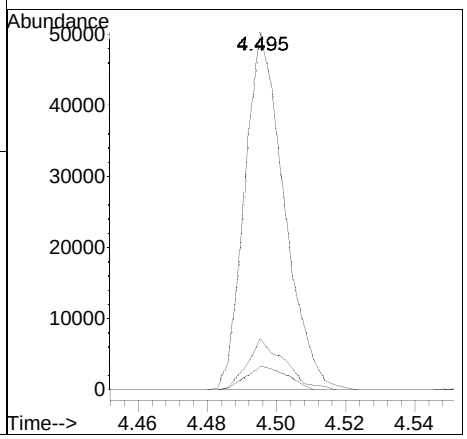


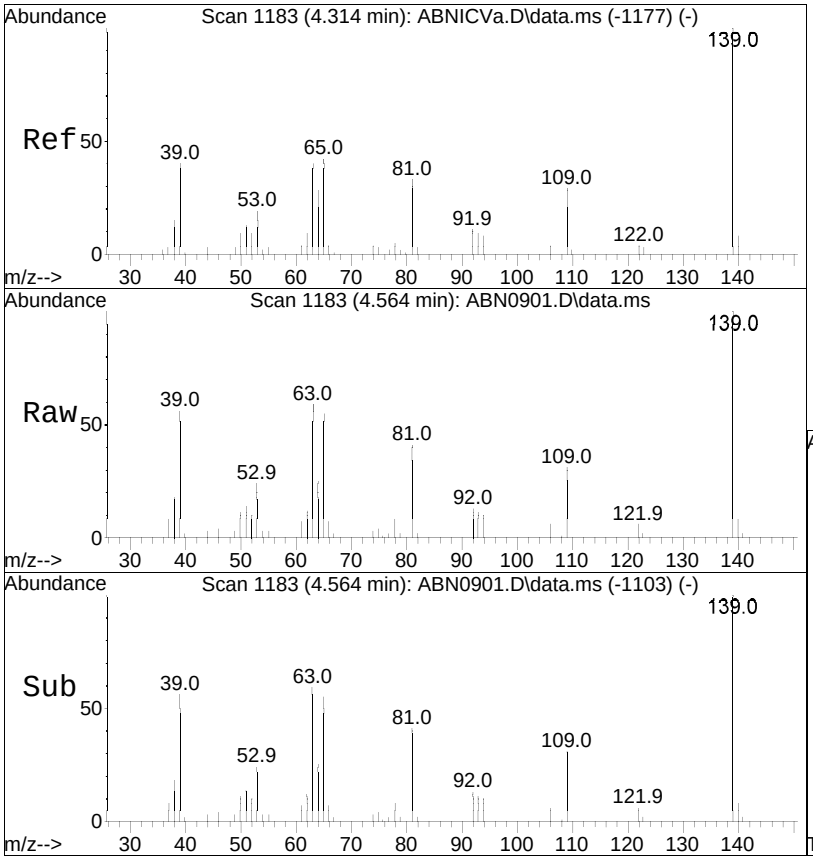


#21
Isophorone
Concen: 4.68 ug/ml
RT: 4.495 min Scan# 1161
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 82 Resp: 39429

Ion	Ratio	Lower	Upper
82	100		
138	13.6	14.7	22.1#
95	7.0	5.2	7.8

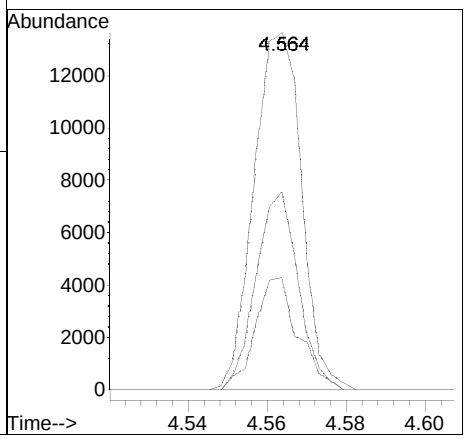


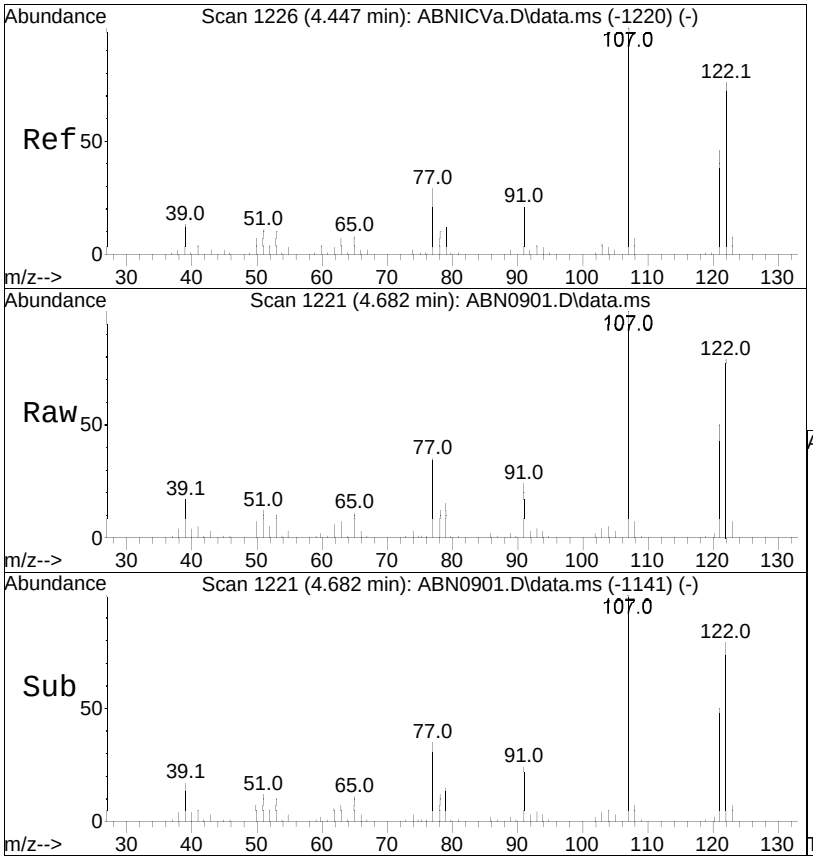


#22
2-Nitrophenol
Concen: 5.09 ug/ml
RT: 4.564 min Scan# 1183
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:139 Resp: 11327

Ion	Ratio	Lower	Upper
139	100		
109	28.5	19.4	29.0
65	49.3	46.1	69.1

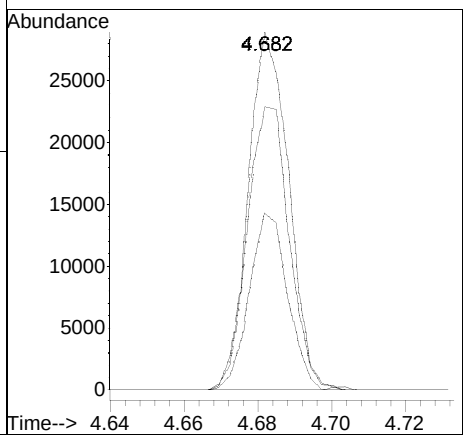


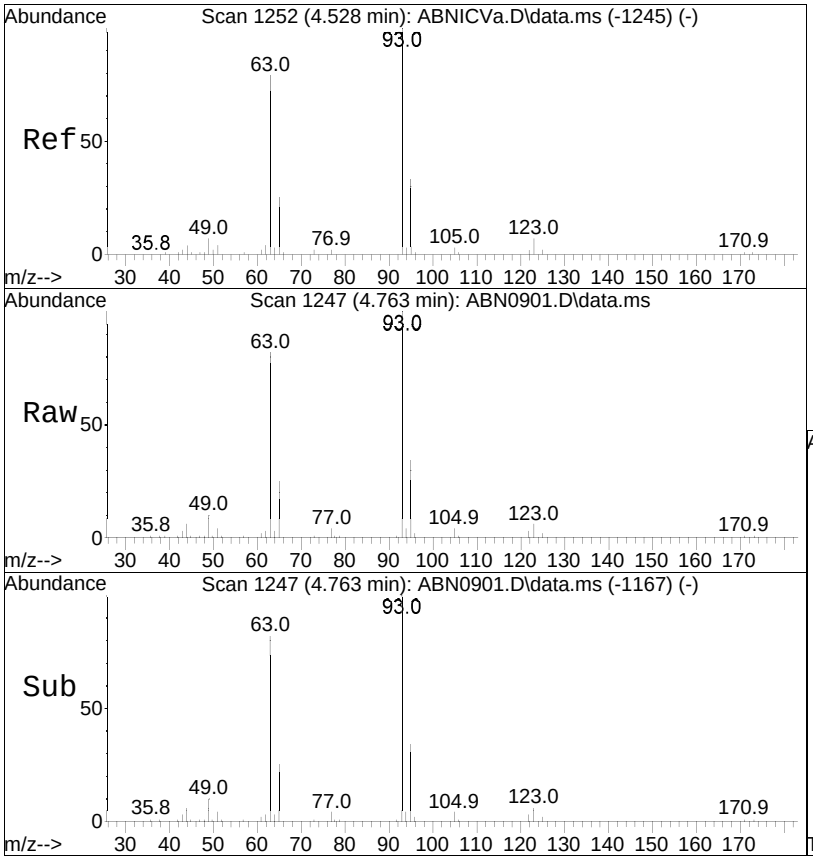


#23
2,4-Dimethylphenol
Concen: 5.11 ug/ml
RT: 4.682 min Scan# 1221
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:107 Resp: 21861

Ion	Ratio	Lower	Upper
107	100		
121	47.0	40.0	60.0
122	81.7	70.2	105.4

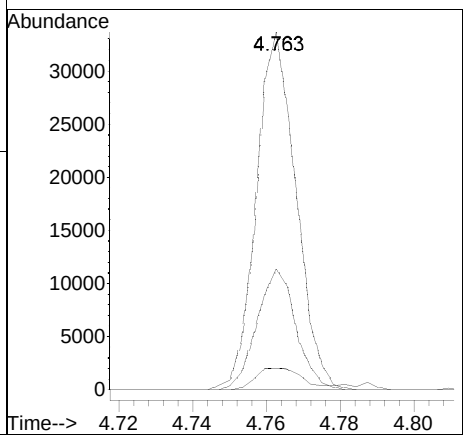


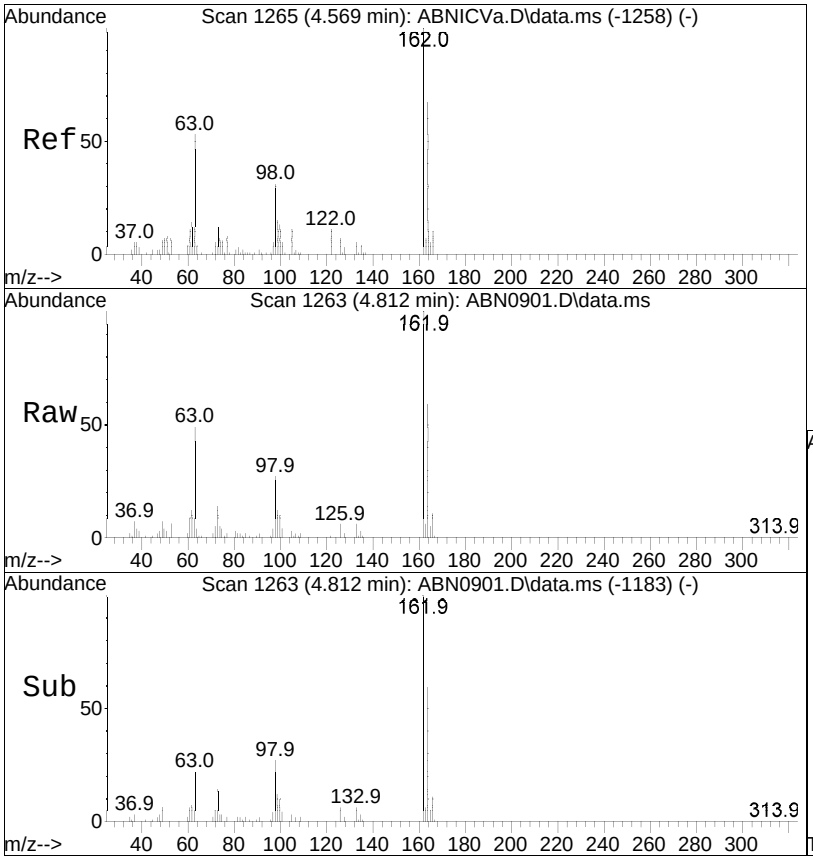


#24
Bis(2-chloroethoxy)methane
Concen: 4.56 ug/ml
RT: 4.763 min Scan# 1247
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 93 Resp: 24893

Ion	Ratio	Lower	Upper
93	100		
95	33.4	25.8	38.8
123	7.5	10.1	15.1#

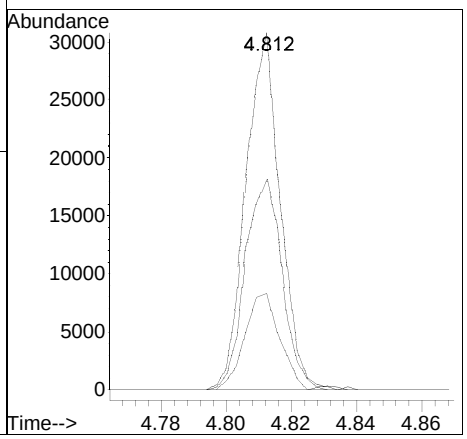


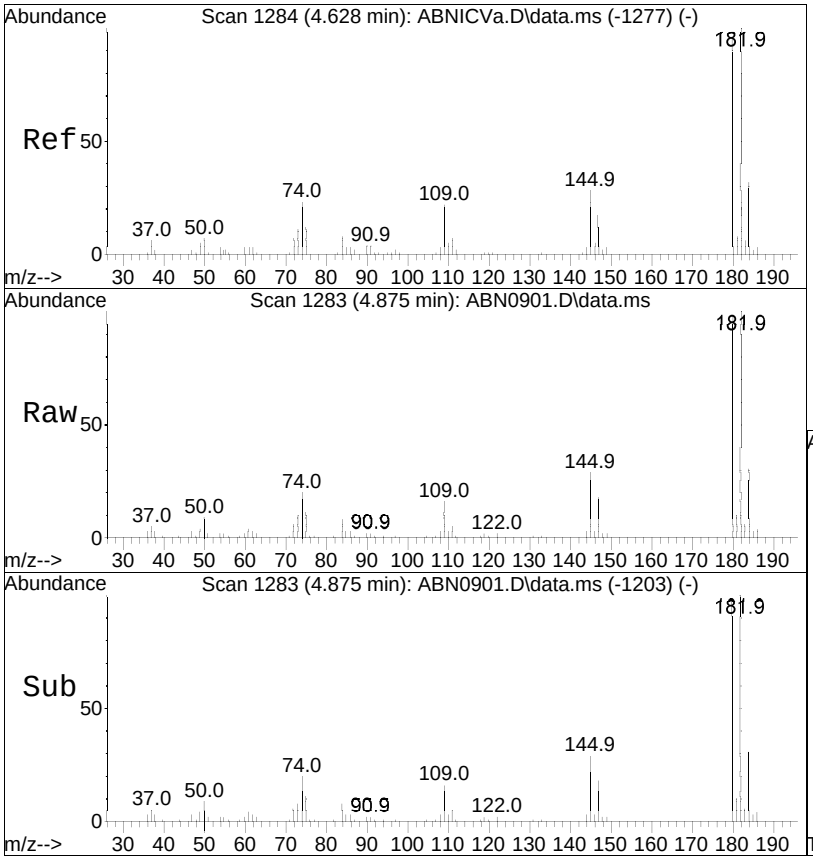


#25
2,4-Dichlorophenol
Concen: 5.59 ug/ml
RT: 4.812 min Scan# 1263
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:162 Resp: 22507

Ion	Ratio	Lower	Upper
162	100		
164	63.8	51.0	76.4
98	27.7	32.2	48.2#

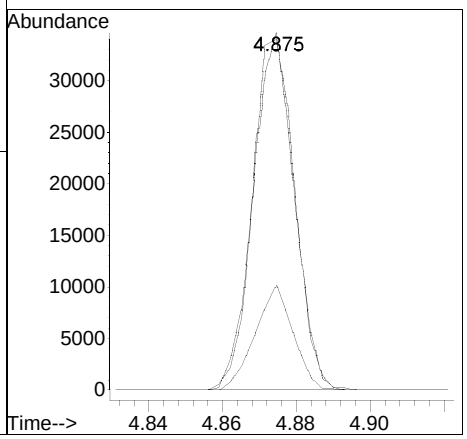


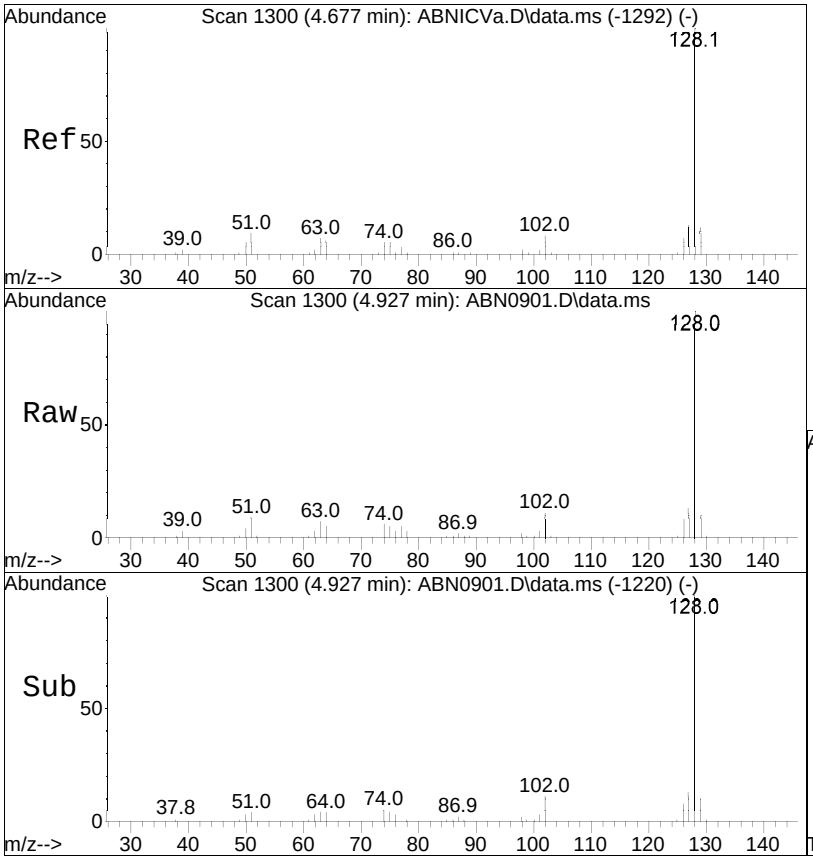


#26
1,2,4-Trichlorobenzene
Concen: 5.56 ug/ml
RT: 4.875 min Scan# 1283
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:180 Resp: 27371

Ion	Ratio	Lower	Upper
180	100		
182	96.1	76.0	114.0
145	26.4	25.7	38.5

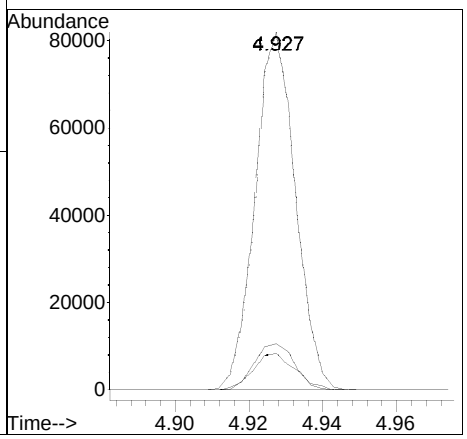


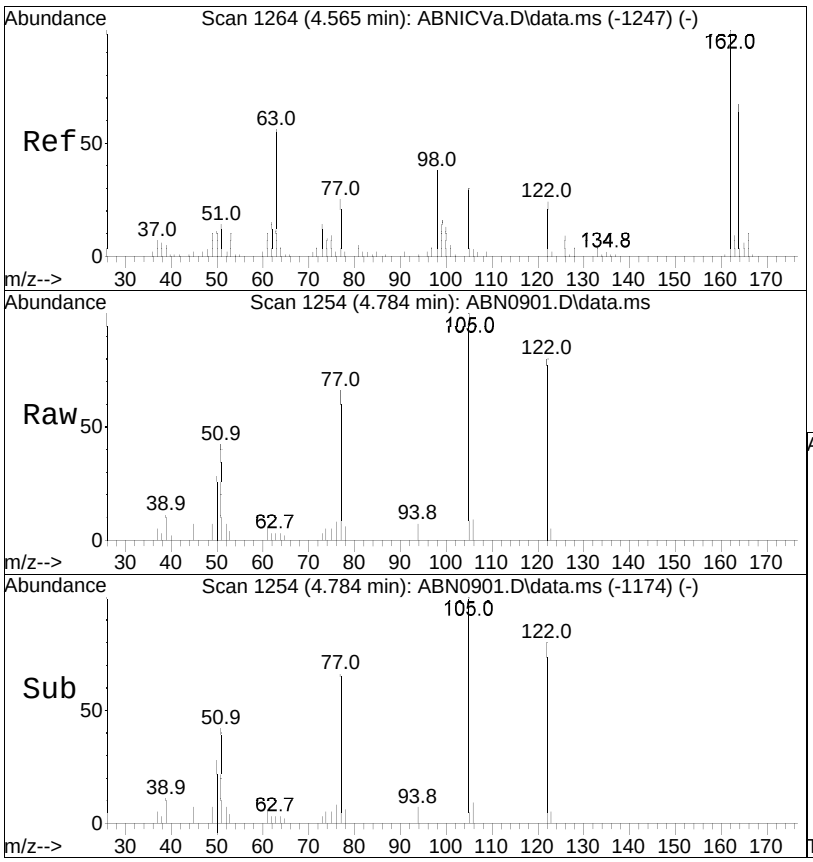


#35
Naphthalene
Concen: 4.64 ug/ml
RT: 4.927 min Scan# 1300
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:128 Resp: 61534

Ion	Ratio	Lower	Upper
128	100		
129	10.6	8.7	13.1
127	13.4	10.3	15.5

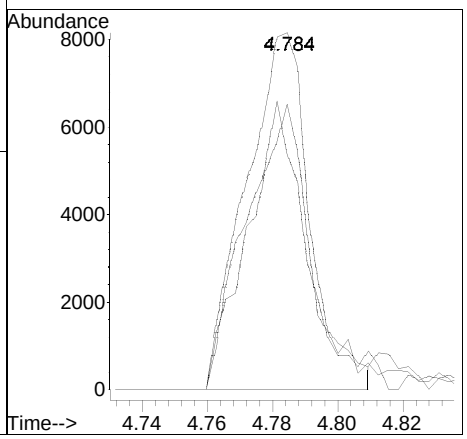


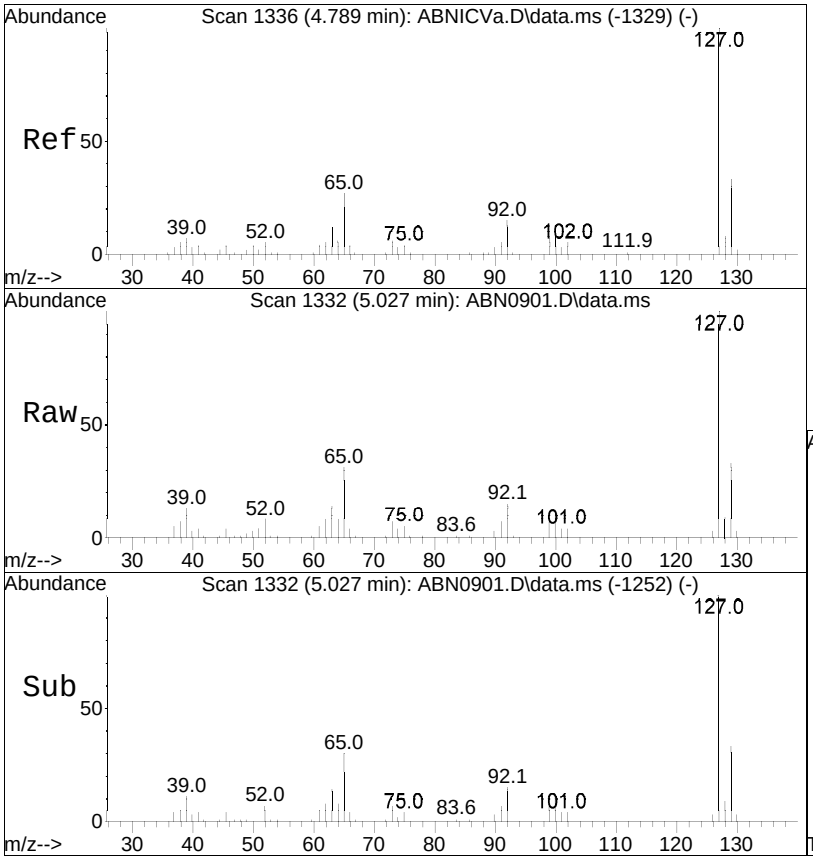


#36
Benzoic Acid
Concen: 5.68 ug/ml
RT: 4.784 min Scan# 1254
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:105 Resp: 11118

Ion	Ratio	Lower	Upper
105	100		
122	82.9	59.9	89.9
77	75.4	60.1	90.1

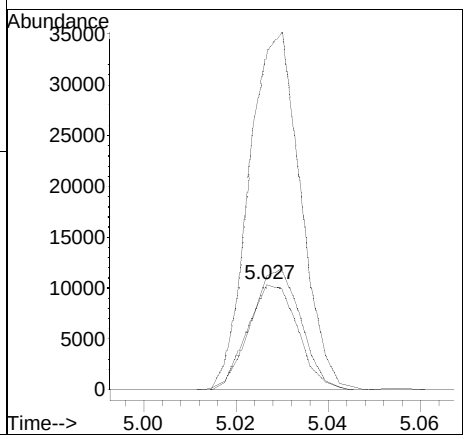


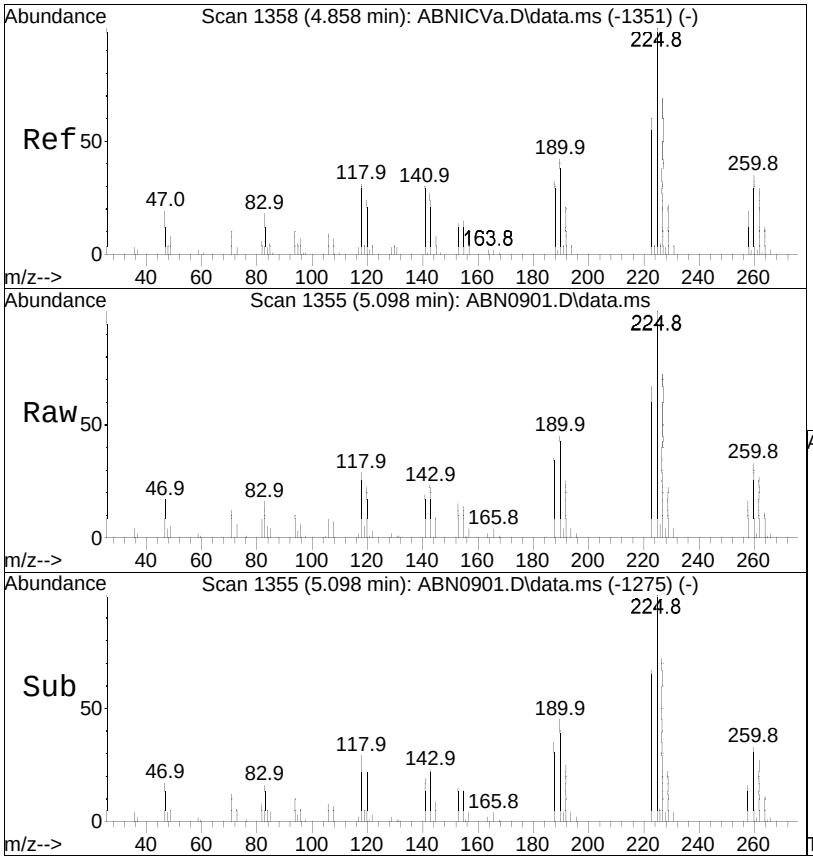


#37
4-Chloroaniline
Concen: 5.01 ug/ml
RT: 5.027 min Scan# 1332
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 65 Resp: 7844

Ion	Ratio	Lower	Upper
65	100		
127	344.7	237.6	356.4
129	113.6	76.3	114.5

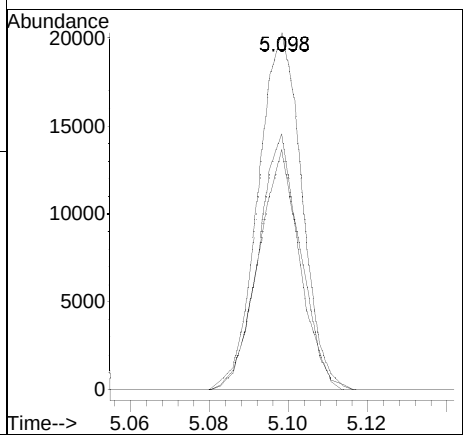


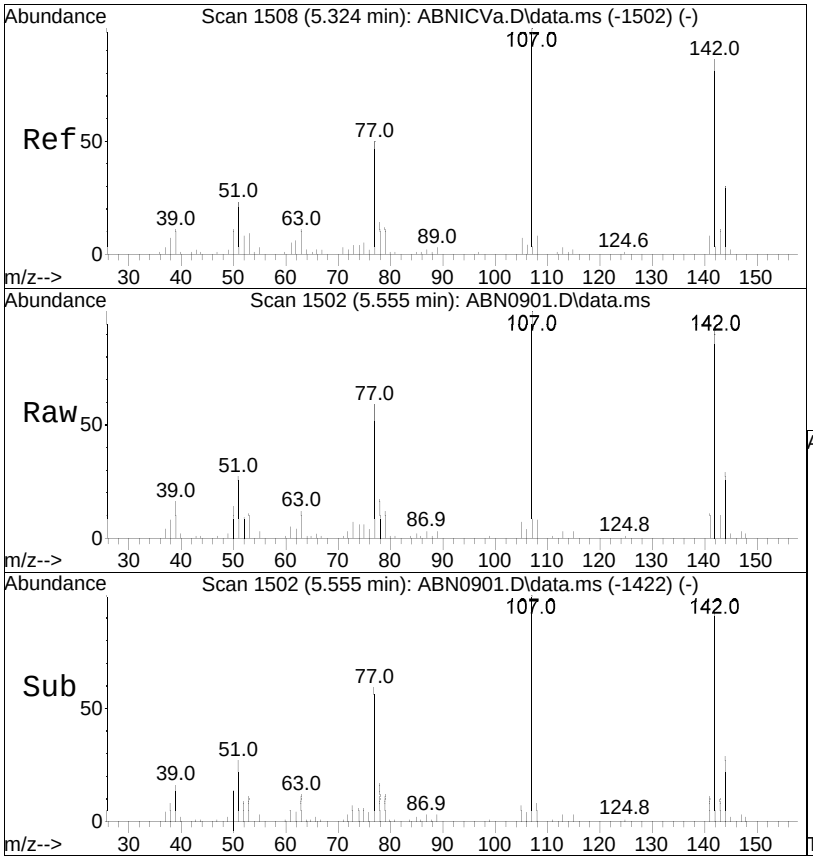


#38
Hexachlorobutadiene
Concen: 5.76 ug/ml
RT: 5.098 min Scan# 1355
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:225 Resp: 15552

Ion	Ratio	Lower	Upper
225	100		
223	63.9	50.3	75.5
227	69.0	52.2	78.2

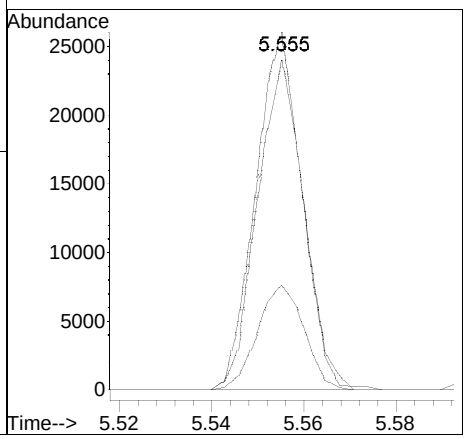


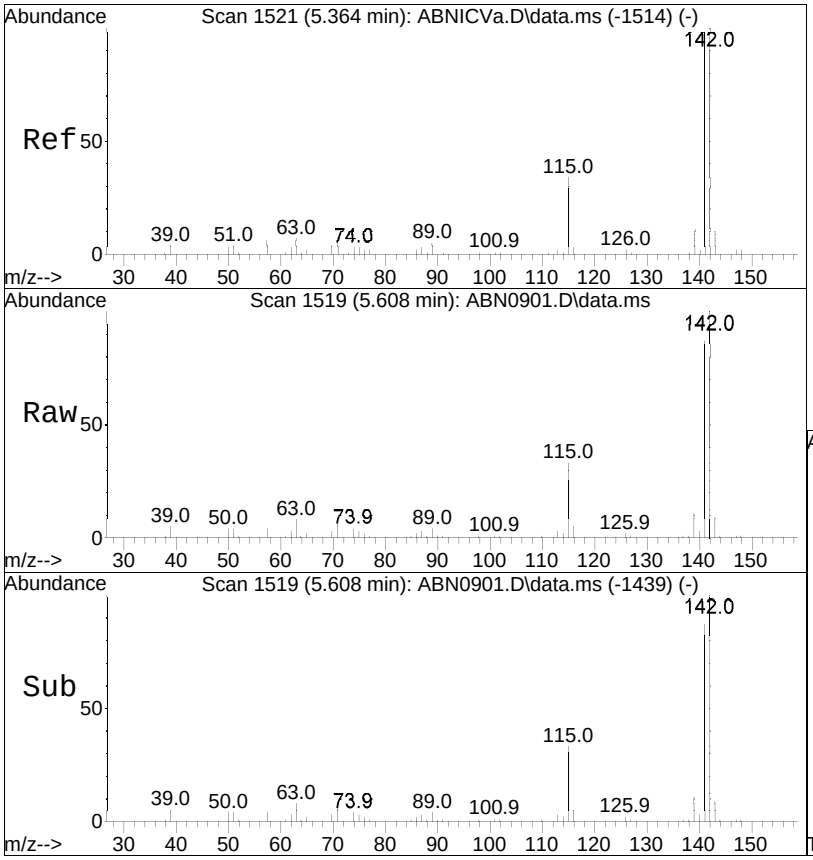


#39
p-Chloro-m-cresol
Concen: 5.25 ug/ml
RT: 5.555 min Scan# 1502
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:107 Resp: 18196

Ion	Ratio	Lower	Upper
107	100		
144	29.3	20.9	31.3
142	90.5	66.1	99.1

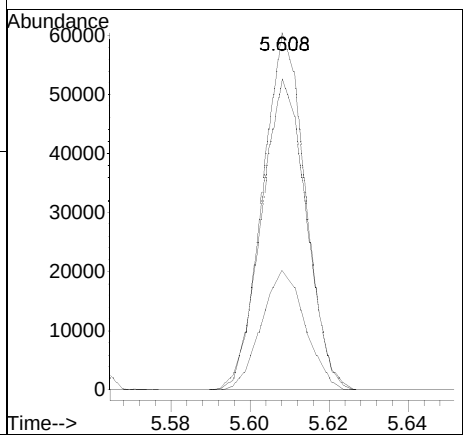


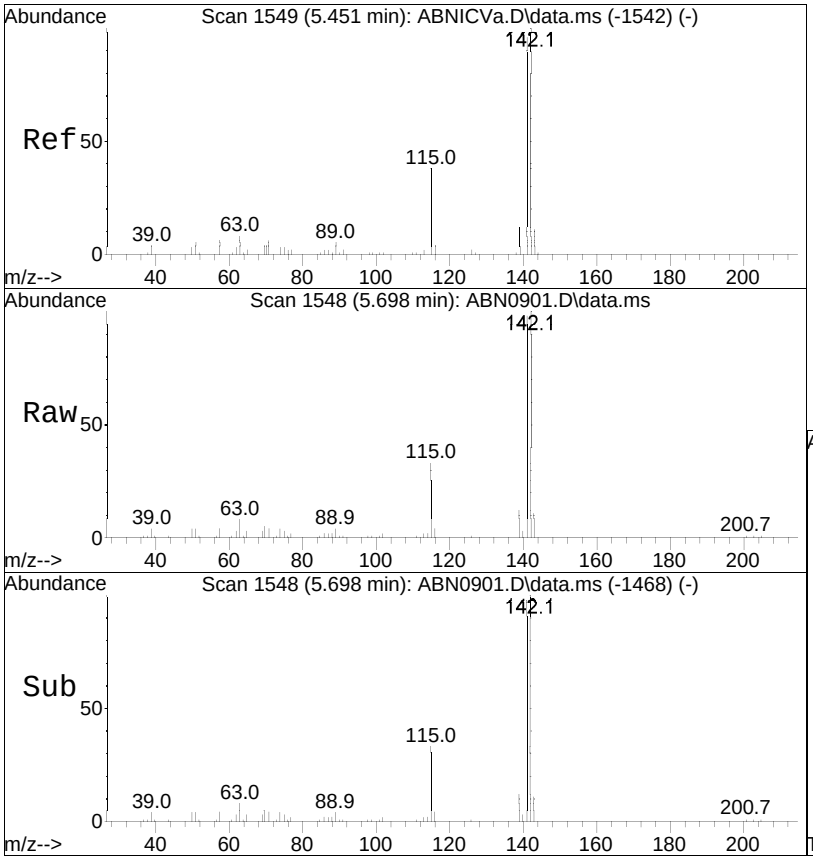


#40
2-Methylnaphthalene
Concen: 5.28 ug/ml
RT: 5.608 min Scan# 1519
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:142 Resp: 45522

Ion	Ratio	Lower	Upper
142	100		
141	90.3	69.6	104.4
115	34.1	26.6	40.0

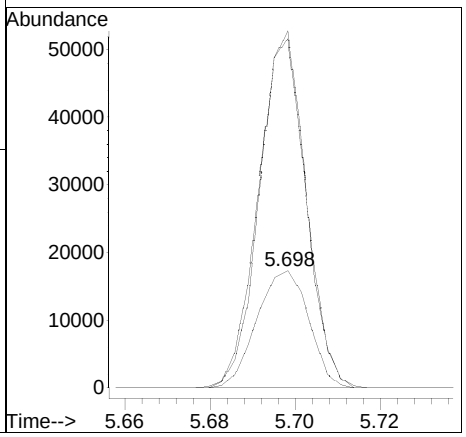


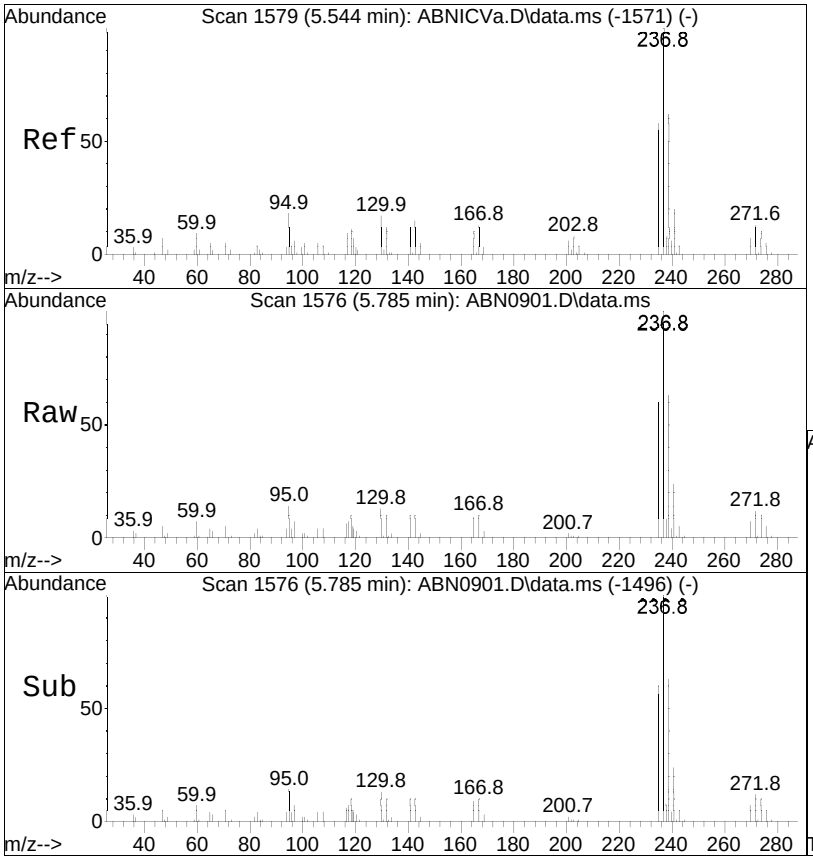


#41
1-Methylnaphthalene
Concen: 4.91 ug/ml
RT: 5.698 min Scan# 1548
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:115 Resp: 14634

Ion	Ratio	Lower	Upper
115	100		
141	268.0	207.8	311.6
142	276.2	226.8	340.2

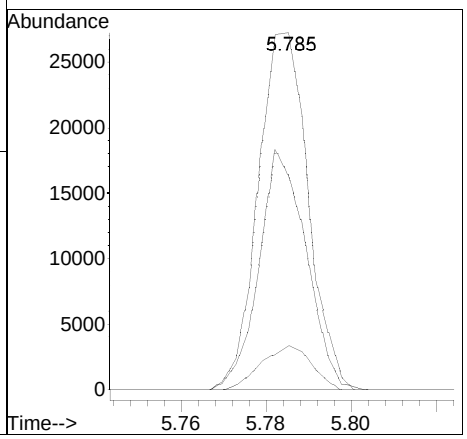


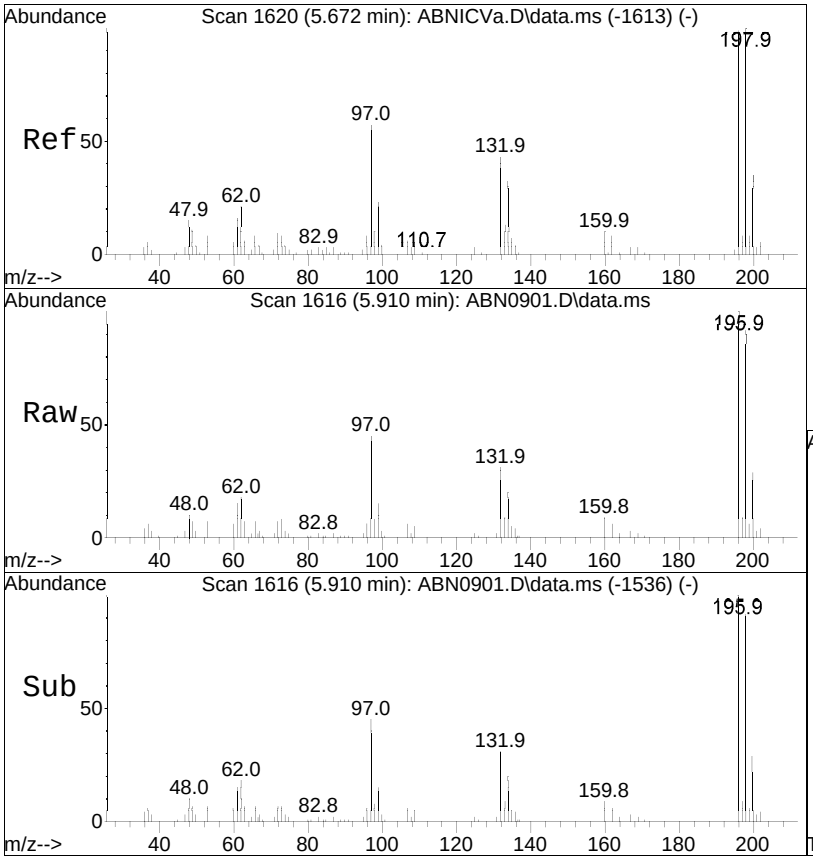


#42
Hexachlorocyclopentadiene
Concen: 6.77 ug/ml
RT: 5.785 min Scan# 1576
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:237 Resp: 22107

Ion	Ratio	Lower	Upper
237	100		
235	63.5	49.7	74.5
272	12.6	9.8	14.6

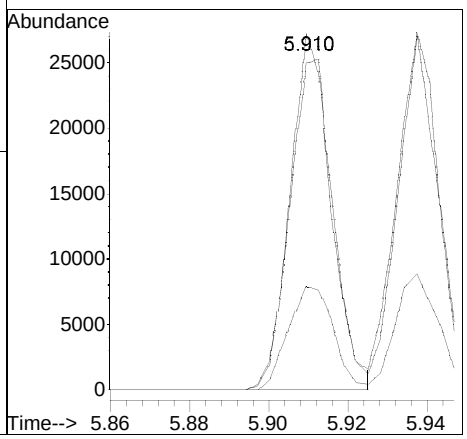


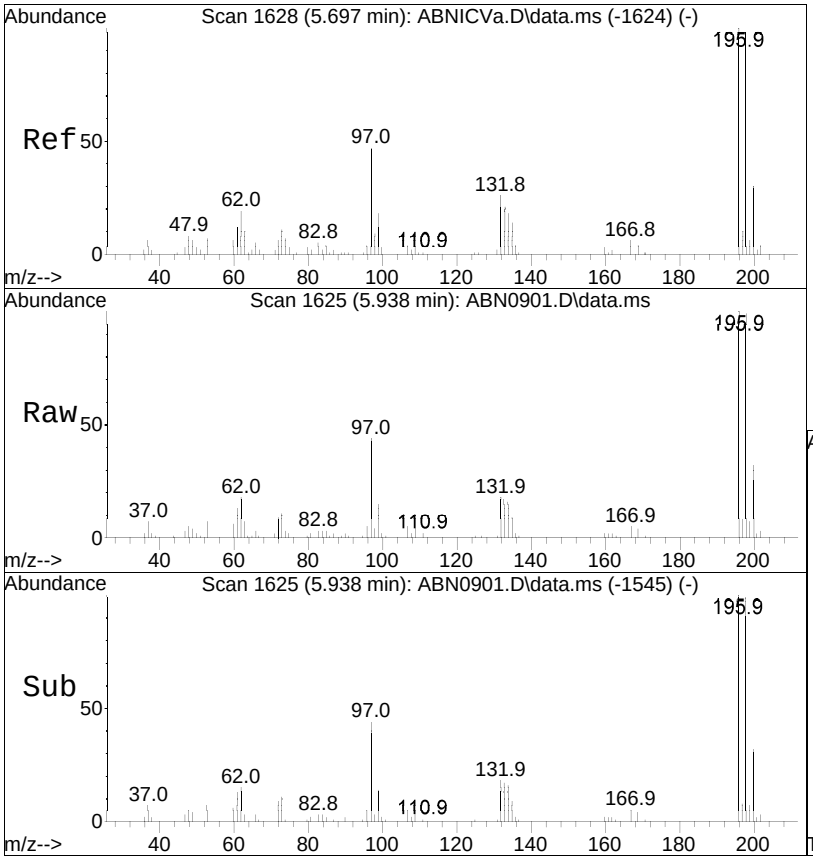


#43
2,4,6-Trichlorophenol
Concen: 6.20 ug/ml M3
RT: 5.910 min Scan# 1616
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:196 Resp: 19758

Ion	Ratio	Lower	Upper
196	100		
198	96.0	77.5	116.3
200	31.8	23.8	35.6

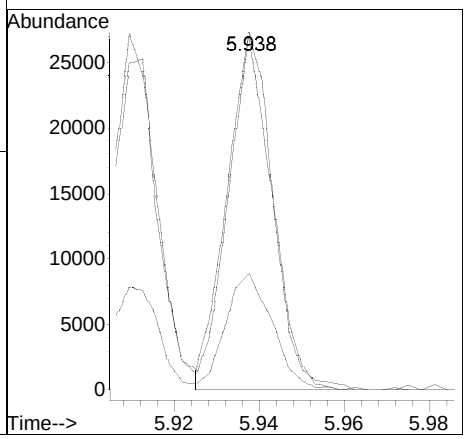


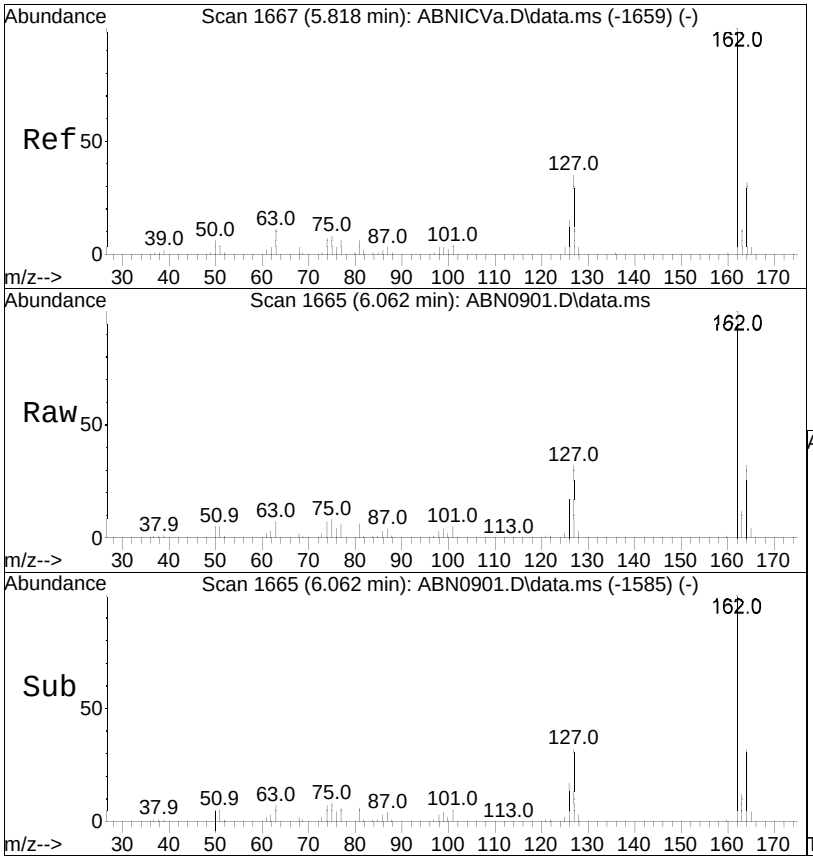


#44
2,4,5-Trichlorophenol
Concen: 6.39 ug/ml
RT: 5.938 min Scan# 1625
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:196 Resp: 20380

Ion	Ratio	Lower	Upper
196	100		
200	33.2	25.4	38.0
198	94.2	78.0	117.0

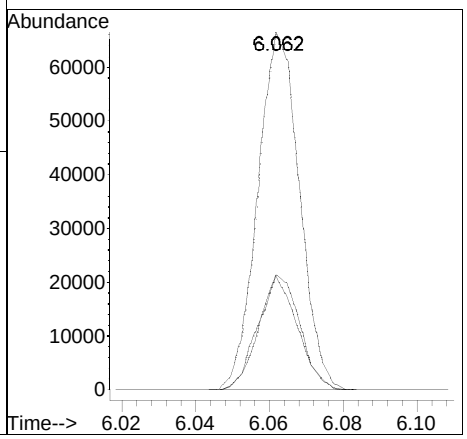


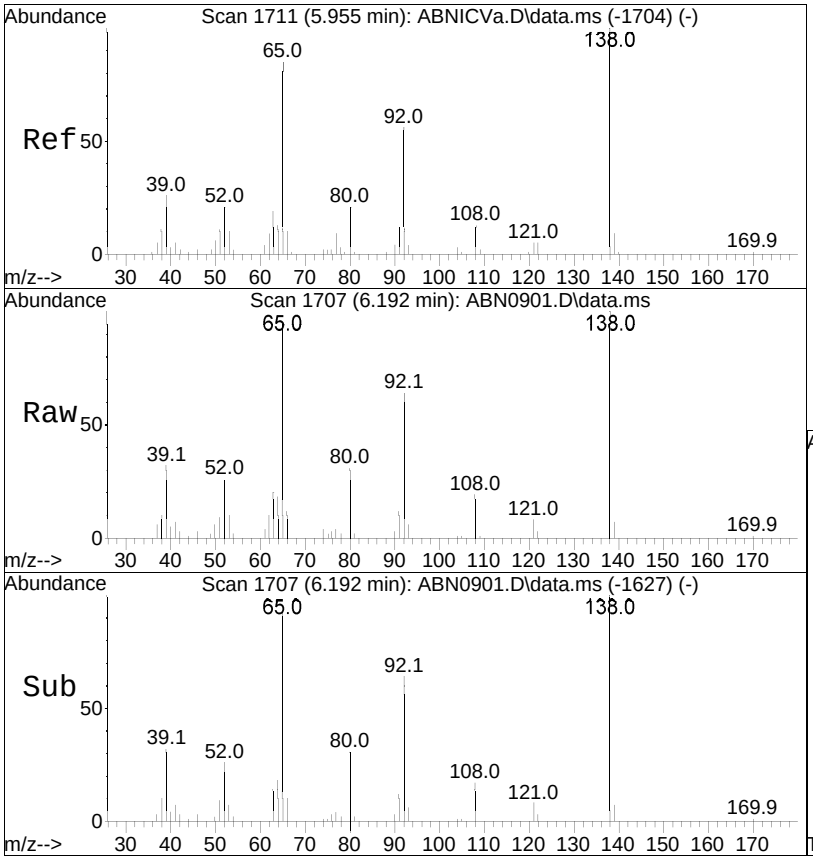


#46
2-Chloronaphthalene
Concen: 5.46 ug/ml
RT: 6.062 min Scan# 1665
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:162 Resp: 51623

Ion	Ratio	Lower	Upper
162	100		
127	30.5	32.2	48.4#
164	31.8	25.7	38.5

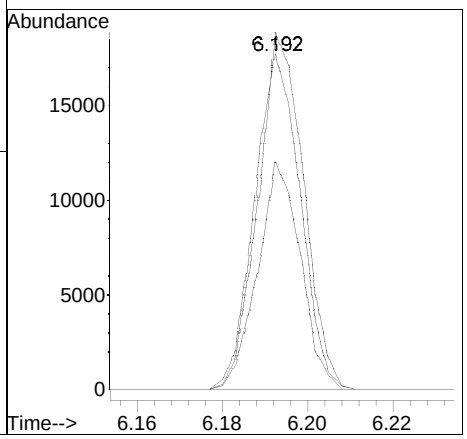


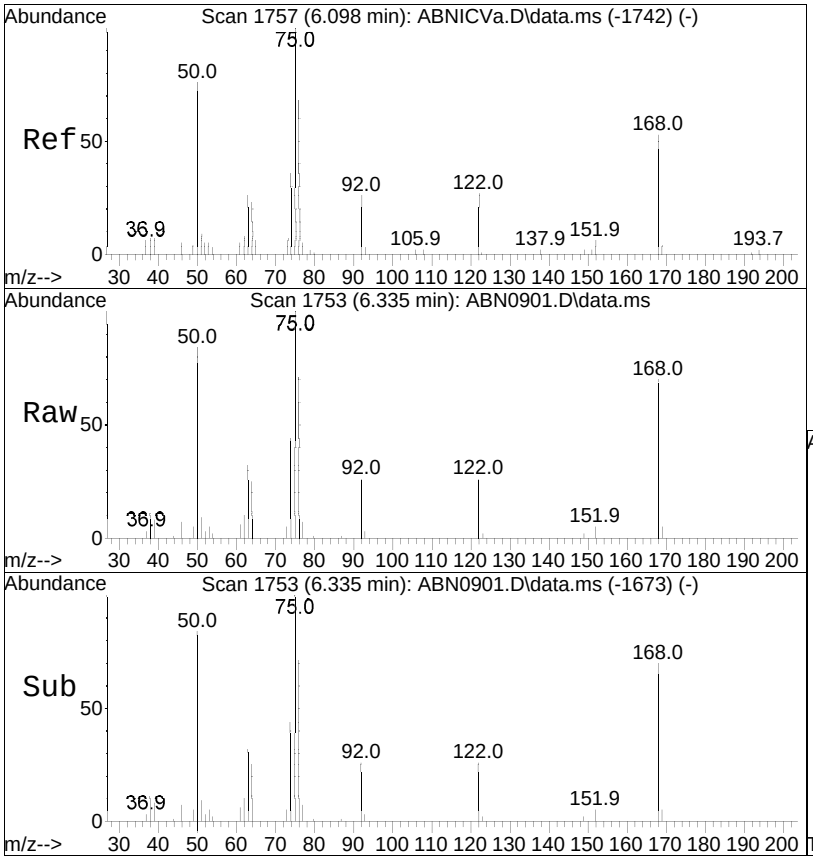


#47
2-Nitroaniline
Concen: 5.08 ug/ml
RT: 6.192 min Scan# 1707
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:138 Resp: 13872

Ion	Ratio	Lower	Upper
138	100		
92	60.3	53.5	80.3
65	94.5	86.3	129.5

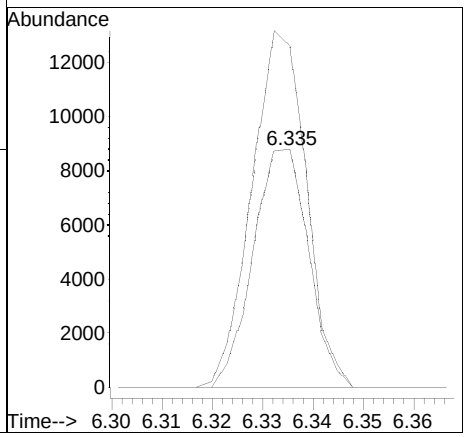


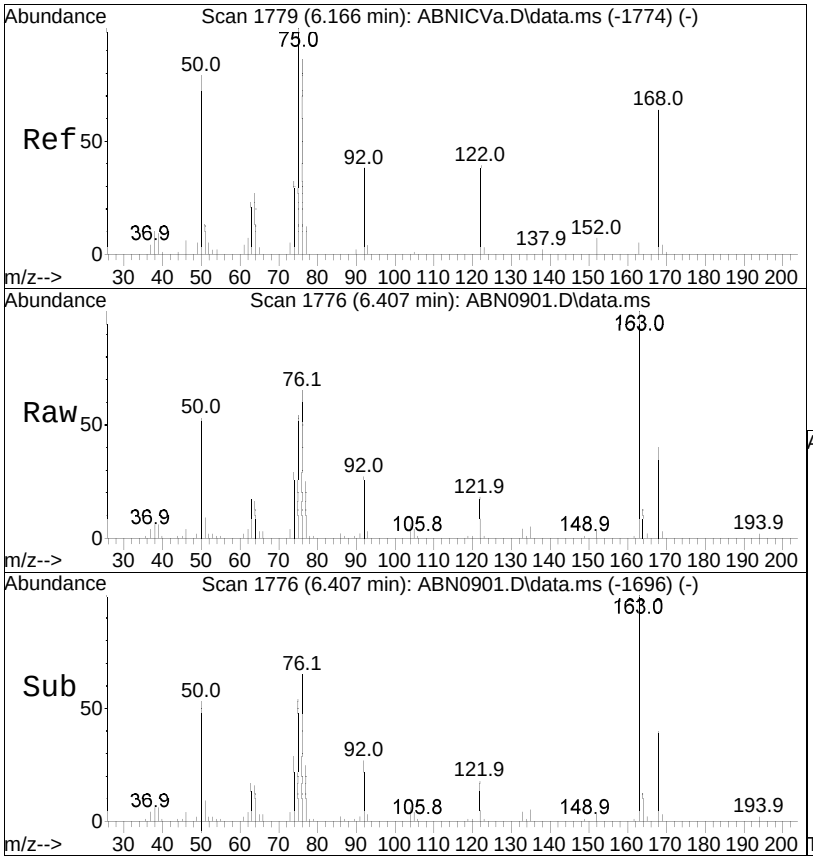


#48
1,4-Dinitrobenzene
Concen: 5.27 ug/ml
RT: 6.335 min Scan# 1753
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:168 Resp: 6726

Ion	Ratio	Lower	Upper
168	100		
75	146.8	121.8	182.8

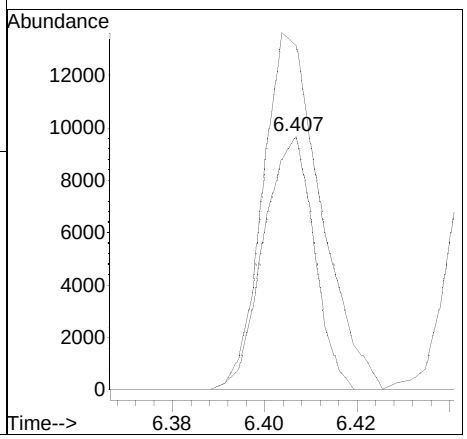


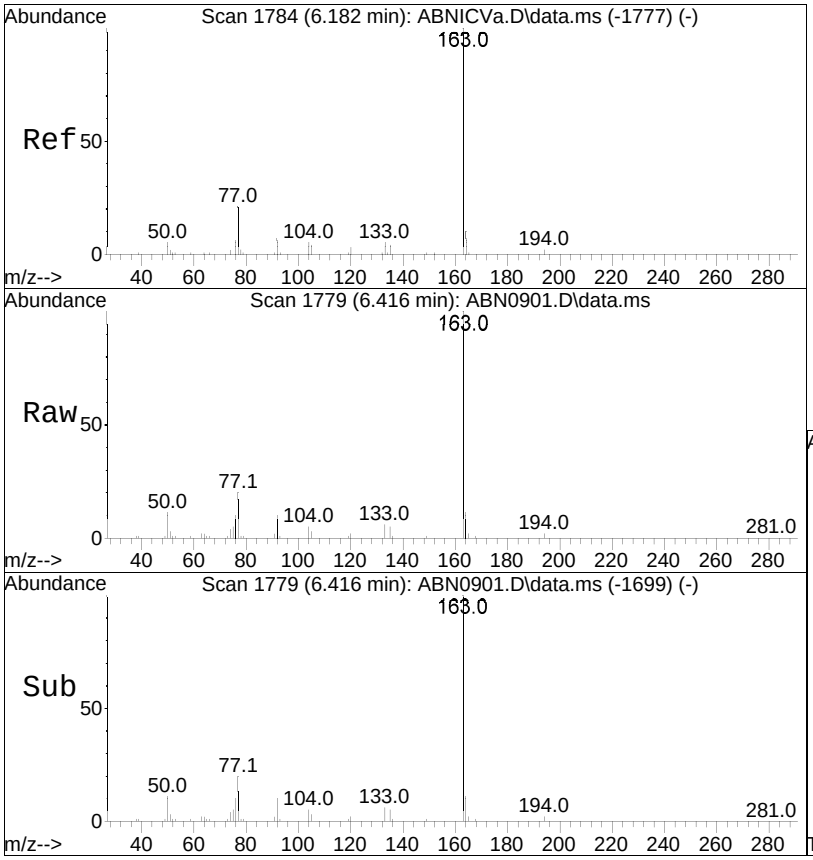


#49
1,3-Dinitrobenzene
Concen: 4.93 ug/ml
RT: 6.407 min Scan# 1776
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:168 Resp: 7335

Ion	Ratio	Lower	Upper
168	100		
75	162.3	22.7	34.1#

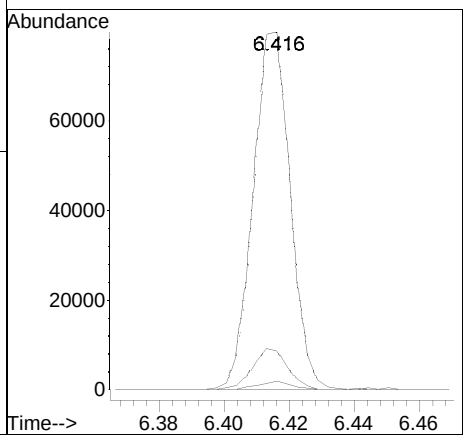


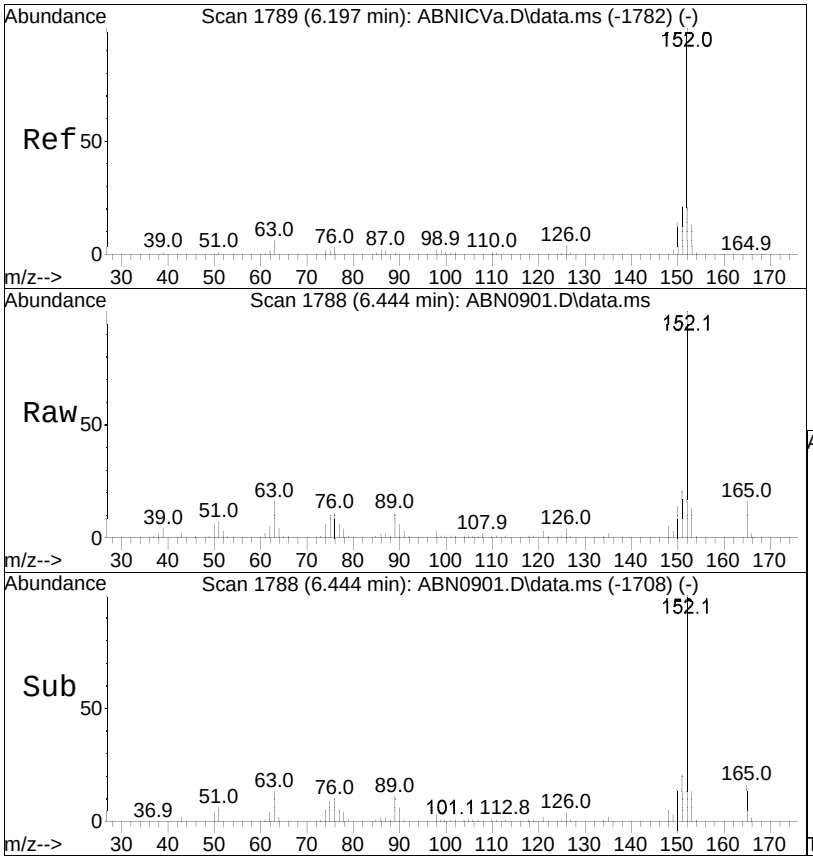


#50
Dimethyl phthalate
Concen: 5.65 ug/ml
RT: 6.416 min Scan# 1779
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:163 Resp: 62388

Ion	Ratio	Lower	Upper
163	100		
194	1.9	3.5	5.3#
164	11.0	7.9	11.9

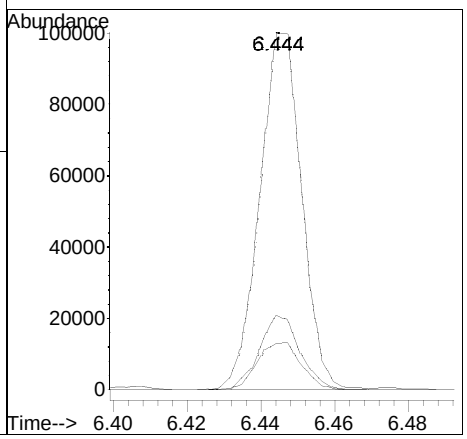


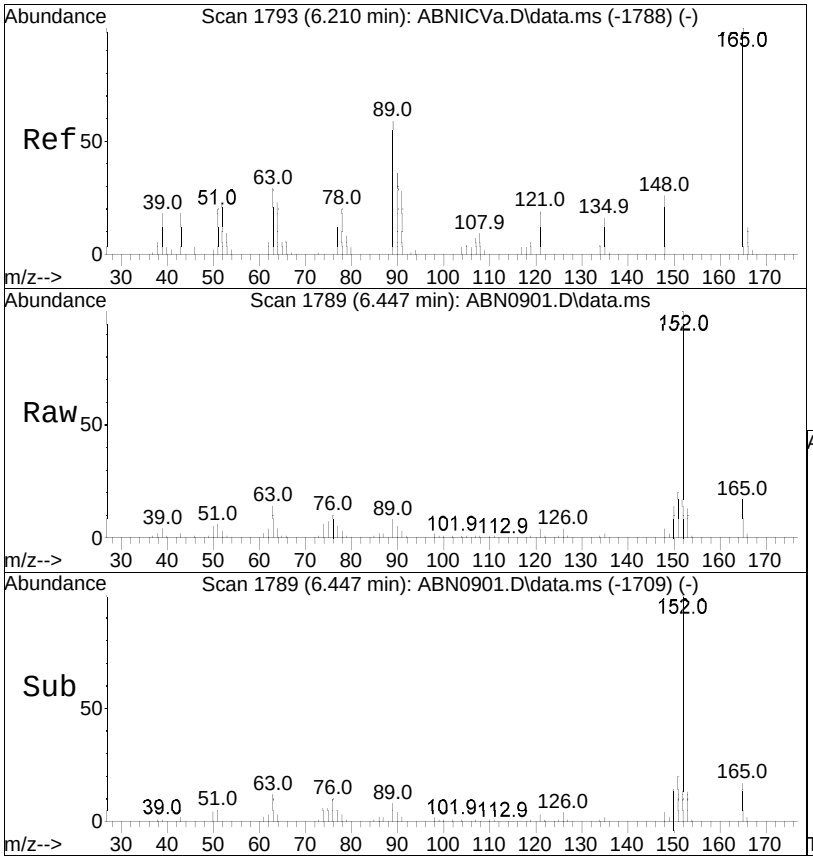


#51
Acenaphthylene
Concen: 5.48 ug/ml
RT: 6.444 min Scan# 1788
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:152 Resp: 78583

Ion	Ratio	Lower	Upper
152	100		
151	20.3	15.8	23.6
153	13.9	10.5	15.7

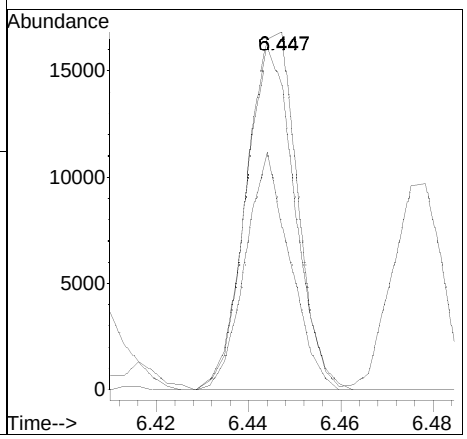


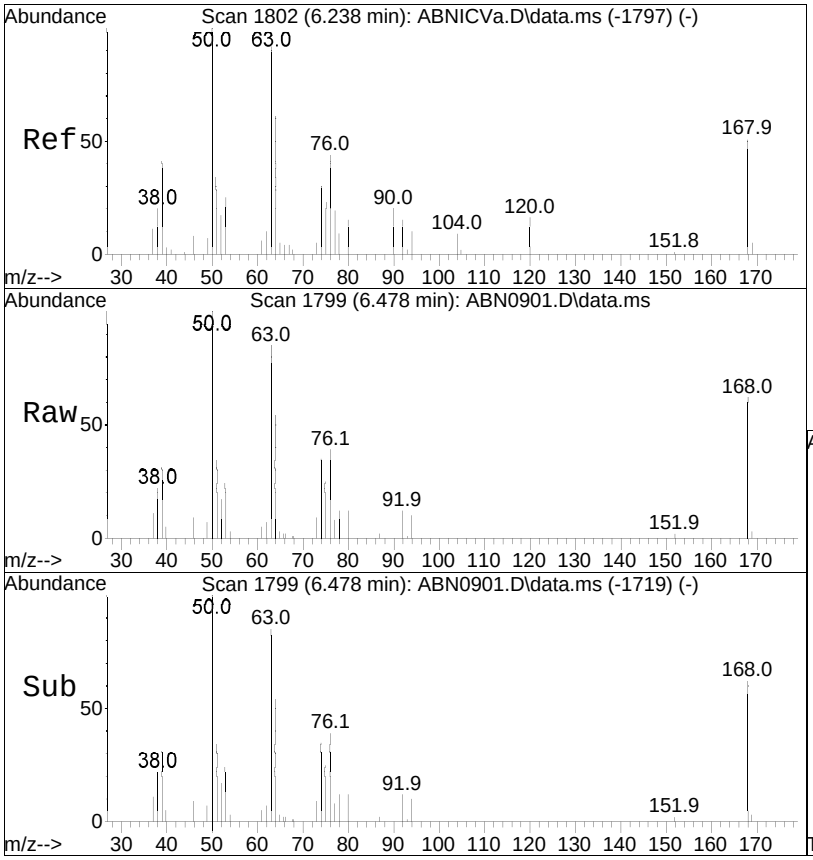


#52
2,6-Dinitrotoluene
Concen: 5.60 ug/ml
RT: 6.447 min Scan# 1789
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:165 Resp: 12768

Ion	Ratio	Lower	Upper
165	100		
89	58.9	54.2	81.2
63	93.0	64.2	96.2

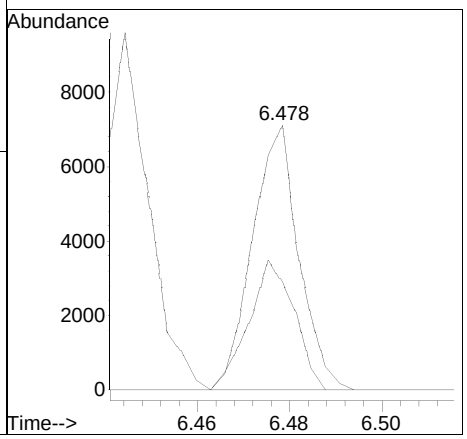


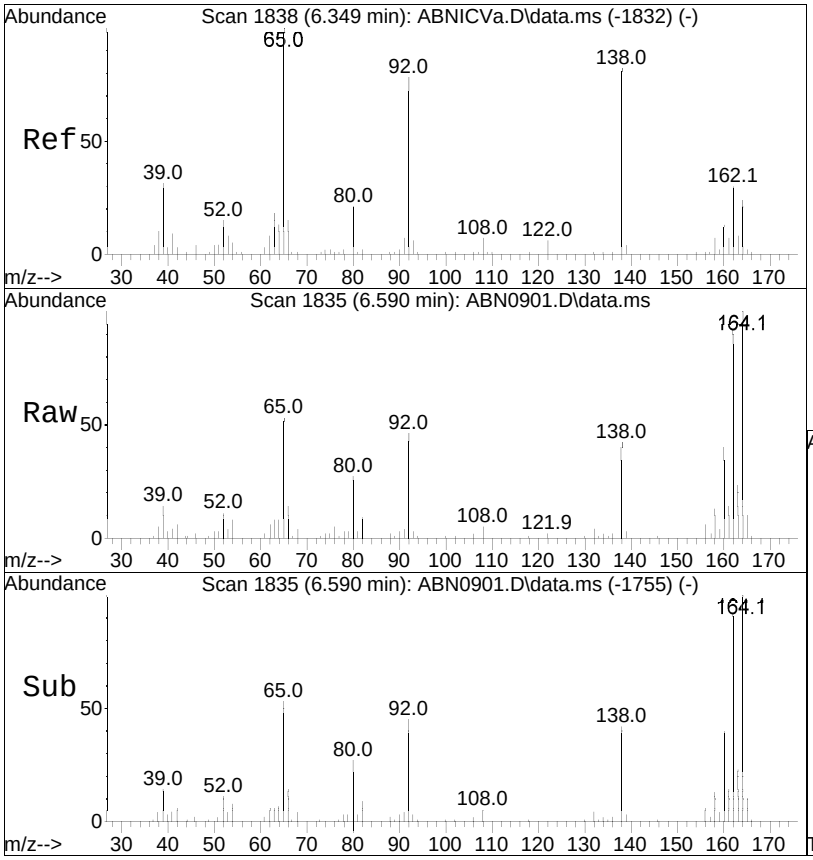


#53
1,2-Dinitrobenzene
Concen: 5.56 ug/ml
RT: 6.478 min Scan# 1799
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:168 Resp: 4954

Ion	Ratio	Lower	Upper
168	100		
75	48.0	30.9	46.3#

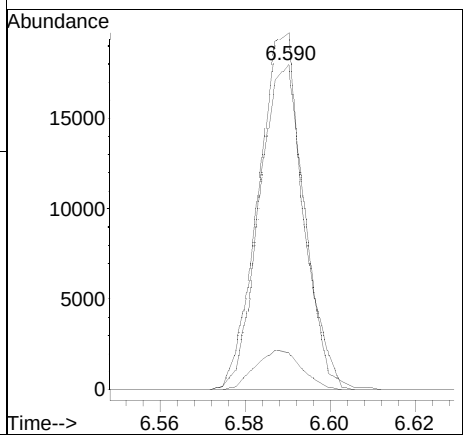


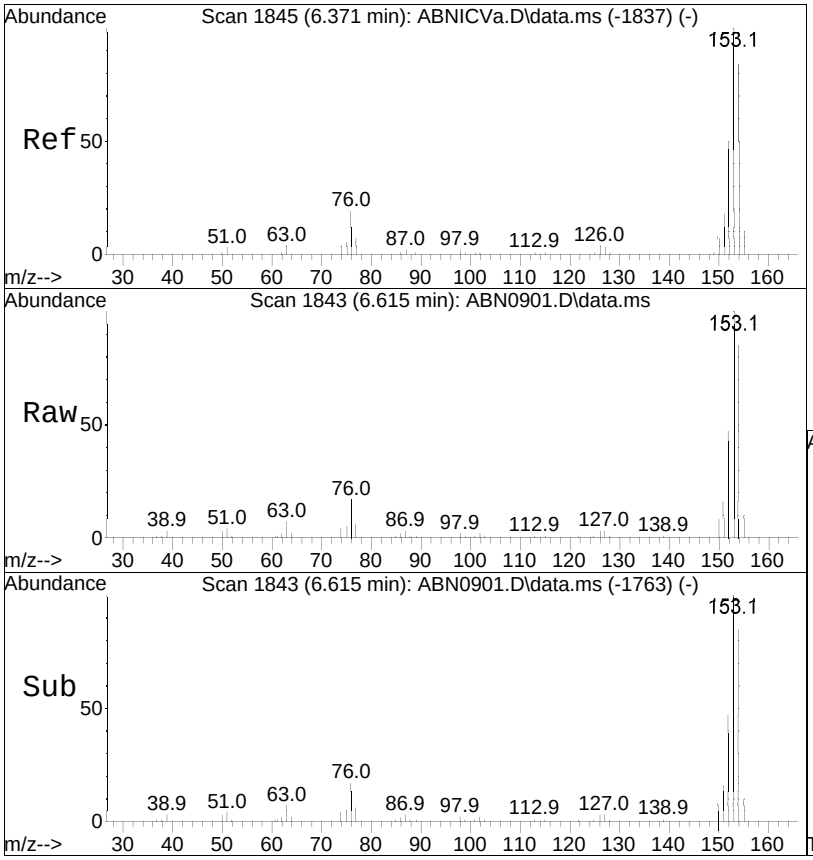


#63
3-Nitroaniline
Concen: 4.53 ug/ml
RT: 6.590 min Scan# 1835
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:138 Resp: 13302

Ion	Ratio	Lower	Upper
138	100		
92	107.0	93.4	140.2
108	12.5	9.5	14.3

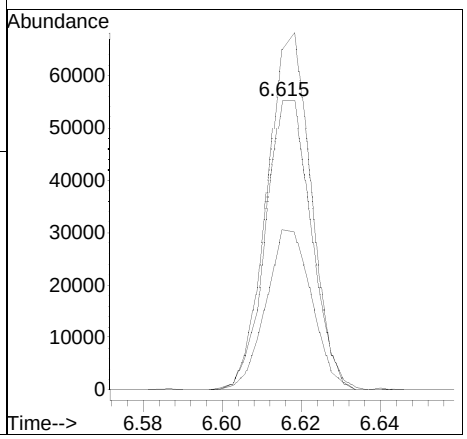


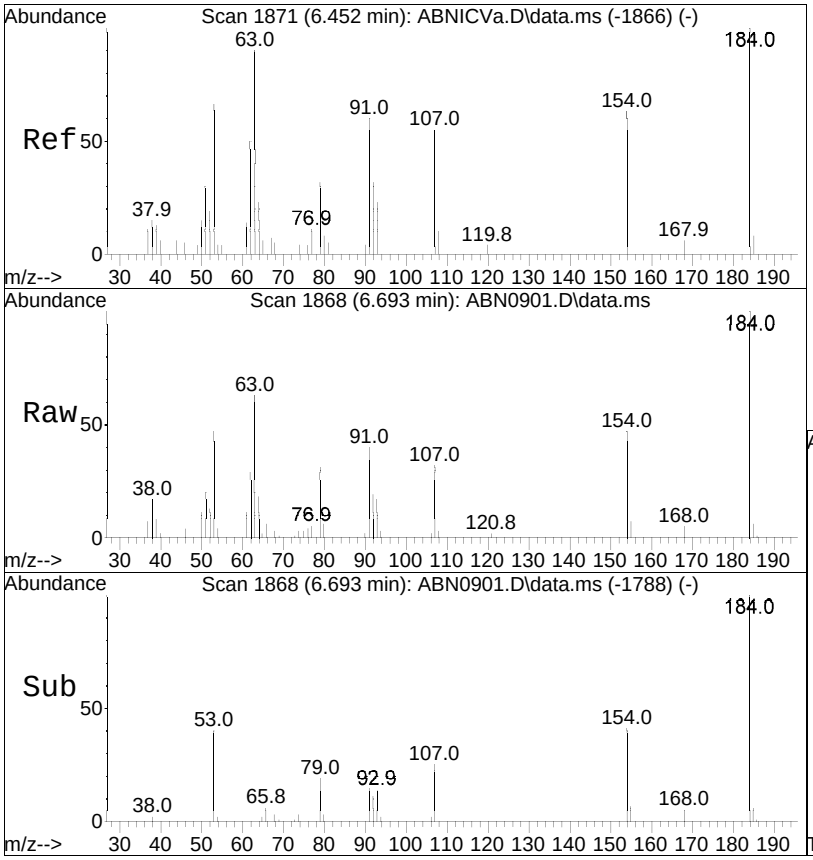


#64
Acenaphthene
Concen: 4.41 ug/ml
RT: 6.615 min Scan# 1843
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:154 Resp: 44302

Ion	Ratio	Lower	Upper
154	100		
153	119.4	85.3	127.9
152	55.6	41.4	62.0

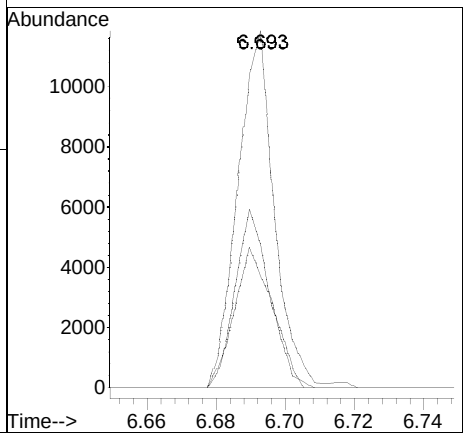


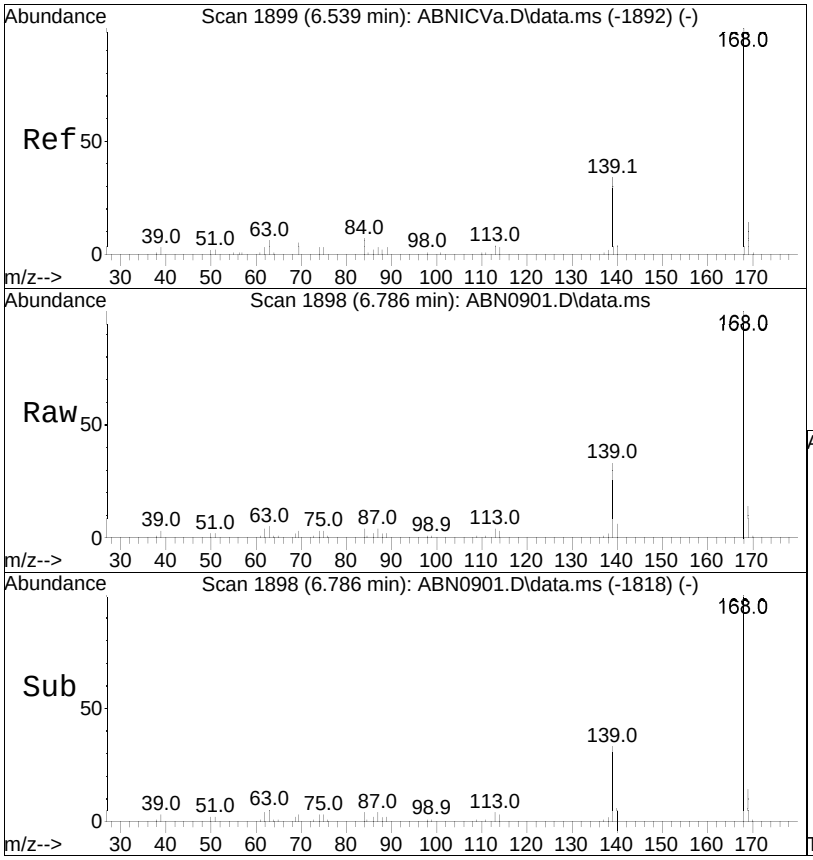


#65
2,4-Dinitrophenol
Concen: 5.91 ug/ml
RT: 6.693 min Scan# 1868
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:184 Resp: 8715

Ion	Ratio	Lower	Upper
184	100		
107	40.5	37.7	56.5
91	47.5	46.3	69.5

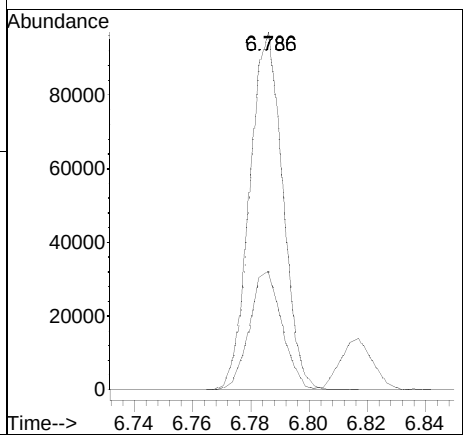


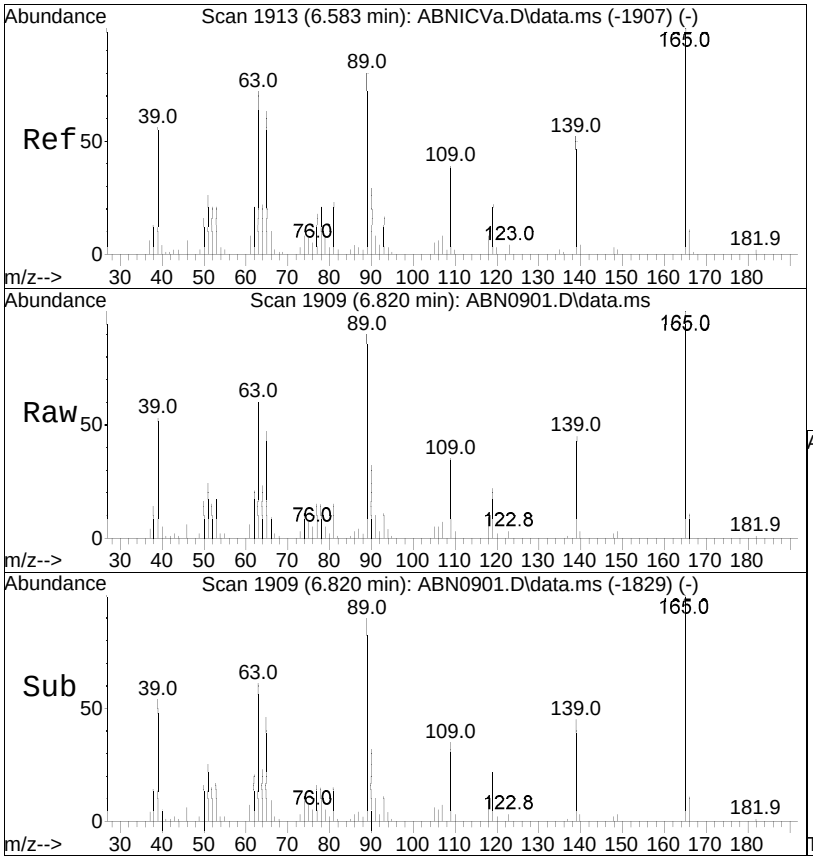


#66
Dibenzofuran
Concen: 4.73 ug/ml
RT: 6.786 min Scan# 1898
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:168 Resp: 75915

Ion	Ratio	Lower	Upper
168	100		
139	32.9	31.4	47.2

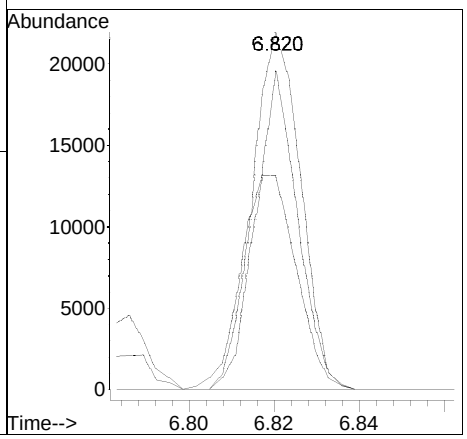


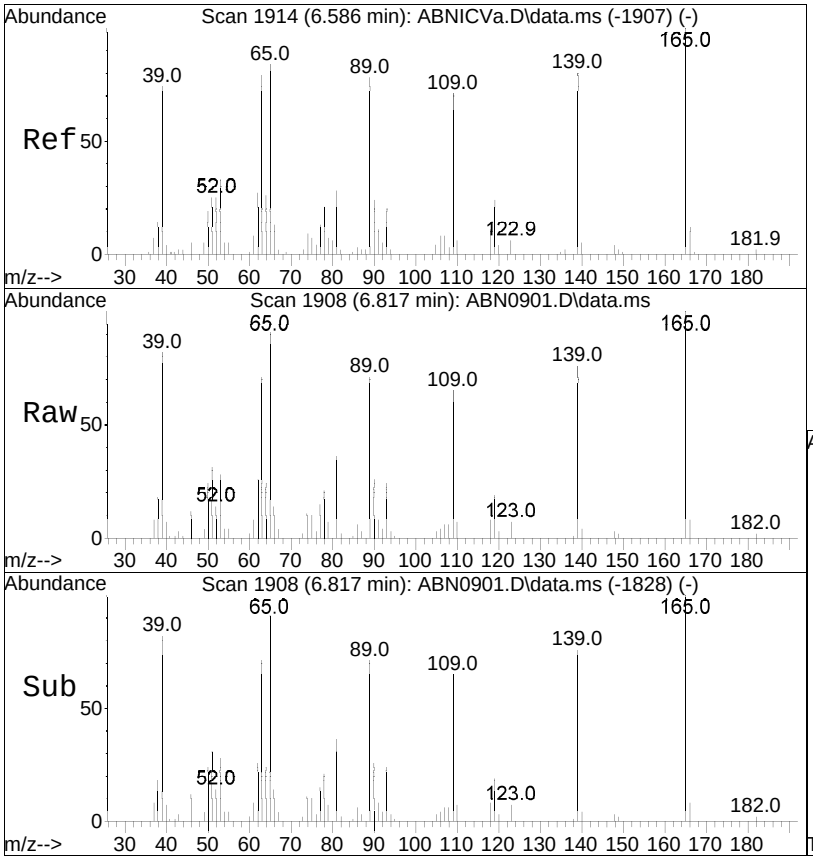


#67
2,4-Dinitrotoluene
Concen: 4.77 ug/ml
RT: 6.820 min Scan# 1909
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:165 Resp: 17264

Ion	Ratio	Lower	Upper
165	100		
89	77.8	72.0	108.0
63	68.6	52.7	79.1

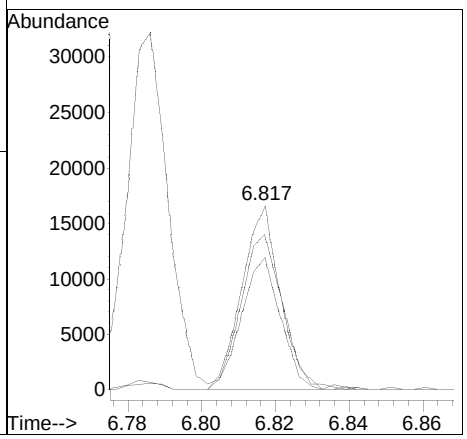


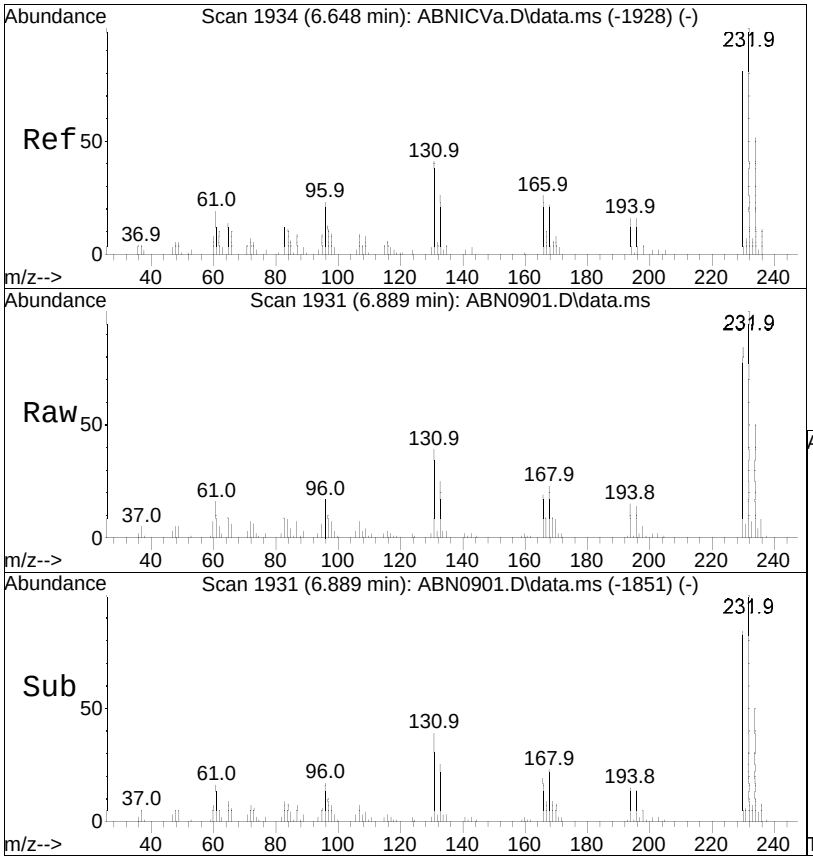


#68
4-Nitrophenol
Concen: 4.98 ug/ml
RT: 6.817 min Scan# 1908
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 65 Resp: 12070

Ion	Ratio	Lower	Upper
65	100		
109	72.4	47.4	71.2#
139	90.9	76.6	115.0

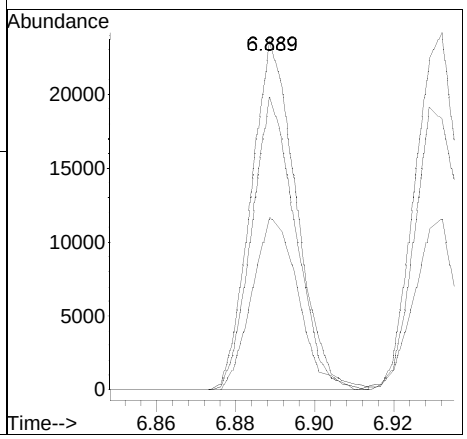


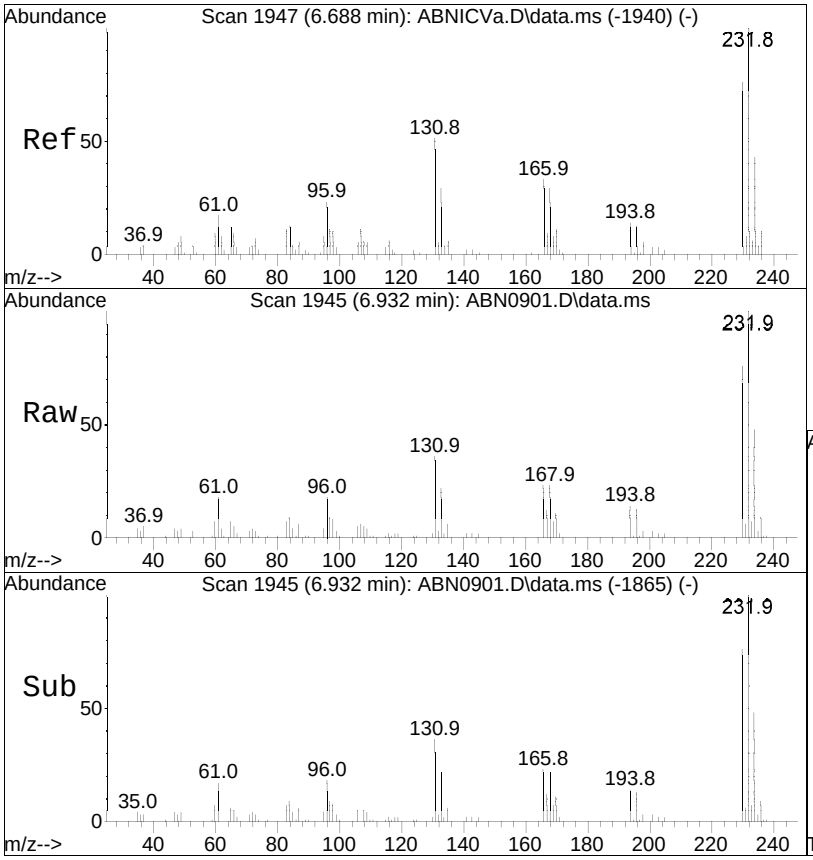


#69
2,3,5,6-Tetrachlorophenol
Concen: 5.61 ug/ml
RT: 6.889 min Scan# 1931
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:232 Resp: 18924

Ion	Ratio	Lower	Upper
232	100		
230	80.9	64.2	96.4
234	50.1	38.1	57.1

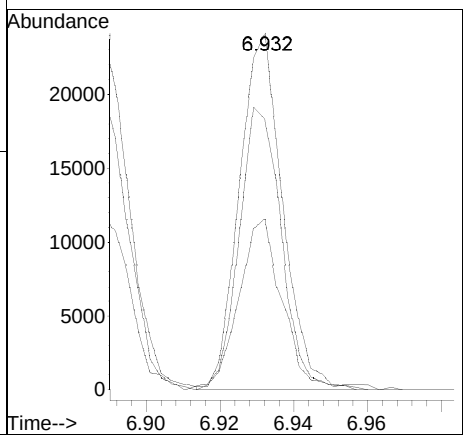


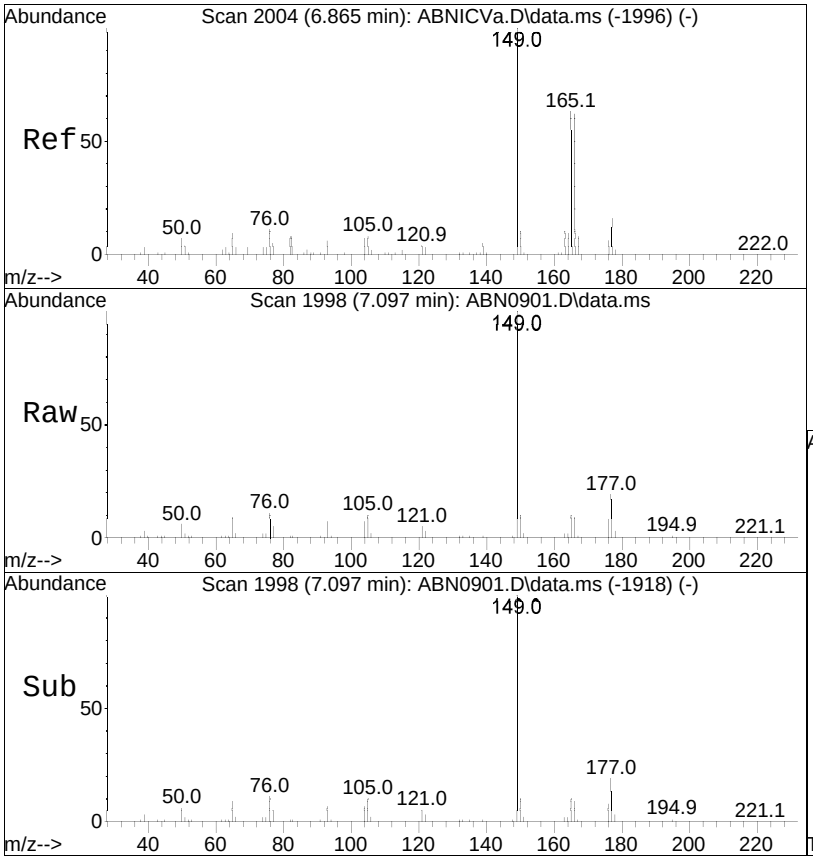


#70
2,3,4,6-Tetrachlorophenol
Concen: 5.79 ug/ml
RT: 6.932 min Scan# 1945
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:232 Resp: 19643

Ion	Ratio	Lower	Upper
232	100		
230	78.2	61.8	92.8
234	48.0	36.2	54.2

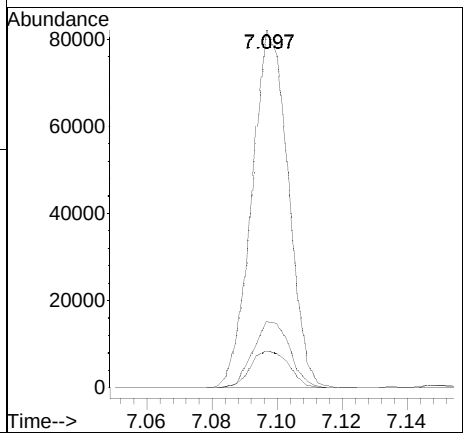


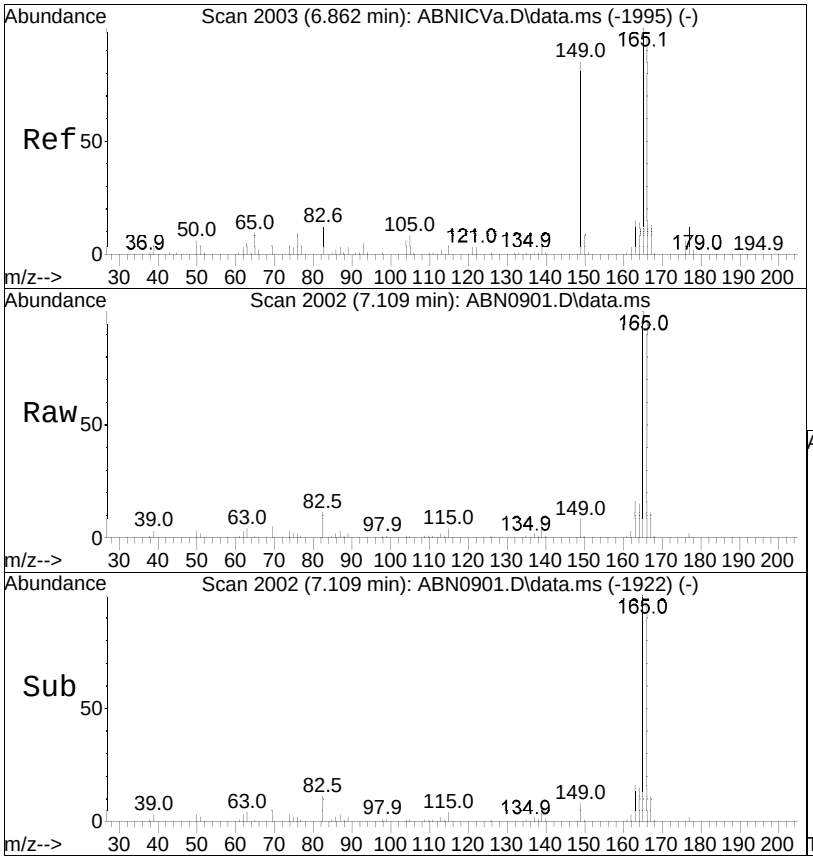


#71
Diethyl phthalate
Concen: 4.66 ug/ml
RT: 7.097 min Scan# 1998
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:149 Resp: 63130

Ion	Ratio	Lower	Upper
149	100		
177	18.9	16.1	24.1
150	11.1	9.4	14.2

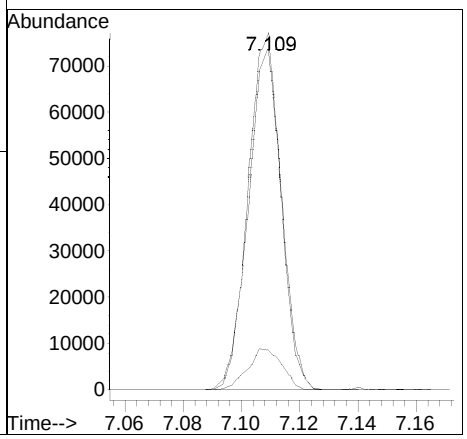


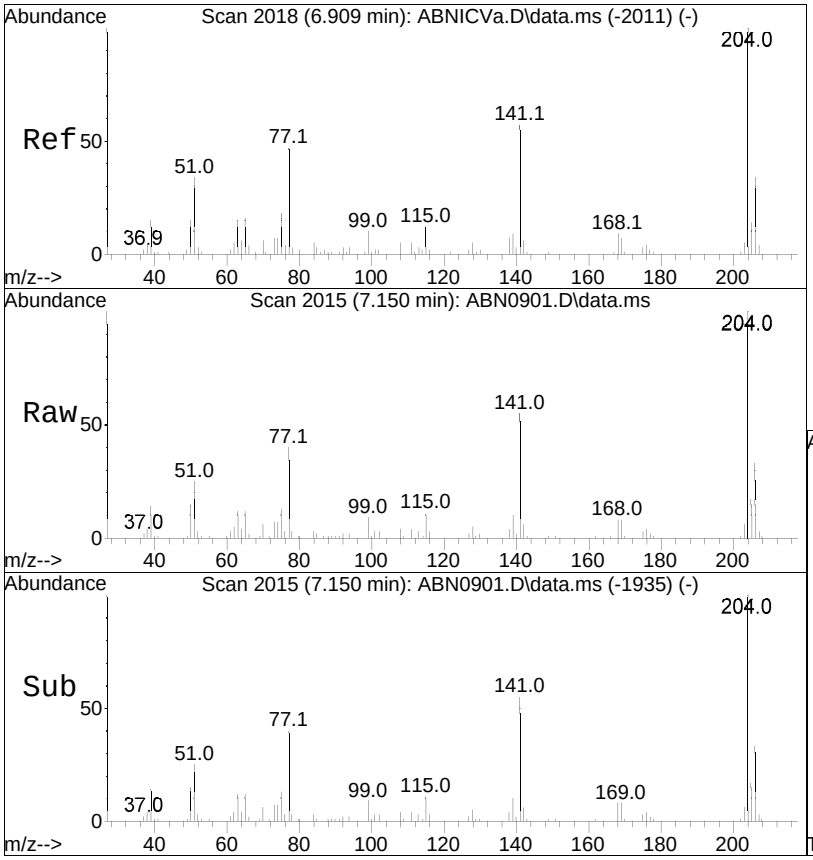


#72
Fluorene
Concen: 4.46 ug/ml
RT: 7.109 min Scan# 2002
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:166 Resp: 57609

Ion	Ratio	Lower	Upper
166	100		
165	105.9	76.2	114.2
167	12.9	10.6	15.8

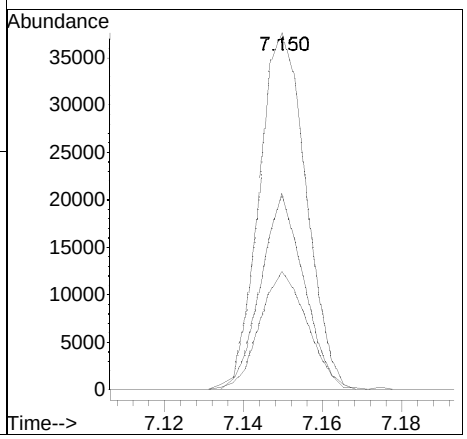


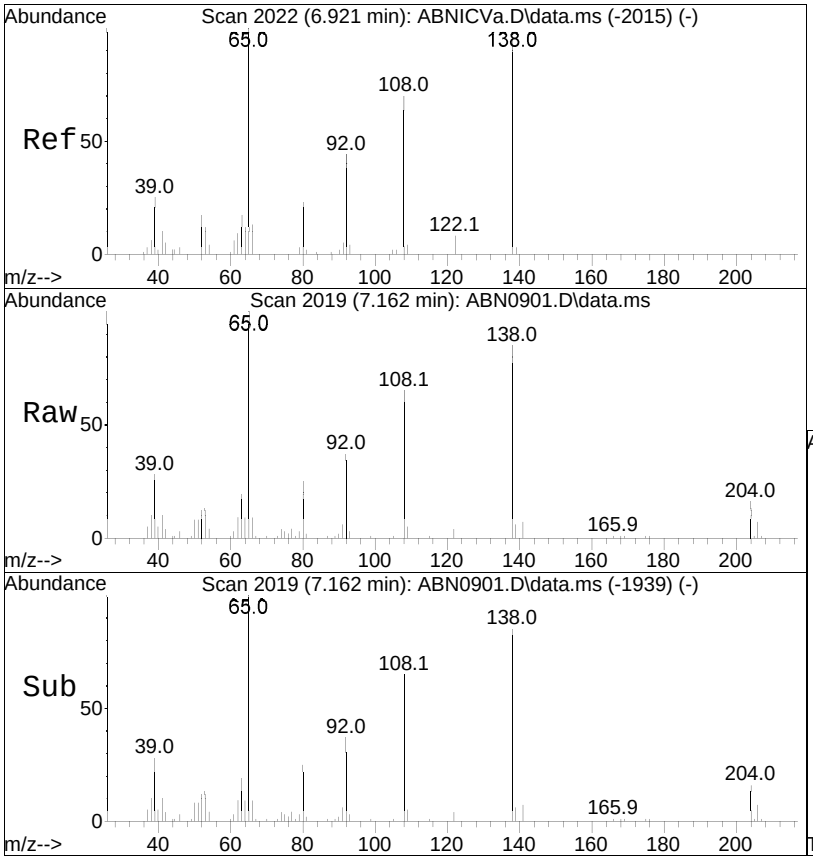


#73
4-Chlorophenyl phenyl ether
Concen: 4.91 ug/ml
RT: 7.150 min Scan# 2015
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:204 Resp: 30850

Ion	Ratio	Lower	Upper
204	100		
206	33.5	25.8	38.6
141	50.6	53.6	80.4#

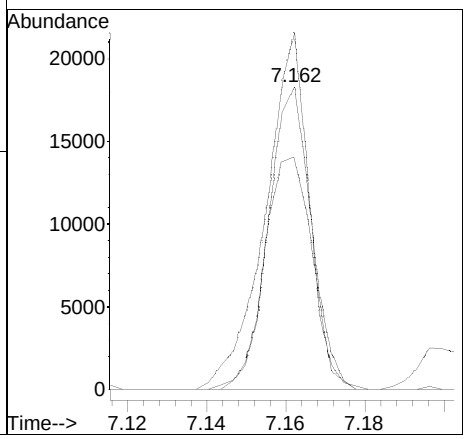


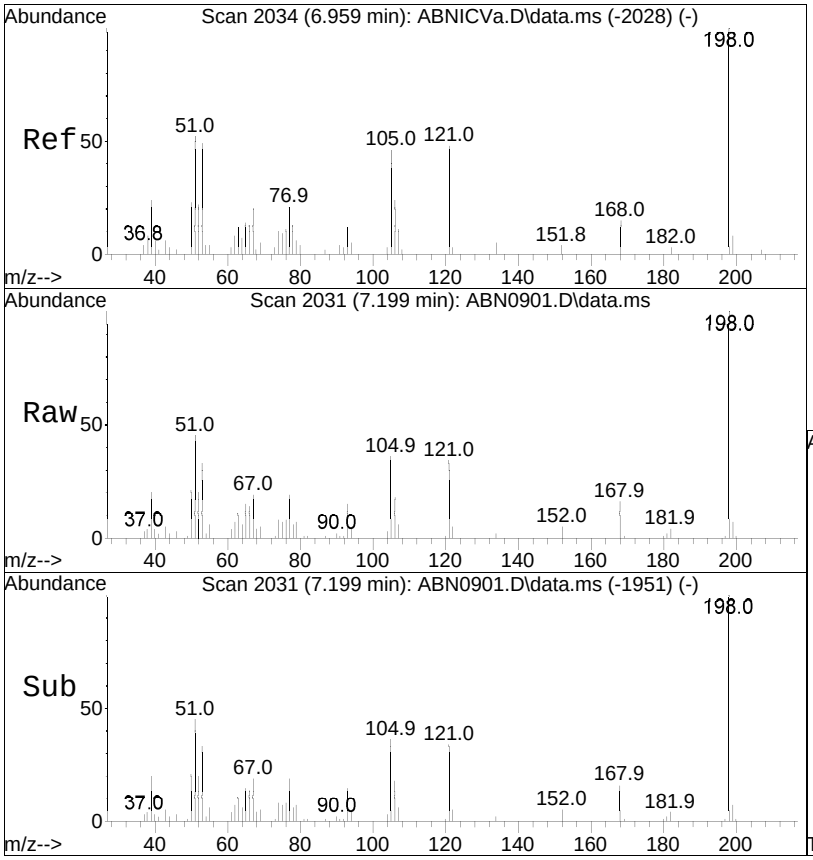


#74
4-Nitroaniline
Concen: 4.73 ug/ml
RT: 7.162 min Scan# 2019
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:138 Resp: 13795

Ion	Ratio	Lower	Upper
138	100		
108	84.3	52.1	78.1#
65	119.3	115.0	172.6

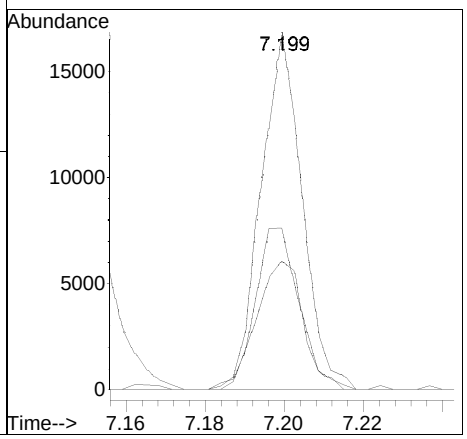


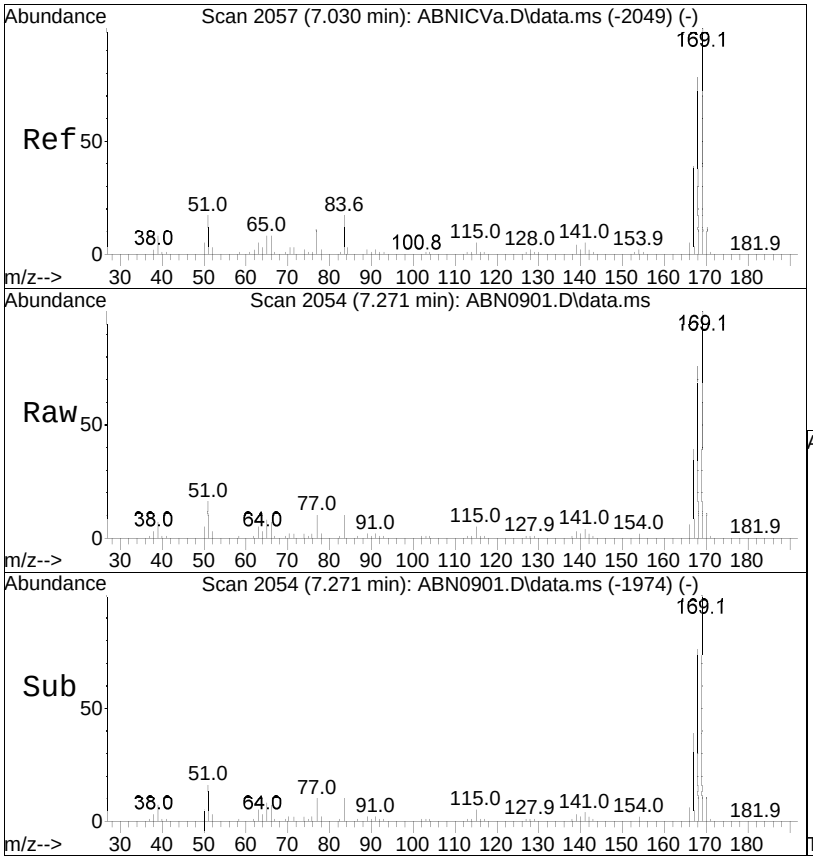


#75
4,6-Dinitro-o-cresol
Concen: 6.06 ug/ml
RT: 7.199 min Scan# 2031
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:198 Resp: 12095

Ion	Ratio	Lower	Upper
198	100		
51	48.9	76.0	114.0#
105	40.7	45.6	68.4#

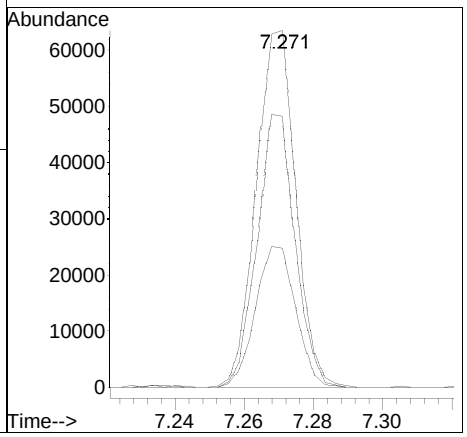


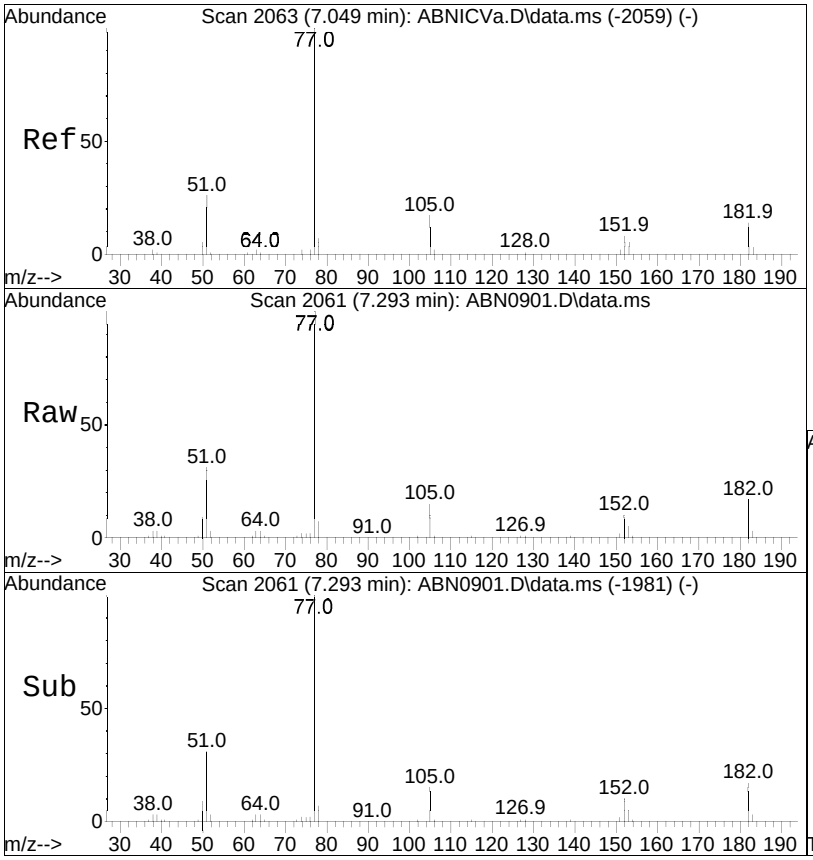


#76
NDPA/DPA
Concen: 4.57 ug/ml
RT: 7.271 min Scan# 2054
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:169 Resp: 50425

Ion	Ratio	Lower	Upper
169	100		
168	73.4	54.0	81.0
167	40.3	28.6	42.8

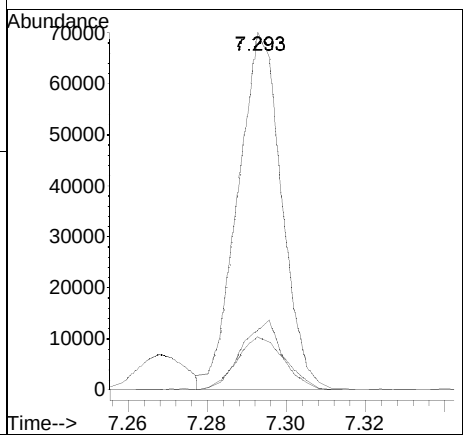


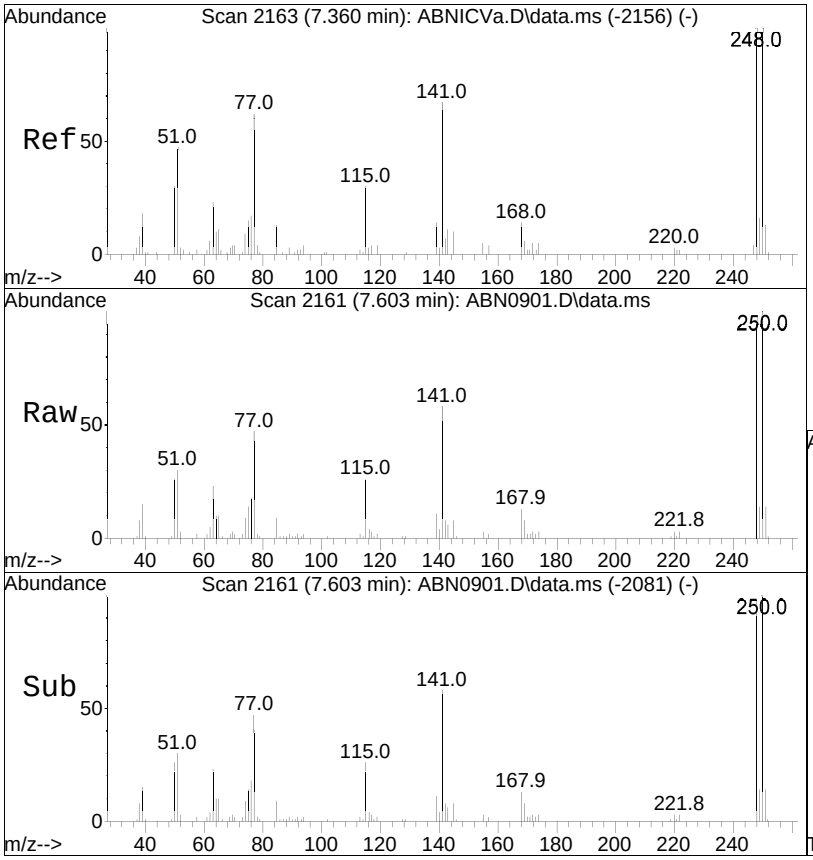


#77
Azobenzene
Concen: 4.61 ug/ml
RT: 7.293 min Scan# 2061
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion: 77 Resp: 53494

Ion	Ratio	Lower	Upper
77	100		
182	18.9	17.4	26.2
105	16.3	15.4	23.2

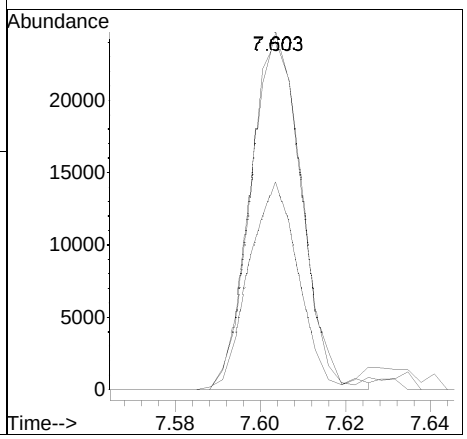


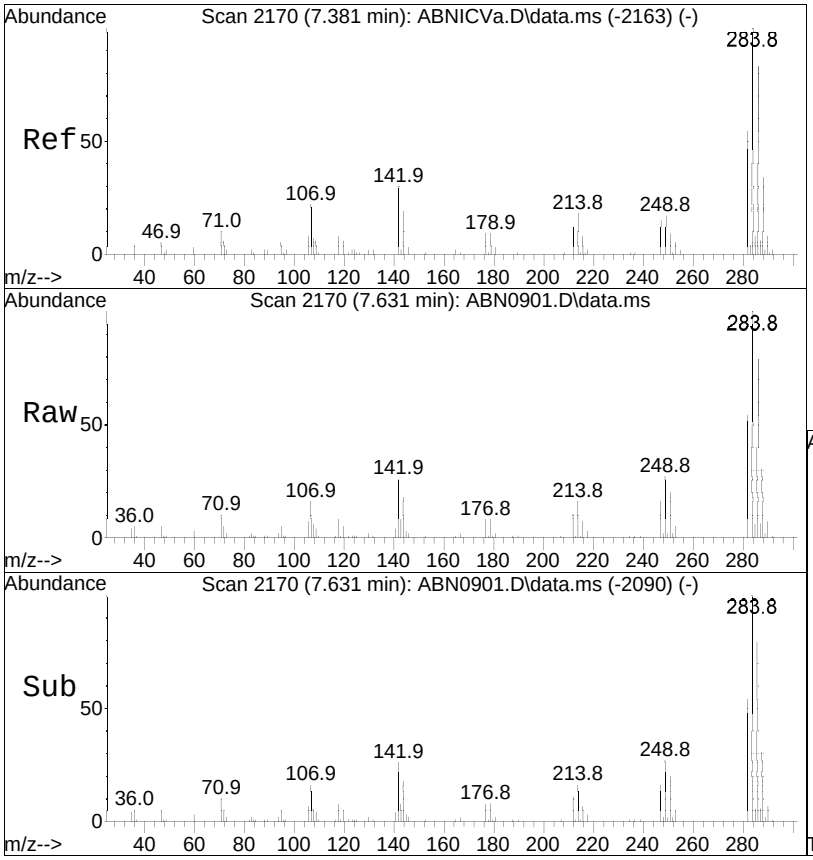


#79
4-Bromophenyl phenyl ether
Concen: 5.19 ug/ml
RT: 7.603 min Scan# 2161
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:248 Resp: 20381

Ion	Ratio	Lower	Upper
248	100		
141	56.4	76.6	114.8#
250	98.6	77.3	115.9

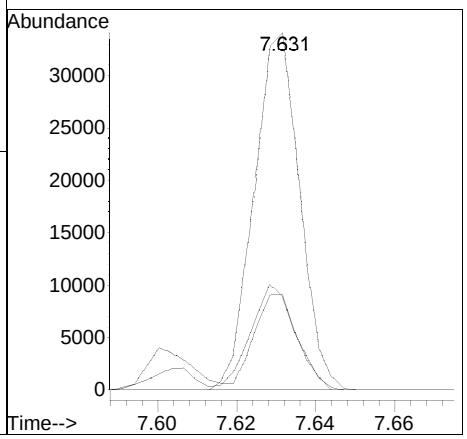


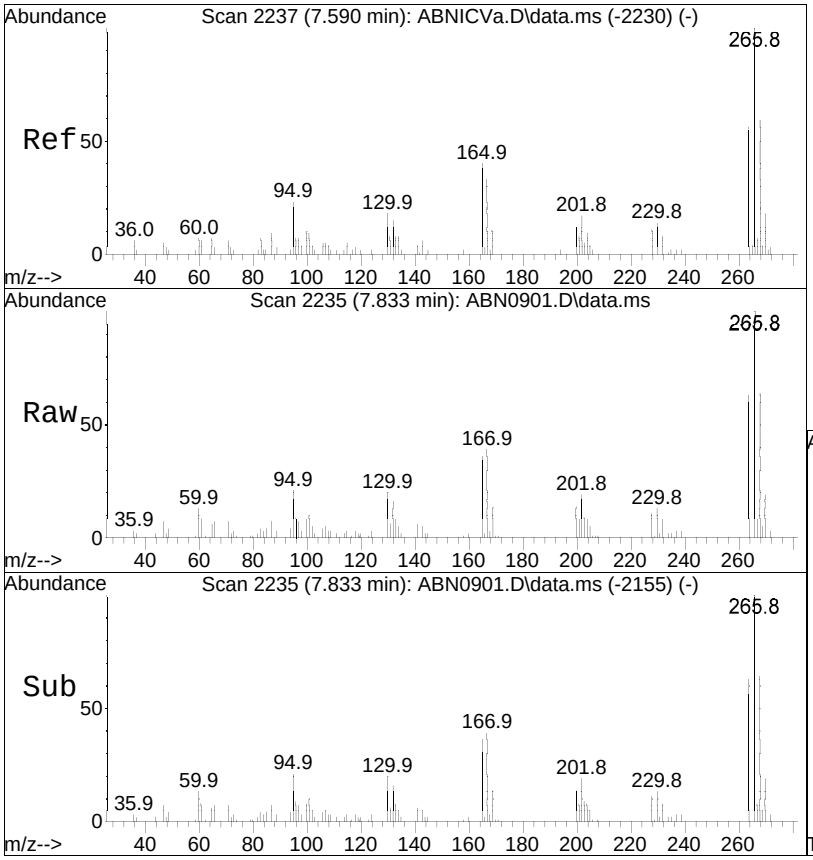


#80
Hexachlorobenzene
Concen: 5.54 ug/ml
RT: 7.631 min Scan# 2170
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:284 Resp: 27222

Ion	Ratio	Lower	Upper
284	100		
142	29.1	41.9	62.9#
249	25.3	24.1	36.1

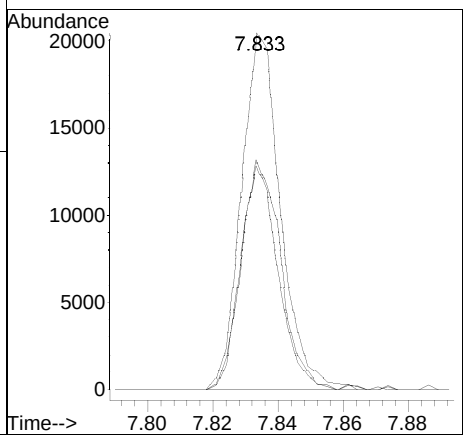


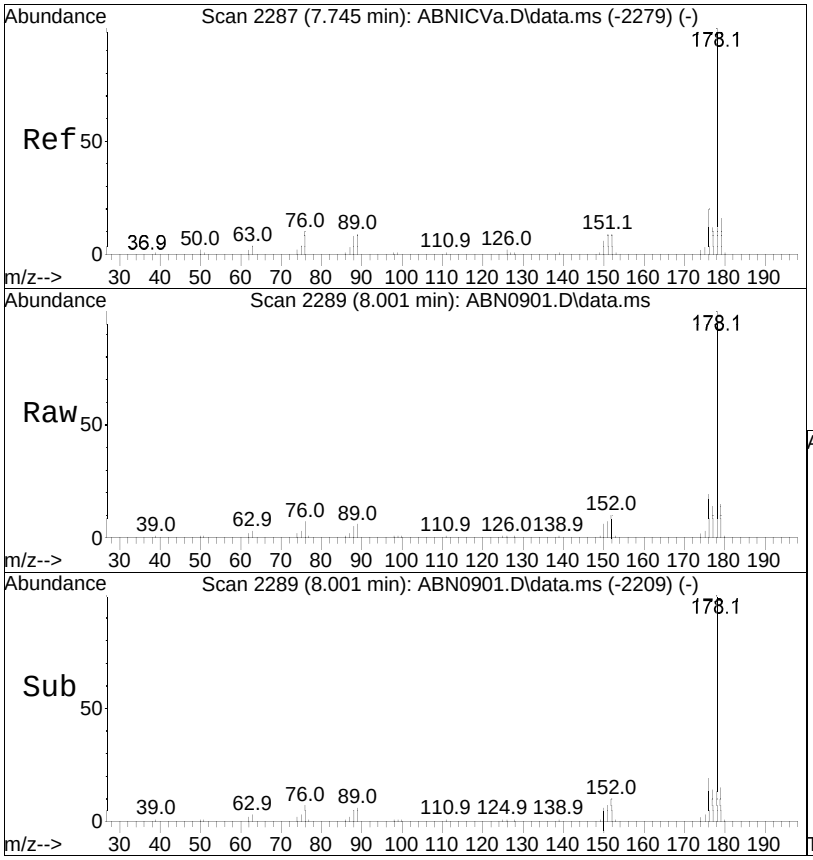


#81
Pentachlorophenol
Concen: 6.15 ug/ml
RT: 7.833 min Scan# 2235
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:266 Resp: 17024

Ion	Ratio	Lower	Upper
266	100		
264	60.4	49.7	74.5
268	65.0	50.5	75.7

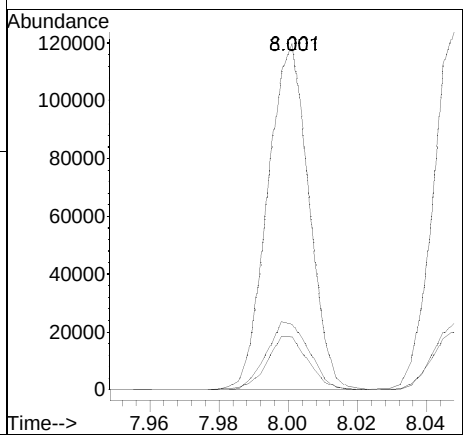


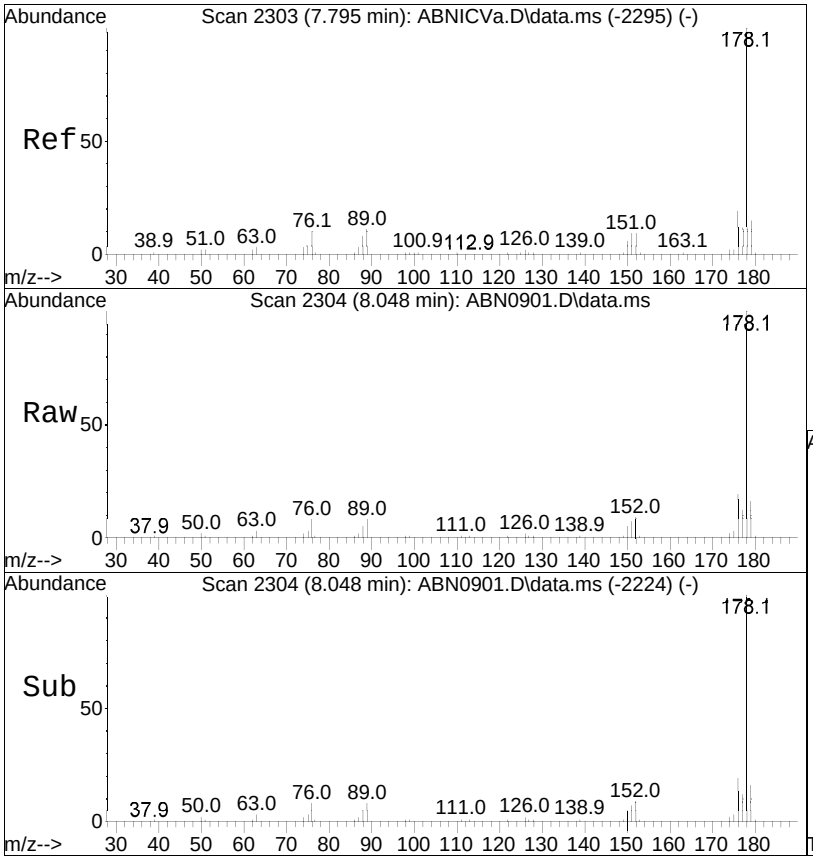


#88
Phenanthrene
Concen: 4.44 ug/ml
RT: 8.001 min Scan# 2289
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:178 Resp: 99122

Ion	Ratio	Lower	Upper
178	100		
179	15.4	12.2	18.2
176	20.2	15.4	23.2

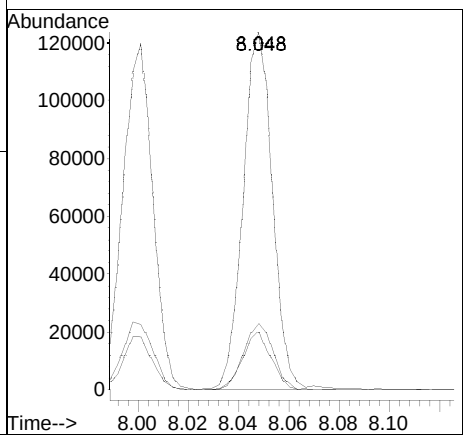


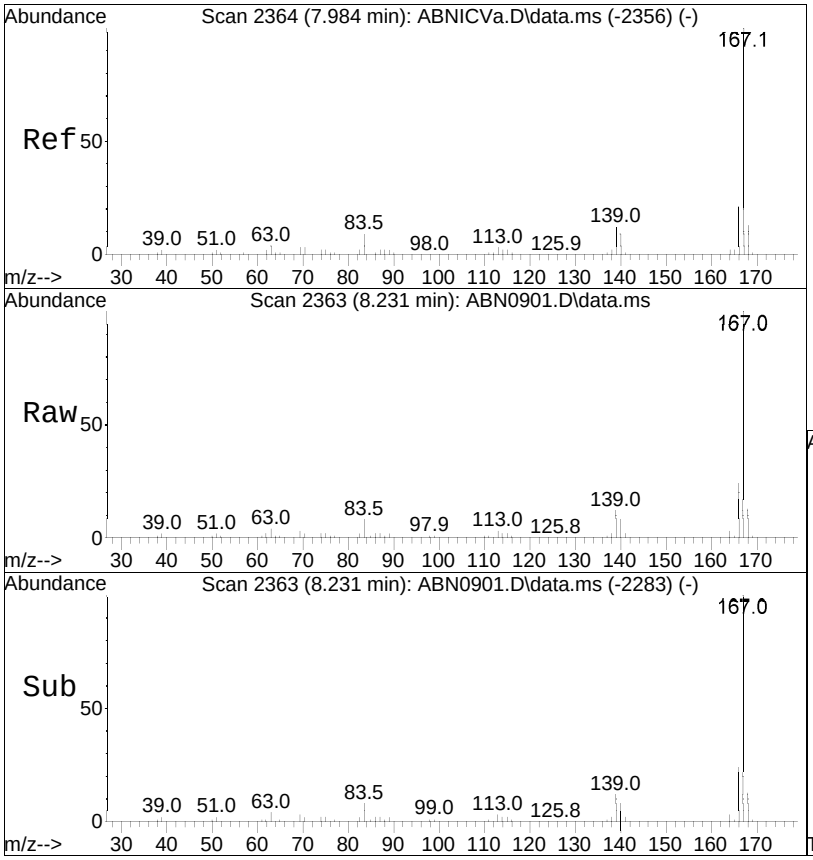


#89
Anthracene
Concen: 4.66 ug/ml
RT: 8.048 min Scan# 2304
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:178 Resp: 100859

Ion	Ratio	Lower	Upper
178	100		
179	15.6	12.0	18.0
176	18.7	14.6	22.0

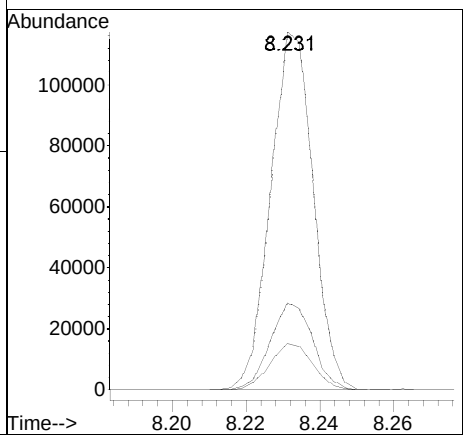


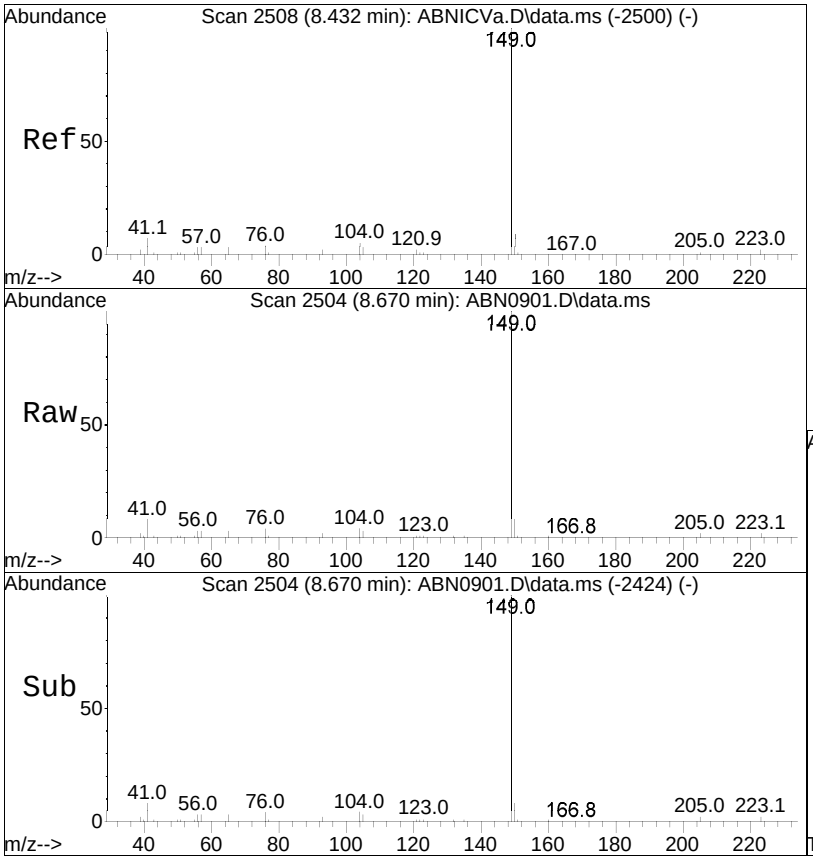


#90
Carbazole
Concen: 4.57 ug/ml
RT: 8.231 min Scan# 2363
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:167 Resp: 93150

Ion	Ratio	Lower	Upper
167	100		
168	13.2	10.6	15.8
166	24.3	17.4	26.0

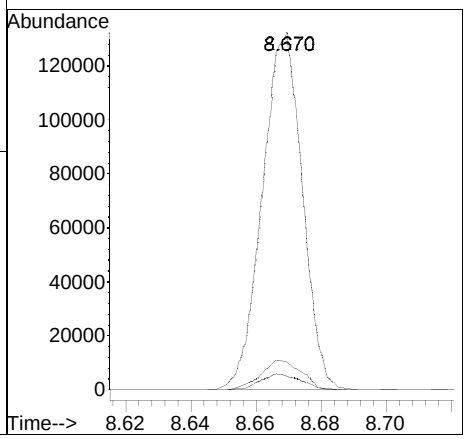


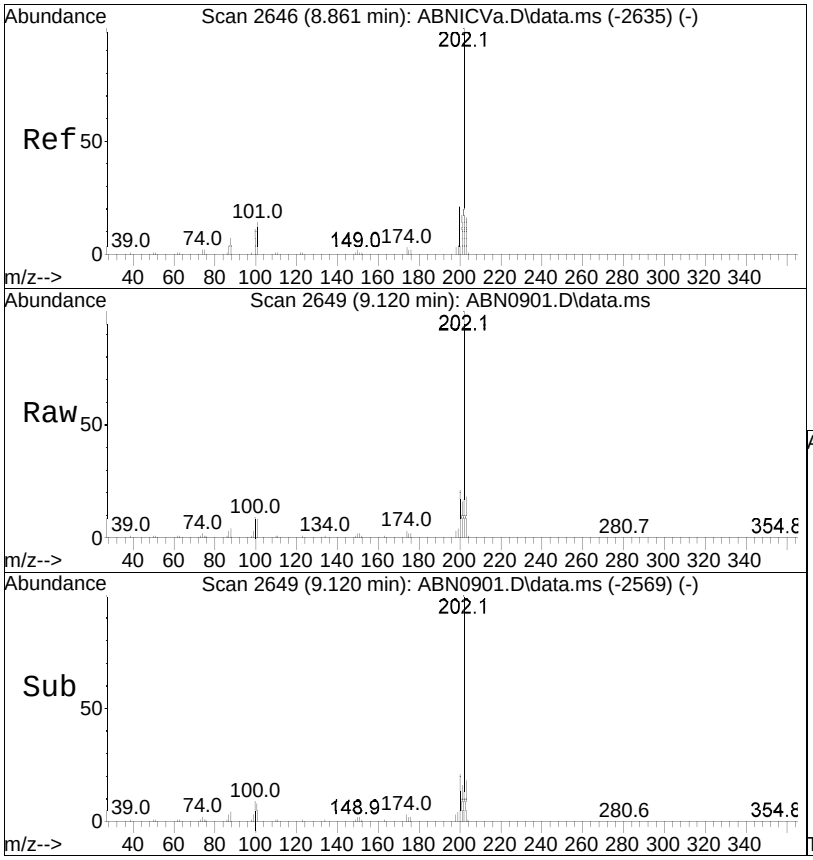


#91
Di-n-butylphthalate
Concen: 4.64 ug/ml
RT: 8.670 min Scan# 2504
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:149 Resp: 111302

Ion	Ratio	Lower	Upper
149	100		
150	8.5	7.0	10.6
104	4.5	4.5	6.7

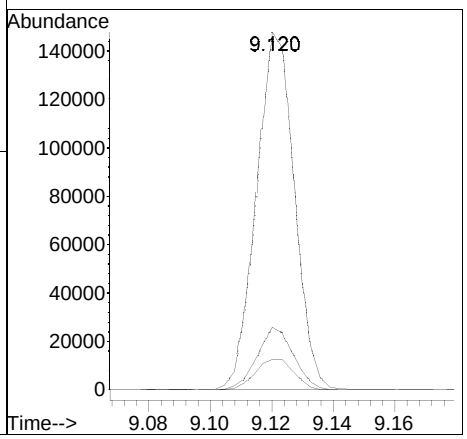


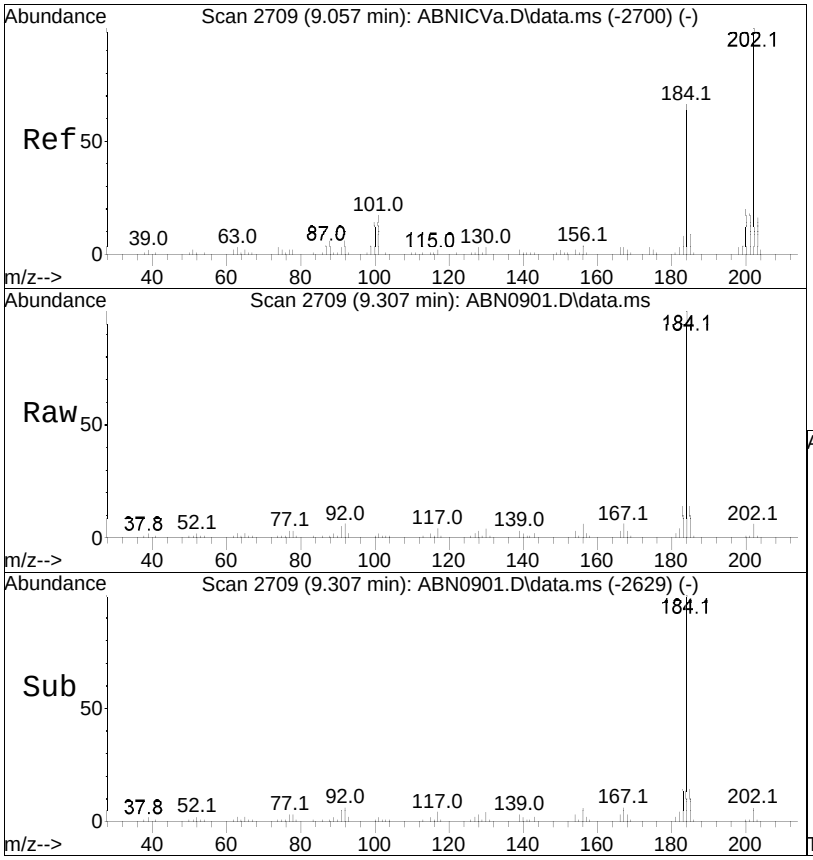


#92
Fluoranthene
Concen: 4.80 ug/ml
RT: 9.120 min Scan# 2649
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:202 Resp: 125687

Ion	Ratio	Lower	Upper
202	100		
101	8.8	13.5	20.3#
203	16.9	13.6	20.4

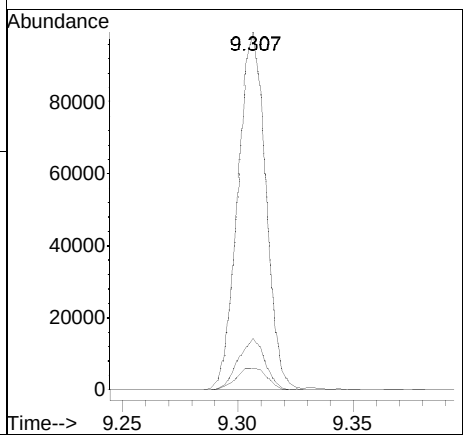


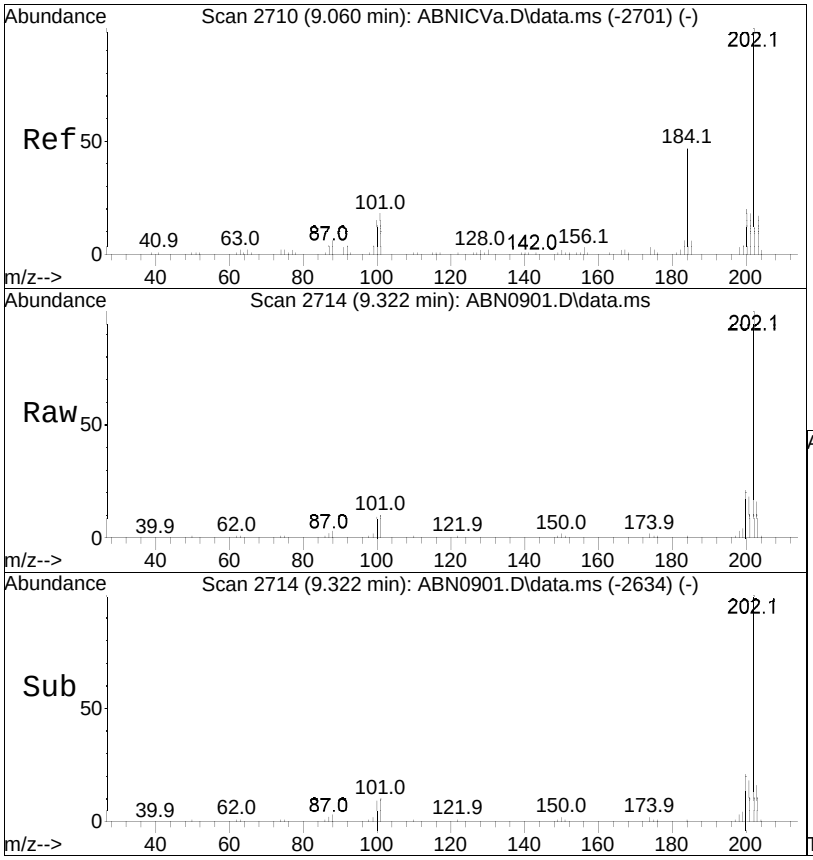


#93
Benzidine
Concen: 4.84 ug/ml
RT: 9.307 min Scan# 2709
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:184 Resp: 83077

Ion	Ratio	Lower	Upper
184	100		
92	6.6	9.1	13.7#
185	13.8	11.1	16.7

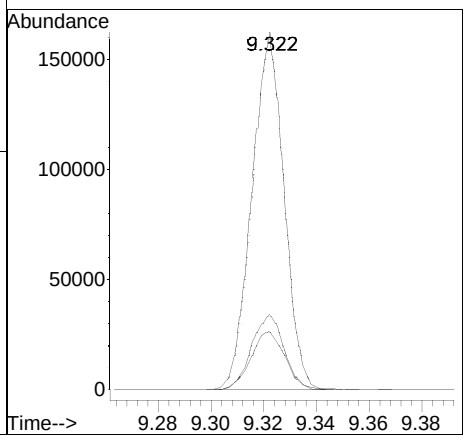


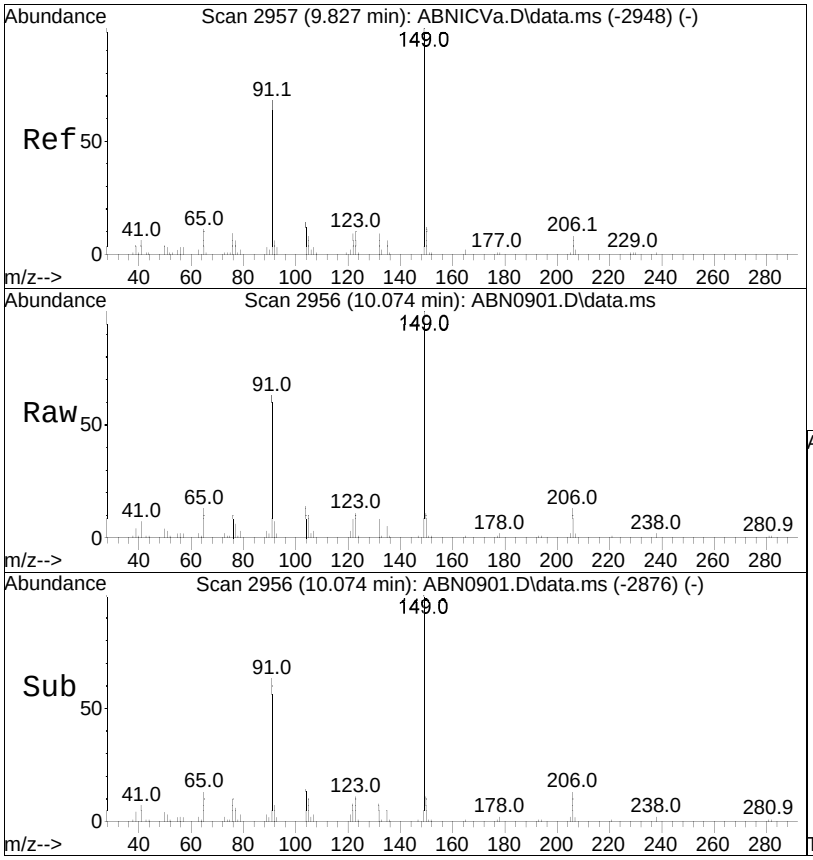


#94
Pyrene
Concen: 4.90 ug/ml
RT: 9.322 min Scan# 2714
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:202 Resp: 135592

Ion	Ratio	Lower	Upper
202	100		
200	21.4	16.7	25.1
203	17.5	14.2	21.4

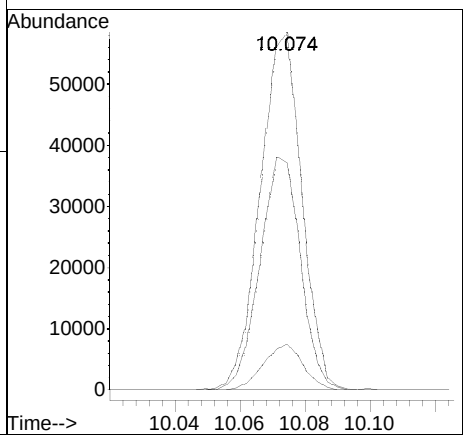


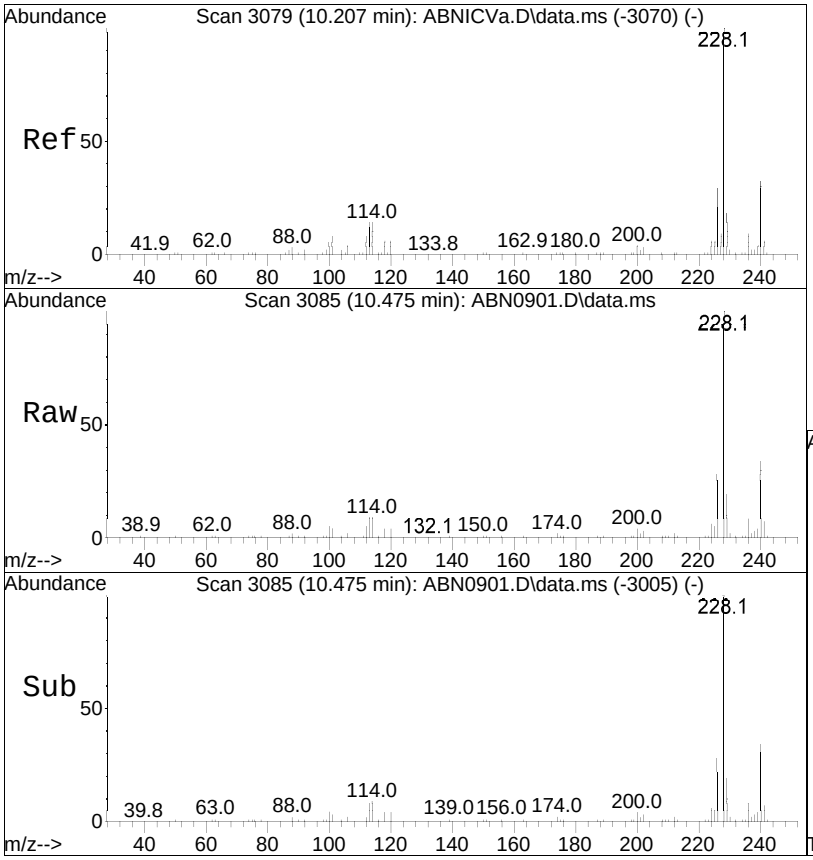


#96
Butyl benzyl phthalate
Concen: 4.71 ug/ml
RT: 10.074 min Scan# 2956
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:149 Resp: 51389

Ion	Ratio	Lower	Upper
149	100		
91	63.6	63.3	94.9
206	12.2	13.9	20.9#

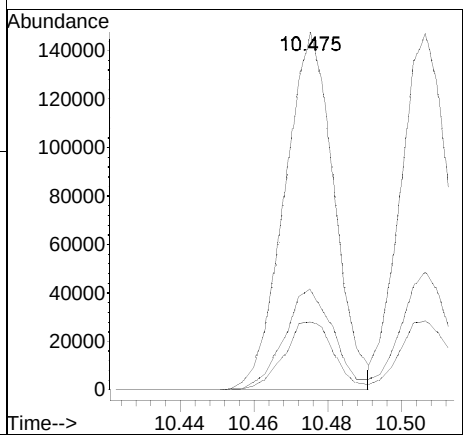


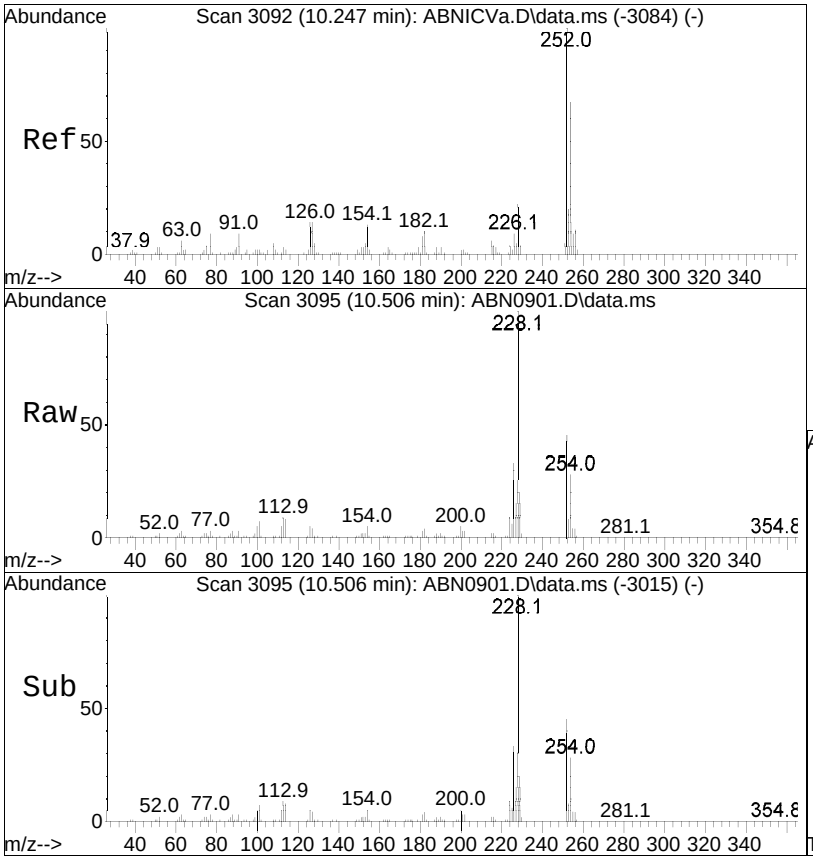


#104
Benzo(a)anthracene
Concen: 4.61 ug/ml M3
RT: 10.475 min Scan# 3085
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:228 Resp: 137479

Ion	Ratio	Lower	Upper
228	100		
226	28.2	22.2	33.4
229	19.1	15.6	23.4

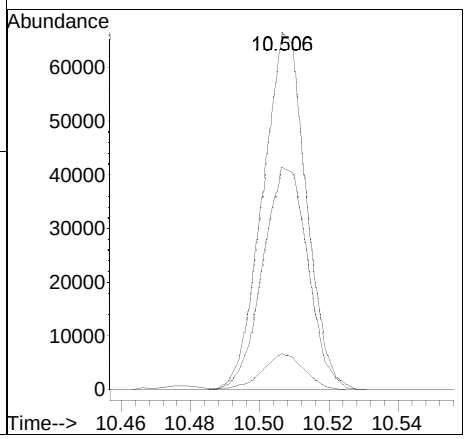


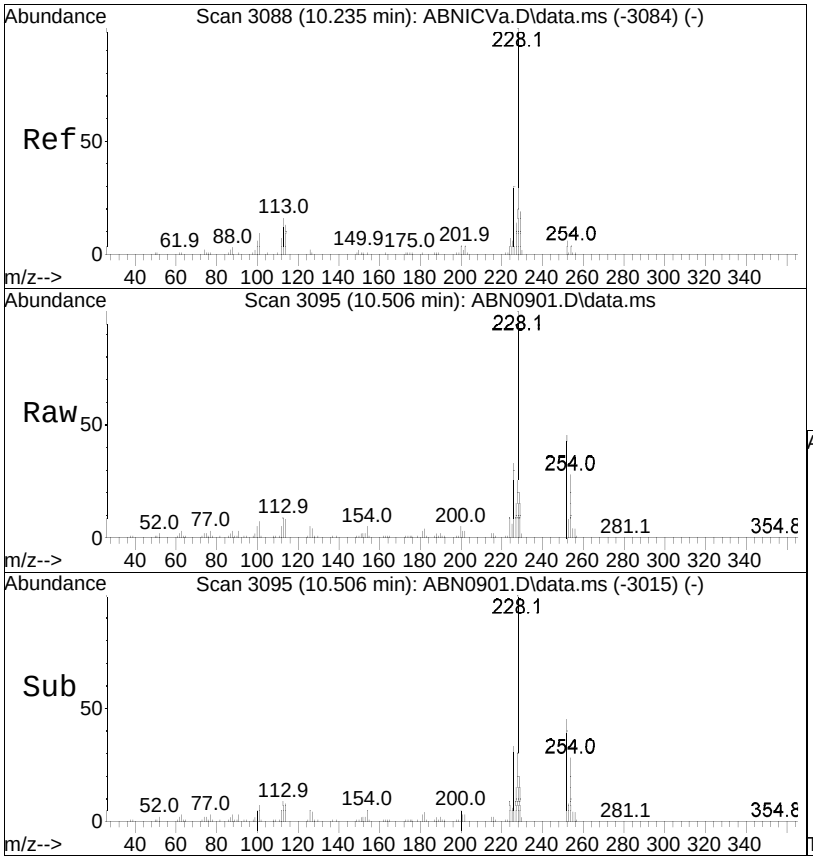


#105
3,3'-Dichlorobenzidine
Concen: 5.05 ug/ml
RT: 10.506 min Scan# 3095
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:252 Resp: 57881

Ion	Ratio	Lower	Upper
252	100		
126	9.9	14.5	21.7#
254	64.9	51.2	76.8

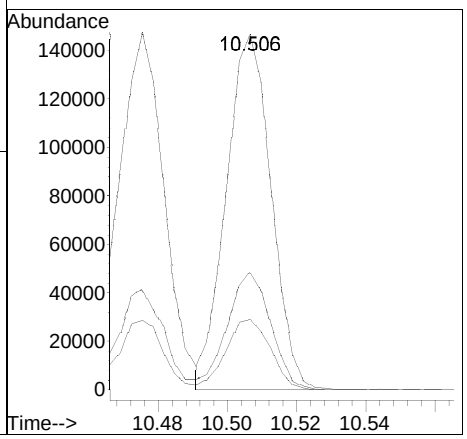


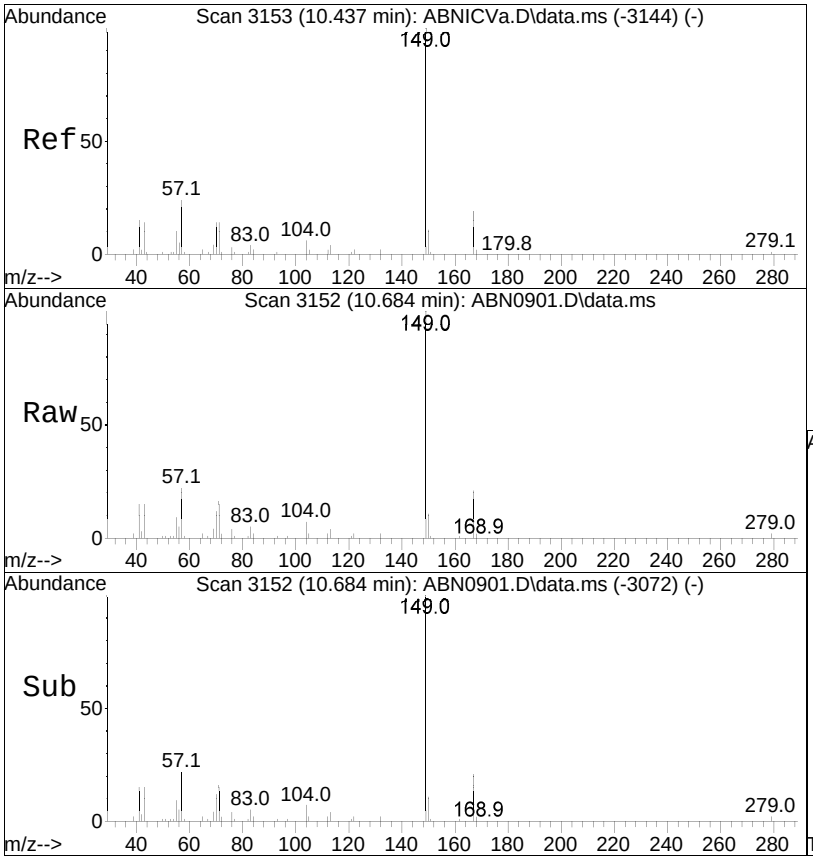


#106
Chrysene
Concen: 4.70 ug/ml
RT: 10.506 min Scan# 3095
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:228 Resp: 132349

Ion	Ratio	Lower	Upper
228	100		
226	31.9	24.0	36.0
229	19.6	15.8	23.8

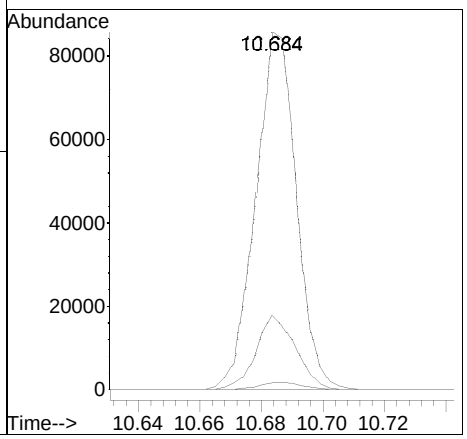


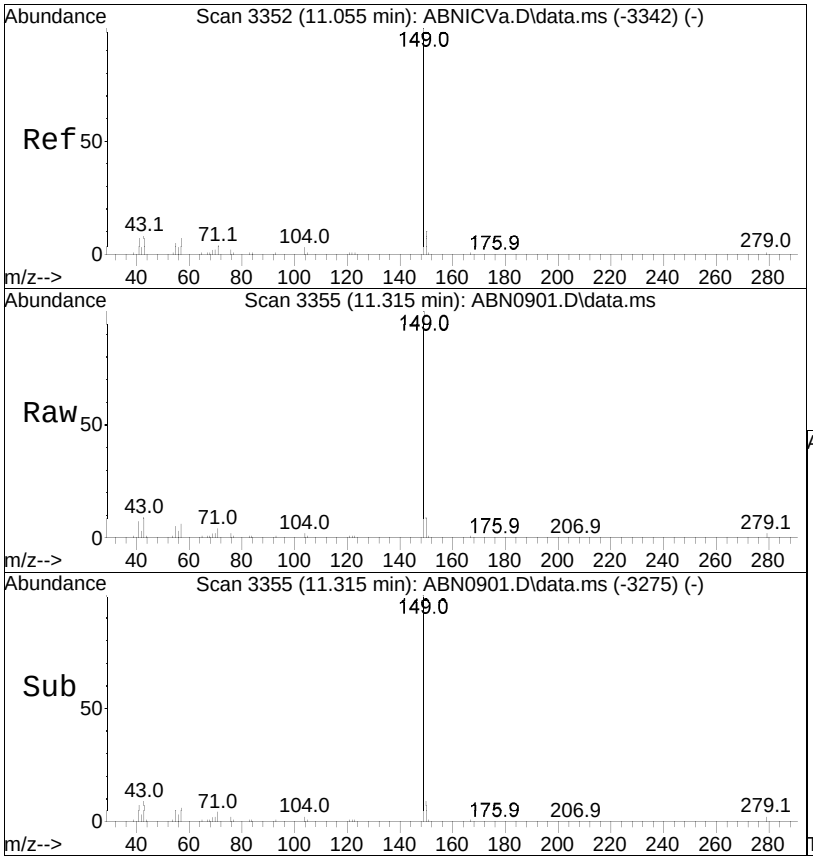


#107
Bis(2-ethylhexyl)phthalate
Concen: 4.68 ug/ml
RT: 10.684 min Scan# 3152
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:149 Resp: 78011

Ion	Ratio	Lower	Upper
149	100		
167	20.2	22.1	33.1#
279	1.9	3.0	4.4#

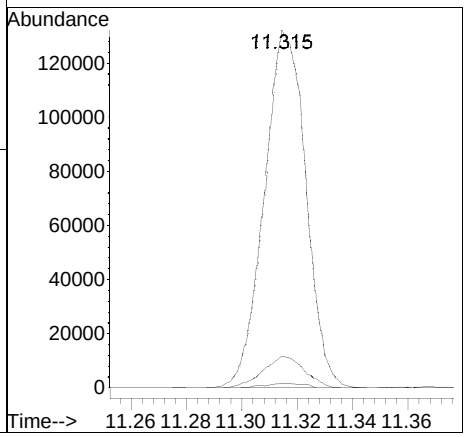


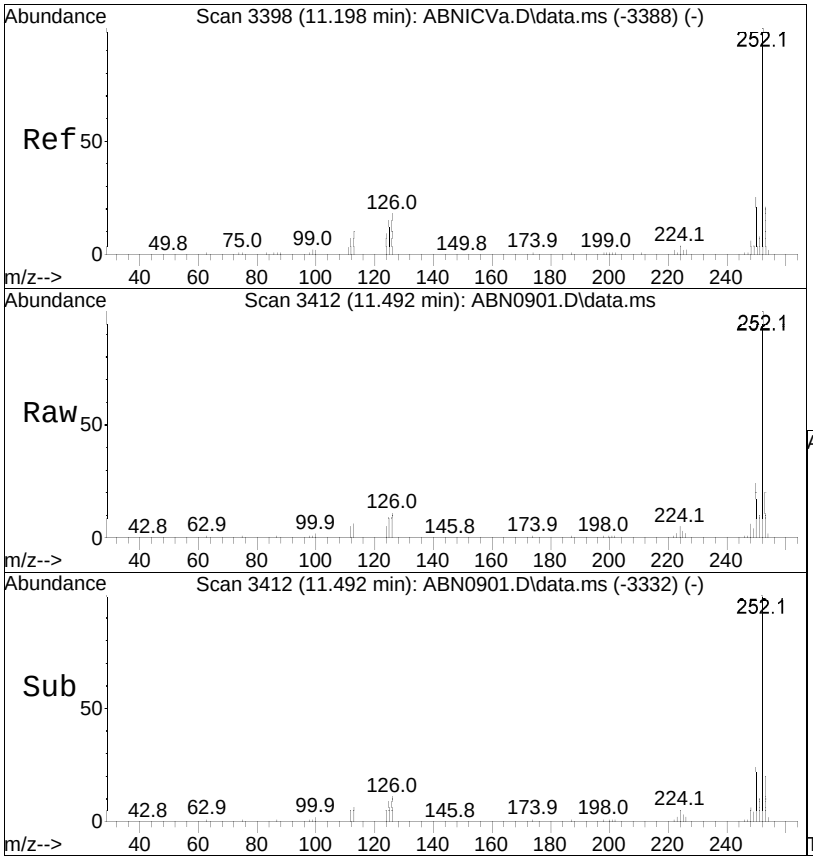


#108
Di-n-octylphthalate
Concen: 4.50 ug/ml
RT: 11.315 min Scan# 3355
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:149 Resp: 136219

Ion	Ratio	Lower	Upper
149	100		
43	8.9	18.8	28.2#
167	1.1	1.3	1.9#

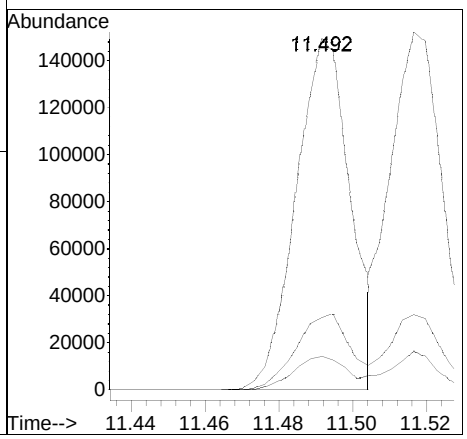


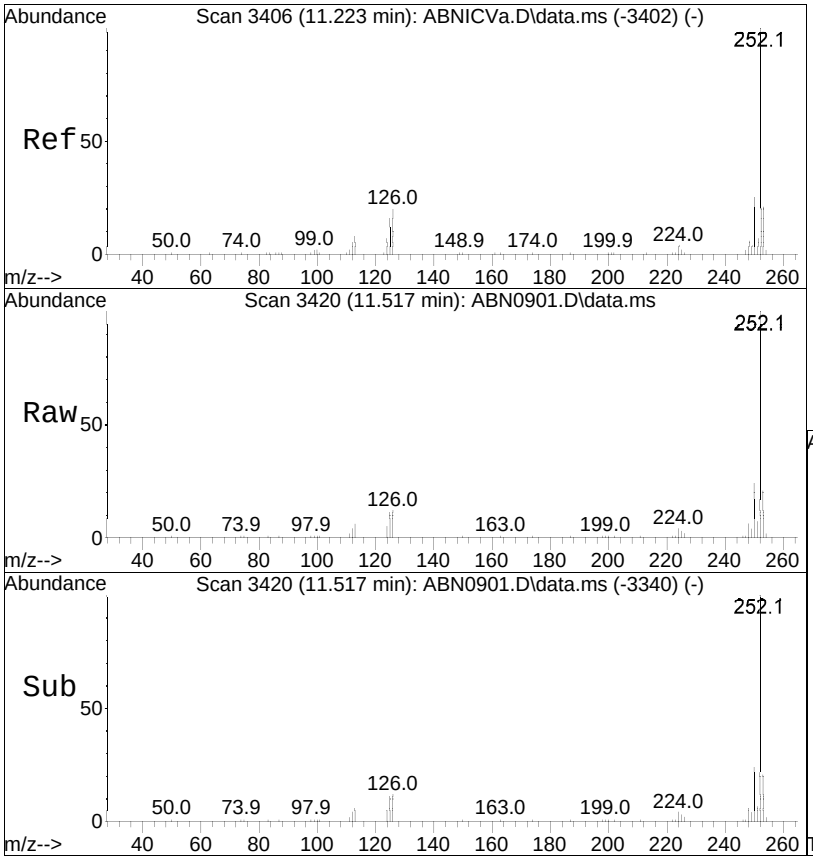


#109
Benzo(b)fluoranthene
Concen: 4.73 ug/ml M3
RT: 11.492 min Scan# 3412
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:252 Resp: 153118

Ion	Ratio	Lower	Upper
252	100		
125	9.1	13.3	19.9#
253	21.7	17.1	25.7

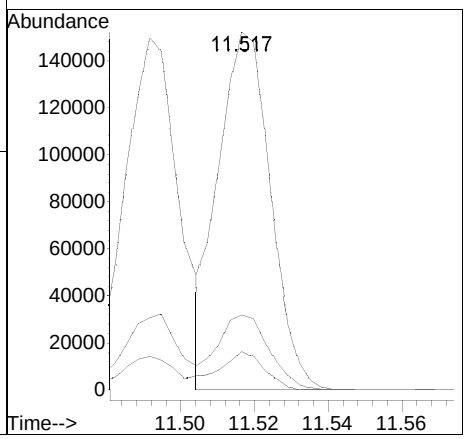


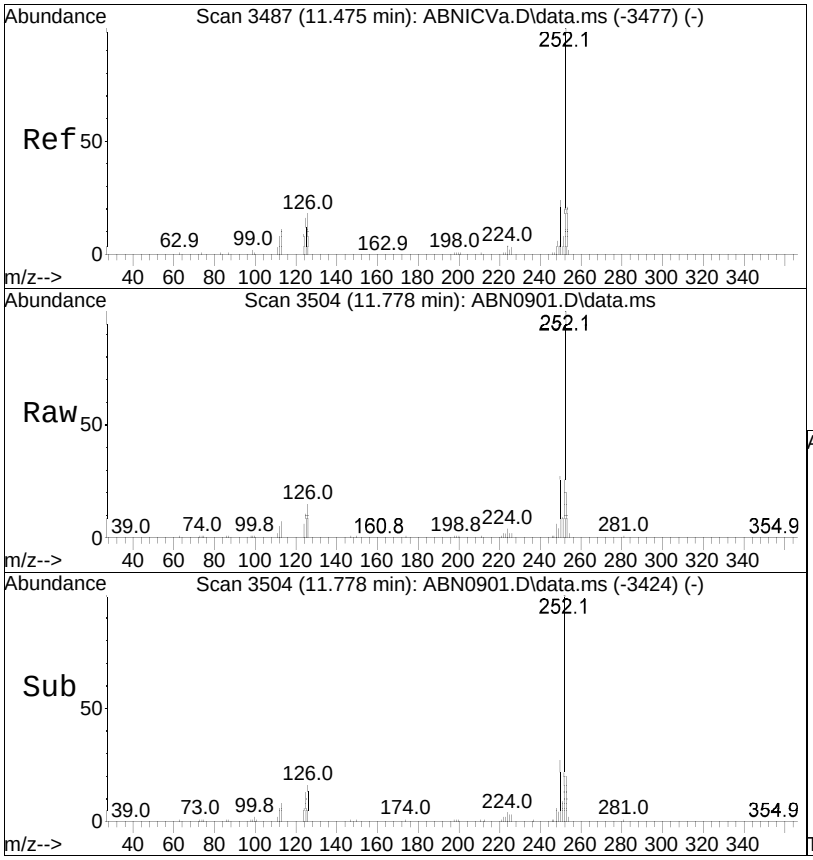


#110
Benzo(k)fluoranthene
Concen: 4.86 ug/ml
RT: 11.517 min Scan# 3420
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:252 Resp: 150214

Ion	Ratio	Lower	Upper
252	100		
125	9.0	13.0	19.6#
253	20.7	16.8	25.2

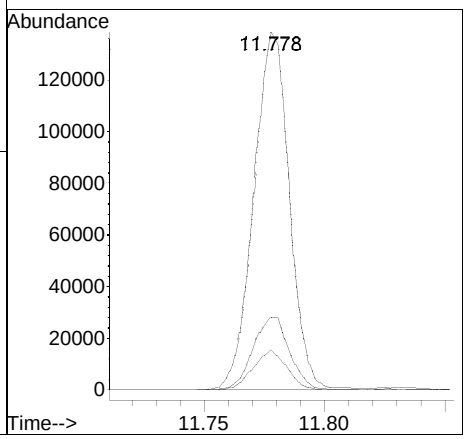


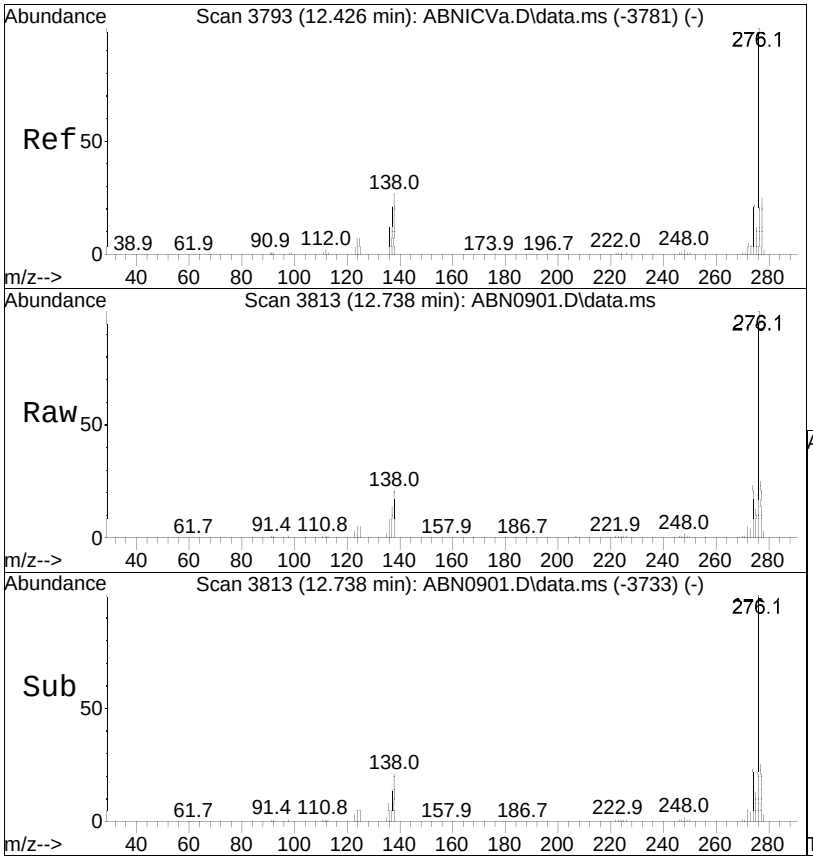


#111
Benzo(a)pyrene
Concen: 5.03 ug/ml
RT: 11.778 min Scan# 3504
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:252 Resp: 141679

Ion	Ratio	Lower	Upper
252	100		
125	10.7	14.2	21.2#
253	21.0	16.9	25.3

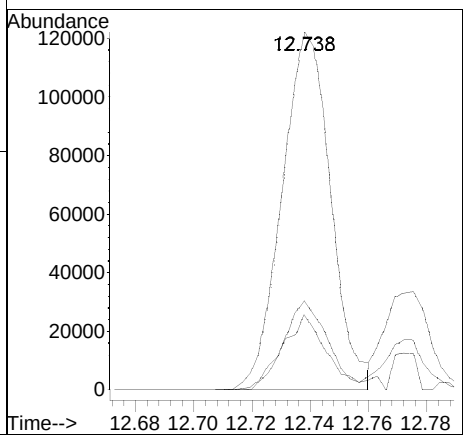


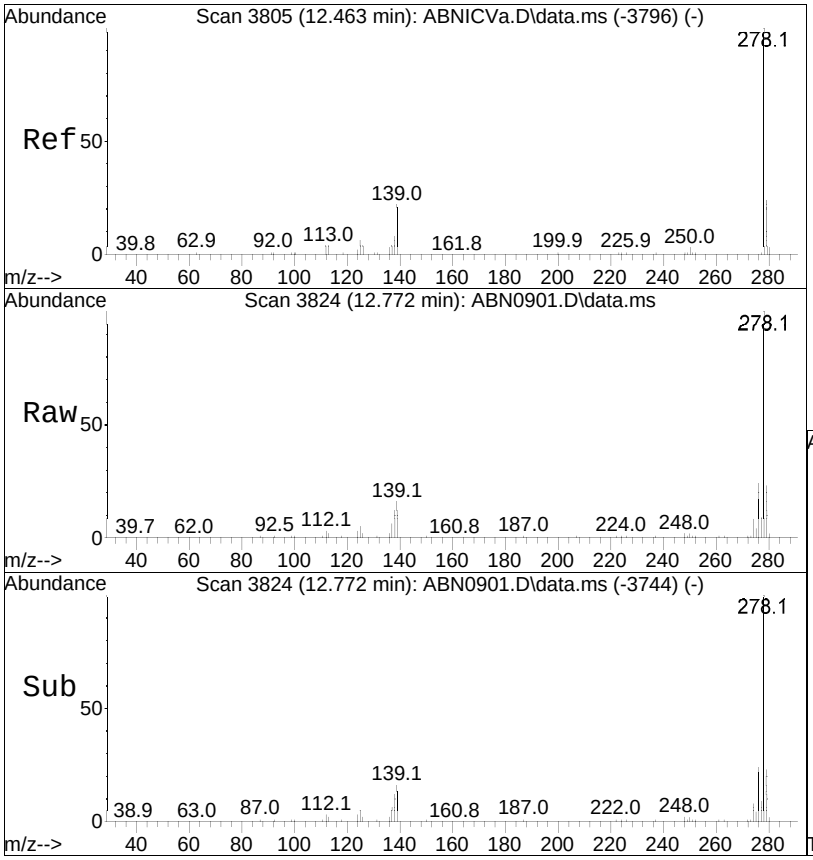


#113
Indeno(1,2,3-cd)pyrene
Concen: 4.46 ug/mL M3
RT: 12.738 min Scan# 3813
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:276 Resp: 141255

Ion	Ratio	Lower	Upper
276	100		
138	18.7	25.1	37.7#
277	23.5	18.6	28.0

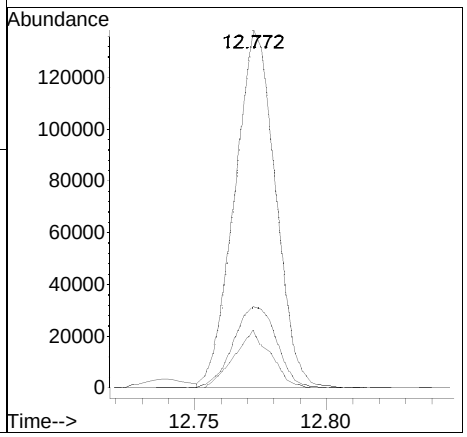


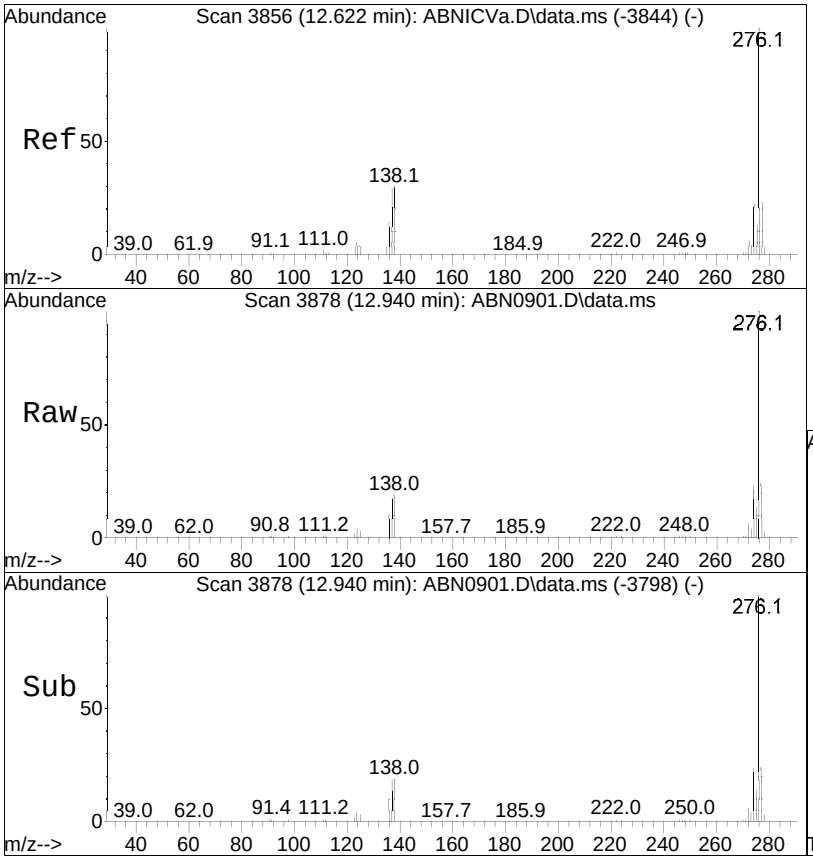


#114
Dibenzo(a,h)anthracene
Concen: 4.46 ug/ml
RT: 12.772 min Scan# 3824
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:278 Resp: 148064

Ion	Ratio	Lower	Upper
278	100		
139	14.7	20.8	31.2#
279	24.3	18.3	27.5

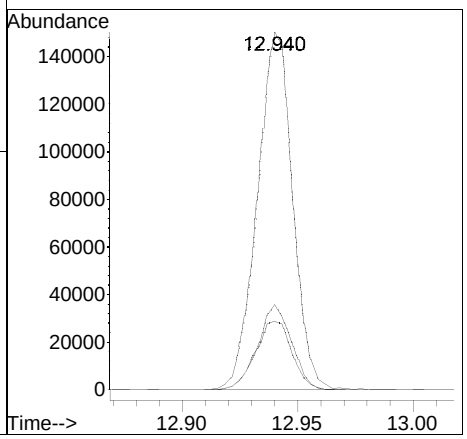




#115
Benzo(ghi)perylene
Concen: 4.73 ug/ml
RT: 12.940 min Scan# 3878
Delta R.T. 0.000 min
Lab File: ABN0901.D
Acq: 1 Sep 2023 6:40 am

Tgt Ion:276 Resp: 158488

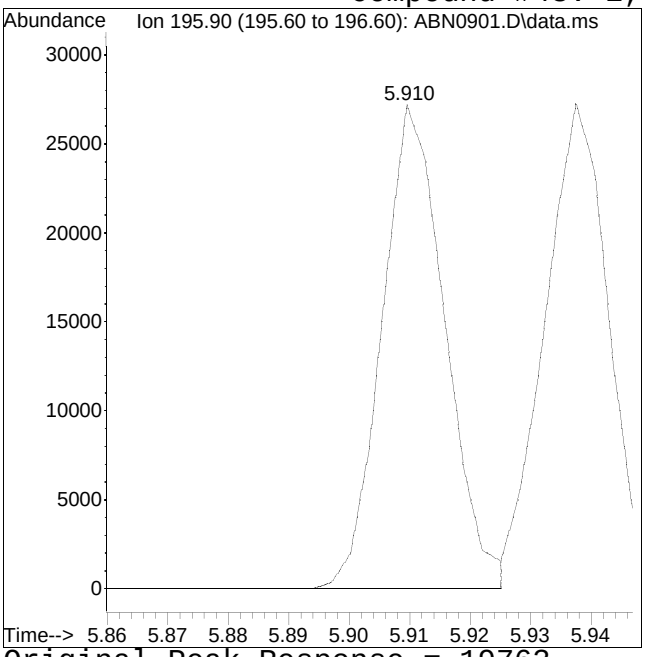
Ion	Ratio	Lower	Upper
276	100		
138	20.1	29.2	43.8#
277	23.0	18.8	28.2

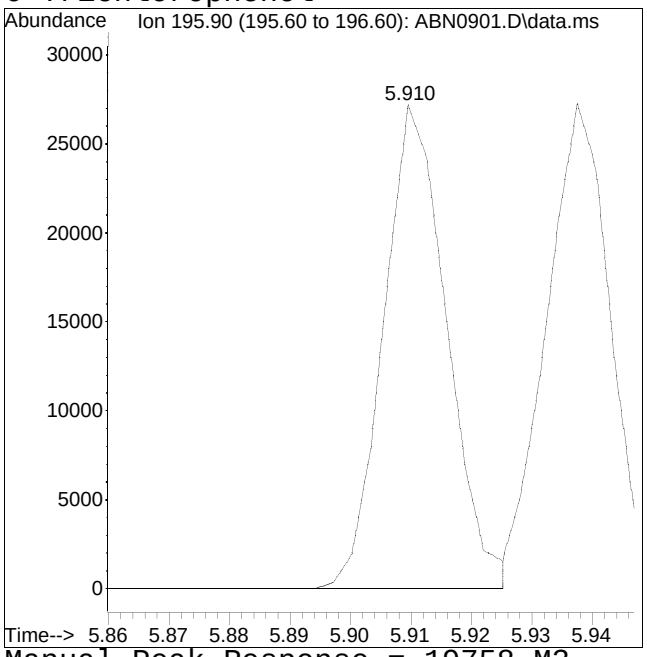


Manual Integration Report

Data Path : I:\8270\Dakota\230901lvi\ QMethod : FS230412LVIDakota.m
Data File : ABN0901.D Operator : Dakota:cmm
Date Inj'd : 9/1/2023 6:40 am Instrument : Dakota
Sample : WG1822785-3,32,,ABN 10210 Quant Date : 9/1/2023 7:59 am

Compound #43: 2,4,6-Trichlorophenol





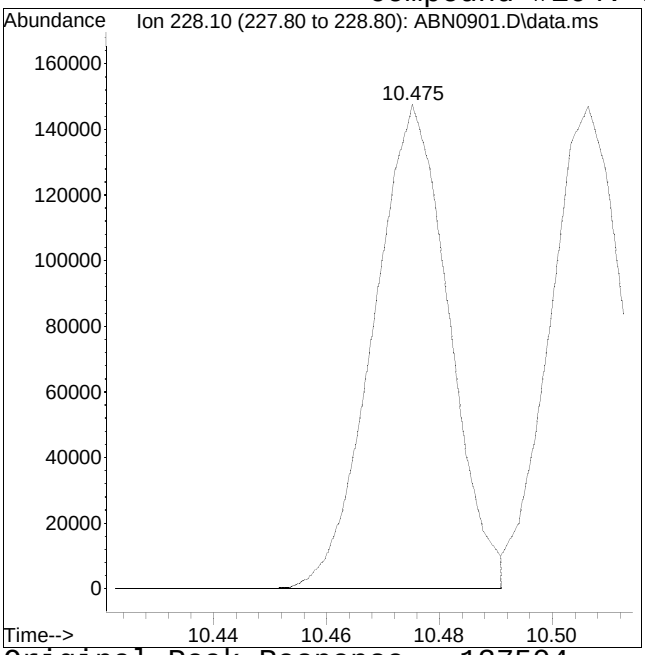
Original Peak Response = 19763 Manual Peak Response = 19758 M3

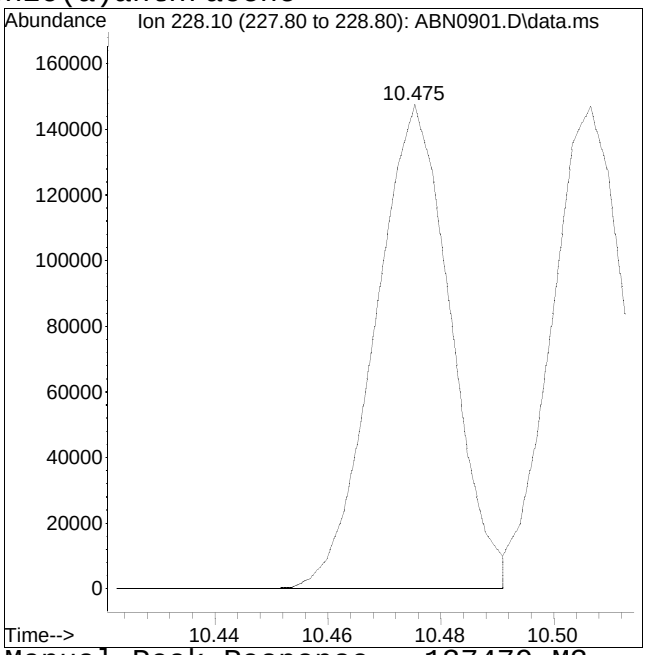
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\Dakota\230901lvi\ QMethod : FS230412LVIDakota.m
Data File : ABN0901.D Operator : Dakota:cmm
Date Inj'd : 9/1/2023 6:40 am Instrument : Dakota
Sample : WG1822785-3,32,,ABN 10210 Quant Date : 9/1/2023 7:59 am

Compound #104: Benzo(a)anthracene





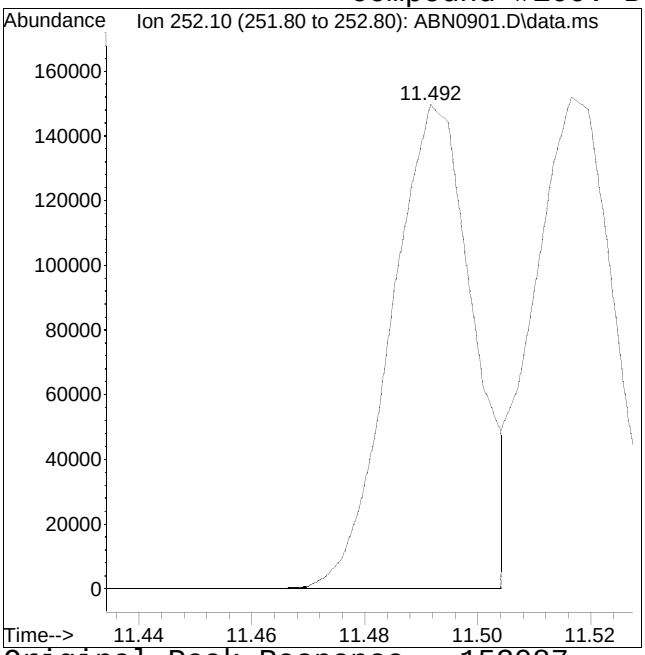
Original Peak Response = 137504 Manual Peak Response = 137479 M3

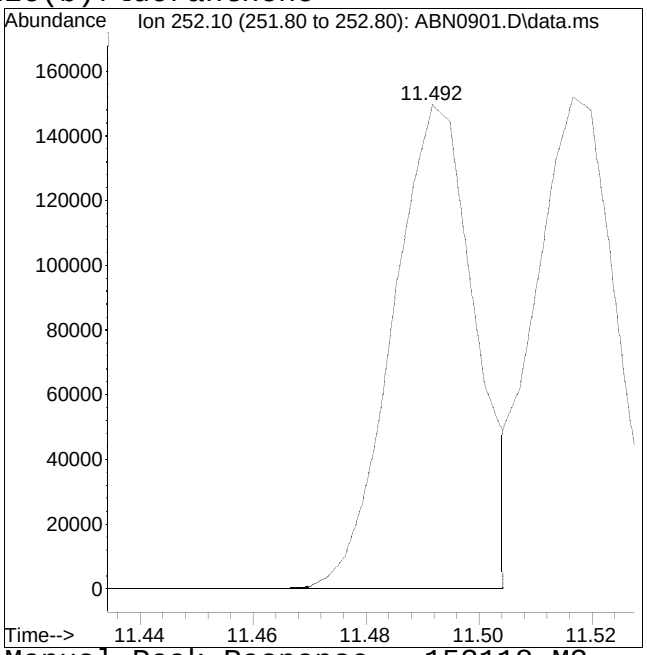
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\Dakota\230901lvi\ QMethod : FS230412LVIDakota.m
Data File : ABN0901.D Operator : Dakota:cmm
Date Inj'd : 9/1/2023 6:40 am Instrument : Dakota
Sample : WG1822785-3,32,,ABN 10210 Quant Date : 9/1/2023 7:59 am

Compound #109: Benzo(b)fluoranthene





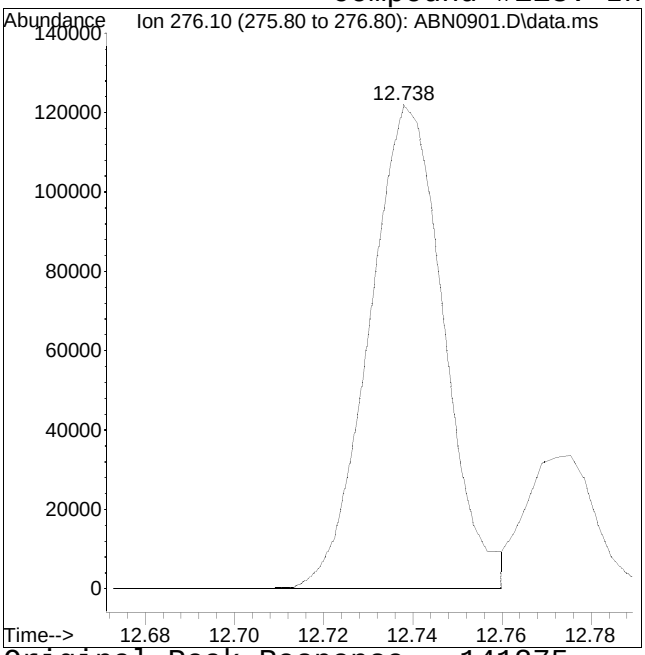
Original Peak Response = 153087 Manual Peak Response = 153118 M3

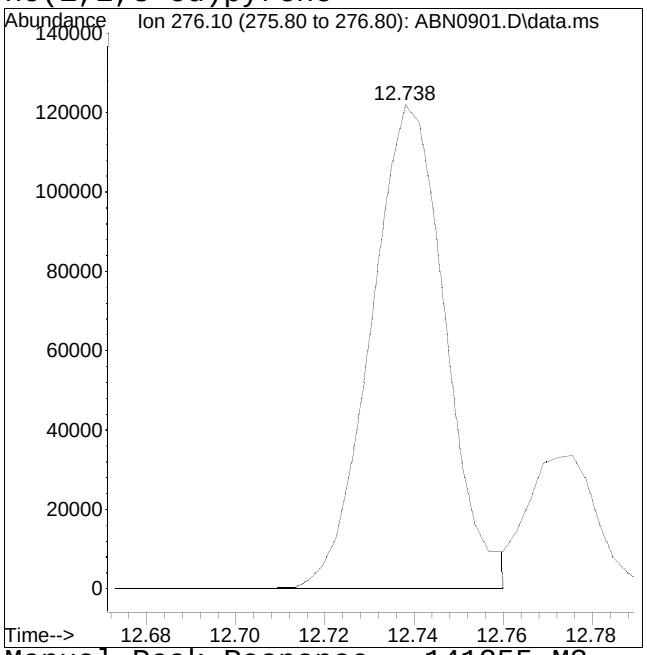
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270\Dakota\230901lvi\ QMethod : FS230412LVIDakota.m
Data File : ABN0901.D Operator : Dakota:cmm
Date Inj'd : 9/1/2023 6:40 am Instrument : Dakota
Sample : WG1822785-3,32,,ABN 10210 Quant Date : 9/1/2023 7:59 am

Compound #113: Indeno(1,2,3-cd)pyrene





Original Peak Response = 141275 Manual Peak Response = 141255 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230901lvi\
Data File : AP90901.D
Acq On : 1 Sep 2023 7:02 am
Operator : Dakota:cmm
Sample : WG1822785-4,32,,AP9 10166 gmr0805B
Misc : WG1822785,,ical19934
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Sep 01 07:59:12 2023
Quant Method : I:\8270\Dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 07:58:12 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
27	I	IS2_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	113	0.00
28	T	Benzaldehyde		1.046	0.655	37.4#	65	0.00
29	T	Acetophenone		1.831	1.409	23.0#	81	0.00
30	T	m-Toluidine	*	5.000	3.317	33.7#	68	0.00
31	T	2-Chloroaniline		1.693	1.291	23.7#	79	0.00
54	I	IS2_Naphthalene-d8		1.000	1.000	0.0	104	0.00
55	T	a-Terpineol		0.277	0.236	14.8	84	0.00
56	T	3-Chloroaniline		0.138	0.125	9.4	82	0.00
57	T	2,6-Dichlorophenol		0.276	0.305	-10.5	108	0.00
58	T	1-chloro-2-nitrobenzene		0.149	0.123	17.4	82	0.00
59	T	Caprolactam		0.149	0.132	11.4	91	0.00
60	T	1,2,4,5-Tetrachlorobenzene		0.402	0.428	-6.5	106	0.00
61	T	Biphenyl		0.901	0.787	12.7	86	0.00
82	I	IS2_Acenaphthene-d10		1.000	1.000	0.0	120	0.00
83	T	Dichloran	*	5.000	4.461	10.8	122	0.00
84	T	Pentachloronitrobenzene		0.203	0.205	-1.0	120	0.00
97	I	IS2_Phenanthrene-d10		1.000	1.000	0.0	135	0.00
98	T	Diphenamid		0.501	0.397	20.8#	103	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230901lvi\
Data File : AP90901.D
Acq On : 1 Sep 2023 7:02 am
Operator : Dakota:cmm
Sample : WG1822785-4,32,,AP9 10166 gmr0805B
Misc : WG1822785,,ical19934
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Sep 01 07:59:12 2023
Quant Method : I:\8270\Dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 07:58:12 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
27) IS2_1,4-Dichlorobenzen...	3.650	152	18596	4.000	ug/ml	0.00
54) IS2_Naphthalene-d8	4.909	136	66803	4.000	ug/ml	0.00
82) IS2_Acenaphthene-d10	6.587	164	43020	4.000	ug/ml	0.00
97) IS2_Phenanthrene-d10	7.979	188	105762	4.000	ug/ml	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
28) Benzaldehyde	3.187	105	15237	3.133	ug/ml	100
29) Acetophenone	4.088	105	32752	3.847	ug/ml#	79
30) m-Toluidine	4.175	106	26188	3.317	ug/ml	91
31) 2-Chloroaniline	4.533	127	30005	3.811	ug/ml	94
55) a-Terpineol	4.999	59	19721	4.269	ug/ml#	82
56) 3-Chloroaniline	5.008	65	10455	4.547	ug/ml	87
57) 2,6-Dichlorophenol	5.027	162	25504	5.533	ug/ml#	85
58) 1-chloro-2-nitrobenzene	5.278	111	10269	4.135	ug/ml#	1
59) Caprolactam	5.322	55	11047	4.450	ug/ml#	83
60) 1,2,4,5-Tetrachloroben...	5.779	216	35711	5.319	ug/ml#	93
61) Biphenyl	6.071	154	65746	4.369	ug/ml	95
83) Dichloran	7.709	206	9913	4.461	ug/ml#	60
84) Pentachloronitrobenzene	7.843	237	10998	5.031	ug/ml#	77
98) Diphenamid	8.912	167	52528	3.962	ug/ml#	77

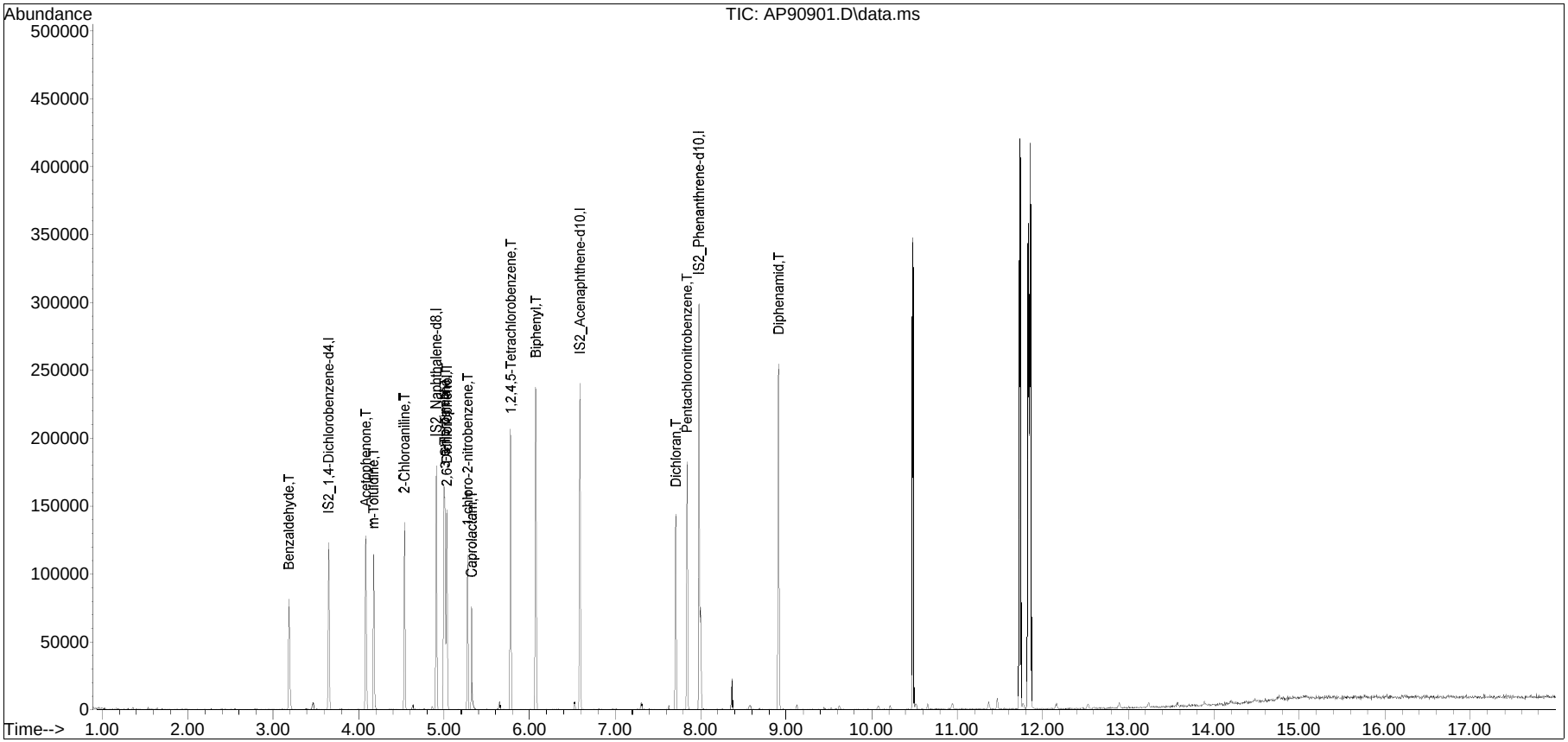
(#) = qualifier out of range (m) = manual integration (+) = signals summed

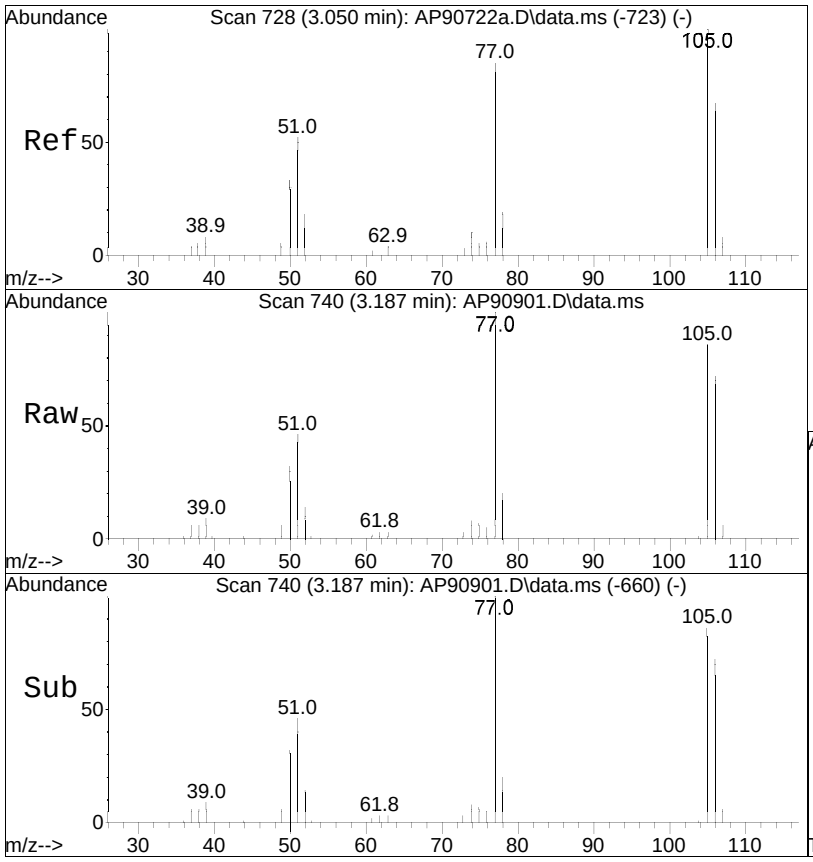
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230901lvi\
Data File : AP90901.D
Acq On : 1 Sep 2023 7:02 am
Operator : Dakota:cmm
Sample : WG1822785-4,32,,AP9 10166 gmr0805B
Misc : WG1822785,,ical19934
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Sep 01 07:59:12 2023
Quant Method : I:\8270\Dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 07:58:12 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublist

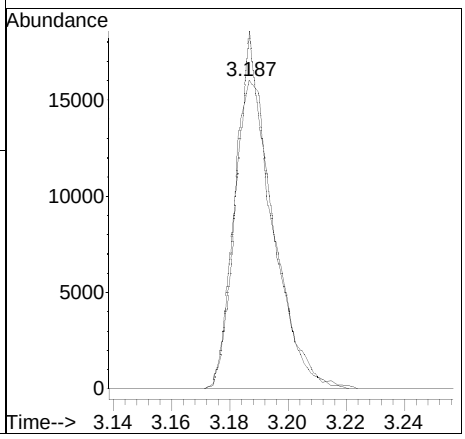


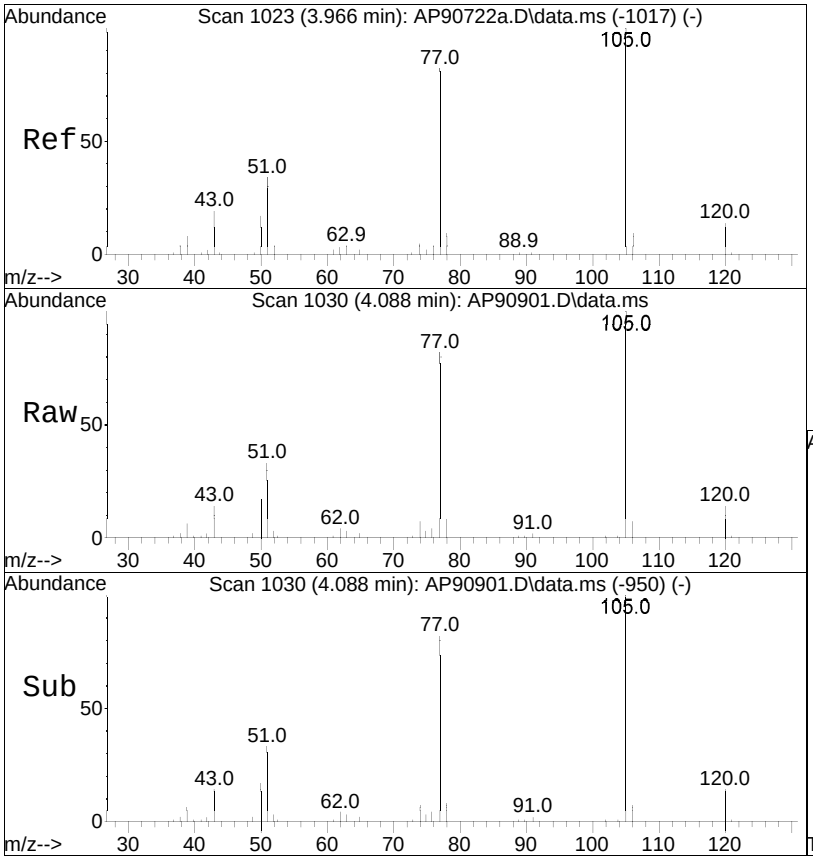


#28
Benzaldehyde
Concen: 3.13 ug/ml
RT: 3.187 min Scan# 740
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion:105 Resp: 15237

Ion	Ratio	Lower	Upper
105	100		
77	102.8	82.2	123.4

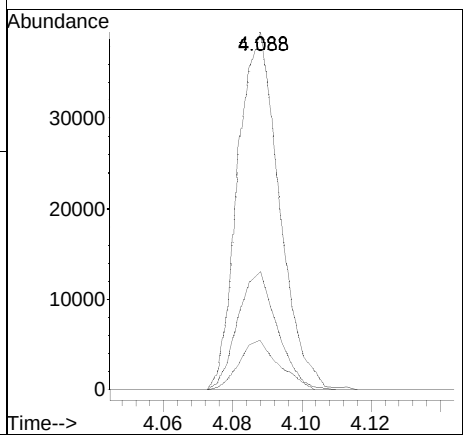


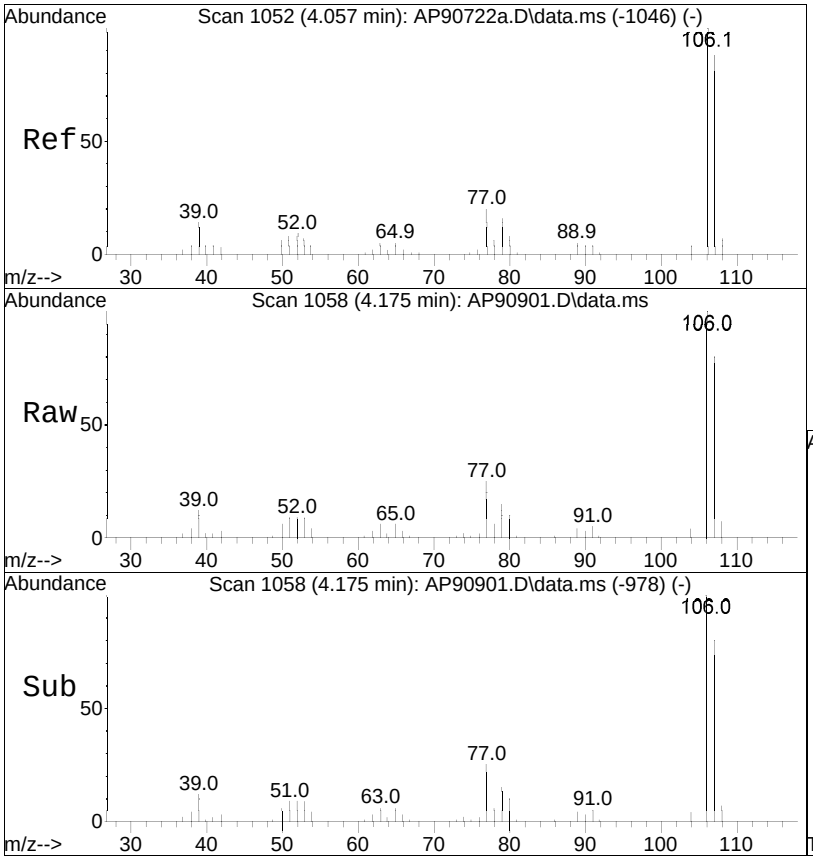


#29
Acetophenone
Concen: 3.85 ug/ml
RT: 4.088 min Scan# 1030
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion:105 Resp: 32752

Ion	Ratio	Lower	Upper
105	100		
120	13.2	20.5	30.7#
51	31.5	34.9	52.3#

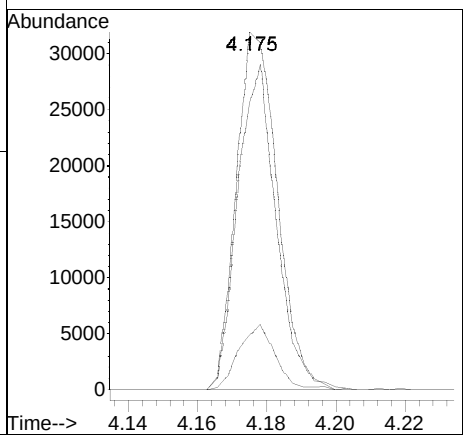


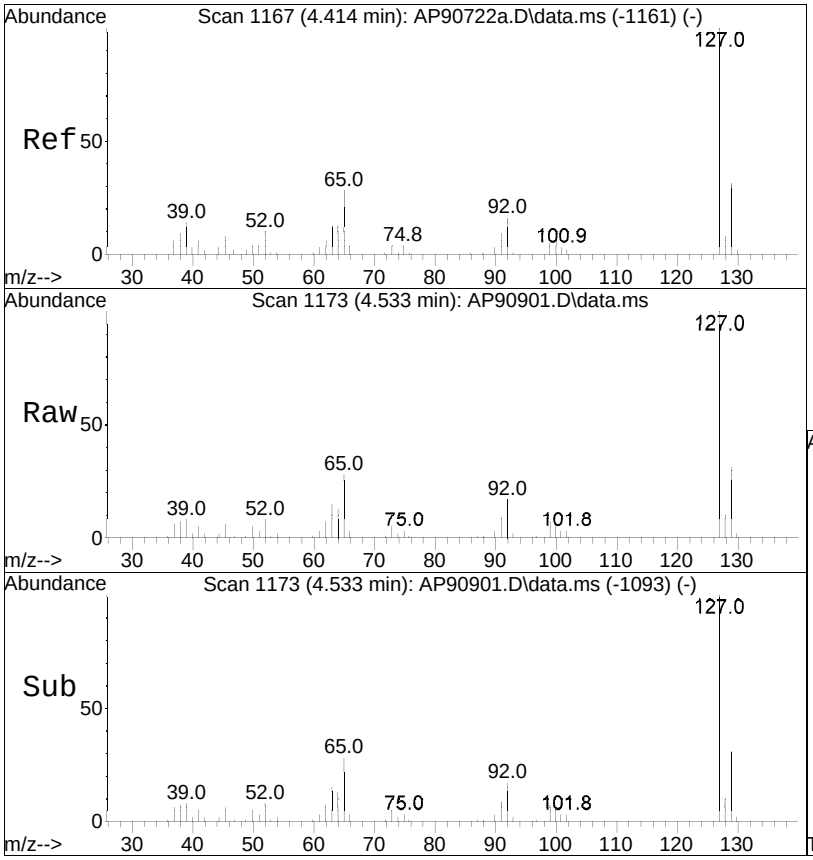


#30
m-Toluidine
Concen: 3.32 ug/ml
RT: 4.175 min Scan# 1058
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion:106 Resp: 26188

Ion	Ratio	Lower	Upper
106	100		
107	84.9	75.7	113.5
79	16.3	11.8	17.8

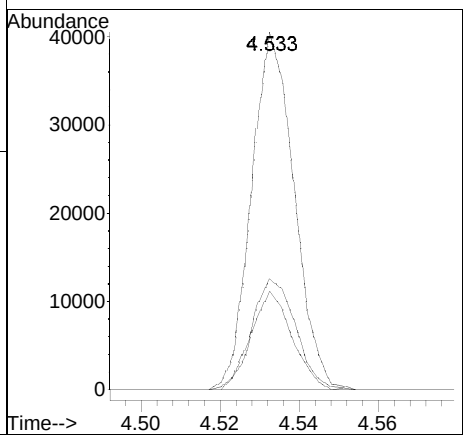


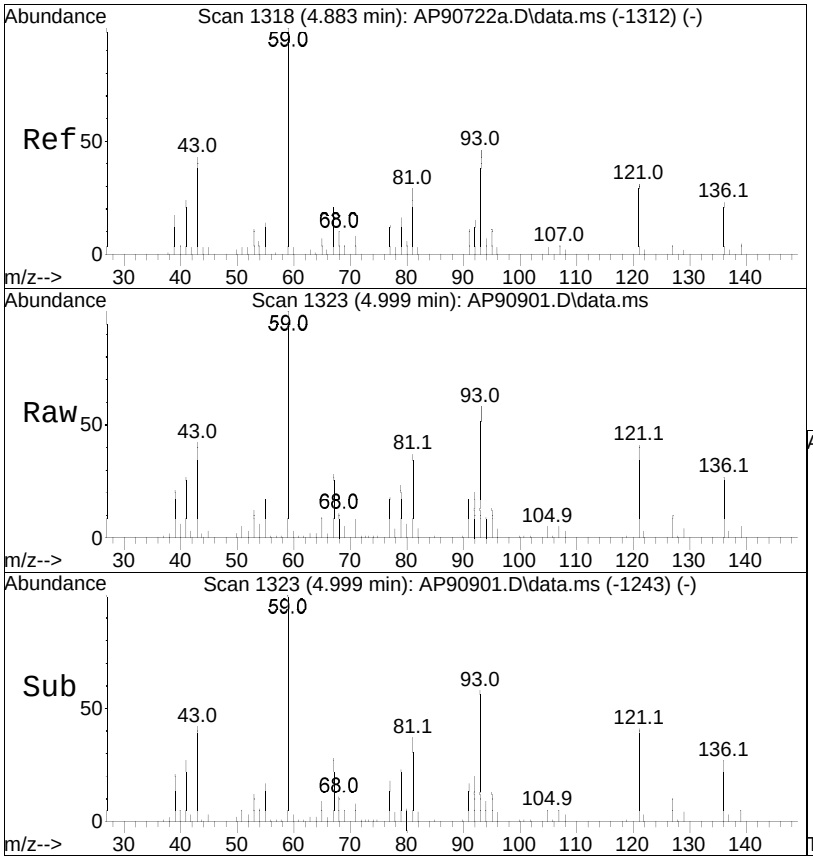


#31
2-Chloroaniline
Concen: 3.81 ug/ml
RT: 4.533 min Scan# 1173
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion:127 Resp: 30005

Ion	Ratio	Lower	Upper
127	100		
129	31.8	25.9	38.9
65	27.2	26.3	39.5

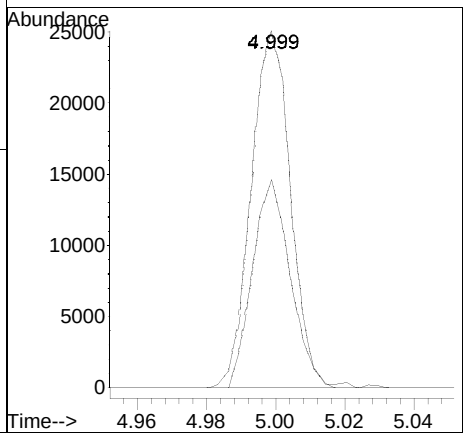


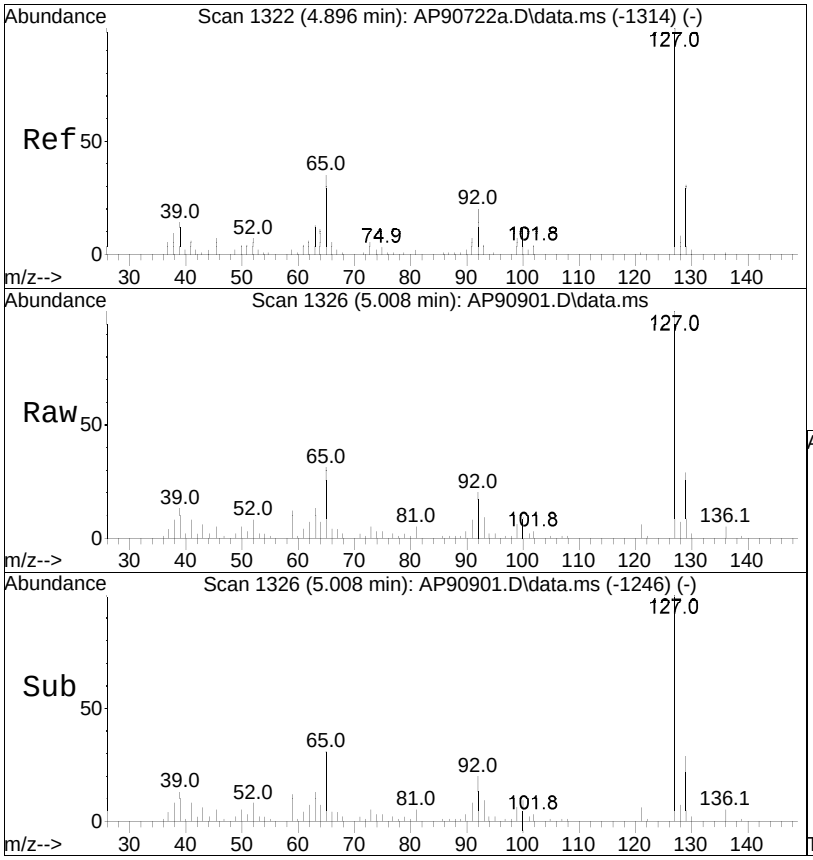


#55
a-Terpineol
Concen: 4.27 ug/ml
RT: 4.999 min Scan# 1323
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion: 59 Resp: 19721

Ion	Ratio	Lower	Upper
59	100		
93	56.1	35.6	53.4#

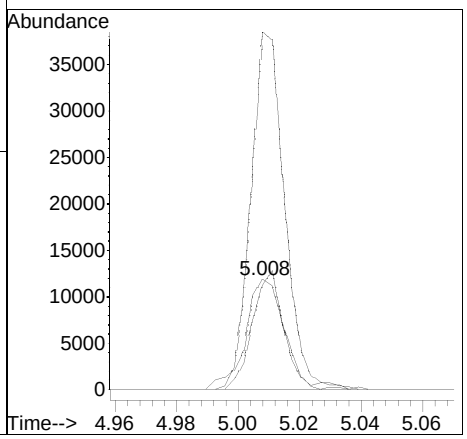


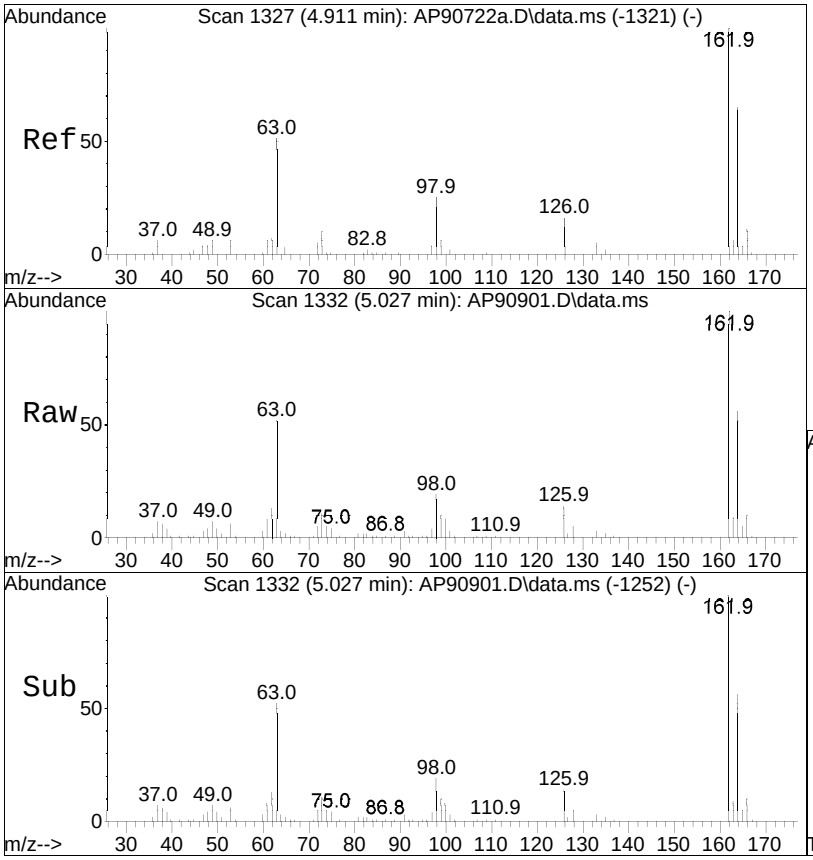


#56
3-Chloroaniline
Concen: 4.55 ug/ml
RT: 5.008 min Scan# 1326
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion: 65 Resp: 10455

Ion	Ratio	Lower	Upper
65	100		
127	276.5	243.2	364.8
129	87.2	78.8	118.2

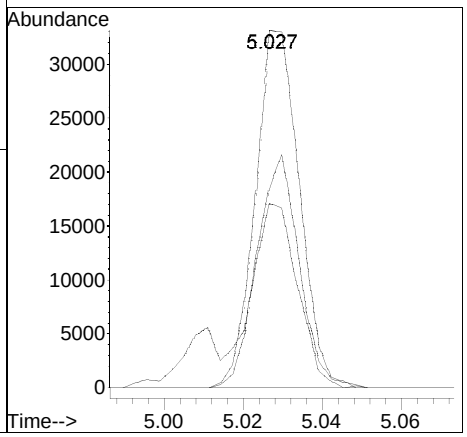


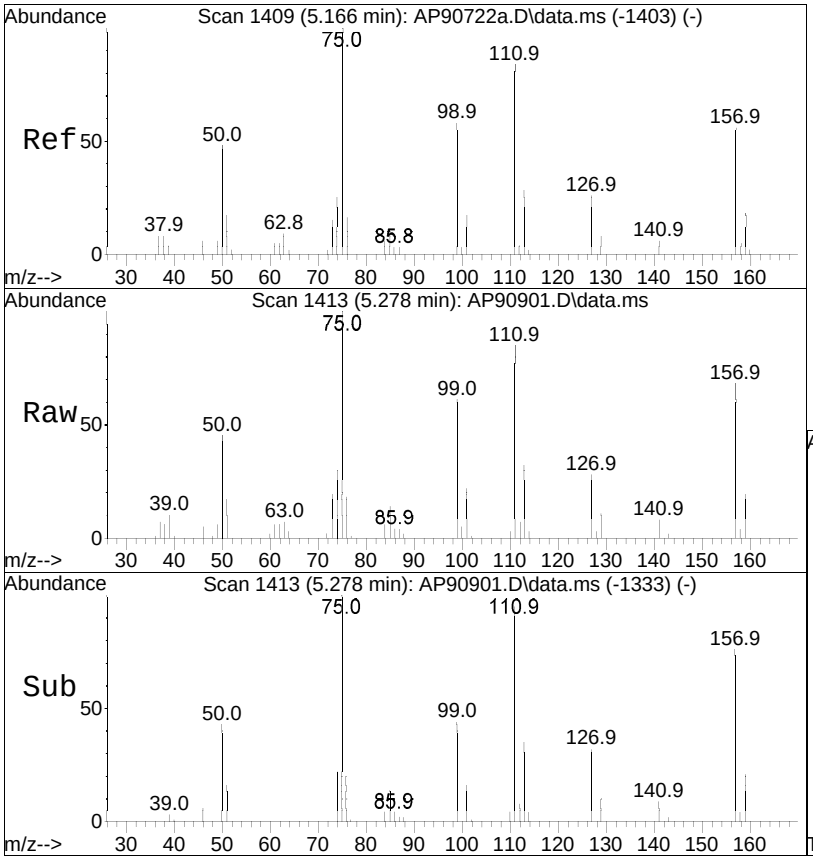


#57
2,6-Dichlorophenol
Concen: 5.53 ug/ml
RT: 5.027 min Scan# 1332
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion:162 Resp: 25504

Ion	Ratio	Lower	Upper
162	100		
164	62.6	51.1	76.7
63	54.1	60.8	91.2#

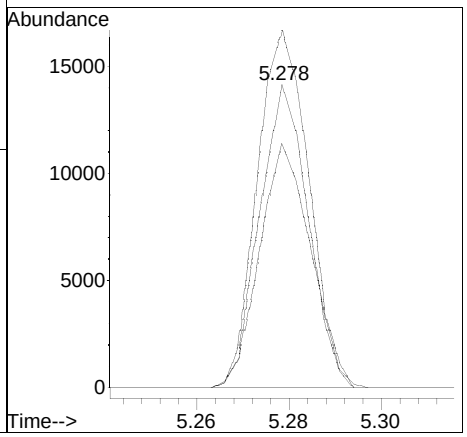


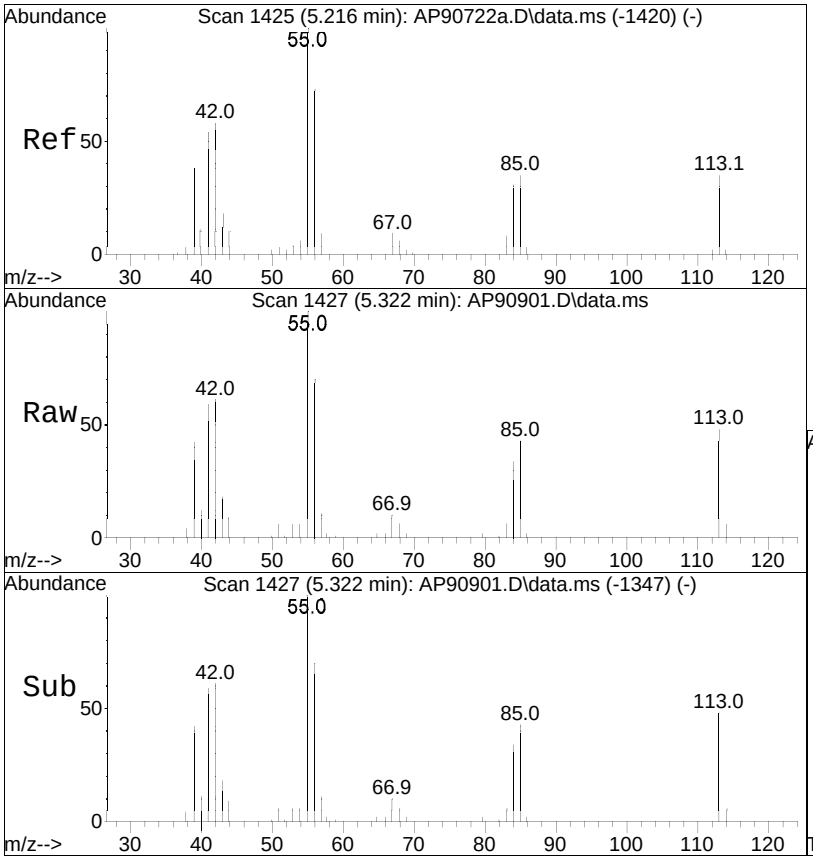


#58
1-chloro-2-nitrobenzene
Concen: 4.14 ug/ml
RT: 5.278 min Scan# 1413
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion:111 Resp: 10269

Ion	Ratio	Lower	Upper
111	100		
157	84.9	0.0	0.0#
75	125.7	28.2	42.2#

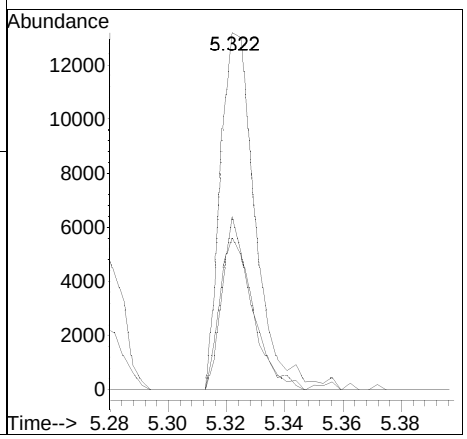


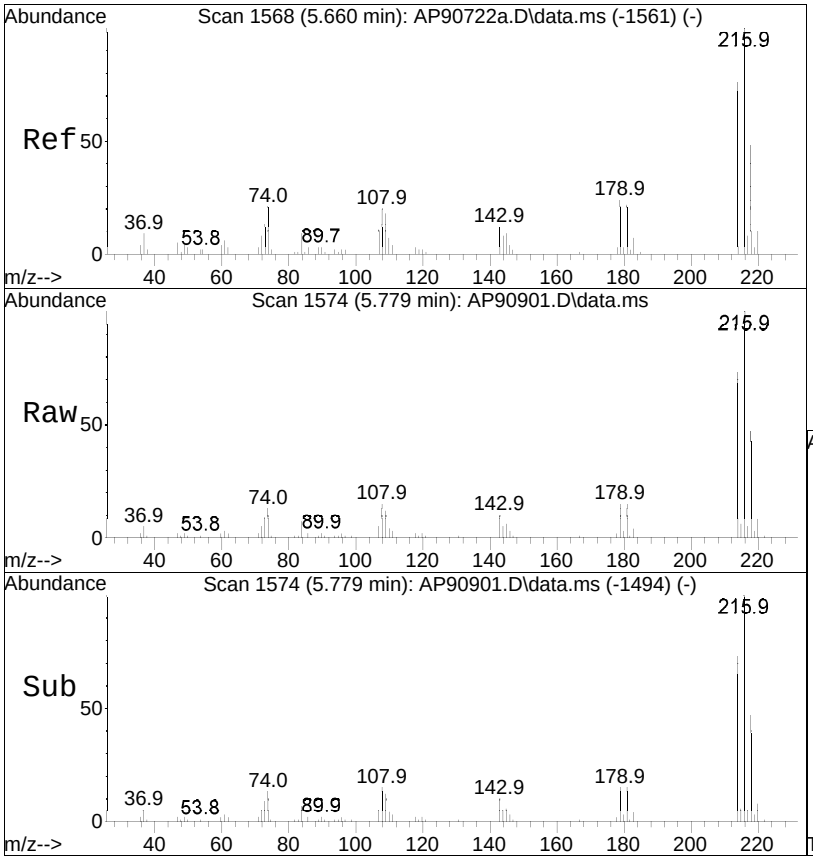


#59
Caprolactam
Concen: 4.45 ug/ml
RT: 5.322 min Scan# 1427
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion: 55 Resp: 11047

Ion	Ratio	Lower	Upper
55	100		
85	41.3	19.8	29.6#
113	40.7	29.6	44.4

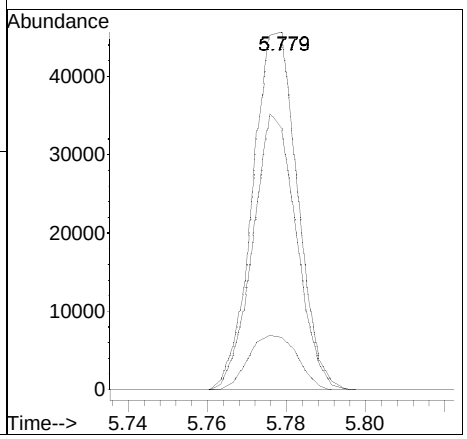


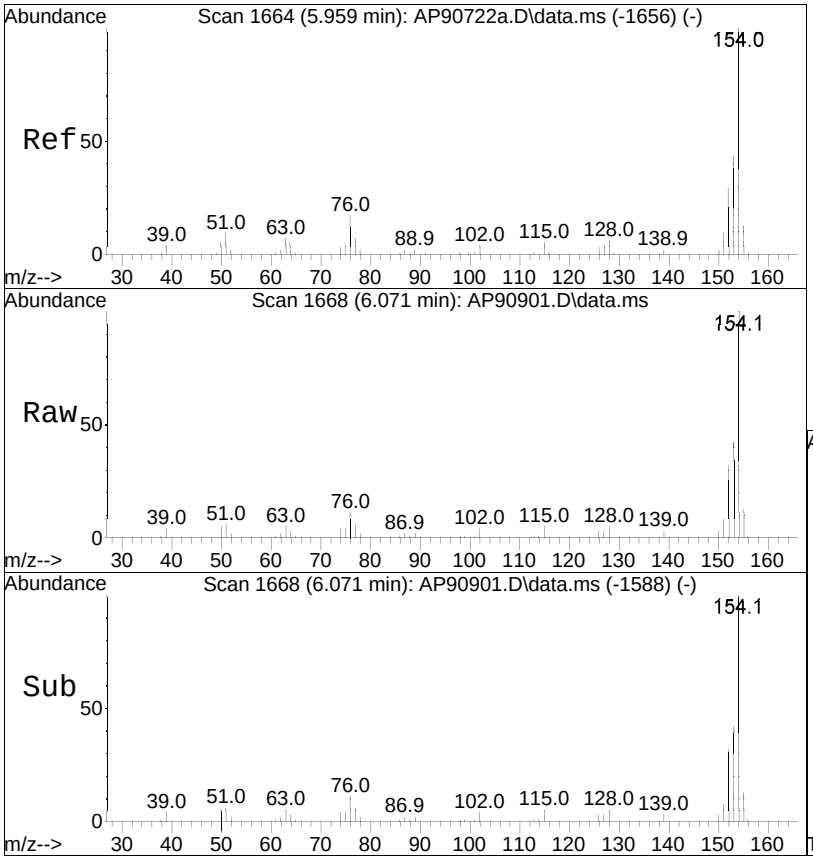


#60
1,2,4,5-Tetrachlorobenzene
Concen: 5.32 ug/ml
RT: 5.779 min Scan# 1574
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion:216 Resp: 35711

Ion	Ratio	Lower	Upper
216	100		
214	74.9	63.7	95.5
179	16.6	19.0	28.6#

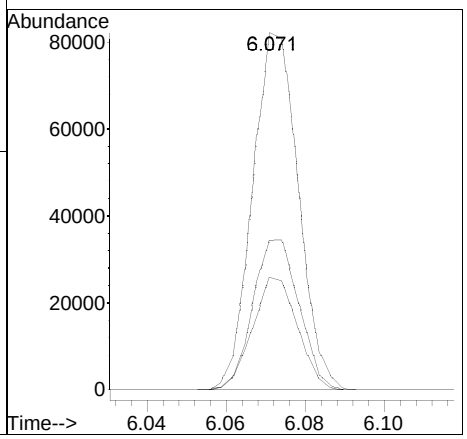


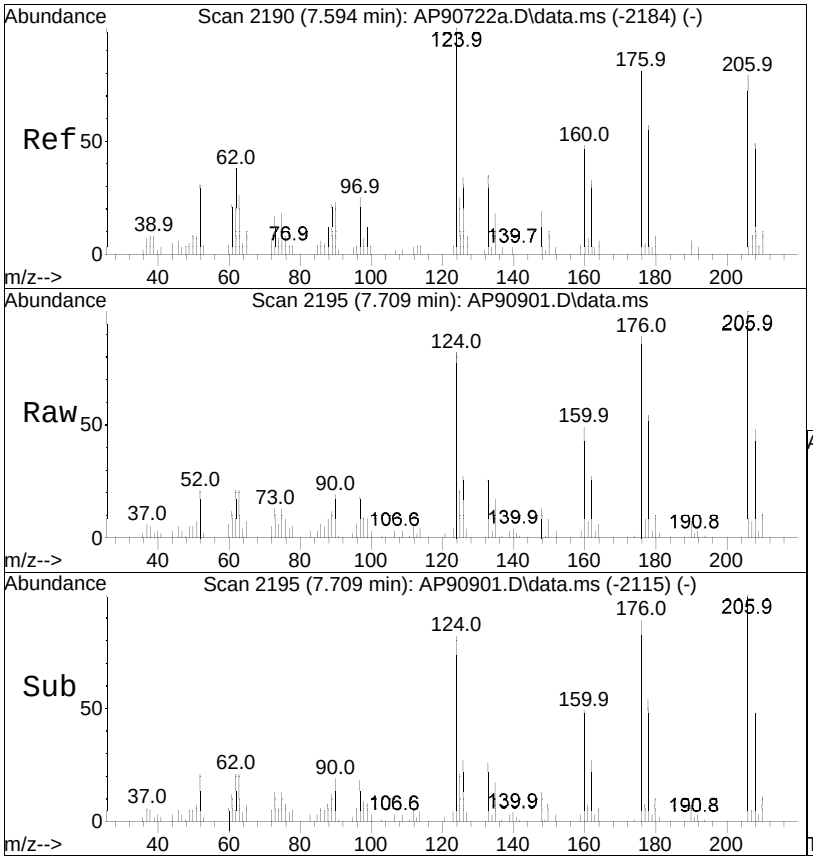


#61
Biphenyl
Concen: 4.37 ug/ml
RT: 6.071 min Scan# 1668
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion:154 Resp: 65746

Ion	Ratio	Lower	Upper
154	100		
153	42.6	32.3	48.5
152	31.1	22.5	33.7

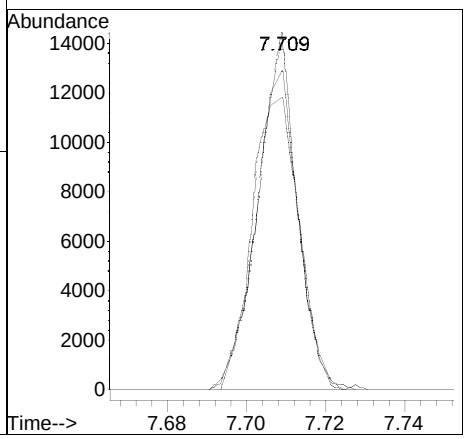


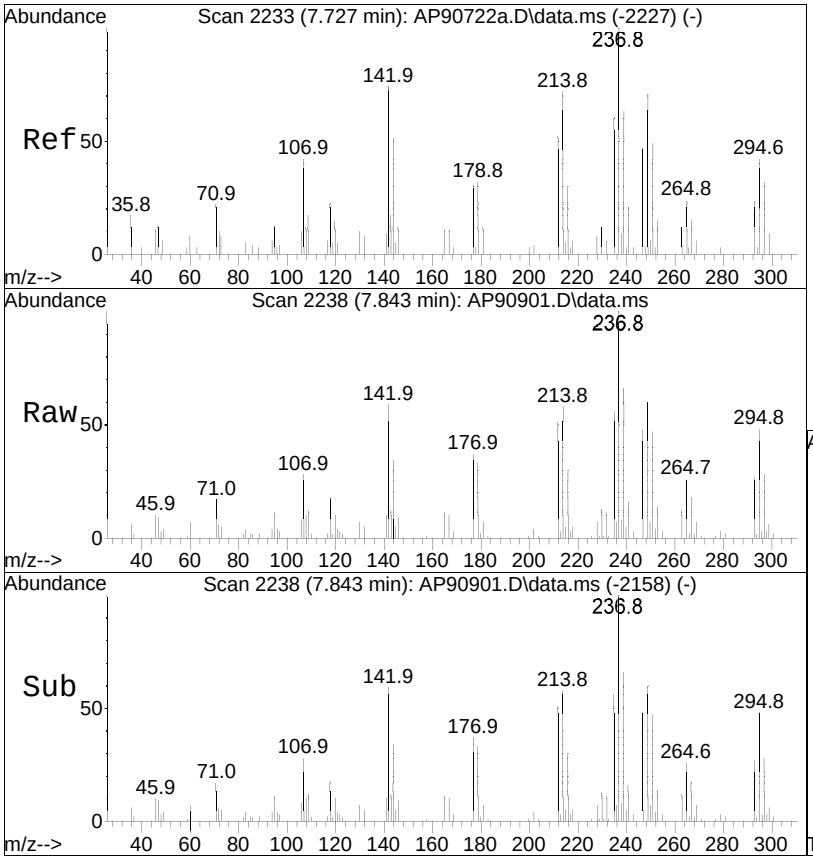


#83
Dichloran
Concen: 4.46 ug/ml
RT: 7.709 min Scan# 2195
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion:206 Resp: 9913

Ion	Ratio	Lower	Upper
206	100		
176	97.8	104.6	157.0#
124	96.8	130.5	195.7#

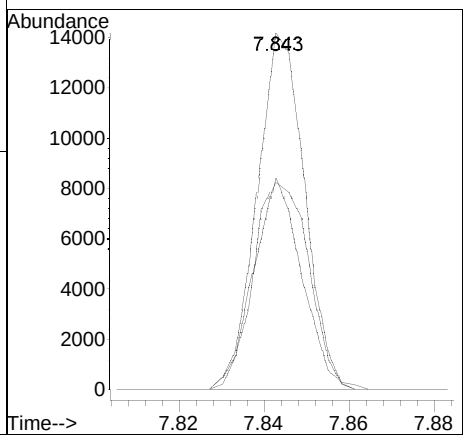


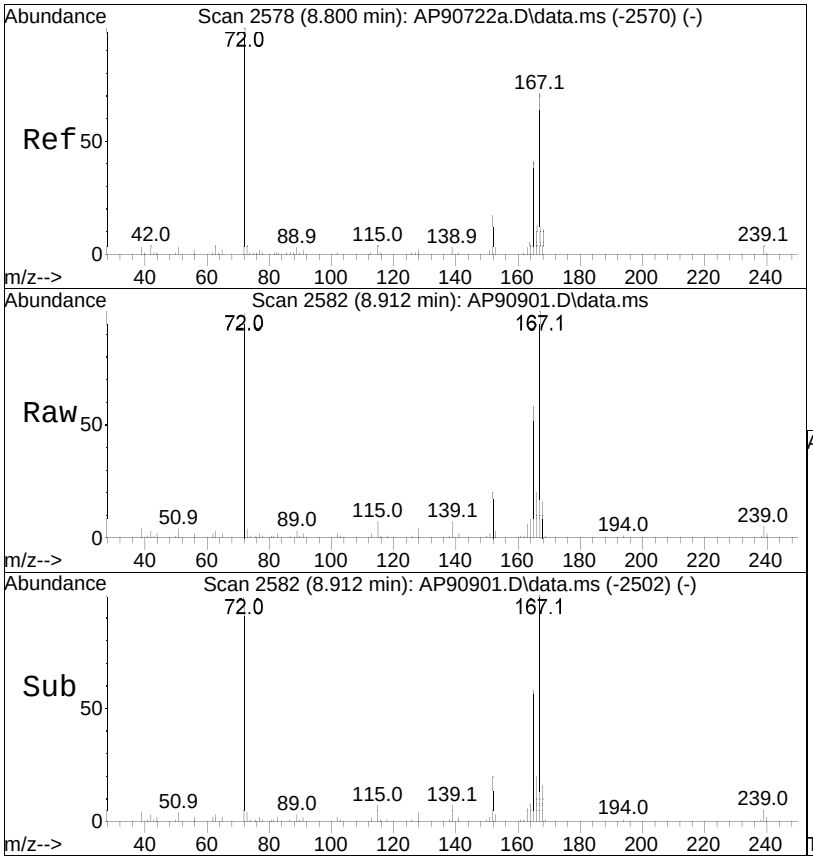


#84
Pentachloronitrobenzene
Concen: 5.03 ug/ml
RT: 7.843 min Scan# 2238
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion:237 Resp: 10998

Ion	Ratio	Lower	Upper
237	100		
142	60.2	77.0	115.4#
214	67.9	58.2	87.4

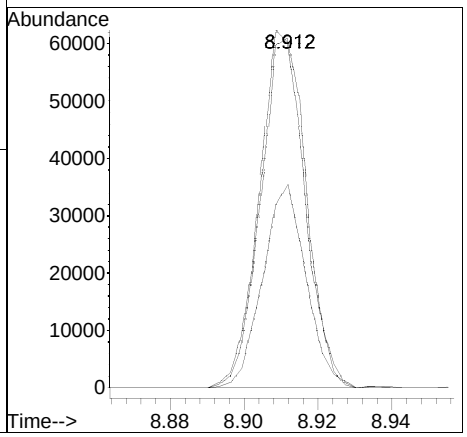




#98
Diphenamid
Concen: 3.96 ug/ml
RT: 8.912 min Scan# 2582
Delta R.T. 0.000 min
Lab File: AP90901.D
Acq: 1 Sep 2023 7:02 am

Tgt Ion:167 Resp: 52528

Ion	Ratio	Lower	Upper
167	100		
72	100.1	109.7	164.5#
165	55.0	41.8	62.6



Manual Integration Report

Data Path	: I:\8270\Dakota\230901lvi\	QMethod	: FS230412LVIDakota.m
Data File	: AP90901.D	Operator	: Dakota:cmm
Date Inj'd	: 9/1/2023 7:02 am	Instrument	: Dakota
Sample	: WG1822785-4,32,,AP9 10166	Quant Date	: 9/1/2023 7:59 am

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230901lvi\
Data File : ADP0901.D
Acq On : 1 Sep 2023 7:24 am
Operator : Dakota:cmm
Sample : WG1822785-5,32,,ADP 10092 gmr0805B
Misc : WG1822785,,ical19934
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Sep 01 07:58:29 2023
Quant Method : I:\8270\Dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 07:58:12 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
32	I	IS3_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	88	0.00
33	T	n-Decane		1.231	1.025	16.7	71	0.00
85	I	IS3_Acenaphthene-d10		1.000	1.000	0.0	94	0.00
86	T	Atrazine		0.363	0.363	0.0	91	0.00
99	I	IS3_Phenanthrene-d10		1.000	1.000	0.0	101	0.00
100	T	n-Octadecane		0.386	0.286	25.9#	72	0.00
101	T	Parathion	*	5.000	4.094	18.1	80	0.00
102	T	3,3'-Dimethylbenzidine	*	5.000	4.543	9.1	91	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230901lvi\
Data File : ADP0901.D
Acq On : 1 Sep 2023 7:24 am
Operator : Dakota:cmm
Sample : WG1822785-5,32,,ADP 10092 gmr0805B
Misc : WG1822785,,ical19934
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Sep 01 07:58:29 2023
Quant Method : I:\8270\Dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 07:58:12 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	3.650	152	16426	4.000	ug/ml	0.00
85) IS3_Acenaphthene-d10	6.584	164	36794	4.000	ug/ml	0.00
99) IS3_Phenanthrene-d10	7.977	188	90565	4.000	ug/ml	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	3.575	57	21043	4.161	ug/ml#	34
86) Atrazine	7.821	200	16713	5.003	ug/ml#	87
100) n-Octadecane	8.048	57	32392	3.709	ug/ml#	1
101) Parathion	8.797	109	8647	4.094	ug/ml	85
102) 3,3'-Dimethylbenzidine	10.009	212	66071	4.543	ug/ml	99

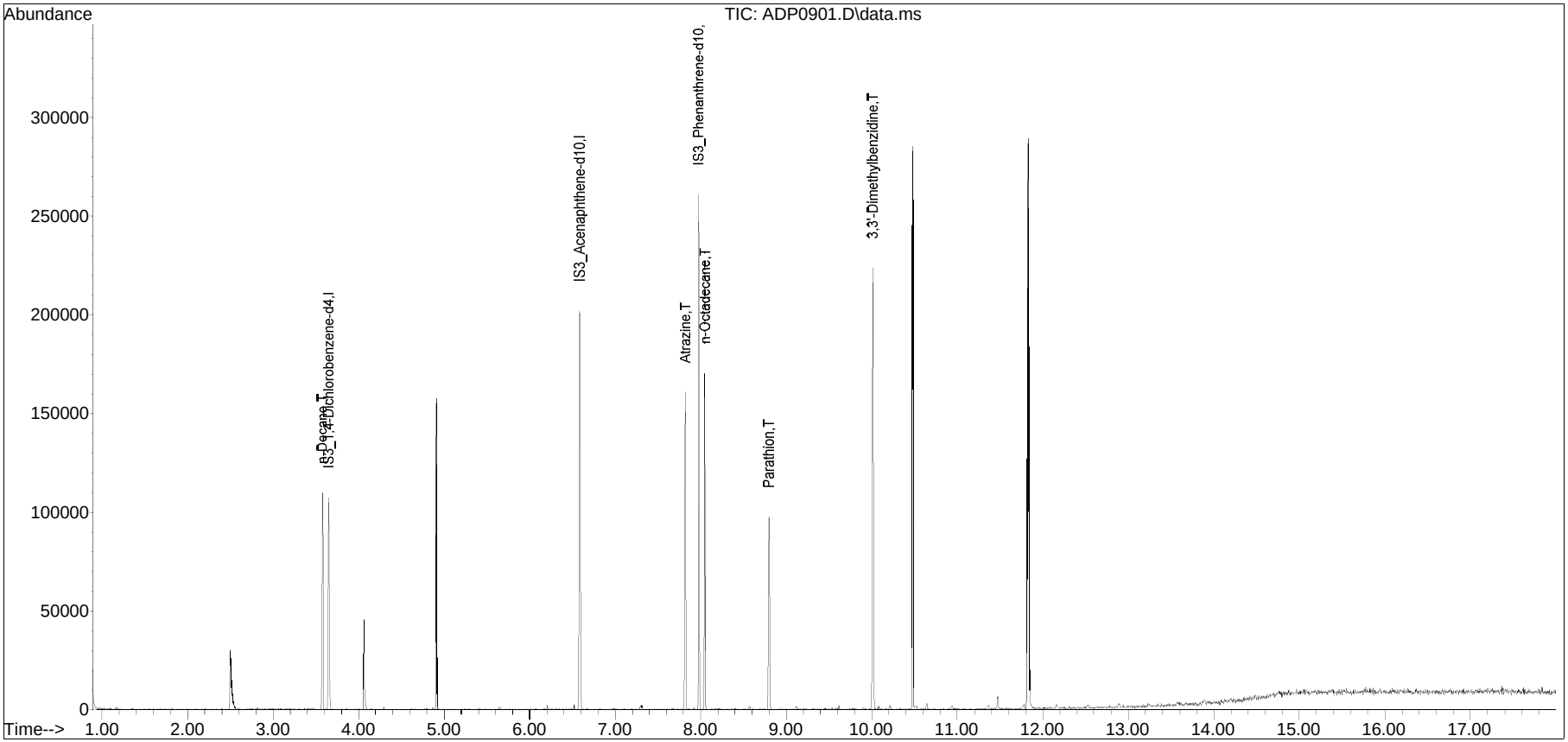
(#) = qualifier out of range (m) = manual integration (+) = signals summed

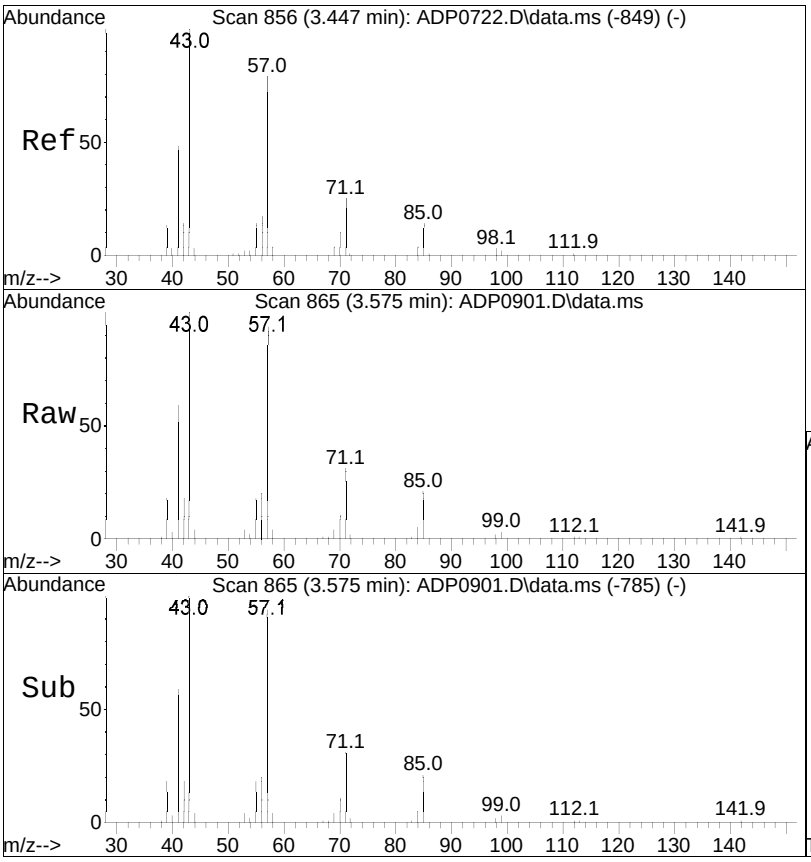
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230901lvi\
Data File : ADP0901.D
Acq On : 1 Sep 2023 7:24 am
Operator : Dakota:cmm
Sample : WG1822785-5,32,,ADP 10092 gmr0805B
Misc : WG1822785,,ical19934
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Sep 01 07:58:29 2023
Quant Method : I:\8270\Dakota\230901lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 07:58:12 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublist

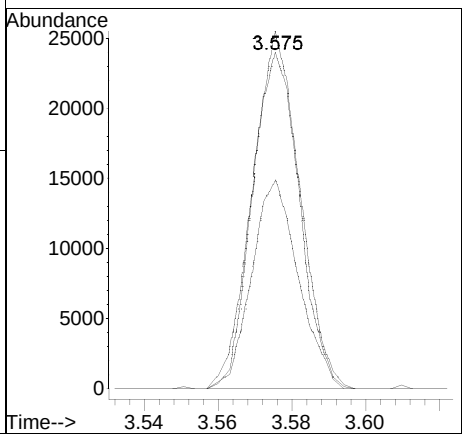


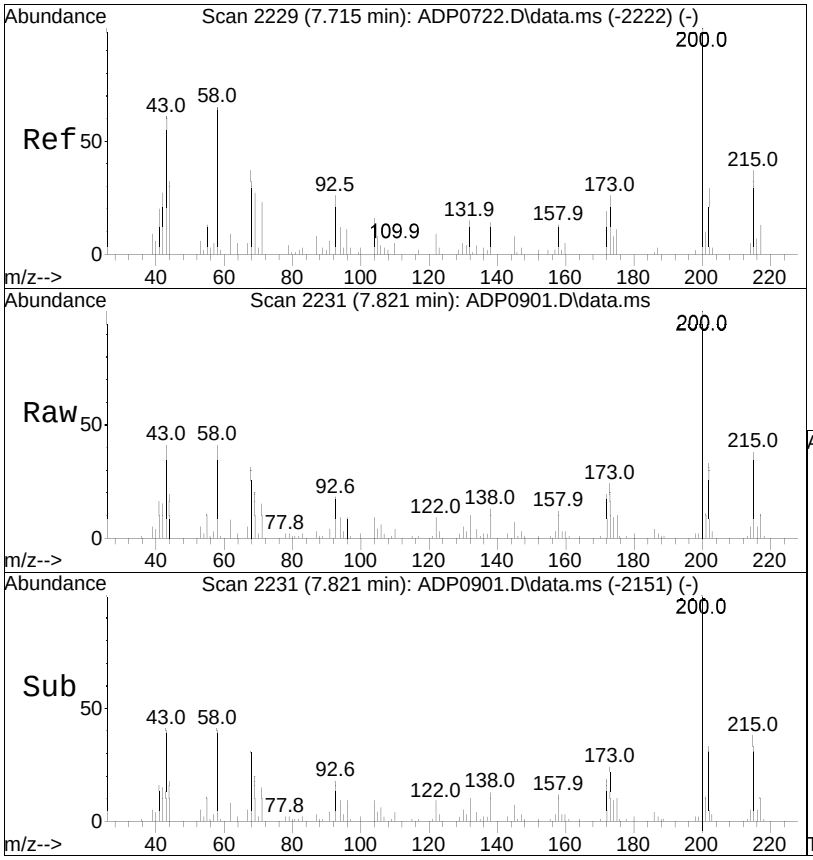


#33
n-Decane
Concen: 4.16 ug/ml
RT: 3.575 min Scan# 865
Delta R.T. 0.000 min
Lab File: ADP0901.D
Acq: 1 Sep 2023 7:24 am

Tgt Ion: 57 Resp: 21043

Ion	Ratio	Lower	Upper
57	100		
43	108.0	0.2	0.2#
41	62.1	0.2	0.2#

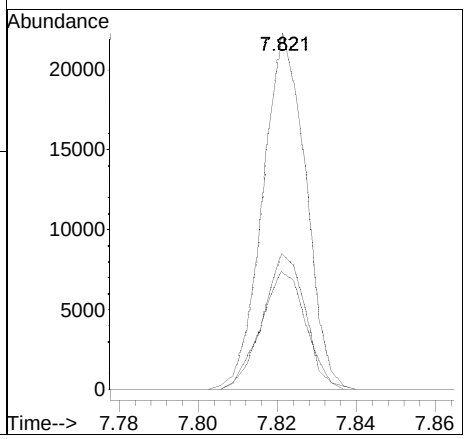


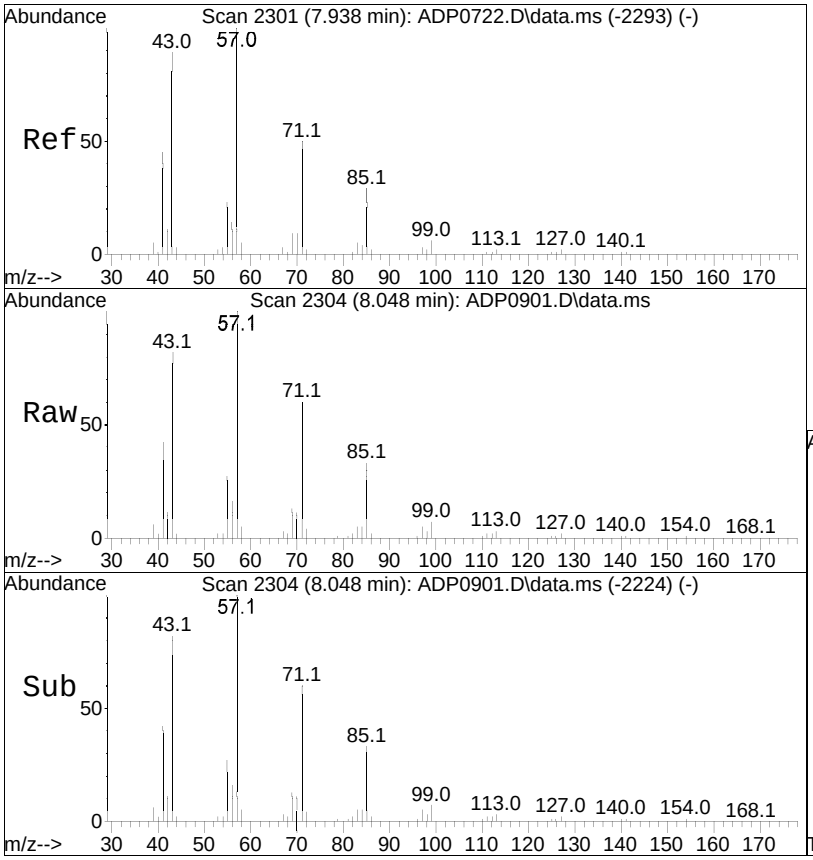


#86
Atrazine
Concen: 5.00 ug/ml
RT: 7.821 min Scan# 2231
Delta R.T. 0.000 min
Lab File: ADP0901.D
Acq: 1 Sep 2023 7:24 am

Tgt Ion:200 Resp: 16713

Ion	Ratio	Lower	Upper
200	100		
202	35.0	25.8	38.6
215	37.9	40.2	60.4#

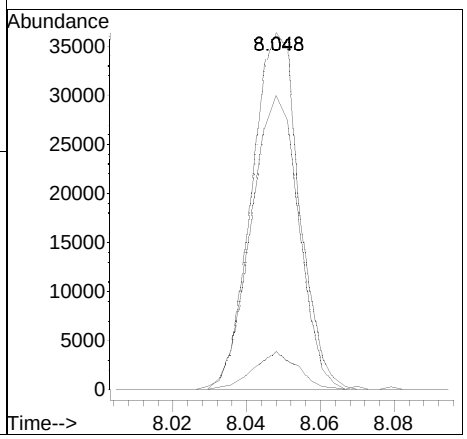


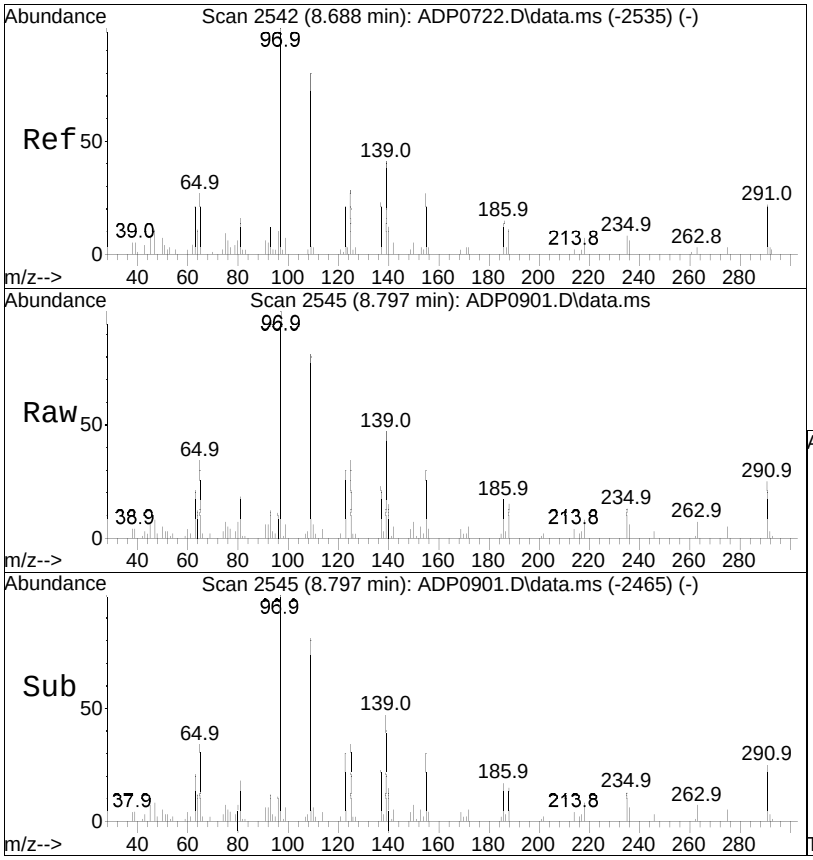


#100
n-Octadecane
Concen: 3.71 ug/ml
RT: 8.048 min Scan# 2304
Delta R.T. 0.000 min
Lab File: ADP0901.D
Acq: 1 Sep 2023 7:24 am

Tgt Ion: 57 Resp: 32392

Ion	Ratio	Lower	Upper
57	100		
43	83.3	9.0	13.6#
70	10.0	0.2	0.2#

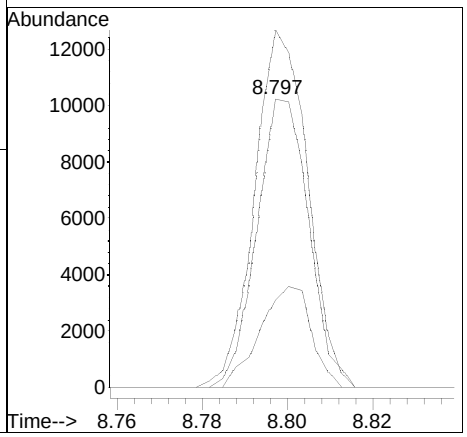


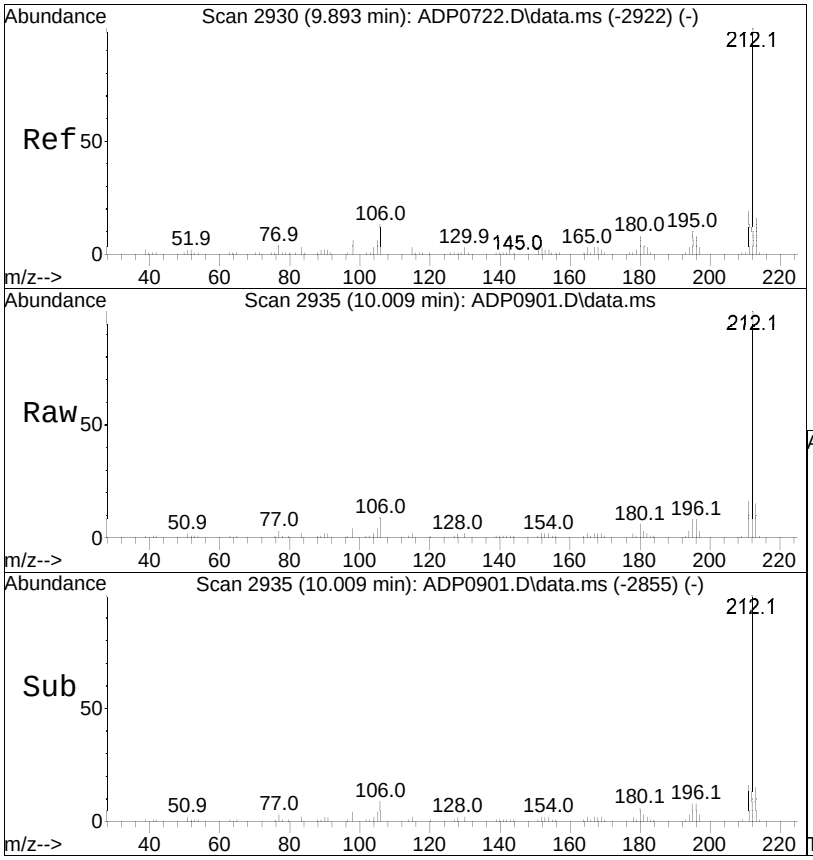


#101
Parathion
Concen: 4.09 ug/ml
RT: 8.797 min Scan# 2545
Delta R.T. 0.000 min
Lab File: ADP0901.D
Acq: 1 Sep 2023 7:24 am

Tgt Ion:109 Resp: 8647

Ion	Ratio	Lower	Upper
109	100		
97	126.4	87.4	131.2
291	34.8	34.2	51.2

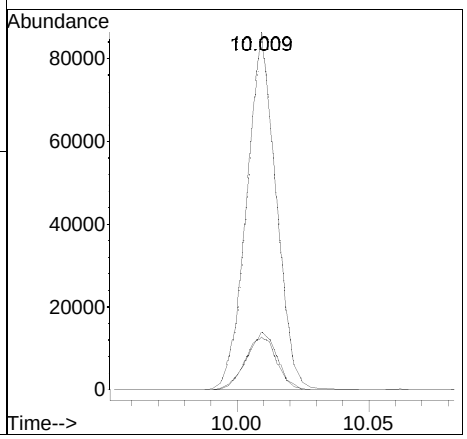




#102
3,3'-Dimethylbenzidine
Concen: 4.54 ug/ml
RT: 10.009 min Scan# 2935
Delta R.T. 0.000 min
Lab File: ADP0901.D
Acq: 1 Sep 2023 7:24 am

Tgt Ion:212 Resp: 66071

Ion	Ratio	Lower	Upper
212	100		
211	16.9	12.9	19.3
213	16.1	13.2	19.8



Manual Integration Report

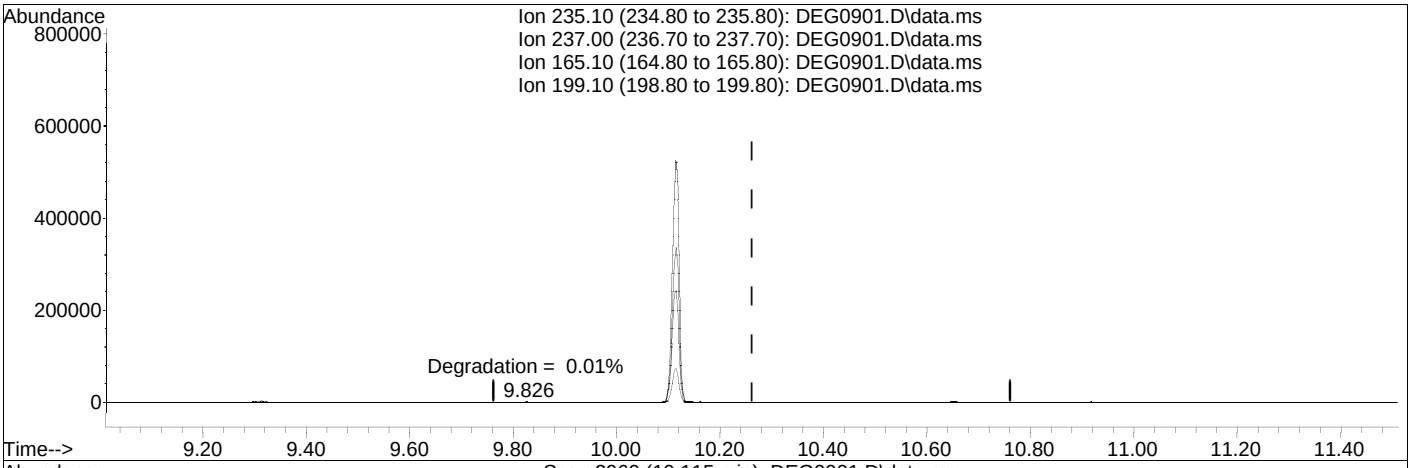
Data Path	: I:\8270\Dakota\230901lvi\	QMethod	: FS230412LVIDakota.m
Data File	: ADP0901.D	Operator	: Dakota:cmm
Date Inj'd	: 9/1/2023 7:24 am	Instrument	: Dakota
Sample	: WG1822785-5,32,,ADP 10092	Quant Date	: 9/1/2023 7:58 am

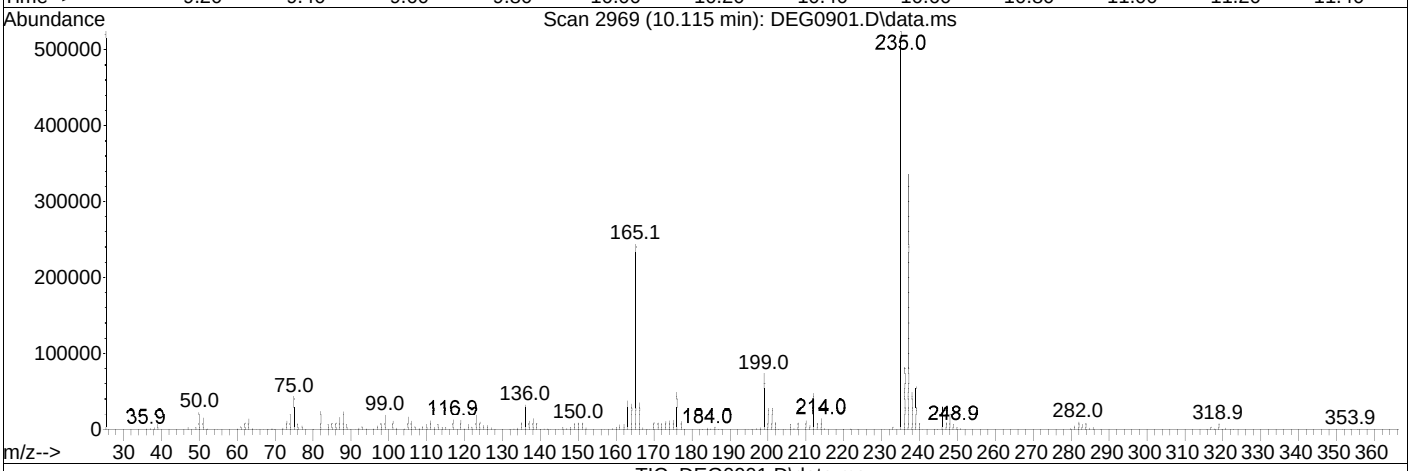
There are no manual integrations or false positives in this file.

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230901lvi\
Data File : DEG0901.D
Acq On : 1 Sep 2023 6:17 am
Operator : Dakota:cmm
Sample : WG1822785-2,32,,Dakota Degdftpp
Misc : WG1822785,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Sep 01 06:39:27 2023
Quant Method : I:\8270\Dakota\230901lvi\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 30 01:12:04 2023
Response via : Initial Calibration





TIC: DEG0901.D\data.ms

(6) DDT (T)

10.115min (-0.147) 72.75

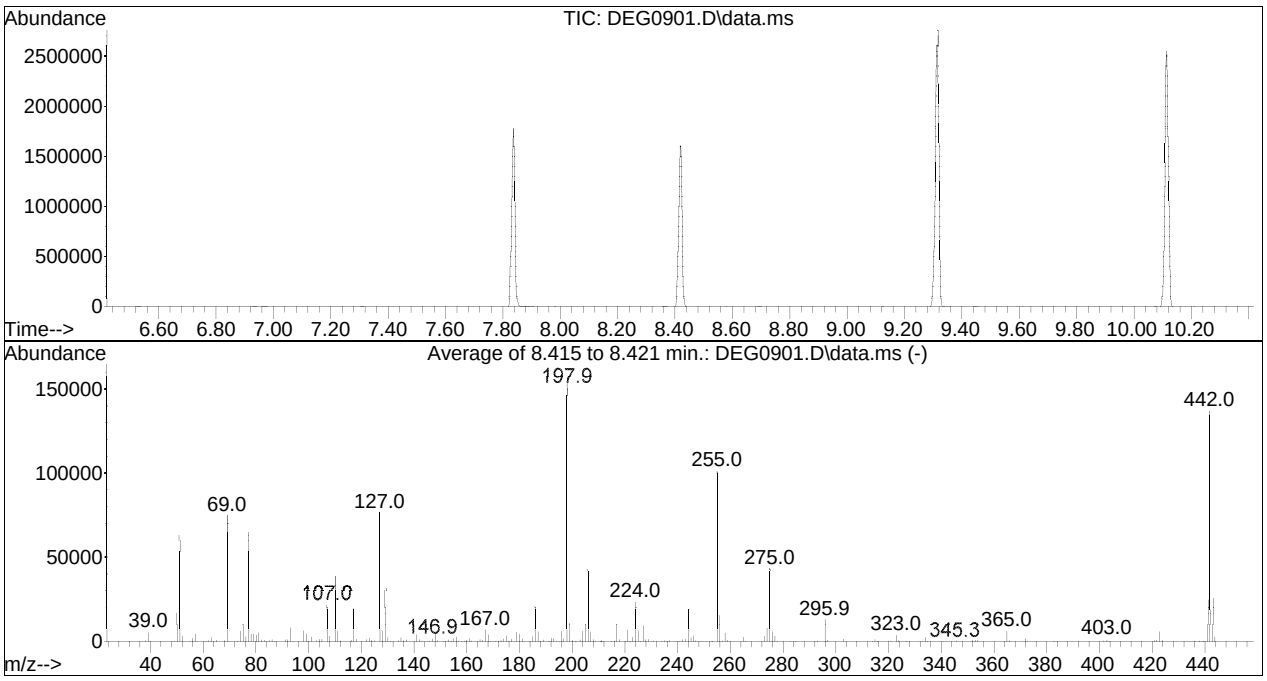
response 443476

Ion	Exp%	Act%
235.10	100.00	100.00
237.00	64.90	65.29
165.10	46.10	46.64
199.10	13.20	14.09

Data Path : I:\8270\Dakota\230901lvi\
Data File : DEG0901.D
Acq On : 1 Sep 2023 6:17 am
Operator : Dakota:gmr
Sample : WG1822785-1,32,,Dakota Degdftpp
Misc : WG1822785,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270\Dakota\230901lvi\FS230412LVIDakota.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Fri Sep 01 07:28:03 2023



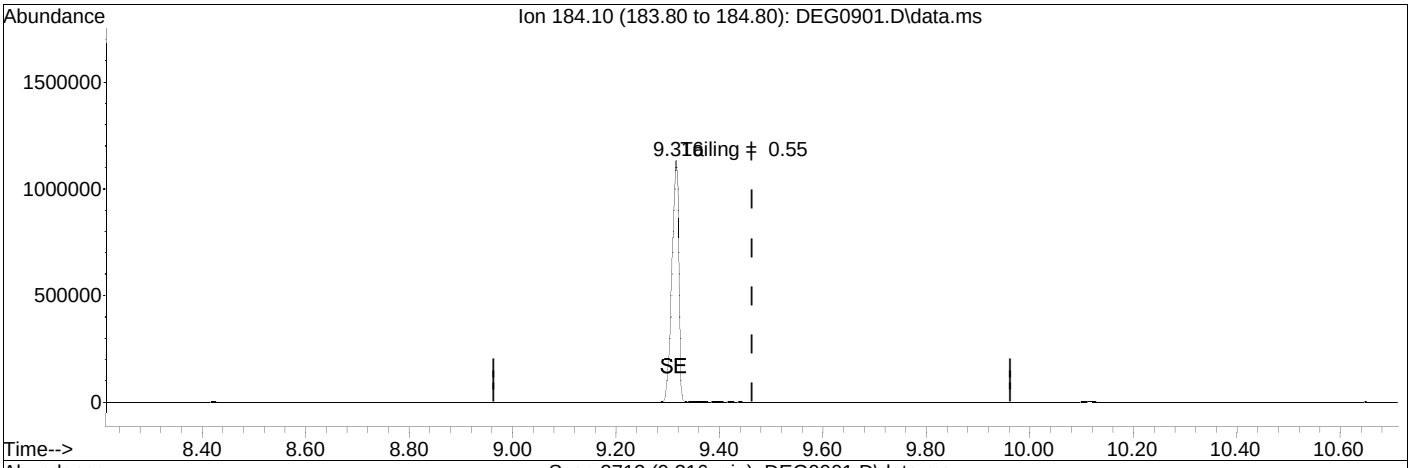
Spectrum Information: Average of 8.415 to 8.421 min.

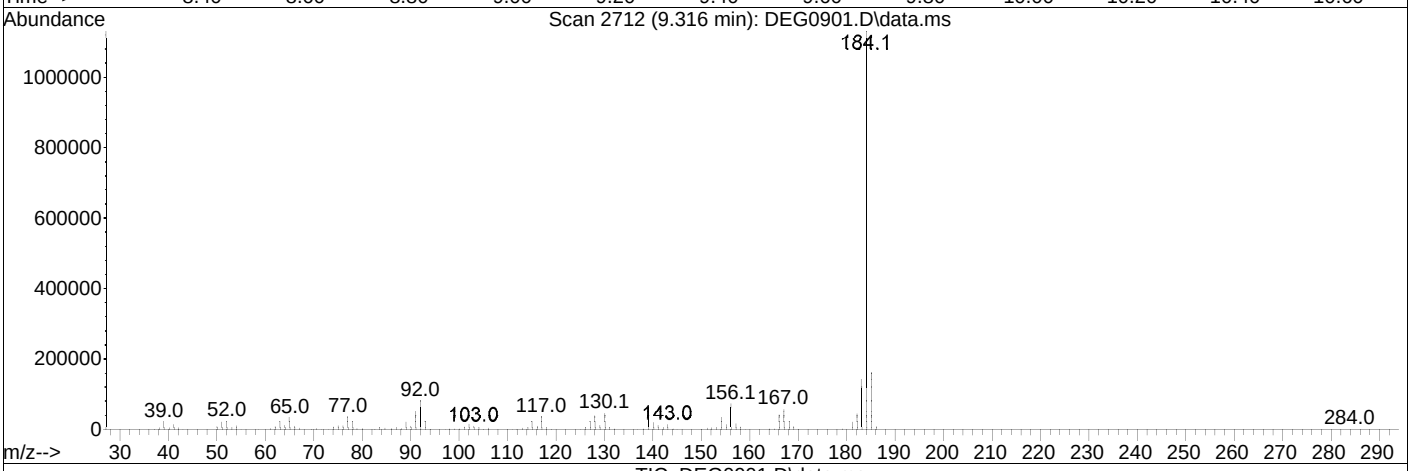
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	40.0	62715	PASS
68	69	0.00	2	1.4	1065	PASS
69	69	100	100	100.0	74685	PASS
70	69	0.00	2	0.5	371	PASS
127	198	10	80	48.8	76501	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	156728	PASS
199	198	5	9	7.1	11100	PASS
275	198	10	60	27.5	43077	PASS
365	198	1	100	3.8	6000	PASS
441	442	0.01	24	18.0	24661	PASS
442	198	50	100	87.3	136768	PASS
443	442	15	24	18.7	25549	PASS

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230901lvi\
Data File : DEG0901.D
Acq On : 1 Sep 2023 6:17 am
Operator : Dakota:cmm
Sample : WG1822785-6,32,,Dakota Degdftpp
Misc : WG1822785,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Sep 01 06:39:27 2023
Quant Method : I:\8270\Dakota\230901lvi\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 30 01:12:04 2023
Response via : Initial Calibration





TIC: DEG0901.D\data.ms

(3) Benzidine (T)

9.316min (-0.147) 96.05

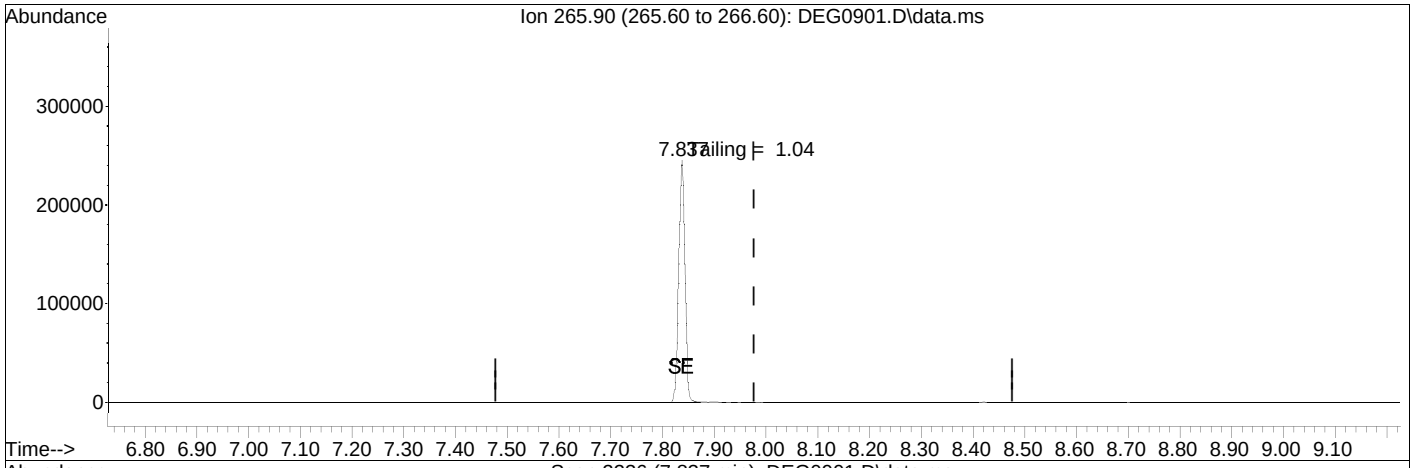
response 977837

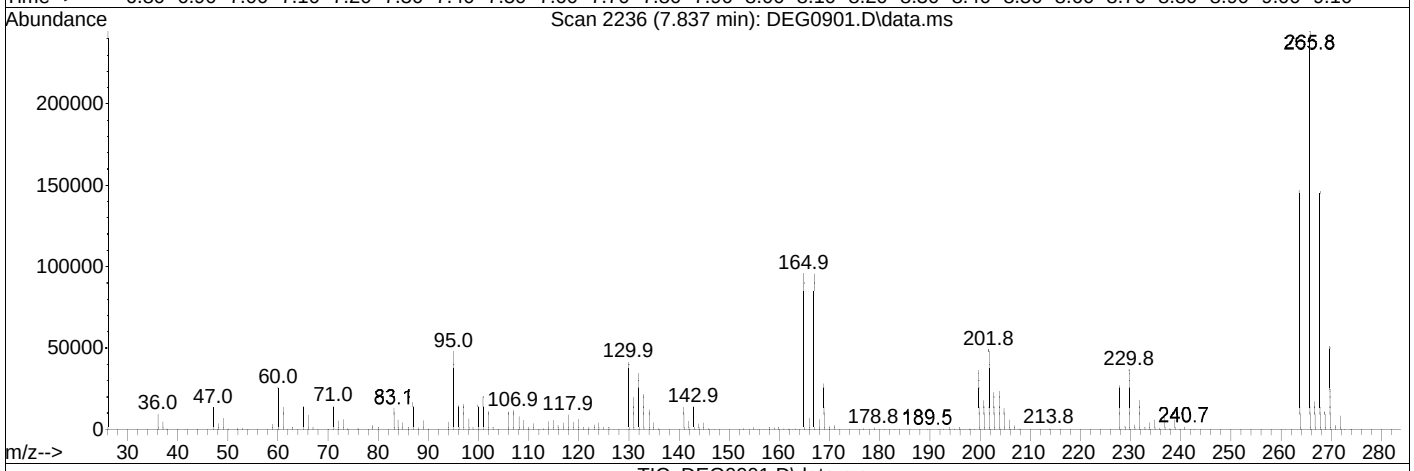
Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230901lvi\
Data File : DEG0901.D
Acq On : 1 Sep 2023 6:17 am
Operator : Dakota:cmm
Sample : WG1822785-7,32,,Dakota Degdftpp
Misc : WG1822785,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Sep 01 06:39:27 2023
Quant Method : I:\8270\Dakota\230901lvi\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 30 01:12:04 2023
Response via : Initial Calibration





TIC: DEG0901.D\data.ms

(1) Pentachlorophenol (T)

7.837min (-0.140) 92.48

response 194238

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230905nlvi\
Data File : ABN0905n.D
Acq On : 5 Sep 2023 8:32 pm
Operator : Dakota:sz
Sample : wg1823113-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1823113,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 05 20:55:14 2023
Quant Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 20:54:56 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	IS1_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	81	0.00
2	t	n-Nitrosodimethylamine	*	5.000	4.225	15.5	72	0.00
3	t	Pyridine	*	5.000	4.120	17.6	83	0.00
4	S	2-Fluorophenol		1.033	1.017	1.5	80	0.00
5	T	Aniline		1.790	1.472	17.8	66	0.00
6	t	2-Chlorophenol		1.195	1.069	10.5	70	0.00
7	S	Phenol-d6		1.324	1.158	12.5	70	0.00
8	T	Phenol		1.539	1.211	21.3#	65	0.00
9	T	Bis(2-chloroethyl)ether		1.066	0.884	17.1	70	0.00
10	T	1,3-Dichlorobenzene		1.435	1.316	8.3	76	0.00
11	T	1,4-Dichlorobenzene		1.452	1.328	8.5	78	0.00
12	T	1,2-Dichlorobenzene		1.406	1.313	6.6	75	0.00
13	t	Benzyl alcohol		0.936	0.841	10.1	71	0.00
14	T	Bis(2-chloroisopropyl)ether		1.785	1.478	17.2	67	0.00
15	T	2-Methylphenol		1.016	0.877	13.7	68	0.00
16	T	Hexachloroethane		0.551	0.551	0.0	84	0.00
17	T	n-Nitrosodi-n-propylamine		0.818	0.769	6.0	77	0.00
18	T	3-Methylphenol/4-Methylphen		1.050	0.957	8.9	73	0.00
19	S	Nitrobenzene-d5		1.269	1.197	5.7	77	0.00
20	T	Nitrobenzene		1.234	1.153	6.6	78	0.00
21	T	Isophorone		2.183	1.922	12.0	71	0.00
22	T	2-Nitrophenol		0.577	0.598	-3.6	78	0.00
23	T	2,4-Dimethylphenol		1.110	0.983	11.4	71	0.00
24	T	Bis(2-chloroethoxy)methane		1.416	1.218	14.0	71	0.00
25	T	2,4-Dichlorophenol		1.044	1.076	-3.1	88	0.00
26	T	1,2,4-Trichlorobenzene		1.276	1.351	-5.9	84	0.00
34	I	IS1_Naphthalene-d8		1.000	1.000	0.0	73	0.00
35	T	Naphthalene		0.971	0.893	8.0	68	0.00
36	T	Benzoic Acid	*	5.000	7.288	-45.8#	135	0.00
37	T	4-Chloroaniline		0.115	0.113	1.7	76	0.00
38	T	Hexachlorobutadiene		0.198	0.233	-17.7	87	0.00
39	T	p-Chloro-m-cresol		0.254	0.259	-2.0	73	0.00
40	T	2-Methylnaphthalene		0.631	0.637	-1.0	75	0.00
41	T	1-Methylnaphthalene		0.218	0.218	0.0	71	0.00
42	T	Hexachlorocyclopentadiene		0.239	0.303	-26.8#	92	0.00
43	T	2,4,6-Trichlorophenol	*	5.000	6.087	-21.7#	96	0.00
44	T	2,4,5-Trichlorophenol		0.234	0.300	-28.2#	90	0.00
45	S	2-Fluorobiphenyl		0.787	0.841	-6.9	78	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230905nlvi\
Data File : ABN0905n.D
Acq On : 5 Sep 2023 8:32 pm
Operator : Dakota:sz
Sample : wg1823113-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1823113,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 05 20:55:14 2023
Quant Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 20:54:56 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
46	T	2-Chloronaphthalene		0.692	0.726	-4.9	77	0.00
47	T	2-Nitroaniline		0.200	0.218	-9.0	79	0.00
48	T	1,4-Dinitrobenzene		0.093	0.103	-10.8	79	0.00
49	T	1,3-Dinitrobenzene		0.109	0.120	-10.1	88	0.00
50	T	Dimethyl phthalate		0.809	0.916	-13.2	81	0.00
51	T	Acenaphthylene		1.049	1.175	-12.0	80	0.00
52	T	2,6-Dinitrotoluene		0.167	0.187	-12.0	78	0.00
53	T	1,2-Dinitrobenzene		0.065	0.067	-3.1	73	0.00
62	I	IS1_Acenaphthene-d10		1.000	1.000	0.0	86	0.00
63	T	3-Nitroaniline		0.318	0.304	4.4	77	0.00
64	T	Acenaphthene		1.089	0.936	14.0	75	0.00
65	T	2,4-Dinitrophenol	*	5.000	5.898	-18.0	104	0.00
66	T	Dibenzofuran		1.737	1.597	8.1	79	0.00
67	T	2,4-Dinitrotoluene		0.392	0.381	2.8	79	0.00
68	T	4-Nitrophenol	*	5.000	5.529	-10.6	99	0.00
69	T	2,3,5,6-Tetrachlorophenol	*	5.000	5.841	-16.8	105	0.00
70	T	2,3,4,6-Tetrachlorophenol	*	5.000	5.792	-15.8	103	0.00
71	T	Diethyl phthalate		1.466	1.326	9.5	77	0.00
72	T	Fluorene		1.400	1.288	8.0	79	0.00
73	T	4-Chlorophenyl phenyl ether		0.681	0.637	6.5	82	0.00
74	T	4-Nitroaniline		0.316	0.306	3.2	80	0.00
75	T	4,6-Dinitro-o-cresol	*	5.000	6.169	-23.4#	112	0.00
76	T	NDPA/DPA		1.195	1.053	11.9	74	0.00
77	T	Azobenzene		1.256	1.150	8.4	75	0.00
78	S	2,4,6-Tribromophenol		0.232	0.330	-42.2#	123	0.00
79	T	4-Bromophenyl phenyl ether		0.425	0.447	-5.2	90	0.00
80	T	Hexachlorobenzene		0.532	0.583	-9.6	99	0.00
81	T	Pentachlorophenol	*	5.000	6.390	-27.8#	127	0.00
87	I	IS1_Phenanthrene-d10		1.000	1.000	0.0	90	0.00
88	T	Phenanthrene		1.030	0.876	15.0	79	0.00
89	T	Anthracene		0.998	0.880	11.8	81	0.00
90	T	Carbazole		0.941	0.850	9.7	81	0.00
91	T	Di-n-butylphthalate		1.108	0.988	10.8	83	0.00
92	T	Fluoranthene		1.208	1.102	8.8	84	0.00
93	T	Benzidine		0.791	0.747	5.6	100	0.00
94	T	Pyrene		1.277	1.205	5.6	87	0.00
95	S	4-Terphenyl-d14		0.978	0.921	5.8	86	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230905nlvi\
Data File : ABN0905n.D
Acq On : 5 Sep 2023 8:32 pm
Operator : Dakota:sz
Sample : wg1823113-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1823113,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 05 20:55:14 2023
Quant Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 20:54:56 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96	T	Butyl benzyl phthalate	0.504	0.461	8.5	86	0.00
103	I	IS1_Chrysene-d12	1.000	1.000	0.0	94	0.00
104	T	Benzo(a)anthracene	1.254	1.139	9.2	86	0.00
105	T	3,3'-Dichlorobenzidine	0.482	0.482	0.0	95	0.00
106	T	Chrysene	1.184	1.064	10.1	83	0.00
107	T	Bis(2-ethylhexyl)phthalate	0.700	0.665	5.0	88	0.00
108	T	Di-n-octylphthalate	1.271	1.119	12.0	87	0.00
109	T	Benzo(b)fluoranthene	1.361	1.294	4.9	92	0.00
110	T	Benzo(k)fluoranthene	1.299	1.179	9.2	82	0.00
111	T	Benzo(a)pyrene	1.183	1.171	1.0	92	0.00
112	I	IS1_Perylene-d12	1.000	1.000	0.0	96	0.00
113	T	Indeno(1,2,3-cd)pyrene	1.060	0.889	16.1	80	0.00
114	T	Dibenzo(a,h)anthracene	1.111	0.943	15.1	82	0.00
115	T	Benzo(ghi)perylene	1.122	0.996	11.2	86	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : ABN0905n.D
Acq On : 5 Sep 2023 8:32 pm
Operator : Dakota:sz
Sample : wg1823113-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1823113,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 05 20:55:14 2023
Quant Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 20:54:56 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.463	152	14403	4.000	ug/ml		0.00
34) IS1_Naphthalene-d8	4.731	136	49518	4.000	ug/ml	#	0.00
62) IS1_Acenaphthene-d10	6.409	164	33908	4.000	ug/ml		0.00
87) IS1_Phenanthrene-d10	7.792	188	83627	4.000	ug/ml		0.00
103) IS1_Chrysene-d12	10.279	240	91716	4.000	ug/ml		0.00
112) IS1_Perylene-d12	11.603	264	117565	4.000	ug/ml		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	1.980	112	18314	4.924	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 98.48%				
7) Phenol-d6	3.195	99	20857	4.376	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 87.52%				
19) Nitrobenzene-d5	4.041	82	21553	4.718	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 188.72%#				
45) 2-Fluorobiphenyl	5.819	172	52075	5.345	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 213.80%#				
78) 2,4,6-Tribromophenol	7.158	330	13992	7.129	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 142.58%#				
95) 4-Terphenyl-d14	9.359	244	96241	4.708	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 188.32%#				
Target Compounds							Qvalue
2) n-Nitrosodimethylamine	0.895	74	11779	4.225	ug/ml	#	85
3) Pyridine	0.911	79	17246	4.120	ug/ml	#	62
5) Aniline	3.127	93	26502	4.111	ug/ml		99
6) 2-Chlorophenol	3.242	128	19239	4.470	ug/ml		92
8) Phenol	3.208	94	21807	3.936	ug/ml		90
9) Bis(2-chloroethyl)ether	3.248	93	15918	4.146	ug/ml	#	67
10) 1,3-Dichlorobenzene	3.391	146	23700	4.586	ug/ml		96
11) 1,4-Dichlorobenzene	3.475	146	23911	4.574	ug/ml		95
12) 1,2-Dichlorobenzene	3.627	146	23637	4.669	ug/ml		93
13) Benzyl alcohol	3.665	79	15140	4.490	ug/ml		95
14) Bis(2-chloroisopropyl)...	3.826	45	26618	4.142	ug/ml	#	58
15) 2-Methylphenol	3.833	108	15798	4.318	ug/ml		93
16) Hexachloroethane	3.960	117	9929	5.006	ug/ml	#	57
17) n-Nitrosodi-n-propylamine	3.954	70	13838	4.699	ug/ml	#	83
18) 3-Methylphenol/4-Methy...	4.007	108	17233	4.560	ug/ml		98
20) Nitrobenzene	4.059	77	20752	4.672	ug/ml		95
21) Isophorone	4.324	82	34601	4.403	ug/ml	#	91
22) 2-Nitrophenol	4.386	139	10769	5.187	ug/ml		90

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : ABN0905n.D
Acq On : 5 Sep 2023 8:32 pm
Operator : Dakota:sz
Sample : wg1823113-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1823113,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 05 20:55:14 2023
Quant Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 20:54:56 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) 2,4-Dimethylphenol	4.516	107	17703	4.428	ug/ml	91
24) Bis(2-chloroethoxy)met...	4.594	93	21920	4.299	ug/ml#	94
25) 2,4-Dichlorophenol	4.641	162	19364	5.153	ug/ml#	93
26) 1,2,4-Trichlorobenzene	4.697	180	24317	5.291	ug/ml	94
35) Naphthalene	4.749	128	55295	4.600	ug/ml	99
36) Benzoic Acid	4.631	105	14997	7.288	ug/ml	96
37) 4-Chloroaniline	4.858	65	7010	4.940	ug/ml	76
38) Hexachlorobutadiene	4.923	225	14404	5.890	ug/ml	99
39) p-Chloro-m-cresol	5.393	107	16001	5.097	ug/ml#	90
40) 2-Methylnaphthalene	5.433	142	39406	5.045	ug/ml	95
41) 1-Methylnaphthalene	5.520	115	13468	4.981	ug/ml	92
42) Hexachlorocyclopentadiene	5.607	237	18731	6.332	ug/ml	100
43) 2,4,6-Trichlorophenol	5.738	196	17573	6.087	ug/ml	99
44) 2,4,5-Trichlorophenol	5.766	196	18549	6.416	ug/ml	98
46) 2-Chloronaphthalene	5.884	162	44941	5.244	ug/ml#	91
47) 2-Nitroaniline	6.021	138	13510	5.454	ug/ml	85
48) 1,4-Dinitrobenzene	6.164	168	6353	5.491	ug/ml	96
49) 1,3-Dinitrobenzene	6.235	168	7406	5.490	ug/ml#	1
50) Dimethyl phthalate	6.244	163	56694	5.661	ug/ml#	96
51) Acenaphthylene	6.266	152	72735	5.599	ug/ml	99
52) 2,6-Dinitrotoluene	6.272	165	11575	5.598	ug/ml#	85
53) 1,2-Dinitrobenzene	6.303	168	4150	5.135	ug/ml#	82
63) 3-Nitroaniline	6.415	138	12891	4.777	ug/ml	91
64) Acenaphthene	6.437	154	39675	4.297	ug/ml	90
65) 2,4-Dinitrophenol	6.518	184	7975	5.898	ug/ml	91
66) Dibenzofuran	6.605	168	67701	4.597	ug/ml	90
67) 2,4-Dinitrotoluene	6.648	165	16136	4.858	ug/ml	88
68) 4-Nitrophenol	6.655	65	12426	5.529	ug/ml#	88
69) 2,3,5,6-Tetrachlorophenol	6.714	232	18132	5.841	ug/ml	98
70) 2,3,4,6-Tetrachlorophenol	6.754	232	18028	5.792	ug/ml	98
71) Diethyl phthalate	6.928	149	56201	4.522	ug/ml	98
72) Fluorene	6.925	166	54603	4.599	ug/ml	92
73) 4-Chlorophenyl phenyl ...	6.972	204	26991	4.678	ug/ml#	86
74) 4-Nitroaniline	6.984	138	12979	4.844	ug/ml#	84
75) 4,6-Dinitro-o-cresol	7.021	198	11338	6.169	ug/ml#	61
76) NDPA/DPA	7.093	169	44630	4.407	ug/ml	90
77) Azobenzene	7.115	77	48731	4.578	ug/ml	94
79) 4-Bromophenyl phenyl e...	7.422	248	18964	5.263	ug/ml#	79
80) Hexachlorobenzene	7.444	284	24710	5.480	ug/ml#	76
81) Pentachlorophenol	7.652	266	16340	6.390	ug/ml	99
88) Phenanthrene	7.811	178	91525	4.249	ug/ml	100

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : ABN0905n.D
Acq On : 5 Sep 2023 8:32 pm
Operator : Dakota:sz
Sample : wg1823113-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1823113,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 05 20:55:14 2023
Quant Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 20:54:56 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
89) Anthracene	7.861	178	92009	4.410	ug/ml	98
90) Carbazole	8.050	167	88821	4.516	ug/ml	99
91) Di-n-butylphthalate	8.492	149	103289	4.460	ug/ml	98
92) Fluoranthene	8.927	202	115148	4.560	ug/ml#	91
93) Benzidine	9.119	184	78084	4.719	ug/ml#	94
94) Pyrene	9.126	202	125965	4.719	ug/ml	99
96) Butyl benzyl phthalate	9.887	149	48176	4.576	ug/ml#	86
104) Benzo(a)anthracene	10.273	228	130557	4.541	ug/ml	98
105) 3,3'-Dichlorobenzidine	10.310	252	55251	4.999	ug/ml#	96
106) Chrysene	10.304	228	121989	4.492	ug/ml	98
107) Bis(2-ethylhexyl)phtha...	10.496	149	76184	4.744	ug/ml#	84
108) Di-n-octylphthalate	11.118	149	128260	4.401	ug/ml#	73
109) Benzo(b)fluoranthene	11.267	252	148321	4.753	ug/ml#	91
110) Benzo(k)fluoranthene	11.295	252	135162	4.538	ug/ml#	92
111) Benzo(a)pyrene	11.550	252	134277	4.950	ug/ml#	92
113) Indeno(1,2,3-cd)pyrene	12.498	276	130572	4.190	ug/mL#	88
114) Dibenzo(a,h)anthracene	12.535	278	138566	4.242	ug/ml#	89
115) Benzo(ghi)perylene	12.697	276	146418	4.442	ug/ml#	84

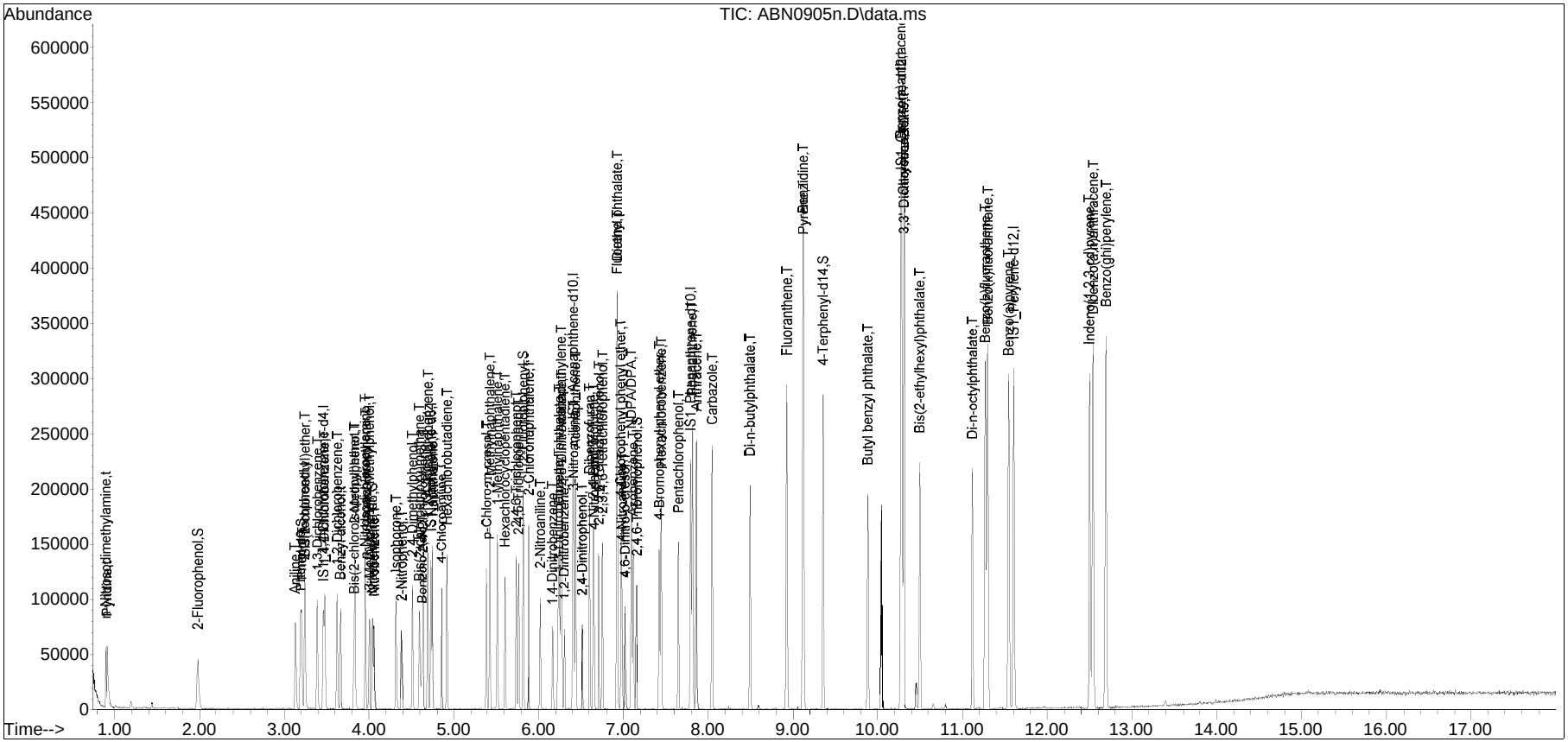
(#) = qualifier out of range (m) = manual integration (+) = signals summed

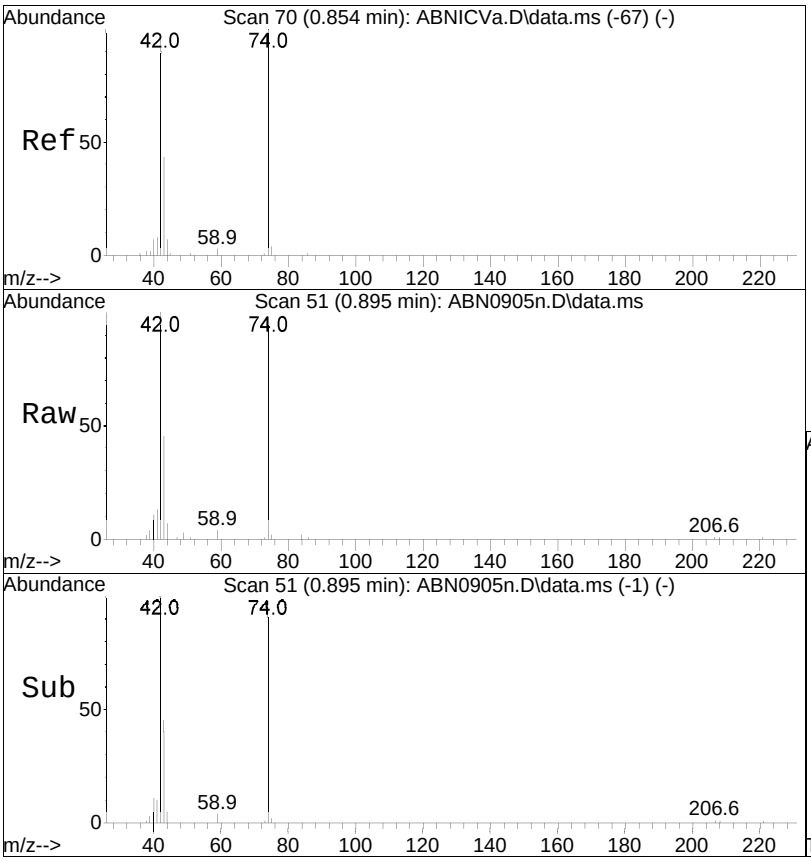
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : ABN0905n.D
Acq On : 5 Sep 2023 8:32 pm
Operator : Dakota:sz
Sample : wg1823113-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1823113,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 05 20:55:14 2023
Quant Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 20:54:56 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

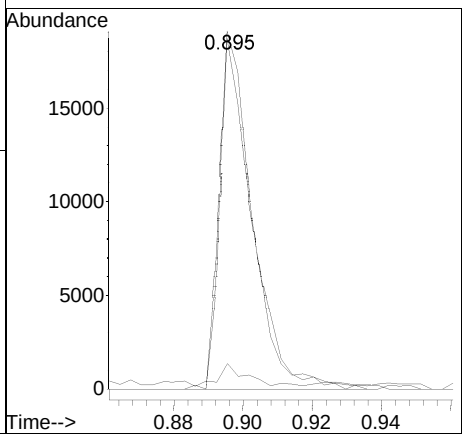


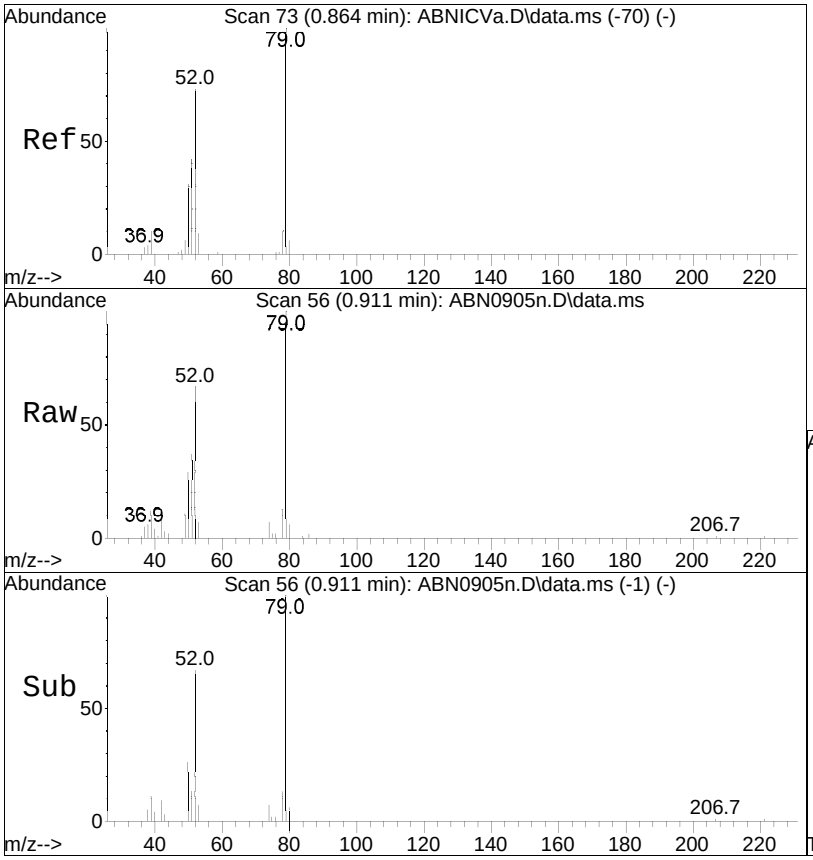


#2
n-Nitrosodimethylamine
Concen: 4.22 ug/ml
RT: 0.895 min Scan# 51
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 74 Resp: 11779

Ion	Ratio	Lower	Upper
74	100		
42	107.9	100.0	150.0
44	5.5	6.7	10.1#

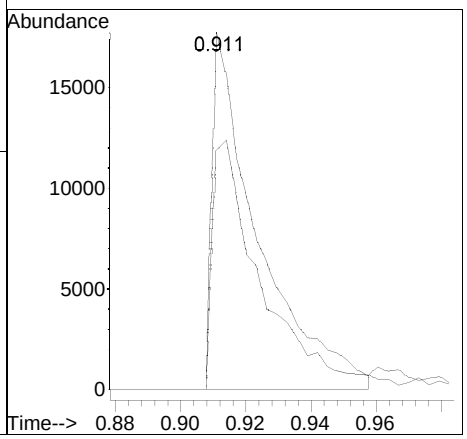


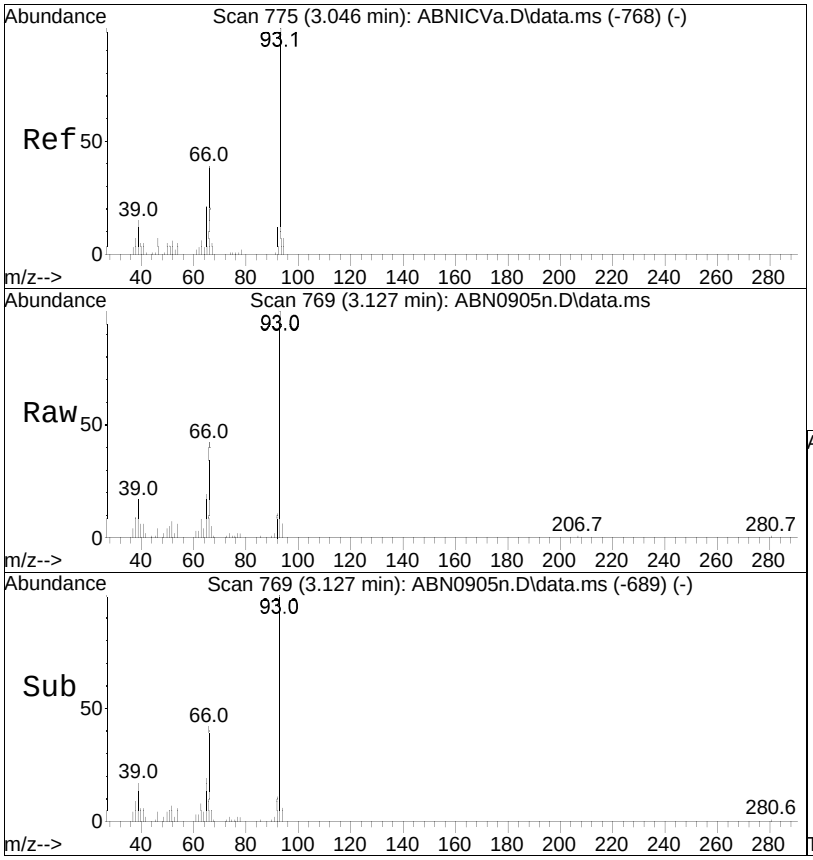


#3
Pyridine
Concen: 4.12 ug/ml
RT: 0.911 min Scan# 56
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 79 Resp: 17246

Ion	Ratio	Lower	Upper
79	100		
52	75.0	93.1	139.7#

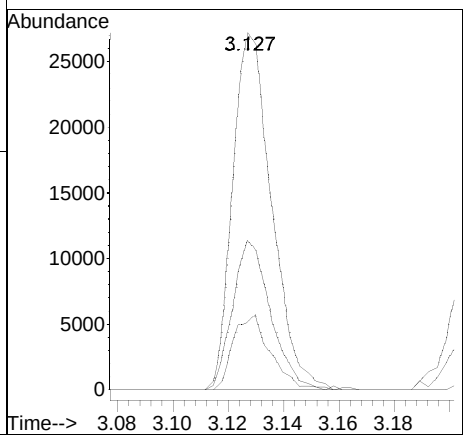


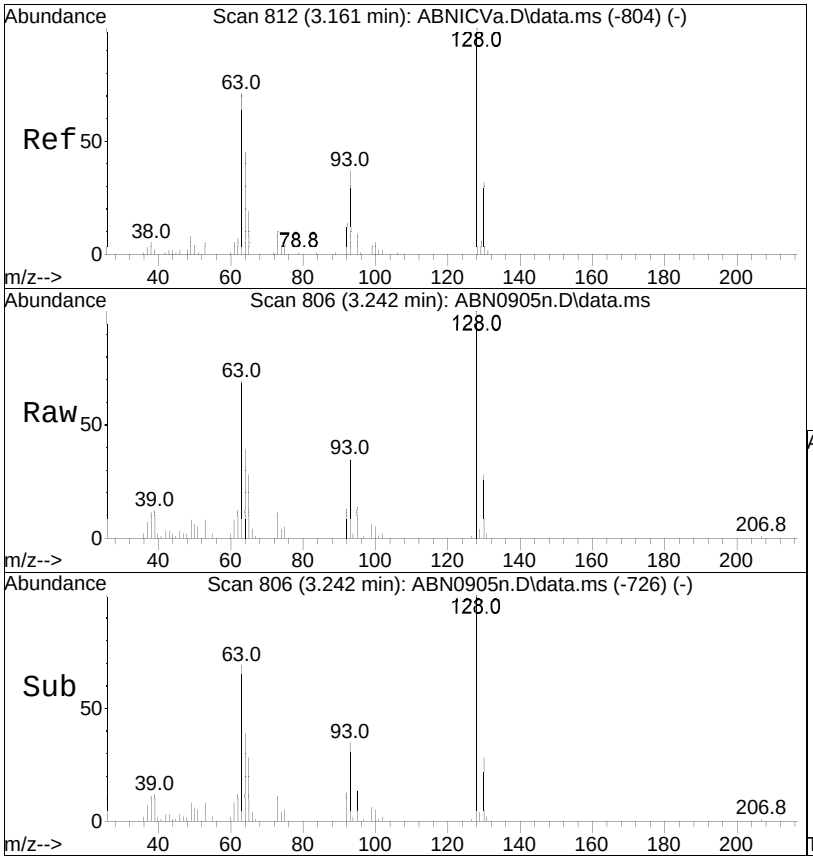


#5
Aniline
Concen: 4.11 ug/ml
RT: 3.127 min Scan# 769
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 93 Resp: 26502

Ion	Ratio	Lower	Upper
93	100		
66	40.8	32.6	49.0
65	20.3	17.6	26.4

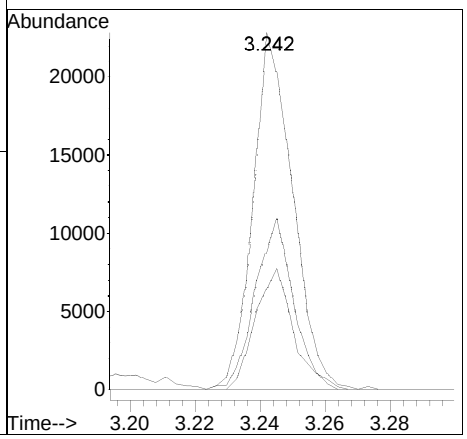


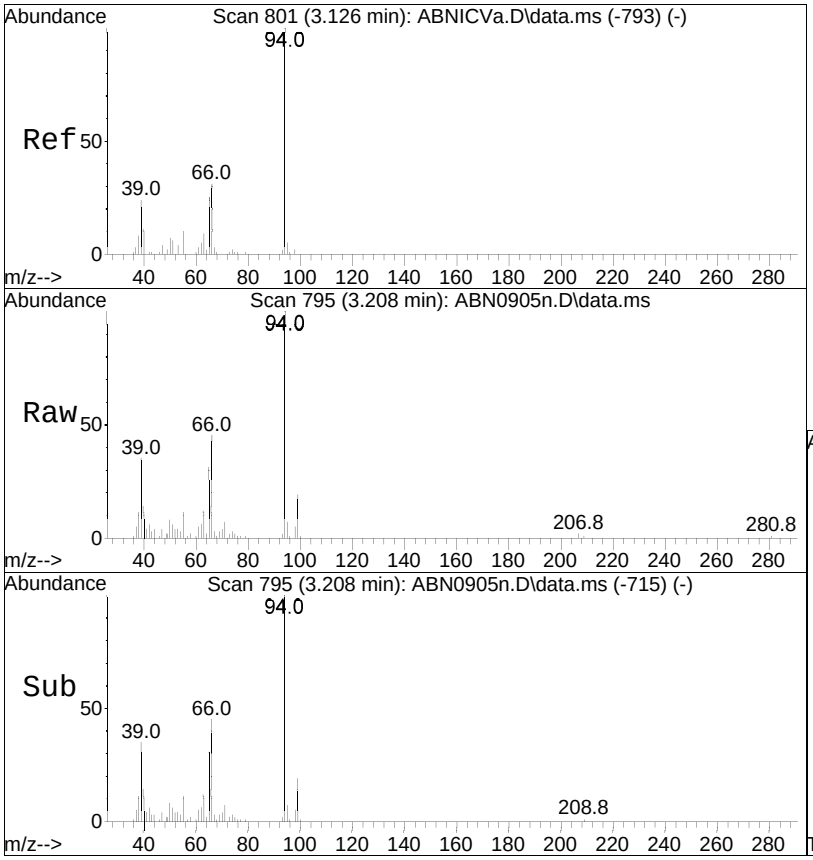


#6
2-Chlorophenol
Concen: 4.47 ug/ml
RT: 3.242 min Scan# 806
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:128 Resp: 19239

Ion	Ratio	Lower	Upper
128	100		
64	46.9	45.1	67.7
130	32.5	26.2	39.4

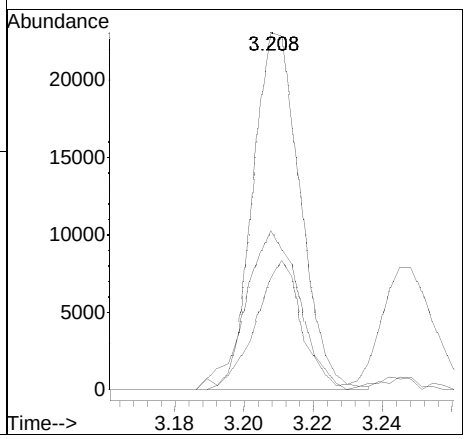


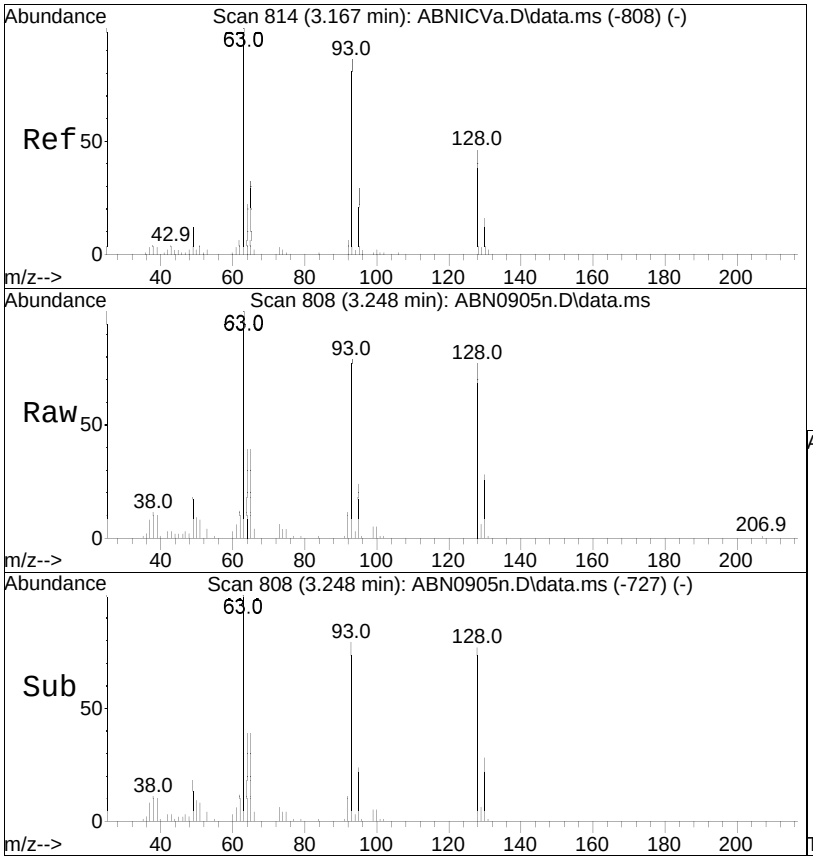


#8
Phenol
Concen: 3.94 ug/ml
RT: 3.208 min Scan# 795
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 94 Resp: 21807

Ion	Ratio	Lower	Upper
94	100		
65	35.5	26.0	39.0
66	50.6	33.8	50.8

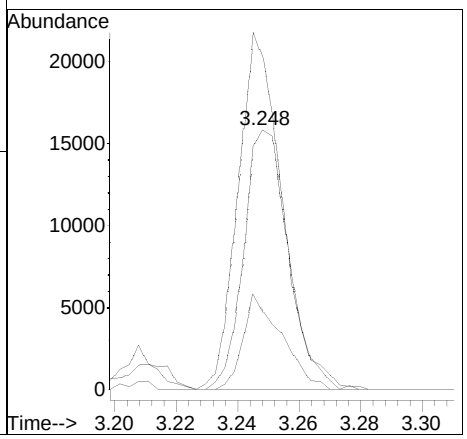


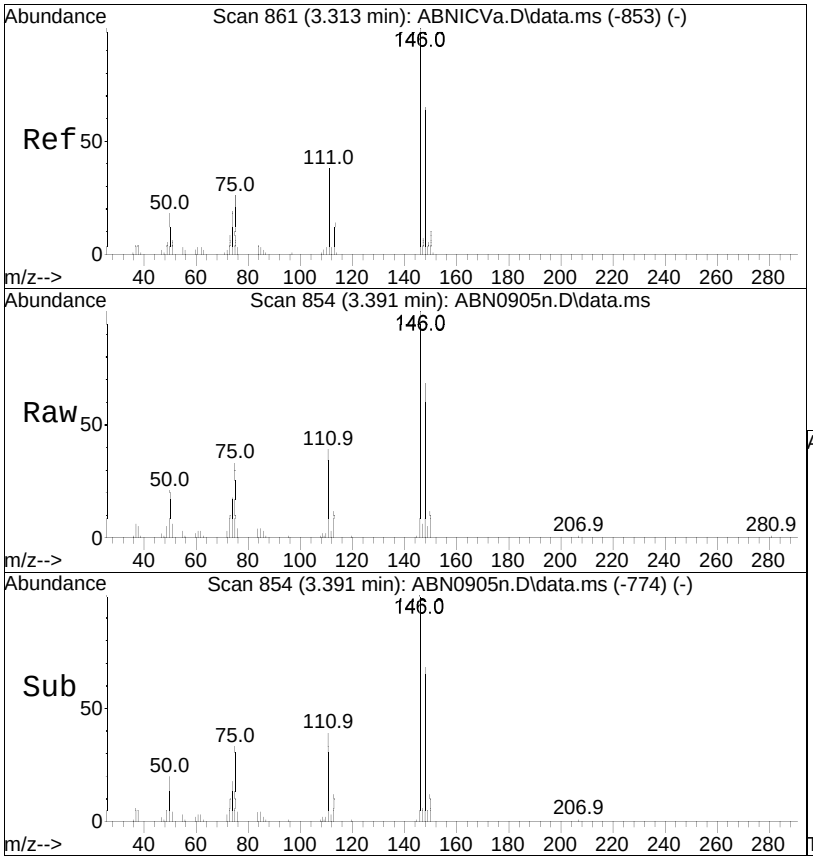


#9
Bis(2-chloroethyl)ether
Concen: 4.15 ug/ml
RT: 3.248 min Scan# 808
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 93 Resp: 15918

Ion	Ratio	Lower	Upper
93	100		
63	135.7	74.6	111.8#
95	32.1	25.9	38.9

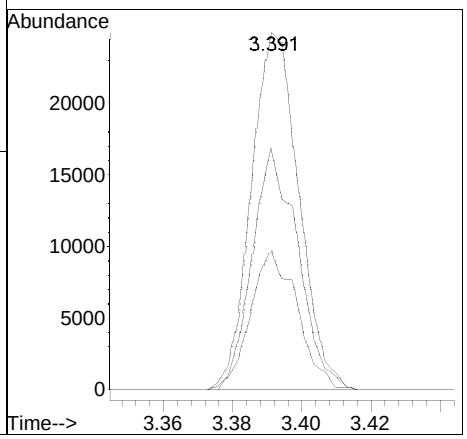


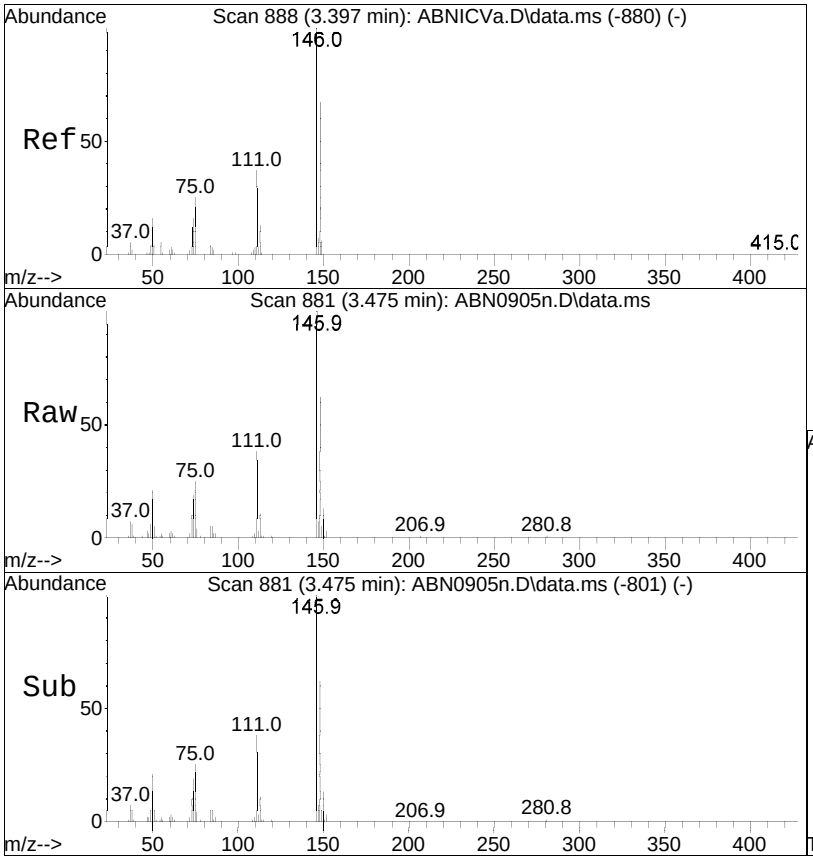


#10
1,3-Dichlorobenzene
Concen: 4.59 ug/ml
RT: 3.391 min Scan# 854
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:146 Resp: 23700

Ion	Ratio	Lower	Upper
146	100		
111	38.6	34.3	51.5
148	64.8	50.8	76.2

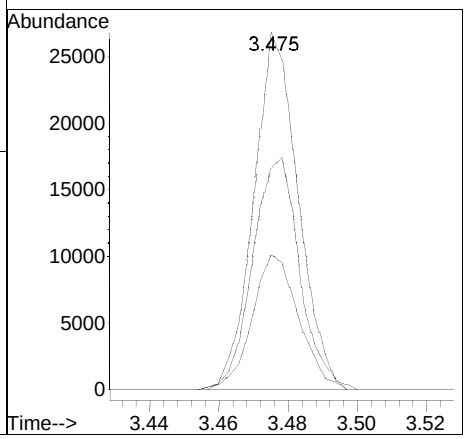


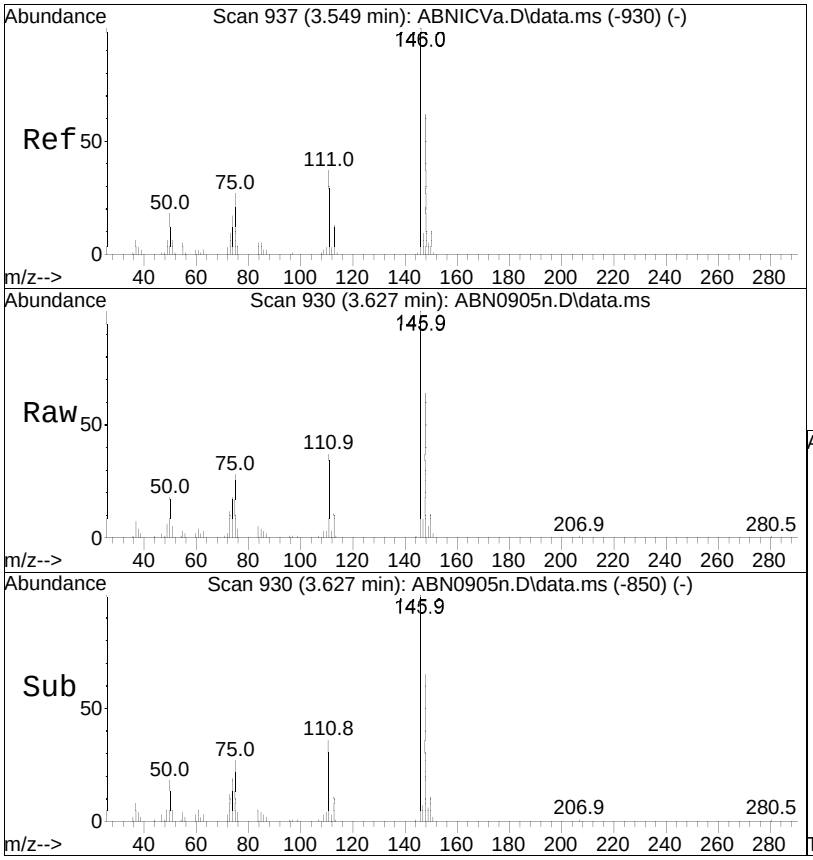


#11
1,4-Dichlorobenzene
Concen: 4.57 ug/ml
RT: 3.475 min Scan# 881
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:146 Resp: 23911

Ion	Ratio	Lower	Upper
146	100		
148	68.1	50.7	76.1
111	39.8	33.4	50.0

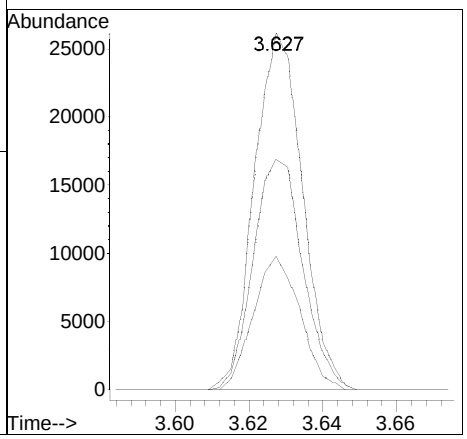


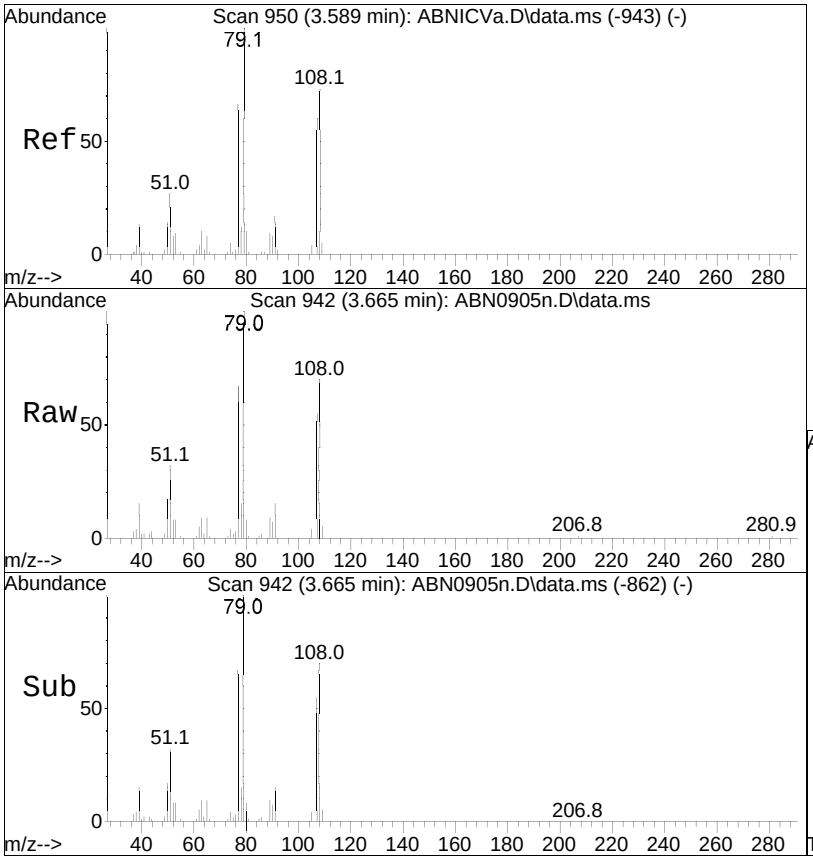


#12
1,2-Dichlorobenzene
Concen: 4.67 ug/ml
RT: 3.627 min Scan# 930
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:146 Resp: 23637

Ion	Ratio	Lower	Upper
146	100		
111	36.5	34.6	52.0
148	66.6	50.2	75.4

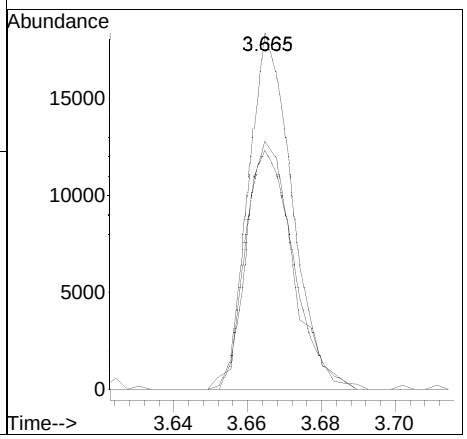


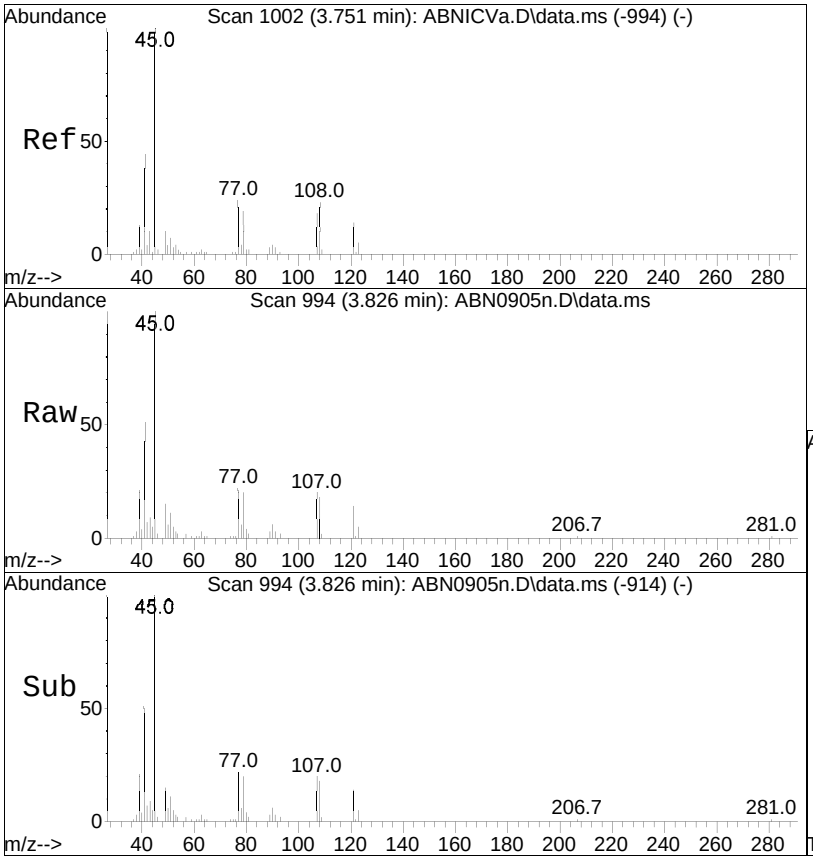


#13
Benzyl alcohol
Concen: 4.49 ug/ml
RT: 3.665 min Scan# 942
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 79 Resp: 15140

Ion	Ratio	Lower	Upper
79	100		
77	72.8	54.9	82.3
108	74.9	63.1	94.7

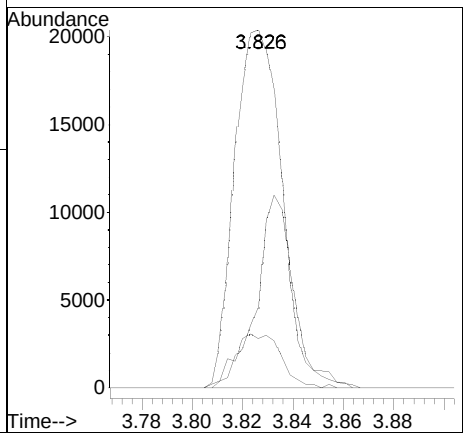


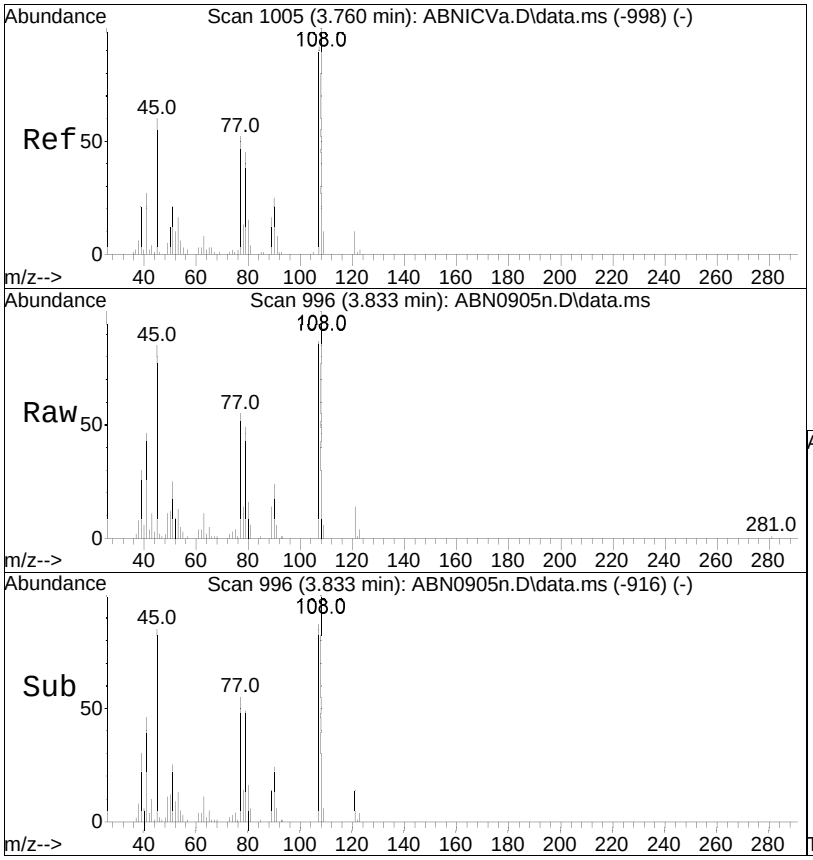


#14
Bis(2-chloroisopropyl)ether
Concen: 4.14 ug/ml
RT: 3.826 min Scan# 994
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 45 Resp: 26618

Ion	Ratio	Lower	Upper
45	100		
121	15.0	9.8	14.6#
77	41.6	6.1	9.1#

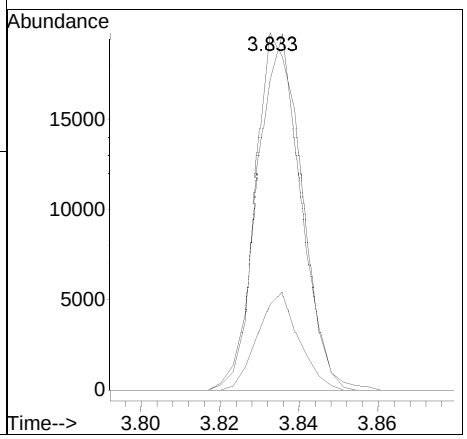


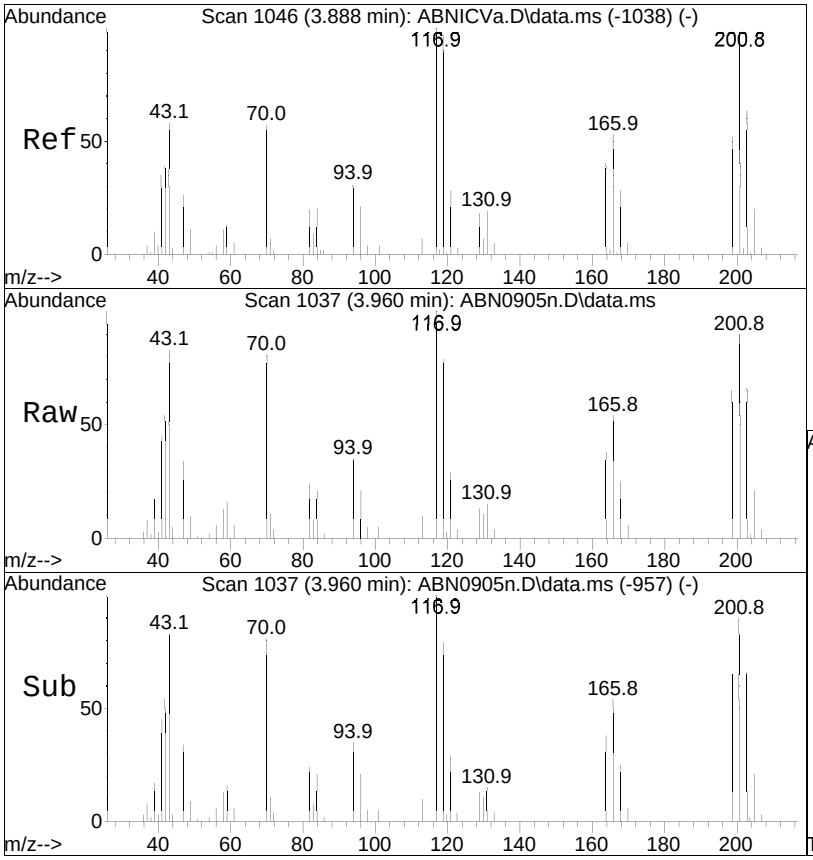


#15
2-Methylphenol
Concen: 4.32 ug/ml
RT: 3.833 min Scan# 996
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:108 Resp: 15798

Ion	Ratio	Lower	Upper
108	100		
107	96.5	70.7	106.1
90	24.6	18.7	28.1

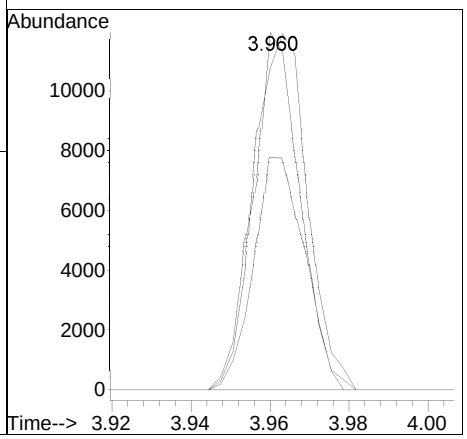


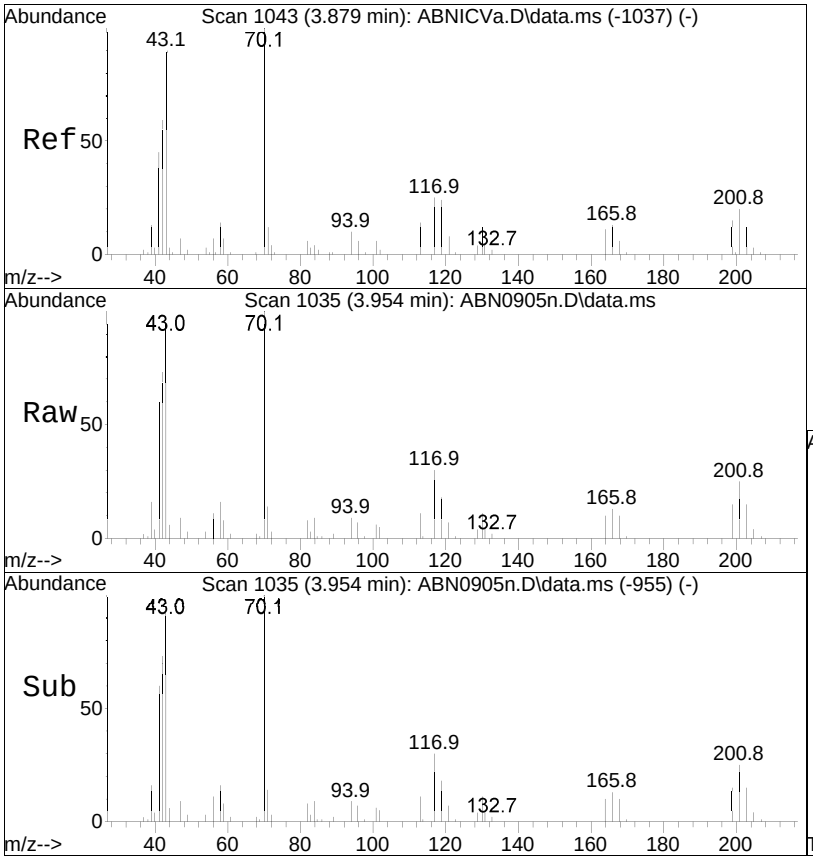


#16
Hexachloroethane
Concen: 5.01 ug/ml
RT: 3.960 min Scan# 1037
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:117 Resp: 9929

Ion	Ratio	Lower	Upper
117	100		
201	112.4	58.6	87.8#
199	70.4	36.9	55.3#

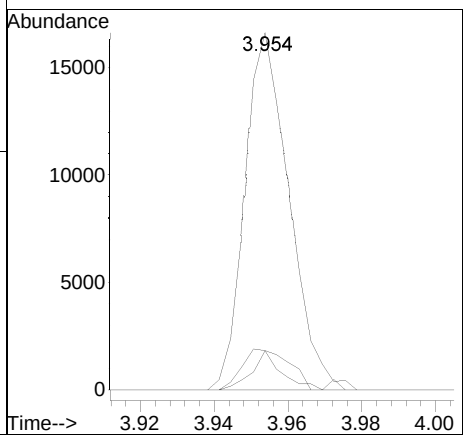


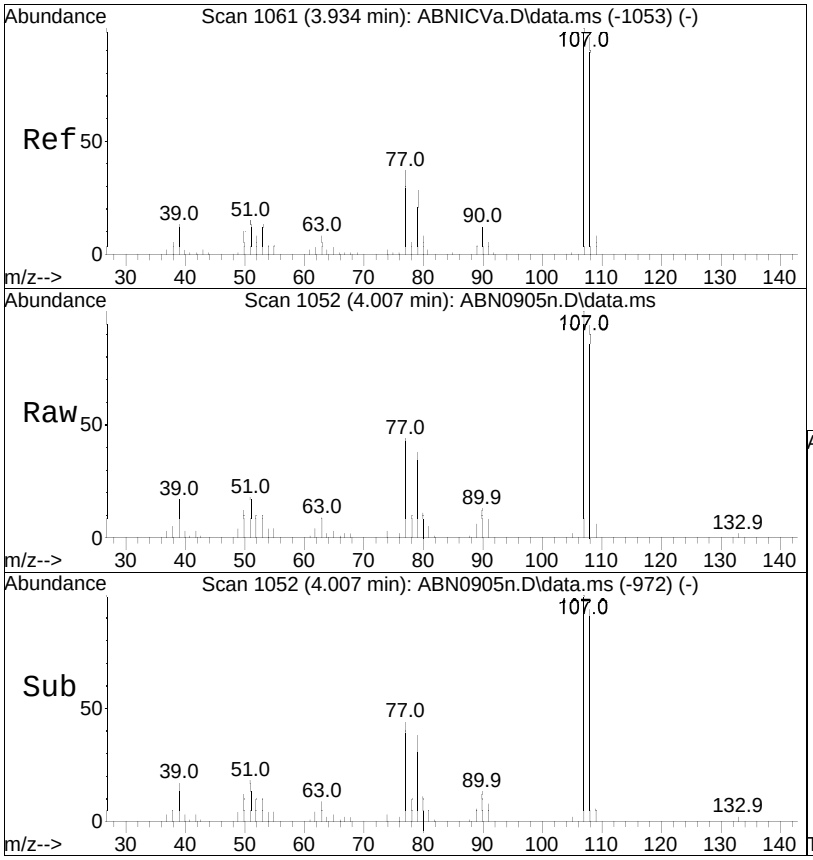


#17
n-Nitrosodi-n-propylamine
Concen: 4.70 ug/ml
RT: 3.954 min Scan# 1035
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 70 Resp: 13838

Ion	Ratio	Lower	Upper
70	100		
130	12.2	18.2	27.4#
101	7.3	7.8	11.8#

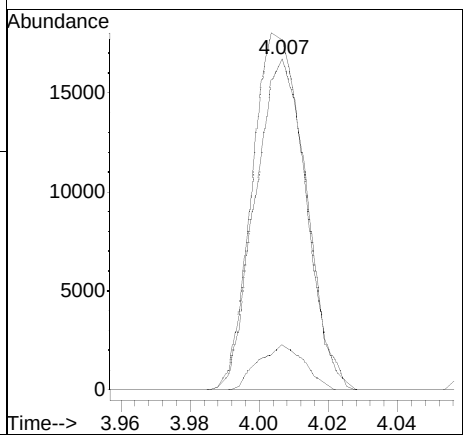


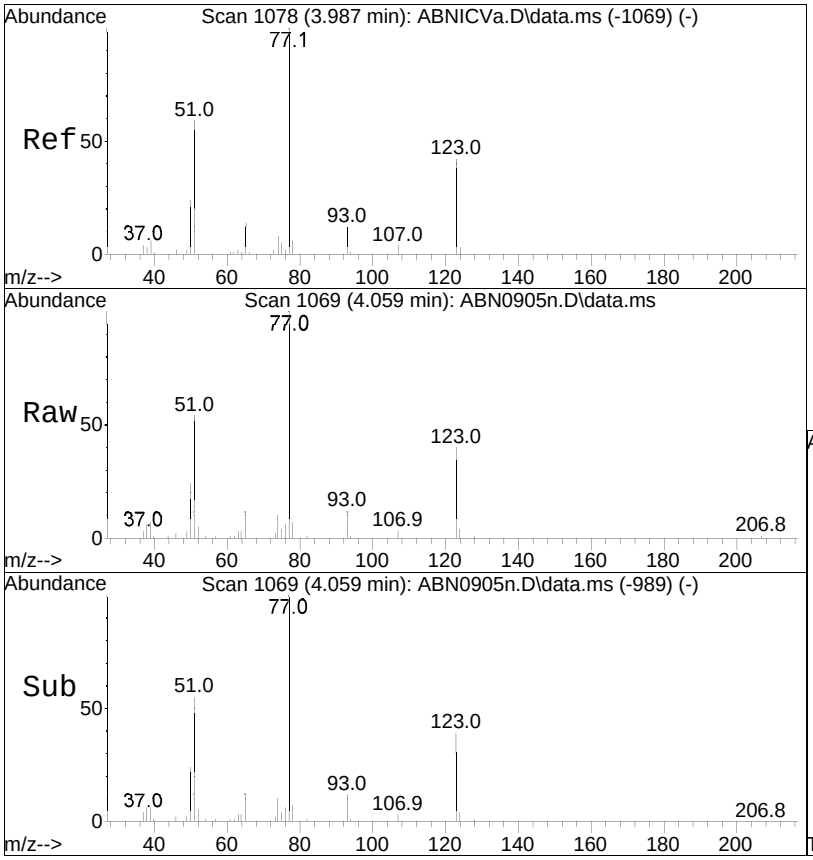


#18
3-Methylphenol/4-Methylphenol
Concen: 4.56 ug/ml
RT: 4.007 min Scan# 1052
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:108 Resp: 17233

Ion	Ratio	Lower	Upper
108	100		
107	108.7	88.6	132.8
90	12.3	8.8	13.2

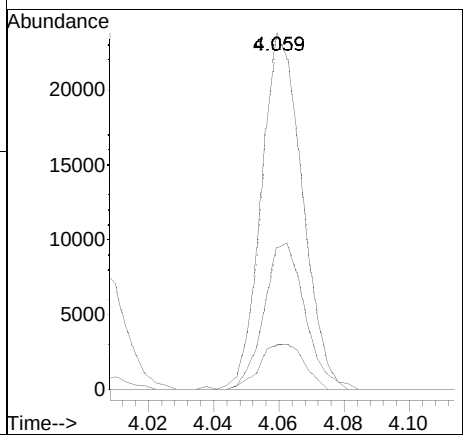


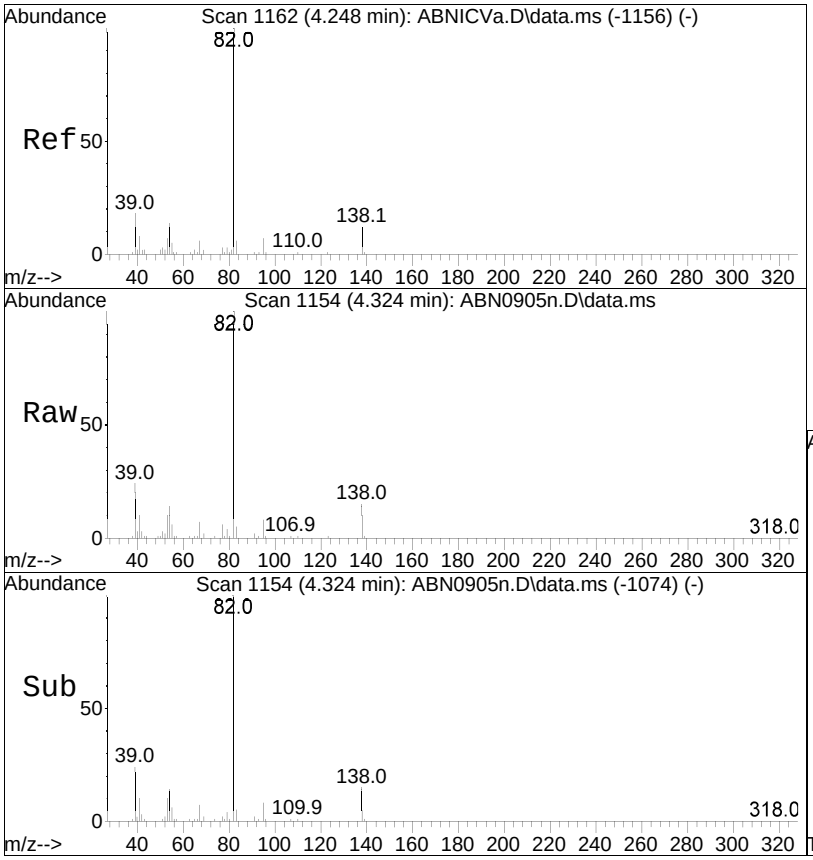


#20
Nitrobenzene
Concen: 4.67 ug/ml
RT: 4.059 min Scan# 1069
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 77 Resp: 20752

Ion	Ratio	Lower	Upper
77	100		
123	41.1	36.3	54.5
65	14.0	11.6	17.4

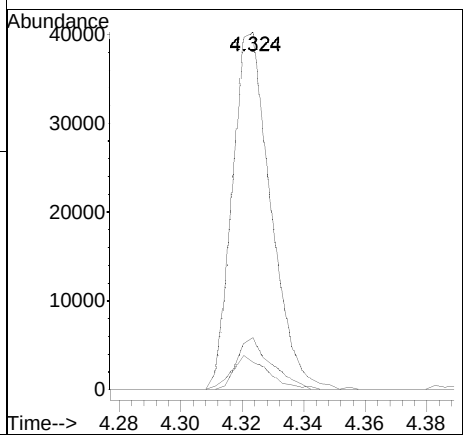


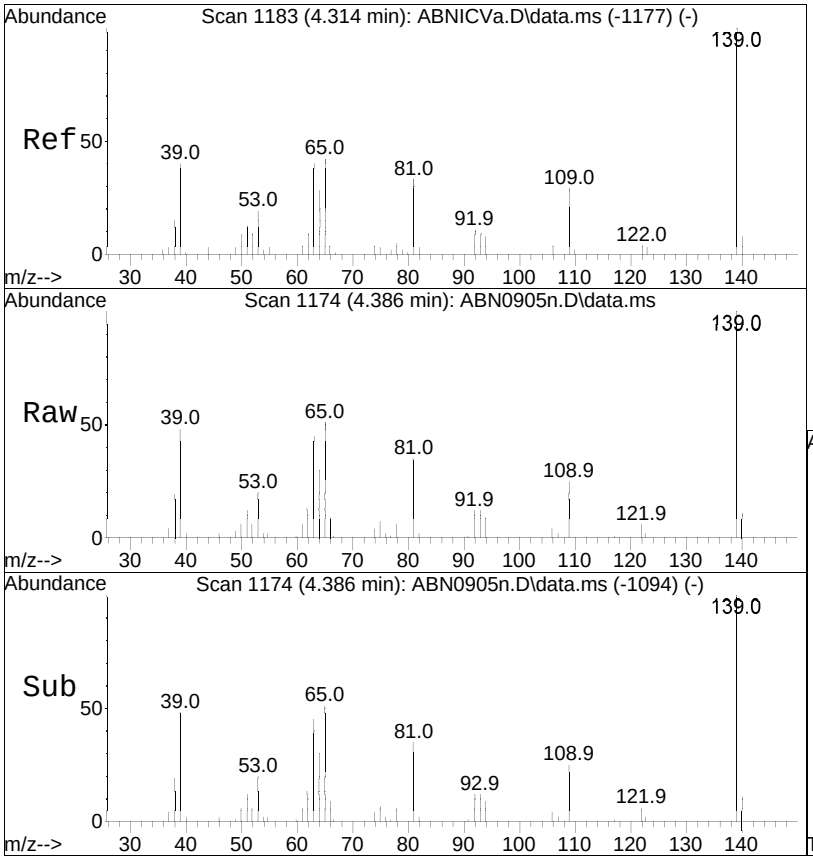


#21
Isophorone
Concen: 4.40 ug/ml
RT: 4.324 min Scan# 1154
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 82 Resp: 34601

Ion	Ratio	Lower	Upper
82	100		
138	13.5	14.7	22.1#
95	8.4	5.2	7.8#

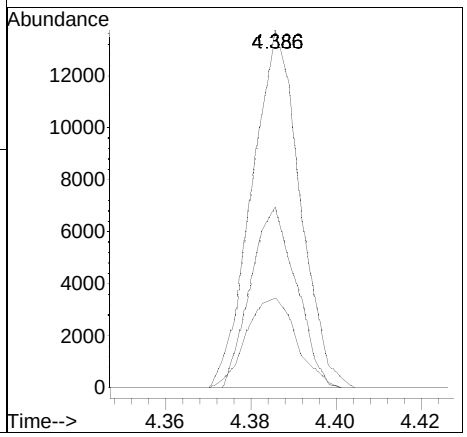


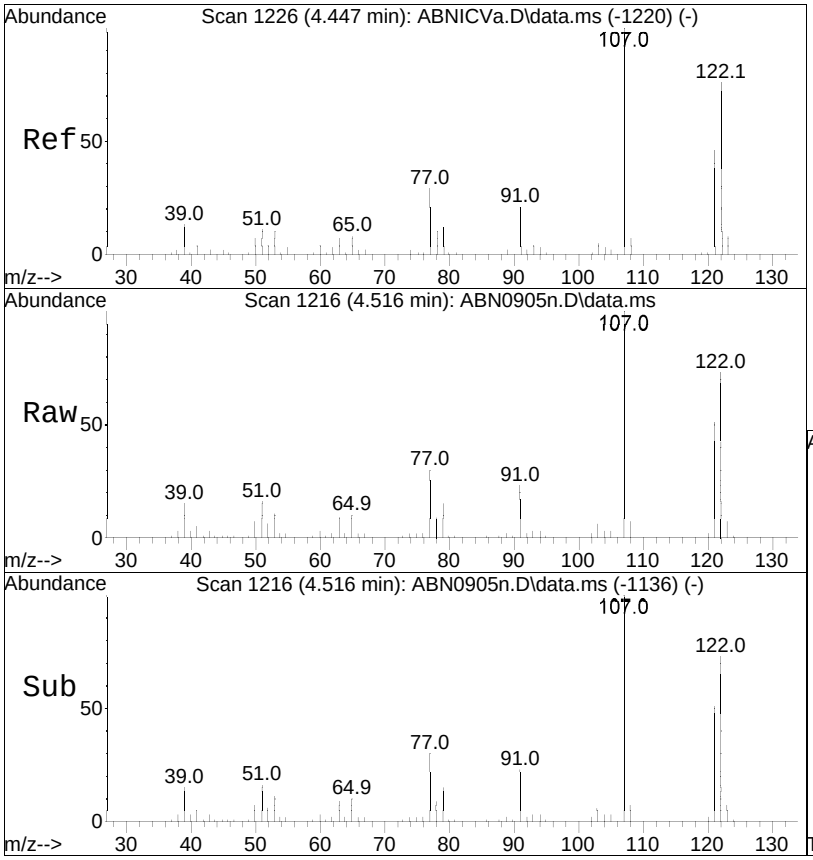


#22
2-Nitrophenol
Concen: 5.19 ug/ml
RT: 4.386 min Scan# 1174
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:139 Resp: 10769

Ion	Ratio	Lower	Upper
139	100		
109	26.4	19.4	29.0
65	48.0	46.1	69.1

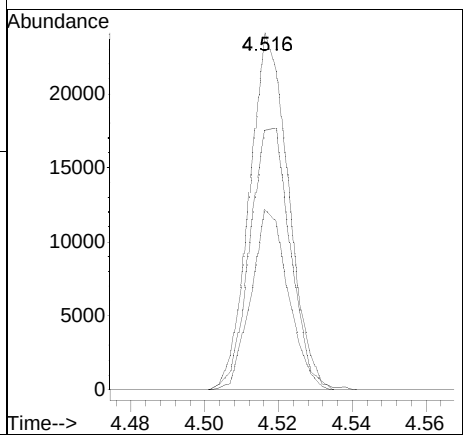


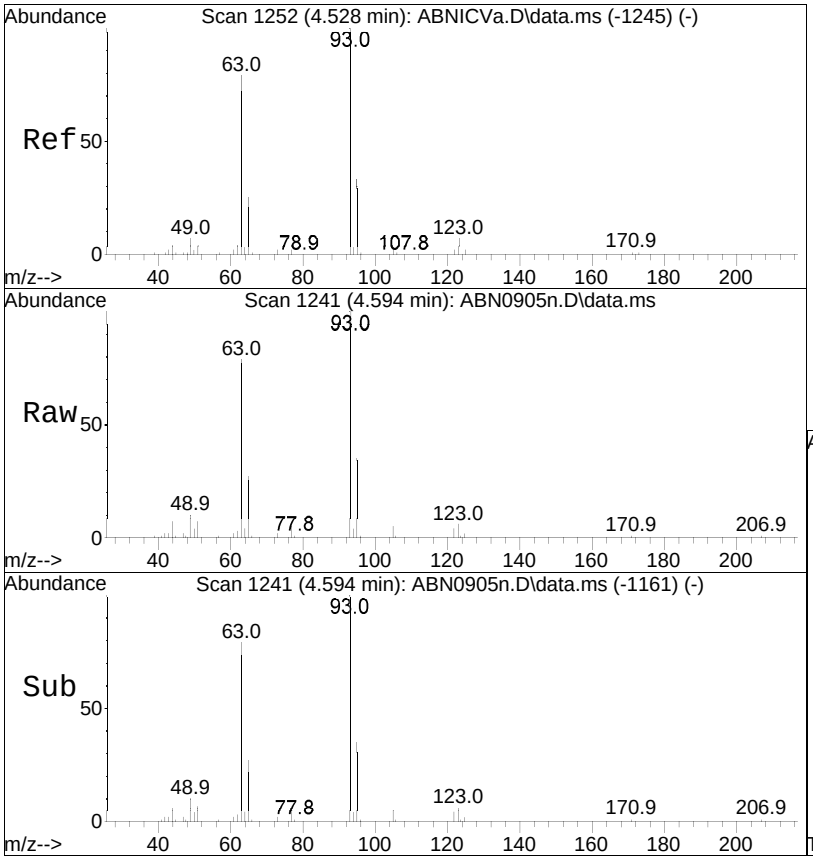


#23
2,4-Dimethylphenol
Concen: 4.43 ug/ml
RT: 4.516 min Scan# 1216
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:107 Resp: 17703

Ion	Ratio	Lower	Upper
107	100		
121	48.2	40.0	60.0
122	75.5	70.2	105.4

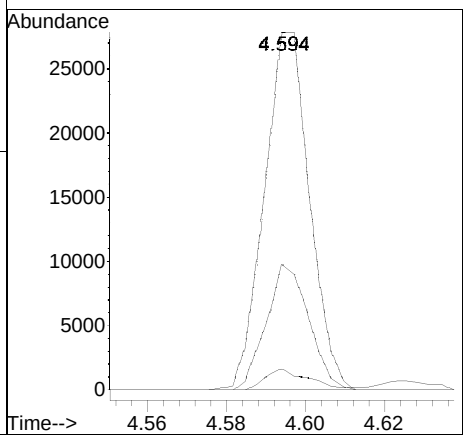


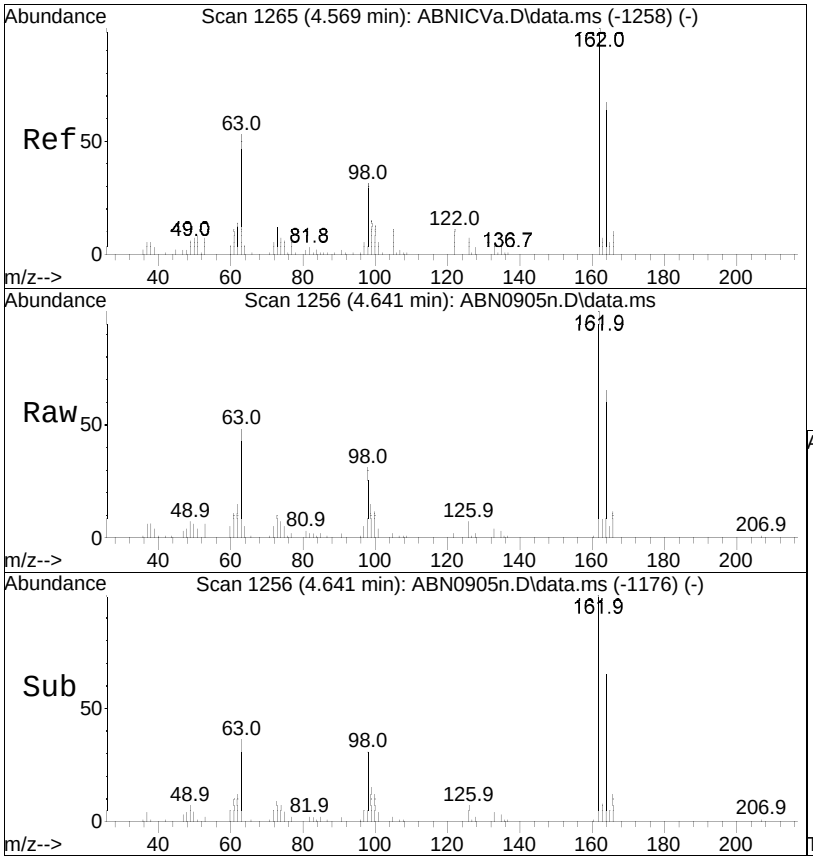


#24
Bis(2-chloroethoxy)methane
Concen: 4.30 ug/ml
RT: 4.594 min Scan# 1241
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 93 Resp: 21920

Ion	Ratio	Lower	Upper
93	100		
95	33.2	25.8	38.8
123	5.7	10.1	15.1#

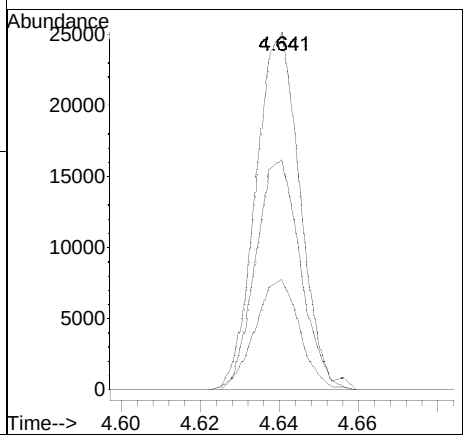


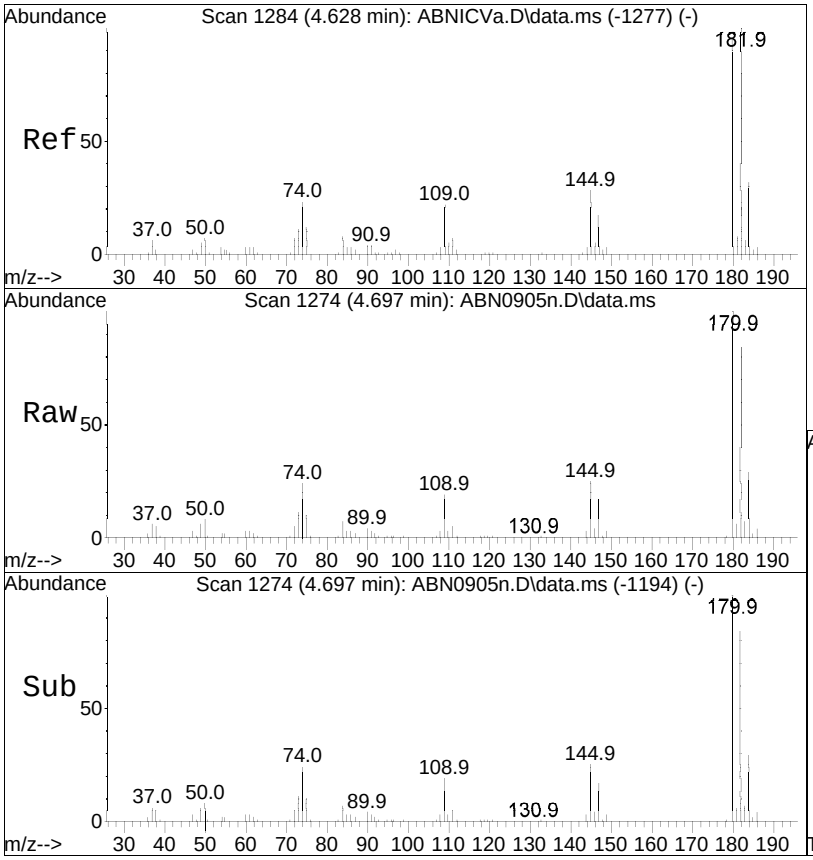


#25
2,4-Dichlorophenol
Concen: 5.15 ug/ml
RT: 4.641 min Scan# 1256
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:162 Resp: 19364

Ion	Ratio	Lower	Upper
162	100		
164	65.4	51.0	76.4
98	31.2	32.2	48.2#

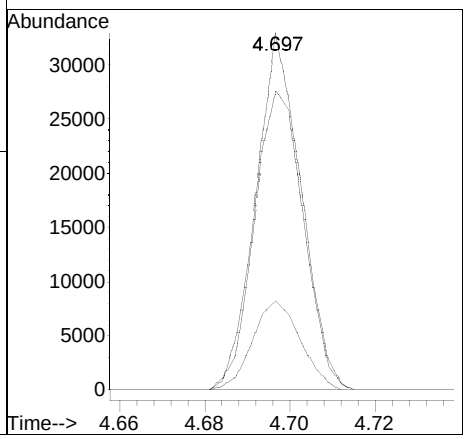


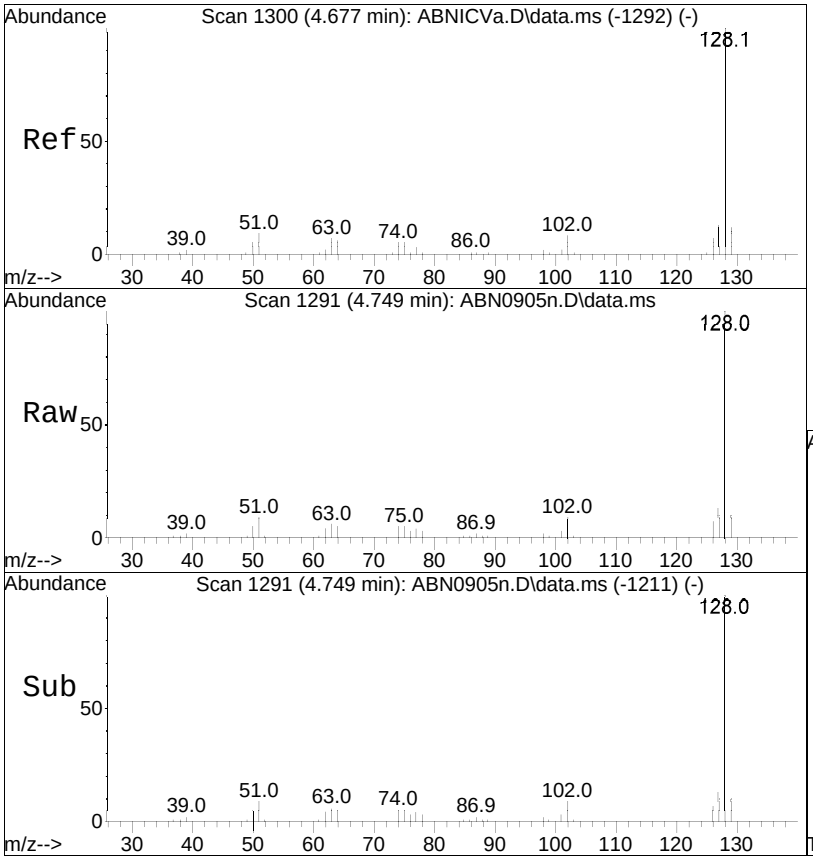


#26
1,2,4-Trichlorobenzene
Concen: 5.29 ug/ml
RT: 4.697 min Scan# 1274
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:180 Resp: 24317

Ion	Ratio	Lower	Upper
180	100		
182	90.7	76.0	114.0
145	26.3	25.7	38.5

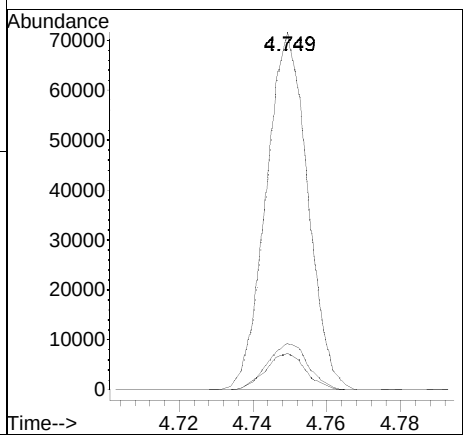


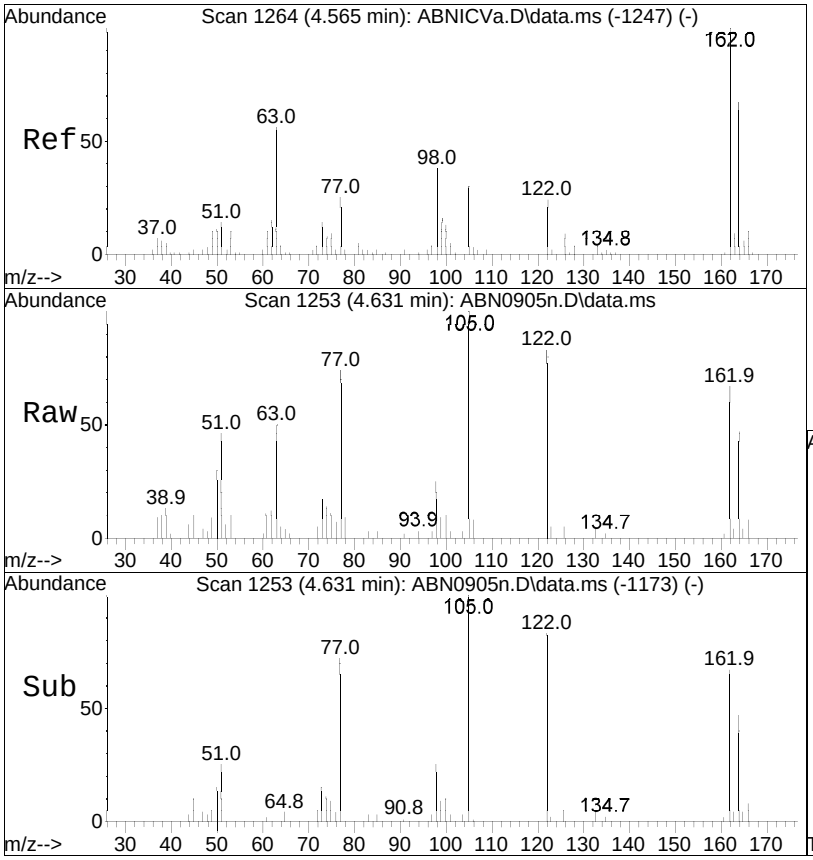


#35
Naphthalene
Concen: 4.60 ug/ml
RT: 4.749 min Scan# 1291
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:128 Resp: 55295

Ion	Ratio	Lower	Upper
128	100		
129	10.1	8.7	13.1
127	13.0	10.3	15.5

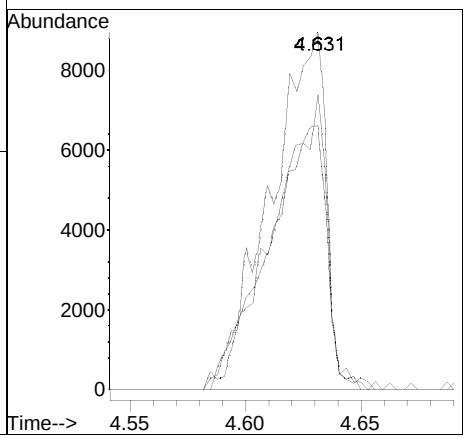


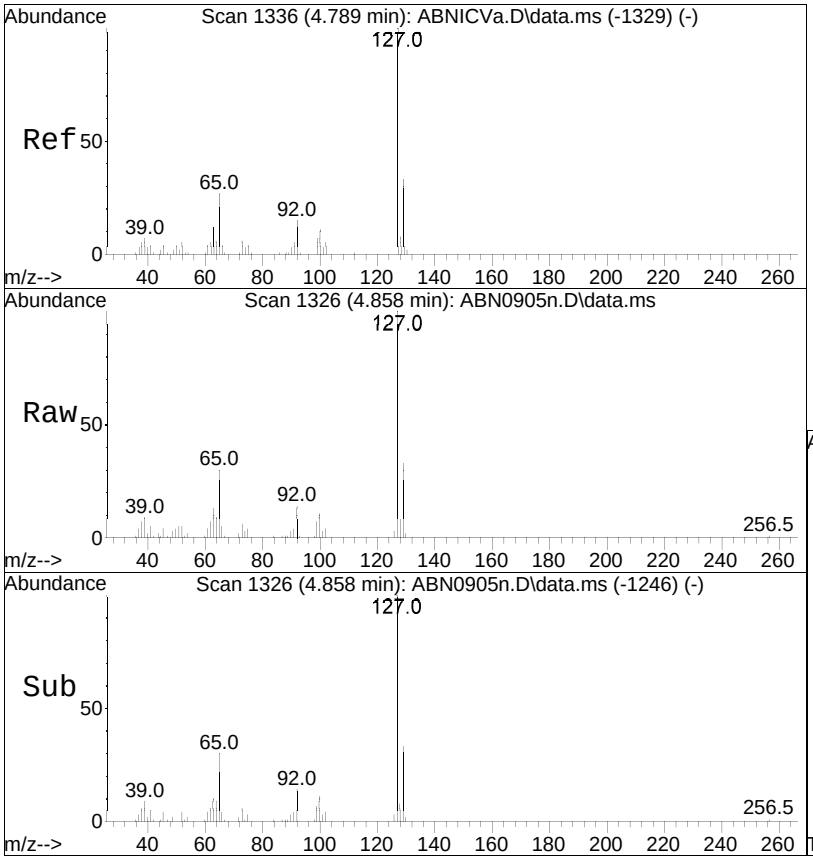


#36
Benzoic Acid
Concen: 7.29 ug/ml
RT: 4.631 min Scan# 1253
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:105 Resp: 14997

Ion	Ratio	Lower	Upper
105	100		
122	78.2	59.9	89.9
77	78.5	60.1	90.1

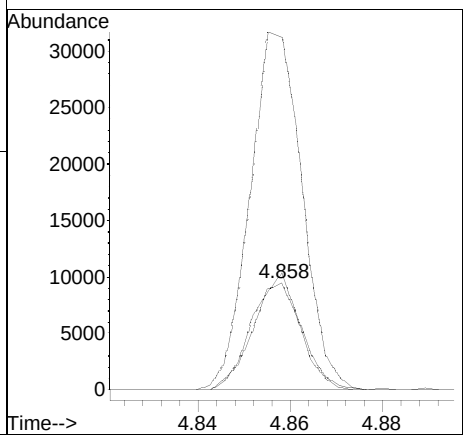


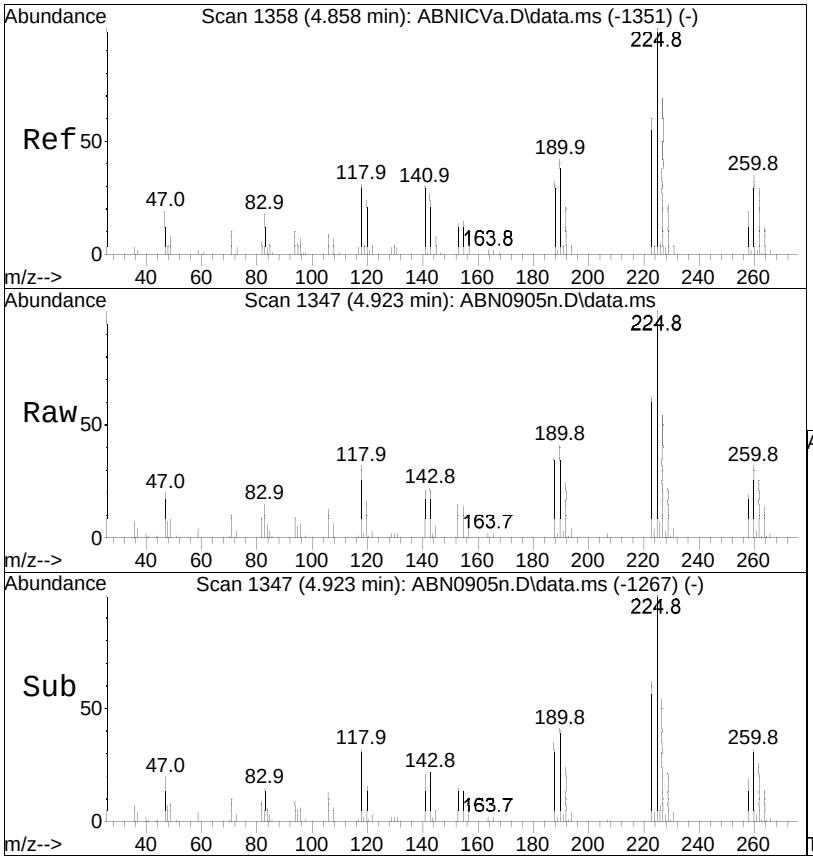


#37
4-Chloroaniline
Concen: 4.94 ug/ml
RT: 4.858 min Scan# 1326
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 65 Resp: 7010

Ion	Ratio	Lower	Upper
65	100		
127	351.7	237.6	356.4
129	108.1	76.3	114.5

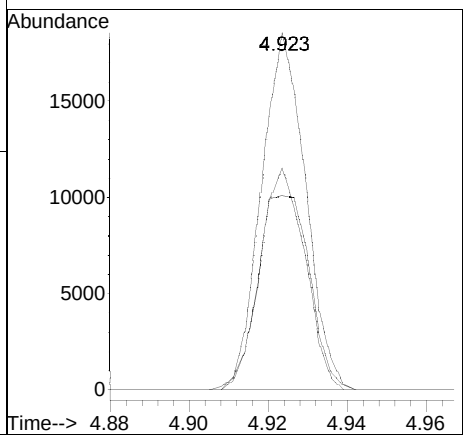


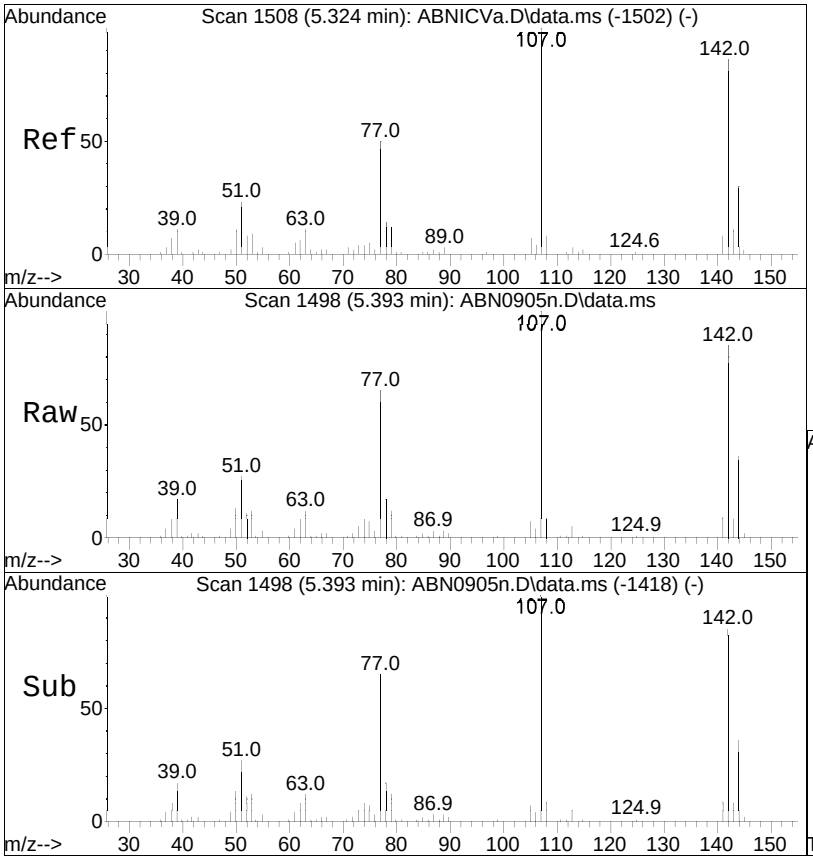


#38
Hexachlorobutadiene
Concen: 5.89 ug/ml
RT: 4.923 min Scan# 1347
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:225 Resp: 14404

Ion	Ratio	Lower	Upper
225	100		
223	63.0	50.3	75.5
227	63.8	52.2	78.2

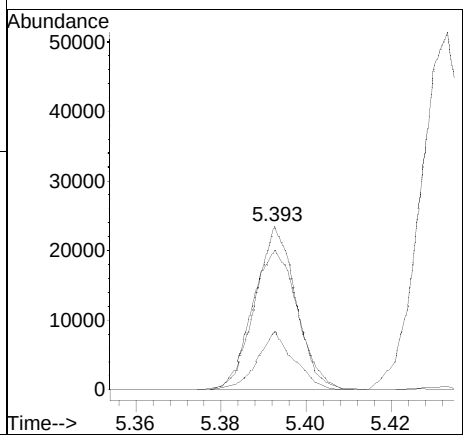


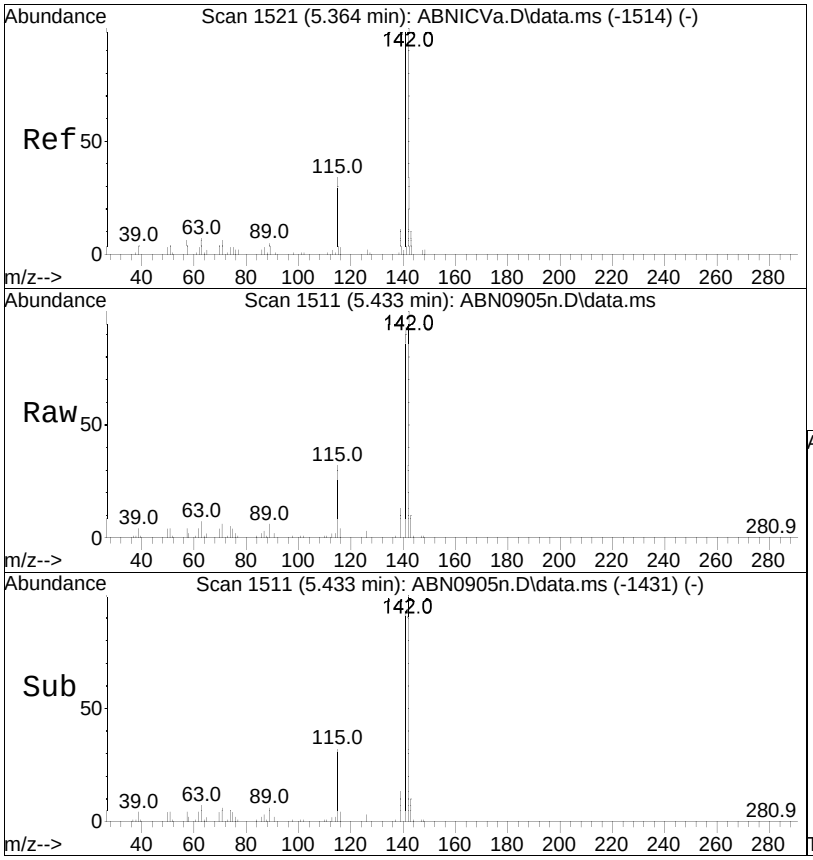


#39
p-Chloro-m-cresol
Concen: 5.10 ug/ml
RT: 5.393 min Scan# 1498
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:107 Resp: 16001

Ion	Ratio	Lower	Upper
107	100		
144	31.3	20.9	31.3#
142	92.0	66.1	99.1

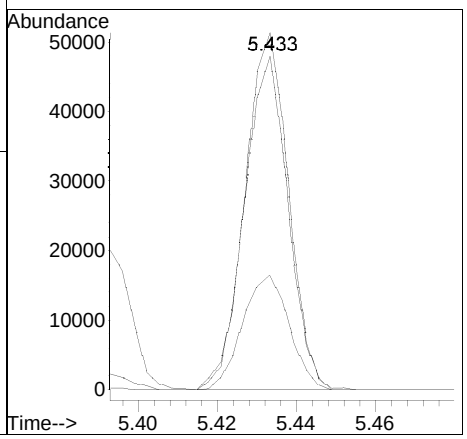


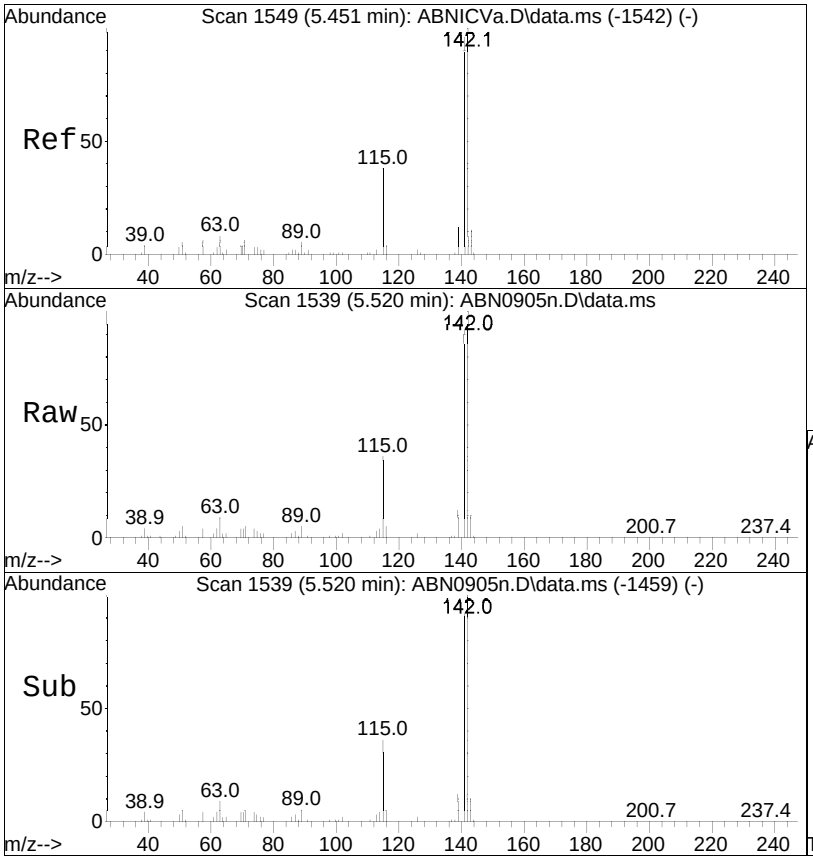


#40
2-Methylnaphthalene
Concen: 5.04 ug/ml
RT: 5.433 min Scan# 1511
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:142 Resp: 39406

Ion	Ratio	Lower	Upper
142	100		
141	92.9	69.6	104.4
115	34.3	26.6	40.0

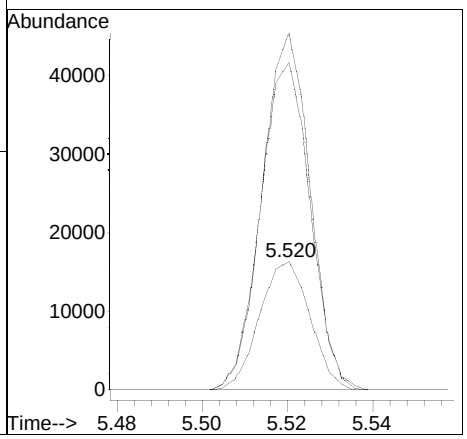


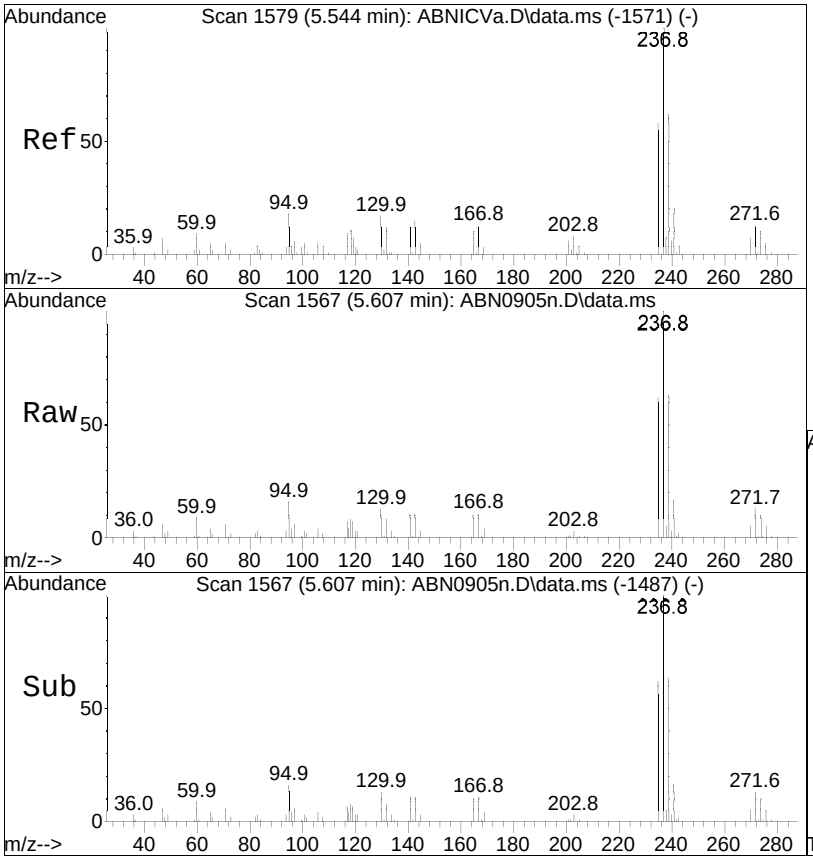


#41
1-Methylnaphthalene
Concen: 4.98 ug/ml
RT: 5.520 min Scan# 1539
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:115 Resp: 13468

Ion	Ratio	Lower	Upper
115	100		
141	250.1	207.8	311.6
142	263.6	226.8	340.2

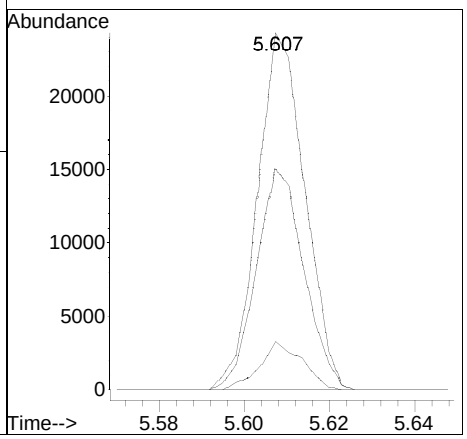


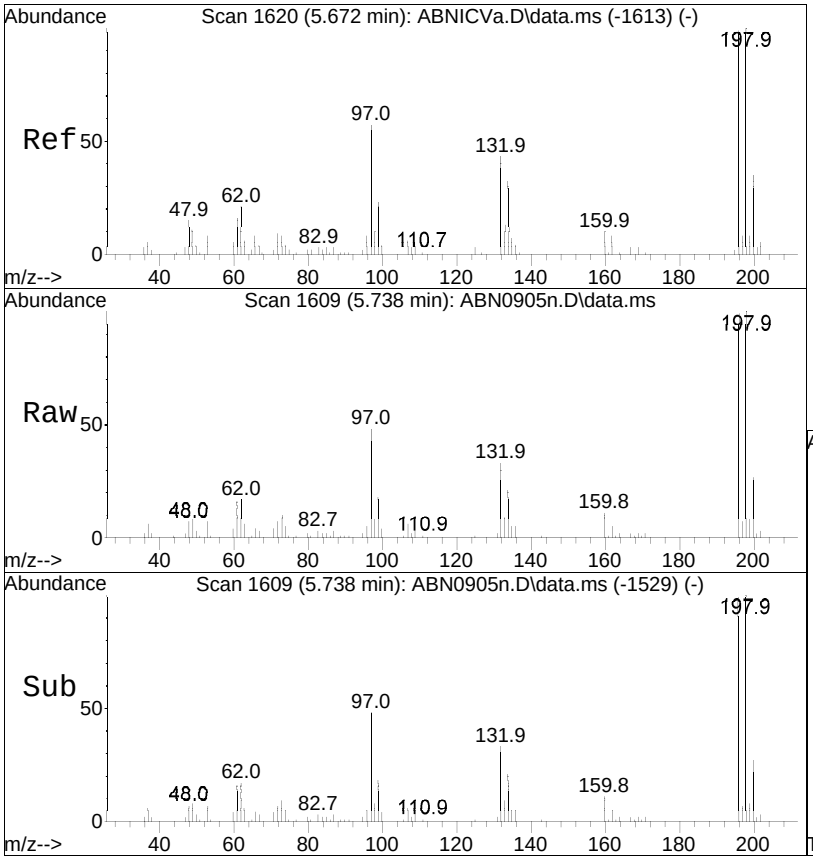


#42
Hexachlorocyclopentadiene
Concen: 6.33 ug/ml
RT: 5.607 min Scan# 1567
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:237 Resp: 18731

Ion	Ratio	Lower	Upper
237	100		
235	62.4	49.7	74.5
272	12.3	9.8	14.6

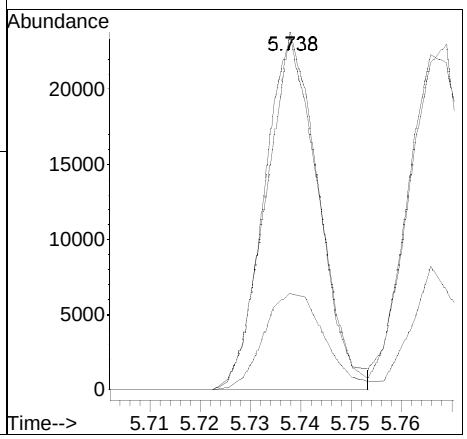


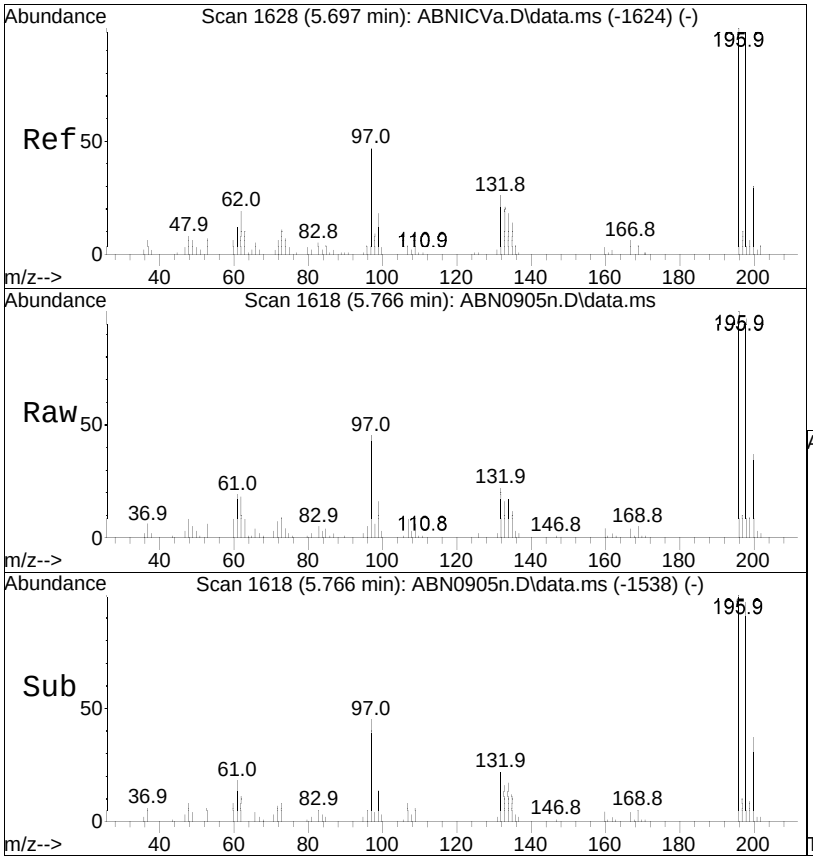


#43
2,4,6-Trichlorophenol
Concen: 6.09 ug/ml
RT: 5.738 min Scan# 1609
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:196 Resp: 17573

Ion	Ratio	Lower	Upper
196	100		
198	98.2	77.5	116.3
200	30.7	23.8	35.6

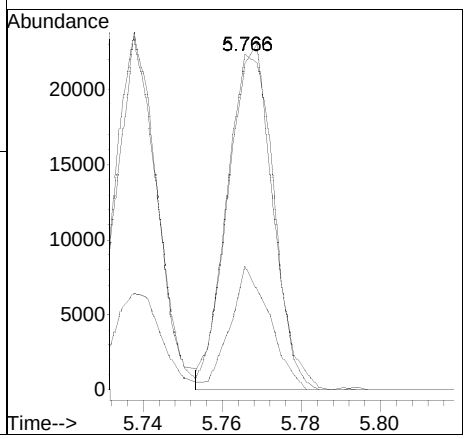


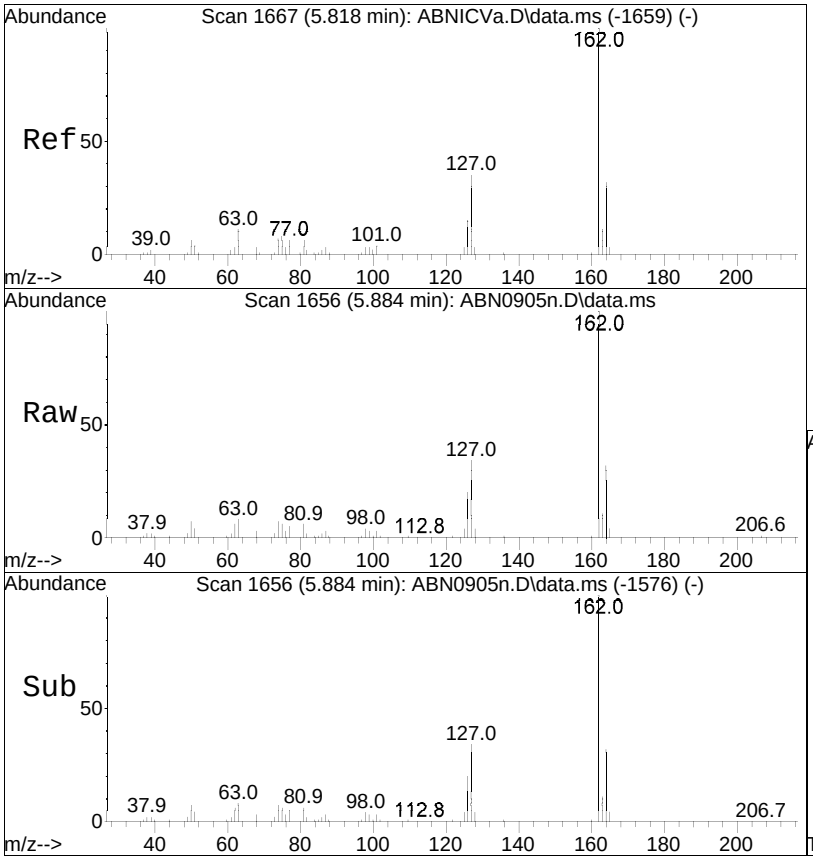


#44
2,4,5-Trichlorophenol
Concen: 6.42 ug/ml
RT: 5.766 min Scan# 1618
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:196 Resp: 18549

Ion	Ratio	Lower	Upper
196	100		
200	30.9	25.4	38.0
198	96.0	78.0	117.0

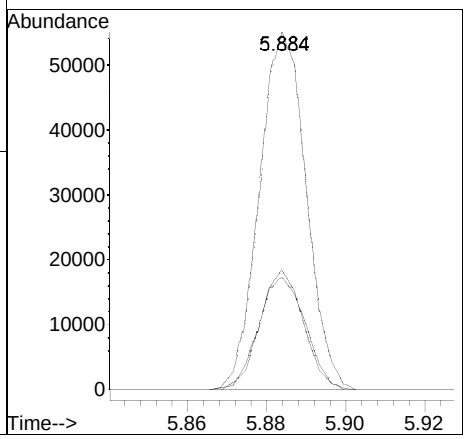


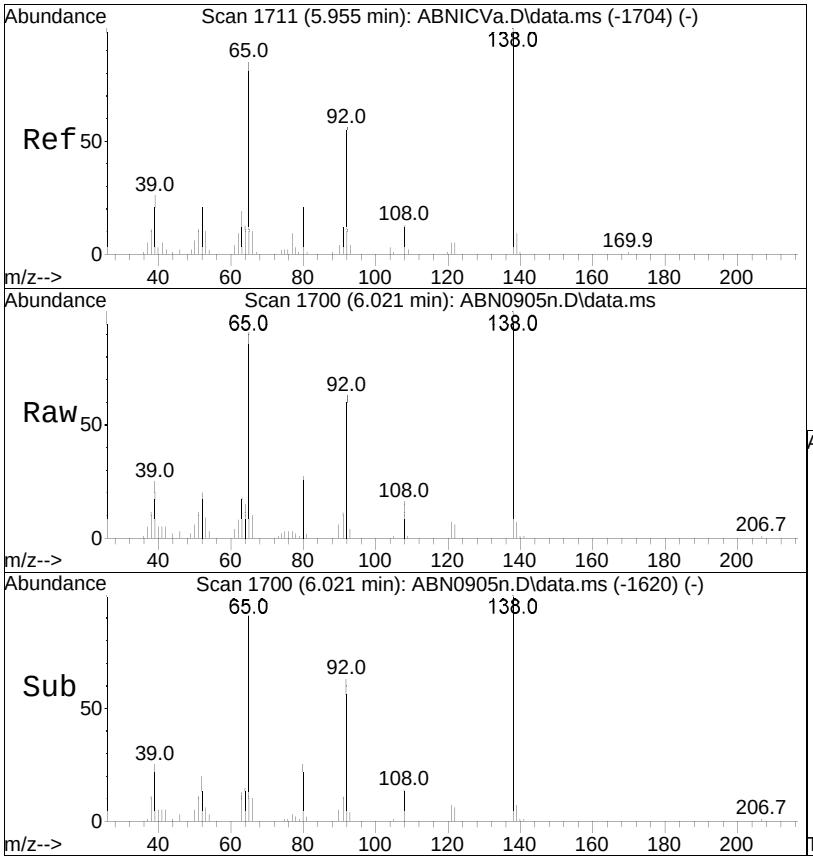


#46
2-Chloronaphthalene
Concen: 5.24 ug/ml
RT: 5.884 min Scan# 1656
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:162 Resp: 44941

Ion	Ratio	Lower	Upper
162	100		
127	31.1	32.2	48.4#
164	31.6	25.7	38.5

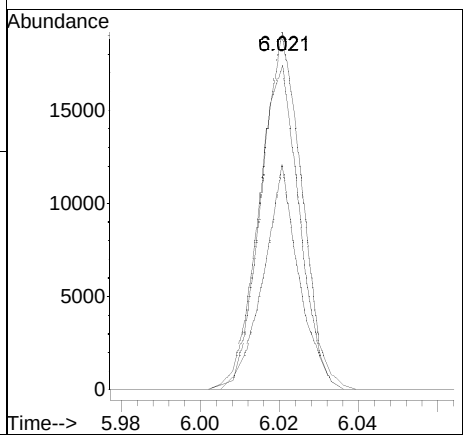


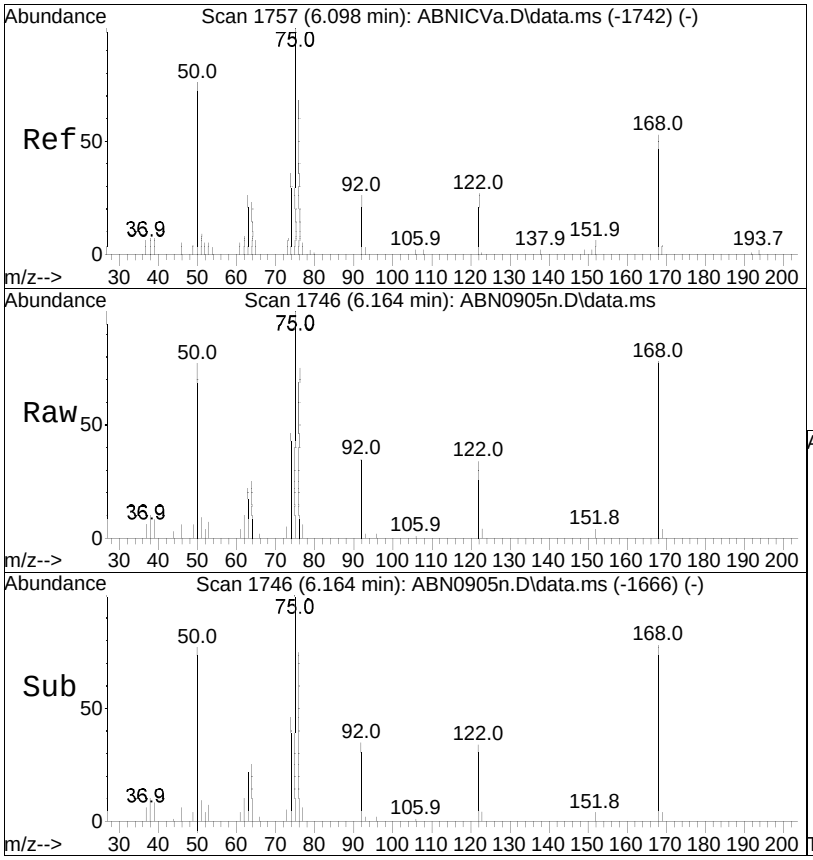


#47
2-Nitroaniline
Concen: 5.45 ug/ml
RT: 6.021 min Scan# 1700
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:138 Resp: 13510

Ion	Ratio	Lower	Upper
138	100		
92	55.7	53.5	80.3
65	91.9	86.3	129.5

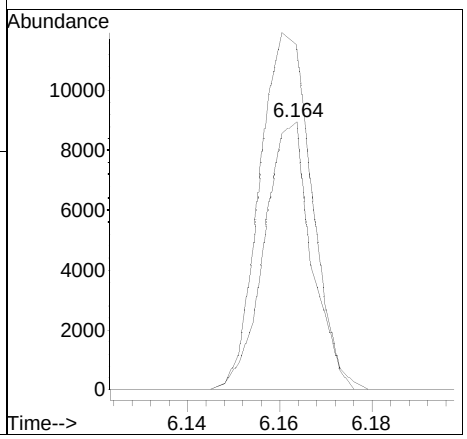


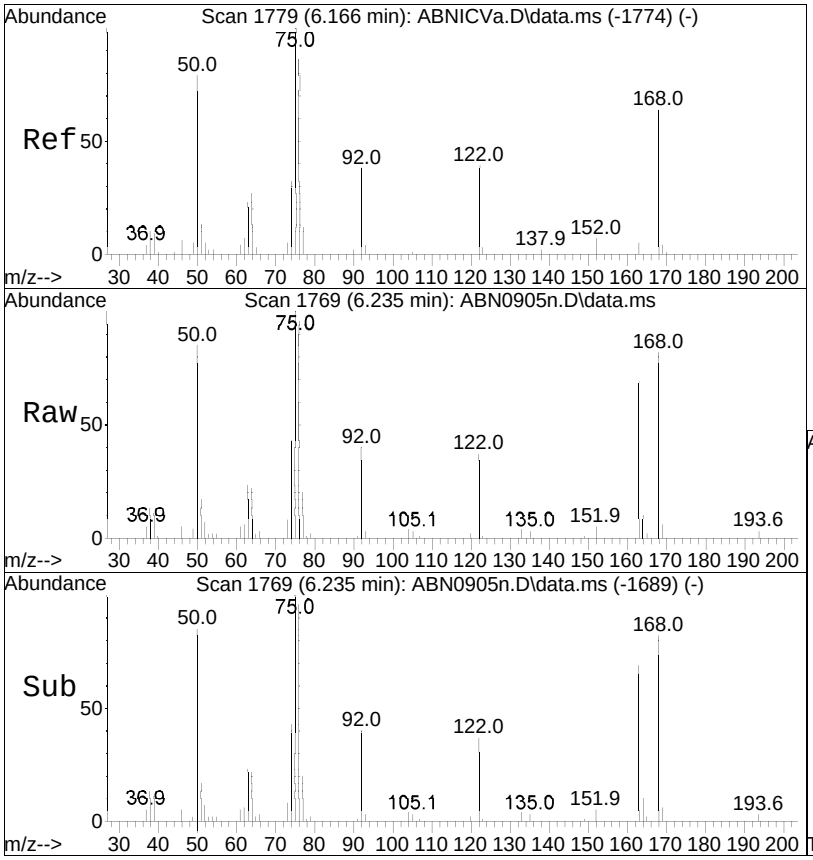


#48
1,4-Dinitrobenzene
Concen: 5.49 ug/ml
RT: 6.164 min Scan# 1746
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:168 Resp: 6353

Ion	Ratio	Lower	Upper
168	100		
75	147.0	121.8	182.8

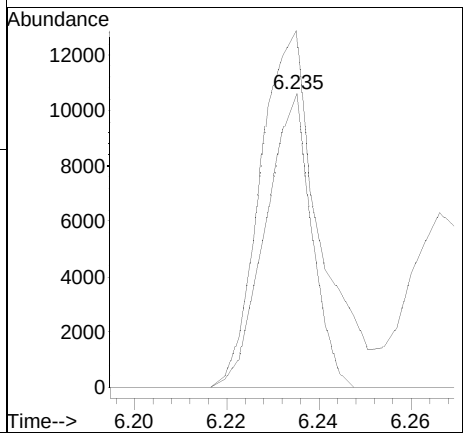


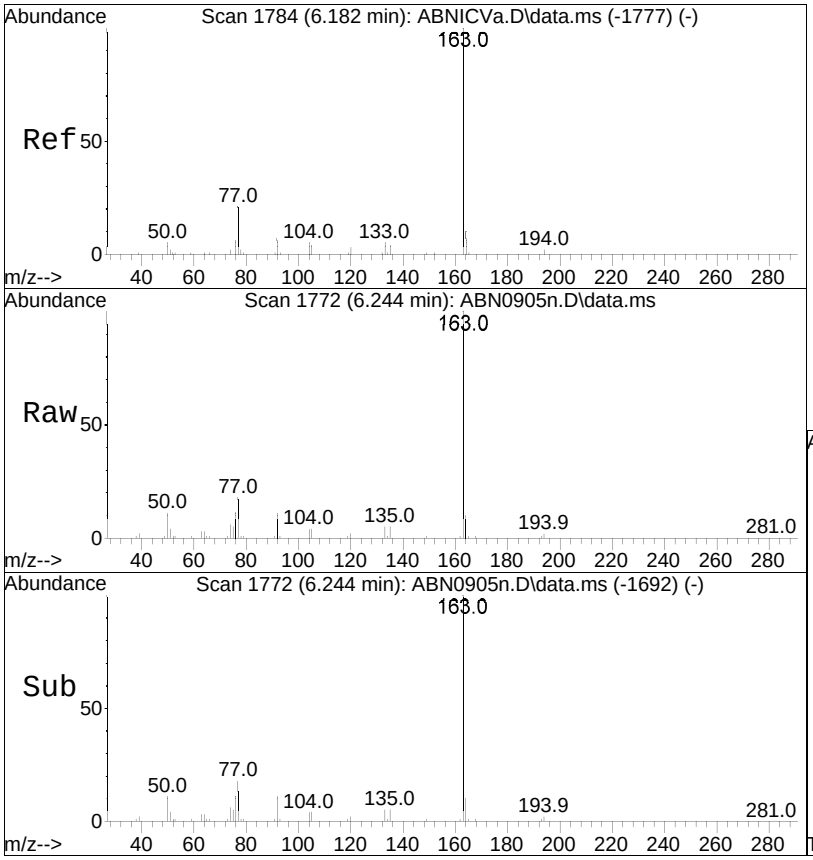


#49
1,3-Dinitrobenzene
Concen: 5.49 ug/ml
RT: 6.235 min Scan# 1769
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:168 Resp: 7406

Ion	Ratio	Lower	Upper
168	100		
75	154.2	22.7	34.1#

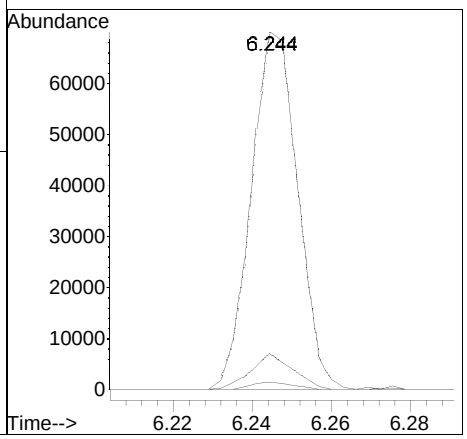


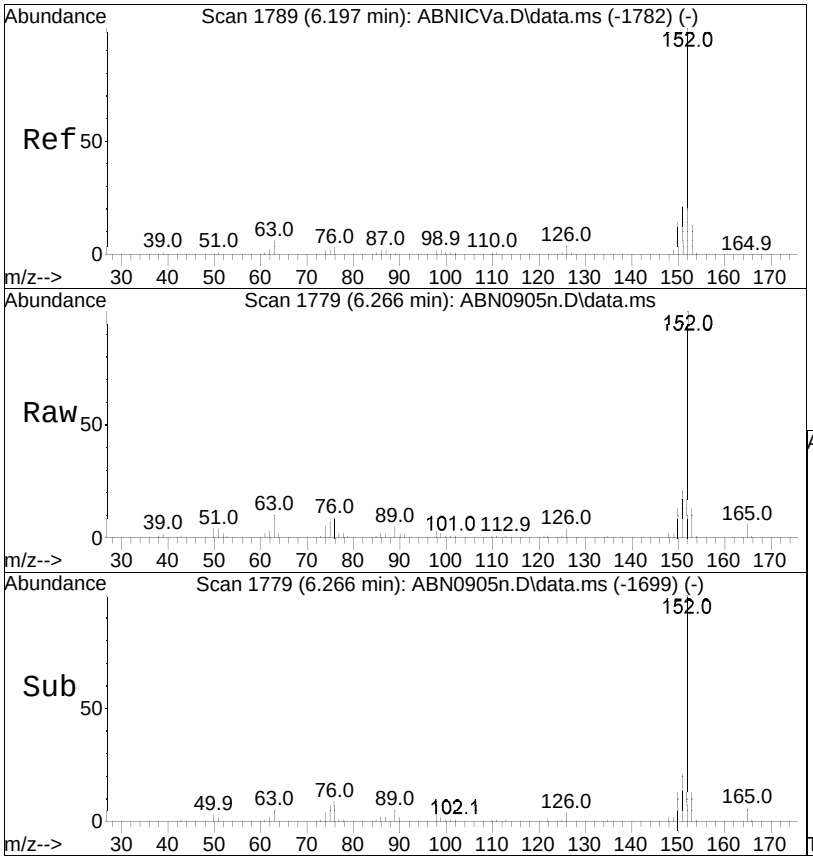


#50
Dimethyl phthalate
Concen: 5.66 ug/ml
RT: 6.244 min Scan# 1772
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:163 Resp: 56694

Ion	Ratio	Lower	Upper
163	100		
194	1.7	3.5	5.3#
164	9.2	7.9	11.9

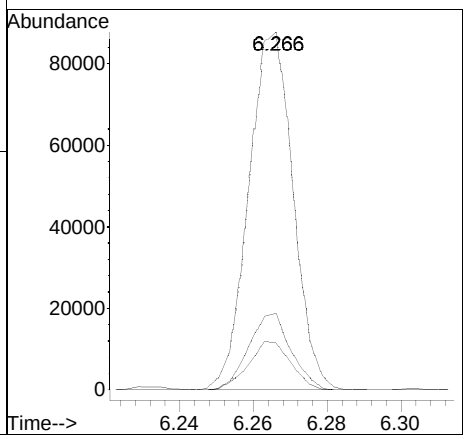


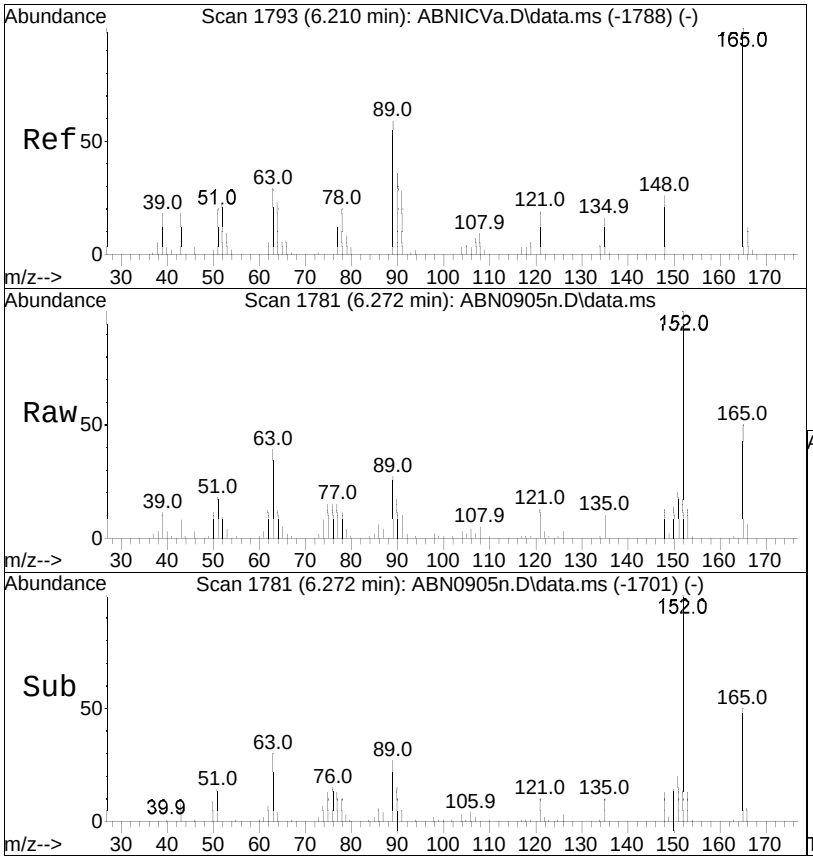


#51
Acenaphthylene
Concen: 5.60 ug/ml
RT: 6.266 min Scan# 1779
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:152 Resp: 72735

Ion	Ratio	Lower	Upper
152	100		
151	20.5	15.8	23.6
153	13.1	10.5	15.7

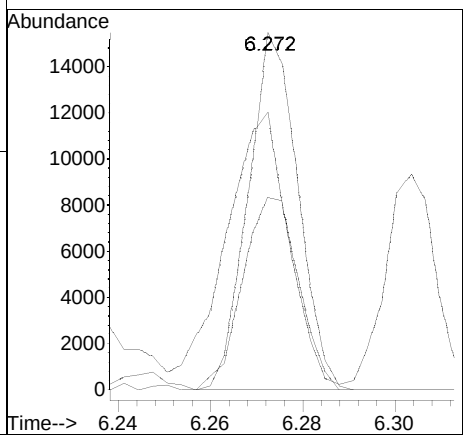


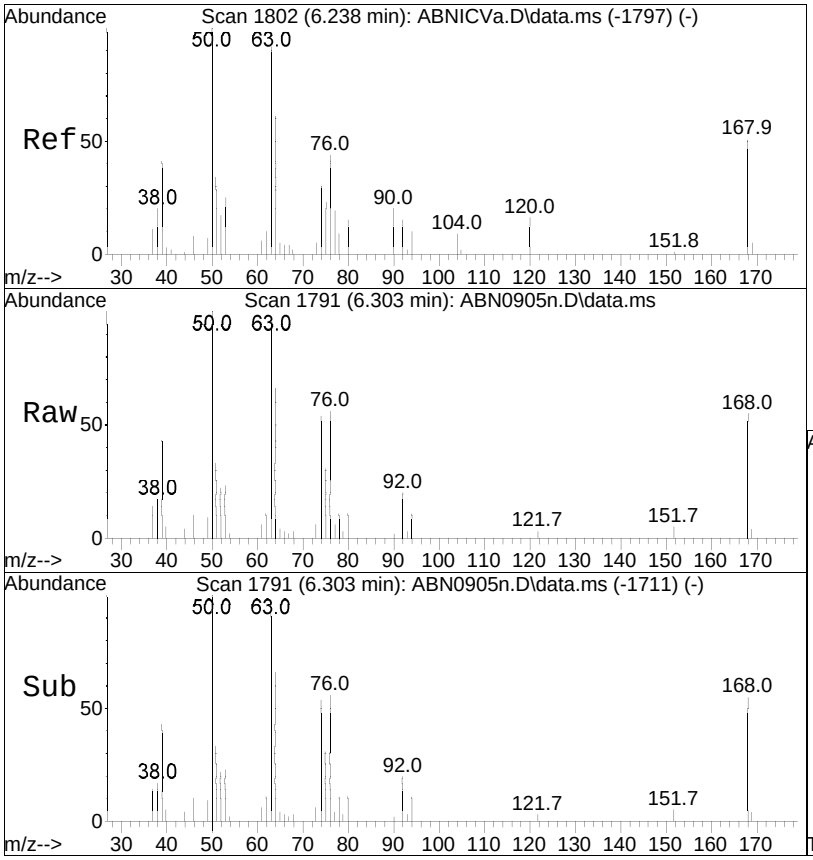


#52
2,6-Dinitrotoluene
Concen: 5.60 ug/ml
RT: 6.272 min Scan# 1781
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:165 Resp: 11575

Ion	Ratio	Lower	Upper
165	100		
89	60.5	54.2	81.2
63	98.4	64.2	96.2#

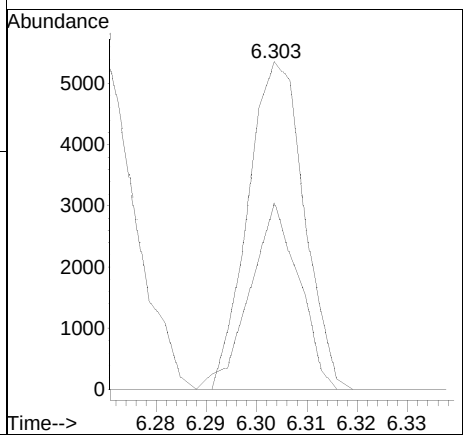


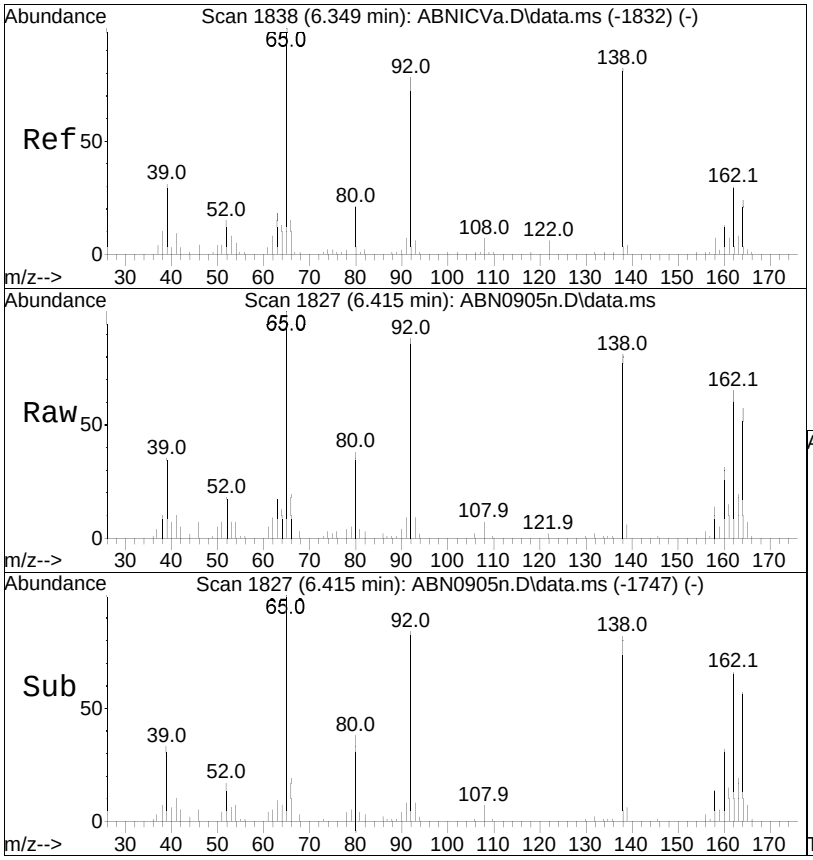


#53
1,2-Dinitrobenzene
Concen: 5.13 ug/ml
RT: 6.303 min Scan# 1791
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:168 Resp: 4150

Ion	Ratio	Lower	Upper
168	100		
75	49.8	30.9	46.3#

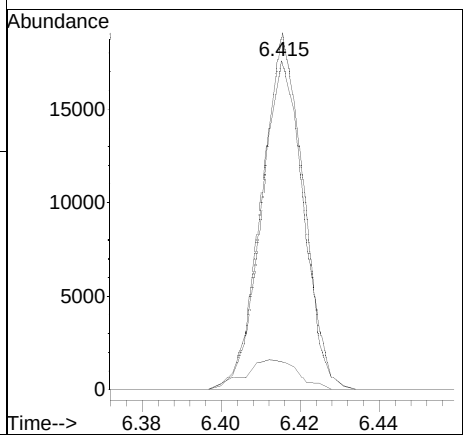


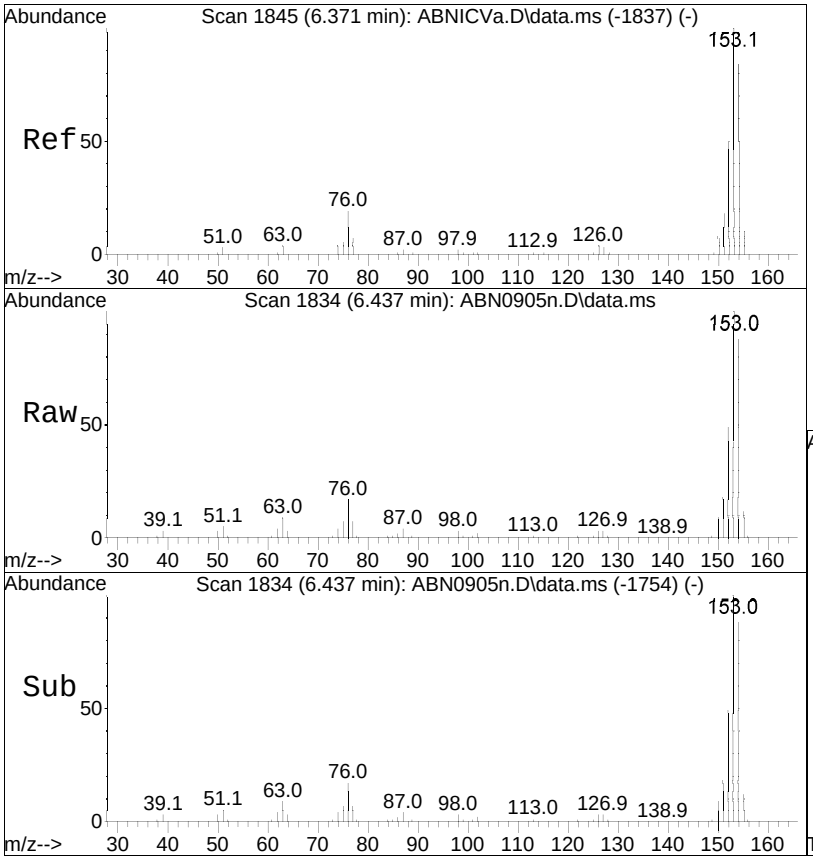


#63
3-Nitroaniline
Concen: 4.78 ug/ml
RT: 6.415 min Scan# 1827
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:138 Resp: 12891

Ion	Ratio	Lower	Upper
138	100		
92	106.3	93.4	140.2
108	11.6	9.5	14.3

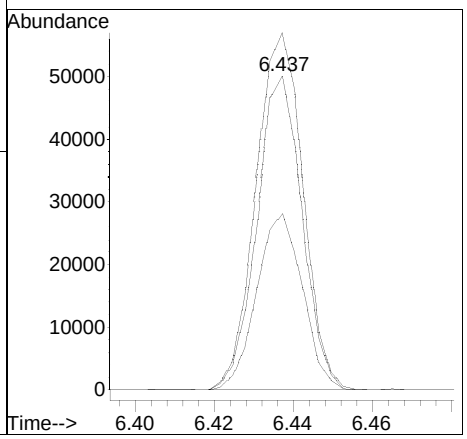


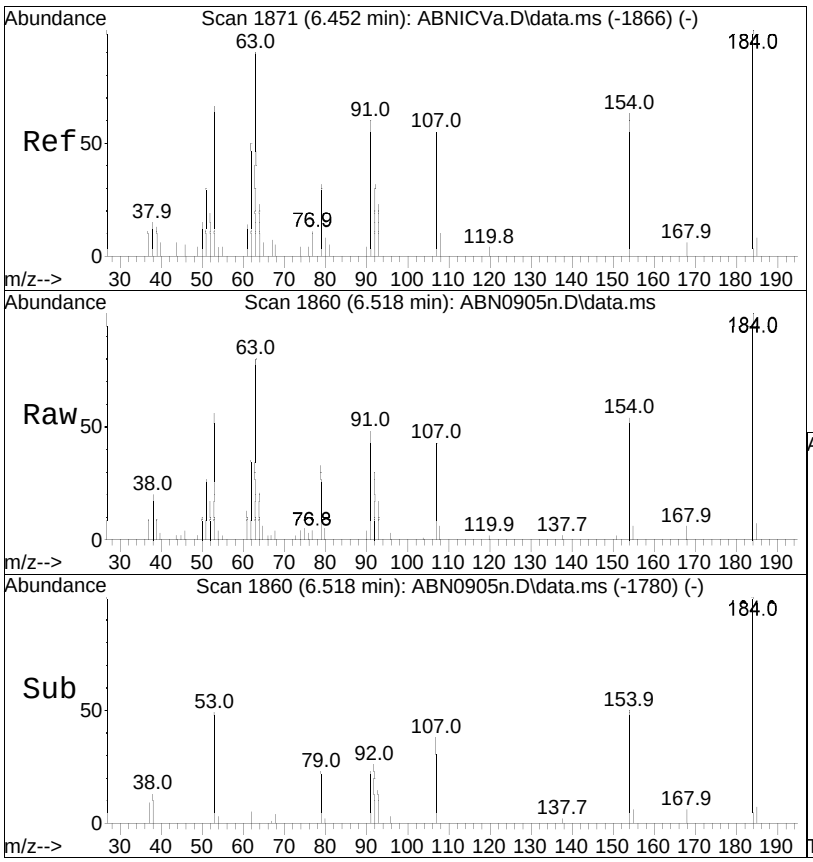


#64
Acenaphthene
Concen: 4.30 ug/ml
RT: 6.437 min Scan# 1834
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:154 Resp: 39675

Ion	Ratio	Lower	Upper
154	100		
153	118.7	85.3	127.9
152	57.1	41.4	62.0

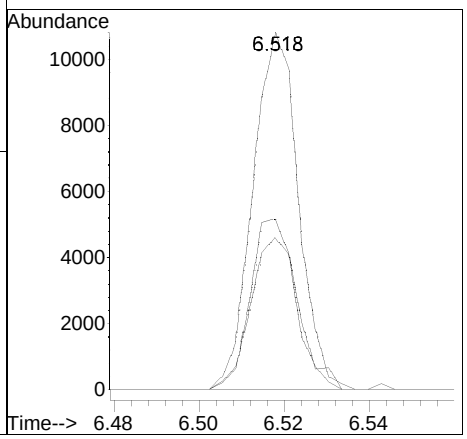


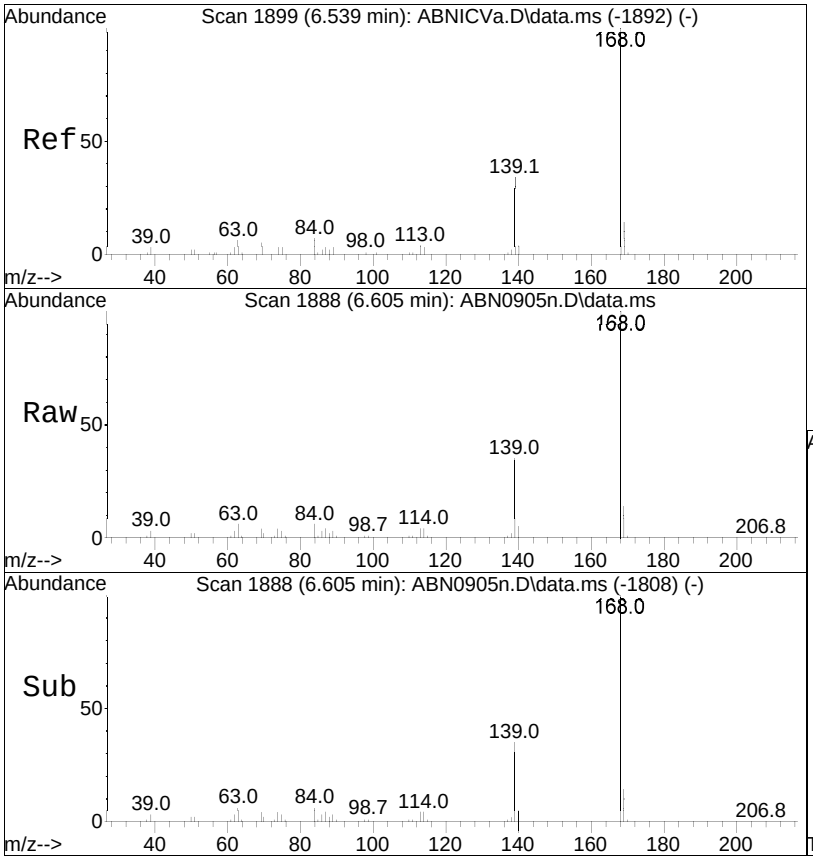


#65
2,4-Dinitrophenol
Concen: 5.90 ug/ml
RT: 6.518 min Scan# 1860
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:184 Resp: 7975

Ion	Ratio	Lower	Upper
184	100		
107	43.5	37.7	56.5
91	49.3	46.3	69.5

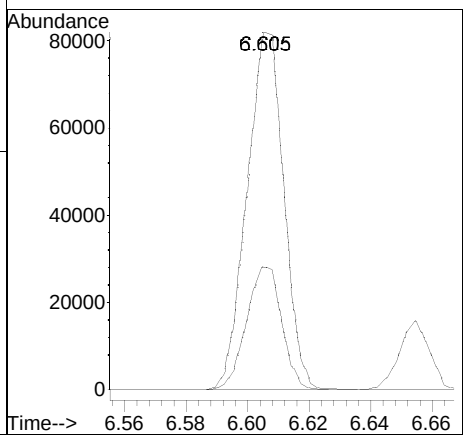


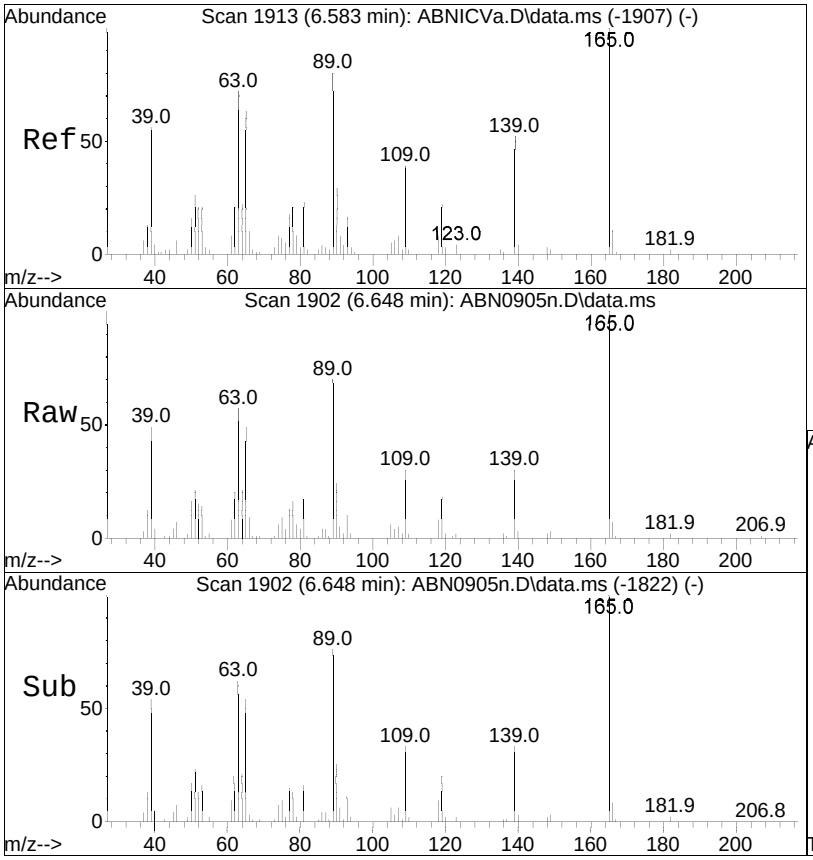


#66
Dibenzofuran
Concen: 4.60 ug/ml
RT: 6.605 min Scan# 1888
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:168 Resp: 67701

Ion	Ratio	Lower	Upper
168	100		
139	33.1	31.4	47.2

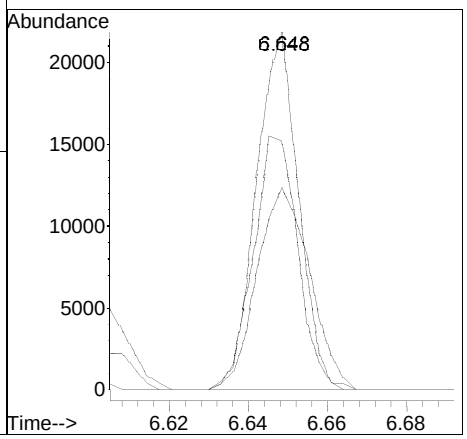


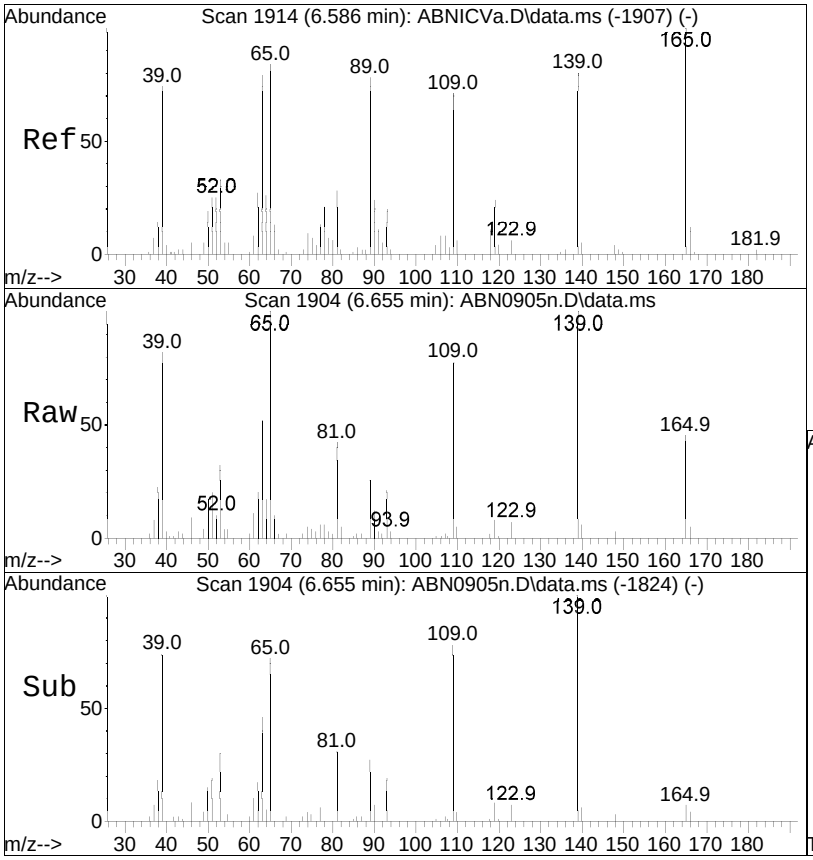


#67
2,4-Dinitrotoluene
Concen: 4.86 ug/ml
RT: 6.648 min Scan# 1902
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:165 Resp: 16136

Ion	Ratio	Lower	Upper
165	100		
89	74.6	72.0	108.0
63	70.7	52.7	79.1

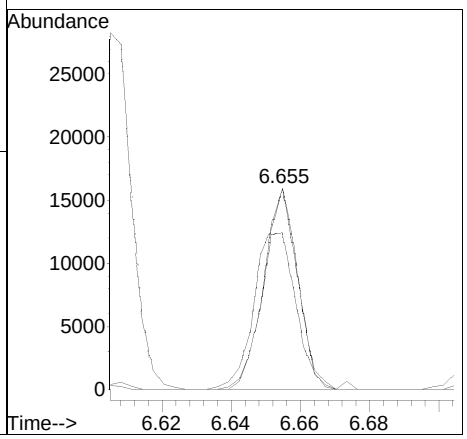


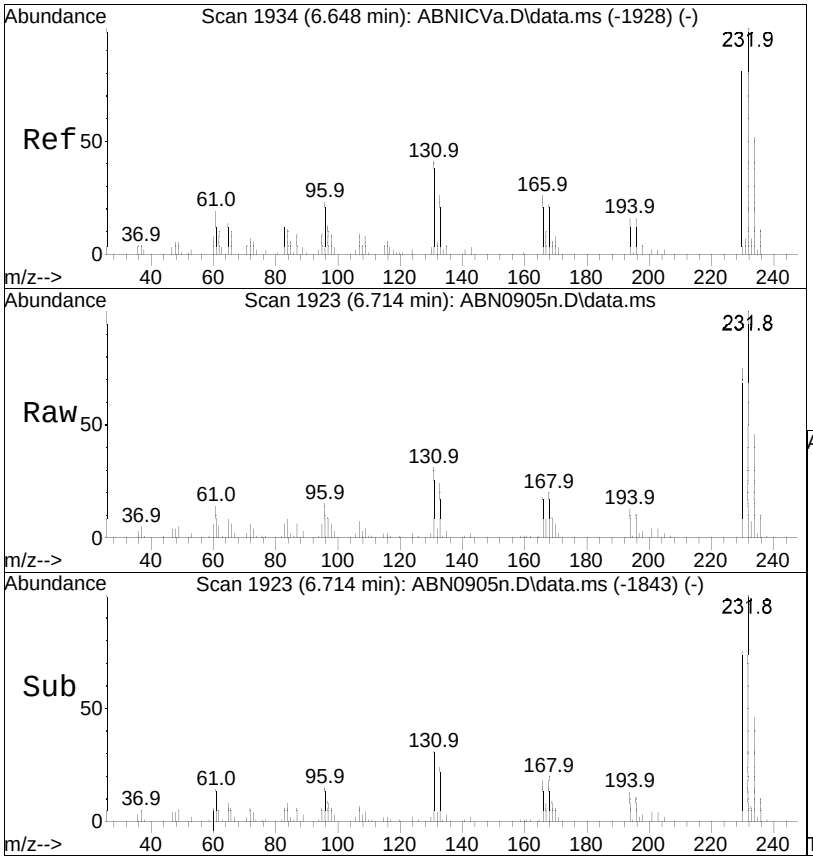


#68
4-Nitrophenol
Concen: 5.53 ug/ml
RT: 6.655 min Scan# 1904
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 65 Resp: 12426

Ion	Ratio	Lower	Upper
65	100		
109	72.1	47.4	71.2#
139	87.4	76.6	115.0

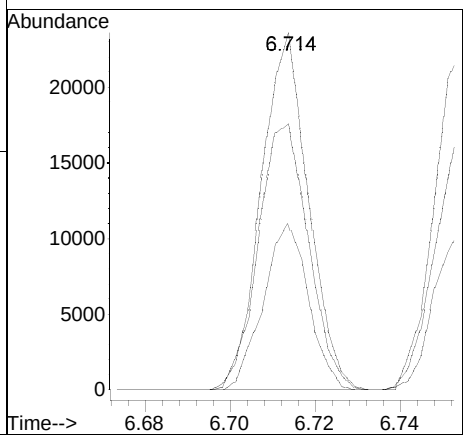


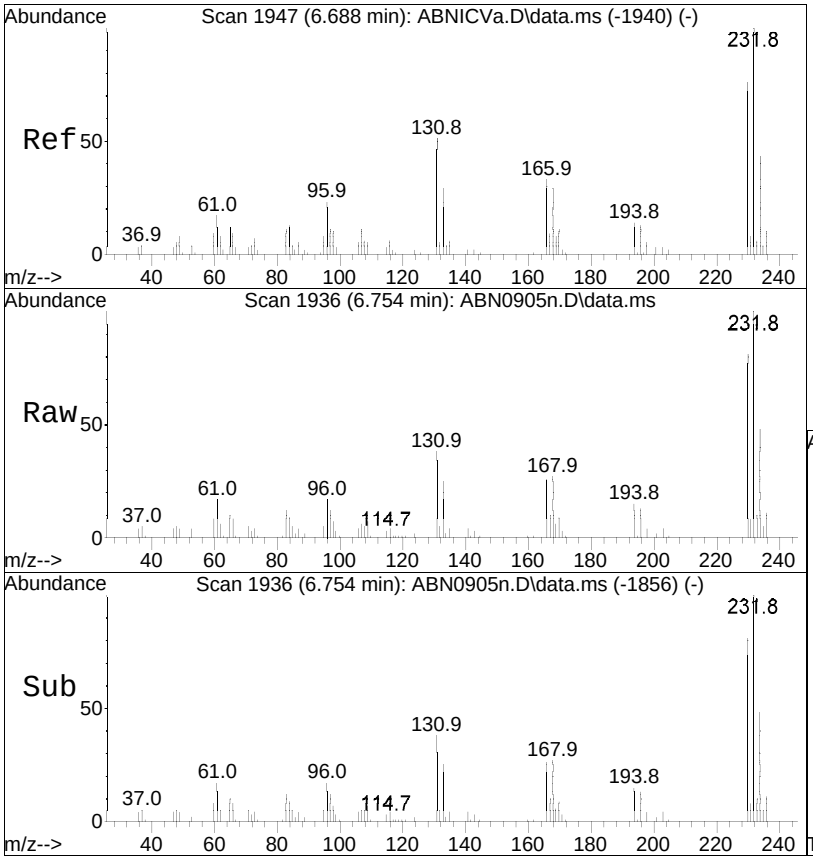


#69
2,3,5,6-Tetrachlorophenol
Concen: 5.84 ug/ml
RT: 6.714 min Scan# 1923
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:232 Resp: 18132

Ion	Ratio	Lower	Upper
232	100		
230	79.4	64.2	96.4
234	44.7	38.1	57.1

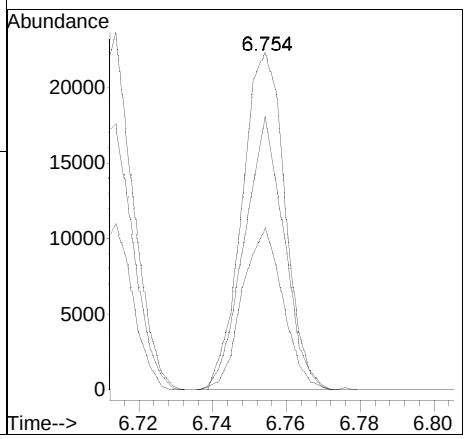


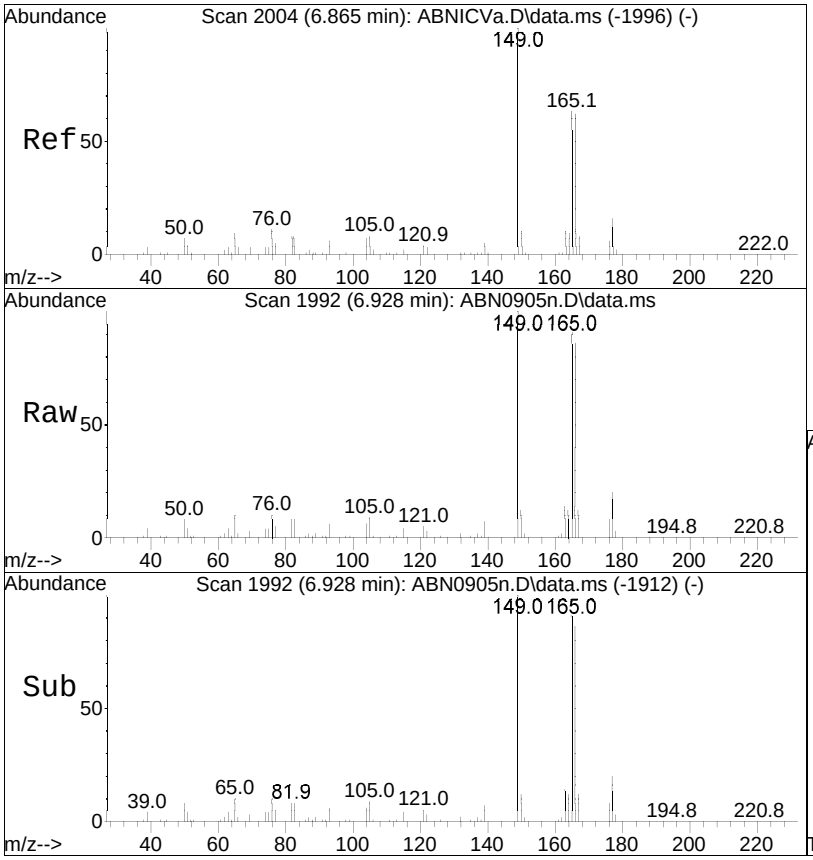


#70
2,3,4,6-Tetrachlorophenol
Concen: 5.79 ug/ml
RT: 6.754 min Scan# 1936
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:232 Resp: 18028

Ion	Ratio	Lower	Upper
232	100		
230	75.4	61.8	92.8
234	45.8	36.2	54.2

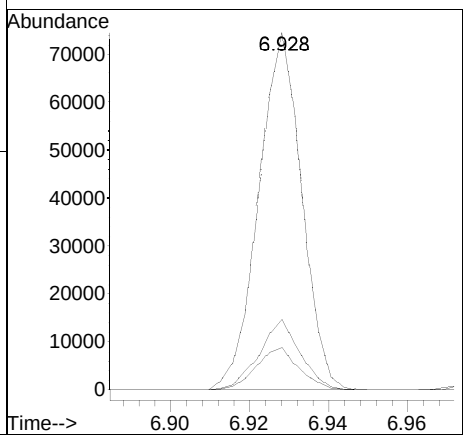


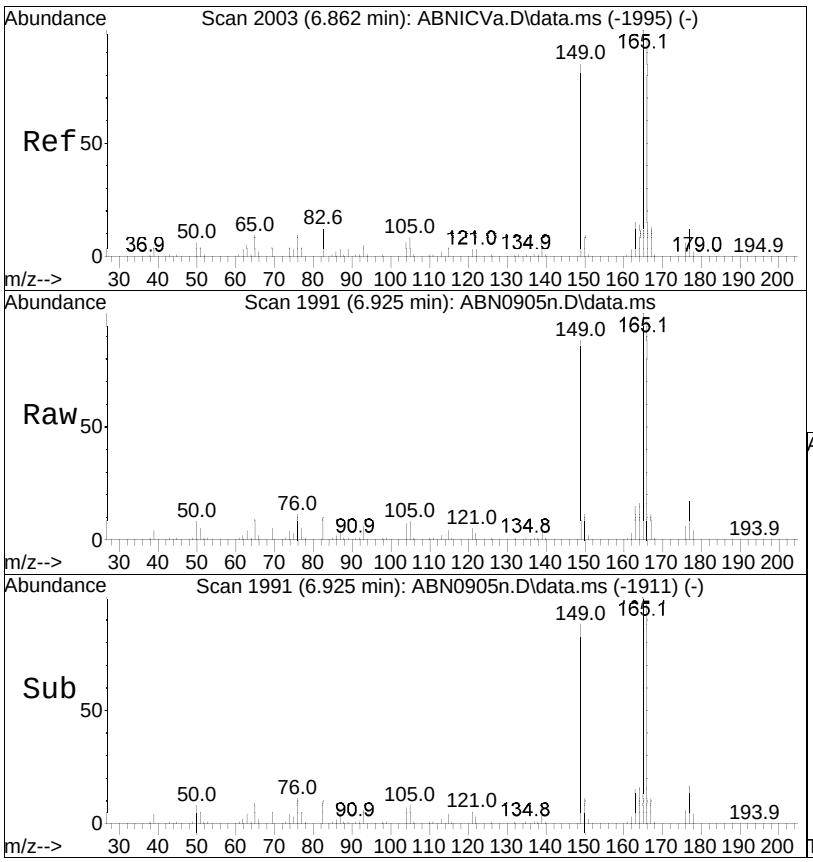


#71
Diethyl phthalate
Concen: 4.52 ug/ml
RT: 6.928 min Scan# 1992
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:149 Resp: 56201

Ion	Ratio	Lower	Upper
149	100		
177	18.8	16.1	24.1
150	11.8	9.4	14.2

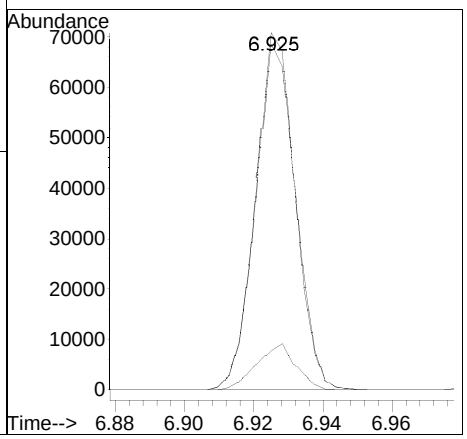


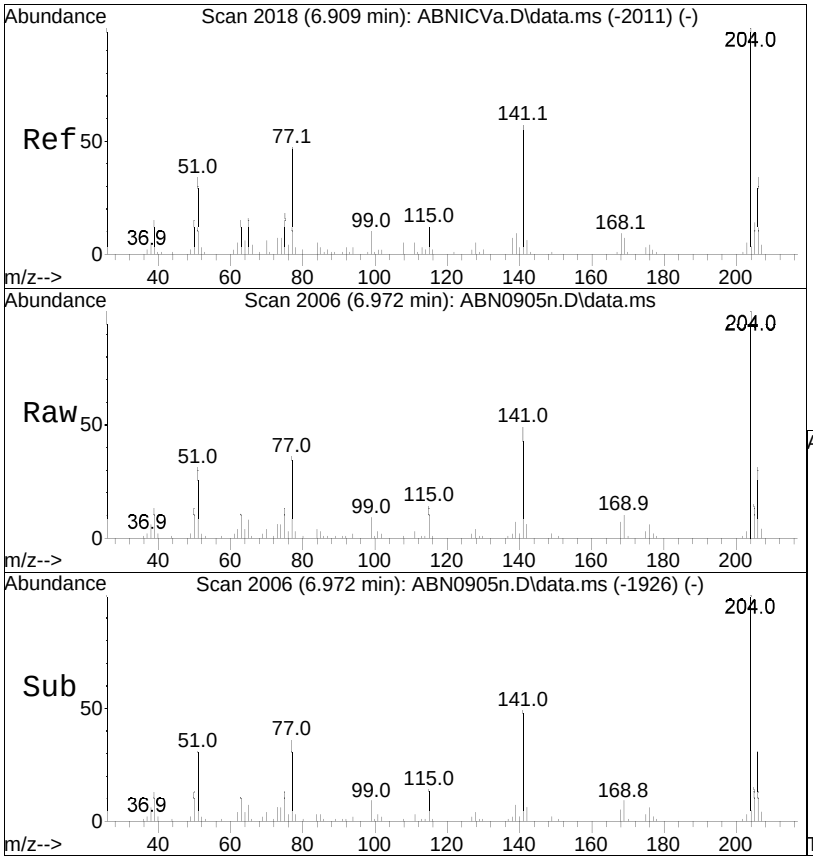


#72
Fluorene
Concen: 4.60 ug/ml
RT: 6.925 min Scan# 1991
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:166 Resp: 54603

Ion	Ratio	Lower	Upper
166	100		
165	103.7	76.2	114.2
167	13.1	10.6	15.8

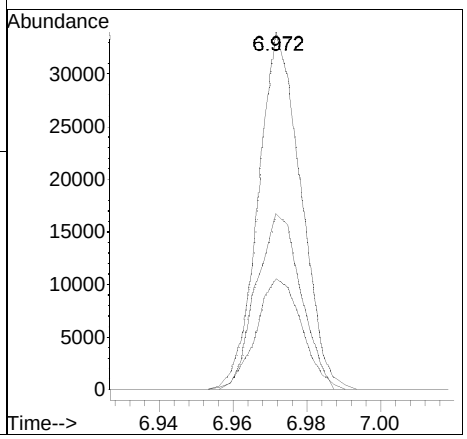


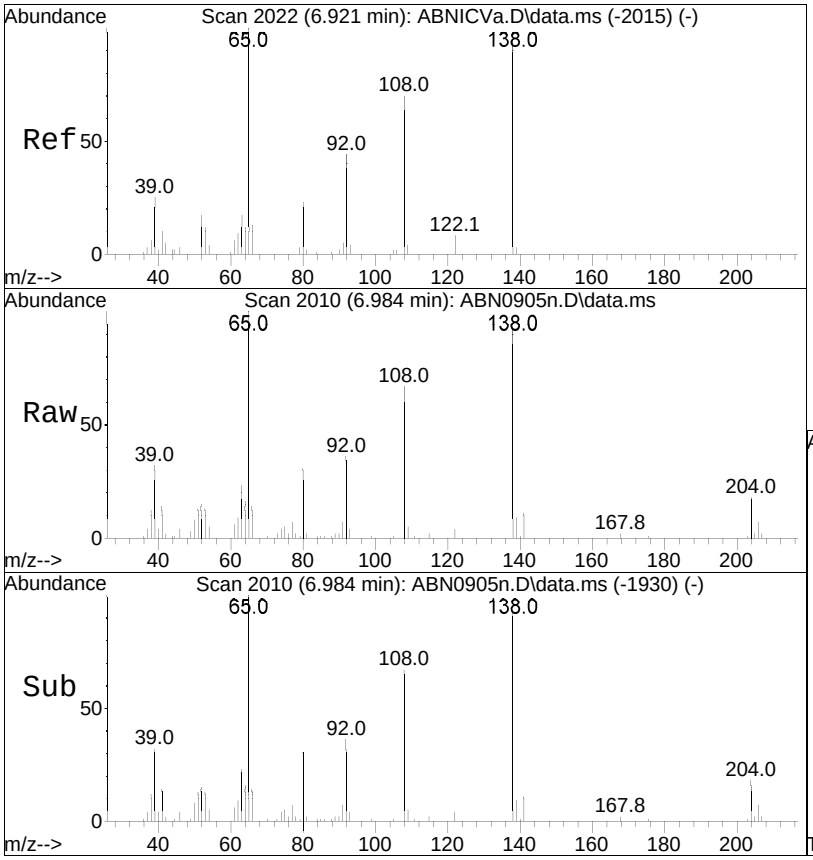


#73
4-Chlorophenyl phenyl ether
Concen: 4.68 ug/ml
RT: 6.972 min Scan# 2006
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:204 Resp: 26991

Ion	Ratio	Lower	Upper
204	100		
206	33.5	25.8	38.6
141	51.8	53.6	80.4#

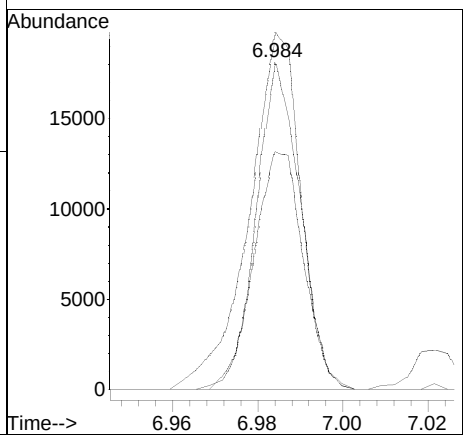


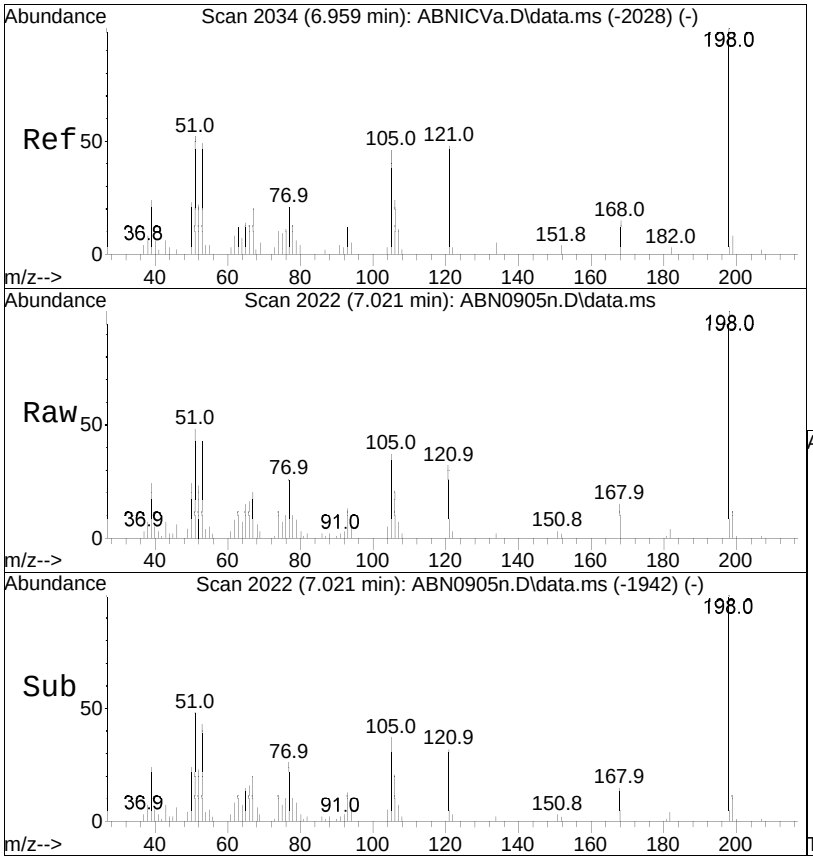


#74
4-Nitroaniline
Concen: 4.84 ug/ml
RT: 6.984 min Scan# 2010
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:138 Resp: 12979

Ion	Ratio	Lower	Upper
138	100		
108	81.6	52.1	78.1#
65	127.4	115.0	172.6

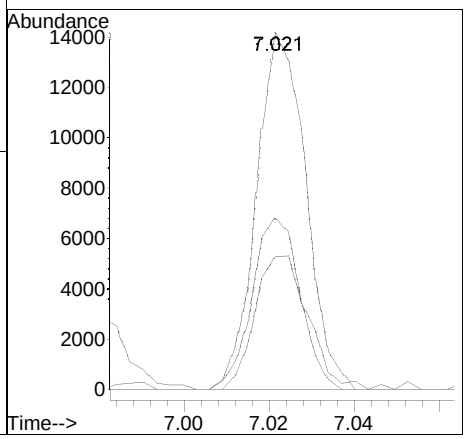


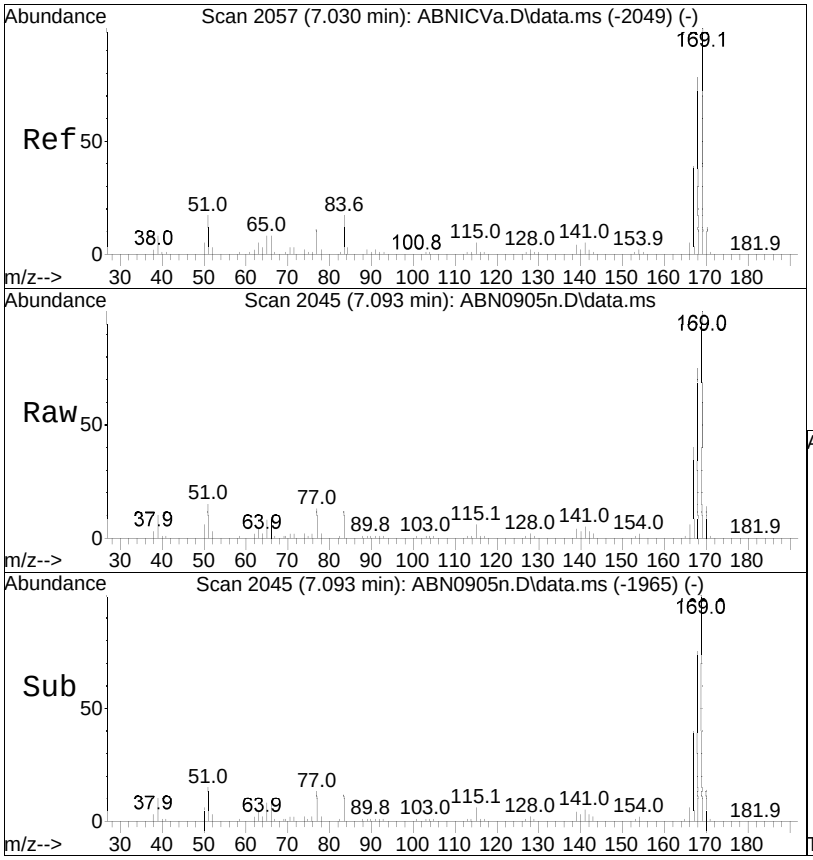


#75
4,6-Dinitro-o-cresol
Concen: 6.17 ug/ml
RT: 7.021 min Scan# 2022
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:198 Resp: 11338

Ion	Ratio	Lower	Upper
198	100		
51	50.0	76.0	114.0#
105	37.4	45.6	68.4#

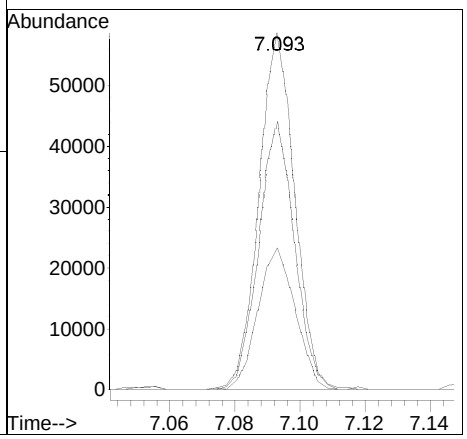


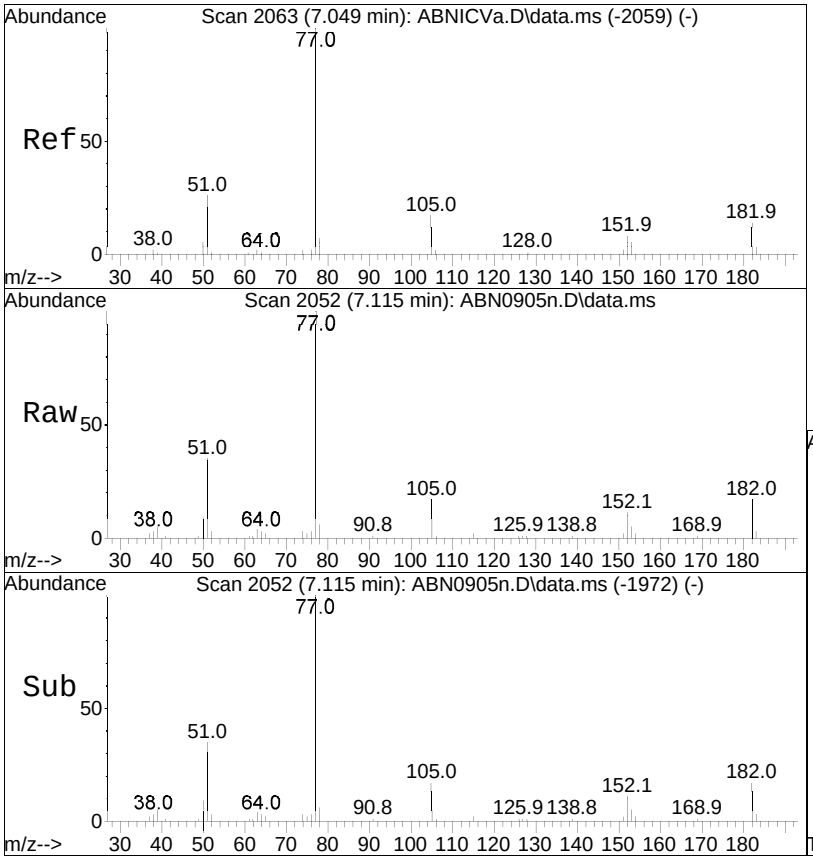


#76
NDPA/DPA
Concen: 4.41 ug/ml
RT: 7.093 min Scan# 2045
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:169 Resp: 44630

Ion	Ratio	Lower	Upper
169	100		
168	75.1	54.0	81.0
167	41.7	28.6	42.8

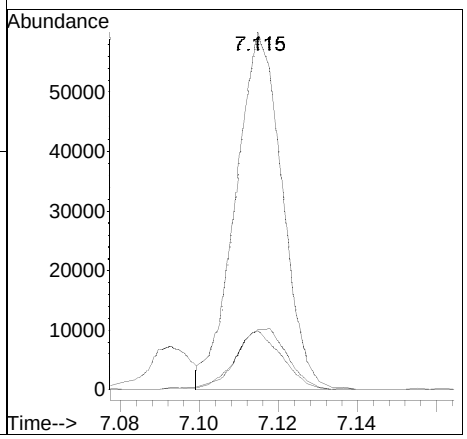


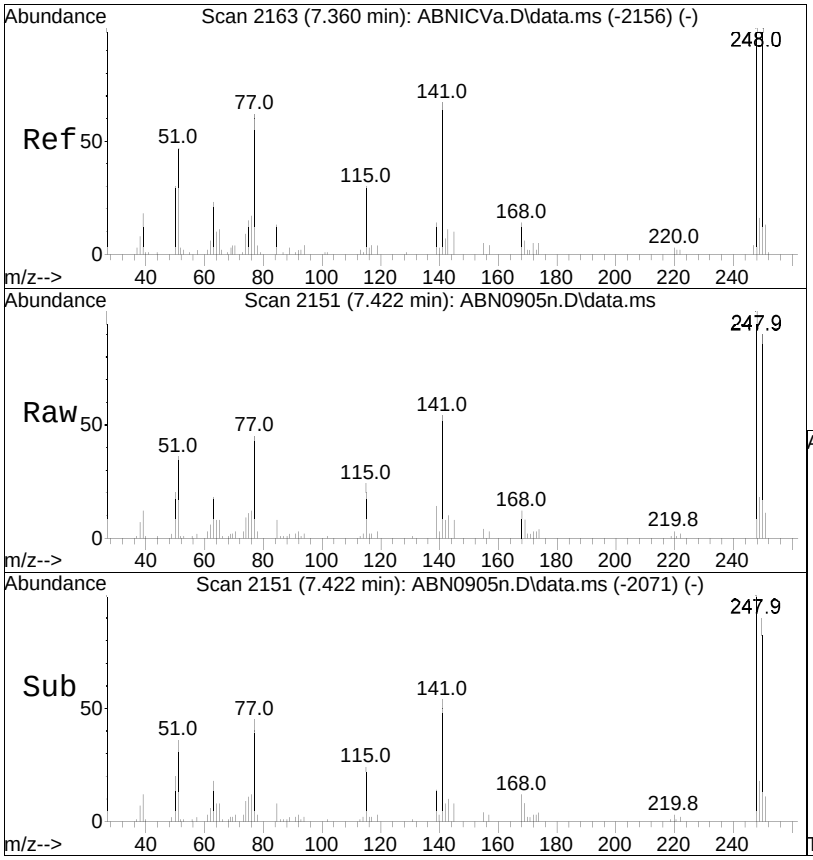


#77
Azobenzene
Concen: 4.58 ug/ml
RT: 7.115 min Scan# 2052
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion: 77 Resp: 48731

Ion	Ratio	Lower	Upper
77	100		
182	18.9	17.4	26.2
105	17.0	15.4	23.2

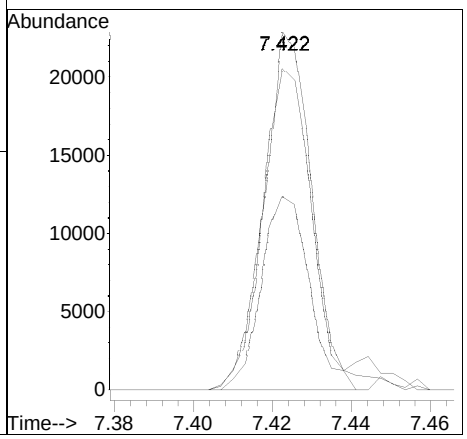


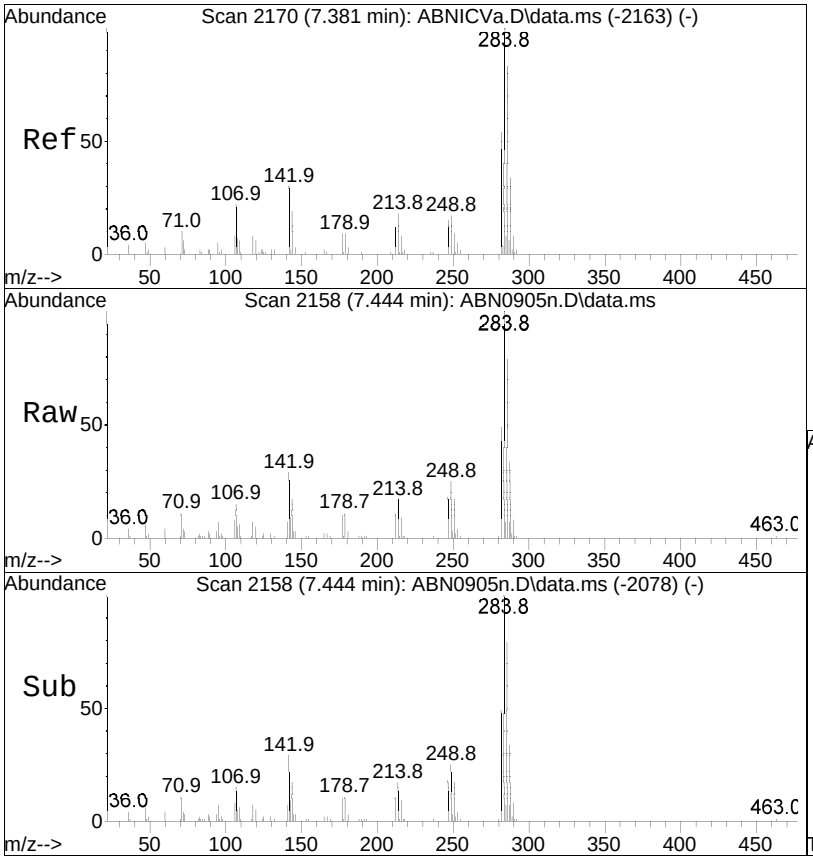


#79
4-Bromophenyl phenyl ether
Concen: 5.26 ug/ml
RT: 7.422 min Scan# 2151
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:248 Resp: 18964

Ion	Ratio	Lower	Upper
248	100		
141	54.9	76.6	114.8#
250	95.4	77.3	115.9

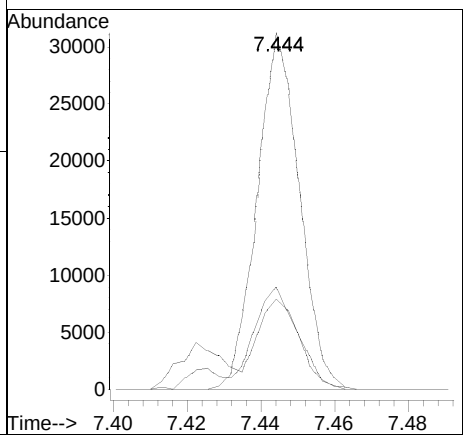


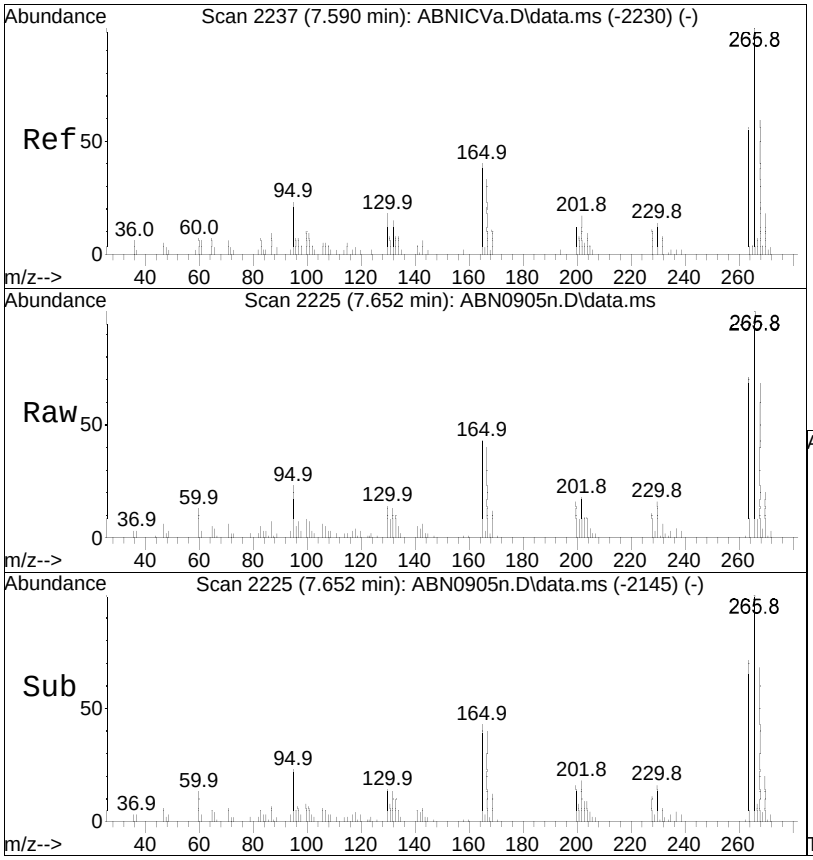


#80
Hexachlorobenzene
Concen: 5.48 ug/ml
RT: 7.444 min Scan# 2158
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:284 Resp: 24710

Ion	Ratio	Lower	Upper
284	100		
142	28.9	41.9	62.9#
249	25.5	24.1	36.1

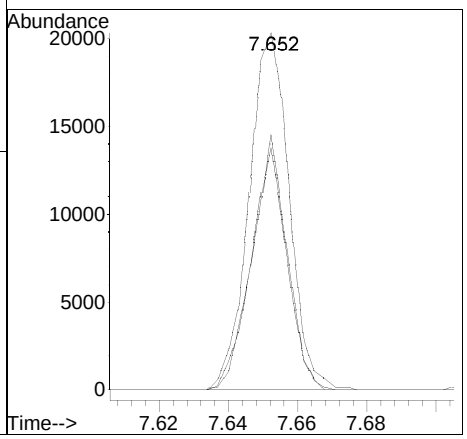


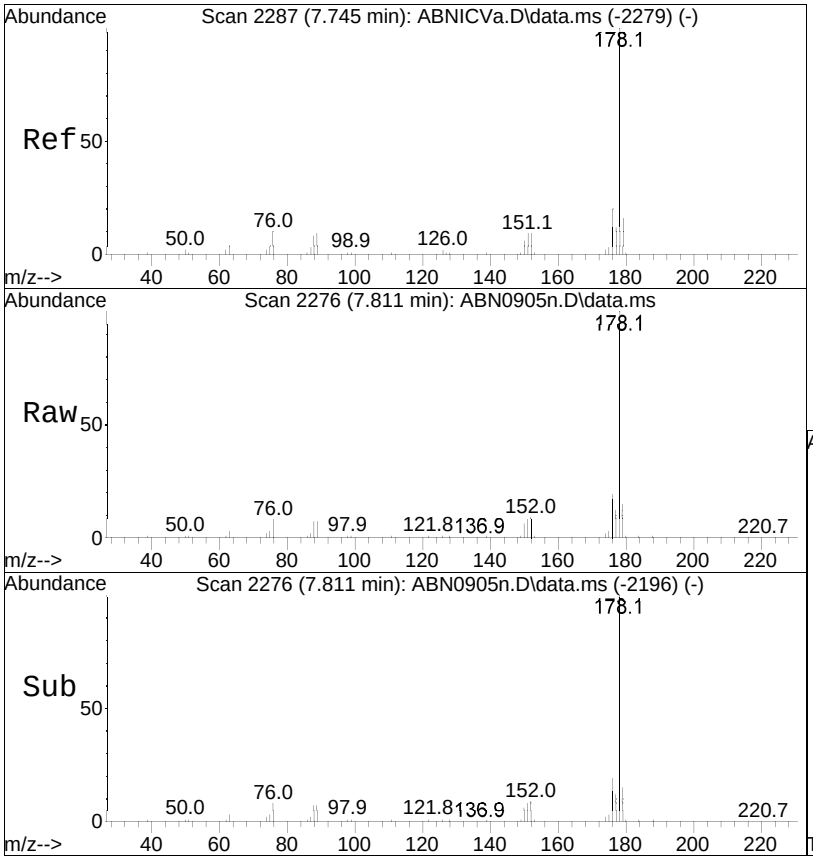


#81
Pentachlorophenol
Concen: 6.39 ug/ml
RT: 7.652 min Scan# 2225
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:266 Resp: 16340

Ion	Ratio	Lower	Upper
266	100		
264	62.2	49.7	74.5
268	61.3	50.5	75.7

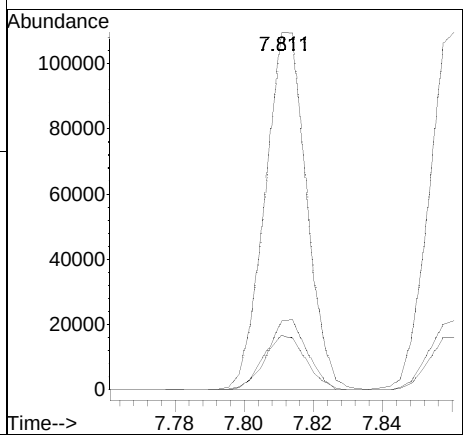


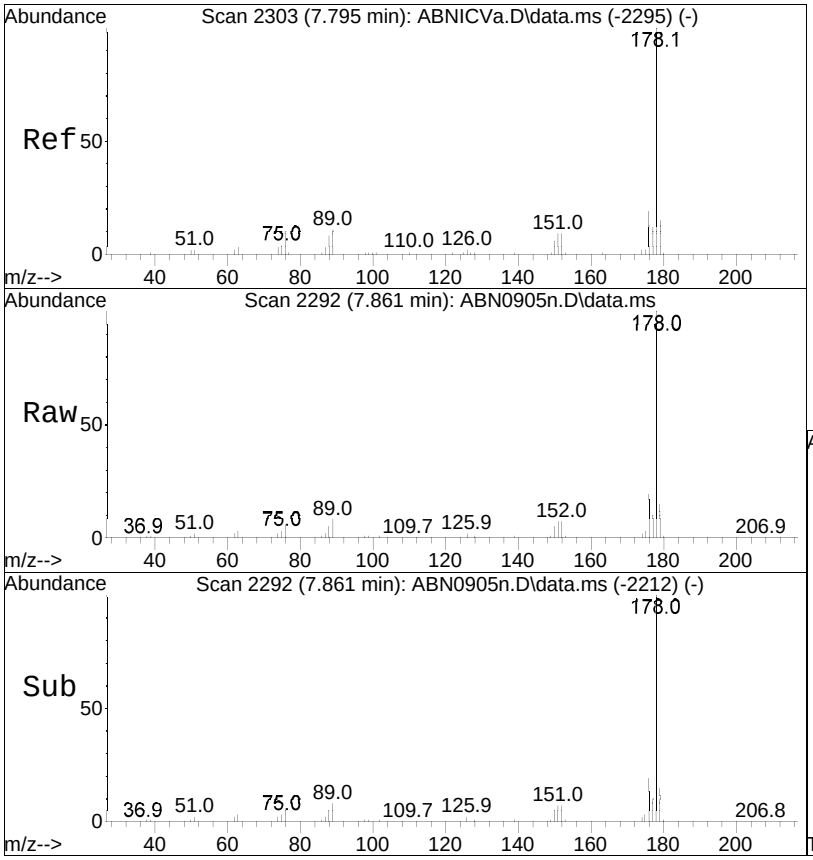


#88
Phenanthrene
Concen: 4.25 ug/ml
RT: 7.811 min Scan# 2276
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:178 Resp: 91525

Ion	Ratio	Lower	Upper
178	100		
179	15.2	12.2	18.2
176	19.2	15.4	23.2

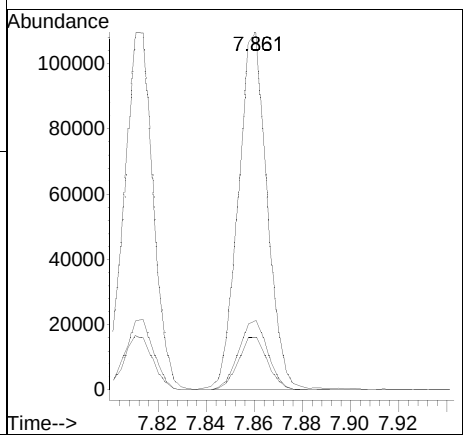


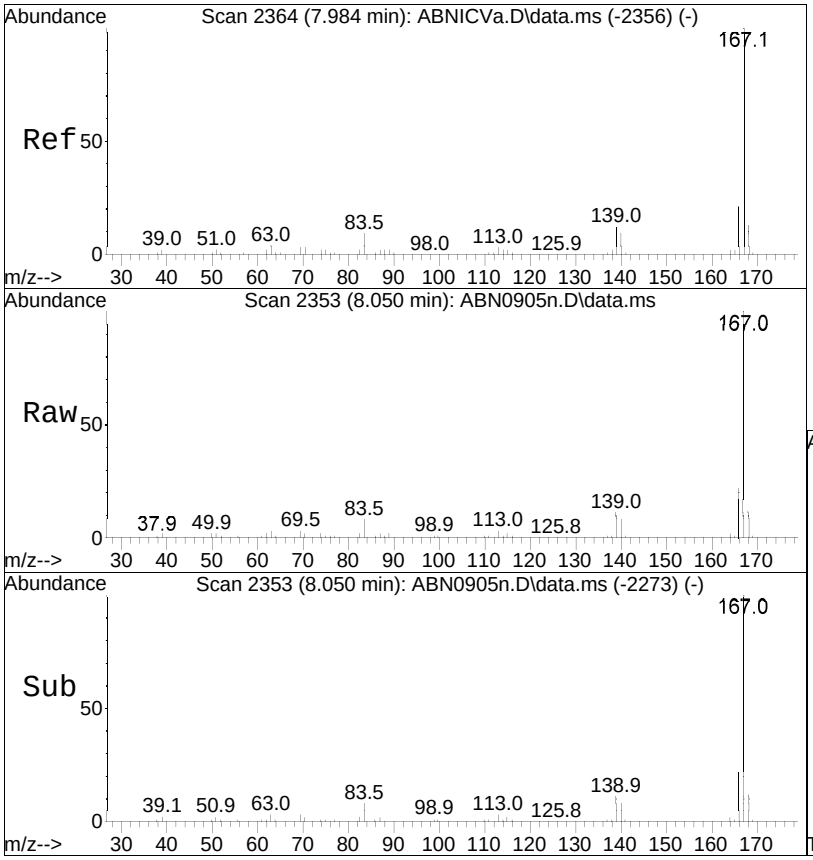


#89
Anthracene
Concen: 4.41 ug/ml
RT: 7.861 min Scan# 2292
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:178 Resp: 92009

Ion	Ratio	Lower	Upper
178	100		
179	14.8	12.0	18.0
176	19.5	14.6	22.0

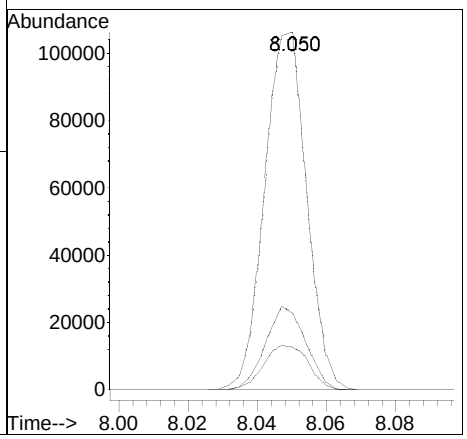


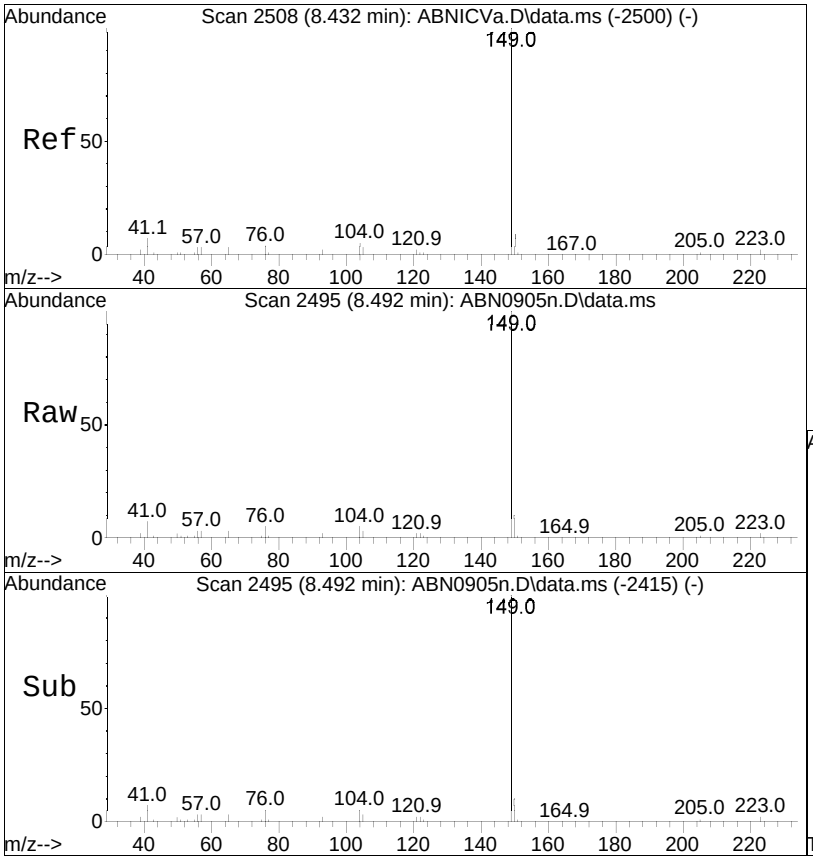


#90
Carbazole
Concen: 4.52 ug/ml
RT: 8.050 min Scan# 2353
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:167 Resp: 88821

Ion	Ratio	Lower	Upper
167	100		
168	13.4	10.6	15.8
166	22.5	17.4	26.0

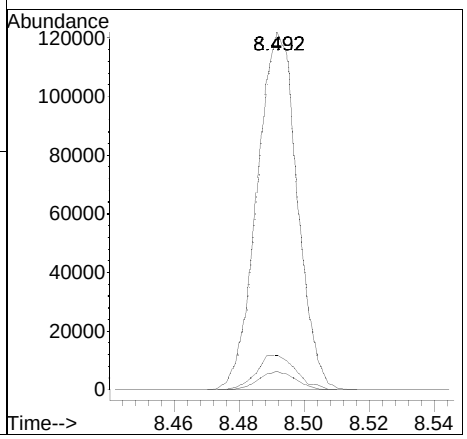


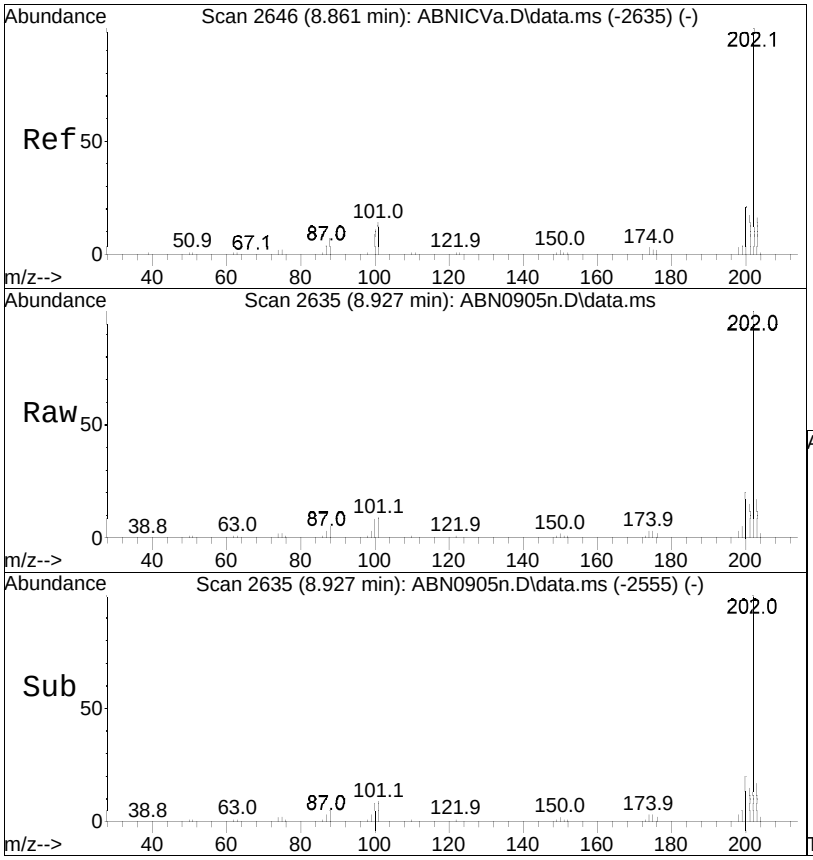


#91
Di-n-butylphthalate
Concen: 4.46 ug/ml
RT: 8.492 min Scan# 2495
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:149 Resp: 103289

Ion	Ratio	Lower	Upper
149	100		
150	9.6	7.0	10.6
104	4.8	4.5	6.7

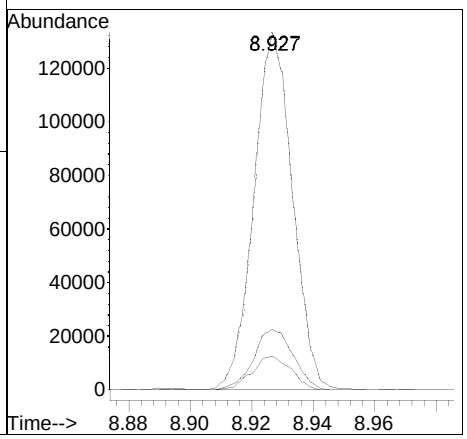


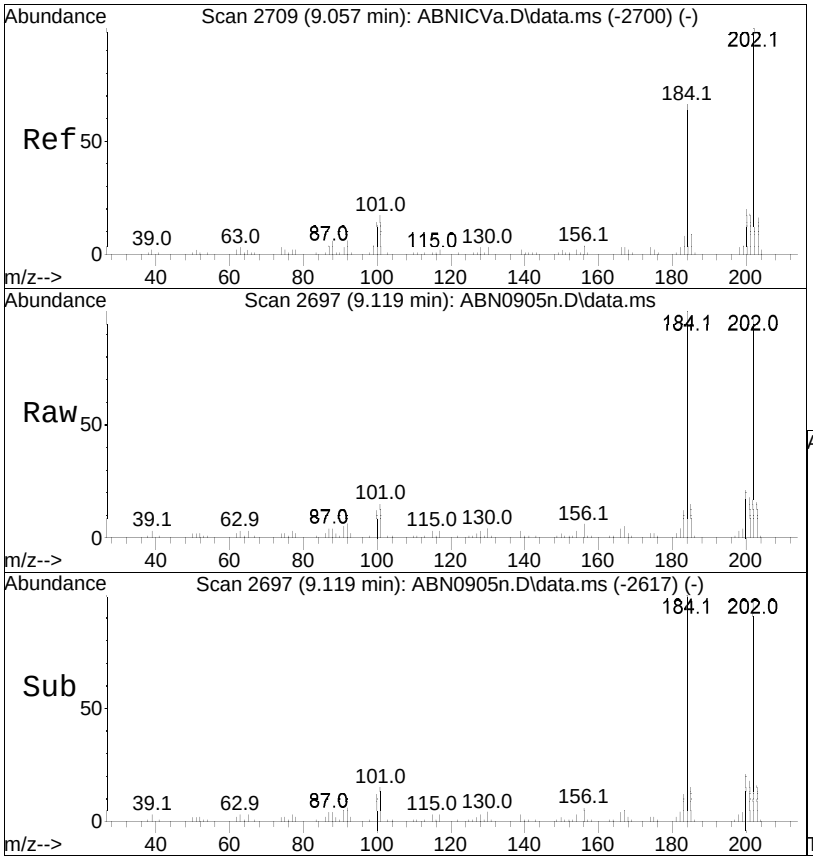


#92
Fluoranthene
Concen: 4.56 ug/ml
RT: 8.927 min Scan# 2635
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:202 Resp: 115148

Ion	Ratio	Lower	Upper
202	100		
101	9.6	13.5	20.3#
203	17.5	13.6	20.4

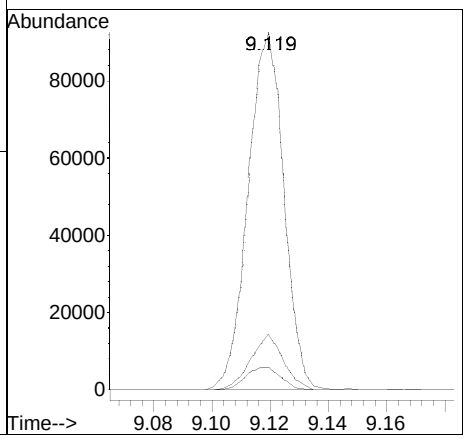


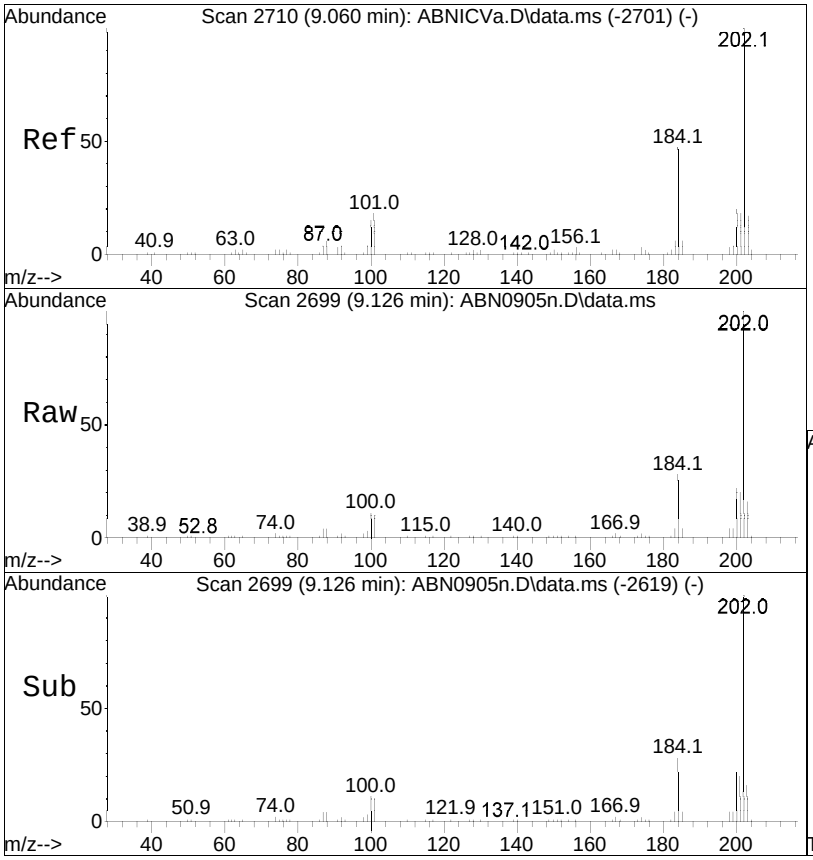


#93
Benzidine
Concen: 4.72 ug/ml
RT: 9.119 min Scan# 2697
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:184 Resp: 78084

Ion	Ratio	Lower	Upper
184	100		
92	6.2	9.1	13.7#
185	14.2	11.1	16.7

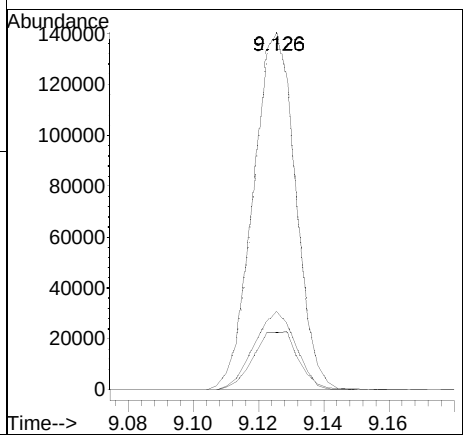


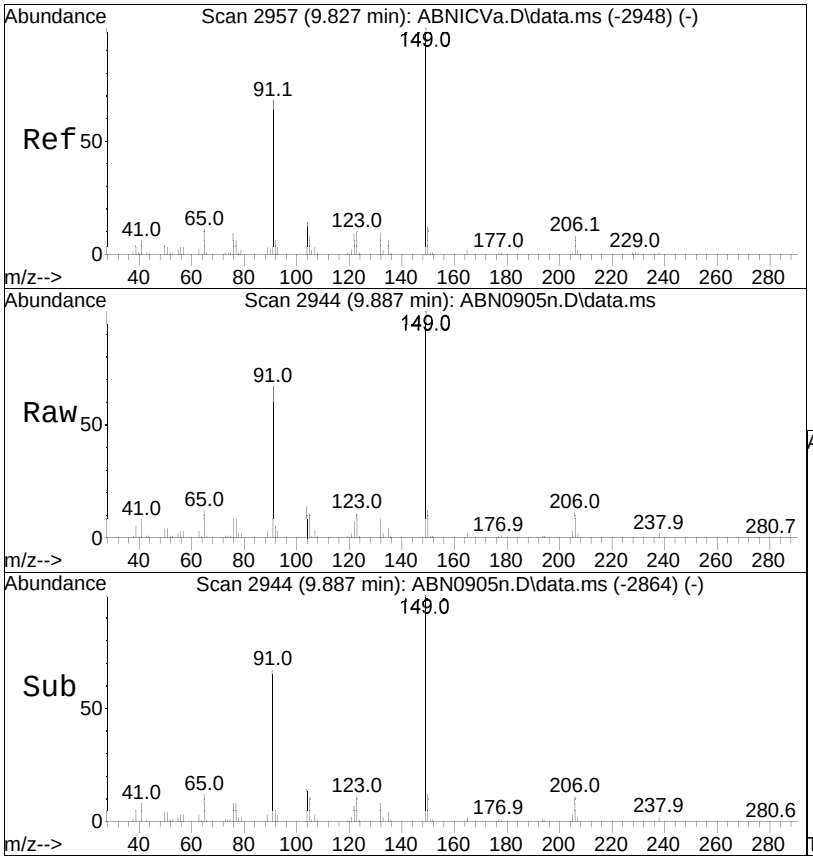


#94
Pyrene
Concen: 4.72 ug/ml
RT: 9.126 min Scan# 2699
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:202 Resp: 125965

Ion	Ratio	Lower	Upper
202	100		
200	21.7	16.7	25.1
203	17.4	14.2	21.4

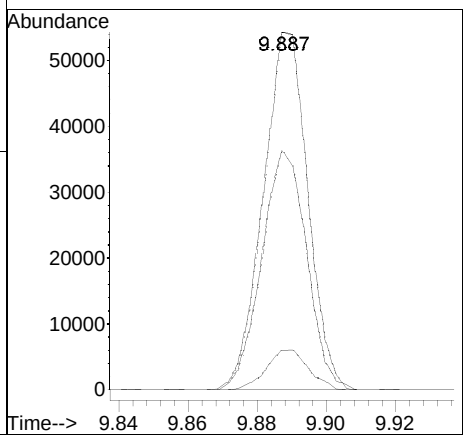


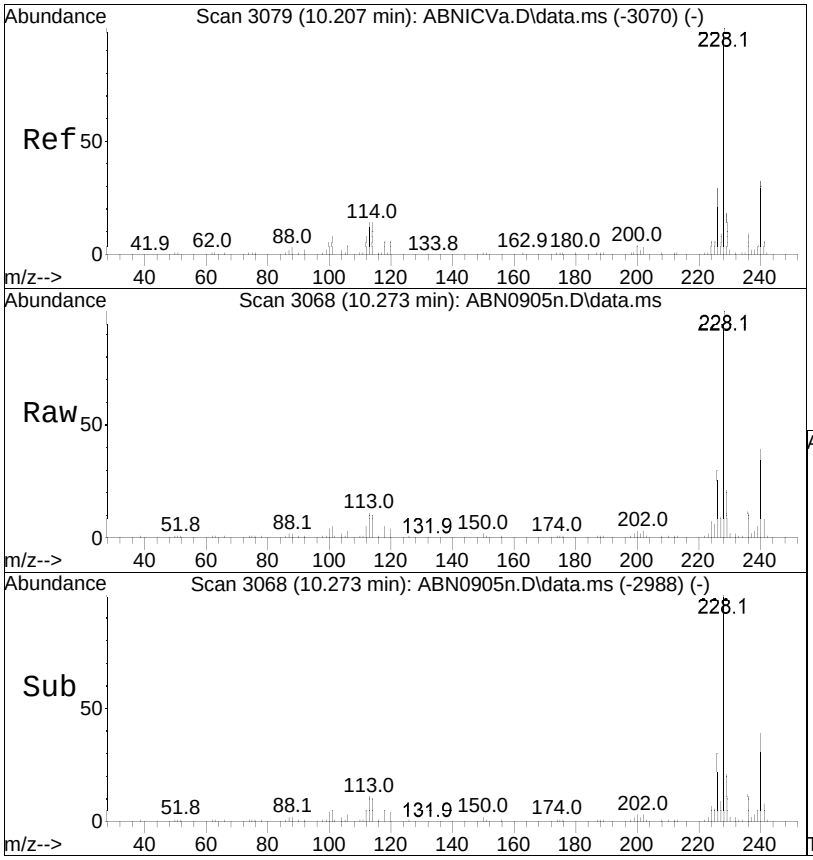


#96
Butyl benzyl phthalate
Concen: 4.58 ug/ml
RT: 9.887 min Scan# 2944
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:149 Resp: 48176

Ion	Ratio	Lower	Upper
149	100		
91	67.6	63.3	94.9
206	10.7	13.9	20.9#

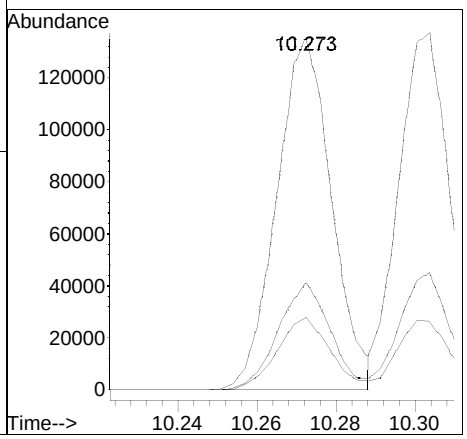


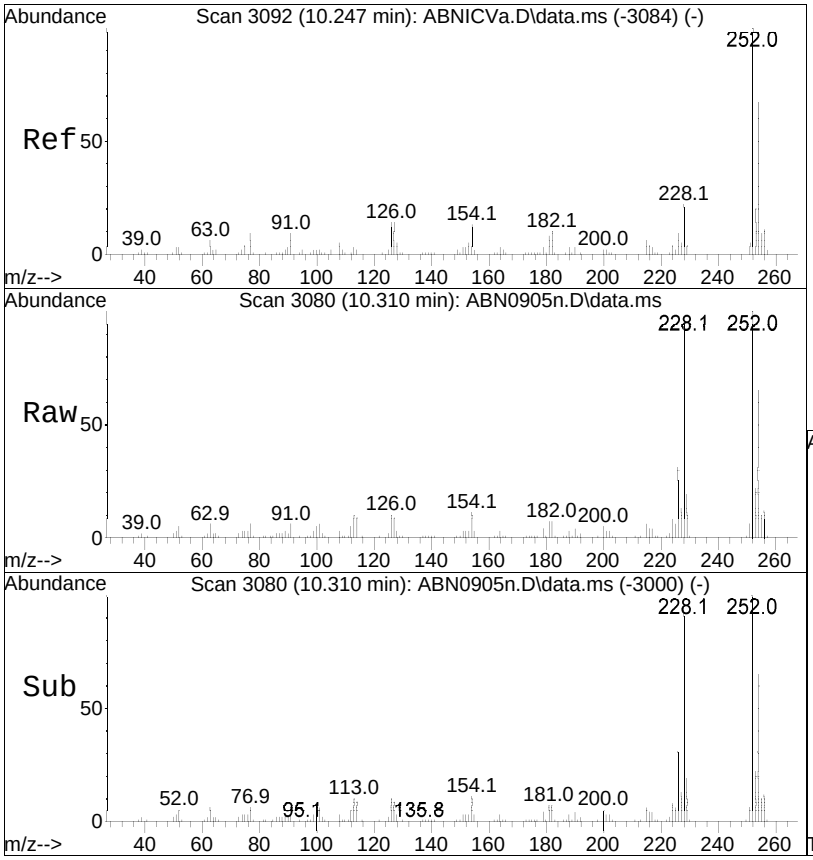


#104
Benzo(a)anthracene
Concen: 4.54 ug/ml
RT: 10.273 min Scan# 3068
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:228 Resp: 130557

Ion	Ratio	Lower	Upper
228	100		
226	29.1	22.2	33.4
229	20.1	15.6	23.4

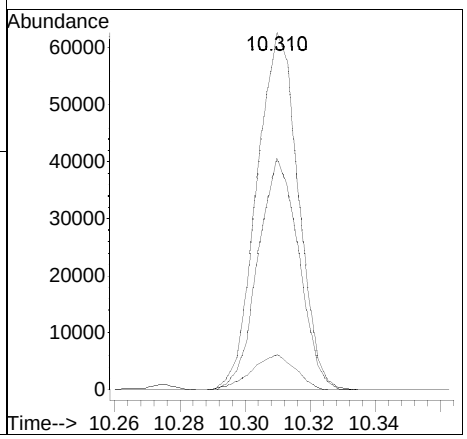


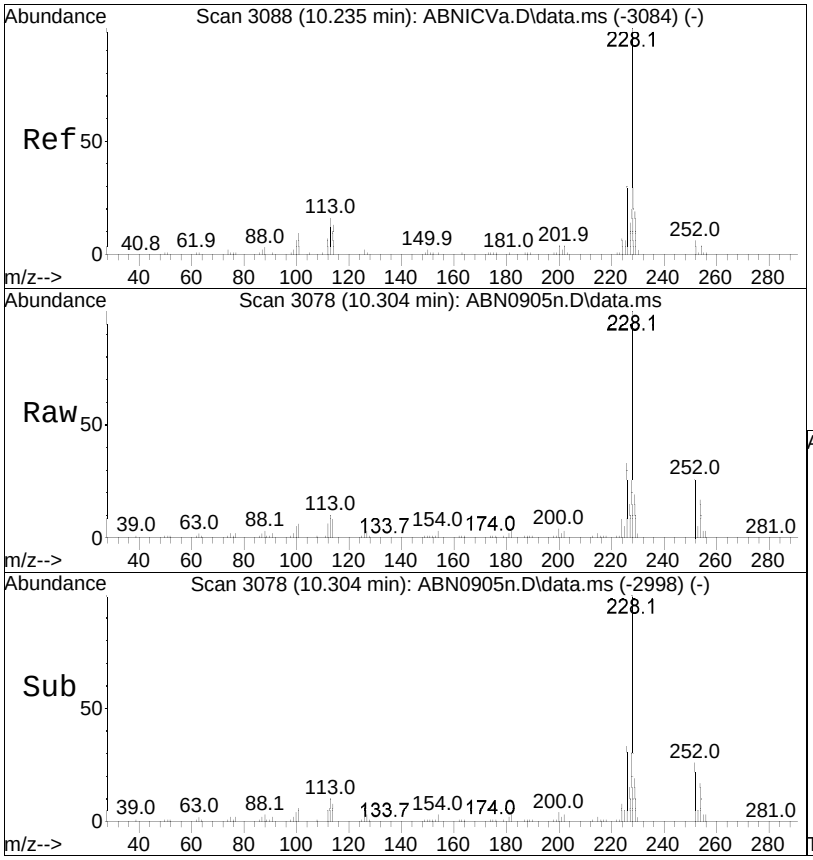


#105
3,3'-Dichlorobenzidine
Concen: 5.00 ug/ml
RT: 10.310 min Scan# 3080
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:252 Resp: 55251

Ion	Ratio	Lower	Upper
252	100		
126	10.5	14.5	21.7#
254	63.9	51.2	76.8

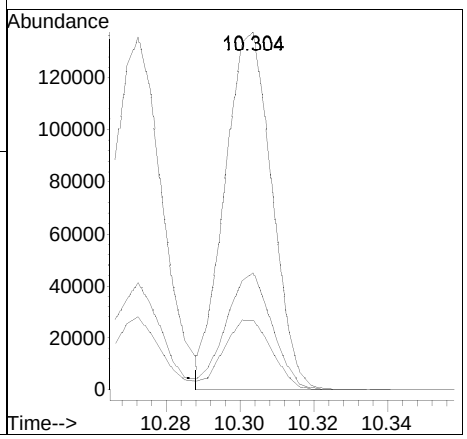


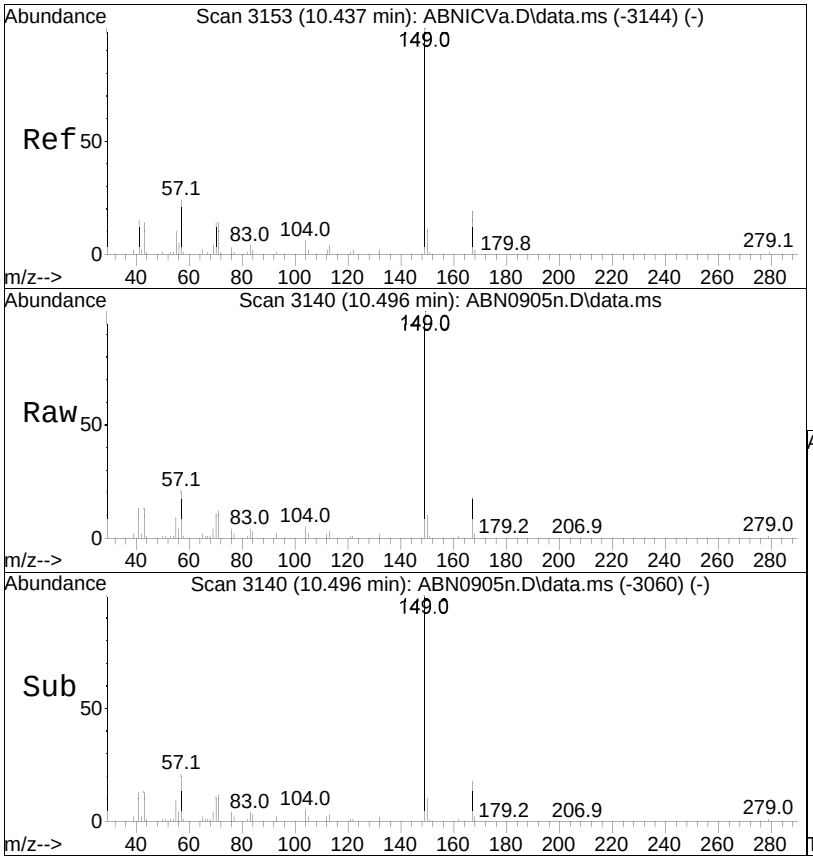


#106
Chrysene
Concen: 4.49 ug/ml
RT: 10.304 min Scan# 3078
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:228 Resp: 121989

Ion	Ratio	Lower	Upper
228	100		
226	31.9	24.0	36.0
229	19.8	15.8	23.8

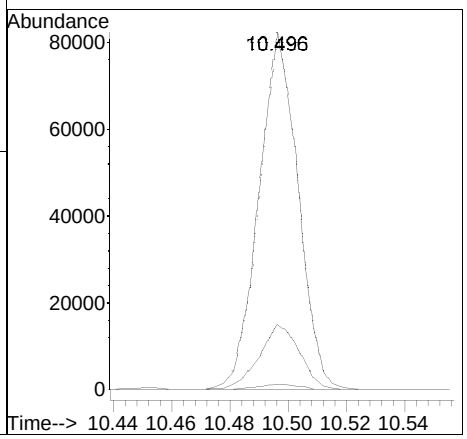


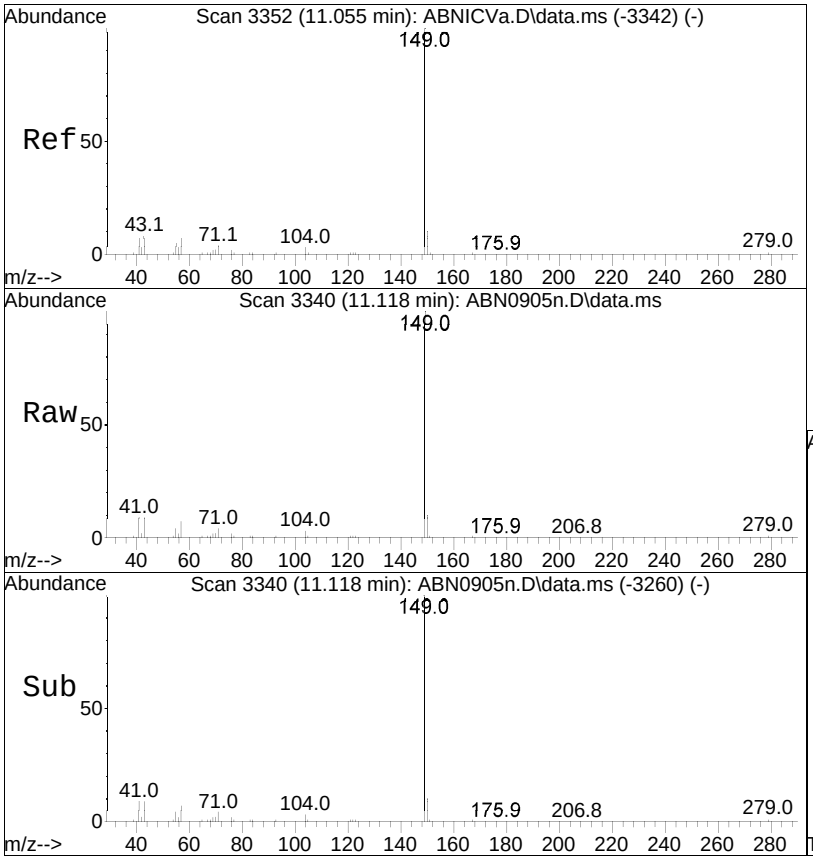


#107
Bis(2-ethylhexyl)phthalate
Concen: 4.74 ug/ml
RT: 10.496 min Scan# 3140
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:149 Resp: 76184

Ion	Ratio	Lower	Upper
149	100		
167	18.9	22.1	33.1#
279	1.3	3.0	4.4#

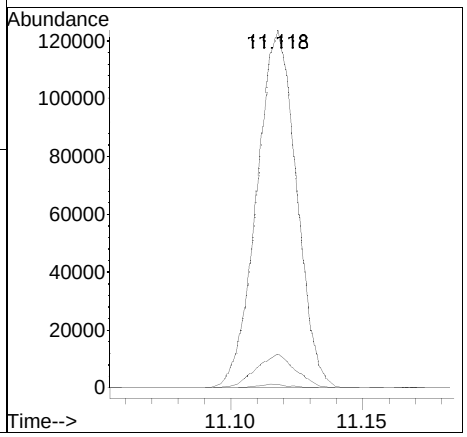


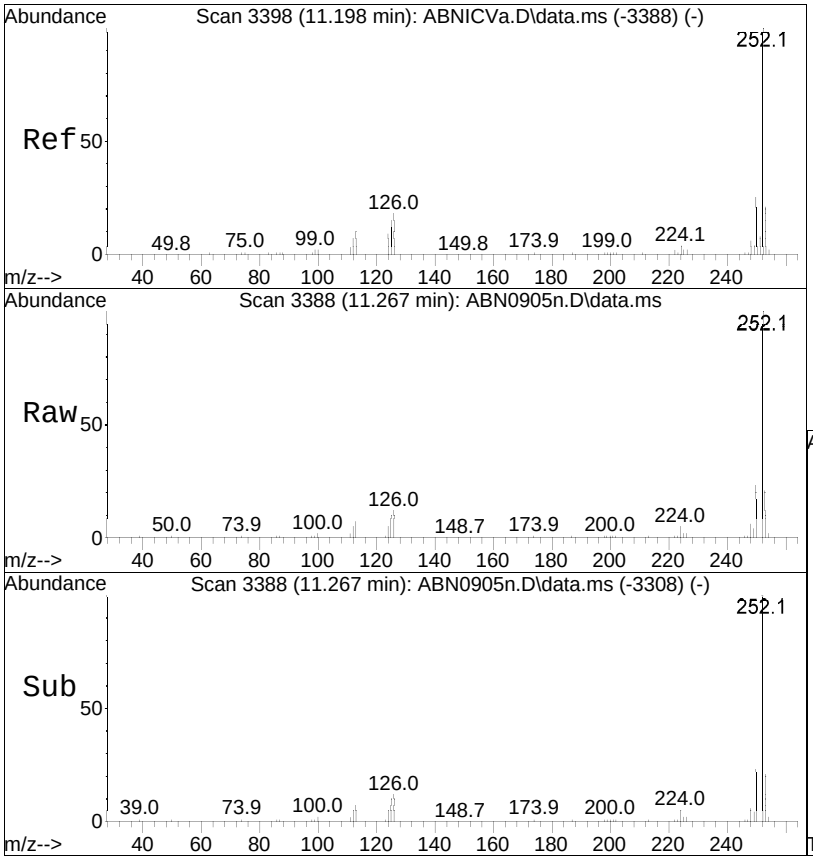


#108
Di-n-octylphthalate
Concen: 4.40 ug/ml
RT: 11.118 min Scan# 3340
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:149 Resp: 128260

Ion	Ratio	Lower	Upper
149	100		
43	9.4	18.8	28.2#
167	0.9	1.3	1.9#

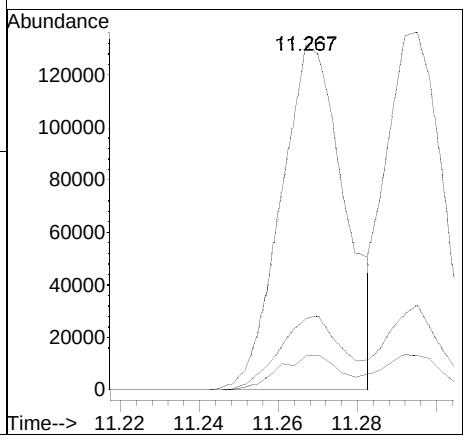


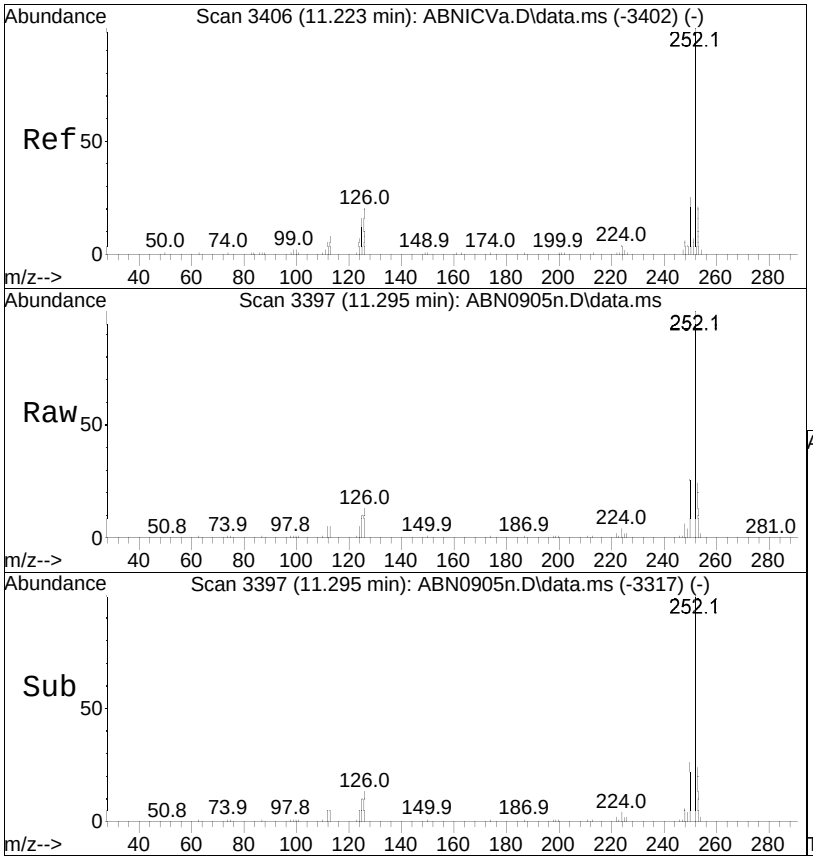


#109
Benzo(b)fluoranthene
Concen: 4.75 ug/ml
RT: 11.267 min Scan# 3388
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:252 Resp: 148321

Ion	Ratio	Lower	Upper
252	100		
125	9.5	13.3	19.9#
253	20.2	17.1	25.7

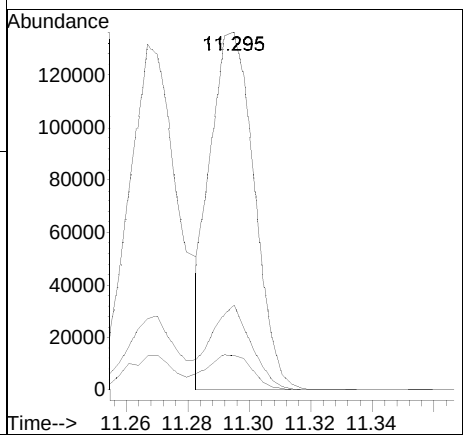


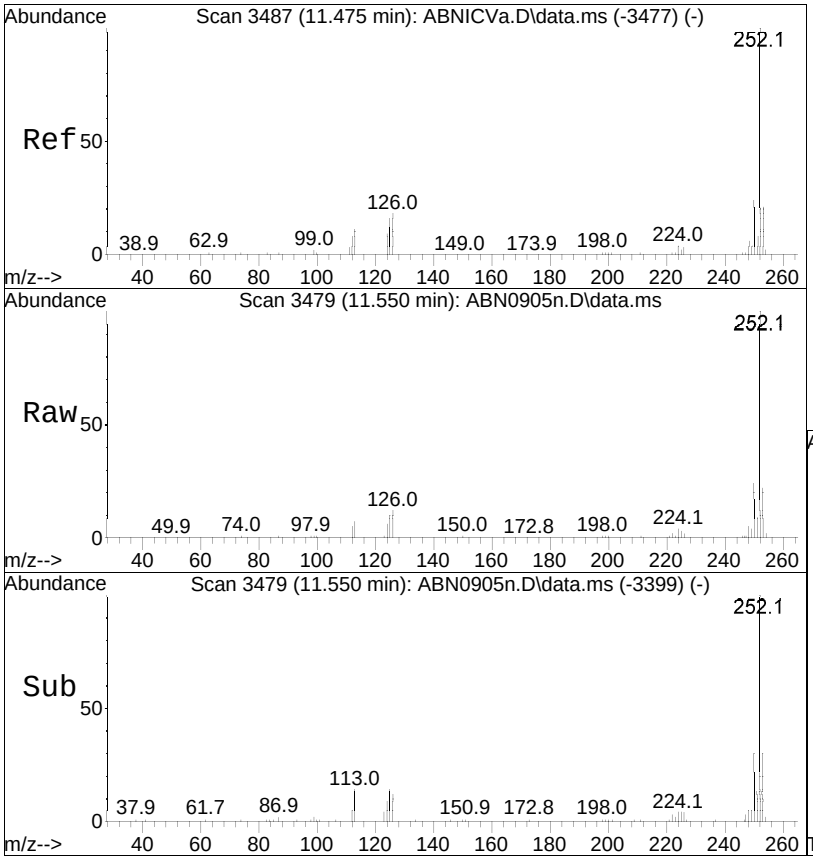


#110
Benzo(k)fluoranthene
Concen: 4.54 ug/ml
RT: 11.295 min Scan# 3397
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:252 Resp: 135162

Ion	Ratio	Lower	Upper
252	100		
125	10.4	13.0	19.6#
253	22.9	16.8	25.2

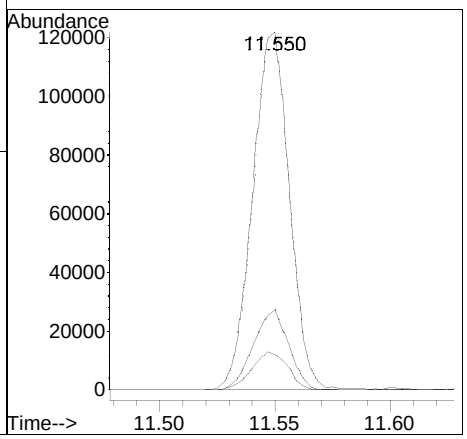


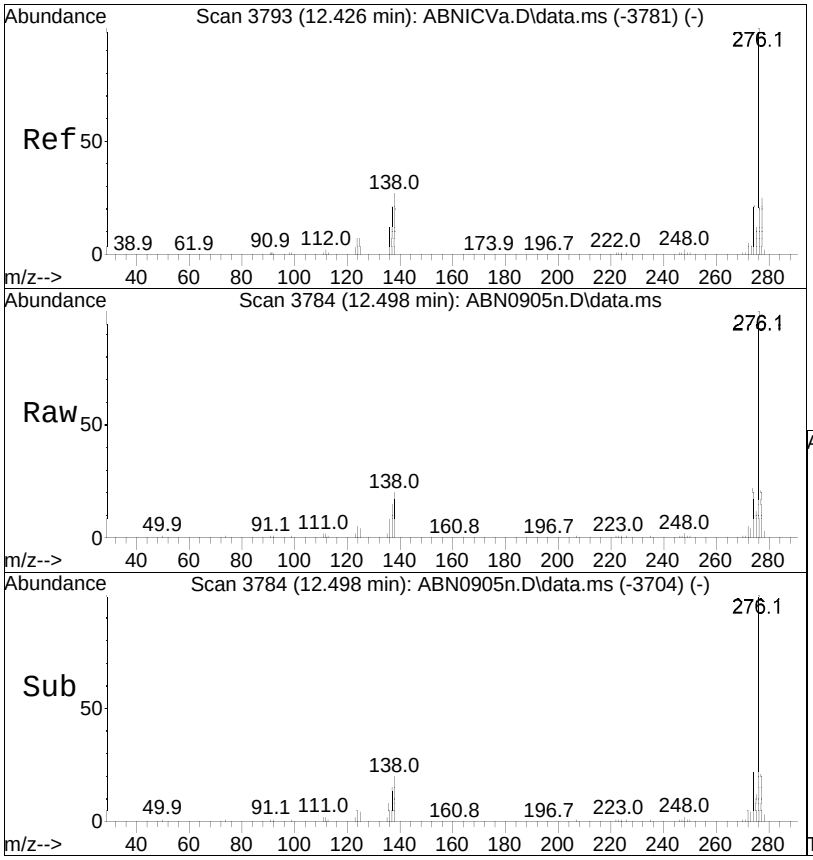


#111
Benzo(a)pyrene
Concen: 4.95 ug/ml
RT: 11.550 min Scan# 3479
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:252 Resp: 134277

Ion	Ratio	Lower	Upper
252	100		
125	10.7	14.2	21.2#
253	21.7	16.9	25.3

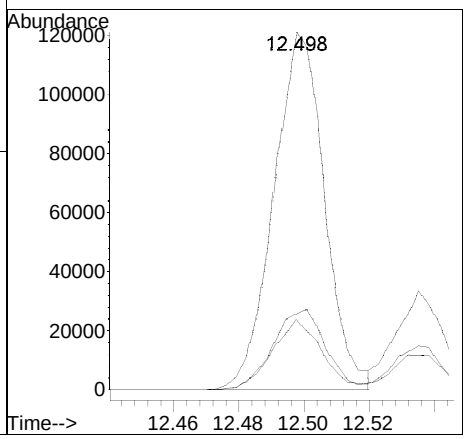


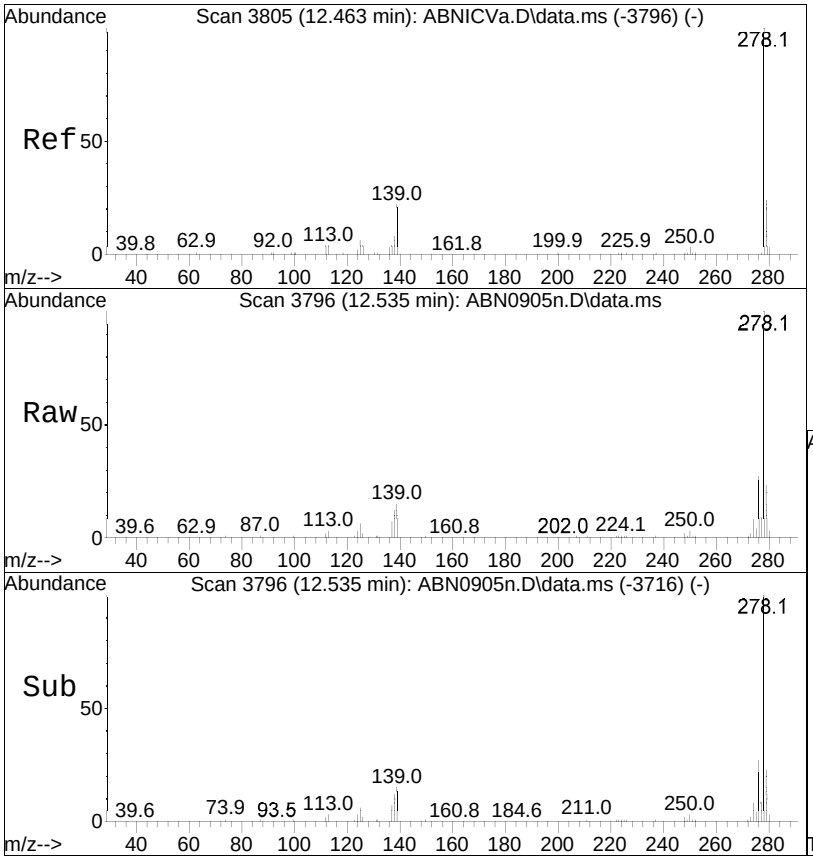


#113
Indeno(1,2,3-cd)pyrene
Concen: 4.19 ug/mL
RT: 12.498 min Scan# 3784
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:276 Resp: 130572

Ion	Ratio	Lower	Upper
276	100		
138	19.6	25.1	37.7#
277	23.4	18.6	28.0

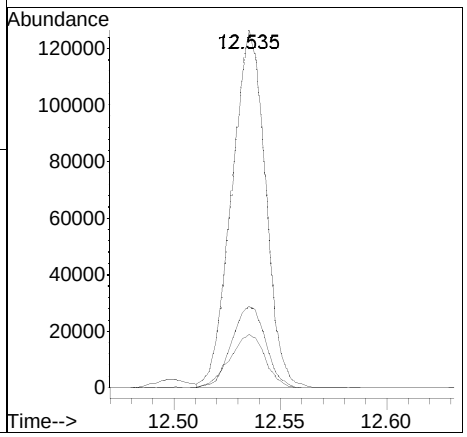


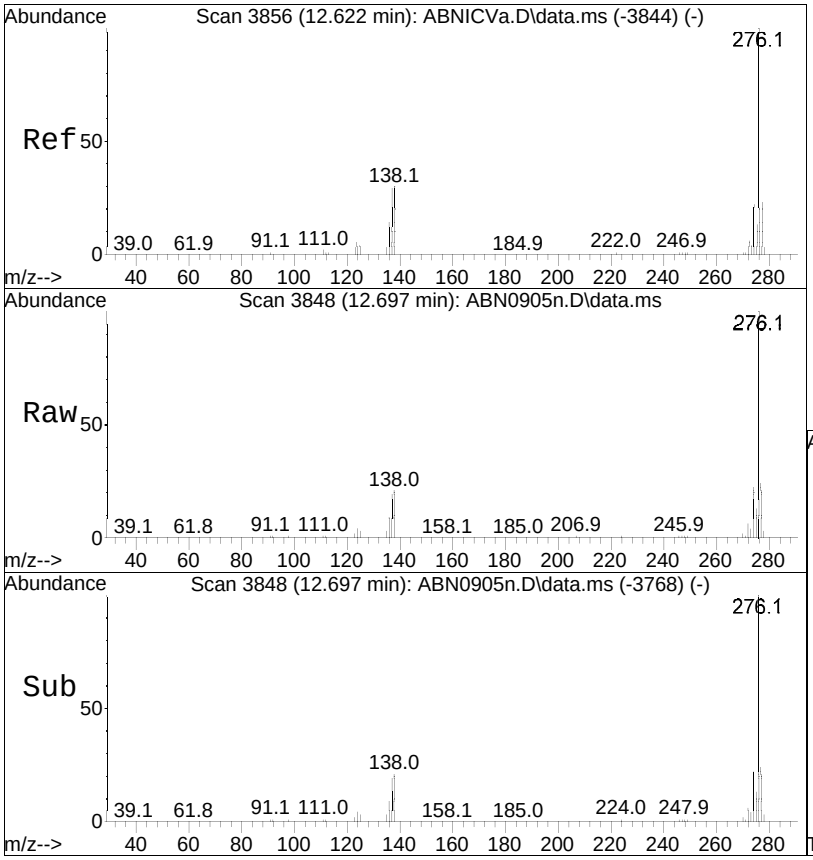


#114
Dibenzo(a,h)anthracene
Concen: 4.24 ug/ml
RT: 12.535 min Scan# 3796
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:278 Resp: 138566

Ion	Ratio	Lower	Upper
278	100		
139	15.6	20.8	31.2#
279	23.3	18.3	27.5

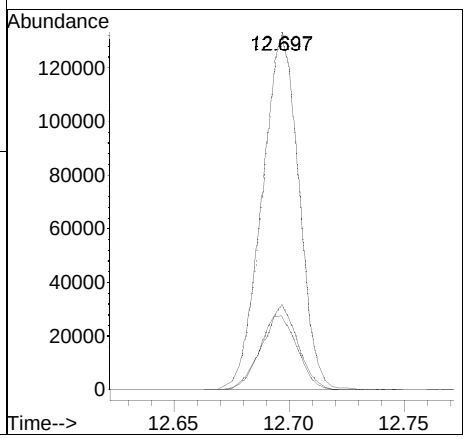




#115
Benzo(ghi)perylene
Concen: 4.44 ug/ml
RT: 12.697 min Scan# 3848
Delta R.T. 0.000 min
Lab File: ABN0905n.D
Acq: 5 Sep 2023 8:32 pm

Tgt Ion:276 Resp: 146418

Ion	Ratio	Lower	Upper
276	100		
138	21.0	29.2	43.8#
277	23.5	18.8	28.2



Manual Integration Report

Data Path	: I:\8270\Dakota\230905nlvi\	QMethod	: FS230412LVIDakota.m
Data File	: ABN0905n.D	Operator	: Dakota:sz
Date Inj'd	: 9/5/2023 8:32 pm	Instrument	: Dakota
Sample	: wg1823113-3,32,,ABN LVI CC	Quant Date	: 9/5/2023 8:55 pm

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230905nlvi\
Data File : AP90905n.D
Acq On : 5 Sep 2023 8:55 pm
Operator : Dakota:sz
Sample : wg1823113-4,32,,AP9 LVI CCV Lot # 10181
Misc : wg1823113,,ical19934
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Sep 05 21:18:57 2023
Quant Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 21:15:53 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
27	I	IS2_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	86	0.00
28	T	Benzaldehyde		1.046	0.803	23.2#	61	0.00
29	T	Acetophenone		1.831	1.444	21.1#	63	0.00
30	T	m-Toluidine	*	5.000	3.804	23.9#	60	0.00
31	T	2-Chloroaniline		1.693	1.321	22.0#	62	0.00
54	I	IS2_Naphthalene-d8		1.000	1.000	0.0	74	0.00
55	T	a-Terpineol		0.277	0.265	4.3	67	0.00
56	T	3-Chloroaniline		0.138	0.144	-4.3	67	0.00
57	T	2,6-Dichlorophenol		0.276	0.329	-19.2	82	0.00
58	T	1-chloro-2-nitrobenzene		0.149	0.139	6.7	65	0.00
59	T	Caprolactam		0.149	0.144	3.4	71	0.00
60	T	1,2,4,5-Tetrachlorobenzene		0.402	0.430	-7.0	75	0.00
61	T	Biphenyl		0.901	0.847	6.0	66	0.00
82	I	IS2_Acenaphthene-d10		1.000	1.000	0.0	85	0.00
83	T	Dichloran	*	5.000	4.712	5.8	92	0.00
84	T	Pentachloronitrobenzene		0.203	0.233	-14.8	97	0.00
97	I	IS2_Phenanthrene-d10		1.000	1.000	0.0	100	0.00
98	T	Diphenamid		0.501	0.401	20.0	77	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : AP90905n.D
Acq On : 5 Sep 2023 8:55 pm
Operator : Dakota:sz
Sample : wg1823113-4,32,,AP9 LVI CCV Lot # 10181
Misc : wg1823113,,ical19934
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Sep 05 21:18:57 2023
Quant Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 21:15:53 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
27) IS2_1,4-Dichlorobenzen...	3.460	152	14263	4.000	ug/ml		0.00
54) IS2_Naphthalene-d8	4.731	136	47445	4.000	ug/ml	#	0.00
82) IS2_Acenaphthene-d10	6.406	164	30377	4.000	ug/ml		0.00
97) IS2_Phenanthrene-d10	7.792	188	78300	4.000	ug/ml		0.00
System Monitoring Compounds							
Target Compounds							Qvalue
28) Benzaldehyde	2.984	105	14324	3.840	ug/ml		96
29) Acetophenone	3.907	105	25752	3.943	ug/ml	#	81
30) m-Toluidine	4.000	106	23182	3.804	ug/ml		93
31) 2-Chloroaniline	4.358	127	23546	3.899	ug/ml		94
55) a-Terpineol	4.827	59	15719	4.791	ug/ml	#	82
56) 3-Chloroaniline	4.840	65	8550	5.236	ug/ml		82
57) 2,6-Dichlorophenol	4.855	162	19490	5.954	ug/ml	#	84
58) 1-chloro-2-nitrobenzene	5.107	111	8232	4.667	ug/ml	#	1
59) Caprolactam	5.157	55	8533	4.840	ug/ml	#	79
60) 1,2,4,5-Tetrachloroben...	5.601	216	25509	5.350	ug/ml	#	97
61) Biphenyl	5.896	154	50233	4.701	ug/ml		96
83) Dichloran	7.528	206	7444	4.712	ug/ml	#	65
84) Pentachloronitrobenzene	7.662	237	8852	5.734	ug/ml	#	74
98) Diphenamid	8.731	167	39277	4.002	ug/ml	#	79

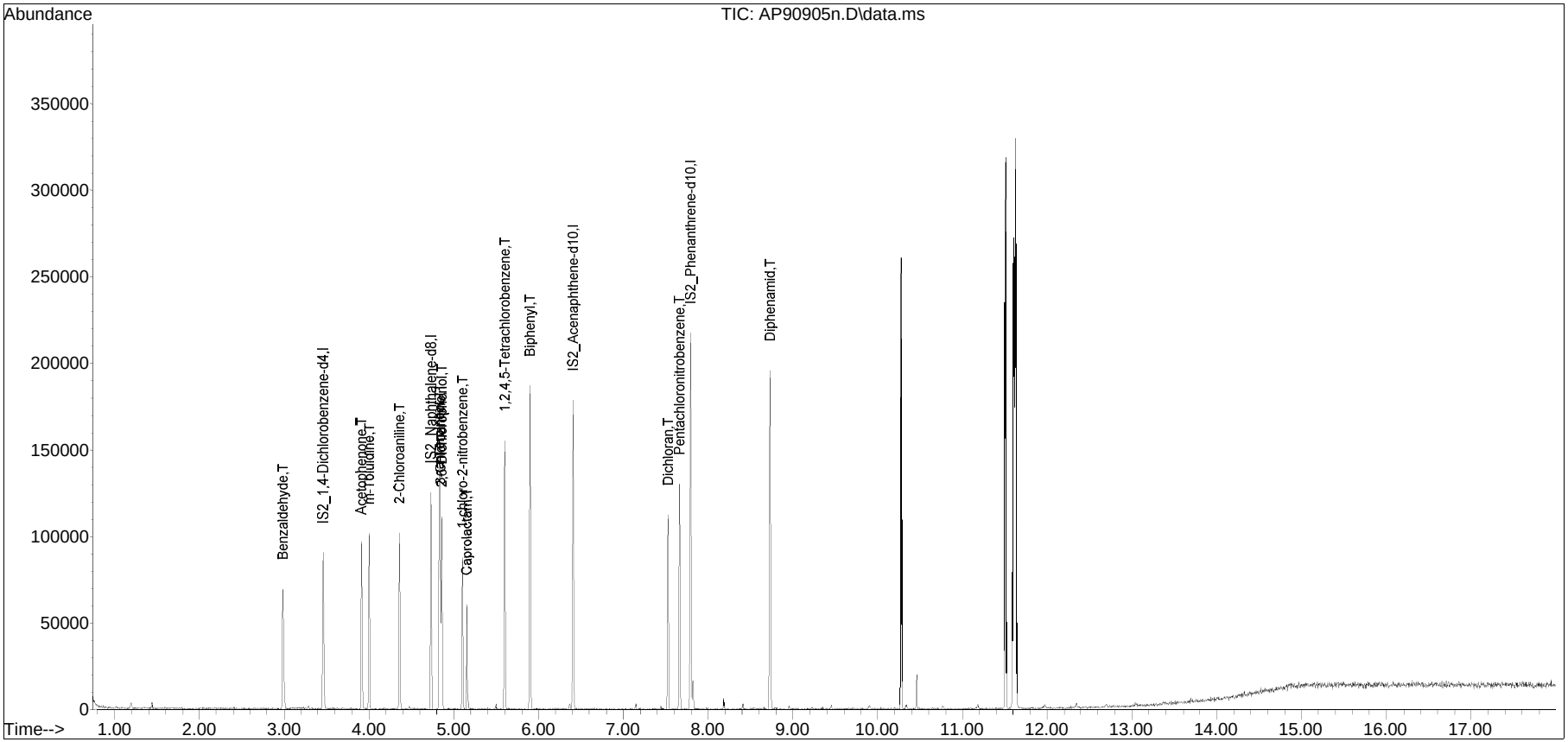
(#) = qualifier out of range (m) = manual integration (+) = signals summed

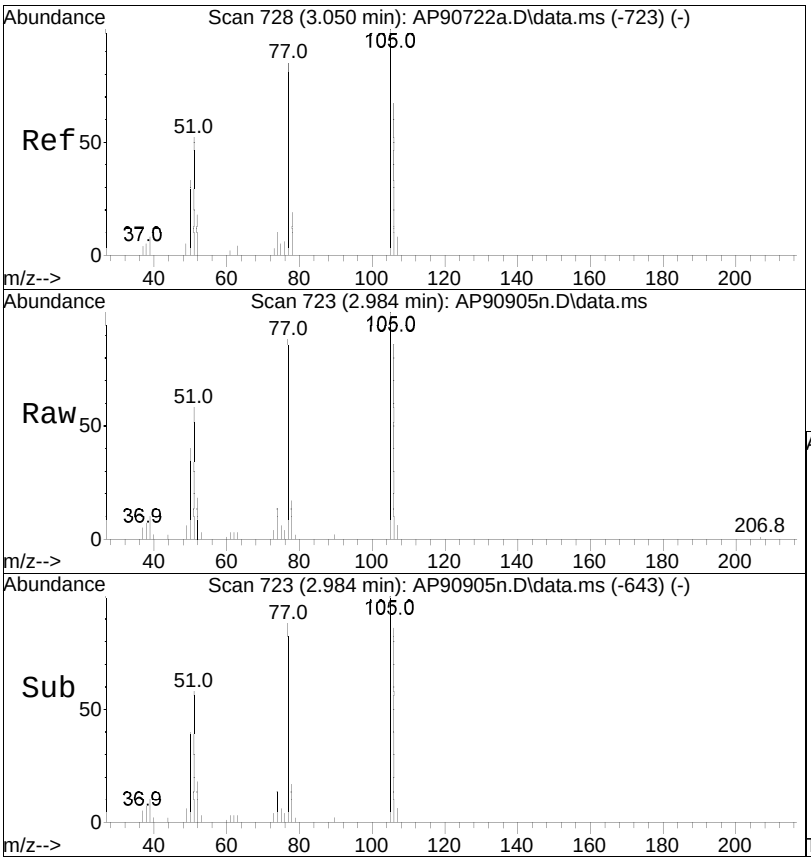
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : AP90905n.D
Acq On : 5 Sep 2023 8:55 pm
Operator : Dakota:sz
Sample : wg1823113-4,32,,AP9 LVI CCV Lot # 10181
Misc : wg1823113,,ical19934
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Sep 05 21:18:57 2023
Quant Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 21:15:53 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublist

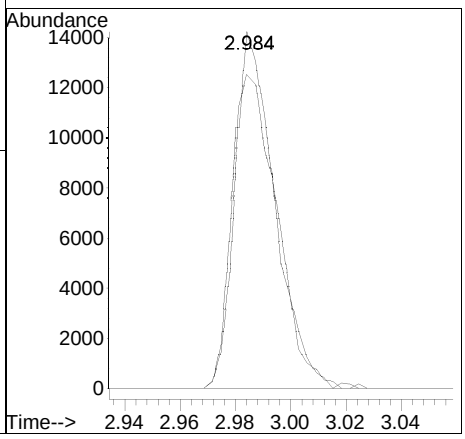


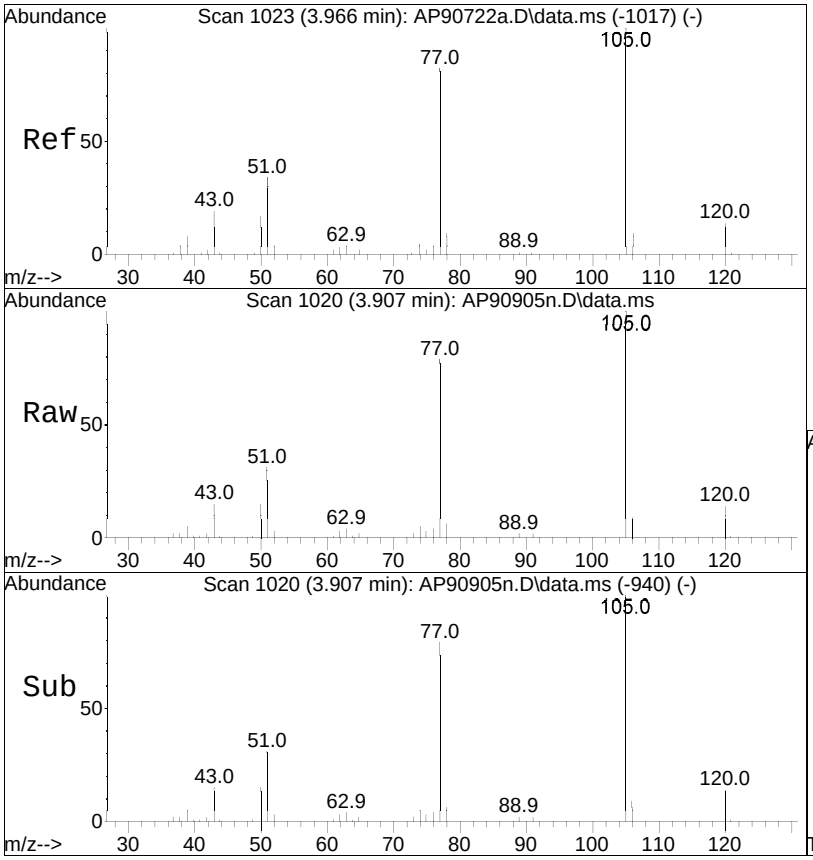


#28
Benzaldehyde
Concen: 3.84 ug/ml
RT: 2.984 min Scan# 723
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion:105 Resp: 14324

Ion	Ratio	Lower	Upper
105	100		
77	99.2	82.2	123.4

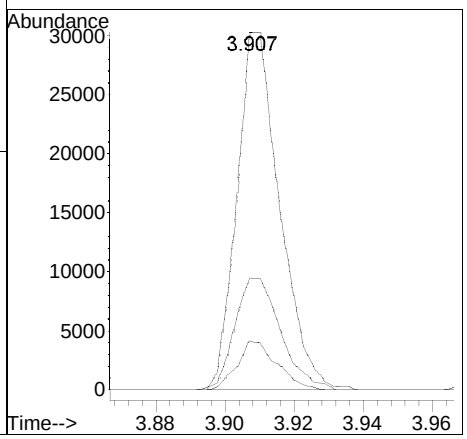


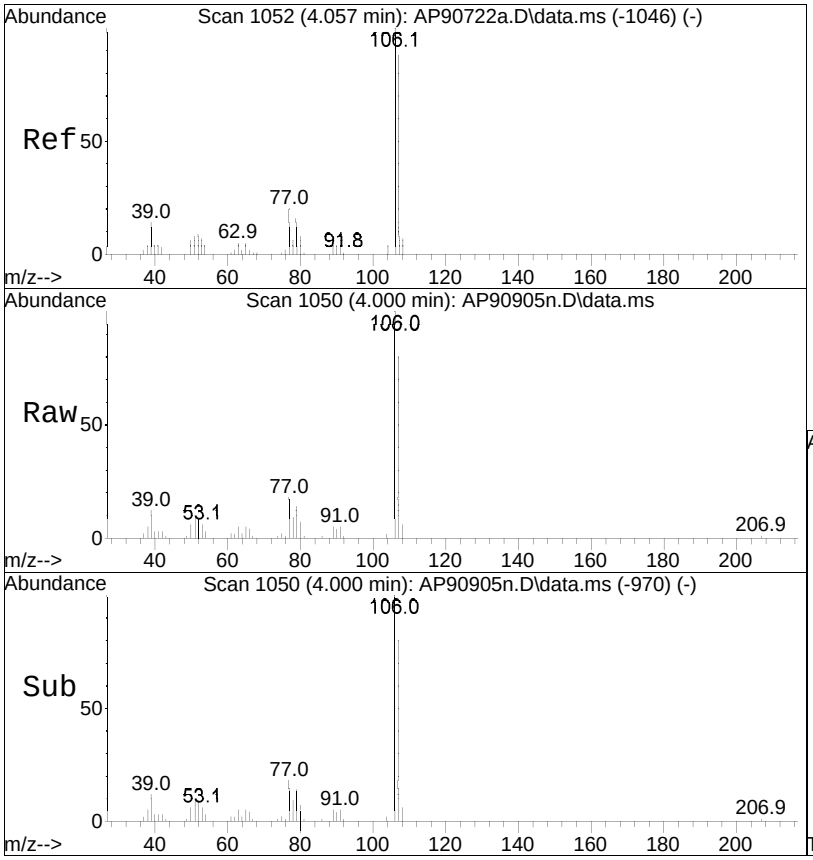


#29
Acetophenone
Concen: 3.94 ug/ml
RT: 3.907 min Scan# 1020
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion:105 Resp: 25752

Ion	Ratio	Lower	Upper
105	100		
120	12.8	20.5	30.7#
51	33.5	34.9	52.3#

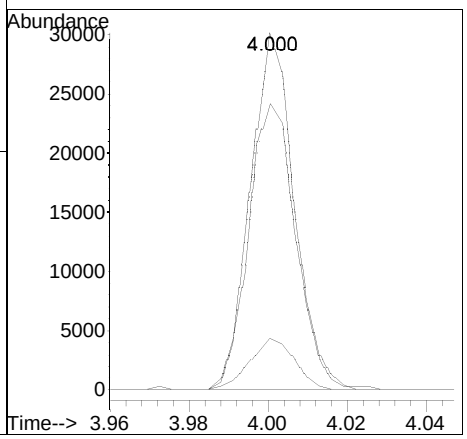


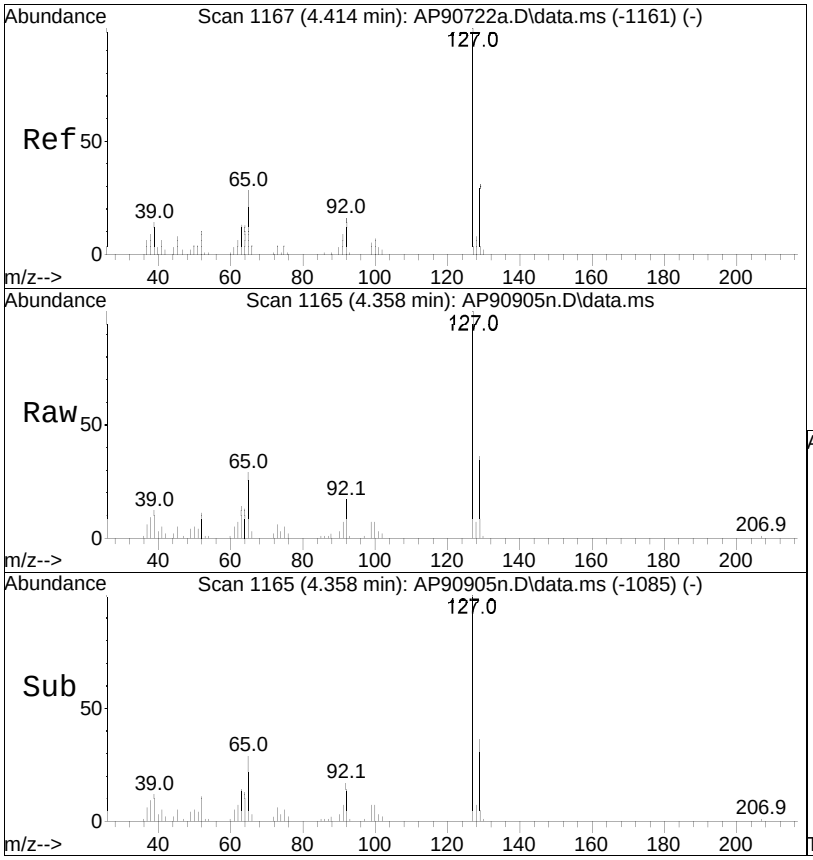


#30
m-Toluidine
Concen: 3.80 ug/ml
RT: 4.000 min Scan# 1050
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion:106 Resp: 23182

Ion	Ratio	Lower	Upper
106	100		
107	86.5	75.7	113.5
79	14.7	11.8	17.8

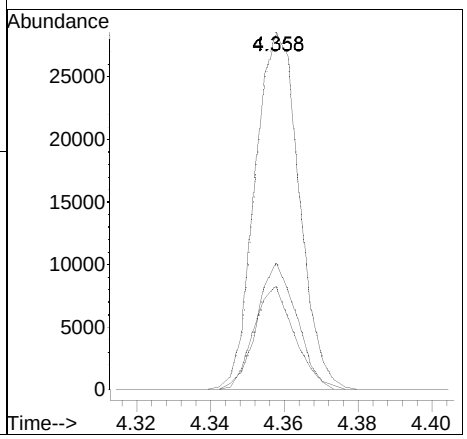


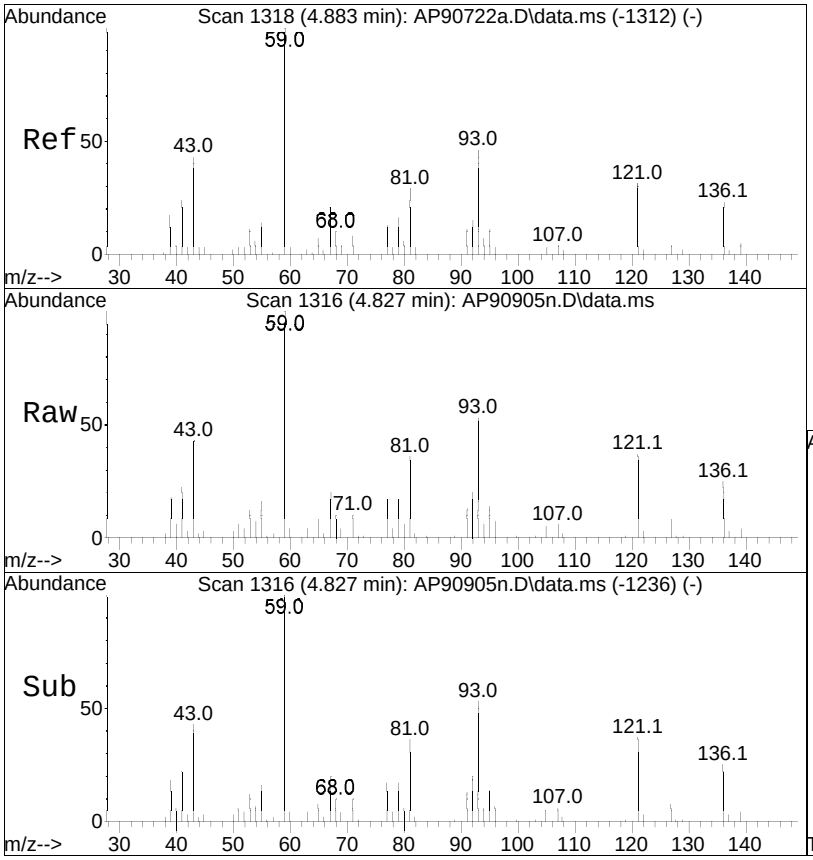


#31
2-Chloroaniline
Concen: 3.90 ug/ml
RT: 4.358 min Scan# 1165
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion:127 Resp: 23546

Ion	Ratio	Lower	Upper
127	100		
129	32.3	25.9	38.9
65	26.7	26.3	39.5

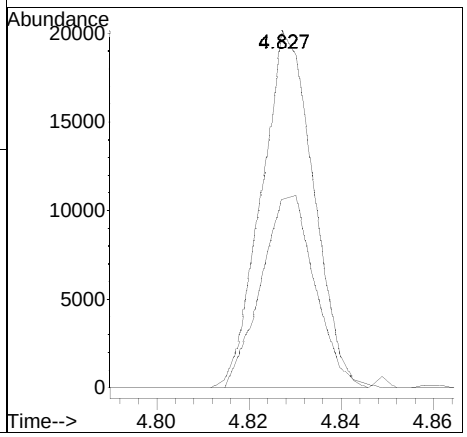


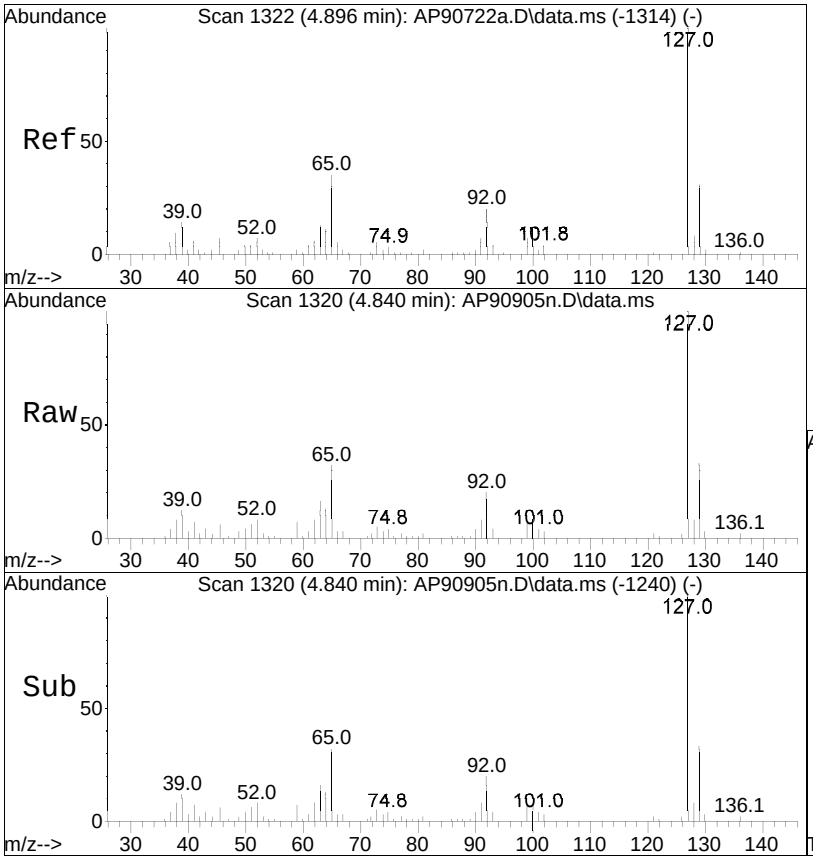


#55
a-Terpineol
Concen: 4.79 ug/ml
RT: 4.827 min Scan# 1316
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion: 59 Resp: 15719

Ion	Ratio	Lower	Upper
59	100		
93	56.0	35.6	53.4#

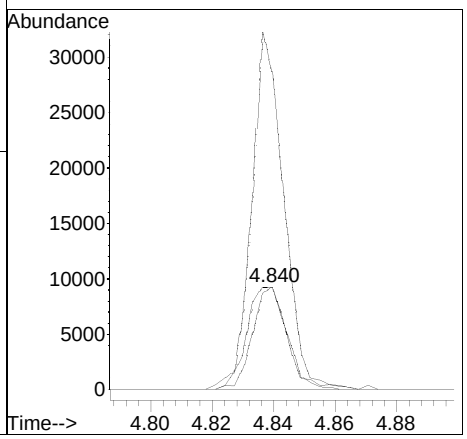


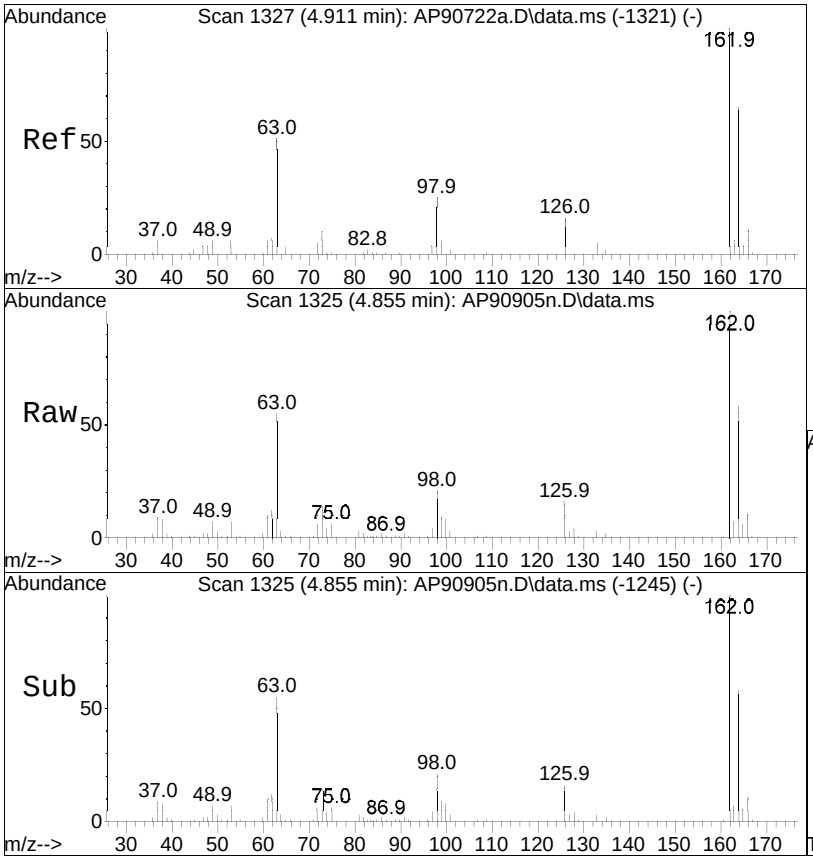


#56
3-Chloroaniline
Concen: 5.24 ug/ml
RT: 4.840 min Scan# 1320
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion: 65 Resp: 8550

Ion	Ratio	Lower	Upper
65	100		
127	266.8	243.2	364.8
129	83.5	78.8	118.2

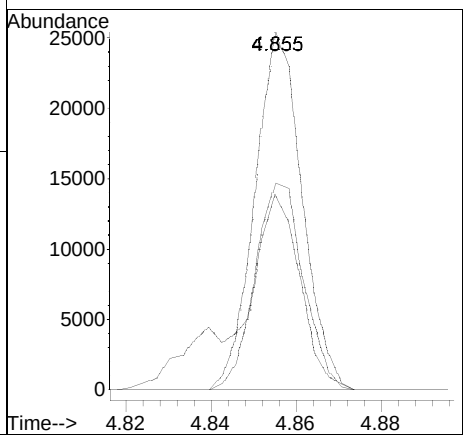


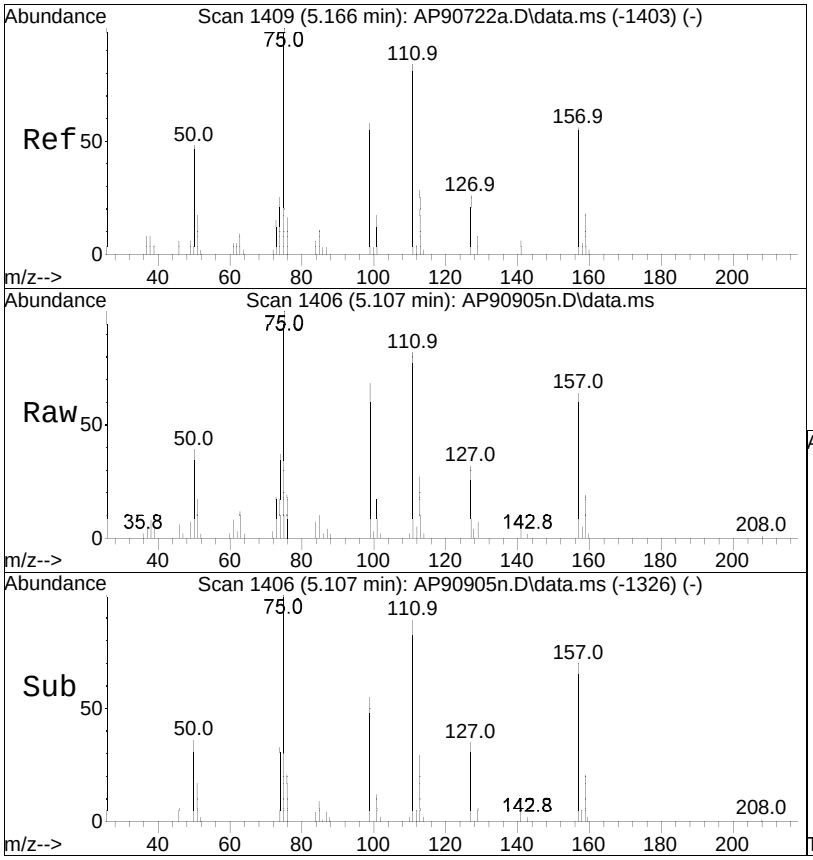


#57
2,6-Dichlorophenol
Concen: 5.95 ug/ml
RT: 4.855 min Scan# 1325
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion:162 Resp: 19490

Ion	Ratio	Lower	Upper
162	100		
164	59.4	51.1	76.7
63	54.4	60.8	91.2#

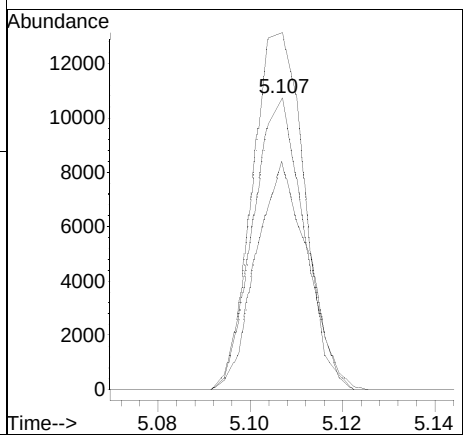


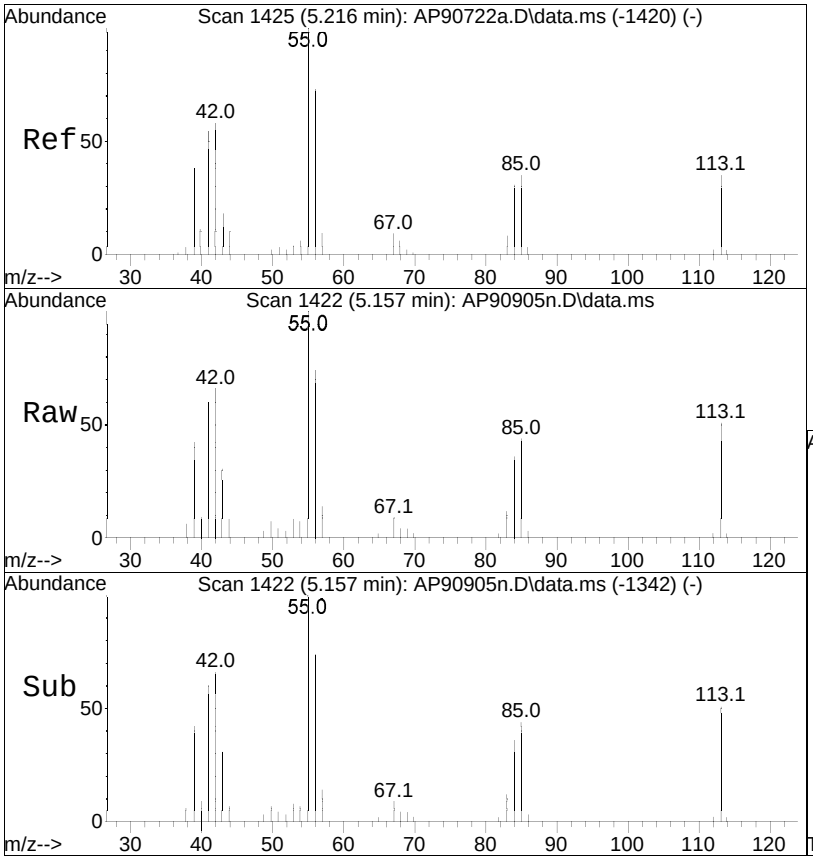


#58
1-chloro-2-nitrobenzene
Concen: 4.67 ug/ml
RT: 5.107 min Scan# 1406
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion:111 Resp: 8232

Ion	Ratio	Lower	Upper
111	100		
157	77.7	0.0	0.0#
75	126.2	28.2	42.2#

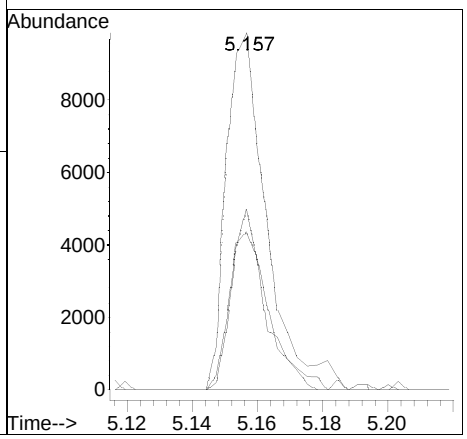


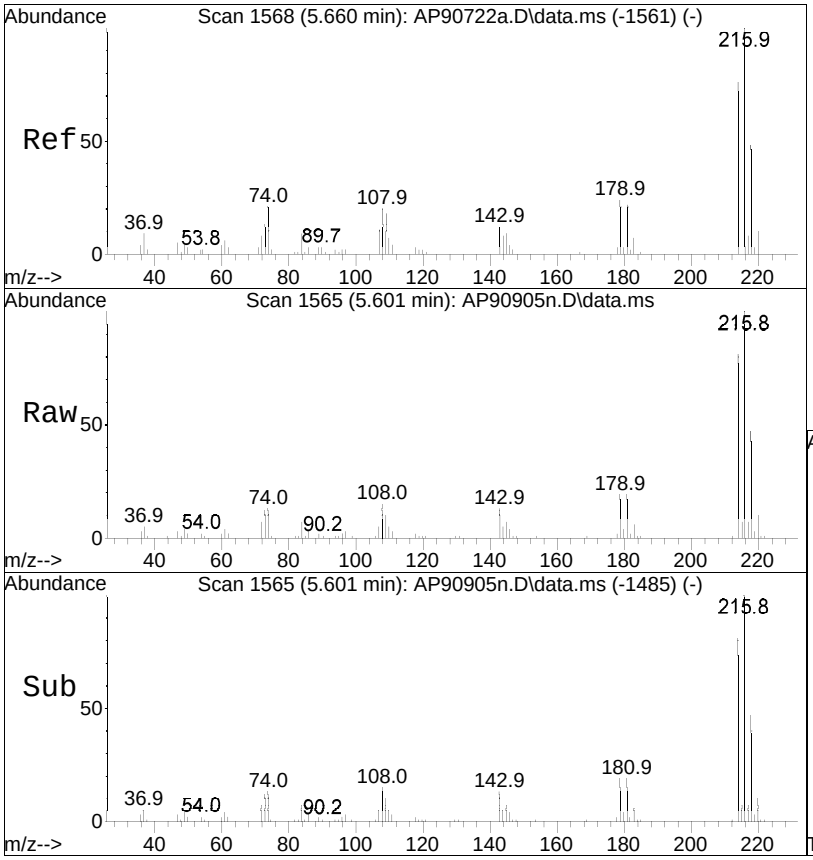


#59
Caprolactam
Concen: 4.84 ug/ml
RT: 5.157 min Scan# 1422
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion: 55 Resp: 8533

Ion	Ratio	Lower	Upper
55	100		
85	44.7	19.8	29.6#
113	41.8	29.6	44.4

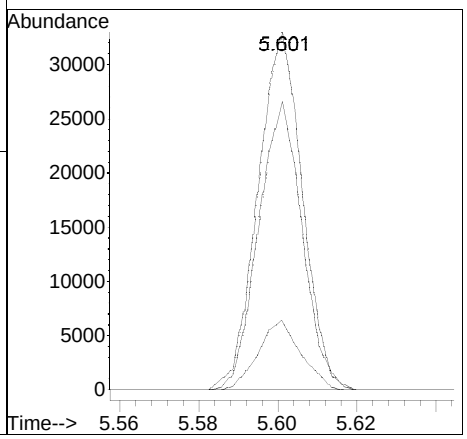


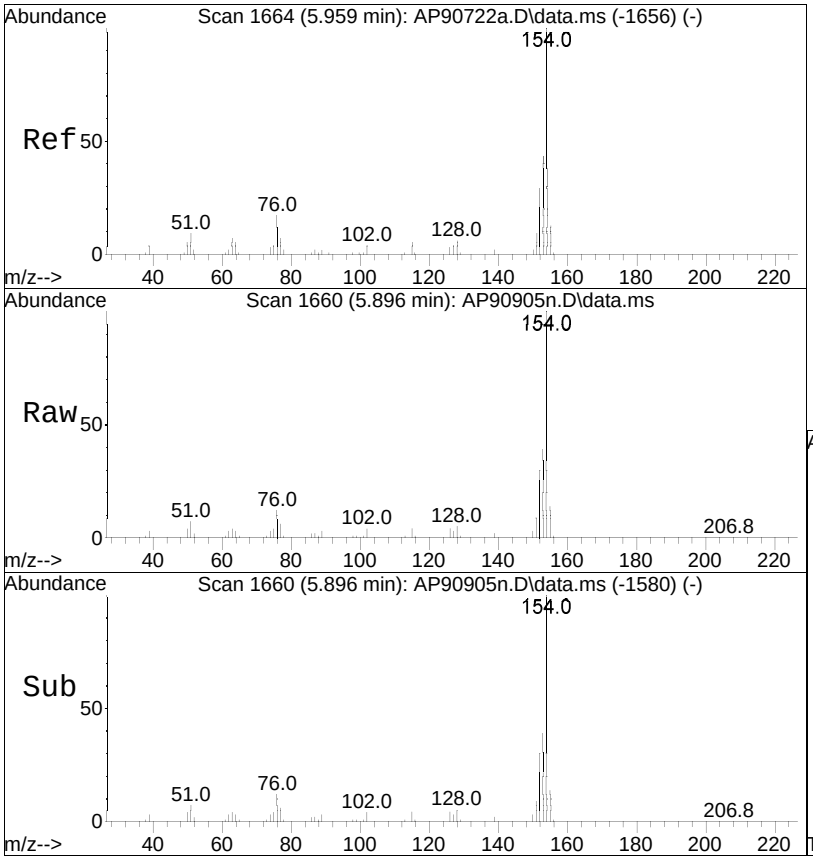


#60
1,2,4,5-Tetrachlorobenzene
Concen: 5.35 ug/ml
RT: 5.601 min Scan# 1565
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion:216 Resp: 25509

Ion	Ratio	Lower	Upper
216	100		
214	79.2	63.7	95.5
179	18.7	19.0	28.6#

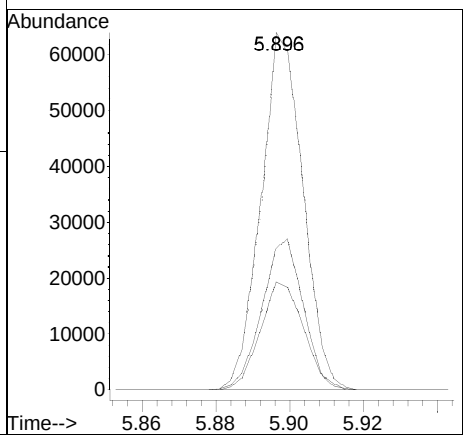


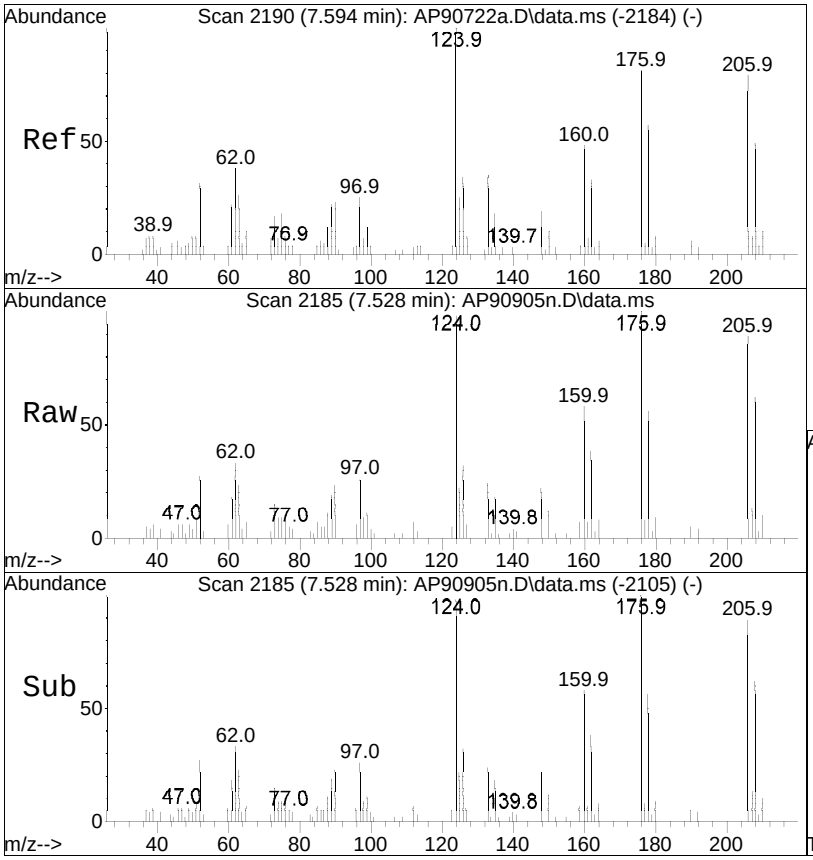


#61
Biphenyl
Concen: 4.70 ug/ml
RT: 5.896 min Scan# 1660
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion:154 Resp: 50233

Ion	Ratio	Lower	Upper
154	100		
153	41.8	32.3	48.5
152	31.3	22.5	33.7

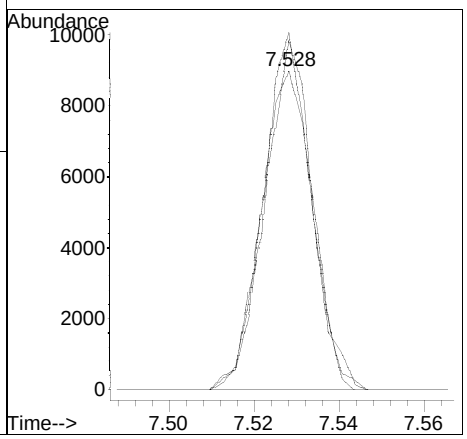


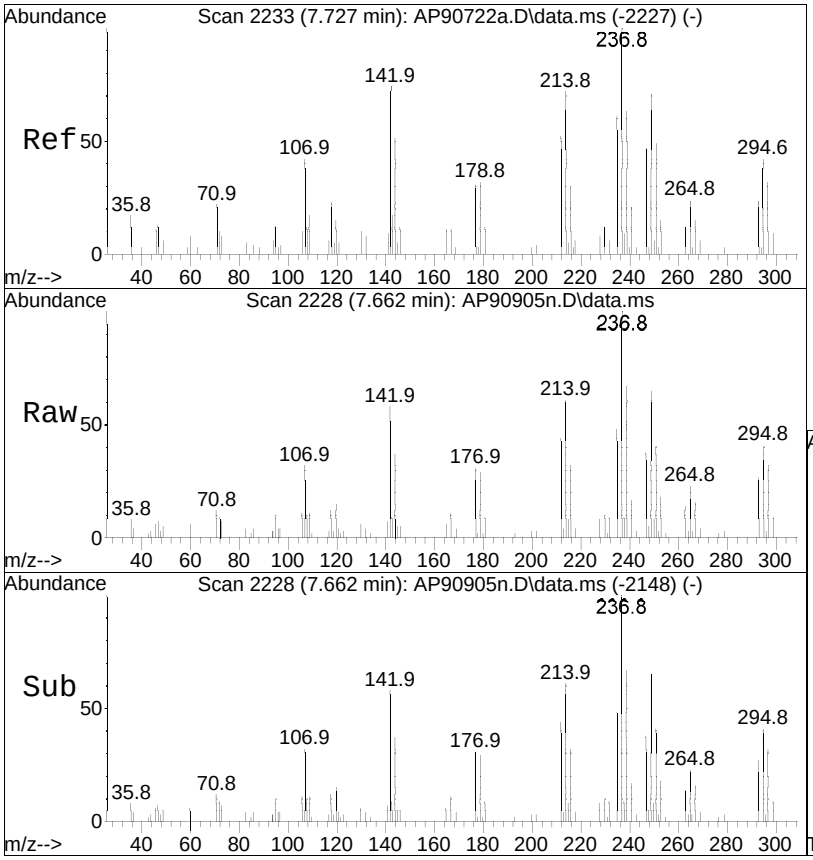


#83
Dichloran
Concen: 4.71 ug/ml
RT: 7.528 min Scan# 2185
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion:206 Resp: 7444

Ion	Ratio	Lower	Upper
206	100		
176	104.3	104.6	157.0#
124	104.1	130.5	195.7#

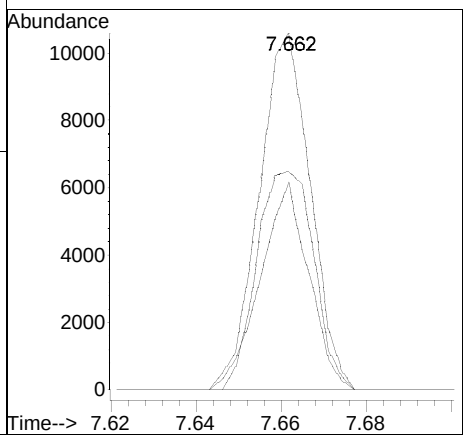


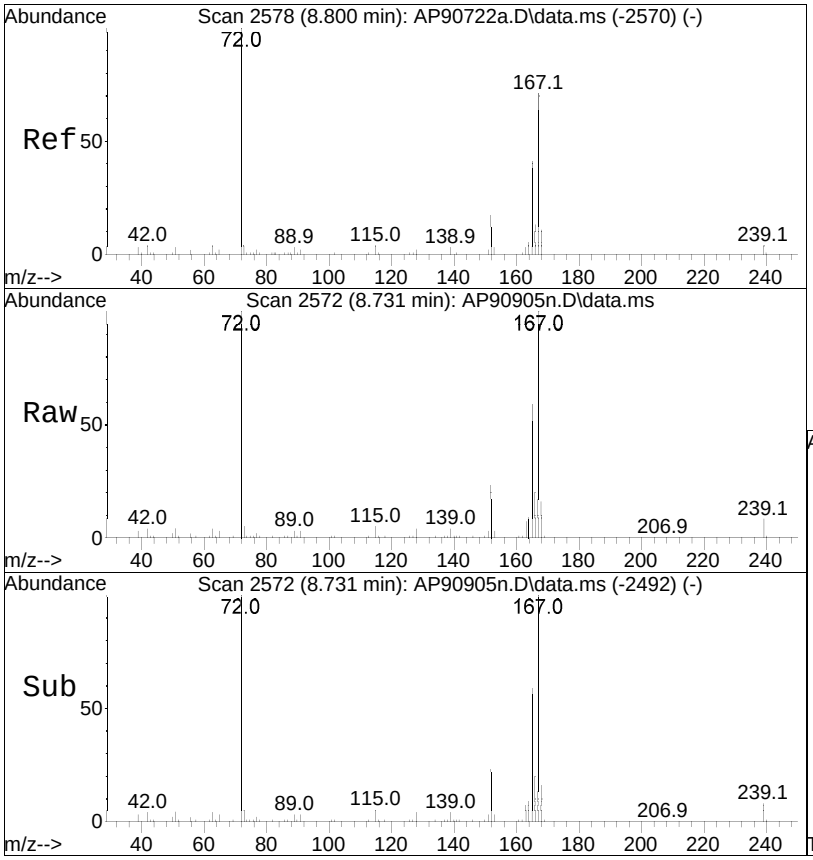


#84
Pentachloronitrobenzene
Concen: 5.73 ug/ml
RT: 7.662 min Scan# 2228
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion:237 Resp: 8852

Ion	Ratio	Lower	Upper
237	100		
142	55.0	77.0	115.4#
214	68.0	58.2	87.4

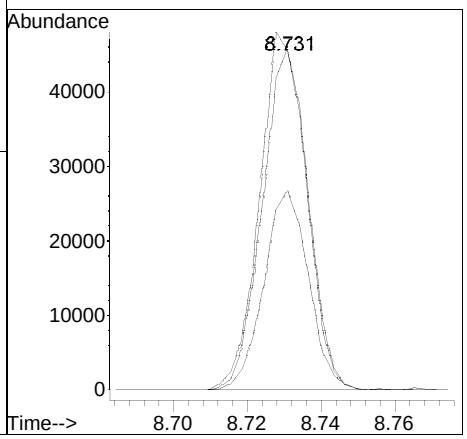




#98
Diphenamid
Concen: 4.00 ug/ml
RT: 8.731 min Scan# 2572
Delta R.T. 0.000 min
Lab File: AP90905n.D
Acq: 5 Sep 2023 8:55 pm

Tgt Ion:167 Resp: 39277

Ion	Ratio	Lower	Upper
167	100		
72	105.8	109.7	164.5#
165	57.1	41.8	62.6



Manual Integration Report

Data Path	: I:\8270\Dakota\230905nlvi\	QMethod	: FS230412LVIDakota.m
Data File	: AP90905n.D	Operator	: Dakota:sz
Date Inj'd	: 9/5/2023 8:55 pm	Instrument	: Dakota
Sample	: wg1823113-4,32,,AP9 LVI CC	Quant Date	: 9/5/2023 9:16 pm

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230905nlvi\
Data File : ADP0905n.D
Acq On : 5 Sep 2023 9:18 pm
Operator : Dakota:sz
Sample : wg1823113-5,32,,ADP LVI CCV Lot # 10092
Misc : wg1823113,,ical19934
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Sep 05 22:23:56 2023
Quant Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 22:23:35 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
32	I	IS3_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	79	0.00
33	T	n-Decane		1.231	1.114	9.5	70	0.00
85	I	IS3_Acenaphthene-d10		1.000	1.000	0.0	81	0.00
86	T	Atrazine		0.363	0.409	-12.7	89	0.00
99	I	IS3_Phenanthrene-d10		1.000	1.000	0.0	85	0.00
100	T	n-Octadecane		0.386	0.323	16.3	69	0.00
101	T	Parathion	*	5.000	4.994	0.1	84	0.00
102	T	3,3'-Dimethylbenzidine	*	5.000	5.075	-1.5	86	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : ADP0905n.D
Acq On : 5 Sep 2023 9:18 pm
Operator : Dakota:sz
Sample : wg1823113-5,32,,ADP LVI CCV Lot # 10092
Misc : wg1823113,,ical19934
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Sep 05 22:23:56 2023
Quant Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 22:23:35 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	3.463	152	14772	4.000	ug/ml	0.00
85) IS3_Acenaphthene-d10	6.406	164	31769	4.000	ug/ml	0.00
99) IS3_Phenanthrene-d10	7.789	188	76421	4.000	ug/ml	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	3.394	57	20574	4.524	ug/ml#	30
86) Atrazine	7.649	200	16261	5.638	ug/ml#	91
100) n-Octadecane	7.879	57	30871	4.190	ug/ml#	1
101) Parathion	8.619	109	9061	4.994	ug/ml	86
102) 3,3'-Dimethylbenzidine	9.822	212	63043	5.075	ug/ml	98

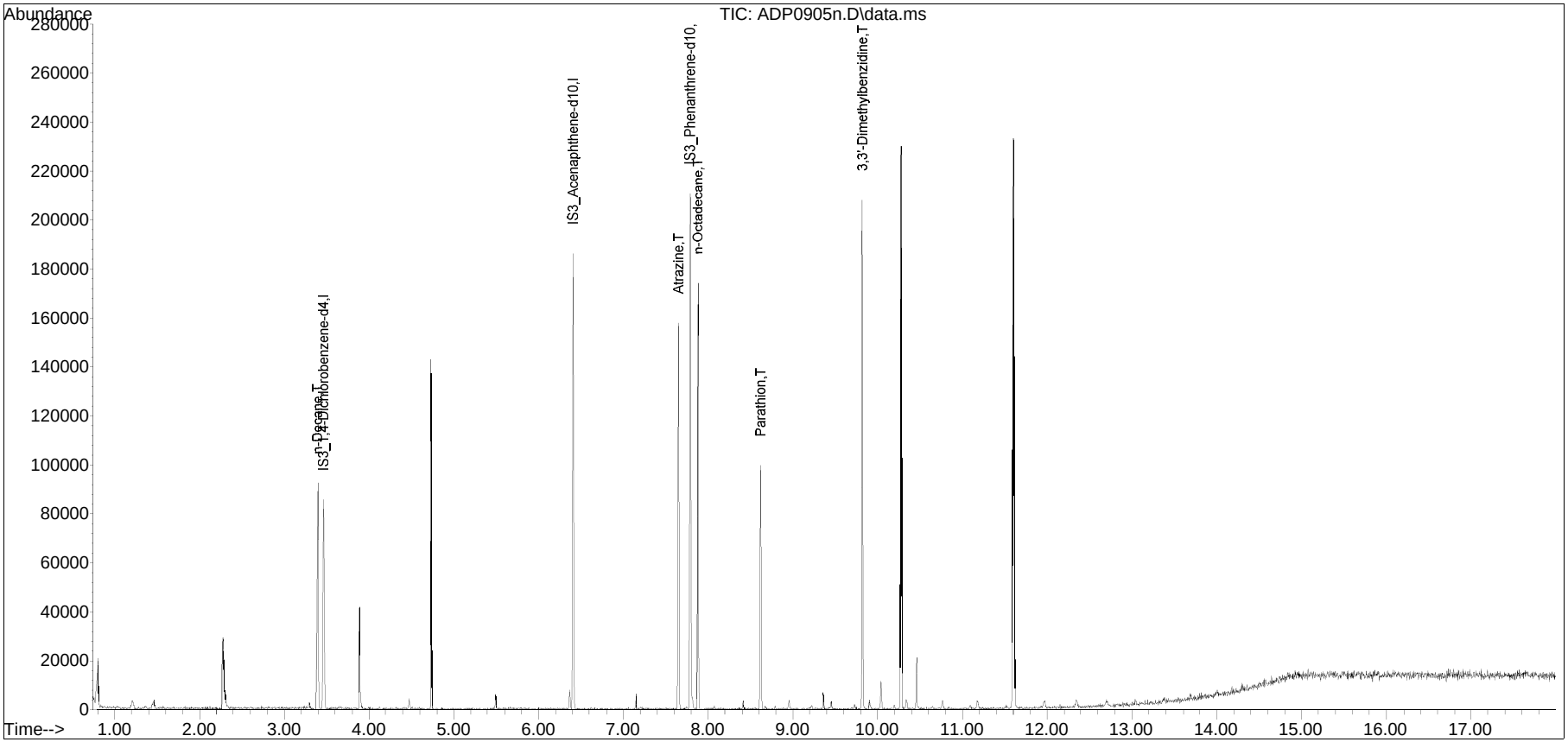
(#) = qualifier out of range (m) = manual integration (+) = signals summed

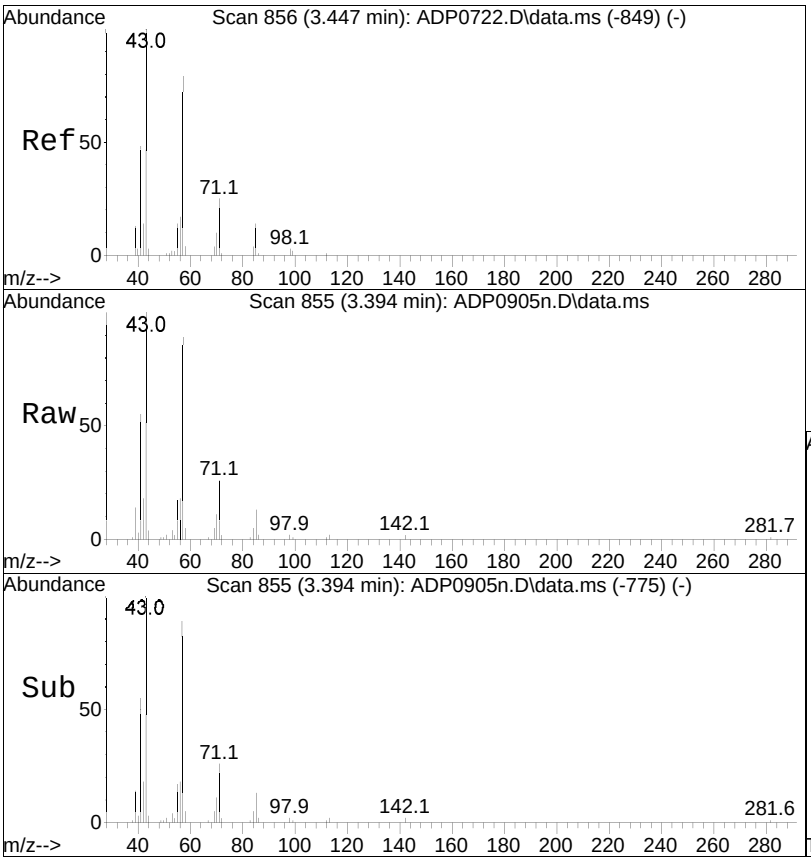
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : ADP0905n.D
Acq On : 5 Sep 2023 9:18 pm
Operator : Dakota:sz
Sample : wg1823113-5,32,,ADP LVI CCV Lot # 10092
Misc : wg1823113,,ical19934
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Sep 05 22:23:56 2023
Quant Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 22:23:35 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublist

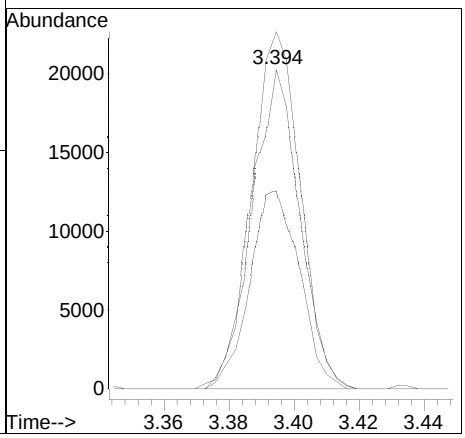


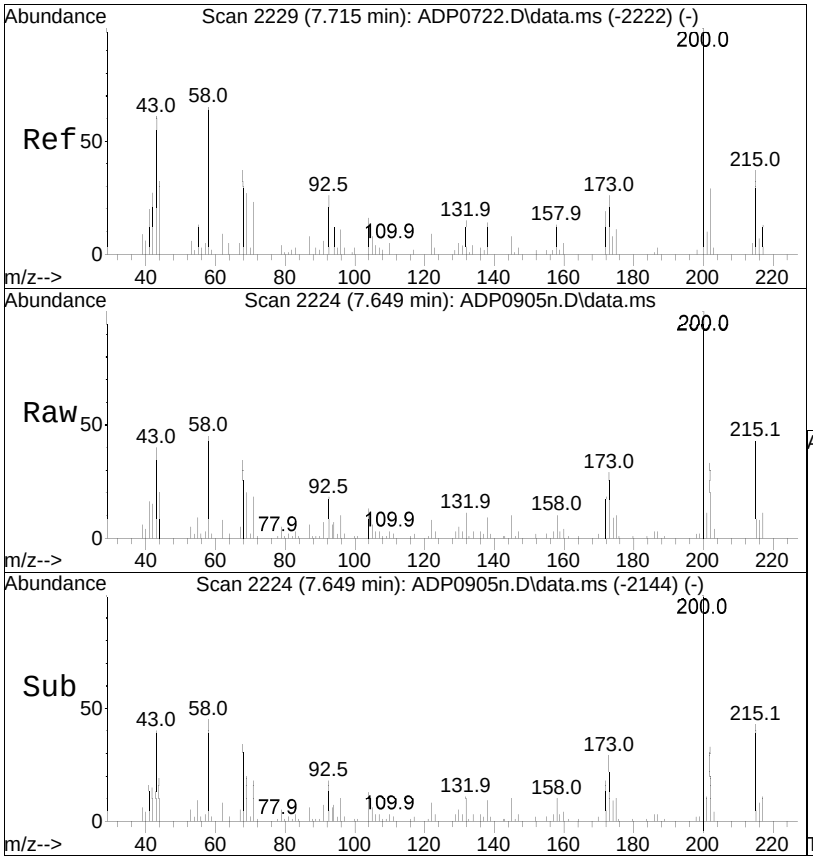


#33
n-Decane
Concen: 4.52 ug/ml
RT: 3.394 min Scan# 855
Delta R.T. 0.000 min
Lab File: ADP0905n.D
Acq: 5 Sep 2023 9:18 pm

Tgt Ion: 57 Resp: 20574

Ion	Ratio	Lower	Upper
57	100		
43	114.5	0.2	0.2#
41	64.8	0.2	0.2#

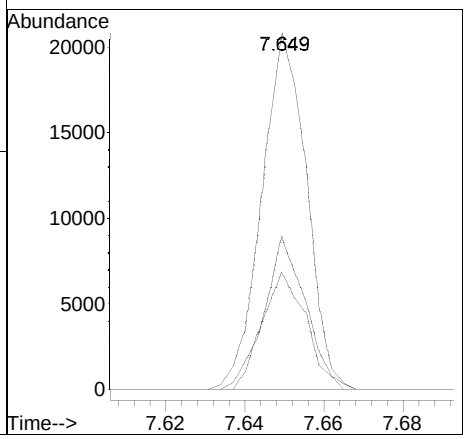


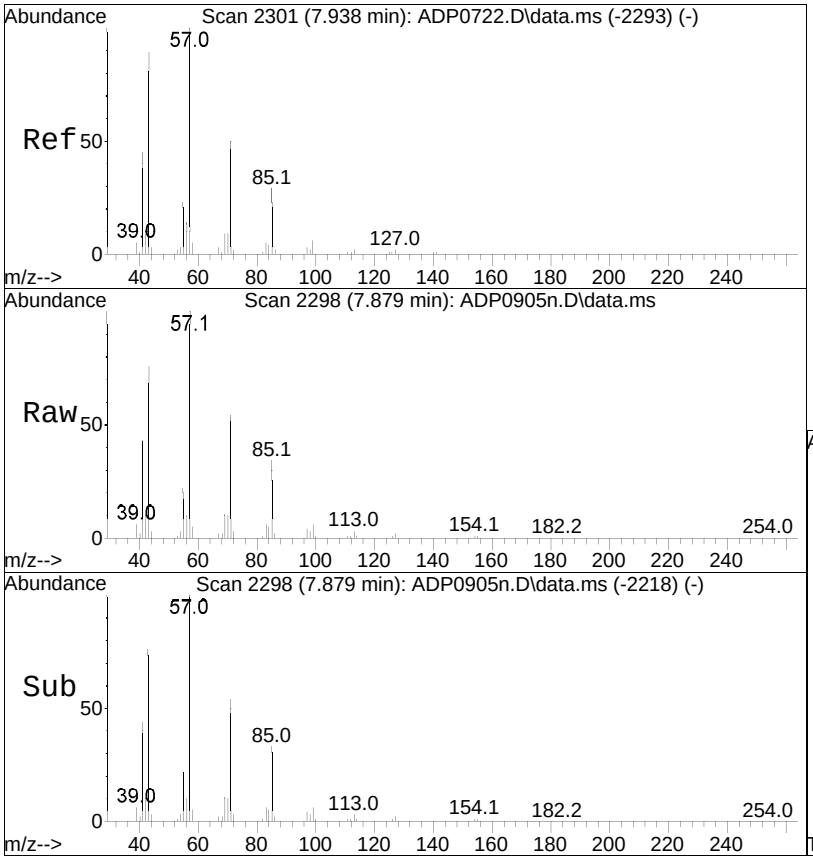


#86
Atrazine
Concen: 5.64 ug/ml
RT: 7.649 min Scan# 2224
Delta R.T. 0.000 min
Lab File: ADP0905n.D
Acq: 5 Sep 2023 9:18 pm

Tgt Ion:200 Resp: 16261

Ion	Ratio	Lower	Upper
200	100		
202	32.4	25.8	38.6
215	40.2	40.2	60.4#

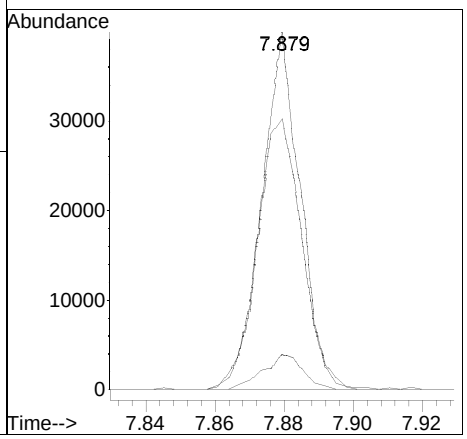


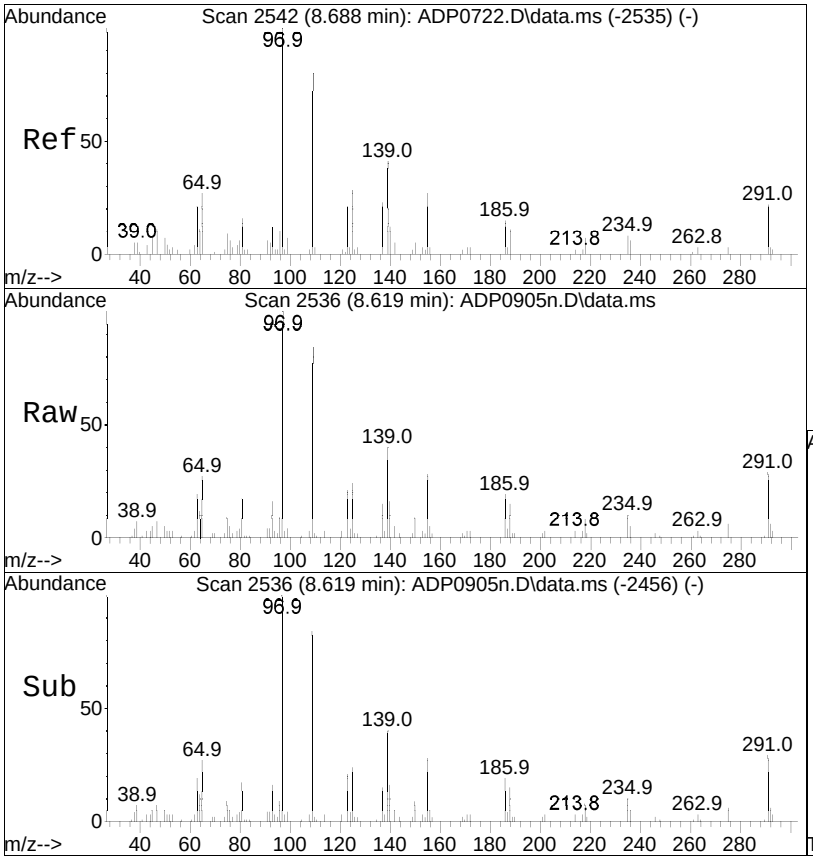


#100
n-Octadecane
Concen: 4.19 ug/ml
RT: 7.879 min Scan# 2298
Delta R.T. 0.000 min
Lab File: ADP0905n.D
Acq: 5 Sep 2023 9:18 pm

Tgt Ion: 57 Resp: 30871

Ion	Ratio	Lower	Upper
57	100		
43	86.0	9.0	13.6#
70	10.1	0.2	0.2#

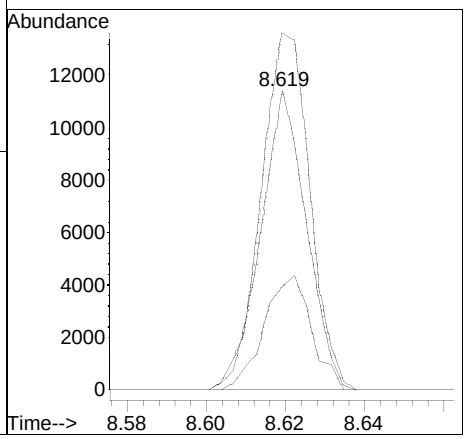


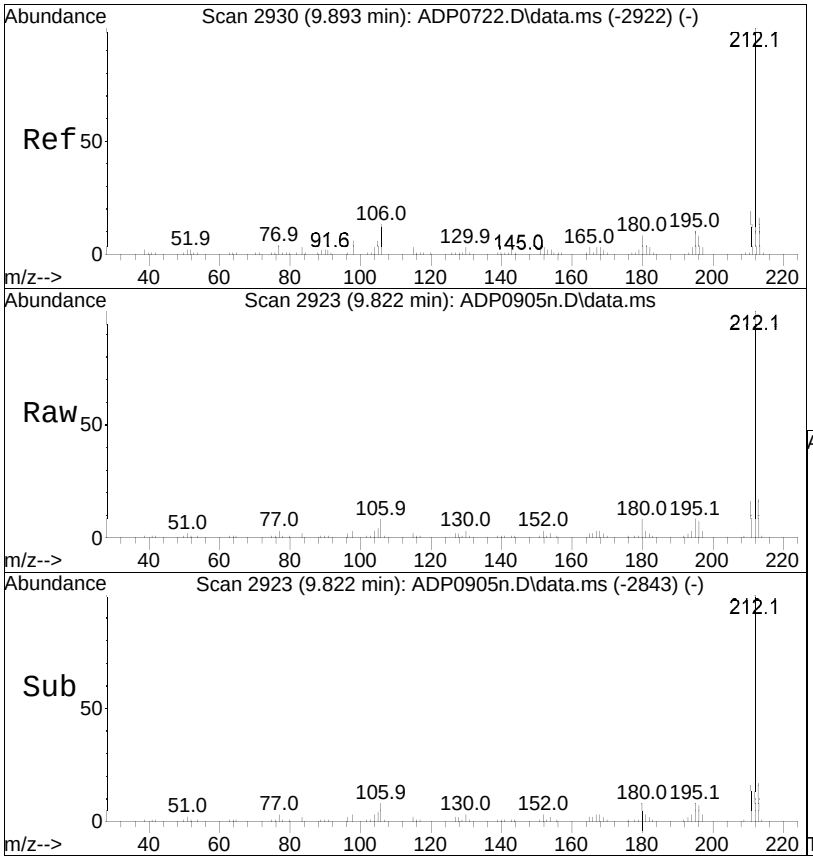


#101
Parathion
Concen: 4.99 ug/ml
RT: 8.619 min Scan# 2536
Delta R.T. 0.000 min
Lab File: ADP0905n.D
Acq: 5 Sep 2023 9:18 pm

Tgt Ion:109 Resp: 9061

Ion	Ratio	Lower	Upper
109	100		
97	128.2	87.4	131.2
291	39.7	34.2	51.2

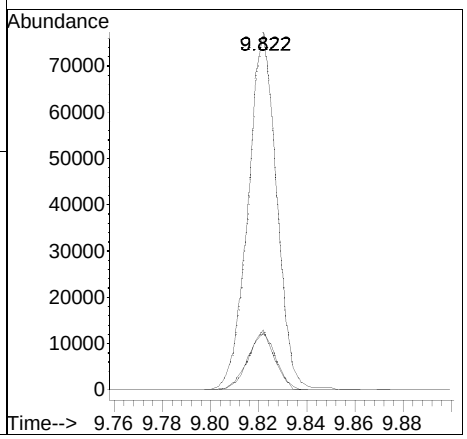




#102
3,3'-Dimethylbenzidine
Concen: 5.07 ug/ml
RT: 9.822 min Scan# 2923
Delta R.T. 0.000 min
Lab File: ADP0905n.D
Acq: 5 Sep 2023 9:18 pm

Tgt Ion:212 Resp: 63043

Ion	Ratio	Lower	Upper
212	100		
211	15.6	12.9	19.3
213	15.5	13.2	19.8



Manual Integration Report

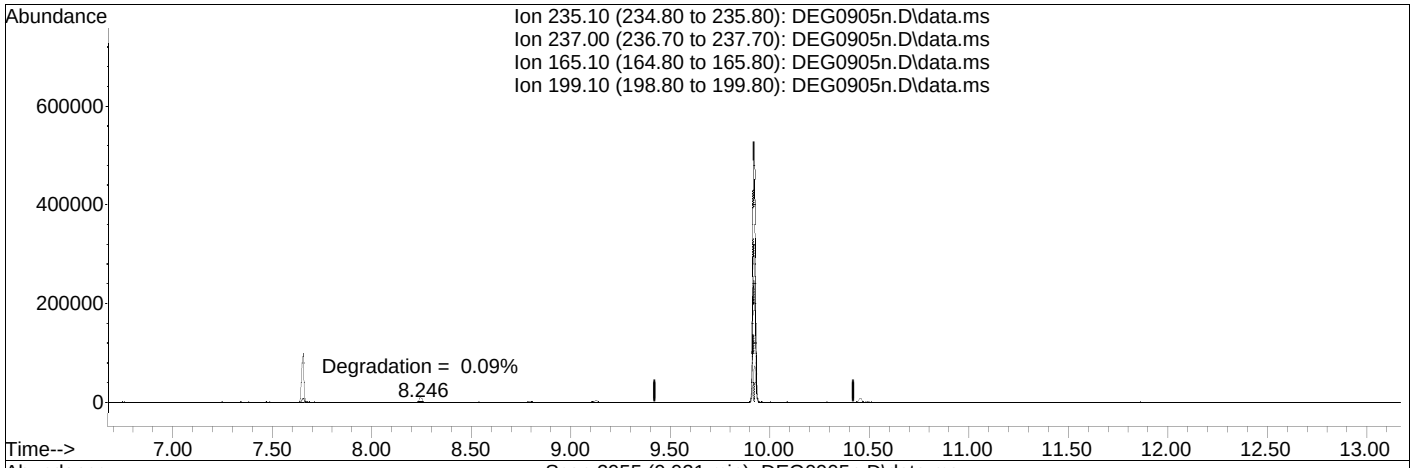
Data Path	: I:\8270\Dakota\230905nlvi\	QMethod	: FS230412LVIDakota.m
Data File	: ADP0905n.D	Operator	: Dakota:sz
Date Inj'd	: 9/5/2023 9:18 pm	Instrument	: Dakota
Sample	: wg1823113-5,32,,ADP LVI CC	Quant Date	: 9/5/2023 10:23 pm

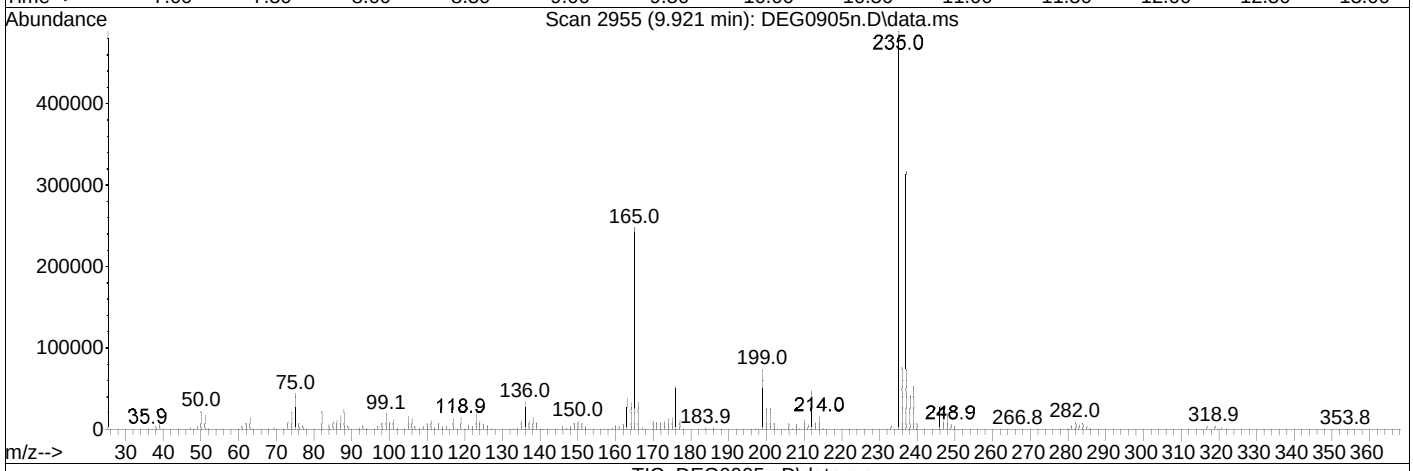
There are no manual integrations or false positives in this file.

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : DEG0905n.D
Acq On : 5 Sep 2023 8:09 pm
Operator : Dakota:sz
Sample : wg1823113-2,32,,Dakota Degdftpp
Misc : wg1823113,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Sep 07 09:04:36 2023
Quant Method : I:\8270\Dakota\230905nlvi\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 09:04:15 2023
Response via : Initial Calibration





TIC: DEG0905n.D\data.ms

(6) DDT (T)

9.921min (0.000) 75.82

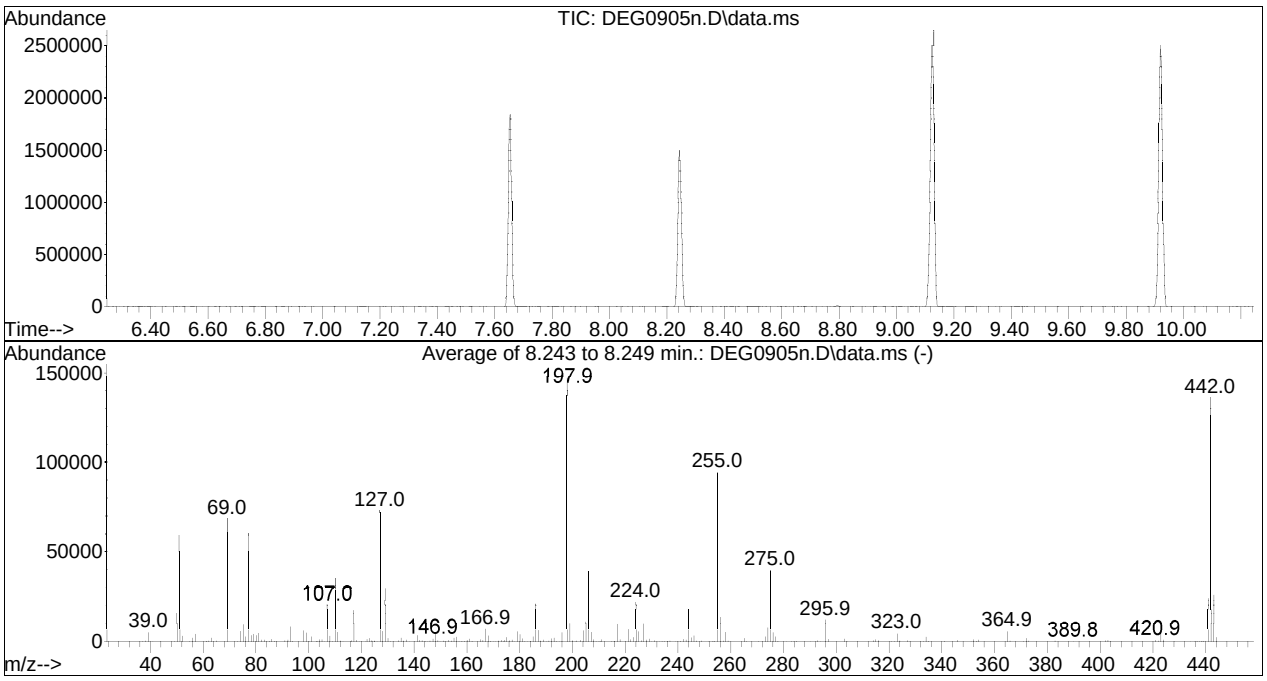
response 462170

Ion	Exp%	Act%
235.10	100.00	100.00
237.00	64.70	64.61
165.10	50.50	47.85
199.10	15.10	14.54

Data Path : I:\8270\Dakota\230905nlvi\
Data File : DEG0905n.D
Acq On : 5 Sep 2023 8:09 pm
Operator : Dakota:sz
Sample : wg1823113-1,32,,Dakota Degdftpp
Misc : wg1823113,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270\Dakota\230905nlvi\FS230412LVIDakota.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Thu Sep 07 09:02:11 2023



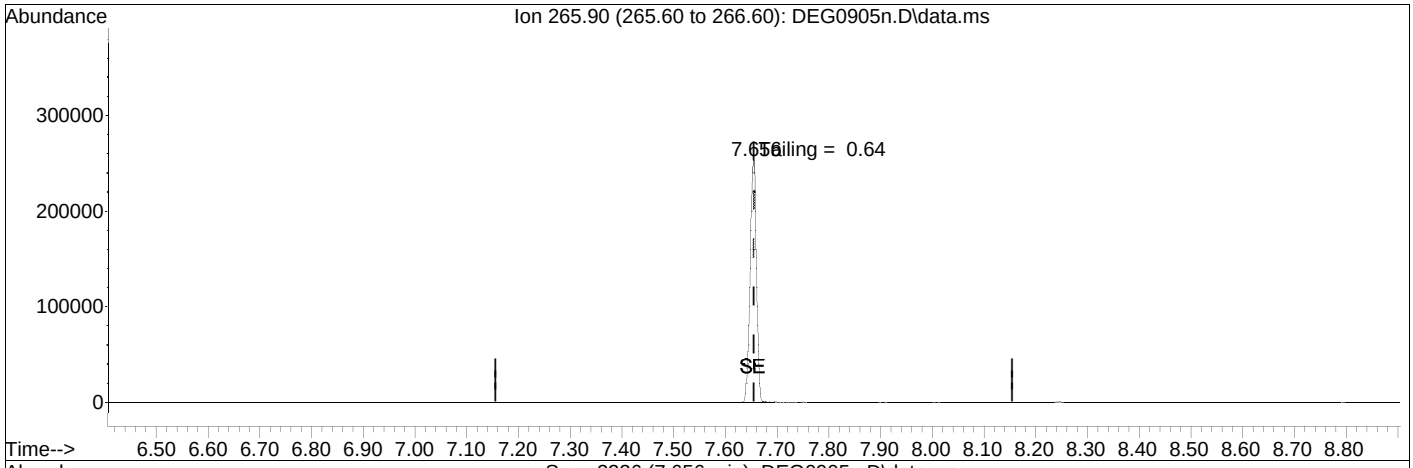
Spectrum Information: Average of 8.243 to 8.249 min.

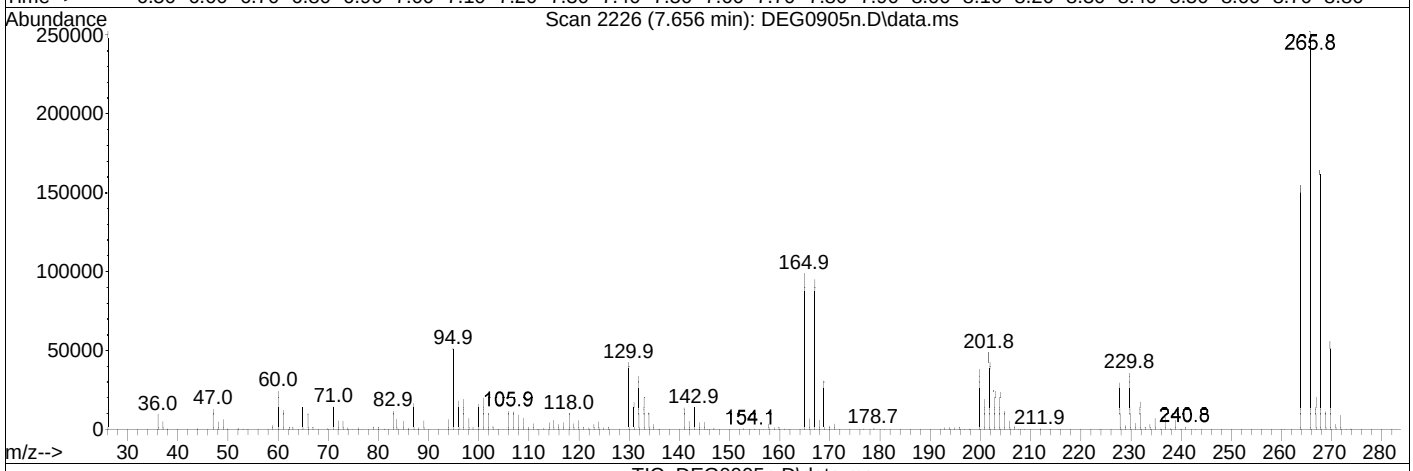
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	40.2	59237	PASS
68	69	0.00	2	0.0	0	PASS
69	69	100	100	100.0	68645	PASS
70	69	0.00	2	0.2	126	PASS
127	198	10	80	49.4	72784	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	147275	PASS
199	198	5	9	6.7	9832	PASS
275	198	10	60	26.9	39675	PASS
365	198	1	100	3.8	5643	PASS
441	442	0.01	24	17.8	24163	PASS
442	198	50	100	92.3	135997	PASS
443	442	15	24	19.0	25853	PASS

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : DEG0905n.D
Acq On : 5 Sep 2023 8:09 pm
Operator : Dakota:sz
Sample : wg1823113-7,32,,Dakota Degdftpp
Misc : wg1823113,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Sep 07 09:04:36 2023
Quant Method : I:\8270\Dakota\230905nlvi\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 09:04:15 2023
Response via : Initial Calibration





TIC: DEG0905n.D\data.ms

(1) Pentachlorophenol (T)

7.656min (0.000) 96.91

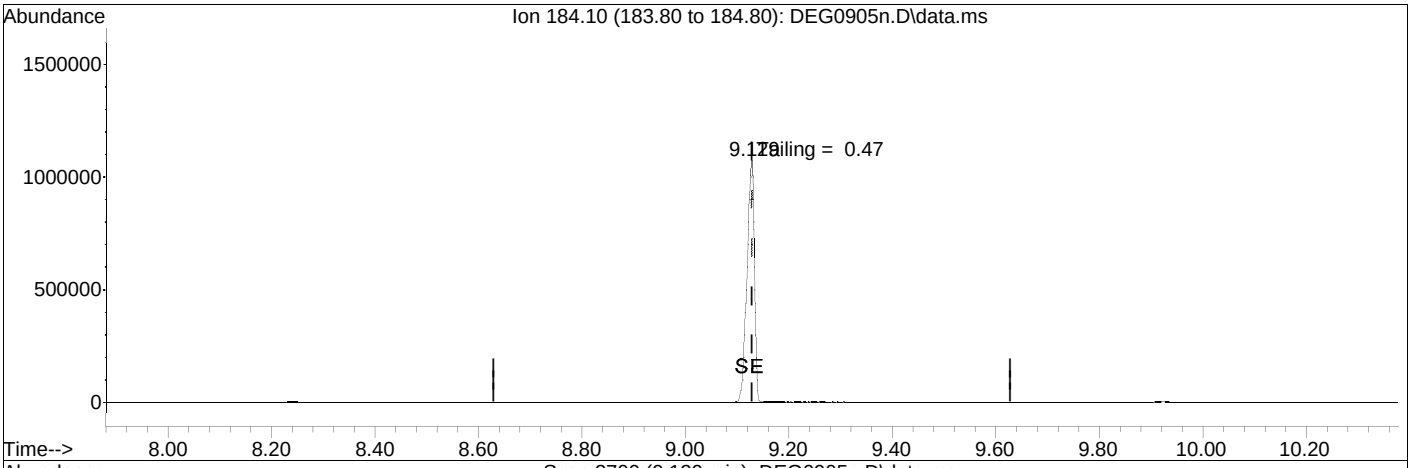
response 203553

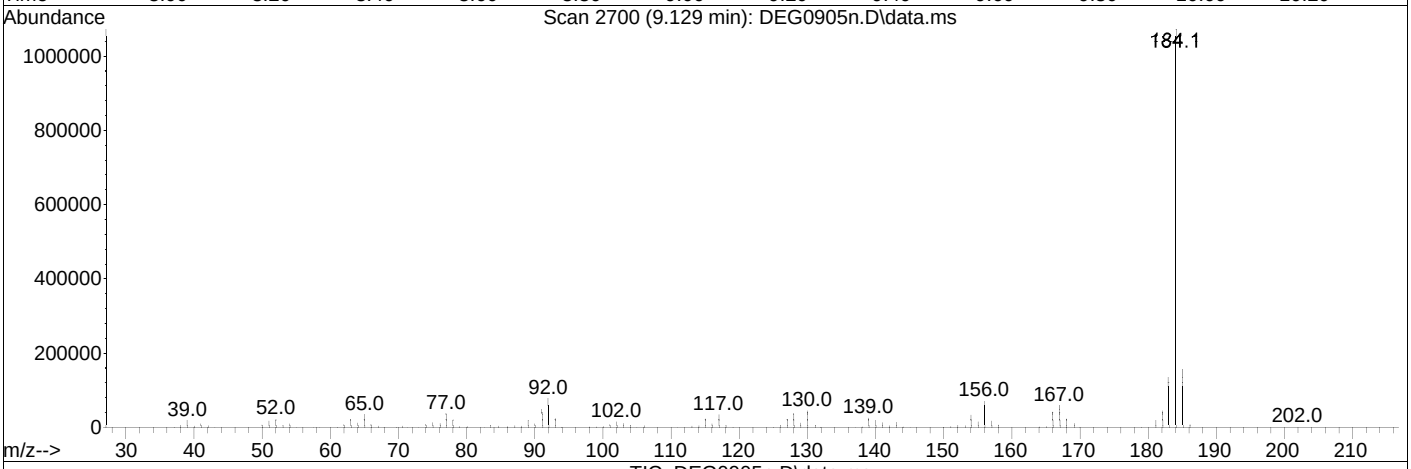
Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : DEG0905n.D
Acq On : 5 Sep 2023 8:09 pm
Operator : Dakota:sz
Sample : wg1823113-6,32,,Dakota Degdftpp
Misc : wg1823113,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Sep 07 09:04:36 2023
Quant Method : I:\8270\Dakota\230905nlvi\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 09:04:15 2023
Response via : Initial Calibration





TIC: DEG0905n.D\data.ms

(3) Benzidine (T)

9.129min (0.000) 99.74

response 1015404

Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\230905lvi\
Data File : ABN0905.D
Acq On : 5 Sep 2023 9:04 pm
Operator : SV106:jg
Sample : WG1823865-3,32,,ABN LVI CCV Lot # 10166
Misc : WG1823865,,ical20337
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 07 11:38:42 2023
Quant Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:32:08 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	IS1_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	98	0.00
2	t	n-Nitrosodimethylamine		0.677	0.621	8.3	97	0.00
3	t	Pyridine		1.151	1.087	5.6	100	0.00
4	S	2-Fluorophenol		1.116	0.984	11.8	97	0.00
5	T	Aniline		1.893	1.625	14.2	92	0.00
6	t	2-Chlorophenol		1.274	1.082	15.1	89	0.00
7	S	Phenol-d6		1.437	1.147	20.2	84	0.00
8	T	Phenol		1.521	1.293	15.0	92	0.00
9	T	Bis(2-chloroethyl)ether		1.222	1.048	14.2	92	0.00
10	T	1,3-Dichlorobenzene		1.461	1.268	13.2	92	0.00
11	T	1,4-Dichlorobenzene		1.503	1.314	12.6	95	0.00
12	T	1,2-Dichlorobenzene		1.431	1.238	13.5	94	0.00
13	t	Benzyl alcohol		1.074	0.896	16.6	88	0.00
14	T	Bis(2-chloroisopropyl)ether		1.800	1.530	15.0	91	0.00
15	T	2-Methylphenol		1.138	0.956	16.0	92	0.00
16	T	Hexachloroethane		0.586	0.503	14.2	92	0.00
17	T	n-Nitrosodi-n-propylamine		0.923	0.763	17.3	89	0.00
18	T	3-Methylphenol/4-Methylphen		1.193	1.006	15.7	90	0.00
19	S	Nitrobenzene-d5		1.303	1.050	19.4	88	0.00
20	T	Nitrobenzene		1.295	1.089	15.9	89	0.00
21	T	Isophorone		2.478	2.031	18.0	89	0.00
22	T	2-Nitrophenol		0.518	0.434	16.2	91	0.00
23	T	2,4-Dimethylphenol		1.281	1.010	21.2#	82	0.00
24	T	Bis(2-chloroethoxy)methane		1.552	1.296	16.5	89	0.00
25	T	2,4-Dichlorophenol		1.076	0.869	19.2	83	0.00
26	T	1,2,4-Trichlorobenzene		1.235	1.059	14.3	94	0.00
34	I	IS1_Naphthalene-d8		1.000	1.000	0.0	92	0.00
35	T	Naphthalene		1.008	0.887	12.0	91	0.00
36	T	Benzoic Acid	*	5.000	4.166	16.7	80	0.00
37	T	4-Chloroaniline		0.132	0.112	15.2	86	0.00
38	T	Hexachlorobutadiene		0.206	0.184	10.7	93	0.00
39	T	p-Chloro-m-cresol		0.291	0.248	14.8	85	0.00
40	T	2-Methylnaphthalene		0.642	0.566	11.8	91	0.00
41	T	1-Methylnaphthalene		0.241	0.222	7.9	93	0.00
42	T	Hexachlorocyclopentadiene		0.219	0.195	11.0	92	0.00
43	T	2,4,6-Trichlorophenol		0.209	0.175	16.3	88	0.00
44	T	2,4,5-Trichlorophenol		0.224	0.190	15.2	89	0.00
45	S	2-Fluorobiphenyl		0.764	0.644	15.7	87	0.00

Data Path : I:\8270\SV106\230905lvi\
Data File : ABN0905.D
Acq On : 5 Sep 2023 9:04 pm
Operator : SV106:jg
Sample : WG1823865-3,32,,ABN LVI CCV Lot # 10166
Misc : WG1823865,,ical20337
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 07 11:38:42 2023
Quant Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:32:08 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
46	T	2-Chloronaphthalene		0.669	0.580	13.3	89	0.00
47	T	2-Nitroaniline	*	5.000	3.957	20.9#	84	0.00
48	T	1,4-Dinitrobenzene	*	5.000	4.159	16.8	92	0.00
49	T	1,3-Dinitrobenzene	*	5.000	4.112	17.8	84	0.00
50	T	Dimethyl phthalate		0.787	0.670	14.9	86	0.00
51	T	Acenaphthylene		1.077	0.930	13.6	90	0.00
52	T	2,6-Dinitrotoluene	*	5.000	3.970	20.6#	85	0.00
53	T	1,2-Dinitrobenzene		0.063	0.053	15.9	86	0.00
62	I	IS1_Acenaphthene-d10		1.000	1.000	0.0	92	0.00
63	T	3-Nitroaniline		0.286	0.248	13.3	87	0.00
64	T	Acenaphthene		1.131	0.987	12.7	91	0.00
65	T	2,4-Dinitrophenol	*	5.000	4.116	17.7	82	0.00
66	T	Dibenzofuran		1.690	1.480	12.4	90	0.00
67	T	2,4-Dinitrotoluene	*	5.000	4.081	18.4	87	0.00
68	T	4-Nitrophenol	*	5.000	3.886	22.3#	83	0.00
69	T	2,3,5,6-Tetrachlorophenol		0.325	0.259	20.3	80	0.00
70	T	2,3,4,6-Tetrachlorophenol		0.337	0.279	17.2	83	0.00
71	T	Diethyl phthalate		1.415	1.222	13.6	86	0.00
72	T	Fluorene		1.336	1.175	12.1	89	0.00
73	T	4-Chlorophenyl phenyl ether		0.637	0.547	14.1	89	0.00
74	T	4-Nitroaniline		0.289	0.244	15.6	81	0.00
75	T	4,6-Dinitro-o-cresol	*	5.000	4.452	11.0	99	0.00
76	T	NDPA/DPA		1.124	0.949	15.6	84	0.00
77	T	Azobenzene		1.319	1.130	14.3	87	0.00
78	S	2,4,6-Tribromophenol		0.184	0.153	16.8	82	0.00
79	T	4-Bromophenyl phenyl ether		0.371	0.318	14.3	88	0.00
80	T	Hexachlorobenzene		0.432	0.358	17.1	87	0.00
81	T	Pentachlorophenol	*	5.000	4.039	19.2	86	0.00
87	I	IS1_Phenanthrene-d10		1.000	1.000	0.0	89	0.00
88	T	Phenanthrene		1.089	0.942	13.5	86	0.00
89	T	Anthracene		1.084	0.976	10.0	89	0.00
90	T	Carbazole		0.991	0.882	11.0	86	0.00
91	T	Di-n-butylphthalate		1.269	1.077	15.1	83	0.00
92	T	Fluoranthene		1.165	1.002	14.0	86	0.00
93	T	Benzidine		0.770	0.624	19.0	79	0.00
94	T	Pyrene		1.233	1.088	11.8	88	0.00
95	S	4-Terphenyl-d14		0.877	0.758	13.6	85	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\230905lvi\
Data File : ABN0905.D
Acq On : 5 Sep 2023 9:04 pm
Operator : SV106:jg
Sample : WG1823865-3,32,,ABN LVI CCV Lot # 10166
Misc : WG1823865,,ical20337
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 07 11:38:42 2023
Quant Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:32:08 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96	T	Butyl benzyl phthalate	0.541	0.452	16.5	81	0.00
103	I	IS1_Chrysene-d12	1.000	1.000	0.0	88	0.00
104	T	Benzo(a)anthracene	1.326	1.133	14.6	84	0.00
105	T	3,3'-Dichlorobenzidine	0.472	0.400	15.3	81	0.00
106	T	Chrysene	1.231	1.066	13.4	86	0.00
107	T	Bis(2-ethylhexyl)phthalate	0.889	0.752	15.4	80	0.00
108	T	Di-n-octylphthalate	1.499	1.250	16.6	79	0.00
109	T	Benzo(b)fluoranthene	1.266	1.102	13.0	87	0.00
110	T	Benzo(k)fluoranthene	1.214	1.098	9.6	84	0.00
111	T	Benzo(a)pyrene	1.083	0.953	12.0	85	0.00
112	I	IS1_Perylene-d12	1.000	1.000	0.0	89	0.00
113	T	Indeno(1,2,3-cd)pyrene	0.935	0.833	10.9	89	0.00
114	T	Dibenzo(a,h)anthracene	0.999	0.885	11.4	86	0.00
115	T	Benzo(ghi)perylene	0.991	0.886	10.6	87	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230905lvi\
Data File : ABN0905.D
Acq On : 5 Sep 2023 9:04 pm
Operator : SV106:jg
Sample : WG1823865-3,32,,ABN LVI CCV Lot # 10166
Misc : WG1823865,,ical20337
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 07 11:38:42 2023
Quant Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:32:08 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	6.281	152	42087	4.000	ug/ml		0.00
34) IS1_Naphthalene-d8	7.716	136	153350	4.000	ug/ml		0.00
62) IS1_Acenaphthene-d10	9.475	164	85310	4.000	ug/ml		0.00
87) IS1_Phenanthrene-d10	10.910	188	160190	4.000	ug/ml	#	0.00
103) IS1_Chrysene-d12	13.521	240	145804	4.000	ug/ml		0.00
112) IS1_Perylene-d12	14.968	264	162944	4.000	ug/ml		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	4.245	112	51752	4.409	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 88.18%				
7) Phenol-d6	5.916	99	60339	3.990	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 79.80%				
19) Nitrobenzene-d5	6.945	82	55220	4.028	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 161.12%#				
45) 2-Fluorobiphenyl	8.839	172	123490	4.218	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 168.72%#				
78) 2,4,6-Tribromophenol	10.245	330	16310	4.167	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 83.34%				
95) 4-Terphenyl-d14	12.486	244	151720	4.318	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 172.72%#				
Target Compounds							Qvalue
2) n-Nitrosodimethylamine	1.922	74	32661	4.583	ug/ml	#	64
3) Pyridine	1.951	79	57204	4.725	ug/ml	#	66
5) Aniline	5.863	93	85478	4.291	ug/ml		94
6) 2-Chlorophenol	6.010	128	56941	4.247	ug/ml		91
8) Phenol	5.928	94	68026	4.251	ug/ml		96
9) Bis(2-chloroethyl)ether	6.004	93	55129	4.288	ug/ml	#	85
10) 1,3-Dichlorobenzene	6.204	146	66726	4.341	ug/ml		99
11) 1,4-Dichlorobenzene	6.298	146	69141	4.372	ug/ml		99
12) 1,2-Dichlorobenzene	6.481	146	65110	4.324	ug/ml		97
13) Benzyl alcohol	6.498	79	47114	4.171	ug/ml		98
14) Bis(2-chloroisopropyl)...	6.681	45	80517	4.253	ug/ml	#	50
15) 2-Methylphenol	6.675	108	50269	4.199	ug/ml		98
16) Hexachloroethane	6.875	117	26468	4.293	ug/ml	#	76
17) n-Nitrosodi-n-propylamine	6.828	70	40144	4.132	ug/ml		93
18) 3-Methylphenol/4-Methy...	6.863	108	52923	4.215	ug/ml		97
20) Nitrobenzene	6.969	77	57267	4.204	ug/ml		97
21) Isophorone	7.251	82	106857	4.099	ug/ml		96
22) 2-Nitrophenol	7.328	139	22838	4.192	ug/ml	#	94

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230905lvi\
Data File : ABN0905.D
Acq On : 5 Sep 2023 9:04 pm
Operator : SV106:jg
Sample : WG1823865-3,32,,ABN LVI CCV Lot # 10166
Misc : WG1823865,,ical20337
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 07 11:38:42 2023
Quant Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:32:08 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) 2,4-Dimethylphenol	7.433	107	53118	3.941	ug/ml	96
24) Bis(2-chloroethoxy)met...	7.528	93	68157	4.173	ug/ml	99
25) 2,4-Dichlorophenol	7.592	162	45743	4.042	ug/ml	95
26) 1,2,4-Trichlorobenzene	7.675	180	55705	4.287	ug/ml	97
35) Naphthalene	7.739	128	170042	4.399	ug/ml	100
36) Benzoic Acid	7.522	105	26921	4.166	ug/ml	96
37) 4-Chloroaniline	7.828	65	21503	4.248	ug/ml	85
38) Hexachlorobutadiene	7.910	225	35242	4.470	ug/ml	98
39) p-Chloro-m-cresol	8.357	107	47547	4.255	ug/ml	94
40) 2-Methylnaphthalene	8.457	142	108412	4.405	ug/ml	98
41) 1-Methylnaphthalene	8.551	115	42508	4.605	ug/ml	77
42) Hexachlorocyclopentadiene	8.633	237	37471	4.458	ug/ml	98
43) 2,4,6-Trichlorophenol	8.757	196	33586	4.200	ug/ml	97
44) 2,4,5-Trichlorophenol	8.786	196	36339	4.225	ug/ml	97
46) 2-Chloronaphthalene	8.933	162	111123	4.332	ug/ml	98
47) 2-Nitroaniline	9.051	138	27348	3.957	ug/ml	90
48) 1,4-Dinitrobenzene	9.186	168	11766	4.159	ug/ml	92
49) 1,3-Dinitrobenzene	9.257	168	13445	4.112	ug/ml#	1
50) Dimethyl phthalate	9.257	163	128415	4.254	ug/ml#	98
51) Acenaphthylene	9.333	152	178186	4.316	ug/ml	99
52) 2,6-Dinitrotoluene	9.298	165	22507	3.970	ug/ml#	88
53) 1,2-Dinitrobenzene	9.339	168	10100	4.158	ug/ml#	1
63) 3-Nitroaniline	9.451	138	26477	4.339	ug/ml	96
64) Acenaphthene	9.504	154	105205	4.363	ug/ml	95
65) 2,4-Dinitrophenol	9.551	184	10339	4.116	ug/ml	94
66) Dibenzofuran	9.680	168	157816	4.378	ug/ml	99
67) 2,4-Dinitrotoluene	9.686	165	30782	4.081	ug/ml	93
68) 4-Nitrophenol	9.645	65	21874	3.886	ug/ml#	87
69) 2,3,5,6-Tetrachlorophenol	9.769	232	27648	3.989	ug/ml	99
70) 2,3,4,6-Tetrachlorophenol	9.810	232	29760	4.138	ug/ml	97
71) Diethyl phthalate	9.951	149	130343	4.319	ug/ml	99
72) Fluorene	10.010	166	125345	4.401	ug/ml	97
73) 4-Chlorophenyl phenyl ...	10.033	204	58296	4.289	ug/ml	99
74) 4-Nitroaniline	10.039	138	25986	4.219	ug/ml#	89
75) 4,6-Dinitro-o-cresol	10.074	198	15061	4.452	ug/ml#	71
76) NDPA/DPA	10.145	169	101242	4.224	ug/ml	97
77) Azobenzene	10.180	77	120455	4.281	ug/ml	98
79) 4-Bromophenyl phenyl e...	10.498	248	33872	4.282	ug/ml	93
80) Hexachlorobenzene	10.545	284	38136	4.142	ug/ml#	88
81) Pentachlorophenol	10.739	266	21534	4.039	ug/ml	96
88) Phenanthrene	10.927	178	188685	4.325	ug/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230905lvi\
Data File : ABN0905.D
Acq On : 5 Sep 2023 9:04 pm
Operator : SV106:jg
Sample : WG1823865-3,32,,ABN LVI CCV Lot # 10166
Misc : WG1823865,,ical20337
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 07 11:38:42 2023
Quant Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:32:08 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
89)	Anthracene	10.980	178	195371	4.499	ug/ml	100
90)	Carbazole	11.145	167	176631	4.452	ug/ml	100
91)	Di-n-butylphthalate	11.545	149	215714	4.245	ug/ml	99
92)	Fluoranthene	12.080	202	200675	4.303	ug/ml#	93
93)	Benzidine	12.233	184	124990	4.056	ug/ml#	95
94)	Pyrene	12.292	202	217948	4.414	ug/ml	100
96)	Butyl benzyl phthalate	13.010	149	90421	4.170	ug/ml	89
104)	Benzo(a)anthracene	13.510	228	206583	4.276	ug/ml	99
105)	3,3'-Dichlorobenzidine	13.515	252	72918	4.241	ug/ml	95
106)	Chrysene	13.545	228	194273	4.331	ug/ml	100
107)	Bis(2-ethylhexyl)phtha...	13.645	149	136979	4.229	ug/ml#	91
108)	Di-n-octylphthalate	14.315	149	227825	4.169	ug/ml#	72
109)	Benzo(b)fluoranthene	14.604	252	200869	4.352	ug/ml#	95
110)	Benzo(k)fluoranthene	14.633	252	200027	4.521	ug/ml#	95
111)	Benzo(a)pyrene	14.915	252	173665	4.398	ug/ml#	94
113)	Indeno(1,2,3-cd)pyrene	15.927	276	169641M1	4.456	ug/mL	
114)	Dibenzo(a,h)anthracene	15.951	278	180163	4.425	ug/ml#	89
115)	Benzo(ghi)perylene	16.156	276	180369	4.466	ug/ml#	88

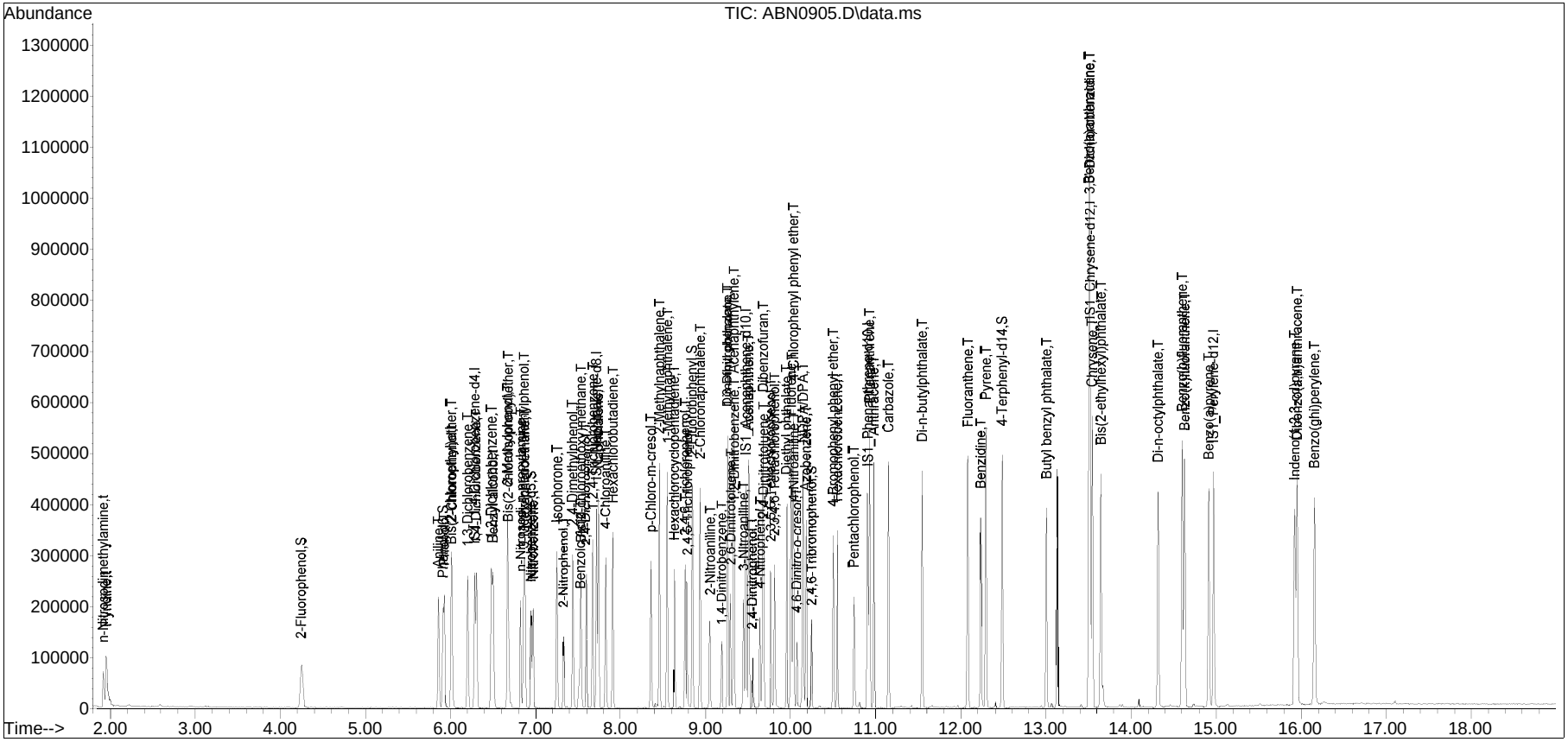
(#) = qualifier out of range (m) = manual integration (+) = signals summed

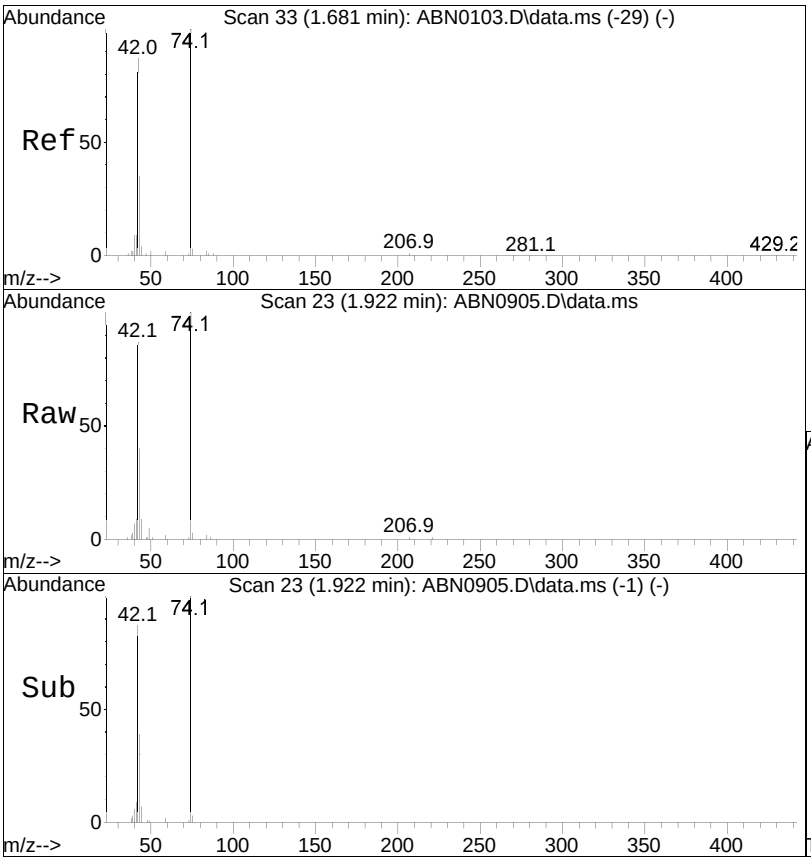
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230905lvi\
Data File : ABN0905.D
Acq On : 5 Sep 2023 9:04 pm
Operator : SV106:jg
Sample : WG1823865-3,32,,ABN LVI CCV Lot # 10166
Misc : WG1823865,,ical20337
ALS Vial : 142 Sample Multiplier: 1

Quant Time: Sep 07 11:38:42 2023
Quant Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:32:08 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

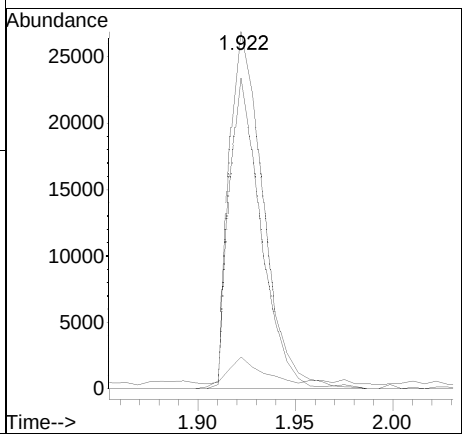


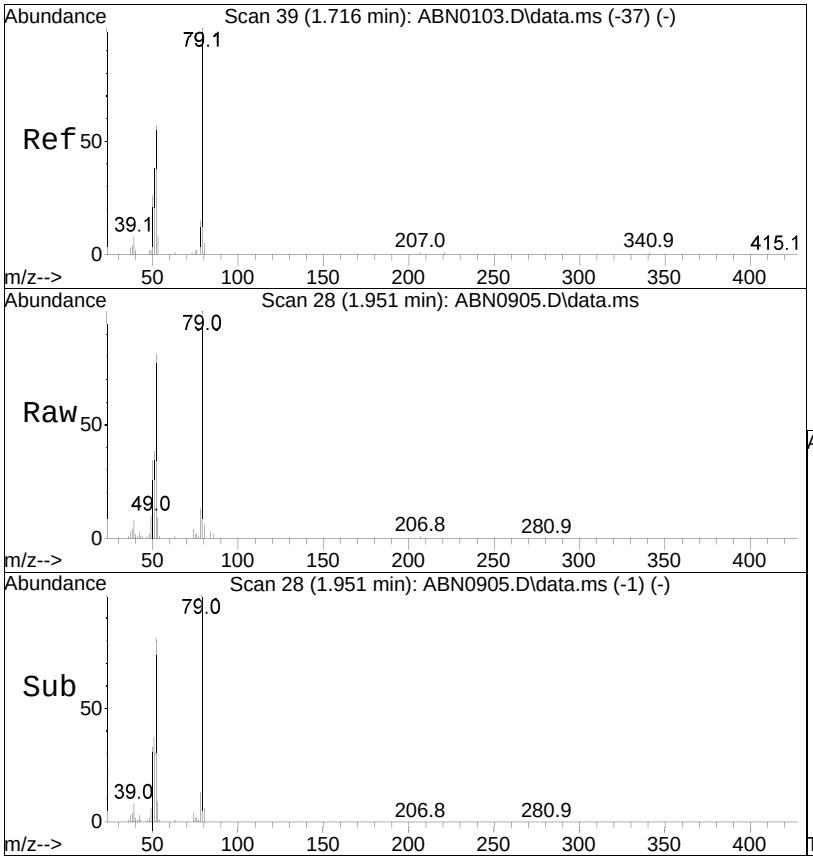


#2
n-Nitrosodimethylamine
Concen: 4.58 ug/ml
RT: 1.922 min Scan# 23
Delta R.T. -0.006 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 74 Resp: 32661

Ion	Ratio	Lower	Upper
74	100		
42	82.0	100.0	150.0#
44	6.8	6.7	10.1

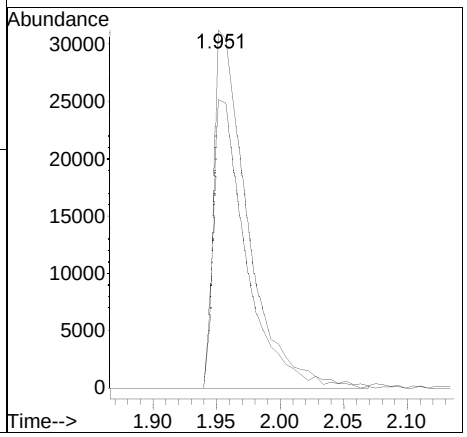


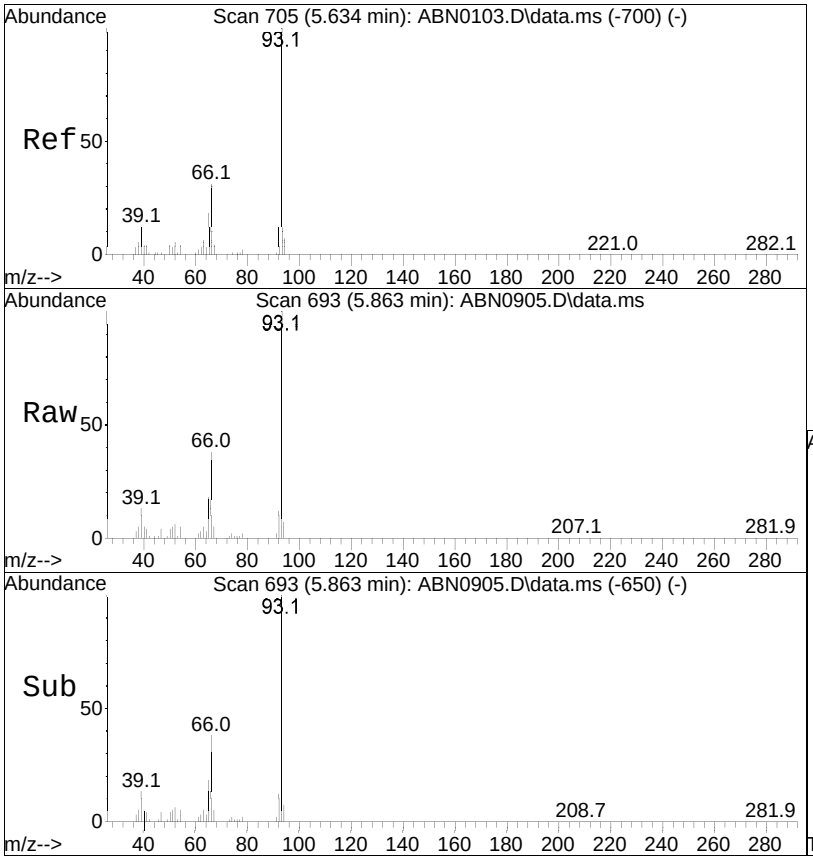


#3
Pyridine
Concen: 4.73 ug/ml
RT: 1.951 min Scan# 28
Delta R.T. -0.018 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 79 Resp: 57204

Ion	Ratio	Lower	Upper
79	100		
52	79.2	93.1	139.7#

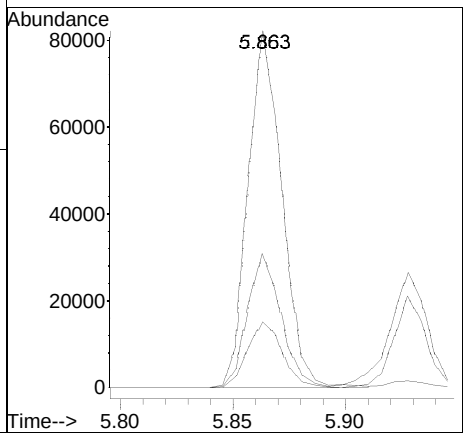


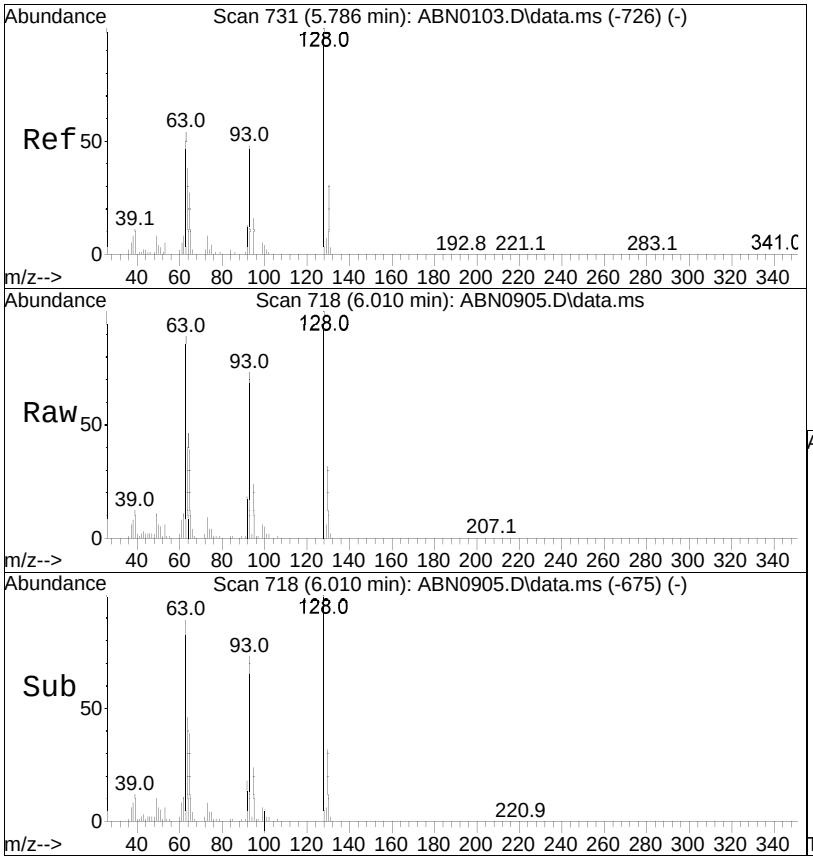


#5
Aniline
Concen: 4.29 ug/ml
RT: 5.863 min Scan# 693
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 93 Resp: 85478

Ion	Ratio	Lower	Upper
93	100		
66	37.3	32.6	49.0
65	19.0	17.6	26.4

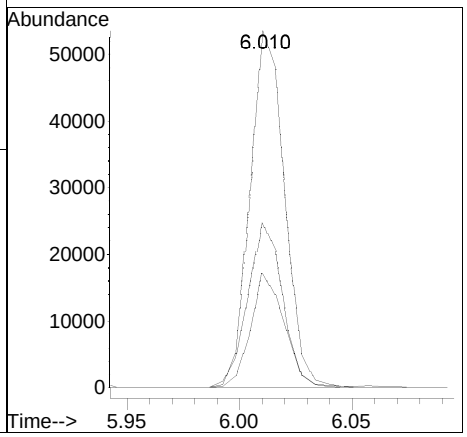


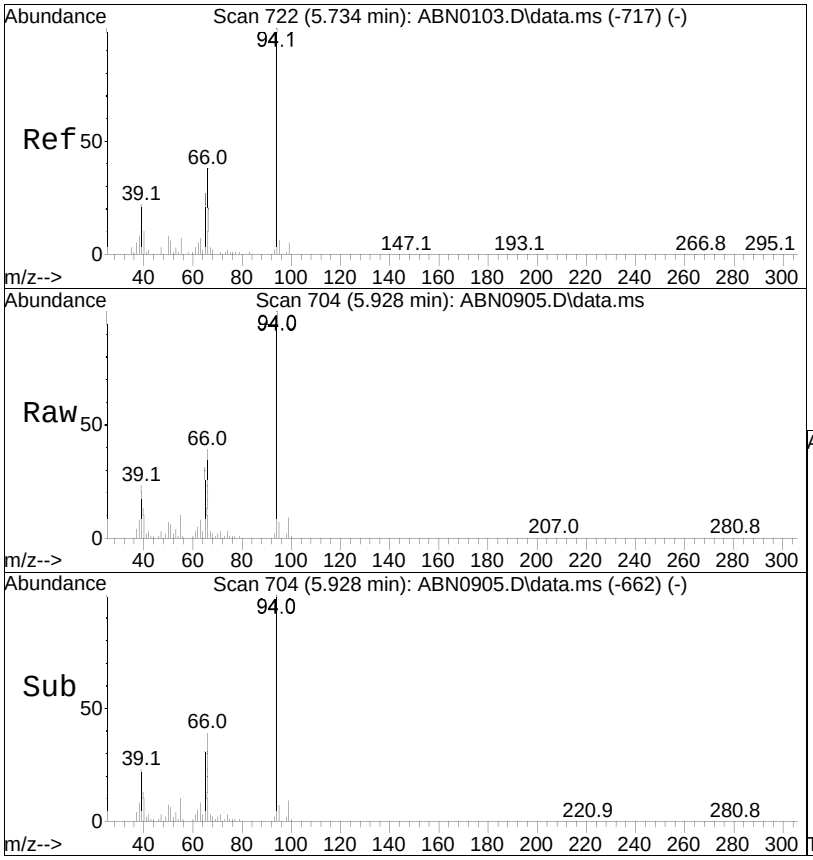


#6
2-Chlorophenol
Concen: 4.25 ug/ml
RT: 6.010 min Scan# 718
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:128 Resp: 56941

Ion	Ratio	Lower	Upper
128	100		
64	47.1	45.1	67.7
130	31.3	26.2	39.4

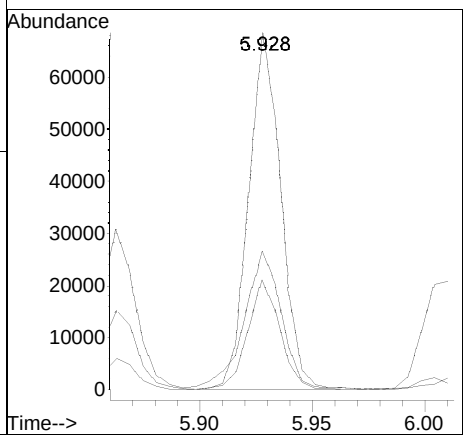


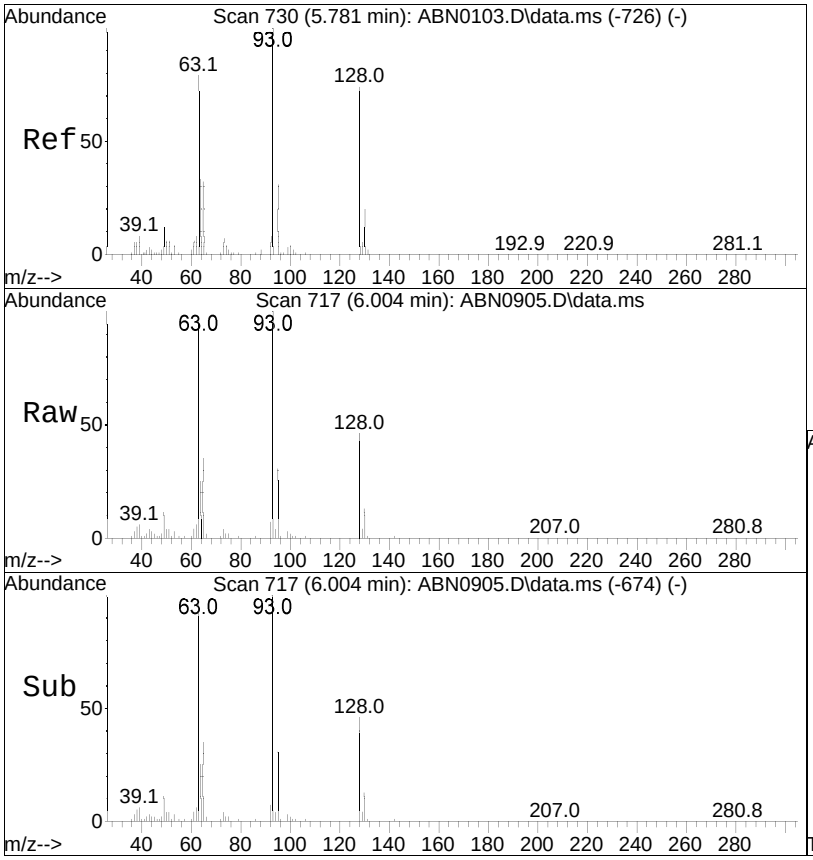


#8
Phenol
Concen: 4.25 ug/ml
RT: 5.928 min Scan# 704
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 94 Resp: 68026

Ion	Ratio	Lower	Upper
94	100		
65	30.9	26.0	39.0
66	45.3	33.8	50.8

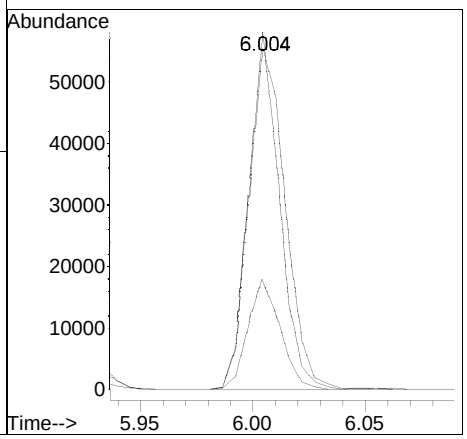


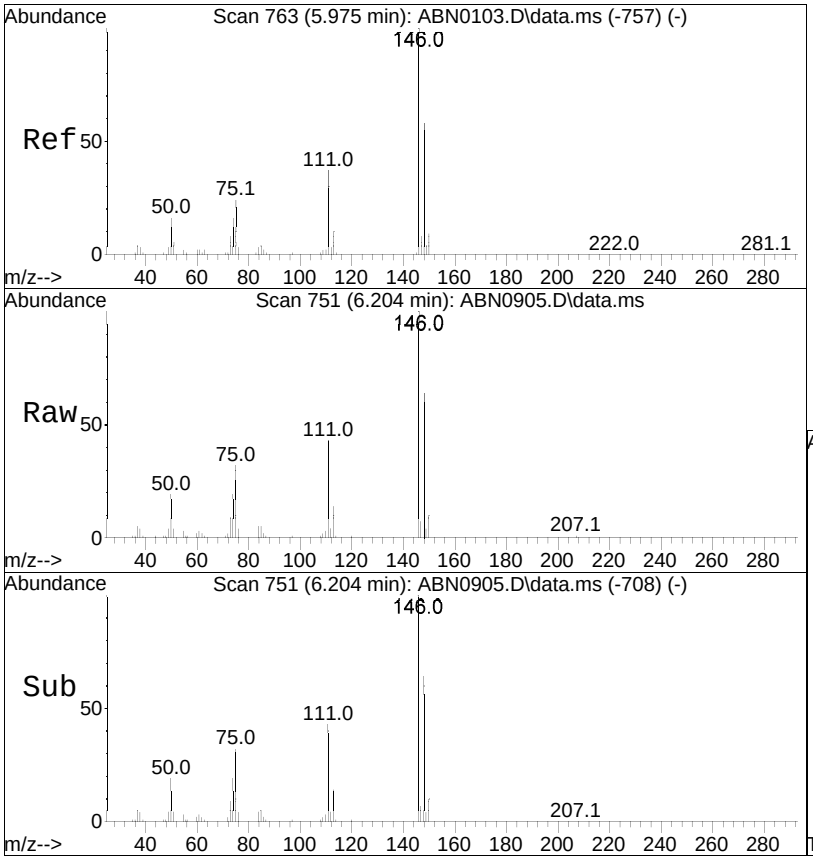


#9
Bis(2-chloroethyl)ether
Concen: 4.29 ug/ml
RT: 6.004 min Scan# 717
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 93 Resp: 55129

Ion	Ratio	Lower	Upper
93	100		
63	112.5	74.6	111.8#
95	32.4	25.9	38.9

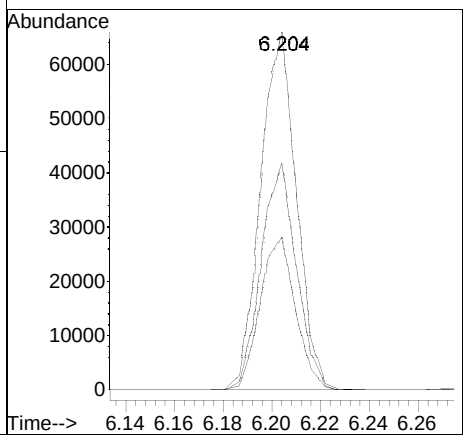


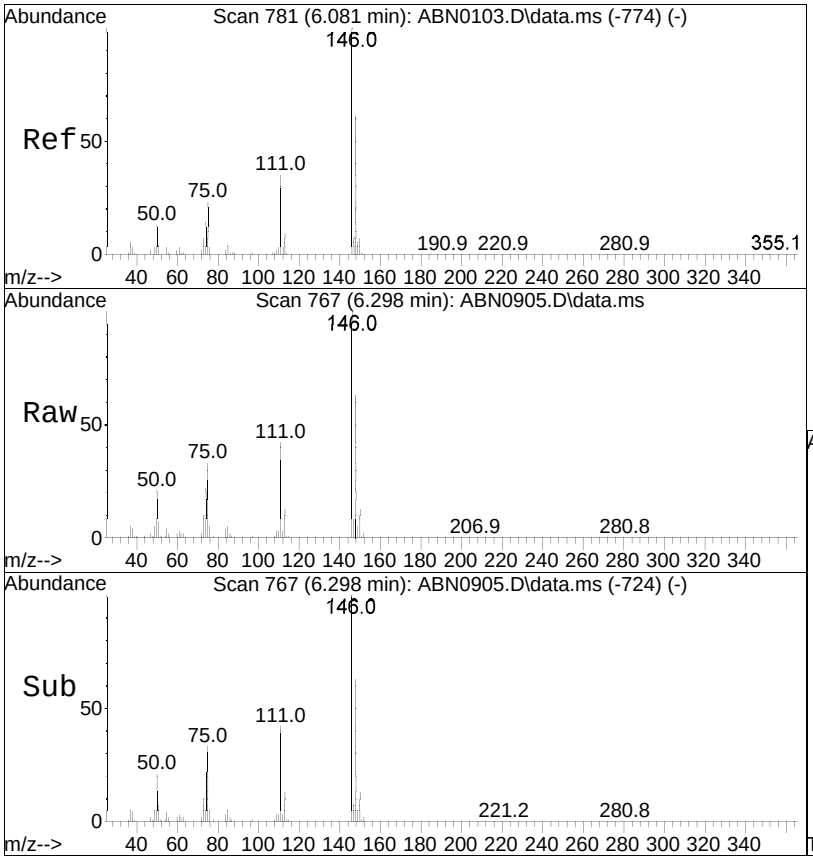


#10
1,3-Dichlorobenzene
Concen: 4.34 ug/ml
RT: 6.204 min Scan# 751
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:146 Resp: 66726

Ion	Ratio	Lower	Upper
146	100		
111	42.4	34.3	51.5
148	62.5	50.8	76.2

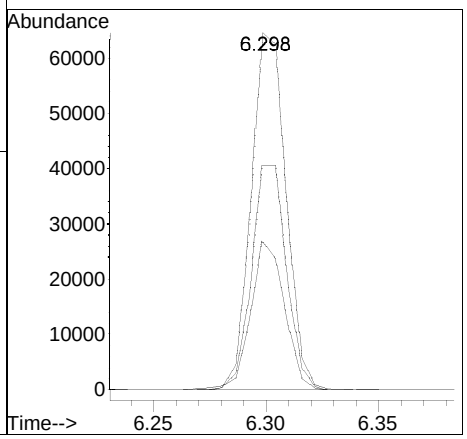


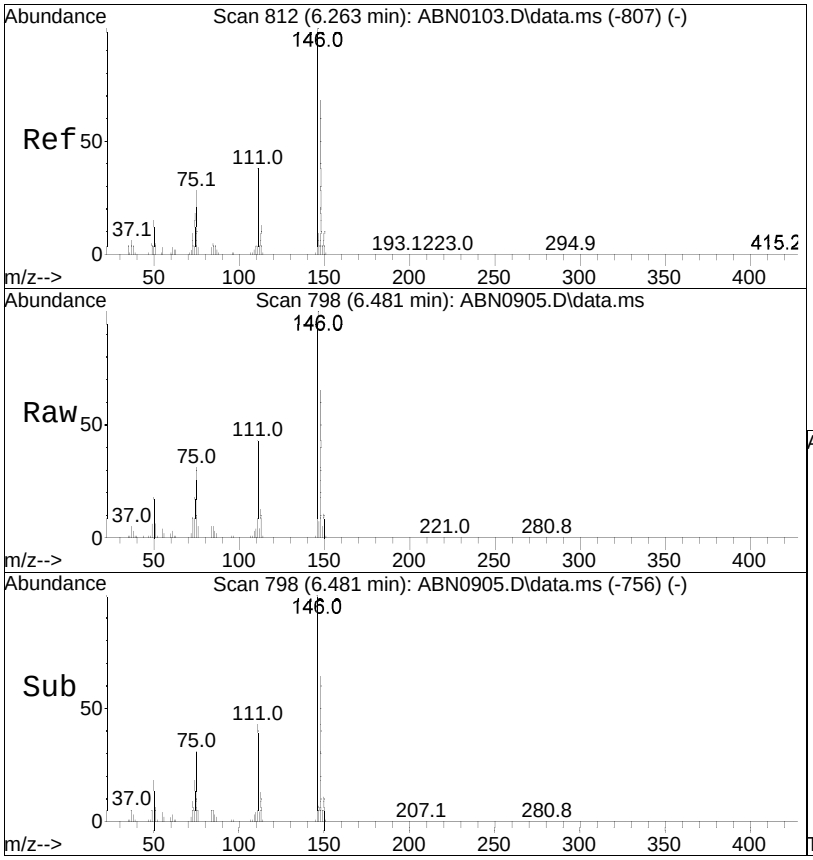


#11
1,4-Dichlorobenzene
Concen: 4.37 ug/ml
RT: 6.298 min Scan# 767
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:146 Resp: 69141

Ion	Ratio	Lower	Upper
146	100		
148	63.2	50.7	76.1
111	40.9	33.4	50.0

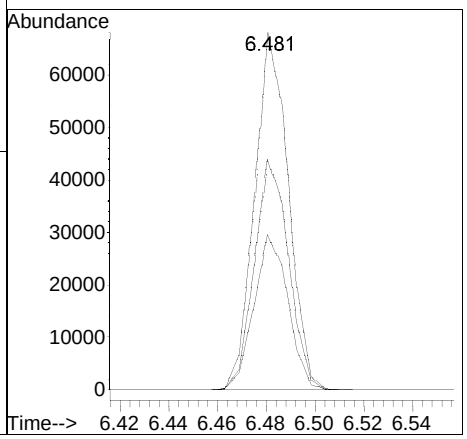


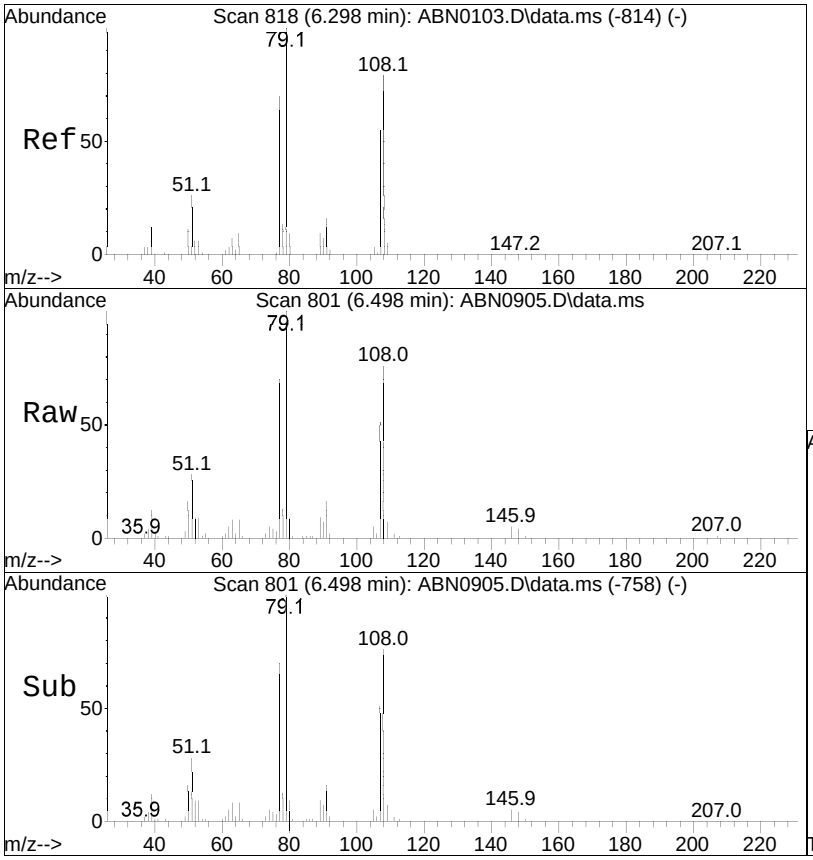


#12
1,2-Dichlorobenzene
Concen: 4.32 ug/ml
RT: 6.481 min Scan# 798
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:146 Resp: 65110

Ion	Ratio	Lower	Upper
146	100		
111	44.1	34.6	52.0
148	65.7	50.2	75.4

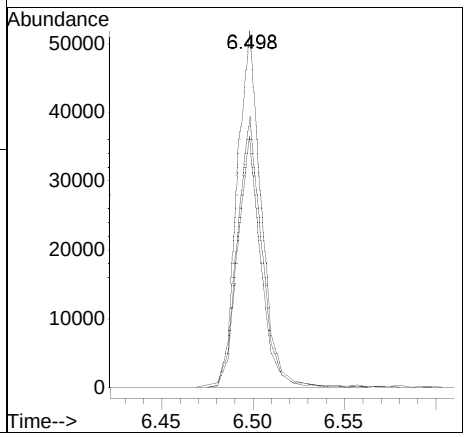


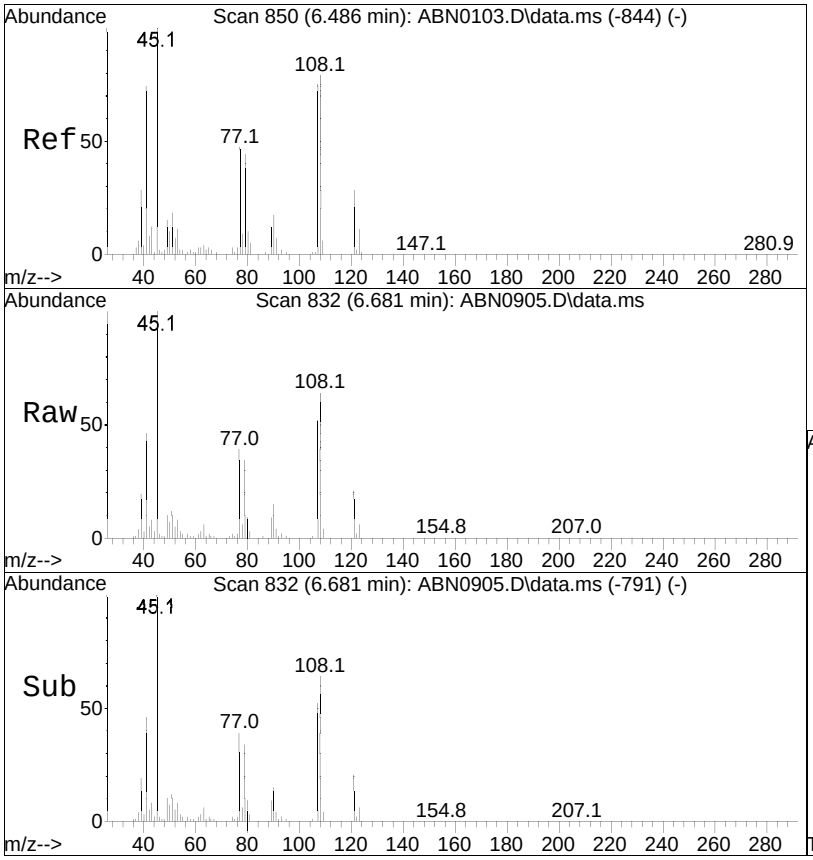


#13
Benzyl alcohol
Concen: 4.17 ug/ml
RT: 6.498 min Scan# 801
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 79 Resp: 47114

Ion	Ratio	Lower	Upper
79	100		
77	67.5	54.9	82.3
108	76.6	63.1	94.7

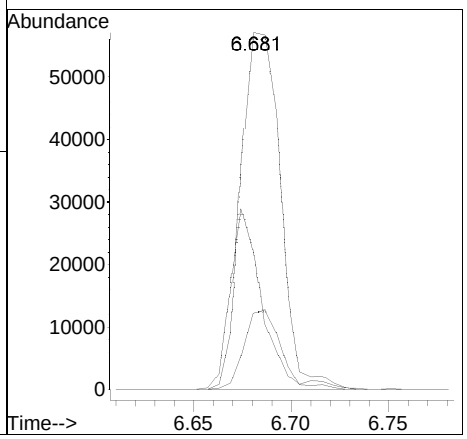


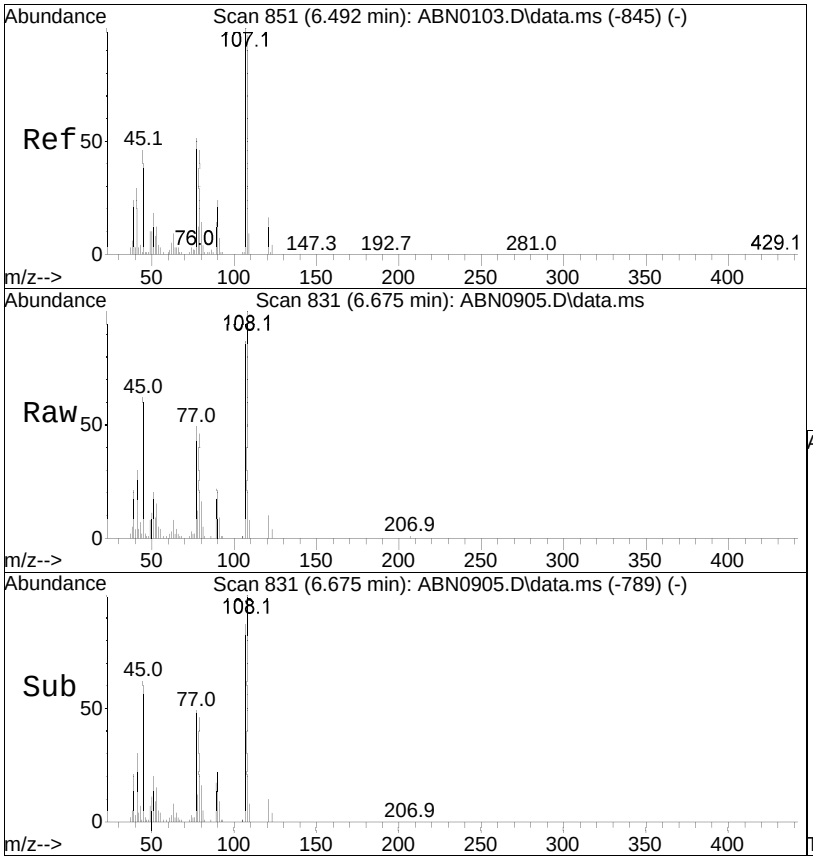


#14
Bis(2-chloroisopropyl)ether
Concen: 4.25 ug/ml
RT: 6.681 min Scan# 832
Delta R.T. -0.006 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 45 Resp: 80517

Ion	Ratio	Lower	Upper
45	100		
121	20.6	9.8	14.6#
77	41.2	6.1	9.1#

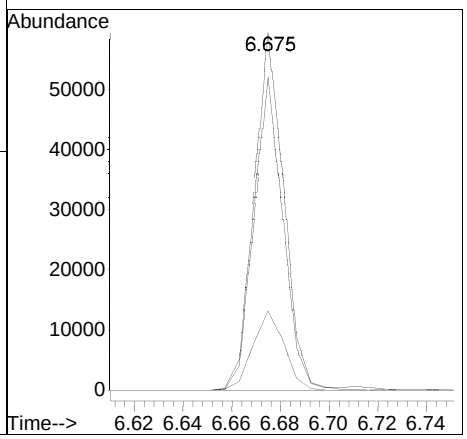


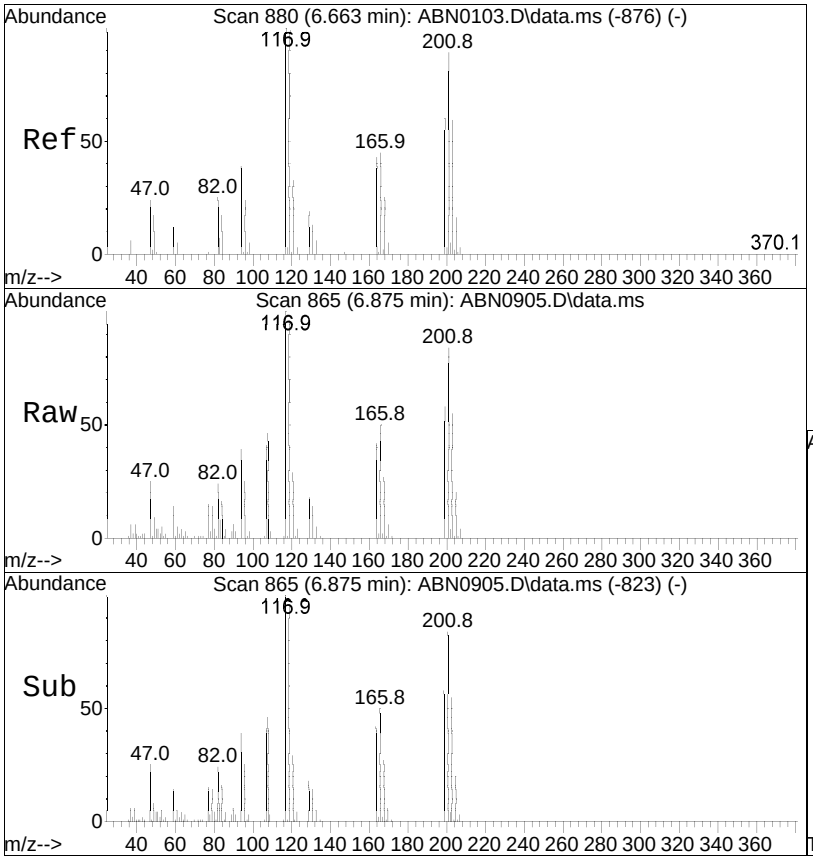


#15
2-Methylphenol
Concen: 4.20 ug/ml
RT: 6.675 min Scan# 831
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:108 Resp: 50269

Ion	Ratio	Lower	Upper
108	100		
107	85.9	70.7	106.1
90	23.2	18.7	28.1

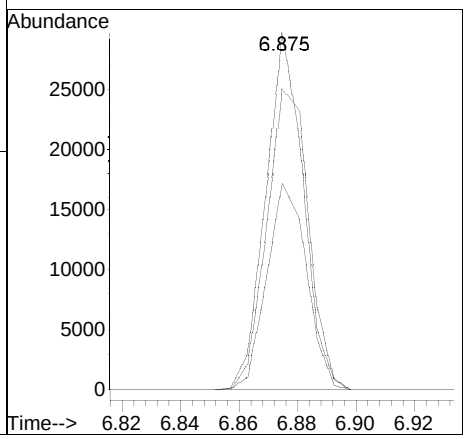


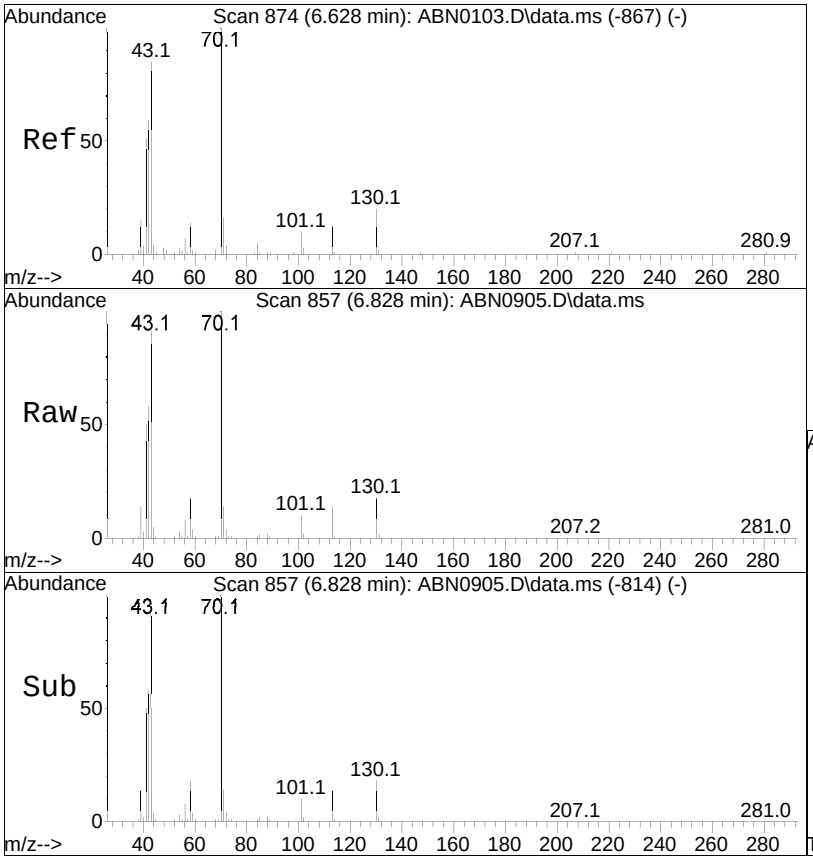


#16
Hexachloroethane
Concen: 4.29 ug/ml
RT: 6.875 min Scan# 865
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:117 Resp: 26468

Ion	Ratio	Lower	Upper
117	100		
201	93.8	58.6	87.8#
199	61.3	36.9	55.3#

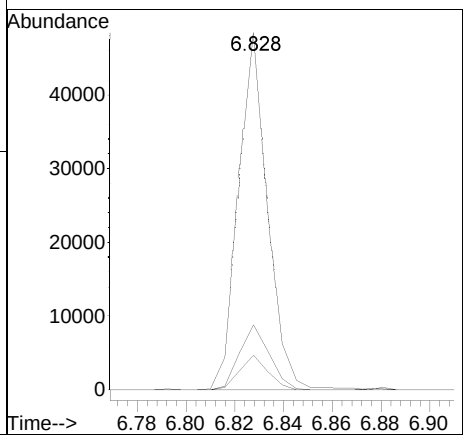


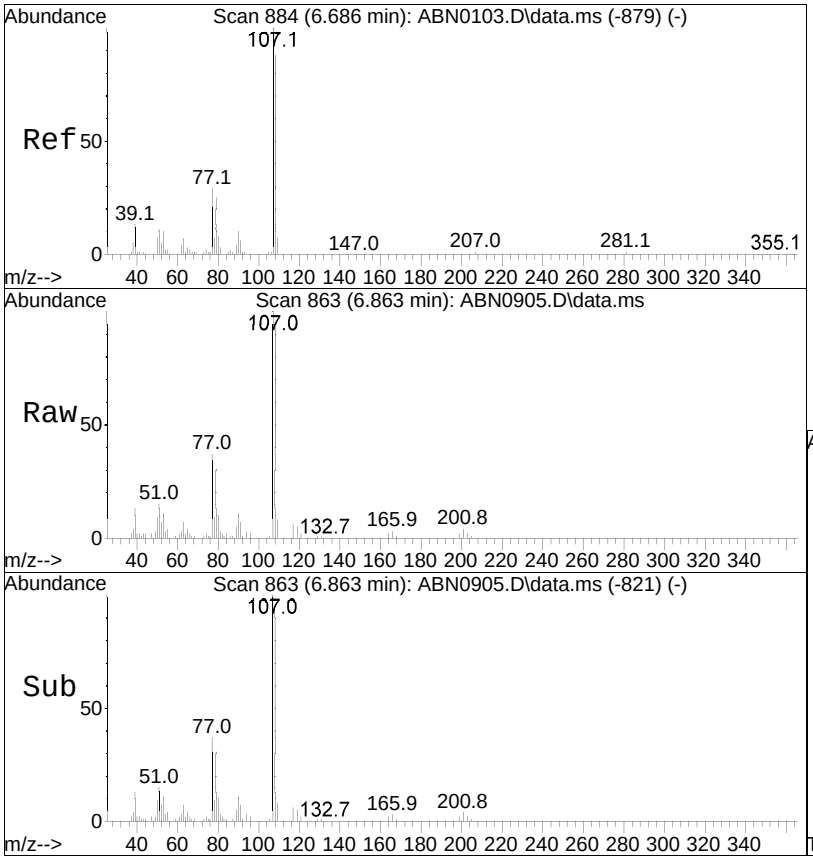


#17
n-Nitrosodi-n-propylamine
Concen: 4.13 ug/ml
RT: 6.828 min Scan# 857
Delta R.T. 0.006 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 70 Resp: 40144

Ion	Ratio	Lower	Upper
70	100		
130	18.5	18.2	27.4
101	9.4	7.8	11.8

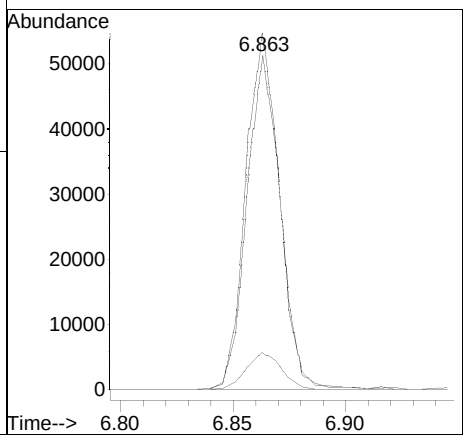


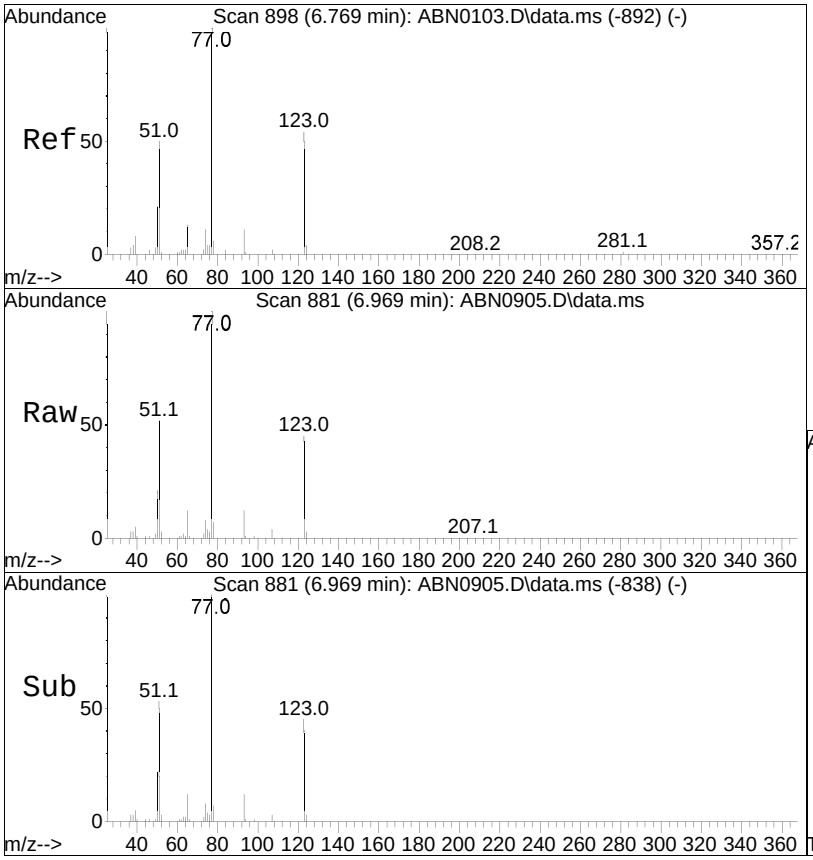


#18
3-Methylphenol/4-Methylphenol
Concen: 4.21 ug/ml
RT: 6.863 min Scan# 863
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:108 Resp: 52923

Ion	Ratio	Lower	Upper
108	100		
107	107.6	88.6	132.8
90	11.6	8.8	13.2

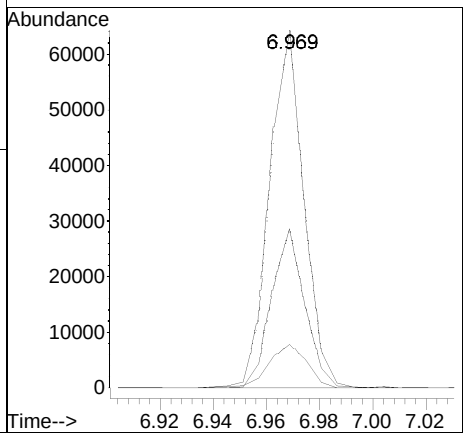


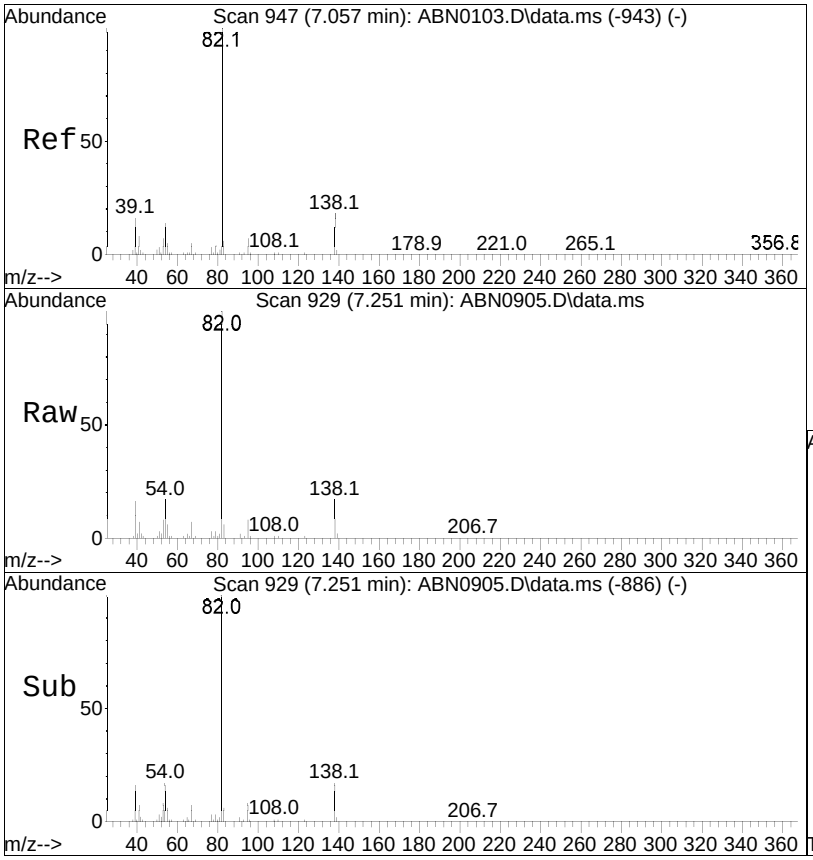


#20
Nitrobenzene
Concen: 4.20 ug/ml
RT: 6.969 min Scan# 881
Delta R.T. 0.006 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 77 Resp: 57267

Ion	Ratio	Lower	Upper
77	100		
123	43.3	36.3	54.5
65	13.6	11.6	17.4

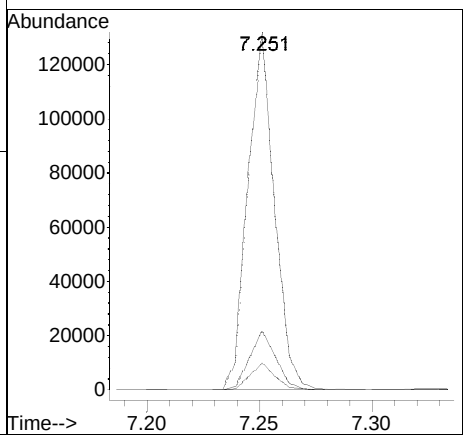


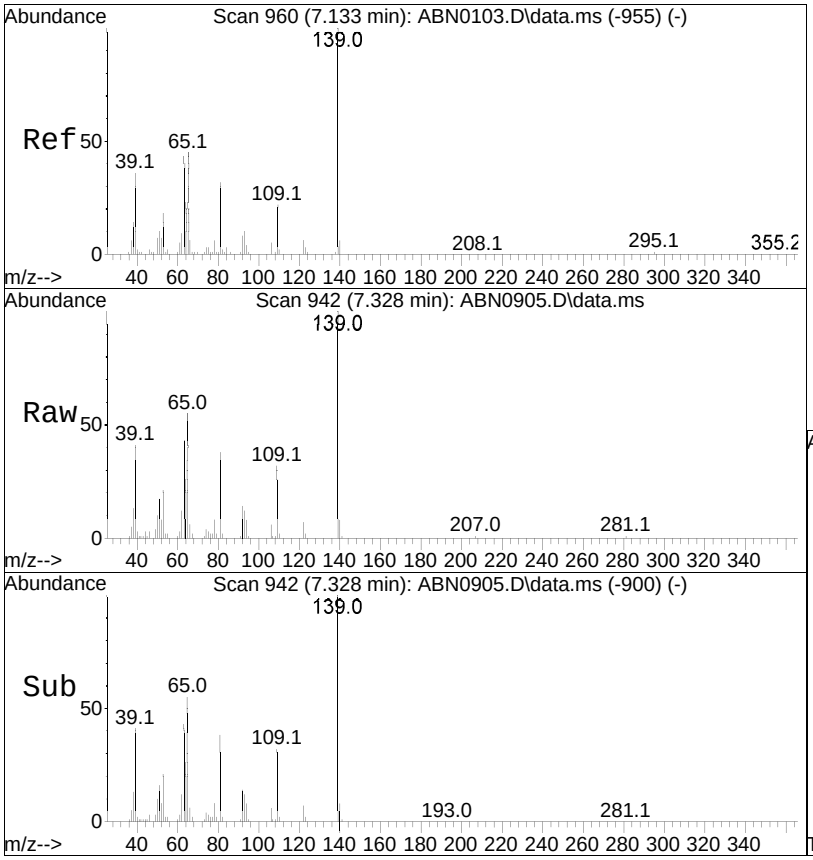


#21
Isophorone
Concen: 4.10 ug/ml
RT: 7.251 min Scan# 929
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 82 Resp: 106857

Ion	Ratio	Lower	Upper
82	100		
138	16.3	14.7	22.1
95	7.1	5.2	7.8

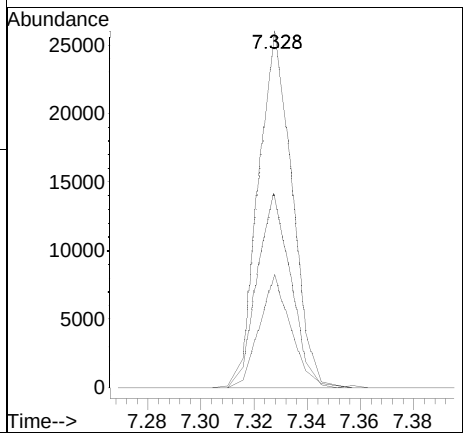


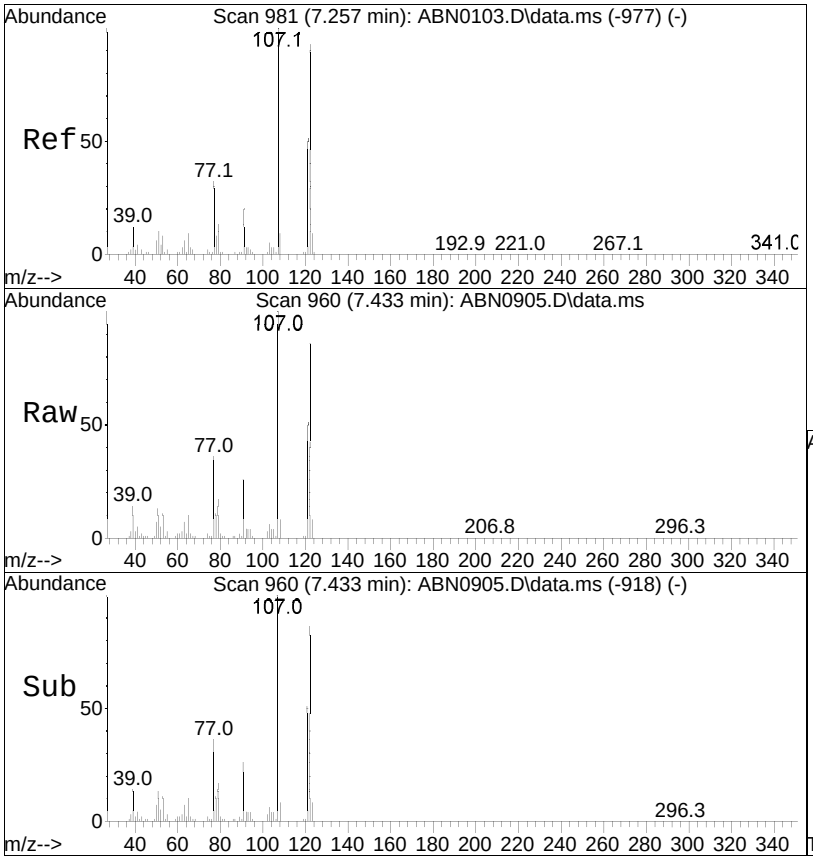


#22
2-Nitrophenol
Concen: 4.19 ug/ml
RT: 7.328 min Scan# 942
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:139 Resp: 22838

Ion	Ratio	Lower	Upper
139	100		
109	29.9	19.4	29.0#
65	54.7	46.1	69.1

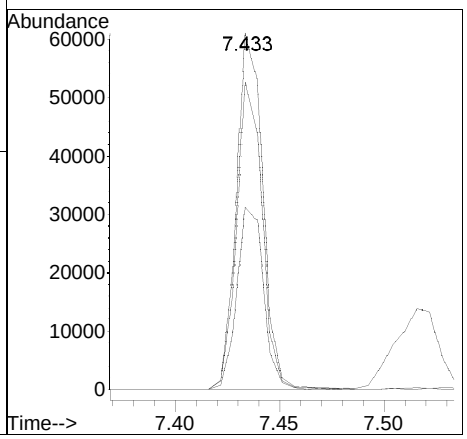


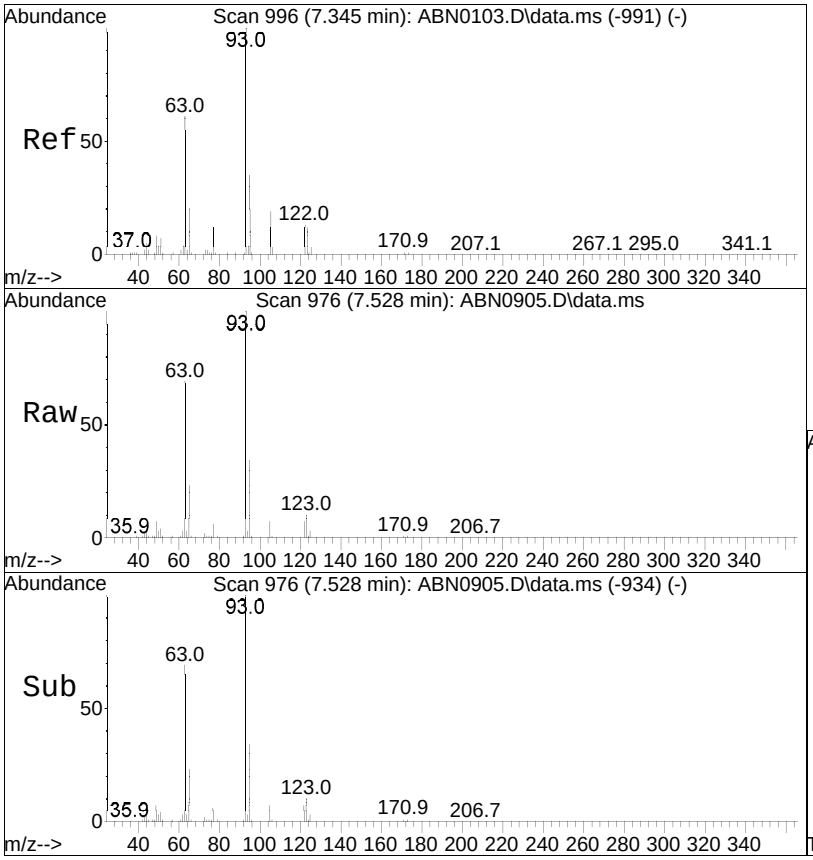


#23
2,4-Dimethylphenol
Concen: 3.94 ug/ml
RT: 7.433 min Scan# 960
Delta R.T. -0.001 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:107 Resp: 53118

Ion	Ratio	Lower	Upper
107	100		
121	52.1	40.0	60.0
122	83.9	70.2	105.4

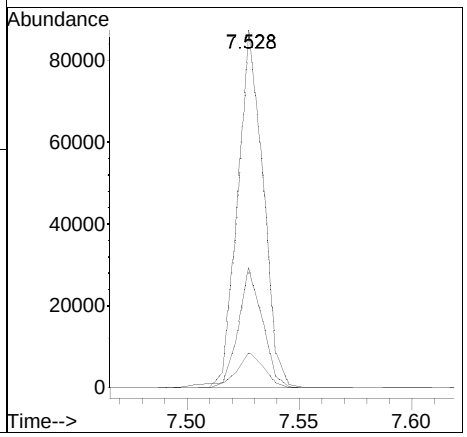


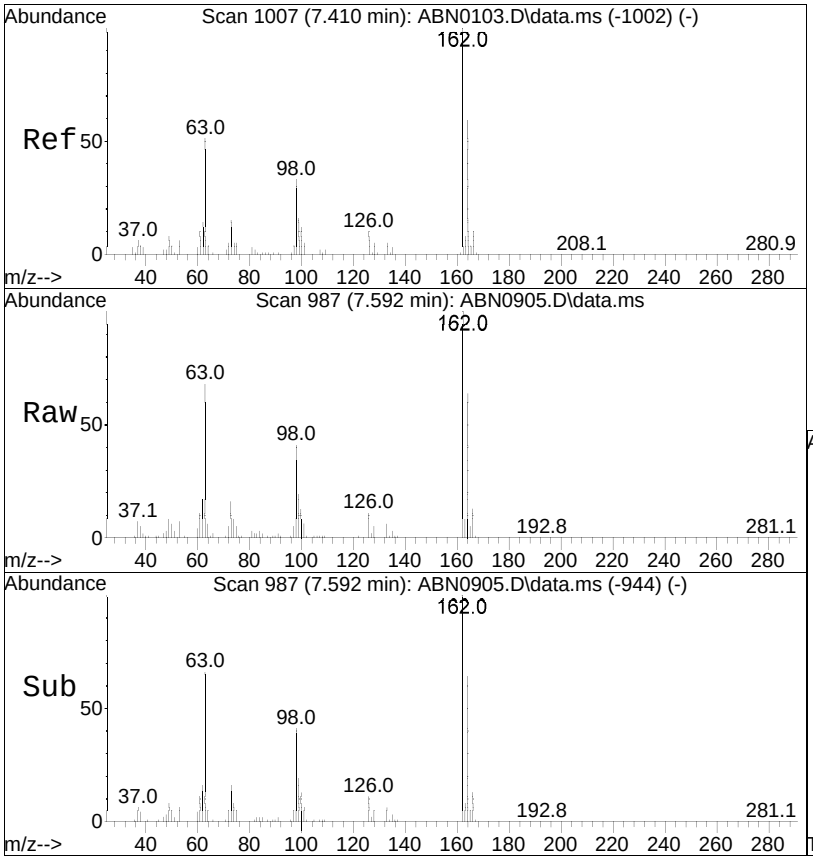


#24
Bis(2-chloroethoxy)methane
Concen: 4.17 ug/ml
RT: 7.528 min Scan# 976
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 93 Resp: 68157

Ion	Ratio	Lower	Upper
93	100		
95	32.0	25.8	38.8
123	11.6	10.1	15.1

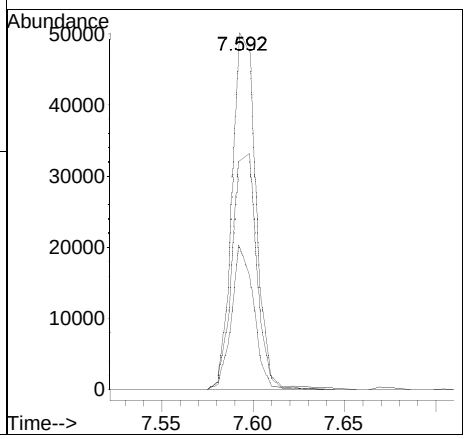


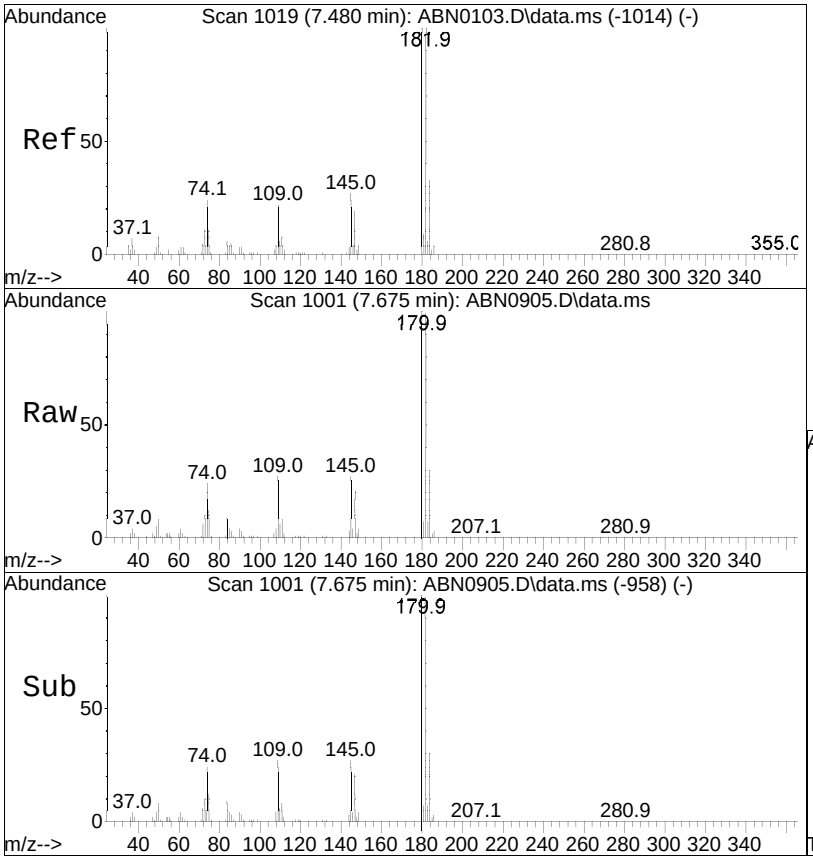


#25
2,4-Dichlorophenol
Concen: 4.04 ug/ml
RT: 7.592 min Scan# 987
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:162 Resp: 45743

Ion	Ratio	Lower	Upper
162	100		
164	68.1	51.0	76.4
98	37.8	32.2	48.2

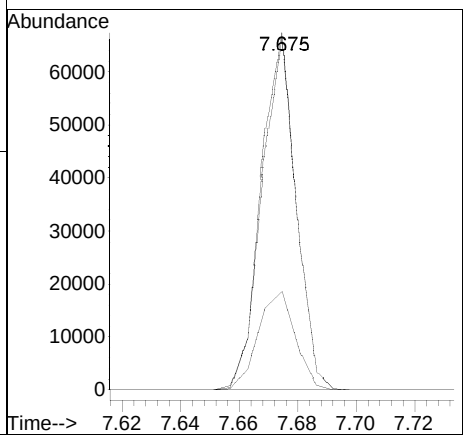


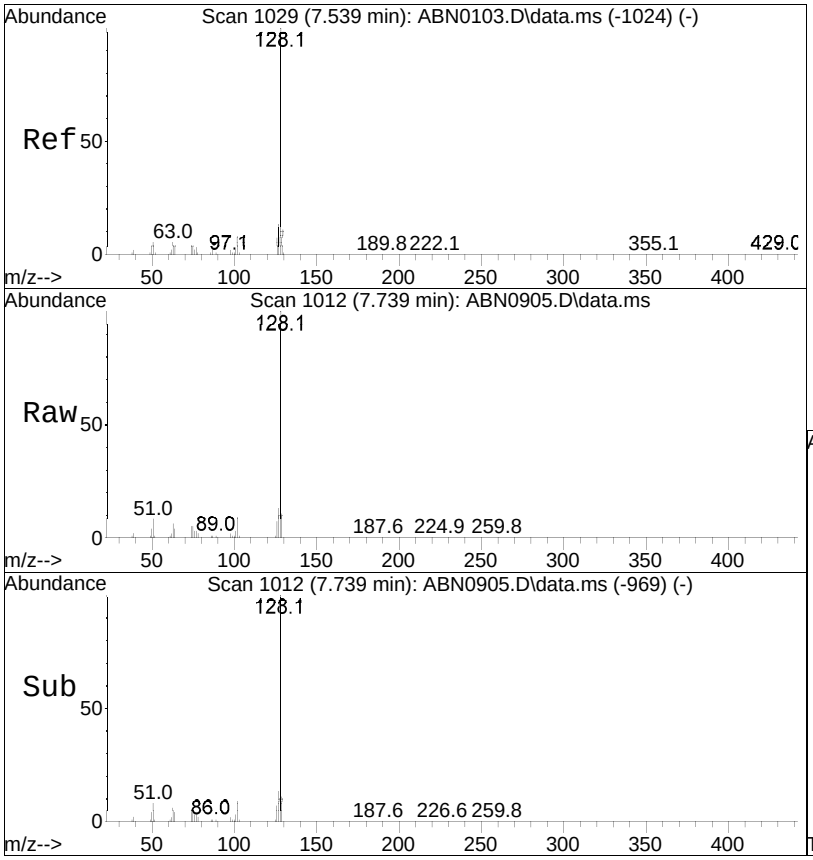


#26
1,2,4-Trichlorobenzene
Concen: 4.29 ug/ml
RT: 7.675 min Scan# 1001
Delta R.T. 0.006 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:180 Resp: 55705

Ion	Ratio	Lower	Upper
180	100		
182	97.1	76.0	114.0
145	29.5	25.7	38.5

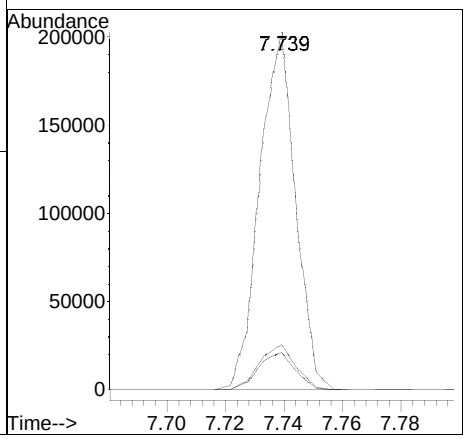


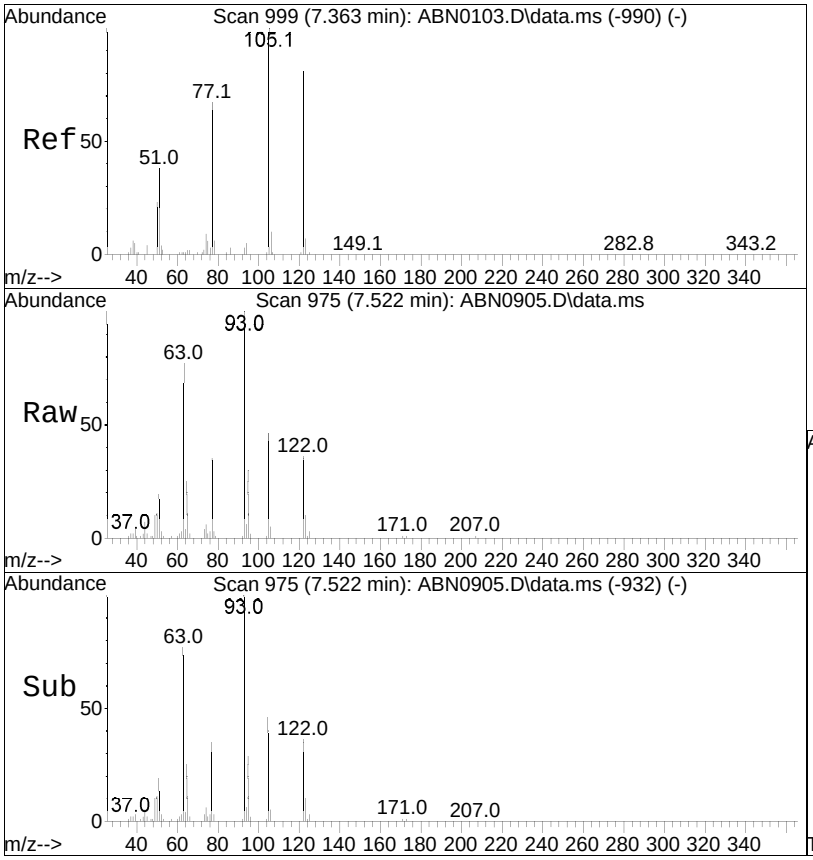


#35
Naphthalene
Concen: 4.40 ug/ml
RT: 7.739 min Scan# 1012
Delta R.T. 0.005 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:128 Resp: 170042

Ion	Ratio	Lower	Upper
128	100		
129	10.9	8.7	13.1
127	13.1	10.3	15.5

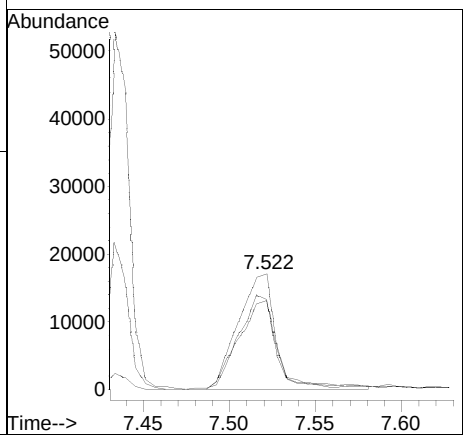


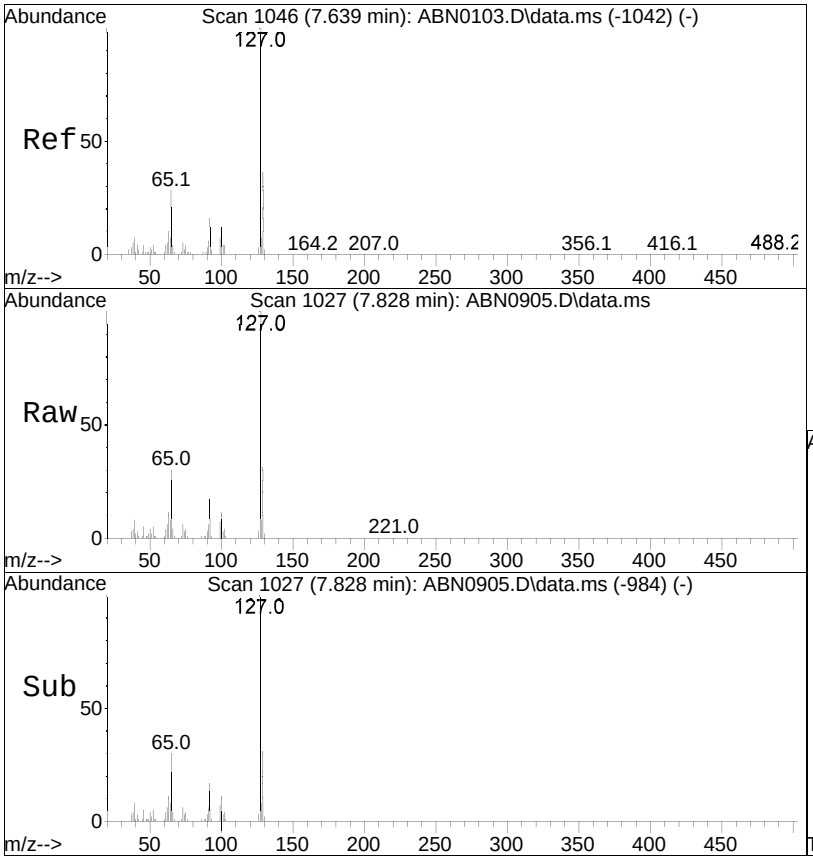


#36
Benzoic Acid
Concen: 4.17 ug/ml
RT: 7.522 min Scan# 975
Delta R.T. 0.006 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:105 Resp: 26921

Ion	Ratio	Lower	Upper
105	100		
122	82.1	59.9	89.9
77	74.7	60.1	90.1

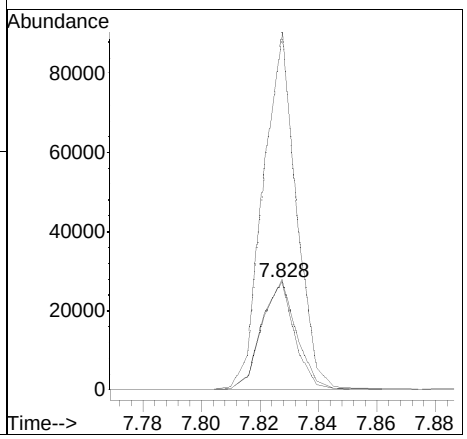


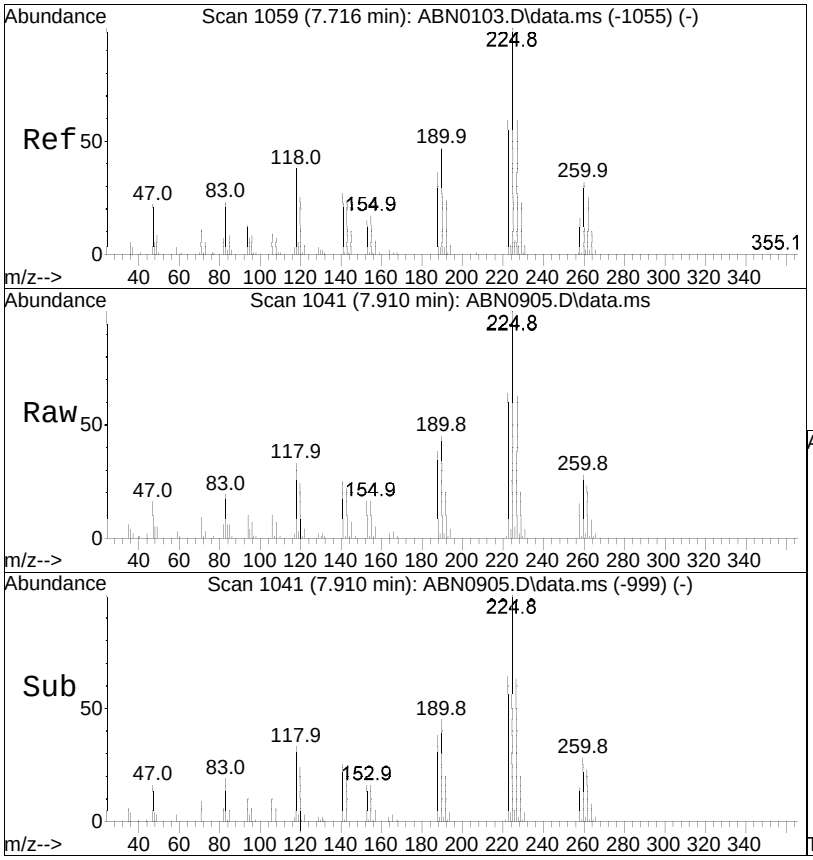


#37
4-Chloroaniline
Concen: 4.25 ug/ml
RT: 7.828 min Scan# 1027
Delta R.T. 0.006 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 65 Resp: 21503

Ion	Ratio	Lower	Upper
65	100		
127	330.1	237.6	356.4
129	105.9	76.3	114.5

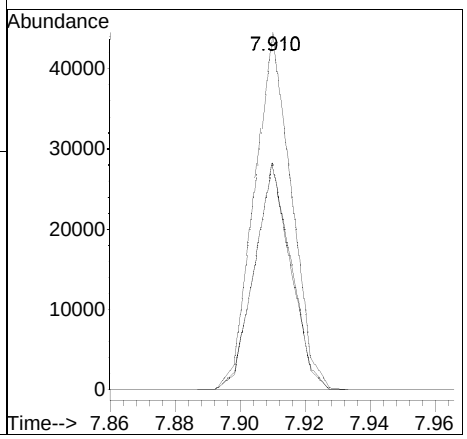


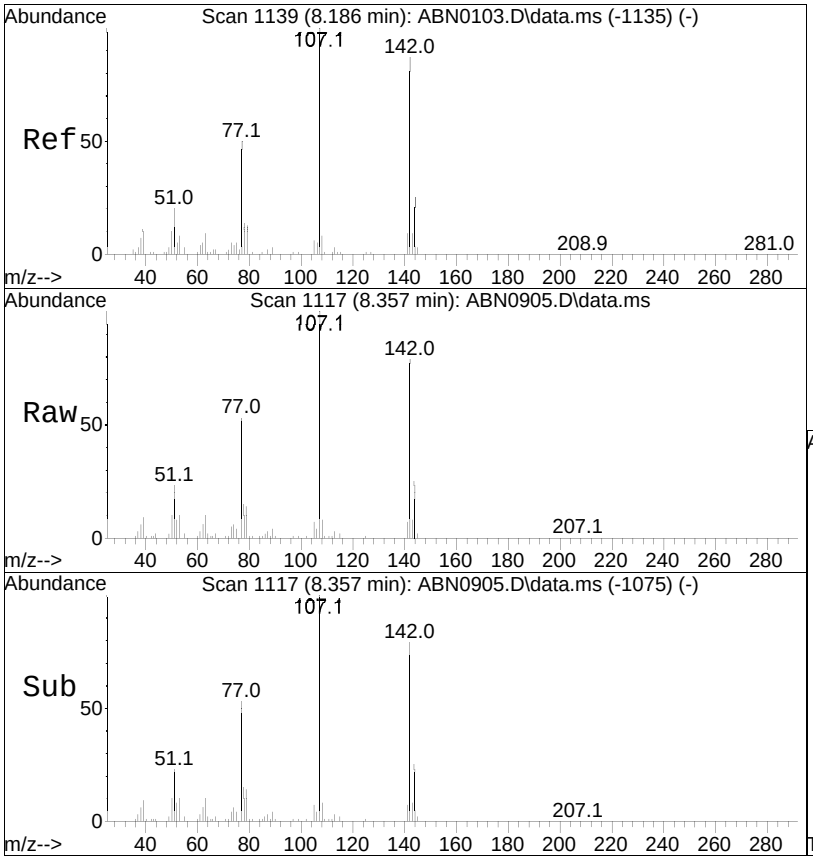


#38
Hexachlorobutadiene
Concen: 4.47 ug/ml
RT: 7.910 min Scan# 1041
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:225 Resp: 35242

Ion	Ratio	Lower	Upper
225	100		
223	62.3	50.3	75.5
227	62.8	52.2	78.2

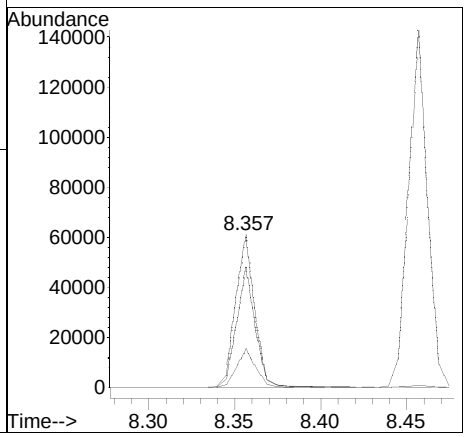


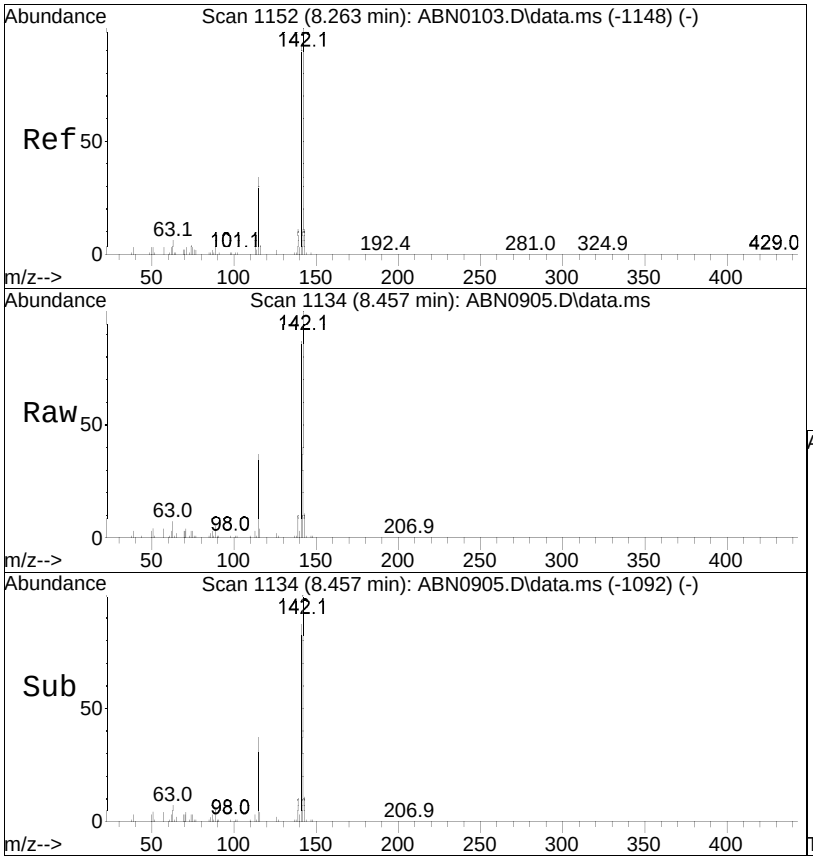


#39
p-Chloro-m-cresol
Concen: 4.25 ug/ml
RT: 8.357 min Scan# 1117
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:107 Resp: 47547

Ion	Ratio	Lower	Upper
107	100		
144	24.9	20.9	31.3
142	76.0	66.1	99.1

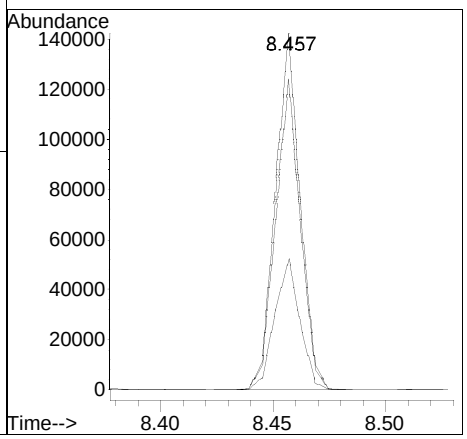


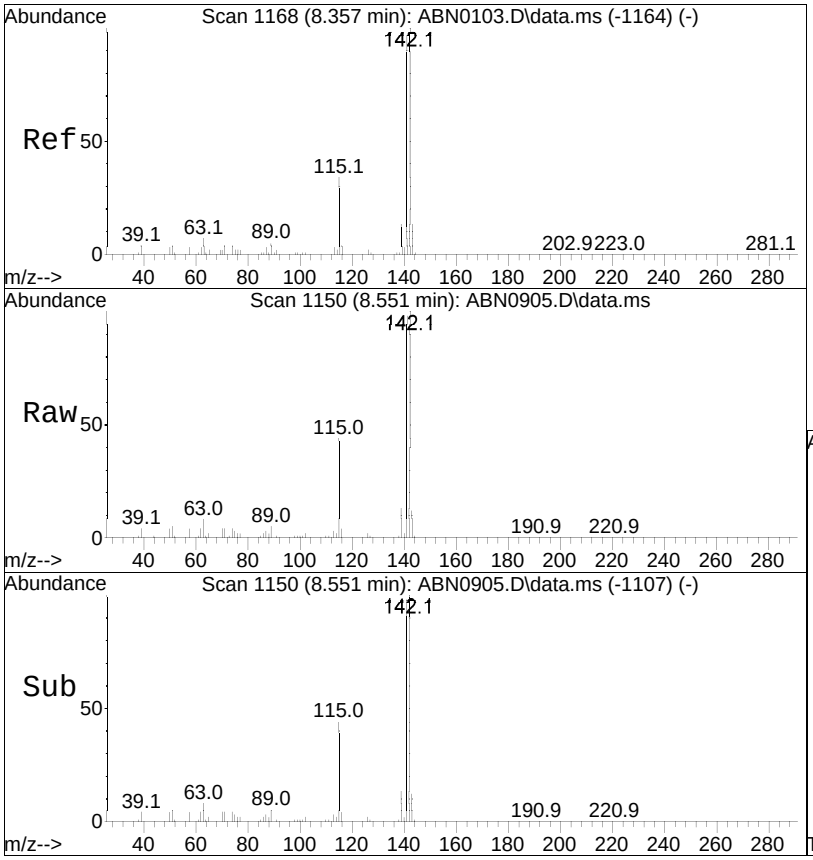


#40
2-Methylnaphthalene
Concen: 4.40 ug/ml
RT: 8.457 min Scan# 1134
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:142 Resp: 108412

Ion	Ratio	Lower	Upper
142	100		
141	87.3	69.6	104.4
115	37.5	26.6	40.0

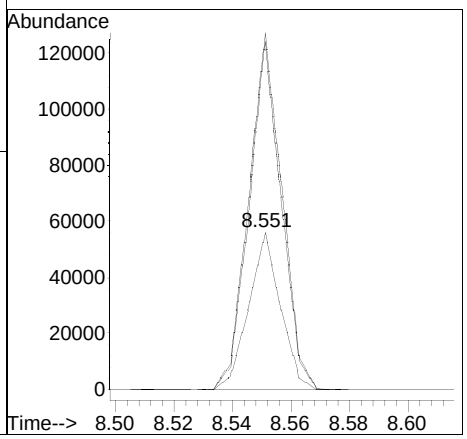


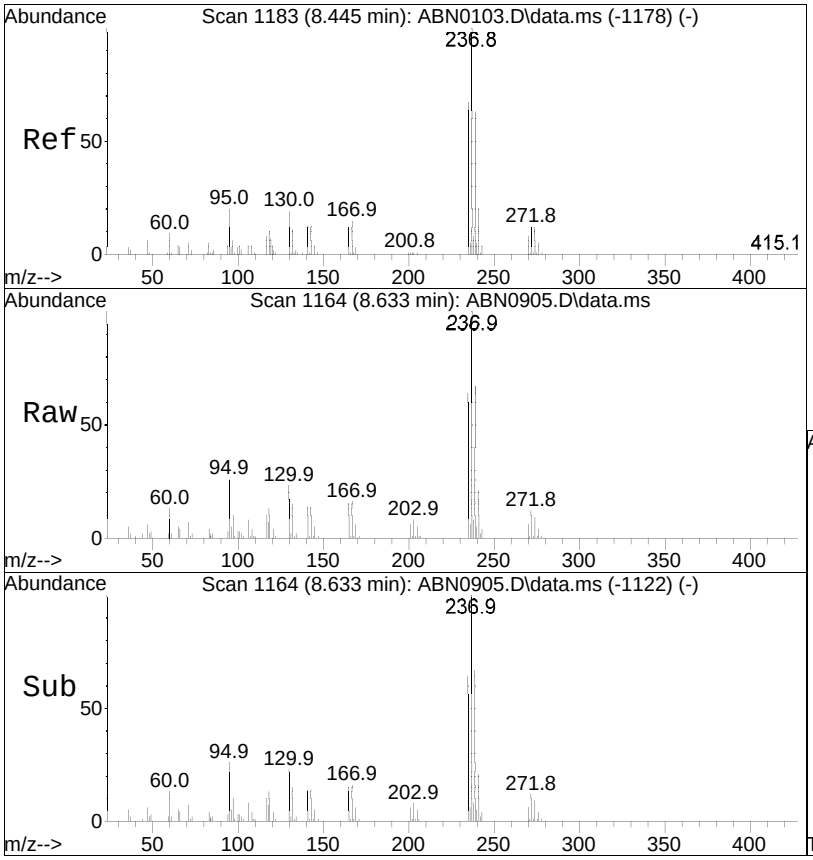


#41
1-Methylnaphthalene
Concen: 4.61 ug/ml
RT: 8.551 min Scan# 1150
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:115 Resp: 42508

Ion	Ratio	Lower	Upper
115	100		
141	221.7	207.8	311.6
142	235.6	226.8	340.2

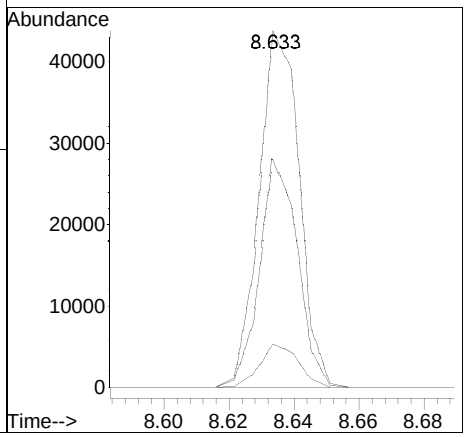


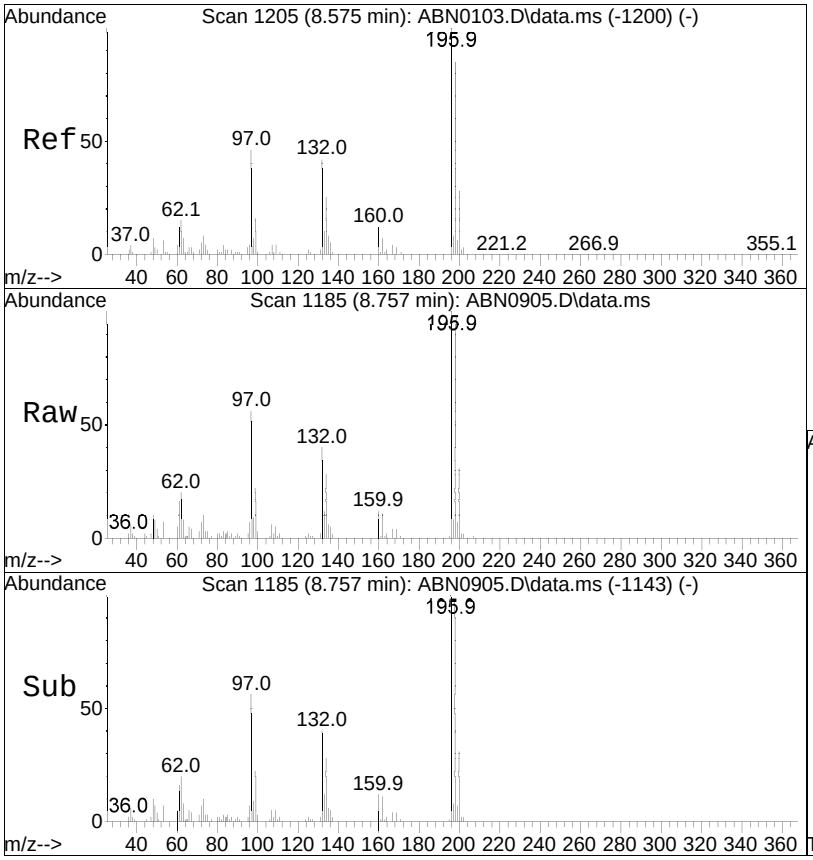


#42
Hexachlorocyclopentadiene
Concen: 4.46 ug/ml
RT: 8.633 min Scan# 1164
Delta R.T. -0.001 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:237 Resp: 37471

Ion	Ratio	Lower	Upper
237	100		
235	60.7	49.7	74.5
272	11.8	9.8	14.6

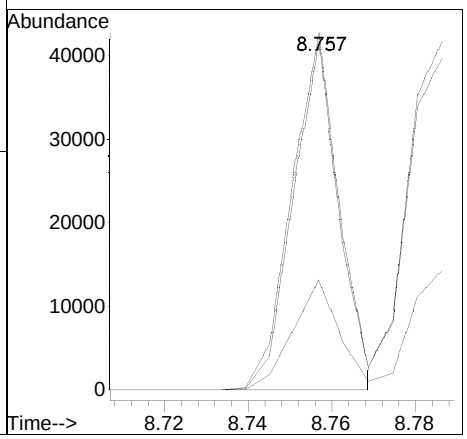


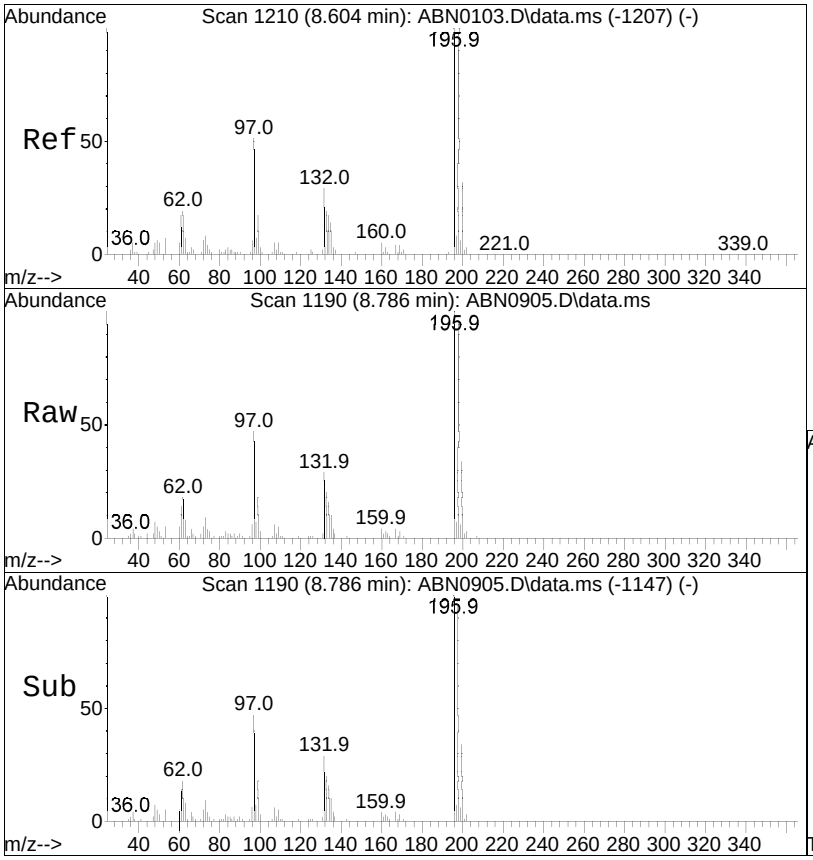


#43
2,4,6-Trichlorophenol
Concen: 4.20 ug/ml
RT: 8.757 min Scan# 1185
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:196 Resp: 33586

Ion	Ratio	Lower	Upper
196	100		
198	94.0	77.5	116.3
200	30.6	23.8	35.6

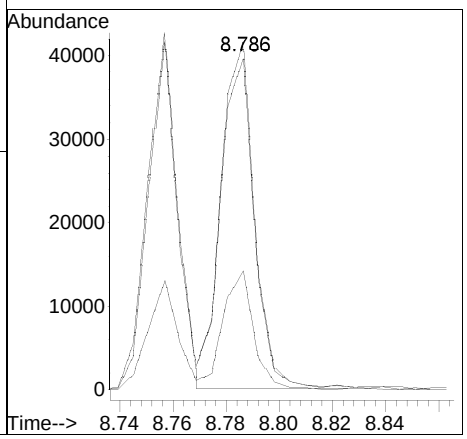


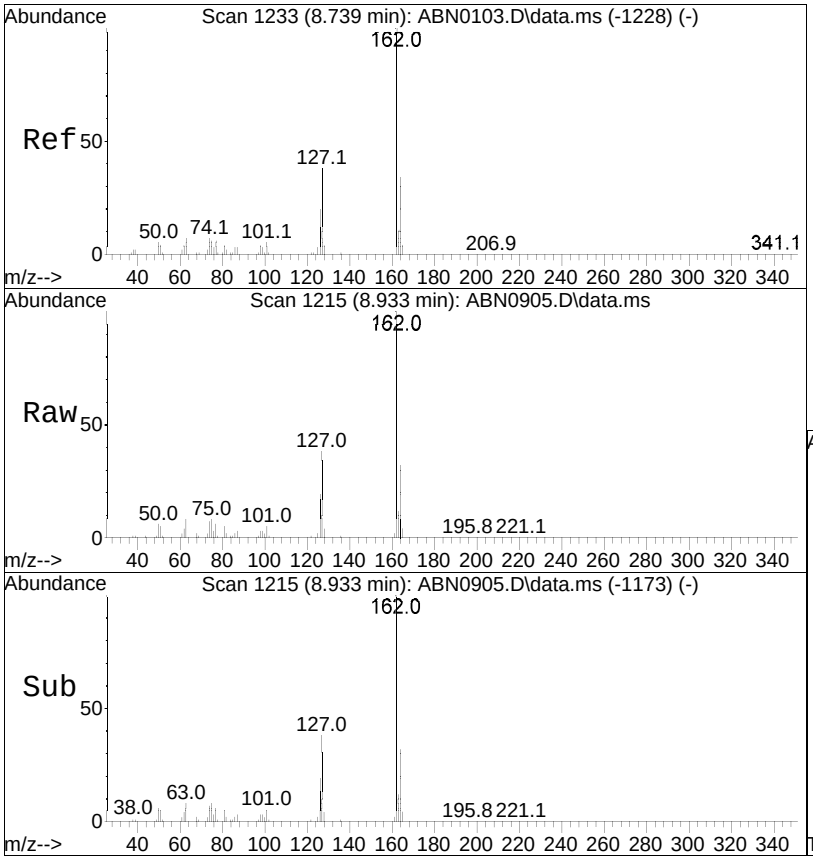


#44
2,4,5-Trichlorophenol
Concen: 4.23 ug/ml
RT: 8.786 min Scan# 1190
Delta R.T. 0.005 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:196 Resp: 36339

Ion	Ratio	Lower	Upper
196	100		
200	31.4	25.4	38.0
198	94.3	78.0	117.0

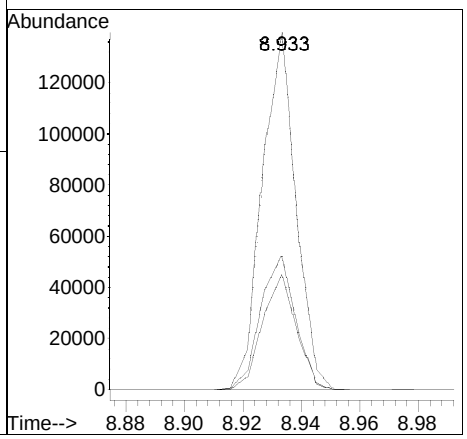


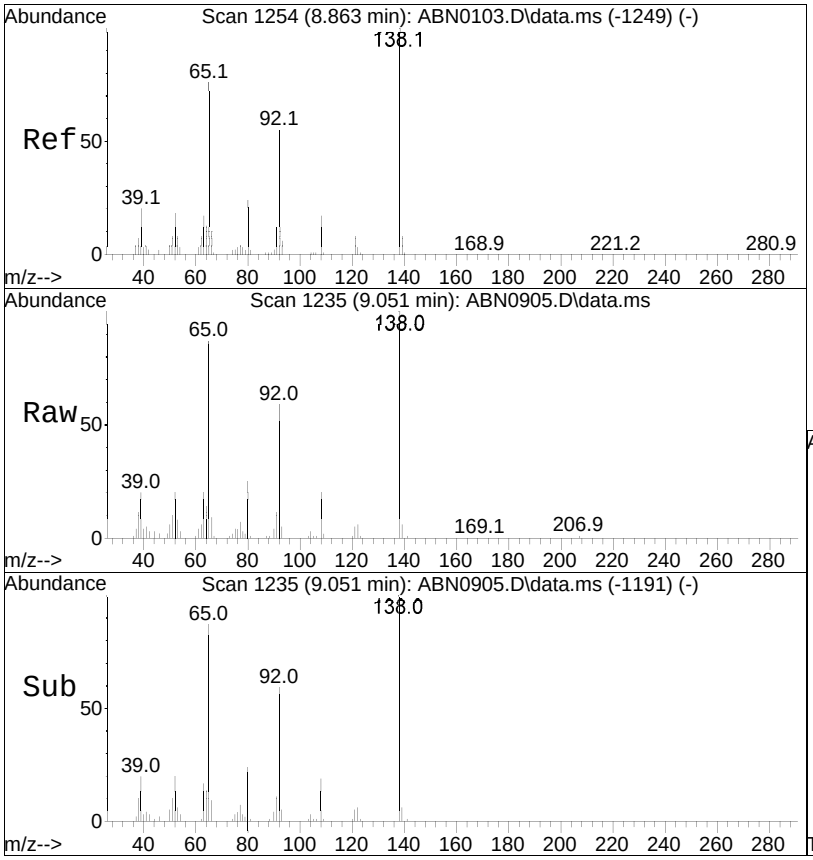


#46
2-Chloronaphthalene
Concen: 4.33 ug/ml
RT: 8.933 min Scan# 1215
Delta R.T. -0.001 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:162 Resp: 111123

Ion	Ratio	Lower	Upper
162	100		
127	39.2	32.2	48.4
164	32.8	25.7	38.5

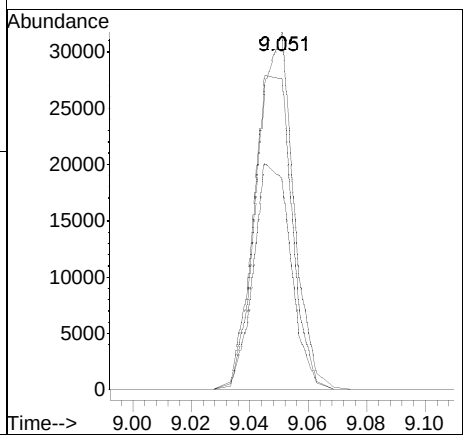


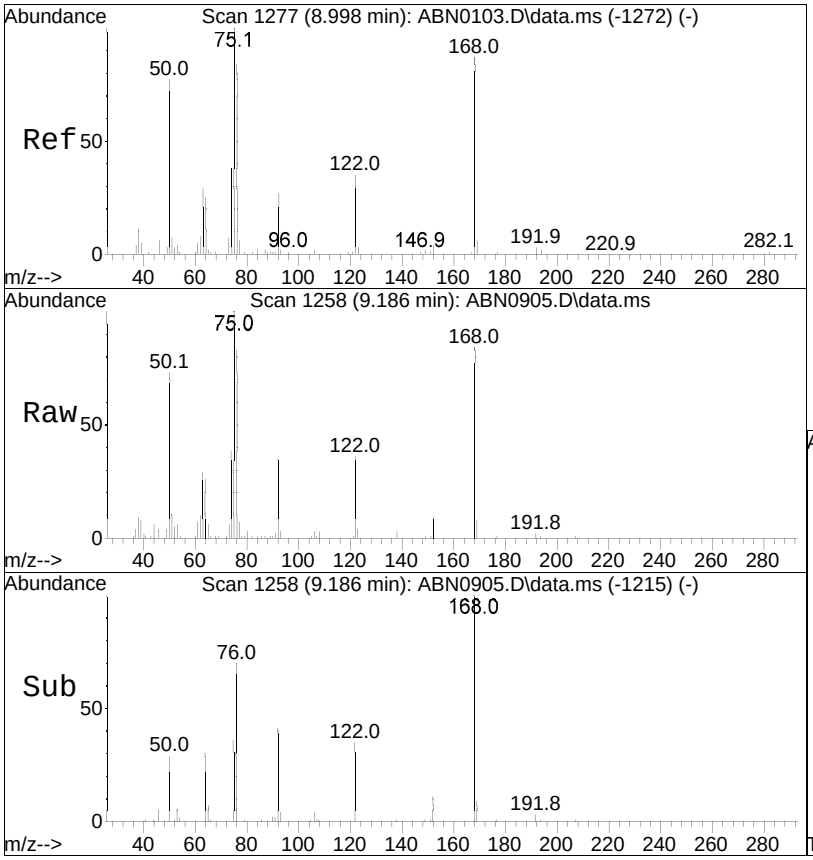


#47
2-Nitroaniline
Concen: 3.96 ug/ml
RT: 9.051 min Scan# 1235
Delta R.T. 0.006 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:138 Resp: 27348

Ion	Ratio	Lower	Upper
138	100		
92	65.1	53.5	80.3
65	93.2	86.3	129.5

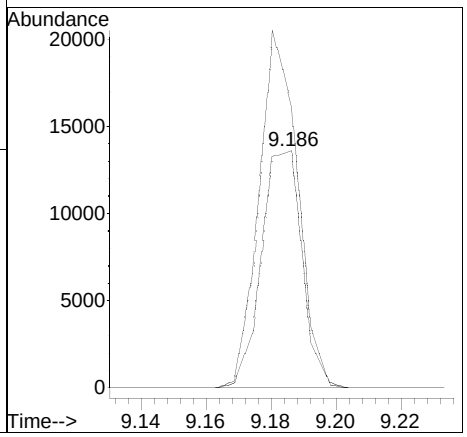


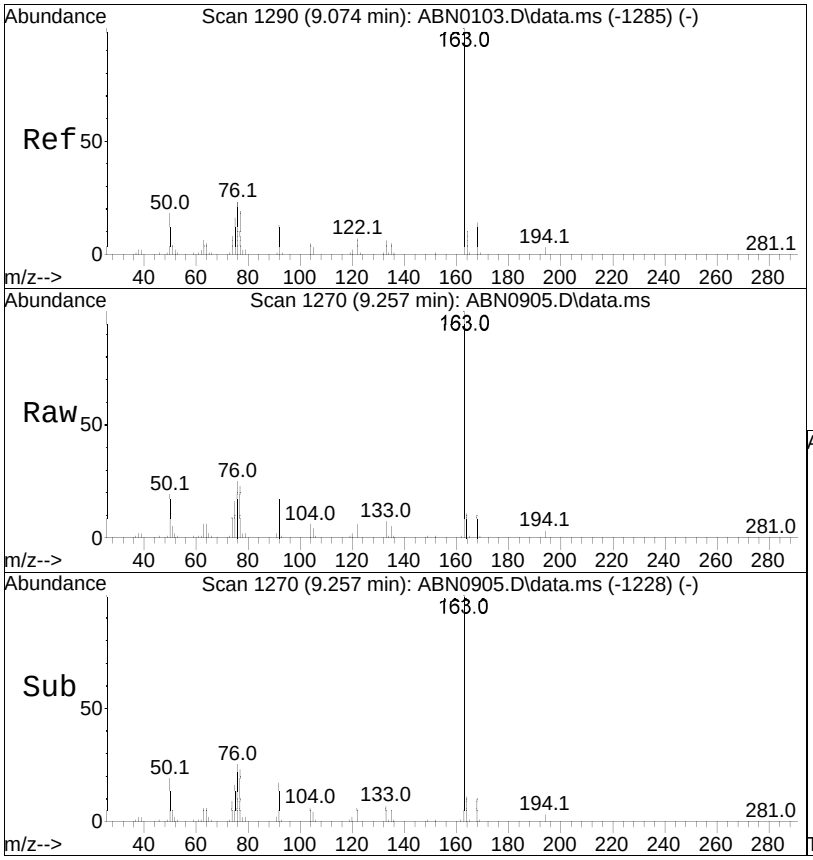


#48
1,4-Dinitrobenzene
Concen: 4.16 ug/ml
RT: 9.186 min Scan# 1258
Delta R.T. 0.005 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:168 Resp: 11766

Ion	Ratio	Lower	Upper
168	100		
75	142.2	121.8	182.8

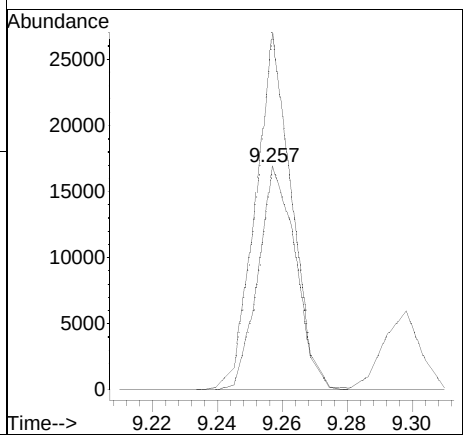


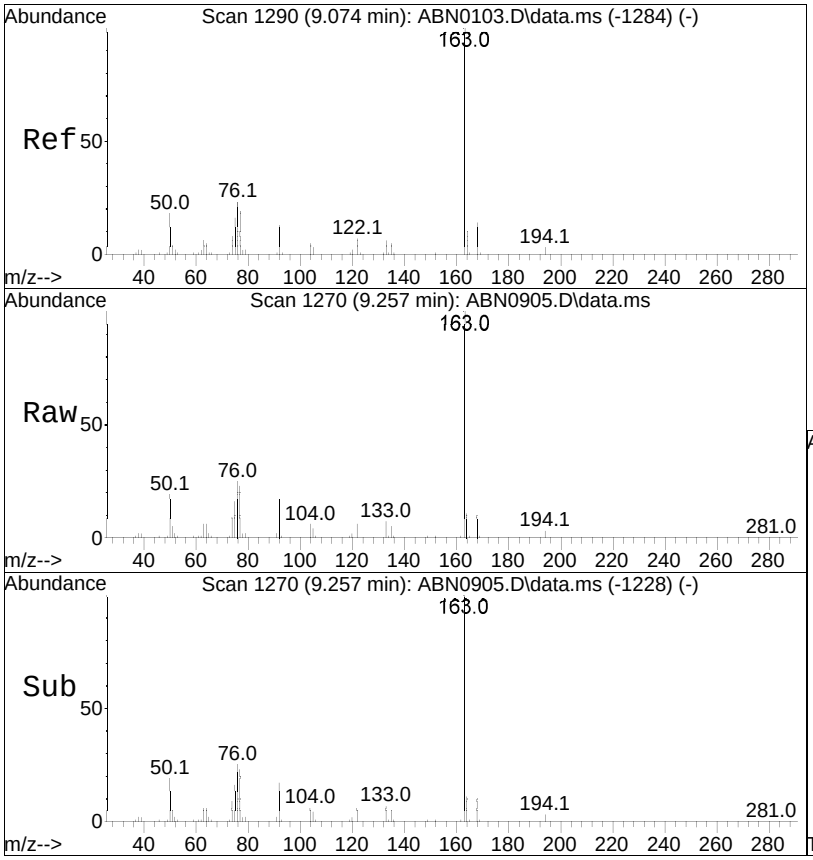


#49
1,3-Dinitrobenzene
Concen: 4.11 ug/ml
RT: 9.257 min Scan# 1270
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:168 Resp: 13445

Ion	Ratio	Lower	Upper
168	100		
75	153.9	22.7	34.1#

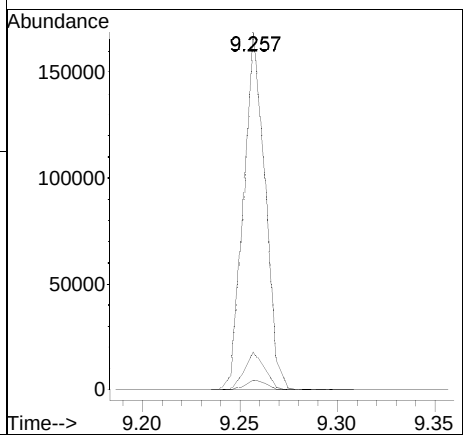


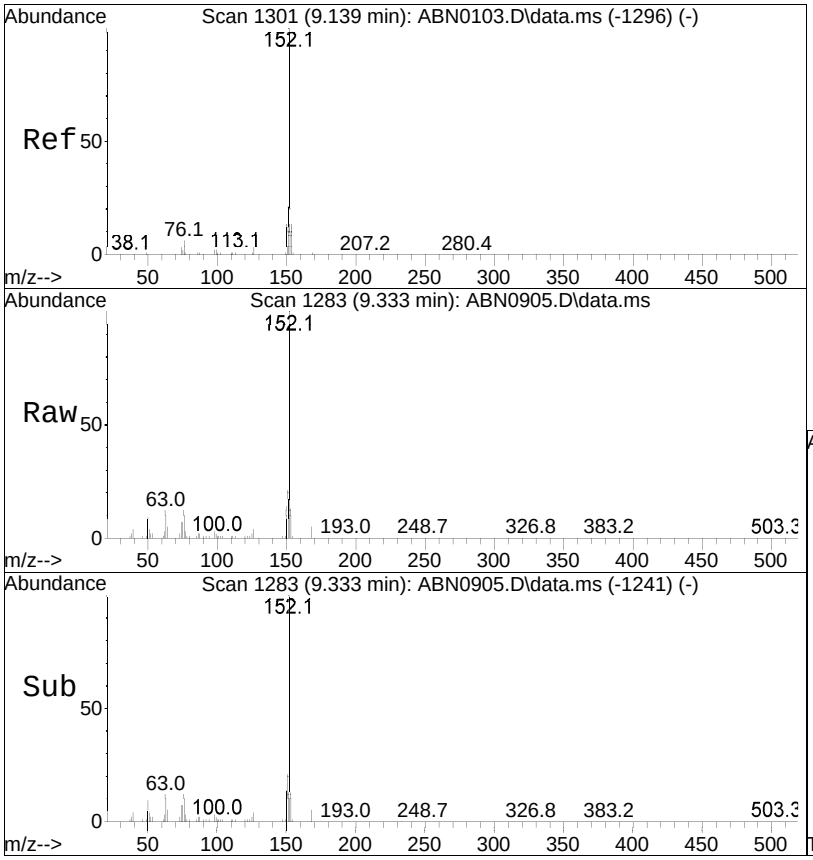


#50
Dimethyl phthalate
Concen: 4.25 ug/ml
RT: 9.257 min Scan# 1270
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:163 Resp: 128415

Ion	Ratio	Lower	Upper
163	100		
194	2.9	3.5	5.3#
164	10.2	7.9	11.9

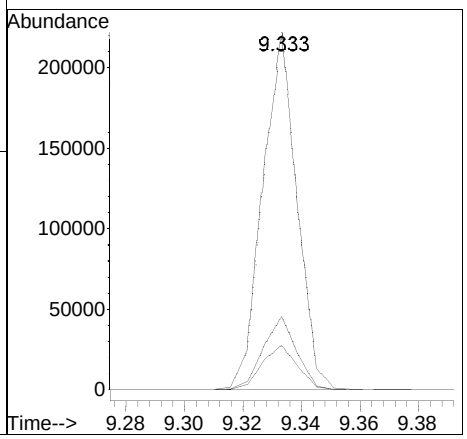


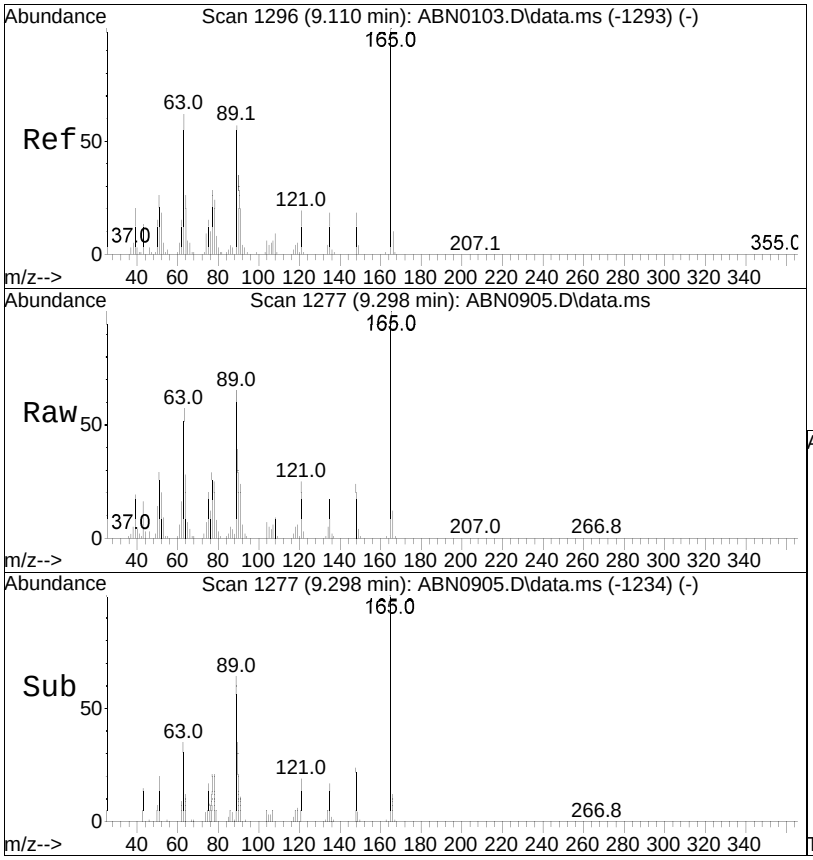


#51
Acenaphthylene
Concen: 4.32 ug/ml
RT: 9.333 min Scan# 1283
Delta R.T. -0.001 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:152 Resp: 178186

Ion	Ratio	Lower	Upper
152	100		
151	20.1	15.8	23.6
153	13.0	10.5	15.7

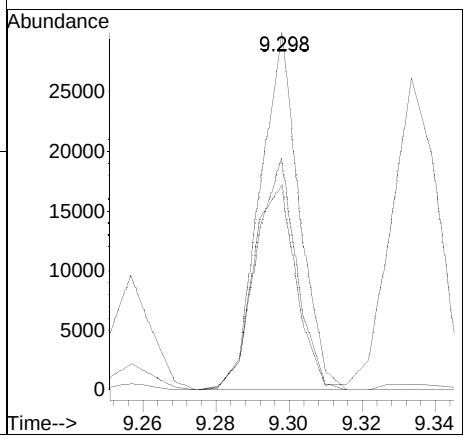


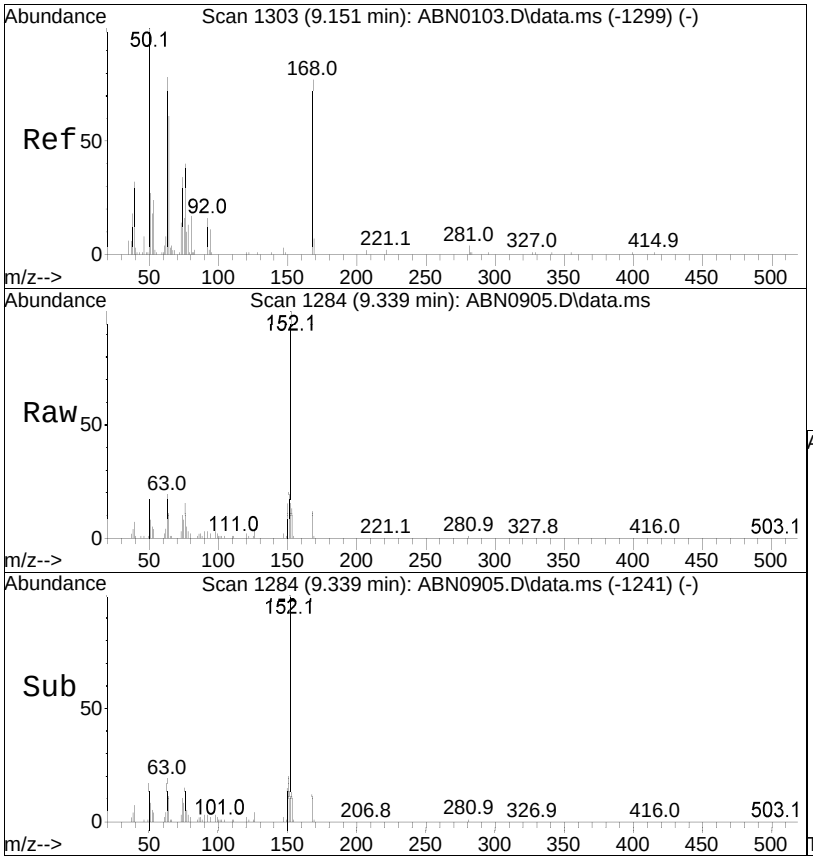


#52
2,6-Dinitrotoluene
Concen: 3.97 ug/ml
RT: 9.298 min Scan# 1277
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:165 Resp: 22507

Ion	Ratio	Lower	Upper
165	100		
89	66.1	54.2	81.2
63	62.5	64.2	96.2#

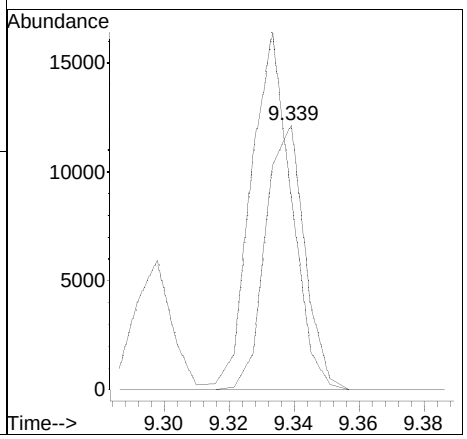


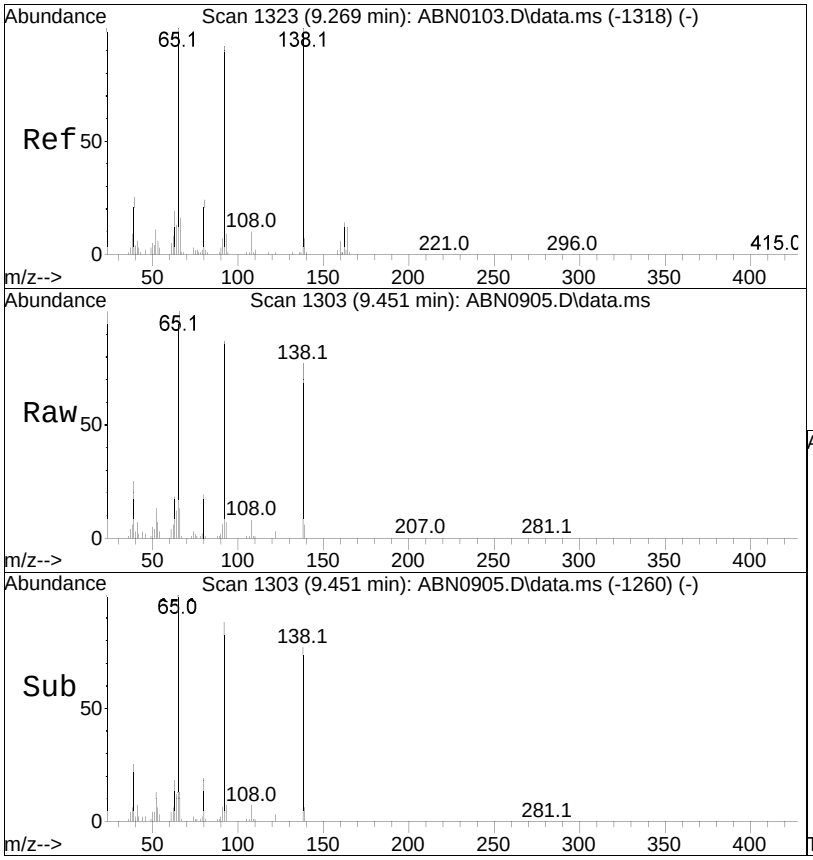


#53
1,2-Dinitrobenzene
Concen: 4.16 ug/ml
RT: 9.339 min Scan# 1284
Delta R.T. 0.005 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:168 Resp: 10100

Ion	Ratio	Lower	Upper
168	100		
75	138.5	30.9	46.3#

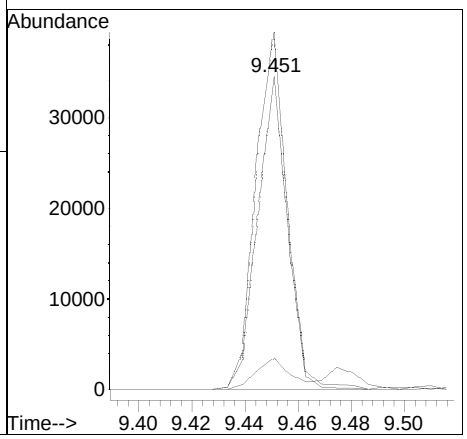


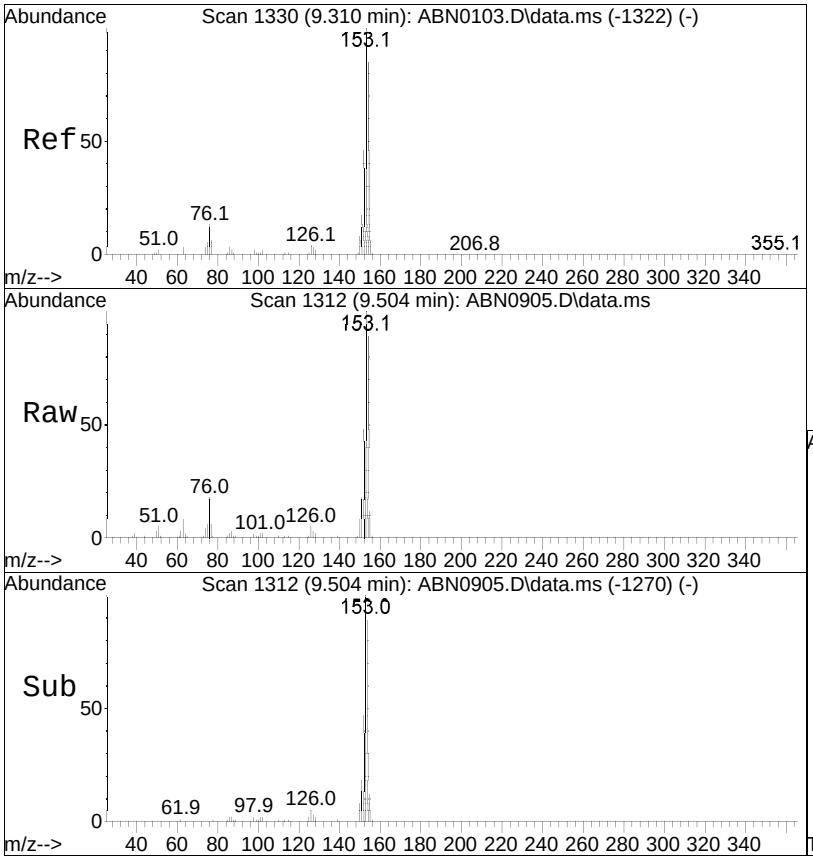


#63
3-Nitroaniline
Concen: 4.34 ug/ml
RT: 9.451 min Scan# 1303
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:138 Resp: 26477

Ion	Ratio	Lower	Upper
138	100		
92	121.0	93.4	140.2
108	11.7	9.5	14.3

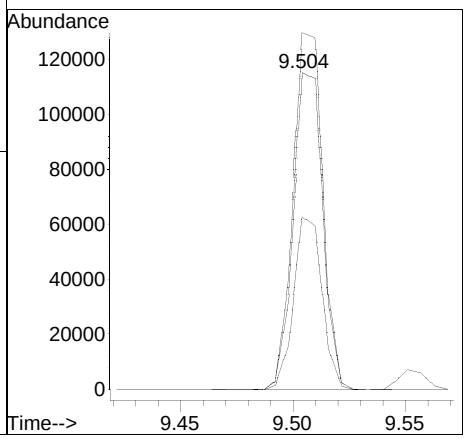


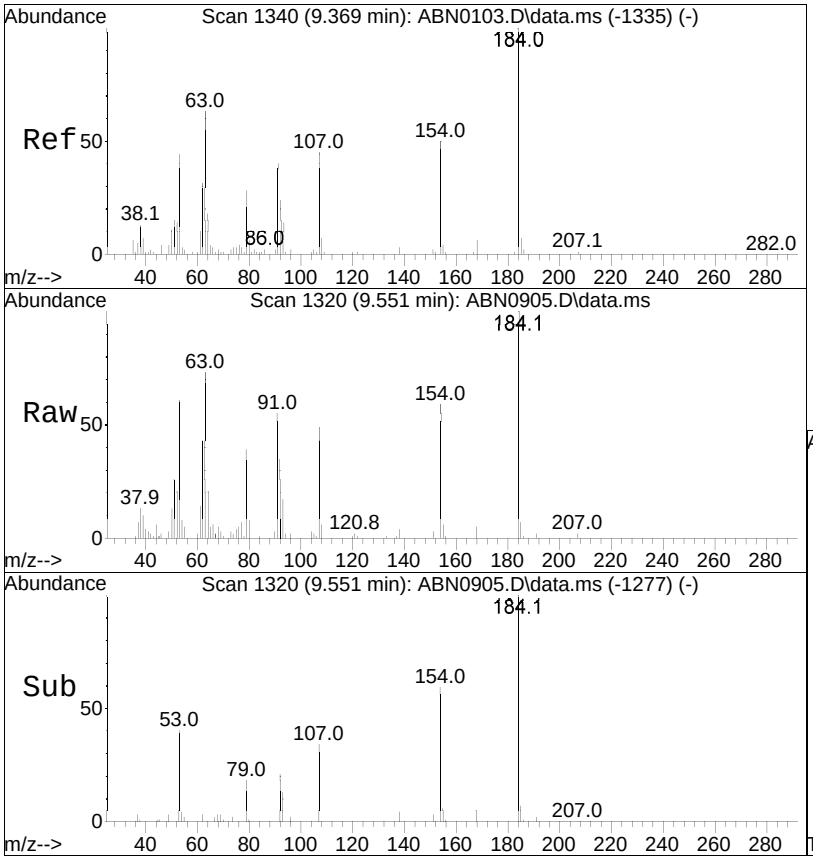


#64
Acenaphthene
Concen: 4.36 ug/ml
RT: 9.504 min Scan# 1312
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:154 Resp: 105205

Ion	Ratio	Lower	Upper
154	100		
153	113.1	85.3	127.9
152	52.7	41.4	62.0

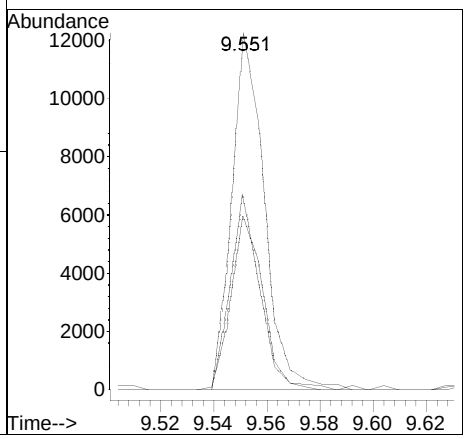


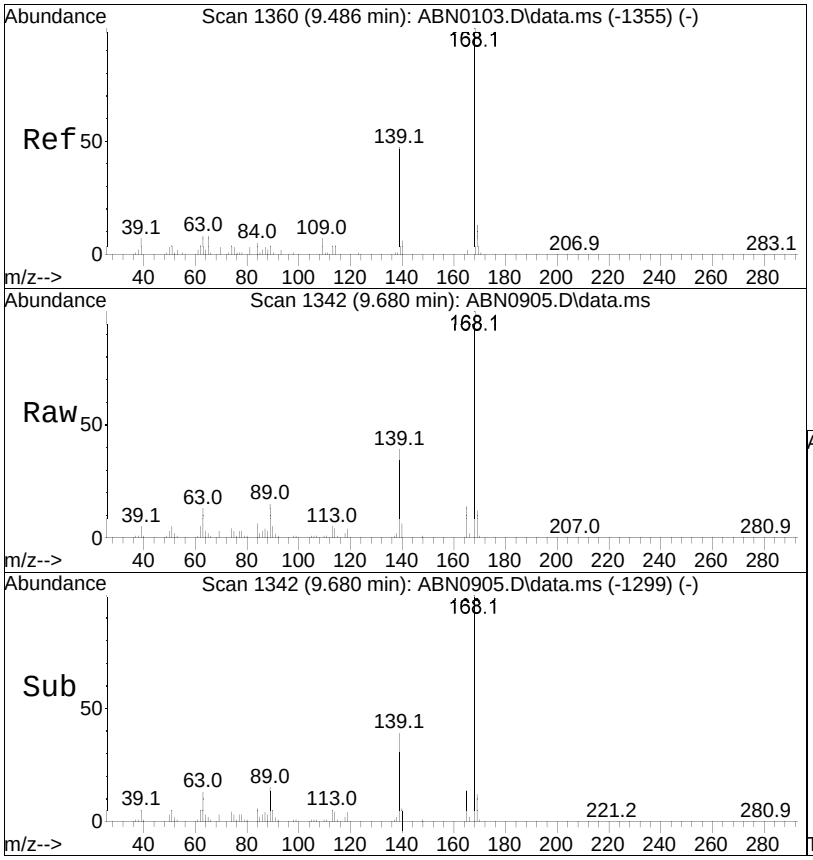


#65
2,4-Dinitrophenol
Concen: 4.12 ug/ml
RT: 9.551 min Scan# 1320
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:184 Resp: 10339

Ion	Ratio	Lower	Upper
184	100		
107	47.7	37.7	56.5
91	49.8	46.3	69.5

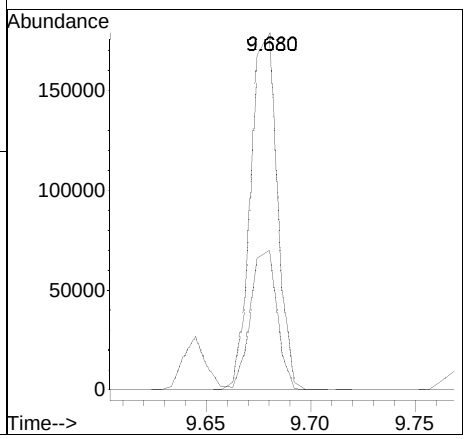


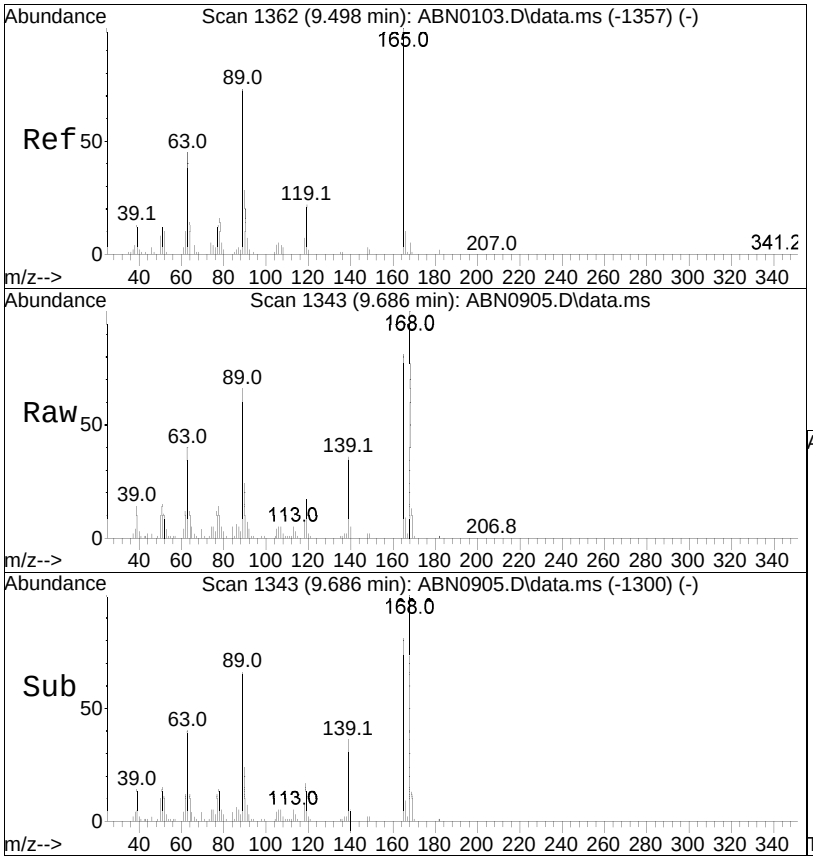


#66
Dibenzofuran
Concen: 4.38 ug/ml
RT: 9.680 min Scan# 1342
Delta R.T. 0.005 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:168 Resp: 157816

Ion	Ratio	Lower	Upper
168	100		
139	38.8	31.4	47.2

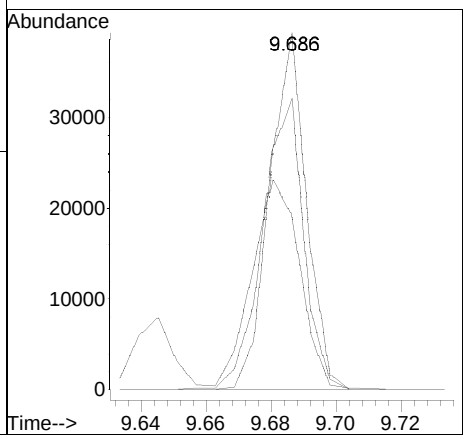


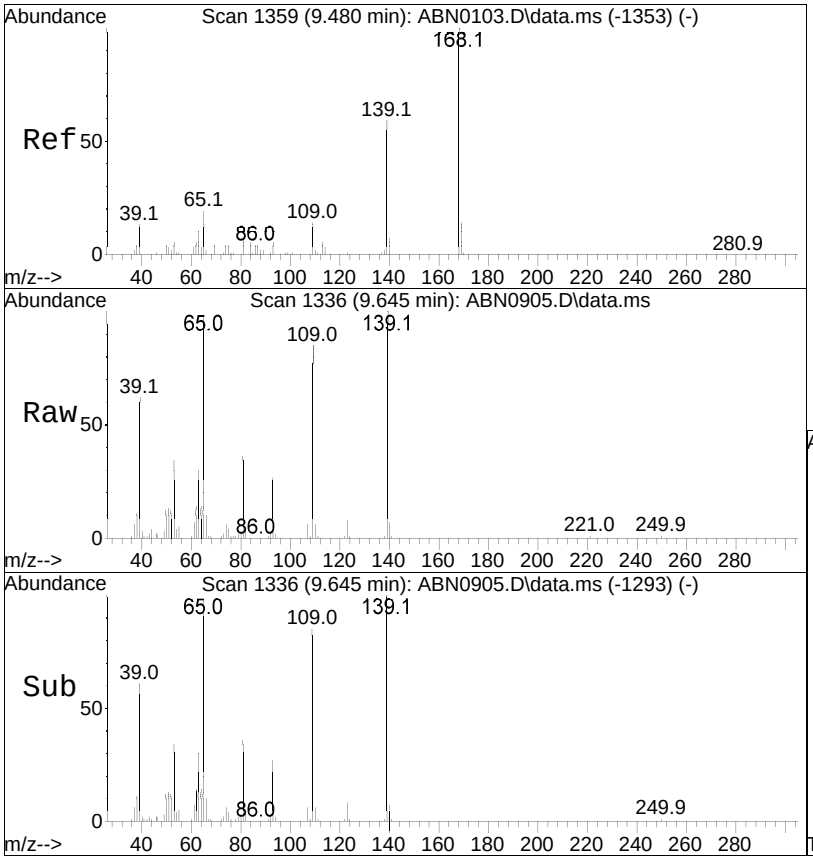


#67
2,4-Dinitrotoluene
Concen: 4.08 ug/ml
RT: 9.686 min Scan# 1343
Delta R.T. 0.005 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:165 Resp: 30782

Ion	Ratio	Lower	Upper
165	100		
89	91.4	72.0	108.0
63	77.0	52.7	79.1

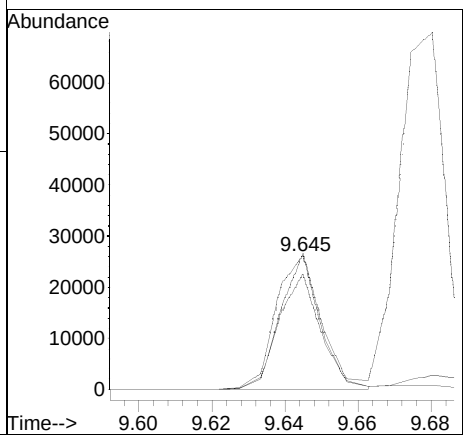


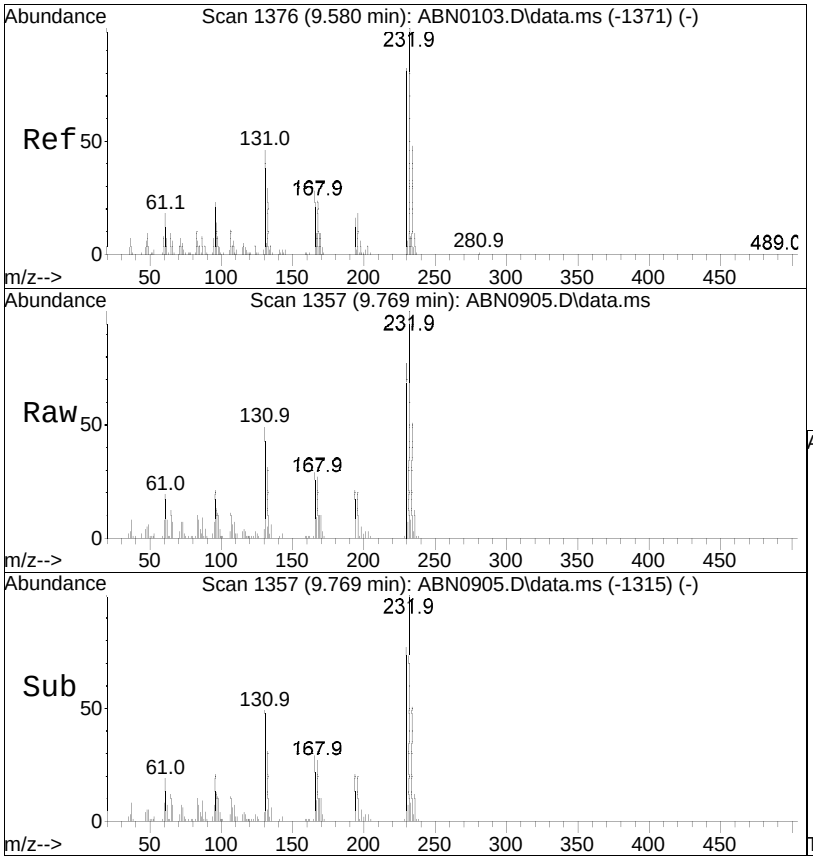


#68
4-Nitrophenol
Concen: 3.89 ug/ml
RT: 9.645 min Scan# 1336
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 65 Resp: 21874

Ion	Ratio	Lower	Upper
65	100		
109	84.0	47.4	71.2#
139	95.9	76.6	115.0

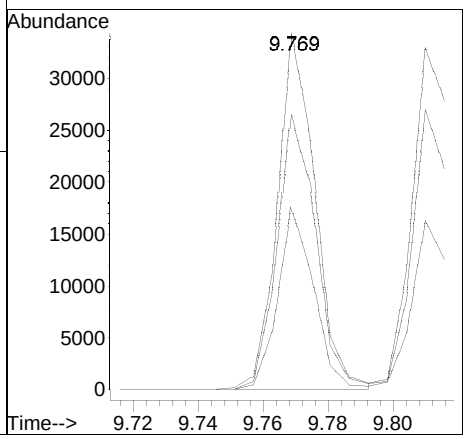


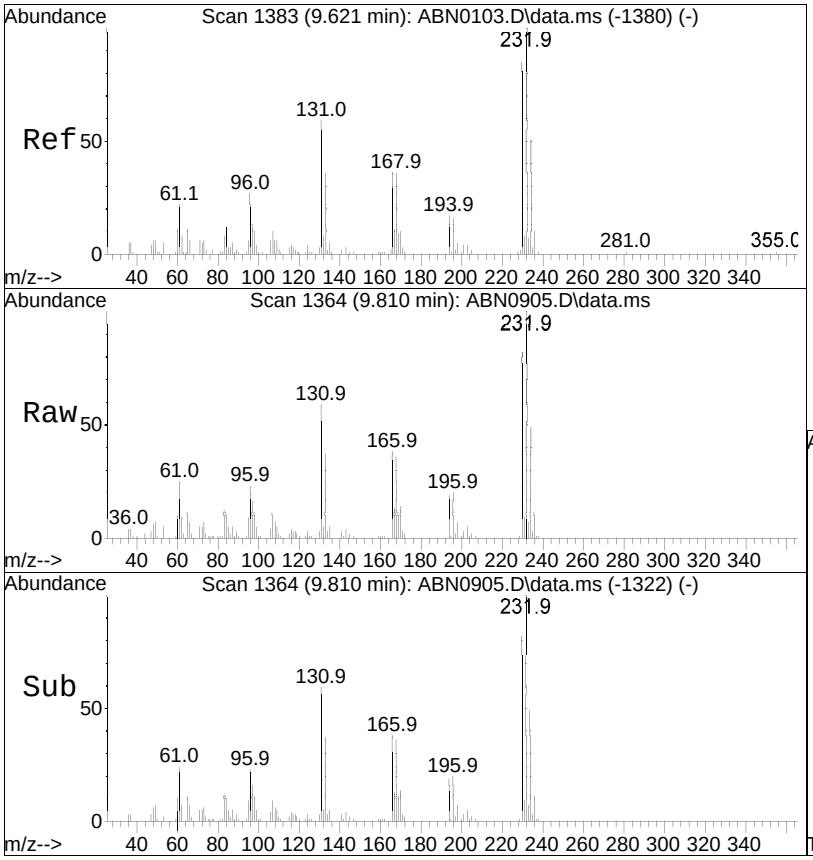


#69
2,3,5,6-Tetrachlorophenol
Concen: 3.99 ug/ml
RT: 9.769 min Scan# 1357
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:232 Resp: 27648

Ion	Ratio	Lower	Upper
232	100		
230	79.9	64.2	96.4
234	48.9	38.1	57.1

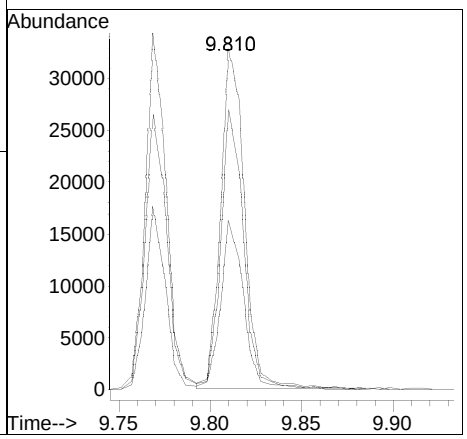


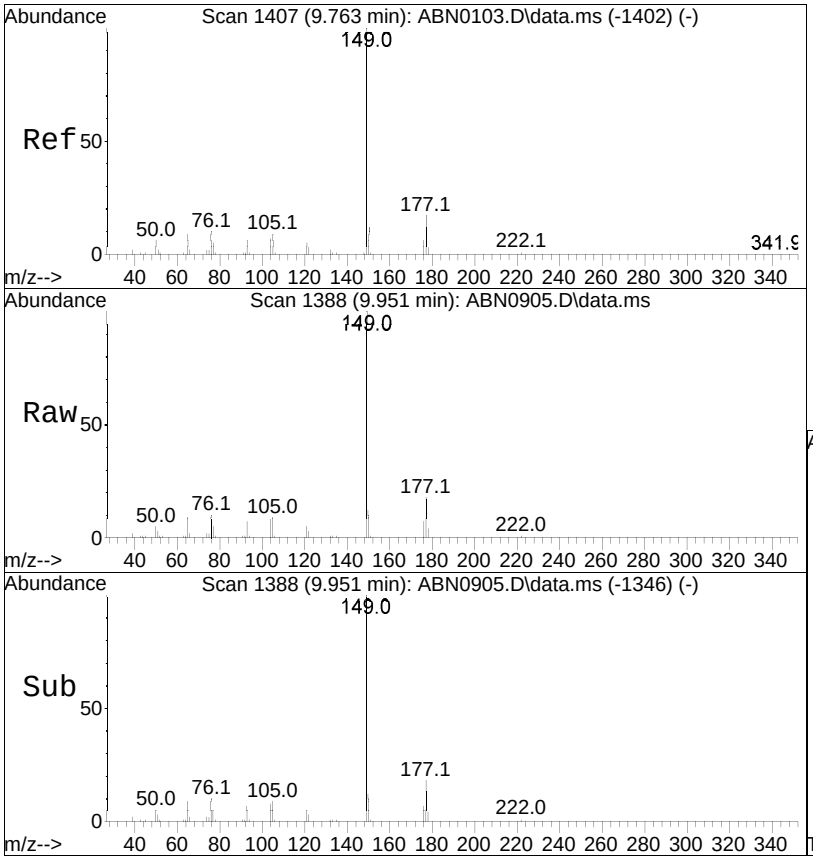


#70
2,3,4,6-Tetrachlorophenol
Concen: 4.14 ug/ml
RT: 9.810 min Scan# 1364
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:232 Resp: 29760

Ion	Ratio	Lower	Upper
232	100		
230	79.5	61.8	92.8
234	48.5	36.2	54.2

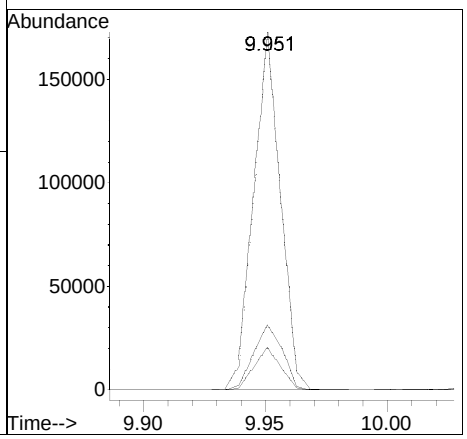


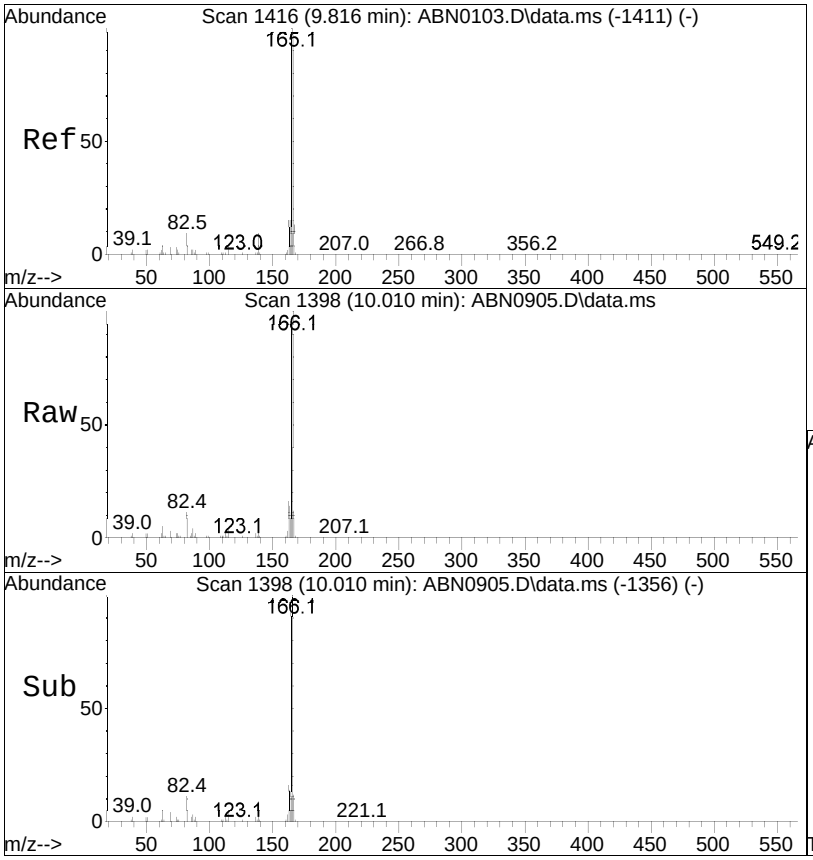


#71
Diethyl phthalate
Concen: 4.32 ug/ml
RT: 9.951 min Scan# 1388
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:149 Resp: 130343

Ion	Ratio	Lower	Upper
149	100		
177	19.7	16.1	24.1
150	11.9	9.4	14.2

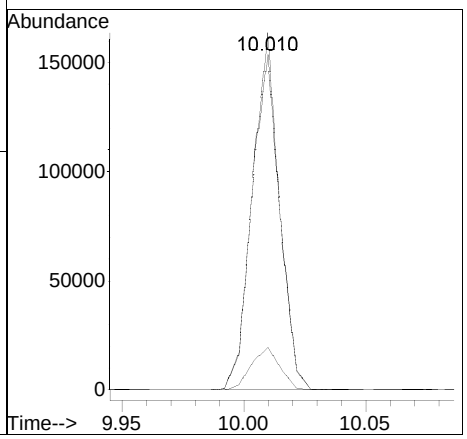


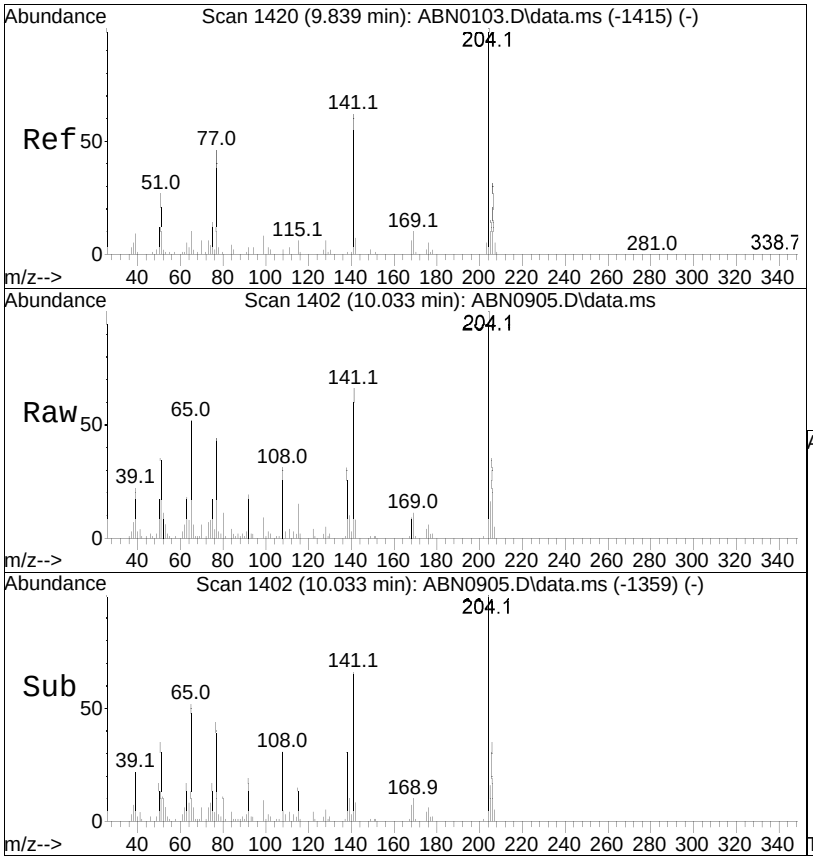


#72
Fluorene
Concen: 4.40 ug/ml
RT: 10.010 min Scan# 1398
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:166 Resp: 125345

Ion	Ratio	Lower	Upper
166	100		
165	98.3	76.2	114.2
167	13.1	10.6	15.8

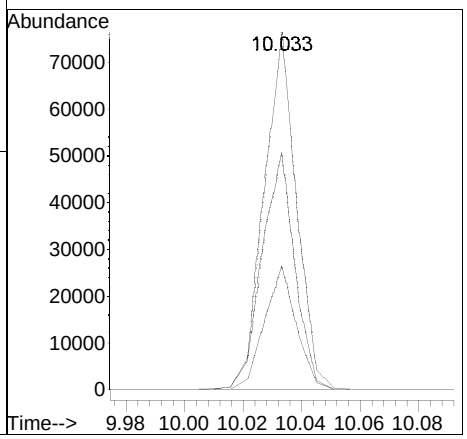


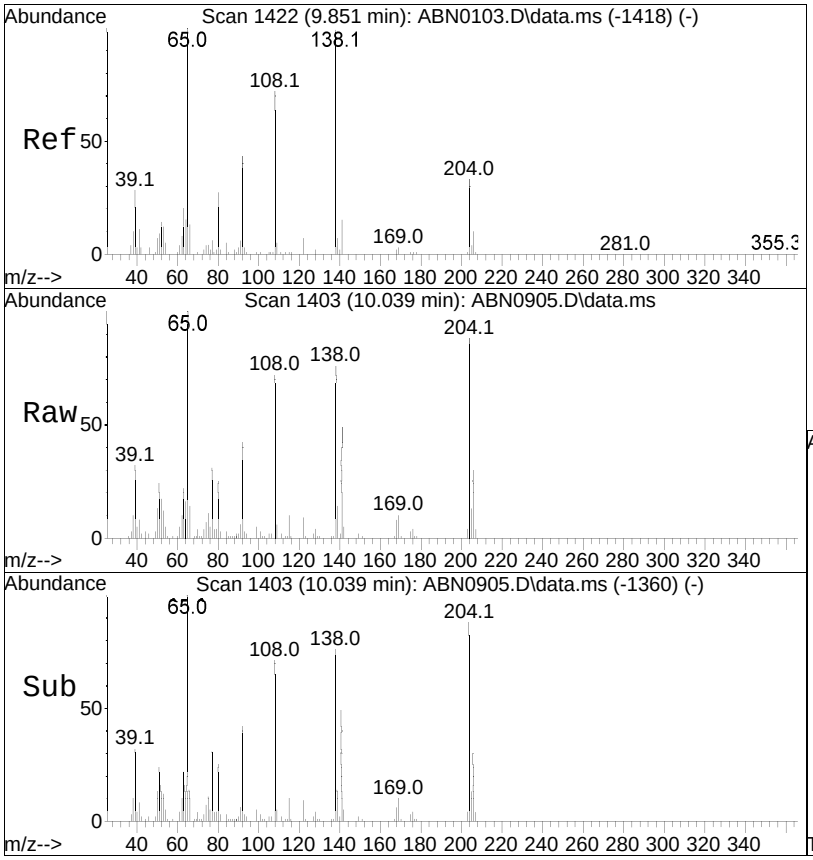


#73
4-Chlorophenyl phenyl ether
Concen: 4.29 ug/ml
RT: 10.033 min Scan# 1402
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:204 Resp: 58296

Ion	Ratio	Lower	Upper
204	100		
206	34.1	25.8	38.6
141	67.1	53.6	80.4

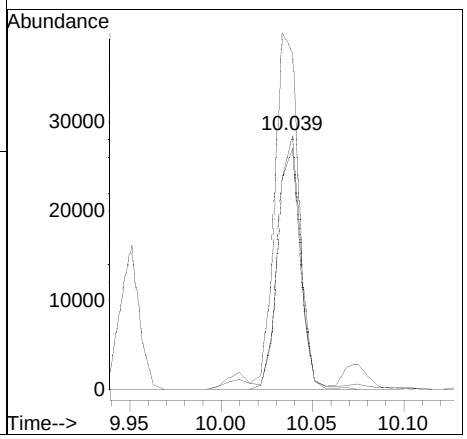


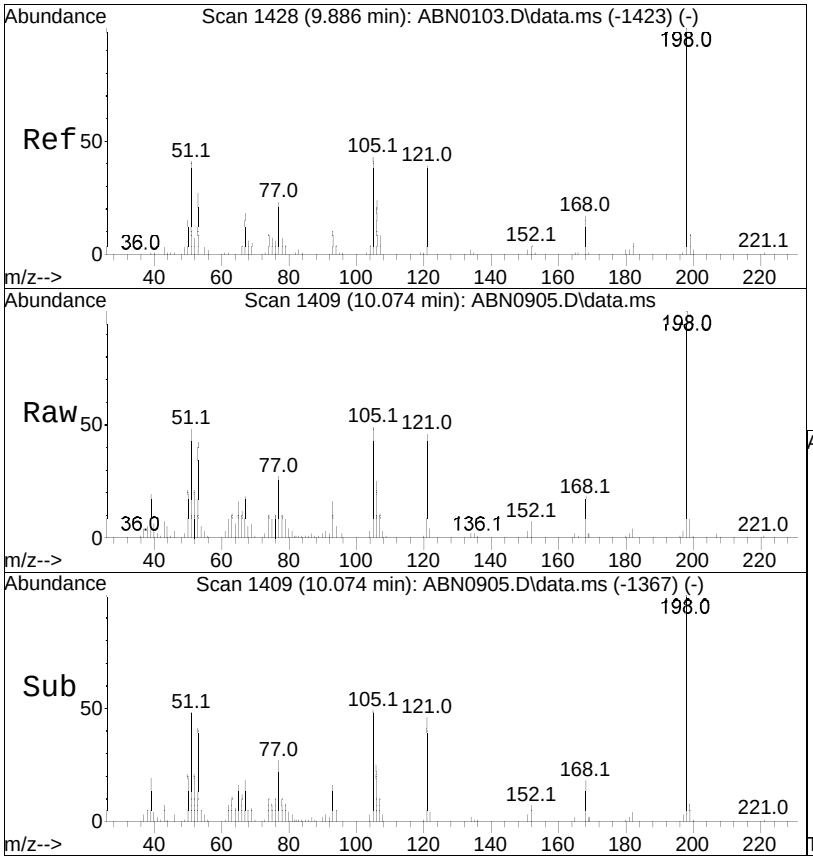


#74
4-Nitroaniline
Concen: 4.22 ug/ml
RT: 10.039 min Scan# 1403
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:138 Resp: 25986

Ion	Ratio	Lower	Upper
138	100		
108	91.1	52.1	78.1#
65	142.7	115.0	172.6

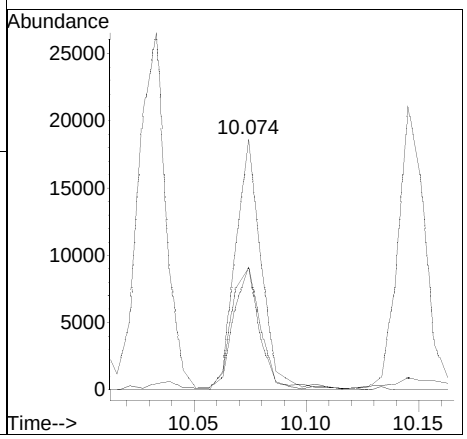


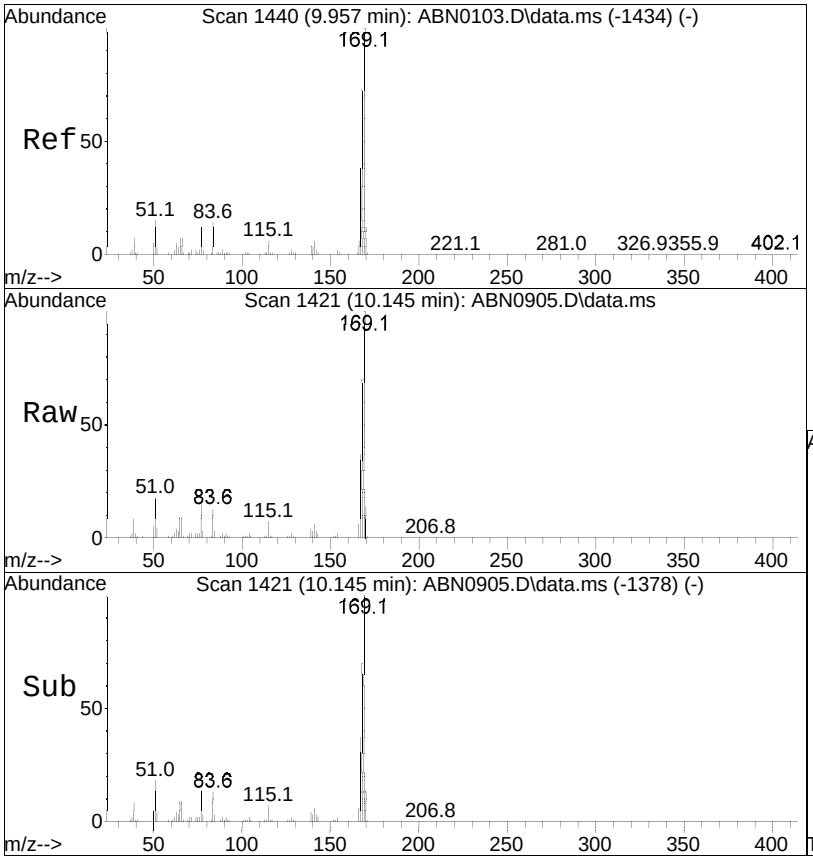


#75
4,6-Dinitro-o-cresol
Concen: 4.45 ug/ml
RT: 10.074 min Scan# 1409
Delta R.T. -0.001 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:198 Resp: 15061

Ion	Ratio	Lower	Upper
198	100		
51	54.4	76.0	114.0#
105	50.8	45.6	68.4

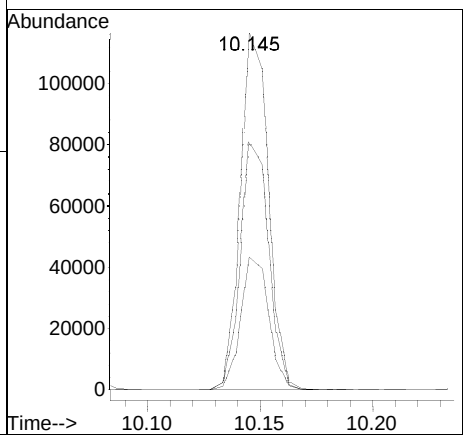


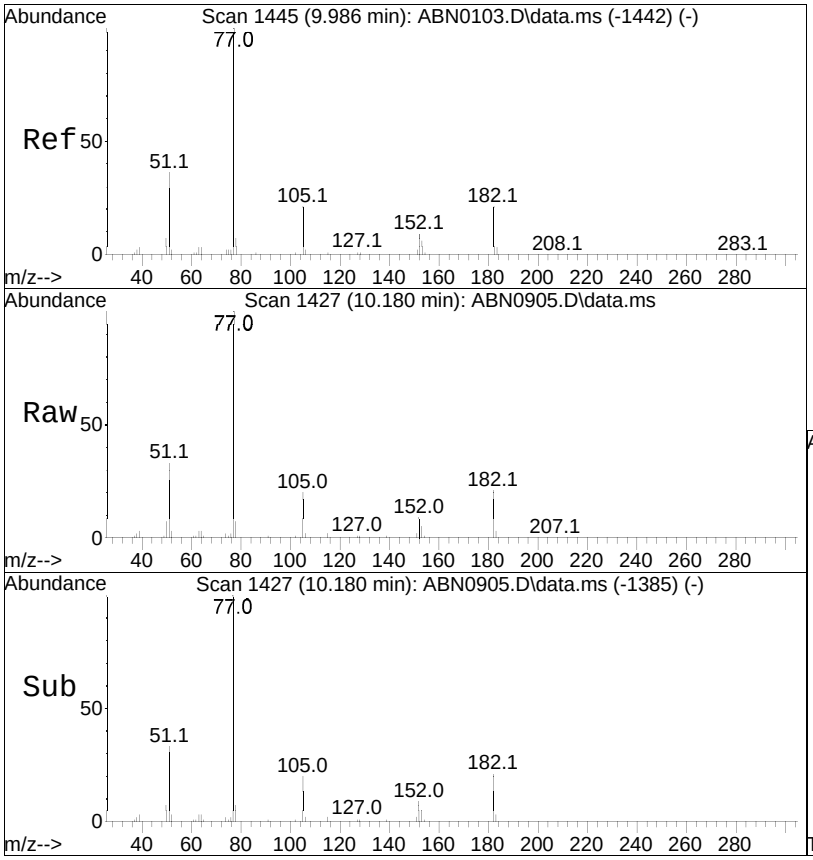


#76
NDPA/DPA
Concen: 4.22 ug/ml
RT: 10.145 min Scan# 1421
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:169 Resp: 101242

Ion	Ratio	Lower	Upper
169	100		
168	70.3	54.0	81.0
167	37.4	28.6	42.8

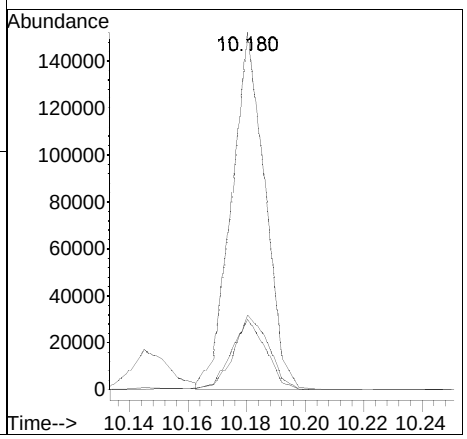


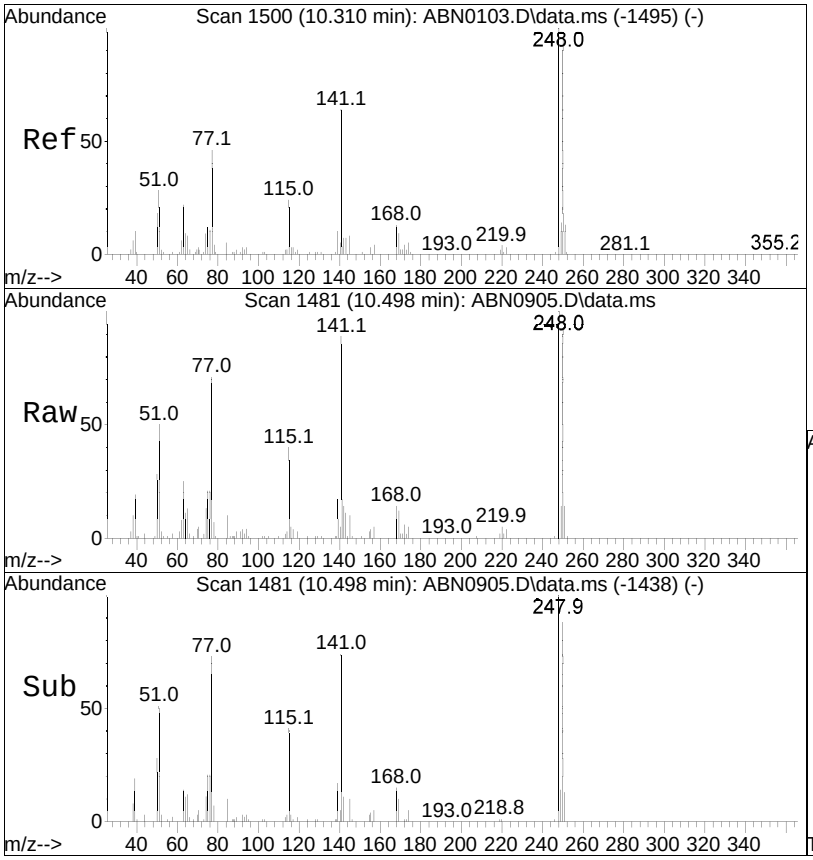


#77
Azobenzene
Concen: 4.28 ug/ml
RT: 10.180 min Scan# 1427
Delta R.T. -0.001 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion: 77 Resp: 120455

Ion	Ratio	Lower	Upper
77	100		
182	22.3	17.4	26.2
105	20.7	15.4	23.2

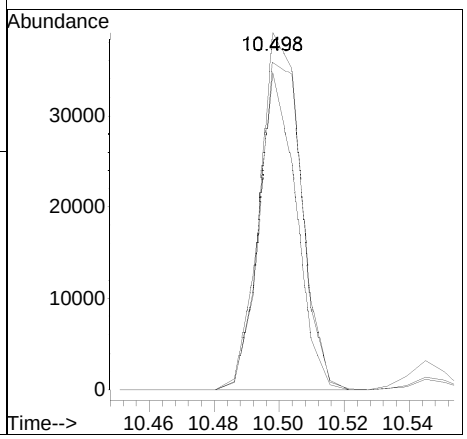


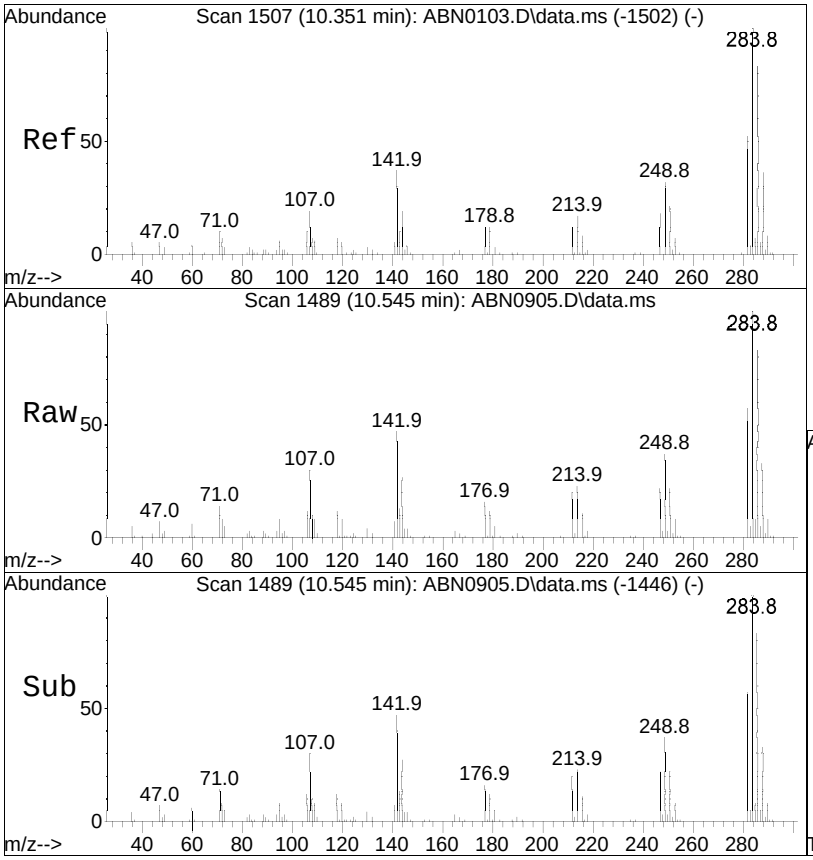


#79
4-Bromophenyl phenyl ether
Concen: 4.28 ug/ml
RT: 10.498 min Scan# 1481
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:248 Resp: 33872

Ion	Ratio	Lower	Upper
248	100		
141	82.9	76.6	114.8
250	96.2	77.3	115.9

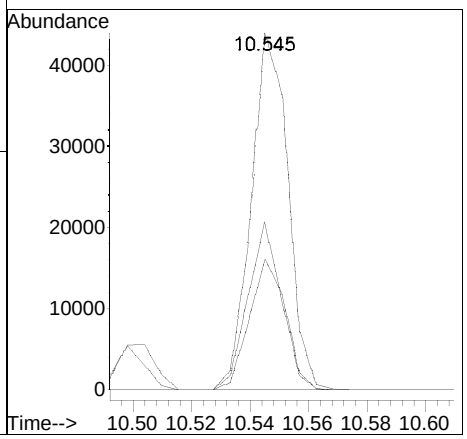


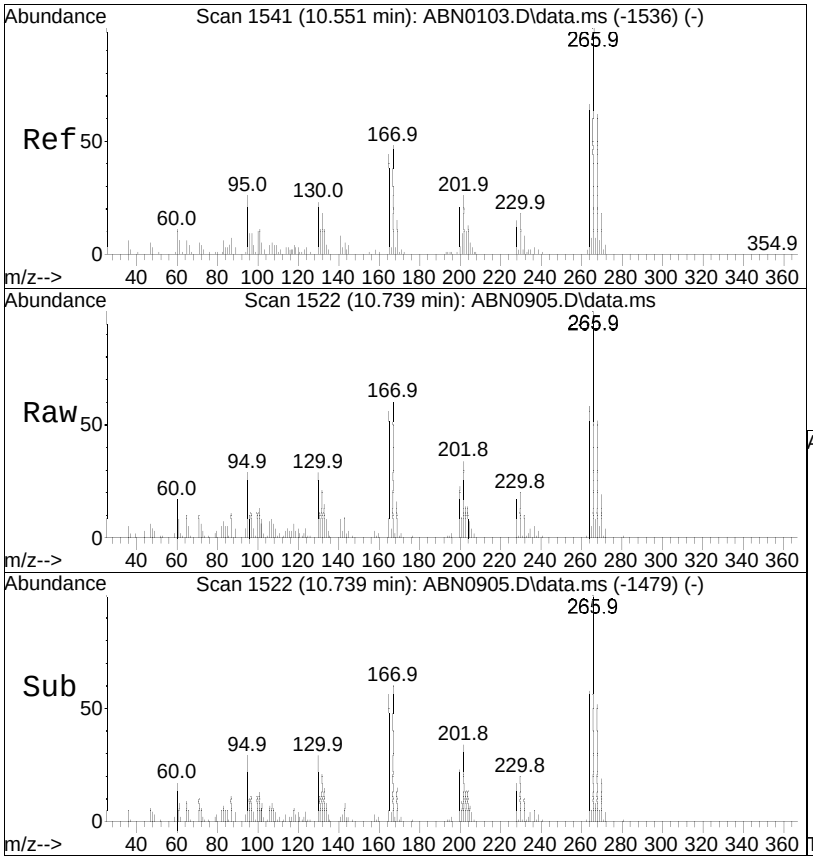


#80
Hexachlorobenzene
Concen: 4.14 ug/ml
RT: 10.545 min Scan# 1489
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:284 Resp: 38136

Ion	Ratio	Lower	Upper
284	100		
142	43.1	41.9	62.9
249	36.2	24.1	36.1#

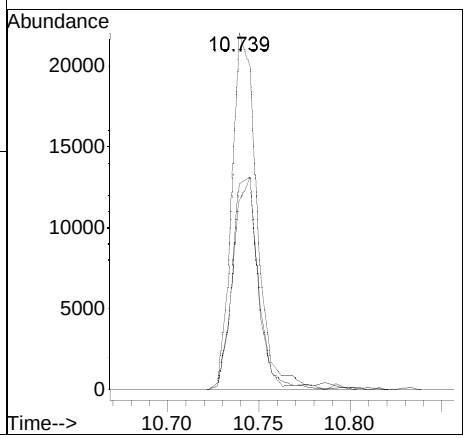


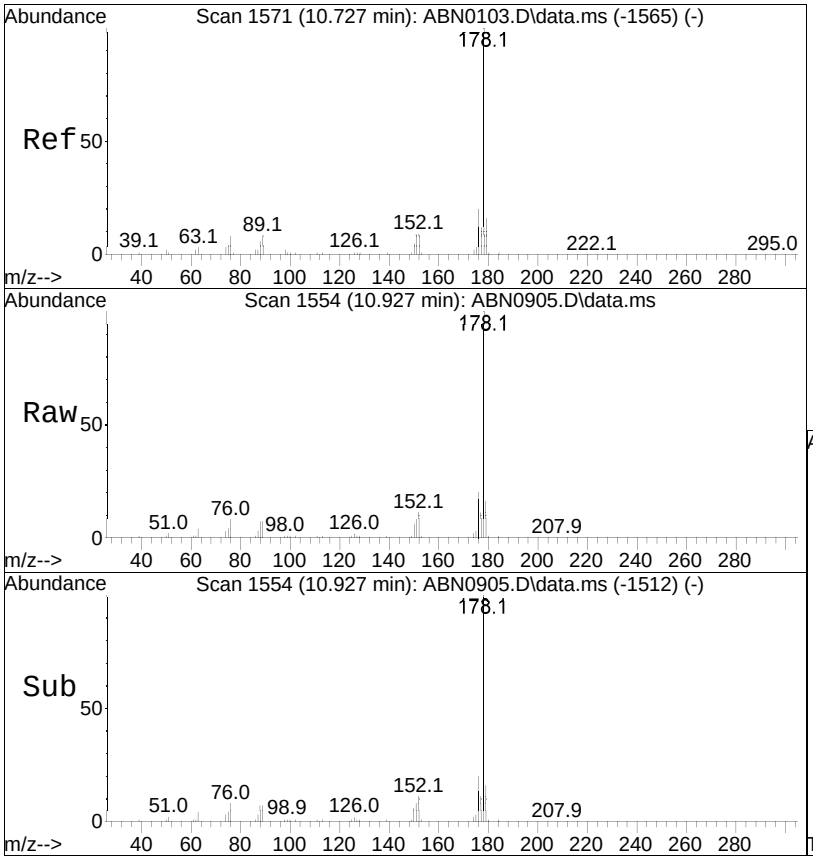


#81
Pentachlorophenol
Concen: 4.04 ug/ml
RT: 10.739 min Scan# 1522
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:266 Resp: 21534

Ion	Ratio	Lower	Upper
266	100		
264	60.5	49.7	74.5
268	59.1	50.5	75.7

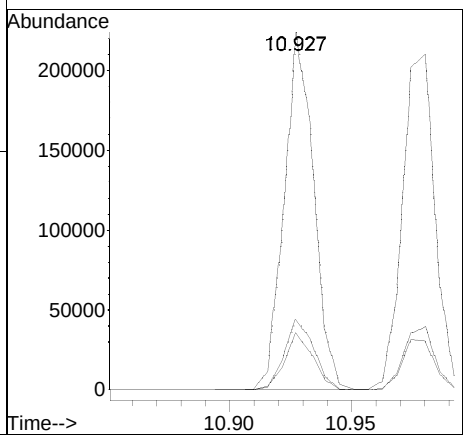


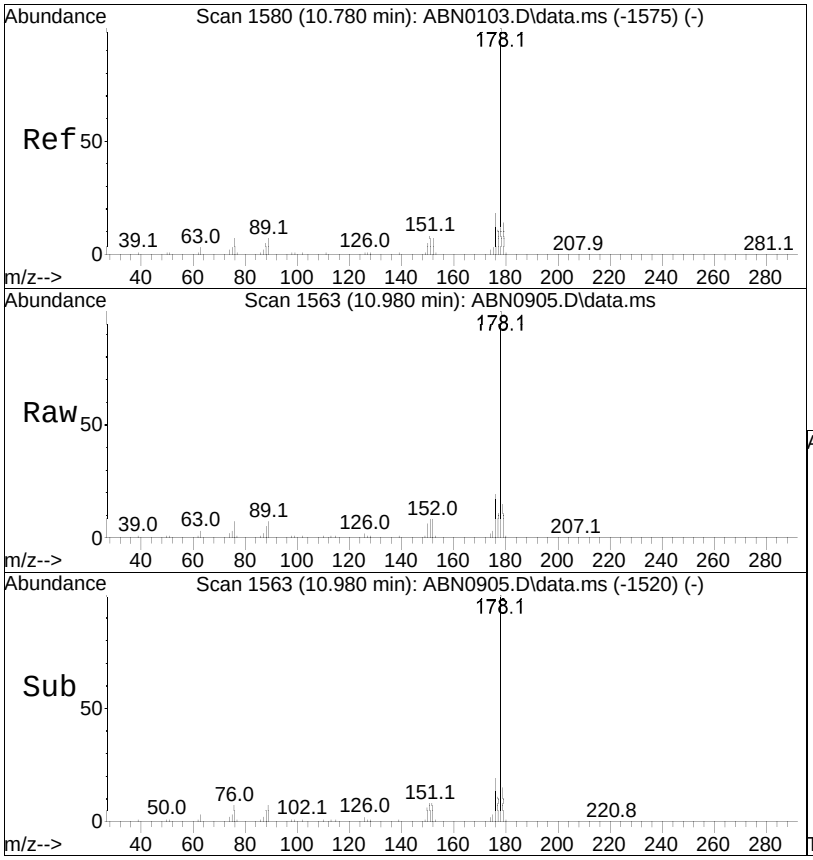


#88
Phenanthrene
Concen: 4.33 ug/ml
RT: 10.927 min Scan# 1554
Delta R.T. -0.001 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:178 Resp: 188685

Ion	Ratio	Lower	Upper
178	100		
179	15.4	12.2	18.2
176	19.7	15.4	23.2

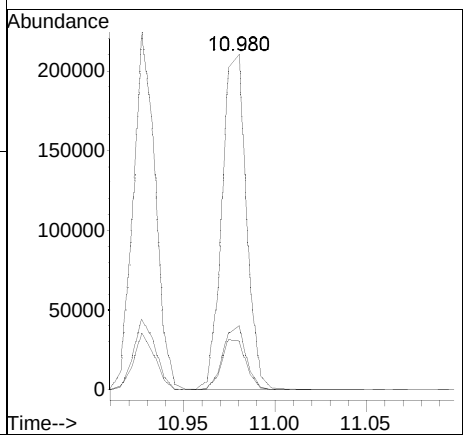


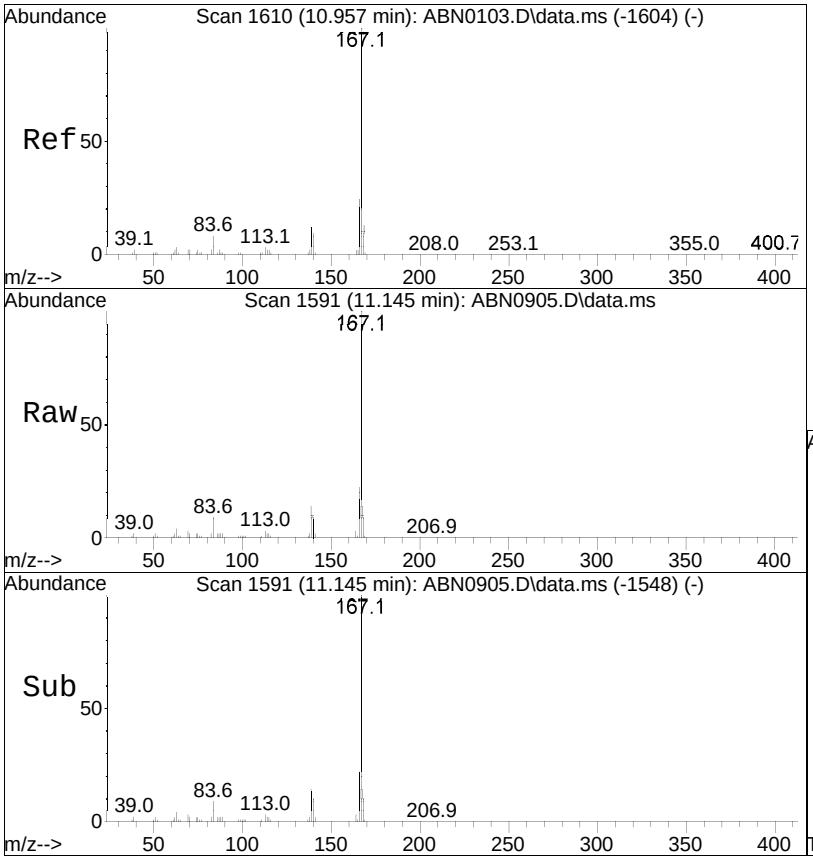


#89
Anthracene
Concen: 4.50 ug/ml
RT: 10.980 min Scan# 1563
Delta R.T. 0.005 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:178 Resp: 195371

Ion	Ratio	Lower	Upper
178	100		
179	15.1	12.0	18.0
176	18.0	14.6	22.0

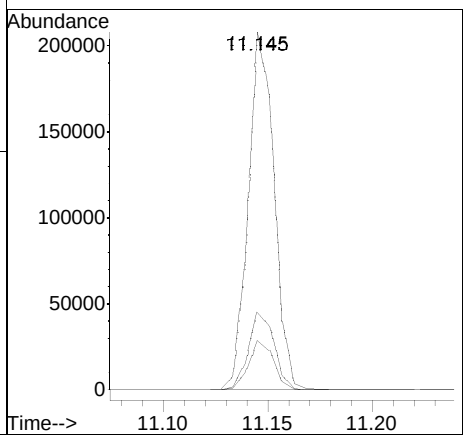


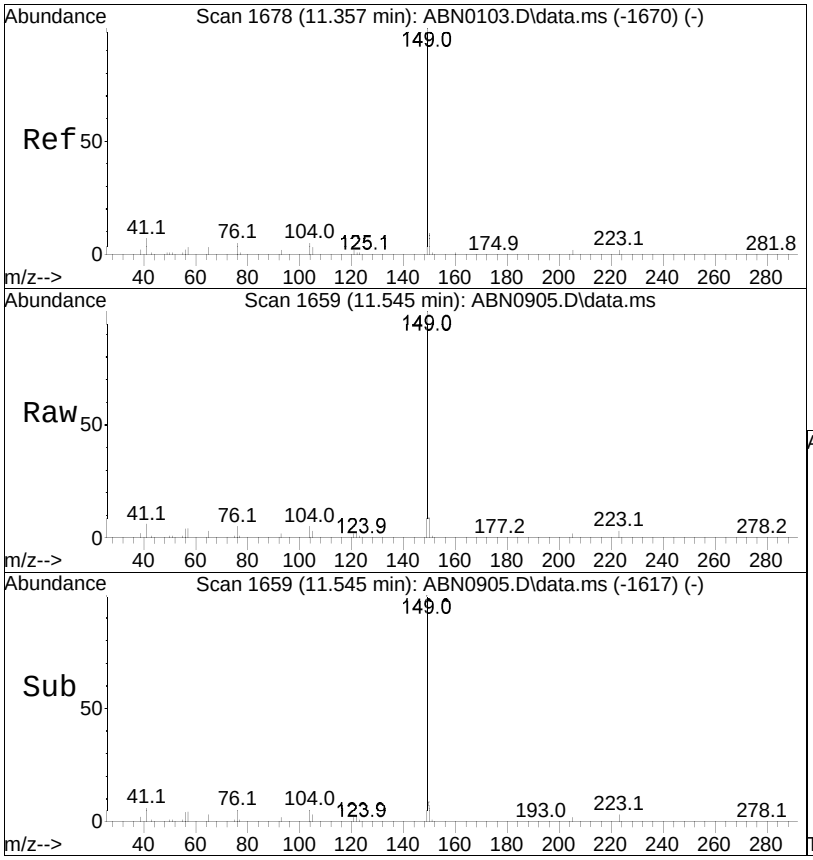


#90
Carbazole
Concen: 4.45 ug/ml
RT: 11.145 min Scan# 1591
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:167 Resp: 176631

Ion	Ratio	Lower	Upper
167	100		
168	13.4	10.6	15.8
166	21.8	17.4	26.0

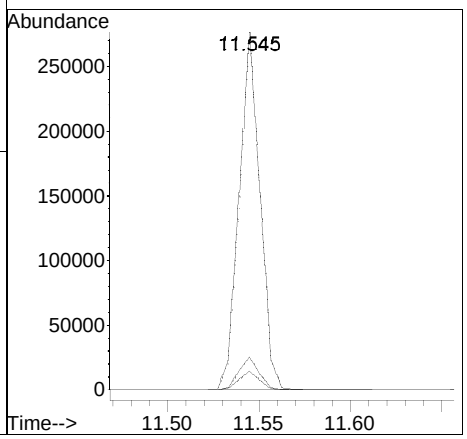


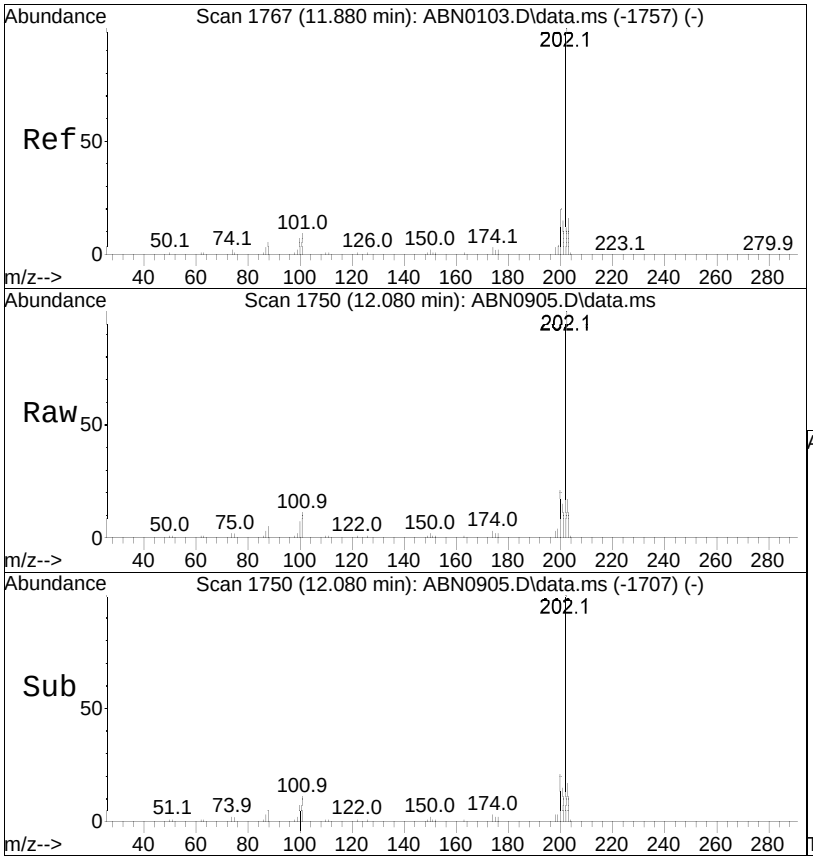


#91
Di-n-butylphthalate
Concen: 4.25 ug/ml
RT: 11.545 min Scan# 1659
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:149 Resp: 215714

Ion	Ratio	Lower	Upper
149	100		
150	9.0	7.0	10.6
104	5.4	4.5	6.7

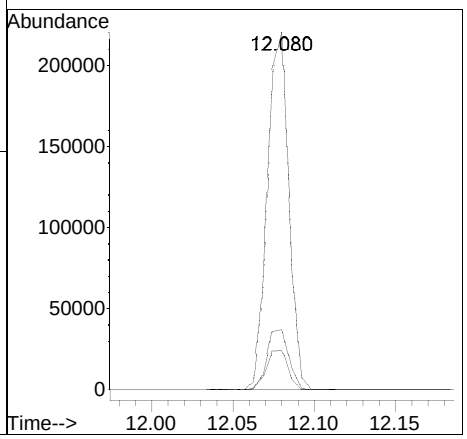


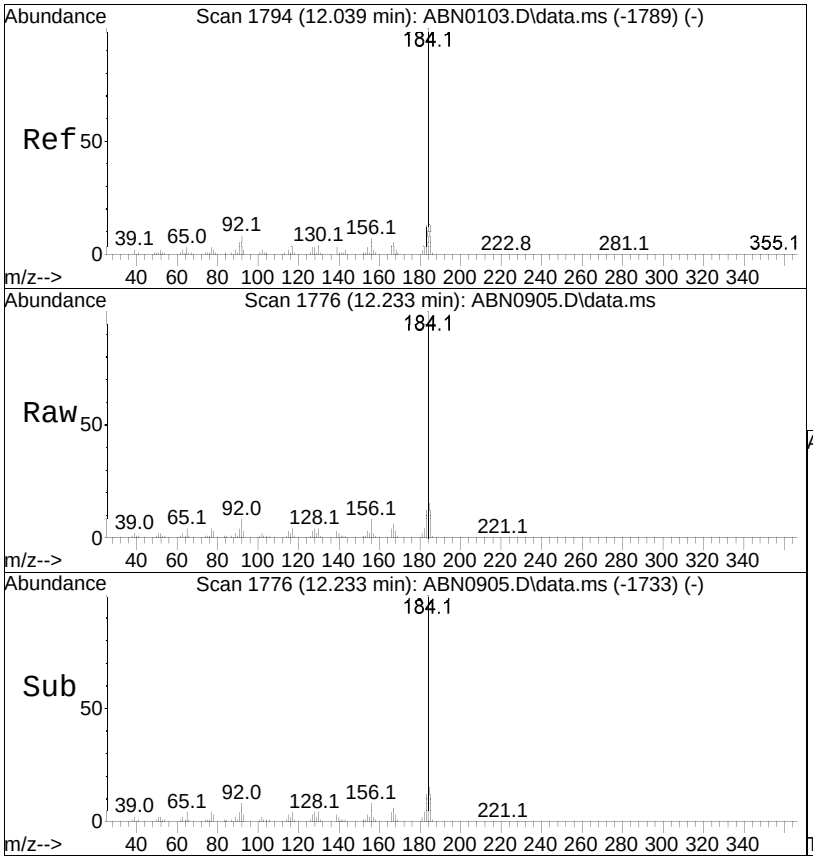


#92
Fluoranthene
Concen: 4.30 ug/ml
RT: 12.080 min Scan# 1750
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:202 Resp: 200675

Ion	Ratio	Lower	Upper
202	100		
101	11.5	13.5	20.3#
203	17.4	13.6	20.4

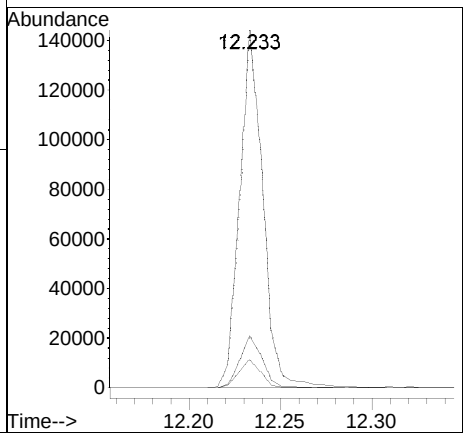


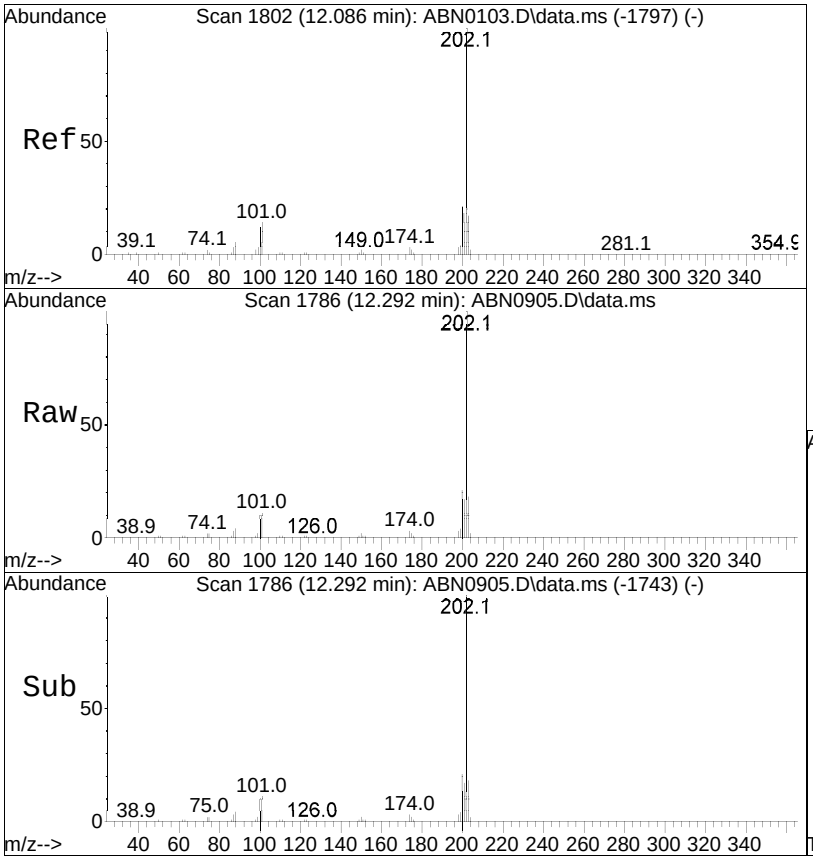


#93
Benzidine
Concen: 4.06 ug/ml
RT: 12.233 min Scan# 1776
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:184 Resp: 124990

Ion	Ratio	Lower	Upper
184	100		
92	7.7	9.1	13.7#
185	14.5	11.1	16.7

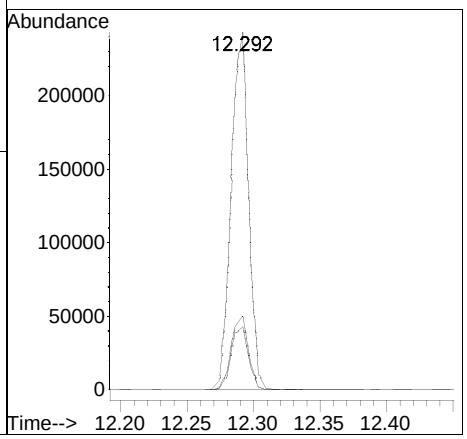


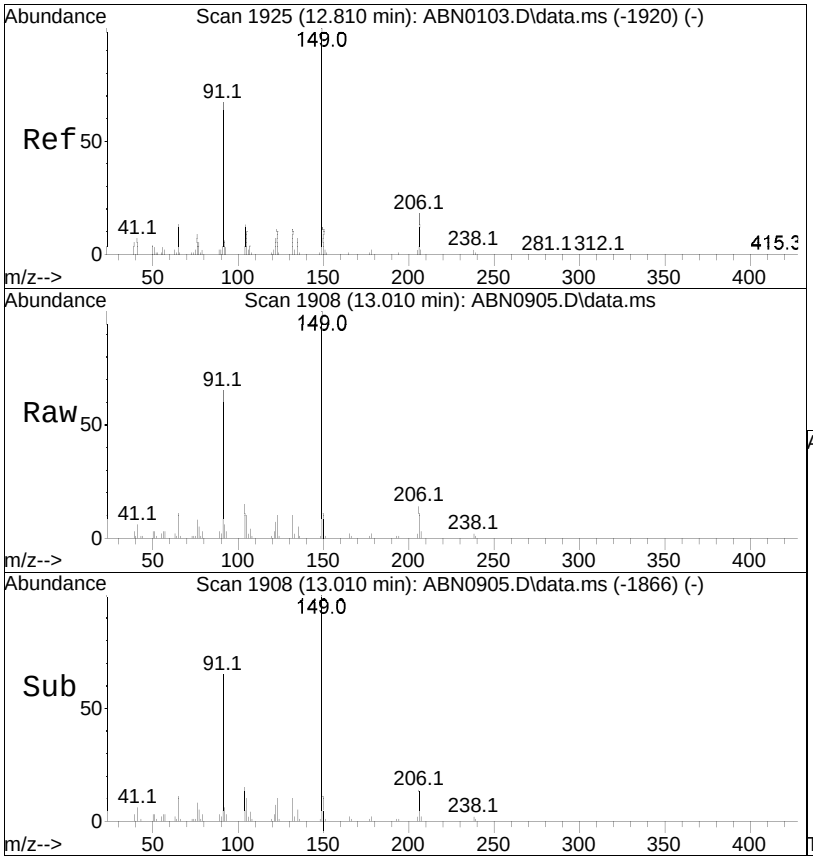


#94
Pyrene
Concen: 4.41 ug/ml
RT: 12.292 min Scan# 1786
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:202 Resp: 217948

Ion	Ratio	Lower	Upper
202	100		
200	20.6	16.7	25.1
203	17.8	14.2	21.4

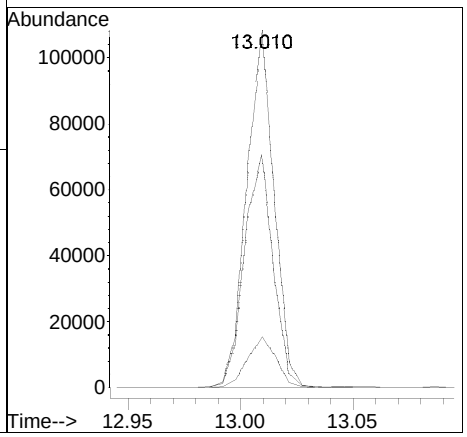


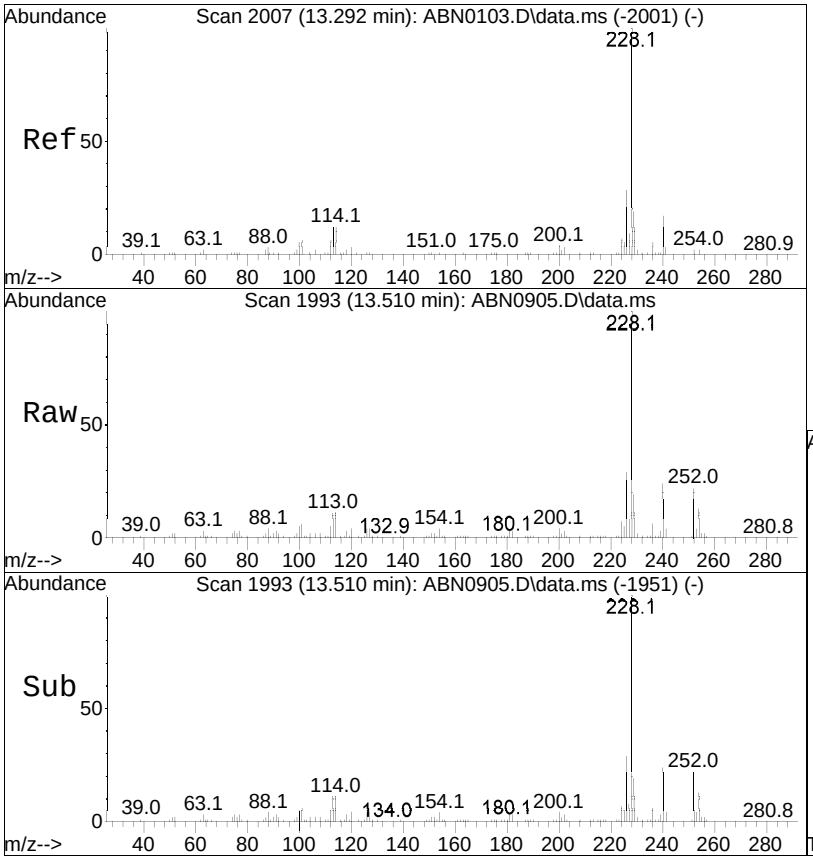


#96
Butyl benzyl phthalate
Concen: 4.17 ug/ml
RT: 13.010 min Scan# 1908
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:149 Resp: 90421

Ion	Ratio	Lower	Upper
149	100		
91	68.1	63.3	94.9
206	14.9	13.9	20.9

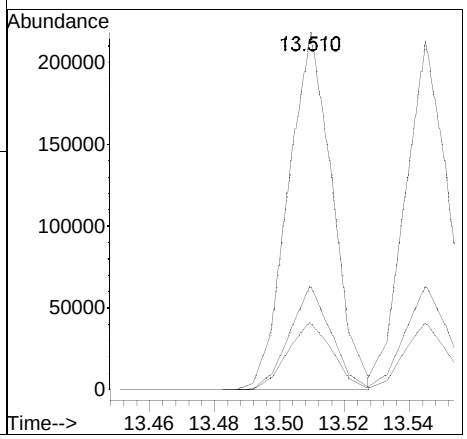


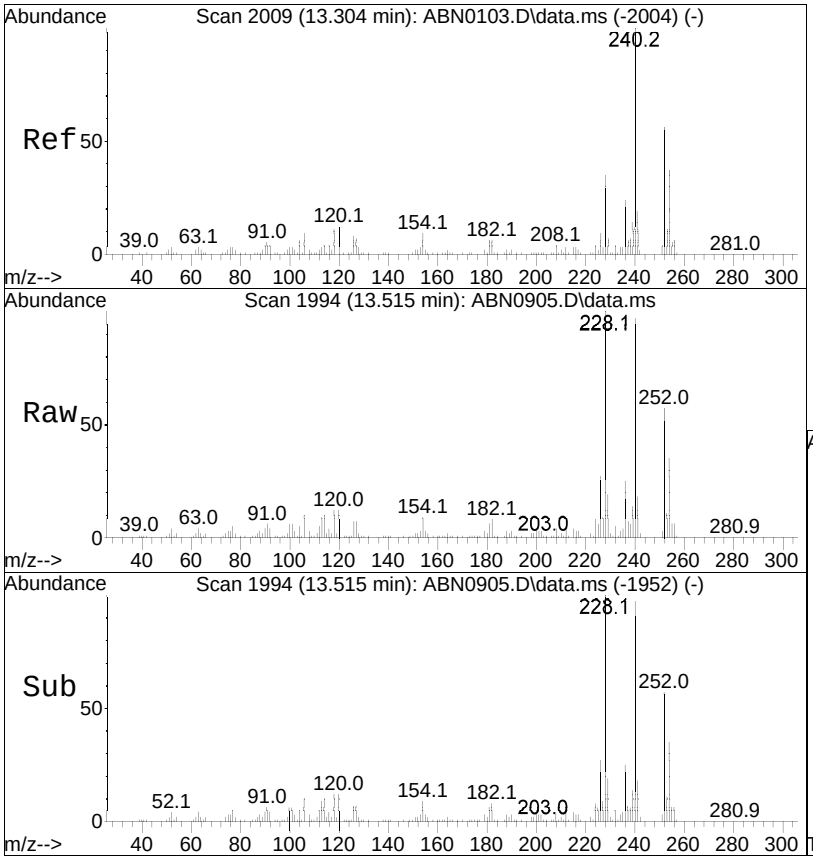


#104
Benzo(a)anthracene
Concen: 4.28 ug/ml
RT: 13.510 min Scan# 1993
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:228 Resp: 206583

Ion	Ratio	Lower	Upper
228	100		
226	27.5	22.2	33.4
229	19.3	15.6	23.4

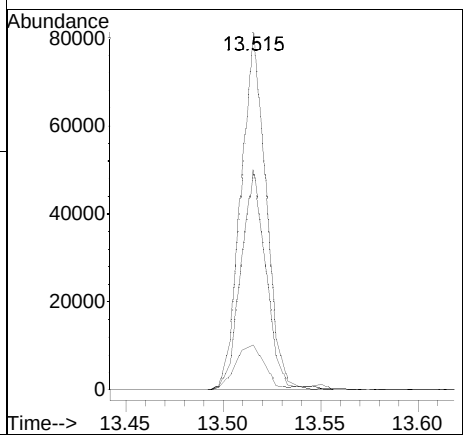


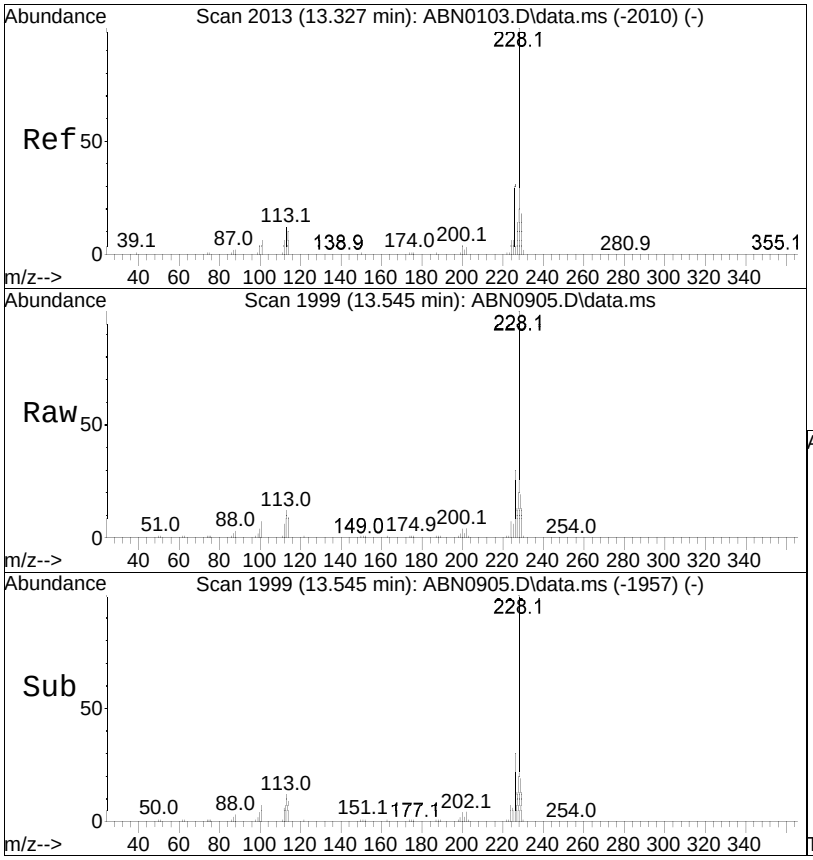


#105
3,3'-Dichlorobenzidine
Concen: 4.24 ug/ml
RT: 13.515 min Scan# 1994
Delta R.T. -0.001 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:252 Resp: 72918

Ion	Ratio	Lower	Upper
252	100		
126	14.8	14.5	21.7
254	61.0	51.2	76.8

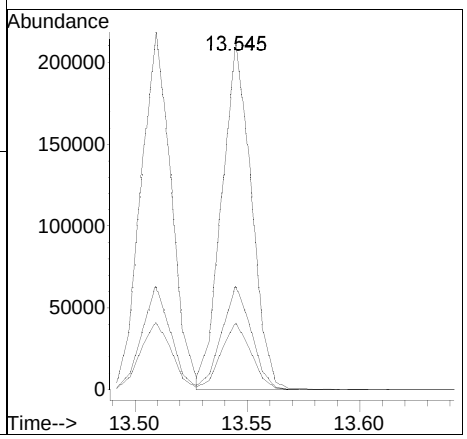


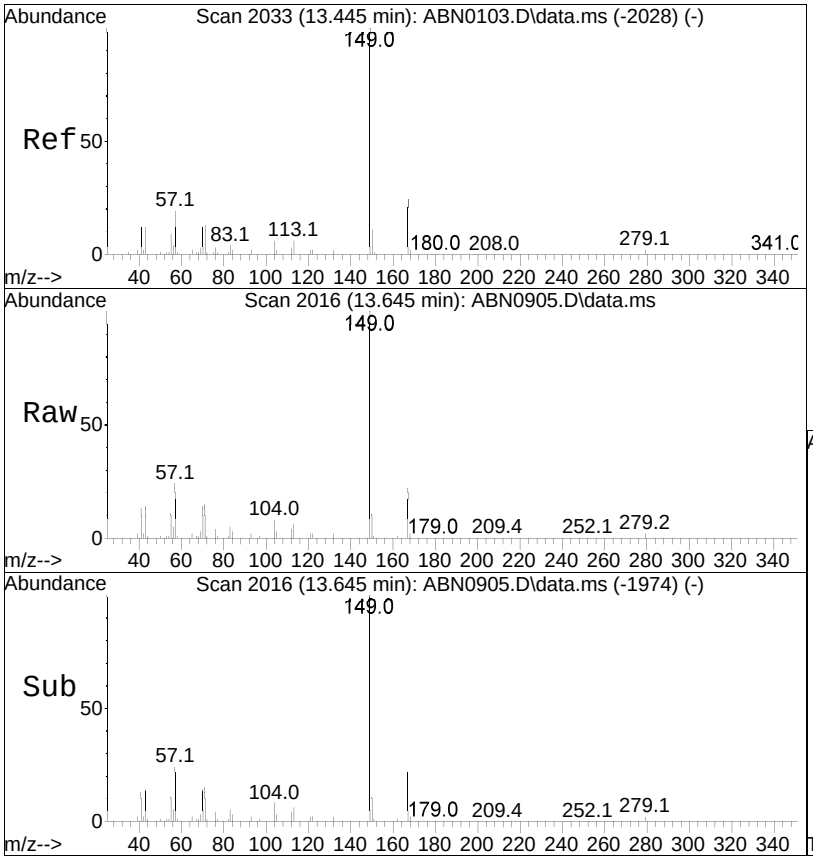


#106
Chrysene
Concen: 4.33 ug/ml
RT: 13.545 min Scan# 1999
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:228 Resp: 194273

Ion	Ratio	Lower	Upper
228	100		
226	29.9	24.0	36.0
229	19.4	15.8	23.8

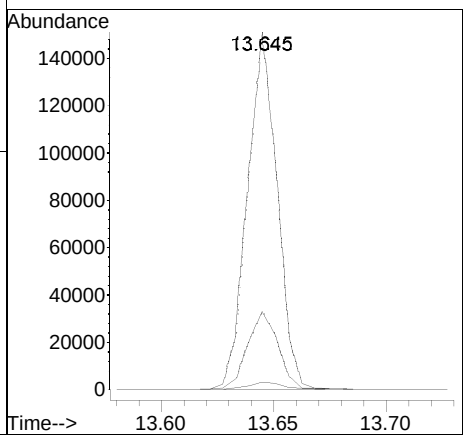


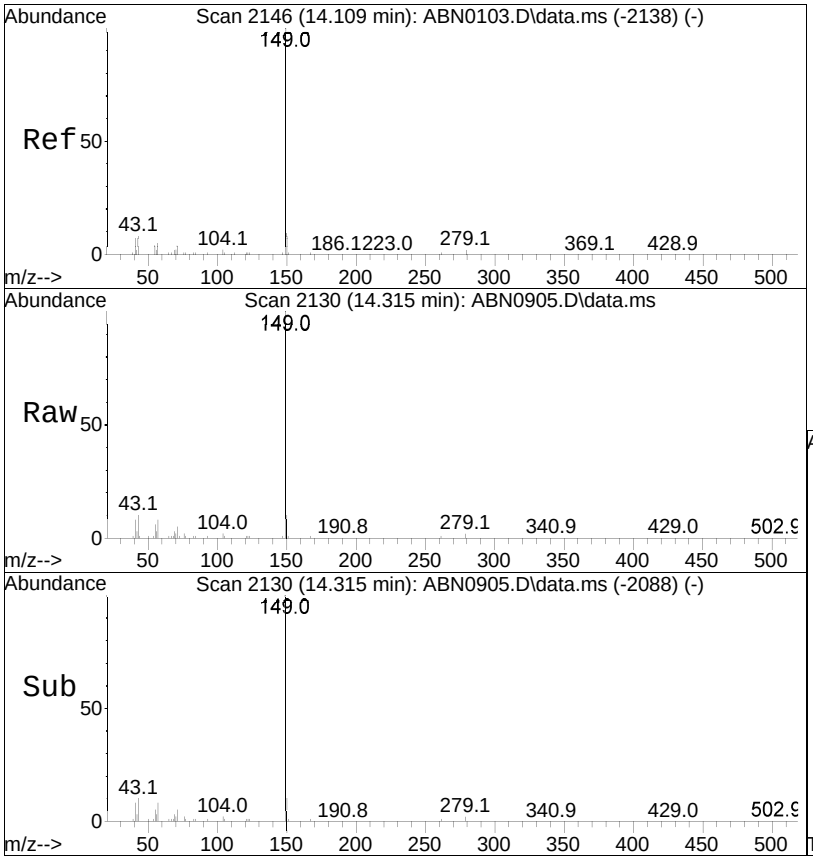


#107
Bis(2-ethylhexyl)phthalate
Concen: 4.23 ug/ml
RT: 13.645 min Scan# 2016
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:149 Resp: 136979

Ion	Ratio	Lower	Upper
149	100		
167	22.5	22.1	33.1
279	2.5	3.0	4.4#

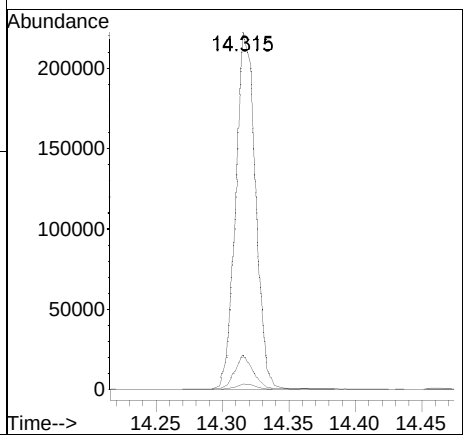


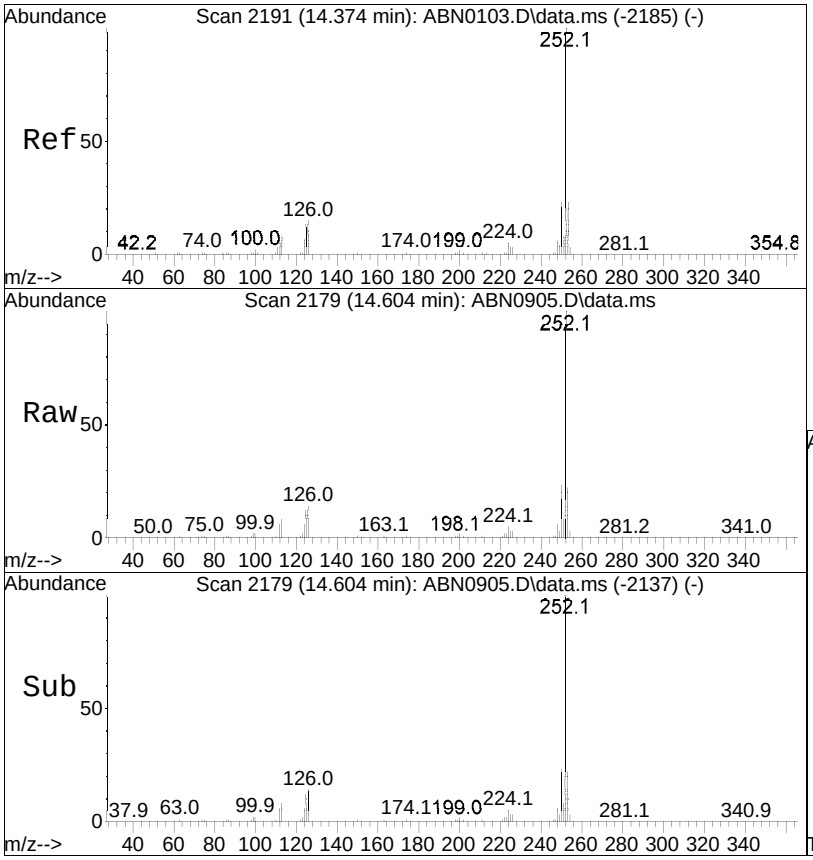


#108
Di-n-octylphthalate
Concen: 4.17 ug/ml
RT: 14.315 min Scan# 2130
Delta R.T. -0.001 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:149 Resp: 227825

Ion	Ratio	Lower	Upper
149	100		
43	9.0	18.8	28.2#
167	1.4	1.3	1.9

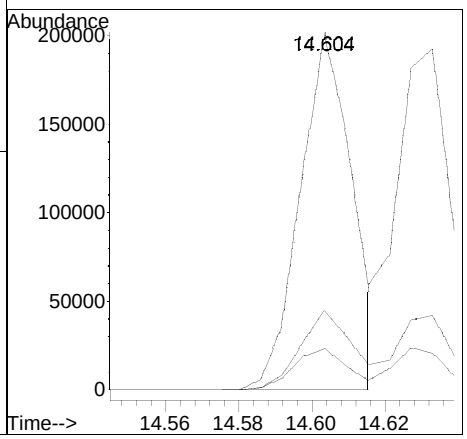


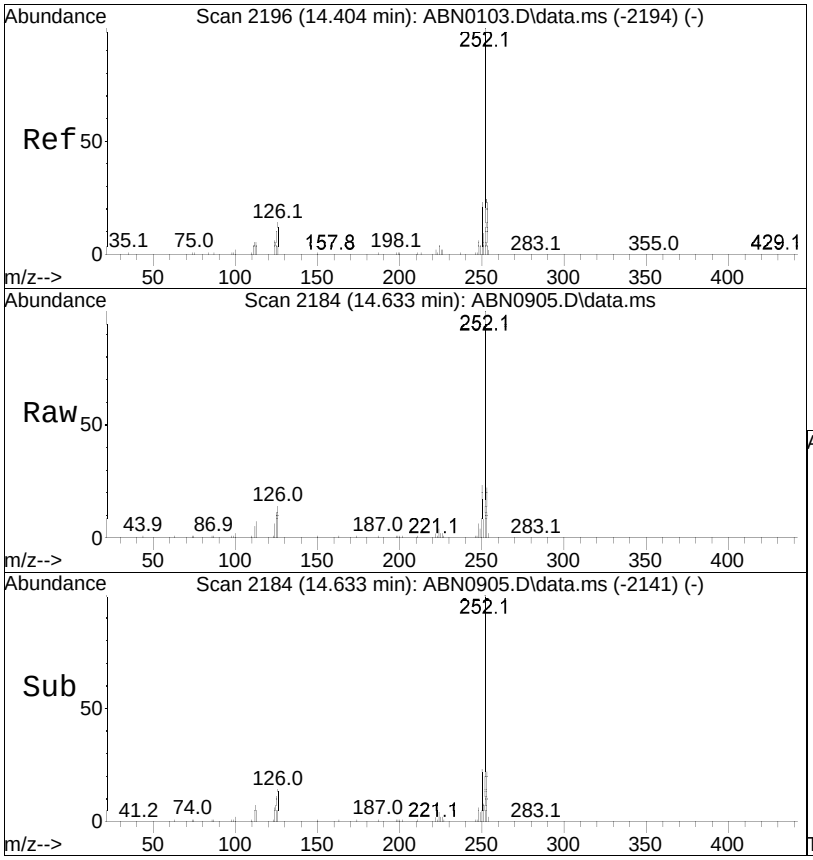


#109
Benzo(b)fluoranthene
Concen: 4.35 ug/ml
RT: 14.604 min Scan# 2179
Delta R.T. -0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:252 Resp: 200869

Ion	Ratio	Lower	Upper
252	100		
125	12.1	13.3	19.9#
253	22.1	17.1	25.7

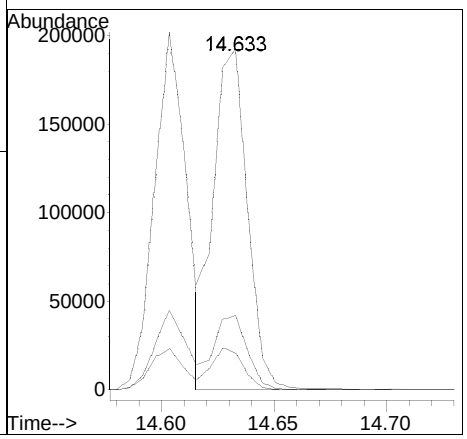


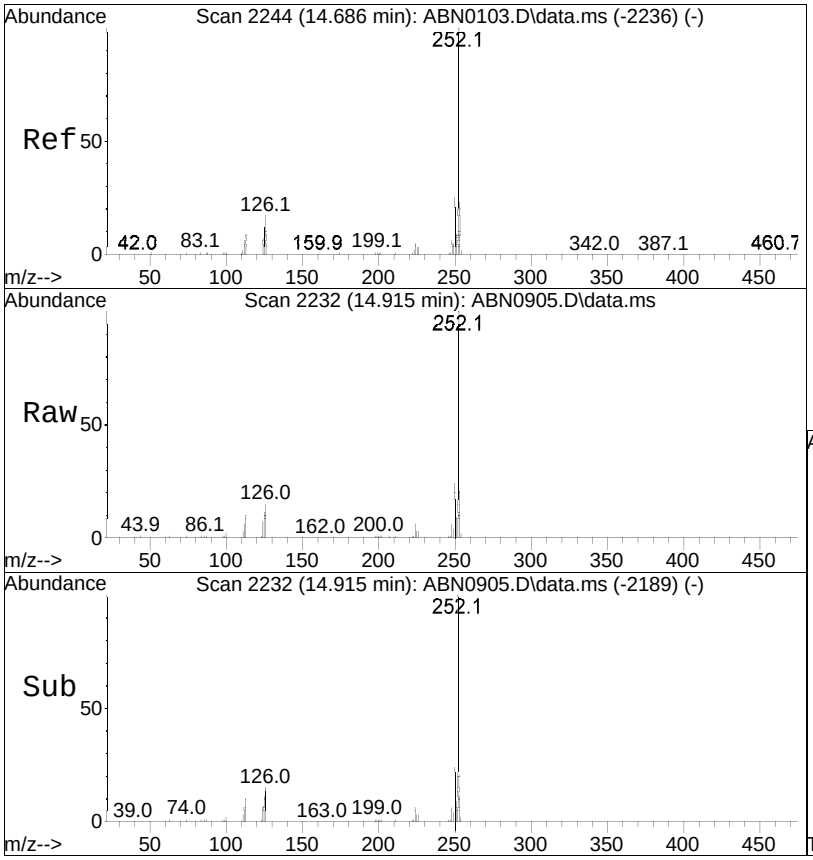


#110
Benzo(k)fluoranthene
Concen: 4.52 ug/ml
RT: 14.633 min Scan# 2184
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:252 Resp: 200027

Ion	Ratio	Lower	Upper
252	100		
125	11.7	13.0	19.6#
253	21.5	16.8	25.2

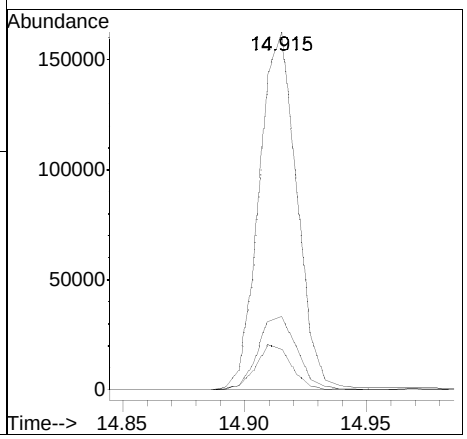


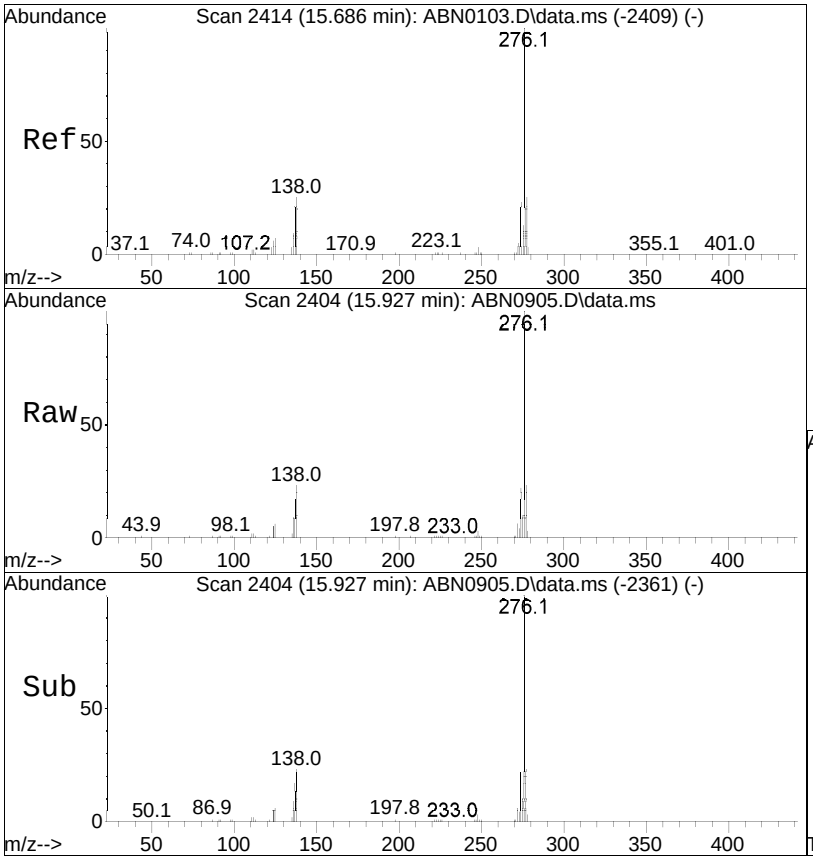


#111
Benzo(a)pyrene
Concen: 4.40 ug/ml
RT: 14.915 min Scan# 2232
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:252 Resp: 173665

Ion	Ratio	Lower	Upper
252	100		
125	12.2	14.2	21.2#
253	21.4	16.9	25.3

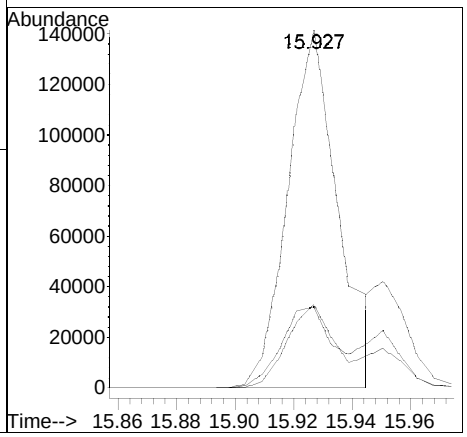


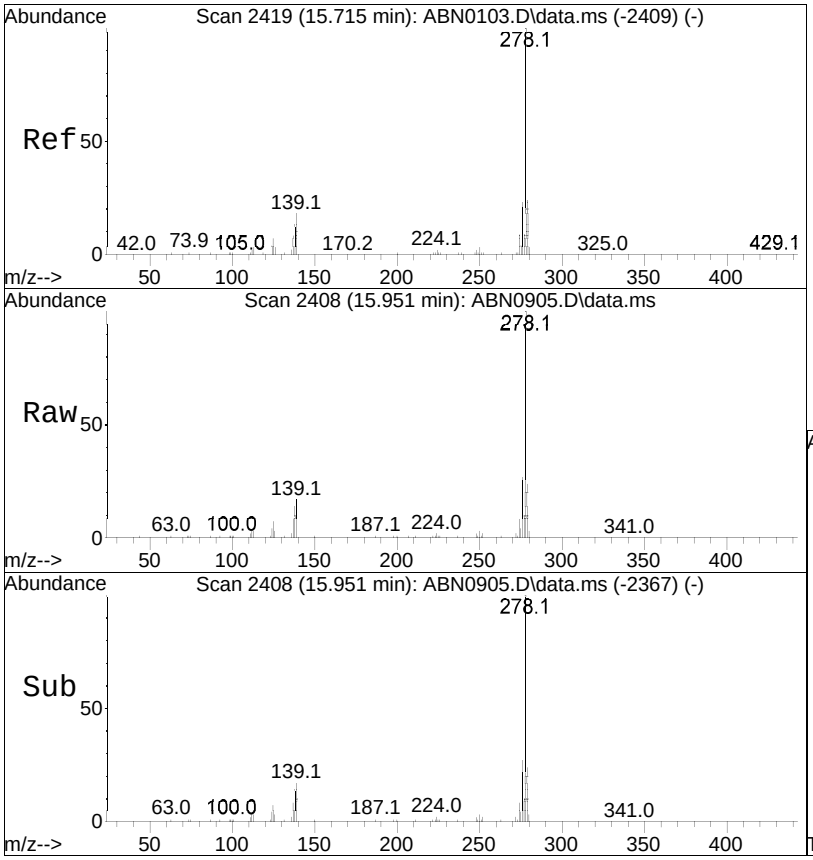


#113
Indeno(1,2,3-cd)pyrene
Concen: 4.46 ug/mL M1
RT: 15.927 min Scan# 2404
Delta R.T. 0.000 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:276 Resp: 169641

Ion	Ratio	Lower	Upper
276	100		
138	23.8	25.1	37.7#
277	31.4	18.6	28.0#

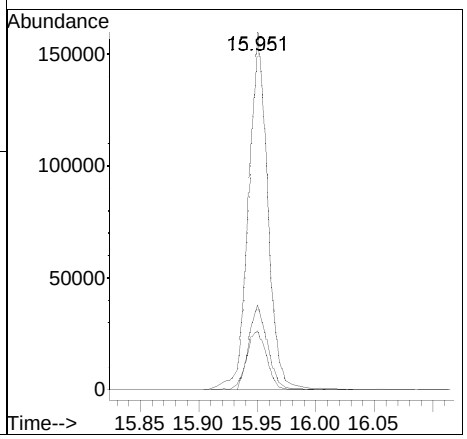


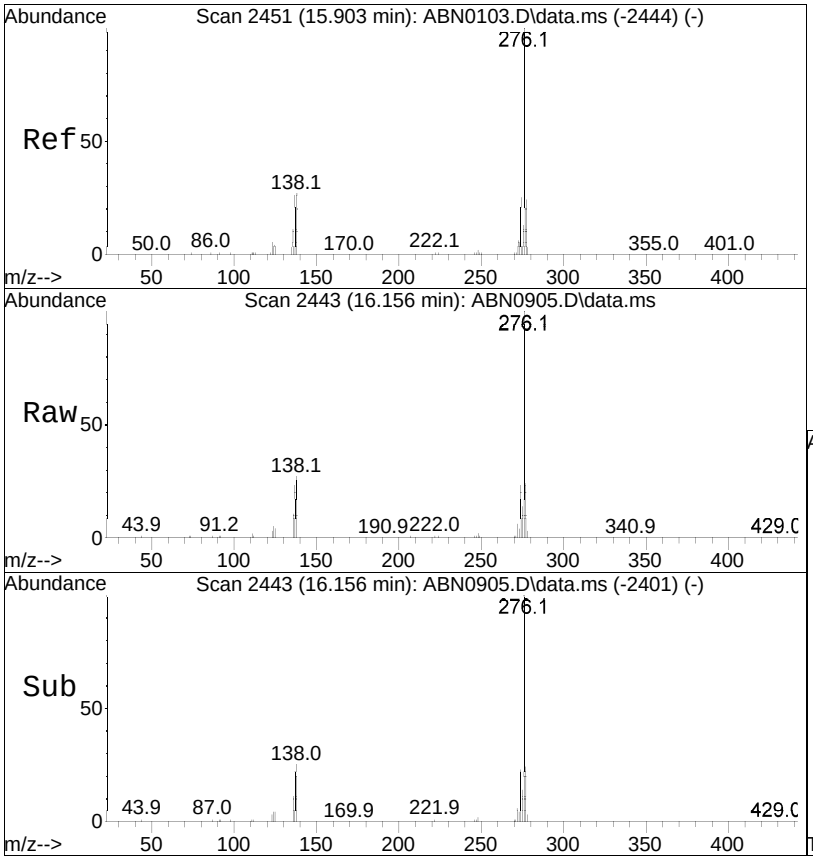


#114
Dibenzo(a,h)anthracene
Concen: 4.43 ug/ml
RT: 15.951 min Scan# 2408
Delta R.T. -0.006 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:278 Resp: 180163

Ion	Ratio	Lower	Upper
278	100		
139	16.9	20.8	31.2#
279	23.9	18.3	27.5

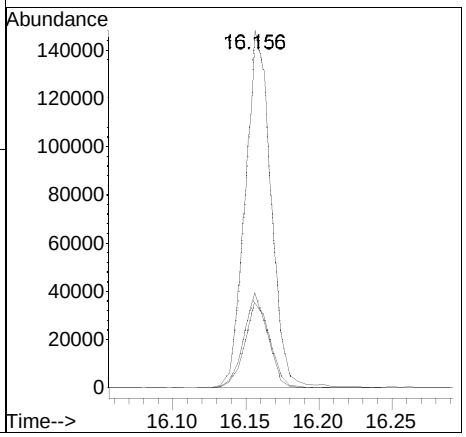




#115
Benzo(ghi)perylene
Concen: 4.47 ug/ml
RT: 16.156 min Scan# 2443
Delta R.T. -0.006 min
Lab File: ABN0905.D
Acq: 5 Sep 2023 9:04 pm

Tgt Ion:276 Resp: 180369

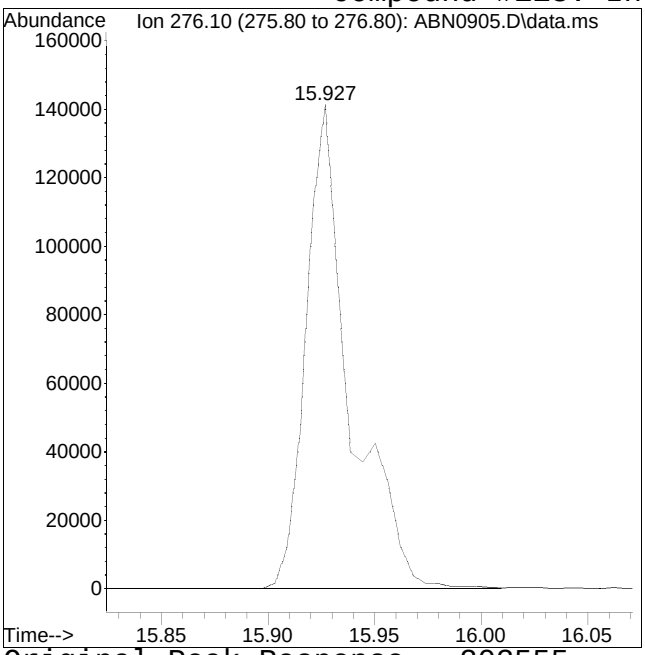
Ion	Ratio	Lower	Upper
276	100		
138	24.9	29.2	43.8#
277	24.0	18.8	28.2



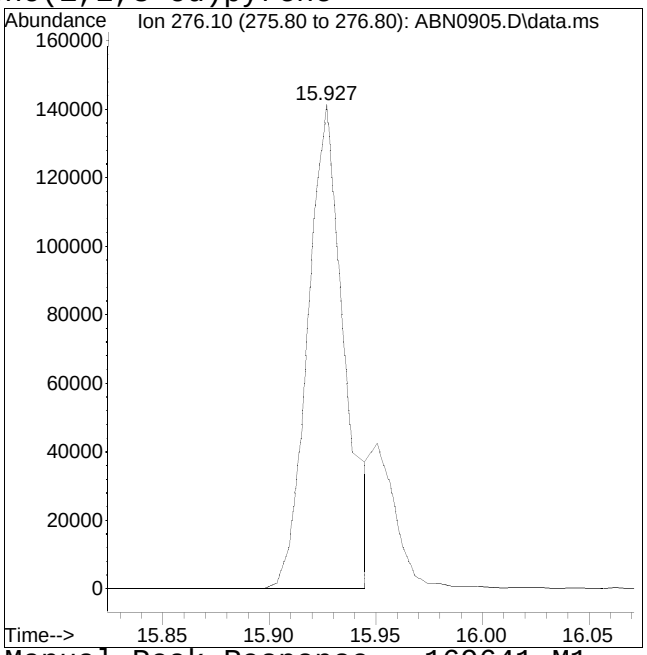
Manual Integration Report

Data Path : I:\8270\SV106\230905lvi\ QMethod : FS230902SV106.m
Data File : ABN0905.D Operator : SV106:jg
Date Inj'd : 9/5/2023 9:04 pm Instrument : SV 106
Sample : WG1823865-3,32,,ABN LVI CCQuant Date : 9/5/2023 9:24 pm

Compound #113: Indeno(1,2,3-cd)pyrene



Original Peak Response = 203555



Manual Peak Response = 169641 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\230905lvi\
Data File : ADP0905.D
Acq On : 5 Sep 2023 9:52 pm
Operator : SV106:jg
Sample : WG1823865-5,32,,ADP LVI CCV Lot # 10092
Misc : WG1823865,,ical20337
ALS Vial : 144 Sample Multiplier: 1

Quant Time: Sep 05 22:27:30 2023
Quant Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 22:27:08 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
32	I	IS3_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	86	0.00
33	T	n-Decane		1.347	1.440	-6.9	93	0.00
85	I	IS3_Acenaphthene-d10		1.000	1.000	0.0	89	0.00
86	T	Atrazine		0.345	0.343	0.6	89	0.00
99	I	IS3_Phenanthrene-d10		1.000	1.000	0.0	90	0.00
100	T	n-Octadecane		0.460	0.459	0.2	88	0.00
101	T	Parathion		0.094	0.091	3.2	96	0.00
102	T	3,3'-Dimethylbenzidine	*	5.000	4.634	7.3	91	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230905lvi\
Data File : ADP0905.D
Acq On : 5 Sep 2023 9:52 pm
Operator : SV106:jg
Sample : WG1823865-5,32,,ADP LVI CCV Lot # 10092
Misc : WG1823865,,ical20337
ALS Vial : 144 Sample Multiplier: 1

Quant Time: Sep 05 22:27:30 2023
Quant Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 22:27:08 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	6.281	152	38953	4.000	ug/ml	0.00
85) IS3_Acenaphthene-d10	9.475	164	81272	4.000	ug/ml	0.00
99) IS3_Phenanthrene-d10	10.904	188	162279	4.000	ug/ml	# 0.00
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	6.181	57	70133	5.346	ug/ml#	43
86) Atrazine	10.686	200	34857	4.978	ug/ml	92
100) n-Octadecane	10.898	57	93072	4.990	ug/ml#	1
101) Parathion	11.698	109	18436	4.840	ug/ml#	90
102) 3,3'-Dimethylbenzidine	12.968	212	122342	4.634	ug/ml	100

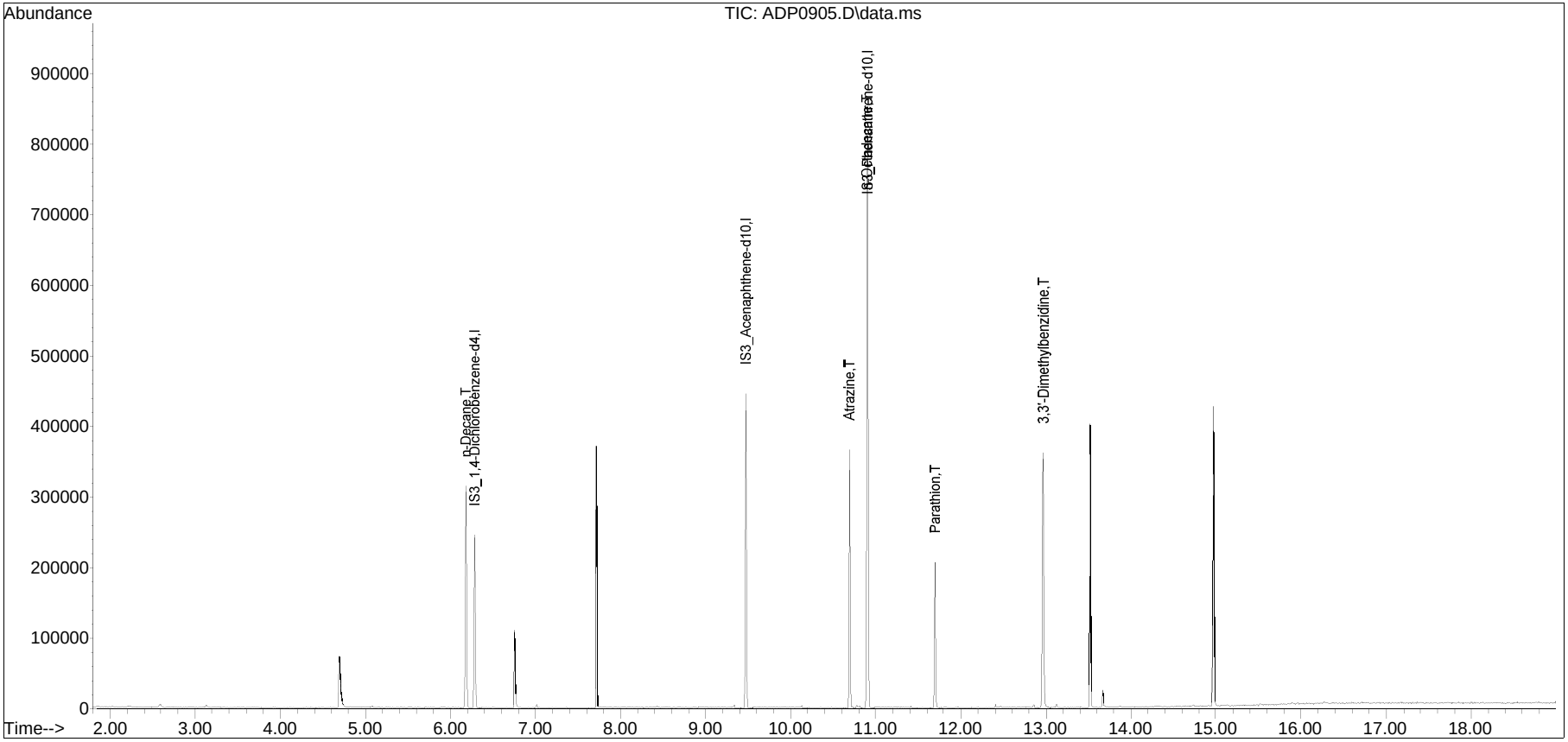
(#) = qualifier out of range (m) = manual integration (+) = signals summed

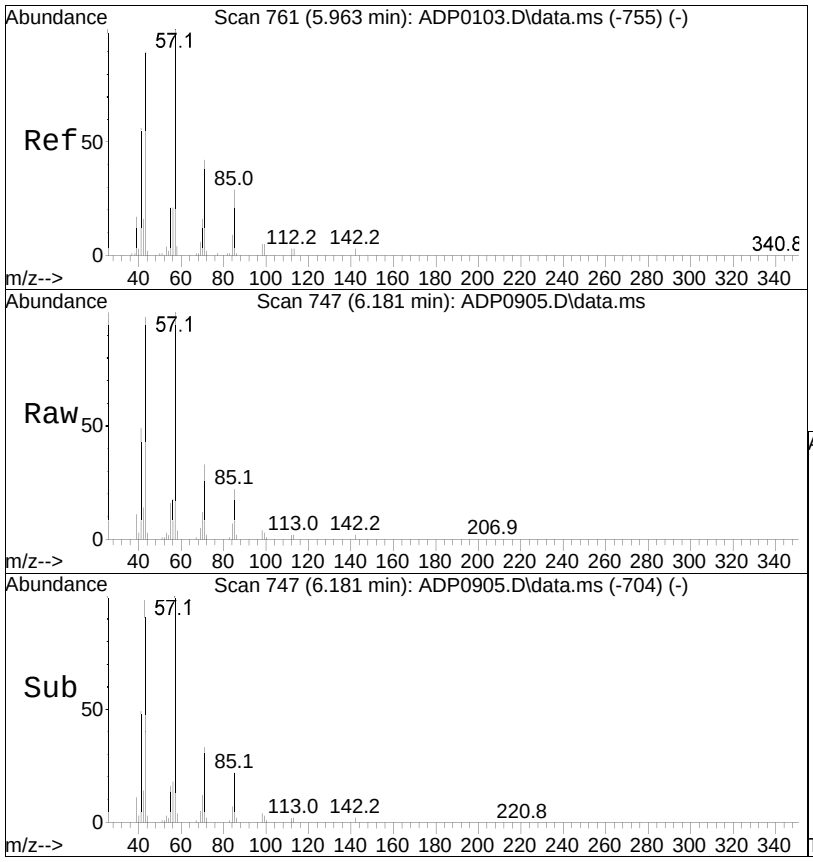
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230905lvi\
Data File : ADP0905.D
Acq On : 5 Sep 2023 9:52 pm
Operator : SV106:jg
Sample : WG1823865-5,32,,ADP LVI CCV Lot # 10092
Misc : WG1823865,,ical20337
ALS Vial : 144 Sample Multiplier: 1

Quant Time: Sep 05 22:27:30 2023
Quant Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 22:27:08 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublist

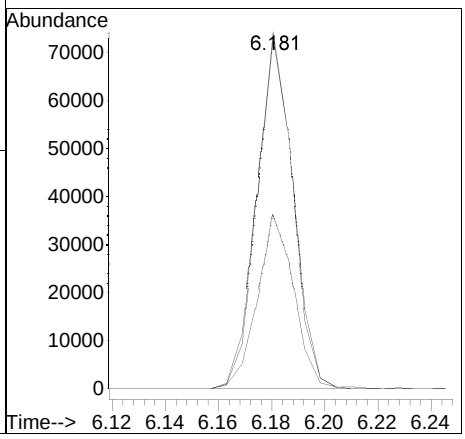


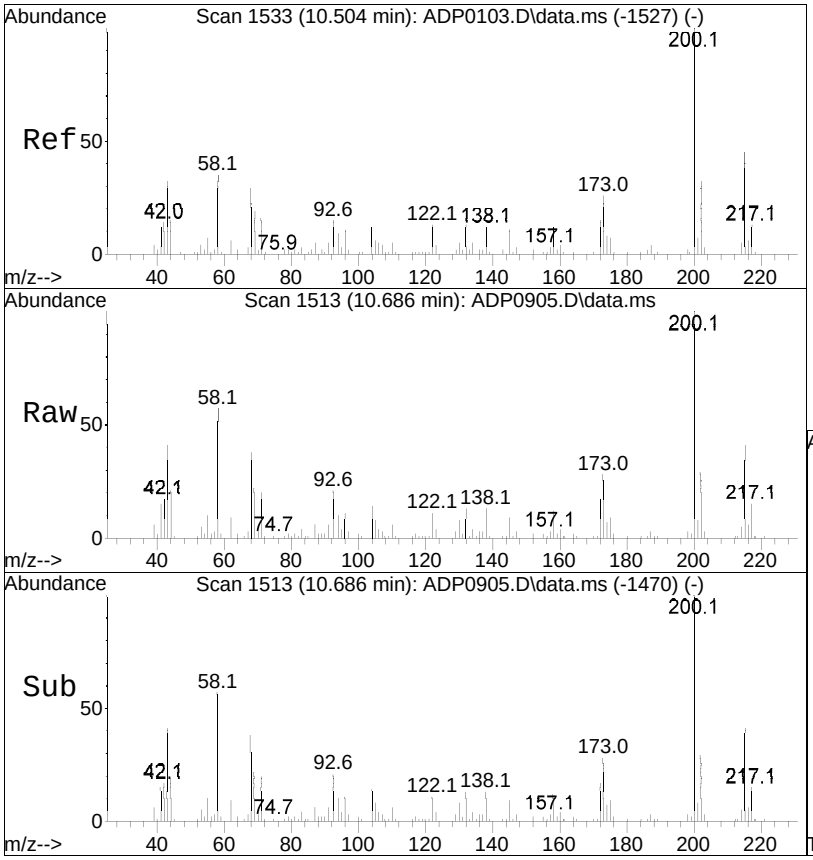


#33
n-Decane
Concen: 5.35 ug/ml
RT: 6.181 min Scan# 747
Delta R.T. 0.000 min
Lab File: ADP0905.D
Acq: 5 Sep 2023 9:52 pm

Tgt Ion: 57 Resp: 70133

Ion	Ratio	Lower	Upper
57	100		
43	96.9	0.2	0.2#
41	49.0	0.2	0.2#

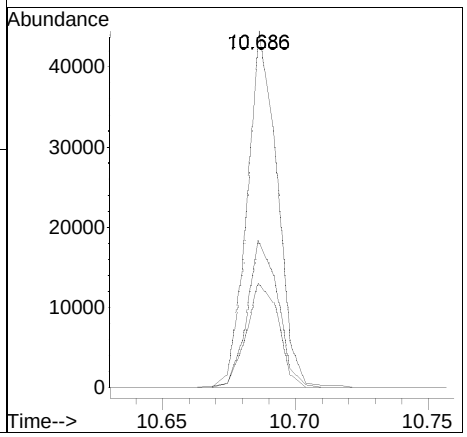


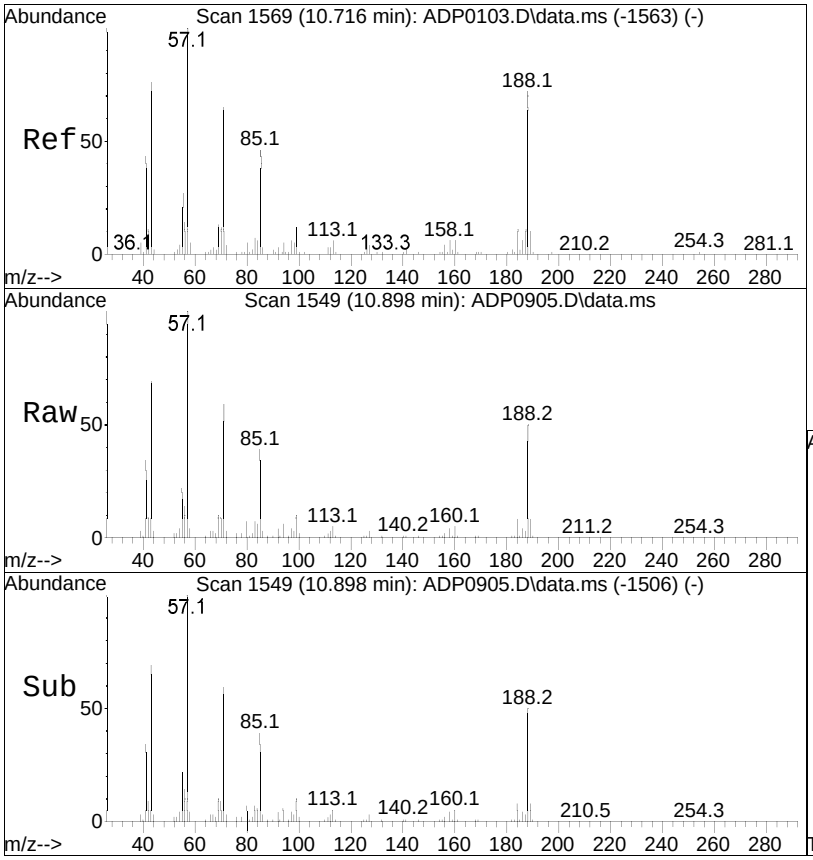


#86
Atrazine
Concen: 4.98 ug/ml
RT: 10.686 min Scan# 1513
Delta R.T. 0.000 min
Lab File: ADP0905.D
Acq: 5 Sep 2023 9:52 pm

Tgt Ion:200 Resp: 34857

Ion	Ratio	Lower	Upper
200	100		
202	31.4	25.8	38.6
215	42.2	40.2	60.4

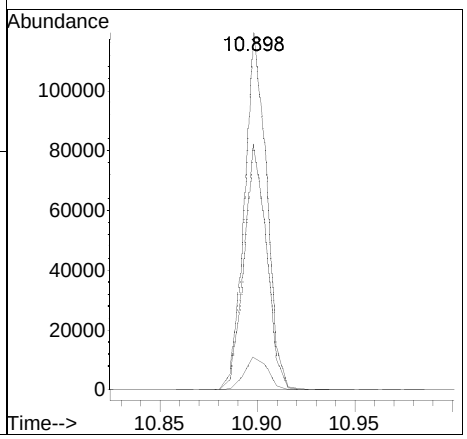


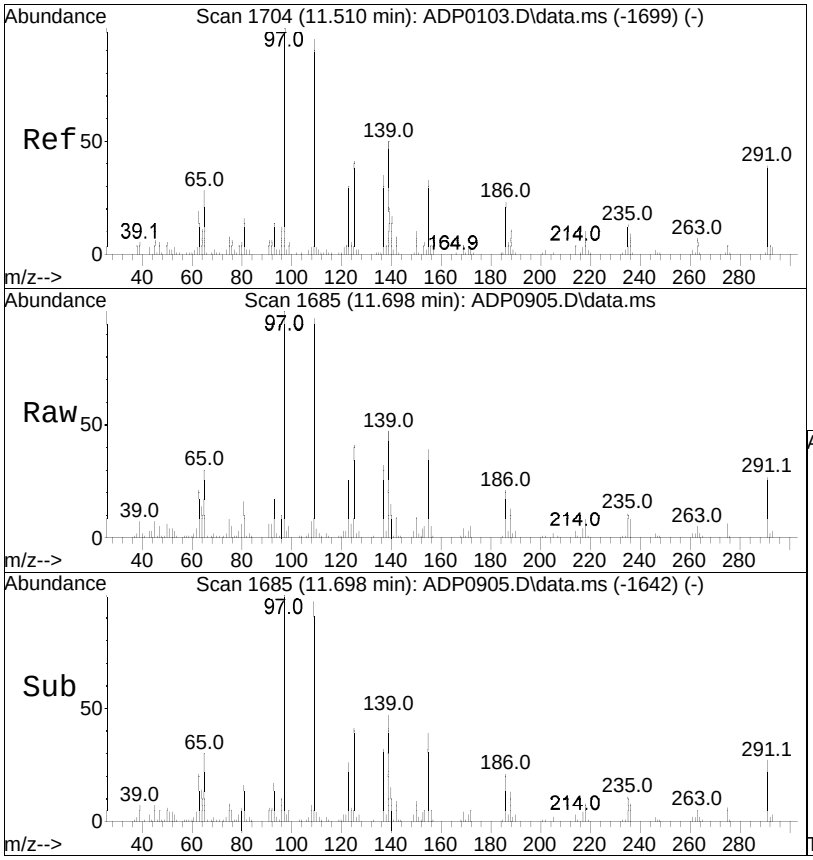


#100
n-Octadecane
Concen: 4.99 ug/ml
RT: 10.898 min Scan# 1549
Delta R.T. 0.000 min
Lab File: ADP0905.D
Acq: 5 Sep 2023 9:52 pm

Tgt Ion: 57 Resp: 93072

Ion	Ratio	Lower	Upper
57	100		
43	70.2	9.0	13.6#
70	9.8	0.2	0.2#

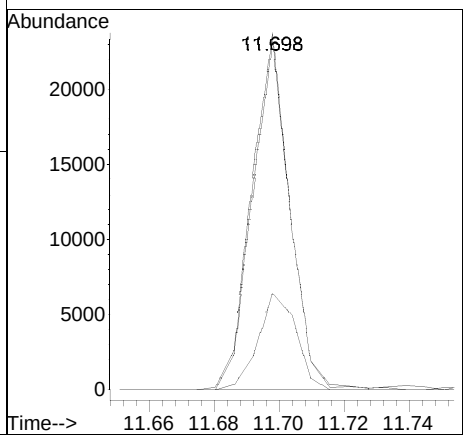


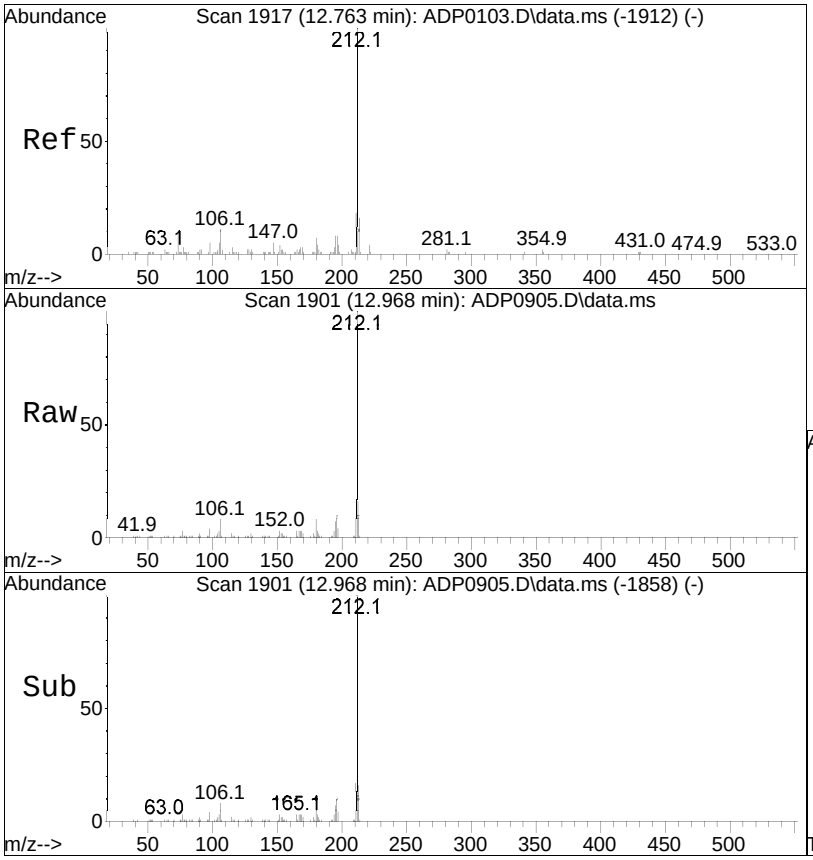


#101
Parathion
Concen: 4.84 ug/ml
RT: 11.698 min Scan# 1685
Delta R.T. 0.000 min
Lab File: ADP0905.D
Acq: 5 Sep 2023 9:52 pm

Tgt Ion:109 Resp: 18436

Ion	Ratio	Lower	Upper
109	100		
97	103.8	87.4	131.2
291	28.2	34.2	51.2#

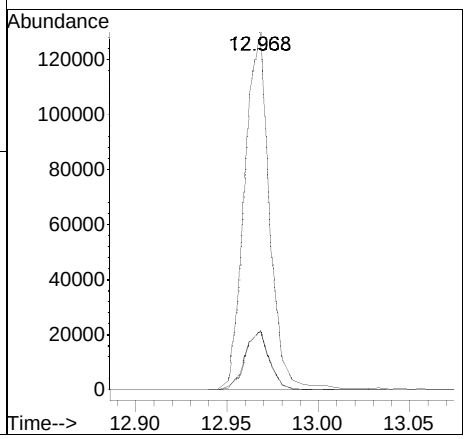




#102
3,3'-Dimethylbenzidine
Concen: 4.63 ug/ml
RT: 12.968 min Scan# 1901
Delta R.T. 0.000 min
Lab File: ADP0905.D
Acq: 5 Sep 2023 9:52 pm

Tgt Ion:212 Resp: 122342

Ion	Ratio	Lower	Upper
212	100		
211	16.2	12.9	19.3
213	16.2	13.2	19.8



Manual Integration Report

Data Path	: I:\8270\SV106\230905lvi\	QMethod	: FS230902SV106.m
Data File	: ADP0905.D	Operator	: SV106:jg
Date Inj'd	: 9/5/2023 9:52 pm	Instrument	: SV 106
Sample	: WG1823865-5,32,,ADP LVI CC	Quant Date	: 9/5/2023 10:27 pm

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\8270\SV106\230905lvi\
Data File : AP90905a.D
Acq On : 5 Sep 2023 10:16 pm
Operator : SV106:jg
Sample : WG1823865-4,32,,AP9 LVI CCV Lot # 10181
Misc : WG1823865,,ical20337
ALS Vial : 143 Sample Multiplier: 1

Quant Time: Sep 05 22:46:39 2023
Quant Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 22:46:19 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
27	I	IS2_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	89	0.00
28	T	Benzaldehyde		0.928	1.021	-10.0	70	0.00
29	T	Acetophenone		1.994	1.903	4.6	66	0.00
30	T	m-Toluidine		1.550	1.618	-4.4	66	0.00
31	T	2-Chloroaniline		1.670	1.603	4.0	65	0.00
54	I	IS2_Naphthalene-d8		1.000	1.000	0.0	88	0.00
55	T	a-Terpineol		0.289	0.278	3.8	65	0.00
56	T	3-Chloroaniline		0.150	0.148	1.3	65	0.00
57	T	2,6-Dichlorophenol		0.277	0.267	3.6	62	0.00
58	T	1-chloro-2-nitrobenzene		0.131	0.129	1.5	65	0.00
59	T	Caprolactam		0.147	0.138	6.1	61	0.00
60	T	1,2,4,5-Tetrachlorobenzene		0.348	0.331	4.9	66	0.00
61	T	Biphenyl		0.856	0.816	4.7	65	0.00
82	I	IS2_Acenaphthene-d10		1.000	1.000	0.0	90	0.00
83	T	Dichloran	*	5.000	4.870	2.6	68	0.00
84	T	Pentachloronitrobenzene	*	5.000	4.904	1.9	67	0.00
97	I	IS2_Phenanthrene-d10		1.000	1.000	0.0	90	0.00
98	T	Diphenamid		0.508	0.482	5.1	62	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230905lvi\
Data File : AP90905a.D
Acq On : 5 Sep 2023 10:16 pm
Operator : SV106:jg
Sample : WG1823865-4,32,,AP9 LVI CCV Lot # 10181
Misc : WG1823865,,ical20337
ALS Vial : 143 Sample Multiplier: 1

Quant Time: Sep 05 22:46:39 2023
Quant Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 22:46:19 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
27) IS2_1,4-Dichlorobenzen...	6.281	152	39853	4.000	ug/ml	0.00
54) IS2_Naphthalene-d8	7.716	136	150081	4.000	ug/ml	0.00
82) IS2_Acenaphthene-d10	9.475	164	81052	4.000	ug/ml	0.00
97) IS2_Phenanthrene-d10	10.904	188	164576	4.000	ug/ml	# 0.00
System Monitoring Compounds						
Target Compounds						Qvalue
28) Benzaldehyde	5.687	105	50840	5.497	ug/ml	95
29) Acetophenone	6.787	105	94780	4.771	ug/ml#	79
30) m-Toluidine	6.887	106	80600	5.220	ug/ml	97
31) 2-Chloroaniline	7.292	127	79831	4.797	ug/ml#	92
55) a-Terpineol	7.792	59	52060	4.806	ug/ml#	72
56) 3-Chloroaniline	7.804	65	27733	4.915	ug/ml	89
57) 2,6-Dichlorophenol	7.834	162	50083	4.826	ug/ml#	90
58) 1-chloro-2-nitrobenzene	8.098	111	24138	4.909	ug/ml#	1
59) Caprolactam	8.134	55	25873	4.703	ug/ml#	69
60) 1,2,4,5-Tetrachloroben...	8.628	216	62110	4.758	ug/ml	99
61) Biphenyl	8.928	154	153120	4.769	ug/ml	100
83) Dichloran	10.610	206	13006	4.870	ug/ml	88
84) Pentachloronitrobenzene	10.757	237	16679	4.904	ug/ml#	82
98) Diphenamid	11.816	167	99163	4.744	ug/ml	84

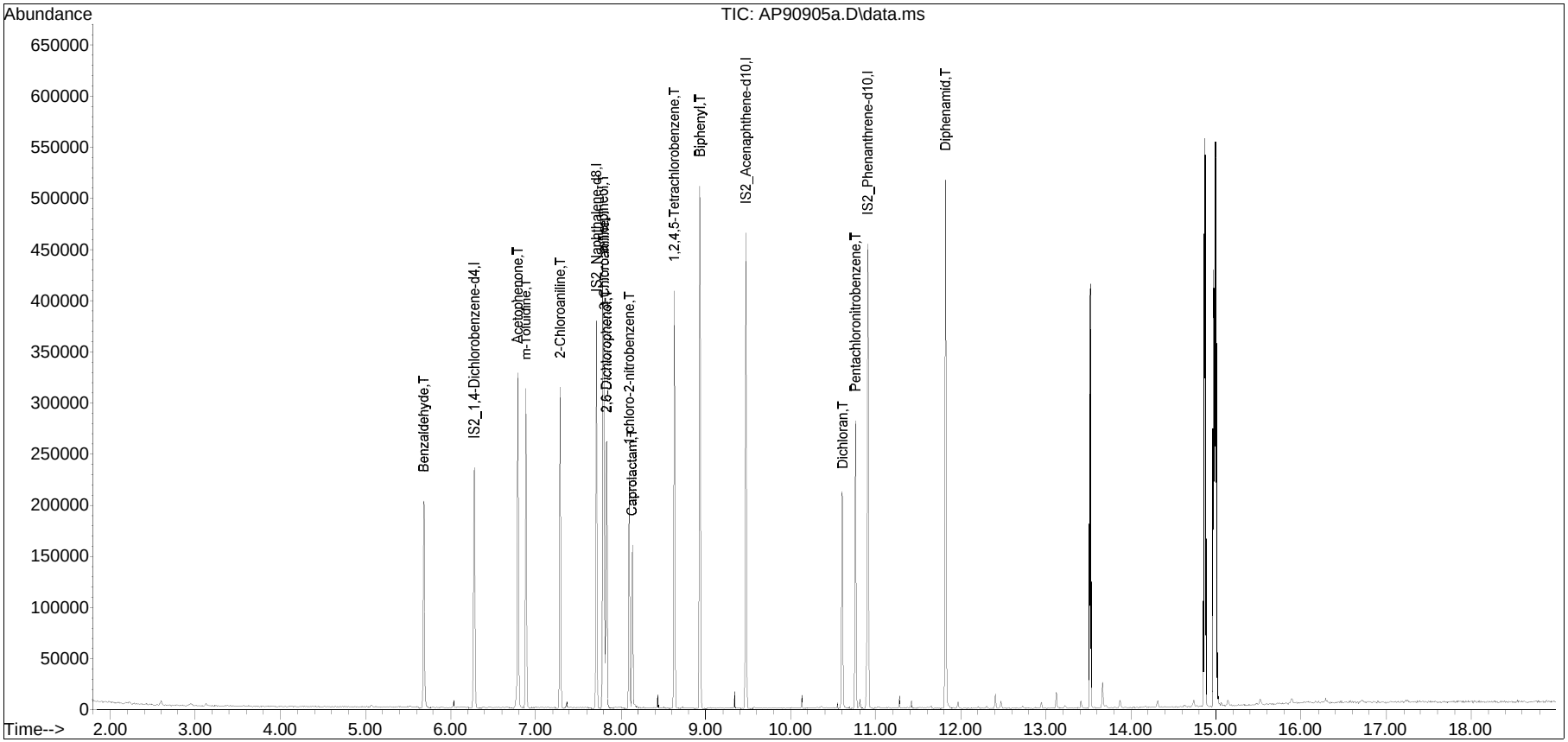
(#) = qualifier out of range (m) = manual integration (+) = signals summed

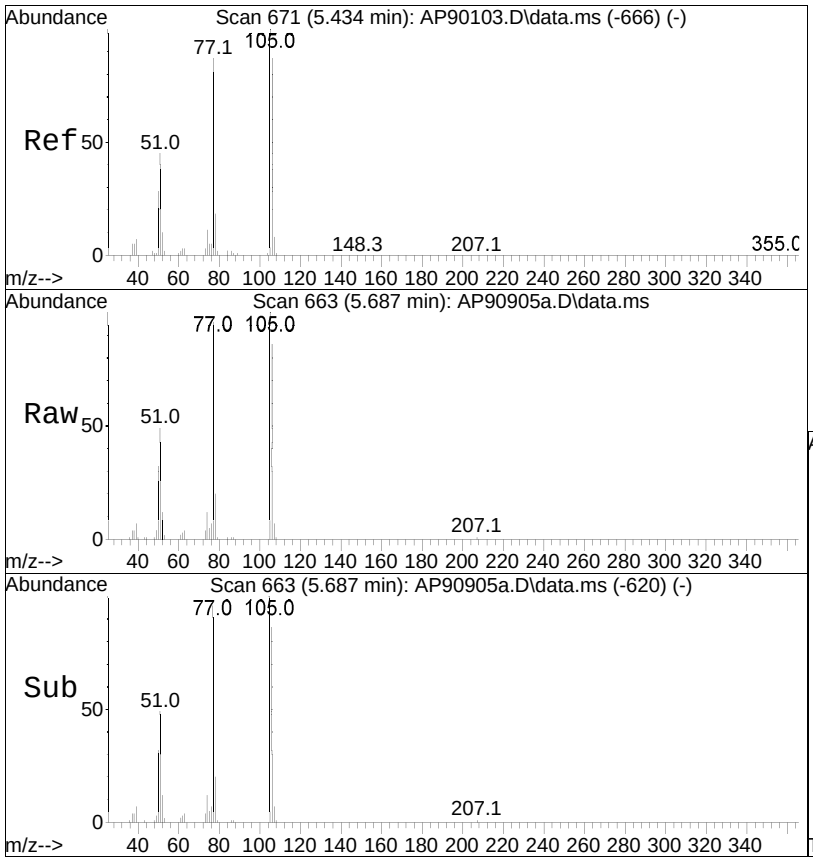
Quantitation Report (QT Reviewed)

Data Path : I:\8270\SV106\230905lvi\
Data File : AP90905a.D
Acq On : 5 Sep 2023 10:16 pm
Operator : SV106:jg
Sample : WG1823865-4,32,,AP9 LVI CCV Lot # 10181
Misc : WG1823865,,ical20337
ALS Vial : 143 Sample Multiplier: 1

Quant Time: Sep 05 22:46:39 2023
Quant Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 22:46:19 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublist

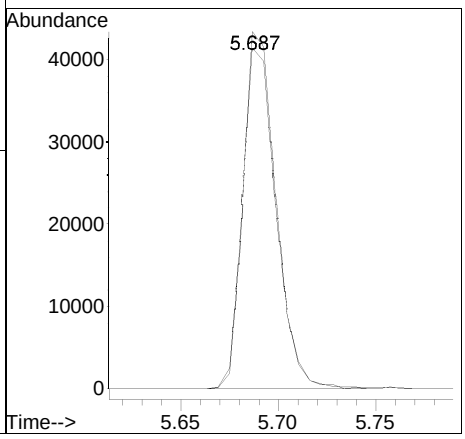


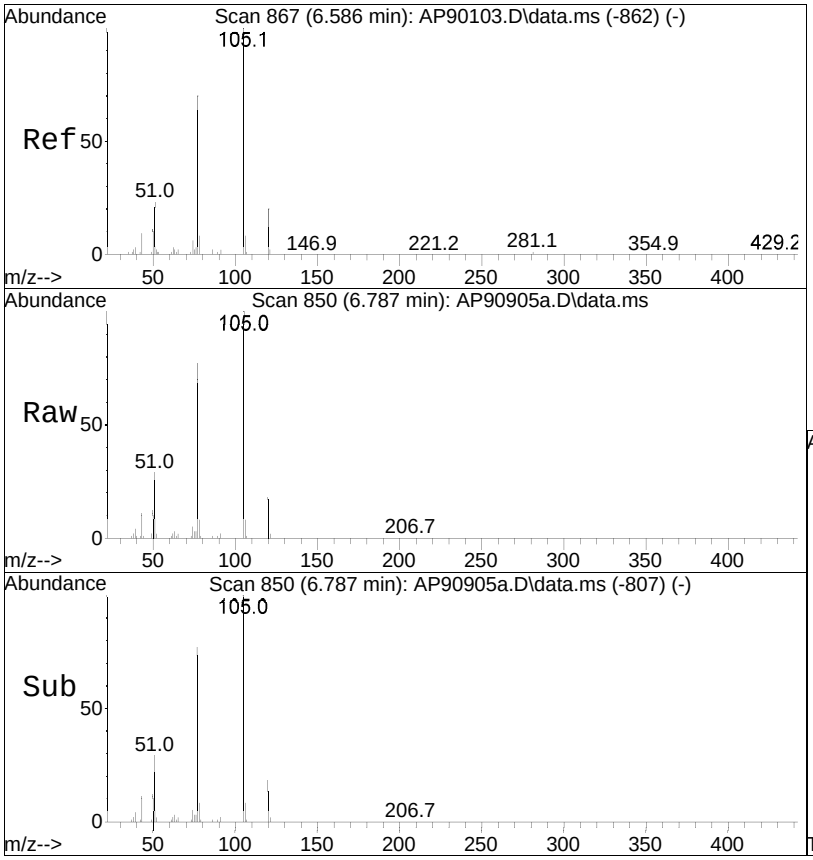


#28
Benzaldehyde
Concen: 5.50 ug/ml
RT: 5.687 min Scan# 663
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion:105 Resp: 50840

Ion	Ratio	Lower	Upper
105	100		
77	97.7	82.2	123.4

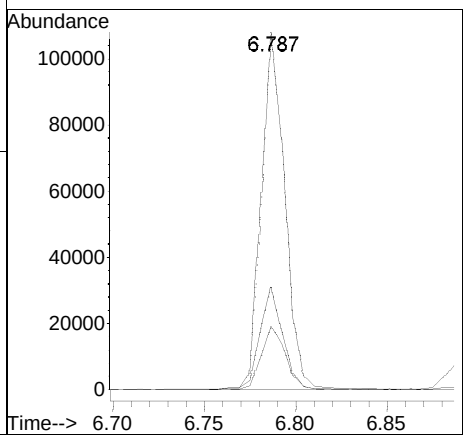


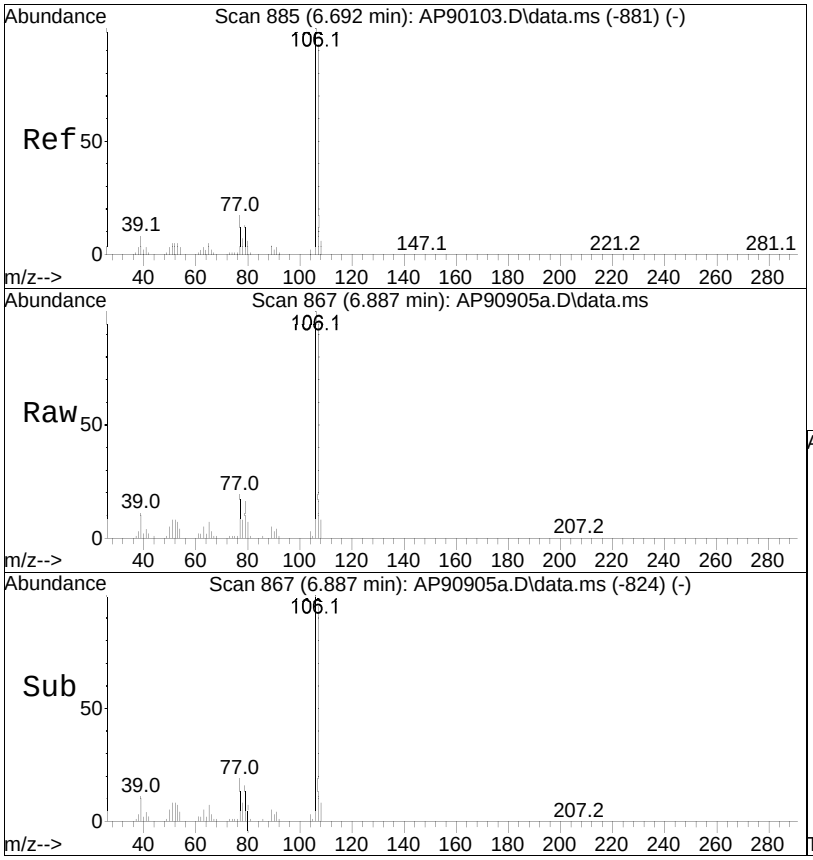


#29
Acetophenone
Concen: 4.77 ug/ml
RT: 6.787 min Scan# 850
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion:105 Resp: 94780

Ion	Ratio	Lower	Upper
105	100		
120	18.3	20.5	30.7#
51	27.8	34.9	52.3#

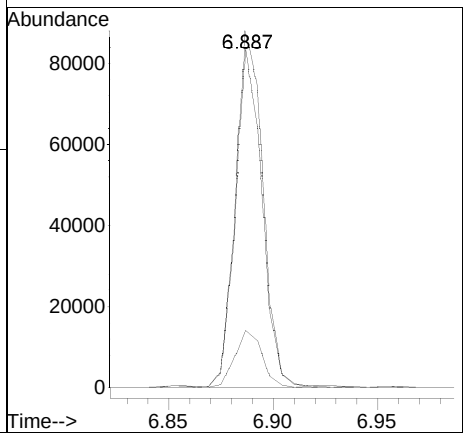


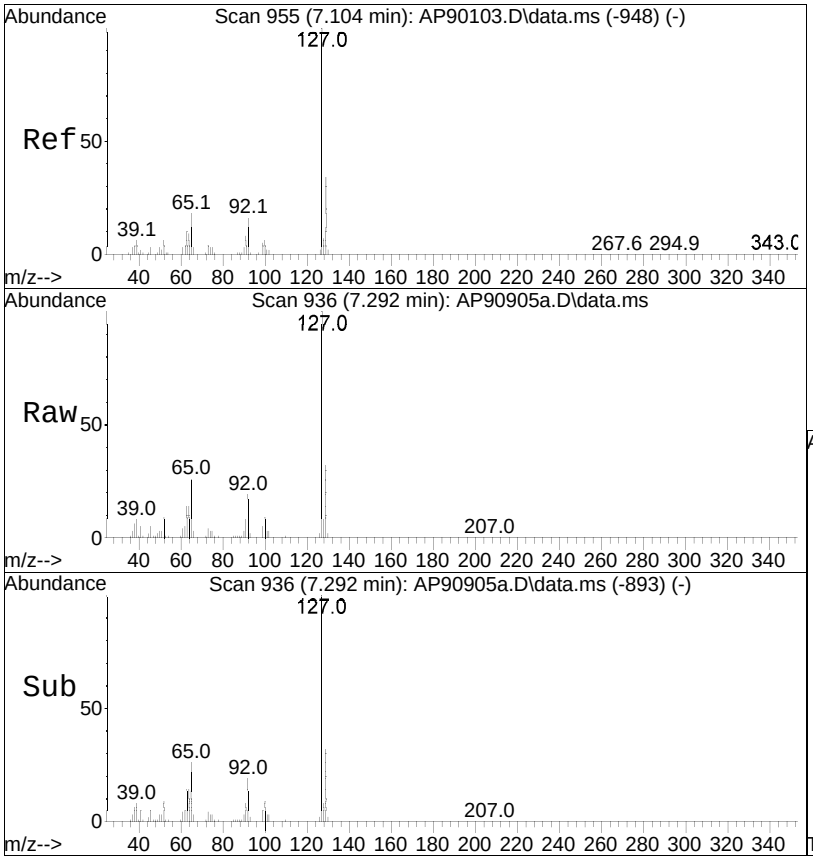


#30
m-Toluidine
Concen: 5.22 ug/ml
RT: 6.887 min Scan# 867
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion:106 Resp: 80600

Ion	Ratio	Lower	Upper
106	100		
107	91.5	75.7	113.5
79	15.8	11.8	17.8

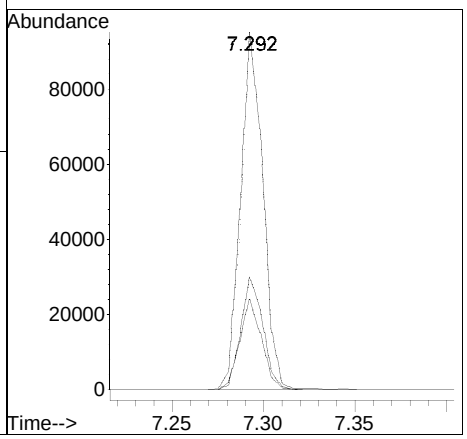


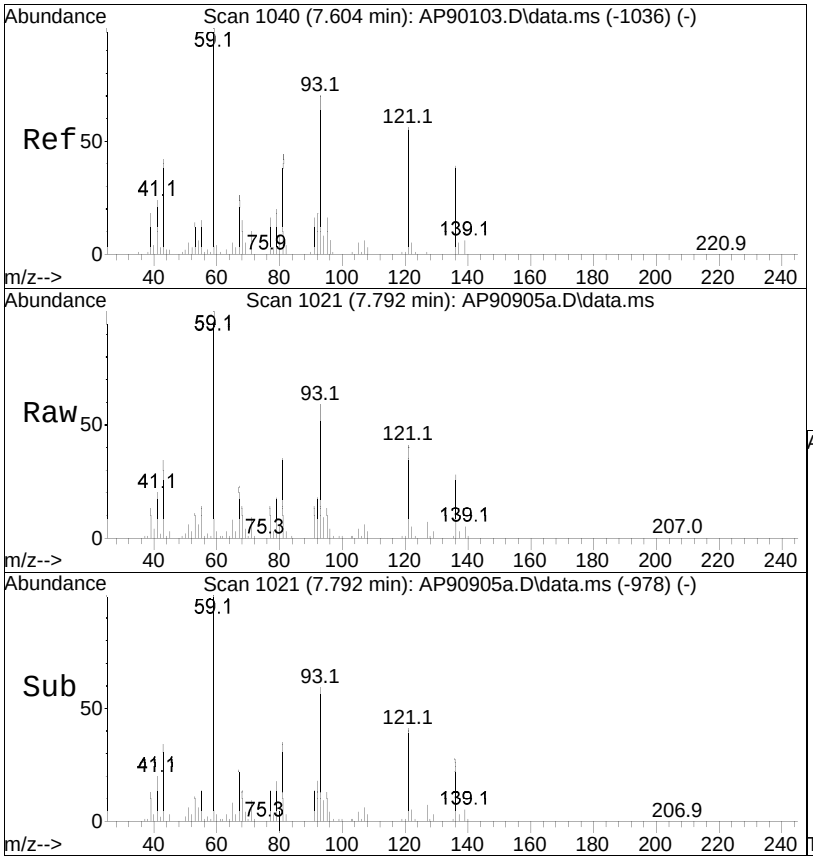


#31
2-Chloroaniline
Concen: 4.80 ug/ml
RT: 7.292 min Scan# 936
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion:127 Resp: 79831

Ion	Ratio	Lower	Upper
127	100		
129	31.5	25.9	38.9
65	25.2	26.3	39.5#

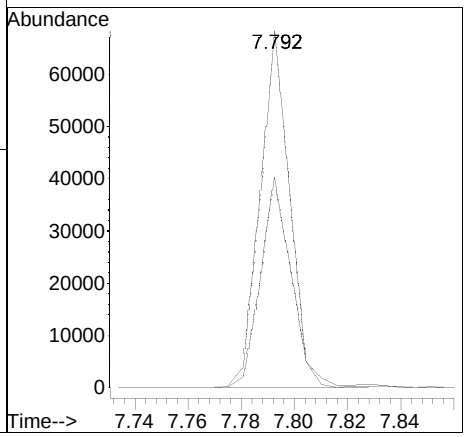


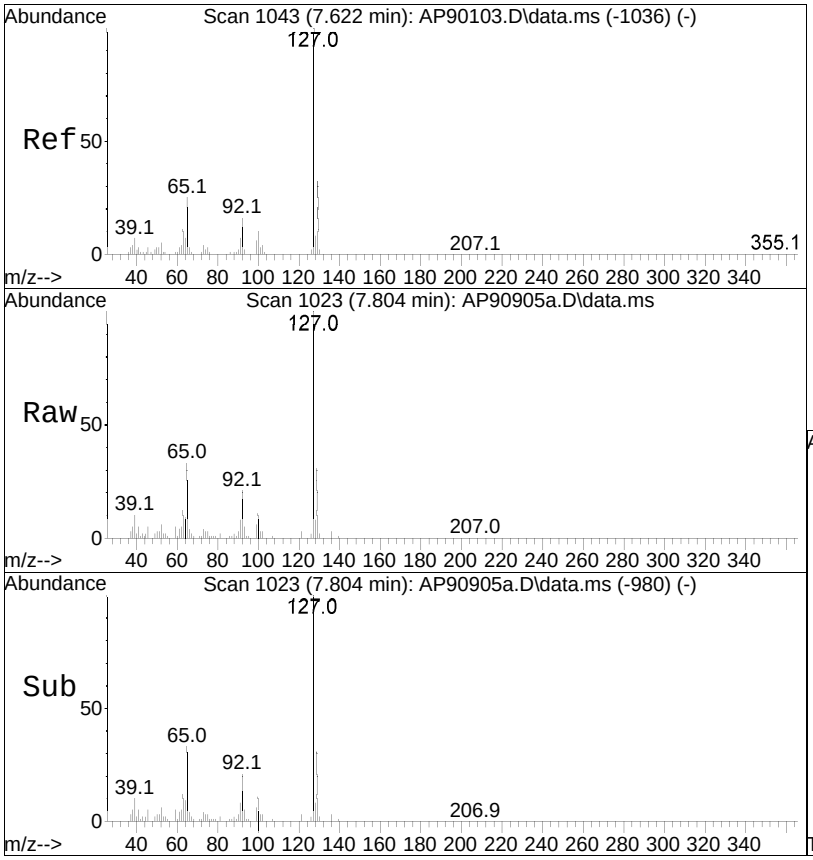


#55
a-Terpineol
Concen: 4.81 ug/ml
RT: 7.792 min Scan# 1021
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion: 59 Resp: 52060

Ion	Ratio	Lower	Upper
59	100		
93	62.6	35.6	53.4#

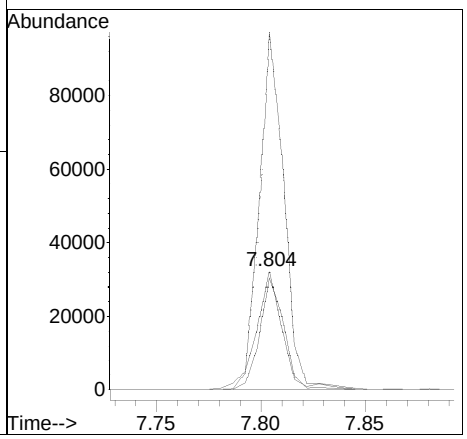


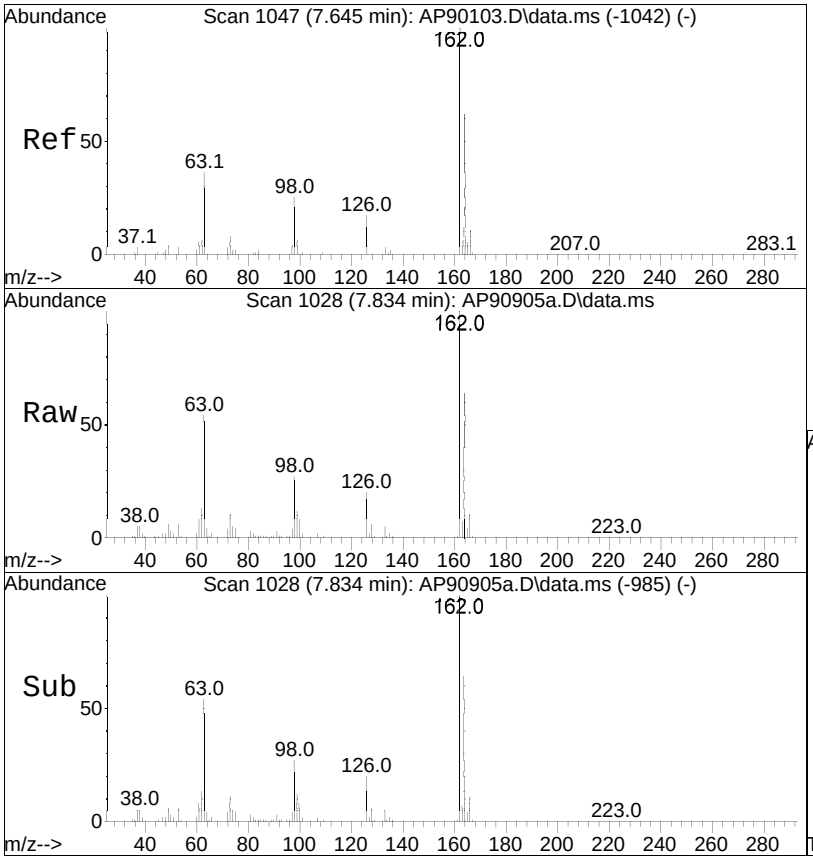


#56
3-Chloroaniline
Concen: 4.91 ug/ml
RT: 7.804 min Scan# 1023
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion: 65 Resp: 27733

Ion	Ratio	Lower	Upper
65	100		
127	283.2	243.2	364.8
129	87.6	78.8	118.2

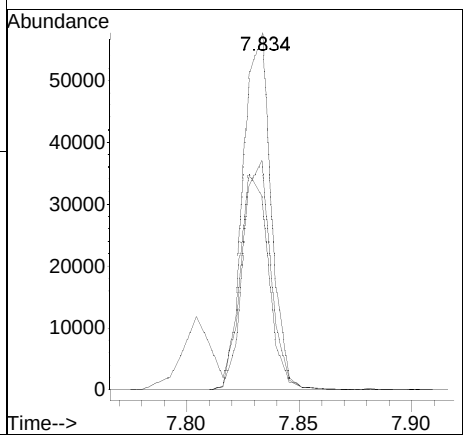


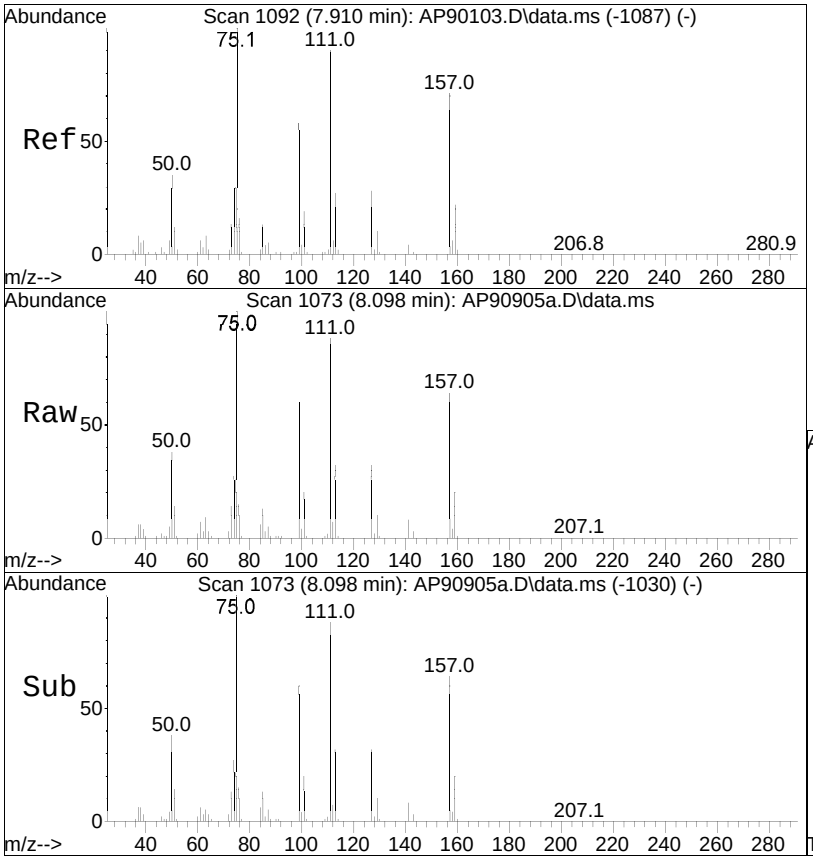


#57
2,6-Dichlorophenol
Concen: 4.83 ug/ml
RT: 7.834 min Scan# 1028
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion:162 Resp: 50083

Ion	Ratio	Lower	Upper
162	100		
164	64.1	51.1	76.7
63	60.7	60.8	91.2#

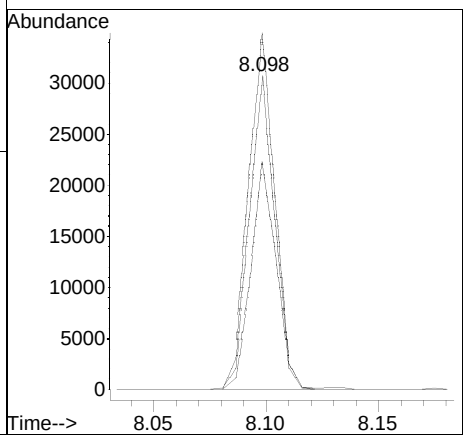


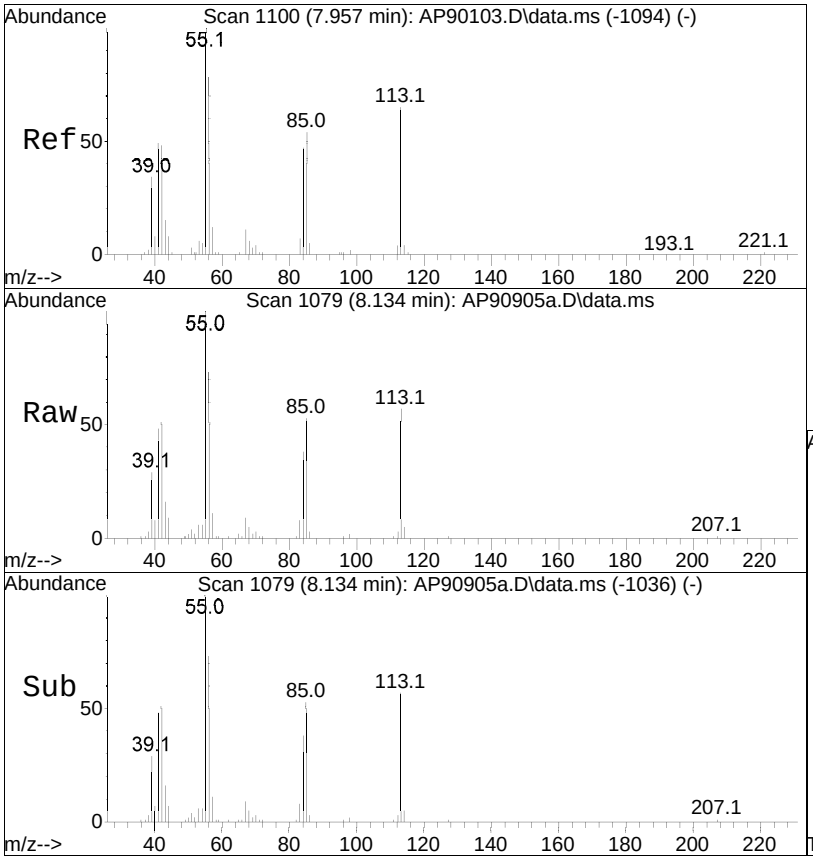


#58
1-chloro-2-nitrobenzene
Concen: 4.91 ug/ml
RT: 8.098 min Scan# 1073
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion:111 Resp: 24138

Ion	Ratio	Lower	Upper
111	100		
157	71.0	0.0	0.0#
75	116.8	28.2	42.2#

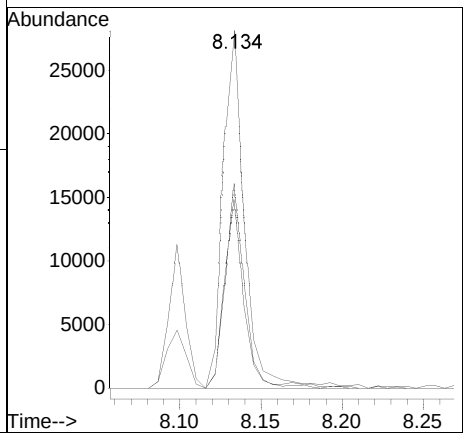


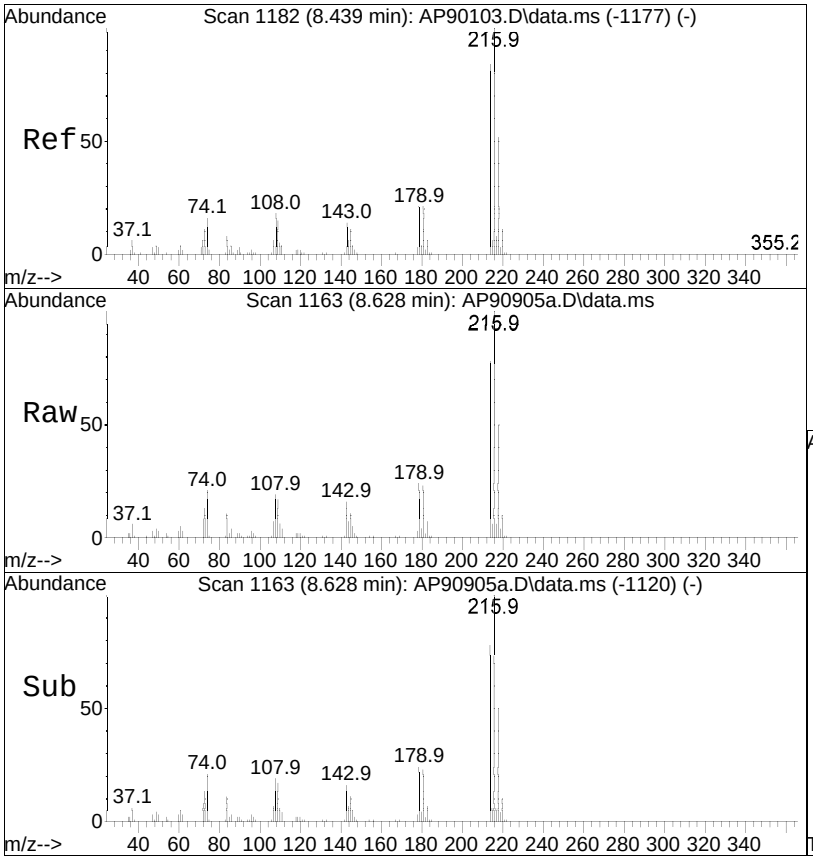


#59
Caprolactam
Concen: 4.70 ug/ml
RT: 8.134 min Scan# 1079
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion: 55 Resp: 25873

Ion	Ratio	Lower	Upper
55	100		
85	46.7	19.8	29.6#
113	50.5	29.6	44.4#

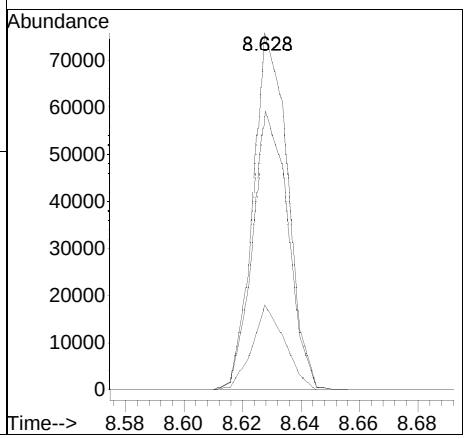


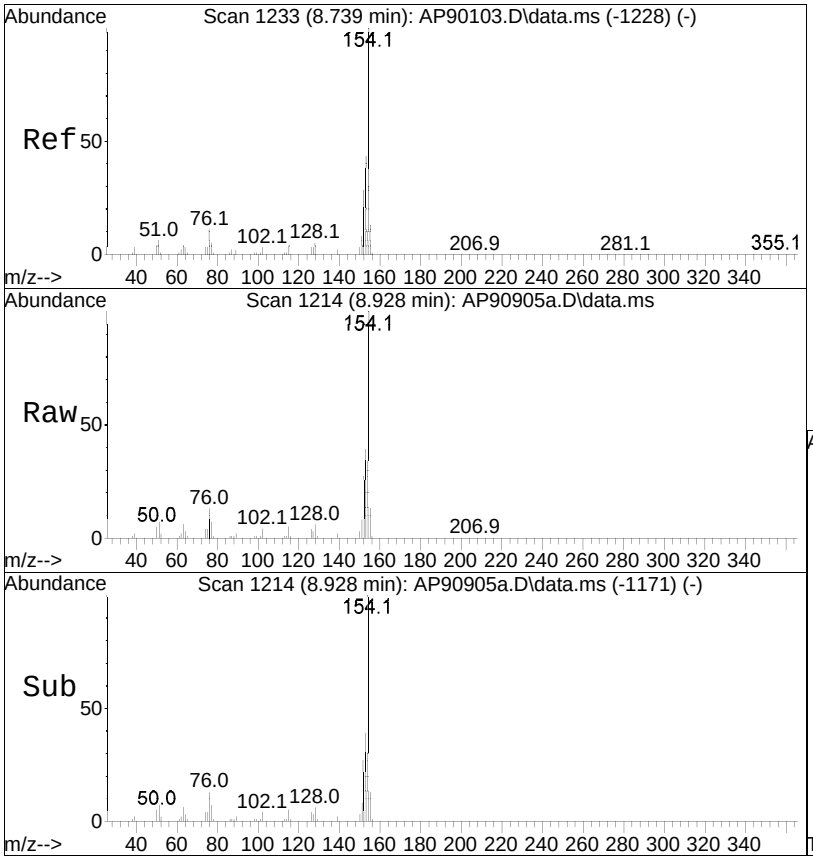


#60
1,2,4,5-Tetrachlorobenzene
Concen: 4.76 ug/ml
RT: 8.628 min Scan# 1163
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion:216 Resp: 62110

Ion	Ratio	Lower	Upper
216	100		
214	80.2	63.7	95.5
179	22.6	19.0	28.6

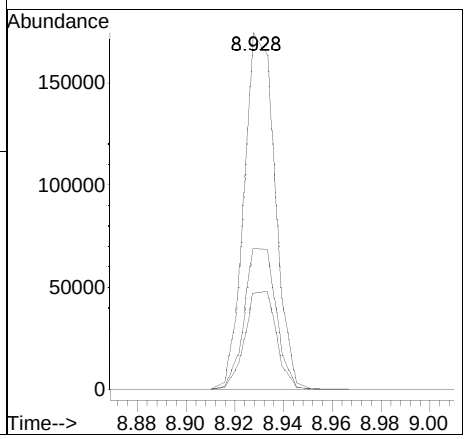


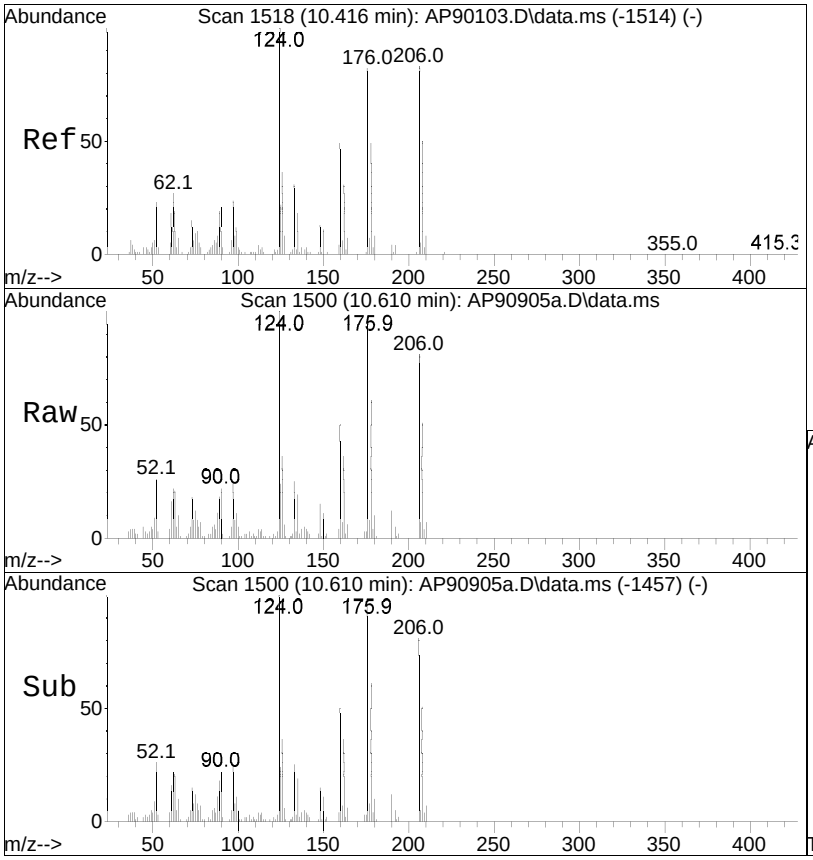


#61
Biphenyl
Concen: 4.77 ug/ml
RT: 8.928 min Scan# 1214
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion:154 Resp: 153120

Ion	Ratio	Lower	Upper
154	100		
153	40.5	32.3	48.5
152	28.1	22.5	33.7

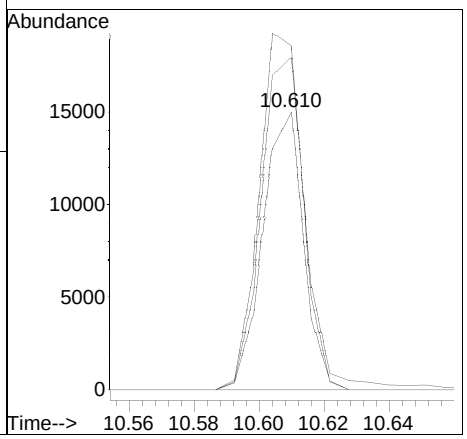


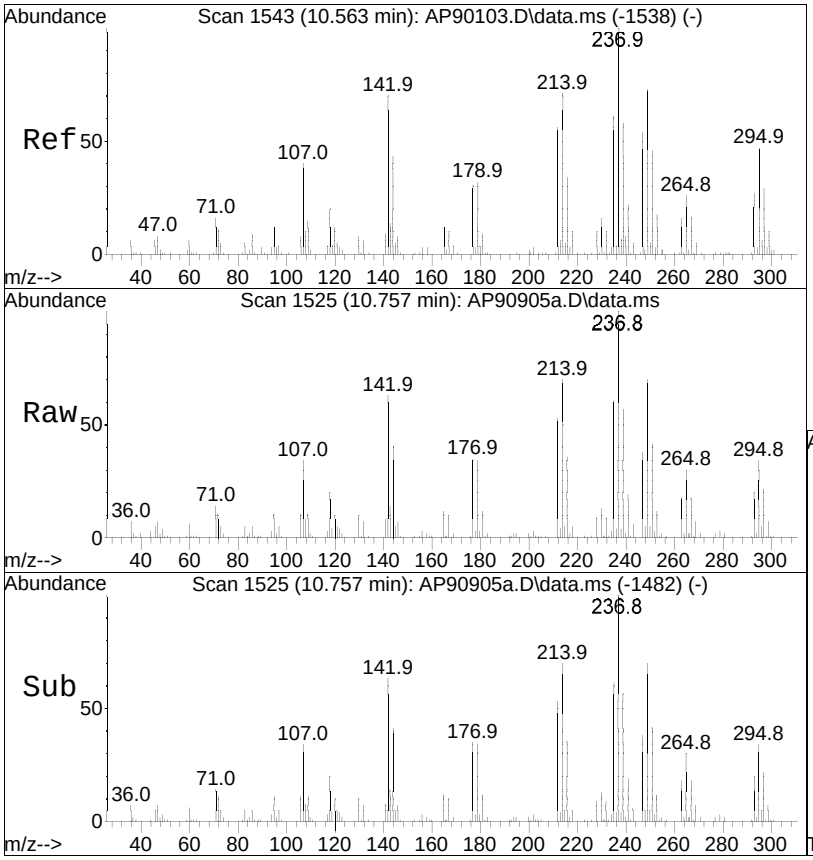


#83
Dichloran
Concen: 4.87 ug/ml
RT: 10.610 min Scan# 1500
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion:206 Resp: 13006

Ion	Ratio	Lower	Upper
206	100		
176	133.7	104.6	157.0
124	136.3	130.5	195.7

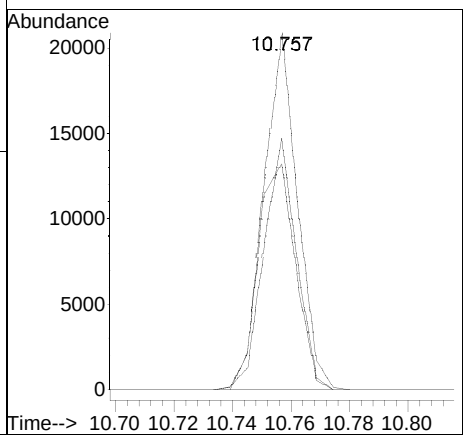


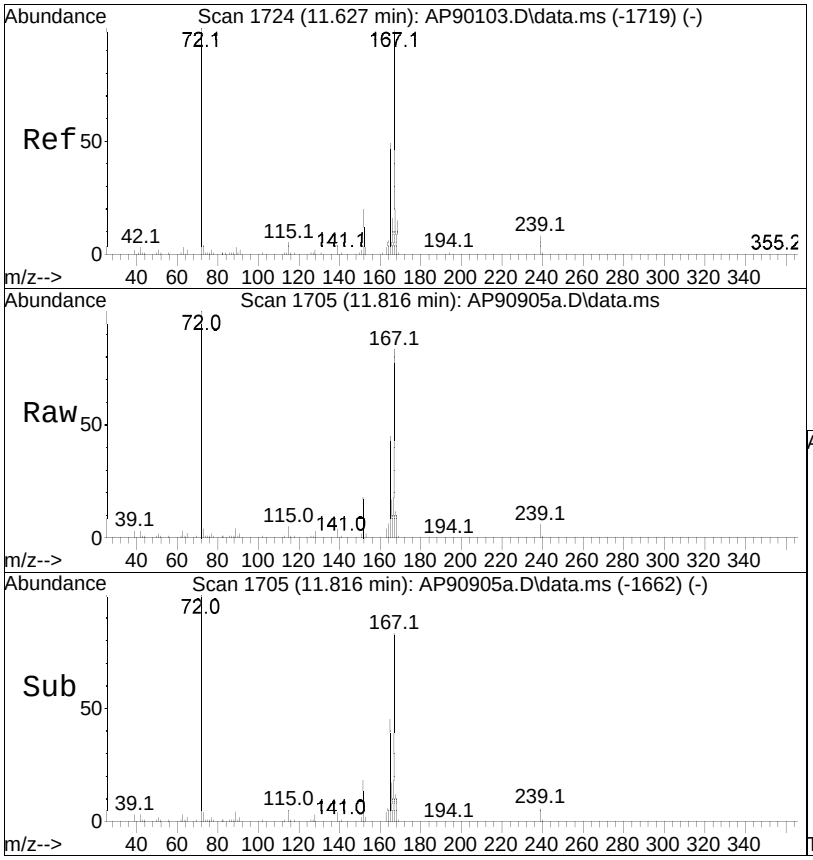


#84
Pentachloronitrobenzene
Concen: 4.90 ug/ml
RT: 10.757 min Scan# 1525
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion:237 Resp: 16679

Ion	Ratio	Lower	Upper
237	100		
142	70.3	77.0	115.4#
214	67.9	58.2	87.4

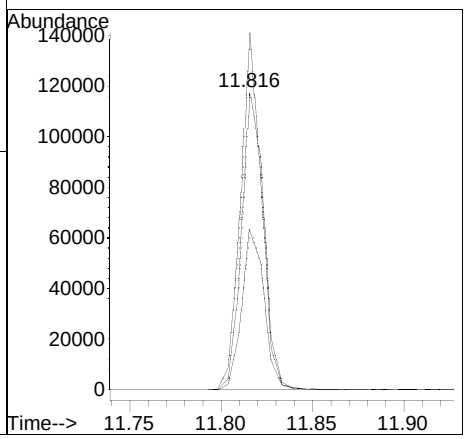




#98
Diphenamid
Concen: 4.74 ug/ml
RT: 11.816 min Scan# 1705
Delta R.T. 0.000 min
Lab File: AP90905a.D
Acq: 5 Sep 2023 10:16 pm

Tgt Ion:167 Resp: 99163

Ion	Ratio	Lower	Upper
167	100		
72	111.9	109.7	164.5
165	55.0	41.8	62.6



Manual Integration Report

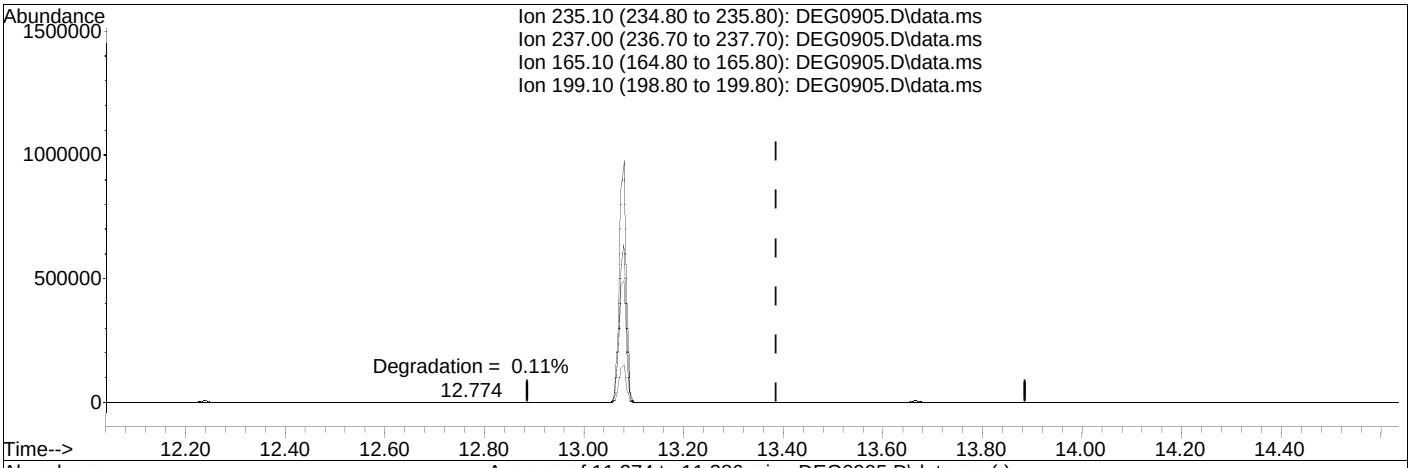
Data Path	: I:\8270\SV106\230905lvi\	QMethod	: FS230902SV106.m
Data File	: AP90905a.D	Operator	: SV106:jg
Date Inj'd	: 9/5/2023 10:16 pm	Instrument	: SV 106
Sample	: WG1823865-4,32,,AP9 LVI CC	Quant Date	: 9/5/2023 10:46 pm

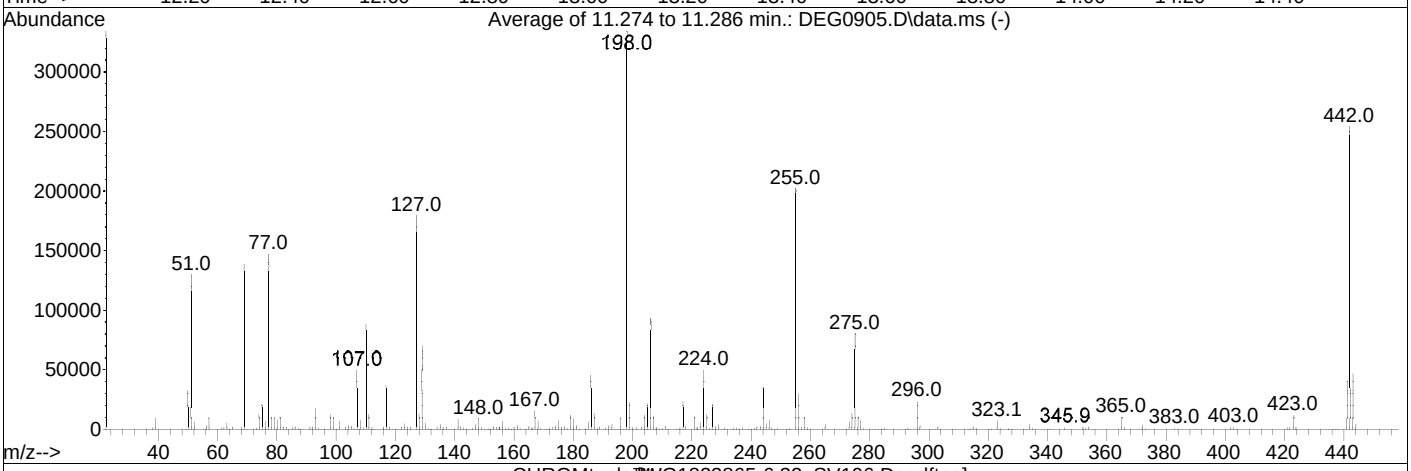
There are no manual integrations or false positives in this file.

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\230905lvi\
Data File : DEG0905.D
Acq On : 5 Sep 2023 8:40 pm
Operator : SV106:jg
Sample : WG1823865-2,32,,SV106 Degdftpp
Misc : WG1823865,,ical20337
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Sep 05 21:01:43 2023
Quant Method : I:\8270\SV106\230905lvi\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 23 13:06:27 2023
Response via : Initial Calibration





CHROMtools [WG1823865-6,32,,SV106 Degdftpp]

(6) DDT (T)

13.080min (-0.306) 148.03

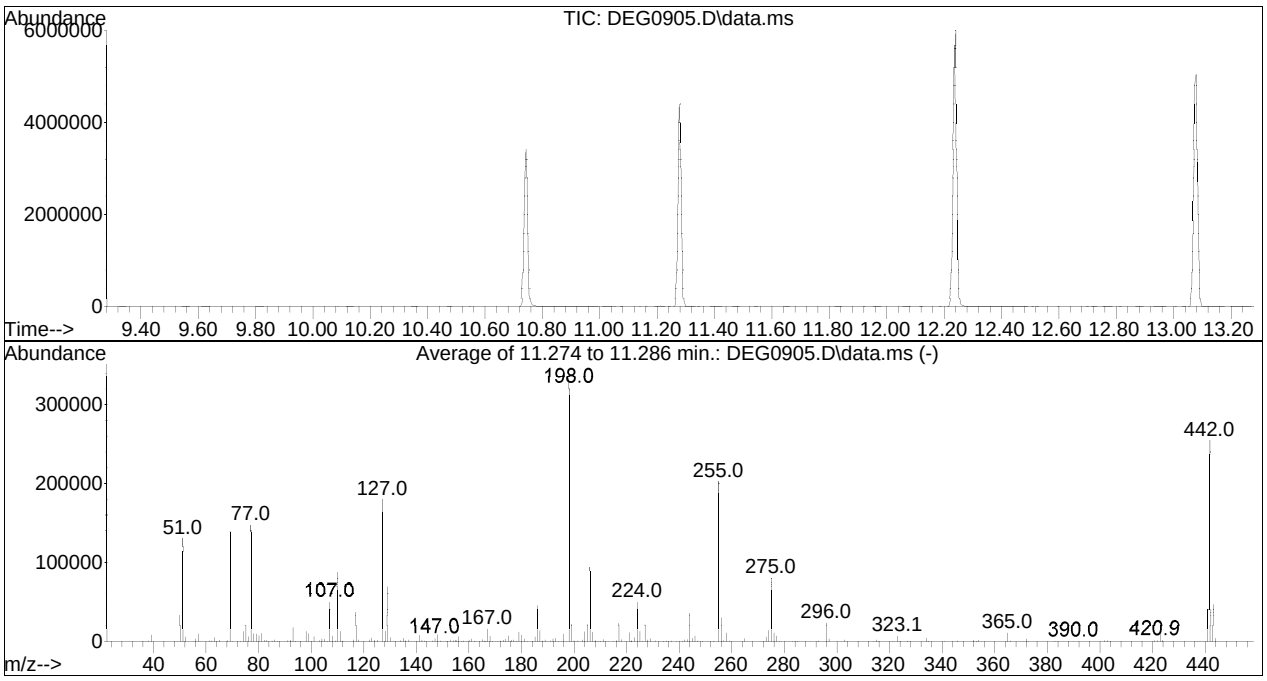
response 902339

Ion	Exp%	Act%
235.10	100.00	100.00
237.00	63.00	64.16
165.10	54.80	52.65
199.10	16.50	15.89

Data Path : I:\8270\SV106\230905lvi\
Data File : DEG0905.D
Acq On : 5 Sep 2023 8:40 pm
Operator : SV106:jg
Sample : WG1823865-1,32,,SV106 Degdftpp
Misc : WG1823865,,ical20337
ALS Vial : 141 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270\SV106\230905lvi\FS230902SV106.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Wed Sep 06 08:55:23 2023



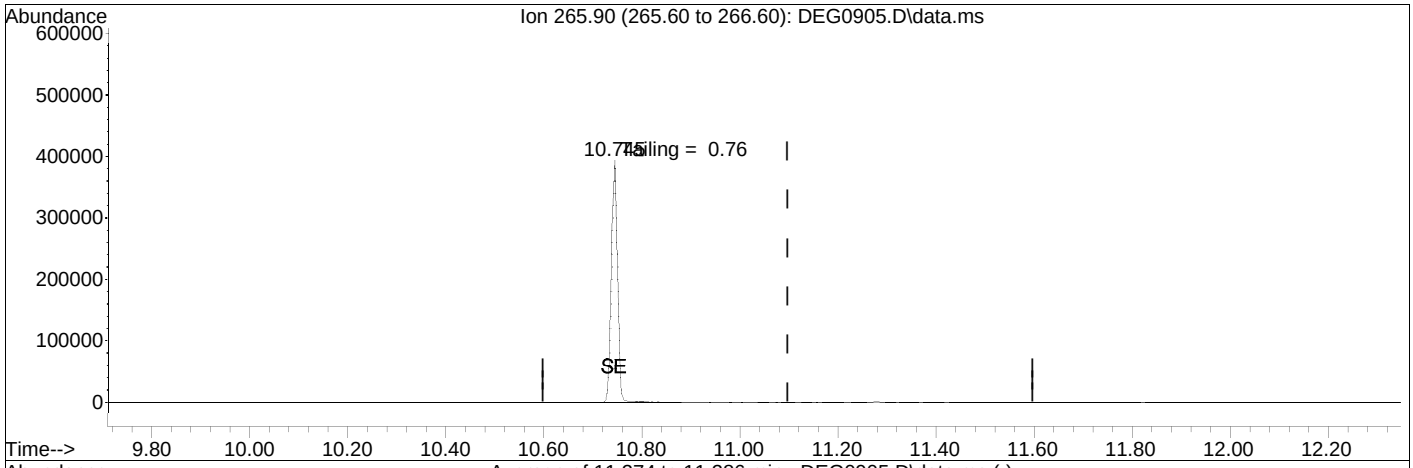
Spectrum Information: Average of 11.274 to 11.286 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	38.8	129664	PASS
68	69	0.00	2	1.5	2089	PASS
69	69	100	100	100.0	138737	PASS
70	69	0.00	2	0.5	651	PASS
127	198	10	80	53.7	179339	PASS
197	198	0.00	2	0.2	531	PASS
198	198	100	100	100.0	334208	PASS
199	198	5	9	6.8	22671	PASS
275	198	10	60	24.1	80491	PASS
365	198	1	100	3.2	10792	PASS
441	442	0.01	24	16.1	40931	PASS
442	198	50	100	76.1	254336	PASS
443	442	15	24	18.4	46717	PASS

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\230905lvi\
Data File : DEG0905.D
Acq On : 5 Sep 2023 8:40 pm
Operator : SV106:jg
Sample : WG1823865-7,32,,SV106 Degdftpp
Misc : WG1823865,,ical20337
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Sep 05 21:01:43 2023
Quant Method : I:\8270\SV106\230905lvi\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 23 13:06:27 2023
Response via : Initial Calibration



CHROMtools [WG1823865-1,32,,SV106 Degdftpp]

(1) Pentachlorophenol (T)

10.745min (-0.353) 151.87

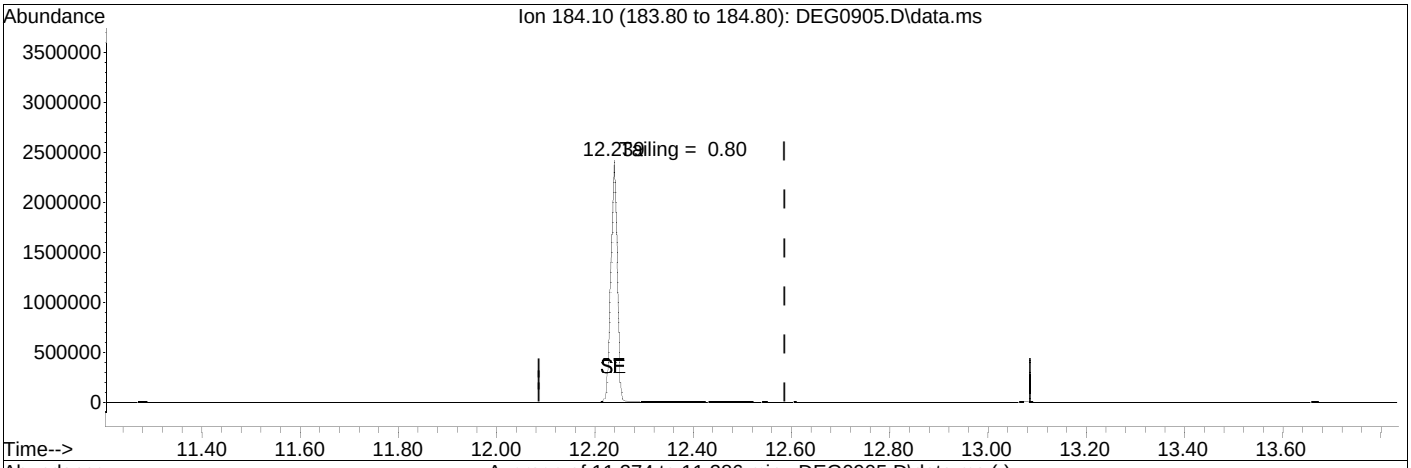
response 318977

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270\SV106\230905lvi\
Data File : DEG0905.D
Acq On : 5 Sep 2023 8:40 pm
Operator : SV106:jg
Sample : WG1823865-6,32,,SV106 Degdftpp
Misc : WG1823865,,ical20337
ALS Vial : 141 Sample Multiplier: 1

Quant Time: Sep 05 21:01:43 2023
Quant Method : I:\8270\SV106\230905lvi\DftppSV106.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Aug 23 13:06:27 2023
Response via : Initial Calibration



CHROMtools TM [WG1823865-7,32,,SV106 Degdftpp]

(3) Benzidine (T)

12.239min (-0.347) 199.52

response 2031098

Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230906lvi\
Data File : ABN0906.D
Acq On : 6 Sep 2023 10:19 am
Operator : Dakota:sz
Sample : wg1824168-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1824168,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 06 11:55:02 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 11:52:34 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
1	I	IS1_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	94	0.00
2	t	n-Nitrosodimethylamine	*	5.000	4.154	16.9	83	0.00
3	t	Pyridine	*	5.000	4.530	9.4	107	0.00
4	S	2-Fluorophenol		1.033	1.037	-0.4	94	0.00
5	T	Aniline		1.790	1.534	14.3	80	0.00
6	t	2-Chlorophenol		1.195	1.081	9.5	83	0.00
7	S	Phenol-d6		1.324	1.232	6.9	86	0.00
8	T	Phenol		1.539	1.282	16.7	80	0.00
9	T	Bis(2-chloroethyl)ether		1.066	0.939	11.9	87	0.00
10	T	1,3-Dichlorobenzene		1.435	1.372	4.4	92	0.00
11	T	1,4-Dichlorobenzene		1.452	1.435	1.2	98	0.00
12	T	1,2-Dichlorobenzene		1.406	1.364	3.0	91	0.00
13	t	Benzyl alcohol		0.936	0.916	2.1	89	0.00
14	T	Bis(2-chloroisopropyl)ether		1.785	1.521	14.8	81	0.00
15	T	2-Methylphenol		1.016	0.930	8.5	84	0.00
16	T	Hexachloroethane		0.551	0.560	-1.6	99	0.00
17	T	n-Nitrosodi-n-propylamine		0.818	0.782	4.4	91	0.00
18	T	3-Methylphenol/4-Methylphen		1.050	0.976	7.0	86	0.00
19	S	Nitrobenzene-d5		1.269	1.226	3.4	92	0.00
20	T	Nitrobenzene		1.234	1.178	4.5	92	0.00
21	T	Isophorone		2.183	1.971	9.7	85	0.00
22	T	2-Nitrophenol		0.577	0.554	4.0	84	0.00
23	T	2,4-Dimethylphenol		1.110	1.064	4.1	89	0.00
24	T	Bis(2-chloroethoxy)methane		1.416	1.285	9.3	87	0.00
25	T	2,4-Dichlorophenol		1.044	1.104	-5.7	104	0.00
26	T	1,2,4-Trichlorobenzene		1.276	1.377	-7.9	99	0.00
34	I	IS1_Naphthalene-d8		1.000	1.000	0.0	86	0.00
35	T	Naphthalene		0.971	0.881	9.3	79	0.00
36	T	Benzoic Acid	*	5.000	6.194	-23.9#	125	0.00
37	T	4-Chloroaniline		0.115	0.117	-1.7	94	0.00
38	T	Hexachlorobutadiene		0.198	0.245	-23.7#	109	0.00
39	T	p-Chloro-m-cresol		0.254	0.266	-4.7	89	0.00
40	T	2-Methylnaphthalene		0.631	0.630	0.2	88	0.00
41	T	1-Methylnaphthalene		0.218	0.219	-0.5	85	0.00
42	T	Hexachlorocyclopentadiene		0.239	0.318	-33.1#	114	0.00
43	T	2,4,6-Trichlorophenol	*	5.000	5.943	-18.9	112	0.00
44	T	2,4,5-Trichlorophenol		0.234	0.295	-26.1#	105	0.00
45	S	2-Fluorobiphenyl		0.787	0.849	-7.9	94	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230906lvi\
Data File : ABN0906.D
Acq On : 6 Sep 2023 10:19 am
Operator : Dakota:sz
Sample : wg1824168-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1824168,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 06 11:55:02 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 11:52:34 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
46	T	2-Chloronaphthalene		0.692	0.712	-2.9	90	0.00
47	T	2-Nitroaniline		0.200	0.208	-4.0	89	0.00
48	T	1,4-Dinitrobenzene		0.093	0.099	-6.5	91	0.00
49	T	1,3-Dinitrobenzene		0.109	0.113	-3.7	98	0.00
50	T	Dimethyl phthalate		0.809	0.894	-10.5	94	0.00
51	T	Acenaphthylene		1.049	1.159	-10.5	94	0.00
52	T	2,6-Dinitrotoluene		0.167	0.179	-7.2	89	0.00
53	T	1,2-Dinitrobenzene		0.065	0.068	-4.6	88	0.00
62	I	IS1_Acenaphthene-d10		1.000	1.000	0.0	97	0.00
63	T	3-Nitroaniline		0.318	0.309	2.8	88	0.00
64	T	Acenaphthene		1.089	0.969	11.0	87	0.00
65	T	2,4-Dinitrophenol	*	5.000	5.780	-15.6	115	0.00
66	T	Dibenzofuran		1.737	1.714	1.3	96	0.00
67	T	2,4-Dinitrotoluene		0.392	0.373	4.8	87	0.00
68	T	4-Nitrophenol	*	5.000	5.133	-2.7	103	0.00
69	T	2,3,5,6-Tetrachlorophenol	*	5.000	5.819	-16.4	118	0.00
70	T	2,3,4,6-Tetrachlorophenol	*	5.000	5.881	-17.6	118	0.00
71	T	Diethyl phthalate		1.466	1.409	3.9	93	0.00
72	T	Fluorene		1.400	1.272	9.1	87	0.00
73	T	4-Chlorophenyl phenyl ether		0.681	0.668	1.9	97	0.00
74	T	4-Nitroaniline		0.316	0.296	6.3	87	0.00
75	T	4,6-Dinitro-o-cresol	*	5.000	5.976	-19.5	122	0.00
76	T	NDPA/DPA		1.195	1.104	7.6	88	0.00
77	T	Azobenzene		1.256	1.214	3.3	90	0.00
78	S	2,4,6-Tribromophenol		0.232	0.327	-40.9#	138	0.00
79	T	4-Bromophenyl phenyl ether		0.425	0.459	-8.0	104	0.00
80	T	Hexachlorobenzene		0.532	0.615	-15.6	118	0.00
81	T	Pentachlorophenol	*	5.000	6.275	-25.5#	140	0.00
87	I	IS1_Phenanthrene-d10		1.000	1.000	0.0	96	0.00
88	T	Phenanthrene		1.030	0.891	13.5	86	0.00
89	T	Anthracene		0.998	0.920	7.8	89	0.00
90	T	Carbazole		0.941	0.870	7.5	88	0.00
91	T	Di-n-butylphthalate		1.108	1.046	5.6	93	0.00
92	T	Fluoranthene		1.208	1.138	5.8	92	0.00
93	T	Benzidine		0.791	0.758	4.2	108	0.00
94	T	Pyrene		1.277	1.206	5.6	92	0.00
95	S	4-Terphenyl-d14		0.978	0.938	4.1	93	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230906lvi\
Data File : ABN0906.D
Acq On : 6 Sep 2023 10:19 am
Operator : Dakota:sz
Sample : wg1824168-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1824168,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 06 11:55:02 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 11:52:34 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
96	T	Butyl benzyl phthalate	0.504	0.461	8.5	91	0.00
103	I	IS1_Chrysene-d12	1.000	1.000	0.0	96	0.00
104	T	Benzo(a)anthracene	1.254	1.153	8.1	88	0.00
105	T	3,3'-Dichlorobenzidine	0.482	0.485	-0.6	98	0.00
106	T	Chrysene	1.184	1.082	8.6	86	0.00
107	T	Bis(2-ethylhexyl)phthalate	0.700	0.696	0.6	95	0.00
108	T	Di-n-octylphthalate	1.271	1.193	6.1	95	0.00
109	T	Benzo(b)fluoranthene	1.361	1.294	4.9	94	0.00
110	T	Benzo(k)fluoranthene	1.299	1.166	10.2	83	0.00
111	T	Benzo(a)pyrene	1.183	1.156	2.3	93	0.00
112	I	IS1_Perylene-d12	1.000	1.000	0.0	93	0.00
113	T	Indeno(1,2,3-cd)pyrene	1.060	0.922	13.0	81	0.00
114	T	Dibenzo(a,h)anthracene	1.111	0.970	12.7	82	0.00
115	T	Benzo(ghi)perylene	1.122	1.049	6.5	88	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230906lvi\
Data File : ABN0906.D
Acq On : 6 Sep 2023 10:19 am
Operator : Dakota:sz
Sample : wg1824168-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1824168,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 06 11:55:02 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 11:52:34 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.450	152	16731	4.000	ug/ml		0.00
34) IS1_Naphthalene-d8	4.722	136	58788	4.000	ug/ml	#	0.00
62) IS1_Acenaphthene-d10	6.394	164	38225	4.000	ug/ml		0.00
87) IS1_Phenanthrene-d10	7.780	188	88761	4.000	ug/ml		0.00
103) IS1_Chrysene-d12	10.266	240	93649	4.000	ug/ml		0.00
112) IS1_Perylene-d12	11.587	264	114119	4.000	ug/ml		0.00
System Monitoring Compounds							
4) 2-Fluorophenol	1.965	112	21693	5.021	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 100.42%				
7) Phenol-d6	3.186	99	25756	4.652	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 93.04%				
19) Nitrobenzene-d5	4.032	82	25640	4.831	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 193.24%#				
45) 2-Fluorobiphenyl	5.809	172	62419	5.397	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 215.88%#				
78) 2,4,6-Tribromophenol	7.146	330	15633	7.065	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 141.30%#				
95) 4-Terphenyl-d14	9.346	244	104054	4.796	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 191.84%#				
Target Compounds							Qvalue
2) n-Nitrosodimethylamine	0.892	74	13442	4.154	ug/ml		86
3) Pyridine	0.911	79	22174	4.530	ug/ml	#	57
5) Aniline	3.115	93	32078	4.284	ug/ml		99
6) 2-Chlorophenol	3.230	128	22608	4.522	ug/ml		91
8) Phenol	3.199	94	26818	4.167	ug/ml		94
9) Bis(2-chloroethyl)ether	3.236	93	19643	4.404	ug/ml	#	70
10) 1,3-Dichlorobenzene	3.382	146	28696	4.780	ug/ml		94
11) 1,4-Dichlorobenzene	3.466	146	30017	4.943	ug/ml		96
12) 1,2-Dichlorobenzene	3.615	146	28532	4.852	ug/ml		95
13) Benzyl alcohol	3.655	79	19150	4.889	ug/ml		95
14) Bis(2-chloroisopropyl)...	3.814	45	31809	4.262	ug/ml	#	58
15) 2-Methylphenol	3.823	108	19443	4.574	ug/ml		98
16) Hexachloroethane	3.951	117	11702	5.079	ug/ml	#	54
17) n-Nitrosodi-n-propylamine	3.941	70	16353	4.780	ug/ml	#	84
18) 3-Methylphenol/4-Methy...	3.997	108	20419	4.651	ug/ml		99
20) Nitrobenzene	4.050	77	24631	4.774	ug/ml		95
21) Isophorone	4.311	82	41218	4.515	ug/ml	#	92
22) 2-Nitrophenol	4.377	139	11590	4.806	ug/ml	#	96

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230906lvi\
Data File : ABN0906.D
Acq On : 6 Sep 2023 10:19 am
Operator : Dakota:sz
Sample : wg1824168-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1824168,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 06 11:55:02 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 11:52:34 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
23) 2,4-Dimethylphenol	4.507	107	22260	4.794	ug/ml	97
24) Bis(2-chloroethoxy)met...	4.585	93	26873	4.537	ug/ml#	93
25) 2,4-Dichlorophenol	4.628	162	23081	5.288	ug/ml#	94
26) 1,2,4-Trichlorobenzene	4.687	180	28801	5.395	ug/ml#	96
35) Naphthalene	4.737	128	64719	4.535	ug/ml	99
36) Benzoic Acid	4.619	105	13842	6.194	ug/ml	94
37) 4-Chloroaniline	4.846	65	8622	5.118	ug/ml	85
38) Hexachlorobutadiene	4.914	225	17994	6.197	ug/ml	94
39) p-Chloro-m-cresol	5.384	107	19527	5.239	ug/ml	93
40) 2-Methylnaphthalene	5.421	142	46288	4.991	ug/ml	94
41) 1-Methylnaphthalene	5.508	115	16109	5.018	ug/ml	93
42) Hexachlorocyclopentadiene	5.598	237	23364	6.652	ug/ml	98
43) 2,4,6-Trichlorophenol	5.729	196	20346	5.943	ug/ml	96
44) 2,4,5-Trichlorophenol	5.757	196	21650	6.308	ug/ml	96
46) 2-Chloronaphthalene	5.872	162	52357	5.146	ug/ml#	92
47) 2-Nitroaniline	6.008	138	15275	5.194	ug/ml	89
48) 1,4-Dinitrobenzene	6.148	168	7280	5.300	ug/ml	91
49) 1,3-Dinitrobenzene	6.223	168	8314	5.191	ug/ml#	1
50) Dimethyl phthalate	6.235	163	65669	5.523	ug/ml#	97
51) Acenaphthylene	6.254	152	85149	5.521	ug/ml	99
52) 2,6-Dinitrotoluene	6.263	165	13165	5.363	ug/ml#	86
53) 1,2-Dinitrobenzene	6.291	168	4992	5.203	ug/ml#	85
63) 3-Nitroaniline	6.403	138	14777	4.858	ug/ml	89
64) Acenaphthene	6.425	154	46303	4.448	ug/ml	90
65) 2,4-Dinitrophenol	6.506	184	8762	5.780	ug/ml#	89
66) Dibenzofuran	6.593	168	81888	4.933	ug/ml	89
67) 2,4-Dinitrotoluene	6.636	165	17845	4.766	ug/ml	90
68) 4-Nitrophenol	6.642	65	12918	5.133	ug/ml#	87
69) 2,3,5,6-Tetrachlorophenol	6.701	232	20356	5.819	ug/ml	99
70) 2,3,4,6-Tetrachlorophenol	6.742	232	20654	5.881	ug/ml	98
71) Diethyl phthalate	6.916	149	67323	4.805	ug/ml	97
72) Fluorene	6.916	166	60774	4.541	ug/ml	91
73) 4-Chlorophenyl phenyl ...	6.959	204	31908	4.906	ug/ml#	84
74) 4-Nitroaniline	6.972	138	14166	4.690	ug/ml#	80
75) 4,6-Dinitro-o-cresol	7.012	198	12318	5.976	ug/ml#	62
76) NDPA/DPA	7.081	169	52764	4.622	ug/ml	93
77) Azobenzene	7.102	77	57992	4.833	ug/ml	93
79) 4-Bromophenyl phenyl e...	7.410	248	21944	5.403	ug/ml#	79
80) Hexachlorobenzene	7.435	284	29407	5.785	ug/ml#	82
81) Pentachlorophenol	7.640	266	18036	6.275	ug/ml	97
88) Phenanthrene	7.802	178	98838	4.323	ug/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230906lvi\
Data File : ABN0906.D
Acq On : 6 Sep 2023 10:19 am
Operator : Dakota:sz
Sample : wg1824168-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1824168,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 06 11:55:02 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 11:52:34 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
89)	Anthracene	7.848	178	102107	4.611	ug/ml	98
90)	Carbazole	8.038	167	96501	4.623	ug/ml	99
91)	Di-n-butylphthalate	8.482	149	116024	4.720	ug/ml	99
92)	Fluoranthene	8.914	202	126245	4.710	ug/ml#	91
93)	Benzidine	9.107	184	84062	4.786	ug/ml#	95
94)	Pyrene	9.113	202	133779	4.722	ug/ml	99
96)	Butyl benzyl phthalate	9.878	149	51119	4.575	ug/ml#	85
104)	Benzo(a)anthracene	10.260	228	134999	4.599	ug/ml	100
105)	3,3'-Dichlorobenzidine	10.297	252	56816	5.035	ug/ml#	94
106)	Chrysene	10.288	228	126631	4.567	ug/ml	98
107)	Bis(2-ethylhexyl)phtha...	10.487	149	81512	4.971	ug/ml#	85
108)	Di-n-octylphthalate	11.106	149	139662	4.693	ug/ml#	72
109)	Benzo(b)fluoranthene	11.255	252	151502M3	4.755	ug/ml	
110)	Benzo(k)fluoranthene	11.280	252	136435	4.486	ug/ml#	94
111)	Benzo(a)pyrene	11.535	252	135336	4.886	ug/ml#	92
113)	Indeno(1,2,3-cd)pyrene	12.482	276	131579	4.350	ug/mL#	87
114)	Dibenzo(a,h)anthracene	12.520	278	138344	4.364	ug/ml#	88
115)	Benzo(ghi)perylene	12.681	276	149576	4.674	ug/ml#	84

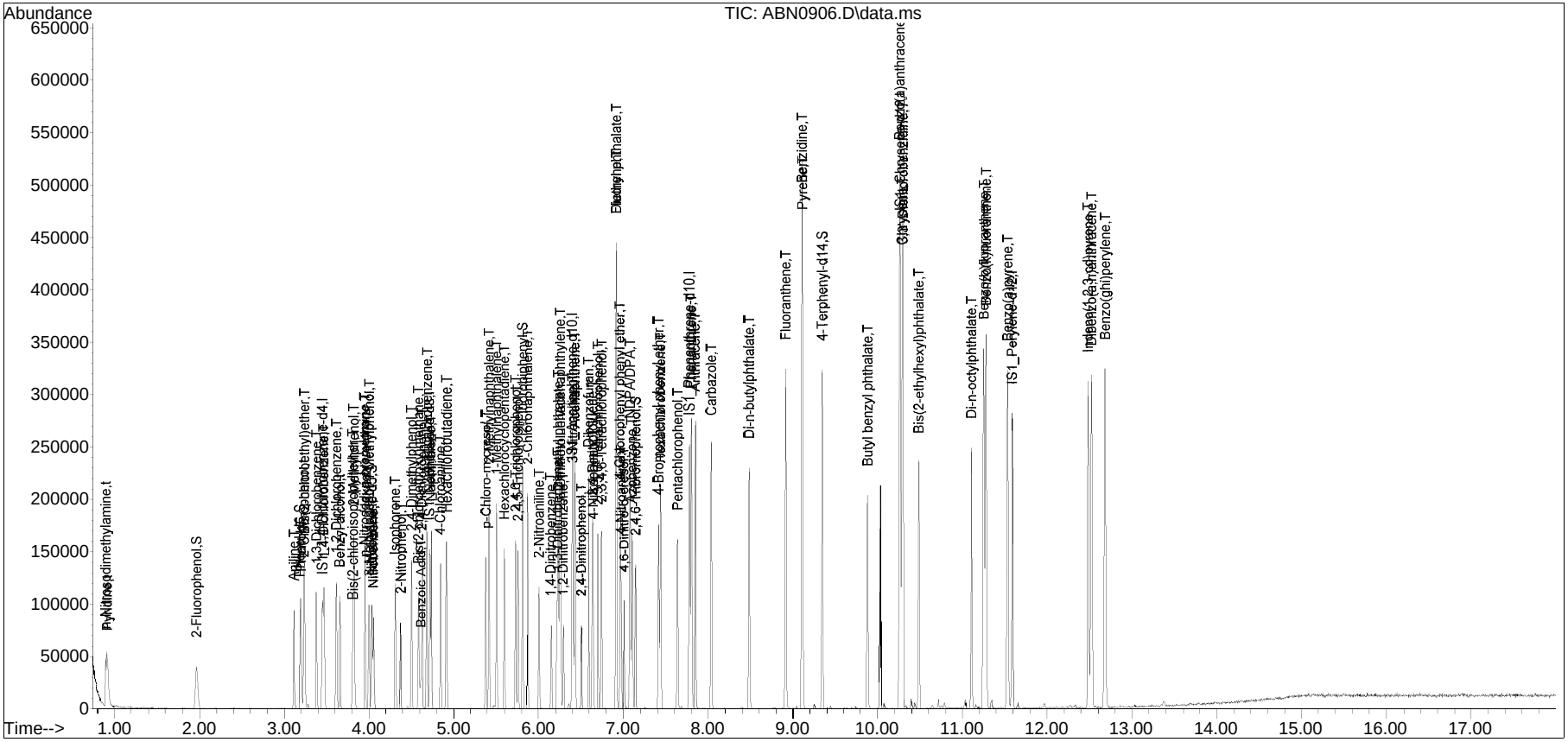
(#) = qualifier out of range (m) = manual integration (+) = signals summed

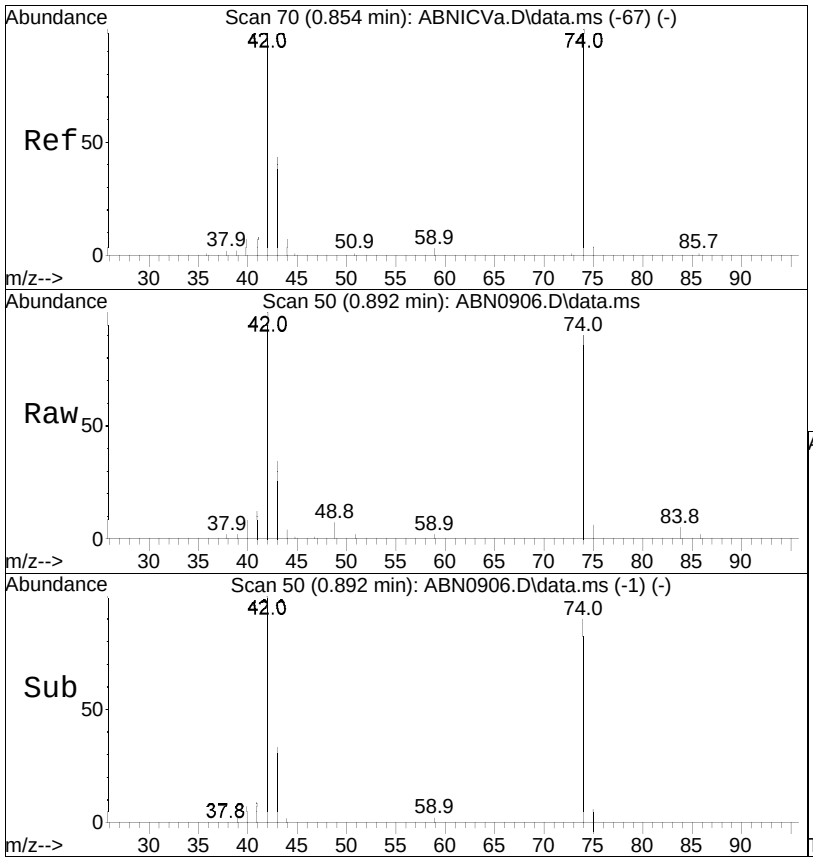
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230906lvi\
Data File : ABN0906.D
Acq On : 6 Sep 2023 10:19 am
Operator : Dakota:sz
Sample : wg1824168-3,32,,ABN LVI CCV Lot # 10166
Misc : wg1824168,,ical19934
ALS Vial : 96 Sample Multiplier: 1

Quant Time: Sep 06 11:55:02 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 11:52:34 2023
Response via : Initial Calibration

Sub List : ABNical - ABN ical sublist

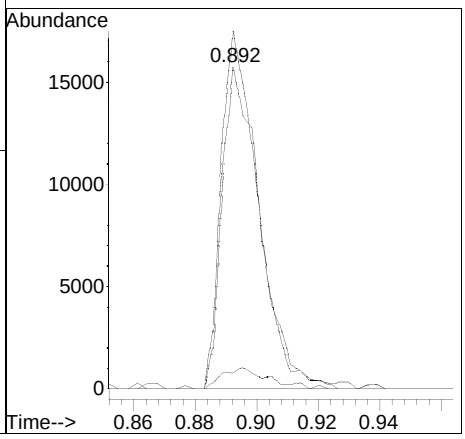


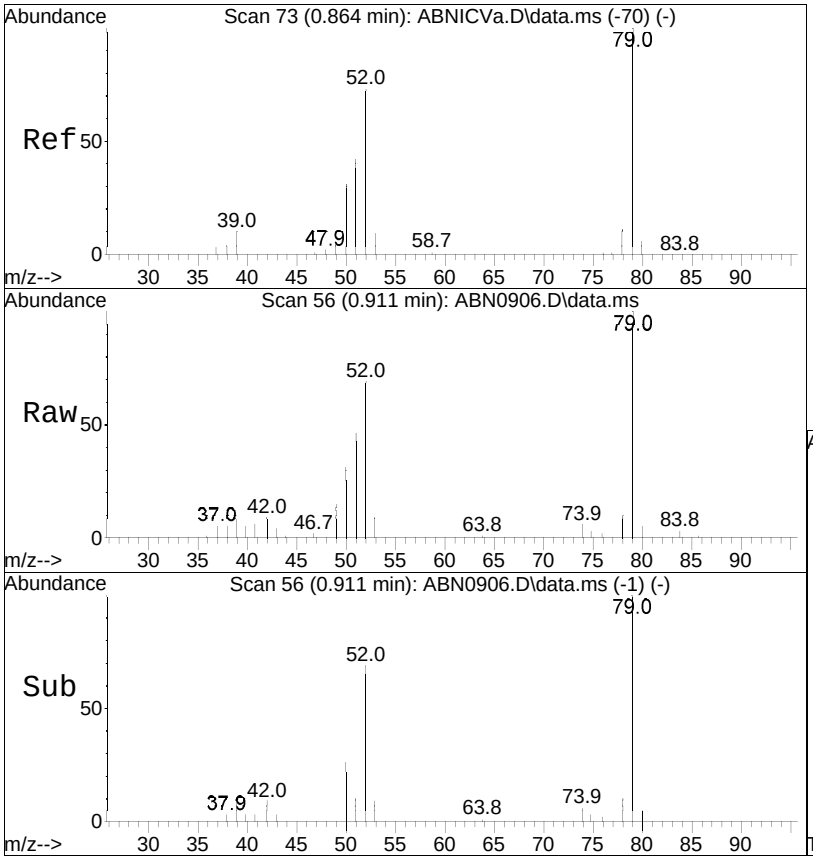


#2
n-Nitrosodimethylamine
Concen: 4.15 ug/ml
RT: 0.892 min Scan# 50
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 74 Resp: 13442

Ion	Ratio	Lower	Upper
74	100		
42	108.5	100.0	150.0
44	8.0	6.7	10.1

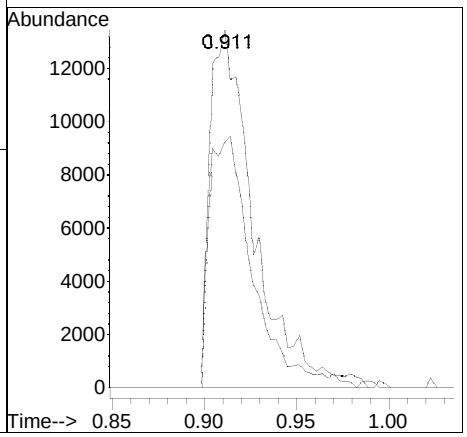


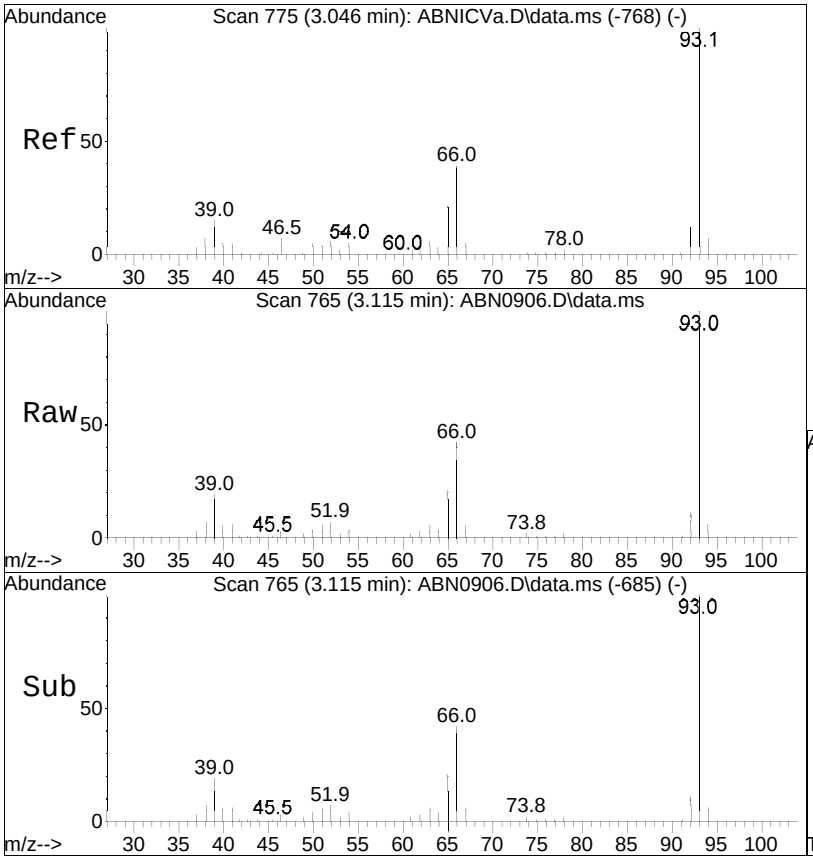


#3
Pyridine
Concen: 4.53 ug/ml
RT: 0.911 min Scan# 56
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 79 Resp: 22174

Ion	Ratio	Lower	Upper
79	100		
52	69.6	93.1	139.7#

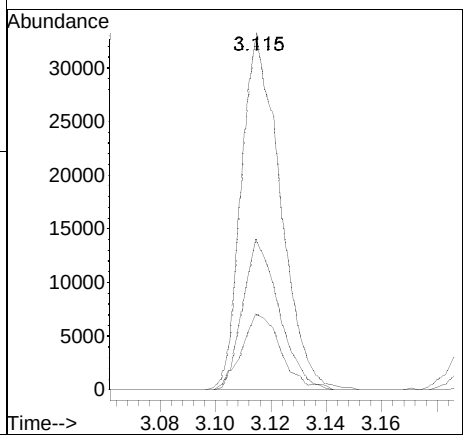


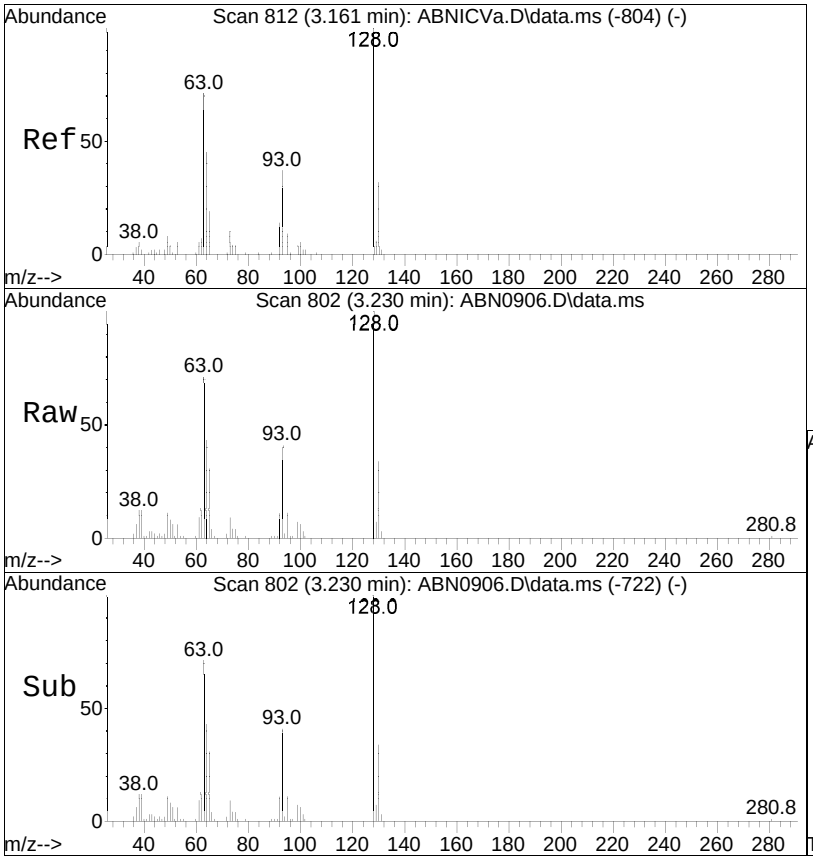


#5
Aniline
Concen: 4.28 ug/ml
RT: 3.115 min Scan# 765
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 93 Resp: 32078

Ion	Ratio	Lower	Upper
93	100		
66	39.9	32.6	49.0
65	21.4	17.6	26.4

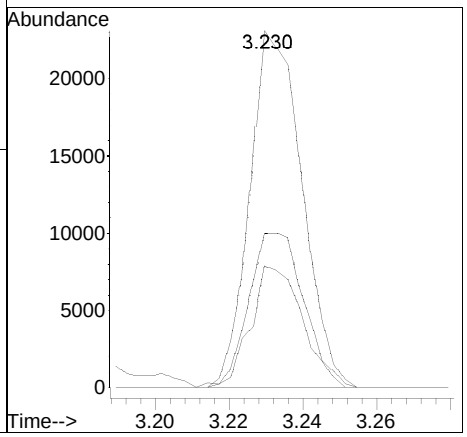


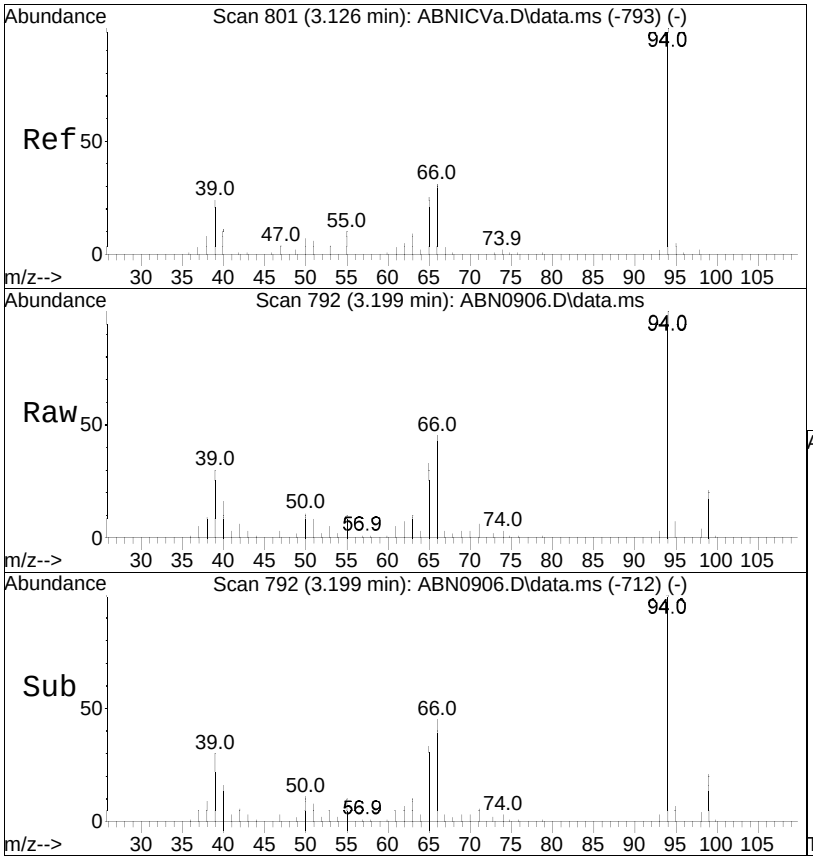


#6
2-Chlorophenol
Concen: 4.52 ug/ml
RT: 3.230 min Scan# 802
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:128 Resp: 22608

Ion	Ratio	Lower	Upper
128	100		
64	46.1	45.1	67.7
130	33.7	26.2	39.4

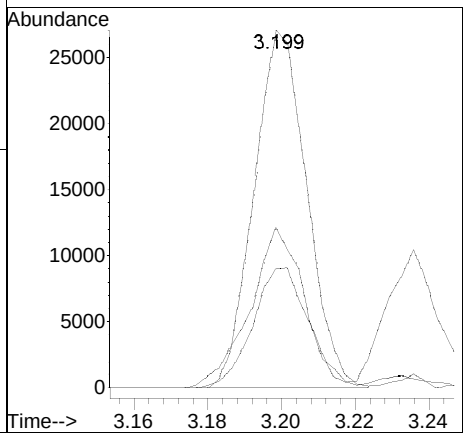


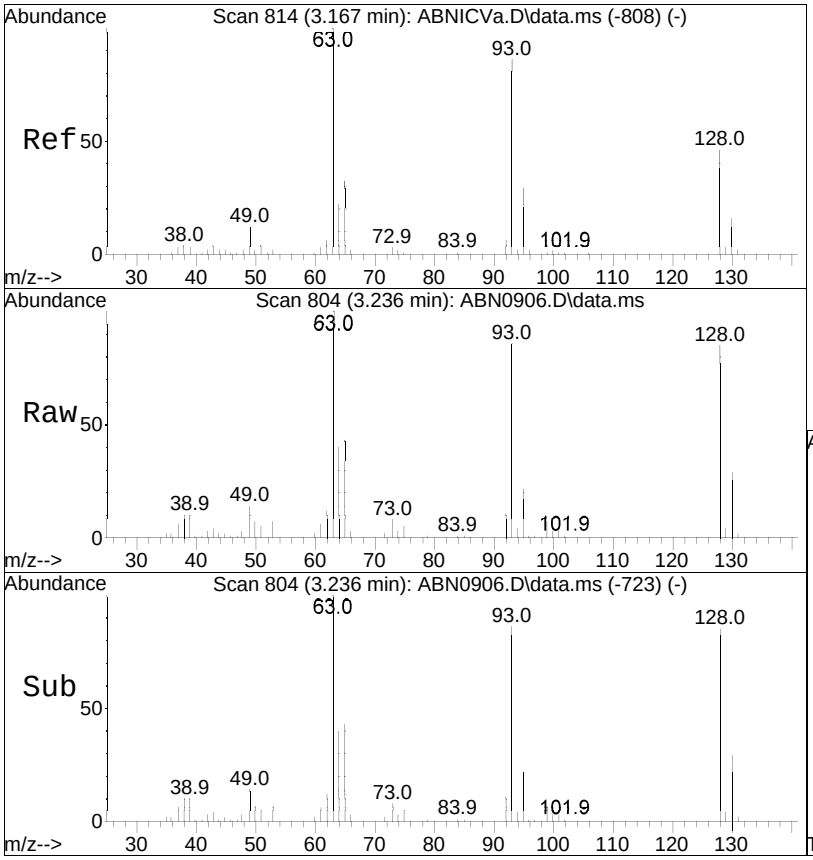


#8
Phenol
Concen: 4.17 ug/ml
RT: 3.199 min Scan# 792
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 94 Resp: 26818

Ion	Ratio	Lower	Upper
94	100		
65	35.2	26.0	39.0
66	46.5	33.8	50.8

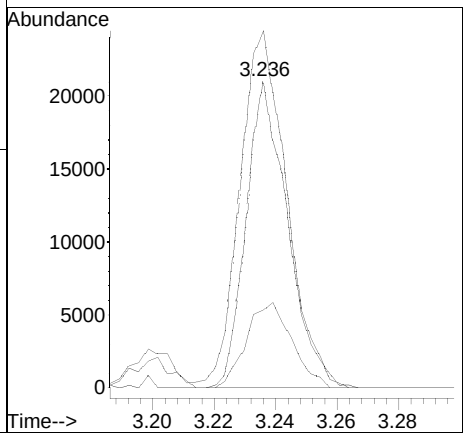


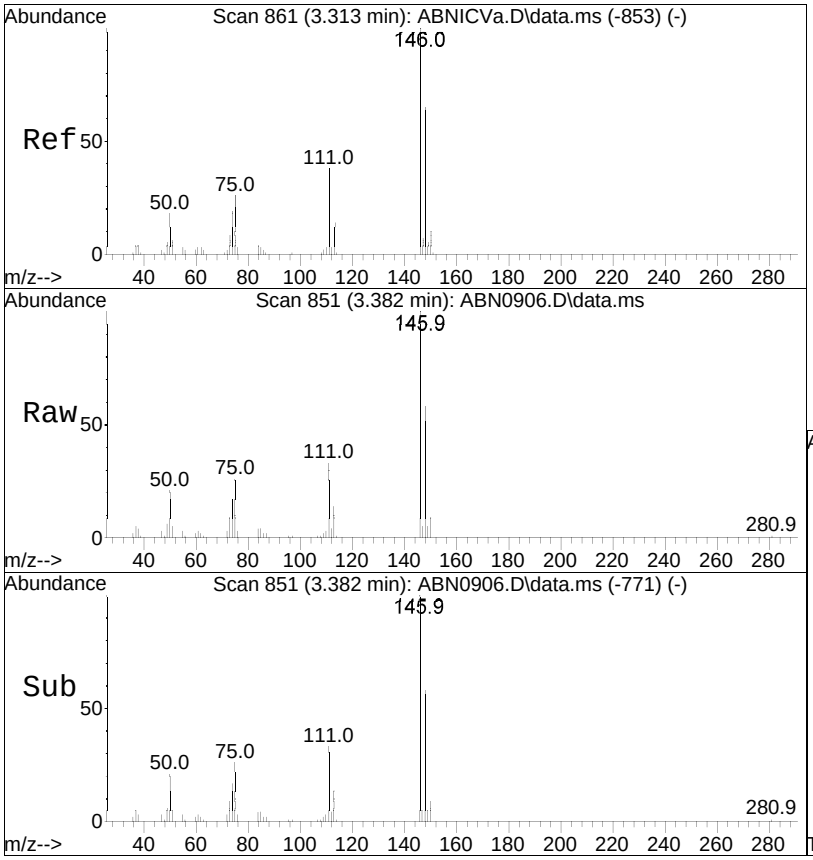


#9
Bis(2-chloroethyl)ether
Concen: 4.40 ug/ml
RT: 3.236 min Scan# 804
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 93 Resp: 19643

Ion	Ratio	Lower	Upper
93	100		
63	130.9	74.6	111.8#
95	30.6	25.9	38.9

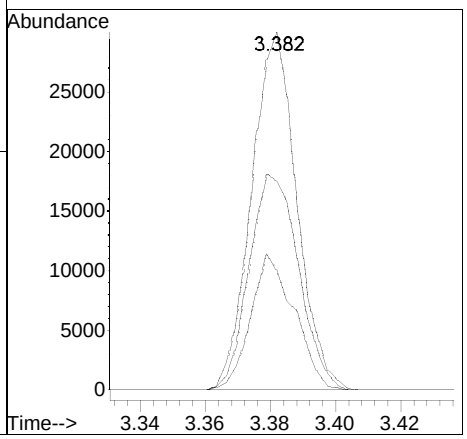


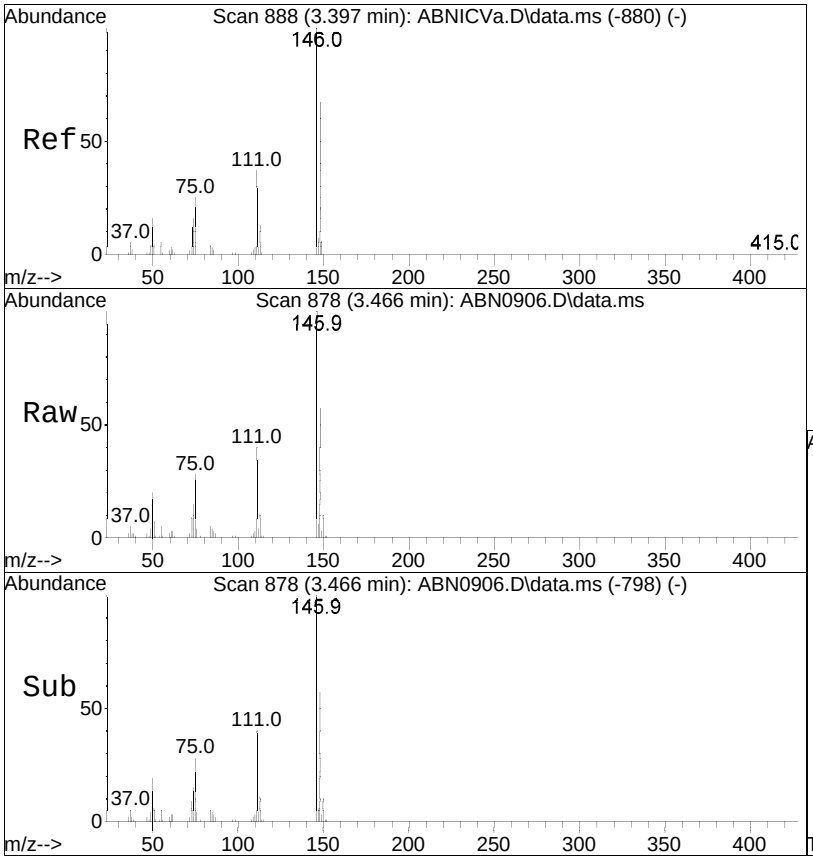


#10
1,3-Dichlorobenzene
Concen: 4.78 ug/ml
RT: 3.382 min Scan# 851
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:146 Resp: 28696

Ion	Ratio	Lower	Upper
146	100		
111	36.7	34.3	51.5
148	65.9	50.8	76.2

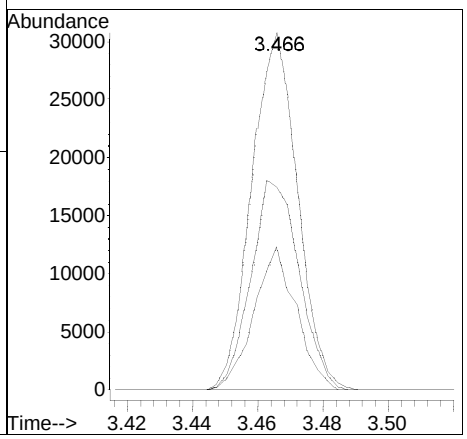


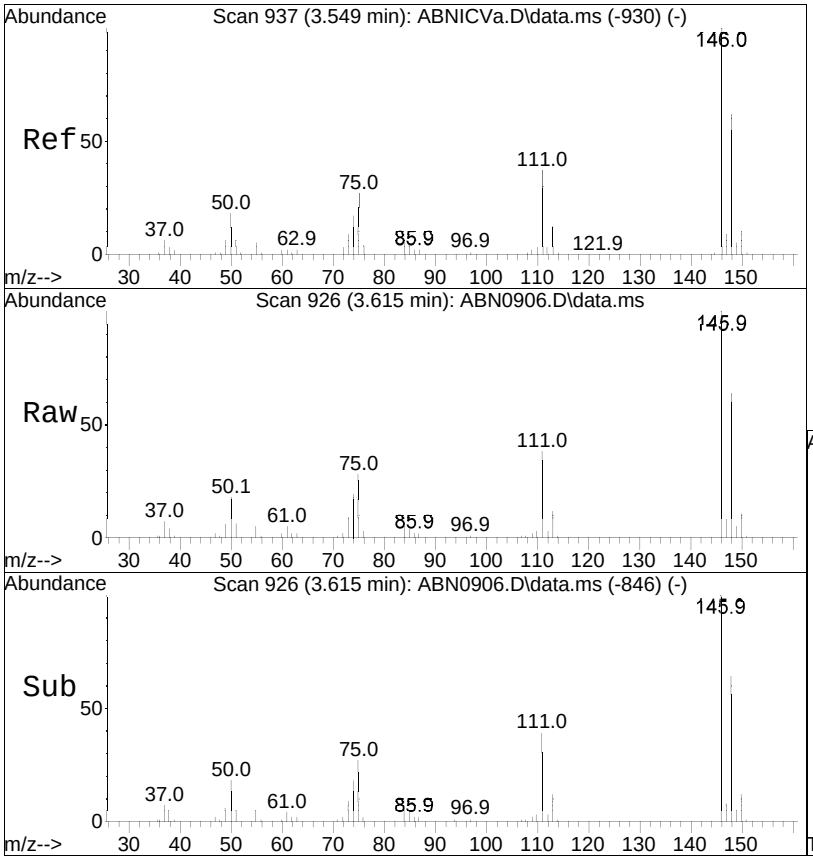


#11
1,4-Dichlorobenzene
Concen: 4.94 ug/ml
RT: 3.466 min Scan# 878
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:146 Resp: 30017

Ion	Ratio	Lower	Upper
146	100		
148	61.6	50.7	76.1
111	37.1	33.4	50.0

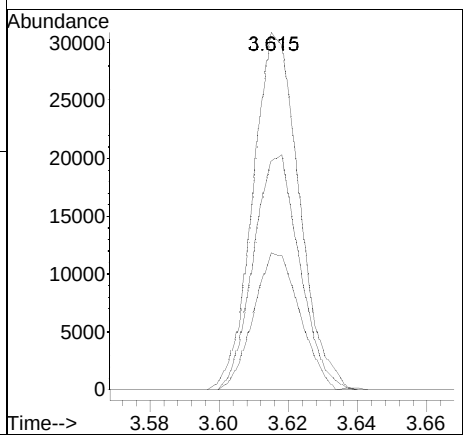


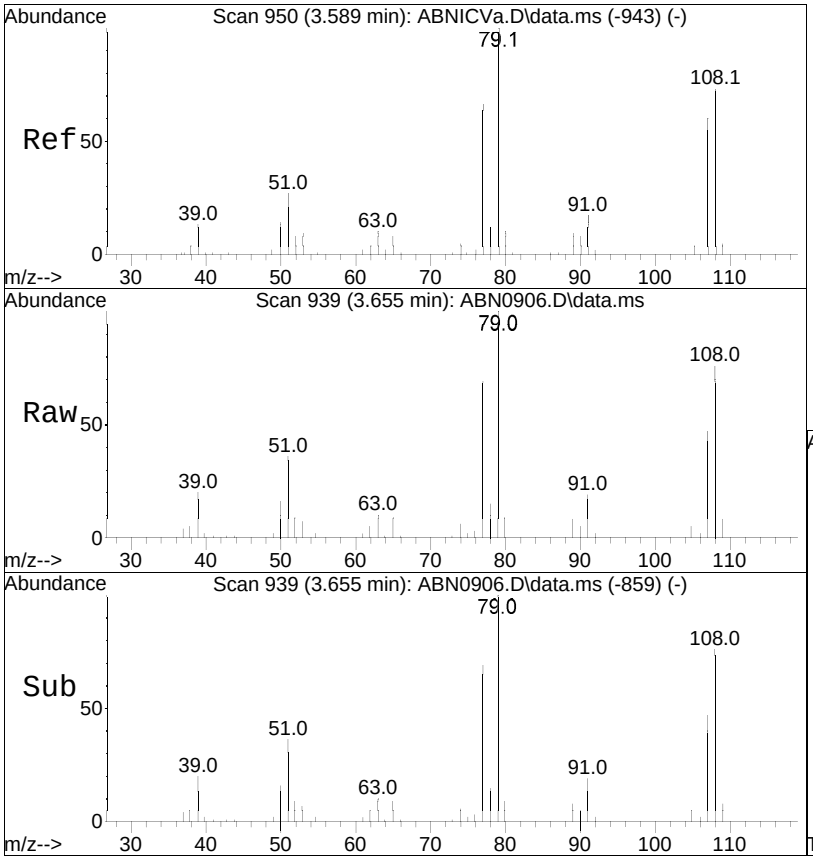


#12
1,2-Dichlorobenzene
Concen: 4.85 ug/ml
RT: 3.615 min Scan# 926
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:146 Resp: 28532

Ion	Ratio	Lower	Upper
146	100		
111	38.5	34.6	52.0
148	65.8	50.2	75.4

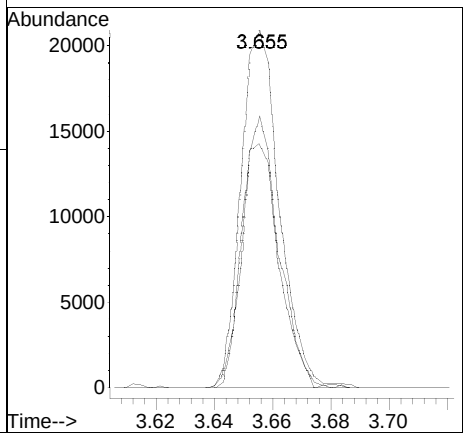


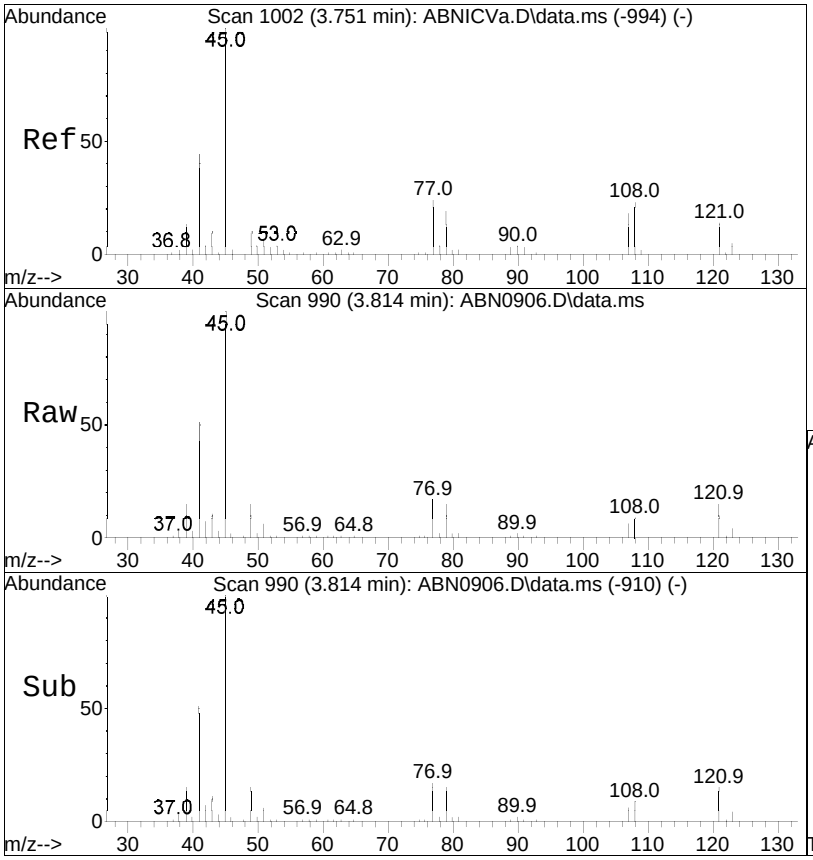


#13
Benzyl alcohol
Concen: 4.89 ug/ml
RT: 3.655 min Scan# 939
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 79 Resp: 19150

Ion	Ratio	Lower	Upper
79	100		
77	67.5	54.9	82.3
108	71.6	63.1	94.7

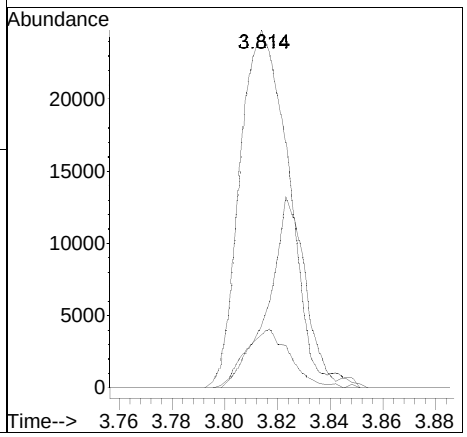


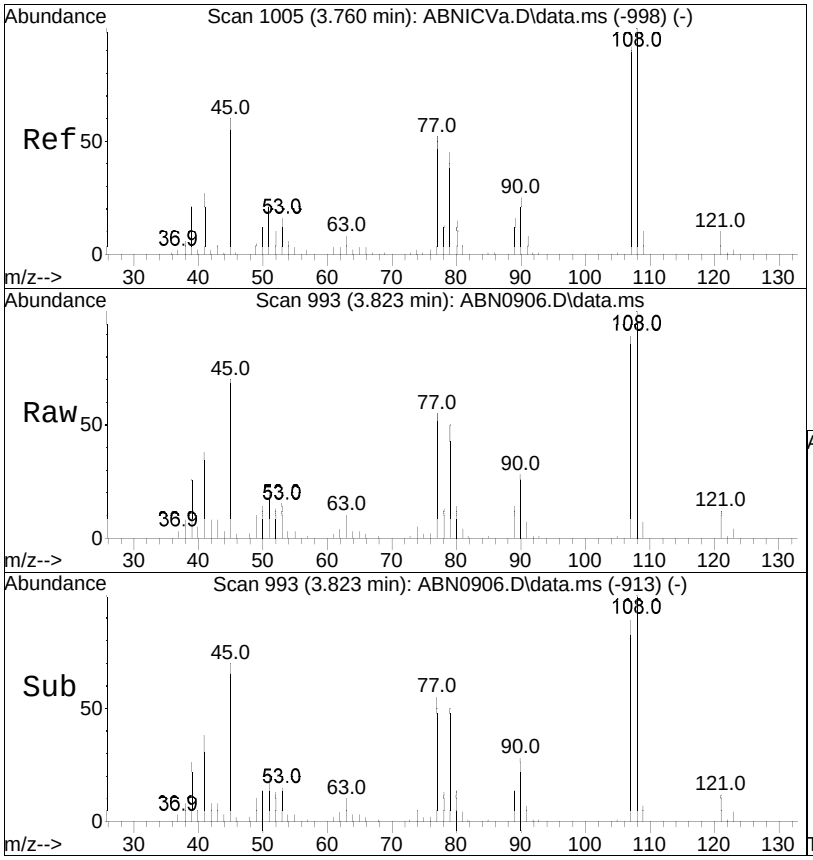


#14
Bis(2-chloroisopropyl)ether
Concen: 4.26 ug/ml
RT: 3.814 min Scan# 990
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 45 Resp: 31809

Ion	Ratio	Lower	Upper
45	100		
121	15.3	9.8	14.6#
77	41.2	6.1	9.1#

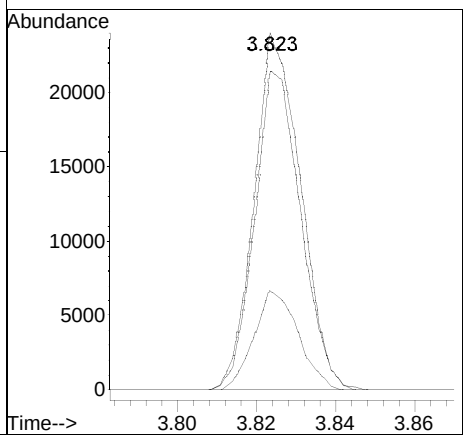


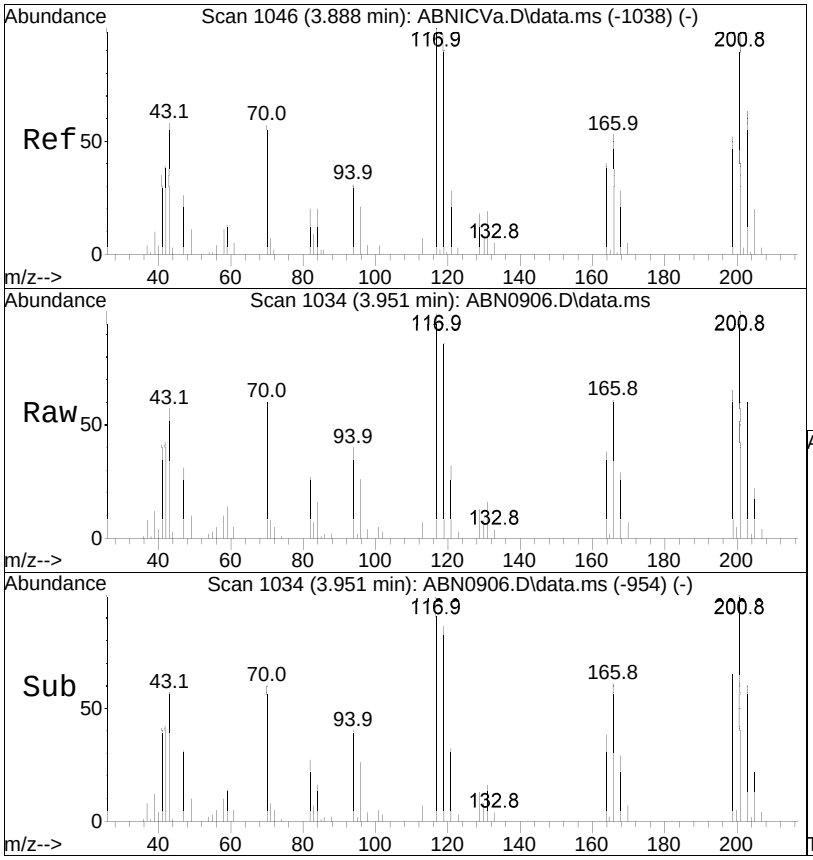


#15
2-Methylphenol
Concen: 4.57 ug/ml
RT: 3.823 min Scan# 993
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:108 Resp: 19443

Ion	Ratio	Lower	Upper
108	100		
107	89.0	70.7	106.1
90	26.7	18.7	28.1

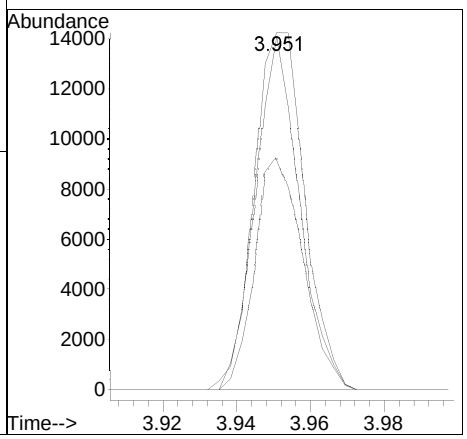


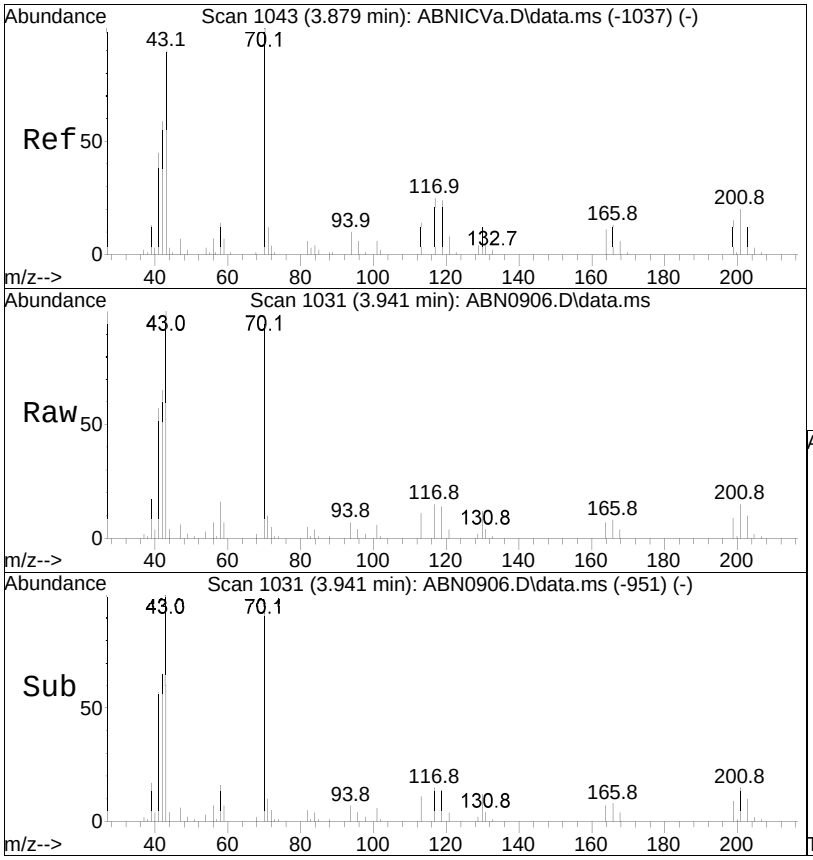


#16
Hexachloroethane
Concen: 5.08 ug/ml
RT: 3.951 min Scan# 1034
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:117 Resp: 11702

Ion	Ratio	Lower	Upper
117	100		
201	115.1	58.6	87.8#
199	71.7	36.9	55.3#

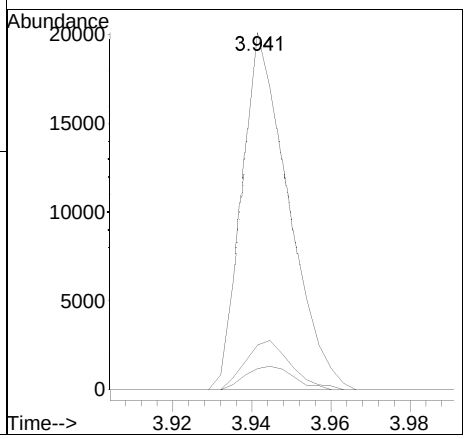


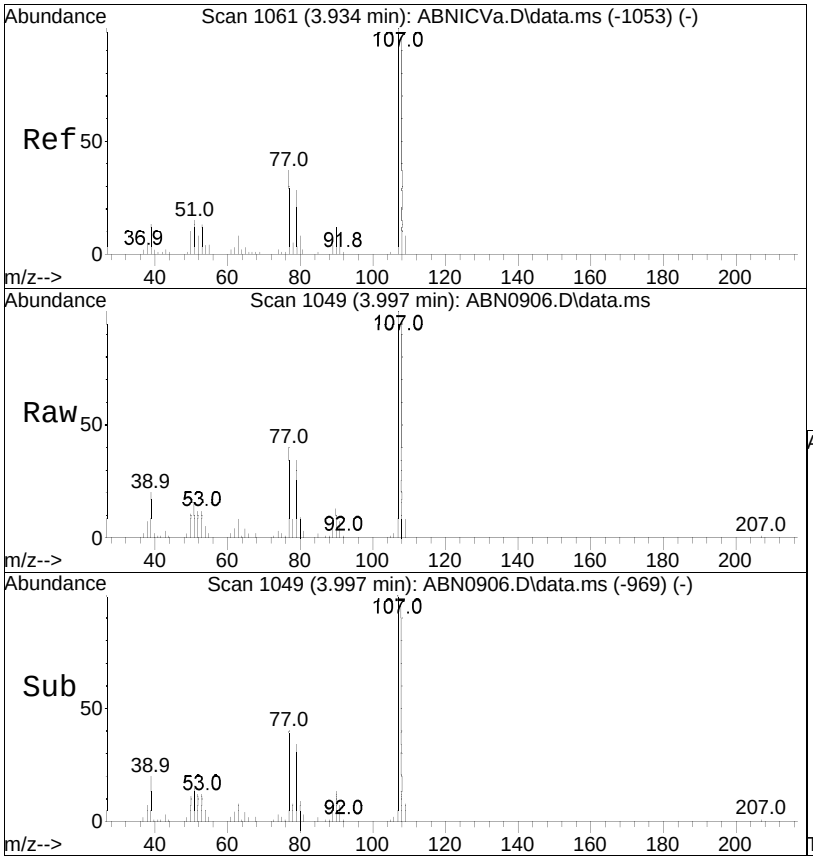


#17
n-Nitrosodi-n-propylamine
Concen: 4.78 ug/ml
RT: 3.941 min Scan# 1031
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 70 Resp: 16353

Ion	Ratio	Lower	Upper
70	100		
130	13.4	18.2	27.4#
101	6.8	7.8	11.8#

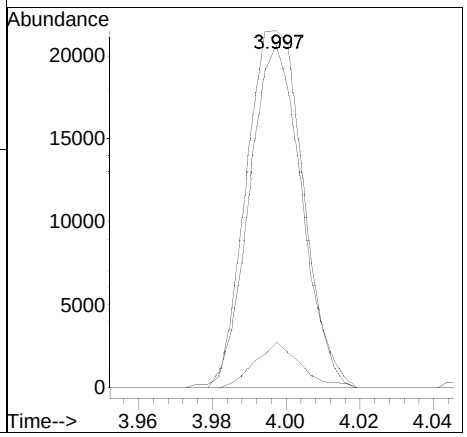


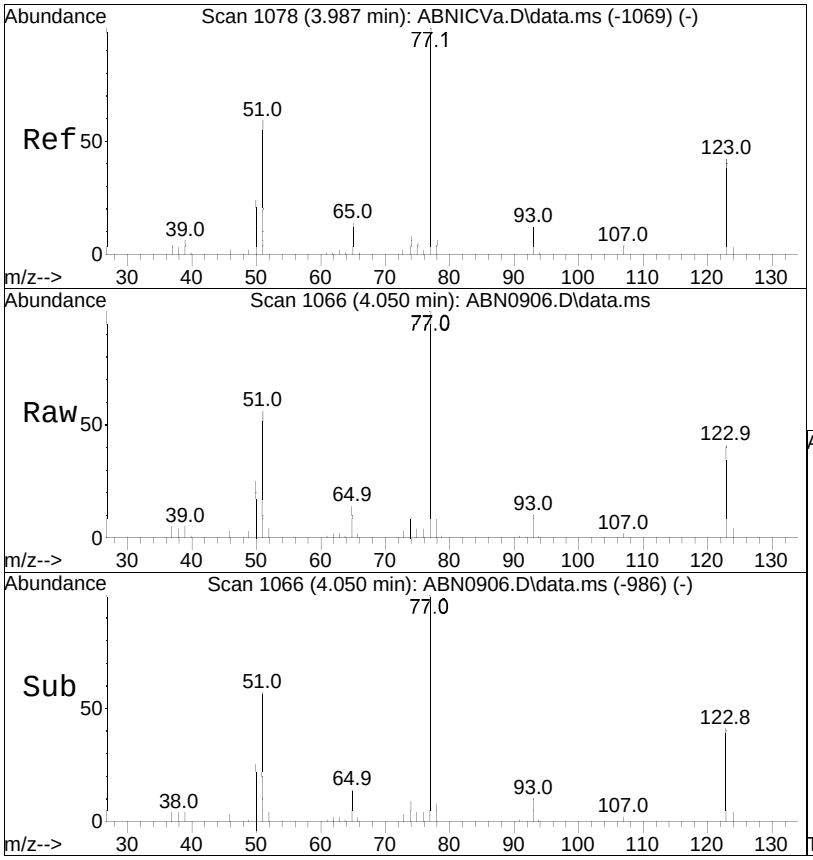


#18
3-Methylphenol/4-Methylphenol
Concen: 4.65 ug/ml
RT: 3.997 min Scan# 1049
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:108 Resp: 20419

Ion	Ratio	Lower	Upper
108	100		
107	112.1	88.6	132.8
90	11.6	8.8	13.2

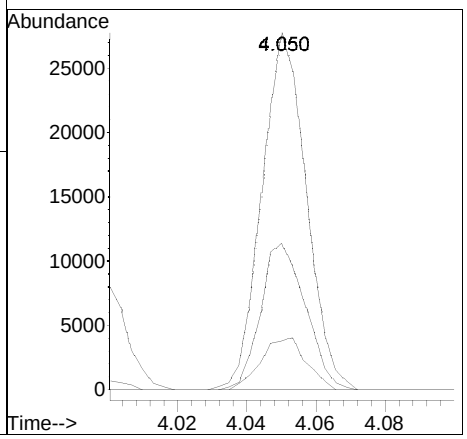


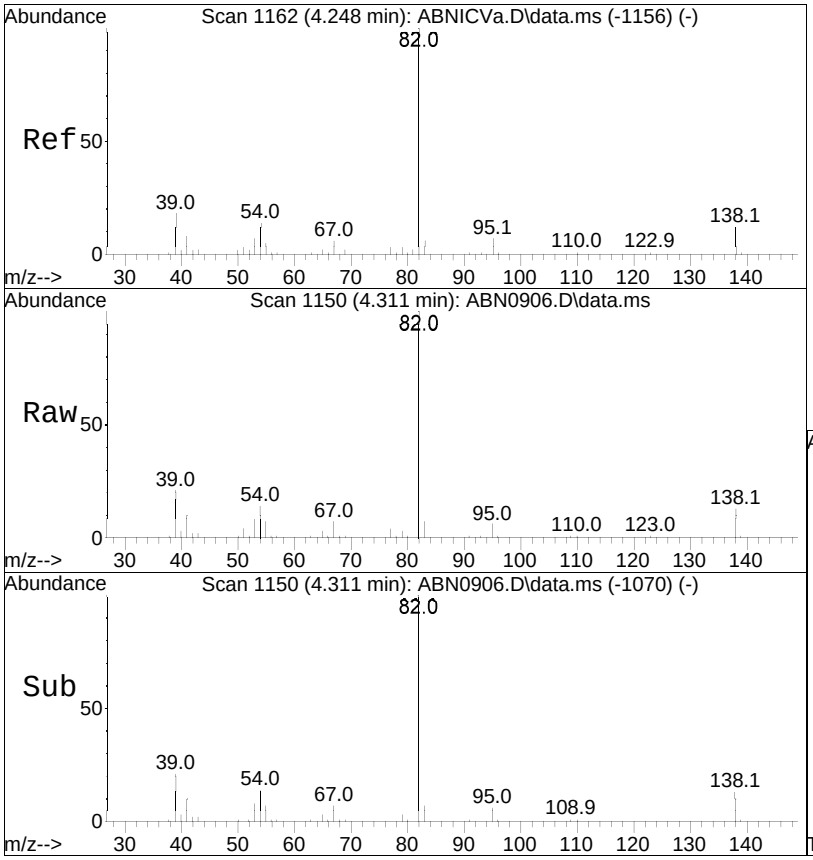


#20
Nitrobenzene
Concen: 4.77 ug/ml
RT: 4.050 min Scan# 1066
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 77 Resp: 24631

Ion	Ratio	Lower	Upper
77	100		
123	41.5	36.3	54.5
65	14.9	11.6	17.4

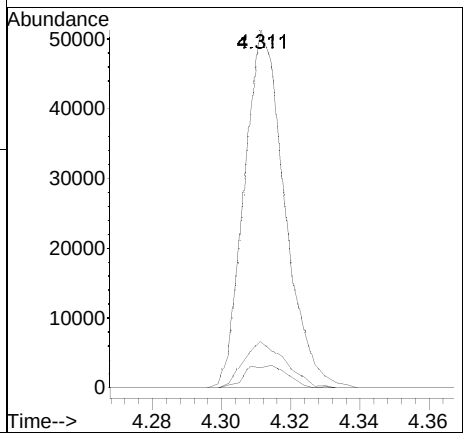


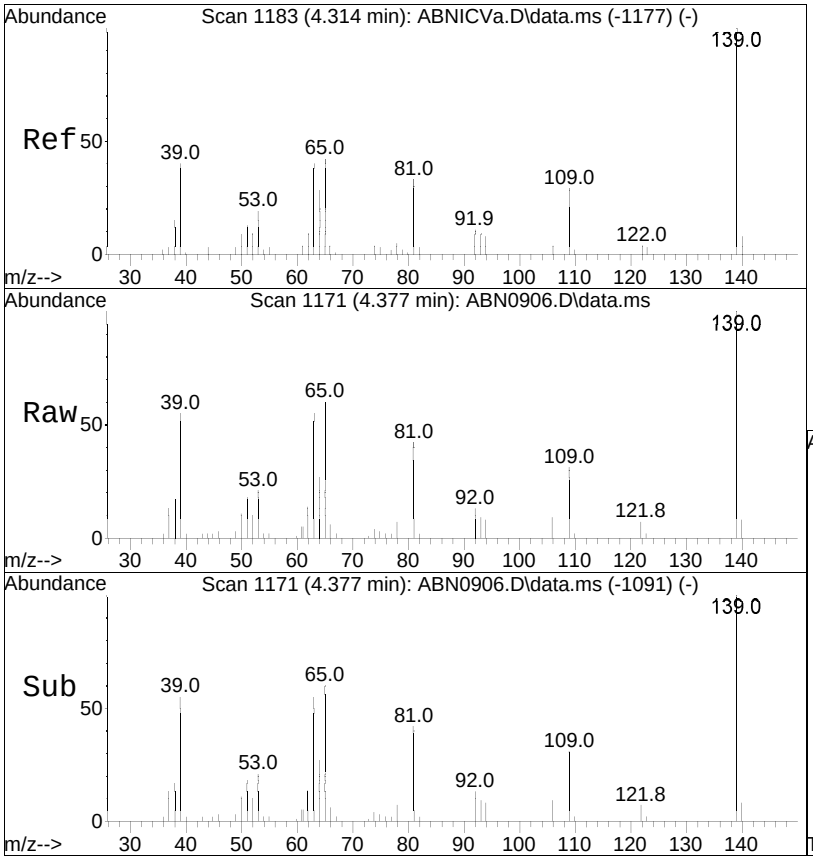


#21
Isophorone
Concen: 4.51 ug/ml
RT: 4.311 min Scan# 1150
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 82 Resp: 41218

Ion	Ratio	Lower	Upper
82	100		
138	13.6	14.7	22.1#
95	6.8	5.2	7.8

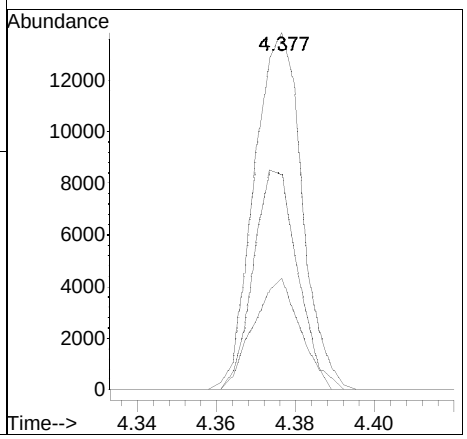


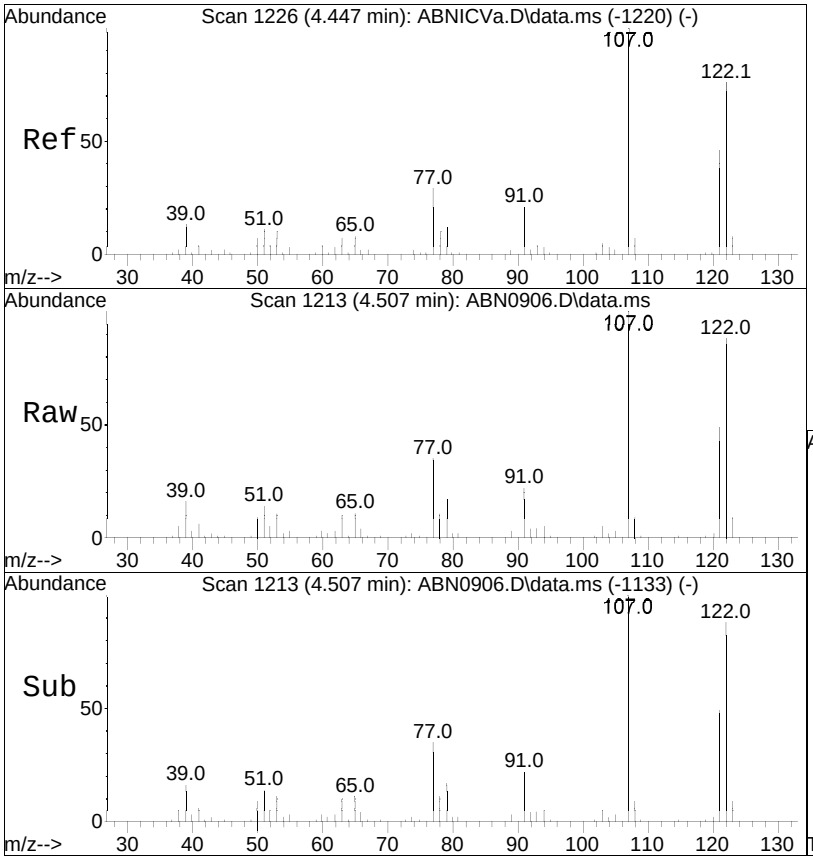


#22
2-Nitrophenol
Concen: 4.81 ug/ml
RT: 4.377 min Scan# 1171
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:139 Resp: 11590

Ion	Ratio	Lower	Upper
139	100		
109	30.3	19.4	29.0#
65	57.0	46.1	69.1

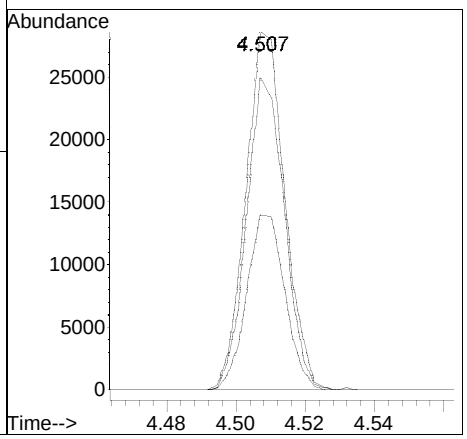


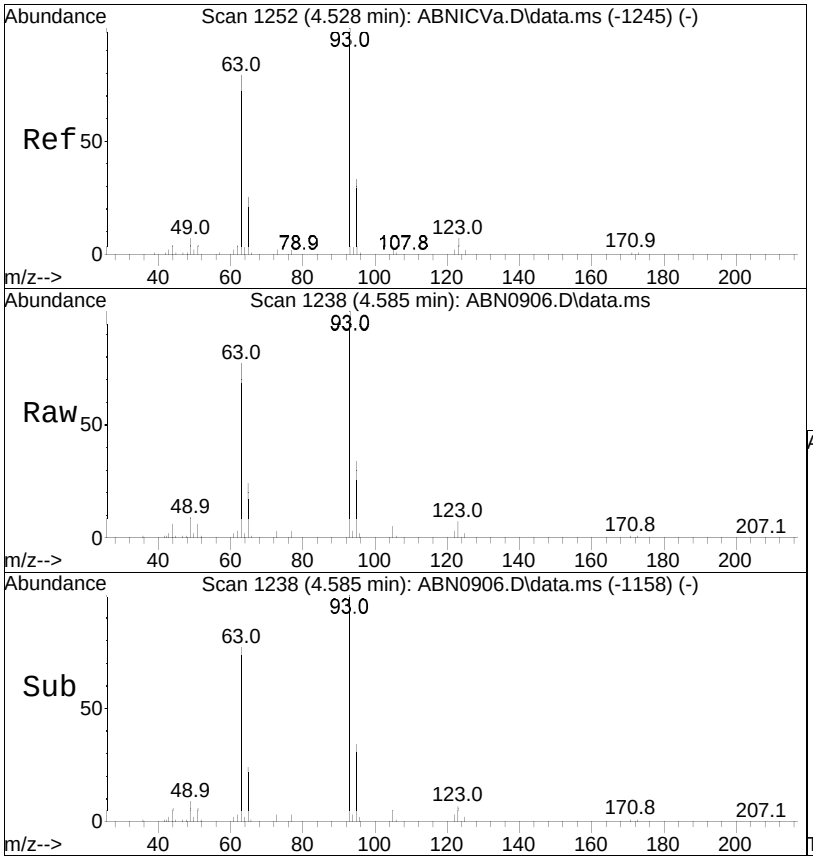


#23
2,4-Dimethylphenol
Concen: 4.79 ug/ml
RT: 4.507 min Scan# 1213
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:107 Resp: 22260

Ion	Ratio	Lower	Upper
107	100		
121	48.1	40.0	60.0
122	84.6	70.2	105.4

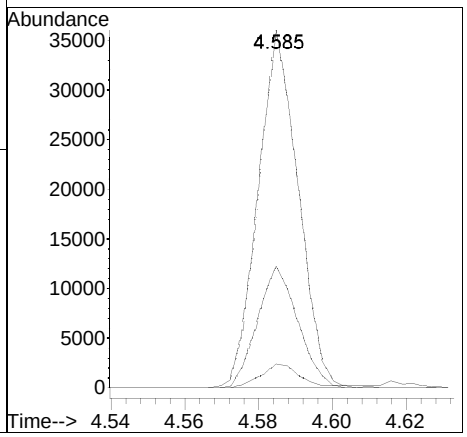


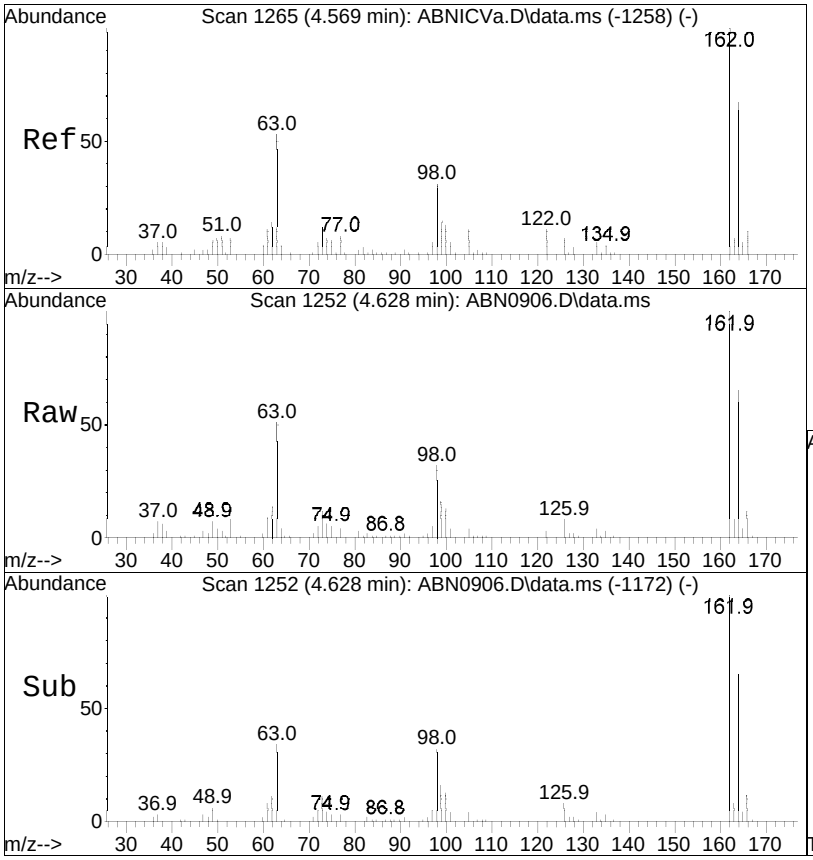


#24
Bis(2-chloroethoxy)methane
Concen: 4.54 ug/ml
RT: 4.585 min Scan# 1238
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 93 Resp: 26873

Ion	Ratio	Lower	Upper
93	100		
95	34.5	25.8	38.8
123	7.2	10.1	15.1#

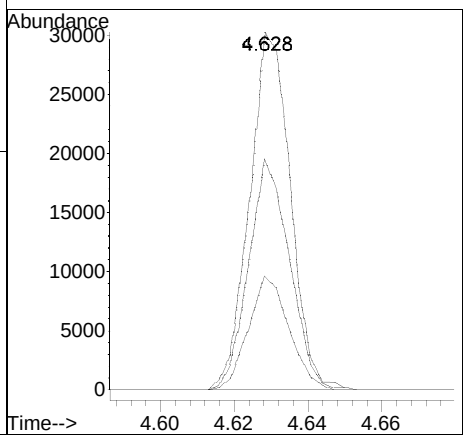


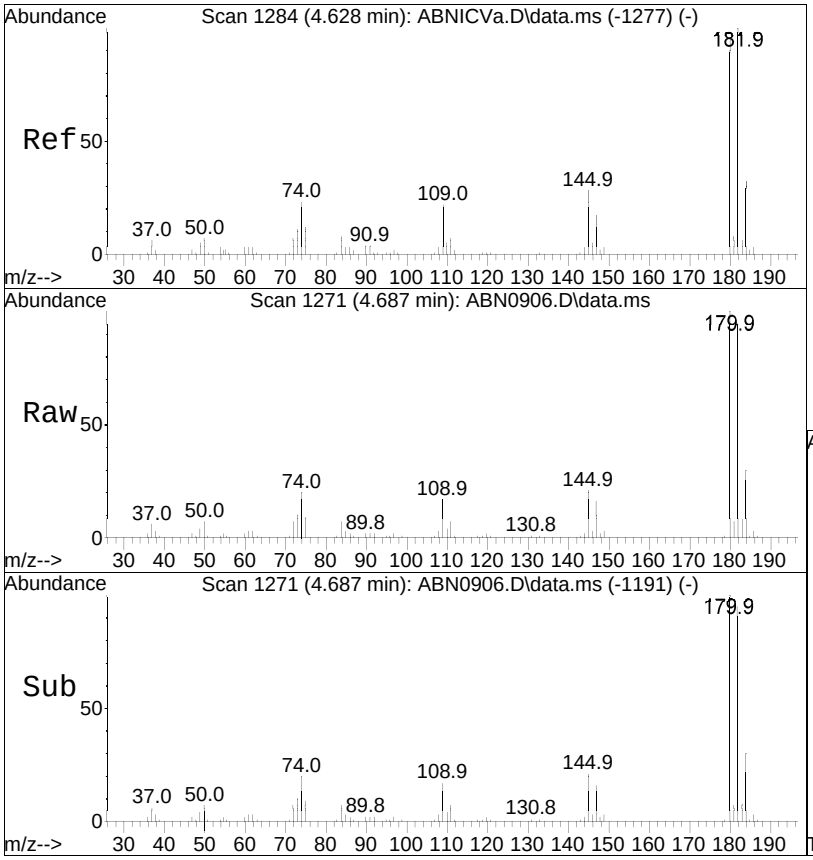


#25
2,4-Dichlorophenol
Concen: 5.29 ug/ml
RT: 4.628 min Scan# 1252
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:162 Resp: 23081

Ion	Ratio	Lower	Upper
162	100		
164	64.8	51.0	76.4
98	31.7	32.2	48.2#

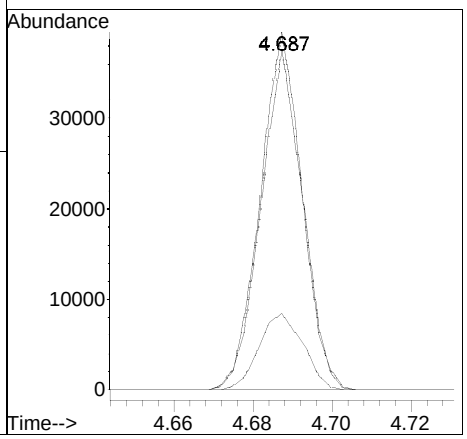


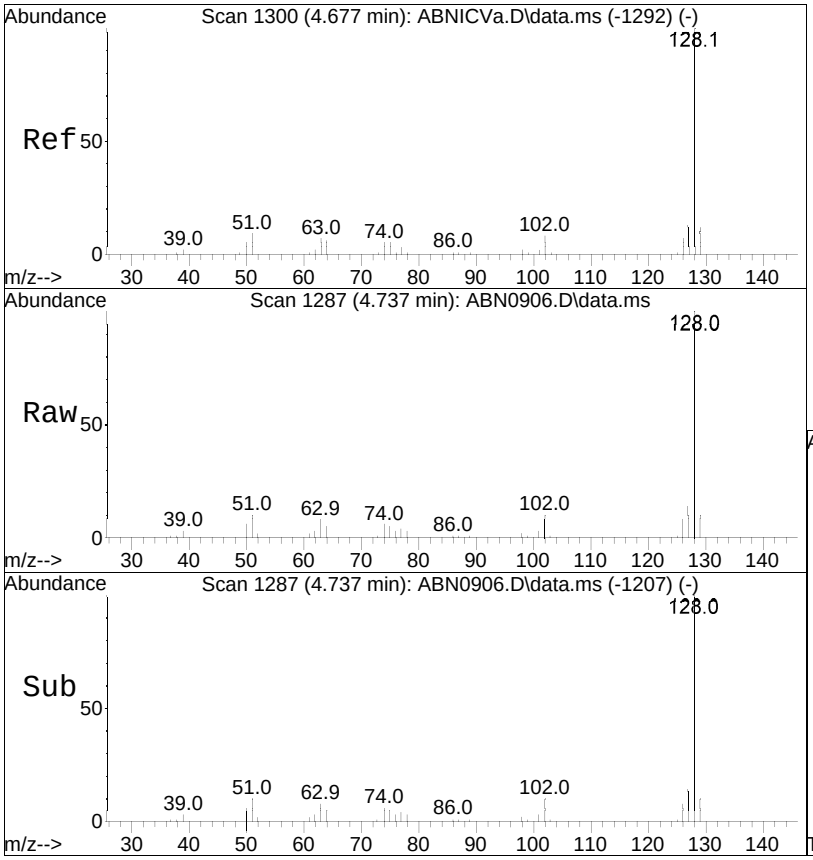


#26
1,2,4-Trichlorobenzene
Concen: 5.39 ug/ml
RT: 4.687 min Scan# 1271
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:180 Resp: 28801

Ion	Ratio	Lower	Upper
180	100		
182	94.9	76.0	114.0
145	22.6	25.7	38.5#

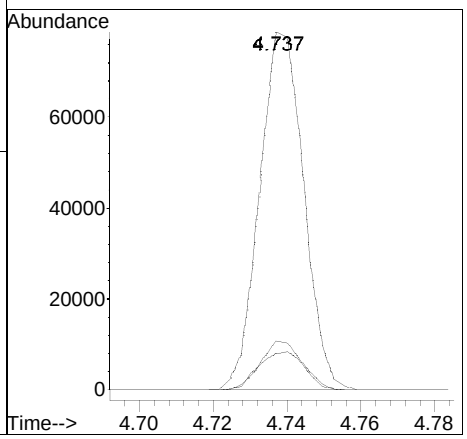


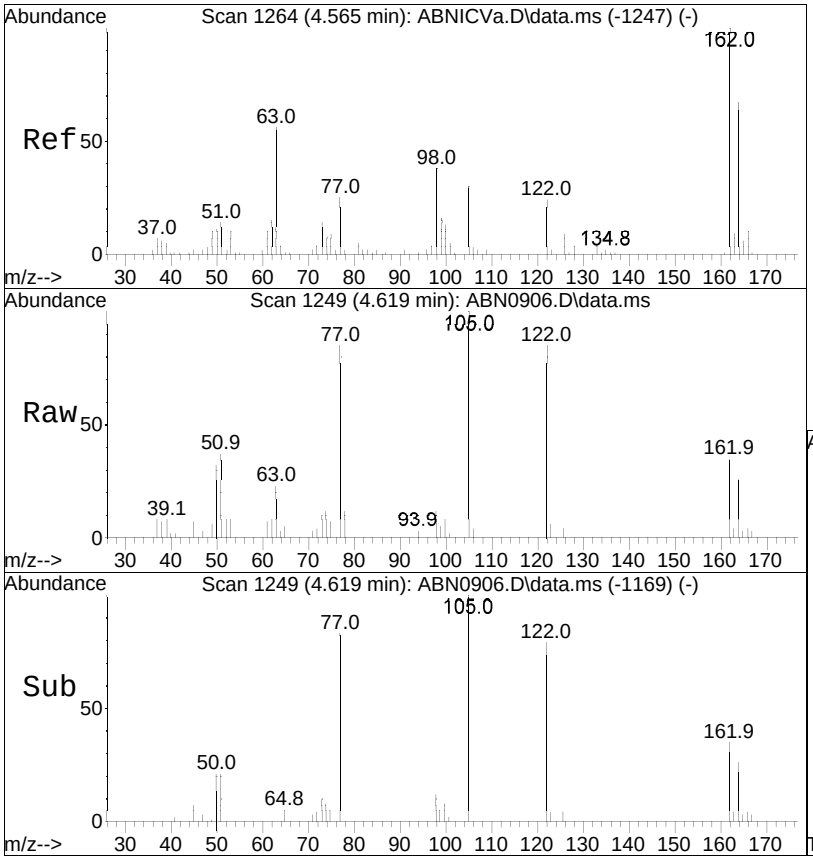


#35
Naphthalene
Concen: 4.53 ug/ml
RT: 4.737 min Scan# 1287
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:128 Resp: 64719

Ion	Ratio	Lower	Upper
128	100		
129	11.3	8.7	13.1
127	13.2	10.3	15.5

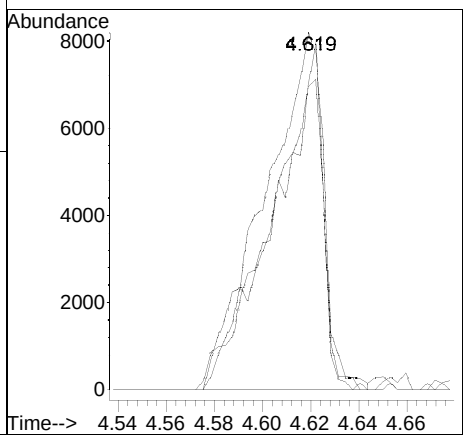


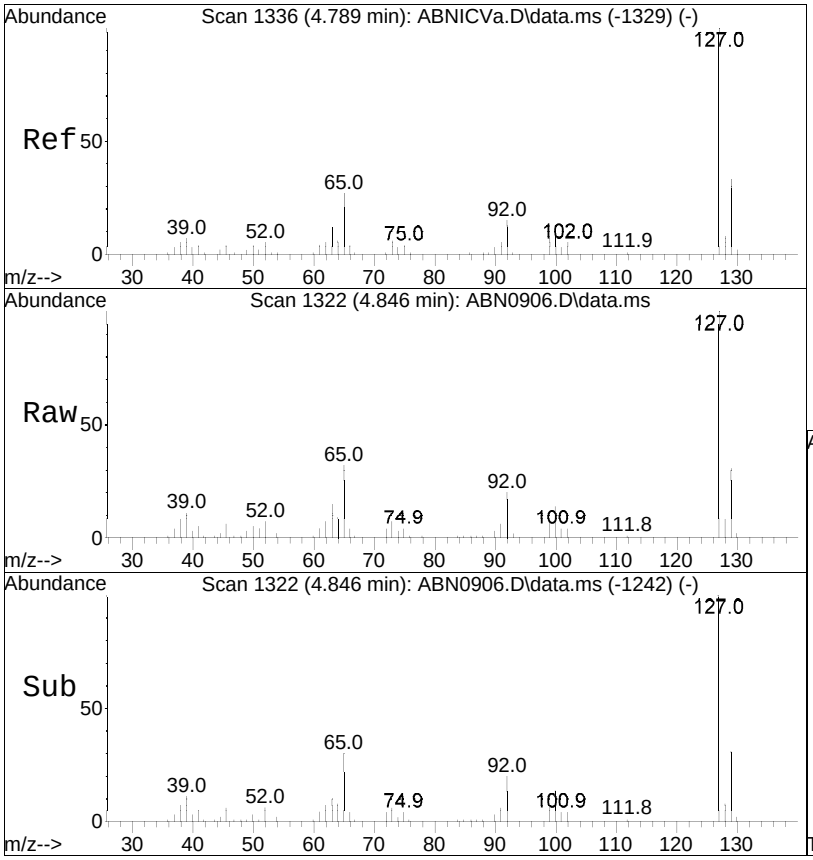


#36
Benzoic Acid
Concen: 6.19 ug/ml
RT: 4.619 min Scan# 1249
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:105 Resp: 13842

Ion	Ratio	Lower	Upper
105	100		
122	79.6	59.9	89.9
77	81.1	60.1	90.1

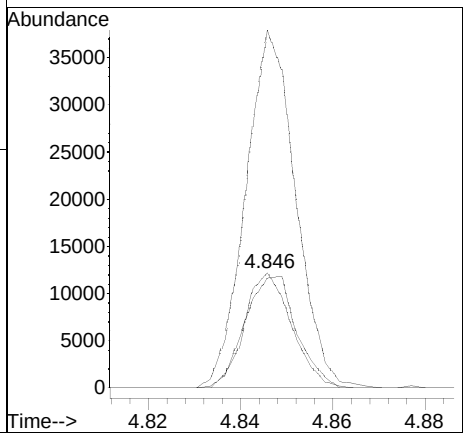


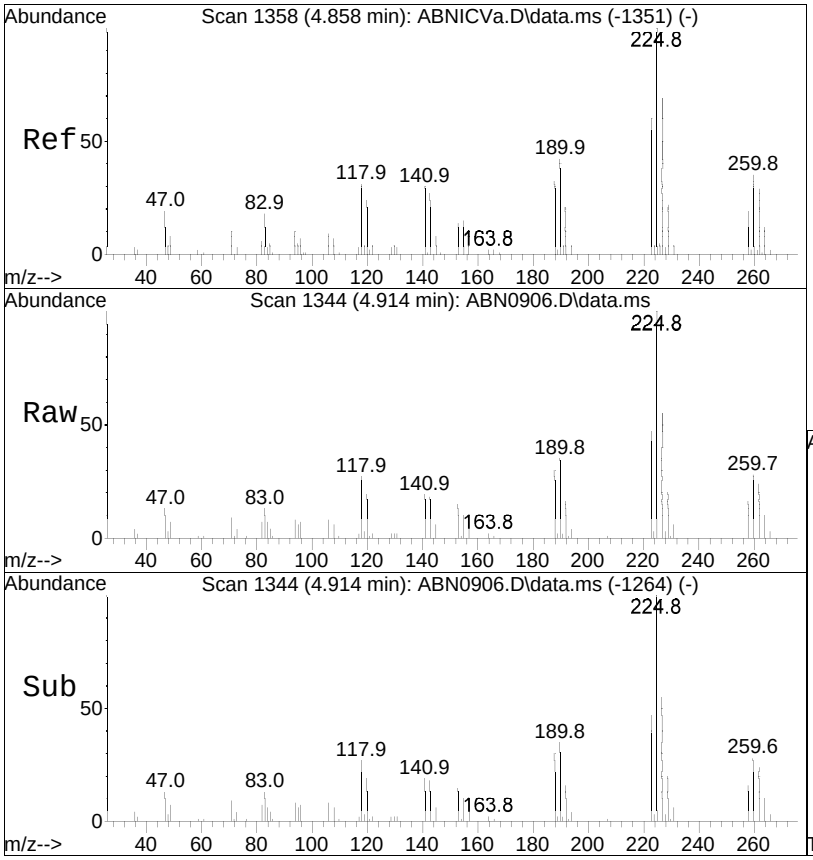


#37
4-Chloroaniline
Concen: 5.12 ug/ml
RT: 4.846 min Scan# 1322
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 65 Resp: 8622

Ion	Ratio	Lower	Upper
65	100		
127	328.5	237.6	356.4
129	106.4	76.3	114.5

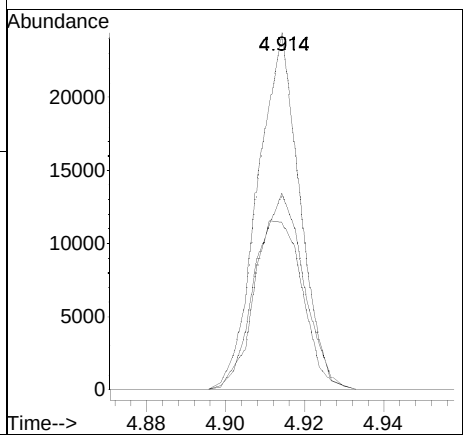


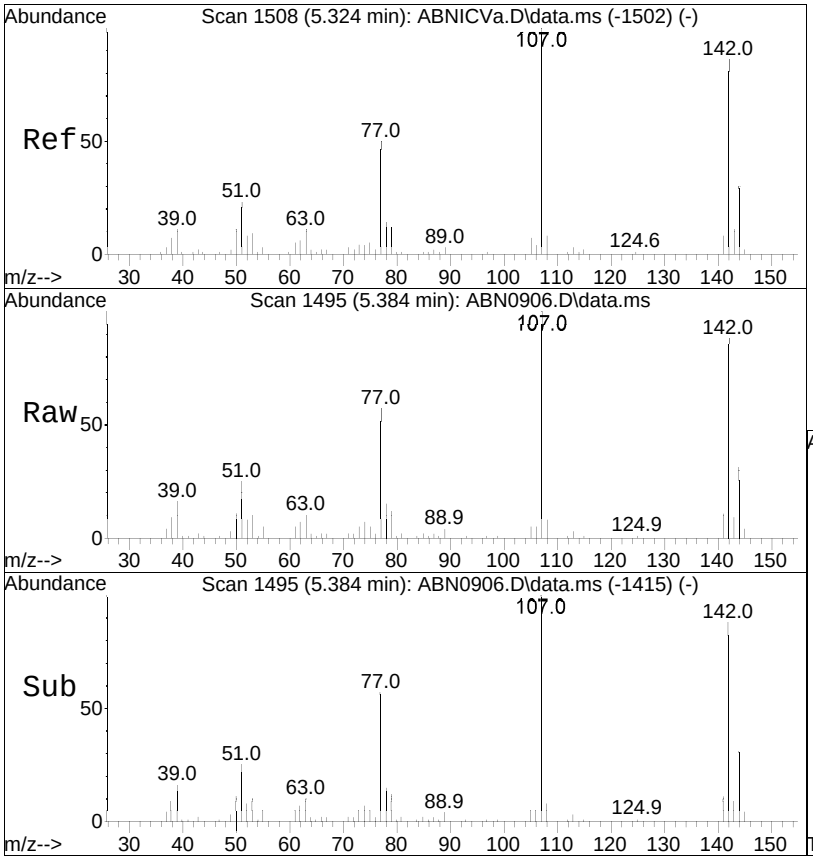


#38
Hexachlorobutadiene
Concen: 6.20 ug/ml
RT: 4.914 min Scan# 1344
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:225 Resp: 17994

Ion	Ratio	Lower	Upper
225	100		
223	55.3	50.3	75.5
227	62.6	52.2	78.2

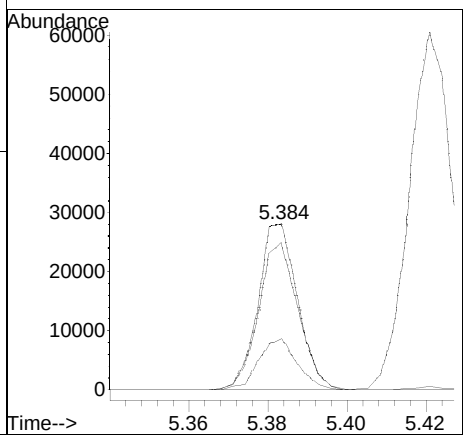


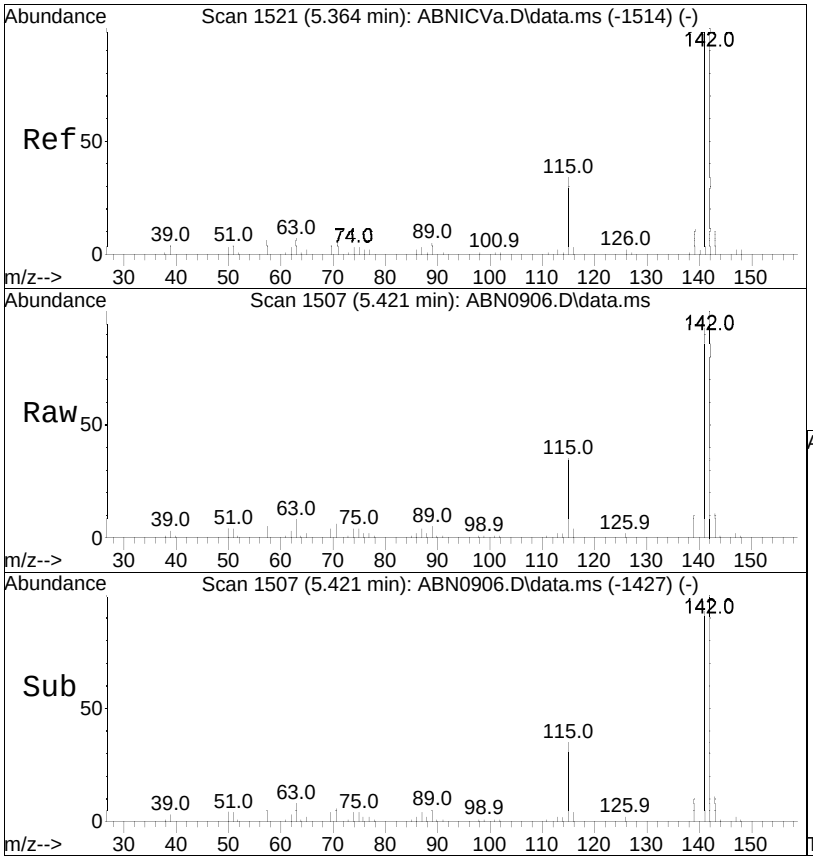


#39
p-Chloro-m-cresol
Concen: 5.24 ug/ml
RT: 5.384 min Scan# 1495
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:107 Resp: 19527

Ion	Ratio	Lower	Upper
107	100		
144	30.1	20.9	31.3
142	88.5	66.1	99.1

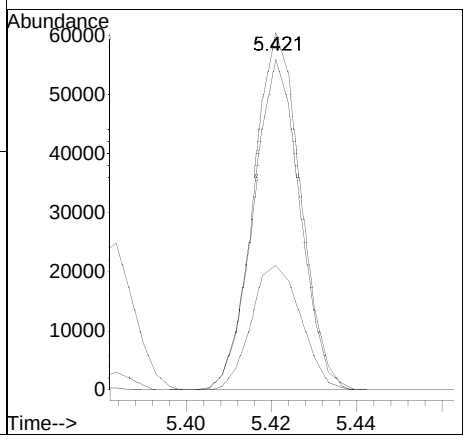


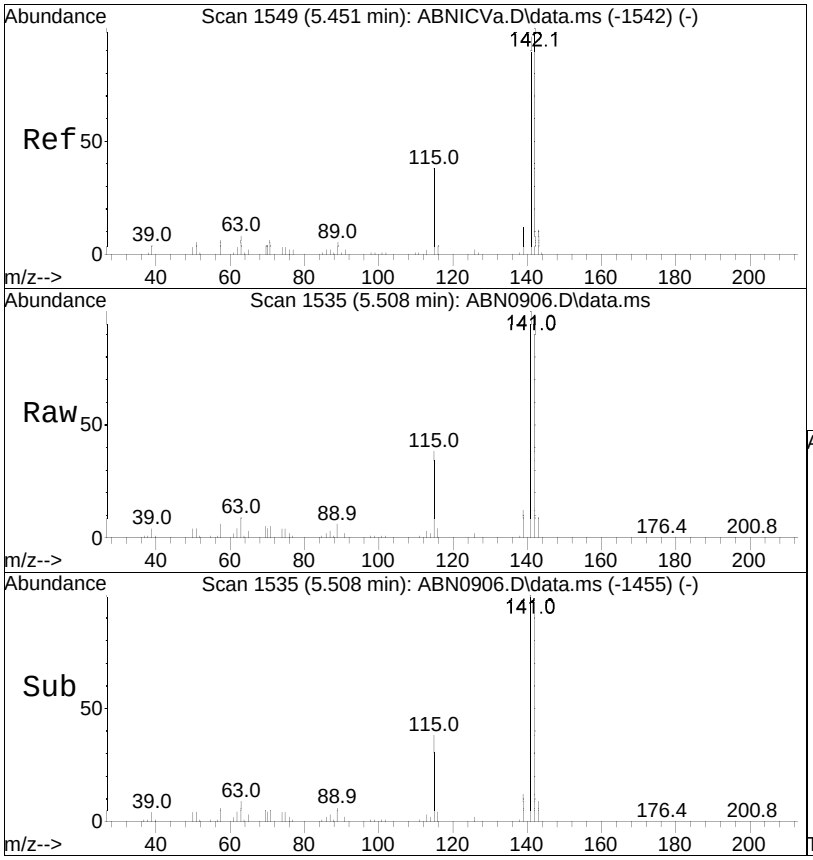


#40
2-Methylnaphthalene
Concen: 4.99 ug/ml
RT: 5.421 min Scan# 1507
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:142 Resp: 46288

Ion	Ratio	Lower	Upper
142	100		
141	91.8	69.6	104.4
115	36.9	26.6	40.0

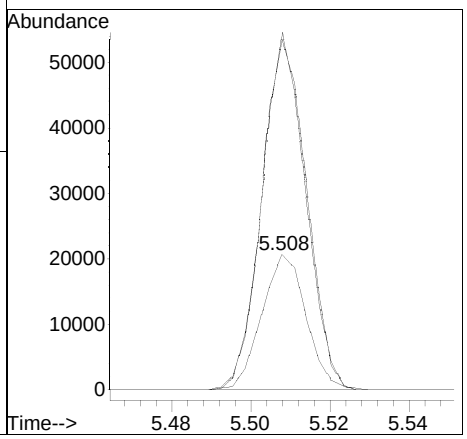


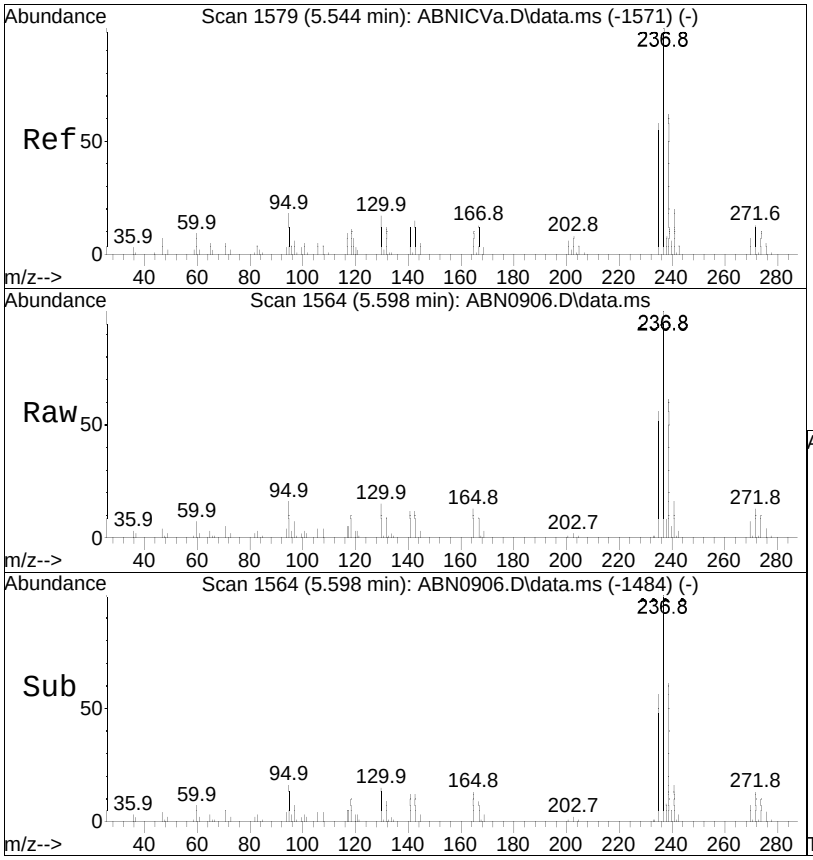


#41
1-Methylnaphthalene
Concen: 5.02 ug/ml
RT: 5.508 min Scan# 1535
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:115 Resp: 16109

Ion	Ratio	Lower	Upper
115	100		
141	257.2	207.8	311.6
142	261.1	226.8	340.2

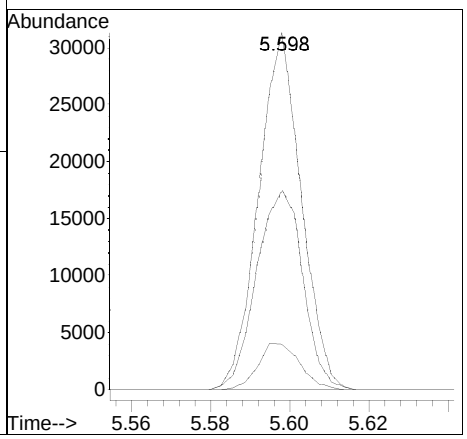


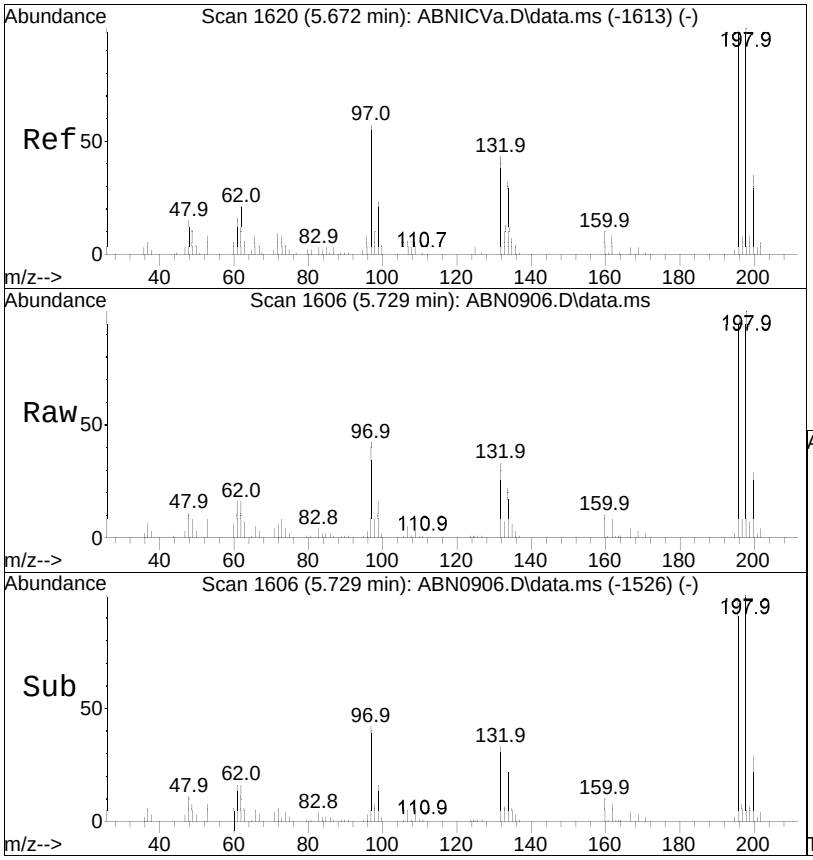


#42
Hexachlorocyclopentadiene
Concen: 6.65 ug/ml
RT: 5.598 min Scan# 1564
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:237 Resp: 23364

Ion	Ratio	Lower	Upper
237	100		
235	60.8	49.7	74.5
272	12.9	9.8	14.6

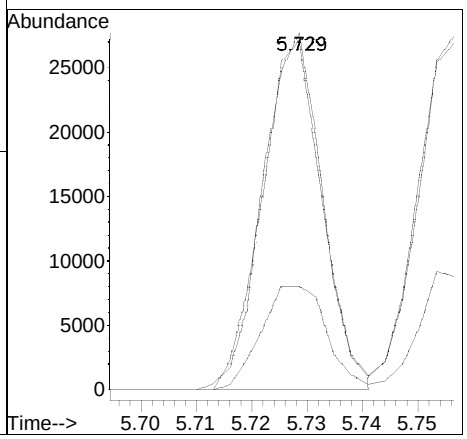


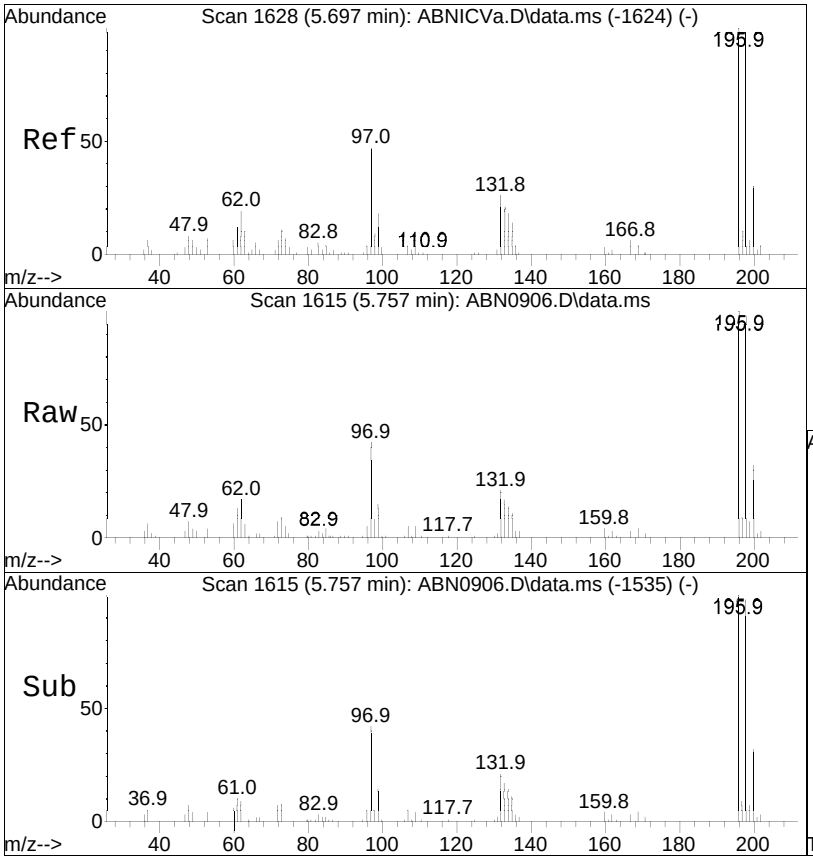


#43
2,4,6-Trichlorophenol
Concen: 5.94 ug/ml
RT: 5.729 min Scan# 1606
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:196 Resp: 20346

Ion	Ratio	Lower	Upper
196	100		
198	100.8	77.5	116.3
200	32.6	23.8	35.6

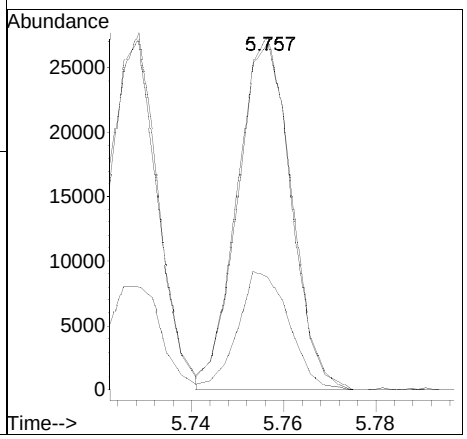


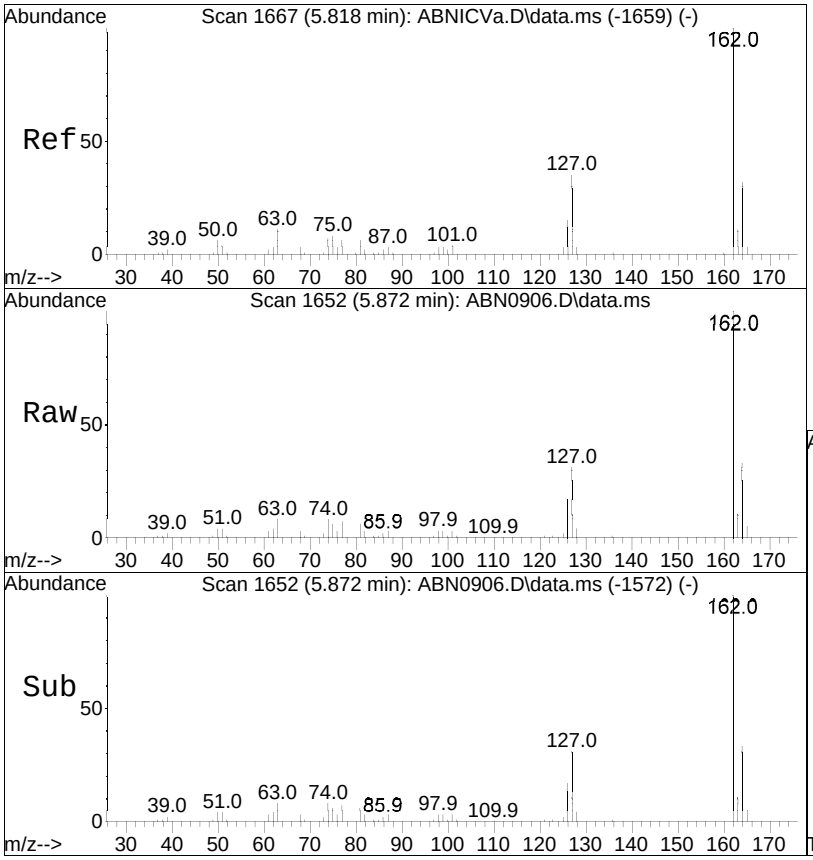


#44
2,4,5-Trichlorophenol
Concen: 6.31 ug/ml
RT: 5.757 min Scan# 1615
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:196 Resp: 21650

Ion	Ratio	Lower	Upper
196	100		
200	32.7	25.4	38.0
198	101.6	78.0	117.0

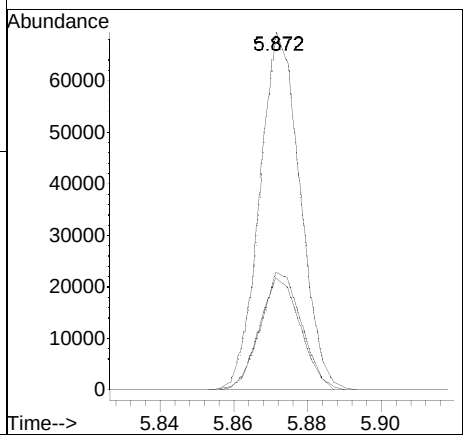


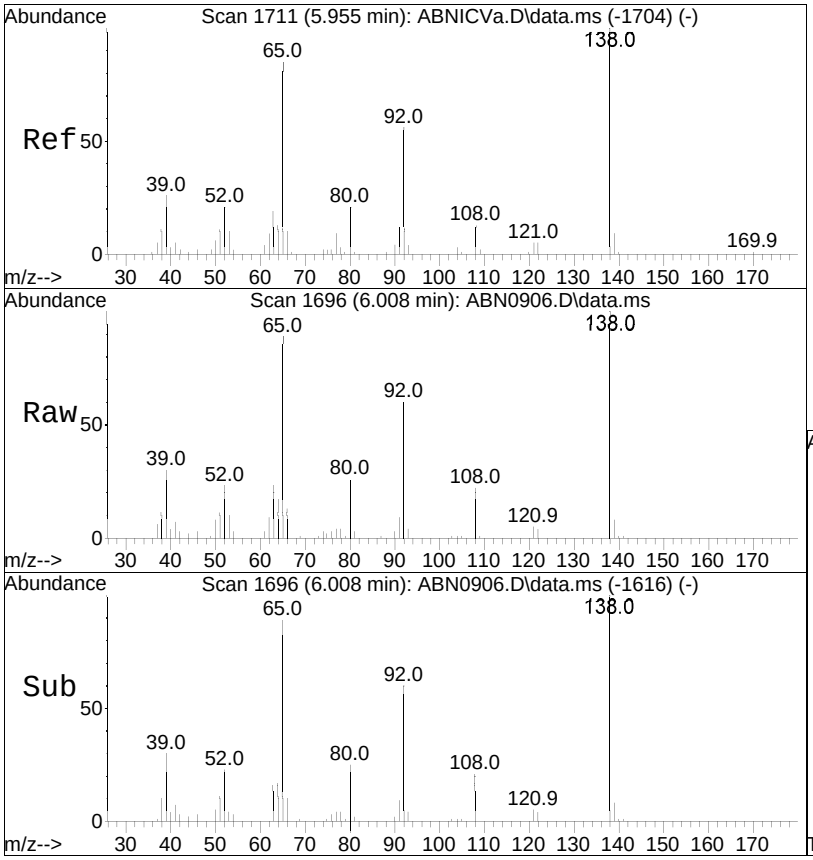


#46
2-Chloronaphthalene
Concen: 5.15 ug/ml
RT: 5.872 min Scan# 1652
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:162 Resp: 52357

Ion	Ratio	Lower	Upper
162	100		
127	32.1	32.2	48.4#
164	33.4	25.7	38.5

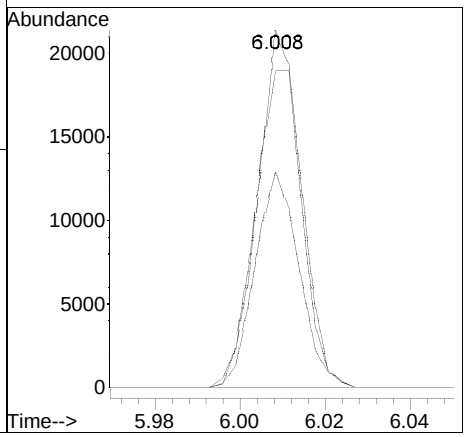


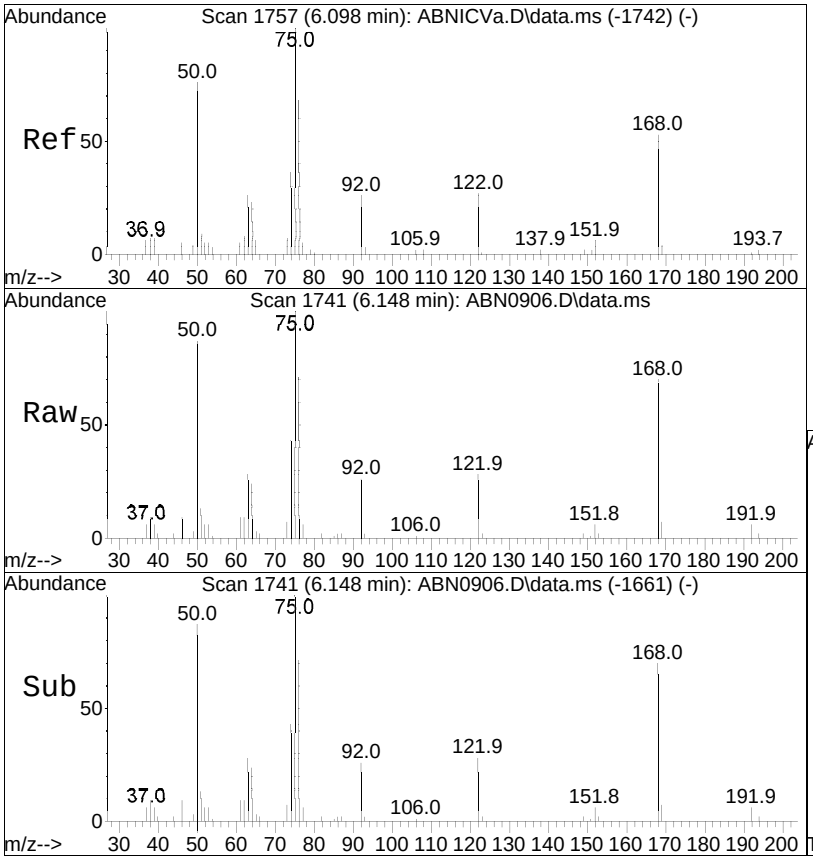


#47
2-Nitroaniline
Concen: 5.19 ug/ml
RT: 6.008 min Scan# 1696
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:138 Resp: 15275

Ion	Ratio	Lower	Upper
138	100		
92	60.7	53.5	80.3
65	93.8	86.3	129.5

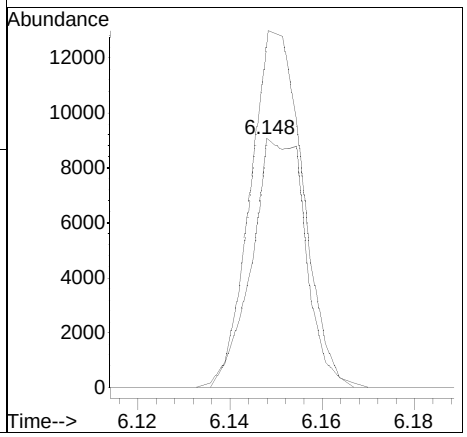


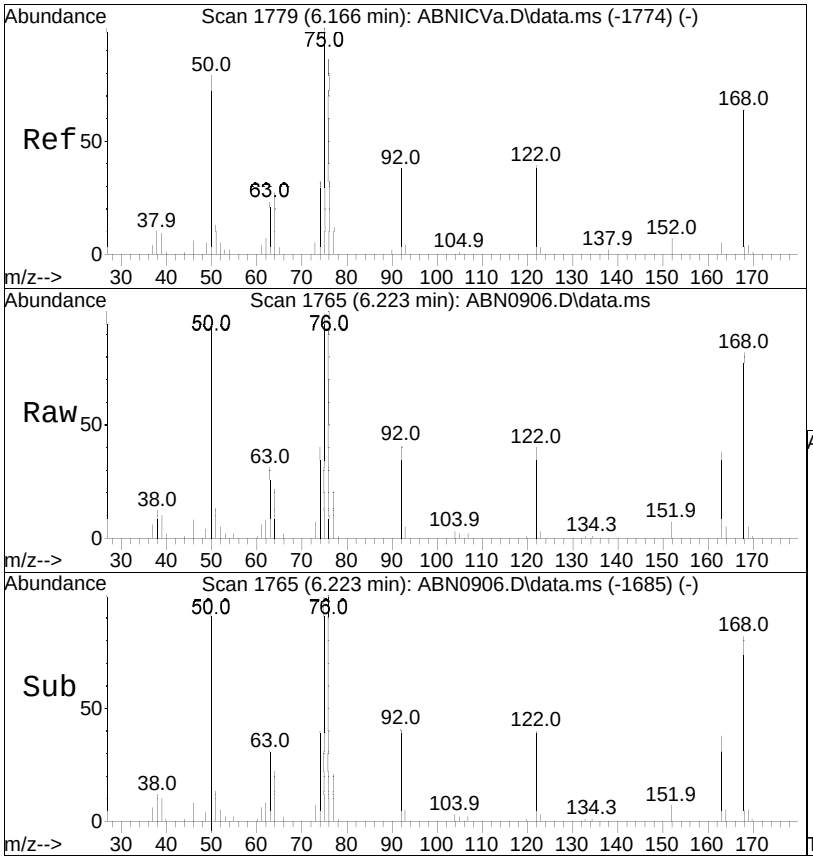


#48
1,4-Dinitrobenzene
Concen: 5.30 ug/ml
RT: 6.148 min Scan# 1741
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:168 Resp: 7280

Ion	Ratio	Lower	Upper
168	100		
75	140.7	121.8	182.8

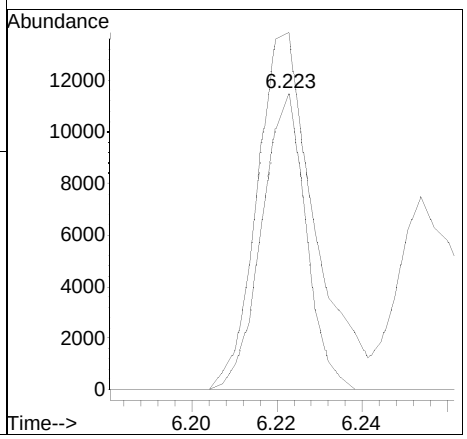


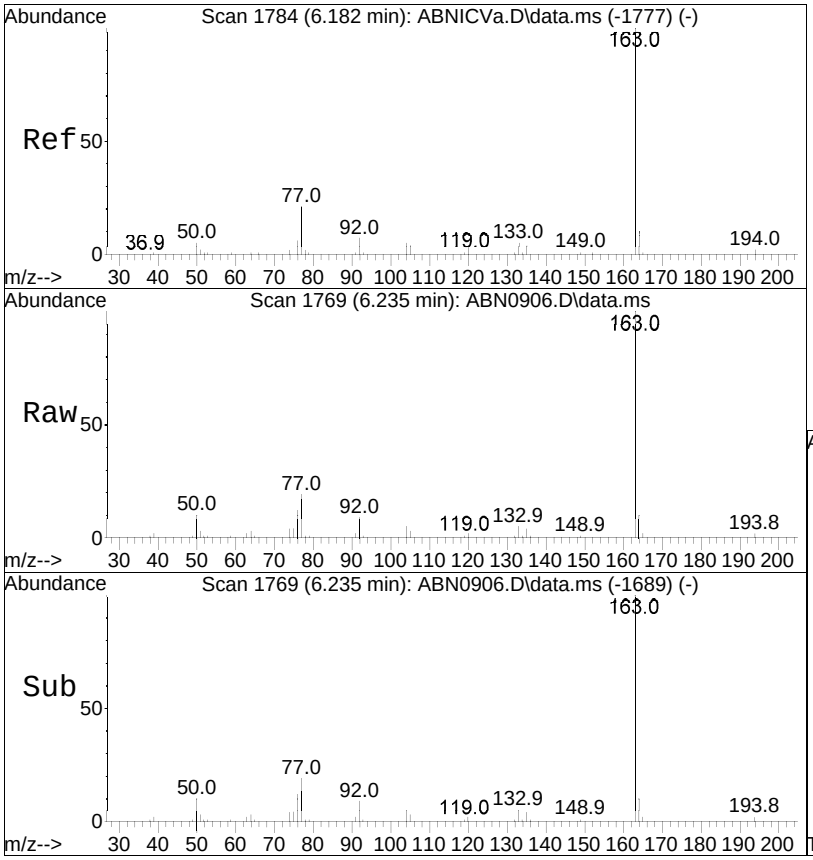


#49
1,3-Dinitrobenzene
Concen: 5.19 ug/ml
RT: 6.223 min Scan# 1765
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:168 Resp: 8314

Ion	Ratio	Lower	Upper
168	100		
75	155.9	22.7	34.1#

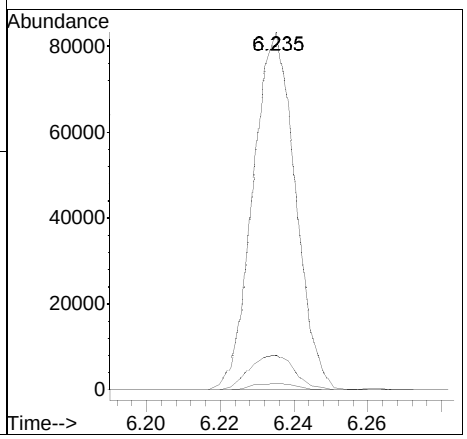


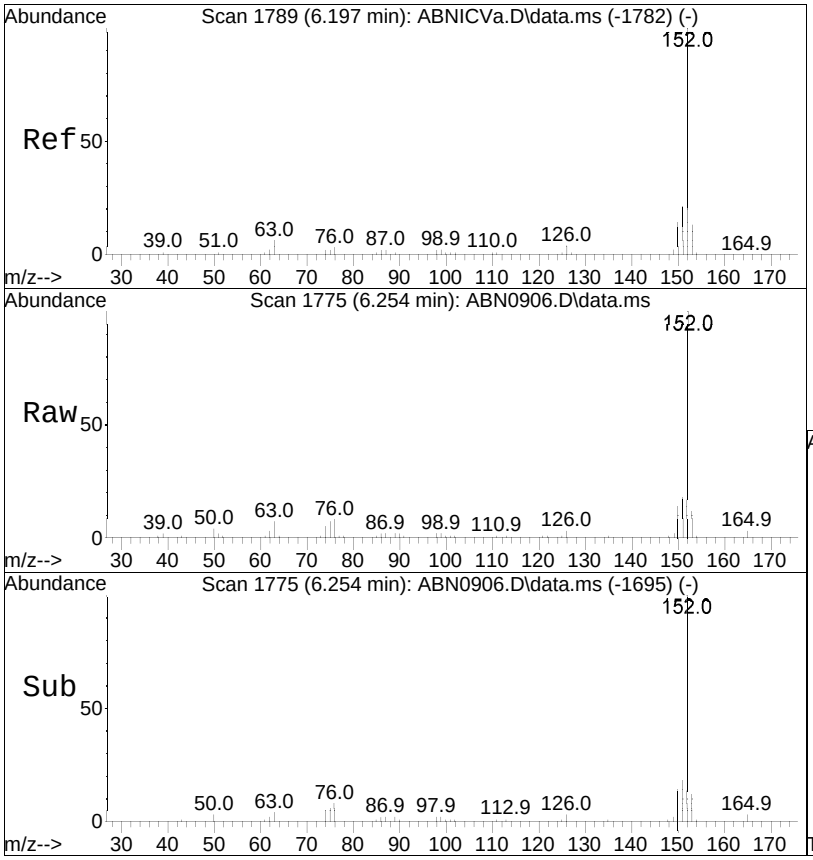


#50
Dimethyl phthalate
Concen: 5.52 ug/ml
RT: 6.235 min Scan# 1769
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:163 Resp: 65669

Ion	Ratio	Lower	Upper
163	100		
194	1.8	3.5	5.3#
164	10.4	7.9	11.9

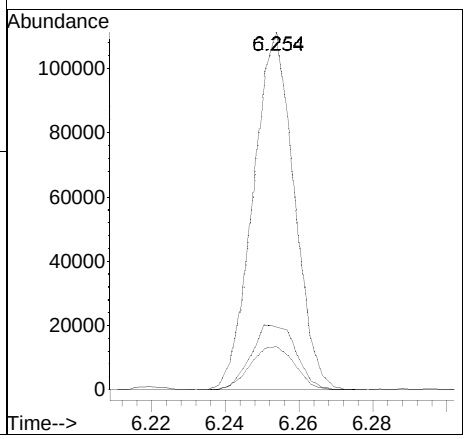


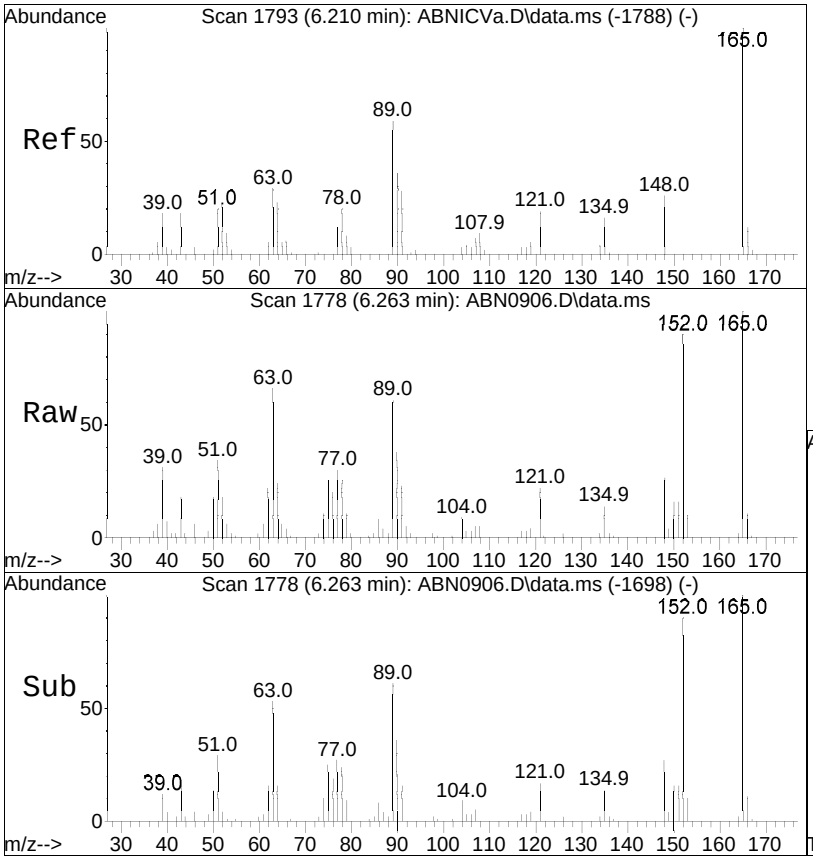


#51
Acenaphthylene
Concen: 5.52 ug/ml
RT: 6.254 min Scan# 1775
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:152 Resp: 85149

Ion	Ratio	Lower	Upper
152	100		
151	20.1	15.8	23.6
153	13.4	10.5	15.7

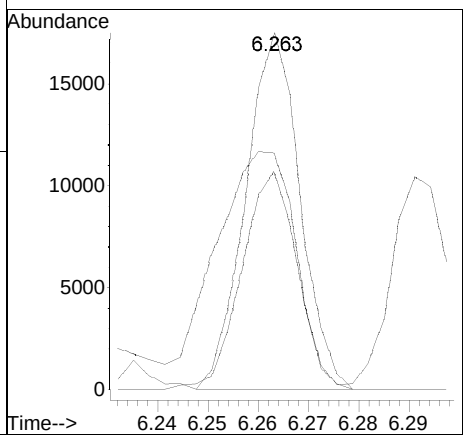


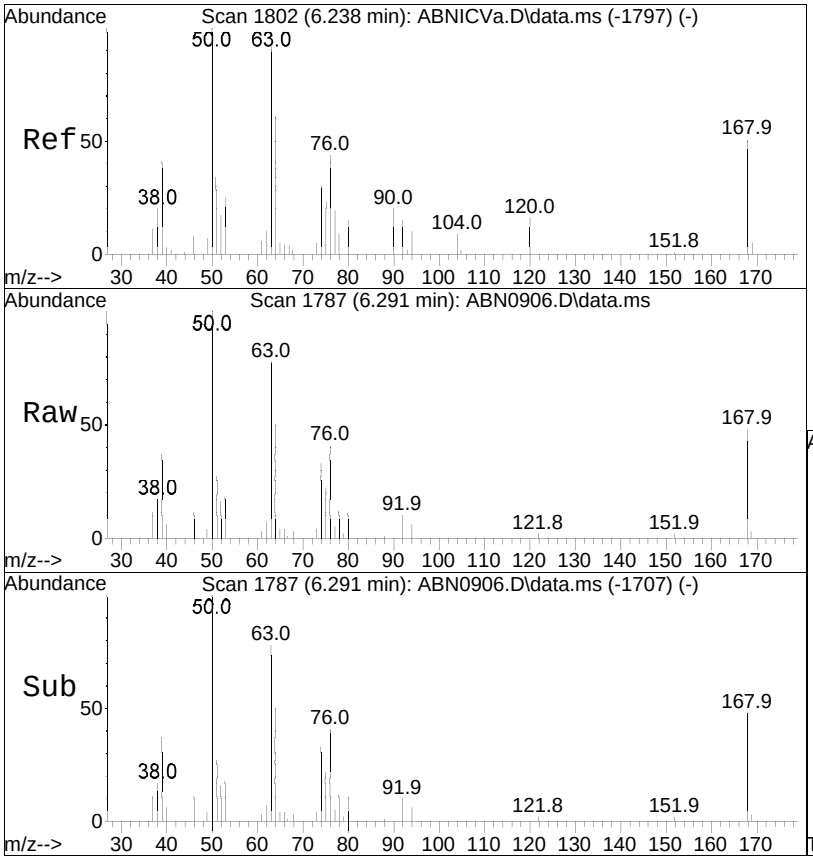


#52
2,6-Dinitrotoluene
Concen: 5.36 ug/ml
RT: 6.263 min Scan# 1778
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:165 Resp: 13165

Ion	Ratio	Lower	Upper
165	100		
89	61.9	54.2	81.2
63	97.9	64.2	96.2#

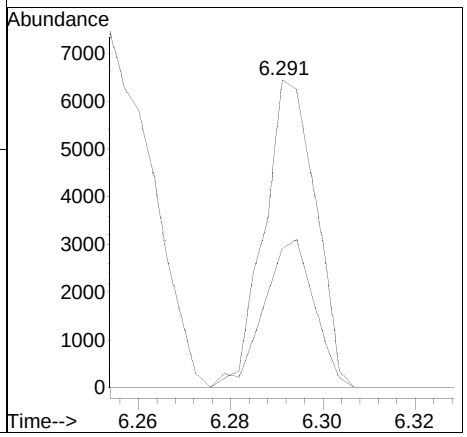


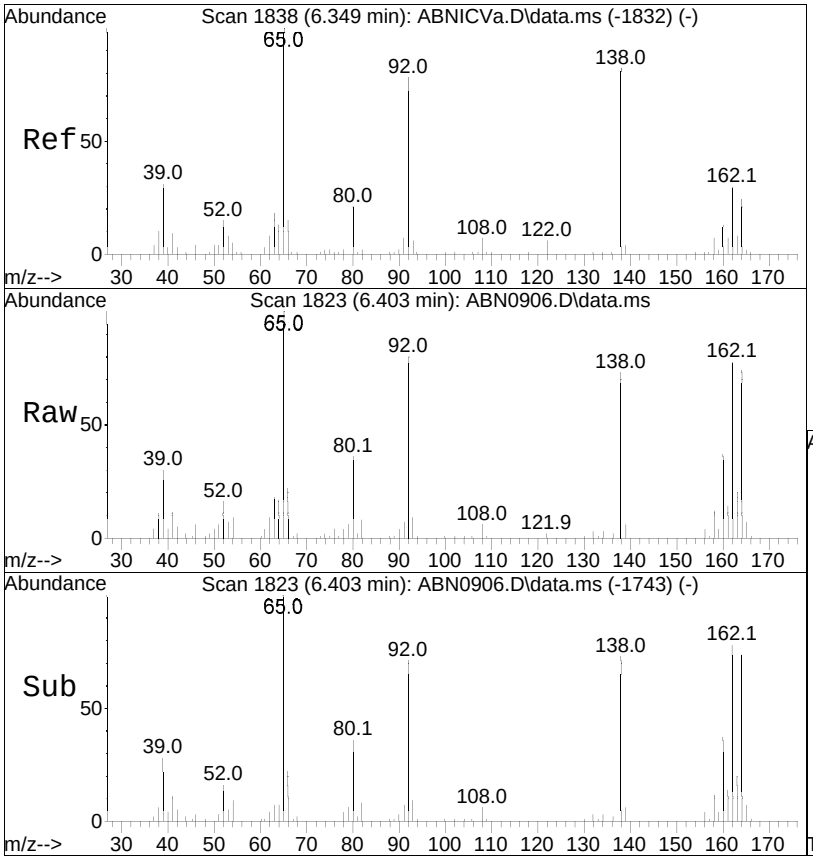


#53
1,2-Dinitrobenzene
Concen: 5.20 ug/ml
RT: 6.291 min Scan# 1787
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:168 Resp: 4992

Ion	Ratio	Lower	Upper
168	100		
75	47.5	30.9	46.3#

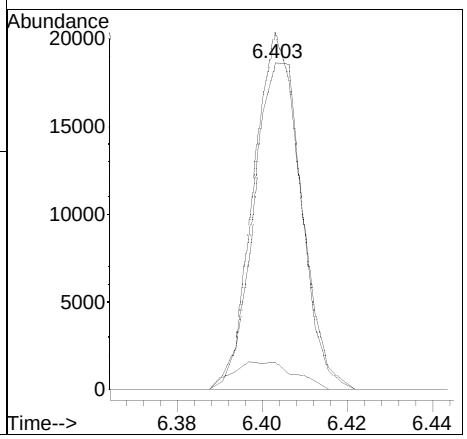


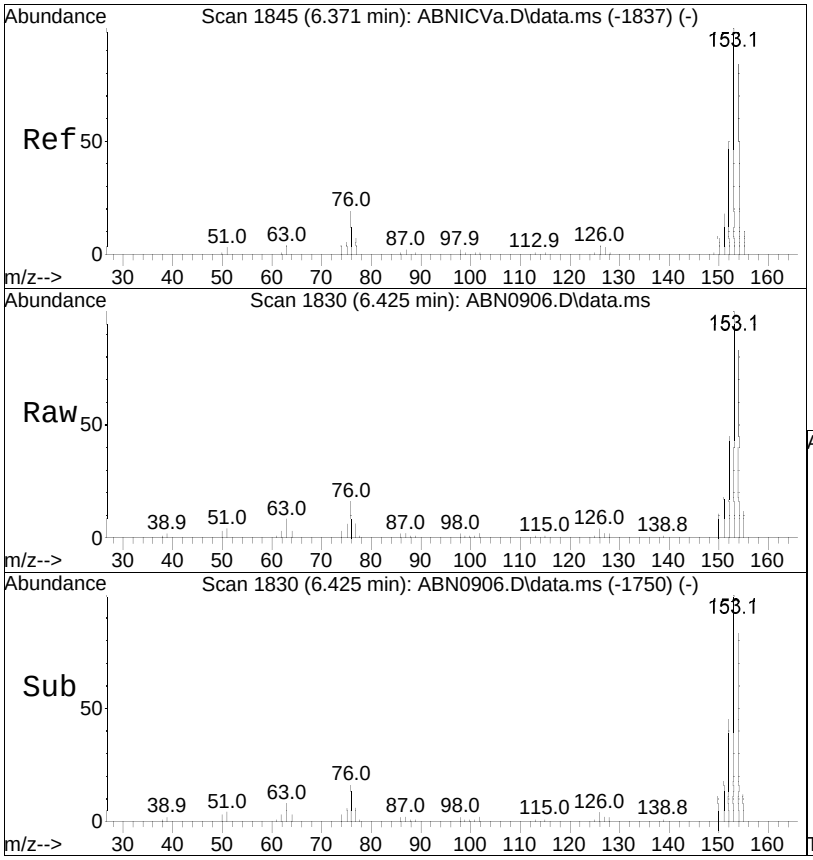


#63
3-Nitroaniline
Concen: 4.86 ug/ml
RT: 6.403 min Scan# 1823
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:138 Resp: 14777

Ion	Ratio	Lower	Upper
138	100		
92	103.7	93.4	140.2
108	11.1	9.5	14.3

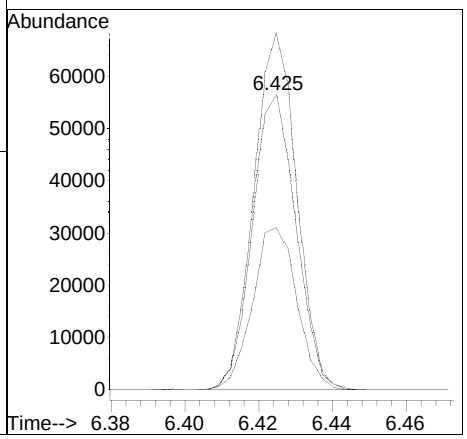


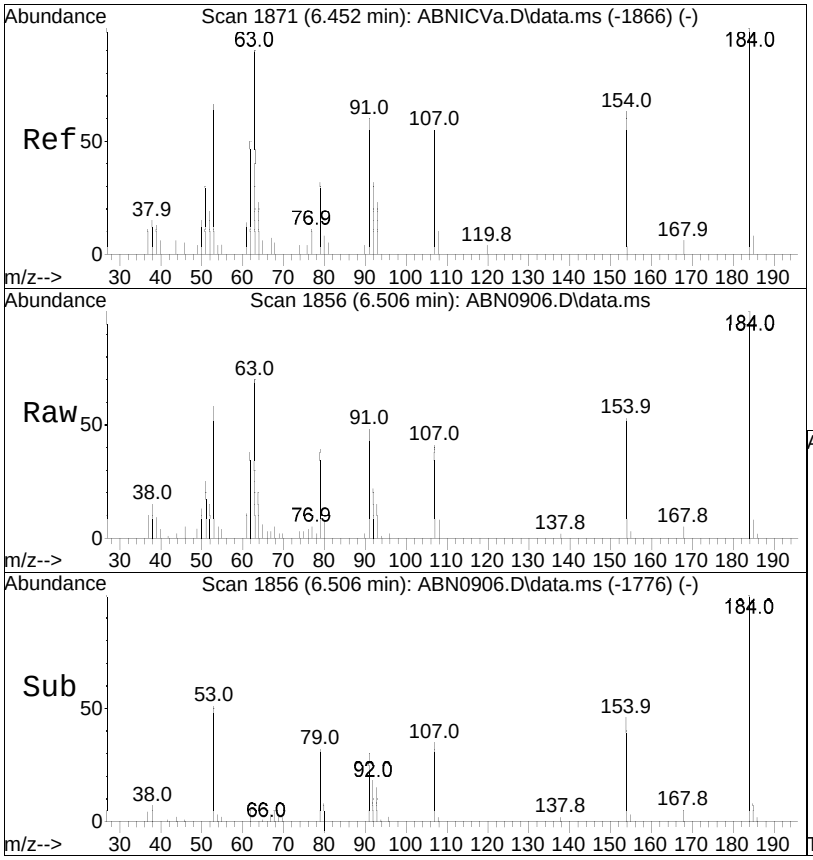


#64
Acenaphthene
Concen: 4.45 ug/ml
RT: 6.425 min Scan# 1830
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:154 Resp: 46303

Ion	Ratio	Lower	Upper
154	100		
153	119.2	85.3	127.9
152	56.3	41.4	62.0

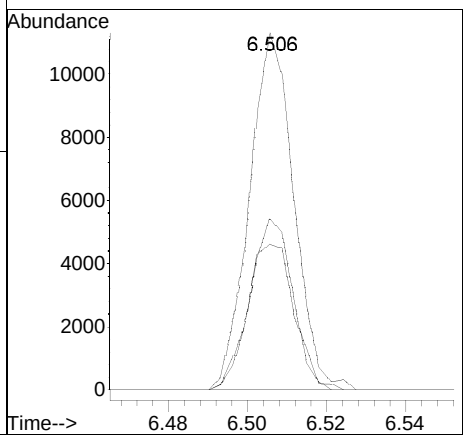


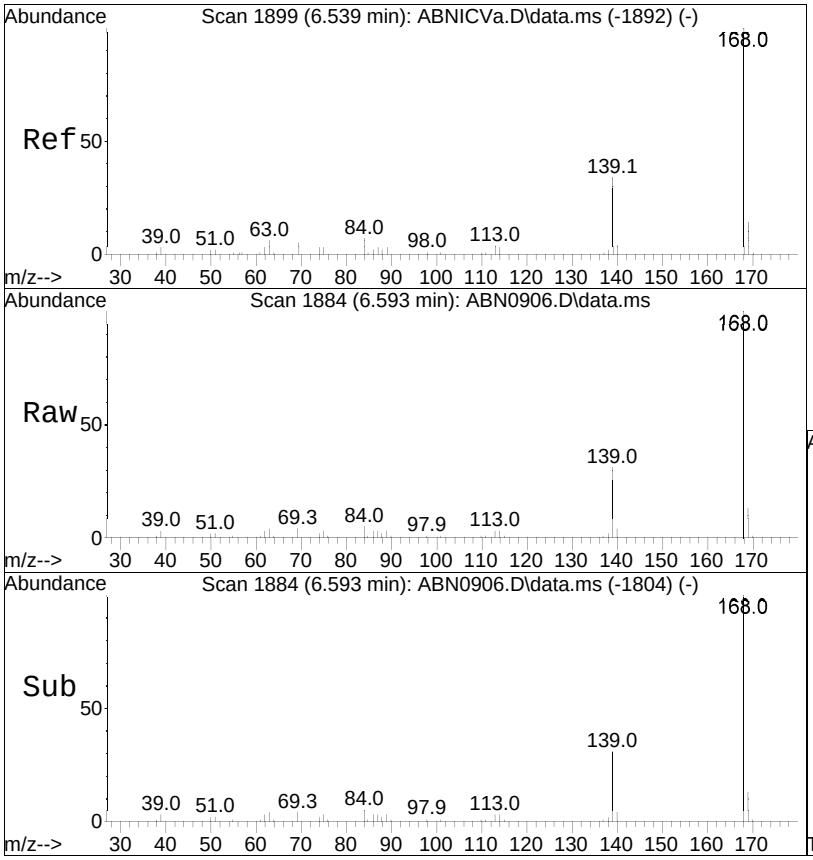


#65
2,4-Dinitrophenol
Concen: 5.78 ug/ml
RT: 6.506 min Scan# 1856
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:184 Resp: 8762

Ion	Ratio	Lower	Upper
184	100		
107	43.5	37.7	56.5
91	46.2	46.3	69.5#

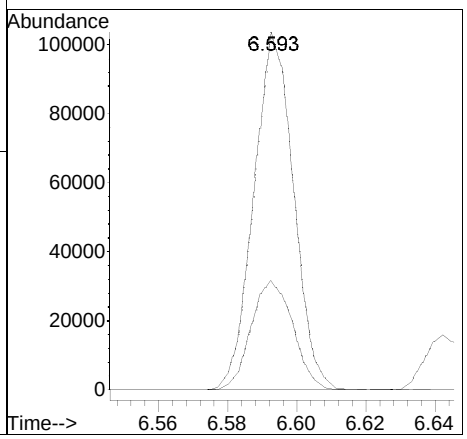


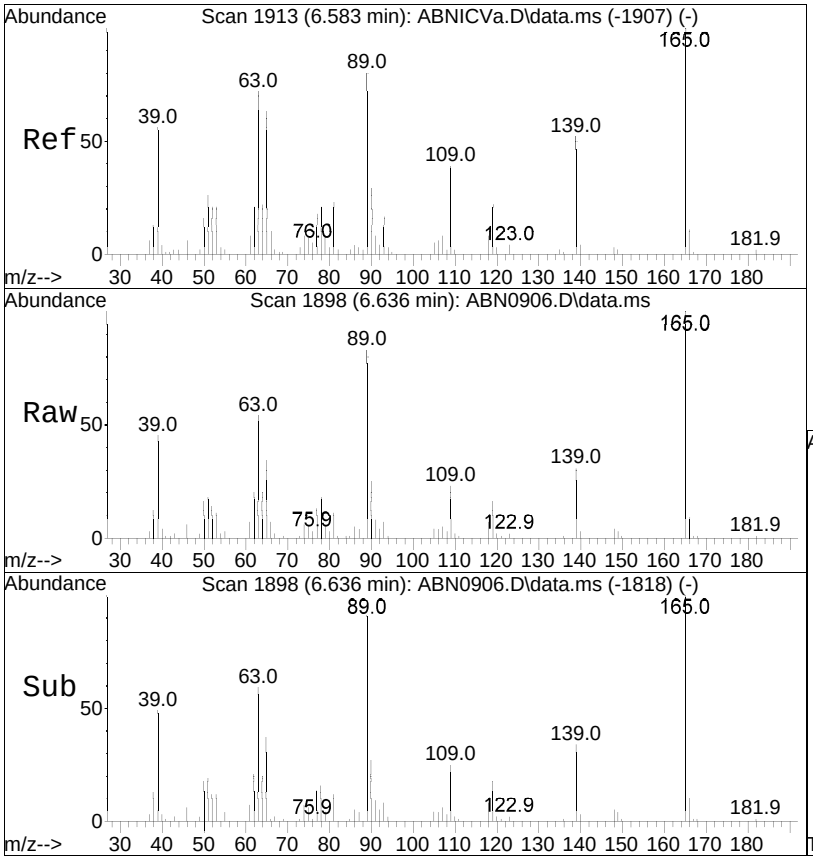


#66
Dibenzofuran
Concen: 4.93 ug/ml
RT: 6.593 min Scan# 1884
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:168 Resp: 81888

Ion	Ratio	Lower	Upper
168	100		
139	32.4	31.4	47.2

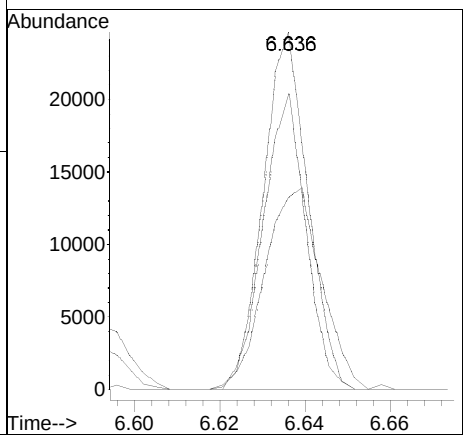


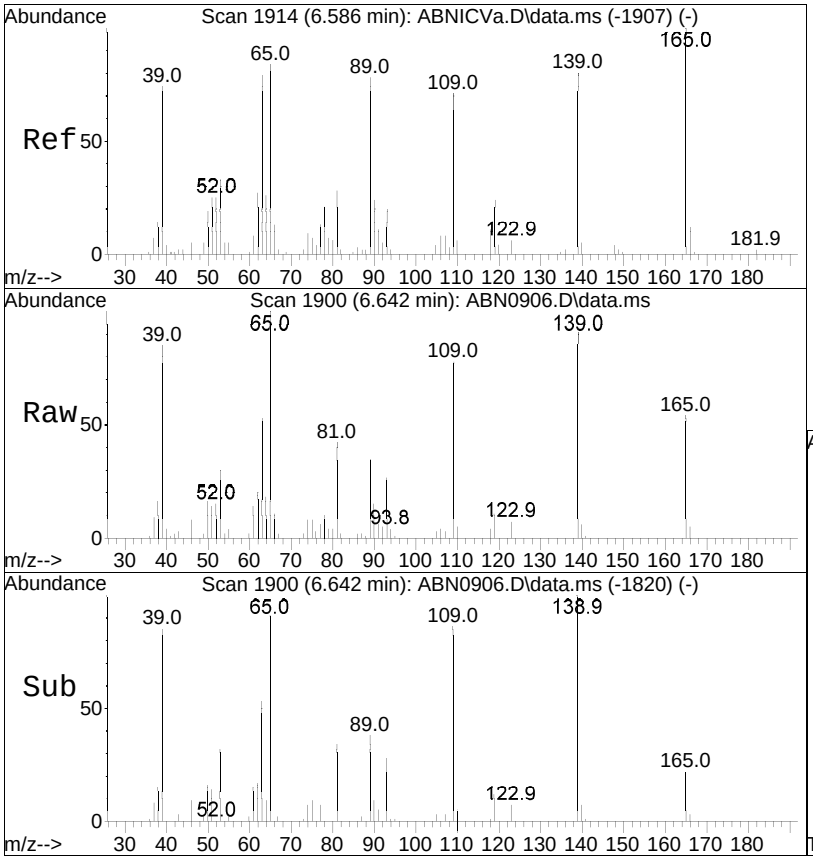


#67
2,4-Dinitrotoluene
Concen: 4.77 ug/ml
RT: 6.636 min Scan# 1898
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:165 Resp: 17845

Ion	Ratio	Lower	Upper
165	100		
89	79.3	72.0	108.0
63	72.0	52.7	79.1

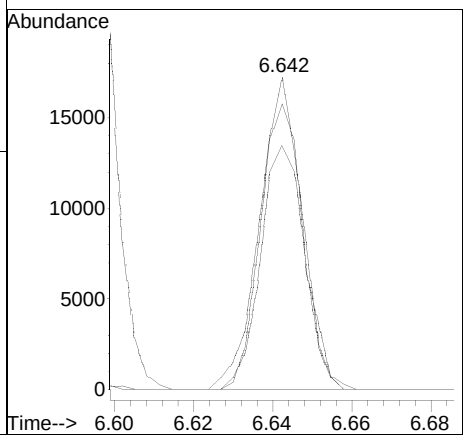


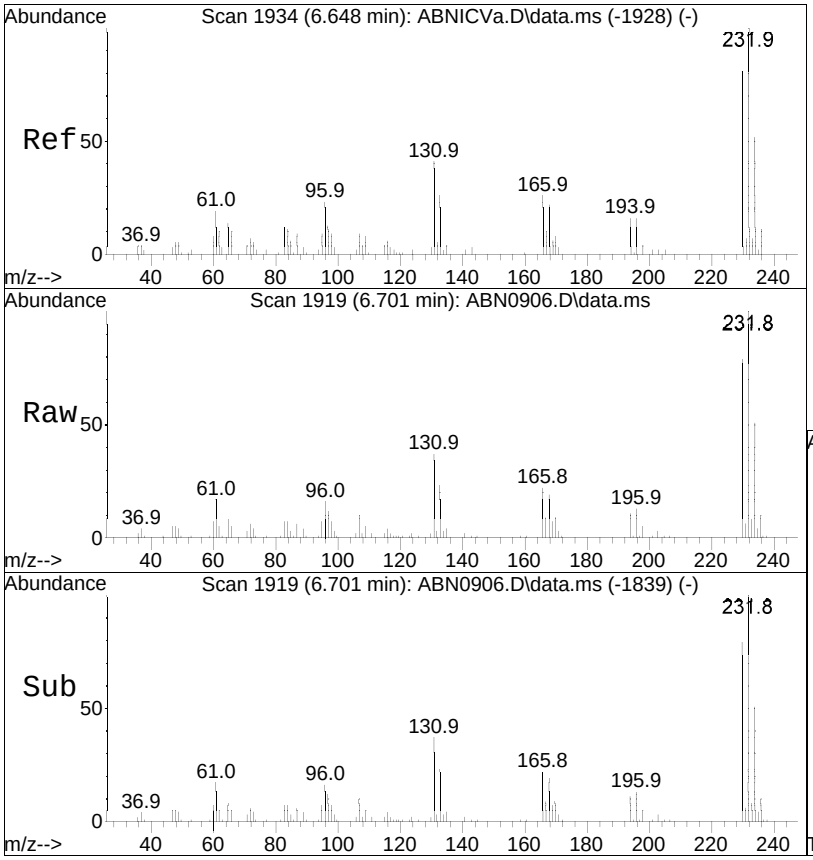


#68
4-Nitrophenol
Concen: 5.13 ug/ml
RT: 6.642 min Scan# 1900
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 65 Resp: 12918

Ion	Ratio	Lower	Upper
65	100		
109	79.9	47.4	71.2#
139	92.5	76.6	115.0

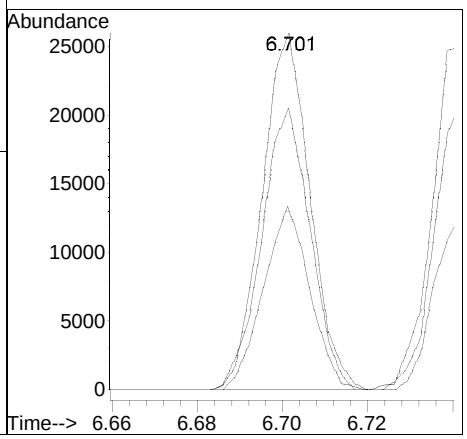


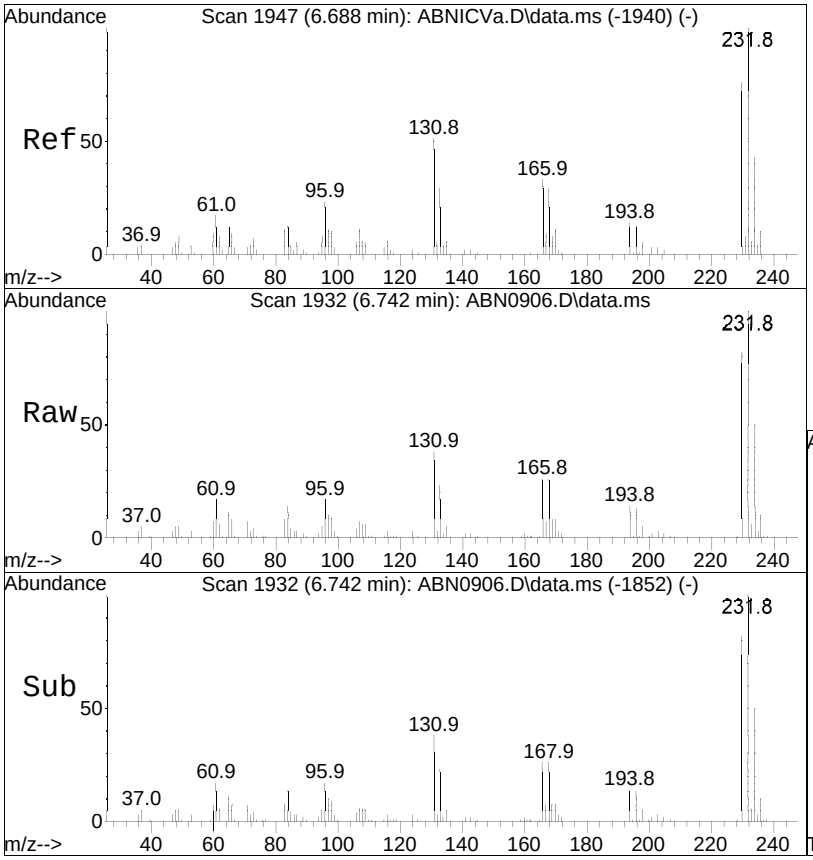


#69
2,3,5,6-Tetrachlorophenol
Concen: 5.82 ug/ml
RT: 6.701 min Scan# 1919
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:232 Resp: 20356

Ion	Ratio	Lower	Upper
232	100		
230	80.1	64.2	96.4
234	49.8	38.1	57.1

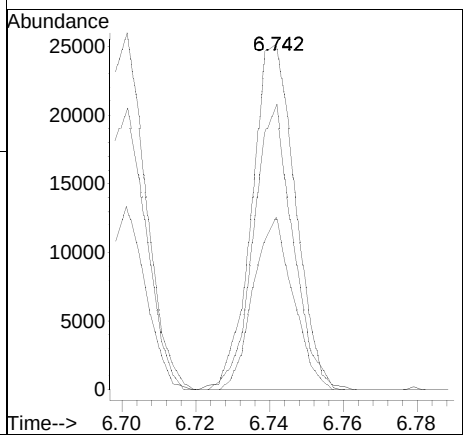


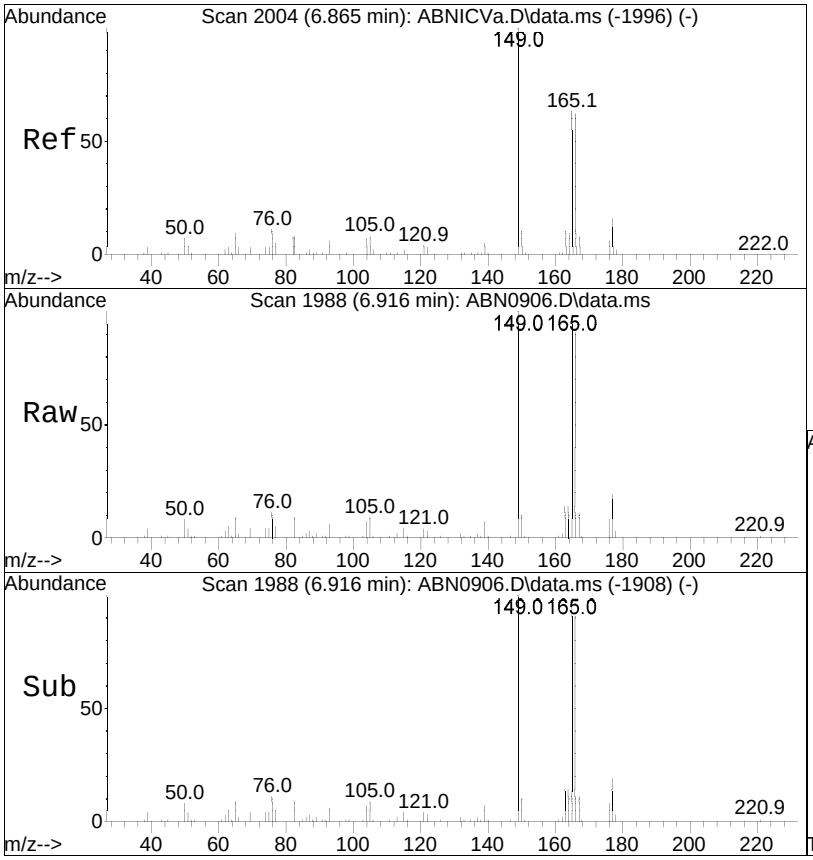


#70
2,3,4,6-Tetrachlorophenol
Concen: 5.88 ug/ml
RT: 6.742 min Scan# 1932
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:232 Resp: 20654

Ion	Ratio	Lower	Upper
232	100		
230	74.9	61.8	92.8
234	45.7	36.2	54.2

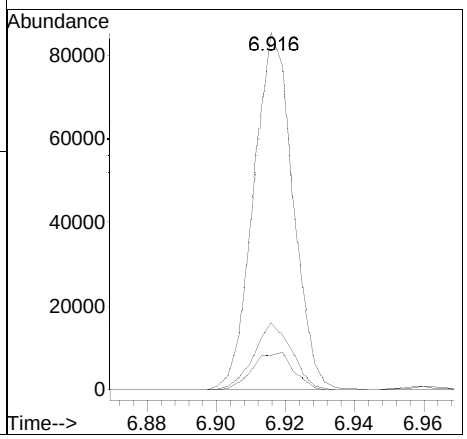


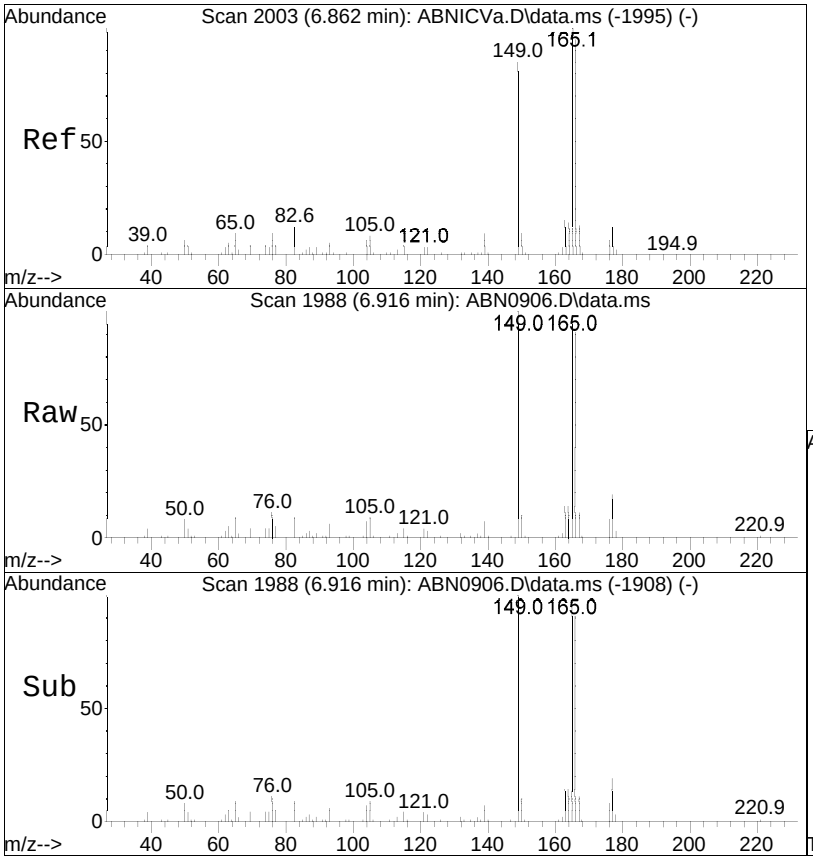


#71
Diethyl phthalate
Concen: 4.80 ug/ml
RT: 6.916 min Scan# 1988
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:149 Resp: 67323

Ion	Ratio	Lower	Upper
149	100		
177	18.2	16.1	24.1
150	11.0	9.4	14.2

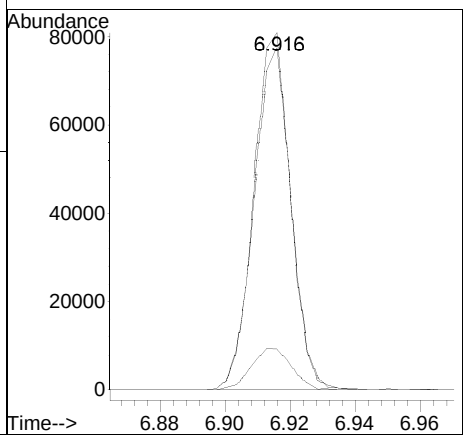


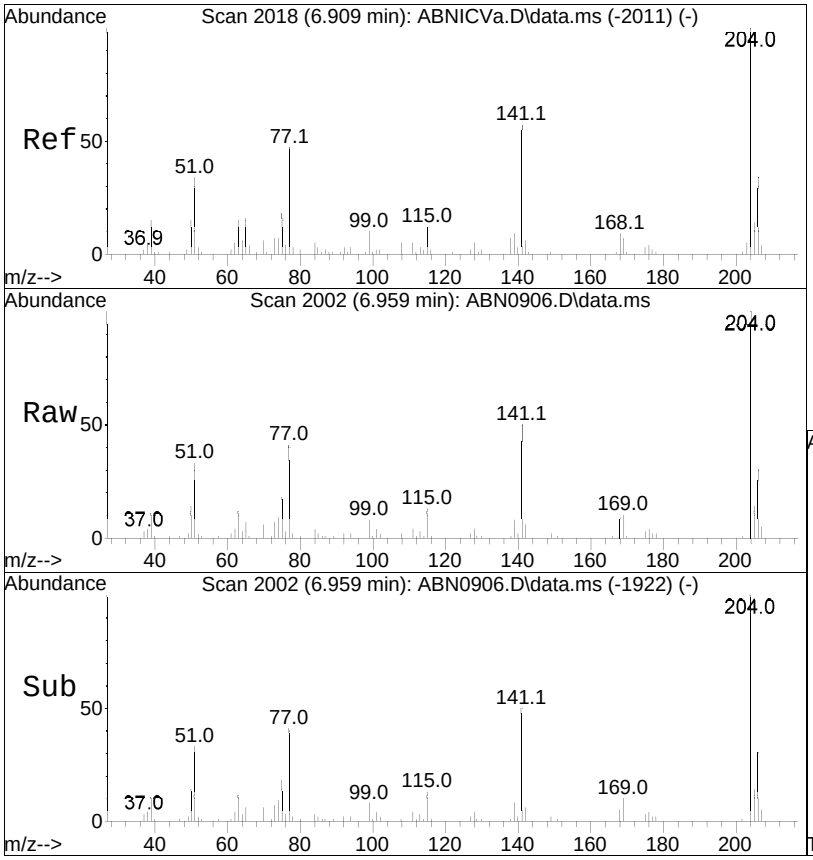


#72
Fluorene
Concen: 4.54 ug/ml
RT: 6.916 min Scan# 1988
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:166 Resp: 60774

Ion	Ratio	Lower	Upper
166	100		
165	104.8	76.2	114.2
167	13.3	10.6	15.8

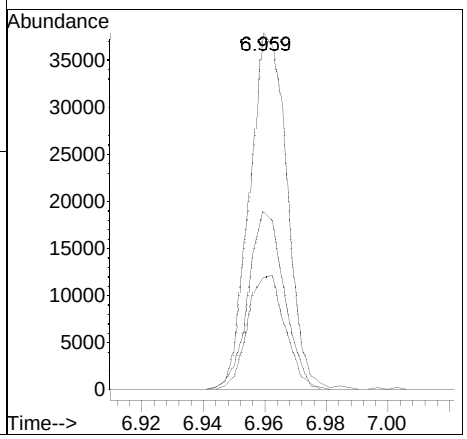


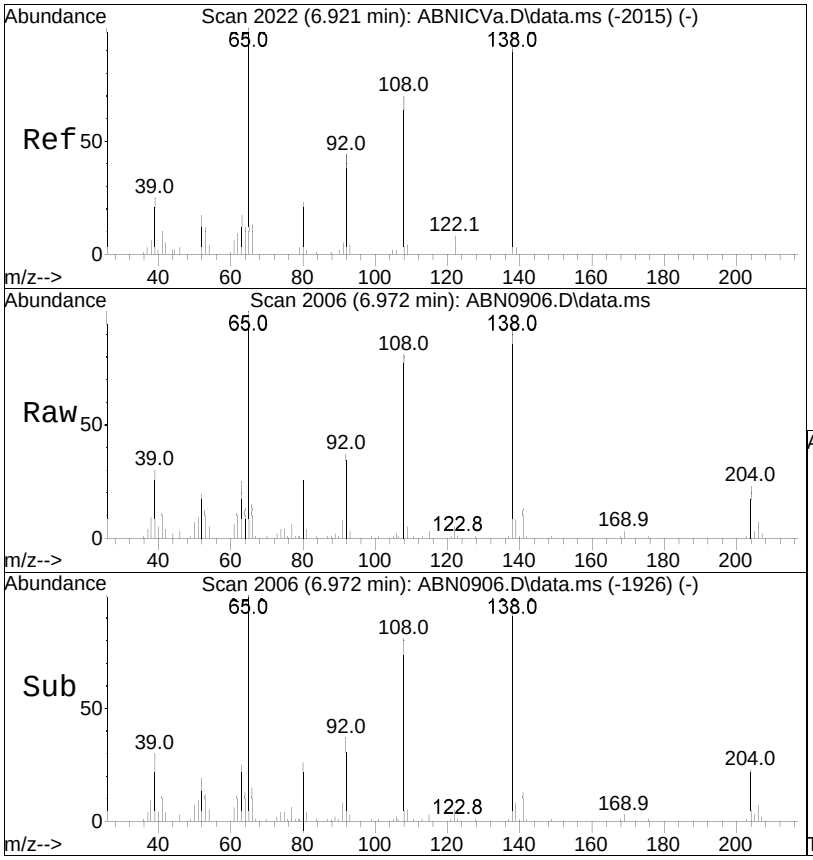


#73
4-Chlorophenyl phenyl ether
Concen: 4.91 ug/ml
RT: 6.959 min Scan# 2002
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:204 Resp: 31908

Ion	Ratio	Lower	Upper
204	100		
206	32.2	25.8	38.6
141	47.9	53.6	80.4#

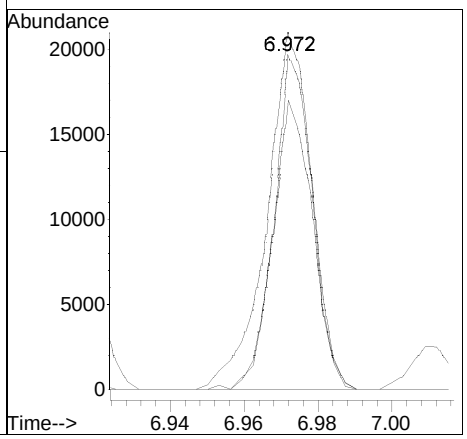


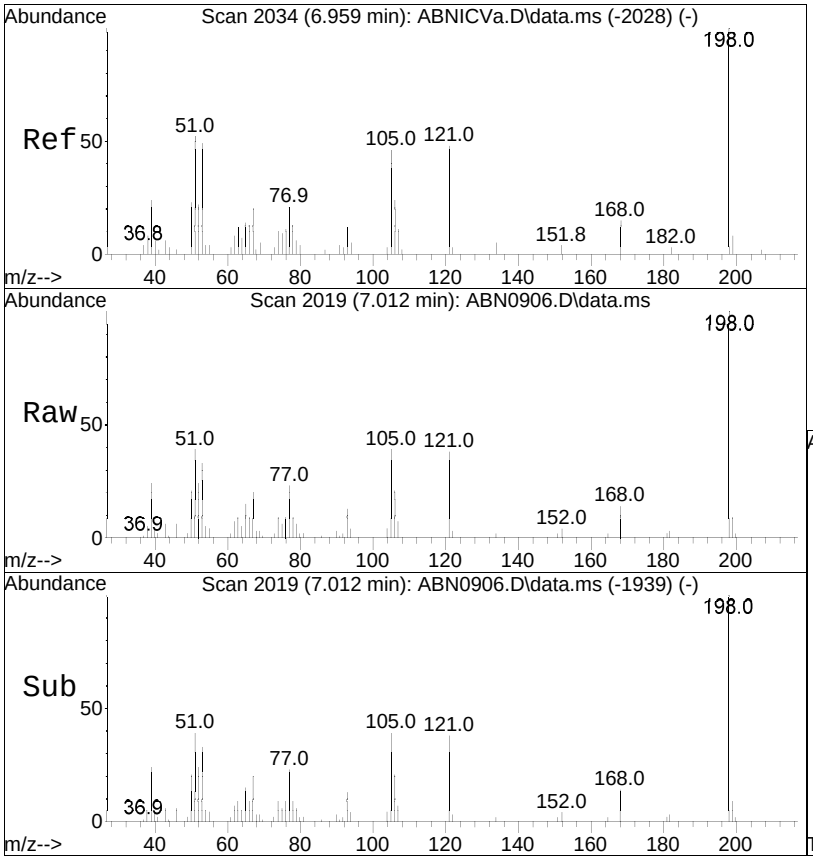


#74
4-Nitroaniline
Concen: 4.69 ug/ml
RT: 6.972 min Scan# 2006
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:138 Resp: 14166

Ion	Ratio	Lower	Upper
138	100		
108	89.1	52.1	78.1#
65	125.1	115.0	172.6

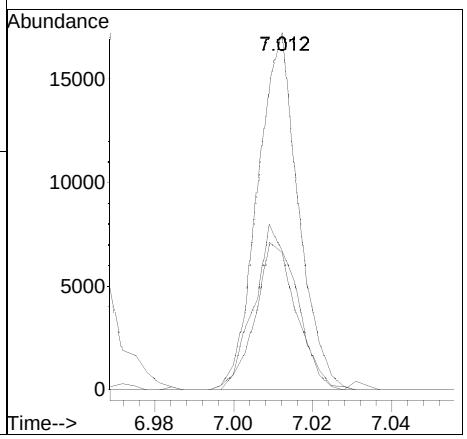


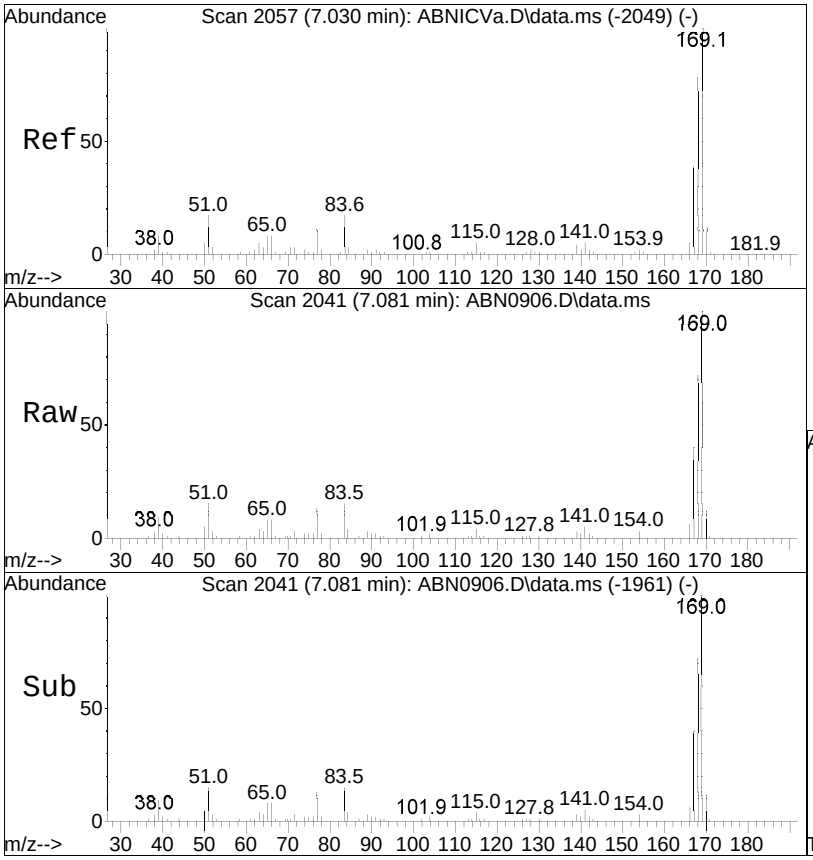


#75
4,6-Dinitro-o-cresol
Concen: 5.98 ug/ml
RT: 7.012 min Scan# 2019
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:198 Resp: 12318

Ion	Ratio	Lower	Upper
198	100		
51	48.4	76.0	114.0#
105	41.5	45.6	68.4#

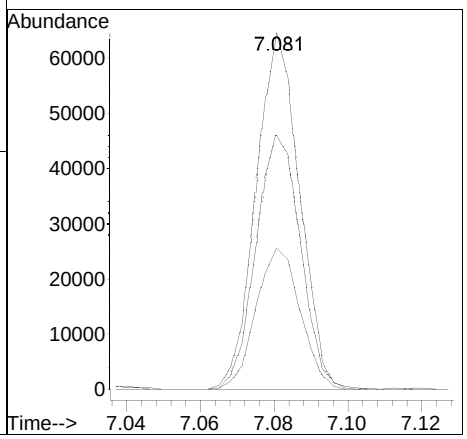


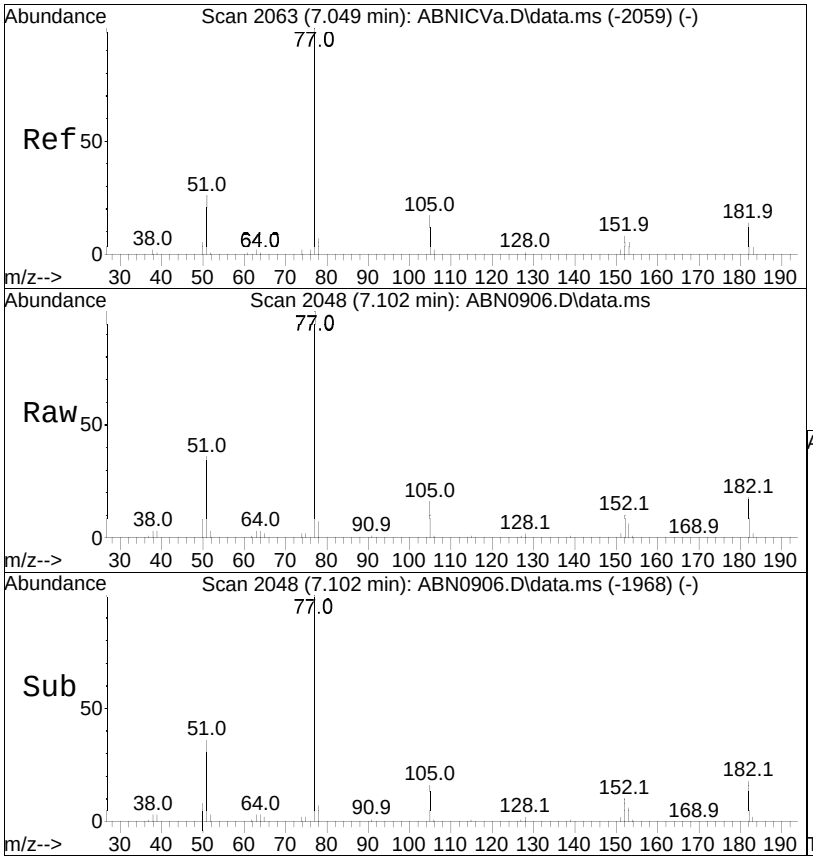


#76
NDPA/DPA
Concen: 4.62 ug/ml
RT: 7.081 min Scan# 2041
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:169 Resp: 52764

Ion	Ratio	Lower	Upper
169	100		
168	73.2	54.0	81.0
167	40.5	28.6	42.8

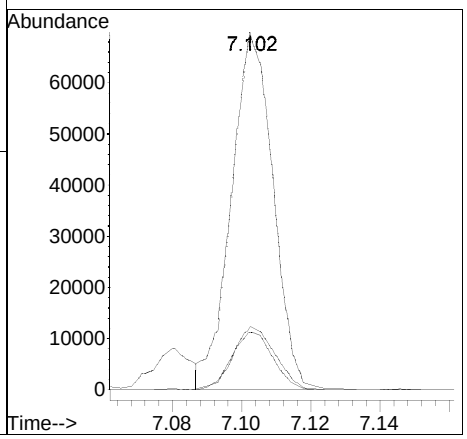


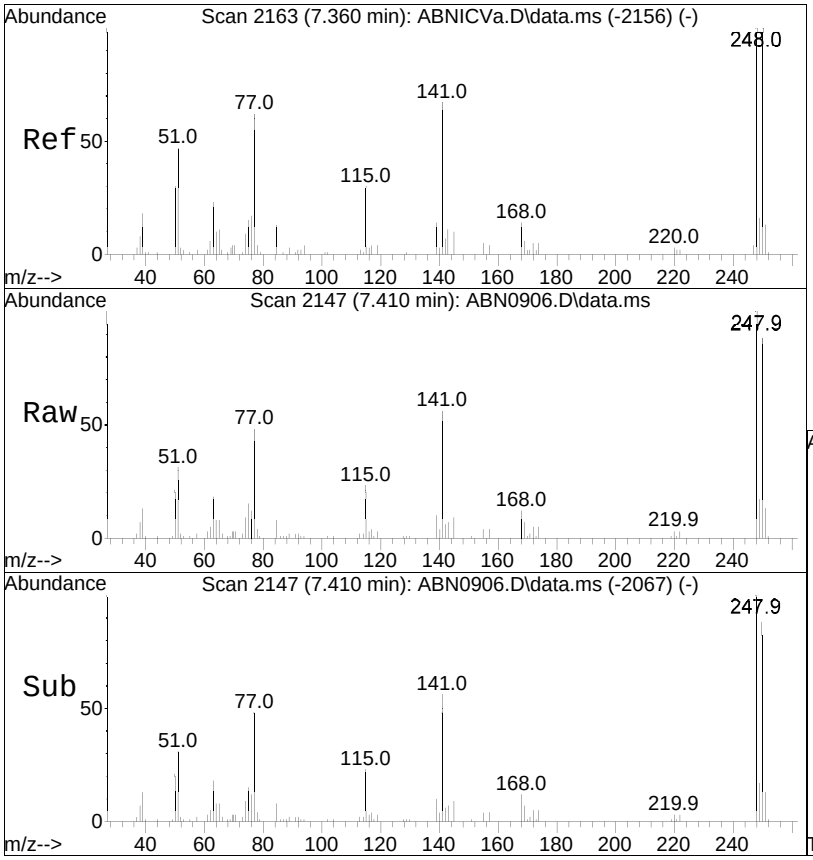


#77
Azobenzene
Concen: 4.83 ug/ml
RT: 7.102 min Scan# 2048
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion: 77 Resp: 57992

Ion	Ratio	Lower	Upper
77	100		
182	18.0	17.4	26.2
105	16.3	15.4	23.2

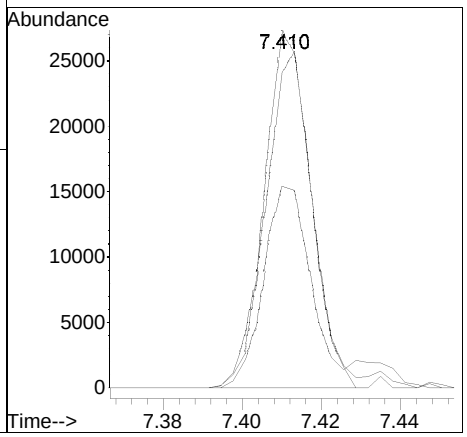


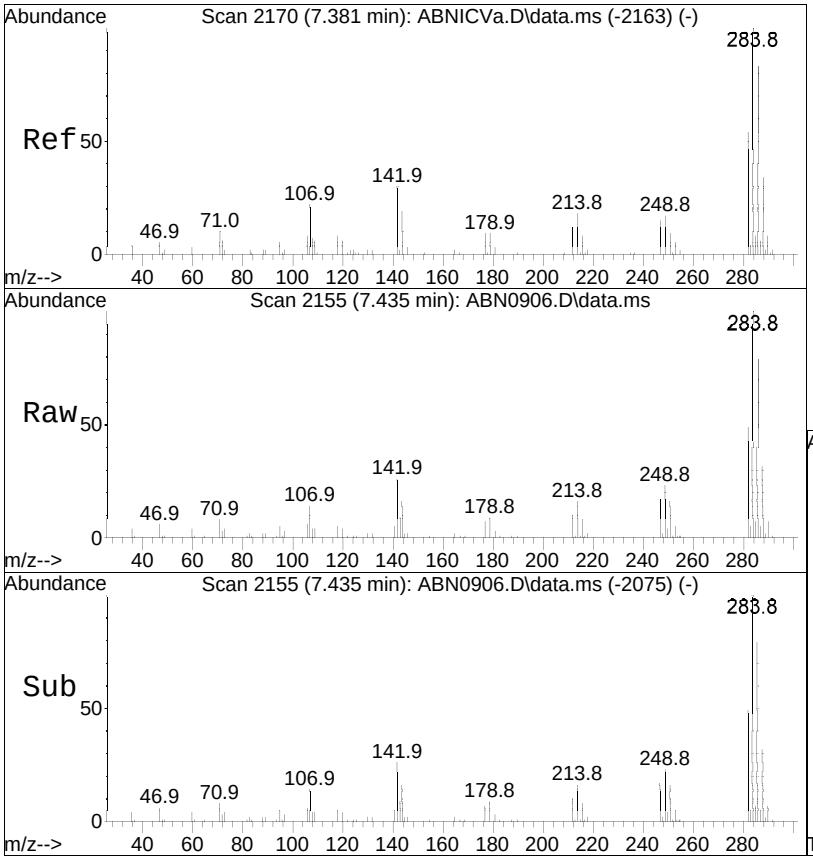


#79
4-Bromophenyl phenyl ether
Concen: 5.40 ug/ml
RT: 7.410 min Scan# 2147
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:248 Resp: 21944

Ion	Ratio	Lower	Upper
248	100		
141	58.2	76.6	114.8#
250	99.6	77.3	115.9

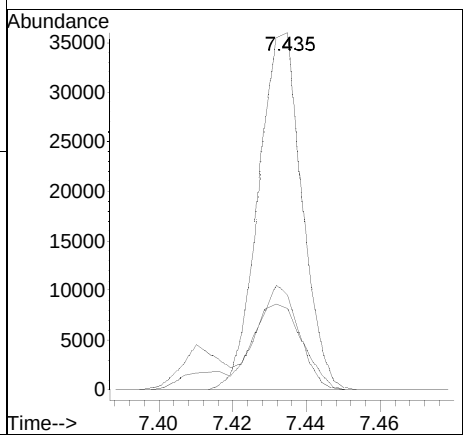


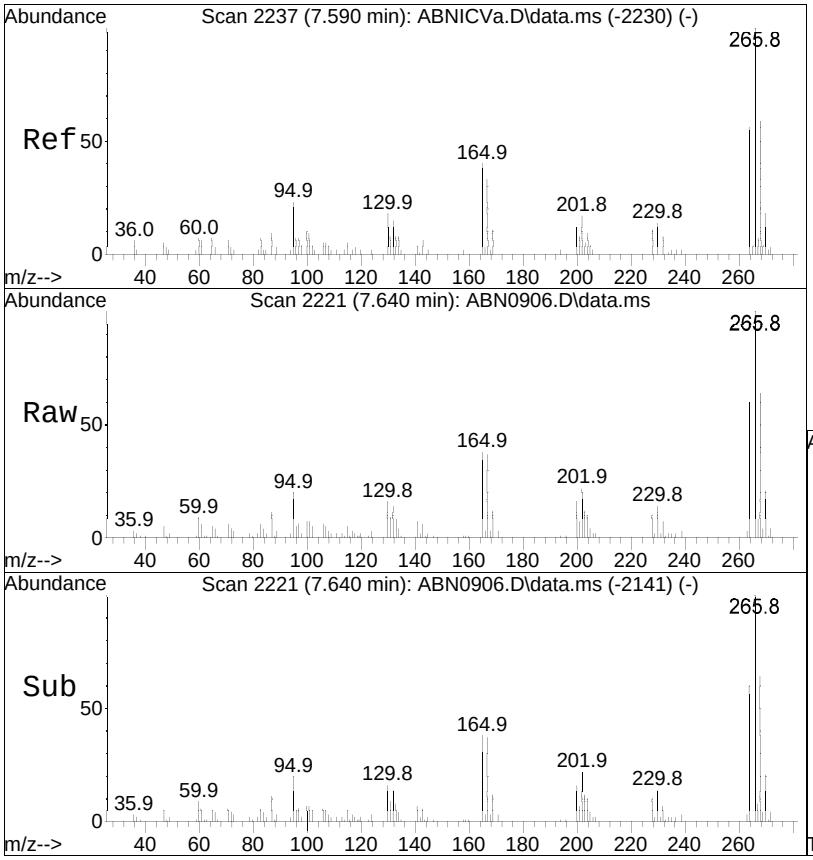


#80
Hexachlorobenzene
Concen: 5.78 ug/ml
RT: 7.435 min Scan# 2155
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:284 Resp: 29407

Ion	Ratio	Lower	Upper
284	100		
142	34.2	41.9	62.9#
249	27.3	24.1	36.1

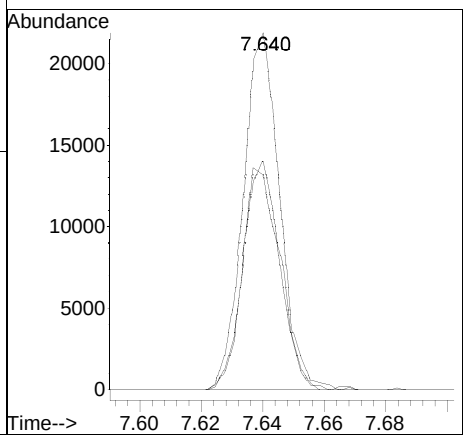


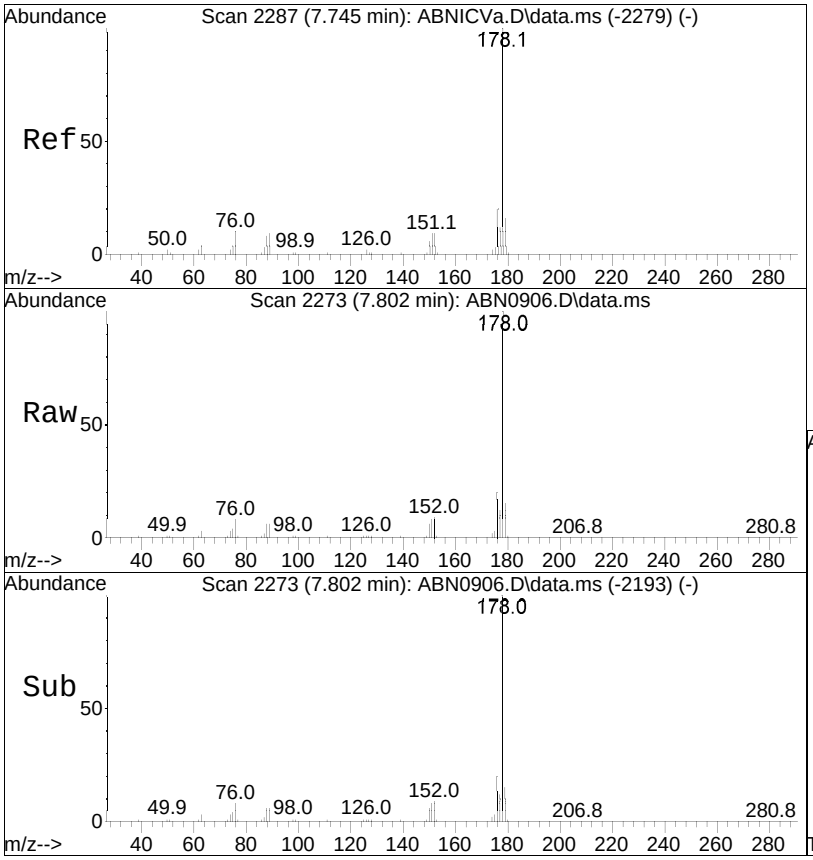


#81
Pentachlorophenol
Concen: 6.27 ug/ml
RT: 7.640 min Scan# 2221
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:266 Resp: 18036

Ion	Ratio	Lower	Upper
266	100		
264	64.8	49.7	74.5
268	64.3	50.5	75.7

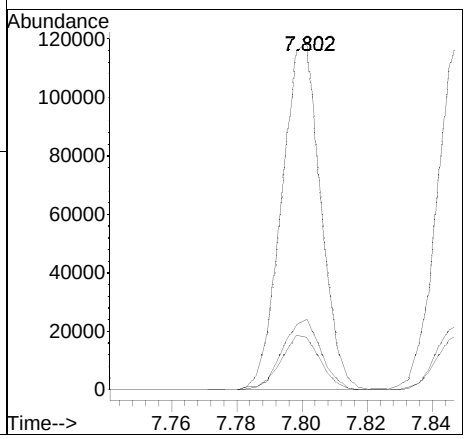


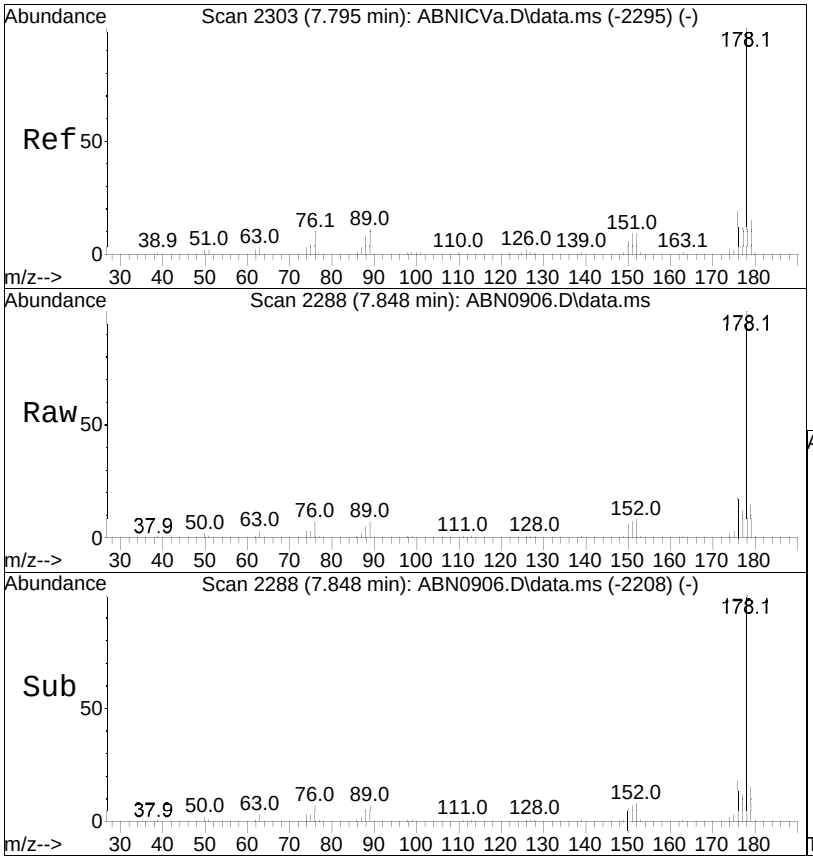


#88
Phenanthrene
Concen: 4.32 ug/ml
RT: 7.802 min Scan# 2273
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:178 Resp: 98838

Ion	Ratio	Lower	Upper
178	100		
179	15.8	12.2	18.2
176	19.9	15.4	23.2

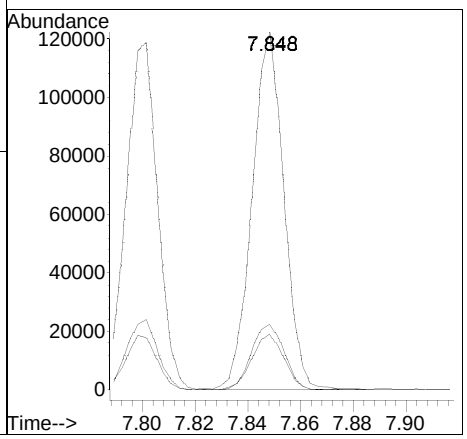


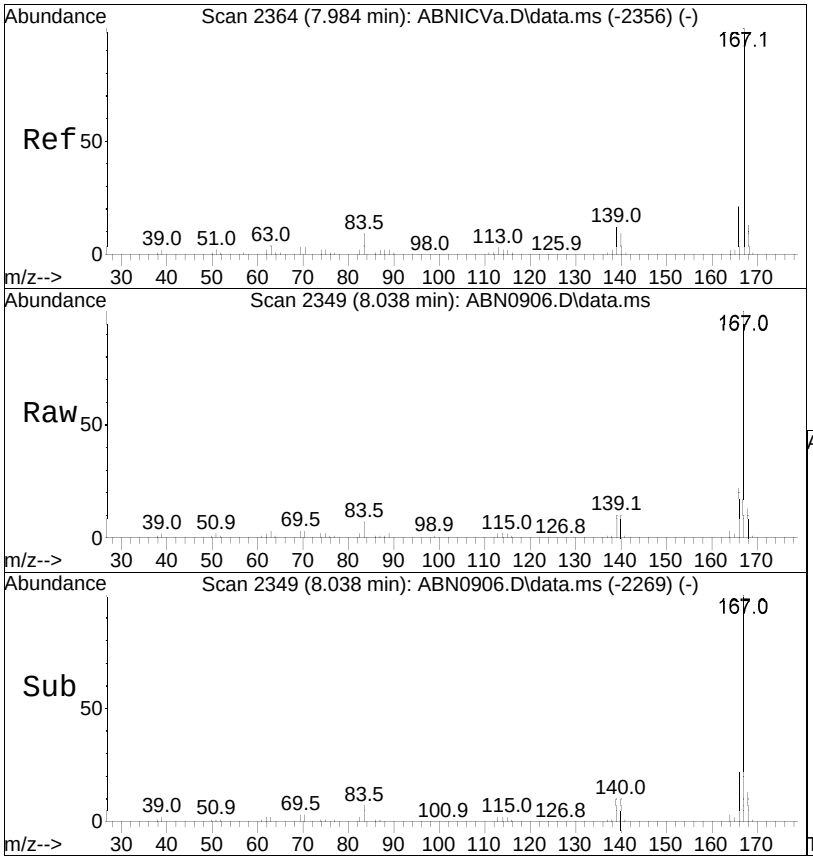


#89
Anthracene
Concen: 4.61 ug/ml
RT: 7.848 min Scan# 2288
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:178 Resp: 102107

Ion	Ratio	Lower	Upper
178	100		
179	15.7	12.0	18.0
176	19.1	14.6	22.0

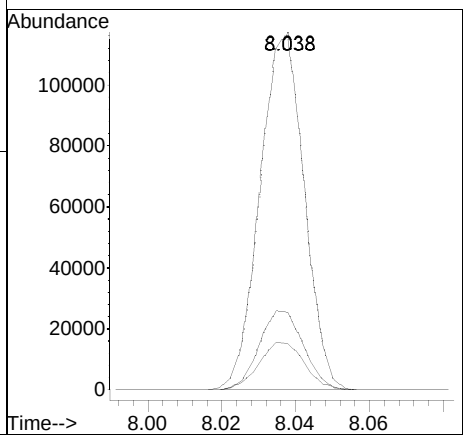


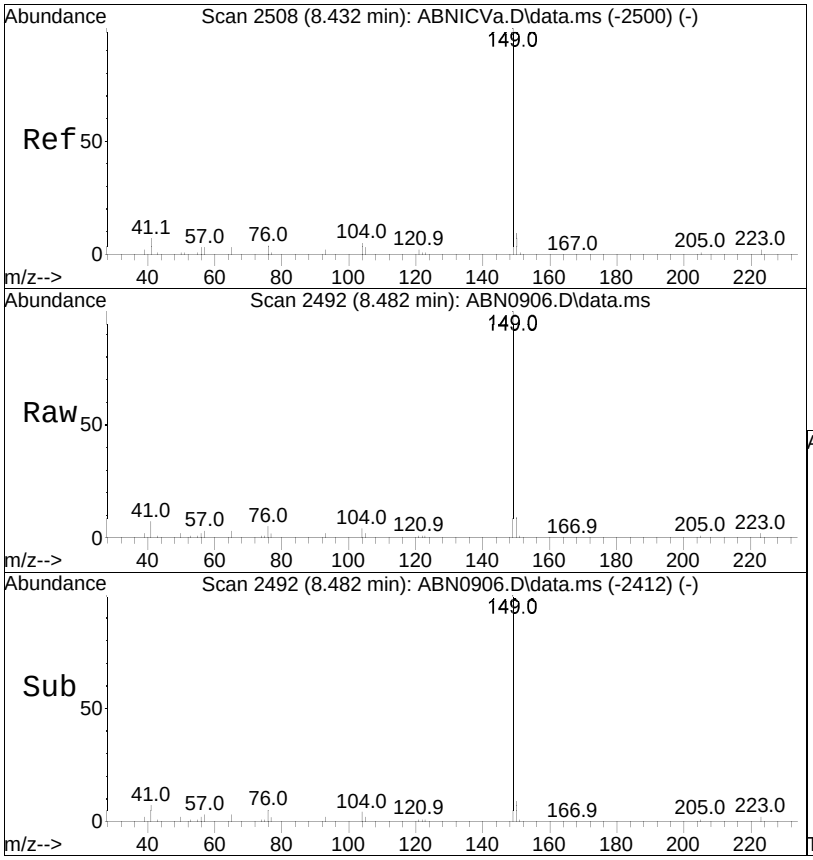


#90
Carbazole
Concen: 4.62 ug/ml
RT: 8.038 min Scan# 2349
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:167 Resp: 96501

Ion	Ratio	Lower	Upper
167	100		
168	13.7	10.6	15.8
166	22.3	17.4	26.0

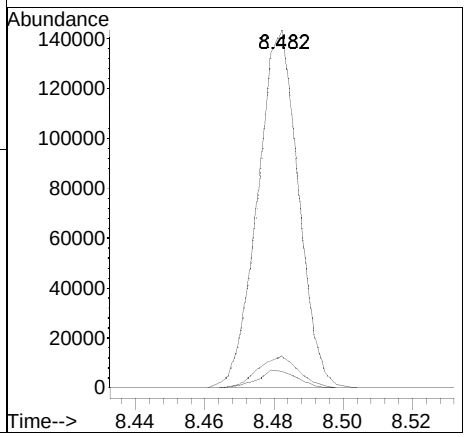


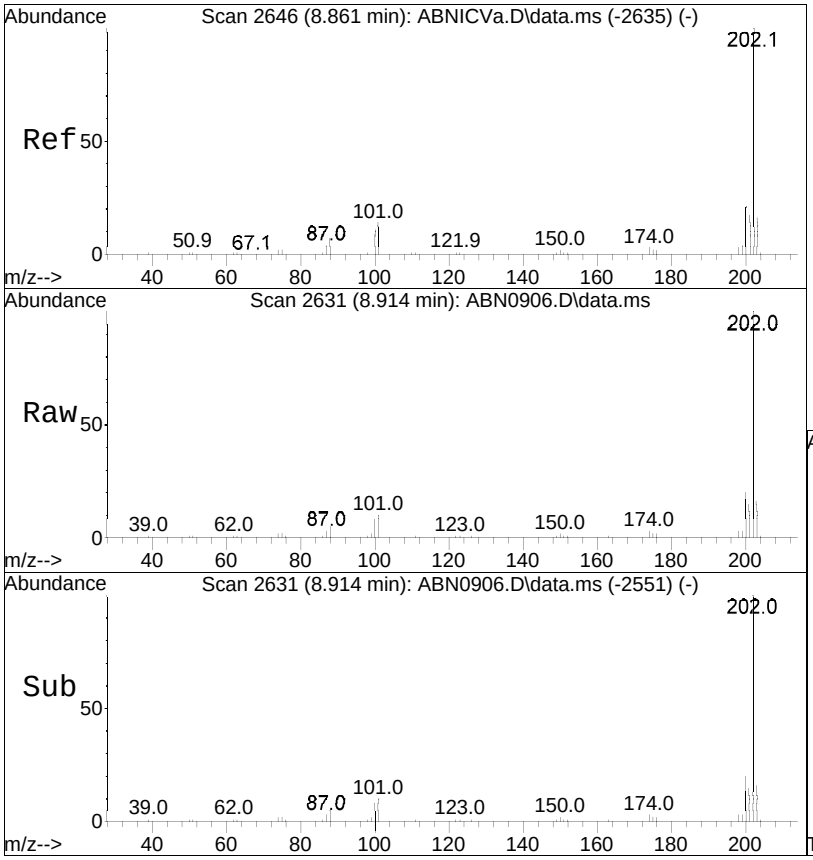


#91
Di-n-butylphthalate
Concen: 4.72 ug/ml
RT: 8.482 min Scan# 2492
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:149 Resp: 116024

Ion	Ratio	Lower	Upper
149	100		
150	8.8	7.0	10.6
104	4.7	4.5	6.7

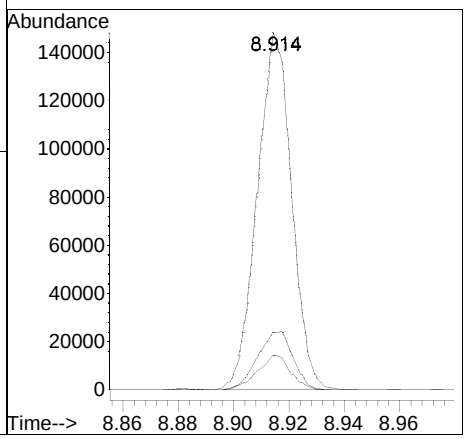


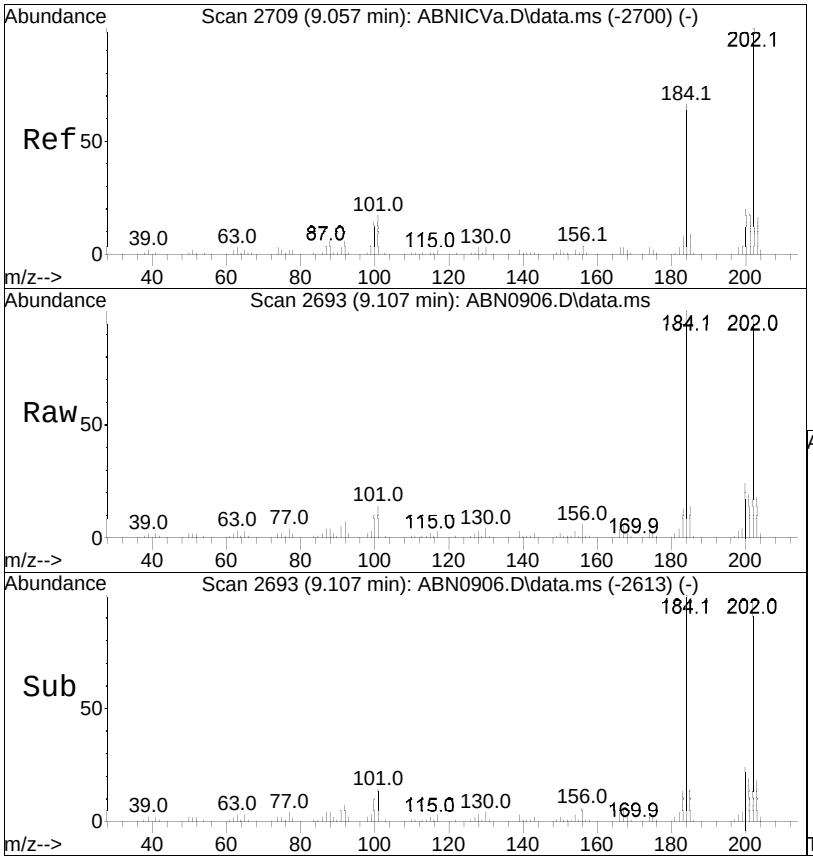


#92
Fluoranthene
Concen: 4.71 ug/ml
RT: 8.914 min Scan# 2631
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:202 Resp: 126245

Ion	Ratio	Lower	Upper
202	100		
101	9.4	13.5	20.3#
203	17.0	13.6	20.4

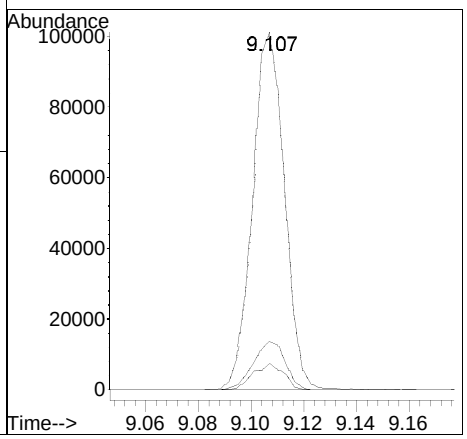


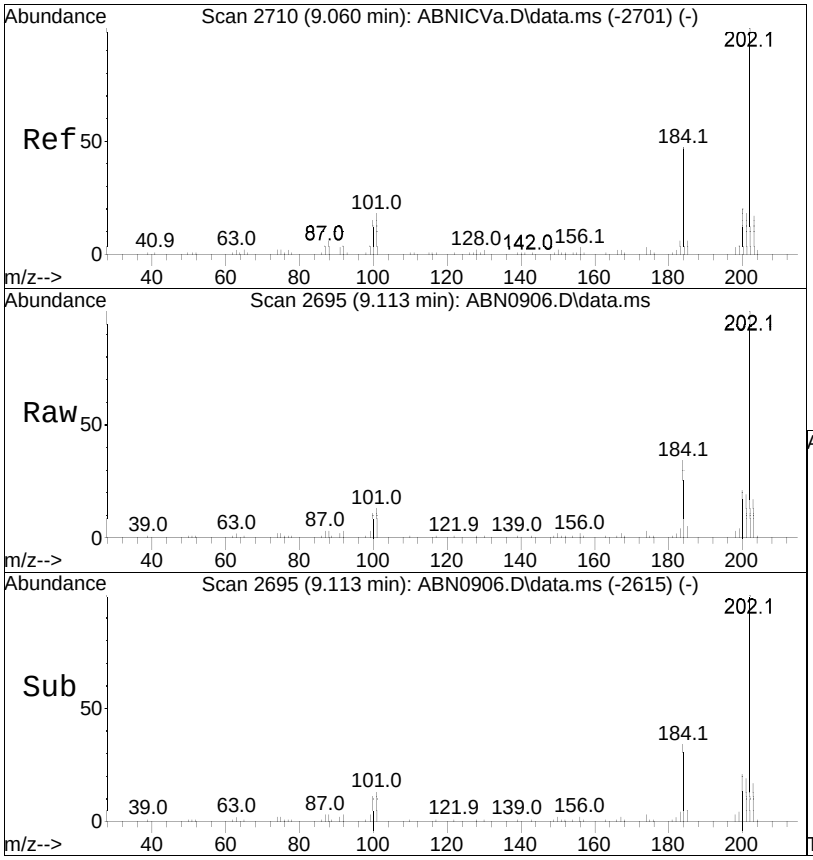


#93
Benzidine
Concen: 4.79 ug/ml
RT: 9.107 min Scan# 2693
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:184 Resp: 84062

Ion	Ratio	Lower	Upper
184	100		
92	7.1	9.1	13.7#
185	13.7	11.1	16.7

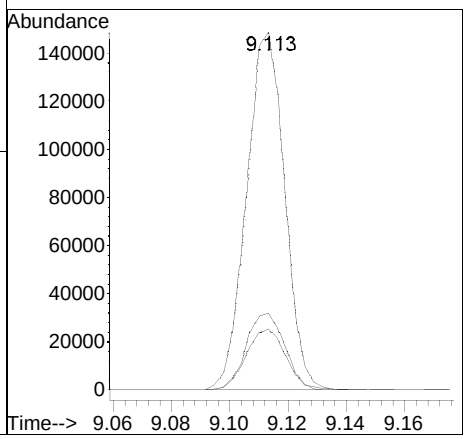


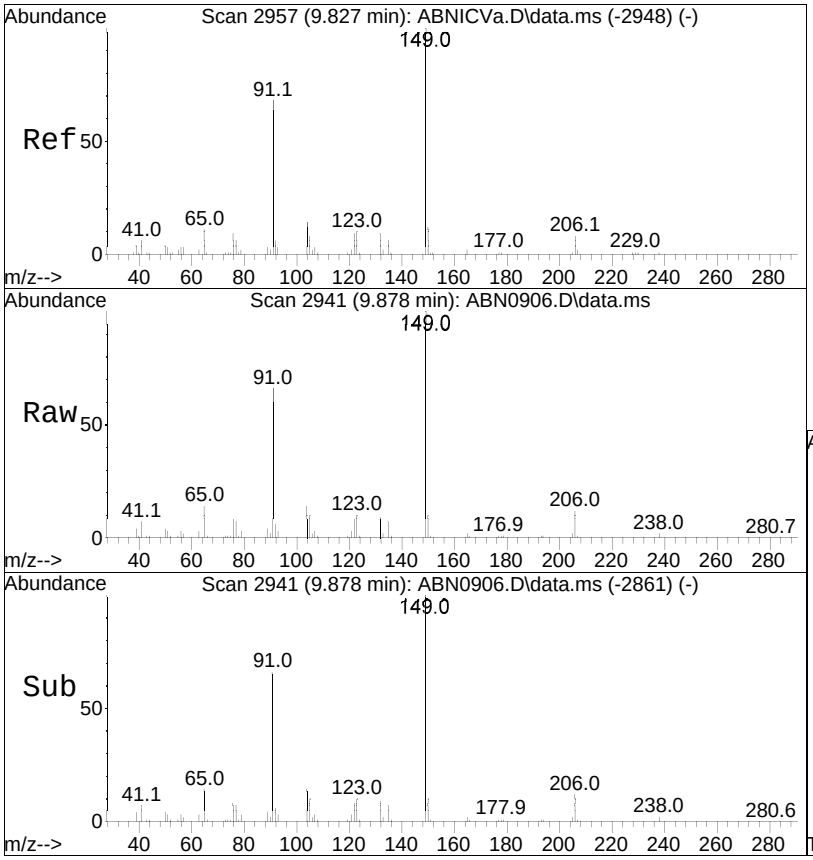


#94
Pyrene
Concen: 4.72 ug/ml
RT: 9.113 min Scan# 2695
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:202 Resp: 133779

Ion	Ratio	Lower	Upper
202	100		
200	21.8	16.7	25.1
203	17.9	14.2	21.4

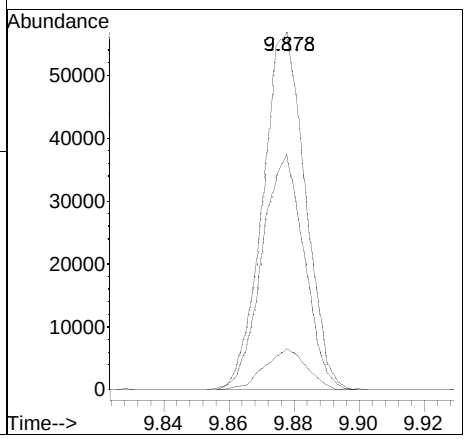


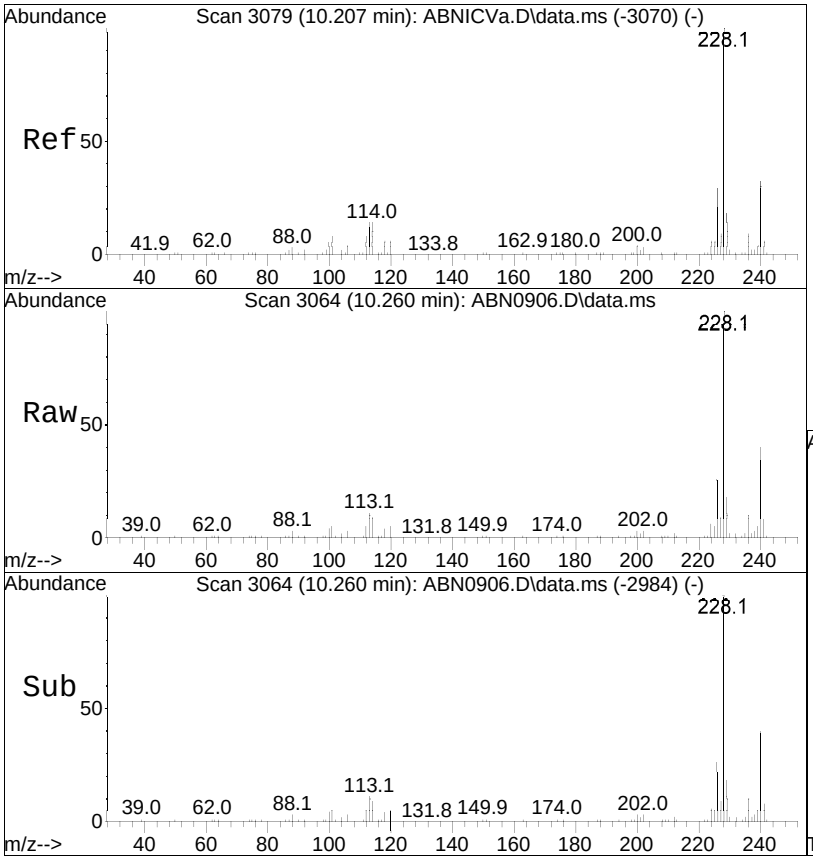


#96
Butyl benzyl phthalate
Concen: 4.57 ug/ml
RT: 9.878 min Scan# 2941
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:149 Resp: 51119

Ion	Ratio	Lower	Upper
149	100		
91	65.7	63.3	94.9
206	11.6	13.9	20.9#

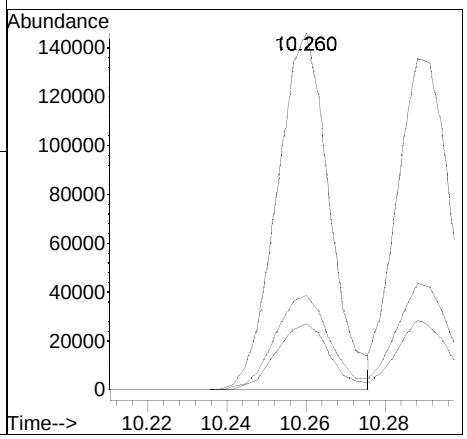


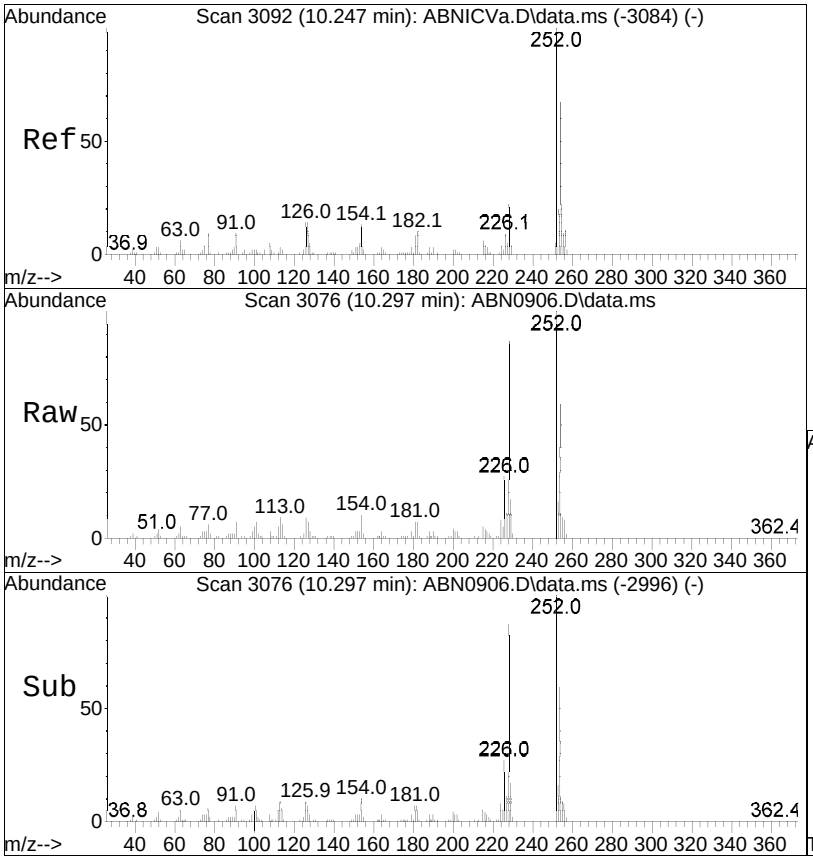


#104
Benzo(a)anthracene
Concen: 4.60 ug/ml
RT: 10.260 min Scan# 3064
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:228 Resp: 134999

Ion	Ratio	Lower	Upper
228	100		
226	27.9	22.2	33.4
229	19.1	15.6	23.4

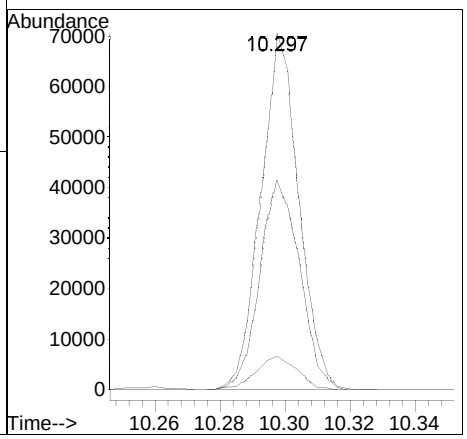


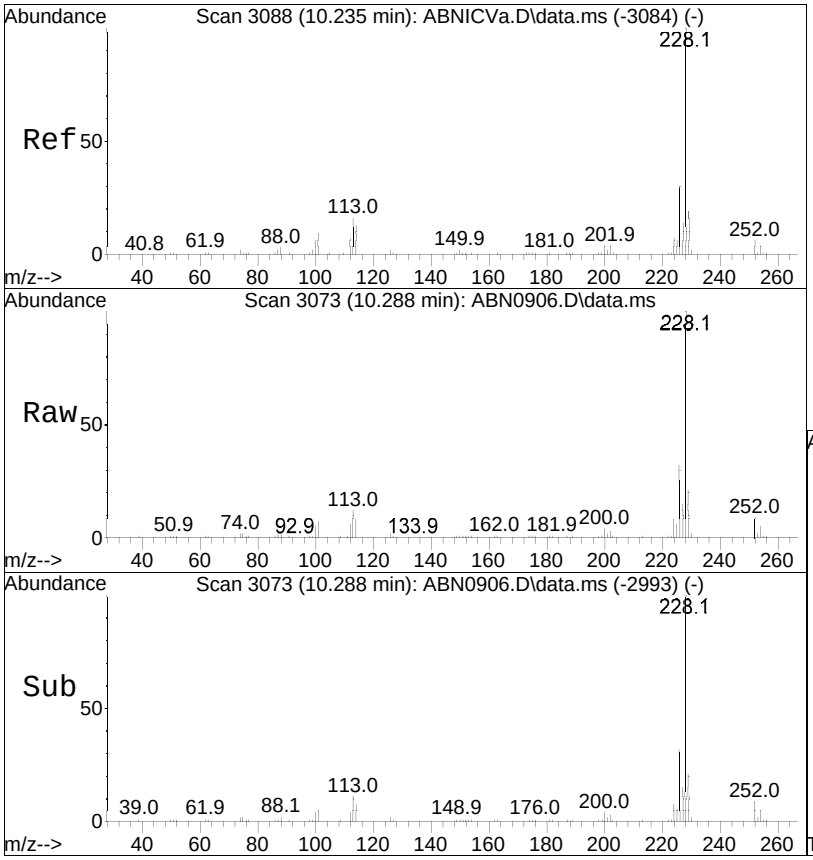


#105
3,3'-Dichlorobenzidine
Concen: 5.03 ug/ml
RT: 10.297 min Scan# 3076
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:252 Resp: 56816

Ion	Ratio	Lower	Upper
252	100		
126	10.4	14.5	21.7#
254	62.1	51.2	76.8

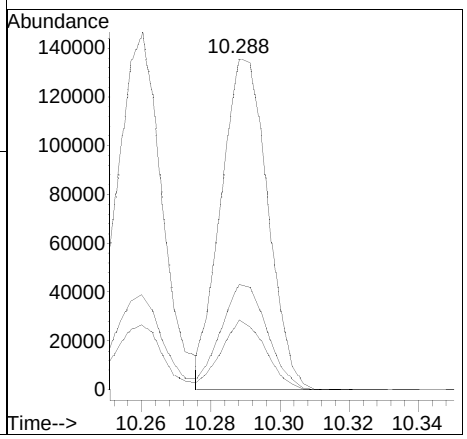


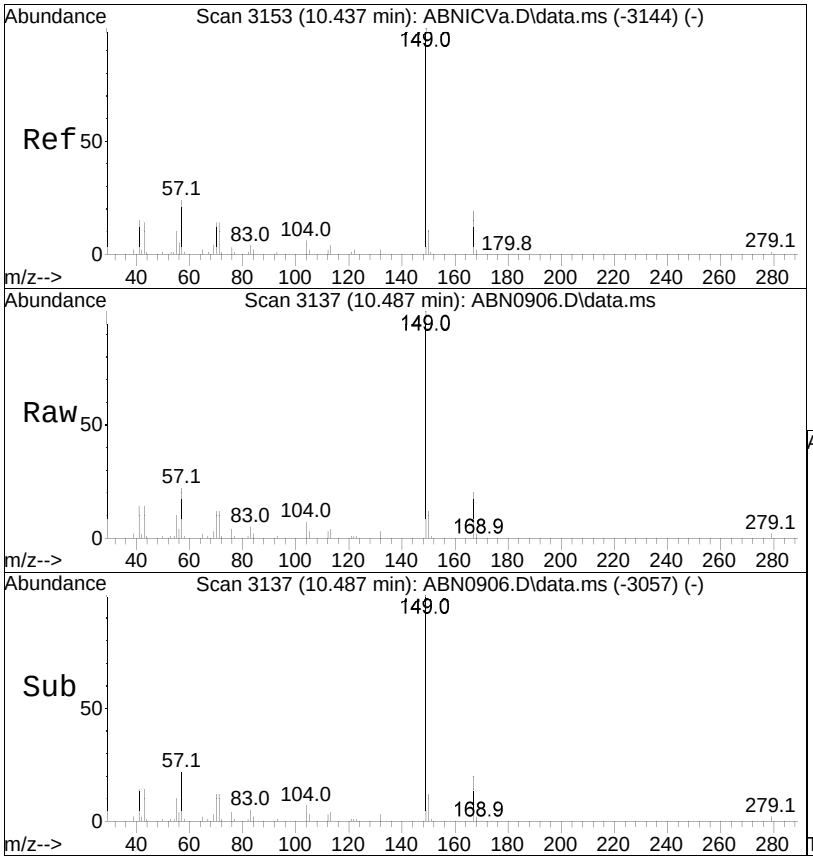


#106
Chrysene
Concen: 4.57 ug/ml
RT: 10.288 min Scan# 3073
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:228 Resp: 126631

Ion	Ratio	Lower	Upper
228	100		
226	31.7	24.0	36.0
229	20.1	15.8	23.8

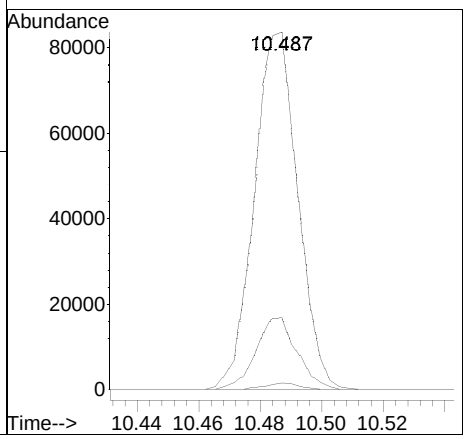


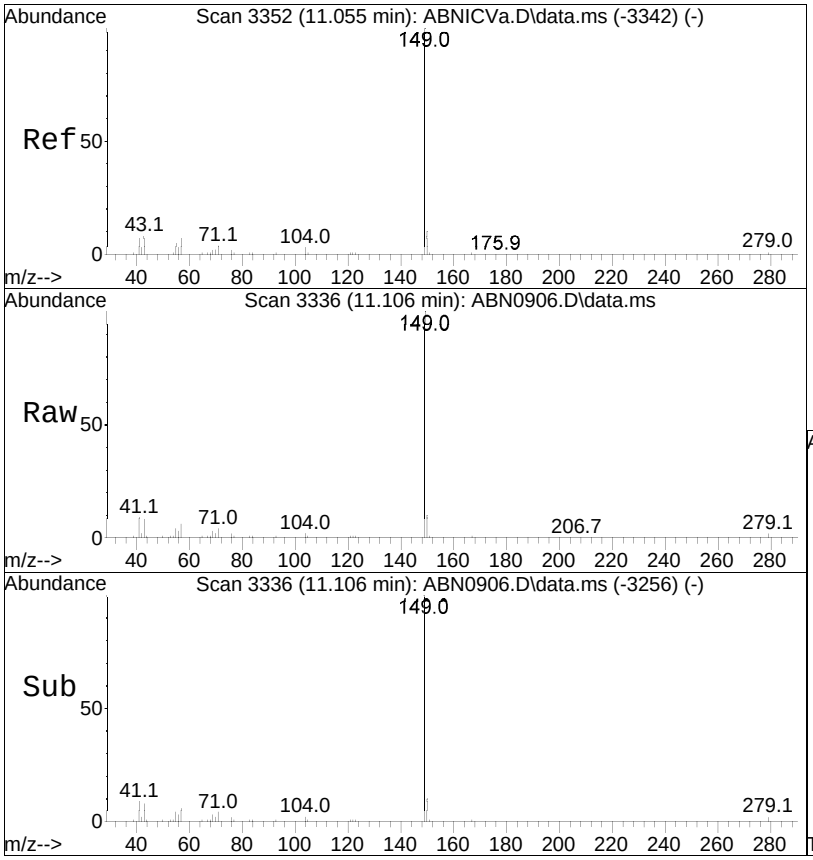


#107
Bis(2-ethylhexyl)phthalate
Concen: 4.97 ug/ml
RT: 10.487 min Scan# 3137
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:149 Resp: 81512

Ion	Ratio	Lower	Upper
149	100		
167	19.1	22.1	33.1#
279	1.3	3.0	4.4#

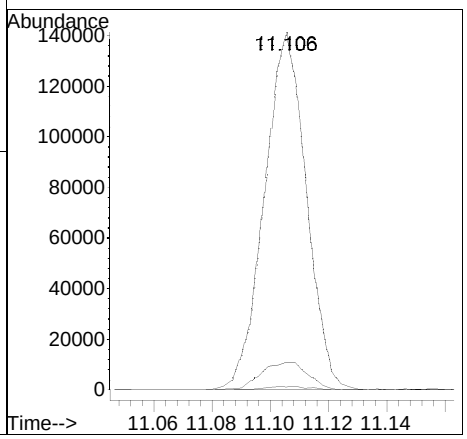


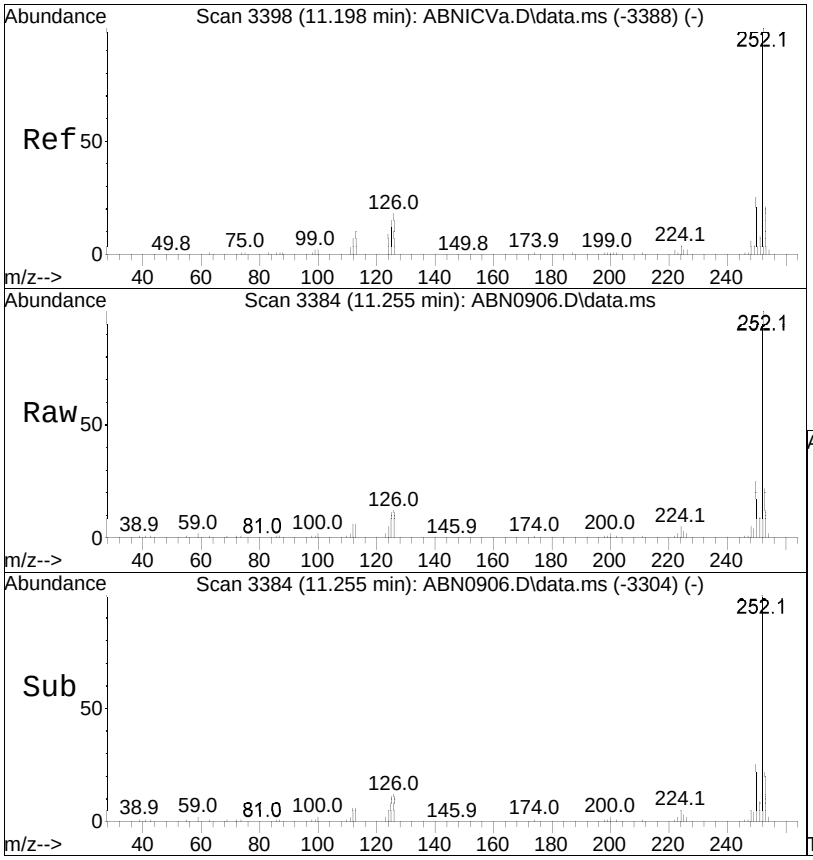


#108
Di-n-octylphthalate
Concen: 4.69 ug/ml
RT: 11.106 min Scan# 3336
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:149 Resp: 139662

Ion	Ratio	Lower	Upper
149	100		
43	8.8	18.8	28.2#
167	1.1	1.3	1.9#

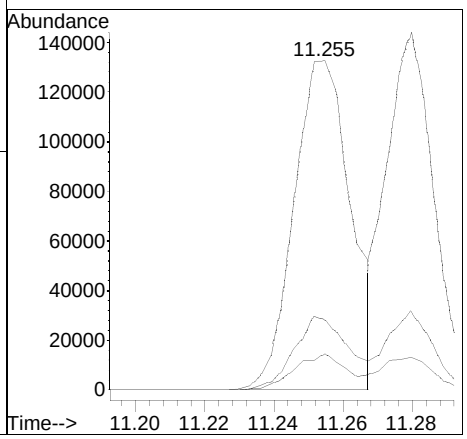


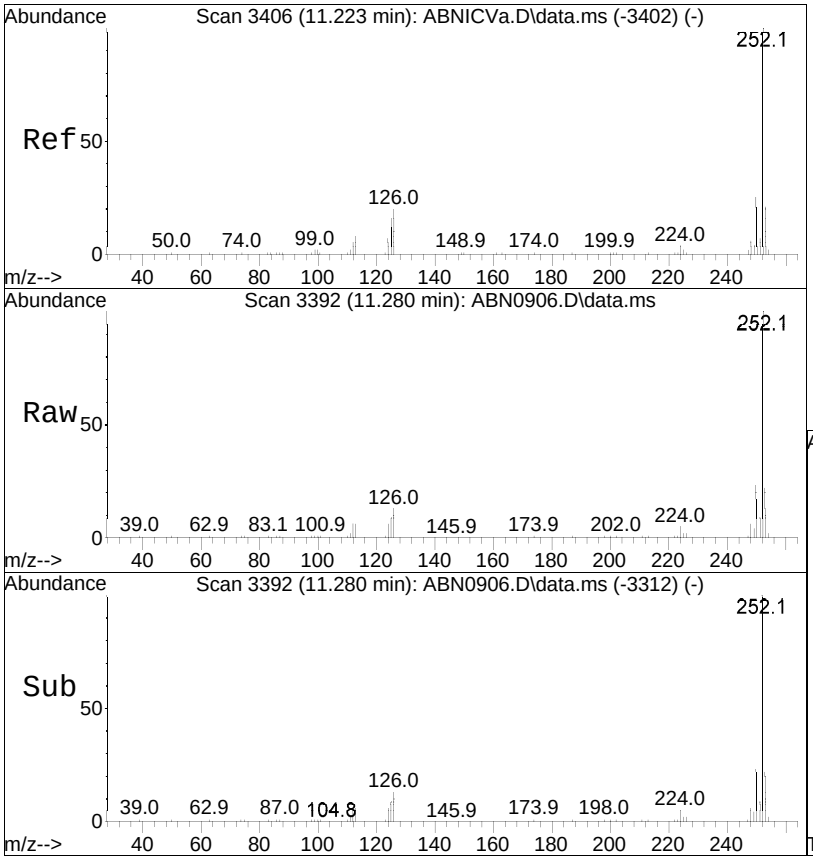


#109
Benzo(b)fluoranthene
Concen: 4.76 ug/ml M3
RT: 11.255 min Scan# 3384
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:252 Resp: 151502

Ion	Ratio	Lower	Upper
252	100		
125	9.7	13.3	19.9#
253	21.5	17.1	25.7

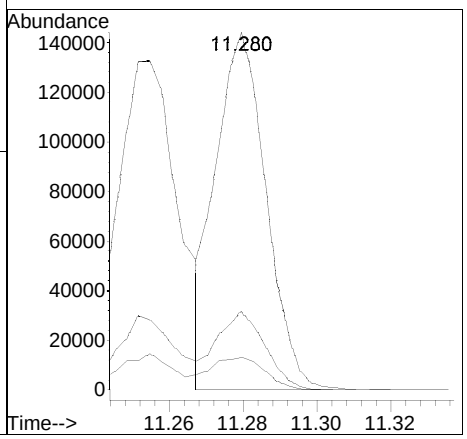


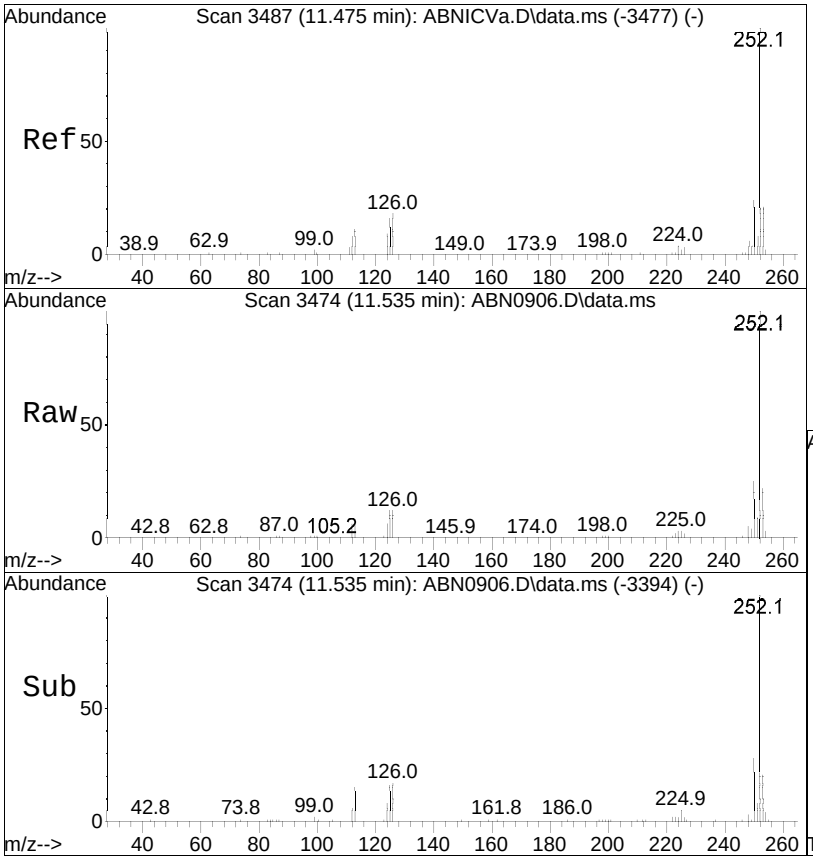


#110
Benzo(k)fluoranthene
Concen: 4.49 ug/ml
RT: 11.280 min Scan# 3392
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:252 Resp: 136435

Ion	Ratio	Lower	Upper
252	100		
125	10.4	13.0	19.6#
253	21.1	16.8	25.2

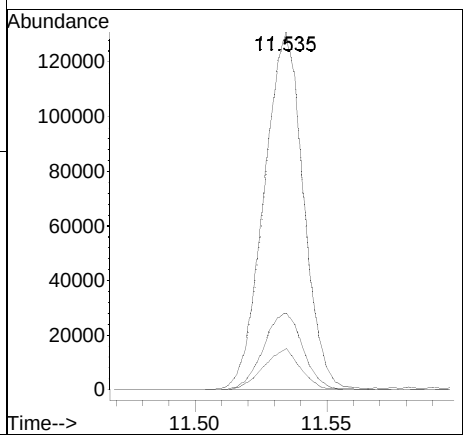


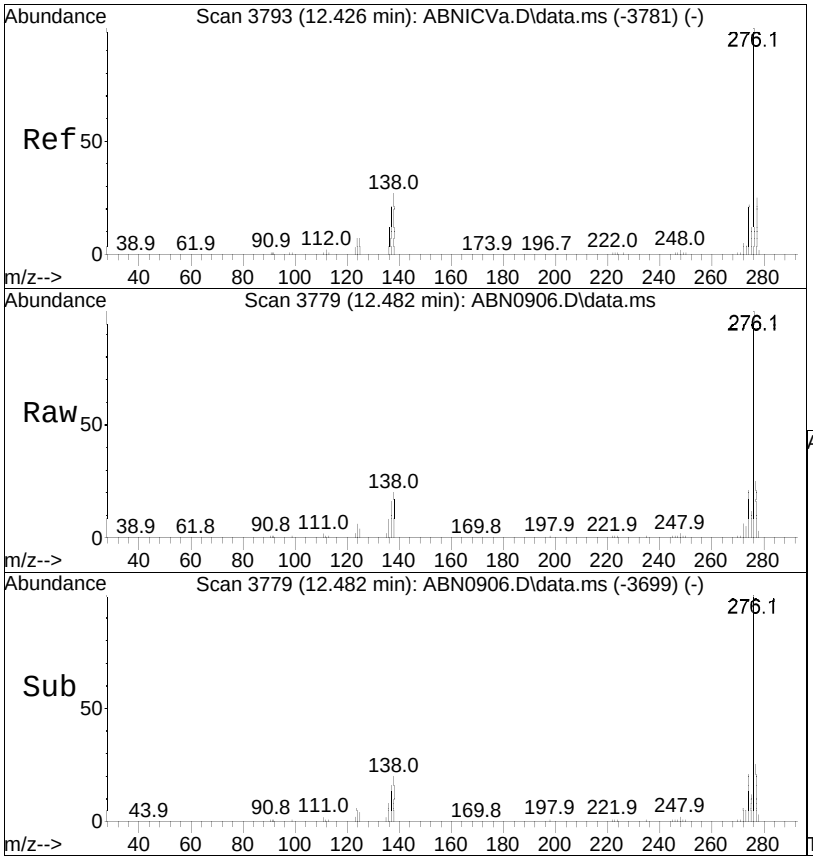


#111
Benzo(a)pyrene
Concen: 4.89 ug/ml
RT: 11.535 min Scan# 3474
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:252 Resp: 135336

Ion	Ratio	Lower	Upper
252	100		
125	10.9	14.2	21.2#
253	21.8	16.9	25.3

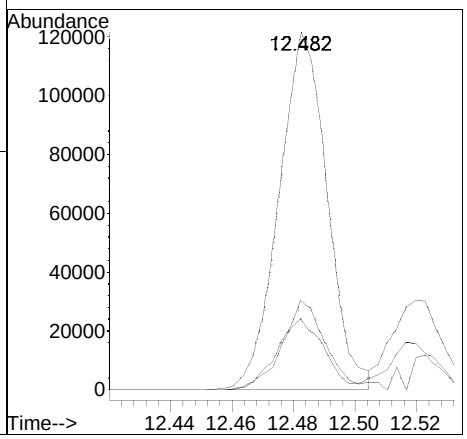


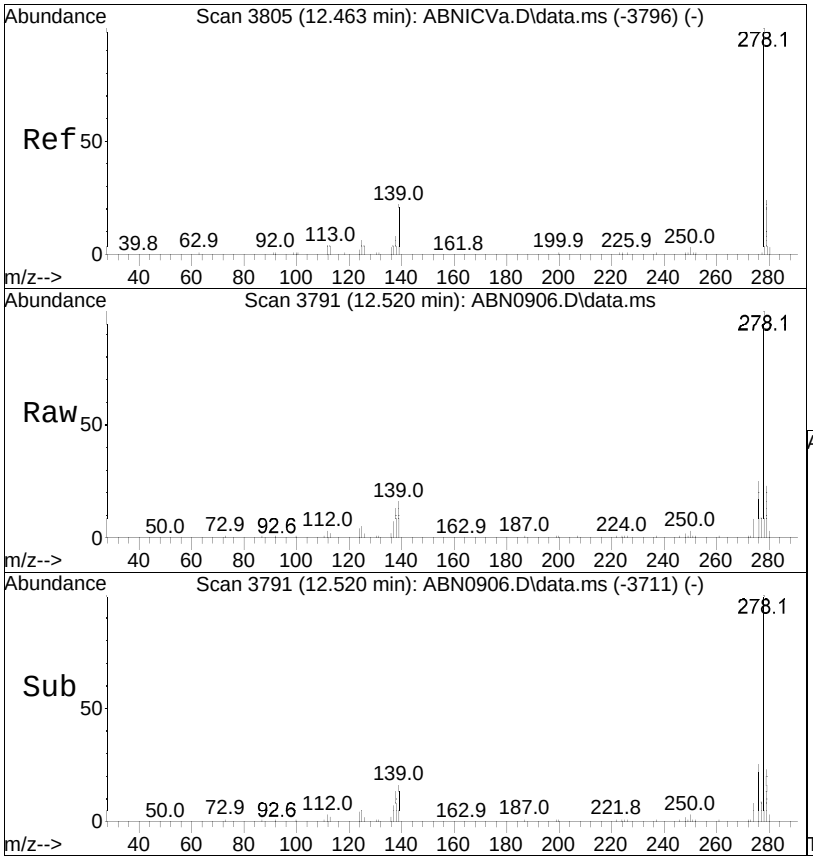


#113
Indeno(1,2,3-cd)pyrene
Concen: 4.35 ug/mL
RT: 12.482 min Scan# 3779
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:276 Resp: 131579

Ion	Ratio	Lower	Upper
276	100		
138	19.2	25.1	37.7#
277	23.4	18.6	28.0

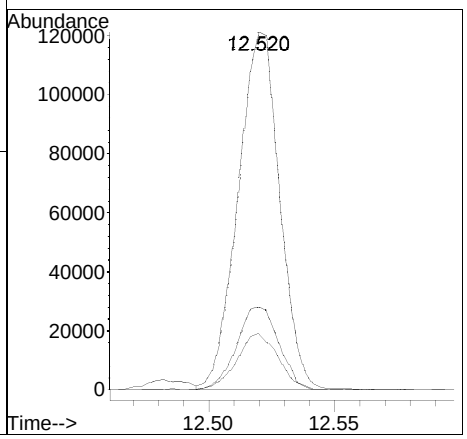


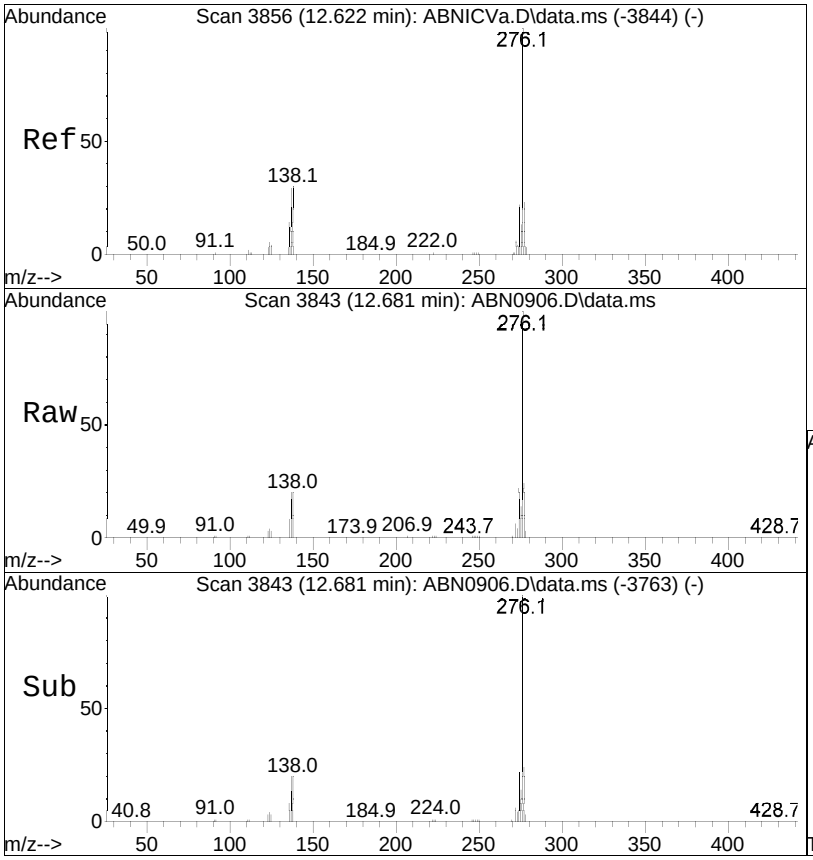


#114
Dibenzo(a,h)anthracene
Concen: 4.36 ug/ml
RT: 12.520 min Scan# 3791
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:278 Resp: 138344

Ion	Ratio	Lower	Upper
278	100		
139	15.7	20.8	31.2#
279	23.7	18.3	27.5

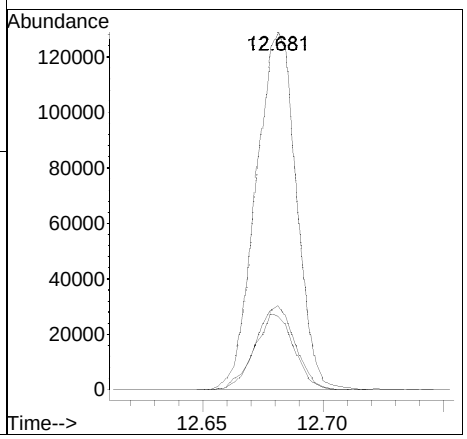




#115
Benzo(ghi)perylene
Concen: 4.67 ug/ml
RT: 12.681 min Scan# 3843
Delta R.T. 0.000 min
Lab File: ABN0906.D
Acq: 6 Sep 2023 10:19 am

Tgt Ion:276 Resp: 149576

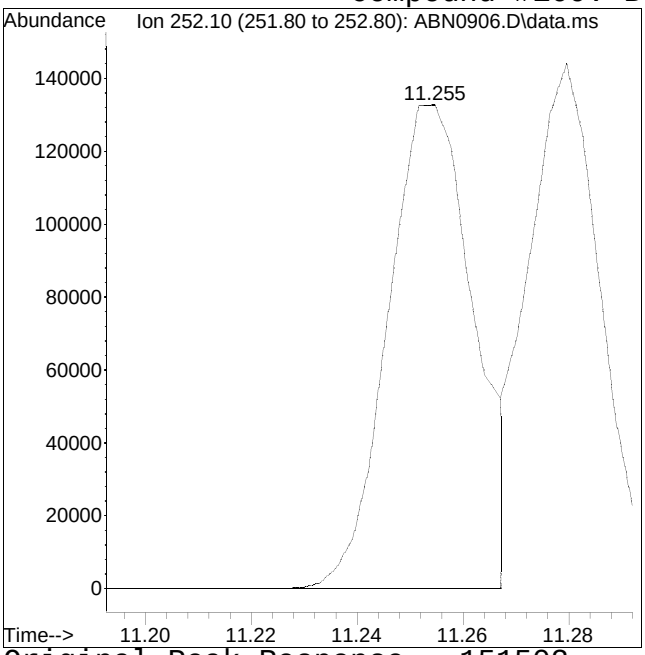
Ion	Ratio	Lower	Upper
276	100		
138	21.0	29.2	43.8#
277	23.1	18.8	28.2



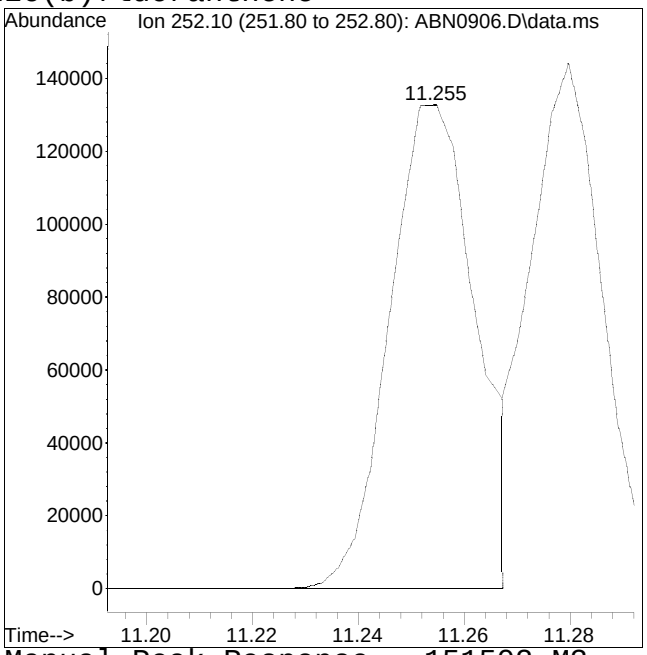
Manual Integration Report

Data Path : I:\8270\Dakota\230906lvi\ QMethod : FS230412LVIDakota.m
Data File : ABN0906.D Operator : Dakota:sz
Date Inj'd : 9/6/2023 10:19 am Instrument : Dakota
Sample : wg1824168-3,32,,ABN LVI CCQuant Date : 9/6/2023 11:54 am

Compound #109: Benzo(b)fluoranthene



Original Peak Response = 151502



Manual Peak Response = 151502 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230906lvi\
Data File : AP90906.D
Acq On : 6 Sep 2023 10:41 am
Operator : Dakota:sz
Sample : wg1824168-4,32,,AP9 LVI CCV Lot # 10181
Misc : wg1824168,,ical19934
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Sep 06 11:20:03 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 11:19:36 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
27	I	IS2_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	93	0.00
28	T	Benzaldehyde		1.046	0.673	35.7#	55	0.00
29	T	Acetophenone		1.831	1.523	16.8	72	0.00
30	T	m-Toluidine	*	5.000	3.340	33.2#	56	0.00
31	T	2-Chloroaniline		1.693	1.382	18.4	70	0.00
54	I	IS2_Naphthalene-d8		1.000	1.000	0.0	84	0.00
55	T	a-Terpineol		0.277	0.255	7.9	74	0.00
56	T	3-Chloroaniline		0.138	0.130	5.8	69	0.00
57	T	2,6-Dichlorophenol		0.276	0.305	-10.5	87	0.00
58	T	1-chloro-2-nitrobenzene		0.149	0.137	8.1	74	0.00
59	T	Caprolactam		0.149	0.147	1.3	82	0.00
60	T	1,2,4,5-Tetrachlorobenzene		0.402	0.418	-4.0	84	0.00
61	T	Biphenyl		0.901	0.858	4.8	76	0.00
82	I	IS2_Acenaphthene-d10		1.000	1.000	0.0	103	0.00
83	T	Dichloran	*	5.000	4.432	11.4	104	0.00
84	T	Pentachloronitrobenzene		0.203	0.212	-4.4	107	0.00
97	I	IS2_Phenanthrene-d10		1.000	1.000	0.0	118	0.00
98	T	Diphenamid		0.501	0.400	20.2	90	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230906lvi\
Data File : AP90906.D
Acq On : 6 Sep 2023 10:41 am
Operator : Dakota:sz
Sample : wg1824168-4,32,,AP9 LVI CCV Lot # 10181
Misc : wg1824168,,ical19934
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Sep 06 11:20:03 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 11:19:36 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublist

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
27) IS2_1,4-Dichlorobenzen...	3.447	152	15278	4.000	ug/ml		0.00
54) IS2_Naphthalene-d8	4.718	136	54182	4.000	ug/ml	#	0.00
82) IS2_Acenaphthene-d10	6.394	164	36903	4.000	ug/ml		0.00
97) IS2_Phenanthrene-d10	7.777	188	92510	4.000	ug/ml		0.00
System Monitoring Compounds							
Target Compounds							Qvalue
28) Benzaldehyde	2.972	105	12861	3.219	ug/ml		99
29) Acetophenone	3.898	105	29083	4.158	ug/ml	#	80
30) m-Toluidine	3.991	106	21671	3.340	ug/ml		94
31) 2-Chloroaniline	4.349	127	26386	4.079	ug/ml	#	93
55) a-Terpineol	4.818	59	17260	4.607	ug/ml	#	85
56) 3-Chloroaniline	4.827	65	8793	4.715	ug/ml		89
57) 2,6-Dichlorophenol	4.846	162	20685	5.533	ug/ml	#	85
58) 1-chloro-2-nitrobenzene	5.094	111	9267	4.601	ug/ml	#	1
59) Caprolactam	5.141	55	9938	4.936	ug/ml	#	82
60) 1,2,4,5-Tetrachloroben...	5.589	216	28336	5.204	ug/ml	#	96
61) Biphenyl	5.887	154	58082	4.759	ug/ml		96
83) Dichloran	7.516	206	8442	4.432	ug/ml	#	62
84) Pentachloronitrobenzene	7.649	237	9787	5.219	ug/ml	#	78
98) Diphenamid	8.719	167	46209	3.985	ug/ml	#	80

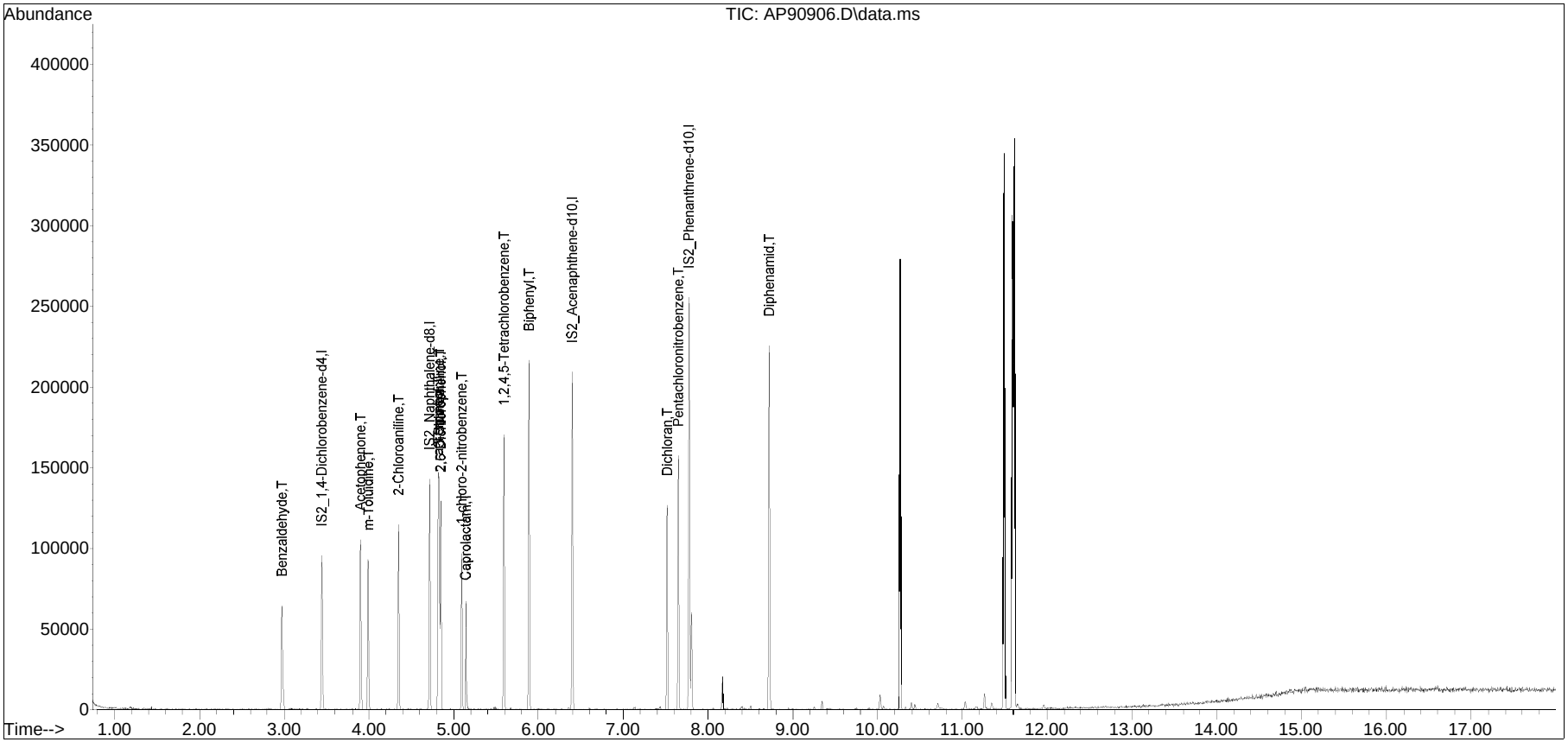
(#) = qualifier out of range (m) = manual integration (+) = signals summed

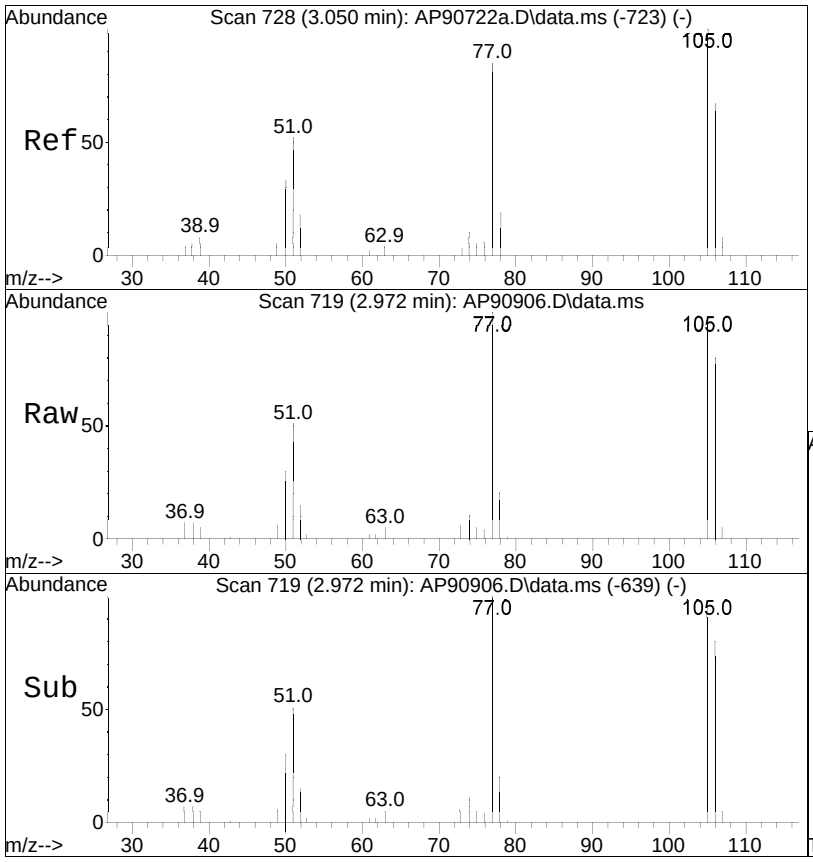
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230906lvi\
Data File : AP90906.D
Acq On : 6 Sep 2023 10:41 am
Operator : Dakota:sz
Sample : wg1824168-4,32,,AP9 LVI CCV Lot # 10181
Misc : wg1824168,,ical19934
ALS Vial : 97 Sample Multiplier: 1

Quant Time: Sep 06 11:20:03 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 11:19:36 2023
Response via : Initial Calibration

Sub List : AP9ical - AP9 ical sublist

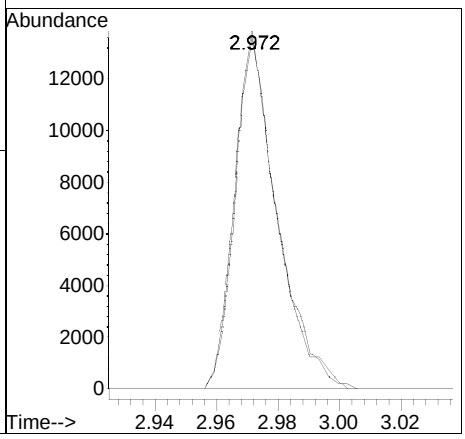


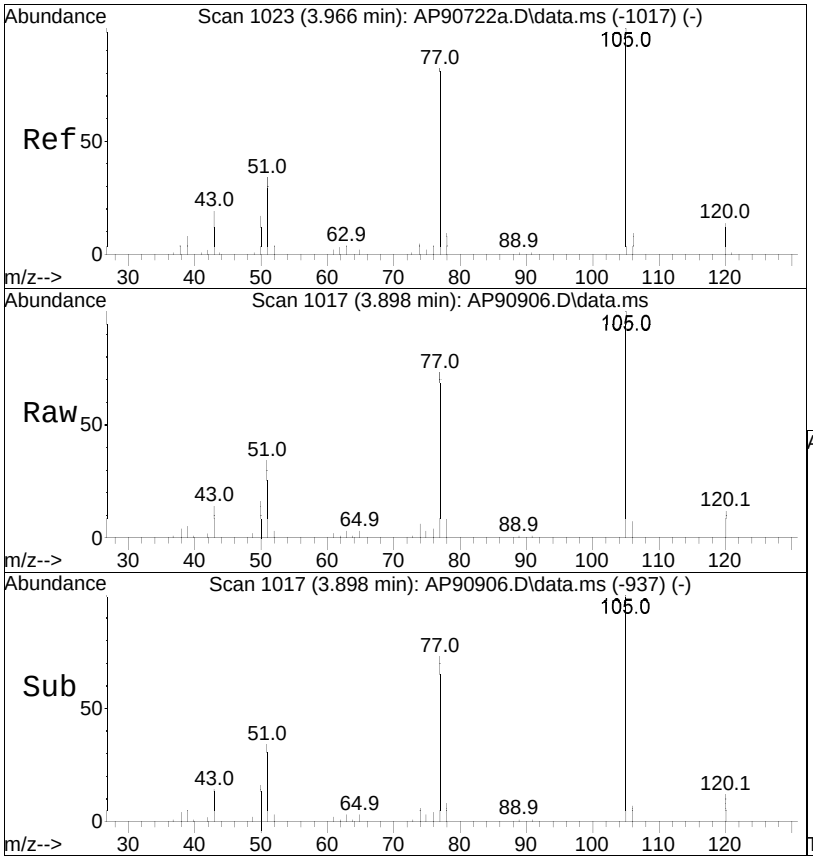


#28
Benzaldehyde
Concen: 3.22 ug/ml
RT: 2.972 min Scan# 719
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion:105 Resp: 12861

Ion	Ratio	Lower	Upper
105	100		
77	101.9	82.2	123.4

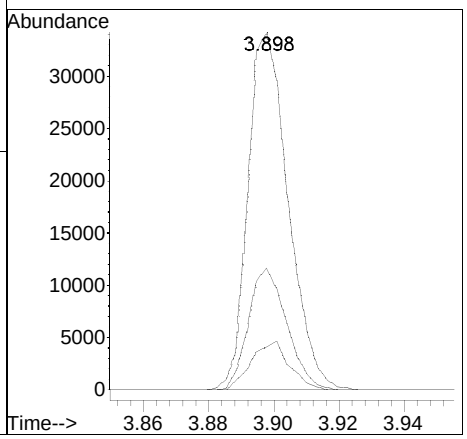


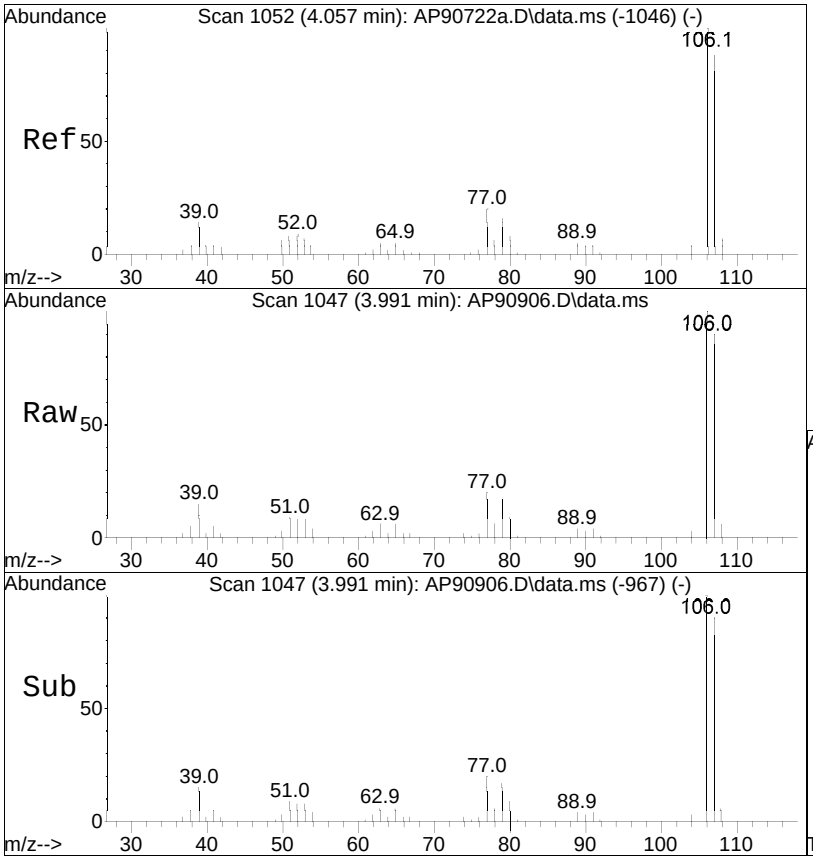


#29
Acetophenone
Concen: 4.16 ug/ml
RT: 3.898 min Scan# 1017
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion:105 Resp: 29083

Ion	Ratio	Lower	Upper
105	100		
120	12.9	20.5	30.7#
51	32.5	34.9	52.3#

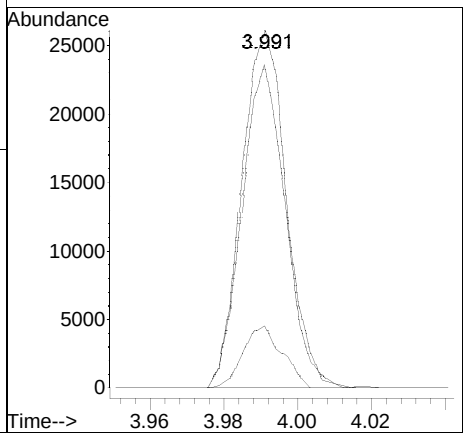


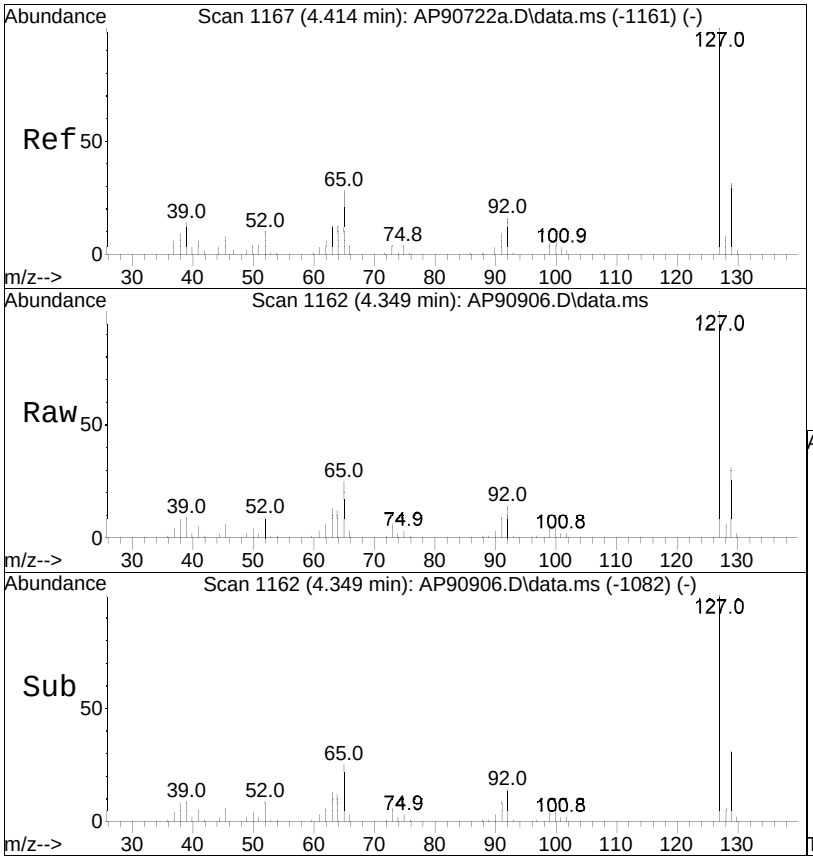


#30
m-Toluidine
Concen: 3.34 ug/ml
RT: 3.991 min Scan# 1047
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion:106 Resp: 21671

Ion	Ratio	Lower	Upper
106	100		
107	88.4	75.7	113.5
79	15.4	11.8	17.8

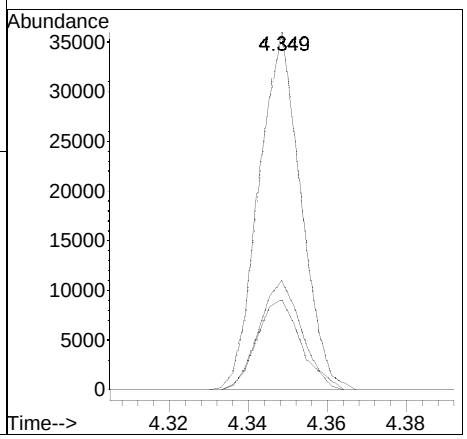


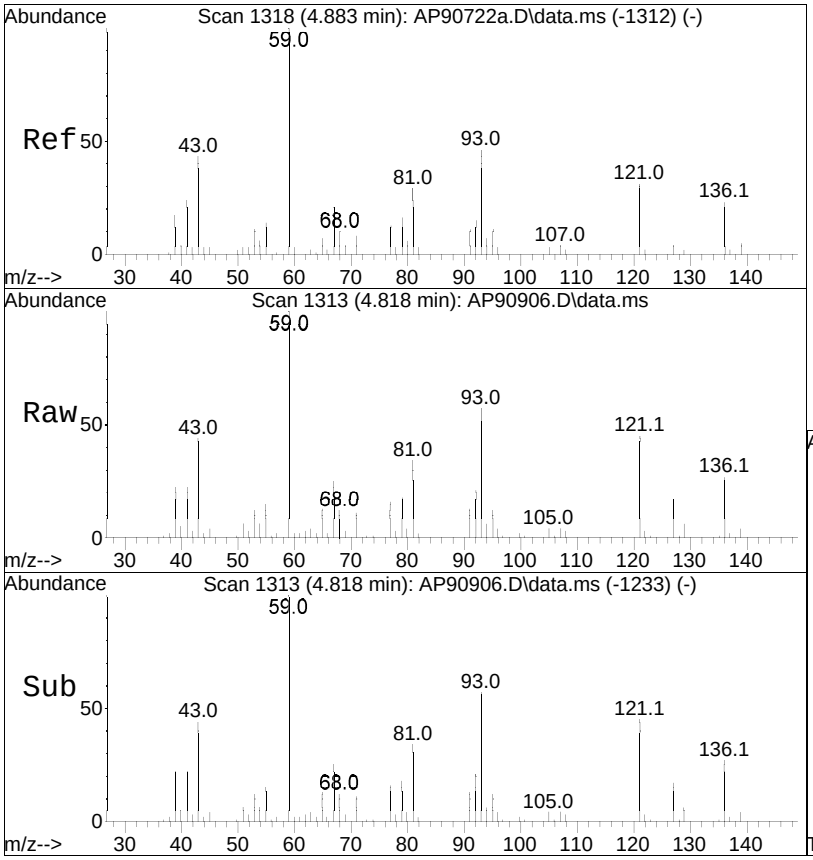


#31
2-Chloroaniline
Concen: 4.08 ug/ml
RT: 4.349 min Scan# 1162
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion:127 Resp: 26386

Ion	Ratio	Lower	Upper
127	100		
129	31.1	25.9	38.9
65	26.1	26.3	39.5#

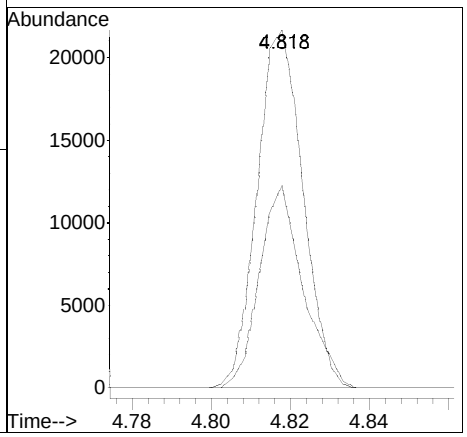


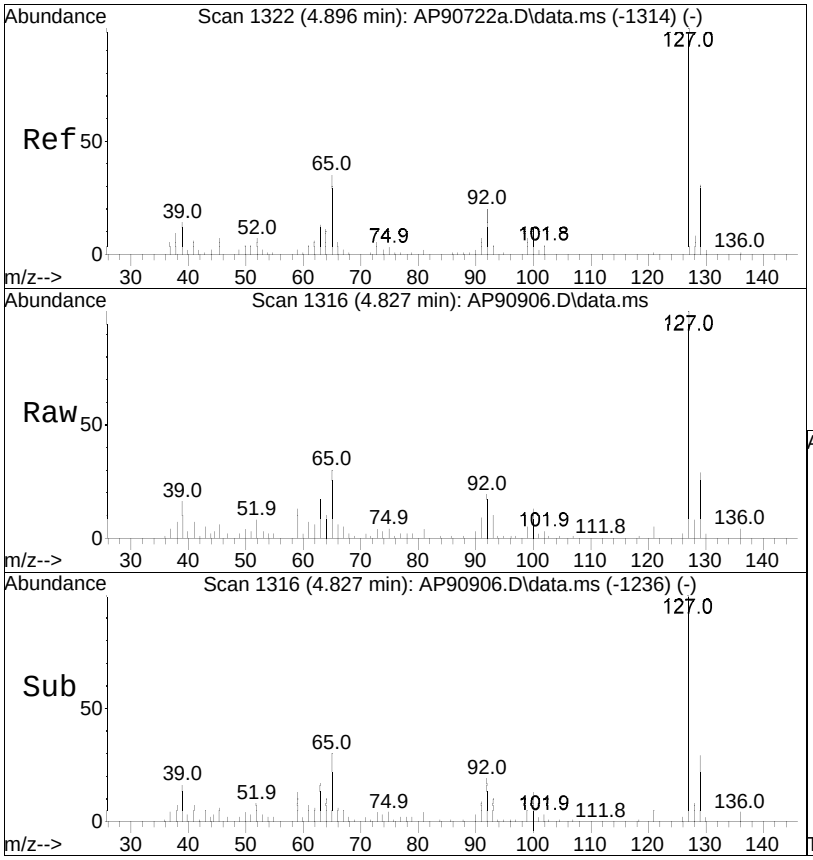


#55
a-Terpineol
Concen: 4.61 ug/ml
RT: 4.818 min Scan# 1313
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion: 59 Resp: 17260

Ion	Ratio	Lower	Upper
59	100		
93	54.4	35.6	53.4#

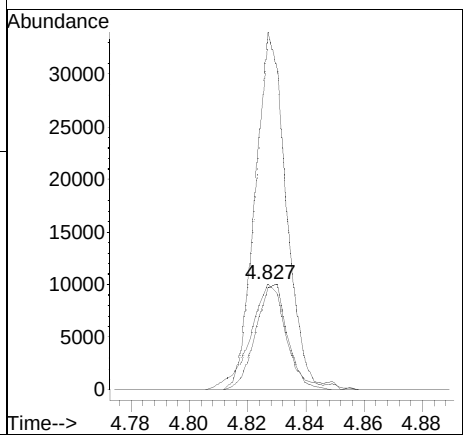


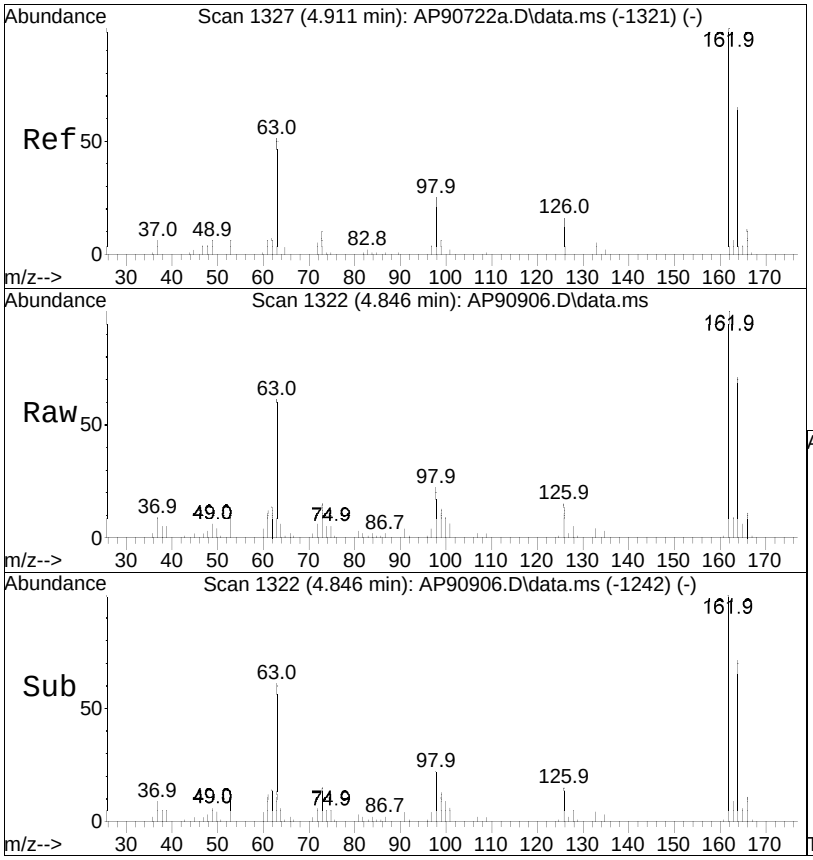


#56
3-Chloroaniline
Concen: 4.71 ug/ml
RT: 4.827 min Scan# 1316
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion: 65 Resp: 8793

Ion	Ratio	Lower	Upper
65	100		
127	284.8	243.2	364.8
129	85.7	78.8	118.2

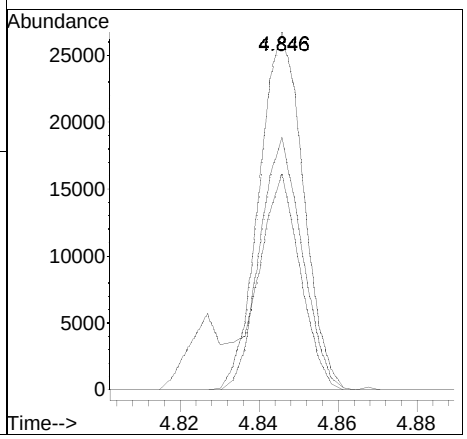


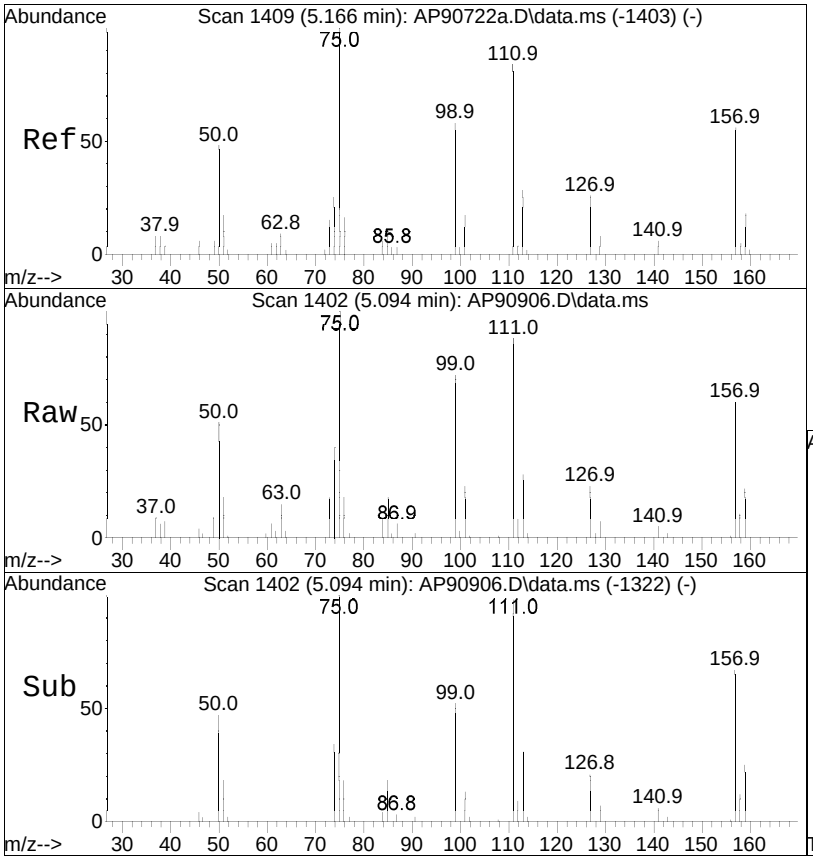


#57
2,6-Dichlorophenol
Concen: 5.53 ug/ml
RT: 4.846 min Scan# 1322
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion:162 Resp: 20685

Ion	Ratio	Lower	Upper
162	100		
164	67.4	51.1	76.7
63	55.8	60.8	91.2#

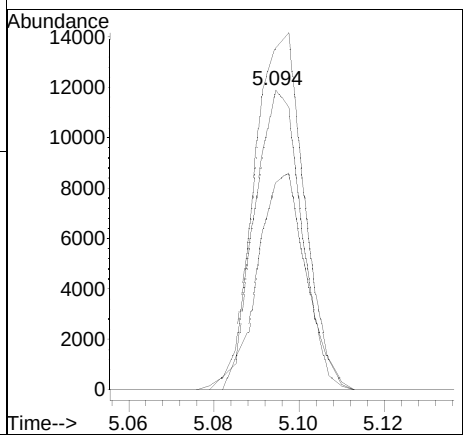


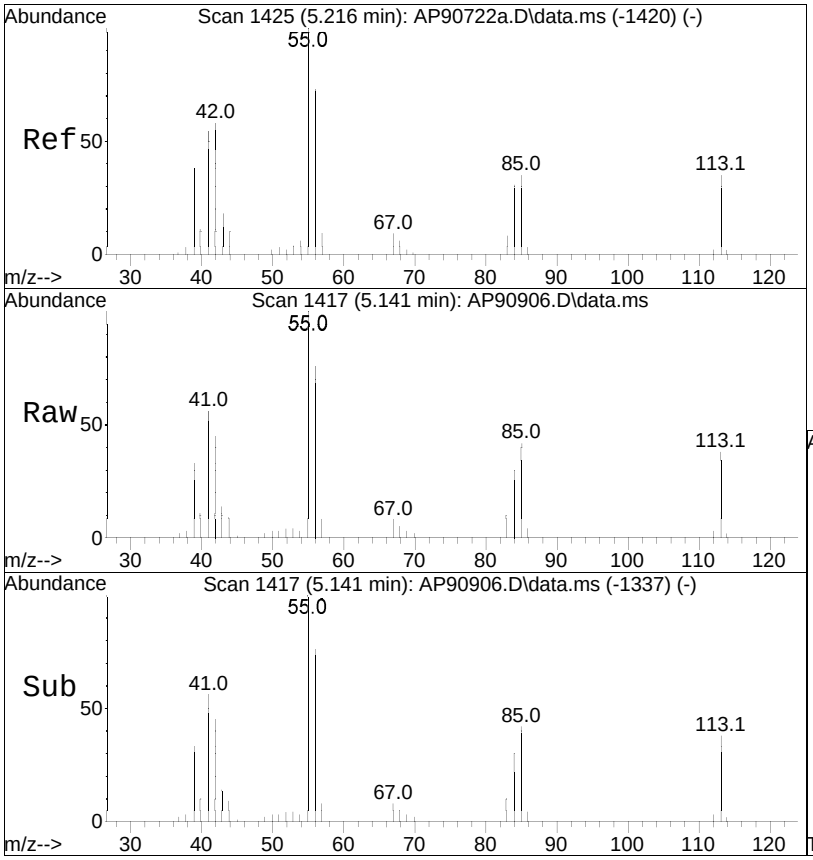


#58
1-chloro-2-nitrobenzene
Concen: 4.60 ug/ml
RT: 5.094 min Scan# 1402
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion:111 Resp: 9267

Ion	Ratio	Lower	Upper
111	100		
157	71.7	0.0	0.0#
75	124.1	28.2	42.2#

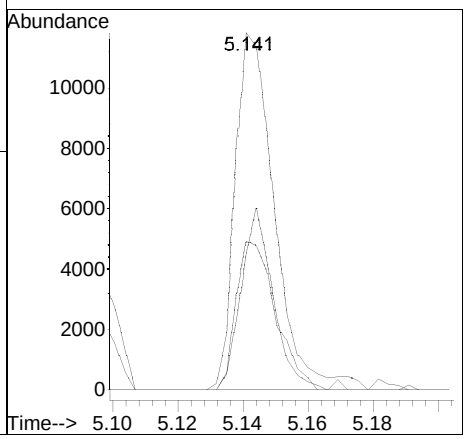


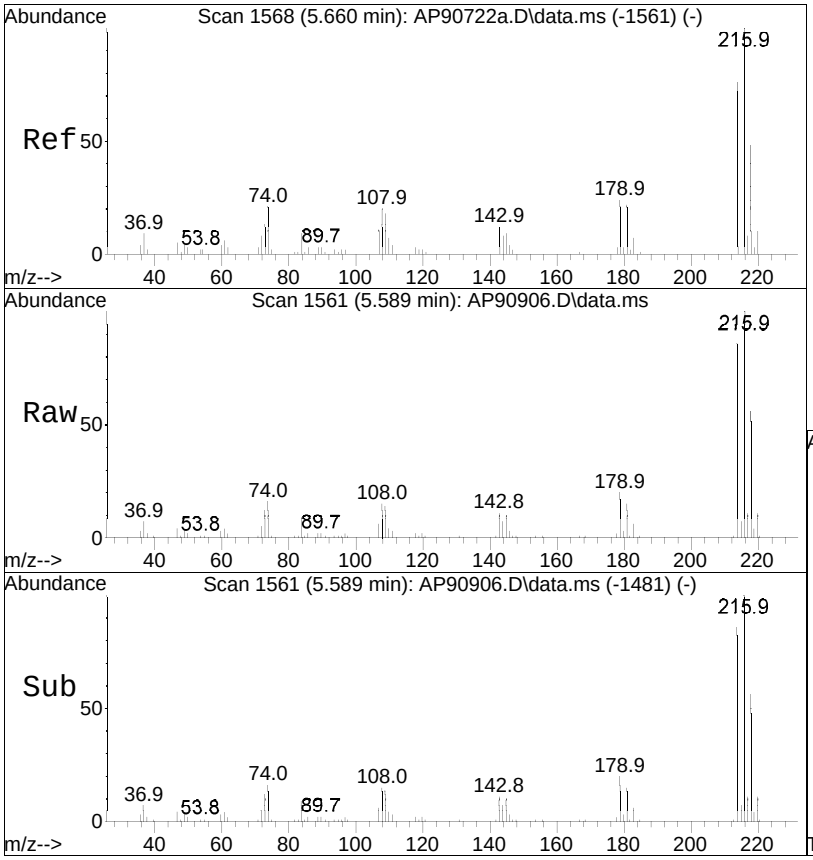


#59
Caprolactam
Concen: 4.94 ug/ml
RT: 5.141 min Scan# 1417
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion: 55 Resp: 9938

Ion	Ratio	Lower	Upper
55	100		
85	41.6	19.8	29.6#
113	41.2	29.6	44.4

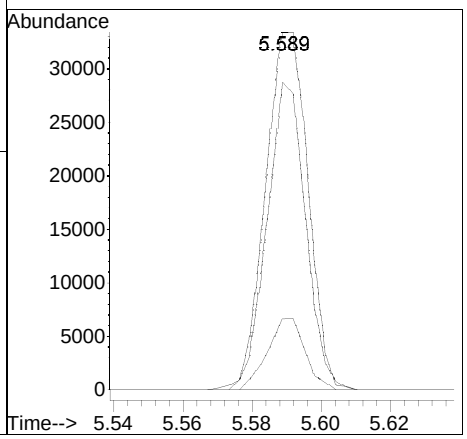


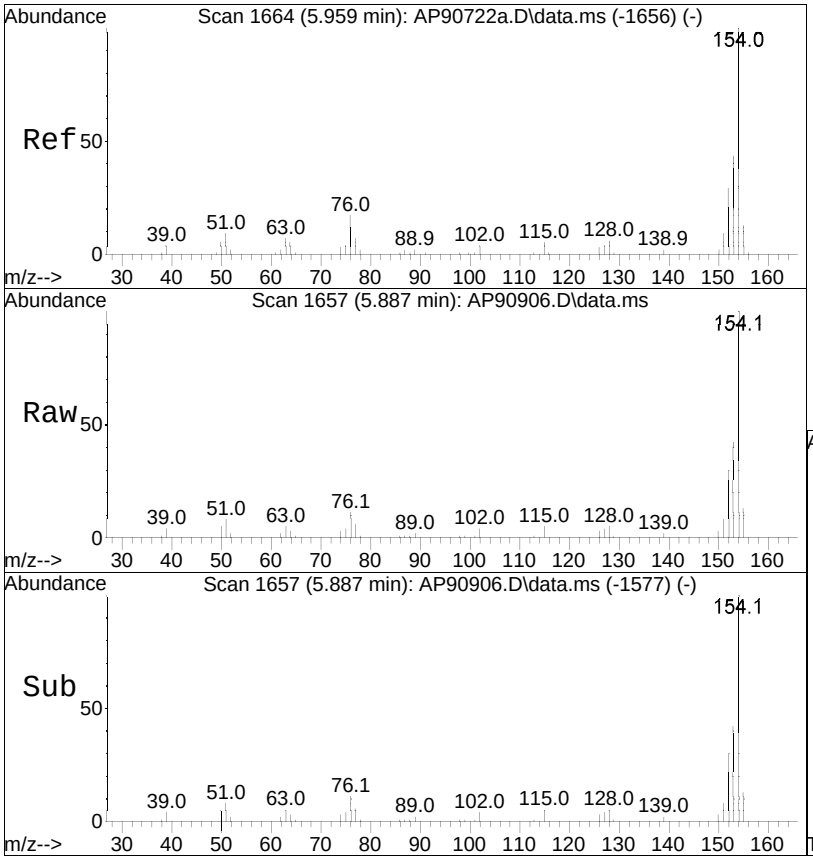


#60
1,2,4,5-Tetrachlorobenzene
Concen: 5.20 ug/ml
RT: 5.589 min Scan# 1561
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion:216 Resp: 28336

Ion	Ratio	Lower	Upper
216	100		
214	78.1	63.7	95.5
179	17.7	19.0	28.6#

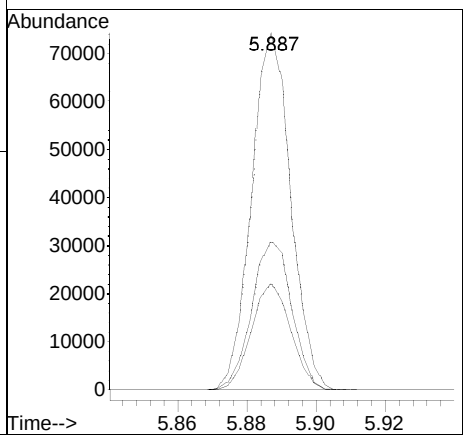


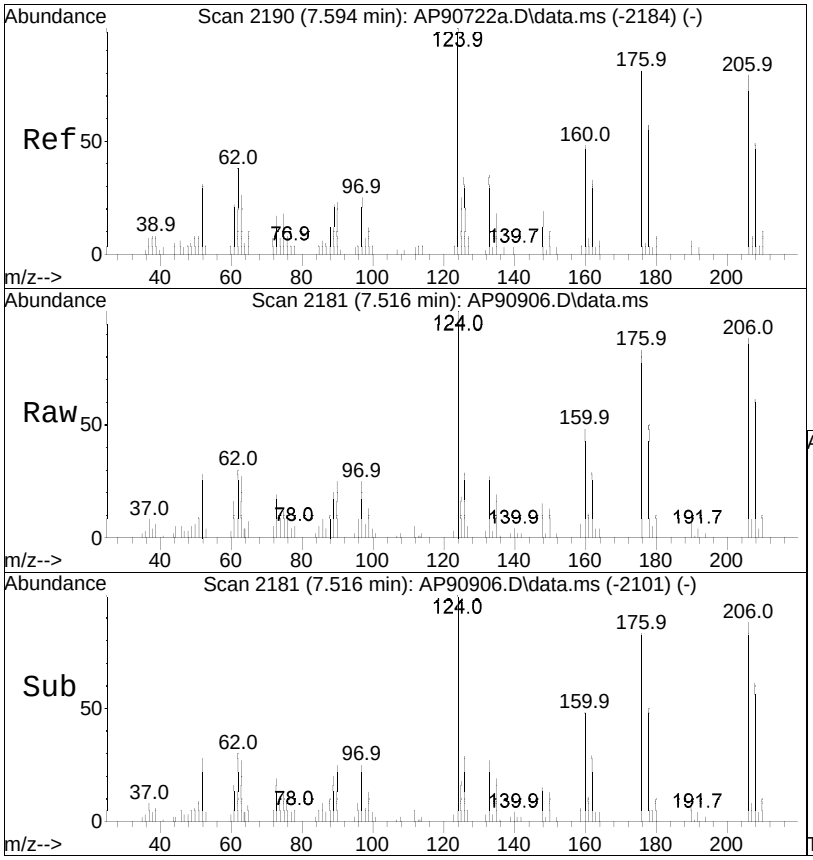


#61
Biphenyl
Concen: 4.76 ug/ml
RT: 5.887 min Scan# 1657
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion:154 Resp: 58082

Ion	Ratio	Lower	Upper
154	100		
153	42.7	32.3	48.5
152	30.1	22.5	33.7

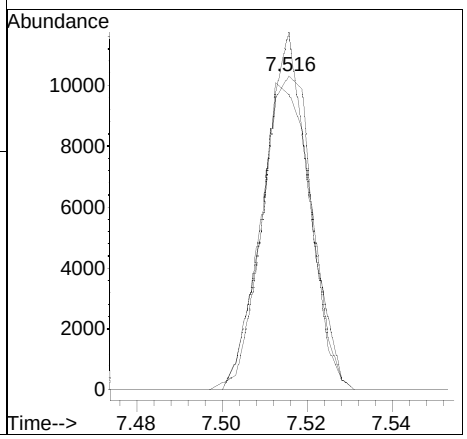


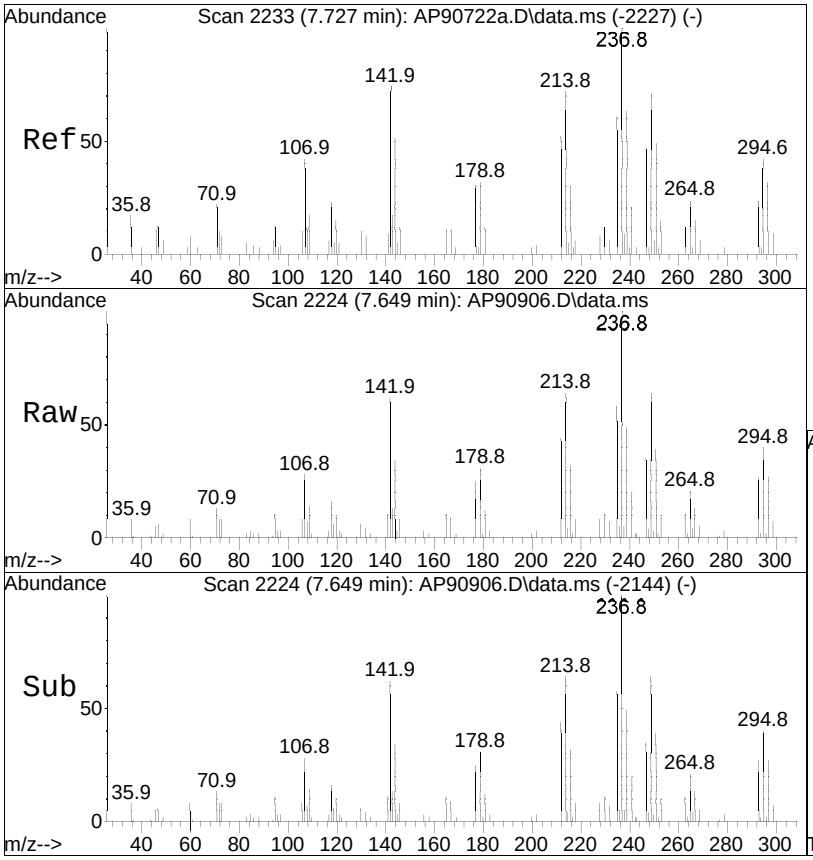


#83
Dichloran
Concen: 4.43 ug/ml
RT: 7.516 min Scan# 2181
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion:206 Resp: 8442

Ion	Ratio	Lower	Upper
206	100		
176	98.2	104.6	157.0#
124	100.8	130.5	195.7#

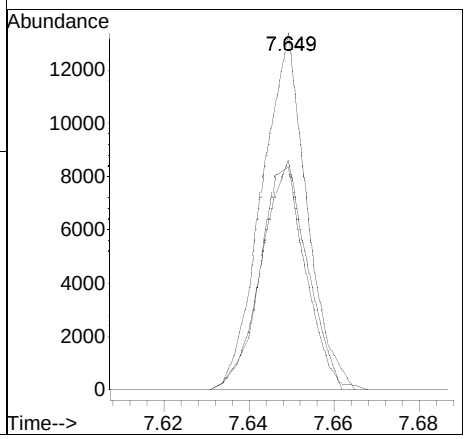


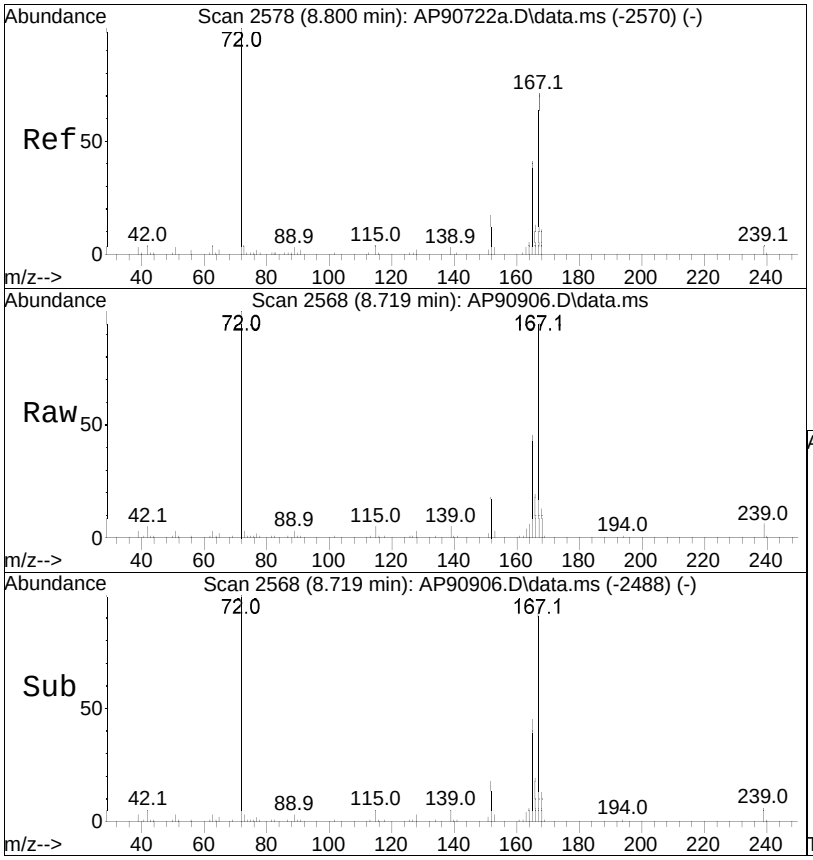


#84
Pentachloronitrobenzene
Concen: 5.22 ug/ml
RT: 7.649 min Scan# 2224
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion:237 Resp: 9787

Ion	Ratio	Lower	Upper
237	100		
142	64.3	77.0	115.4#
214	65.9	58.2	87.4

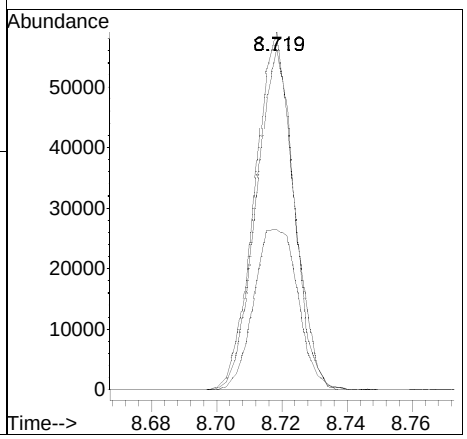




#98
Diphenamid
Concen: 3.98 ug/ml
RT: 8.719 min Scan# 2568
Delta R.T. 0.000 min
Lab File: AP90906.D
Acq: 6 Sep 2023 10:41 am

Tgt Ion:167 Resp: 46209

Ion	Ratio	Lower	Upper
167	100		
72	104.5	109.7	164.5#
165	53.7	41.8	62.6



Manual Integration Report

Data Path	: I:\8270\Dakota\230906lvi\	QMethod	: FS230412LVIDakota.m
Data File	: AP90906.D	Operator	: Dakota:sz
Date Inj'd	: 9/6/2023 10:41 am	Instrument	: Dakota
Sample	: wg1824168-4,32,,AP9 LVI CC	Quant Date	: 9/6/2023 11:19 am

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\8270\Dakota\230906lvi\
Data File : ADP0906.D
Acq On : 6 Sep 2023 11:04 am
Operator : Dakota:sz
Sample : wg1824168-5,32,,ADP LVI CCV Lot # 10092
Misc : wg1824168,,ical19934
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Sep 06 11:52:59 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 11:52:34 2023
Response via : Initial Calibration

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(min)
32	I	IS3_1,4-Dichlorobenzene-d4		1.000	1.000	0.0	88	0.00
33	T	n-Decane		1.231	0.996	19.1	69	0.00
85	I	IS3_Acenaphthene-d10		1.000	1.000	0.0	95	0.00
86	T	Atrazine		0.363	0.369	-1.7	94	0.00
99	I	IS3_Phenanthrene-d10		1.000	1.000	0.0	104	0.00
100	T	n-Octadecane		0.386	0.296	23.3#	76	0.00
101	T	Parathion	*	5.000	4.598	8.0	94	0.00
102	T	3,3'-Dimethylbenzidine	*	5.000	4.611	7.8	94	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230906lvi\
Data File : ADP0906.D
Acq On : 6 Sep 2023 11:04 am
Operator : Dakota:sz
Sample : wg1824168-5,32,,ADP LVI CCV Lot # 10092
Misc : wg1824168,,ical19934
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Sep 06 11:52:59 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 11:52:34 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublist

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
32) IS3_1,4-Dichlorobenzen...	3.447	152	16353	4.000	ug/ml	0.00
85) IS3_Acenaphthene-d10	6.394	164	37358	4.000	ug/ml	0.00
99) IS3_Phenanthrene-d10	7.780	188	92849	4.000	ug/ml	0.00
System Monitoring Compounds						
Target Compounds						Qvalue
33) n-Decane	3.379	57	20353	4.043	ug/ml#	32
86) Atrazine	7.640	200	17221	5.077	ug/ml#	86
100) n-Octadecane	7.867	57	34307	3.832	ug/ml#	1
101) Parathion	8.610	109	10062	4.598	ug/ml	83
102) 3,3'-Dimethylbenzidine	9.809	212	68862	4.611	ug/ml	98

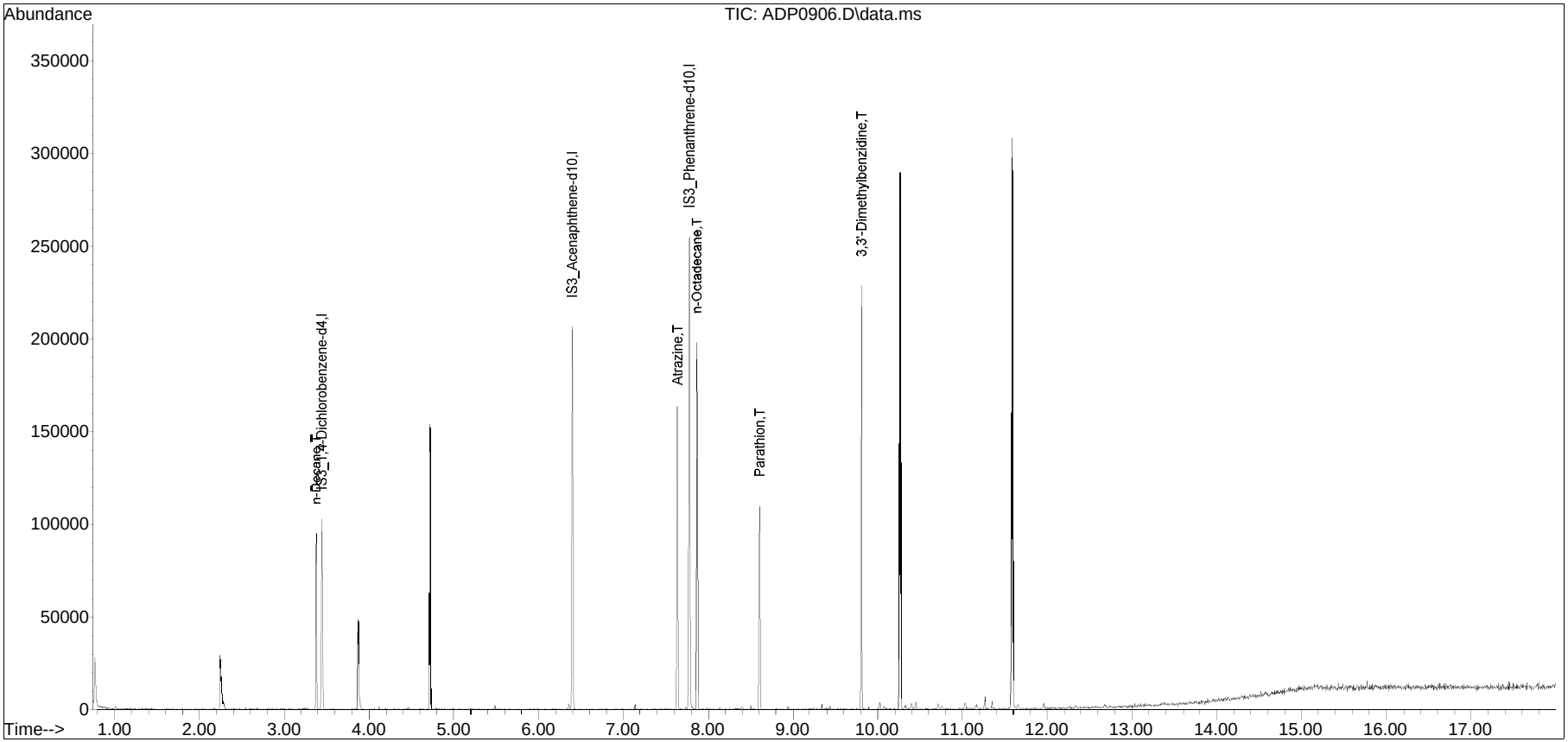
(#) = qualifier out of range (m) = manual integration (+) = signals summed

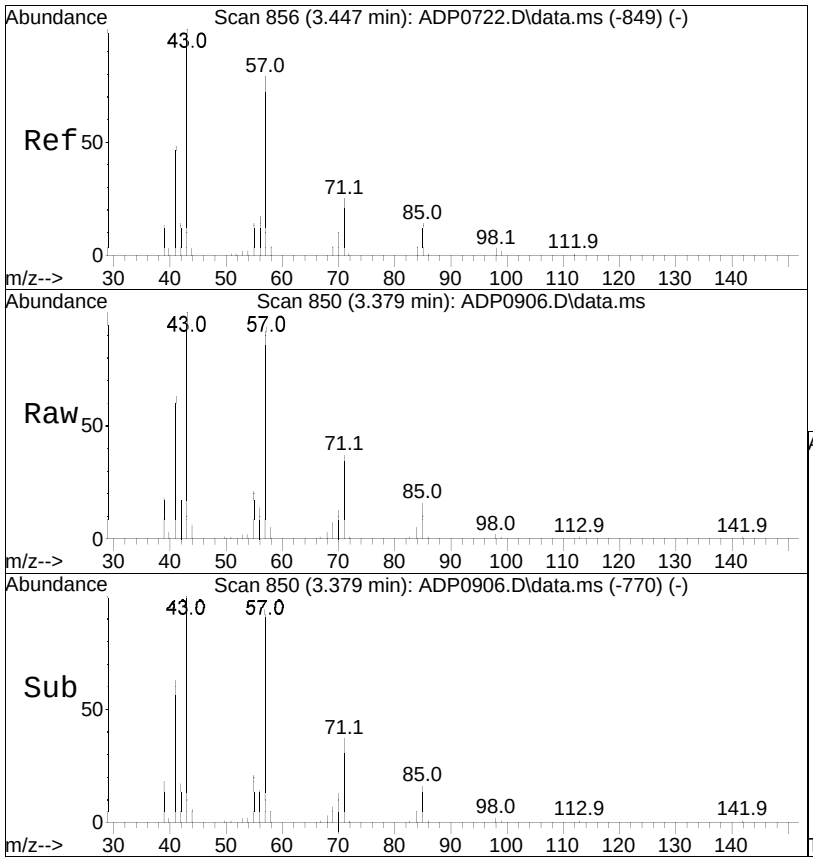
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230906lvi\
Data File : ADP0906.D
Acq On : 6 Sep 2023 11:04 am
Operator : Dakota:sz
Sample : wg1824168-5,32,,ADP LVI CCV Lot # 10092
Misc : wg1824168,,ical19934
ALS Vial : 98 Sample Multiplier: 1

Quant Time: Sep 06 11:52:59 2023
Quant Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 11:52:34 2023
Response via : Initial Calibration

Sub List : ADPical_REV2 - ADP sublist

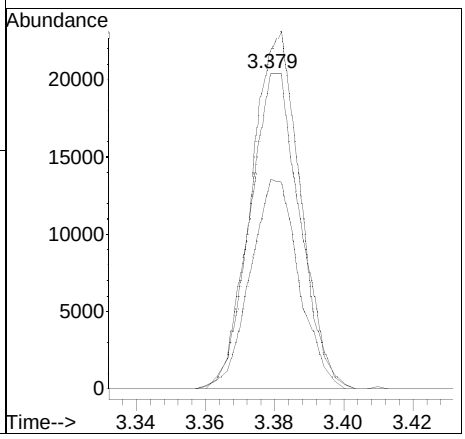


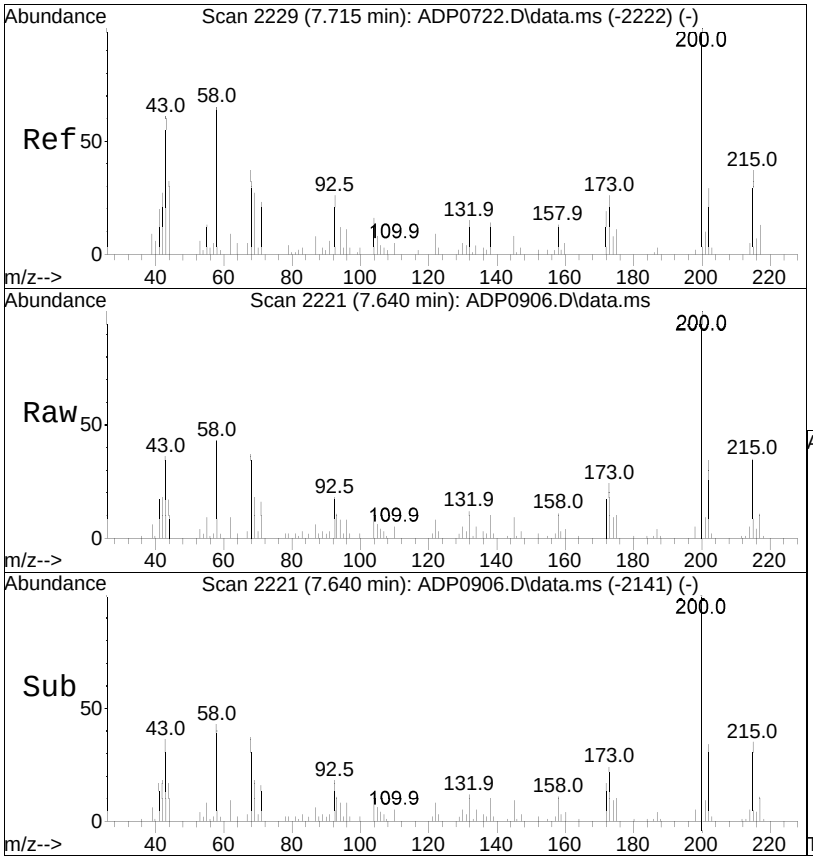


#33
n-Decane
Concen: 4.04 ug/ml
RT: 3.379 min Scan# 850
Delta R.T. 0.000 min
Lab File: ADP0906.D
Acq: 6 Sep 2023 11:04 am

Tgt Ion: 57 Resp: 20353

Ion	Ratio	Lower	Upper
57	100		
43	110.0	0.2	0.2#
41	64.6	0.2	0.2#

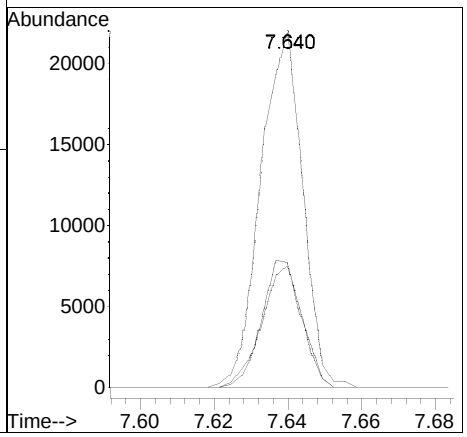


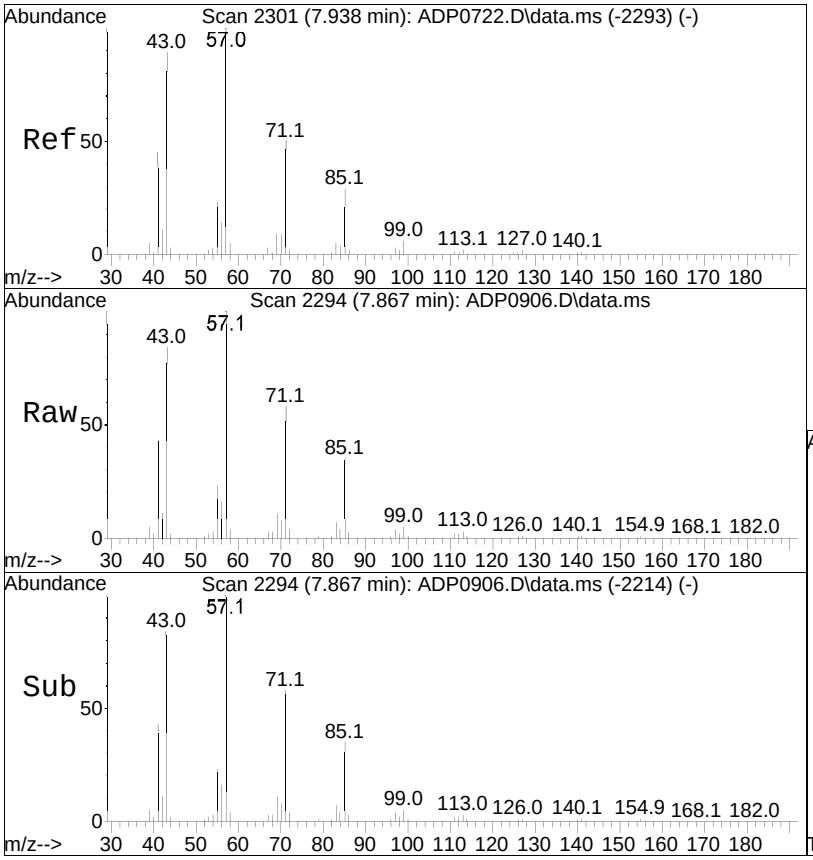


#86
Atrazine
Concen: 5.08 ug/ml
RT: 7.640 min Scan# 2221
Delta R.T. 0.000 min
Lab File: ADP0906.D
Acq: 6 Sep 2023 11:04 am

Tgt Ion:200 Resp: 17221

Ion	Ratio	Lower	Upper
200	100		
202	32.5	25.8	38.6
215	34.8	40.2	60.4#

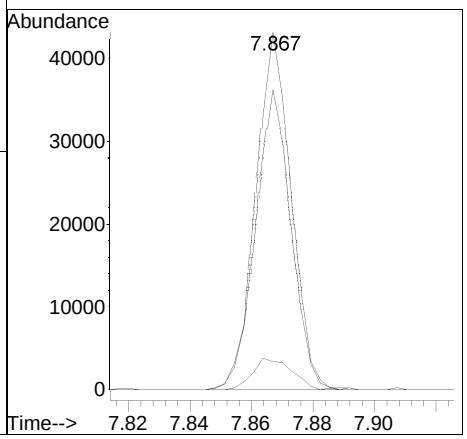


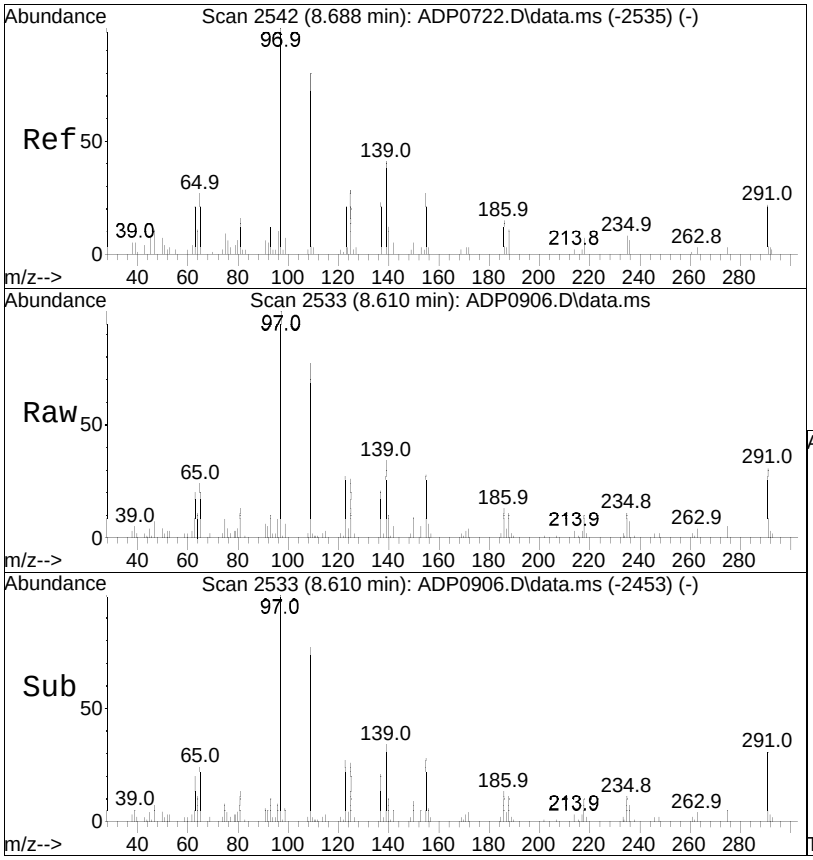


#100
n-Octadecane
Concen: 3.83 ug/ml
RT: 7.867 min Scan# 2294
Delta R.T. 0.000 min
Lab File: ADP0906.D
Acq: 6 Sep 2023 11:04 am

Tgt Ion: 57 Resp: 34307

Ion	Ratio	Lower	Upper
57	100		
43	84.3	9.0	13.6#
70	9.7	0.2	0.2#

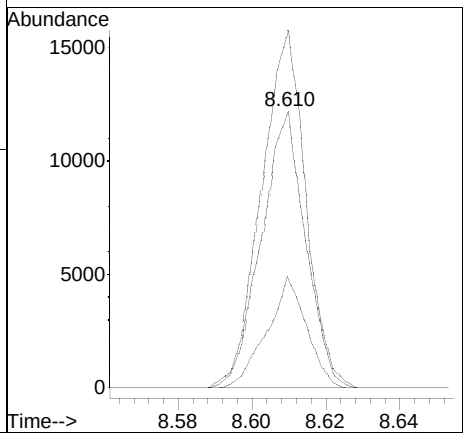


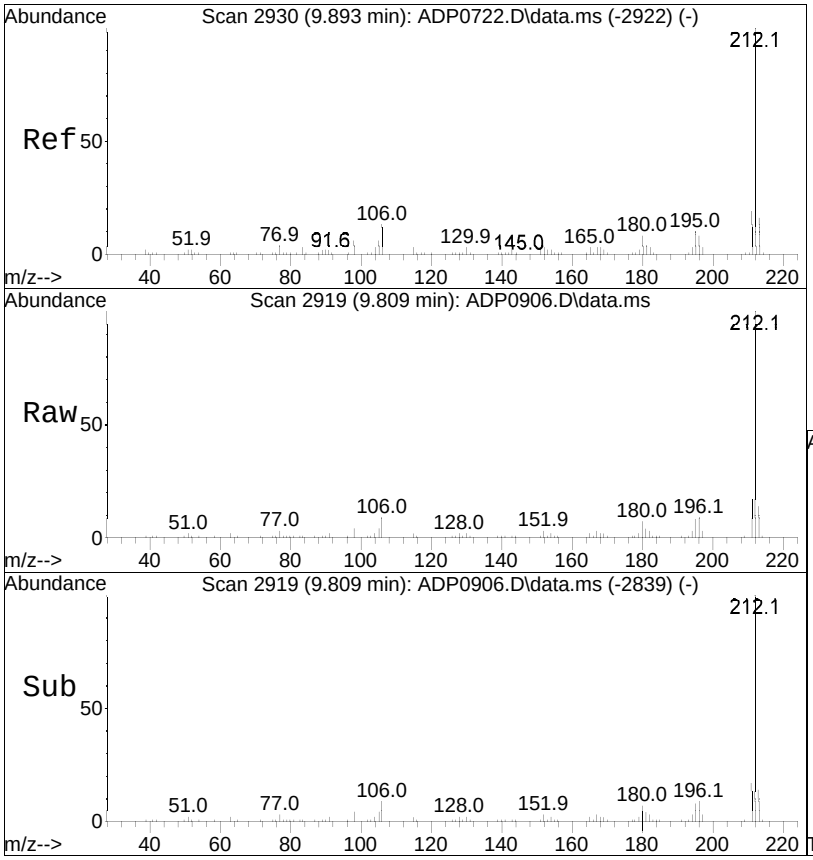


#101
Parathion
Concen: 4.60 ug/ml
RT: 8.610 min Scan# 2533
Delta R.T. 0.000 min
Lab File: ADP0906.D
Acq: 6 Sep 2023 11:04 am

Tgt Ion:109 Resp: 10062

Ion	Ratio	Lower	Upper
109	100		
97	129.6	87.4	131.2
291	36.2	34.2	51.2

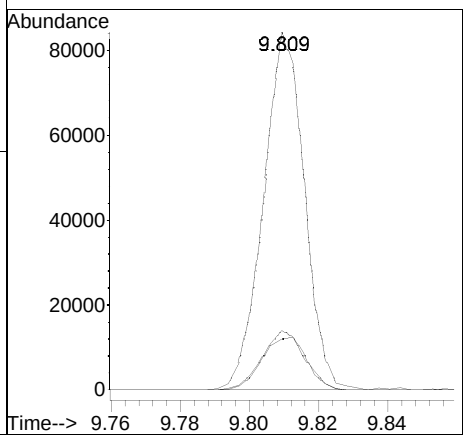




#102
3,3'-Dimethylbenzidine
Concen: 4.61 ug/ml
RT: 9.809 min Scan# 2919
Delta R.T. 0.000 min
Lab File: ADP0906.D
Acq: 6 Sep 2023 11:04 am

Tgt Ion:212 Resp: 68862

Ion	Ratio	Lower	Upper
212	100		
211	17.2	12.9	19.3
213	16.2	13.2	19.8



Manual Integration Report

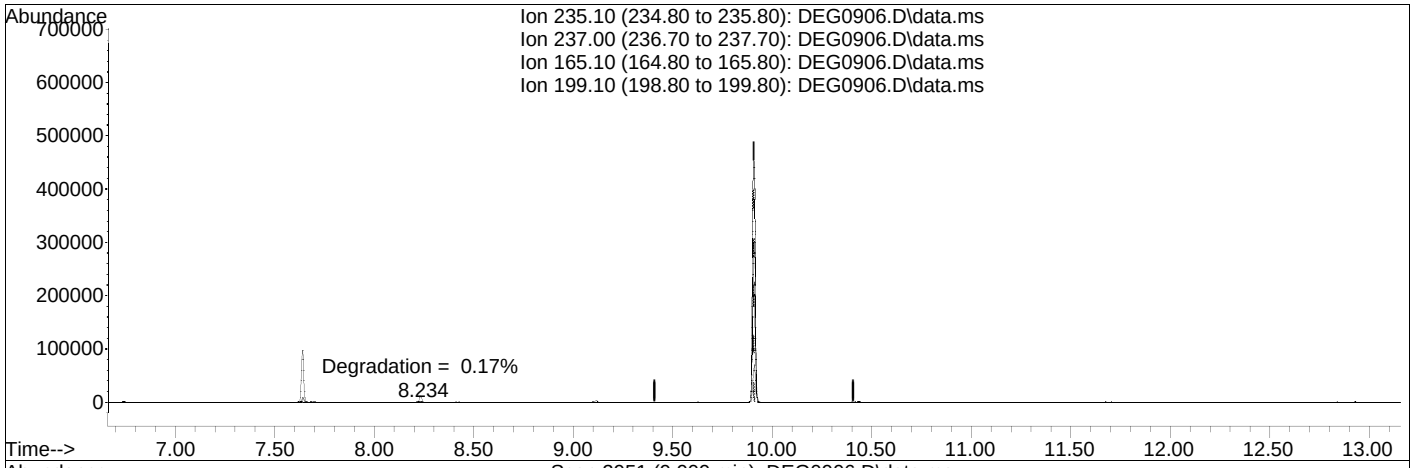
Data Path	: I:\8270\Dakota\230906lvi\	QMethod	: FS230412LVIDakota.m
Data File	: ADP0906.D	Operator	: Dakota:sz
Date Inj'd	: 9/6/2023 11:04 am	Instrument	: Dakota
Sample	: wg1824168-5,32,,ADP LVI CC	Quant Date	: 9/6/2023 11:52 am

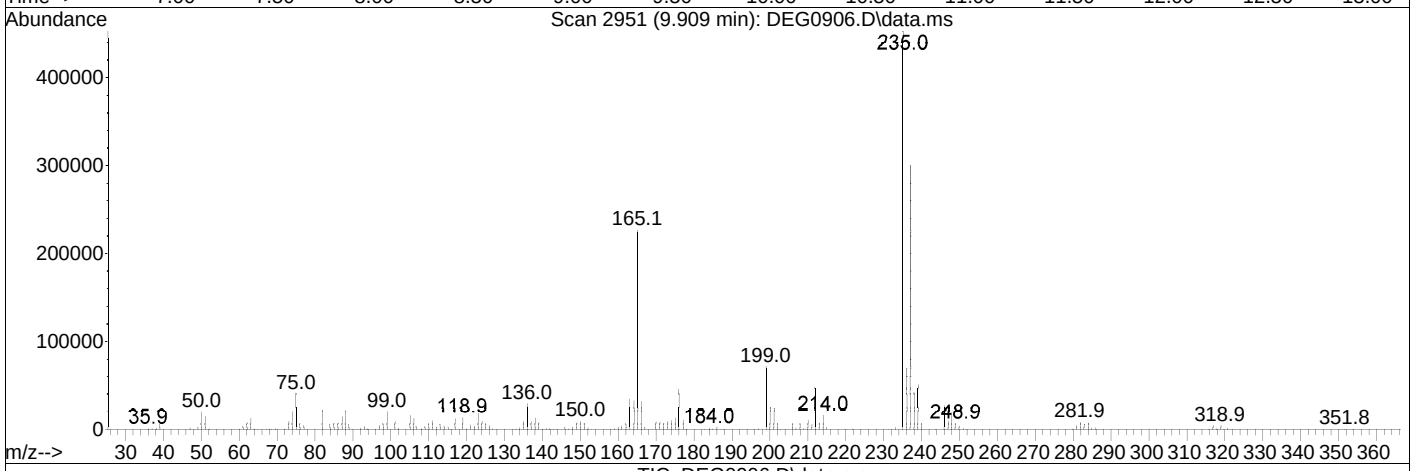
There are no manual integrations or false positives in this file.

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230906lvi\
Data File : DEG0906.D
Acq On : 6 Sep 2023 9:53 am
Operator : Dakota:sz
Sample : wg1824168-2,32,,Dakota Degdftpp
Misc : wg1824168,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Sep 07 12:29:38 2023
Quant Method : I:\8270\Dakota\230906lvi\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 12:29:27 2023
Response via : Initial Calibration





TIC: DEG0906.D\data.ms

(6) DDT (T)

9.909min (0.000) 68.41

response 417034

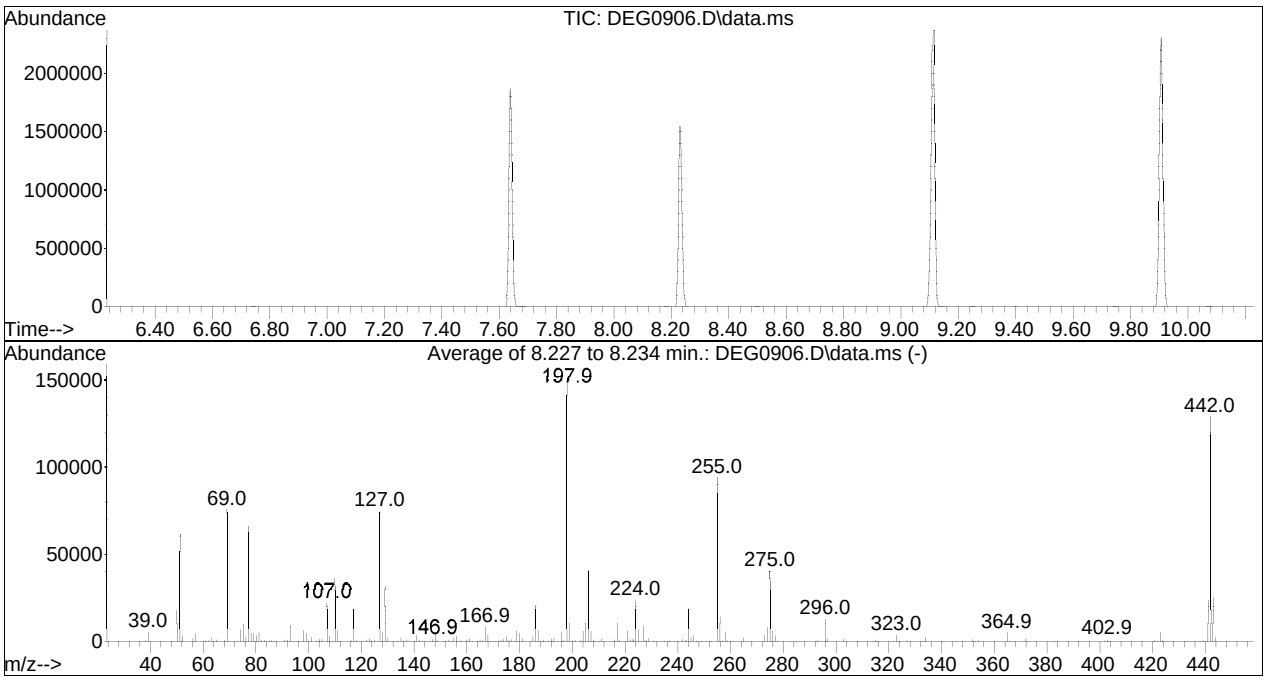
Ion	Exp%	Act%
235.10	100.00	100.00
237.00	66.10	65.13
165.10	50.00	47.76
199.10	15.80	14.53

DFTPP

Data Path : I:\8270\Dakota\230906lvi\
Data File : DEG0906.D
Acq On : 6 Sep 2023 9:53 am
Operator : Dakota:sz
Sample : wg1824168-1,32,,Dakota Degdftpp
Misc : wg1824168,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270\dakota\230906lvi\FS230412LVIDakota.m
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Thu Sep 07 12:27:35 2023



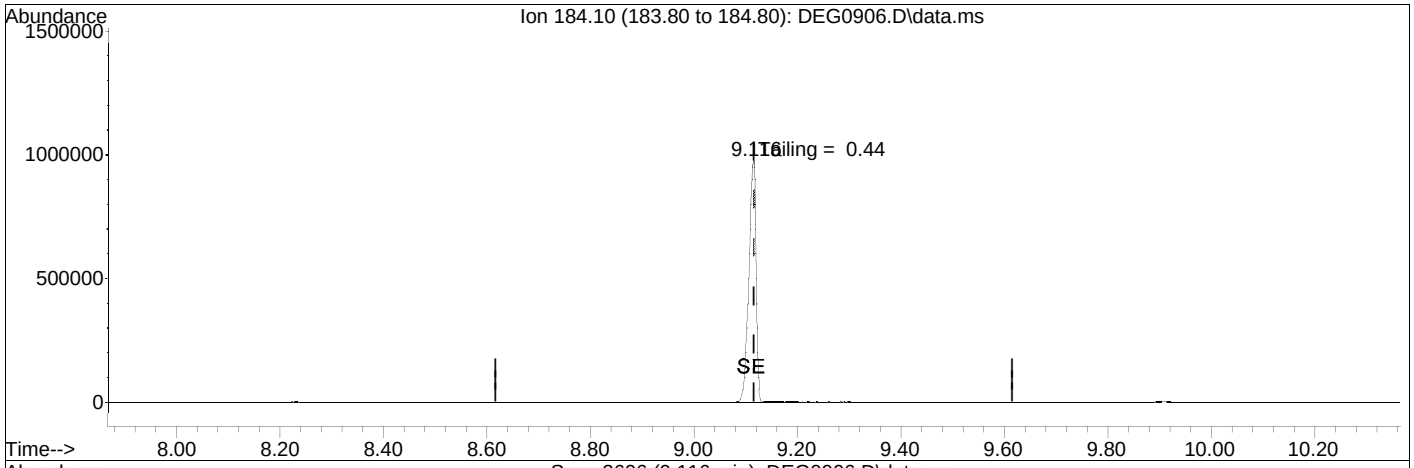
Spectrum Information: Average of 8.227 to 8.234 min.

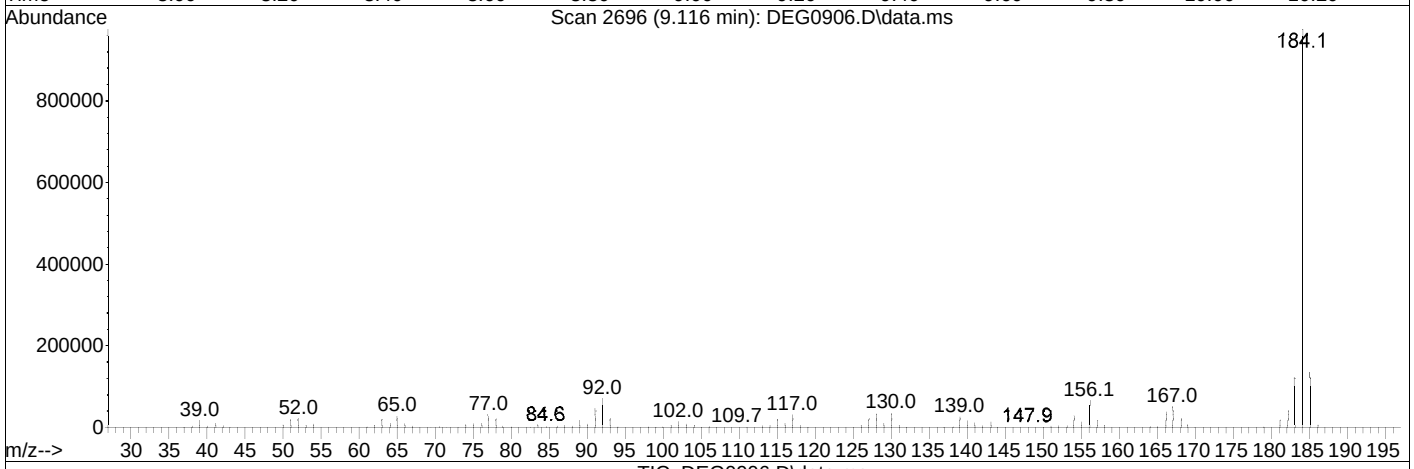
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	40.4	61133	PASS
68	69	0.00	2	1.3	961	PASS
69	69	100	100	100.0	75776	PASS
70	69	0.00	2	0.5	377	PASS
127	198	10	80	49.3	74691	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	151371	PASS
199	198	5	9	6.6	9973	PASS
275	198	10	60	26.5	40187	PASS
365	198	1	100	3.3	5064	PASS
441	442	0.01	24	18.6	23944	PASS
442	198	50	100	85.1	128821	PASS
443	442	15	24	19.8	25509	PASS

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230906lvi\
Data File : DEG0906.D
Acq On : 6 Sep 2023 9:53 am
Operator : Dakota:sz
Sample : wg1824168-6,32,,Dakota Degdftpp
Misc : wg1824168,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Sep 07 12:29:38 2023
Quant Method : I:\8270\Dakota\230906lvi\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 12:29:27 2023
Response via : Initial Calibration





TIC: DEG0906.D\data.ms

(3) Benzidine (T)

9.116min (0.000) 88.30

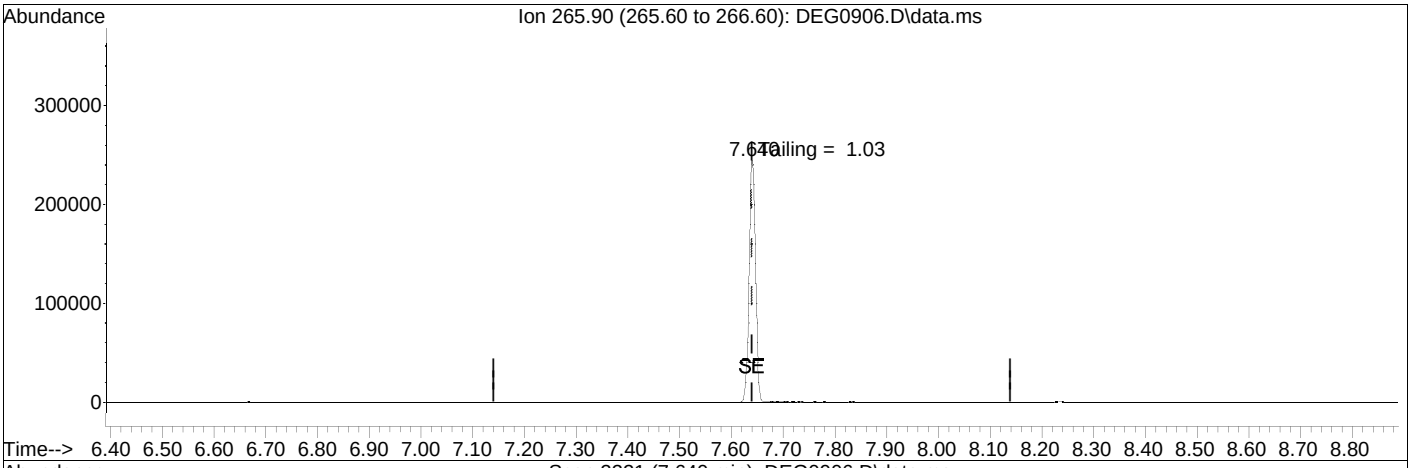
response 898942

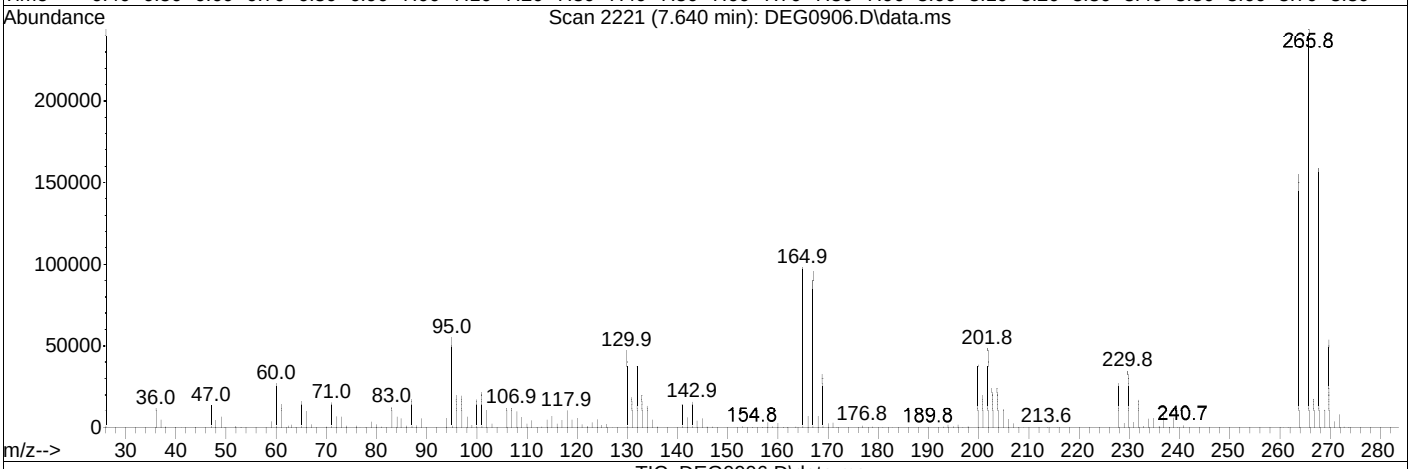
Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270\Dakota\230906lvi\
Data File : DEG0906.D
Acq On : 6 Sep 2023 9:53 am
Operator : Dakota:sz
Sample : wg1824168-7,32,,Dakota Degdftpp
Misc : wg1824168,,ical19934
ALS Vial : 100 Sample Multiplier: 1

Quant Time: Sep 07 12:29:38 2023
Quant Method : I:\8270\Dakota\230906lvi\DftppDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 12:29:27 2023
Response via : Initial Calibration





TIC: DEG0906.D\data.ms

(1) Pentachlorophenol (T)

7.640min (0.000) 94.00

response 197429

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Semivolatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-1.D
Acq On : 31 Aug 2023 11:32 am
Operator : Dakota:sz
Sample : WG1822188-1,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 14:24:44 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:51:04 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.669	152	17353	4.000	ug/ml		0.00
Standard Area 1 = 14463			Recovery = 119.98%				
27) IS2_1,4-Dichlorobenzen...	3.669	152	17353	4.000	ug/ml		0.00
Standard Area 3 = 16508			Recovery = 105.12%				
32) IS3_1,4-Dichlorobenzen...	3.669	152	17353	4.000	ug/ml		0.00
Standard Area 2 = 17146			Recovery = 101.21%				
34) IS1_Naphthalene-d8	4.927	136	56688	4.000	ug/ml	#	0.00
Standard Area 1 = 50867			Recovery = 111.44%				
54) IS2_Naphthalene-d8	4.927	136	56688	4.000	ug/ml	#	0.00
Standard Area 3 = 55735			Recovery = 101.71%				
62) IS1_Acenaphthene-d10	6.609	164	34939	4.000	ug/ml		0.00
Standard Area 1 = 33572			Recovery = 104.07%				
82) IS2_Acenaphthene-d10	6.609	164	34939	4.000	ug/ml		0.00
Standard Area 3 = 35012			Recovery = 99.79%				
85) IS3_Acenaphthene-d10	6.609	164	34939	4.000	ug/ml		0.00
Standard Area 2 = 37775			Recovery = 92.49%				
87) IS1_Phenanthrene-d10	8.001	188	81050	4.000	ug/ml		0.00
Standard Area 1 = 80682			Recovery = 100.46%				
99) IS3_Phenanthrene-d10	8.001	188	81050	4.000	ug/ml		0.00
Standard Area 2 = 96848			Recovery = 83.69%				
103) IS1_Chrysene-d12	10.510	240	88018	4.000	ug/ml		0.00
Standard Area 1 = 88271			Recovery = 99.71%				
112) IS1_Perylene-d12	11.868	264	108272	4.000	ug/ml		0.00
Standard Area 1 = 110283			Recovery = 98.18%				
System Monitoring Compounds							
4) 2-Fluorophenol	2.270	112	14496	3.235	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 64.70%				
7) Phenol-d6	3.398	99	14090	2.454	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 49.08%				
19) Nitrobenzene-d5	4.244	82	9020	1.639	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 65.56%				
45) 2-Fluorobiphenyl	6.012	172	21438	1.922	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 76.88%				
78) 2,4,6-Tribromophenol	7.358	330	10878	5.379	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 107.58%				

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-1.D
Acq On : 31 Aug 2023 11:32 am
Operator : Dakota:sz
Sample : WG1822188-1,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 14:24:44 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:51:04 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) 4-Terphenyl-d14	9.574	244	39728	2.005	ug/ml	0.00

Spiked Amount 2.500 Range 30 - 130 Recovery = 80.20%

Target Compounds				Qvalue
6) 2-Chlorophenol	0.000	0	N.D.	
8) Phenol	0.000	0	N.D.	
9) Bis(2-chloroethyl)ether	0.000	0	N.D.	
14) Bis(2-chloroisopropyl)...	0.000	0	N.D.	
15) 2-Methylphenol	0.000	0	N.D.	
17) n-Nitrosodi-n-propylamine	0.000	0	N.D.	d
18) 3-Methylphenol/4-Methy...	0.000	0	N.D.	
20) Nitrobenzene	0.000	0	N.D.	
21) Isophorone	0.000	0	N.D.	
22) 2-Nitrophenol	0.000	0	N.D.	
23) 2,4-Dimethylphenol	0.000	0	N.D.	
24) Bis(2-chloroethoxy)met...	0.000	0	N.D.	
25) 2,4-Dichlorophenol	0.000	0	N.D.	
28) Benzaldehyde	0.000	0	N.D.	
29) Acetophenone	0.000	0	N.D.	
37) 4-Chloroaniline	0.000	0	N.D.	
39) p-Chloro-m-cresol	0.000	0	N.D.	
42) Hexachlorocyclopentadiene	0.000	0	N.D.	
43) 2,4,6-Trichlorophenol	0.000	0	N.D.	
44) 2,4,5-Trichlorophenol	0.000	0	N.D.	
47) 2-Nitroaniline	0.000	0	N.D.	
50) Dimethyl phthalate	0.000	0	N.D.	d
52) 2,6-Dinitrotoluene	0.000	0	N.D.	d
59) Caprolactam	0.000	0	N.D.	
60) 1,2,4,5-Tetrachloroben...	0.000	0	N.D.	
61) Biphenyl	0.000	0	N.D.	
63) 3-Nitroaniline	0.000	0	N.D.	
65) 2,4-Dinitrophenol	0.000	0	N.D.	
66) Dibenzofuran	0.000	0	N.D.	
67) 2,4-Dinitrotoluene	0.000	0	N.D.	d
68) 4-Nitrophenol	0.000	0	N.D.	
70) 2,3,4,6-Tetrachlorophenol	0.000	0	N.D.	
71) Diethyl phthalate	0.000	0	N.D.	

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-1.D
Acq On : 31 Aug 2023 11:32 am
Operator : Dakota:sz
Sample : WG1822188-1,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 14:24:44 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:51:04 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
73) 4-Chlorophenyl phenyl ...	0.000		0		N.D.	
74) 4-Nitroaniline	0.000		0		N.D.	
75) 4,6-Dinitro-o-cresol	0.000		0		N.D.	
76) NDPA/DPA	0.000		0		N.D.	
79) 4-Bromophenyl phenyl e...	0.000		0		N.D.	
86) Atrazine	0.000		0		N.D.	
90) Carbazole	0.000		0		N.D.	
91) Di-n-butylphthalate	0.000		0		N.D.	
96) Butyl benzyl phthalate	0.000		0		N.D.	
105) 3,3'-Dichlorobenzidine	0.000		0		N.D.	
107) Bis(2-ethylhexyl)phtha...	0.000		0		N.D.	
108) Di-n-octylphthalate	0.000		0		N.D.	d

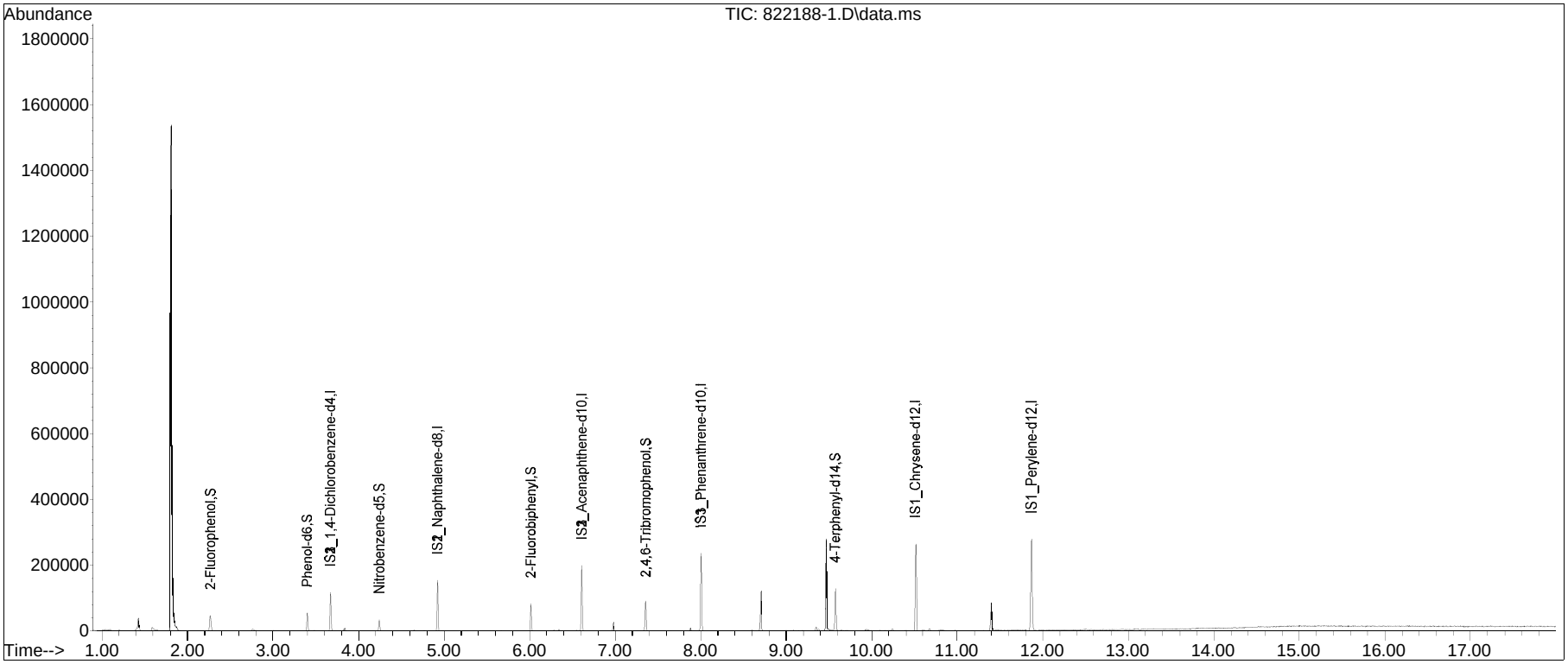
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-1.D
Acq On : 31 Aug 2023 11:32 am
Operator : Dakota:sz
Sample : WG1822188-1,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 14:24:44 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 11:51:04 2023
Response via : Initial Calibration

Sub List : 8270TCL_REV2 - TCL/CT/MA1lvi\AP90831.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230831lvi\	QMethod	: FS230412LVIDakota.m
Data File	: 822188-1.D	Operator	: Dakota:sz
Date Inj'd	: 8/31/2023 11:32 am	Instrument	: Dakota
Sample	: WG1822188-1,32,,gmr	Quant Date	: 8/31/2023 11:51 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : 823488-1.D
Acq On : 5 Sep 2023 10:48 pm
Operator : Dakota:sz
Sample : WG1823488-1,32,,ASK
Misc : WG1823113,WG1823488,ical19934
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 07 09:11:31 2023
Quant Method : I:\8270\dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 23:07:22 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230905nlvi\ABN0905n.D
: 2 - I:\8270\dakota\230905nlvi\ADP0905n.D
: 3 - I:\8270\dakota\230905nlvi\AP90905n.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.460	152	15089	4.000	ug/ml		0.00
Standard Area 1 = 14403			Recovery = 104.76%				
27) IS2_1,4-Dichlorobenzen...	3.460	152	15089	4.000	ug/ml		0.00
Standard Area 3 = 14263			Recovery = 105.79%				
32) IS3_1,4-Dichlorobenzen...	3.460	152	15089	4.000	ug/ml		0.00
Standard Area 2 = 14772			Recovery = 102.15%				
34) IS1_Naphthalene-d8	4.731	136	51786	4.000	ug/ml	#	0.00
Standard Area 1 = 49518			Recovery = 104.58%				
54) IS2_Naphthalene-d8	4.731	136	51786	4.000	ug/ml	#	0.00
Standard Area 3 = 47445			Recovery = 109.15%				
62) IS1_Acenaphthene-d10	6.406	164	33433	4.000	ug/ml		0.00
Standard Area 1 = 33908			Recovery = 98.60%				
82) IS2_Acenaphthene-d10	6.406	164	33433	4.000	ug/ml		0.00
Standard Area 3 = 30377			Recovery = 110.06%				
85) IS3_Acenaphthene-d10	6.406	164	33433	4.000	ug/ml		0.00
Standard Area 2 = 31769			Recovery = 105.24%				
87) IS1_Phenanthrene-d10	7.792	188	80687	4.000	ug/ml		0.00
Standard Area 1 = 83627			Recovery = 96.48%				
99) IS3_Phenanthrene-d10	7.792	188	80687	4.000	ug/ml		0.00
Standard Area 2 = 76421			Recovery = 105.58%				
103) IS1_Chrysene-d12	10.276	240	89845	4.000	ug/ml	#	0.00
Standard Area 1 = 91716			Recovery = 97.96%				
112) IS1_Perylene-d12	11.600	264	113614	4.000	ug/ml		0.00
Standard Area 1 = 117565			Recovery = 96.64%				
System Monitoring Compounds							
4) 2-Fluorophenol	1.986	112	11436	2.935	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 58.70%				
7) Phenol-d6	3.202	99	11056	2.214	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 44.28%				
19) Nitrobenzene-d5	4.044	82	8161	1.705	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 68.20%				
45) 2-Fluorobiphenyl	5.819	172	20594	2.021	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 80.84%				
78) 2,4,6-Tribromophenol	7.158	330	9758	5.042	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 100.84%				

Data Path : I:\8270\Dakota\230905nlvi\
Data File : 823488-1.D
Acq On : 5 Sep 2023 10:48 pm
Operator : Dakota:sz
Sample : WG1823488-1,32,,ASK
Misc : WG1823113,WG1823488,ical19934
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 07 09:11:31 2023
Quant Method : I:\8270\dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 23:07:22 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230905nlvi\ABN0905n.D
: 2 - I:\8270\dakota\230905nlvi\ADP0905n.D
: 3 - I:\8270\dakota\230905nlvi\AP90905n.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) 4-Terphenyl-d14	9.359	244	39347	1.995	ug/ml	0.00

Spiked Amount 2.500 Range 30 - 130 Recovery = 79.80%

Target Compounds				Qvalue
6) 2-Chlorophenol	0.000	0	N.D.	
8) Phenol	0.000	0	N.D.	
9) Bis(2-chloroethyl)ether	0.000	0	N.D.	
14) Bis(2-chloroisopropyl)...	0.000	0	N.D.	
15) 2-Methylphenol	0.000	0	N.D.	
17) n-Nitrosodi-n-propylamine	0.000	0	N.D.	d
18) 3-Methylphenol/4-Methy...	0.000	0	N.D.	
20) Nitrobenzene	0.000	0	N.D.	
21) Isophorone	0.000	0	N.D.	
22) 2-Nitrophenol	0.000	0	N.D.	
23) 2,4-Dimethylphenol	0.000	0	N.D.	
24) Bis(2-chloroethoxy)met...	0.000	0	N.D.	
25) 2,4-Dichlorophenol	0.000	0	N.D.	
28) Benzaldehyde	0.000	0	N.D.	
29) Acetophenone	0.000	0	N.D.	
37) 4-Chloroaniline	0.000	0	N.D.	
39) p-Chloro-m-cresol	0.000	0	N.D.	
42) Hexachlorocyclopentadiene	0.000	0	N.D.	
43) 2,4,6-Trichlorophenol	0.000	0	N.D.	
44) 2,4,5-Trichlorophenol	0.000	0	N.D.	
47) 2-Nitroaniline	0.000	0	N.D.	
50) Dimethyl phthalate	0.000	0	N.D.	d
52) 2,6-Dinitrotoluene	0.000	0	N.D.	d
59) Caprolactam	0.000	0	N.D.	
60) 1,2,4,5-Tetrachloroben...	0.000	0	N.D.	
61) Biphenyl	0.000	0	N.D.	
63) 3-Nitroaniline	0.000	0	N.D.	
65) 2,4-Dinitrophenol	0.000	0	N.D.	
66) Dibenzofuran	0.000	0	N.D.	
67) 2,4-Dinitrotoluene	0.000	0	N.D.	
68) 4-Nitrophenol	0.000	0	N.D.	
70) 2,3,4,6-Tetrachlorophenol	0.000	0	N.D.	
71) Diethyl phthalate	0.000	0	N.D.	

Data Path : I:\8270\Dakota\230905nlvi\
Data File : 823488-1.D
Acq On : 5 Sep 2023 10:48 pm
Operator : Dakota:sz
Sample : WG1823488-1,32,,ASK
Misc : WG1823113,WG1823488,ical19934
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 07 09:11:31 2023
Quant Method : I:\8270\dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 23:07:22 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230905nlvi\ABN0905n.D
: 2 - I:\8270\dakota\230905nlvi\ADP0905n.D
: 3 - I:\8270\dakota\230905nlvi\AP90905n.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
73) 4-Chlorophenyl phenyl ...	0.000		0	N.D.		
74) 4-Nitroaniline	0.000		0	N.D.		
75) 4,6-Dinitro-o-cresol	0.000		0	N.D.		
76) NDPA/DPA	0.000		0	N.D.		
79) 4-Bromophenyl phenyl e...	0.000		0	N.D.		
86) Atrazine	0.000		0	N.D.		
90) Carbazole	0.000		0	N.D.		
91) Di-n-butylphthalate	0.000		0	N.D.	d	
96) Butyl benzyl phthalate	0.000		0	N.D.		
105) 3,3'-Dichlorobenzidine	0.000		0	N.D.		
107) Bis(2-ethylhexyl)phtha...	0.000		0	N.D.	d	
108) Di-n-octylphthalate	0.000		0	N.D.	d	

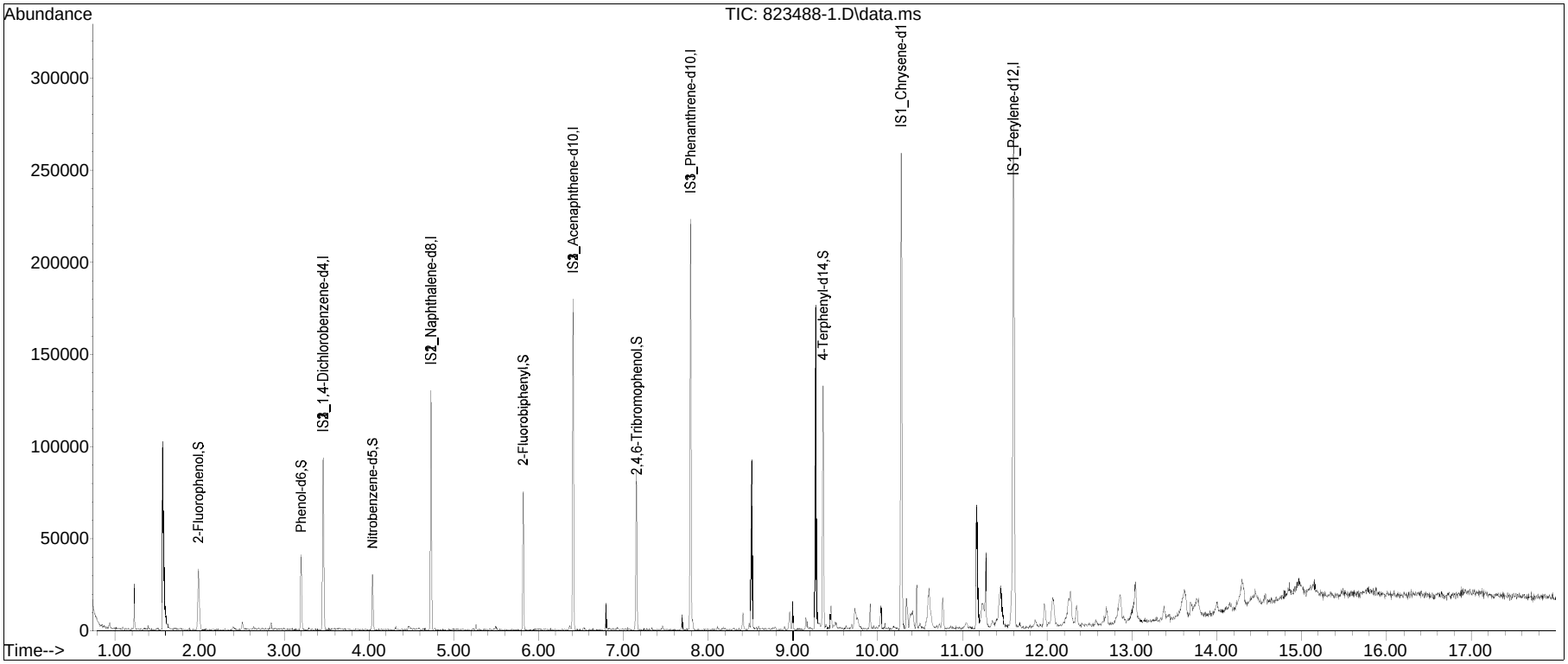
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : 823488-1.D
Acq On : 5 Sep 2023 10:48 pm
Operator : Dakota:sz
Sample : WG1823488-1,32,,ASK
Misc : WG1823113,WG1823488,ical19934
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 07 09:11:31 2023
Quant Method : I:\8270\dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 23:07:22 2023
Response via : Initial Calibration

Sub List : 8270TCL_REV2 - TCL/CT/MA5nlvi\AP90905n.D•



Manual Integration Report

Data Path	: I:\8270\Dakota\230905nlvi\	QMethod	: FS230412LVIDakota.m
Data File	: 823488-1.D	Operator	: Dakota:sz
Date Inj'd	: 9/5/2023 10:48 pm	Instrument	: Dakota
Sample	: WG1823488-1,32,,ASK	Quant Date	: 9/5/2023 11:07 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-2.D
Acq On : 31 Aug 2023 11:54 am
Operator : Dakota:sz
Sample : WG1822188-2,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 14:22:31 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 12:13:43 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.669	152	16221	4.000	ug/ml		0.00
Standard Area 1 = 14463			Recovery = 112.16%				
27) IS2_1,4-Dichlorobenzen...	3.669	152	16221	4.000	ug/ml		0.00
Standard Area 3 = 16508			Recovery = 98.26%				
32) IS3_1,4-Dichlorobenzen...	3.669	152	16221	4.000	ug/ml		0.00
Standard Area 2 = 17146			Recovery = 94.61%				
34) IS1_Naphthalene-d8	4.924	136	55769	4.000	ug/ml	#	0.00
Standard Area 1 = 50867			Recovery = 109.64%				
54) IS2_Naphthalene-d8	4.924	136	55769	4.000	ug/ml	#	0.00
Standard Area 3 = 55735			Recovery = 100.06%				
62) IS1_Acenaphthene-d10	6.606	164	34638	4.000	ug/ml		0.00
Standard Area 1 = 33572			Recovery = 103.18%				
82) IS2_Acenaphthene-d10	6.606	164	34638	4.000	ug/ml		0.00
Standard Area 3 = 35012			Recovery = 98.93%				
85) IS3_Acenaphthene-d10	6.606	164	34638	4.000	ug/ml		0.00
Standard Area 2 = 37775			Recovery = 91.70%				
87) IS1_Phenanthrene-d10	7.998	188	79883	4.000	ug/ml		0.00
Standard Area 1 = 80682			Recovery = 99.01%				
99) IS3_Phenanthrene-d10	7.998	188	79883	4.000	ug/ml		0.00
Standard Area 2 = 96848			Recovery = 82.48%				
103) IS1_Chrysene-d12	10.510	240	84586	4.000	ug/ml		0.00
Standard Area 1 = 88271			Recovery = 95.83%				
112) IS1_Perylene-d12	11.865	264	106418	4.000	ug/ml		0.00
Standard Area 1 = 110283			Recovery = 96.50%				
System Monitoring Compounds							
4) 2-Fluorophenol	2.273	112	13333	3.183	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 63.66%				
7) Phenol-d6	3.398	99	15636	2.913	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 58.26%				
19) Nitrobenzene-d5	4.241	82	9791	1.903	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 76.12%				
45) 2-Fluorobiphenyl	6.009	172	24094	2.196	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 87.84%				
78) 2,4,6-Tribromophenol	7.358	330	12386	6.177	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 123.54%#				

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-2.D
Acq On : 31 Aug 2023 11:54 am
Operator : Dakota:sz
Sample : WG1822188-2,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 14:22:31 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 12:13:43 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) 4-Terphenyl-d14	9.571	244	42171	2.160	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 86.40%			
Target Compounds						Qvalue
6) 2-Chlorophenol	3.460	128	17039	3.515	ug/ml	91
8) Phenol	3.411	94	16784	2.690	ug/ml	93
9) Bis(2-chloroethyl)ether	3.457	93	14097	3.260	ug/ml#	73
14) Bis(2-chloroisopropyl)...	4.020	45	22832	3.155	ug/ml#	58
15) 2-Methylphenol	4.023	108	14110	3.424	ug/ml	94
17) n-Nitrosodi-n-propylamine	4.144	70	12336	3.719	ug/ml#	82
18) 3-Methylphenol/4-Methy...	4.191	108	15485	3.638	ug/ml#	60
20) Nitrobenzene	4.259	77	17664	3.531	ug/ml	99
21) Isophorone	4.514	82	31179	3.523	ug/ml#	91
22) 2-Nitrophenol	4.579	139	9094	3.889	ug/ml	90
23) 2,4-Dimethylphenol	4.698	107	16856	3.744	ug/ml	97
24) Bis(2-chloroethoxy)met...	4.778	93	20381	3.549	ug/ml#	96
25) 2,4-Dichlorophenol	4.828	162	18283	4.320	ug/ml#	91
28) Benzaldehyde	3.209	105	12720	2.999	ug/ml	97
29) Acetophenone	4.104	105	20296	2.733	ug/ml#	80
37) 4-Chloroaniline	5.046	65	4860	3.041	ug/ml	80
39) p-Chloro-m-cresol	5.574	107	16220	4.587	ug/ml#	92
42) Hexachlorocyclopentadiene	5.801	237	13058	3.919	ug/ml	95
43) 2,4,6-Trichlorophenol	5.928	196	16611	5.150	ug/ml	98
44) 2,4,5-Trichlorophenol	5.956	196	18441	5.664	ug/ml	100
47) 2-Nitroaniline	6.214	138	12845	4.604	ug/ml#	80
50) Dimethyl phthalate	6.432	163	46207	4.096	ug/ml#	98
52) 2,6-Dinitrotoluene	6.463	165	10392	4.462	ug/ml#	86
59) Caprolactam	5.347	55	4116	1.986	ug/ml#	84
60) 1,2,4,5-Tetrachloroben...	5.795	216	19979	3.565	ug/ml#	95
61) Biphenyl	6.090	154	40863	3.253	ug/ml	98
63) 3-Nitroaniline	6.606	138	8486	3.078	ug/ml#	94
65) 2,4-Dinitrophenol	6.708	184	7063	5.281	ug/ml	92
66) Dibenzofuran	6.805	168	63254	4.205	ug/ml	90
67) 2,4-Dinitrotoluene	6.839	165	15423	4.546	ug/ml#	87
68) 4-Nitrophenol	6.836	65	9729	4.342	ug/ml#	91
70) 2,3,4,6-Tetrachlorophenol	6.948	232	16477	5.213	ug/ml	98
71) Diethyl phthalate	7.116	149	50404	3.970	ug/ml	97

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-2.D
Acq On : 31 Aug 2023 11:54 am
Operator : Dakota:sz
Sample : WG1822188-2,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 14:22:31 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 12:13:43 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
73)	4-Chlorophenyl phenyl ...	7.168	204	24119	4.092	ug/ml#	88
74)	4-Nitroaniline	7.181	138	9536	3.484	ug/ml#	91
75)	4,6-Dinitro-o-cresol	7.218	198	9557	5.237	ug/ml#	66
76)	NDPA/DPA	7.290	169	41267	3.989	ug/ml	91
79)	4-Bromophenyl phenyl e...	7.622	248	16684	4.533	ug/ml#	80
86)	Atrazine	7.843	200	14645	4.657	ug/ml#	73
90)	Carbazole	8.253	167	81537	4.340	ug/ml	100
91)	Di-n-butylphthalate	8.688	149	93123	4.210	ug/ml	99
96)	Butyl benzyl phthalate	10.096	149	44253	4.400	ug/ml#	85
105)	3,3'-Dichlorobenzidine	10.535	252	21071	2.067	ug/ml#	94
107)	Bis(2-ethylhexyl)phtha...	10.709	149	66608	4.497	ug/ml#	87
108)	Di-n-octylphthalate	11.343	149	115090	4.282	ug/ml#	73

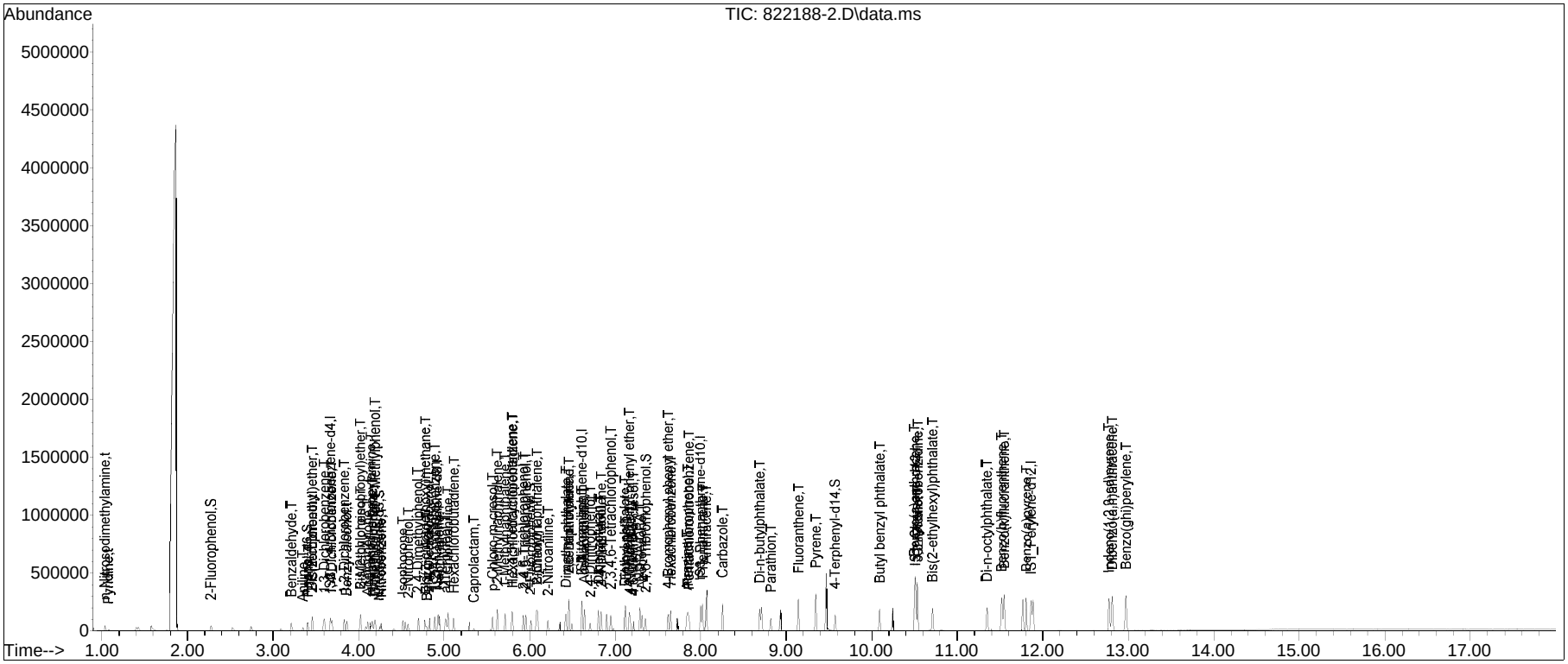
(#) = qualifier out of range (m) = manual integration (+) = signals summed

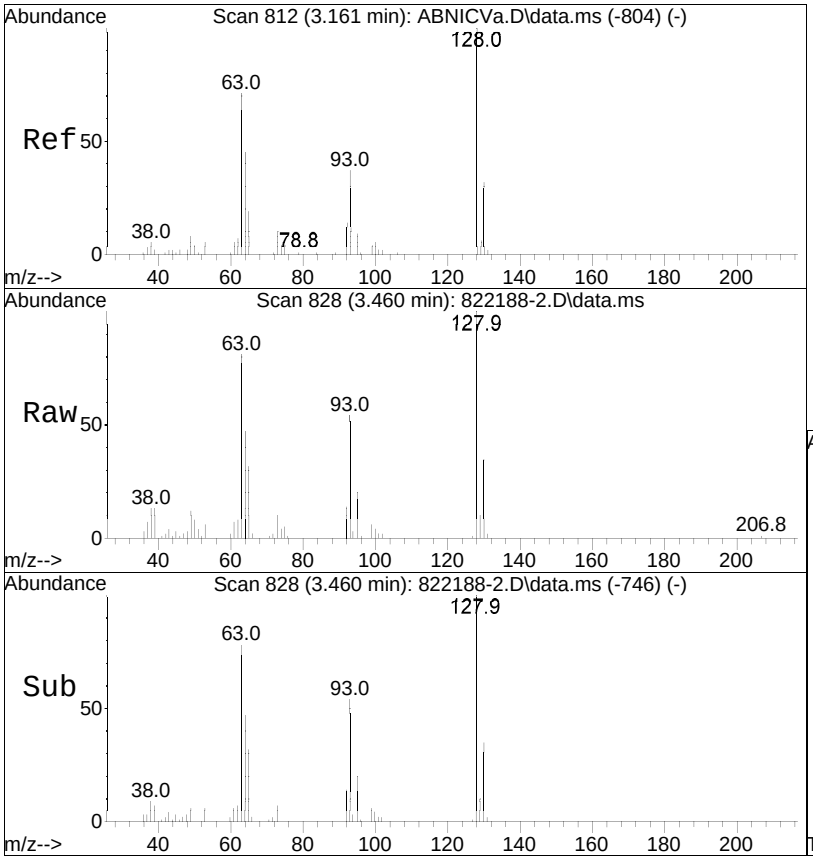
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-2.D
Acq On : 31 Aug 2023 11:54 am
Operator : Dakota:sz
Sample : WG1822188-2,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 14:22:31 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 12:13:43 2023
Response via : Initial Calibration

Sub List : 8270TCL_REV2 - TCL/CT/MA1lvi\AP90831.D•

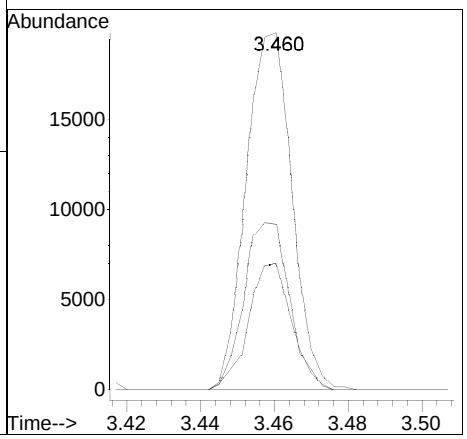


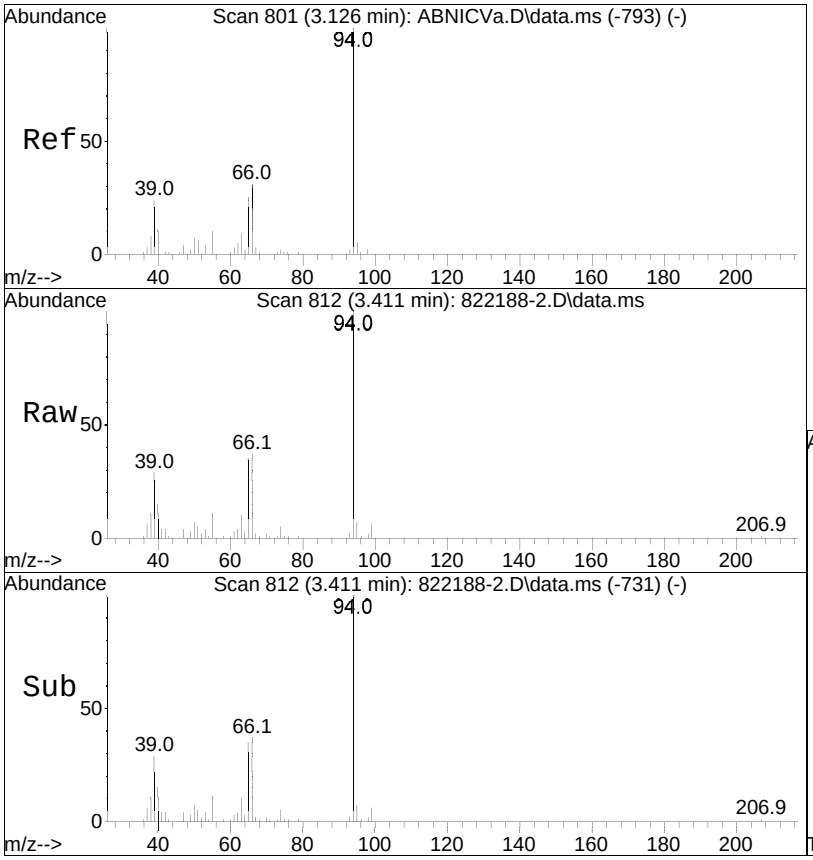


#6
2-Chlorophenol
Concen: 3.52 ug/ml
RT: 3.460 min Scan# 828
Delta R.T. 0.006 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:128 Resp: 17039

Ion	Ratio	Lower	Upper
128	100		
64	46.6	45.1	67.7
130	33.6	26.2	39.4

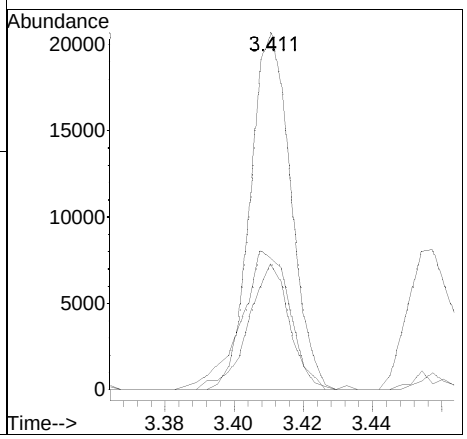


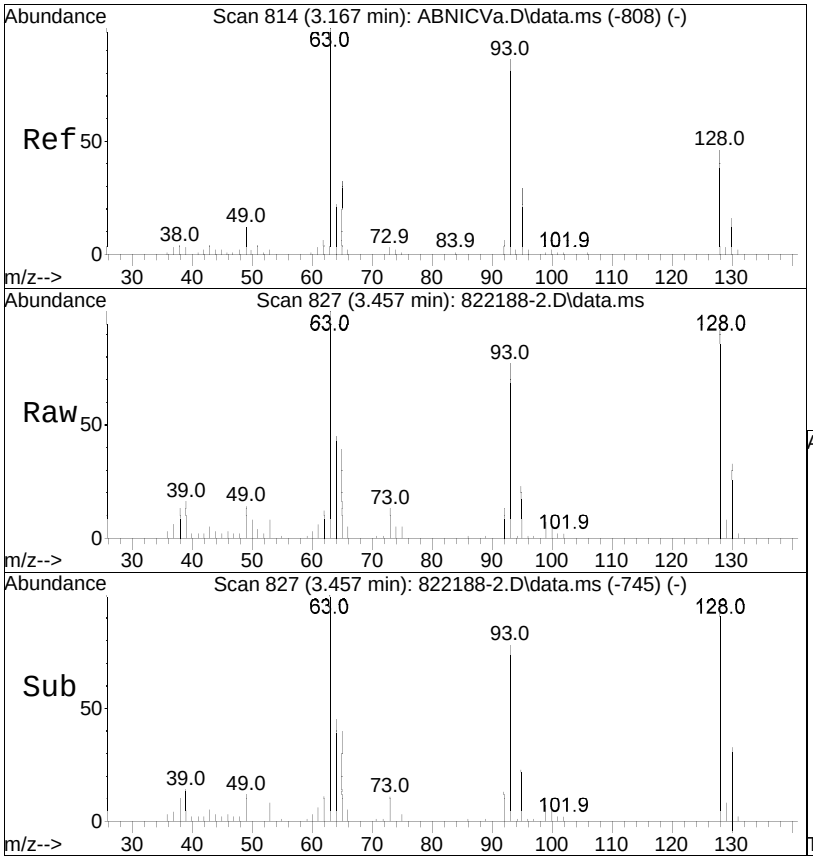


#8
Phenol
Concen: 2.69 ug/ml
RT: 3.411 min Scan# 812
Delta R.T. 0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion: 94 Resp: 16784

Ion	Ratio	Lower	Upper
94	100		
65	36.0	26.0	39.0
66	47.2	33.8	50.8

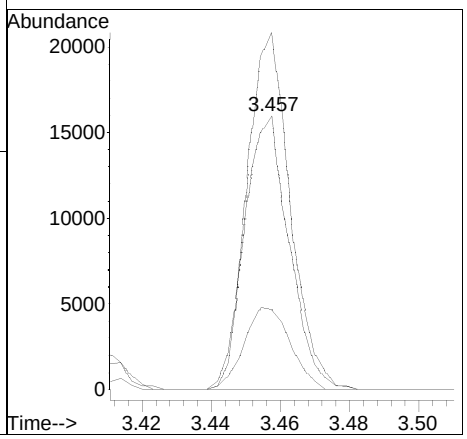


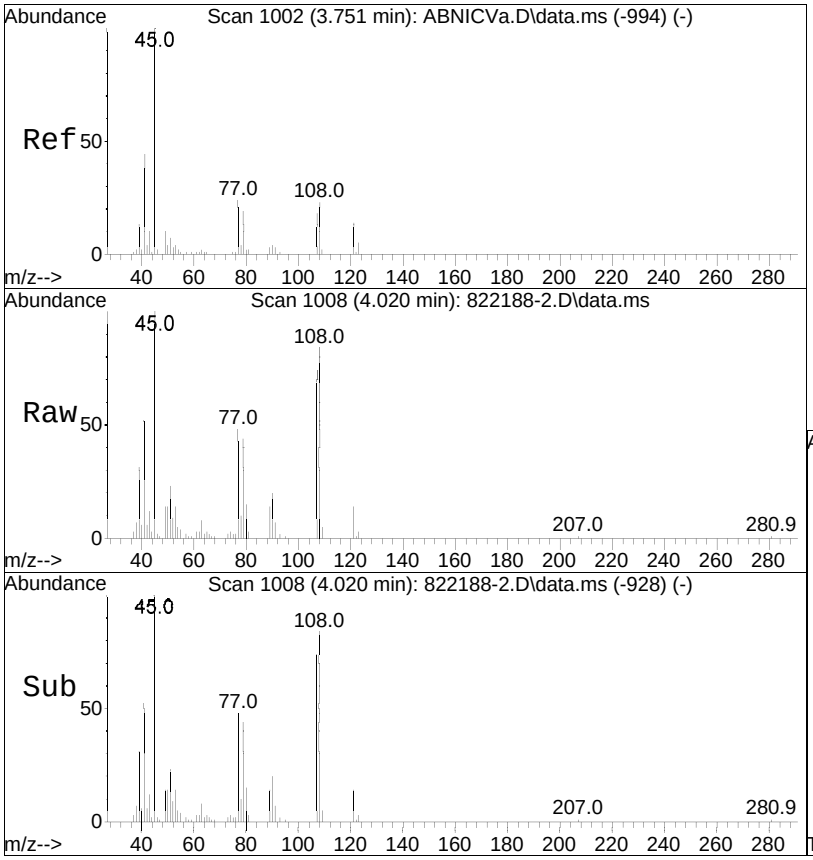


#9
Bis(2-chloroethyl)ether
Concen: 3.26 ug/ml
RT: 3.457 min Scan# 827
Delta R.T. 0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion: 93 Resp: 14097

Ion	Ratio	Lower	Upper
93	100		
63	128.2	74.6	111.8#
95	31.7	25.9	38.9

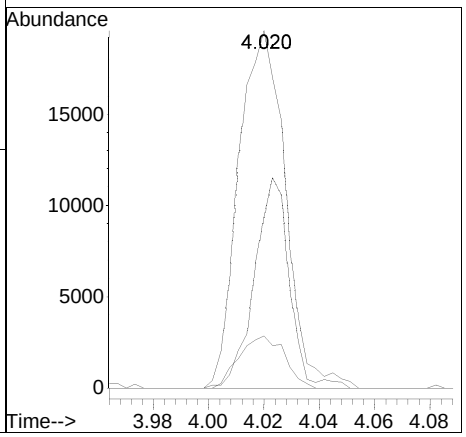


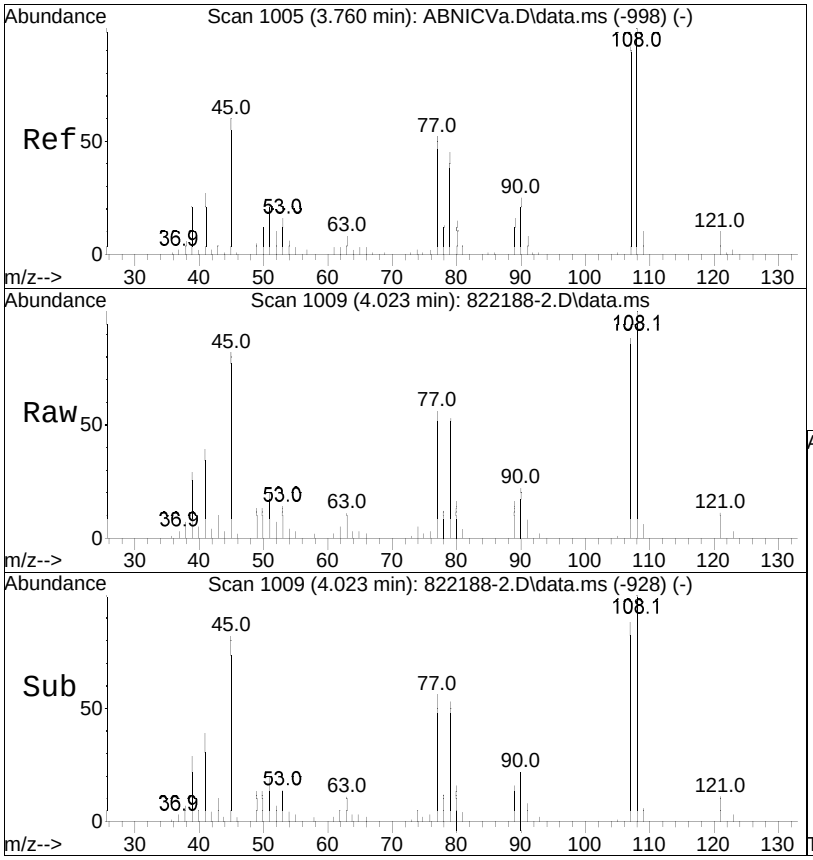


#14
Bis(2-chloroisopropyl)ether
Concen: 3.16 ug/ml
RT: 4.020 min Scan# 1008
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion: 45 Resp: 22832

Ion	Ratio	Lower	Upper
45	100		
121	14.0	9.8	14.6
77	43.2	6.1	9.1#

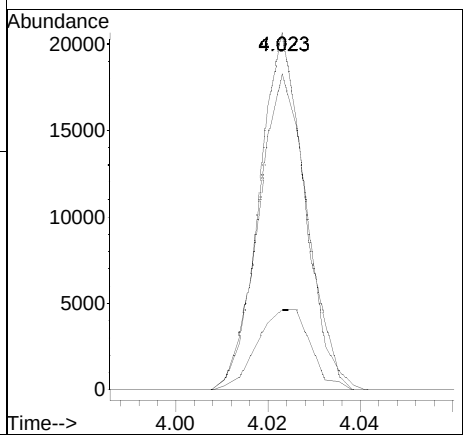


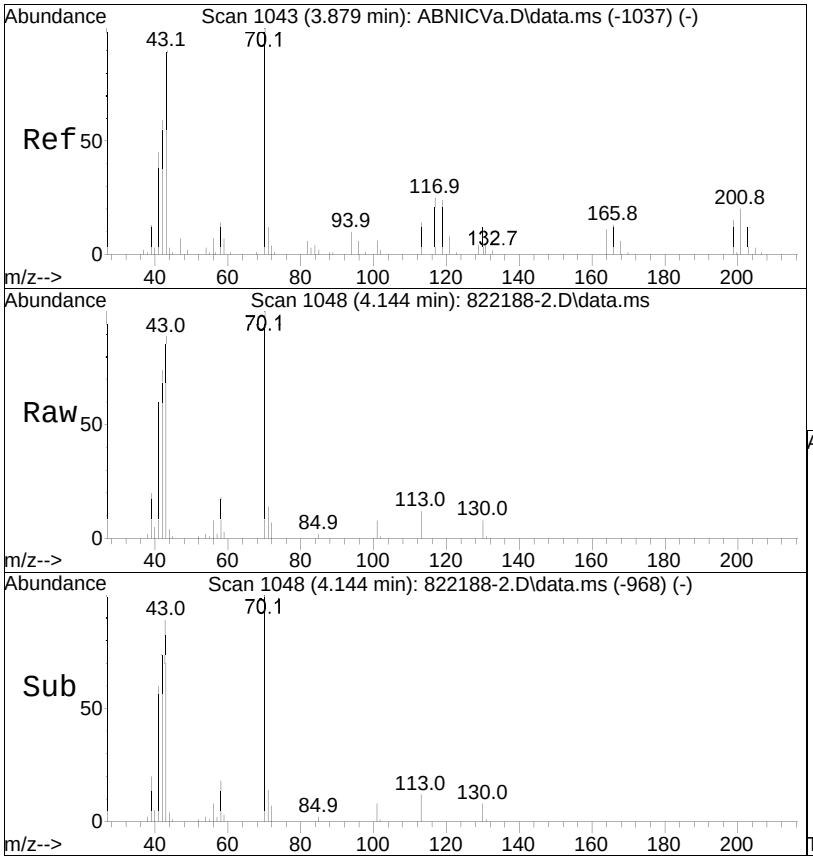


#15
2-Methylphenol
Concen: 3.42 ug/ml
RT: 4.023 min Scan# 1009
Delta R.T. 0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:108 Resp: 14110

Ion	Ratio	Lower	Upper
108	100		
107	94.3	70.7	106.1
90	26.4	18.7	28.1

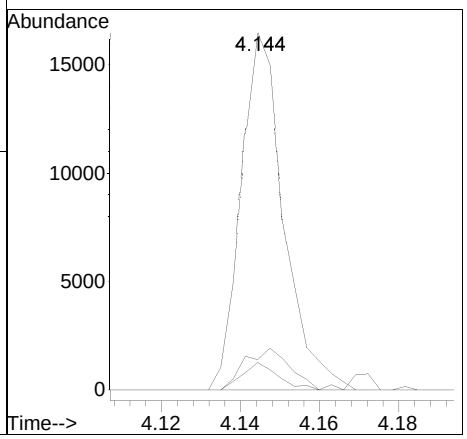


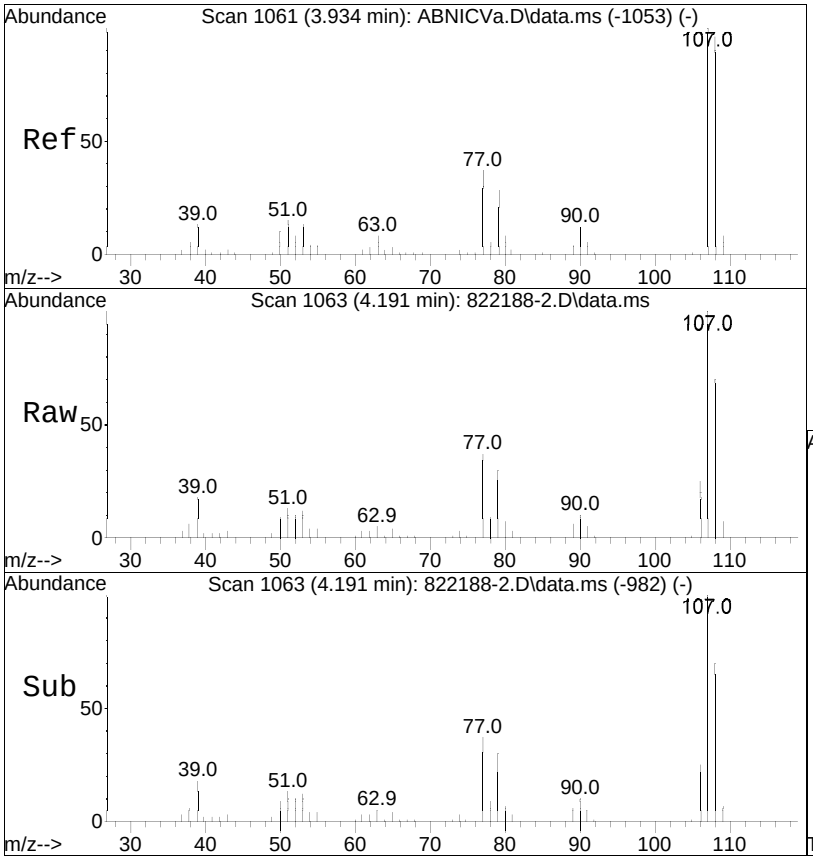


#17
n-Nitrosodi-n-propylamine
Concen: 3.72 ug/ml
RT: 4.144 min Scan# 1048
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion: 70 Resp: 12336

Ion	Ratio	Lower	Upper
70	100		
130	12.3	18.2	27.4#
101	6.4	7.8	11.8#

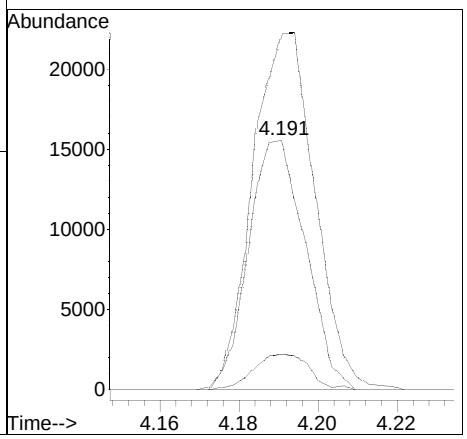


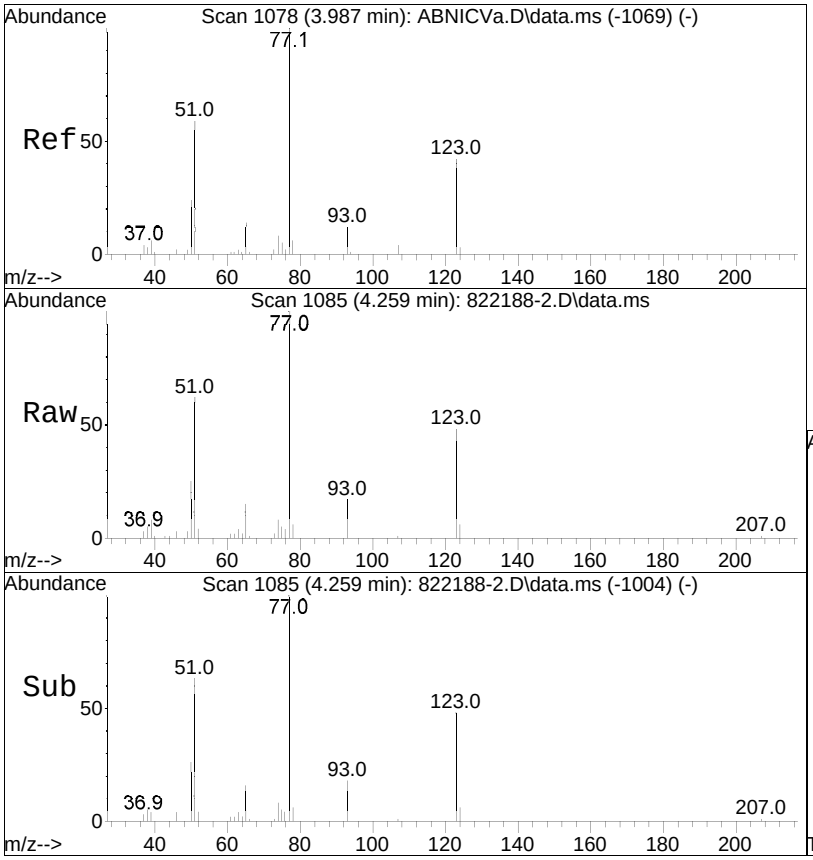


#18
3-Methylphenol/4-Methylphenol
Concen: 3.64 ug/ml
RT: 4.191 min Scan# 1063
Delta R.T. 0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:108 Resp: 15485

Ion	Ratio	Lower	Upper
108	100		
107	156.6	88.6	132.8#
90	14.4	8.8	13.2#

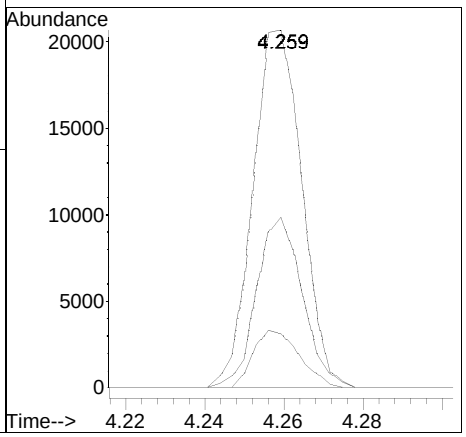


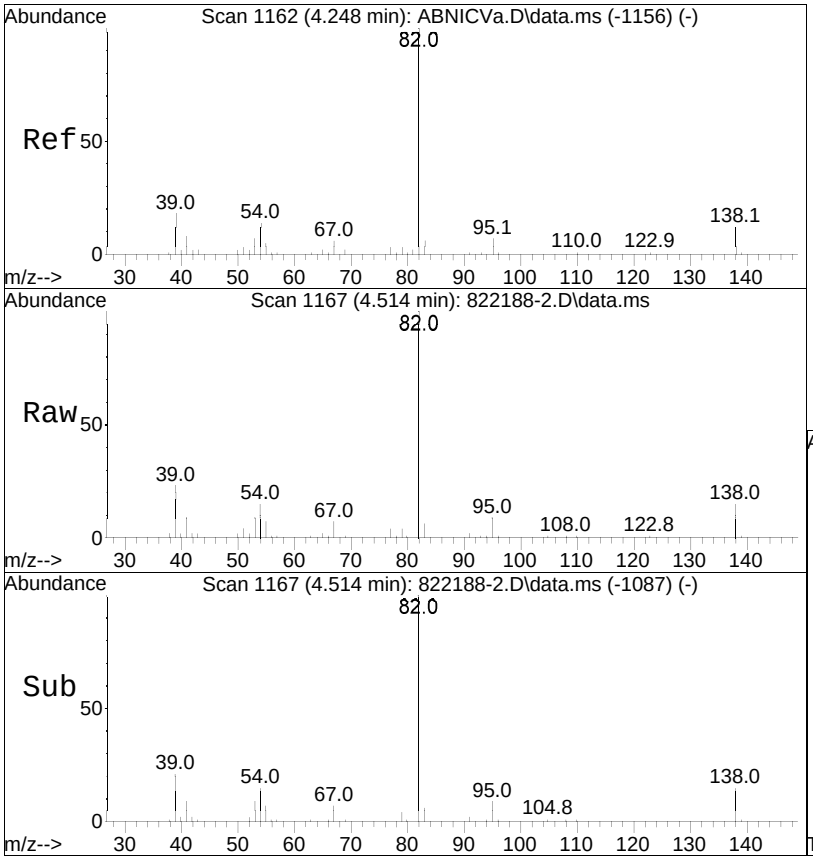


#20
Nitrobenzene
Concen: 3.53 ug/ml
RT: 4.259 min Scan# 1085
Delta R.T. 0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion: 77 Resp: 17664

Ion	Ratio	Lower	Upper
77	100		
123	44.8	36.3	54.5
65	15.2	11.6	17.4

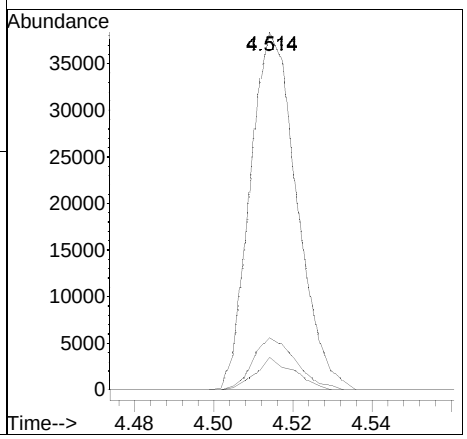


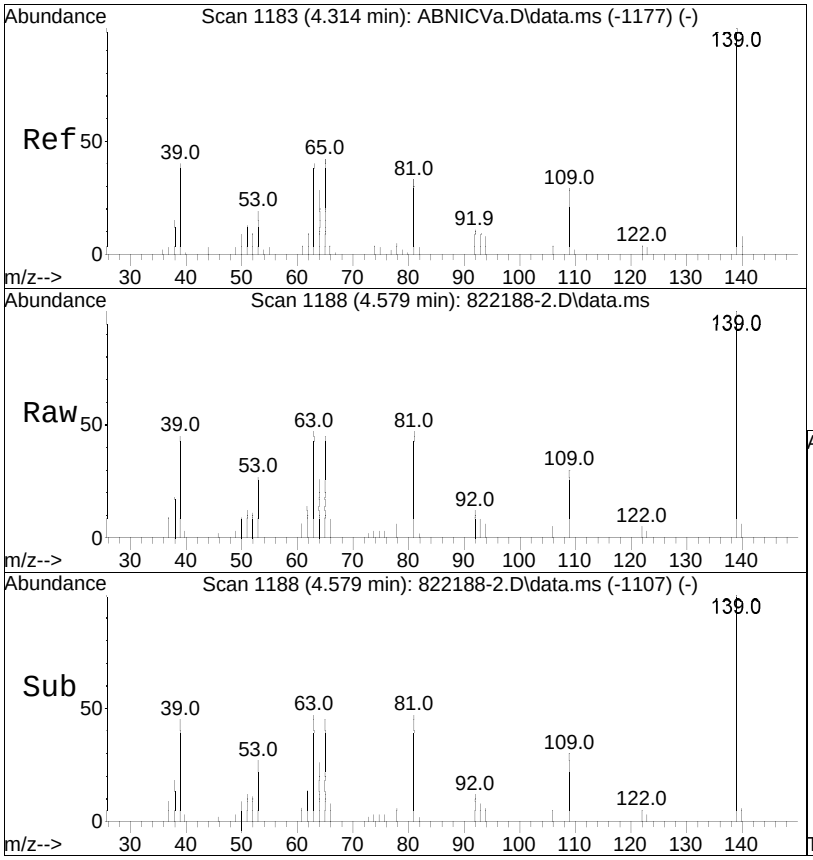


#21
Isophorone
Concen: 3.52 ug/ml
RT: 4.514 min Scan# 1167
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion: 82 Resp: 31179

Ion	Ratio	Lower	Upper
82	100		
138	13.6	14.7	22.1#
95	7.6	5.2	7.8

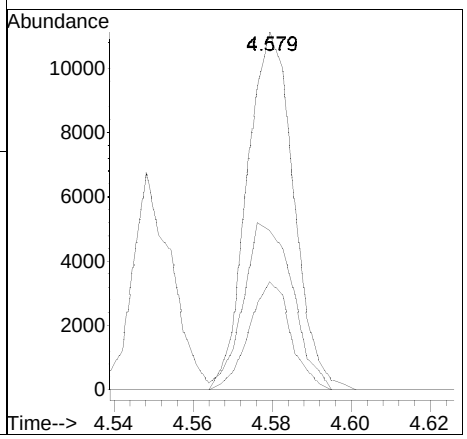


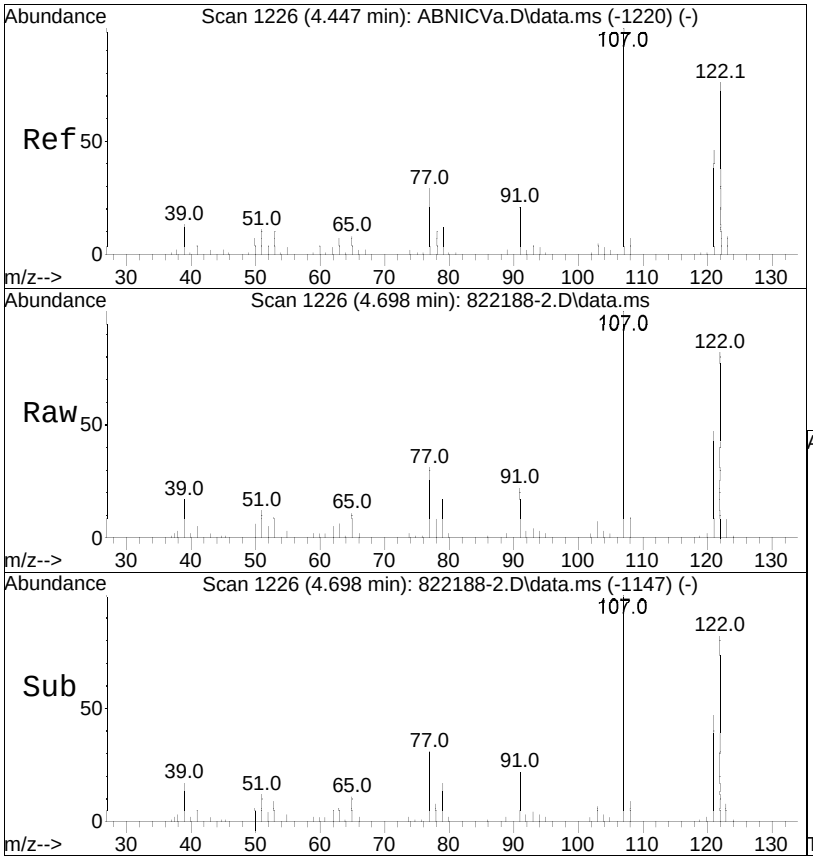


#22
2-Nitrophenol
Concen: 3.89 ug/ml
RT: 4.579 min Scan# 1188
Delta R.T. 0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:139 Resp: 9094

Ion	Ratio	Lower	Upper
139	100		
109	27.2	19.4	29.0
65	49.2	46.1	69.1

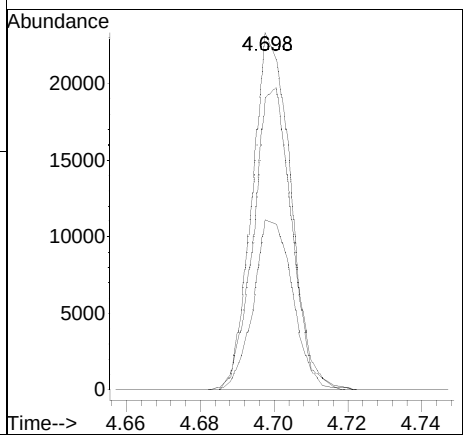


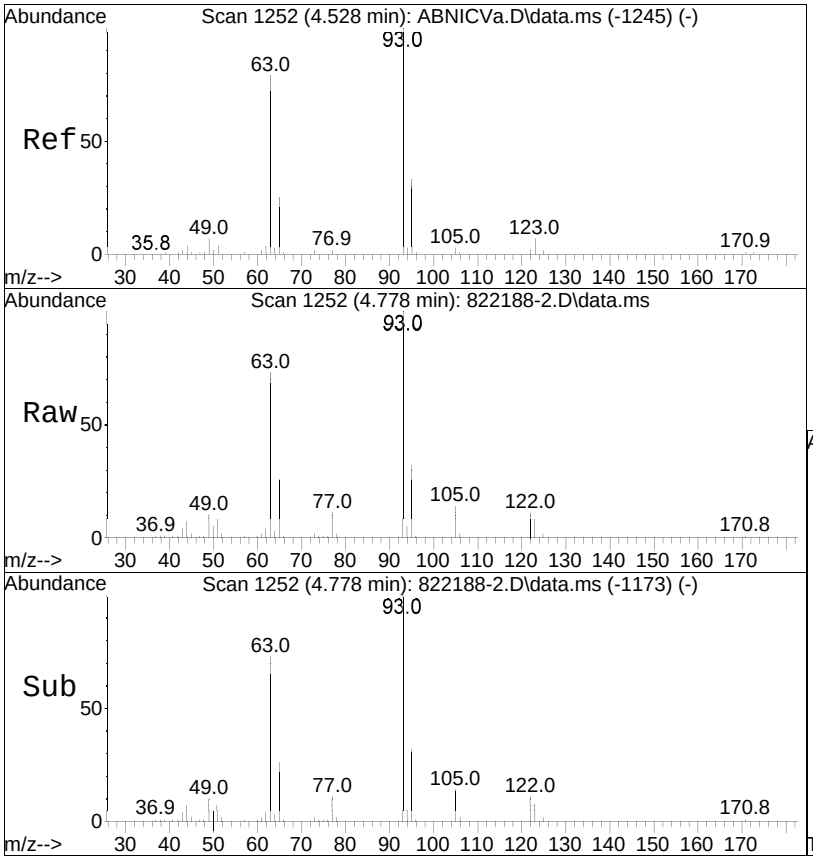


#23
2,4-Dimethylphenol
Concen: 3.74 ug/ml
RT: 4.698 min Scan# 1226
Delta R.T. -0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:107 Resp: 16856

Ion	Ratio	Lower	Upper
107	100		
121	48.7	40.0	60.0
122	83.9	70.2	105.4

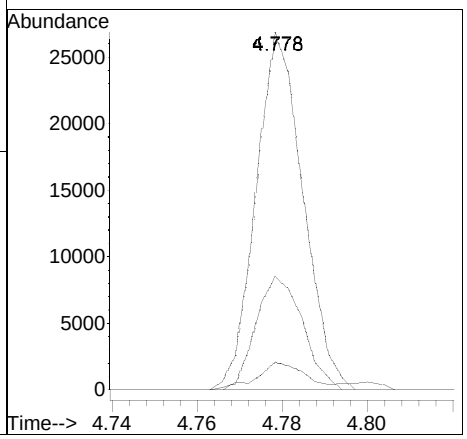


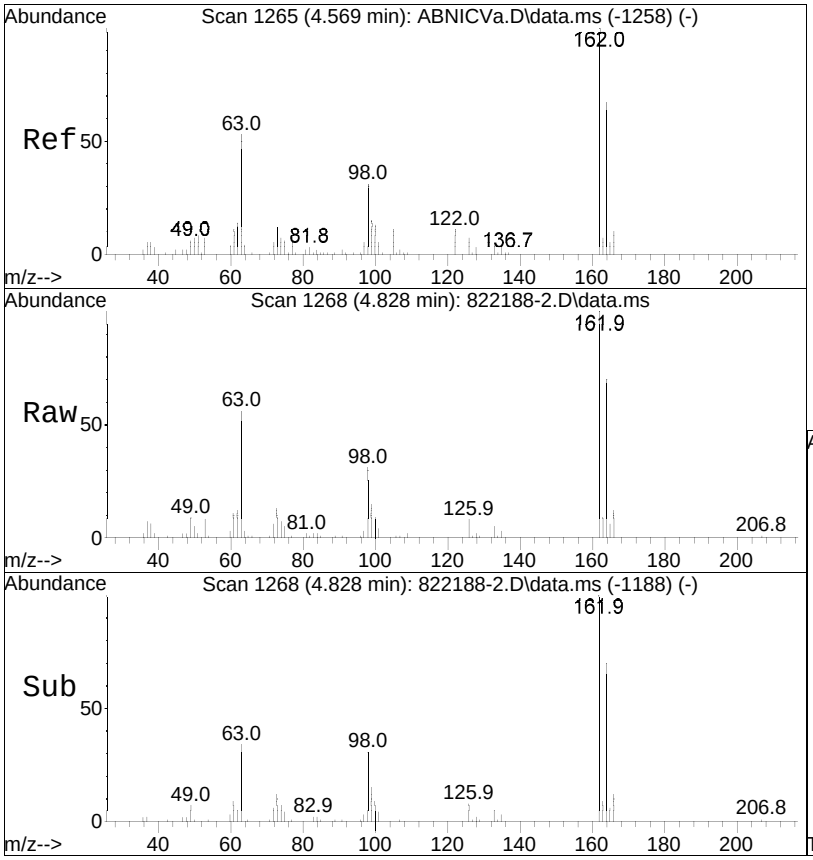


#24
Bis(2-chloroethoxy)methane
Concen: 3.55 ug/ml
RT: 4.778 min Scan# 1252
Delta R.T. -0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion: 93 Resp: 20381

Ion	Ratio	Lower	Upper
93	100		
95	31.7	25.8	38.8
123	8.3	10.1	15.1#

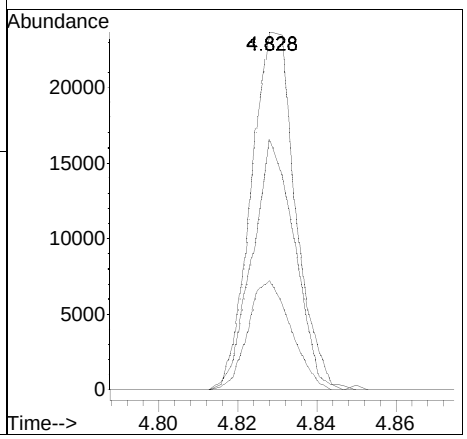


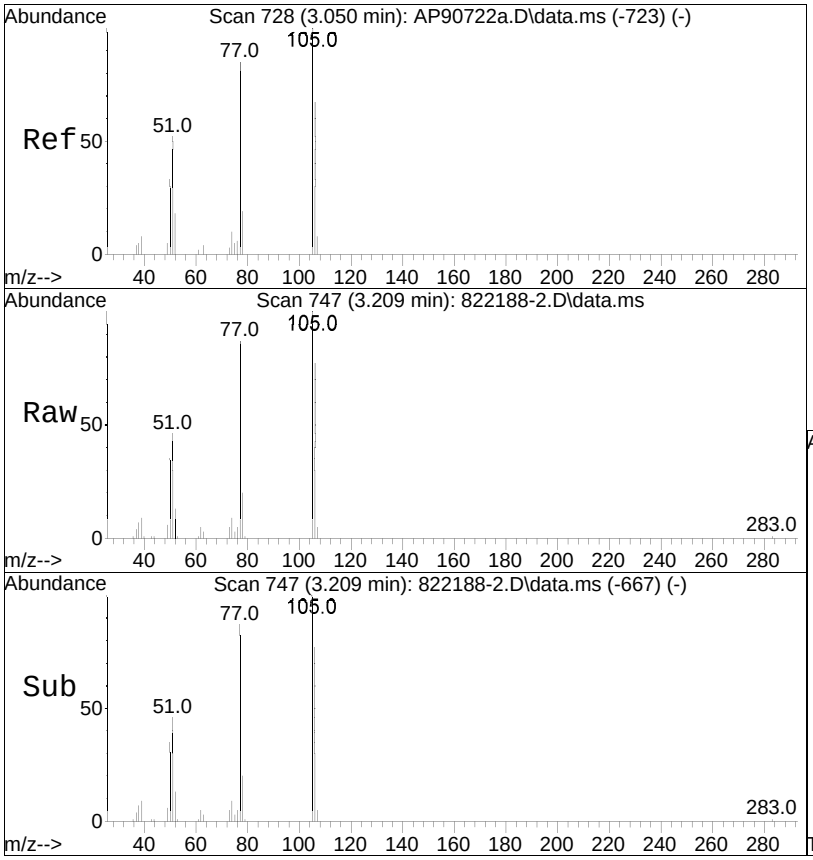


#25
2,4-Dichlorophenol
Concen: 4.32 ug/ml
RT: 4.828 min Scan# 1268
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:162 Resp: 18283

Ion	Ratio	Lower	Upper
162	100		
164	67.3	51.0	76.4
98	29.8	32.2	48.2#

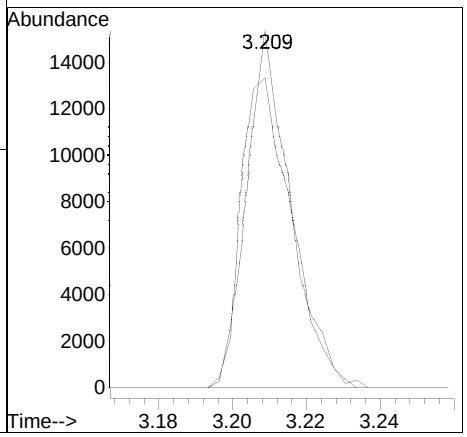


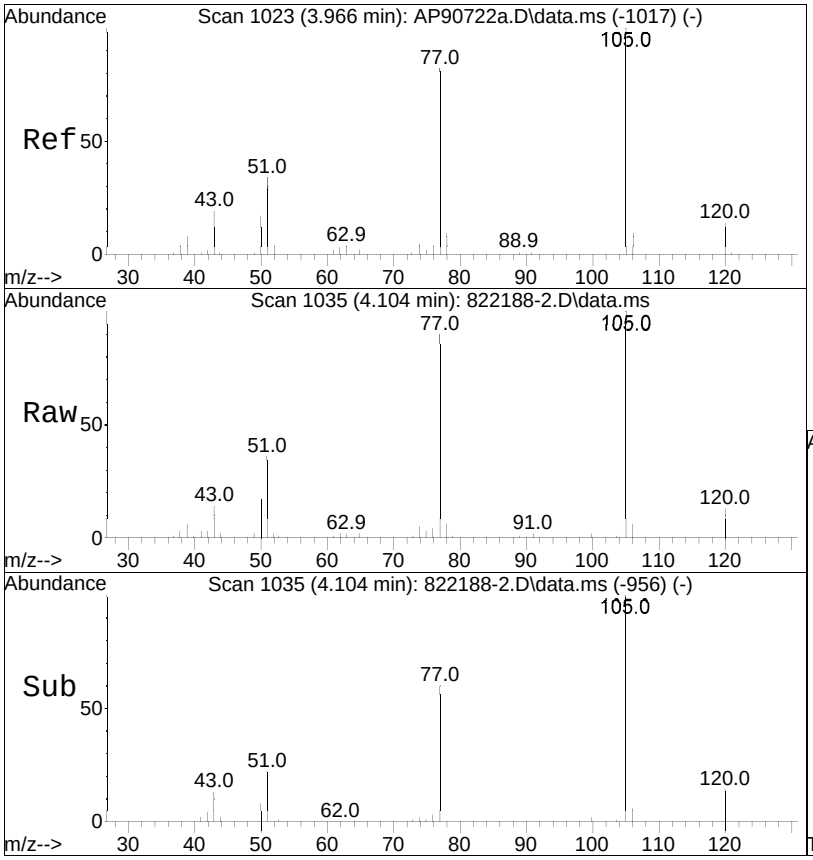


#28
Benzaldehyde
Concen: 3.00 ug/ml
RT: 3.209 min Scan# 747
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:105 Resp: 12720

Ion	Ratio	Lower	Upper
105	100		
77	100.1	82.2	123.4

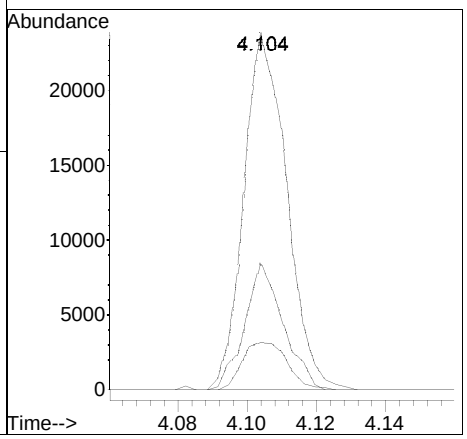


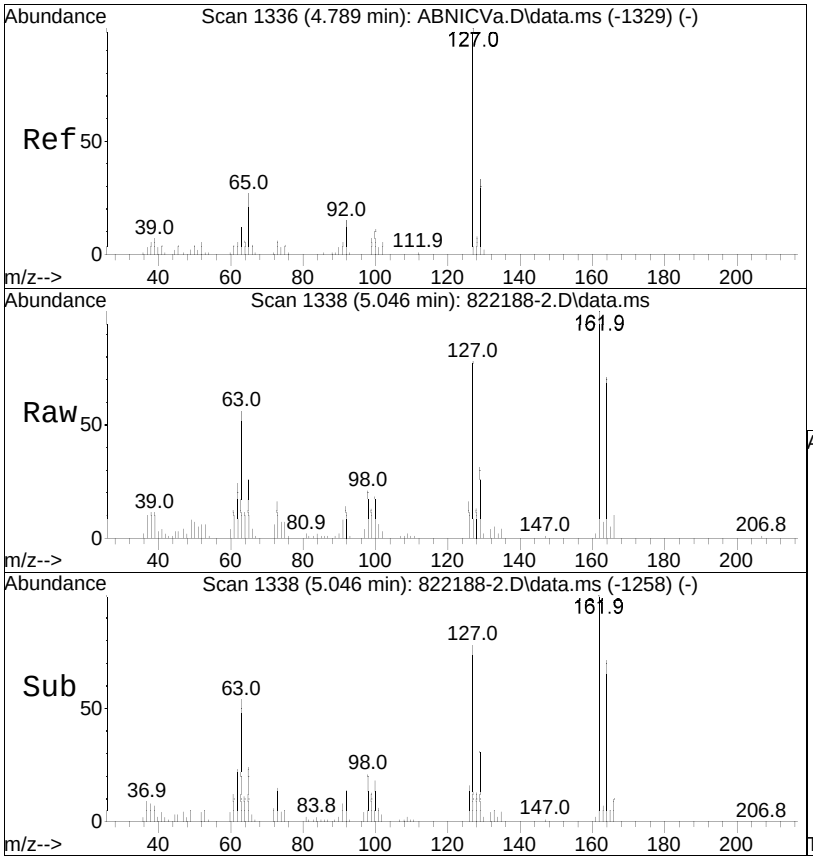


#29
Acetophenone
Concen: 2.73 ug/ml
RT: 4.104 min Scan# 1035
Delta R.T. -0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:105 Resp: 20296

Ion	Ratio	Lower	Upper
105	100		
120	14.2	20.5	30.7#
51	32.1	34.9	52.3#

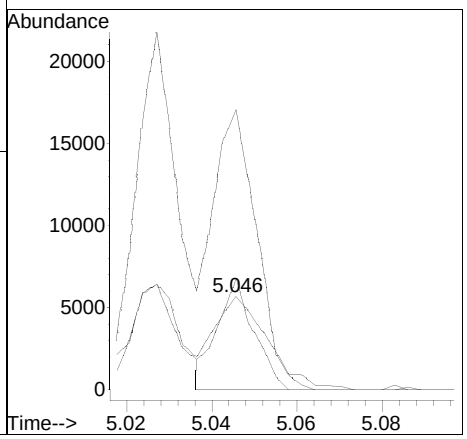


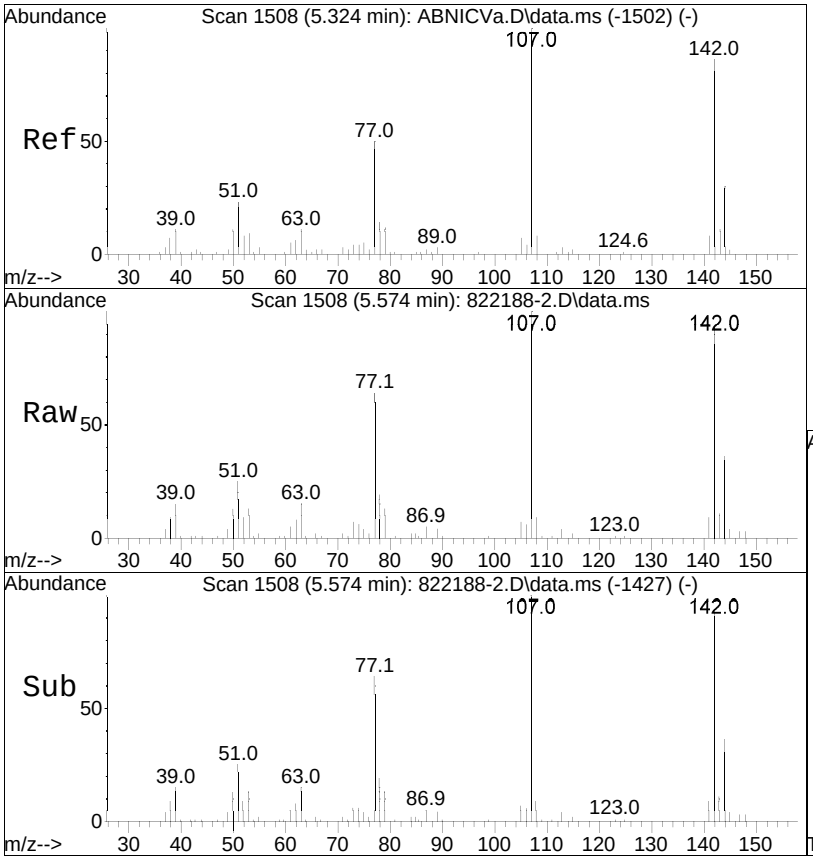


#37
4-Chloroaniline
Concen: 3.04 ug/ml
RT: 5.046 min Scan# 1338
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion: 65 Resp: 4860

Ion	Ratio	Lower	Upper
65	100		
127	251.2	237.6	356.4
129	84.6	76.3	114.5

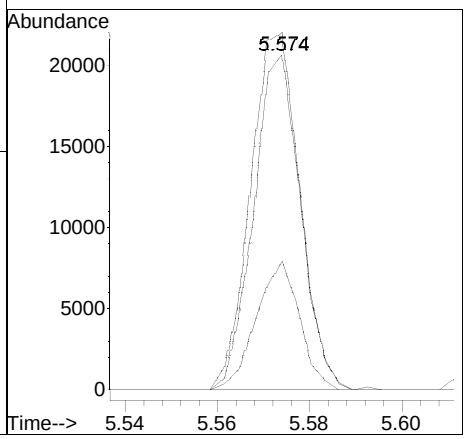


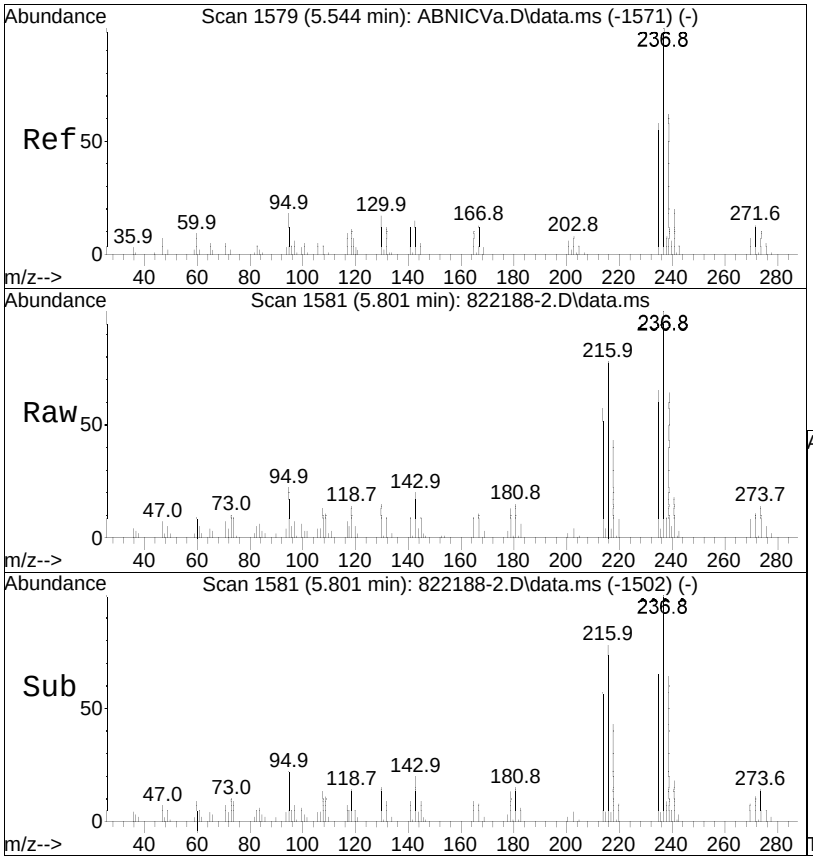


#39
p-Chloro-m-cresol
Concen: 4.59 ug/ml
RT: 5.574 min Scan# 1508
Delta R.T. 0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:107 Resp: 16220

Ion	Ratio	Lower	Upper
107	100		
144	31.7	20.9	31.3#
142	89.3	66.1	99.1

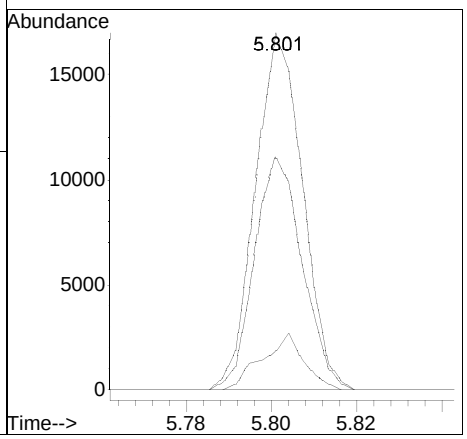


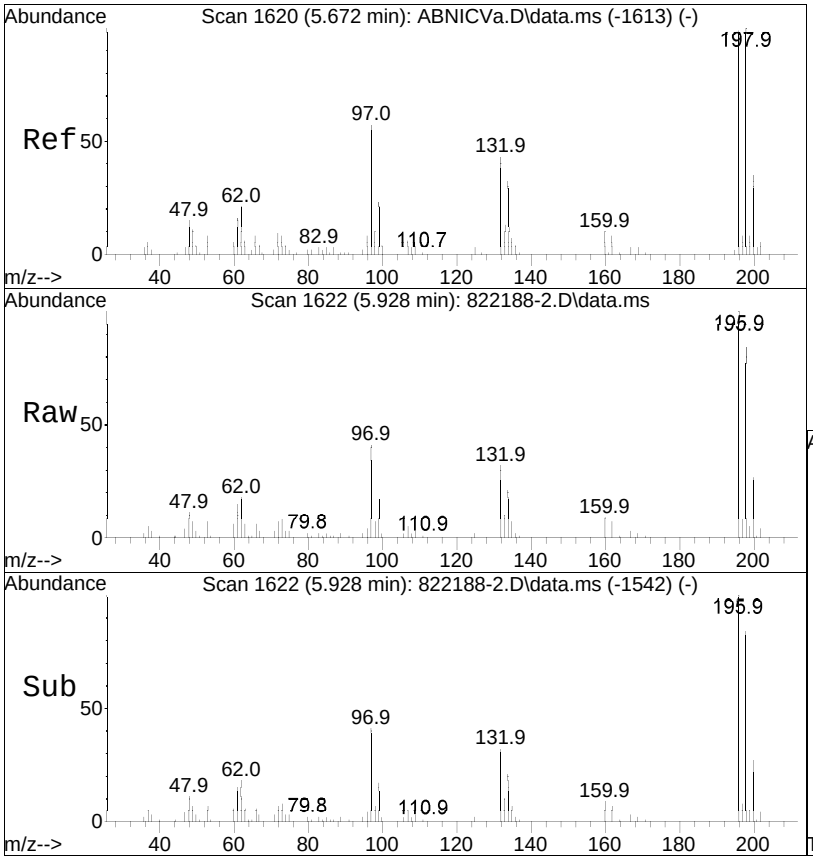


#42
Hexachlorocyclopentadiene
Concen: 3.92 ug/ml
RT: 5.801 min Scan# 1581
Delta R.T. -0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:237 Resp: 13058

Ion	Ratio	Lower	Upper
237	100		
235	66.3	49.7	74.5
272	14.0	9.8	14.6

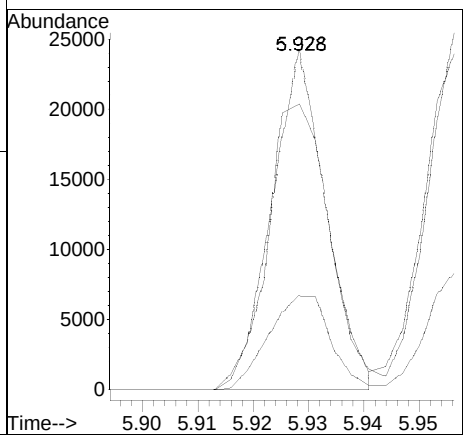


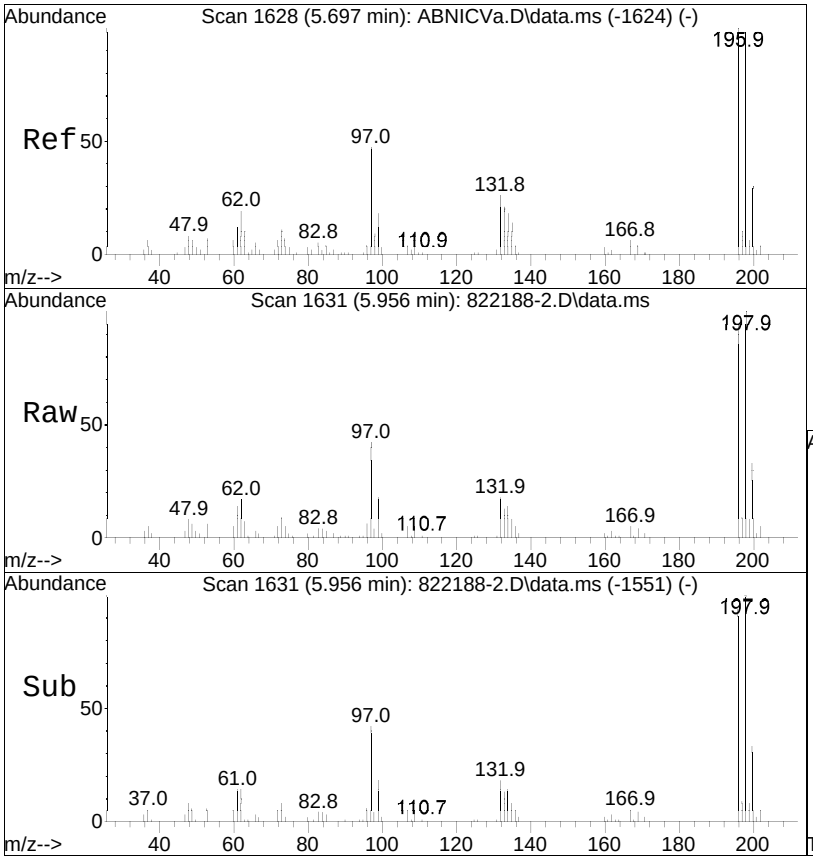


#43
2,4,6-Trichlorophenol
Concen: 5.15 ug/ml
RT: 5.928 min Scan# 1622
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:196 Resp: 16611

Ion	Ratio	Lower	Upper
196	100		
198	96.1	77.5	116.3
200	32.0	23.8	35.6

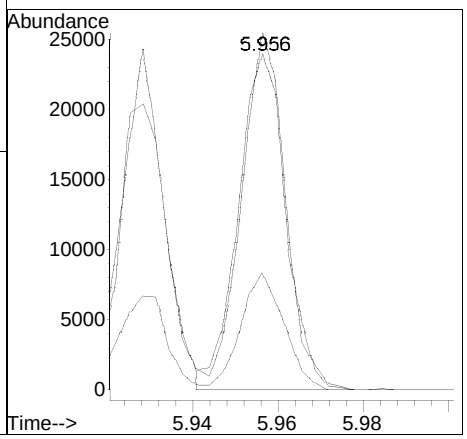


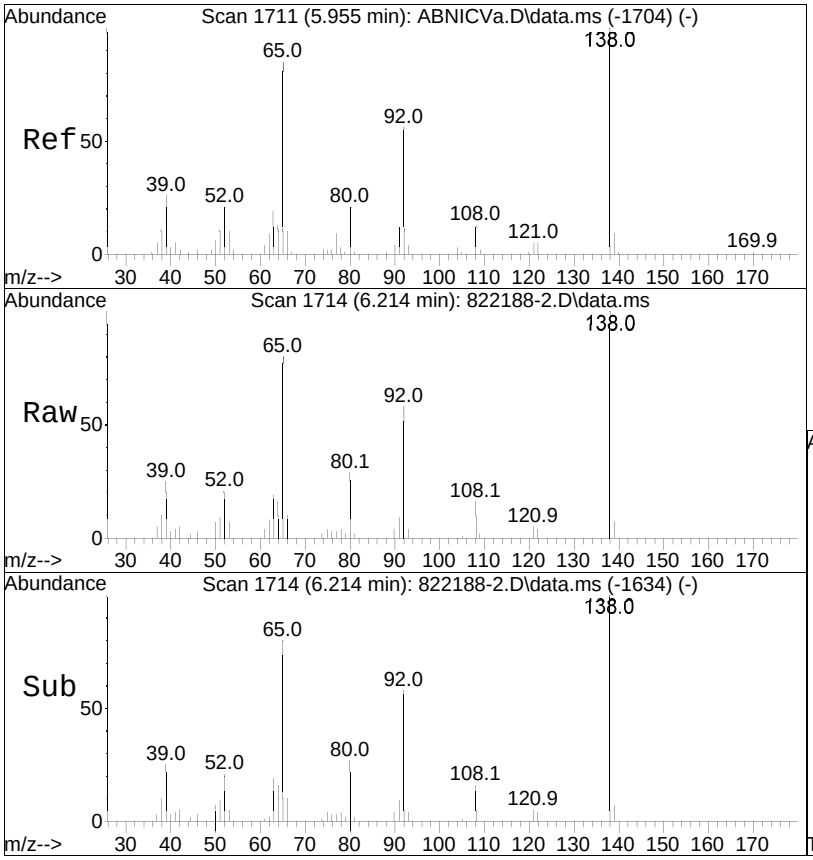


#44
2,4,5-Trichlorophenol
Concen: 5.66 ug/ml
RT: 5.956 min Scan# 1631
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:196 Resp: 18441

Ion	Ratio	Lower	Upper
196	100		
200	31.8	25.4	38.0
198	97.7	78.0	117.0

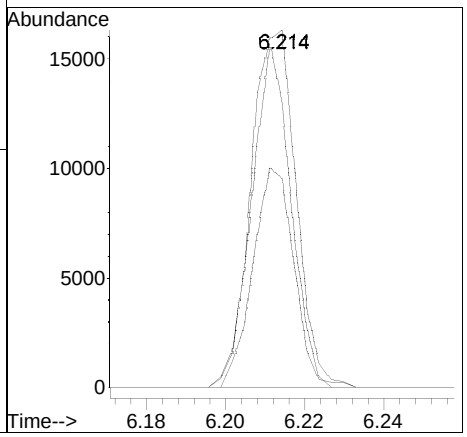


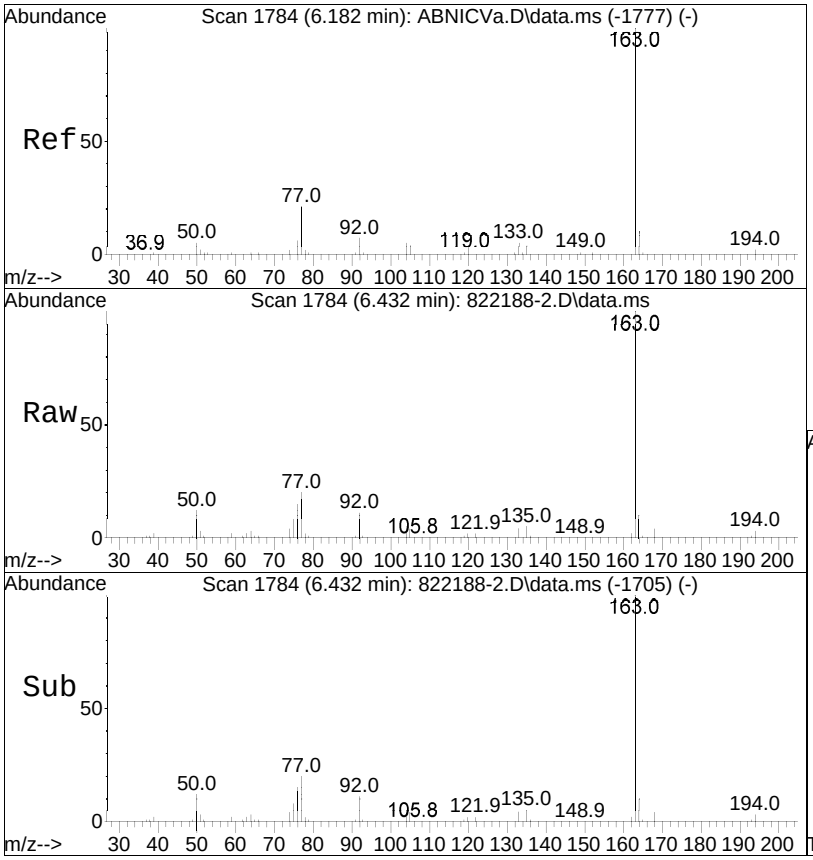


#47
2-Nitroaniline
Concen: 4.60 ug/ml
RT: 6.214 min Scan# 1714
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:138 Resp: 12845

Ion	Ratio	Lower	Upper
138	100		
92	56.3	53.5	80.3
65	83.3	86.3	129.5#

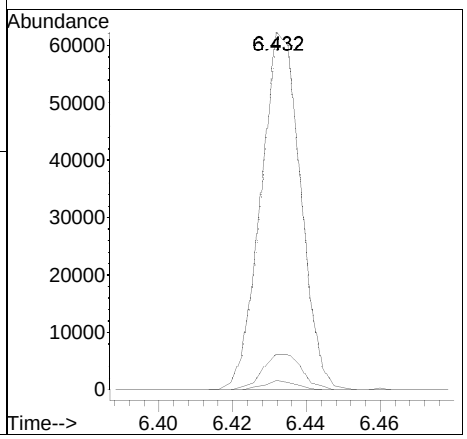


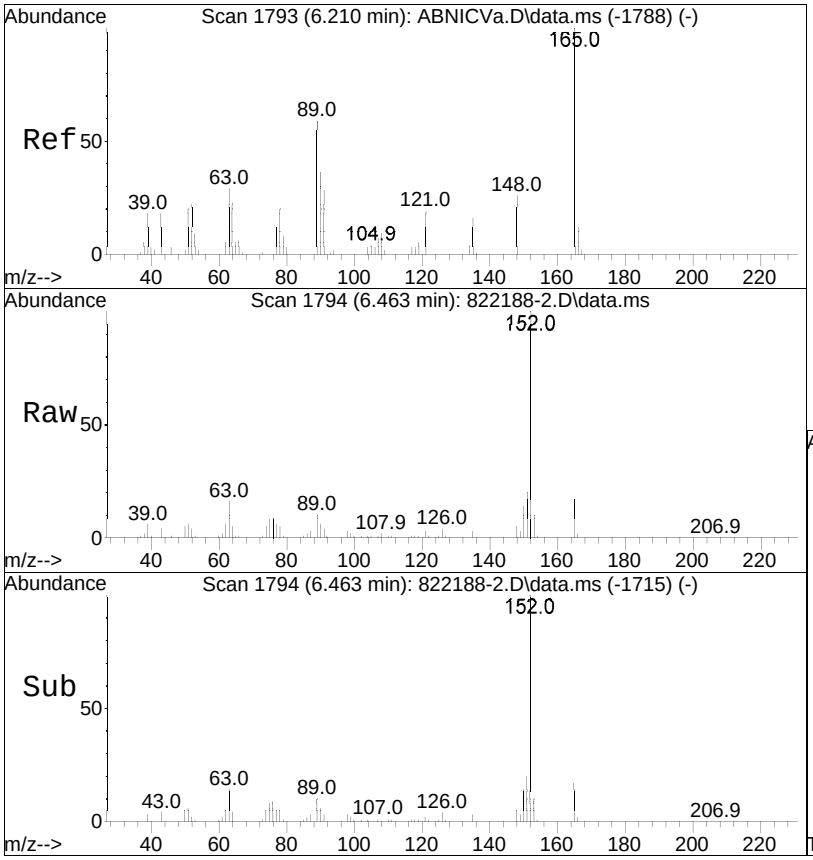


#50
Dimethyl phthalate
Concen: 4.10 ug/ml
RT: 6.432 min Scan# 1784
Delta R.T. -0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:163 Resp: 46207

Ion	Ratio	Lower	Upper
163	100		
194	2.1	3.5	5.3#
164	10.0	7.9	11.9

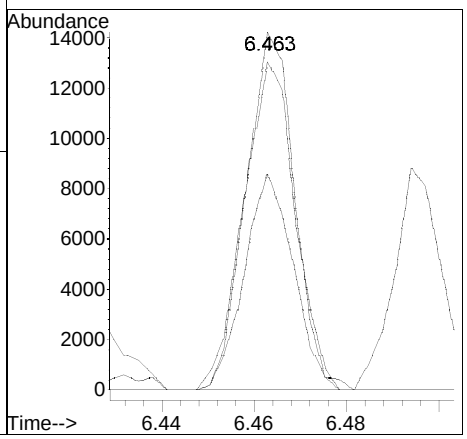


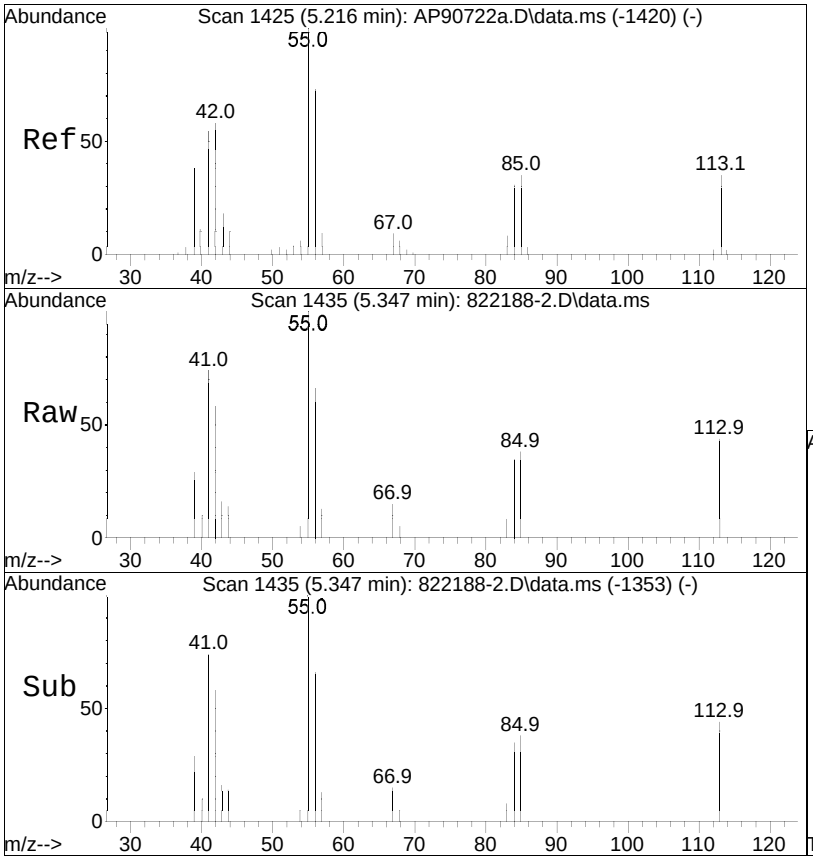


#52
2,6-Dinitrotoluene
Concen: 4.46 ug/ml
RT: 6.463 min Scan# 1794
Delta R.T. -0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:165 Resp: 10392

Ion	Ratio	Lower	Upper
165	100		
89	61.0	54.2	81.2
63	97.5	64.2	96.2#

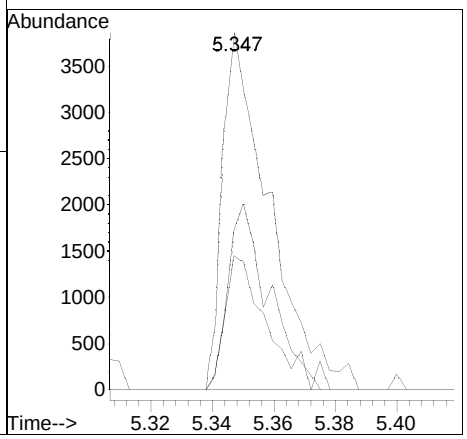


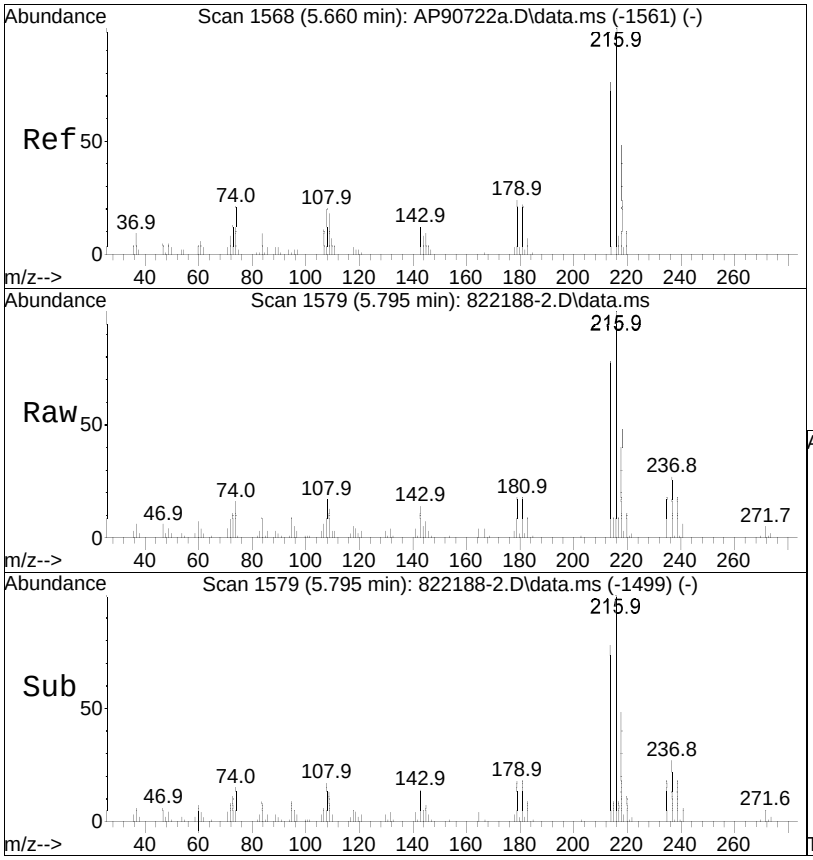


#59
Caprolactam
Concen: 1.99 ug/ml
RT: 5.347 min Scan# 1435
Delta R.T. 0.006 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion: 55 Resp: 4116

Ion	Ratio	Lower	Upper
55	100		
85	34.0	19.8	29.6#
113	45.3	29.6	44.4#

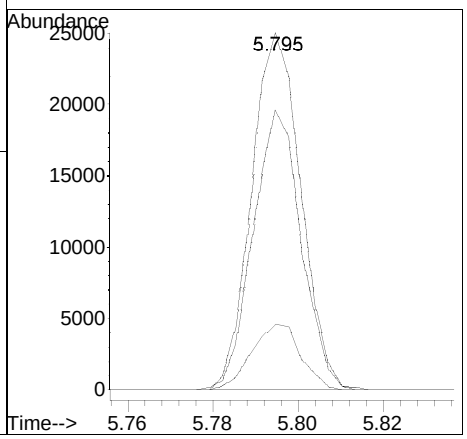


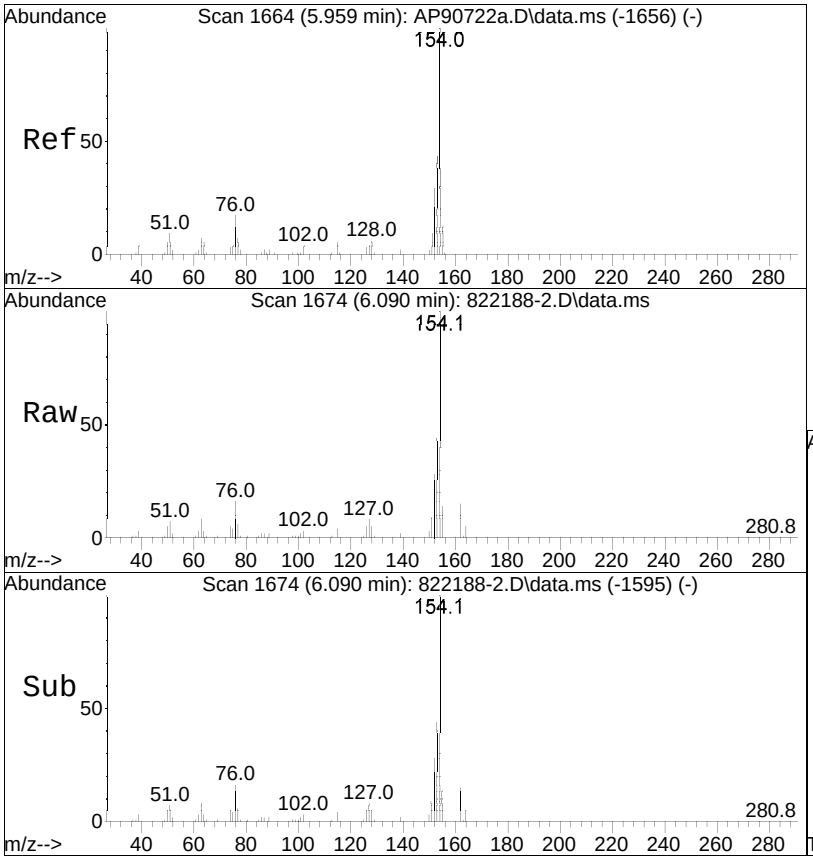


#60
1,2,4,5-Tetrachlorobenzene
Concen: 3.56 ug/ml
RT: 5.795 min Scan# 1579
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:216 Resp: 19979

Ion	Ratio	Lower	Upper
216	100		
214	76.9	63.7	95.5
179	18.5	19.0	28.6#

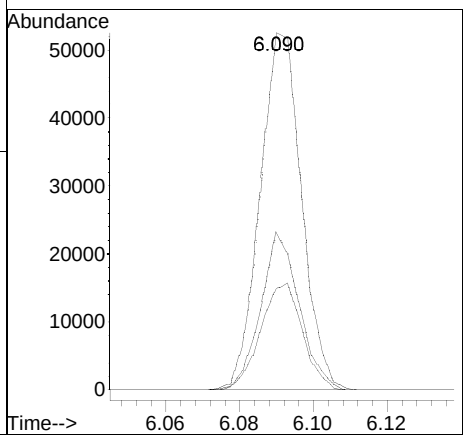


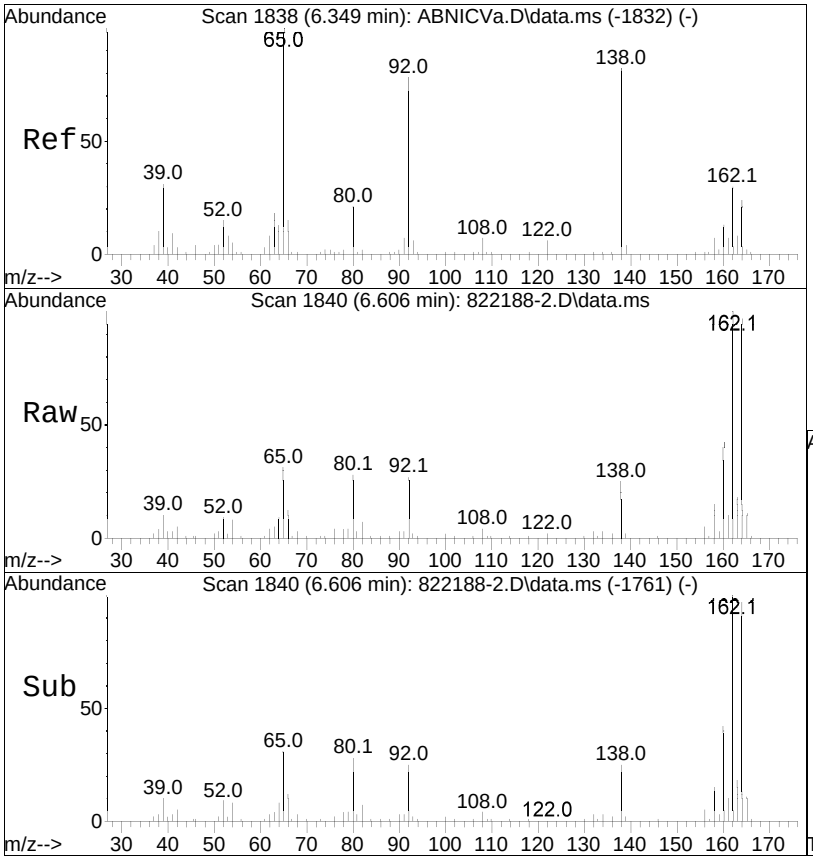


#61
Biphenyl
Concen: 3.25 ug/ml
RT: 6.090 min Scan# 1674
Delta R.T. -0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:154 Resp: 40863

Ion	Ratio	Lower	Upper
154	100		
153	41.1	32.3	48.5
152	30.3	22.5	33.7

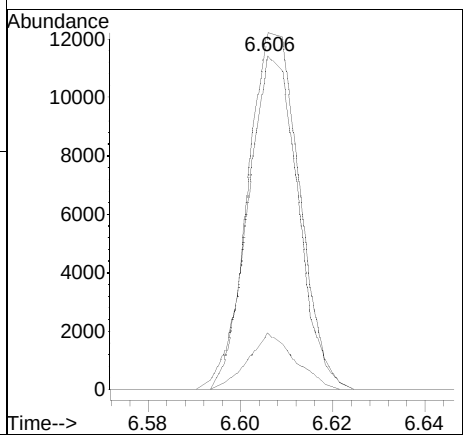


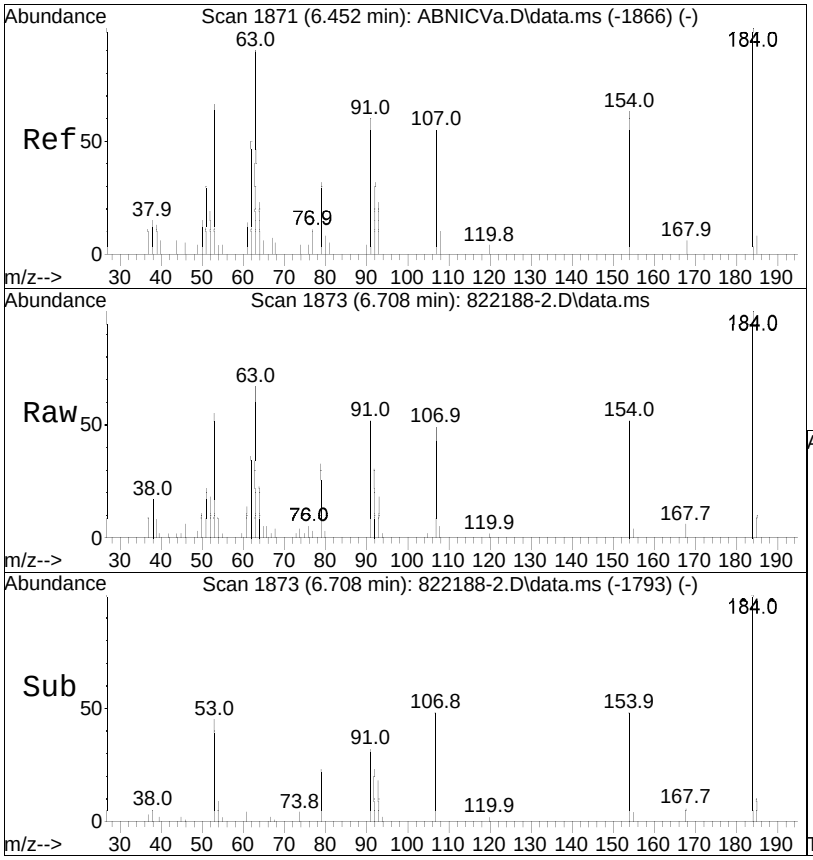


#63
3-Nitroaniline
Concen: 3.08 ug/ml
RT: 6.606 min Scan# 1840
Delta R.T. -0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:138 Resp: 8486

Ion	Ratio	Lower	Upper
138	100		
92	111.3	93.4	140.2
108	16.0	9.5	14.3#

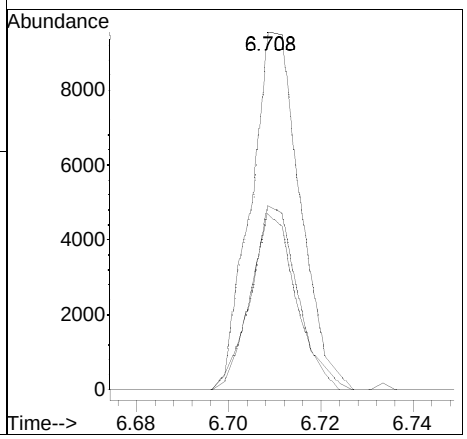


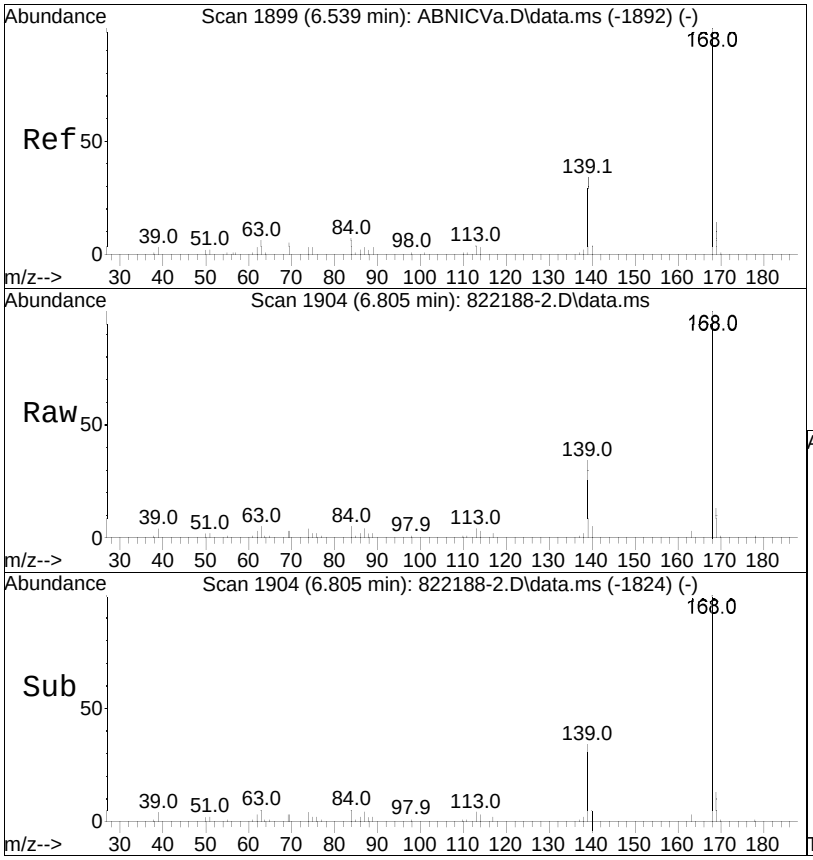


#65
2,4-Dinitrophenol
Concen: 5.28 ug/ml
RT: 6.708 min Scan# 1873
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:184 Resp: 7063

Ion	Ratio	Lower	Upper
184	100		
107	45.3	37.7	56.5
91	49.1	46.3	69.5

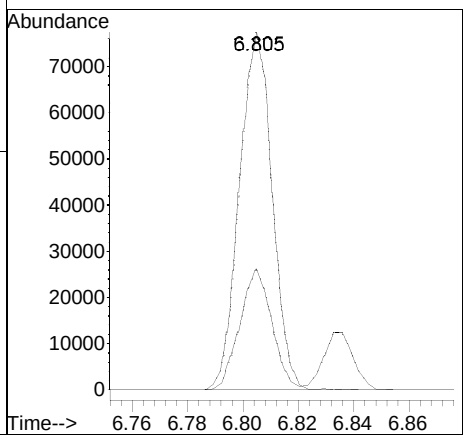


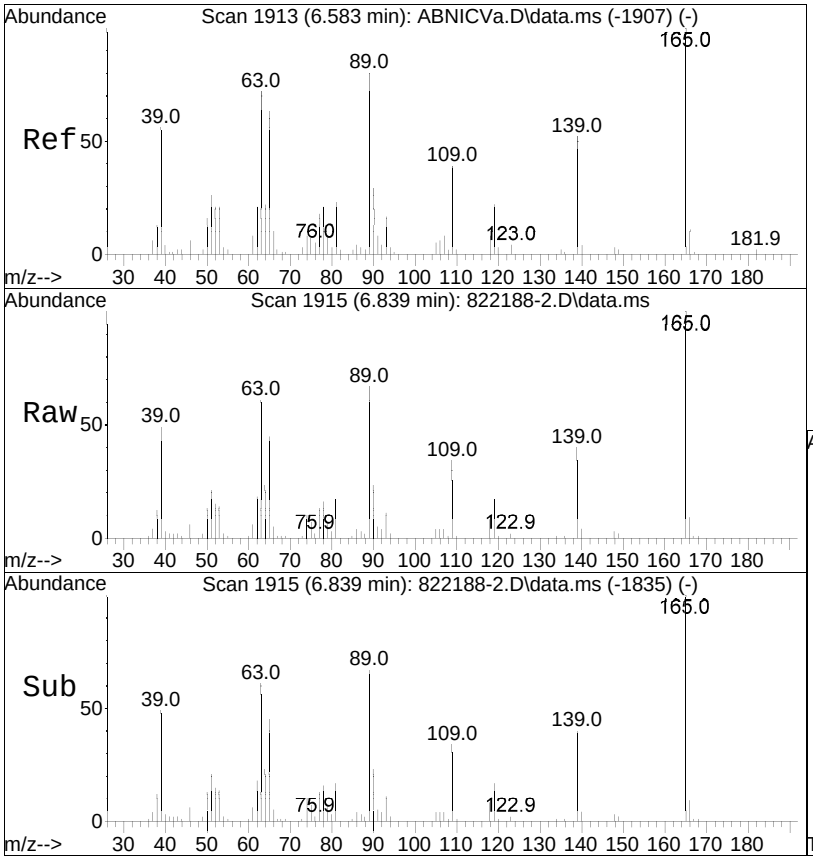


#66
Dibenzofuran
Concen: 4.20 ug/ml
RT: 6.805 min Scan# 1904
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:168 Resp: 63254

Ion	Ratio	Lower	Upper
168	100		
139	33.2	31.4	47.2

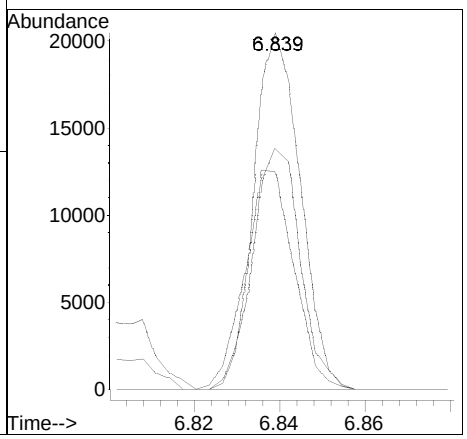


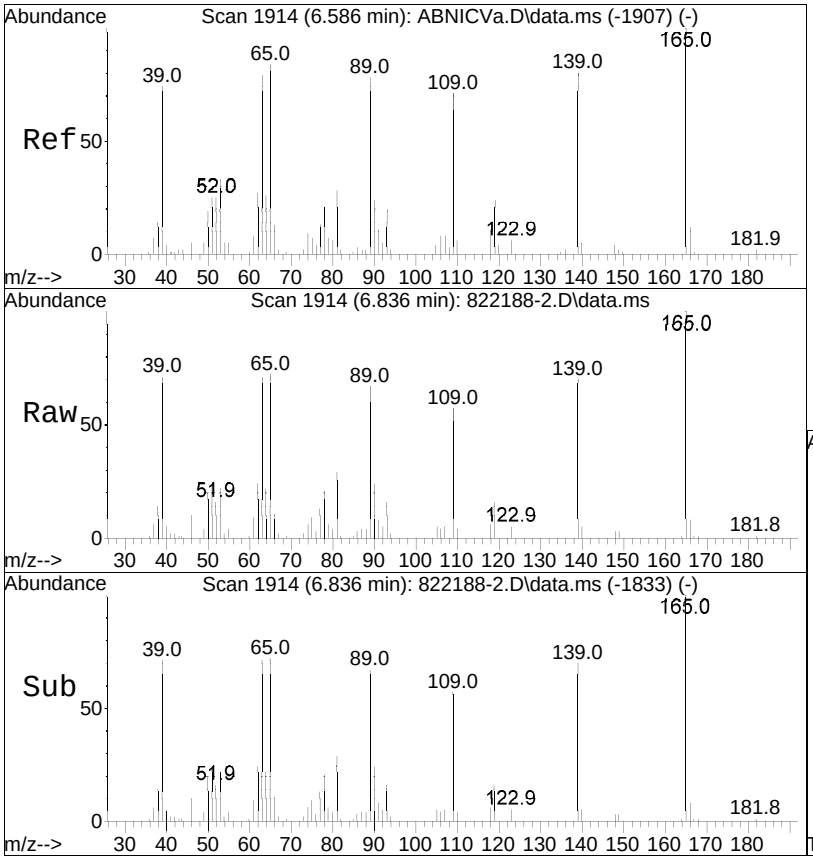


#67
2,4-Dinitrotoluene
Concen: 4.55 ug/ml
RT: 6.839 min Scan# 1915
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:165 Resp: 15423

Ion	Ratio	Lower	Upper
165	100		
89	70.0	72.0	108.0#
63	65.3	52.7	79.1

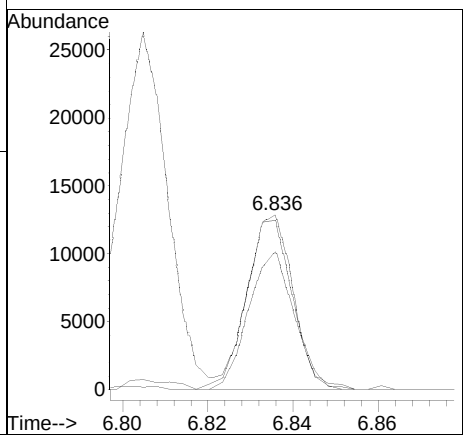


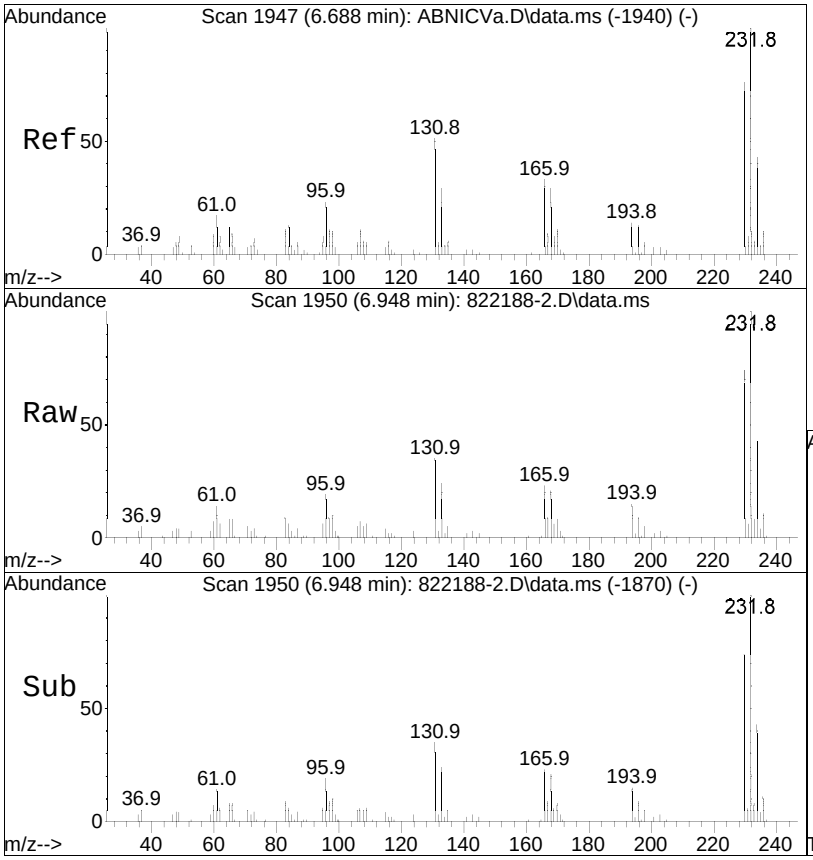


#68
4-Nitrophenol
Concen: 4.34 ug/ml
RT: 6.836 min Scan# 1914
Delta R.T. 0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion: 65 Resp: 9729

Ion	Ratio	Lower	Upper
65	100		
109	76.6	47.4	71.2#
139	96.8	76.6	115.0

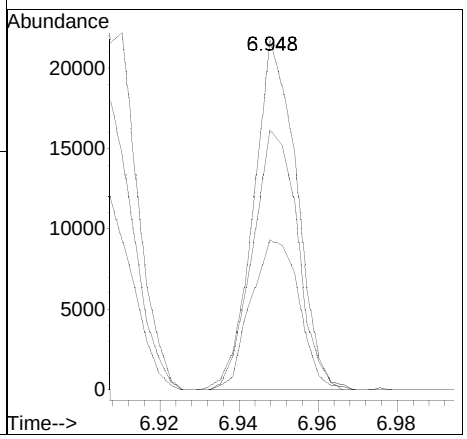


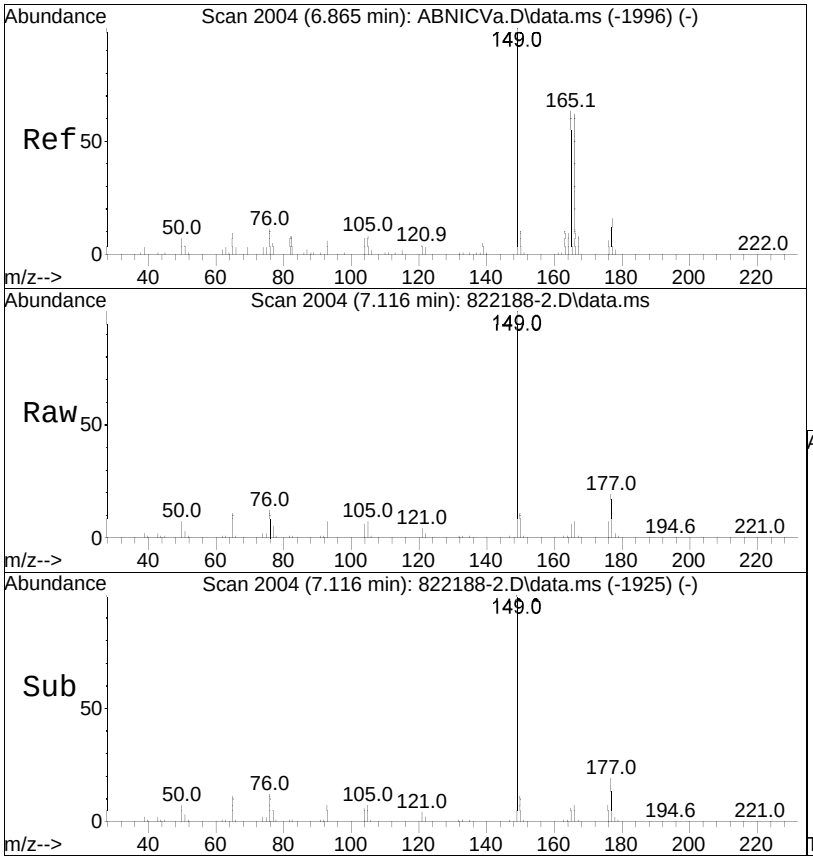


#70
2,3,4,6-Tetrachlorophenol
Concen: 5.21 ug/ml
RT: 6.948 min Scan# 1950
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:232 Resp: 16477

Ion	Ratio	Lower	Upper
232	100		
230	77.6	61.8	92.8
234	48.1	36.2	54.2

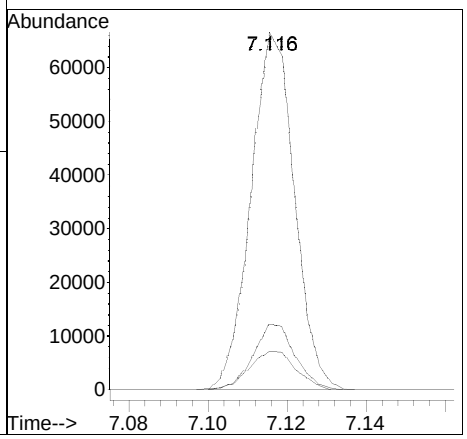


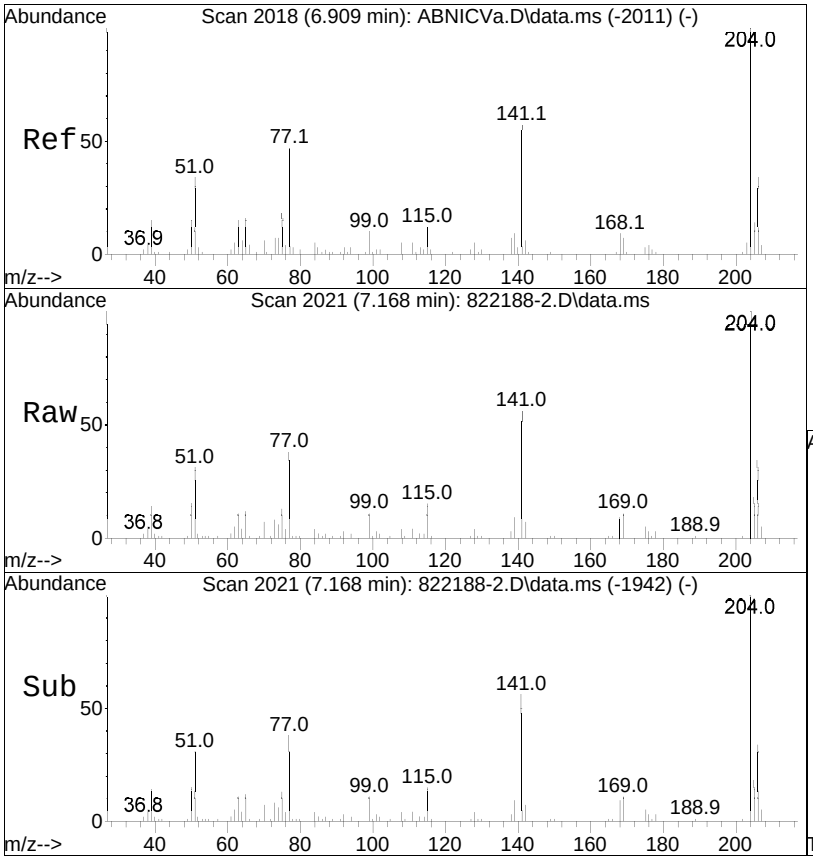


#71
Diethyl phthalate
Concen: 3.97 ug/ml
RT: 7.116 min Scan# 2004
Delta R.T. -0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:149 Resp: 50404

Ion	Ratio	Lower	Upper
149	100		
177	18.0	16.1	24.1
150	11.7	9.4	14.2

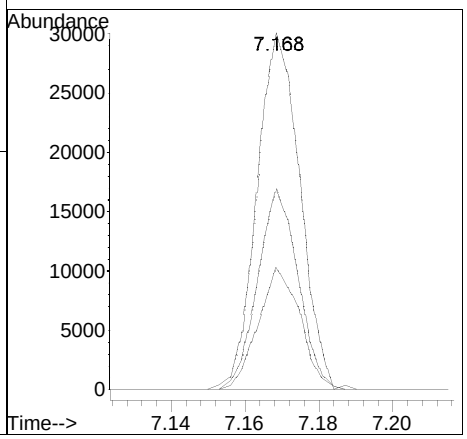


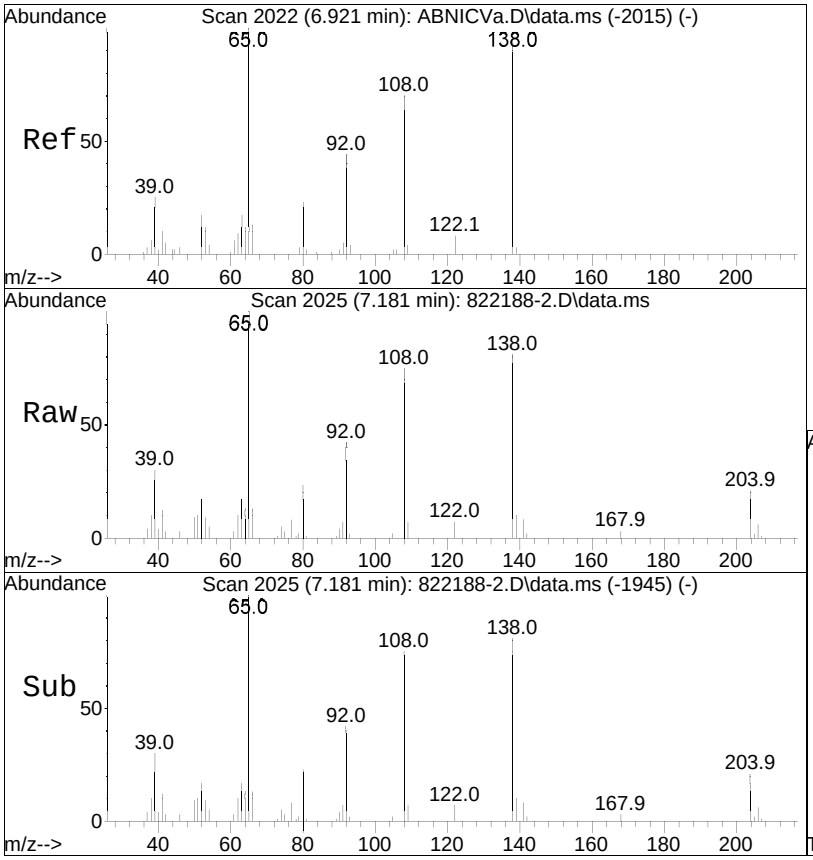


#73
4-Chlorophenyl phenyl ether
Concen: 4.09 ug/ml
RT: 7.168 min Scan# 2021
Delta R.T. -0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:204 Resp: 24119

Ion	Ratio	Lower	Upper
204	100		
206	33.4	25.8	38.6
141	53.0	53.6	80.4#

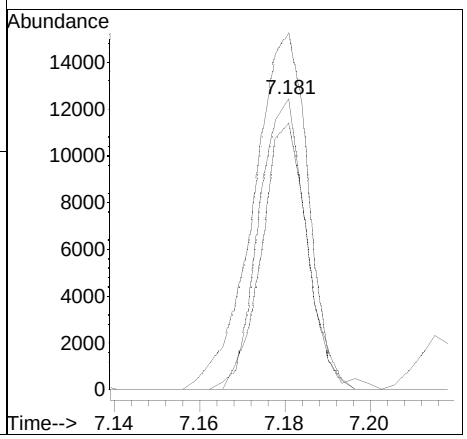


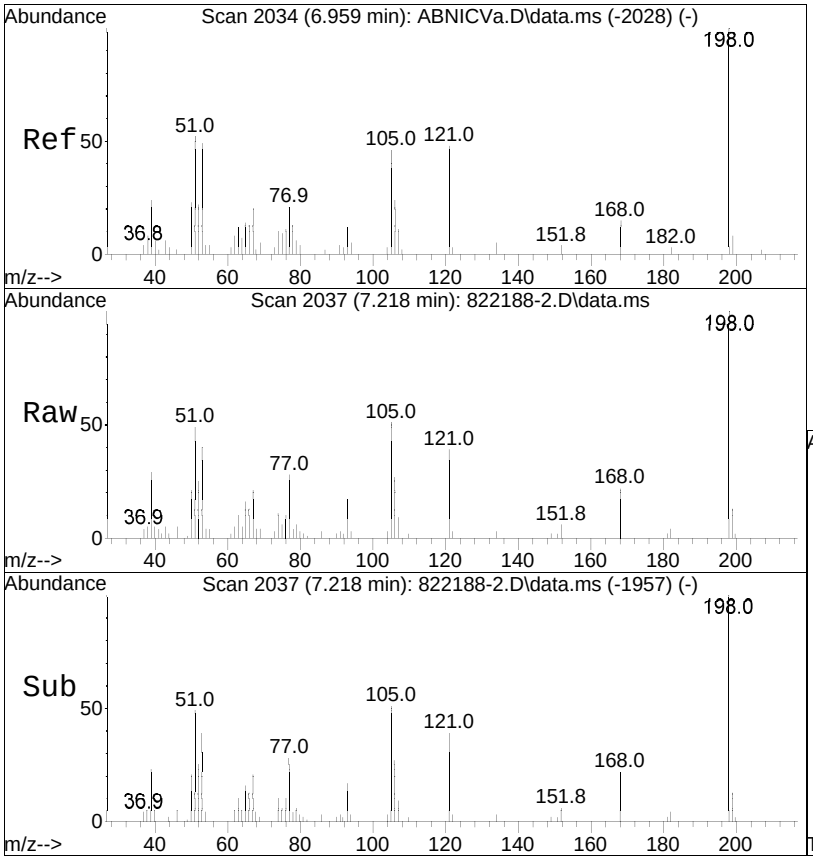


#74
4-Nitroaniline
Concen: 3.48 ug/ml
RT: 7.181 min Scan# 2025
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:138 Resp: 9536

Ion	Ratio	Lower	Upper
138	100		
108	88.5	52.1	78.1#
65	143.5	115.0	172.6

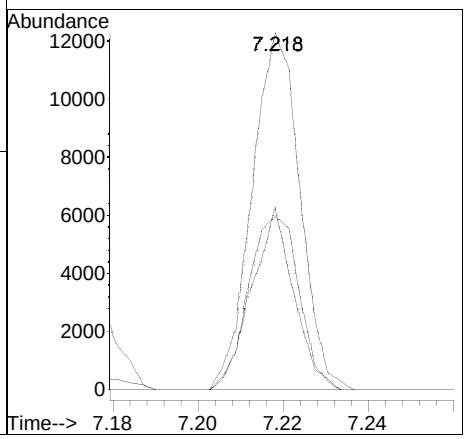


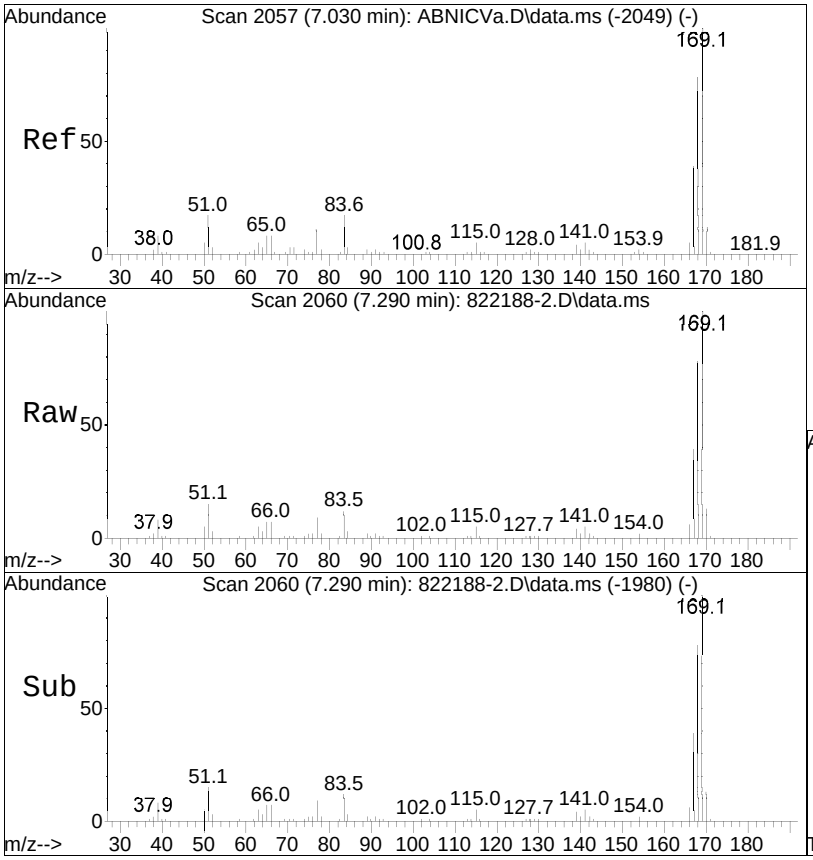


#75
4,6-Dinitro-o-cresol
Concen: 5.24 ug/ml
RT: 7.218 min Scan# 2037
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:198 Resp: 9557

Ion	Ratio	Lower	Upper
198	100		
51	51.4	76.0	114.0#
105	45.0	45.6	68.4#

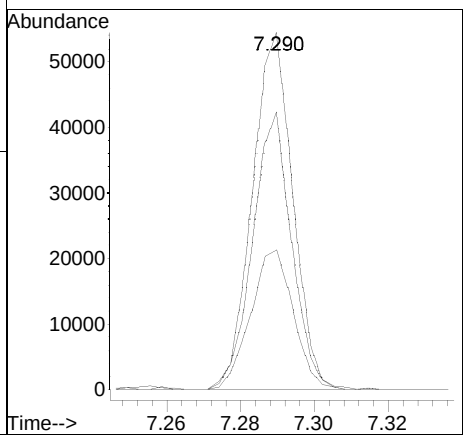


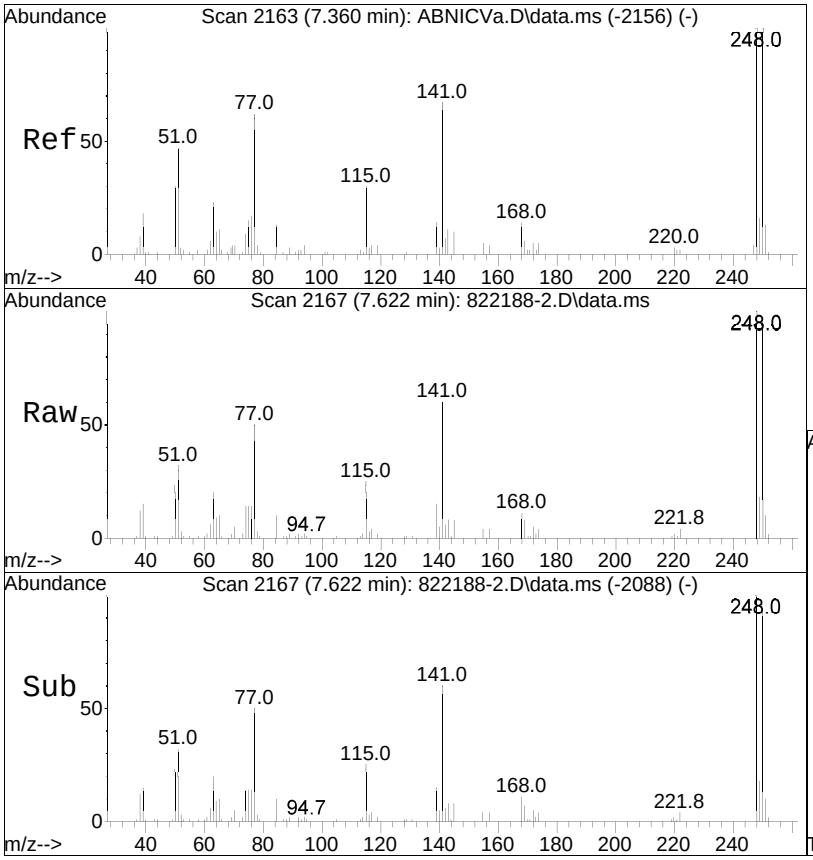


#76
NDPA/DPA
Concen: 3.99 ug/ml
RT: 7.290 min Scan# 2060
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:169 Resp: 41267

Ion	Ratio	Lower	Upper
169	100		
168	74.8	54.0	81.0
167	41.5	28.6	42.8

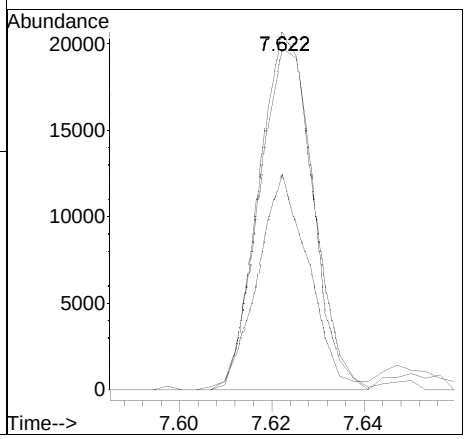


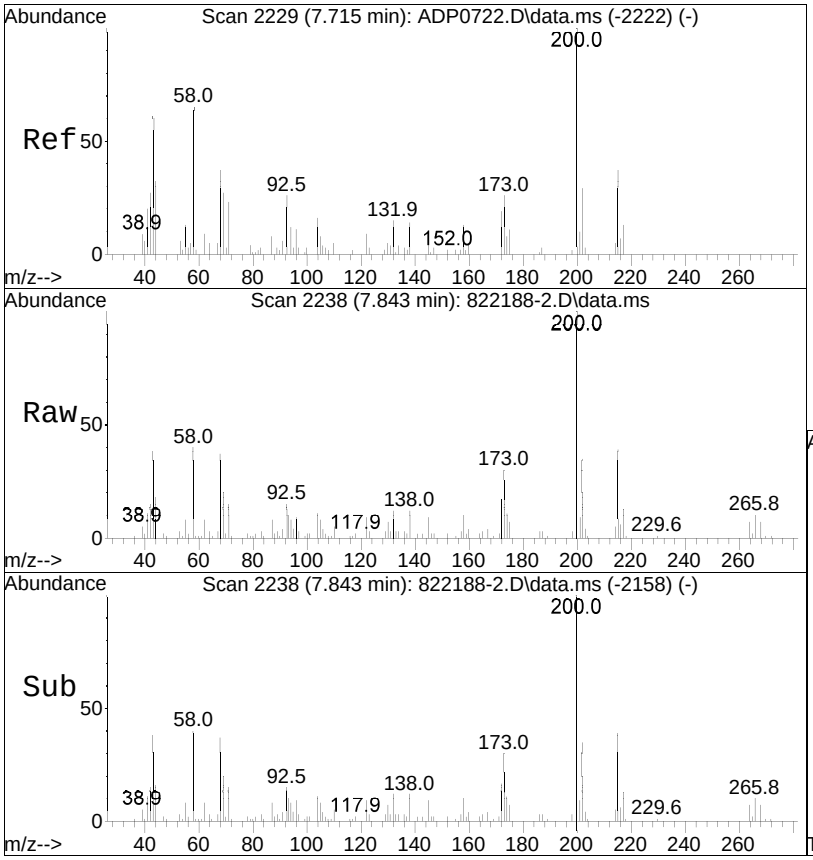


#79
4-Bromophenyl phenyl ether
Concen: 4.53 ug/ml
RT: 7.622 min Scan# 2167
Delta R.T. -0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:248 Resp: 16684

Ion	Ratio	Lower	Upper
248	100		
141	57.7	76.6	114.8#
250	96.0	77.3	115.9

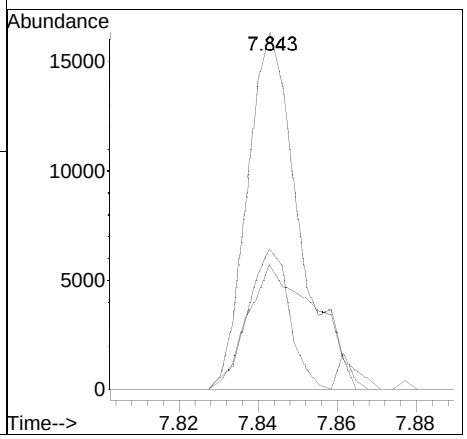


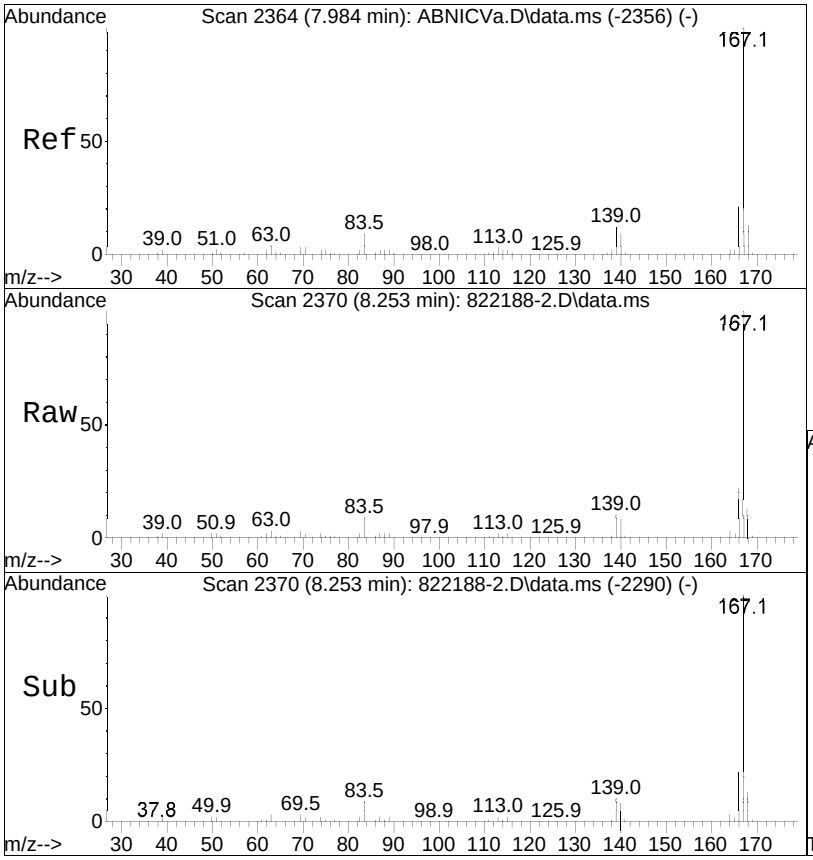


#86
Atrazine
Concen: 4.66 ug/ml
RT: 7.843 min Scan# 2238
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:200 Resp: 14645

Ion	Ratio	Lower	Upper
200	100		
202	48.5	25.8	38.6#
215	32.3	40.2	60.4#

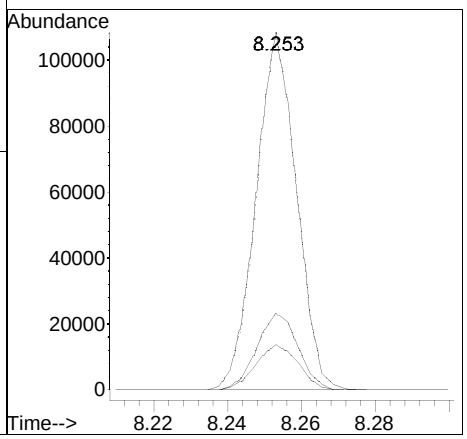


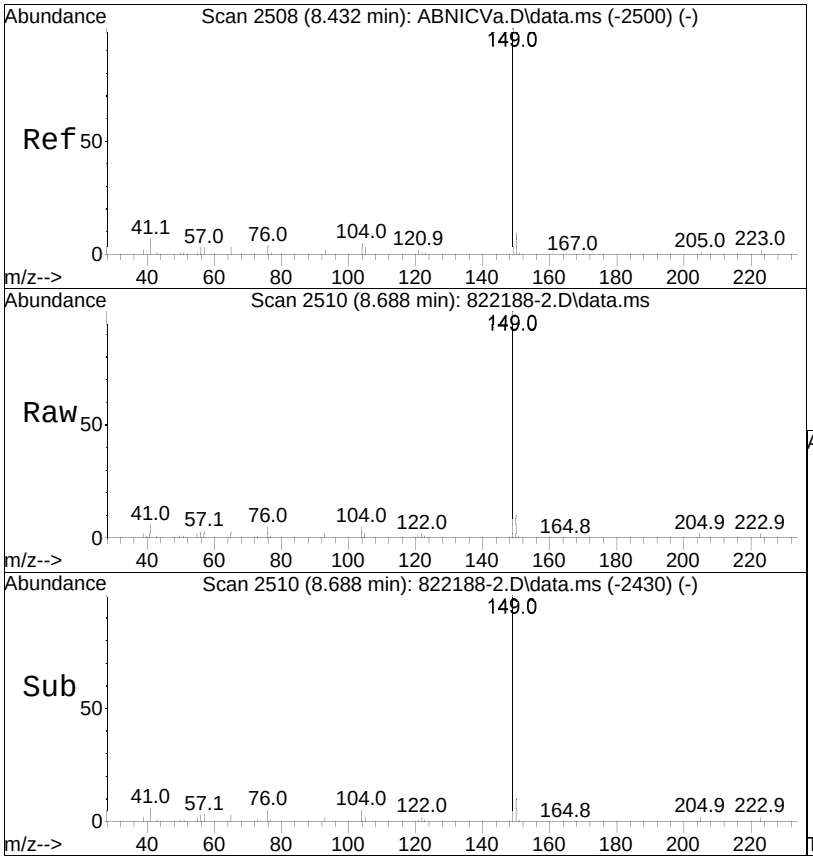


#90
Carbazole
Concen: 4.34 ug/ml
RT: 8.253 min Scan# 2370
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:167 Resp: 81537

Ion	Ratio	Lower	Upper
167	100		
168	13.4	10.6	15.8
166	21.9	17.4	26.0

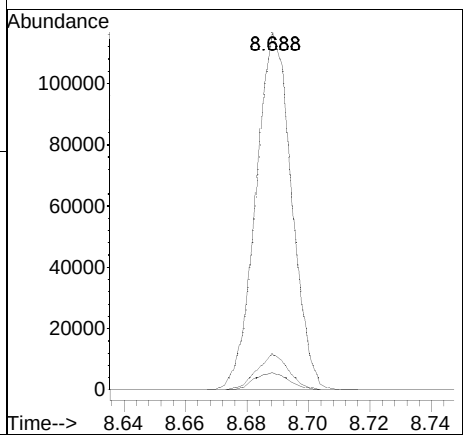


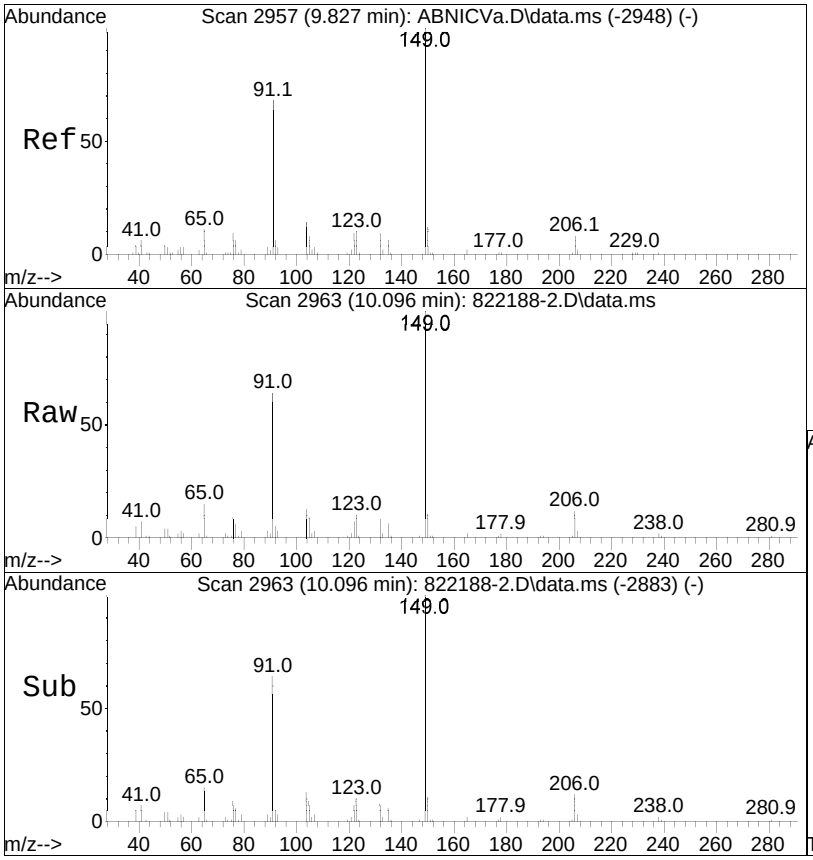


#91
Di-n-butylphthalate
Concen: 4.21 ug/ml
RT: 8.688 min Scan# 2510
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:149 Resp: 93123

Ion	Ratio	Lower	Upper
149	100		
150	9.2	7.0	10.6
104	4.9	4.5	6.7

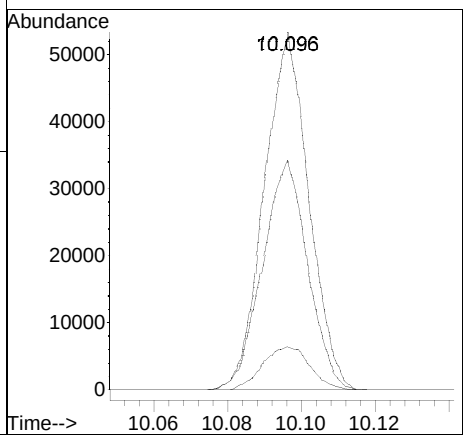


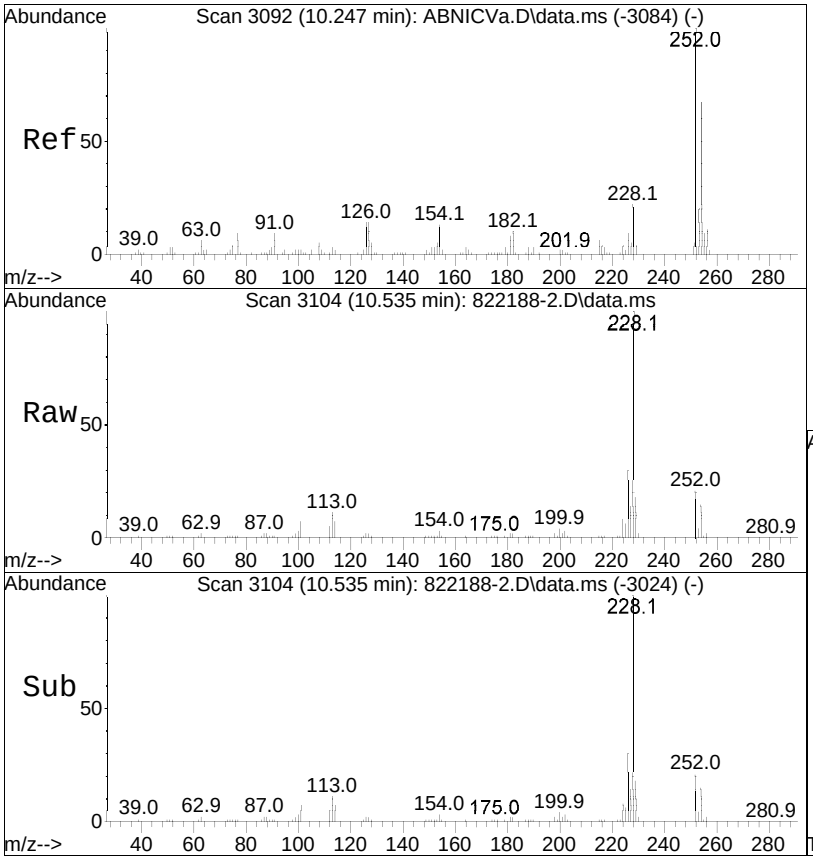


#96
Butyl benzyl phthalate
Concen: 4.40 ug/ml
RT: 10.096 min Scan# 2963
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:149 Resp: 44253

Ion	Ratio	Lower	Upper
149	100		
91	65.4	63.3	94.9
206	13.0	13.9	20.9#

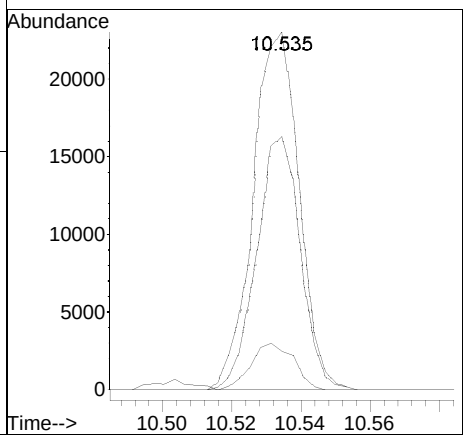


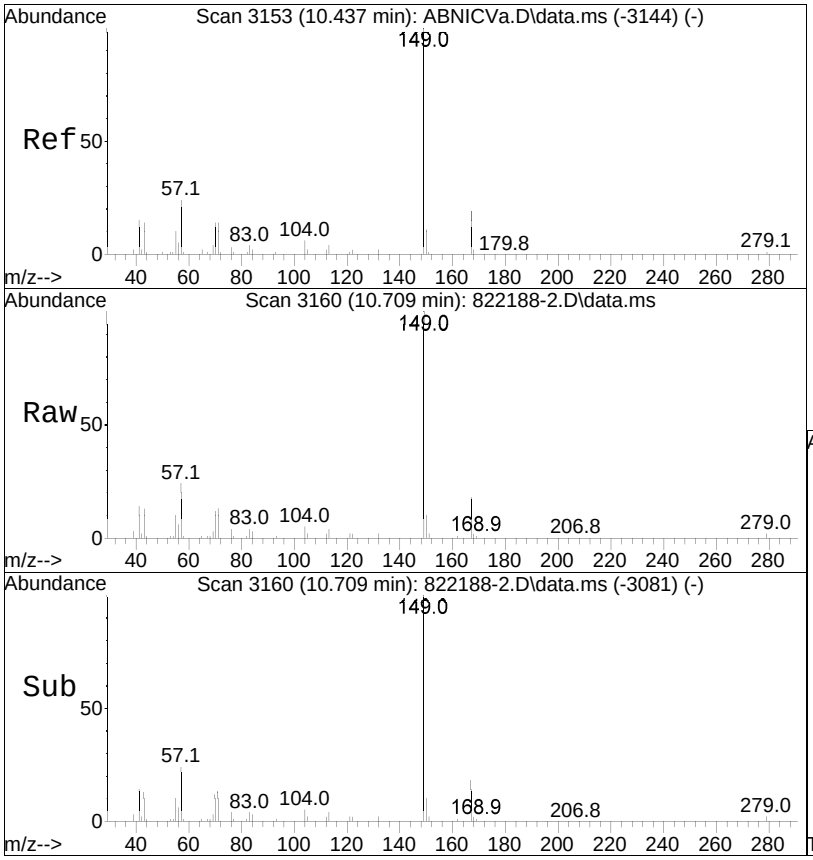


#105
3,3'-Dichlorobenzidine
Concen: 2.07 ug/ml
RT: 10.535 min Scan# 3104
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:252 Resp: 21071

Ion	Ratio	Lower	Upper
252	100		
126	12.3	14.5	21.7#
254	67.3	51.2	76.8

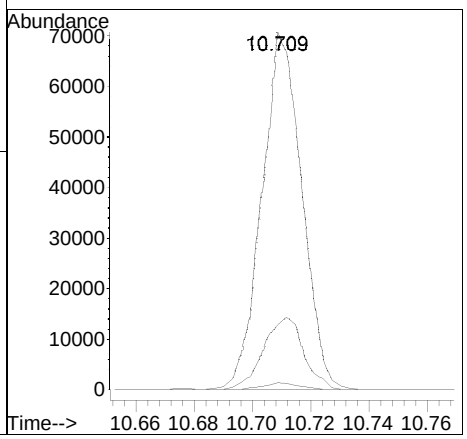


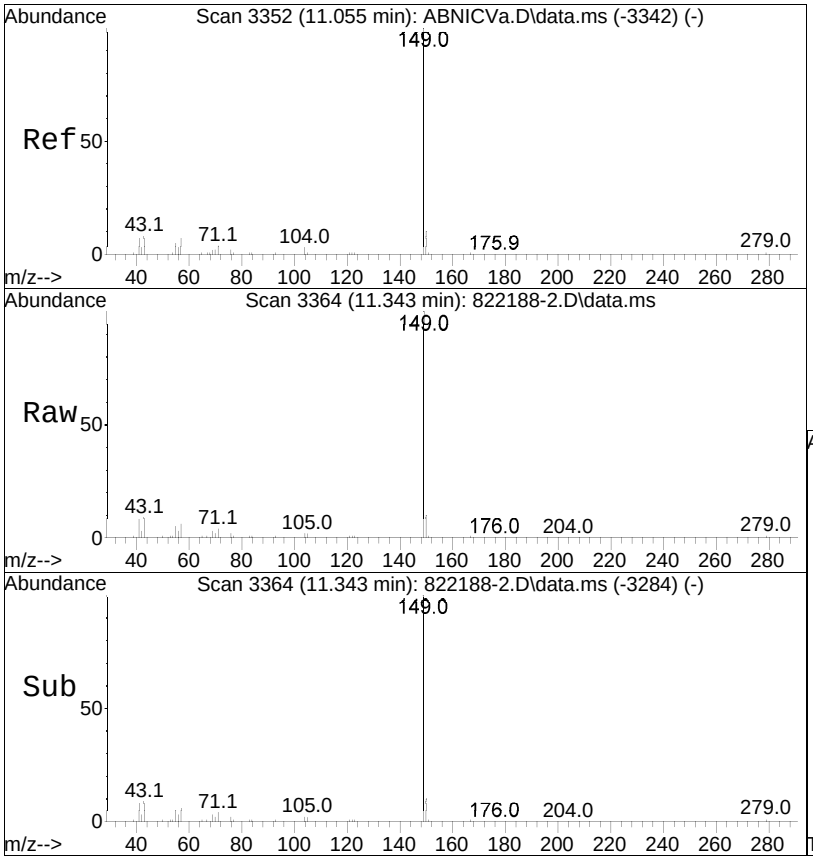


#107
Bis(2-ethylhexyl)phthalate
Concen: 4.50 ug/ml
RT: 10.709 min Scan# 3160
Delta R.T. -0.003 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:149 Resp: 66608

Ion	Ratio	Lower	Upper
149	100		
167	20.4	22.1	33.1#
279	1.5	3.0	4.4#

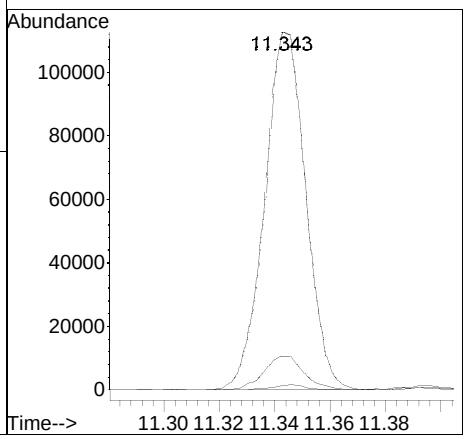




#108
Di-n-octylphthalate
Concen: 4.28 ug/ml
RT: 11.343 min Scan# 3364
Delta R.T. 0.000 min
Lab File: 822188-2.D
Acq: 31 Aug 2023 11:54 am

Tgt Ion:149 Resp: 115090

Ion	Ratio	Lower	Upper
149	100		
43	9.3	18.8	28.2#
167	1.2	1.3	1.9#



Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : 823488-2.D
Acq On : 5 Sep 2023 11:11 pm
Operator : Dakota:sz
Sample : WG1823488-2,32,,ASK
Misc : WG1823113,WG1823488,ical19934
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 07 09:12:22 2023
Quant Method : I:\8270\dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 23:29:52 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230905nlvi\ABN0905n.D
: 2 - I:\8270\dakota\230905nlvi\ADP0905n.D
: 3 - I:\8270\dakota\230905nlvi\AP90905n.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.456	152	15245	4.000	ug/ml		0.00
Standard Area 1 = 14403			Recovery = 105.85%				
27) IS2_1,4-Dichlorobenzen...	3.456	152	15245	4.000	ug/ml		0.00
Standard Area 3 = 14263			Recovery = 106.88%				
32) IS3_1,4-Dichlorobenzen...	3.456	152	15245	4.000	ug/ml		0.00
Standard Area 2 = 14772			Recovery = 103.20%				
34) IS1_Naphthalene-d8	4.731	136	51450	4.000	ug/ml	#	0.00
Standard Area 1 = 49518			Recovery = 103.90%				
54) IS2_Naphthalene-d8	4.731	136	51450	4.000	ug/ml	#	0.00
Standard Area 3 = 47445			Recovery = 108.44%				
62) IS1_Acenaphthene-d10	6.406	164	33531	4.000	ug/ml		0.00
Standard Area 1 = 33908			Recovery = 98.89%				
82) IS2_Acenaphthene-d10	6.406	164	33531	4.000	ug/ml		0.00
Standard Area 3 = 30377			Recovery = 110.38%				
85) IS3_Acenaphthene-d10	6.406	164	33531	4.000	ug/ml		0.00
Standard Area 2 = 31769			Recovery = 105.55%				
87) IS1_Phenanthrene-d10	7.789	188	80060	4.000	ug/ml		0.00
Standard Area 1 = 83627			Recovery = 95.73%				
99) IS3_Phenanthrene-d10	7.789	188	80060	4.000	ug/ml		0.00
Standard Area 2 = 76421			Recovery = 104.76%				
103) IS1_Chrysene-d12	10.279	240	89117	4.000	ug/ml		0.00
Standard Area 1 = 91716			Recovery = 97.17%				
112) IS1_Perylene-d12	11.603	264	111161	4.000	ug/ml		0.00
Standard Area 1 = 117565			Recovery = 94.55%				
System Monitoring Compounds							
4) 2-Fluorophenol	1.986	112	9902	2.515	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 50.30%				
7) Phenol-d6	3.198	99	10098	2.002	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 40.04%				
19) Nitrobenzene-d5	4.044	82	6774	1.401	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 56.04%				
45) 2-Fluorobiphenyl	5.819	172	16228	1.603	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 64.12%				
78) 2,4,6-Tribromophenol	7.158	330	8926	4.599	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 91.98%				

Data Path : I:\8270\Dakota\230905nlvi\
Data File : 823488-2.D
Acq On : 5 Sep 2023 11:11 pm
Operator : Dakota:sz
Sample : WG1823488-2,32,,ASK
Misc : WG1823113,WG1823488,ical19934
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 07 09:12:22 2023
Quant Method : I:\8270\dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 23:29:52 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230905nlvi\ABN0905n.D
: 2 - I:\8270\dakota\230905nlvi\ADP0905n.D
: 3 - I:\8270\dakota\230905nlvi\AP90905n.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) 4-Terphenyl-d14	9.359	244	30240	1.545	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 61.80%			
Target Compounds						Qvalue
6) 2-Chlorophenol	3.245	128	13007	2.855	ug/ml#	90
8) Phenol	3.211	94	12593	2.147	ug/ml	91
9) Bis(2-chloroethyl)ether	3.248	93	10534	2.592	ug/ml#	66
14) Bis(2-chloroisopropyl)...	3.823	45	17469	2.569	ug/ml#	55
15) 2-Methylphenol	3.836	108	11378	2.938	ug/ml	94
17) n-Nitrosodi-n-propylamine	3.954	70	9411	3.019	ug/ml#	78
18) 3-Methylphenol/4-Methy...	4.007	108	13323	3.331	ug/ml#	50
20) Nitrobenzene	4.062	77	13768	2.928	ug/ml	91
21) Isophorone	4.320	82	23658	2.844	ug/ml#	92
22) 2-Nitrophenol	4.386	139	7093	3.228	ug/ml#	88
23) 2,4-Dimethylphenol	4.516	107	13513	3.194	ug/ml	94
24) Bis(2-chloroethoxy)met...	4.594	93	15674	2.904	ug/ml#	94
25) 2,4-Dichlorophenol	4.641	162	14674	3.689	ug/ml#	88
28) Benzaldehyde	2.984	105	10691	2.682	ug/ml	91
29) Acetophenone	3.910	105	15614	2.237	ug/ml#	78
37) 4-Chloroaniline	4.858	65	5795	3.930	ug/ml	91
39) p-Chloro-m-cresol	5.393	107	12140	3.722	ug/ml#	88
42) Hexachlorocyclopentadiene	5.607	237	10156	3.304	ug/ml	97
43) 2,4,6-Trichlorophenol	5.738	196	12542	4.260	ug/ml	97
44) 2,4,5-Trichlorophenol	5.769	196	14378	4.787	ug/ml	99
47) 2-Nitroaniline	6.021	138	9468	3.679	ug/ml#	82
50) Dimethyl phthalate	6.244	163	38991	3.747	ug/ml#	98
52) 2,6-Dinitrotoluene	6.272	165	7859	3.658	ug/ml#	86
59) Caprolactam	5.163	55	2912	1.523	ug/ml#	83
60) 1,2,4,5-Tetrachloroben...	5.601	216	16076	3.109	ug/ml#	95
61) Biphenyl	5.899	154	31977	2.759	ug/ml	96
63) 3-Nitroaniline	6.415	138	8507	3.188	ug/ml#	91
65) 2,4-Dinitrophenol	6.518	184	5210	4.323	ug/ml#	84
66) Dibenzofuran	6.605	168	49030	3.367	ug/ml	88
67) 2,4-Dinitrotoluene	6.645	165	10579	3.221	ug/ml	88
68) 4-Nitrophenol	6.652	65	7944	3.732	ug/ml#	89
70) 2,3,4,6-Tetrachlorophenol	6.751	232	12482	4.144	ug/ml	96
71) Diethyl phthalate	6.925	149	41200	3.352	ug/ml	97

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : 823488-2.D
Acq On : 5 Sep 2023 11:11 pm
Operator : Dakota:sz
Sample : WG1823488-2,32,,ASK
Misc : WG1823113,WG1823488,ical19934
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 07 09:12:22 2023
Quant Method : I:\8270\dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 23:29:52 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230905nlvi\ABN0905n.D
: 2 - I:\8270\dakota\230905nlvi\ADP0905n.D
: 3 - I:\8270\dakota\230905nlvi\AP90905n.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
73) 4-Chlorophenyl phenyl ...	6.972	204	18927	3.317	ug/ml#	85
74) 4-Nitroaniline	6.984	138	8453	3.190	ug/ml#	82
75) 4,6-Dinitro-o-cresol	7.021	198	6975	4.154	ug/ml#	67
76) NDPA/DPA	7.093	169	31104	3.106	ug/ml	90
79) 4-Bromophenyl phenyl e...	7.422	248	13674	3.838	ug/ml#	82
86) Atrazine	7.649	200	11478	3.770	ug/ml#	77
90) Carbazole	8.047	167	62284	3.308	ug/ml	98
91) Di-n-butylphthalate	8.492	149	76302	3.442	ug/ml#	98
96) Butyl benzyl phthalate	9.887	149	37299	3.701	ug/ml#	88
105) 3,3'-Dichlorobenzidine	10.307	252	30389	2.830	ug/ml#	94
107) Bis(2-ethylhexyl)phtha...	10.496	149	60971	3.907	ug/ml#	86
108) Di-n-octylphthalate	11.115	149	102543	3.621	ug/ml#	74

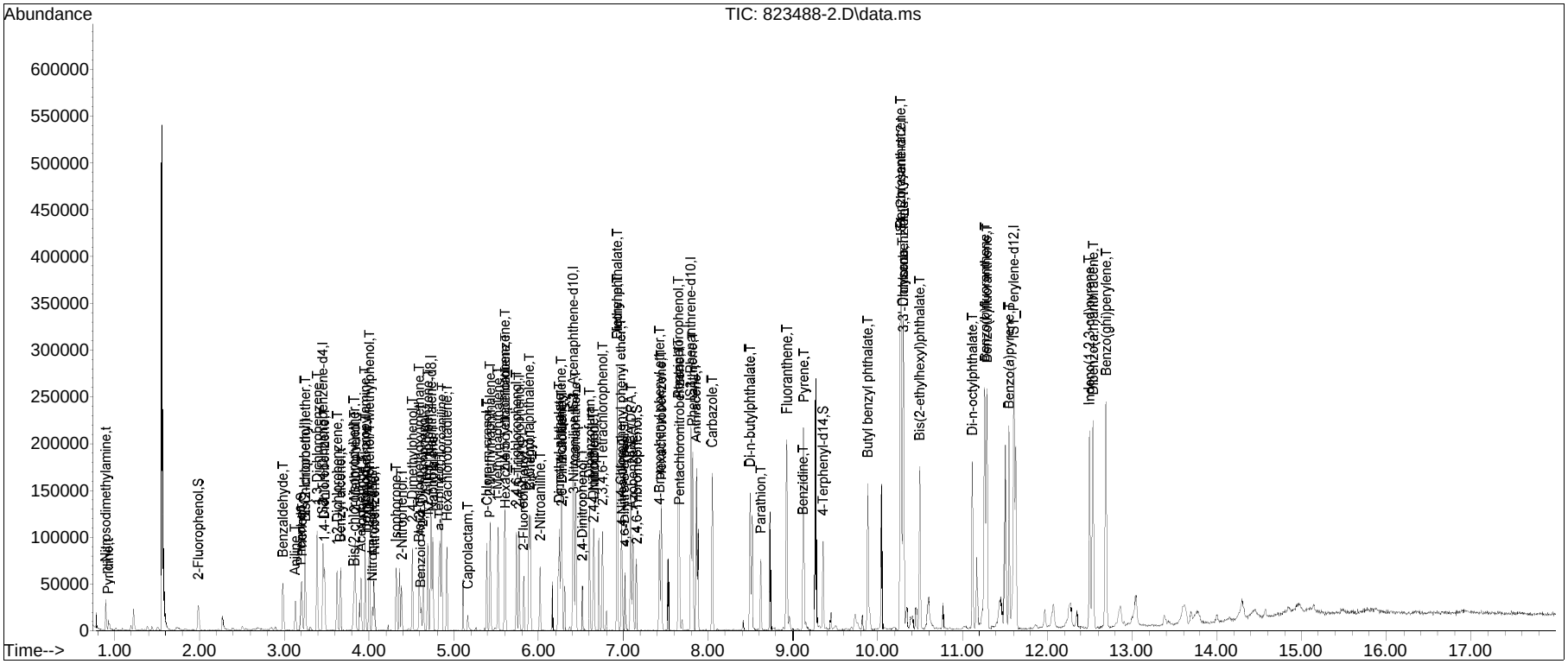
(#) = qualifier out of range (m) = manual integration (+) = signals summed

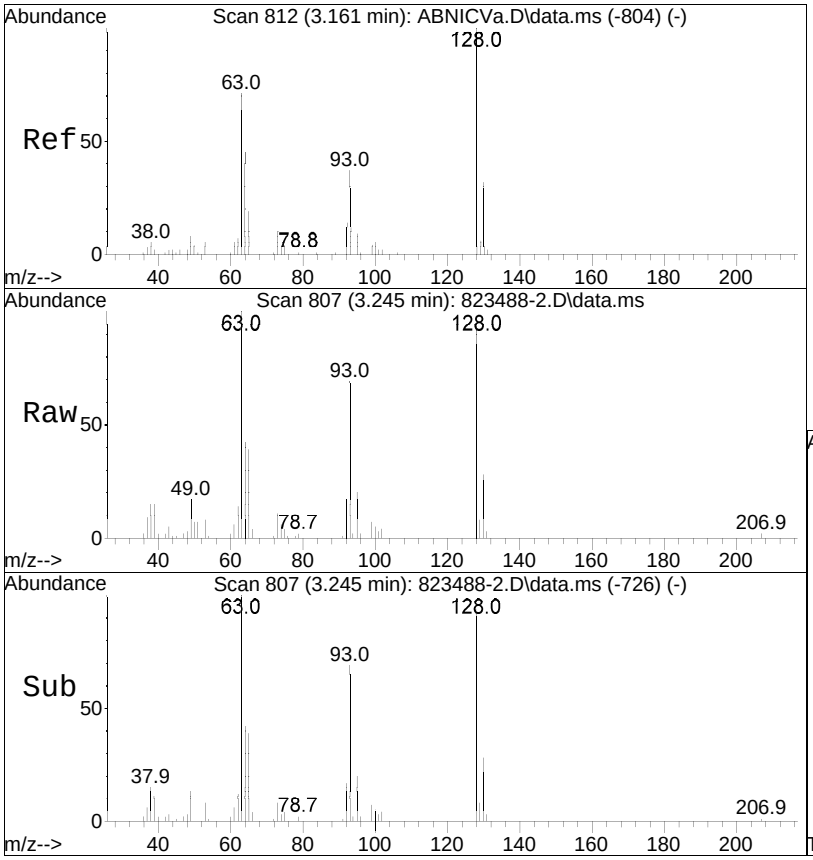
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : 823488-2.D
Acq On : 5 Sep 2023 11:11 pm
Operator : Dakota:sz
Sample : WG1823488-2,32,,ASK
Misc : WG1823113,WG1823488,ical19934
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 07 09:12:22 2023
Quant Method : I:\8270\dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 23:29:52 2023
Response via : Initial Calibration

Sub List : 8270TCL_REV2 - TCL/CT/MA5nlvi\AP90905n.D•

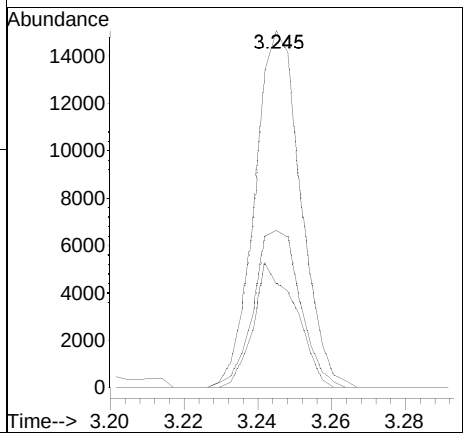


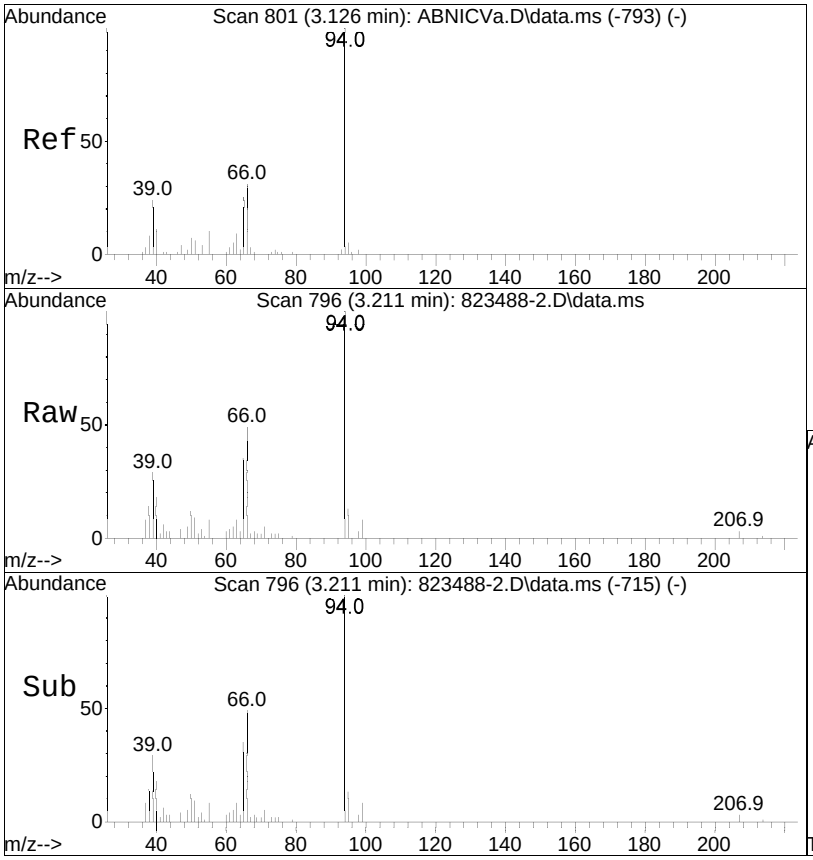


#6
2-Chlorophenol
Concen: 2.86 ug/ml
RT: 3.245 min Scan# 807
Delta R.T. 0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:128 Resp: 13007

Ion	Ratio	Lower	Upper
128	100		
64	44.8	45.1	67.7#
130	32.2	26.2	39.4

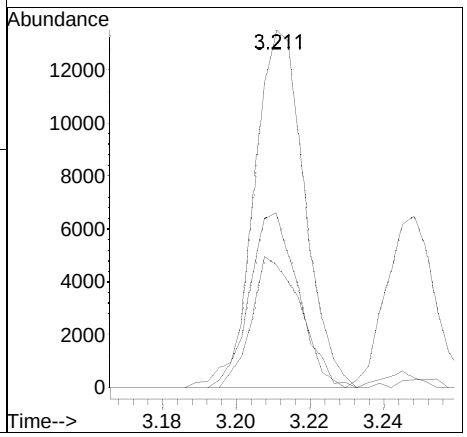


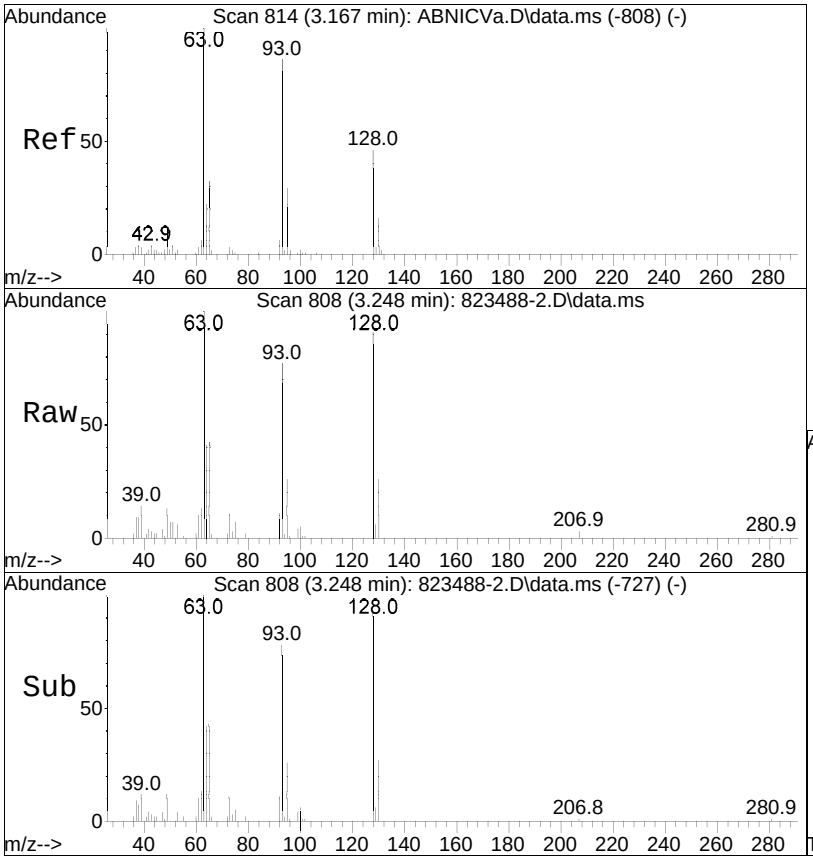


#8
Phenol
Concen: 2.15 ug/ml
RT: 3.211 min Scan# 796
Delta R.T. 0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion: 94 Resp: 12593

Ion	Ratio	Lower	Upper
94	100		
65	36.0	26.0	39.0
66	49.5	33.8	50.8

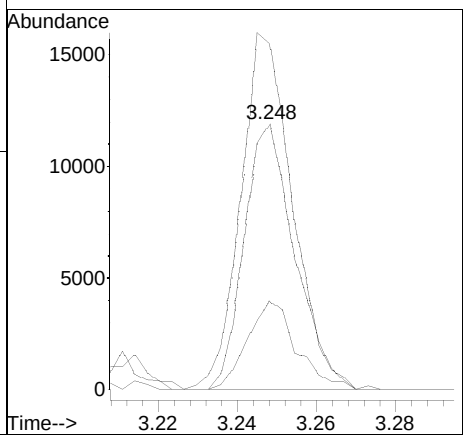


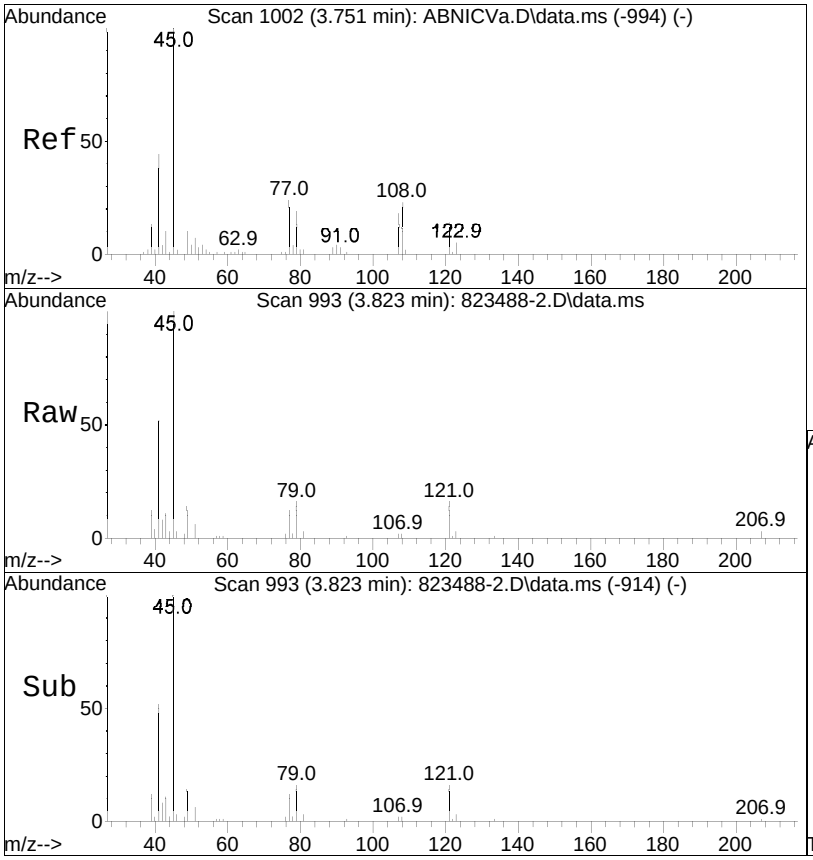


#9
Bis(2-chloroethyl)ether
Concen: 2.59 ug/ml
RT: 3.248 min Scan# 808
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion: 93 Resp: 10534

Ion	Ratio	Lower	Upper
93	100		
63	137.7	74.6	111.8#
95	32.5	25.9	38.9

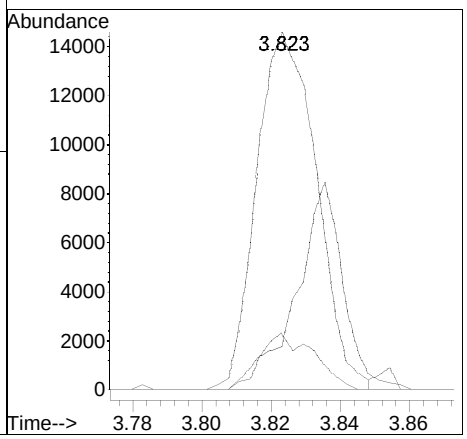


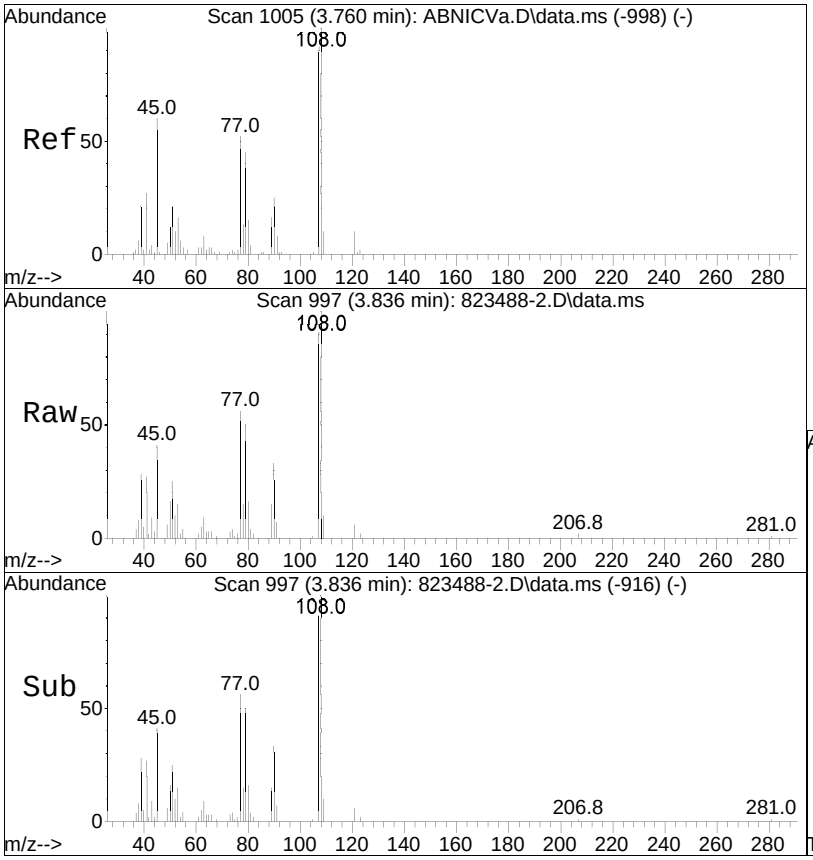


#14
Bis(2-chloroisopropyl)ether
Concen: 2.57 ug/ml
RT: 3.823 min Scan# 993
Delta R.T. -0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion: 45 Resp: 17469

Ion	Ratio	Lower	Upper
45	100		
121	14.7	9.8	14.6#
77	44.9	6.1	9.1#

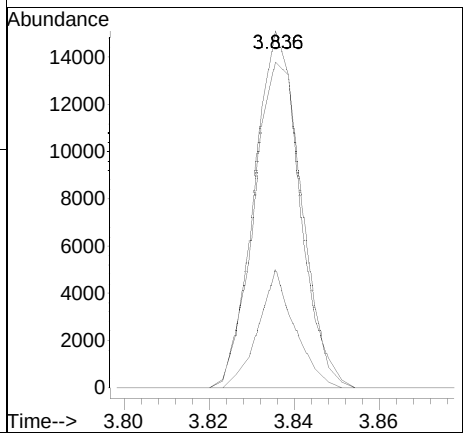


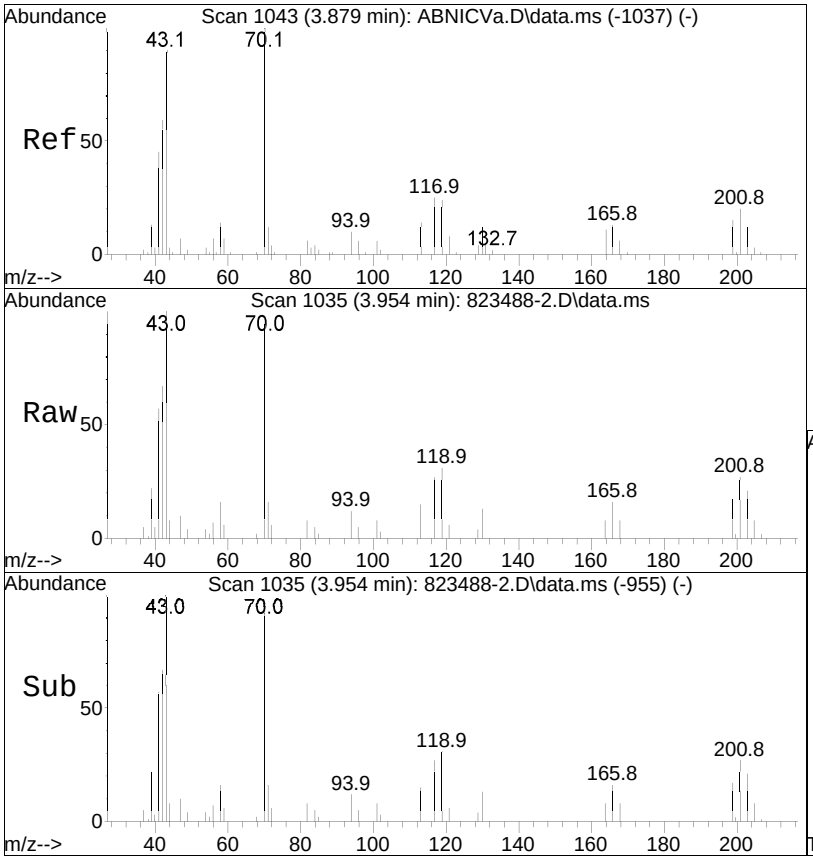


#15
2-Methylphenol
Concen: 2.94 ug/ml
RT: 3.836 min Scan# 997
Delta R.T. 0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:108 Resp: 11378

Ion	Ratio	Lower	Upper
108	100		
107	94.1	70.7	106.1
90	26.2	18.7	28.1

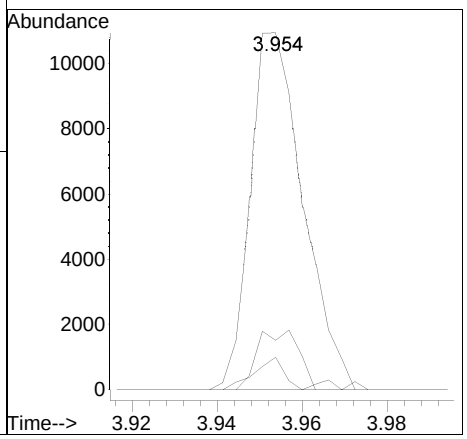


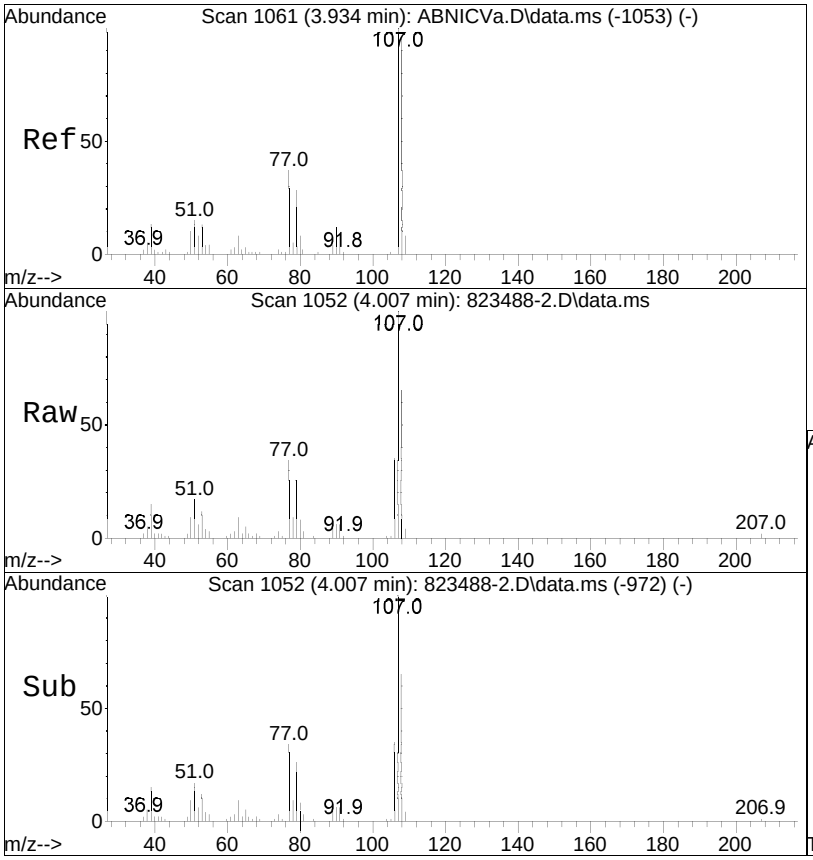


#17
n-Nitrosodi-n-propylamine
Concen: 3.02 ug/ml
RT: 3.954 min Scan# 1035
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion: 70 Resp: 9411

Ion	Ratio	Lower	Upper
70	100		
130	13.0	18.2	27.4#
101	0.0	7.8	11.8#

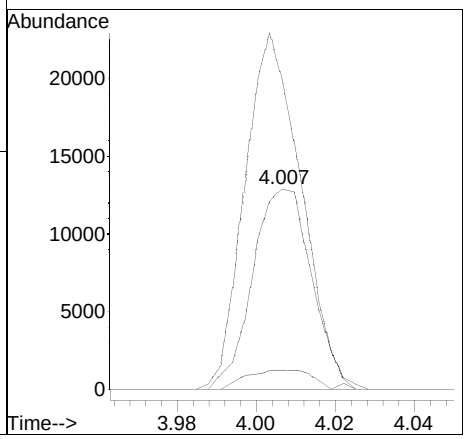


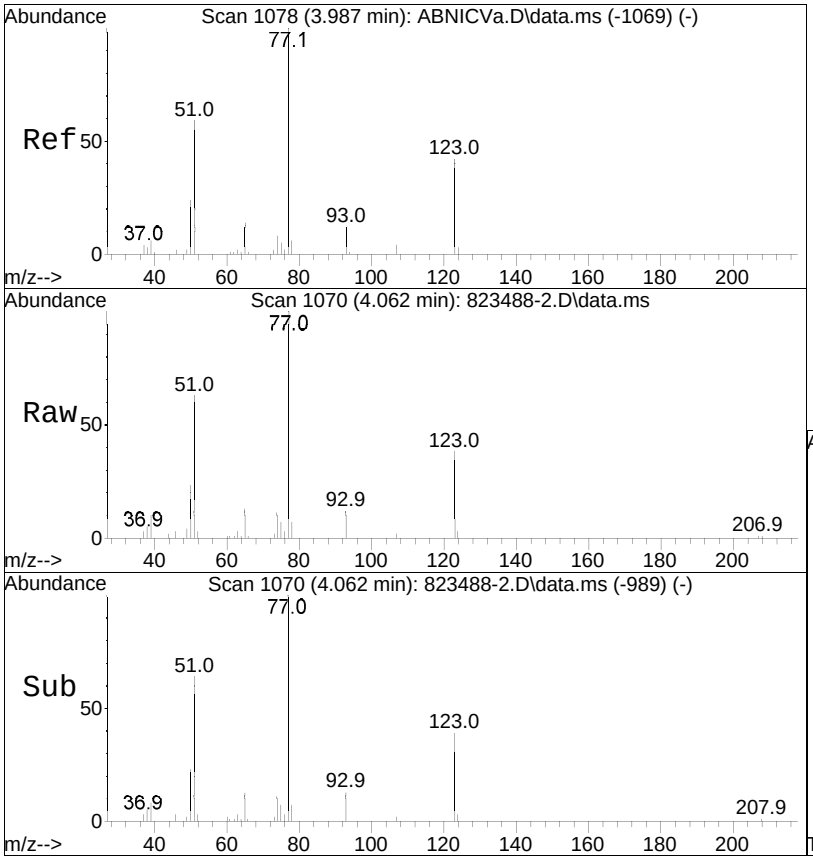


#18
3-Methylphenol/4-Methylphenol
Concen: 3.33 ug/ml
RT: 4.007 min Scan# 1052
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:108 Resp: 13323

Ion	Ratio	Lower	Upper
108	100		
107	169.2	88.6	132.8#
90	11.4	8.8	13.2

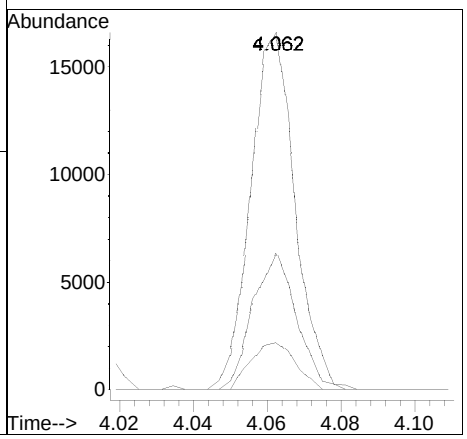


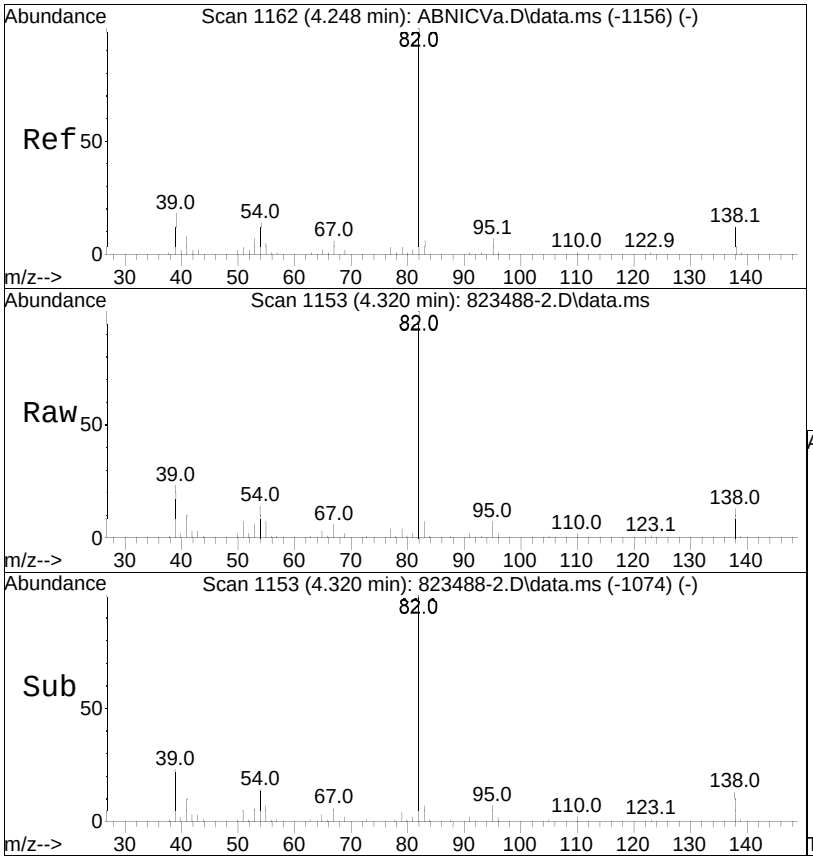


#20
Nitrobenzene
Concen: 2.93 ug/ml
RT: 4.062 min Scan# 1070
Delta R.T. 0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion: 77 Resp: 13768

Ion	Ratio	Lower	Upper
77	100		
123	37.8	36.3	54.5
65	13.5	11.6	17.4

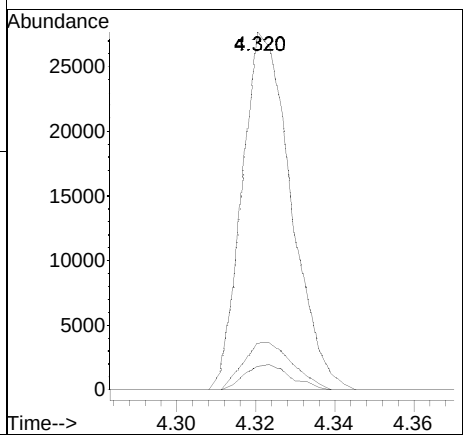


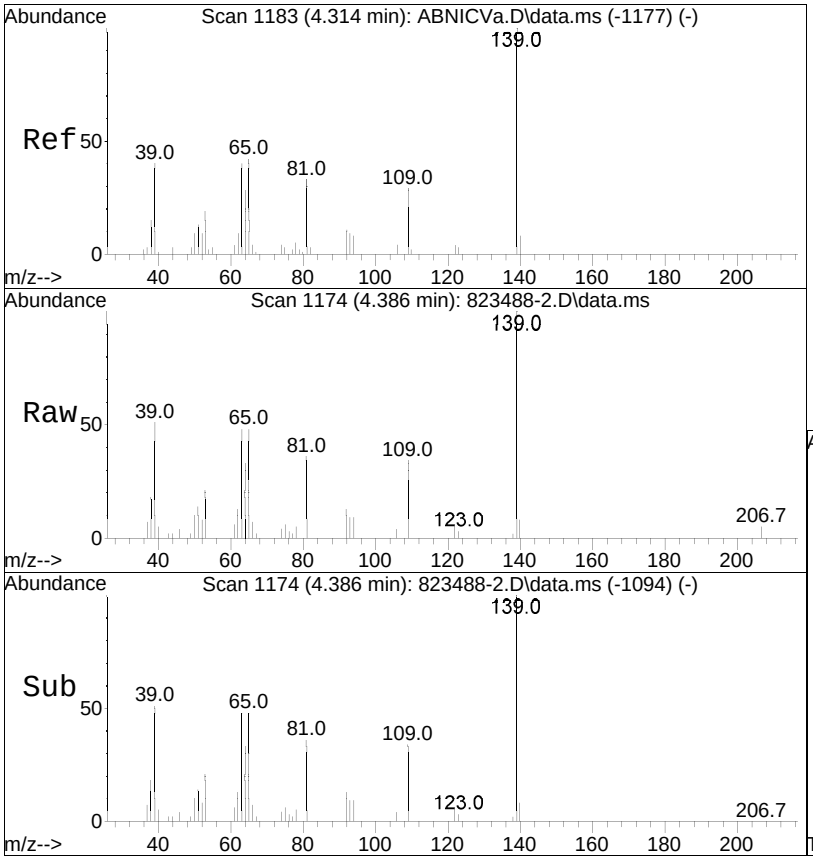


#21
Isophorone
Concen: 2.84 ug/ml
RT: 4.320 min Scan# 1153
Delta R.T. -0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion: 82 Resp: 23658

Ion	Ratio	Lower	Upper
82	100		
138	13.4	14.7	22.1#
95	6.7	5.2	7.8

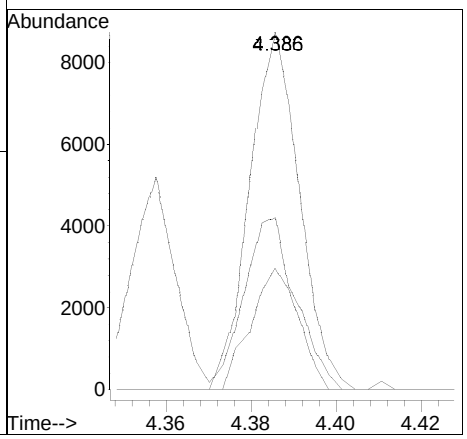


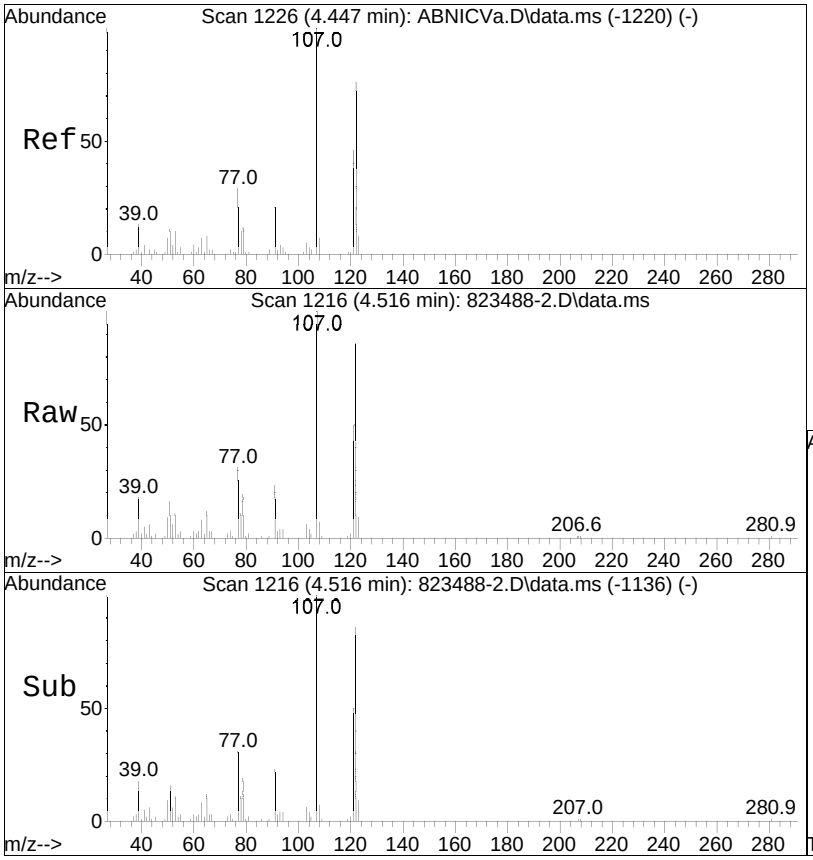


#22
2-Nitrophenol
Concen: 3.23 ug/ml
RT: 4.386 min Scan# 1174
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:139 Resp: 7093

Ion	Ratio	Lower	Upper
139	100		
109	32.6	19.4	29.0#
65	50.1	46.1	69.1

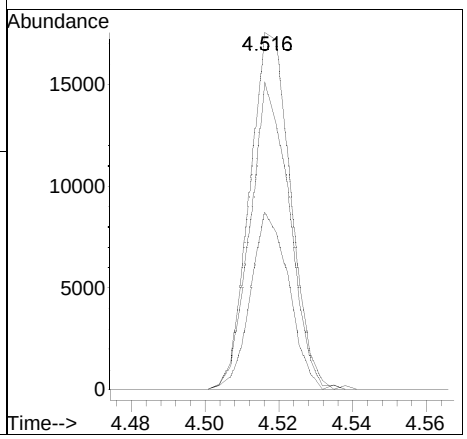


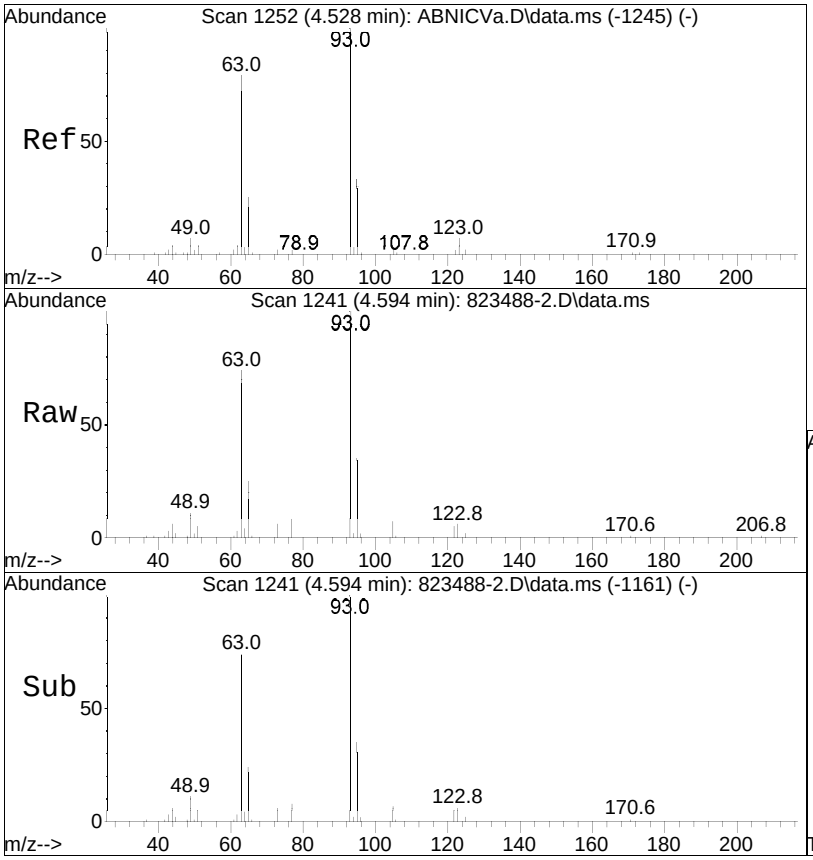


#23
2,4-Dimethylphenol
Concen: 3.19 ug/ml
RT: 4.516 min Scan# 1216
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:107 Resp: 13513

Ion	Ratio	Lower	Upper
107	100		
121	46.8	40.0	60.0
122	82.1	70.2	105.4

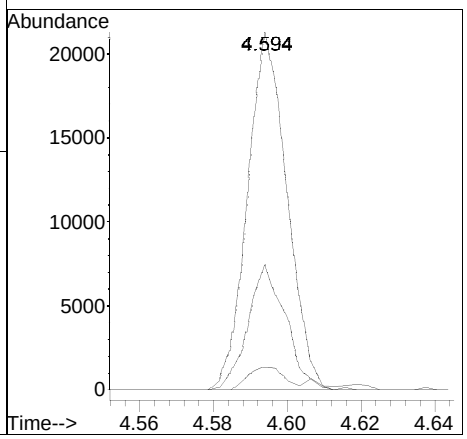


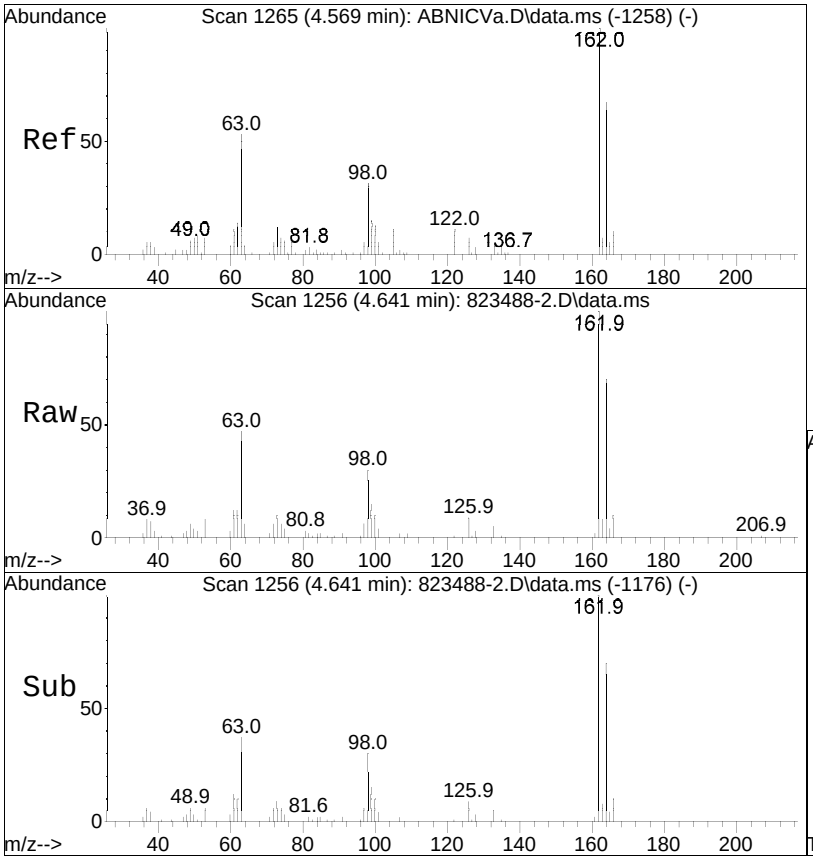


#24
Bis(2-chloroethoxy)methane
Concen: 2.90 ug/ml
RT: 4.594 min Scan# 1241
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion: 93 Resp: 15674

Ion	Ratio	Lower	Upper
93	100		
95	33.5	25.8	38.8
123	6.0	10.1	15.1#

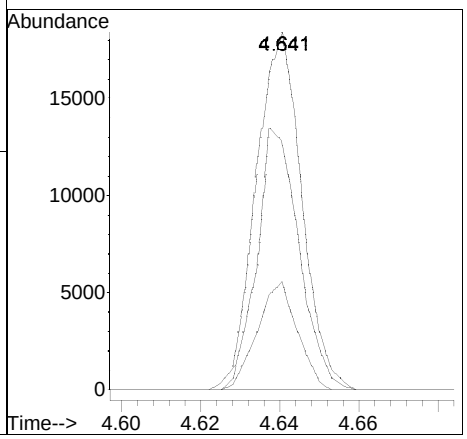


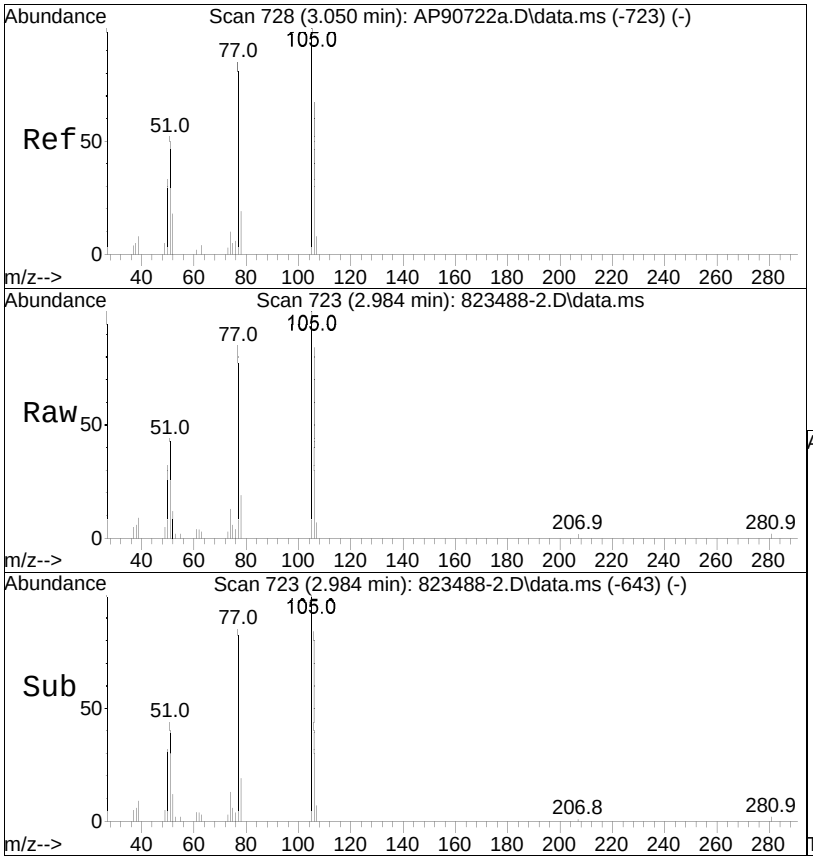


#25
2,4-Dichlorophenol
Concen: 3.69 ug/ml
RT: 4.641 min Scan# 1256
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:162 Resp: 14674

Ion	Ratio	Lower	Upper
162	100		
164	67.7	51.0	76.4
98	26.6	32.2	48.2#

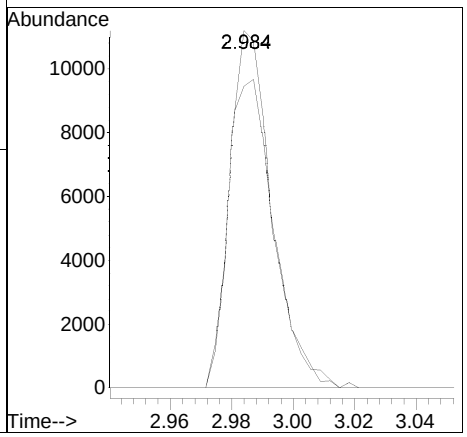


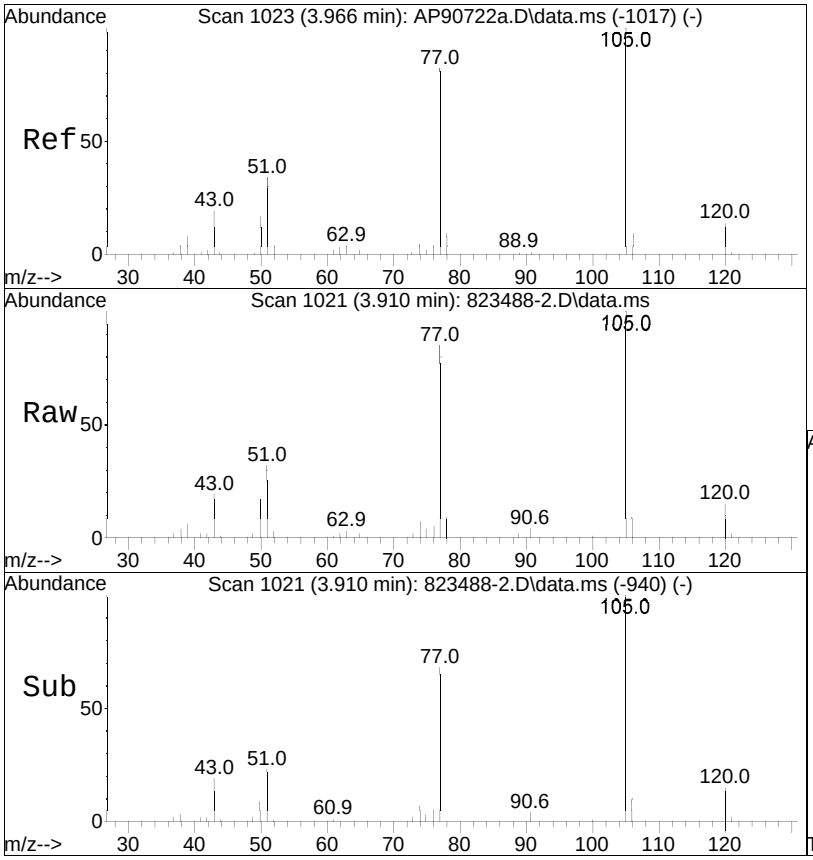


#28
Benzaldehyde
Concen: 2.68 ug/ml
RT: 2.984 min Scan# 723
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:105 Resp: 10691

Ion	Ratio	Lower	Upper
105	100		
77	93.5	82.2	123.4

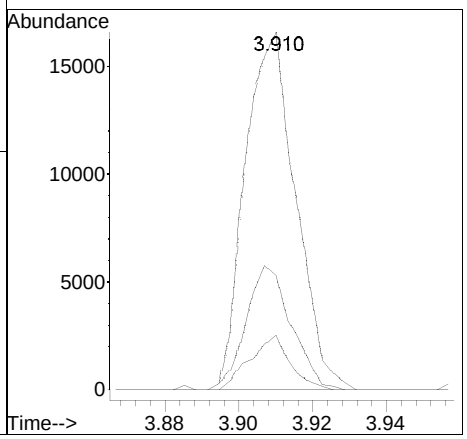


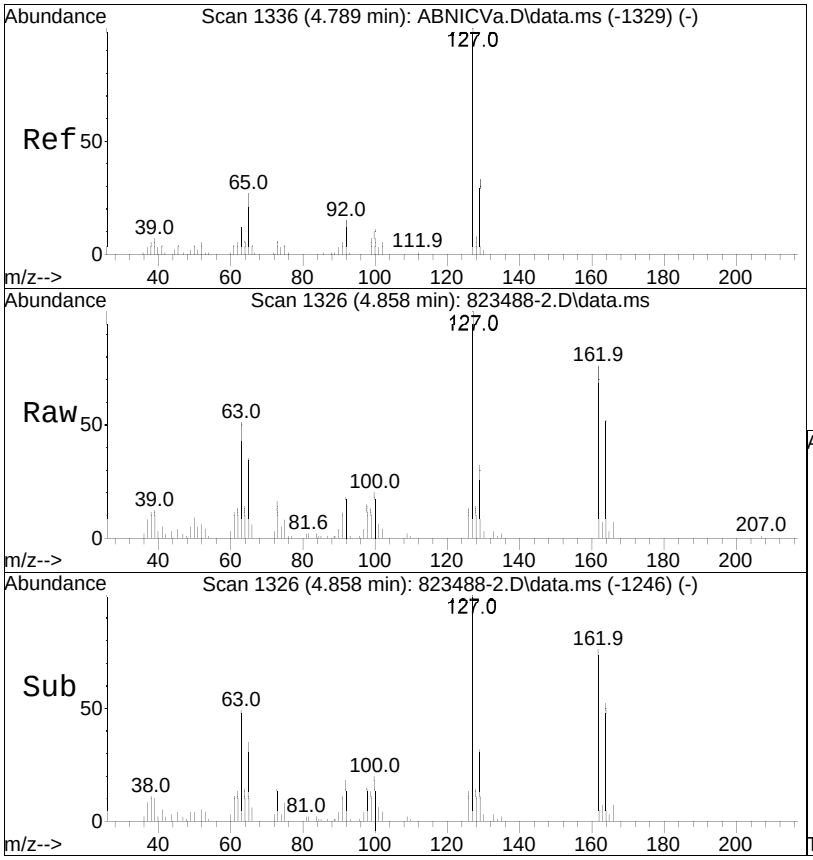


#29
Acetophenone
Concen: 2.24 ug/ml
RT: 3.910 min Scan# 1021
Delta R.T. 0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:105 Resp: 15614

Ion	Ratio	Lower	Upper
105	100		
120	12.3	20.5	30.7#
51	31.2	34.9	52.3#

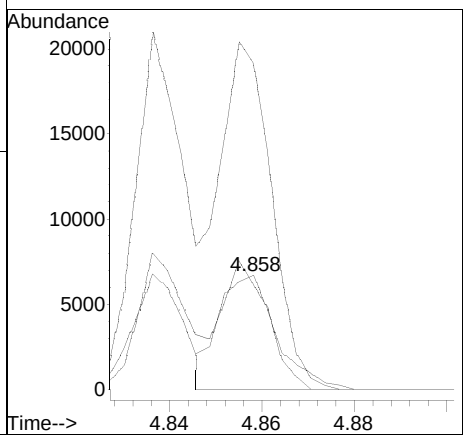


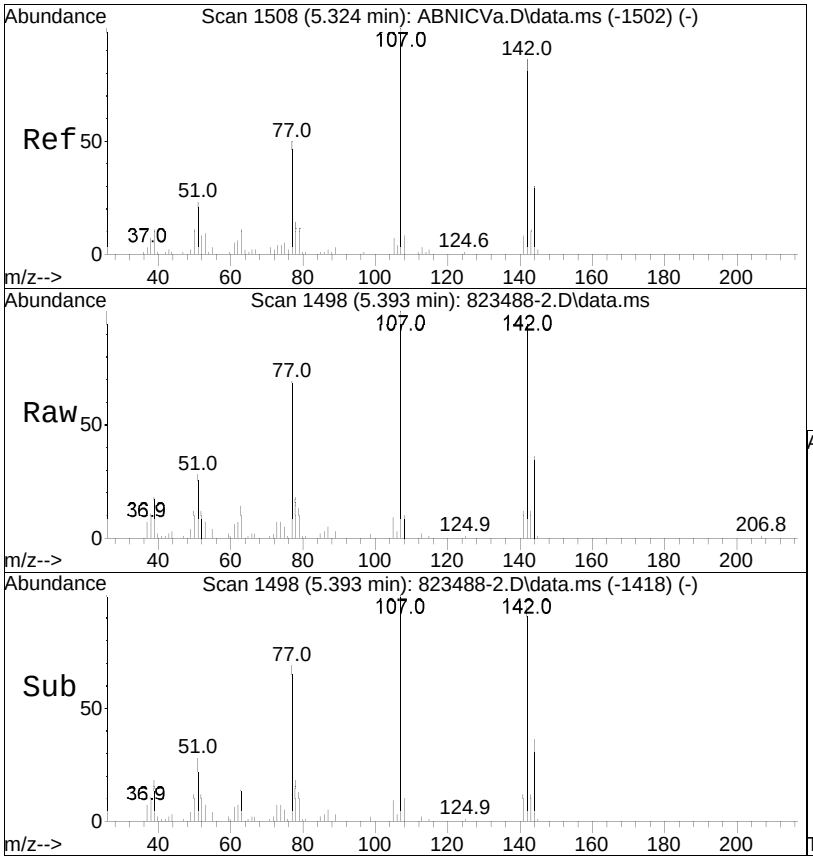


#37
4-Chloroaniline
Concen: 3.93 ug/ml
RT: 4.858 min Scan# 1326
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion: 65 Resp: 5795

Ion	Ratio	Lower	Upper
65	100		
127	280.4	237.6	356.4
129	84.0	76.3	114.5

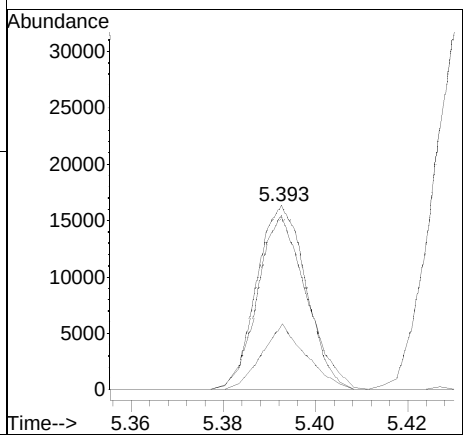


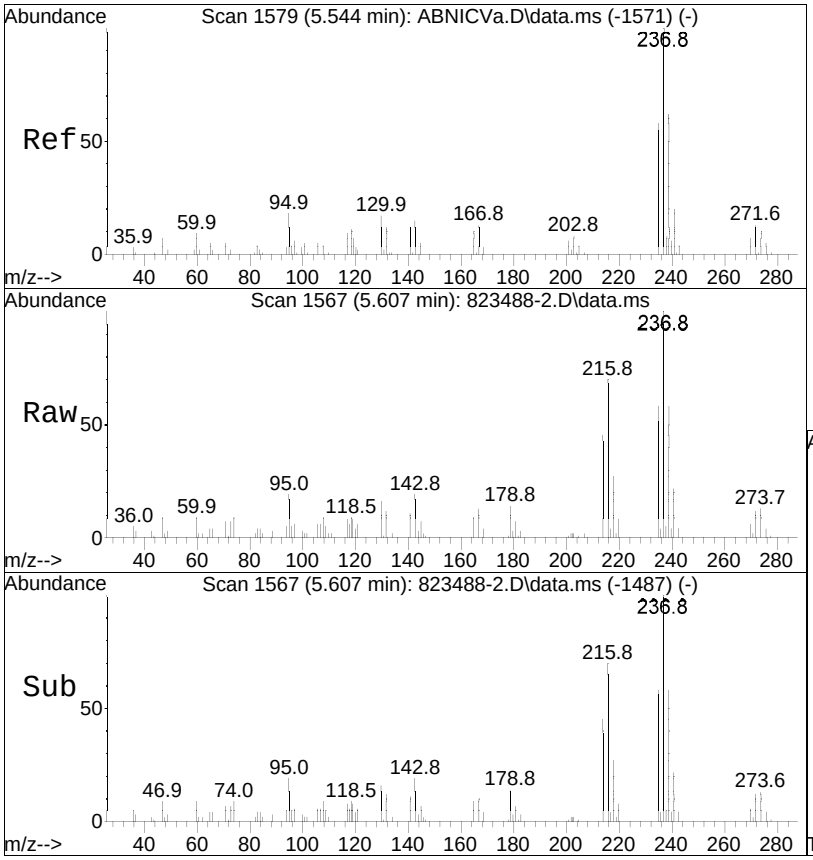


#39
p-Chloro-m-cresol
Concen: 3.72 ug/ml
RT: 5.393 min Scan# 1498
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:107 Resp: 12140

Ion	Ratio	Lower	Upper
107	100		
144	31.9	20.9	31.3#
142	93.9	66.1	99.1

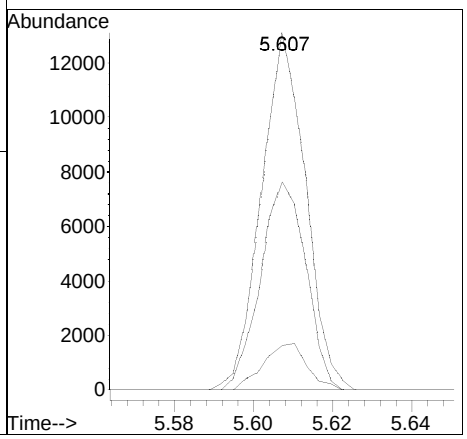


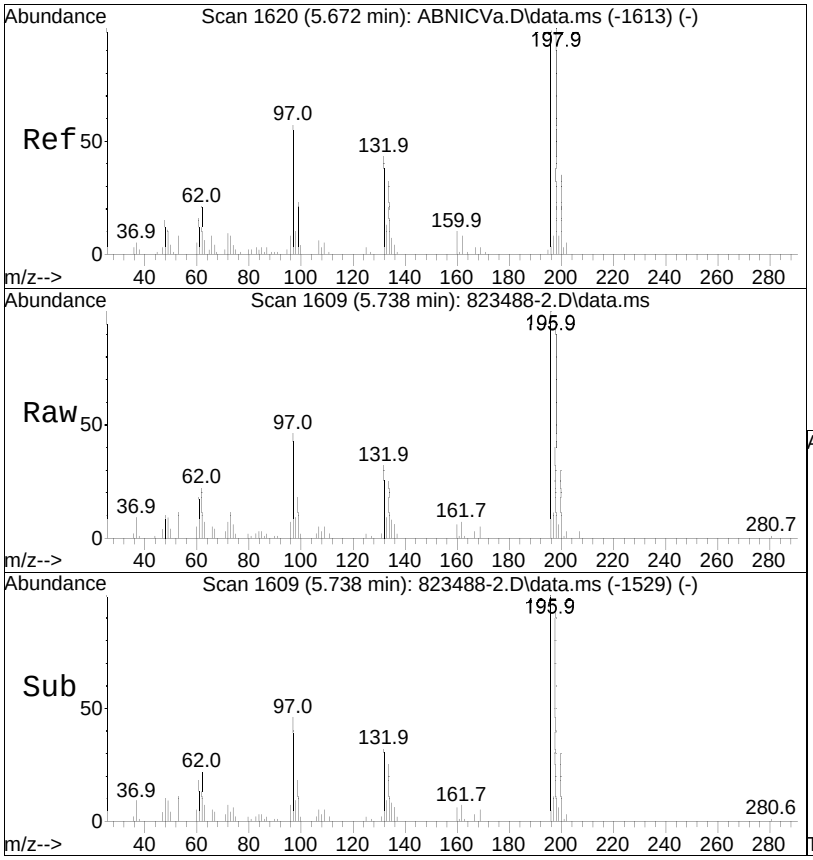


#42
Hexachlorocyclopentadiene
Concen: 3.30 ug/ml
RT: 5.607 min Scan# 1567
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:237 Resp: 10156

Ion	Ratio	Lower	Upper
237	100		
235	60.1	49.7	74.5
272	13.1	9.8	14.6

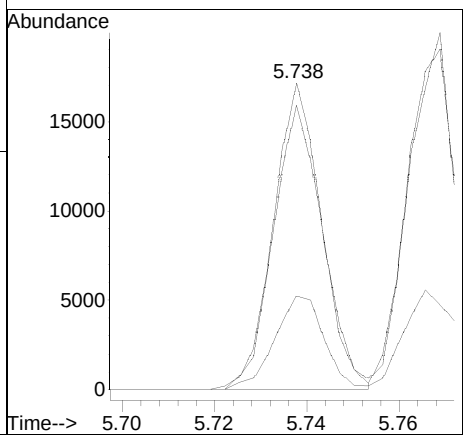


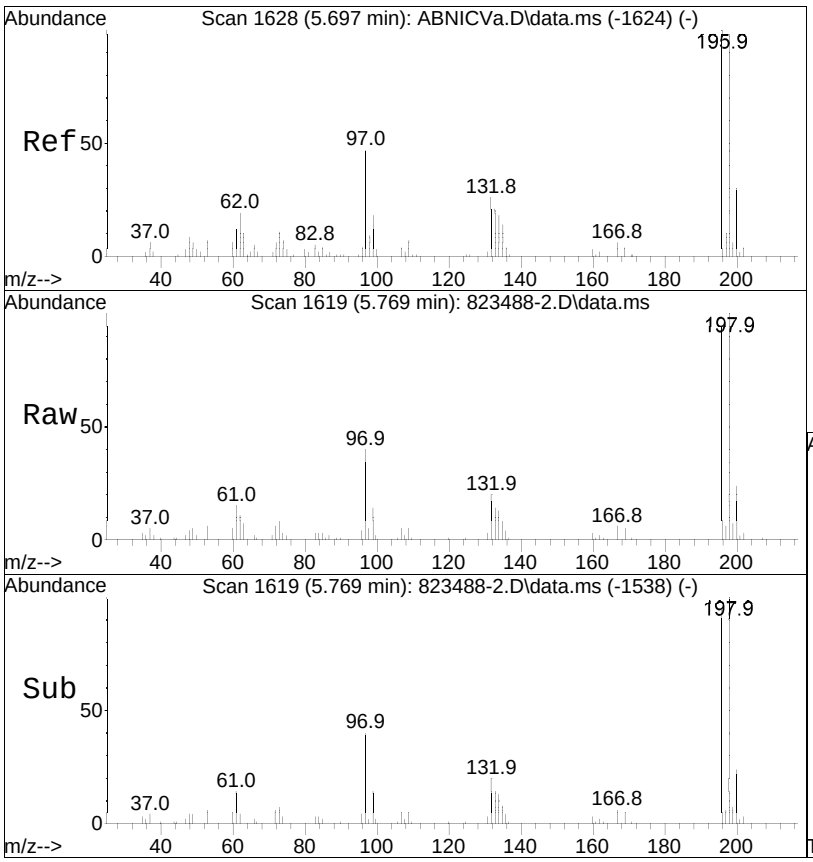


#43
2,4,6-Trichlorophenol
Concen: 4.26 ug/ml
RT: 5.738 min Scan# 1609
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:196 Resp: 12542

Ion	Ratio	Lower	Upper
196	100		
198	93.8	77.5	116.3
200	31.2	23.8	35.6

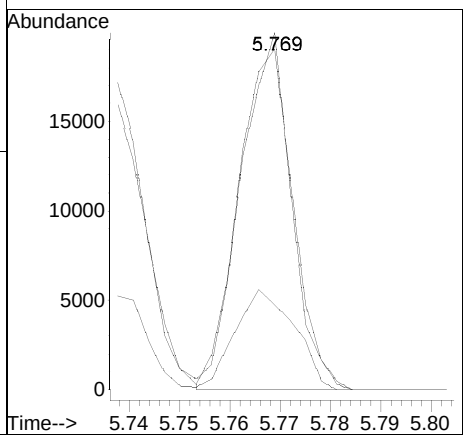


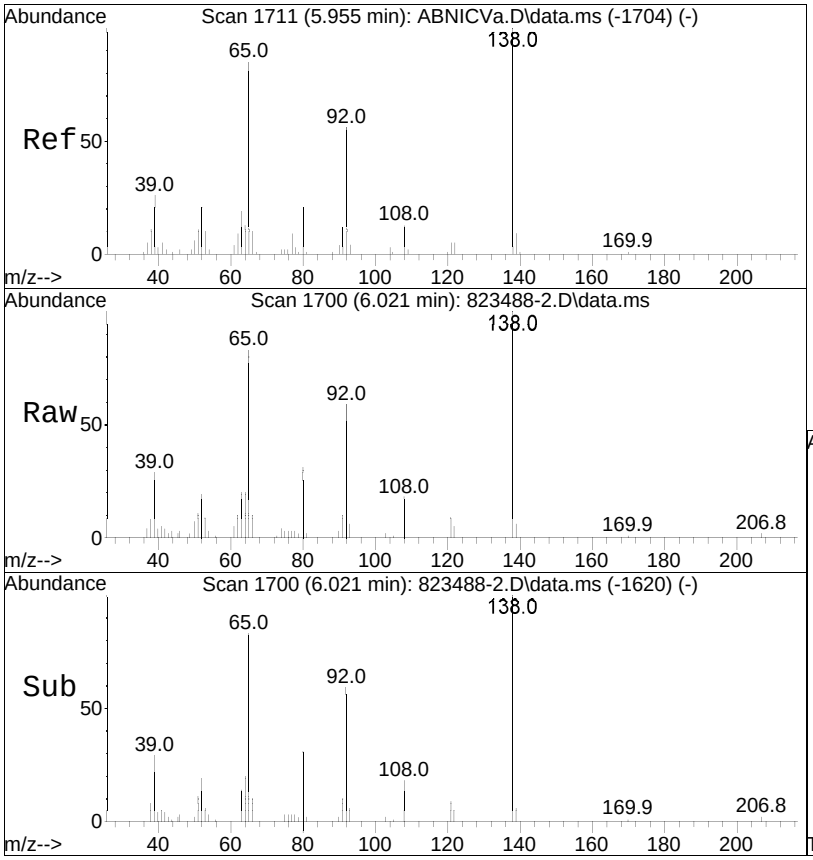


#44
2,4,5-Trichlorophenol
Concen: 4.79 ug/ml
RT: 5.769 min Scan# 1619
Delta R.T. 0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:196 Resp: 14378

Ion	Ratio	Lower	Upper
196	100		
200	31.8	25.4	38.0
198	96.8	78.0	117.0

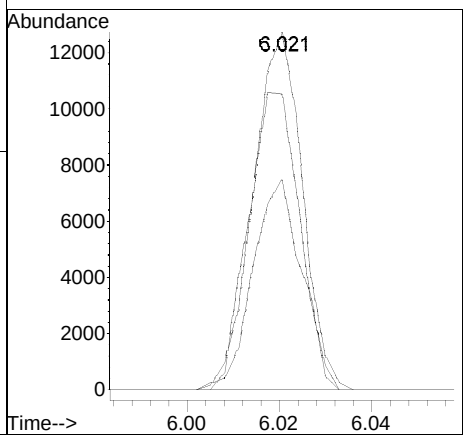


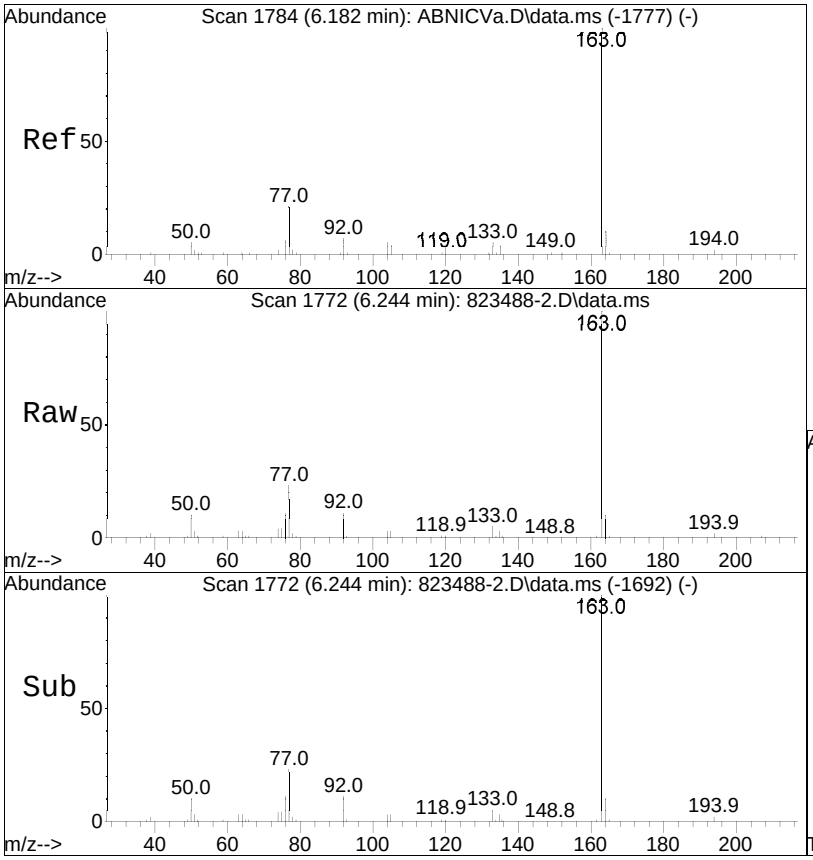


#47
2-Nitroaniline
Concen: 3.68 ug/ml
RT: 6.021 min Scan# 1700
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:138 Resp: 9468

Ion	Ratio	Lower	Upper
138	100		
92	57.7	53.5	80.3
65	85.0	86.3	129.5#

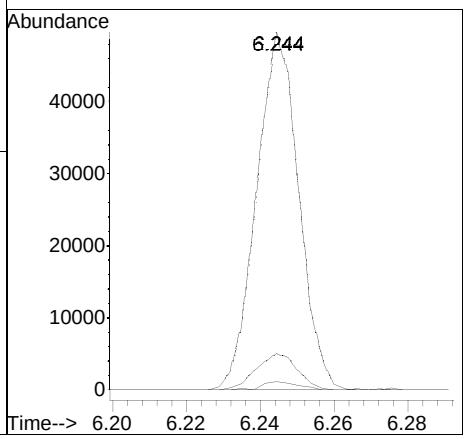


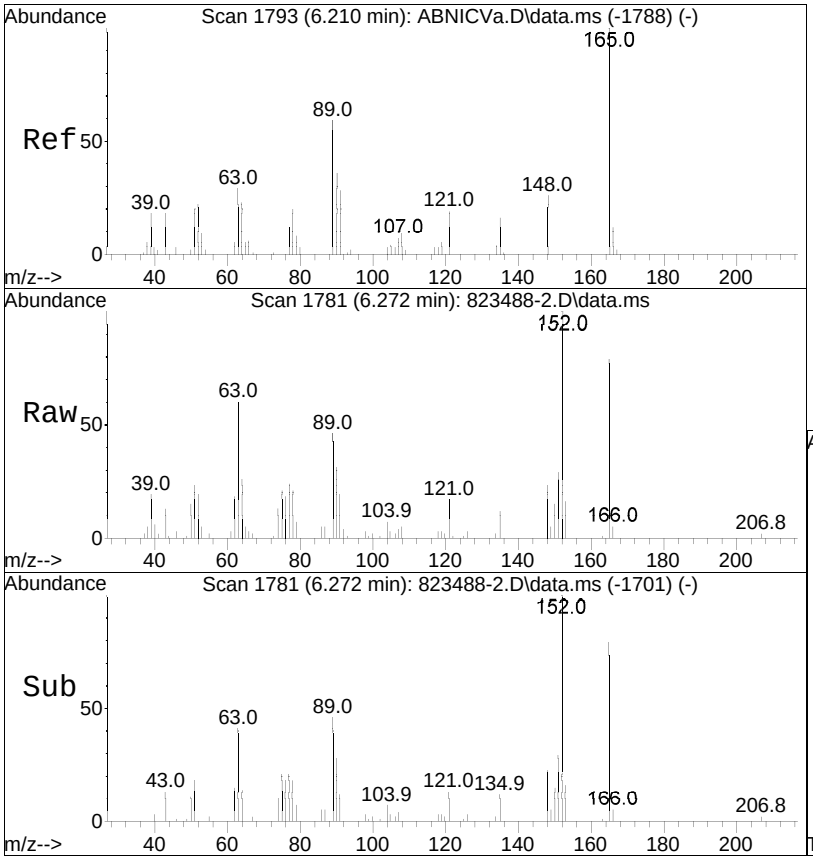


#50
Dimethyl phthalate
Concen: 3.75 ug/ml
RT: 6.244 min Scan# 1772
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:163 Resp: 38991

Ion	Ratio	Lower	Upper
163	100		
194	2.0	3.5	5.3#
164	10.0	7.9	11.9

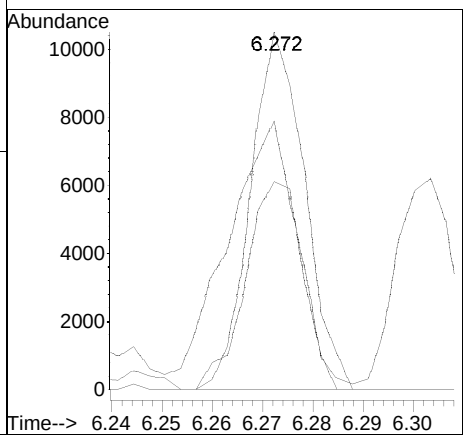


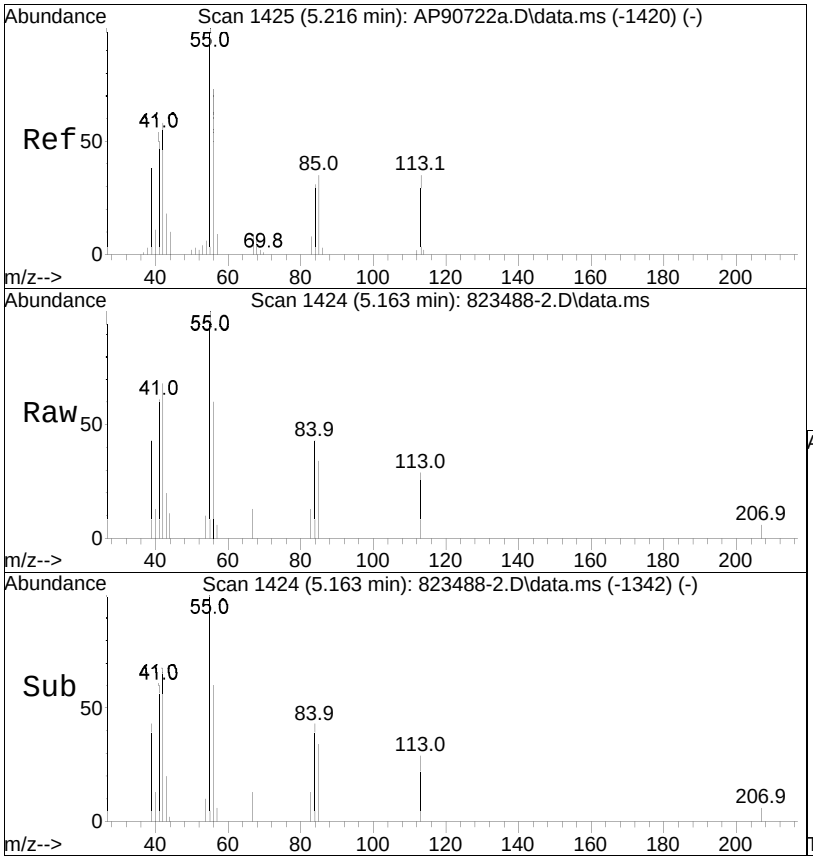


#52
2,6-Dinitrotoluene
Concen: 3.66 ug/ml
RT: 6.272 min Scan# 1781
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:165 Resp: 7859

Ion	Ratio	Lower	Upper
165	100		
89	61.3	54.2	81.2
63	97.0	64.2	96.2#

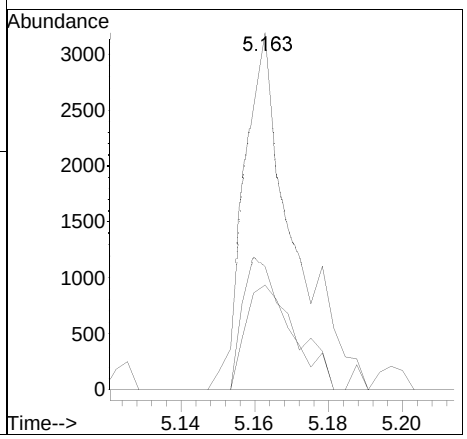


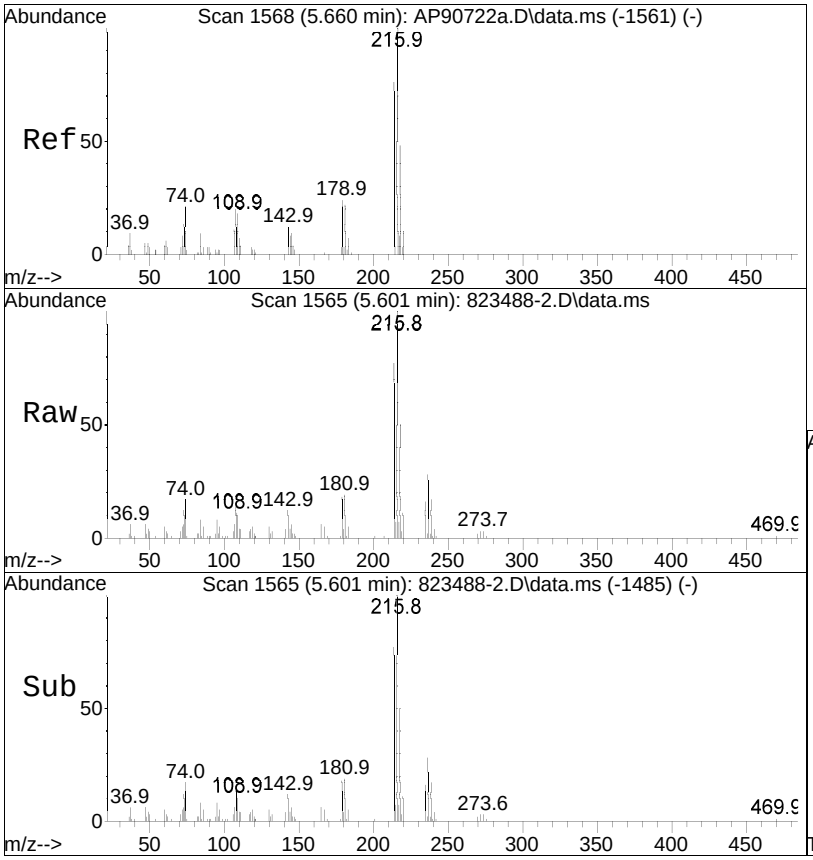


#59
Caprolactam
Concen: 1.52 ug/ml
RT: 5.163 min Scan# 1424
Delta R.T. 0.006 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion: 55 Resp: 2912

Ion	Ratio	Lower	Upper
55	100		
85	36.2	19.8	29.6#
113	28.9	29.6	44.4#

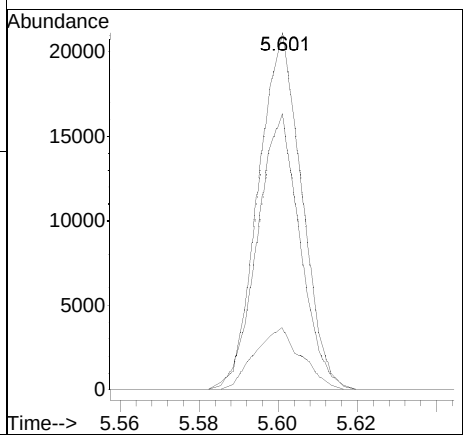


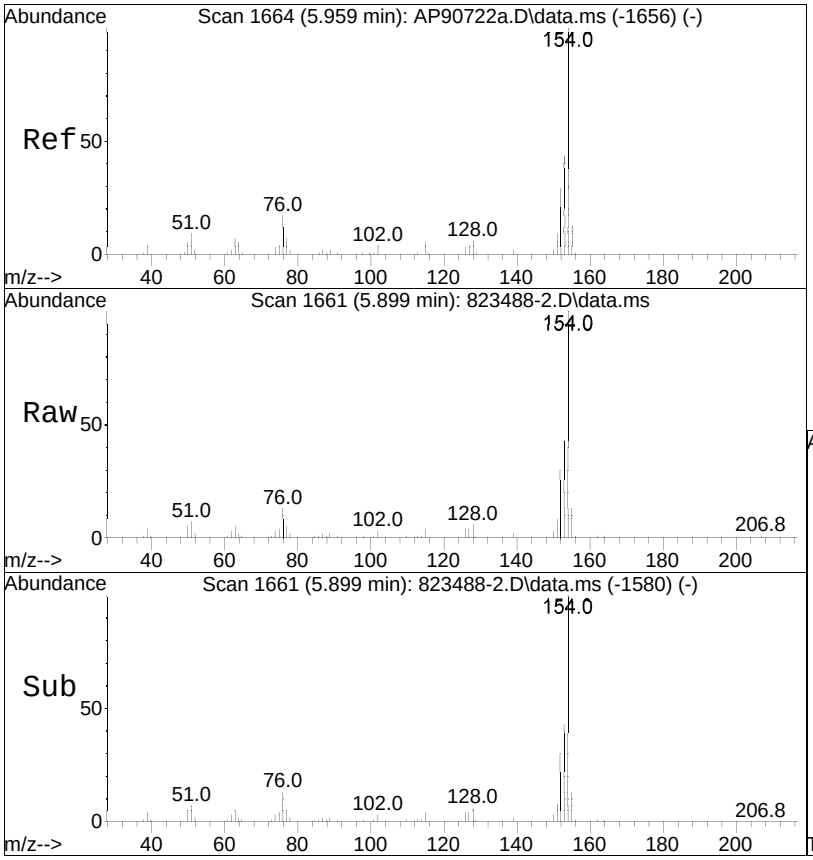


#60
1,2,4,5-Tetrachlorobenzene
Concen: 3.11 ug/ml
RT: 5.601 min Scan# 1565
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:216 Resp: 16076

Ion	Ratio	Lower	Upper
216	100		
214	76.3	63.7	95.5
179	18.6	19.0	28.6#

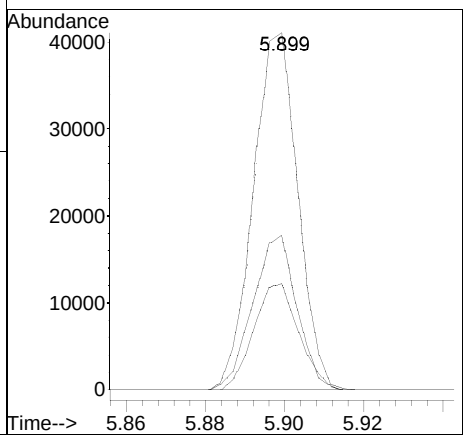


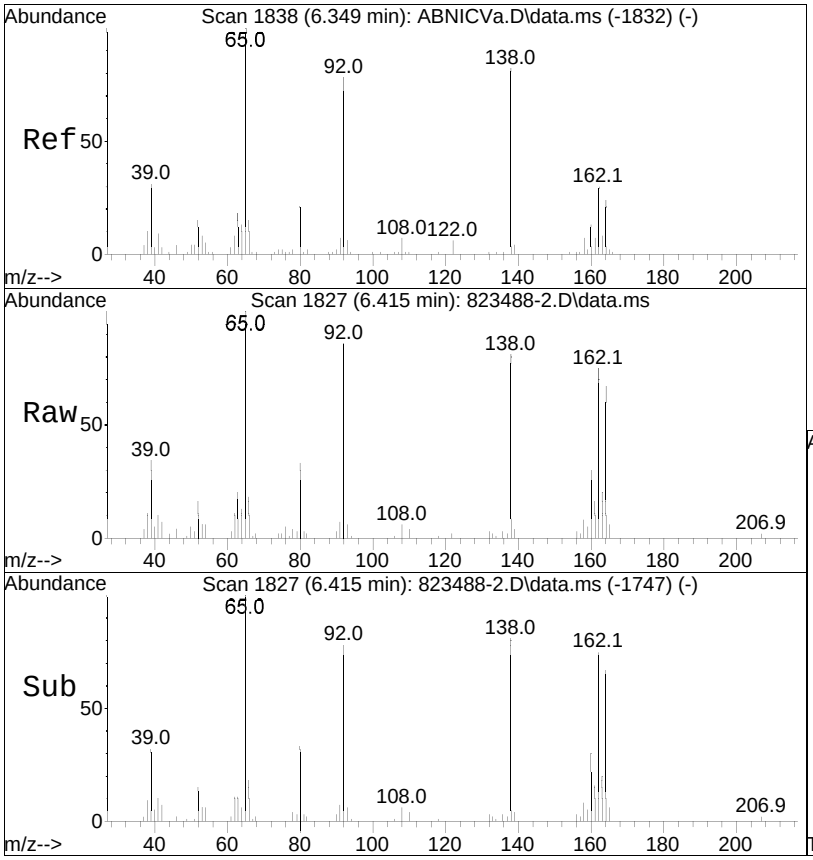


#61
Biphenyl
Concen: 2.76 ug/ml
RT: 5.899 min Scan# 1661
Delta R.T. 0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:154 Resp: 31977

Ion	Ratio	Lower	Upper
154	100		
153	42.8	32.3	48.5
152	30.2	22.5	33.7

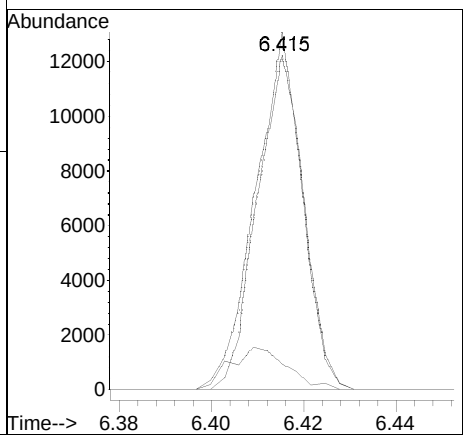


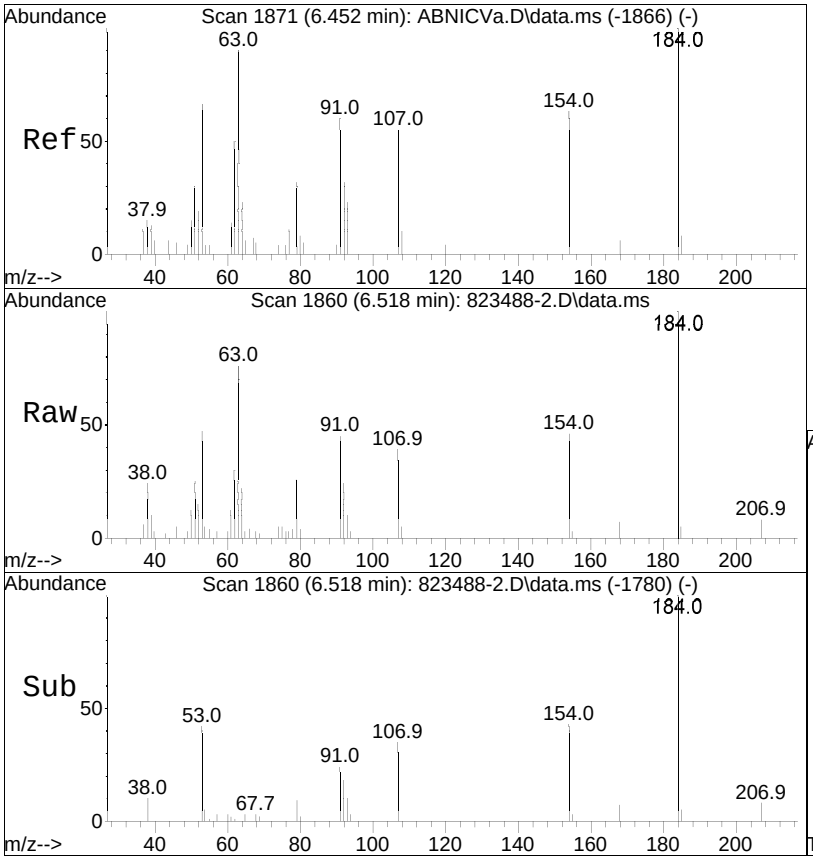


#63
3-Nitroaniline
Concen: 3.19 ug/ml
RT: 6.415 min Scan# 1827
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:138 Resp: 8507

Ion	Ratio	Lower	Upper
138	100		
92	106.8	93.4	140.2
108	15.5	9.5	14.3#

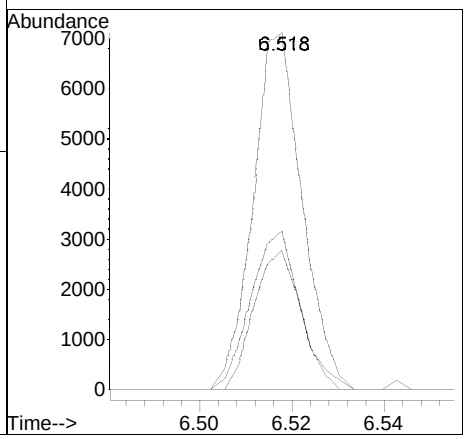


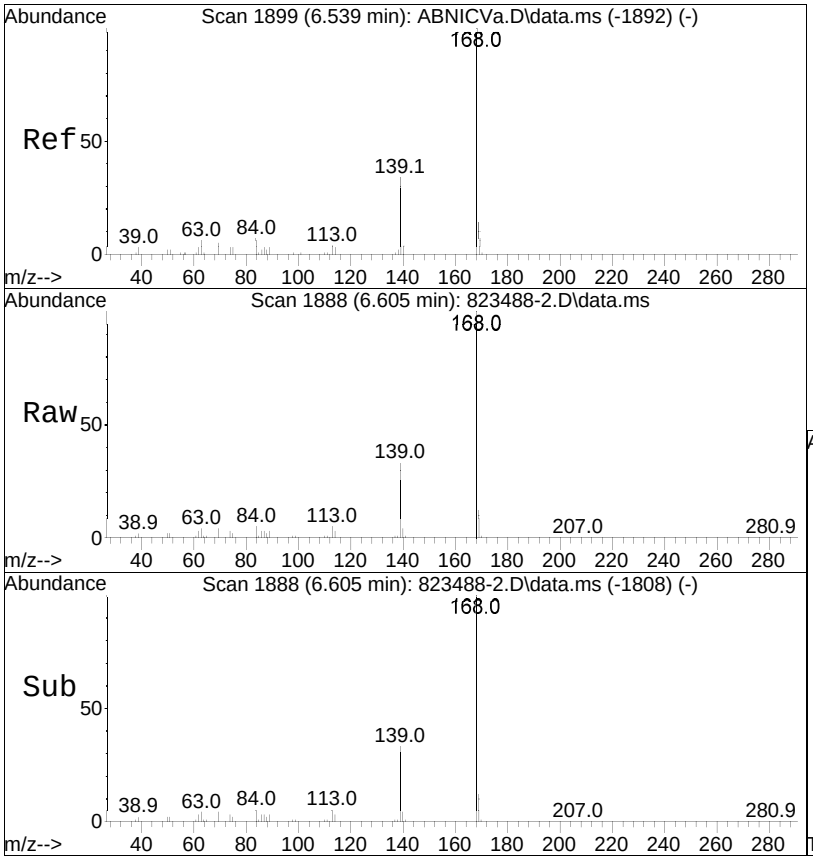


#65
2,4-Dinitrophenol
Concen: 4.32 ug/ml
RT: 6.518 min Scan# 1860
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:184 Resp: 5210

Ion	Ratio	Lower	Upper
184	100		
107	38.5	37.7	56.5
91	44.1	46.3	69.5#

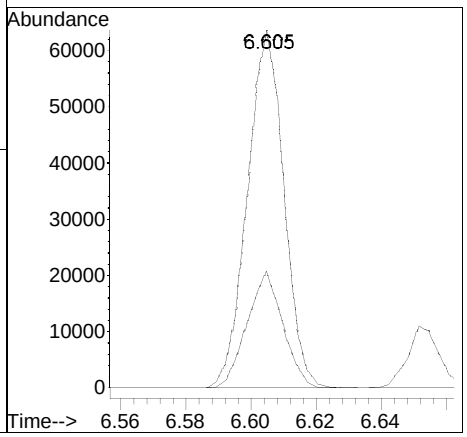


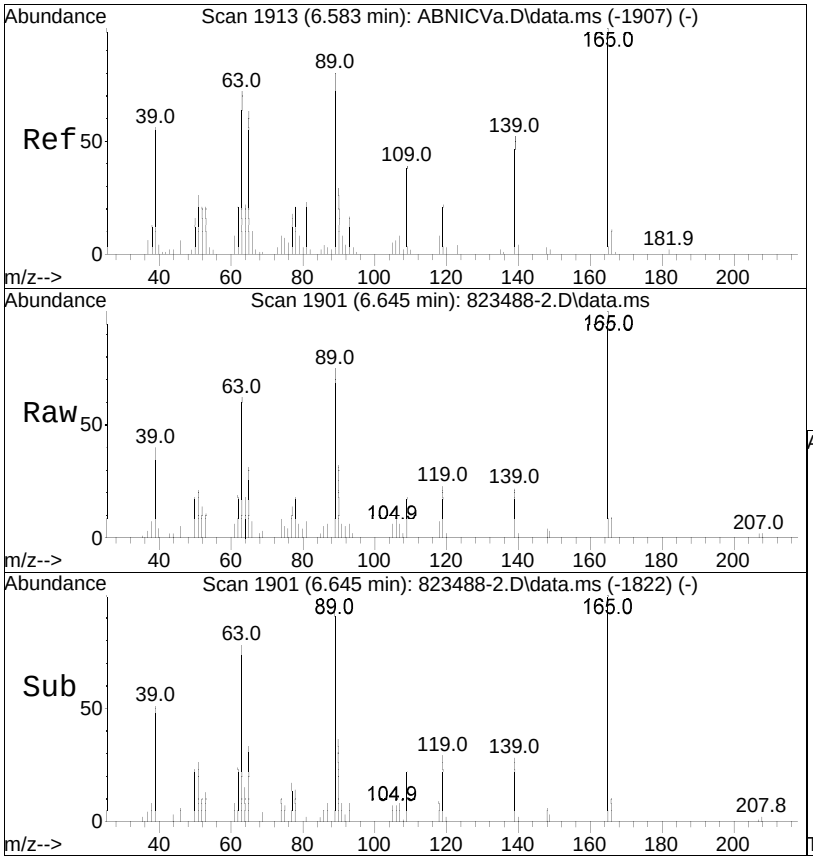


#66
Dibenzofuran
Concen: 3.37 ug/ml
RT: 6.605 min Scan# 1888
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:168 Resp: 49030

Ion	Ratio	Lower	Upper
168	100		
139	32.2	31.4	47.2

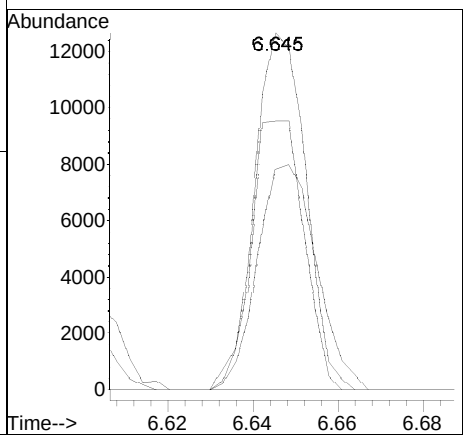


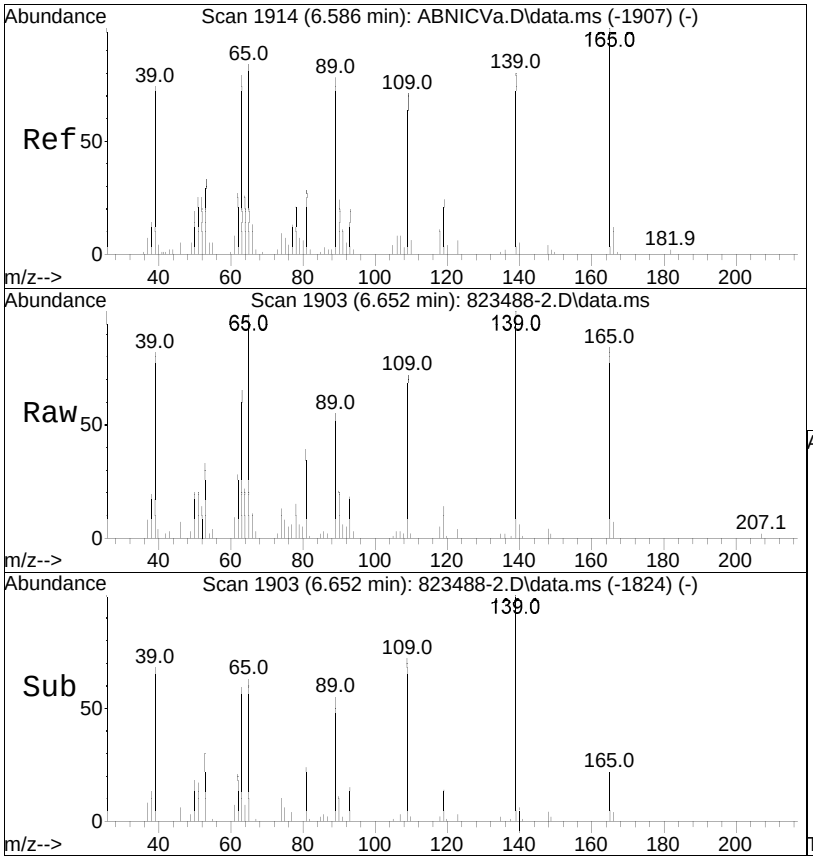


#67
2,4-Dinitrotoluene
Concen: 3.22 ug/ml
RT: 6.645 min Scan# 1901
Delta R.T. -0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:165 Resp: 10579

Ion	Ratio	Lower	Upper
165	100		
89	76.7	72.0	108.0
63	72.6	52.7	79.1

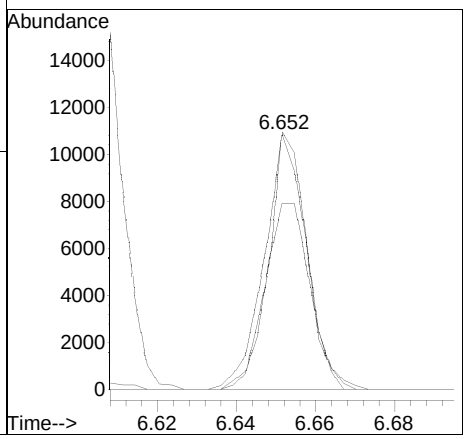


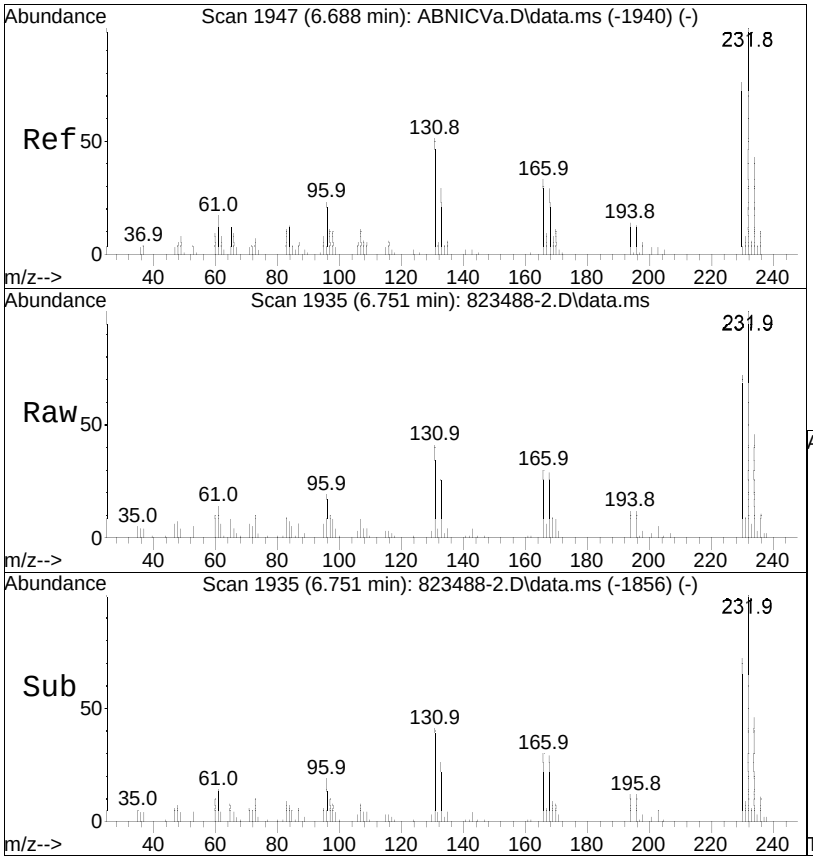


#68
4-Nitrophenol
Concen: 3.73 ug/ml
RT: 6.652 min Scan# 1903
Delta R.T. -0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion: 65 Resp: 7944

Ion	Ratio	Lower	Upper
65	100		
109	78.0	47.4	71.2#
139	94.2	76.6	115.0

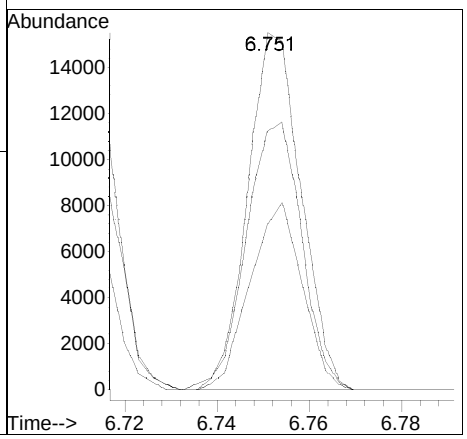


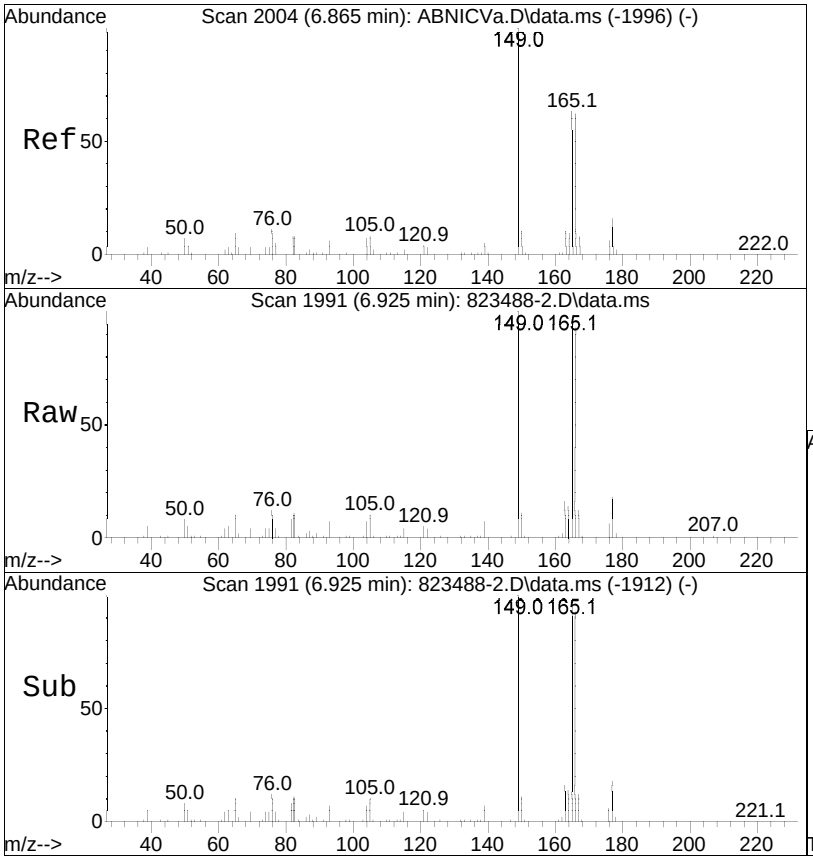


#70
2,3,4,6-Tetrachlorophenol
Concen: 4.14 ug/ml
RT: 6.751 min Scan# 1935
Delta R.T. -0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:232 Resp: 12482

Ion	Ratio	Lower	Upper
232	100		
230	77.8	61.8	92.8
234	51.4	36.2	54.2

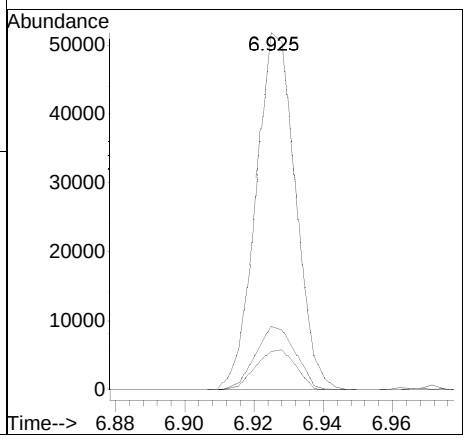


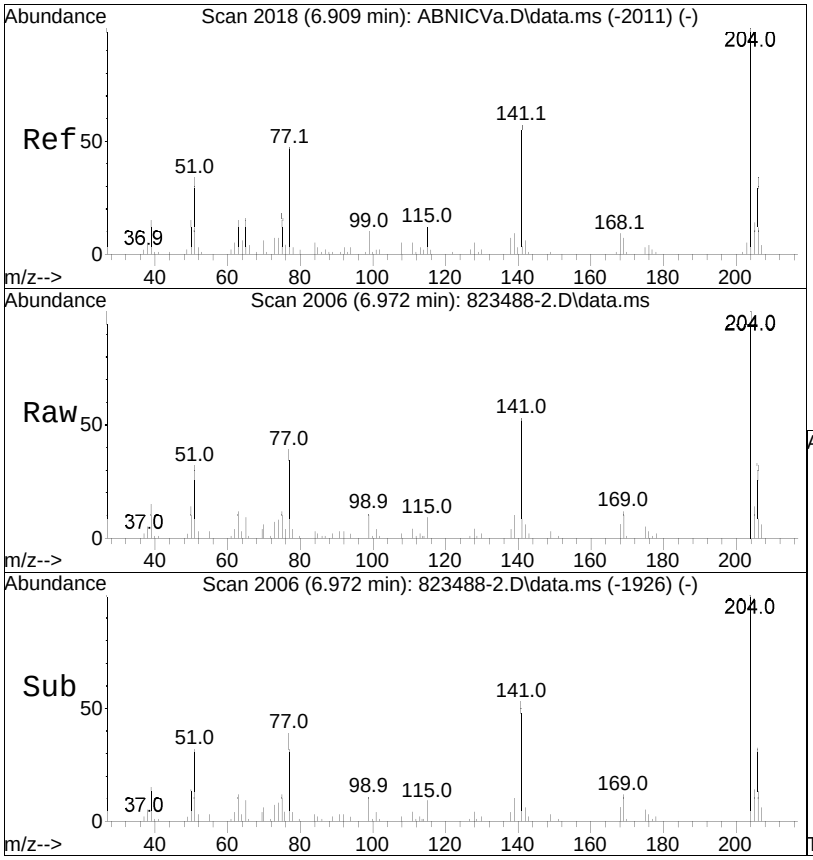


#71
Diethyl phthalate
Concen: 3.35 ug/ml
RT: 6.925 min Scan# 1991
Delta R.T. -0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:149 Resp: 41200

Ion	Ratio	Lower	Upper
149	100		
177	18.1	16.1	24.1
150	11.5	9.4	14.2

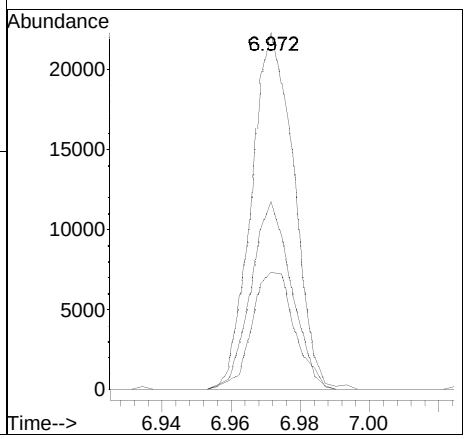


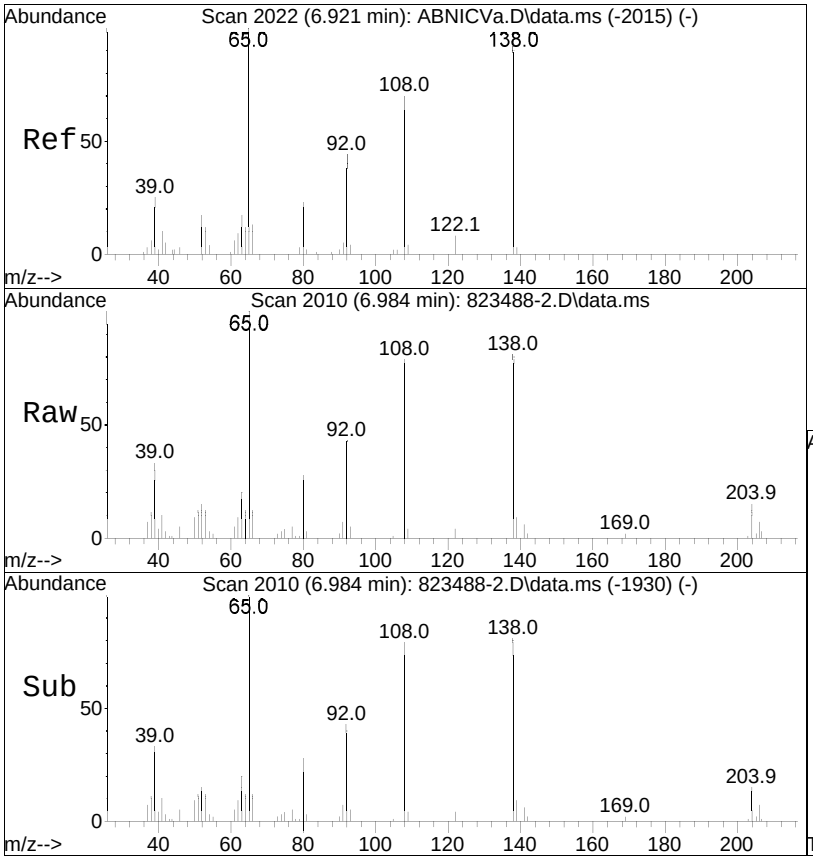


#73
4-Chlorophenyl phenyl ether
Concen: 3.32 ug/ml
RT: 6.972 min Scan# 2006
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:204 Resp: 18927

Ion	Ratio	Lower	Upper
204	100		
206	33.5	25.8	38.6
141	49.9	53.6	80.4#

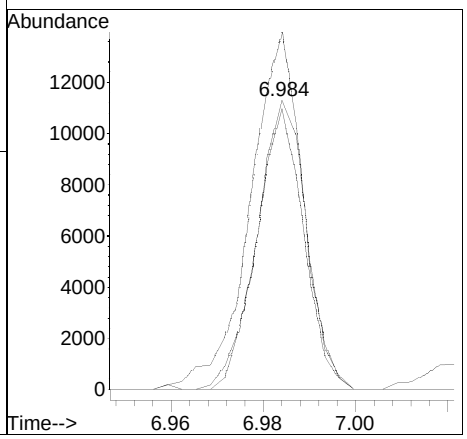


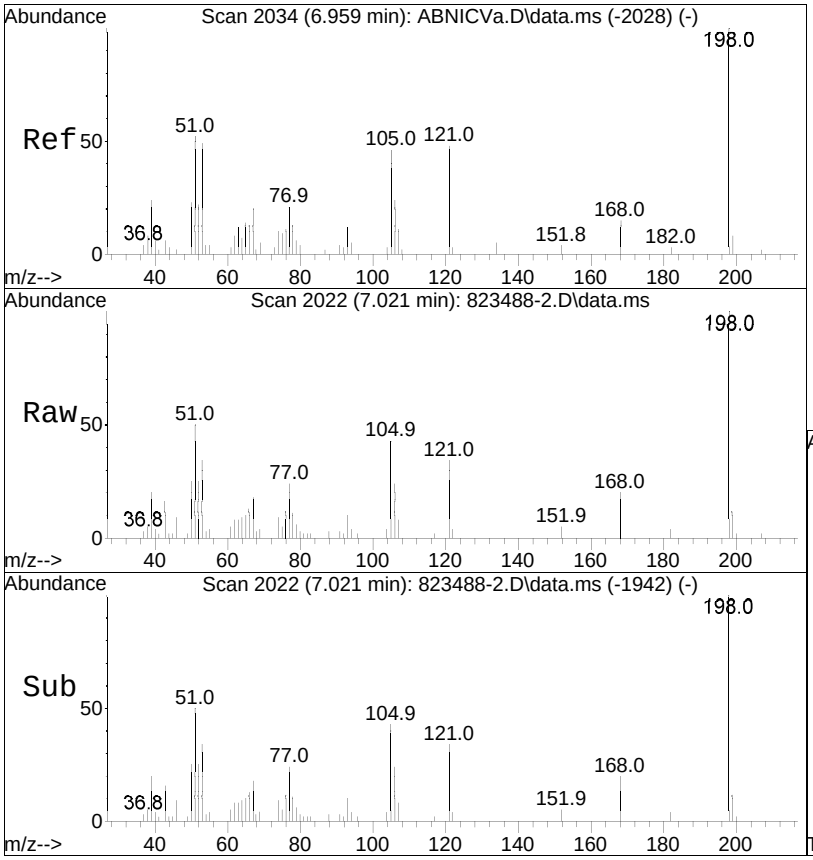


#74
4-Nitroaniline
Concen: 3.19 ug/ml
RT: 6.984 min Scan# 2010
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:138 Resp: 8453

Ion	Ratio	Lower	Upper
138	100		
108	91.6	52.1	78.1#
65	130.6	115.0	172.6

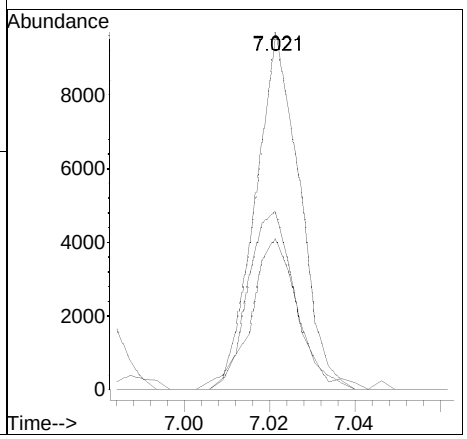


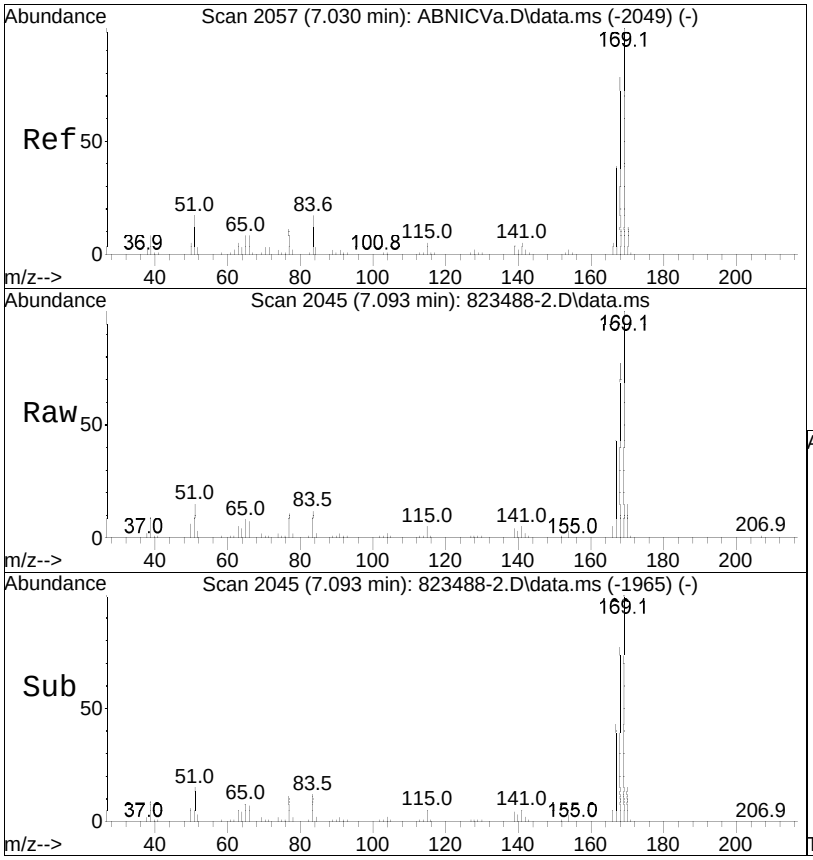


#75
4,6-Dinitro-o-cresol
Concen: 4.15 ug/ml
RT: 7.021 min Scan# 2022
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:198 Resp: 6975

Ion	Ratio	Lower	Upper
198	100		
51	54.4	76.0	114.0#
105	44.1	45.6	68.4#

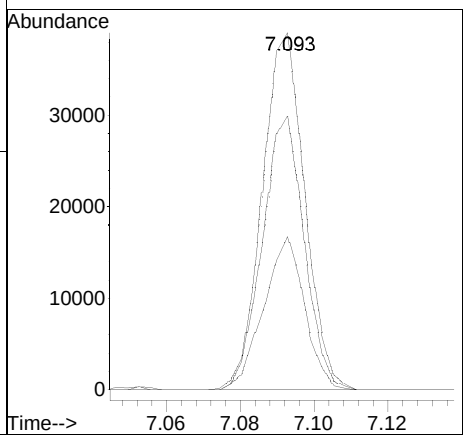


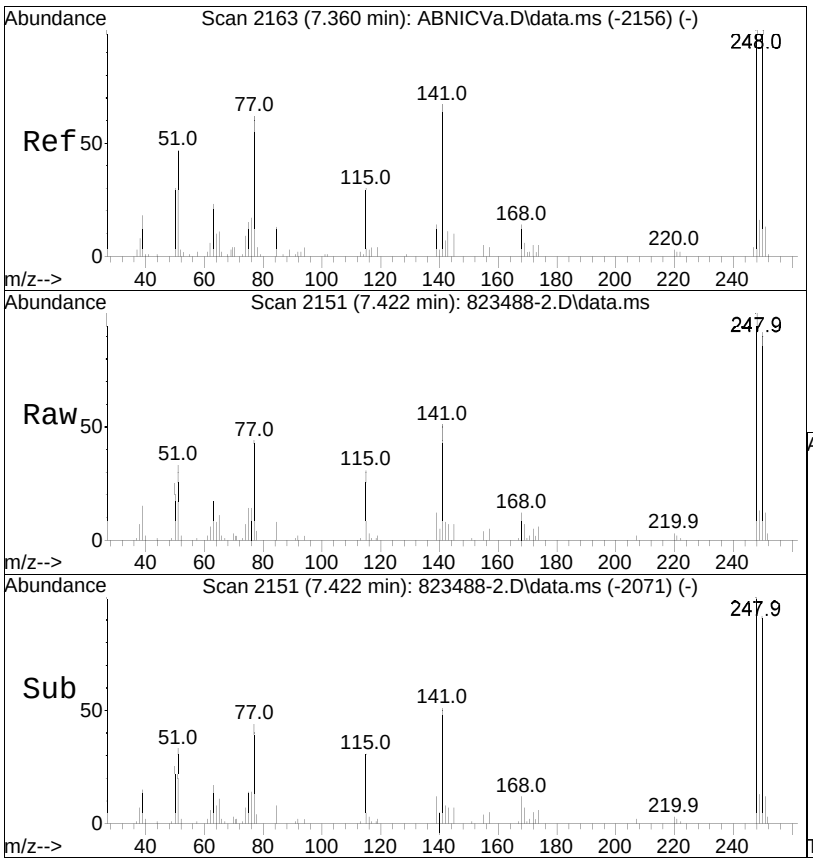


#76
NDPA/DPA
Concen: 3.11 ug/ml
RT: 7.093 min Scan# 2045
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:169 Resp: 31104

Ion	Ratio	Lower	Upper
169	100		
168	75.6	54.0	81.0
167	41.5	28.6	42.8

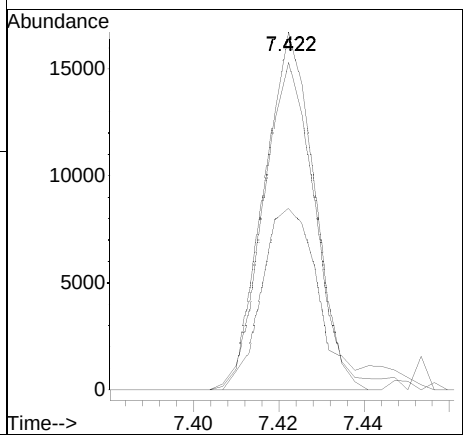


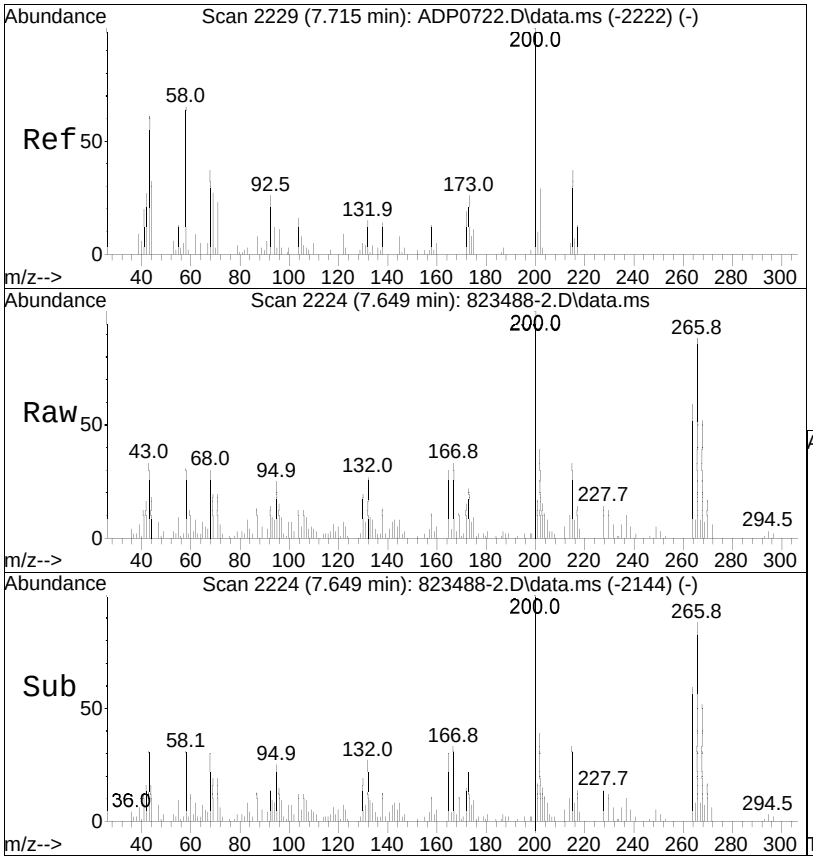


#79
4-Bromophenyl phenyl ether
Concen: 3.84 ug/ml
RT: 7.422 min Scan# 2151
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:248 Resp: 13674

Ion	Ratio	Lower	Upper
248	100		
141	62.2	76.6	114.8#
250	94.5	77.3	115.9

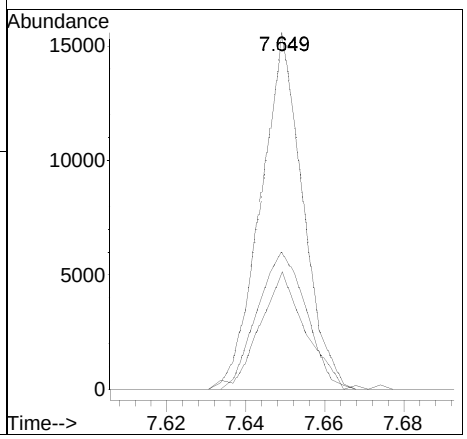


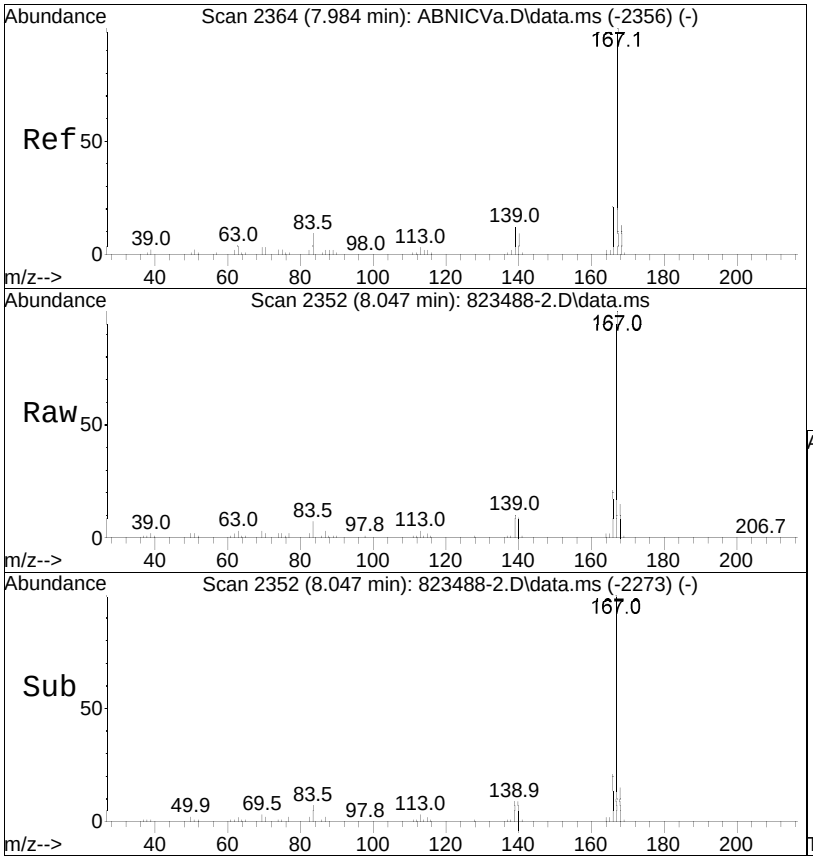


#86
Atrazine
Concen: 3.77 ug/ml
RT: 7.649 min Scan# 2224
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:200 Resp: 11478

Ion	Ratio	Lower	Upper
200	100		
202	45.7	25.8	38.6#
215	35.2	40.2	60.4#

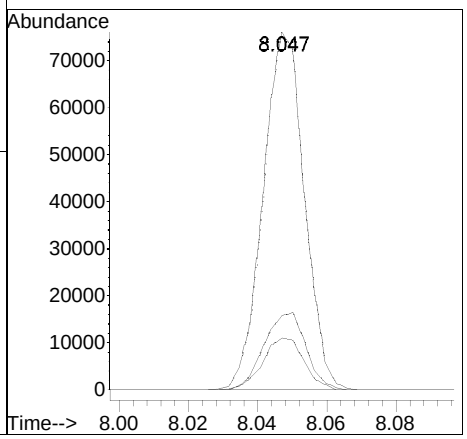


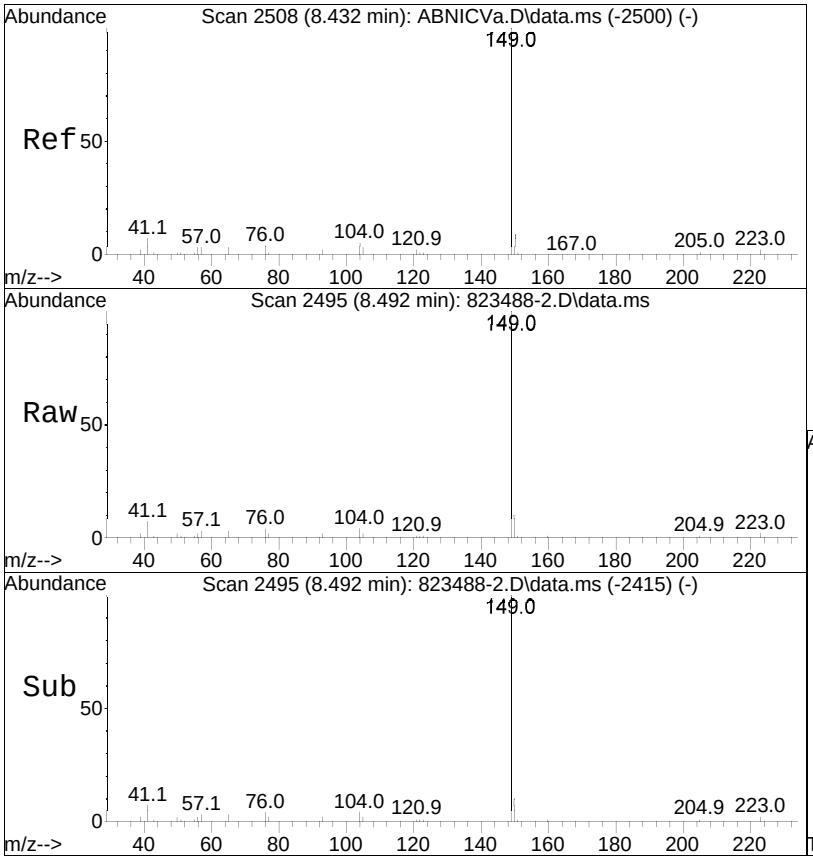


#90
Carbazole
Concen: 3.31 ug/ml
RT: 8.047 min Scan# 2352
Delta R.T. -0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:167 Resp: 62284

Ion	Ratio	Lower	Upper
167	100		
168	14.6	10.6	15.8
166	22.0	17.4	26.0

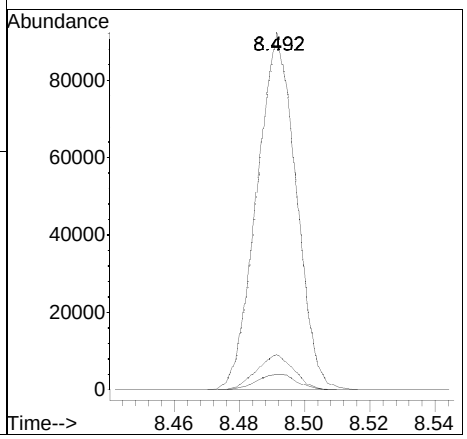


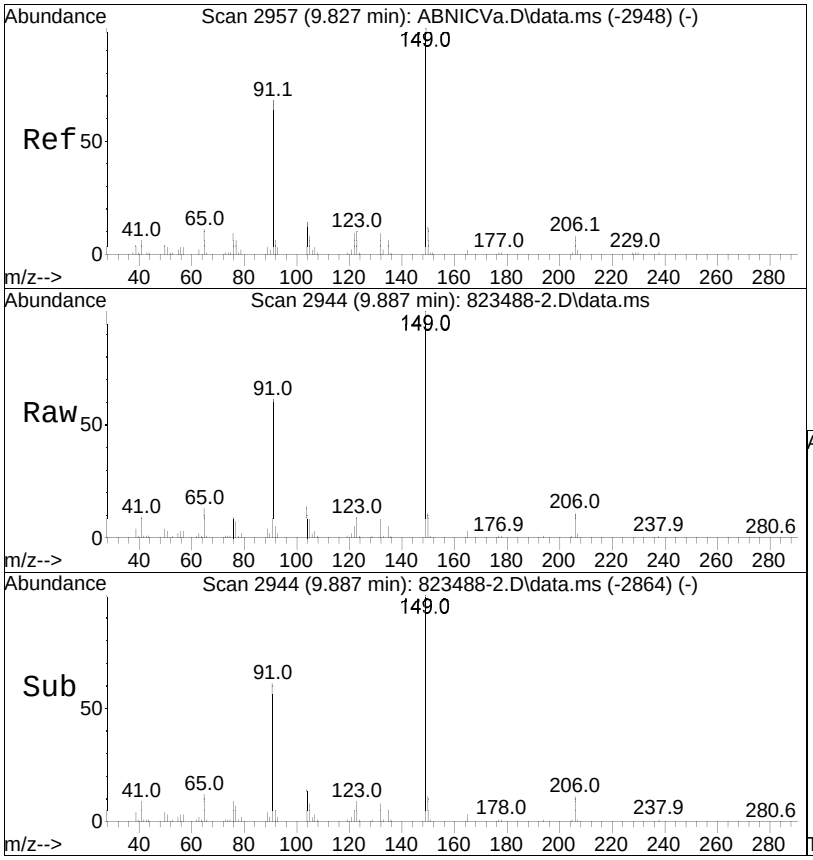


#91
Di-n-butylphthalate
Concen: 3.44 ug/ml
RT: 8.492 min Scan# 2495
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:149 Resp: 76302

Ion	Ratio	Lower	Upper
149	100		
150	9.4	7.0	10.6
104	4.5	4.5	6.7#

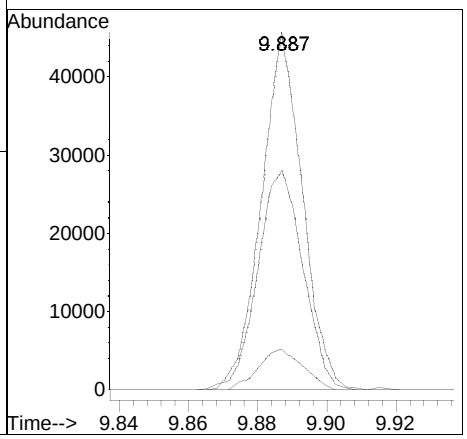


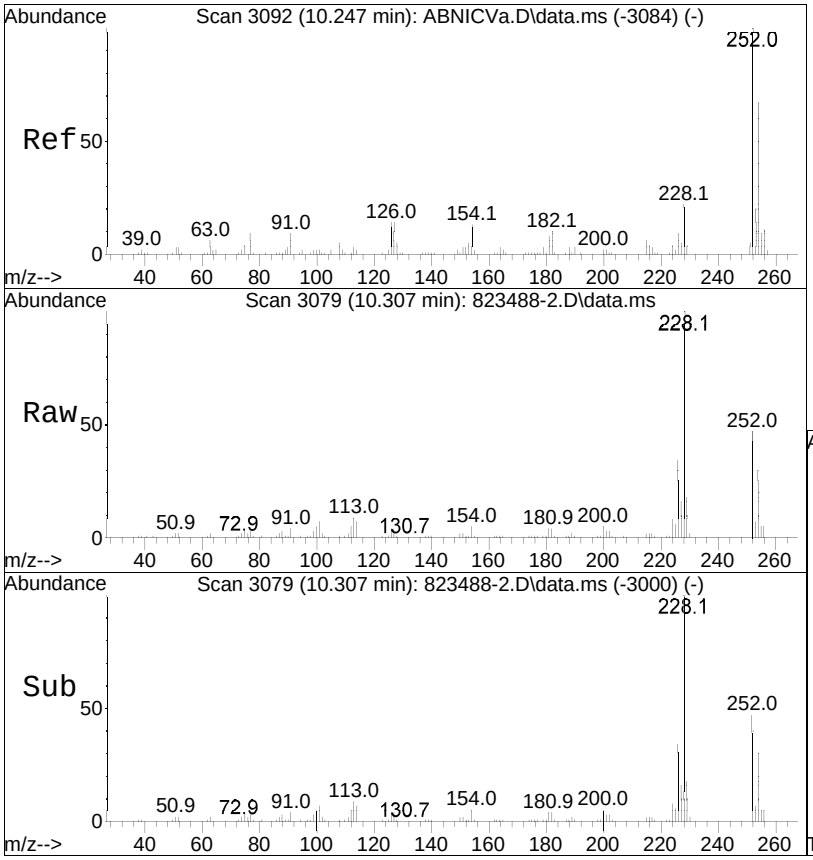


#96
Butyl benzyl phthalate
Concen: 3.70 ug/ml
RT: 9.887 min Scan# 2944
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:149 Resp: 37299

Ion	Ratio	Lower	Upper
149	100		
91	67.9	63.3	94.9
206	12.5	13.9	20.9#

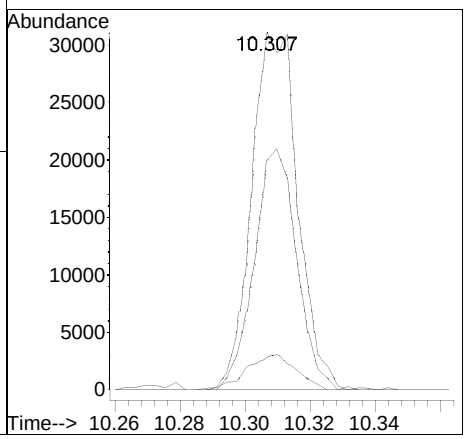


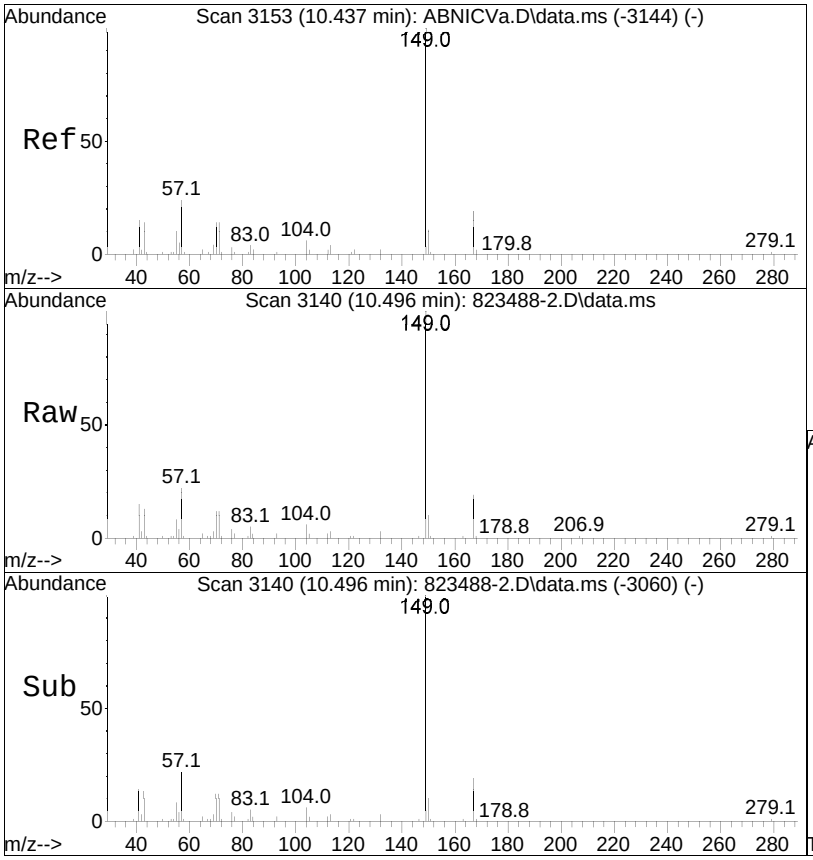


#105
3,3'-Dichlorobenzidine
Concen: 2.83 ug/ml
RT: 10.307 min Scan# 3079
Delta R.T. -0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:252 Resp: 30389

Ion	Ratio	Lower	Upper
252	100		
126	10.8	14.5	21.7#
254	62.1	51.2	76.8

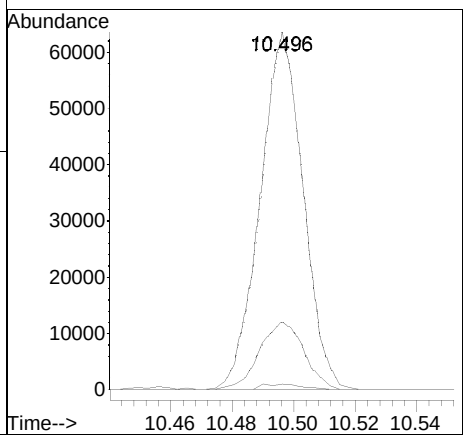


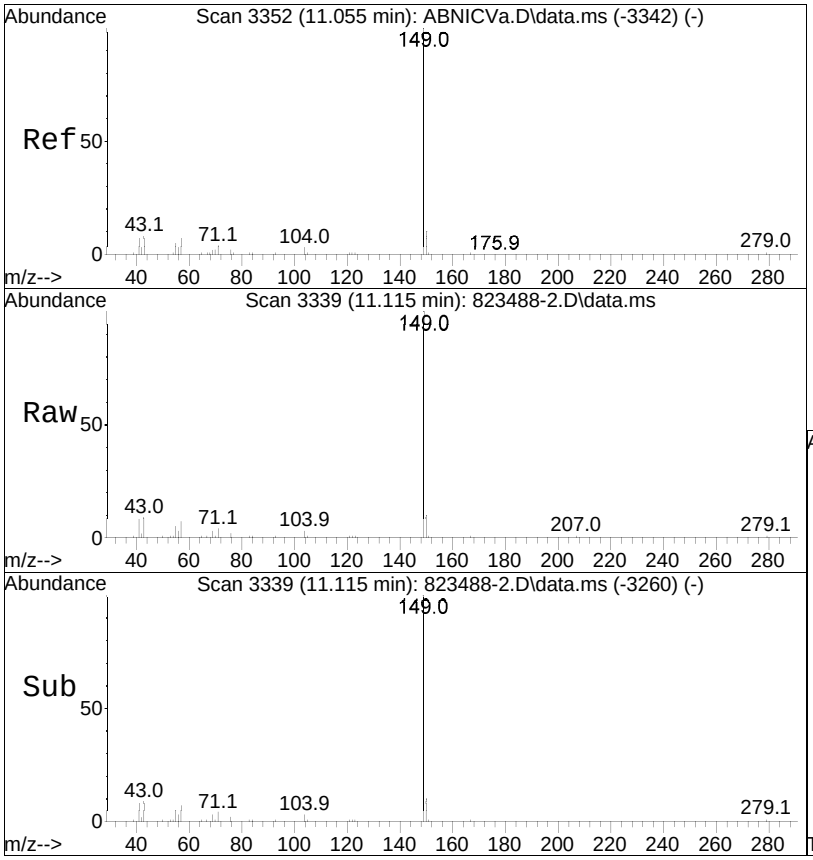


#107
Bis(2-ethylhexyl)phthalate
Concen: 3.91 ug/ml
RT: 10.496 min Scan# 3140
Delta R.T. -0.000 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:149 Resp: 60971

Ion	Ratio	Lower	Upper
149	100		
167	19.6	22.1	33.1#
279	1.3	3.0	4.4#

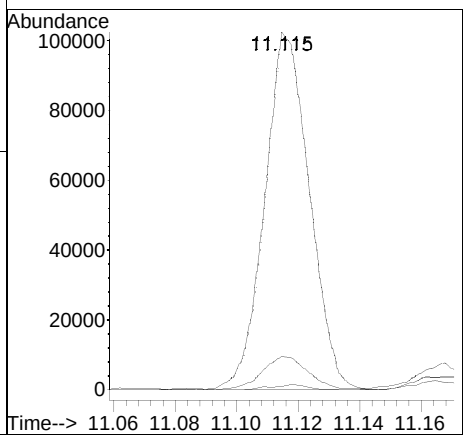




#108
Di-n-octylphthalate
Concen: 3.62 ug/ml
RT: 11.115 min Scan# 3339
Delta R.T. -0.003 min
Lab File: 823488-2.D
Acq: 5 Sep 2023 11:11 pm

Tgt Ion:149 Resp: 102543

Ion	Ratio	Lower	Upper
149	100		
43	9.8	18.8	28.2#
167	1.2	1.3	1.9#



Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-3.D
Acq On : 31 Aug 2023 12:17 pm
Operator : Dakota:sz
Sample : WG1822188-3,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 14:26:00 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 12:36:23 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.669	152	16589	4.000	ug/ml		0.00
Standard Area 1 = 14463			Recovery = 114.70%				
27) IS2_1,4-Dichlorobenzen...	3.669	152	16589	4.000	ug/ml		0.00
Standard Area 3 = 16508			Recovery = 100.49%				
32) IS3_1,4-Dichlorobenzen...	3.669	152	16589	4.000	ug/ml		0.00
Standard Area 2 = 17146			Recovery = 96.75%				
34) IS1_Naphthalene-d8	4.927	136	55310	4.000	ug/ml	#	0.00
Standard Area 1 = 50867			Recovery = 108.73%				
54) IS2_Naphthalene-d8	4.927	136	55310	4.000	ug/ml	#	0.00
Standard Area 3 = 55735			Recovery = 99.24%				
62) IS1_Acenaphthene-d10	6.606	164	35357	4.000	ug/ml		0.00
Standard Area 1 = 33572			Recovery = 105.32%				
82) IS2_Acenaphthene-d10	6.606	164	35357	4.000	ug/ml		0.00
Standard Area 3 = 35012			Recovery = 100.99%				
85) IS3_Acenaphthene-d10	6.606	164	35357	4.000	ug/ml		0.00
Standard Area 2 = 37775			Recovery = 93.60%				
87) IS1_Phenanthrene-d10	8.001	188	77713	4.000	ug/ml		0.00
Standard Area 1 = 80682			Recovery = 96.32%				
99) IS3_Phenanthrene-d10	8.001	188	77713	4.000	ug/ml		0.00
Standard Area 2 = 96848			Recovery = 80.24%				
103) IS1_Chrysene-d12	10.507	240	77820	4.000	ug/ml		0.00
Standard Area 1 = 88271			Recovery = 88.16%				
112) IS1_Perylene-d12	11.865	264	97234	4.000	ug/ml		0.00
Standard Area 1 = 110283			Recovery = 88.17%				
System Monitoring Compounds							
4) 2-Fluorophenol	2.279	112	14061	3.283	ug/ml		0.02
Spiked Amount 5.000	Range 15 - 110		Recovery = 65.66%				
7) Phenol-d6	3.398	99	15331	2.793	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 55.86%				
19) Nitrobenzene-d5	4.241	82	9573	1.819	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 72.76%				
45) 2-Fluorobiphenyl	6.009	172	25168	2.313	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 92.52%				
78) 2,4,6-Tribromophenol	7.358	330	11586	5.661	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 113.22%#				

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-3.D
Acq On : 31 Aug 2023 12:17 pm
Operator : Dakota:sz
Sample : WG1822188-3,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 14:26:00 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 12:36:23 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) 4-Terphenyl-d14	9.571	244	41538	2.187	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 87.48%			
Target Compounds						Qvalue
6) 2-Chlorophenol	3.457	128	19705	3.975	ug/ml#	89
8) Phenol	3.411	94	17843	2.796	ug/ml	96
9) Bis(2-chloroethyl)ether	3.457	93	15504	3.506	ug/ml#	64
14) Bis(2-chloroisopropyl)...	4.017	45	25898	3.499	ug/ml#	55
15) 2-Methylphenol	4.023	108	15943	3.783	ug/ml	97
17) n-Nitrosodi-n-propylamine	4.144	70	14214	4.191	ug/ml#	87
18) 3-Methylphenol/4-Methy...	4.188	108	15858	3.643	ug/ml#	78
20) Nitrobenzene	4.259	77	20485	4.004	ug/ml	93
21) Isophorone	4.514	82	34595	3.822	ug/ml#	91
22) 2-Nitrophenol	4.579	139	10655	4.456	ug/ml	93
23) 2,4-Dimethylphenol	4.701	107	18850	4.094	ug/ml	98
24) Bis(2-chloroethoxy)met...	4.778	93	21867	3.724	ug/ml#	94
25) 2,4-Dichlorophenol	4.828	162	21266	4.913	ug/ml#	89
28) Benzaldehyde	3.209	105	14684	3.385	ug/ml	93
29) Acetophenone	4.104	105	22983	3.026	ug/ml#	80
37) 4-Chloroaniline	5.046	65	4274M3	2.697	ug/ml	
39) p-Chloro-m-cresol	5.571	107	16932	4.829	ug/ml#	90
42) Hexachlorocyclopentadiene	5.801	237	14737	4.460	ug/ml	99
43) 2,4,6-Trichlorophenol	5.928	196	17525	5.462	ug/ml	96
44) 2,4,5-Trichlorophenol	5.956	196	18743	5.804	ug/ml	96
47) 2-Nitroaniline	6.211	138	13072	4.724	ug/ml	85
50) Dimethyl phthalate	6.432	163	45849	4.098	ug/ml#	97
52) 2,6-Dinitrotoluene	6.463	165	11977	5.186	ug/ml	89
59) Caprolactam	5.350	55	3963	1.928	ug/ml#	82
60) 1,2,4,5-Tetrachloroben...	5.795	216	23193	4.173	ug/ml#	94
61) Biphenyl	6.090	154	46105	3.701	ug/ml	97
63) 3-Nitroaniline	6.606	138	9082	3.228	ug/ml	90
65) 2,4-Dinitrophenol	6.708	184	7301	5.332	ug/ml	91
66) Dibenzofuran	6.805	168	68793	4.480	ug/ml	90
67) 2,4-Dinitrotoluene	6.839	165	15938	4.602	ug/ml	90
68) 4-Nitrophenol	6.836	65	9608	4.215	ug/ml#	90
70) 2,3,4,6-Tetrachlorophenol	6.951	232	17422	5.390	ug/ml	97
71) Diethyl phthalate	7.116	149	52246	4.031	ug/ml	98

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-3.D
Acq On : 31 Aug 2023 12:17 pm
Operator : Dakota:sz
Sample : WG1822188-3,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 14:26:00 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 12:36:23 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
73)	4-Chlorophenyl phenyl ...	7.168	204	27220	4.524	ug/ml#	82
74)	4-Nitroaniline	7.181	138	10228	3.661	ug/ml#	85
75)	4,6-Dinitro-o-cresol	7.218	198	10116	5.399	ug/ml#	63
76)	NDPA/DPA	7.290	169	44991	4.261	ug/ml	95
79)	4-Bromophenyl phenyl e...	7.622	248	18007	4.793	ug/ml#	80
86)	Atrazine	7.843	200	15162	4.723	ug/ml#	73
90)	Carbazole	8.253	167	80011	4.378	ug/ml	97
91)	Di-n-butylphthalate	8.688	149	96326	4.476	ug/ml	99
96)	Butyl benzyl phthalate	10.096	149	46749	4.778	ug/ml#	82
105)	3,3'-Dichlorobenzidine	10.535	252	20352	2.170	ug/ml#	93
107)	Bis(2-ethylhexyl)phtha...	10.709	149	71329	5.235	ug/ml#	86
108)	Di-n-octylphthalate	11.343	149	121706	4.922	ug/ml#	72

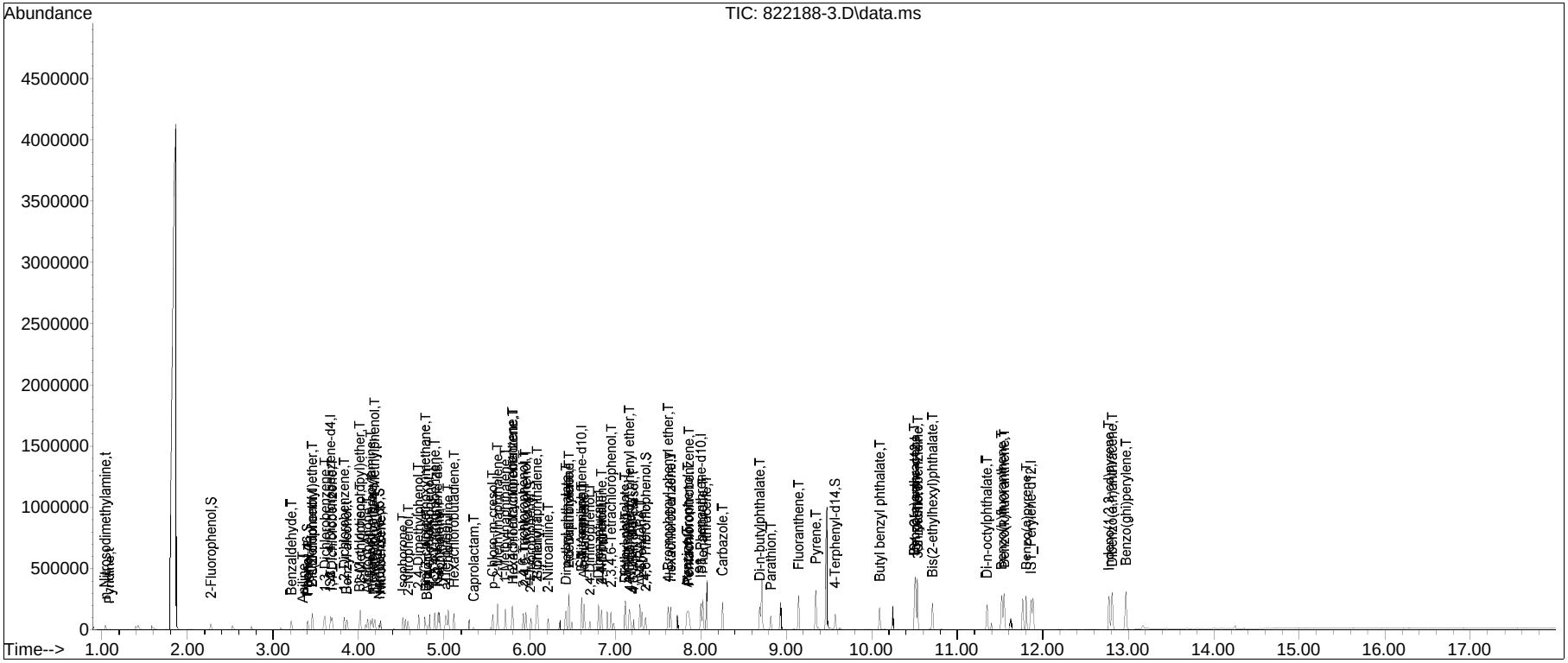
(#) = qualifier out of range (m) = manual integration (+) = signals summed

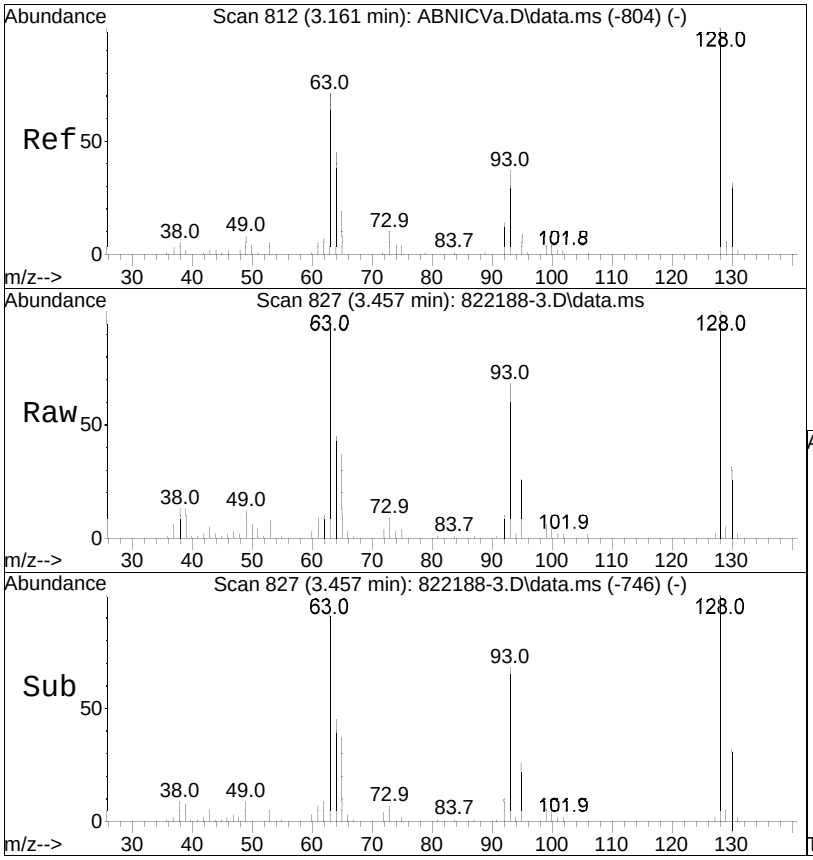
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-3.D
Acq On : 31 Aug 2023 12:17 pm
Operator : Dakota:sz
Sample : WG1822188-3,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 14:26:00 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 12:36:23 2023
Response via : Initial Calibration

Sub List : 8270TCL_REV2 - TCL/CT/MA1lvi\AP90831.D•

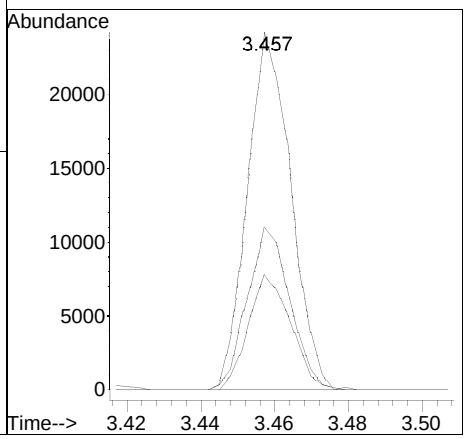


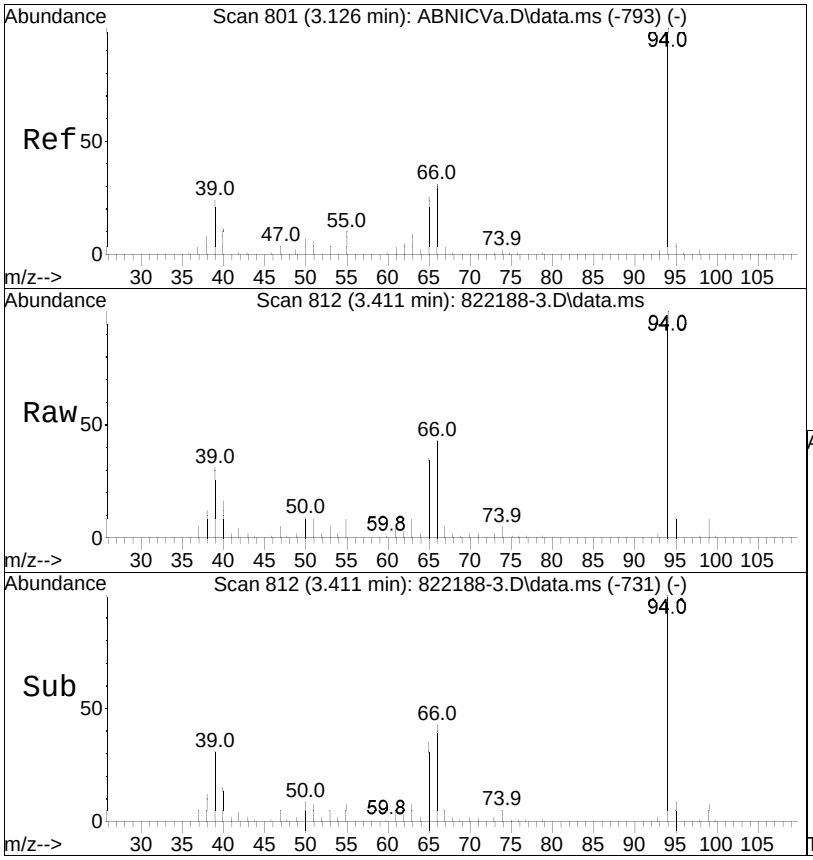


#6
2-Chlorophenol
Concen: 3.98 ug/ml
RT: 3.457 min Scan# 827
Delta R.T. 0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:128 Resp: 19705

Ion	Ratio	Lower	Upper
128	100		
64	44.8	45.1	67.7#
130	31.6	26.2	39.4

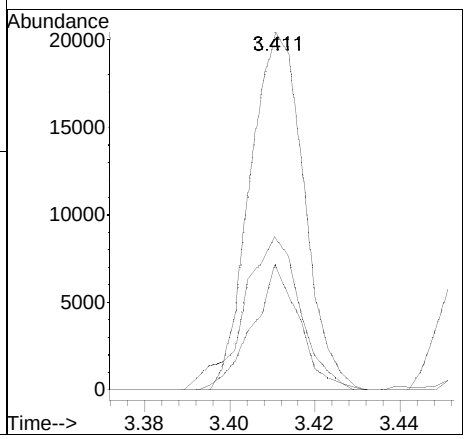


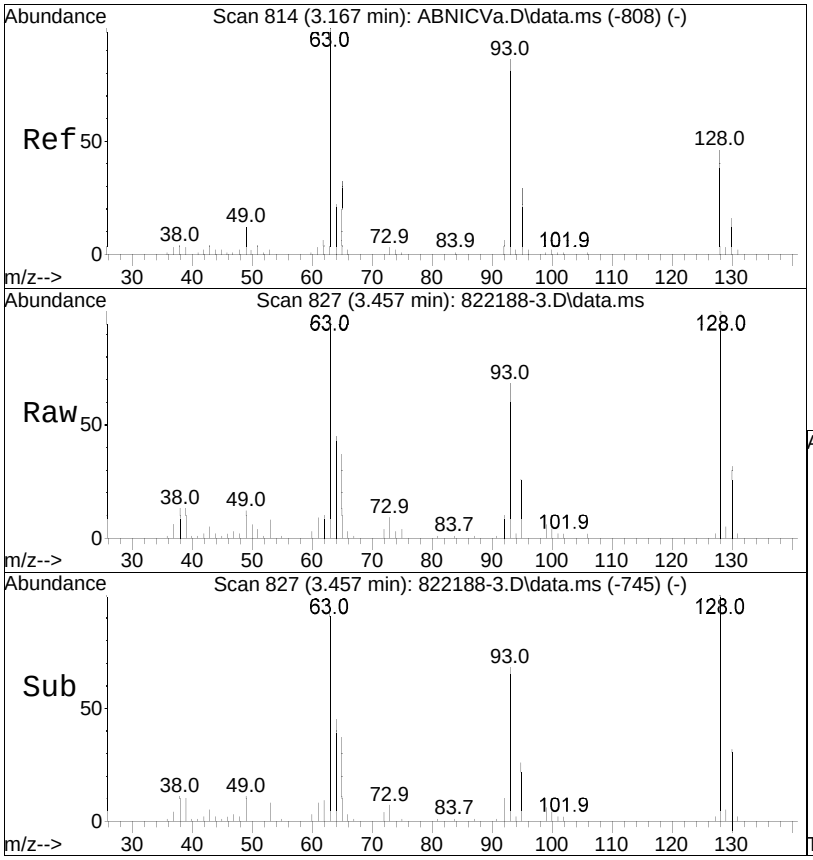


#8
Phenol
Concen: 2.80 ug/ml
RT: 3.411 min Scan# 812
Delta R.T. 0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion: 94 Resp: 17843

Ion	Ratio	Lower	Upper
94	100		
65	30.6	26.0	39.0
66	45.3	33.8	50.8

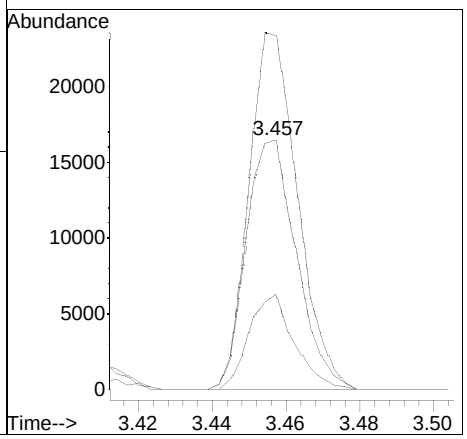


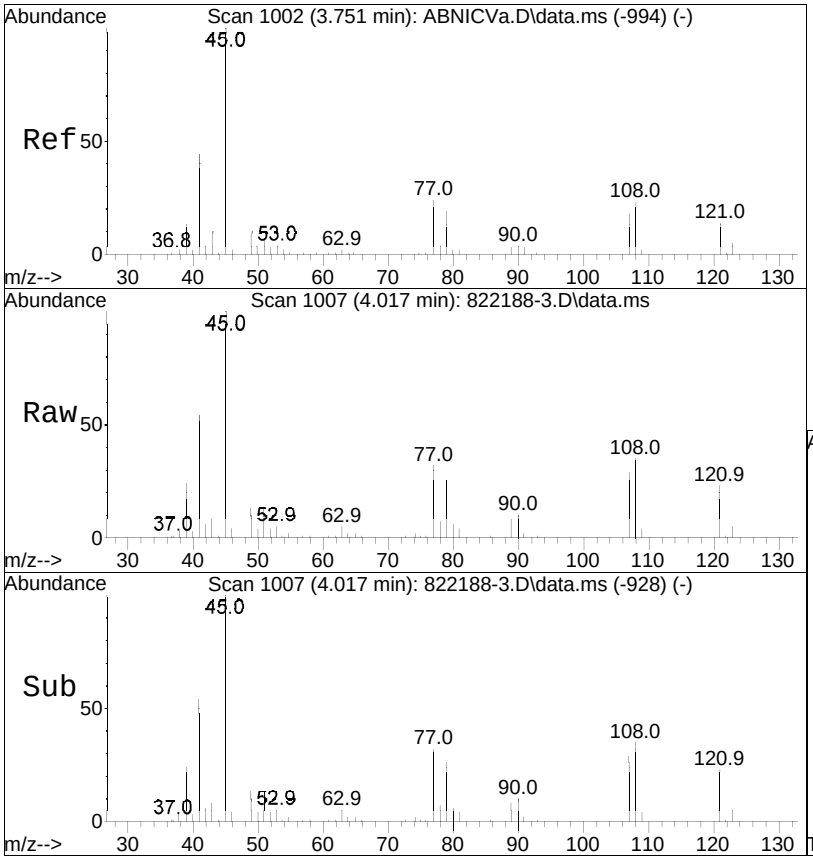


#9
Bis(2-chloroethyl)ether
Concen: 3.51 ug/ml
RT: 3.457 min Scan# 827
Delta R.T. 0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion: 93 Resp: 15504

Ion	Ratio	Lower	Upper
93	100		
63	138.8	74.6	111.8#
95	34.4	25.9	38.9

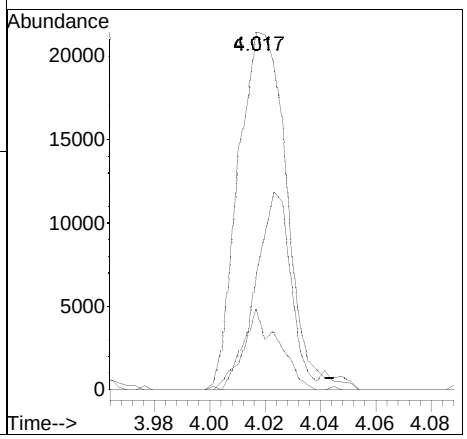


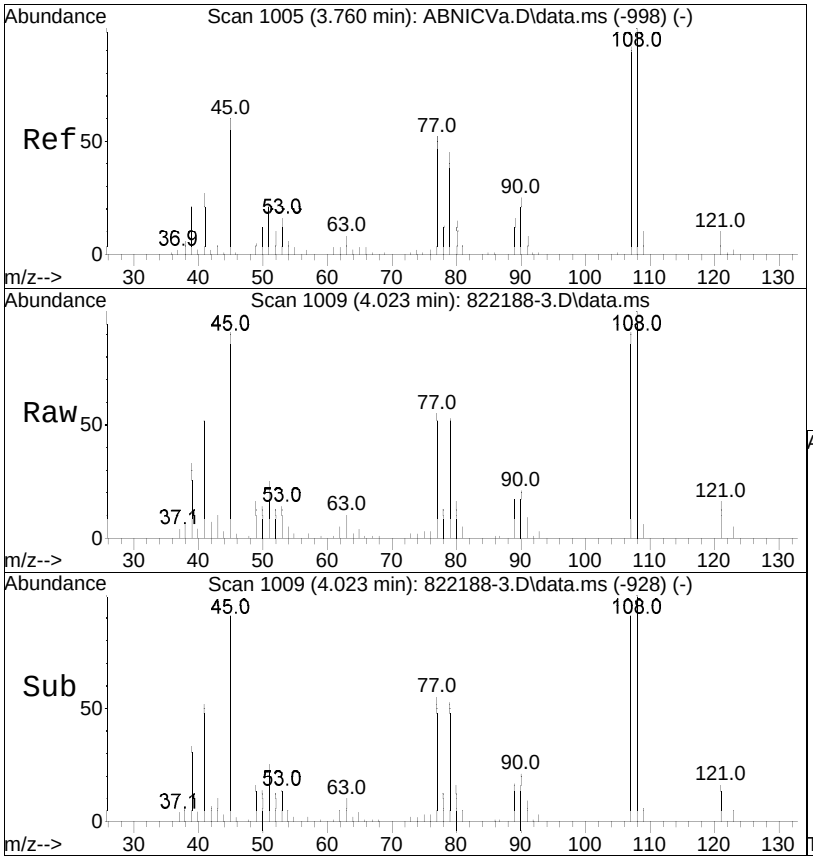


#14
Bis(2-chloroisopropyl)ether
Concen: 3.50 ug/ml
RT: 4.017 min Scan# 1007
Delta R.T. -0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion: 45 Resp: 25898

Ion	Ratio	Lower	Upper
45	100		
121	16.5	9.8	14.6#
77	42.6	6.1	9.1#

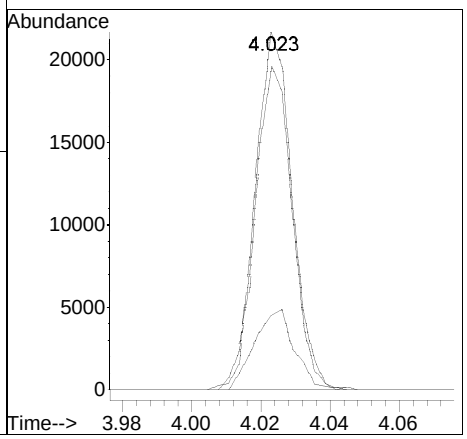


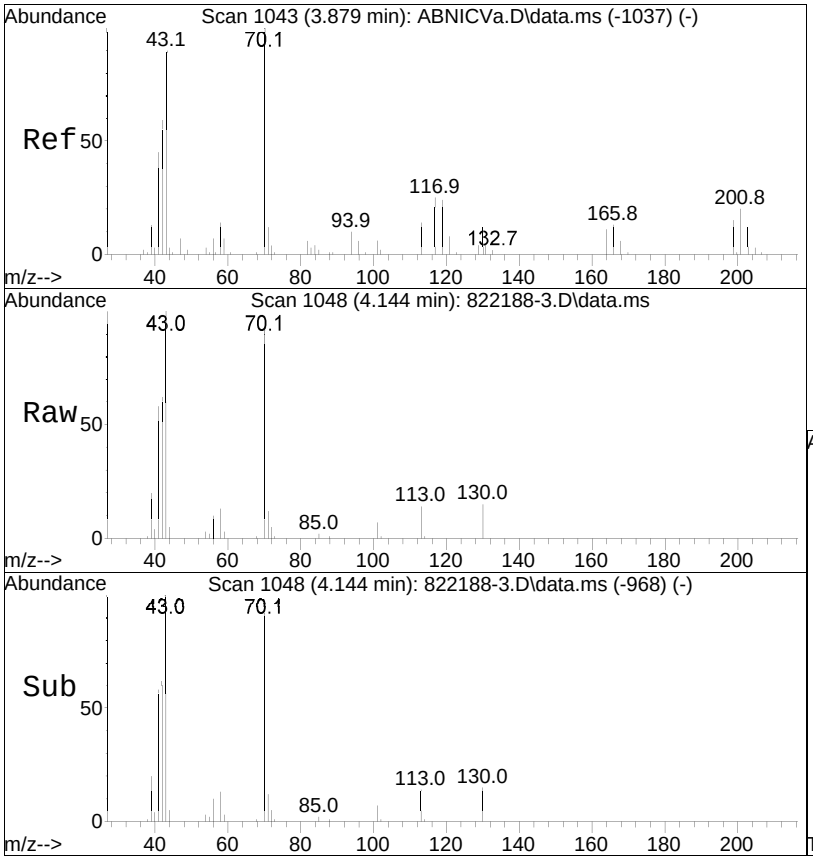


#15
2-Methylphenol
Concen: 3.78 ug/ml
RT: 4.023 min Scan# 1009
Delta R.T. 0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:108 Resp: 15943

Ion	Ratio	Lower	Upper
108	100		
107	91.5	70.7	106.1
90	24.6	18.7	28.1

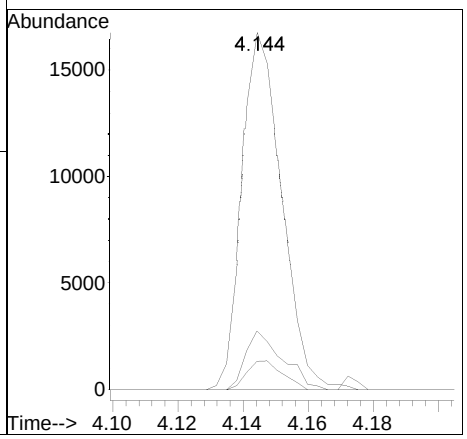


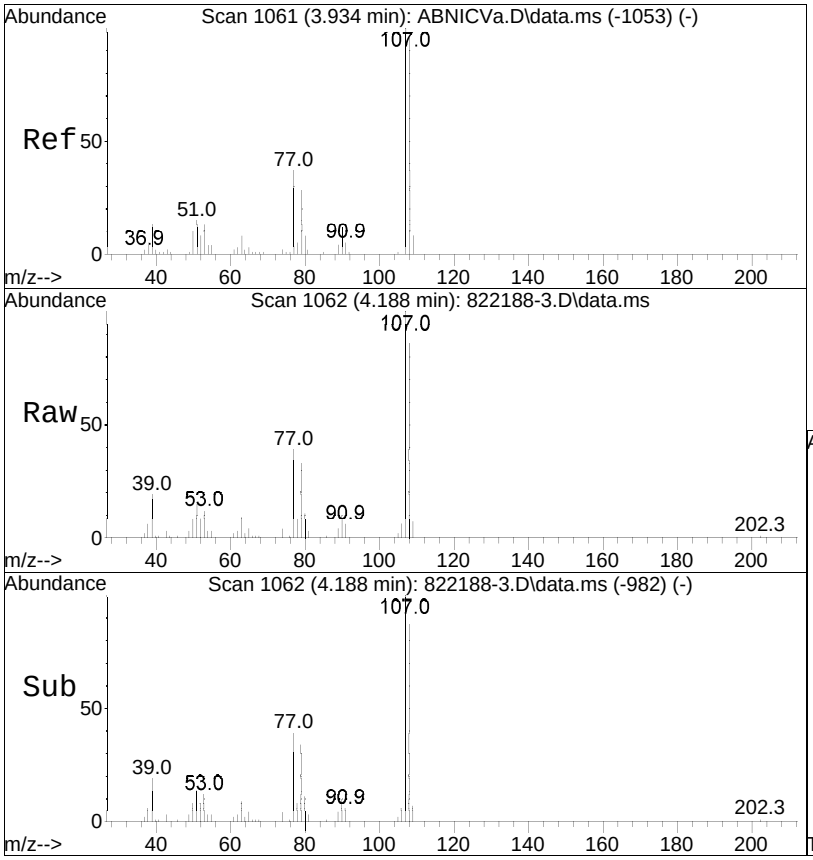


#17
n-Nitrosodi-n-propylamine
Concen: 4.19 ug/ml
RT: 4.144 min Scan# 1048
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion: 70 Resp: 14214

Ion	Ratio	Lower	Upper
70	100		
130	15.3	18.2	27.4#
101	7.2	7.8	11.8#

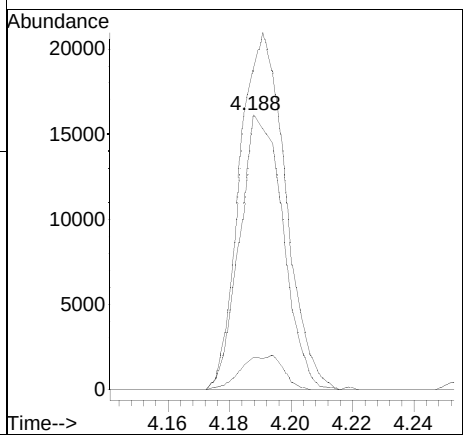


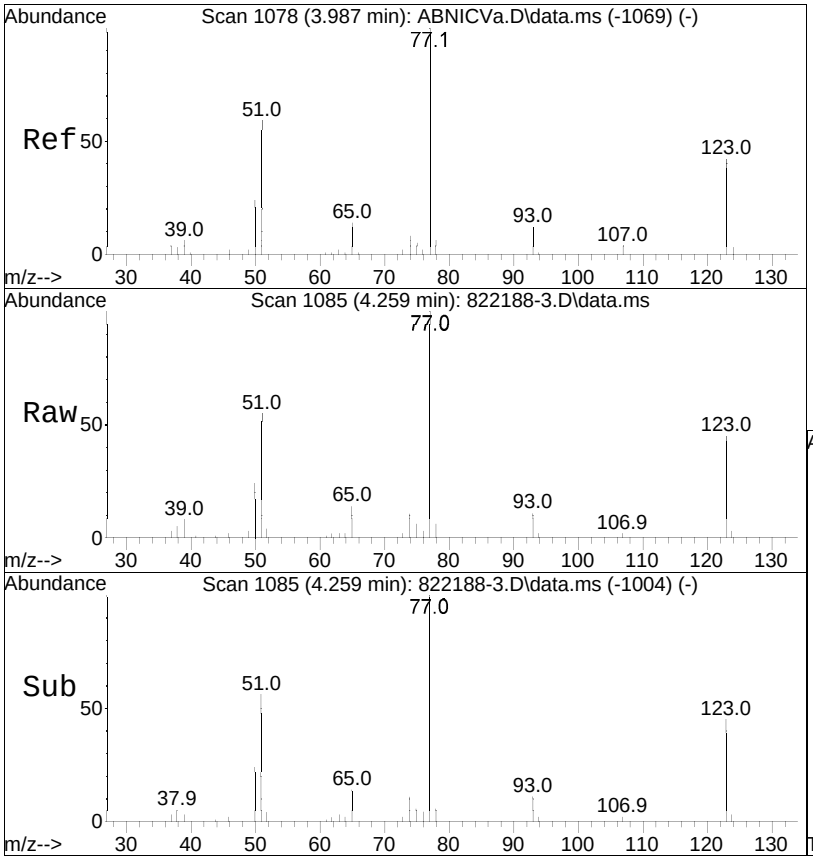


#18
3-Methylphenol/4-Methylphenol
Concen: 3.64 ug/ml
RT: 4.188 min Scan# 1062
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:108 Resp: 15858

Ion	Ratio	Lower	Upper
108	100		
107	136.5	88.6	132.8#
90	12.3	8.8	13.2

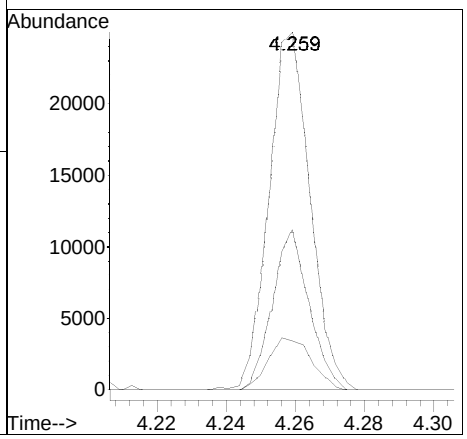


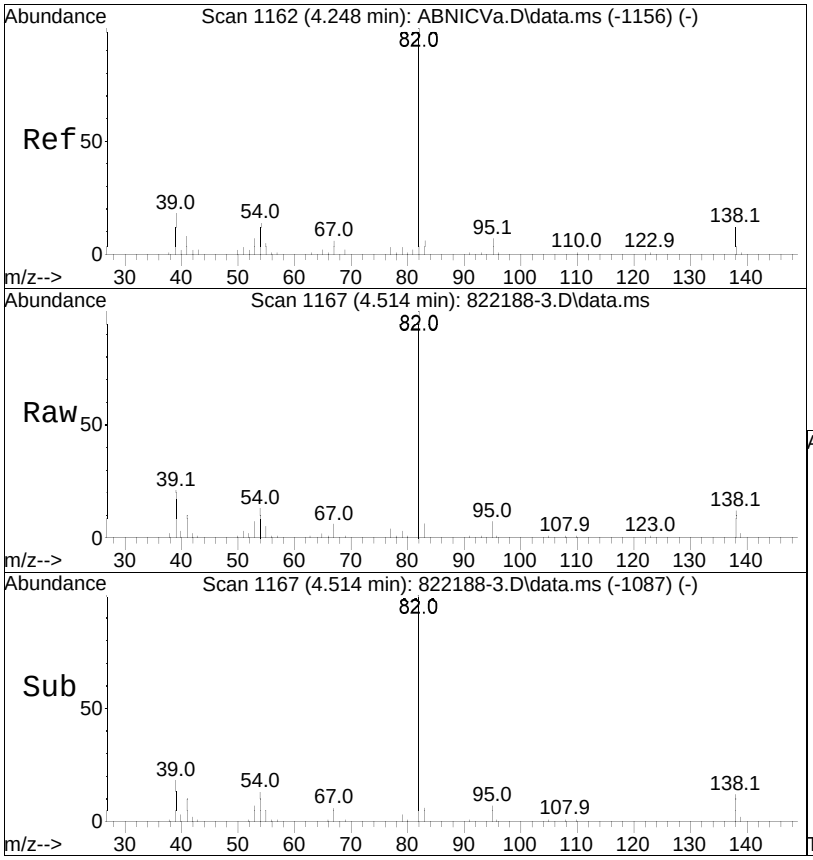


#20
Nitrobenzene
Concen: 4.00 ug/ml
RT: 4.259 min Scan# 1085
Delta R.T. 0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion: 77 Resp: 20485

Ion	Ratio	Lower	Upper
77	100		
123	40.1	36.3	54.5
65	15.4	11.6	17.4

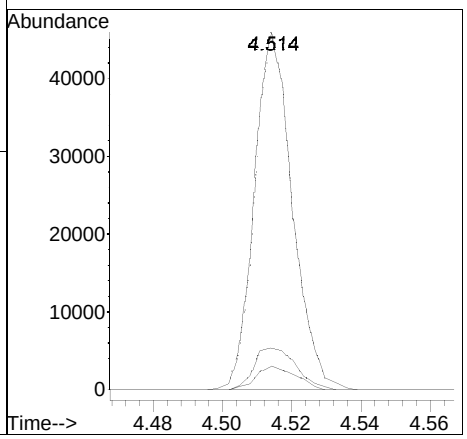


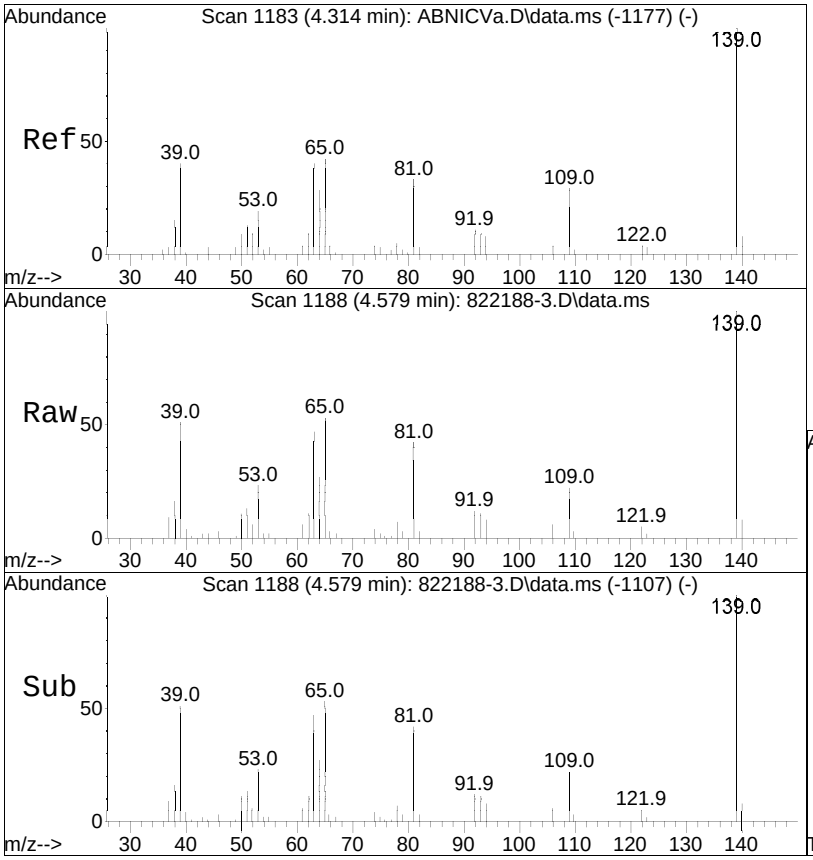


#21
Isophorone
Concen: 3.82 ug/ml
RT: 4.514 min Scan# 1167
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion: 82 Resp: 34595

Ion	Ratio	Lower	Upper
82	100		
138	13.2	14.7	22.1#
95	7.1	5.2	7.8

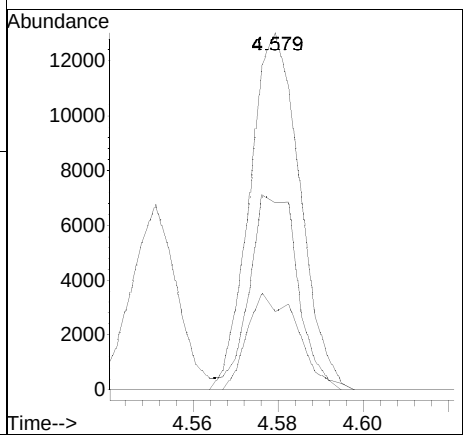


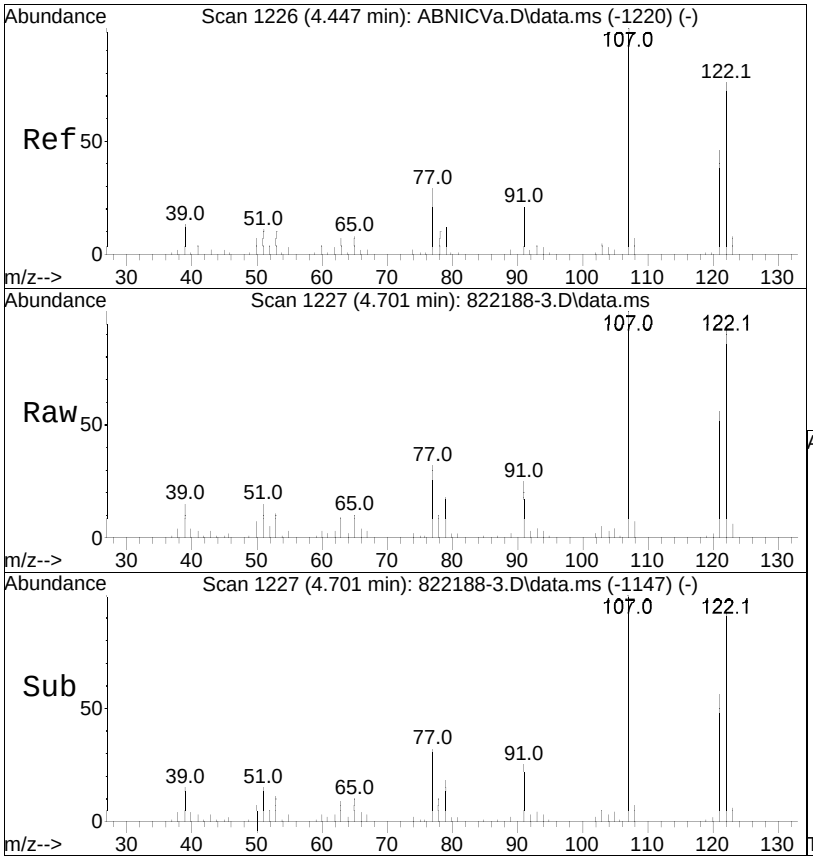


#22
2-Nitrophenol
Concen: 4.46 ug/ml
RT: 4.579 min Scan# 1188
Delta R.T. 0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:139 Resp: 10655

Ion	Ratio	Lower	Upper
139	100		
109	27.3	19.4	29.0
65	52.5	46.1	69.1

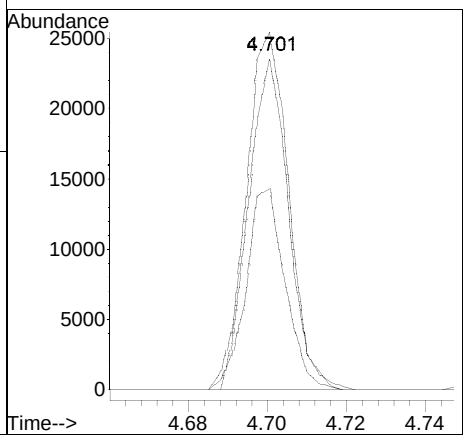


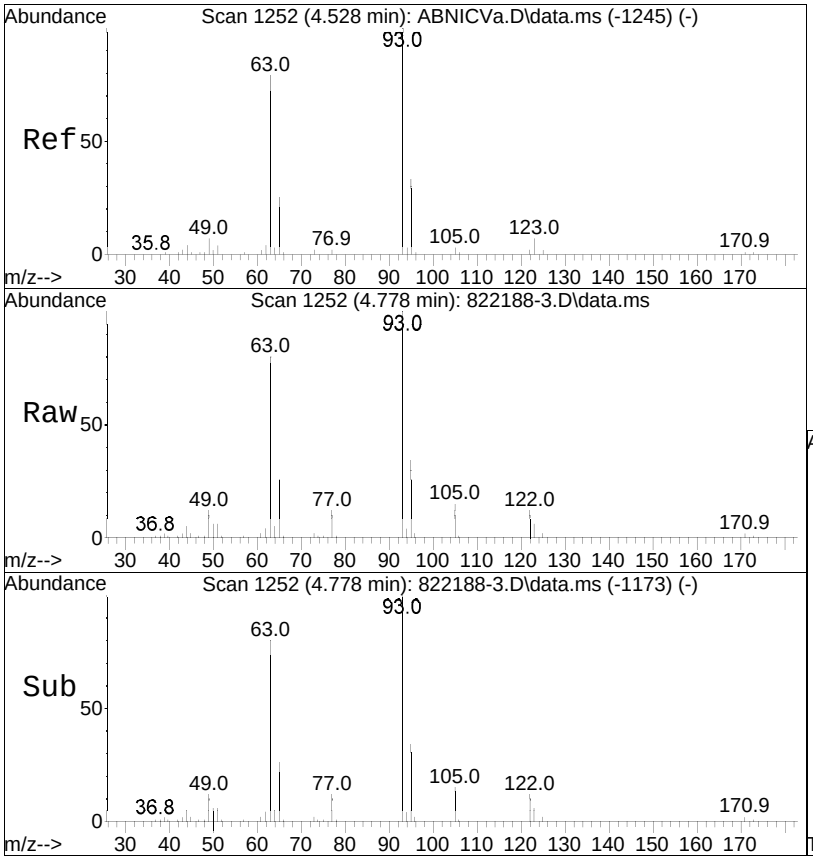


#23
2,4-Dimethylphenol
Concen: 4.09 ug/ml
RT: 4.701 min Scan# 1227
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:107 Resp: 18850

Ion	Ratio	Lower	Upper
107	100		
121	52.1	40.0	60.0
122	86.8	70.2	105.4

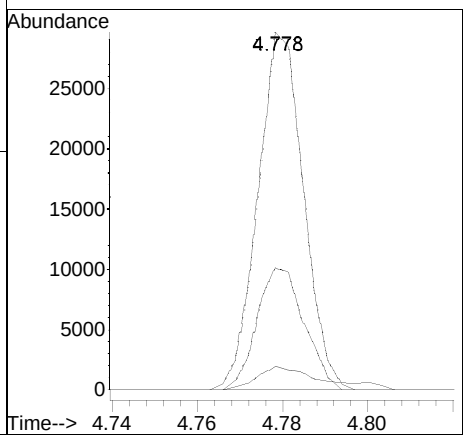


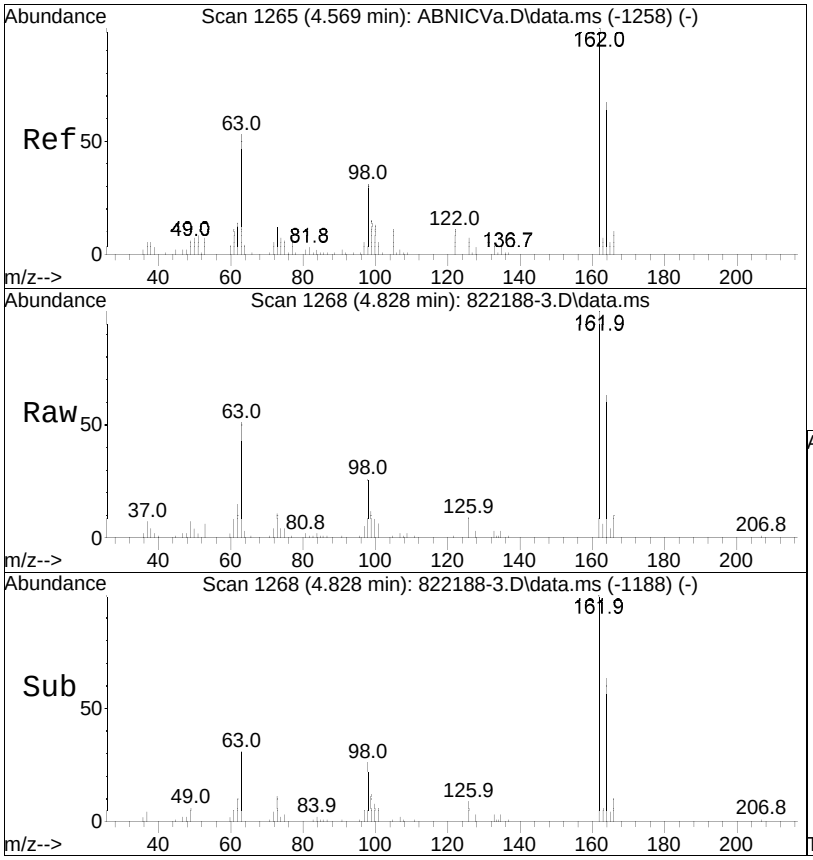


#24
Bis(2-chloroethoxy)methane
Concen: 3.72 ug/ml
RT: 4.778 min Scan# 1252
Delta R.T. -0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion: 93 Resp: 21867

Ion	Ratio	Lower	Upper
93	100		
95	35.4	25.8	38.8
123	9.1	10.1	15.1#

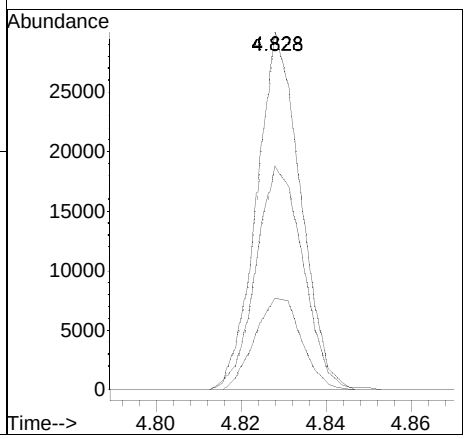


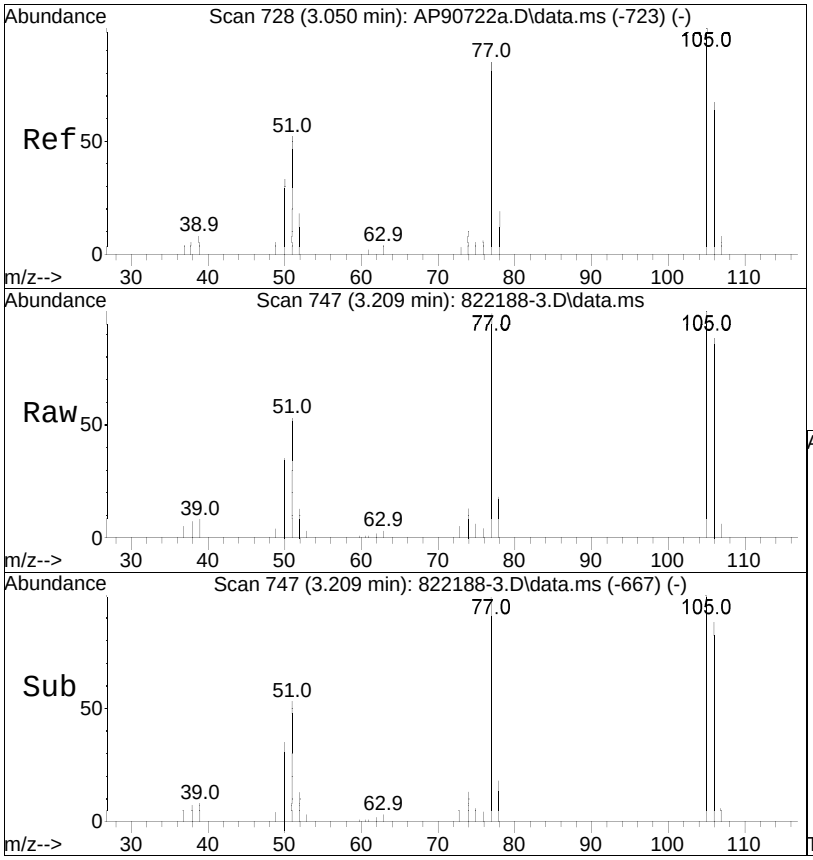


#25
2,4-Dichlorophenol
Concen: 4.91 ug/ml
RT: 4.828 min Scan# 1268
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:162 Resp: 21266

Ion	Ratio	Lower	Upper
162	100		
164	67.7	51.0	76.4
98	27.5	32.2	48.2#

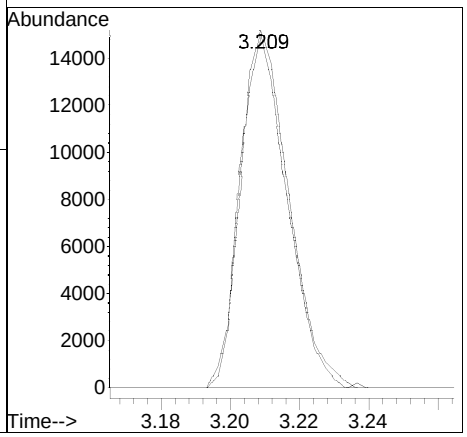


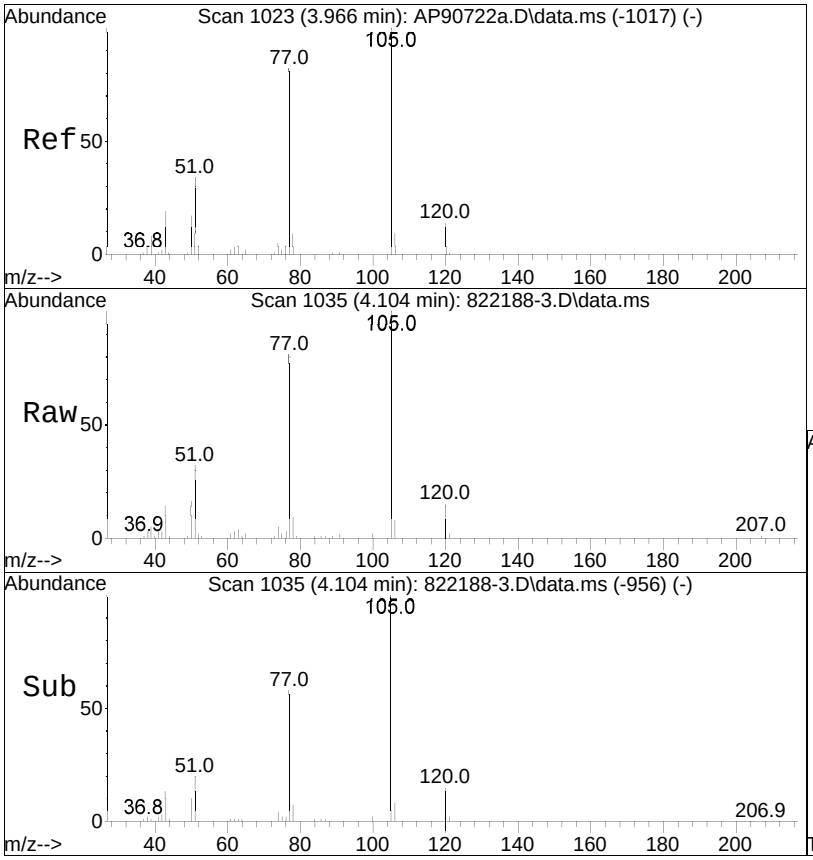


#28
Benzaldehyde
Concen: 3.38 ug/ml
RT: 3.209 min Scan# 747
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:105 Resp: 14684

Ion	Ratio	Lower	Upper
105	100		
77	95.5	82.2	123.4

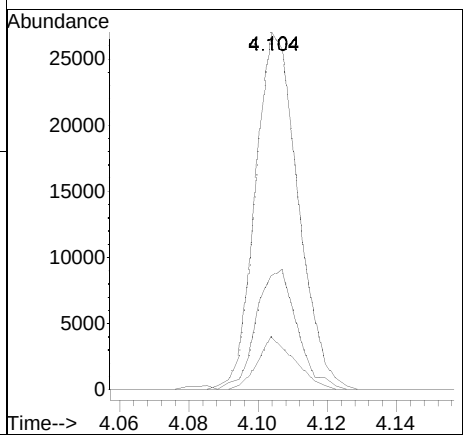


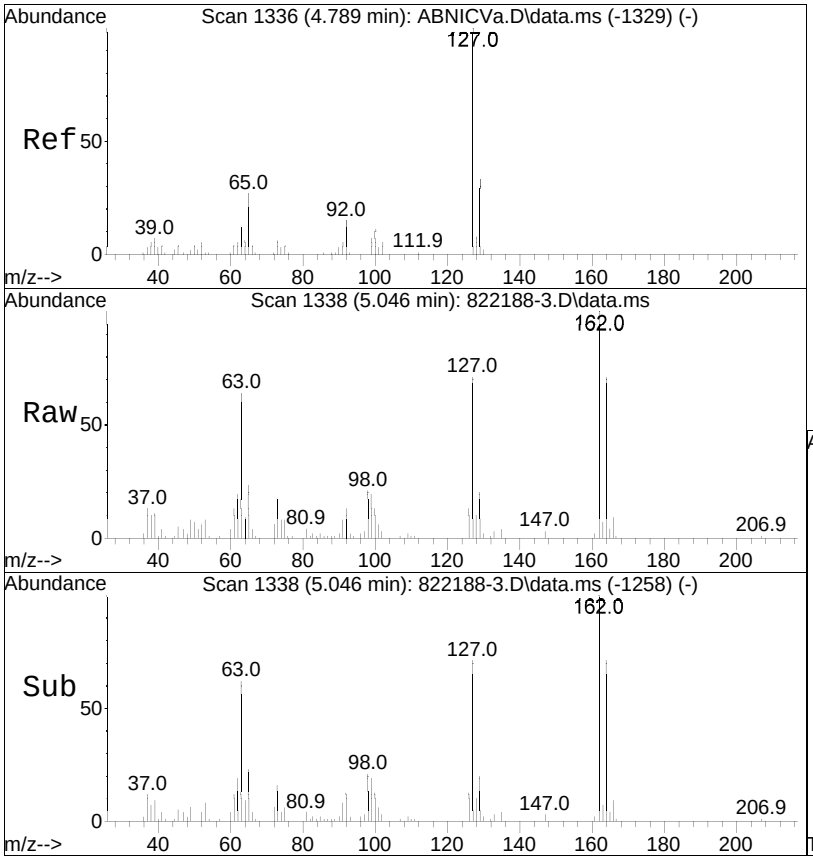


#29
Acetophenone
Concen: 3.03 ug/ml
RT: 4.104 min Scan# 1035
Delta R.T. -0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:105 Resp: 22983

Ion	Ratio	Lower	Upper
105	100		
120	12.9	20.5	30.7#
51	32.8	34.9	52.3#

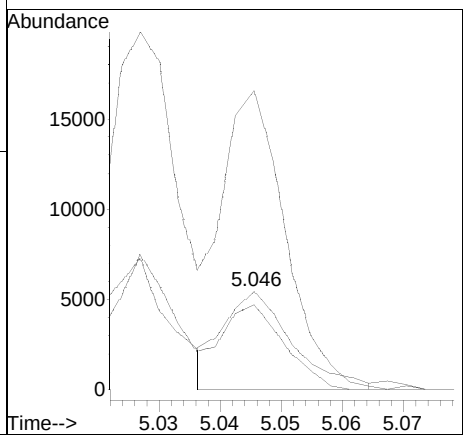


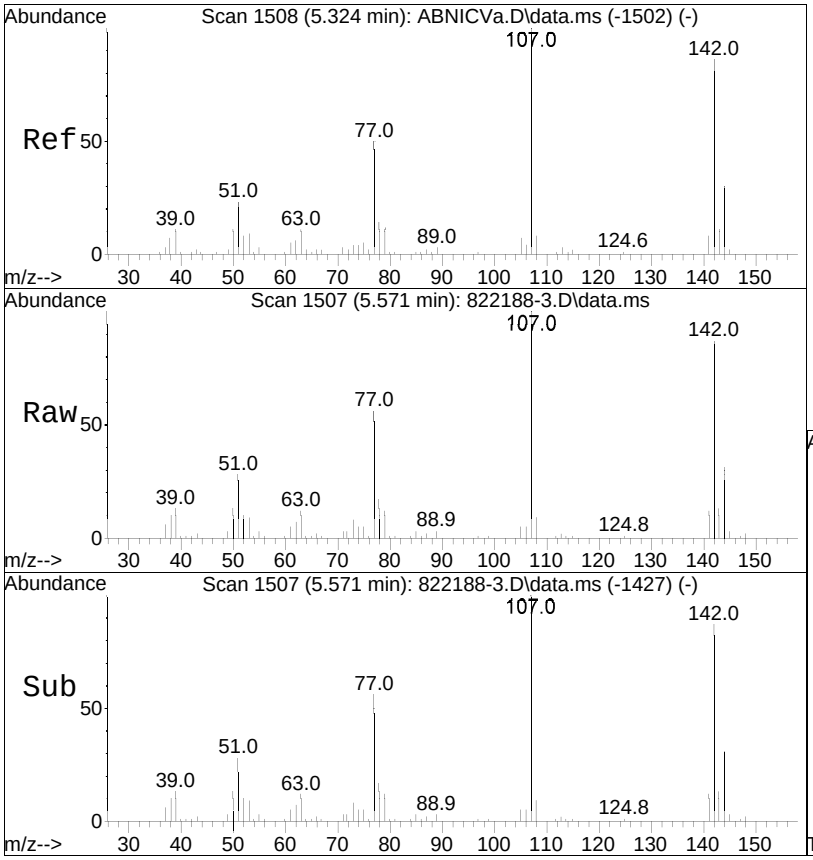


#37
4-Chloroaniline
Concen: 2.70 ug/ml M3
RT: 5.046 min Scan# 1338
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion: 65 Resp: 4274

Ion	Ratio	Lower	Upper
65	100		
127	370.2	237.6	356.4#
129	126.0	76.3	114.5#

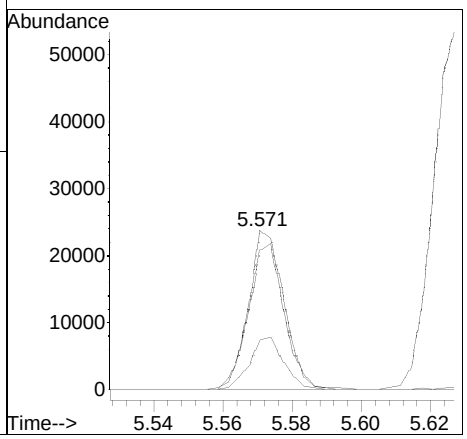


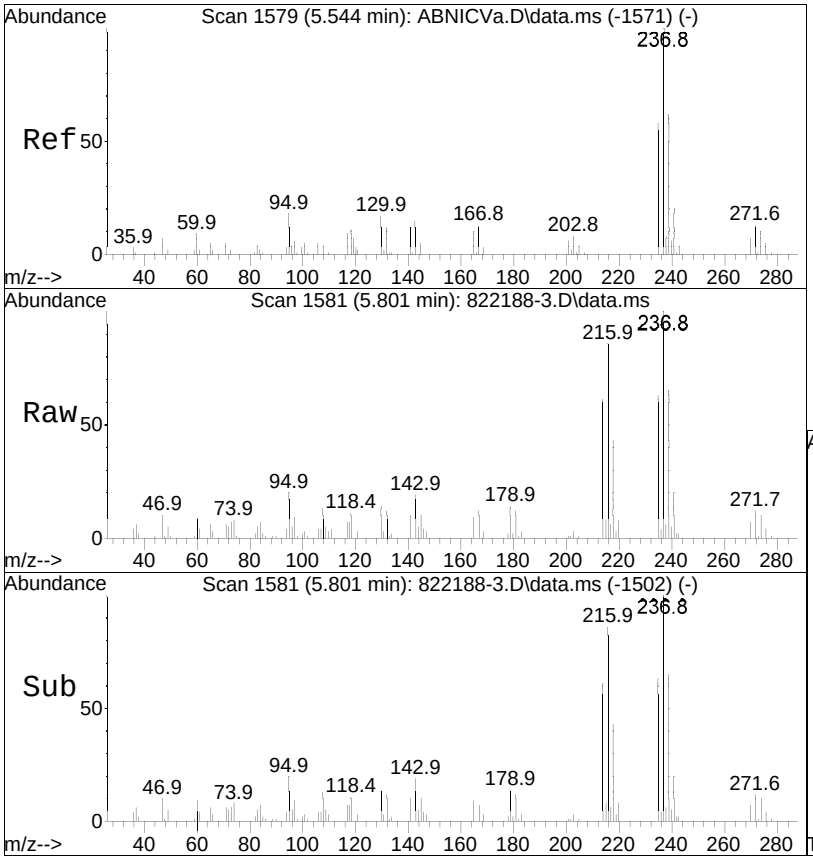


#39
p-Chloro-m-cresol
Concen: 4.83 ug/ml
RT: 5.571 min Scan# 1507
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:107 Resp: 16932

Ion	Ratio	Lower	Upper
107	100		
144	31.4	20.9	31.3#
142	91.8	66.1	99.1

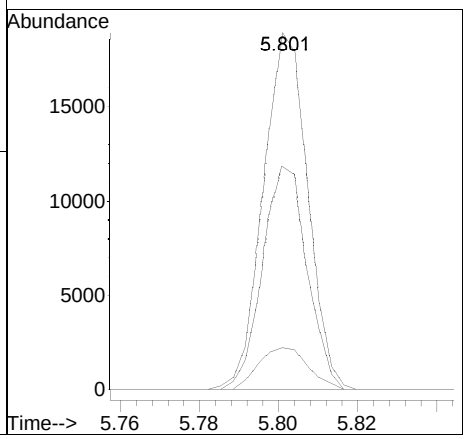


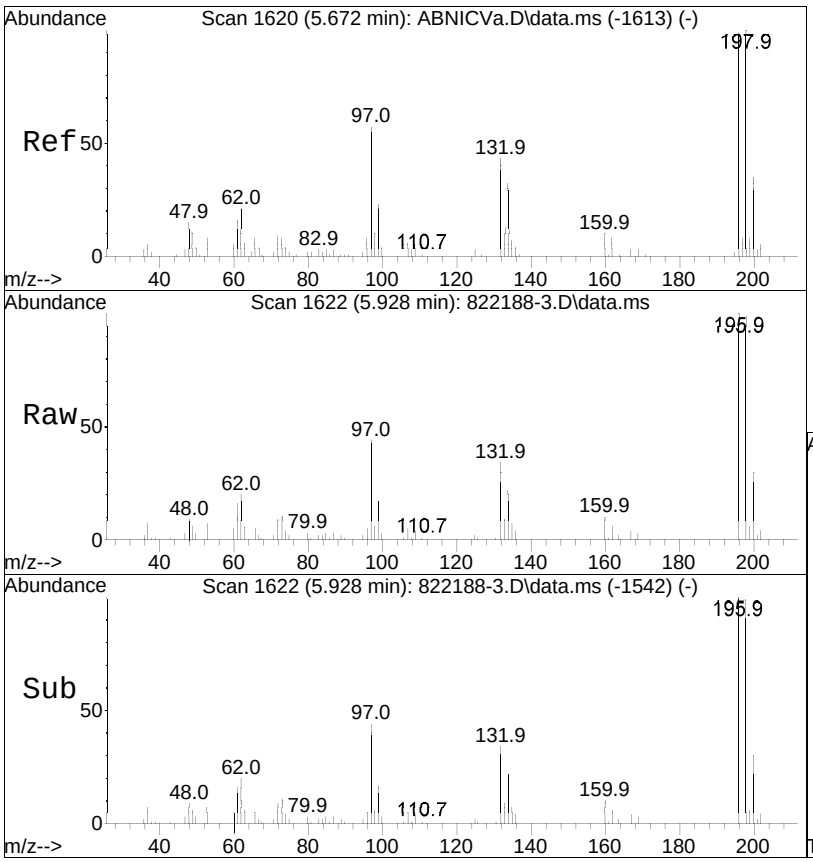


#42
Hexachlorocyclopentadiene
Concen: 4.46 ug/ml
RT: 5.801 min Scan# 1581
Delta R.T. -0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:237 Resp: 14737

Ion	Ratio	Lower	Upper
237	100		
235	63.0	49.7	74.5
272	13.3	9.8	14.6

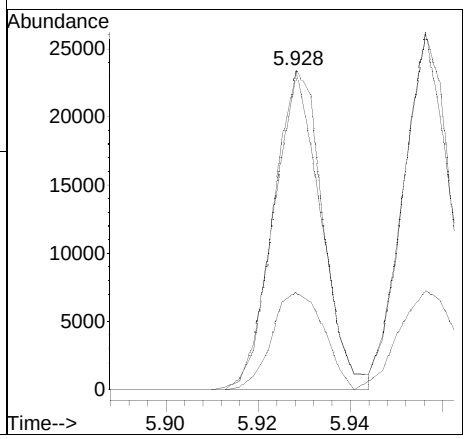


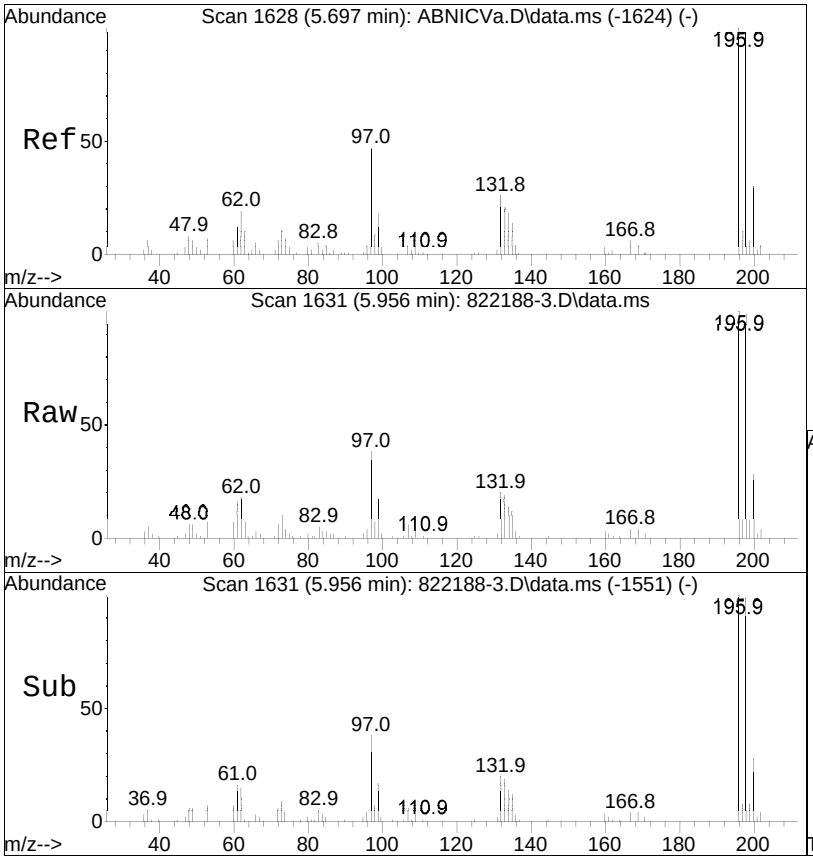


#43
2,4,6-Trichlorophenol
Concen: 5.46 ug/ml
RT: 5.928 min Scan# 1622
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:196 Resp: 17525

Ion	Ratio	Lower	Upper
196	100		
198	93.3	77.5	116.3
200	31.8	23.8	35.6

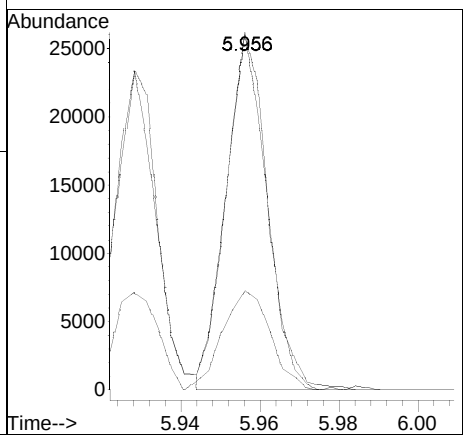


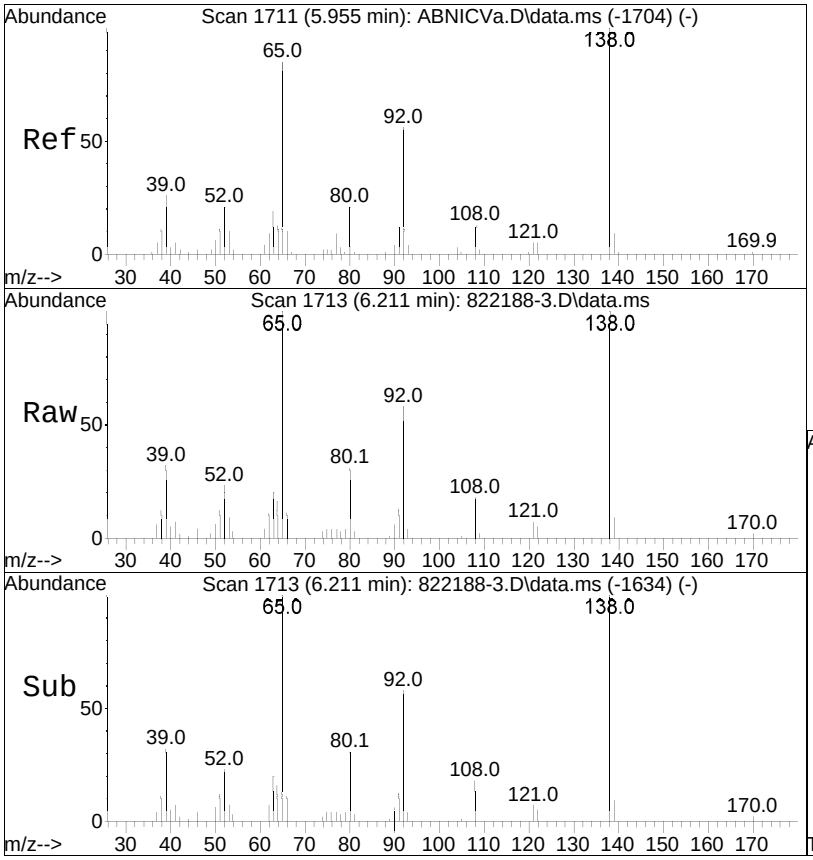


#44
2,4,5-Trichlorophenol
Concen: 5.80 ug/ml
RT: 5.956 min Scan# 1631
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:196 Resp: 18743

Ion	Ratio	Lower	Upper
196	100		
200	32.7	25.4	38.0
198	101.8	78.0	117.0

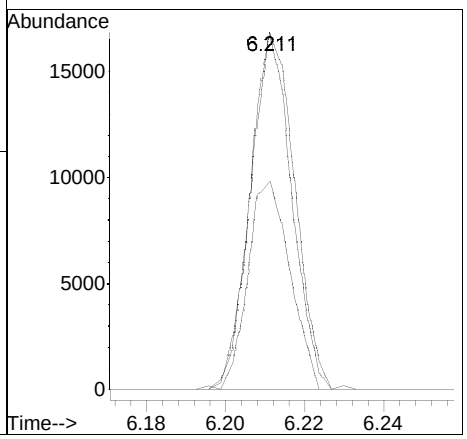


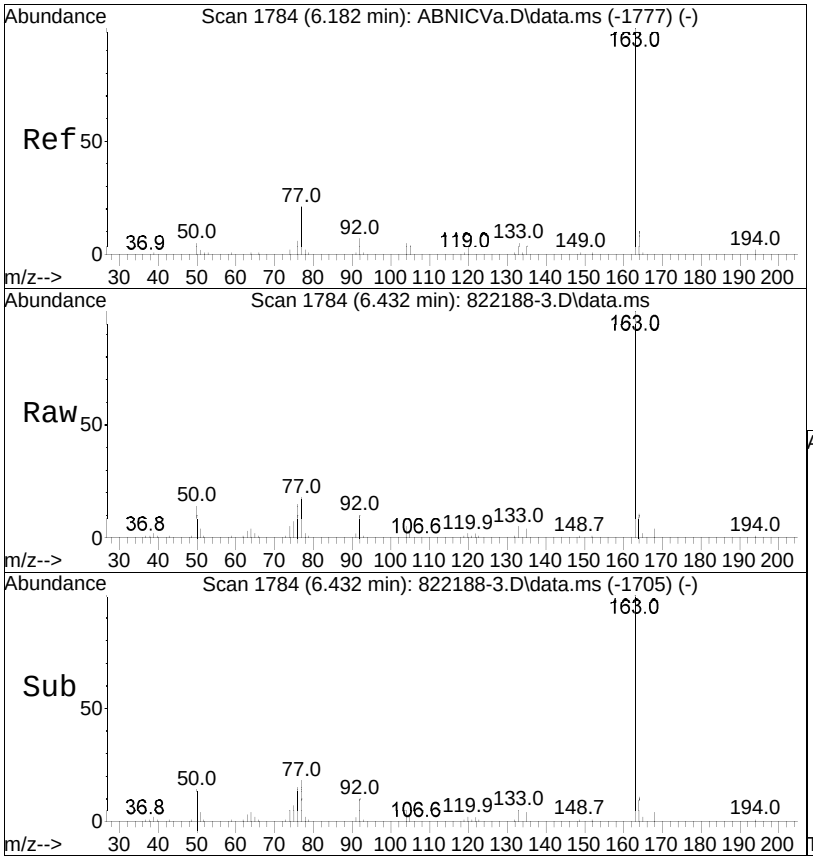


#47
2-Nitroaniline
Concen: 4.72 ug/ml
RT: 6.211 min Scan# 1713
Delta R.T. -0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:138 Resp: 13072

Ion	Ratio	Lower	Upper
138	100		
92	55.3	53.5	80.3
65	92.3	86.3	129.5

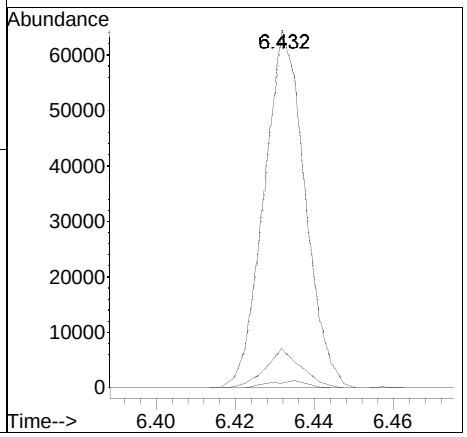


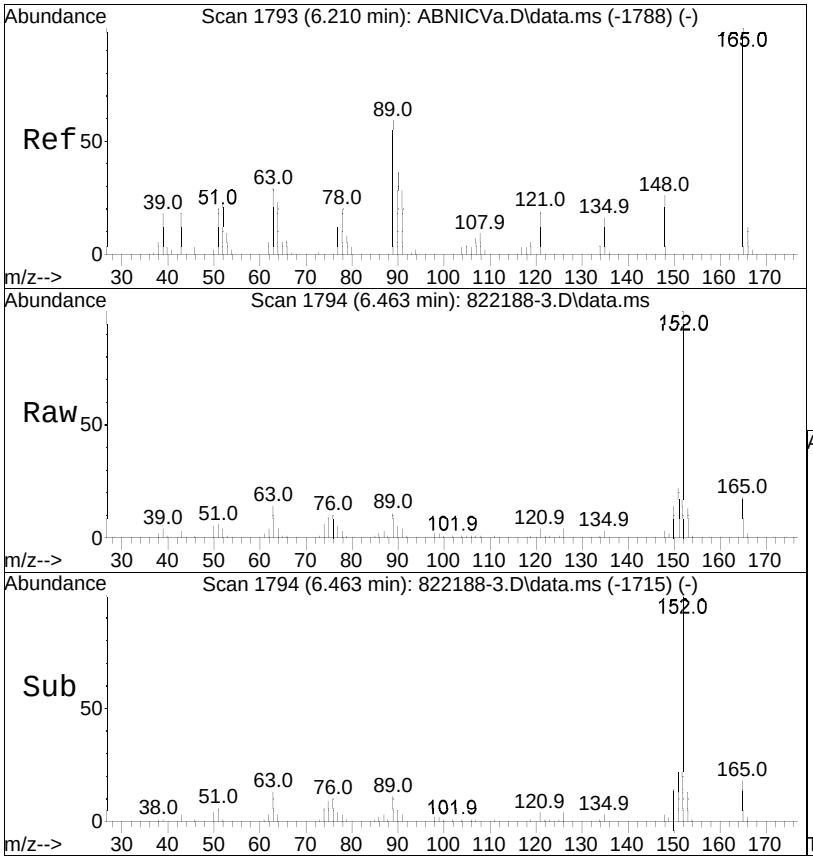


#50
Dimethyl phthalate
Concen: 4.10 ug/ml
RT: 6.432 min Scan# 1784
Delta R.T. -0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:163 Resp: 45849

Ion	Ratio	Lower	Upper
163	100		
194	1.8	3.5	5.3#
164	9.6	7.9	11.9

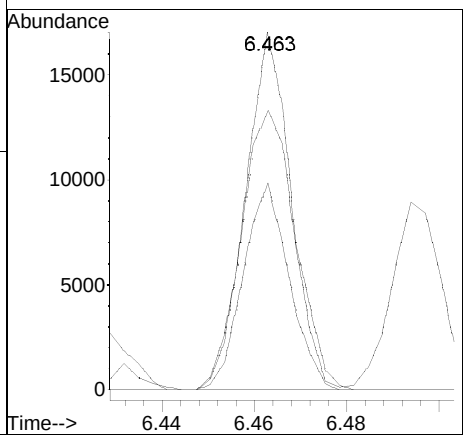


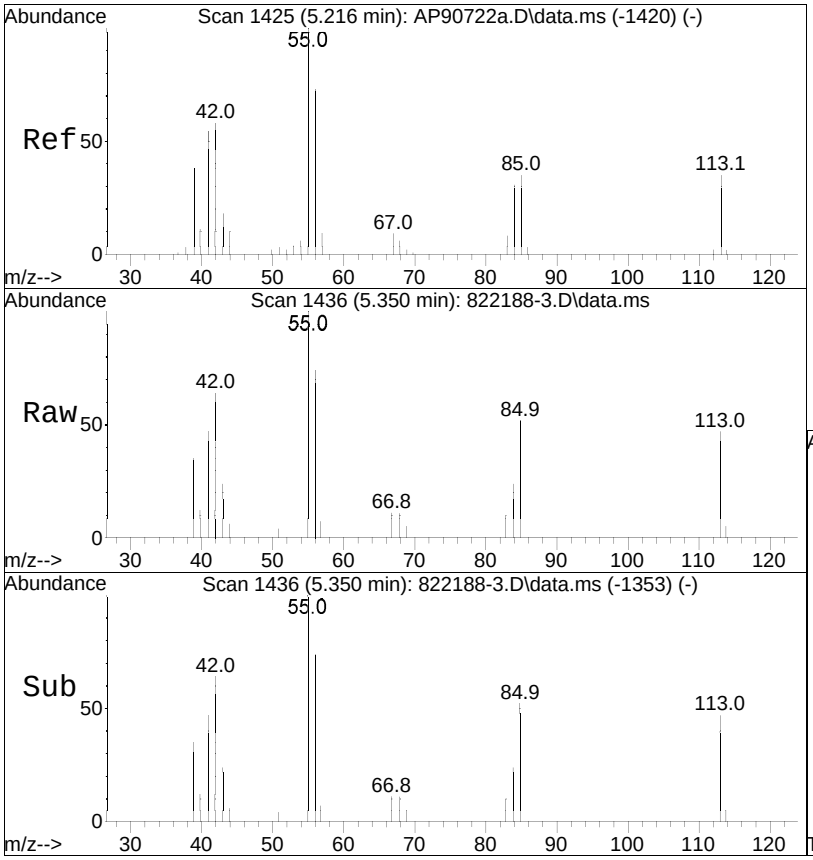


#52
2,6-Dinitrotoluene
Concen: 5.19 ug/ml
RT: 6.463 min Scan# 1794
Delta R.T. -0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:165 Resp: 11977

Ion	Ratio	Lower	Upper
165	100		
89	56.8	54.2	81.2
63	87.7	64.2	96.2

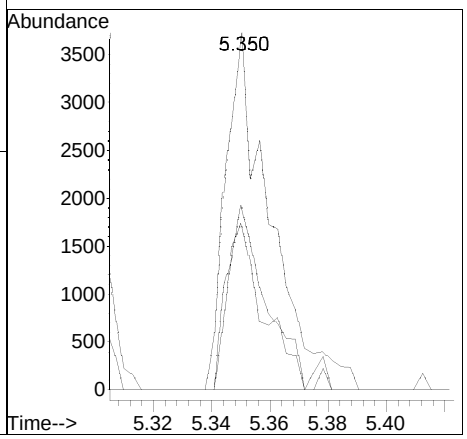


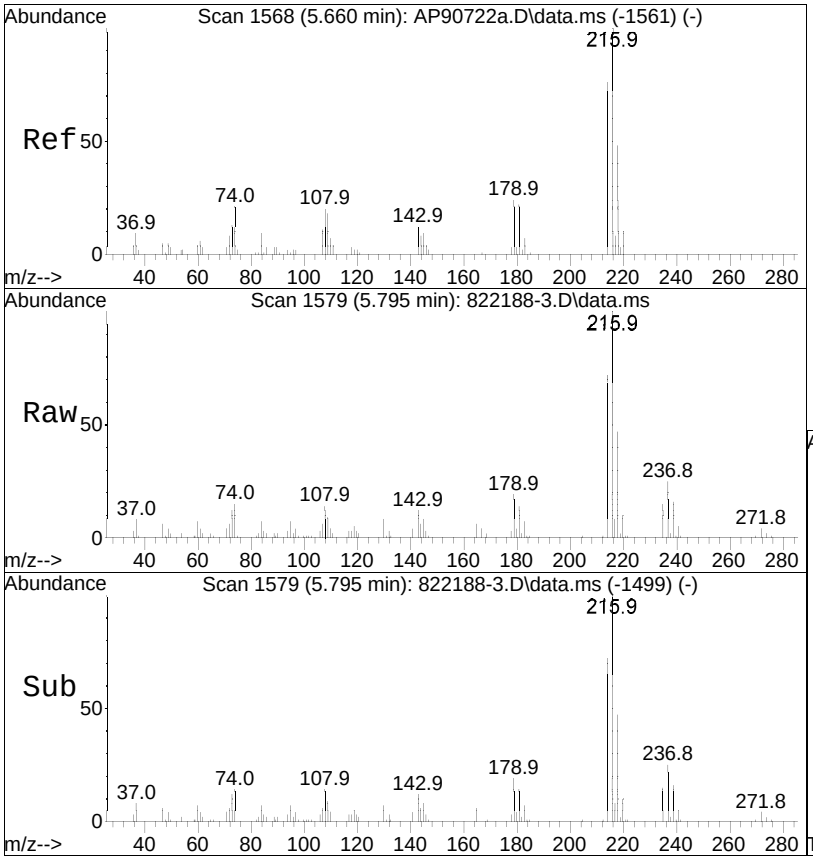


#59
Caprolactam
Concen: 1.93 ug/ml
RT: 5.350 min Scan# 1436
Delta R.T. 0.009 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion: 55 Resp: 3963

Ion	Ratio	Lower	Upper
55	100		
85	44.9	19.8	29.6#
113	38.4	29.6	44.4

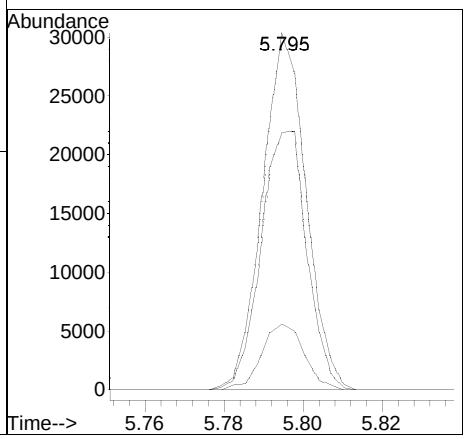


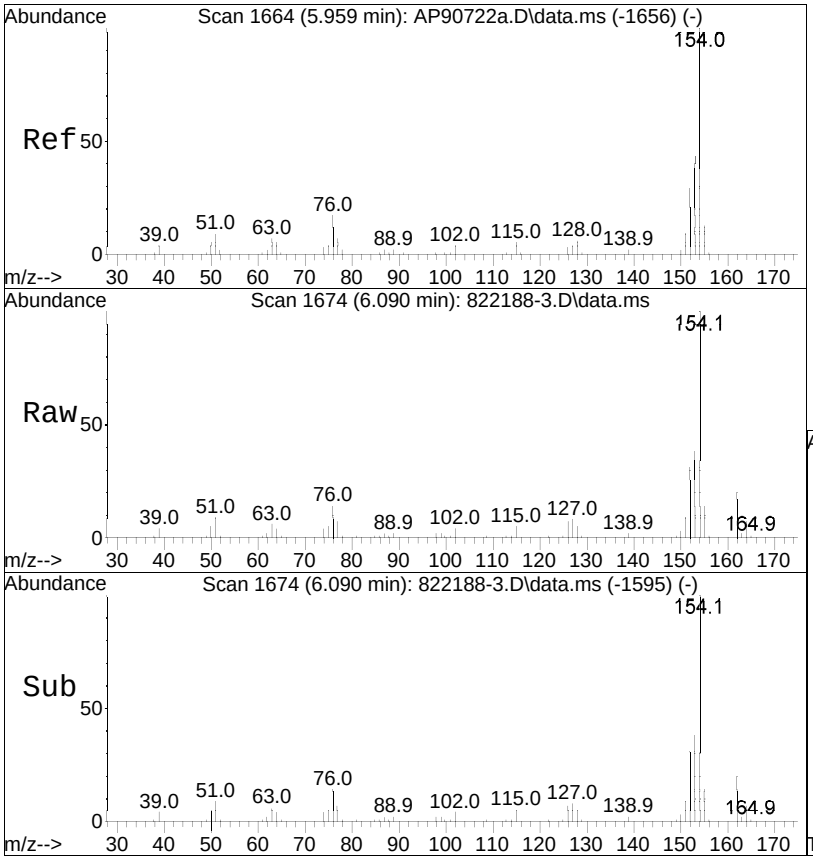


#60
1,2,4,5-Tetrachlorobenzene
Concen: 4.17 ug/ml
RT: 5.795 min Scan# 1579
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:216 Resp: 23193

Ion	Ratio	Lower	Upper
216	100		
214	76.1	63.7	95.5
179	18.0	19.0	28.6#

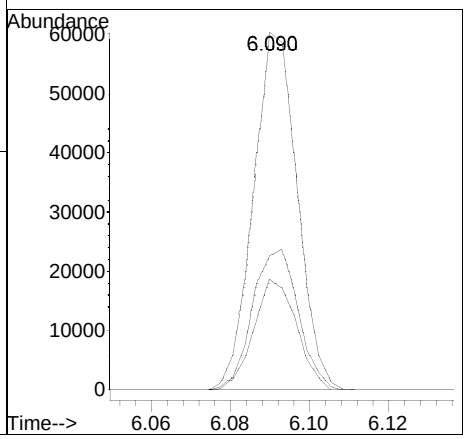


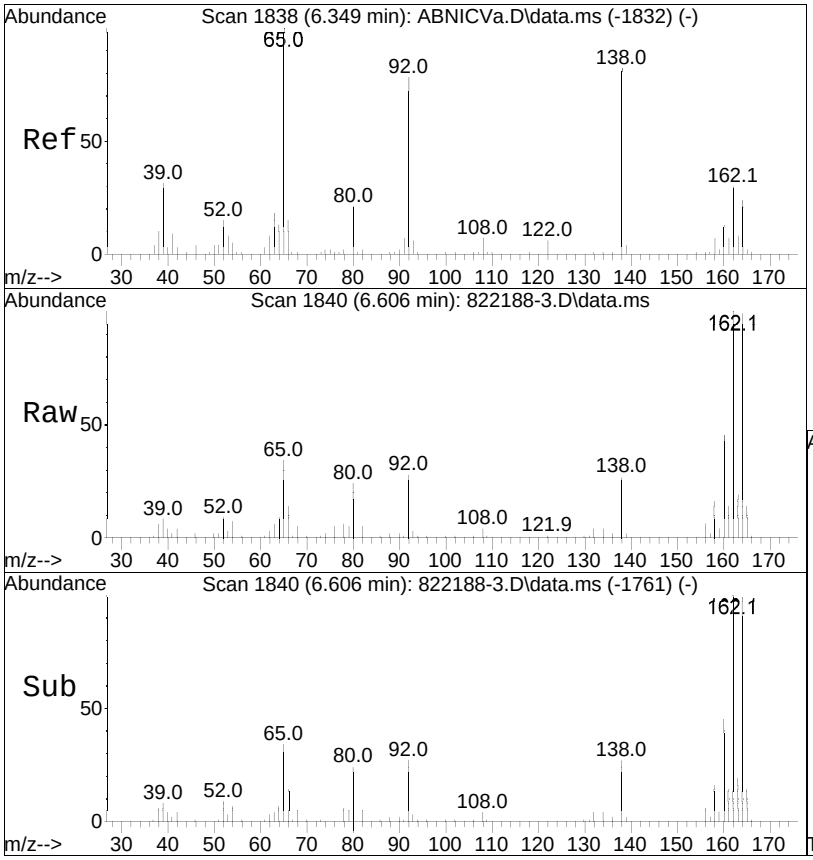


#61
Biphenyl
Concen: 3.70 ug/ml
RT: 6.090 min Scan# 1674
Delta R.T. -0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:154 Resp: 46105

Ion	Ratio	Lower	Upper
154	100		
153	41.1	32.3	48.5
152	30.5	22.5	33.7

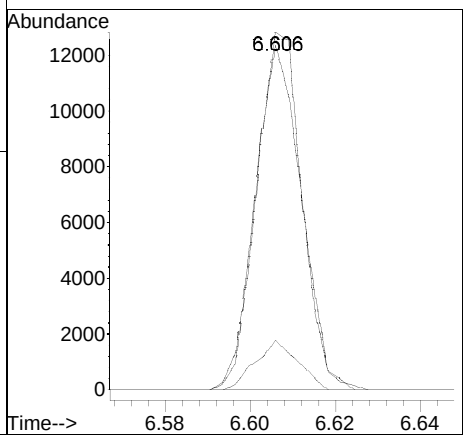


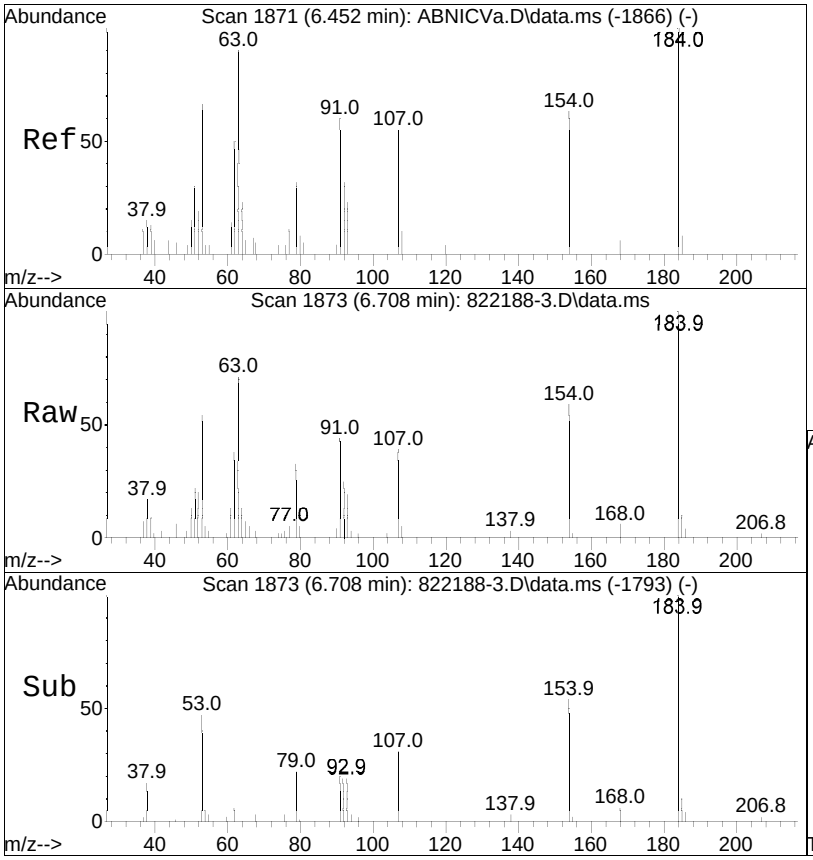


#63
3-Nitroaniline
Concen: 3.23 ug/ml
RT: 6.606 min Scan# 1840
Delta R.T. -0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:138 Resp: 9082

Ion	Ratio	Lower	Upper
138	100		
92	105.6	93.4	140.2
108	13.6	9.5	14.3

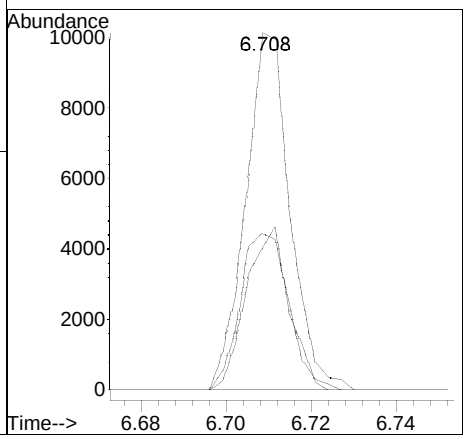


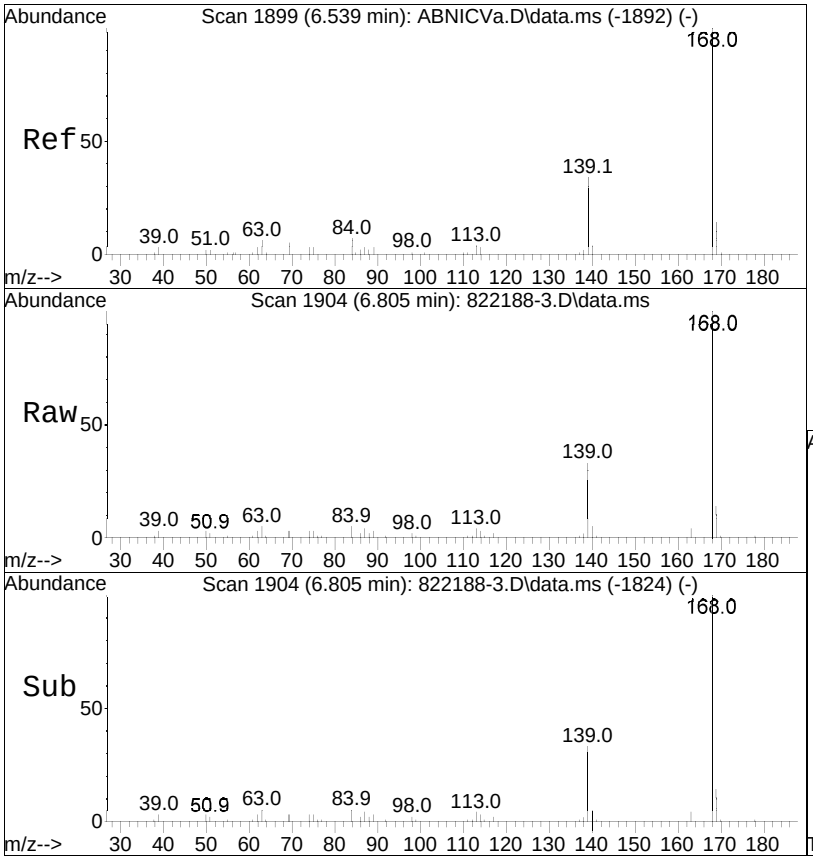


#65
2,4-Dinitrophenol
Concen: 5.33 ug/ml
RT: 6.708 min Scan# 1873
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:184 Resp: 7301

Ion	Ratio	Lower	Upper
184	100		
107	44.0	37.7	56.5
91	48.0	46.3	69.5

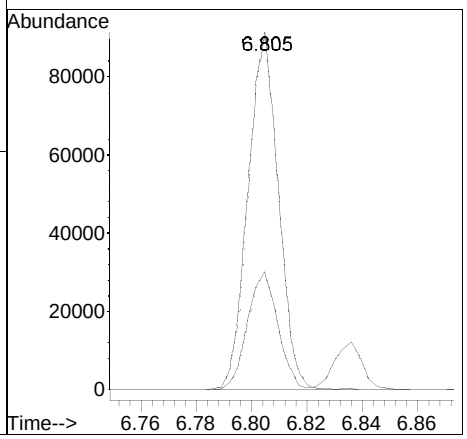


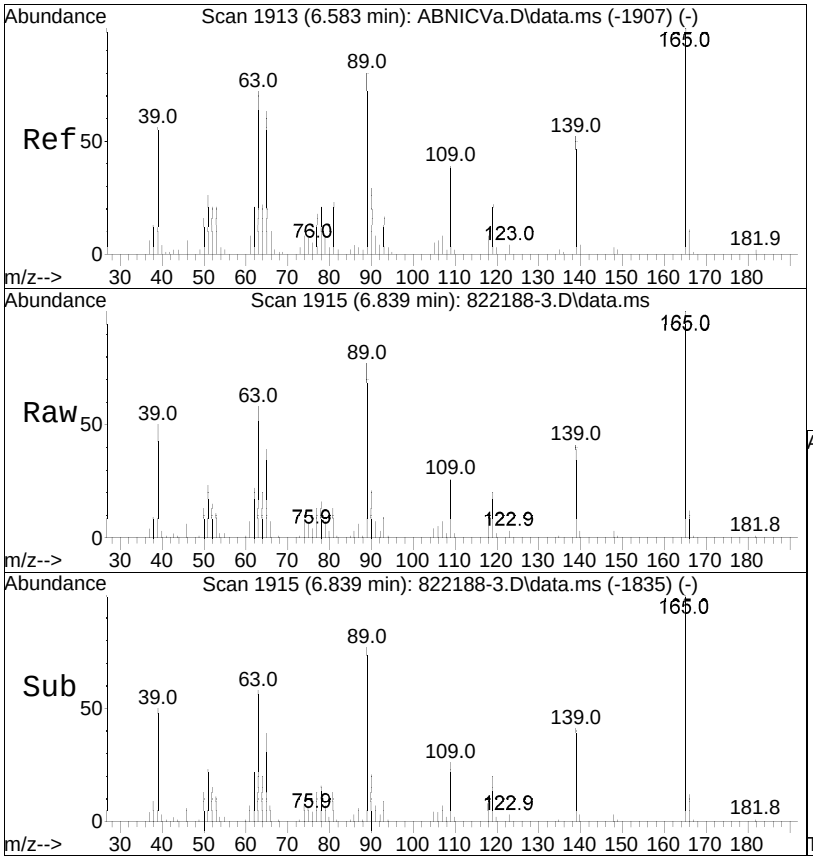


#66
Dibenzofuran
Concen: 4.48 ug/ml
RT: 6.805 min Scan# 1904
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:168 Resp: 68793

Ion	Ratio	Lower	Upper
168	100		
139	33.3	31.4	47.2

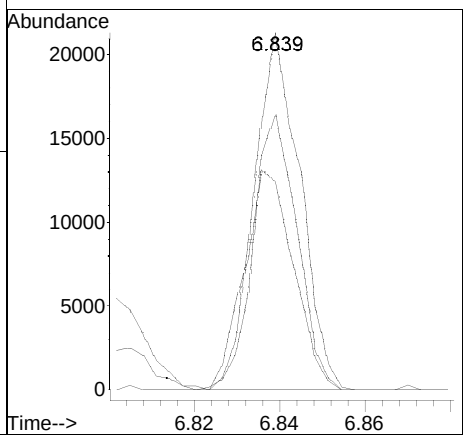


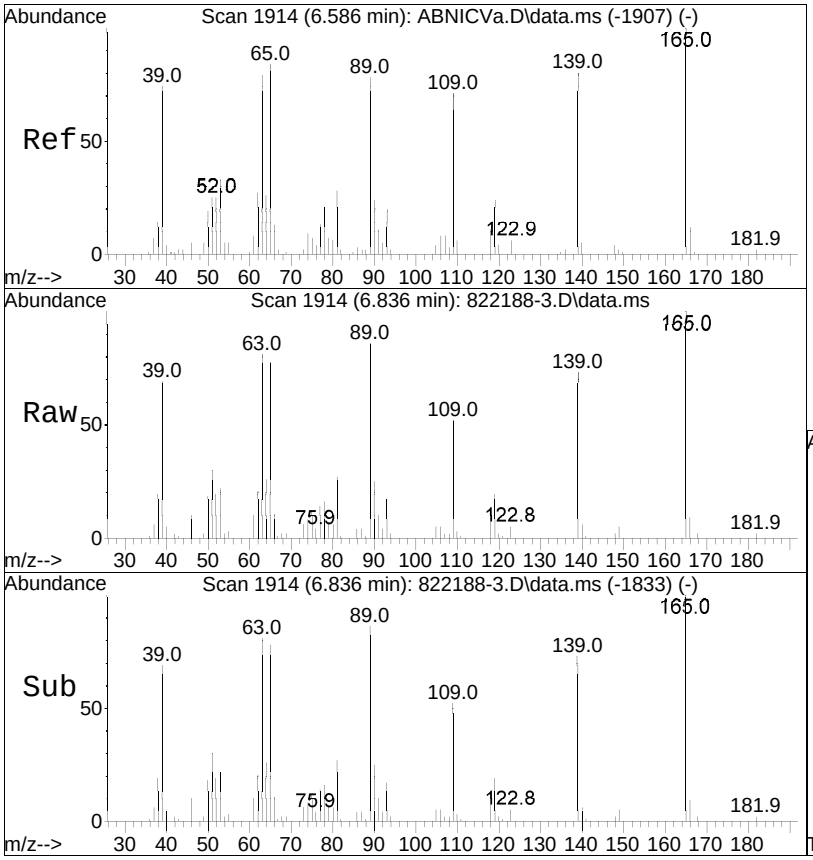


#67
2,4-Dinitrotoluene
Concen: 4.60 ug/ml
RT: 6.839 min Scan# 1915
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:165 Resp: 15938

Ion	Ratio	Lower	Upper
165	100		
89	73.6	72.0	108.0
63	66.2	52.7	79.1

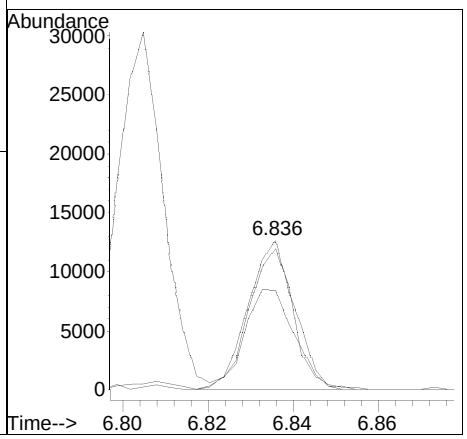


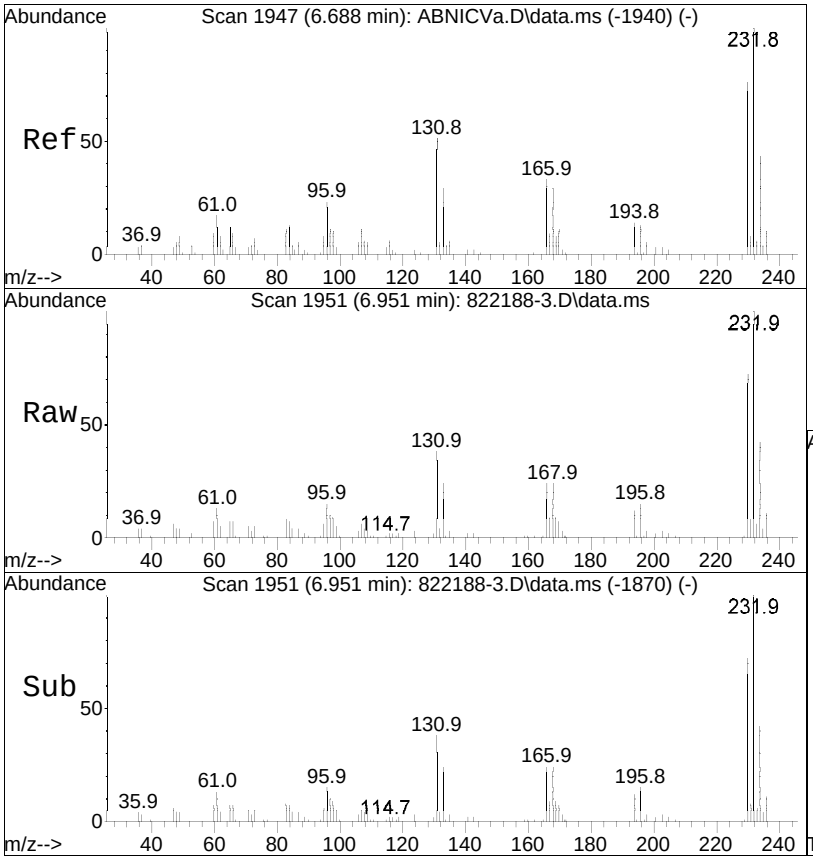


#68
4-Nitrophenol
Concen: 4.21 ug/ml
RT: 6.836 min Scan# 1914
Delta R.T. 0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion: 65 Resp: 9608

Ion	Ratio	Lower	Upper
65	100		
109	71.9	47.4	71.2#
139	89.7	76.6	115.0

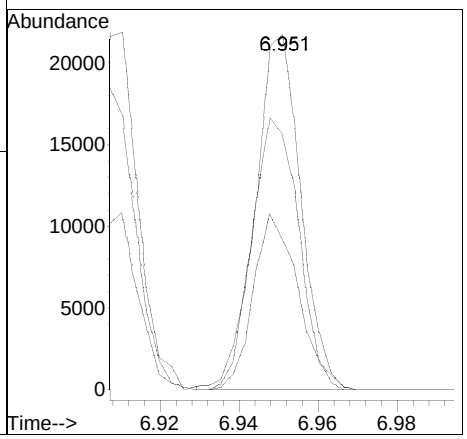


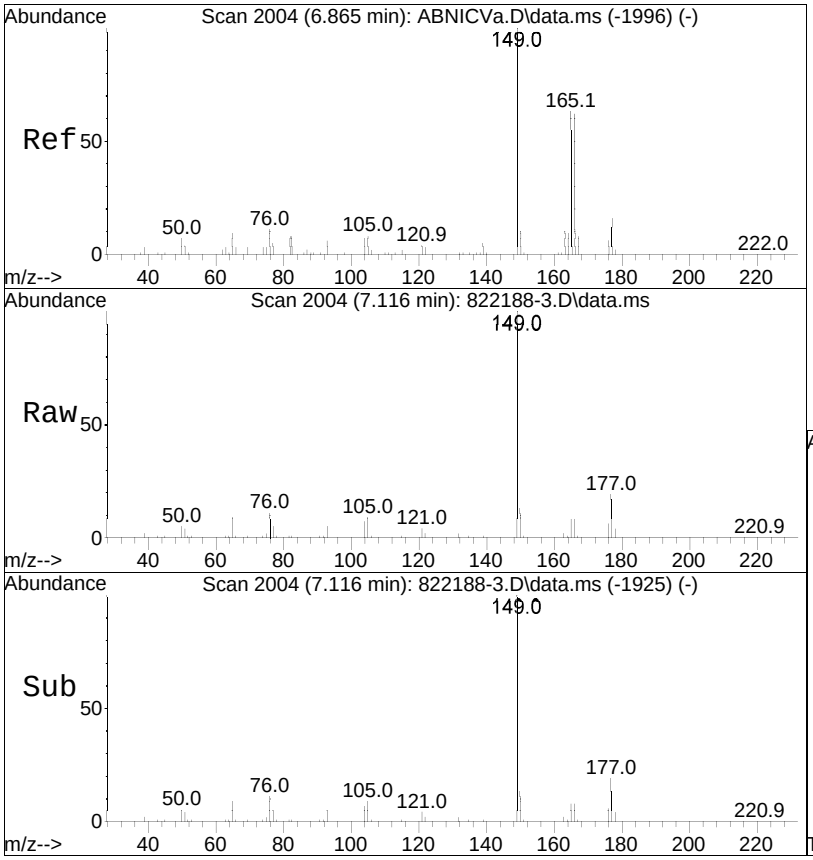


#70
2,3,4,6-Tetrachlorophenol
Concen: 5.39 ug/ml
RT: 6.951 min Scan# 1951
Delta R.T. 0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:232 Resp: 17422

Ion	Ratio	Lower	Upper
232	100		
230	79.1	61.8	92.8
234	48.3	36.2	54.2

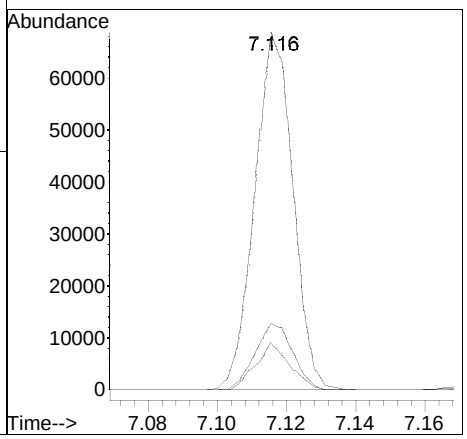


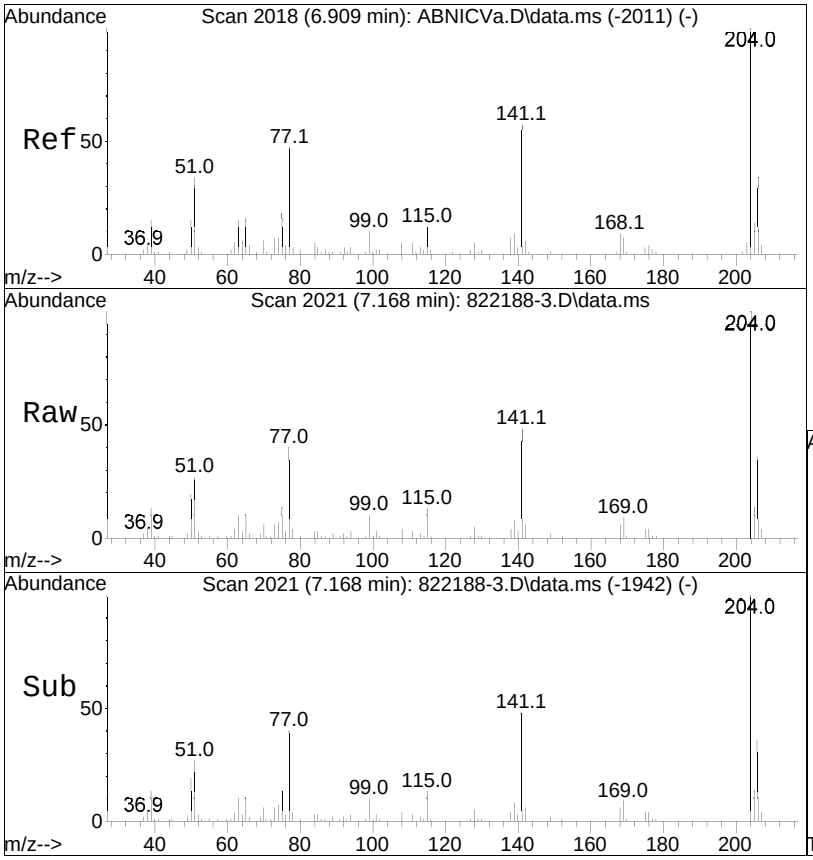


#71
Diethyl phthalate
Concen: 4.03 ug/ml
RT: 7.116 min Scan# 2004
Delta R.T. -0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:149 Resp: 52246

Ion	Ratio	Lower	Upper
149	100		
177	18.5	16.1	24.1
150	12.0	9.4	14.2

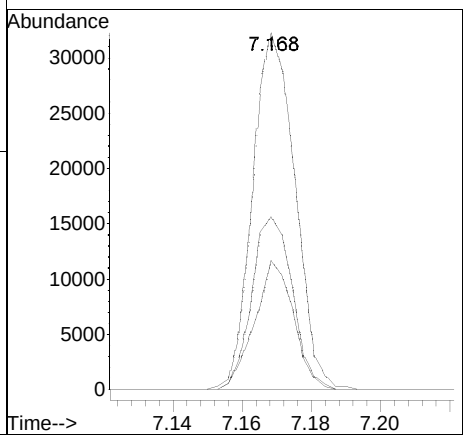


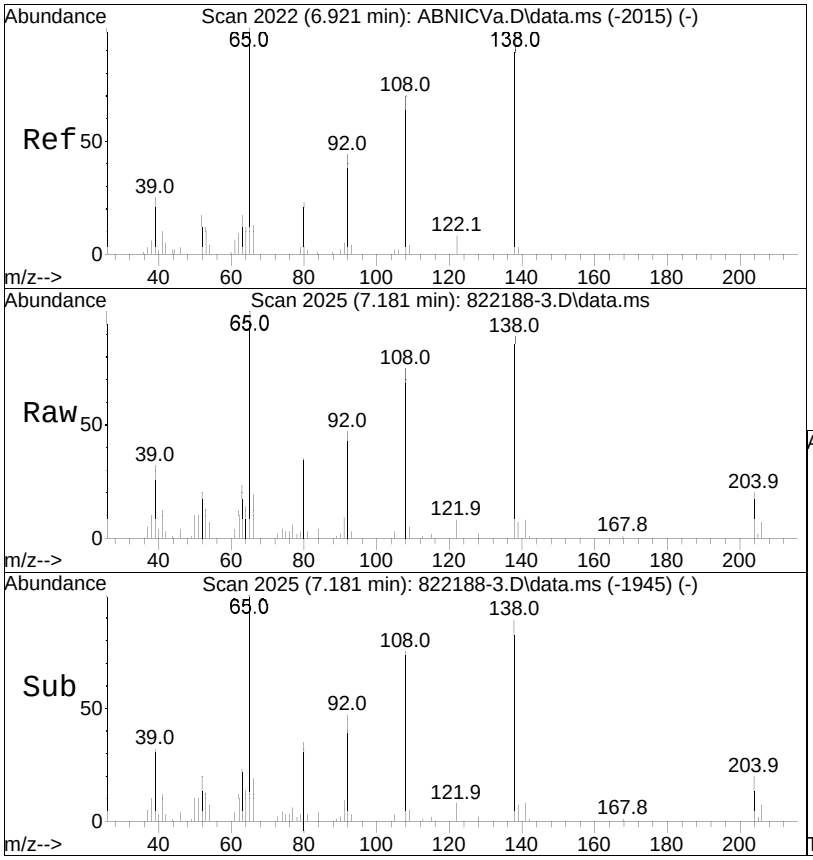


#73
4-Chlorophenyl phenyl ether
Concen: 4.52 ug/ml
RT: 7.168 min Scan# 2021
Delta R.T. -0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:204 Resp: 27220

Ion	Ratio	Lower	Upper
204	100		
206	33.2	25.8	38.6
141	46.4	53.6	80.4#

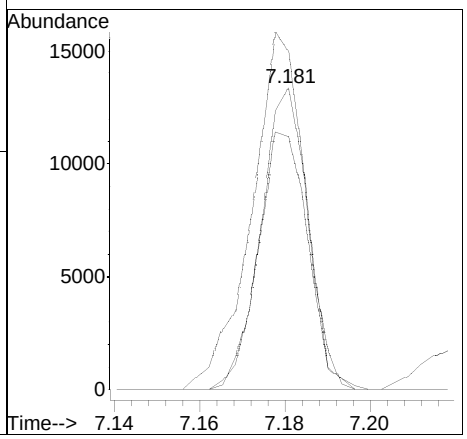


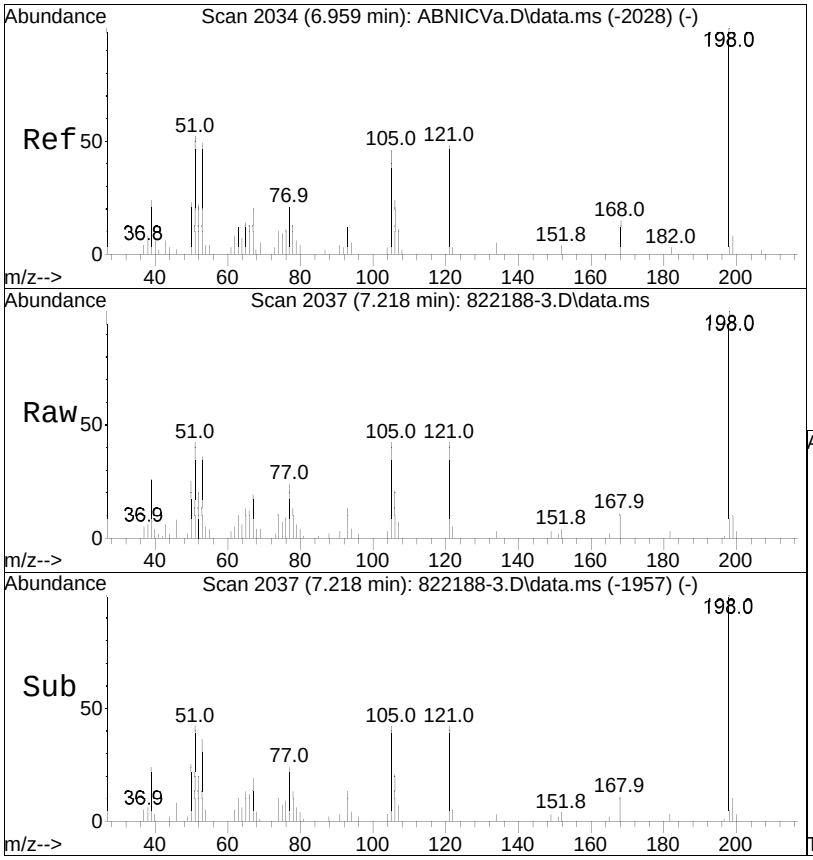


#74
4-Nitroaniline
Concen: 3.66 ug/ml
RT: 7.181 min Scan# 2025
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:138 Resp: 10228

Ion	Ratio	Lower	Upper
138	100		
108	89.9	52.1	78.1#
65	133.8	115.0	172.6

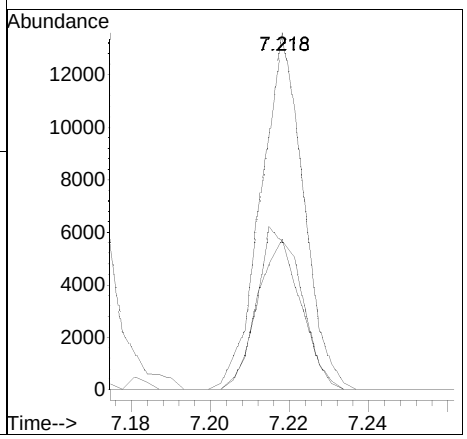


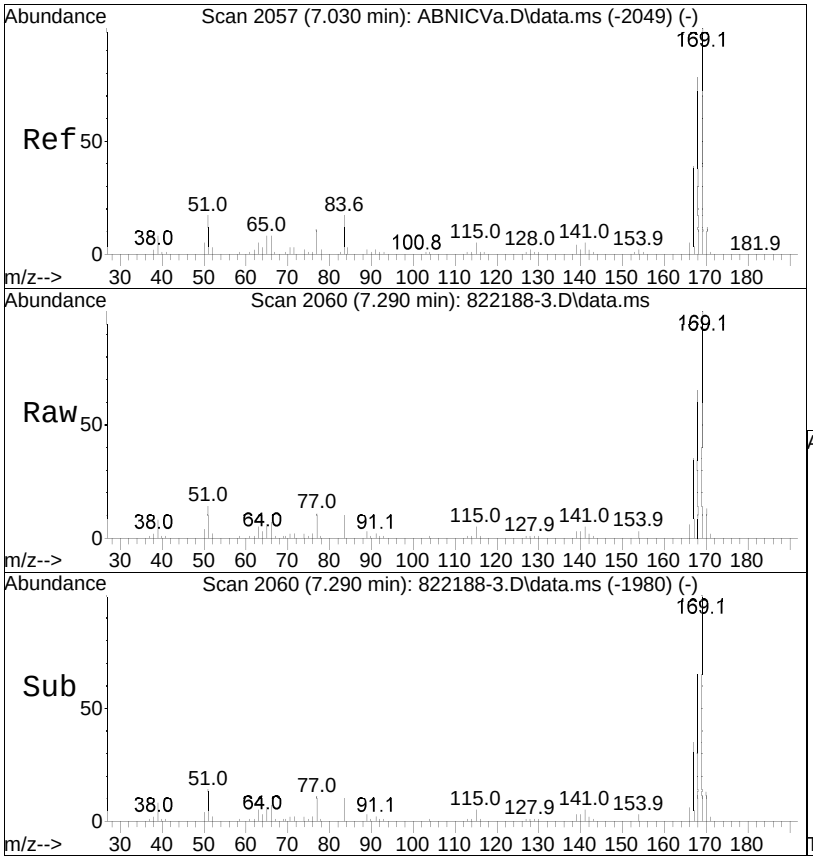


#75
4,6-Dinitro-o-cresol
Concen: 5.40 ug/ml
RT: 7.218 min Scan# 2037
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:198 Resp: 10116

Ion	Ratio	Lower	Upper
198	100		
51	47.9	76.0	114.0#
105	43.6	45.6	68.4#

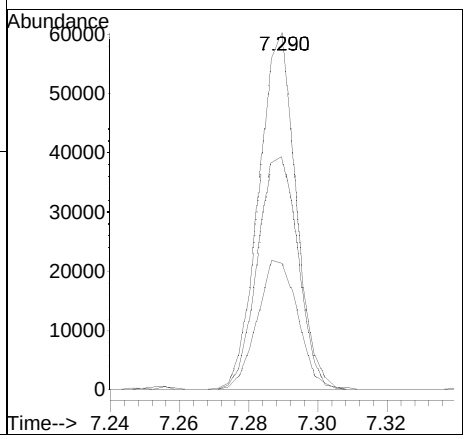


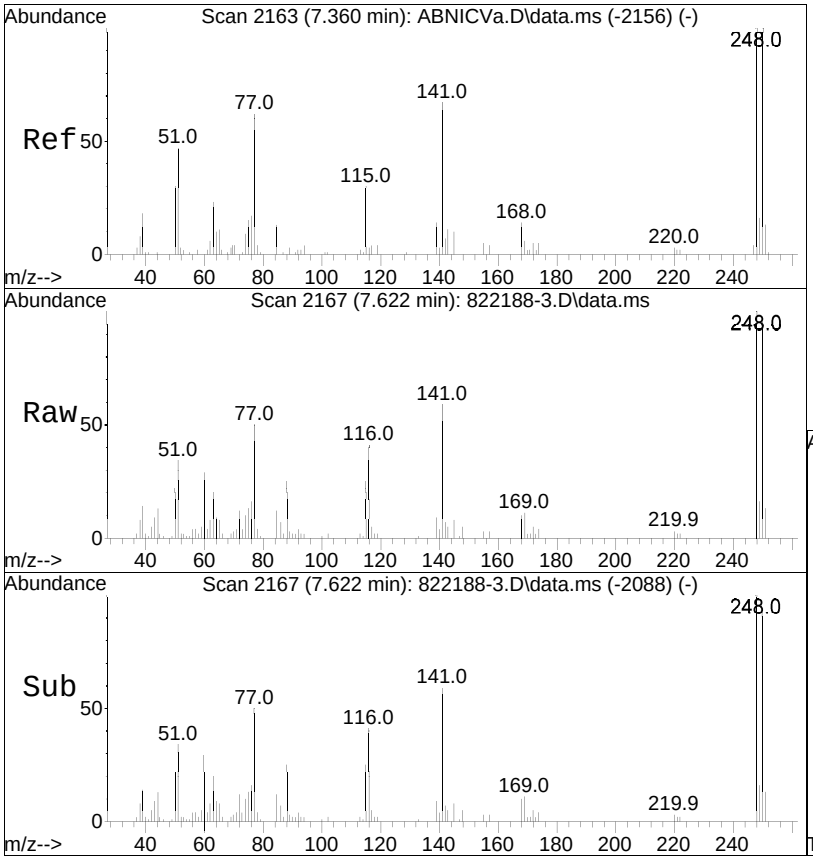


#76
NDPA/DPA
Concen: 4.26 ug/ml
RT: 7.290 min Scan# 2060
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:169 Resp: 44991

Ion	Ratio	Lower	Upper
169	100		
168	71.1	54.0	81.0
167	39.6	28.6	42.8

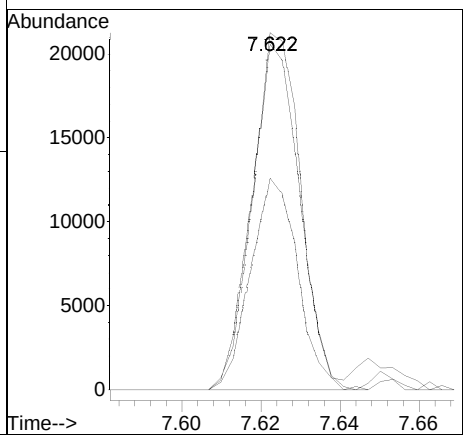


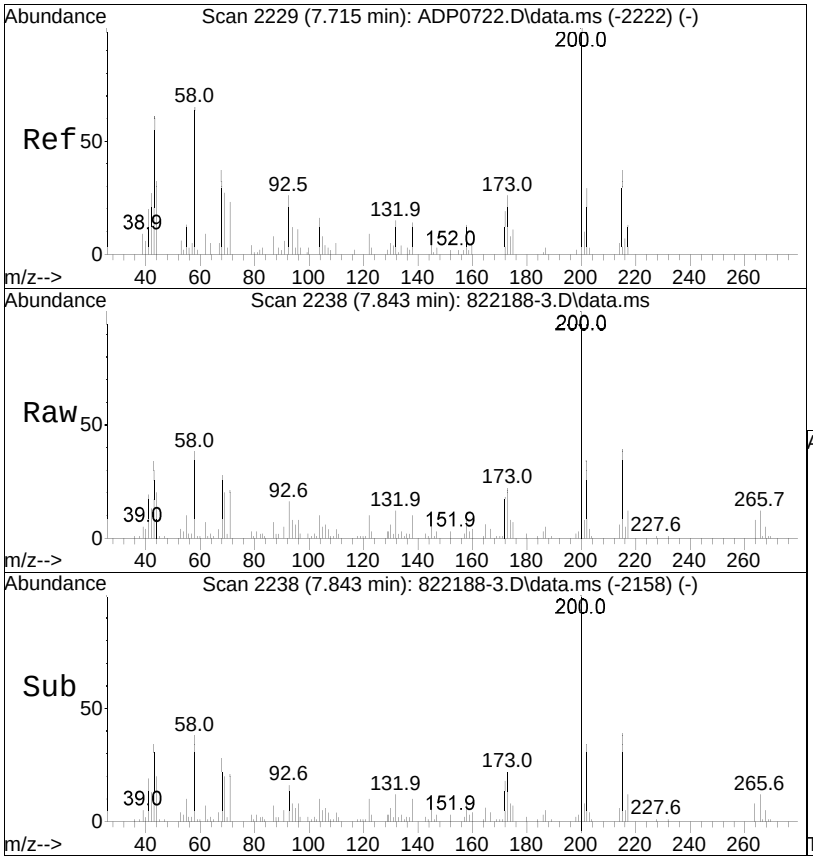


#79
4-Bromophenyl phenyl ether
Concen: 4.79 ug/ml
RT: 7.622 min Scan# 2167
Delta R.T. -0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:248 Resp: 18007

Ion	Ratio	Lower	Upper
248	100		
141	58.0	76.6	114.8#
250	94.9	77.3	115.9

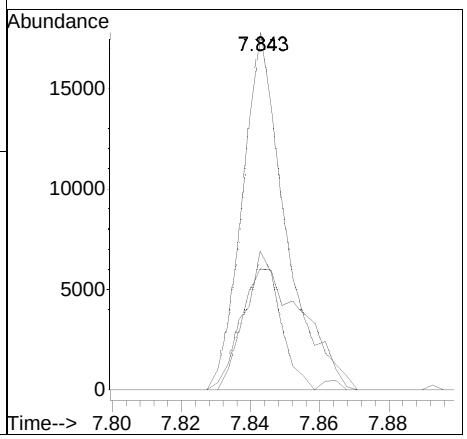


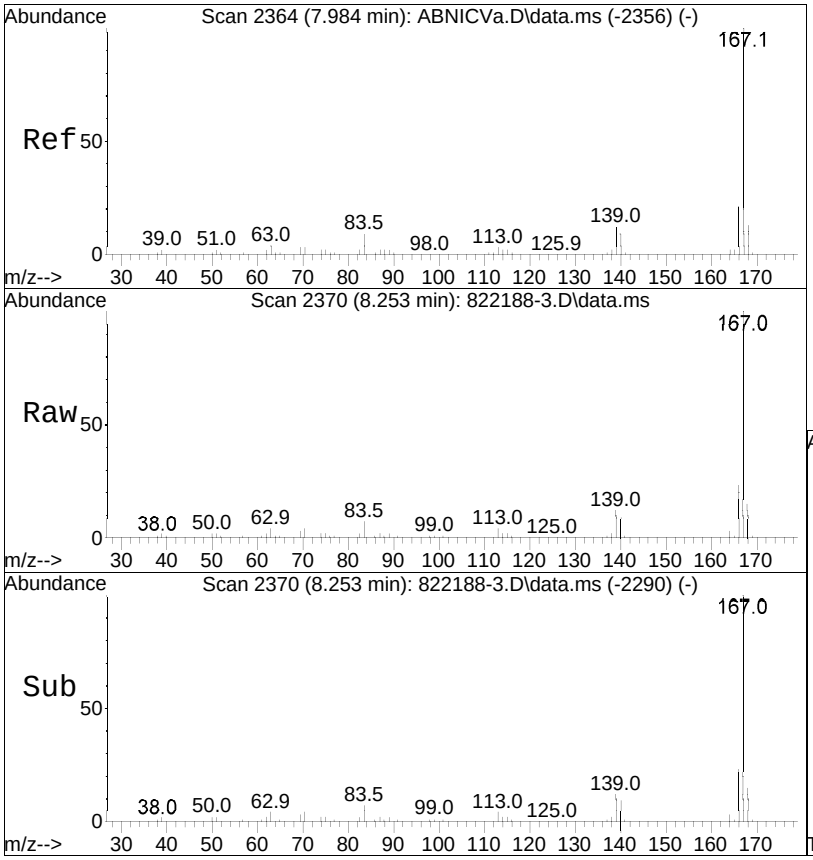


#86
Atrazine
Concen: 4.72 ug/ml
RT: 7.843 min Scan# 2238
Delta R.T. -0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:200 Resp: 15162

Ion	Ratio	Lower	Upper
200	100		
202	49.7	25.8	38.6#
215	33.2	40.2	60.4#

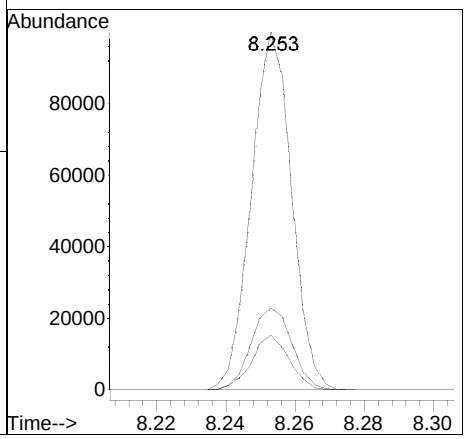


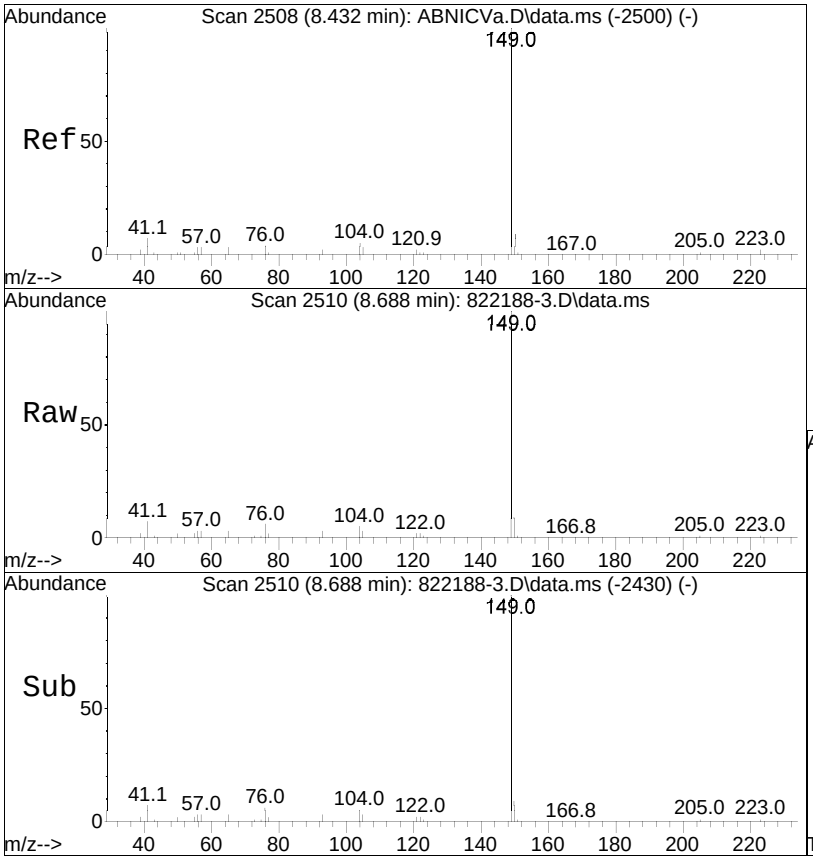


#90
Carbazole
Concen: 4.38 ug/ml
RT: 8.253 min Scan# 2370
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:167 Resp: 80011

Ion	Ratio	Lower	Upper
167	100		
168	14.4	10.6	15.8
166	23.5	17.4	26.0

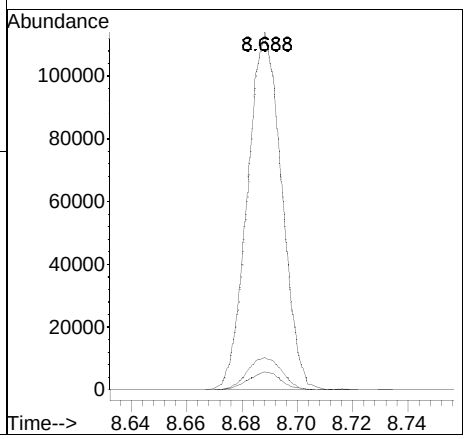


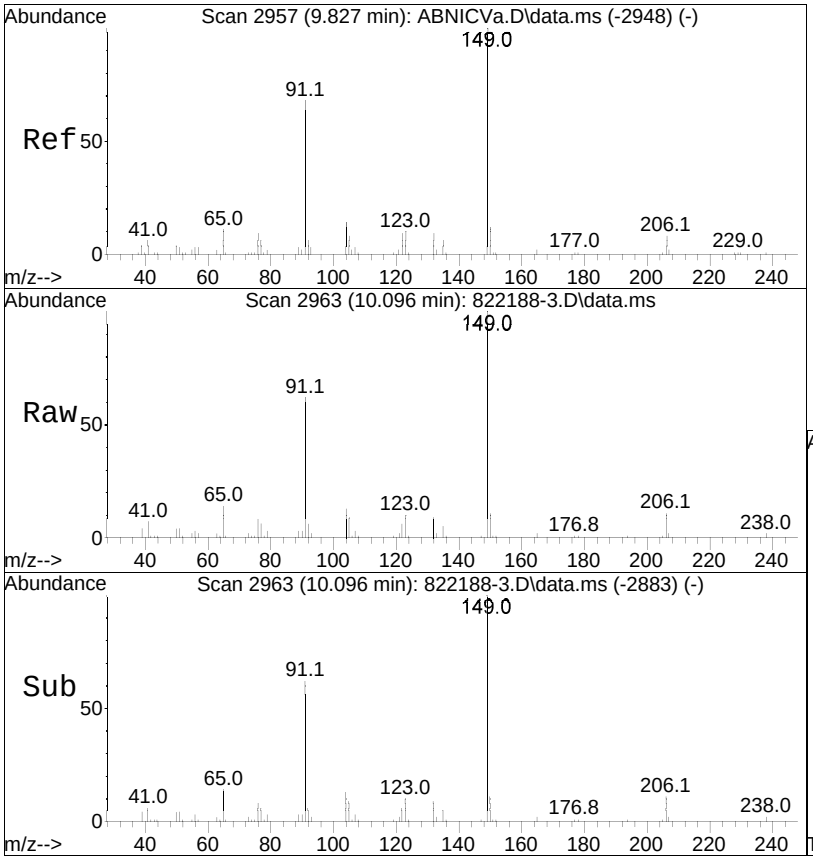


#91
Di-n-butylphthalate
Concen: 4.48 ug/ml
RT: 8.688 min Scan# 2510
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:149 Resp: 96326

Ion	Ratio	Lower	Upper
149	100		
150	9.1	7.0	10.6
104	4.9	4.5	6.7

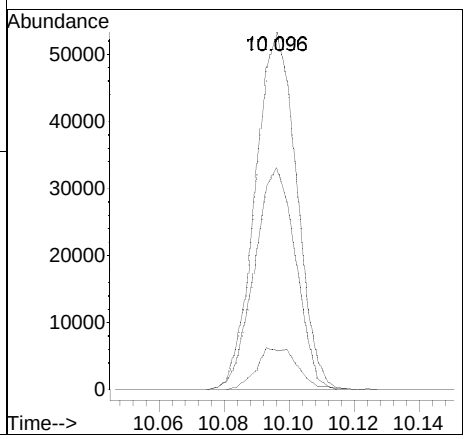


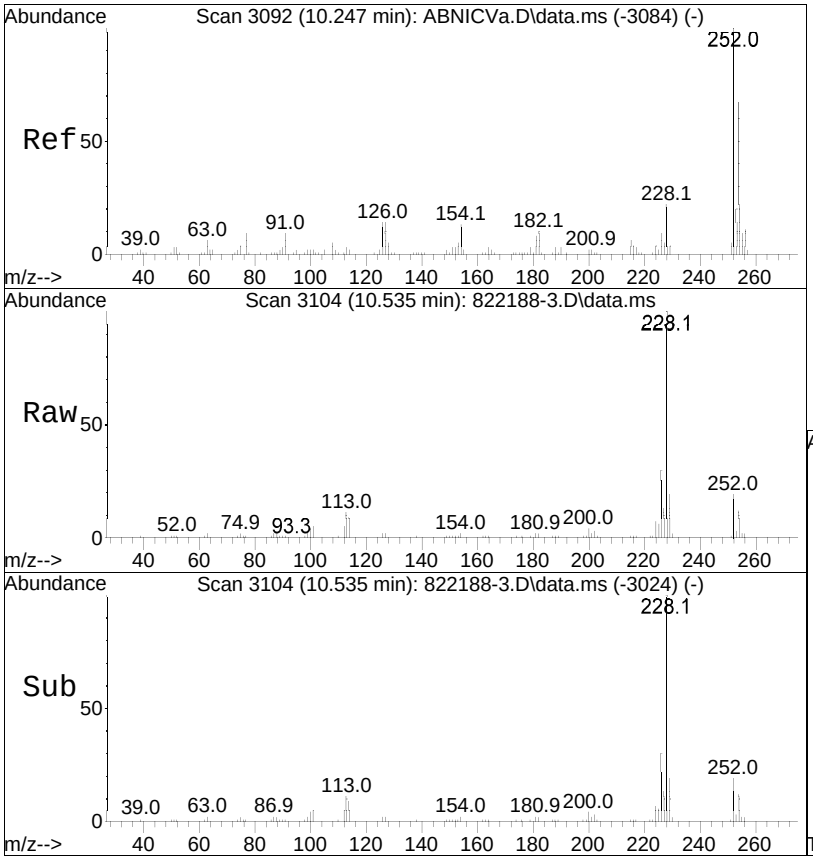


#96
Butyl benzyl phthalate
Concen: 4.78 ug/ml
RT: 10.096 min Scan# 2963
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:149 Resp: 46749

Ion	Ratio	Lower	Upper
149	100		
91	62.7	63.3	94.9#
206	11.7	13.9	20.9#

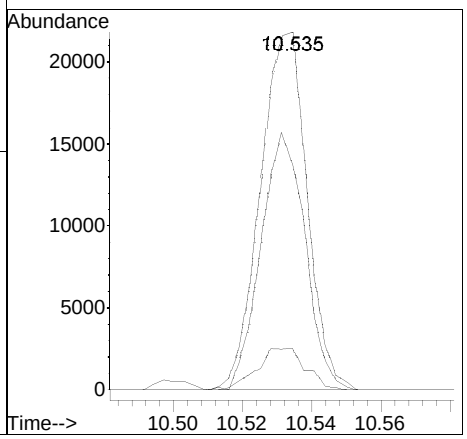


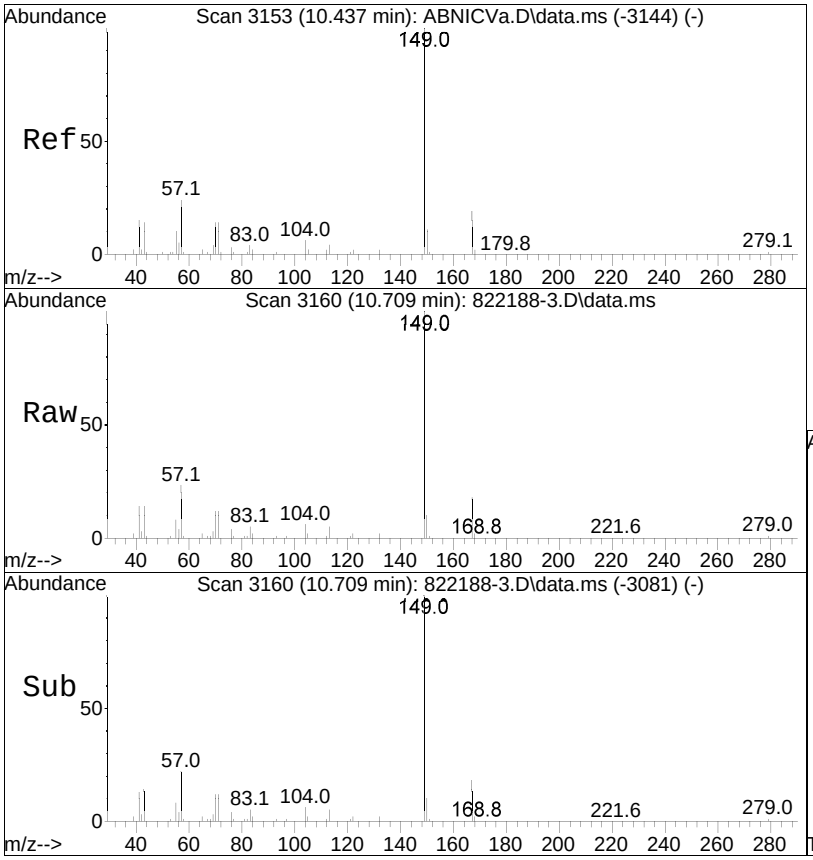


#105
3,3'-Dichlorobenzidine
Concen: 2.17 ug/ml
RT: 10.535 min Scan# 3104
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:252 Resp: 20352

Ion	Ratio	Lower	Upper
252	100		
126	12.1	14.5	21.7#
254	68.0	51.2	76.8

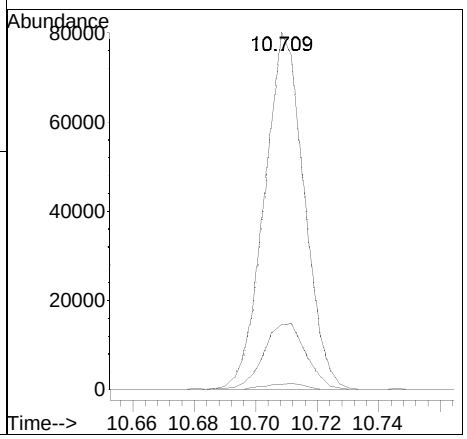


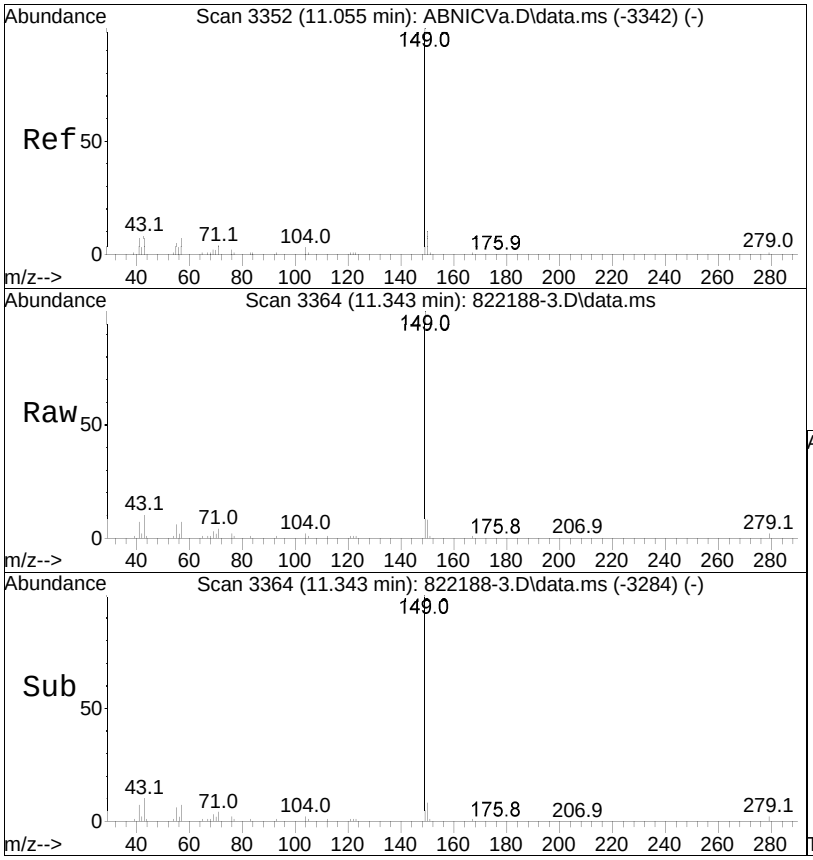


#107
Bis(2-ethylhexyl)phthalate
Concen: 5.23 ug/ml
RT: 10.709 min Scan# 3160
Delta R.T. -0.003 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:149 Resp: 71329

Ion	Ratio	Lower	Upper
149	100		
167	19.9	22.1	33.1#
279	1.5	3.0	4.4#

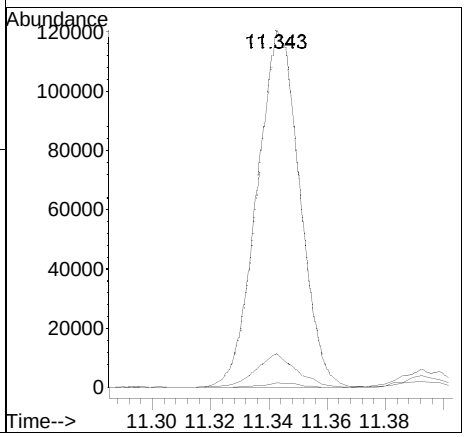




#108
Di-n-octylphthalate
Concen: 4.92 ug/ml
RT: 11.343 min Scan# 3364
Delta R.T. 0.000 min
Lab File: 822188-3.D
Acq: 31 Aug 2023 12:17 pm

Tgt Ion:149 Resp: 121706

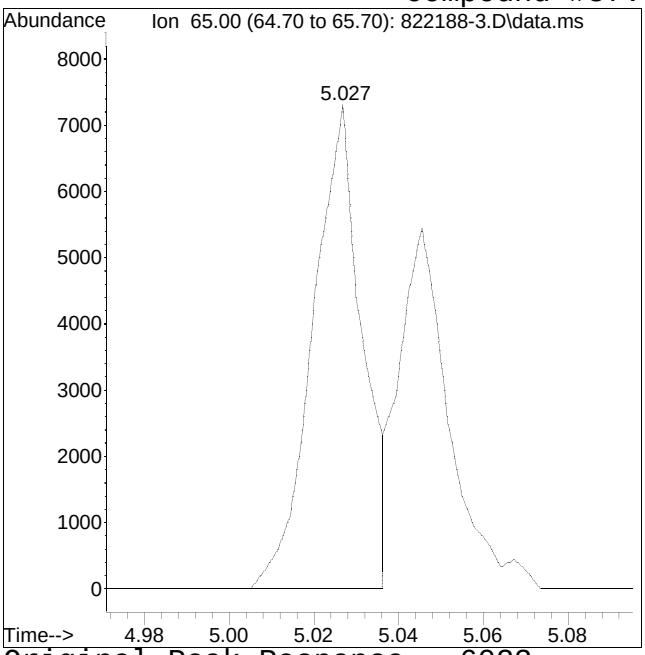
Ion	Ratio	Lower	Upper
149	100		
43	9.1	18.8	28.2#
167	1.0	1.3	1.9#

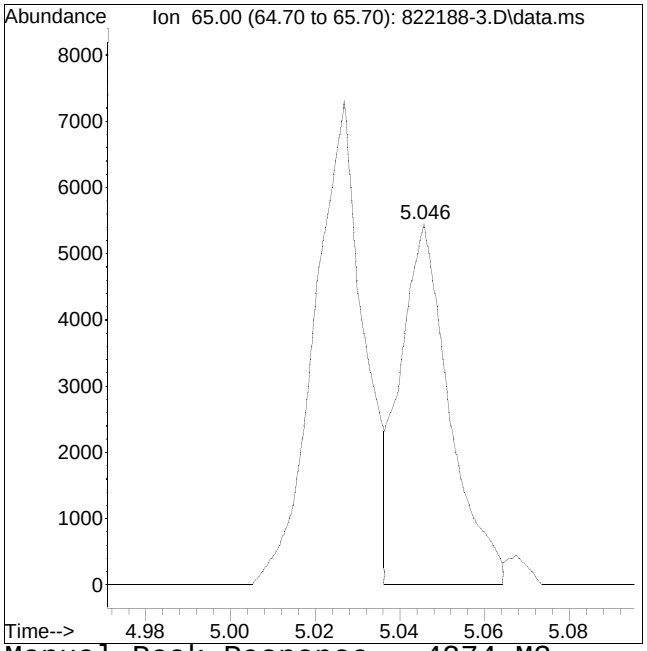


Manual Integration Report

Data Path	: I:\8270\Dakota\230831lvi\	QMethod	: FS230412LVIDakota.m
Data File	: 822188-3.D	Operator	: Dakota:sz
Date Inj'd	: 8/31/2023 12:17 pm	Instrument	: Dakota
Sample	: WG1822188-3,32,,gmr	Quant Date	: 8/31/2023 12:36 pm

Compound #37: 4-Chloroaniline





Original Peak Response = 6023 Manual Peak Response = 4274 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : 823488-3.D
Acq On : 5 Sep 2023 11:33 pm
Operator : Dakota:sz
Sample : WG1823488-3,32,,ASK
Misc : WG1823113,WG1823488,ical19934
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 07 09:13:11 2023
Quant Method : I:\8270\dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 23:52:21 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230905nlvi\ABN0905n.D
: 2 - I:\8270\dakota\230905nlvi\ADP0905n.D
: 3 - I:\8270\dakota\230905nlvi\AP90905n.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.459	152	13871	4.000	ug/ml		0.00
Standard Area 1 = 14403			Recovery = 96.31%				
27) IS2_1,4-Dichlorobenzen...	3.459	152	13871	4.000	ug/ml		0.00
Standard Area 3 = 14263			Recovery = 97.25%				
32) IS3_1,4-Dichlorobenzen...	3.459	152	13871	4.000	ug/ml		0.00
Standard Area 2 = 14772			Recovery = 93.90%				
34) IS1_Naphthalene-d8	4.728	136	48687	4.000	ug/ml	#	0.00
Standard Area 1 = 49518			Recovery = 98.32%				
54) IS2_Naphthalene-d8	4.728	136	48687	4.000	ug/ml	#	0.00
Standard Area 3 = 47445			Recovery = 102.62%				
62) IS1_Acenaphthene-d10	6.406	164	31755	4.000	ug/ml		0.00
Standard Area 1 = 33908			Recovery = 93.65%				
82) IS2_Acenaphthene-d10	6.406	164	31755	4.000	ug/ml		0.00
Standard Area 3 = 30377			Recovery = 104.54%				
85) IS3_Acenaphthene-d10	6.406	164	31755	4.000	ug/ml		0.00
Standard Area 2 = 31769			Recovery = 99.96%				
87) IS1_Phenanthrene-d10	7.792	188	77941	4.000	ug/ml		0.00
Standard Area 1 = 83627			Recovery = 93.20%				
99) IS3_Phenanthrene-d10	7.792	188	77941	4.000	ug/ml		0.00
Standard Area 2 = 76421			Recovery = 101.99%				
103) IS1_Chrysene-d12	10.279	240	84952	4.000	ug/ml		0.00
Standard Area 1 = 91716			Recovery = 92.63%				
112) IS1_Perylene-d12	11.603	264	105407	4.000	ug/ml		0.00
Standard Area 1 = 117565			Recovery = 89.66%				
System Monitoring Compounds							
4) 2-Fluorophenol	1.980	112	9870	2.756	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 55.12%				
7) Phenol-d6	3.198	99	11448	2.494	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 49.88%				
19) Nitrobenzene-d5	4.044	82	6647	1.511	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 60.44%				
45) 2-Fluorobiphenyl	5.819	172	16917	1.766	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 70.64%				
78) 2,4,6-Tribromophenol	7.155	330	8778	4.775	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 95.50%				

Data Path : I:\8270\Dakota\230905nlvi\
Data File : 823488-3.D
Acq On : 5 Sep 2023 11:33 pm
Operator : Dakota:sz
Sample : WG1823488-3,32,,ASK
Misc : WG1823113,WG1823488,ical19934
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 07 09:13:11 2023
Quant Method : I:\8270\dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 23:52:21 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230905nlvi\ABN0905n.D
: 2 - I:\8270\dakota\230905nlvi\ADP0905n.D
: 3 - I:\8270\dakota\230905nlvi\AP90905n.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
95) 4-Terphenyl-d14	9.359	244	31005	1.627	ug/ml	0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 65.08%			
Target Compounds						Qvalue
6) 2-Chlorophenol	3.245	128	13962	3.368	ug/ml	92
8) Phenol	3.211	94	14695	2.754	ug/ml	99
9) Bis(2-chloroethyl)ether	3.245	93	11629	3.145	ug/ml#	71
14) Bis(2-chloroisopropyl)...	3.823	45	19122	3.090	ug/ml#	56
15) 2-Methylphenol	3.836	108	12418	3.524	ug/ml	100
17) n-Nitrosodi-n-propylamine	3.954	70	9913	3.495	ug/ml#	82
18) 3-Methylphenol/4-Methy...	4.007	108	14011	3.850	ug/ml#	44
20) Nitrobenzene	4.059	77	14432	3.374	ug/ml	92
21) Isophorone	4.320	82	24942	3.295	ug/ml#	91
22) 2-Nitrophenol	4.383	139	7564	3.783	ug/ml#	91
23) 2,4-Dimethylphenol	4.516	107	15060	3.912	ug/ml	94
24) Bis(2-chloroethoxy)met...	4.594	93	16125	3.284	ug/ml#	96
25) 2,4-Dichlorophenol	4.641	162	15981	4.416	ug/ml#	91
28) Benzaldehyde	2.984	105	10873	2.997	ug/ml	99
29) Acetophenone	3.907	105	16414	2.585	ug/ml#	80
37) 4-Chloroaniline	4.855	65	5473	3.923	ug/ml	96
39) p-Chloro-m-cresol	5.393	107	14053	4.553	ug/ml	93
42) Hexachlorocyclopentadiene	5.610	237	11392	3.916	ug/ml	99
43) 2,4,6-Trichlorophenol	5.738	196	14113	5.018	ug/ml	97
44) 2,4,5-Trichlorophenol	5.769	196	14944	5.257	ug/ml	96
47) 2-Nitroaniline	6.021	138	10087	4.142	ug/ml	86
50) Dimethyl phthalate	6.244	163	40707	4.134	ug/ml#	95
52) 2,6-Dinitrotoluene	6.272	165	8662	4.261	ug/ml#	84
59) Caprolactam	5.160	55	3024	1.671	ug/ml#	84
60) 1,2,4,5-Tetrachloroben...	5.598	216	16938	3.462	ug/ml	97
61) Biphenyl	5.899	154	33448	3.050	ug/ml	95
63) 3-Nitroaniline	6.415	138	8823	3.491	ug/ml#	93
65) 2,4-Dinitrophenol	6.518	184	5555	4.709	ug/ml	93
66) Dibenzofuran	6.605	168	51946	3.767	ug/ml	92
67) 2,4-Dinitrotoluene	6.648	165	11780	3.787	ug/ml	89
68) 4-Nitrophenol	6.652	65	8446	4.135	ug/ml#	85
70) 2,3,4,6-Tetrachlorophenol	6.754	232	13849	4.804	ug/ml	96
71) Diethyl phthalate	6.925	149	43930	3.774	ug/ml	96

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : 823488-3.D
Acq On : 5 Sep 2023 11:33 pm
Operator : Dakota:sz
Sample : WG1823488-3,32,,ASK
Misc : WG1823113,WG1823488,ical19934
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 07 09:13:11 2023
Quant Method : I:\8270\dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 23:52:21 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230905nlvi\ABN0905n.D
: 2 - I:\8270\dakota\230905nlvi\ADP0905n.D
: 3 - I:\8270\dakota\230905nlvi\AP90905n.D
Sub List : 8270TCL_REV2 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
73) 4-Chlorophenyl phenyl ...	6.972	204	20552	3.803	ug/ml#	85
74) 4-Nitroaniline	6.984	138	9420	3.754	ug/ml#	82
75) 4,6-Dinitro-o-cresol	7.021	198	7969	4.839	ug/ml#	62
76) NDPA/DPA	7.090	169	34308	3.617	ug/ml	92
79) 4-Bromophenyl phenyl e...	7.422	248	13990	4.146	ug/ml#	80
86) Atrazine	7.649	200	12362	4.288	ug/ml#	80
90) Carbazole	8.047	167	67398	3.677	ug/ml	98
91) Di-n-butylphthalate	8.492	149	82604	3.827	ug/ml	98
96) Butyl benzyl phthalate	9.887	149	41903	4.271	ug/ml#	86
105) 3,3'-Dichlorobenzidine	10.310	252	29015	2.834	ug/ml#	93
107) Bis(2-ethylhexyl)phtha...	10.496	149	69981	4.705	ug/ml#	87
108) Di-n-octylphthalate	11.118	149	119832	4.439	ug/ml#	73

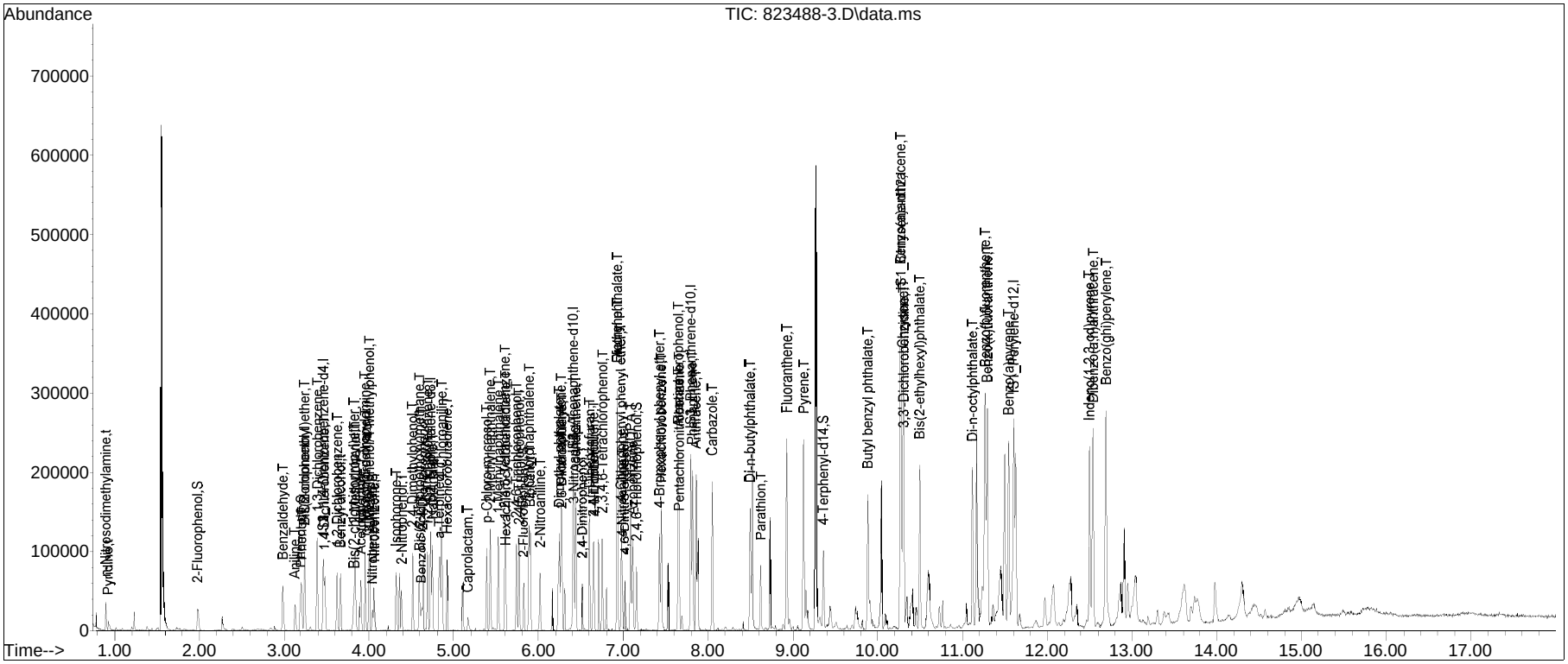
(#) = qualifier out of range (m) = manual integration (+) = signals summed

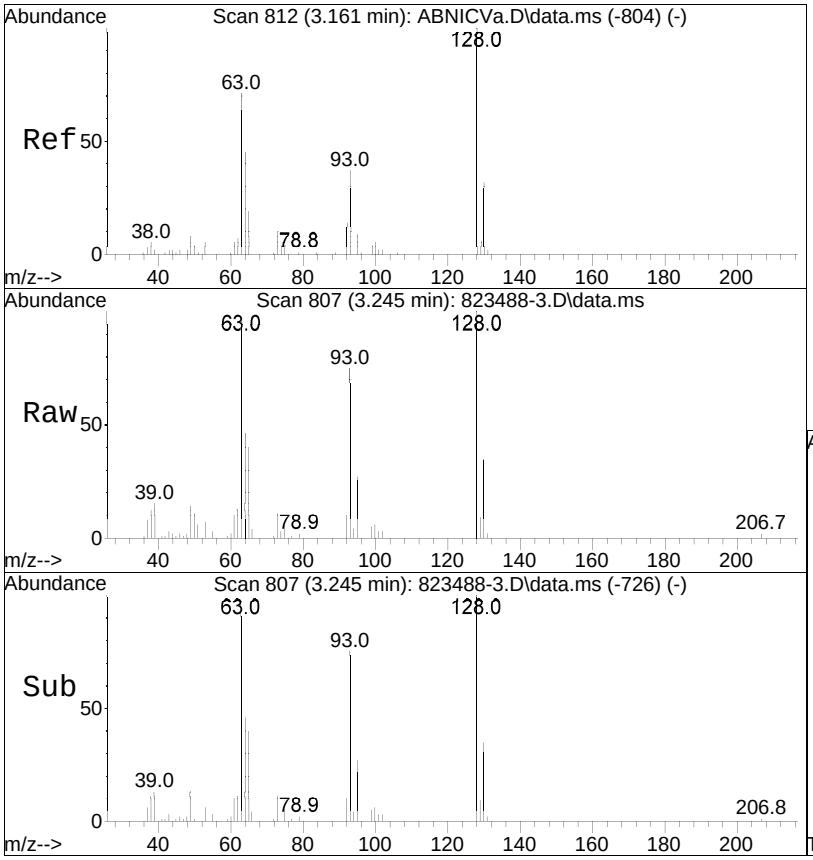
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230905nlvi\
Data File : 823488-3.D
Acq On : 5 Sep 2023 11:33 pm
Operator : Dakota:sz
Sample : WG1823488-3,32,,ASK
Misc : WG1823113,WG1823488,ical19934
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 07 09:13:11 2023
Quant Method : I:\8270\dakota\230905nlvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 23:52:21 2023
Response via : Initial Calibration

Sub List : 8270TCL_REV2 - TCL/CT/MA5nlvi\AP90905n.D•

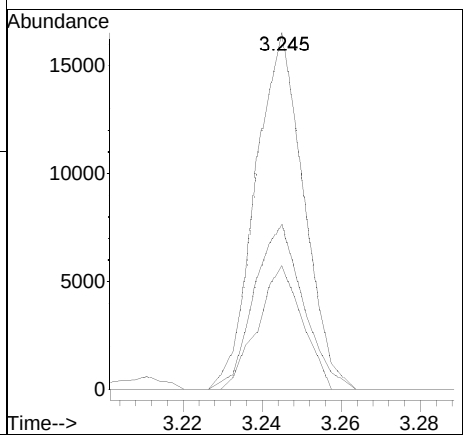


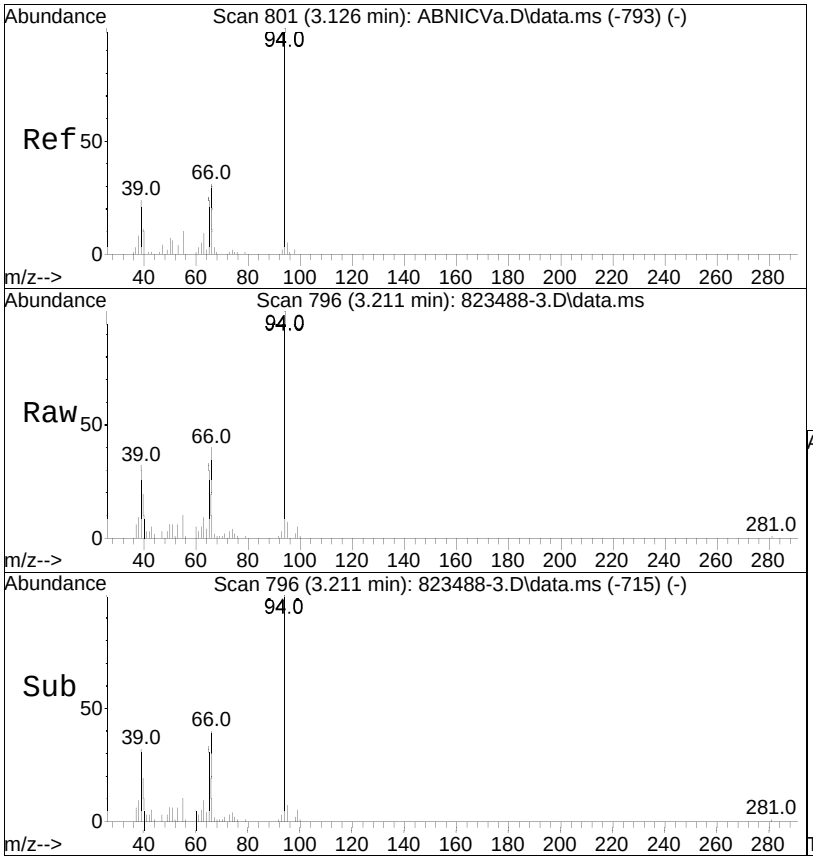


#6
2-Chlorophenol
Concen: 3.37 ug/ml
RT: 3.245 min Scan# 807
Delta R.T. 0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:128 Resp: 13962

Ion	Ratio	Lower	Upper
128	100		
64	47.4	45.1	67.7
130	32.3	26.2	39.4

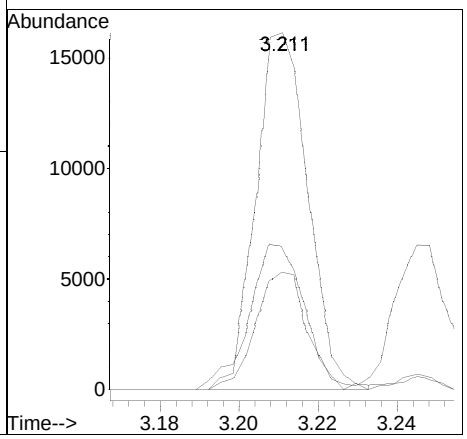


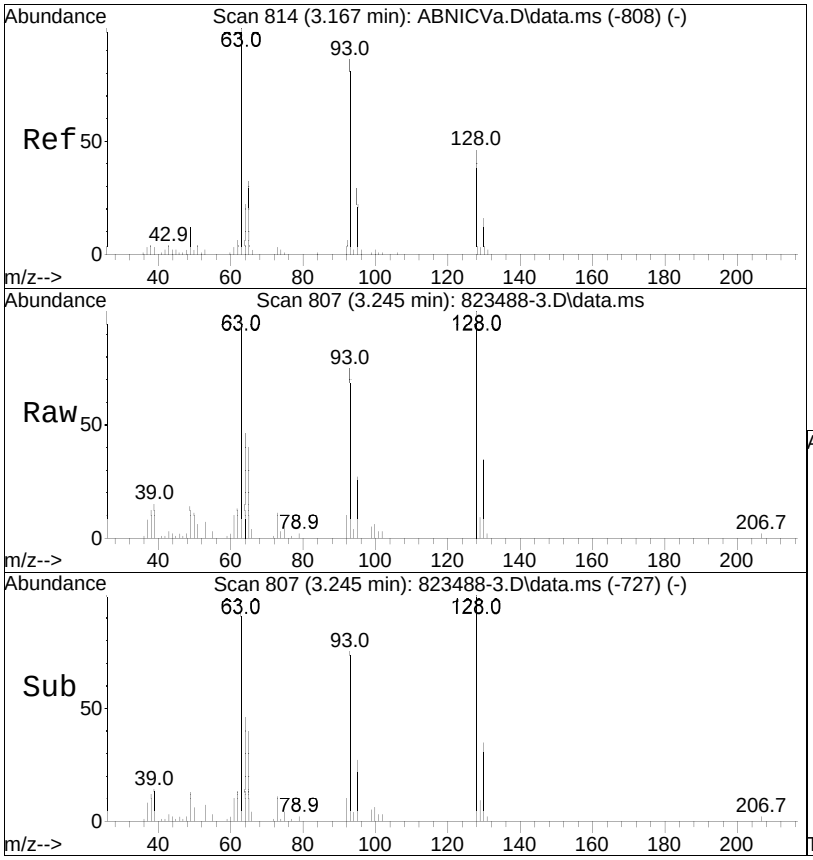


#8
Phenol
Concen: 2.75 ug/ml
RT: 3.211 min Scan# 796
Delta R.T. 0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion: 94 Resp: 14695

Ion	Ratio	Lower	Upper
94	100		
65	32.8	26.0	39.0
66	43.2	33.8	50.8

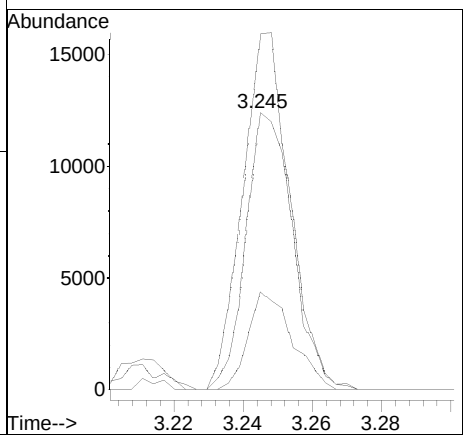


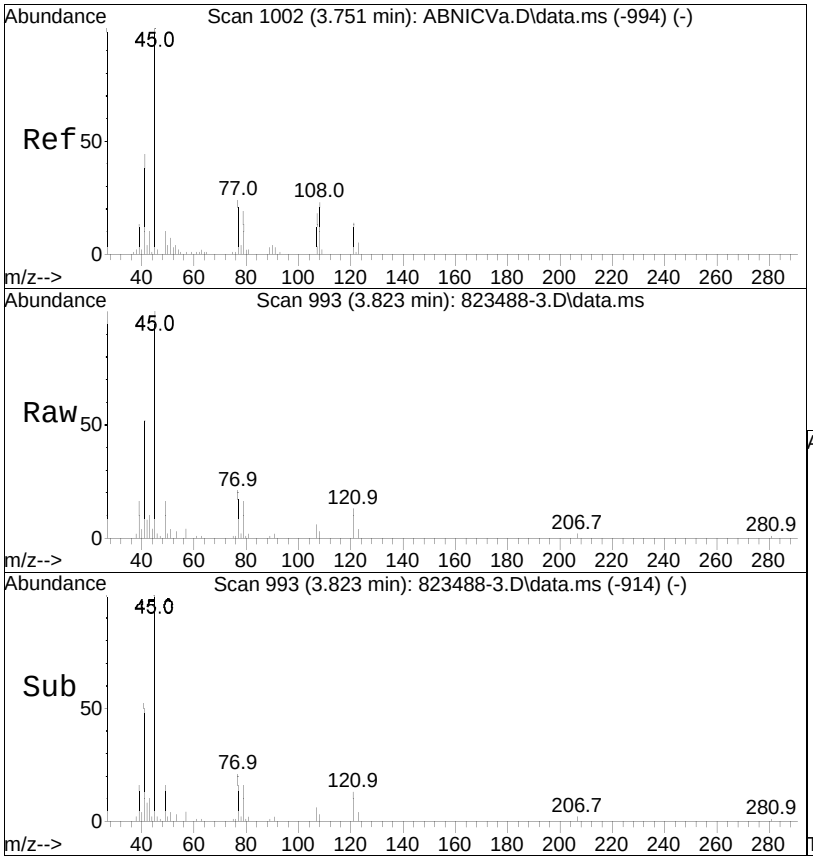


#9
Bis(2-chloroethyl)ether
Concen: 3.14 ug/ml
RT: 3.245 min Scan# 807
Delta R.T. -0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion: 93 Resp: 11629

Ion	Ratio	Lower	Upper
93	100		
63	130.3	74.6	111.8#
95	33.4	25.9	38.9

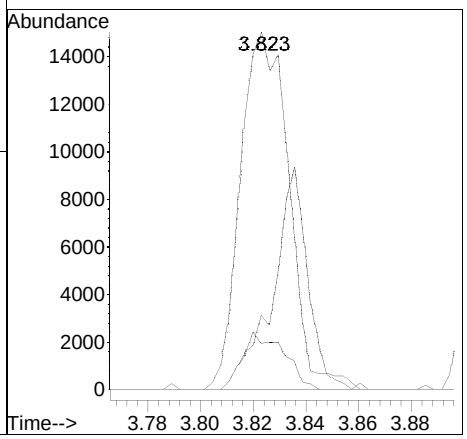


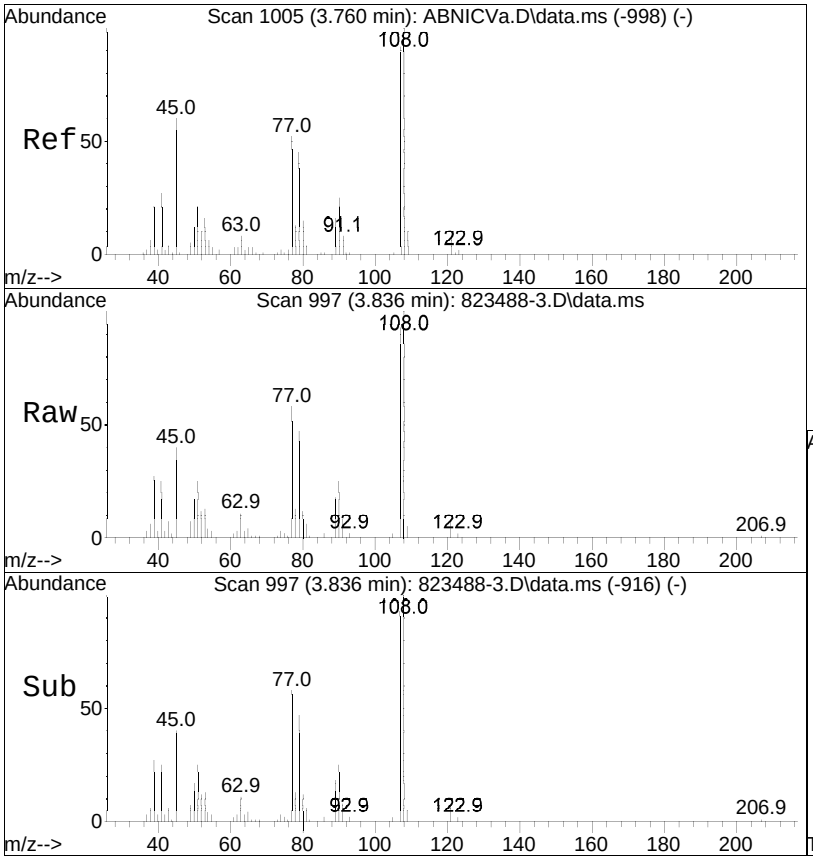


#14
Bis(2-chloroisopropyl)ether
Concen: 3.09 ug/ml
RT: 3.823 min Scan# 993
Delta R.T. -0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion: 45 Resp: 19122

Ion	Ratio	Lower	Upper
45	100		
121	13.9	9.8	14.6
77	45.3	6.1	9.1#

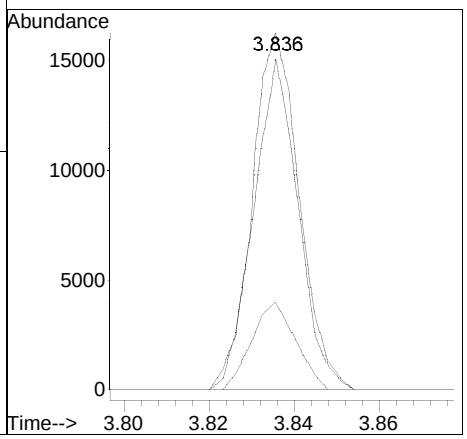


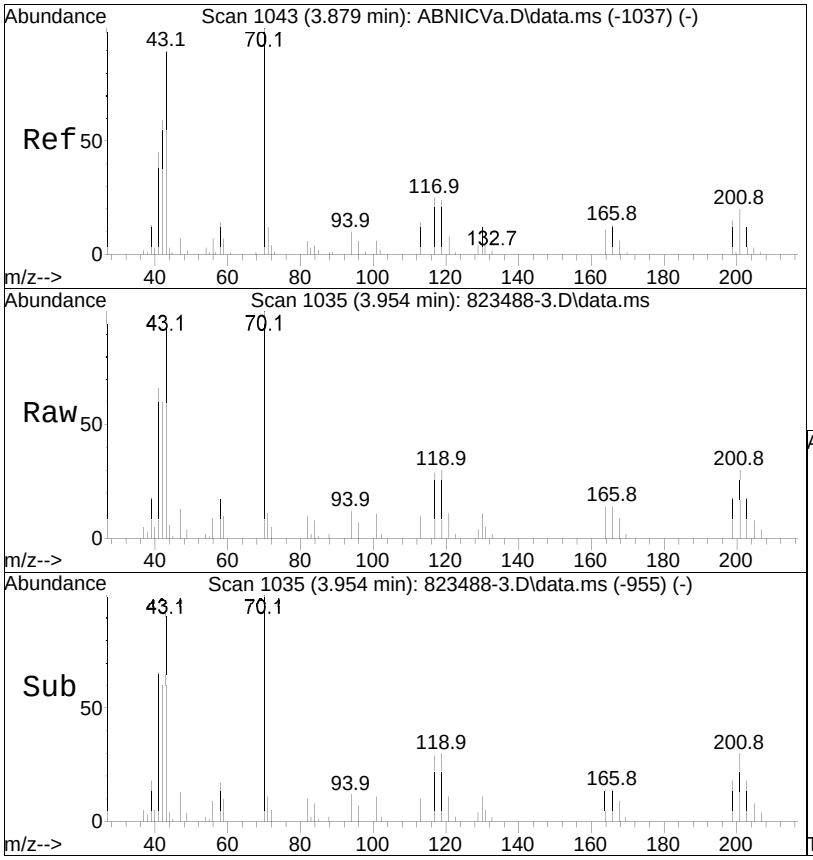


#15
2-Methylphenol
Concen: 3.52 ug/ml
RT: 3.836 min Scan# 997
Delta R.T. 0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:108 Resp: 12418

Ion	Ratio	Lower	Upper
108	100		
107	88.7	70.7	106.1
90	23.0	18.7	28.1

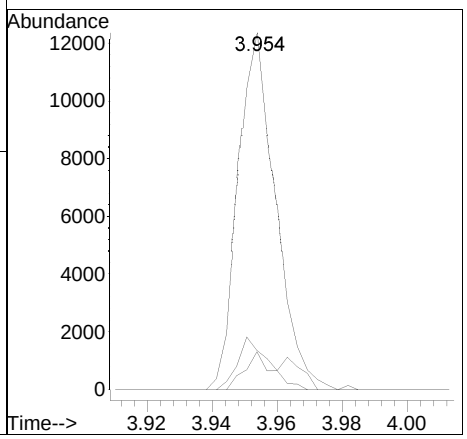


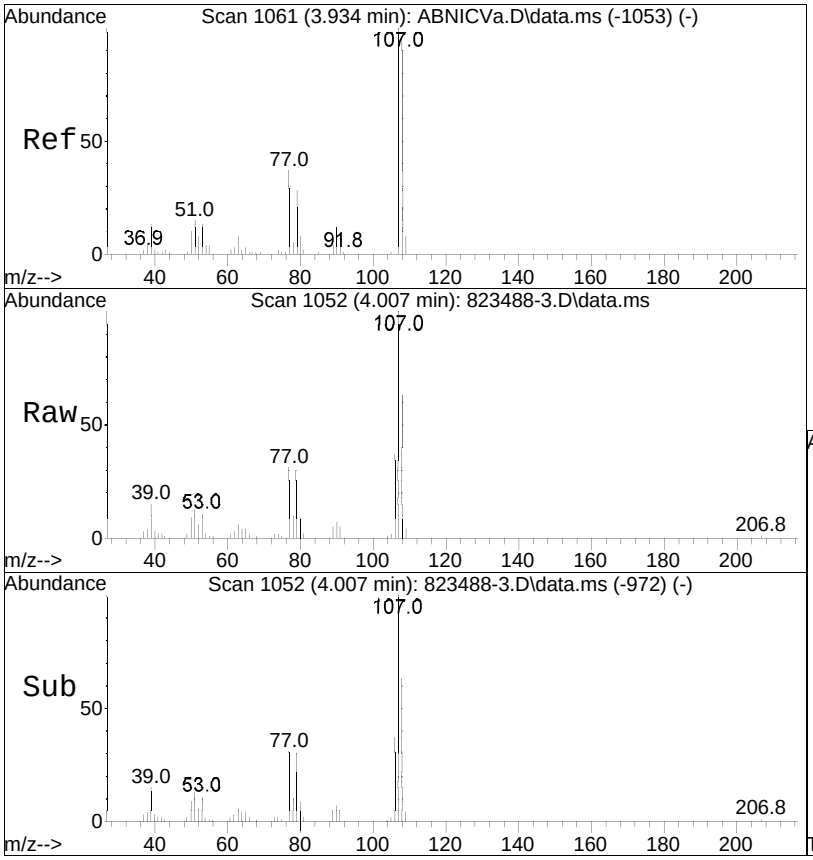


#17
n-Nitrosodi-n-propylamine
Concen: 3.50 ug/ml
RT: 3.954 min Scan# 1035
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion: 70 Resp: 9913

Ion	Ratio	Lower	Upper
70	100		
130	11.3	18.2	27.4#
101	7.9	7.8	11.8

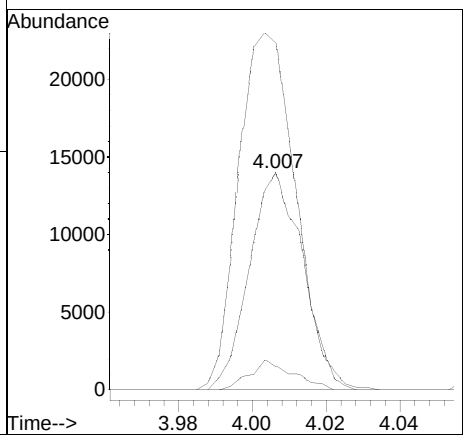


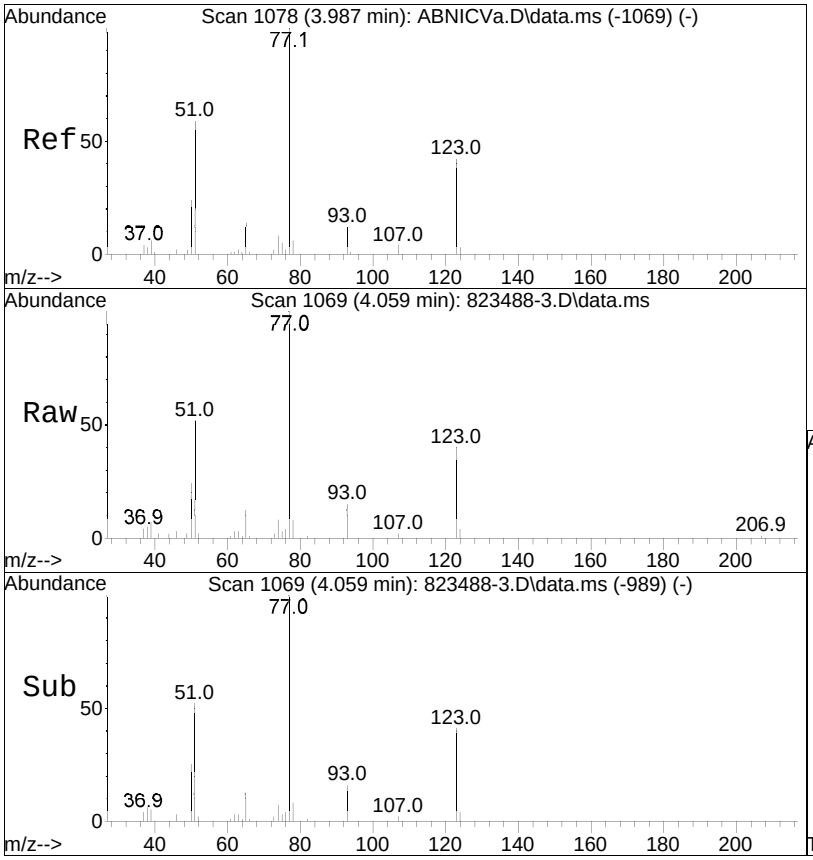


#18
3-Methylphenol/4-Methylphenol
Concen: 3.85 ug/ml
RT: 4.007 min Scan# 1052
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:108 Resp: 14011

Ion	Ratio	Lower	Upper
108	100		
107	176.0	88.6	132.8#
90	11.2	8.8	13.2

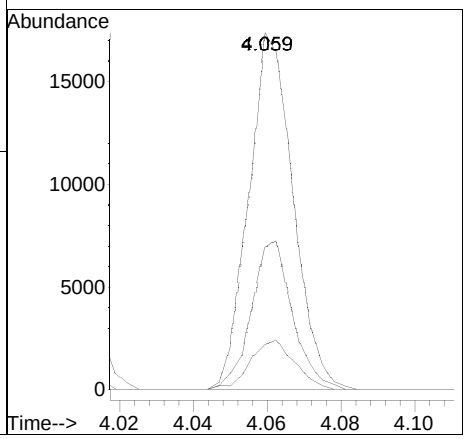


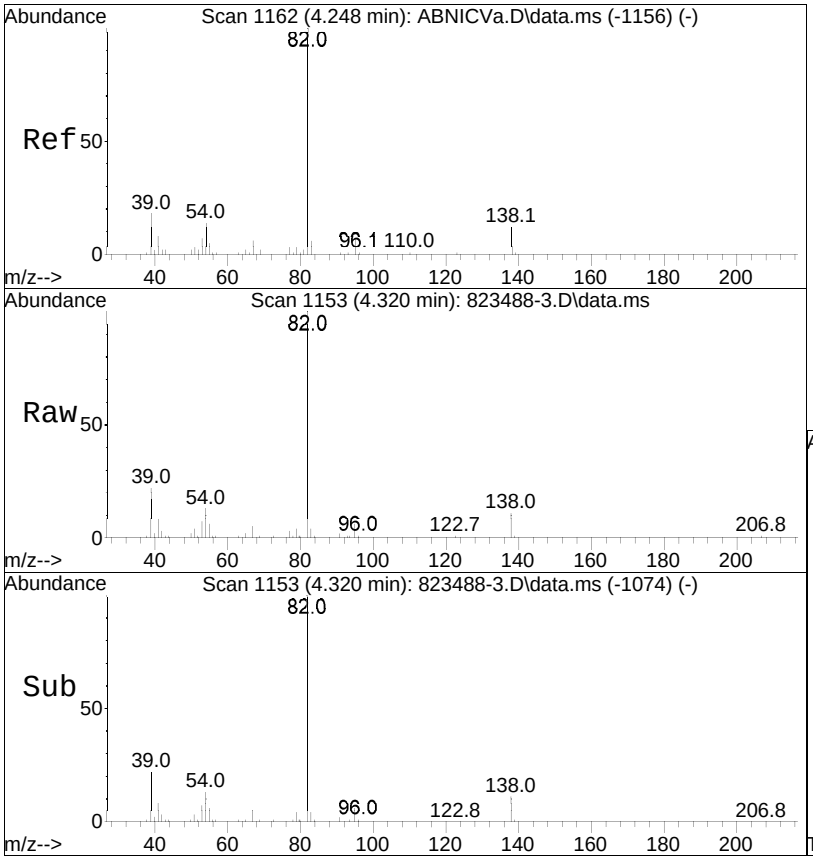


#20
Nitrobenzene
Concen: 3.37 ug/ml
RT: 4.059 min Scan# 1069
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion: 77 Resp: 14432

Ion	Ratio	Lower	Upper
77	100		
123	38.9	36.3	54.5
65	13.9	11.6	17.4

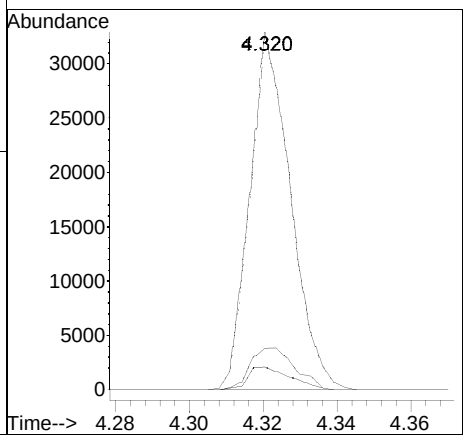


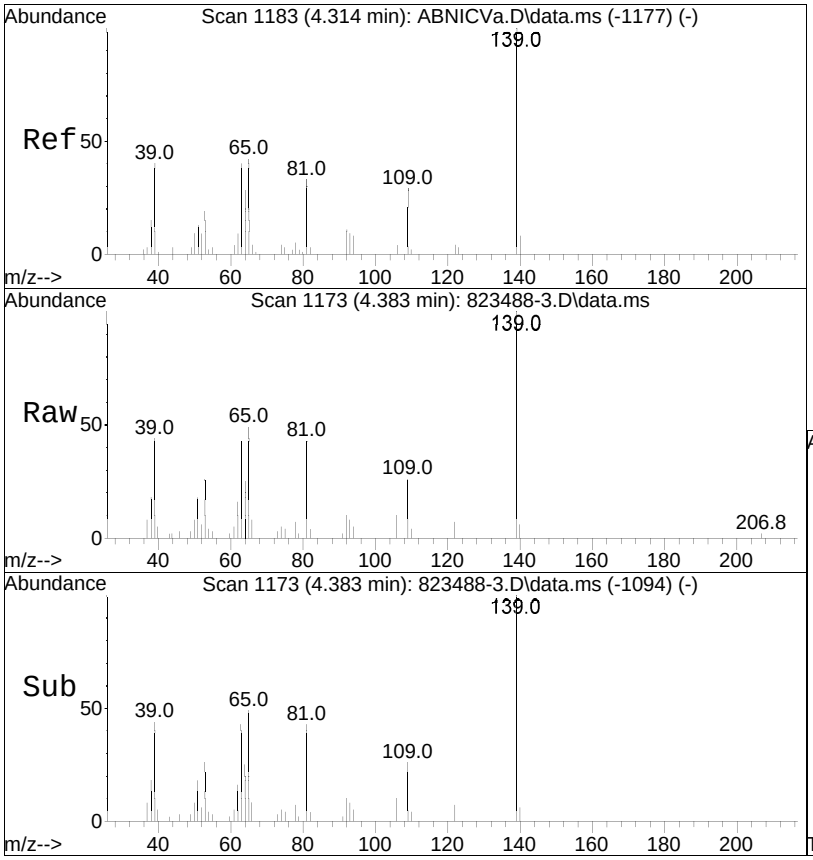


#21
Isophorone
Concen: 3.30 ug/ml
RT: 4.320 min Scan# 1153
Delta R.T. -0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion: 82 Resp: 24942

Ion	Ratio	Lower	Upper
82	100		
138	13.0	14.7	22.1#
95	6.8	5.2	7.8

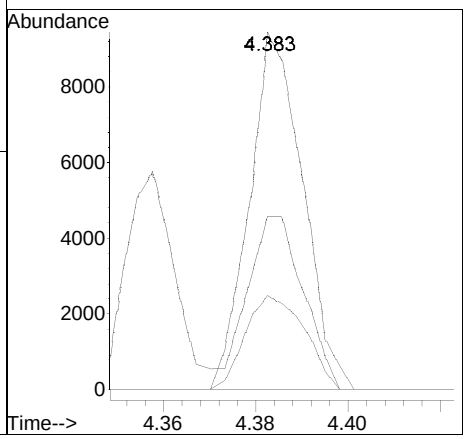


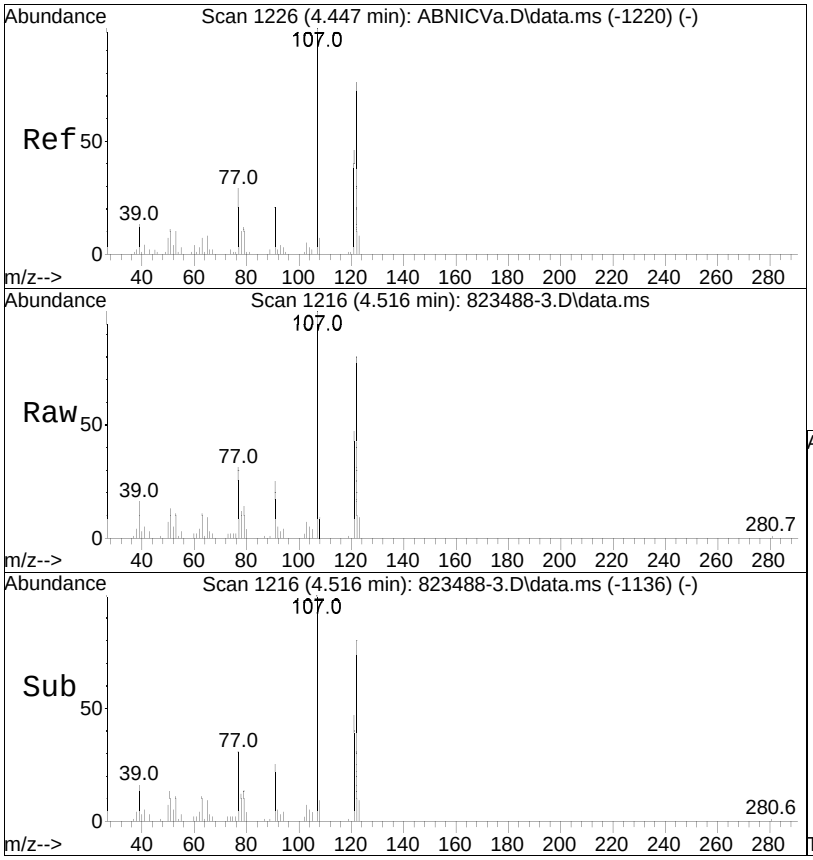


#22
2-Nitrophenol
Concen: 3.78 ug/ml
RT: 4.383 min Scan# 1173
Delta R.T. -0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:139 Resp: 7564

Ion	Ratio	Lower	Upper
139	100		
109	29.1	19.4	29.0#
65	51.1	46.1	69.1

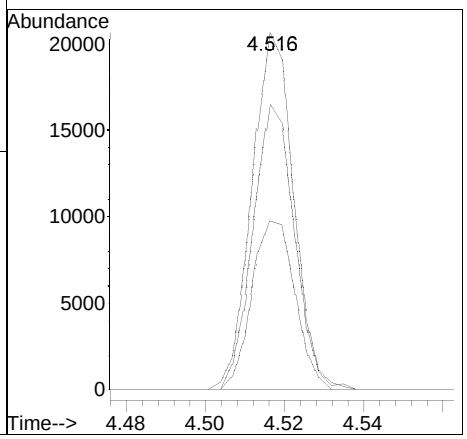


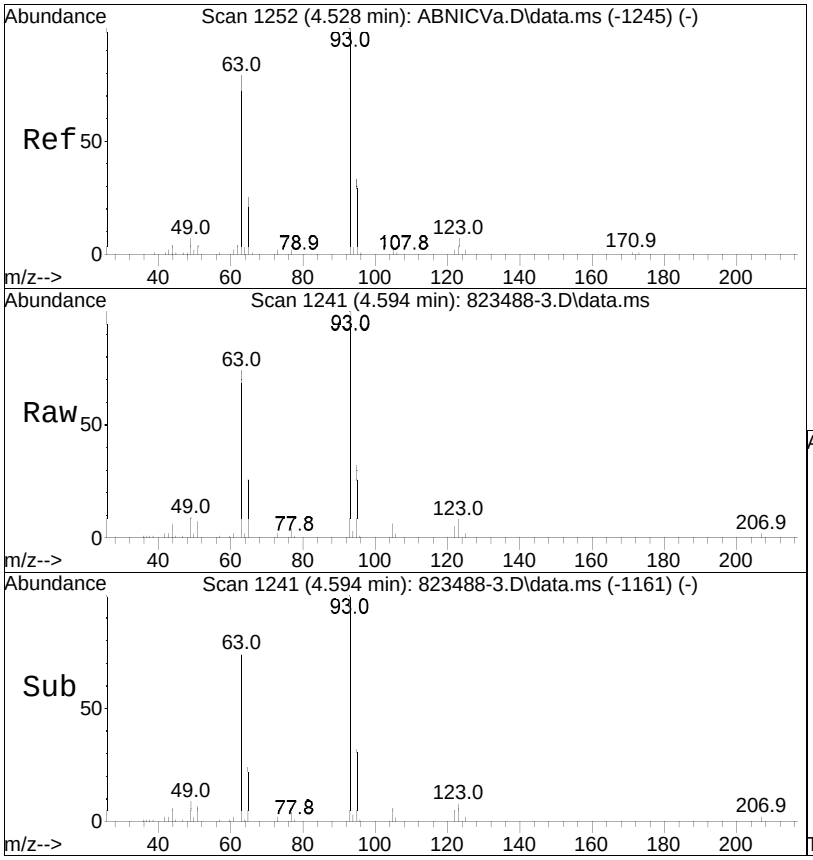


#23
2,4-Dimethylphenol
Concen: 3.91 ug/ml
RT: 4.516 min Scan# 1216
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:107 Resp: 15060

Ion	Ratio	Lower	Upper
107	100		
121	49.1	40.0	60.0
122	79.6	70.2	105.4

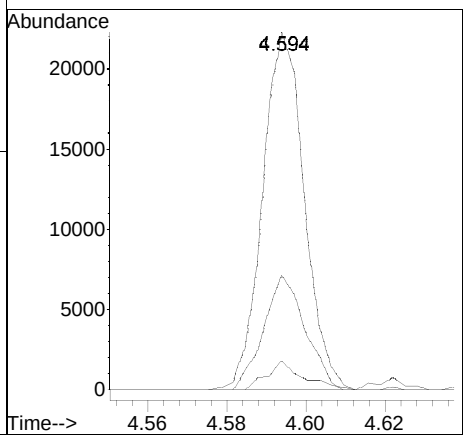


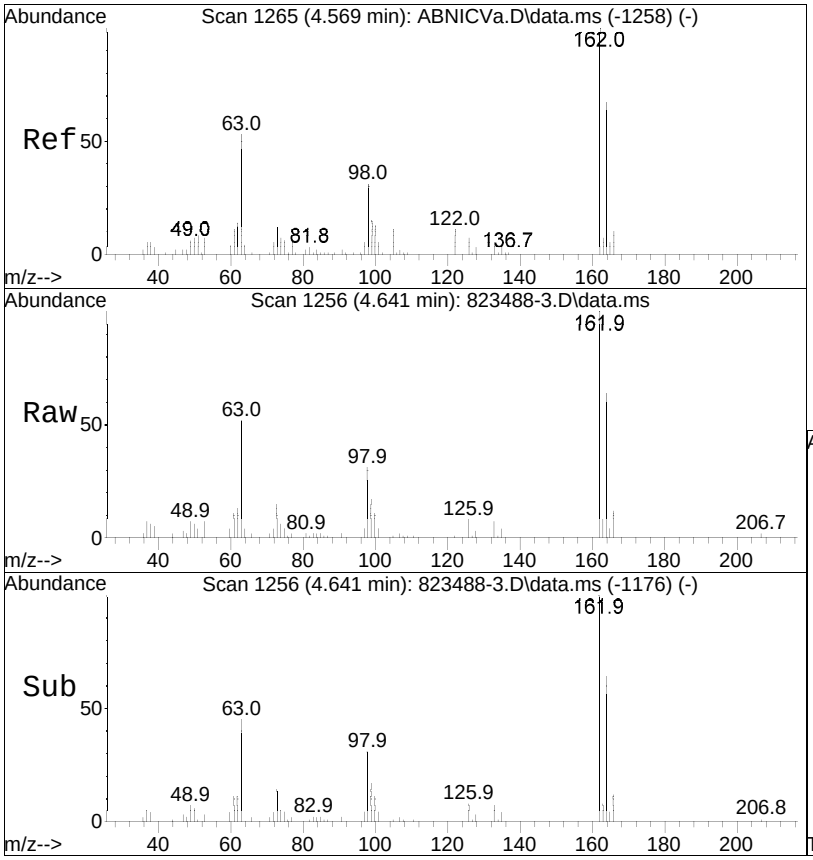


#24
Bis(2-chloroethoxy)methane
Concen: 3.28 ug/ml
RT: 4.594 min Scan# 1241
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion: 93 Resp: 16125

Ion	Ratio	Lower	Upper
93	100		
95	32.0	25.8	38.8
123	7.2	10.1	15.1#

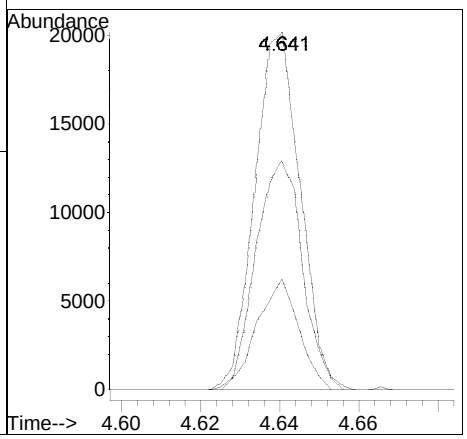


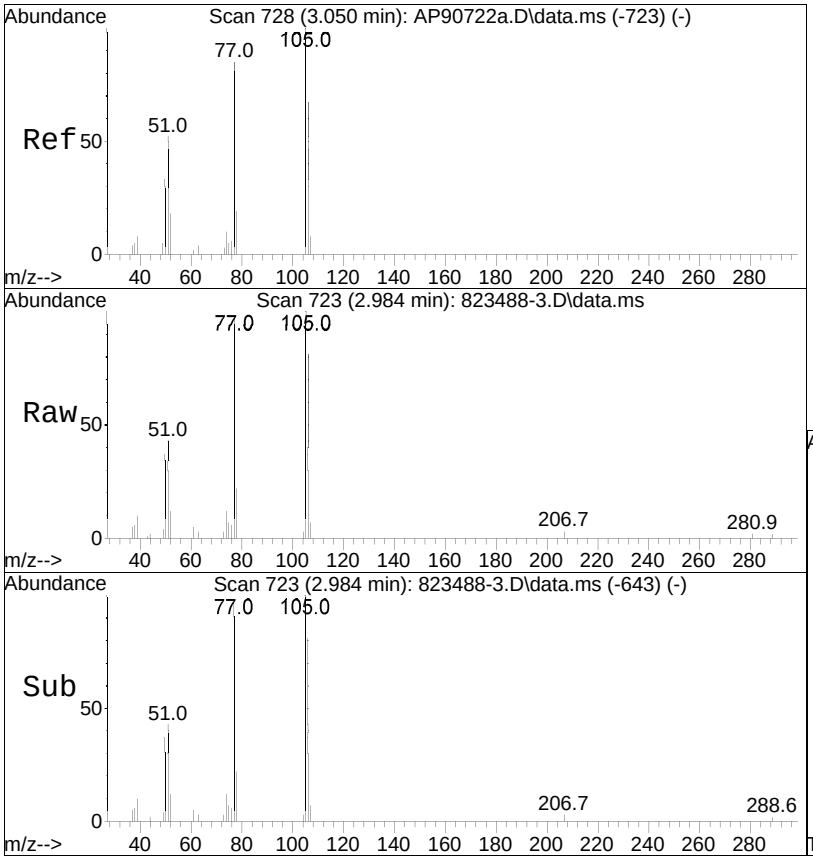


#25
2,4-Dichlorophenol
Concen: 4.42 ug/ml
RT: 4.641 min Scan# 1256
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:162 Resp: 15981

Ion	Ratio	Lower	Upper
162	100		
164	65.7	51.0	76.4
98	28.6	32.2	48.2#

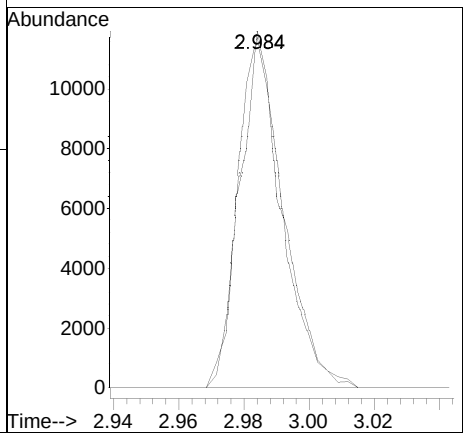


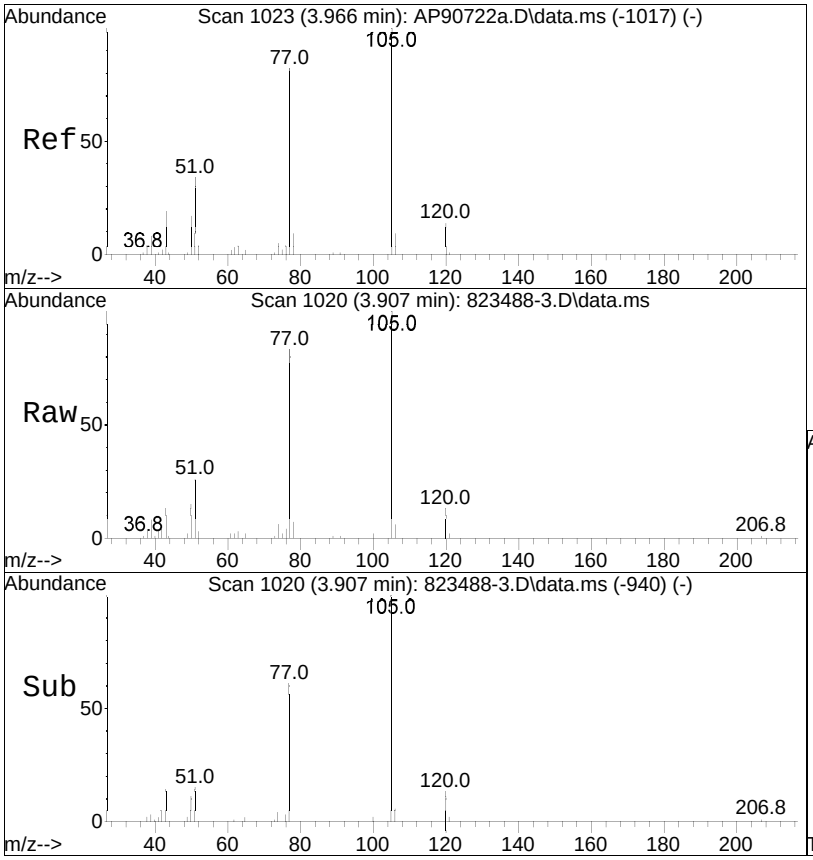


#28
Benzaldehyde
Concen: 3.00 ug/ml
RT: 2.984 min Scan# 723
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:105 Resp: 10873

Ion	Ratio	Lower	Upper
105	100		
77	102.0	82.2	123.4

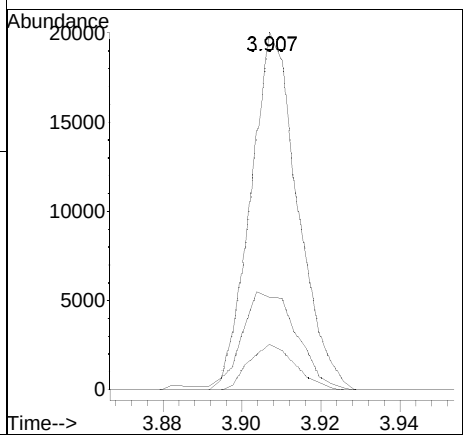


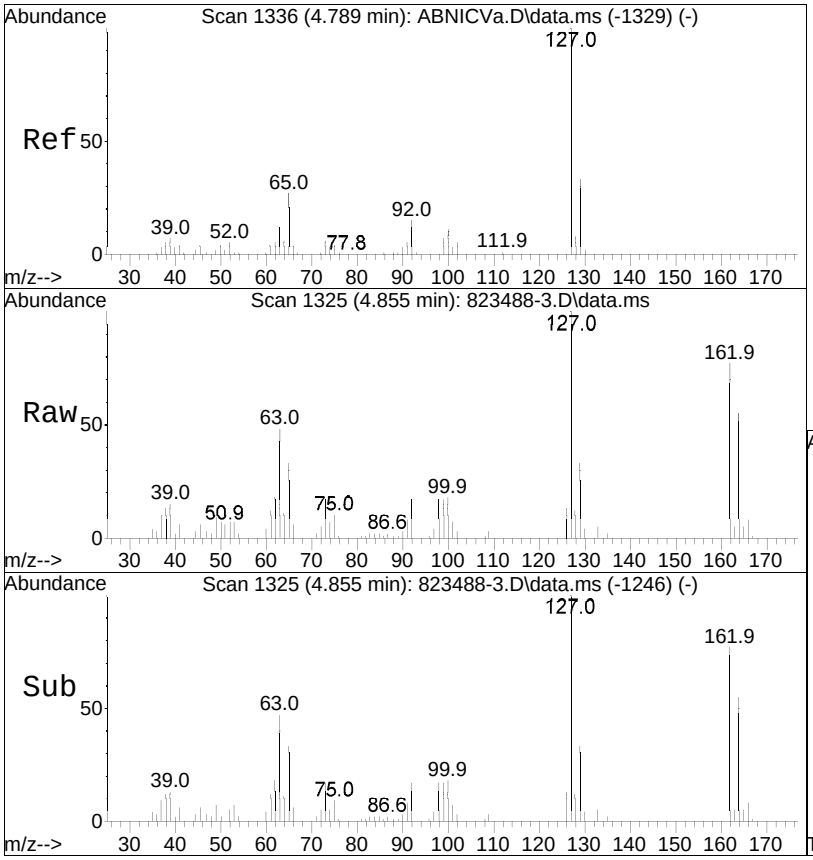


#29
Acetophenone
Concen: 2.58 ug/ml
RT: 3.907 min Scan# 1020
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:105 Resp: 16414

Ion	Ratio	Lower	Upper
105	100		
120	12.7	20.5	30.7#
51	33.1	34.9	52.3#

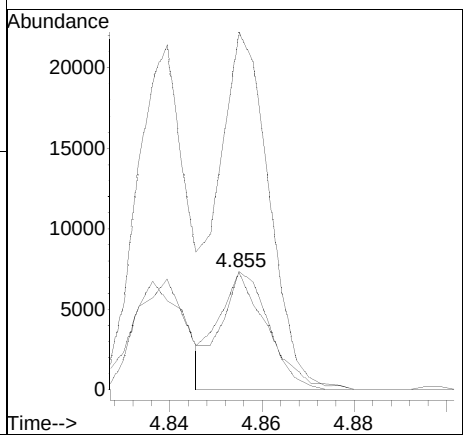


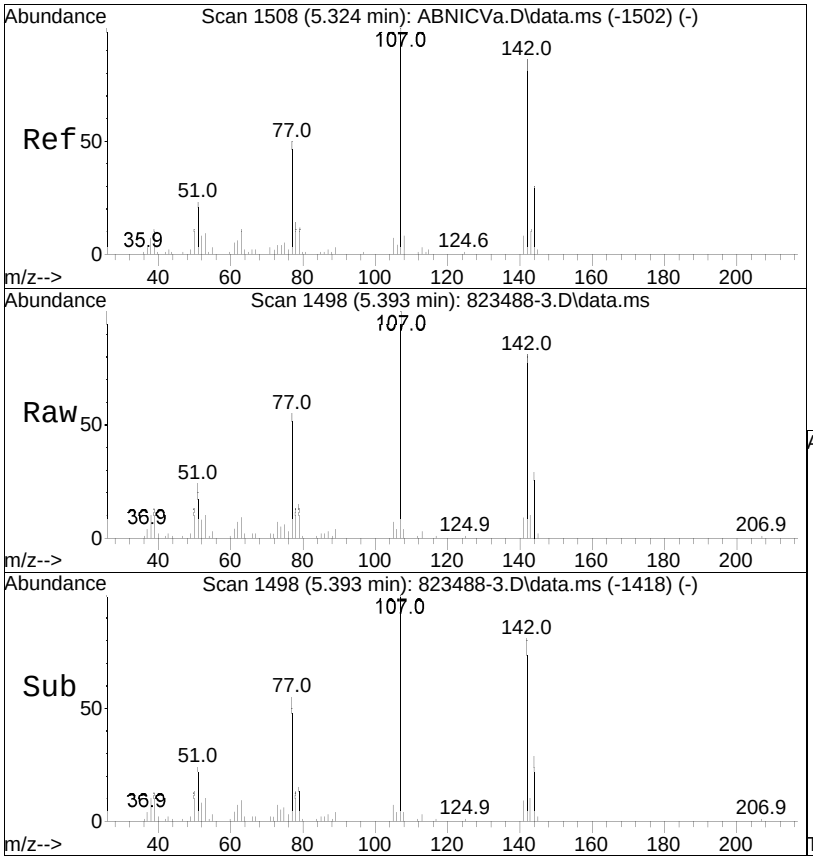


#37
4-Chloroaniline
Concen: 3.92 ug/ml
RT: 4.855 min Scan# 1325
Delta R.T. -0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion: 65 Resp: 5473

Ion	Ratio	Lower	Upper
65	100		
127	307.2	237.6	356.4
129	96.1	76.3	114.5

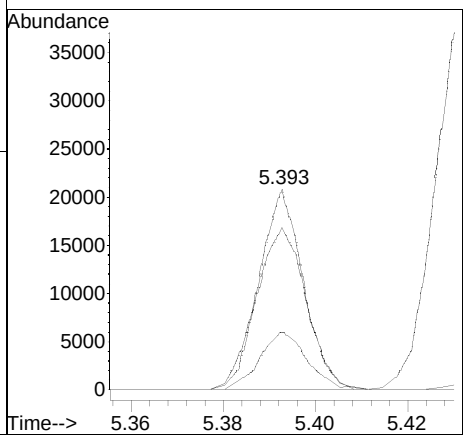


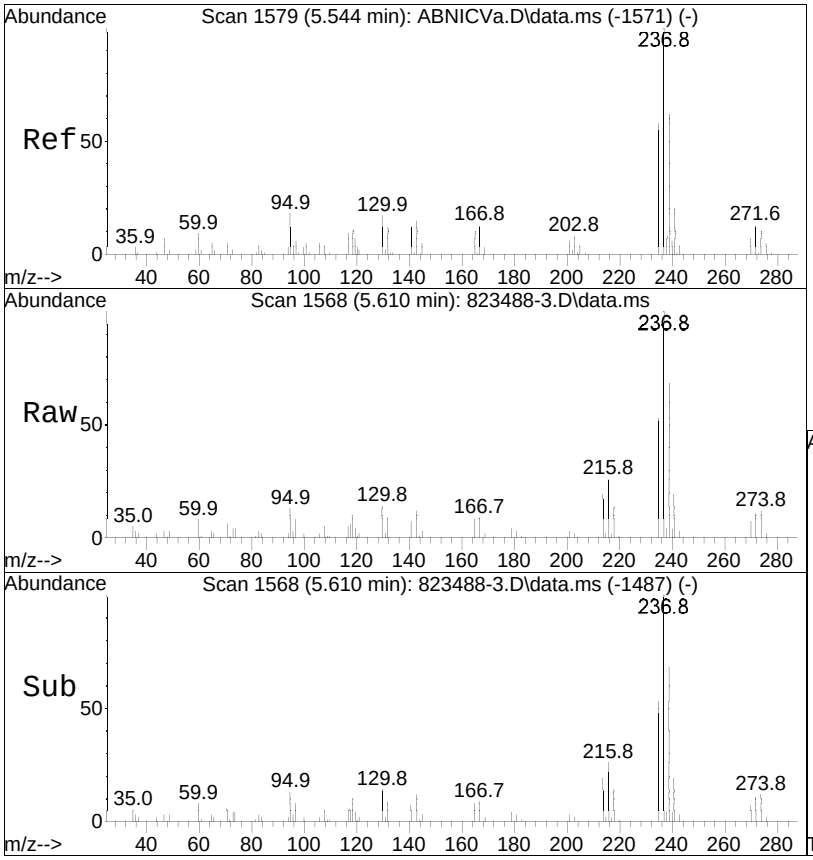


#39
p-Chloro-m-cresol
Concen: 4.55 ug/ml
RT: 5.393 min Scan# 1498
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:107 Resp: 14053

Ion	Ratio	Lower	Upper
107	100		
144	30.3	20.9	31.3
142	88.3	66.1	99.1

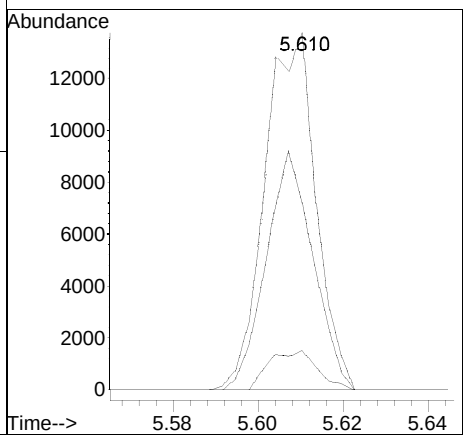


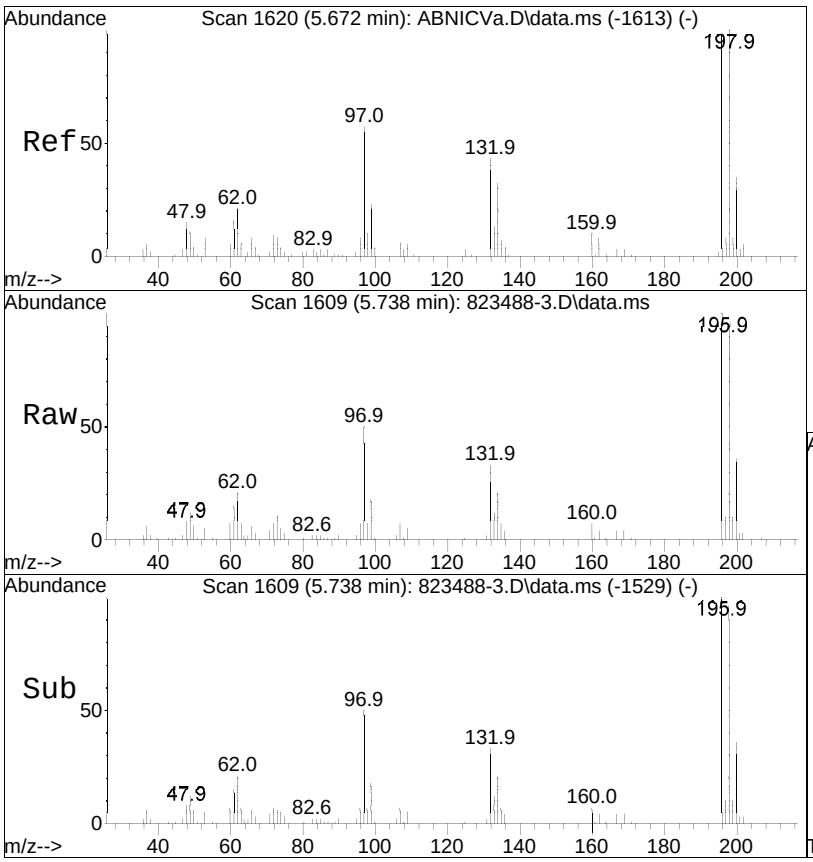


#42
Hexachlorocyclopentadiene
Concen: 3.92 ug/ml
RT: 5.610 min Scan# 1568
Delta R.T. 0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:237 Resp: 11392

Ion	Ratio	Lower	Upper
237	100		
235	61.4	49.7	74.5
272	10.5	9.8	14.6

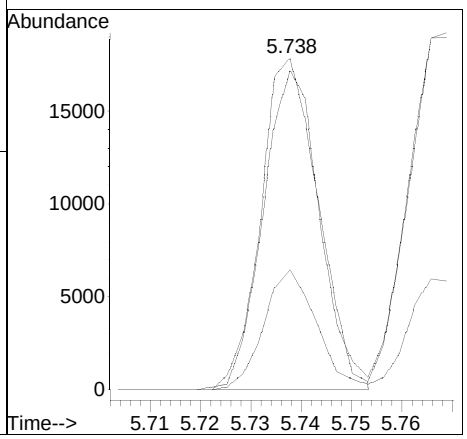


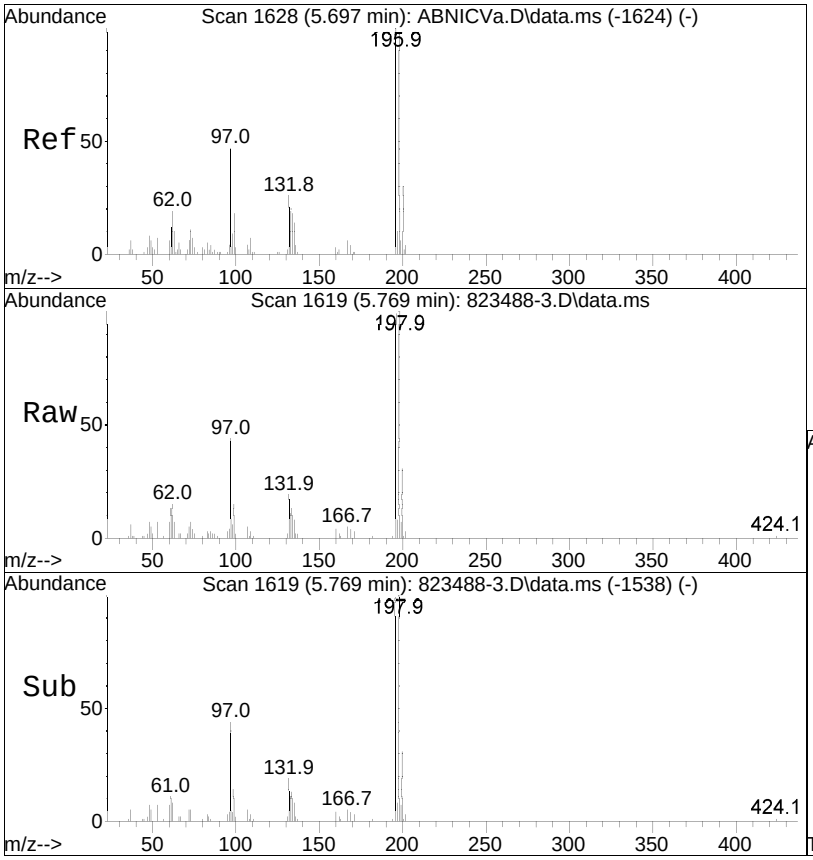


#43
2,4,6-Trichlorophenol
Concen: 5.02 ug/ml
RT: 5.738 min Scan# 1609
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:196 Resp: 14113

Ion	Ratio	Lower	Upper
196	100		
198	95.3	77.5	116.3
200	33.5	23.8	35.6

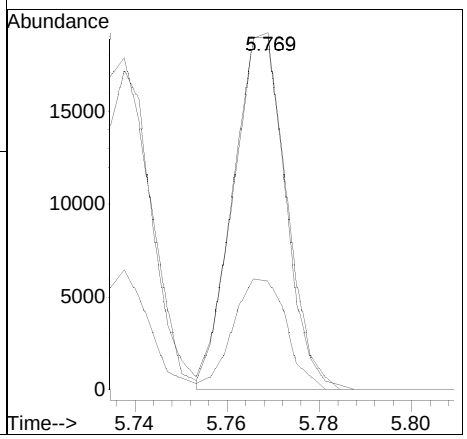


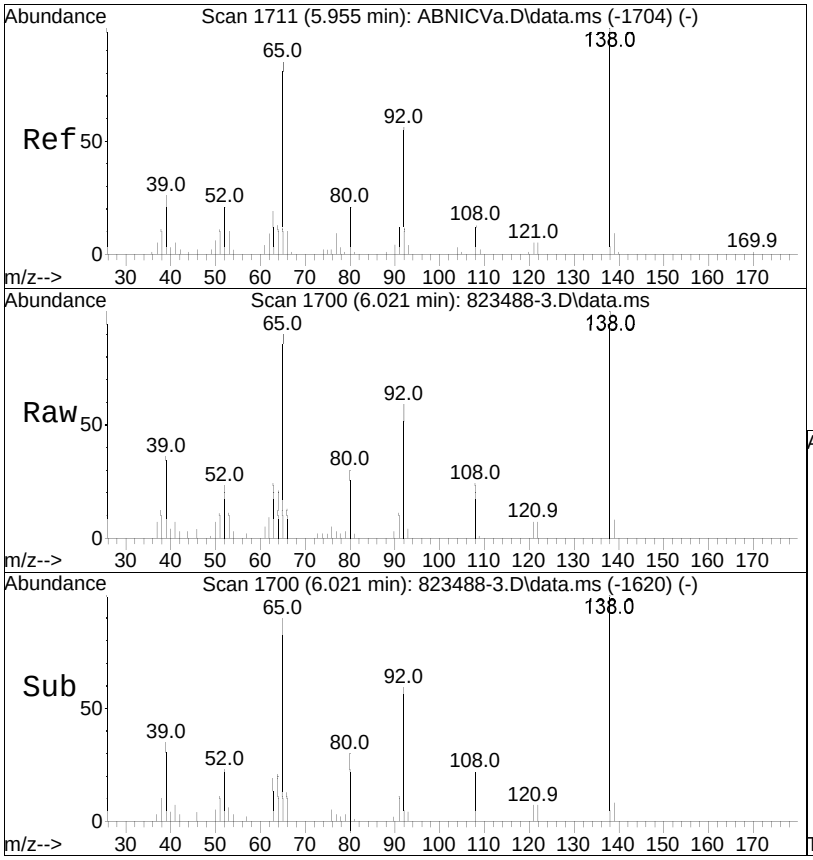


#44
2,4,5-Trichlorophenol
Concen: 5.26 ug/ml
RT: 5.769 min Scan# 1619
Delta R.T. 0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:196 Resp: 14944

Ion	Ratio	Lower	Upper
196	100		
200	32.0	25.4	38.0
198	103.1	78.0	117.0

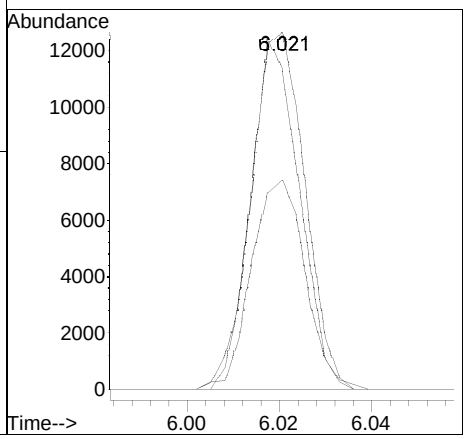


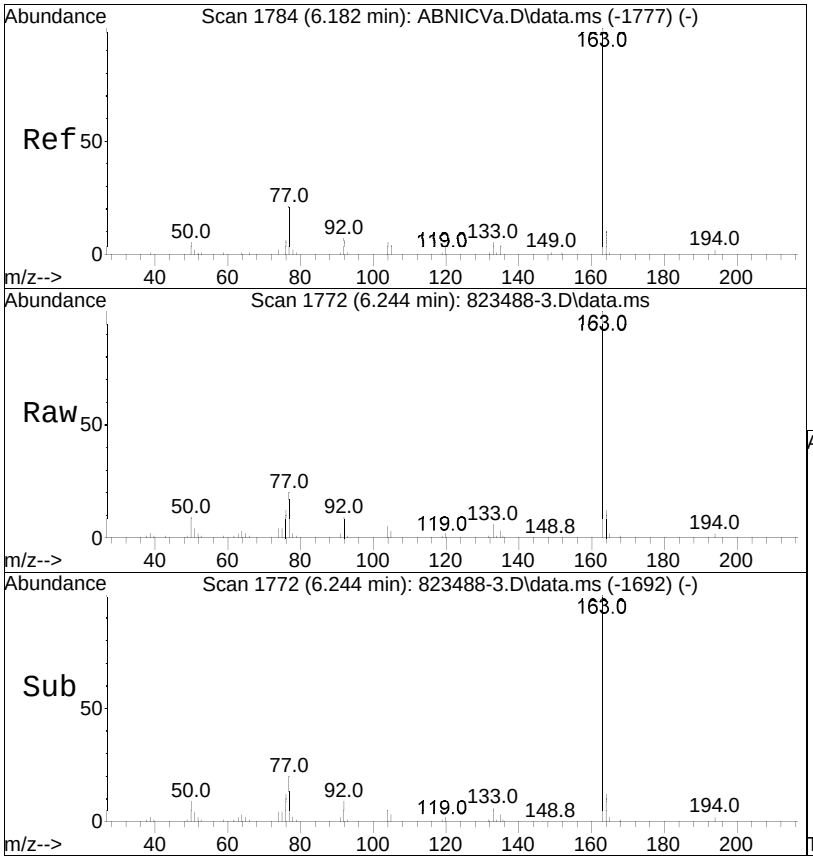


#47
2-Nitroaniline
Concen: 4.14 ug/ml
RT: 6.021 min Scan# 1700
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:138 Resp: 10087

Ion	Ratio	Lower	Upper
138	100		
92	59.1	53.5	80.3
65	91.1	86.3	129.5

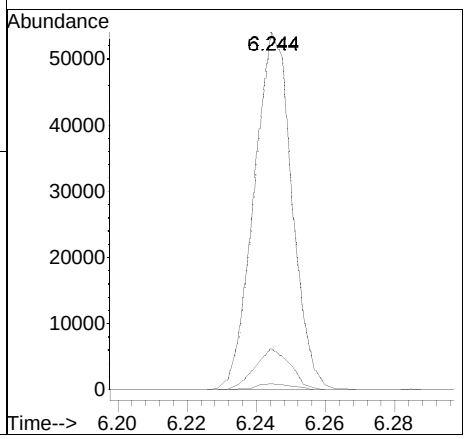


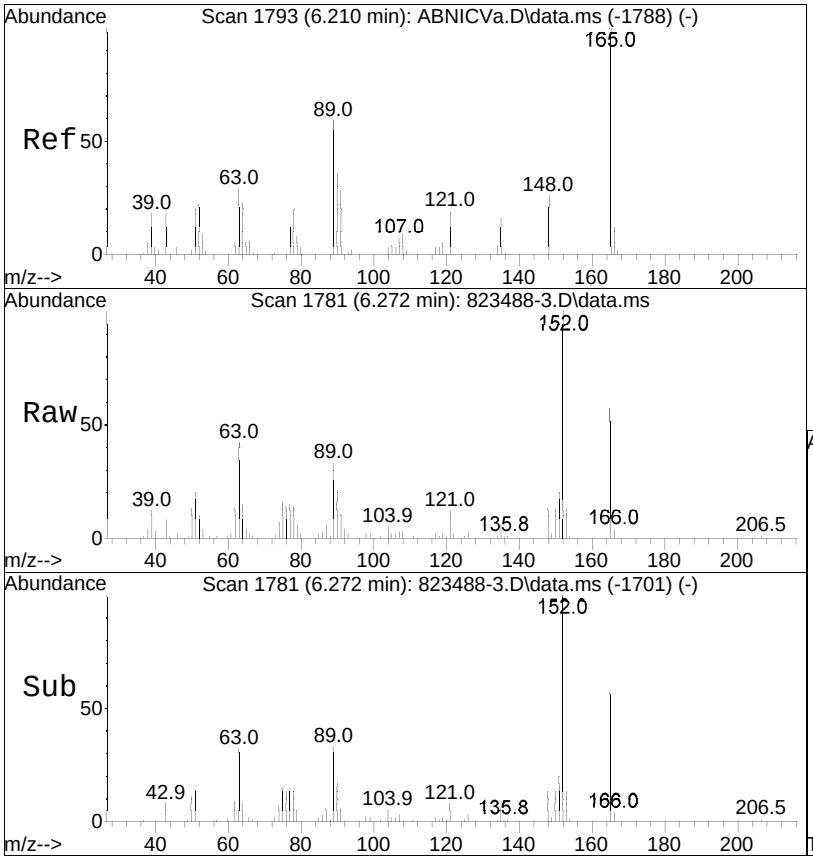


#50
Dimethyl phthalate
Concen: 4.13 ug/ml
RT: 6.244 min Scan# 1772
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:163 Resp: 40707

Ion	Ratio	Lower	Upper
163	100		
194	1.7	3.5	5.3#
164	11.0	7.9	11.9

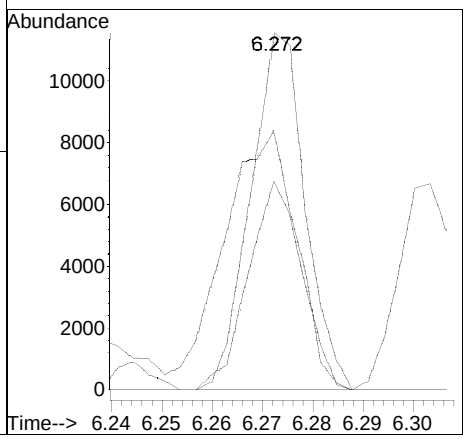


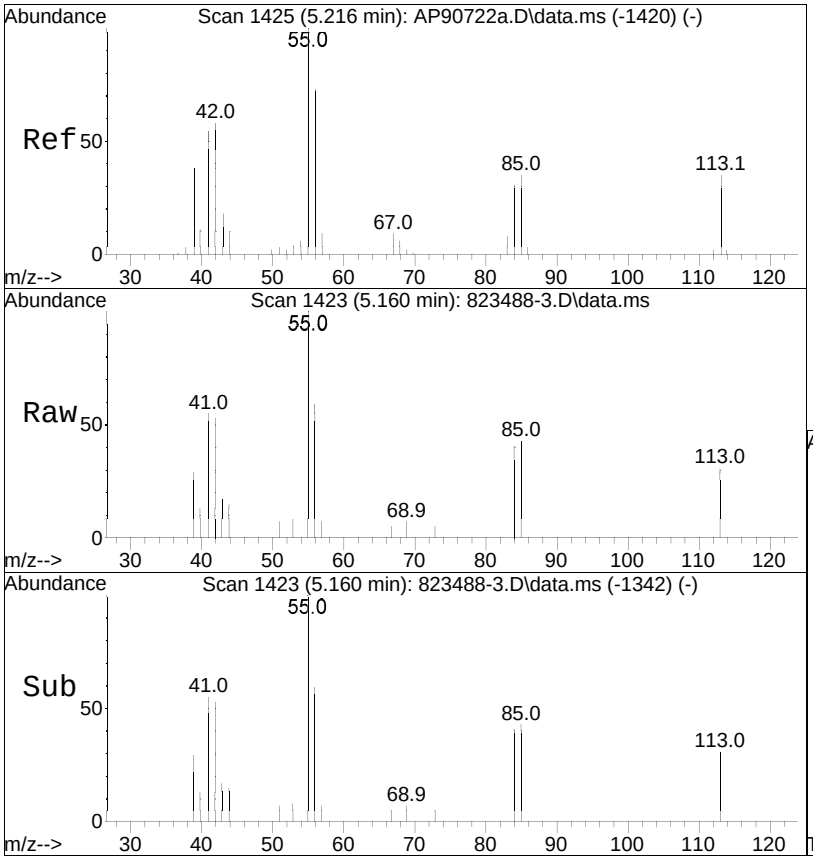


#52
2,6-Dinitrotoluene
Concen: 4.26 ug/ml
RT: 6.272 min Scan# 1781
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:165 Resp: 8662

Ion	Ratio	Lower	Upper
165	100		
89	57.7	54.2	81.2
63	96.5	64.2	96.2#

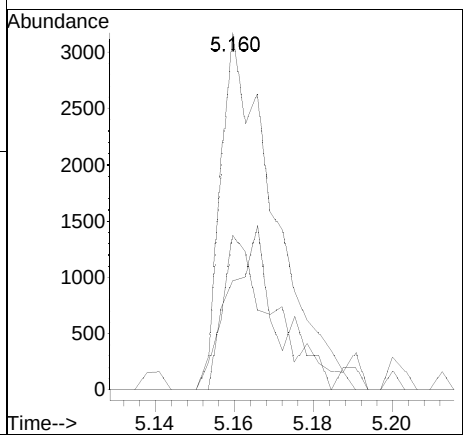


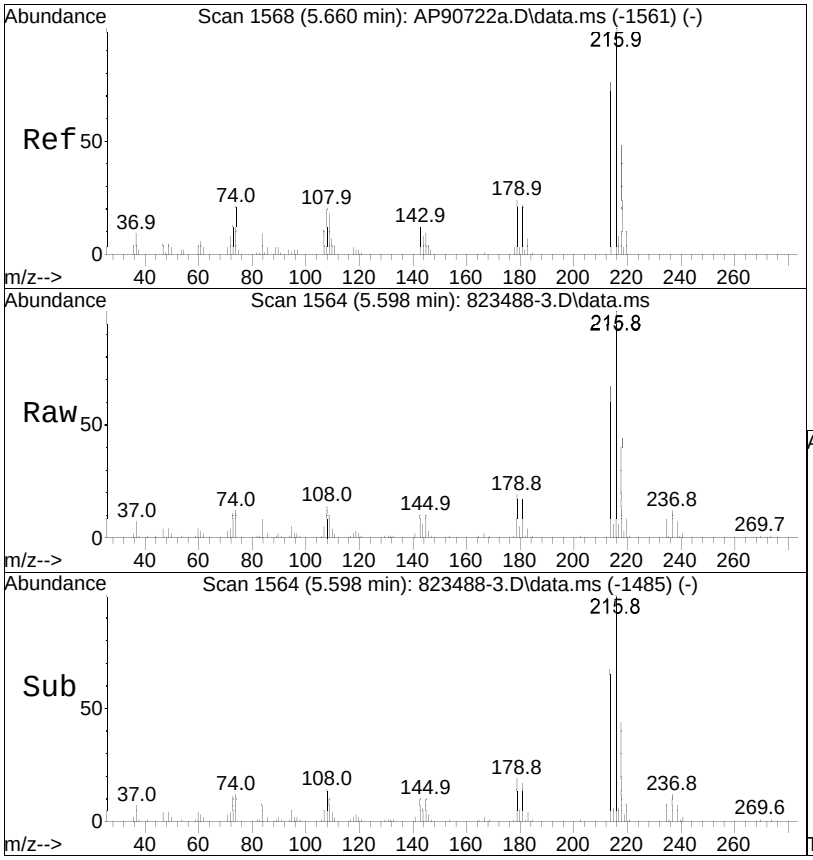


#59
Caprolactam
Concen: 1.67 ug/ml
RT: 5.160 min Scan# 1423
Delta R.T. 0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion: 55 Resp: 3024

Ion	Ratio	Lower	Upper
55	100		
85	42.0	19.8	29.6#
113	39.4	29.6	44.4

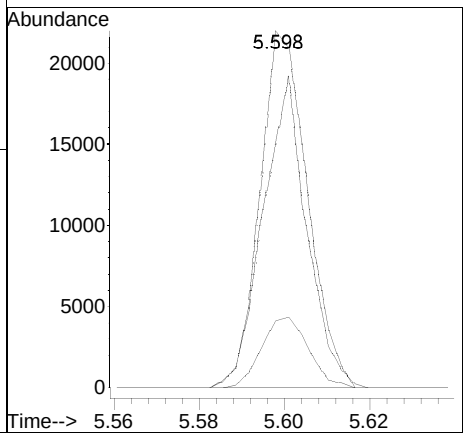


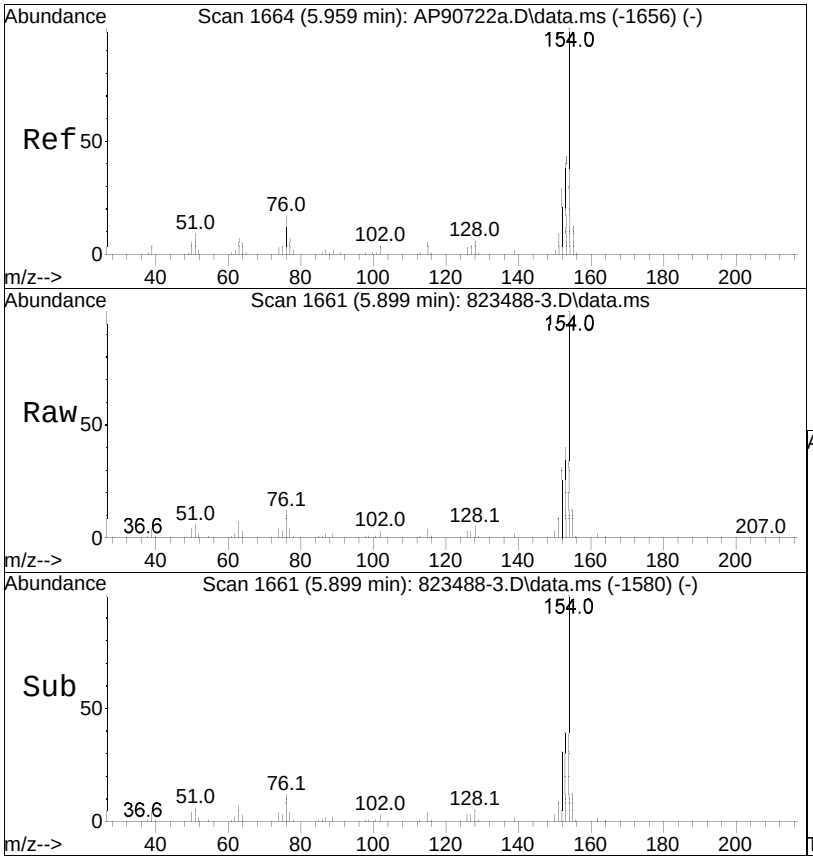


#60
1,2,4,5-Tetrachlorobenzene
Concen: 3.46 ug/ml
RT: 5.598 min Scan# 1564
Delta R.T. -0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:216 Resp: 16938

Ion	Ratio	Lower	Upper
216	100		
214	80.4	63.7	95.5
179	19.6	19.0	28.6

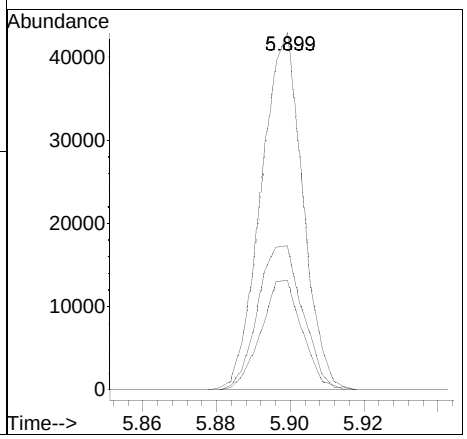


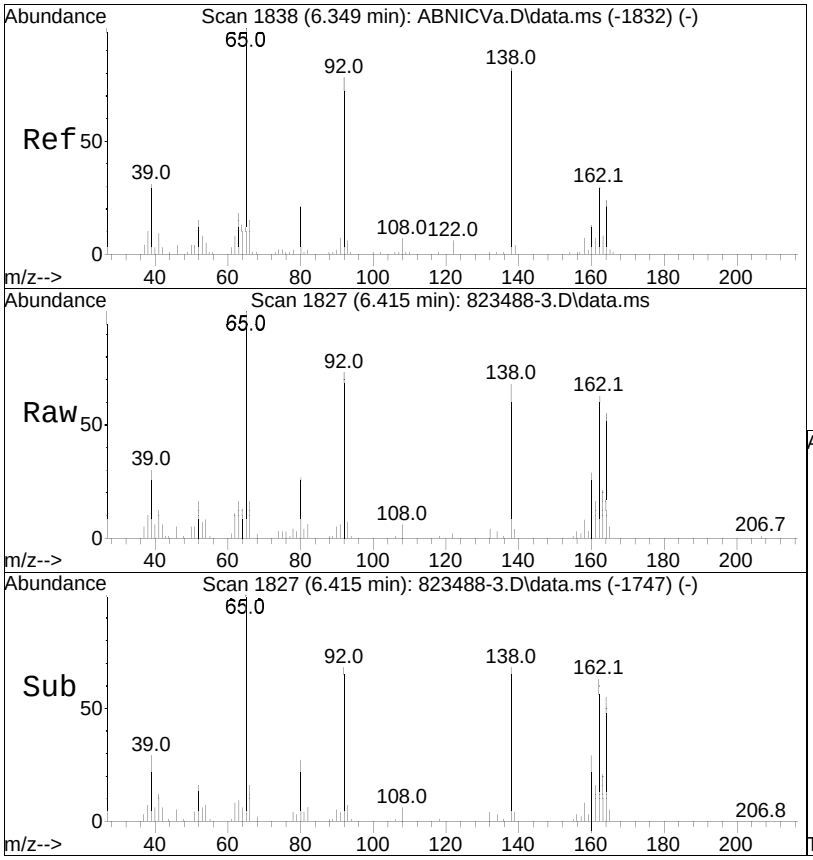


#61
Biphenyl
Concen: 3.05 ug/ml
RT: 5.899 min Scan# 1661
Delta R.T. 0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:154 Resp: 33448

Ion	Ratio	Lower	Upper
154	100		
153	43.7	32.3	48.5
152	30.6	22.5	33.7

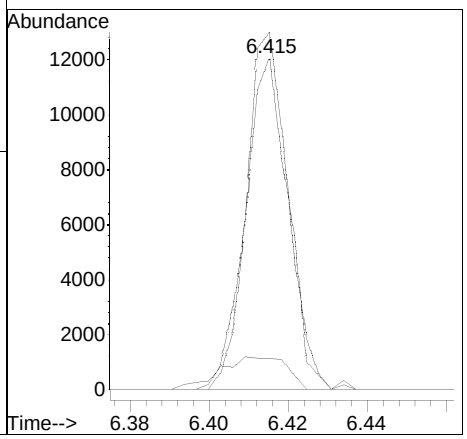


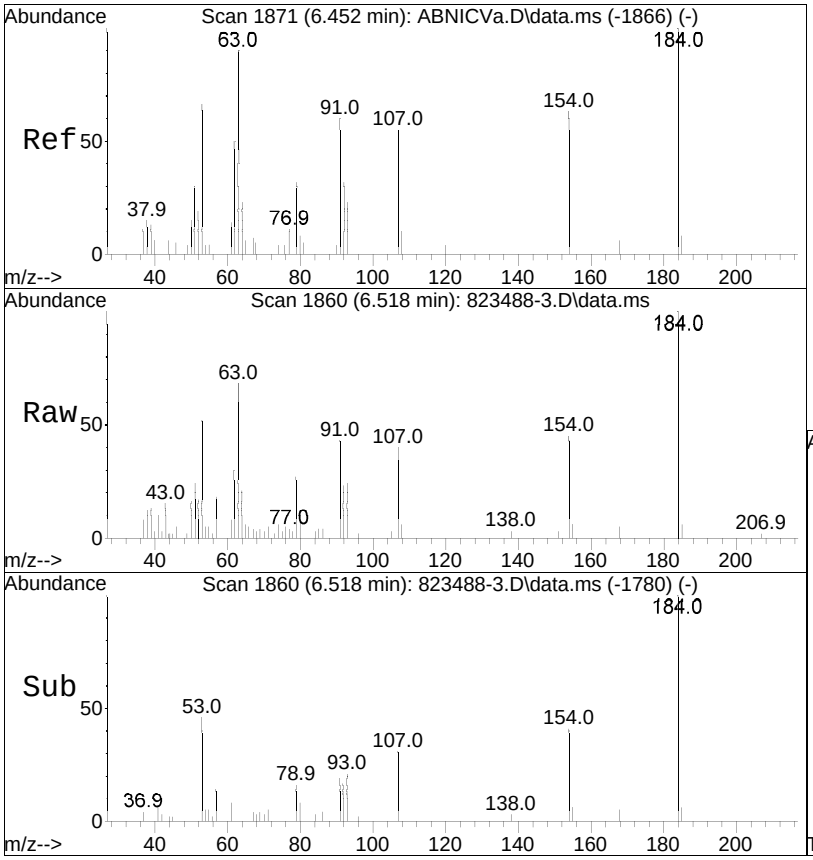


#63
3-Nitroaniline
Concen: 3.49 ug/ml
RT: 6.415 min Scan# 1827
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:138 Resp: 8823

Ion	Ratio	Lower	Upper
138	100		
92	109.8	93.4	140.2
108	15.8	9.5	14.3#

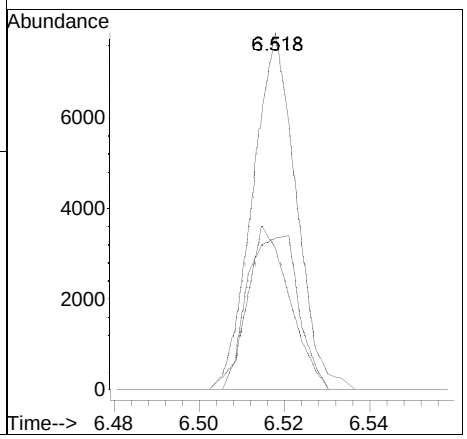


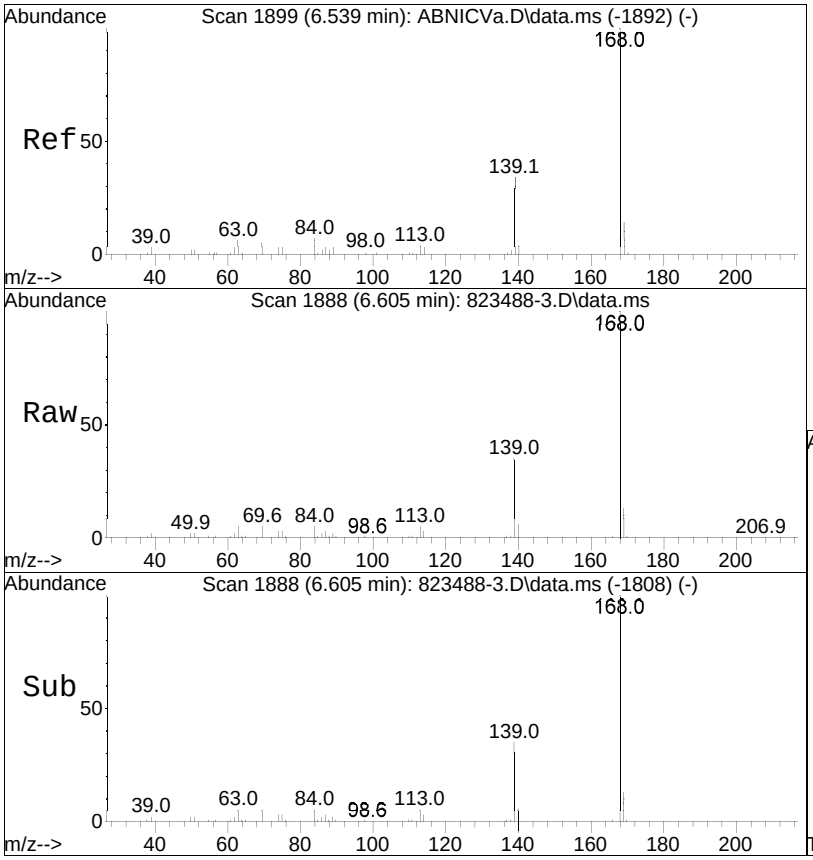


#65
2,4-Dinitrophenol
Concen: 4.71 ug/ml
RT: 6.518 min Scan# 1860
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:184 Resp: 5555

Ion	Ratio	Lower	Upper
184	100		
107	45.0	37.7	56.5
91	50.8	46.3	69.5

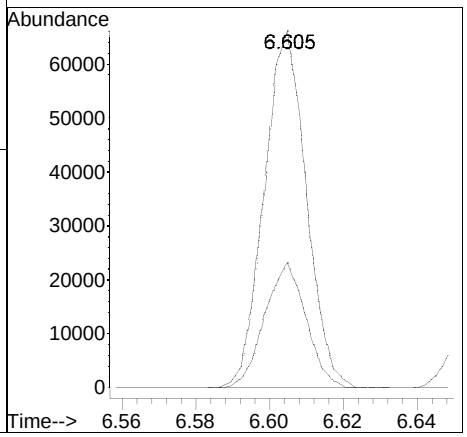


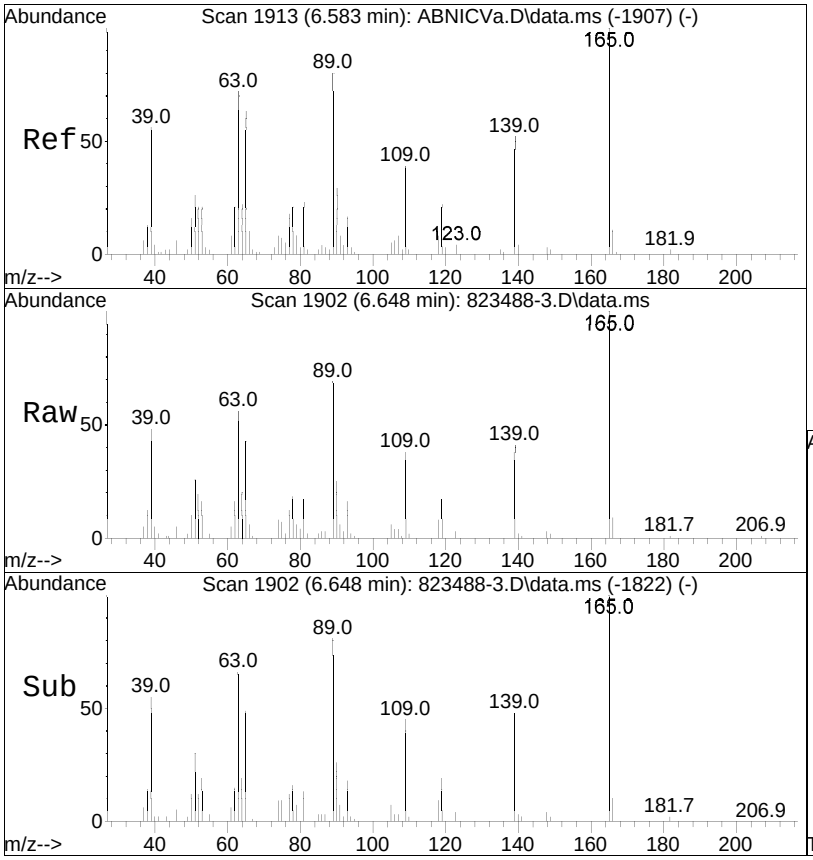


#66
Dibenzofuran
Concen: 3.77 ug/ml
RT: 6.605 min Scan# 1888
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:168 Resp: 51946

Ion	Ratio	Lower	Upper
168	100		
139	34.7	31.4	47.2

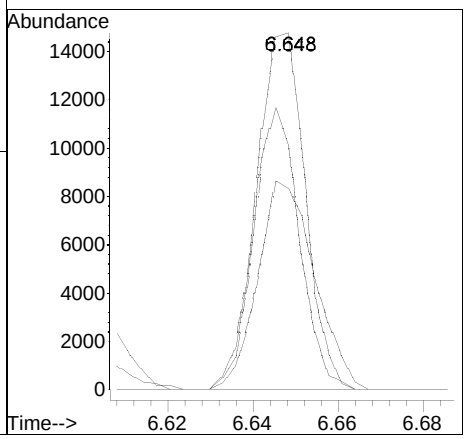


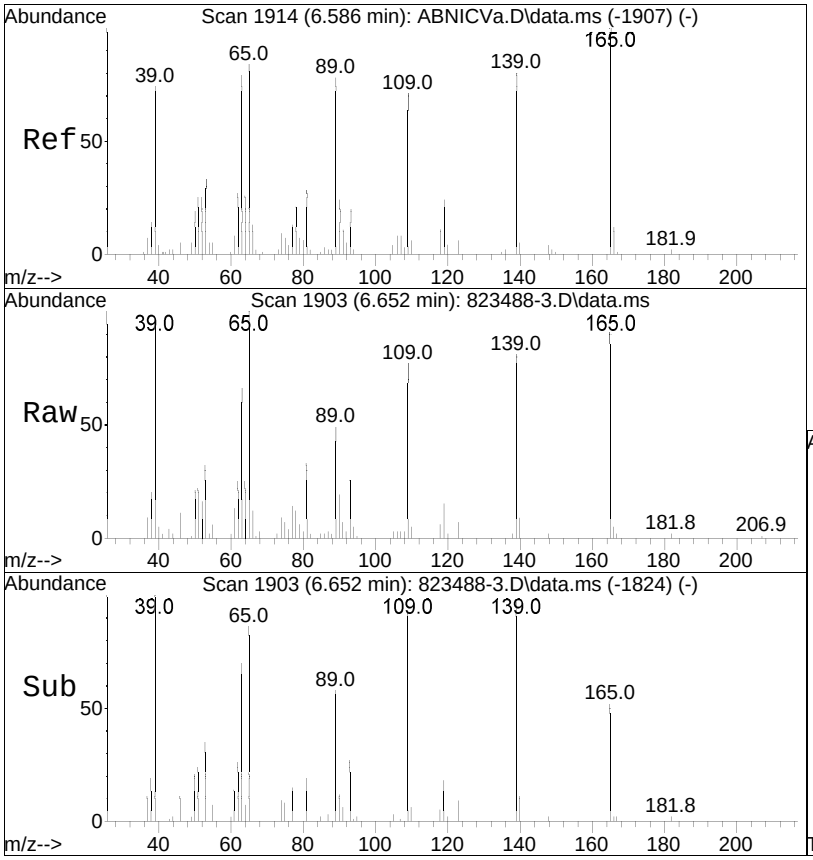


#67
2,4-Dinitrotoluene
Concen: 3.79 ug/ml
RT: 6.648 min Scan# 1902
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:165 Resp: 11780

Ion	Ratio	Lower	Upper
165	100		
89	73.6	72.0	108.0
63	67.5	52.7	79.1

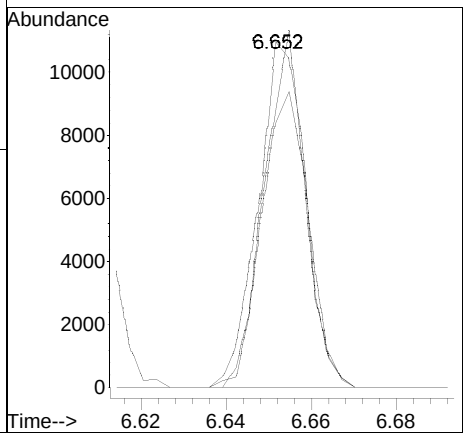


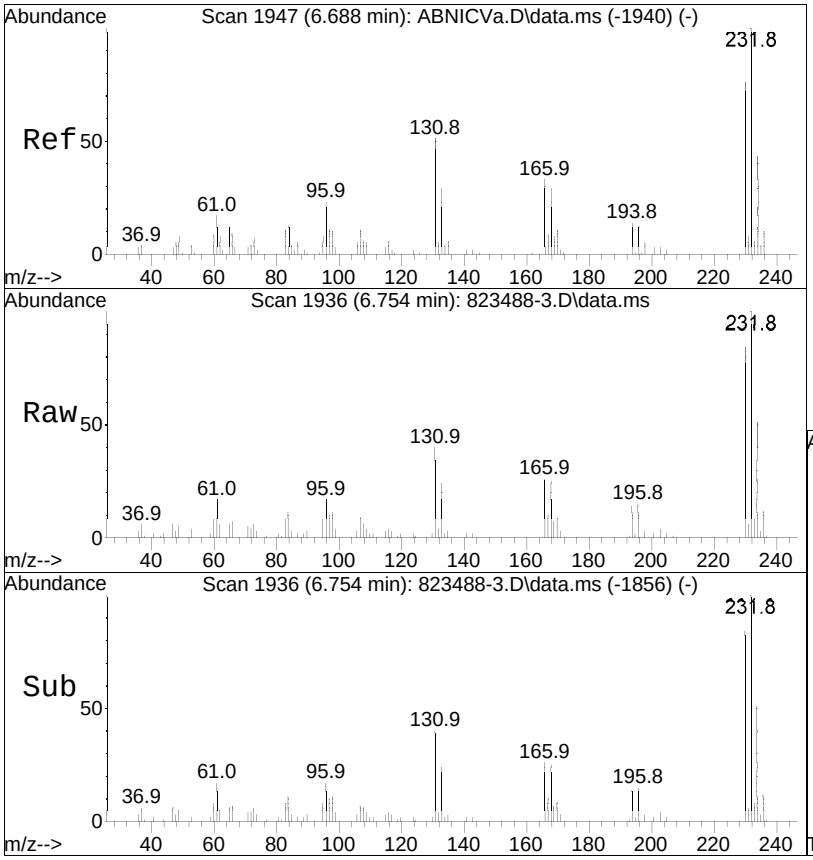


#68
4-Nitrophenol
Concen: 4.13 ug/ml
RT: 6.652 min Scan# 1903
Delta R.T. -0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion: 65 Resp: 8446

Ion	Ratio	Lower	Upper
65	100		
109	82.9	47.4	71.2#
139	91.5	76.6	115.0

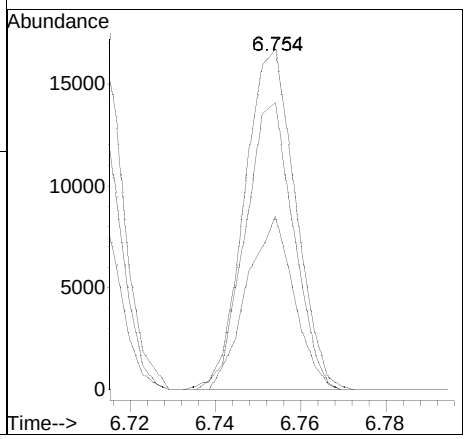


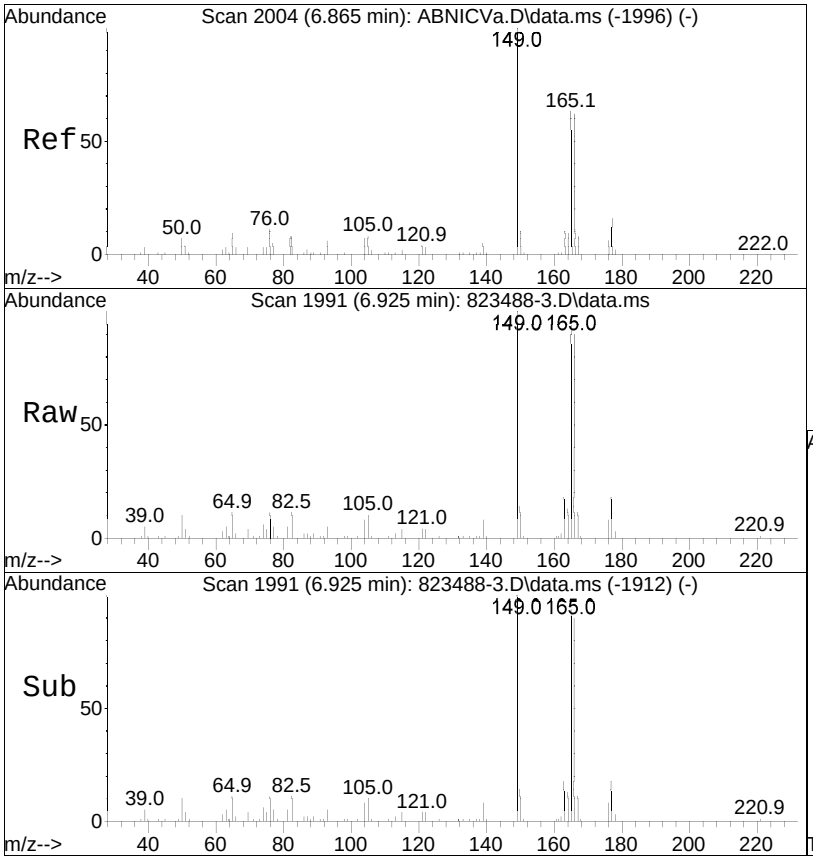


#70
2,3,4,6-Tetrachlorophenol
Concen: 4.80 ug/ml
RT: 6.754 min Scan# 1936
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:232 Resp: 13849

Ion	Ratio	Lower	Upper
232	100		
230	80.7	61.8	92.8
234	47.4	36.2	54.2

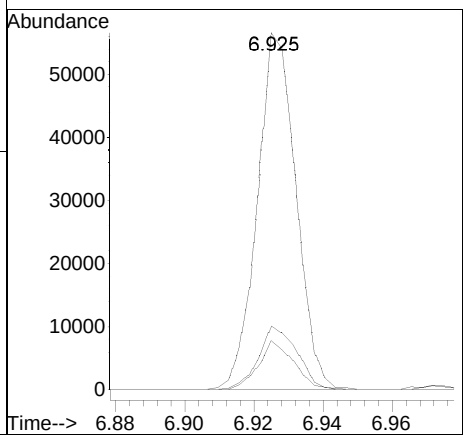


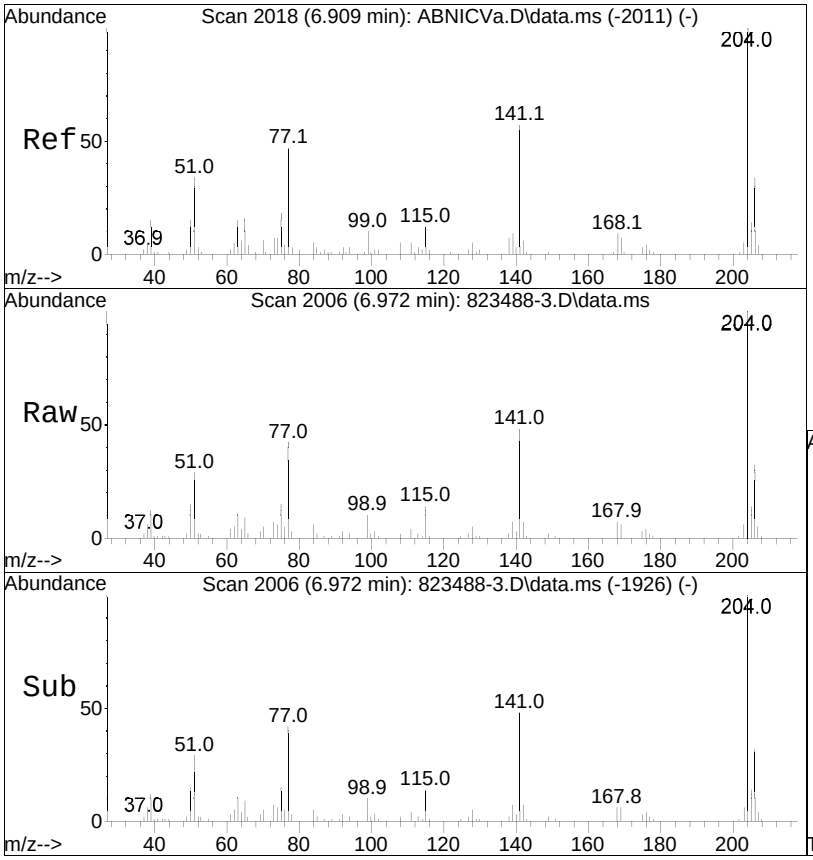


#71
Diethyl phthalate
Concen: 3.77 ug/ml
RT: 6.925 min Scan# 1991
Delta R.T. -0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:149 Resp: 43930

Ion	Ratio	Lower	Upper
149	100		
177	17.7	16.1	24.1
150	12.4	9.4	14.2

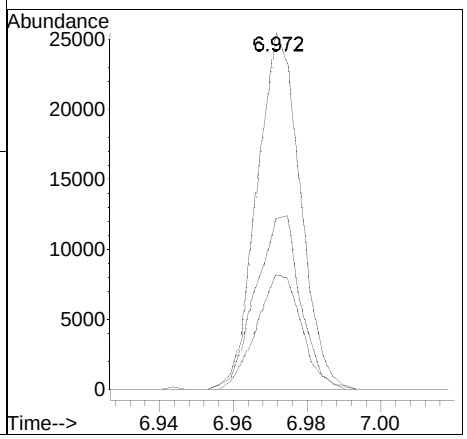


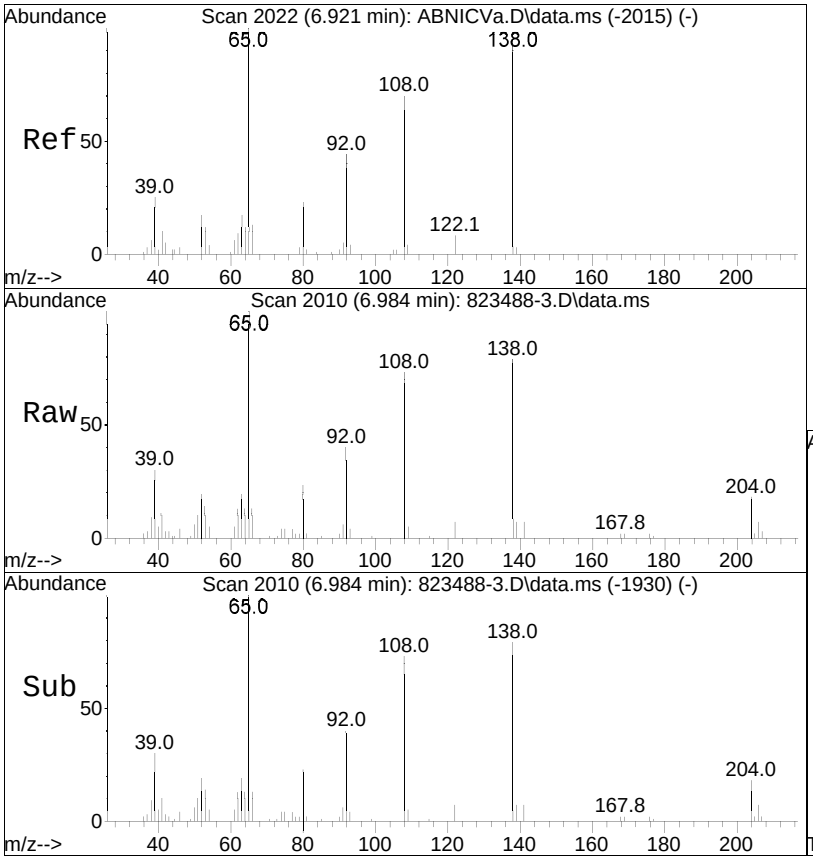


#73
4-Chlorophenyl phenyl ether
Concen: 3.80 ug/ml
RT: 6.972 min Scan# 2006
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:204 Resp: 20552

Ion	Ratio	Lower	Upper
204	100		
206	33.8	25.8	38.6
141	50.8	53.6	80.4#

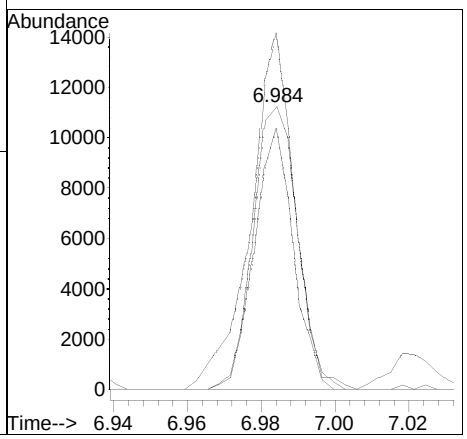


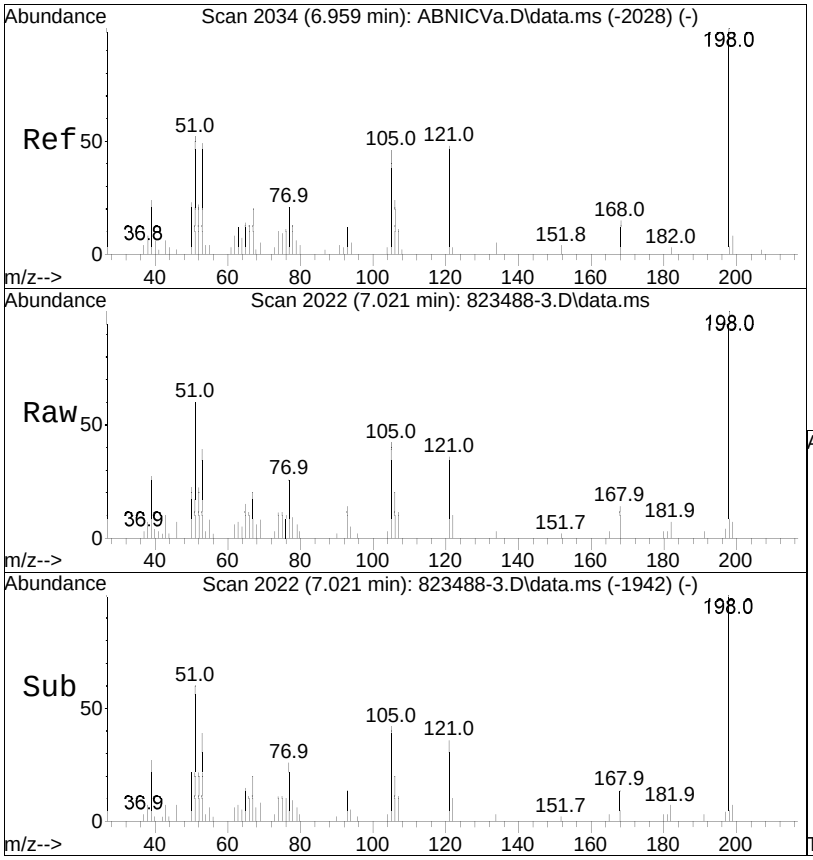


#74
4-Nitroaniline
Concen: 3.75 ug/ml
RT: 6.984 min Scan# 2010
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:138 Resp: 9420

Ion	Ratio	Lower	Upper
138	100		
108	81.1	52.1	78.1#
65	122.7	115.0	172.6

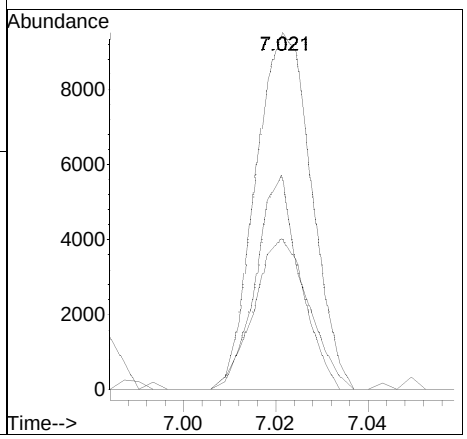


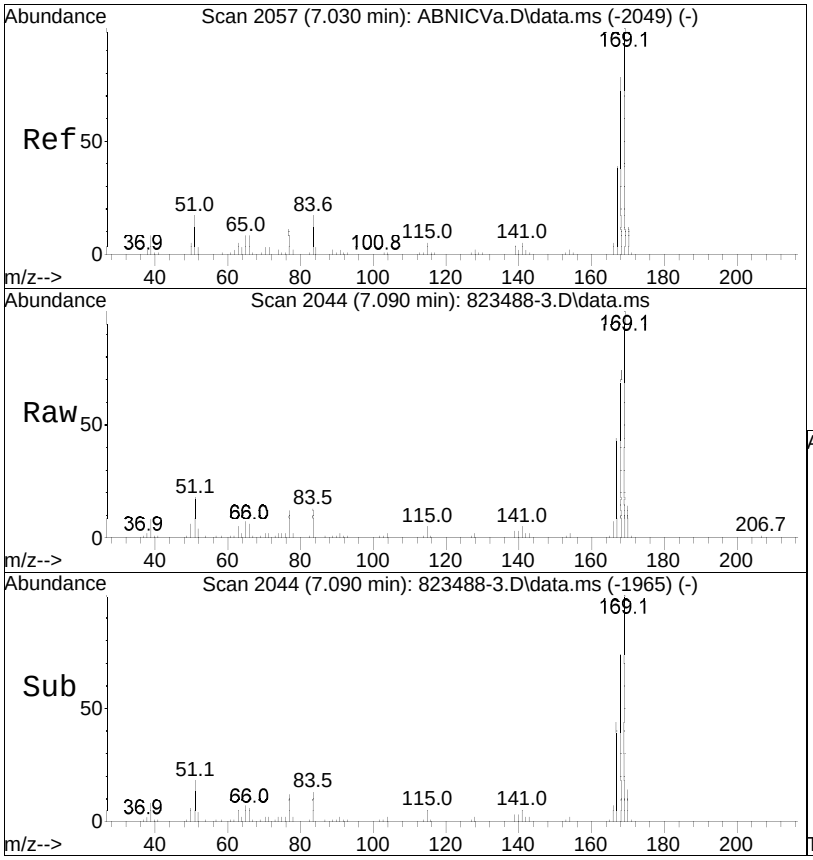


#75
4,6-Dinitro-o-cresol
Concen: 4.84 ug/ml
RT: 7.021 min Scan# 2022
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:198 Resp: 7969

Ion	Ratio	Lower	Upper
198	100		
51	49.7	76.0	114.0#
105	39.7	45.6	68.4#

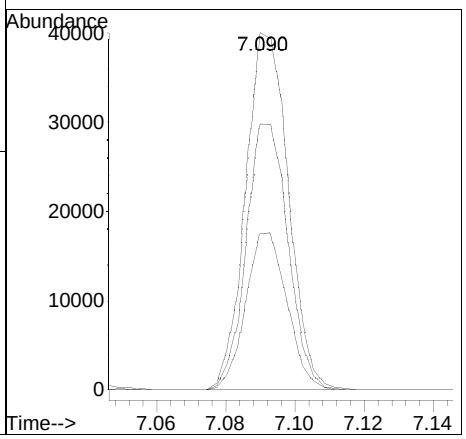


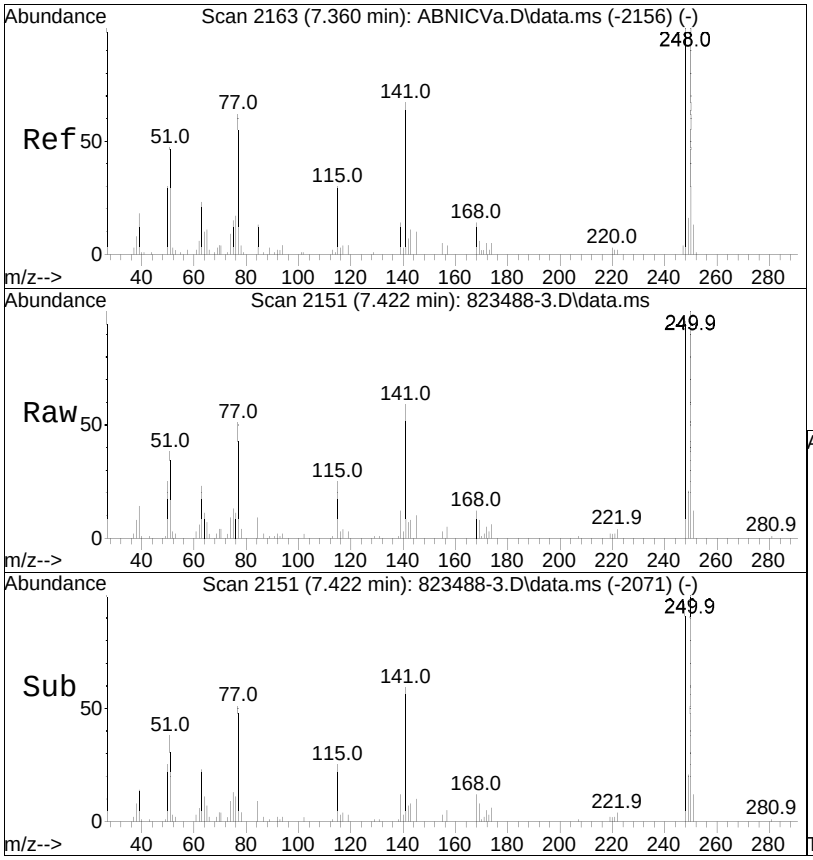


#76
NDPA/DPA
Concen: 3.62 ug/ml
RT: 7.090 min Scan# 2044
Delta R.T. -0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:169 Resp: 34308

Ion	Ratio	Lower	Upper
169	100		
168	72.8	54.0	81.0
167	42.5	28.6	42.8

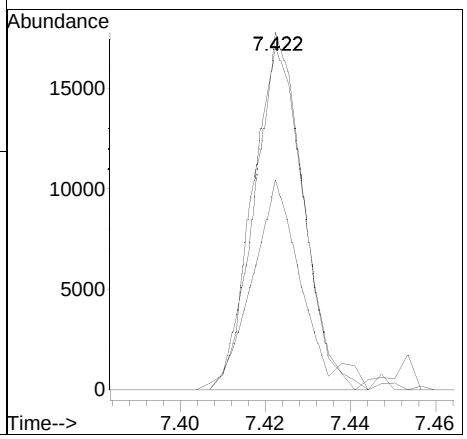


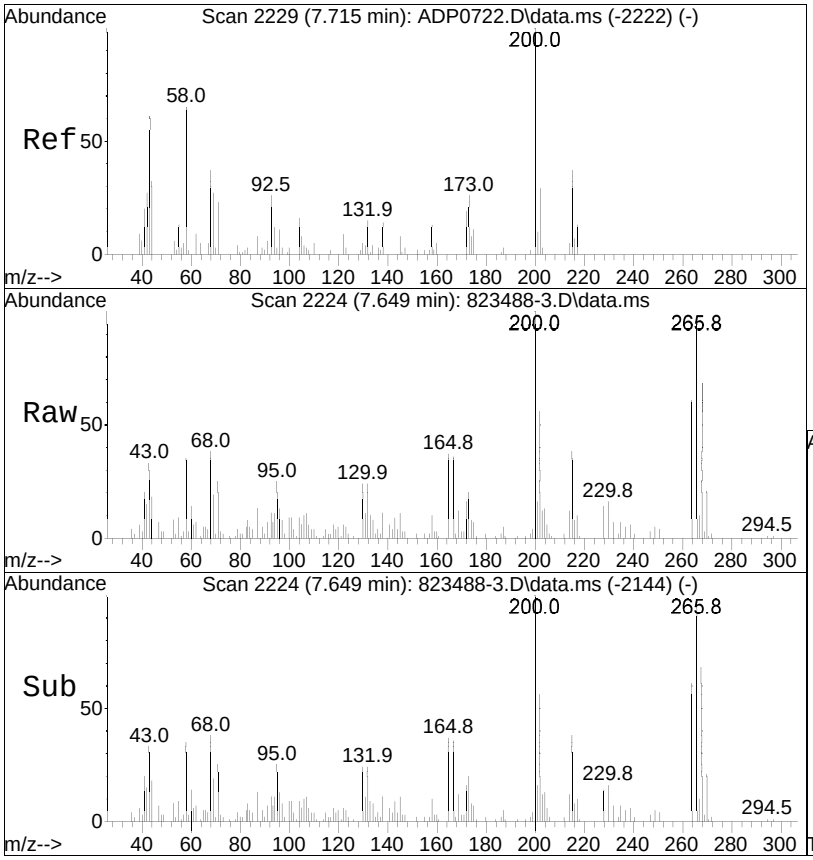


#79
4-Bromophenyl phenyl ether
Concen: 4.15 ug/ml
RT: 7.422 min Scan# 2151
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:248 Resp: 13990

Ion	Ratio	Lower	Upper
248	100		
141	61.4	76.6	114.8#
250	101.3	77.3	115.9

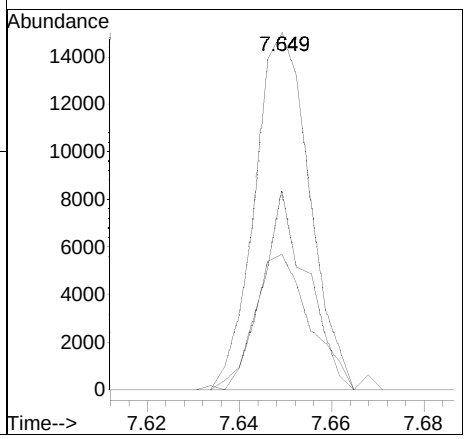


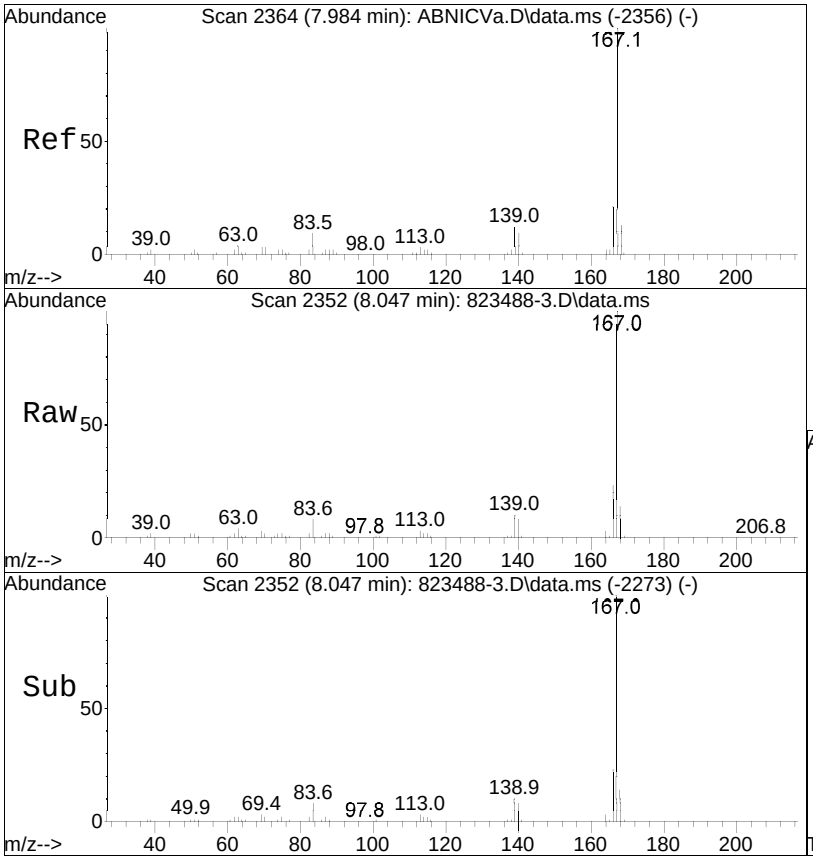


#86
Atrazine
Concen: 4.29 ug/ml
RT: 7.649 min Scan# 2224
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:200 Resp: 12362

Ion	Ratio	Lower	Upper
200	100		
202	46.4	25.8	38.6#
215	38.7	40.2	60.4#

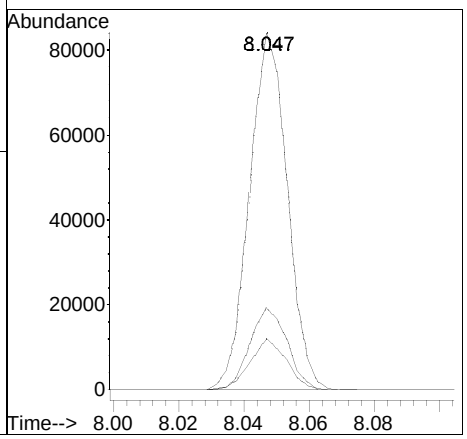


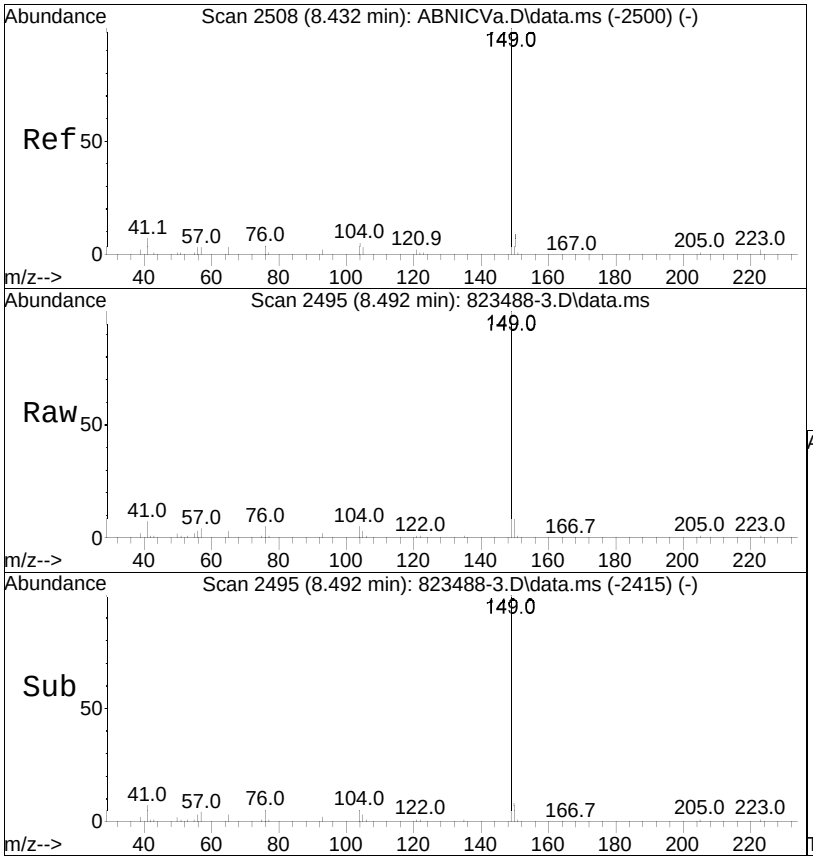


#90
Carbazole
Concen: 3.68 ug/ml
RT: 8.047 min Scan# 2352
Delta R.T. -0.003 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:167 Resp: 67398

Ion	Ratio	Lower	Upper
167	100		
168	13.9	10.6	15.8
166	22.6	17.4	26.0

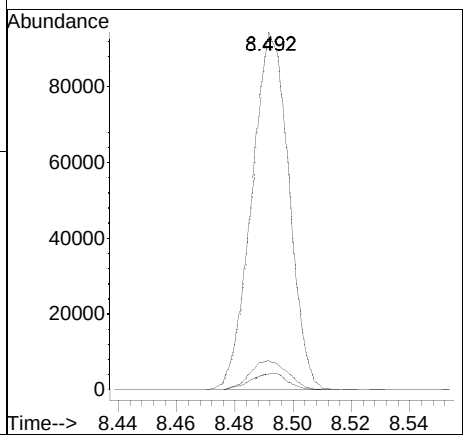


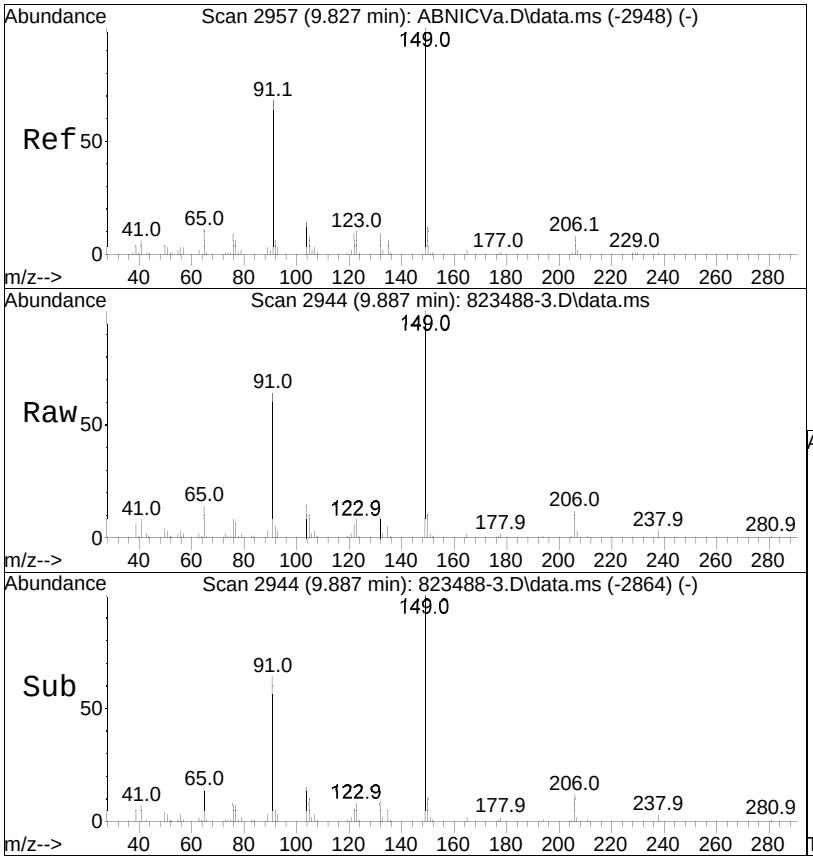


#91
Di-n-butylphthalate
Concen: 3.83 ug/ml
RT: 8.492 min Scan# 2495
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:149 Resp: 82604

Ion	Ratio	Lower	Upper
149	100		
150	8.3	7.0	10.6
104	4.7	4.5	6.7

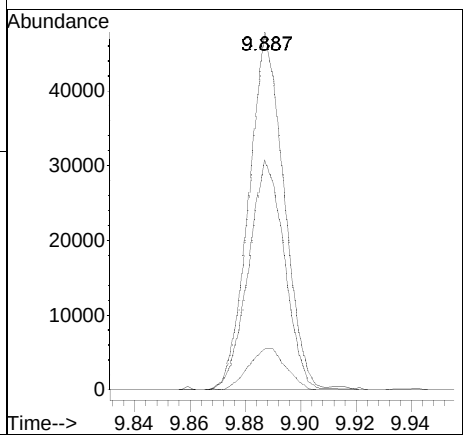


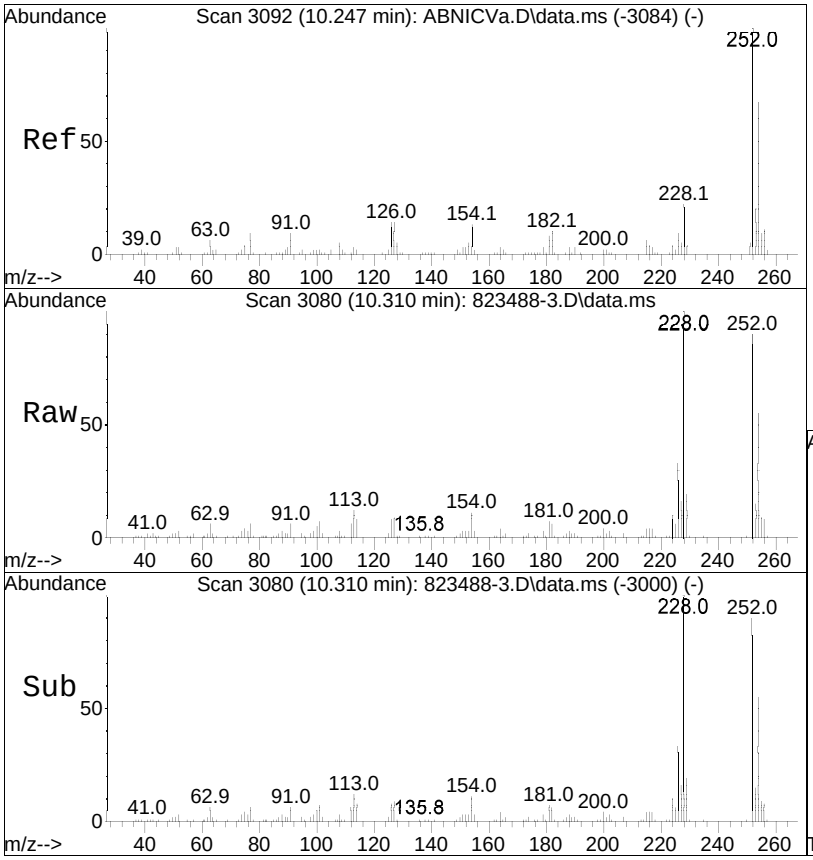


#96
Butyl benzyl phthalate
Concen: 4.27 ug/ml
RT: 9.887 min Scan# 2944
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:149 Resp: 41903

Ion	Ratio	Lower	Upper
149	100		
91	66.1	63.3	94.9
206	12.5	13.9	20.9#

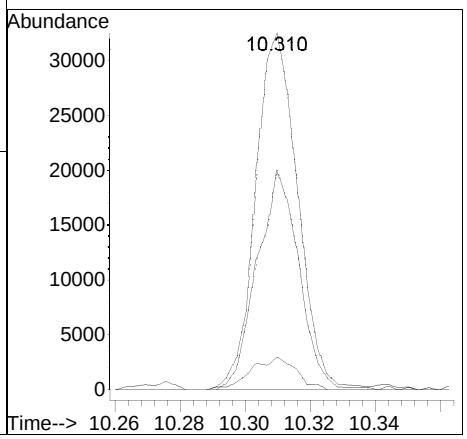


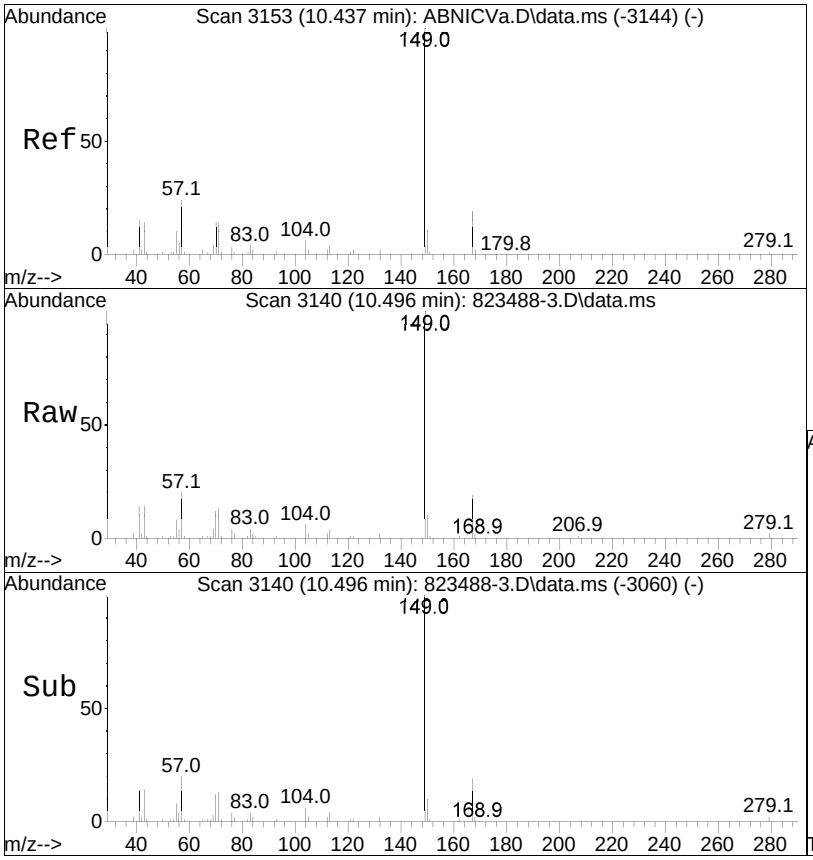


#105
3,3'-Dichlorobenzidine
Concen: 2.83 ug/ml
RT: 10.310 min Scan# 3080
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:252 Resp: 29015

Ion	Ratio	Lower	Upper
252	100		
126	9.9	14.5	21.7#
254	61.3	51.2	76.8

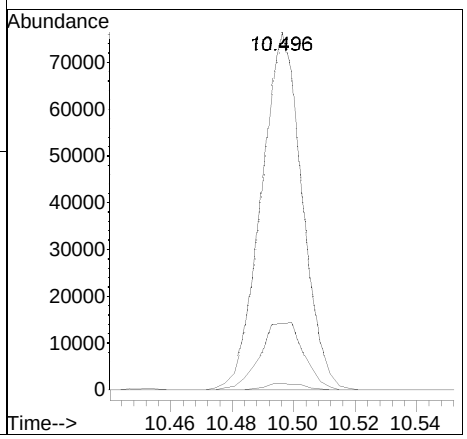


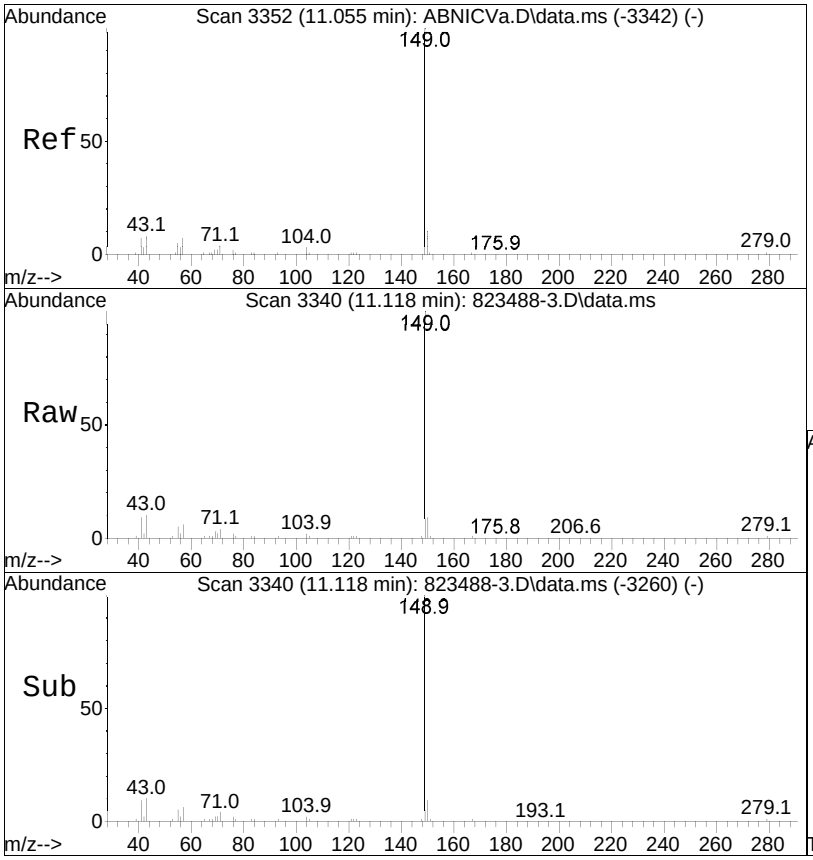


#107
Bis(2-ethylhexyl)phthalate
Concen: 4.70 ug/ml
RT: 10.496 min Scan# 3140
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:149 Resp: 69981

Ion	Ratio	Lower	Upper
149	100		
167	20.2	22.1	33.1#
279	1.6	3.0	4.4#

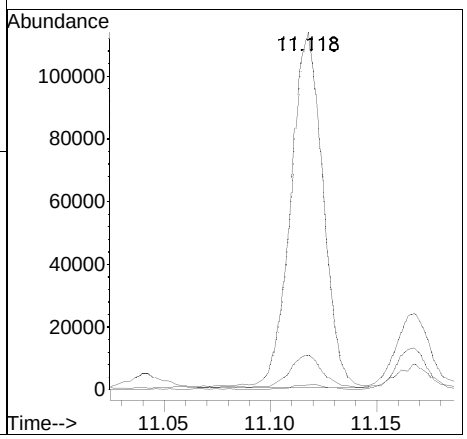




#108
Di-n-octylphthalate
Concen: 4.44 ug/ml
RT: 11.118 min Scan# 3340
Delta R.T. -0.000 min
Lab File: 823488-3.D
Acq: 5 Sep 2023 11:33 pm

Tgt Ion:149 Resp: 119832

Ion	Ratio	Lower	Upper
149	100		
43	9.2	18.8	28.2#
167	1.3	1.3	1.9



Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-4.D
Acq On : 31 Aug 2023 4:23 pm
Operator : Dakota:jg
Sample : WG1822188-4,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 12 14:29:40 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 16:42:41 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.669	152	15793	4.000	ug/ml		0.00
Standard Area 1 = 14463			Recovery = 109.20%				
27) IS2_1,4-Dichlorobenzen...	3.669	152	15793	4.000	ug/ml		0.00
Standard Area 3 = 16508			Recovery = 95.67%				
34) IS1_Naphthalene-d8	4.924	136	53504	4.000	ug/ml	#	0.00
Standard Area 1 = 50867			Recovery = 105.18%				
54) IS2_Naphthalene-d8	4.924	136	53504	4.000	ug/ml	#	0.00
Standard Area 3 = 55735			Recovery = 96.00%				
62) IS1_Acenaphthene-d10	6.606	164	34718	4.000	ug/ml		0.00
Standard Area 1 = 33572			Recovery = 103.41%				
82) IS2_Acenaphthene-d10	6.606	164	34718	4.000	ug/ml		0.00
Standard Area 3 = 35012			Recovery = 99.16%				
85) IS3_Acenaphthene-d10	6.606	164	34718	4.000	ug/ml		0.00
Standard Area 2 = 37775			Recovery = 91.91%				
87) IS1_Phenanthrene-d10	8.001	188	81698	4.000	ug/ml		0.00
Standard Area 1 = 80682			Recovery = 101.26%				
99) IS3_Phenanthrene-d10	8.001	188	81698	4.000	ug/ml		0.00
Standard Area 2 = 96848			Recovery = 84.36%				
103) IS1_Chrysene-d12	10.507	240	83177	4.000	ug/ml		0.00
Standard Area 1 = 88271			Recovery = 94.23%				
112) IS1_Perylene-d12	11.862	264	104400	4.000	ug/ml		0.00
Standard Area 1 = 110283			Recovery = 94.67%				
System Monitoring Compounds							
4) 2-Fluorophenol	2.273	112	14383	3.527	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 70.54%				
7) Phenol-d6	3.398	99	14824	2.837	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 56.74%				
19) Nitrobenzene-d5	4.241	82	10175	2.031	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 81.24%				
45) 2-Fluorobiphenyl	6.009	172	25933	2.464	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 98.56%				
78) 2,4,6-Tribromophenol	7.358	330	12516	6.228	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 124.56%#				
95) 4-Terphenyl-d14	9.571	244	43442	2.175	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 87.00%				

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-4.D
Acq On : 31 Aug 2023 4:23 pm
Operator : Dakota:jg
Sample : WG1822188-4,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 12 14:29:40 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 16:42:41 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Target Compounds						Qvalue
6) 2-Chlorophenol	3.457	128	17890	3.791	ug/ml	92
8) Phenol	3.411	94	16982	2.795	ug/ml	95
9) Bis(2-chloroethyl)ether	3.457	93	14460	3.435	ug/ml#	67
14) Bis(2-chloroisopropyl)...	4.017	45	24552	3.485	ug/ml#	59
15) 2-Methylphenol	4.023	108	14580	3.634	ug/ml	99
17) n-Nitrosodi-n-propylamine	4.144	70	13278	4.112	ug/ml#	84
18) 3-Methylphenol/4-Methy...	4.188	108	15787	3.810	ug/ml	88
20) Nitrobenzene	4.256	77	20265	4.161	ug/ml	95
21) Isophorone	4.514	82	32410	3.761	ug/ml#	93
22) 2-Nitrophenol	4.579	139	10343	4.543	ug/ml	91
23) 2,4-Dimethylphenol	4.701	107	13354	3.047	ug/ml	98
24) Bis(2-chloroethoxy)met...	4.778	93	21460	3.838	ug/ml	98
25) 2,4-Dichlorophenol	4.828	162	19090	4.633	ug/ml	93
28) Benzaldehyde	3.209	105	13159	3.186	ug/ml	98
29) Acetophenone	4.104	105	21816	3.017	ug/ml#	79
37) 4-Chloroaniline	5.046	65	2953	1.926	ug/ml	98
39) p-Chloro-m-cresol	5.574	107	16293	4.803	ug/ml	91
42) Hexachlorocyclopentadiene	5.801	237	15768	4.933	ug/ml	97
43) 2,4,6-Trichlorophenol	5.928	196	17502	5.631	ug/ml	98
44) 2,4,5-Trichlorophenol	5.956	196	18877	6.043	ug/ml	98
47) 2-Nitroaniline	6.211	138	12709	4.748	ug/ml	88
50) Dimethyl phthalate	6.432	163	48309	4.464	ug/ml#	95
52) 2,6-Dinitrotoluene	6.463	165	10773	4.822	ug/ml	88
59) Caprolactam	5.350	55	4524	2.275	ug/ml#	76
60) 1,2,4,5-Tetrachloroben...	5.795	216	21263	3.954	ug/ml	97
61) Biphenyl	6.090	154	44707	3.710	ug/ml	99
63) 3-Nitroaniline	6.609	138	8851	3.203	ug/ml#	92
65) 2,4-Dinitrophenol	6.712	184	8748	6.229	ug/ml#	82
66) Dibenzofuran	6.805	168	66187	4.390	ug/ml	90
67) 2,4-Dinitrotoluene	6.842	165	15143	4.453	ug/ml#	86
68) 4-Nitrophenol	6.836	65	10491	4.637	ug/ml#	91
70) 2,3,4,6-Tetrachlorophenol	6.948	232	17452	5.492	ug/ml	99
71) Diethyl phthalate	7.116	149	53253	4.184	ug/ml	98
73) 4-Chlorophenyl phenyl ...	7.168	204	25807	4.368	ug/ml#	85
74) 4-Nitroaniline	7.181	138	9333	3.402	ug/ml#	84
75) 4,6-Dinitro-o-cresol	7.218	198	10089	5.471	ug/ml#	64

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Misc : WG1822460,WG1822188,ical19934
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 12 14:29:40 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 16:42:41 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76)	NDPA/DPA	7.287	169	40580	3.914	ug/ml	93
79)	4-Bromophenyl phenyl e...	7.625	248	17088	4.632	ug/ml#	77
86)	Atrazine	7.849	200	15789	5.009	ug/ml#	77
90)	Carbazole	8.253	167	82707	4.304	ug/ml	97
91)	Di-n-butylphthalate	8.688	149	102351	4.524	ug/ml#	97
96)	Butyl benzyl phthalate	10.096	149	48567	4.722	ug/ml#	85
105)	3,3'-Dichlorobenzidine	0.000		0	N.D.		
107)	Bis(2-ethylhexyl)phtha...	10.709	149	71338	4.898	ug/ml#	87
108)	Di-n-octylphthalate	11.343	149	125598	4.752	ug/ml#	74

(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
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Sample : WG1822188-4,32,,gmr
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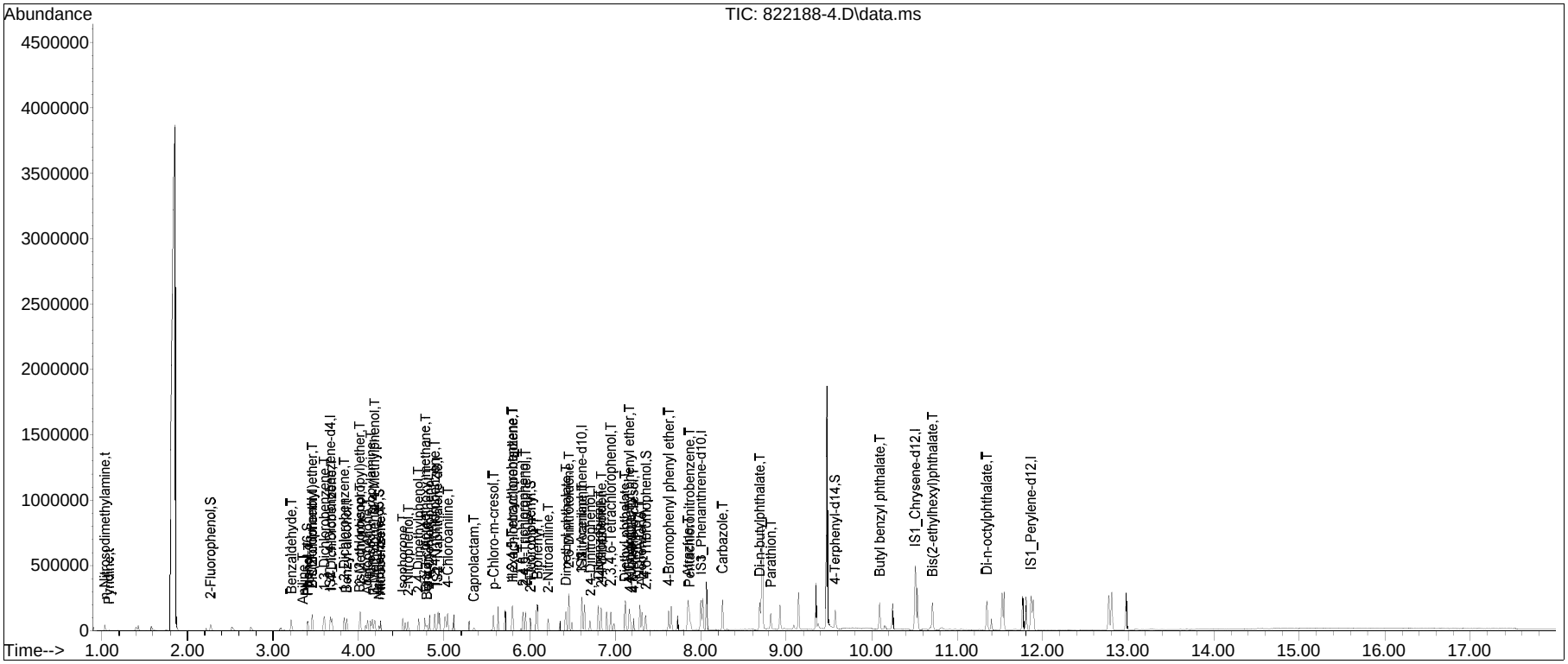
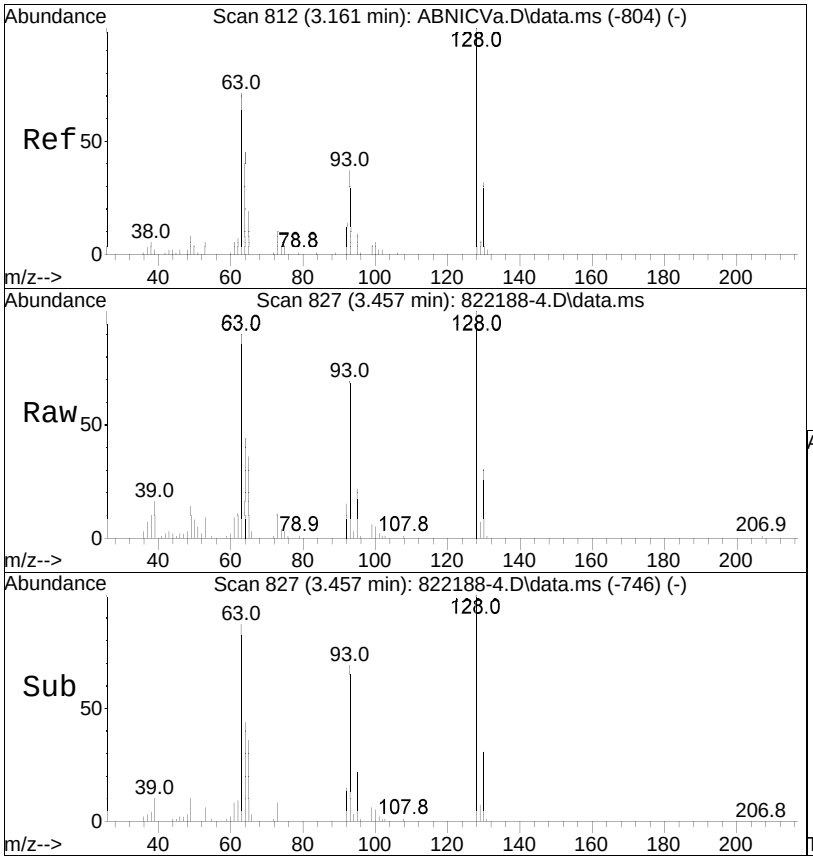
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 16:42:41 2023
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MAP90831.D•

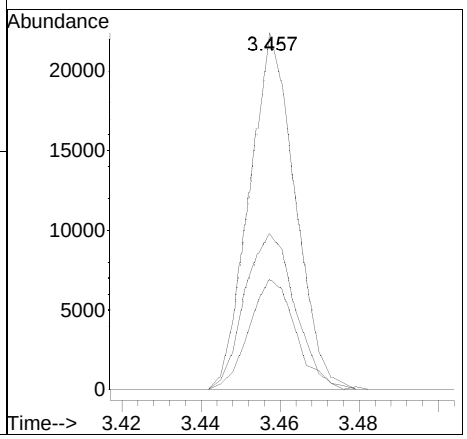


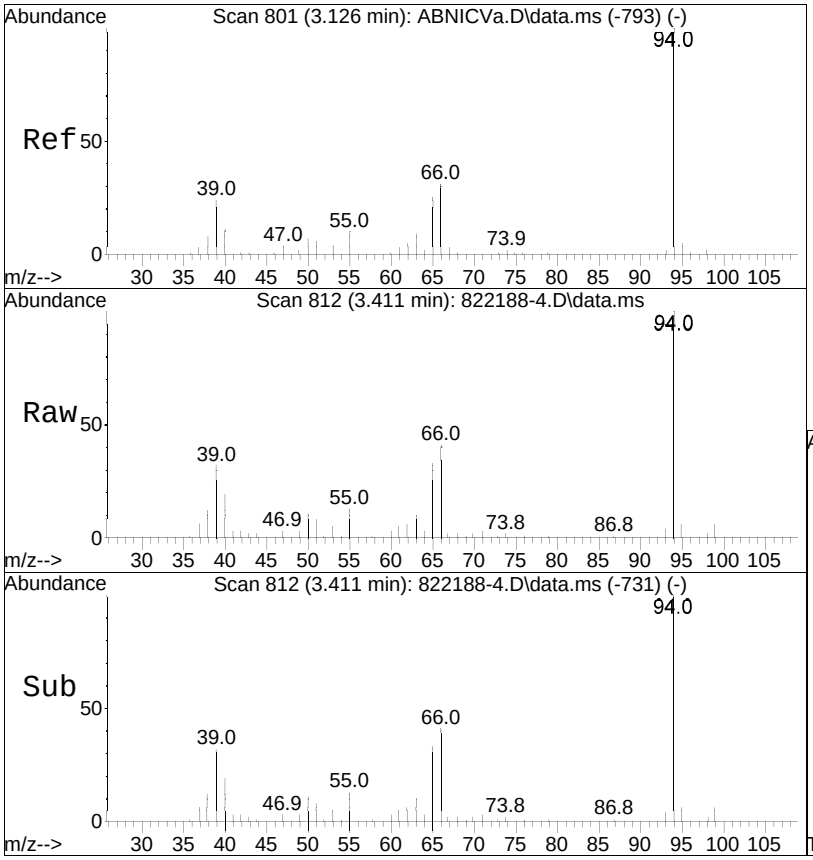


#6
2-Chlorophenol
Concen: 3.79 ug/ml
RT: 3.457 min Scan# 827
Delta R.T. 0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:128 Resp: 17890

Ion	Ratio	Lower	Upper
128	100		
64	48.0	45.1	67.7
130	31.9	26.2	39.4

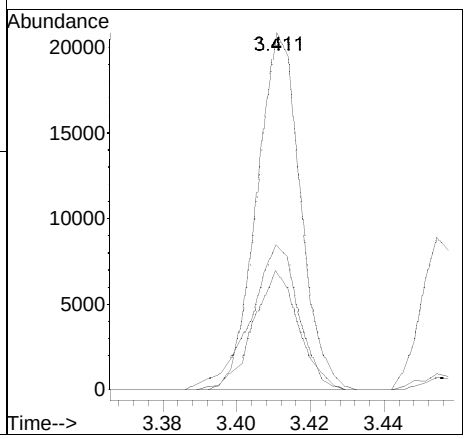


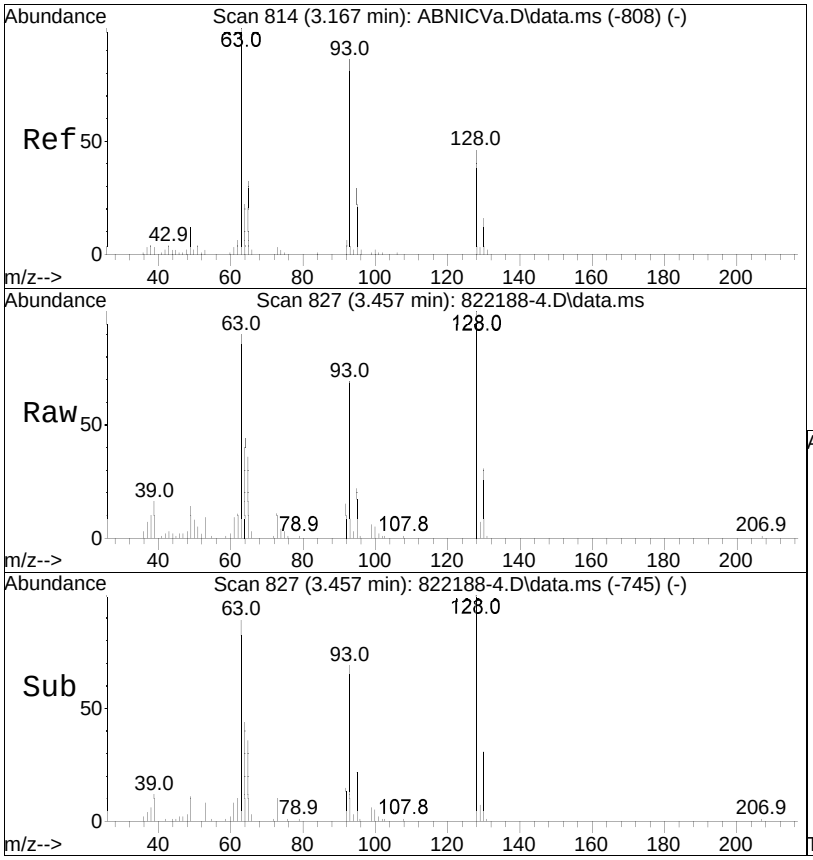


#8
Phenol
Concen: 2.80 ug/ml
RT: 3.411 min Scan# 812
Delta R.T. 0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion: 94 Resp: 16982

Ion	Ratio	Lower	Upper
94	100		
65	35.1	26.0	39.0
66	45.3	33.8	50.8

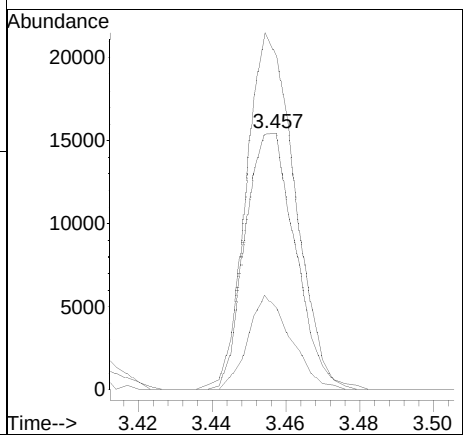


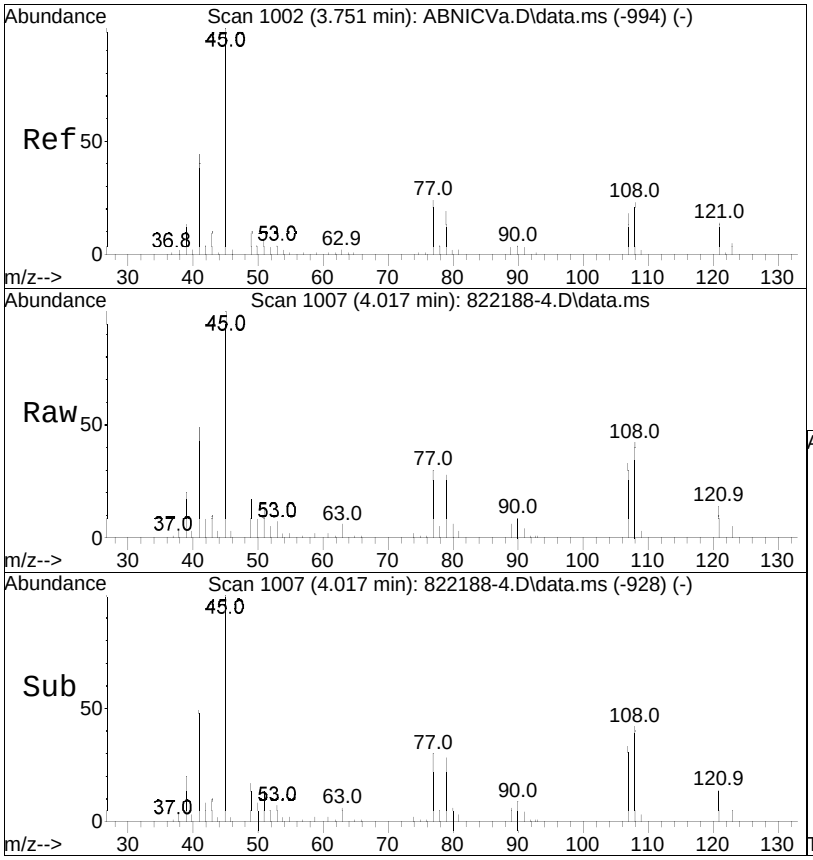


#9
Bis(2-chloroethyl)ether
Concen: 3.43 ug/ml
RT: 3.457 min Scan# 827
Delta R.T. 0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion: 93 Resp: 14460

Ion	Ratio	Lower	Upper
93	100		
63	135.7	74.6	111.8#
95	32.0	25.9	38.9

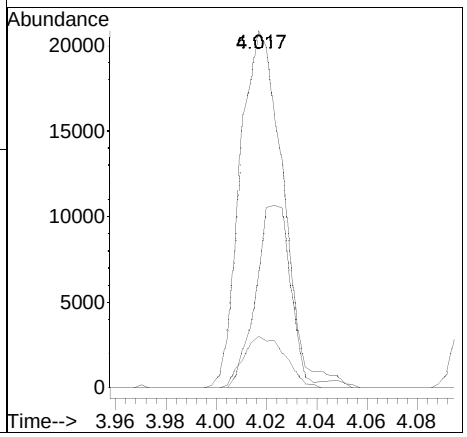


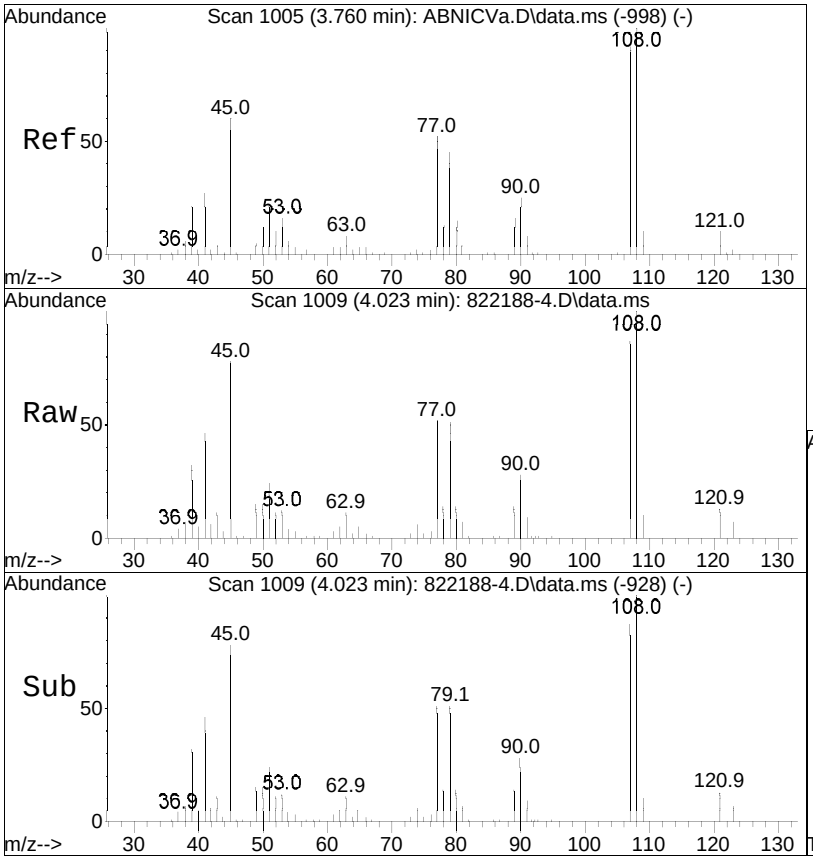


#14
Bis(2-chloroisopropyl)ether
Concen: 3.48 ug/ml
RT: 4.017 min Scan# 1007
Delta R.T. -0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion: 45 Resp: 24552

Ion	Ratio	Lower	Upper
45	100		
121	14.2	9.8	14.6
77	41.8	6.1	9.1#

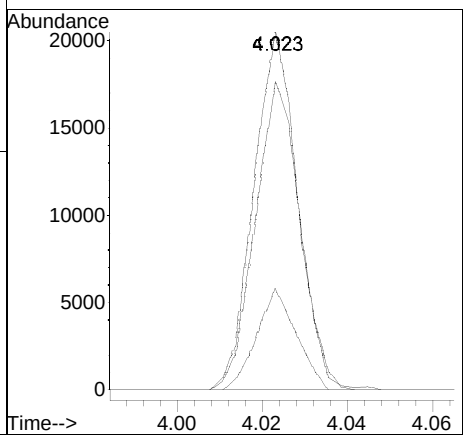


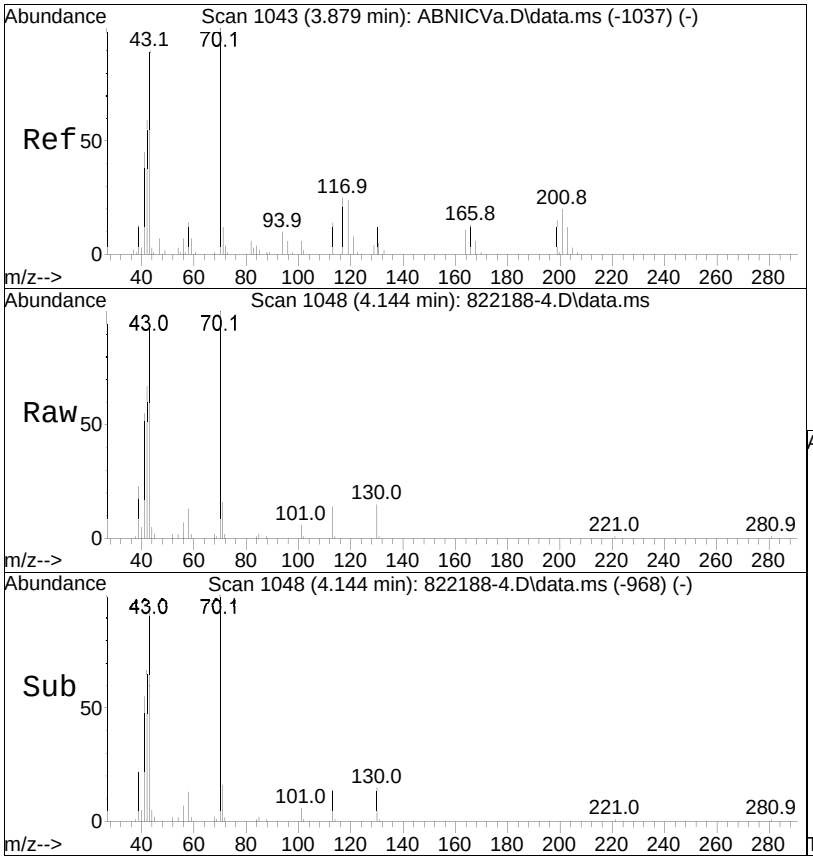


#15
2-Methylphenol
Concen: 3.63 ug/ml
RT: 4.023 min Scan# 1009
Delta R.T. 0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:108 Resp: 14580

Ion	Ratio	Lower	Upper
108	100		
107	87.8	70.7	106.1
90	25.6	18.7	28.1

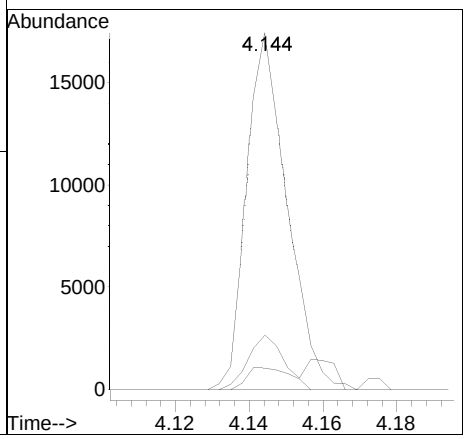


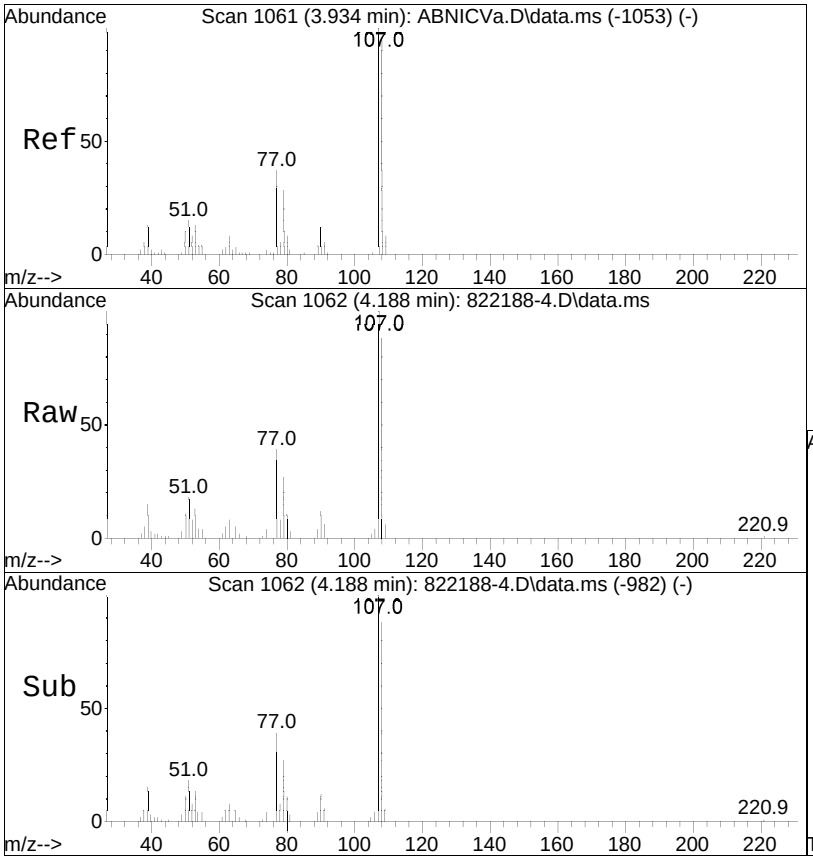


#17
n-Nitrosodi-n-propylamine
Concen: 4.11 ug/ml
RT: 4.144 min Scan# 1048
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion: 70 Resp: 13278

Ion	Ratio	Lower	Upper
70	100		
130	13.4	18.2	27.4#
101	6.6	7.8	11.8#

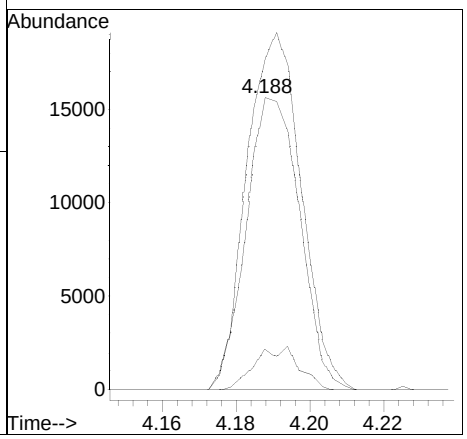


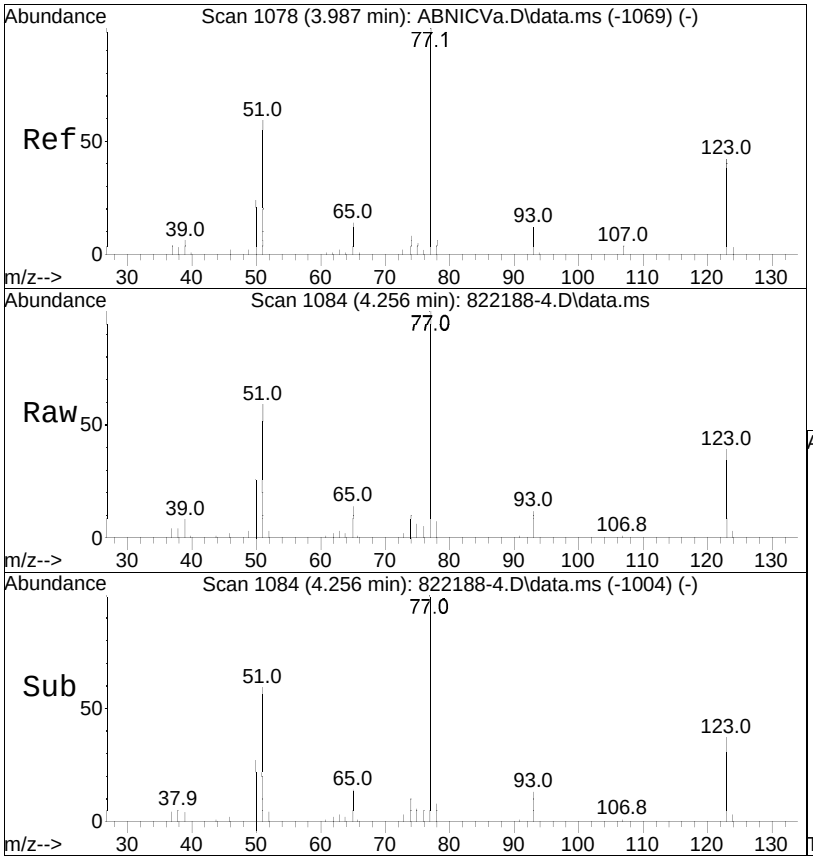


#18
3-Methylphenol/4-Methylphenol
Concen: 3.81 ug/ml
RT: 4.188 min Scan# 1062
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:108 Resp: 15787

Ion	Ratio	Lower	Upper
108	100		
107	124.0	88.6	132.8
90	12.3	8.8	13.2

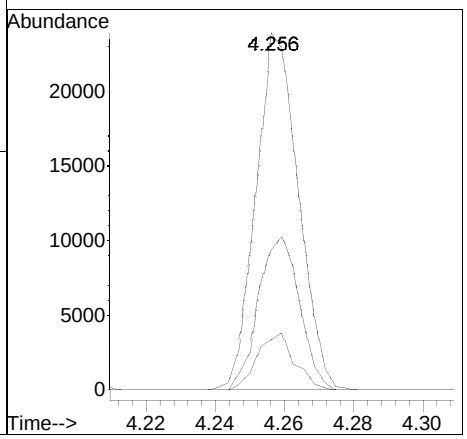


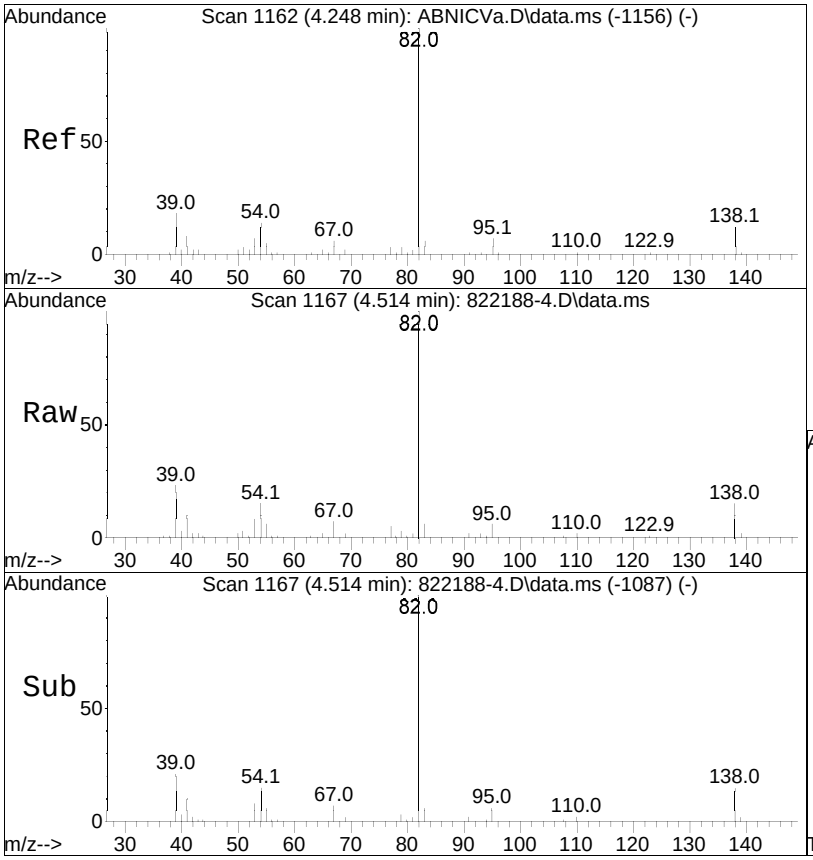


#20
Nitrobenzene
Concen: 4.16 ug/ml
RT: 4.256 min Scan# 1084
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion: 77 Resp: 20265

Ion	Ratio	Lower	Upper
77	100		
123	41.6	36.3	54.5
65	14.0	11.6	17.4

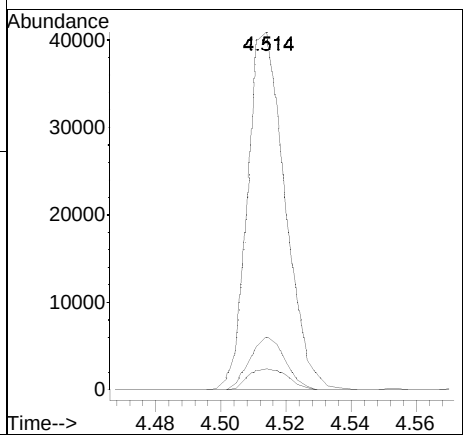


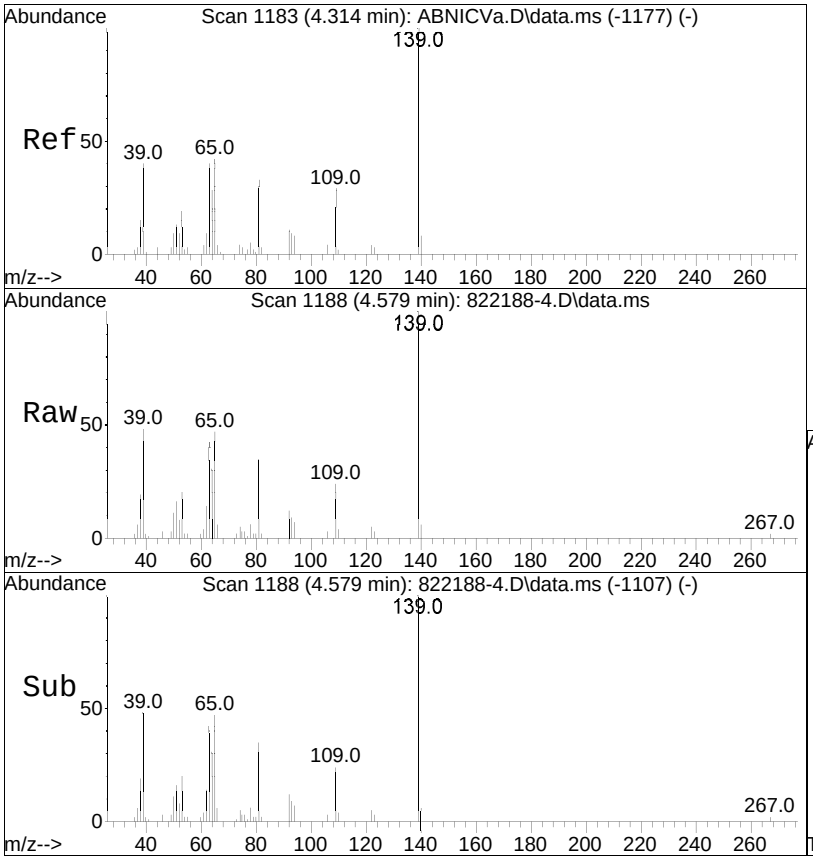


#21
Isophorone
Concen: 3.76 ug/ml
RT: 4.514 min Scan# 1167
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion: 82 Resp: 32410

Ion	Ratio	Lower	Upper
82	100		
138	14.0	14.7	22.1#
95	6.4	5.2	7.8

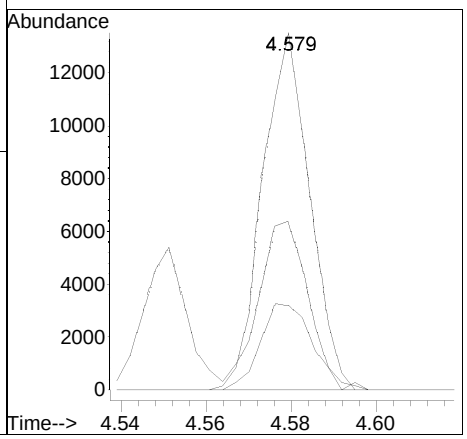


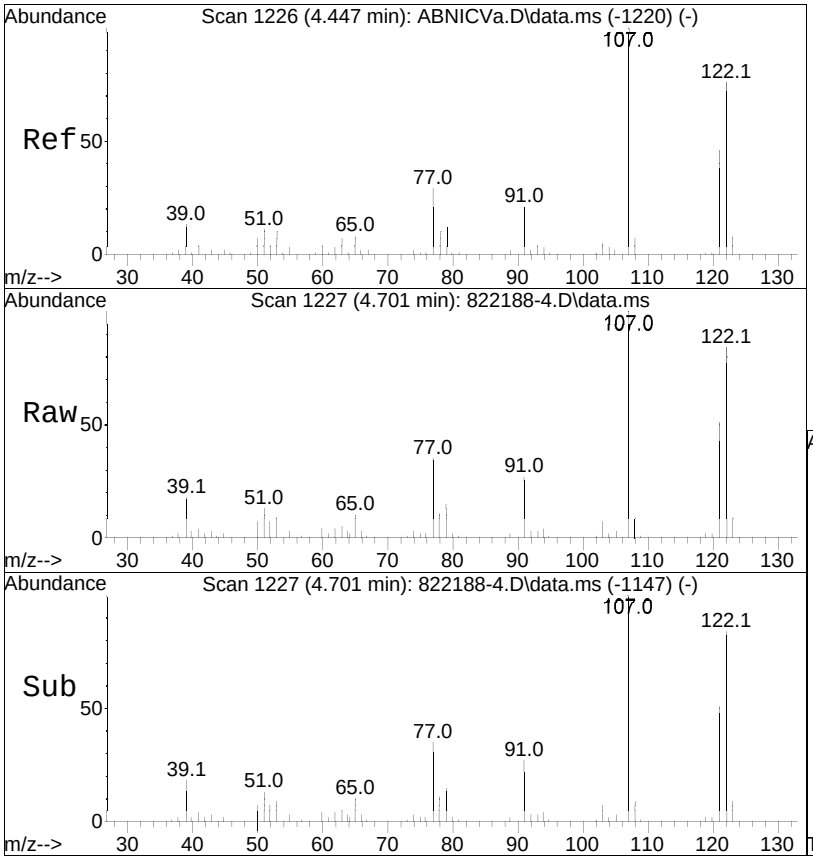


#22
2-Nitrophenol
Concen: 4.54 ug/ml
RT: 4.579 min Scan# 1188
Delta R.T. 0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:139 Resp: 10343

Ion	Ratio	Lower	Upper
139	100		
109	26.7	19.4	29.0
65	50.1	46.1	69.1

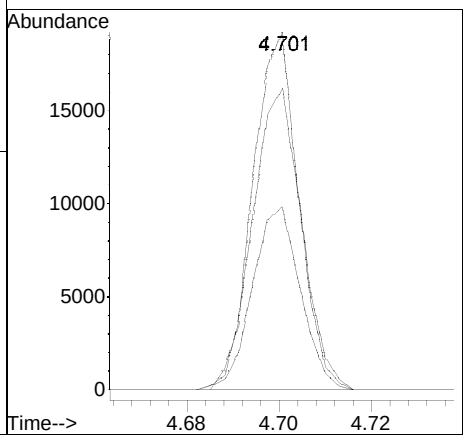


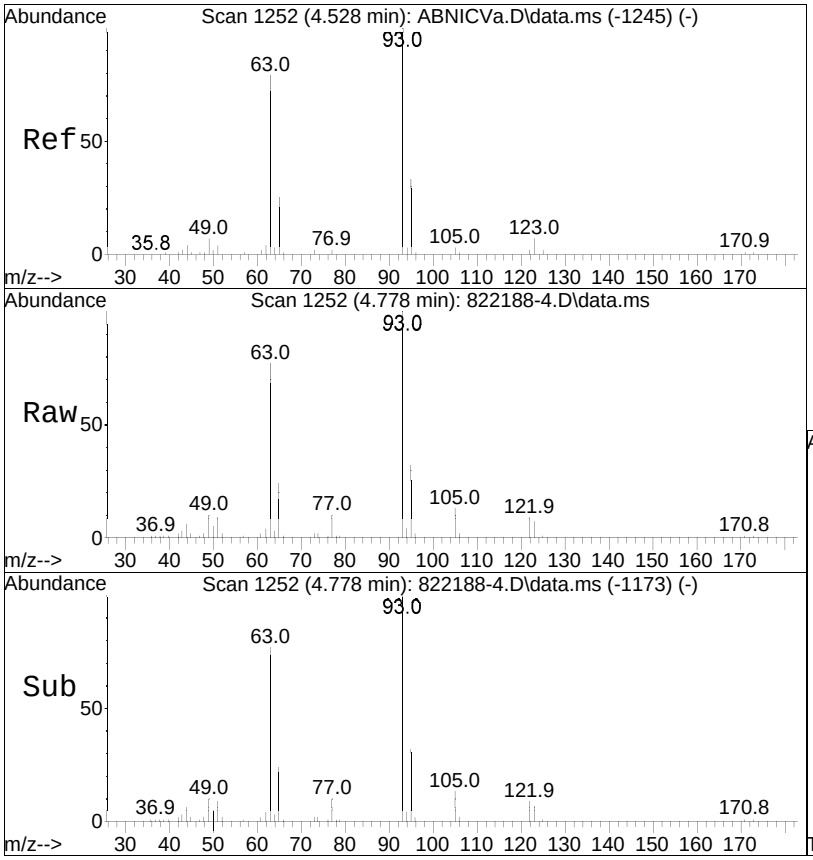


#23
2,4-Dimethylphenol
Concen: 3.05 ug/ml
RT: 4.701 min Scan# 1227
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:107 Resp: 13354

Ion	Ratio	Lower	Upper
107	100		
121	52.9	40.0	60.0
122	87.4	70.2	105.4

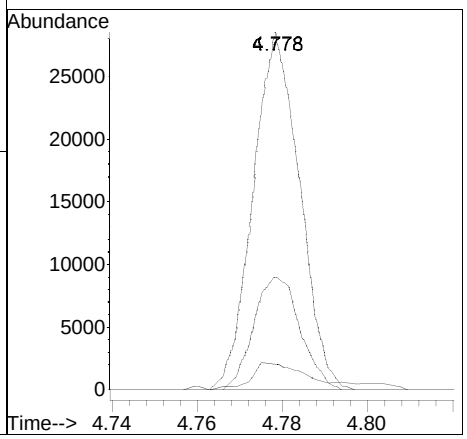


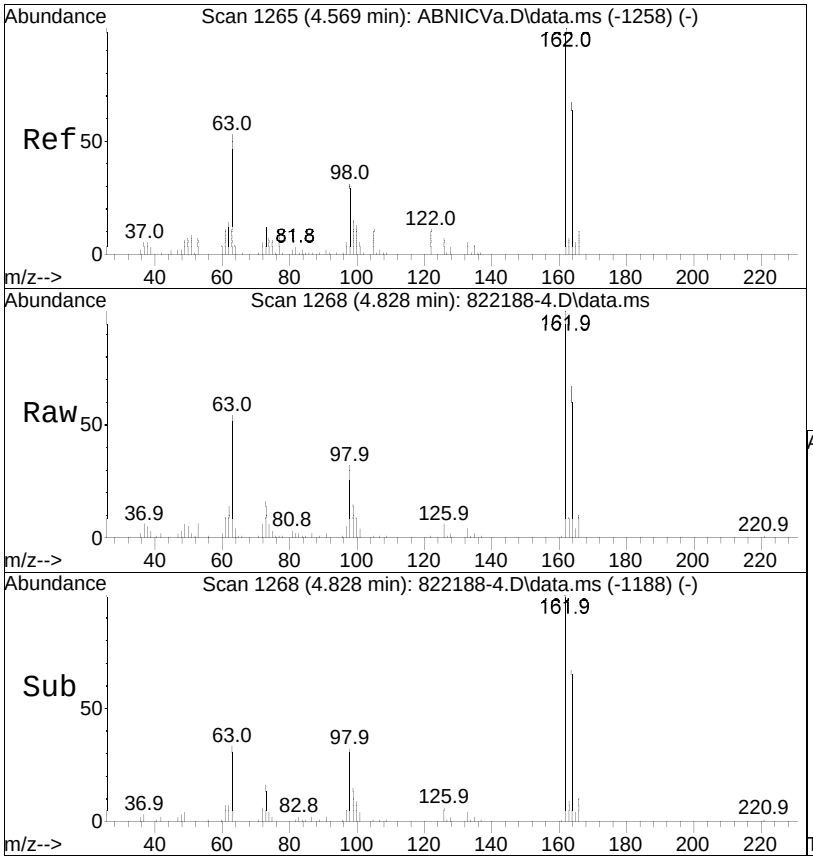


#24
Bis(2-chloroethoxy)methane
Concen: 3.84 ug/ml
RT: 4.778 min Scan# 1252
Delta R.T. -0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion: 93 Resp: 21460

Ion	Ratio	Lower	Upper
93	100		
95	31.7	25.8	38.8
123	10.7	10.1	15.1

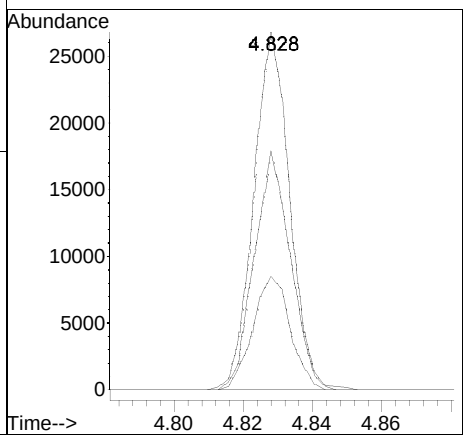


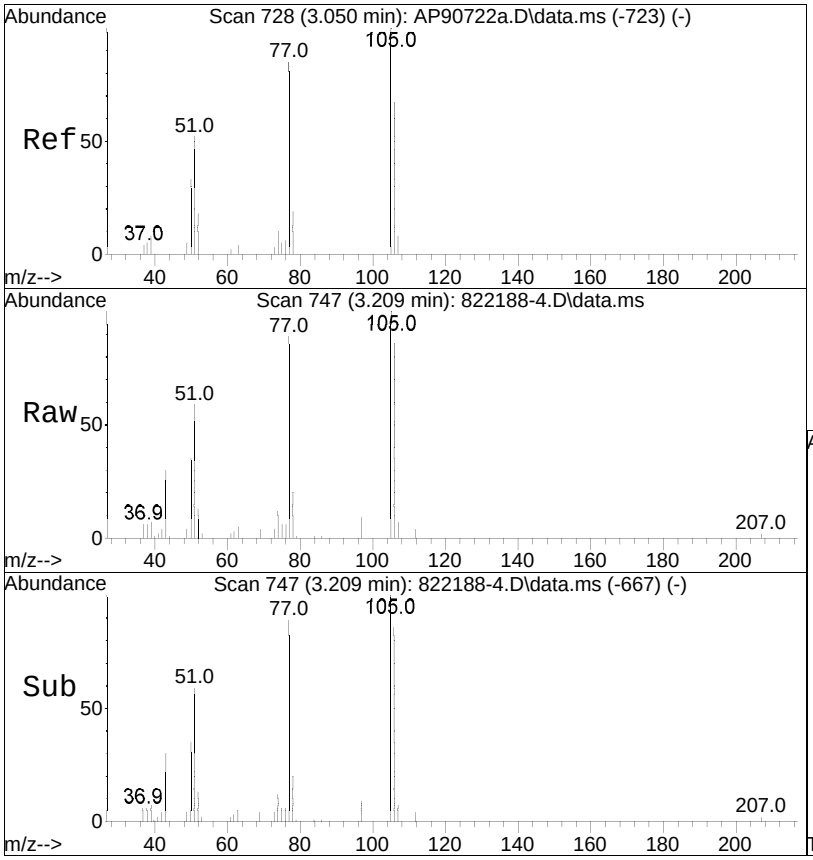


#25
2,4-Dichlorophenol
Concen: 4.63 ug/ml
RT: 4.828 min Scan# 1268
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:162 Resp: 19090

Ion	Ratio	Lower	Upper
162	100		
164	67.4	51.0	76.4
98	33.3	32.2	48.2

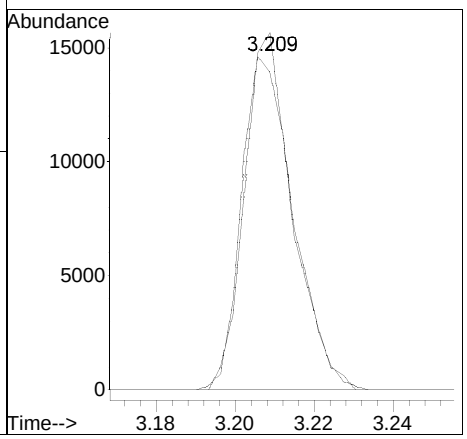


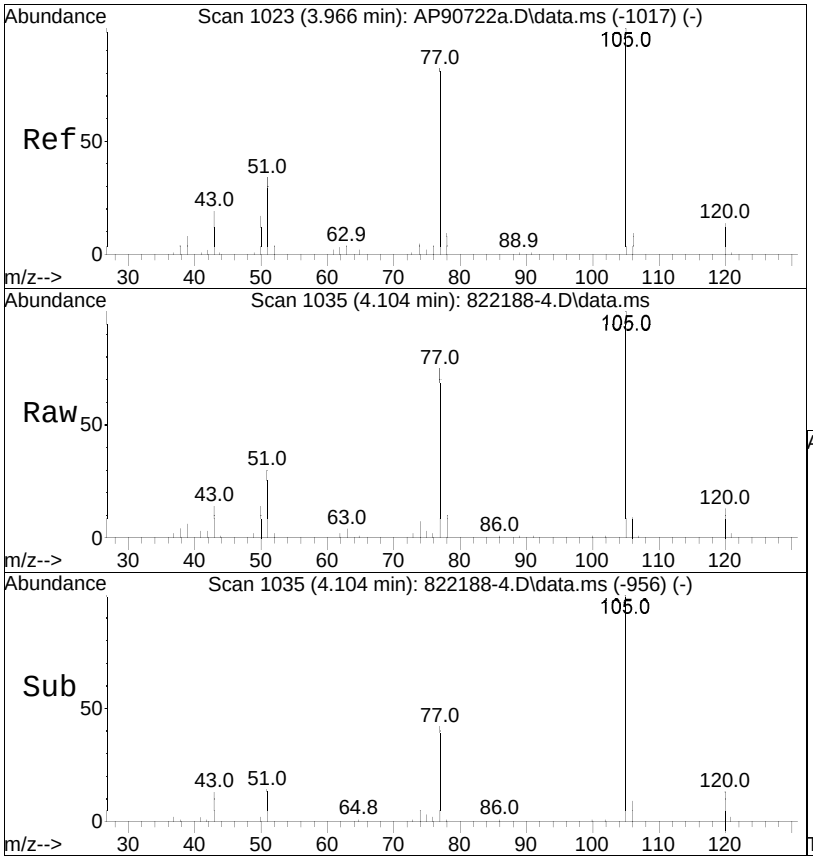


#28
Benzaldehyde
Concen: 3.19 ug/ml
RT: 3.209 min Scan# 747
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:105 Resp: 13159

Ion	Ratio	Lower	Upper
105	100		
77	100.8	82.2	123.4

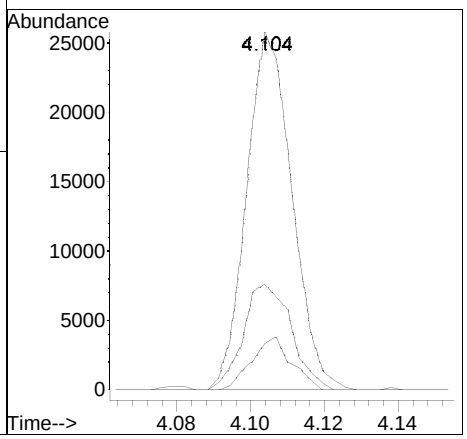


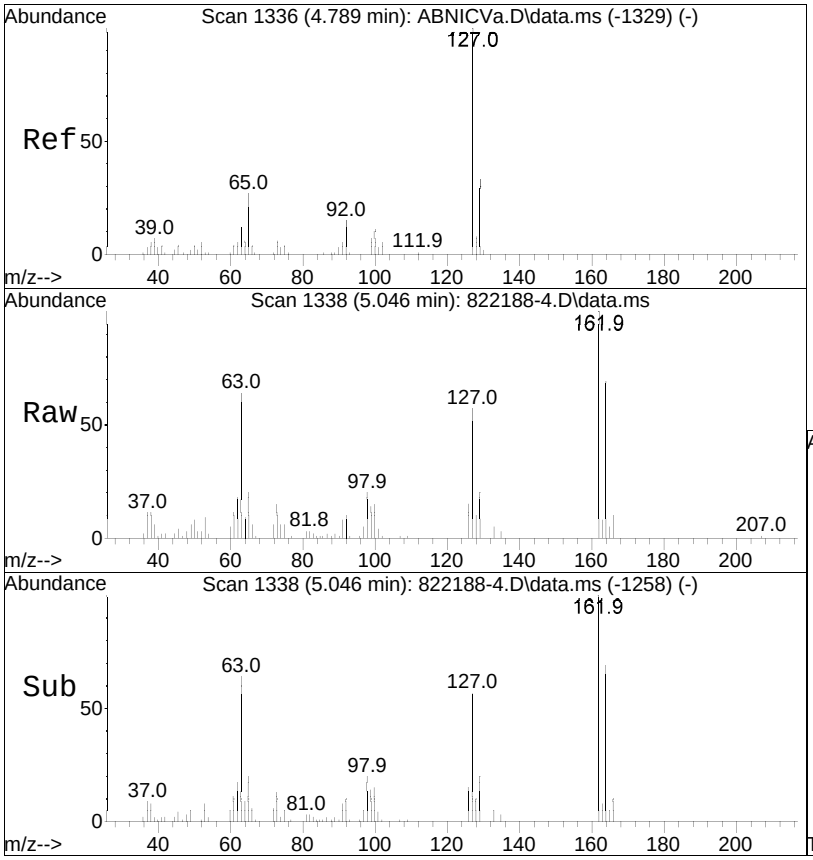


#29
Acetophenone
Concen: 3.02 ug/ml
RT: 4.104 min Scan# 1035
Delta R.T. -0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:105 Resp: 21816

Ion	Ratio	Lower	Upper
105	100		
120	13.0	20.5	30.7#
51	31.3	34.9	52.3#

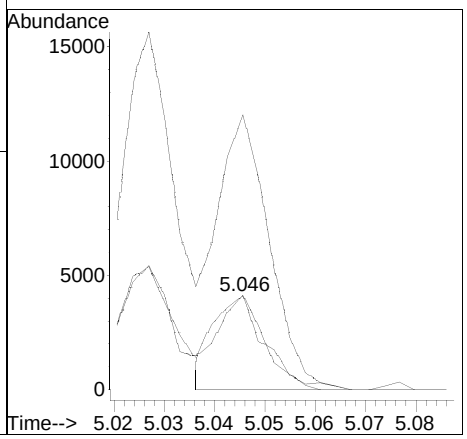


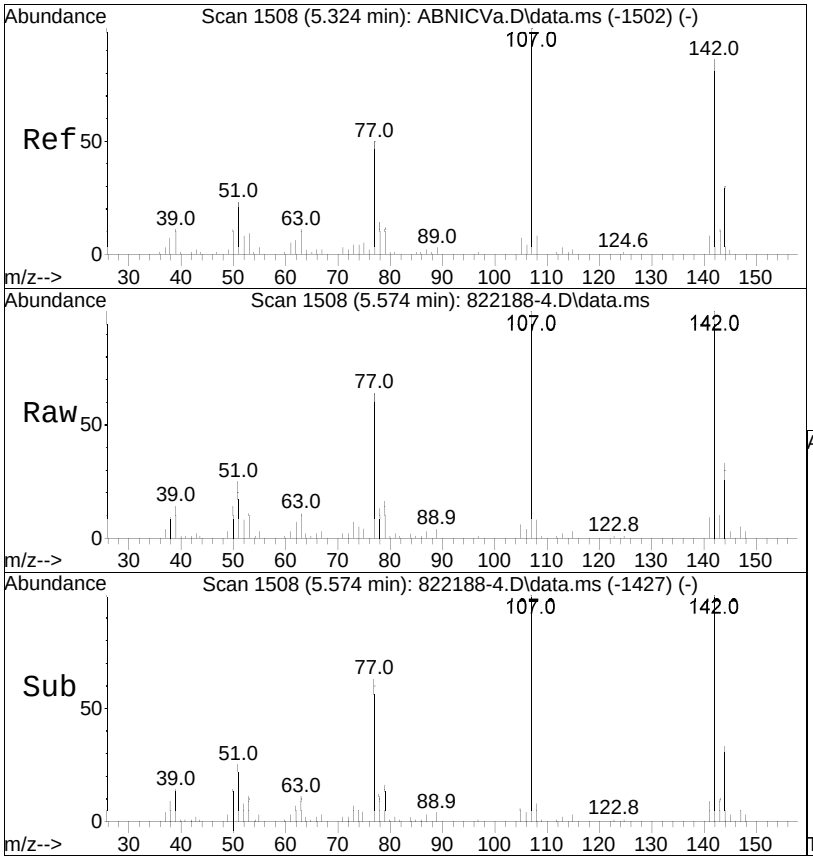


#37
4-Chloroaniline
Concen: 1.93 ug/ml
RT: 5.046 min Scan# 1338
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion: 65 Resp: 2953

Ion	Ratio	Lower	Upper
65	100		
127	294.5	237.6	356.4
129	90.6	76.3	114.5

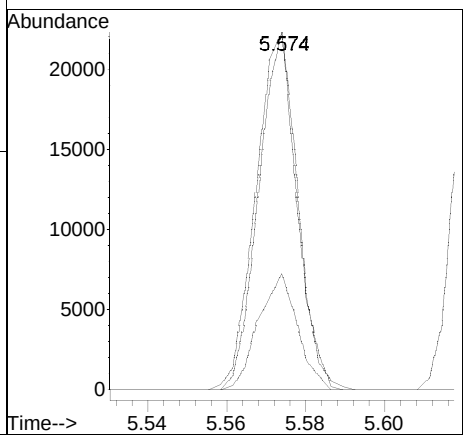


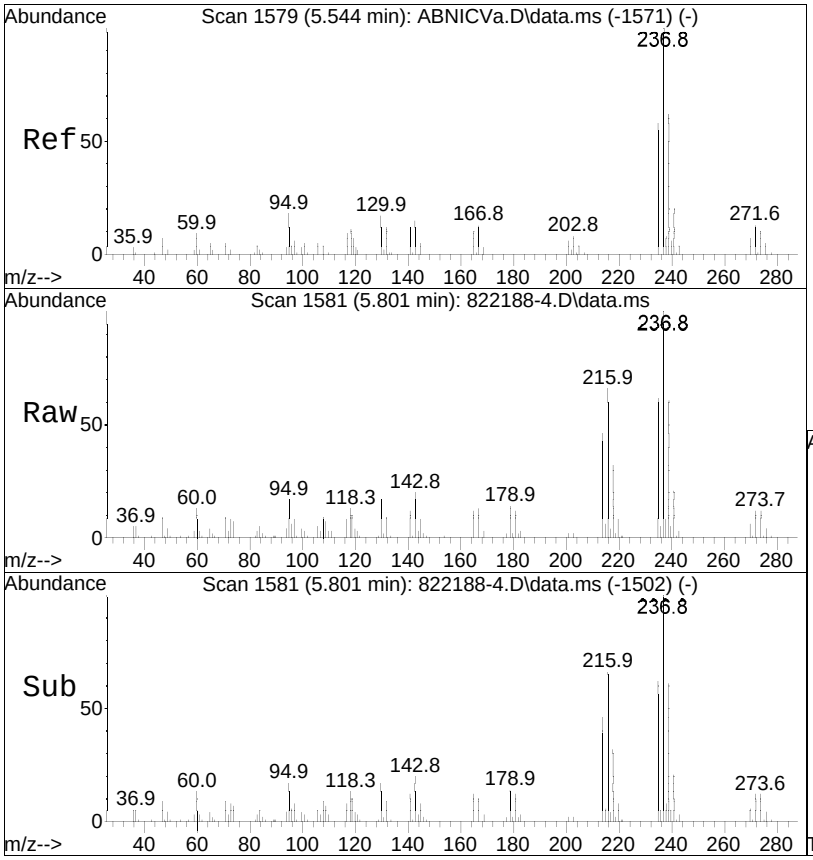


#39
p-Chloro-m-cresol
Concen: 4.80 ug/ml
RT: 5.574 min Scan# 1508
Delta R.T. 0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:107 Resp: 16293

Ion	Ratio	Lower	Upper
107	100		
144	30.3	20.9	31.3
142	91.4	66.1	99.1

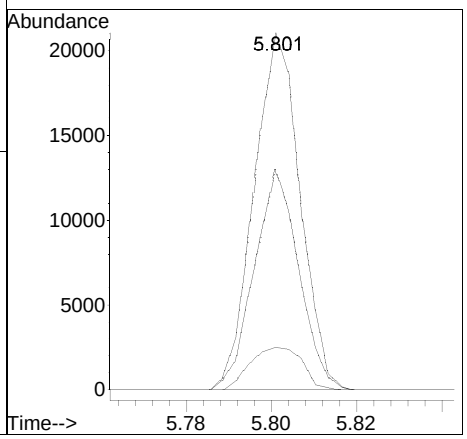


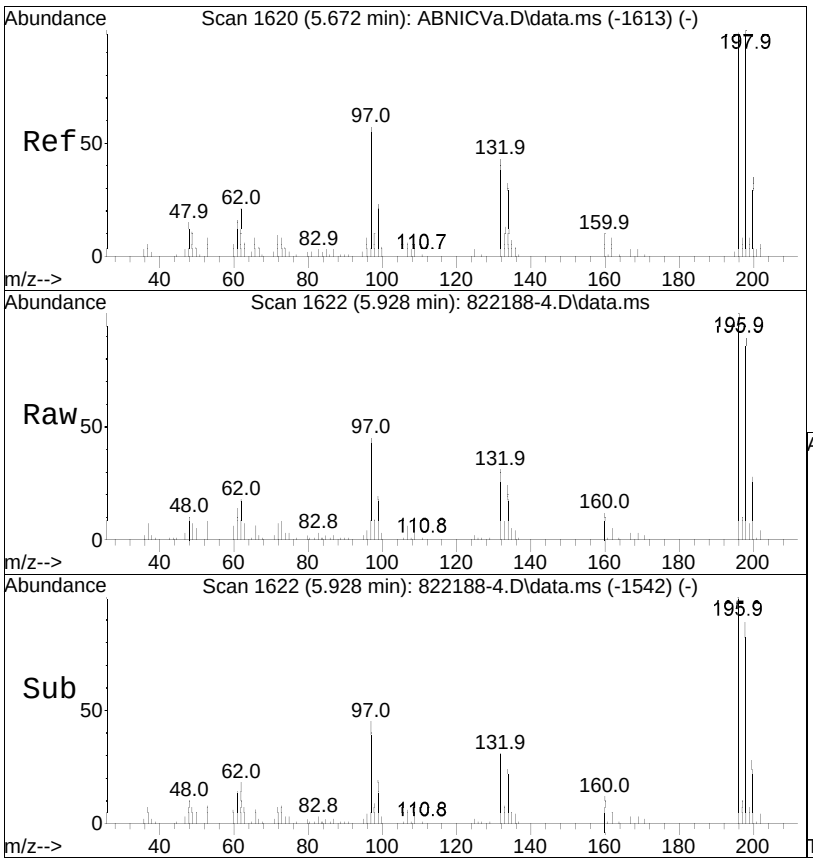


#42
Hexachlorocyclopentadiene
Concen: 4.93 ug/ml
RT: 5.801 min Scan# 1581
Delta R.T. -0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:237 Resp: 15768

Ion	Ratio	Lower	Upper
237	100		
235	59.8	49.7	74.5
272	13.7	9.8	14.6

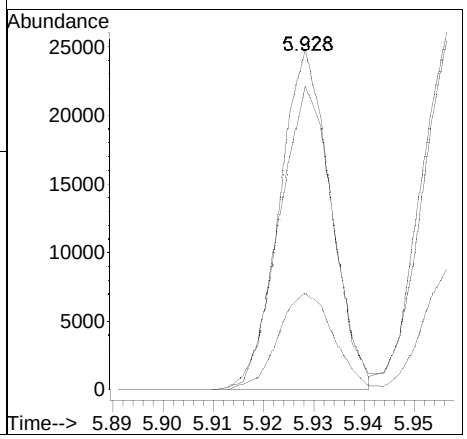


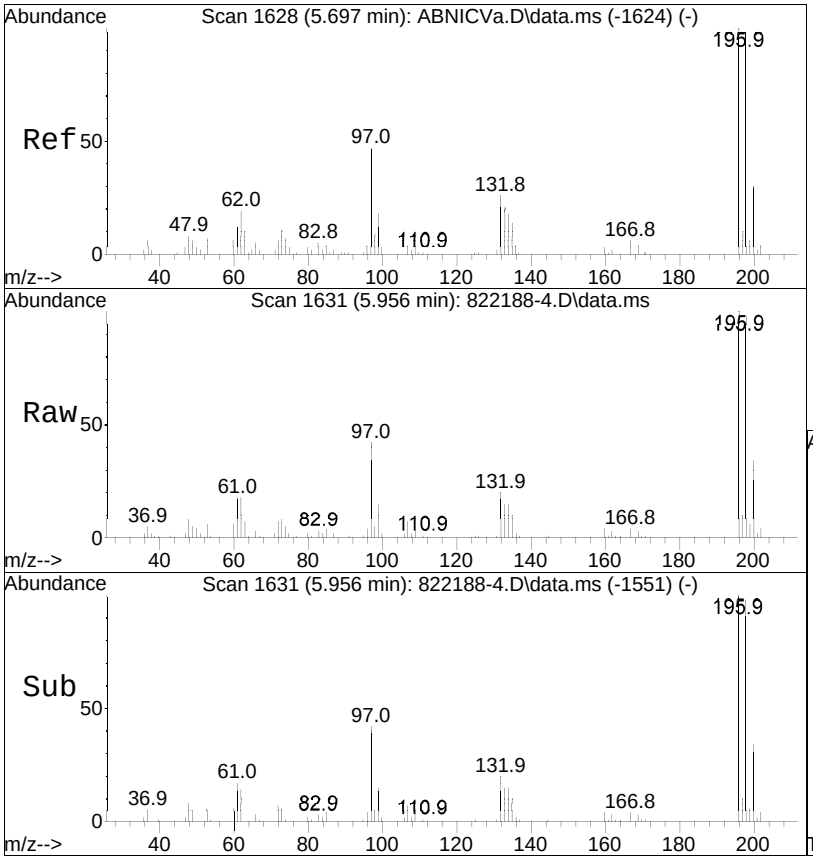


#43
2,4,6-Trichlorophenol
Concen: 5.63 ug/ml
RT: 5.928 min Scan# 1622
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:196 Resp: 17502

Ion	Ratio	Lower	Upper
196	100		
198	95.0	77.5	116.3
200	30.9	23.8	35.6

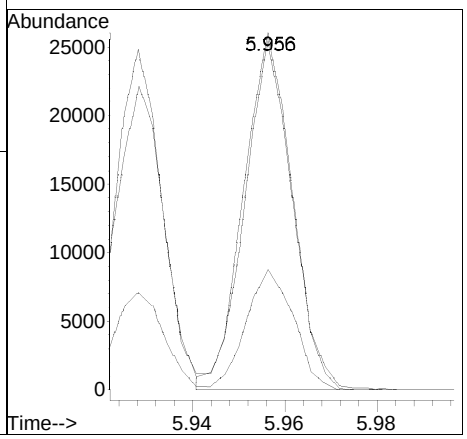


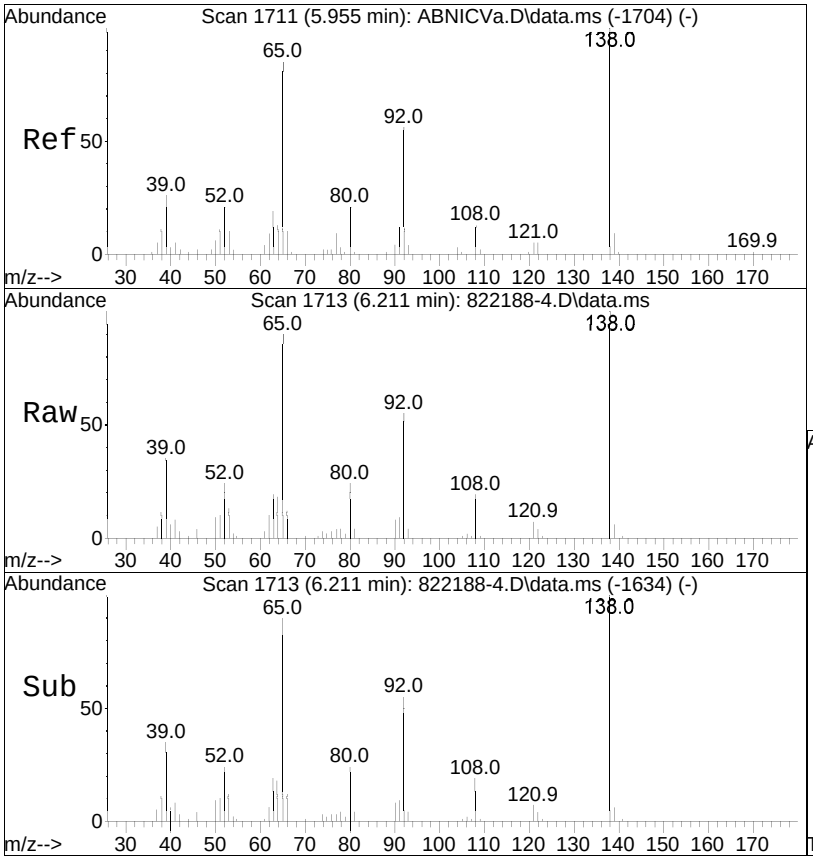


#44
2,4,5-Trichlorophenol
Concen: 6.04 ug/ml
RT: 5.956 min Scan# 1631
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:196 Resp: 18877

Ion	Ratio	Lower	Upper
196	100		
200	33.1	25.4	38.0
198	95.2	78.0	117.0

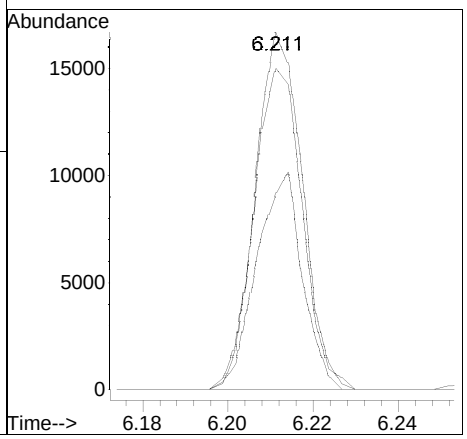


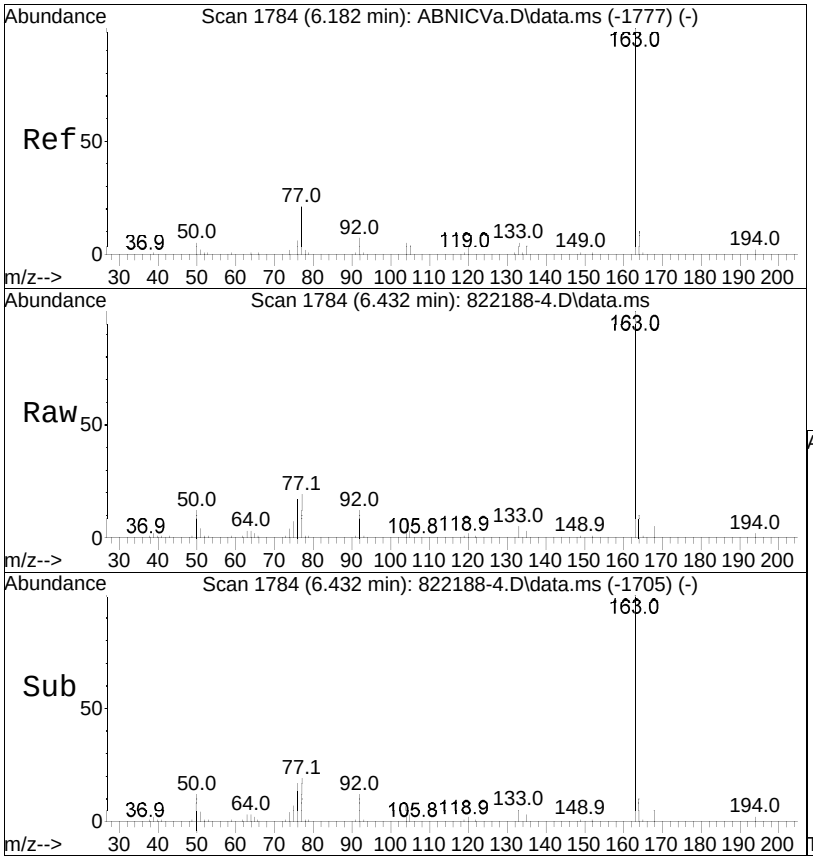


#47
2-Nitroaniline
Concen: 4.75 ug/ml
RT: 6.211 min Scan# 1713
Delta R.T. -0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:138 Resp: 12709

Ion	Ratio	Lower	Upper
138	100		
92	59.4	53.5	80.3
65	93.0	86.3	129.5

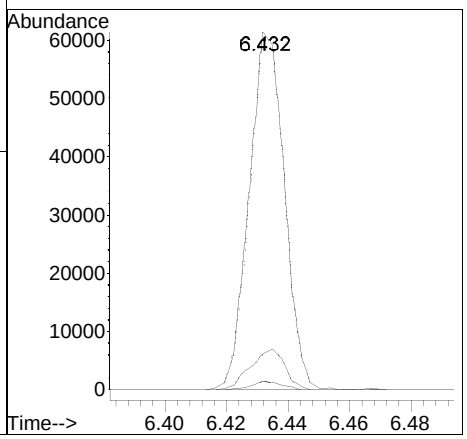


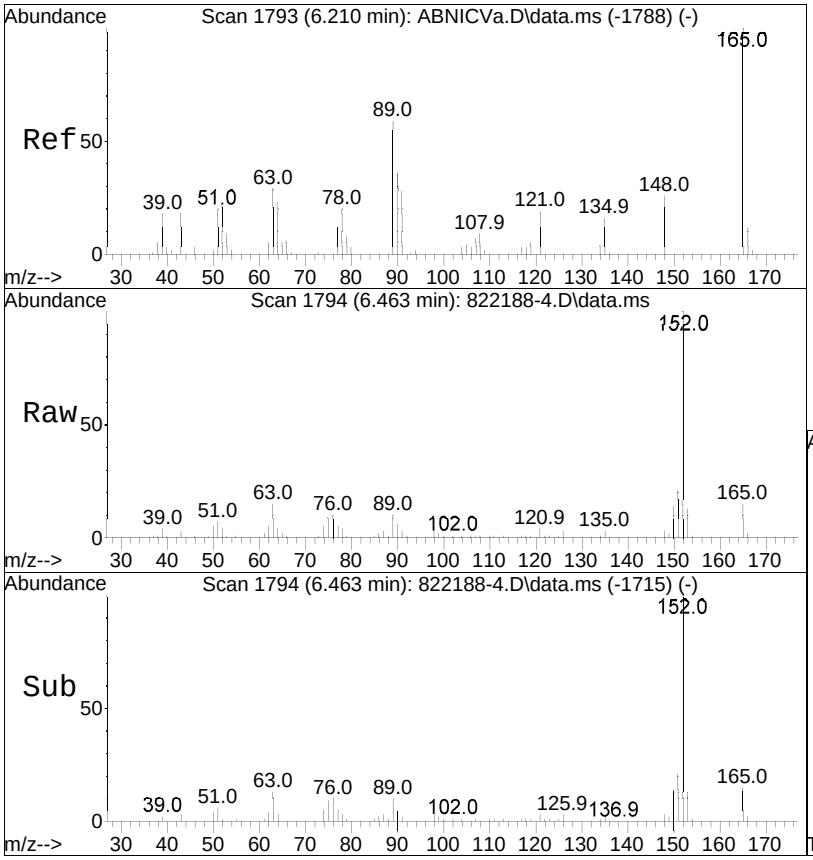


#50
Dimethyl phthalate
Concen: 4.46 ug/ml
RT: 6.432 min Scan# 1784
Delta R.T. -0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:163 Resp: 48309

Ion	Ratio	Lower	Upper
163	100		
194	2.1	3.5	5.3#
164	11.3	7.9	11.9

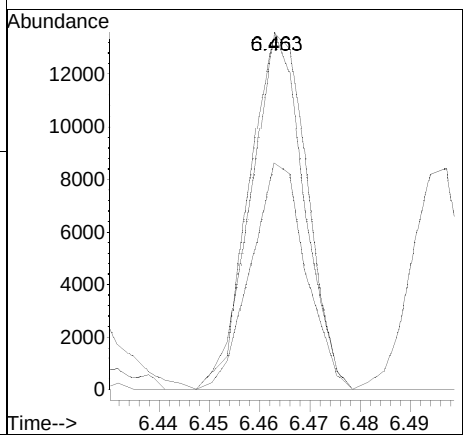


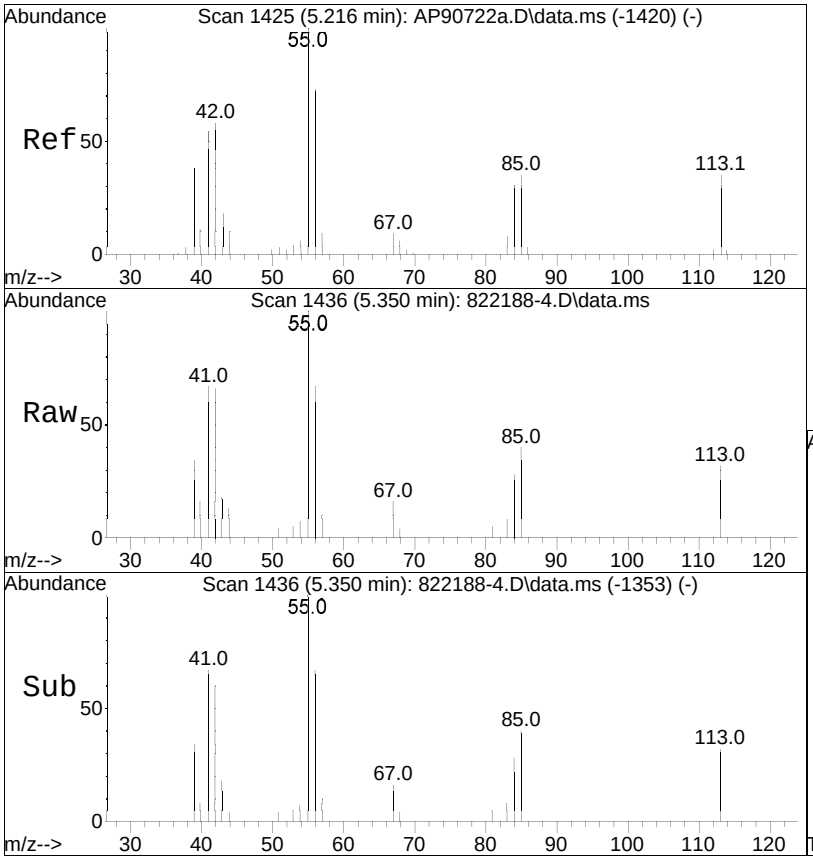


#52
2,6-Dinitrotoluene
Concen: 4.82 ug/ml
RT: 6.463 min Scan# 1794
Delta R.T. -0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:165 Resp: 10773

Ion	Ratio	Lower	Upper
165	100		
89	60.6	54.2	81.2
63	92.6	64.2	96.2

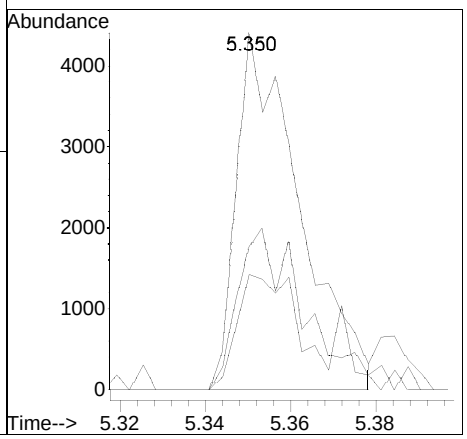


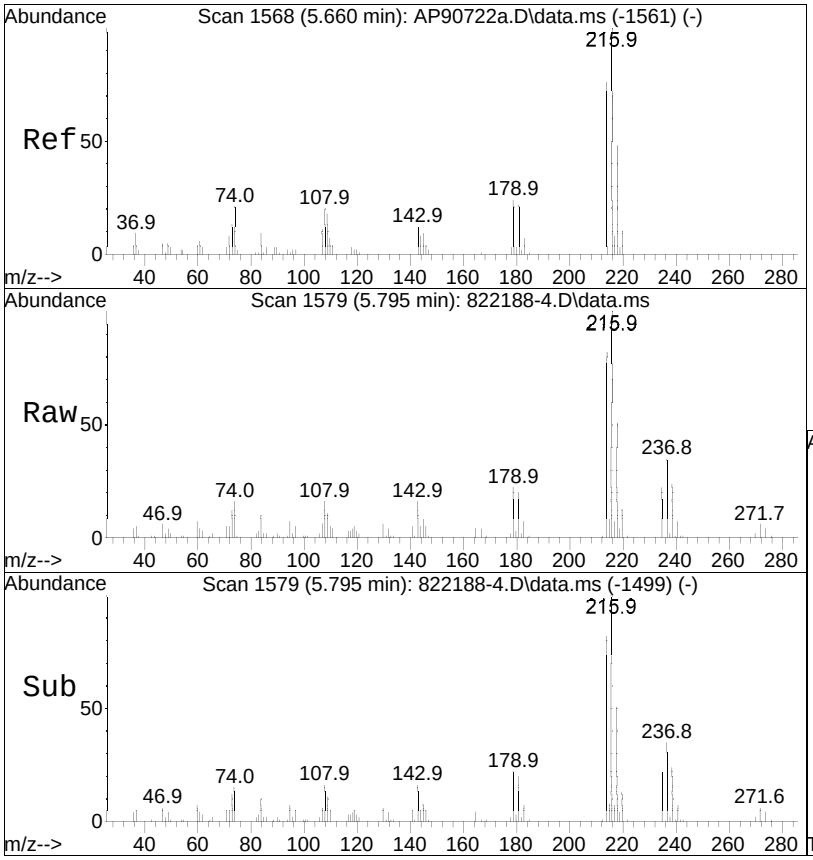


#59
Caprolactam
Concen: 2.28 ug/ml
RT: 5.350 min Scan# 1436
Delta R.T. 0.009 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion: 55 Resp: 4524

Ion	Ratio	Lower	Upper
55	100		
85	46.8	19.8	29.6#
113	31.2	29.6	44.4

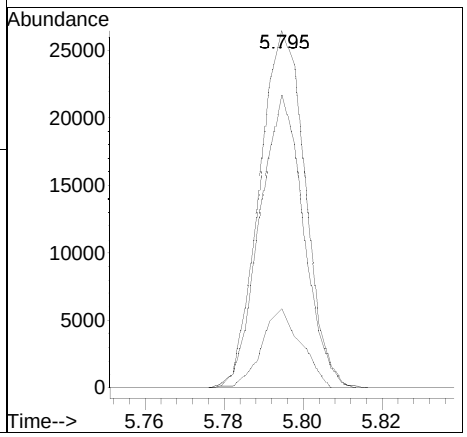


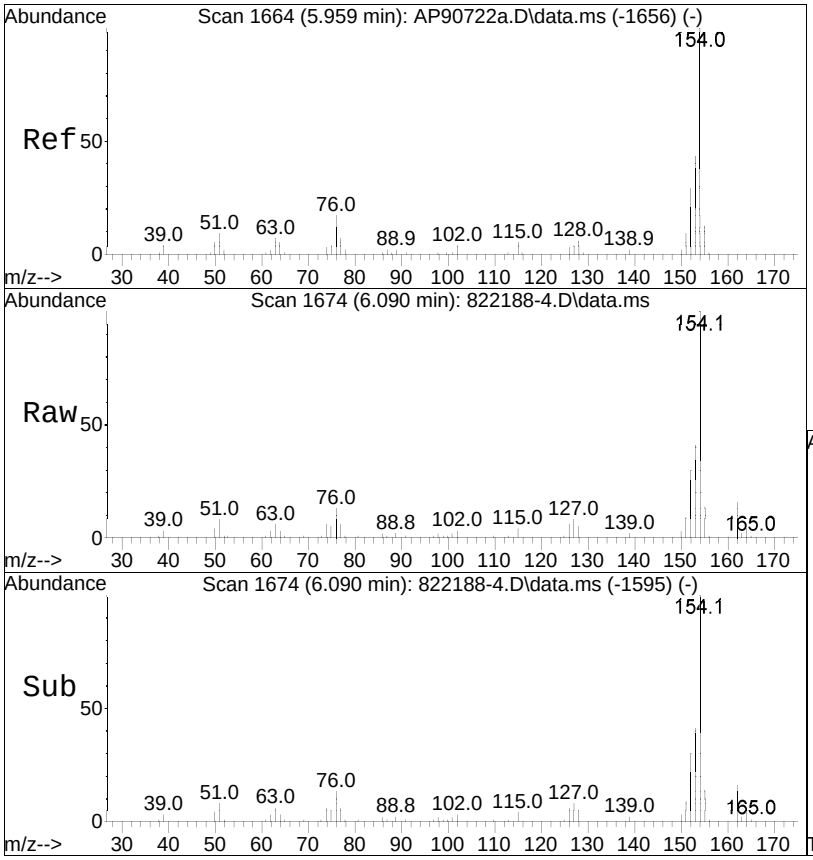


#60
1,2,4,5-Tetrachlorobenzene
Concen: 3.95 ug/ml
RT: 5.795 min Scan# 1579
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:216 Resp: 21263

Ion	Ratio	Lower	Upper
216	100		
214	79.0	63.7	95.5
179	19.2	19.0	28.6

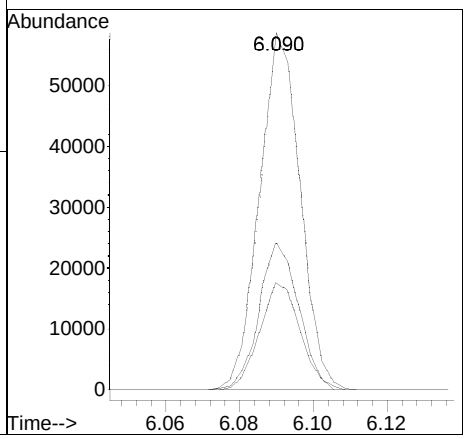


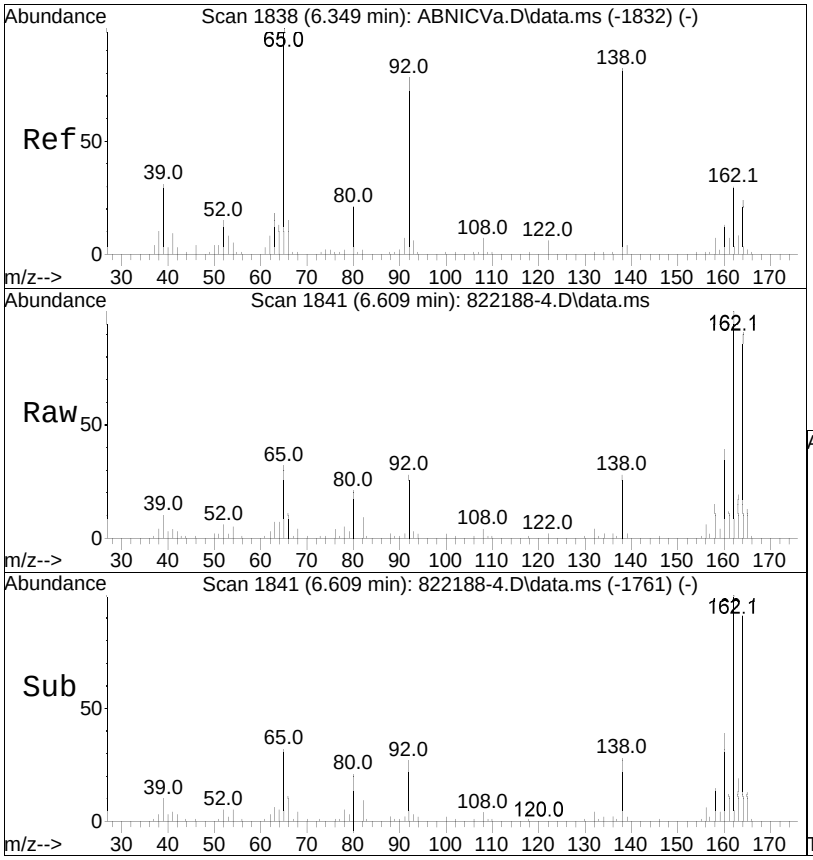


#61
Biphenyl
Concen: 3.71 ug/ml
RT: 6.090 min Scan# 1674
Delta R.T. -0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:154 Resp: 44707

Ion	Ratio	Lower	Upper
154	100		
153	40.4	32.3	48.5
152	29.8	22.5	33.7

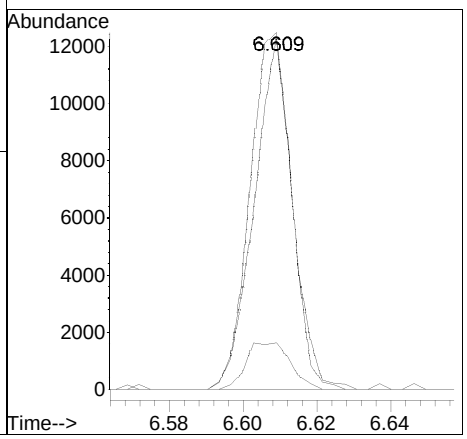


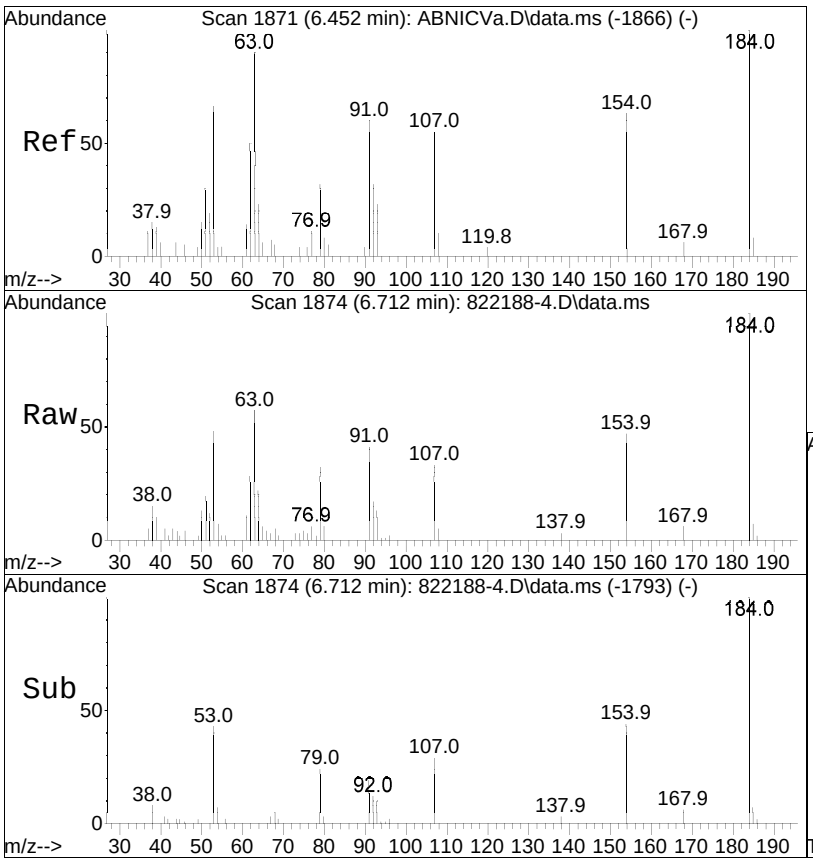


#63
3-Nitroaniline
Concen: 3.20 ug/ml
RT: 6.609 min Scan# 1841
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:138 Resp: 8851

Ion	Ratio	Lower	Upper
138	100		
92	108.6	93.4	140.2
108	15.5	9.5	14.3#

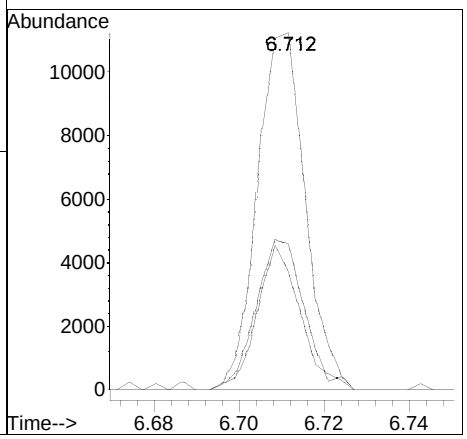


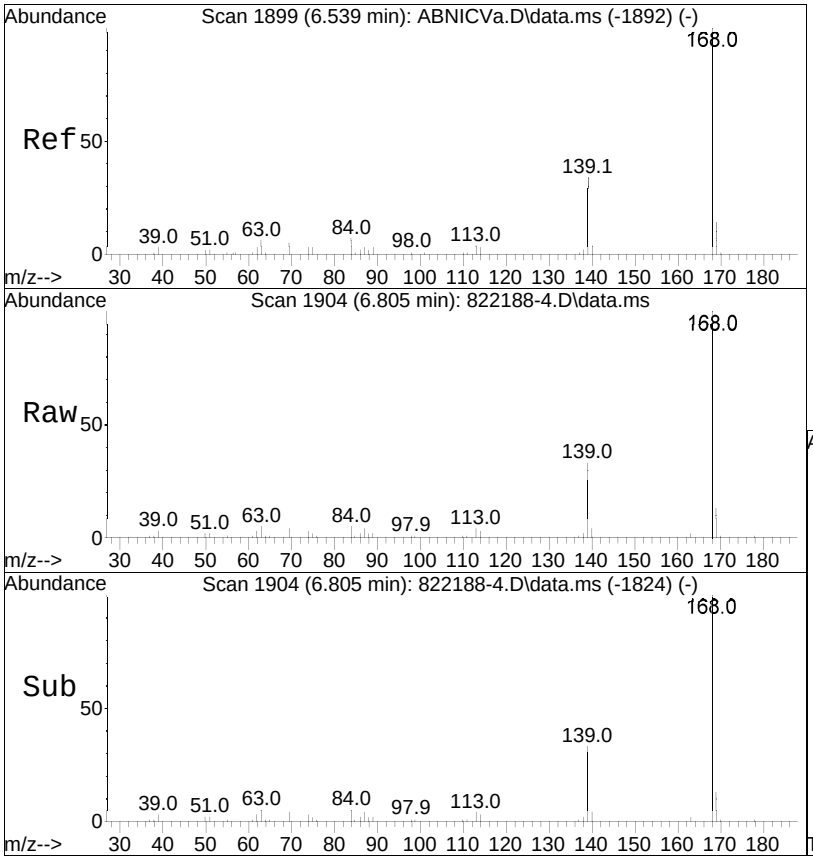


#65
2,4-Dinitrophenol
Concen: 6.23 ug/ml
RT: 6.712 min Scan# 1874
Delta R.T. 0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:184 Resp: 8748

Ion	Ratio	Lower	Upper
184	100		
107	36.6	37.7	56.5#
91	42.6	46.3	69.5#

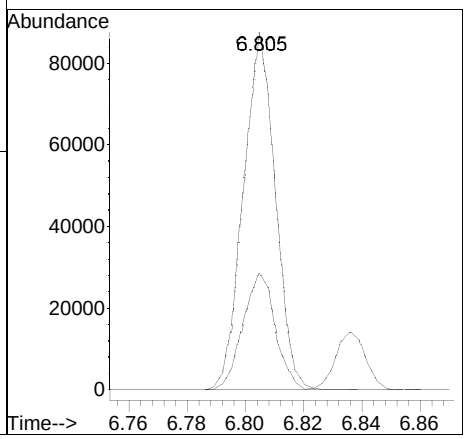


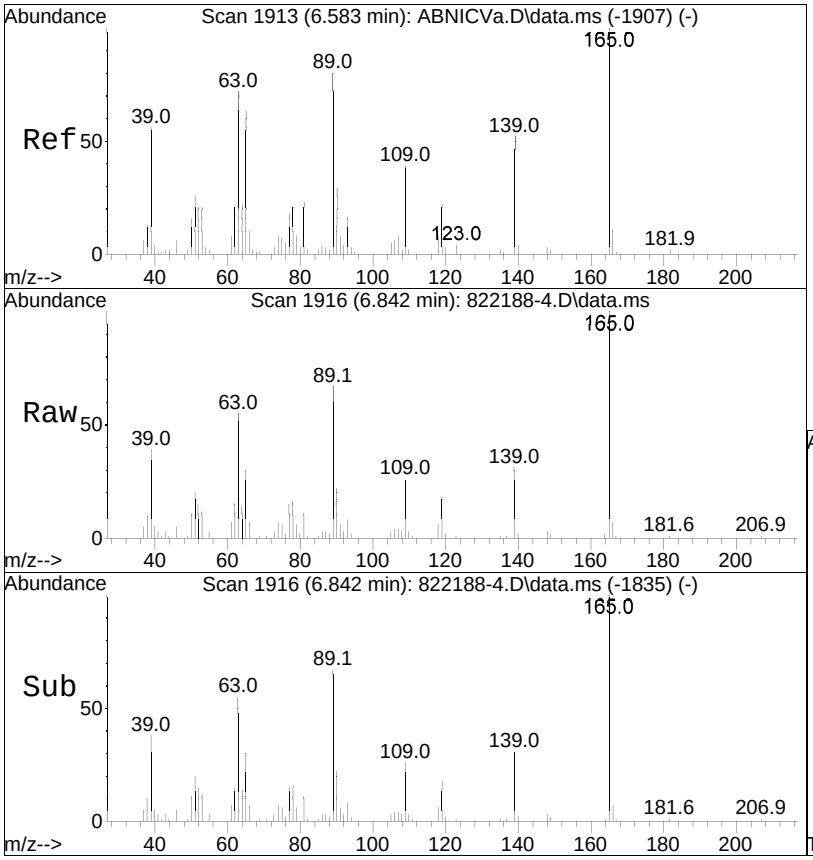


#66
Dibenzofuran
Concen: 4.39 ug/ml
RT: 6.805 min Scan# 1904
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:168 Resp: 66187

Ion	Ratio	Lower	Upper
168	100		
139	33.2	31.4	47.2

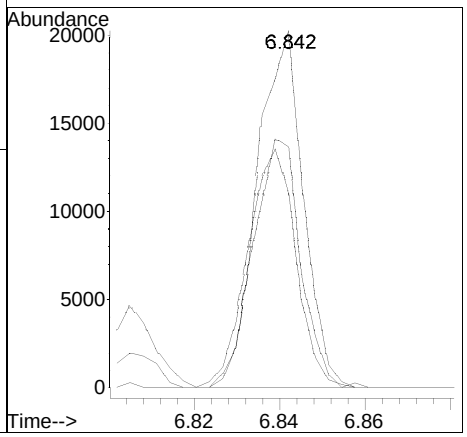


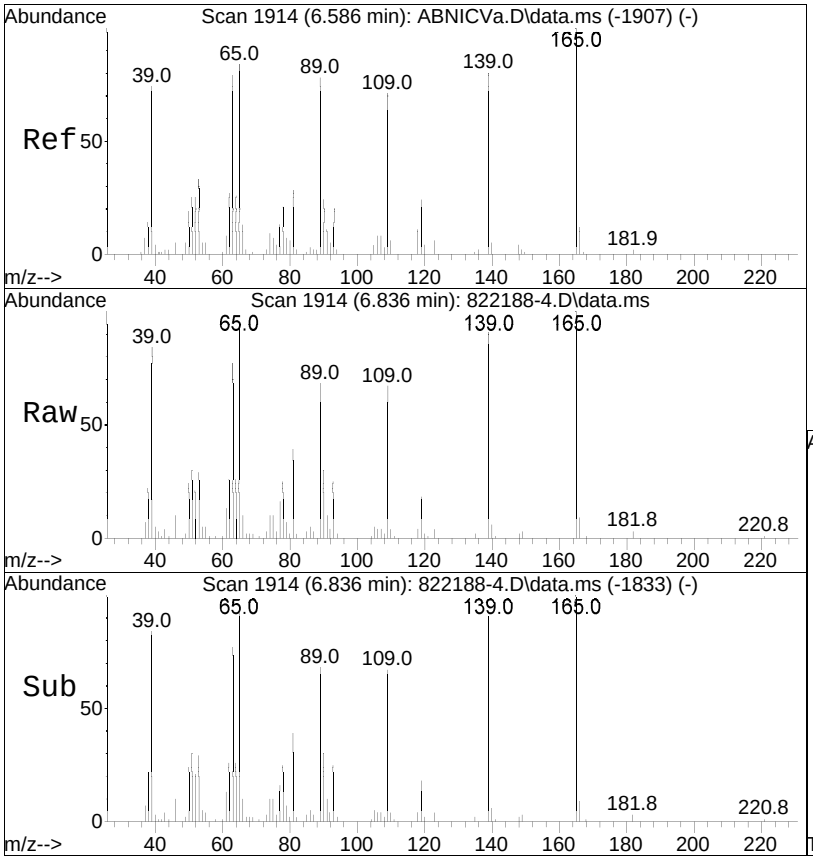


#67
2,4-Dinitrotoluene
Concen: 4.45 ug/ml
RT: 6.842 min Scan# 1916
Delta R.T. 0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:165 Resp: 15143

Ion	Ratio	Lower	Upper
165	100		
89	71.6	72.0	108.0#
63	70.1	52.7	79.1

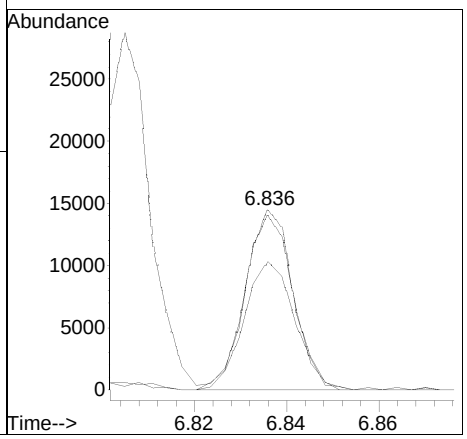


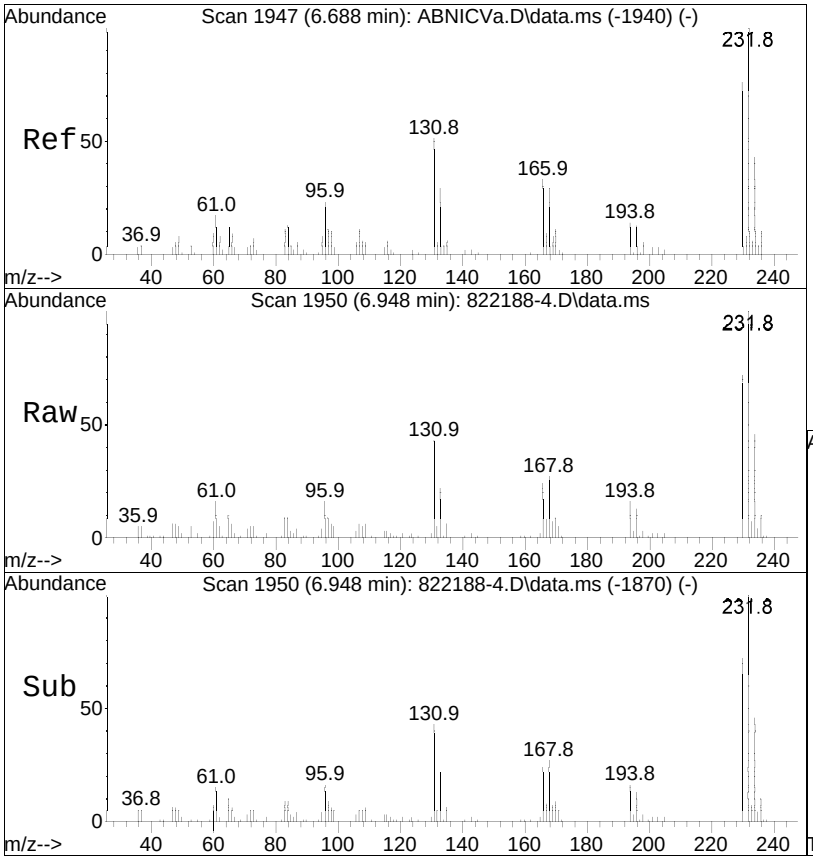


#68
4-Nitrophenol
Concen: 4.64 ug/ml
RT: 6.836 min Scan# 1914
Delta R.T. 0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion: 65 Resp: 10491

Ion	Ratio	Lower	Upper
65	100		
109	75.1	47.4	71.2#
139	96.7	76.6	115.0

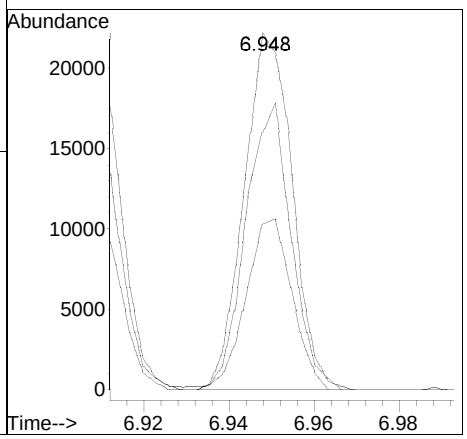


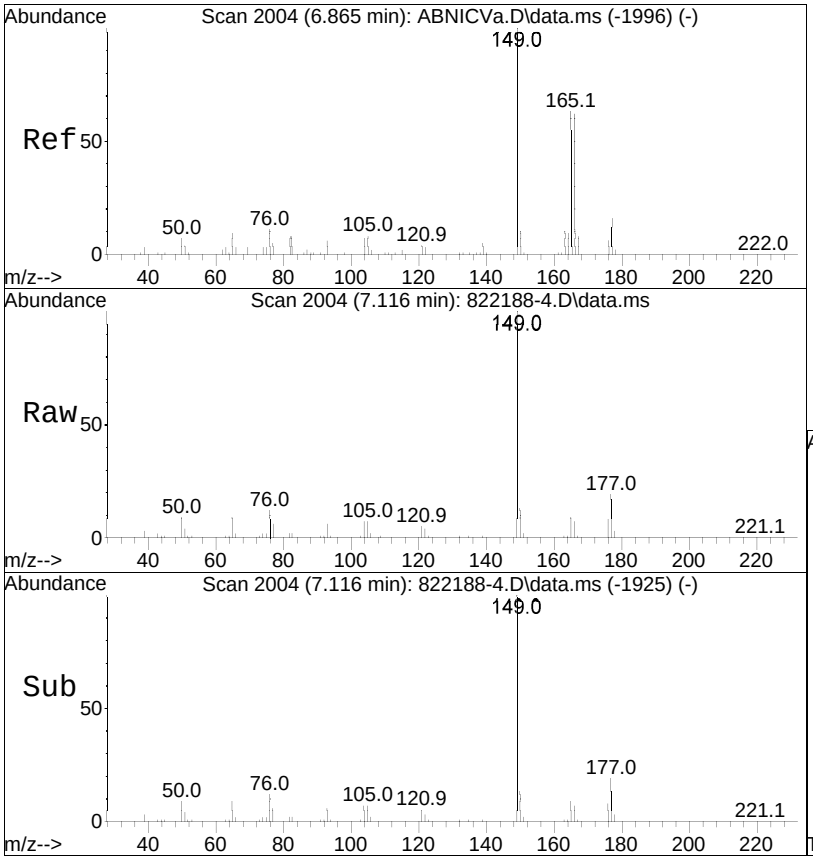


#70
2,3,4,6-Tetrachlorophenol
Concen: 5.49 ug/ml
RT: 6.948 min Scan# 1950
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:232 Resp: 17452

Ion	Ratio	Lower	Upper
232	100		
230	76.0	61.8	92.8
234	45.9	36.2	54.2

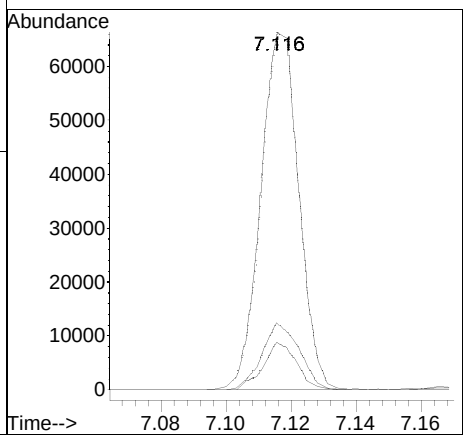


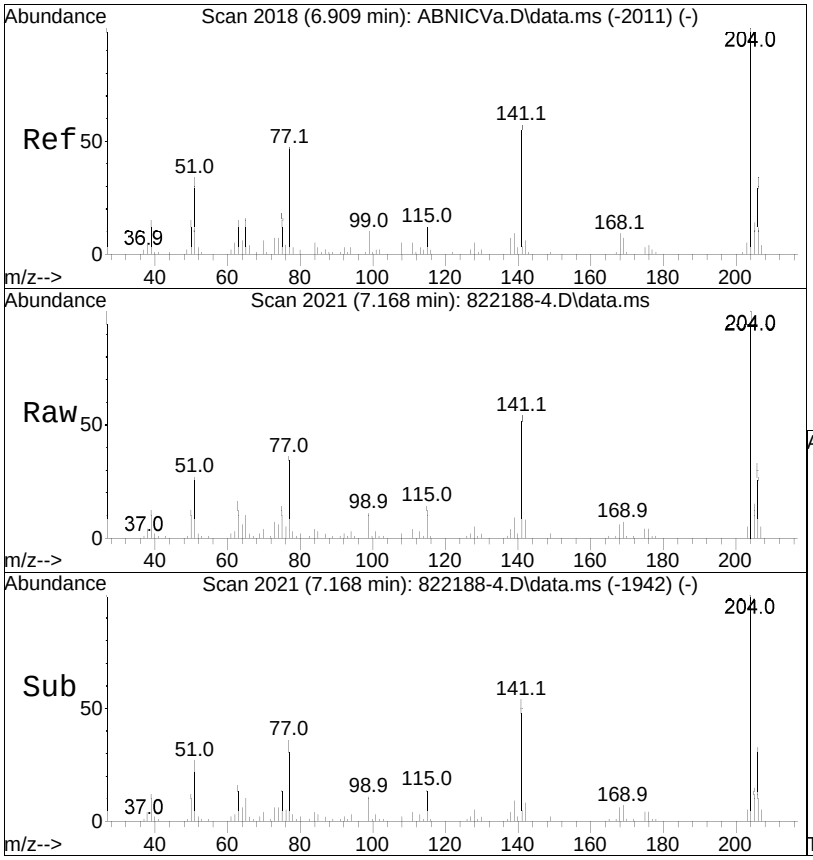


#71
Diethyl phthalate
Concen: 4.18 ug/ml
RT: 7.116 min Scan# 2004
Delta R.T. -0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:149 Resp: 53253

Ion	Ratio	Lower	Upper
149	100		
177	18.6	16.1	24.1
150	11.9	9.4	14.2

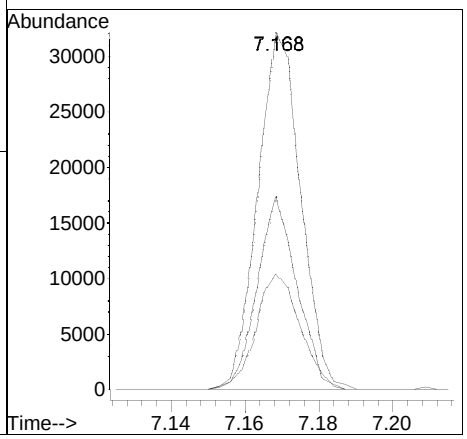


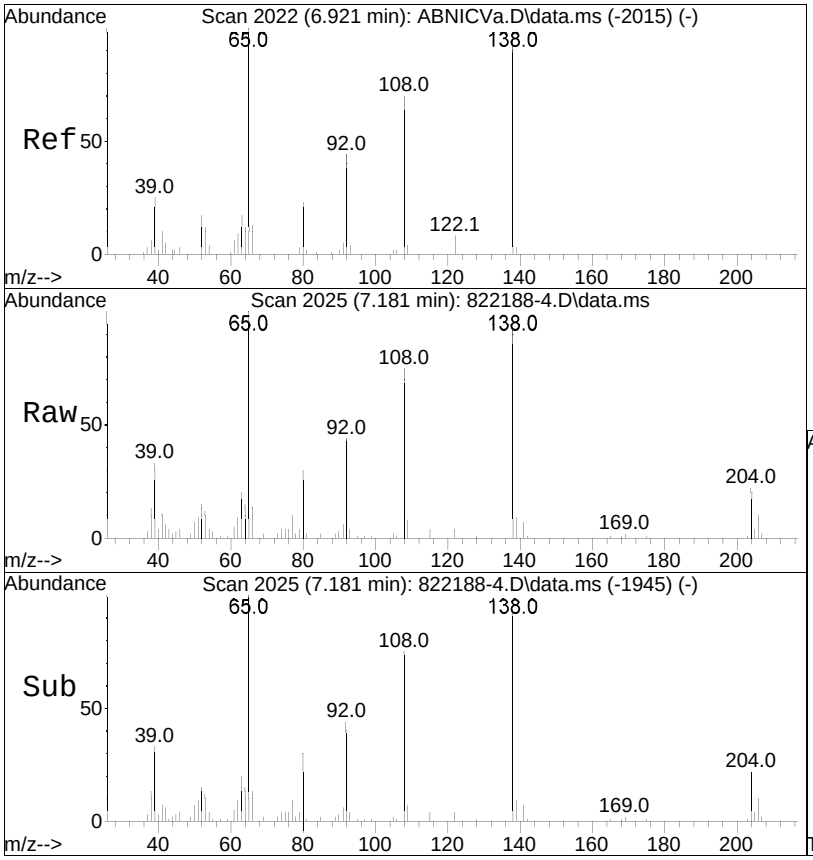


#73
4-Chlorophenyl phenyl ether
Concen: 4.37 ug/ml
RT: 7.168 min Scan# 2021
Delta R.T. -0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:204 Resp: 25807

Ion	Ratio	Lower	Upper
204	100		
206	33.5	25.8	38.6
141	50.2	53.6	80.4#

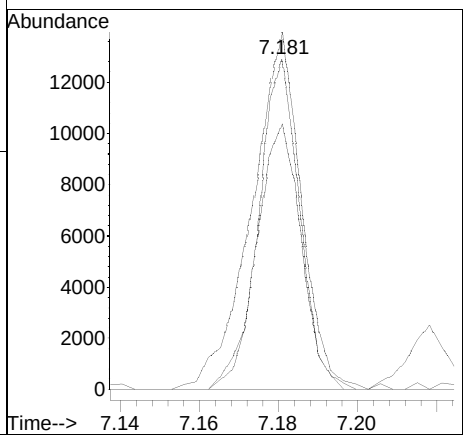


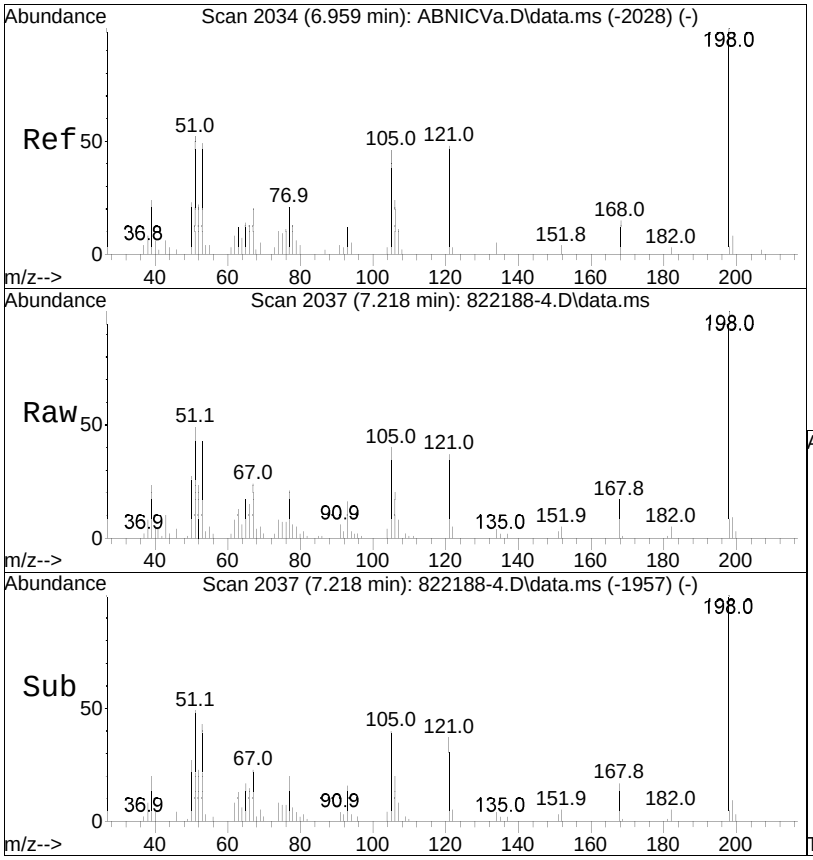


#74
4-Nitroaniline
Concen: 3.40 ug/ml
RT: 7.181 min Scan# 2025
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:138 Resp: 9333

Ion	Ratio	Lower	Upper
138	100		
108	85.9	52.1	78.1#
65	129.9	115.0	172.6

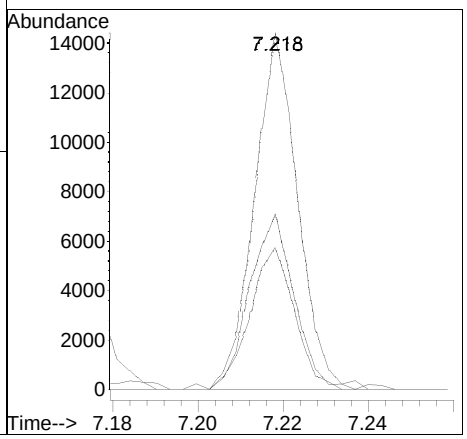


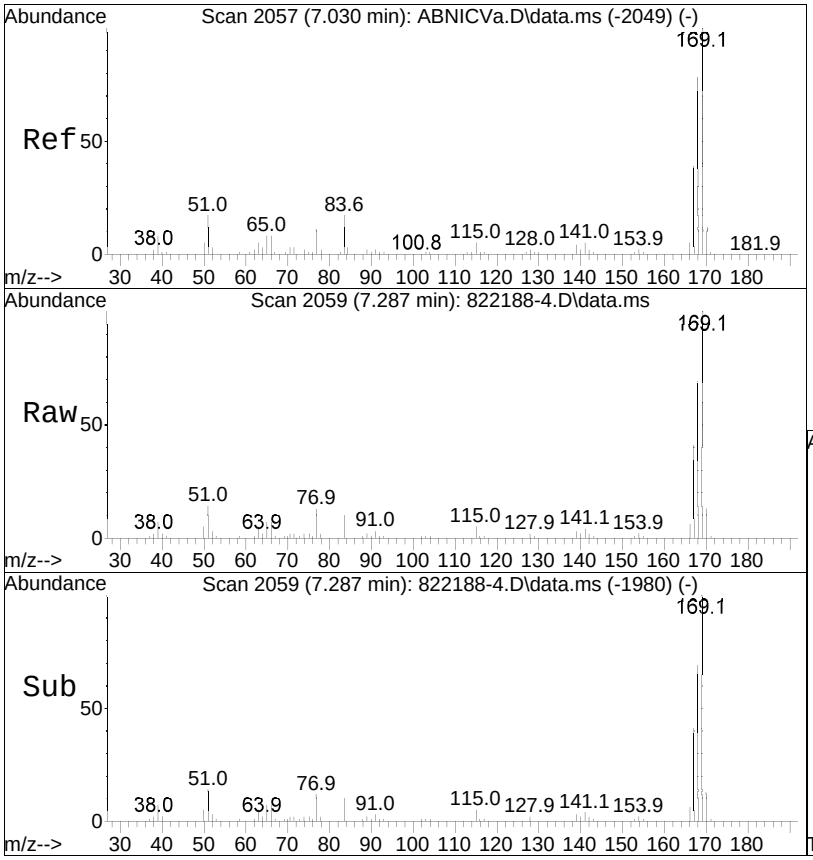


#75
4,6-Dinitro-o-cresol
Concen: 5.47 ug/ml
RT: 7.218 min Scan# 2037
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:198 Resp: 10089

Ion	Ratio	Lower	Upper
198	100		
51	51.3	76.0	114.0#
105	41.6	45.6	68.4#

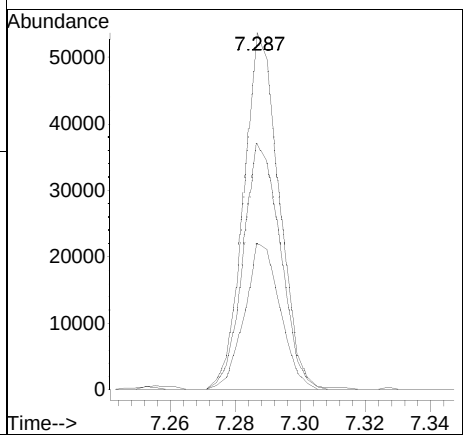


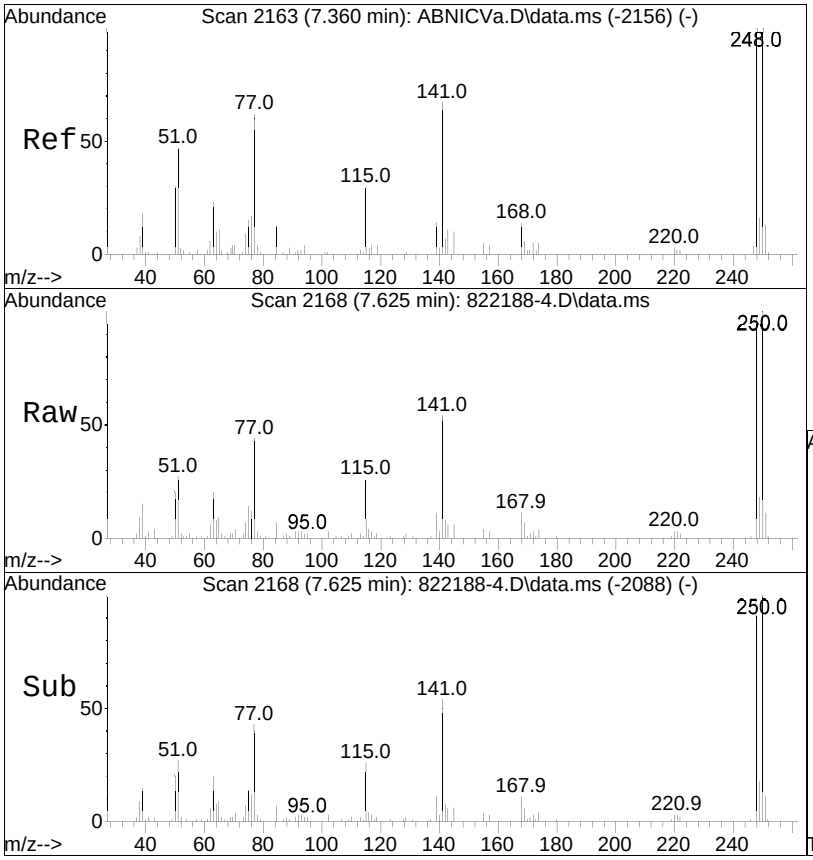


#76
NDPA/DPA
Concen: 3.91 ug/ml
RT: 7.287 min Scan# 2059
Delta R.T. -0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:169 Resp: 40580

Ion	Ratio	Lower	Upper
169	100		
168	72.4	54.0	81.0
167	41.3	28.6	42.8

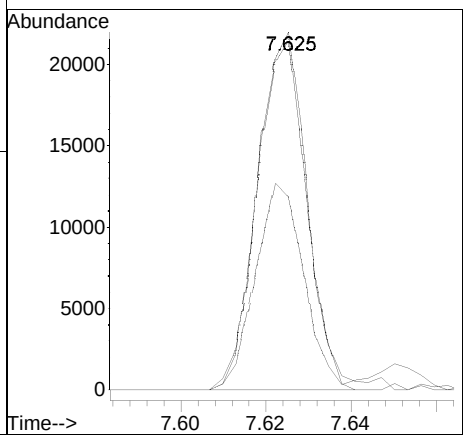


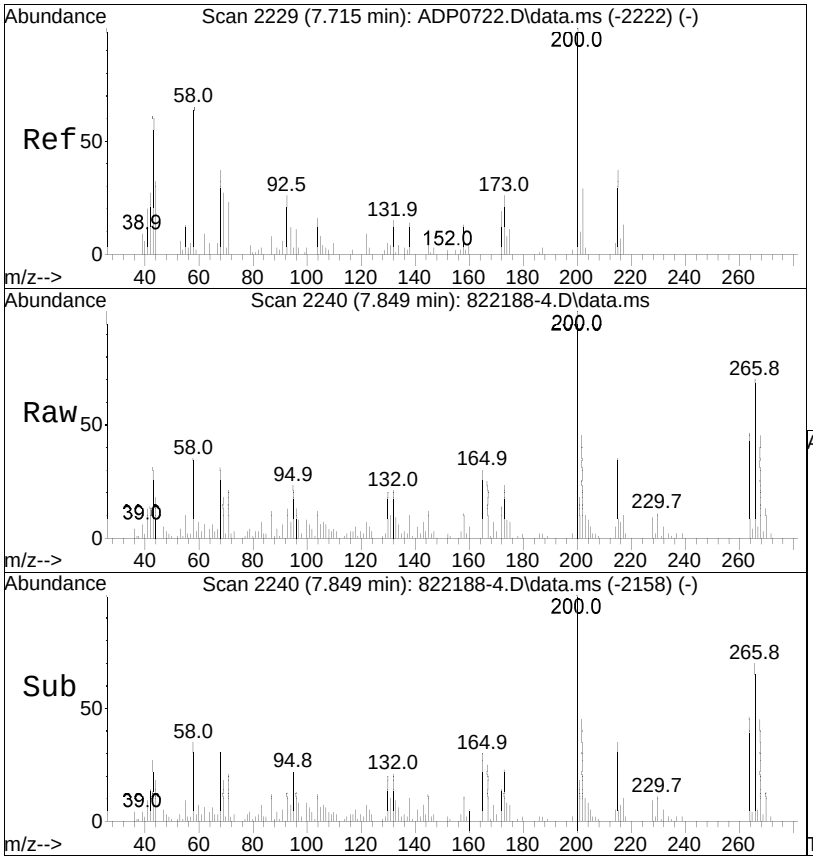


#79
4-Bromophenyl phenyl ether
Concen: 4.63 ug/ml
RT: 7.625 min Scan# 2168
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:248 Resp: 17088

Ion	Ratio	Lower	Upper
248	100		
141	59.1	76.6	114.8#
250	104.8	77.3	115.9

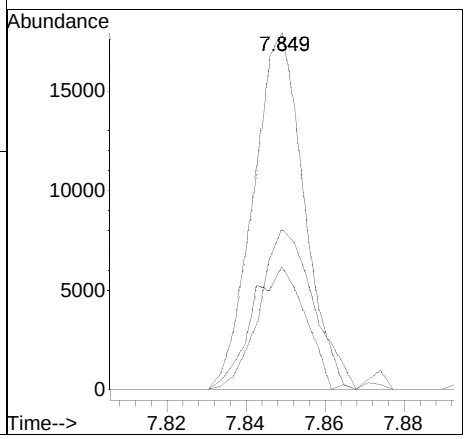


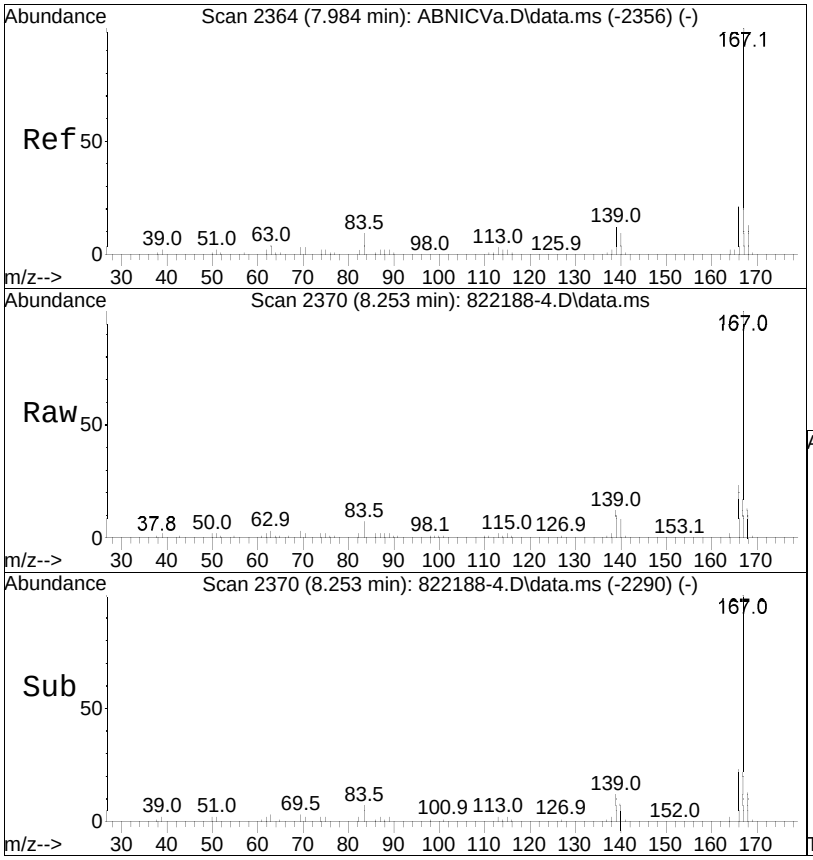


#86
Atrazine
Concen: 5.01 ug/ml
RT: 7.849 min Scan# 2240
Delta R.T. 0.006 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:200 Resp: 15789

Ion	Ratio	Lower	Upper
200	100		
202	48.8	25.8	38.6#
215	37.1	40.2	60.4#

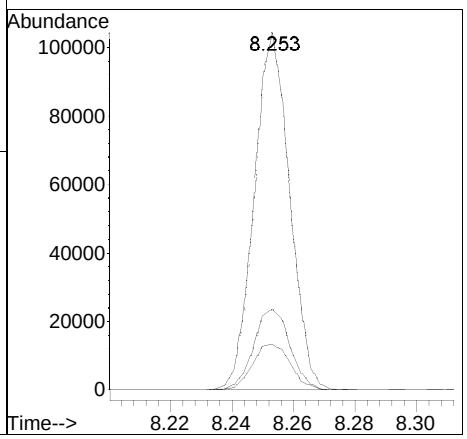


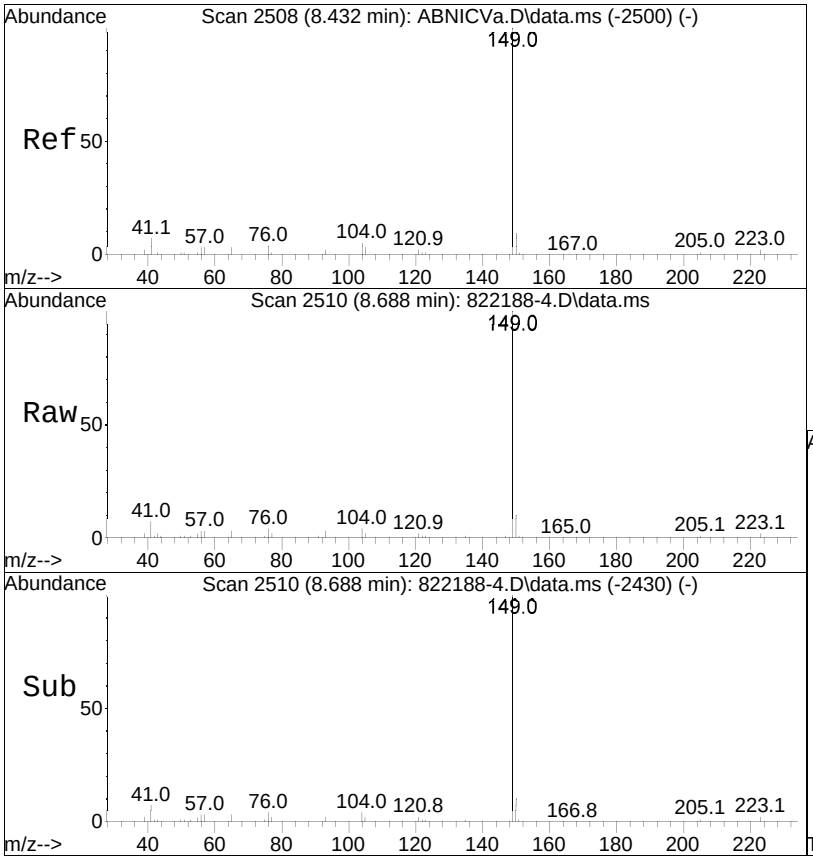


#90
Carbazole
Concen: 4.30 ug/ml
RT: 8.253 min Scan# 2370
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:167 Resp: 82707

Ion	Ratio	Lower	Upper
167	100		
168	13.9	10.6	15.8
166	23.4	17.4	26.0

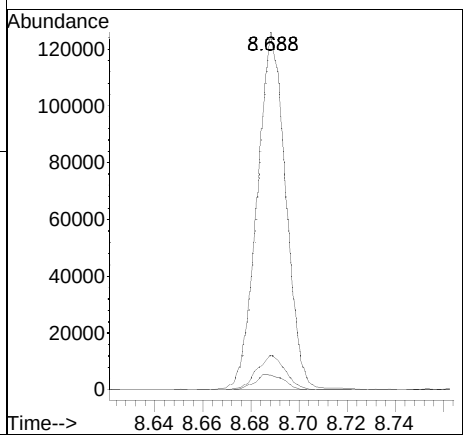


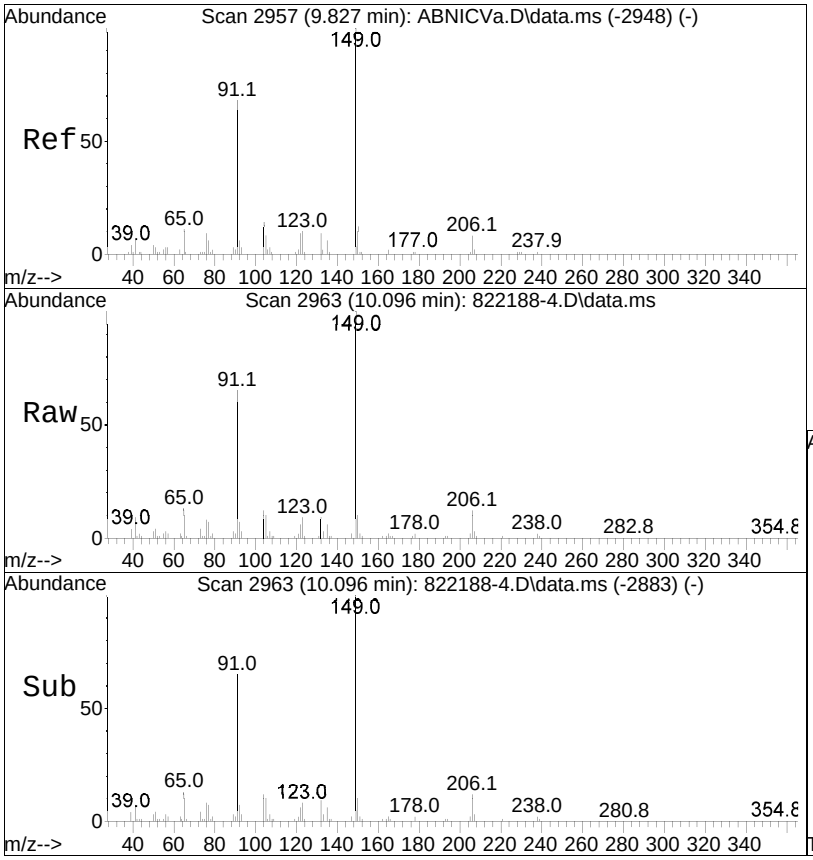


#91
Di-n-butylphthalate
Concen: 4.52 ug/ml
RT: 8.688 min Scan# 2510
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:149 Resp: 102351

Ion	Ratio	Lower	Upper
149	100		
150	9.7	7.0	10.6
104	4.4	4.5	6.7#

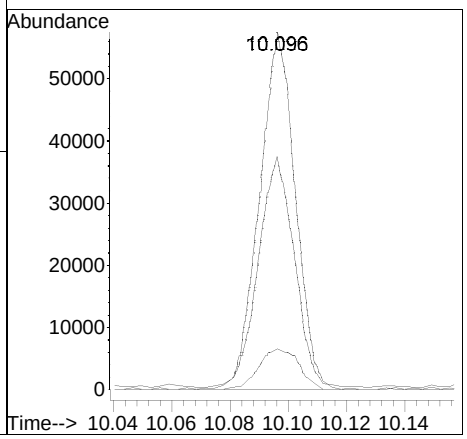


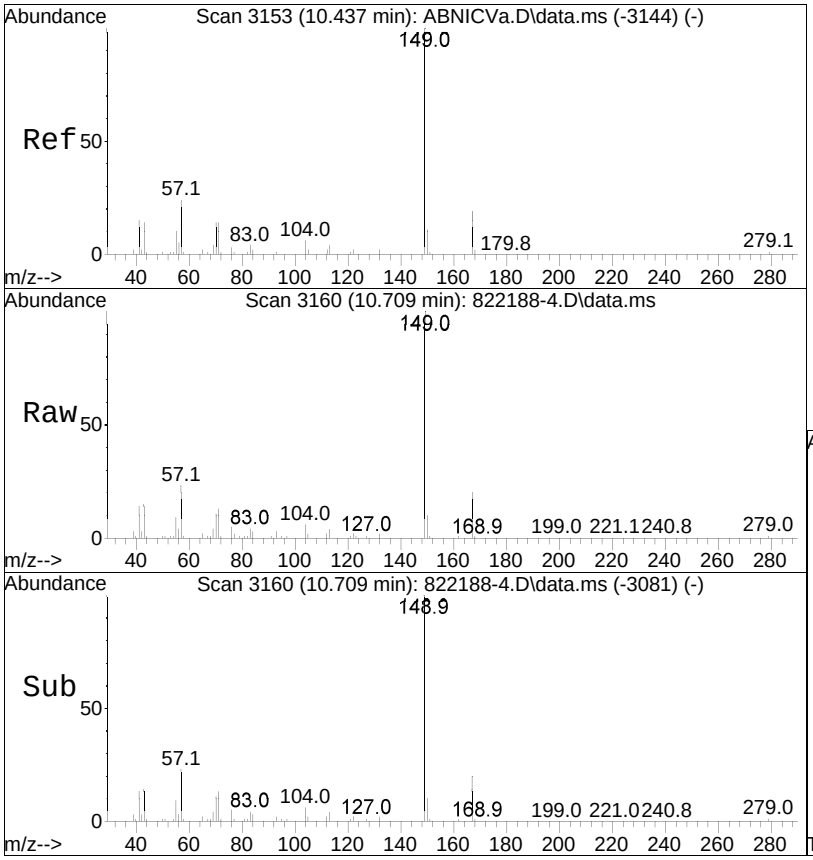


#96
Butyl benzyl phthalate
Concen: 4.72 ug/ml
RT: 10.096 min Scan# 2963
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:149 Resp: 48567

Ion	Ratio	Lower	Upper
149	100		
91	65.3	63.3	94.9
206	12.9	13.9	20.9#

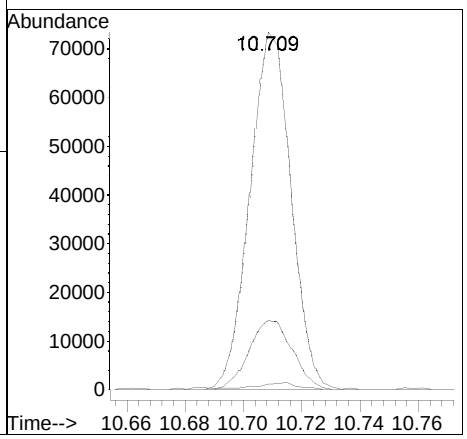


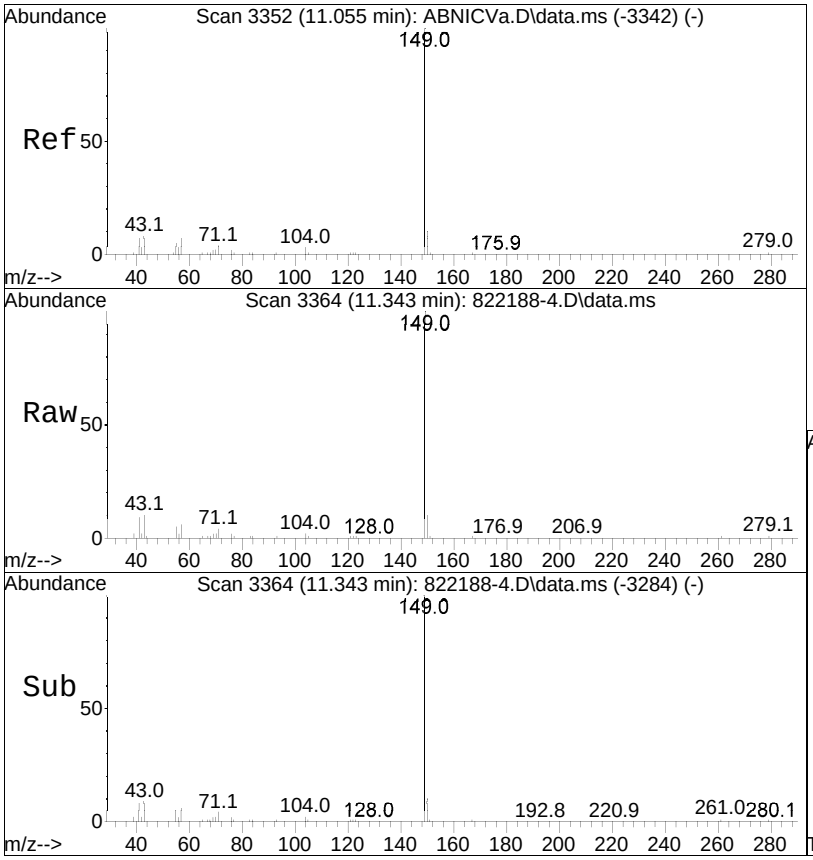


#107
Bis(2-ethylhexyl)phthalate
Concen: 4.90 ug/ml
RT: 10.709 min Scan# 3160
Delta R.T. -0.003 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:149 Resp: 71338

Ion	Ratio	Lower	Upper
149	100		
167	20.6	22.1	33.1#
279	1.6	3.0	4.4#

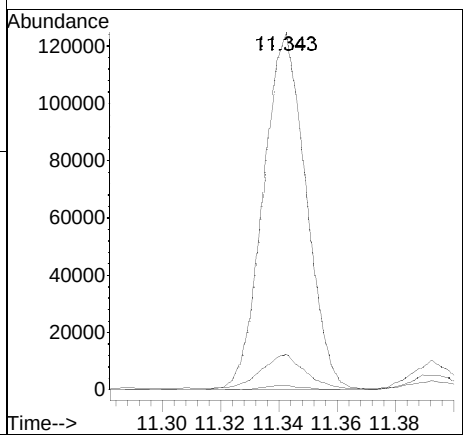




#108
Di-n-octylphthalate
Concen: 4.75 ug/ml
RT: 11.343 min Scan# 3364
Delta R.T. 0.000 min
Lab File: 822188-4.D
Acq: 31 Aug 2023 4:23 pm

Tgt Ion:149 Resp: 125598

Ion	Ratio	Lower	Upper
149	100		
43	9.8	18.8	28.2#
167	1.2	1.3	1.9#



Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-5.D
Acq On : 31 Aug 2023 4:46 pm
Operator : Dakota:jg
Sample : WG1822188-5,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 12 14:30:48 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 17:05:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) IS1_1,4-Dichlorobenzen...	3.669	152	17009	4.000	ug/ml		0.00
Standard Area 1 = 14463			Recovery = 117.60%				
27) IS2_1,4-Dichlorobenzen...	3.669	152	17009	4.000	ug/ml		0.00
Standard Area 3 = 16508			Recovery = 103.03%				
34) IS1_Naphthalene-d8	4.924	136	57715	4.000	ug/ml	#	0.00
Standard Area 1 = 50867			Recovery = 113.46%				
54) IS2_Naphthalene-d8	4.924	136	57715	4.000	ug/ml	#	0.00
Standard Area 3 = 55735			Recovery = 103.55%				
62) IS1_Acenaphthene-d10	6.606	164	36211	4.000	ug/ml		0.00
Standard Area 1 = 33572			Recovery = 107.86%				
82) IS2_Acenaphthene-d10	6.606	164	36211	4.000	ug/ml		0.00
Standard Area 3 = 35012			Recovery = 103.42%				
85) IS3_Acenaphthene-d10	6.606	164	36211	4.000	ug/ml		0.00
Standard Area 2 = 37775			Recovery = 95.86%				
87) IS1_Phenanthrene-d10	7.998	188	87792	4.000	ug/ml		0.00
Standard Area 1 = 80682			Recovery = 108.81%				
99) IS3_Phenanthrene-d10	7.998	188	87792	4.000	ug/ml		0.00
Standard Area 2 = 96848			Recovery = 90.65%				
103) IS1_Chrysene-d12	10.506	240	94612	4.000	ug/ml		0.00
Standard Area 1 = 88271			Recovery = 107.18%				
112) IS1_Perylene-d12	11.862	264	119062	4.000	ug/ml		0.00
Standard Area 1 = 110283			Recovery = 107.96%				
System Monitoring Compounds							
4) 2-Fluorophenol	2.276	112	9153	2.084	ug/ml		0.01
Spiked Amount 5.000	Range 15 - 110		Recovery = 41.68%				
7) Phenol-d6	3.398	99	9371	1.665	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 33.30%				
19) Nitrobenzene-d5	4.241	82	6306	1.169	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 46.76%				
45) 2-Fluorobiphenyl	6.009	172	16529	1.456	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 58.24%				
78) 2,4,6-Tribromophenol	7.361	330	8101	3.865	ug/ml		0.00
Spiked Amount 5.000	Range 15 - 110		Recovery = 77.30%				
95) 4-Terphenyl-d14	9.571	244	29958	1.396	ug/ml		0.00
Spiked Amount 2.500	Range 30 - 130		Recovery = 55.84%				

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-5.D
Acq On : 31 Aug 2023 4:46 pm
Operator : Dakota:jg
Sample : WG1822188-5,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 12 14:30:48 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 17:05:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Target Compounds						Qvalue
6) 2-Chlorophenol	3.460	128	10767	2.118	ug/ml	96
8) Phenol	3.411	94	11150	1.704	ug/ml	93
9) Bis(2-chloroethyl)ether	3.454	93	9330	2.058	ug/ml#	67
14) Bis(2-chloroisopropyl)...	4.020	45	15819	2.085	ug/ml#	59
15) 2-Methylphenol	4.023	108	9565	2.214	ug/ml	98
17) n-Nitrosodi-n-propylamine	4.147	70	8433	2.425	ug/ml#	83
18) 3-Methylphenol/4-Methy...	4.188	108	10381	2.326	ug/ml	97
20) Nitrobenzene	4.256	77	13126	2.502	ug/ml	94
21) Isophorone	4.514	82	21275	2.292	ug/ml#	93
22) 2-Nitrophenol	4.579	139	6587	2.687	ug/ml	96
23) 2,4-Dimethylphenol	4.701	107	9755	2.066	ug/ml	91
24) Bis(2-chloroethoxy)met...	4.778	93	13540	2.249	ug/ml	98
25) 2,4-Dichlorophenol	4.828	162	11998	2.704	ug/ml#	88
28) Benzaldehyde	3.209	105	9067	2.038	ug/ml	97
29) Acetophenone	4.104	105	14579	1.872	ug/ml#	79
37) 4-Chloroaniline	0.000		0	N.D.	d	
39) p-Chloro-m-cresol	5.574	107	10987	3.003	ug/ml	92
42) Hexachlorocyclopentadiene	5.801	237	10652	3.089	ug/ml	92
43) 2,4,6-Trichlorophenol	5.928	196	11545	3.541	ug/ml	99
44) 2,4,5-Trichlorophenol	5.956	196	13126	3.895	ug/ml	98
47) 2-Nitroaniline	6.211	138	8691	3.010	ug/ml#	79
50) Dimethyl phthalate	6.432	163	32492	2.783	ug/ml#	96
52) 2,6-Dinitrotoluene	6.463	165	7692	3.192	ug/ml#	88
59) Caprolactam	5.353	55	1863	0.869	ug/ml#	78
60) 1,2,4,5-Tetrachloroben...	5.795	216	13729	2.367	ug/ml	98
61) Biphenyl	6.090	154	28811	2.216	ug/ml	98
63) 3-Nitroaniline	6.606	138	1985	0.689	ug/ml#	87
65) 2,4-Dinitrophenol	6.711	184	5433	4.217	ug/ml	89
66) Dibenzofuran	6.805	168	42959	2.732	ug/ml	90
67) 2,4-Dinitrotoluene	6.839	165	10016	2.824	ug/ml#	87
68) 4-Nitrophenol	6.833	65	7206	3.206	ug/ml#	85
70) 2,3,4,6-Tetrachlorophenol	6.951	232	11240	3.505	ug/ml	94
71) Diethyl phthalate	7.116	149	36059	2.717	ug/ml	98
73) 4-Chlorophenyl phenyl ...	7.171	204	17064	2.769	ug/ml#	83
74) 4-Nitroaniline	7.181	138	6196	2.166	ug/ml#	84
75) 4,6-Dinitro-o-cresol	7.218	198	6871	3.862	ug/ml#	64

Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-5.D
Acq On : 31 Aug 2023 4:46 pm
Operator : Dakota:jg
Sample : WG1822188-5,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 12 14:30:48 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 17:05:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270\dakota\230831lvi\ABN0831.D
: 2 - I:\8270\dakota\230831lvi\ADP0831.D
: 3 - I:\8270\dakota\230831lvi\AP90831.D
Sub List : 8270TCL_combo_REV1 - TCL/CT/MA

	Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
76)	NDPA/DPA	7.286	169	26954	2.492	ug/ml	92
79)	4-Bromophenyl phenyl e...	7.622	248	11786	3.063	ug/ml#	79
86)	Atrazine	7.846	200	12966	3.944	ug/ml#	74
90)	Carbazole	8.253	167	56882	2.755	ug/ml	98
91)	Di-n-butylphthalate	8.688	149	69128	2.843	ug/ml	97
96)	Butyl benzyl phthalate	10.096	149	33796	3.058	ug/ml#	87
105)	3,3'-Dichlorobenzidine	0.000		0	N.D.		
107)	Bis(2-ethylhexyl)phtha...	10.709	149	50414	3.043	ug/ml#	88
108)	Di-n-octylphthalate	11.343	149	89148	2.965	ug/ml#	74

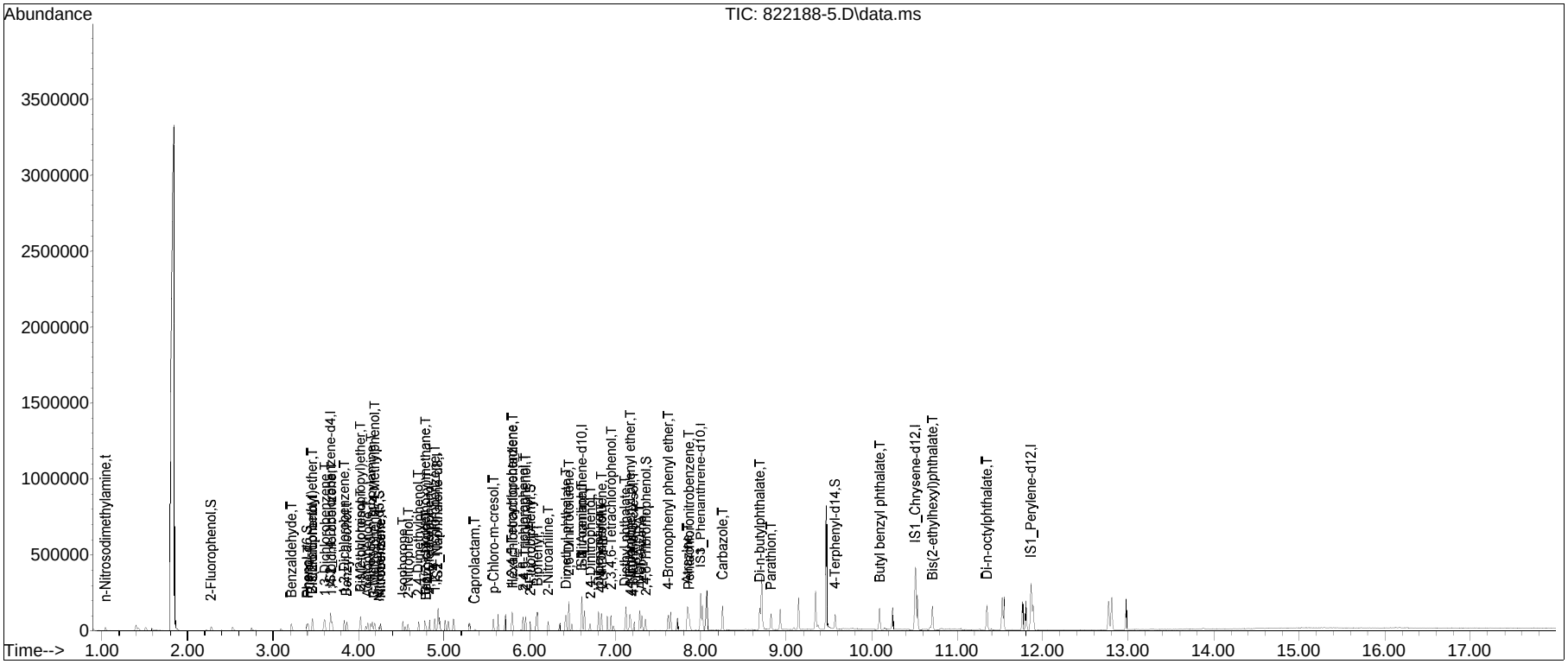
(#) = qualifier out of range (m) = manual integration (+) = signals summed

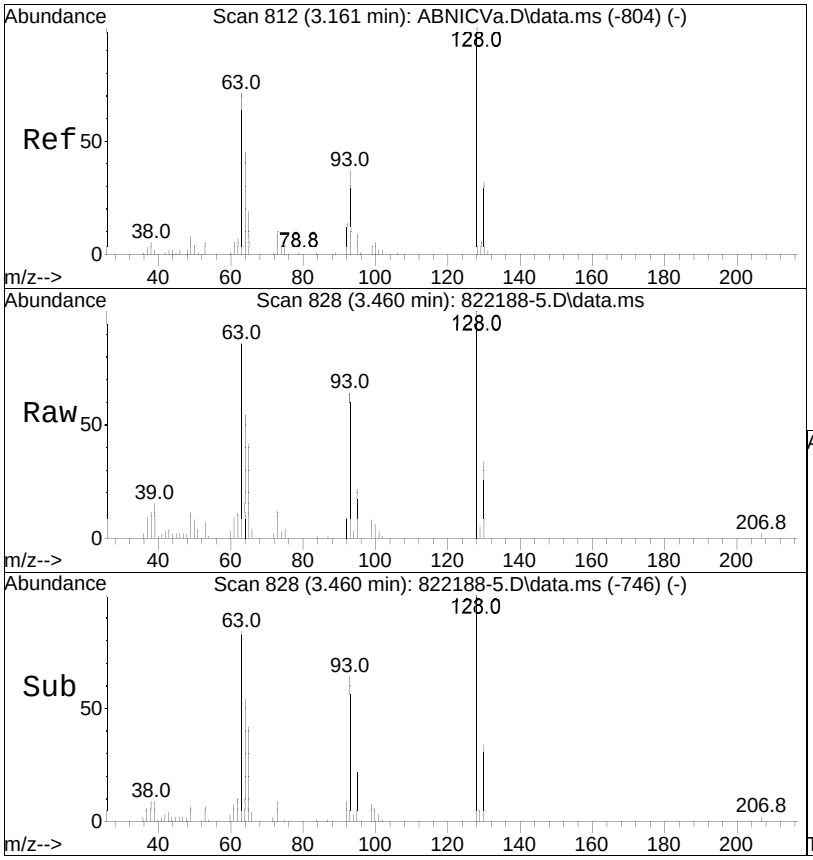
Quantitation Report (QT Reviewed)

Data Path : I:\8270\Dakota\230831lvi\
Data File : 822188-5.D
Acq On : 31 Aug 2023 4:46 pm
Operator : Dakota:jg
Sample : WG1822188-5,32,,gmr
Misc : WG1822460,WG1822188,ical19934
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 12 14:30:48 2023
Quant Method : I:\8270\dakota\230831lvi\FS230412LVIDakota.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 17:05:11 2023
Response via : Initial Calibration

Sub List : 8270TCL_combo_REV1 - TCL/CT/MAP90831.D•

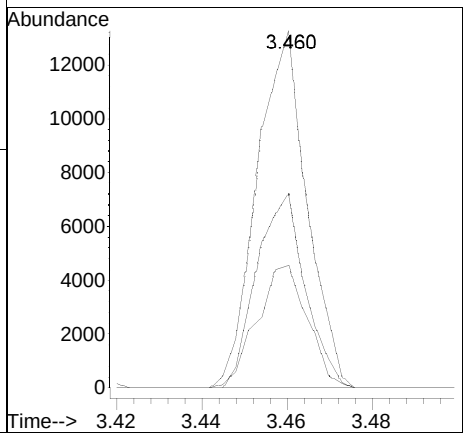


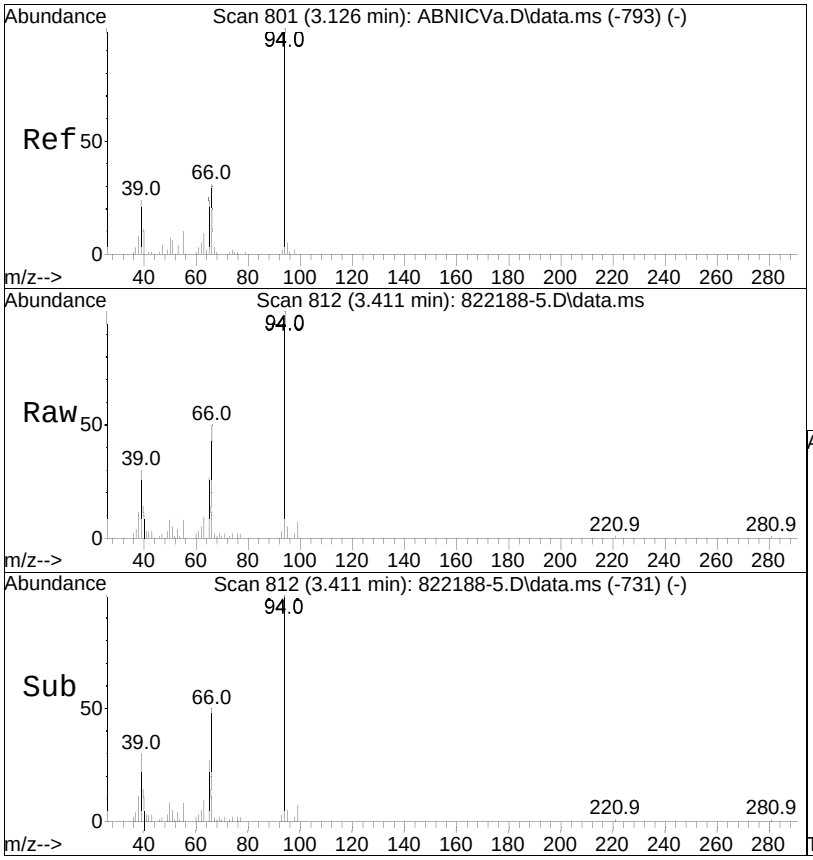


#6
2-Chlorophenol
Concen: 2.12 ug/ml
RT: 3.460 min Scan# 828
Delta R.T. 0.006 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:128 Resp: 10767

Ion	Ratio	Lower	Upper
128	100		
64	53.1	45.1	67.7
130	35.0	26.2	39.4

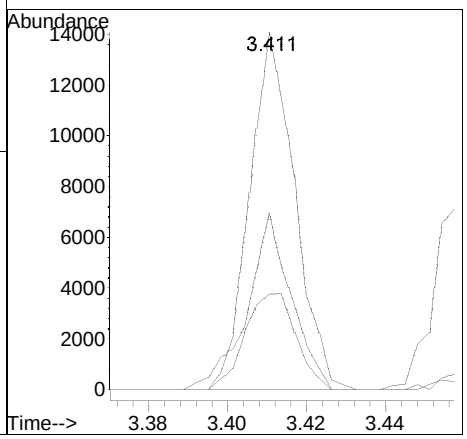


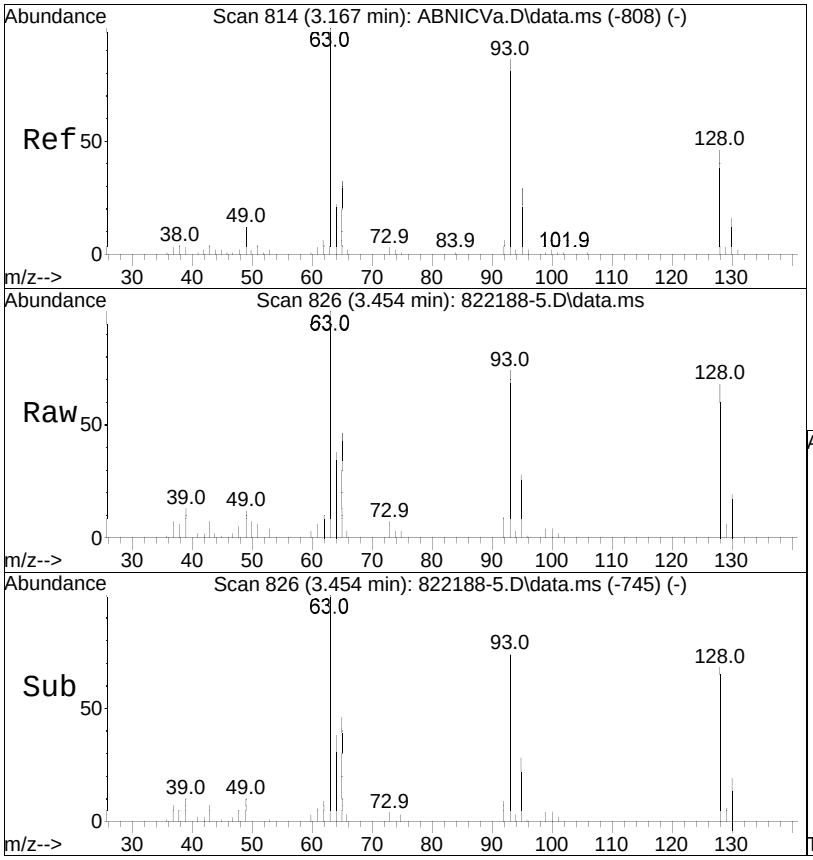


#8
Phenol
Concen: 1.70 ug/ml
RT: 3.411 min Scan# 812
Delta R.T. 0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion: 94 Resp: 11150

Ion	Ratio	Lower	Upper
94	100		
65	30.4	26.0	39.0
66	48.0	33.8	50.8

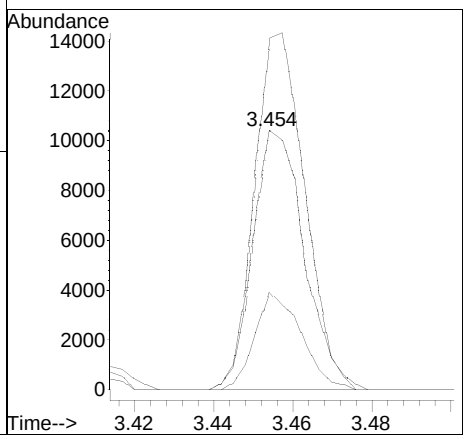


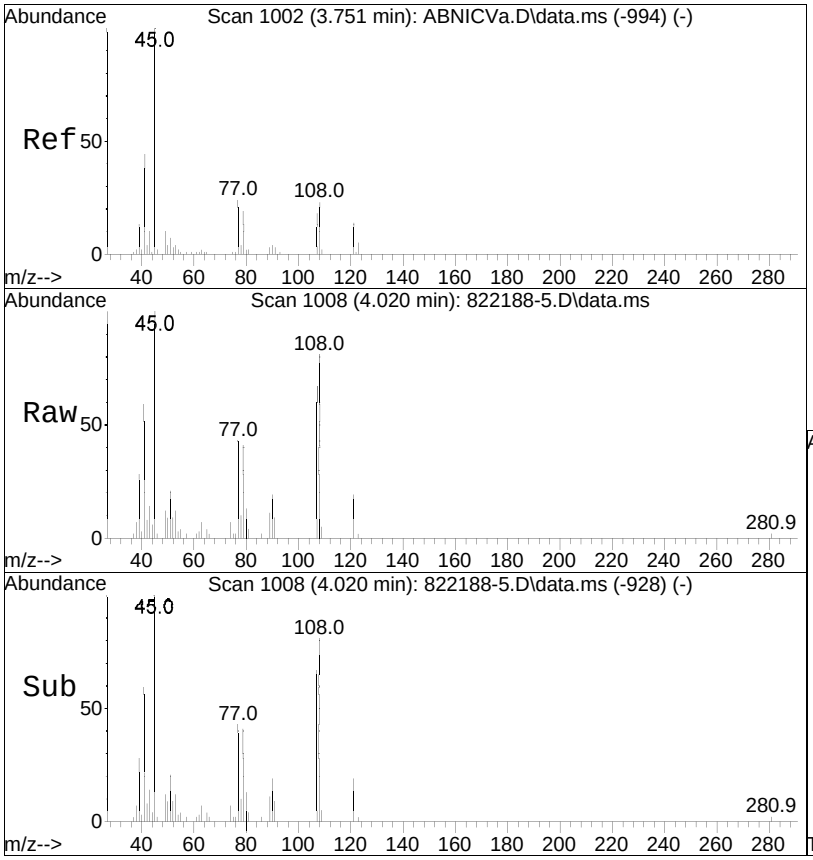


#9
Bis(2-chloroethyl)ether
Concen: 2.06 ug/ml
RT: 3.454 min Scan# 826
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion: 93 Resp: 9330

Ion	Ratio	Lower	Upper
93	100		
63	135.3	74.6	111.8#
95	34.3	25.9	38.9

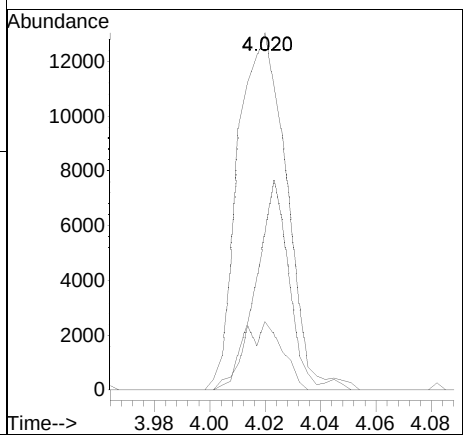


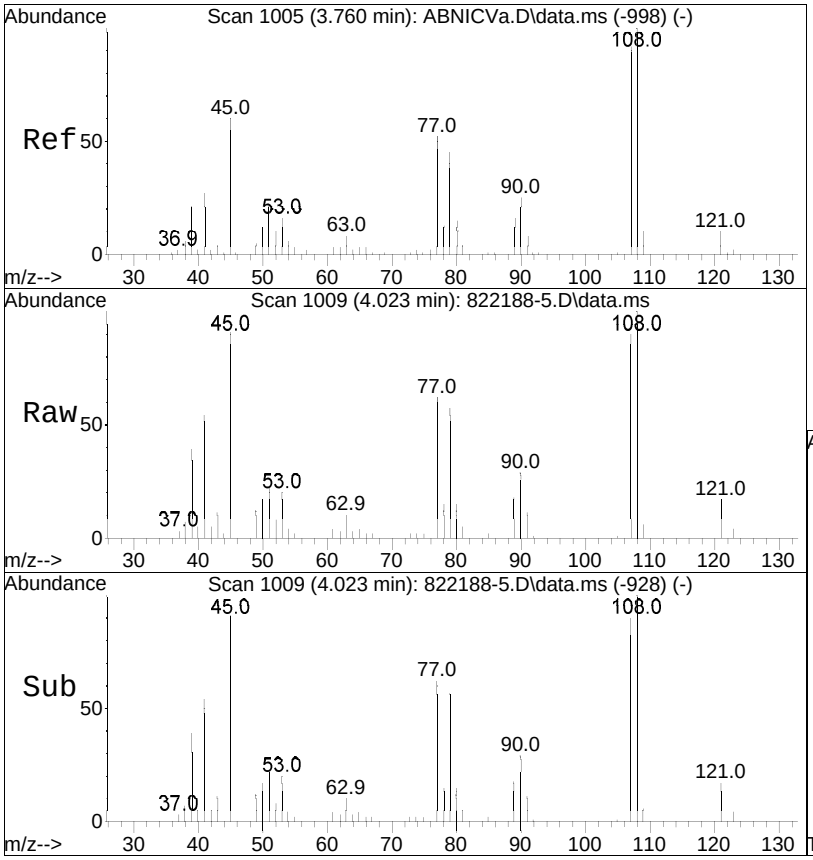


#14
Bis(2-chloroisopropyl)ether
Concen: 2.08 ug/ml
RT: 4.020 min Scan# 1008
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion: 45 Resp: 15819

Ion	Ratio	Lower	Upper
45	100		
121	15.5	9.8	14.6#
77	40.0	6.1	9.1#

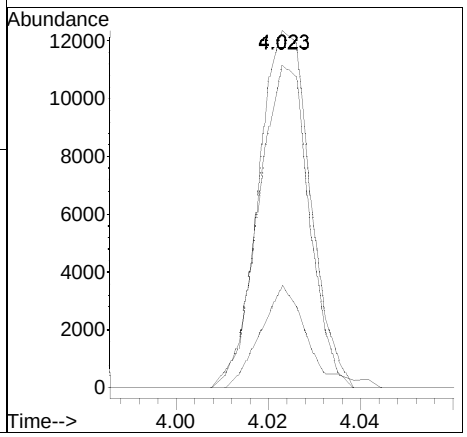


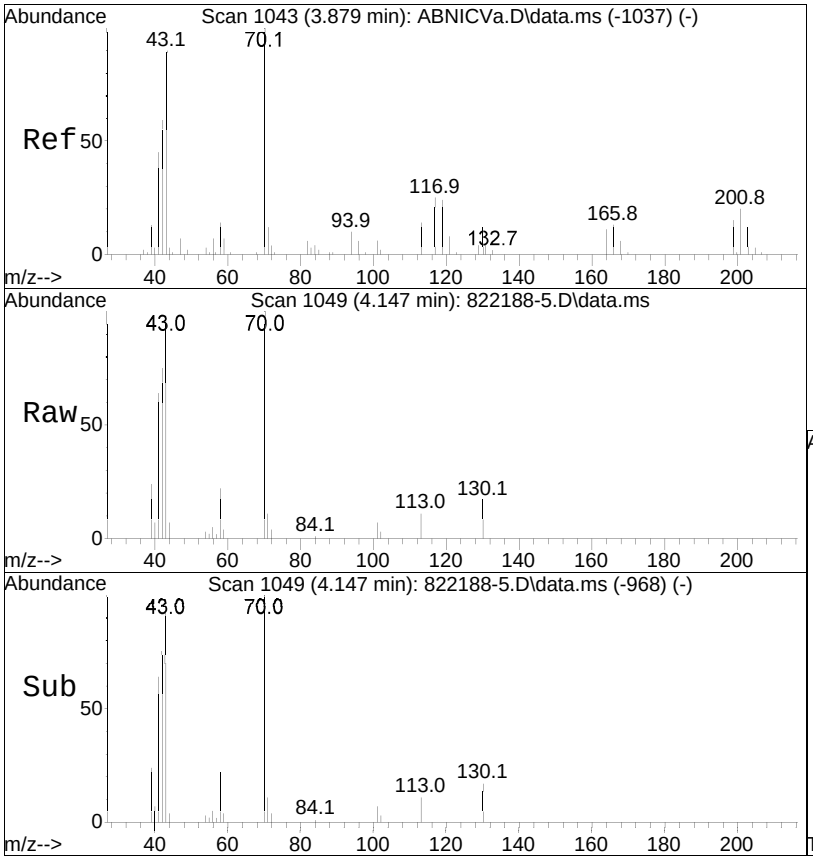


#15
2-Methylphenol
Concen: 2.21 ug/ml
RT: 4.023 min Scan# 1009
Delta R.T. 0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:108 Resp: 9565

Ion	Ratio	Lower	Upper
108	100		
107	89.3	70.7	106.1
90	25.4	18.7	28.1

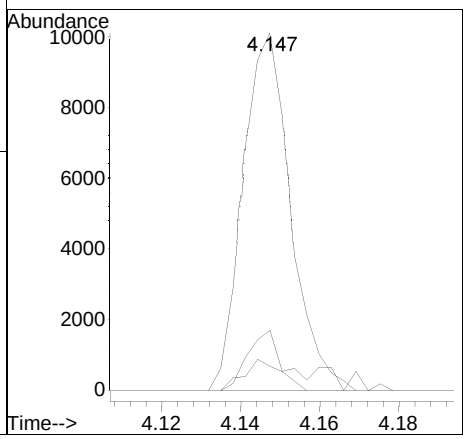


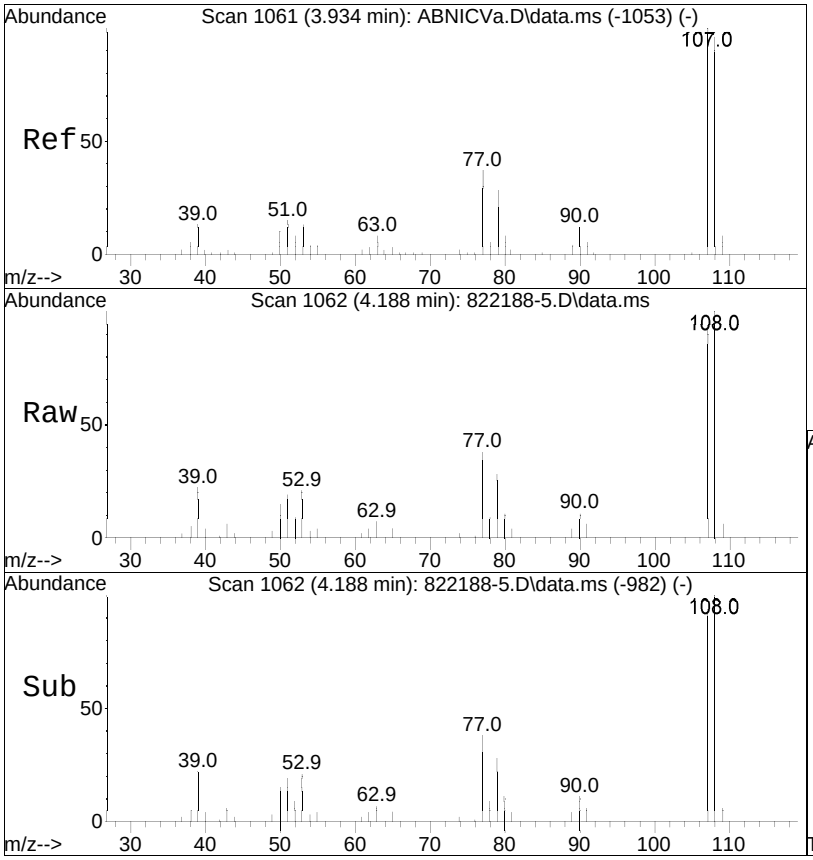


#17
n-Nitrosodi-n-propylamine
Concen: 2.42 ug/ml
RT: 4.147 min Scan# 1049
Delta R.T. 0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion: 70 Resp: 8433

Ion	Ratio	Lower	Upper
70	100		
130	12.7	18.2	27.4#
101	6.9	7.8	11.8#

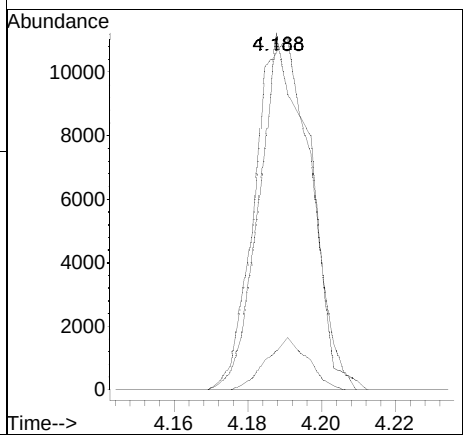


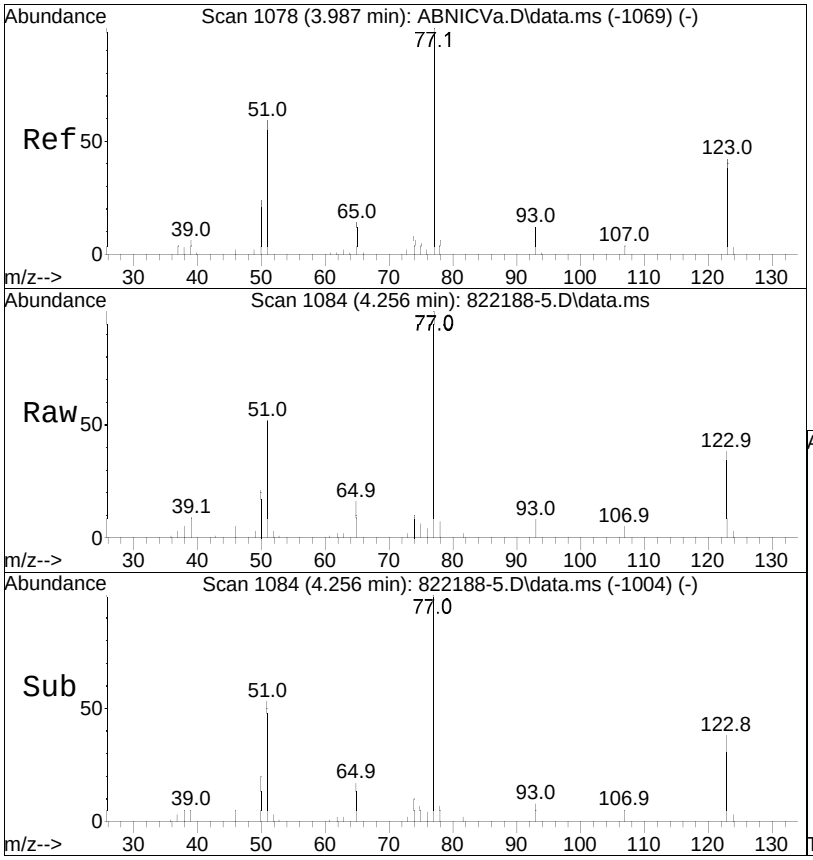


#18
3-Methylphenol/4-Methylphenol
Concen: 2.33 ug/ml
RT: 4.188 min Scan# 1062
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:108 Resp: 10381

Ion	Ratio	Lower	Upper
108	100		
107	113.6	88.6	132.8
90	12.5	8.8	13.2

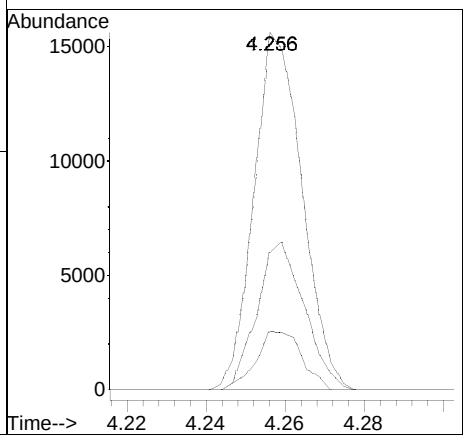


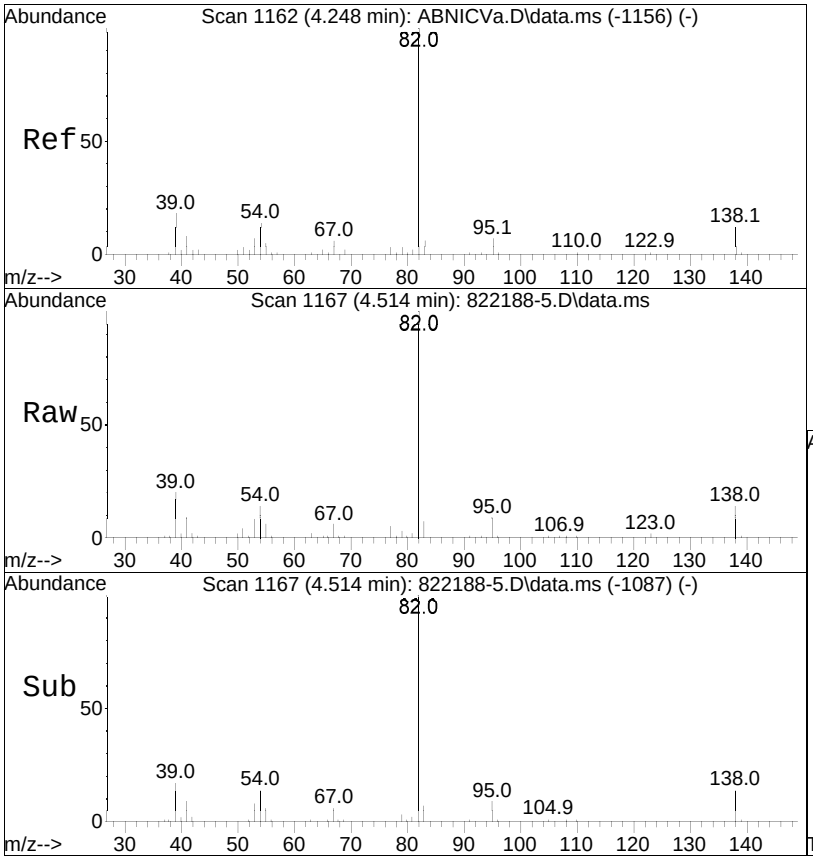


#20
Nitrobenzene
Concen: 2.50 ug/ml
RT: 4.256 min Scan# 1084
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion: 77 Resp: 13126

Ion	Ratio	Lower	Upper
77	100		
123	40.8	36.3	54.5
65	15.7	11.6	17.4

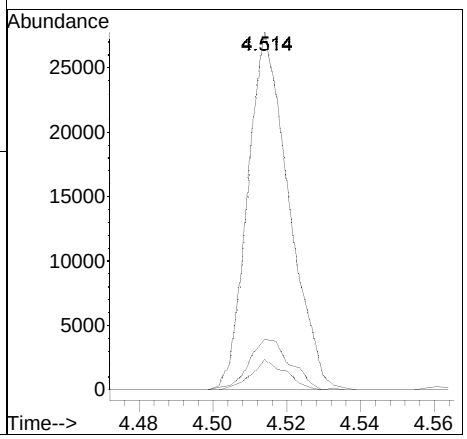


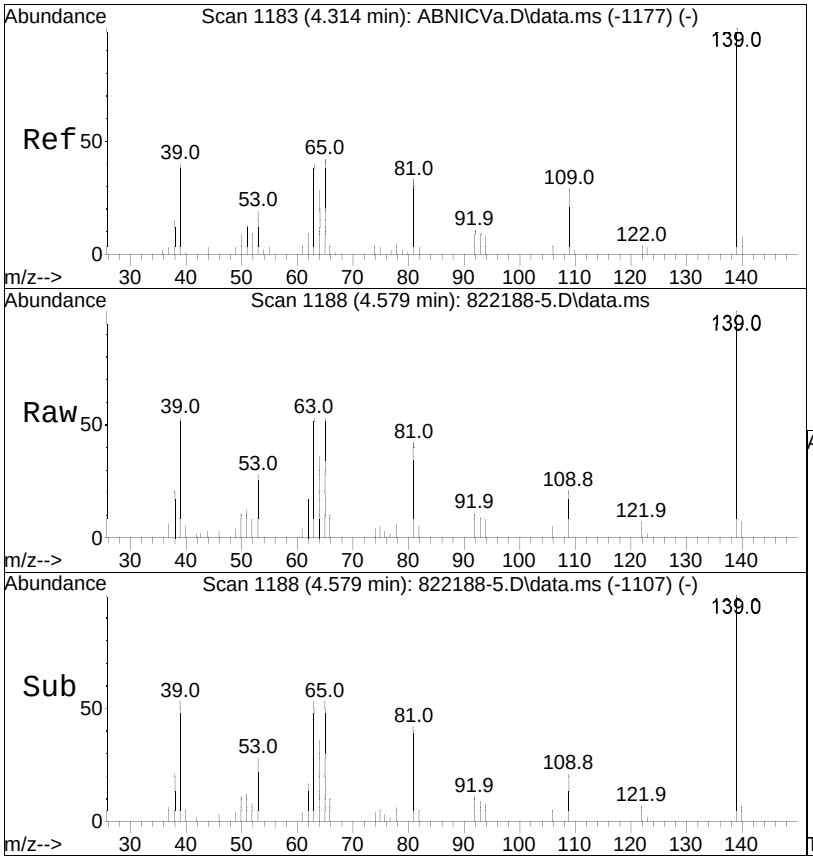


#21
Isophorone
Concen: 2.29 ug/ml
RT: 4.514 min Scan# 1167
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion: 82 Resp: 21275

Ion	Ratio	Lower	Upper
82	100		
138	14.5	14.7	22.1#
95	7.3	5.2	7.8

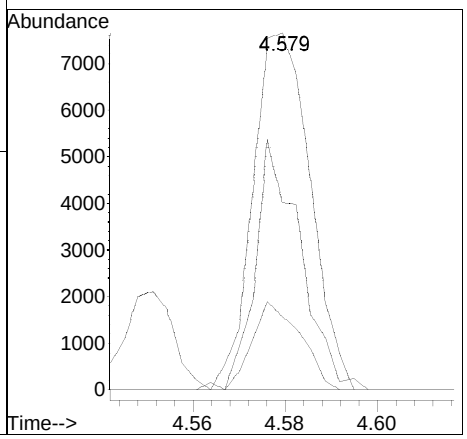


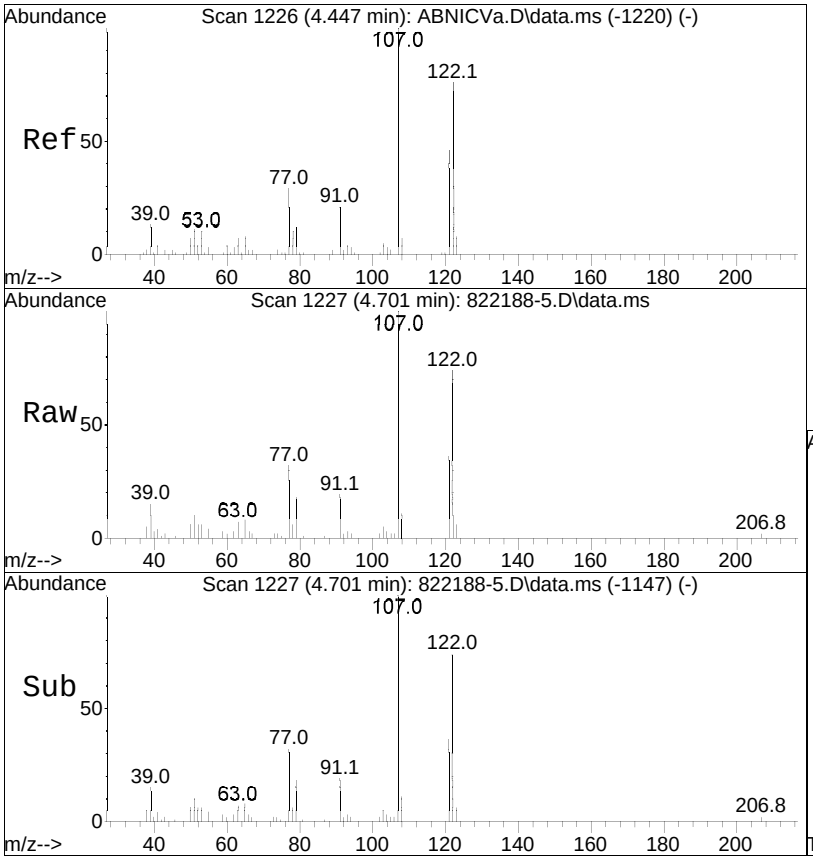


#22
2-Nitrophenol
Concen: 2.69 ug/ml
RT: 4.579 min Scan# 1188
Delta R.T. 0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:139 Resp: 6587

Ion	Ratio	Lower	Upper
139	100		
109	21.3	19.4	29.0
65	54.9	46.1	69.1

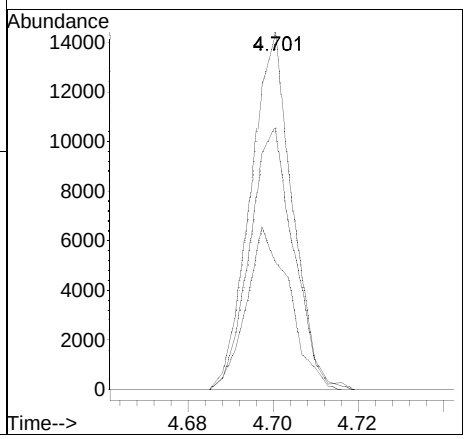


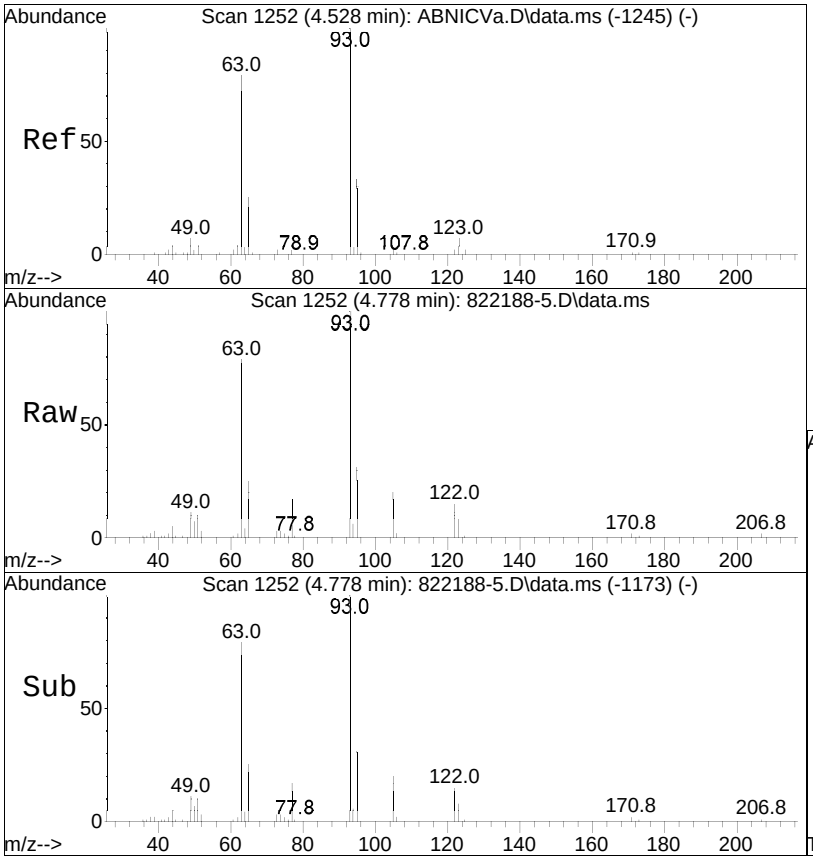


#23
2,4-Dimethylphenol
Concen: 2.07 ug/ml
RT: 4.701 min Scan# 1227
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:107 Resp: 9755

Ion	Ratio	Lower	Upper
107	100		
121	47.0	40.0	60.0
122	76.9	70.2	105.4

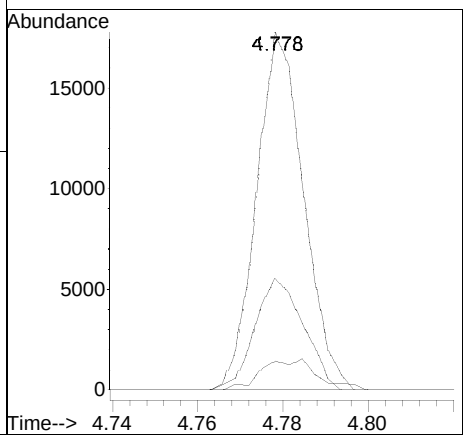


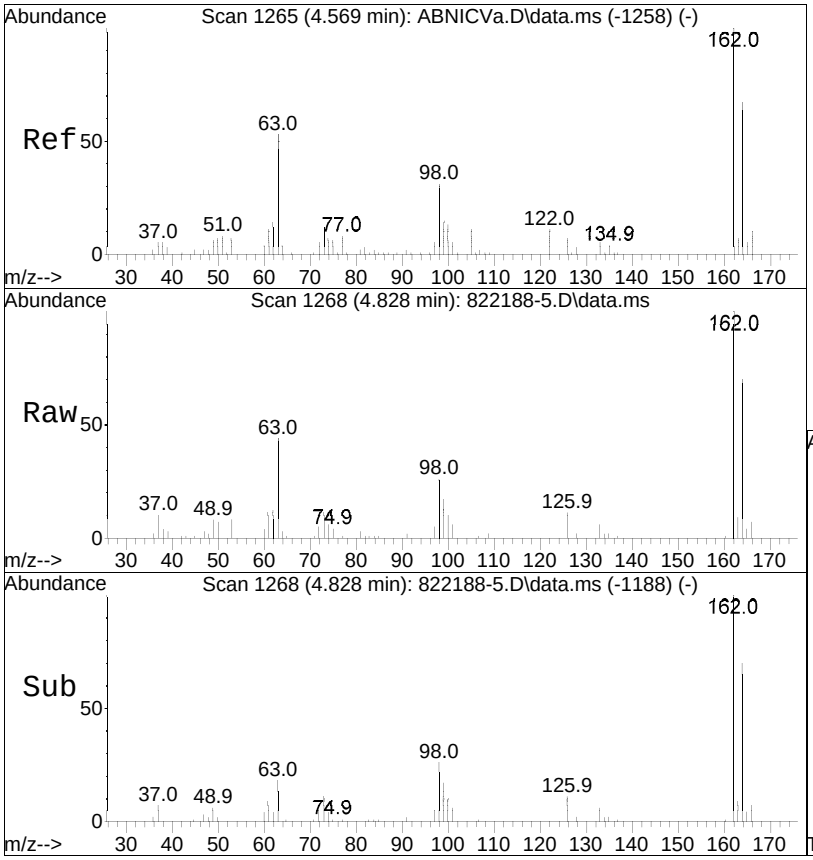


#24
Bis(2-chloroethoxy)methane
Concen: 2.25 ug/ml
RT: 4.778 min Scan# 1252
Delta R.T. -0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion: 93 Resp: 13540

Ion	Ratio	Lower	Upper
93	100		
95	32.4	25.8	38.8
123	10.5	10.1	15.1

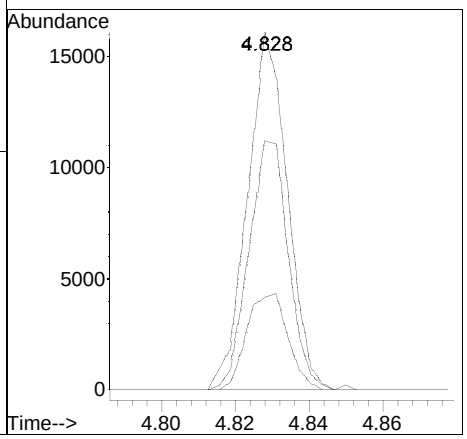


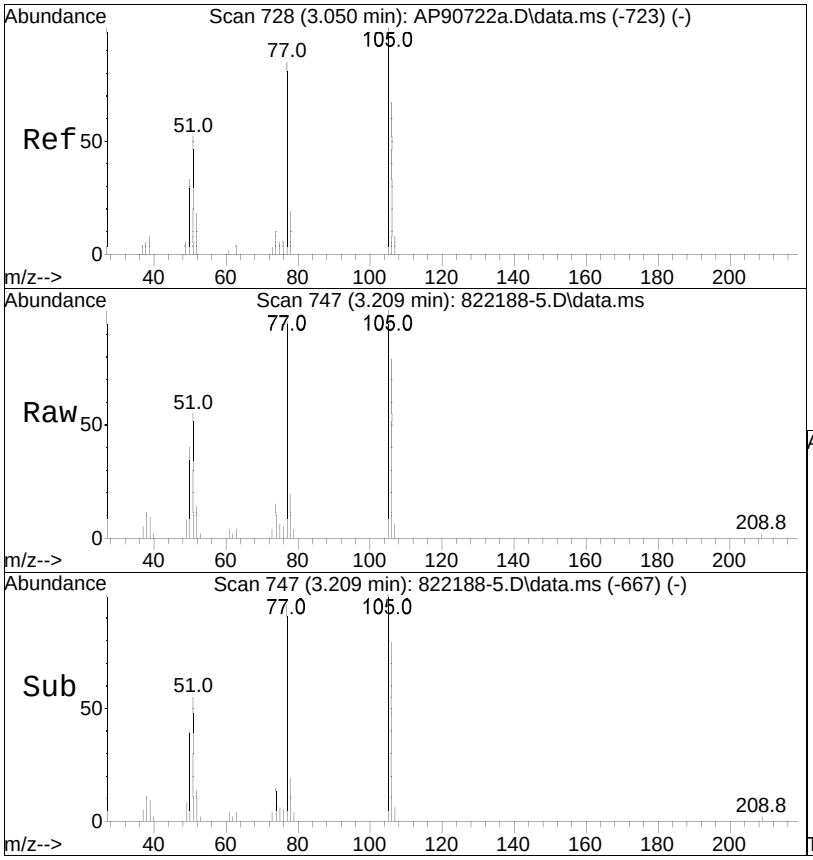


#25
2,4-Dichlorophenol
Concen: 2.70 ug/ml
RT: 4.828 min Scan# 1268
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:162 Resp: 11998

Ion	Ratio	Lower	Upper
162	100		
164	69.0	51.0	76.4
98	27.9	32.2	48.2#

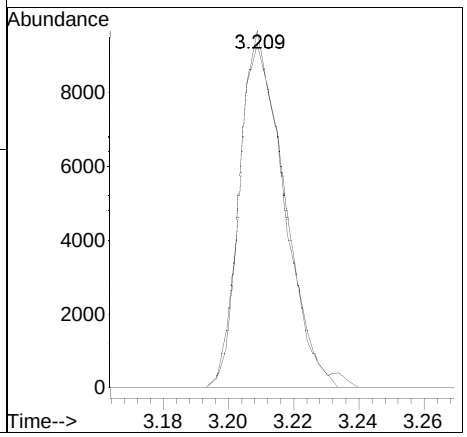


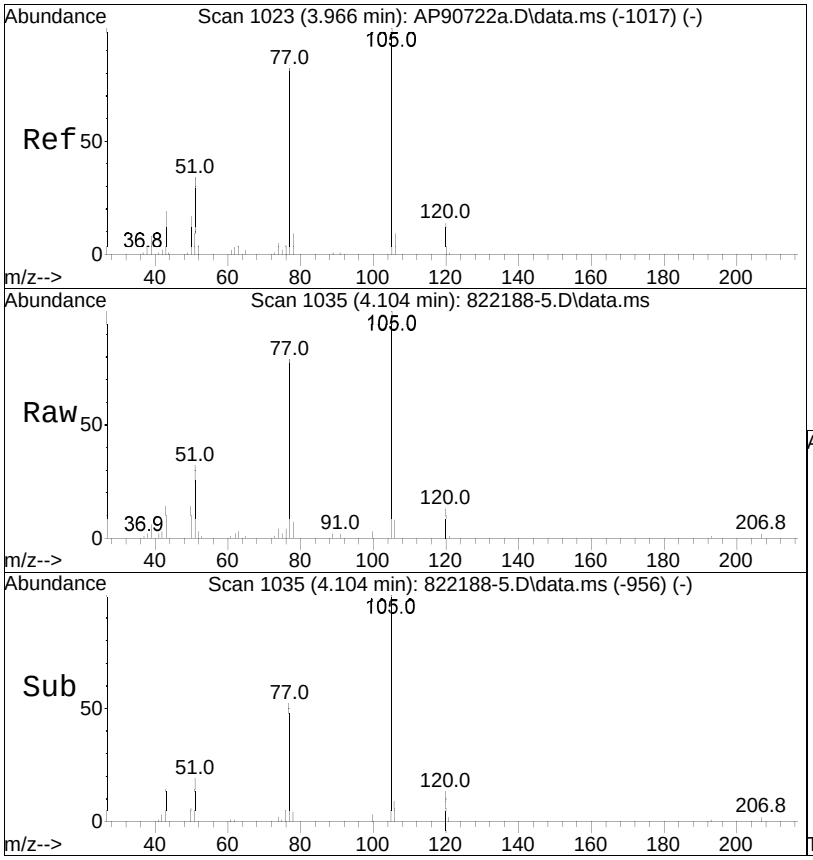


#28
Benzaldehyde
Concen: 2.04 ug/ml
RT: 3.209 min Scan# 747
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:105 Resp: 9067

Ion	Ratio	Lower	Upper
105	100		
77	99.6	82.2	123.4

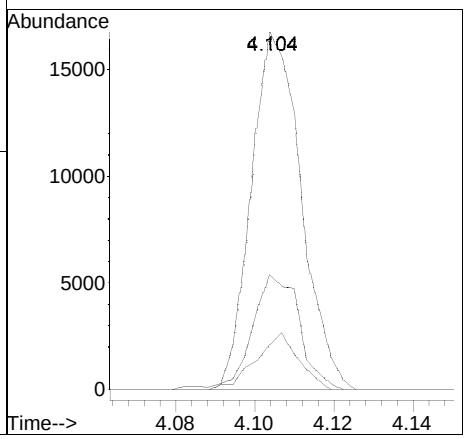


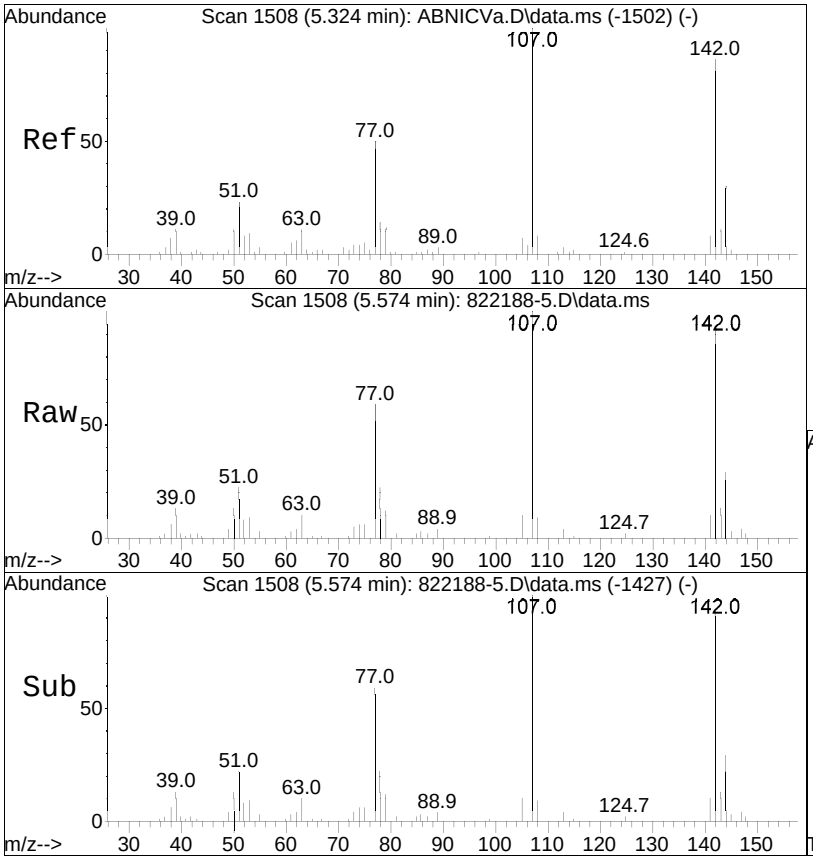


#29
Acetophenone
Concen: 1.87 ug/ml
RT: 4.104 min Scan# 1035
Delta R.T. -0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:105 Resp: 14579

Ion	Ratio	Lower	Upper
105	100		
120	13.8	20.5	30.7#
51	30.7	34.9	52.3#

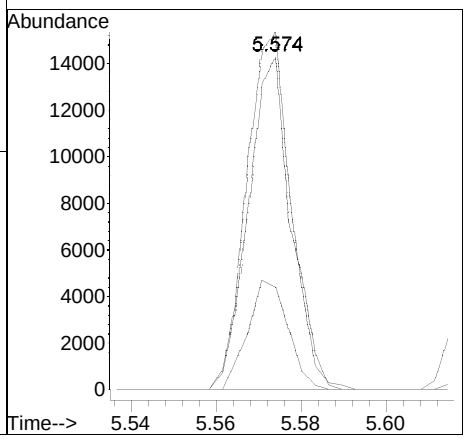


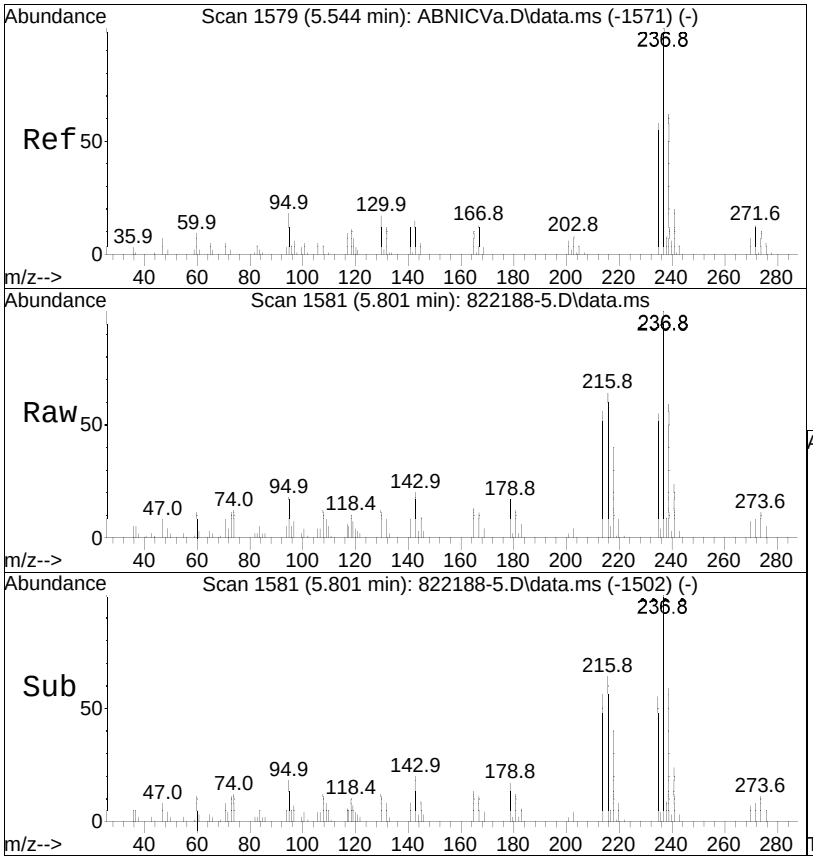


#39
p-Chloro-m-cresol
Concen: 3.00 ug/ml
RT: 5.574 min Scan# 1508
Delta R.T. 0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:107 Resp: 10987

Ion	Ratio	Lower	Upper
107	100		
144	28.1	20.9	31.3
142	90.4	66.1	99.1

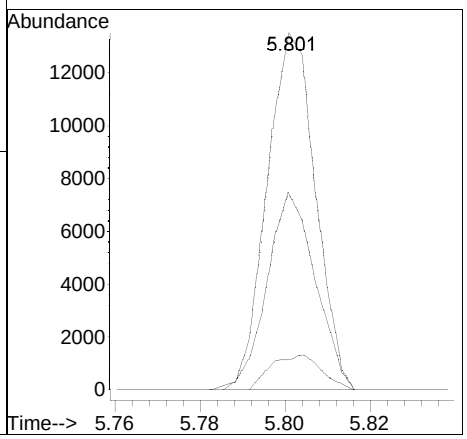


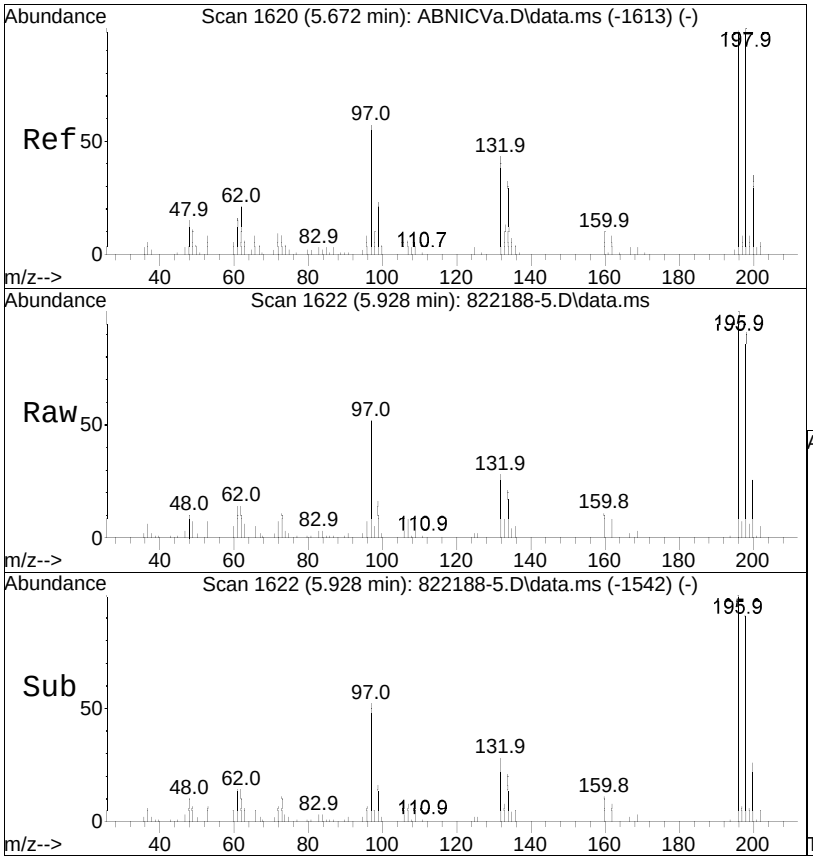


#42
Hexachlorocyclopentadiene
Concen: 3.09 ug/ml
RT: 5.801 min Scan# 1581
Delta R.T. -0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:237 Resp: 10652

Ion	Ratio	Lower	Upper
237	100		
235	55.1	49.7	74.5
272	10.3	9.8	14.6

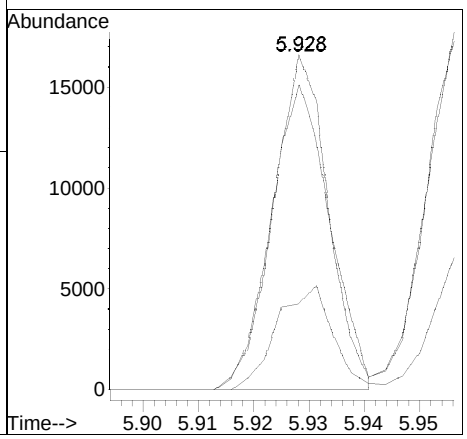


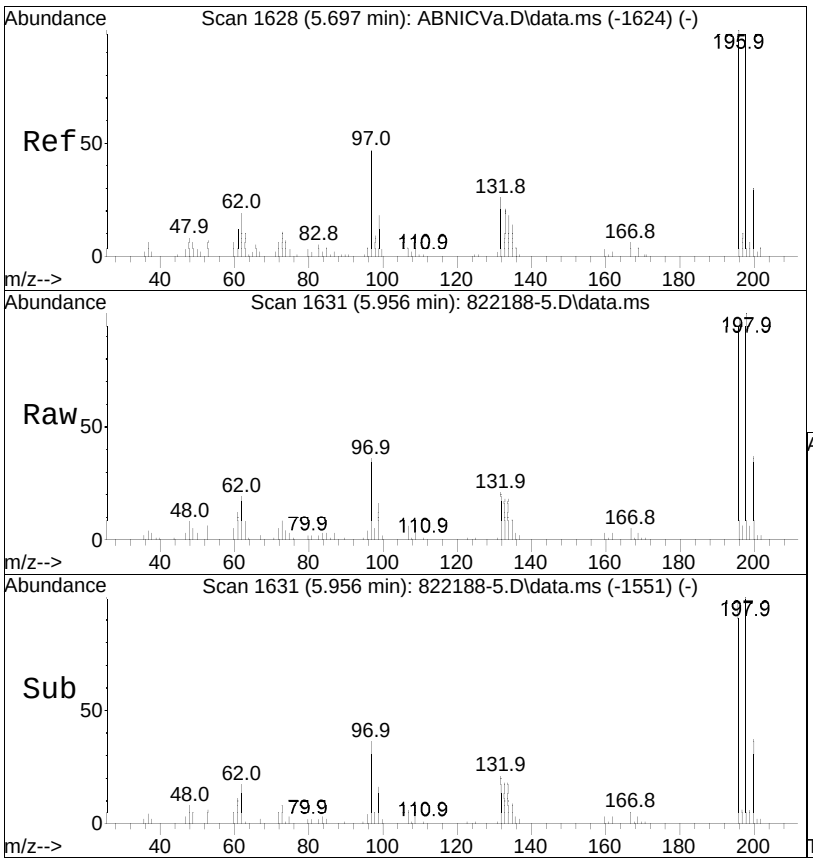


#43
2,4,6-Trichlorophenol
Concen: 3.54 ug/ml
RT: 5.928 min Scan# 1622
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:196 Resp: 11545

Ion	Ratio	Lower	Upper
196	100		
198	96.3	77.5	116.3
200	31.9	23.8	35.6

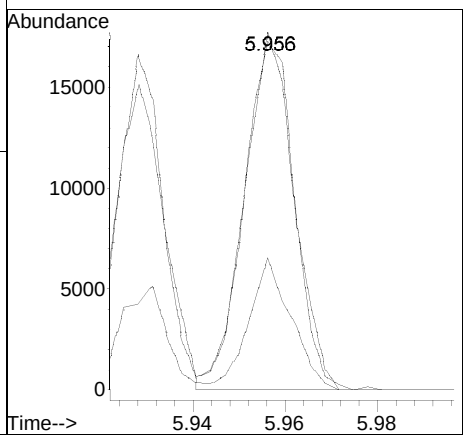


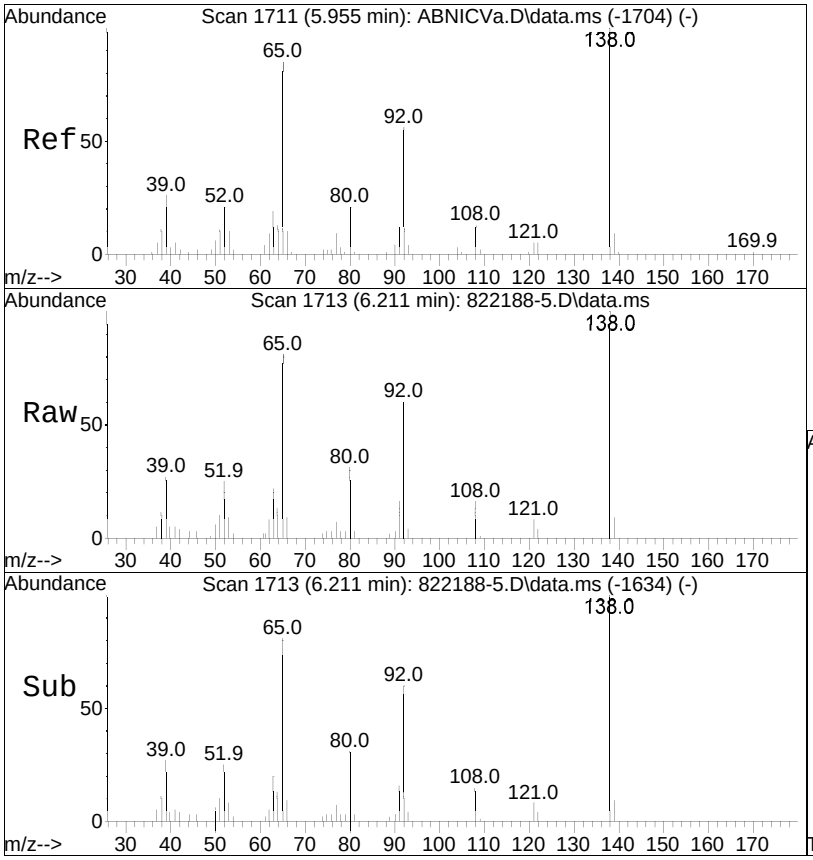


#44
2,4,5-Trichlorophenol
Concen: 3.90 ug/ml
RT: 5.956 min Scan# 1631
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:196 Resp: 13126

Ion	Ratio	Lower	Upper
196	100		
200	31.7	25.4	38.0
198	100.1	78.0	117.0

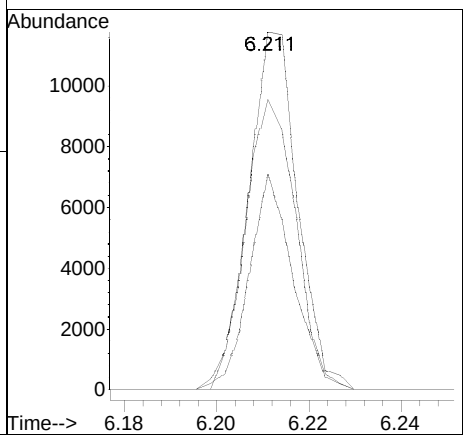


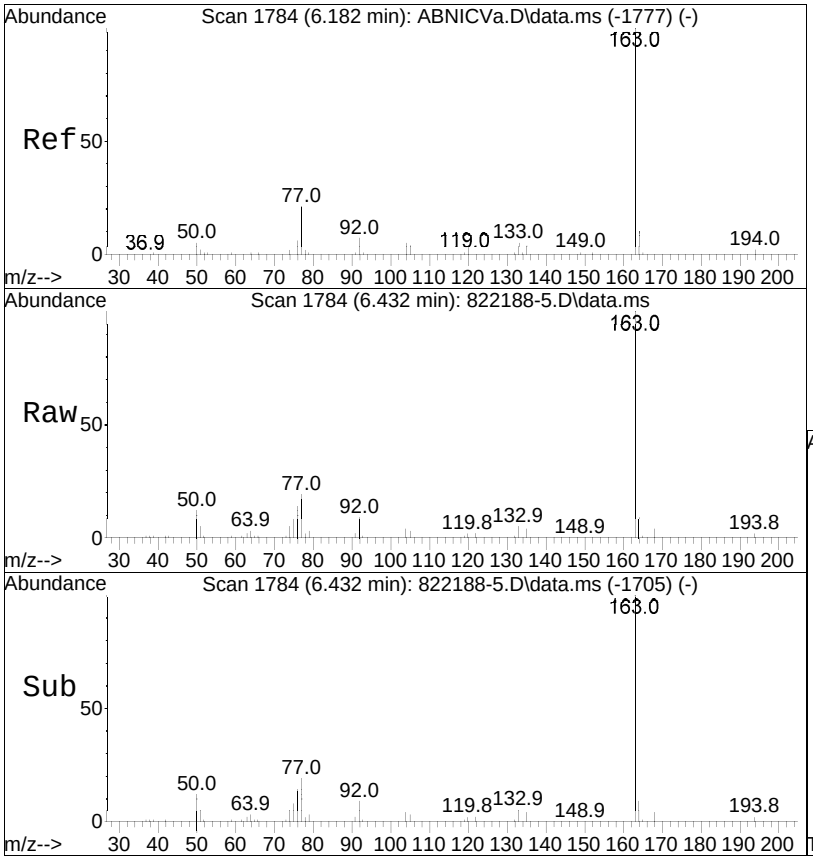


#47
2-Nitroaniline
Concen: 3.01 ug/ml
RT: 6.211 min Scan# 1713
Delta R.T. -0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:138 Resp: 8691

Ion	Ratio	Lower	Upper
138	100		
92	54.0	53.5	80.3
65	83.5	86.3	129.5#

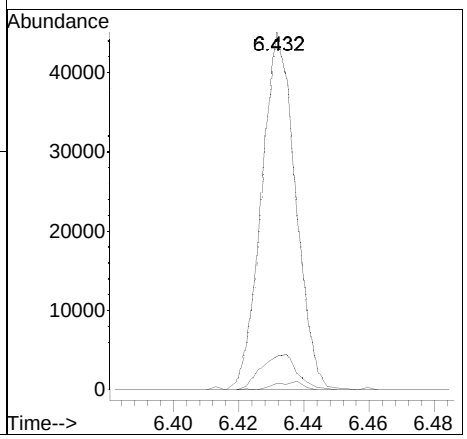


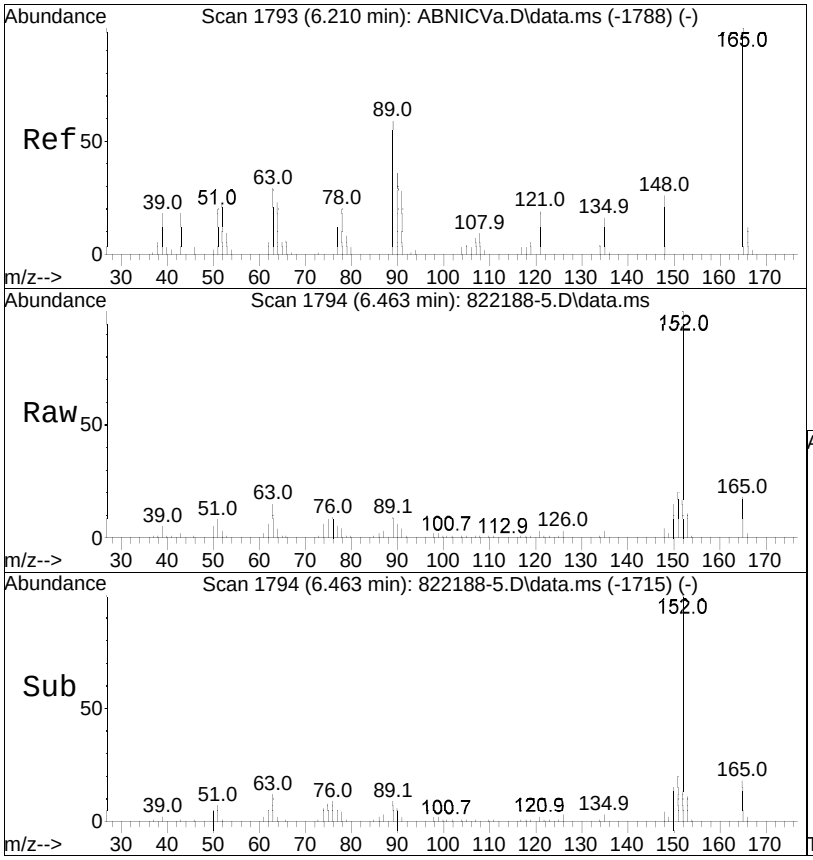


#50
Dimethyl phthalate
Concen: 2.78 ug/ml
RT: 6.432 min Scan# 1784
Delta R.T. -0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:163 Resp: 32492

Ion	Ratio	Lower	Upper
163	100		
194	2.0	3.5	5.3#
164	10.6	7.9	11.9

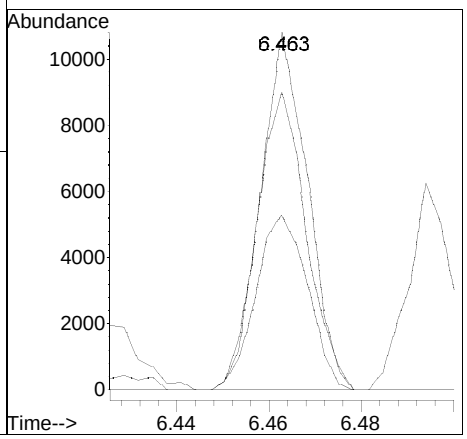


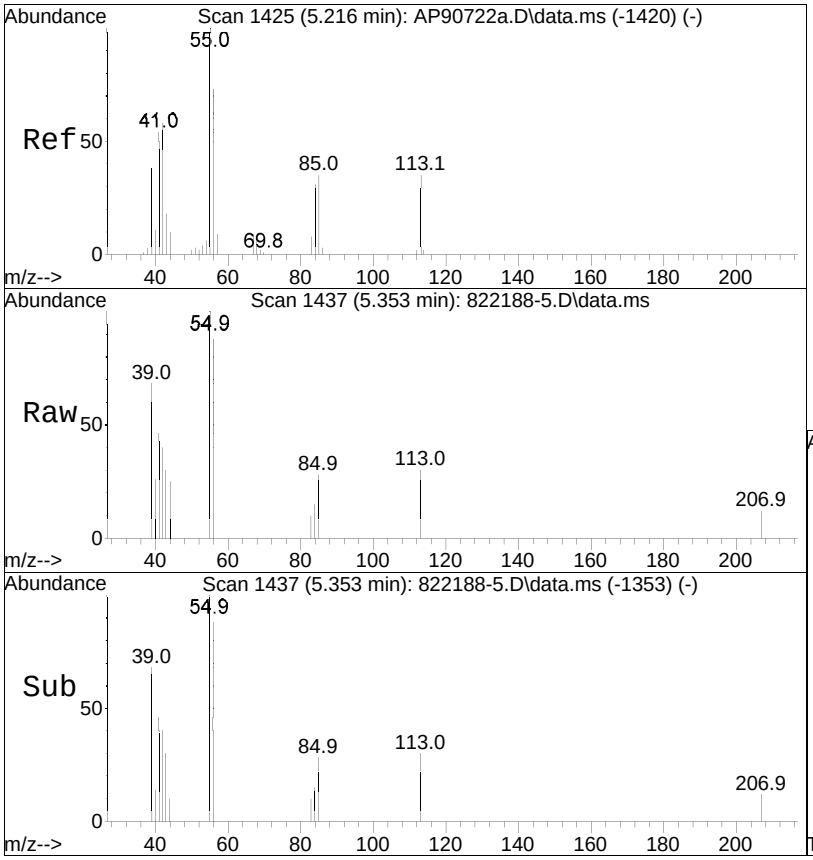


#52
2,6-Dinitrotoluene
Concen: 3.19 ug/ml
RT: 6.463 min Scan# 1794
Delta R.T. -0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:165 Resp: 7692

Ion	Ratio	Lower	Upper
165	100		
89	53.6	54.2	81.2#
63	86.2	64.2	96.2

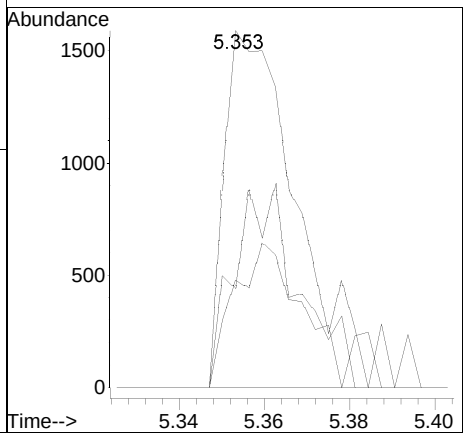


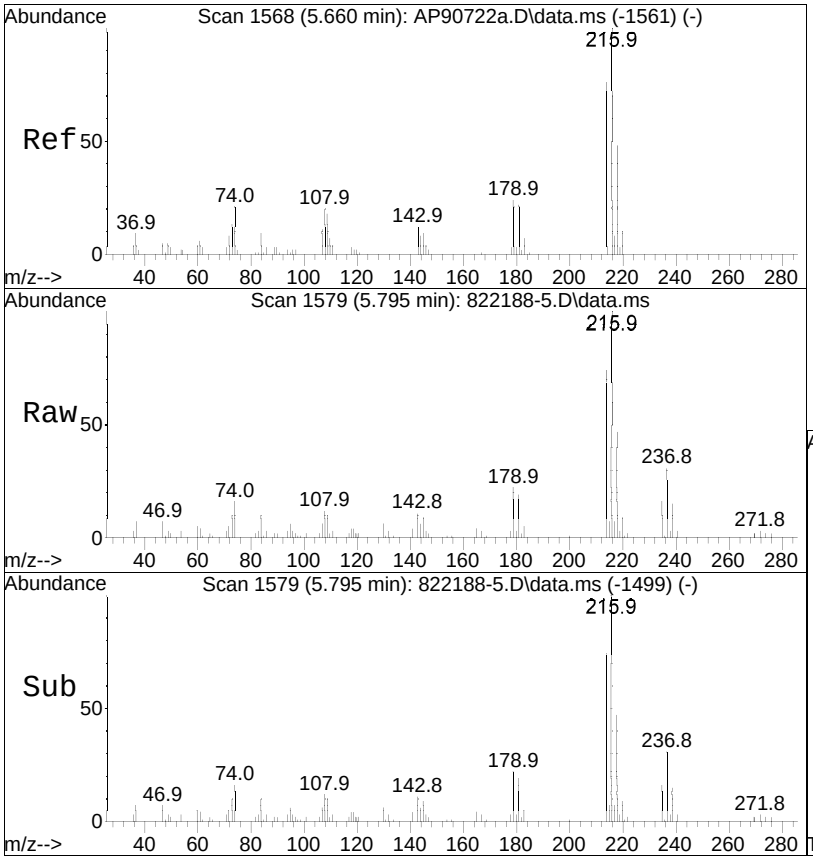


#59
Caprolactam
Concen: 0.87 ug/ml
RT: 5.353 min Scan# 1437
Delta R.T. 0.012 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion: 55 Resp: 1863

Ion	Ratio	Lower	Upper
55	100		
85	50.9	19.8	29.6#
113	37.7	29.6	44.4

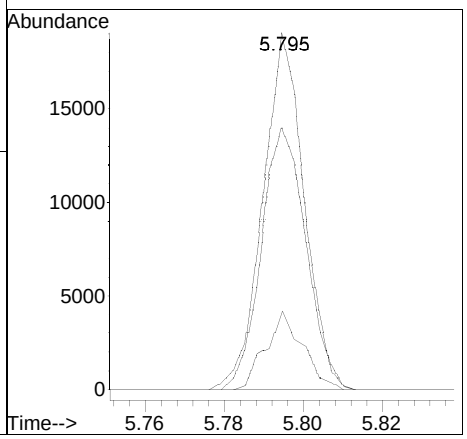


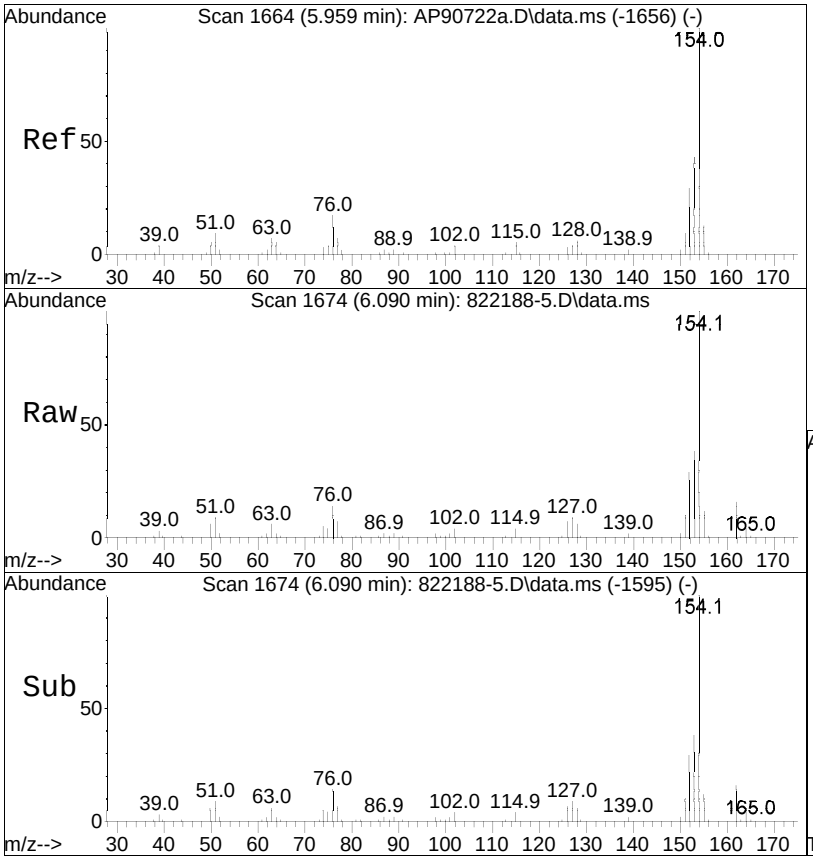


#60
1,2,4,5-Tetrachlorobenzene
Concen: 2.37 ug/ml
RT: 5.795 min Scan# 1579
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:216 Resp: 13729

Ion	Ratio	Lower	Upper
216	100		
214	79.6	63.7	95.5
179	19.8	19.0	28.6

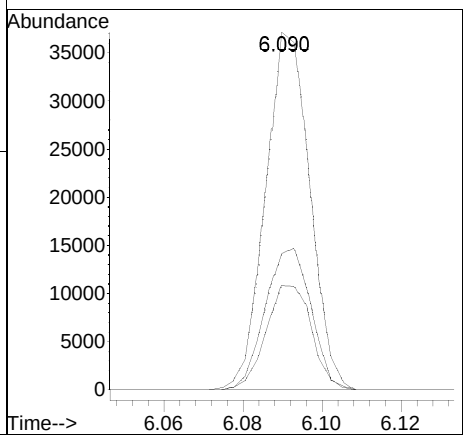


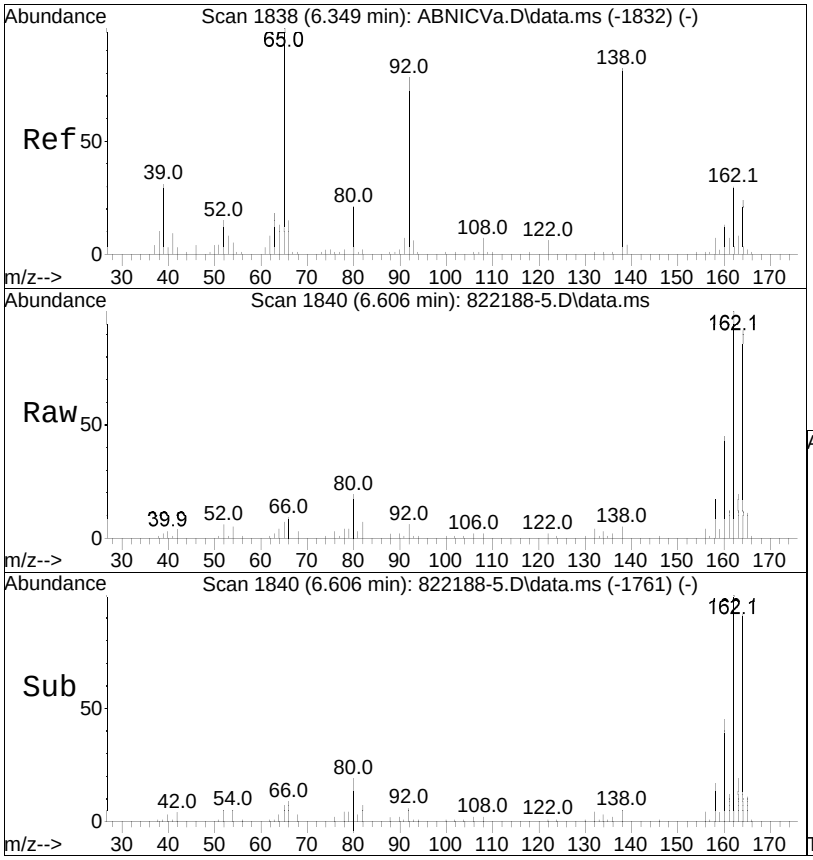


#61
Biphenyl
Concen: 2.22 ug/ml
RT: 6.090 min Scan# 1674
Delta R.T. -0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:154 Resp: 28811

Ion	Ratio	Lower	Upper
154	100		
153	40.9	32.3	48.5
152	30.2	22.5	33.7

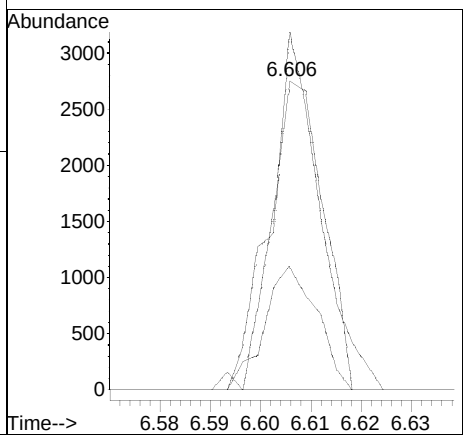


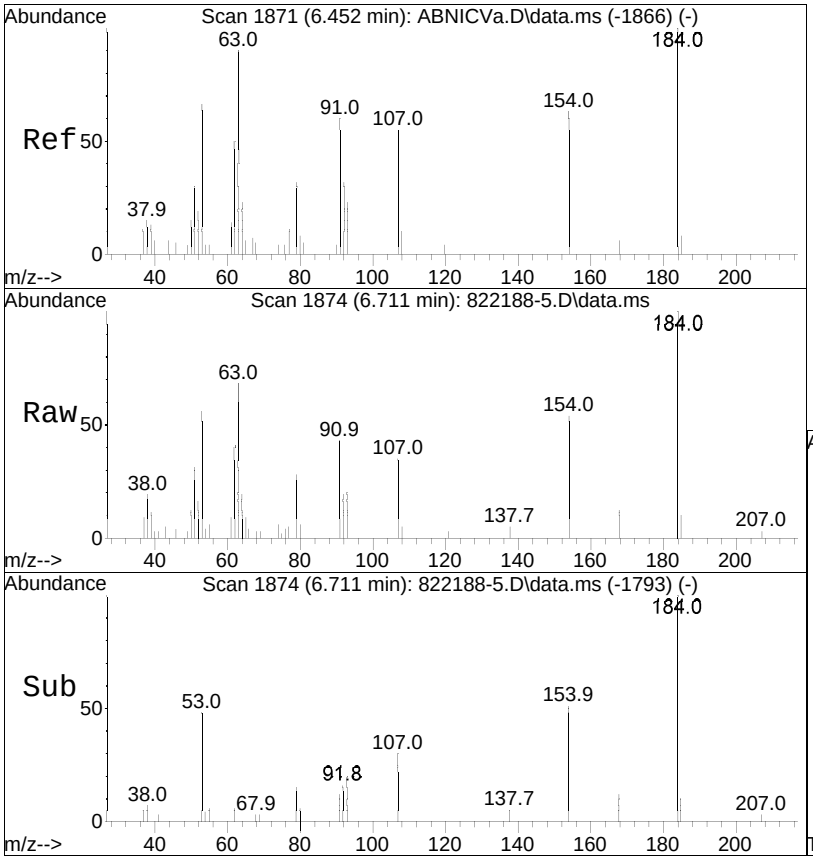


#63
3-Nitroaniline
Concen: 0.69 ug/ml
RT: 6.606 min Scan# 1840
Delta R.T. -0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:138 Resp: 1985

Ion	Ratio	Lower	Upper
138	100		
92	109.6	93.4	140.2
108	40.1	9.5	14.3#

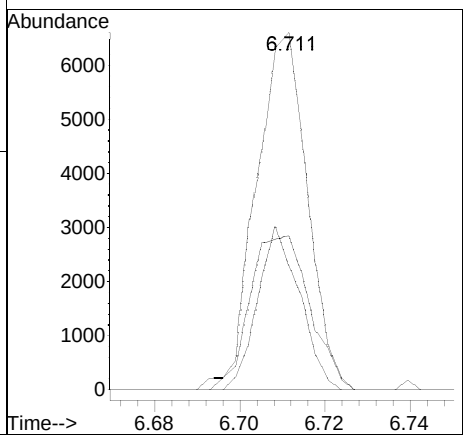


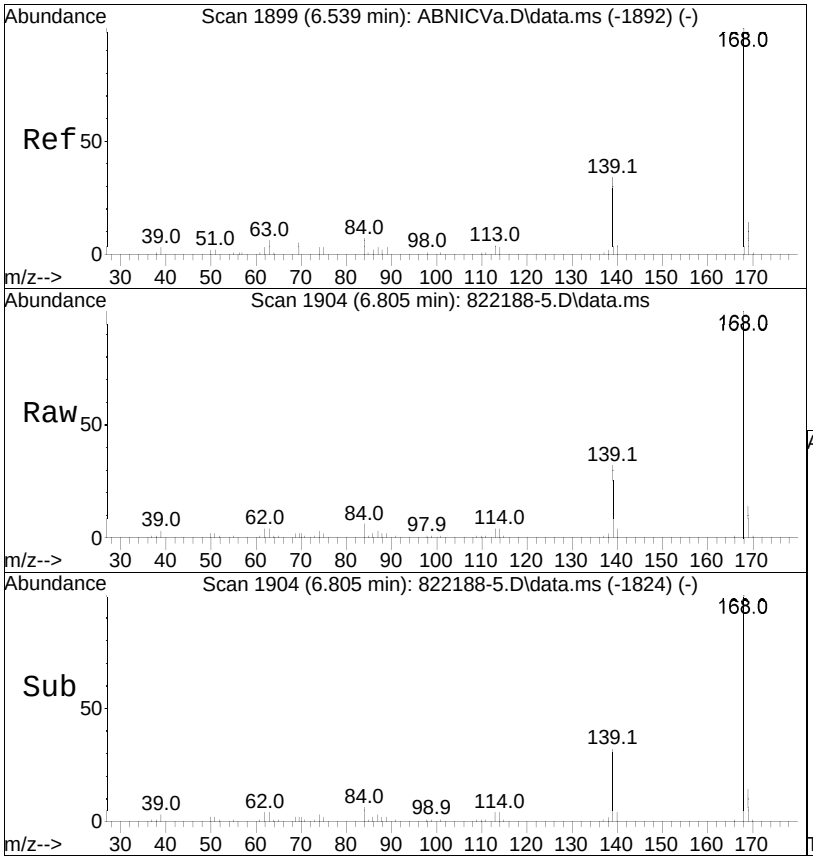


#65
2,4-Dinitrophenol
Concen: 4.22 ug/ml
RT: 6.711 min Scan# 1874
Delta R.T. 0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:184 Resp: 5433

Ion	Ratio	Lower	Upper
184	100		
107	37.9	37.7	56.5
91	51.5	46.3	69.5

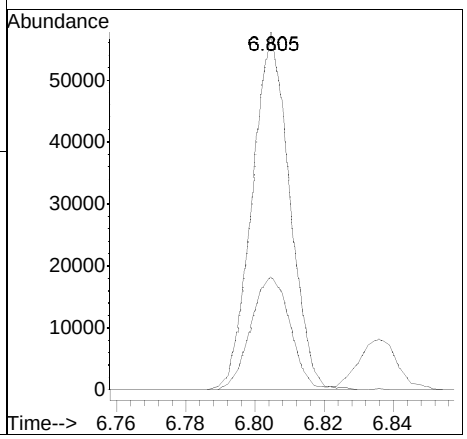


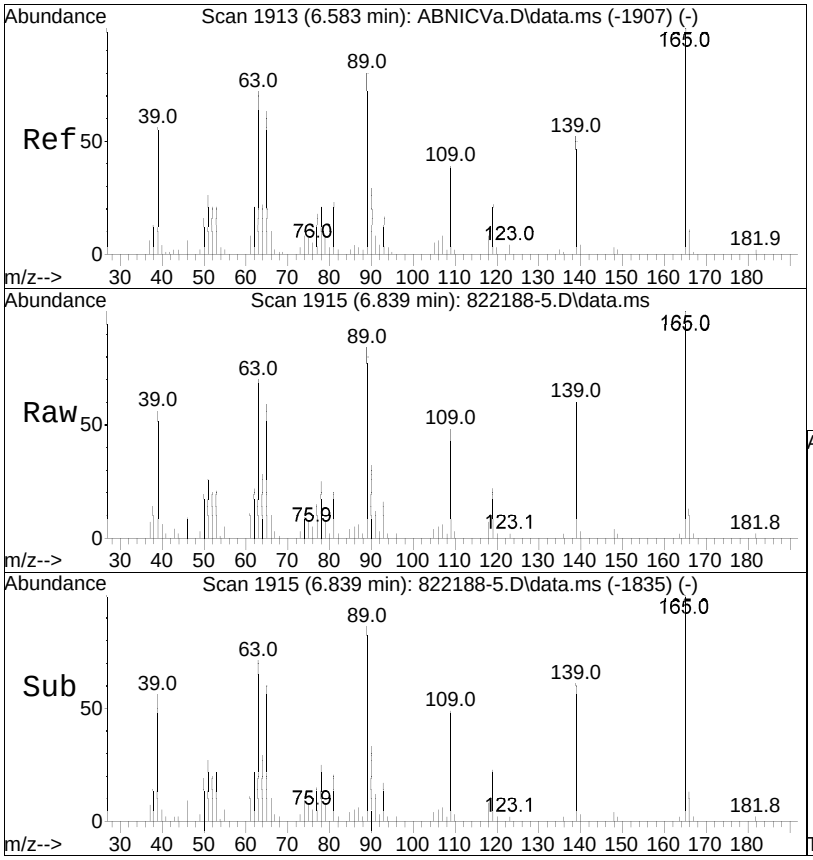


#66
Dibenzofuran
Concen: 2.73 ug/ml
RT: 6.805 min Scan# 1904
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:168 Resp: 42959

Ion	Ratio	Lower	Upper
168	100		
139	33.3	31.4	47.2

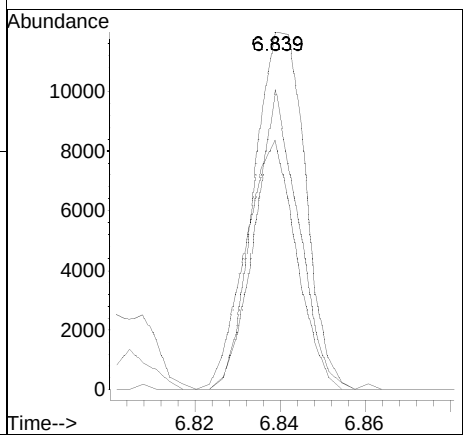


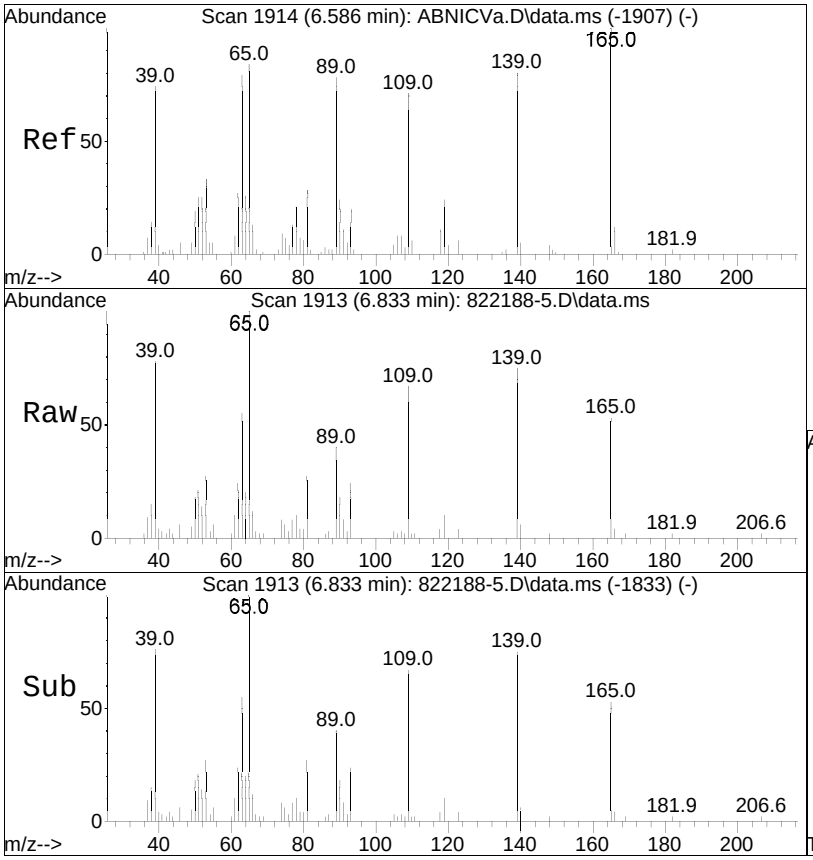


#67
2,4-Dinitrotoluene
Concen: 2.82 ug/ml
RT: 6.839 min Scan# 1915
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:165 Resp: 10016

Ion	Ratio	Lower	Upper
165	100		
89	71.4	72.0	108.0#
63	69.3	52.7	79.1

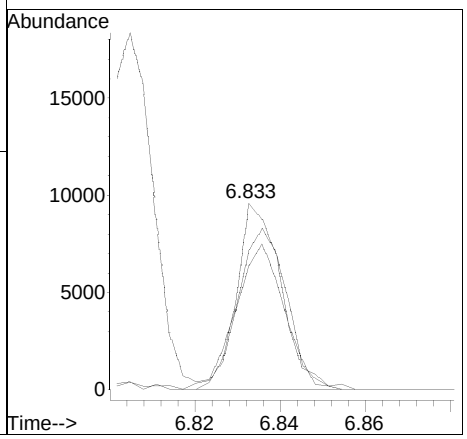


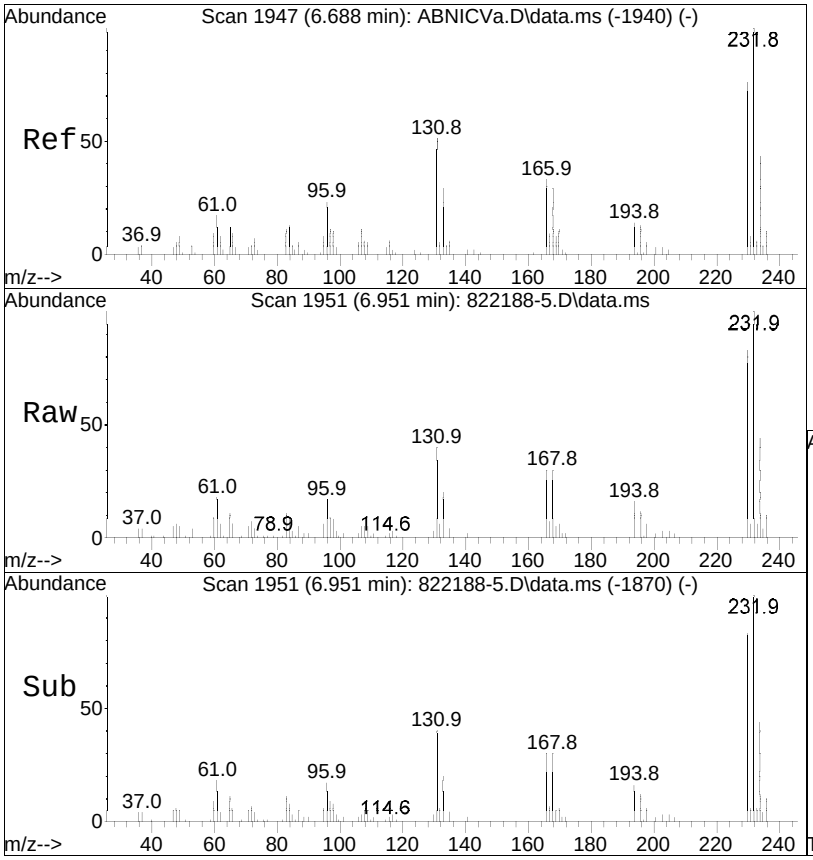


#68
4-Nitrophenol
Concen: 3.21 ug/ml
RT: 6.833 min Scan# 1913
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion: 65 Resp: 7206

Ion	Ratio	Lower	Upper
65	100		
109	80.6	47.4	71.2#
139	89.6	76.6	115.0

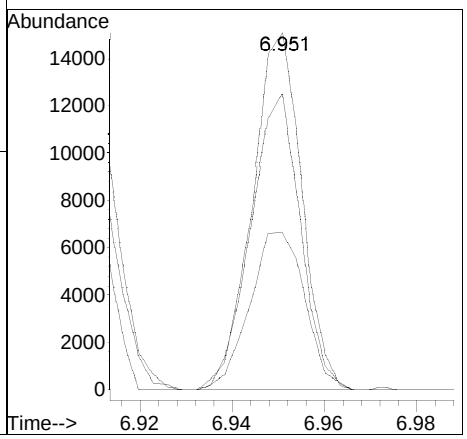


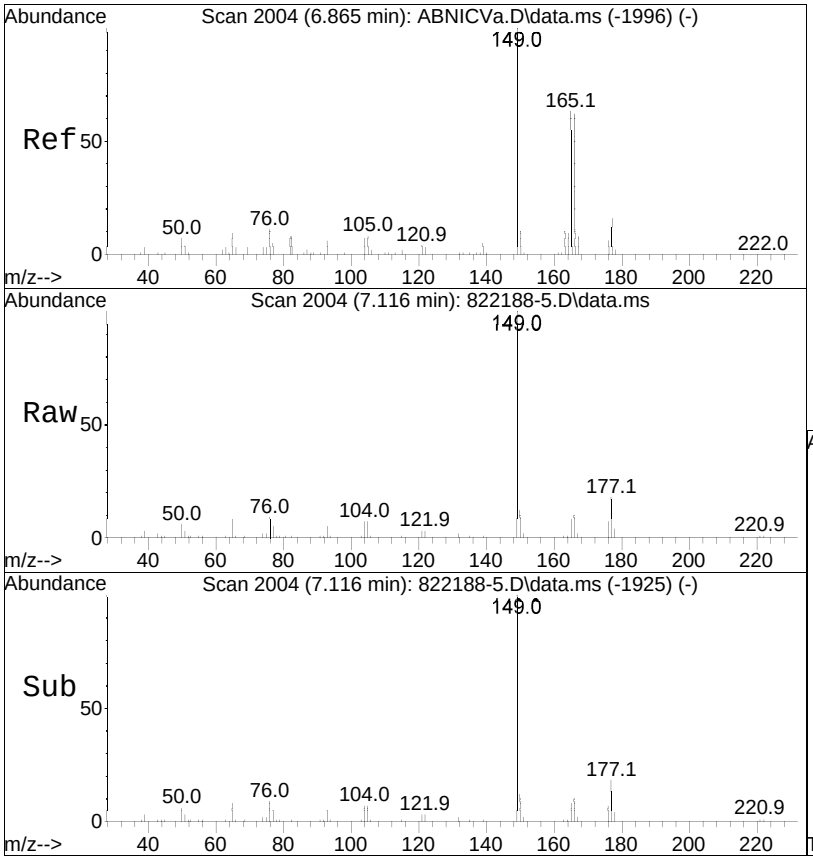


#70
2,3,4,6-Tetrachlorophenol
Concen: 3.51 ug/ml
RT: 6.951 min Scan# 1951
Delta R.T. 0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:232 Resp: 11240

Ion	Ratio	Lower	Upper
232	100		
230	83.1	61.8	92.8
234	49.2	36.2	54.2

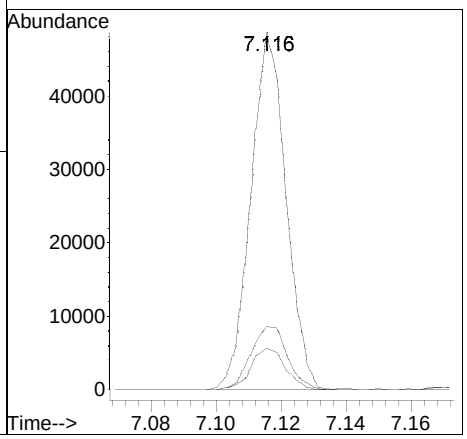


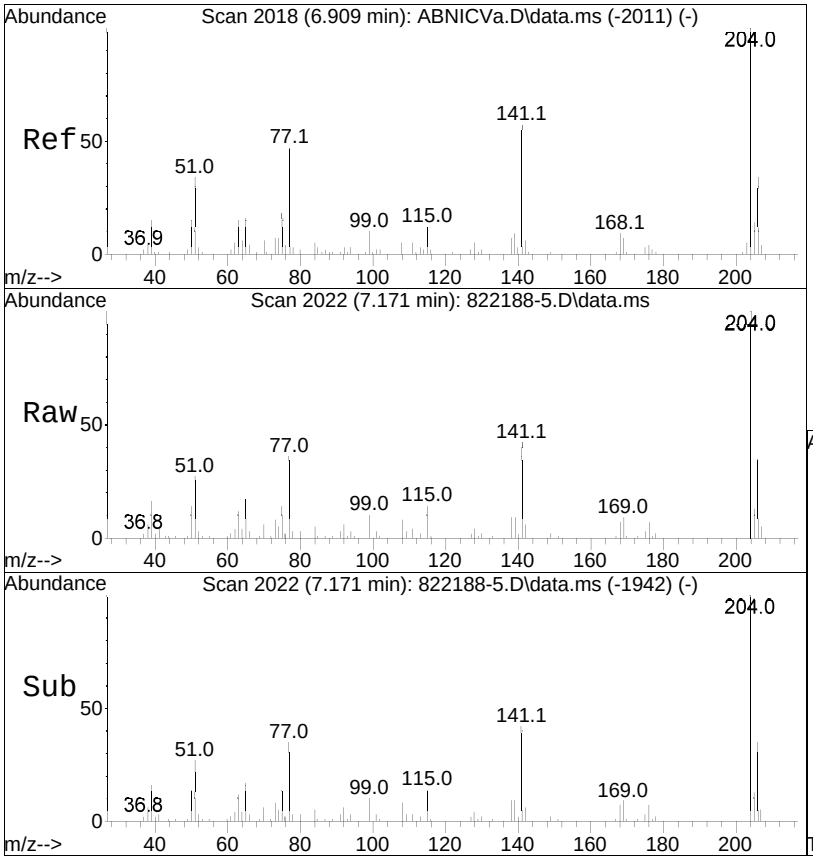


#71
Diethyl phthalate
Concen: 2.72 ug/ml
RT: 7.116 min Scan# 2004
Delta R.T. -0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:149 Resp: 36059

Ion	Ratio	Lower	Upper
149	100		
177	18.7	16.1	24.1
150	11.8	9.4	14.2

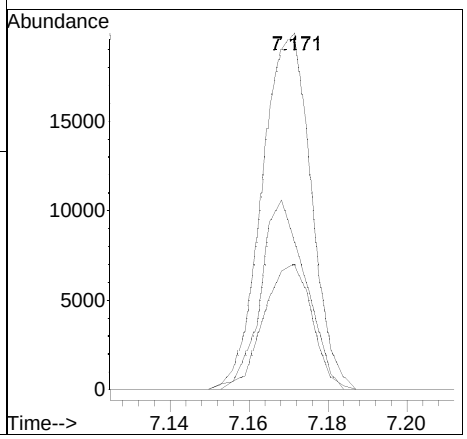


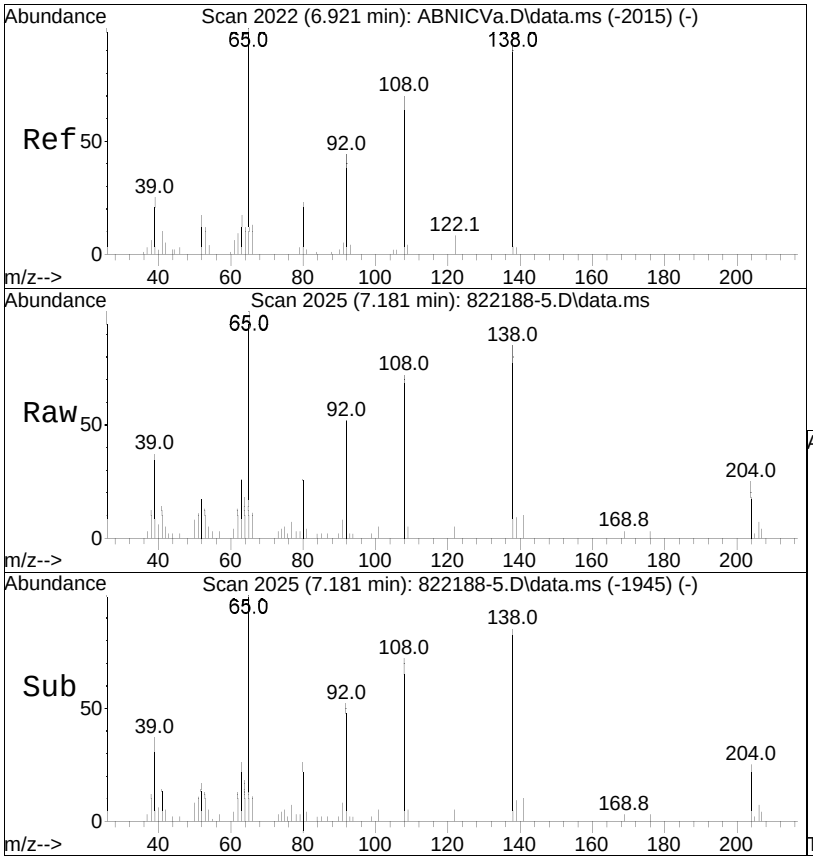


#73
4-Chlorophenyl phenyl ether
Concen: 2.77 ug/ml
RT: 7.171 min Scan# 2022
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:204 Resp: 17064

Ion	Ratio	Lower	Upper
204	100		
206	34.8	25.8	38.6
141	48.8	53.6	80.4#

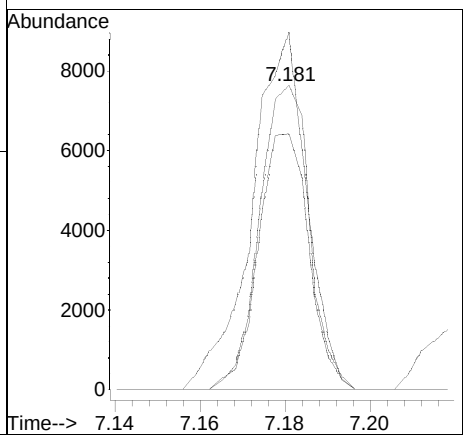


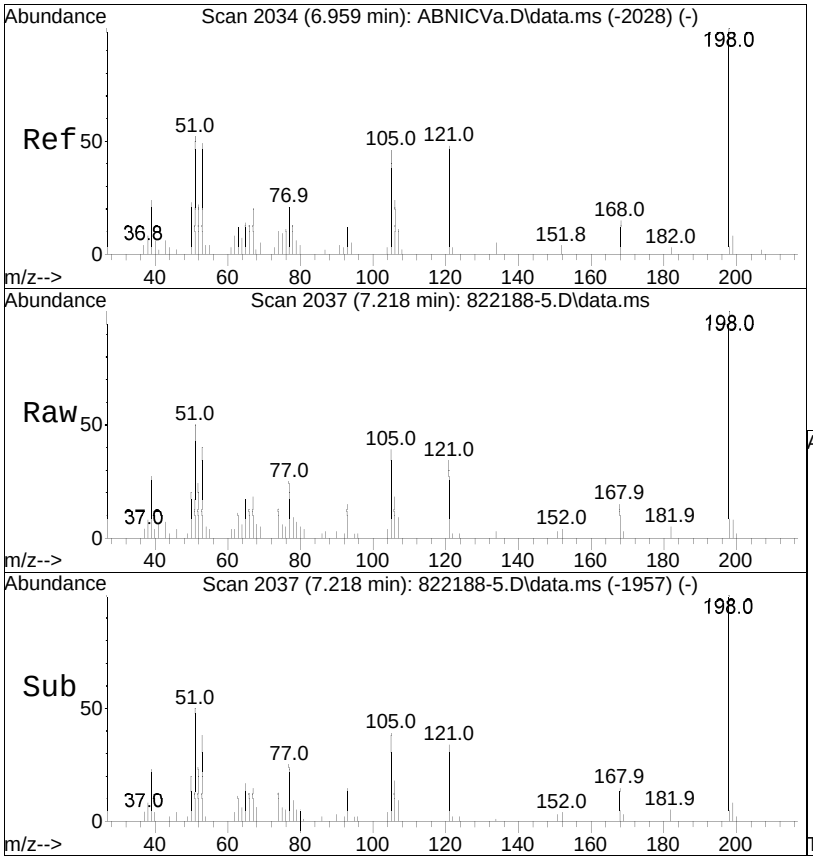


#74
4-Nitroaniline
Concen: 2.17 ug/ml
RT: 7.181 min Scan# 2025
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:138 Resp: 6196

Ion	Ratio	Lower	Upper
138	100		
108	85.0	52.1	78.1#
65	129.2	115.0	172.6

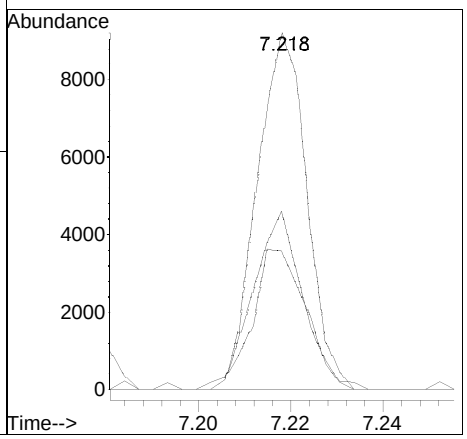


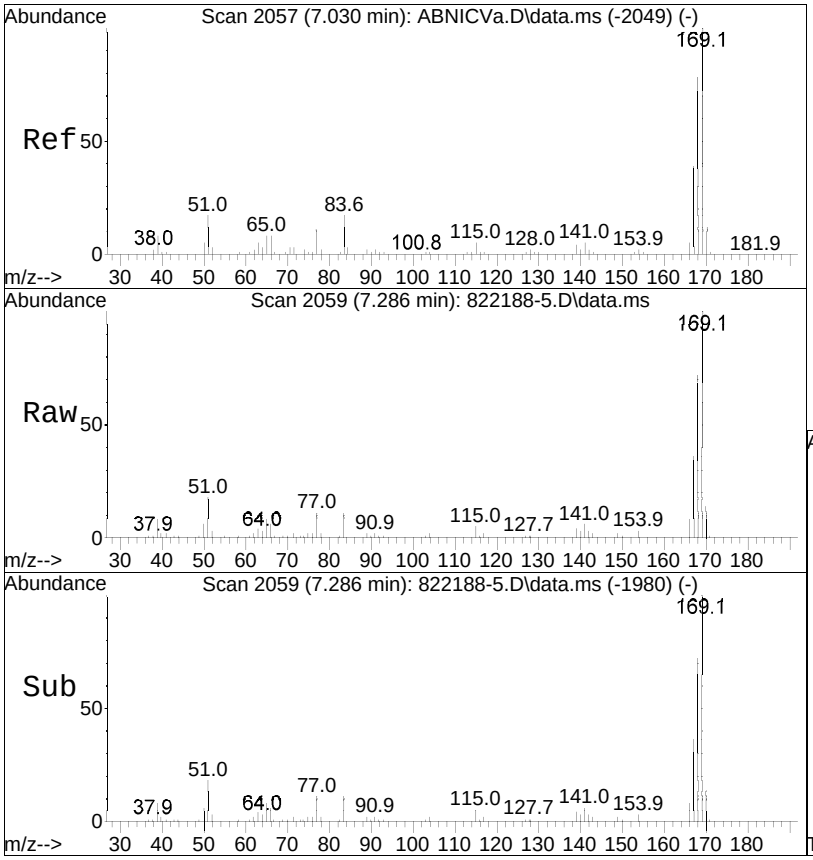


#75
4,6-Dinitro-o-cresol
Concen: 3.86 ug/ml
RT: 7.218 min Scan# 2037
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:198 Resp: 6871

Ion	Ratio	Lower	Upper
198	100		
51	49.8	76.0	114.0#
105	42.7	45.6	68.4#

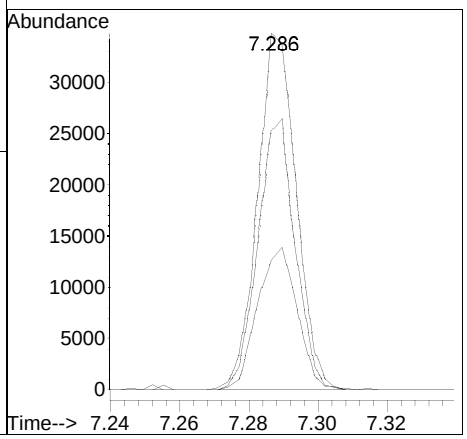


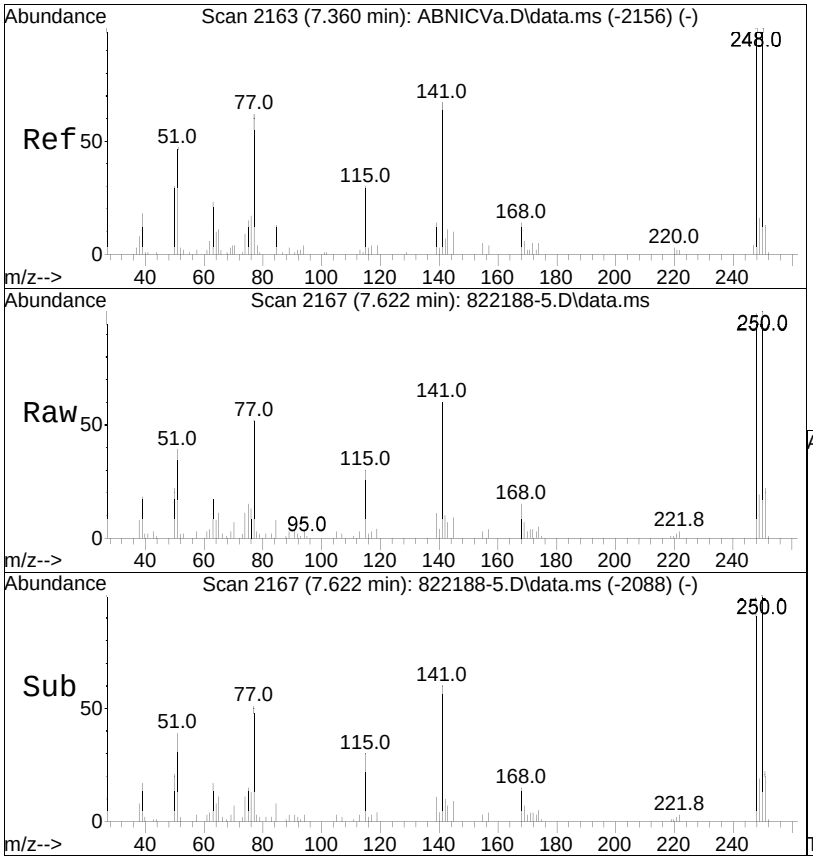


#76
NDPA/DPA
Concen: 2.49 ug/ml
RT: 7.286 min Scan# 2059
Delta R.T. -0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:169 Resp: 26954

Ion	Ratio	Lower	Upper
169	100		
168	73.0	54.0	81.0
167	41.0	28.6	42.8

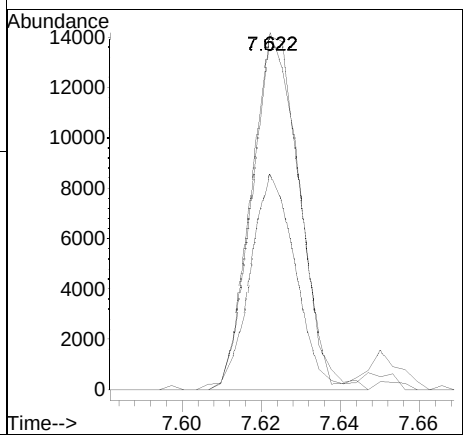


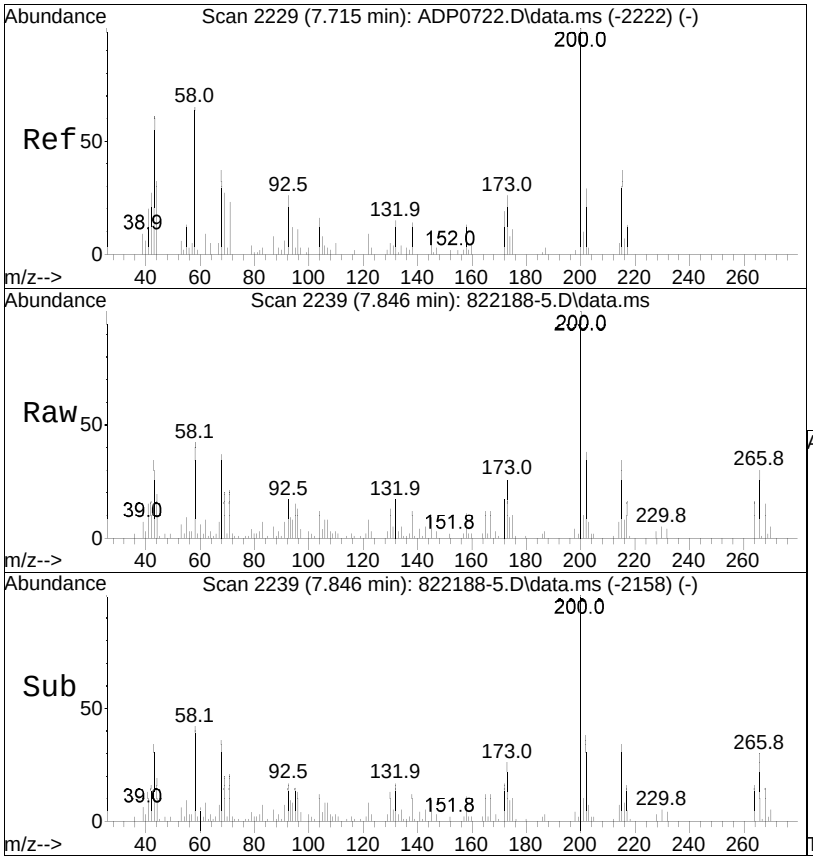


#79
4-Bromophenyl phenyl ether
Concen: 3.06 ug/ml
RT: 7.622 min Scan# 2167
Delta R.T. -0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:248 Resp: 11786

Ion	Ratio	Lower	Upper
248	100		
141	57.5	76.6	114.8#
250	100.0	77.3	115.9

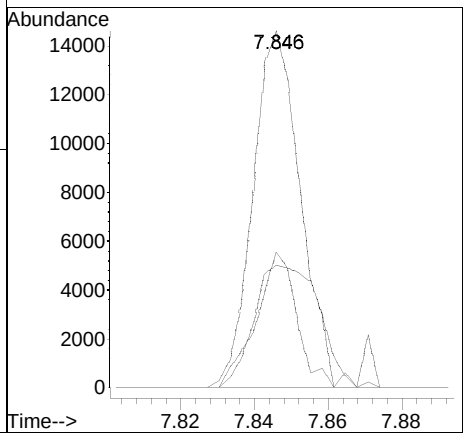


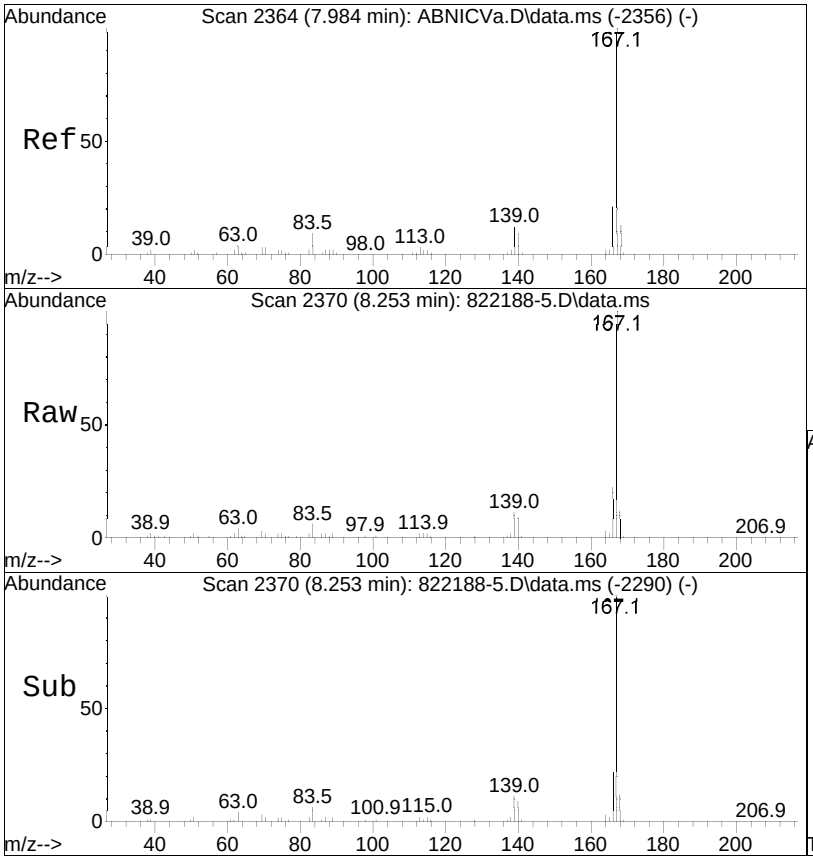


#86
Atrazine
Concen: 3.94 ug/ml
RT: 7.846 min Scan# 2239
Delta R.T. 0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:200 Resp: 12966

Ion	Ratio	Lower	Upper
200	100		
202	47.4	25.8	38.6#
215	32.6	40.2	60.4#

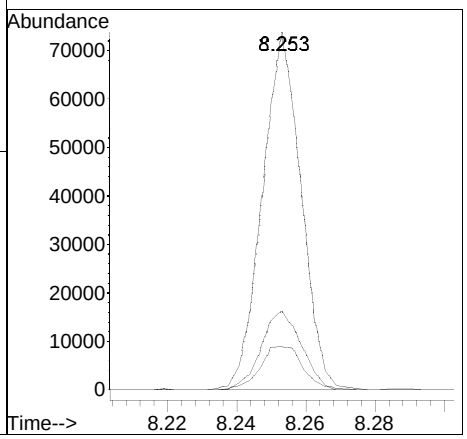


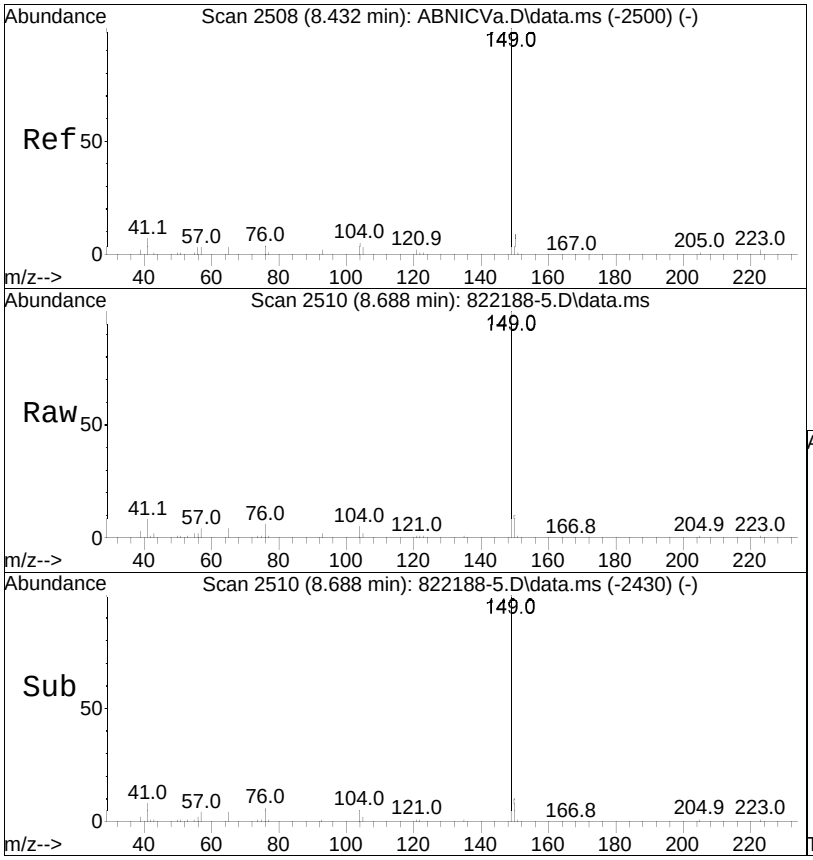


#90
Carbazole
Concen: 2.75 ug/ml
RT: 8.253 min Scan# 2370
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:167 Resp: 56882

Ion	Ratio	Lower	Upper
167	100		
168	13.4	10.6	15.8
166	23.1	17.4	26.0

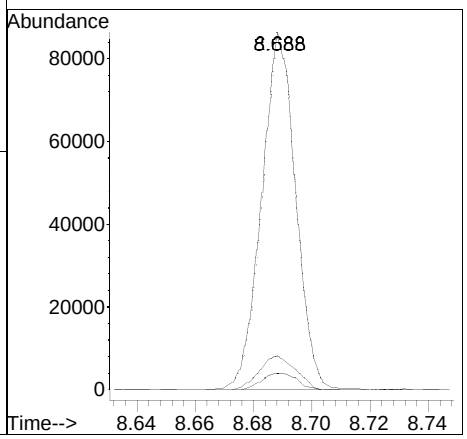


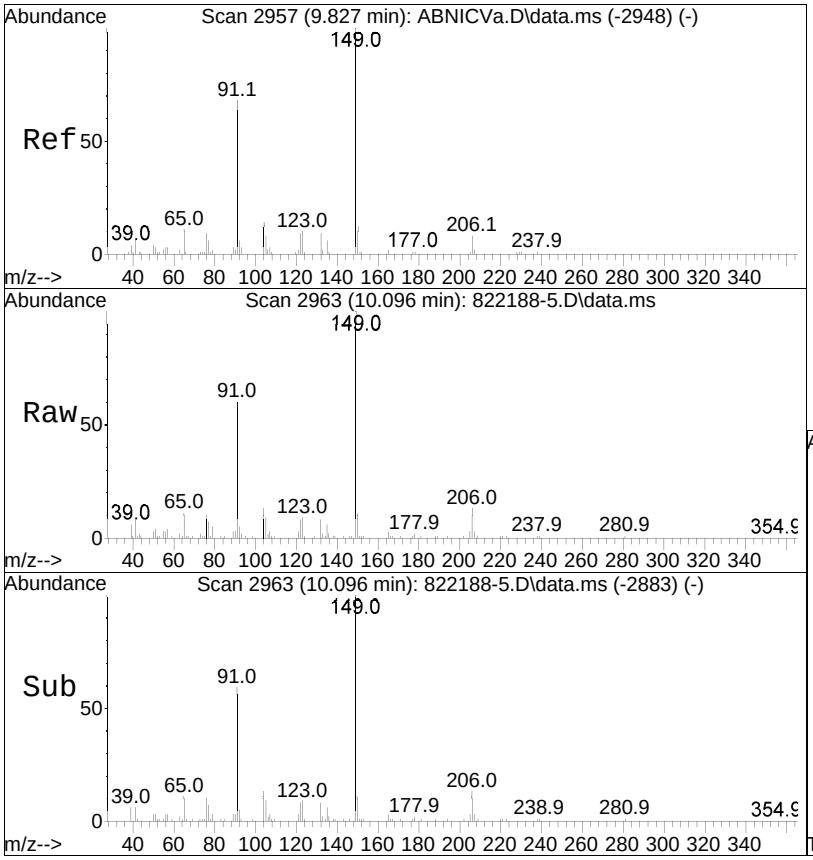


#91
Di-n-butylphthalate
Concen: 2.84 ug/ml
RT: 8.688 min Scan# 2510
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:149 Resp: 69128

Ion	Ratio	Lower	Upper
149	100		
150	10.2	7.0	10.6
104	4.9	4.5	6.7

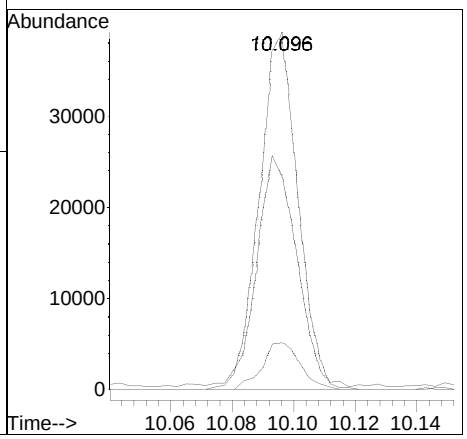


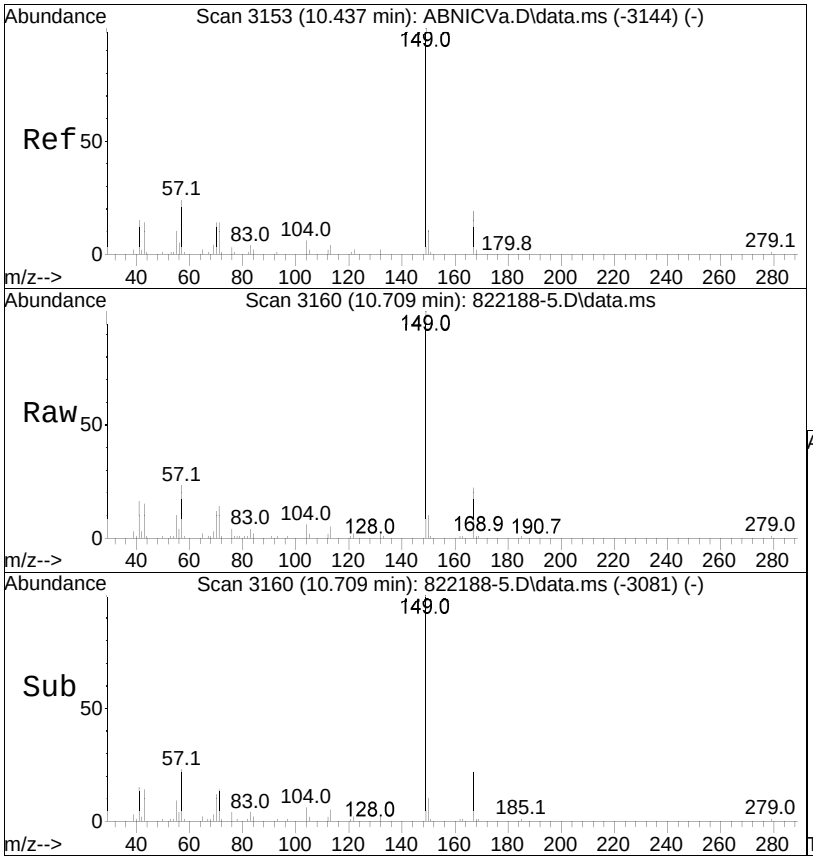


#96
Butyl benzyl phthalate
Concen: 3.06 ug/ml
RT: 10.096 min Scan# 2963
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:149 Resp: 33796

Ion	Ratio	Lower	Upper
149	100		
91	67.0	63.3	94.9
206	13.0	13.9	20.9#

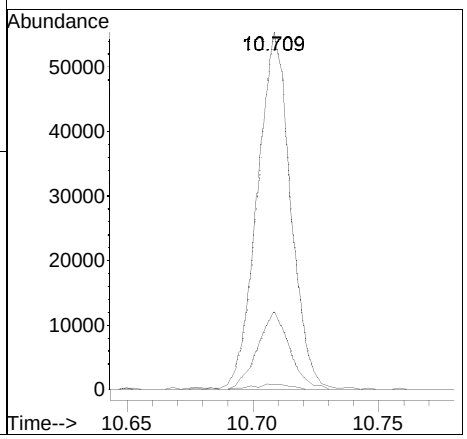


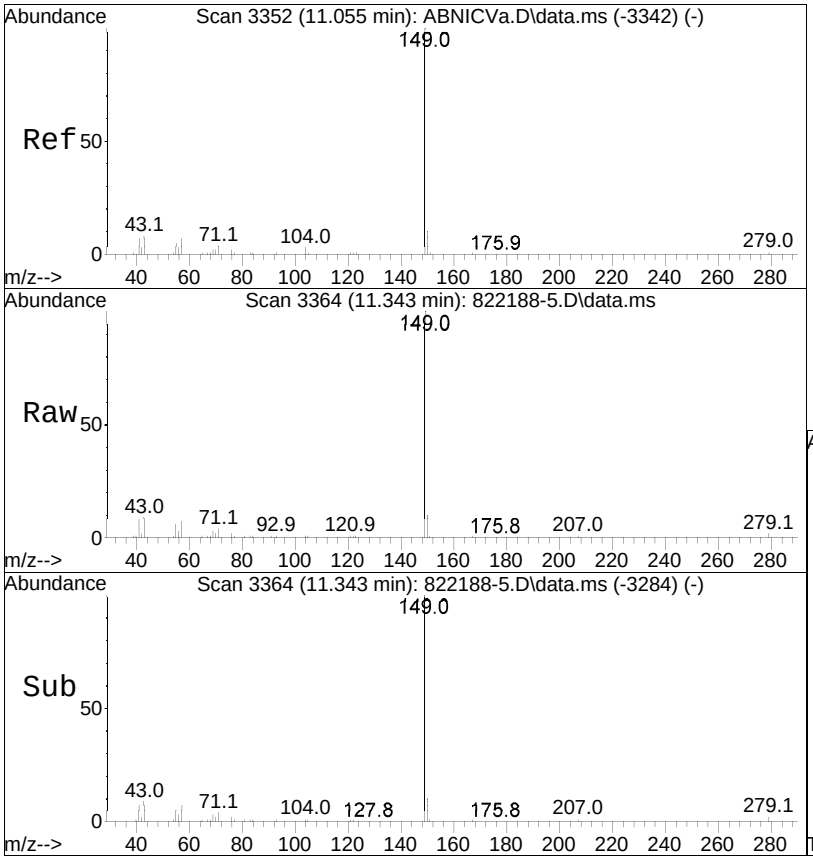


#107
Bis(2-ethylhexyl)phthalate
Concen: 3.04 ug/ml
RT: 10.709 min Scan# 3160
Delta R.T. -0.003 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:149 Resp: 50414

Ion	Ratio	Lower	Upper
149	100		
167	21.1	22.1	33.1#
279	1.5	3.0	4.4#

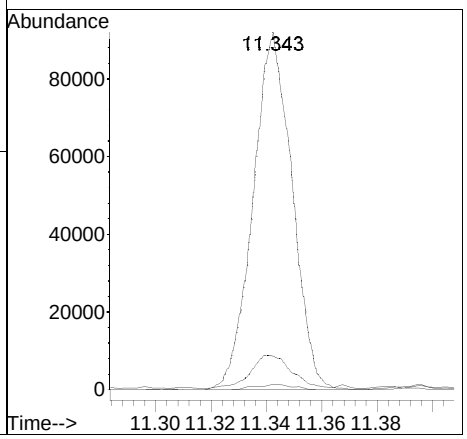




#108
Di-n-octylphthalate
Concen: 2.97 ug/ml
RT: 11.343 min Scan# 3364
Delta R.T. 0.000 min
Lab File: 822188-5.D
Acq: 31 Aug 2023 4:46 pm

Tgt Ion:149 Resp: 89148

Ion	Ratio	Lower	Upper
149	100		
43	10.1	18.8	28.2#
167	1.4	1.3	1.9



Manual Integration Report

Data Path	: I:\8270\Dakota\230831lvi\	QMethod	: FS230412LVIDakota.m
Data File	: 822188-5.D	Operator	: Dakota:jg
Date Inj'd	: 8/31/2023 4:46 pm	Instrument	: Dakota
Sample	: WG1822188-5,32,,gmr	Quant Date	: 8/31/2023 5:05 pm

There are no manual integrations or false positives in this file.

Calculation of Semi Volatile Organic Compounds

Aqueous Concentration Formula: Amt * DF * 1000 * (1/Vo) * Vf

Where:
DF = Dilution Factor
Vo = Volume of Sample (mL)
Vf = Extraction Lab Final Volume (mL)

Soil Concentration Formula: Amt * DF * 1000 * (1/Wt) * Vf * (100/TS)
Where:
DF = Dilution Factor
Wt = Weight of Sample (g)
Vf = Extraction Lab Final Volume (mL)
TS = Total Solids

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 13 2023, 10:54 am

Work Group: WG1822188 for Department: 2 Organic Preparation

Created: 30-AUG-23 Due: Operator: DDG

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2350148-01	MW-11S	C	NYTCL-8270-LVI	WATER	DONE	U	0905	0906	S0	Amber-A.25
L2350148-02	MW-11D	C	NYTCL-8270-LVI	WATER	DONE	U	0905	0906	S0	Amber-A.25
L2350148-03	MW-1SR	C	NYTCL-8270-LVI	WATER	DONE	U	0905	0906	S0	Amber-A.25
L2350148-04	MW-1DR2	C	NYTCL-8270-LVI	WATER	DONE	U	0905	0906	S0	Amber-A.25
L2350269-01	MW-1S	C	NYTCL-8270-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
L2350269-02	MW-2S	C	NYTCL-8270-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
L2350269-03	MW-3S	C	NYTCL-8270-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
L2350269-04	MW-4D	C	NYTCL-8270-LVI	WATER	DONE	U	0905	0913	S0	Amber-A.25
L2350269-05	MW-5S	C	NYTCL-8270-LVI	WATER	DONE	U	0905	0913	S0	Amber-A.25
L2350269-06	MW-6D	C	NYTCL-8270-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
L2350269-07	MW-7S	C	NYTCL-8270-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
L2350269-08	MW-8S	C	NYTCL-8270-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
L2350269-09	DUP	C	NYTCL-8270-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
WG1822188-1	Laboratory Method Bl	S	NYTCL-8270-LVI	WATER	DONE	U				
WG1822188-2	Laboratory Control S	S	NYTCL-8270-LVI	WATER	DONE	U				
WG1822188-3	LCS Duplicate	S	NYTCL-8270-LVI	WATER	DONE	U				
WG1822188-4	Matrix Spike	S	NYTCL-8270-LVI	WATER	DONE	U				
WG1822188-5	Matrix Spike Duplica	S	NYTCL-8270-LVI	WATER	DONE	U				

Comments:

WG1822188-3	WG1822188-2
WG1822188-4	L2350269-08
WG1822188-5	L2350269-08

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 13 2023, 10:54 am

Work Group: WG1823488 for Department: 2 Organic Preparation

Created: 05-SEP-23 Due: Operator: EMI

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2350269-11	EQUIPMENT BLANK	C	NYTCL-8270-LVI	WATER	DONE	U	0905	0913	S0	Amber-A.25
L2350946-01	SCDOH-DR	C	NYTCL-8270-LVI	WATER	DONE	U	0908	0911	S0	Amber-A.25
L2350946-02	MW-10S	C	NYTCL-8270-LVI	WATER	DONE	U	0908	0911	S0	Amber-A.25
L2350946-03	MW-10D	C	NYTCL-8270-LVI	WATER	DONE	U	0908	0911	S0	Amber-A.25
L2350946-04	DUP_09012023	C	NYTCL-8270-LVI	WATER	DONE	U	0908	0911	S0	Amber-A.25
L2350946-06	EB_09012023	C	NYTCL-8270-LVI	WATER	DONE	U	0908	0911	S0	Amber-A.25
WG1823488-1	Laboratory Method Bl	S	NYTCL-8270-LVI	WATER	DONE	U				
WG1823488-2	Laboratory Control S	S	NYTCL-8270-LVI	WATER	DONE	U				
WG1823488-3	LCS Duplicate	S	NYTCL-8270-LVI	WATER	DONE	U				

Comments:

WG1823488-3 WG1823488-2

Analysis log File

Total Files Reported in Log : 37
Log Generated From Directory: I:\8270\Dakota\230412lviical\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	Tune1.D	ABNLVI.M	Tune1	WG1768668,,	4/13/2023 1:15 am
2	ABNL10.D	ABNLVI.M	IL1,32,,ABNL50 Lot# 100	WG1768668,,	4/13/2023 1:37 am
3	ABNL9.D	ABNLVI.M	IL2,32,,ABNL35 Lot# 100	WG1768668,,	4/13/2023 2:00 am
4	ABNL8.D	ABNLVI.M	IL3,32,,ABNL15 Lot# 100	WG1768668,,	4/13/2023 2:23 am
5	ABNL7.D	ABNLVI.M	IL4,32,,ABNL10 Lot# 100	WG1768668,,	4/13/2023 2:45 am
6	ABNL6.D	ABNLVI.M	IL5,32,,ABNL5 Lot# 1003	WG1768668,,	4/13/2023 3:08 am
7	ABNL5.D	ABNLVI.M	IL6,32,,ABNL3 Lot# 1003	WG1768668,,	4/13/2023 3:31 am
8	ABNL4.D	ABNLVI.M	IL7,32,,ABNL2 Lot# 1003	WG1768668,,	4/13/2023 3:54 am
9	ABNL3.D	ABNLVI.M	IL8,32,,ABNL1 Lot# 1003	WG1768668,,	4/13/2023 4:16 am
10	ABNL2.D	ABNLVI.M	IL9,32,,ABNL0.4 Lot# 10	WG1768668,,	4/13/2023 4:39 am
11	ABNL1.D	ABNLVI.M	IL10,32,,ABNL0.2 Lot# 1	WG1768668,,	4/13/2023 5:02 am
12	AP9L10.D	ABNLVI.M	IL1,32,,AP9L50 Lot# 998	WG1768668,,	4/13/2023 5:25 am
13	AP9L9.D	ABNLVI.M	IL2,32,,AP9L35 Lot# 993	WG1768668,,	4/13/2023 5:47 am
14	AP9L8.D	ABNLVI.M	IL3,32,,AP9L15 Lot# 993	WG1768668,,	4/13/2023 6:10 am
15	AP9L7.D	ABNLVI.M	IL4,32,,AP9L10 Lot# 993	WG1768668,,	4/13/2023 6:33 am
16	AP9L6.D	ABNLVI.M	IL5,32,,AP9L5 Lot# 9978	WG1768668,,	4/13/2023 6:55 am
17	AP9L5.D	ABNLVI.M	IL6,32,,AP9L3 Lot# 9937	WG1768668,,	4/13/2023 7:18 am
18	AP9L4.D	ABNLVI.M	IL7,32,,AP9L2 Lot# 9938	WG1768668,,	4/13/2023 7:41 am
19	AP9L3.D	ABNLVI.M	IL8,32,,AP9L1 Lot# 9939	WG1768668,,	4/13/2023 8:04 am
20	AP9L2.D	ABNLVI.M	IL9,32,,AP9L0.4 Lot# 99	WG1768668,,	4/13/2023 8:27 am
21	AP9L1.D	ABNLVI.M	IL10,32,,AP9L0.2 Lot# 9	WG1768668,,	4/13/2023 8:50 am
22	ABNICV.D	ABNLVI.M	CQICV1,32,,ABNICV Lot#	WG1768668,,	4/13/2023 9:12 am
23	AP9ICV.D	ABNLVI.M	CQICV2,32,,AP9ICV Lot#	WG1768668,,	4/13/2023 9:35 am
24	Tune2.D	ABNLVI.M	Tune2	WG1768668,,	4/13/2023 10:50 am
25	ADPL10.D	ABNLVI.M	IL1,32,,ADPL50 Lot# 995	WG1768668,,	4/13/2023 11:12 am
26	ADPL9.D	ABNLVI.M	IL2,32,,ADPL35 Lot# 996	WG1768668,,	4/13/2023 11:35 am
27	ADPL8.D	ABNLVI.M	IL3,32,,ADPL15 Lot# 997	WG1768668,,	4/13/2023 11:58 am
28	ADPL7.D	ABNLVI.M	IL4,32,,ADPL10 Lot# 997	WG1768668,,	4/13/2023 12:20 pm
29	ADPL6.D	ABNLVI.M	IL5,32,,ADPL5 Lot# 9972	WG1768668,,	4/13/2023 12:43 pm
30	ADPL5.D	ABNLVI.M	IL6,32,,ADPL3 Lot# 9973	WG1768668,,	4/13/2023 1:06 pm
31	ADPL4.D	ABNLVI.M	IL7,32,,ADPL2 Lot# 9974	WG1768668,,	4/13/2023 1:29 pm
32	ADPL3.D	ABNLVI.M	IL8,32,,ADPL1 Lot# 9975	WG1768668,,	4/13/2023 1:52 pm
33	ADPL2.D	ABNLVI.M	IL9,32,,ADPL0.4 Lot# 99	WG1768668,,	4/13/2023 2:14 pm
34	ADPL1.D	ABNLVI.M	IL10,32,,ADPL0.2 Lot# 9	WG1768668,,	4/13/2023 2:37 pm
35	ADPICV.D	ABNLVI.M	CQICV3,32,,ADPICV Lot#	WG1768668,,	4/13/2023 3:00 pm
36	Blank.D	ABNLVI.M	Instrument Blank	Dakota ICAL 04-12-23	4/13/2023 3:23 pm
37	ABN Test.D	ABNLVI.M	ABN LVI Test		4/19/2023 10:45 pm

SeqLog 1.0 - (c) 2009 Abacus Database Applications

Analysis log File

Total Files Reported in Log : 36
Log Generated From Directory: I:\8270\SV106\230902lviical\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	Tune1.D	ABNLVI.M	Tune1	WG1823680	9/2/2023 11:50 am
2	ABNL10.D	ABNLVI.M	IL1,32,,ABNL50 Lot# 101	WG1823680	9/2/2023 12:13 pm
3	ABNL9.D	ABNLVI.M	IL2,32,,ABNL35 Lot# 101	WG1823680	9/2/2023 12:37 pm
4	ABNL8.D	ABNLVI.M	IL3,32,,ABNL15 Lot# 101	WG1823680	9/2/2023 1:01 pm
5	ABNL7.D	ABNLVI.M	IL4,32,,ABNL10 Lot# 101	WG1823680	9/2/2023 1:24 pm
6	ABNL6.D	ABNLVI.M	IL5,32,,ABNL5 Lot# 1016	WG1823680	9/2/2023 1:48 pm
7	ABNL5.D	ABNLVI.M	IL6,32,,ABNL3 Lot# 1016	WG1823680	9/2/2023 2:12 pm
8	ABNL4.D	ABNLVI.M	IL7,32,,ABNL2 Lot# 1016	WG1823680	9/2/2023 2:36 pm
9	ABNL3.D	ABNLVI.M	IL8,32,,ABNL1 Lot# 1016	WG1823680	9/2/2023 2:59 pm
10	ABNL2.D	ABNLVI.M	IL9,32,,ABNL0.4 Lot# 10	WG1823680	9/2/2023 3:23 pm
11	ABNL1.D	ABNLVI.M	IL10,32,,ABNL0.2 Lot# 1	WG1823680	9/2/2023 3:47 pm
12	AP9L10.D	ABNLVI.M	IL1,32,,AP9L50 Lot# 100	WG1823680	9/2/2023 4:10 pm
13	AP9L9.D	ABNLVI.M	IL2,32,,AP9L35 Lot# 100	WG1823680	9/2/2023 4:34 pm
14	AP9L8.D	ABNLVI.M	IL3,32,,AP9L15 Lot# 100	WG1823680	9/2/2023 4:58 pm
15	AP9L7.D	ABNLVI.M	IL4,32,,AP9L10 Lot# 100	WG1823680	9/2/2023 5:21 pm
16	AP9L6.D	ABNLVI.M	IL5,32,,AP9L5 Lot# 1008	WG1823680	9/2/2023 5:45 pm
17	AP9L5.D	ABNLVI.M	IL6,32,,AP9L3 Lot# 1008	WG1823680	9/2/2023 6:09 pm
18	AP9L4.D	ABNLVI.M	IL7,32,,AP9L2 Lot# 1008	WG1823680	9/2/2023 6:32 pm
19	AP9L3.D	ABNLVI.M	IL8,32,,AP9L1 Lot# 1008	WG1823680	9/2/2023 6:56 pm
20	AP9L2.D	ABNLVI.M	IL9,32,,AP9L0.4 Lot# 10	WG1823680	9/2/2023 7:20 pm
21	AP9L1.D	ABNLVI.M	IL10,32,,AP9L0.2 Lot# 1	WG1823680	9/2/2023 7:43 pm
22	ABNICV.D	ABNLVI.M	CQICV1,32,,ABNICV Lot#	WG1823680	9/2/2023 8:07 pm
23	AP9ICV.D	ABNLVI.M	CQICV2,32,,AP9ICV Lot#	WG1823680	9/2/2023 8:31 pm
24	Tune2.D	ABNLVI.M	Tune2	WG1823680	9/2/2023 8:54 pm
25	ADPL10.D	ABNLVI.M	IL1,32,,ADPL50 Lot# 100	WG1823680	9/2/2023 9:18 pm
26	ADPL9.D	ABNLVI.M	IL2,32,,ADPL35 Lot# 100	WG1823680	9/2/2023 9:42 pm
27	ADPL8.D	ABNLVI.M	IL3,32,,ADPL15 Lot# 100	WG1823680	9/2/2023 10:05 pm
28	ADPL7.D	ABNLVI.M	IL4,32,,ADPL10 Lot# 100	WG1823680	9/2/2023 10:29 pm
29	ADPL6.D	ABNLVI.M	IL5,32,,ADPL5 Lot# 1009	WG1823680	9/2/2023 10:53 pm
30	ADPL5.D	ABNLVI.M	IL6,32,,ADPL3 Lot# 1009	WG1823680	9/2/2023 11:17 pm
31	ADPL4.D	ABNLVI.M	IL7,32,,ADPL2 Lot# 1009	WG1823680	9/2/2023 11:40 pm
32	ADPL2.D	ABNLVI.M	IL9,32,,ADPL0.4 Lot# 10	WG1823680	9/3/2023 12:28 am
33	ADPL3.D	ABNLVI.M	IL8,32,,ADPL1 Lot# 1009	WG1823680	9/3/2023 12:04 am
34	ADPL1.D	ABNLVI.M	IL10,32,,ADPL0.2 Lot# 1	WG1823680	9/3/2023 12:52 am
35	ADPICV.D	ABNLVI.M	CQICV3,32,,ADPICV Lot#	WG1823680	9/3/2023 1:15 am
36	Blank1.D	ABNLVI.M	LVI Instrument Blank	WG1823680	9/3/2023 1:39 am

Sequence Name: C:\msdchem\1\sequence\230831.S
Comment:
Operator: Dakota:
Data Path: C:\MSDCHEM\1\DATA\230831lvi\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run	Sequence Barcode Options
(X) Full Method	(X) On Mismatch, Inject Anyway
( ) Reprocessing Only	( ) On Mismatch, Don't Inject
	( ) Barcode Disabled

Line			Sample Name/Misc Info		
1)	Sample	100	DEG0831a	ABNLVI	wg-1,32,,Dakota Degdftpp
2)	Sample	96	ABN0831	ABNLVI	wg-3,32,,ABN 10210 gmr0812B
3)	Sample	97	AP90831	ABNLVI	wg-4,32,,AP9 10166 gmr0805B
4)	Sample	98	ADP0831	ABNLVI	wg-5,32,,ADP 10092 gmr0805B
5)	Sample	1	822188-1	ABNLVI	WG1822188-1,32,,gmr
6)	Sample	2	822188-2	ABNLVI	WG1822188-2,32,,gmr
7)	Sample	3	822188-3	ABNLVI	WG1822188-3,32,,gmr
8)	Sample	4	822339-1	ABNLVI	WG1822339-1,32,,RE,gmr
9)	Sample	5	822339-2	ABNLVI	WG1822339-2,32,,RE,gmr
10)	Sample	6	822339-3	ABNLVI	WG1822339-3,32,,RE,gmr
11)	Sample	7	49377-08	ABNLVI	L2349377-08,32,,RE,gmr
12)	Sample	8	8013-05d	ABNLVI	L2348013-05d,32,5,rv
13)	Sample	9	50269-02	ABNLVI	L2350269-02,32,,gmr
14)	Sample	10	50269-03	ABNLVI	L2350269-03,32,,gmr
15)	Sample	11	50269-06	ABNLVI	L2350269-06,32,,gmr
16)	Sample	12	50269-07	ABNLVI	L2350269-07,32,,gmr
17)	Sample	13	50269-08	ABNLVI	L2350269-08,32,,gmr
18)	Sample	14	822188-4	ABNLVI	WG1822188-4,32,,gmr
19)	Sample	15	822188-5	ABNLVI	WG1822188-5,32,,gmr
20)	Sample	16	50269-09	ABNLVI	L2350269-09,32,,gmr
21)	Sample	17	50202-01	ABNLVI	L2350202-01,32,,gmr
22)	Sample	18	50202-02	ABNLVI	L2350202-02,32,,gmr
23)	Sample	19	50202-03	ABNLVI	L2350202-03,32,,gmr
24)	Sample	20	50202-04	ABNLVI	L2350202-04,32,,gmr
25)	Sample	21	50202-05	ABNLVI	L2350202-05,32,,gmr
26)	Sample	22	50202-06	ABNLVI	L2350202-06,32,,gmr
27)	Sample	23	49968-01	ABNLVI	L2349968-01,32,,gmr
28)	Sample	24	49968-02	ABNLVI	L2349968-02,32,,gmr
29)	Sample	25	49968-03	ABNLVI	L2349968-03,32,,gmr
30)	Sample	26	49968-04	ABNLVI	L2349968-04,32,,gmr
31)	Sample	27	49968-05	ABNLVI	L2349968-05,32,,gmr

Sequence Name: C:\msdchem\1\sequence\230901.S
Comment:
Operator: Dakota:
Data Path: C:\MSDCHEM\1\DATA\230901lvi\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run	Sequence Barcode Options
(X) Full Method	(X) On Mismatch, Inject Anyway
( ) Reprocessing Only	( ) On Mismatch, Don't Inject
	( ) Barcode Disabled

Line			Sample Name/Misc Info		
1)	Sample	100	DEG0901	ABNLVI	wg-1,32,,Dakota Degdftpp
2)	Sample	96	ABN0901	ABNLVI	wg-3,32,,ABN 10210 gmr0812B
3)	Sample	97	AP90901	ABNLVI	wg-4,32,,AP9 10166 gmr0805B
4)	Sample	98	ADP0901	ABNLVI	wg-5,32,,ADP 10092 gmr0805B
5)	Sample	1	822454-1	ABNLVI	WG1822454-1,32,,gmr
6)	Sample	2	822454-2	ABNLVI	WG1822454-2,32,,gmr
7)	Sample	3	822454-3	ABNLVI	WG1822454-3,32,,gmr
8)	Sample	4	821731-2	ABNLVI	WG1821731-2,32,,RV,gmr
9)	Sample	5	821731-3	ABNLVI	WG1821731-3,32,,RV,gmr
10)	Sample	6	822340-1	ABNLVI	WG1822340-1,32,,gmr
11)	Sample	7	822340-2	ABNLVI	WG1822340-2,32,,gmr
12)	Sample	8	822340-3	ABNLVI	WG1822340-3,32,,gmr
13)	Sample	9	50228-01	ABNLVI	L2350228-01,32,,gmr
14)	Sample	10	50228-02	ABNLVI	L2350228-02,32,,gmr
15)	Sample	11	50768-11	ABNLVI	L2350768-11,32,,R1A,gmr
16)	Sample	12	50228-03	ABNLVI	L2350228-03,32,,gmr
17)	Sample	13	50228-04	ABNLVI	L2350228-04,32,,gmr
18)	Sample	14	0768-11	ABNLVI	L2350768-11,32,,RV
19)	Sample	15	50228-05	ABNLVI	L2350228-05,32,,gmr
20)	Sample	16	50228-06	ABNLVI	L2350228-06,32,,gmr
21)	Sample	17	50269-01	ABNLVI	L2350269-01,32,,gmr
22)	Sample	18	50148-04	ABNLVI	L2350148-04,32,,gmr
23)	Sample	19	50148-03	ABNLVI	L2350148-03,32,,gmr
24)	Sample	20	50148-02	ABNLVI	L2350148-02,32,,gmr
25)	Sample	21	ABN LVI Surrogate Lot #10232		
	Datafile		10232test		
	Method		ABNLVI		
26)	Sample	22	50148-01	ABNLVI	L2350148-01,32,,gmr
27)	Sample	23	50229-03	ABNLVI	L2350229-03,32,,gmr
28)	Sample	24	50229-02	ABNLVI	L2350229-02,32,,gmr
29)	Sample	25	50229-01	ABNLVI	L2350229-01,32,,gmr
30)	Sample	26	49792-01	ABNLVI	L2349792-01,32,,gmr
31)	Sample	27	822454-4	ABNLVI	WG1822454-4,32,,gmr
32)	Sample	28	822454-5	ABNLVI	WG1822454-5,32,,gmr

Sequence Name: C:\msdchem\1\sequence\230905n.S
Comment:
Operator: Dakota:
Data Path: C:\MSDCHEM\1\DATA\230905nlvi\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run	Sequence Barcode Options
(X) Full Method	(X) On Mismatch, Inject Anyway
( ) Reprocessing Only	( ) On Mismatch, Don't Inject
	( ) Barcode Disabled

Line			Sample Name/Misc Info	
1)	Sample	100	DEG0905n ABNLVI	wg-1,32,,Dakota Degdftpp
2)	Sample	96	ABN0905n ABNLVI	wg-3,32,,ABN LVI CCV Lot # 10
3)	Sample	97	AP90905n ABNLVI	wg-4,32,,AP9 LVI CCV Lot # 10
4)	Sample	98	ADP0905n ABNLVI	wg-5,32,,ADP LVI CCV Lot # 10
5)	Sample	1	823347-1 ABNLVI	WG1823347-1,32,,ASK
6)	Sample	2	823347-2 ABNLVI	WG1823347-2,32,,ASK
7)	Sample	3	823347-3 ABNLVI	WG1823347-3,32,,ASK
8)	Sample	4	823488-1 ABNLVI	WG1823488-1,32,,ASK
9)	Sample	5	823488-2 ABNLVI	WG1823488-2,32,,ASK
10)	Sample	6	823488-3 ABNLVI	WG1823488-3,32,,ASK
11)	Sample	7	823423-1 ABNLVI	WG1823423-1,32,,ASK
12)	Sample	8	823423-2 ABNLVI	WG1823423-2,32,,ASK
13)	Sample	9	823423-3 ABNLVI	WG1823423-3,32,,ASK
14)	Sample	10	50654-03 ABNLVI	L2350654-03,32,,R2F,ASK
15)	Sample	11	50787-16 ABNLVI	L2350787-16,32,,ASK
16)	Sample	12	50658-01 ABNLVI	L2350658-01,32,,ASK
17)	Sample	13	823347-4 ABNLVI	WG1823347-4,32,,ASK
18)	Sample	14	823347-5 ABNLVI	WG1823347-5,32,,ASK
19)	Sample	15	50658-02 ABNLVI	L2350658-02,32,,ASK
20)	Sample	16	823347-6 ABNLVI	WG1823347-6,32,,ASK
21)	Sample	17	823347-7 ABNLVI	WG1823347-7,32,,ASK
22)	Sample	18	50658-03 ABNLVI	L2350658-03,32,,ASK
23)	Sample	19	50658-04 ABNLVI	L2350658-04,32,,ASK
24)	Sample	20	50658-05 ABNLVI	L2350658-05,32,,ASK
25)	Sample	21	50658-06 ABNLVI	L2350658-06,32,,ASK
26)	Sample	22	50658-07 ABNLVI	L2350658-07,32,,ASK
27)	Sample	23	50658-08 ABNLVI	L2350658-08,32,,ASK
28)	Sample	24	50946-01 ABNLVI	L2350946-01,32,,ASK
29)	Sample	25	50946-02 ABNLVI	L2350946-02,32,,ASK
30)	Sample	26	50946-03 ABNLVI	L2350946-03,32,,ASK
31)	Sample	27	50946-04 ABNLVI	L2350946-04,32,,ASK
32)	Sample	28	50946-06 ABNLVI	L2350946-06,32,,ASK
33)	Sample	29	49968-01 ABNLVI	L2349968-01,32,,ASK

Analysis log File

Total Files Reported in Log : 31
Log Generated From Directory: I:\8270\SV106\230905lvi\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	DEG0905.D	ABNLVI.M	WG1823865-2,32,,SV106 D	WG1823865,,ical20337	9/5/2023 8:40 pm
2	ABN0905.D	ABNLVI.M	WG1823865-3,32,,ABN LVI	WG1823865,,ical20337	9/5/2023 9:04 pm
3	AP90905.D	ABNLVI.M	wg-4,32,,AP9 LVI CCV Lo	wg,,ical20337	9/5/2023 9:28 pm
4	ADP0905.D	ABNLVI.M	WG1823865-5,32,,ADP LVI	WG1823865,,ical20337	9/5/2023 9:52 pm
5	AP90905a.D	ABNLVI.M	WG1823865-4,32,,AP9 LVI	WG1823865,,ical20337	9/5/2023 10:16 pm
6	821850-1.D	ABNLVI.M	WG1821850-1,32,,ASK	WG1823865,WG1821850,ical20337	9/5/2023 10:40 pm
7	821850-2.D	ABNLVI.M	WG1821850-2,32,,ASK	WG1823865,WG1821850,ical20337	9/5/2023 11:04 pm
8	821850-3.D	ABNLVI.M	WG1821850-3,32,,ASK	WG1823865,WG1821850,ical20337	9/5/2023 11:28 pm
9	822633-1.D	ABNLVI.M	WG1822633-1,32,,ASK	WG1823865,WG1822633,ical20337	9/5/2023 11:51 pm
10	822633-3.D	ABNLVI.M	WG1822633-3,32,,ASK	WG1823865,WG1822633,ical20337	9/6/2023 12:39 am
11	822633-2.D	ABNLVI.M	WG1822633-2,32,,ASK	WG1823865,WG1822633,ical20337	9/6/2023 12:15 am
12	822550-1.D	ABNLVI.M	WG1822550-1,32,,ASK	WG1823865,WG1822550,ical20337	9/6/2023 1:03 am
13	822550-2.D	ABNLVI.M	WG1822550-2,32,,ASK	WG1823865,WG1822550,ical20337	9/6/2023 1:27 am
14	822550-3.D	ABNLVI.M	WG1822550-3,32,,ASK	WG1823865,WG1822550,ical20337	9/6/2023 1:51 am
15	50464-05.D	ABNLVI.M	L2350464-05,32,,ASK	WG1823865,WG1823018,ical20337	9/6/2023 2:15 am
16	49968-06.D	ABNLVI.M	L2349968-06,32,,ASK	WG1823865,WG1822093,ical20337	9/6/2023 2:38 am
17	49968-07.D	ABNLVI.M	L2349968-07,32,,ASK	WG1823865,WG1822093,ical20337	9/6/2023 3:02 am
18	50160-01.D	ABNLVI.M	L2350160-01,32,,ASK	WG1823865,WG1821850,ical20337	9/6/2023 3:26 am
19	50160-02.D	ABNLVI.M	L2350160-02,32,,ASK,scr	WG1823865,WG1821850,ical20337	9/6/2023 3:50 am
20	50160-04.D	ABNLVI.M	L2350160-04,32,,ASK	WG1823865,WG1821850,ical20337	9/6/2023 4:14 am
21	50160-05.D	ABNLVI.M	L2350160-05,32,,ASK	WG1823865,WG1821850,ical20337	9/6/2023 4:37 am
22	50160-06.D	ABNLVI.M	L2350160-06,32,,ASK	WG1823865,WG1821850,ical20337	9/6/2023 5:01 am
23	50160-07.D	ABNLVI.M	L2350160-07,32,,ASK	WG1823865,WG1821850,ical20337	9/6/2023 5:25 am
24	50160-08.D	ABNLVI.M	L2350160-08,32,,ASK	WG1823865,WG1821850,ical20337	9/6/2023 5:49 am
25	50160-10.D	ABNLVI.M	L2350160-10,32,,ASK	WG1823865,WG1821850,ical20337	9/6/2023 6:12 am
26	50269-05.D	ABNLVI.M	L2350269-05,32,,ASK	WG1823865,WG1822188,ical20337	9/6/2023 6:36 am
27	50269-04.D	ABNLVI.M	L2350269-04,32,,ASK	WG1823865,WG1822188,ical20337	9/6/2023 7:00 am
28	50246-01.D	ABNLVI.M	L2350246-01,32,,ASK	WG1823865,WG1822633,ical20337	9/6/2023 7:24 am
29	50202-07.D	ABNLVI.M	L2350202-07,32,,ASK	WG1823865,WG1821889,ical20337	9/6/2023 7:48 am
30	50202-08.D	ABNLVI.M	L2350202-08,32,,ASK	WG1823865,WG1821889,ical20337	9/6/2023 8:11 am
31	50202-09.D	ABNLVI.M	L2350202-09,32,,ASK	WG1823865,WG1821889,ical20337	9/6/2023 8:35 am

Printed: 09/13/23 Page: 1

Sequence Name: C:\msdchem\1\sequence\230906.S
Comment:
Operator: Dakota:
Data Path: C:\MSDCHEM\1\DATA\230906lvi\
Instrument Control Pre-Seq Cmd:
Data Analysis Pre-Seq Cmd:

Instrument Control Post-Seq Cmd:
Data Analysis Post-Seq Cmd:

Method Sections To Run
(X) Full Method
( ) Reprocessing Only

Sequence Barcode Options
(X) On Mismatch, Inject Anyway
( ) On Mismatch, Don't Inject
( ) Barcode Disabled

Line			Sample Name/Misc Info		
1)	Sample	100	DEG0906	ABNLVI	wg-1,32,,Dakota Degdftpp
2)	Sample	96	ABN0906	ABNLVI	wg-3,32,,ABN LVI CCV Lot # 10
3)	Sample	97	AP90906	ABNLVI	wg-4,32,,AP9 LVI CCV Lot # 10
4)	Sample	98	ADP0906	ABNLVI	wg-5,32,,ADP LVI CCV Lot # 10
5)	Sample	1	823493-1	ABNLVI	WG1823493-1,32,,gmr
6)	Sample	2	823493-2	ABNLVI	WG1823493-2,32,,gmr
7)	Sample	3	823493-3	ABNLVI	WG1823493-3,32,,gmr
8)	Sample	4	823327-1	ABNLVI	WG1823327-1,32,,gmr
9)	Sample	5	823327-2	ABNLVI	WG1823327-2,32,,gmr
10)	Sample	6	823327-3	ABNLVI	WG1823327-3,32,,gmr
11)	Sample	7	50658-10	ABNLVI	L2350658-10,32,,gmr
12)	Sample	8	50658-09	ABNLVI	L2350658-09,32,,gmr
13)	Sample	9	50970-01	ABNLVI	L2350970-01,32,,gmr
14)	Sample	10	50970-02	ABNLVI	L2350970-02,32,,gmr
15)	Sample	11	50970-03	ABNLVI	L2350970-03,32,,gmr
16)	Sample	12	50970-04	ABNLVI	L2350970-04,32,,gmr
17)	Sample	13	50970-05	ABNLVI	L2350970-05,32,,gmr
18)	Sample	14	50433-05	ABNLVI	L2350433-05,32,,rv
19)	Sample	15	50970-06	ABNLVI	L2350970-06,32,,gmr
20)	Sample	16	50269-11	ABNLVI	L2350269-11,32,,gmr
21)	Sample	17	49792-04	ABNLVI	L2349792-04,32,,gmr
22)	Sample	18	50405-03	ABNLVI	L2350405-03,32,,gmr
23)	Sample	19	50405-06	ABNLVI	L2350405-06,32,,gmr
24)	Sample	20	50405-01	ABNLVI	L2350405-01,32,,gmr
25)	Sample	21	50405-04	ABNLVI	L2350405-04,32,,gmr
26)	Sample	22	50405-05	ABNLVI	L2350405-05,32,,gmr
27)	Sample	23	823327-4	ABNLVI	WG1823327-4,32,,gmr
28)	Sample	24	823327-5	ABNLVI	WG1823327-5,32,,gmr
29)	Sample	25	823493-4	ABNLVI	WG1823493-4,32,,gmr
30)	Sample	26	823493-5	ABNLVI	WG1823493-5,32,,gmr

ORGANIC ELN REPORT

Workgroup: WG1823488

Prep Method: EPA 3510C
Solvent Type: DCM **Lot #:** EH108
Surrogate Type: ABN **Lot #:** 10212u-020224,
Spike Type: ABN **Lot #:** 10208s-012824,10214p-02092
Spike Verify by: EMI
Lims Spikelot: 8270-LVI

Additional Reagents/Stds

H2SO4	2023061363
Na2SO4	23d0756233
NaOH	10nnaoh081023

Conc.Method: Buchi
Solvent Type: DCM
Lot #: EH108

Additional Reagents/Stds

Cleanup 1

Cleanup Method 1:
Cleanup Method 2:
Solvent Type: **Lot #:**

Additional Reagents/Stds

Sample/ Type	Extraction: Extract Date	Analyst	Sample Vol ml	Ph	Surr Amt ml	Spike Amt ml	Concentration: Conc Date	Analyst	Final Vol ml	Conc Unit
L2350269-11 WATER	09/05/23 09:24	Tian-Long Chheou	275	<2, >12	1		09/05/23 20:08	Anita Ofori	1	H
L2350946-01 SAMP	09/05/23 02:44	Emmanuel Ilori	275	<2,>12	1		09/05/23 10:14	Caroline Doiron	1	H
L2350946-02 SAMP	09/05/23 02:44	Emmanuel Ilori	275	<2,>12	1		09/05/23 10:14	Caroline Doiron	1	H
L2350946-03 SAMP	09/05/23 02:44	Emmanuel Ilori	275	<2,>12	1		09/05/23 10:14	Caroline Doiron	1	H
L2350946-04 SAMP	09/05/23 02:44	Emmanuel Ilori	275	<2,>12	1		09/05/23 10:14	Caroline Doiron	1	H
L2350946-06 SAMP	09/05/23 02:44	Emmanuel Ilori	275	<2,>12	1		09/05/23 10:14	Caroline Doiron	1	H
WG1823488-1 BLANK	09/05/23 02:44 **WG1823489**	Emmanuel Ilori	275	<2,>12	1		09/05/23 10:14	Caroline Doiron	1	H

Reported: 13-SEP-23 10:54 AM

ORGANIC ELN REPORT

Workgroup: WG1823488

Sample/ Type	Extraction						Concentration			
	Extract Date	Analyst	Sample Vol **ml**	Ph	Surr Amt **ml**	Spike Amt **ml**	Conc Date	Analyst	Final Vol **ml**	Conc Unit
WG1823488-2 LCS	09/05/23 02:44 **WG1823489**	Emmanuel Ilori	275	<2,>12	1	1	09/05/23 10:14	Caroline Doiron	1	H
WG1823488-3 LCSD	09/05/23 02:44 **WG1823489**	Emmanuel Ilori	275	<2,>12	1	1	09/05/23 10:14	Caroline Doiron	1	H

Reported: 13-SEP-23 10:54 AM

ORGANIC ELN REPORT

Workgroup: WG1822188

Prep Method: EPA 3510C
Solvent Type: DCM **Lot #:** EG858
Surrogate Type: ABN **Lot #:** 10212e-020224,
Spike Type: ABN **Lot #:** 10208m-012824,10214i-02092
Spike Verify by: DDG/FMM
Lims Spikelot: 8270-LVI

Additional Reagents/Stds

H2SO4	A072523
Na2SO4	23A1161008
NaOH	10NNaOH081023

Conc.Method: Buchi
Solvent Type: DCM
Lot #: EG858

Additional Reagents/Stds

Cleanup 1

Cleanup Method 1:
Cleanup Method 2:
Solvent Type: **Lot #:**

Additional Reagents/Stds

Sample/ Type	Extraction: Extract Date	Analyst	Sample Vol ml	Ph	Surr Amt ml	Spike Amt ml	Concentration: Conc Date	Analyst	Final Vol ml	Conc Unit
L2350148-01 WATER	08/31/23 04:16	Francis Mbro-Menyah	275	<2,>12	1		08/31/23 18:28	Victor Kono	1	H
L2350148-02 WATER	08/31/23 04:16	Francis Mbro-Menyah	275	<2,>12	1		08/31/23 18:28	Victor Kono	1	H
L2350148-03 WATER	08/31/23 04:16	Francis Mbro-Menyah	275	<2,>12	1		08/31/23 18:28	Victor Kono	1	H
L2350148-04 WATER	08/31/23 04:16	Francis Mbro-Menyah	275	<2,>12	1		08/31/23 18:28	Victor Kono	1	H
L2350269-01 WATER	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1		08/31/23 18:28	Victor Kono	1	H
	SAMPLE BROKE ON BUCHI CONC.									
L2350269-02 WATER	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H

Reported: 13-SEP-23 10:54 AM

ORGANIC ELN REPORT

Workgroup: WG1822188

Sample/ Type	Extraction						Concentration			
	Extract Date	Analyst	Sample Vol **ml**	Ph	Surr Amt **ml**	Spike Amt **ml**	Conc Date	Analyst	Final Vol **ml**	Conc Unit
L2350269-03 WATER	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H
L2350269-04 WATER	08/31/23 19:22	Daniel Gyedu	275	<2,>12	1		09/01/23 04:03	Annabella Sarfo	1	H
L2350269-05 WATER	08/31/23 19:22	Daniel Gyedu	275	<2,>12	1		09/01/23 04:03	Annabella Sarfo	1	H
L2350269-06 WATER	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H
L2350269-07 WATER	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H
L2350269-08 WATER	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H
L2350269-09 WATER	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H
WG1822188-1 BLANK	08/30/23 19:43 **WG1822198**	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H
WG1822188-2 LCS	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1	1	08/31/23 02:13	Annabella Sarfo	1	H
WG1822188-3 LCSD	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1	1	08/31/23 02:13	Annabella Sarfo	1	H

Reported: 13-SEP-23 10:54 AM

ORGANIC ELN REPORT

Workgroup: WG1822188

Sample/ Type	Extraction						Concentration			
	Extract Date	Analyst	Sample Vol **ml**	Ph	Surr Amt **ml**	Spike Amt **ml**	Conc Date	Analyst	Final Vol **ml**	Conc Unit
WG1822188-4 MS	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1	1	08/31/23 02:13	Annabella Sarfo	1	H
WG1822188-5 MSD	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1	1	08/31/23 02:13	Annabella Sarfo	1	H

Reported: 13-SEP-23 10:54 AM

Semivolatiles Data
by Method 8270D-SIM

Semivolatiles QC Summary

Surrogate Recovery Summary
Form 2
Semivolatiles

Client: Alpha Geoscience
Project Name: HUNTINGTON READY MIX

Lab Number: L2350269
Project Number: 20116
Matrix: Water

CLIENT ID (LAB SAMPLE NO.)	S1 (2FP)	S2 (PHL)	S3 (NBZ)	S4 (FBP)	S5 (TBP)	S6 (TPH)	TOT OUT
MW-1S (L2350269-01)	65	54	78	76	81	64	0
MW-2S (L2350269-02)	79	69	118	80	131*	82	1
MW-3S (L2350269-03)	77	70	126*	86	128*	80	2
MW-4D (L2350269-04)	61	50	74	69	68	53	0
MW-5S (L2350269-05)	62	55	84	78	73	76	0
MW-6D (L2350269-06)	33	23	114	79	85	79	0
MW-7S (L2350269-07)	79	69	91	85	91	80	0
MW-8S (L2350269-08)	15*	15	72	74	10	74	1
DUP (L2350269-09)	61	51	70	64	66	64	0
EQUIPMENT BLANK (L2350269-11)	76	63	91	92	93	82	0
WG1822198-1BLANK	76	70	110	74	118	70	0
WG1822198-2LCS	92	85	122*	83	124*	82	2
WG1822198-3LCSD	92	84	130*	88	127*	82	2
MW-8SMS	77	67	92	80	85	77	0
MW-8SMSD	45	41	55	51	48	50	0
WG1823489-1BLANK	69	61	115	79	104	74	0
WG1823489-2LCS	71	65	95	67	106	72	0
WG1823489-3LCSD	76	70	100	71	114	77	0

QC LIMITS

(21-120)	2FP = 2-FLUOROPHENOL
(10-120)	PHL = PHENOL-D6
(23-120)	NBZ = NITROBENZENE-D5
(15-120)	FBP = 2-FLUOROBIPHENYL
(10-120)	TBP = 2,4,6-TRIBROMOPHENOL
(41-149)	TPH = 4-TERPHENYL-D14

*** Values outside of QC limits**

FORM II NYTCL-8270-SIM-LVI

Laboratory Control Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1822198-2 **Analysis Date** : 09/01/23 17:20	**File ID**	: 822198-2
LCSD Sample ID	: WG1822198-3 **Analysis Date** : 09/01/23 17:37	**File ID**	: 822198-3

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Acenaphthene	36	16	86	36	17	94	9	40-140	40
2-Chloronaphthalene	36	14	80	36	16	89	11	40-140	40
Fluoranthene	36	17	95	36	18	100	5	40-140	40
Hexachlorobutadiene	36	14	79	36	16	85	7	40-140	40
Naphthalene	36	14	80	36	16	88	10	40-140	40
Benzo(a)anthracene	36	19	104	36	20	110	6	40-140	40
Benzo(a)pyrene	36	20	111	36	21	117	5	40-140	40
Benzo(b)fluoranthene	36	19	106	36	20	111	5	40-140	40
Benzo(k)fluoranthene	36	20	110	36	21	114	4	40-140	40
Chrysene	36	18	98	36	19	103	5	40-140	40
Acenaphthylene	36	16	89	36	18	98	10	40-140	40
Anthracene	36	17	95	36	18	100	5	40-140	40
Benzo(ghi)perylene	36	21	114	36	22	120	5	40-140	40
Fluorene	36	16	89	36	18	96	8	40-140	40
Phenanthrene	36	16	89	36	17	94	5	40-140	40
Dibenzo(a,h)anthracene	36	20	109	36	21	114	4	40-140	40
Indeno(1,2,3-cd)pyrene	36	20	110	36	21	116	5	40-140	40
Pyrene	36	17	93	36	18	99	6	40-140	40
2-Methylnaphthalene	36	15	82	36	17	92	11	40-140	40
Pentachlorophenol	36	24	133	36	25	139	4	40-140	40
Hexachlorobenzene	36	16	89	36	17	95	7	40-140	40
Hexachloroethane	36	16	88	36	17	95	8	40-140	40

Laboratory Control Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1823489-2 **Analysis Date** : 09/07/23 15:19	**File ID**	: 823489-2
LCSD Sample ID	: WG1823489-3 **Analysis Date** : 09/07/23 15:36	**File ID**	: 823489-3

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Acenaphthene	36	13	74	36	15	84	13	40-140	40
2-Chloronaphthalene	36	13	73	36	15	81	10	40-140	40
Fluoranthene	36	16	88	36	18	99	12	40-140	40
Hexachlorobutadiene	36	13	71	36	14	79	11	40-140	40
Naphthalene	36	12	69	36	14	77	11	40-140	40
Benzo(a)anthracene	36	16	90	36	18	99	10	40-140	40
Benzo(a)pyrene	36	18	97	36	20	107	10	40-140	40
Benzo(b)fluoranthene	36	17	94	36	19	104	10	40-140	40
Benzo(k)fluoranthene	36	17	94	36	19	105	11	40-140	40
Chrysene	36	15	83	36	17	92	10	40-140	40
Acenaphthylene	36	15	83	36	17	92	10	40-140	40
Anthracene	36	15	81	36	16	91	12	40-140	40
Benzo(ghi)perylene	36	17	91	36	18	102	11	40-140	40
Fluorene	36	14	79	36	16	89	12	40-140	40
Phenanthrene	36	14	74	36	15	84	13	40-140	40
Dibenzo(a,h)anthracene	36	16	91	36	18	101	10	40-140	40
Indeno(1,2,3-cd)pyrene	36	17	92	36	19	103	11	40-140	40
Pyrene	36	16	87	36	18	98	12	40-140	40
2-Methylnaphthalene	36	14	75	36	15	84	11	40-140	40
Pentachlorophenol	36	22	119	36	24	131	10	40-140	40
Hexachlorobenzene	36	14	76	36	15	84	10	40-140	40
Hexachloroethane	36	14	77	36	16	86	11	40-140	40

Matrix Spike Sample Summary
Form 3
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2350269-08	**Analysis Date**	: 09/07/23 15:58
Matrix Spike	: WG1822198-4	**MS Analysis Date**	: 09/07/23 16:15
Matrix Spike Dup	: WG1822198-5	**MSD Analysis Date**	: 09/07/23 16:32

		Matrix Spike Sample			Matrix Spike Duplicate						
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD		Recovery Limits	RPD Limit
Acenaphthene	ND	18.2	16	88	18.2	10	55	46	Q	40-140	40
2-Chloronaphthalene	0.02J	18.2	14	77	18.2	9.1	50	42	Q	40-140	40
Fluoranthene	ND	18.2	14	77	18.2	9.7	53	36		40-140	40
Hexachlorobutadiene	ND	18.2	13	72	18.2	8.8	48	39		40-140	40
Naphthalene	ND	18.2	14	77	18.2	9.1	50	42	Q	40-140	40
Benzo(a)anthracene	ND	18.2	16	88	18.2	11	61	37		40-140	40
Benzo(a)pyrene	ND	18.2	17	94	18.2	11	61	43	Q	40-140	40
Benzo(b)fluoranthene	ND	18.2	18	99	18.2	12	66	40		40-140	40
Benzo(k)fluoranthene	ND	18.2	19	100	18.2	12	66	45	Q	40-140	40
Chrysene	ND	18.2	16	88	18.2	11	61	37		40-140	40
Acenaphthylene	ND	18.2	14	77	18.2	9.1	50	42	Q	40-140	40
Anthracene	0.04J	18.2	16	88	18.2	11	61	37		40-140	40
Benzo(ghi)perylene	ND	18.2	19	100	18.2	13	72	38		40-140	40
Fluorene	ND	18.2	16	88	18.2	10	55	46	Q	40-140	40
Phenanthrene	ND	18.2	16	88	18.2	11	61	37		40-140	40
Dibenzo(a,h)anthracene	ND	18.2	20	110	18.2	14	77	35		40-140	40
Indeno(1,2,3-cd)pyrene	ND	18.2	18	99	18.2	12	66	40		40-140	40
Pyrene	ND	18.2	14	77	18.2	9.4	52	39		40-140	40
2-Methylnaphthalene	ND	18.2	14	77	18.2	9.3	51	40		40-140	40
Pentachlorophenol	ND	18.2	10	55	18.2	9.3	51	7		40-140	40
Hexachlorobenzene	ND	18.2	16	88	18.2	11	61	37		40-140	40
Hexachloroethane	ND	18.2	14	77	18.2	8.7	48	47	Q	40-140	40

Method Blank Summary
Form 4
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: WG1822198-1	**Lab File ID**	: 822198-1
Instrument ID	: SV119	**Extraction Date**	: 08/30/23
Matrix	: WATER	**Analysis Date**	: 08/31/23 18:14
Level	: LOW		

Client Sample No.	Lab Sample ID	Analysis Date
MW-2S	L2350269-02	08/31/23 18:30
MW-3S	L2350269-03	08/31/23 18:46
MW-6D	L2350269-06	08/31/23 19:03
WG1822198-2LCS	WG1822198-2	09/01/23 17:20
WG1822198-3LCSD	WG1822198-3	09/01/23 17:37
MW-1S	L2350269-01	09/07/23 14:51
MW-4D	L2350269-04	09/07/23 15:07
MW-7S	L2350269-07	09/07/23 15:41
MW-8S	L2350269-08	09/07/23 15:58
MW-8SMS	WG1822198-4	09/07/23 16:15
MW-8SMSD	WG1822198-5	09/07/23 16:32
DUP	L2350269-09	09/07/23 16:49
MW-5S	L2350269-05	09/09/23 11:32

Method Blank Summary
Form 4
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: WG1823489-1	**Lab File ID**	: 823489-1
Instrument ID	: SV119	**Extraction Date**	: 09/05/23
Matrix	: WATER	**Analysis Date**	: 09/06/23 16:58
Level	: LOW		

Client Sample No.	Lab Sample ID	Analysis Date
EQUIPMENT BLANK	L2350269-11	09/07/23 13:43
WG1823489-2LCS	WG1823489-2	09/07/23 15:19
WG1823489-3LCSD	WG1823489-3	09/07/23 15:36

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV119	**Analysis Date**	: 03/06/23 11:20
Tune Standard	: R1670290-12	**Tune File ID**	: TUNE_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	51.2
68	Less than 2.0% of mass 69	0.7 (1.9)1
69		100
70	Less than 2.0% of mass 69	0.2 (.5)1
127	10.0 - 80.0% of Base Peak	53
197	Less than 2.0% of mass 198	0.3
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	7.1
275	10.0 - 60.0% of Base Peak	26.3
365	Greater than 1.0% of mass 198	2.7
441	Present, but less than 24% of mass 442	18.8
442	Base Peak, or >50% of mass 198	79
443	15.0 - 24.0% of mass 442	14.6 (18.5)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
IL10	R1670290-2	IL10	03/06/23 11:49
IL9	R1670290-11	IL9	03/06/23 12:55
IL8	R1670290-9	IL8	03/06/23 13:29
IL7	R1670290-10	IL7	03/06/23 13:46
IL6	R1670290-7	IL6	03/06/23 14:03
IL5	R1670290-8	IL5	03/06/23 14:19
IL4	R1670290-6	IL4	03/06/23 14:36
IL3	R1670290-4	IL3	03/06/23 14:52
IL2	R1670290-5	IL2	03/06/23 15:09
IL1	R1670290-3	IL1	03/06/23 15:26
ICV Quant Report	R1670290-1	ICV	03/06/23 15:42

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV119	**Analysis Date**	: 08/31/23 07:05
Tune Standard	: WG1822344-1	**Tune File ID**	: deg0831_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	59.4
68	Less than 2.0% of mass 69	0.7 (1.6)1
69		100
70	Less than 2.0% of mass 69	0.2 (.5)1
127	10.0 - 80.0% of Base Peak	54
197	Less than 2.0% of mass 198	0.8
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	8.2
275	10.0 - 60.0% of Base Peak	22.9
365	Greater than 1.0% of mass 198	2.5
441	Present, but less than 24% of mass 442	20.6
442	Base Peak, or >50% of mass 198	63.5
443	15.0 - 24.0% of mass 442	13.1 (20.7)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1822344-4TFACTOR-B	WG1822344-4	DEG0831	08/31/23 07:05
WG1822344-5TFACTOR-P	WG1822344-5	DEG0831	08/31/23 07:05
WG1822344-3CCAL	WG1822344-3	CCV0831	08/31/23 07:21
WG1822198-1BLANK	WG1822198-1	822198-1	08/31/23 18:14
MW-2S	L2350269-02	50269-02	08/31/23 18:30
MW-3S	L2350269-03	50269-03	08/31/23 18:46
MW-6D	L2350269-06	50269-06	08/31/23 19:03

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV119	**Analysis Date**	: 09/01/23 09:19
Tune Standard	: WG1822868-1	**Tune File ID**	: deg0901a_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	61.2
68	Less than 2.0% of mass 69	0.7 (1.6)1
69		100
70	Less than 2.0% of mass 69	0 (0)1
127	10.0 - 80.0% of Base Peak	58.2
197	Less than 2.0% of mass 198	0
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	7.8
275	10.0 - 60.0% of Base Peak	22
365	Greater than 1.0% of mass 198	2.1
441	Present, but less than 24% of mass 442	18.5
442	Base Peak, or >50% of mass 198	56.2
443	15.0 - 24.0% of mass 442	10.6 (18.8)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1822868-4TFACTOR-B	WG1822868-4	DEG0901A	09/01/23 09:19
WG1822868-5TFACTOR-P	WG1822868-5	DEG0901A	09/01/23 09:19
WG1822868-3CCAL	WG1822868-3	CCV0901	09/01/23 09:36
WG1822198-2LCS	WG1822198-2	822198-2	09/01/23 17:20
WG1822198-3LCSD	WG1822198-3	822198-3	09/01/23 17:37

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV119	**Analysis Date**	: 09/06/23 06:44
Tune Standard	: WG1824028-1	**Tune File ID**	: deg0906_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	63.4
68	Less than 2.0% of mass 69	0.8 (1.7)1
69		100
70	Less than 2.0% of mass 69	0.3 (.6)1
127	10.0 - 80.0% of Base Peak	57.1
197	Less than 2.0% of mass 198	0
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	7.8
275	10.0 - 60.0% of Base Peak	22.1
365	Greater than 1.0% of mass 198	2.6
441	Present, but less than 24% of mass 442	18.9
442	Base Peak, or >50% of mass 198	54.5
443	15.0 - 24.0% of mass 442	10.1 (18.5)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1824028-4TFACTOR-B	WG1824028-4	DEG0906	09/06/23 06:44
WG1824028-5TFACTOR-P	WG1824028-5	DEG0906	09/06/23 06:44
WG1824028-3CCAL	WG1824028-3	CCV0906	09/06/23 07:01
WG1823489-1BLANK	WG1823489-1	823489-1	09/06/23 16:58

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV119	**Analysis Date**	: 09/07/23 10:24
Tune Standard	: WG1824714-1	**Tune File ID**	: deg0907a_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	71.2
68	Less than 2.0% of mass 69	0.9 (1.8)1
69		100
70	Less than 2.0% of mass 69	0 (0)1
127	10.0 - 80.0% of Base Peak	56.2
197	Less than 2.0% of mass 198	0.8
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	6.6
275	10.0 - 60.0% of Base Peak	20.1
365	Greater than 1.0% of mass 198	2.3
441	Present, but less than 24% of mass 442	19.8
442	Base Peak, or >50% of mass 198	50.2
443	15.0 - 24.0% of mass 442	9.7 (19.3)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1824714-4TFACTOR-B	WG1824714-4	DEG0907A	09/07/23 10:24
WG1824714-5TFACTOR-P	WG1824714-5	DEG0907A	09/07/23 10:24
WG1824714-3CCAL	WG1824714-3	CCV0907A	09/07/23 10:41
WG1823489-2LCS	WG1823489-2	823489-2	09/07/23 15:19
WG1823489-3LCSD	WG1823489-3	823489-3	09/07/23 15:36

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV128	**Analysis Date**	: 08/31/23 09:28
Tune Standard	: R1737186-12	**Tune File ID**	: TUNE_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	49.9
68	Less than 2.0% of mass 69	0.8 (1.9)1
69		100
70	Less than 2.0% of mass 69	0.2 (.5)1
127	10.0 - 80.0% of Base Peak	54.3
197	Less than 2.0% of mass 198	0
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	6.8
275	10.0 - 60.0% of Base Peak	25.6
365	Greater than 1.0% of mass 198	3.5
441	Present, but less than 24% of mass 442	17.3
442	Base Peak, or >50% of mass 198	86.4
443	15.0 - 24.0% of mass 442	16.9 (19.6)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
IL10	R1737186-2	IL10	08/31/23 09:45
IL9	R1737186-10	IL9	08/31/23 10:01
IL8	R1737186-9	IL8	08/31/23 10:17
IL7	R1737186-8	IL7	08/31/23 10:34
IL6	R1737186-7	IL6	08/31/23 10:50
IL5	R1737186-6	IL5	08/31/23 11:06
IL4	R1737186-5	IL4	08/31/23 11:23
IL2	R1737186-3	IL2	08/31/23 11:56
IL1	R1737186-1	IL1	08/31/23 12:12

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV128	**Analysis Date**	: 09/05/23 08:49
Tune Standard	: R1737186-13	**Tune File ID**	: TUNEa_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	47.1
68	Less than 2.0% of mass 69	0.7 (1.7)1
69		100
70	Less than 2.0% of mass 69	0.2 (.6)1
127	10.0 - 80.0% of Base Peak	52.6
197	Less than 2.0% of mass 198	0
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	6.7
275	10.0 - 60.0% of Base Peak	25.7
365	Greater than 1.0% of mass 198	3.5
441	Present, but less than 24% of mass 442	17.8
442	Base Peak, or >50% of mass 198	89.2
443	15.0 - 24.0% of mass 442	17.2 (19.2)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
IL3a	R1737186-4	IL3A	09/05/23 09:24
ICV Quant Report	R1737186-11	ICVA	09/05/23 11:08

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV128	**Analysis Date**	: 09/07/23 07:09
Tune Standard	: WG1824579-1	**Tune File ID**	: deg0907_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	53.1
68	Less than 2.0% of mass 69	0.7 (1.6)1
69		100
70	Less than 2.0% of mass 69	0.2 (.5)1
127	10.0 - 80.0% of Base Peak	55
197	Less than 2.0% of mass 198	0
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	7
275	10.0 - 60.0% of Base Peak	25.2
365	Greater than 1.0% of mass 198	3.2
441	Present, but less than 24% of mass 442	18.2
442	Base Peak, or >50% of mass 198	77.9
443	15.0 - 24.0% of mass 442	14.5 (18.6)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1824579-4TFACTOR-B	WG1824579-4	DEG0907	09/07/23 07:09
WG1824579-5TFACTOR-P	WG1824579-5	DEG0907	09/07/23 07:09
WG1824579-3CCAL	WG1824579-3	CCV0907A	09/07/23 07:51
EQUIPMENT BLANK	L2350269-11	50269-11	09/07/23 13:43
MW-1S	L2350269-01	50269-01	09/07/23 14:51
MW-4D	L2350269-04	50269-04	09/07/23 15:07
MW-7S	L2350269-07	50269-07	09/07/23 15:41
MW-8S	L2350269-08	50269-08	09/07/23 15:58
WG1822198-4MS	WG1822198-4	822198-4	09/07/23 16:15
WG1822198-5MSD	WG1822198-5	822198-5	09/07/23 16:32
DUP	L2350269-09	50269-09	09/07/23 16:49

Instrument Performance Check (Tune) Summary
Form 5
Semivolatiles
Decafluorotriphenylphosphine (DFTPP)

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV128	**Analysis Date**	: 09/09/23 07:37
Tune Standard	: WG1825552-1	**Tune File ID**	: deg0909_tune

m/e	Ion Abundance Criteria	%Relative Abundance
51	10.0 - 80.0% of Base Peak	50.4
68	Less than 2.0% of mass 69	0.4 (.8)1
69		100
70	Less than 2.0% of mass 69	0.2 (.6)1
127	10.0 - 80.0% of Base Peak	55
197	Less than 2.0% of mass 198	0
198	Base Peak, or >50% of mass 442	100
199	5.0 - 9.0% of mass 198	7
275	10.0 - 60.0% of Base Peak	26.4
365	Greater than 1.0% of mass 198	3.5
441	Present, but less than 24% of mass 442	18.8
442	Base Peak, or >50% of mass 198	77.6
443	15.0 - 24.0% of mass 442	16.3 (21)2

1-Value is % of mass 69 2-Value is % of mass 442

This Check Applies to the following Samples, MS, MSD, Blanks, and Standards:

Client Sample ID	Lab Sample ID	File ID	Analysis Date/Time
WG1825552-4TFACTOR-B	WG1825552-4	DEG0909	09/09/23 07:37
WG1825552-5TFACTOR-P	WG1825552-5	DEG0909	09/09/23 07:37
WG1825552-3CCAL	WG1825552-3	CCV0909	09/09/23 07:57
MW-5S	L2350269-05	50269-05	09/09/23 11:32

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV119	**Analysis Date**	: 08/31/23 07:21:00
Sample No	: WG1822344-3	**Lab File ID**	: CCV0831

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
	Area	RT	Area	RT	Area	RT
WG1822344-3	44950	2.27	161376	2.94	81212	3.93
Upper Limit	89900	2.77	322752	3.44	162424	4.43
Lower Limit	22475	1.77	80688	2.44	40606	3.43
Sample ID						
WG1822198-1 BLANK	64590	2.26	242685	2.94	129758	3.92
MW-2S	48230	2.26	178756	2.94	93237	3.92
MW-3S	60752	2.26	229413	2.94	124446	3.92
MW-6D	54245	2.26	198287	2.94	105148	3.92

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV119	**Analysis Date**	: 08/31/23 07:21:00
Sample No	: WG1822344-3	**Lab File ID**	: CCV0831

	Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area	RT	Area	RT	Area	RT
WG1822344-3	177149	4.77	152182	6.33	169708	7.57
Upper Limit	354298	5.27	304364	6.83	339416	8.07
Lower Limit	88575	4.27	76091	5.83	84854	7.07
Sample ID						
WG1822198-1 BLANK	293954	4.77	243909	6.33	229562	7.56
MW-2S	212320	4.77	211772	6.33	217119	7.56
MW-3S	282574	4.77	239857	6.33	225769	7.56
MW-6D	244458	4.77	231918	6.33	236832	7.56

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV119	**Analysis Date**	: 09/01/23 09:36:00
Sample No	: WG1822868-3	**Lab File ID**	: CCV0901

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
	Area	RT	Area	RT	Area	RT
WG1822868-3	53473	2.26	193222	2.93	98963	3.92
Upper Limit	106946	2.76	386444	3.43	197926	4.42
Lower Limit	26737	1.76	96611	2.43	49482	3.42
Sample ID						
WG1822198-2 LCS	56188	2.26	205875	2.94	100912	3.92
WG1822198-3 LCSD	56047	2.26	205224	2.94	101546	3.92

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV119	**Analysis Date**	: 09/01/23 09:36:00
Sample No	: WG1822868-3	**Lab File ID**	: CCV0901

	Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area	RT	Area	RT	Area	RT
WG1822868-3	220308	4.76	182645	6.36	191472	7.59
Upper Limit	440616	5.26	365290	6.86	382944	8.09
Lower Limit	110154	4.26	91323	5.86	95736	7.09
Sample ID						
WG1822198-2 LCS	218679	4.77	182597	6.34	201420	7.57
WG1822198-3 LCSD	217541	4.77	182858	6.34	203937	7.58

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV119	**Analysis Date**	: 09/06/23 07:01:00
Sample No	: WG1824028-3	**Lab File ID**	: CCV0906

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
	Area	RT	Area	RT	Area	RT
WG1824028-3	56406	2.24	206621	2.90	110458	3.88
Upper Limit	112812	2.74	413242	3.40	220916	4.38
Lower Limit	28203	1.74	103311	2.40	55229	3.38
Sample ID						
WG1823489-1 BLANK	62701	2.23	236871	2.90	129173	3.87

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV119	**Analysis Date**	: 09/06/23 07:01:00
Sample No	: WG1824028-3	**Lab File ID**	: CCV0906

	Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area	RT	Area	RT	Area	RT
WG1824028-3	263512	4.72	254375	6.27	265654	7.46
Upper Limit	527024	5.22	508750	6.77	531308	7.96
Lower Limit	131756	4.22	127188	5.77	132827	6.96
Sample ID						
WG1823489-1 BLANK	269019	4.71	257100	6.27	276738	7.47

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV128	**Analysis Date**	: 09/07/23 07:51:00
Sample No	: WG1824579-3	**Lab File ID**	: CCV0907A

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
	Area	RT	Area	RT	Area	RT
WG1824579-3	2265	2.26	8686	2.93	5058	3.92
Upper Limit	4530	2.76	17372	3.43	10116	4.42
Lower Limit	1133	1.76	4343	2.43	2529	3.42
Sample ID						
EQUIPMENT BLANK	3098	2.26	11805	2.93	6262	3.91
MW-1S	4001	2.26	15270	2.93	8053	3.91
MW-4D	4177	2.26	16214	2.93	9038	3.91
MW-7S	3555	2.26	13547	2.93	7181	3.91
MW-8S	3153	2.26	11807	2.93	6241	3.91
MW-8S MS	3659	2.26	14983	2.93	7269	3.91
MW-8S MSD	3546	2.26	14058	2.93	6944	3.91
DUP	3452	2.26	12853	2.93	6386	3.92

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT

RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV128	**Analysis Date**	: 09/07/23 07:51:00
Sample No	: WG1824579-3	**Lab File ID**	: CCV0907A

	Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area	RT	Area	RT	Area	RT
WG1824579-3	12202	4.76	11660	6.34	12832	7.62
Upper Limit	24404	5.26	23320	6.84	25664	8.12
Lower Limit	6101	4.26	5830	5.84	6416	7.12
Sample ID						
EQUIPMENT BLANK	12311	4.76	7890	6.33	8596	7.61
MW-1S	14819	4.76	9815	6.33	11421	7.61
MW-4D	17659	4.76	10647	6.33	12001	7.60
MW-7S	13849	4.76	10063	6.33	11392	7.60
MW-8S	12354	4.76	9207	6.33	10772	7.60
MW-8S MS	13775	4.76	9810	6.33	10203	7.61
MW-8S MSD	12985	4.76	9302	6.33	10795	7.61
DUP	11800	4.76	9504	6.33	12221	7.62

Area Upper Limit = +100% of internal standard area

Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT

RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV119	**Analysis Date**	: 09/07/23 10:41:00
Sample No	: WG1824714-3	**Lab File ID**	: CCV0907A

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
	Area	RT	Area	RT	Area	RT
WG1824714-3	64197	2.17	236804	2.83	129941	3.80
Upper Limit	128394	2.67	473608	3.33	259882	4.30
Lower Limit	32099	1.67	118402	2.33	64971	3.30
Sample ID						
WG1823489-2 LCS	47391	2.17	175185	2.83	92790	3.79
WG1823489-3 LCSD	45880	2.17	170253	2.83	89504	3.79

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV119	**Analysis Date**	: 09/07/23 10:41:00
Sample No	: WG1824714-3	**Lab File ID**	: CCV0907A

	Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area	RT	Area	RT	Area	RT
WG1824714-3	316231	4.63	299020	6.25	305793	7.39
Upper Limit	632462	5.13	598040	6.75	611586	7.89
Lower Limit	158116	4.13	149510	5.75	152897	6.89
Sample ID						
WG1823489-2 LCS	217185	4.62	209214	6.21	228162	7.35
WG1823489-3 LCSD	212093	4.62	207547	6.19	221845	7.32

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV128	**Analysis Date**	: 09/09/23 07:57:00
Sample No	: WG1825552-3	**Lab File ID**	: CCV0909

	1,4-Dichlorobenzene-d4		Naphthalene-d8		Acenaphthene-d10	
	Area	RT	Area	RT	Area	RT
WG1825552-3	1923	2.26	7039	2.93	3871	3.92
Upper Limit	3846	2.76	14078	3.43	7742	4.42
Lower Limit	962	1.76	3520	2.43	1936	3.42
Sample ID						
MW-5S	2535	2.26	9639	2.93	5638	3.91

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Internal Standard Area and RT Summary
Form 8a
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: SV128	**Analysis Date**	: 09/09/23 07:57:00
Sample No	: WG1825552-3	**Lab File ID**	: CCV0909

	Phenanthrene-d10		Chrysene-d12		Perylene-d12	
	Area	RT	Area	RT	Area	RT
WG1825552-3	8884	4.77	8811	6.34	9706	7.63
Upper Limit	17768	5.27	17622	6.84	19412	8.13
Lower Limit	4442	4.27	4406	5.84	4853	7.13
Sample ID						
MW-5S	12649	4.77	11829	6.34	15194	7.62

Area Upper Limit = +100% of internal standard area
Area Lower Limit = - 50% of internal standard area

RT Upper Limit = +0.50 minutes of internal standard RT
RT Lower Limit = -0.50 minutes of internal standard RT

* Values outside of QC limits

Date Created: 03/07/23
Created By: Jason Hebert
File: PM14021-1
Page: 1

EPA 8270E Low Level PAH (WATER)

Holding Time: 7 days
Container/Sample Preservation: 2 - Amber 1000ml unpreserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Acenaphthene	83-32-9	0.1	0.035	ug/l	40-140	40	40-140	40	40			
2-Chloronaphthalene	91-58-7	0.2	0.035	ug/l	40-140	40	40-140	40	40			
Fluoranthene	206-44-0	0.1	0.038	ug/l	40-140	40	40-140	40	40			
Hexachlorobutadiene	87-68-3	0.5	0.036	ug/l	40-140	40	40-140	40	40			
Naphthalene	91-20-3	0.1	0.043	ug/l	40-140	40	40-140	40	40			
Benzo(a)anthracene	56-55-3	0.1	0.018	ug/l	40-140	40	40-140	40	40			
Benzo(a)pyrene	50-32-8	0.1	0.039	ug/l	40-140	40	40-140	40	40			
Benzo(b)fluoranthene	205-99-2	0.1	0.016	ug/l	40-140	40	40-140	40	40			
Benzo(k)fluoranthene	207-08-9	0.1	0.042	ug/l	40-140	40	40-140	40	40			
Chrysene	218-01-9	0.1	0.038	ug/l	40-140	40	40-140	40	40			
Acenaphthylene	208-96-8	0.1	0.035	ug/l	40-140	40	40-140	40	40			
Anthracene	120-12-7	0.1	0.035	ug/l	40-140	40	40-140	40	40			
Benzo(ghi)perylene	191-24-2	0.1	0.042	ug/l	40-140	40	40-140	40	40			
Fluorene	86-73-7	0.1	0.037	ug/l	40-140	40	40-140	40	40			
Phenanthrene	85-01-8	0.1	0.015	ug/l	40-140	40	40-140	40	40			
Dibenzo(a,h)anthracene	53-70-3	0.1	0.039	ug/l	40-140	40	40-140	40	40			
Indeno(1,2,3-cd)Pyrene	193-39-5	0.1	0.04	ug/l	40-140	40	40-140	40	40			
Pyrene	129-00-0	0.1	0.04	ug/l	40-140	40	40-140	40	40			
1-Methylnaphthalene	90-12-0	0.1	0.041	ug/l	40-140	40	40-140	40	40			
2-Methylnaphthalene	91-57-6	0.1	0.045	ug/l	40-140	40	40-140	40	40			
Pentachlorophenol	87-86-5	0.8	0.22	ug/l	40-140	40	40-140	40	40			
Hexachlorobenzene	118-74-1	0.8	0.032	ug/l	40-140	40	40-140	40	40			
Hexachloroethane	67-72-1	0.8	0.03	ug/l	40-140	40	40-140	40	40			
2-Fluorophenol	*367-12-4*									*21-120*		
Phenol-d6	*13127-88-3*									*10-120*		
Nitrobenzene-d5	*4165-60-0*									*23-120*		
2-Fluorobiphenyl	*321-60-8*									*15-120*		
2,4,6-Tribromophenol	*118-79-6*									*10-120*		
4-Terphenyl-d14	*1718-51-0*									*41-149*		

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 03/07/23
Created By: Jason Hebert
File: PM14022-1
Page: 1

EPA 8270E Low Level PAH (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - Glass 250ml/8oz unpreserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Acenaphthene	83-32-9	6.68	1.4028	ug/kg	40-140	50	40-140	50	50			
2-Chloronaphthalene	91-58-7	6.68	0.8684	ug/kg	40-140	50	40-140	50	50			
Fluoranthene	206-44-0	6.68	0.4676	ug/kg	40-140	50	40-140	50	50			
Hexachlorobutadiene	87-68-3	6.68	0.9352	ug/kg	34-107	50	40-140	50	50			
Naphthalene	91-20-3	6.68	1.2024	ug/kg	40-140	50	40-140	50	50			
Benzo(a)anthracene	56-55-3	6.68	0.6346	ug/kg	40-140	50	40-140	50	50			
Benzo(a)pyrene	50-32-8	6.68	0.8016	ug/kg	40-140	50	40-140	50	50			
Benzo(b)fluoranthene	205-99-2	6.68	0.6346	ug/kg	40-140	50	40-140	50	50			
Benzo(k)fluoranthene	207-08-9	6.68	0.6012	ug/kg	40-140	50	40-140	50	50			
Chrysene	218-01-9	6.68	0.501	ug/kg	40-140	50	40-140	50	50			
Acenaphthylene	208-96-8	6.68	0.835	ug/kg	40-140	50	40-140	50	50			
Anthracene	120-12-7	6.68	0.5344	ug/kg	40-140	50	40-140	50	50			
Benzo(ghi)perylene	191-24-2	6.68	0.5678	ug/kg	40-140	50	40-140	50	50			
Fluorene	86-73-7	6.68	0.8016	ug/kg	40-140	50	40-140	50	50			
Phenanthrene	85-01-8	6.68	0.5678	ug/kg	40-140	50	40-140	50	50			
Dibenzo(a,h)anthracene	53-70-3	6.68	0.668	ug/kg	40-140	50	40-140	50	50			
Indeno(1,2,3-cd)Pyrene	193-39-5	6.68	0.8016	ug/kg	40-140	50	40-140	50	50			
Pyrene	129-00-0	6.68	0.4676	ug/kg	35-142	50	35-142	50	50			
1-Methylnaphthalene	90-12-0	6.68	1.0354	ug/kg	40-140	50	40-140	50	50			
2-Methylnaphthalene	91-57-6	6.68	1.9038	ug/kg	40-140	50	40-140	50	50			
Pentachlorophenol	87-86-5	26.72	2.9392	ug/kg	17-109	50	17-109	50	50			
Hexachlorobenzene	118-74-1	6.68	0.7014	ug/kg	40-140	50	40-140	50	50			
Hexachloroethane	67-72-1	6.68	1.2358	ug/kg	29-106	50	40-140	50	50			
2-Fluorophenol	*367-12-4*									*25-120*		
Phenol-d6	*13127-88-3*									*10-120*		
Nitrobenzene-d5	*4165-60-0*									*23-120*		
2-Fluorobiphenyl	*321-60-8*									*30-120*		
2,4,6-Tribromophenol	*118-79-6*									*10-136*		
4-Terphenyl-d14	*1718-51-0*									*18-120*		

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Semivolatile Sample Data

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 14:51
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-01	**Analyst**	: JJW
Sample Amount	: 275 ml	**Instrument ID**	: SV128
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	0.10	0.10	0.01	J
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	0.03	0.10	0.02	J
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	0.22	0.10	0.05	
56-55-3	Benzo(a)anthracene	0.03	0.10	0.02	J
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	0.01	0.10	0.01	J
120-12-7	Anthracene	0.07	0.10	0.01	J
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	0.06	0.10	0.01	J
85-01-8	Phenanthrene	0.09	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	0.03	0.10	0.02	J
91-57-6	2-Methylnaphthalene	0.05	0.10	0.02	J
87-86-5	Pentachlorophenol	0.23	0.80	0.01	J
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 18:30
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-02	**Analyst**	: DV
Sample Amount	: 275 ml	**Instrument ID**	: SV119
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	0.02	0.10	0.01	J
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 18:46
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-03	**Analyst**	: DV
Sample Amount	: 275 ml	**Instrument ID**	: SV119
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:07
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-04	**Analyst**	: JJW
Sample Amount	: 275 ml	**Instrument ID**	: SV128
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/09/23 11:32
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-05	**Analyst**	: JJW
Sample Amount	: 275 ml	**Instrument ID**	: SV128
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 19:03
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-06	**Analyst**	: DV
Sample Amount	: 275 ml	**Instrument ID**	: SV119
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:41
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-07	**Analyst**	: JJW
Sample Amount	: 275 ml	**Instrument ID**	: SV128
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:58
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-08	**Analyst**	: JJW
Sample Amount	: 275 ml	**Instrument ID**	: SV128
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	0.02	0.20	0.02	J
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	0.04	0.10	0.01	J
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 16:49
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-09	**Analyst**	: JJW
Sample Amount	: 275 ml	**Instrument ID**	: SV128
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	0.10	0.10	0.01	J
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	0.24	0.10	0.05	
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	0.02	0.10	0.01	J
120-12-7	Anthracene	0.12	0.10	0.01	
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	0.05	0.10	0.01	J
85-01-8	Phenanthrene	0.08	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	0.05	0.10	0.02	J
87-86-5	Pentachlorophenol	0.85	0.80	0.01	
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 13:43
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 50269-11	**Analyst**	: AH
Sample Amount	: 275 ml	**Instrument ID**	: SV128
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	0.05	0.10	0.05	J
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	0.03	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822198-1	**Date Collected**	: NA
Client ID	: WG1822198-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/31/23 18:14
Sample Matrix	: WATER	**Date Extracted**	: 08/30/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 822198-1	**Analyst**	: AH
Sample Amount	: 275 ml	**Instrument ID**	: SV119
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	0.02	0.10	0.01	J
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	0.01	0.10	0.01	J
85-01-8	Phenanthrene	0.02	0.10	0.02	J
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	0.04	0.80	0.01	J
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Results Summary
Form 1
Semivolatile Organics by GC/MS-SIM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823489-1	**Date Collected**	: NA
Client ID	: WG1823489-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/06/23 16:58
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8270E-SIM	**Dilution Factor**	: 1
Lab File ID	: 823489-1	**Analyst**	: JJW
Sample Amount	: 275 ml	**Instrument ID**	: SV119
Extraction Method	: EPA 3510C	**GC Column**	: RXI-5SilM
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
83-32-9	Acenaphthene	ND	0.10	0.01	U
91-58-7	2-Chloronaphthalene	ND	0.20	0.02	U
206-44-0	Fluoranthene	ND	0.10	0.02	U
87-68-3	Hexachlorobutadiene	ND	0.50	0.05	U
91-20-3	Naphthalene	ND	0.10	0.05	U
56-55-3	Benzo(a)anthracene	ND	0.10	0.02	U
50-32-8	Benzo(a)pyrene	ND	0.10	0.02	U
205-99-2	Benzo(b)fluoranthene	ND	0.10	0.01	U
207-08-9	Benzo(k)fluoranthene	ND	0.10	0.01	U
218-01-9	Chrysene	ND	0.10	0.01	U
208-96-8	Acenaphthylene	ND	0.10	0.01	U
120-12-7	Anthracene	ND	0.10	0.01	U
191-24-2	Benzo(ghi)perylene	ND	0.10	0.01	U
86-73-7	Fluorene	ND	0.10	0.01	U
85-01-8	Phenanthrene	ND	0.10	0.02	U
53-70-3	Dibenzo(a,h)anthracene	ND	0.10	0.01	U
193-39-5	Indeno(1,2,3-cd)pyrene	ND	0.10	0.01	U
129-00-0	Pyrene	ND	0.10	0.02	U
91-57-6	2-Methylnaphthalene	ND	0.10	0.02	U
87-86-5	Pentachlorophenol	ND	0.80	0.01	U
118-74-1	Hexachlorobenzene	ND	0.80	0.01	U
67-72-1	Hexachloroethane	ND	0.80	0.06	U

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : 50269-02.D
Acq On : 31 Aug 2023 06:30 pm
Operator : sv119:dv
Sample : L2350269-02,32,,ah
Misc : WG1822344,WG1822198,ical19785
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Sep 08 10:15:58 2023
Quant Method : I:\8270sim\sv119\230831LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230831LVI\ccv0831.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.263	152	48230	4000.000	ng/ml	0.00
Standard Area 1 = 44950			Recovery = 107.30%			
8) Naphthalene-d8	2.937	136	178756	4000.000	ng/ml	0.00
Standard Area 1 = 161376			Recovery = 110.77%			
17) Acenaphthene-d10	3.921	164	93237	4000.000	ng/ml	0.00
Standard Area 1 = 81212			Recovery = 114.81%			
22) Phenanthrene-d10	4.767	188	212320	4000.000	ng/ml	0.00
Standard Area 1 = 177149			Recovery = 119.85%			
31) Chrysene-d12	6.334	240	211772	4000.000	ng/ml	0.00
Standard Area 1 = 152182			Recovery = 139.16%			
36) Perylene-d12	7.564	264	217119	4000.000	ng/ml	0.00
Standard Area 1 = 169708			Recovery = 127.94%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.655	112	47070	3966.570	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 79.33%			
3) Phenol-d6	2.074	99	48065	3428.214	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 68.56%			
7) Nitrobenzene-d5	2.547	82	31171	2955.219	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 118.21%			
13) 2-Fluorobiphenyl	3.541	172	73903	2010.853	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 80.43%			
21) 2,4,6-Tribromophenol	4.370	330	24559	6537.532	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 130.75%#			
30) 4-Terphenyl-d14	5.687	244	90902	2051.835	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 82.07%			
Target Compounds						Qvalue
6) Hexachloroethane	0.000		0	N.D.	d	
9) Naphthalene	0.000		0	N.D.	d	
10) Hexachlorobutadiene	0.000		0	N.D.	d	
11) 2-Methylnaphthalene	3.332	142	87	3.058	ng/ml	99
14) 2-Chloronaphthalene	0.000		0	N.D.	d	
16) Acenaphthylene	0.000		0	N.D.	d	
18) Acenaphthene	0.000		0	N.D.	d	
20) Fluorene	0.000		0	N.D.	d	
24) Hexachlorobenzene	0.000		0	N.D.	d	
25) Pentachlorophenol	0.000		0	N.D.	d	

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : 50269-02.D
Acq On : 31 Aug 2023 06:30 pm
Operator : sv119:dv
Sample : L2350269-02,32,,ah
Misc : WG1822344,WG1822198,ical19785
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Sep 08 10:15:58 2023
Quant Method : I:\8270sim\sv119\230831LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230831LVI\ccv0831.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.779	178	277	5.149	ng/ml	96
27) Anthracene	4.808	178	238	4.742	ng/ml#	90
28) Fluoranthene	5.463	202	250	4.067	ng/ml	97
29) Pyrene	5.594	202	256	4.021	ng/ml	99
32) Benzo[a]anthracene	0.000		0	N.D.	d	
34) Chrysene	0.000		0	N.D.	d	
37) Benzo[b]fluoranthene	0.000		0	N.D.	d	
38) Benzo[k]fluoranthene	0.000		0	N.D.	d	
39) Benzo[a]pyrene	0.000		0	N.D.	d	
40) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.	d	
41) Dibenzo[a,h]anthracene	0.000		0	N.D.	d	
42) Benzo[g,h,i]perylene	0.000		0	N.D.	d	

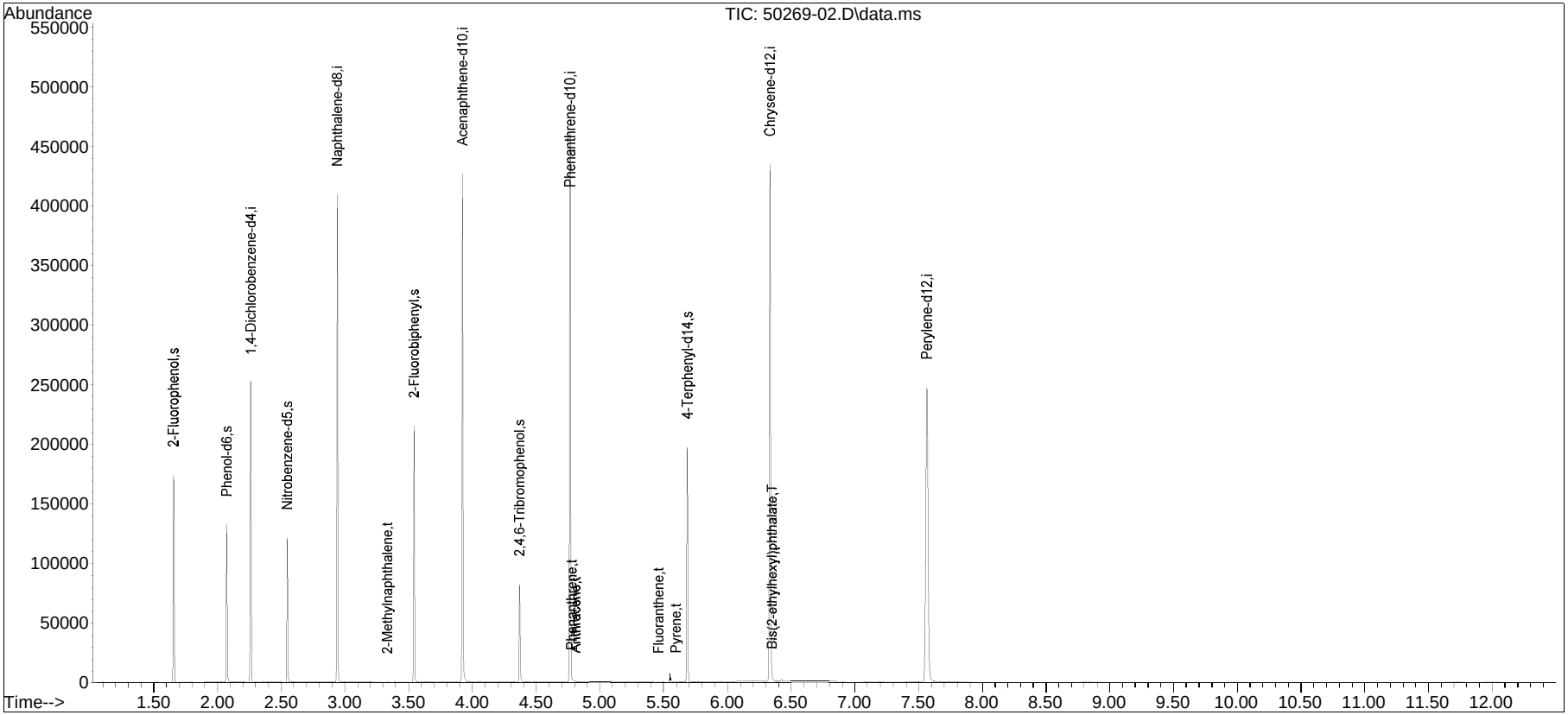
(#) = qualifier out of range (m) = manual integration (+) = signals summed

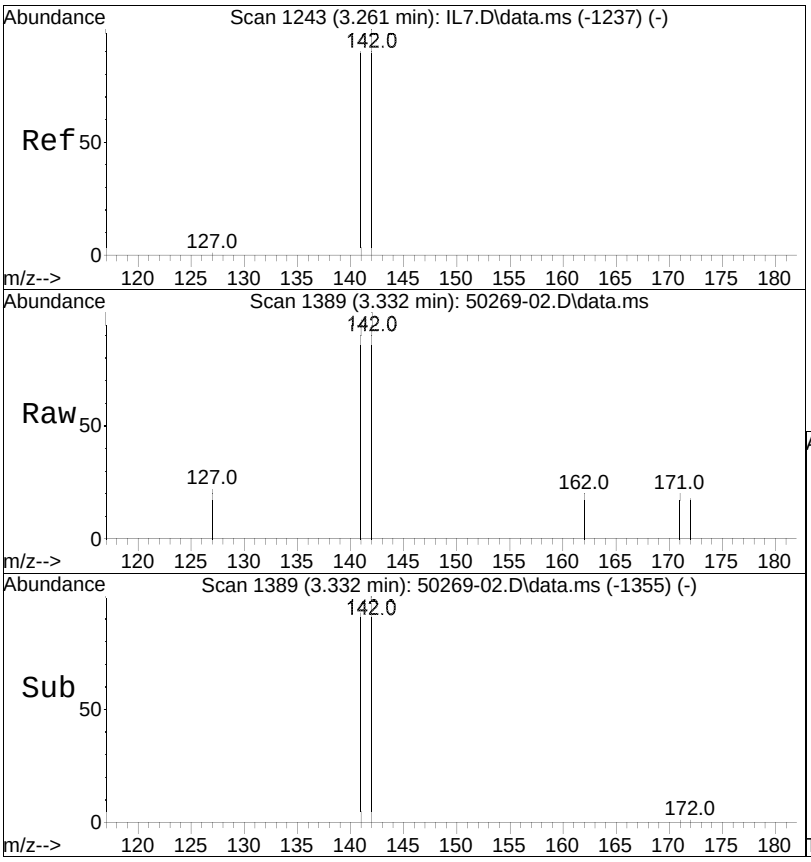
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : 50269-02.D
Acq On : 31 Aug 2023 06:30 pm
Operator : sv119:dv
Sample : L2350269-02,32,,ah
Misc : WG1822344,WG1822198,ical19785
ALS Vial : 39 Sample Multiplier: 1

Quant Time: Sep 08 10:15:58 2023
Quant Method : I:\8270sim\sv119\230831LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:11 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0831.D•

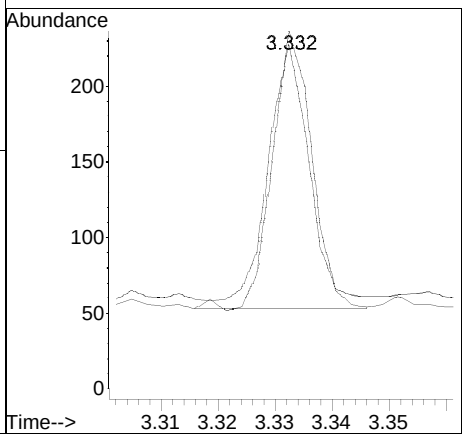


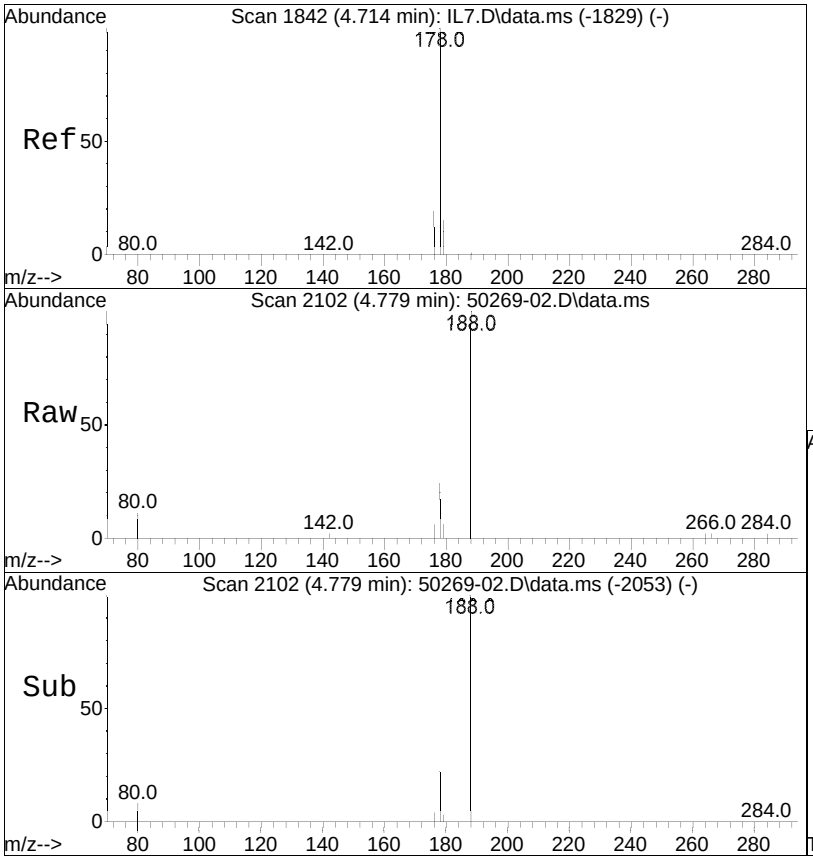


#11
2-Methylnaphthalene
Concen: 3.06 ng/ml
RT: 3.332 min Scan# 1389
Delta R.T. -0.006 min
Lab File: 50269-02.D
Acq: 31 Aug 2023 06:30 pm

Tgt Ion:142 Resp: 87

Ion	Ratio	Lower	Upper
142	100		
141	93.1	74.1	111.1

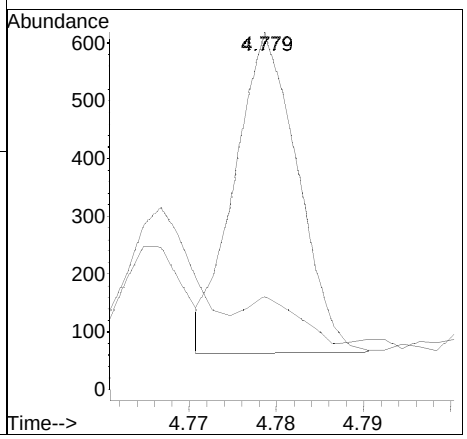


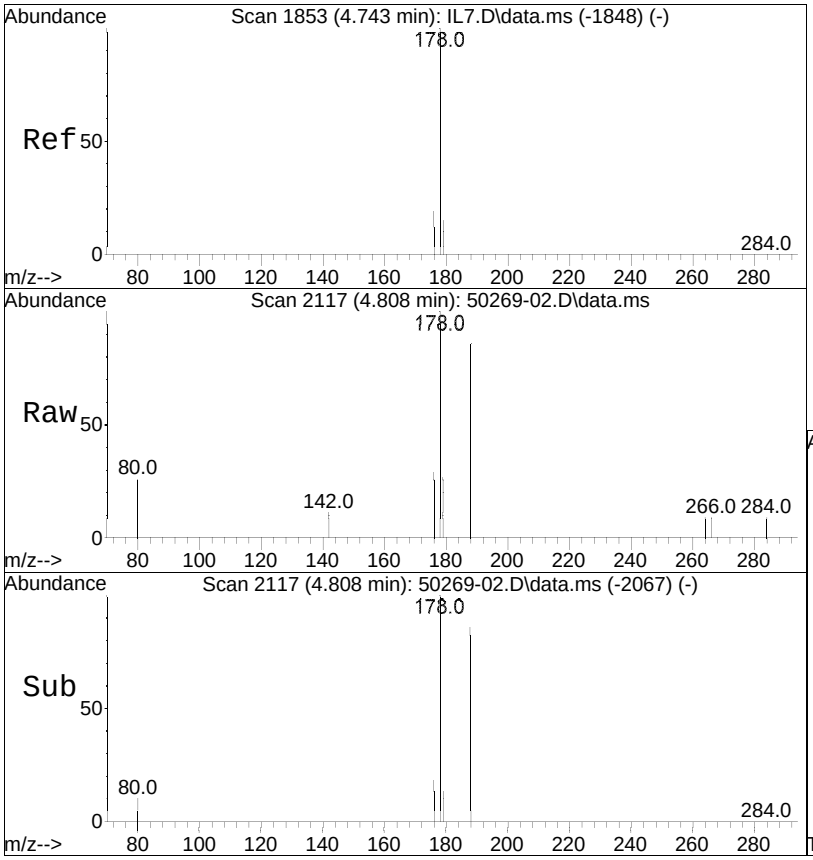


#26
Phenanthrene
Concen: 5.15 ng/ml
RT: 4.779 min Scan# 2102
Delta R.T. -0.004 min
Lab File: 50269-02.D
Acq: 31 Aug 2023 06:30 pm

Tgt Ion:178 Resp: 277

Ion	Ratio	Lower	Upper
178	100		
179	13.7	12.3	18.5

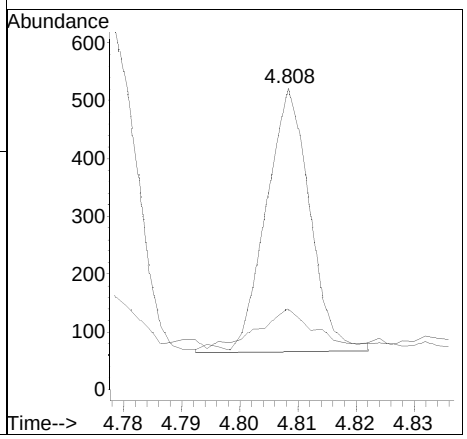


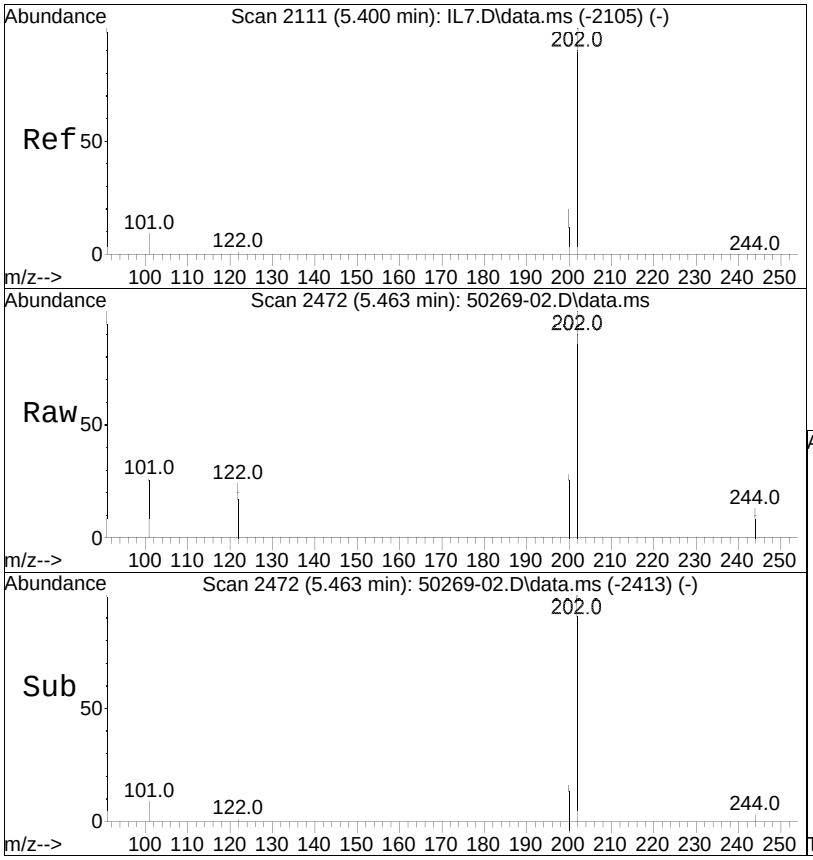


#27
Anthracene
Concen: 4.74 ng/ml
RT: 4.808 min Scan# 2117
Delta R.T. -0.002 min
Lab File: 50269-02.D
Acq: 31 Aug 2023 06:30 pm

Tgt Ion:178 Resp: 238

Ion	Ratio	Lower	Upper
178	100		
179	19.3	12.2	18.4#

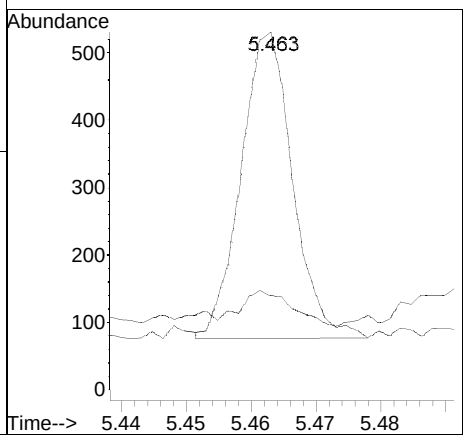


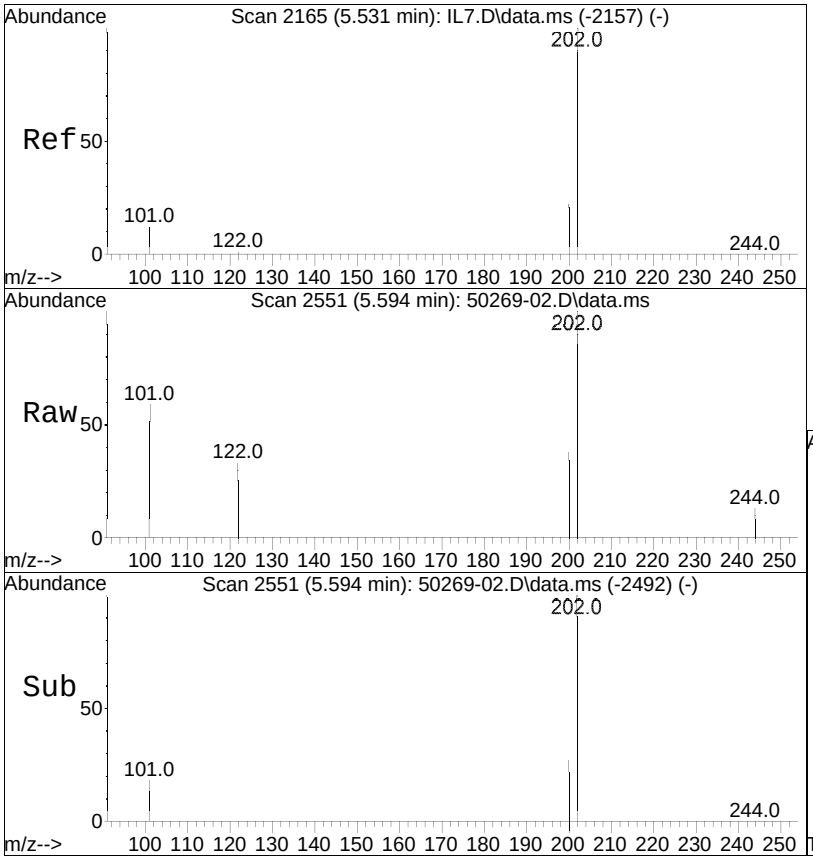


#28
Fluoranthene
Concen: 4.07 ng/ml
RT: 5.463 min Scan# 2472
Delta R.T. -0.002 min
Lab File: 50269-02.D
Acq: 31 Aug 2023 06:30 pm

Tgt Ion:202 Resp: 250

Ion	Ratio	Lower	Upper
202	100		
101	11.6	8.3	12.5

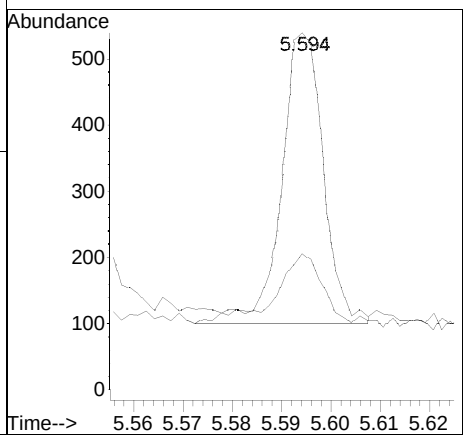




#29
Pyrene
Concen: 4.02 ng/ml
RT: 5.594 min Scan# 2551
Delta R.T. -0.002 min
Lab File: 50269-02.D
Acq: 31 Aug 2023 06:30 pm

Tgt Ion:202 Resp: 256

Ion	Ratio	Lower	Upper
202	100		
200	21.9	17.3	25.9



Manual Integration Report

Data Path	: I:\8270SIM\sv119\230831LVI	QMethod	: SIM-LVI_230306_sv119.M
Data File	: 50269-02.D	Operator	: sv119:dv
Date Inj'd	: 8/31/2023 6:30 pm	Instrument	: SV119
Sample	: L2350269-02,32,,ah	Quant Date	: 8/31/2023 6:45 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : 50269-03.D
Acq On : 31 Aug 2023 06:46 pm
Operator : sv119:dv
Sample : L2350269-03,32,,ah
Misc : WG1822344,WG1822198,ical19785
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Sep 08 10:17:03 2023
Quant Method : I:\8270sim\sv119\230831LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230831LVI\ccv0831.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.264	152	60752	4000.000	ng/ml	0.00
Standard Area 1 = 44950			Recovery = 135.15%			
8) Naphthalene-d8	2.938	136	229413	4000.000	ng/ml	0.00
Standard Area 1 = 161376			Recovery = 142.16%			
17) Acenaphthene-d10	3.921	164	124446	4000.000	ng/ml	0.00
Standard Area 1 = 81212			Recovery = 153.24%			
22) Phenanthrene-d10	4.767	188	282574	4000.000	ng/ml	0.00
Standard Area 1 = 177149			Recovery = 159.51%			
31) Chrysene-d12	6.334	240	239857	4000.000	ng/ml	0.00
Standard Area 1 = 152182			Recovery = 157.61%			
36) Perylene-d12	7.564	264	225769	4000.000	ng/ml	0.00
Standard Area 1 = 169708			Recovery = 133.03%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.656	112	57592	3852.918	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 77.06%			
3) Phenol-d6	2.074	99	61862	3502.834	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 70.06%			
7) Nitrobenzene-d5	2.548	82	41865	3150.988	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 126.04%			
13) 2-Fluorobiphenyl	3.541	172	101404	2149.889	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 86.00%			
21) 2,4,6-Tribromophenol	4.370	330	32110	6403.993	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 128.08%#			
30) 4-Terphenyl-d14	5.687	244	117660	1995.522	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 79.82%			

Target Compounds				Qvalue
6) Hexachloroethane	0.000	0	N.D. d	
9) Naphthalene	0.000	0	N.D. d	
10) Hexachlorobutadiene	0.000	0	N.D.	
11) 2-Methylnaphthalene	0.000	0	N.D. d	
14) 2-Chloronaphthalene	0.000	0	N.D. d	
16) Acenaphthylene	0.000	0	N.D. d	
18) Acenaphthene	0.000	0	N.D. d	
20) Fluorene	0.000	0	N.D. d	
24) Hexachlorobenzene	0.000	0	N.D. d	
25) Pentachlorophenol	0.000	0	N.D. d	

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : 50269-03.D
Acq On : 31 Aug 2023 06:46 pm
Operator : sv119:dv
Sample : L2350269-03,32,,ah
Misc : WG1822344,WG1822198,ical19785
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Sep 08 10:17:03 2023
Quant Method : I:\8270sim\sv119\230831LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230831LVI\ccv0831.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	0.000		0	N.D.	d	
27) Anthracene	0.000		0	N.D.	d	
28) Fluoranthene	0.000		0	N.D.	d	
29) Pyrene	0.000		0	N.D.	d	
32) Benzo[a]anthracene	0.000		0	N.D.	d	
34) Chrysene	0.000		0	N.D.	d	
37) Benzo[b]fluoranthene	0.000		0	N.D.	d	
38) Benzo[k]fluoranthene	0.000		0	N.D.	d	
39) Benzo[a]pyrene	0.000		0	N.D.	d	
40) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.	d	
41) Dibenzo[a,h]anthracene	0.000		0	N.D.	d	
42) Benzo[g,h,i]perylene	0.000		0	N.D.	d	

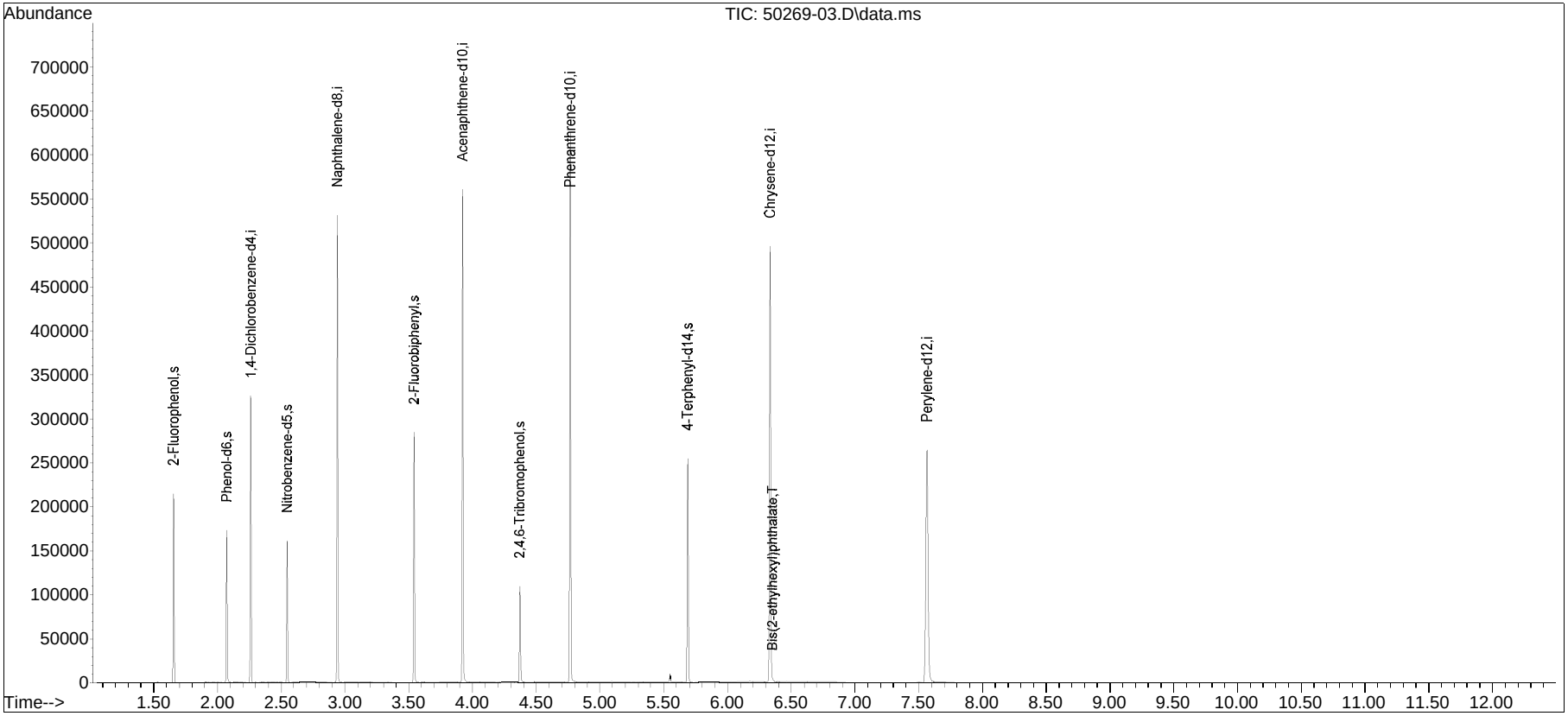
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : 50269-03.D
Acq On : 31 Aug 2023 06:46 pm
Operator : sv119:dv
Sample : L2350269-03,32,,ah
Misc : WG1822344,WG1822198,ical19785
ALS Vial : 40 Sample Multiplier: 1

Quant Time: Sep 08 10:17:03 2023
Quant Method : I:\8270sim\sv119\230831LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:11 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0831.D•



Manual Integration Report

Data Path	: I:\8270SIM\sv119\230831LVI	QMethod	: SIM-LVI_230306_sv119.M
Data File	: 50269-03.D	Operator	: sv119:dv
Date Inj'd	: 8/31/2023 6:46 pm	Instrument	: SV119
Sample	: L2350269-03,32,,ah	Quant Date	: 8/31/2023 7:01 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : 50269-06.D
Acq On : 31 Aug 2023 07:03 pm
Operator : sv119:dv
Sample : L2350269-06,32,,ah
Misc : WG1822344,WG1822198,ical19785
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Sep 08 10:17:56 2023
Quant Method : I:\8270sim\sv119\230831LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230831LVI\ccv0831.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.264	152	54245	4000.000	ng/ml	0.00
Standard Area 1 = 44950			Recovery = 120.68%			
8) Naphthalene-d8	2.938	136	198287	4000.000	ng/ml	0.00
Standard Area 1 = 161376			Recovery = 122.87%			
17) Acenaphthene-d10	3.921	164	105148	4000.000	ng/ml	0.00
Standard Area 1 = 81212			Recovery = 129.47%			
22) Phenanthrene-d10	4.767	188	244458	4000.000	ng/ml	0.00
Standard Area 1 = 177149			Recovery = 138.00%			
31) Chrysene-d12	6.332	240	231918	4000.000	ng/ml	0.00
Standard Area 1 = 152182			Recovery = 152.40%			
36) Perylene-d12	7.564	264	236832	4000.000	ng/ml	0.00
Standard Area 1 = 169708			Recovery = 139.55%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.657	112	22109	1656.523	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 33.13%			
3) Phenol-d6	2.074	99	18027	1143.194	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 22.86%			
7) Nitrobenzene-d5	2.548	82	33955	2862.202	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 114.49%			
13) 2-Fluorobiphenyl	3.541	172	80059	1963.789	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 78.55%			
21) 2,4,6-Tribromophenol	4.370	330	17965	4240.506	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 84.81%			
30) 4-Terphenyl-d14	5.687	244	101086	1981.740	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 79.27%			

Target Compounds				Qvalue
6) Hexachloroethane	0.000	0	N.D. d	
9) Naphthalene	0.000	0	N.D. d	
10) Hexachlorobutadiene	0.000	0	N.D. d	
11) 2-Methylnaphthalene	0.000	0	N.D. d	
14) 2-Chloronaphthalene	0.000	0	N.D. d	
16) Acenaphthylene	0.000	0	N.D. d	
18) Acenaphthene	0.000	0	N.D. d	
20) Fluorene	0.000	0	N.D. d	
24) Hexachlorobenzene	0.000	0	N.D. d	
25) Pentachlorophenol	0.000	0	N.D. d	

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : 50269-06.D
Acq On : 31 Aug 2023 07:03 pm
Operator : sv119:dv
Sample : L2350269-06,32,,ah
Misc : WG1822344,WG1822198,ical19785
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Sep 08 10:17:56 2023
Quant Method : I:\8270sim\sv119\230831LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230831LVI\ccv0831.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	0.000		0	N.D.	d	
27) Anthracene	0.000		0	N.D.	d	
28) Fluoranthene	0.000		0	N.D.	d	
29) Pyrene	0.000		0	N.D.	d	
32) Benzo[a]anthracene	0.000		0	N.D.	d	
34) Chrysene	0.000		0	N.D.	d	
37) Benzo[b]fluoranthene	0.000		0	N.D.	d	
38) Benzo[k]fluoranthene	0.000		0	N.D.	d	
39) Benzo[a]pyrene	0.000		0	N.D.	d	
40) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.	d	
41) Dibenzo[a,h]anthracene	0.000		0	N.D.	d	
42) Benzo[g,h,i]perylene	0.000		0	N.D.	d	

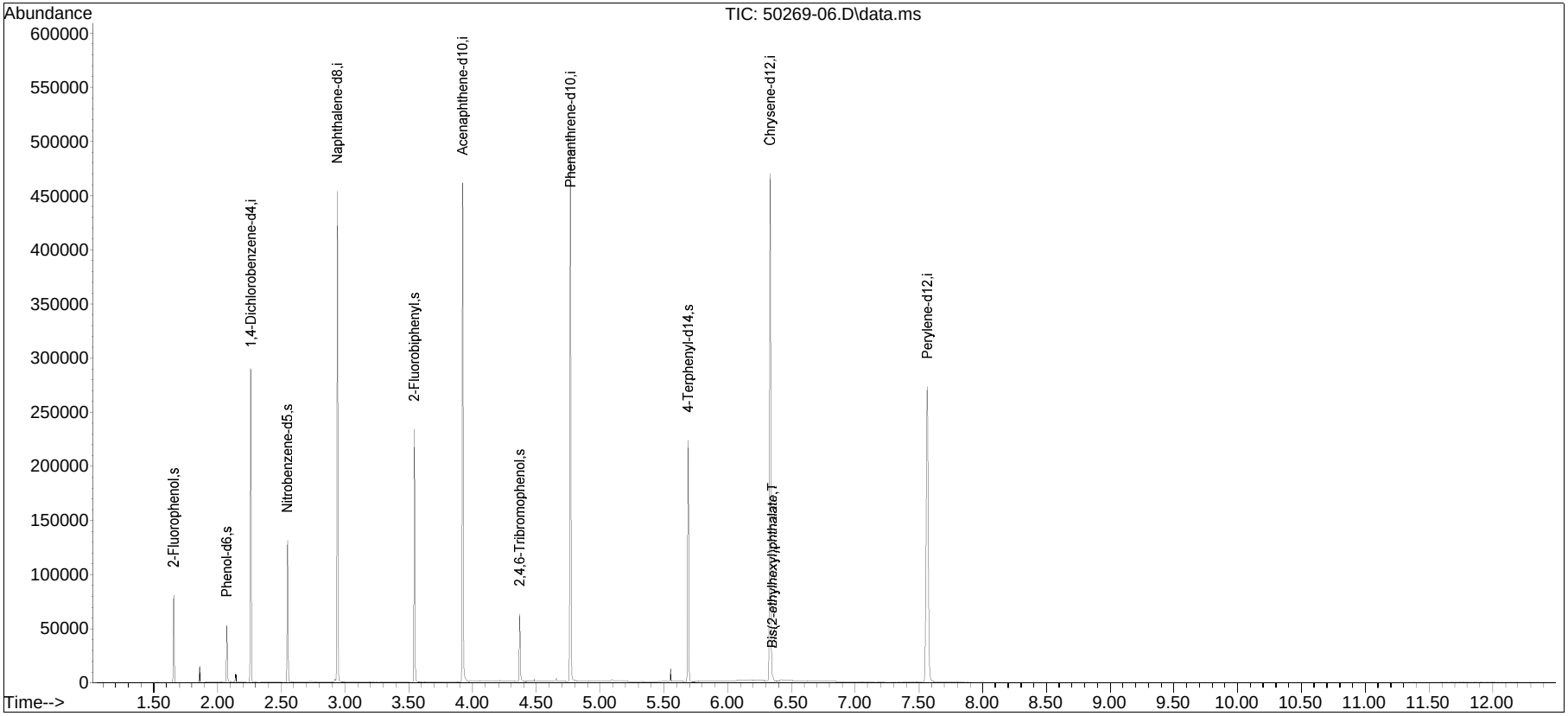
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : 50269-06.D
Acq On : 31 Aug 2023 07:03 pm
Operator : sv119:dv
Sample : L2350269-06,32,,ah
Misc : WG1822344,WG1822198,ical19785
ALS Vial : 41 Sample Multiplier: 1

Quant Time: Sep 08 10:17:56 2023
Quant Method : I:\8270sim\sv119\230831LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:11 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0831.D•



Manual Integration Report

Data Path	: I:\8270SIM\sv119\230831LVI	QMethod	: SIM-LVI_230306_sv119.M
Data File	: 50269-06.D	Operator	: sv119:dv
Date Inj'd	: 8/31/2023 7:03 pm	Instrument	: SV119
Sample	: L2350269-06,32,,ah	Quant Date	: 8/31/2023 7:17 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-11.D
Acq On : 07 Sep 2023 01:43 pm
Operator : SV128:ah
Sample : L2350269-11,32,,ah
Misc : WG1824579,WG1823489,ical20340
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 10 13:13:35 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.262	152	3098	4000.000	ng/ml	0.00
Standard Area 1 = 2265			Recovery = 136.78%			
8) Naphthalene-d8	2.928	136	11805	4000.000	ng/ml	0.00
Standard Area 1 = 8686			Recovery = 135.91%			
17) Acenaphthene-d10	3.912	164	6262	4000.000	ng/ml	0.00
Standard Area 1 = 5058			Recovery = 123.80%			
22) Phenanthrene-d10	4.761	188	12311	4000.000	ng/ml	0.00
Standard Area 1 = 12202			Recovery = 100.89%			
31) Chrysene-d12	6.328	240	7890	4000.000	ng/ml	-0.01
Standard Area 1 = 11660			Recovery = 67.67%			
36) Perylene-d12	7.606	264	8596	4000.000	ng/ml	-0.01
Standard Area 1 = 12832			Recovery = 66.99%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.665	112	2993	3780.691	ng/ml	0.02
Spiked Amount 5000.000	Range 15 - 110		Recovery = 75.61%			
3) Phenol-d6	2.076	99	3070	3169.101	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 63.38%			
7) Nitrobenzene-d5	2.540	82	1873	2281.042	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 91.24%			
13) 2-Fluorobiphenyl	3.530	172	5551	2292.732	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 91.71%			
21) 2,4,6-Tribromophenol	4.364	330	1223	4651.356	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 93.03%			
30) 4-Terphenyl-d14	5.685	244	5314	2042.549	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 81.70%			
Target Compounds						Qvalue
6) Hexachloroethane	0.000		0	N.D.		
9) Naphthalene	2.940	128	41M4	14.215	ng/ml	
10) Hexachlorobutadiene	0.000		0	N.D.		
11) 2-Methylnaphthalene	3.322	142	11	5.714	ng/ml	93
14) 2-Chloronaphthalene	0.000		0	N.D.		
16) Acenaphthylene	0.000		0	N.D. d		
18) Acenaphthene	0.000		0	N.D. d		
20) Fluorene	4.224	166	7M2	3.233	ng/ml	
24) Hexachlorobenzene	0.000		0	N.D. d		
25) Pentachlorophenol	0.000		0	N.D. d		

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-11.D
Acq On : 07 Sep 2023 01:43 pm
Operator : SV128:ah
Sample : L2350269-11,32,,ah
Misc : WG1824579,WG1823489,ical20340
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 10 13:13:35 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.772	178	21M6	6.842	ng/ml	
27) Anthracene	0.000		0	N.D.	d	
28) Fluoranthene	5.458	202	12M4	3.366	ng/ml	
29) Pyrene	5.589	202	9M7	2.438	ng/ml	
32) Benzo[a]anthracene	6.328	228	29M1	4.287	ng/ml	
34) Chrysene	6.344	228	4M3	1.643	ng/ml	
37) Benzo[b]fluoranthene	0.000		0	N.D.	d	
38) Benzo[k]fluoranthene	0.000		0	N.D.	d	
39) Benzo[a]pyrene	0.000		0	N.D.	d	
40) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.		
41) Dibenzo[a,h]anthracene	0.000		0	N.D.		
42) Benzo[g,h,i]perylene	0.000		0	N.D.		

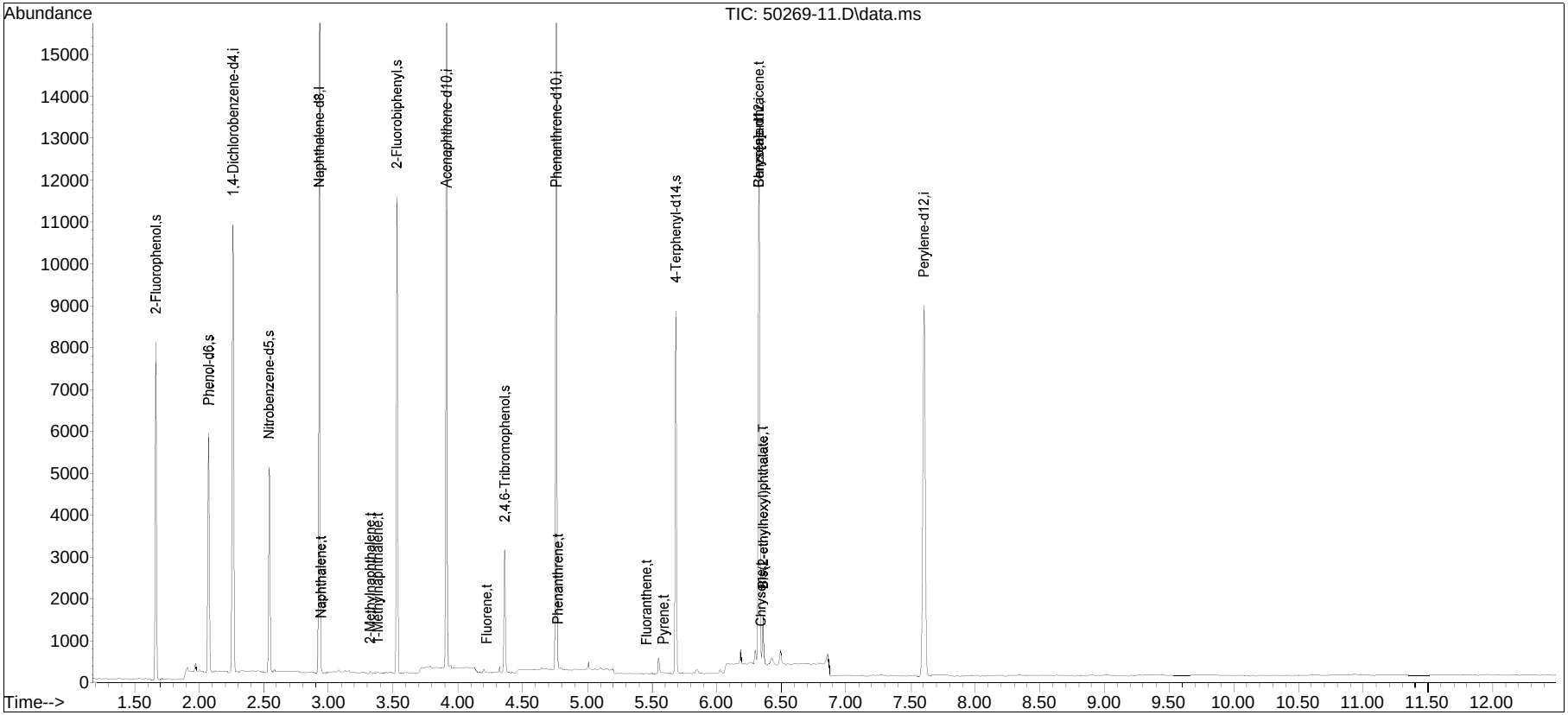
(#) = qualifier out of range (m) = manual integration (+) = signals summed

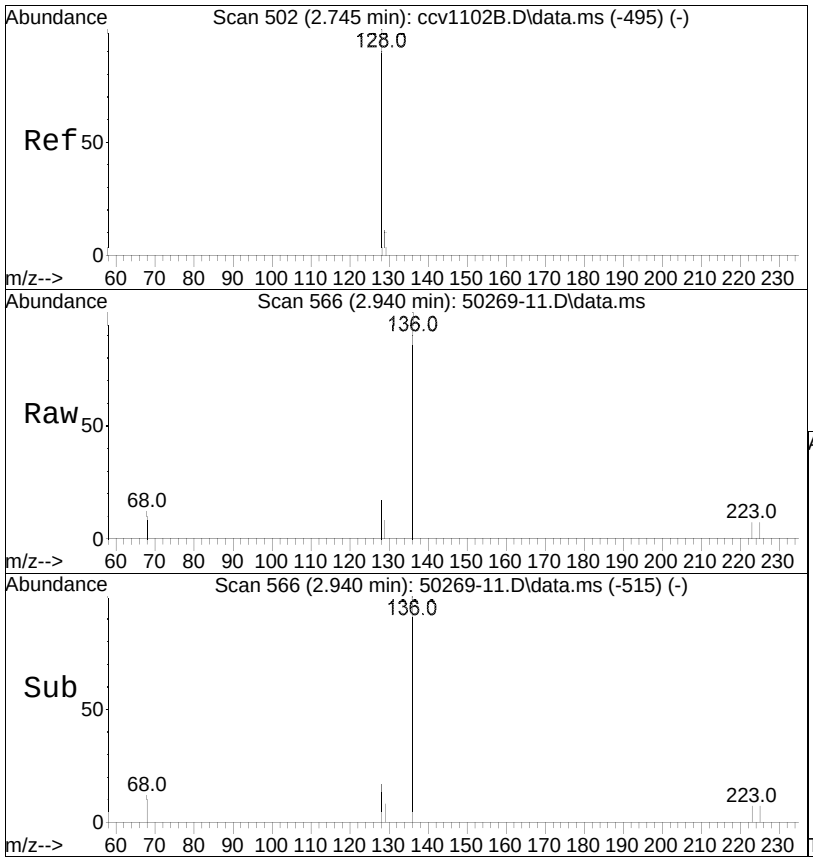
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-11.D
Acq On : 07 Sep 2023 01:43 pm
Operator : SV128:ah
Sample : L2350269-11,32,,ah
Misc : WG1824579,WG1823489,ical20340
ALS Vial : 19 Sample Multiplier: 1

Quant Time: Sep 10 13:13:35 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listedv0907a.D•

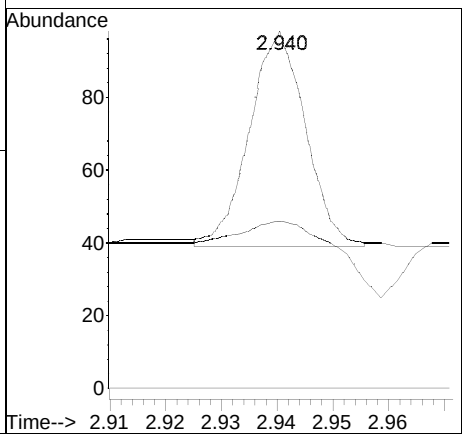


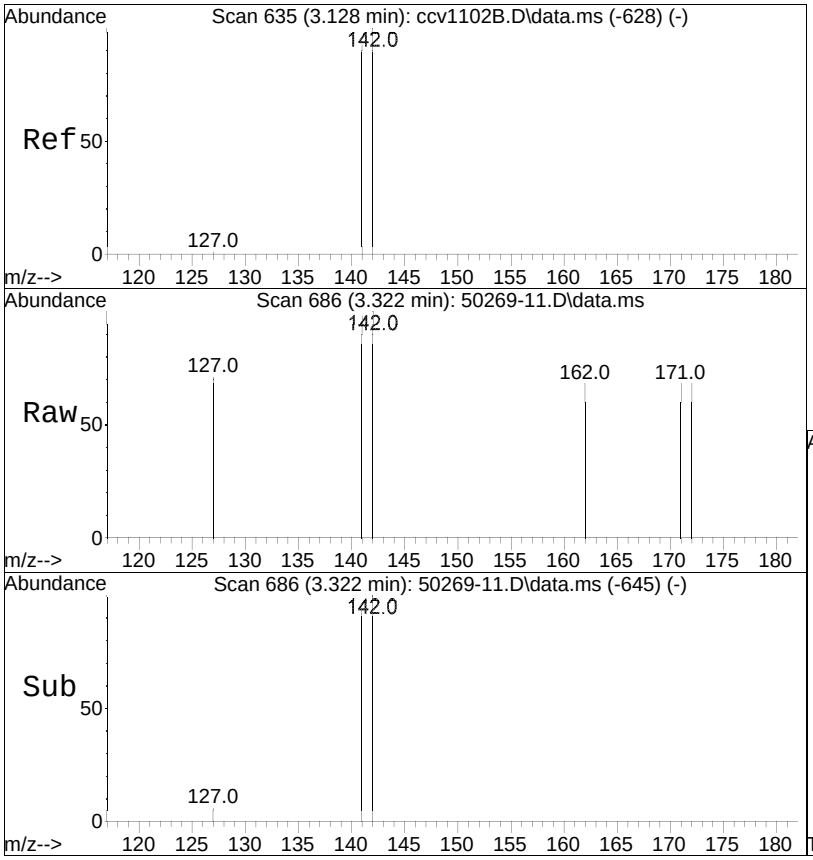


#9
Naphthalene
Concen: 14.21 ng/ml M4
RT: 2.940 min Scan# 566
Delta R.T. 0.000 min
Lab File: 50269-11.D
Acq: 07 Sep 2023 01:43 pm

Tgt Ion:128 Resp: 41

Ion	Ratio	Lower	Upper
128	100		
129	9.8	8.8	13.2
127	0.0	0.0	0.0

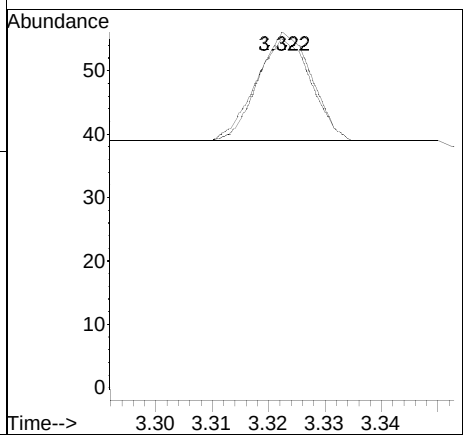


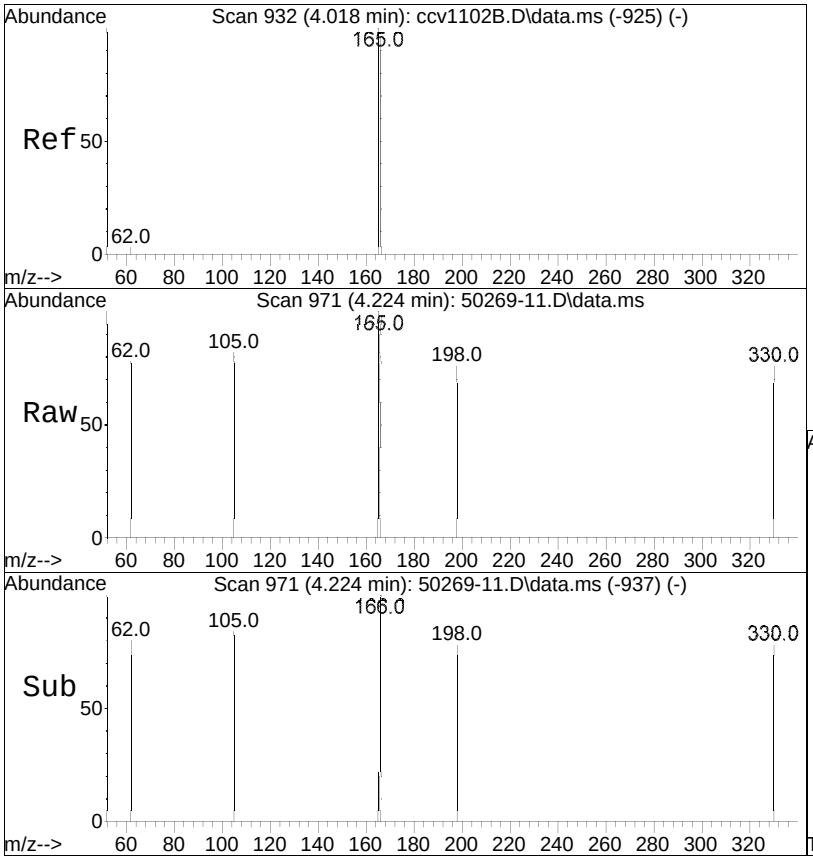


#11
2-Methylnaphthalene
Concen: 5.71 ng/ml
RT: 3.322 min Scan# 686
Delta R.T. 0.000 min
Lab File: 50269-11.D
Acq: 07 Sep 2023 01:43 pm

Tgt Ion:142 Resp: 11

Ion	Ratio	Lower	Upper
142	100		
141	100.0	75.0	112.4

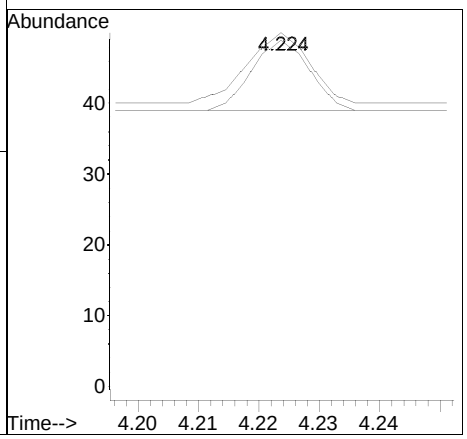


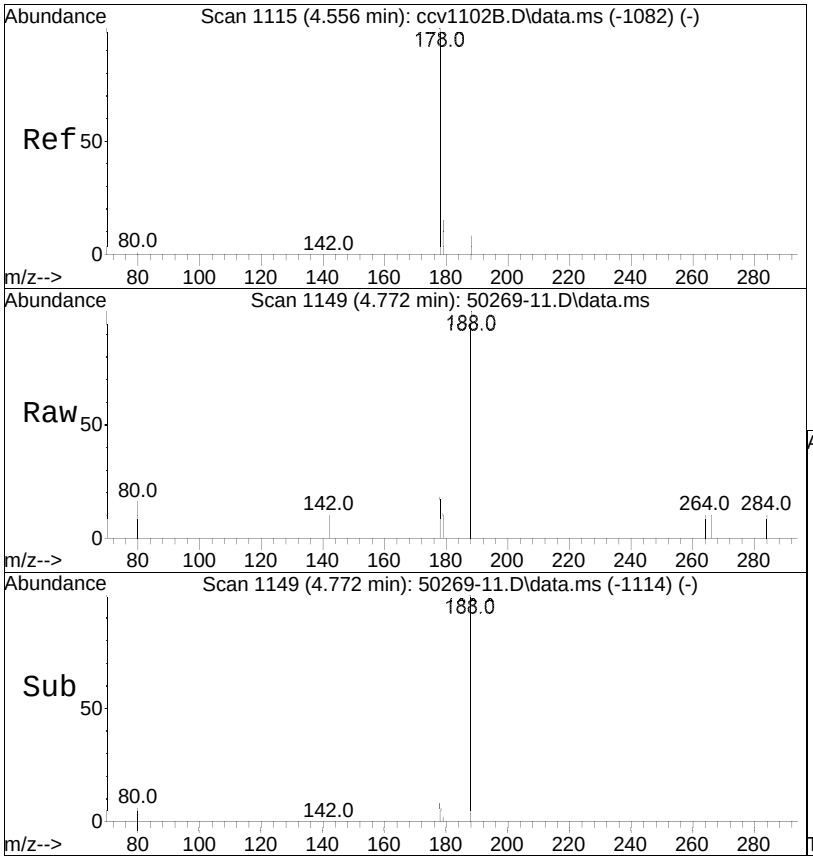


#20
Fluorene
Concen: 3.23 ng/ml M2
RT: 4.224 min Scan# 971
Delta R.T. -0.003 min
Lab File: 50269-11.D
Acq: 07 Sep 2023 01:43 pm

Tgt Ion:166 Resp: 7

Ion	Ratio	Lower	Upper
166	100		
165	100.0	82.7	124.1

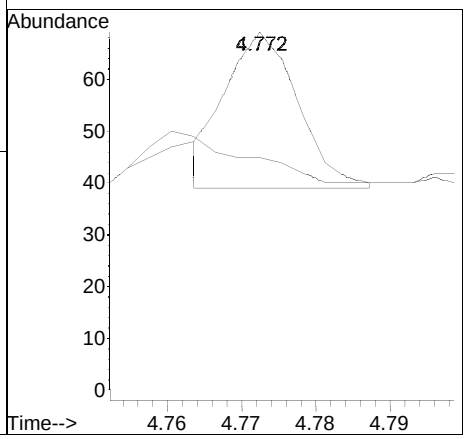


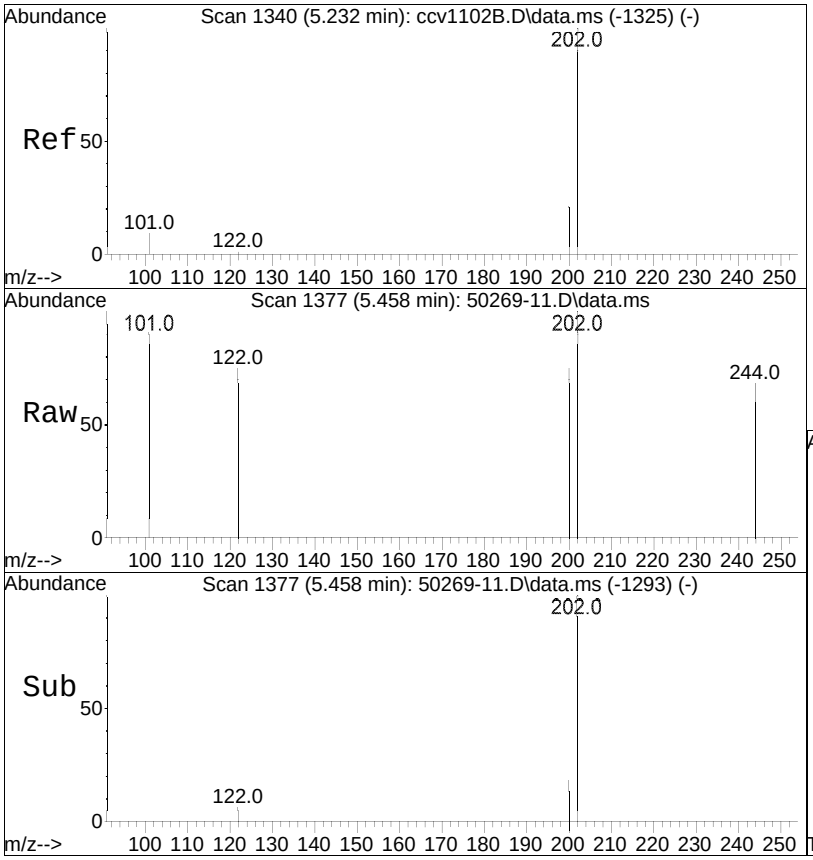


#26
Phenanthrene
Concen: 6.84 ng/ml M6
RT: 4.772 min Scan# 1149
Delta R.T. -0.003 min
Lab File: 50269-11.D
Acq: 07 Sep 2023 01:43 pm

Tgt Ion:178 Resp: 21

Ion	Ratio	Lower	Upper
178	100		
179	9.5	12.4	18.6#

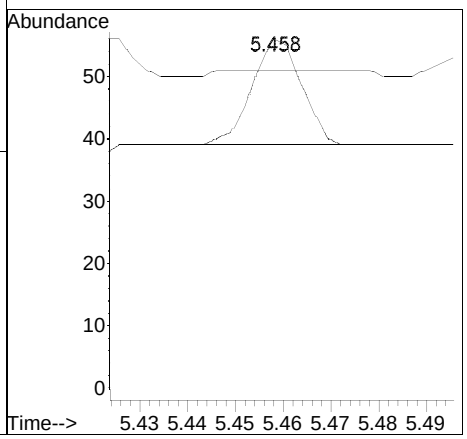


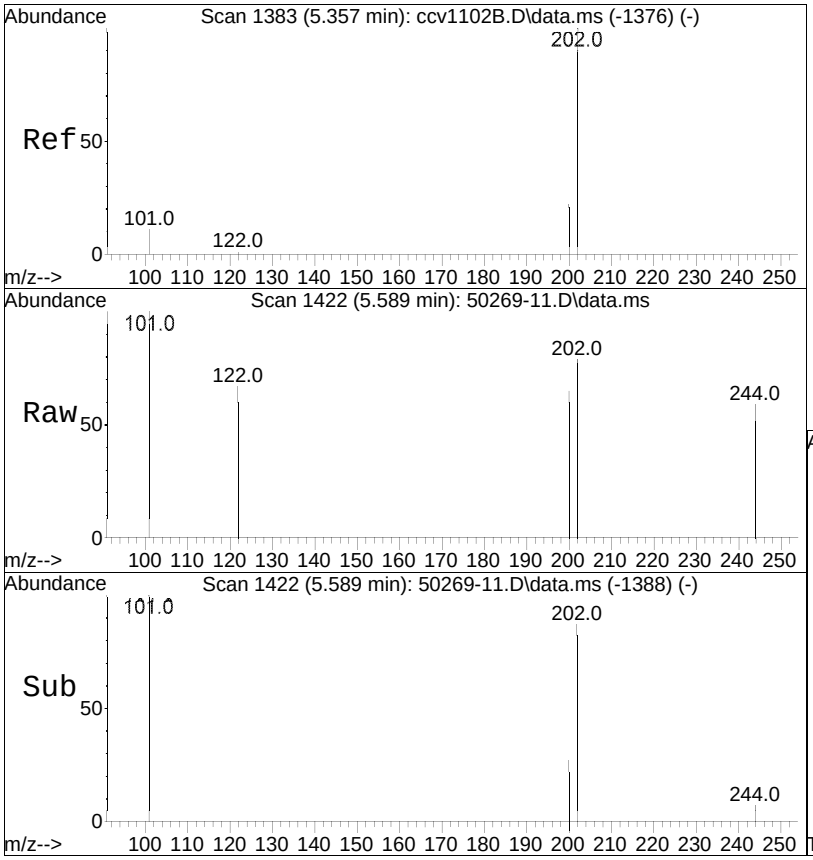


#28
Fluoranthene
Concen: 3.37 ng/ml M4
RT: 5.458 min Scan# 1377
Delta R.T. -0.006 min
Lab File: 50269-11.D
Acq: 07 Sep 2023 01:43 pm

Tgt Ion:202 Resp: 12

Ion	Ratio	Lower	Upper
202	100		
101	16.7	7.0	10.6#

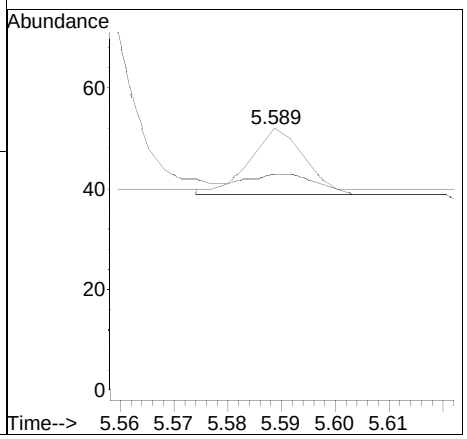


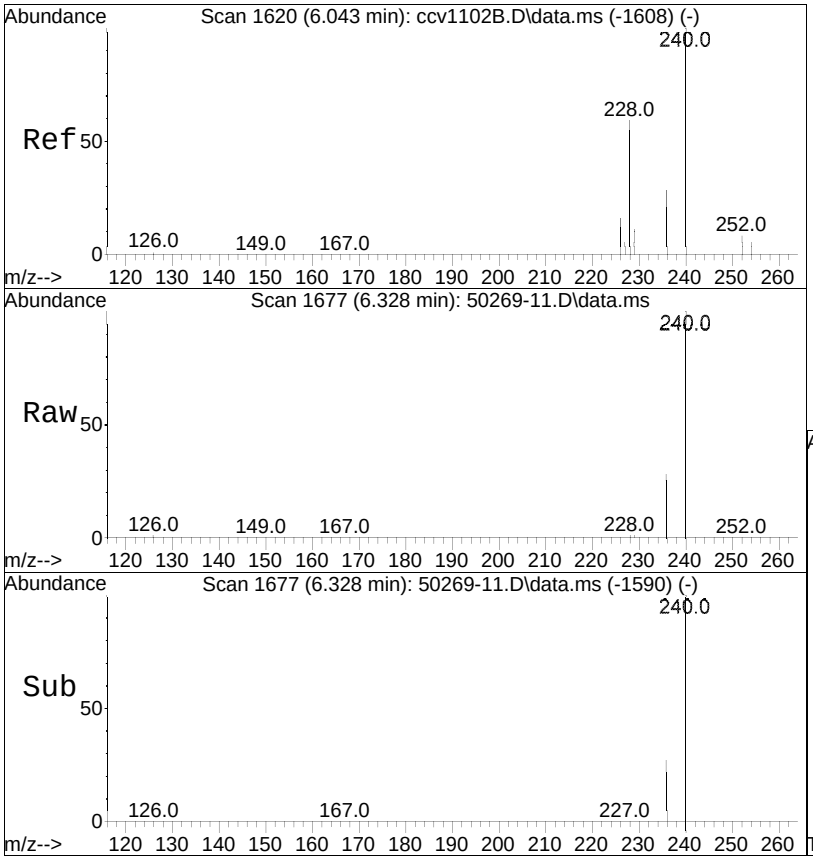


#29
Pyrene
Concen: 2.44 ng/ml M7
RT: 5.589 min Scan# 1422
Delta R.T. -0.006 min
Lab File: 50269-11.D
Acq: 07 Sep 2023 01:43 pm

Tgt Ion:202 Resp: 9

Ion	Ratio	Lower	Upper
202	100		
200	33.3	17.0	25.4#

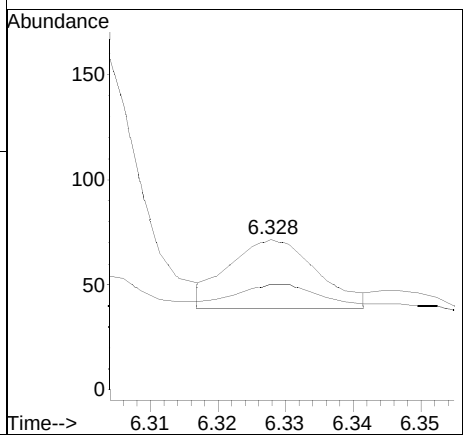


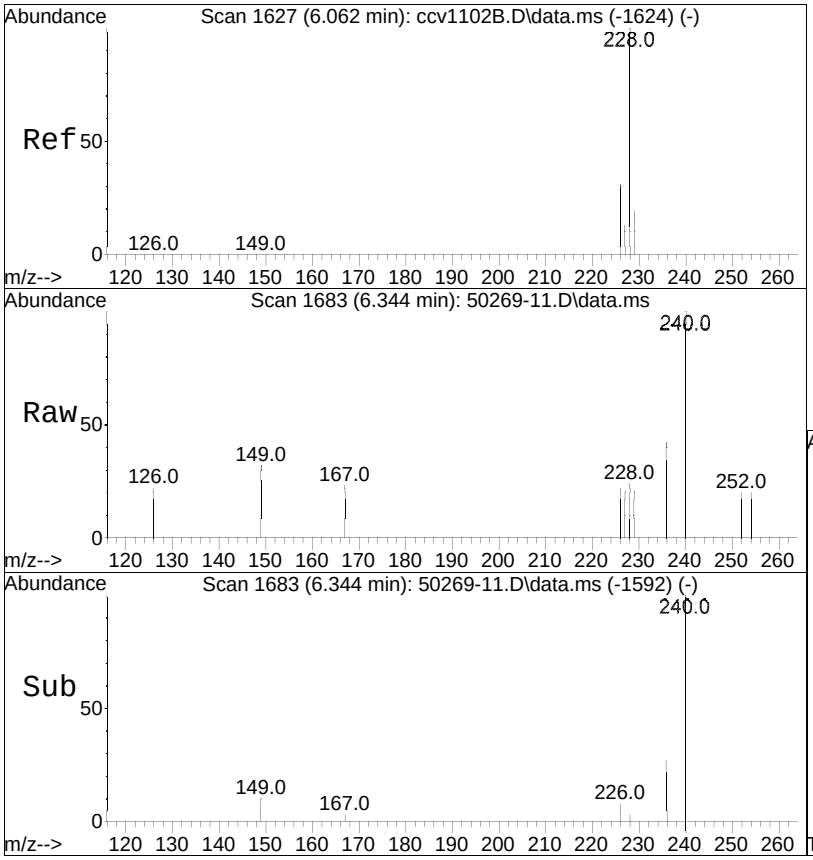


#32
Benzo[a]anthracene
Concen: 4.29 ng/ml M1
RT: 6.328 min Scan# 1677
Delta R.T. -0.002 min
Lab File: 50269-11.D
Acq: 07 Sep 2023 01:43 pm

Tgt Ion:228 Resp: 29

Ion	Ratio	Lower	Upper
228	100		
229	34.5	15.7	23.5#

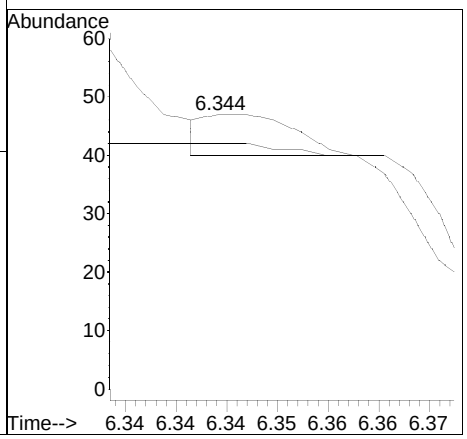




#34
Chrysene
Concen: 1.64 ng/ml M3
RT: 6.344 min Scan# 1683
Delta R.T. -0.010 min
Lab File: 50269-11.D
Acq: 07 Sep 2023 01:43 pm

Tgt Ion:228 Resp: 4

Ion	Ratio	Lower	Upper
228	100		
226	50.0	24.6	37.0#

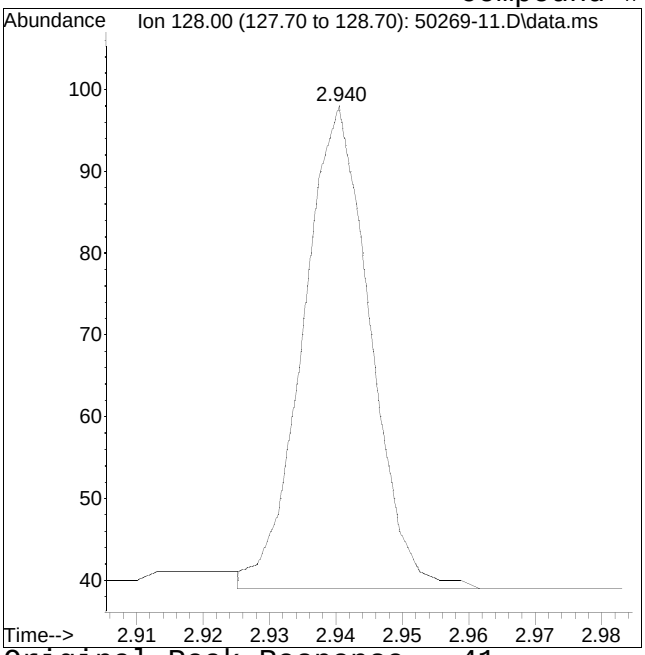


Manual Integration Report

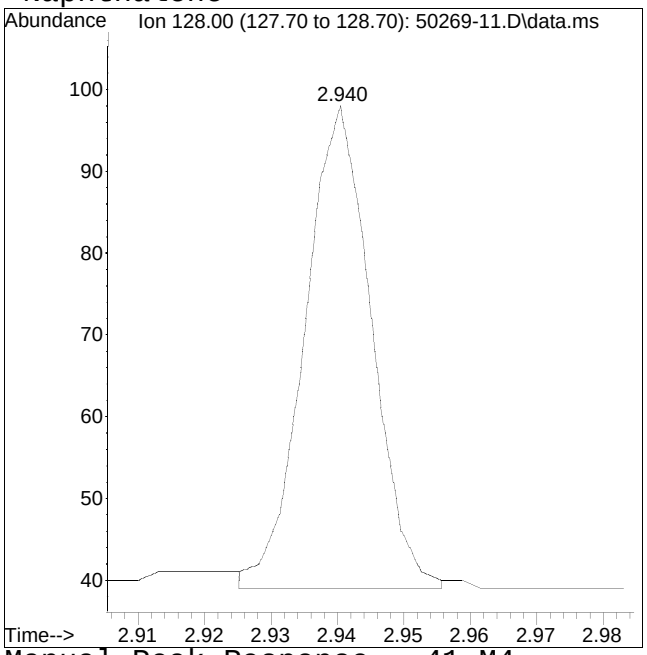
Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-11.D
Date Inj'd : 9/7/2023 1:43 pm
Sample : L2350269-11,32,,ah

QMethod : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/7/2023 1:57 pm

Compound #9: Naphthalene



Original Peak Response = 41



Manual Peak Response = 41 M4

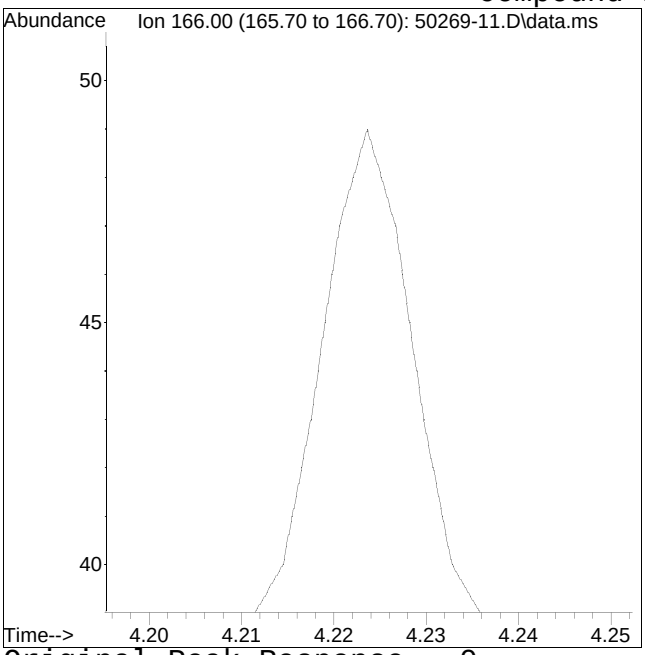
M4 = Poor automated baseline construction.

Manual Integration Report

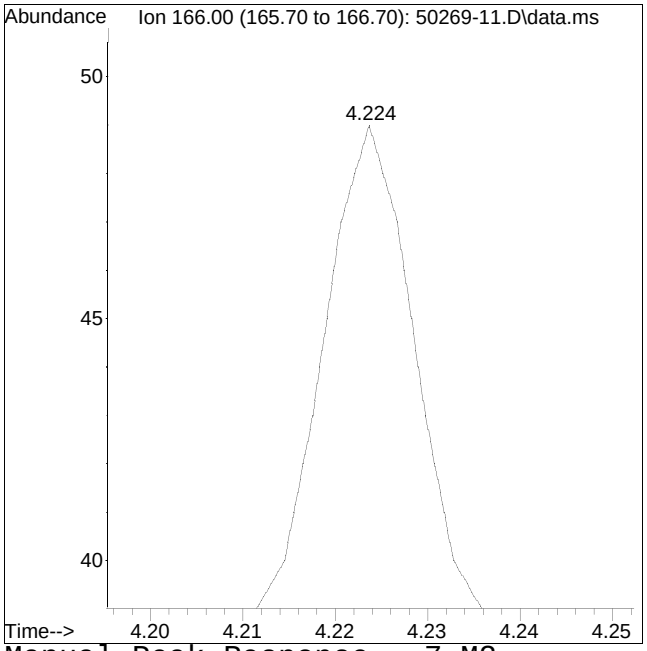
Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-11.D
Date Inj'd : 9/7/2023 1:43 pm
Sample : L2350269-11,32,,ah

QMethod : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/7/2023 1:57 pm

Compound #20: Fluorene



Original Peak Response = 0



Manual Peak Response = 7 M2

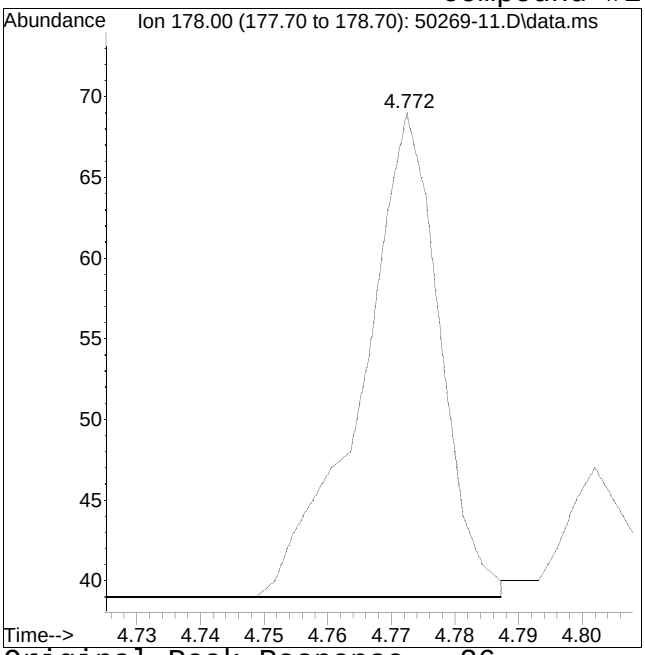
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

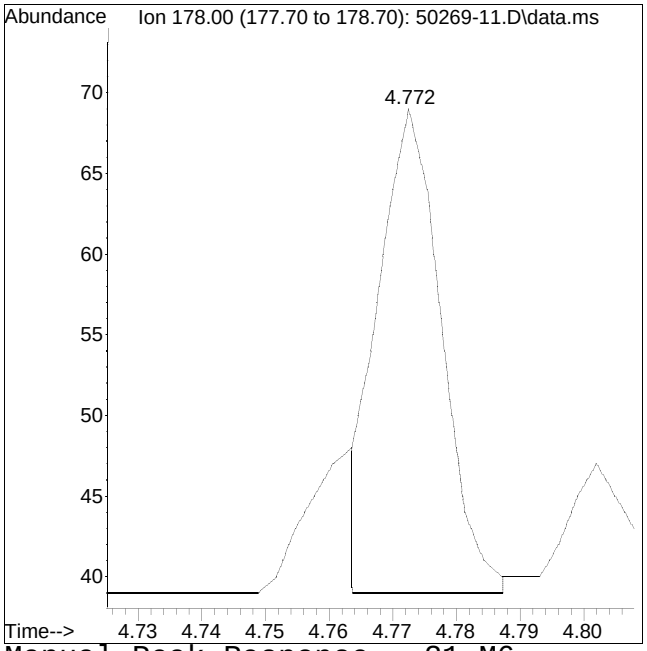
Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-11.D
Date Inj'd : 9/7/2023 1:43 pm
Sample : L2350269-11,32,,ah

QMethod : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/7/2023 1:57 pm

Compound #26: Phenanthrene



Original Peak Response = 26



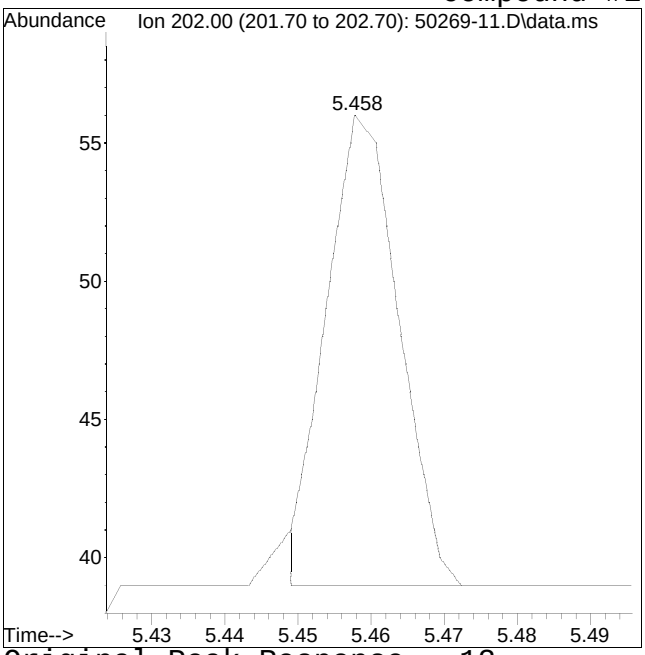
Manual Peak Response = 21 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

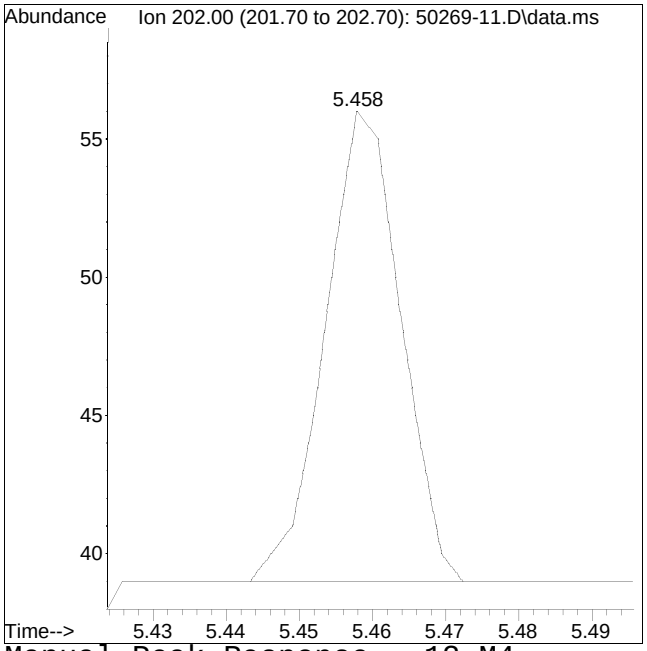
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-11.D Operator : SV128:ah
Date Inj'd : 9/7/2023 1:43 pm Instrument : SV128
Sample : L2350269-11,32,,ah Quant Date : 9/7/2023 1:57 pm

Compound #28: Fluoranthene



Original Peak Response = 12



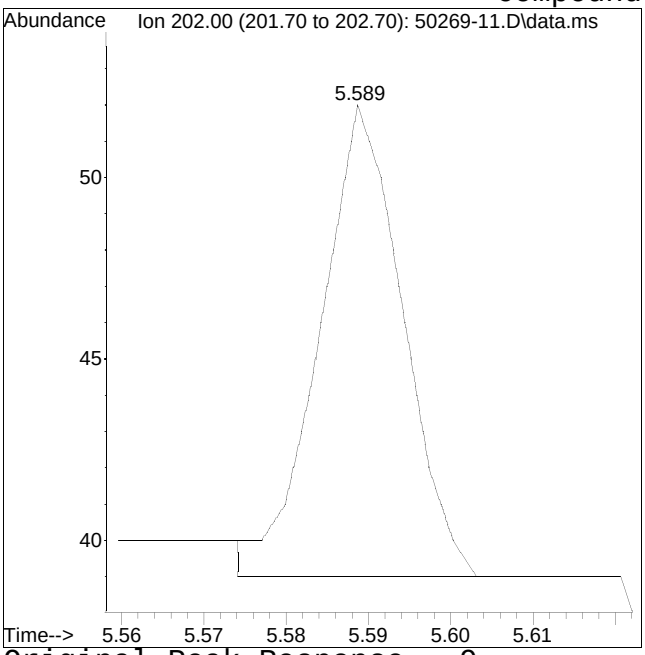
Manual Peak Response = 12 M4

M4 = Poor automated baseline construction.

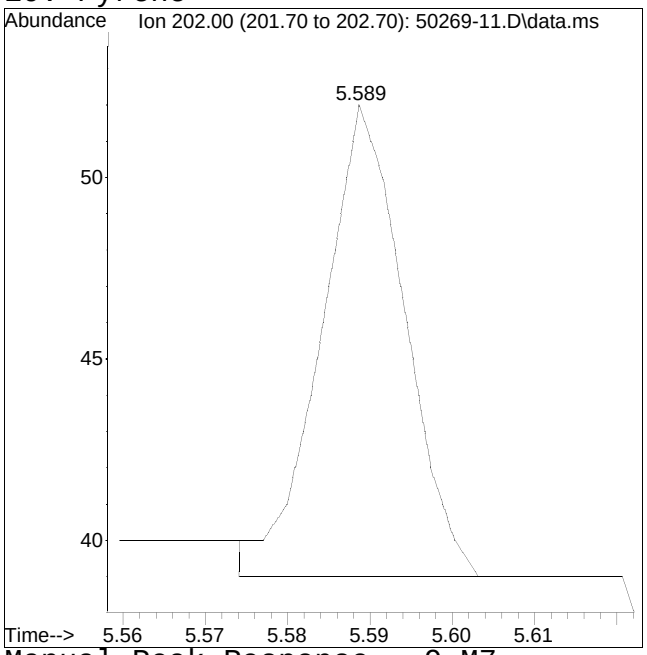
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-11.D Operator : SV128:ah
Date Inj'd : 9/7/2023 1:43 pm Instrument : SV128
Sample : L2350269-11,32,,ah Quant Date : 9/7/2023 1:57 pm

Compound #29: Pyrene



Original Peak Response = 9



Manual Peak Response = 9 M7

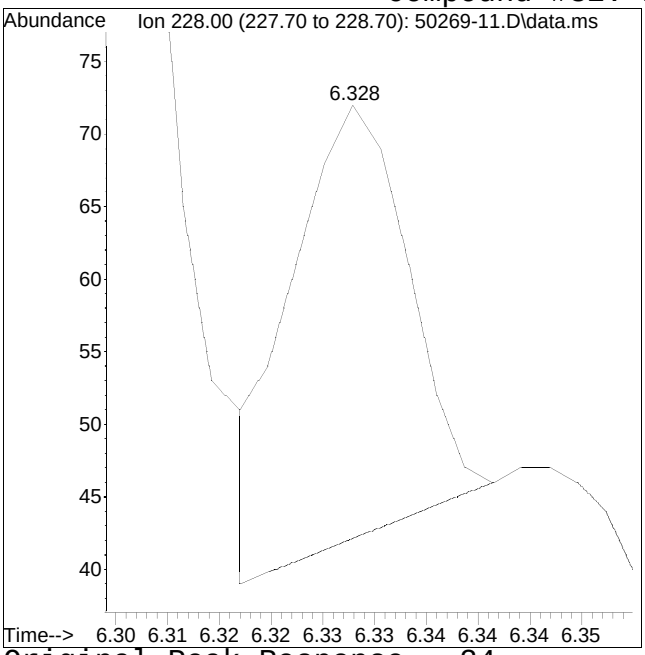
M7 = A qualifier ion was manually integrated (only for GC/MS data).

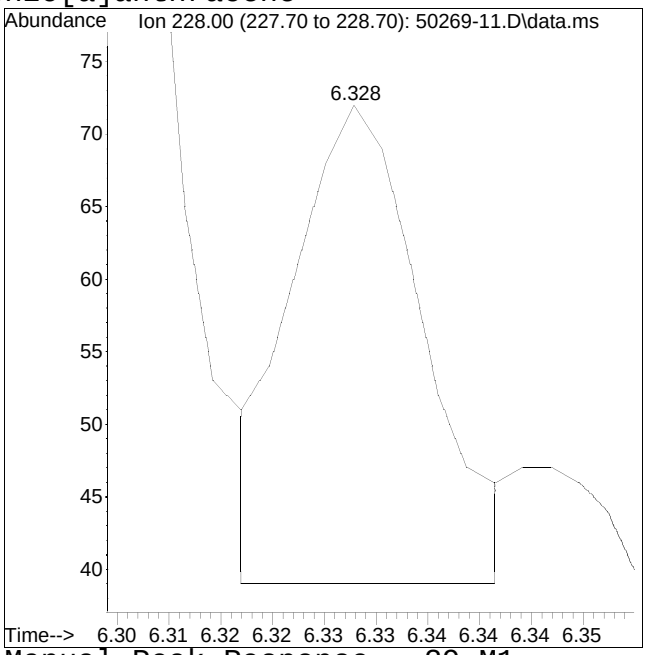
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-11.D
Date Inj'd : 9/7/2023 1:43 pm
Sample : L2350269-11,32,,ah

QMethod : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/7/2023 1:57 pm

Compound #32: Benzo[a]anthracene





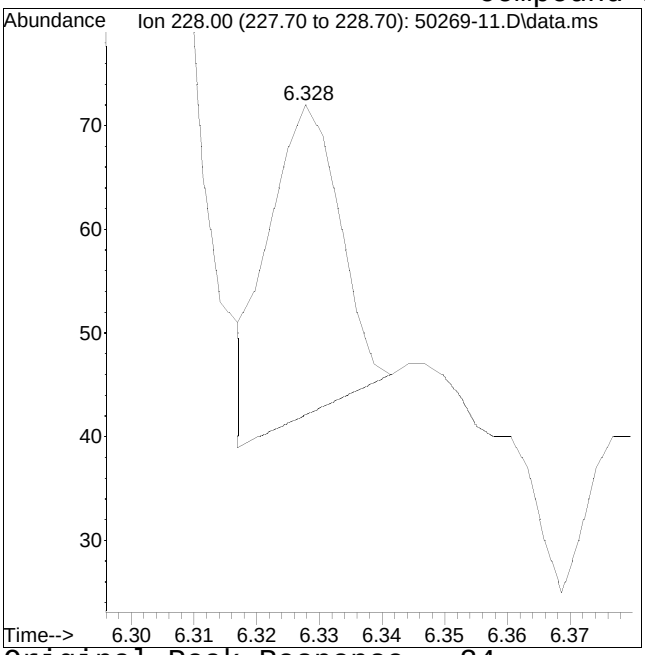
Original Peak Response = 24 Manual Peak Response = 29 M1

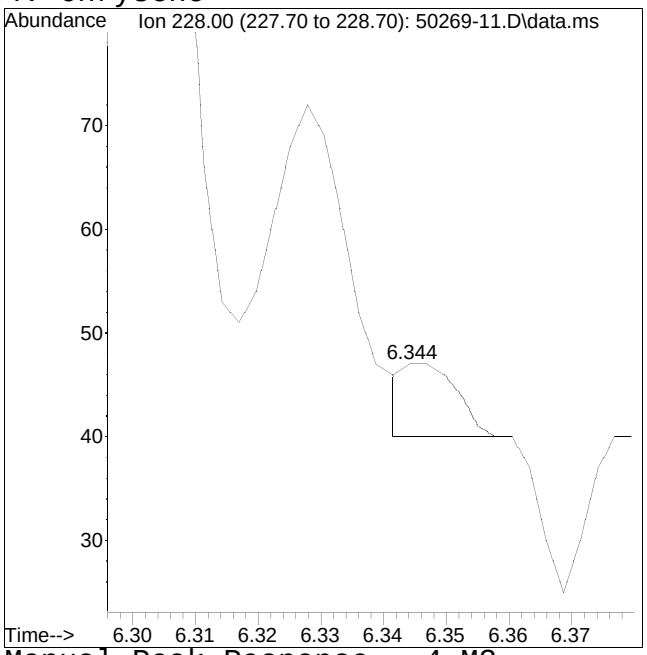
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-11.D Operator : SV128:ah
Date Inj'd : 9/7/2023 1:43 pm Instrument : SV128
Sample : L2350269-11,32,,ah Quant Date : 9/7/2023 1:57 pm

Compound #34: Chrysene





Original Peak Response = 24 Manual Peak Response = 4 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-01.D
Acq On : 07 Sep 2023 02:51 pm
Operator : SV128:jjw
Sample : L2350269-01,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 10 14:03:37 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.262	152	4001	4000.000	ng/ml	0.00
Standard Area 1 = 2265			Recovery = 176.64%			
8) Naphthalene-d8	2.928	136	15270	4000.000	ng/ml	0.00
Standard Area 1 = 8686			Recovery = 175.80%			
17) Acenaphthene-d10	3.911	164	8053	4000.000	ng/ml	0.00
Standard Area 1 = 5058			Recovery = 159.21%			
22) Phenanthrene-d10	4.760	188	14819	4000.000	ng/ml	0.00
Standard Area 1 = 12202			Recovery = 121.45%			
31) Chrysene-d12	6.330	240	9815	4000.000	ng/ml	0.00
Standard Area 1 = 11660			Recovery = 84.18%			
36) Perylene-d12	7.610	264	11421	4000.000	ng/ml	0.00
Standard Area 1 = 12832			Recovery = 89.00%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.665	112	3301	3228.664	ng/ml	0.02
Spiked Amount 5000.000	Range 15 - 110		Recovery = 64.57%			
3) Phenol-d6	2.072	99	3387	2707.234	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 54.14%			
7) Nitrobenzene-d5	2.543	82	2072	1953.881	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 78.16%			
13) 2-Fluorobiphenyl	3.529	172	5938	1896.048	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 75.84%			
21) 2,4,6-Tribromophenol	4.363	330	1376	4069.367	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 81.39%			
30) 4-Terphenyl-d14	5.684	244	4979	1589.892	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 63.60%			
Target Compounds						Qvalue
6) Hexachloroethane	0.000		0	N.D.	d	
9) Naphthalene	2.940	128	224	60.039	ng/ml#	99
10) Hexachlorobutadiene	0.000		0	N.D.		
11) 2-Methylnaphthalene	3.322	142	31	12.448	ng/ml	96
14) 2-Chloronaphthalene	0.000		0	N.D.	d	
16) Acenaphthylene	3.829	152	14M6	3.405	ng/ml	
18) Acenaphthene	3.930	153	67M4	26.258	ng/ml	
20) Fluorene	4.223	166	43M1	15.444	ng/ml	
24) Hexachlorobenzene	0.000		0	N.D.		
25) Pentachlorophenol	4.657	266	21	62.613	ng/ml	99

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-01.D
Acq On : 07 Sep 2023 02:51 pm
Operator : SV128:jjw
Sample : L2350269-01,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 10 14:03:37 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.775	178	89M6	24.089	ng/ml	
27) Anthracene	4.801	178	72M1	20.025	ng/ml	
28) Fluoranthene	5.460	202	36M1	8.388	ng/ml	
29) Pyrene	5.588	202	33M6	7.428	ng/ml	
32) Benzo[a]anthracene	6.330	228	46M6	7.408	ng/ml	
34) Chrysene	6.346	228	5M3	1.651	ng/ml	
37) Benzo[b]fluoranthene	0.000		0	N.D.		
38) Benzo[k]fluoranthene	0.000		0	N.D.		
39) Benzo[a]pyrene	0.000		0	N.D.	d	
40) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.		
41) Dibenzo[a,h]anthracene	0.000		0	N.D.		
42) Benzo[g,h,i]perylene	0.000		0	N.D.		

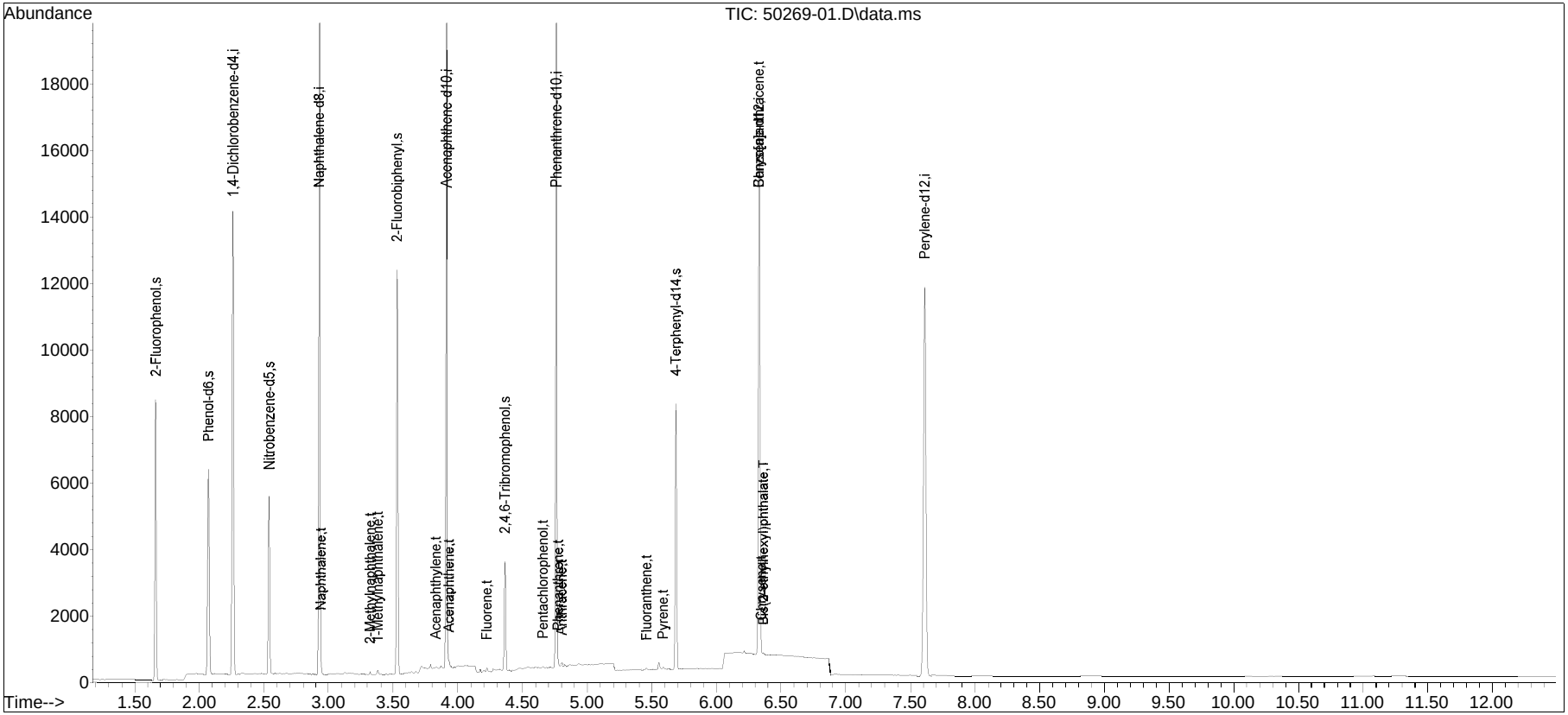
(#) = qualifier out of range (m) = manual integration (+) = signals summed

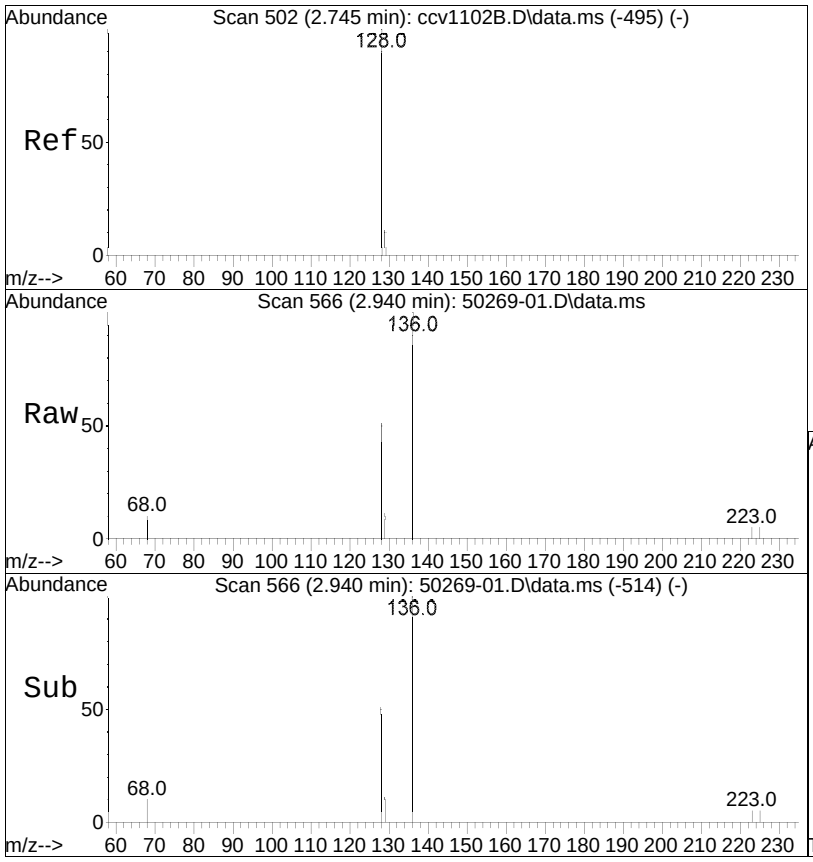
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-01.D
Acq On : 07 Sep 2023 02:51 pm
Operator : SV128:jjw
Sample : L2350269-01,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 23 Sample Multiplier: 1

Quant Time: Sep 10 14:03:37 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listedv0907a.D•

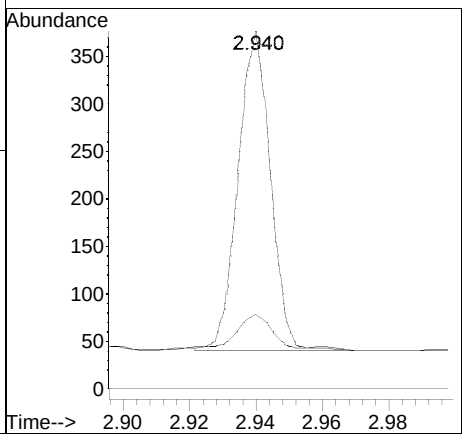


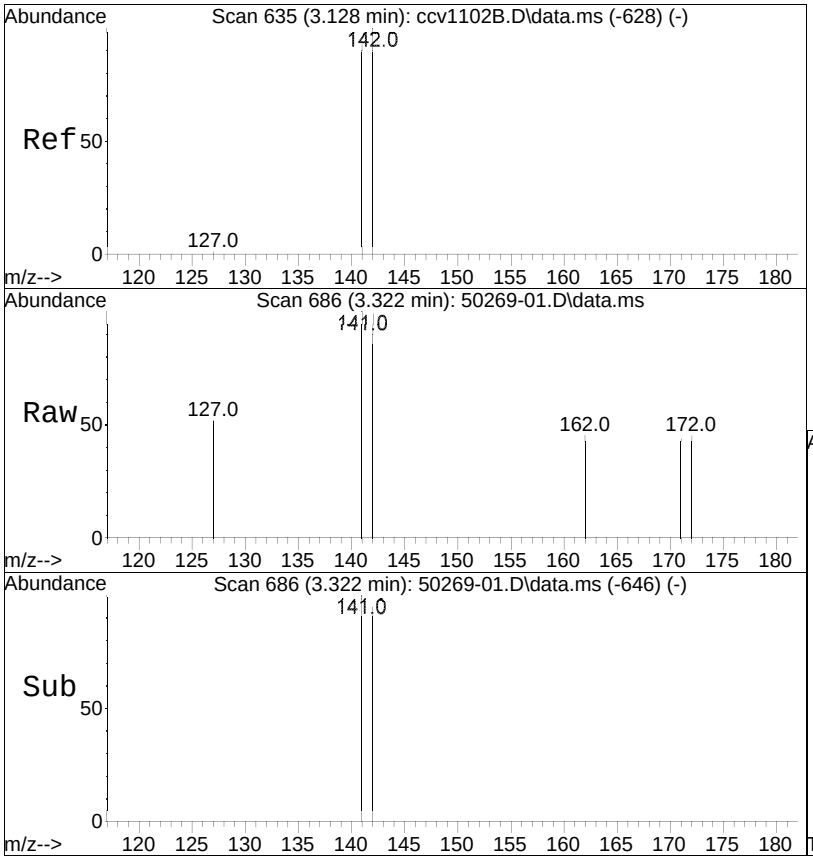


#9
Naphthalene
Concen: 60.04 ng/ml
RT: 2.940 min Scan# 566
Delta R.T. -0.000 min
Lab File: 50269-01.D
Acq: 07 Sep 2023 02:51 pm

Tgt Ion:128 Resp: 224

Ion	Ratio	Lower	Upper
128	100		
129	10.7	8.8	13.2
127	0.0	0.0	0.0

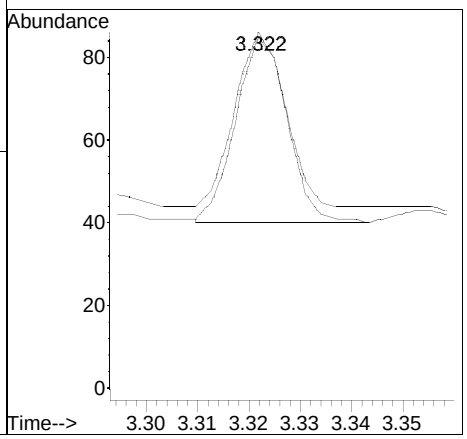


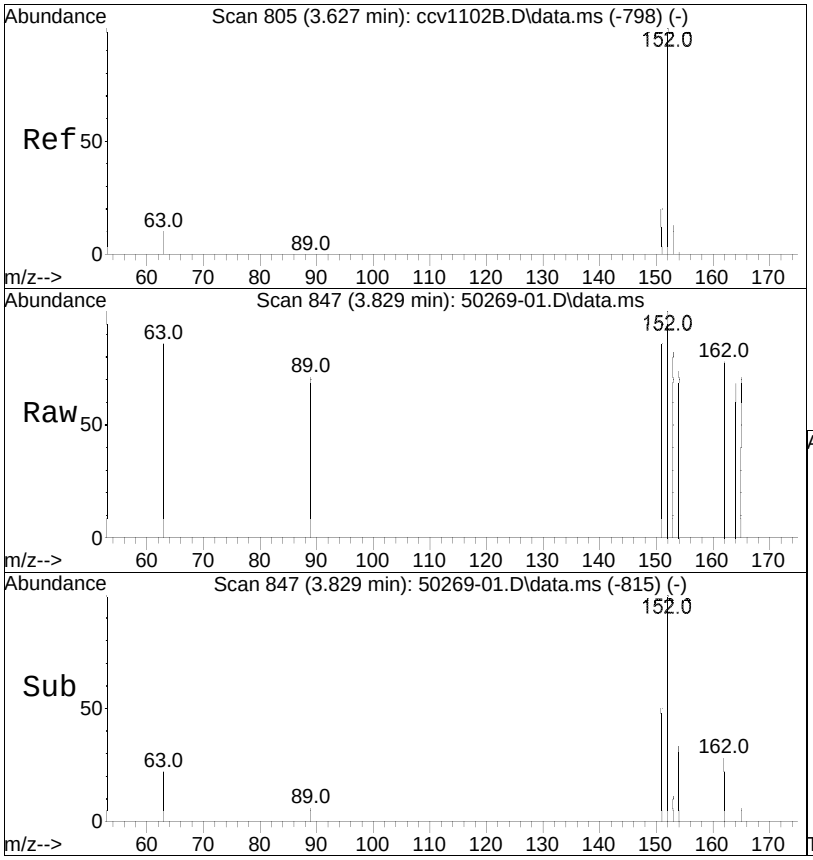


#11
2-Methylnaphthalene
Concen: 12.45 ng/ml
RT: 3.322 min Scan# 686
Delta R.T. -0.000 min
Lab File: 50269-01.D
Acq: 07 Sep 2023 02:51 pm

Tgt Ion:142 Resp: 31

Ion	Ratio	Lower	Upper
142	100		
141	90.3	75.0	112.4

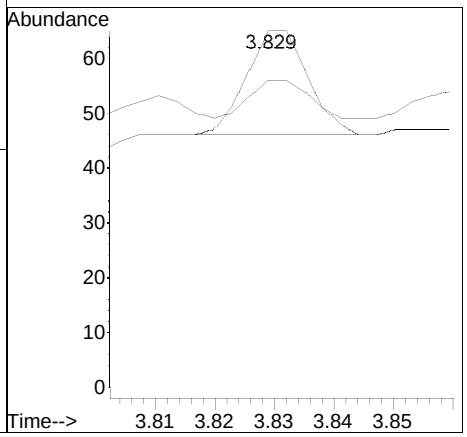


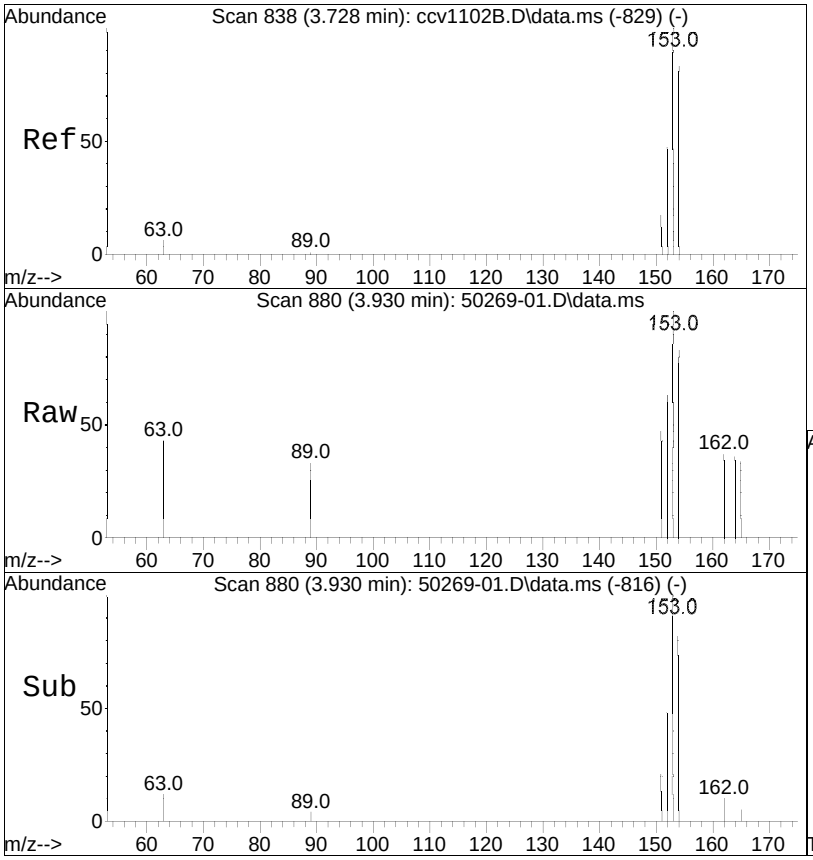


#16
Acenaphthylene
Concen: 3.41 ng/ml M6
RT: 3.829 min Scan# 847
Delta R.T. -0.000 min
Lab File: 50269-01.D
Acq: 07 Sep 2023 02:51 pm

Tgt Ion:152 Resp: 14

Ion	Ratio	Lower	Upper
152	100		
151	35.7	16.1	24.1#

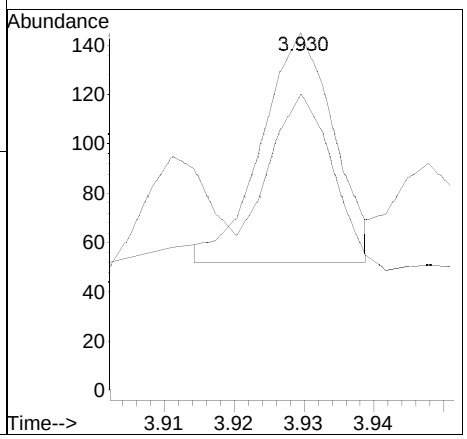


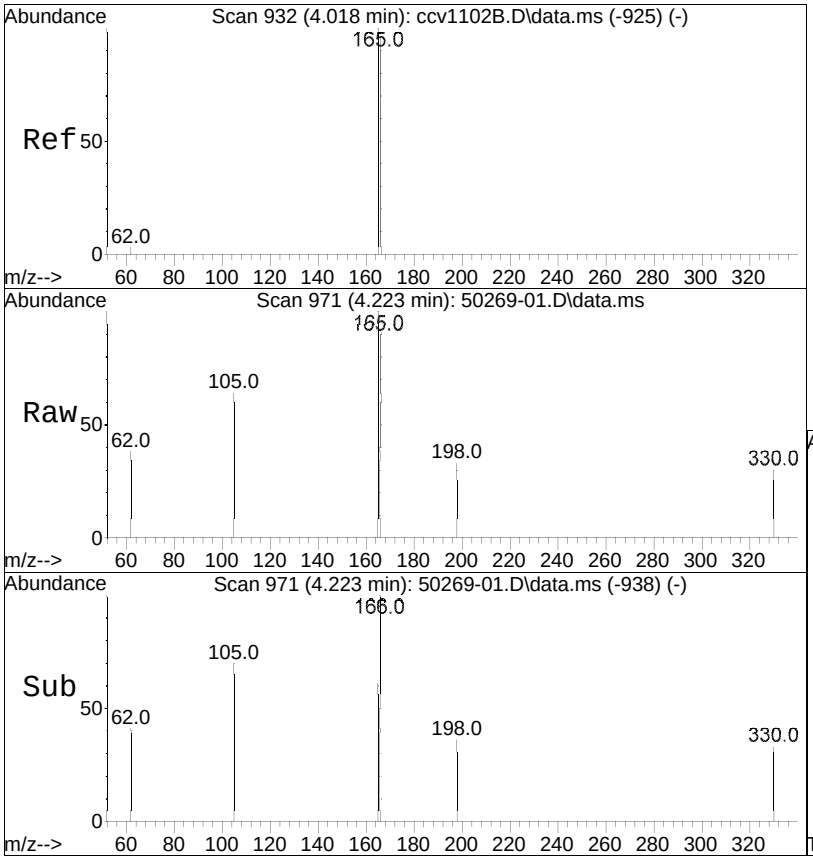


#18
Acenaphthene
Concen: 26.26 ng/ml M4
RT: 3.930 min Scan# 880
Delta R.T. -0.000 min
Lab File: 50269-01.D
Acq: 07 Sep 2023 02:51 pm

Tgt Ion:153 Resp: 67

Ion	Ratio	Lower	Upper
153	100		
154	76.1	67.4	101.2

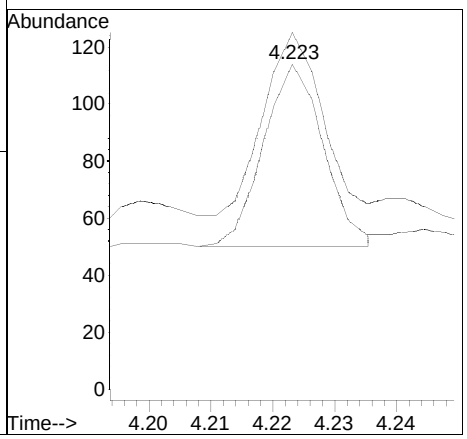


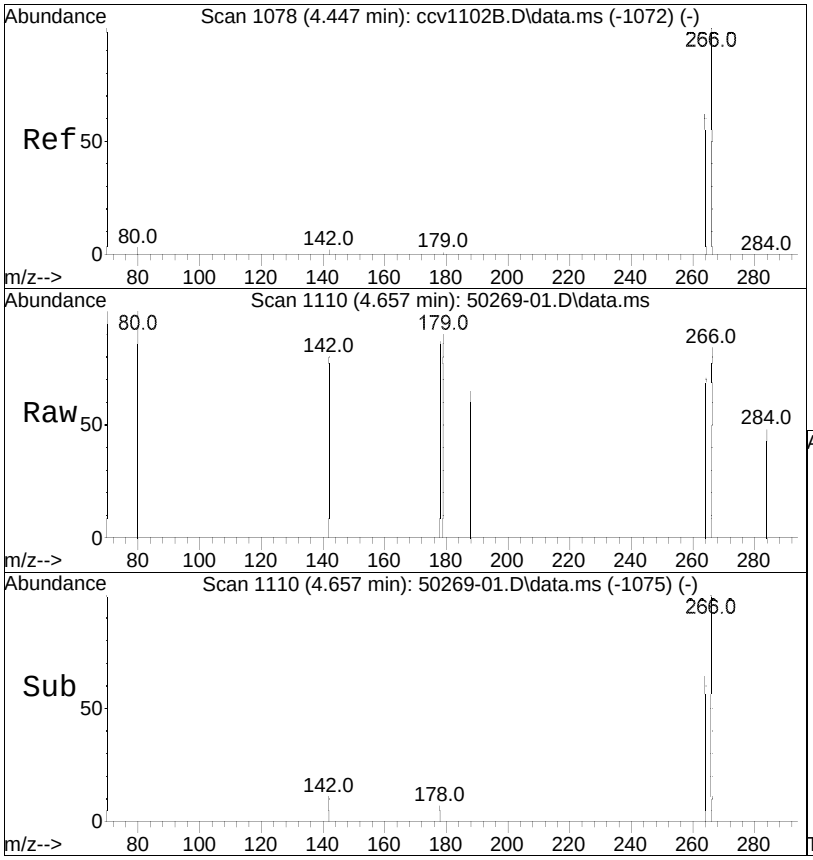


#20
Fluorene
Concen: 15.44 ng/ml M1
RT: 4.223 min Scan# 971
Delta R.T. -0.003 min
Lab File: 50269-01.D
Acq: 07 Sep 2023 02:51 pm

Tgt Ion:166 Resp: 43

Ion	Ratio	Lower	Upper
166	100		
165	114.0	82.7	124.1

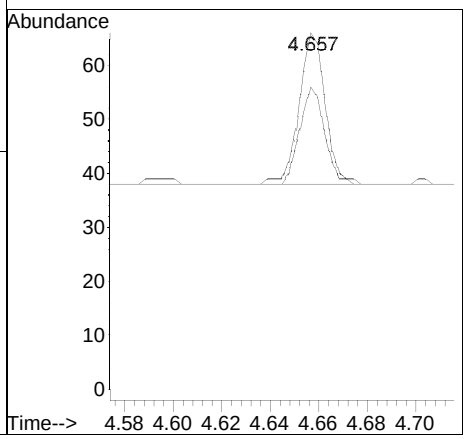


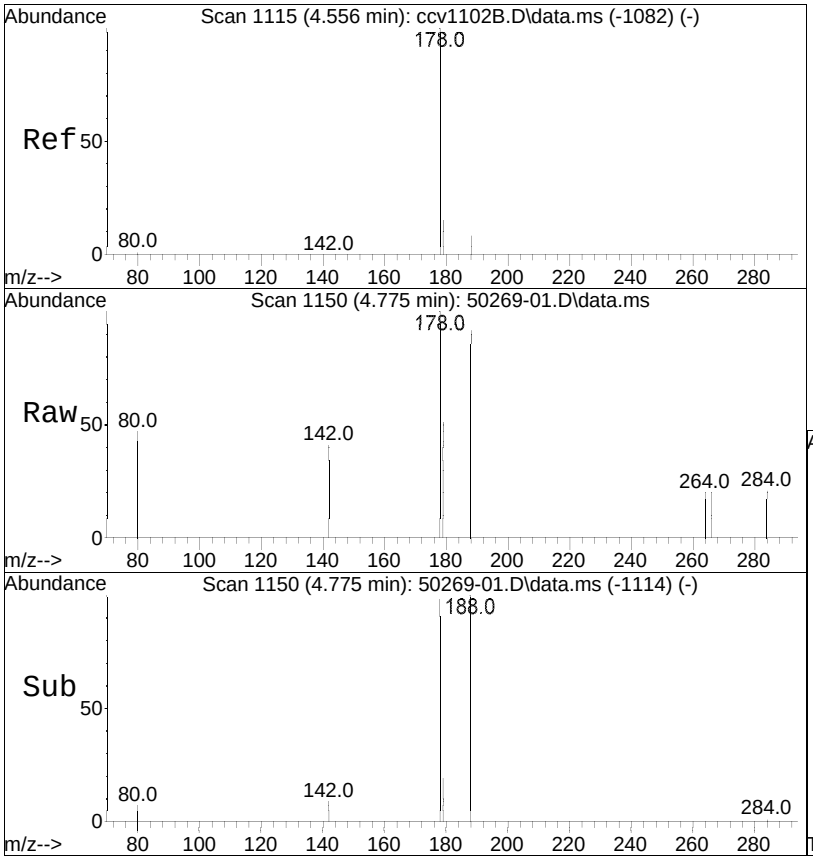


#25
Pentachlorophenol
Concen: 62.61 ng/ml
RT: 4.657 min Scan# 1110
Delta R.T. -0.000 min
Lab File: 50269-01.D
Acq: 07 Sep 2023 02:51 pm

Tgt Ion:266 Resp: 21

Ion	Ratio	Lower	Upper
266	100		
264	61.9	49.8	74.8

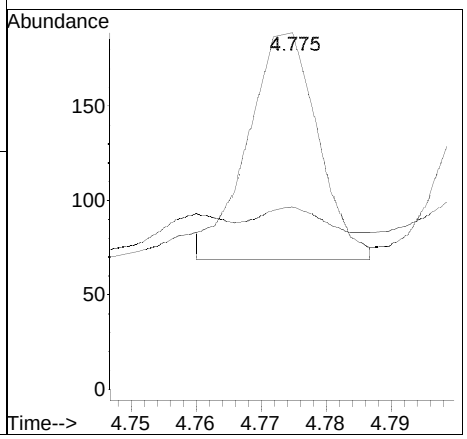


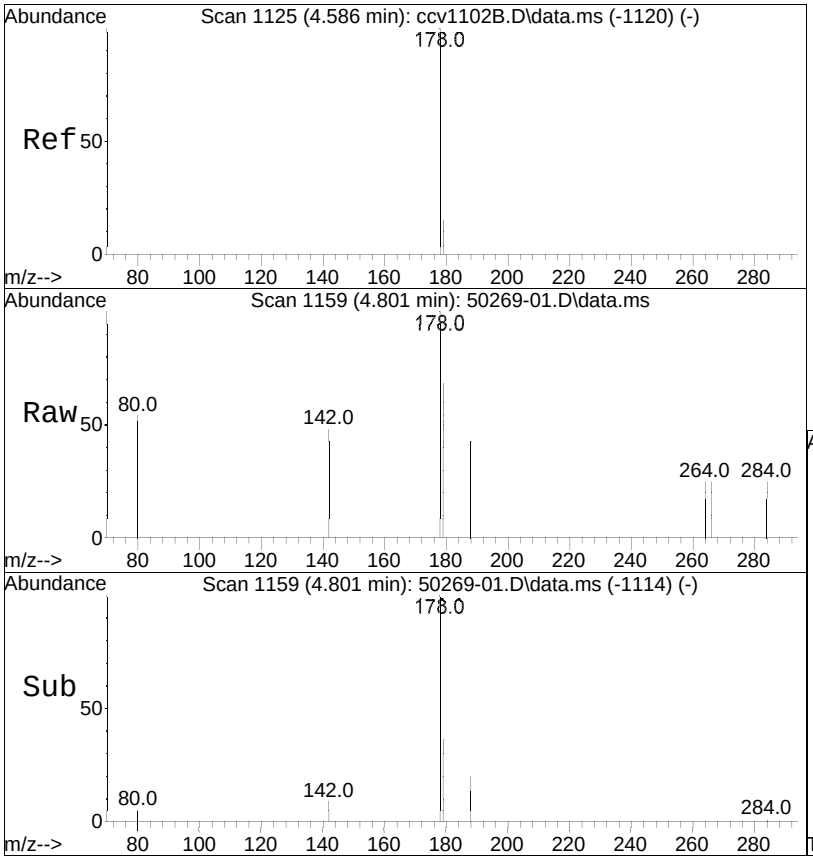


#26
Phenanthrene
Concen: 24.09 ng/ml M6
RT: 4.775 min Scan# 1150
Delta R.T. -0.000 min
Lab File: 50269-01.D
Acq: 07 Sep 2023 02:51 pm

Tgt Ion:178 Resp: 89

Ion	Ratio	Lower	Upper
178	100		
179	16.9	12.4	18.6

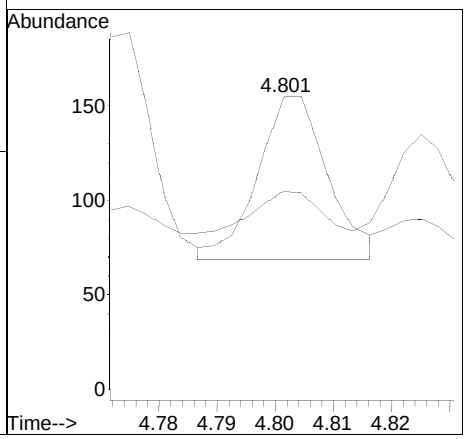


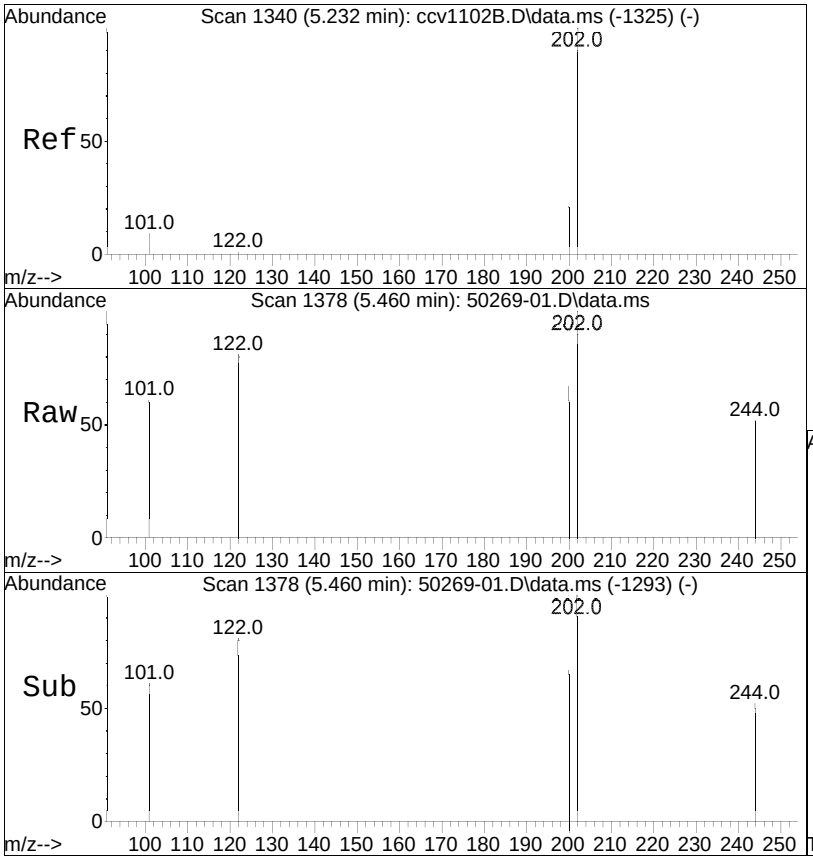


#27
Anthracene
Concen: 20.02 ng/ml M1
RT: 4.801 min Scan# 1159
Delta R.T. -0.003 min
Lab File: 50269-01.D
Acq: 07 Sep 2023 02:51 pm

Tgt Ion:178 Resp: 72

Ion	Ratio	Lower	Upper
178	100		
179	23.6	12.6	19.0#

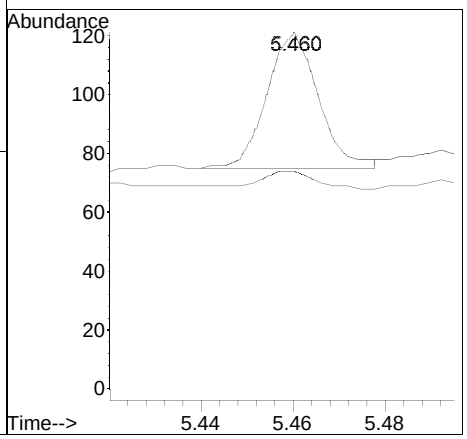


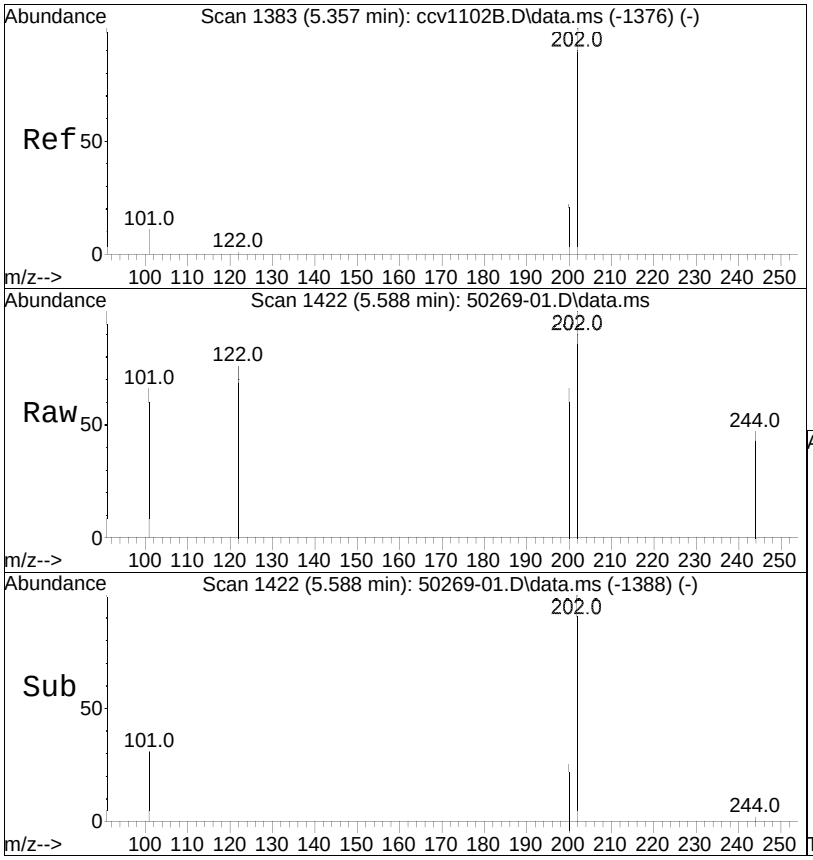


#28
Fluoranthene
Concen: 8.39 ng/ml M1
RT: 5.460 min Scan# 1378
Delta R.T. -0.003 min
Lab File: 50269-01.D
Acq: 07 Sep 2023 02:51 pm

Tgt Ion:202 Resp: 36

Ion	Ratio	Lower	Upper
202	100		
101	8.3	7.0	10.6

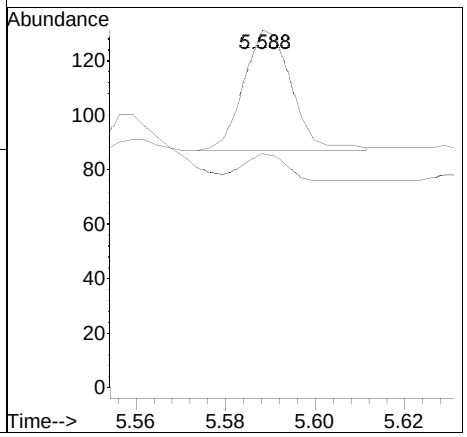


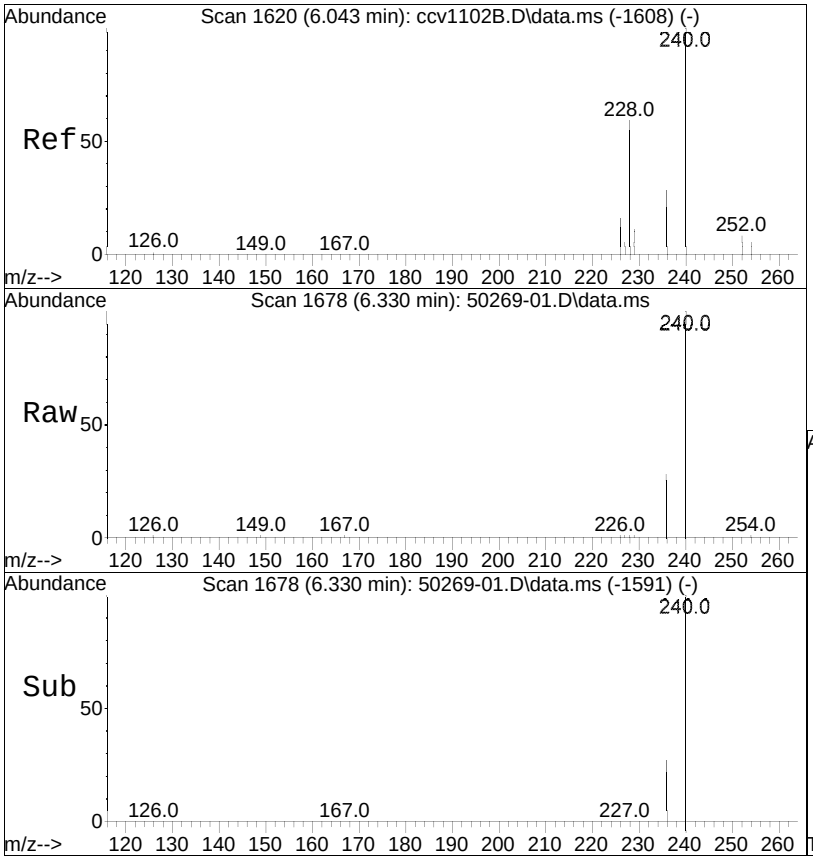


#29
Pyrene
Concen: 7.43 ng/ml M6
RT: 5.588 min Scan# 1422
Delta R.T. -0.006 min
Lab File: 50269-01.D
Acq: 07 Sep 2023 02:51 pm

Tgt Ion:202 Resp: 33

Ion	Ratio	Lower	Upper
202	100		
200	18.2	17.0	25.4

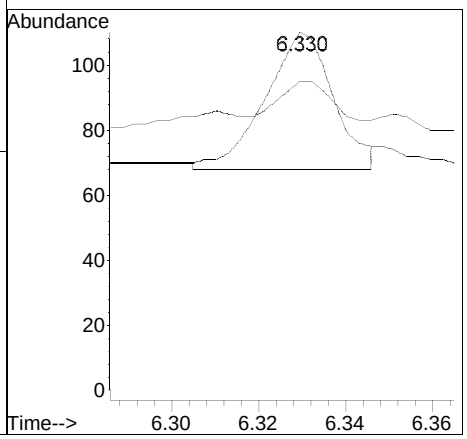


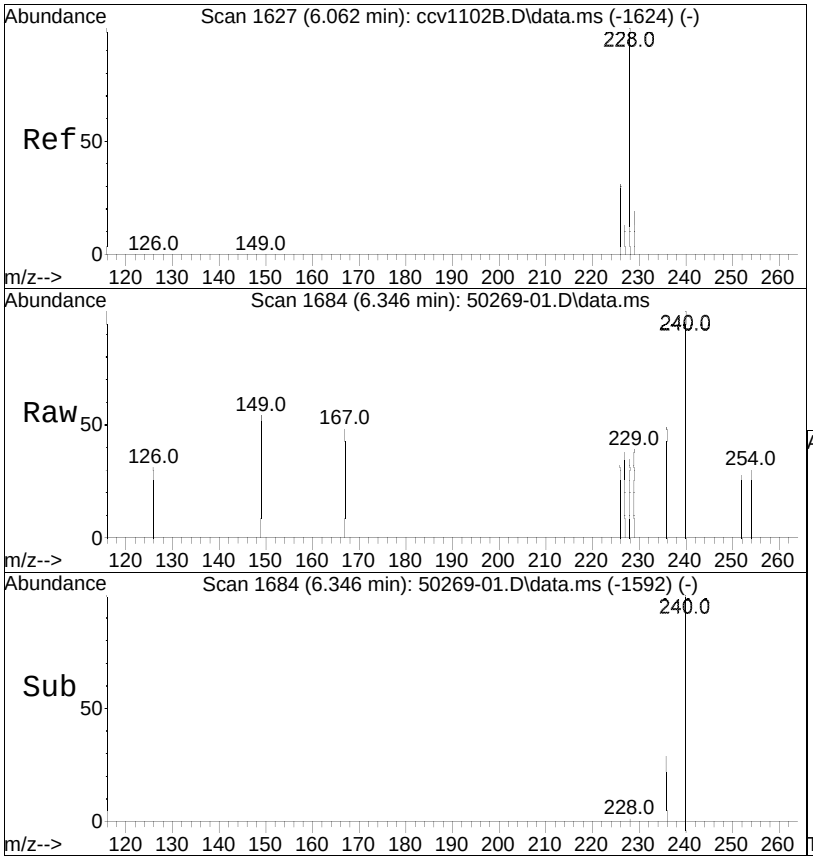


#32
Benzo[a]anthracene
Concen: 7.41 ng/ml M6
RT: 6.330 min Scan# 1678
Delta R.T. -0.000 min
Lab File: 50269-01.D
Acq: 07 Sep 2023 02:51 pm

Tgt Ion:228 Resp: 46

Ion	Ratio	Lower	Upper
228	100		
229	21.7	15.7	23.5

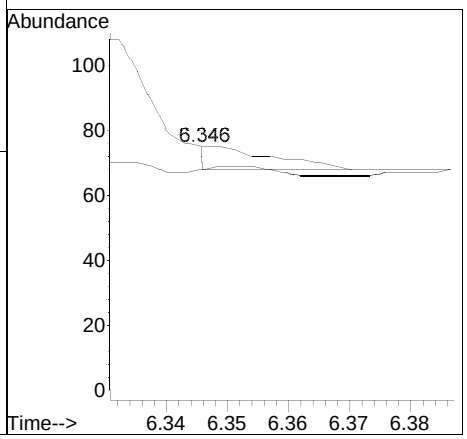




#34
Chrysene
Concen: 1.65 ng/ml M3
RT: 6.346 min Scan# 1684
Delta R.T. -0.009 min
Lab File: 50269-01.D
Acq: 07 Sep 2023 02:51 pm

Tgt Ion:228 Resp: 5

Ion	Ratio	Lower	Upper
228	100		
226	40.0	24.6	37.0#

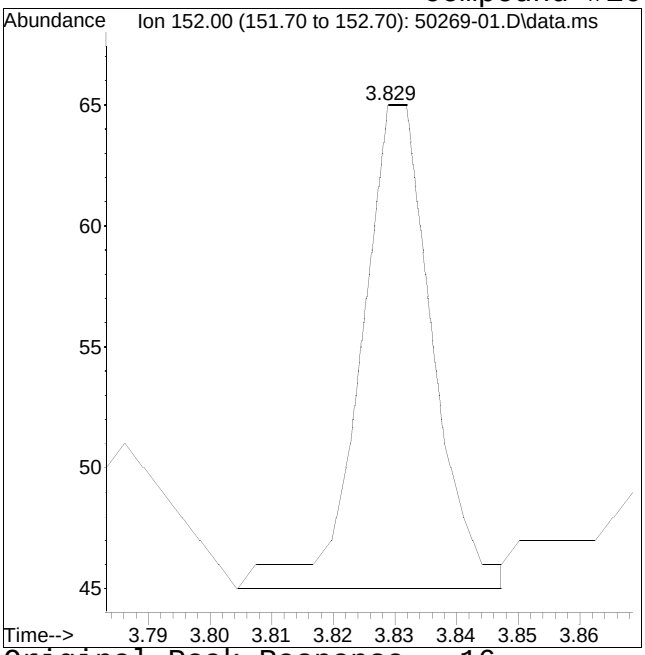


Manual Integration Report

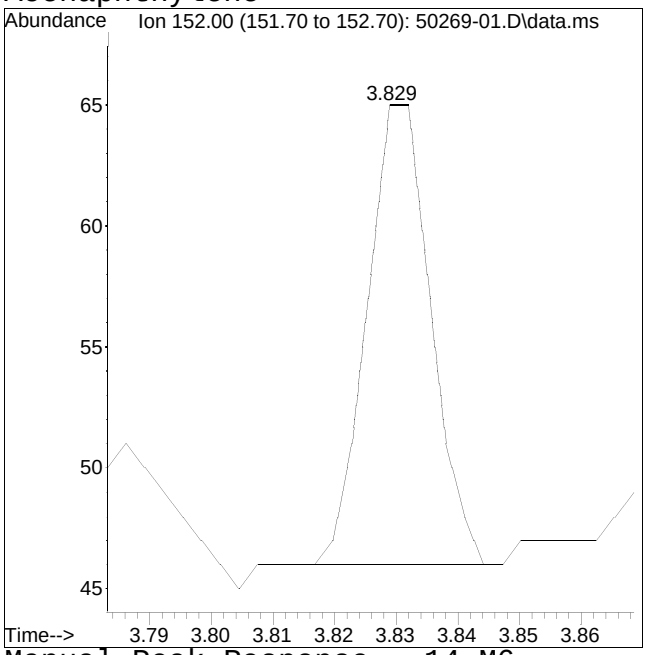
Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-01.D
Date Inj'd : 9/7/2023 2:51 pm
Sample : L2350269-01,32,,ah

QMethod : SIM-LVI_230831_sv128.M
Operator : SV128:jjw
Instrument : SV128
Quant Date : 9/7/2023 3:05 pm

Compound #16: Acenaphthylene



Original Peak Response = 16



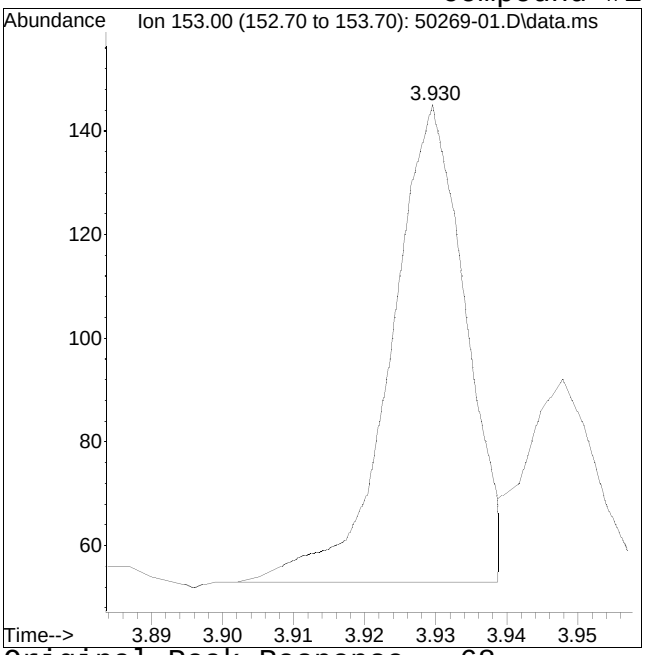
Manual Peak Response = 14 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

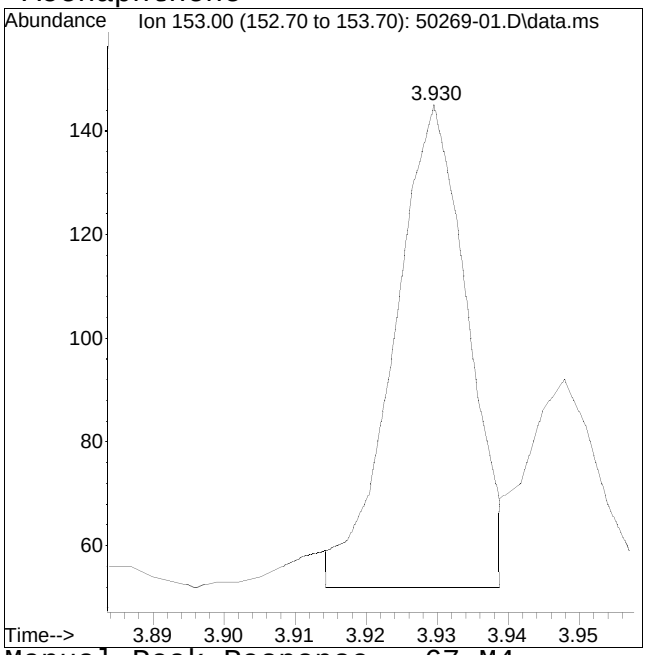
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-01.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 2:51 pm Instrument : SV128
Sample : L2350269-01,32,,ah Quant Date : 9/7/2023 3:05 pm

Compound #18: Acenaphthene



Original Peak Response = 68



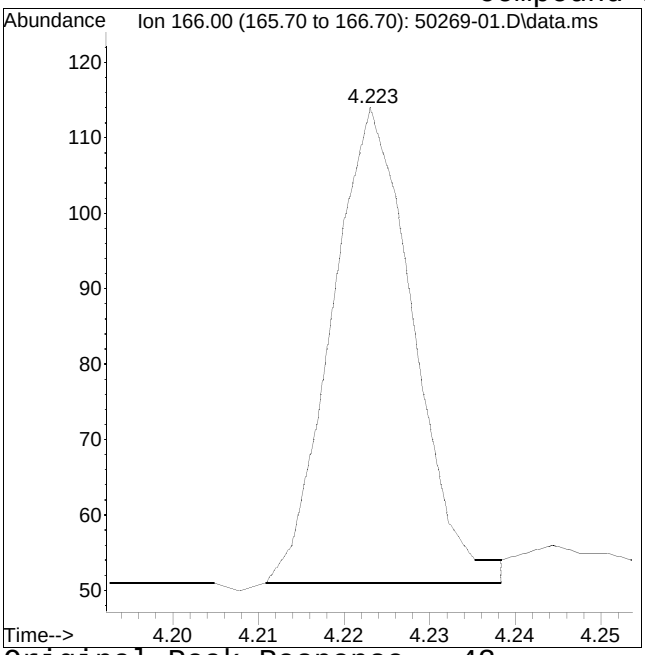
Manual Peak Response = 67 M4

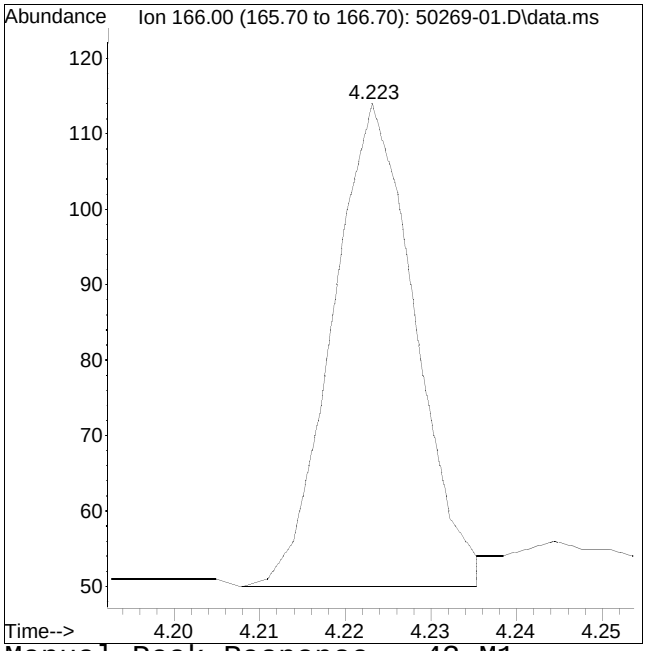
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-01.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 2:51 pm Instrument : SV128
Sample : L2350269-01,32,,ah Quant Date : 9/7/2023 3:05 pm

Compound #20: Fluorene



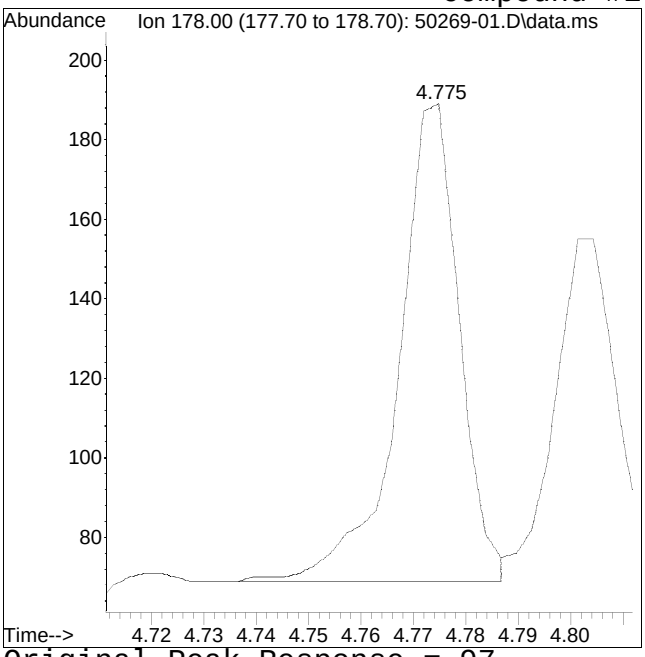


Original Peak Response = 42 Manual Peak Response = 43 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

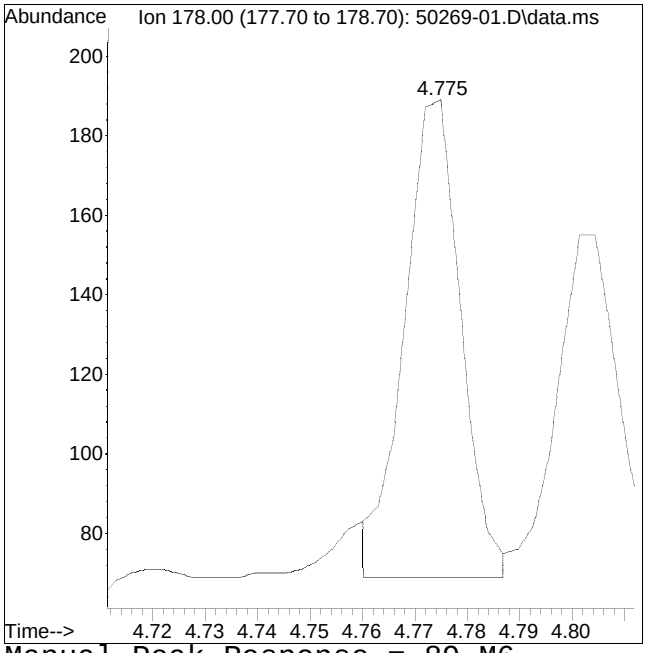
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-01.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 2:51 pm Instrument : SV128
Sample : L2350269-01,32,,ah Quant Date : 9/7/2023 3:05 pm

Compound #26: Phenanthrene



Original Peak Response = 97



Manual Peak Response = 89 M6

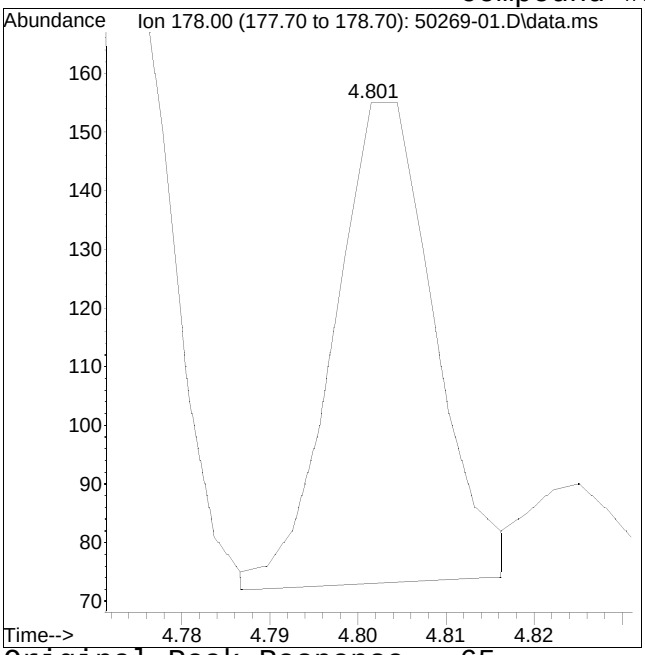
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

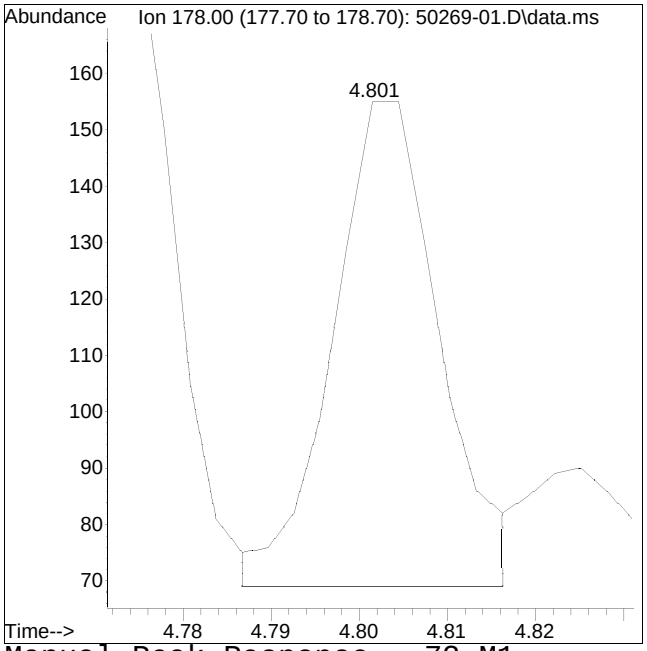
Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-01.D
Date Inj'd : 9/7/2023 2:51 pm
Sample : L2350269-01,32,,ah

QMethod : SIM-LVI_230831_sv128.M
Operator : SV128:jjw
Instrument : SV128
Quant Date : 9/7/2023 3:05 pm

Compound #27: Anthracene



Original Peak Response = 65



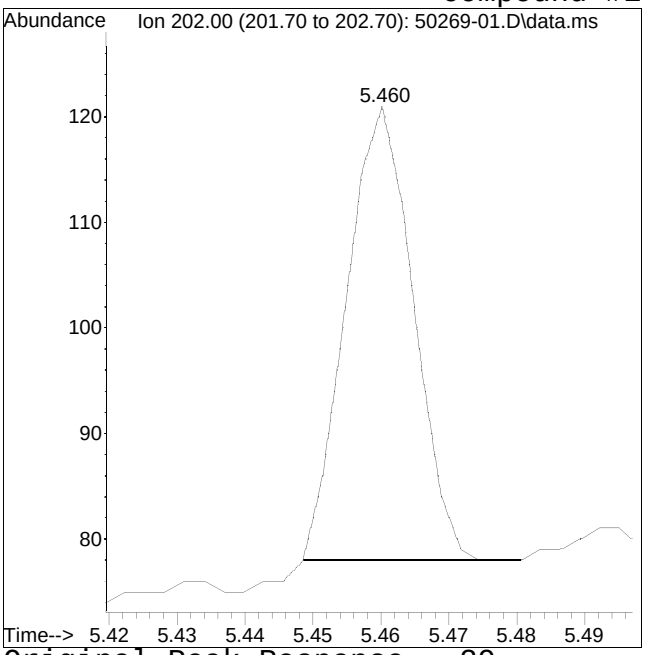
Manual Peak Response = 72 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

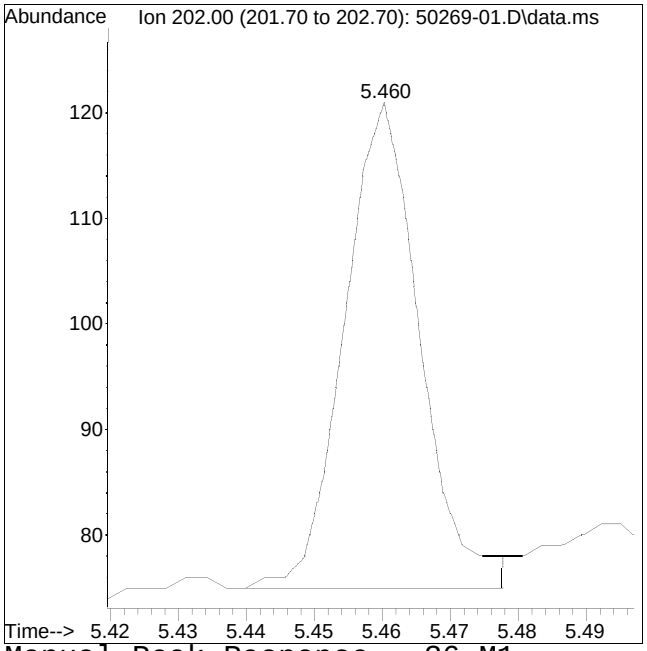
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-01.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 2:51 pm Instrument : SV128
Sample : L2350269-01,32,,ah Quant Date : 9/7/2023 3:05 pm

Compound #28: Fluoranthene



Original Peak Response = 29



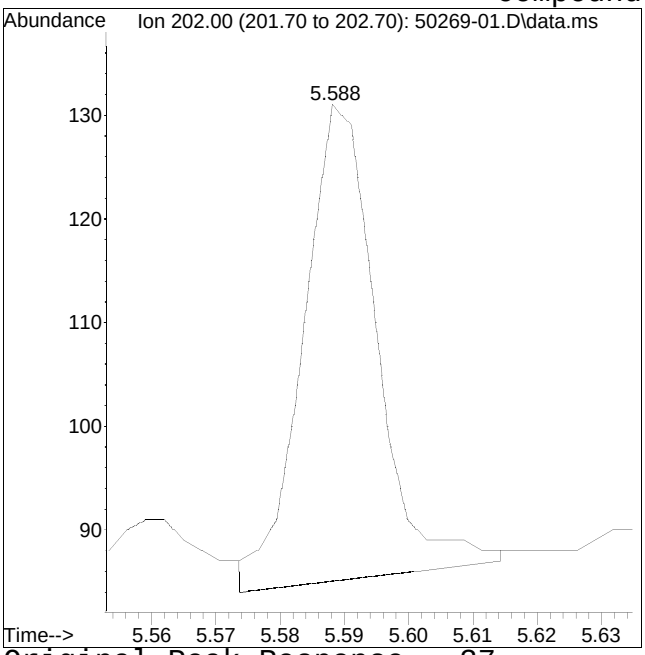
Manual Peak Response = 36 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

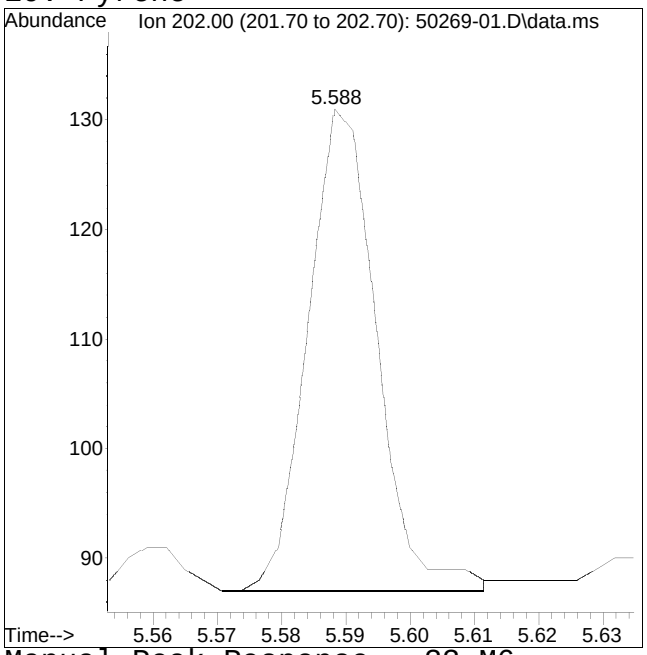
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-01.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 2:51 pm Instrument : SV128
Sample : L2350269-01,32,,ah Quant Date : 9/7/2023 3:05 pm

Compound #29: Pyrene



Original Peak Response = 37



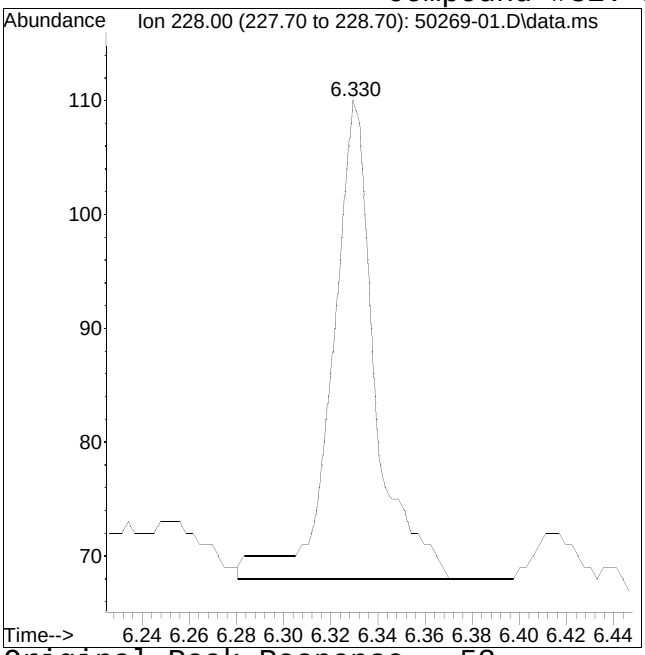
Manual Peak Response = 33 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

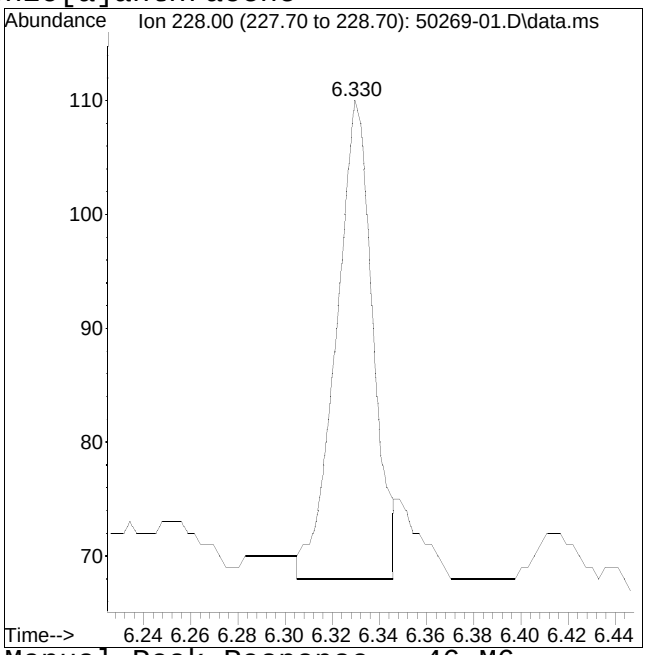
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-01.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 2:51 pm Instrument : SV128
Sample : L2350269-01,32,,ah Quant Date : 9/7/2023 3:05 pm

Compound #32: Benzo[a]anthracene



Original Peak Response = 53



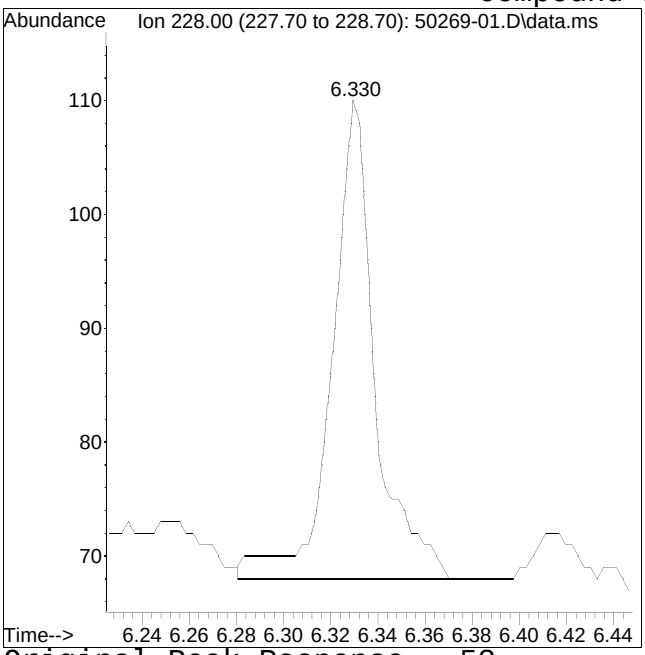
Manual Peak Response = 46 M6

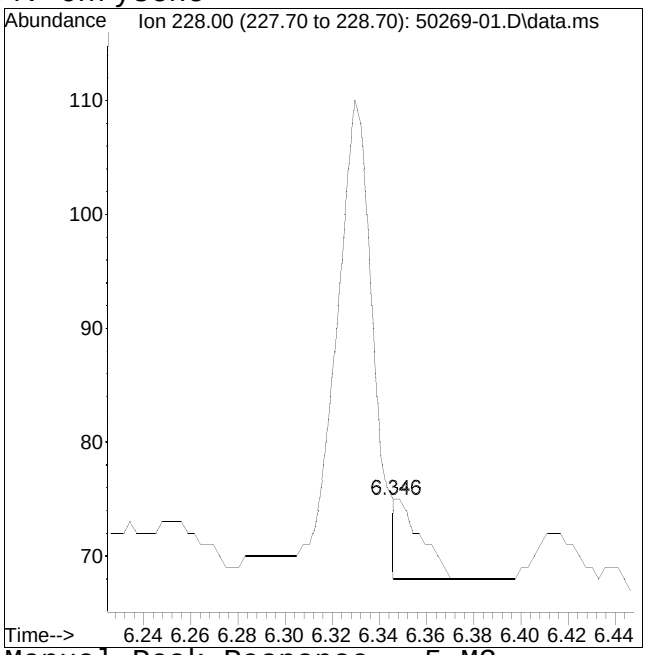
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-01.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 2:51 pm Instrument : SV128
Sample : L2350269-01,32,,ah Quant Date : 9/7/2023 3:05 pm

Compound #34: Chrysene





Original Peak Response = 53 Manual Peak Response = 5 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-04.D
Acq On : 07 Sep 2023 03:07 pm
Operator : SV128:jjw
Sample : L2350269-04,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 10 14:09:13 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.262	152	4177	4000.000	ng/ml	0.00
Standard Area 1 = 2265			Recovery = 184.42%			
8) Naphthalene-d8	2.930	136	16214	4000.000	ng/ml	0.00
Standard Area 1 = 8686			Recovery = 186.67%			
17) Acenaphthene-d10	3.914	164	9038	4000.000	ng/ml	0.00
Standard Area 1 = 5058			Recovery = 178.69%			
22) Phenanthrene-d10	4.760	188	17659	4000.000	ng/ml	0.00
Standard Area 1 = 12202			Recovery = 144.72%			
31) Chrysene-d12	6.329	240	10647	4000.000	ng/ml	0.00
Standard Area 1 = 11660			Recovery = 91.31%			
36) Perylene-d12	7.604	264	12001	4000.000	ng/ml	-0.02
Standard Area 1 = 12832			Recovery = 93.52%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.665	112	3253	3047.653	ng/ml	0.02
Spiked Amount 5000.000	Range 15 - 110		Recovery = 60.95%			
3) Phenol-d6	2.075	99	3271	2504.351	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 50.09%			
7) Nitrobenzene-d5	2.542	82	2058	1858.908	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 74.36%			
13) 2-Fluorobiphenyl	3.532	172	5720	1720.101	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 68.80%			
21) 2,4,6-Tribromophenol	4.363	330	1291	3401.888	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 68.04%			
30) 4-Terphenyl-d14	5.684	244	4971	1332.055	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 53.28%			

Target Compounds			Qvalue
6) Hexachloroethane	0.000	0	N.D.
9) Naphthalene	0.000	0	N.D. d
10) Hexachlorobutadiene	0.000	0	N.D.
11) 2-Methylnaphthalene	0.000	0	N.D.
14) 2-Chloronaphthalene	0.000	0	N.D.
16) Acenaphthylene	0.000	0	N.D. d
18) Acenaphthene	0.000	0	N.D.
20) Fluorene	0.000	0	N.D.
24) Hexachlorobenzene	0.000	0	N.D.
25) Pentachlorophenol	0.000	0	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-04.D
Acq On : 07 Sep 2023 03:07 pm
Operator : SV128:jjw
Sample : L2350269-04,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 10 14:09:13 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	0.000		0	N.D.	d	
27) Anthracene	0.000		0	N.D.	d	
28) Fluoranthene	0.000		0	N.D.		
29) Pyrene	0.000		0	N.D.		
32) Benzo[a]anthracene	0.000		0	N.D.	d	
34) Chrysene	0.000		0	N.D.	d	
37) Benzo[b]fluoranthene	0.000		0	N.D.	d	
38) Benzo[k]fluoranthene	0.000		0	N.D.	d	
39) Benzo[a]pyrene	0.000		0	N.D.	d	
40) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.		
41) Dibenzo[a,h]anthracene	0.000		0	N.D.		
42) Benzo[g,h,i]perylene	0.000		0	N.D.		

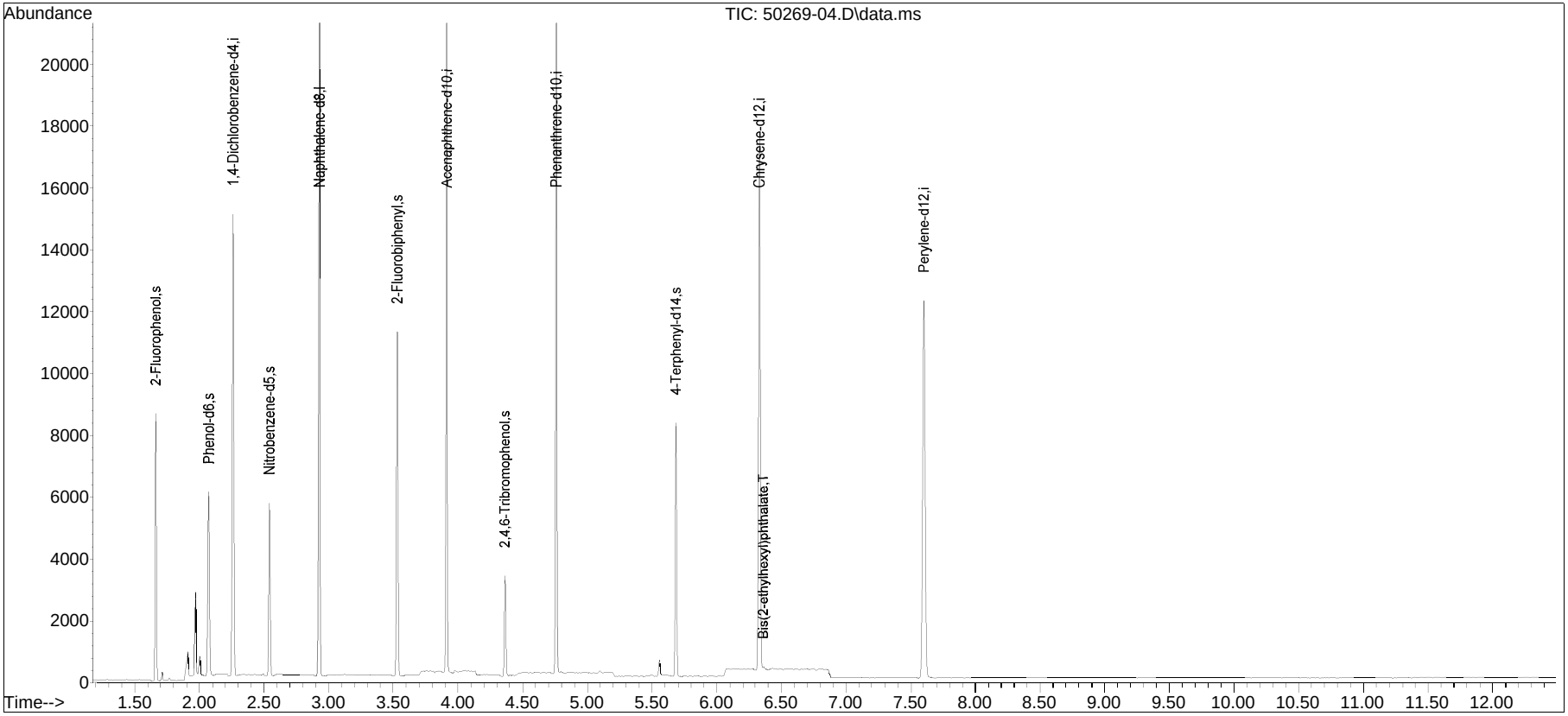
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-04.D
Acq On : 07 Sep 2023 03:07 pm
Operator : SV128:jjw
Sample : L2350269-04,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 24 Sample Multiplier: 1

Quant Time: Sep 10 14:09:13 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listedv0907a.D•



Manual Integration Report

Data Path	: I:\8270SIM\SV128\230907\	QMethod	: SIM-LVI_230831_sv128.M
Data File	: 50269-04.D	Operator	: SV128:jjw
Date Inj'd	: 9/7/2023 3:07 pm	Instrument	: SV128
Sample	: L2350269-04,32,,ah	Quant Date	: 9/7/2023 3:21 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-07.D
Acq On : 07 Sep 2023 03:41 pm
Operator : SV128:jjw
Sample : L2350269-07,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 10 14:10:44 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.259	152	3555	4000.000	ng/ml	0.00
Standard Area 1 = 2265			Recovery = 156.95%			
8) Naphthalene-d8	2.928	136	13547	4000.000	ng/ml	0.00
Standard Area 1 = 8686			Recovery = 155.96%			
17) Acenaphthene-d10	3.911	164	7181	4000.000	ng/ml	0.00
Standard Area 1 = 5058			Recovery = 141.97%			
22) Phenanthrene-d10	4.760	188	13849	4000.000	ng/ml	0.00
Standard Area 1 = 12202			Recovery = 113.50%			
31) Chrysene-d12	6.330	240	10063	4000.000	ng/ml	0.00
Standard Area 1 = 11660			Recovery = 86.30%			
36) Perylene-d12	7.604	264	11392	4000.000	ng/ml	-0.02
Standard Area 1 = 12832			Recovery = 88.78%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.662	112	3582	3943.046	ng/ml	0.02
Spiked Amount 5000.000	Range 15 - 110		Recovery = 78.86%			
3) Phenol-d6	2.072	99	3826	3441.791	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 68.84%			
7) Nitrobenzene-d5	2.540	82	2135	2265.871	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 90.63%			
13) 2-Fluorobiphenyl	3.529	172	5922	2131.441	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 85.26%			
21) 2,4,6-Tribromophenol	4.363	330	1369	4540.301	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 90.81%			
30) 4-Terphenyl-d14	5.684	244	5838	1994.757	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 79.79%			
Target Compounds						Qvalue
6) Hexachloroethane	0.000		0	N.D.		
9) Naphthalene	2.940	128	8M3	2.417	ng/ml	
10) Hexachlorobutadiene	0.000		0	N.D.		
11) 2-Methylnaphthalene	0.000		0	N.D.		
14) 2-Chloronaphthalene	0.000		0	N.D.		
16) Acenaphthylene	0.000		0	N.D.	d	
18) Acenaphthene	0.000		0	N.D.		
20) Fluorene	0.000		0	N.D.		
24) Hexachlorobenzene	0.000		0	N.D.		
25) Pentachlorophenol	0.000		0	N.D.		

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-07.D
Acq On : 07 Sep 2023 03:41 pm
Operator : SV128:jjw
Sample : L2350269-07,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 10 14:10:44 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.772	178	8M3	2.317	ng/ml	
27) Anthracene	4.802	178	10M4	2.976	ng/ml	
28) Fluoranthene	0.000		0	N.D.		
29) Pyrene	0.000		0	N.D.		
32) Benzo[a]anthracene	0.000		0	N.D.	d	
34) Chrysene	0.000		0	N.D.	d	
37) Benzo[b]fluoranthene	0.000		0	N.D.	d	
38) Benzo[k]fluoranthene	0.000		0	N.D.	d	
39) Benzo[a]pyrene	0.000		0	N.D.	d	
40) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.		
41) Dibenzo[a,h]anthracene	0.000		0	N.D.		
42) Benzo[g,h,i]perylene	0.000		0	N.D.		

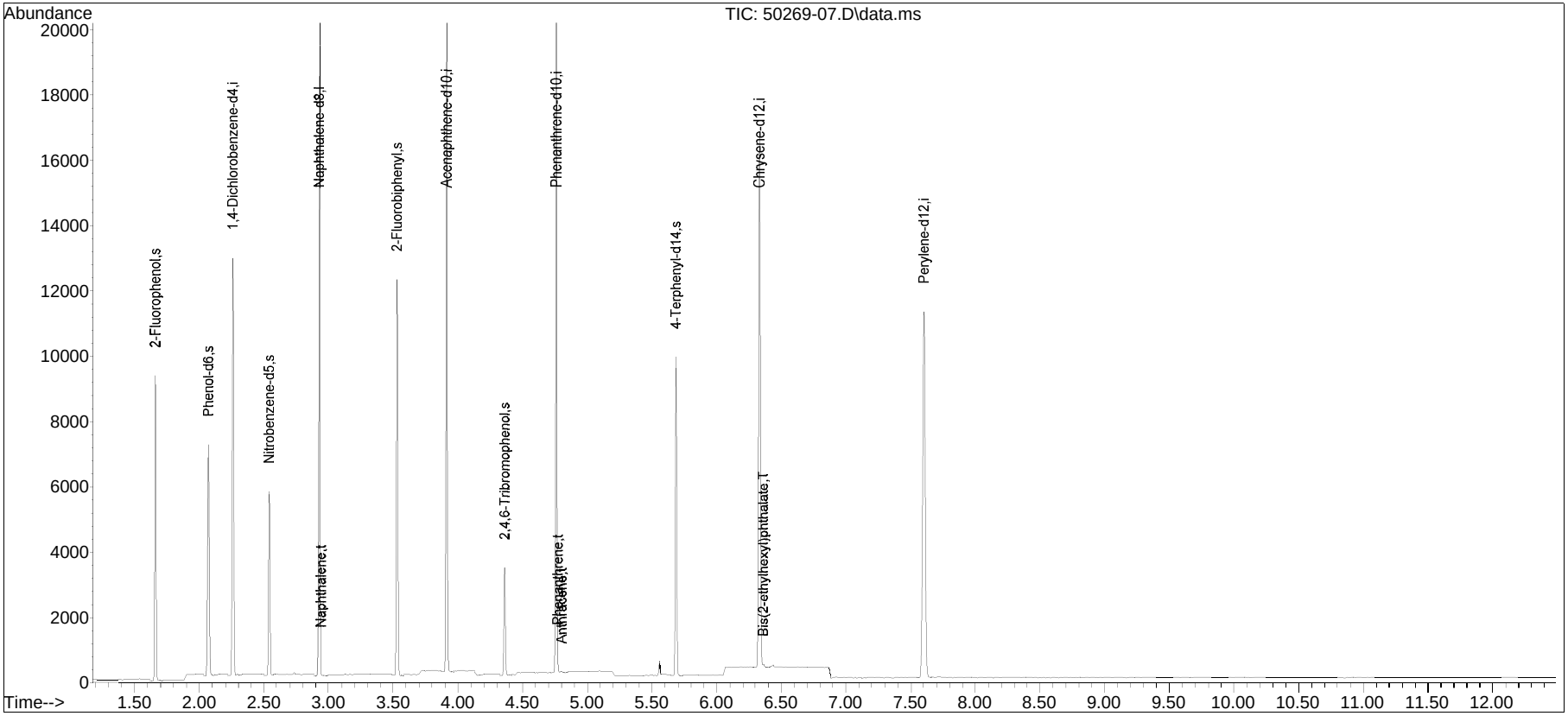
(#) = qualifier out of range (m) = manual integration (+) = signals summed

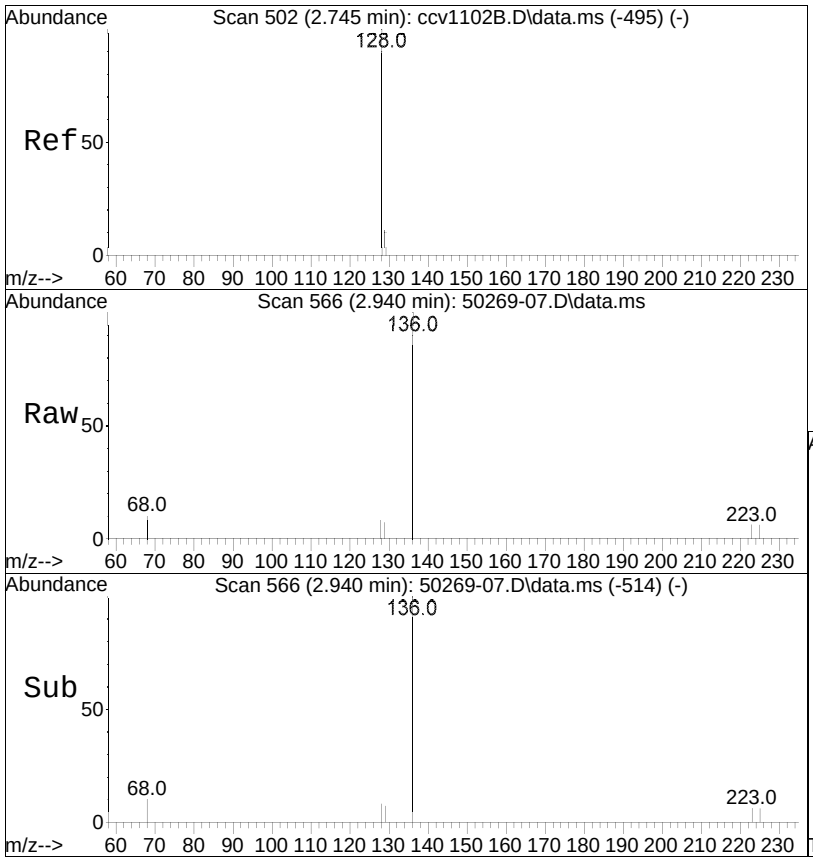
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-07.D
Acq On : 07 Sep 2023 03:41 pm
Operator : SV128:jjw
Sample : L2350269-07,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 26 Sample Multiplier: 1

Quant Time: Sep 10 14:10:44 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listedv0907a.D•

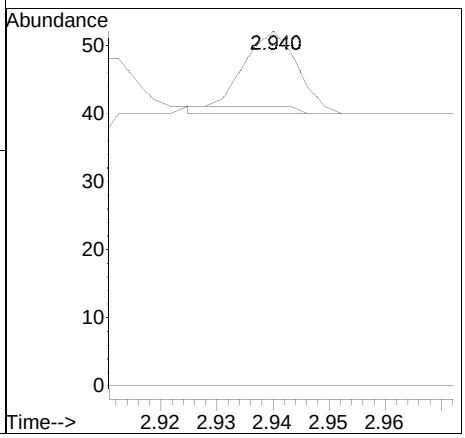


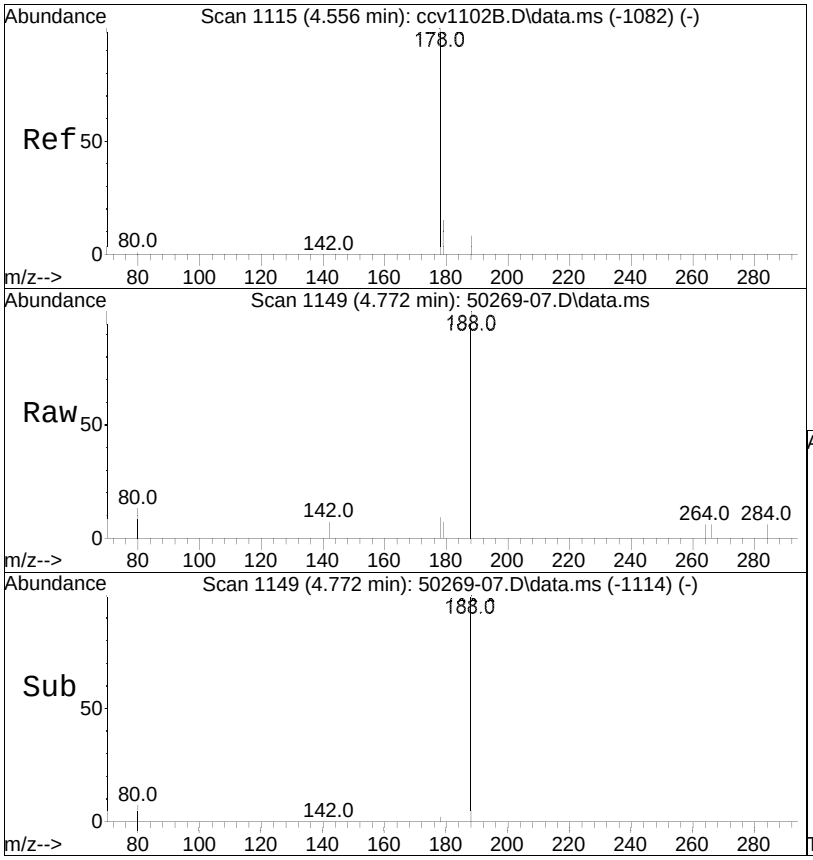


#9
Naphthalene
Concen: 2.42 ng/ml M3
RT: 2.940 min Scan# 566
Delta R.T. -0.000 min
Lab File: 50269-07.D
Acq: 07 Sep 2023 03:41 pm

Tgt Ion:128 Resp: 8

Ion	Ratio	Lower	Upper
128	100		
129	12.5	8.8	13.2
127	0.0	0.0	0.0

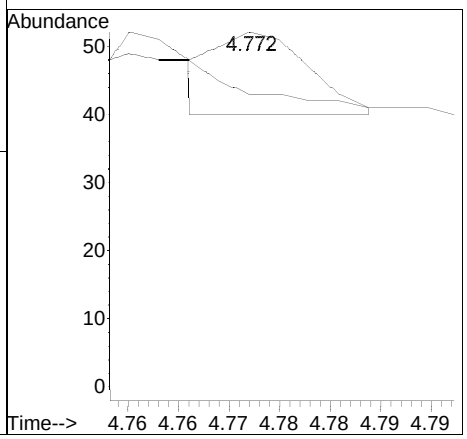


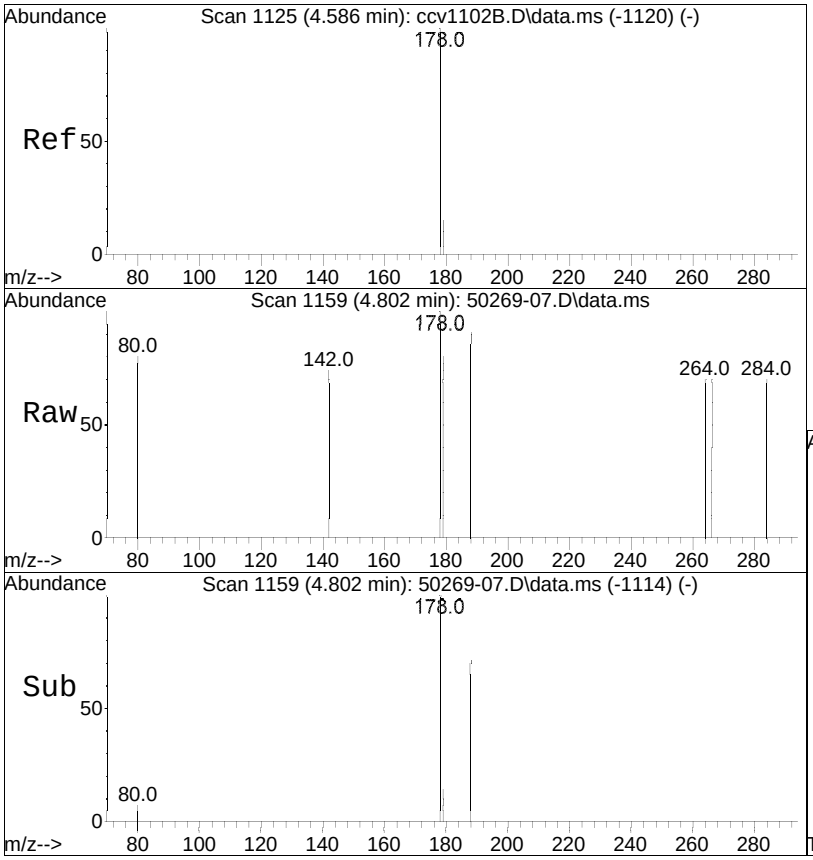


#26
Phenanthrene
Concen: 2.32 ng/ml M3
RT: 4.772 min Scan# 1149
Delta R.T. -0.003 min
Lab File: 50269-07.D
Acq: 07 Sep 2023 03:41 pm

Tgt Ion:178 Resp: 8

Ion	Ratio	Lower	Upper
178	100		
179	12.5	12.4	18.6

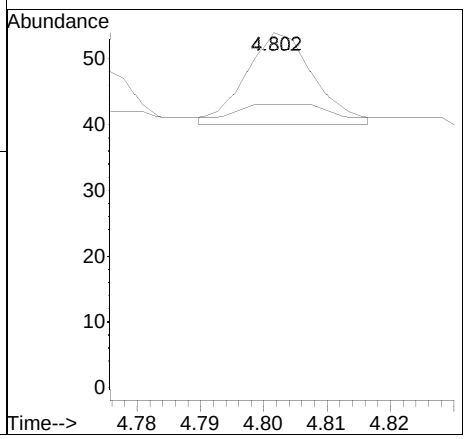




#27
Anthracene
Concen: 2.98 ng/ml M4
RT: 4.802 min Scan# 1159
Delta R.T. -0.003 min
Lab File: 50269-07.D
Acq: 07 Sep 2023 03:41 pm

Tgt Ion:178 Resp: 10

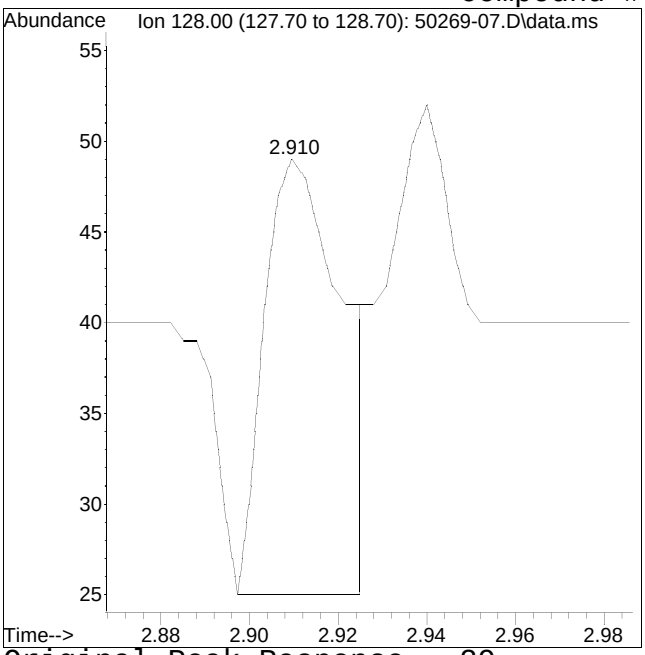
Ion	Ratio	Lower	Upper
178	100		
179	20.0	12.6	19.0#

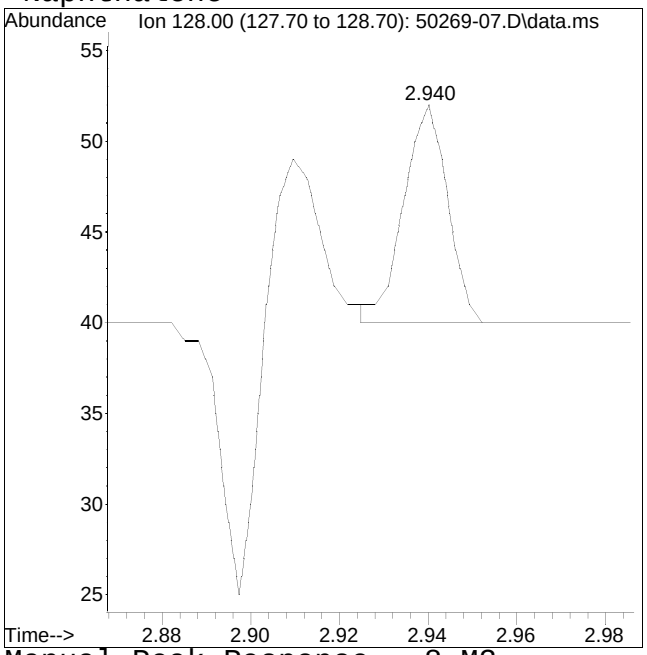


Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-07.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 3:41 pm Instrument : SV128
Sample : L2350269-07,32,,ah Quant Date : 9/7/2023 3:55 pm

Compound #9: Naphthalene





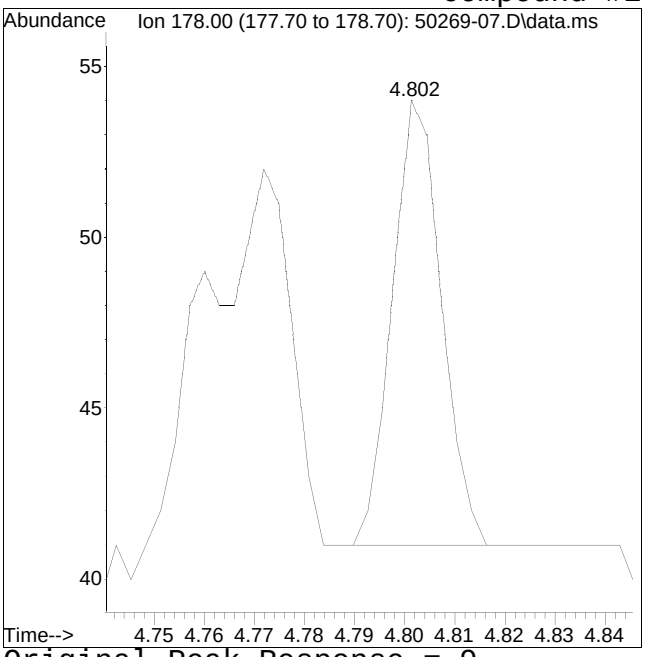
Original Peak Response = 29 Manual Peak Response = 8 M3

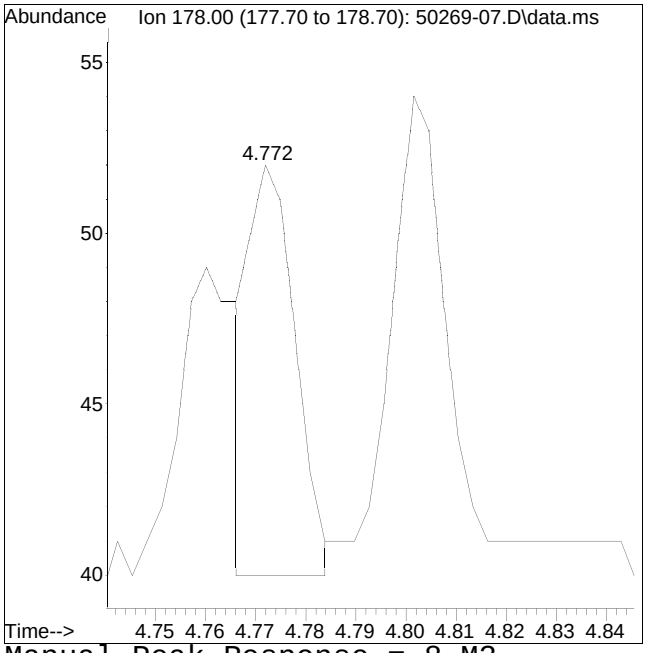
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-07.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 3:41 pm Instrument : SV128
Sample : L2350269-07,32,,ah Quant Date : 9/7/2023 3:55 pm

Compound #26: Phenanthrene





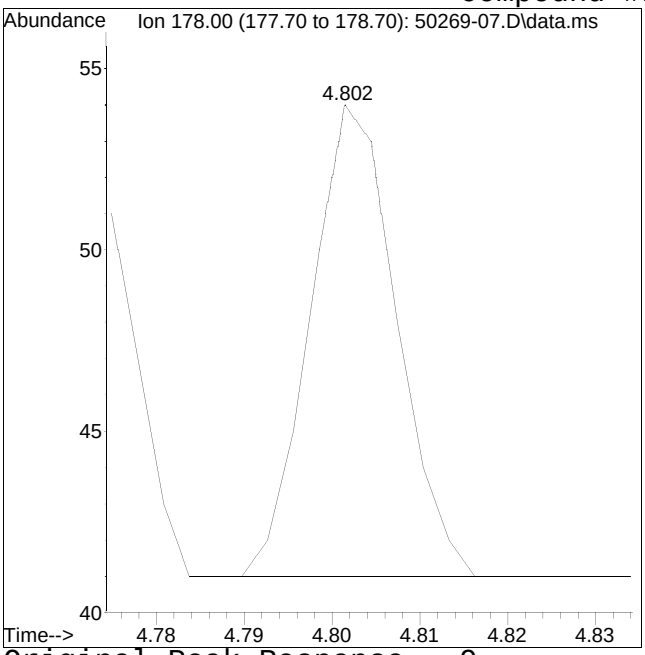
Original Peak Response = 9 Manual Peak Response = 8 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

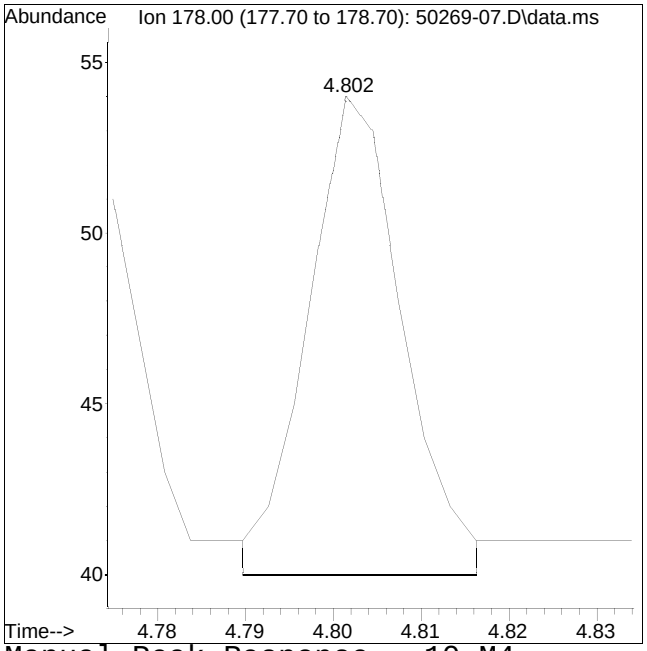
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-07.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 3:41 pm Instrument : SV128
Sample : L2350269-07,32,,ah Quant Date : 9/7/2023 3:55 pm

Compound #27: Anthracene



Original Peak Response = 9



Manual Peak Response = 10 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-08.D
Acq On : 07 Sep 2023 03:58 pm
Operator : SV128:jjw
Sample : L2350269-08,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 10 14:13:24 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.262	152	3153	4000.000	ng/ml	0.00
Standard Area 1 = 2265			Recovery = 139.21%			
8) Naphthalene-d8	2.928	136	11807	4000.000	ng/ml	0.00
Standard Area 1 = 8686			Recovery = 135.93%			
17) Acenaphthene-d10	3.911	164	6241	4000.000	ng/ml	0.00
Standard Area 1 = 5058			Recovery = 123.39%			
22) Phenanthrene-d10	4.760	188	12354	4000.000	ng/ml	0.00
Standard Area 1 = 12202			Recovery = 101.25%			
31) Chrysene-d12	6.330	240	9207	4000.000	ng/ml	0.00
Standard Area 1 = 11660			Recovery = 78.96%			
36) Perylene-d12	7.604	264	10772	4000.000	ng/ml	-0.02
Standard Area 1 = 12832			Recovery = 83.95%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.665	112	624	774.473	ng/ml	0.02
Spiked Amount 5000.000	Range 15 - 110		Recovery = 15.49%			
3) Phenol-d6	2.072	99	756	766.791	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 15.34%			
7) Nitrobenzene-d5	2.540	82	1506	1802.096	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 72.08%			
13) 2-Fluorobiphenyl	3.529	172	4469	1845.521	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 73.82%			
21) 2,4,6-Tribromophenol	4.363	330	129	492.268	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 9.85%#			
30) 4-Terphenyl-d14	5.684	244	4804	1840.093	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 73.60%			
Target Compounds						Qvalue
6) Hexachloroethane	0.000		0	N.D.		
9) Naphthalene	2.940	128	37M6	12.826	ng/ml	
10) Hexachlorobutadiene	0.000		0	N.D.		
11) 2-Methylnaphthalene	3.322	142	9M7	4.674	ng/ml	
14) 2-Chloronaphthalene	3.593	162	11M3	5.510	ng/ml	
16) Acenaphthylene	0.000		0	N.D. d		
18) Acenaphthene	0.000		0	N.D. d		
20) Fluorene	4.223	166	7M6	3.244	ng/ml	
24) Hexachlorobenzene	0.000		0	N.D.		
25) Pentachlorophenol	0.000		0	N.D.		

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-08.D
Acq On : 07 Sep 2023 03:58 pm
Operator : SV128:jjw
Sample : L2350269-08,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 10 14:13:24 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.772	178	15M6	4.870	ng/ml	
27) Anthracene	4.804	178	32M4	10.676	ng/ml	
28) Fluoranthene	0.000		0	N.D.		
29) Pyrene	5.588	202	8M7	2.160	ng/ml	
32) Benzo[a]anthracene	0.000		0	N.D.	d	
34) Chrysene	0.000		0	N.D.	d	
37) Benzo[b]fluoranthene	0.000		0	N.D.	d	
38) Benzo[k]fluoranthene	0.000		0	N.D.	d	
39) Benzo[a]pyrene	0.000		0	N.D.	d	
40) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.		
41) Dibenzo[a,h]anthracene	0.000		0	N.D.		
42) Benzo[g,h,i]perylene	0.000		0	N.D.		

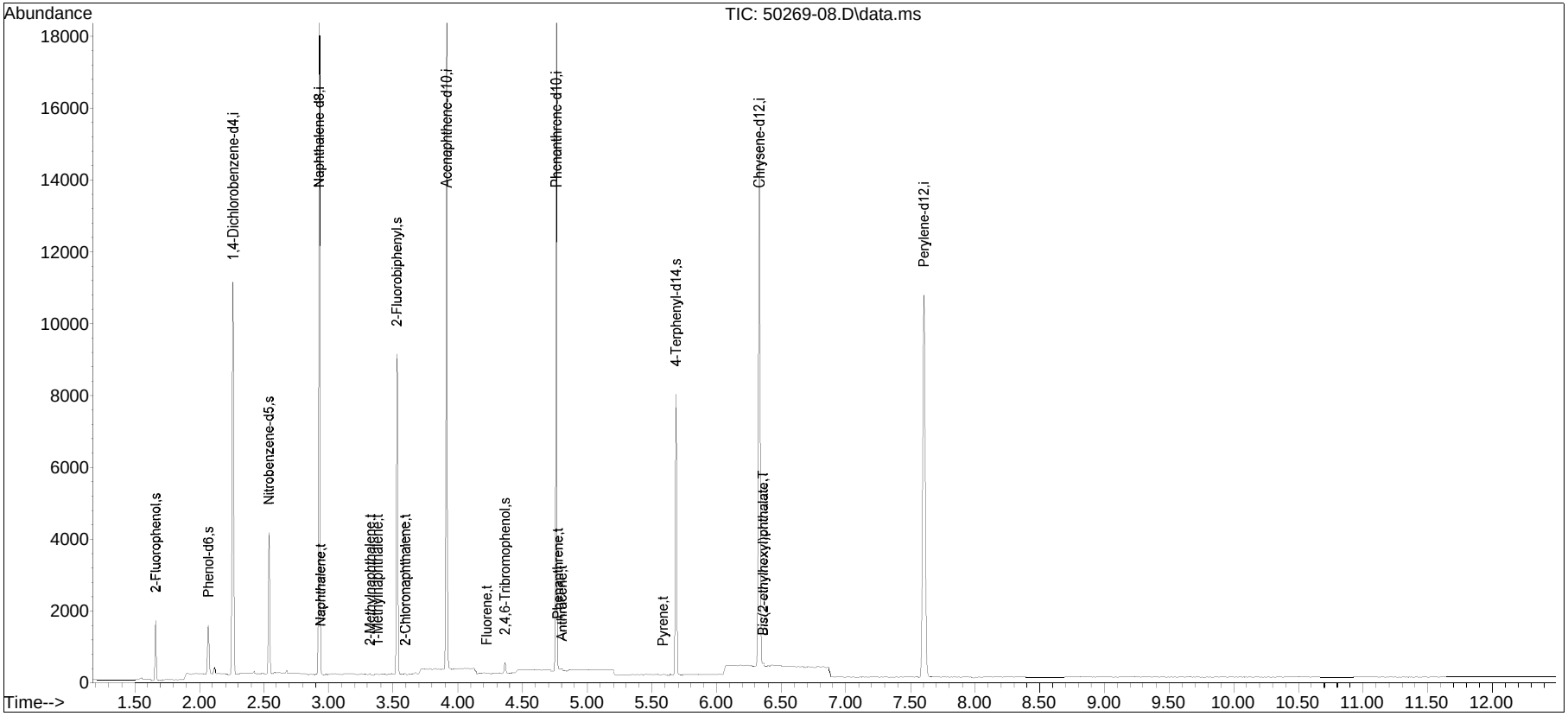
(#) = qualifier out of range (m) = manual integration (+) = signals summed

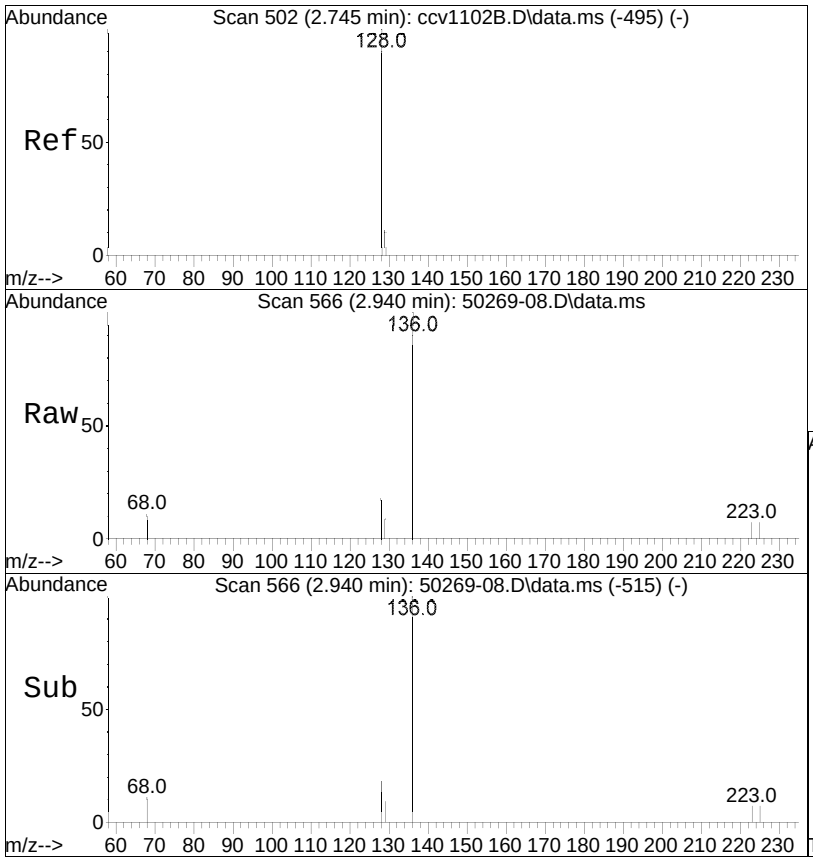
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-08.D
Acq On : 07 Sep 2023 03:58 pm
Operator : SV128:jjw
Sample : L2350269-08,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 10 14:13:24 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listedv0907a.D•

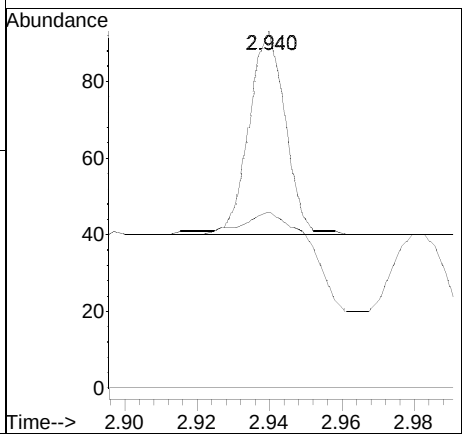


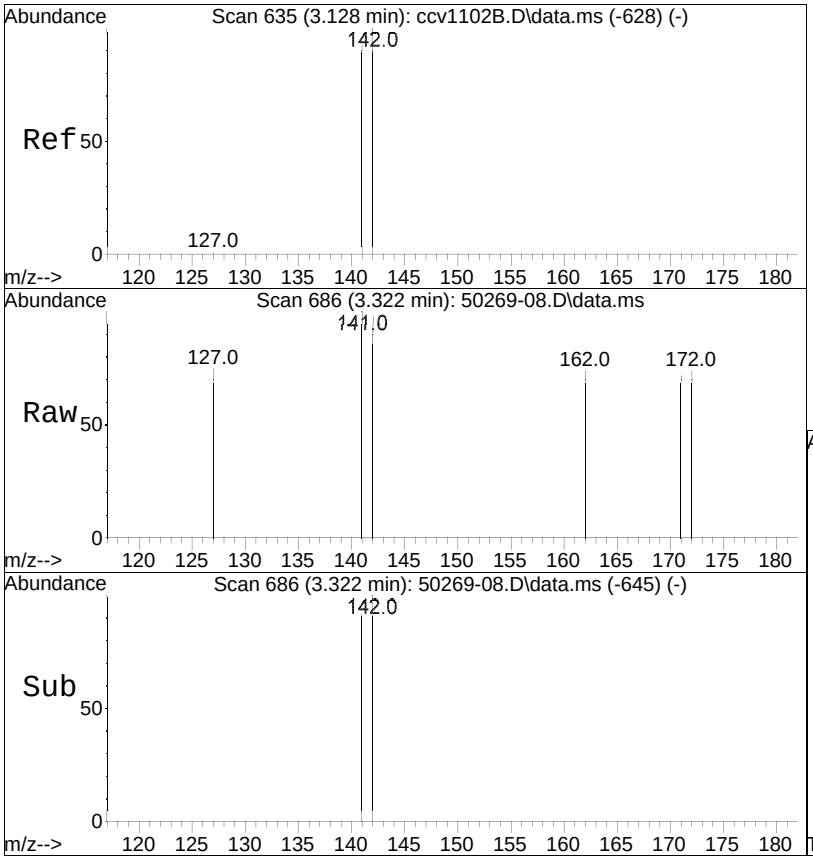


#9
Naphthalene
Concen: 12.83 ng/ml M6
RT: 2.940 min Scan# 566
Delta R.T. -0.000 min
Lab File: 50269-08.D
Acq: 07 Sep 2023 03:58 pm

Tgt Ion:128 Resp: 37

Ion	Ratio	Lower	Upper
128	100		
129	10.8	8.8	13.2
127	0.0	0.0	0.0

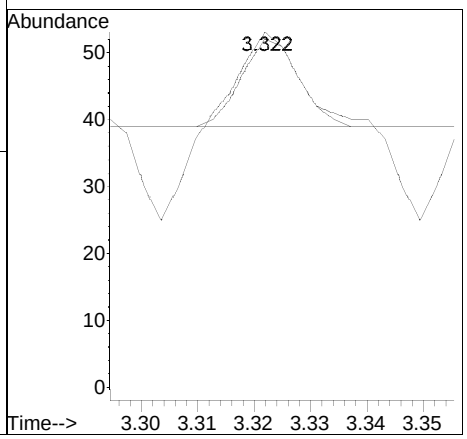


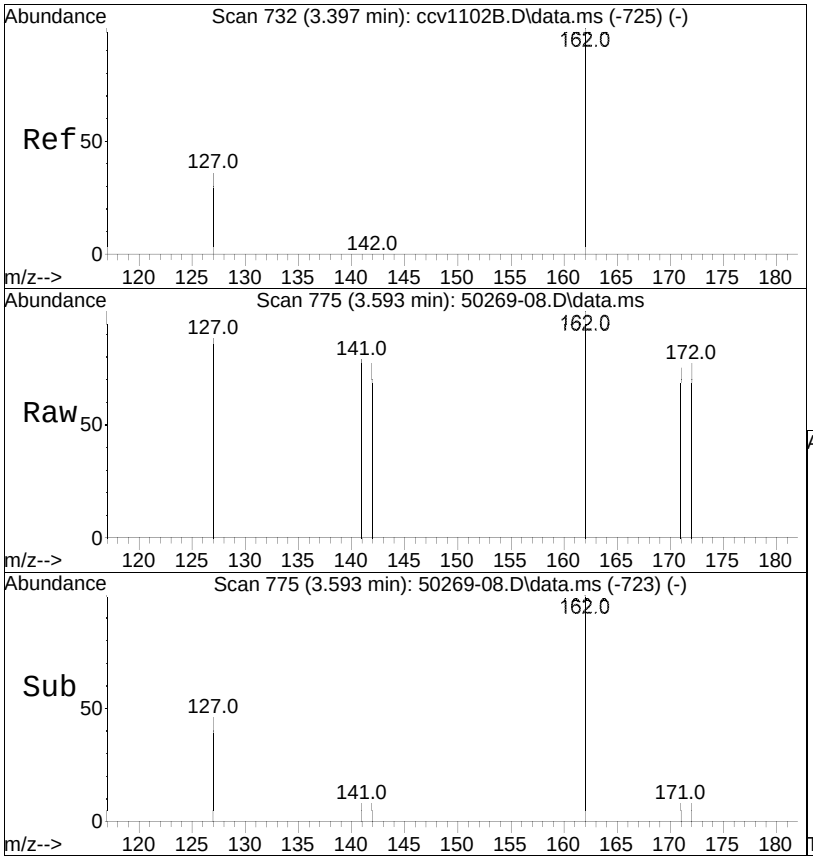


#11
2-Methylnaphthalene
Concen: 4.67 ng/ml M7
RT: 3.322 min Scan# 686
Delta R.T. -0.000 min
Lab File: 50269-08.D
Acq: 07 Sep 2023 03:58 pm

Tgt Ion:142 Resp: 9

Ion	Ratio	Lower	Upper
142	100		
141	88.9	75.0	112.4

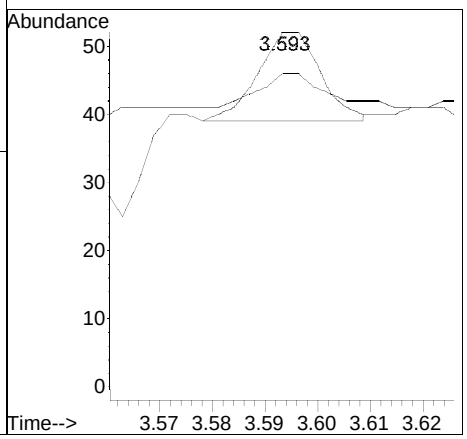


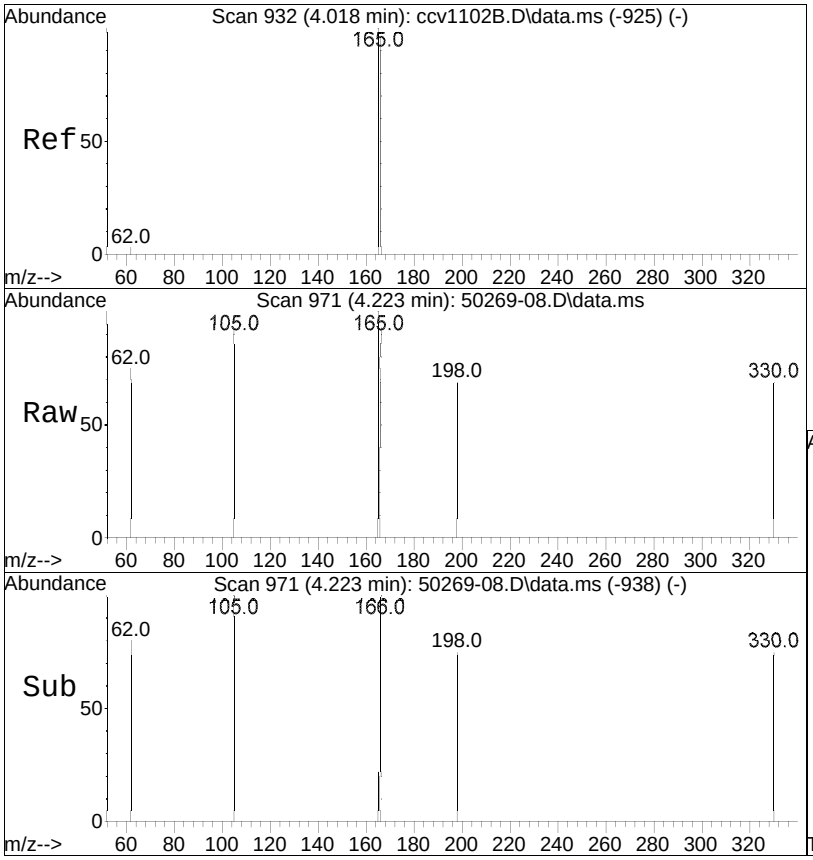


#14
2-Chloronaphthalene
Concen: 5.51 ng/ml M3
RT: 3.593 min Scan# 775
Delta R.T. -0.003 min
Lab File: 50269-08.D
Acq: 07 Sep 2023 03:58 pm

Tgt Ion:162 Resp: 11

Ion	Ratio	Lower	Upper
162	100		
127	36.4	28.7	43.1

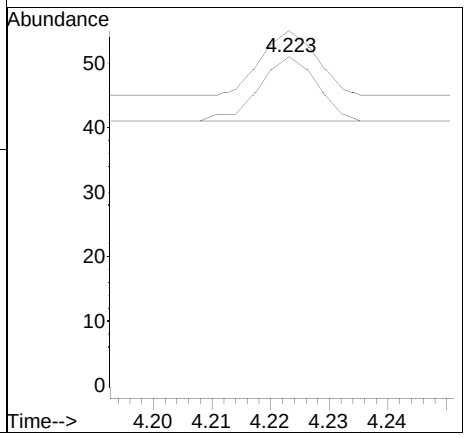


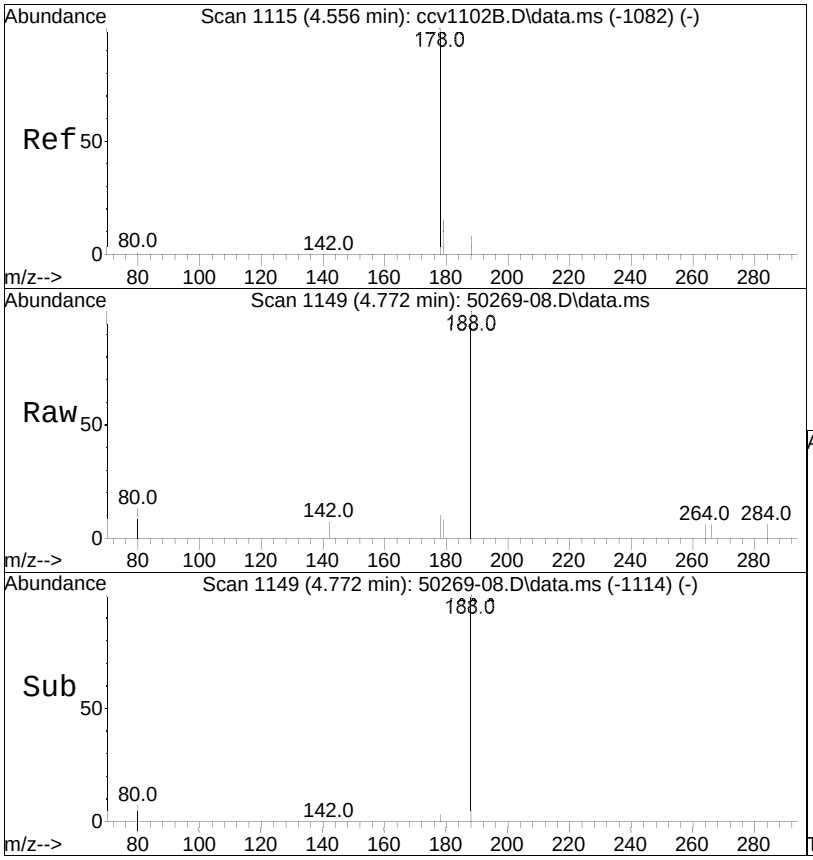


#20
Fluorene
Concen: 3.24 ng/ml M6
RT: 4.223 min Scan# 971
Delta R.T. -0.003 min
Lab File: 50269-08.D
Acq: 07 Sep 2023 03:58 pm

Tgt Ion:166 Resp: 7

Ion	Ratio	Lower	Upper
166	100		
165	100.0	82.7	124.1

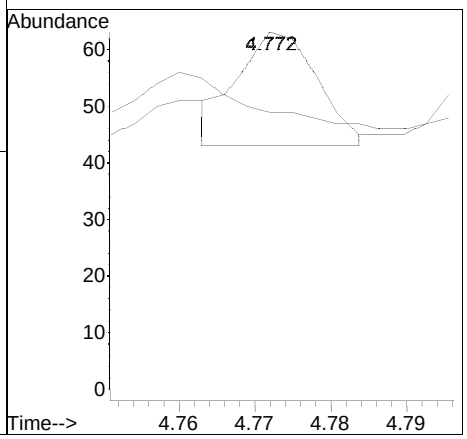


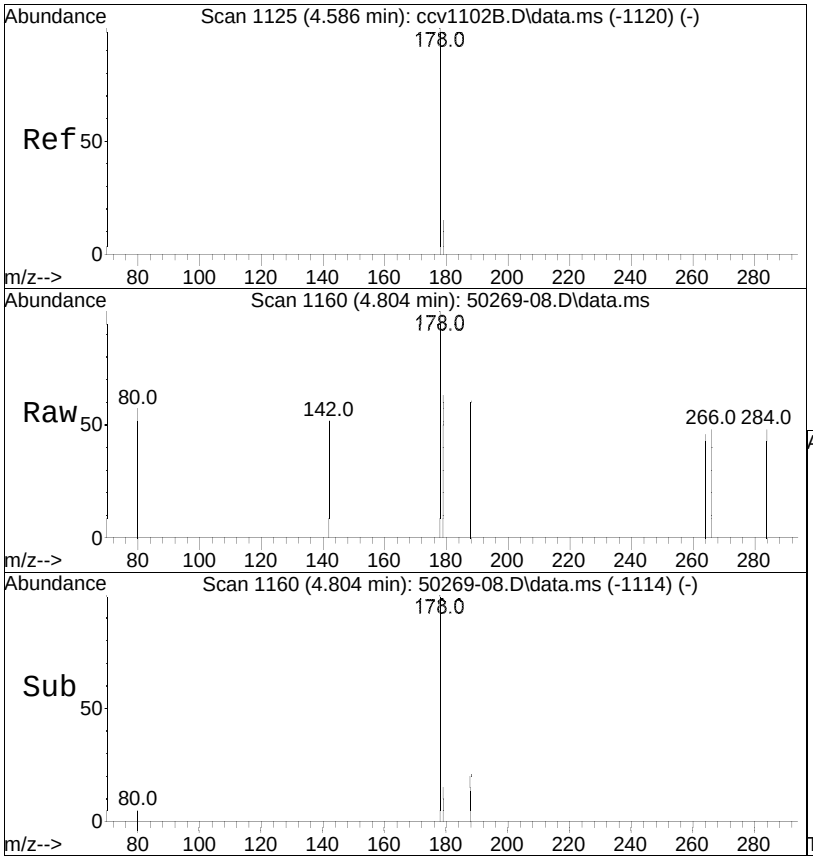


#26
Phenanthrene
Concen: 4.87 ng/ml M6
RT: 4.772 min Scan# 1149
Delta R.T. -0.003 min
Lab File: 50269-08.D
Acq: 07 Sep 2023 03:58 pm

Tgt Ion:178 Resp: 15

Ion	Ratio	Lower	Upper
178	100		
179	20.0	12.4	18.6#

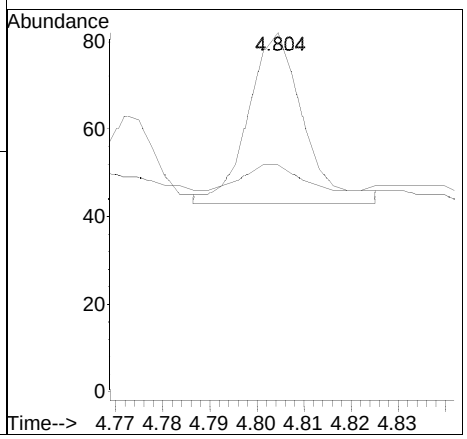


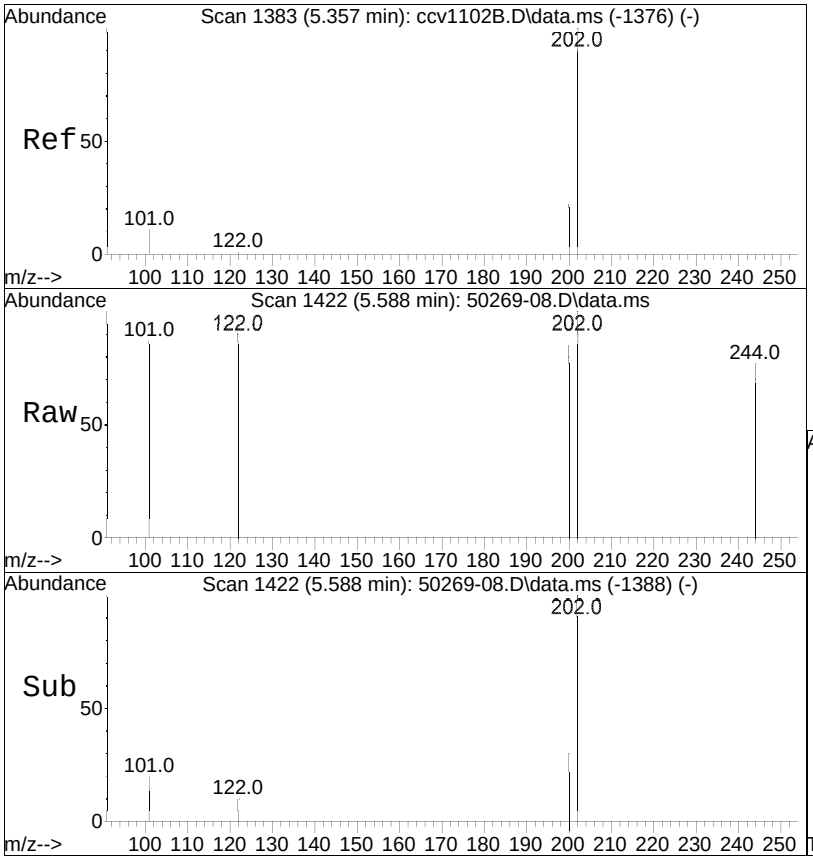


#27
Anthracene
Concen: 10.68 ng/ml M4
RT: 4.804 min Scan# 1160
Delta R.T. -0.000 min
Lab File: 50269-08.D
Acq: 07 Sep 2023 03:58 pm

Tgt Ion:178 Resp: 32

Ion	Ratio	Lower	Upper
178	100		
179	15.6	12.6	19.0

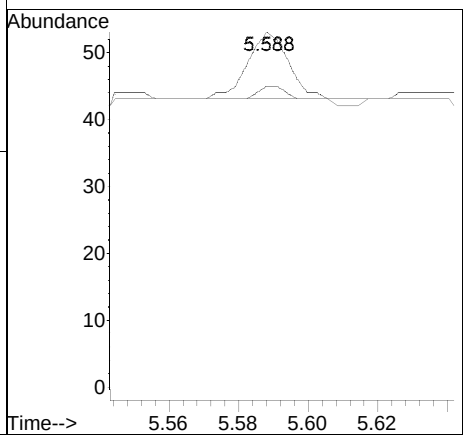




#29
Pyrene
Concen: 2.16 ng/ml M7
RT: 5.588 min Scan# 1422
Delta R.T. -0.006 min
Lab File: 50269-08.D
Acq: 07 Sep 2023 03:58 pm

Tgt Ion:202 Resp: 8

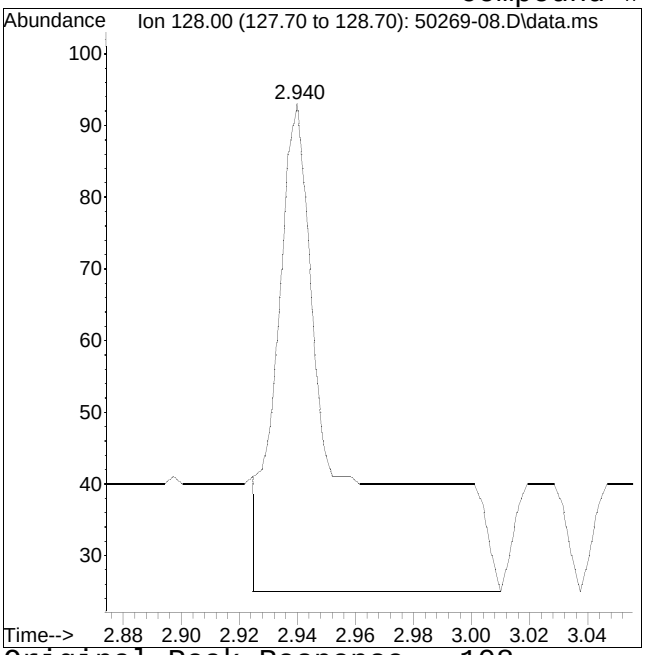
Ion	Ratio	Lower	Upper
202	100		
200	25.0	17.0	25.4



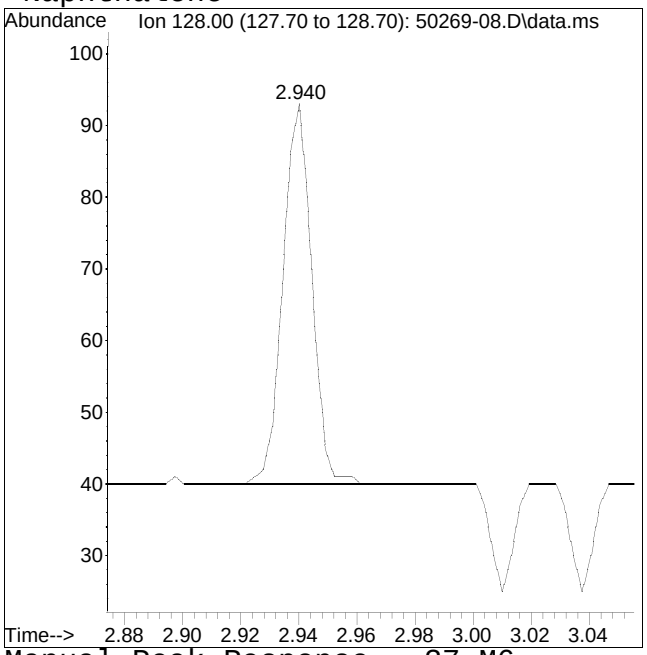
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-08.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 3:58 pm Instrument : SV128
Sample : L2350269-08,32,,ah Quant Date : 9/7/2023 4:12 pm

Compound #9: Naphthalene



Original Peak Response = 108



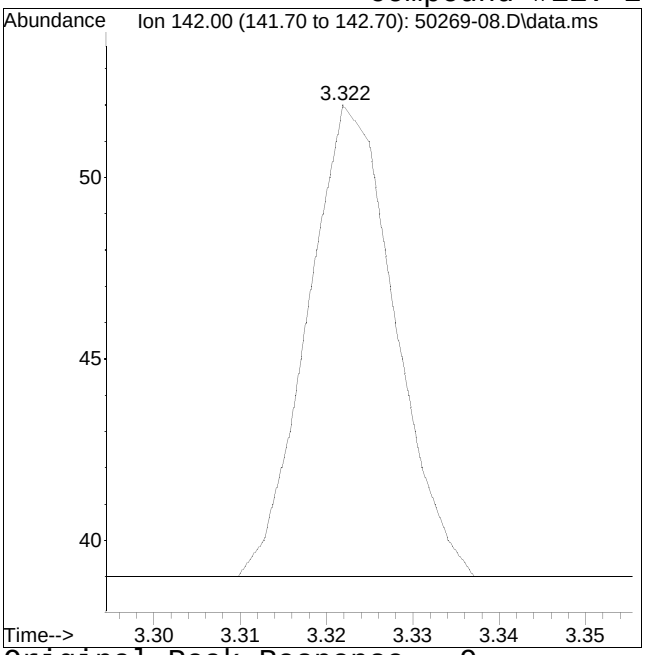
Manual Peak Response = 37 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

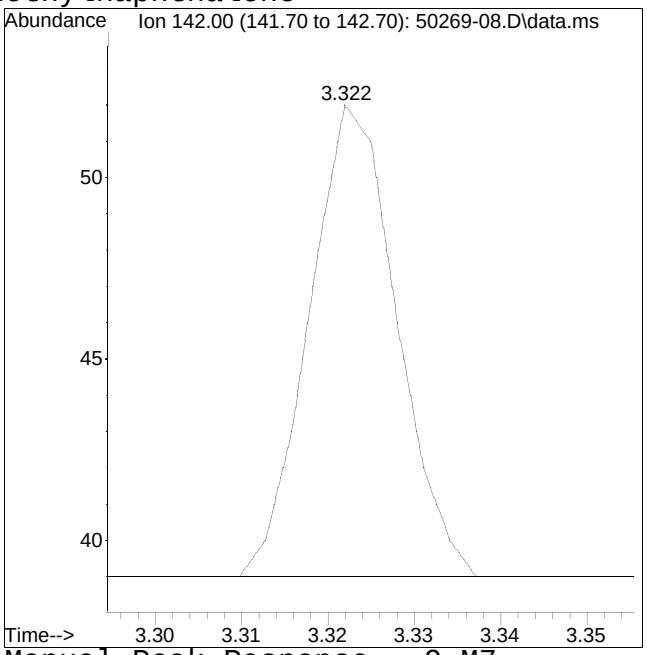
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-08.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 3:58 pm Instrument : SV128
Sample : L2350269-08,32,,ah Quant Date : 9/7/2023 4:12 pm

Compound #11: 2-Methylnaphthalene



Original Peak Response = 9



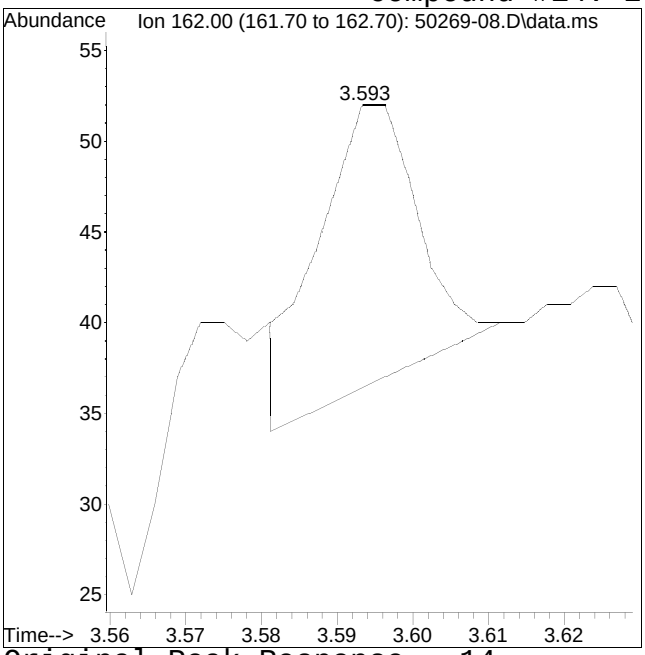
Manual Peak Response = 9 M7

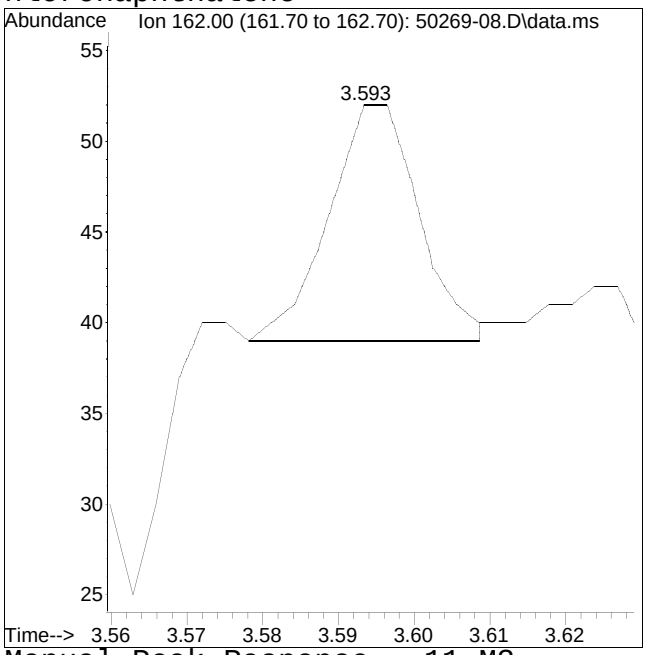
M7 = A qualifier ion was manually integrated (only for GC/MS data).

Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-08.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 3:58 pm Instrument : SV128
Sample : L2350269-08,32,,ah Quant Date : 9/7/2023 4:12 pm

Compound #14: 2-Chloronaphthalene





Original Peak Response = 14 Manual Peak Response = 11 M3

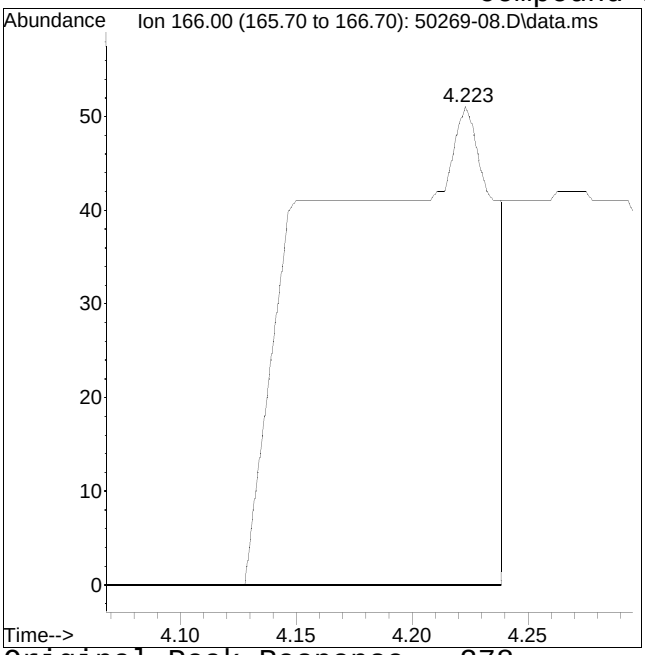
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

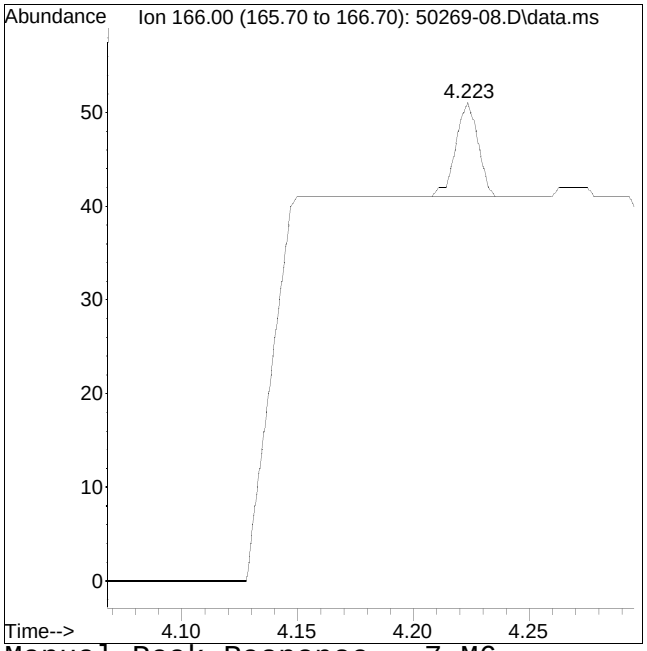
Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-08.D
Date Inj'd : 9/7/2023 3:58 pm
Sample : L2350269-08,32,,ah

QMethod : SIM-LVI_230831_sv128.M
Operator : SV128:jjw
Instrument : SV128
Quant Date : 9/7/2023 4:12 pm

Compound #20: Fluorene



Original Peak Response = 278



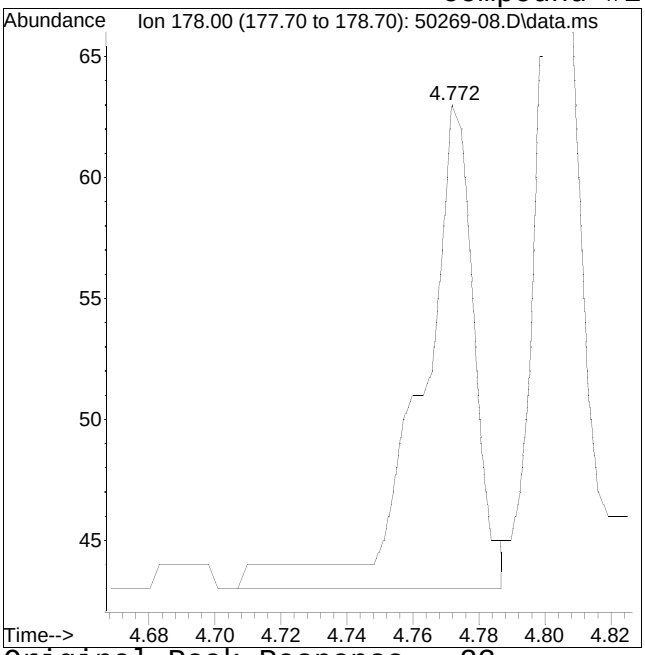
Manual Peak Response = 7 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

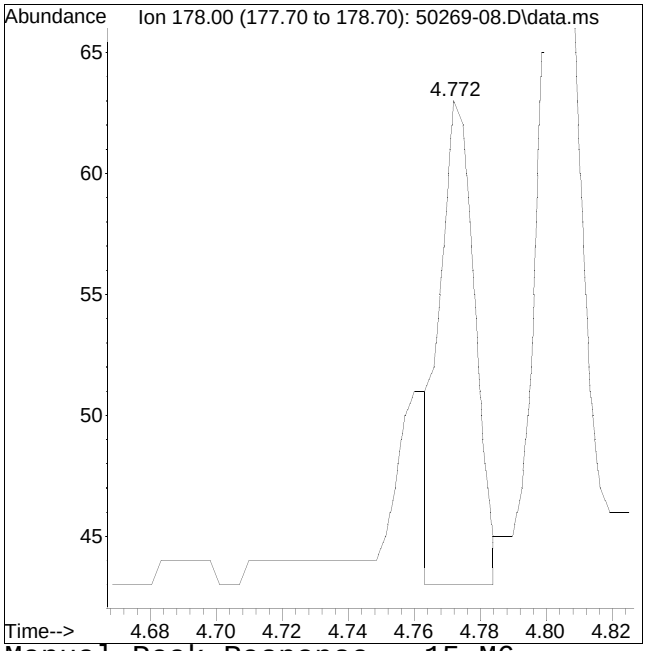
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-08.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 3:58 pm Instrument : SV128
Sample : L2350269-08,32,,ah Quant Date : 9/7/2023 4:12 pm

Compound #26: Phenanthrene



Original Peak Response = 23



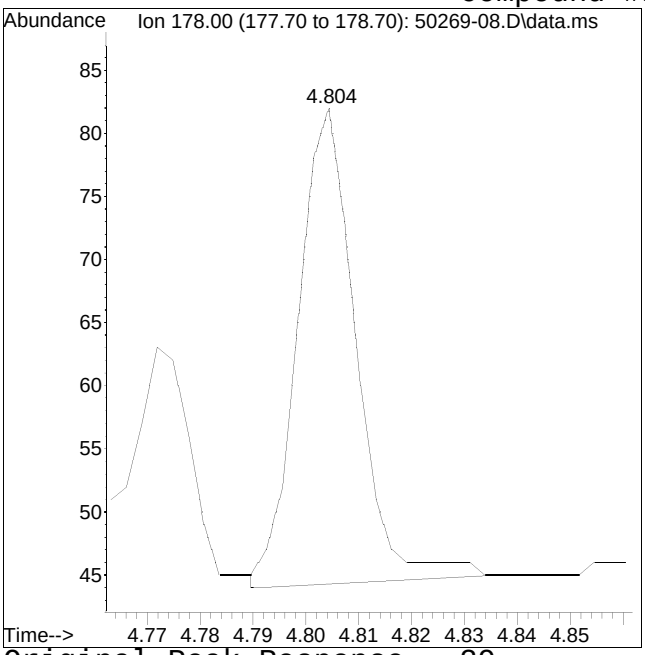
Manual Peak Response = 15 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

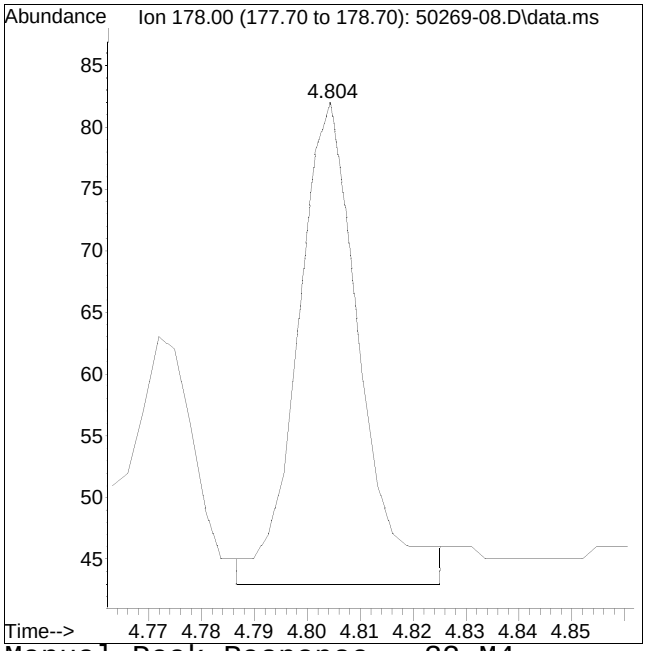
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-08.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 3:58 pm Instrument : SV128
Sample : L2350269-08,32,,ah Quant Date : 9/7/2023 4:12 pm

Compound #27: Anthracene



Original Peak Response = 29



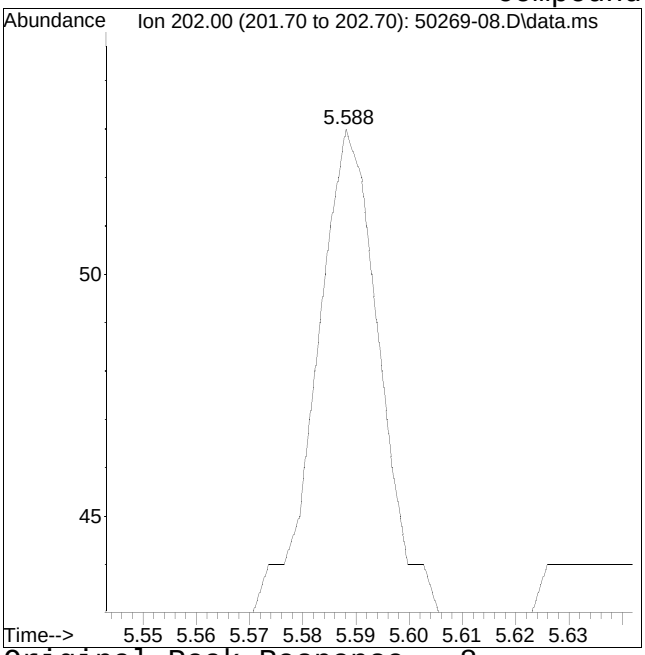
Manual Peak Response = 32 M4

M4 = Poor automated baseline construction.

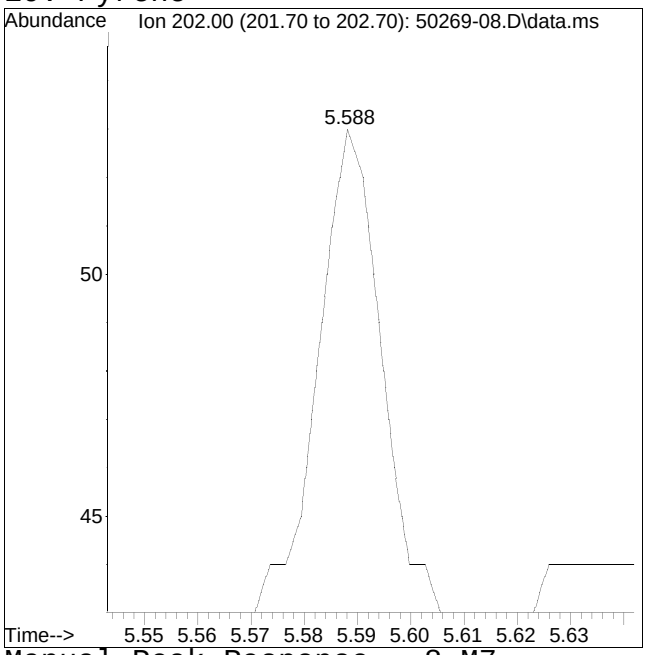
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-08.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 3:58 pm Instrument : SV128
Sample : L2350269-08,32,,ah Quant Date : 9/7/2023 4:12 pm

Compound #29: Pyrene



Original Peak Response = 8



Manual Peak Response = 8 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-09.D
Acq On : 07 Sep 2023 04:49 pm
Operator : SV128:jjw
Sample : L2350269-09,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 10 14:20:52 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.261	152	3452	4000.000	ng/ml	0.00
Standard Area 1 = 2265			Recovery = 152.41%			
8) Naphthalene-d8	2.929	136	12853	4000.000	ng/ml	0.00
Standard Area 1 = 8686			Recovery = 147.97%			
17) Acenaphthene-d10	3.916	164	6386	4000.000	ng/ml	0.00
Standard Area 1 = 5058			Recovery = 126.26%			
22) Phenanthrene-d10	4.762	188	11800	4000.000	ng/ml	0.00
Standard Area 1 = 12202			Recovery = 96.71%			
31) Chrysene-d12	6.332	240	9504	4000.000	ng/ml	0.00
Standard Area 1 = 11660			Recovery = 81.51%			
36) Perylene-d12	7.616	264	12221	4000.000	ng/ml	0.00
Standard Area 1 = 12832			Recovery = 95.24%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.662	112	2701	3061.961	ng/ml	0.02
Spiked Amount 5000.000	Range 15 - 110		Recovery = 61.24%			
3) Phenol-d6	2.074	99	2756	2553.216	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 51.06%			
7) Nitrobenzene-d5	2.541	82	1602	1750.930	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 70.04%			
13) 2-Fluorobiphenyl	3.531	172	4186	1587.972	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 63.52%			
21) 2,4,6-Tribromophenol	4.362	330	889	3315.423	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 66.31%			
30) 4-Terphenyl-d14	5.686	244	3970	1592.036	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 63.68%			
Target Compounds						Qvalue
6) Hexachloroethane	0.000		0	N.D.		
9) Naphthalene	2.939	128	204M4	64.961	ng/ml	
10) Hexachlorobutadiene	0.000		0	N.D.		
11) 2-Methylnaphthalene	3.324	142	27	12.881	ng/ml	93
14) 2-Chloronaphthalene	0.000		0	N.D. d		
16) Acenaphthylene	3.837	152	15M7	4.334	ng/ml	
18) Acenaphthene	3.931	153	54M6	26.687	ng/ml	
20) Fluorene	4.225	166	28	12.681	ng/ml	86
24) Hexachlorobenzene	0.000		0	N.D.		
25) Pentachlorophenol	4.658	266	86	233.189	ng/ml	99

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-09.D
Acq On : 07 Sep 2023 04:49 pm
Operator : SV128:jjw
Sample : L2350269-09,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 10 14:20:52 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.774	178	67M6	22.774	ng/ml	
27) Anthracene	4.803	178	91M1	31.784	ng/ml	
28) Fluoranthene	0.000		0	N.D.	d	
29) Pyrene	0.000		0	N.D.	d	
32) Benzo[a]anthracene	0.000		0	N.D.	d	
34) Chrysene	0.000		0	N.D.	d	
37) Benzo[b]fluoranthene	0.000		0	N.D.	d	
38) Benzo[k]fluoranthene	0.000		0	N.D.	d	
39) Benzo[a]pyrene	0.000		0	N.D.	d	
40) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.	d	
41) Dibenzo[a,h]anthracene	0.000		0	N.D.		
42) Benzo[g,h,i]perylene	0.000		0	N.D.	d	

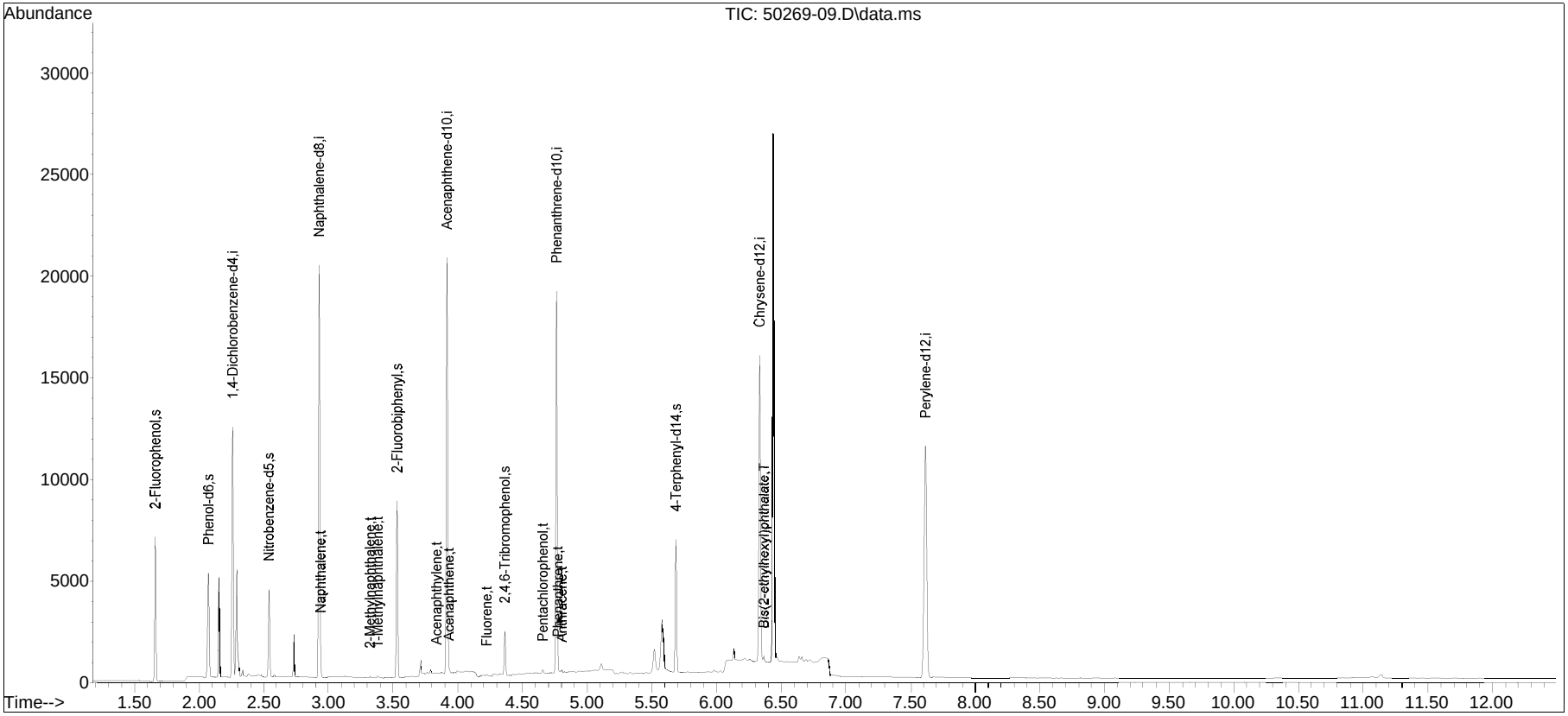
(#) = qualifier out of range (m) = manual integration (+) = signals summed

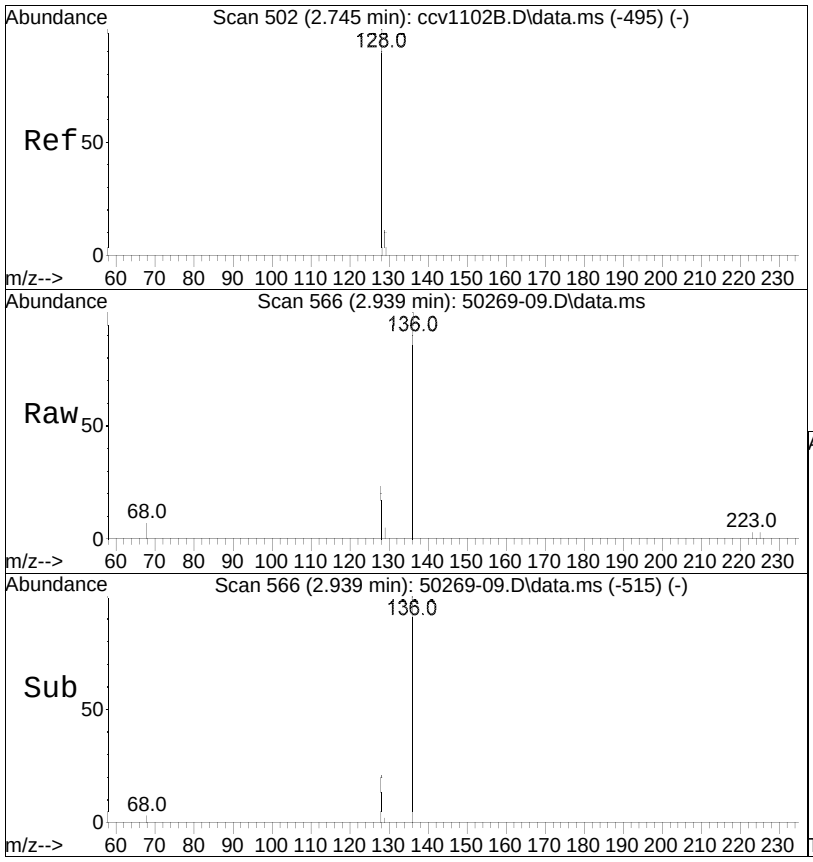
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 50269-09.D
Acq On : 07 Sep 2023 04:49 pm
Operator : SV128:jjw
Sample : L2350269-09,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 30 Sample Multiplier: 1

Quant Time: Sep 10 14:20:52 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listedv0907a.D•

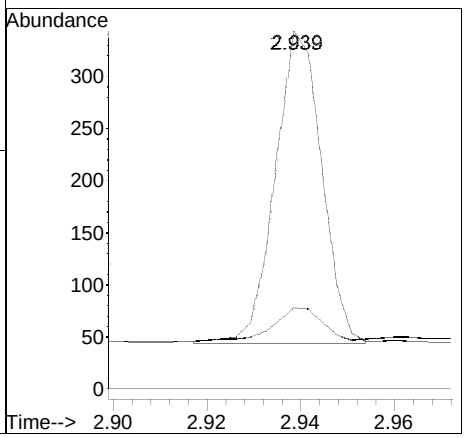


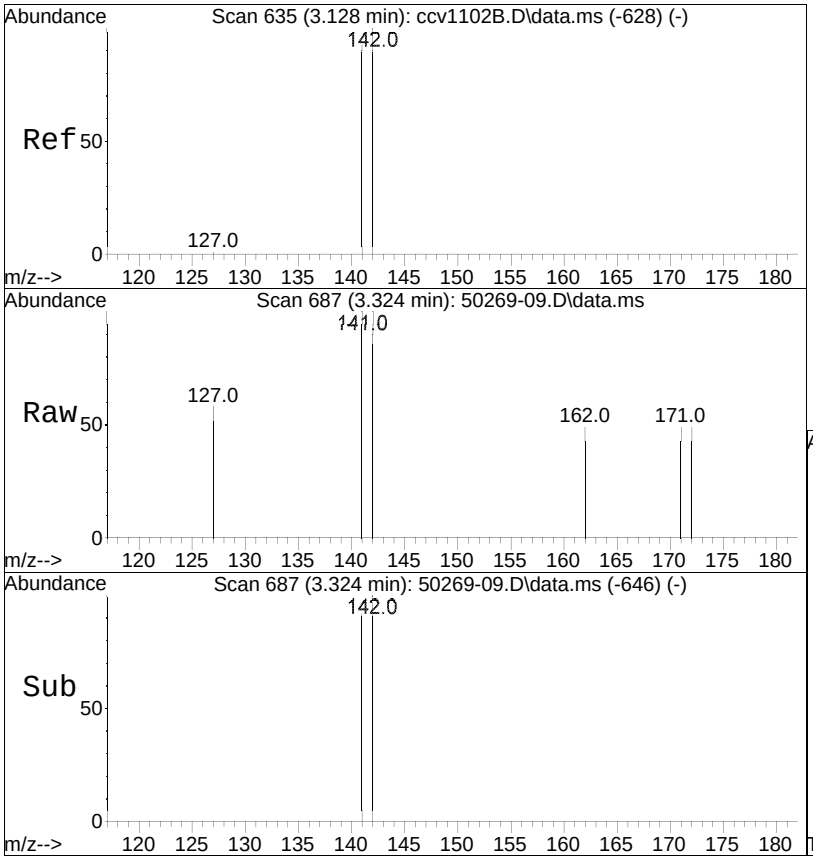


#9
Naphthalene
Concen: 64.96 ng/ml M4
RT: 2.939 min Scan# 566
Delta R.T. -0.002 min
Lab File: 50269-09.D
Acq: 07 Sep 2023 04:49 pm

Tgt Ion:128 Resp: 204

Ion	Ratio	Lower	Upper
128	100		
129	12.7	8.8	13.2
127	0.0	0.0	0.0

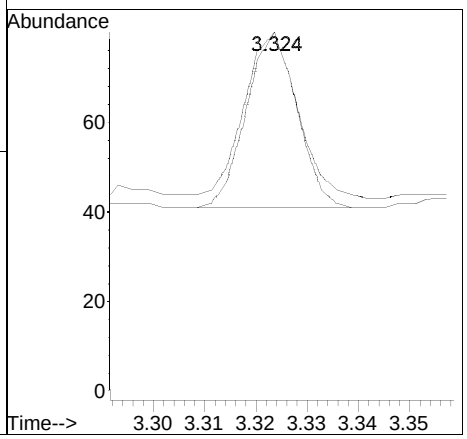


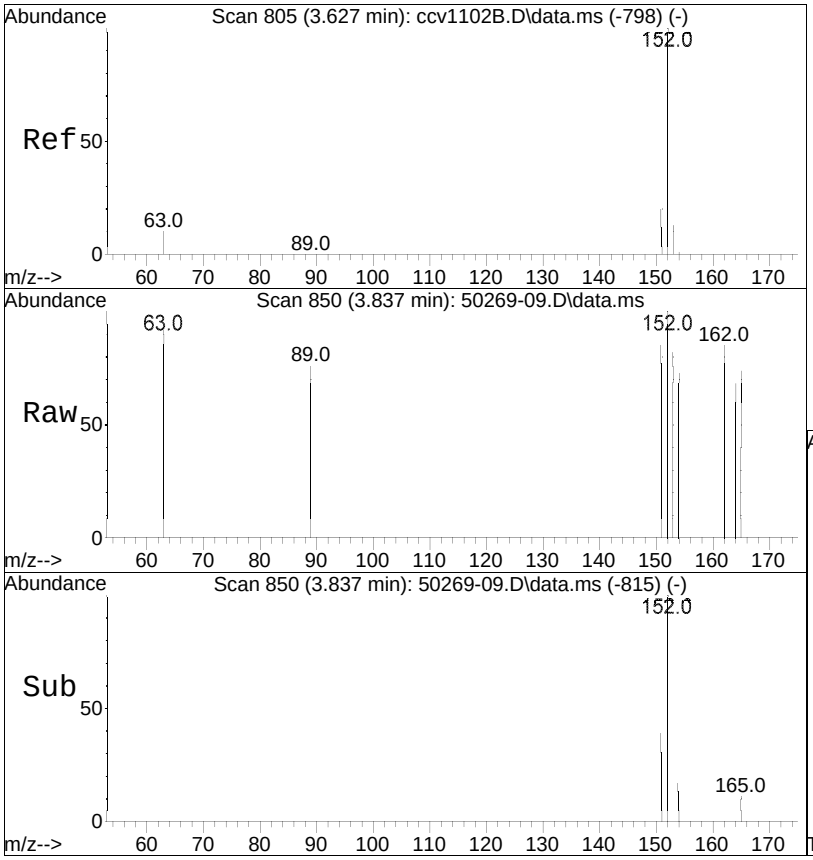


#11
2-Methylnaphthalene
Concen: 12.88 ng/ml
RT: 3.324 min Scan# 687
Delta R.T. 0.001 min
Lab File: 50269-09.D
Acq: 07 Sep 2023 04:49 pm

Tgt Ion:142 Resp: 27

Ion	Ratio	Lower	Upper
142	100		
141	100.0	75.0	112.4

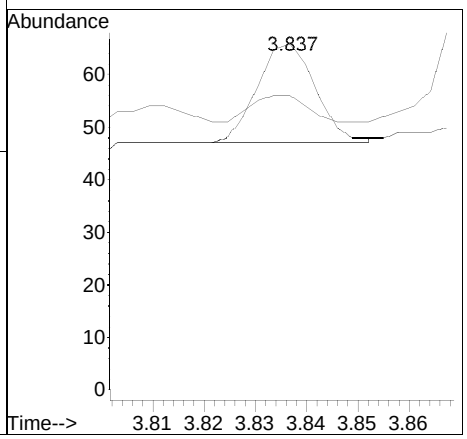


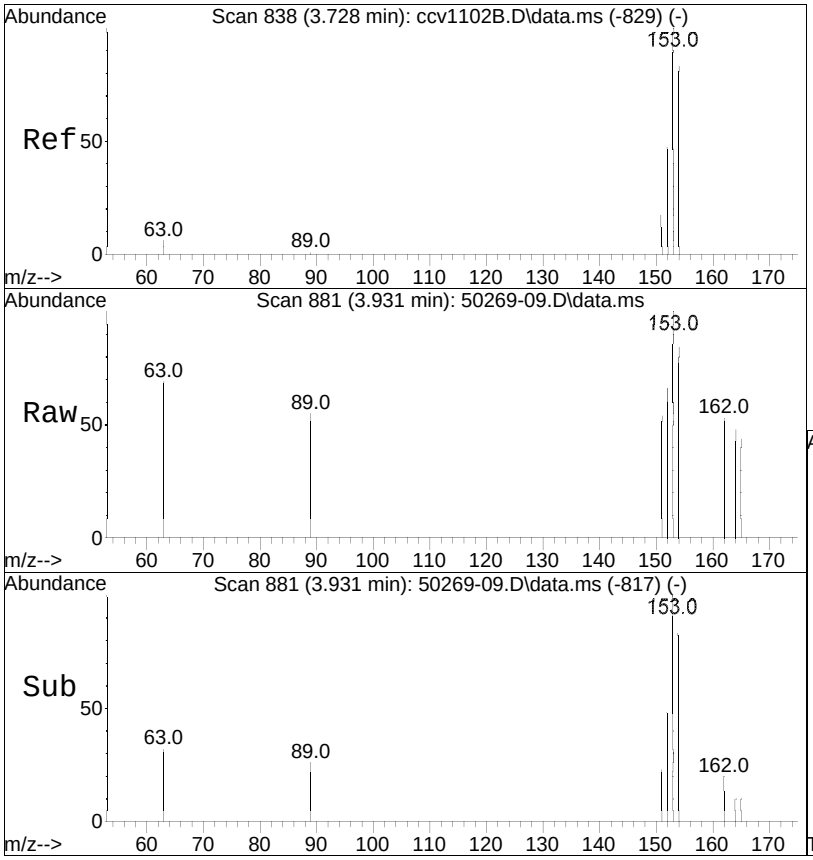


#16
Acenaphthylene
Concen: 4.33 ng/ml M7
RT: 3.837 min Scan# 850
Delta R.T. 0.008 min
Lab File: 50269-09.D
Acq: 07 Sep 2023 04:49 pm

Tgt Ion:152 Resp: 15

Ion	Ratio	Lower	Upper
152	100		
151	26.7	16.1	24.1#

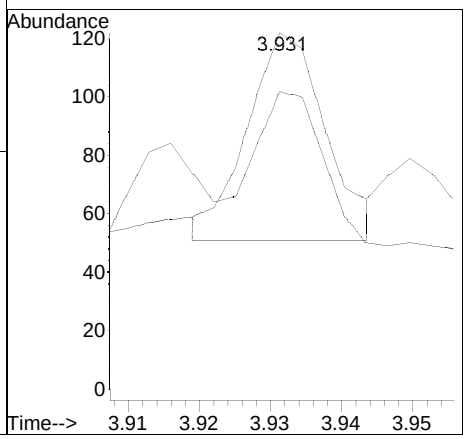


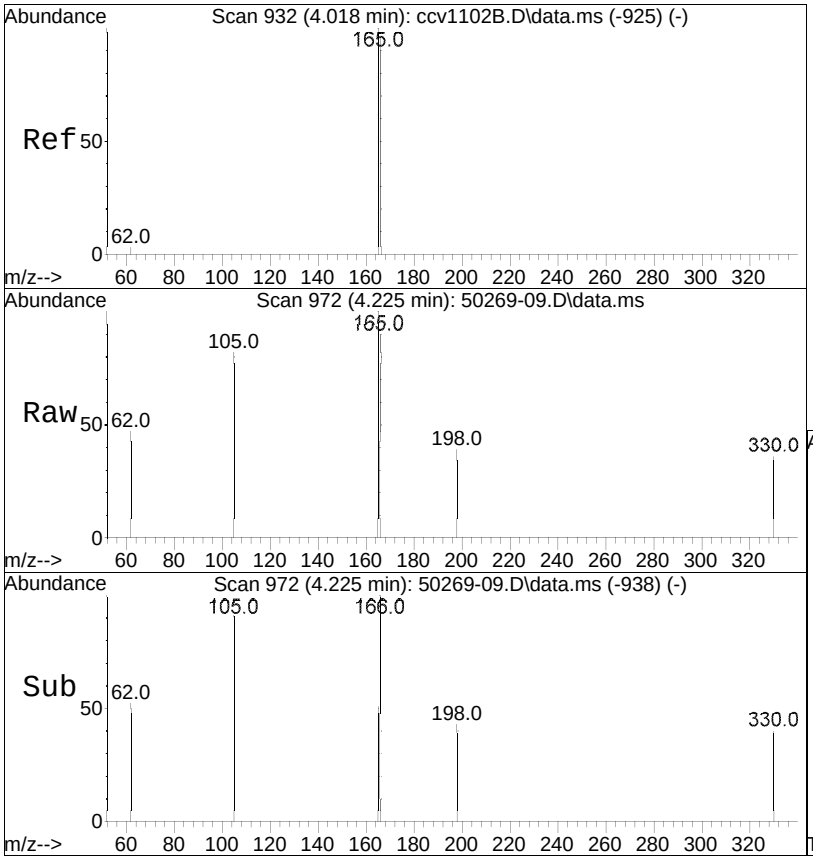


#18
Acenaphthene
Concen: 26.69 ng/ml M6
RT: 3.931 min Scan# 881
Delta R.T. 0.001 min
Lab File: 50269-09.D
Acq: 07 Sep 2023 04:49 pm

Tgt Ion:153 Resp: 54

Ion	Ratio	Lower	Upper
153	100		
154	72.2	67.4	101.2

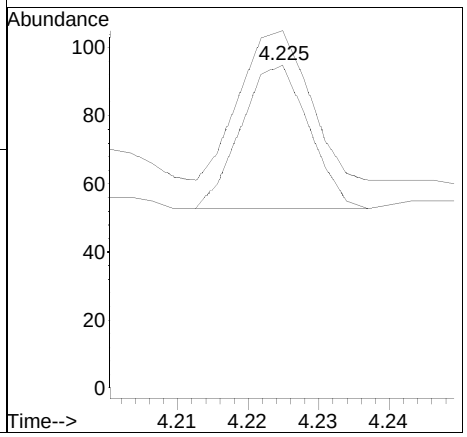


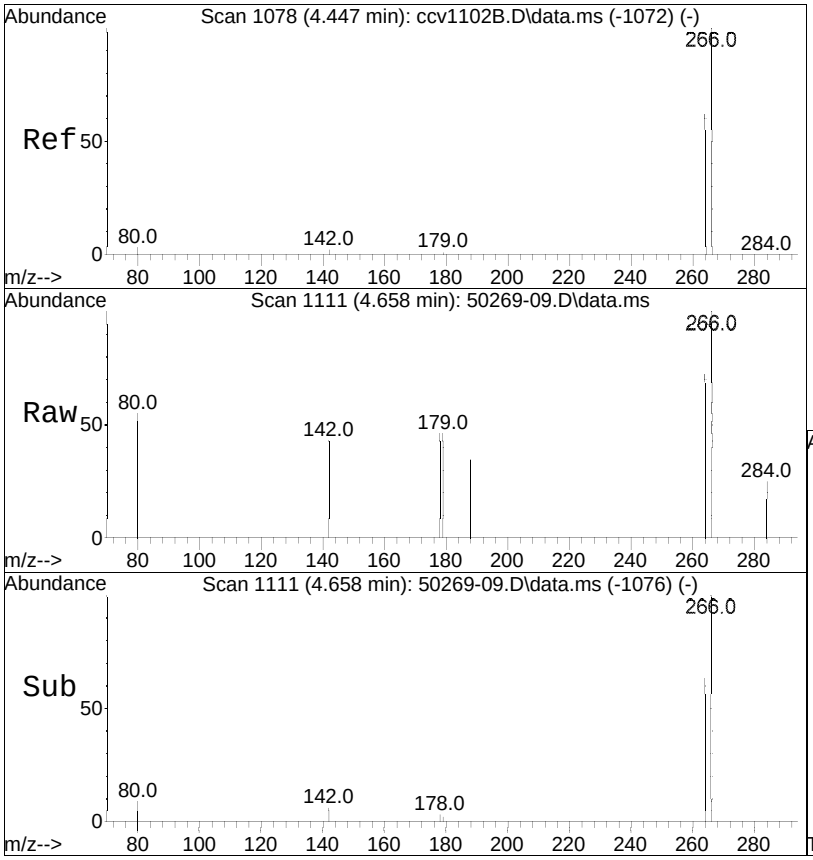


#20
Fluorene
Concen: 12.68 ng/ml
RT: 4.225 min Scan# 972
Delta R.T. -0.002 min
Lab File: 50269-09.D
Acq: 07 Sep 2023 04:49 pm

Tgt Ion:166 Resp: 28

Ion	Ratio	Lower	Upper
166	100		
165	117.9	82.7	124.1

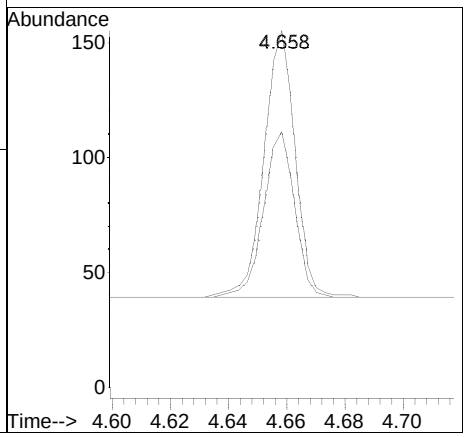


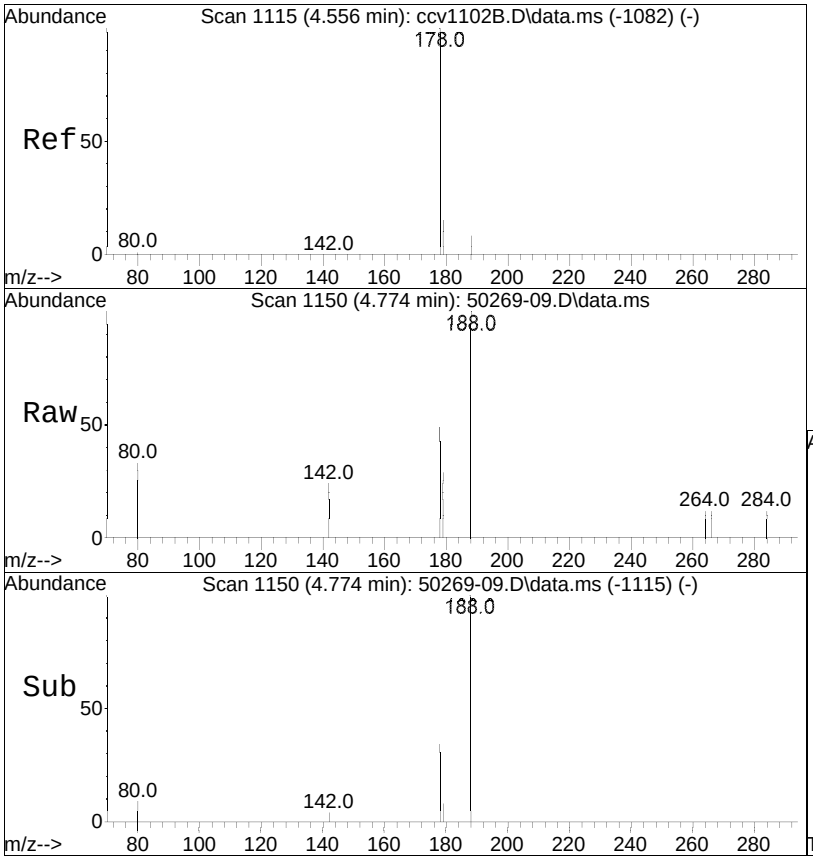


#25
Pentachlorophenol
Concen: 233.19 ng/ml
RT: 4.658 min Scan# 1111
Delta R.T. 0.001 min
Lab File: 50269-09.D
Acq: 07 Sep 2023 04:49 pm

Tgt Ion:266 Resp: 86

Ion	Ratio	Lower	Upper
266	100		
264	61.6	49.8	74.8

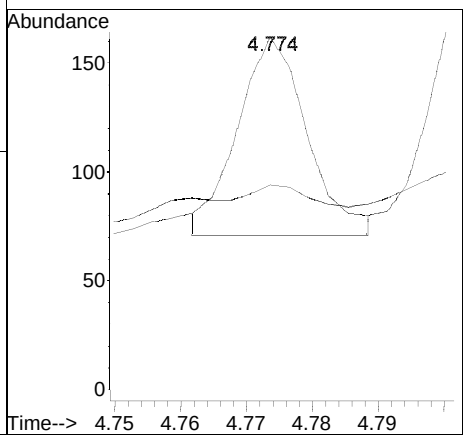


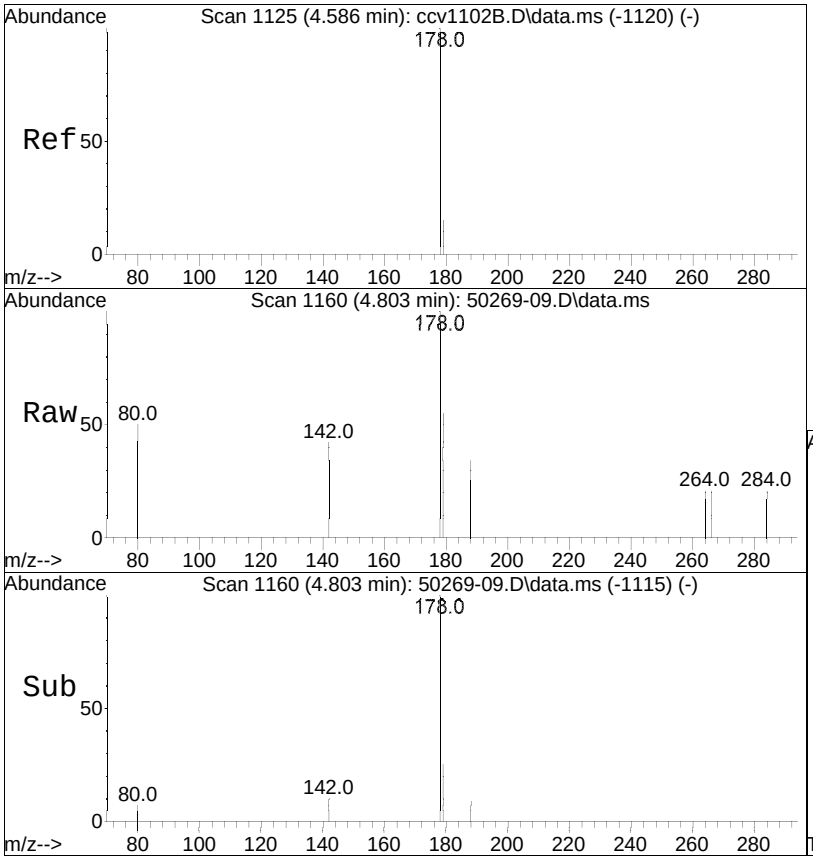


#26
Phenanthrene
Concen: 22.77 ng/ml M6
RT: 4.774 min Scan# 1150
Delta R.T. -0.002 min
Lab File: 50269-09.D
Acq: 07 Sep 2023 04:49 pm

Tgt Ion:178 Resp: 67

Ion	Ratio	Lower	Upper
178	100		
179	19.4	12.4	18.6#

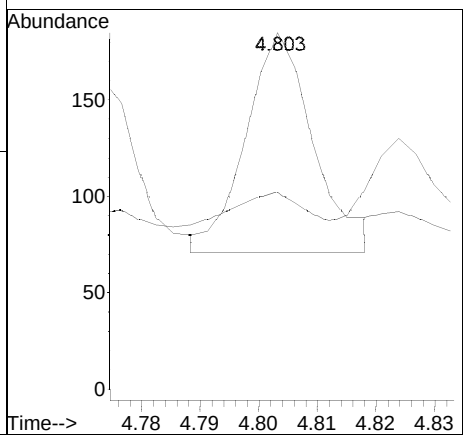




#27
Anthracene
Concen: 31.78 ng/ml M1
RT: 4.803 min Scan# 1160
Delta R.T. -0.002 min
Lab File: 50269-09.D
Acq: 07 Sep 2023 04:49 pm

Tgt Ion:178 Resp: 91

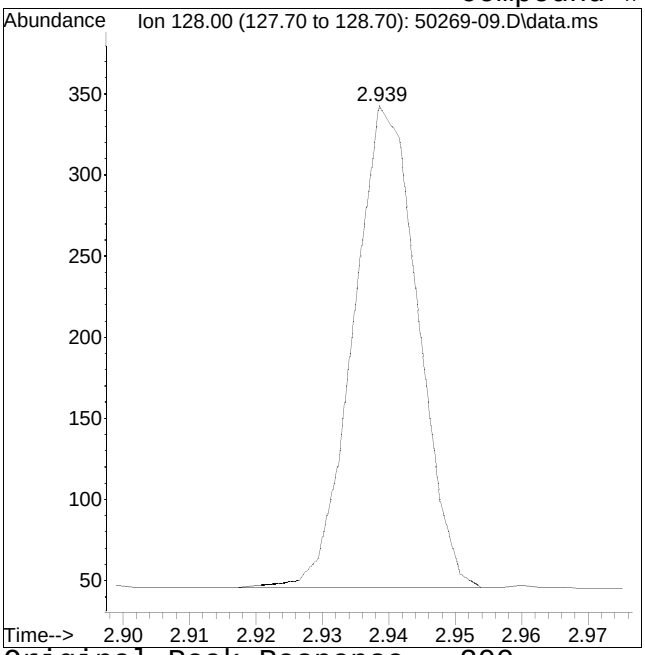
Ion	Ratio	Lower	Upper
178	100		
179	16.5	12.6	19.0



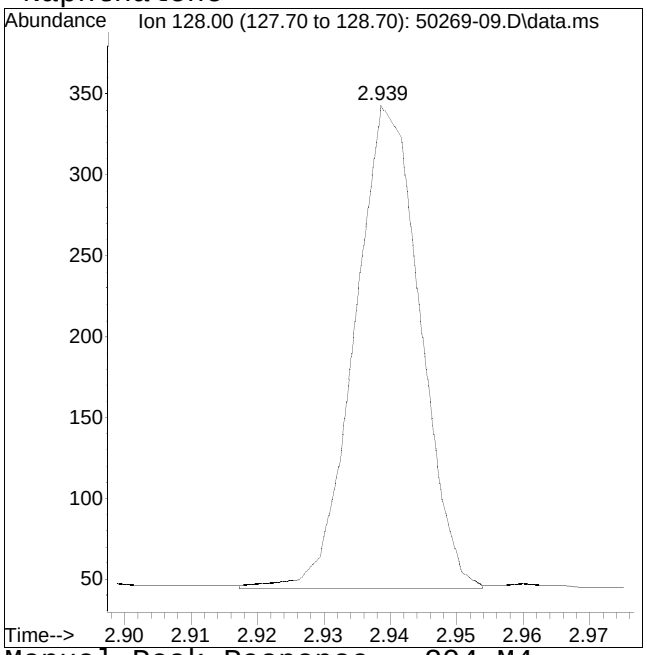
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-09.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 4:49 pm Instrument : SV128
Sample : L2350269-09,32,,ah Quant Date : 9/7/2023 5:03 pm

Compound #9: Naphthalene



Original Peak Response = 200



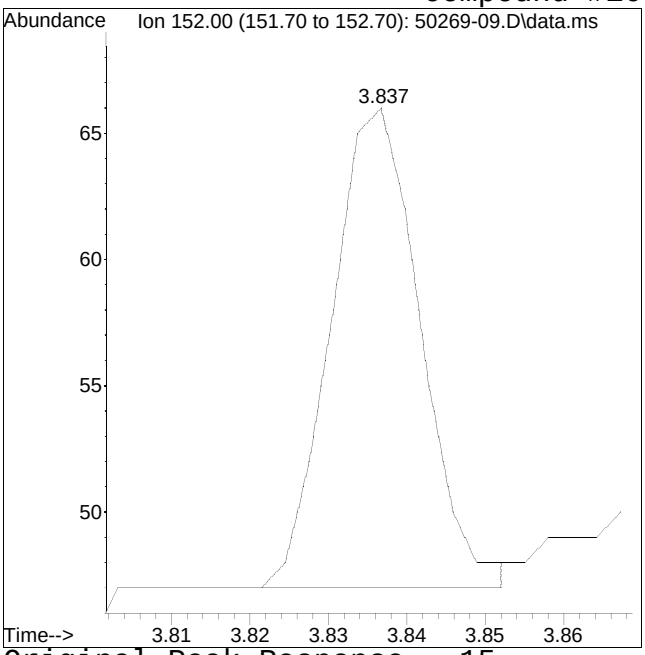
Manual Peak Response = 204 M4

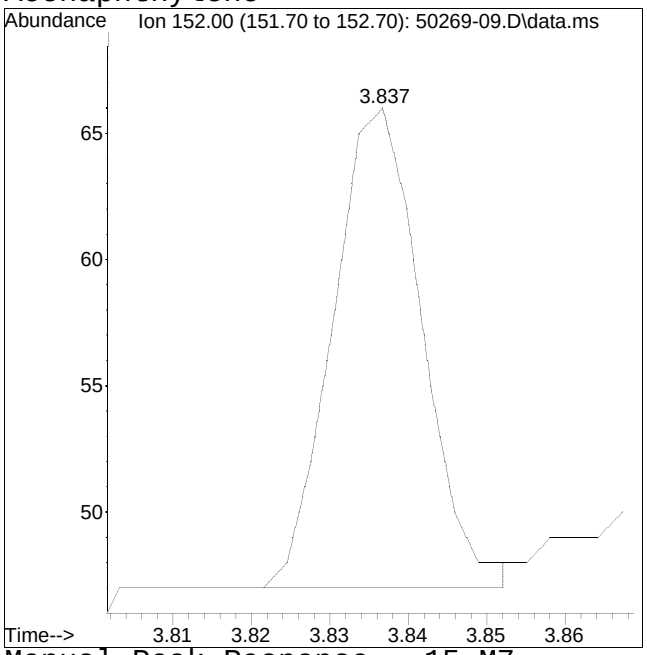
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-09.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 4:49 pm Instrument : SV128
Sample : L2350269-09,32,,ah Quant Date : 9/7/2023 5:03 pm

Compound #16: Acenaphthylene



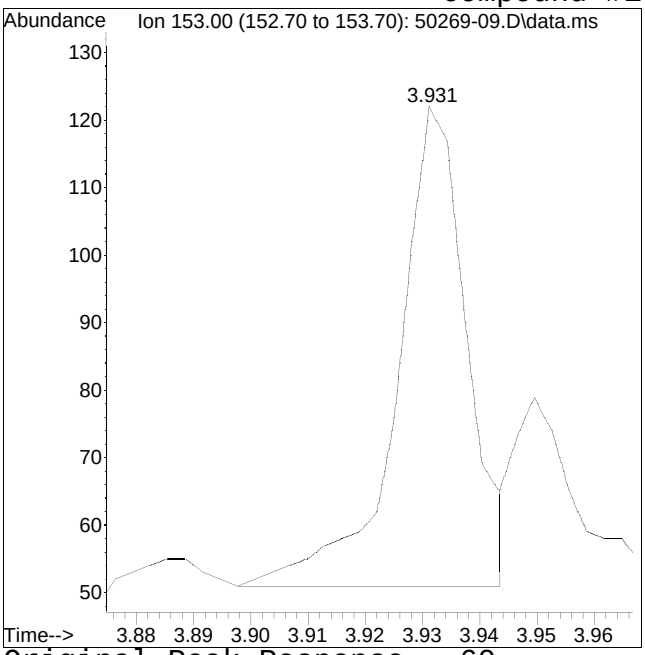


Original Peak Response = 15 Manual Peak Response = 15 M7
M7 = A qualifier ion was manually integrated (only for GC/MS data).

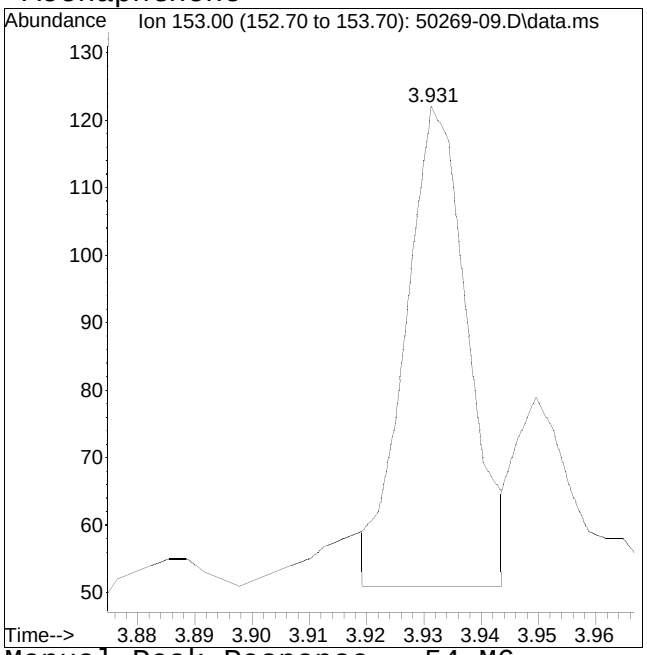
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-09.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 4:49 pm Instrument : SV128
Sample : L2350269-09,32,,ah Quant Date : 9/7/2023 5:03 pm

Compound #18: Acenaphthene



Original Peak Response = 60



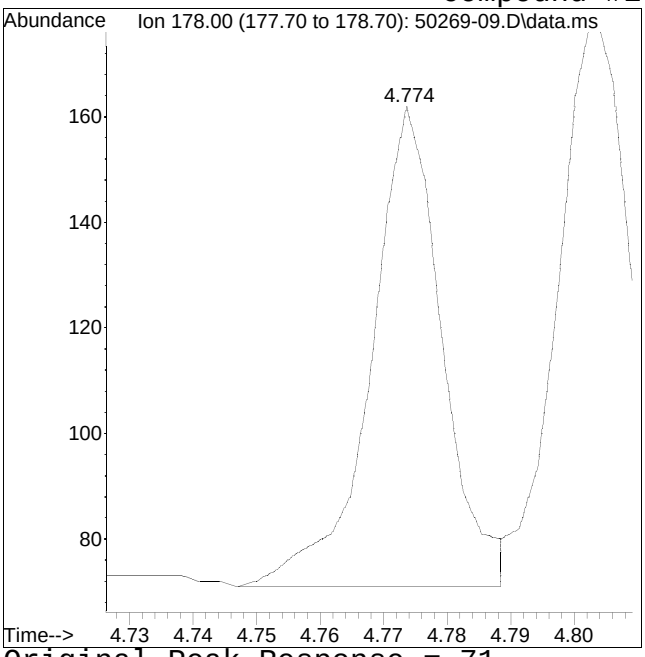
Manual Peak Response = 54 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

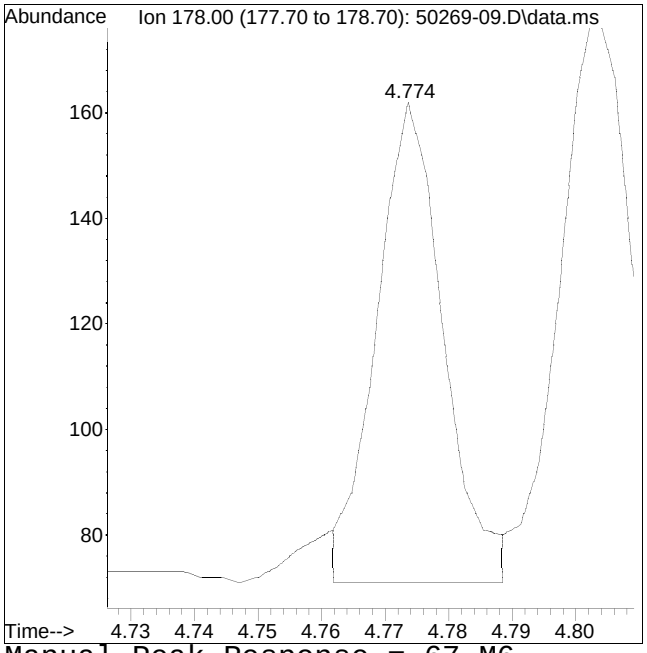
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-09.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 4:49 pm Instrument : SV128
Sample : L2350269-09,32,,ah Quant Date : 9/7/2023 5:03 pm

Compound #26: Phenanthrene



Original Peak Response = 71



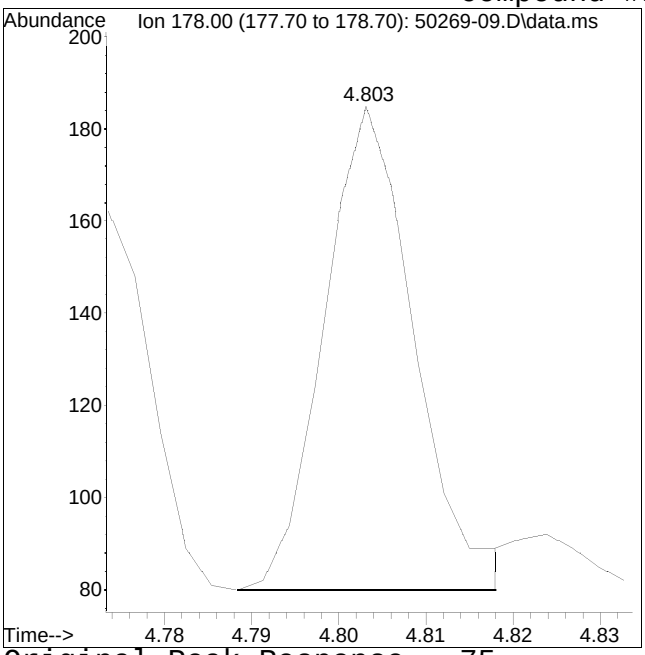
Manual Peak Response = 67 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

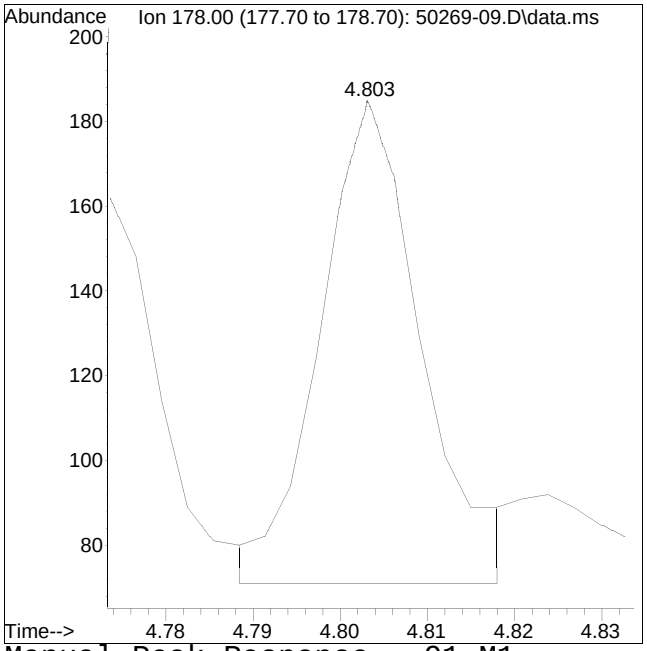
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-09.D Operator : SV128:jjw
Date Inj'd : 9/7/2023 4:49 pm Instrument : SV128
Sample : L2350269-09,32,,ah Quant Date : 9/7/2023 5:03 pm

Compound #27: Anthracene



Original Peak Response = 75



Manual Peak Response = 91 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230909\
Data File : 50269-05.D
Acq On : 09 Sep 2023 11:32 am
Operator : SV128:jjw
Sample : L2350269-05,32,,ah
Misc : WG1825552,wg1822198,ical20340
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 12:30:44 2023
Quant Method : I:\8270sim\sv128\230909\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 09 08:13:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230909\ccv0909.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units		Dev(Min)
Internal Standards							
1) 1,4-Dichlorobenzene-d4	2.261	152	2535	4000.000	ng/ml		0.00
Standard Area 1 = 1923			Recovery = 131.83%				
8) Naphthalene-d8	2.930	136	9639	4000.000	ng/ml		0.00
Standard Area 1 = 7039			Recovery = 136.94%				
17) Acenaphthene-d10	3.913	164	5638	4000.000	ng/ml		0.00
Standard Area 1 = 3871			Recovery = 145.65%				
22) Phenanthrene-d10	4.765	188	12649	4000.000	ng/ml	#	0.00
Standard Area 1 = 8884			Recovery = 142.38%				
31) Chrysene-d12	6.337	240	11829	4000.000	ng/ml		0.00
Standard Area 1 = 8811			Recovery = 134.25%				
36) Perylene-d12	7.622	264	15194	4000.000	ng/ml		0.00
Standard Area 1 = 9706			Recovery = 156.54%				
System Monitoring Compounds							
2) 2-Fluorophenol	1.662	112	2003	3092.067	ng/ml		0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 61.84%				
3) Phenol-d6	2.074	99	2164	2729.973	ng/ml		0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 54.60%				
7) Nitrobenzene-d5	2.542	82	1406	2092.591	ng/ml		0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 83.70%				
13) 2-Fluorobiphenyl	3.531	172	3840	1942.439	ng/ml		0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 77.70%				
21) 2,4,6-Tribromophenol	4.365	330	866	3658.129	ng/ml		0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 73.16%				
30) 4-Terphenyl-d14	5.689	244	5048	1888.459	ng/ml		0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 75.54%				
Target Compounds							Qvalue
6) Hexachloroethane	0.000		0	N.D.			
9) Naphthalene	0.000		0	N.D.	d		
10) Hexachlorobutadiene	0.000		0	N.D.			
11) 2-Methylnaphthalene	0.000		0	N.D.			
14) 2-Chloronaphthalene	0.000		0	N.D.			
16) Acenaphthylene	0.000		0	N.D.			
18) Acenaphthene	0.000		0	N.D.			
20) Fluorene	0.000		0	N.D.	d		
24) Hexachlorobenzene	0.000		0	N.D.			
25) Pentachlorophenol	0.000		0	N.D.	d		

Data Path : I:\8270SIM\SV128\230909\
Data File : 50269-05.D
Acq On : 09 Sep 2023 11:32 am
Operator : SV128:jjw
Sample : L2350269-05,32,,ah
Misc : WG1825552,wg1822198,ical20340
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 12:30:44 2023
Quant Method : I:\8270sim\sv128\230909\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 09 08:13:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230909\ccv0909.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	0.000		0	N.D.		d
27) Anthracene	0.000		0	N.D.		d
28) Fluoranthene	0.000		0	N.D.		
29) Pyrene	0.000		0	N.D.		d
32) Benzo[a]anthracene	6.337	228	42M6	3.901	ng/ml	
34) Chrysene	6.353	228	6M3	1.644	ng/ml	
37) Benzo[b]fluoranthene	0.000		0	N.D.		d
38) Benzo[k]fluoranthene	0.000		0	N.D.		d
39) Benzo[a]pyrene	0.000		0	N.D.		d
40) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.		d
41) Dibenzo[a,h]anthracene	0.000		0	N.D.		d
42) Benzo[g,h,i]perylene	0.000		0	N.D.		

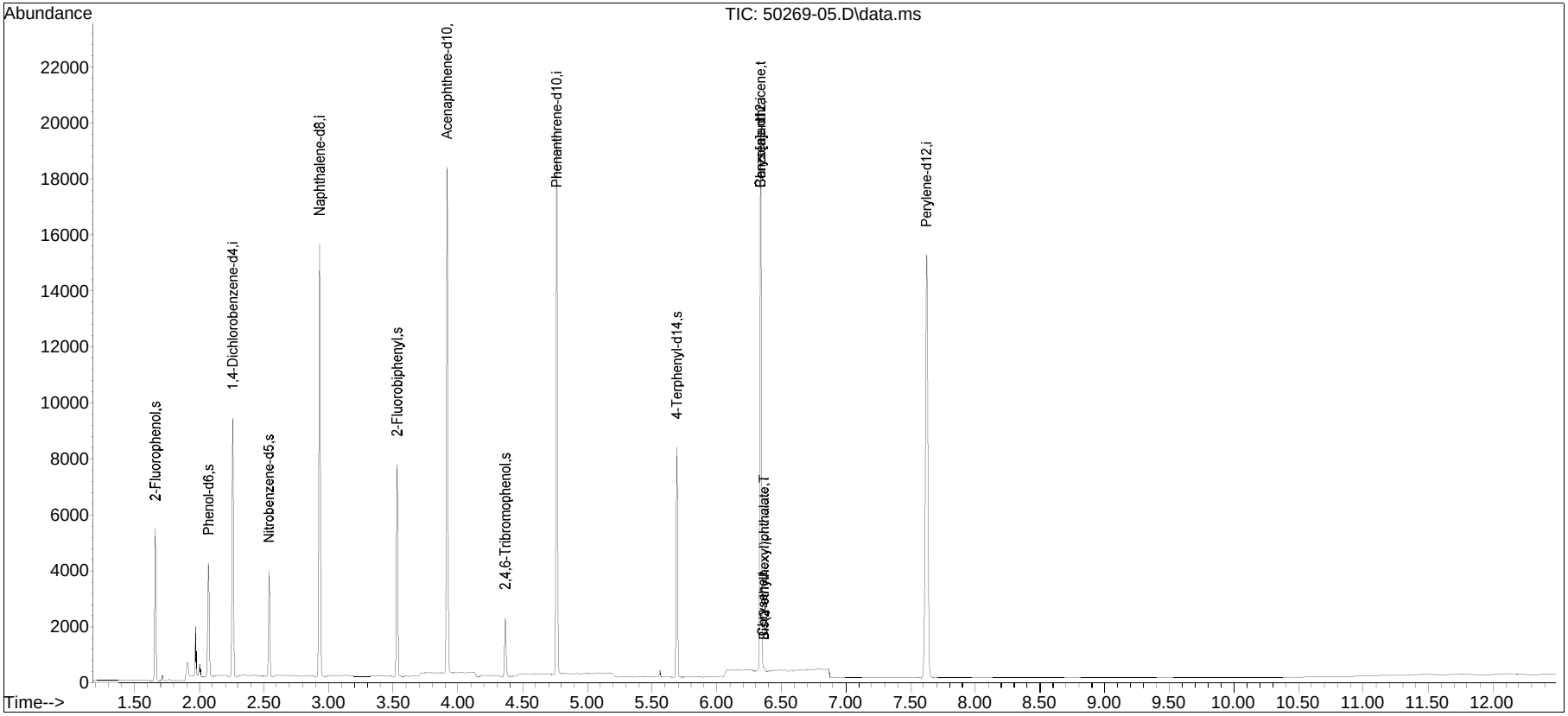
(#) = qualifier out of range (m) = manual integration (+) = signals summed

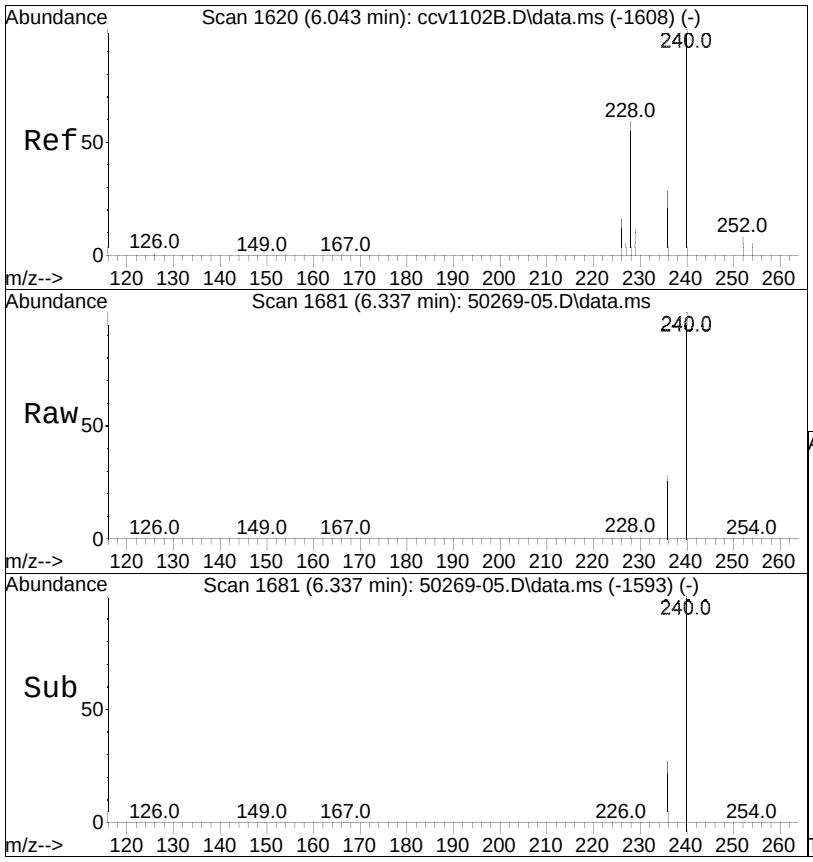
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230909\
Data File : 50269-05.D
Acq On : 09 Sep 2023 11:32 am
Operator : SV128:jjw
Sample : L2350269-05,32,,ah
Misc : WG1825552,wg1822198,ical20340
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Sep 11 12:30:44 2023
Quant Method : I:\8270sim\sv128\230909\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 09 08:13:34 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listedv0909.D•

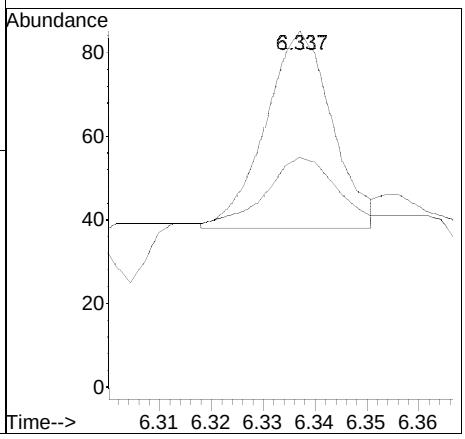


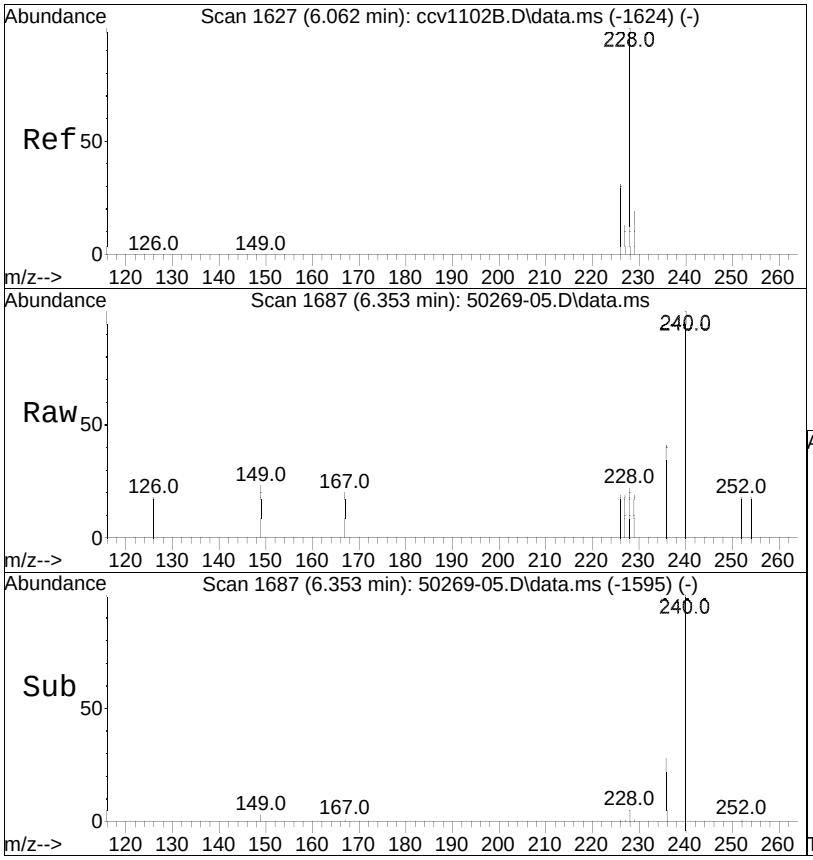


#32
Benzo[a]anthracene
Concen: 3.90 ng/ml M6
RT: 6.337 min Scan# 1681
Delta R.T. 0.001 min
Lab File: 50269-05.D
Acq: 09 Sep 2023 11:32 am

Tgt Ion:228 Resp: 42

Ion	Ratio	Lower	Upper
228	100		
229	28.6	15.7	23.5#

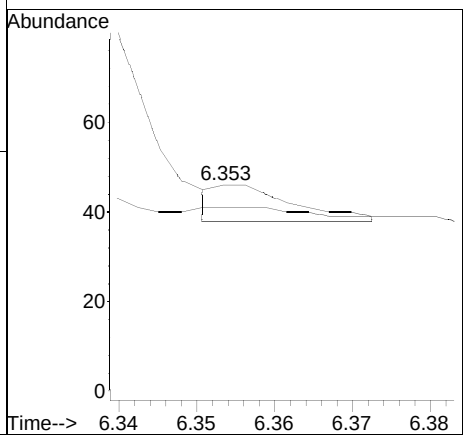




#34
Chrysene
Concen: 1.64 ng/ml M3
RT: 6.353 min Scan# 1687
Delta R.T. -0.009 min
Lab File: 50269-05.D
Acq: 09 Sep 2023 11:32 am

Tgt Ion:228 Resp: 6

Ion	Ratio	Lower	Upper
228	100		
226	33.3	24.6	37.0

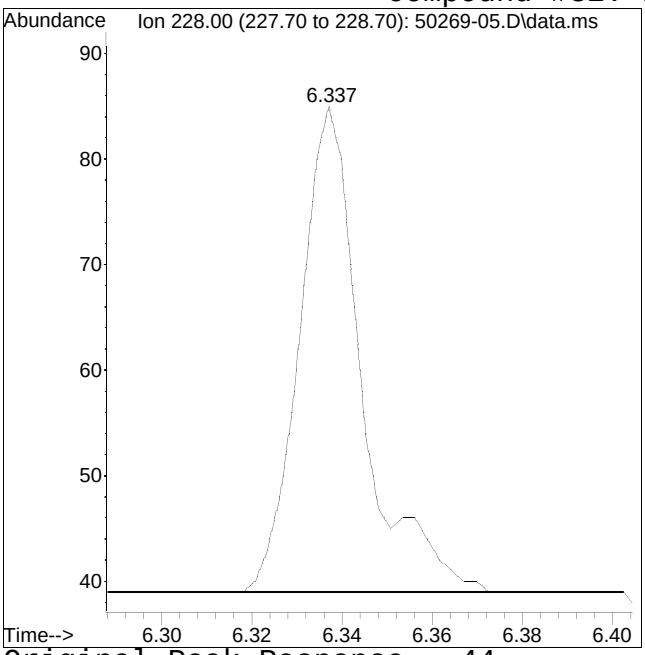


Manual Integration Report

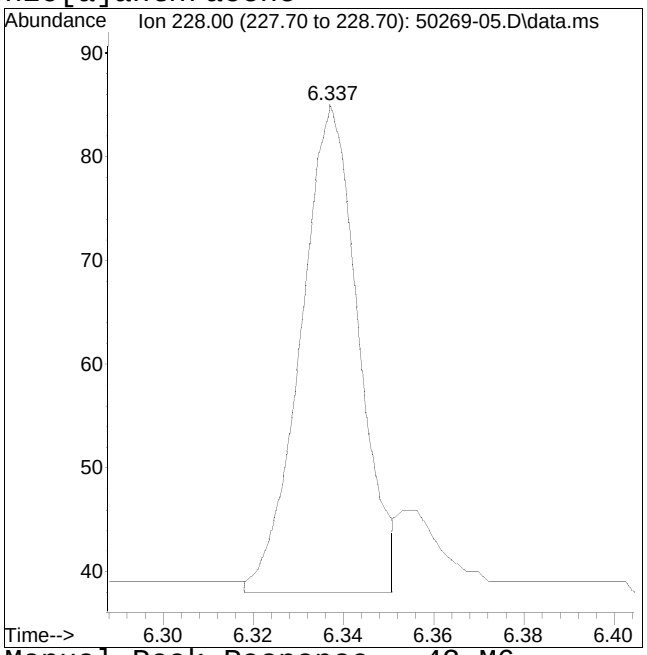
Data Path : I:\8270SIM\SV128\230909\
Data File : 50269-05.D
Date Inj'd : 9/9/2023 11:32 am
Sample : L2350269-05,32,,ah

QMethod : SIM-LVI_230831_sv128.M
Operator : SV128:jjw
Instrument : SV128
Quant Date : 9/9/2023 11:46 am

Compound #32: Benzo[a]anthracene



Original Peak Response = 44



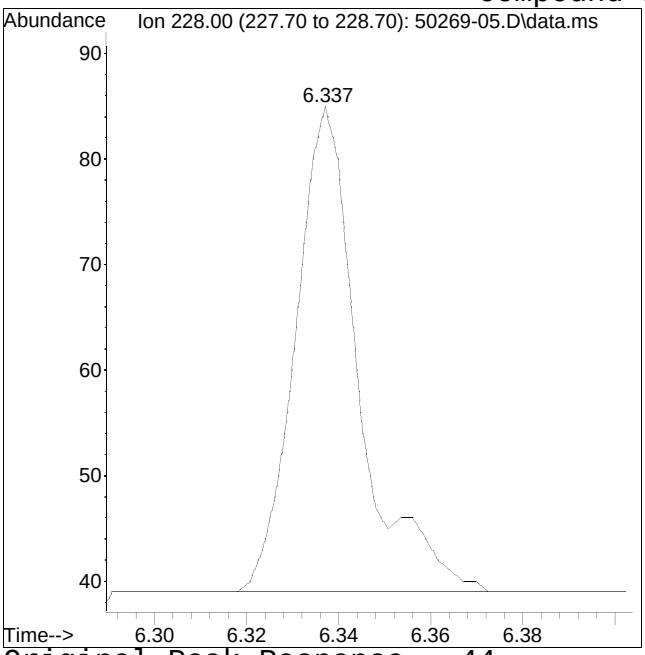
Manual Peak Response = 42 M6

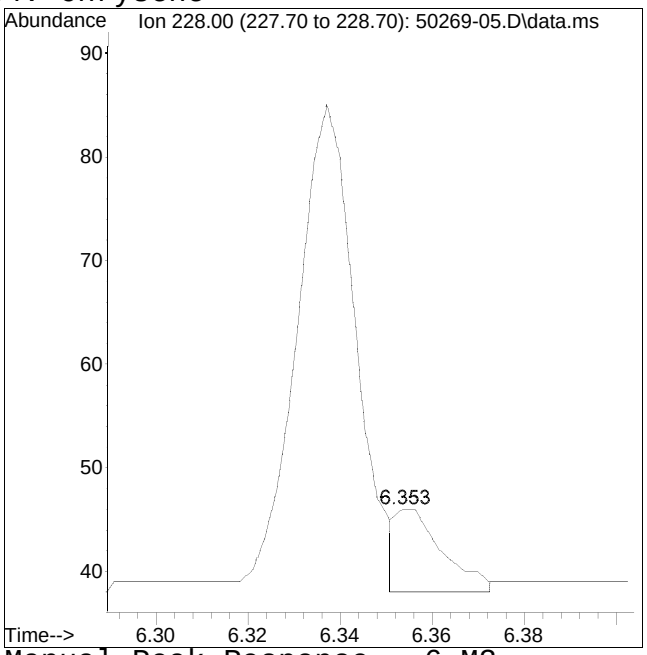
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270SIM\SV128\230909\ QMethod : SIM-LVI_230831_sv128.M
Data File : 50269-05.D Operator : SV128:jjw
Date Inj'd : 9/9/2023 11:32 am Instrument : SV128
Sample : L2350269-05,32,,ah Quant Date : 9/9/2023 11:46 am

Compound #34: Chrysene





Original Peak Response = 44 Manual Peak Response = 6 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Semivolatiles Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: SV119**	**Ical Ref**	**: ICAL19785**
Calibration dates	**: 03/06/23 11:49 03/06/23 15:26**		

Calibration Files
L1 =IL1.D L2 =IL2.D L3 =IL3.D L4 =IL4.D L5 =IL5.D L6 =IL6.D L7 =IL7.D L8 =IL8.D
L9 =IL9.D L10 =IL10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
1)	i	1,4-Dichlorobenzene-d4	ISTD											
2)	s	2-Fluorophenol	1.001	0.970	0.974	0.972	0.997	1.012	1.036	1.011	0.964	0.904	0.984	3.68
3)	s	Phenol-d6	1.222	1.060	1.150	1.147	1.149	1.181	1.192	1.196	1.182	1.150	1.163	3.78
4)	T	bis(2-Chloroethyl)ether	1.210	1.150	1.124	1.103	1.107	1.113	1.094	1.011	0.968	0.930	1.081	7.92
5)	T	n-Nitrosodi-n-propylamine	0.593	0.575	0.576	0.574	0.596	0.614	0.656	0.681	0.690	0.676	0.623	7.63
6)	t	Hexachloroethane	0.477	0.437	0.456	0.450	0.438	0.450	0.459	0.440	0.427	0.413	0.445	4.03
7)	s	Nitrobenzene-d5	0.826	0.785	0.817	0.842	0.868	0.903	0.948	0.941	0.931	0.886	0.875	6.46
8)	i	Naphthalene-d8	ISTD											
9)	t	Naphthalene	0.995	0.998	0.994	0.979	0.985	0.989	0.975	0.906	0.854	0.796	0.947	7.48
10)	t	Hexachlorobutadiene	0.187	0.197	0.198	0.194	0.194	0.192	0.191	0.173	0.162	0.153	0.184	8.50
11)	t	2-Methylnaphthalene	0.641	0.662	0.665	0.679	0.686	0.667	0.663	0.609	0.571	0.524	0.637	8.30
12)	t	1-Methylnaphthalene	0.638	0.636	0.649	0.672	0.659	0.649	0.636	0.570	0.535	0.495	0.614	9.66
13)	s	2-Fluorobiphenyl	0.858	0.862	0.888	0.909	0.900	0.879	0.858	0.753	0.690	0.625	0.822	11.94
14)	t	2-Chloronaphthalene	0.748	0.714	0.725	0.742	0.734	0.723	0.711	0.647	0.609	0.562	0.692	9.17
15)	t	2,6-Dinitrotoluene	0.140	0.106	0.095	0.105	0.108	0.106	0.120	0.140	0.151	0.142	0.121	16.52
16)	t	Acenaphthylene	0.945	0.963	0.994	1.045	1.038	1.021	1.078	1.024	0.976	0.895	0.998	5.44
17)	i	Acenaphthene-d10	ISTD											
18)	t	Acenaphthene	1.313	1.292	1.333	1.321	1.317	1.321	1.318	1.225	1.152	1.088	1.268	6.70
19)	t	2,4-Dinitrotoluene		0.197	0.212	0.236	0.231	0.239	0.298	0.361			*Q	0.9994
20)	t	Fluorene	1.444	1.452	1.486	1.519	1.532	1.508	1.548	1.448	1.367	1.272	1.458	5.77
21)	s	2,4,6-Tribromophenol	0.157	0.136	0.145	0.149	0.152	0.153	0.175	0.183	0.184	0.178	0.161	10.76
22)	i	Phenanthrene-d10	ISTD											
23)	T	4,6-Dinitro-o-cresol					0.047	0.051	0.061	0.071	0.077	0.079	*Q	0.9993
24)	t	Hexachlorobenzene	0.262	0.264	0.247	0.249	0.252	0.254	0.253	0.222	0.205	0.195	0.240	10.01
25)	t	Pentachlorophenol			0.069	0.051	0.084	0.058	0.091	0.115			*Q	0.9977
26)	t	Phenanthrene	1.069	1.058	1.056	1.058	1.071	1.062	1.050	0.968	0.900	0.843	1.013	8.05
27)	t	Anthracene	0.941	0.928	0.941	0.967	0.961	0.988	1.013	0.964	0.905	0.849	0.946	4.83
28)	t	Fluoranthene	1.118	1.135	1.181	1.223	1.220	1.173	1.217	1.185	1.111	1.018	1.158	5.52
29)	t	Pyrene	1.139	1.187	1.216	1.262	1.264	1.218	1.269	1.243	1.156	1.041	1.199	5.97
30)	s	4-Terphenyl-d14	0.801	0.847	0.860	0.914	0.921	0.852	0.871	0.829	0.767	0.686	0.835	8.38
31)	i	Chrysene-d12	ISTD											
32)	t	Benzo[a]anthracene		2.275	1.596	1.401	1.300	1.259	1.317	1.304	1.253	1.219	*Q	1.0000
33)	t	3,3'-Dichlorobenzidine					0.421	0.456	0.503	0.567	0.557	0.565	0.511	12.15
34)	t	Chrysene	1.258	1.295	1.330	1.321	1.330	1.322	1.329	1.246	1.172	1.139	1.274	5.48
35)	T	bis(2-Ethylhexyl)phthalate				0.490	0.484	0.478	0.545	0.709	0.795		*Q	0.9993
36)	i	Perylene-d12	ISTD											

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: SV119**	**Ical Ref**	**: ICAL19785**
Calibration dates	**: 03/06/23 11:49 03/06/23 15:26**		

Calibration Files
L1 =IL1.D L2 =IL2.D L3 =IL3.D L4 =IL4.D L5 =IL5.D L6 =IL6.D L7 =IL7.D L8 =IL8.D
L9 =IL9.D L10 =IL10.D

	Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
37) t	Benzo[b]fluoranthene	1.216	1.199	1.238	1.289	1.257	1.226	1.275	1.218	1.176	1.071	1.216	5.06
38) t	Benzo[k]fluoranthene	1.074	1.088	1.080	1.129	1.159	1.160	1.175	1.077	1.005	0.962	1.091	6.30
39) t	Benzo[a]pyrene	0.972	0.962	0.950	0.973	0.981	0.994	1.048	1.024	0.996	0.946	0.985	3.27
40) t	Indeno[1,2,3-cd]pyrene	1.213	1.112	1.115	1.113	1.117	1.150	1.153	1.120	1.096	1.104	1.129	3.06
41) t	Dibenzo[a,h]anthracene	1.082	1.057	1.074	1.080	1.084	1.124	1.162	1.082	1.022	0.993	1.076	4.39
42) t	Benzo[g,h,i]perylene	1.282	1.237	1.202	1.195	1.198	1.250	1.261	1.170	1.110	1.080	1.199	5.41

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: SV128**	**Ical Ref**	**: ICAL20340**
Calibration dates	**: 08/31/23 09:45 09/05/23 09:24**		

Calibration Files
L1 =IL1.D L2 =IL2.D L3 =IL3a.D L4 =IL4.D L5 =IL5.D L6 =IL6.D L7 =IL7.D L8 =IL8.D
L9 =IL9.D L10 =IL10.D

		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD	
1)	i	1,4-Dichlorobenzene-d4	ISTD												
2)	s	2-Fluorophenol		1.121	0.811	1.026	1.020	1.037	1.056	1.066	1.039	1.023	1.022	8.35	
3)	s	Phenol-d6		1.308	0.973	1.254	1.238	1.260	1.300	1.335	1.297	1.292	1.251	8.68	
4)	T	bis(2-Chloroethyl)ether		1.121	0.865	1.102	1.071	1.093	1.129	1.134	1.115	1.070	1.078	7.72	
5)	T	n-Nitrosodi-n-propylamine			0.648	0.760	0.786	0.801	0.846	0.894	0.875	0.858	0.809	9.81	
6)	t	Hexachloroethane			0.432	0.494	0.485	0.487	0.494	0.497	0.483	0.473	0.481	4.38	
7)	s	Nitrobenzene-d5		0.935	0.811	1.026	1.054	1.072	1.134	1.196	1.167	1.147	1.060	11.66	
8)	i	Naphthalene-d8	ISTD												
9)	t	Naphthalene		1.042	0.780	1.011	1.003	1.006	1.013	1.008	0.990	0.943	0.977	8.04	
10)	t	Hexachlorobutadiene			0.150	0.190	0.187	0.190	0.192	0.192	0.188	0.181	0.184	7.59	
11)	t	2-Methylnaphthalene		0.645	0.520	0.660	0.669	0.666	0.685	0.694	0.684	0.647	0.652	8.04	
12)	t	1-Methylnaphthalene			0.465	0.620	0.617	0.619	0.635	0.642	0.634	0.602	0.604	9.54	
13)	s	2-Fluorobiphenyl		0.843	0.643	0.851	0.838	0.840	0.859	0.867	0.849	0.793	0.820	8.49	
14)	t	2-Chloronaphthalene		0.645	0.534	0.700	0.695	0.701	0.713	0.722	0.709	0.668	0.676	8.67	
15)	t	2,6-Dinitrotoluene				0.110	0.109	0.116	0.128	0.158	0.166	0.160	0.135	18.58	
16)	t	Acenaphthylene		1.042	0.807	1.061	1.073	1.099	1.150	1.201	1.166	1.096	1.077	10.57	
17)	i	Acenaphthene-d10	ISTD												
18)	t	Acenaphthene			0.984	1.308	1.320	1.323	1.324	1.332	1.303	1.246	1.267	9.28	
19)	t	2,4-Dinitrotoluene				0.244	0.245	0.259	0.294	0.353	0.368	0.363	0.304	18.68	
20)	t	Fluorene		1.447	1.029	1.430	1.416	1.434	1.463	1.460	1.424	1.344	1.383	9.94	
21)	s	2,4,6-Tribromophenol			0.112	0.139	0.156	0.163	0.177	0.197	0.201	0.197	0.168	18.89	
22)	i	Phenanthrene-d10	ISTD												
23)	T	4,6-Dinitro-o-cresol					0.043	0.052	0.059	0.073	0.078	0.077		*Q	0.9991
24)	t	Hexachlorobenzene	0.208	0.214	0.160	0.230	0.218	0.223	0.224	0.229	0.224	0.217	0.215	9.45	
25)	t	Pentachlorophenol			0.053	0.093	0.095	0.104	0.118	0.139	0.143	0.140		*Q	0.9991
26)	t	Phenanthrene		1.141	0.712	1.057	1.007	1.025	1.024	1.035	1.010	0.965	0.997	11.74	
27)	t	Anthracene		0.998	0.659	0.992	0.983	0.996	1.021	1.065	1.042	0.979	0.971	12.41	
28)	t	Fluoranthene		1.283	0.801	1.208	1.148	1.189	1.201	1.228	1.225	1.143	1.158	12.13	
29)	t	Pyrene		1.283	0.819	1.266	1.201	1.228	1.263	1.304	1.263	1.167	1.199	12.41	
30)	s	4-Terphenyl-d14		0.927	0.579	0.899	0.847	0.882	0.890	0.902	0.882	0.800	0.845	12.59	
31)	i	Chrysene-d12	ISTD												
32)	t	Benzo[a]anthracene		2.534	1.327	1.516	1.379	1.311	1.339	1.398				*Q	0.9996
33)	t	3,3'-Dichlorobenzidine				0.447	0.446	0.454	0.487	0.554	0.559	0.546	0.499	10.54	
34)	t	Chrysene		1.342	0.857	1.304	1.262	1.296	1.268	1.297	1.284	1.196	1.234	11.90	
35)	T	bis(2-Ethylhexyl)phthalate					0.582	0.634	0.727	0.890	0.936	0.905	0.779	19.50	
36)	i	Perylene-d12	ISTD												

Initial Calibration Summary
Form 6
Semivolatiles

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: SV128**	**Ical Ref**	**: ICAL20340**
Calibration dates	**: 08/31/23 09:45 09/05/23 09:24**		

Calibration Files
L1 =IL1.D L2 =IL2.D L3 =IL3a.D L4 =IL4.D L5 =IL5.D L6 =IL6.D L7 =IL7.D L8 =IL8.D
L9 =IL9.D L10 =IL10.D

	Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
37) t	Benzo[b]fluoranthene		1.066	0.765	1.140	1.099	1.171	1.140	1.245	1.271	1.248	1.127	13.56
38) t	Benzo[k]fluoranthene		1.032	0.665	1.029	1.039	1.041	1.149	1.195	1.138	1.098	1.043	14.74
39) t	Benzo[a]pyrene		0.899	0.599	0.951	0.938	0.984	1.029	1.115	1.112	1.084	0.968	16.42
40) t	Indeno[1,2,3-cd]pyrene			0.690	0.931	0.893	0.904	0.972	1.081	1.106	1.172	0.969	15.69
41) t	Dibenzo[a,h]anthracene		0.799	0.632	0.886	0.857	0.917	1.008	1.103	1.105	1.084	0.932	17.12
42) t	Benzo[g,h,i]perylene			0.873	0.951	0.914	0.958	1.011	1.082	1.079	1.069	0.992	8.07

Response Factor Report SV119

Method Path : I:\8270SIM\sv119\230306nLVIical\
Method File : SIM-LVI_230306_sv119.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Wed Mar 08 08:32:43 2023
Response Via : Initial Calibration

Calibration Files
L1 =IL1.D L2 =IL2.D L3 =IL3.D L4 =IL4.D L5 =IL5.D L6 =IL6.D L7 =IL7.D L8 =IL8.D
L9 =IL9.D L10 =IL10.D

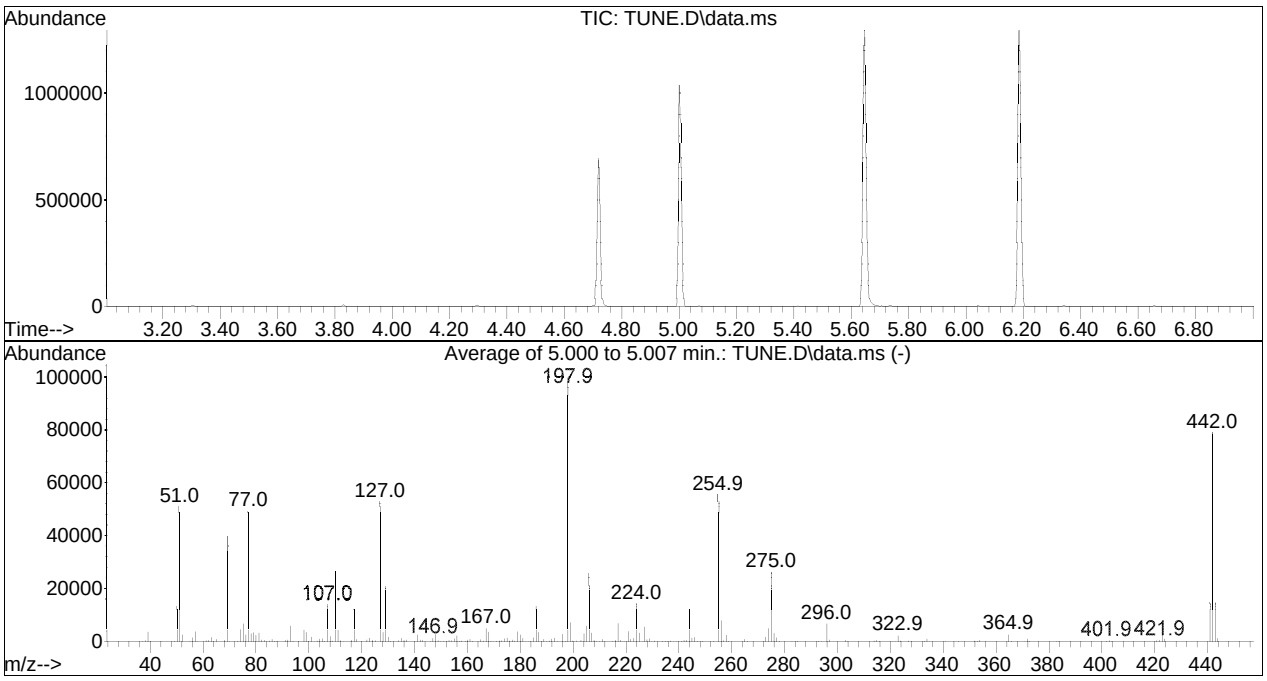
		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
1)	i	1,4-Dichlorobenzene-d4	ISTD											
2)	s	2-Fluorophenol	1.001	0.970	0.974	0.972	0.997	1.012	1.036	1.011	0.964	0.904	0.984	3.68
3)	s	Phenol-d6	1.222	1.060	1.150	1.147	1.149	1.181	1.192	1.196	1.182	1.150	1.163	3.78
4)	T	bis(2-Chloroethyl)ether	1.210	1.150	1.124	1.103	1.107	1.113	1.094	1.011	0.968	0.930	1.081	7.92
5)	T	n-Nitrosodi-n-propylamine	0.593	0.575	0.576	0.574	0.596	0.614	0.656	0.681	0.690	0.676	0.623	7.63
6)	t	Hexachloroethane	0.477	0.437	0.456	0.450	0.438	0.450	0.459	0.440	0.427	0.413	0.445	4.03
7)	s	Nitrobenzene-d5	0.826	0.785	0.817	0.842	0.868	0.903	0.948	0.941	0.931	0.886	0.875	6.46
8)	i	Naphthalene-d8	ISTD											
9)	t	Naphthalene	0.995	0.998	0.994	0.979	0.985	0.989	0.975	0.906	0.854	0.796	0.947	7.48
10)	t	Hexachlorobutadiene	0.187	0.197	0.198	0.194	0.194	0.192	0.191	0.173	0.162	0.153	0.184	8.50
11)	t	2-Methylnaphthalene	0.641	0.662	0.665	0.679	0.686	0.667	0.663	0.609	0.571	0.524	0.637	8.30
12)	t	1-Methylnaphthalene	0.638	0.636	0.649	0.672	0.659	0.649	0.636	0.570	0.535	0.495	0.614	9.66
13)	s	2-Fluorobiphenyl	0.858	0.862	0.888	0.909	0.900	0.879	0.858	0.753	0.690	0.625	0.822	11.94
14)	t	2-Chloronaphthalene	0.748	0.714	0.725	0.742	0.734	0.723	0.711	0.647	0.609	0.562	0.692	9.17
15)	t	2,6-Dinitrotoluene	0.140	0.106	0.095	0.105	0.108	0.106	0.120	0.140	0.151	0.142	0.121	16.52
16)	t	Acenaphthylene	0.945	0.963	0.994	1.045	1.038	1.021	1.078	1.024	0.976	0.895	0.998	5.44
17)	i	Acenaphthene-d10	ISTD											
18)	t	Acenaphthene	1.313	1.292	1.333	1.321	1.317	1.321	1.318	1.225	1.152	1.088	1.268	6.70
19)	t	2,4-Dinitrotoluene		0.197	0.212	0.236	0.231	0.239	0.298	0.361			*Q	0.9994
20)	t	Fluorene	1.444	1.452	1.486	1.519	1.532	1.508	1.548	1.448	1.367	1.272	1.458	5.77
21)	s	2,4,6-Tribromophenol	0.157	0.136	0.145	0.149	0.152	0.153	0.175	0.183	0.184	0.178	0.161	10.76
22)	i	Phenanthrene-d10	ISTD											
23)	T	4,6-Dinitro-o-cresol					0.047	0.051	0.061	0.071	0.077	0.079	*Q	0.9993
24)	t	Hexachlorobenzene	0.262	0.264	0.247	0.249	0.252	0.254	0.253	0.222	0.205	0.195	0.240	10.01
25)	t	Pentachlorophenol			0.069	0.051	0.084	0.058	0.091	0.115			*Q	0.9977
26)	t	Phenanthrene	1.069	1.058	1.056	1.058	1.071	1.062	1.050	0.968	0.900	0.843	1.013	8.05
27)	t	Anthracene	0.941	0.928	0.941	0.967	0.961	0.988	1.013	0.964	0.905	0.849	0.946	4.83
28)	t	Fluoranthene	1.118	1.135	1.181	1.223	1.220	1.173	1.217	1.185	1.111	1.018	1.158	5.52
29)	t	Pyrene	1.139	1.187	1.216	1.262	1.264	1.218	1.269	1.243	1.156	1.041	1.199	5.97
30)	s	4-Terphenyl-d14	0.801	0.847	0.860	0.914	0.921	0.852	0.871	0.829	0.767	0.686	0.835	8.38
31)	i	Chrysene-d12	ISTD											
32)	t	Benzo[a]anthracene		2.275	1.596	1.401	1.300	1.259	1.317	1.304	1.253	1.219	*Q	1.0000
33)	t	3,3'-Dichlorobenzidine					0.421	0.456	0.503	0.567	0.557	0.565	0.511	12.15
34)	t	Chrysene	1.258	1.295	1.330	1.321	1.330	1.322	1.329	1.246	1.172	1.139	1.274	5.48
35)	T	bis(2-Ethylhexyl)phthalate				0.490	0.484	0.478	0.545	0.709	0.795		*Q	0.9993
36)	i	Perylene-d12	ISTD											
37)	t	Benzo[b]fluora...	1.216	1.199	1.238	1.289	1.257	1.226	1.275	1.218	1.176	1.071	1.216	5.06
38)	t	Benzo[k]fluora...	1.074	1.088	1.080	1.129	1.159	1.160	1.175	1.077	1.005	0.962	1.091	6.30
39)	t	Benzo[a]pyrene	0.972	0.962	0.950	0.973	0.981	0.994	1.048	1.024	0.996	0.946	0.985	3.27
40)	t	Indeno[1,2,3-c...	1.213	1.112	1.115	1.113	1.117	1.150	1.153	1.120	1.096	1.104	1.129	3.06
41)	t	Dibenzo[a,h]anthracene	1.082	1.057	1.074	1.080	1.084	1.124	1.162	1.082	1.022	0.993	1.076	4.39
42)	t	Benzo[g,h,i]pe...	1.282	1.237	1.202	1.195	1.198	1.250	1.261	1.170	1.110	1.080	1.199	5.41

(#) = Out of Range

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : TUNE.D
Acq On : 06 Mar 2023 11:20 am
Operator : sv119:ah
Sample : TUNE
Misc : WG1752279,,ical
ALS Vial : 48 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Wed Mar 08 08:32:43 2023



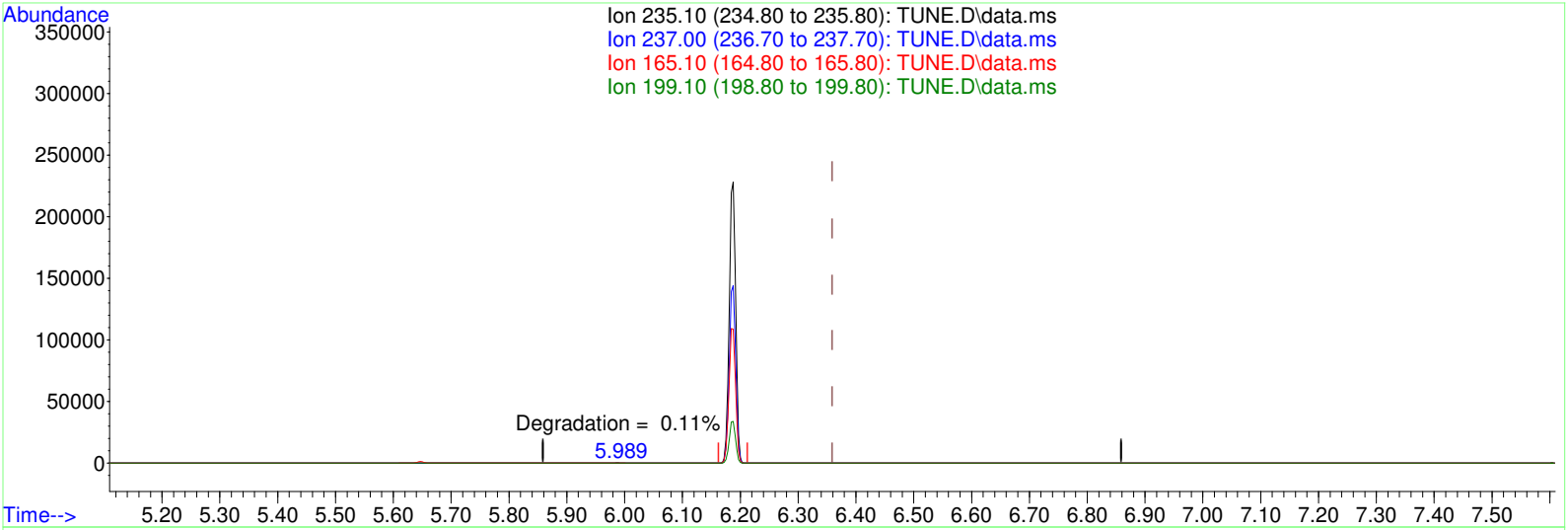
Spectrum Information: Average of 5.000 to 5.007 min.

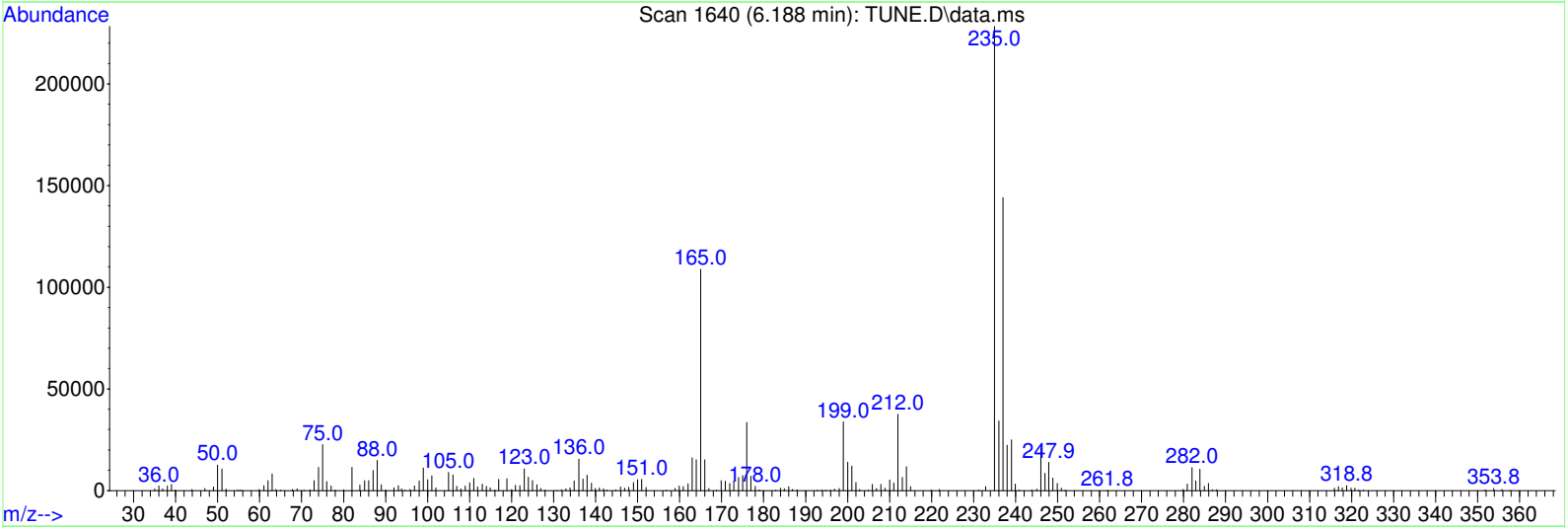
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	51.2	51088	PASS
68	69	0.00	2	1.9	737	PASS
69	69	100	100	100.0	39624	PASS
70	69	0.00	2	0.5	211	PASS
127	198	10	80	53.0	52853	PASS
197	198	0.00	2	0.3	304	PASS
198	198	100	100	100.0	99736	PASS
199	198	5	9	7.1	7121	PASS
275	198	10	60	26.3	26235	PASS
365	198	1	100	2.7	2662	PASS
441	442	0.01	24	18.8	14797	PASS
442	198	50	100	79.0	78816	PASS
443	442	15	24	18.5	14599	PASS

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : TUNE.D
Acq On : 06 Mar 2023 11:20 am
Operator : sv119:ah
Sample : TUNE
Misc : WG1752279,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Mar 06 11:34:13 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Feb 15 07:39:01 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: TUNE.D\data.ms

(6) ddt (T)

6.188min (-0.171) 28.88

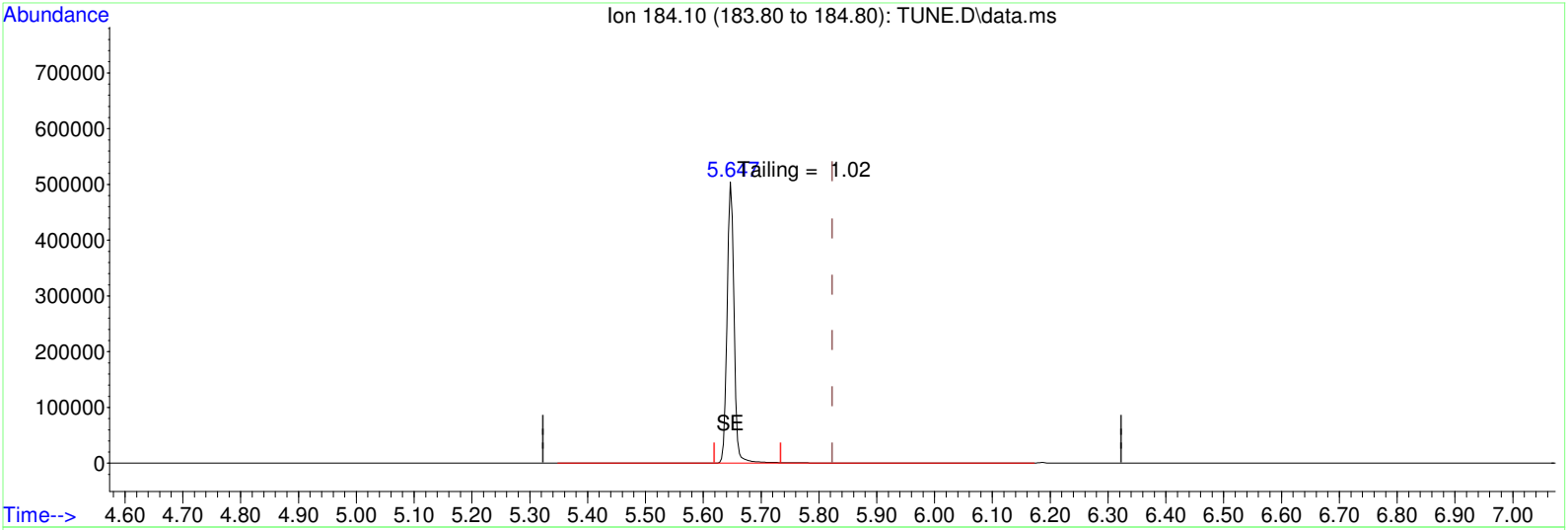
response 176040

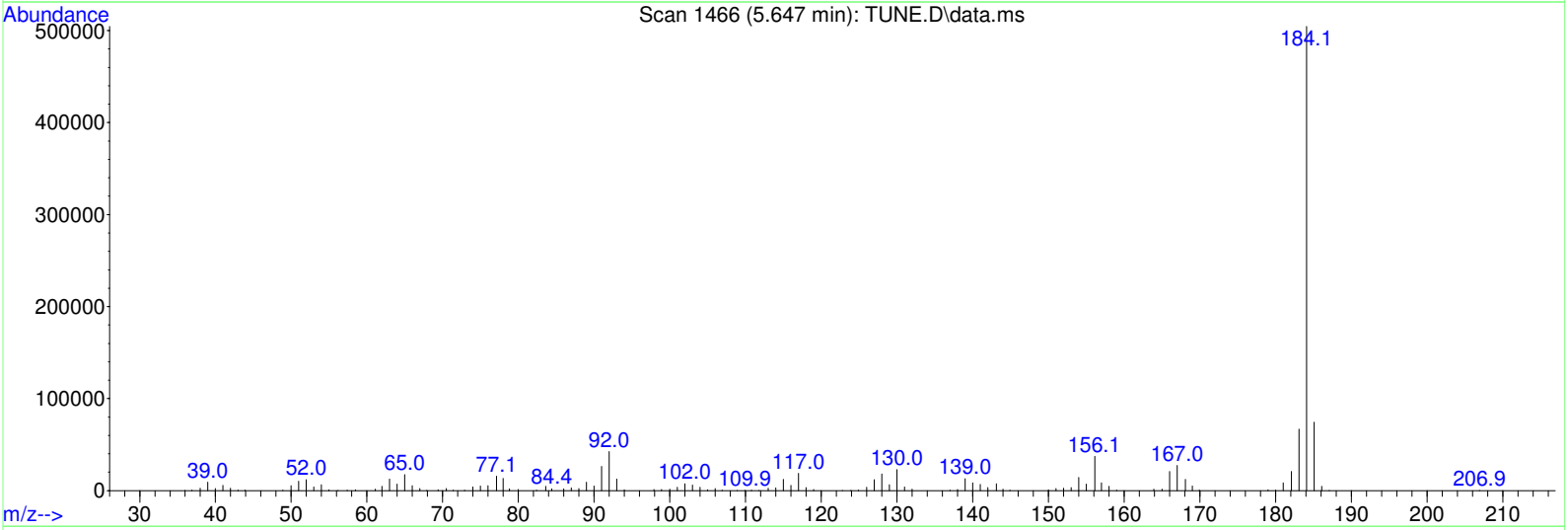
Ion	Exp%	Act%
235.10	100.00	100.00
237.00	65.60	63.80
165.10	53.30	49.10
199.10	17.10	14.80

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : TUNE.D
Acq On : 06 Mar 2023 11:20 am
Operator : sv119:ah
Sample : TUNE
Misc : WG1752279,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Mar 06 11:34:13 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Feb 15 07:39:01 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: TUNE.D\data.ms

(3) benzidine (T)

5.647min (-0.176) 41.65

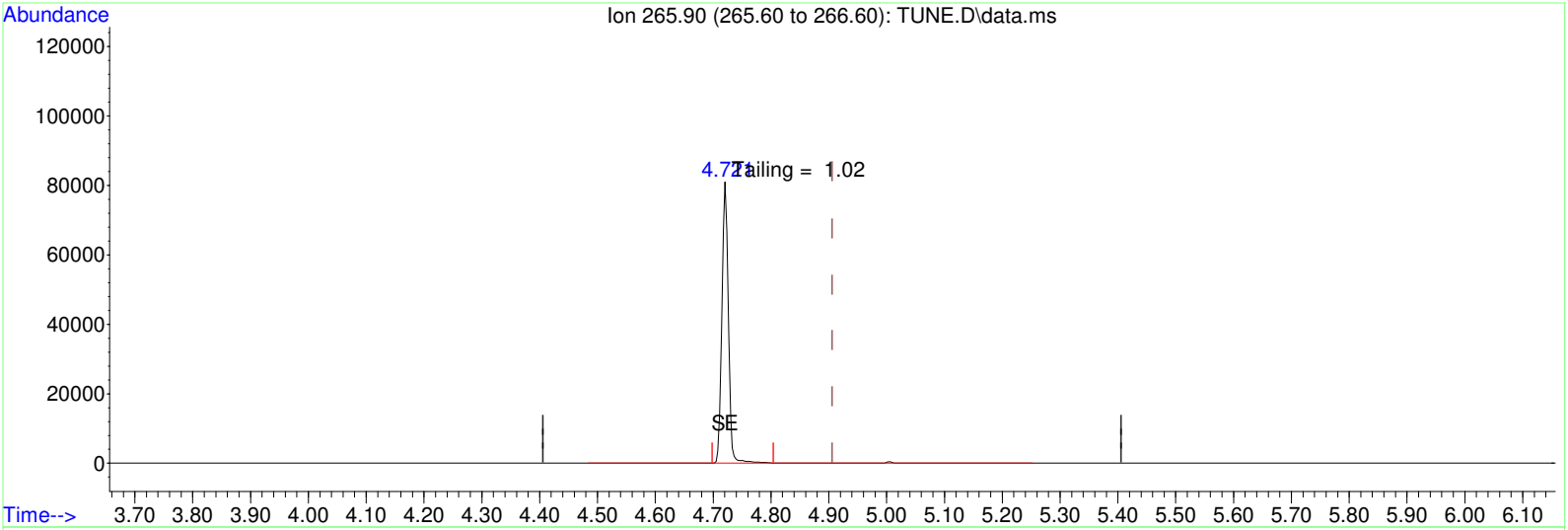
response 423990

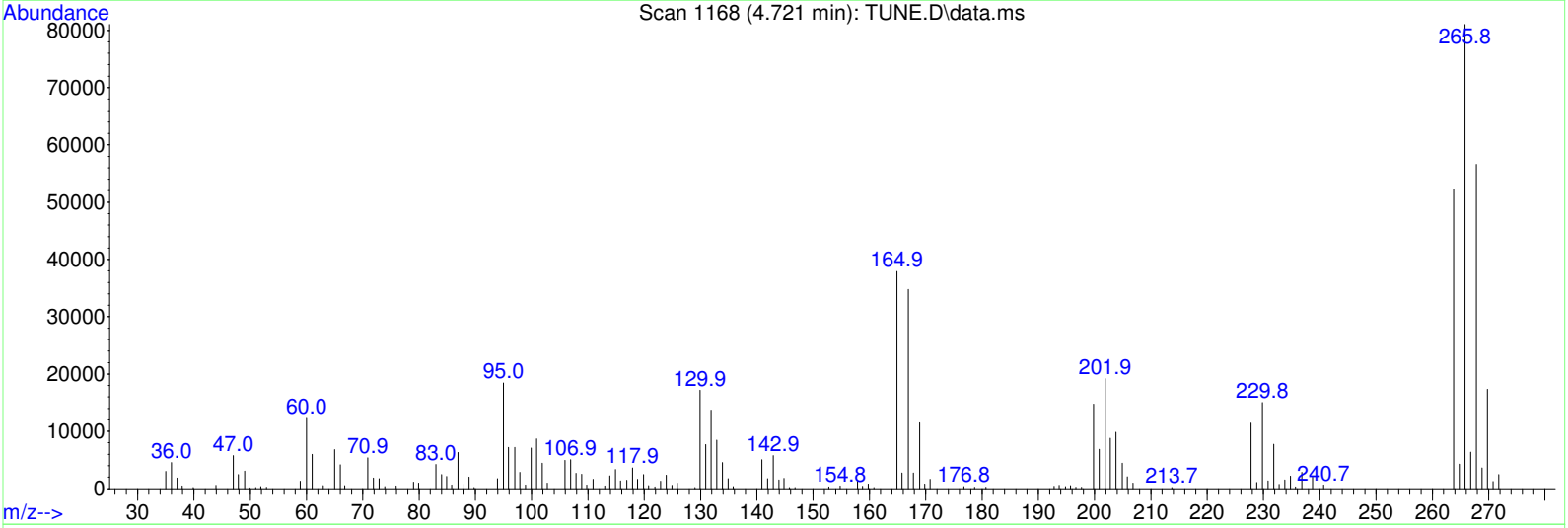
Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : TUNE.D
Acq On : 06 Mar 2023 11:20 am
Operator : sv119:ah
Sample : TUNE
Misc : WG1752279,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Mar 06 11:34:13 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Feb 15 07:39:01 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: TUNE.D\data.ms

(1) pentachlorophenol (T)

4.721min (-0.185) 29.99

response 62983

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL10.D
Acq On : 06 Mar 2023 11:49 am
Operator : sv119:ah
Sample : IL10,32,,20 Lot#9991
Misc : WG1752279,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 13:42:34 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:13 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.142	152	61102M7	4000.000	ng/ml	-0.02
Standard Area 1 = 66115			Recovery = 92.42%			
8) Naphthalene-d8	2.809	136	235058	4000.000	ng/ml	-0.01
Standard Area 1 = 240629			Recovery = 97.68%			
17) Acenaphthene-d10	3.790	164	121638	4000.000	ng/ml	0.00
Standard Area 1 = 125461			Recovery = 96.95%			
22) Phenanthrene-d10	4.631	188	284986	4000.000	ng/ml	0.00
Standard Area 1 = 281681			Recovery = 101.17%			
31) Chrysene-d12	6.255	240	248650	4000.000	ng/ml	0.08
Standard Area 1 = 262172			Recovery = 94.84%			
36) Perylene-d12	7.411	264	307727	4000.000	ng/ml	0.09
Standard Area 1 = 305709			Recovery = 100.66%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.543	112	276221	18373.397	ng/ml	-0.02
Spiked Amount 5000.000	Range 15 - 110		Recovery = 367.47%#			
3) Phenol-d6	1.952	99	351284	19776.943	ng/ml	-0.02
Spiked Amount 5000.000	Range 15 - 110		Recovery = 395.54%#			
7) Nitrobenzene-d5	2.425	82	270798	20264.983	ng/ml	-0.01
Spiked Amount 2500.000	Range 30 - 130		Recovery = 810.60%#			
13) 2-Fluorobiphenyl	3.411	172	734238	15192.905	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 607.72%#			
21) 2,4,6-Tribromophenol	4.237	330	107963	22029.119	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 440.58%#			
30) 4-Terphenyl-d14	5.588	244	976931	16428.587	ng/ml	0.04
Spiked Amount 2500.000	Range 30 - 130		Recovery = 657.14%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.007	93	284142	17207.874	ng/ml	91
5) n-nitrosodi-n-propylamine	2.347	70	206502	21693.408	ng/ml#	91
6) Hexachloroethane	2.403	117	126109	18570.184	ng/ml	96
9) Naphthalene	2.820	128	935898	16813.715	ng/ml	99
10) Hexachlorobutadiene	2.895	225	180328	16667.277	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL10.D
Acq On : 06 Mar 2023 11:49 am
Operator : sv119:ah
Sample : IL10,32,,20 Lot#9991
Misc : WG1752279,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 13:42:34 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:13 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
11) 2-Methylnaphthalene	3.202	142	615371	16446.788	ng/ml	96
12) 1-Methylnaphthalene	3.257	142	581997	16129.043	ng/ml	96
14) 2-Chloronaphthalene	3.474	162	660720	16257.795	ng/ml	100
15) 2,6-Dinitrotoluene	3.673	165	167312M4	23455.084	ng/ml	
16) Acenaphthylene	3.708	152	1051389	17928.949	ng/ml	100
18) Acenaphthene	3.808	153	661873	17162.682	ng/ml	95
19) 2,4-Dinitrotoluene	3.902	165	225501	13993.674	ng/ml#	76
20) Fluorene	4.100	166	773901	17459.618	ng/ml	95
23) 4,6-Dinitro-o-cresol	4.133	198	112862	19888.787	ng/ml	96
24) Hexachlorobenzene	4.418	284	277881	16224.775	ng/ml	100
25) Pentachlorophenol	4.529	266	179460	13958.887	ng/ml	100
26) Phenanthrene	4.645	178	1201533	16640.229	ng/ml	98
27) Anthracene	4.675	178	1209153	17949.470	ng/ml	97
28) Fluoranthene	5.347	202	1451013M3	17585.152	ng/ml	
29) Pyrene	5.485	202	1483579M3	17361.145	ng/ml	
32) Benzo[a]anthracene	6.247	228	1515536	18312.954	ng/ml	97
33) 3,3'-Dichlorobenzidine	6.240	252	701910	22077.485	ng/ml	99
34) Chrysene	6.273	228	1416375	17882.910	ng/ml	100
35) Bis(2-ethylhexyl)phtha...	6.288	149	1026033	17197.702	ng/ml	95
37) Benzo[b]fluoranthene	7.065	252	1647179	17602.314	ng/ml	97
38) Benzo[k]fluoranthene	7.092	252	1479938	17635.566	ng/ml	96
39) Benzo[a]pyrene	7.362	252	1455090	19211.385	ng/ml	98
40) Indeno[1,2,3-cd]pyrene	8.583	276	1698697	19555.355	ng/ml	98
41) Dibenzo[a,h]anthracene	8.620	278	1527220M6	18449.734	ng/ml	
42) Benzo[g,h,i]perylene	8.914	276	1661564M2	18018.650	ng/ml	

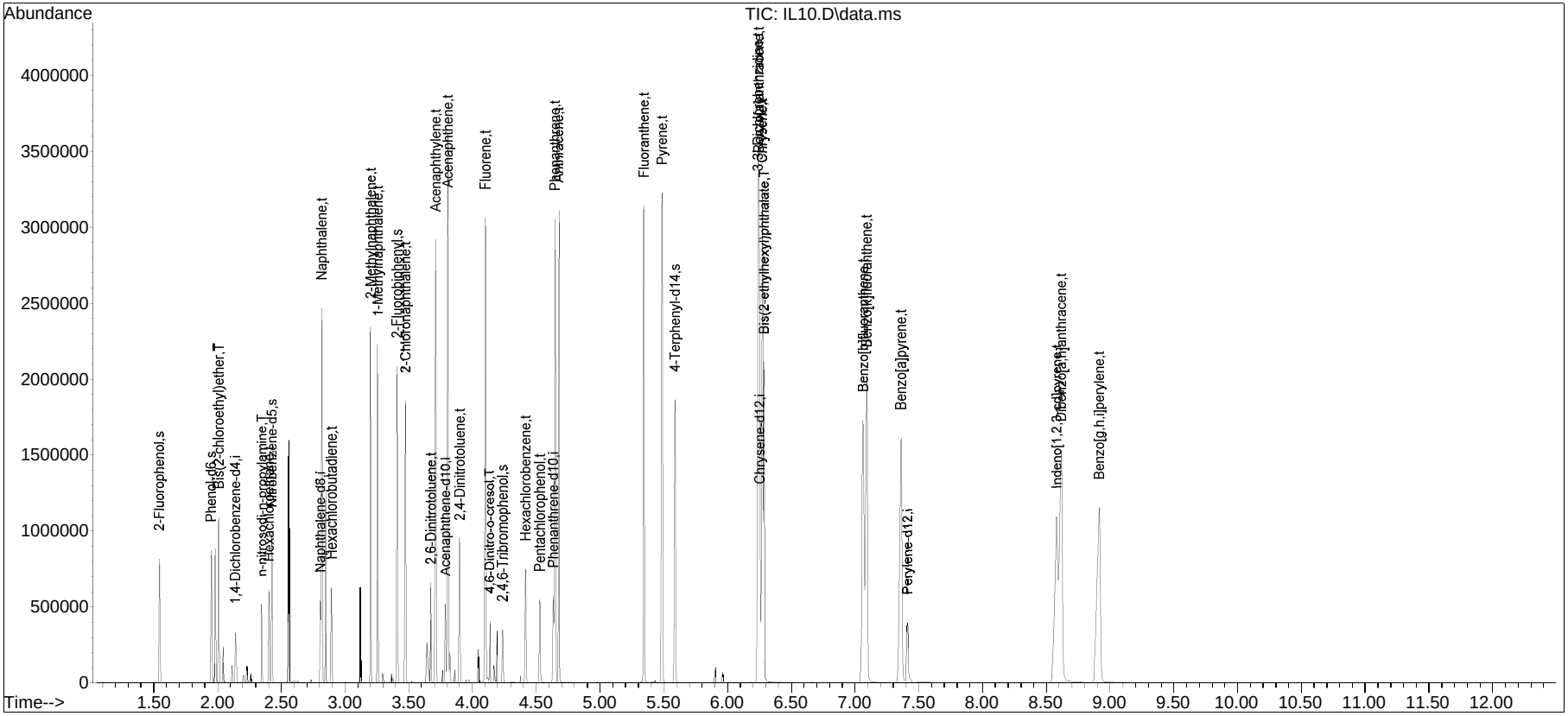
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL10.D
Acq On : 06 Mar 2023 11:49 am
Operator : sv119:ah
Sample : IL10,32,,20 Lot#9991
Misc : WG1752279,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Mar 07 13:42:34 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:13 2023
Response via : Initial Calibration

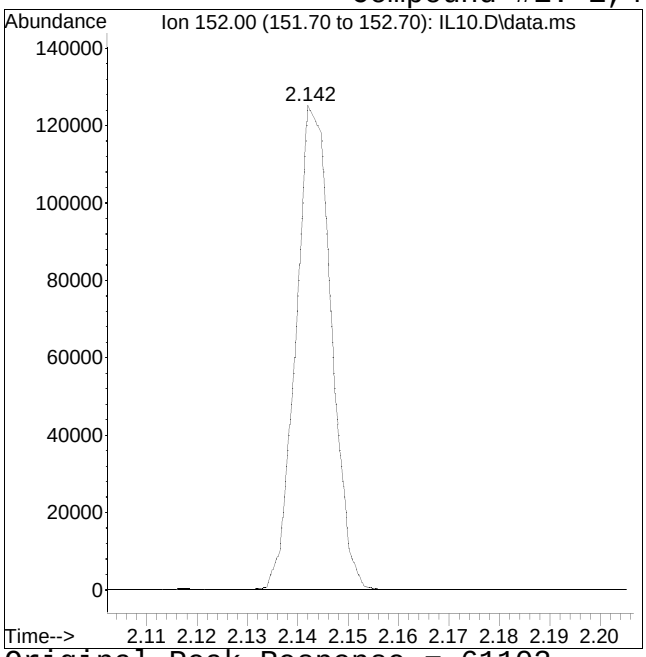
Sub List : Default - All compounds listedIical\IL7.D•

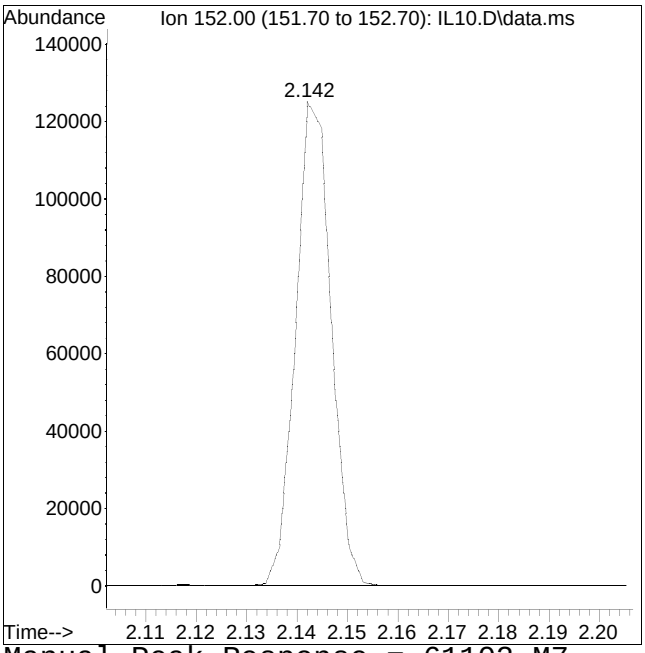


Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL10.D Operator : sv119:ah
Date Inj'd : 3/6/2023 11:49 am Instrument : SV119
Sample : IL10,32,,20 Lot#9991 Quant Date : 3/7/2023 1:29 pm

Compound #1: 1,4-Dichlorobenzene-d4



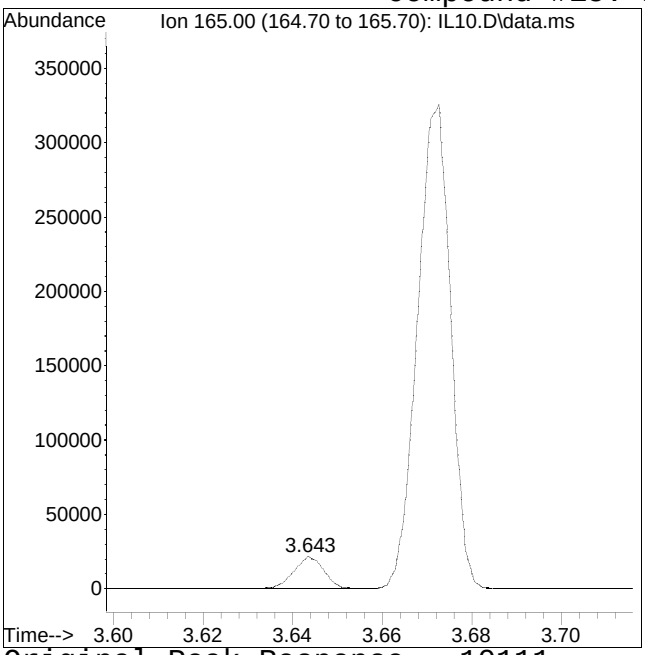


Original Peak Response = 61102 Manual Peak Response = 61102 M7
M7 = A qualifier ion was manually integrated (only for GC/MS data).

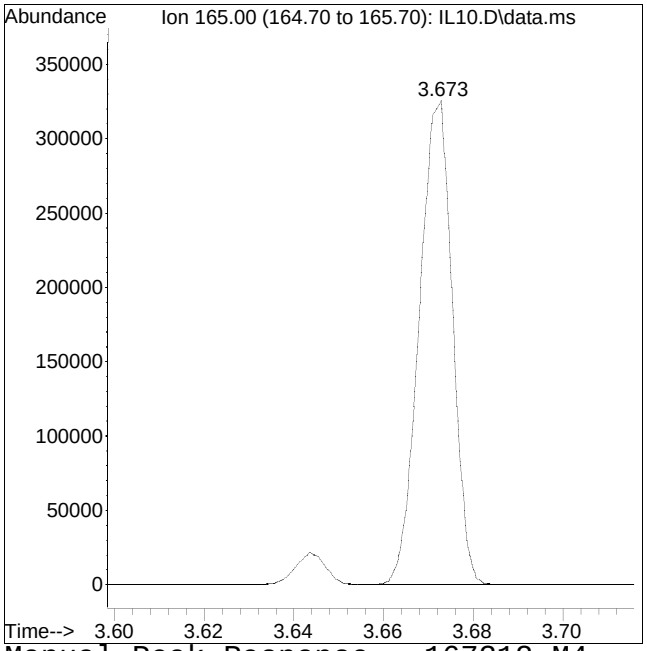
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL10.D Operator : sv119:ah
Date Inj'd : 3/6/2023 11:49 am Instrument : SV119
Sample : IL10,32,,20 Lot#9991 Quant Date : 3/7/2023 1:29 pm

Compound #15: 2,6-Dinitrotoluene



Original Peak Response = 10111



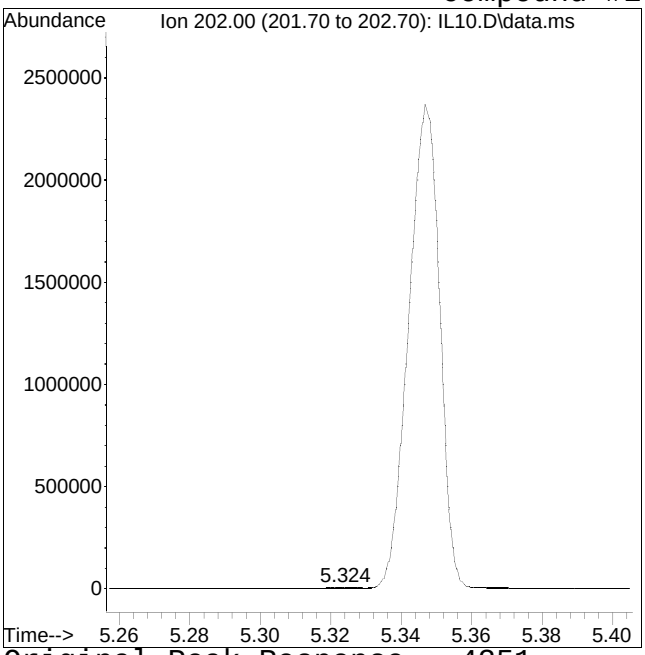
Manual Peak Response = 167312 M4

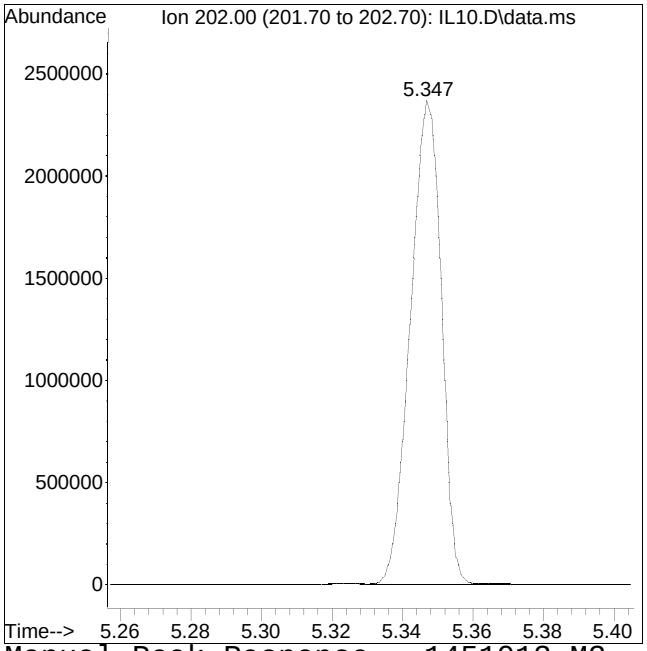
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL10.D Operator : sv119:ah
Date Inj'd : 3/6/2023 11:49 am Instrument : SV119
Sample : IL10,32,,20 Lot#9991 Quant Date : 3/7/2023 1:29 pm

Compound #28: Fluoranthene



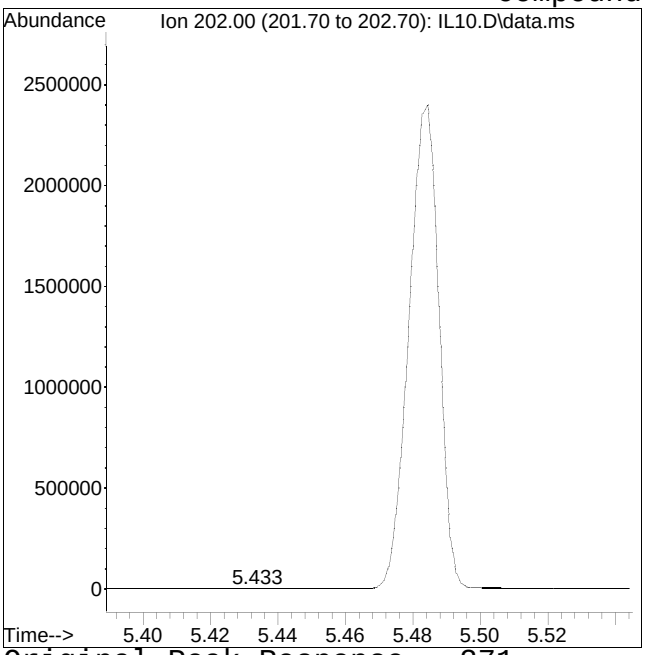


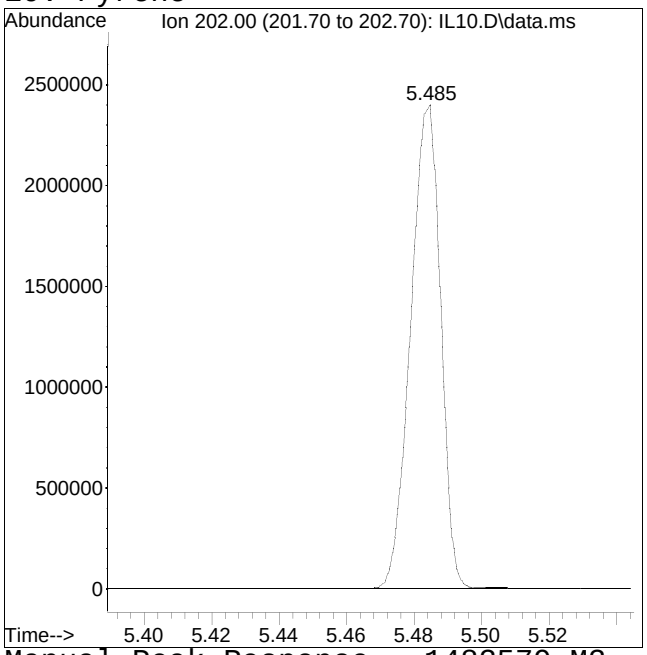
Original Peak Response = 4251 Manual Peak Response = 1451013 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL10.D Operator : sv119:ah
Date Inj'd : 3/6/2023 11:49 am Instrument : SV119
Sample : IL10,32,,20 Lot#9991 Quant Date : 3/7/2023 1:29 pm

Compound #29: Pyrene



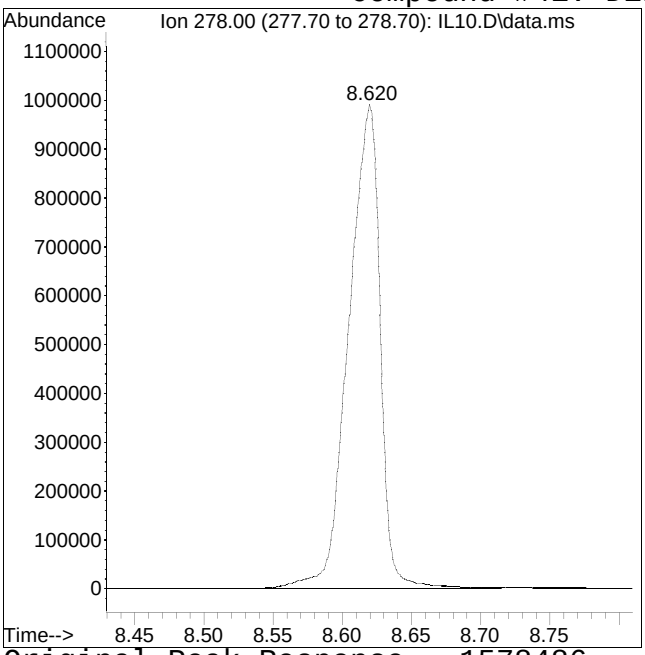


Original Peak Response = 271 Manual Peak Response = 1483579 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

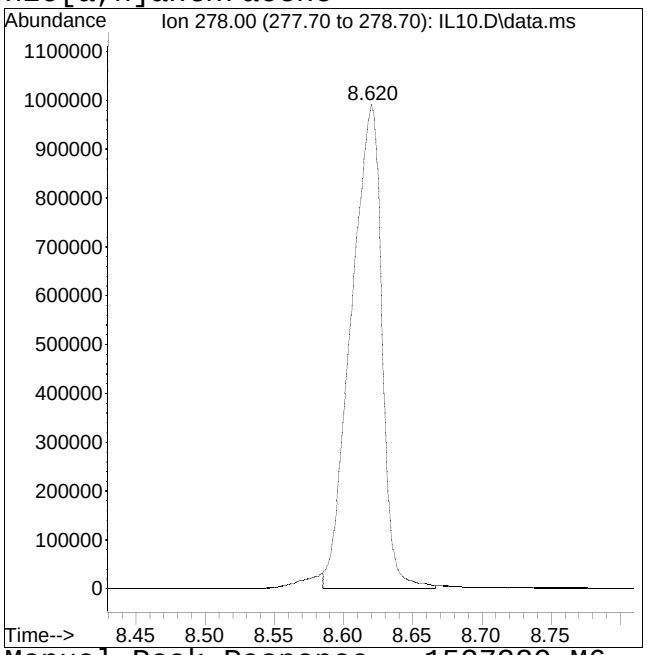
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL10.D Operator : sv119:ah
Date Inj'd : 3/6/2023 11:49 am Instrument : SV119
Sample : IL10,32,,20 Lot#9991 Quant Date : 3/7/2023 1:29 pm

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 1578486



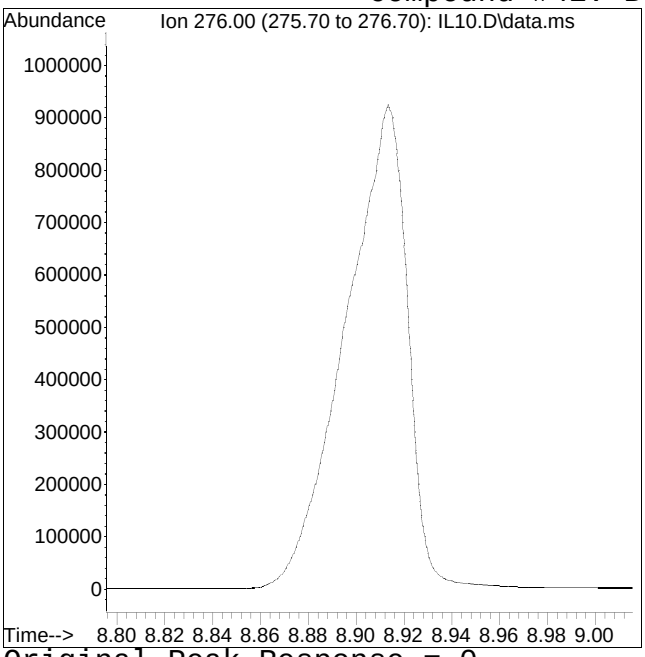
Manual Peak Response = 1527220 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

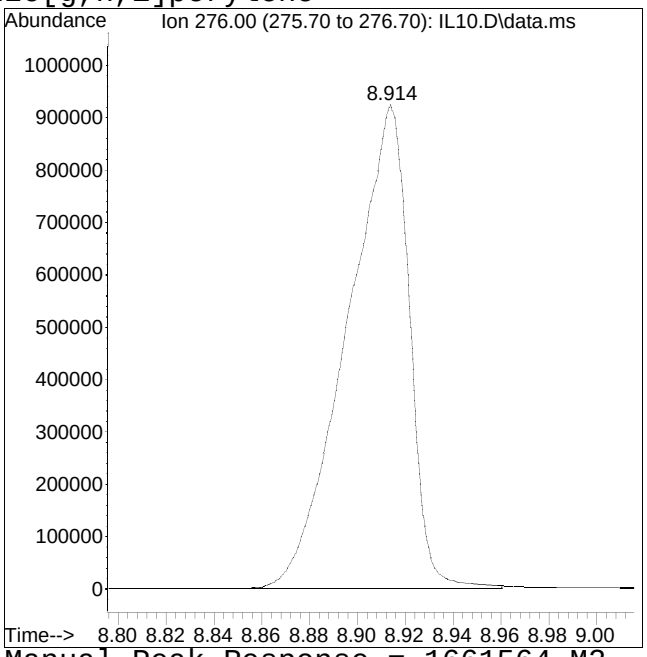
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQ Method : SIM-LVI_230306_sv119.M
Data File : IL10.D Operator : sv119:ah
Date Inj'd : 3/6/2023 11:49 am Instrument : SV119
Sample : IL10,32,,20 Lot#9991 Quant Date : 3/7/2023 1:29 pm

Compound #42: Benzo[g,h,i]perylene



Original Peak Response = 0



Manual Peak Response = 1661564 M2

M2 = Peak not found by automatic integration algorithm.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL9.D
Acq On : 06 Mar 2023 12:55 pm
Operator : sv119:ah
Sample : IL9,32,,10 Lot#9992
Misc : WG1752279,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 07 13:40:56 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:30:29 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.137	152	64176	4000.000	ng/ml	-0.02
Standard Area 1 = 66115			Recovery = 97.07%			
8) Naphthalene-d8	2.802	136	244163	4000.000	ng/ml	-0.02
Standard Area 1 = 240629			Recovery = 101.47%			
17) Acenaphthene-d10	3.785	164	129494	4000.000	ng/ml	0.00
Standard Area 1 = 125461			Recovery = 103.21%			
22) Phenanthrene-d10	4.631	188	310574	4000.000	ng/ml	0.00
Standard Area 1 = 281681			Recovery = 110.26%			
31) Chrysene-d12	6.290	240	290598M2	4000.000	ng/ml	0.11
Standard Area 1 = 262172			Recovery = 110.84%			
36) Perylene-d12	7.445	264	337912M6	4000.000	ng/ml	0.12
Standard Area 1 = 305709			Recovery = 110.53%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.536	112	154740	9799.821	ng/ml	-0.03
Spiked Amount 5000.000	Range 15 - 110		Recovery = 196.00%#			
3) Phenol-d6	1.944	99	189565	10161.123	ng/ml	-0.02
Spiked Amount 5000.000	Range 15 - 110		Recovery = 203.22%#			
7) Nitrobenzene-d5	2.417	82	149410	10645.431	ng/ml	-0.02
Spiked Amount 2500.000	Range 30 - 130		Recovery = 425.82%#			
13) 2-Fluorobiphenyl	3.406	172	421203	8390.553	ng/ml	-0.01
Spiked Amount 2500.000	Range 30 - 130		Recovery = 335.62%#			
21) 2,4,6-Tribromophenol	4.232	330	59697	11441.799	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 228.84%#			
30) 4-Terphenyl-d14	5.606	244	595498	9189.144	ng/ml	0.06
Spiked Amount 2500.000	Range 30 - 130		Recovery = 367.57%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	1.999	93	155292	8954.135	ng/ml	91
5) n-nitrosodi-n-propylamine	2.337	70	110735	11075.701	ng/ml#	91
6) Hexachloroethane	2.397	117	68457	9597.780	ng/ml	96
9) Naphthalene	2.814	128	521448	9018.646	ng/ml	99
10) Hexachlorobutadiene	2.889	225	99149	8822.365	ng/ml	100
11) 2-Methylnaphthalene	3.197	142	348710	8972.297	ng/ml	97
12) 1-Methylnaphthalene	3.252	142	326670	8715.500	ng/ml	97
14) 2-Chloronaphthalene	3.469	162	371590	8802.446	ng/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL9.D
Acq On : 06 Mar 2023 12:55 pm
Operator : sv119:ah
Sample : IL9,32,,10 Lot#9992
Misc : WG1752279,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 07 13:40:56 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:30:29 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc Units	Dev(Min)
15) 2,6-Dinitrotoluene	3.665	165	91931M4	12407.008 ng/ml	
16) Acenaphthylene	3.702	152	595977	9783.992 ng/ml	100
18) Acenaphthene	3.800	153	373003	9085.366 ng/ml	96
19) 2,4-Dinitrotoluene	3.894	165	125317	8904.565 ng/ml#	75
20) Fluorene	4.094	166	442675	9381.104 ng/ml	96
23) 4,6-Dinitro-o-cresol	4.125	198	60161	10293.506 ng/ml	96
24) Hexachlorobenzene	4.414	284	159528	8547.029 ng/ml	99
25) Pentachlorophenol	4.527	266	95837	8680.208 ng/ml	100
26) Phenanthrene	4.645	178	698507	8876.725 ng/ml	99
27) Anthracene	4.675	178	702413	9568.004 ng/ml	99
28) Fluoranthene	5.360	202	862849M1	9595.510 ng/ml	
29) Pyrene	5.499	202	897415M3	9636.503 ng/ml	
32) Benzo[a]anthracene	6.283	228	910639M2	9415.302 ng/ml	
33) 3,3'-Dichlorobenzidine	6.275	252	404850M4	10895.775 ng/ml	
34) Chrysene	6.307	228	851199M2	9195.744 ng/ml	
35) Bis(2-ethylhexyl)phtha...	6.326	149	577422M2	9952.581 ng/ml	
37) Benzo[b]fluoranthene	7.100	252	993327M2	9666.810 ng/ml	
38) Benzo[k]fluoranthene	7.122	252	849127M2	9214.686 ng/ml	
39) Benzo[a]pyrene	7.392	252	841469M2	10117.400 ng/ml	
40) Indeno[1,2,3-cd]pyrene	8.606	276	925635M2	9704.017 ng/ml	
41) Dibenzo[a,h]anthracene	8.640	278	863629M2	9501.184 ng/ml	
42) Benzo[g,h,i]perylene	8.927	276	937632M3	9259.757 ng/ml	

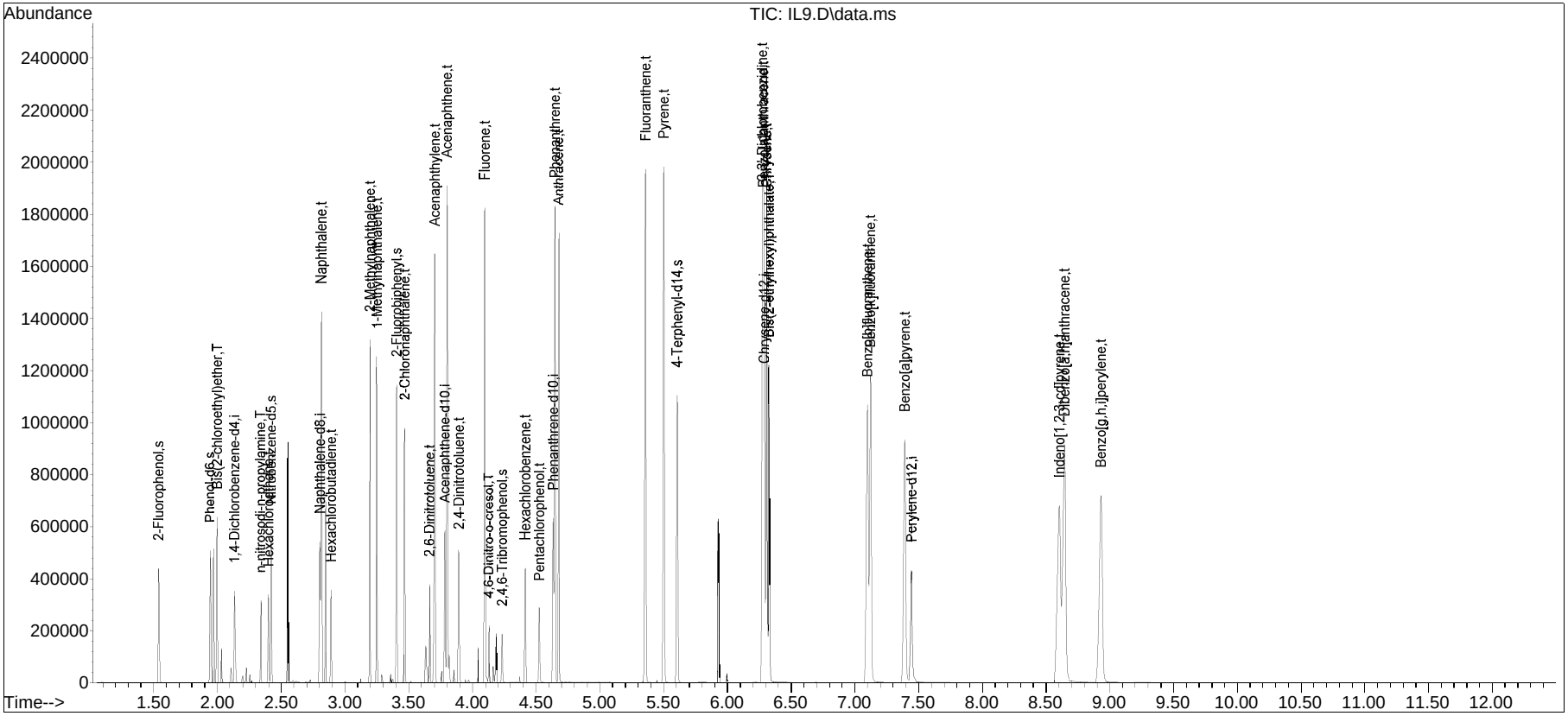
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL9.D
Acq On : 06 Mar 2023 12:55 pm
Operator : sv119:ah
Sample : IL9,32,,10 Lot#9992
Misc : WG1752279,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Mar 07 13:40:56 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:30:29 2023
Response via : Initial Calibration

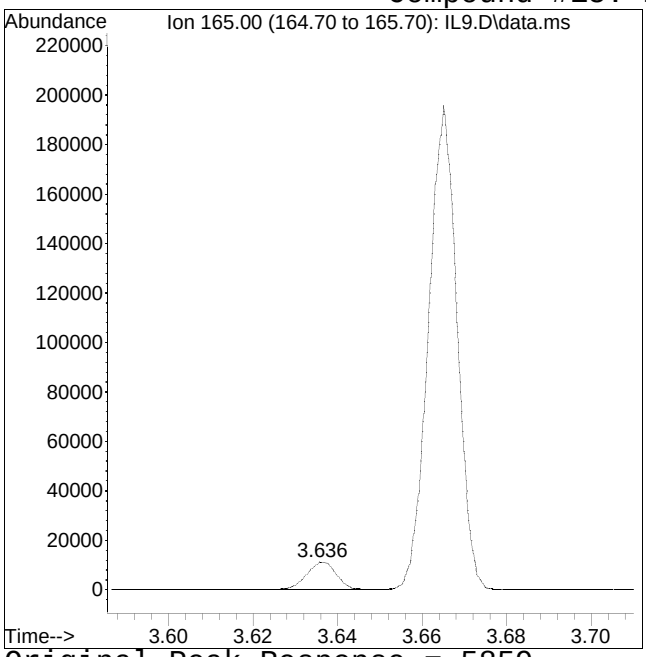
Sub List : Default - All compounds listedIical\IL7.D•



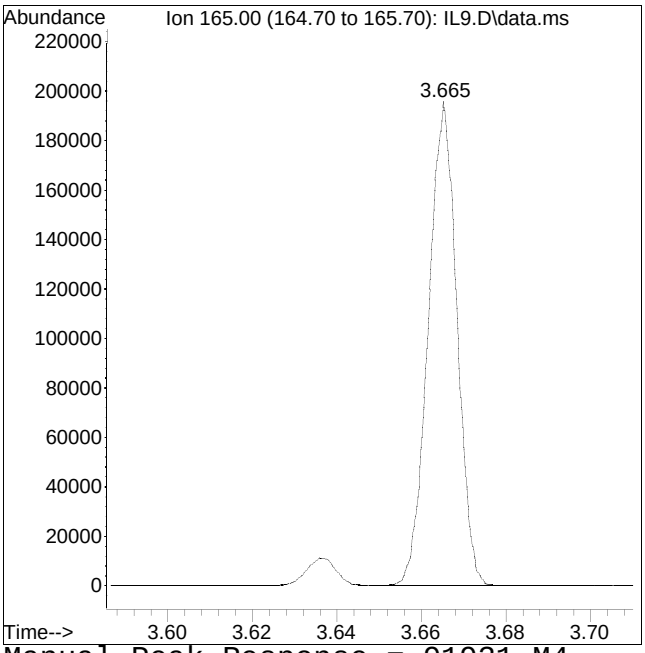
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #15: 2,6-Dinitrotoluene



Original Peak Response = 5859



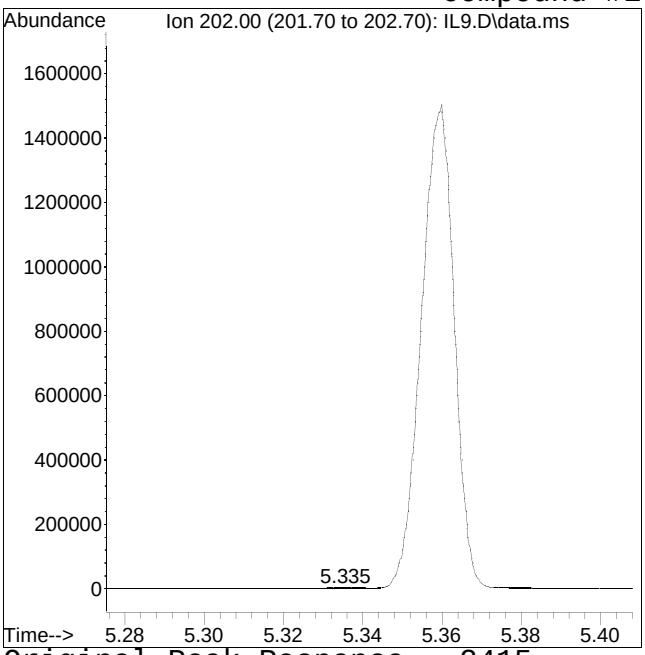
Manual Peak Response = 91931 M4

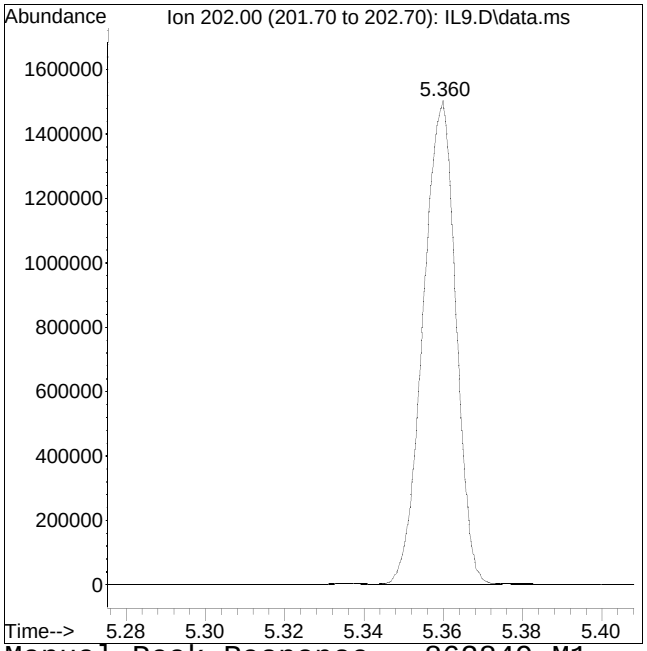
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #28: Fluoranthene



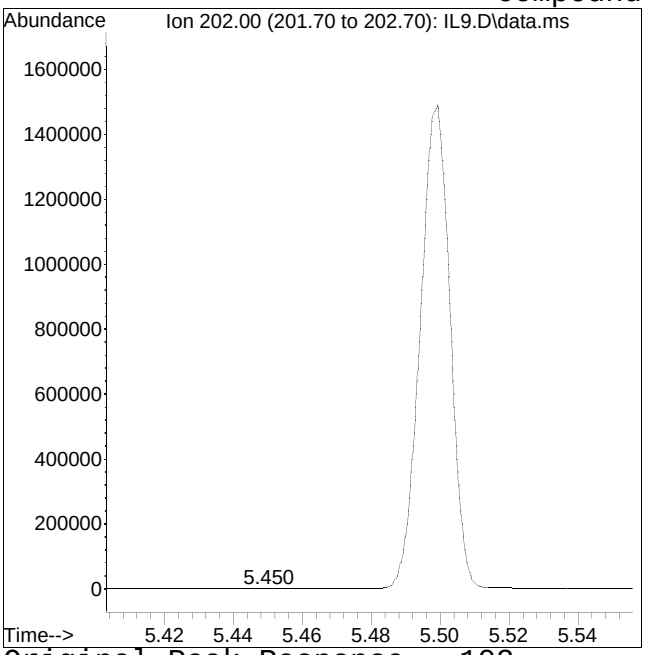


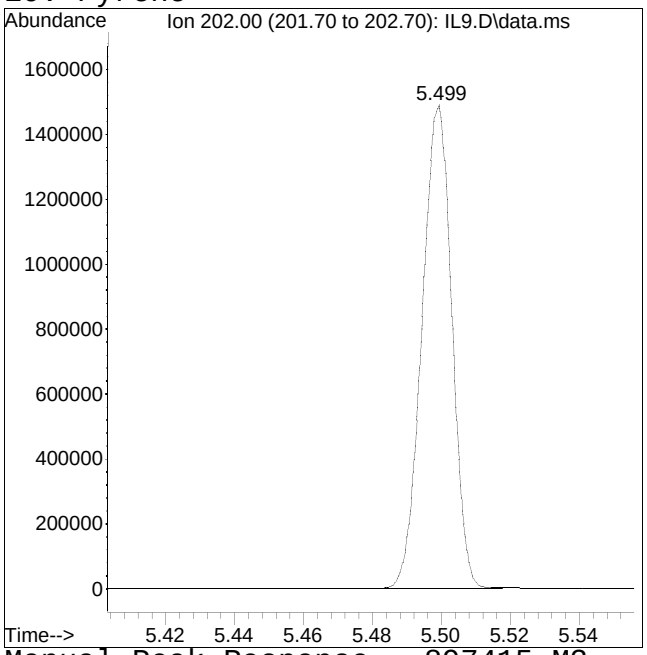
Original Peak Response = 2415 Manual Peak Response = 862849 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #29: Pyrene



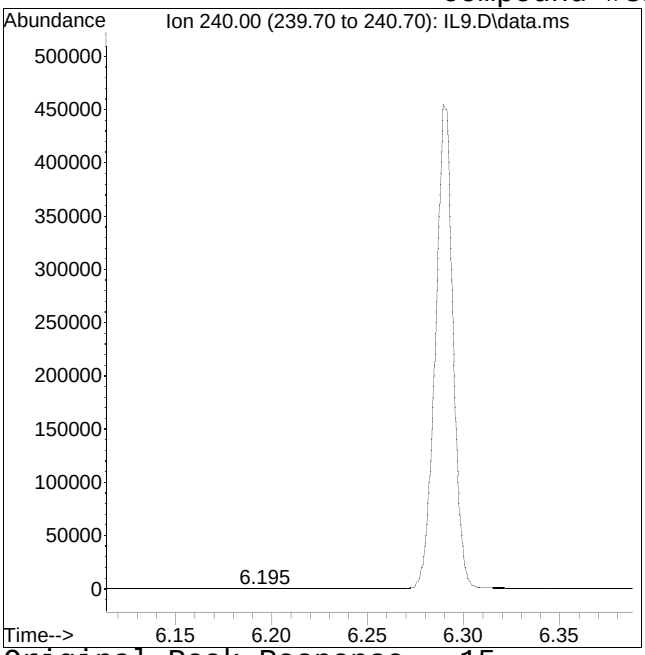


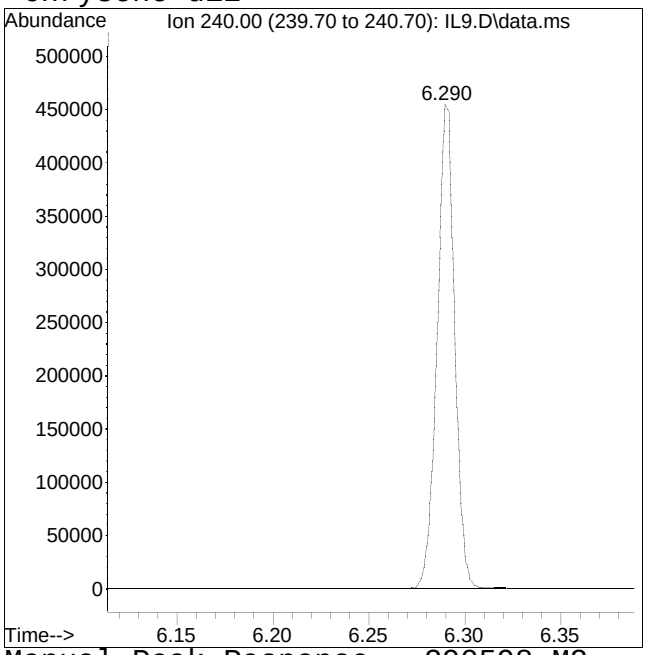
Original Peak Response = 102 Manual Peak Response = 897415 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #31: Chrysene-d12



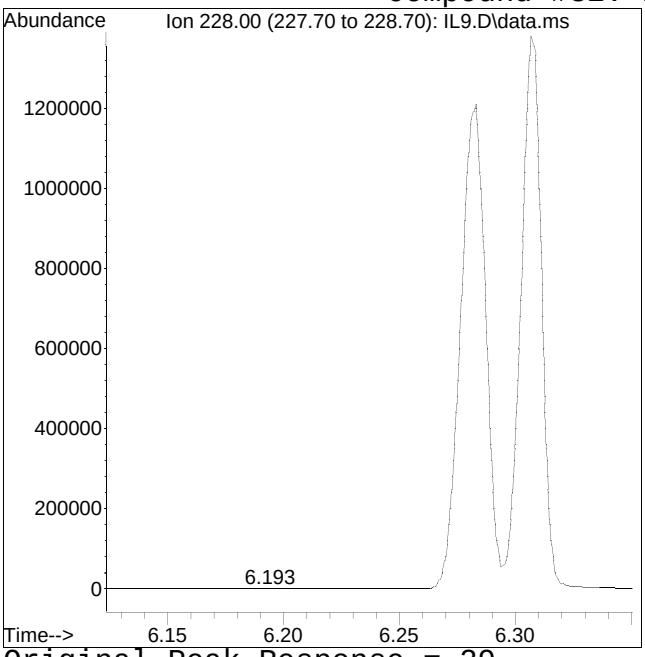


Original Peak Response = 15 Manual Peak Response = 290598 M2
M2 = Peak not found by automatic integration algorithm.

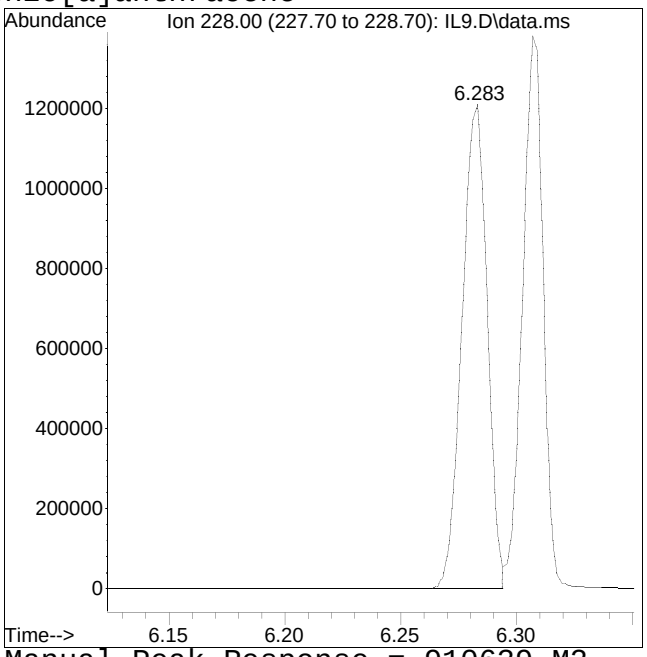
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #32: Benzo[a]anthracene



Original Peak Response = 29



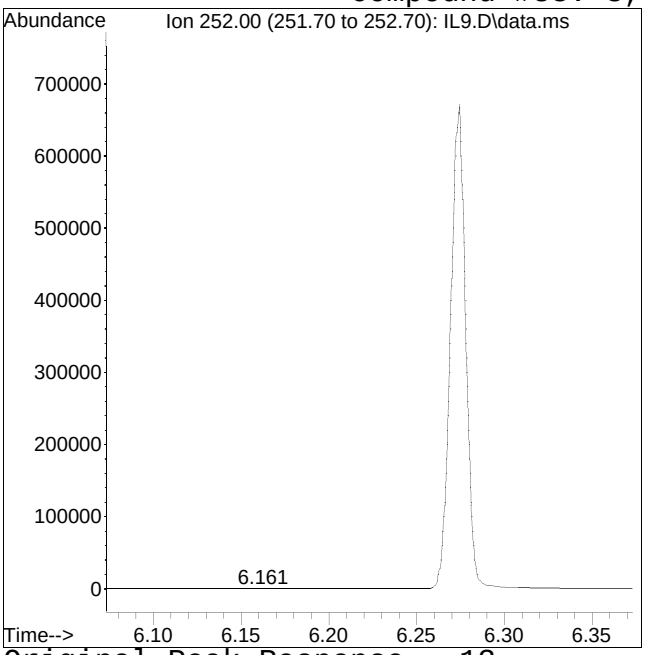
Manual Peak Response = 910639 M2

M2 = Peak not found by automatic integration algorithm.

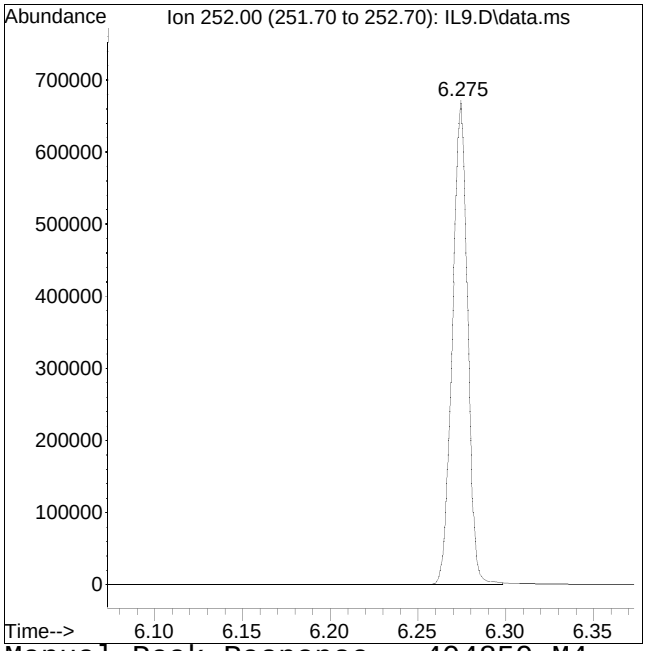
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #33: 3,3'-Dichlorobenzidine



Original Peak Response = 13



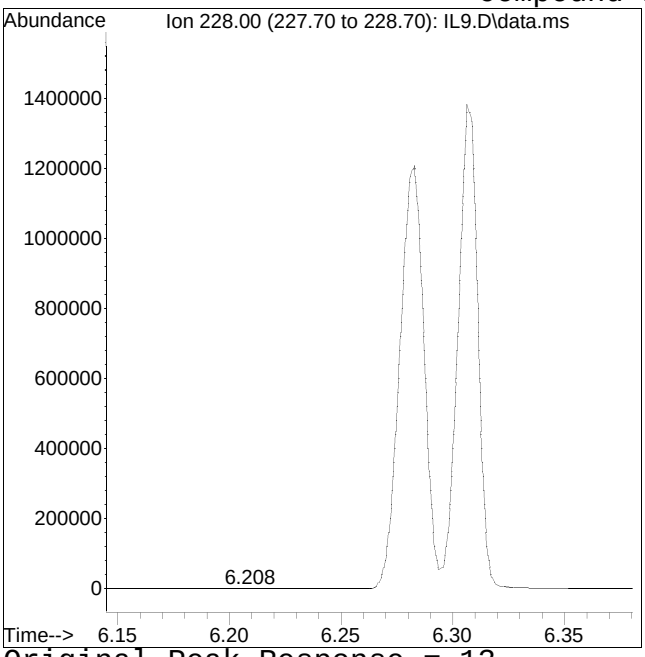
Manual Peak Response = 404850 M4

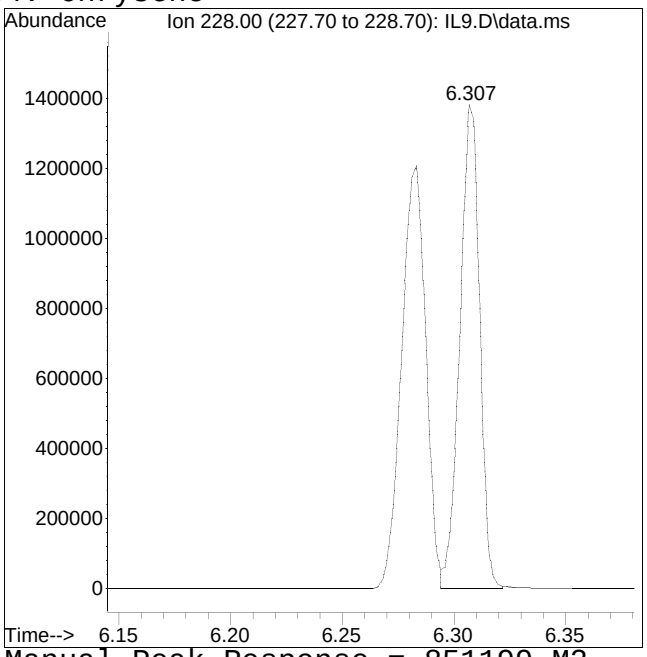
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #34: Chrysene



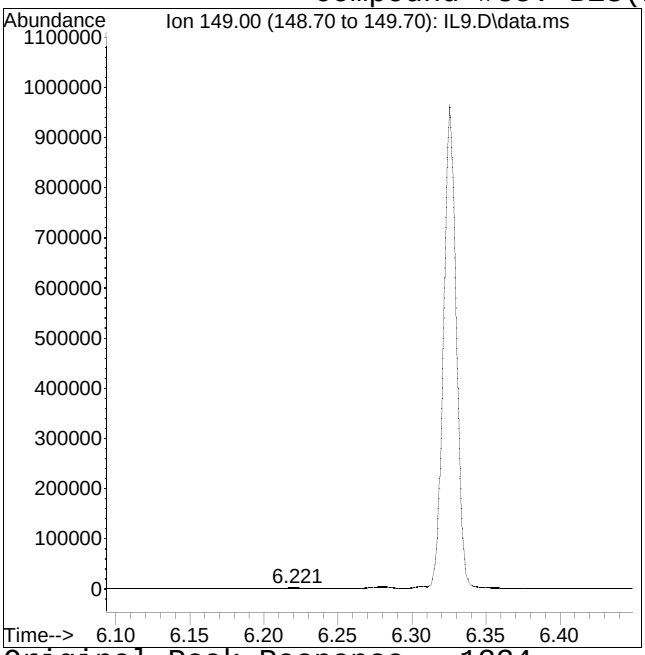


Original Peak Response = 13 Manual Peak Response = 851199 M2
M2 = Peak not found by automatic integration algorithm.

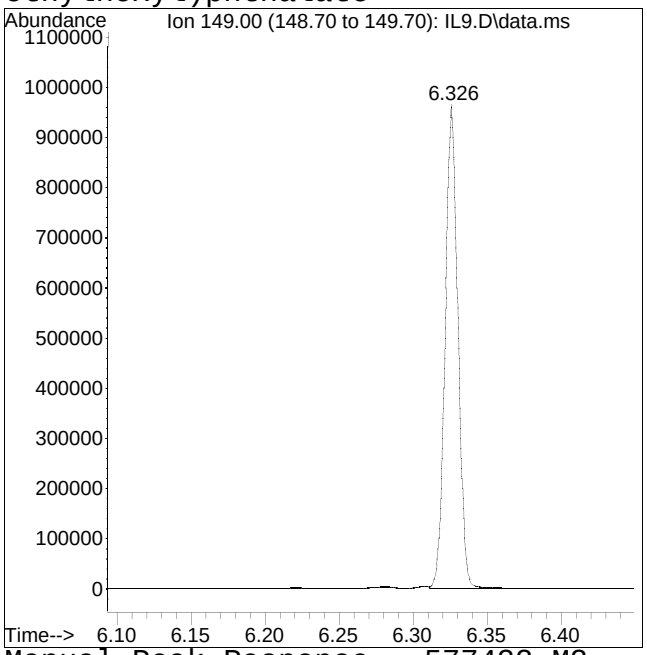
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #35: Bis(2-ethylhexyl)phthalate



Original Peak Response = 1234



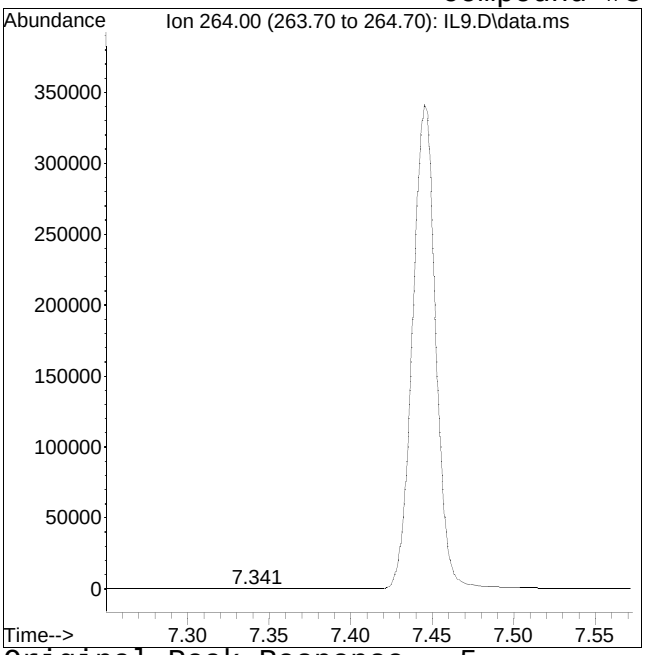
Manual Peak Response = 577422 M2

M2 = Peak not found by automatic integration algorithm.

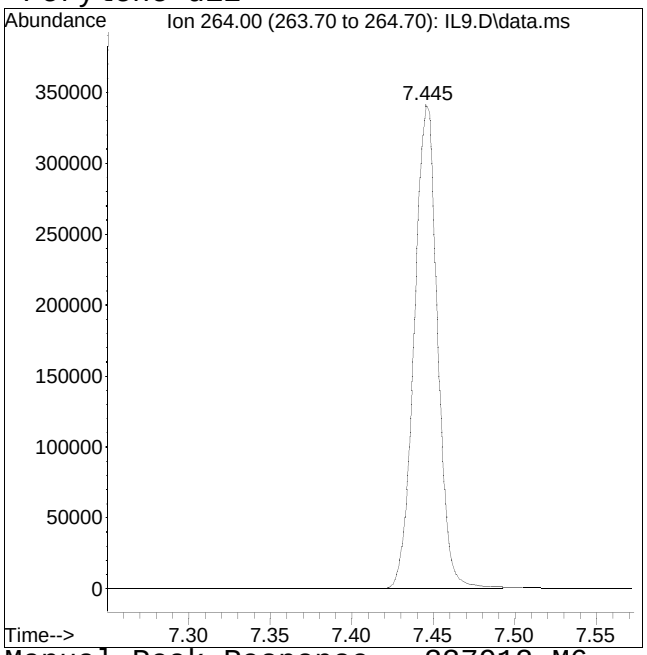
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #36: Perylene-d12



Original Peak Response = 5



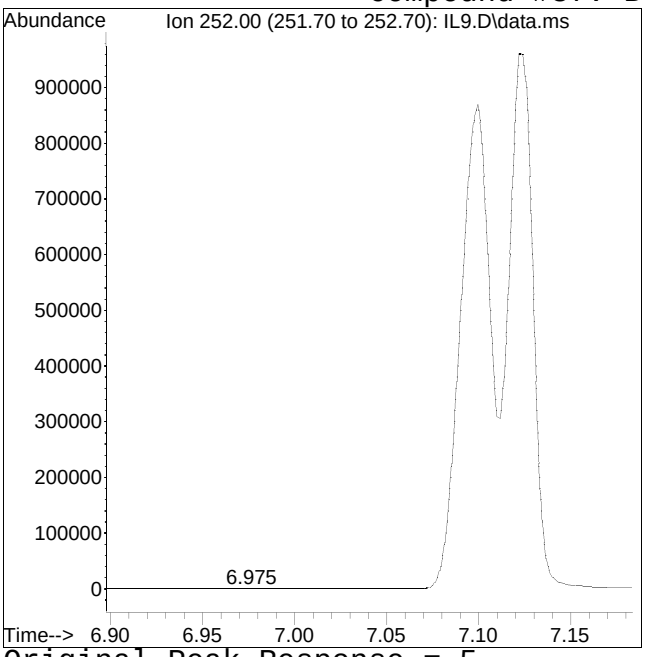
Manual Peak Response = 337912 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

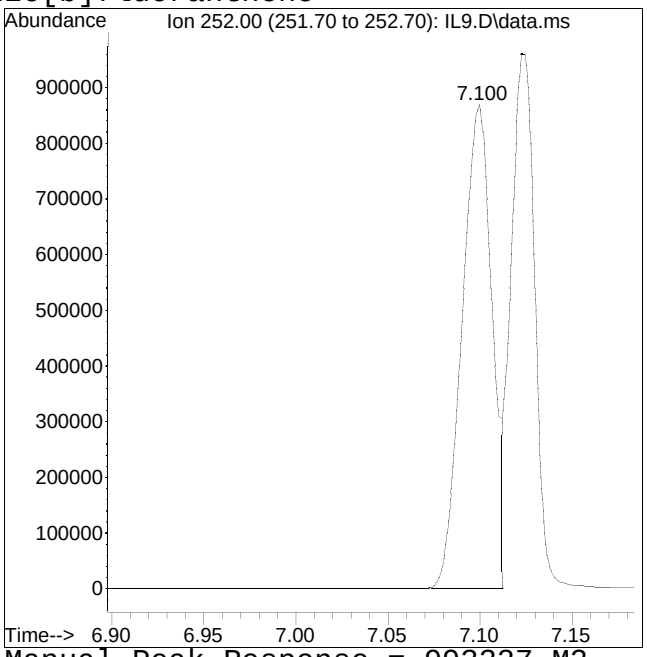
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #37: Benzo[b]fluoranthene



Original Peak Response = 5



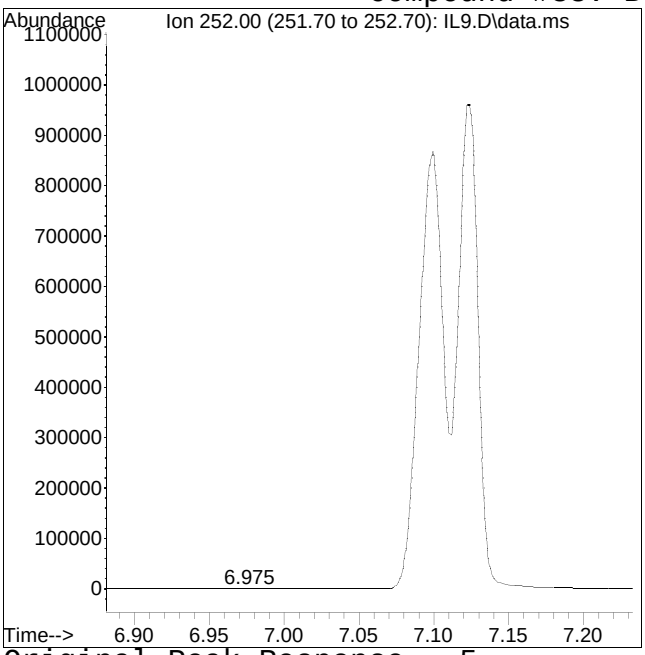
Manual Peak Response = 993327 M2

M2 = Peak not found by automatic integration algorithm.

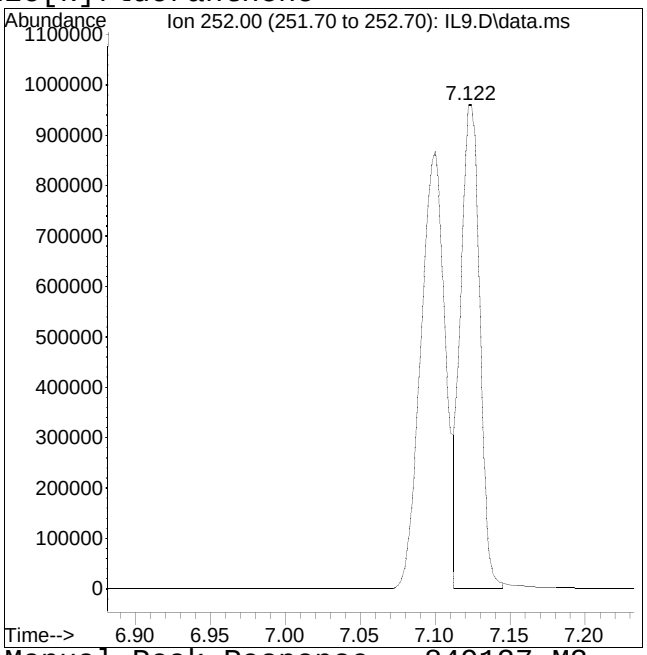
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #38: Benzo[k]fluoranthene



Original Peak Response = 5



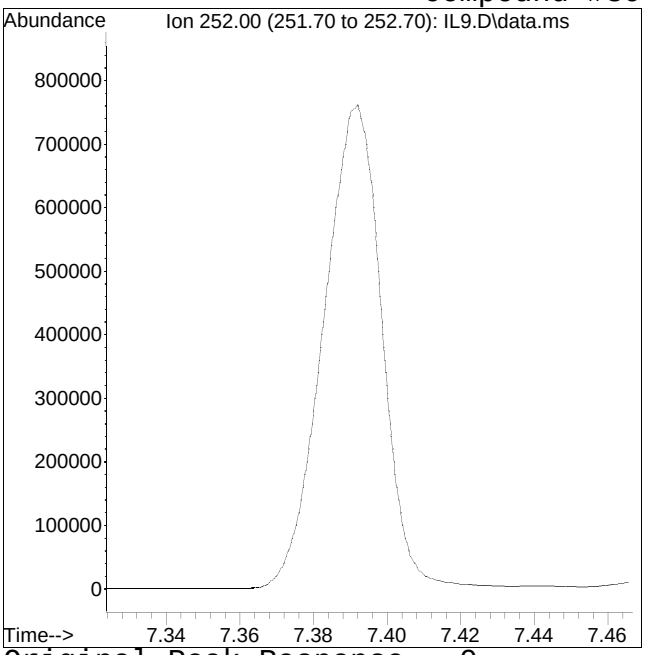
Manual Peak Response = 849127 M2

M2 = Peak not found by automatic integration algorithm.

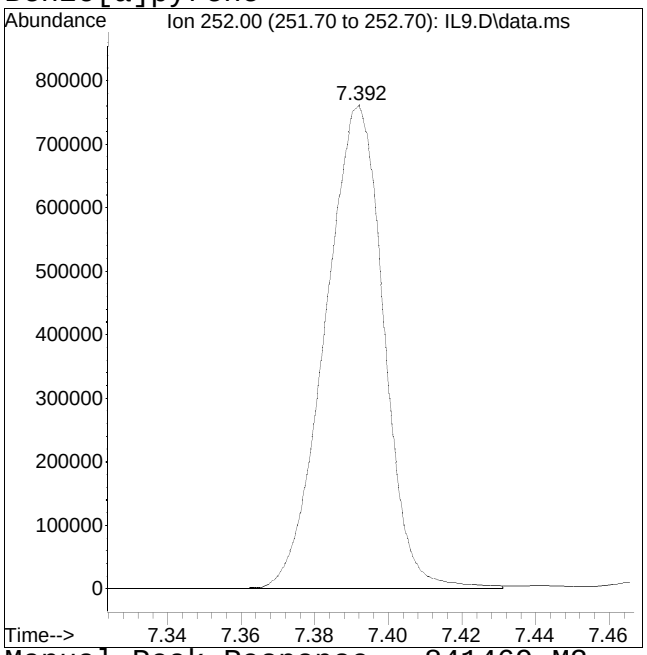
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #39: Benzo[a]pyrene



Original Peak Response = 0



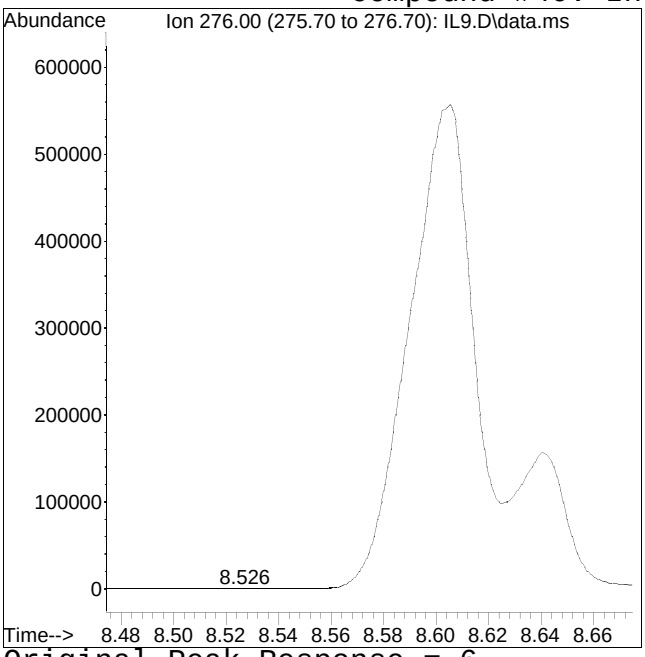
Manual Peak Response = 841469 M2

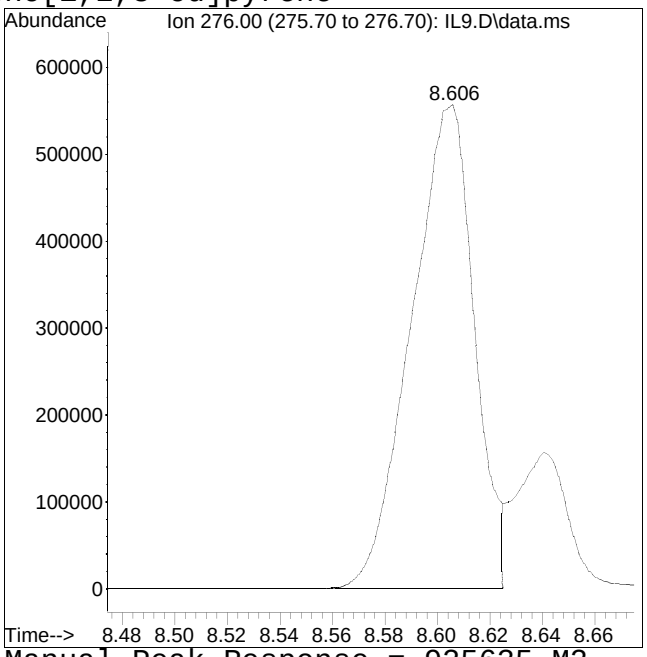
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #40: Indeno[1,2,3-cd]pyrene



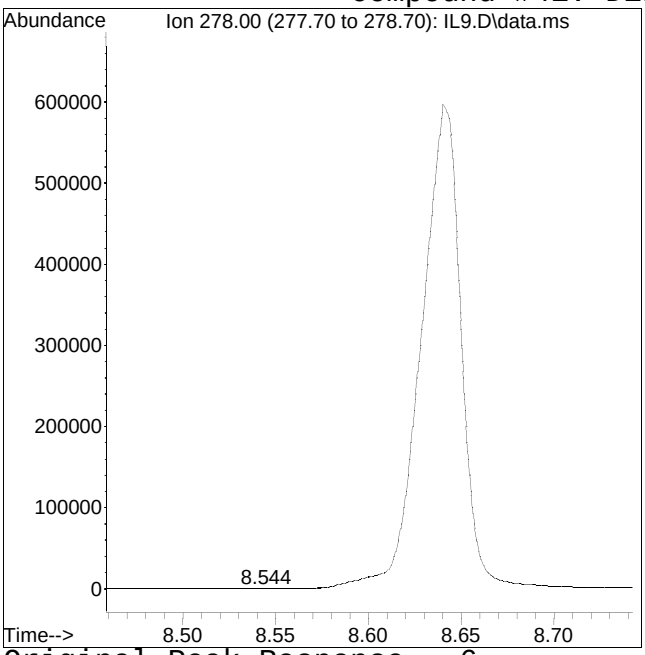


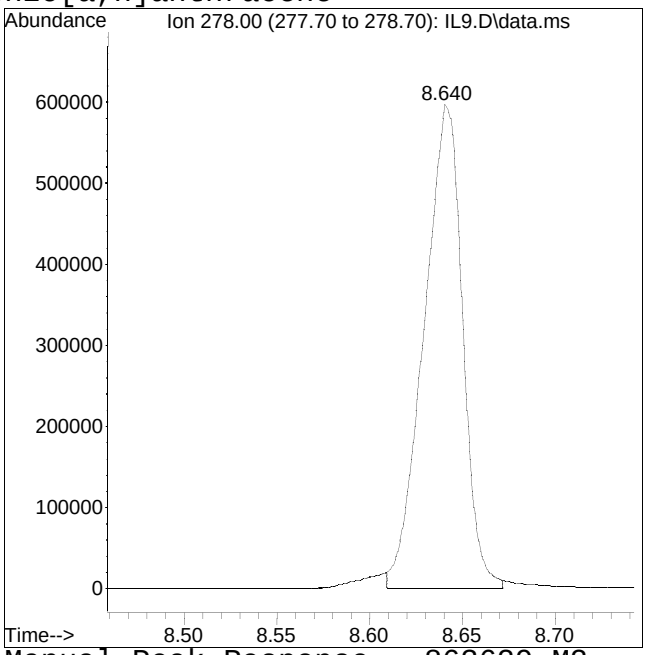
Original Peak Response = 6 Manual Peak Response = 925635 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #41: Dibenzo[a,h]anthracene



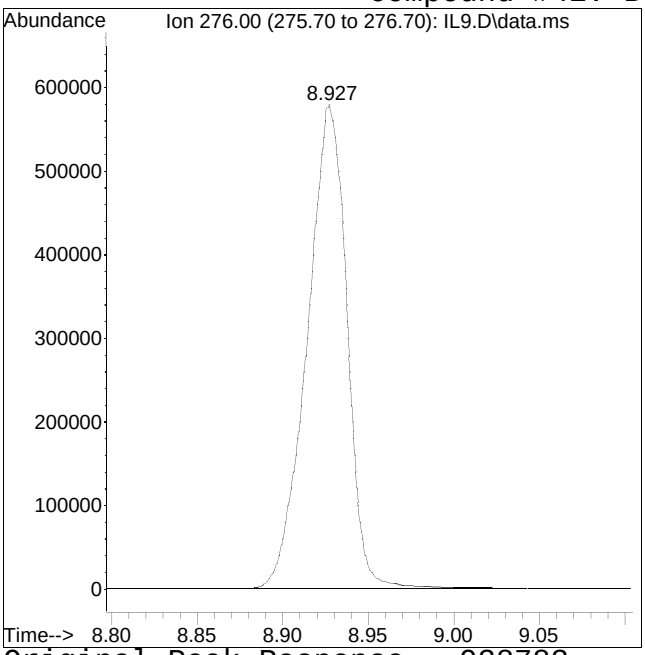


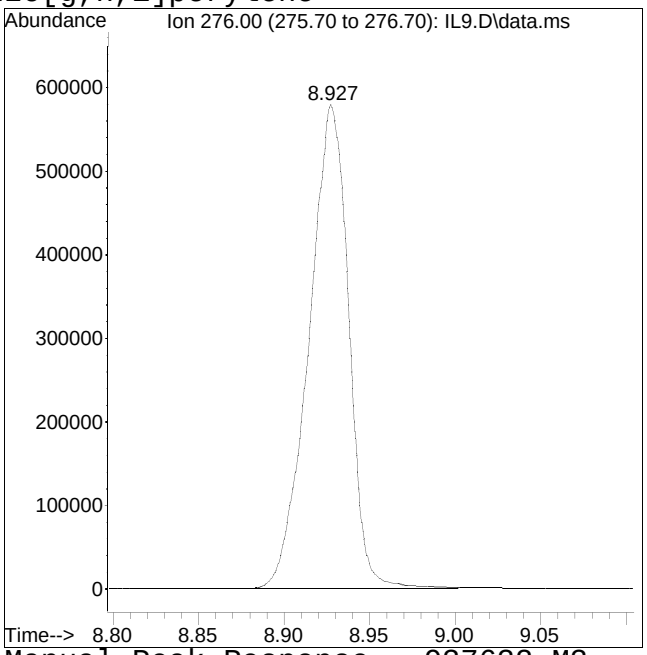
Original Peak Response = 6 Manual Peak Response = 863629 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL9.D Operator : sv119:ah
Date Inj'd : 3/6/2023 12:55 pm Instrument : SV119
Sample : IL9,32,,10 Lot#9992 Quant Date : 3/7/2023 1:30 pm

Compound #42: Benzo[g,h,i]perylene





Original Peak Response = 938783 Manual Peak Response = 937632 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL8.D
Acq On : 06 Mar 2023 01:29 pm
Operator : sv119:ah
Sample : IL8,32,,5 Lot#9993
Misc : WG1752279,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 07 13:38:51 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:30:17 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.139	152	58644	4000.000	ng/ml	-0.02
Standard Area 1 = 66115			Recovery = 88.70%			
8) Naphthalene-d8	2.805	136	219825	4000.000	ng/ml	-0.01
Standard Area 1 = 240629			Recovery = 91.35%			
17) Acenaphthene-d10	3.786	164	114445	4000.000	ng/ml	0.00
Standard Area 1 = 125461			Recovery = 91.22%			
22) Phenanthrene-d10	4.629	188	265465	4000.000	ng/ml	0.00
Standard Area 1 = 281681			Recovery = 94.24%			
31) Chrysene-d12	6.266	240	263623M4	4000.000	ng/ml	0.09
Standard Area 1 = 262172			Recovery = 100.55%			
36) Perylene-d12	7.419	264	315774	4000.000	ng/ml	0.09
Standard Area 1 = 305709			Recovery = 103.29%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.542	112	74112	5136.333	ng/ml	-0.02
Spiked Amount 5000.000	Range 15 - 110		Recovery = 102.73%			
3) Phenol-d6	1.950	99	87660	5142.024	ng/ml	-0.02
Spiked Amount 5000.000	Range 15 - 110		Recovery = 102.84%			
7) Nitrobenzene-d5	2.420	82	69010	5380.773	ng/ml	-0.02
Spiked Amount 2500.000	Range 30 - 130		Recovery = 215.23%#			
13) 2-Fluorobiphenyl	3.405	172	206921	4578.324	ng/ml	-0.01
Spiked Amount 2500.000	Range 30 - 130		Recovery = 183.13%#			
21) 2,4,6-Tribromophenol	4.232	330	26195	5680.846	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 113.62%#			
30) 4-Terphenyl-d14	5.592	244	275161	4967.518	ng/ml	0.04
Spiked Amount 2500.000	Range 30 - 130		Recovery = 198.70%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.002	93	74129	4677.478	ng/ml	90
5) n-nitrosodi-n-propylamine	2.340	70	49929	5464.976	ng/ml	92
6) Hexachloroethane	2.400	117	32252	4948.330	ng/ml	95
9) Naphthalene	2.817	128	248992	4783.200	ng/ml	100
10) Hexachlorobutadiene	2.892	225	47474	4691.970	ng/ml	100
11) 2-Methylnaphthalene	3.197	142	167406	4784.241	ng/ml	97
12) 1-Methylnaphthalene	3.255	142	156746	4644.963	ng/ml	98
14) 2-Chloronaphthalene	3.468	162	177746	4676.727	ng/ml	99
15) 2,6-Dinitrotoluene	3.665	165	38554	5779.327	ng/ml#	83
16) Acenaphthylene	3.702	152	281371	5130.606	ng/ml	99
18) Acenaphthene	3.804	153	175309	4831.558	ng/ml	97

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL8.D
Acq On : 06 Mar 2023 01:29 pm
Operator : sv119:ah
Sample : IL8,32,,5 Lot#9993
Misc : WG1752279,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 07 13:38:51 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:30:17 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
19) 2,4-Dinitrotoluene	3.894	165	51674	4995.706	ng/ml#	76
20) Fluorene	4.095	166	207089	4965.681	ng/ml	97
23) 4,6-Dinitro-o-cresol	4.125	198	23685	4920.144	ng/ml	96
24) Hexachlorobenzene	4.414	284	73814	4626.737	ng/ml	99
25) Pentachlorophenol	4.525	266	38273	4994.929	ng/ml	100
26) Phenanthrene	4.643	178	321059	4773.366	ng/ml	100
27) Anthracene	4.673	178	319845	5097.136	ng/ml	100
28) Fluoranthene	5.350	202	393302M3	5117.021	ng/ml	
29) Pyrene	5.488	202	412350M1	5180.241	ng/ml	
32) Benzo[a]anthracene	6.258	228	429650	4896.797	ng/ml	99
33) 3,3'-Dichlorobenzidine	6.249	252	186792	5541.554	ng/ml	100
34) Chrysene	6.281	228	410437	4887.780	ng/ml	99
35) Bis(2-ethylhexyl)phtha...	6.300	149	233680	5133.054	ng/ml	97
37) Benzo[b]fluoranthene	7.071	252	480739	5006.423	ng/ml	99
38) Benzo[k]fluoranthene	7.094	252	425230	4938.090	ng/ml	99
39) Benzo[a]pyrene	7.362	252	404102	5199.350	ng/ml	99
40) Indeno[1,2,3-cd]pyrene	8.575	276	441946M3	4958.019	ng/ml	
41) Dibenzo[a,h]anthracene	8.611	278	427063M6	5027.704	ng/ml	
42) Benzo[g,h,i]perylene	8.896	276	461770M2	4880.003	ng/ml	

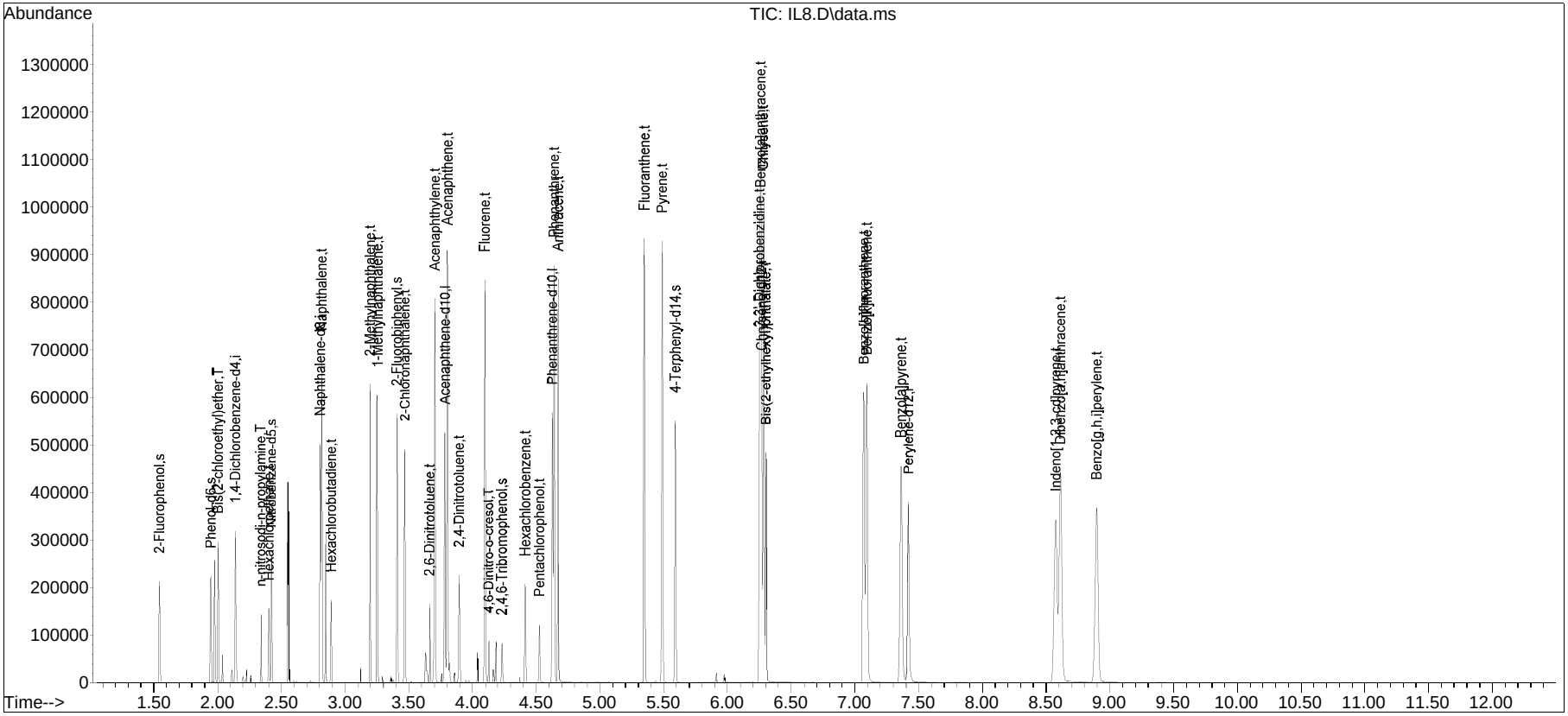
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL8.D
Acq On : 06 Mar 2023 01:29 pm
Operator : sv119:ah
Sample : IL8,32,,5 Lot#9993
Misc : WG1752279,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Mar 07 13:38:51 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:30:17 2023
Response via : Initial Calibration

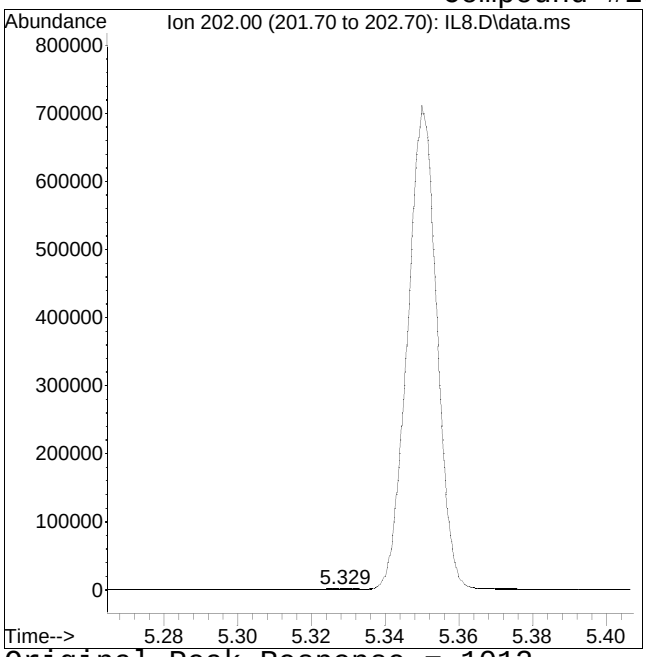
Sub List : Default - All compounds listedIical\IL7.D•

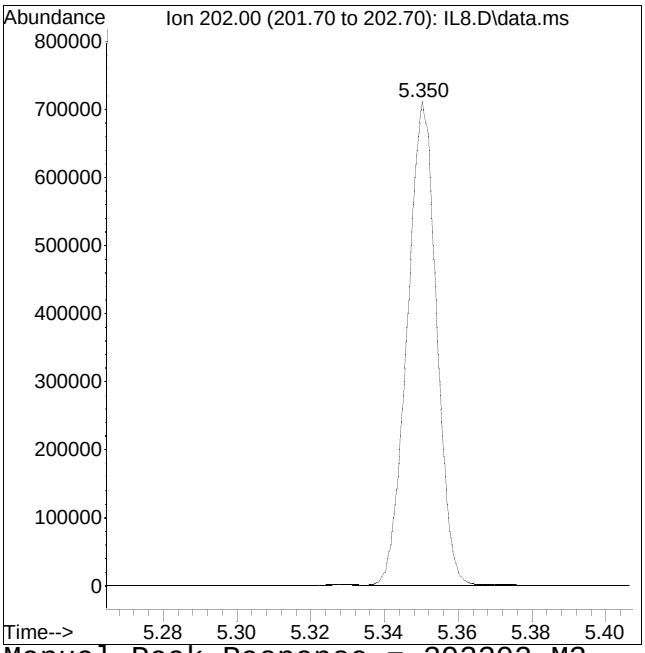


Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL8.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:29 pm Instrument : SV119
Sample : IL8,32,,5 Lot#9993 Quant Date : 3/7/2023 1:30 pm

Compound #28: Fluoranthene



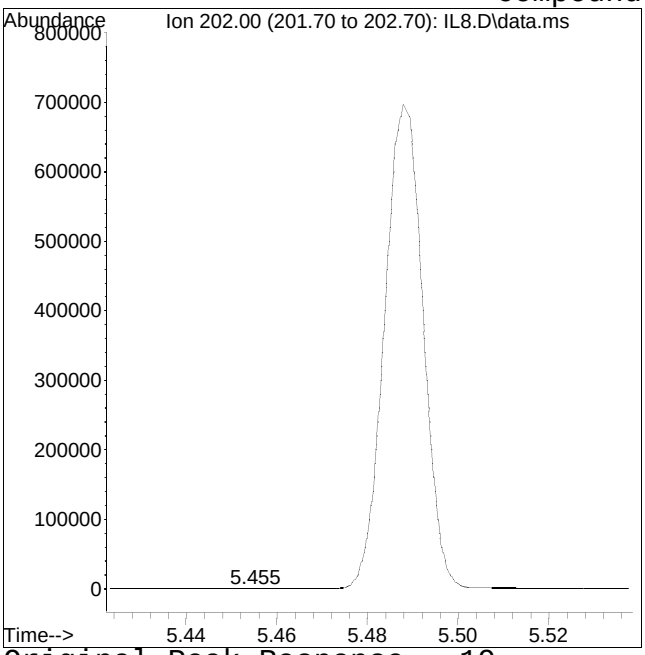


Original Peak Response = 1012 Manual Peak Response = 393302 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

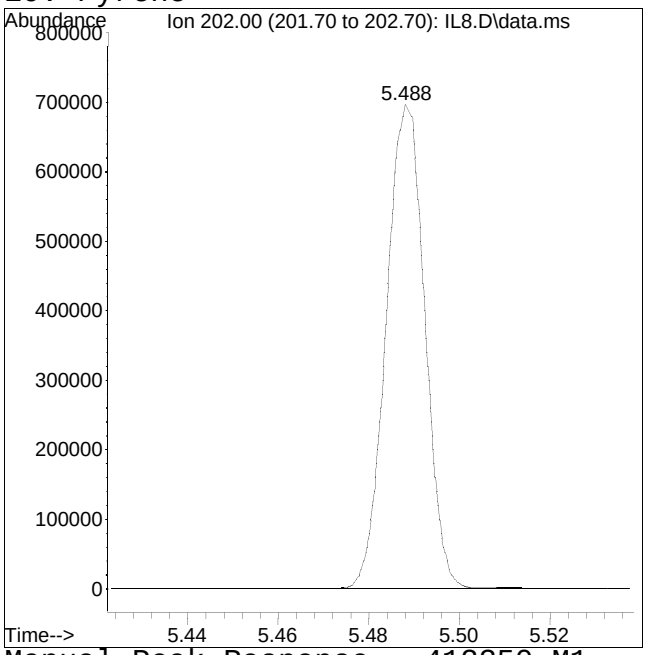
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL8.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:29 pm Instrument : SV119
Sample : IL8,32,,5 Lot#9993 Quant Date : 3/7/2023 1:30 pm

Compound #29: Pyrene



Original Peak Response = 19



Manual Peak Response = 412350 M1

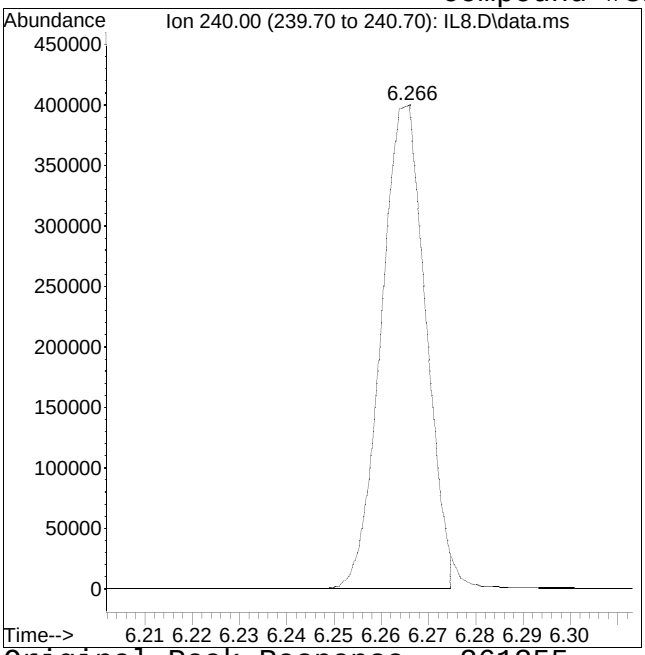
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

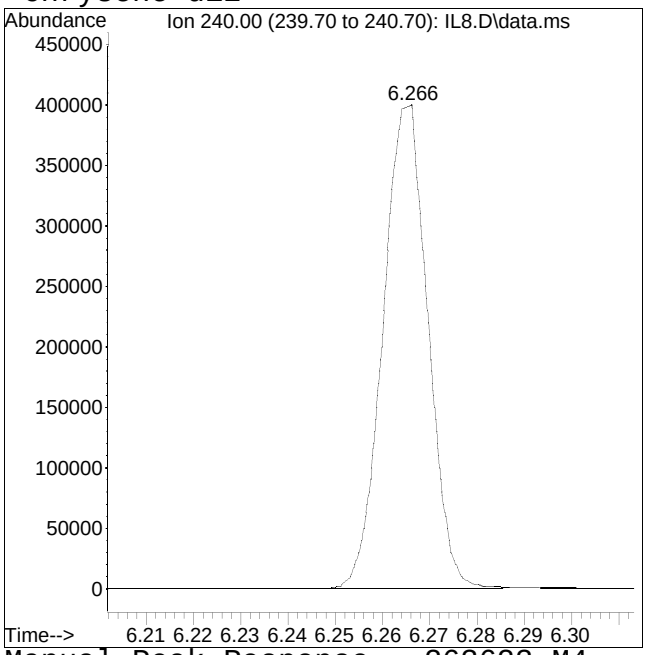
Data Path : I:\8270SIM\sv119\230306nLVQ
Data File : IL8.D
Date Inj'd : 3/6/2023 1:29 pm
Sample : IL8,32,,5 Lot#9993

Method : SIM-LVI_230306_sv119.M
Operator : sv119:ah
Instrument : SV119
Quant Date : 3/7/2023 1:30 pm

Compound #31: Chrysene-d12



Original Peak Response = 261355



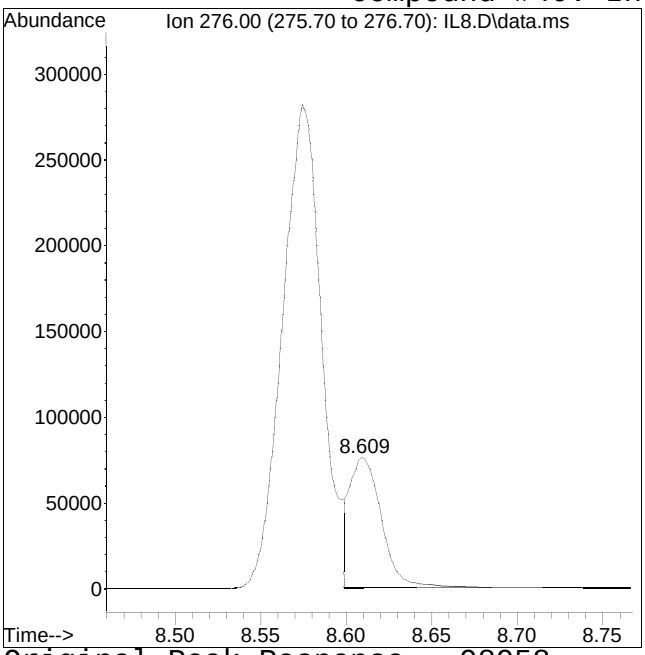
Manual Peak Response = 263623 M4

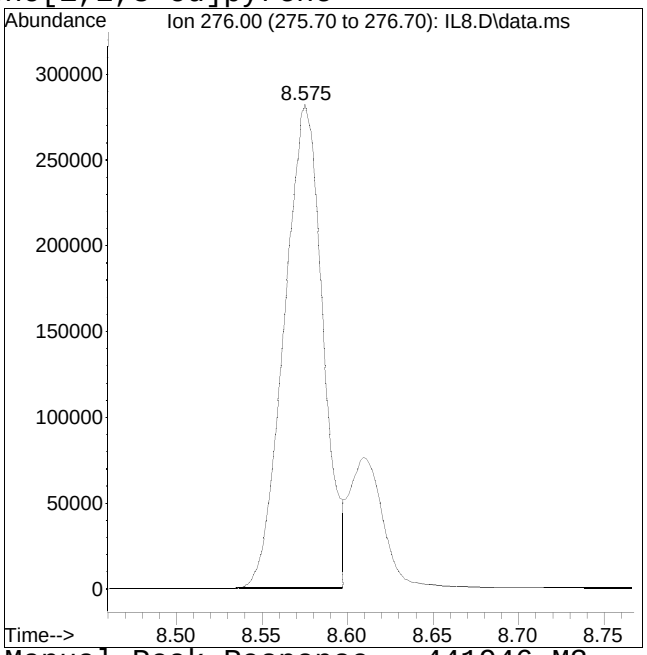
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL8.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:29 pm Instrument : SV119
Sample : IL8,32,,5 Lot#9993 Quant Date : 3/7/2023 1:30 pm

Compound #40: Indeno[1,2,3-cd]pyrene





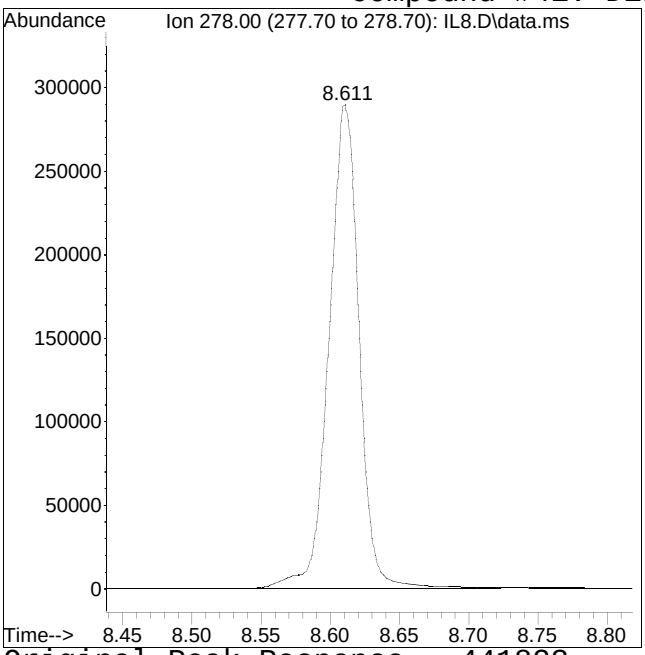
Original Peak Response = 98958 Manual Peak Response = 441946 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

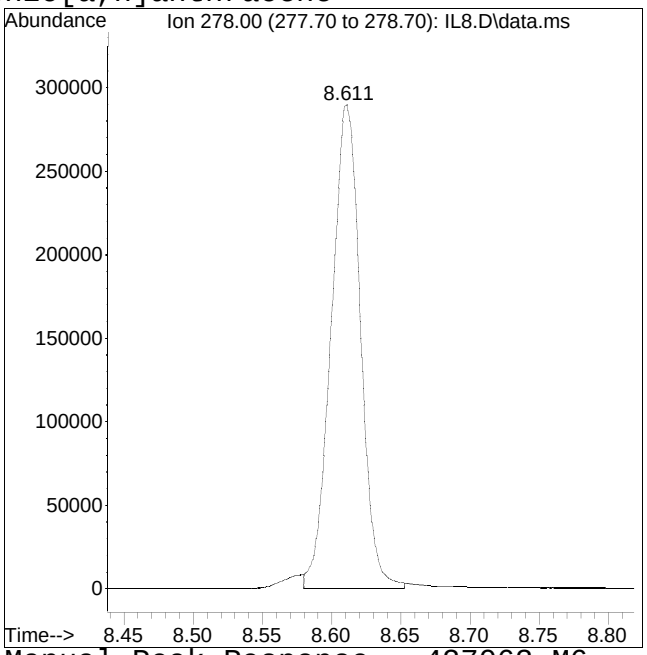
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL8.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:29 pm Instrument : SV119
Sample : IL8,32,,5 Lot#9993 Quant Date : 3/7/2023 1:30 pm

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 441823



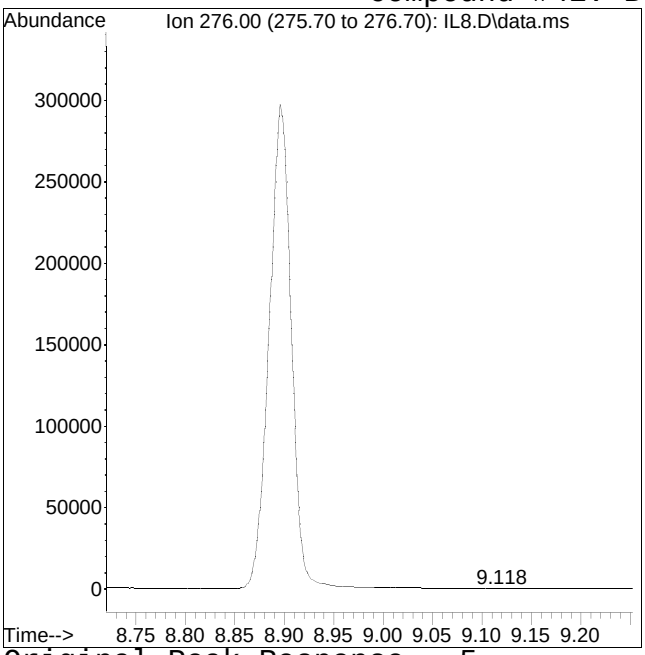
Manual Peak Response = 427063 M6

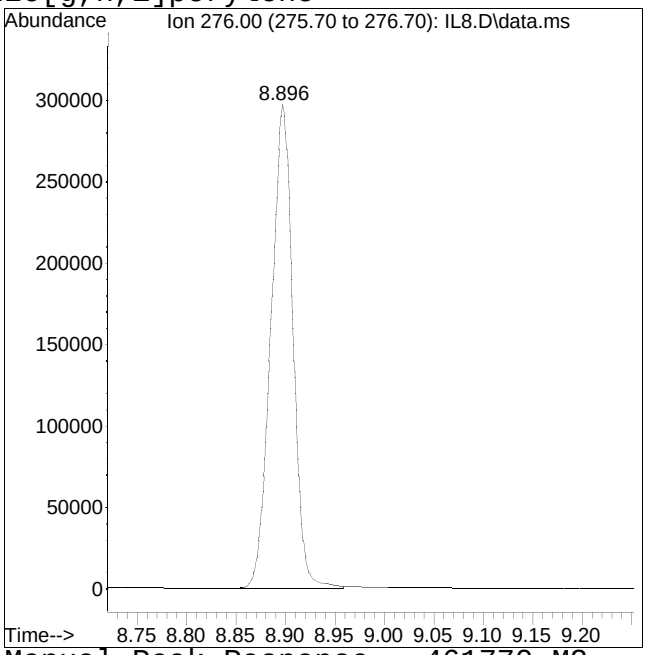
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL8.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:29 pm Instrument : SV119
Sample : IL8,32,,5 Lot#9993 Quant Date : 3/7/2023 1:30 pm

Compound #42: Benzo[g,h,i]perylene





Original Peak Response = 5 Manual Peak Response = 461770 M2
M2 = Peak not found by automatic integration algorithm.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL7.D
Acq On : 06 Mar 2023 01:46 pm
Operator : sv119:ah
Sample : IL7,32,,1 Lot#9994
Misc : WG1752279,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 07 13:37:40 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:30:08 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.159	152	66115M3	4000.000	ng/ml	0.02
Standard Area 1 = 66115			Recovery = 100.00%			
8) Naphthalene-d8	2.820	136	240629	4000.000	ng/ml	0.02
Standard Area 1 = 240629			Recovery = 100.00%			
17) Acenaphthene-d10	3.792	164	125461	4000.000	ng/ml	0.00
Standard Area 1 = 125461			Recovery = 100.00%			
22) Phenanthrene-d10	4.627	188	281681	4000.000	ng/ml	0.00
Standard Area 1 = 281681			Recovery = 100.00%			
31) Chrysene-d12	6.180	240	262172M4	4000.000	ng/ml	-0.10
Standard Area 1 = 262172			Recovery = 100.00%			
36) Perylene-d12	7.324	264	305709	4000.000	ng/ml	-0.12
Standard Area 1 = 305709			Recovery = 100.00%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.563	112	17118	1052.304	ng/ml	0.03
Spiked Amount 5000.000	Range 15 - 110		Recovery = 21.05%			
3) Phenol-d6	1.969	99	19697M3	1024.841	ng/ml	0.02
Spiked Amount 5000.000	Range 15 - 110		Recovery = 20.50%			
7) Nitrobenzene-d5	2.437	82	15665M3	1083.394	ng/ml	0.02
Spiked Amount 2500.000	Range 30 - 130		Recovery = 43.34%			
13) 2-Fluorobiphenyl	3.417	172	51627	1043.537	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 41.74%			
21) 2,4,6-Tribromophenol	4.234	330	5495	1087.052	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 21.74%			
30) 4-Terphenyl-d14	5.549	244	61314M3	1043.186	ng/ml	-0.06
Spiked Amount 2500.000	Range 30 - 130		Recovery = 41.73%			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.024	93	18088M3	1012.366	ng/ml	
5) n-nitrosodi-n-propylamine	2.358	70	10843	1052.709	ng/ml	93
6) Hexachloroethane	2.417	117	7585	1032.241	ng/ml	95
9) Naphthalene	2.831	128	58654	1029.342	ng/ml	100
10) Hexachlorobutadiene	2.905	225	11481	1036.593	ng/ml	100
11) 2-Methylnaphthalene	3.208	142	39856	1040.555	ng/ml	99
12) 1-Methylnaphthalene	3.263	142	38284	1036.412	ng/ml	99
14) 2-Chloronaphthalene	3.480	162	42791	1028.546	ng/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL7.D
Acq On : 06 Mar 2023 01:46 pm
Operator : sv119:ah
Sample : IL7,32,,1 Lot#9994
Misc : WG1752279,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 07 13:37:40 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:30:08 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2,6-Dinitrotoluene	3.672	165	7238	991.187	ng/ml	88
16) Acenaphthylene	3.709	152	64851	1080.277	ng/ml	99
18) Acenaphthene	3.809	153	41330	1039.050	ng/ml	98
19) 2,4-Dinitrotoluene	3.897	165	9337	1038.802	ng/ml#	77
20) Fluorene	4.100	166	48555	1062.047	ng/ml	98
23) 4,6-Dinitro-o-cresol	4.127	198	4262	897.096	ng/ml	98
24) Hexachlorobenzene	4.415	284	17818	1052.555	ng/ml	98
25) Pentachlorophenol	4.524	266	6408	1053.584	ng/ml	99
26) Phenanthrene	4.640	178	73939	1036.008	ng/ml	100
27) Anthracene	4.668	178	71315	1071.068	ng/ml	100
28) Fluoranthene	5.320	202	85681	1050.571	ng/ml	98
29) Pyrene	5.451	202	89366M3	1058.049	ng/ml	
32) Benzo[a]anthracene	6.173	228	86346	989.547	ng/ml	100
33) 3,3'-Dichlorobenzidine	6.163	252	32975	983.683	ng/ml	100
34) Chrysene	6.195	228	87135	1043.409	ng/ml	100
35) Bis(2-ethylhexyl)phtha...	6.208	149	35735	925.704	ng/ml	98
37) Benzo[b]fluoranthene	6.975	252	97449	1048.247	ng/ml	100
38) Benzo[k]fluoranthene	6.999	252	89797	1077.122	ng/ml	100
39) Benzo[a]pyrene	7.269	252	80115	1064.731	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.486	276	88083	1020.703	ng/ml	98
41) Dibenzo[a,h]anthracene	8.519	278	88815M6	1080.021	ng/ml	
42) Benzo[g,h,i]perylene	8.811	276	96386M3	1052.147	ng/ml	

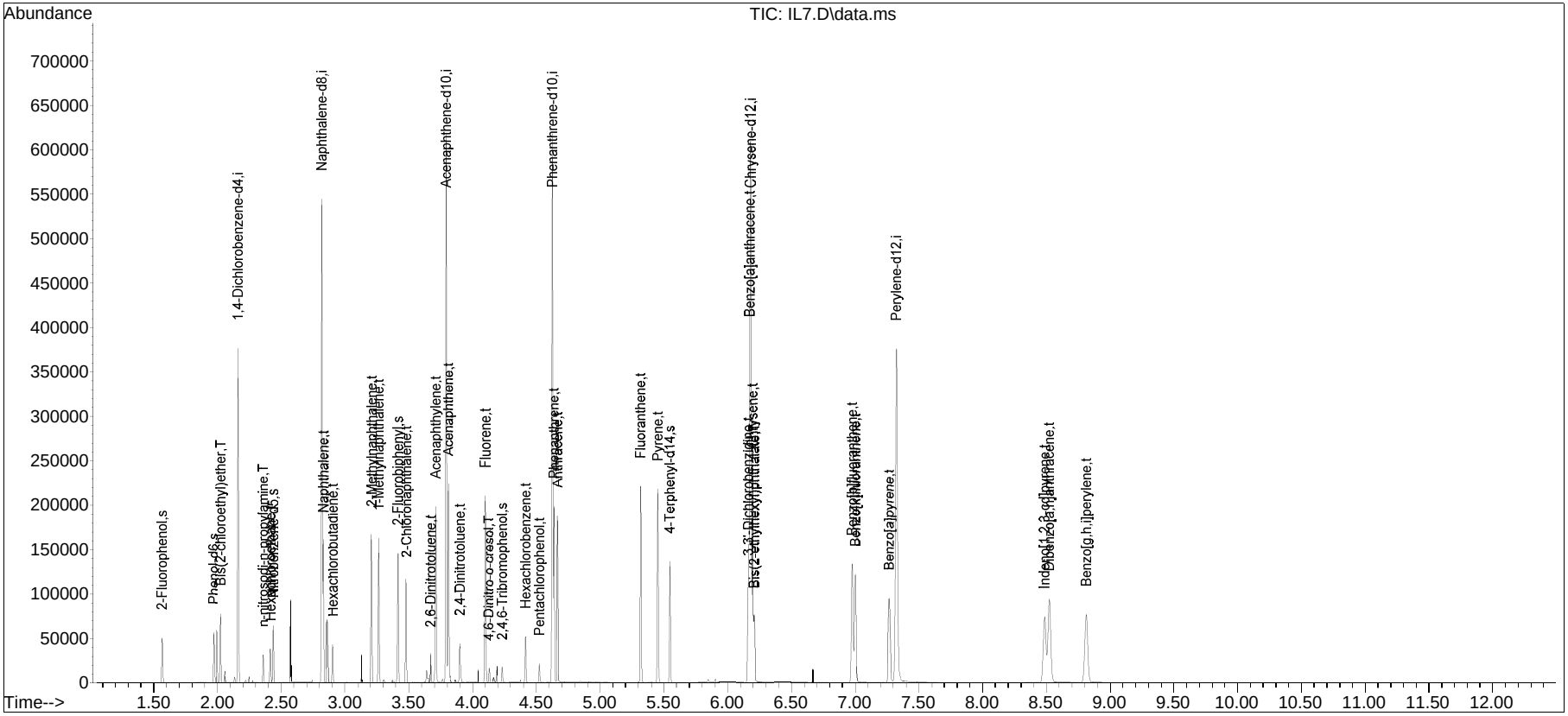
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL7.D
Acq On : 06 Mar 2023 01:46 pm
Operator : sv119:ah
Sample : IL7,32,,1 Lot#9994
Misc : WG1752279,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Mar 07 13:37:40 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:30:08 2023
Response via : Initial Calibration

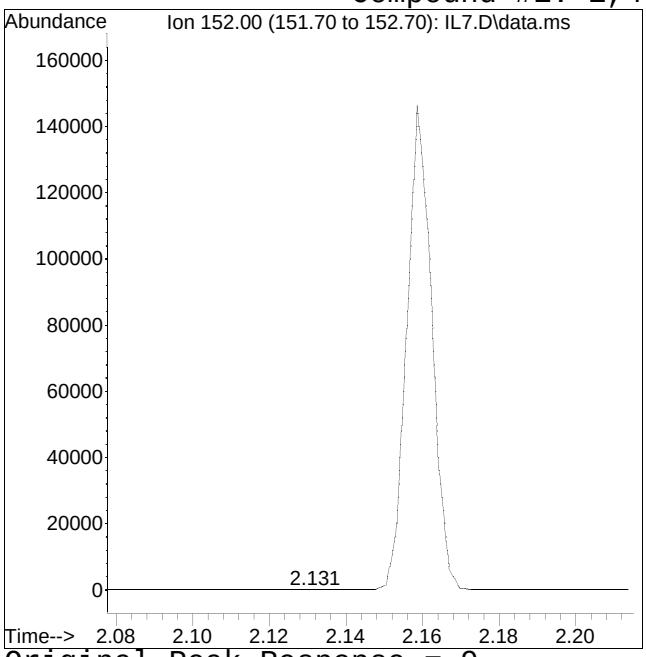
Sub List : Default - All compounds listedIical\IL7.D•

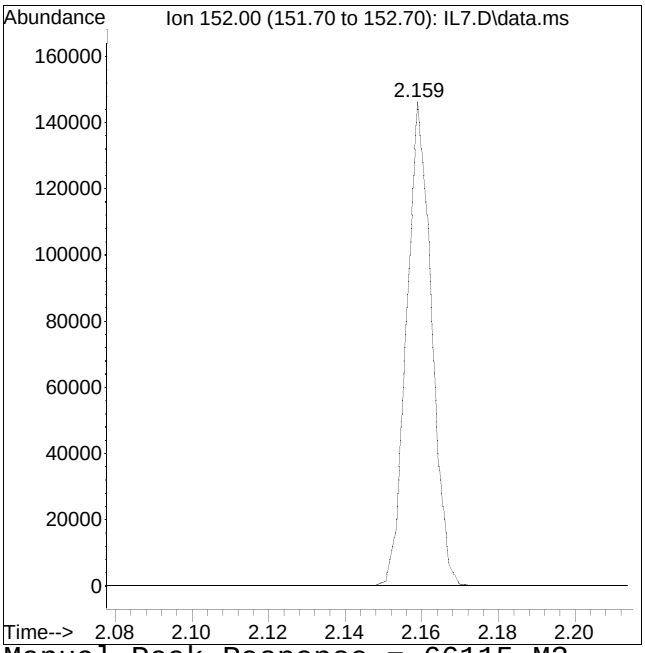


Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL7.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:46 pm Instrument : SV119
Sample : IL7,32,,1 Lot#9994 Quant Date : 3/7/2023 1:30 pm

Compound #1: 1,4-Dichlorobenzene-d4



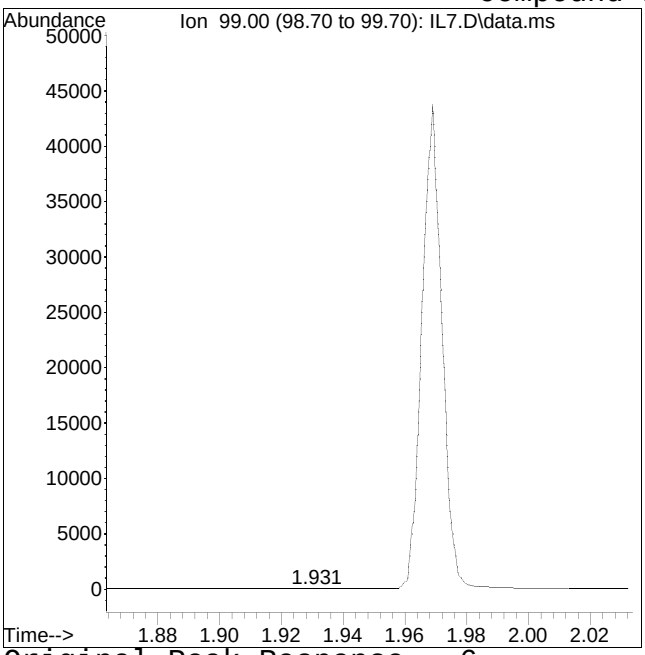


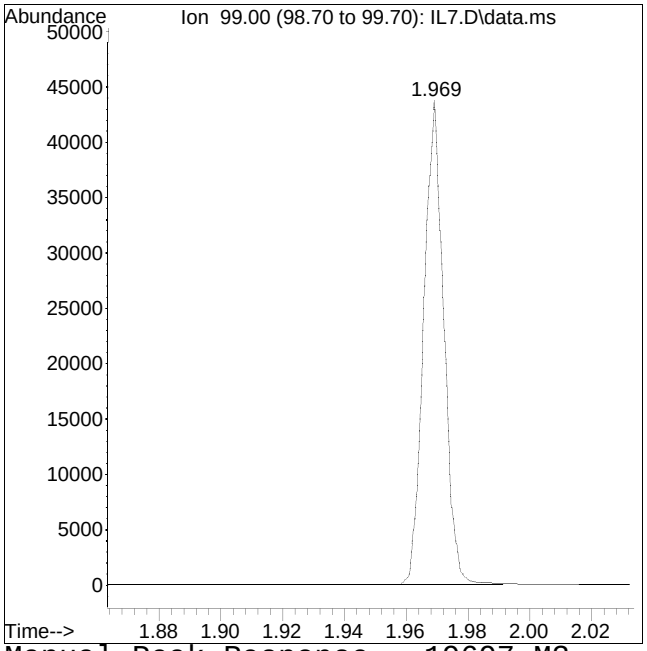
Original Peak Response = 9 Manual Peak Response = 66115 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL7.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:46 pm Instrument : SV119
Sample : IL7,32,,1 Lot#9994 Quant Date : 3/7/2023 1:30 pm

Compound #3: Phenol-d6



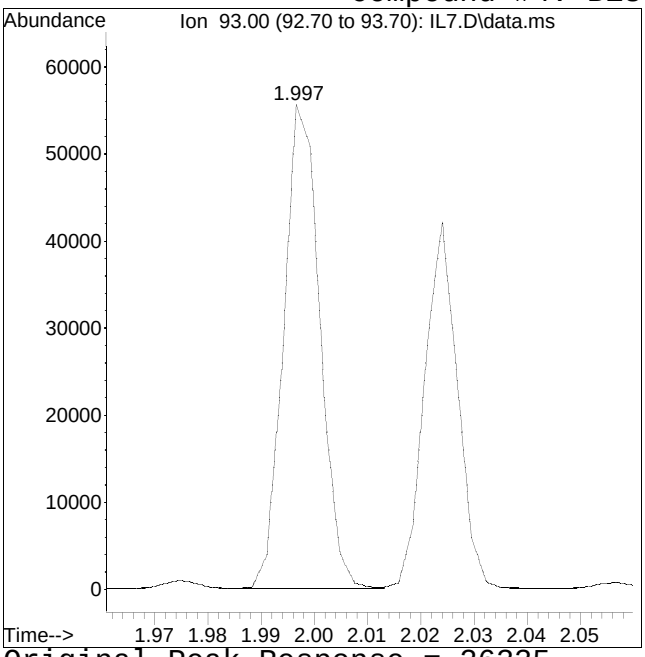


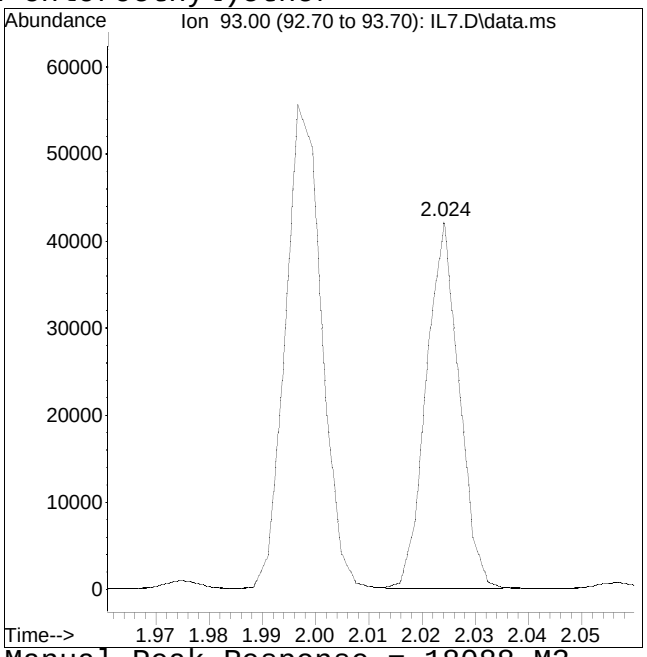
Original Peak Response = 6 Manual Peak Response = 19697 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL7.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:46 pm Instrument : SV119
Sample : IL7,32,,1 Lot#9994 Quant Date : 3/7/2023 1:30 pm

Compound #4: Bis(2-chloroethyl)ether



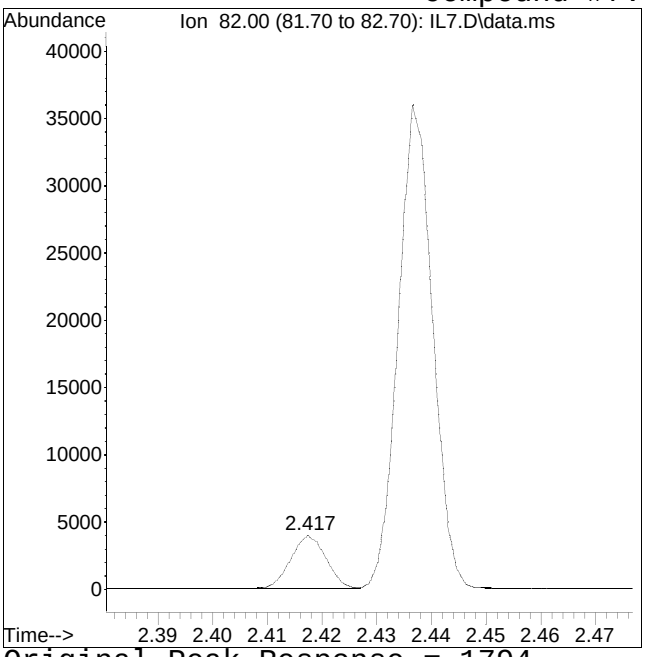


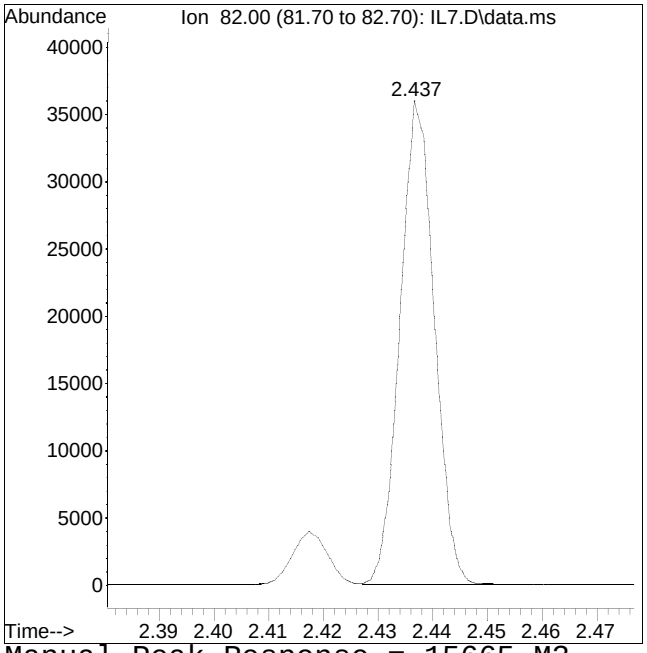
Original Peak Response = 26335 Manual Peak Response = 18088 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL7.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:46 pm Instrument : SV119
Sample : IL7,32,,1 Lot#9994 Quant Date : 3/7/2023 1:30 pm

Compound #7: Nitrobenzene-d5



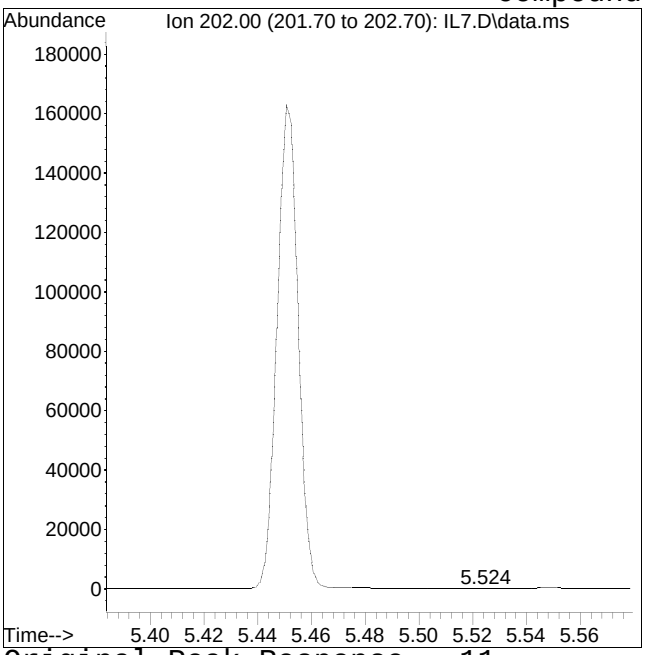


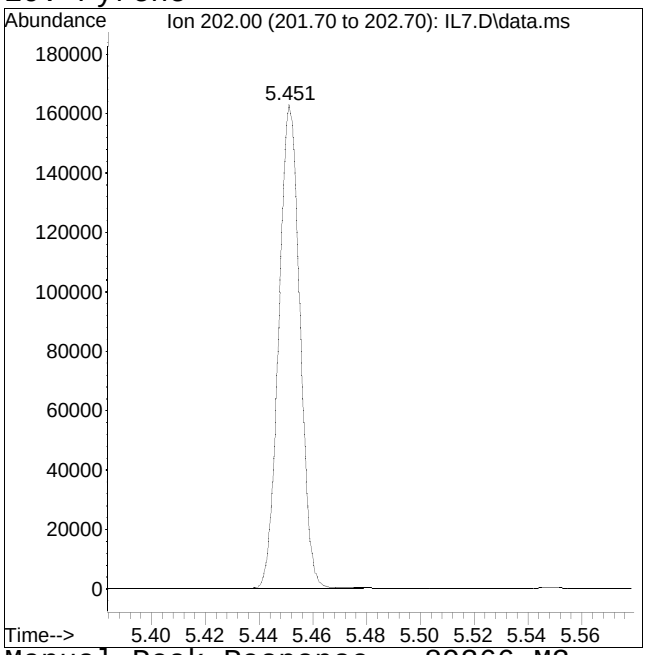
Original Peak Response = 1794 Manual Peak Response = 15665 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL7.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:46 pm Instrument : SV119
Sample : IL7,32,,1 Lot#9994 Quant Date : 3/7/2023 1:30 pm

Compound #29: Pyrene





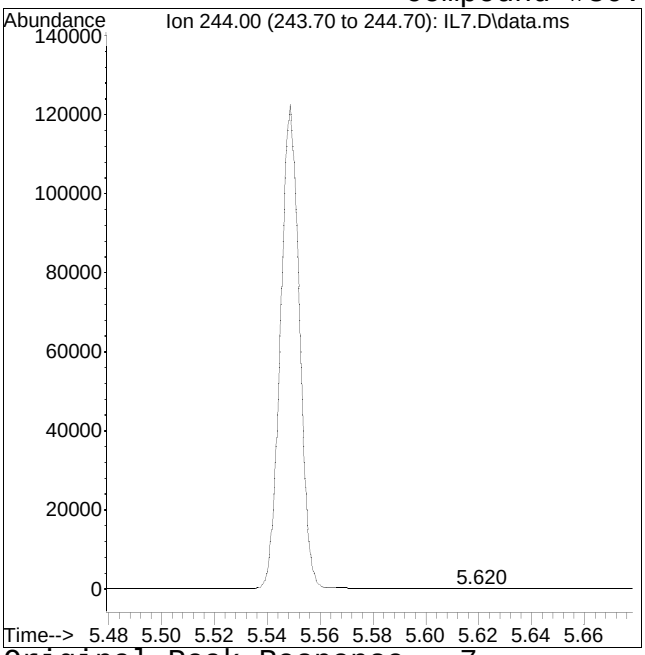
Original Peak Response = 11 Manual Peak Response = 89366 M3

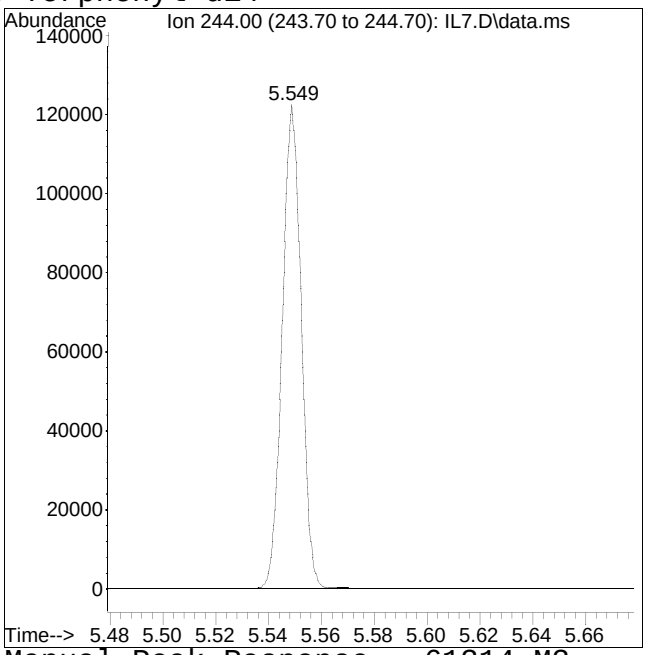
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL7.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:46 pm Instrument : SV119
Sample : IL7,32,,1 Lot#9994 Quant Date : 3/7/2023 1:30 pm

Compound #30: 4-Terphenyl-d14



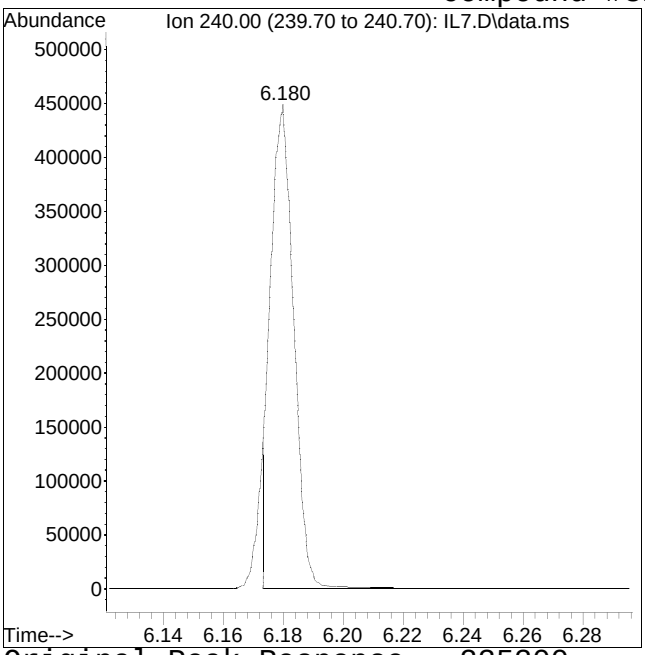


Original Peak Response = 7 Manual Peak Response = 61314 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

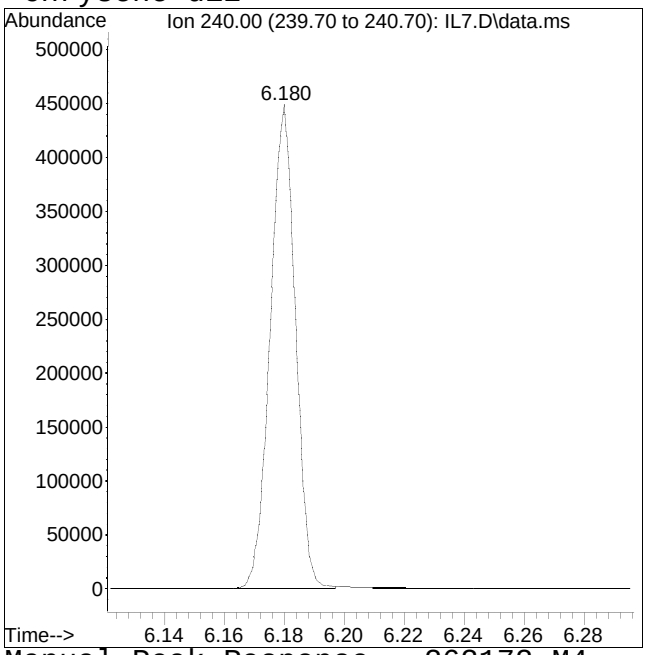
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL7.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:46 pm Instrument : SV119
Sample : IL7,32,,1 Lot#9994 Quant Date : 3/7/2023 1:30 pm

Compound #31: Chrysene-d12



Original Peak Response = 235300



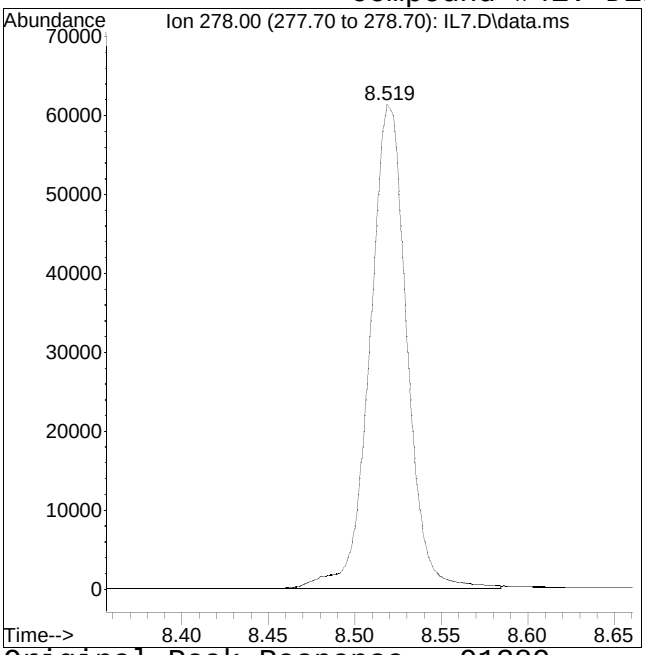
Manual Peak Response = 262172 M4

M4 = Poor automated baseline construction.

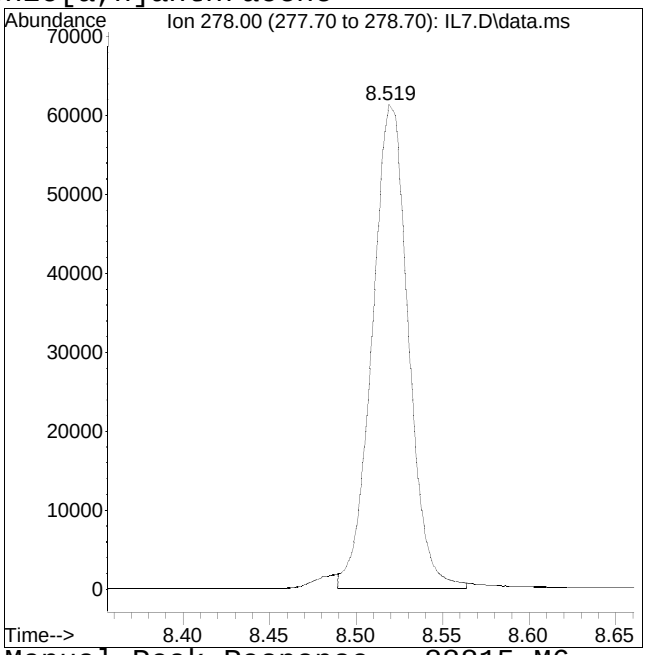
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL7.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:46 pm Instrument : SV119
Sample : IL7,32,,1 Lot#9994 Quant Date : 3/7/2023 1:30 pm

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 91389



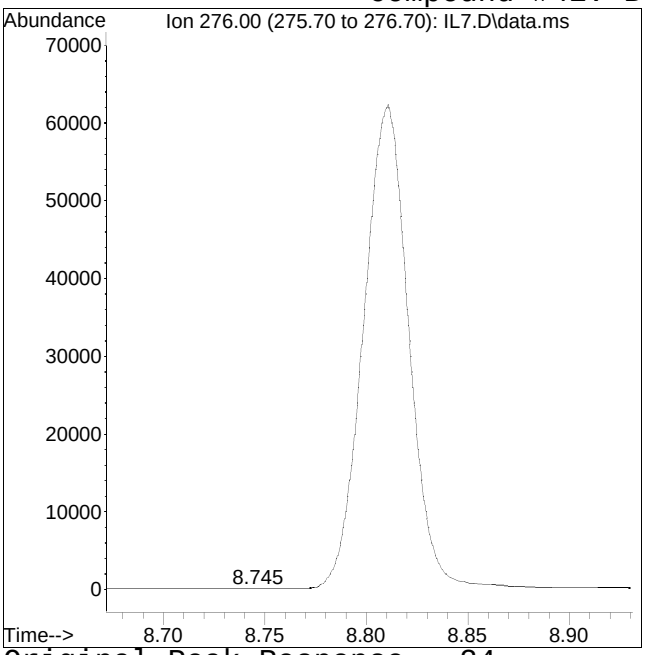
Manual Peak Response = 88815 M6

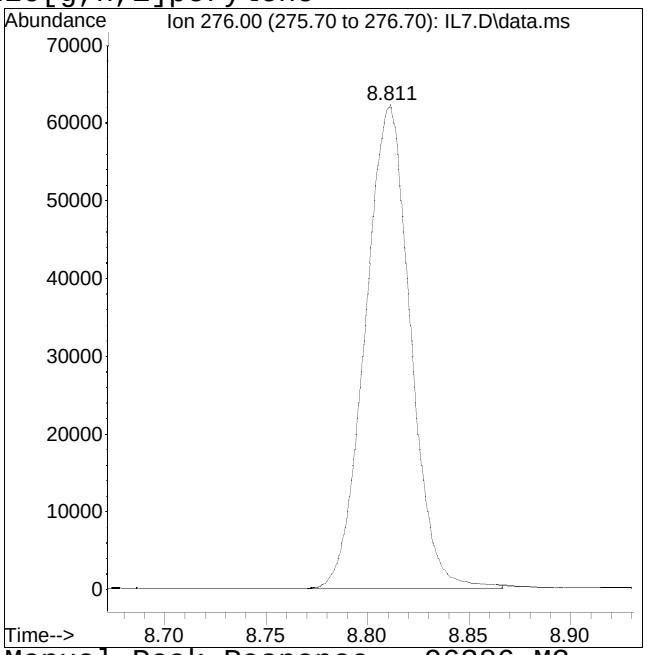
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL7.D Operator : sv119:ah
Date Inj'd : 3/6/2023 1:46 pm Instrument : SV119
Sample : IL7,32,,1 Lot#9994 Quant Date : 3/7/2023 1:30 pm

Compound #42: Benzo[g,h,i]perylene





Original Peak Response = 24 Manual Peak Response = 96386 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL6.D
Acq On : 06 Mar 2023 02:03 pm
Operator : sv119:ah
Sample : IL6,32,,0.25 Lot#9995
Misc : WG1752279,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 07 13:35:56 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:59 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.164	152	66876	4000.000	ng/ml	0.00
Standard Area 1 = 66115			Recovery = 101.15%			
8) Naphthalene-d8	2.823	136	236266	4000.000	ng/ml	0.00
Standard Area 1 = 240629			Recovery = 98.19%			
17) Acenaphthene-d10	3.794	164	121988	4000.000	ng/ml	0.00
Standard Area 1 = 125461			Recovery = 97.23%			
22) Phenanthrene-d10	4.629	188	269844	4000.000	ng/ml	0.00
Standard Area 1 = 281681			Recovery = 95.80%			
31) Chrysene-d12	6.170	240	251783	4000.000	ng/ml	-0.01
Standard Area 1 = 262172			Recovery = 96.04%			
36) Perylene-d12	7.319	264	295985	4000.000	ng/ml	0.00
Standard Area 1 = 305709			Recovery = 96.82%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.567	112	4231	257.135	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 5.14%#			
3) Phenol-d6	1.975	99	4935	253.848	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 5.08%#			
7) Nitrobenzene-d5	2.441	82	3773	257.972	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 10.32%#			
13) 2-Fluorobiphenyl	3.419	172	12987	267.354	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 10.69%#			
21) 2,4,6-Tribromophenol	4.237	330	1165	237.028	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 4.74%#			
30) 4-Terphenyl-d14	5.548	244	14363	255.089	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 10.20%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.030	93	4650	257.294	ng/ml	89
5) n-nitrosodi-n-propylamine	2.363	70	2565	246.193	ng/ml	95
6) Hexachloroethane	2.422	117	1879	252.803	ng/ml	96
9) Naphthalene	2.833	128	14602	260.988	ng/ml	100
10) Hexachlorobutadiene	2.908	225	2836	260.784	ng/ml	99
11) 2-Methylnaphthalene	3.214	142	9850	261.911	ng/ml	100
12) 1-Methylnaphthalene	3.266	142	9584	264.246	ng/ml	100
14) 2-Chloronaphthalene	3.482	162	10672	261.255	ng/ml	98
15) 2,6-Dinitrotoluene	3.675	165	1560	217.575	ng/ml	90
16) Acenaphthylene	3.712	152	15079	255.822	ng/ml	100
18) Acenaphthene	3.812	153	10075	260.500	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL6.D
Acq On : 06 Mar 2023 02:03 pm
Operator : sv119:ah
Sample : IL6,32,,0.25 Lot#9995
Misc : WG1752279,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 07 13:35:56 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:59 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
19) 2,4-Dinitrotoluene	3.902	165	1819	223.547	ng/ml#	77
20) Fluorene	4.102	166	11500	258.702	ng/ml	99
23) 4,6-Dinitro-o-cresol	4.130	198	858	229.544	ng/ml	96
24) Hexachlorobenzene	4.418	284	4282	264.045	ng/ml	98
25) Pentachlorophenol	4.527	266	971	187.274	ng/ml	97
26) Phenanthrene	4.641	178	17914	262.015	ng/ml	99
27) Anthracene	4.671	178	16666	261.284	ng/ml	99
28) Fluoranthene	5.320	202	19786	253.247	ng/ml	99
29) Pyrene	5.451	202	20548	253.950	ng/ml	99
32) Benzo[a]anthracene	6.163	228	19820	236.515	ng/ml	99
33) 3,3'-Dichlorobenzidine	6.152	252	7169	222.684	ng/ml	99
34) Chrysene	6.187	228	20799	259.337	ng/ml	100
35) Bis(2-ethylhexyl)phtha...	6.197	149	7519	220.974	ng/ml	98
37) Benzo[b]fluoranthene	6.965	252	22687	252.059	ng/ml	98
38) Benzo[k]fluoranthene	6.990	252	21456	265.822	ng/ml	97
39) Benzo[a]pyrene	7.259	252	18391	252.447	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.478	276	21272	254.597	ng/ml	97
41) Dibenzo[a,h]anthracene	8.512	278	20789	261.107	ng/ml	98
42) Benzo[g,h,i]perylene	8.801	276	23127M2	260.748	ng/ml	

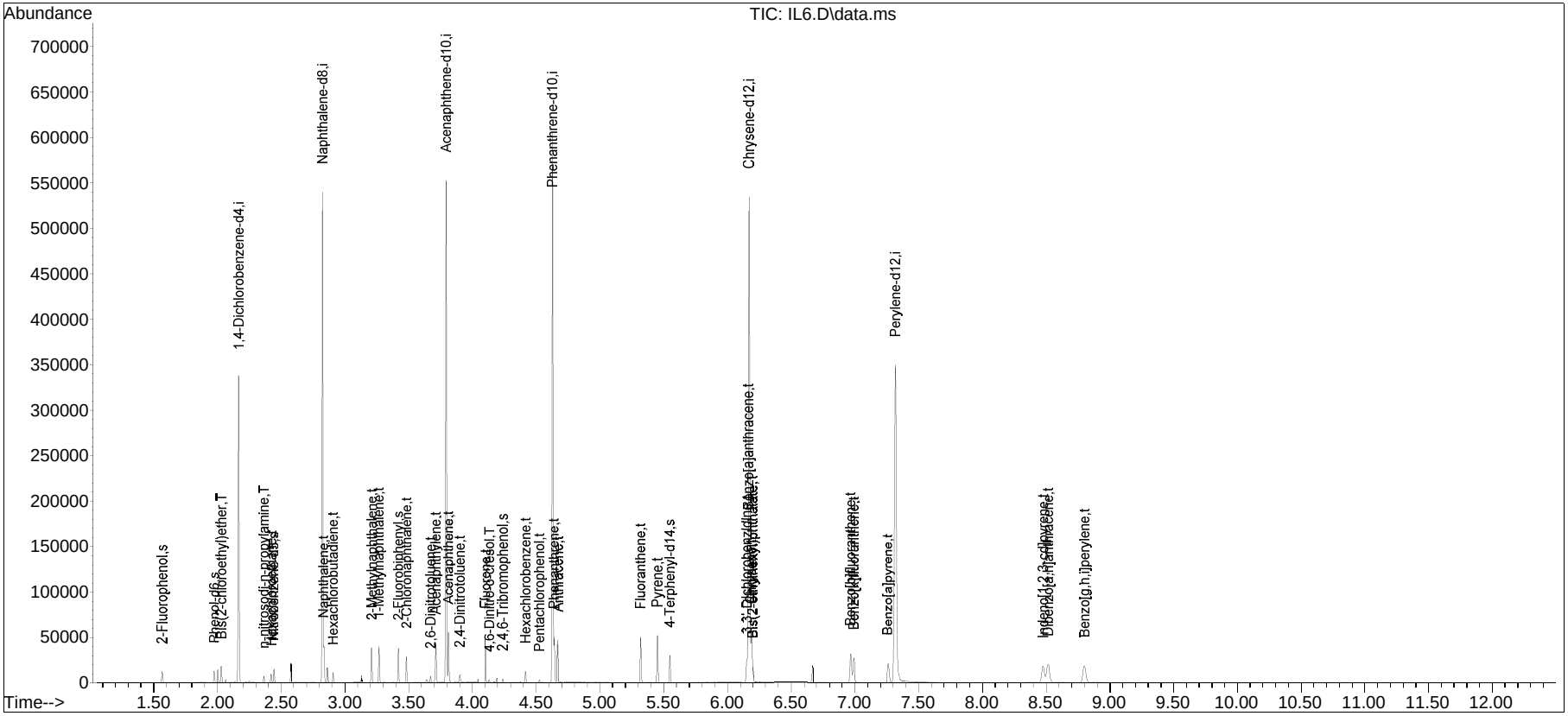
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL6.D
Acq On : 06 Mar 2023 02:03 pm
Operator : sv119:ah
Sample : IL6,32,,0.25 Lot#9995
Misc : WG1752279,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Mar 07 13:35:56 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:59 2023
Response via : Initial Calibration

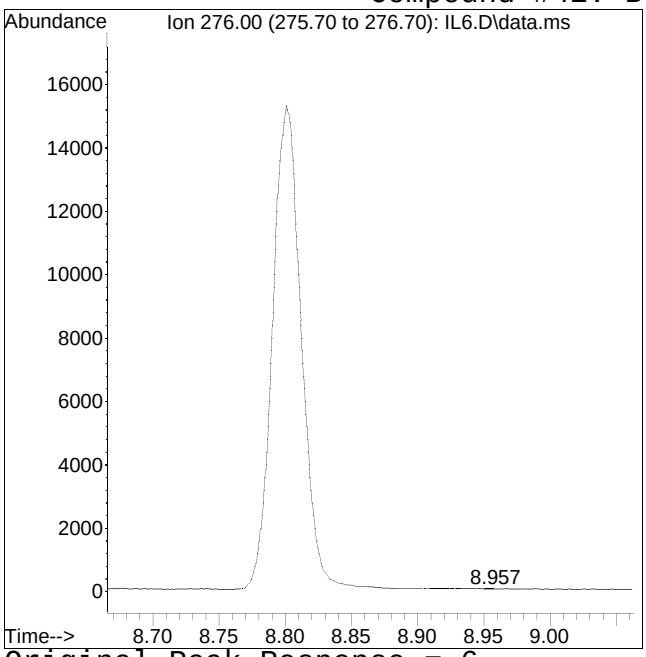
Sub List : Default - All compounds listedIical\IL7.D•



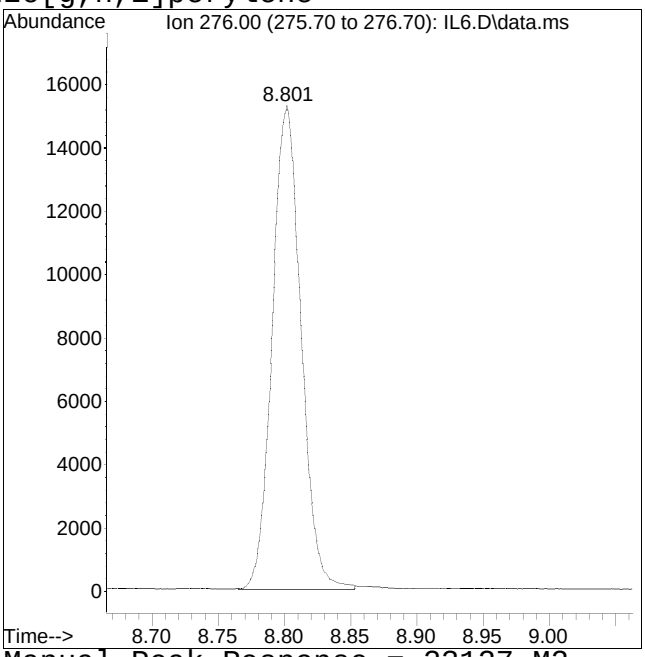
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL6.D Operator : sv119:ah
Date Inj'd : 3/6/2023 2:03 pm Instrument : SV119
Sample : IL6,32,,0.25 Lot#9995 Quant Date : 3/7/2023 1:30 pm

Compound #42: Benzo[g,h,i]perylene



Original Peak Response = 6



Manual Peak Response = 23127 M2

M2 = Peak not found by automatic integration algorithm.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL5.D
Acq On : 06 Mar 2023 02:19 pm
Operator : sv119:ah
Sample : IL5,32,,0.1 Lot# 9996
Misc : WG1752279,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 07 13:35:03 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:48 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.164	152	68666	4000.000	ng/ml	0.00
Standard Area 1 = 66115			Recovery = 103.86%			
8) Naphthalene-d8	2.825	136	241704	4000.000	ng/ml	0.00
Standard Area 1 = 240629			Recovery = 100.45%			
17) Acenaphthene-d10	3.796	164	128871	4000.000	ng/ml	0.00
Standard Area 1 = 125461			Recovery = 102.72%			
22) Phenanthrene-d10	4.631	188	298359	4000.000	ng/ml	0.00
Standard Area 1 = 281681			Recovery = 105.92%			
31) Chrysene-d12	6.167	240	287747	4000.000	ng/ml	-0.01
Standard Area 1 = 262172			Recovery = 109.76%			
36) Perylene-d12	7.314	264	298203	4000.000	ng/ml	0.00
Standard Area 1 = 305709			Recovery = 97.54%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.570	112	1711	101.274	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 2.03%#			
3) Phenol-d6	1.977	99	1973	98.842	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 1.98%#			
7) Nitrobenzene-d5	2.445	82	1490	99.220	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 3.97%#			
13) 2-Fluorobiphenyl	3.419	172	5441	109.490	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 4.38%#			
21) 2,4,6-Tribromophenol	4.238	330	490	94.370	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 1.89%#			
30) 4-Terphenyl-d14	5.546	244	6869	110.335	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 4.41%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.032	93	1901	102.444	ng/ml	88
5) n-nitrosodi-n-propylamine	2.366	70	1023	95.630	ng/ml	93
6) Hexachloroethane	2.424	117	752	98.538	ng/ml	94
9) Naphthalene	2.836	128	5951	103.972	ng/ml	100
10) Hexachlorobutadiene	2.910	225	1171	105.257	ng/ml	100
11) 2-Methylnaphthalene	3.214	142	4147	107.788	ng/ml	98
12) 1-Methylnaphthalene	3.269	142	3984	107.374	ng/ml	99
14) 2-Chloronaphthalene	3.482	162	4438	106.200	ng/ml	99
15) 2,6-Dinitrotoluene	3.676	165	653	89.025	ng/ml#	87
16) Acenaphthylene	3.713	152	6272	104.013	ng/ml	99
18) Acenaphthene	3.813	153	4244	103.872	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL5.D
Acq On : 06 Mar 2023 02:19 pm
Operator : sv119:ah
Sample : IL5,32,,0.1 Lot# 9996
Misc : WG1752279,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 07 13:35:03 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:48 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
19) 2,4-Dinitrotoluene	3.903	165	743	90.151	ng/ml#	75
20) Fluorene	4.103	166	4937	105.130	ng/ml	98
23) 4,6-Dinitro-o-cresol	4.131	198	354	117.679	ng/ml	97
24) Hexachlorobenzene	4.418	284	1881	104.904	ng/ml	97
25) Pentachlorophenol	4.528	266	629	114.248	ng/ml	94
26) Phenanthrene	4.642	178	7990	105.695	ng/ml	96
27) Anthracene	4.672	178	7166	101.609	ng/ml	100
28) Fluoranthene	5.321	202	9101	105.353	ng/ml	99
29) Pyrene	5.449	202	9429	105.394	ng/ml	99
32) Benzo[a]anthracene	6.161	228	9351	97.640	ng/ml	96
33) 3,3'-Dichlorobenzidine	6.150	252	3031	82.382	ng/ml	100
34) Chrysene	6.182	228	9565	104.357	ng/ml	98
35) Bis(2-ethylhexyl)phtha...	6.193	149	3479	99.622	ng/ml	98
37) Benzo[b]fluoranthene	6.963	252	9372	103.351	ng/ml	100
38) Benzo[k]fluoranthene	6.985	252	8643	106.283	ng/ml	100
39) Benzo[a]pyrene	7.255	252	7315	99.664	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.472	276	8328	98.934	ng/ml	98
41) Dibenzo[a,h]anthracene	8.509	278	8083	100.766	ng/ml	98
42) Benzo[g,h,i]perylene	8.797	276	8931M2	99.944	ng/ml	

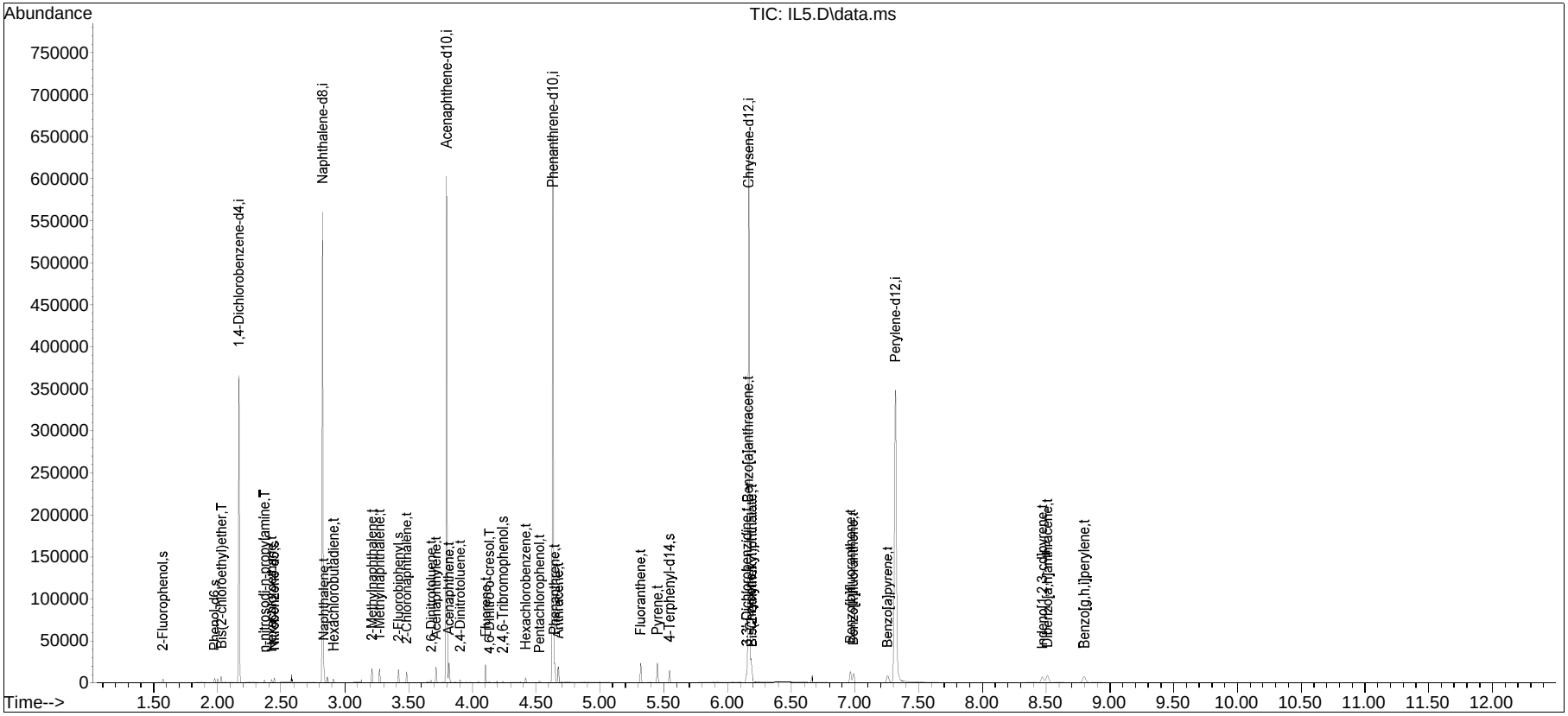
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL5.D
Acq On : 06 Mar 2023 02:19 pm
Operator : sv119:ah
Sample : IL5,32,,0.1 Lot# 9996
Misc : WG1752279,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Mar 07 13:35:03 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:48 2023
Response via : Initial Calibration

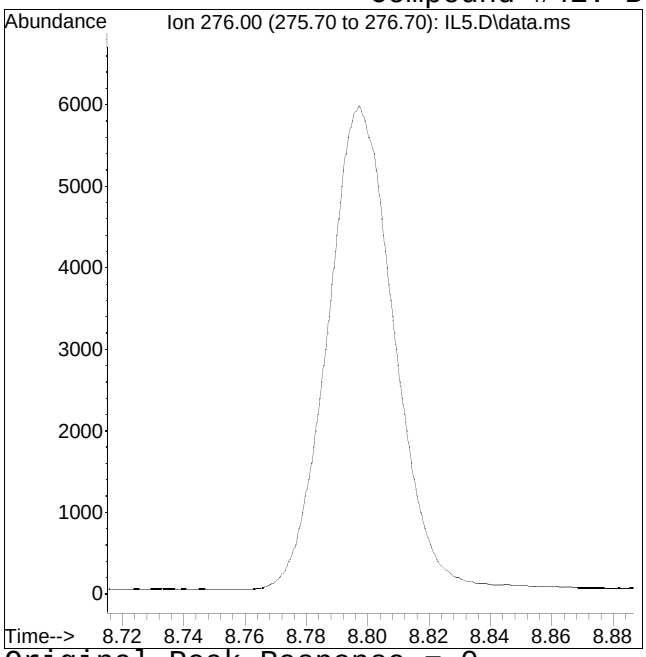
Sub List : Default - All compounds listedIical\IL7.D•

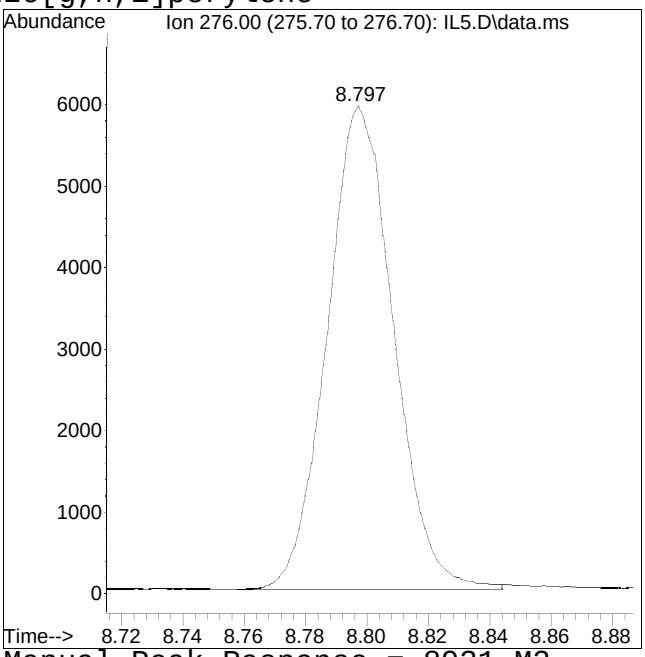


Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL5.D Operator : sv119:ah
Date Inj'd : 3/6/2023 2:19 pm Instrument : SV119
Sample : IL5,32,,0.1 Lot# 9996 Quant Date : 3/7/2023 1:29 pm

Compound #42: Benzo[g,h,i]perylene





Original Peak Response = 0 Manual Peak Response = 8931 M2
M2 = Peak not found by automatic integration algorithm.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL4.D
Acq On : 06 Mar 2023 02:36 pm
Operator : sv119:ah
Sample : IL4,32,,0.05 Lot#9997
Misc : WG1752279,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 07 13:34:16 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:38 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.167	152	70088	4000.000	ng/ml	0.00
Standard Area 1 = 66115			Recovery = 106.01%			
8) Naphthalene-d8	2.827	136	247602	4000.000	ng/ml	0.00
Standard Area 1 = 240629			Recovery = 102.90%			
17) Acenaphthene-d10	3.796	164	133074	4000.000	ng/ml	0.00
Standard Area 1 = 125461			Recovery = 106.07%			
22) Phenanthrene-d10	4.631	188	310364	4000.000	ng/ml	0.00
Standard Area 1 = 281681			Recovery = 110.18%			
31) Chrysene-d12	6.167	240	292011	4000.000	ng/ml	-0.01
Standard Area 1 = 262172			Recovery = 111.38%			
36) Perylene-d12	7.314	264	294846	4000.000	ng/ml	0.00
Standard Area 1 = 305709			Recovery = 96.45%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.572	112	852	49.407	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.99%#			
3) Phenol-d6	1.977	99	1005	49.326	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.99%#			
7) Nitrobenzene-d5	2.445	82	738	48.147	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 1.93%#			
13) 2-Fluorobiphenyl	3.422	172	2814	55.278	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 2.21%#			
21) 2,4,6-Tribromophenol	4.239	330	248	46.254	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.93%#			
30) 4-Terphenyl-d14	5.546	244	3544	54.725	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 2.19%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.032	93	966	51.001	ng/ml	88
5) n-nitrosodi-n-propylamine	2.369	70	503	46.066	ng/ml	93
6) Hexachloroethane	2.426	117	394	50.580	ng/ml	98
9) Naphthalene	2.838	128	3031	51.694	ng/ml	99
10) Hexachlorobutadiene	2.912	225	599	52.559	ng/ml	100
11) 2-Methylnaphthalene	3.216	142	2102	53.333	ng/ml	100
12) 1-Methylnaphthalene	3.271	142	2081	54.750	ng/ml	98
14) 2-Chloronaphthalene	3.485	162	2296	53.634	ng/ml	99
15) 2,6-Dinitrotoluene	3.676	165	324	43.120	ng/ml	92
16) Acenaphthylene	3.715	152	3233	52.338	ng/ml	99
18) Acenaphthene	3.813	153	2198	52.097	ng/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL4.D
Acq On : 06 Mar 2023 02:36 pm
Operator : sv119:ah
Sample : IL4,32,,0.05 Lot#9997
Misc : WG1752279,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 07 13:34:16 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:38 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
19) 2,4-Dinitrotoluene	3.903	165	393	48.639	ng/ml#	76
20) Fluorene	4.105	166	2526	52.091	ng/ml	98
23) 4,6-Dinitro-o-cresol	4.132	198	159	79.805	ng/ml	98
24) Hexachlorobenzene	4.420	284	967	51.844	ng/ml	100
25) Pentachlorophenol	4.528	266	196	40.931	ng/ml	93
26) Phenanthrene	4.644	178	4106M6	52.215	ng/ml	
27) Anthracene	4.672	178	3750	51.116	ng/ml	99
28) Fluoranthene	5.321	202	4743	52.781	ng/ml	99
29) Pyrene	5.451	202	4895	52.598	ng/ml	99
32) Benzo[a]anthracene	6.159	228	5115	52.629	ng/ml	93
33) 3,3'-Dichlorobenzidine	6.148	252	1455	38.969	ng/ml	99
34) Chrysene	6.182	228	4822	51.841	ng/ml	99
35) Bis(2-ethylhexyl)phtha...	6.193	149	1788	58.624	ng/ml	98
37) Benzo[b]fluoranthene	6.961	252	4750	52.978	ng/ml	99
38) Benzo[k]fluoranthene	6.985	252	4160	51.738	ng/ml	99
39) Benzo[a]pyrene	7.255	252	3585	49.400	ng/ml	99
40) Indeno[1,2,3-cd]pyrene	8.474	276	4102	49.285	ng/ml	98
41) Dibenzo[a,h]anthracene	8.510	278	3979M6	50.169	ng/ml	
42) Benzo[g,h,i]perylene	8.799	276	4406M2	49.868	ng/ml	

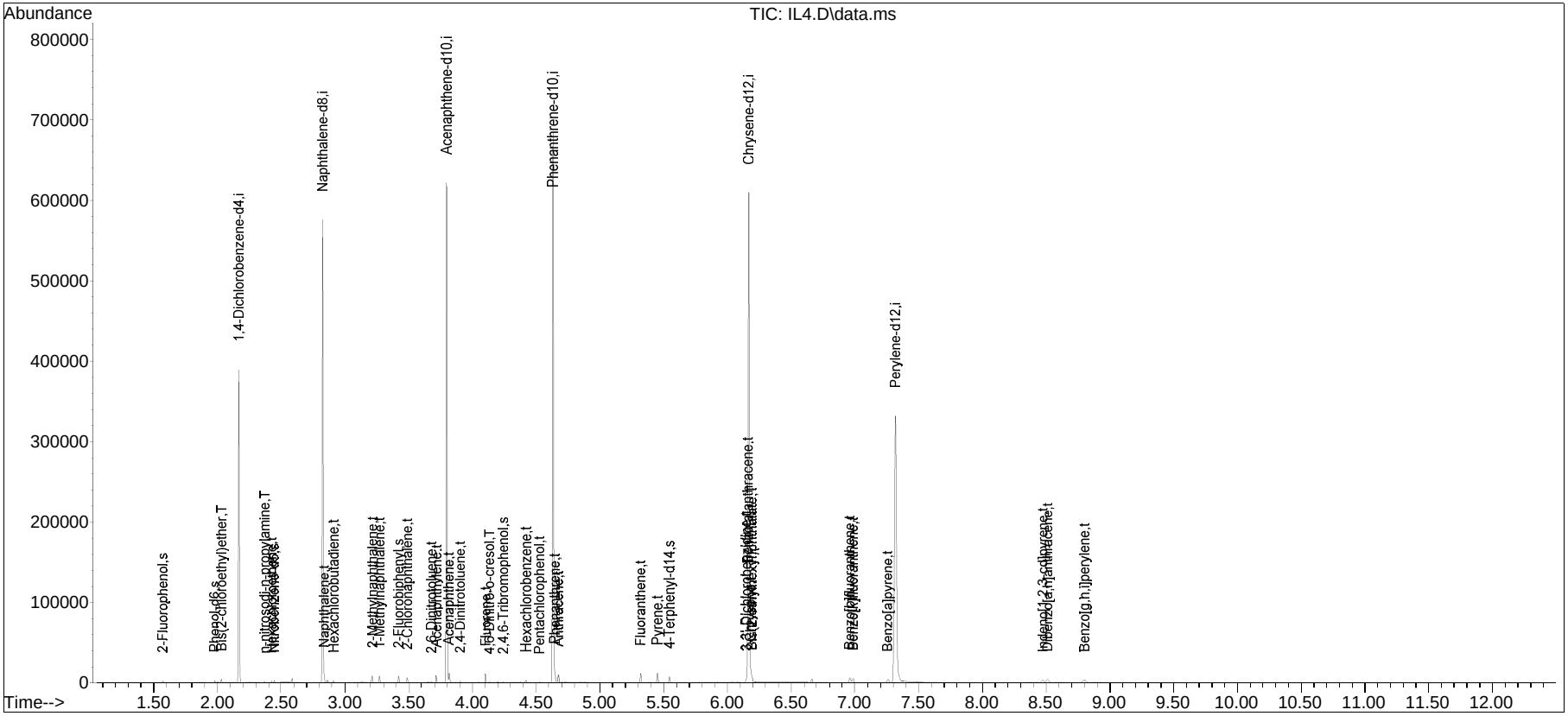
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL4.D
Acq On : 06 Mar 2023 02:36 pm
Operator : sv119:ah
Sample : IL4,32,,0.05 Lot#9997
Misc : WG1752279,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Mar 07 13:34:16 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:38 2023
Response via : Initial Calibration

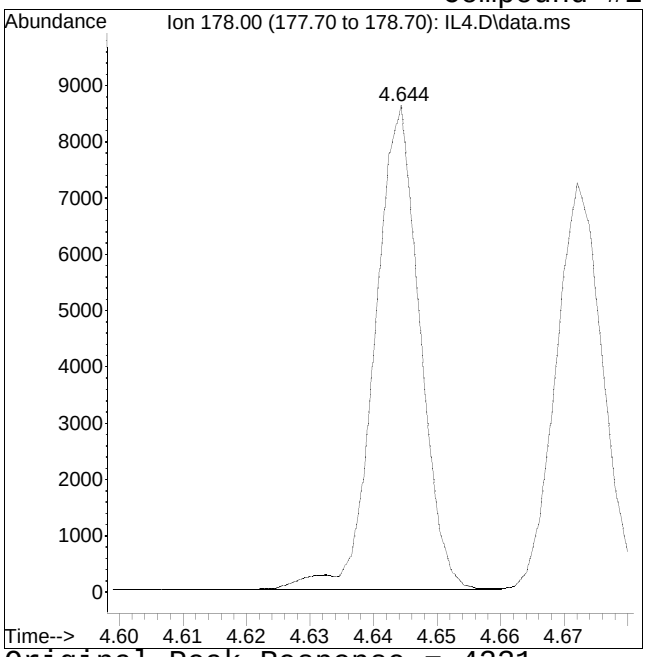
Sub List : Default - All compounds listedIical\IL7.D•



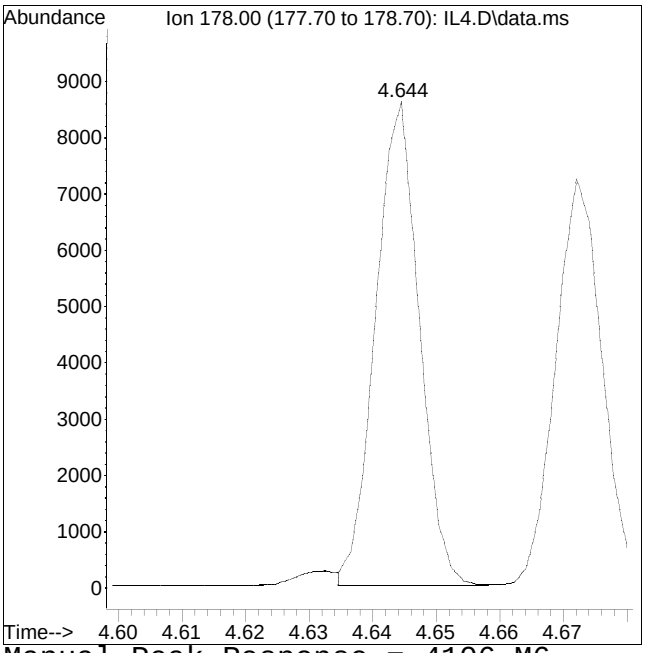
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL4.D Operator : sv119:ah
Date Inj'd : 3/6/2023 2:36 pm Instrument : SV119
Sample : IL4,32,,0.05 Lot#9997 Quant Date : 3/7/2023 1:29 pm

Compound #26: Phenanthrene



Original Peak Response = 4231



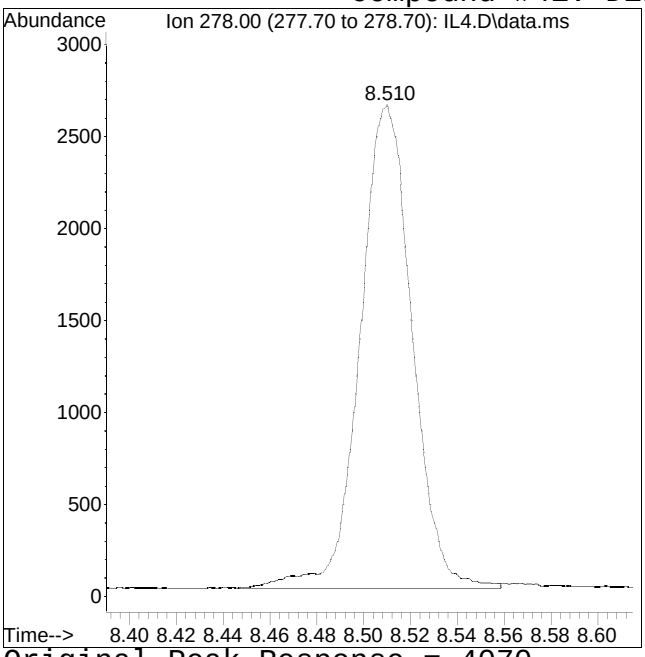
Manual Peak Response = 4106 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

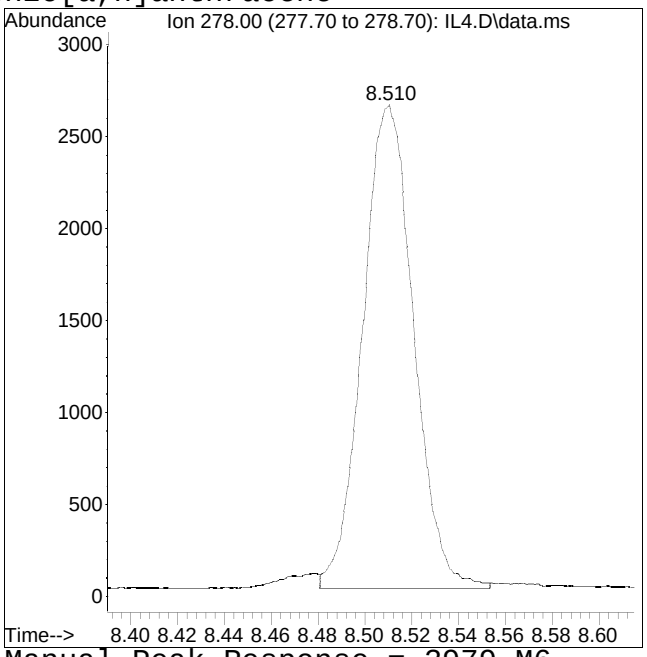
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL4.D Operator : sv119:ah
Date Inj'd : 3/6/2023 2:36 pm Instrument : SV119
Sample : IL4,32,,0.05 Lot#9997 Quant Date : 3/7/2023 1:29 pm

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 4070



Manual Peak Response = 3979 M6

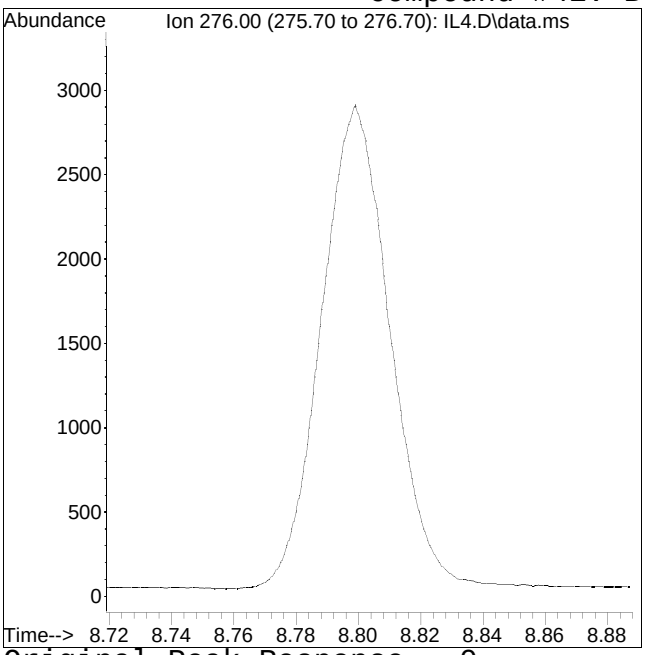
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

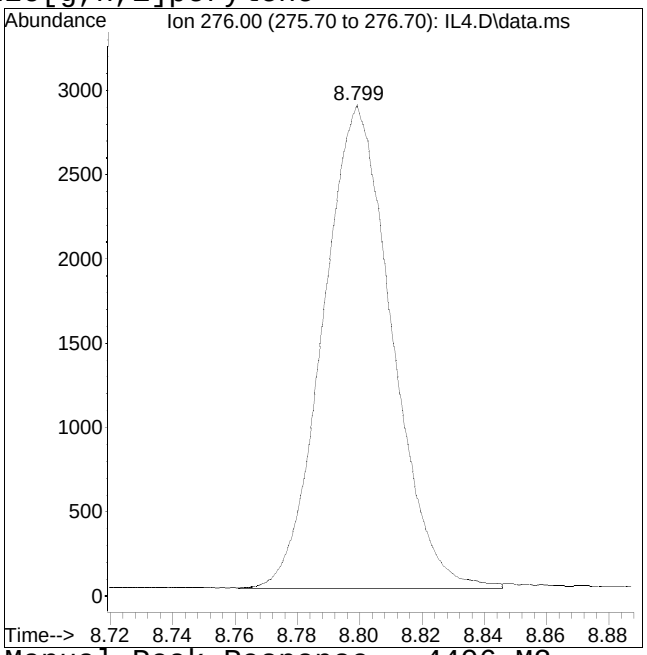
Data Path : I:\8270SIM\sv119\230306nLVQ
Data File : IL4.D
Date Inj'd : 3/6/2023 2:36 pm
Sample : IL4,32,,0.05 Lot#9997

Method : SIM-LVI_230306_sv119.M
Operator : sv119:ah
Instrument : SV119
Quant Date : 3/7/2023 1:29 pm

Compound #42: Benzo[g,h,i]perylene



Original Peak Response = 0



Manual Peak Response = 4406 M2

M2 = Peak not found by automatic integration algorithm.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL3.D
Acq On : 06 Mar 2023 02:52 pm
Operator : sv119:ah
Sample : IL3,32,,0.025 Lot#9998
Misc : WG1752279,,ical
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 07 13:33:32 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:30 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.170	152	66357	4000.000	ng/ml	0.01
Standard Area 1 = 66115			Recovery = 100.37%			
8) Naphthalene-d8	2.828	136	229815	4000.000	ng/ml	0.00
Standard Area 1 = 240629			Recovery = 95.51%			
17) Acenaphthene-d10	3.798	164	118335	4000.000	ng/ml	0.00
Standard Area 1 = 125461			Recovery = 94.32%			
22) Phenanthrene-d10	4.631	188	262287	4000.000	ng/ml	0.00
Standard Area 1 = 281681			Recovery = 93.11%			
31) Chrysene-d12	6.163	240	252921	4000.000	ng/ml	-0.02
Standard Area 1 = 262172			Recovery = 96.47%			
36) Perylene-d12	7.308	264	289340	4000.000	ng/ml	-0.02
Standard Area 1 = 305709			Recovery = 94.65%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.577	112	404	24.745	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.49%#			
3) Phenol-d6	1.980	99	477	24.728	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.49%#			
7) Nitrobenzene-d5	2.448	82	339	23.360	ng/ml	0.01
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.93%#			
13) 2-Fluorobiphenyl	3.422	172	1276	27.005	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 1.08%#			
21) 2,4,6-Tribromophenol	4.240	330	107	22.442	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.45%#			
30) 4-Terphenyl-d14	5.544	244	1410	25.763	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 1.03%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.035	93	466	25.986	ng/ml	89
5) n-nitrosodi-n-propylamine	2.371	70	239	23.119	ng/ml#	92
6) Hexachloroethane	2.427	117	189	25.627	ng/ml	98
9) Naphthalene	2.839	128	1428	26.240	ng/ml	98
10) Hexachlorobutadiene	2.915	225	285	26.943	ng/ml	99
11) 2-Methylnaphthalene	3.216	142	955	26.106	ng/ml	99
12) 1-Methylnaphthalene	3.271	142	932	26.418	ng/ml	99
14) 2-Chloronaphthalene	3.485	162	1042	26.225	ng/ml	98
15) 2,6-Dinitrotoluene	3.677	165	137M6	19.644	ng/ml	
16) Acenaphthylene	3.716	152	1428	24.907	ng/ml	99
18) Acenaphthene	3.814	153	986	26.281	ng/ml	98

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL3.D
Acq On : 06 Mar 2023 02:52 pm
Operator : sv119:ah
Sample : IL3,32,,0.025 Lot#9998
Misc : WG1752279,,ical
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 07 13:33:32 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:30 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
19) 2,4-Dinitrotoluene	3.904	165	157	24.520	ng/ml	90
20) Fluorene	4.105	166	1099	25.486	ng/ml	99
23) 4,6-Dinitro-o-cresol	4.133	198	59	63.657	ng/ml	98
24) Hexachlorobenzene	4.420	284	405	25.693	ng/ml	99
25) Pentachlorophenol	4.529	266	113	30.891	ng/ml	89
26) Phenanthrene	4.643	178	1731M6	26.048	ng/ml	
27) Anthracene	4.673	178	1543	24.888	ng/ml	100
28) Fluoranthene	5.320	202	1936	25.493	ng/ml	100
29) Pyrene	5.450	202	1993	25.341	ng/ml	100
32) Benzo[a]anthracene	6.157	228	2523	29.972	ng/ml#	88
33) 3,3'-Dichlorobenzidine	6.144	252	674	20.842	ng/ml	98
34) Chrysene	6.178	228	2102	26.091	ng/ml	100
35) Bis(2-ethylhexyl)phtha...	6.187	149	758	37.096	ng/ml	98
37) Benzo[b]fluoranthene	6.957	252	2239	25.447	ng/ml	100
38) Benzo[k]fluoranthene	6.979	252	1953	24.752	ng/ml	99
39) Benzo[a]pyrene	7.251	252	1718	24.124	ng/ml	98
40) Indeno[1,2,3-cd]pyrene	8.469	276	2017	24.695	ng/ml	99
41) Dibenzo[a,h]anthracene	8.505	278	1943	24.964	ng/ml	97
42) Benzo[g,h,i]perylene	8.794	276	2174M2	25.074	ng/ml	

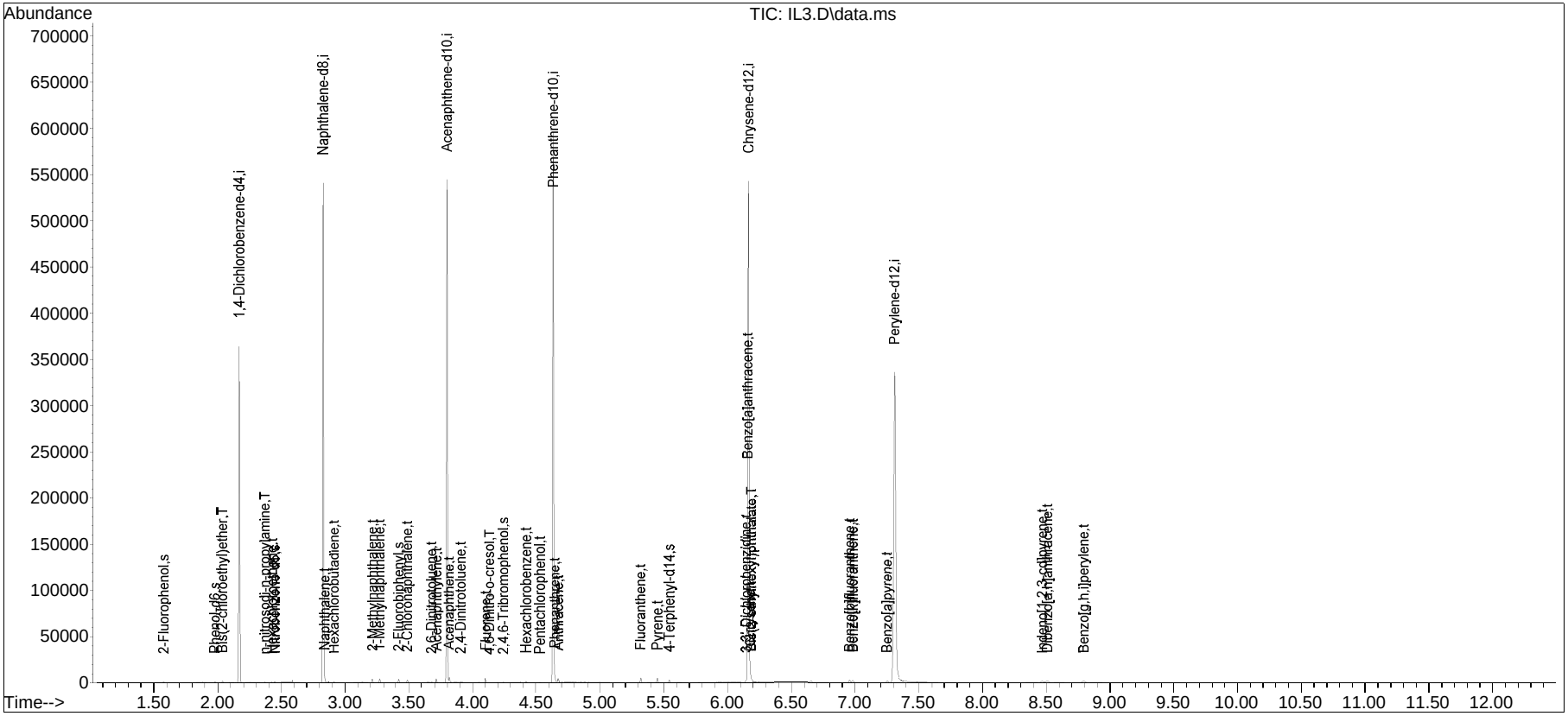
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL3.D
Acq On : 06 Mar 2023 02:52 pm
Operator : sv119:ah
Sample : IL3,32,,0.025 Lot#9998
Misc : WG1752279,,ical
ALS Vial : 8 Sample Multiplier: 1

Quant Time: Mar 07 13:33:32 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:30 2023
Response via : Initial Calibration

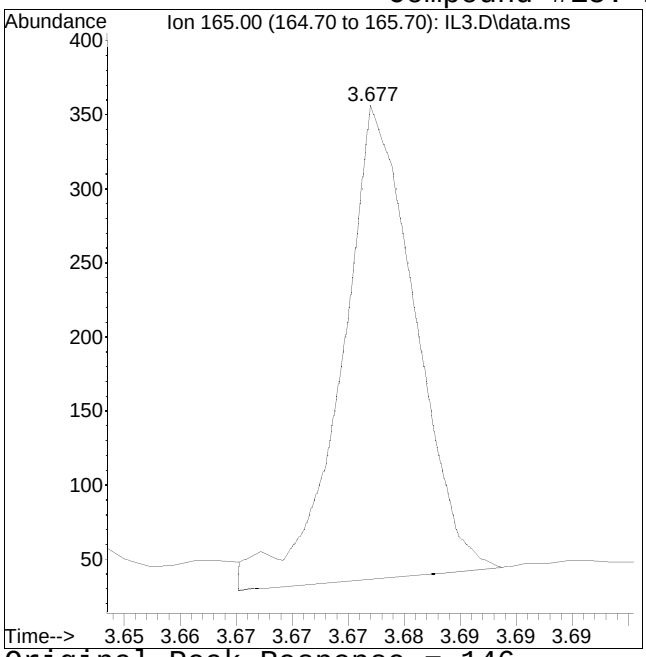
Sub List : Default - All compounds listedIical\IL7.D•



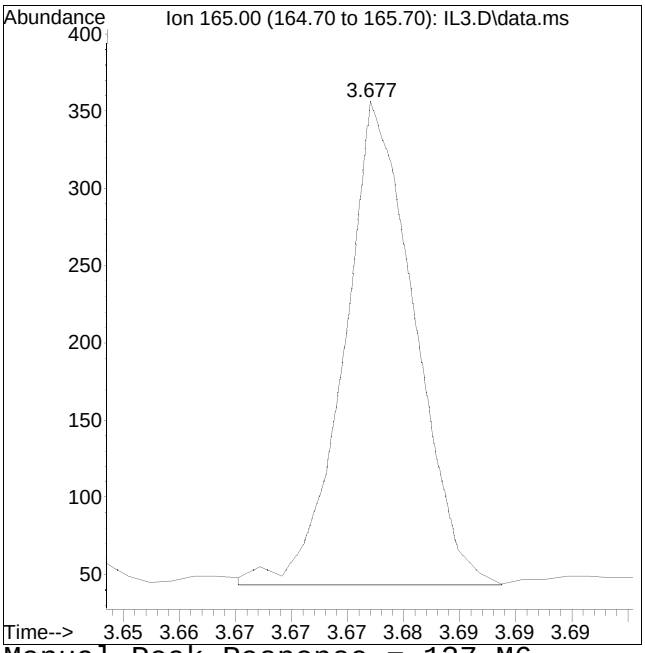
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL3.D Operator : sv119:ah
Date Inj'd : 3/6/2023 2:52 pm Instrument : SV119
Sample : IL3,32,,0.025 Lot#9998 Quant Date : 3/7/2023 1:29 pm

Compound #15: 2,6-Dinitrotoluene



Original Peak Response = 146



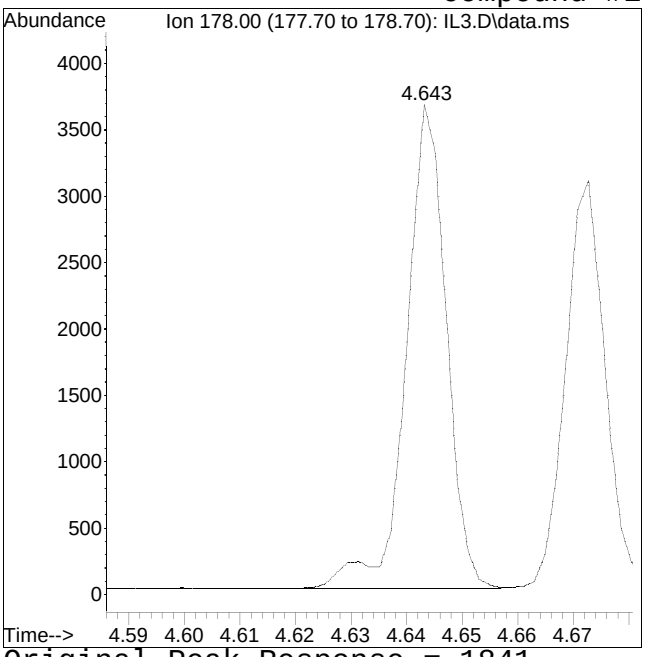
Manual Peak Response = 137 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

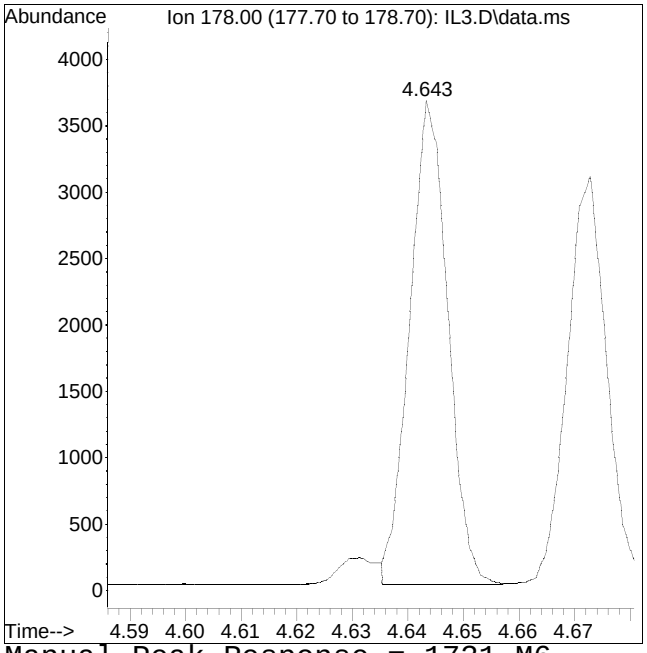
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQ
Data File : IL3.D
Date Inj'd : 3/6/2023 2:52 pm
Sample : IL3,32,,0.025 Lot#9998
Method : SIM-LVI_230306_sv119.M
Operator : sv119:ah
Instrument : SV119
Quant Date : 3/7/2023 1:29 pm

Compound #26: Phenanthrene



Original Peak Response = 1841



Manual Peak Response = 1731 M6

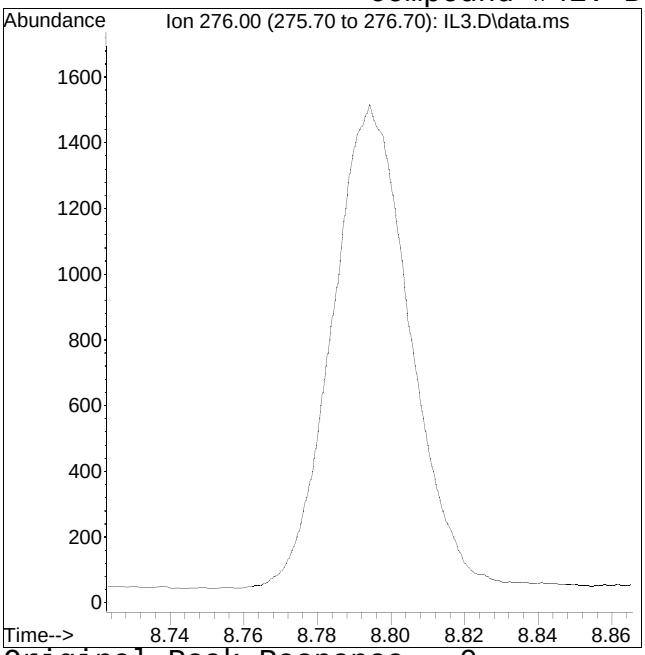
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

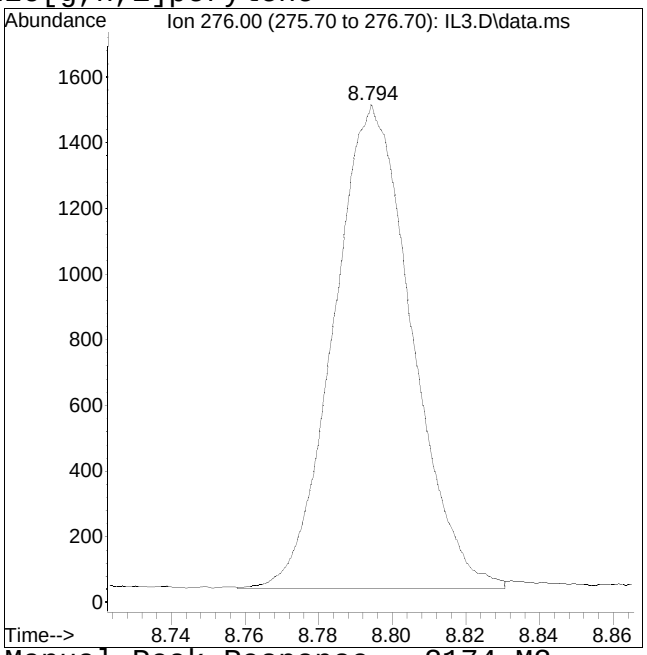
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQ
Data File : IL3.D
Date Inj'd : 3/6/2023 2:52 pm
Sample : IL3,32,,0.025 Lot#9998

Method : SIM-LVI_230306_sv119.M
Operator : sv119:ah
Instrument : SV119
Quant Date : 3/7/2023 1:29 pm

Compound #42: Benzo[g,h,i]perylene





Original Peak Response = 0
Manual Peak Response = 2174 M2
M2 = Peak not found by automatic integration algorithm.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL2.D
Acq On : 06 Mar 2023 03:09 pm
Operator : sv119:ah
Sample : IL2,32,,0.01 Lot#9999
Misc : WG1752279,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 08 06:54:37 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Mar 08 06:54:29 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.170	152	66790	4000.000	ng/ml	0.01
Standard Area 1 = 66115			Recovery = 101.02%			
8) Naphthalene-d8	2.829	136	229653	4000.000	ng/ml	0.00
Standard Area 1 = 240629			Recovery = 95.44%			
17) Acenaphthene-d10	3.798	164	117652	4000.000	ng/ml	0.00
Standard Area 1 = 125461			Recovery = 93.78%			
22) Phenanthrene-d10	4.633	188	257866	4000.000	ng/ml	0.00
Standard Area 1 = 281681			Recovery = 91.55%			
31) Chrysene-d12	6.165	240	244354	4000.000	ng/ml	-0.01
Standard Area 1 = 262172			Recovery = 93.20%			
36) Perylene-d12	7.312	264	285318	4000.000	ng/ml	-0.01
Standard Area 1 = 305709			Recovery = 93.33%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.576	112	162	9.858	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.20%#			
3) Phenol-d6	1.981	99	177	9.116	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.18%#			
7) Nitrobenzene-d5	2.448	82	131	8.968	ng/ml	0.01
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.36%#			
13) 2-Fluorobiphenyl	3.423	172	495	10.484	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.42%#			
21) 2,4,6-Tribromophenol	4.240	330	40M1	8.438	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.17%#			
30) 4-Terphenyl-d14	5.546	244	546	10.147	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.41%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.036	93	192	10.637	ng/ml	95
5) n-nitrosodi-n-propylamine	2.373	70	96	9.226	ng/ml	93
6) Hexachloroethane	2.428	117	73	9.834	ng/ml	99
9) Naphthalene	2.840	128	573	10.536	ng/ml	98
10) Hexachlorobutadiene	2.914	225	113	10.690	ng/ml	91
11) 2-Methylnaphthalene	3.217	142	380	10.395	ng/ml	99
12) 1-Methylnaphthalene	3.272	142	365	10.353	ng/ml	98
14) 2-Chloronaphthalene	3.486	162	410	10.326	ng/ml	98
15) 2,6-Dinitrotoluene	3.679	165	61M4	8.753	ng/ml	
16) Acenaphthylene	3.716	152	553	9.652	ng/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL2.D
Acq On : 06 Mar 2023 03:09 pm
Operator : sv119:ah
Sample : IL2,32,,0.01 Lot#9999
Misc : WG1752279,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 08 06:54:37 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Mar 08 06:54:29 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
18) Acenaphthene	3.816	153	380	10.187	ng/ml	97
19) 2,4-Dinitrotoluene	3.904	165	58	12.126	ng/ml#	70
20) Fluorene	4.105	166	427	9.960	ng/ml	98
23) 4,6-Dinitro-o-cresol	4.134	198	17	54.720	ng/ml	89
24) Hexachlorobenzene	4.420	284	170	10.970	ng/ml	97
25) Pentachlorophenol	4.529	266	59	20.767	ng/ml	86
26) Phenanthrene	4.645	178	682	10.438	ng/ml	100
27) Anthracene	4.673	178	598	9.811	ng/ml	99
28) Fluoranthene	5.322	202	732	9.804	ng/ml	100
29) Pyrene	5.451	202	765	9.894	ng/ml	98
32) Benzo[a]anthracene	6.163	228	1390	8.628	ng/ml#	79
33) 3,3'-Dichlorobenzidine	6.148	252	238	7.618	ng/ml	99
34) Chrysene	6.180	228	791	10.163	ng/ml	97
35) Bis(2-ethylhexyl)phtha...	6.191	149	362	26.646	ng/ml	94
37) Benzo[b]fluoranthene	6.959	252	855	9.854	ng/ml	99
38) Benzo[k]fluoranthene	6.981	252	776	9.973	ng/ml	97
39) Benzo[a]pyrene	7.255	252	686	9.769	ng/ml	99
40) Indeno[1,2,3-cd]pyrene	8.474	276	793	9.846	ng/ml	99
41) Dibenzo[a,h]anthracene	8.509	278	754	9.824	ng/ml	96
42) Benzo[g,h,i]perylene	8.797	276	882M2	10.310	ng/ml	

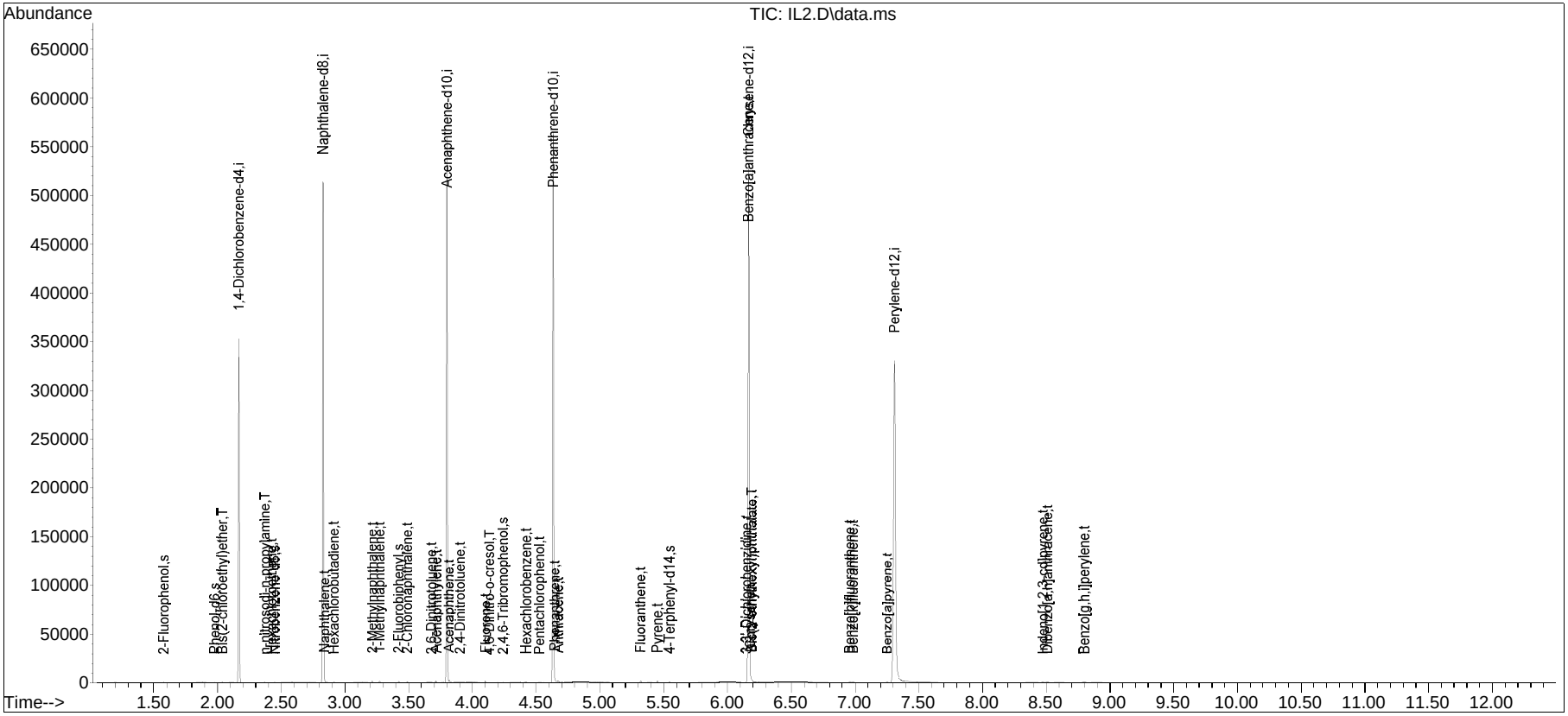
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL2.D
Acq On : 06 Mar 2023 03:09 pm
Operator : sv119:ah
Sample : IL2,32,,0.01 Lot#9999
Misc : WG1752279,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Mar 08 06:54:37 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Mar 08 06:54:29 2023
Response via : Initial Calibration

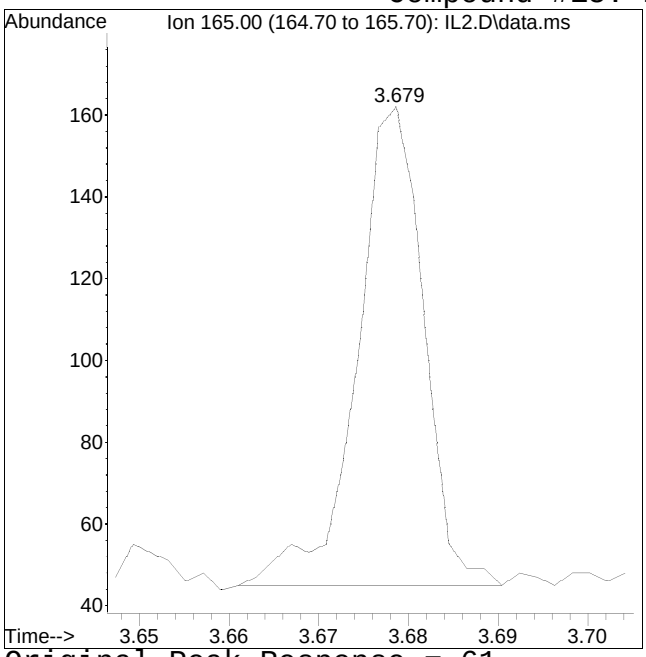
Sub List : Default - All compounds listedIical\IL7.D•



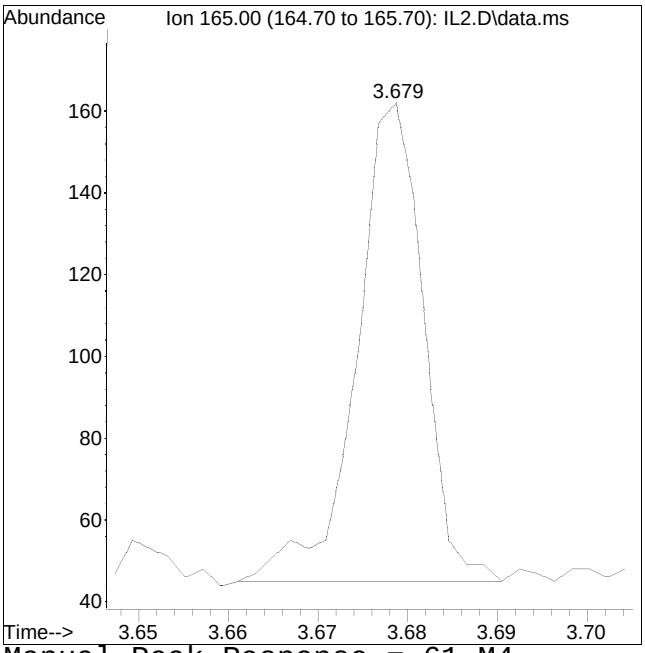
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL2.D Operator : sv119:ah
Date Inj'd : 3/6/2023 3:09 pm Instrument : SV119
Sample : IL2,32,,0.01 Lot#9999 Quant Date : 3/8/2023 6:54 am

Compound #15: 2,6-Dinitrotoluene



Original Peak Response = 61



Manual Peak Response = 61 M4

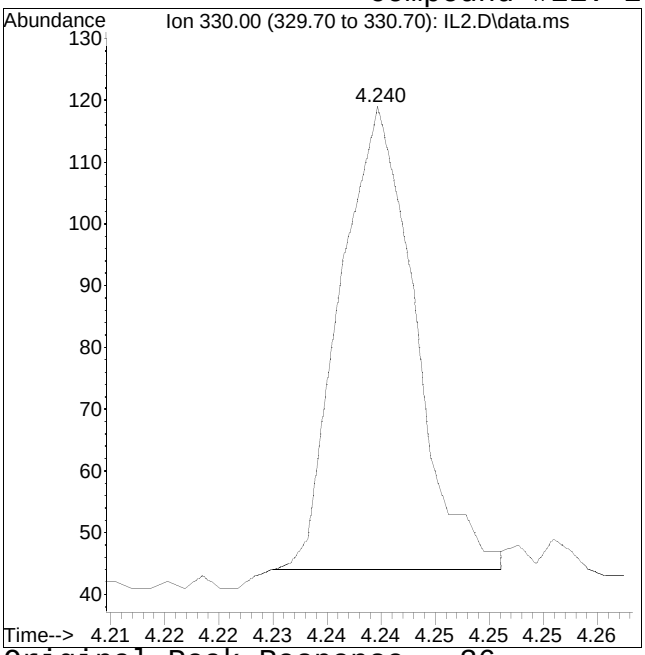
M4 = Poor automated baseline construction.

Manual Integration Report

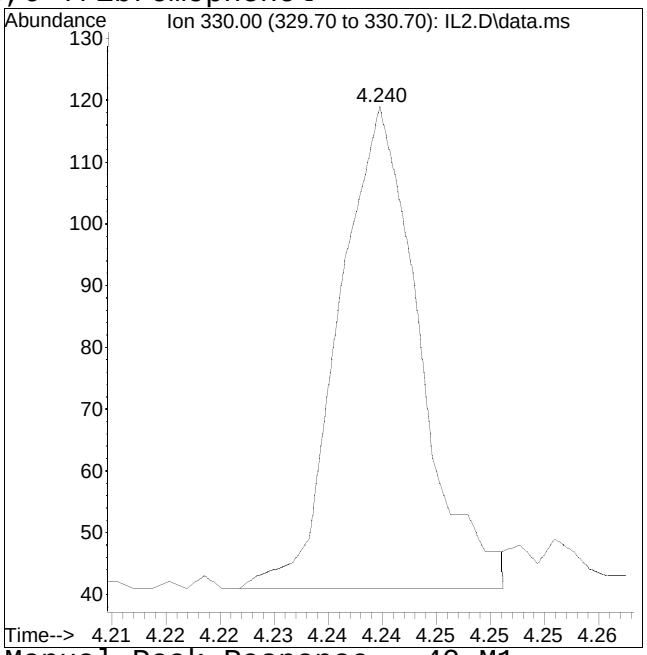
Data Path : I:\8270SIM\sv119\230306nLVQ
Data File : IL2.D
Date Inj'd : 3/6/2023 3:09 pm
Sample : IL2,32,,0.01 Lot#9999

Method : SIM-LVI_230306_sv119.M
Operator : sv119:ah
Instrument : SV119
Quant Date : 3/8/2023 6:54 am

Compound #21: 2,4,6-Tribromophenol



Original Peak Response = 36



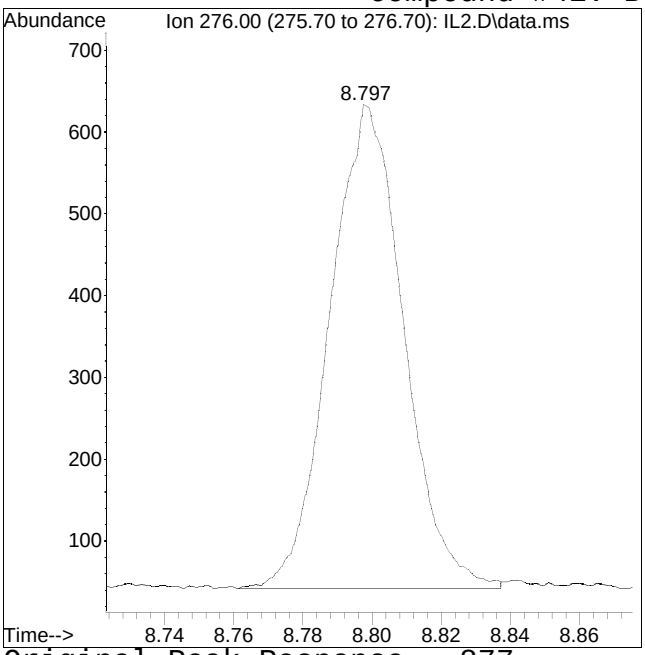
Manual Peak Response = 40 M1

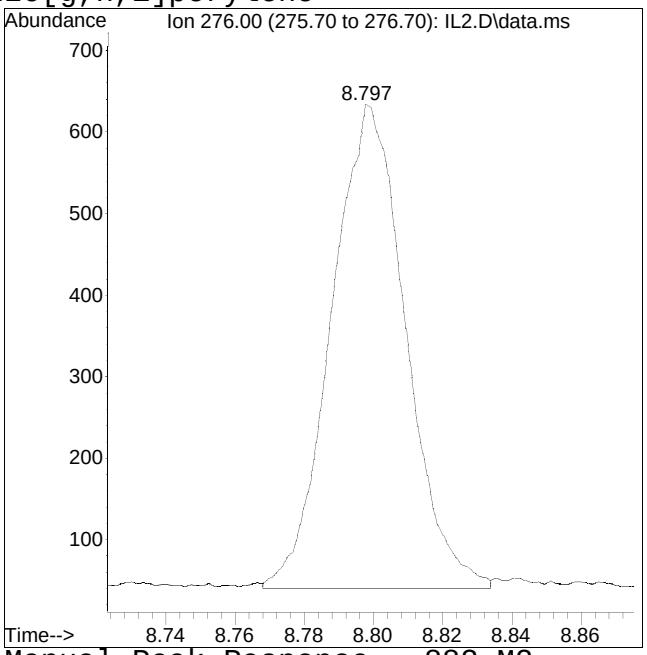
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL2.D Operator : sv119:ah
Date Inj'd : 3/6/2023 3:09 pm Instrument : SV119
Sample : IL2,32,,0.01 Lot#9999 Quant Date : 3/8/2023 6:54 am

Compound #42: Benzo[g,h,i]perylene





Original Peak Response = 877 Manual Peak Response = 882 M2
M2 = Peak not found by automatic integration algorithm.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL1.D
Acq On : 06 Mar 2023 03:26 pm
Operator : sv119:ah
Sample : IL1,32,, 0.005 Lot#10000
Misc : WG1752279,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 07 13:31:37 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:04 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.170	152	68753	4000.000	ng/ml	0.01
Standard Area 1 = 66115			Recovery = 103.99%			
8) Naphthalene-d8	2.827	136	239545	4000.000	ng/ml	0.00
Standard Area 1 = 240629			Recovery = 99.55%			
17) Acenaphthene-d10	3.798	164	122471	4000.000	ng/ml	0.00
Standard Area 1 = 125461			Recovery = 97.62%			
22) Phenanthrene-d10	4.631	188	262729	4000.000	ng/ml	0.00
Standard Area 1 = 281681			Recovery = 93.27%			
31) Chrysene-d12	6.165	240	232678	4000.000	ng/ml	-0.02
Standard Area 1 = 262172			Recovery = 88.75%			
36) Perylene-d12	7.314	264	275713	4000.000	ng/ml	0.00
Standard Area 1 = 305709			Recovery = 90.19%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.574	112	86	5.084	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.10%#			
3) Phenol-d6	1.980	99	105	5.254	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.11%#			
7) Nitrobenzene-d5	2.446	82	71	4.722	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.19%#			
13) 2-Fluorobiphenyl	3.422	172	257	5.218	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.21%#			
21) 2,4,6-Tribromophenol	4.241	330	24	4.864	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.10%#			
30) 4-Terphenyl-d14	5.547	244	263	4.797	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.19%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.035	93	104	5.597	ng/ml	97
5) n-nitrosodi-n-propylamine	2.371	70	51	4.761	ng/ml	94
6) Hexachloroethane	2.427	117	41	5.366	ng/ml	97
9) Naphthalene	2.838	128	298	5.253	ng/ml	98
10) Hexachlorobutadiene	2.913	225	56	5.079	ng/ml	91
11) 2-Methylnaphthalene	3.216	142	192	5.035	ng/ml	99
12) 1-Methylnaphthalene	3.271	142	191	5.194	ng/ml	100
14) 2-Chloronaphthalene	3.485	162	224	5.409	ng/ml	98
15) 2,6-Dinitrotoluene	3.678	165	42	5.778	ng/ml#	75
16) Acenaphthylene	3.715	152	283	4.735	ng/ml	97
18) Acenaphthene	3.813	153	201	5.177	ng/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL1.D
Acq On : 06 Mar 2023 03:26 pm
Operator : sv119:ah
Sample : IL1,32,, 0.005 Lot#10000
Misc : WG1752279,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 07 13:31:37 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:04 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
19) 2,4-Dinitrotoluene	3.905	165	36	9.164	ng/ml	91
20) Fluorene	4.105	166	221	4.952	ng/ml	99
23) 4,6-Dinitro-o-cresol	0.000		0	N.D.	d	
24) Hexachlorobenzene	4.419	284	86	5.447	ng/ml	96
25) Pentachlorophenol	4.530	266	43	17.498	ng/ml#	78
26) Phenanthrene	4.644	178	351	5.273	ng/ml	99
27) Anthracene	4.674	178	309	4.976	ng/ml	97
28) Fluoranthene	5.320	202	367	4.825	ng/ml	96
29) Pyrene	5.451	202	374	4.747	ng/ml	98
32) Benzo[a]anthracene	6.163	228	1014	13.094	ng/ml#	73
33) 3,3'-Dichlorobenzidine	6.148	252	122M7	4.101	ng/ml	
34) Chrysene	6.180	228	366	4.938	ng/ml#	88
35) Bis(2-ethylhexyl)phtha...	6.191	149	210	22.652	ng/ml#	90
37) Benzo[b]fluoranthene	6.961	252	419	4.997	ng/ml	98
38) Benzo[k]fluoranthene	6.983	252	370	4.921	ng/ml	99
39) Benzo[a]pyrene	7.253	252	335	4.937	ng/ml	99
40) Indeno[1,2,3-cd]pyrene	8.472	276	418	5.371	ng/ml	97
41) Dibenzo[a,h]anthracene	8.505	278	373M7	5.029	ng/ml	
42) Benzo[g,h,i]perylene	8.794	276	442M2	5.350	ng/ml	

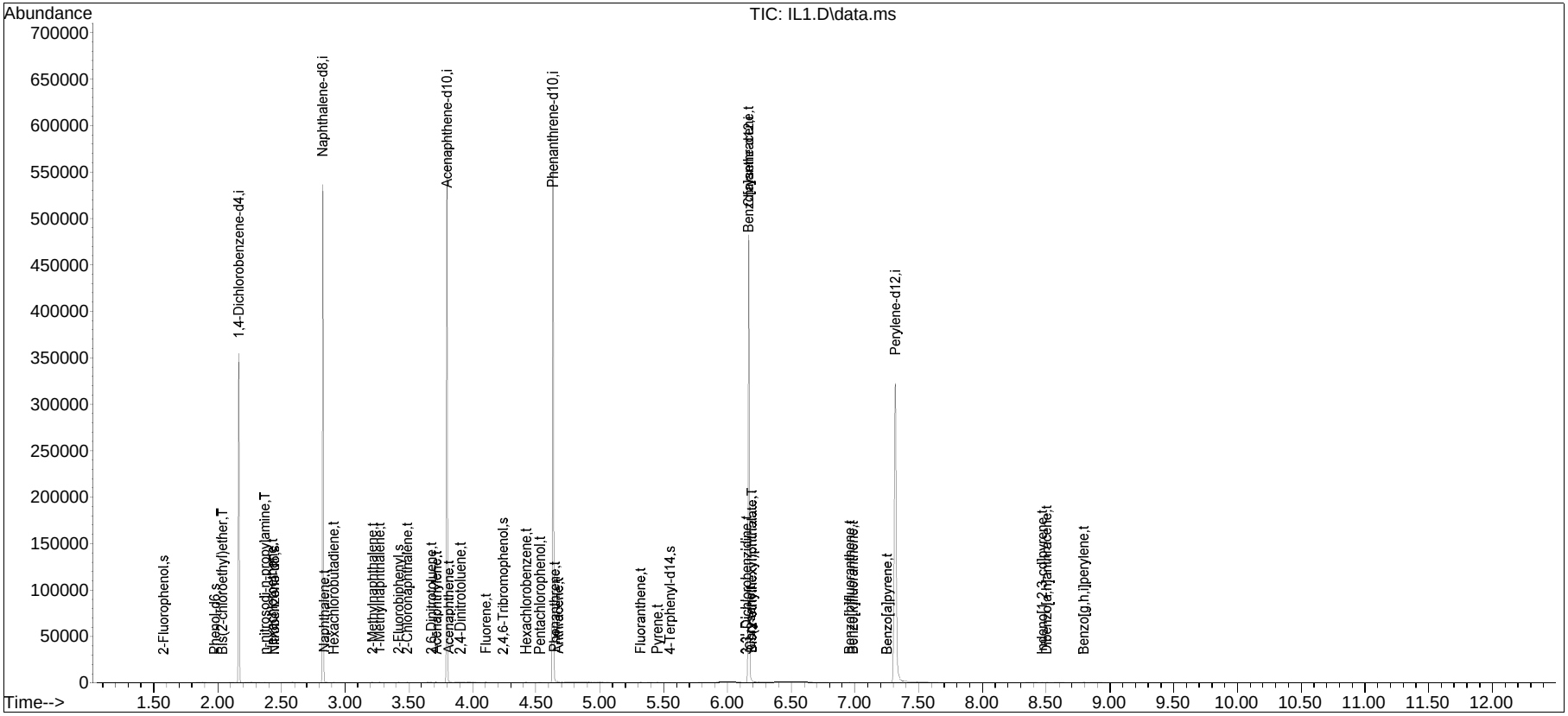
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : IL1.D
Acq On : 06 Mar 2023 03:26 pm
Operator : sv119:ah
Sample : IL1,32,, 0.005 Lot#10000
Misc : WG1752279,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Mar 07 13:31:37 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Mar 07 13:29:04 2023
Response via : Initial Calibration

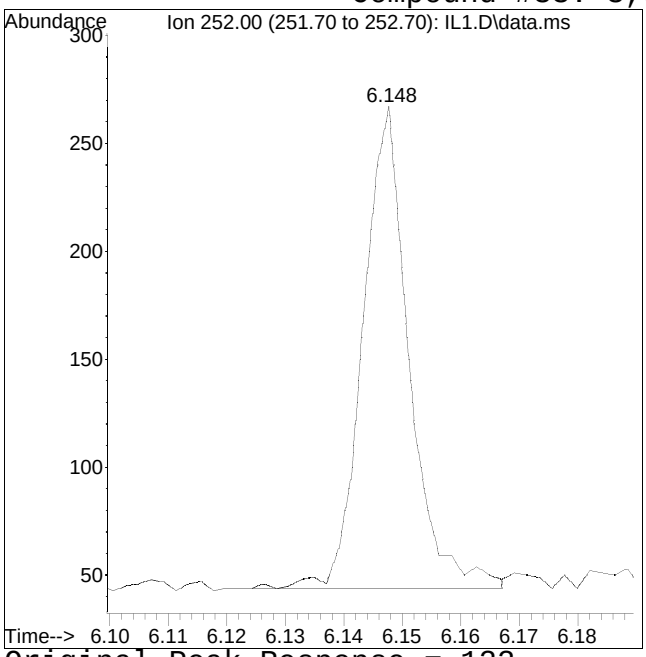
Sub List : Default - All compounds listedIical\IL7.D•



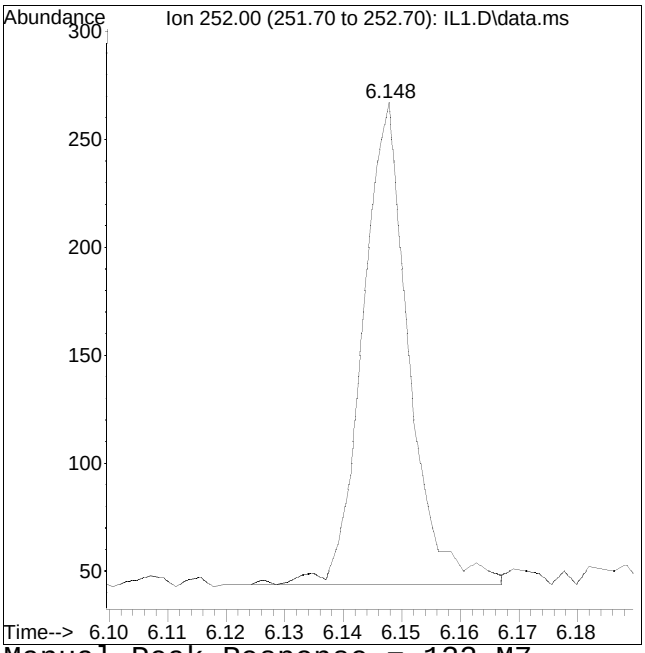
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL1.D Operator : sv119:ah
Date Inj'd : 3/6/2023 3:26 pm Instrument : SV119
Sample : IL1,32,, 0.005 Lot#10000 Quant Date : 3/7/2023 1:29 pm

Compound #33: 3,3'-Dichlorobenzidine



Original Peak Response = 122



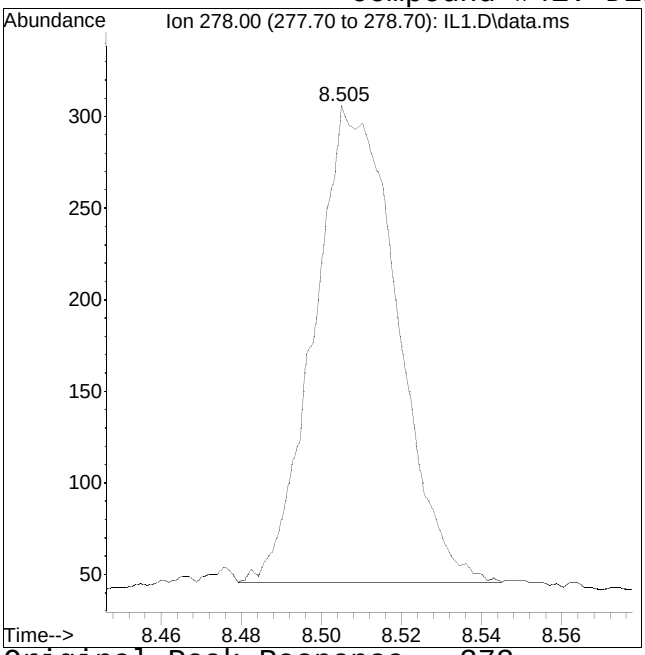
Manual Peak Response = 122 M7

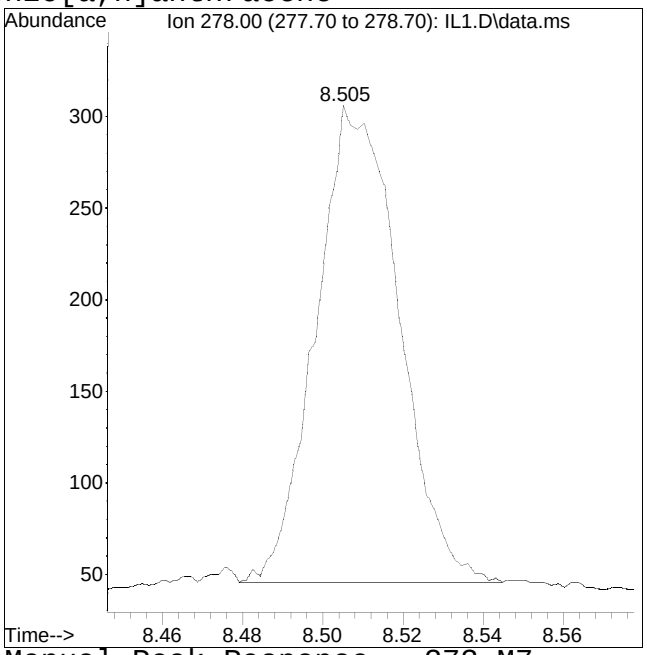
M7 = A qualifier ion was manually integrated (only for GC/MS data).

Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQ
Data File : IL1.D
Date Inj'd : 3/6/2023 3:26 pm
Sample : IL1,32,, 0.005 Lot#10000
Method : SIM-LVI_230306_sv119.M
Operator : sv119:ah
Instrument : SV119
Quant Date : 3/7/2023 1:29 pm

Compound #41: Dibenzo[a,h]anthracene



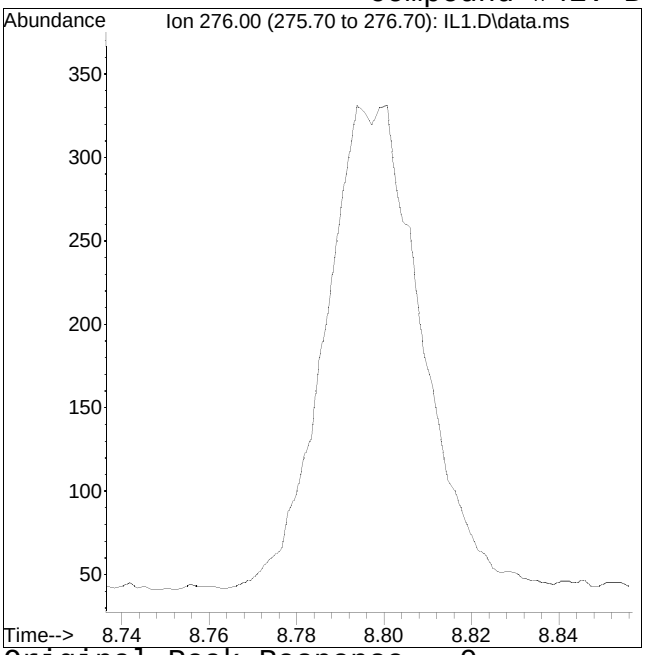


Original Peak Response = 373
Manual Peak Response = 373 M7
M7 = A qualifier ion was manually integrated (only for GC/MS data).

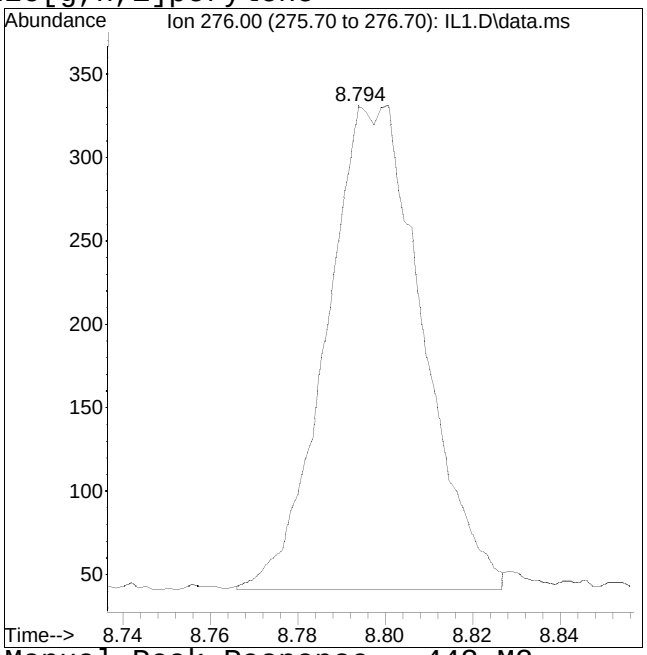
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : IL1.D Operator : sv119:ah
Date Inj'd : 3/6/2023 3:26 pm Instrument : SV119
Sample : IL1,32,, 0.005 Lot#10000 Quant Date : 3/7/2023 1:29 pm

Compound #42: Benzo[g,h,i]perylene



Original Peak Response = 0



Manual Peak Response = 442 M2

M2 = Peak not found by automatic integration algorithm.

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : ICV.D
Acq On : 06 Mar 2023 03:42 pm
Operator : sv119:ah
Sample : CQICV,32,,1.0 Lot#9919
Misc : WG1752279,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 08 06:53:52 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Mar 08 06:54:19 2023
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.03
2	s	2-Fluorophenol	0.984	1.026	-4.3	98	0.03
3	s	Phenol-d6	1.163	1.213	-4.3	100	0.03
4	T	Bis(2-chloroethyl)ether	1.081	1.067	1.3	96	0.03
5	T	n-nitrosodi-n-propylamine	0.623	0.599	3.9	90	0.02
6	t	Hexachloroethane	0.445	0.445	0.0	96	0.02
7	s	Nitrobenzene-d5	0.875	0.842	3.8	88	0.02
8	i	Naphthalene-d8	1.000	1.000	0.0	97	0.02
9	t	Naphthalene	0.947	0.962	-1.6	96	0.02
10	t	Hexachlorobutadiene	0.184	0.187	-1.6	95	0.02
11	t	2-Methylnaphthalene	0.637	0.661	-3.8	97	0.01
12	t	1-Methylnaphthalene	0.614	0.603	1.8	92	0.01
13	s	2-Fluorobiphenyl	0.822	0.836	-1.7	95	0.01
14	t	2-Chloronaphthalene	0.692	0.682	1.4	93	0.01
15	t	2,6-Dinitrotoluene	0.121	0.096	20.7	77	0.00
16	t	Acenaphthylene	0.998	0.953	4.5	86	0.00
17	i	Acenaphthene-d10	1.000	1.000	0.0	95	0.00
18	t	Acenaphthene	1.268	1.303	-2.8	94	0.00
19	t	2,4-Dinitrotoluene	*1000.000	837.972	16.2	75	0.00
20	t	Fluorene	1.458	1.473	-1.0	90	0.00
21	s	2,4,6-Tribromophenol	0.161	0.156	3.1	84	0.00
22	i	Phenanthrene-d10	1.000	1.000	0.0	92	0.00
23	T	4,6-Dinitro-o-cresol	*1000.000	801.801	19.8	81	0.00
24	t	Hexachlorobenzene	0.240	0.244	-1.7	89	0.00
25	t	Pentachlorophenol	*1000.000	950.956	4.9	82	0.00
26	t	Phenanthrene	1.013	1.023	-1.0	89	0.00
27	t	Anthracene	0.946	0.980	-3.6	89	0.00
28	t	Fluoranthene	1.158	1.133	2.2	86	-0.03
29	t	Pyrene	1.199	1.184	1.3	86	-0.04
30	s	4-Terphenyl-d14	0.835	0.816	2.3	86	-0.04
31	i	Chrysene-d12	1.000	1.000	0.0	89	-0.09
32	t	Benzo[a]anthracene	*1000.000	936.029	6.4	83	-0.09
33	t	3,3'-Dichlorobenzidine	0.511	0.452	11.5	80	-0.09
34	t	Chrysene	1.274	1.281	-0.5	86	-0.09
35	T	Bis(2-ethylhexyl)phthalate	*1000.000	779.019	22.1	74	-0.10

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : ICV.D
Acq On : 06 Mar 2023 03:42 pm
Operator : sv119:ah
Sample : CQICV,32,,1.0 Lot#9919
Misc : WG1752279,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 08 06:53:52 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Mar 08 06:54:19 2023
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 30% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
36	i	Perylene-d12	1.000	1.000	0.0	92	-0.10
37	t	Benzo[b]fluoranthene	1.216	1.204	1.0	86	-0.11
38	t	Benzo[k]fluoranthene	1.091	1.175	-7.7	92	-0.11
39	t	Benzo[a]pyrene	0.985	1.000	-1.5	87	-0.11
40	t	Indeno[1,2,3-cd]pyrene	1.129	1.142	-1.2	91	-0.11
41	t	Dibenzo[a,h]anthracene	1.076	1.175	-9.2	93	-0.11
42	t	Benzo[g,h,i]perylene	1.199	1.313	-9.5	95	-0.12

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : ICV.D
Acq On : 06 Mar 2023 03:42 pm
Operator : sv119:ah
Sample : CQICV,32,,1.0 Lot#9919
Misc : WG1752279,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 08 06:53:52 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Mar 08 06:54:19 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.170	152	65133	4000.000	ng/ml	0.01
Standard Area 1 = 66115			Recovery =	98.51%		
8) Naphthalene-d8	2.828	136	233984	4000.000	ng/ml	0.00
Standard Area 1 = 240629			Recovery =	97.24%		
17) Acenaphthene-d10	3.798	164	118949	4000.000	ng/ml	0.00
Standard Area 1 = 125461			Recovery =	94.81%		
22) Phenanthrene-d10	4.631	188	258671	4000.000	ng/ml	0.00
Standard Area 1 = 281681			Recovery =	91.83%		
31) Chrysene-d12	6.163	240	232975	4000.000	ng/ml	-0.02
Standard Area 1 = 262172			Recovery =	88.86%		
36) Perylene-d12	7.308	264	279986	4000.000	ng/ml	-0.02
Standard Area 1 = 305709			Recovery =	91.59%		
System Monitoring Compounds						
2) 2-Fluorophenol	1.576	112	16704	1042.336	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery =	20.85%		
3) Phenol-d6	1.980	99	19747	1042.933	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery =	20.86%		
7) Nitrobenzene-d5	2.448	82	13715	962.833	ng/ml	0.01
Spiked Amount 2500.000	Range 30 - 130		Recovery =	38.51%		
13) 2-Fluorobiphenyl	3.422	172	48890	1016.279	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery =	40.65%		
21) 2,4,6-Tribromophenol	4.239	330	4642	968.581	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery =	19.37%		
30) 4-Terphenyl-d14	5.546	244	52781	977.889	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery =	39.12%		
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.035	93	17371	986.895	ng/ml	89
5) n-nitrosodi-n-propylamine	2.369	70	9754	961.259	ng/ml	95
6) Hexachloroethane	2.427	117	7245	1000.836	ng/ml	95
9) Naphthalene	2.840	128	56258	1015.333	ng/ml	100
10) Hexachlorobutadiene	2.915	225	10948	1016.542	ng/ml	100
11) 2-Methylnaphthalene	3.217	142	38643	1037.537	ng/ml	99
12) 1-Methylnaphthalene	3.271	142	35300	982.769	ng/ml	100
14) 2-Chloronaphthalene	3.485	162	39886	985.947	ng/ml	99
15) 2,6-Dinitrotoluene	3.678	165	5601	788.795	ng/ml	88
16) Acenaphthylene	3.717	152	55747	954.997	ng/ml	99
18) Acenaphthene	3.815	153	38739	1027.229	ng/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : ICV.D
Acq On : 06 Mar 2023 03:42 pm
Operator : sv119:ah
Sample : CQICV,32,,1.0 Lot#9919
Misc : WG1752279,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 08 06:53:52 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Mar 08 06:54:19 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\sv119\230306nLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
19) 2,4-Dinitrotoluene	3.905	165	7040	837.972	ng/ml#	75
20) Fluorene	4.105	166	43799	1010.467	ng/ml	98
23) 4,6-Dinitro-o-cresol	4.132	198	3471	801.801	ng/ml	99
24) Hexachlorobenzene	4.420	284	15784	1015.343	ng/ml	98
25) Pentachlorophenol	4.528	266	5261	950.956	ng/ml	100
26) Phenanthrene	4.645	178	66169	1009.611	ng/ml	100
27) Anthracene	4.672	178	63396	1036.831	ng/ml	100
28) Fluoranthene	5.320	202	73300	978.711	ng/ml	98
29) Pyrene	5.449	202	76594	987.503	ng/ml	99
32) Benzo[a]anthracene	6.156	228	71448	936.029	ng/ml	100
33) 3,3'-Dichlorobenzidine	6.146	252	26320	883.554	ng/ml	100
34) Chrysene	6.178	228	74608	1005.367	ng/ml	100
35) Bis(2-ethylhexyl)phtha...	6.189	149	26488	779.019	ng/ml	98
37) Benzo[b]fluoranthene	6.959	252	84281	989.892	ng/ml	100
38) Benzo[k]fluoranthene	6.981	252	82266	1077.446	ng/ml	100
39) Benzo[a]pyrene	7.251	252	70006	1015.859	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.472	276	79951	1011.586	ng/ml	98
41) Dibenzo[a,h]anthracene	8.505	278	82263M6	1092.251	ng/ml	
42) Benzo[g,h,i]perylene	8.796	276	91873M2	1094.381	ng/ml	

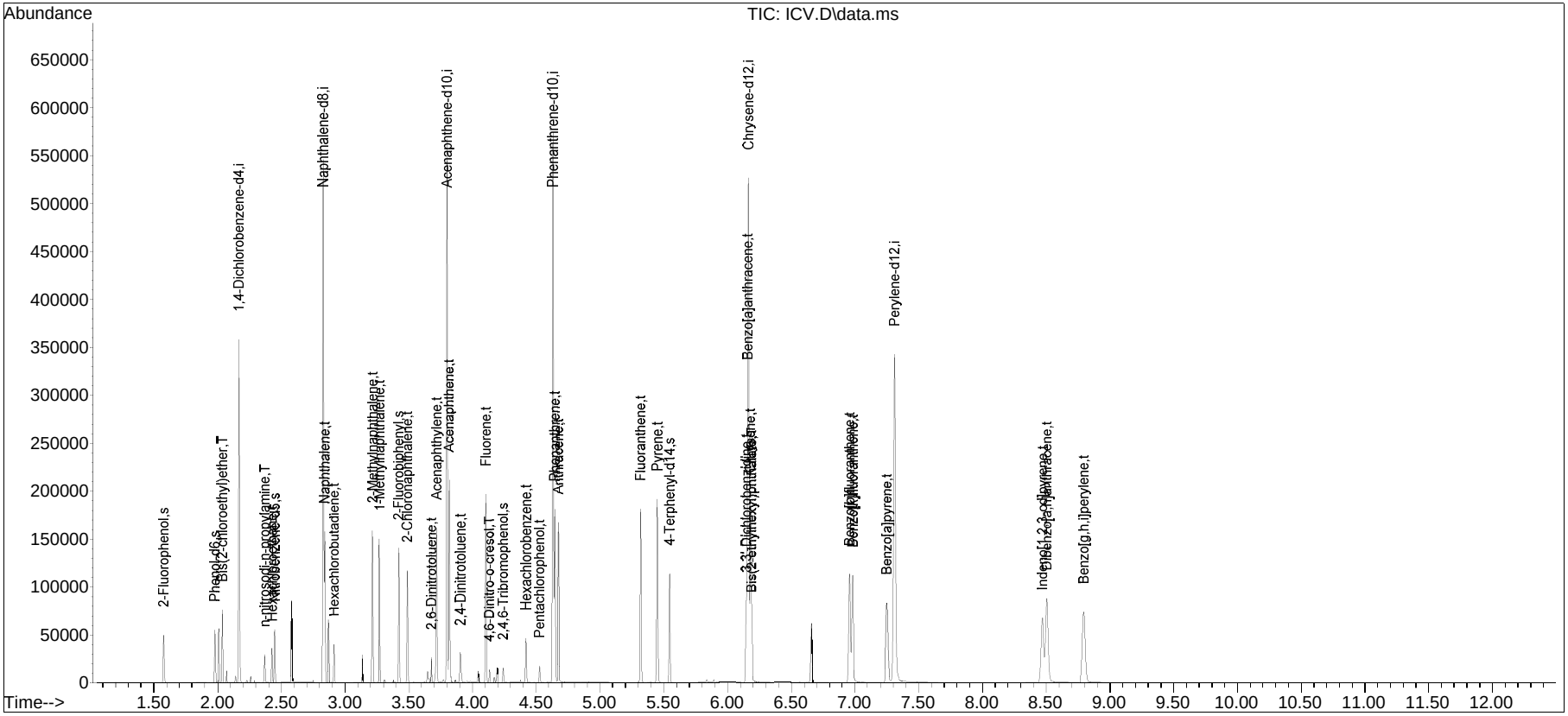
(#) = qualifier out of range (m) = manual integration (+) = signals summed

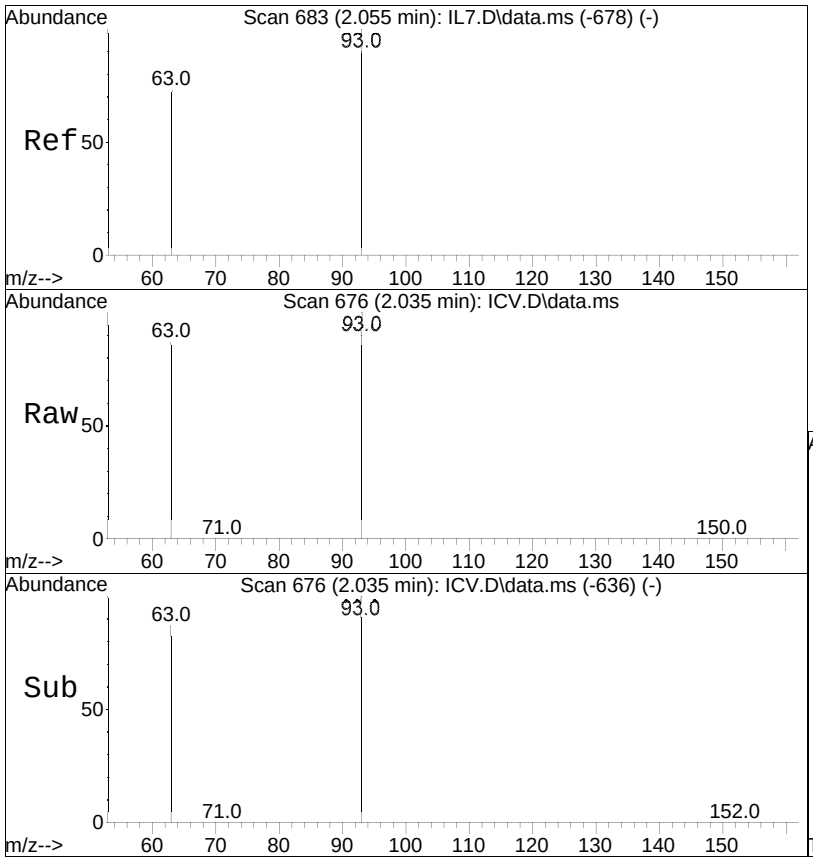
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230306nLVIical\
Data File : ICV.D
Acq On : 06 Mar 2023 03:42 pm
Operator : sv119:ah
Sample : CQICV,32,,1.0 Lot#9919
Misc : WG1752279,,ical
ALS Vial : 11 Sample Multiplier: 1

Quant Time: Mar 08 06:53:52 2023
Quant Method : I:\8270SIM\sv119\230306nLVIical\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Mar 08 06:54:19 2023
Response via : Initial Calibration

Sub List : Default - All compounds listedIical\IL7.D•

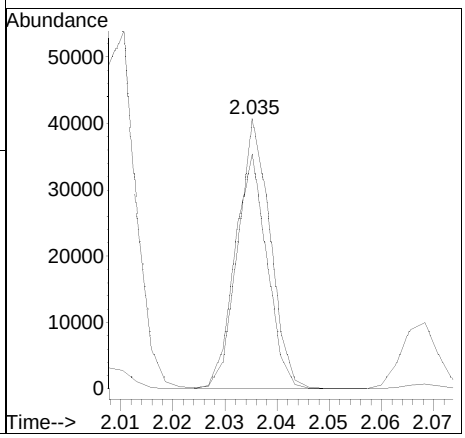


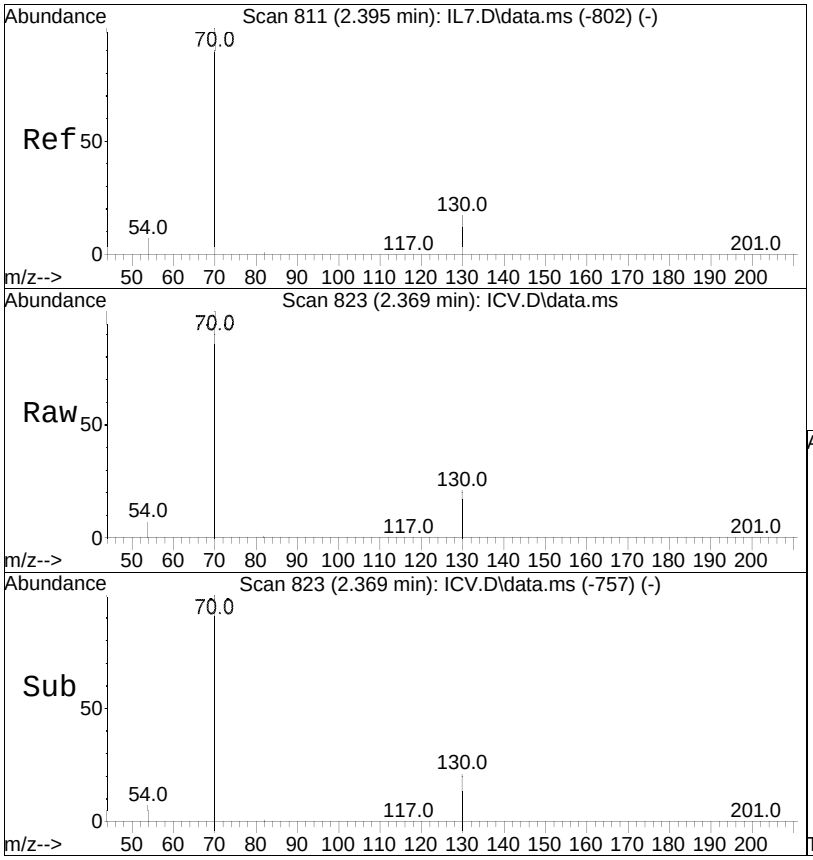


#4
Bis(2-chloroethyl)ether
Concen: 986.90 ng/ml
RT: 2.035 min Scan# 676
Delta R.T. 0.011 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion: 93 Resp: 17371

Ion	Ratio	Lower	Upper
93	100		
63	87.5	62.6	94.0

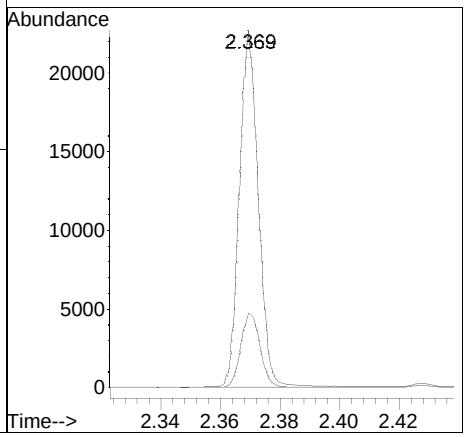


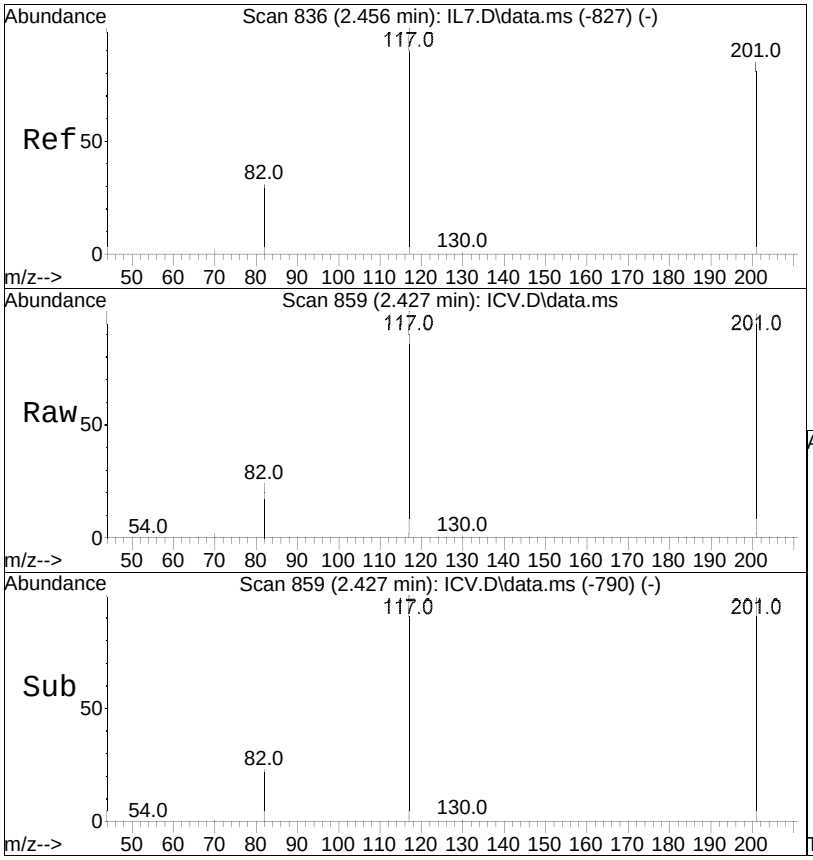


#5
n-nitrosodi-n-propylamine
Concen: 961.26 ng/ml
RT: 2.369 min Scan# 823
Delta R.T. 0.011 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion: 70 Resp: 9754

Ion	Ratio	Lower	Upper
70	100		
130	21.1	15.0	22.6

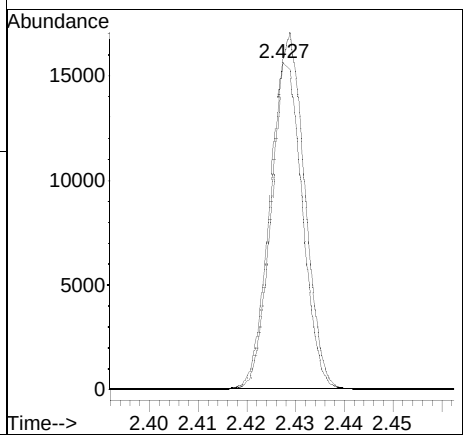


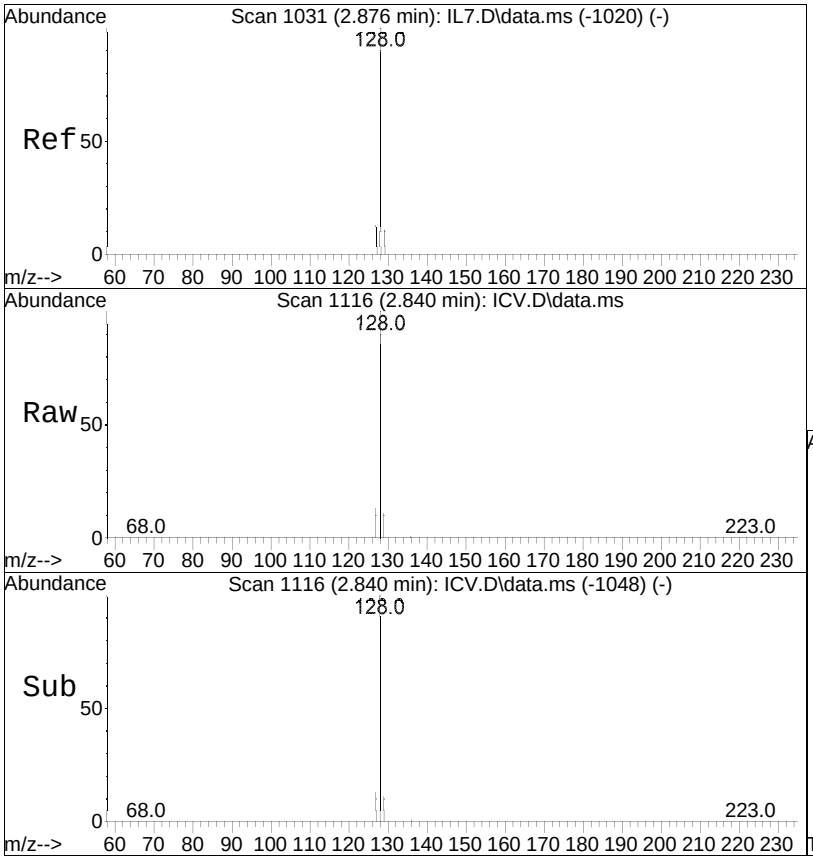


#6
Hexachloroethane
Concen: 1000.84 ng/ml
RT: 2.427 min Scan# 859
Delta R.T. 0.010 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:117 Resp: 7245

Ion	Ratio	Lower	Upper
117	100		
201	106.7	81.5	122.3

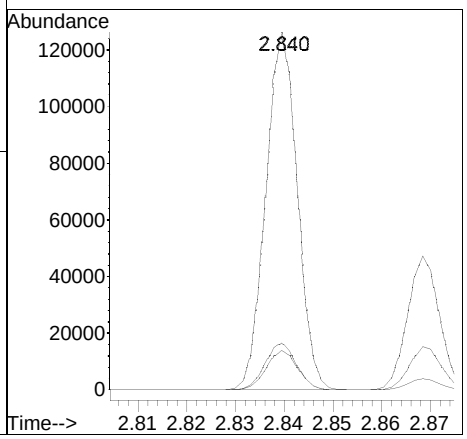


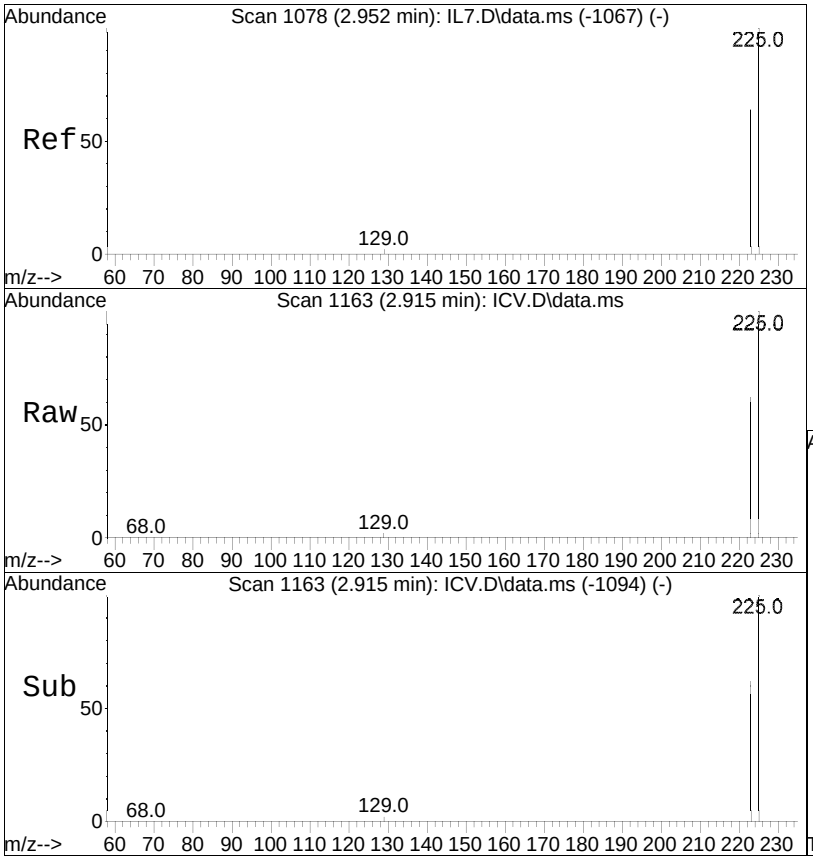


#9
Naphthalene
Concen: 1015.33 ng/ml
RT: 2.840 min Scan# 1116
Delta R.T. 0.009 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:128 Resp: 56258

Ion	Ratio	Lower	Upper
128	100		
129	11.1	8.8	13.2
127	13.0	10.6	15.8

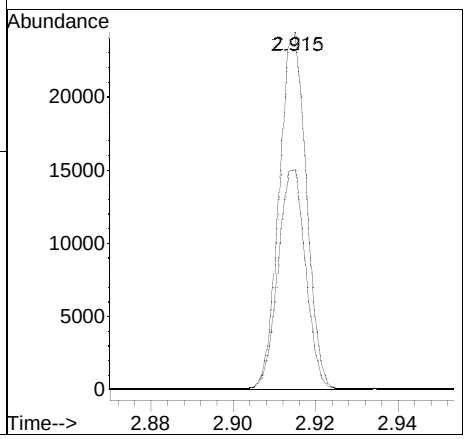


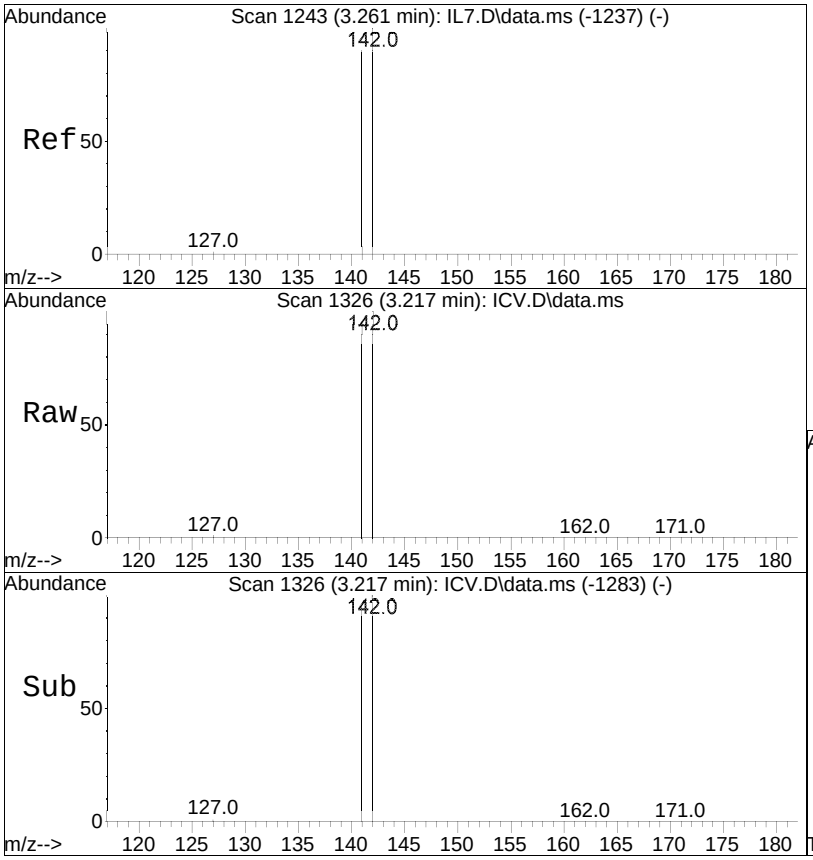


#10
Hexachlorobutadiene
Concen: 1016.54 ng/ml
RT: 2.915 min Scan# 1163
Delta R.T. 0.010 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:225 Resp: 10948

Ion	Ratio	Lower	Upper
225	100		
223	62.6	50.1	75.1

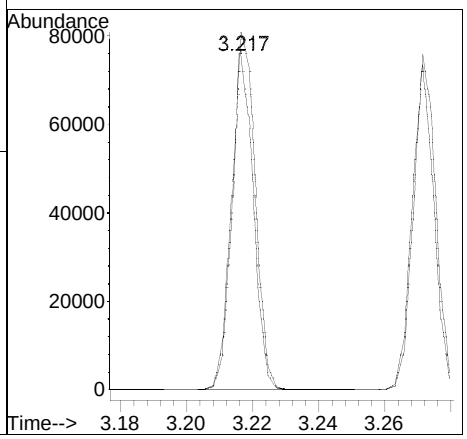


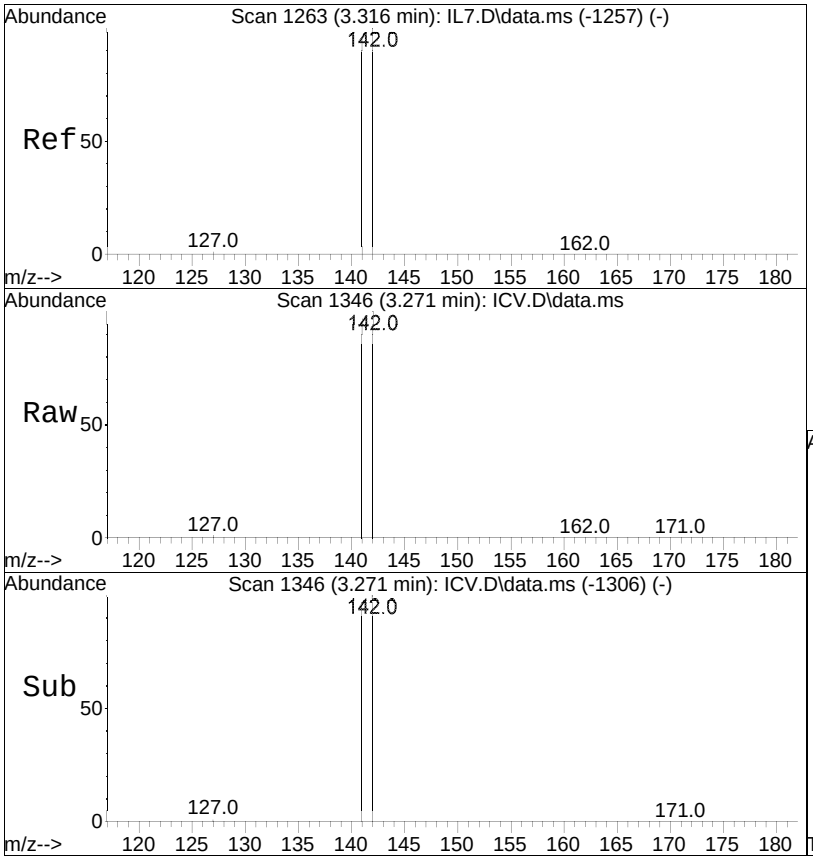


#11
2-Methylnaphthalene
Concen: 1037.54 ng/ml
RT: 3.217 min Scan# 1326
Delta R.T. 0.009 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:142 Resp: 38643

Ion	Ratio	Lower	Upper
142	100		
141	91.4	74.1	111.1

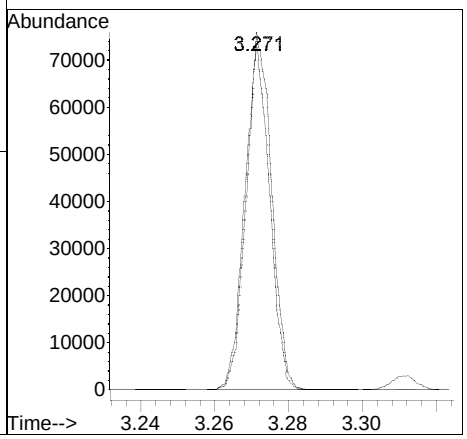


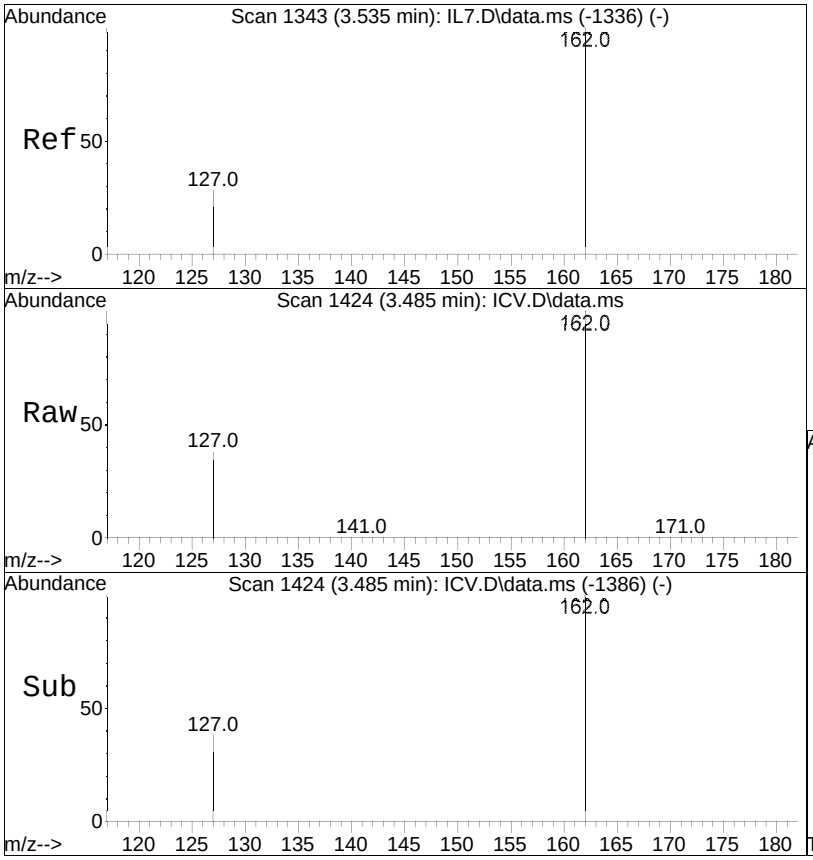


#12
1-Methylnaphthalene
Concen: 982.77 ng/ml
RT: 3.271 min Scan# 1346
Delta R.T. 0.008 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:142 Resp: 35300

Ion	Ratio	Lower	Upper
142	100		
141	95.2	76.6	114.8

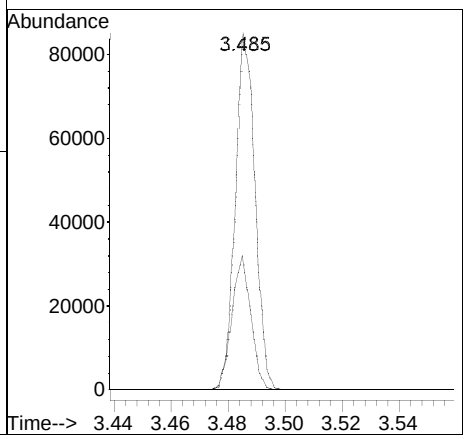


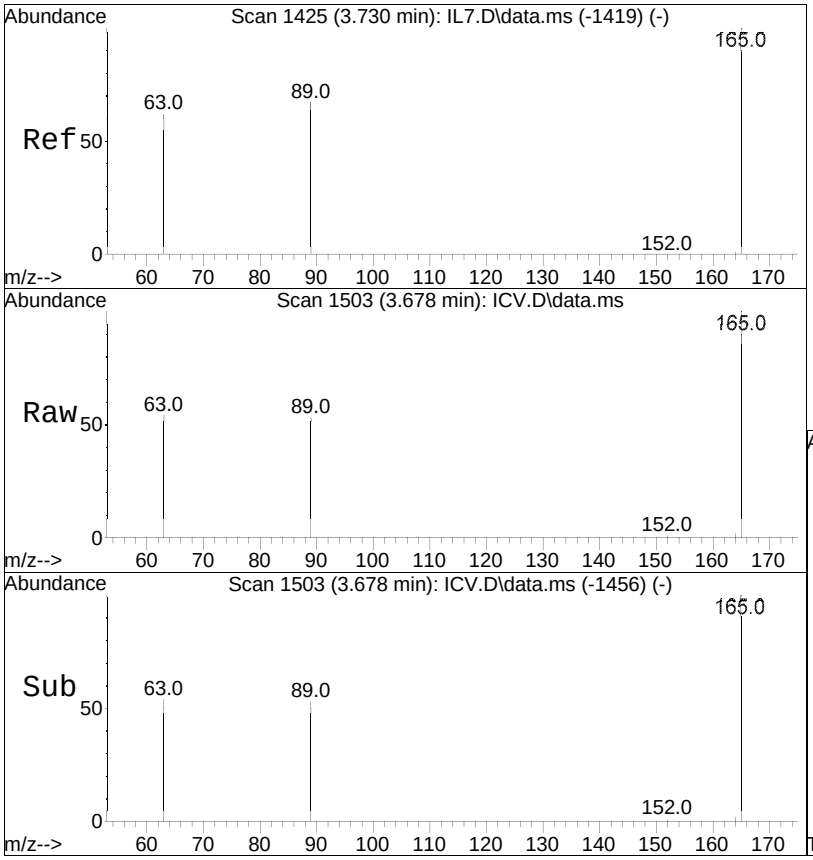


#14
2-Chloronaphthalene
Concen: 985.95 ng/ml
RT: 3.485 min Scan# 1424
Delta R.T. 0.005 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:162 Resp: 39886

Ion	Ratio	Lower	Upper
162	100		
127	36.3	29.7	44.5

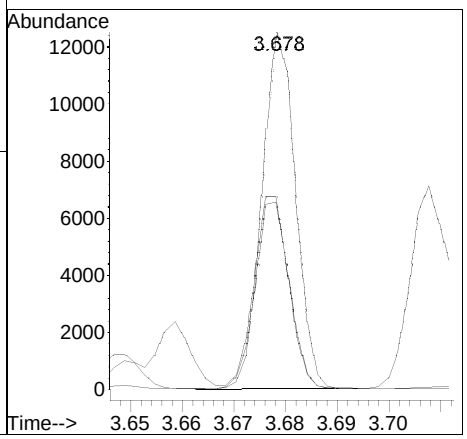


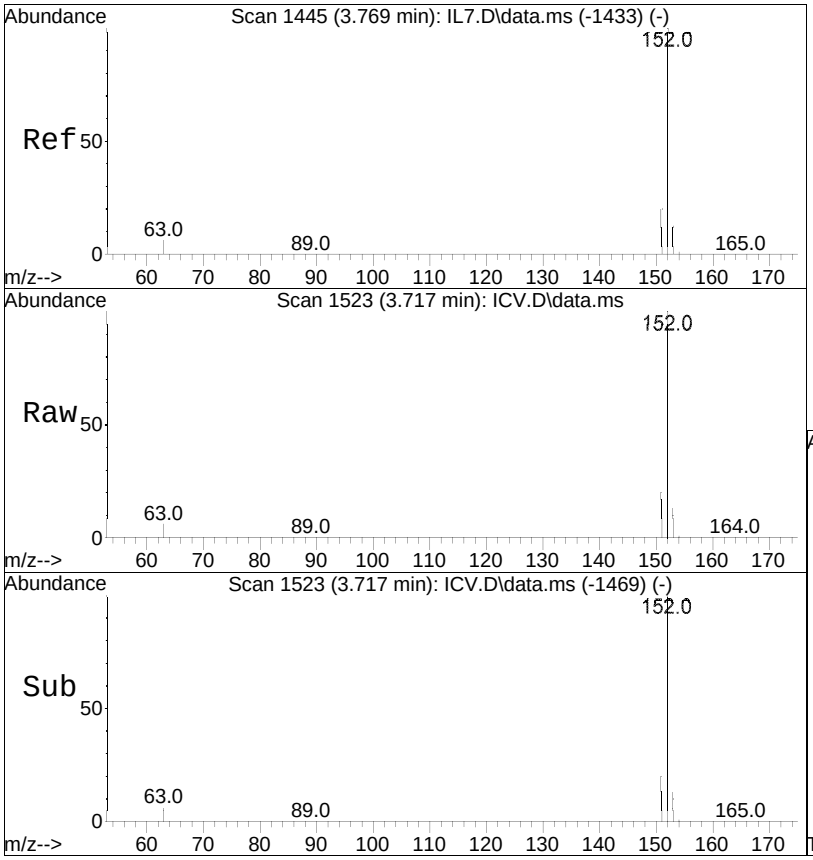


#15
2,6-Dinitrotoluene
Concen: 788.80 ng/ml
RT: 3.678 min Scan# 1503
Delta R.T. 0.006 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:165 Resp: 5601

Ion	Ratio	Lower	Upper
165	100		
89	54.6	52.8	79.2
63	56.4	50.9	76.3

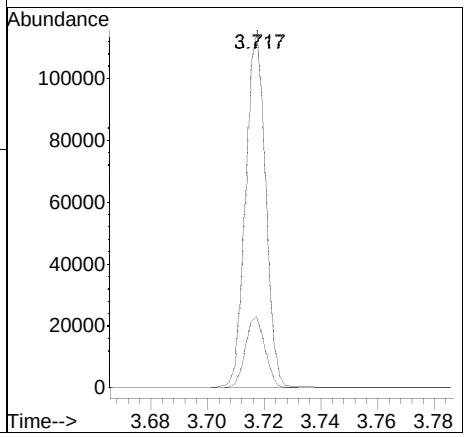


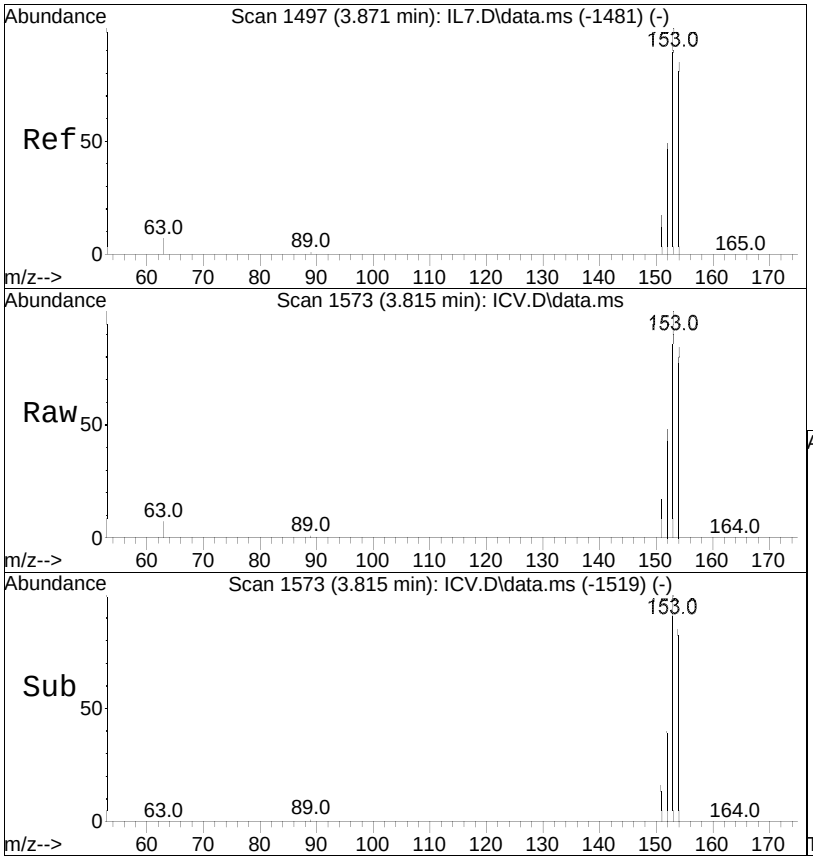


#16
Acenaphthylene
Concen: 955.00 ng/ml
RT: 3.717 min Scan# 1523
Delta R.T. 0.008 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:152 Resp: 55747

Ion	Ratio	Lower	Upper
152	100		
151	19.8	16.0	24.0

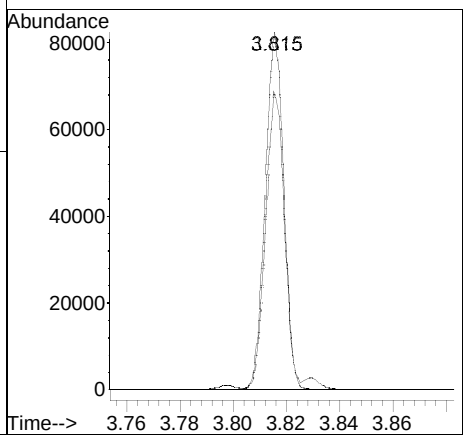


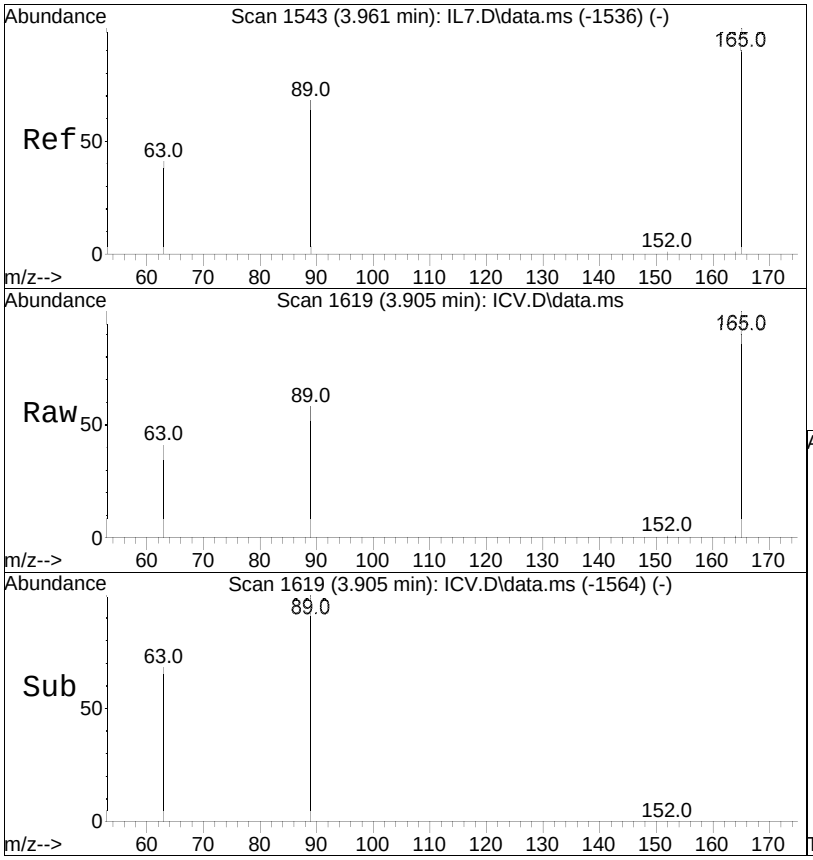


#18
Acenaphthene
Concen: 1027.23 ng/ml
RT: 3.815 min Scan# 1573
Delta R.T. 0.006 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:153 Resp: 38739

Ion	Ratio	Lower	Upper
153	100		
154	84.6	66.9	100.3

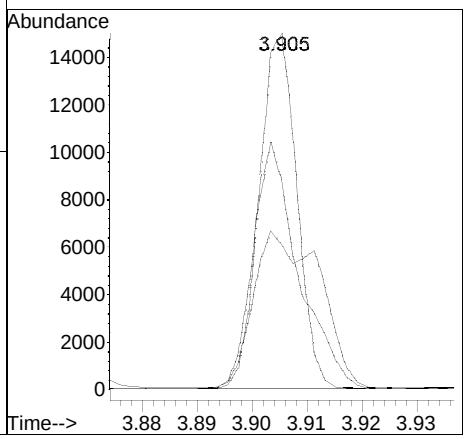


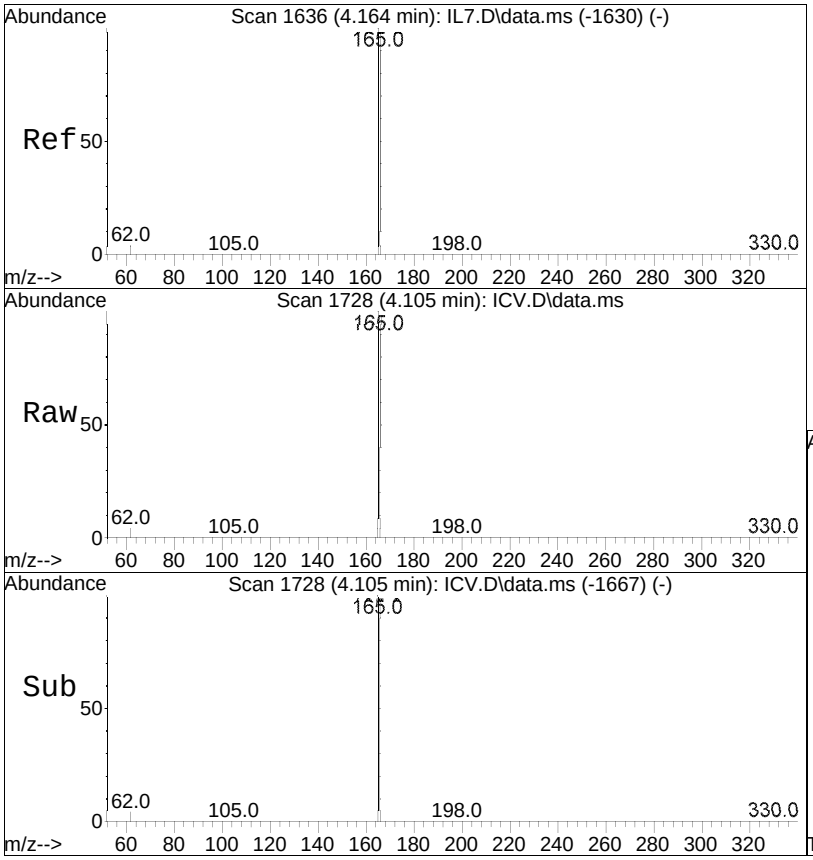


#19
2,4-Dinitrotoluene
Concen: 837.97 ng/ml
RT: 3.905 min Scan# 1619
Delta R.T. 0.008 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:165 Resp: 7040

Ion	Ratio	Lower	Upper
165	100		
89	83.9	80.1	120.1
63	77.3	38.9	58.3#

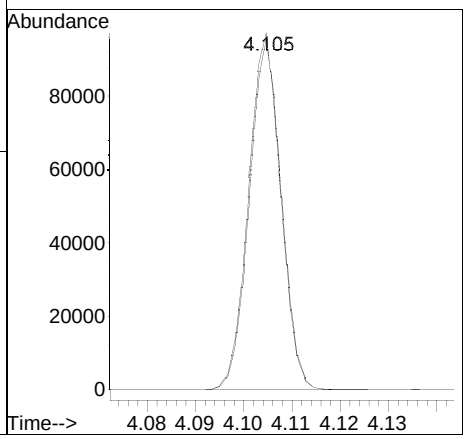


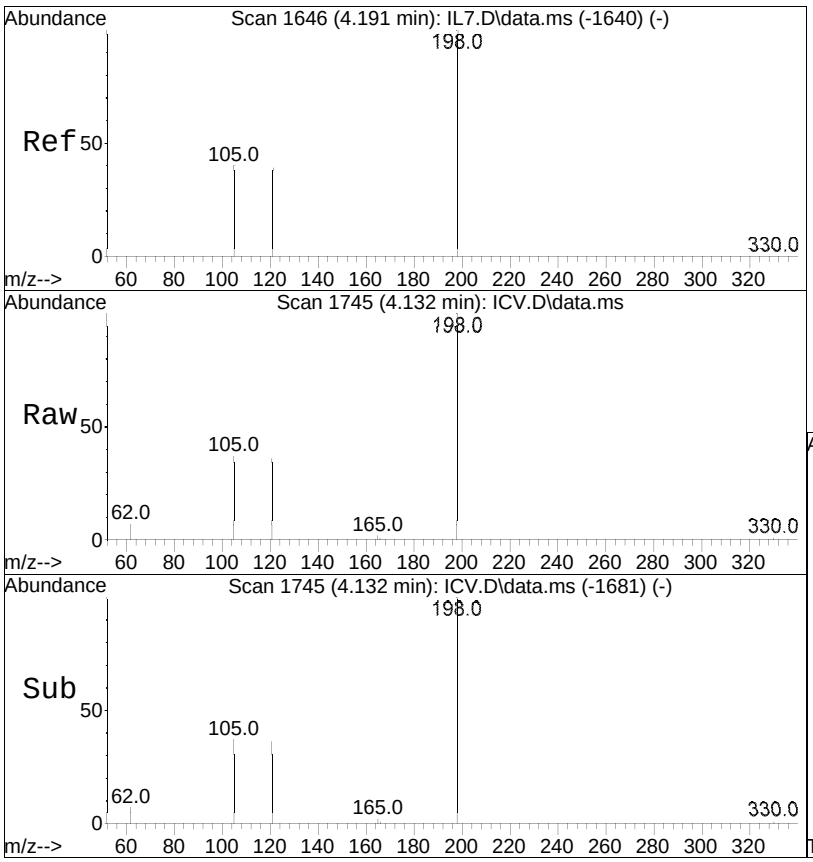


#20
Fluorene
Concen: 1010.47 ng/ml
RT: 4.105 min Scan# 1728
Delta R.T. 0.005 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:166 Resp: 43799

Ion	Ratio	Lower	Upper
166	100		
165	101.9	82.9	124.3

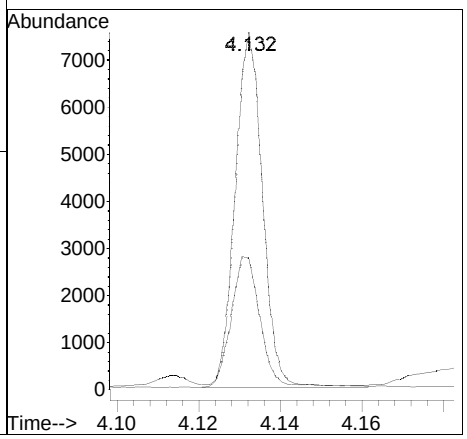


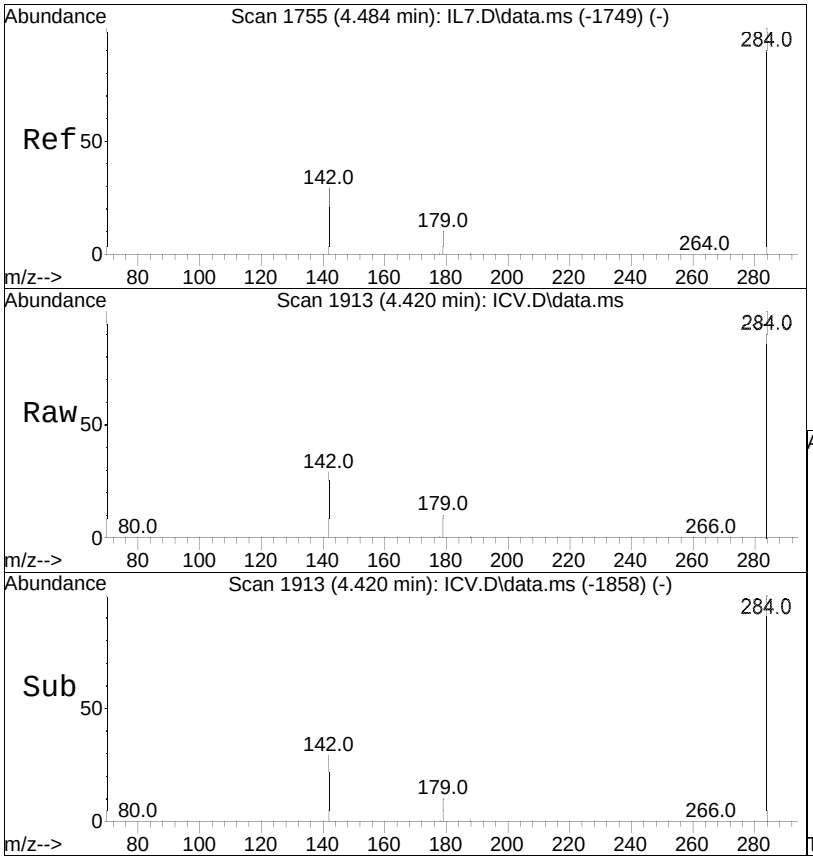


#23
4,6-Dinitro-o-cresol
Concen: 801.80 ng/ml
RT: 4.132 min Scan# 1745
Delta R.T. 0.005 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:198 Resp: 3471

Ion	Ratio	Lower	Upper
198	100		
105	39.9	32.2	48.4

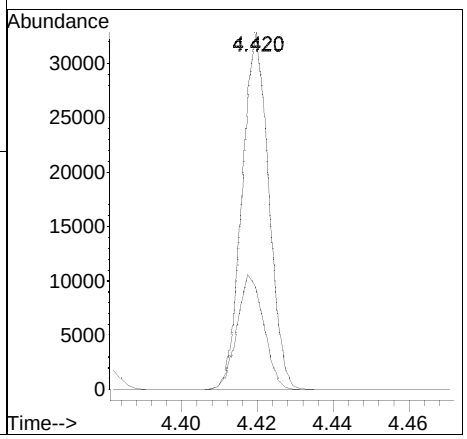


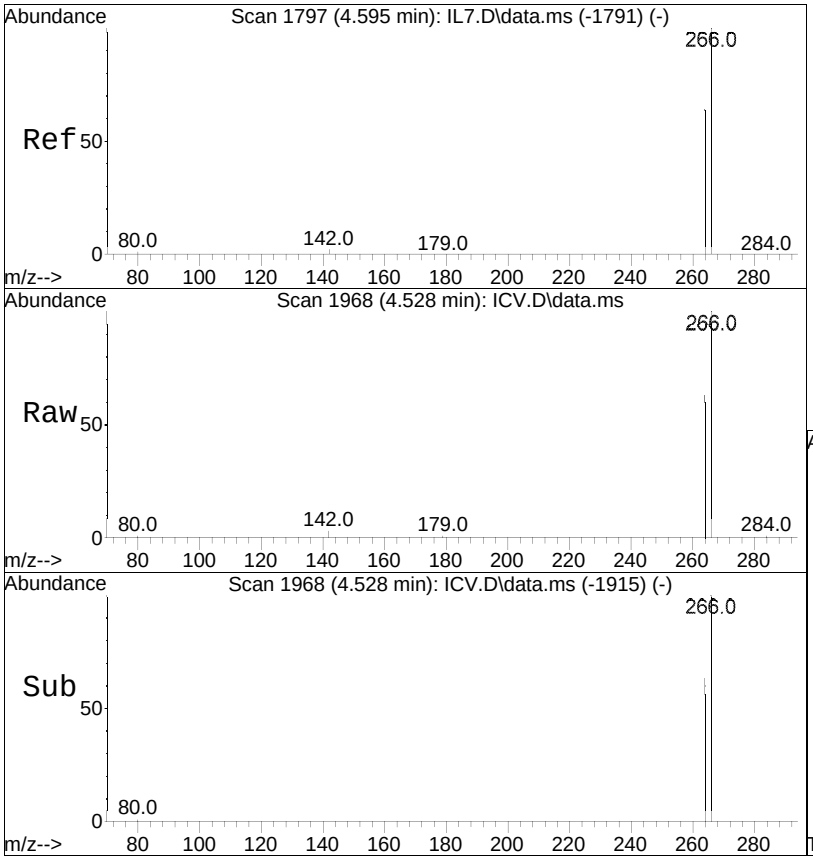


#24
Hexachlorobenzene
Concen: 1015.34 ng/ml
RT: 4.420 min Scan# 1913
Delta R.T. 0.005 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:284 Resp: 15784

Ion	Ratio	Lower	Upper
284	100		
142	32.2	26.9	40.3

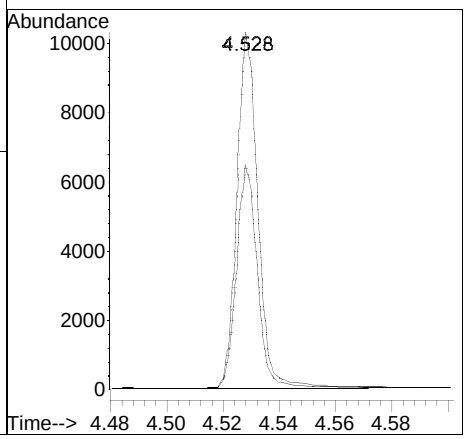


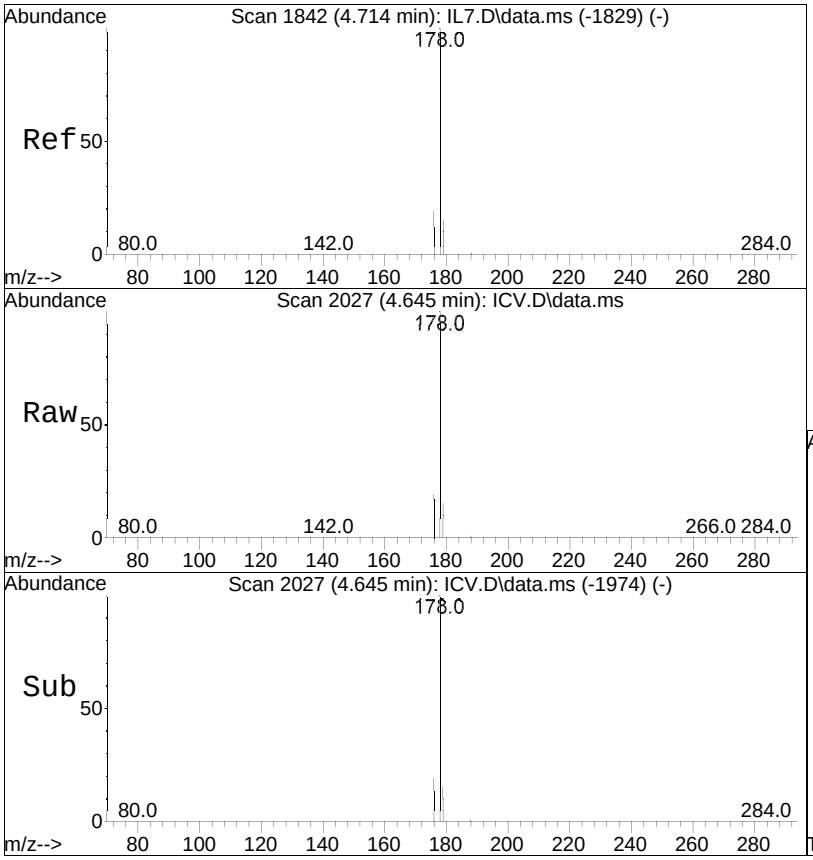


#25
Pentachlorophenol
Concen: 950.96 ng/ml
RT: 4.528 min Scan# 1968
Delta R.T. 0.004 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:266 Resp: 5261

Ion	Ratio	Lower	Upper
266	100		
264	63.0	50.7	76.1

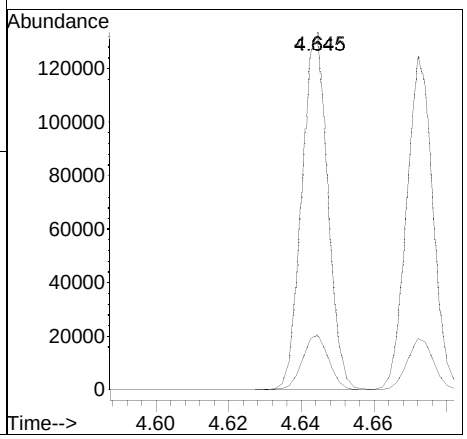


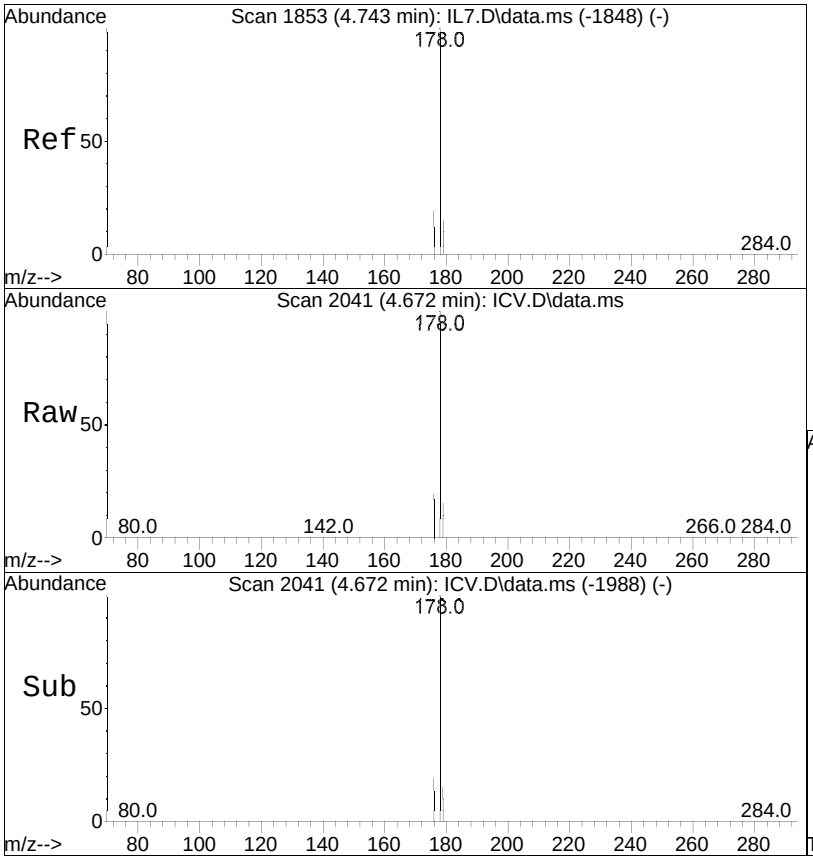


#26
Phenanthrene
Concen: 1009.61 ng/ml
RT: 4.645 min Scan# 2027
Delta R.T. 0.005 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:178 Resp: 66169

Ion	Ratio	Lower	Upper
178	100		
179	15.5	12.3	18.5

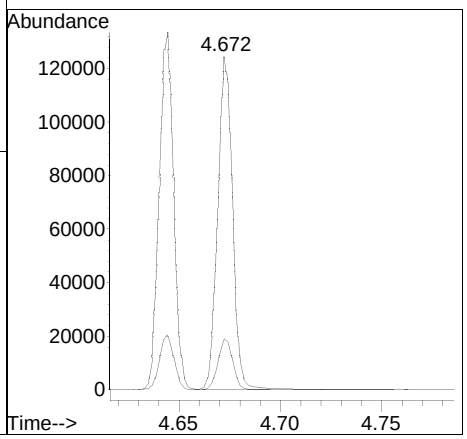


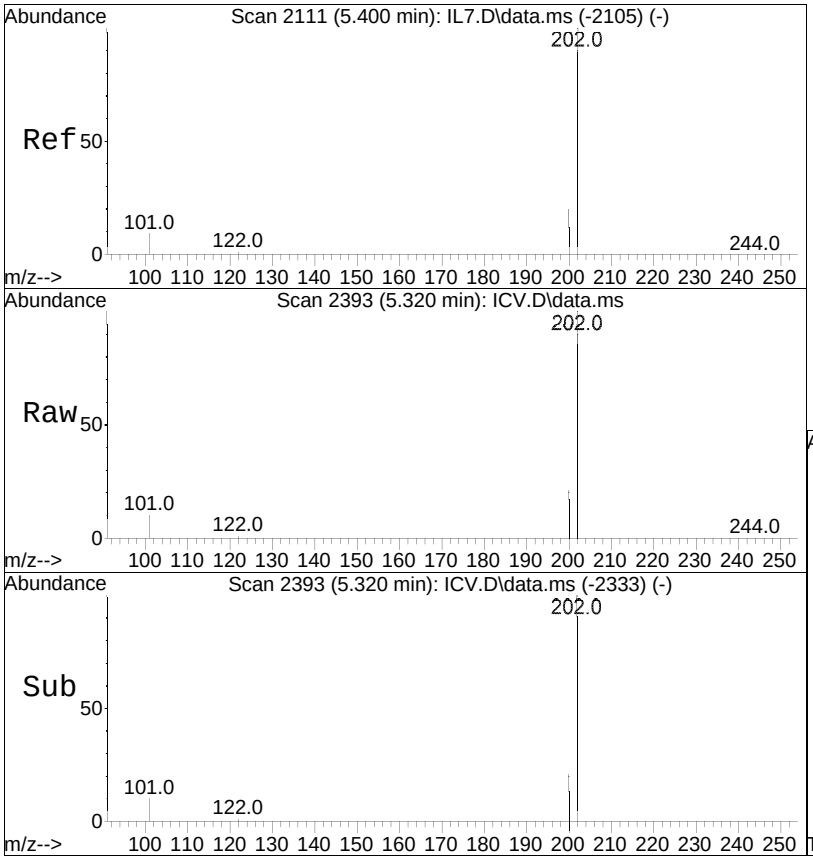


#27
Anthracene
Concen: 1036.83 ng/ml
RT: 4.672 min Scan# 2041
Delta R.T. 0.004 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:178 Resp: 63396

Ion	Ratio	Lower	Upper
178	100		
179	15.3	12.2	18.4

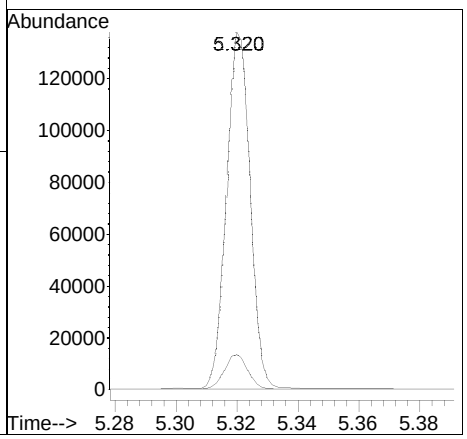


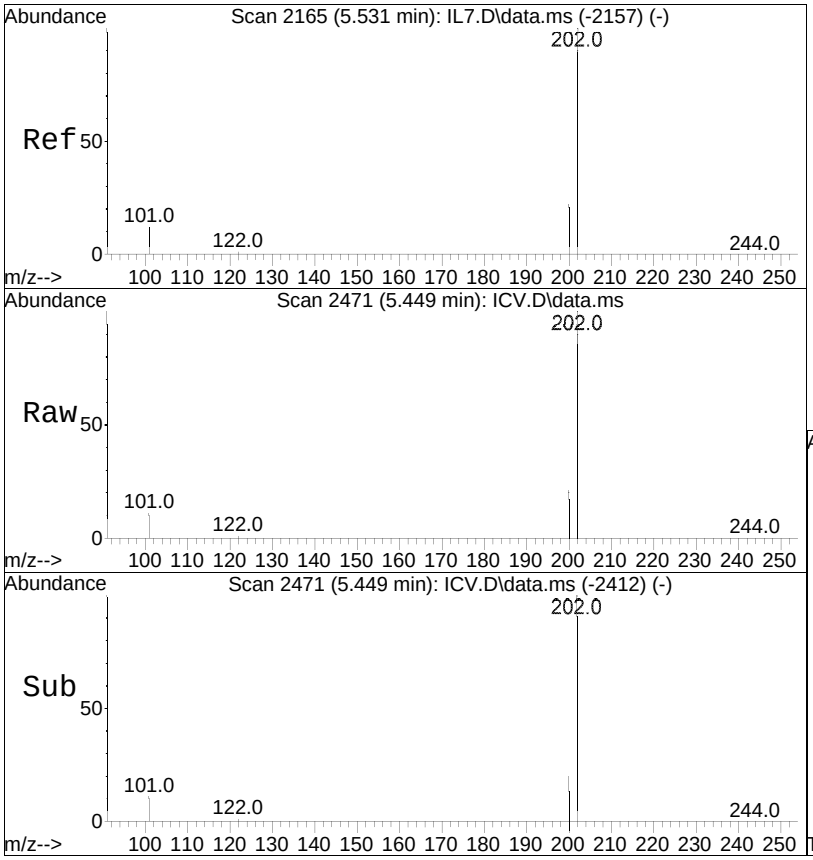


#28
Fluoranthene
Concen: 978.71 ng/ml
RT: 5.320 min Scan# 2393
Delta R.T. -0.000 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:202 Resp: 73300

Ion	Ratio	Lower	Upper
202	100		
101	9.8	8.3	12.5

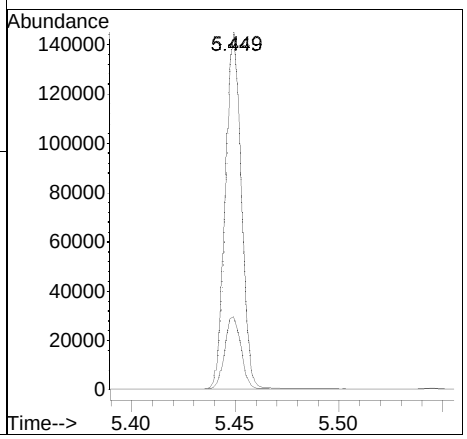


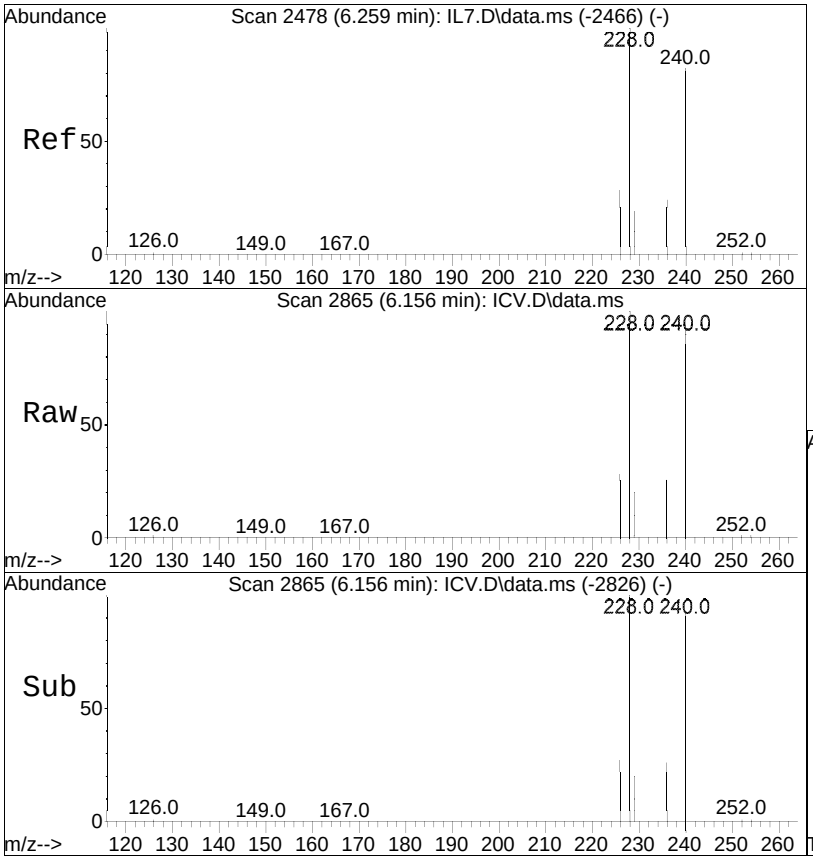


#29
Pyrene
Concen: 987.50 ng/ml
RT: 5.449 min Scan# 2471
Delta R.T. -0.002 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:202 Resp: 76594

Ion	Ratio	Lower	Upper
202	100		
200	21.0	17.3	25.9

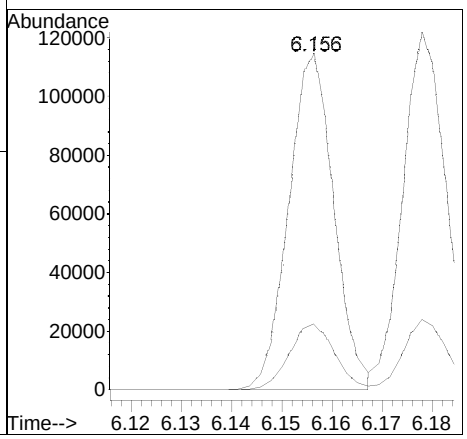


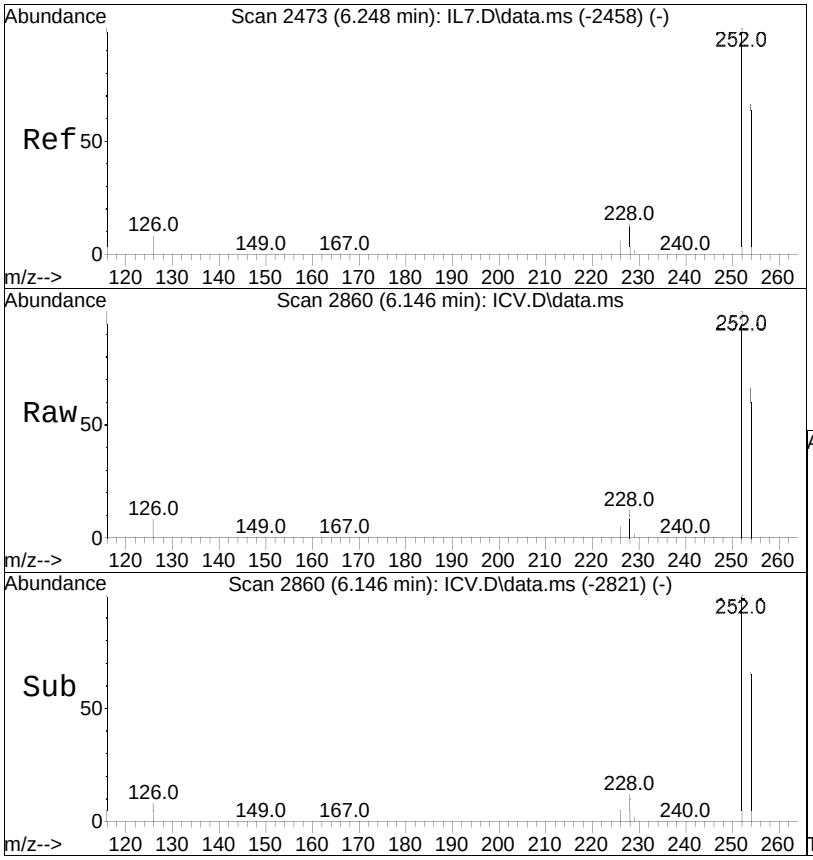


#32
Benzo[a]anthracene
Concen: 936.03 ng/ml
RT: 6.156 min Scan# 2865
Delta R.T. -0.017 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:228 Resp: 71448

Ion	Ratio	Lower	Upper
228	100		
229	19.7	15.6	23.4

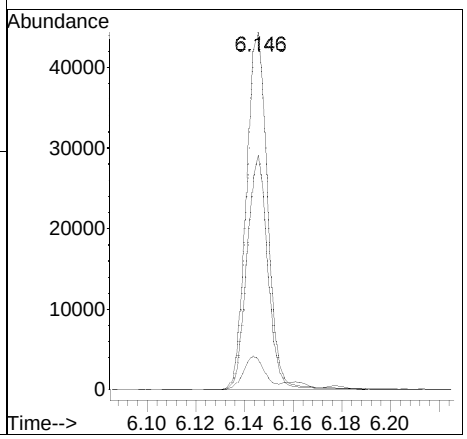


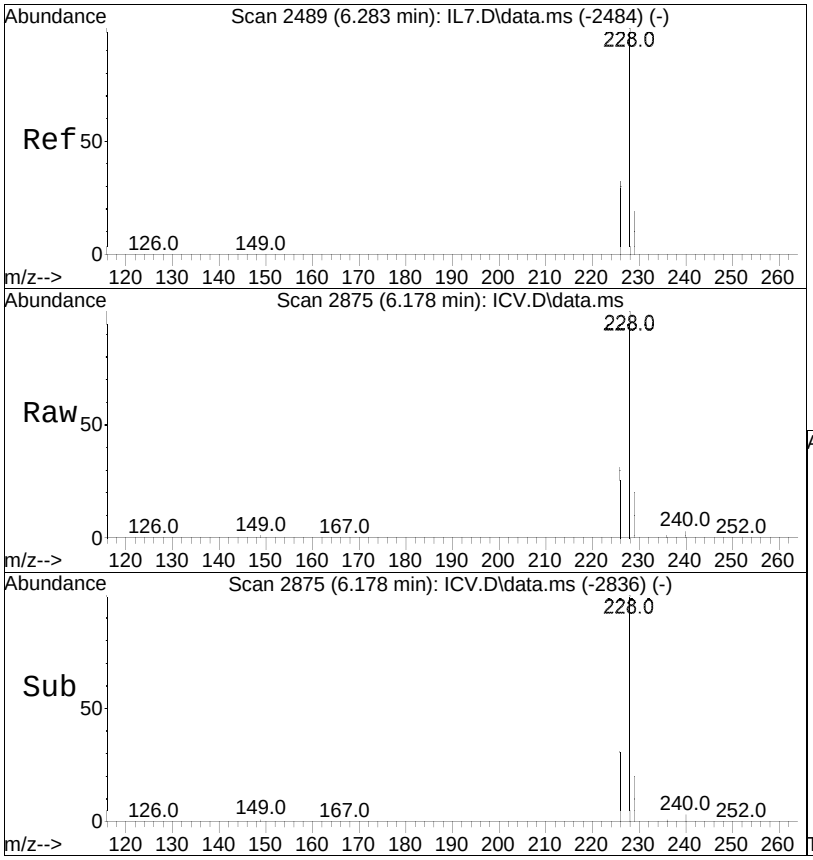


#33
3,3'-Dichlorobenzidine
Concen: 883.55 ng/ml
RT: 6.146 min Scan# 2860
Delta R.T. -0.017 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:252 Resp: 26320

Ion	Ratio	Lower	Upper
252	100		
126	9.6	7.7	11.5
254	65.0	52.0	78.0

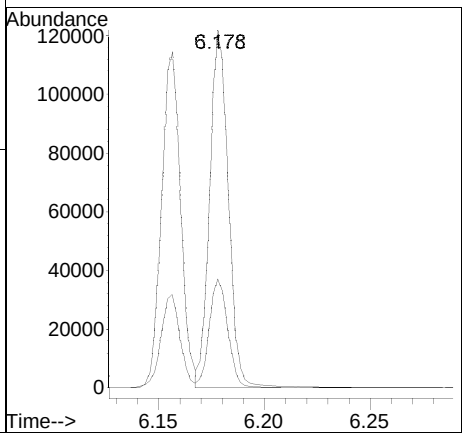


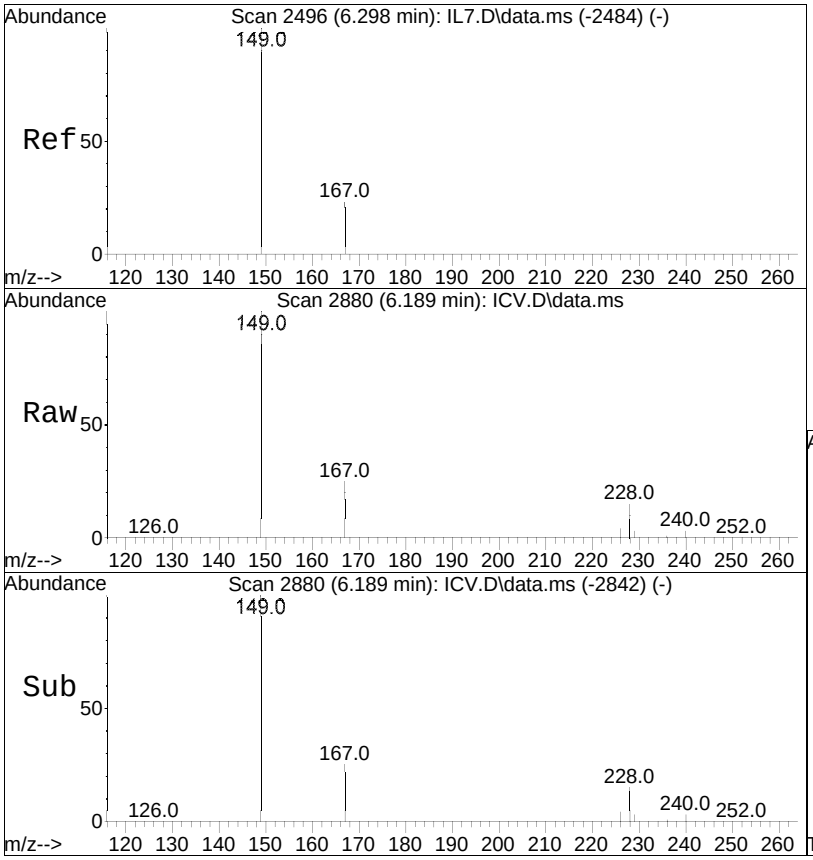


#34
Chrysene
Concen: 1005.37 ng/ml
RT: 6.178 min Scan# 2875
Delta R.T. -0.017 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:228 Resp: 74608

Ion	Ratio	Lower	Upper
228	100		
226	30.4	24.5	36.7

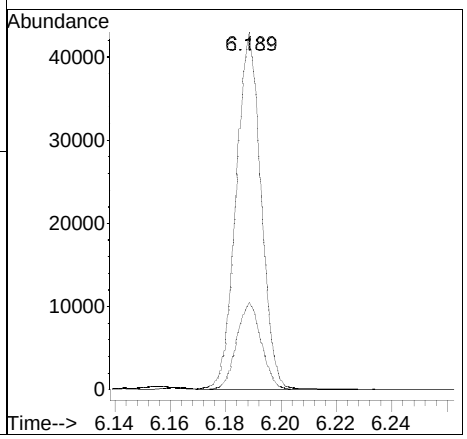


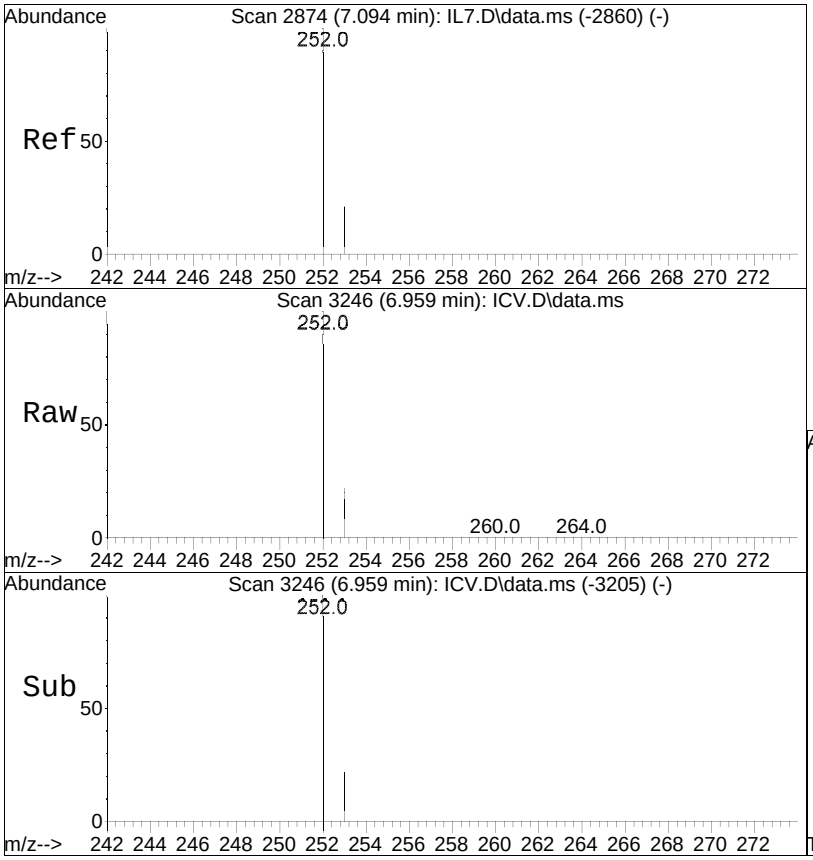


#35
Bis(2-ethylhexyl)phthalate
Concen: 779.02 ng/ml
RT: 6.189 min Scan# 2880
Delta R.T. -0.019 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:149 Resp: 26488

Ion	Ratio	Lower	Upper
149	100		
167	24.0	18.5	27.7

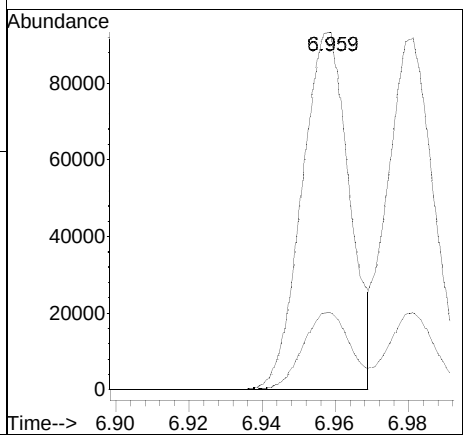


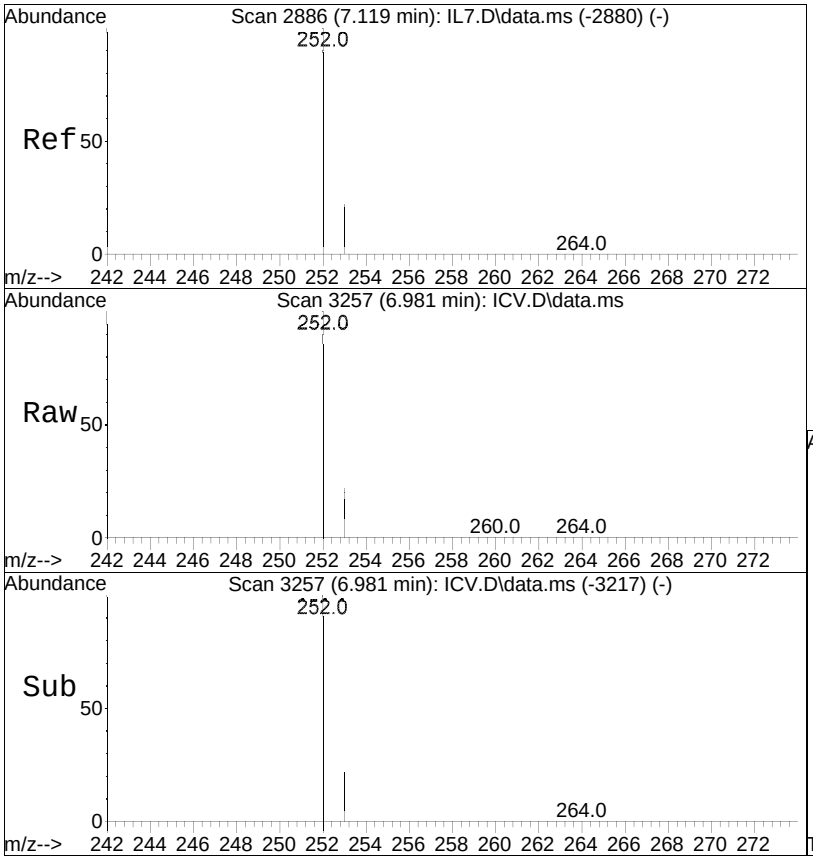


#37
Benzo[b]fluoranthene
Concen: 989.89 ng/ml
RT: 6.959 min Scan# 3246
Delta R.T. -0.016 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:252 Resp: 84281

Ion	Ratio	Lower	Upper
252	100		
253	21.7	17.3	25.9

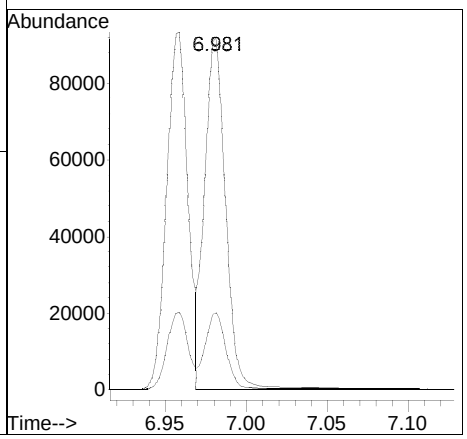


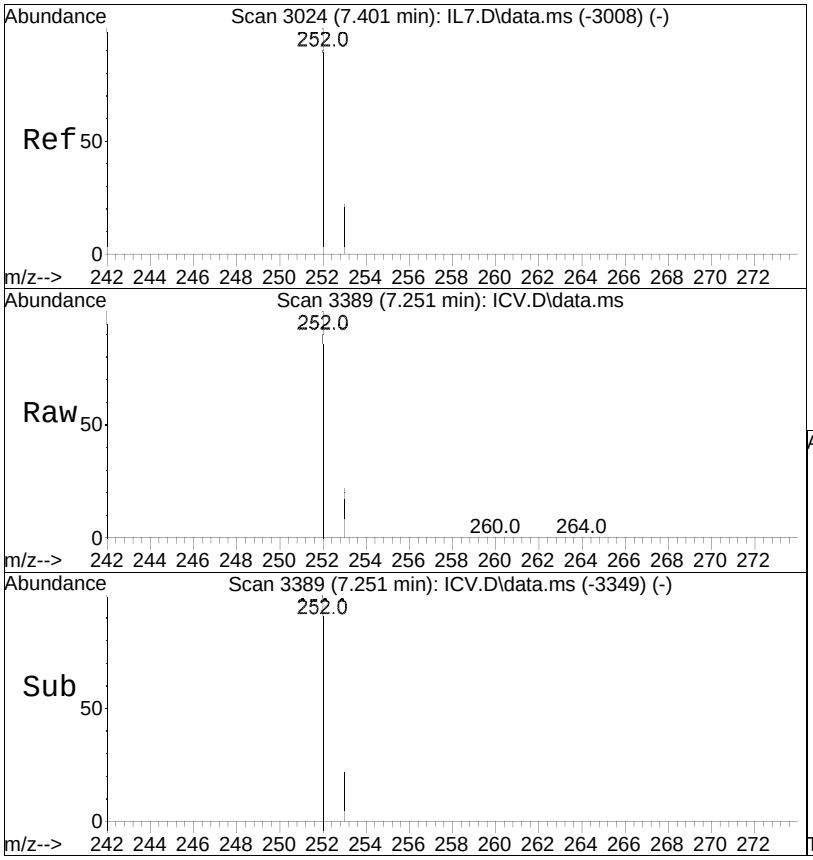


#38
Benzo[k]fluoranthene
Concen: 1077.45 ng/ml
RT: 6.981 min Scan# 3257
Delta R.T. -0.018 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:252 Resp: 82266

Ion	Ratio	Lower	Upper
252	100		
253	22.0	17.4	26.2

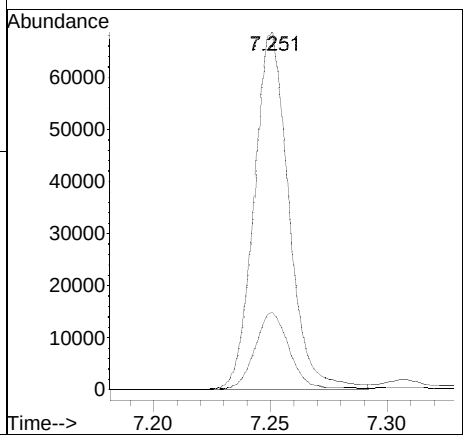


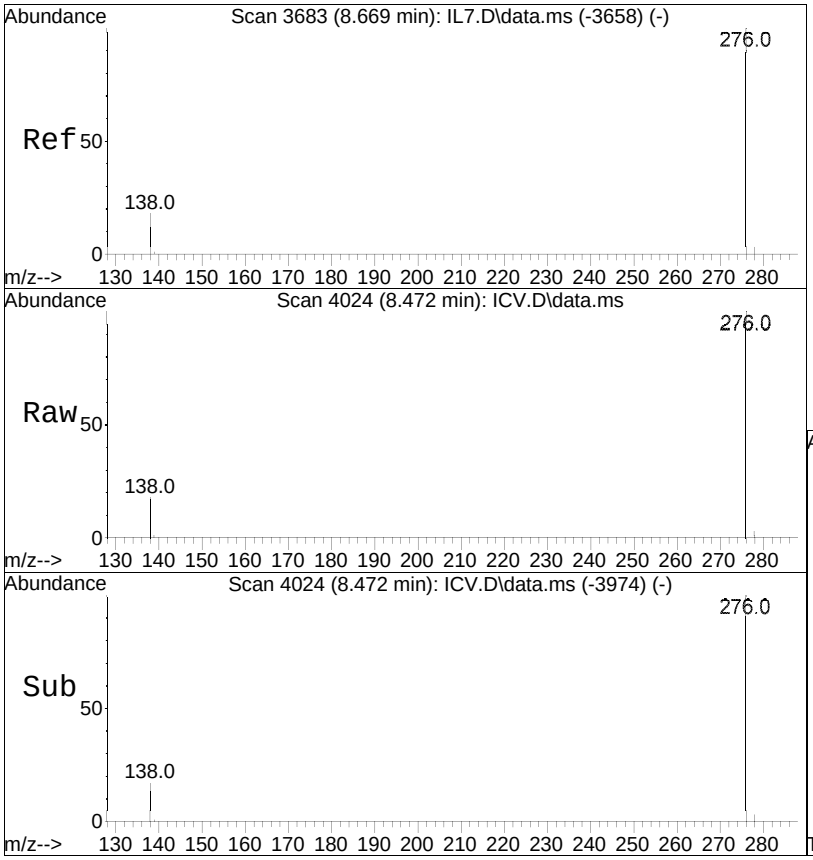


#39
Benzo[a]pyrene
Concen: 1015.86 ng/ml
RT: 7.251 min Scan# 3389
Delta R.T. -0.018 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:252 Resp: 70006

Ion	Ratio	Lower	Upper
252	100		
253	21.6	17.4	26.0

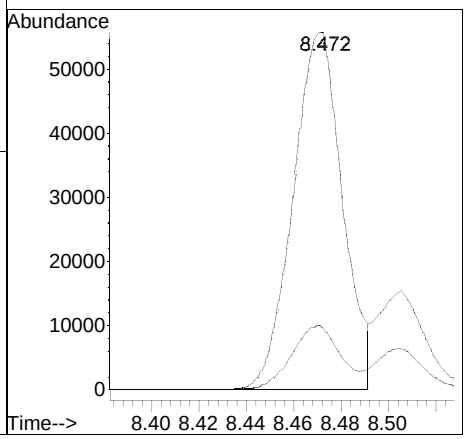


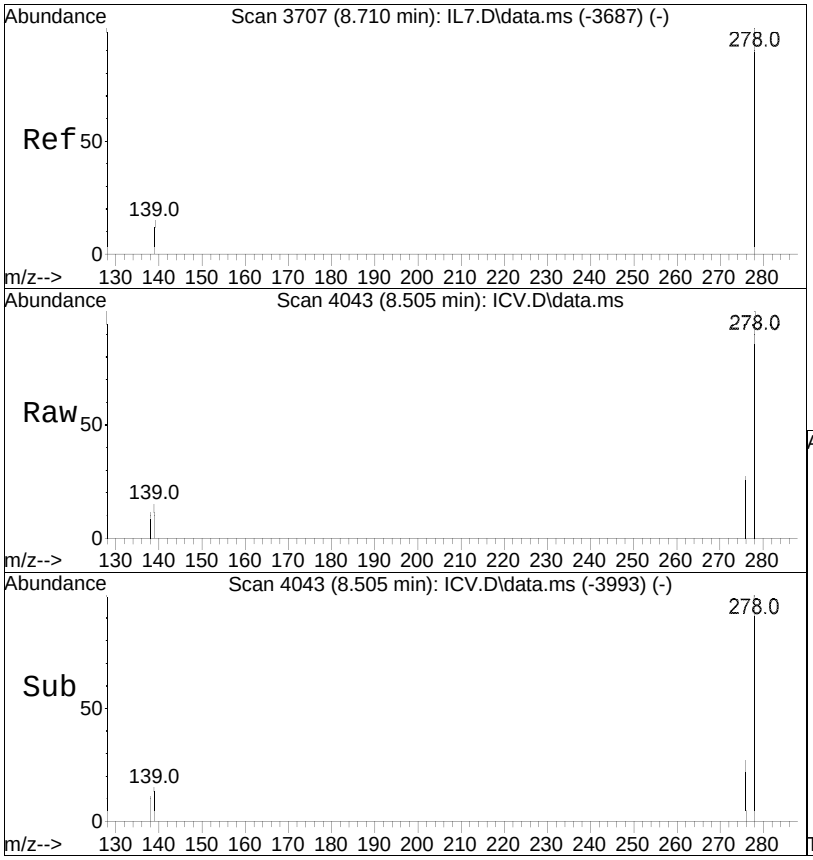


#40
Indeno[1,2,3-cd]pyrene
Concen: 1011.59 ng/ml
RT: 8.472 min Scan# 4024
Delta R.T. -0.014 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:276 Resp: 79951

Ion	Ratio	Lower	Upper
276	100		
138	17.7	14.8	22.2

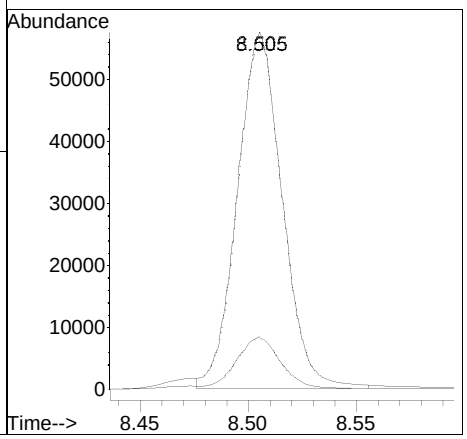


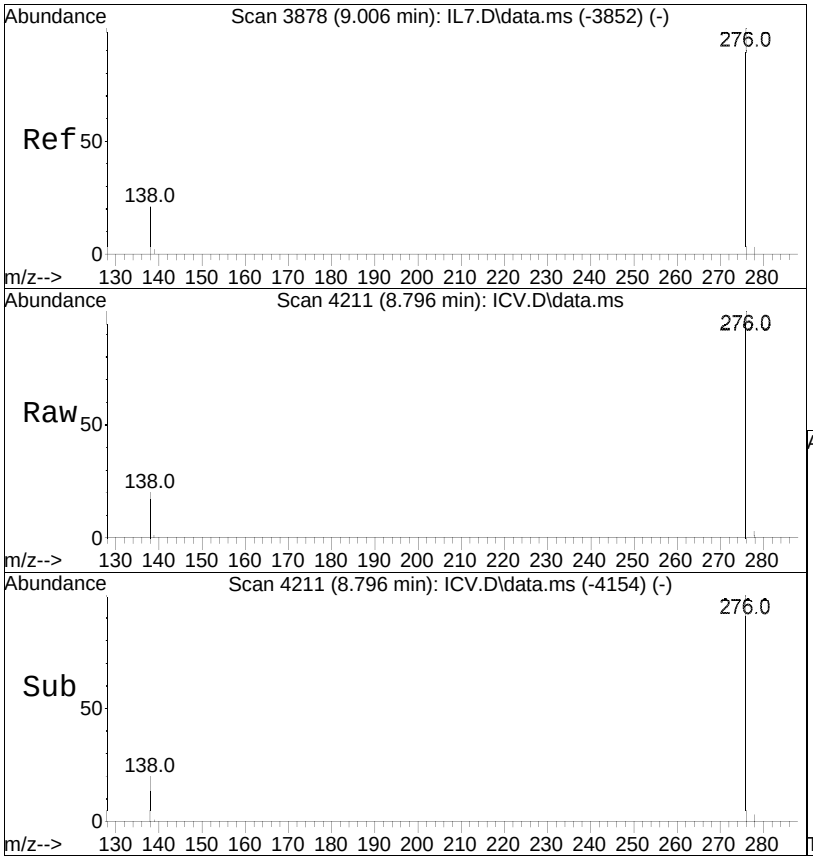


#41
Dibenzo[a,h]anthracene
Concen: 1092.25 ng/ml M6
RT: 8.505 min Scan# 4043
Delta R.T. -0.014 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:278 Resp: 82263

Ion	Ratio	Lower	Upper
278	100		
139	14.6	12.2	18.4

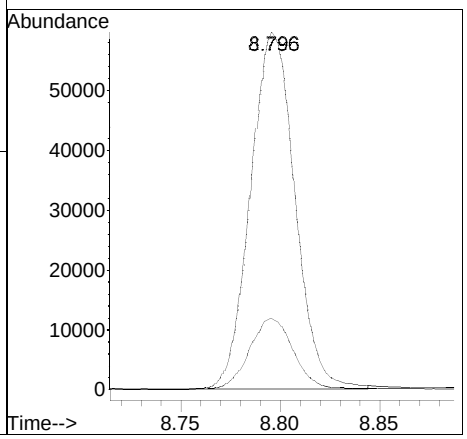




#42
Benzo[g,h,i]perylene
Concen: 1094.38 ng/ml M2
RT: 8.796 min Scan# 4211
Delta R.T. -0.002 min
Lab File: ICV.D
Acq: 06 Mar 2023 03:42 pm

Tgt Ion:276 Resp: 91873

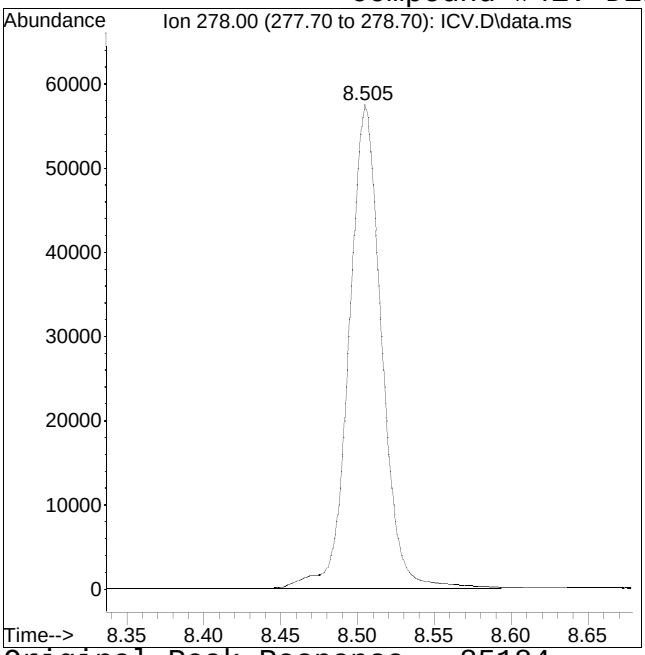
Ion	Ratio	Lower	Upper
276	100		
138	19.9	16.8	25.2



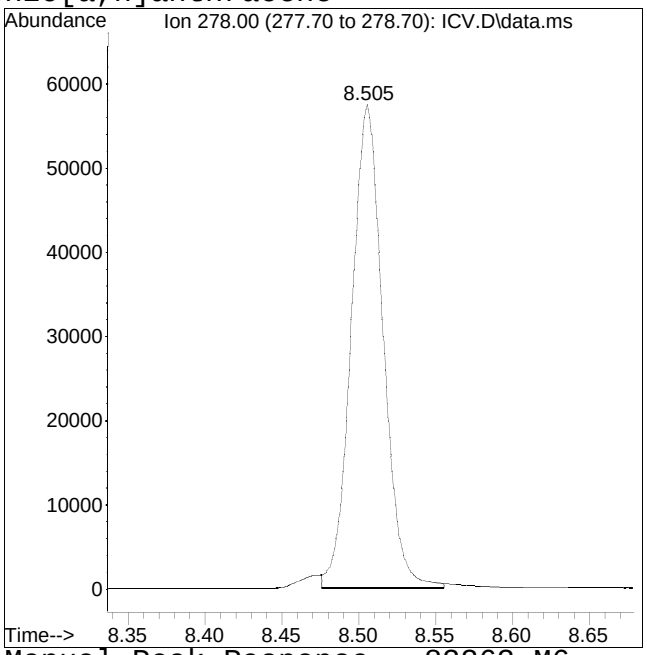
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : ICV.D Operator : sv119:ah
Date Inj'd : 3/6/2023 3:42 pm Instrument : SV119
Sample : CQICV,32,,1.0 Lot#9919 Quant Date : 3/8/2023 6:54 am

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 85184



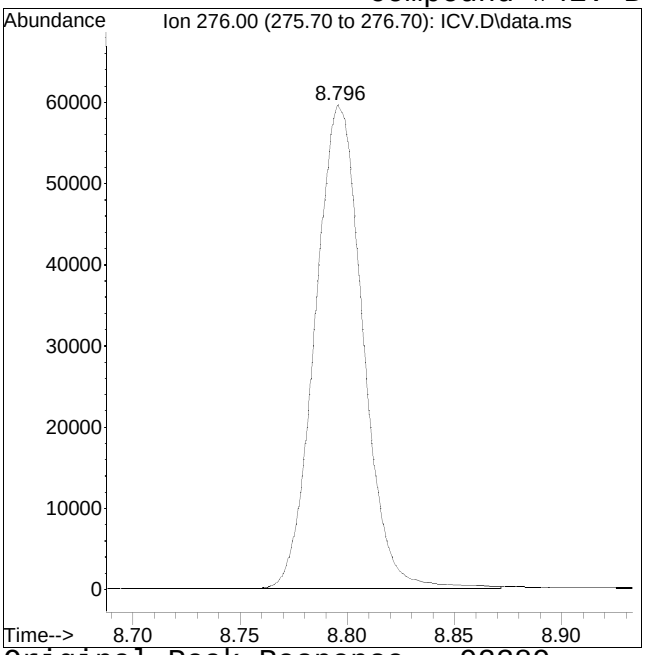
Manual Peak Response = 82263 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

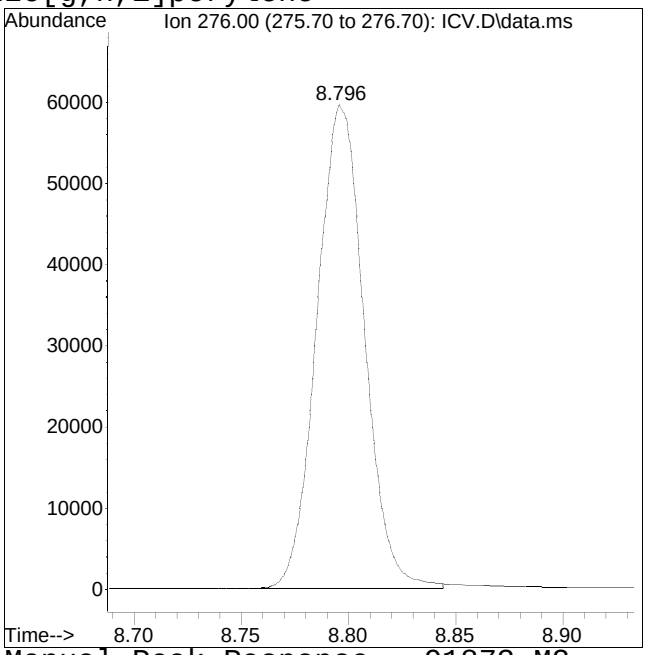
Manual Integration Report

Data Path : I:\8270SIM\sv119\230306nLVQMethod : SIM-LVI_230306_sv119.M
Data File : ICV.D Operator : sv119:ah
Date Inj'd : 3/6/2023 3:42 pm Instrument : SV119
Sample : CQICV,32,,1.0 Lot#9919 Quant Date : 3/8/2023 6:54 am

Compound #42: Benzo[g,h,i]perylene



Original Peak Response = 92389



Manual Peak Response = 91873 M2

M2 = Peak not found by automatic integration algorithm.

Evaluate Relative Error Report SV119

Method Path : I:\8270SIM\sv119\230306nLVIical\
Method File : SIM-LVI_230306_sv119.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Wed Mar 08 08:32:43 2023

	COMPOUND	CalFit	Units	TrueMid	MidConc	%RE	TrueLow	LowConc	%RE
19 T	2,4-Dinitrotoluene	Q	ng/ml	1000.0	1038.802	3.9	10.00	12.126	21.3
23 T	4,6-Dinitro-o-cresol	Q	ng/ml	1000.0	897.096	-10.3	100.00	117.679	17.7
25 T	Pentachlorophenol	Q	ng/ml	1000.0	1053.584	5.4	25.00	30.891	23.6
32 T	Benzo[a]anthracene	Q	ng/ml	1000.0	1006.113	0.6	10.00	8.628	-13.7
35 T	Bis(2-ethylhexyl)phthalate	Q	ng/ml	1000.0	925.704	-7.4	50.00	58.624	17.2

Calibration Correlation Report

	COMPOUND	CalFit	CoefOfDet	QuadTerm	LinTerm	Constant
19 T	2,4-Dinitrotoluene	Quadratic	0.999377	0.074784	0.268383	-0.000321286
23 T	4,6-Dinitro-o-cresol	Quadratic	0.999288	0.001752	0.0711171	-0.000907277
25 T	Pentachlorophenol	Quadratic	0.997750	0.028959	0.0794409	-0.000184411
32 T	Benzo[a]anthracene	Quadratic	0.999970	-0.016878	1.30219	0.00287979
35 T	Bis(2-ethylhexyl)phthalate	Quadratic	0.999287	0.088758	0.578706	-0.00237759

Response Factor Report SV128

Method Path : I:\8270SIM\SV128\230831aLVIical\
Method File : SIM-LVI_230831_sv128.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Sep 05 12:51:59 2023
Response Via : Initial Calibration

Calibration Files
L1 =IL1.D L2 =IL2.D L3 =IL3a.D L4 =IL4.D L5 =IL5.D L6 =IL6.D L7 =IL7.D L8 =IL8.D
L9 =IL9.D L10 =IL10.D

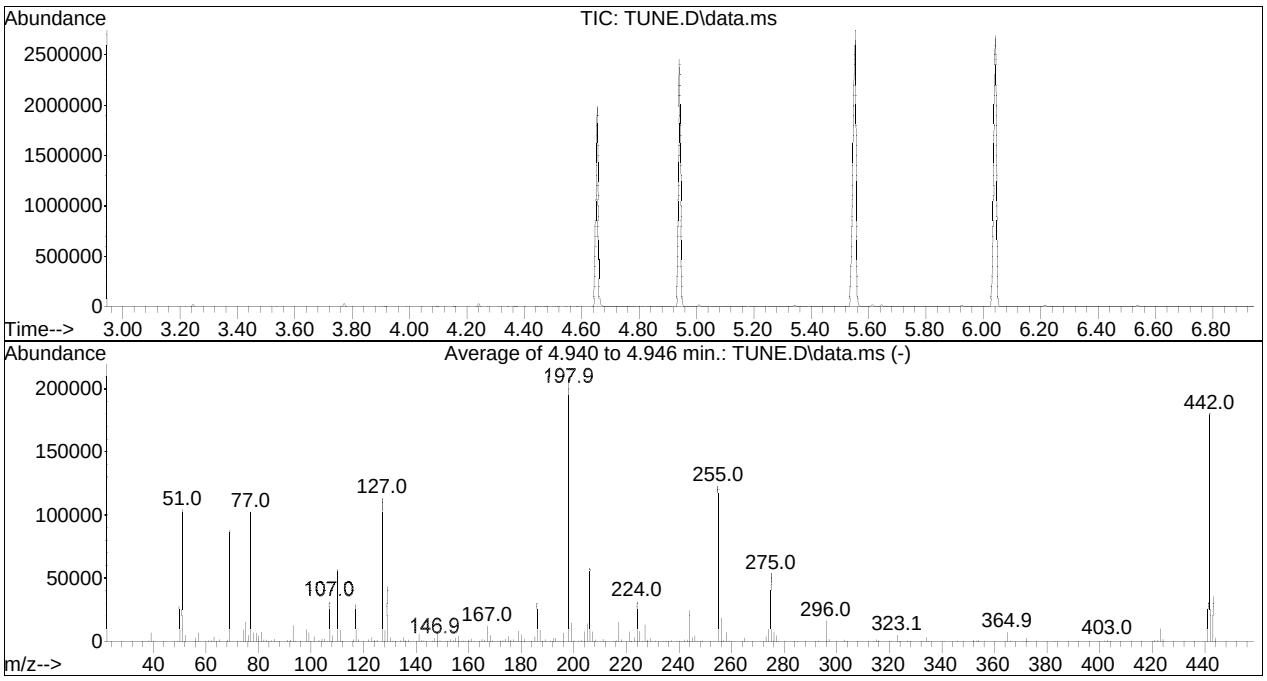
		Compound	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10	Avg	%RSD
1)	i	1,4-Dichlorobenzene-d4	ISTD											
2)	s	2-Fluorophenol		1.121	0.811	1.026	1.020	1.037	1.056	1.066	1.039	1.023	1.022	8.35
3)	s	Phenol-d6		1.308	0.973	1.254	1.238	1.260	1.300	1.335	1.297	1.292	1.251	8.68
4)	T	bis(2-Chloroethyl)ether		1.121	0.865	1.102	1.071	1.093	1.129	1.134	1.115	1.070	1.078	7.72
5)	T	n-Nitrosodi-n-propylamine			0.648	0.760	0.786	0.801	0.846	0.894	0.875	0.858	0.809	9.81
6)	t	Hexachloroethane			0.432	0.494	0.485	0.487	0.494	0.497	0.483	0.473	0.481	4.38
7)	s	Nitrobenzene-d5		0.935	0.811	1.026	1.054	1.072	1.134	1.196	1.167	1.147	1.060	11.66
8)	i	Naphthalene-d8	ISTD											
9)	t	Naphthalene		1.042	0.780	1.011	1.003	1.006	1.013	1.008	0.990	0.943	0.977	8.04
10)	t	Hexachlorobutadiene			0.150	0.190	0.187	0.190	0.192	0.192	0.188	0.181	0.184	7.59
11)	t	2-Methylnaphthalene		0.645	0.520	0.660	0.669	0.666	0.685	0.694	0.684	0.647	0.652	8.04
12)	t	1-Methylnaphthalene			0.465	0.620	0.617	0.619	0.635	0.642	0.634	0.602	0.604	9.54
13)	s	2-Fluorobiphenyl		0.843	0.643	0.851	0.838	0.840	0.859	0.867	0.849	0.793	0.820	8.49
14)	t	2-Chloronaphthalene		0.645	0.534	0.700	0.695	0.701	0.713	0.722	0.709	0.668	0.676	8.67
15)	t	2,6-Dinitrotoluene				0.110	0.109	0.116	0.128	0.158	0.166	0.160	0.135	18.58
16)	t	Acenaphthylene		1.042	0.807	1.061	1.073	1.099	1.150	1.201	1.166	1.096	1.077	10.57
17)	i	Acenaphthene-d10	ISTD											
18)	t	Acenaphthene			0.984	1.308	1.320	1.323	1.324	1.332	1.303	1.246	1.267	9.28
19)	t	2,4-Dinitrotoluene				0.244	0.245	0.259	0.294	0.353	0.368	0.363	0.304	18.68
20)	t	Fluorene		1.447	1.029	1.430	1.416	1.434	1.463	1.460	1.424	1.344	1.383	9.94
21)	s	2,4,6-Tribromophenol			0.112	0.139	0.156	0.163	0.177	0.197	0.201	0.197	0.168	18.89
22)	i	Phenanthrene-d10	ISTD											
23)	T	4,6-Dinitro-o-cresol					0.043	0.052	0.059	0.073	0.078	0.077	*Q	0.9991
24)	t	Hexachlorobenzene	0.208	0.214	0.160	0.230	0.218	0.223	0.224	0.229	0.224	0.217	0.215	9.45
25)	t	Pentachlorophenol			0.053	0.093	0.095	0.104	0.118	0.139	0.143	0.140	*Q	0.9991
26)	t	Phenanthrene		1.141	0.712	1.057	1.007	1.025	1.024	1.035	1.010	0.965	0.997	11.74
27)	t	Anthracene		0.998	0.659	0.992	0.983	0.996	1.021	1.065	1.042	0.979	0.971	12.41
28)	t	Fluoranthene		1.283	0.801	1.208	1.148	1.189	1.201	1.228	1.225	1.143	1.158	12.13
29)	t	Pyrene		1.283	0.819	1.266	1.201	1.228	1.263	1.304	1.263	1.167	1.199	12.41
30)	s	4-Terphenyl-d14		0.927	0.579	0.899	0.847	0.882	0.890	0.902	0.882	0.800	0.845	12.59
31)	i	Chrysene-d12	ISTD											
32)	t	Benzo[a]anthracene		2.534	1.327	1.516	1.379	1.311	1.339	1.398			*Q	0.9996
33)	t	3,3'-Dichlorobenzidine				0.447	0.446	0.454	0.487	0.554	0.559	0.546	0.499	10.54
34)	t	Chrysene		1.342	0.857	1.304	1.262	1.296	1.268	1.297	1.284	1.196	1.234	11.90
35)	T	bis(2-Ethylhexyl)phthalate					0.582	0.634	0.727	0.890	0.936	0.905	0.779	19.50
36)	i	Perylene-d12	ISTD											
37)	t	Benzo[b]fluora...		1.066	0.765	1.140	1.099	1.171	1.140	1.245	1.271	1.248	1.127	13.56
38)	t	Benzo[k]fluora...		1.032	0.665	1.029	1.039	1.041	1.149	1.195	1.138	1.098	1.043	14.74
39)	t	Benzo[a]pyrene		0.899	0.599	0.951	0.938	0.984	1.029	1.115	1.112	1.084	0.968	16.42
40)	t	Indeno[1,2,3-c...			0.690	0.931	0.893	0.904	0.972	1.081	1.106	1.172	0.969	15.69
41)	t	Dibenzo[a,h]anthracene		0.799	0.632	0.886	0.857	0.917	1.008	1.103	1.105	1.084	0.932	17.12
42)	t	Benzo[g,h,i]pe...			0.873	0.951	0.914	0.958	1.011	1.082	1.079	1.069	0.992	8.07

(#) = Out of Range

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : TUNE.D
Acq On : 31 Aug 2023 09:28 am
Operator : SV128:ah
Sample : TUNE
Misc : WG1823727,,ical
ALS Vial : 48 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Sep 05 12:51:59 2023



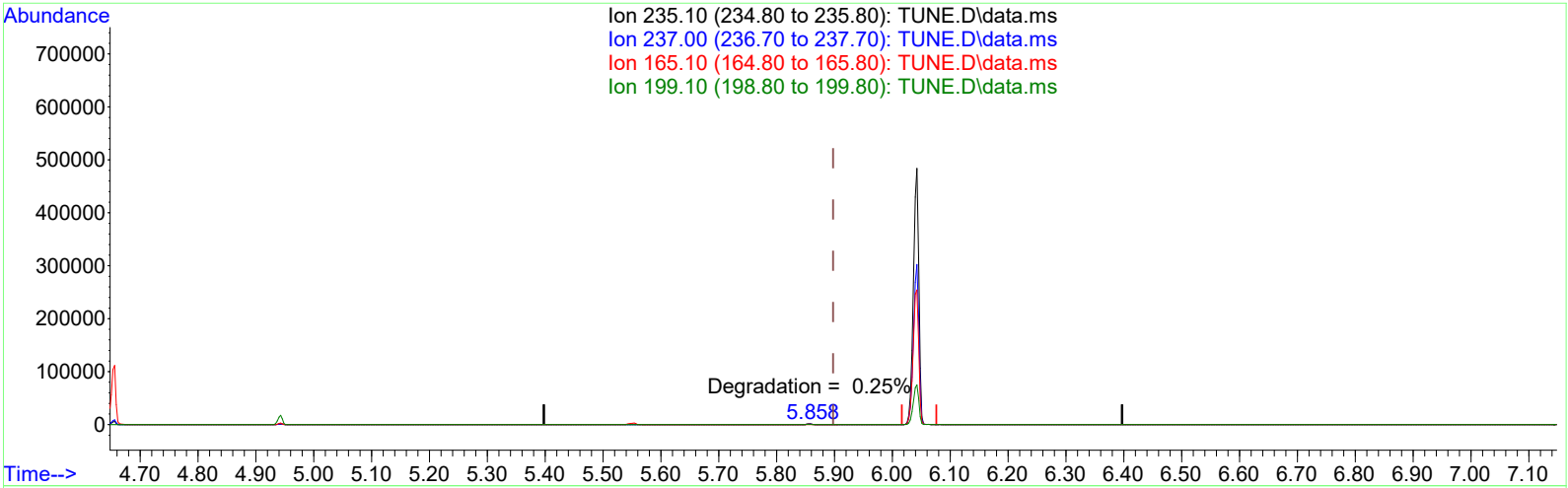
Spectrum Information: Average of 4.940 to 4.946 min.

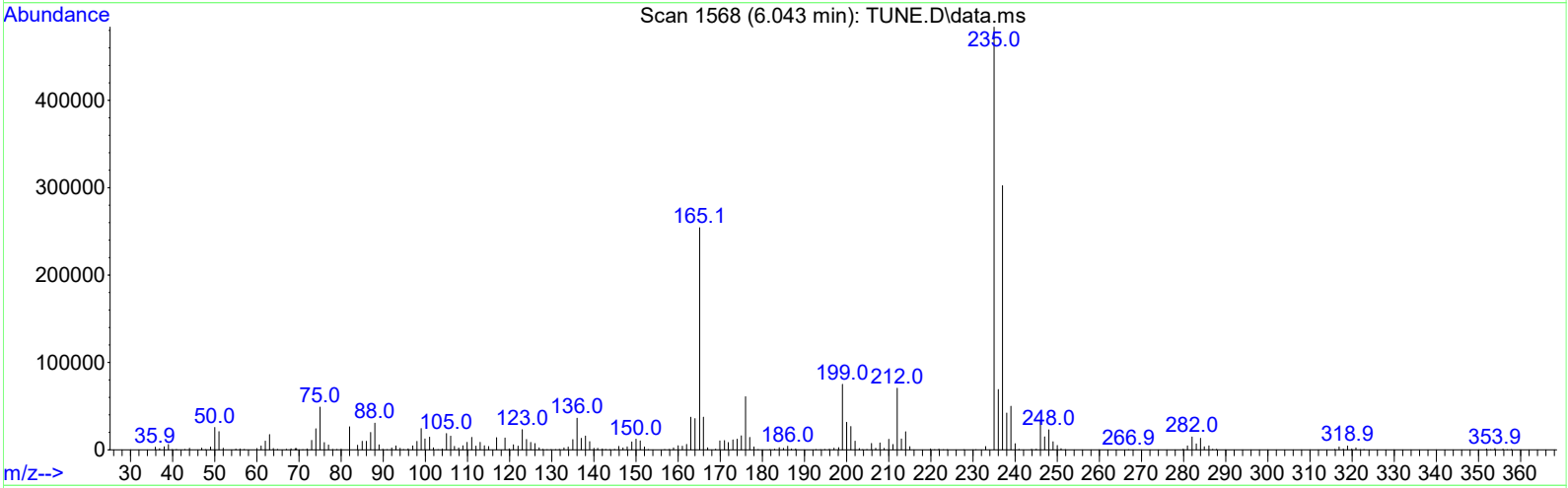
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	49.9	104205	PASS
68	69	0.00	2	1.9	1690	PASS
69	69	100	100	100.0	87443	PASS
70	69	0.00	2	0.5	471	PASS
127	198	10	80	54.3	113336	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	208768	PASS
199	198	5	9	6.8	14193	PASS
275	198	10	60	25.6	53408	PASS
365	198	1	100	3.5	7351	PASS
441	442	0.01	24	17.3	31224	PASS
442	198	50	100	86.4	180349	PASS
443	442	15	24	19.6	35357	PASS

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : TUNE.D
Acq On : 31 Aug 2023 09:28 am
Operator : SV128:ah
Sample : TUNE
Misc : WG1823727,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Aug 31 09:44:13 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\dftppsv128.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Aug 12 18:40:35 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: TUNE.D\data.ms

(6) ddt (T)

6.043min (+ 0.145) 52.00

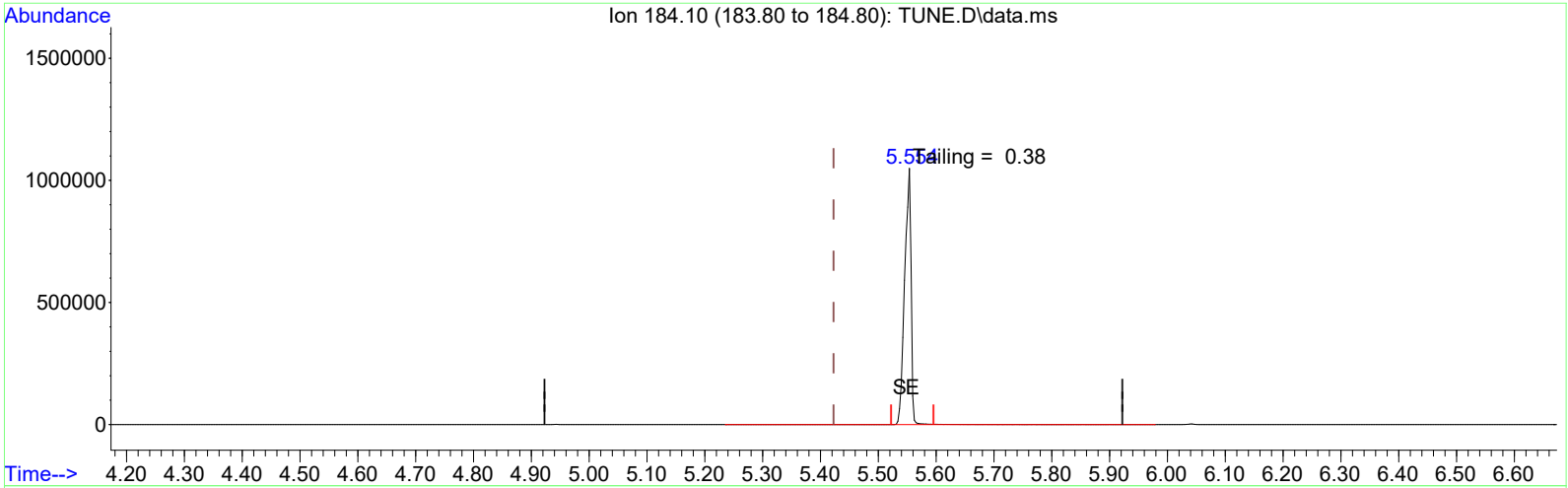
response 316951

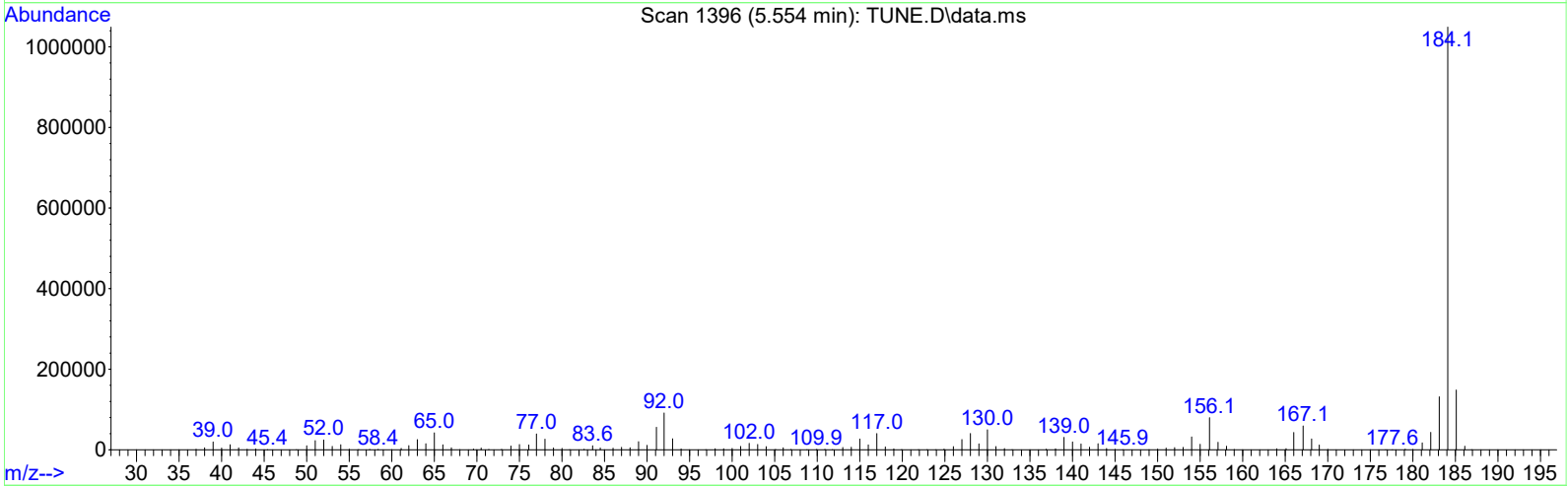
Ion	Exp%	Act%
235.10	100.00	100.00
237.00	65.60	63.00
165.10	53.30	54.33
199.10	17.10	15.92

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : TUNE.D
Acq On : 31 Aug 2023 09:28 am
Operator : SV128:ah
Sample : TUNE
Misc : WG1823727,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Aug 31 09:44:13 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\dftppsv128.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Aug 12 18:40:35 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: TUNE.D\data.ms

(3) benzidine (T)

5.554min (+ 0.131) 79.16

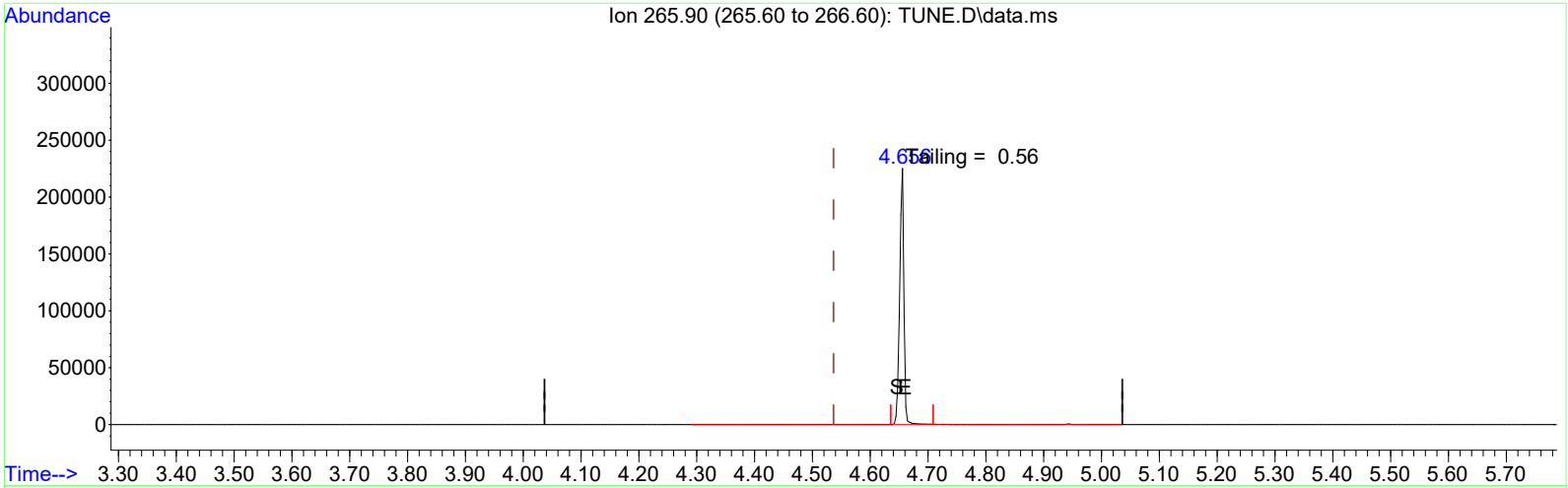
response 805877

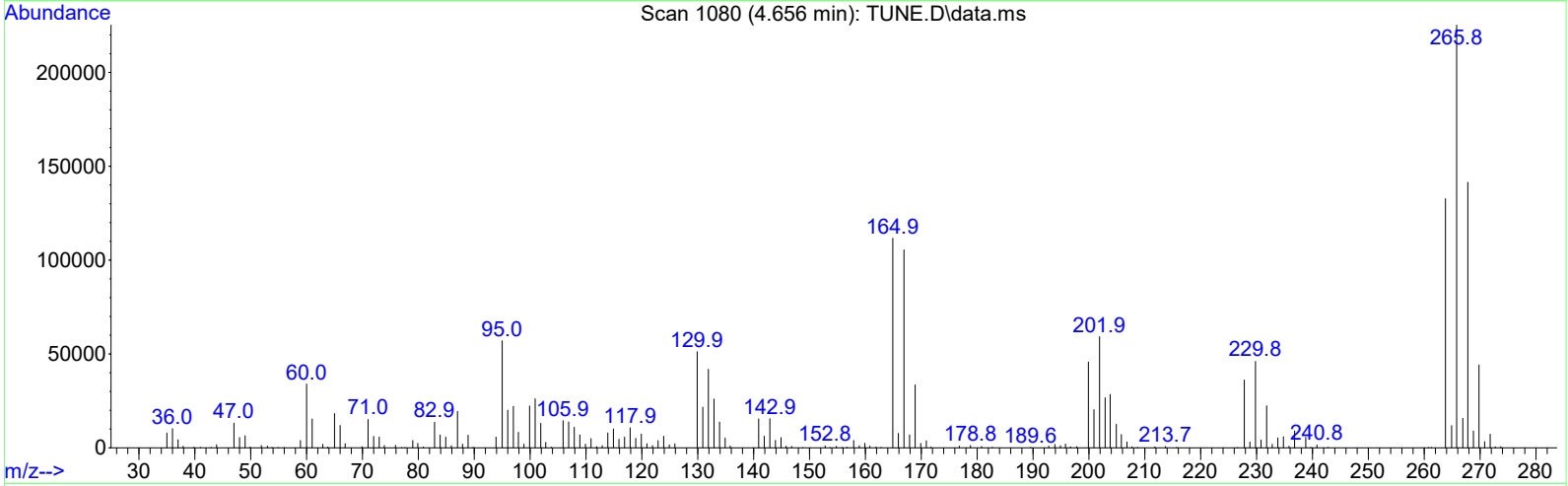
Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : TUNE.D
Acq On : 31 Aug 2023 09:28 am
Operator : SV128:ah
Sample : TUNE
Misc : WG1823727,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Aug 31 09:44:13 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\dftppsv128.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Aug 12 18:40:35 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: TUNE.D\data.ms

(1) pentachlorophenol (T)

4.656min (+ 0.119) 54.32

response 114091

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL10.D
Acq On : 31 Aug 2023 09:45 am
Operator : SV128:ah
Sample : IL10,32,, 20.0 Lot#10186
Misc : WG1823727,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 11:58:37 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.255	152	2427	4000.000	ng/ml	# 0.00
Standard Area 1 = 2292			Recovery = 105.89%			
8) Naphthalene-d8	2.921	136	9687	4000.000	ng/ml	0.00
Standard Area 1 = 8982			Recovery = 107.85%			
17) Acenaphthene-d10	3.902	164	5634	4000.000	ng/ml	0.00
Standard Area 1 = 5319			Recovery = 105.92%			
22) Phenanthrene-d10	4.748	188	12614	4000.000	ng/ml	0.00
Standard Area 1 = 12548			Recovery = 100.53%			
31) Chrysene-d12	6.330	240	11188	4000.000	ng/ml	0.00
Standard Area 1 = 11983			Recovery = 93.37%			
36) Perylene-d12	7.614	264	12425	4000.000	ng/ml	0.00
Standard Area 1 = 13430			Recovery = 92.52%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.651	112	12412	20013.263	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 400.27%#			
3) Phenol-d6	2.065	99	15675	20654.603	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 413.09%#			
7) Nitrobenzene-d5	2.539	82	13923	21644.124	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 865.76%#			
13) 2-Fluorobiphenyl	3.520	172	38427	19341.728	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 773.67%#			
21) 2,4,6-Tribromophenol	4.354	330	5547	23448.594	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 468.97%#			
30) 4-Terphenyl-d14	5.678	244	50473	18934.676	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 757.39%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.118	93	12989	19862.308	ng/ml	98
5) n-nitrosodi-n-propylamine	2.460	70	10407	21213.828	ng/ml	97
6) Hexachloroethane	2.518	117	5745	19690.516	ng/ml	90
9) Naphthalene	2.934	128	45653	19288.779	ng/ml#	100
10) Hexachlorobutadiene	3.007	225	8750M6	19660.851	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL10.D
Acq On : 31 Aug 2023 09:45 am
Operator : SV128:ah
Sample : IL10,32,, 20.0 Lot#10186
Misc : WG1823727,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 11:58:37 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:34 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
11) 2-Methylnaphthalene	3.315	142	31355	19847.243	ng/ml	99
12) 1-Methylnaphthalene	3.370	142	29169	19928.783	ng/ml	100
14) 2-Chloronaphthalene	3.587	162	32338	19744.754	ng/ml	95
15) 2,6-Dinitrotoluene	3.783	165	7728M6	23626.300	ng/ml	
16) Acenaphthylene	3.823	152	53081M6	20351.393	ng/ml	
18) Acenaphthene	3.920	153	35090	19657.034	ng/ml	94
19) 2,4-Dinitrotoluene	4.015	165	10238	23922.787	ng/ml	89
20) Fluorene	4.214	166	37855M6	19433.493	ng/ml	
23) 4,6-Dinitro-o-cresol	4.247	198	4886	19876.041	ng/ml#	73
24) Hexachlorobenzene	4.535	284	13712	20242.406	ng/ml	99
25) Pentachlorophenol	4.645	266	8852M6	19872.684	ng/ml	
26) Phenanthrene	4.763	178	60851	19349.311	ng/ml	100
27) Anthracene	4.792	178	61755	20177.830	ng/ml	99
28) Fluoranthene	5.451	202	72088	19729.677	ng/ml#	95
29) Pyrene	5.582	202	73601	19462.711	ng/ml	99
32) Benzo[a]anthracene	6.322	228	73778	16230.288	ng/ml	100
33) 3,3'-Dichlorobenzidine	6.314	252	30521	21873.811	ng/ml	100
34) Chrysene	6.349	228	66926	19388.791	ng/ml	100
35) Bis(2-ethylhexyl)phtha...	6.363	149	50622	23233.954	ng/ml	100
37) Benzo[b]fluoranthene	7.221	252	77504	22139.094	ng/ml	100
38) Benzo[k]fluoranthene	7.253	252	68195	21049.281	ng/ml	100
39) Benzo[a]pyrene	7.554	252	67361	22404.318	ng/ml	99
40) Indeno[1,2,3-cd]pyrene	8.944	276	72828	24204.202	ng/ml	96
41) Dibenzo[a,h]anthracene	9.000	278	67333M6	23249.025	ng/ml	
42) Benzo[g,h,i]perylene	9.334	276	66435	21505.833	ng/ml	95

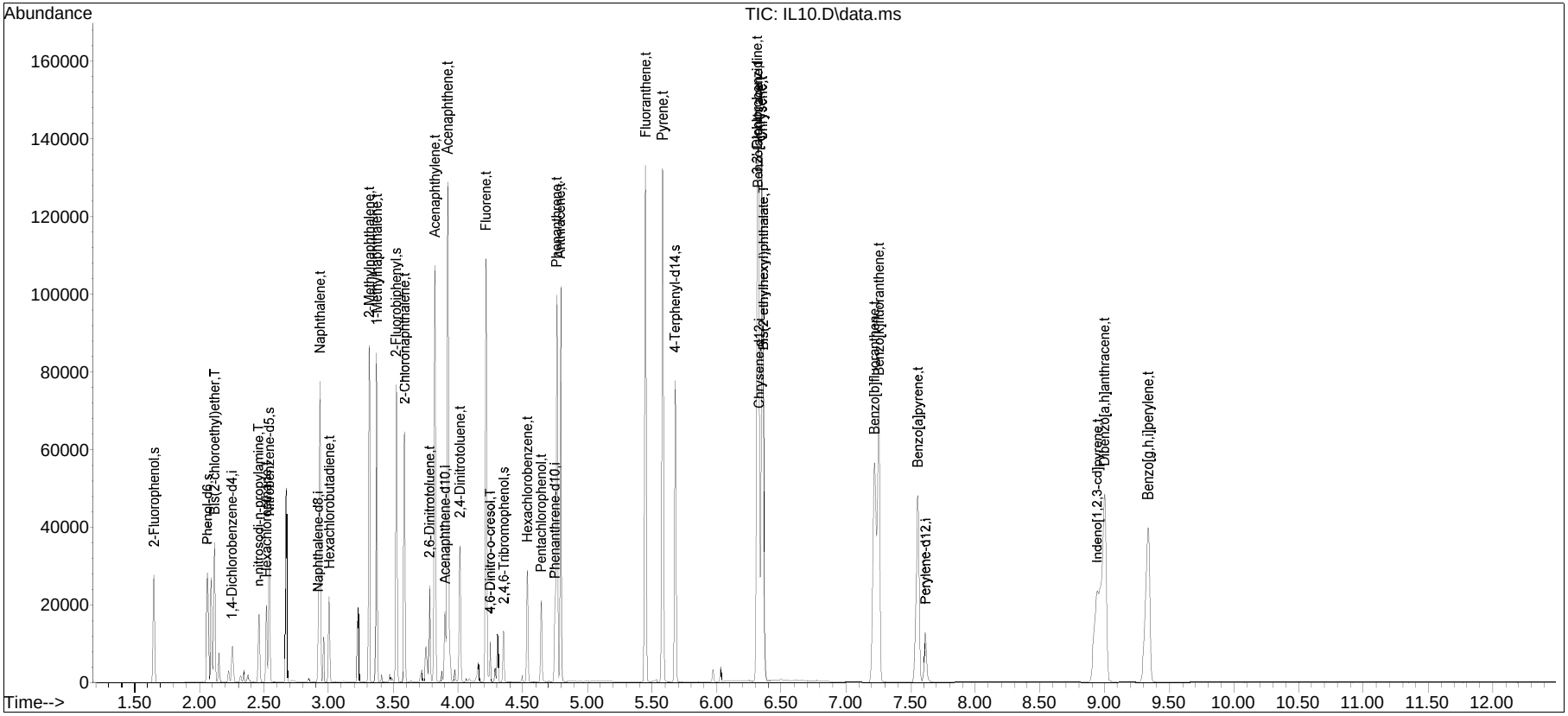
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL10.D
Acq On : 31 Aug 2023 09:45 am
Operator : SV128:ah
Sample : IL10,32,, 20.0 Lot#10186
Misc : WG1823727,,ical
ALS Vial : 1 Sample Multiplier: 1

Quant Time: Sep 05 11:58:37 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:34 2023
Response via : Initial Calibration

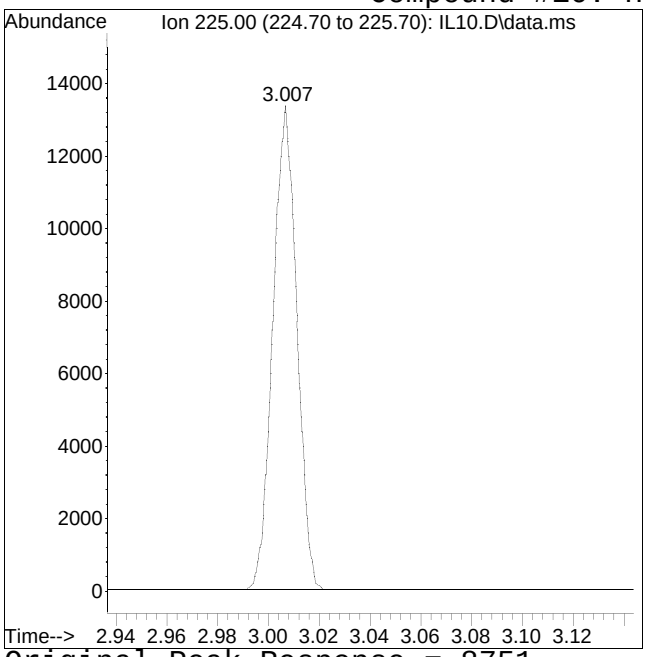
Sub List : Default - All compounds listedIical\IL7.D•



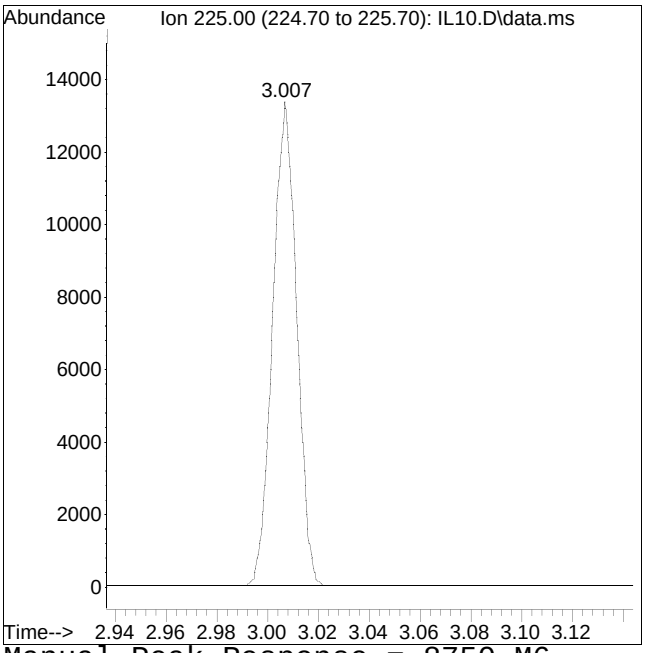
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL10.D Operator : SV128:ah
Date Inj'd : 8/31/2023 9:45 am Instrument : SV128
Sample : IL10,32,, 20.0 Lot#10186 Quant Date : 9/5/2023 11:58 am

Compound #10: Hexachlorobutadiene



Original Peak Response = 8751



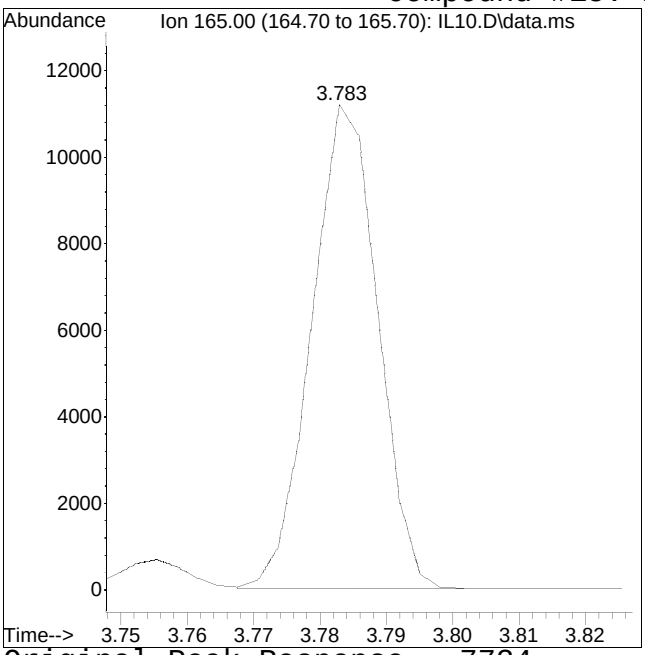
Manual Peak Response = 8750 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

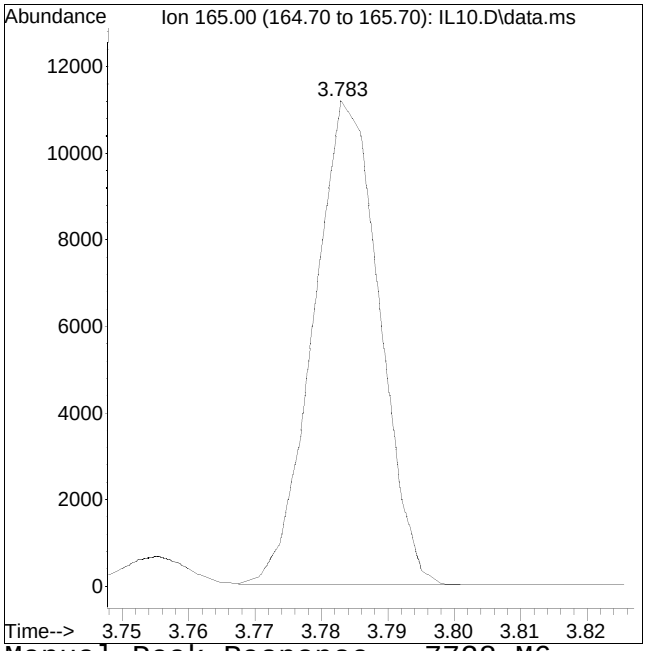
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL10.D Operator : SV128:ah
Date Inj'd : 8/31/2023 9:45 am Instrument : SV128
Sample : IL10,32,, 20.0 Lot#10186 Quant Date : 9/5/2023 11:58 am

Compound #15: 2,6-Dinitrotoluene



Original Peak Response = 7734



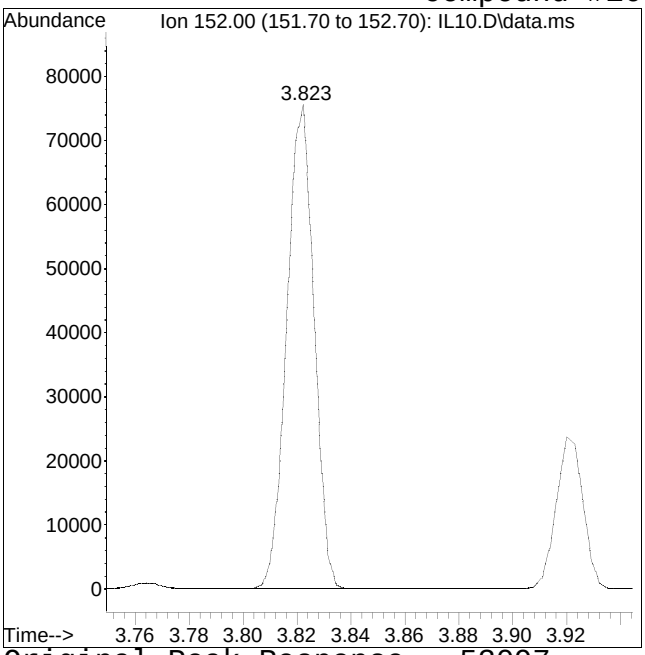
Manual Peak Response = 7728 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

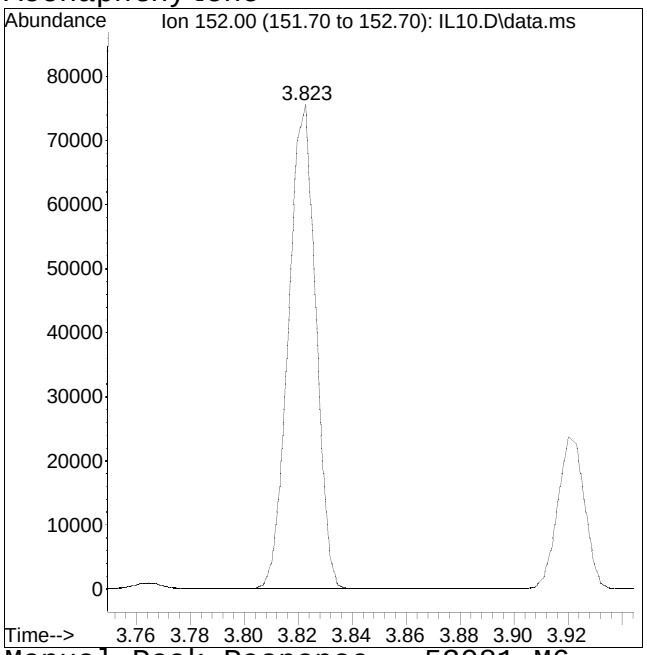
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL10.D Operator : SV128:ah
Date Inj'd : 8/31/2023 9:45 am Instrument : SV128
Sample : IL10,32,, 20.0 Lot#10186 Quant Date : 9/5/2023 11:58 am

Compound #16: Acenaphthylene



Original Peak Response = 53097



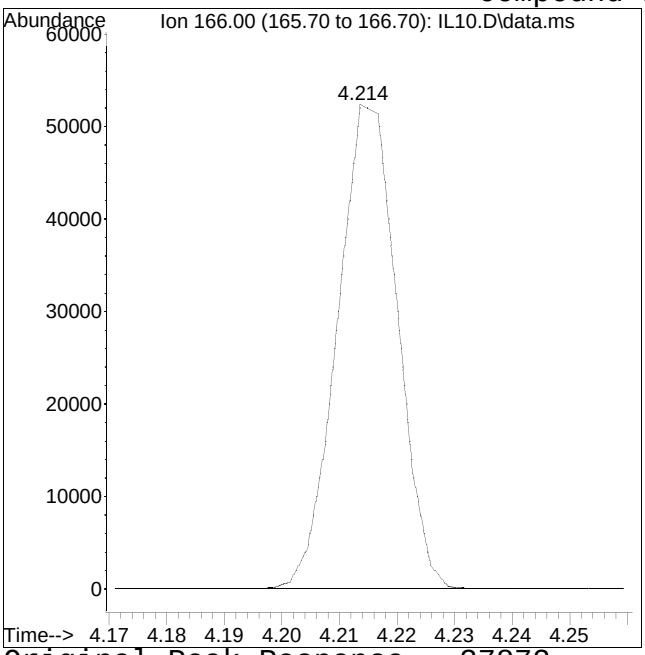
Manual Peak Response = 53081 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

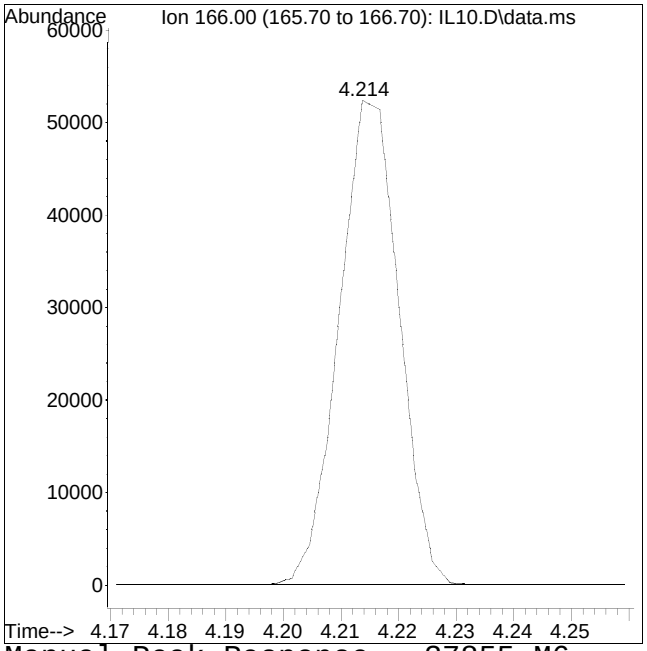
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL10.D Operator : SV128:ah
Date Inj'd : 8/31/2023 9:45 am Instrument : SV128
Sample : IL10,32,, 20.0 Lot#10186 Quant Date : 9/5/2023 11:58 am

Compound #20: Fluorene



Original Peak Response = 37872



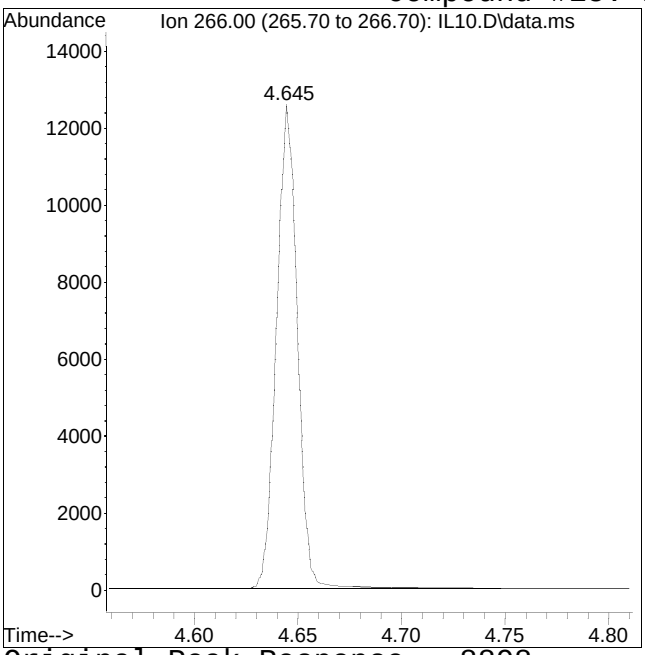
Manual Peak Response = 37855 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

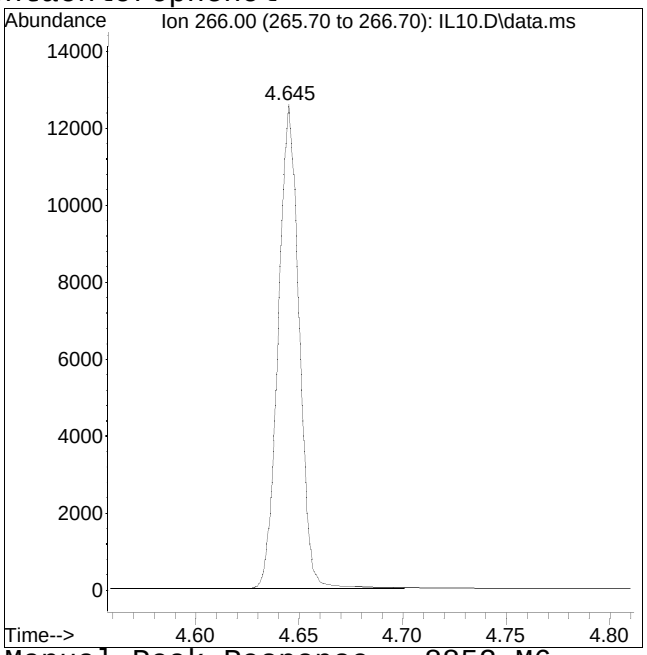
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL10.D Operator : SV128:ah
Date Inj'd : 8/31/2023 9:45 am Instrument : SV128
Sample : IL10,32,, 20.0 Lot#10186 Quant Date : 9/5/2023 11:58 am

Compound #25: Pentachlorophenol



Original Peak Response = 8898



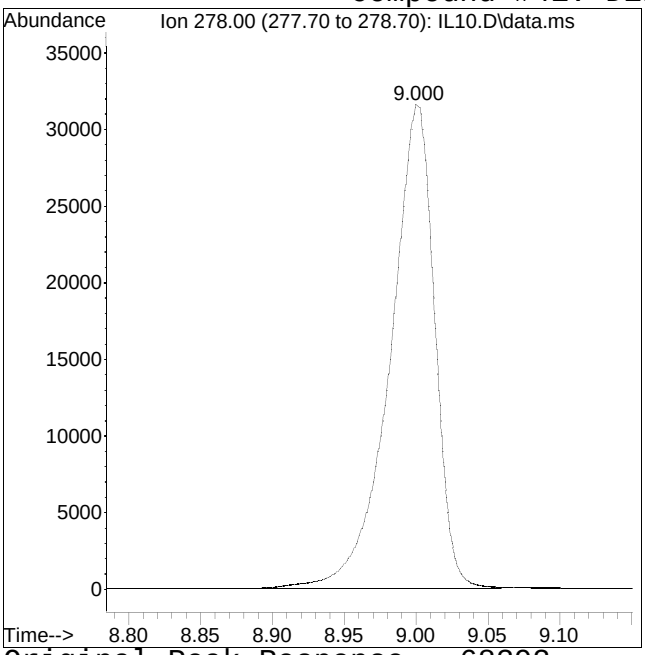
Manual Peak Response = 8852 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

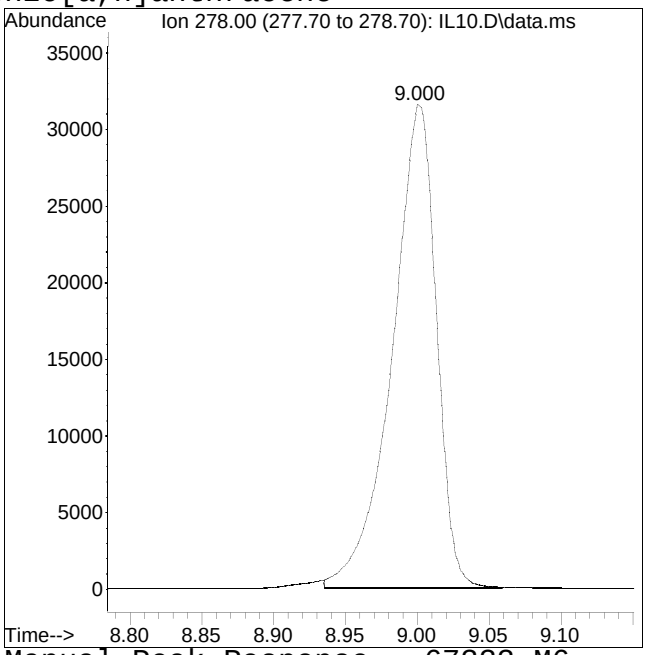
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL10.D Operator : SV128:ah
Date Inj'd : 8/31/2023 9:45 am Instrument : SV128
Sample : IL10,32,, 20.0 Lot#10186 Quant Date : 9/5/2023 11:58 am

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 68392



Manual Peak Response = 67333 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL9.D
Acq On : 31 Aug 2023 10:01 am
Operator : SV128:ah
Sample : IL9,32,, 10.0 Lot#10227
Misc : WG1823727,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 11:59:25 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:22 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.257	152	2355	4000.000	ng/ml	0.00
Standard Area 1 = 2292			Recovery = 102.75%			
8) Naphthalene-d8	2.923	136	9290M6	4000.000	ng/ml	0.00
Standard Area 1 = 8982			Recovery = 103.43%			
17) Acenaphthene-d10	3.901	164	5541	4000.000	ng/ml	0.00
Standard Area 1 = 5319			Recovery = 104.17%			
22) Phenanthrene-d10	4.750	188	12512	4000.000	ng/ml	0.00
Standard Area 1 = 12548			Recovery = 99.71%			
31) Chrysene-d12	6.326	240	11532	4000.000	ng/ml	0.00
Standard Area 1 = 11983			Recovery = 96.24%			
36) Perylene-d12	7.606	264	13119	4000.000	ng/ml	0.00
Standard Area 1 = 13430			Recovery = 97.68%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.651	112	6116	10163.013	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 203.26%#			
3) Phenol-d6	2.063	99	7637	10370.769	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 207.42%#			
7) Nitrobenzene-d5	2.538	82	6870	11006.337	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 440.25%#			
13) 2-Fluorobiphenyl	3.522	172	19718	10348.925	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 413.96%#			
21) 2,4,6-Tribromophenol	4.350	330	2791	11996.296	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 239.93%#			
30) 4-Terphenyl-d14	5.677	244	27580	10430.836	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 417.23%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.120	93	6563	10342.732	ng/ml	100
5) n-nitrosodi-n-propylamine	2.459	70	5149	10816.711	ng/ml	96
6) Hexachloroethane	2.517	117	2845	10049.124	ng/ml	90
9) Naphthalene	2.935	128	23000	10132.972	ng/ml#	100
10) Hexachlorobutadiene	3.009	225	4366M4	10229.433	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL9.D
Acq On : 31 Aug 2023 10:01 am
Operator : SV128:ah
Sample : IL9,32,, 10.0 Lot#10227
Misc : WG1823727,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 11:59:25 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:22 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
11) 2-Methylnaphthalene	3.314	142	15896	10491.917	ng/ml	99
12) 1-Methylnaphthalene	3.369	142	14732	10495.292	ng/ml	100
14) 2-Chloronaphthalene	3.586	162	16465	10482.718	ng/ml	95
15) 2,6-Dinitrotoluene	3.782	165	3846	12260.593	ng/ml	98
16) Acenaphthylene	3.821	152	27071	10822.633	ng/ml	100
18) Acenaphthene	3.919	153	18044	10277.704	ng/ml	93
19) 2,4-Dinitrotoluene	4.010	165	5101	12119.387	ng/ml	91
20) Fluorene	4.212	166	19732	10299.767	ng/ml	99
23) 4,6-Dinitro-o-cresol	4.243	198	2426M7	10296.103	ng/ml	
24) Hexachlorobenzene	4.531	284	7013	10437.374	ng/ml	98
25) Pentachlorophenol	4.643	266	4470M6	10259.844	ng/ml	
26) Phenanthrene	4.762	178	31594	10128.112	ng/ml	100
27) Anthracene	4.791	178	32598	10737.901	ng/ml	99
28) Fluoranthene	5.450	202	38318	10572.700	ng/ml	95
29) Pyrene	5.581	202	39502	10530.883	ng/ml	100
32) Benzo[a]anthracene	6.318	228	39844	9304.627	ng/ml	100
33) 3,3'-Dichlorobenzidine	6.309	252	16130	11215.222	ng/ml	100
34) Chrysene	6.345	228	37019	10404.671	ng/ml	100
35) Bis(2-ethylhexyl)phtha...	6.361	149	26981	12014.057	ng/ml	100
37) Benzo[b]fluoranthene	7.216	252	41676M4	11275.023	ng/ml	
38) Benzo[k]fluoranthene	7.241	252	37318	10909.347	ng/ml	100
39) Benzo[a]pyrene	7.543	252	36472	11488.900	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.927	276	36277	11418.773	ng/ml	96
41) Dibenzo[a,h]anthracene	8.977	278	36243M6	11852.135	ng/ml	
42) Benzo[g,h,i]perylene	9.308	276	35377	10846.160	ng/ml	95

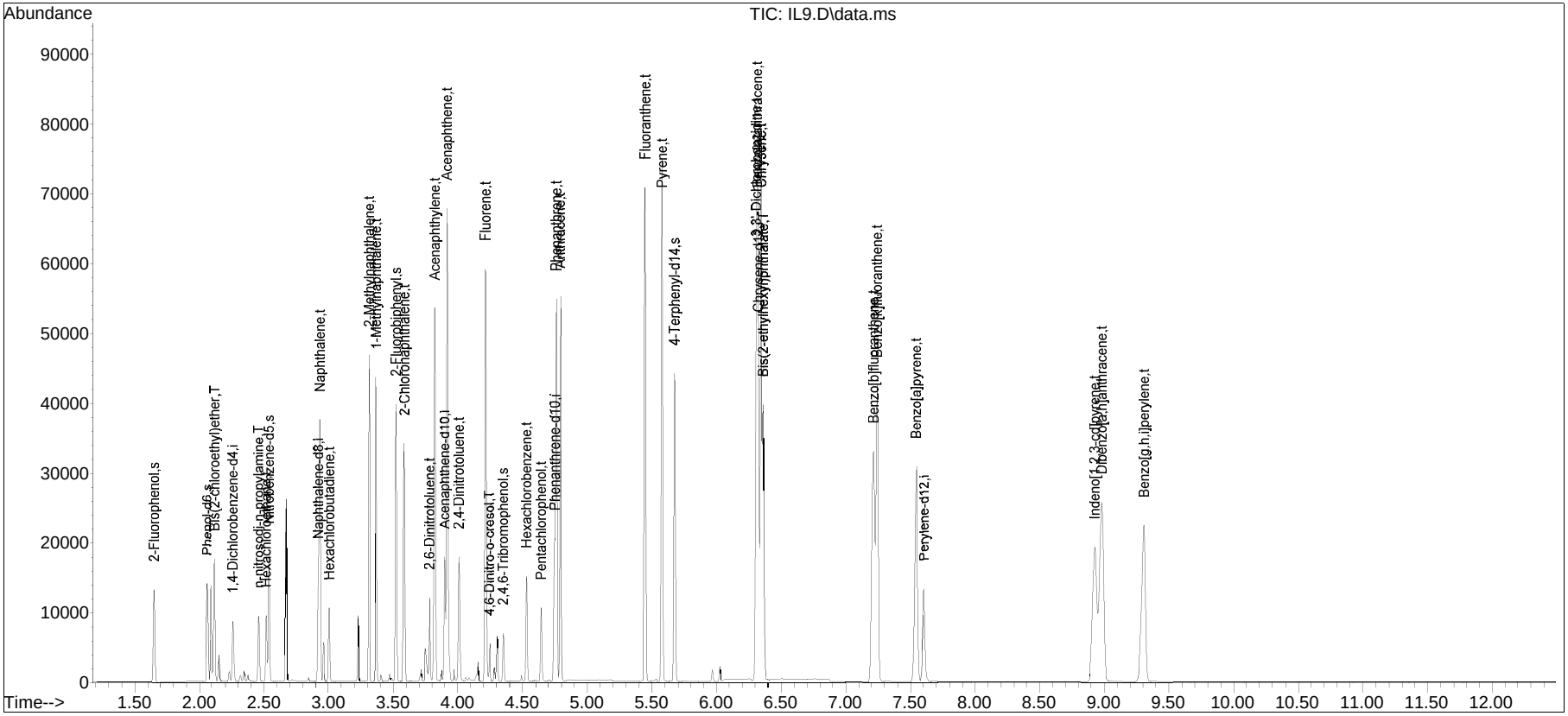
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL9.D
Acq On : 31 Aug 2023 10:01 am
Operator : SV128:ah
Sample : IL9,32,, 10.0 Lot#10227
Misc : WG1823727,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 11:59:25 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:22 2023
Response via : Initial Calibration

Sub List : Default - All compounds listedIical\IL7.D•

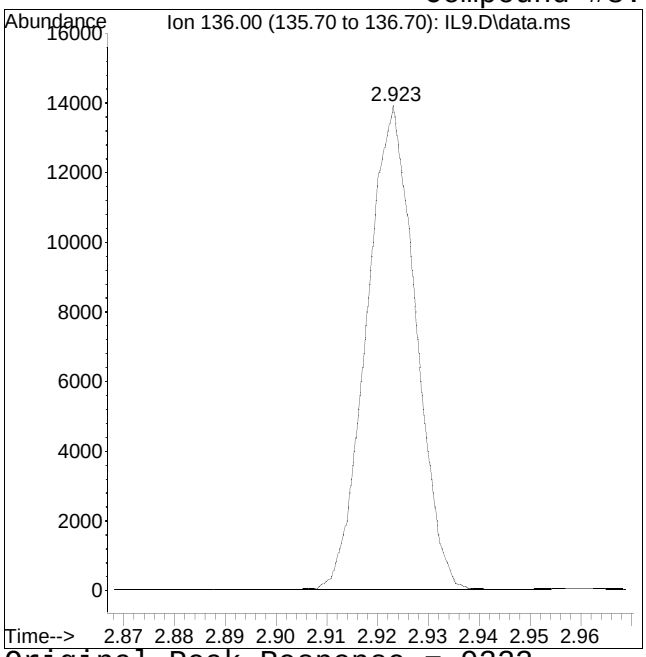


Manual Integration Report

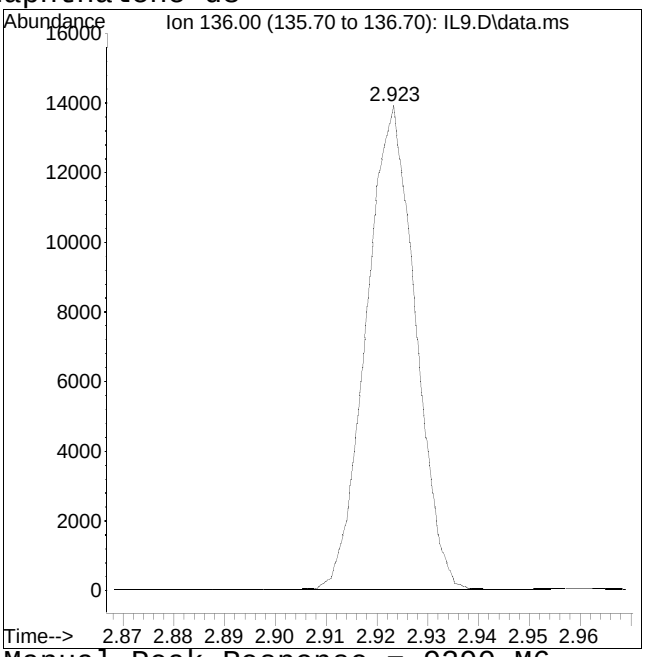
Data Path : I:\8270SIM\SV128\230831aLVQ
Data File : IL9.D
Date Inj'd : 8/31/2023 10:01 am
Sample : IL9,32,, 10.0 Lot#10227

Method : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/5/2023 11:59 am

Compound #8: Naphthalene-d8



Original Peak Response = 9323



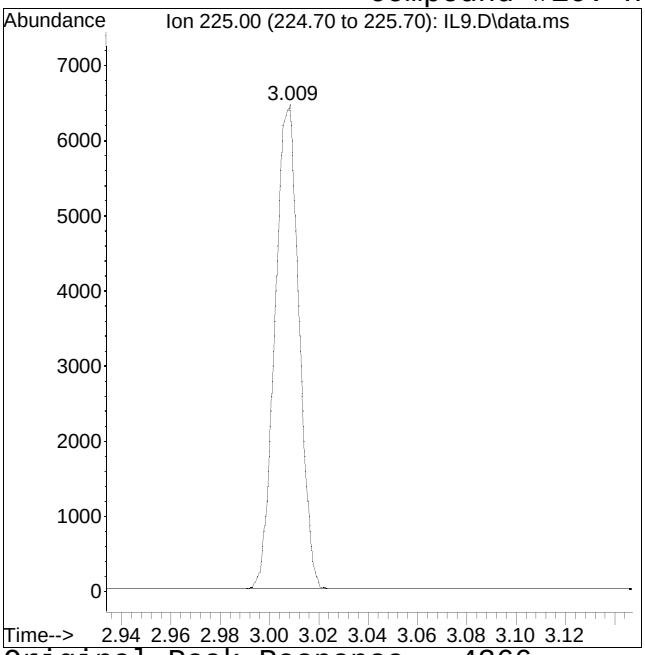
Manual Peak Response = 9290 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

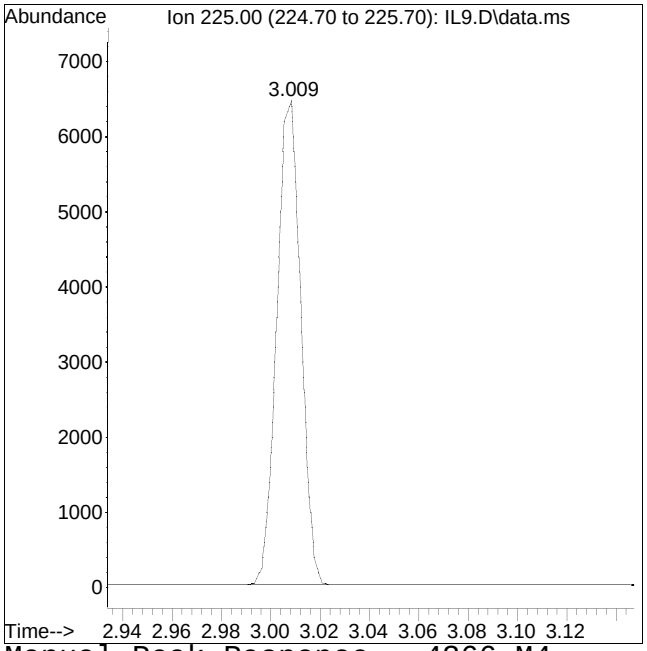
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL9.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:01 am Instrument : SV128
Sample : IL9,32,, 10.0 Lot#10227 Quant Date : 9/5/2023 11:59 am

Compound #10: Hexachlorobutadiene



Original Peak Response = 4366



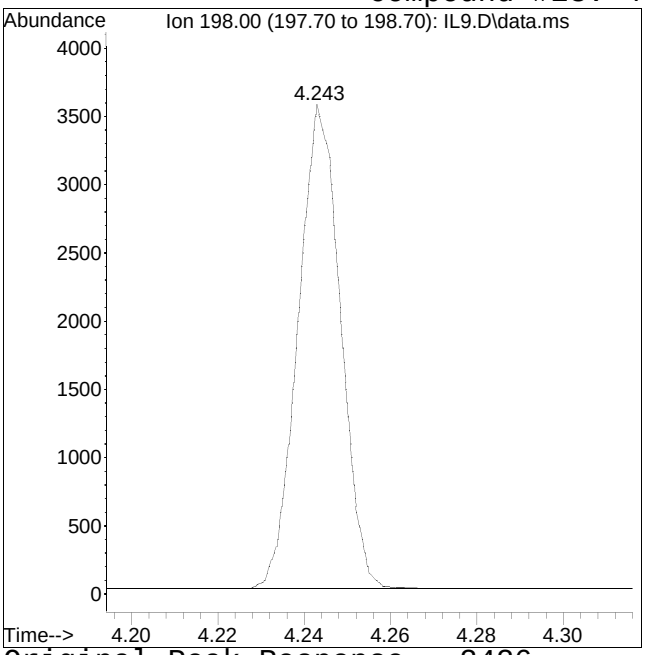
Manual Peak Response = 4366 M4

M4 = Poor automated baseline construction.

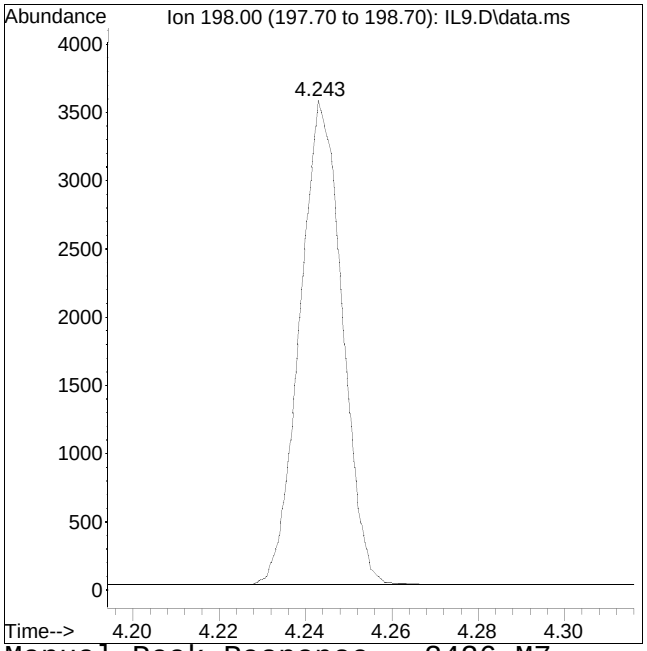
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL9.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:01 am Instrument : SV128
Sample : IL9,32,, 10.0 Lot#10227 Quant Date : 9/5/2023 11:59 am

Compound #23: 4,6-Dinitro-o-cresol



Original Peak Response = 2426



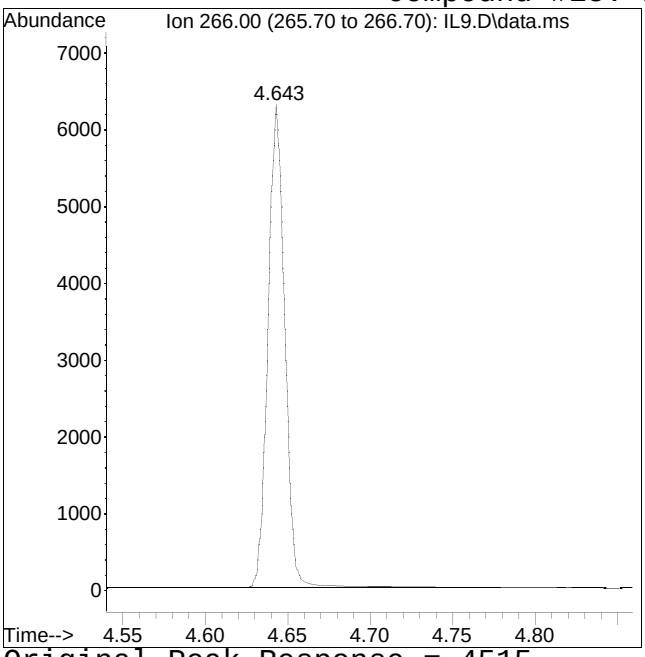
Manual Peak Response = 2426 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

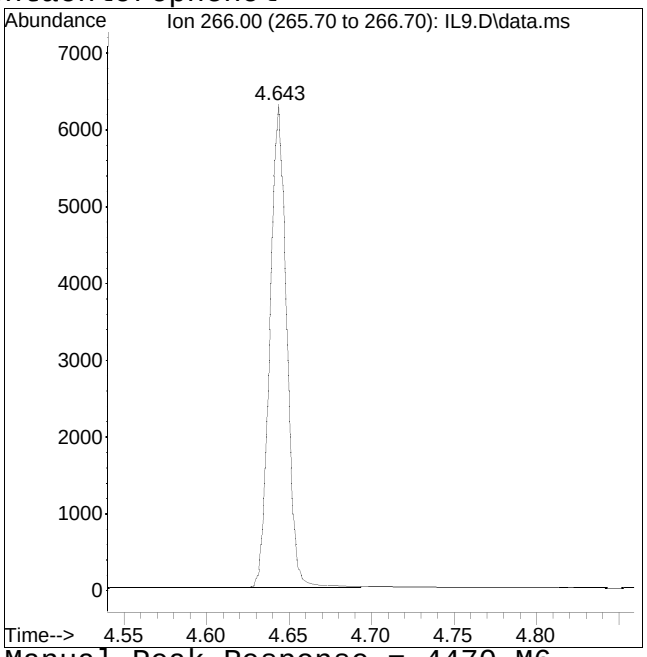
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL9.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:01 am Instrument : SV128
Sample : IL9,32,, 10.0 Lot#10227 Quant Date : 9/5/2023 11:59 am

Compound #25: Pentachlorophenol



Original Peak Response = 4515



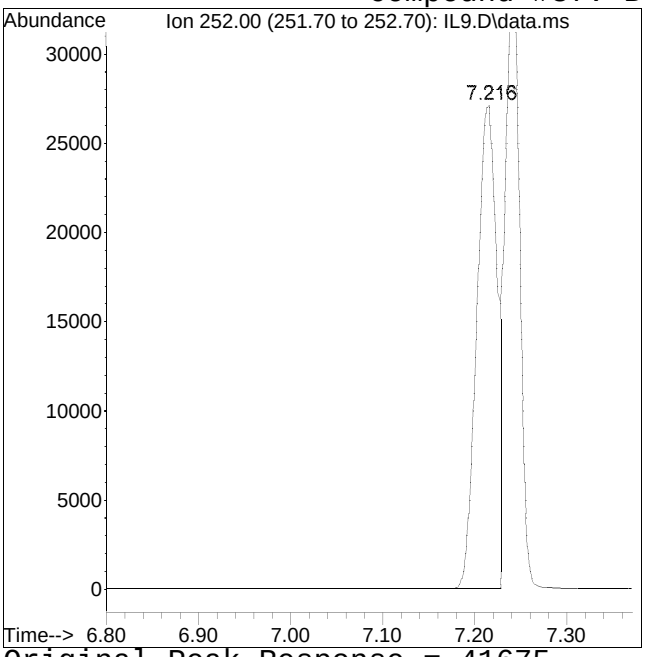
Manual Peak Response = 4470 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

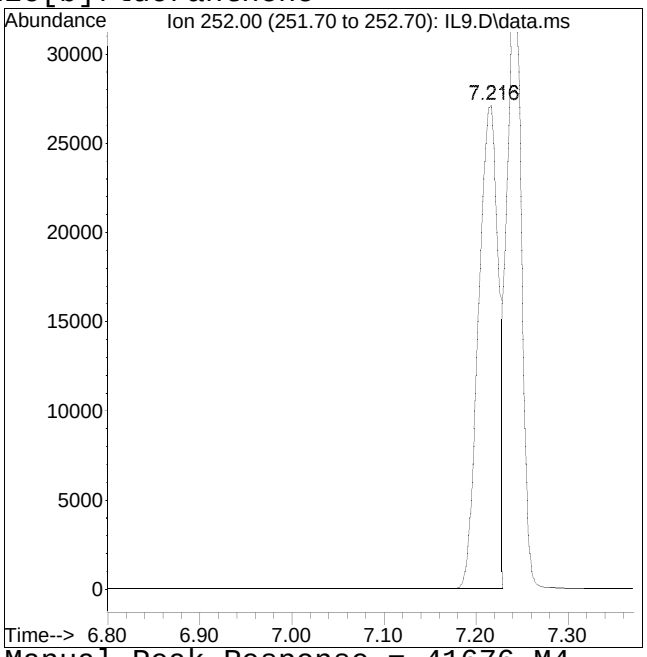
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL9.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:01 am Instrument : SV128
Sample : IL9,32,, 10.0 Lot#10227 Quant Date : 9/5/2023 11:59 am

Compound #37: Benzo[b]fluoranthene



Original Peak Response = 41675



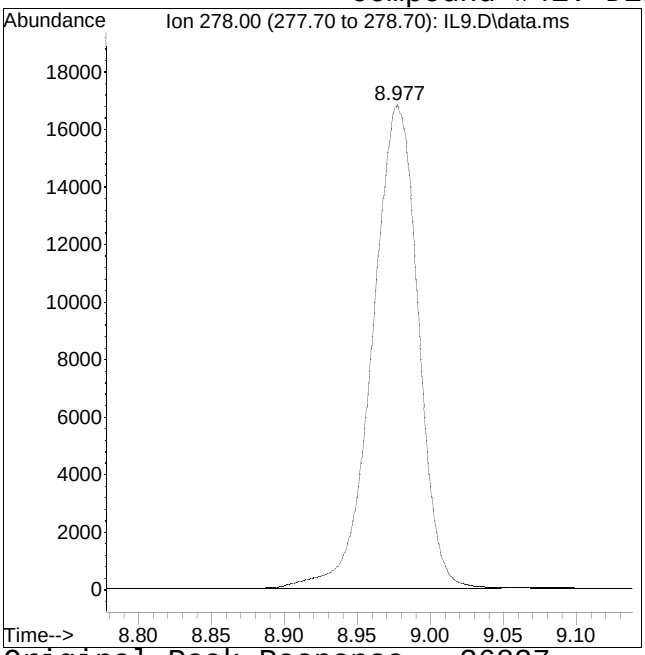
Manual Peak Response = 41676 M4

M4 = Poor automated baseline construction.

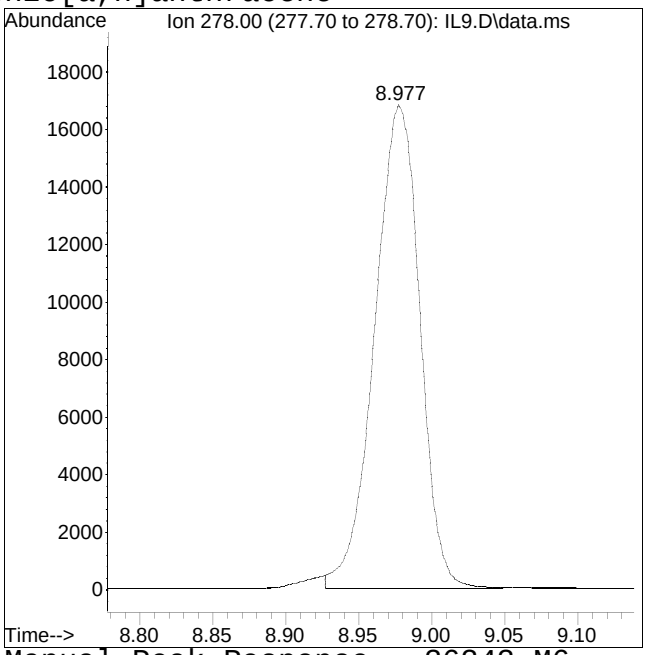
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL9.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:01 am Instrument : SV128
Sample : IL9,32,, 10.0 Lot#10227 Quant Date : 9/5/2023 11:59 am

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 36837



Manual Peak Response = 36243 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL8.D
Acq On : 31 Aug 2023 10:17 am
Operator : SV128:ah
Sample : IL8,32,, 5.0 Lot#10228
Misc : WG1823727,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 11:59:19 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:17 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.258	152	2396	4000.000	ng/ml	0.00
Standard Area 1 = 2292			Recovery = 104.54%			
8) Naphthalene-d8	2.922	136	9576	4000.000	ng/ml	0.00
Standard Area 1 = 8982			Recovery = 106.61%			
17) Acenaphthene-d10	3.902	164	5705	4000.000	ng/ml	0.00
Standard Area 1 = 5319			Recovery = 107.26%			
22) Phenanthrene-d10	4.748	188	12921	4000.000	ng/ml	0.00
Standard Area 1 = 12548			Recovery = 102.97%			
31) Chrysene-d12	6.325	240	12117	4000.000	ng/ml	0.00
Standard Area 1 = 11983			Recovery = 101.12%			
36) Perylene-d12	7.605	264	13630	4000.000	ng/ml	0.00
Standard Area 1 = 13430			Recovery = 101.49%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.651	112	3192	5213.411	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 104.27%			
3) Phenol-d6	2.065	99	3997	5334.902	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 106.70%			
7) Nitrobenzene-d5	2.537	82	3581	5638.901	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 225.56%#			
13) 2-Fluorobiphenyl	3.520	172	10378	5284.180	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 211.37%#			
21) 2,4,6-Tribromophenol	4.351	330	1407	5873.729	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 117.47%#			
30) 4-Terphenyl-d14	5.676	244	14575	5337.821	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 213.51%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.118	93	3396	5260.229	ng/ml	98
5) n-nitrosodi-n-propylamine	2.457	70	2678M6	5529.515	ng/ml	
6) Hexachloroethane	2.518	117	1490	5172.926	ng/ml	91
9) Naphthalene	2.934	128	12071	5159.218	ng/ml#	100
10) Hexachlorobutadiene	3.007	225	2295	5216.535	ng/ml	99
11) 2-Methylnaphthalene	3.313	142	8305	5317.876	ng/ml	98
12) 1-Methylnaphthalene	3.371	142	7687	5312.773	ng/ml	100
14) 2-Chloronaphthalene	3.584	162	8646	5340.218	ng/ml	96
15) 2,6-Dinitrotoluene	3.780	165	1886M6	5832.778	ng/ml	
16) Acenaphthylene	3.820	152	14371	5573.746	ng/ml	100
18) Acenaphthene	3.917	153	9500	5255.565	ng/ml	94

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL8.D
Acq On : 31 Aug 2023 10:17 am
Operator : SV128:ah
Sample : IL8,32,, 5.0 Lot#10228
Misc : WG1823727,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 11:59:19 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:17 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
19) 2,4-Dinitrotoluene	4.009	165	2520	5815.116	ng/ml	94
20) Fluorene	4.211	166	10410	5277.637	ng/ml	99
23) 4,6-Dinitro-o-cresol	4.241	198	1178	4959.808	ng/ml#	76
24) Hexachlorobenzene	4.533	284	3699	5330.922	ng/ml	98
25) Pentachlorophenol	4.642	266	2242M6	5029.817	ng/ml	
26) Phenanthrene	4.760	178	16719	5189.969	ng/ml	100
27) Anthracene	4.790	178	17206	5488.314	ng/ml	99
28) Fluoranthene	5.449	202	19831	5298.566	ng/ml#	94
29) Pyrene	5.580	202	21062	5437.208	ng/ml	100
32) Benzo[a]anthracene	6.317	228	21182	4998.469	ng/ml	100
33) 3,3'-Dichlorobenzidine	6.306	252	8389	5551.281	ng/ml	100
34) Chrysene	6.344	228	19648	5255.712	ng/ml	99
35) Bis(2-ethylhexyl)phtha...	6.360	149	13481	5712.988	ng/ml	100
37) Benzo[b]fluoranthene	7.212	252	21207	5522.243	ng/ml	100
38) Benzo[k]fluoranthene	7.237	252	20352	5726.541	ng/ml	100
39) Benzo[a]pyrene	7.539	252	19002	5761.334	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.918	276	18412	5578.198	ng/ml	96
41) Dibenzo[a,h]anthracene	8.965	278	18800M6	5917.458	ng/ml	
42) Benzo[g,h,i]perylene	9.281	276	18430	5438.576	ng/ml	96

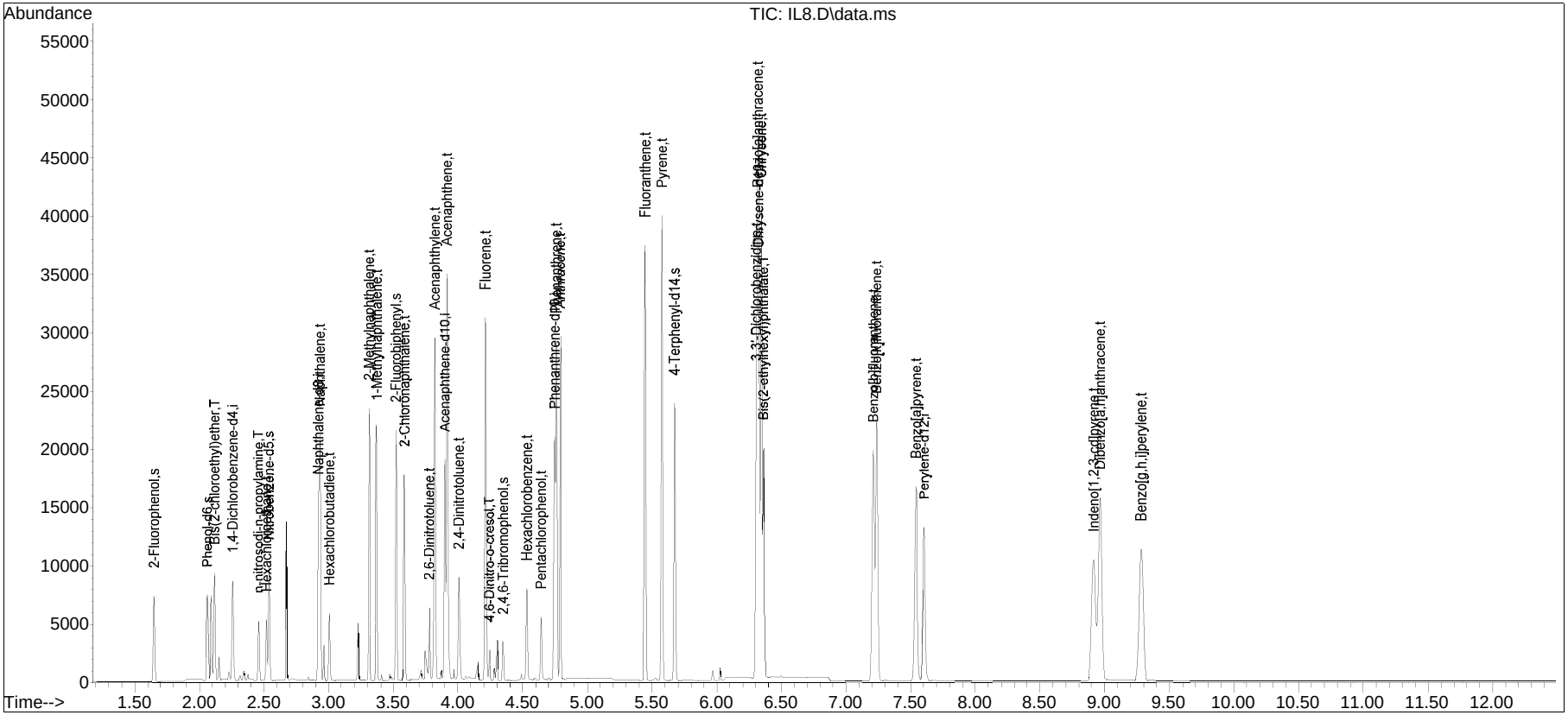
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL8.D
Acq On : 31 Aug 2023 10:17 am
Operator : SV128:ah
Sample : IL8,32,, 5.0 Lot#10228
Misc : WG1823727,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 11:59:19 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:17 2023
Response via : Initial Calibration

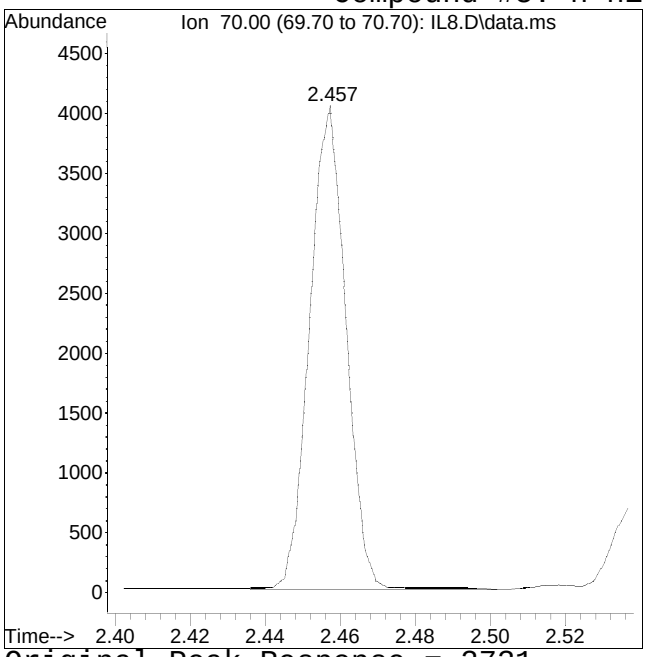
Sub List : Default - All compounds listedIical\IL7.D•



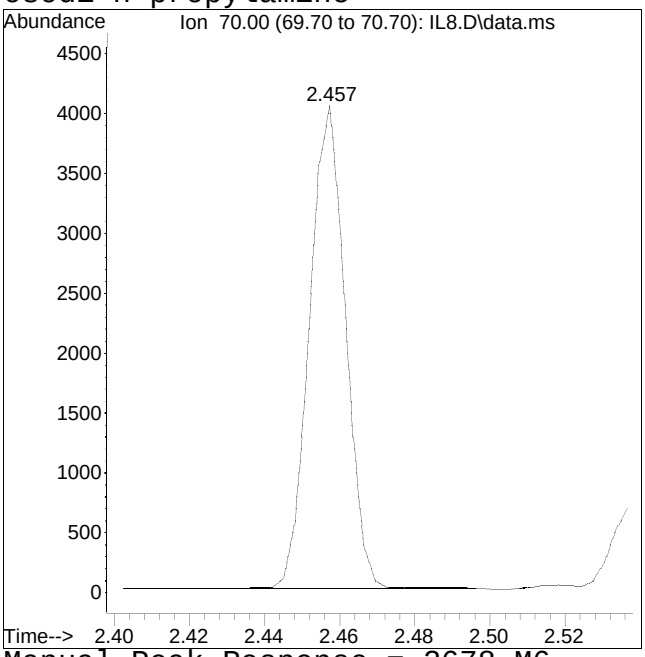
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL8.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:17 am Instrument : SV128
Sample : IL8,32,, 5.0 Lot#10228 Quant Date : 9/5/2023 11:59 am

Compound #5: n-nitrosodi-n-propylamine



Original Peak Response = 2731



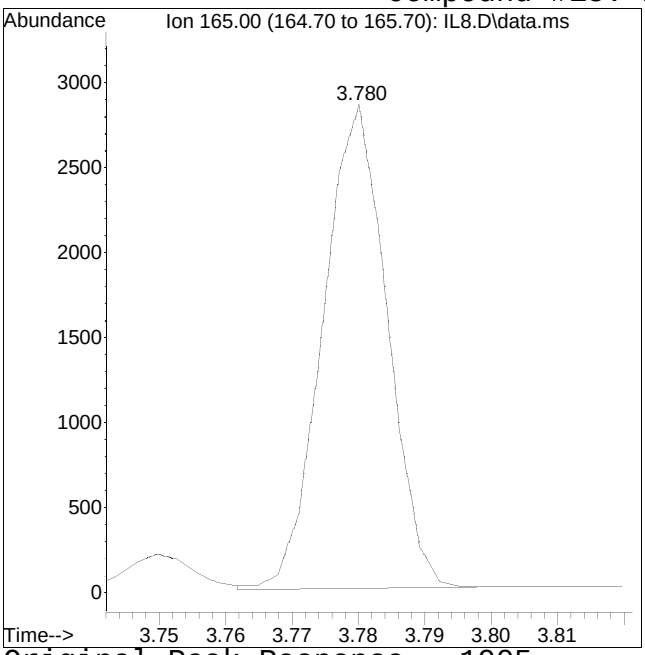
Manual Peak Response = 2678 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

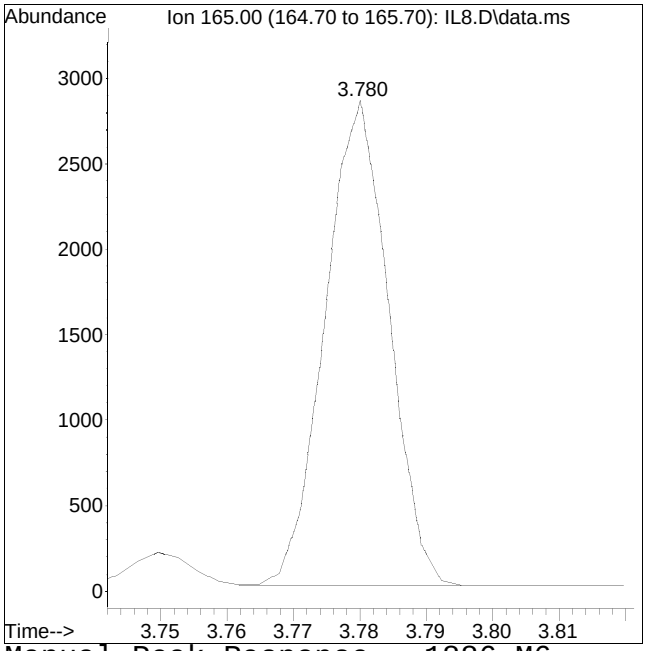
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL8.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:17 am Instrument : SV128
Sample : IL8,32,, 5.0 Lot#10228 Quant Date : 9/5/2023 11:59 am

Compound #15: 2,6-Dinitrotoluene



Original Peak Response = 1905



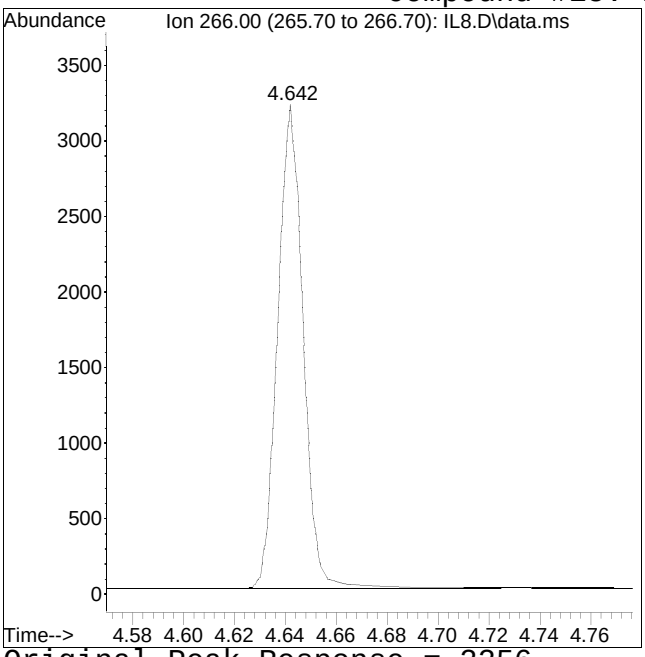
Manual Peak Response = 1886 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

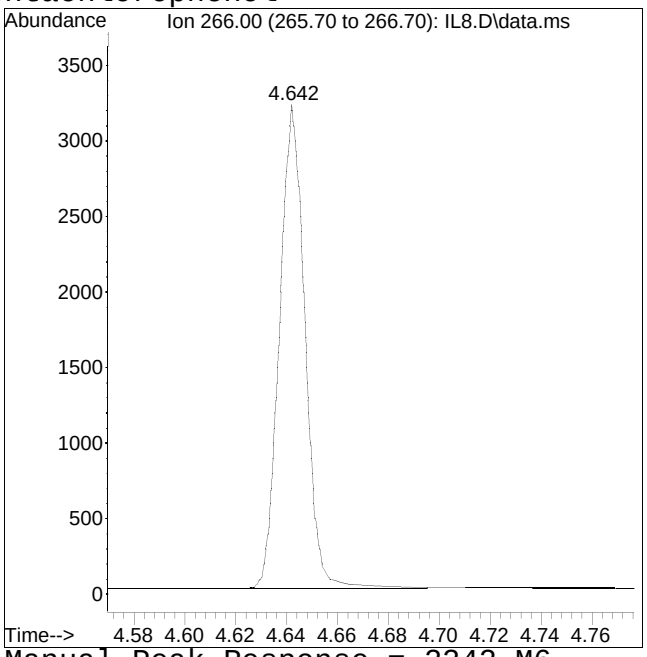
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL8.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:17 am Instrument : SV128
Sample : IL8,32,, 5.0 Lot#10228 Quant Date : 9/5/2023 11:59 am

Compound #25: Pentachlorophenol



Original Peak Response = 2256



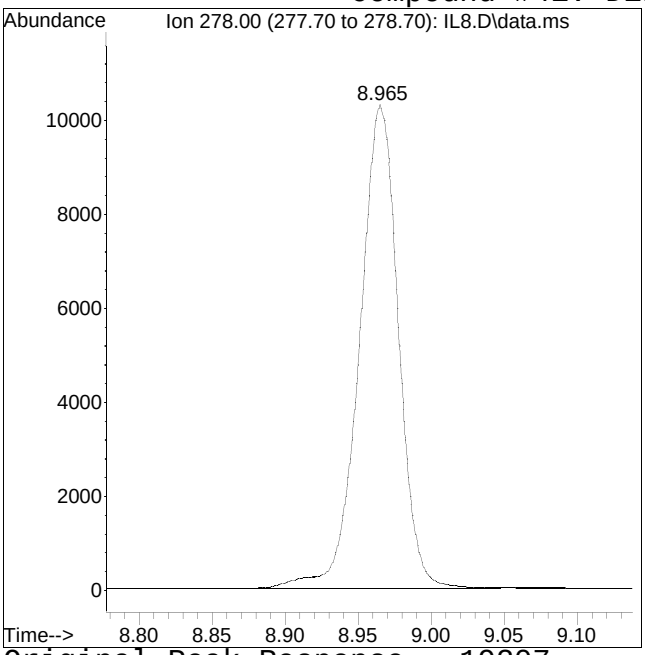
Manual Peak Response = 2242 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

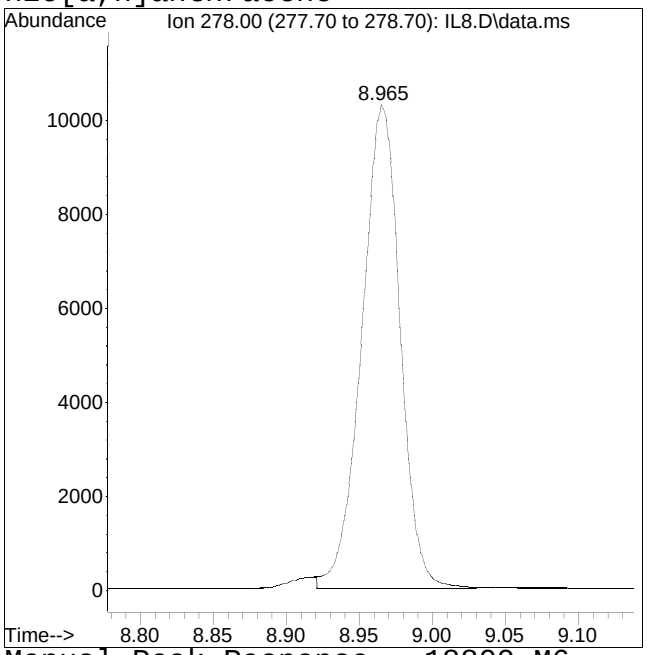
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL8.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:17 am Instrument : SV128
Sample : IL8,32,, 5.0 Lot#10228 Quant Date : 9/5/2023 11:59 am

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 19207



Manual Peak Response = 18800 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL7.D
Acq On : 31 Aug 2023 10:34 am
Operator : SV128:ah
Sample : IL7,32,, 1.0 Lot#10229
Misc : WG1823727,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 05 12:05:07 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.258	152	2292M2	4000.000	ng/ml	-0.06
Standard Area 1 = 2292			Recovery = 100.00%			
8) Naphthalene-d8	2.922	136	8982	4000.000	ng/ml	-0.08
Standard Area 1 = 8982			Recovery = 100.00%			
17) Acenaphthene-d10	3.902	164	5319	4000.000	ng/ml	-0.11
Standard Area 1 = 5319			Recovery = 100.00%			
22) Phenanthrene-d10	4.748	188	12548	4000.000	ng/ml	-0.13
Standard Area 1 = 12548			Recovery = 100.00%			
31) Chrysene-d12	6.324	240	11983	4000.000	ng/ml	-0.20
Standard Area 1 = 11983			Recovery = 100.00%			
36) Perylene-d12	7.604	264	13430M2	4000.000	ng/ml	-0.33
Standard Area 1 = 13430			Recovery = 100.00%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.654	112	605M2	1032.968	ng/ml	-0.04
Spiked Amount 5000.000	Range 15 - 110		Recovery = 20.66%			
3) Phenol-d6	2.064	99	745M3	1039.491	ng/ml	-0.05
Spiked Amount 5000.000	Range 15 - 110		Recovery = 20.79%			
7) Nitrobenzene-d5	2.537	82	650M2	1069.980	ng/ml	-0.07
Spiked Amount 2500.000	Range 30 - 130		Recovery = 42.80%			
13) 2-Fluorobiphenyl	3.520	172	1929	1047.146	ng/ml	-0.10
Spiked Amount 2500.000	Range 30 - 130		Recovery = 41.89%			
21) 2,4,6-Tribromophenol	4.348	330	236	1056.714	ng/ml	-0.12
Spiked Amount 5000.000	Range 15 - 110		Recovery = 21.13%			
30) 4-Terphenyl-d14	5.676	244	2792	1052.913	ng/ml	-0.15
Spiked Amount 2500.000	Range 30 - 130		Recovery = 42.12%			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.121	93	647M3	1047.643	ng/ml	
5) n-nitrosodi-n-propylamine	2.458	70	485M3	1046.864	ng/ml	
6) Hexachloroethane	2.519	117	283M2	1027.090	ng/ml	
9) Naphthalene	2.934	128	2274	1036.197	ng/ml#	100
10) Hexachlorobutadiene	3.007	225	432	1046.874	ng/ml	100
11) 2-Methylnaphthalene	3.316	142	1539	1050.626	ng/ml	99
12) 1-Methylnaphthalene	3.368	142	1426	1050.739	ng/ml	100
14) 2-Chloronaphthalene	3.584	162	1602	1054.915	ng/ml	93

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL7.D
Acq On : 31 Aug 2023 10:34 am
Operator : SV128:ah
Sample : IL7,32,, 1.0 Lot#10229
Misc : WG1823727,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 05 12:05:07 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2,6-Dinitrotoluene	3.780	165	288M4	949.593	ng/ml	
16) Acenaphthylene	3.820	152	2582	1067.647	ng/ml	100
18) Acenaphthene	3.918	153	1761	1044.915	ng/ml	94
19) 2,4-Dinitrotoluene	4.009	165	391	967.743	ng/ml	97
20) Fluorene	4.211	166	1946	1058.175	ng/ml	100
23) 4,6-Dinitro-o-cresol	4.239	198	185M6	862.661	ng/ml	
24) Hexachlorobenzene	4.533	284	702	1041.782	ng/ml	98
25) Pentachlorophenol	4.642	266	369M6	875.107	ng/ml	
26) Phenanthrene	4.760	178	3211	1026.399	ng/ml	100
27) Anthracene	4.790	178	3202M6	1051.724	ng/ml	
28) Fluoranthene	5.449	202	3769	1036.959	ng/ml	96
29) Pyrene	5.580	202	3962	1053.204	ng/ml	100
32) Benzo[a]anthracene	6.316	228	4010	1009.967	ng/ml	100
33) 3,3'-Dichlorobenzidine	6.305	252	1458M6	975.596	ng/ml	
34) Chrysene	6.341	228	3800	1027.842	ng/ml	99
35) Bis(2-ethylhexyl)phtha...	6.360	149	2178M6	933.316	ng/ml	
37) Benzo[b]fluoranthene	7.208	252	3826M3	1011.116	ng/ml	
38) Benzo[k]fluoranthene	7.233	252	3859M3	1101.996	ng/ml	
39) Benzo[a]pyrene	7.538	252	3454M2	1062.835	ng/ml	
40) Indeno[1,2,3-cd]pyrene	8.911	276	3264M3	1003.605	ng/ml	
41) Dibenzo[a,h]anthracene	8.958	278	3385M2	1081.324	ng/ml	
42) Benzo[g,h,i]perylene	9.268	276	3393M2	1016.163	ng/ml	

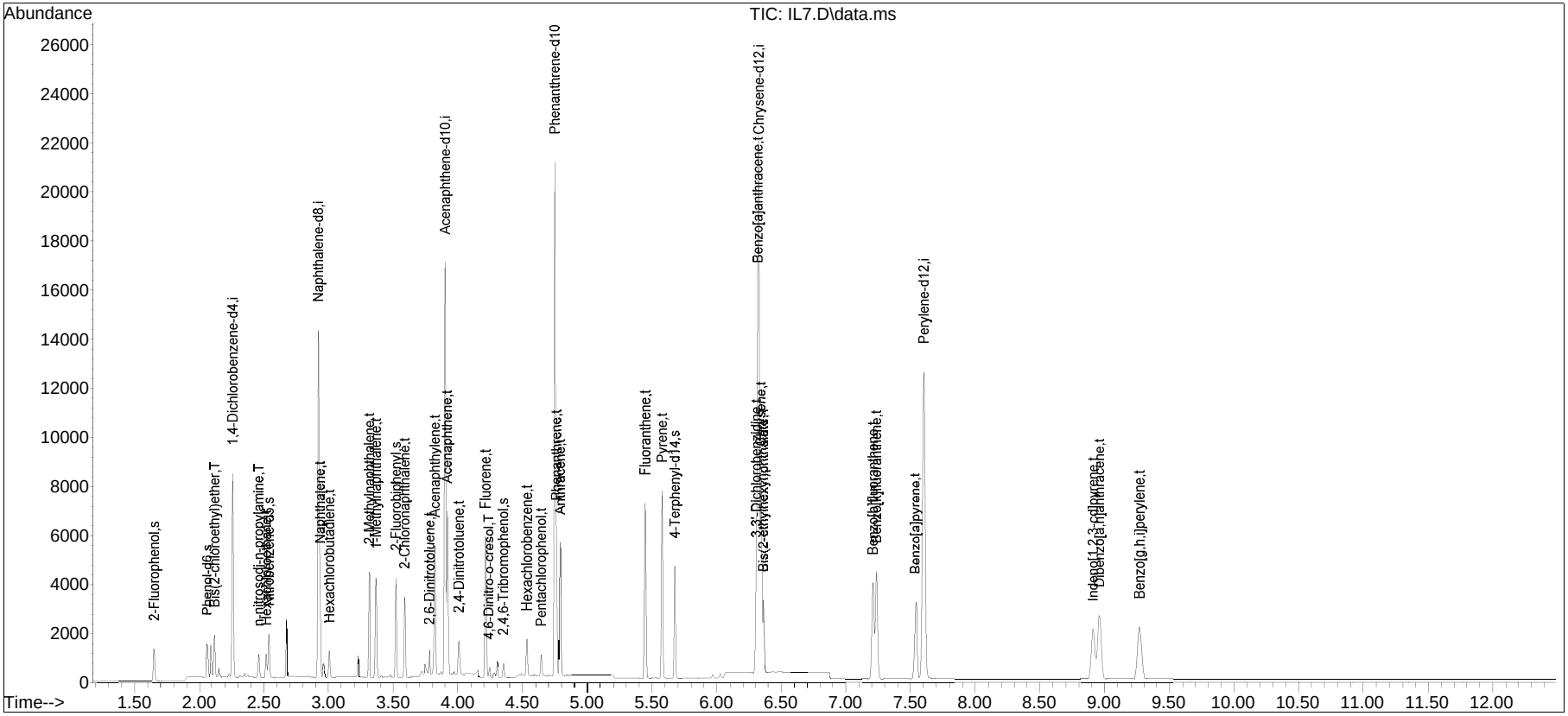
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL7.D
Acq On : 31 Aug 2023 10:34 am
Operator : SV128:ah
Sample : IL7,32,, 1.0 Lot#10229
Misc : WG1823727,,ical
ALS Vial : 4 Sample Multiplier: 1

Quant Time: Sep 05 12:05:07 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:11 2023
Response via : Initial Calibration

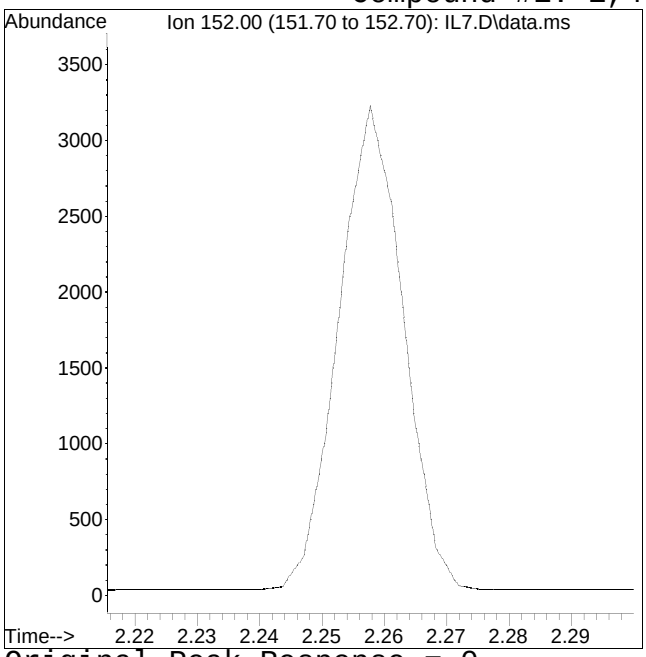
Sub List : Default - All compounds listedIical\IL7.D•



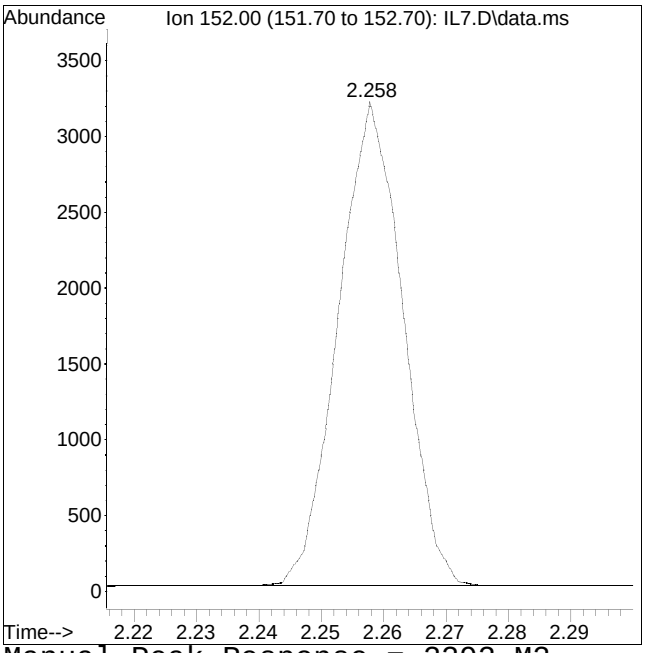
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #1: 1,4-Dichlorobenzene-d4



Original Peak Response = 0



Manual Peak Response = 2292 M2

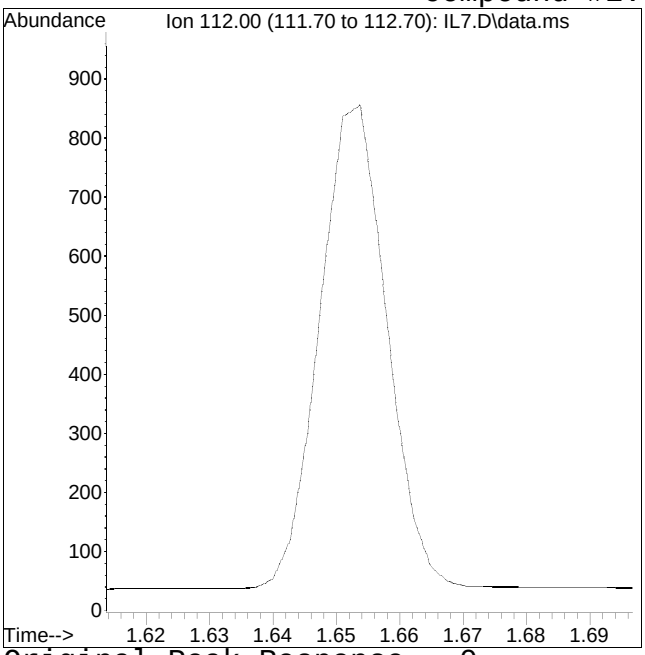
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

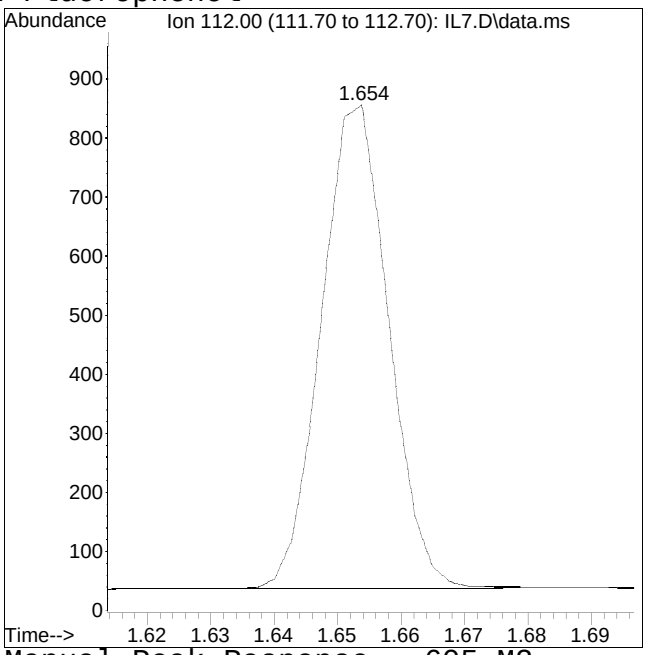
Data Path : I:\8270SIM\SV128\230831aLVQ
Data File : IL7.D
Date Inj'd : 8/31/2023 10:34 am
Sample : IL7,32,, 1.0 Lot#10229

Method : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/5/2023 11:59 am

Compound #2: 2-Fluorophenol



Original Peak Response = 0



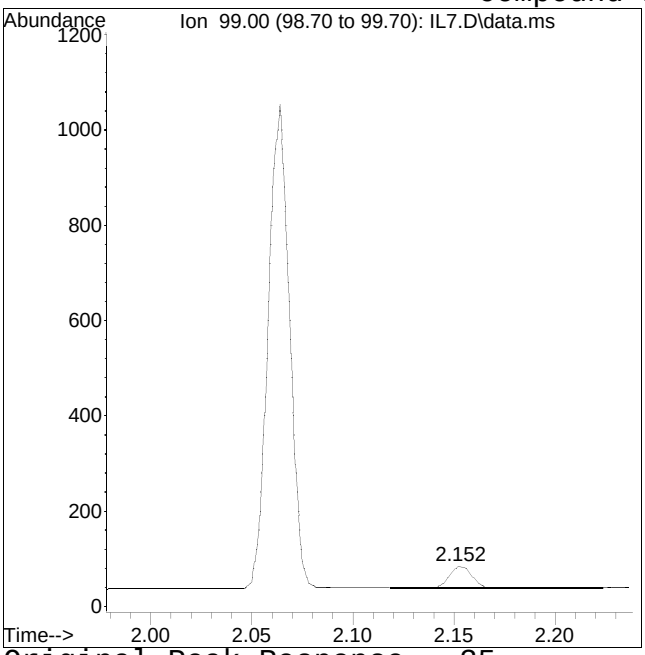
Manual Peak Response = 605 M2

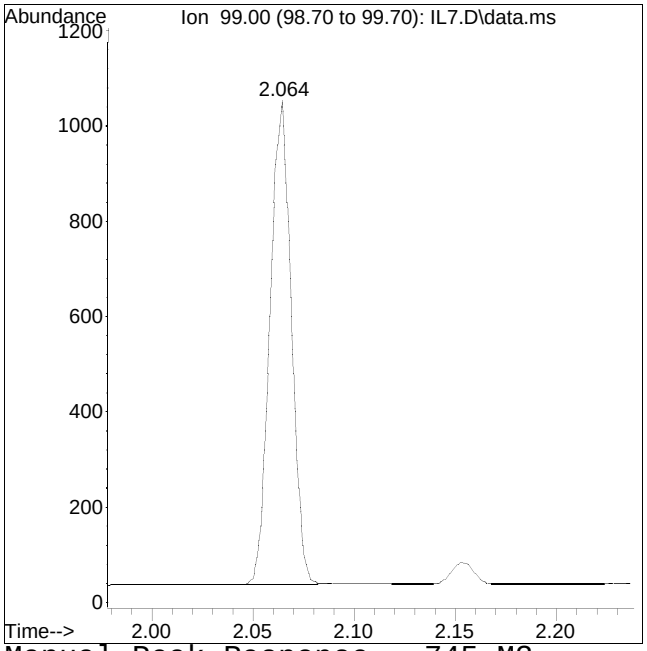
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #3: Phenol-d6



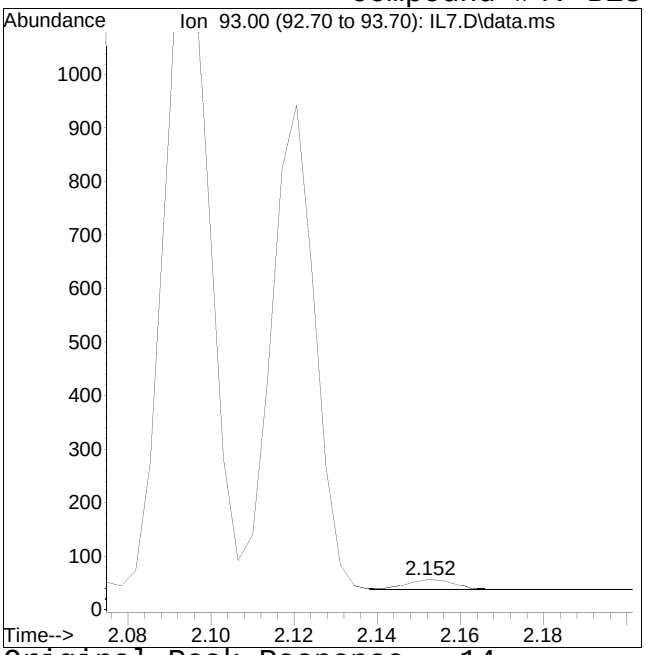


Original Peak Response = 35 Manual Peak Response = 745 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

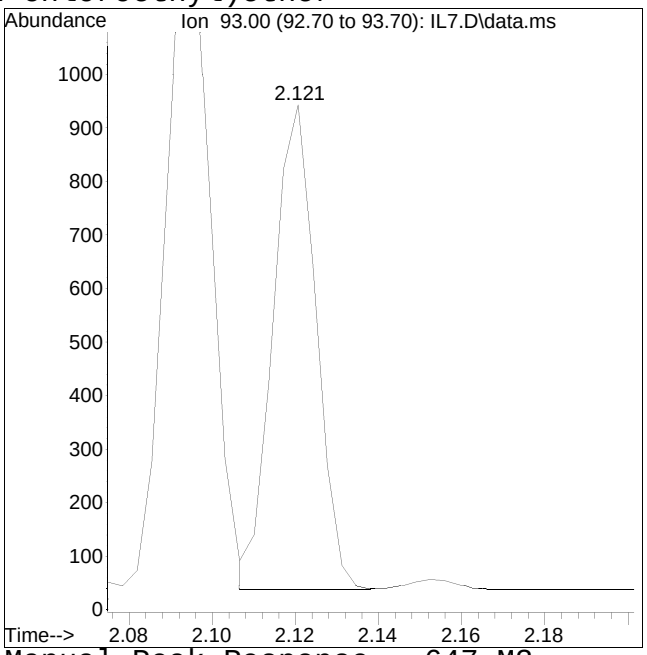
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #4: Bis(2-chloroethyl)ether



Original Peak Response = 14



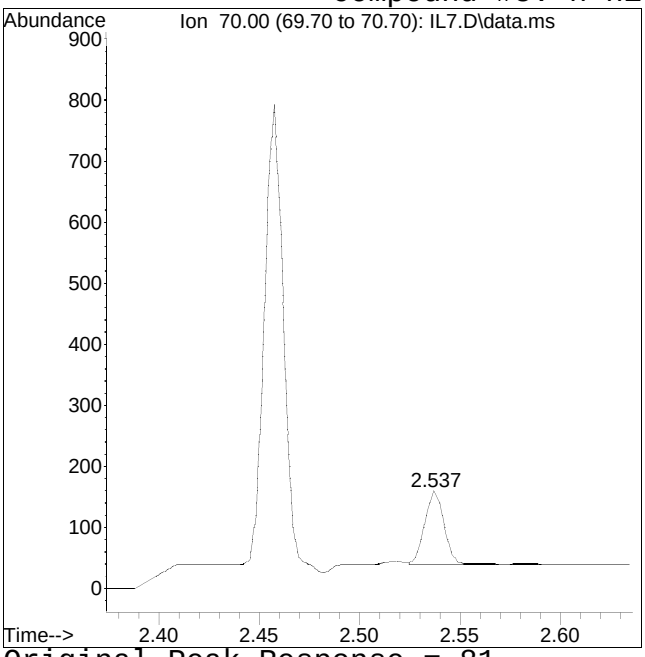
Manual Peak Response = 647 M3

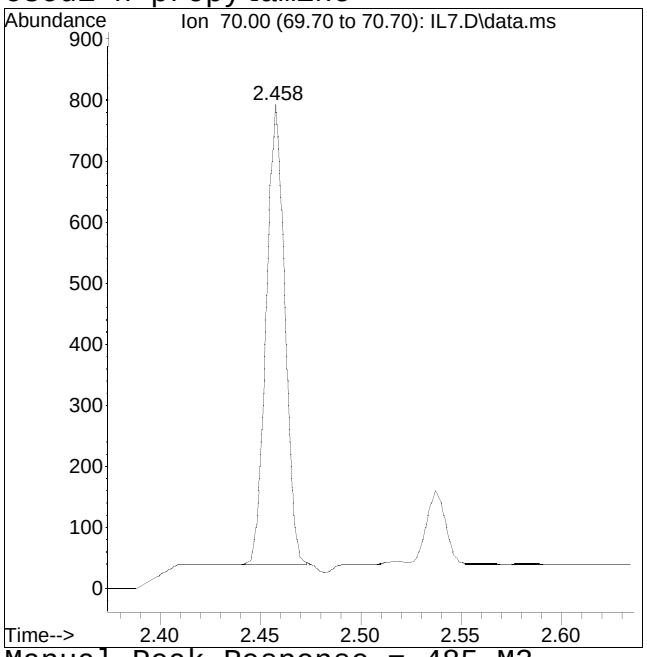
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #5: n-nitrosodi-n-propylamine





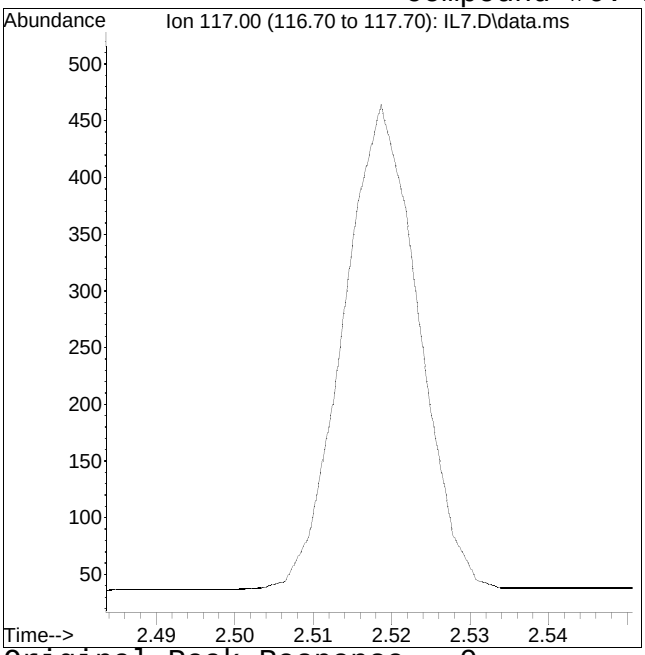
Original Peak Response = 81 Manual Peak Response = 485 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

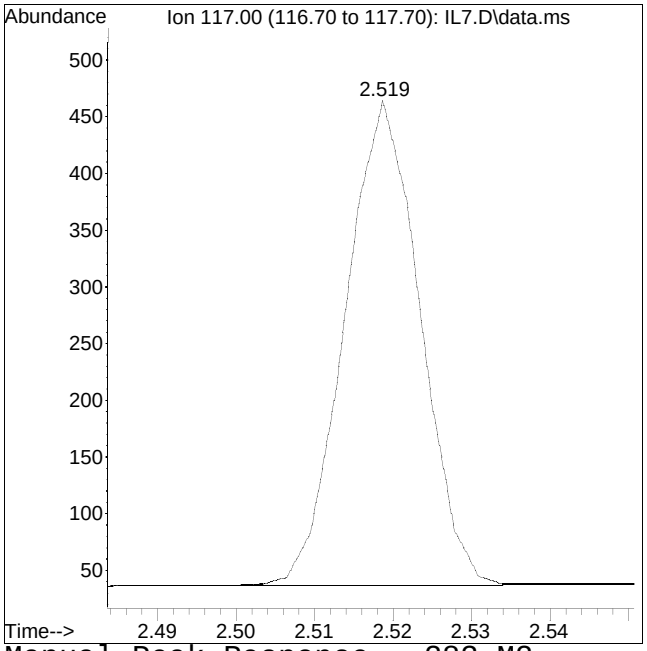
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #6: Hexachloroethane



Original Peak Response = 0



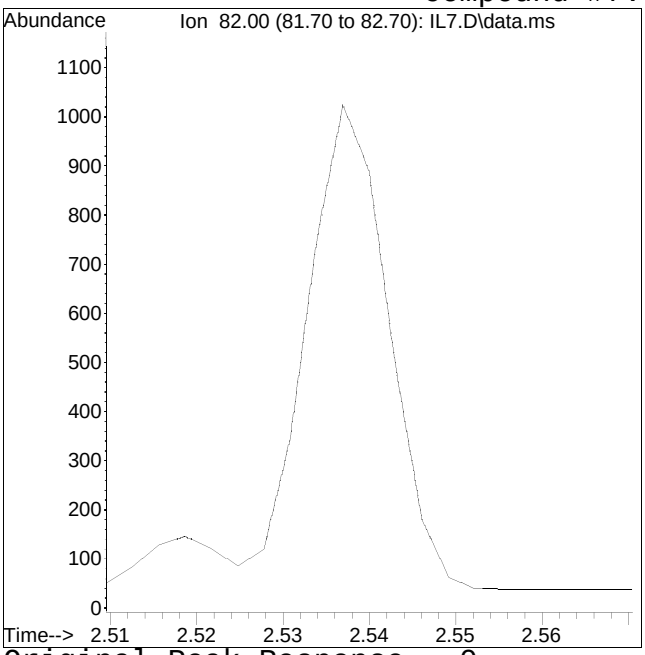
Manual Peak Response = 283 M2

M2 = Peak not found by automatic integration algorithm.

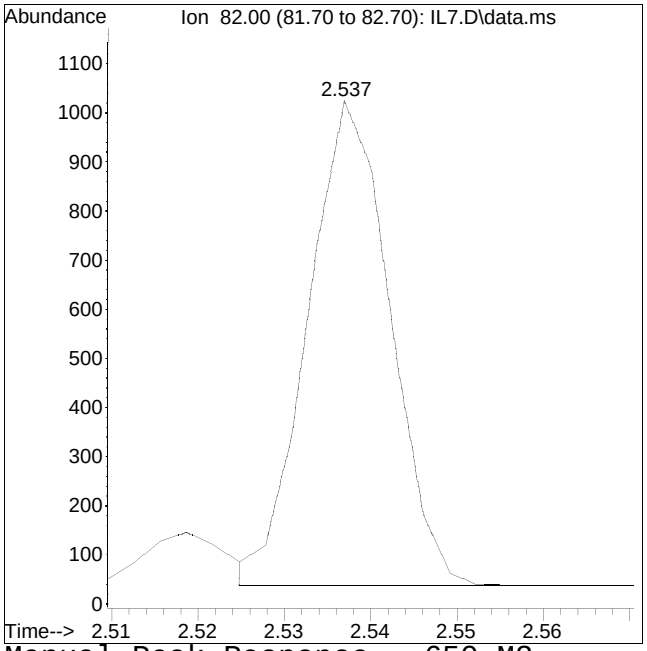
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #7: Nitrobenzene-d5



Original Peak Response = 0



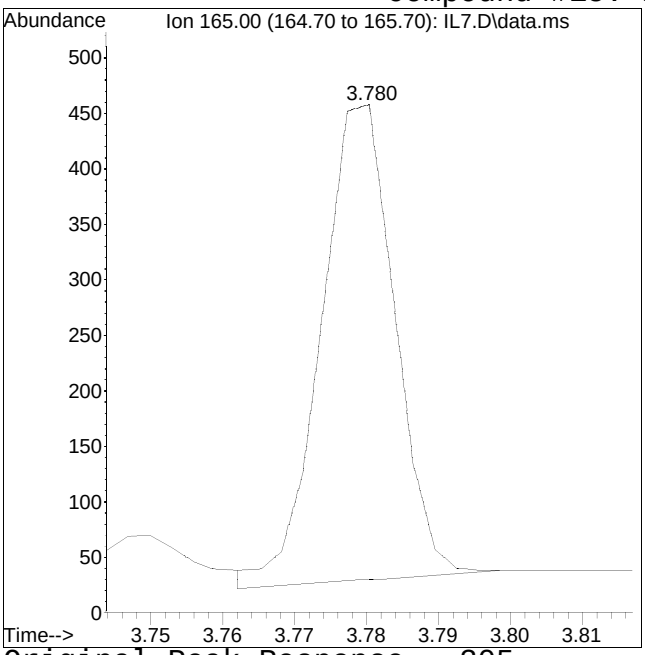
Manual Peak Response = 650 M2

M2 = Peak not found by automatic integration algorithm.

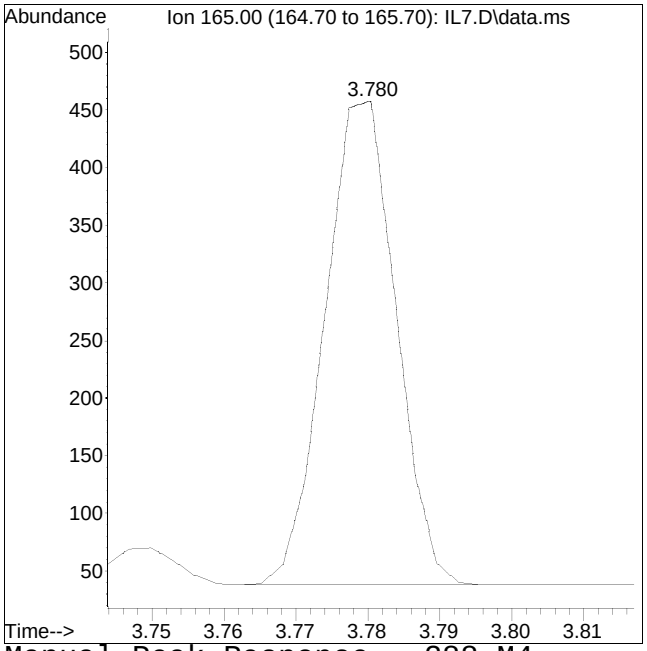
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #15: 2,6-Dinitrotoluene



Original Peak Response = 305



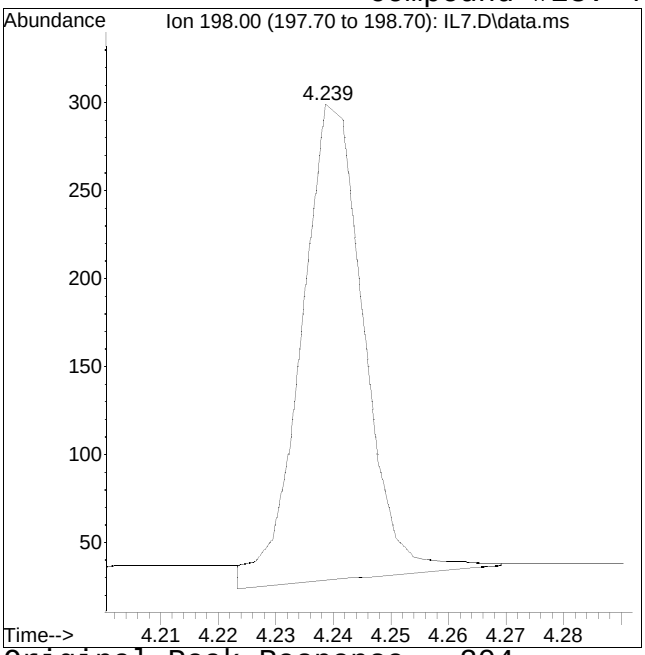
Manual Peak Response = 288 M4

M4 = Poor automated baseline construction.

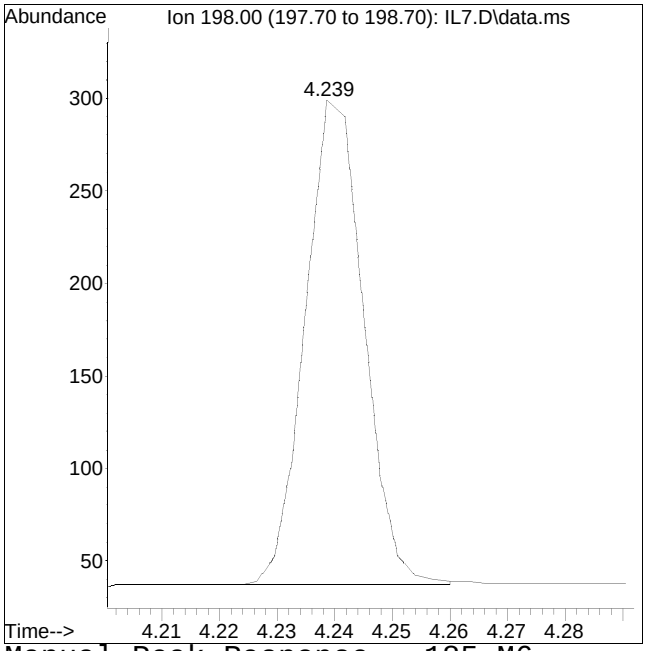
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #23: 4,6-Dinitro-o-cresol



Original Peak Response = 204



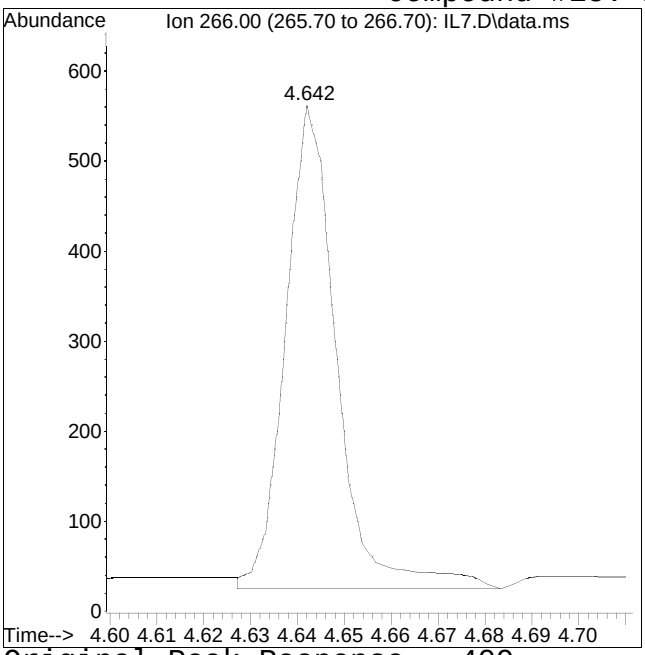
Manual Peak Response = 185 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

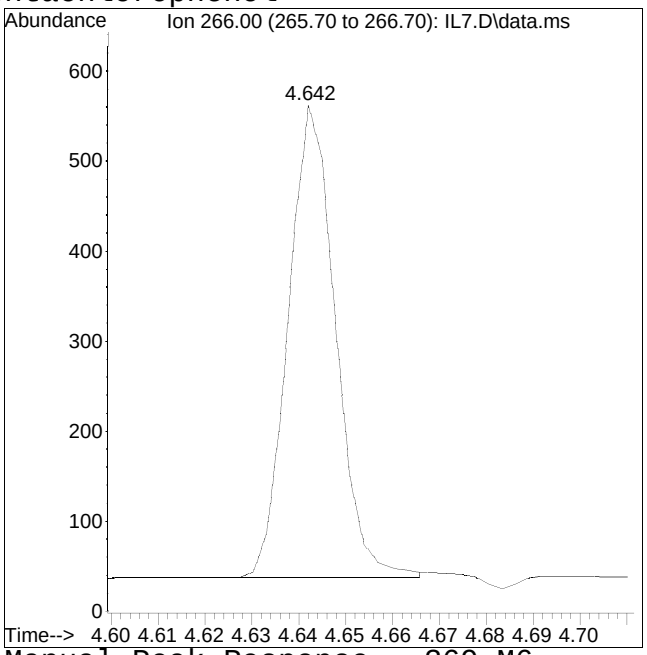
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #25: Pentachlorophenol



Original Peak Response = 409



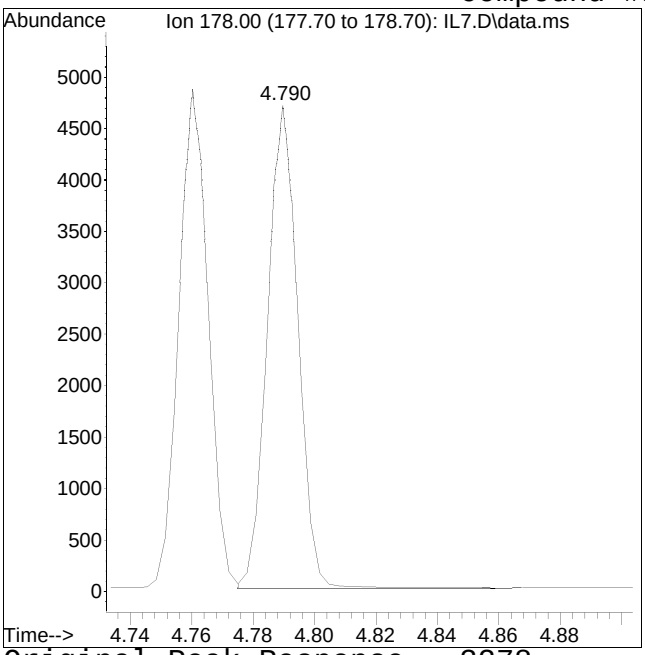
Manual Peak Response = 369 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

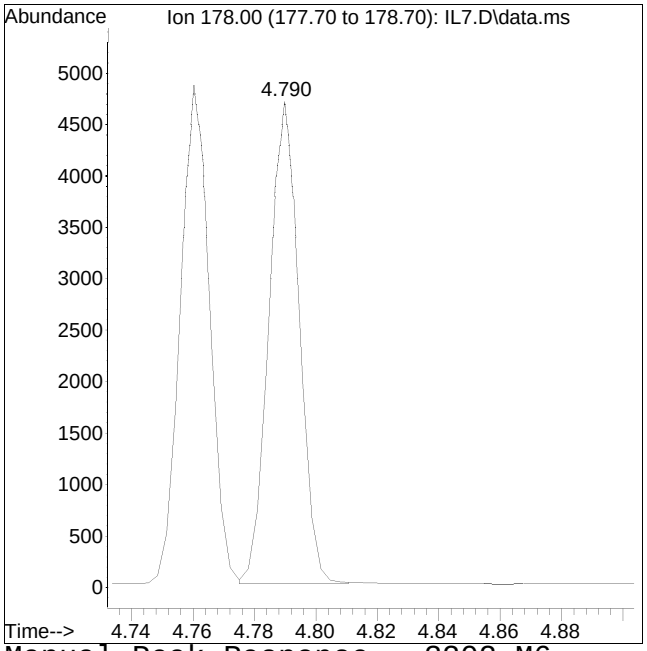
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #27: Anthracene



Original Peak Response = 3278



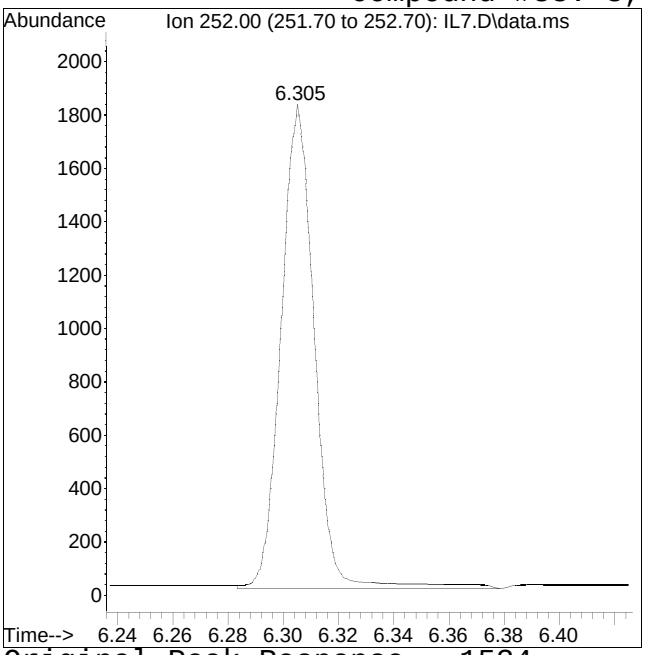
Manual Peak Response = 3202 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

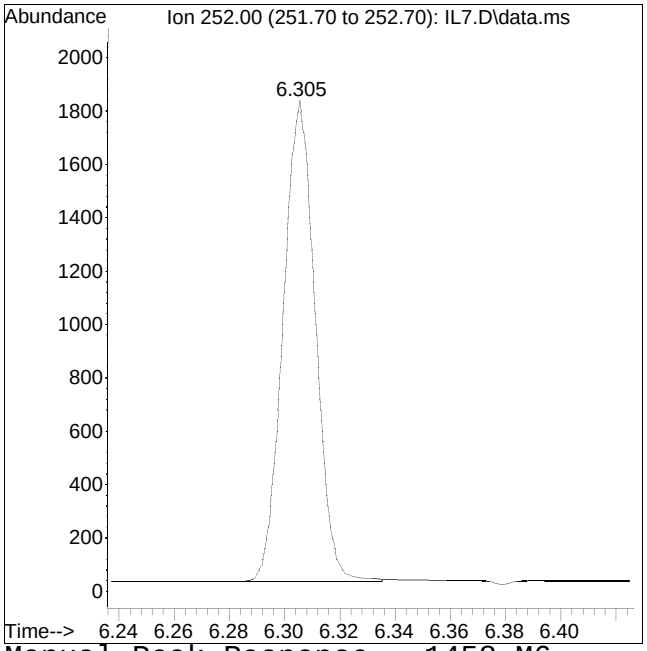
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #33: 3,3'-Dichlorobenzidine



Original Peak Response = 1534



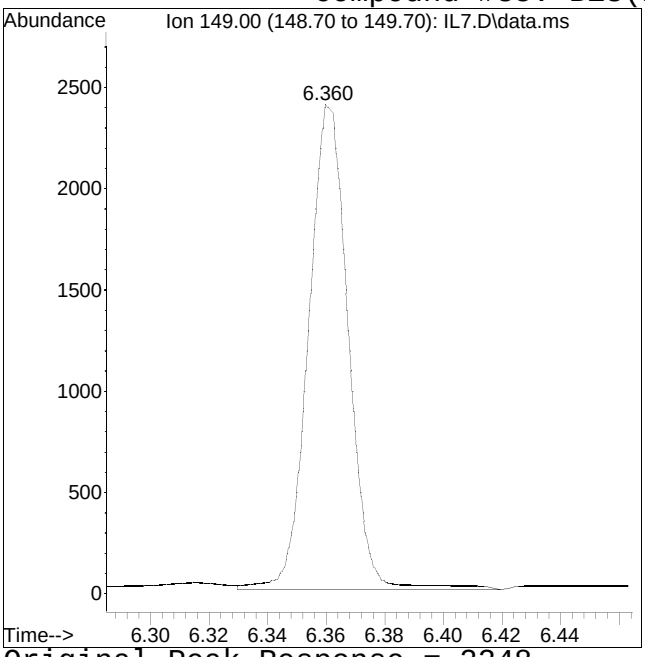
Manual Peak Response = 1458 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

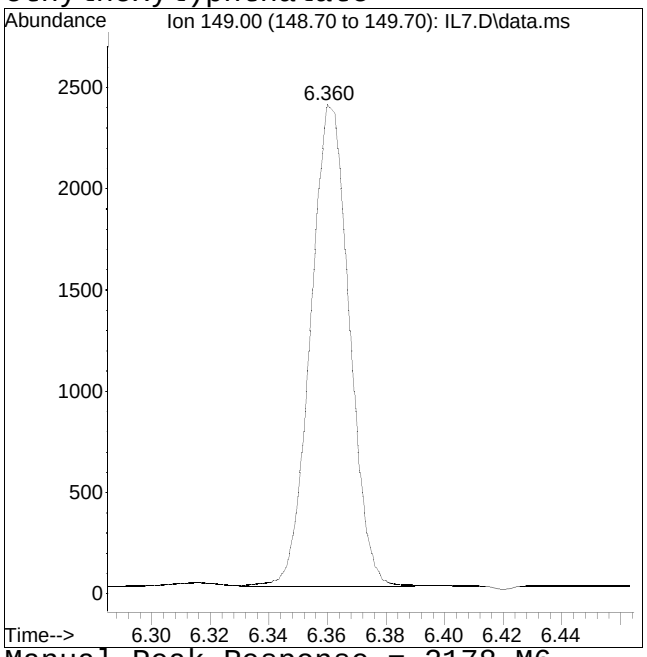
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #35: Bis(2-ethylhexyl)phthalate



Original Peak Response = 2248



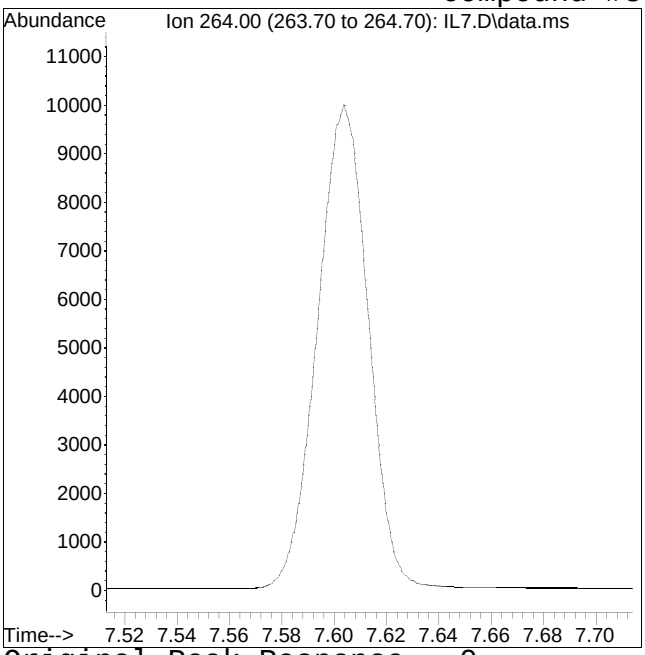
Manual Peak Response = 2178 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

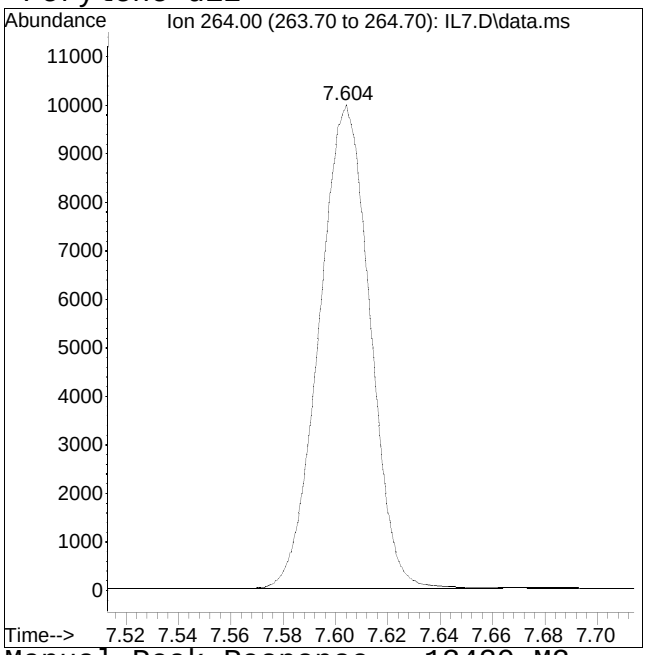
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #36: Perylene-d12



Original Peak Response = 0



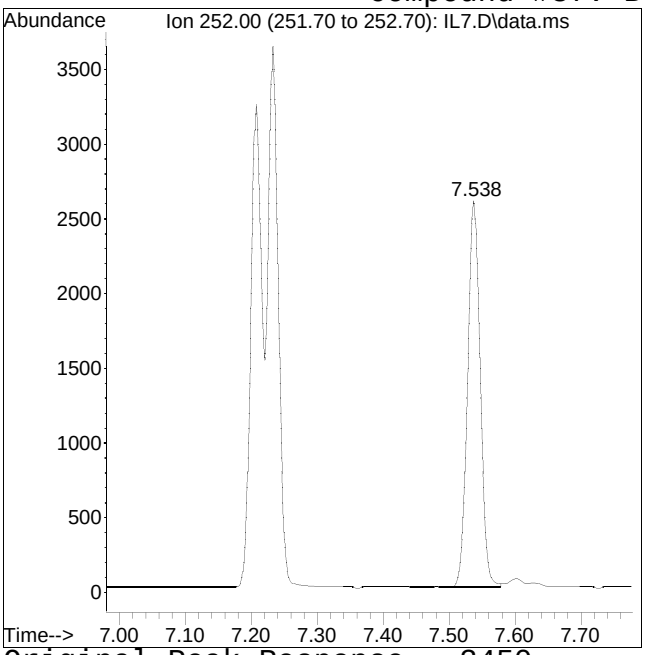
Manual Peak Response = 13430 M2

M2 = Peak not found by automatic integration algorithm.

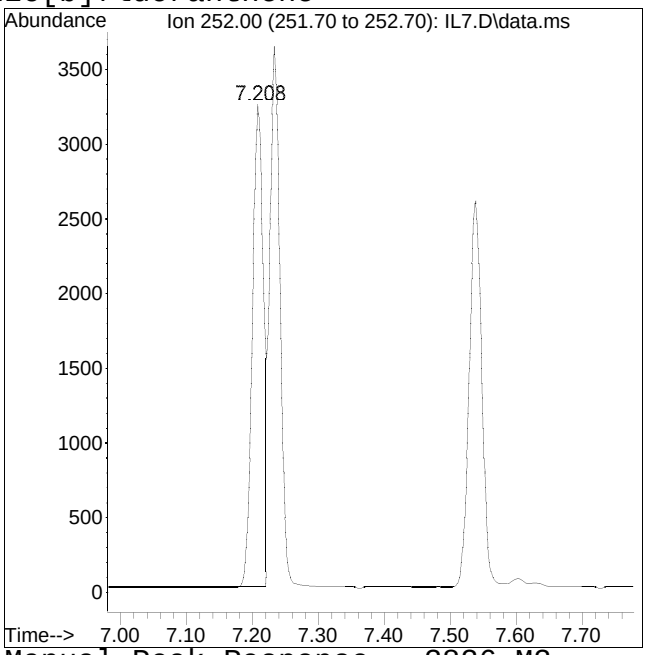
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #37: Benzo[b]fluoranthene



Original Peak Response = 3450



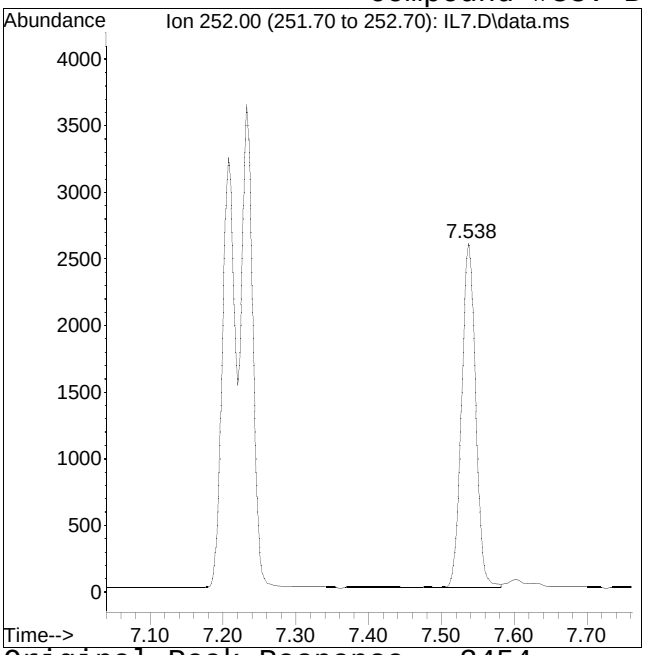
Manual Peak Response = 3826 M3

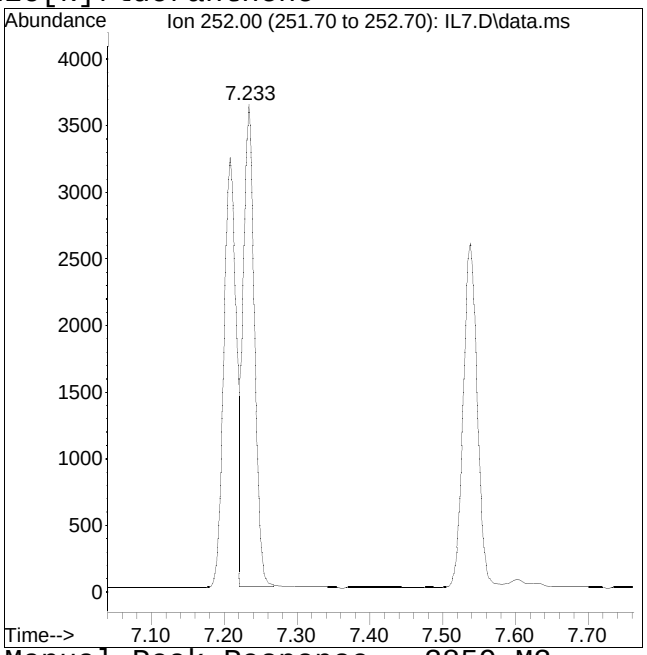
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #38: Benzo[k]fluoranthene



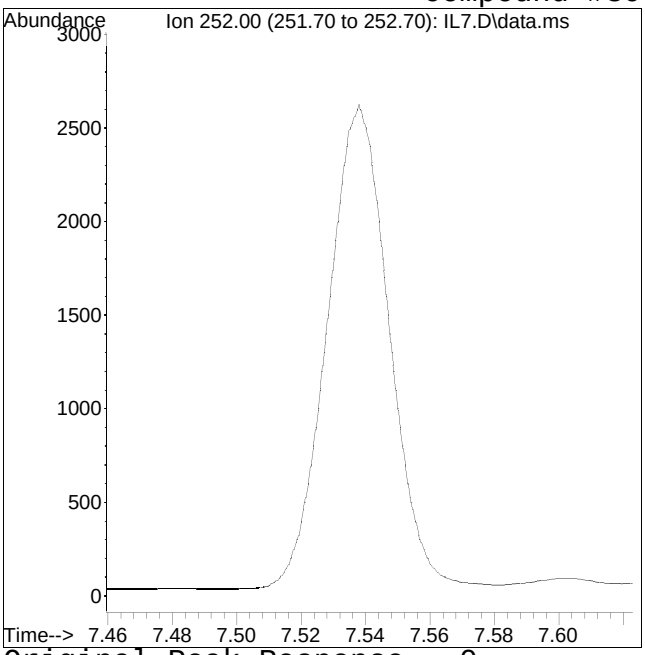


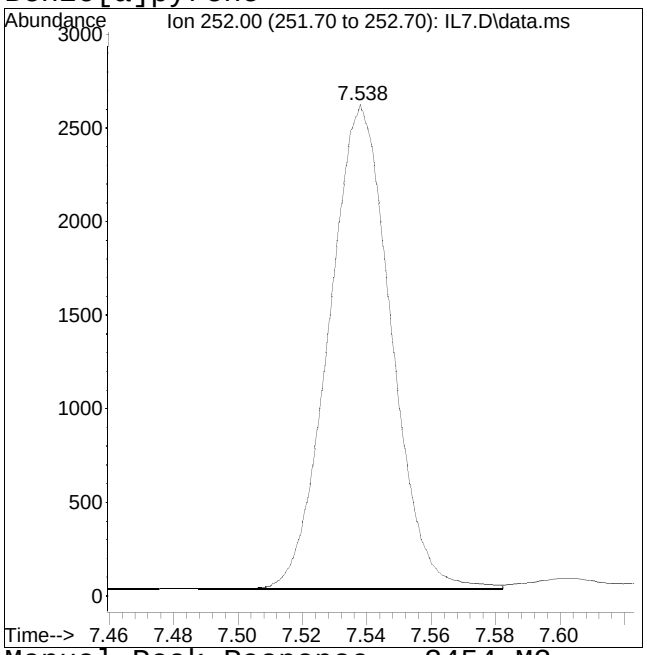
Original Peak Response = 3454 Manual Peak Response = 3859 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #39: Benzo[a]pyrene



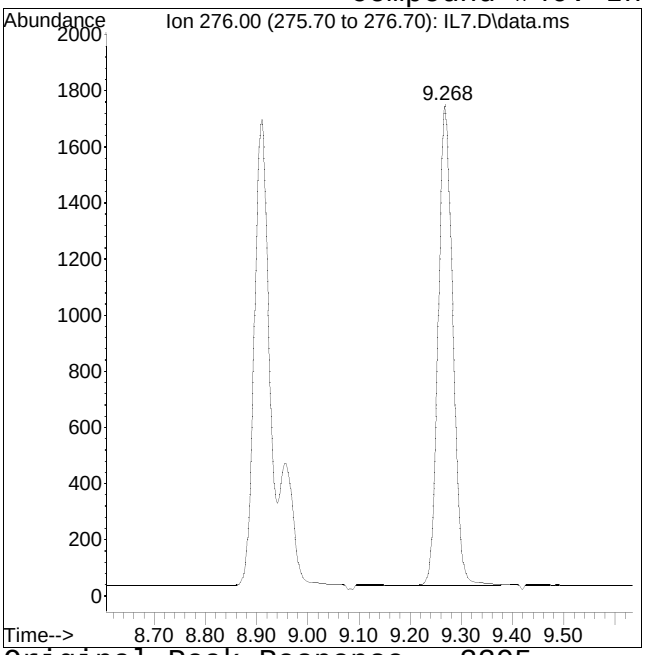


Original Peak Response = 0 Manual Peak Response = 3454 M2
M2 = Peak not found by automatic integration algorithm.

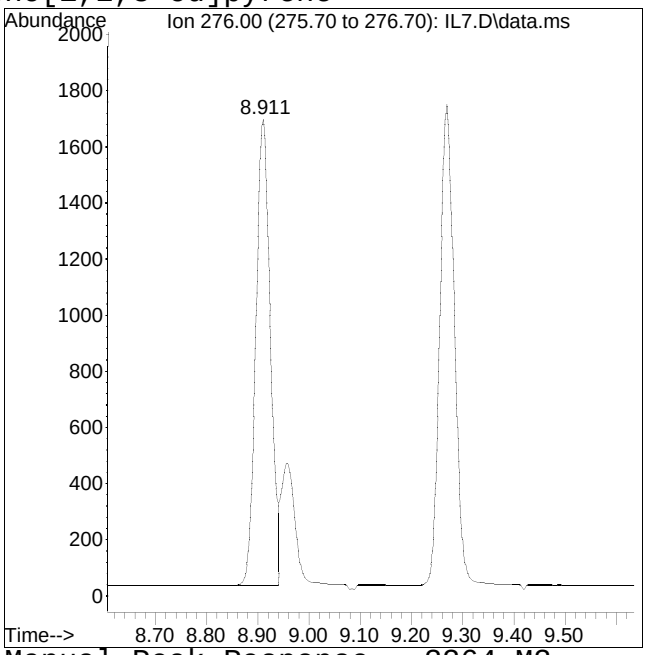
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #40: Indeno[1,2,3-cd]pyrene



Original Peak Response = 3395



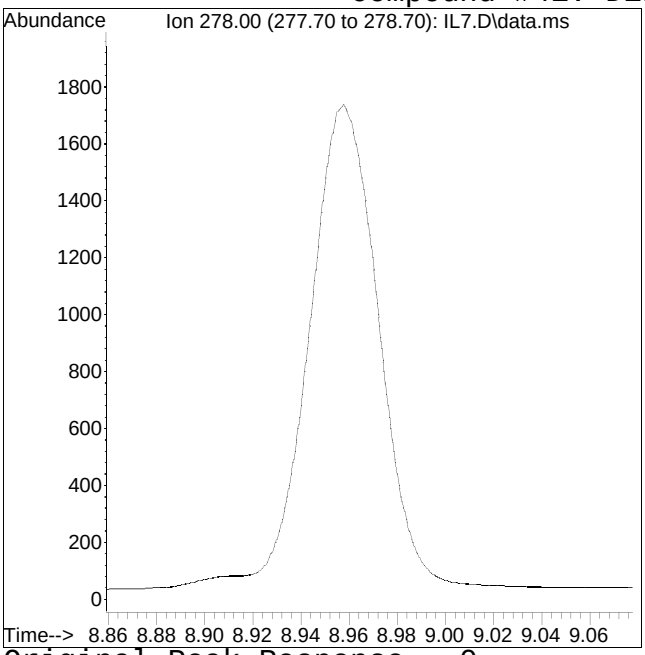
Manual Peak Response = 3264 M3

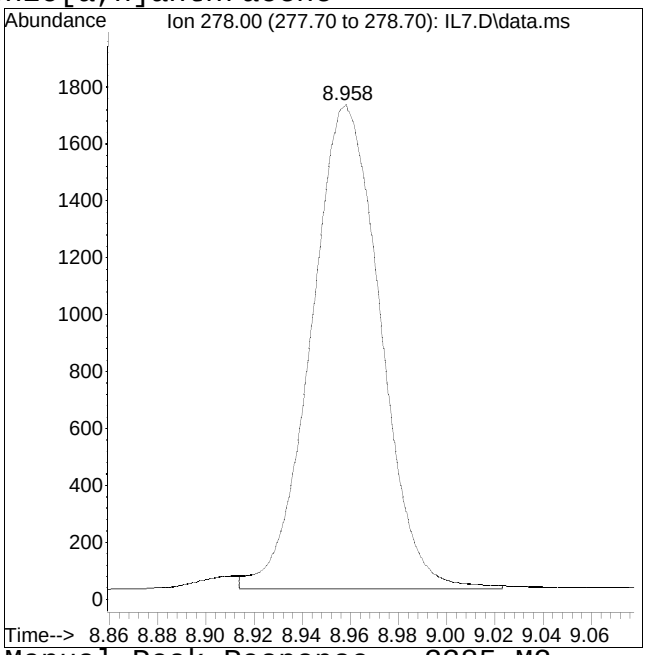
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #41: Dibenzo[a,h]anthracene



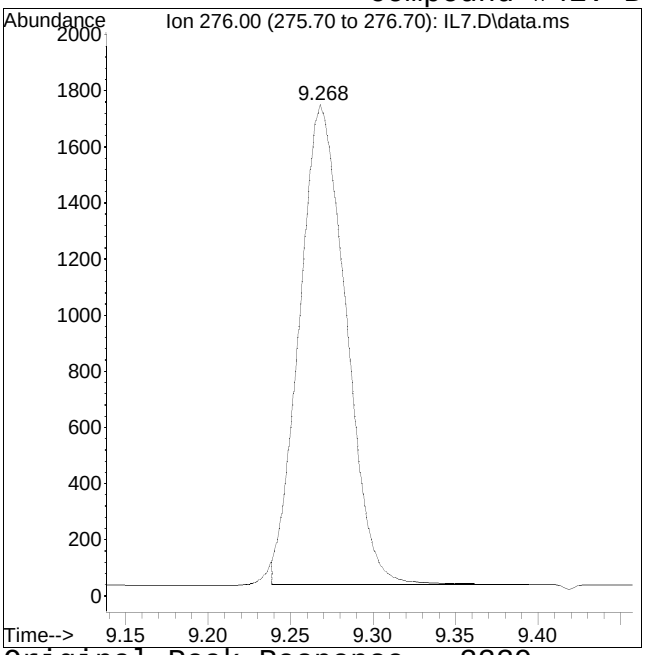


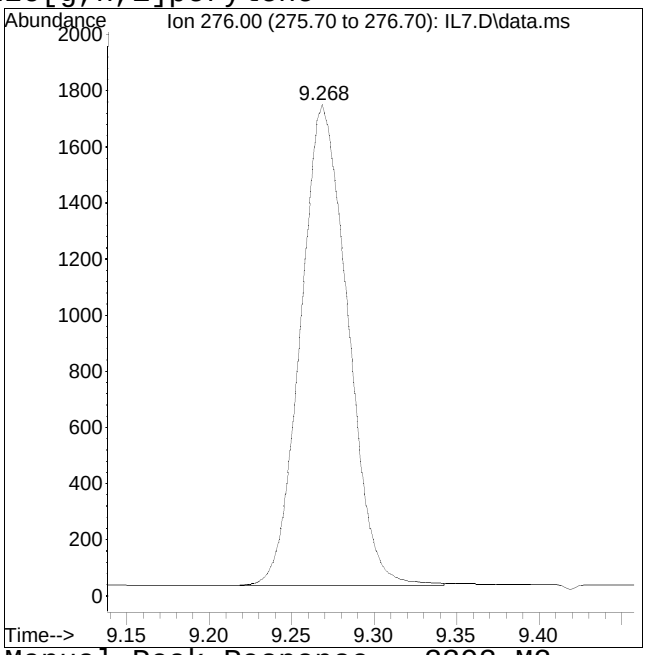
Original Peak Response = 0 Manual Peak Response = 3385 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL7.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:34 am Instrument : SV128
Sample : IL7,32,, 1.0 Lot#10229 Quant Date : 9/5/2023 11:59 am

Compound #42: Benzo[g,h,i]perylene





Original Peak Response = 3339 Manual Peak Response = 3393 M2
M2 = Peak not found by automatic integration algorithm.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL6.D
Acq On : 31 Aug 2023 10:50 am
Operator : SV128:ah
Sample : IL6,32,, 0.25 Lot#10230
Misc : WG1823727,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 05 12:06:31 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:06 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.259	152	2298	4000.000	ng/ml	0.00
Standard Area 1 = 2292			Recovery = 100.26%			
8) Naphthalene-d8	2.922	136	8839	4000.000	ng/ml	0.00
Standard Area 1 = 8982			Recovery = 98.41%			
17) Acenaphthene-d10	3.902	164	5188	4000.000	ng/ml	0.00
Standard Area 1 = 5319			Recovery = 97.54%			
22) Phenanthrene-d10	4.748	188	12627	4000.000	ng/ml	0.00
Standard Area 1 = 12548			Recovery = 100.63%			
31) Chrysene-d12	6.324	240	12193	4000.000	ng/ml	0.00
Standard Area 1 = 11983			Recovery = 101.75%			
36) Perylene-d12	7.607	264	13458	4000.000	ng/ml	0.00
Standard Area 1 = 13430			Recovery = 100.21%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.654	112	149	253.736	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 5.07%#			
3) Phenol-d6	2.065	99	181	251.888	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 5.04%#			
7) Nitrobenzene-d5	2.537	82	154	252.841	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 10.11%#			
13) 2-Fluorobiphenyl	3.520	172	464M7	255.955	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 10.24%#			
21) 2,4,6-Tribromophenol	4.348	330	53	243.305	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 4.87%#			
30) 4-Terphenyl-d14	5.675	244	696	260.832	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 10.43%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.121	93	157	253.556	ng/ml	100
5) n-nitrosodi-n-propylamine	2.458	70	115M7	247.577	ng/ml	
6) Hexachloroethane	2.519	117	70	253.387	ng/ml	88
9) Naphthalene	2.934	128	556	257.452	ng/ml#	99
10) Hexachlorobutadiene	3.007	225	105	258.565	ng/ml	100
11) 2-Methylnaphthalene	3.313	142	368	255.286	ng/ml	100
12) 1-Methylnaphthalene	3.368	142	342	256.078	ng/ml	99
14) 2-Chloronaphthalene	3.584	162	387	258.962	ng/ml	96
15) 2,6-Dinitrotoluene	3.777	165	64M4	214.435	ng/ml	
16) Acenaphthylene	3.820	152	607	255.053	ng/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL6.D
Acq On : 31 Aug 2023 10:50 am
Operator : SV128:ah
Sample : IL6,32,, 0.25 Lot#10230
Misc : WG1823727,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 05 12:06:31 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:06 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
18) Acenaphthene	3.918	153	429	260.981	ng/ml	91
19) 2,4-Dinitrotoluene	4.009	165	84	213.154	ng/ml	95
20) Fluorene	4.211	166	465M6	259.237	ng/ml	
23) 4,6-Dinitro-o-cresol	4.239	198	41M6	236.316	ng/ml	
24) Hexachlorobenzene	4.533	284	176	259.553	ng/ml	99
25) Pentachlorophenol	4.642	266	82	210.122	ng/ml	100
26) Phenanthrene	4.760	178	809	256.980	ng/ml	99
27) Anthracene	4.790	178	786M6	256.553	ng/ml	
28) Fluoranthene	5.449	202	938	256.456	ng/ml	95
29) Pyrene	5.580	202	969	255.974	ng/ml	100
32) Benzo[a]anthracene	6.316	228	999	244.911	ng/ml	99
33) 3,3'-Dichlorobenzidine	6.305	252	346	227.533	ng/ml	100
34) Chrysene	6.341	228	988	262.636	ng/ml	99
35) Bis(2-ethylhexyl)phtha...	6.362	149	483	203.410	ng/ml	99
37) Benzo[b]fluoranthene	7.208	252	985	259.769	ng/ml	100
38) Benzo[k]fluoranthene	7.236	252	876	249.635	ng/ml	100
39) Benzo[a]pyrene	7.541	252	828	254.255	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.911	276	760	233.196	ng/ml	97
41) Dibenzo[a,h]anthracene	8.961	278	771M6	245.780	ng/ml	
42) Benzo[g,h,i]perylene	9.274	276	806M4	240.885	ng/ml	

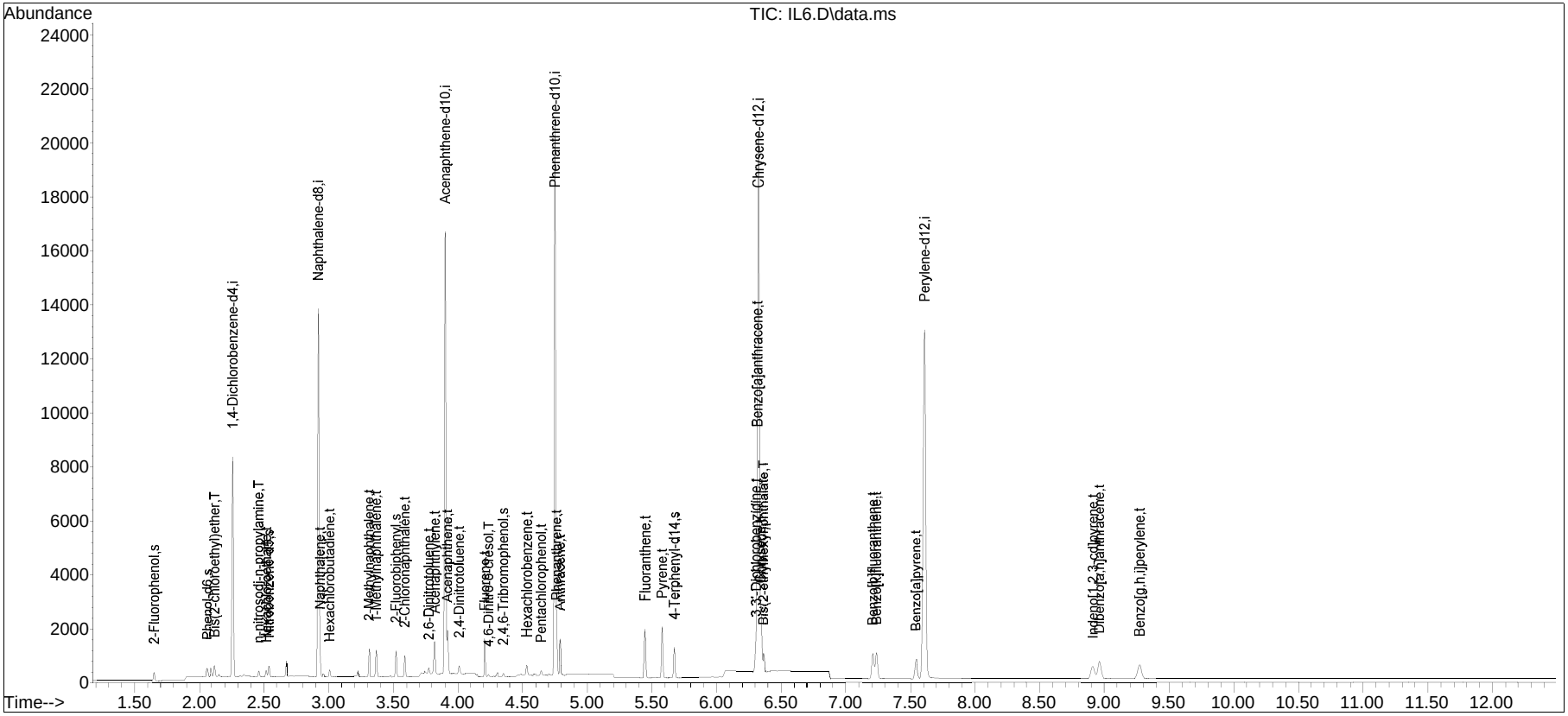
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL6.D
Acq On : 31 Aug 2023 10:50 am
Operator : SV128:ah
Sample : IL6,32,, 0.25 Lot#10230
Misc : WG1823727,,ical
ALS Vial : 5 Sample Multiplier: 1

Quant Time: Sep 05 12:06:31 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:06 2023
Response via : Initial Calibration

Sub List : Default - All compounds listedIical\IL7.D•

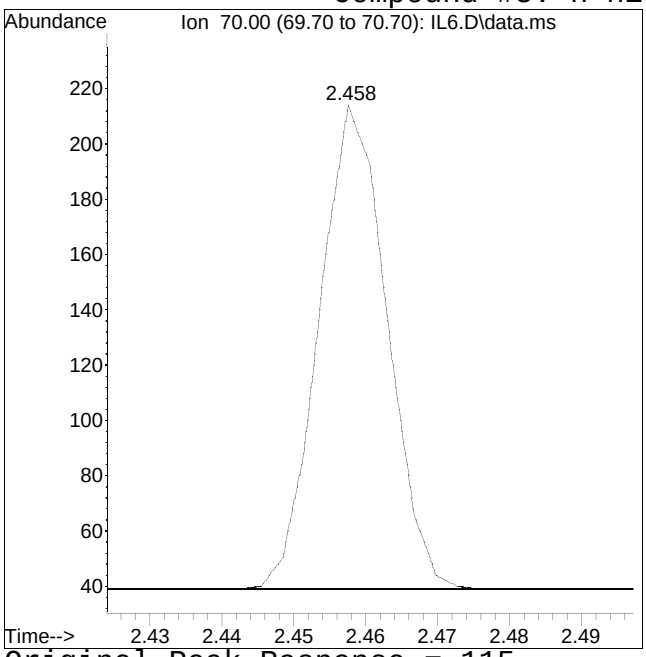


Manual Integration Report

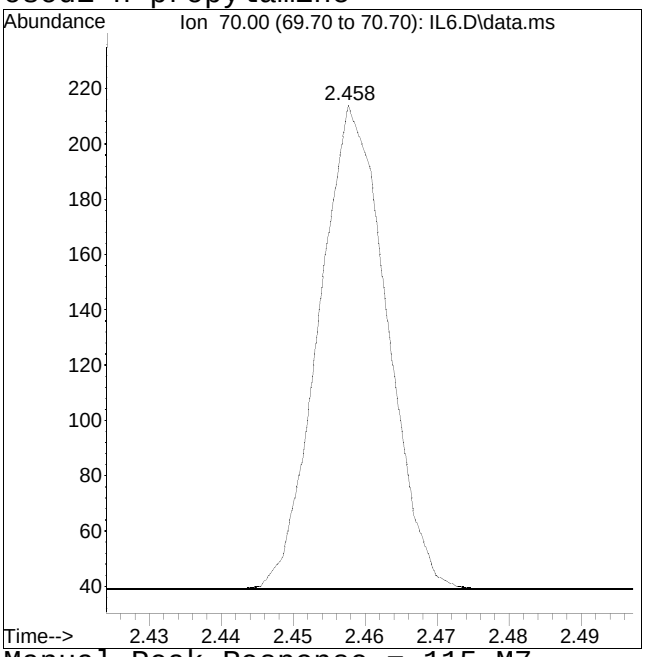
Data Path : I:\8270SIM\SV128\230831aLVQ
Data File : IL6.D
Date Inj'd : 8/31/2023 10:50 am
Sample : IL6,32,, 0.25 Lot#10230

Method : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/5/2023 11:59 am

Compound #5: n-nitrosodi-n-propylamine



Original Peak Response = 115



Manual Peak Response = 115 M7

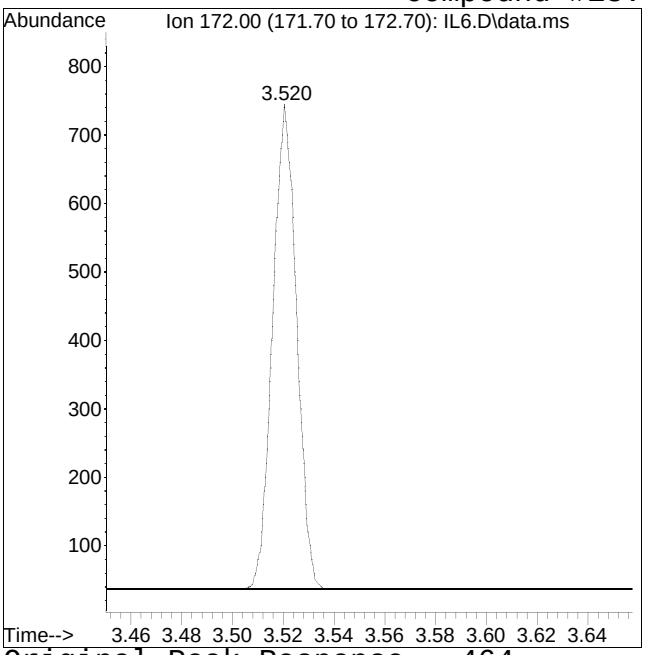
M7 = A qualifier ion was manually integrated (only for GC/MS data).

Manual Integration Report

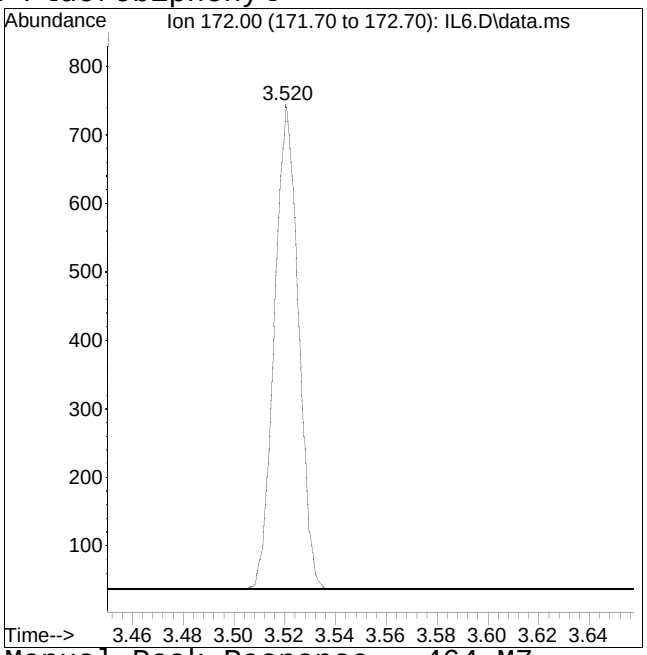
Data Path : I:\8270SIM\SV128\230831aLVQ
Data File : IL6.D
Date Inj'd : 8/31/2023 10:50 am
Sample : IL6,32,, 0.25 Lot#10230

Method : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/5/2023 11:59 am

Compound #13: 2-Fluorobiphenyl



Original Peak Response = 464



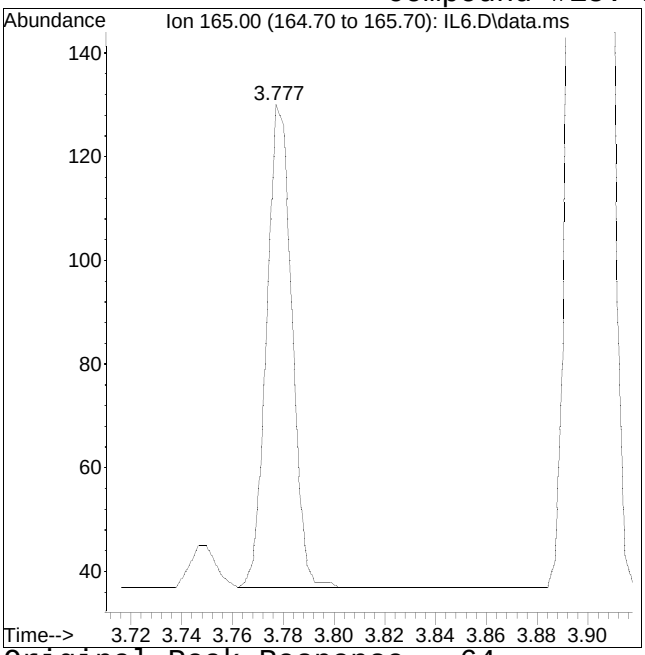
Manual Peak Response = 464 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

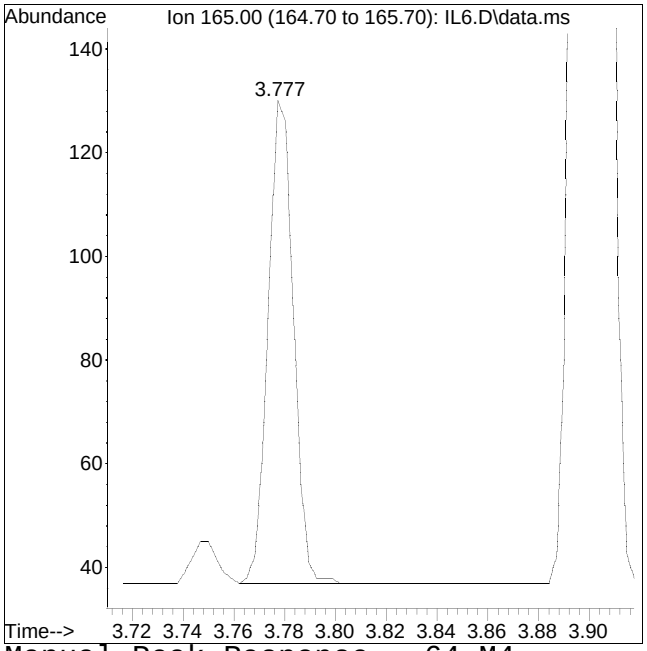
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL6.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:50 am Instrument : SV128
Sample : IL6,32,, 0.25 Lot#10230 Quant Date : 9/5/2023 11:59 am

Compound #15: 2,6-Dinitrotoluene



Original Peak Response = 64



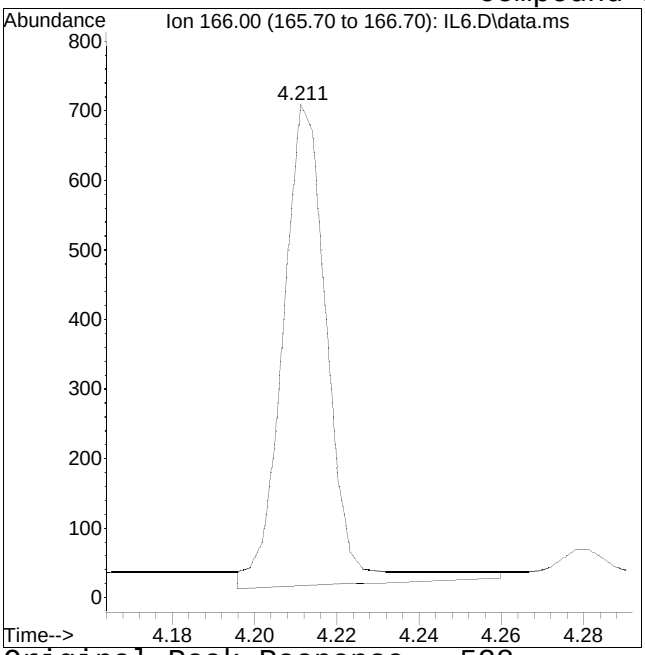
Manual Peak Response = 64 M4

M4 = Poor automated baseline construction.

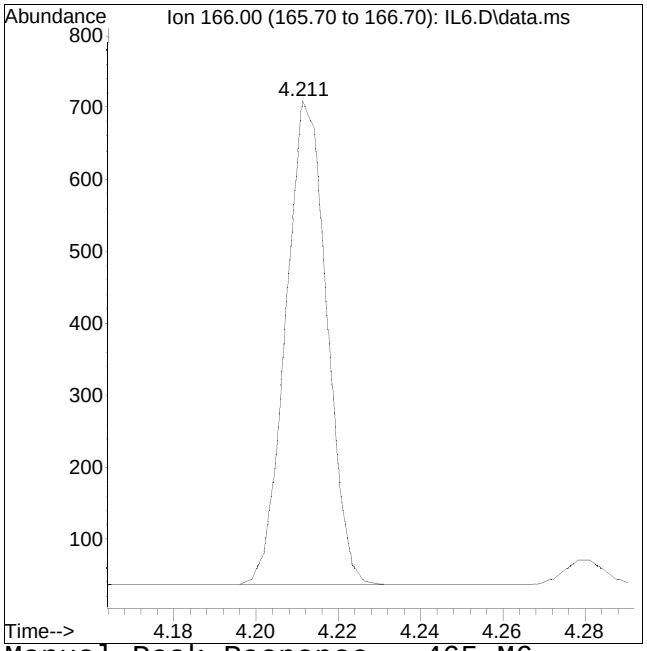
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL6.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:50 am Instrument : SV128
Sample : IL6,32,, 0.25 Lot#10230 Quant Date : 9/5/2023 11:59 am

Compound #20: Fluorene



Original Peak Response = 528



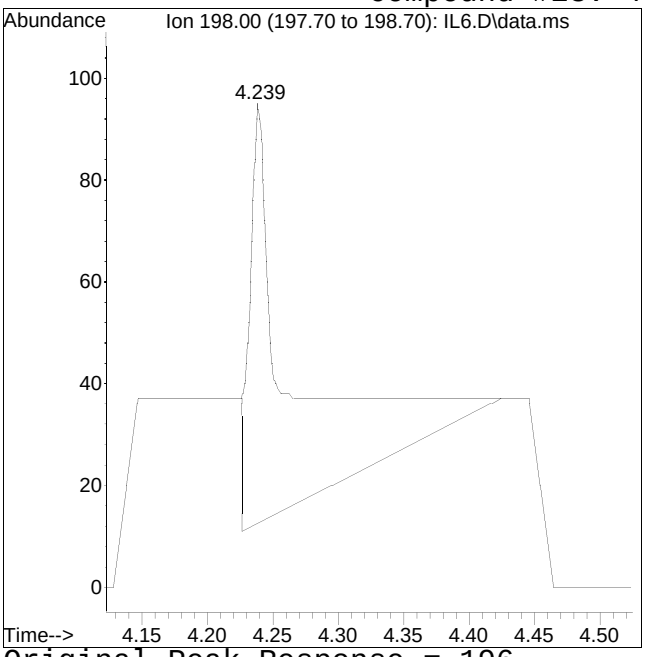
Manual Peak Response = 465 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

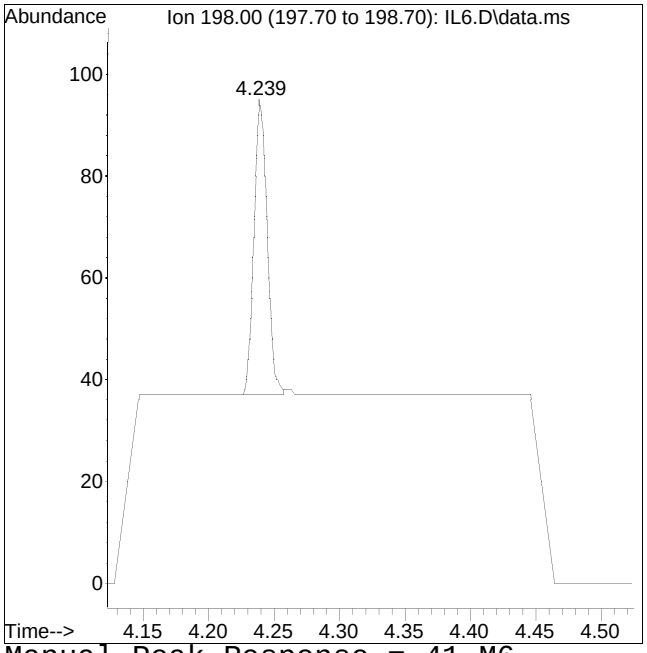
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL6.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:50 am Instrument : SV128
Sample : IL6,32,, 0.25 Lot#10230 Quant Date : 9/5/2023 11:59 am

Compound #23: 4,6-Dinitro-o-cresol



Original Peak Response = 196



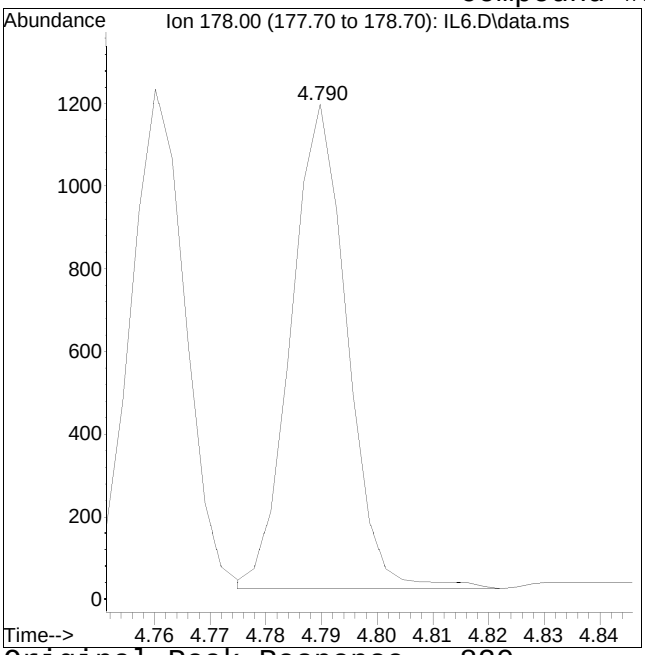
Manual Peak Response = 41 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

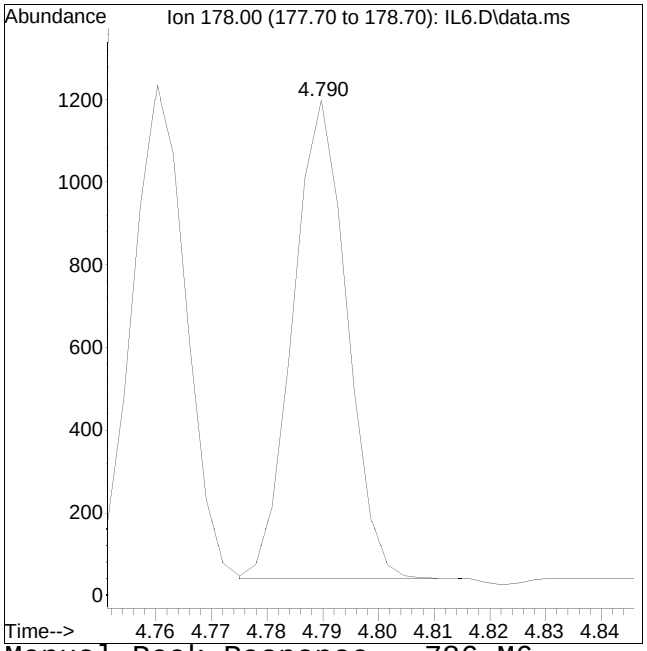
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL6.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:50 am Instrument : SV128
Sample : IL6,32,, 0.25 Lot#10230 Quant Date : 9/5/2023 11:59 am

Compound #27: Anthracene



Original Peak Response = 820



Manual Peak Response = 786 M6

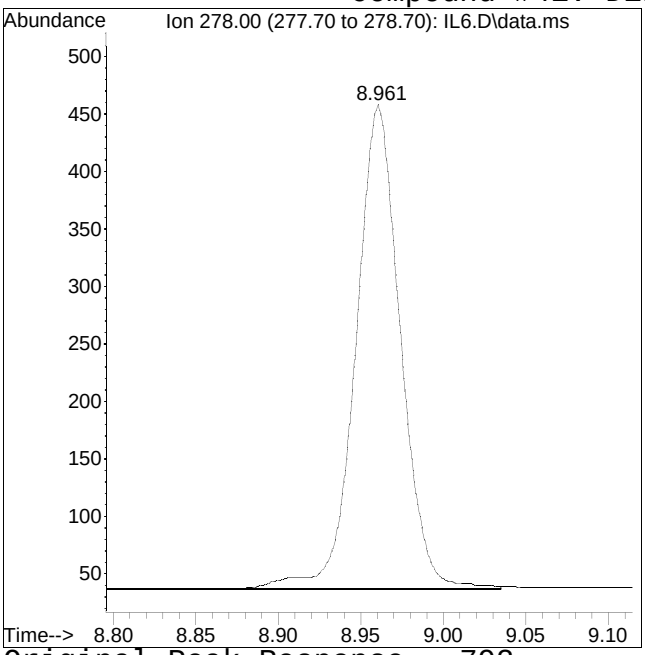
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

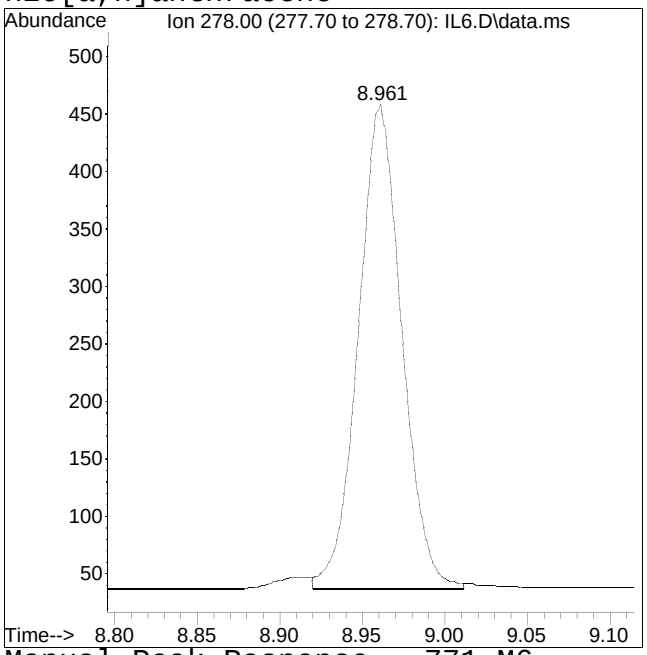
Data Path : I:\8270SIM\SV128\230831aLVQ
Data File : IL6.D
Date Inj'd : 8/31/2023 10:50 am
Sample : IL6,32,, 0.25 Lot#10230

Method : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/5/2023 11:59 am

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 792



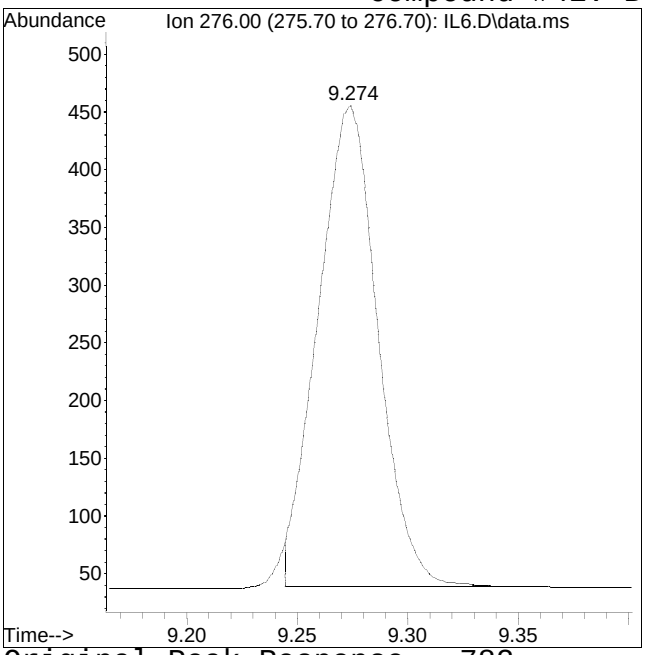
Manual Peak Response = 771 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

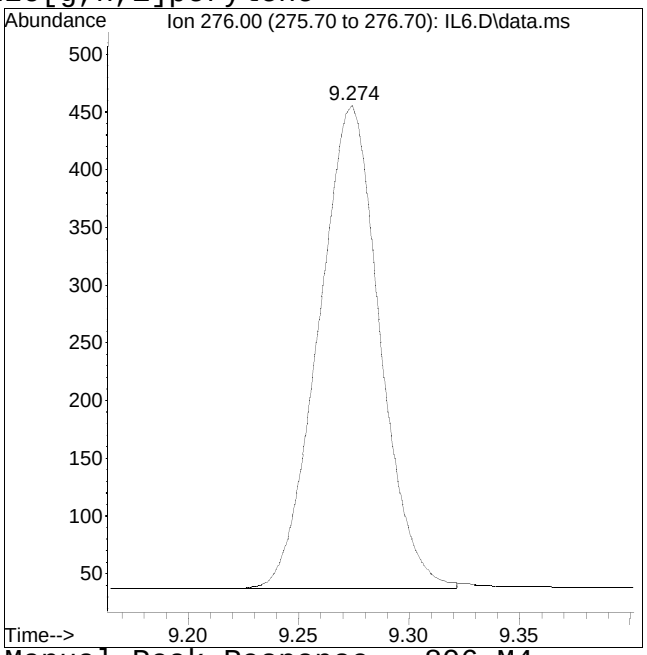
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL6.D Operator : SV128:ah
Date Inj'd : 8/31/2023 10:50 am Instrument : SV128
Sample : IL6,32,, 0.25 Lot#10230 Quant Date : 9/5/2023 11:59 am

Compound #42: Benzo[g,h,i]perylene



Original Peak Response = 782



Manual Peak Response = 806 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL5.D
Acq On : 31 Aug 2023 11:06 am
Operator : SV128:ah
Sample : IL5,32,, 0.1 Lot#10231
Misc : WG1823727,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 05 12:08:55 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:01 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.258	152	2391	4000.000	ng/ml	0.00
Standard Area 1 = 2292			Recovery = 104.32%			
8) Naphthalene-d8	2.924	136	9211	4000.000	ng/ml	0.00
Standard Area 1 = 8982			Recovery = 102.55%			
17) Acenaphthene-d10	3.901	164	5395	4000.000	ng/ml	0.00
Standard Area 1 = 5319			Recovery = 101.43%			
22) Phenanthrene-d10	4.747	188	13027	4000.000	ng/ml	0.00
Standard Area 1 = 12548			Recovery = 103.82%			
31) Chrysene-d12	6.324	240	12299	4000.000	ng/ml	0.00
Standard Area 1 = 11983			Recovery = 102.64%			
36) Perylene-d12	7.606	264	13394	4000.000	ng/ml	0.00
Standard Area 1 = 13430			Recovery = 99.73%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.654	112	61M7	99.838	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 2.00%#			
3) Phenol-d6	2.064	99	74M4	98.976	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 1.98%#			
7) Nitrobenzene-d5	2.539	82	63	99.412	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 3.98%#			
13) 2-Fluorobiphenyl	3.522	172	193	102.164	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 4.09%#			
21) 2,4,6-Tribromophenol	4.350	330	21M6	92.705	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 1.85%#			
30) 4-Terphenyl-d14	5.677	244	276	100.257	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 4.01%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.121	93	64M6	99.340	ng/ml	
5) n-nitrosodi-n-propylamine	2.459	70	47	97.248	ng/ml	98
6) Hexachloroethane	2.520	117	29	100.892	ng/ml	97
9) Naphthalene	2.936	128	231	102.643	ng/ml#	98
10) Hexachlorobutadiene	3.009	225	43M6	101.612	ng/ml	
11) 2-Methylnaphthalene	3.315	142	154	102.517	ng/ml	98
12) 1-Methylnaphthalene	3.370	142	142	102.031	ng/ml	100
14) 2-Chloronaphthalene	3.586	162	160	102.740	ng/ml	96

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL5.D
Acq On : 31 Aug 2023 11:06 am
Operator : SV128:ah
Sample : IL5,32,, 0.1 Lot#10231
Misc : WG1823727,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 05 12:08:55 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:01 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
15) 2,6-Dinitrotoluene	3.779	165	25M4	80.381	ng/ml	
16) Acenaphthylene	3.819	152	247	99.594	ng/ml	96
18) Acenaphthene	3.919	153	178M7	104.131	ng/ml	
19) 2,4-Dinitrotoluene	4.008	165	33	80.526	ng/ml	94
20) Fluorene	4.213	166	191M6	102.397	ng/ml	
23) 4,6-Dinitro-o-cresol	4.240	198	14M6	117.660	ng/ml	
24) Hexachlorobenzene	4.532	284	71M7	101.491	ng/ml	
25) Pentachlorophenol	4.644	266	31M6	90.585	ng/ml	
26) Phenanthrene	4.762	178	328M6	100.990	ng/ml	
27) Anthracene	4.789	178	320	101.242	ng/ml	99
28) Fluoranthene	5.448	202	374M7	99.114	ng/ml	
29) Pyrene	5.579	202	391	100.116	ng/ml	97
32) Benzo[a]anthracene	6.318	228	424	99.200	ng/ml	97
33) 3,3'-Dichlorobenzidine	6.307	252	137	89.316	ng/ml	98
34) Chrysene	6.343	228	388	102.252	ng/ml	91
35) Bis(2-ethylhexyl)phtha...	6.364	149	179	74.734	ng/ml	95
37) Benzo[b]fluoranthene	7.210	252	368	97.515	ng/ml	100
38) Benzo[k]fluoranthene	7.235	252	348	99.644	ng/ml	100
39) Benzo[a]pyrene	7.540	252	314	96.881	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.910	276	299	92.183	ng/ml	98
41) Dibenzo[a,h]anthracene	8.960	278	287M6	91.927	ng/ml	
42) Benzo[g,h,i]perylene	9.270	276	306M1	91.890	ng/ml	

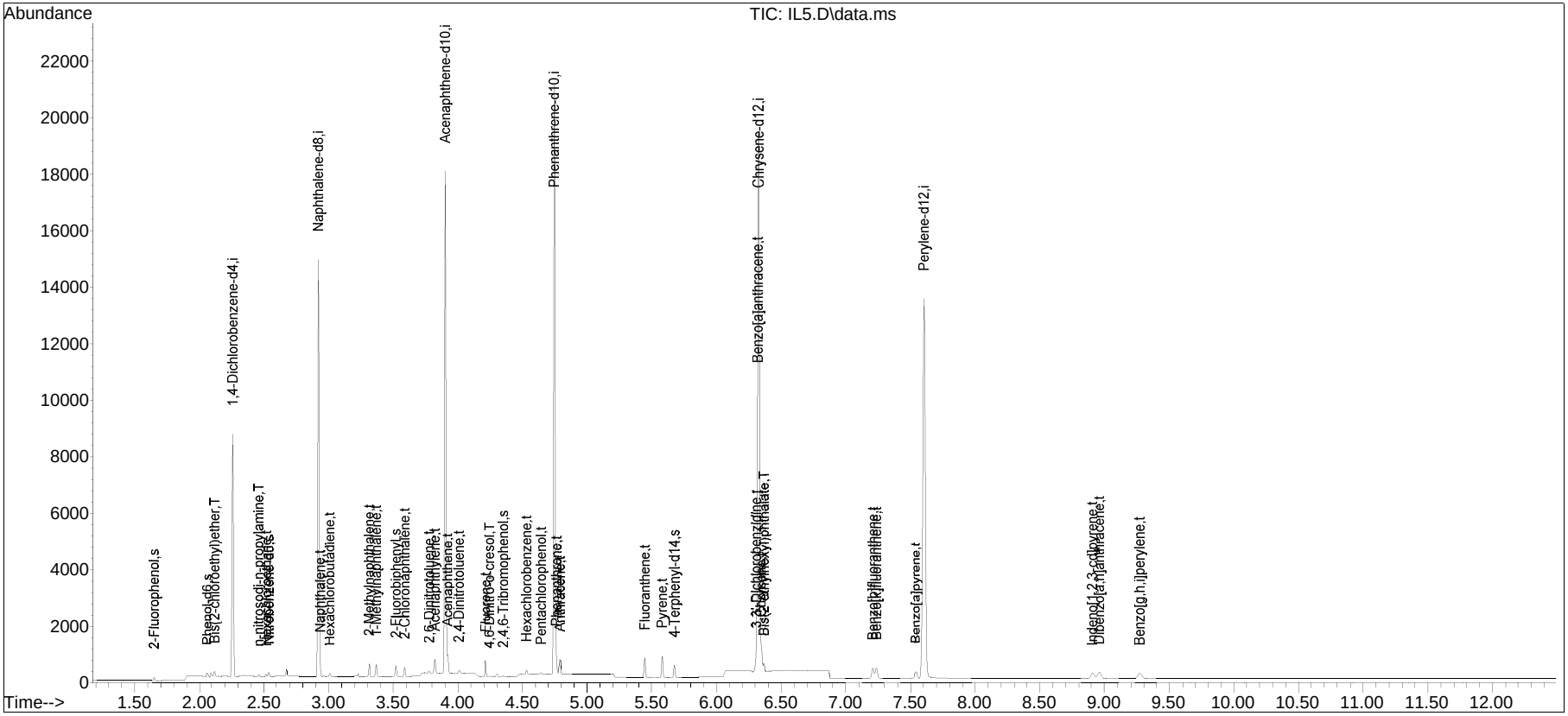
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL5.D
Acq On : 31 Aug 2023 11:06 am
Operator : SV128:ah
Sample : IL5,32,, 0.1 Lot#10231
Misc : WG1823727,,ical
ALS Vial : 6 Sample Multiplier: 1

Quant Time: Sep 05 12:08:55 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:59:01 2023
Response via : Initial Calibration

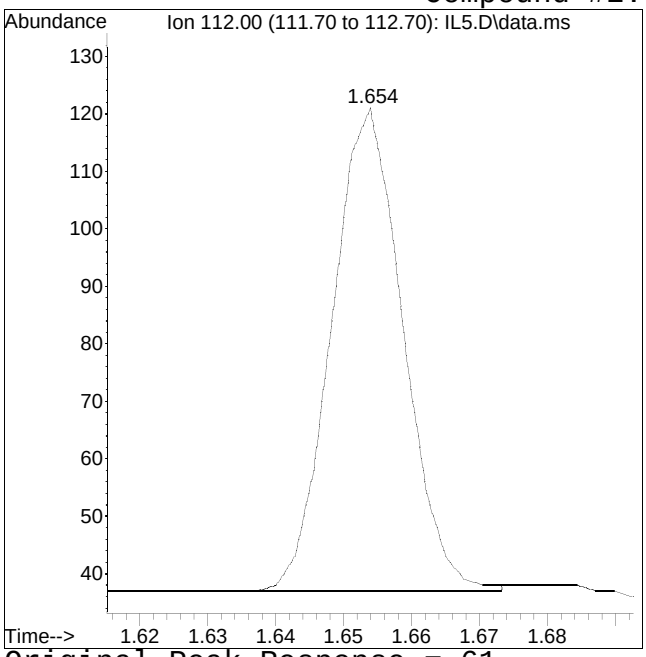
Sub List : Default - All compounds listedIical\IL7.D•

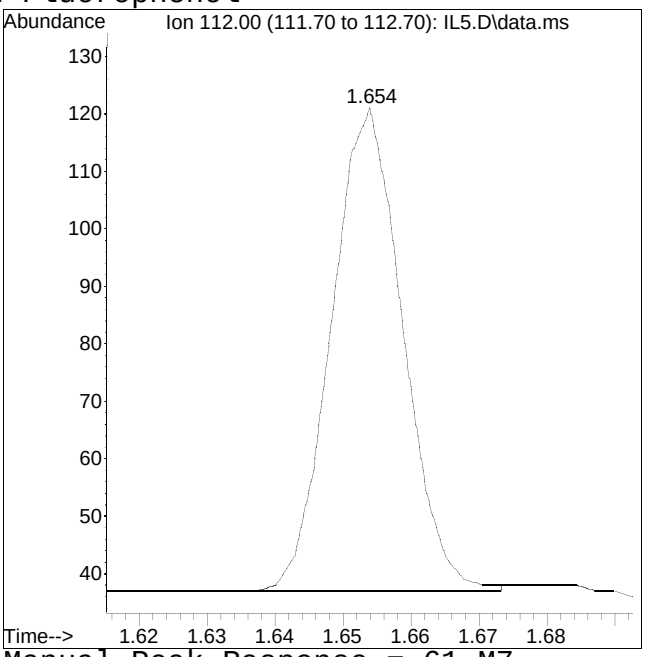


Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #2: 2-Fluorophenol



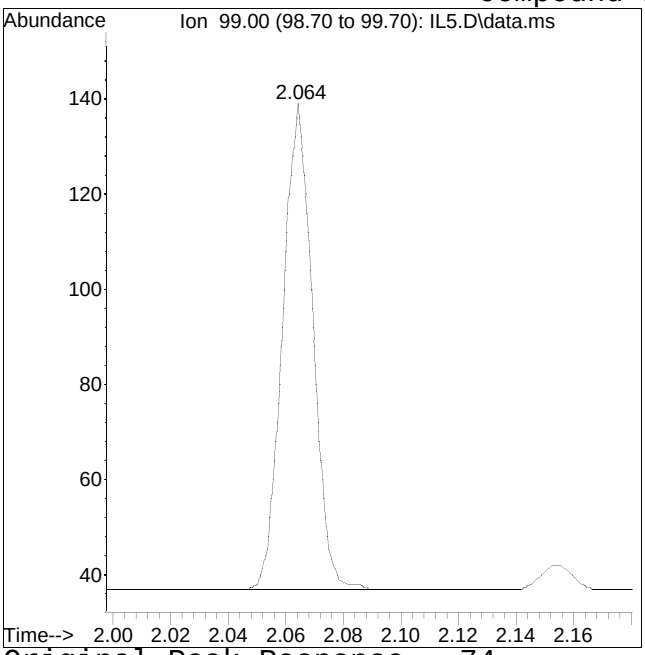


Original Peak Response = 61 Manual Peak Response = 61 M7
M7 = A qualifier ion was manually integrated (only for GC/MS data).

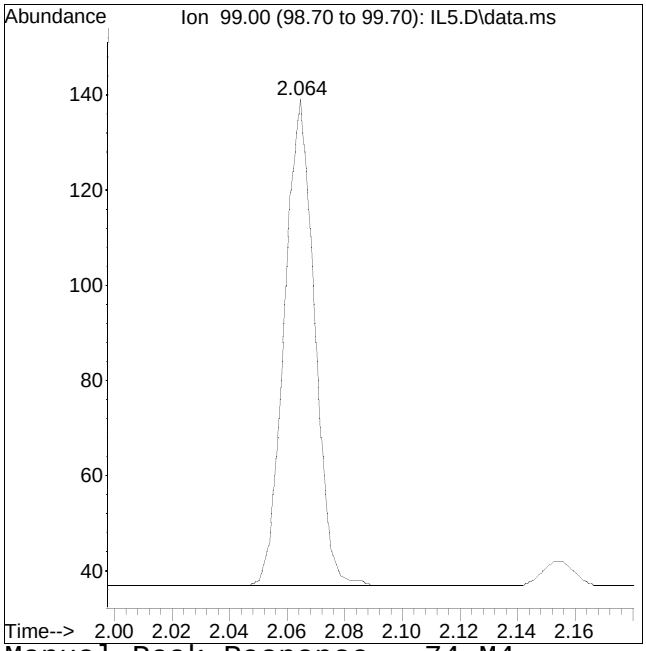
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #3: Phenol-d6



Original Peak Response = 74



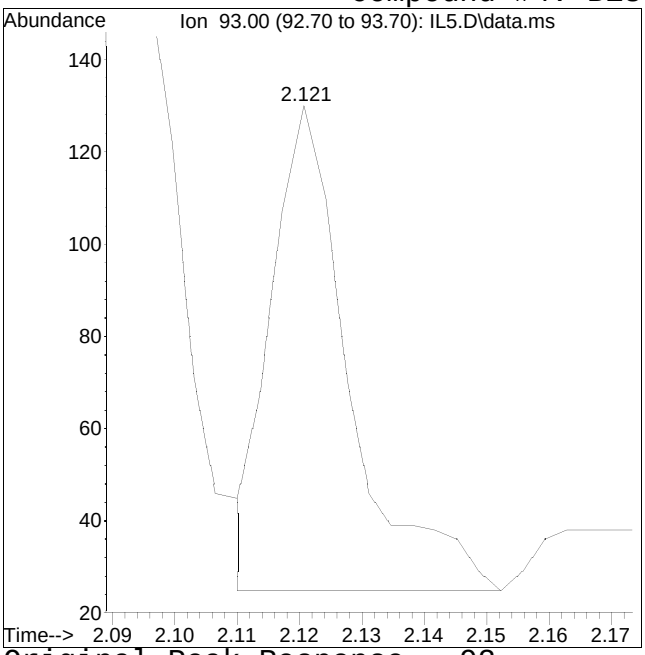
Manual Peak Response = 74 M4

M4 = Poor automated baseline construction.

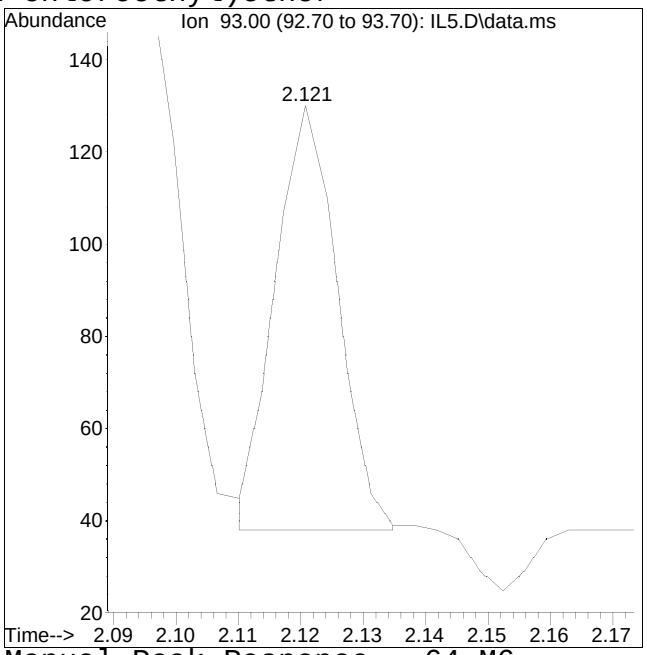
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #4: Bis(2-chloroethyl)ether



Original Peak Response = 92



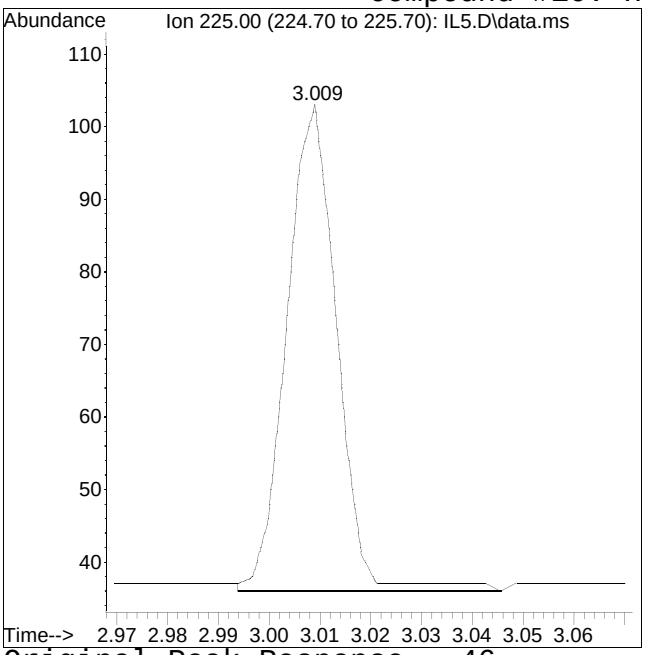
Manual Peak Response = 64 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

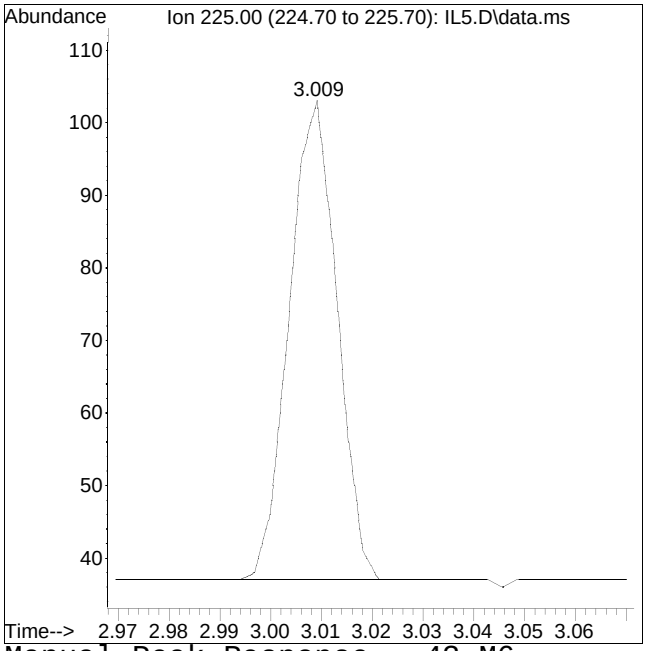
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #10: Hexachlorobutadiene



Original Peak Response = 46



Manual Peak Response = 43 M6

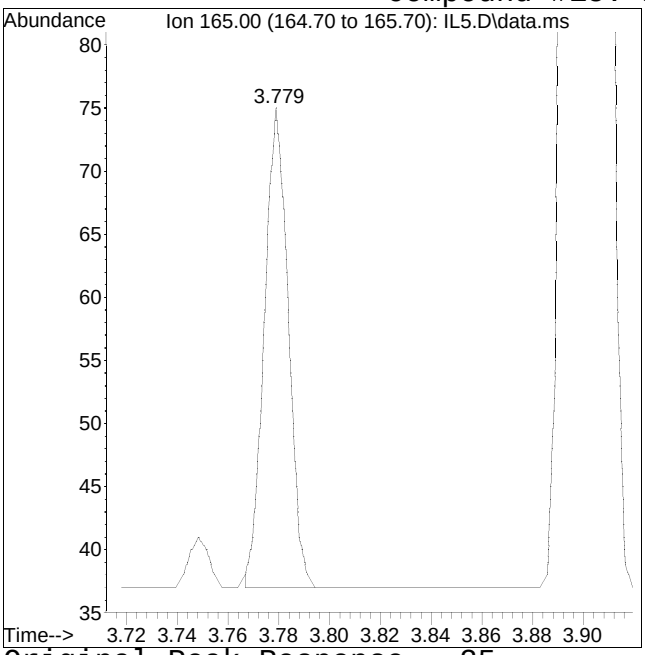
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

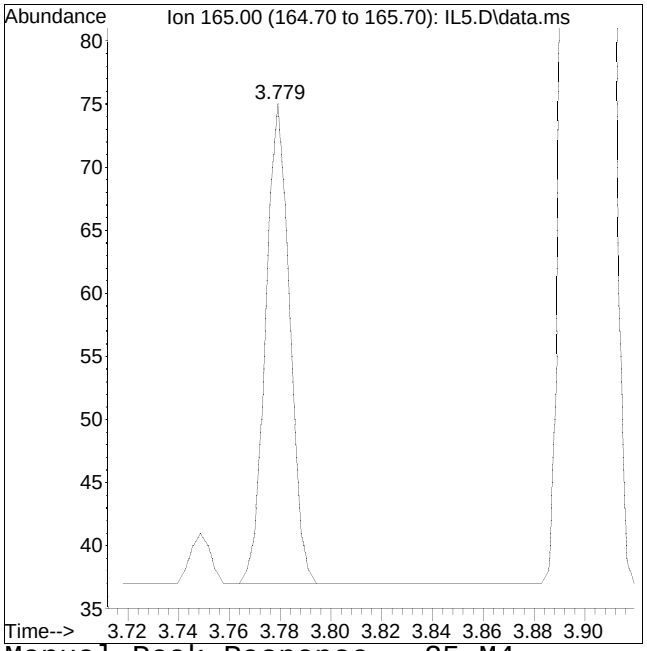
Data Path : I:\8270SIM\SV128\230831aLVQ
Data File : IL5.D
Date Inj'd : 8/31/2023 11:06 am
Sample : IL5,32,, 0.1 Lot#10231

Method : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/5/2023 11:59 am

Compound #15: 2,6-Dinitrotoluene



Original Peak Response = 25



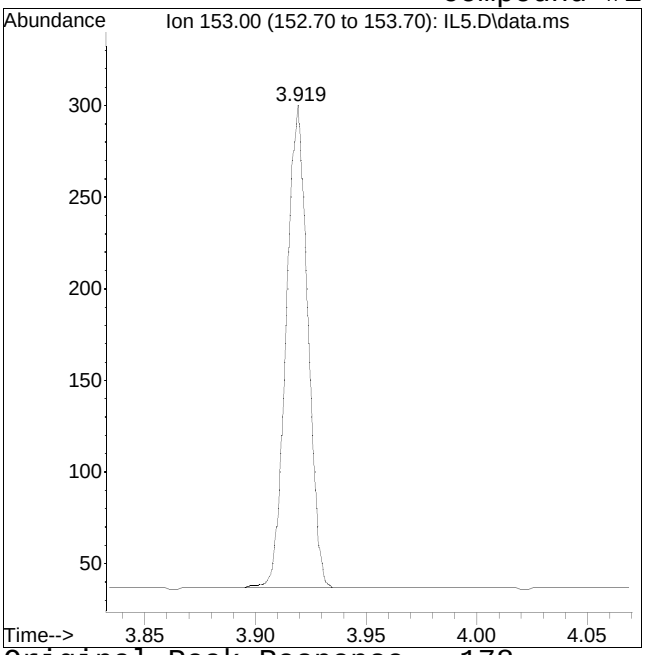
Manual Peak Response = 25 M4

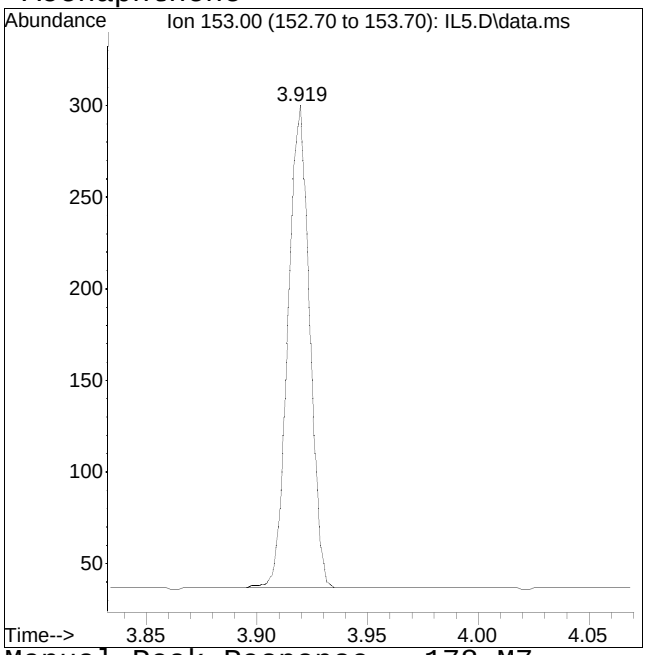
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #18: Acenaphthene



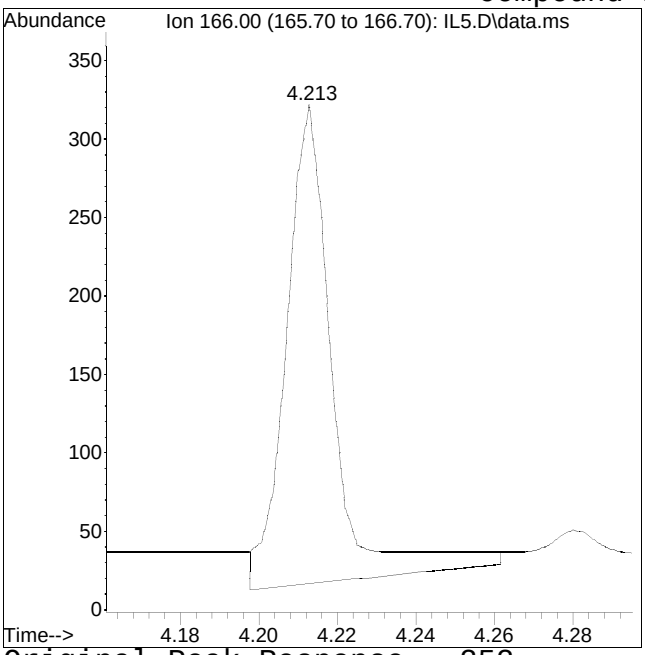


Original Peak Response = 178 Manual Peak Response = 178 M7
M7 = A qualifier ion was manually integrated (only for GC/MS data).

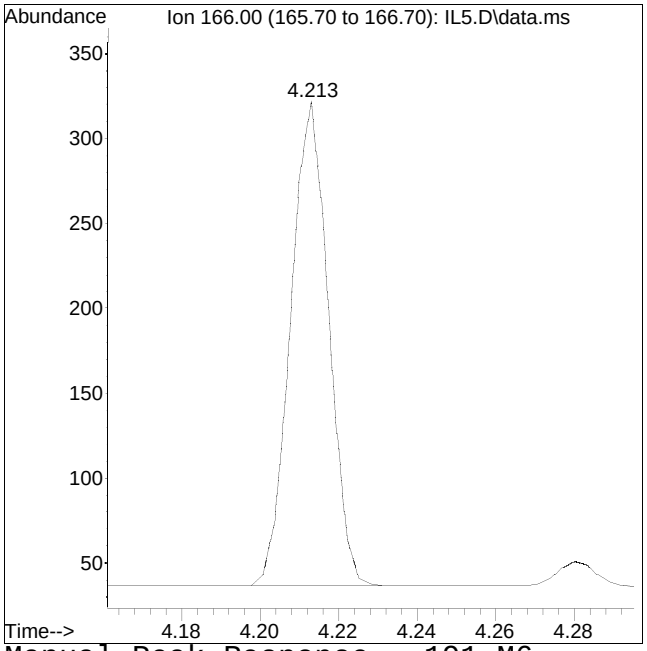
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #20: Fluorene



Original Peak Response = 252



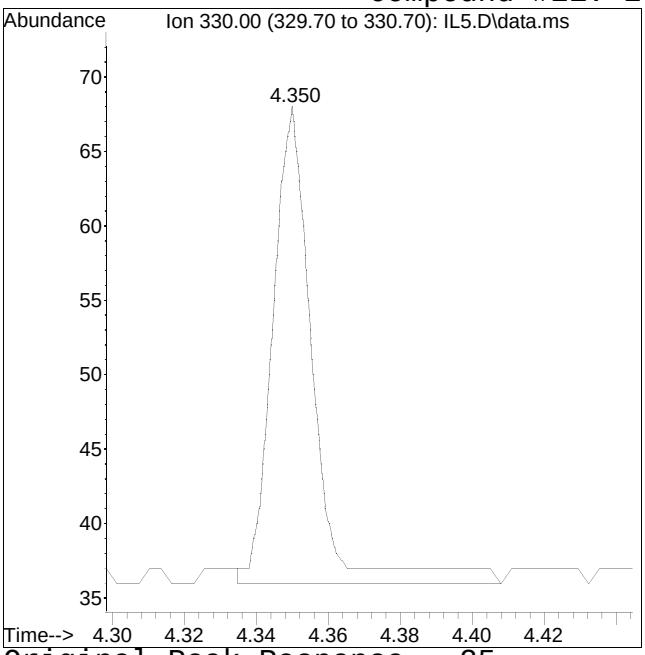
Manual Peak Response = 191 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

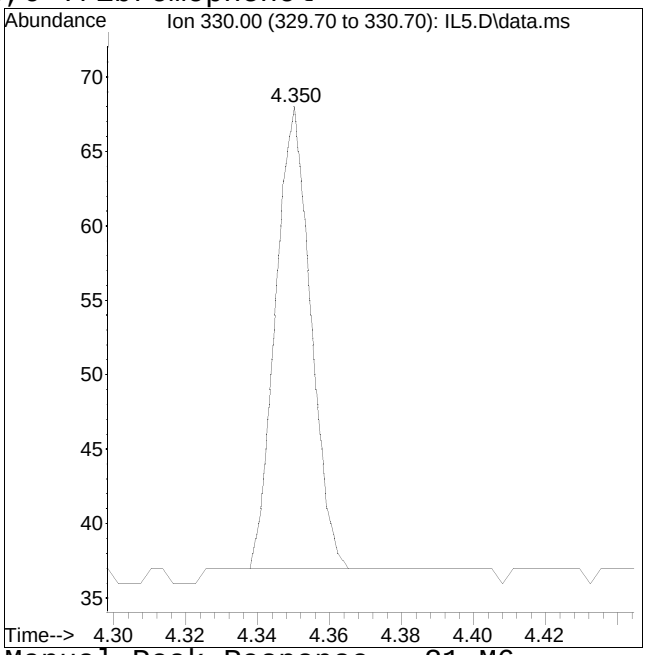
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #21: 2,4,6-Tribromophenol



Original Peak Response = 25



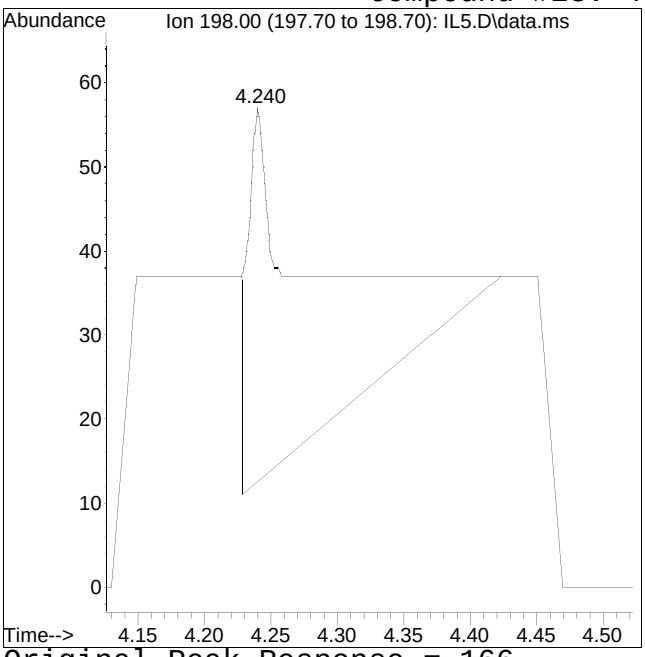
Manual Peak Response = 21 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

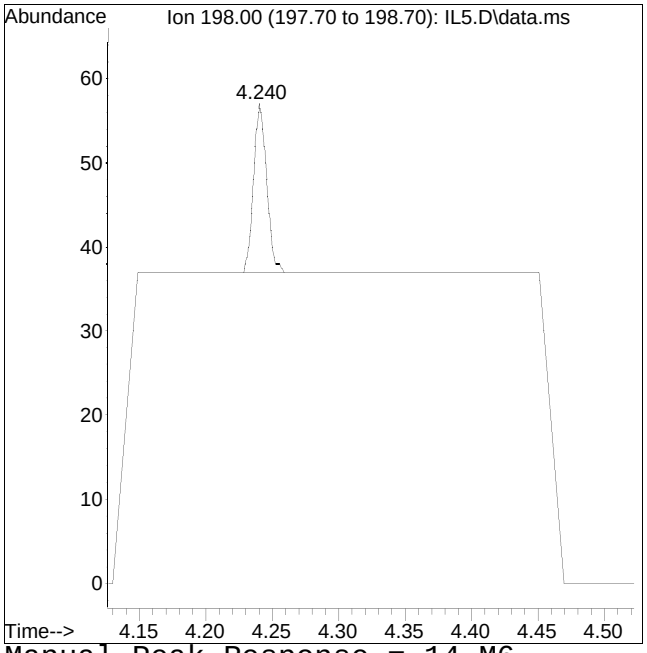
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #23: 4,6-Dinitro-o-cresol



Original Peak Response = 166



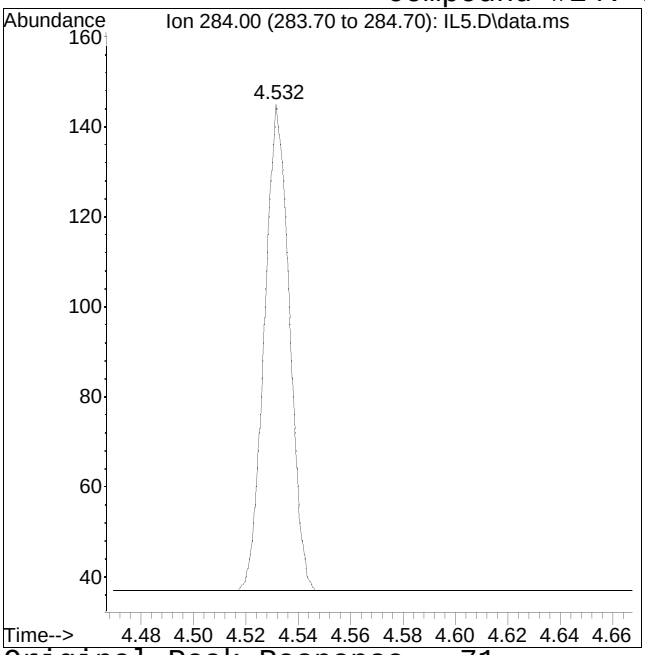
Manual Peak Response = 14 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

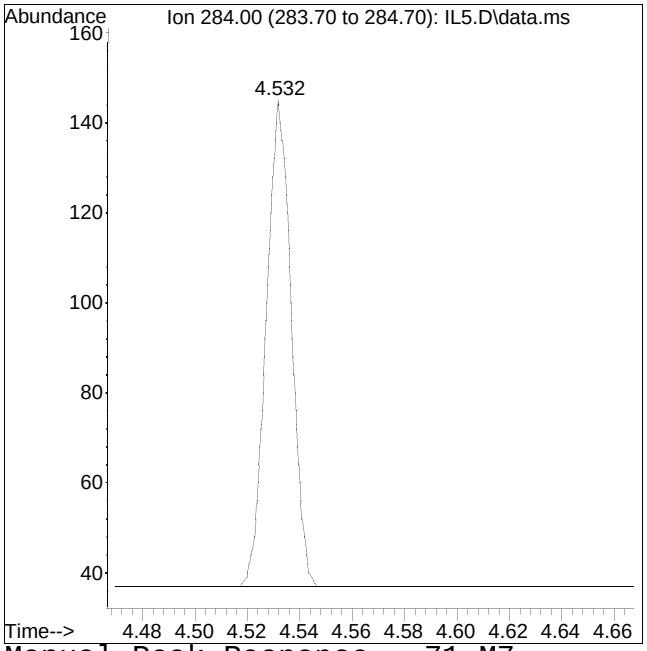
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #24: Hexachlorobenzene



Original Peak Response = 71



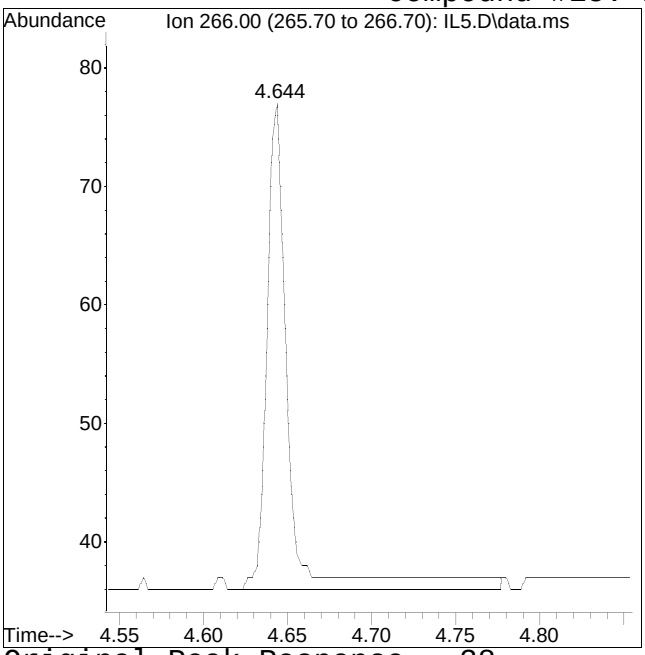
Manual Peak Response = 71 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

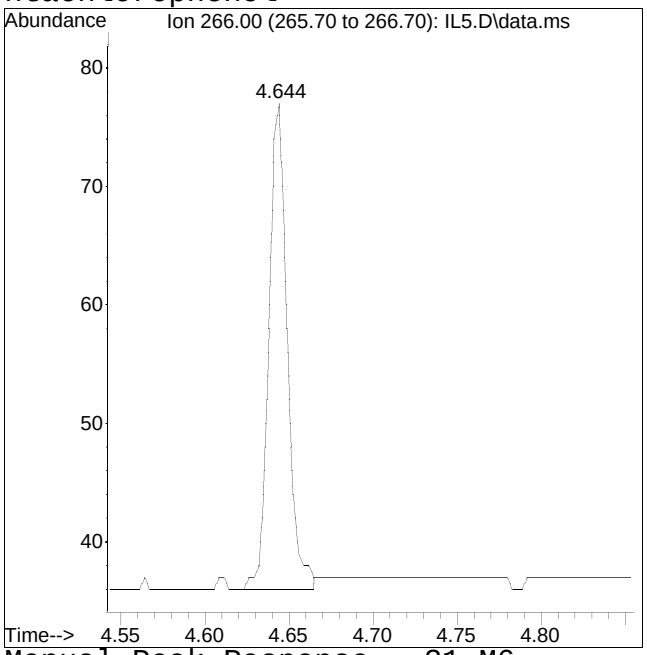
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #25: Pentachlorophenol



Original Peak Response = 38



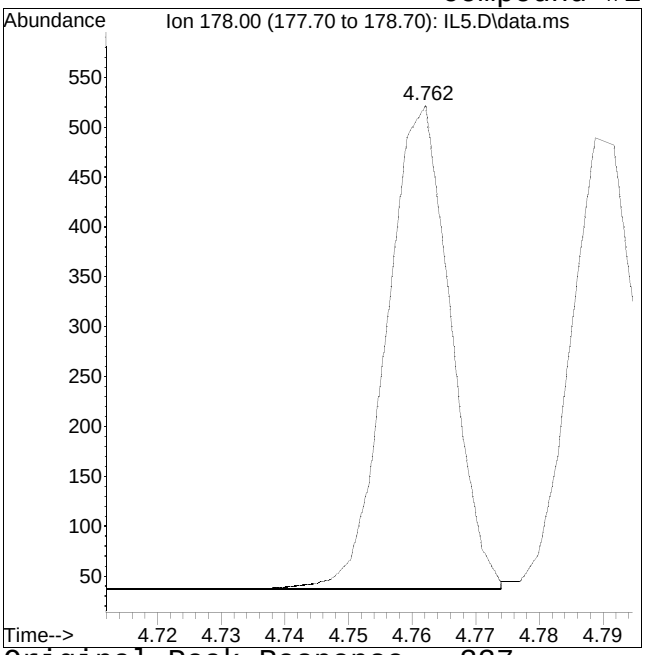
Manual Peak Response = 31 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

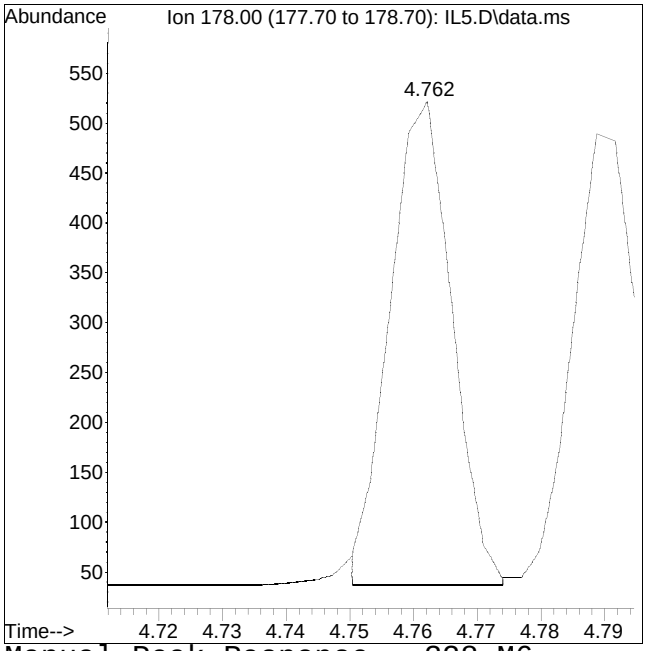
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #26: Phenanthrene



Original Peak Response = 337



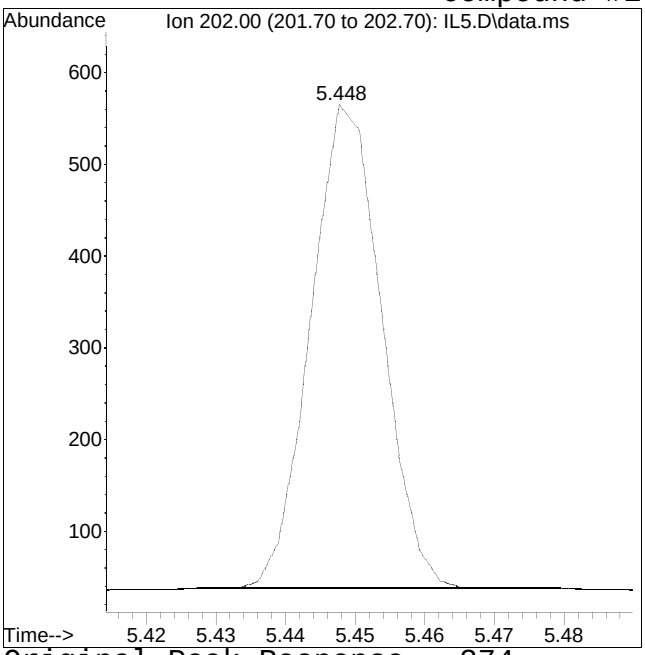
Manual Peak Response = 328 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

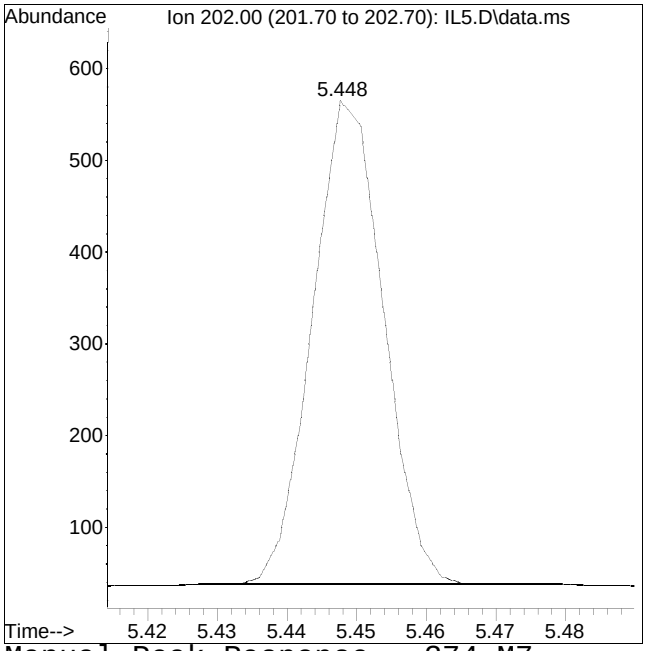
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #28: Fluoranthene



Original Peak Response = 374



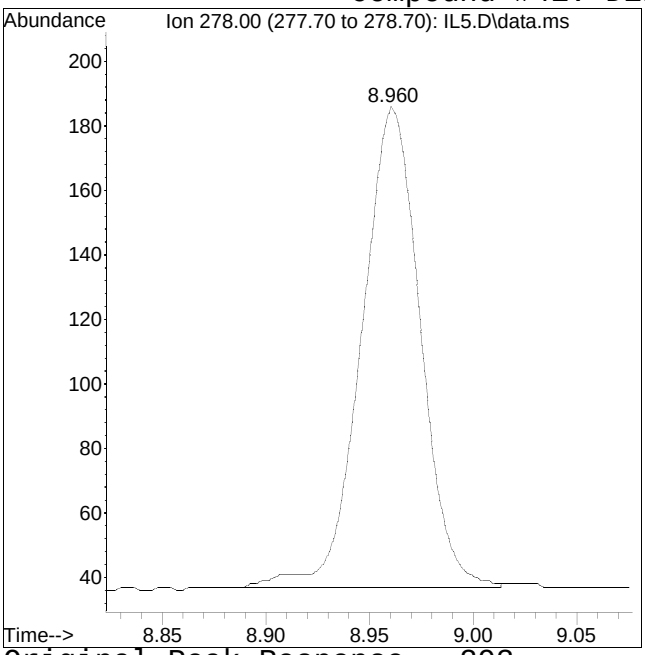
Manual Peak Response = 374 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

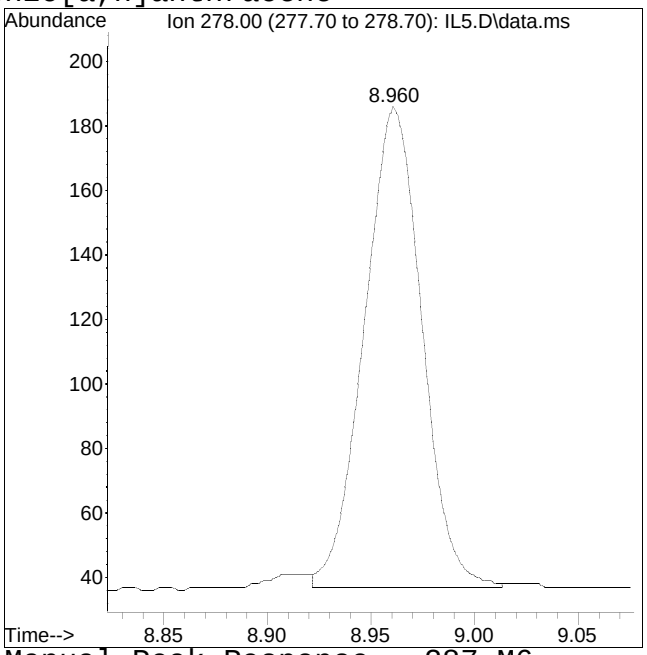
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 293



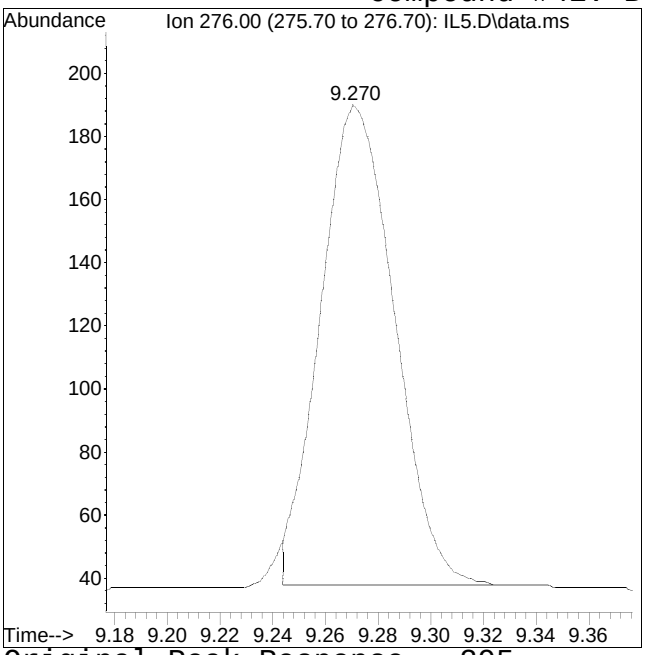
Manual Peak Response = 287 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

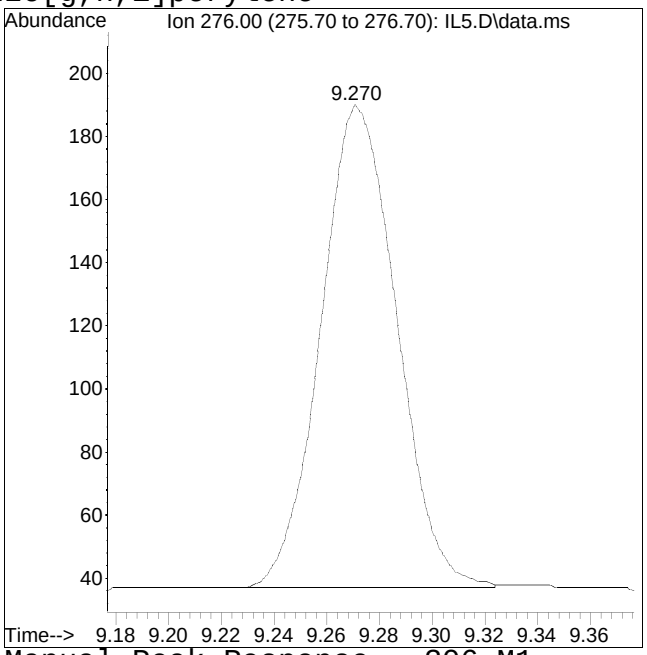
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL5.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:06 am Instrument : SV128
Sample : IL5,32,, 0.1 Lot#10231 Quant Date : 9/5/2023 11:59 am

Compound #42: Benzo[g,h,i]perylene



Original Peak Response = 295



Manual Peak Response = 306 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL4.D
Acq On : 31 Aug 2023 11:23 am
Operator : SV128:ah
Sample : IL4,32,, 0.05 Lot#10232
Misc : WG1823727,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 05 12:10:46 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:56 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.258	152	2105	4000.000	ng/ml	0.00
Standard Area 1 = 2292			Recovery = 91.84%			
8) Naphthalene-d8	2.923	136	7995	4000.000	ng/ml	0.00
Standard Area 1 = 8982			Recovery = 89.01%			
17) Acenaphthene-d10	3.901	164	4588	4000.000	ng/ml	0.00
Standard Area 1 = 5319			Recovery = 86.26%			
22) Phenanthrene-d10	4.750	188	11126	4000.000	ng/ml	0.00
Standard Area 1 = 12548			Recovery = 88.67%			
31) Chrysene-d12	6.324	240	10924	4000.000	ng/ml	0.00
Standard Area 1 = 11983			Recovery = 91.16%			
36) Perylene-d12	7.604	264	12285	4000.000	ng/ml	0.00
Standard Area 1 = 13430			Recovery = 91.47%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.654	112	27	50.195	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 1.00%#			
3) Phenol-d6	2.064	99	33	50.135	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 1.00%#			
7) Nitrobenzene-d5	2.539	82	27	48.394	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 1.94%#			
13) 2-Fluorobiphenyl	3.522	172	85	51.838	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 2.07%#			
21) 2,4,6-Tribromophenol	4.350	330	8M4	41.528	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.83%#			
30) 4-Terphenyl-d14	5.677	244	125	53.165	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 2.13%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.120	93	29	51.129	ng/ml	98
5) n-nitrosodi-n-propylamine	2.459	70	20M7	47.005	ng/ml	
6) Hexachloroethane	2.520	117	13	51.372	ng/ml	80
9) Naphthalene	2.933	128	101	51.704	ng/ml#	97
10) Hexachlorobutadiene	3.009	225	19	51.727	ng/ml	100
11) 2-Methylnaphthalene	3.315	142	66	50.618	ng/ml	100
12) 1-Methylnaphthalene	3.369	142	62	51.324	ng/ml	99
14) 2-Chloronaphthalene	3.586	162	70M6	51.785	ng/ml	
15) 2,6-Dinitrotoluene	3.779	165	11M4	40.747	ng/ml	
16) Acenaphthylene	3.819	152	106M6	49.242	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL4.D
Acq On : 31 Aug 2023 11:23 am
Operator : SV128:ah
Sample : IL4,32,, 0.05 Lot#10232
Misc : WG1823727,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 05 12:10:46 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:56 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
18) Acenaphthene	3.919	153	75M7	51.593	ng/ml	
19) 2,4-Dinitrotoluene	4.011	165	14	40.172	ng/ml	90
20) Fluorene	4.213	166	82M6	51.693	ng/ml	
23) 4,6-Dinitro-o-cresol	4.240	198	5M3	83.487	ng/ml	
24) Hexachlorobenzene	4.531	284	32M4	53.558	ng/ml	
25) Pentachlorophenol	4.644	266	13M4	55.387	ng/ml	
26) Phenanthrene	4.762	178	147M6	52.994	ng/ml	
27) Anthracene	4.791	178	138	51.121	ng/ml	100
28) Fluoranthene	5.450	202	168M6	52.129	ng/ml	
29) Pyrene	5.581	202	176	52.765	ng/ml	98
32) Benzo[a]anthracene	6.318	228	207	51.389	ng/ml	93
33) 3,3'-Dichlorobenzidine	6.307	252	61M7	44.774	ng/ml	
34) Chrysene	6.343	228	178	52.814	ng/ml	96
35) Bis(2-ethylhexyl)phtha...	6.364	149	82	38.545	ng/ml	93
37) Benzo[b]fluoranthene	7.208	252	175	50.559	ng/ml	99
38) Benzo[k]fluoranthene	7.233	252	158M4	49.325	ng/ml	
39) Benzo[a]pyrene	7.538	252	146	49.113	ng/ml	99
40) Indeno[1,2,3-cd]pyrene	8.911	276	143	48.067	ng/ml	99
41) Dibenzo[a,h]anthracene	8.955	278	136	47.494	ng/ml	98
42) Benzo[g,h,i]perylene	9.268	276	146M4	47.801	ng/ml	

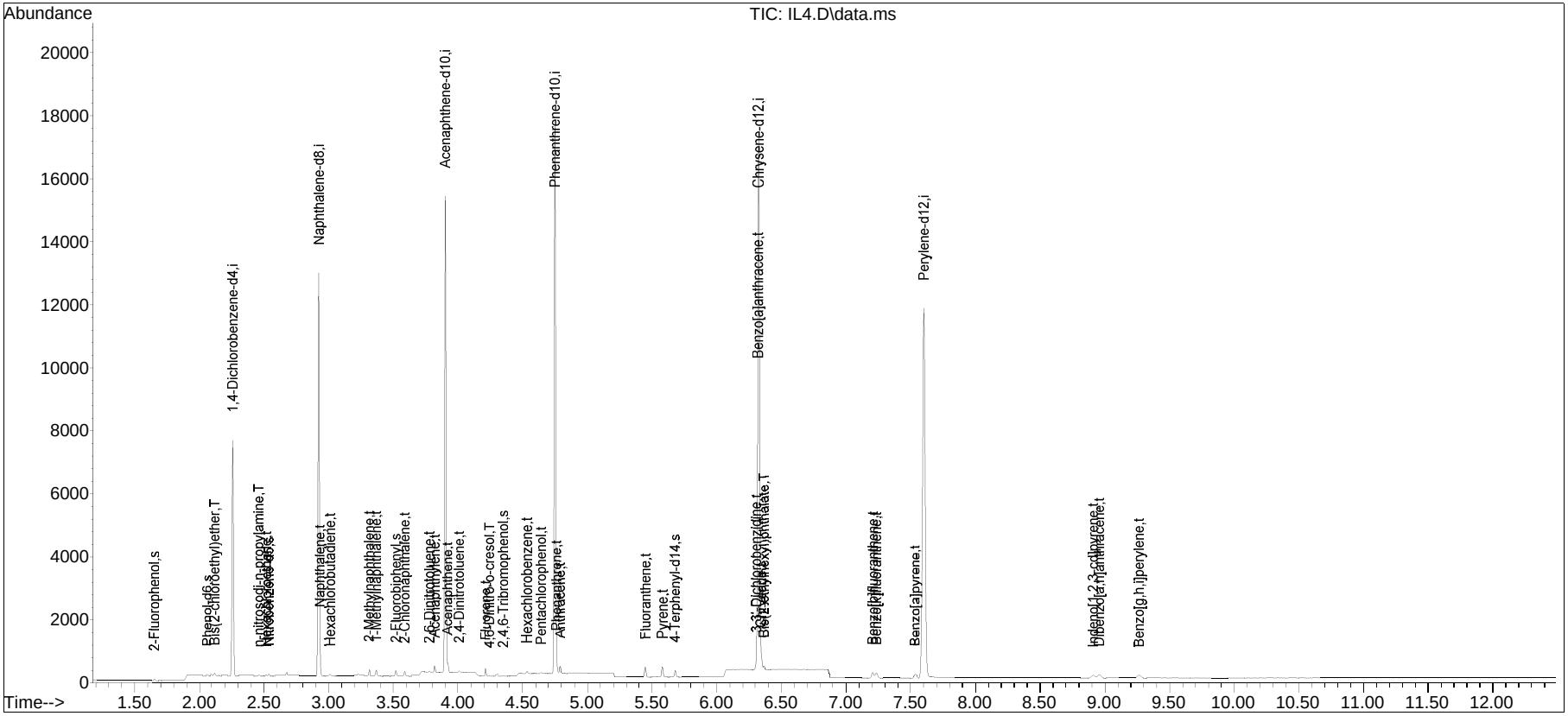
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL4.D
Acq On : 31 Aug 2023 11:23 am
Operator : SV128:ah
Sample : IL4,32,, 0.05 Lot#10232
Misc : WG1823727,,ical
ALS Vial : 7 Sample Multiplier: 1

Quant Time: Sep 05 12:10:46 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:56 2023
Response via : Initial Calibration

Sub List : Default - All compounds listedIical\IL7.D•

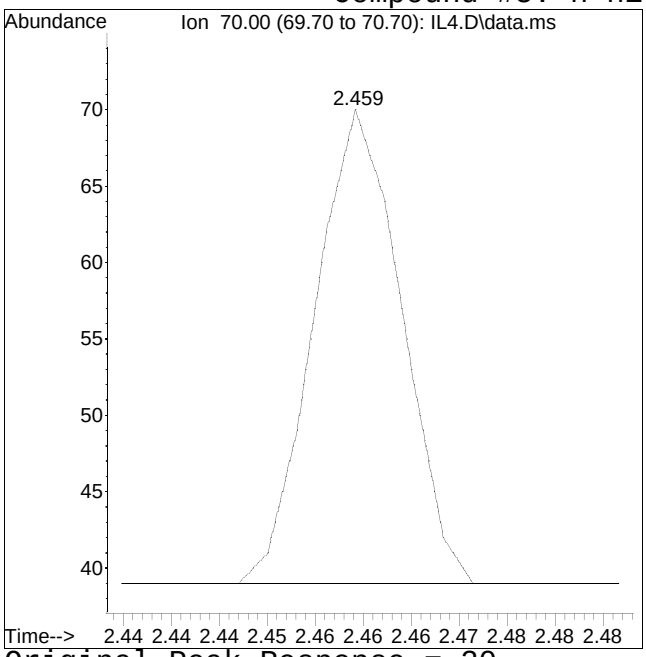


Manual Integration Report

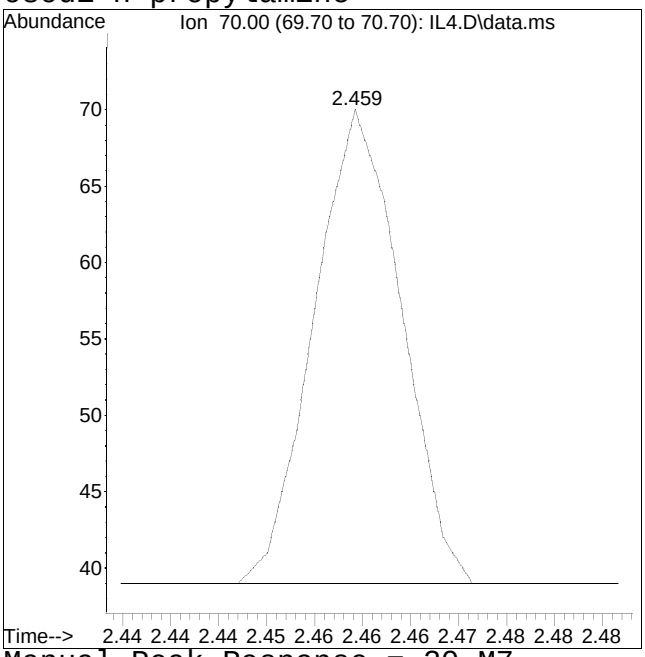
Data Path : I:\8270SIM\SV128\230831aLVQ
Data File : IL4.D
Date Inj'd : 8/31/2023 11:23 am
Sample : IL4,32,, 0.05 Lot#10232

Method : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/5/2023 11:58 am

Compound #5: n-nitrosodi-n-propylamine



Original Peak Response = 20



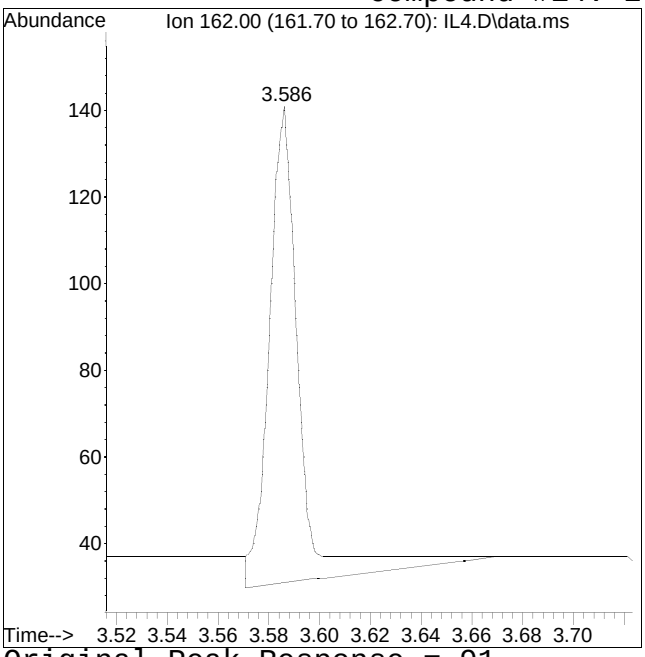
Manual Peak Response = 20 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

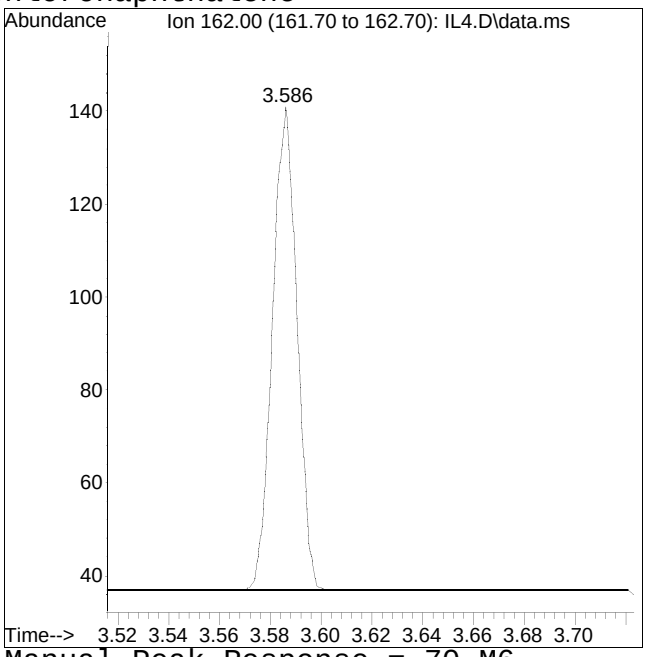
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #14: 2-Chloronaphthalene



Original Peak Response = 91



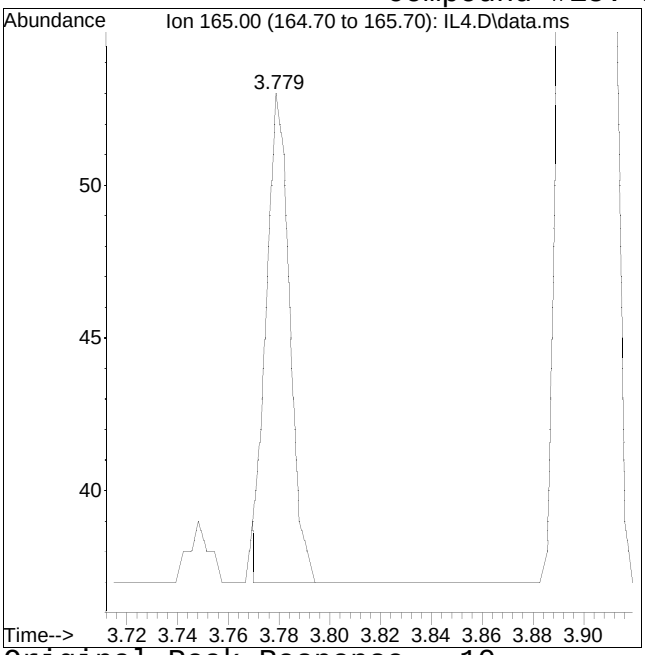
Manual Peak Response = 70 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

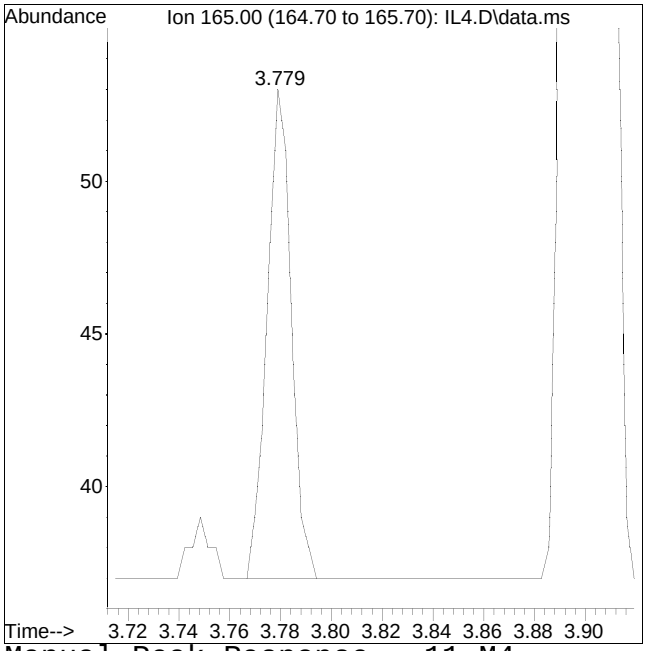
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #15: 2,6-Dinitrotoluene



Original Peak Response = 10



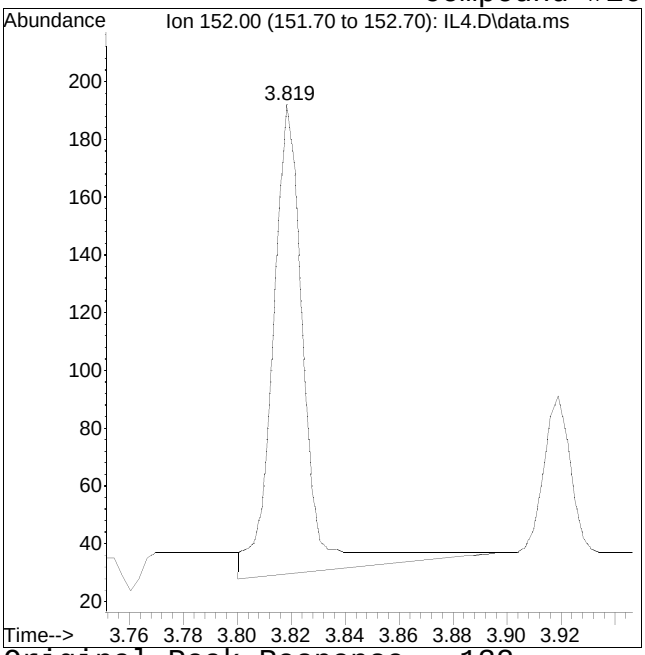
Manual Peak Response = 11 M4

M4 = Poor automated baseline construction.

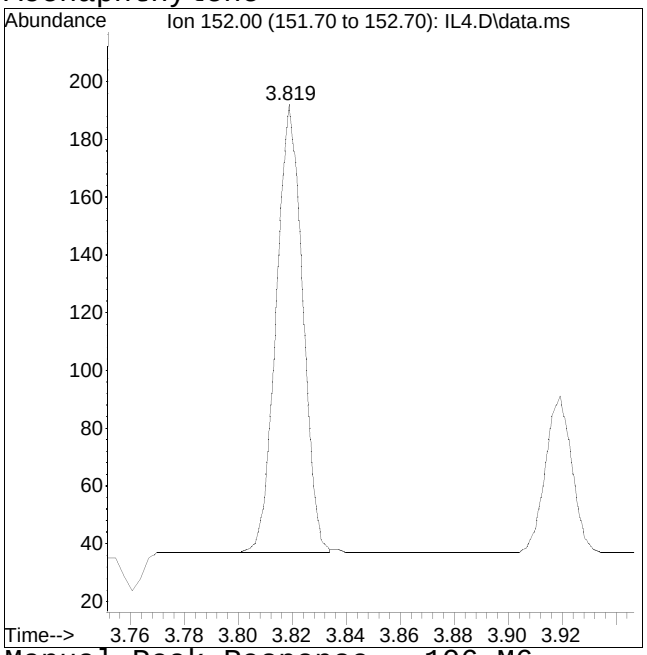
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #16: Acenaphthylene



Original Peak Response = 132



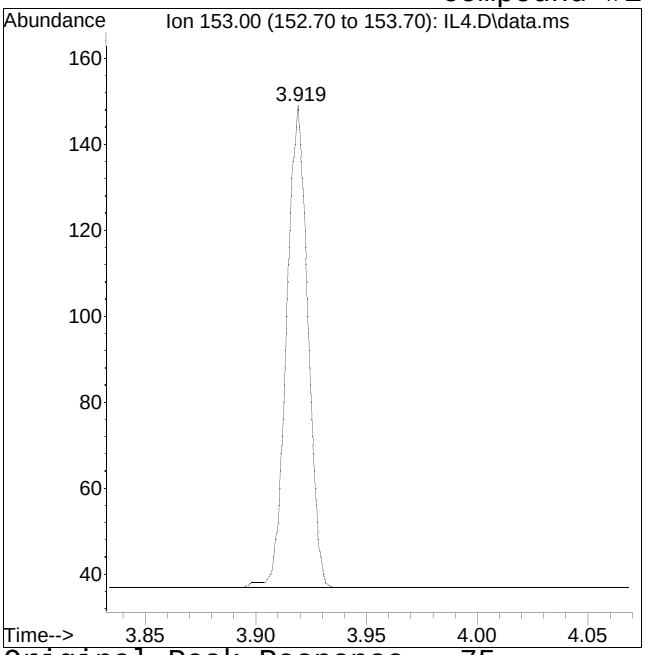
Manual Peak Response = 106 M6

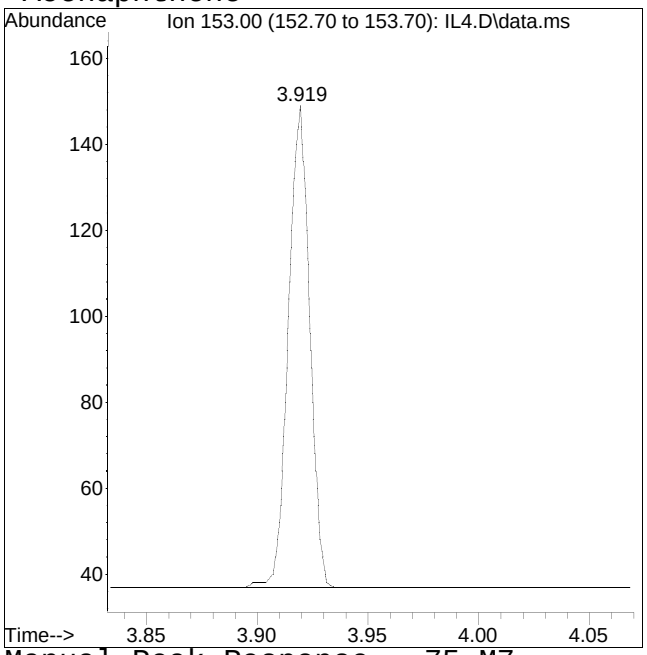
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #18: Acenaphthene



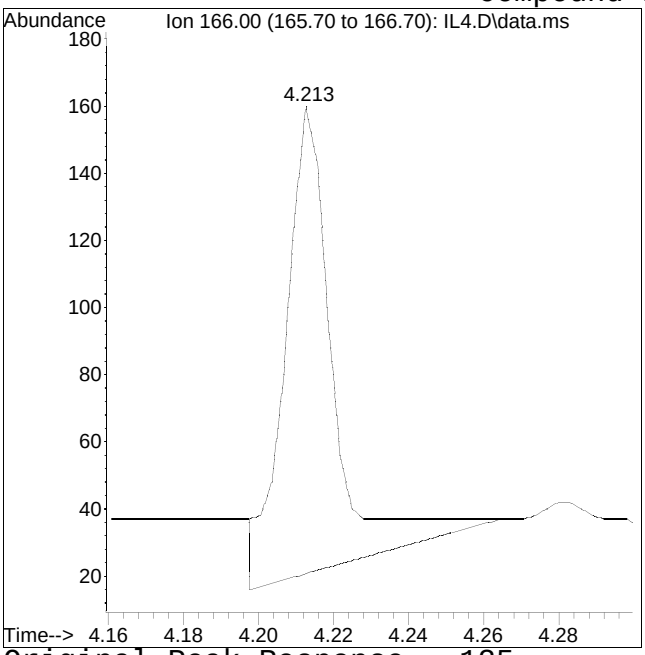


Original Peak Response = 75 Manual Peak Response = 75 M7
M7 = A qualifier ion was manually integrated (only for GC/MS data).

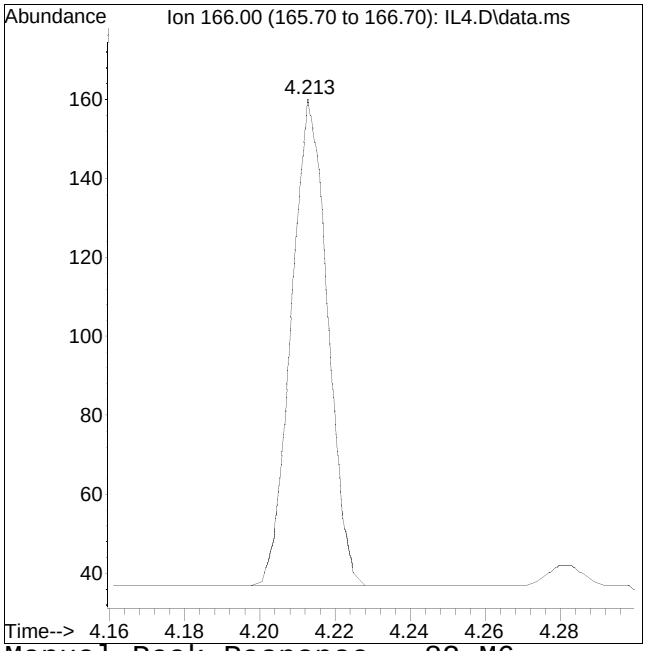
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #20: Fluorene



Original Peak Response = 125



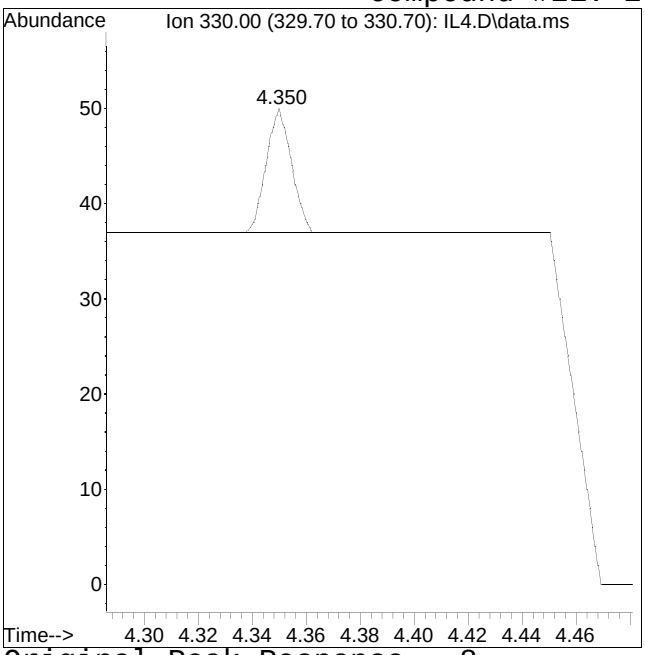
Manual Peak Response = 82 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

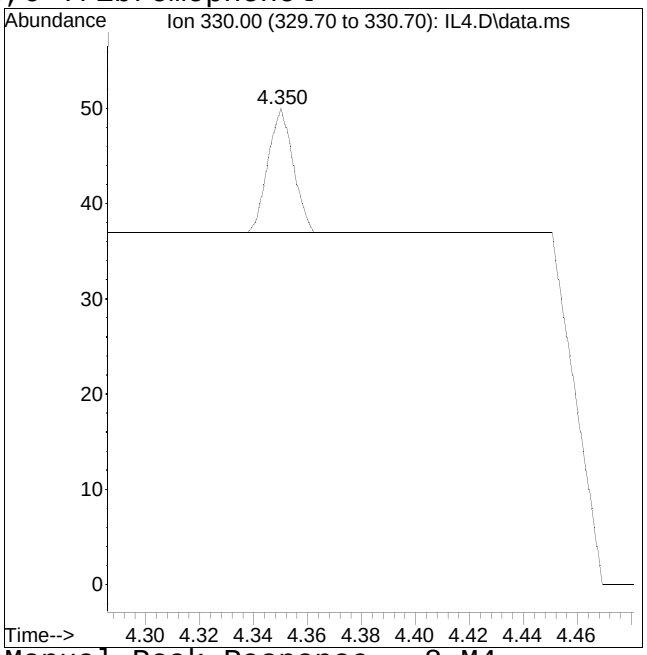
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #21: 2,4,6-Tribromophenol



Original Peak Response = 8



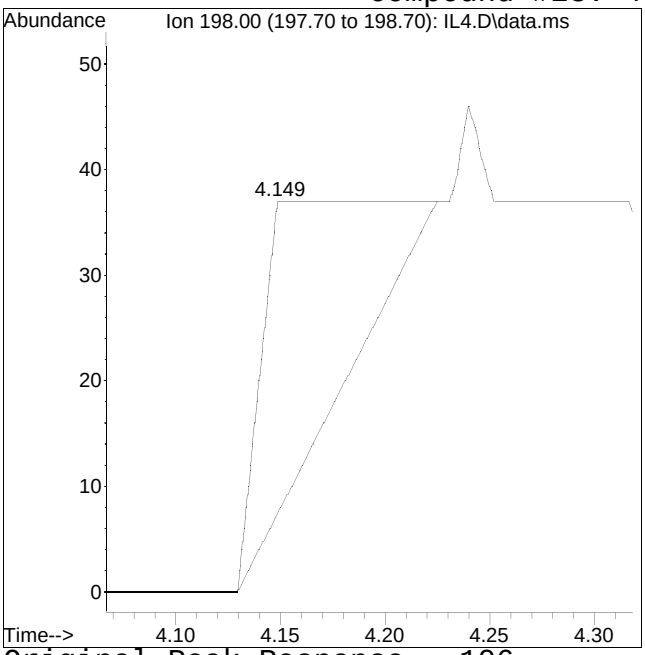
Manual Peak Response = 8 M4

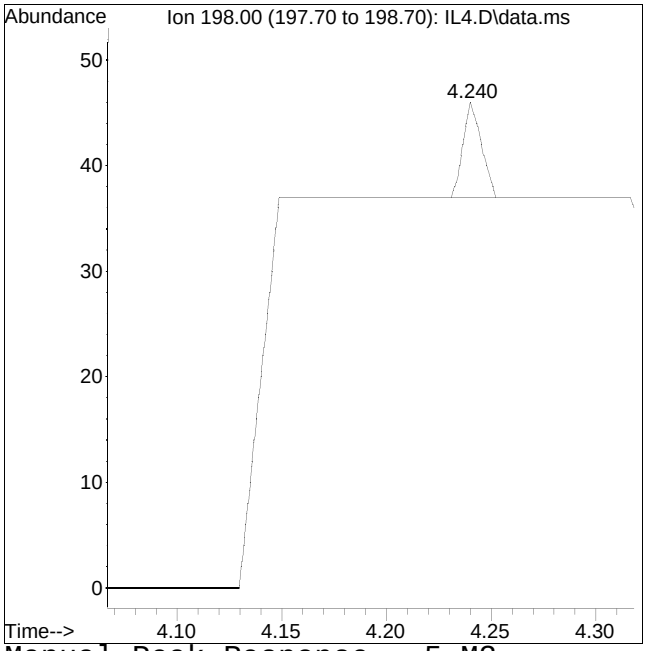
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #23: 4,6-Dinitro-o-cresol





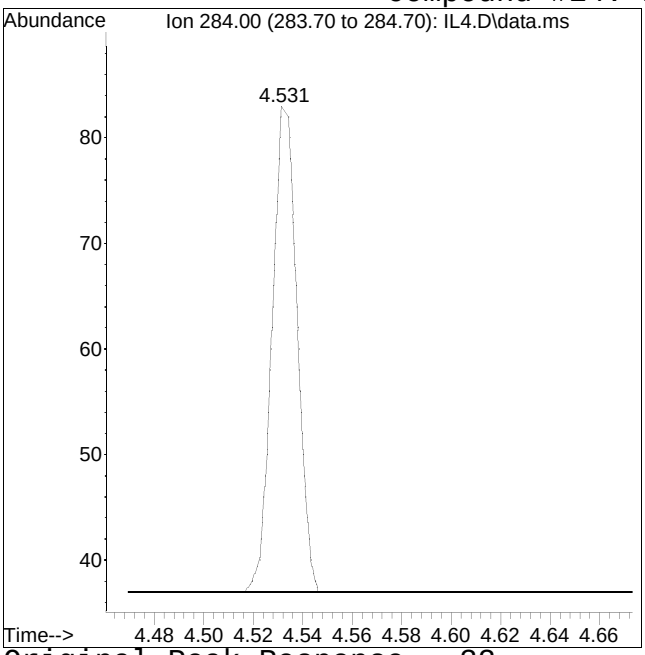
Original Peak Response = 106 Manual Peak Response = 5 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

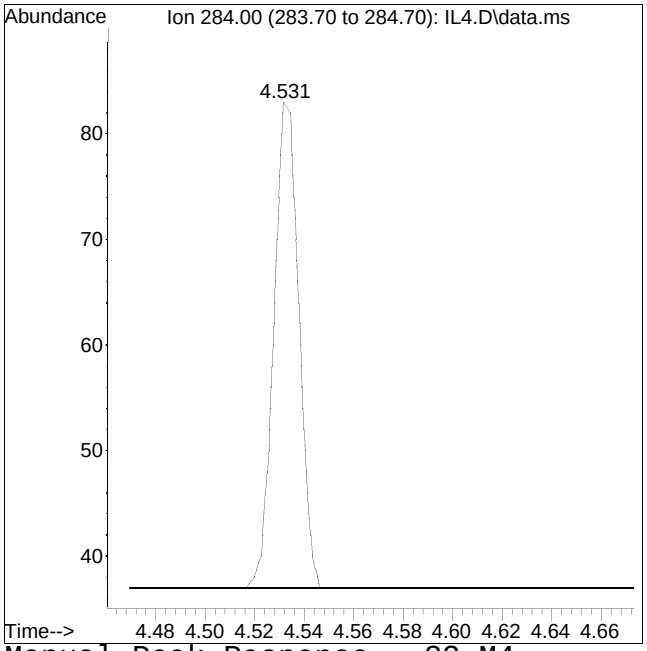
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #24: Hexachlorobenzene



Original Peak Response = 32



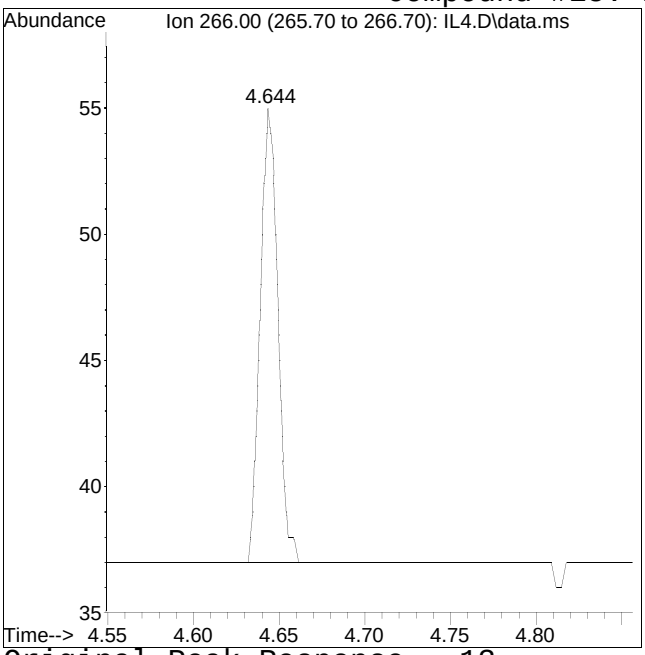
Manual Peak Response = 32 M4

M4 = Poor automated baseline construction.

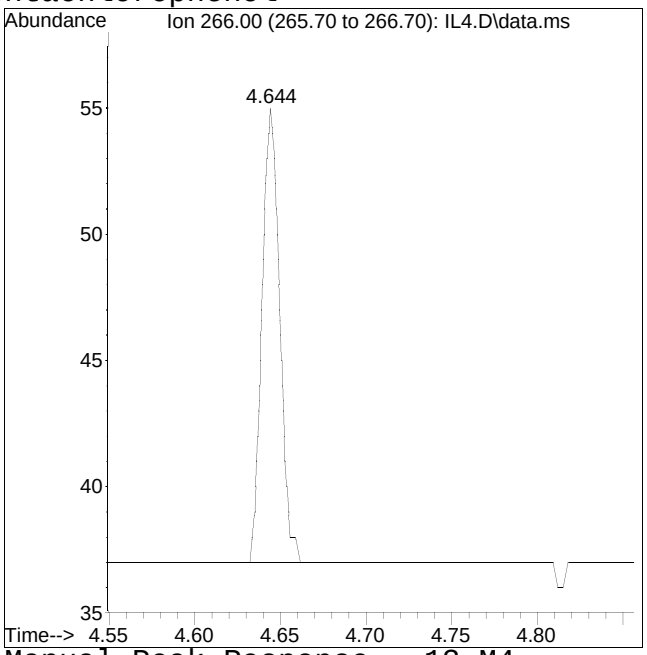
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #25: Pentachlorophenol



Original Peak Response = 13



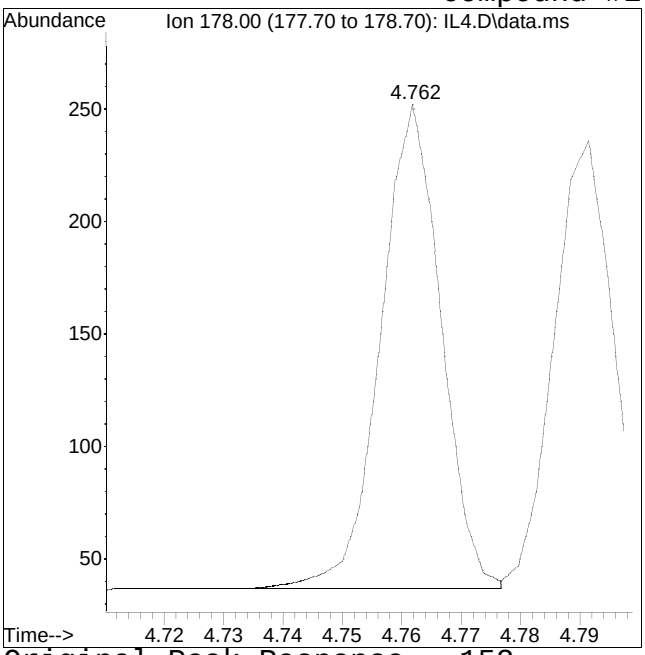
Manual Peak Response = 13 M4

M4 = Poor automated baseline construction.

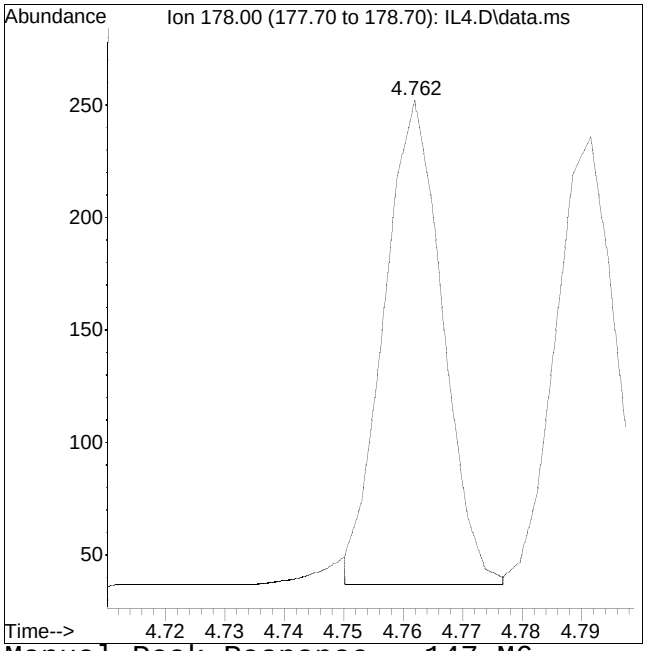
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #26: Phenanthrene



Original Peak Response = 152



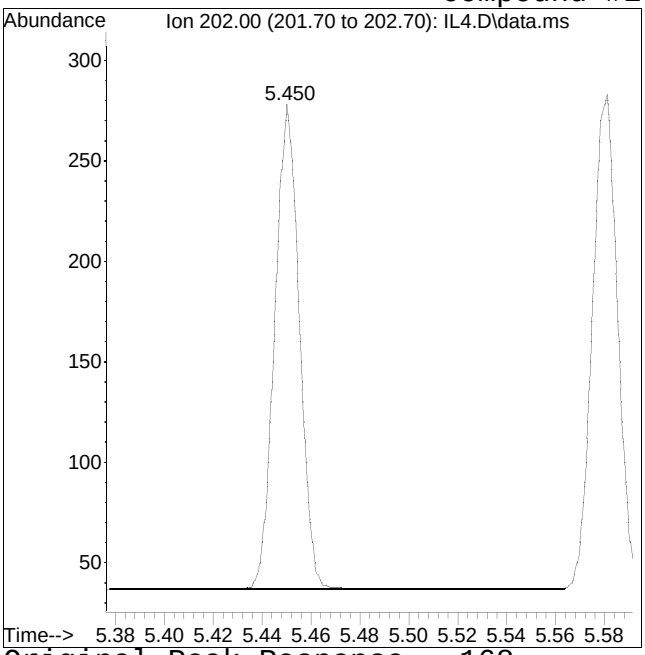
Manual Peak Response = 147 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

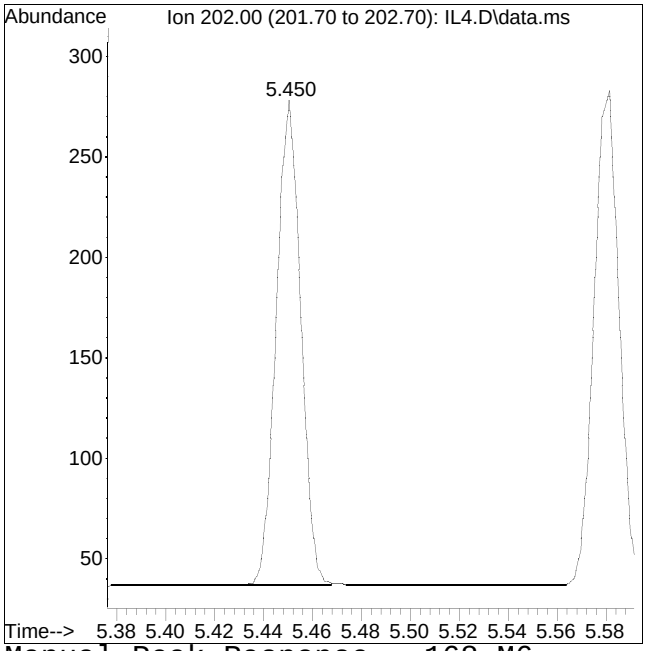
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #28: Fluoranthene



Original Peak Response = 168



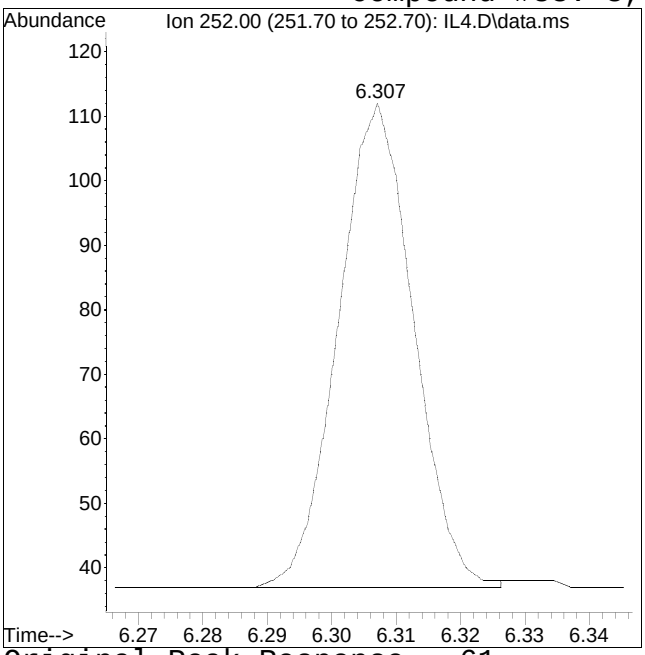
Manual Peak Response = 168 M6

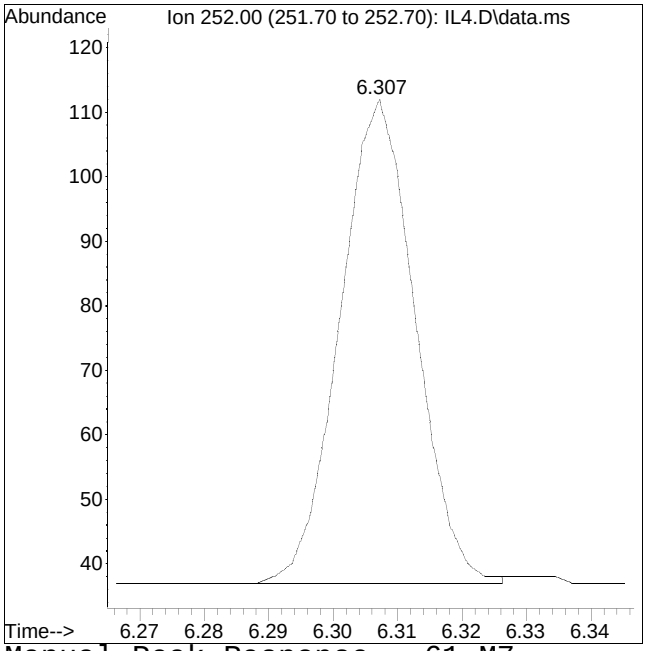
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #33: 3,3'-Dichlorobenzidine



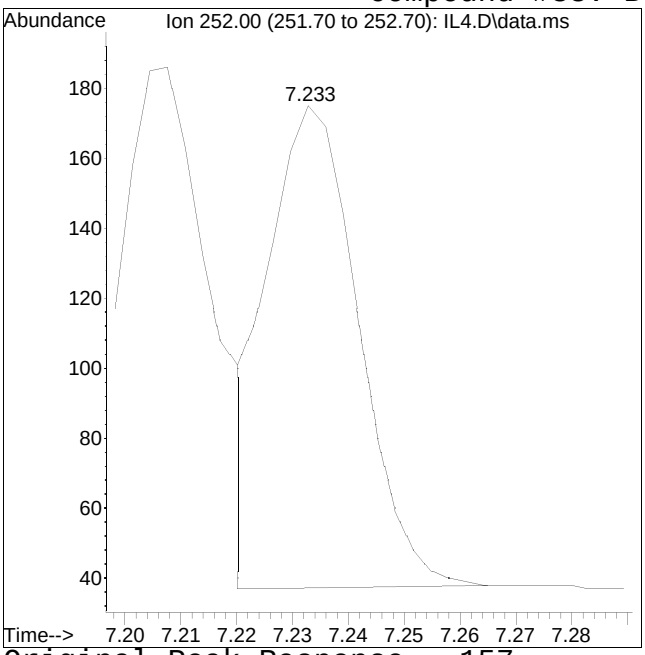


Original Peak Response = 61 Manual Peak Response = 61 M7
M7 = A qualifier ion was manually integrated (only for GC/MS data).

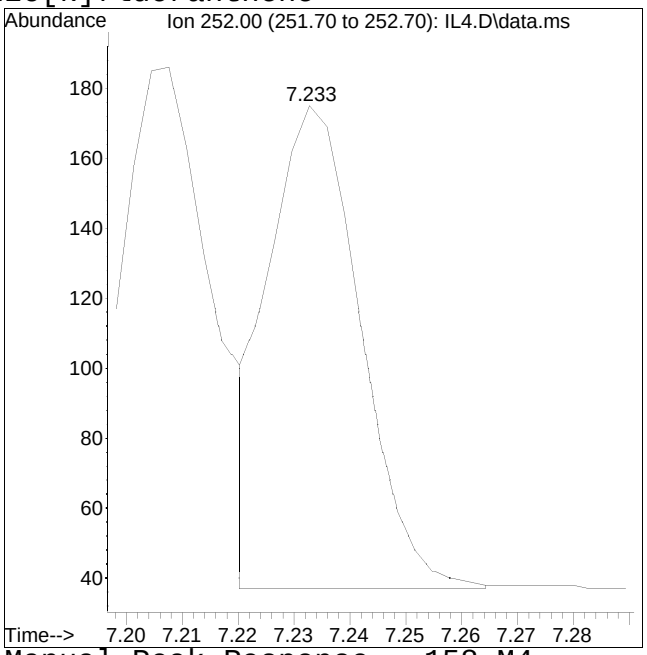
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #38: Benzo[k]fluoranthene



Original Peak Response = 157



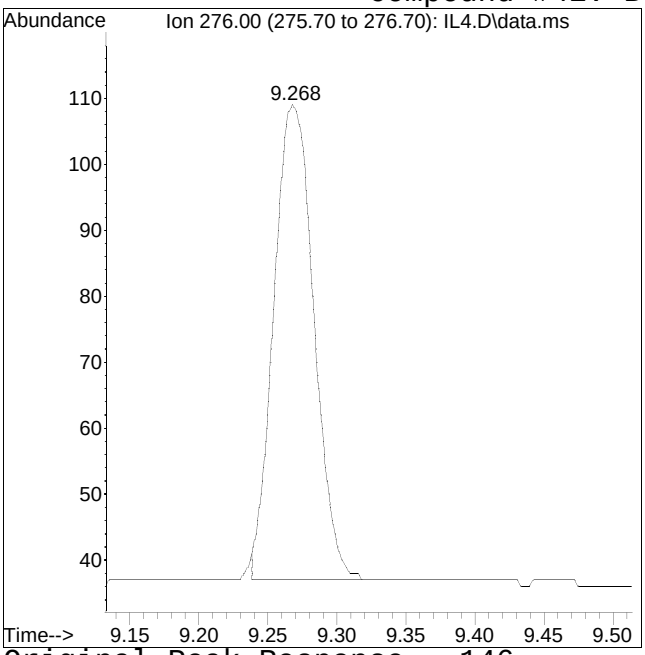
Manual Peak Response = 158 M4

M4 = Poor automated baseline construction.

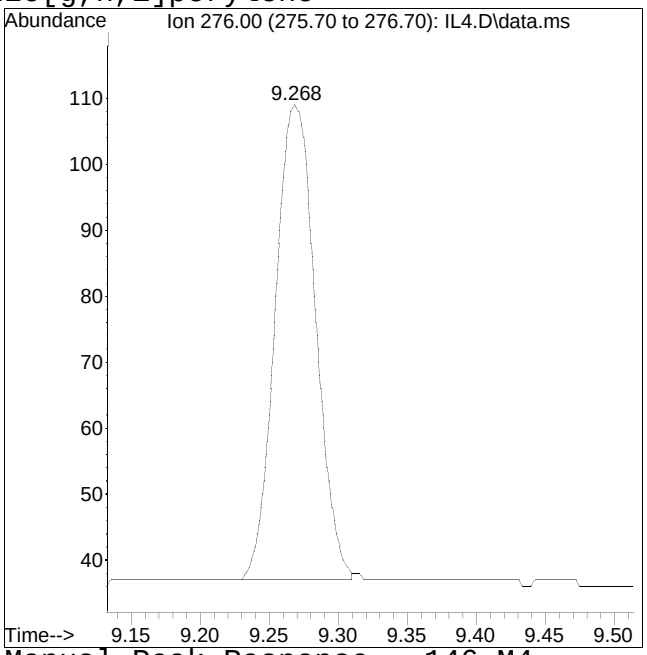
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL4.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:23 am Instrument : SV128
Sample : IL4,32,, 0.05 Lot#10232 Quant Date : 9/5/2023 11:58 am

Compound #42: Benzo[g,h,i]perylene



Original Peak Response = 146



Manual Peak Response = 146 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL2.D
Acq On : 31 Aug 2023 11:56 am
Operator : SV128:ah
Sample : IL2,32,, 0.01 Lot#10234
Misc : WG1823727,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 05 12:46:34 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:39 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.259	152	2140	4000.000	ng/ml	0.00
Standard Area 1 = 2292			Recovery = 93.37%			
8) Naphthalene-d8	2.922	136	8063	4000.000	ng/ml	0.00
Standard Area 1 = 8982			Recovery = 89.77%			
17) Acenaphthene-d10	3.903	164	4700	4000.000	ng/ml	0.00
Standard Area 1 = 5319			Recovery = 88.36%			
22) Phenanthrene-d10	4.749	188	11223	4000.000	ng/ml	0.00
Standard Area 1 = 12548			Recovery = 89.44%			
31) Chrysene-d12	6.325	240	10733	4000.000	ng/ml	0.00
Standard Area 1 = 11983			Recovery = 89.57%			
36) Perylene-d12	7.608	264	12011	4000.000	ng/ml	0.00
Standard Area 1 = 13430			Recovery = 89.43%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.654	112	6M7	10.972	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.22%#			
3) Phenol-d6	2.065	99	7M7	10.461	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.21%#			
7) Nitrobenzene-d5	2.540	82	5M3	8.815	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.35%#			
13) 2-Fluorobiphenyl	3.521	172	17M4	10.280	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.41%#			
21) 2,4,6-Tribromophenol	0.000	330	0d	0.000	ng/ml	
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.00%#			
30) 4-Terphenyl-d14	5.679	244	26M7	10.963	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.44%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.121	93	6M7	10.405	ng/ml	
5) n-nitrosodi-n-propylamine	2.461	70	4M3	9.247	ng/ml	
6) Hexachloroethane	2.519	117	3M2	11.661	ng/ml	
9) Naphthalene	2.934	128	21M7	10.660	ng/ml	
10) Hexachlorobutadiene	3.008	225	4M2	10.798	ng/ml	
11) 2-Methylnaphthalene	3.316	142	13	9.886	ng/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL2.D
Acq On : 31 Aug 2023 11:56 am
Operator : SV128:ah
Sample : IL2,32,, 0.01 Lot#10234
Misc : WG1823727,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 05 12:46:34 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:39 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
12) 1-Methylnaphthalene	3.371	142	12M4	9.850	ng/ml	
14) 2-Chloronaphthalene	3.585	162	13M6	9.536	ng/ml	
15) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
16) Acenaphthylene	3.820	152	21M7	9.673	ng/ml	
18) Acenaphthene	3.918	153	16M4	10.744	ng/ml	
19) 2,4-Dinitrotoluene	0.000		0	N.D.		
20) Fluorene	4.212	166	17M6	10.462	ng/ml	
23) 4,6-Dinitro-o-cresol	0.000		0	N.D.	d	
24) Hexachlorobenzene	4.533	284	6M2	9.955	ng/ml	
25) Pentachlorophenol	4.643	266	2M2	26.609	ng/ml	
26) Phenanthrene	4.764	178	32M6	11.436	ng/ml	
27) Anthracene	4.790	178	28	10.283	ng/ml	95
28) Fluoranthene	5.449	202	36M6	11.074	ng/ml	
29) Pyrene	5.583	202	36M4	10.700	ng/ml	
32) Benzo[a]anthracene	6.322	228	68M6	12.493	ng/ml	
33) 3,3'-Dichlorobenzidine	6.308	252	12M4	8.965	ng/ml	
34) Chrysene	6.344	228	36M6	10.872	ng/ml	
35) Bis(2-ethylhexyl)phtha...	6.366	149	16M7	7.655	ng/ml	
37) Benzo[b]fluoranthene	7.212	252	32	9.456	ng/ml	100
38) Benzo[k]fluoranthene	7.237	252	31	9.898	ng/ml	98
39) Benzo[a]pyrene	7.538	252	27	9.290	ng/ml	99
40) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.	d	
41) Dibenzo[a,h]anthracene	8.956	278	24M7	8.572	ng/ml	
42) Benzo[g,h,i]perylene	0.000		0	N.D.	d	

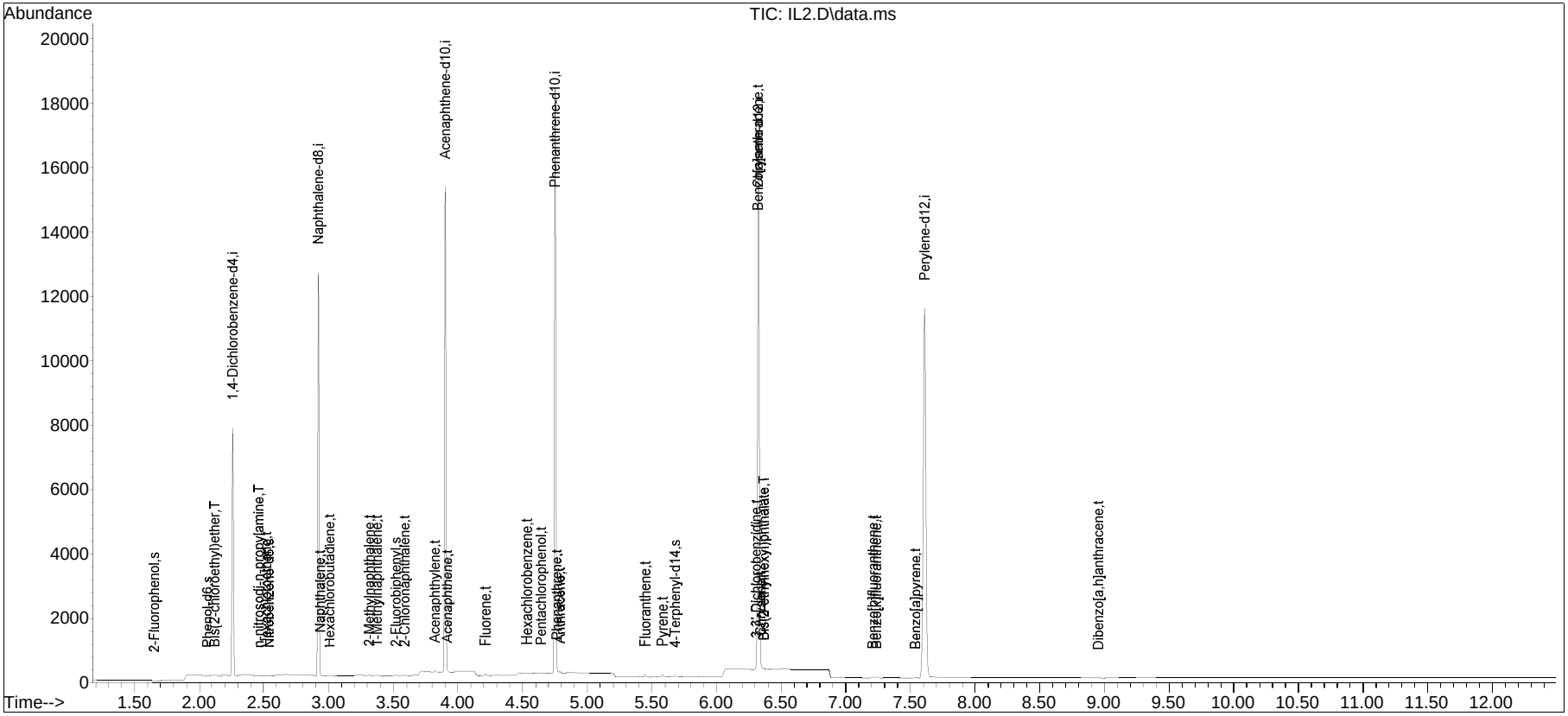
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL2.D
Acq On : 31 Aug 2023 11:56 am
Operator : SV128:ah
Sample : IL2,32,, 0.01 Lot#10234
Misc : WG1823727,,ical
ALS Vial : 9 Sample Multiplier: 1

Quant Time: Sep 05 12:46:34 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:39 2023
Response via : Initial Calibration

Sub List : Default - All compounds listedIical\IL7.D•

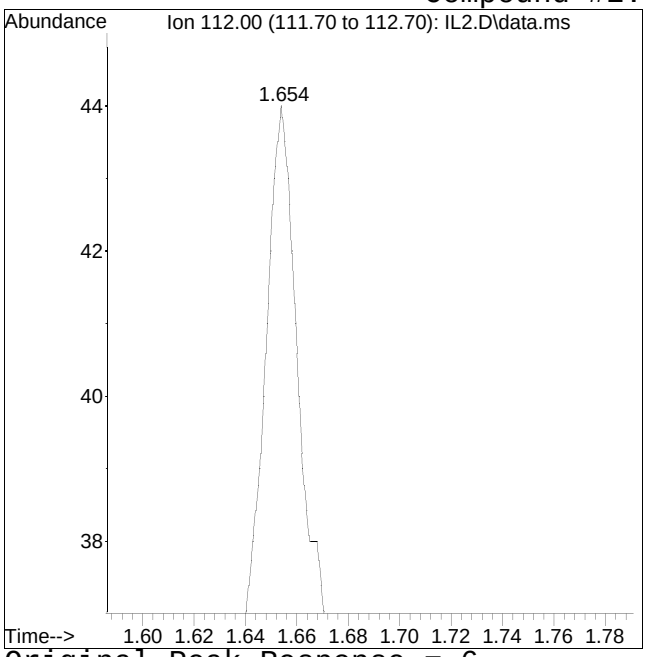


Manual Integration Report

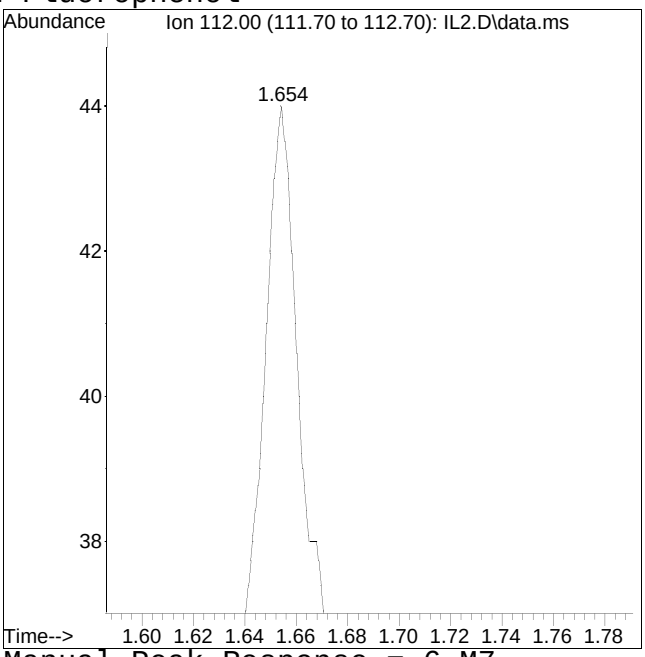
Data Path : I:\8270SIM\SV128\230831aLVQ
Data File : IL2.D
Date Inj'd : 8/31/2023 11:56 am
Sample : IL2,32,, 0.01 Lot#10234

Method : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/5/2023 11:58 am

Compound #2: 2-Fluorophenol



Original Peak Response = 6



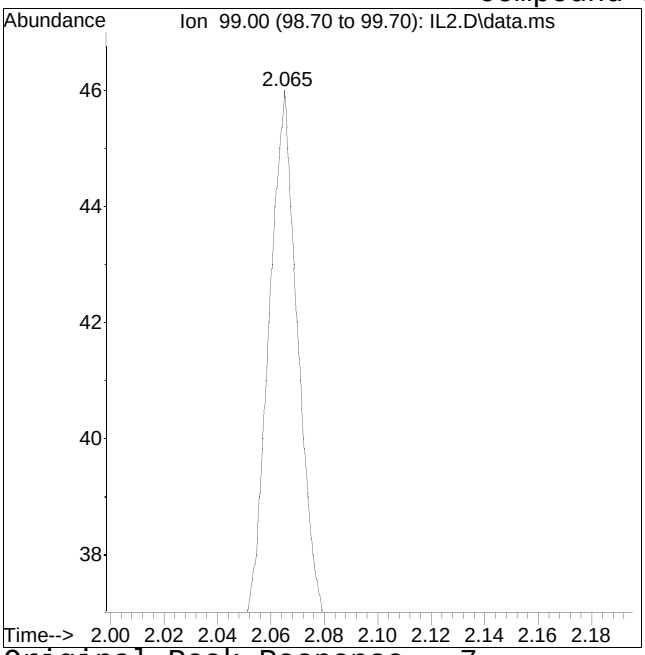
Manual Peak Response = 6 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

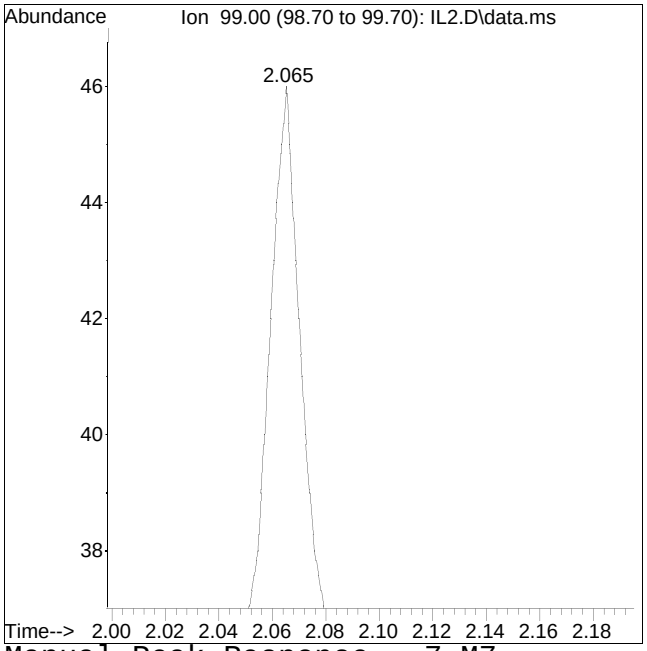
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #3: Phenol-d6



Original Peak Response = 7



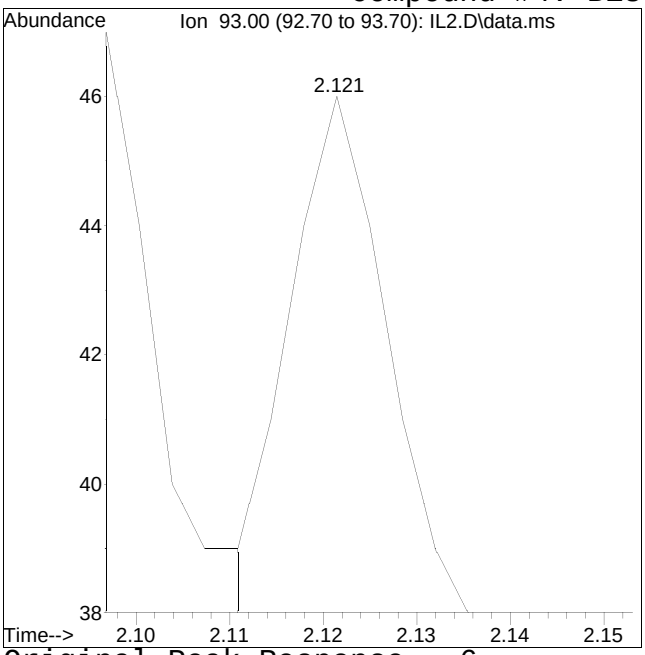
Manual Peak Response = 7 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

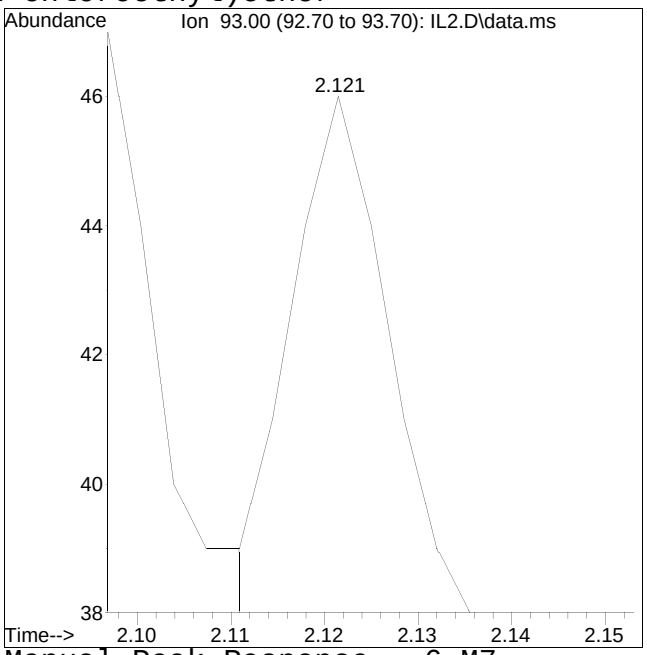
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #4: Bis(2-chloroethyl)ether



Original Peak Response = 6



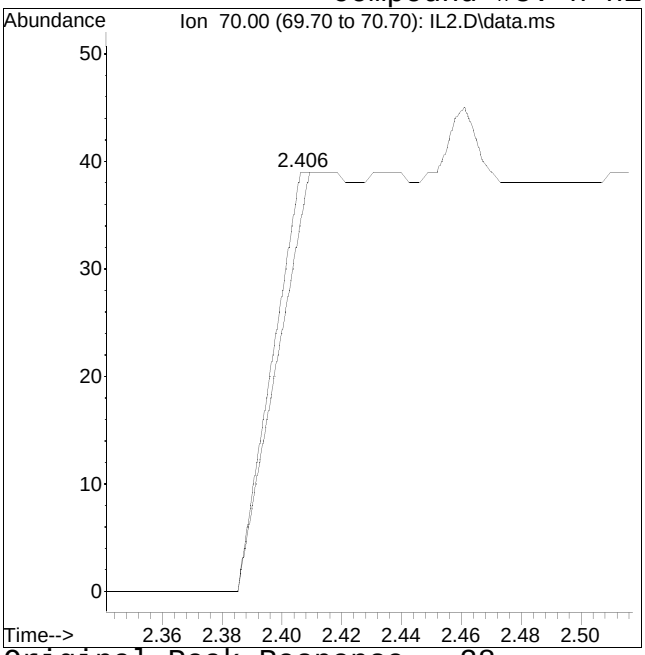
Manual Peak Response = 6 M7

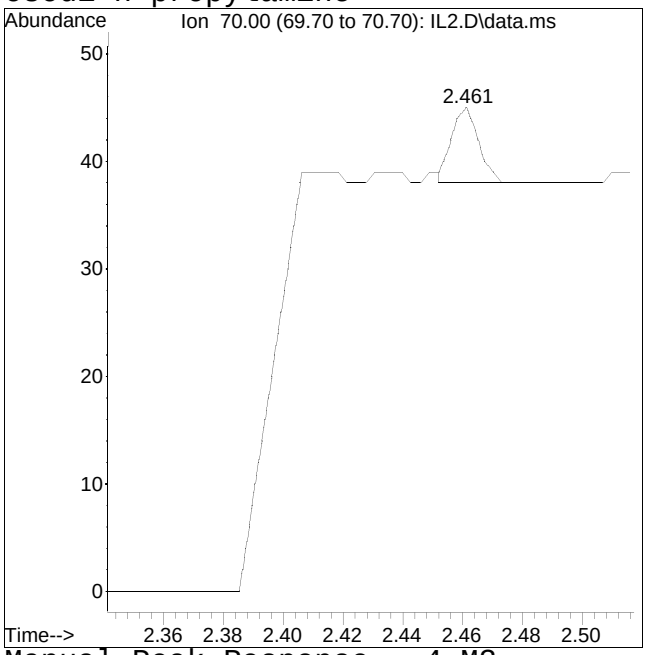
M7 = A qualifier ion was manually integrated (only for GC/MS data).

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #5: n-nitrosodi-n-propylamine





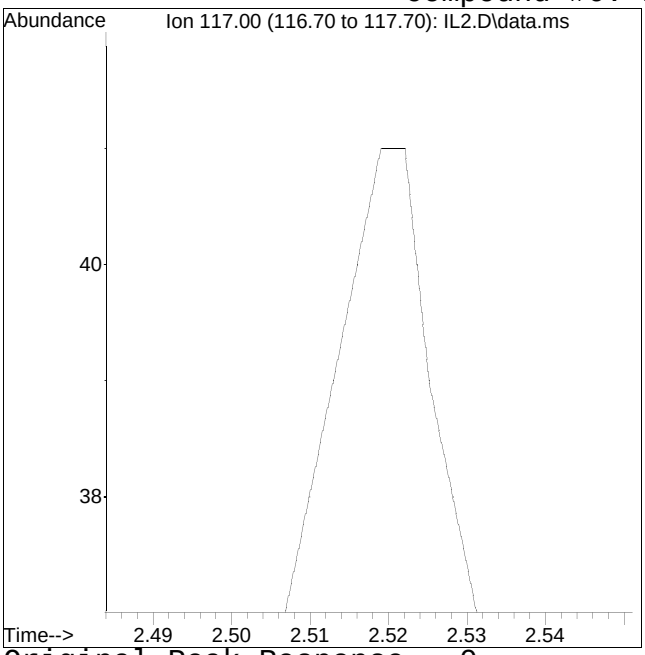
Original Peak Response = 28 Manual Peak Response = 4 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

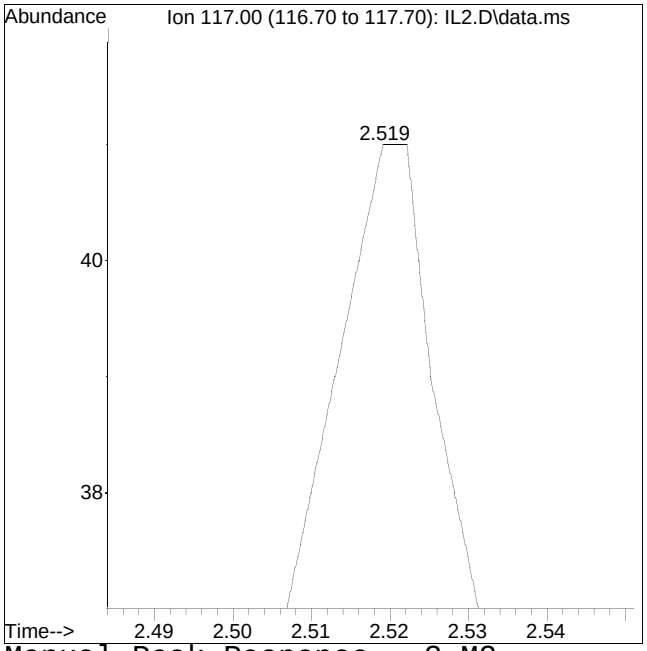
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #6: Hexachloroethane



Original Peak Response = 0



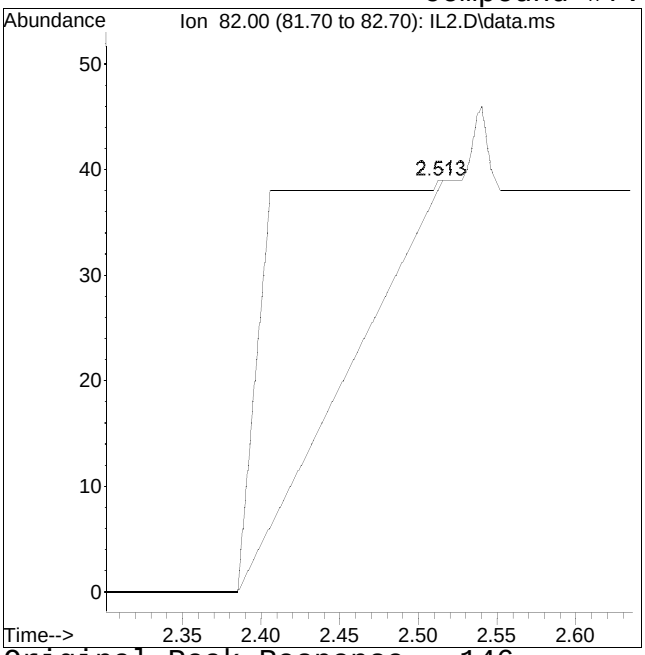
Manual Peak Response = 3 M2

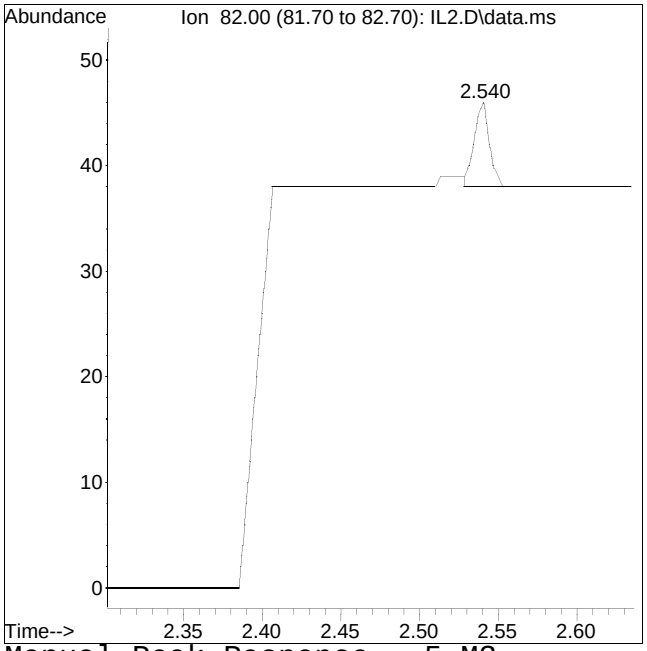
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #7: Nitrobenzene-d5



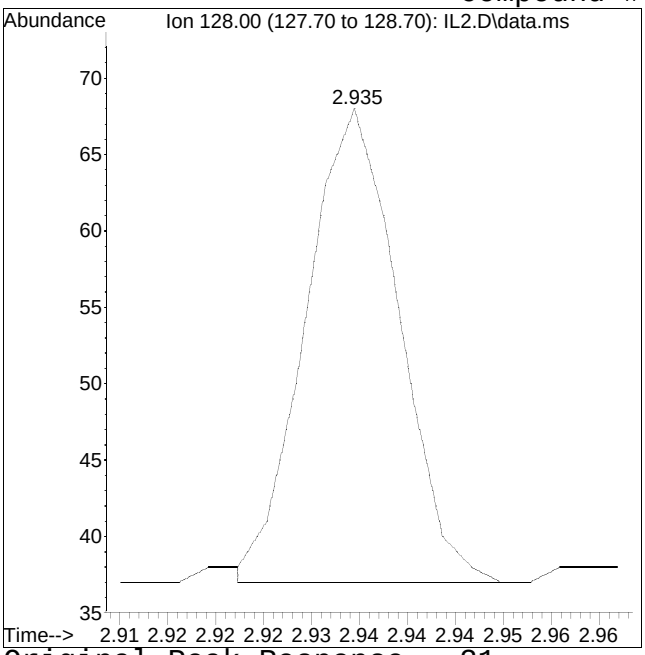


Original Peak Response = 146 Manual Peak Response = 5 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

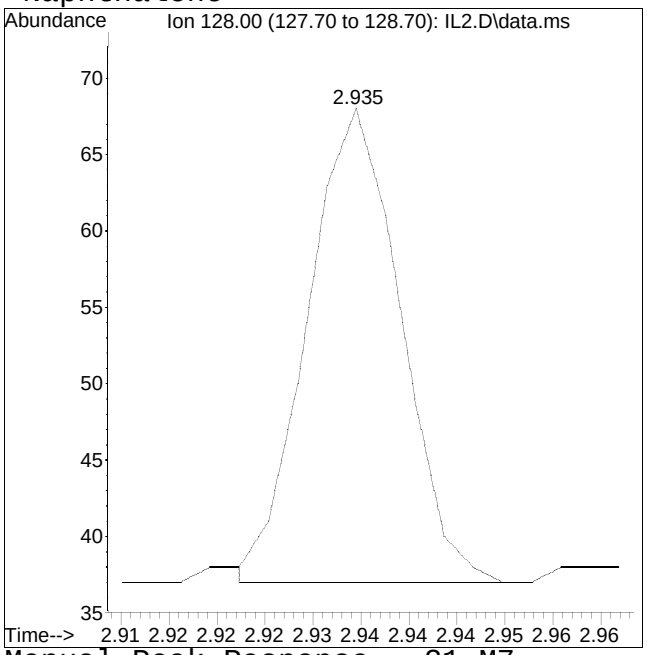
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #9: Naphthalene



Original Peak Response = 21



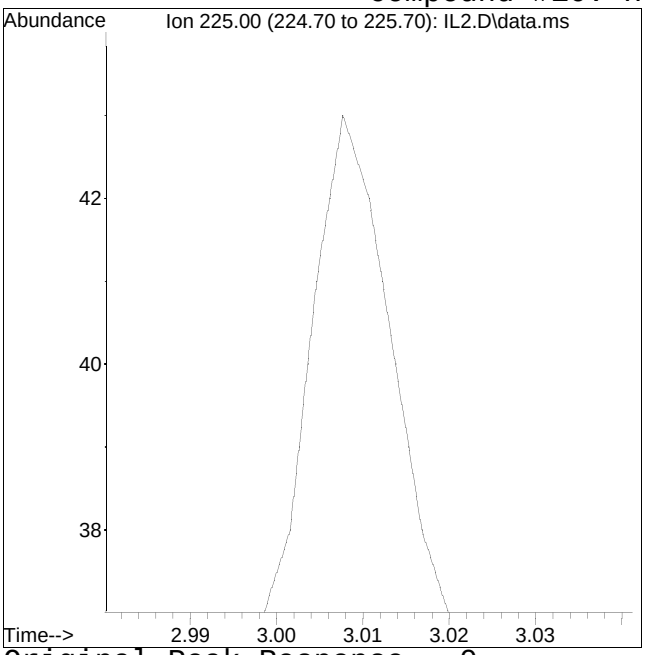
Manual Peak Response = 21 M7

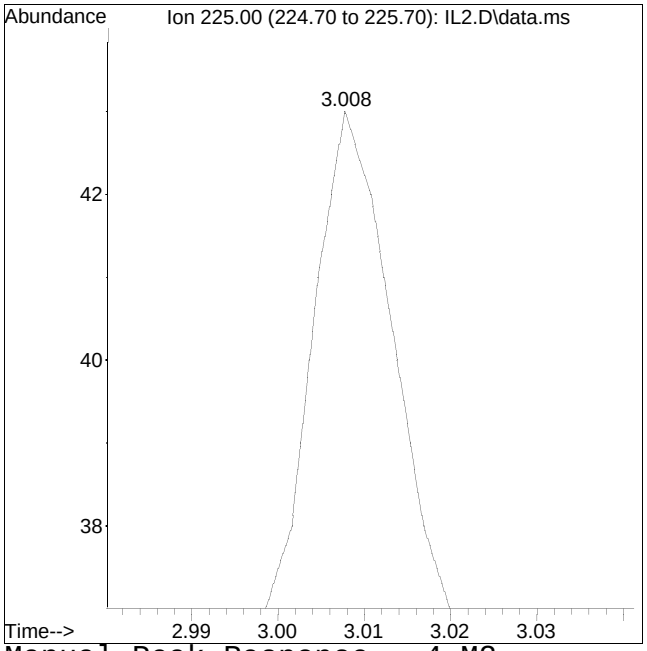
M7 = A qualifier ion was manually integrated (only for GC/MS data).

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #10: Hexachlorobutadiene



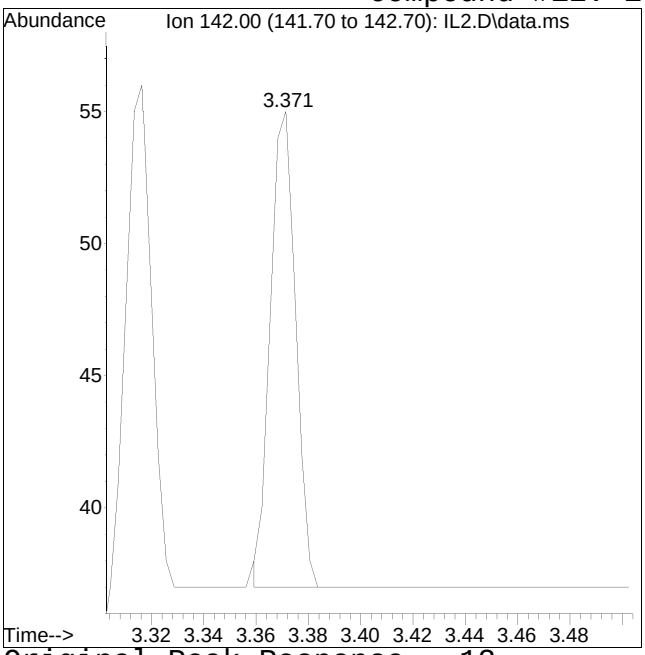


Original Peak Response = 0 Manual Peak Response = 4 M2
M2 = Peak not found by automatic integration algorithm.

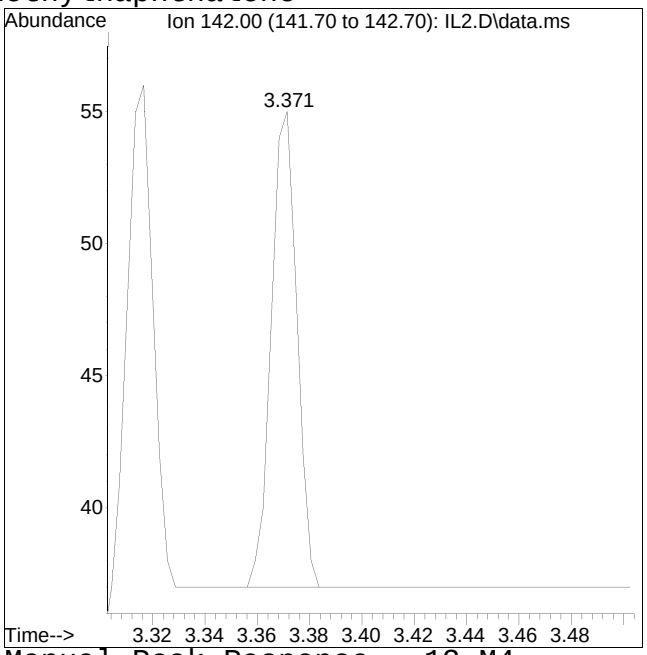
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #12: 1-Methylnaphthalene



Original Peak Response = 12



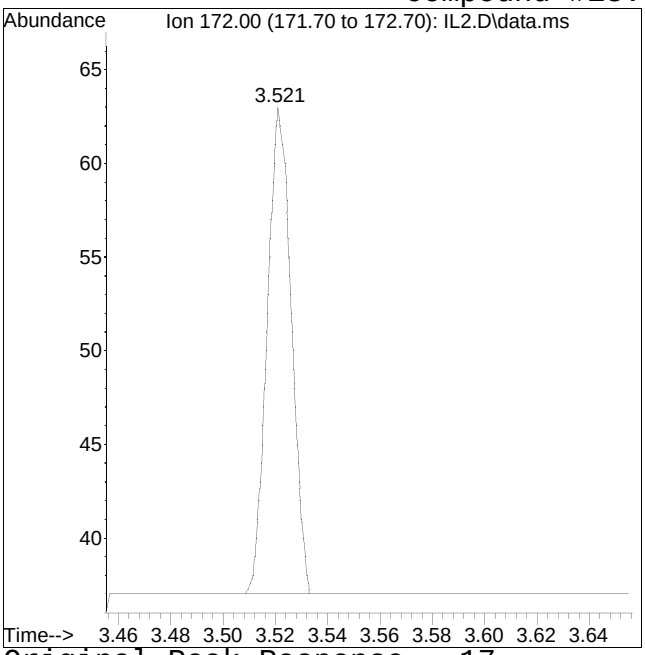
Manual Peak Response = 12 M4

M4 = Poor automated baseline construction.

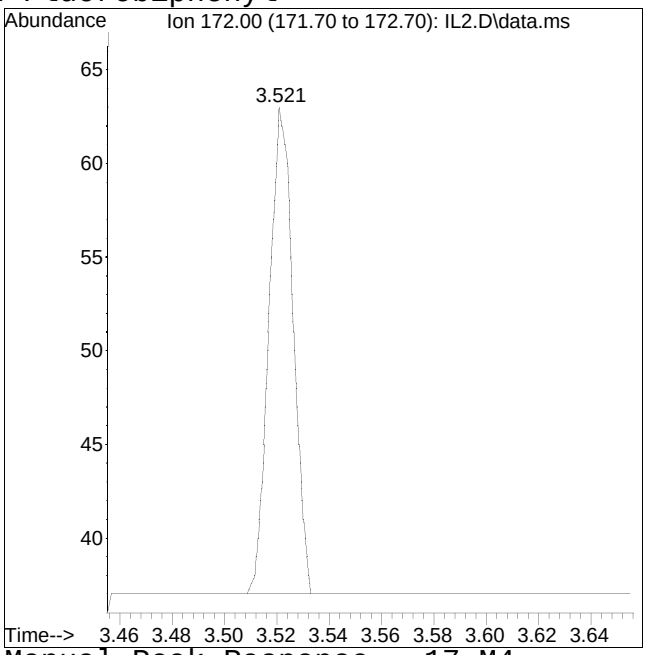
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #13: 2-Fluorobiphenyl



Original Peak Response = 17



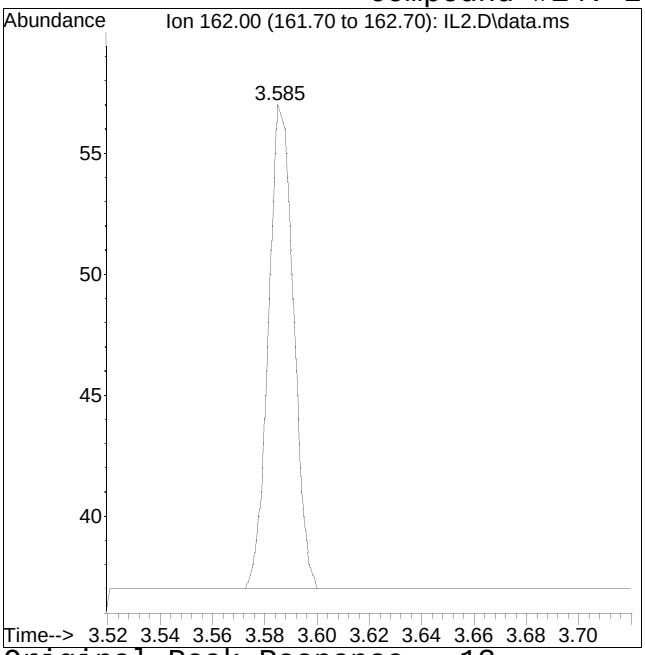
Manual Peak Response = 17 M4

M4 = Poor automated baseline construction.

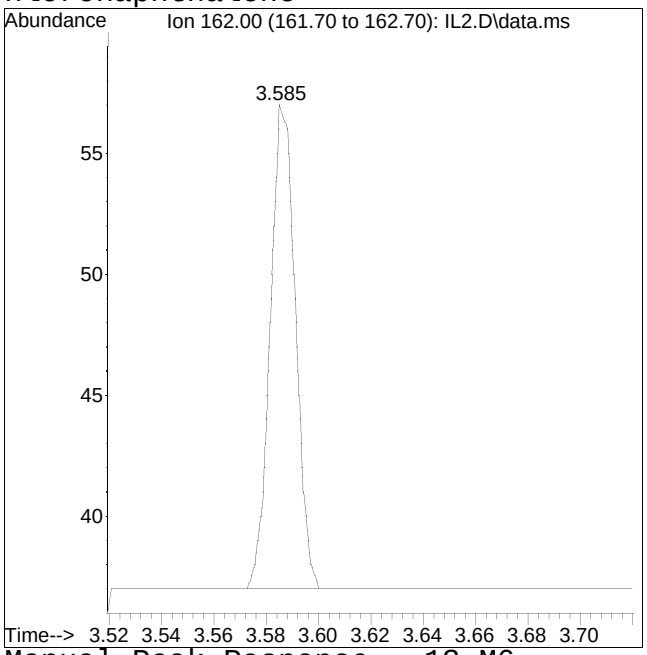
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #14: 2-Chloronaphthalene



Original Peak Response = 13



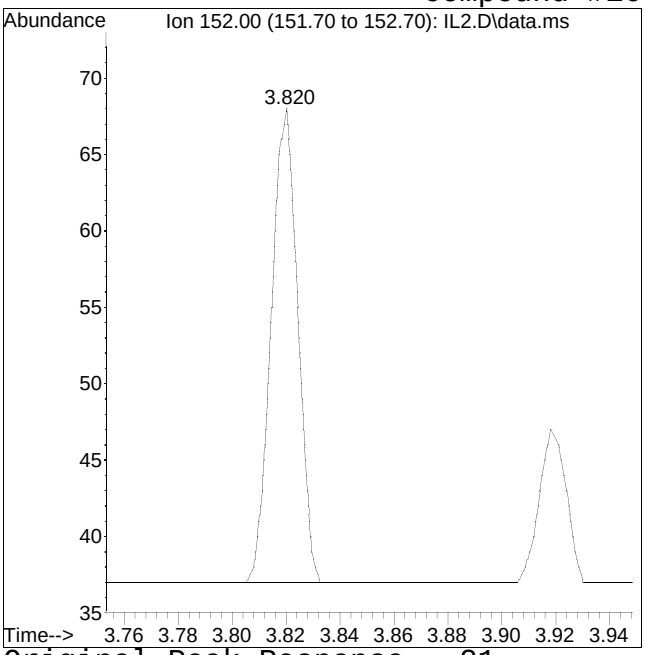
Manual Peak Response = 13 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

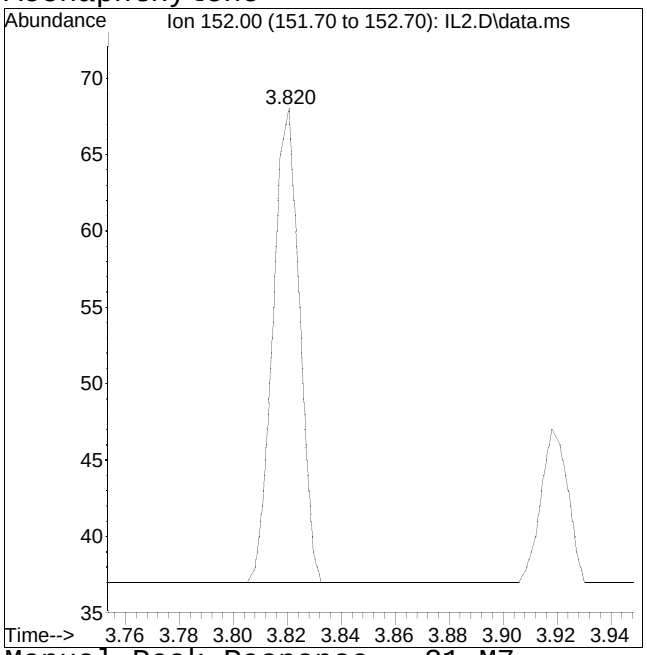
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #16: Acenaphthylene



Original Peak Response = 21



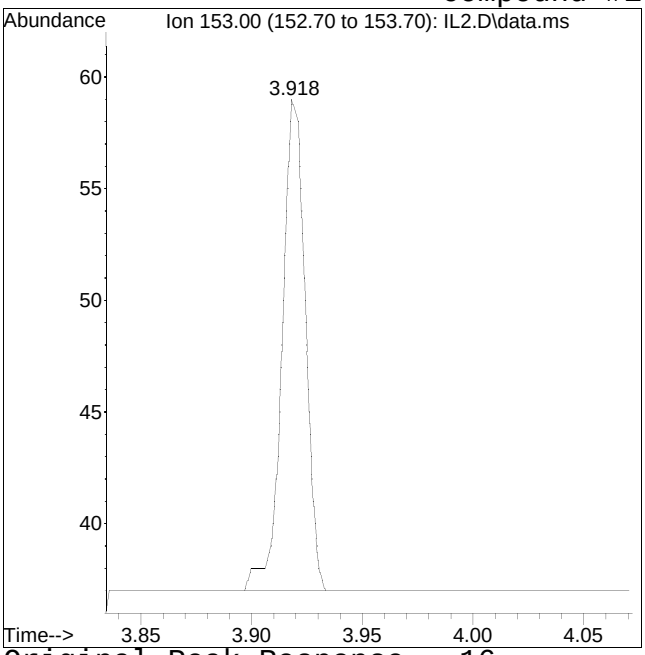
Manual Peak Response = 21 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

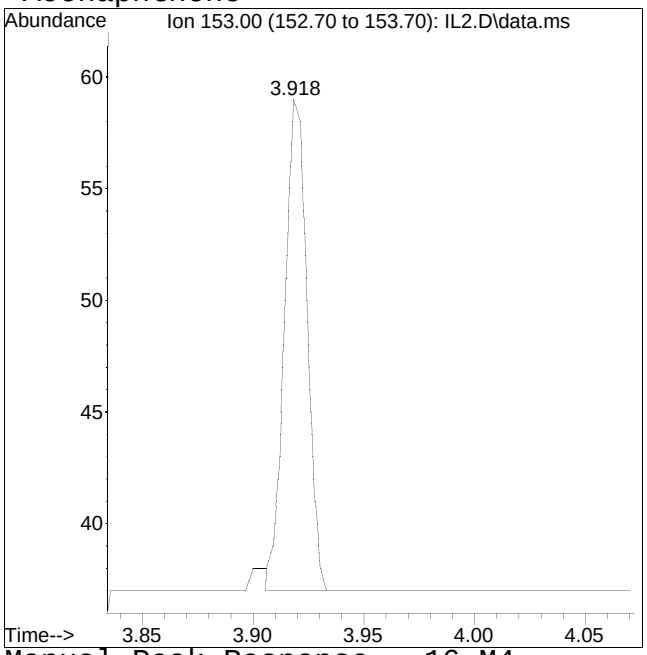
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #18: Acenaphthene



Original Peak Response = 16



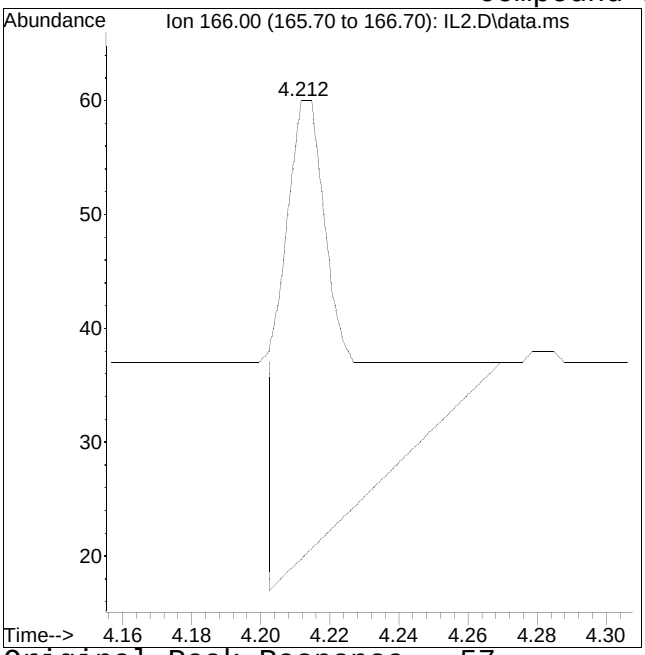
Manual Peak Response = 16 M4

M4 = Poor automated baseline construction.

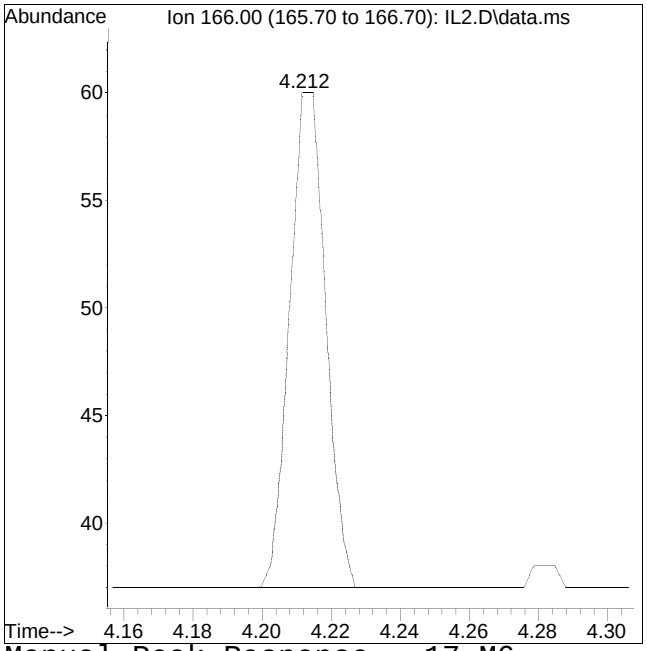
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #20: Fluorene



Original Peak Response = 57



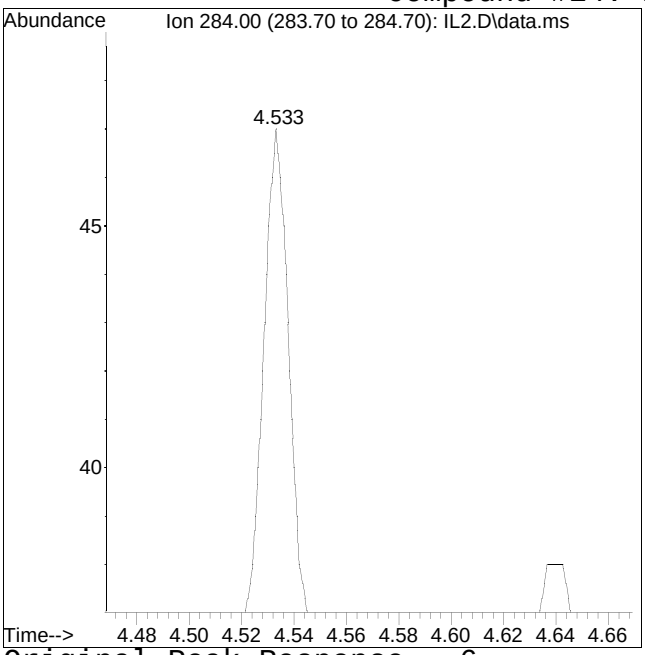
Manual Peak Response = 17 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

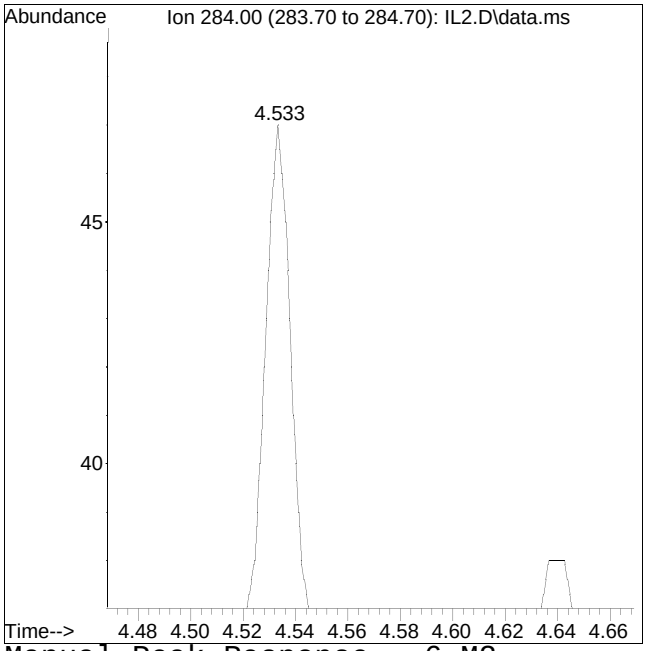
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #24: Hexachlorobenzene



Original Peak Response = 6



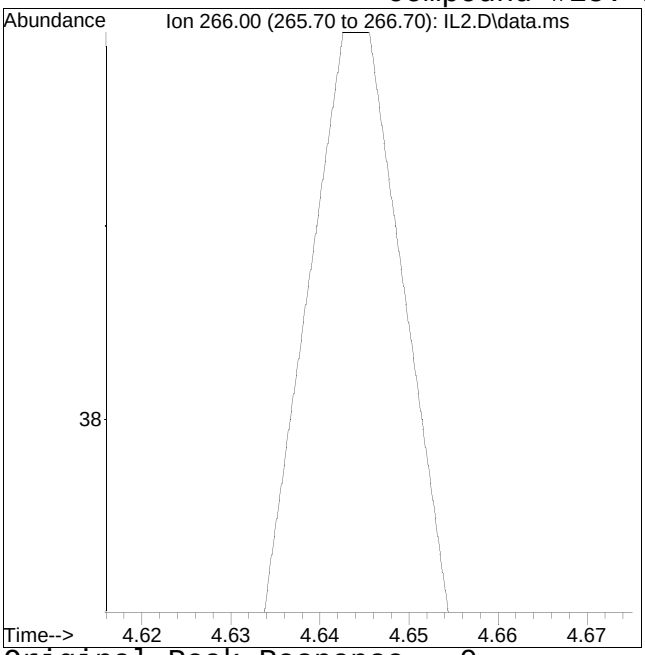
Manual Peak Response = 6 M2

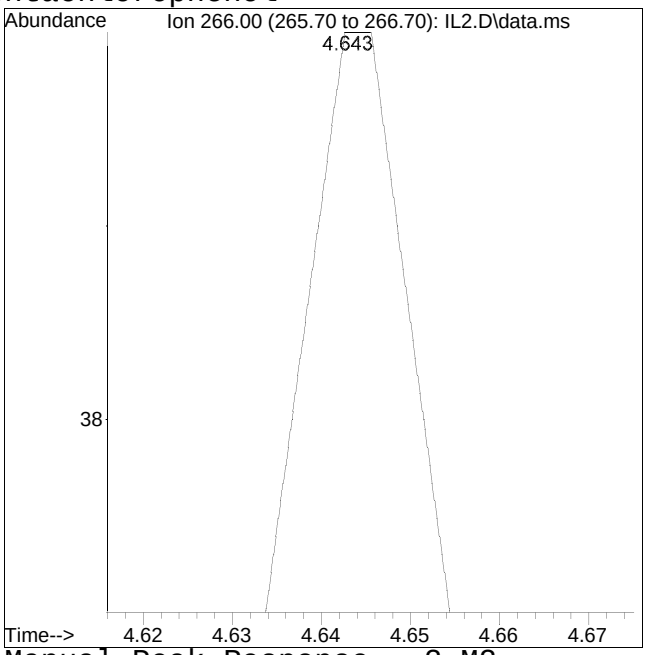
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #25: Pentachlorophenol



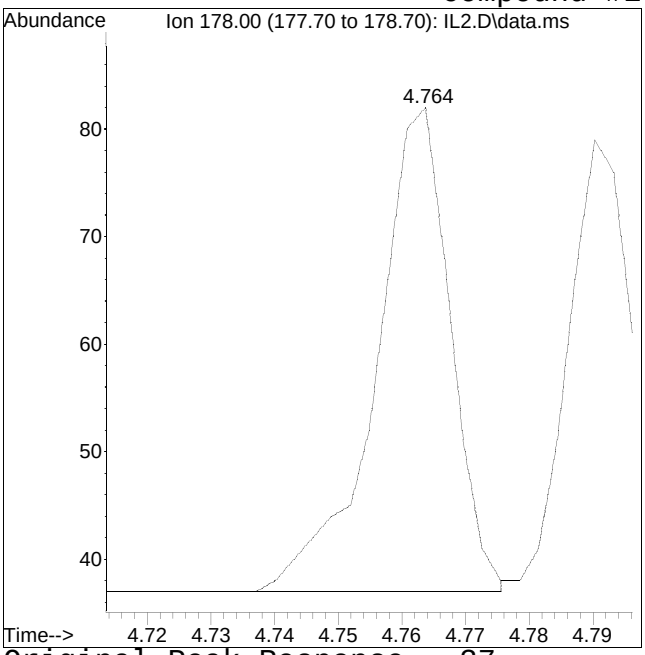


Original Peak Response = 0 Manual Peak Response = 2 M2
M2 = Peak not found by automatic integration algorithm.

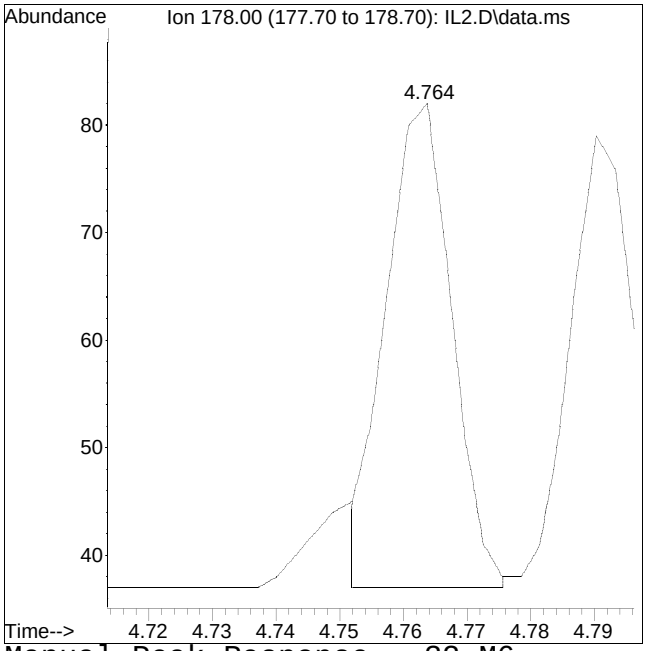
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #26: Phenanthrene



Original Peak Response = 37



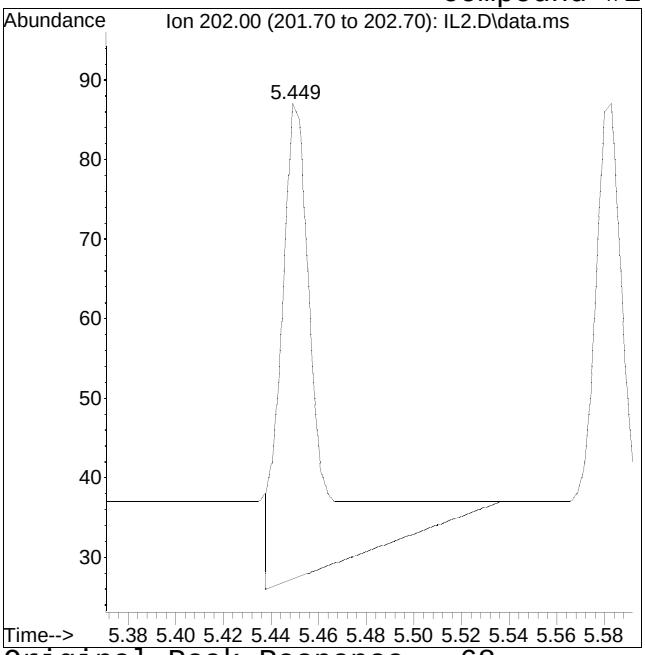
Manual Peak Response = 32 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

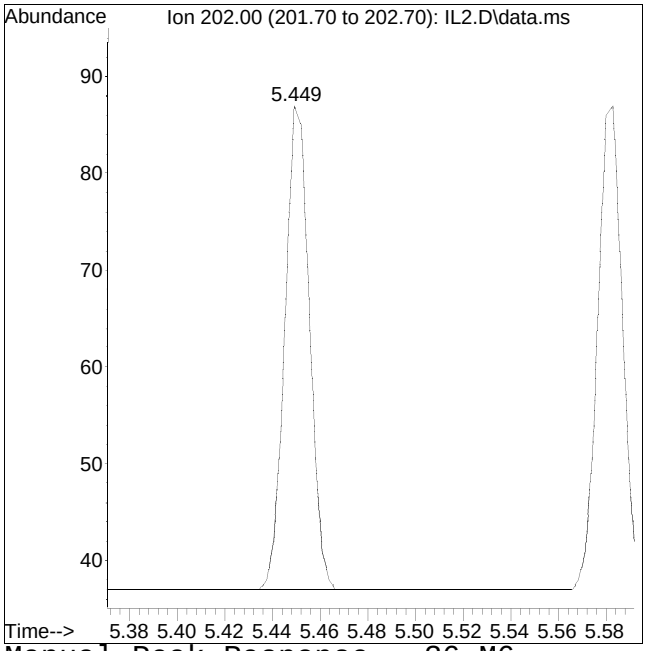
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #28: Fluoranthene



Original Peak Response = 68



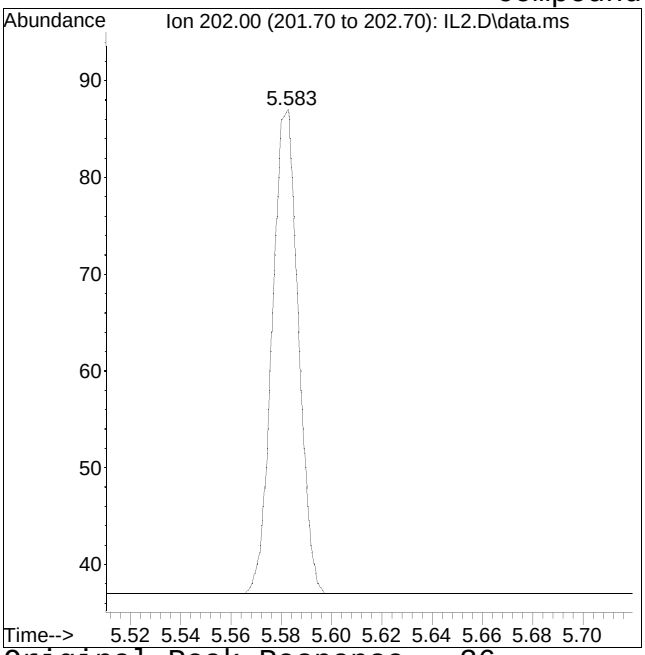
Manual Peak Response = 36 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

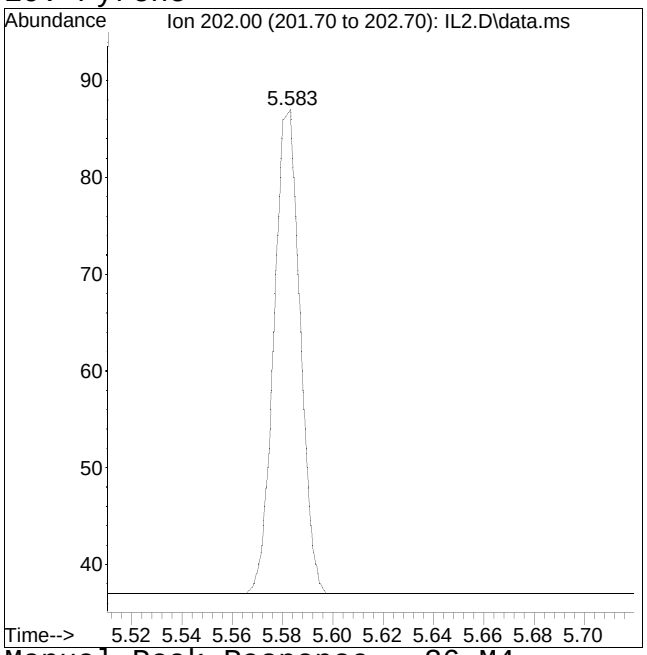
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #29: Pyrene



Original Peak Response = 36



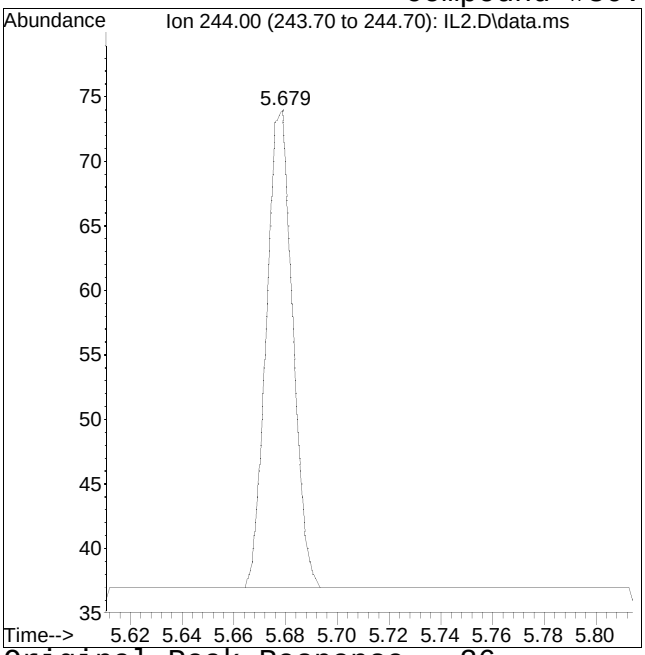
Manual Peak Response = 36 M4

M4 = Poor automated baseline construction.

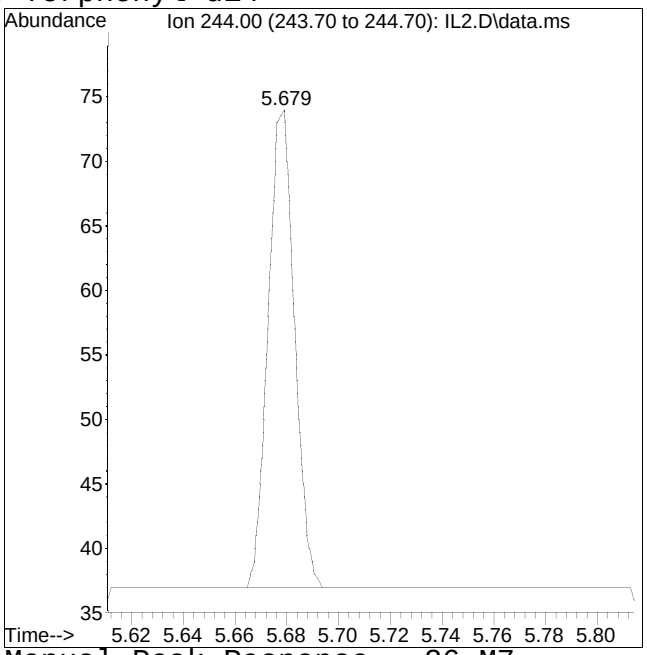
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #30: 4-Terphenyl-d14



Original Peak Response = 26



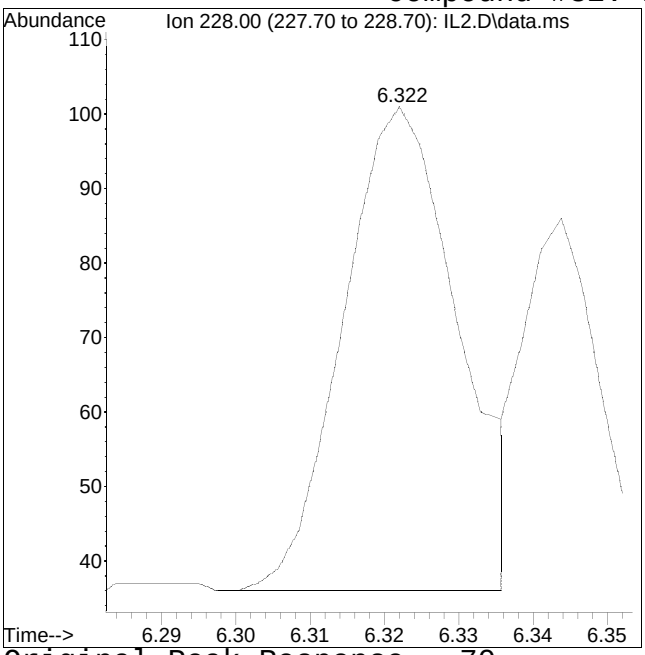
Manual Peak Response = 26 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

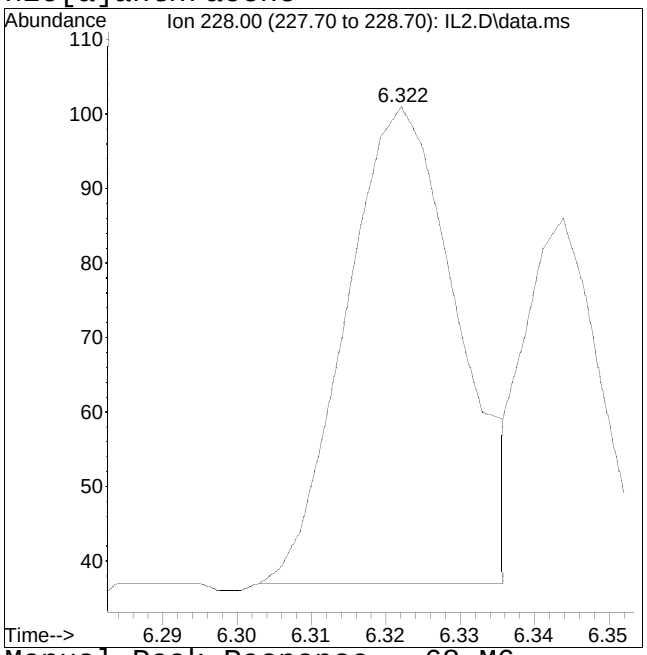
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #32: Benzo[a]anthracene



Original Peak Response = 70



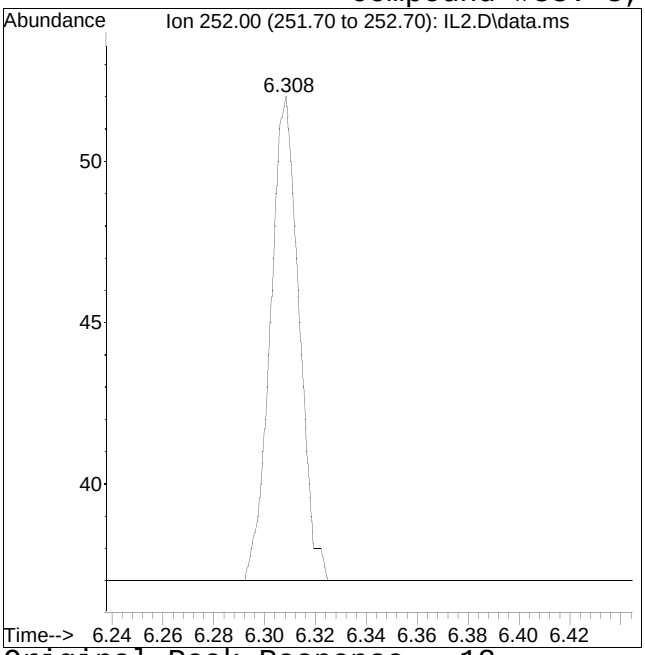
Manual Peak Response = 68 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

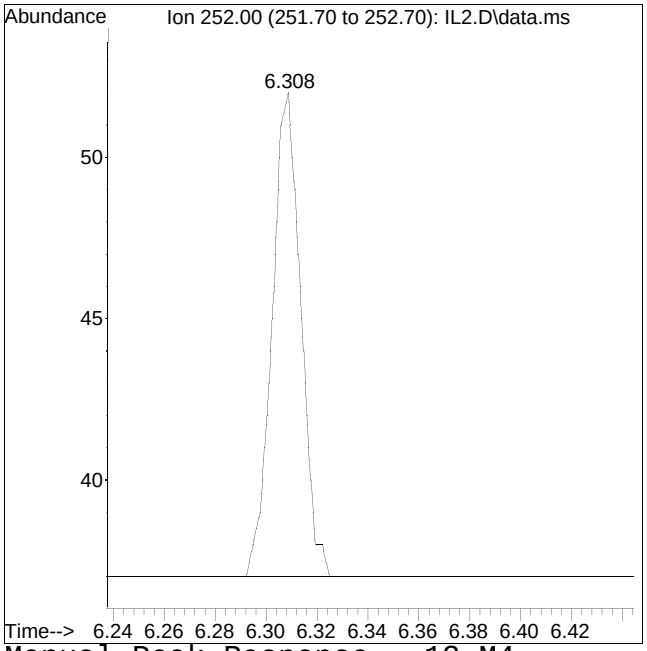
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #33: 3,3'-Dichlorobenzidine



Original Peak Response = 12



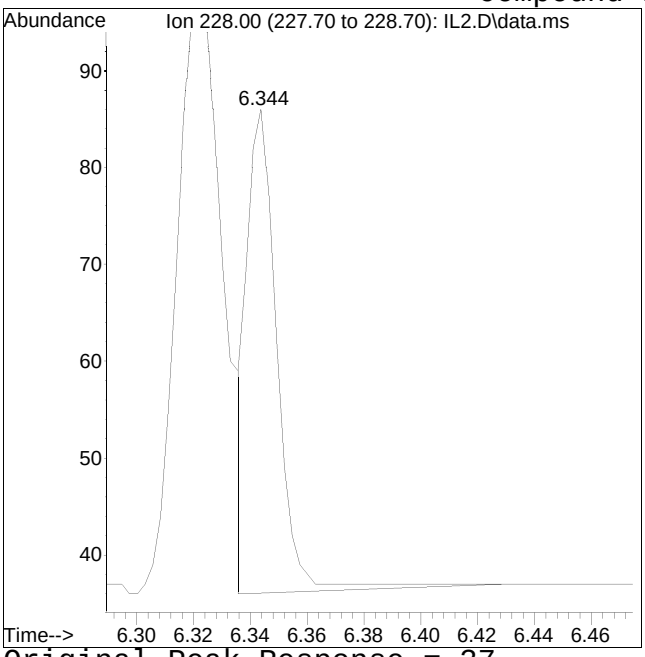
Manual Peak Response = 12 M4

M4 = Poor automated baseline construction.

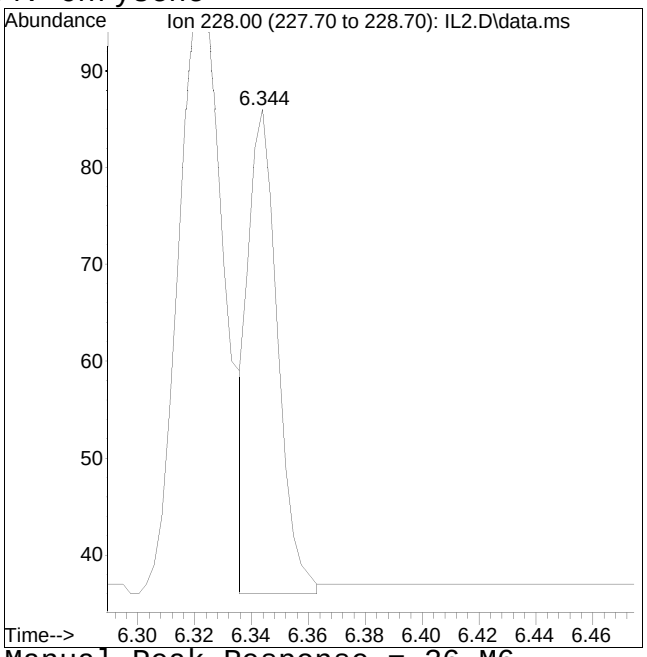
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #34: Chrysene



Original Peak Response = 37



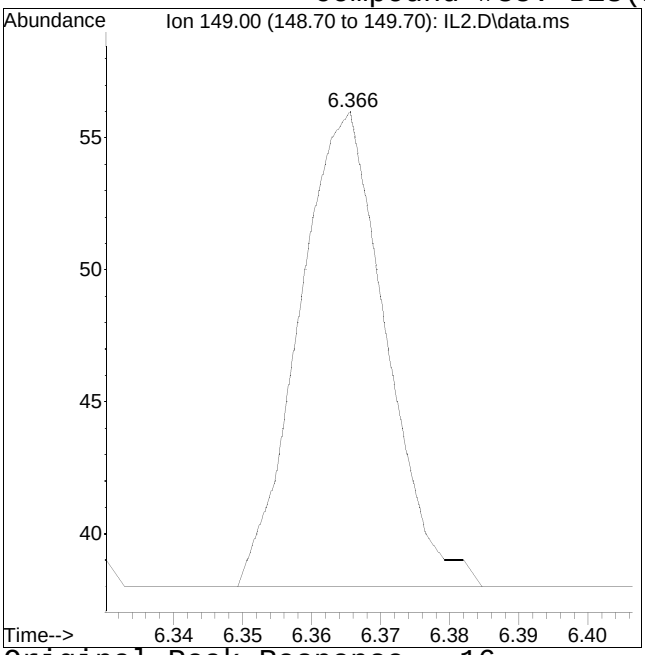
Manual Peak Response = 36 M6

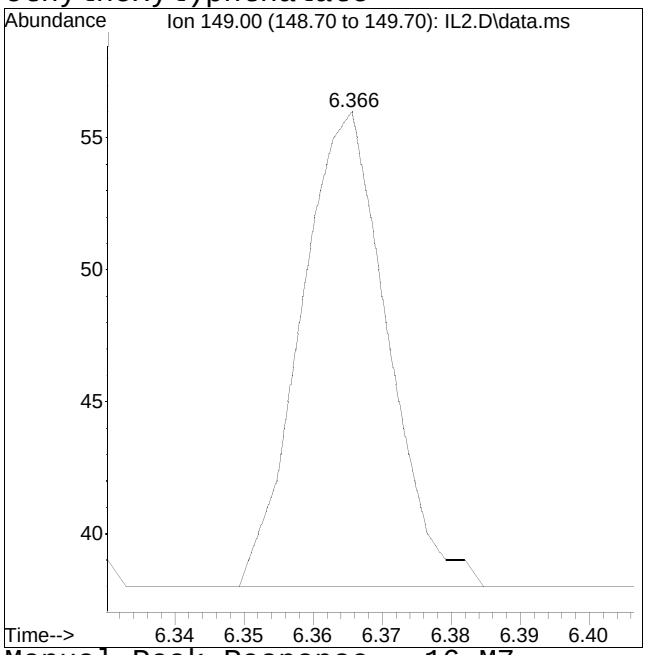
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #35: Bis(2-ethylhexyl)phthalate



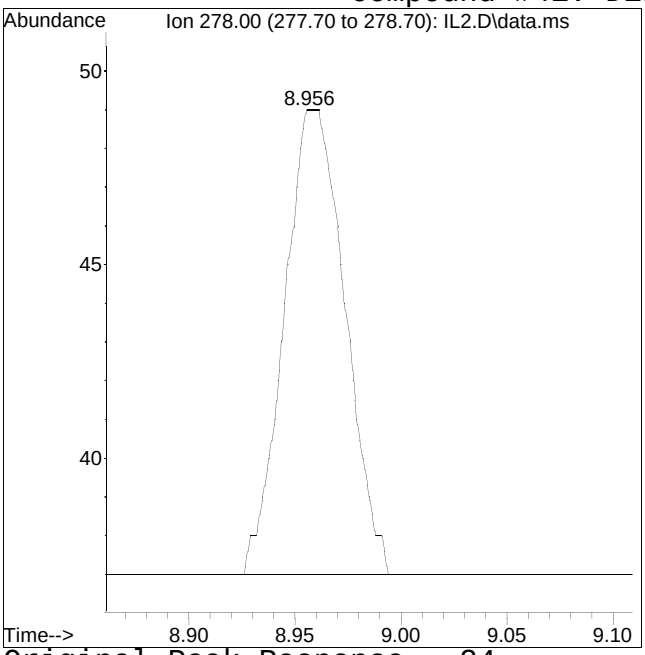


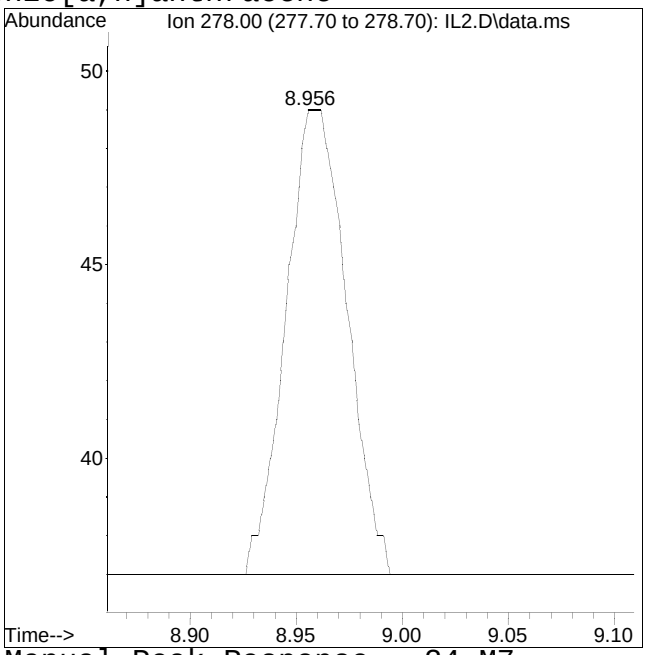
Original Peak Response = 16 Manual Peak Response = 16 M7
M7 = A qualifier ion was manually integrated (only for GC/MS data).

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL2.D Operator : SV128:ah
Date Inj'd : 8/31/2023 11:56 am Instrument : SV128
Sample : IL2,32,, 0.01 Lot#10234 Quant Date : 9/5/2023 11:58 am

Compound #41: Dibenzo[a,h]anthracene





Original Peak Response = 24 Manual Peak Response = 24 M7
M7 = A qualifier ion was manually integrated (only for GC/MS data).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL1.D
Acq On : 31 Aug 2023 12:12 pm
Operator : SV128:ah
Sample : IL1,32,, 0.005 Lot#10235
Misc : WG1823727,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 05 12:48:33 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:28 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.258	152	2185	4000.000	ng/ml	0.00
Standard Area 1 = 2292			Recovery = 95.33%			
8) Naphthalene-d8	2.923	136	8297	4000.000	ng/ml	0.00
Standard Area 1 = 8982			Recovery = 92.37%			
17) Acenaphthene-d10	3.901	164	4736	4000.000	ng/ml	0.00
Standard Area 1 = 5319			Recovery = 89.04%			
22) Phenanthrene-d10	4.750	188	11512	4000.000	ng/ml	0.00
Standard Area 1 = 12548			Recovery = 91.74%			
31) Chrysene-d12	6.326	240	11008	4000.000	ng/ml	0.00
Standard Area 1 = 11983			Recovery = 91.86%			
36) Perylene-d12	7.607	264	12106	4000.000	ng/ml	0.00
Standard Area 1 = 13430			Recovery = 90.14%			
System Monitoring Compounds						
2) 2-Fluorophenol	0.000	112	0	0.000	ng/ml	
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.00%#			
3) Phenol-d6	0.000	99	0	0.000	ng/ml	
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.00%#			
7) Nitrobenzene-d5	2.539	82	3M2	5.180	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.21%#			
13) 2-Fluorobiphenyl	3.522	172	8M7	4.701	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.19%#			
21) 2,4,6-Tribromophenol	4.350	330	0M4	0.000	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.00%#			
30) 4-Terphenyl-d14	5.677	244	15M6	6.166	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.25%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.120	93	3M2	5.096	ng/ml	
5) n-nitrosodi-n-propylamine	0.000		0	N.D.		
6) Hexachloroethane	0.000		0	N.D.		
9) Naphthalene	2.933	128	11M7	5.426	ng/ml	
10) Hexachlorobutadiene	0.000		0	N.D.	d	
11) 2-Methylnaphthalene	3.315	142	7	5.173	ng/ml	92
12) 1-Methylnaphthalene	3.369	142	6M2	4.786	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL1.D
Acq On : 31 Aug 2023 12:12 pm
Operator : SV128:ah
Sample : IL1,32,, 0.005 Lot#10235
Misc : WG1823727,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 05 12:48:33 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:28 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
14) 2-Chloronaphthalene	3.586	162	6M7	4.277	ng/ml	
15) 2,6-Dinitrotoluene	0.000		0	N.D.	d	
16) Acenaphthylene	3.819	152	11M4	4.924	ng/ml	
18) Acenaphthene	3.919	153	8M6	5.331	ng/ml	
19) 2,4-Dinitrotoluene	0.000		0	N.D.		
20) Fluorene	4.213	166	8M6	4.886	ng/ml	
23) 4,6-Dinitro-o-cresol	0.000		0	N.D.	d	
24) Hexachlorobenzene	4.534	284	3M2	4.853	ng/ml	
25) Pentachlorophenol	0.000		0	N.D.	d	
26) Phenanthrene	4.762	178	17M6	5.923	ng/ml	
27) Anthracene	4.791	178	16M7	5.728	ng/ml	
28) Fluoranthene	0.000		0	N.D.	d	
29) Pyrene	5.581	202	20	5.795	ng/ml	92
32) Benzo[a]anthracene	6.324	228	51M4	7.239	ng/ml	
33) 3,3'-Dichlorobenzidine	6.307	252	6M7	4.370	ng/ml	
34) Chrysene	6.343	228	20M6	5.889	ng/ml	
35) Bis(2-ethylhexyl)phtha...	6.364	149	9M6	4.198	ng/ml	
37) Benzo[b]fluoranthene	0.000		0	N.D.	d	
38) Benzo[k]fluoranthene	0.000		0	N.D.	d	
39) Benzo[a]pyrene	7.541	252	14M7	4.779	ng/ml	
40) Indeno[1,2,3-cd]pyrene	8.908	276	12M6	4.093	ng/ml	
41) Dibenzo[a,h]anthracene	8.958	278	11M6	3.898	ng/ml	
42) Benzo[g,h,i]perylene	9.274	276	12M4	3.987	ng/ml	

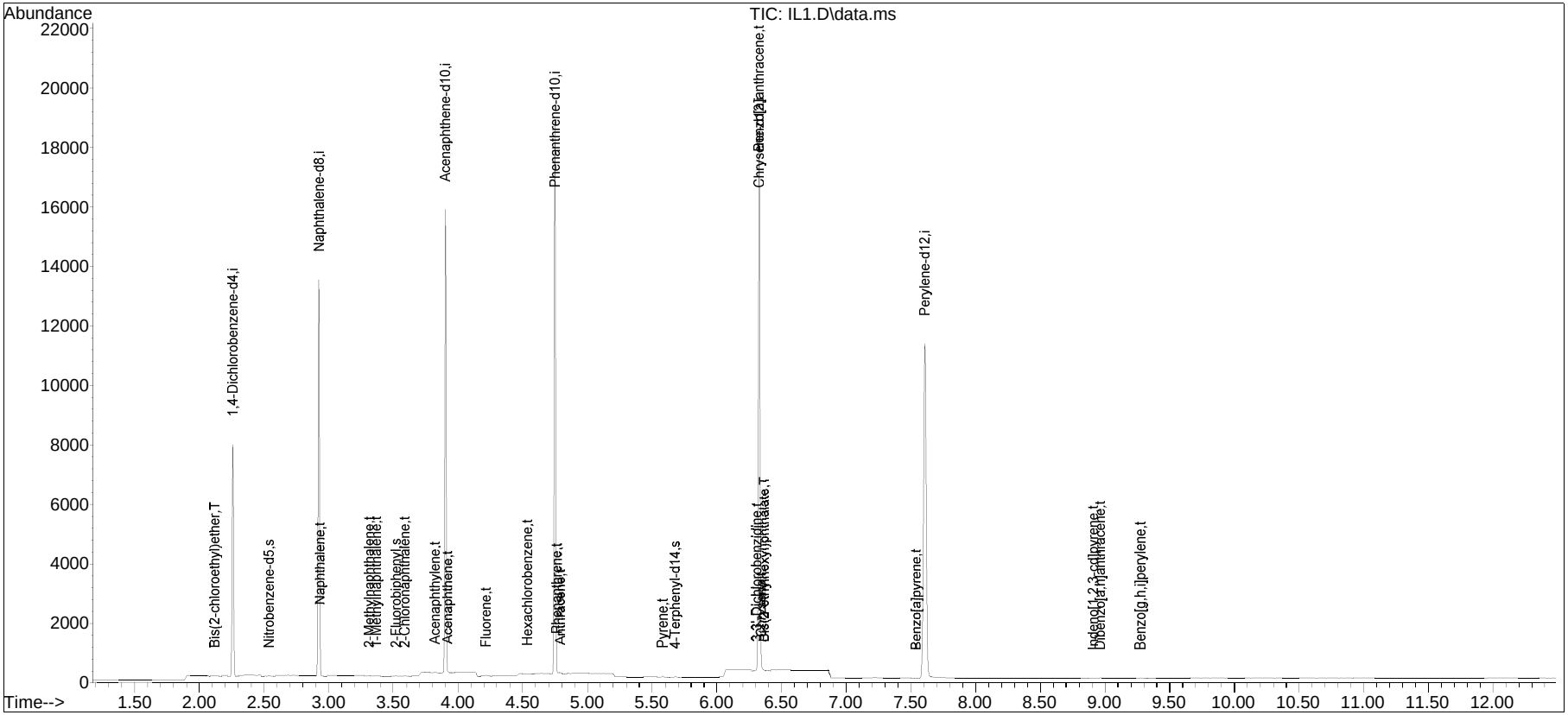
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL1.D
Acq On : 31 Aug 2023 12:12 pm
Operator : SV128:ah
Sample : IL1,32,, 0.005 Lot#10235
Misc : WG1823727,,ical
ALS Vial : 10 Sample Multiplier: 1

Quant Time: Sep 05 12:48:33 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:28 2023
Response via : Initial Calibration

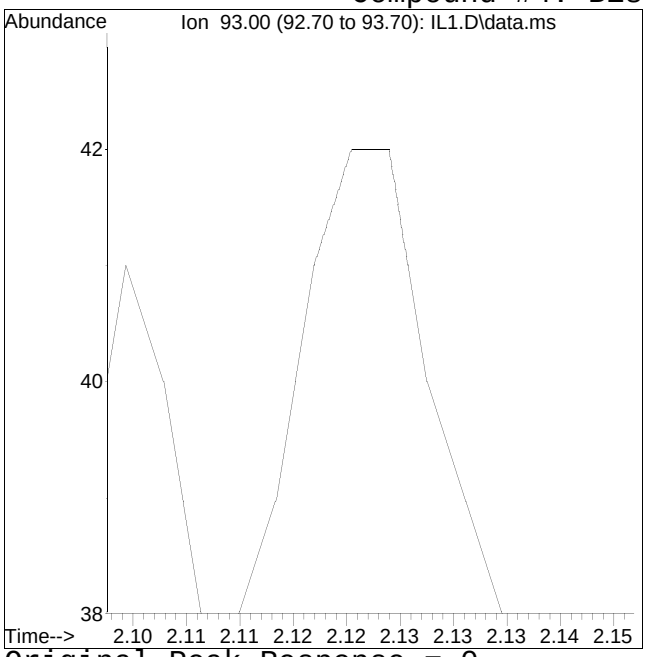
Sub List : Default - All compounds listedIical\IL7.D•



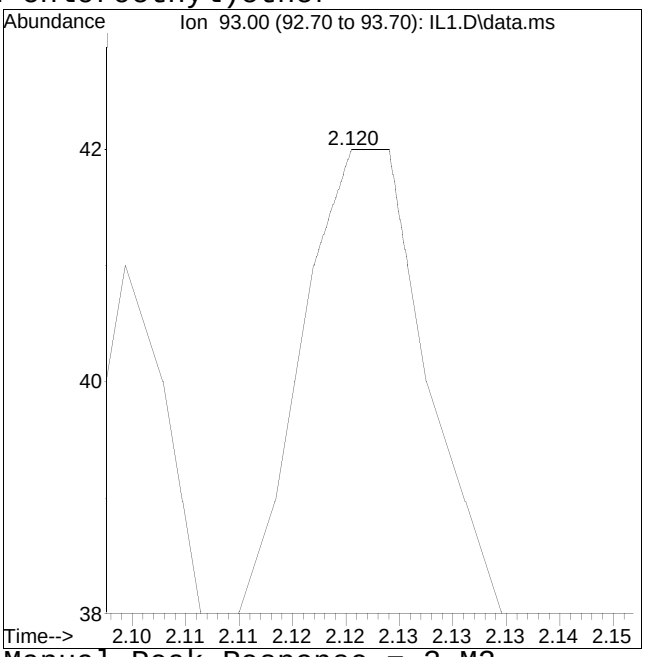
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQ
Data File : IL1.D
Date Inj'd : 8/31/2023 12:12 pm
Sample : IL1,32,, 0.005 Lot#10235
Method : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/5/2023 11:58 am

Compound #4: Bis(2-chloroethyl)ether



Original Peak Response = 0



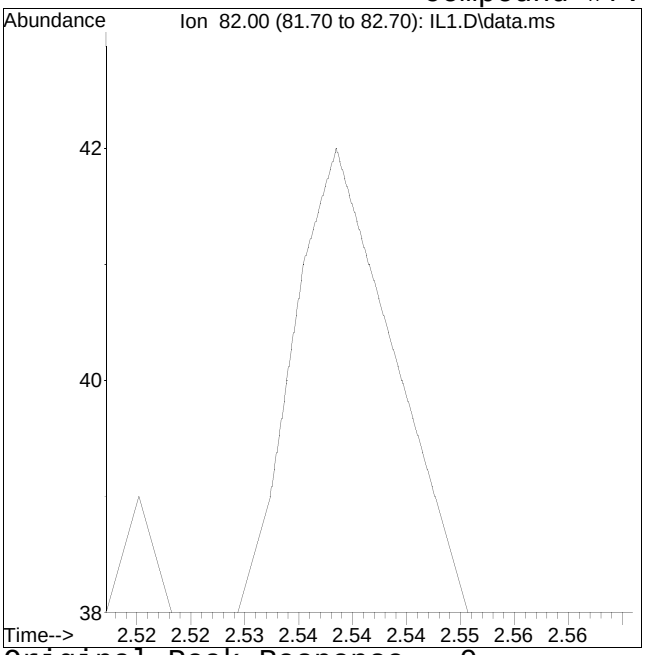
Manual Peak Response = 3 M2

M2 = Peak not found by automatic integration algorithm.

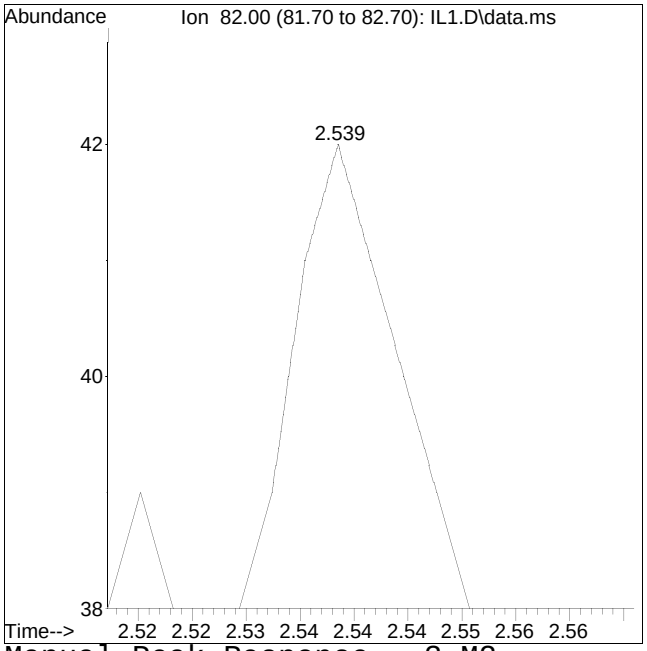
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #7: Nitrobenzene-d5



Original Peak Response = 0



Manual Peak Response = 3 M2

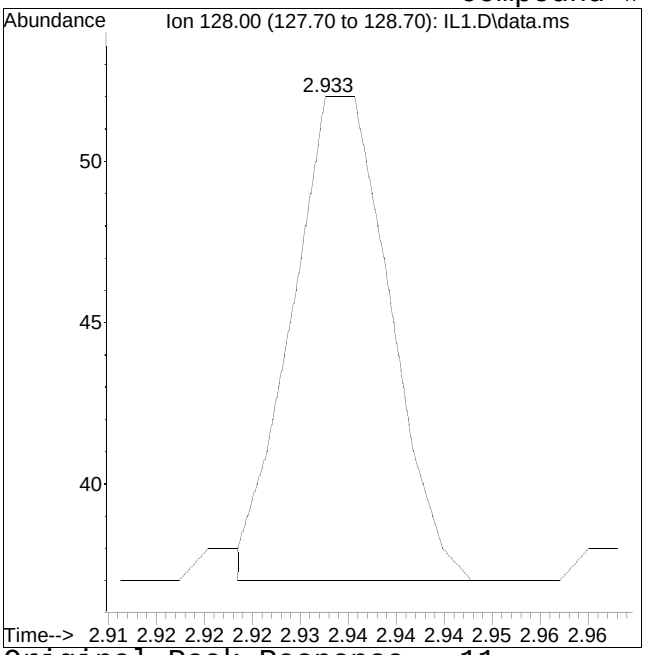
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

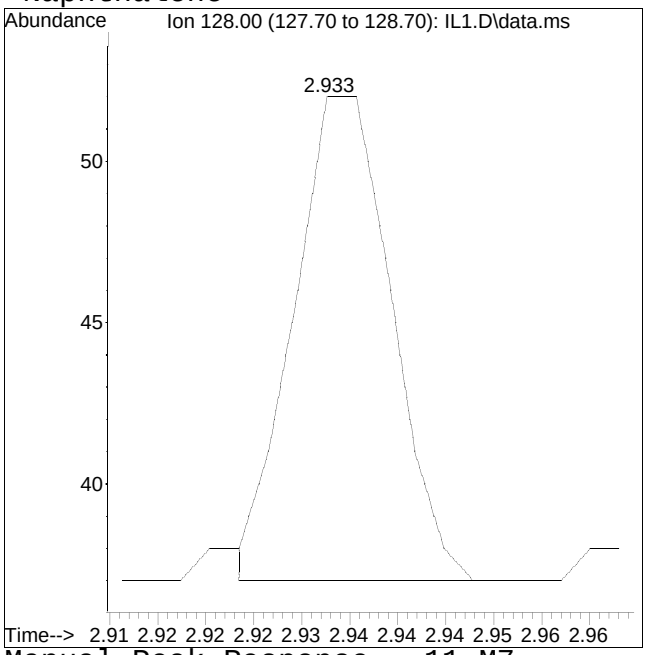
Data Path : I:\8270SIM\SV128\230831a
Data File : IL1.D
Date Inj'd : 8/31/2023 12:12 pm
Sample : IL1,32,, 0.005 Lot#10235

LVQMethod : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/5/2023 11:58 am

Compound #9: Naphthalene



Original Peak Response = 11



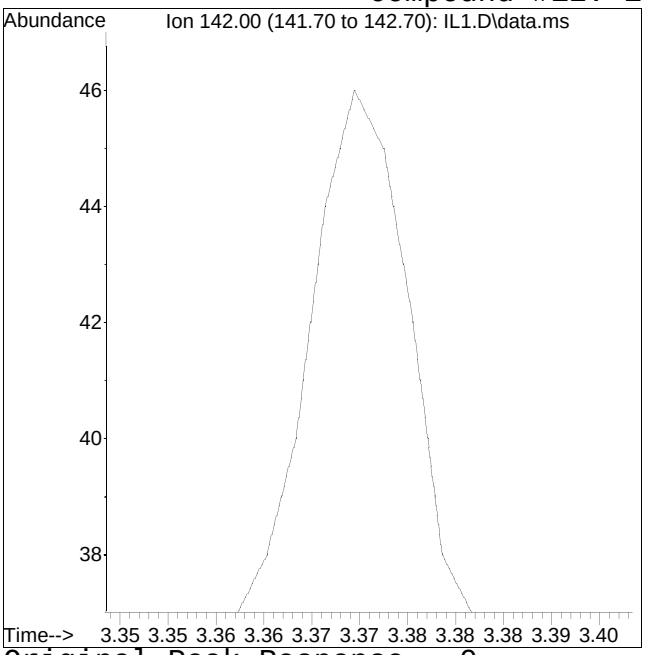
Manual Peak Response = 11 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

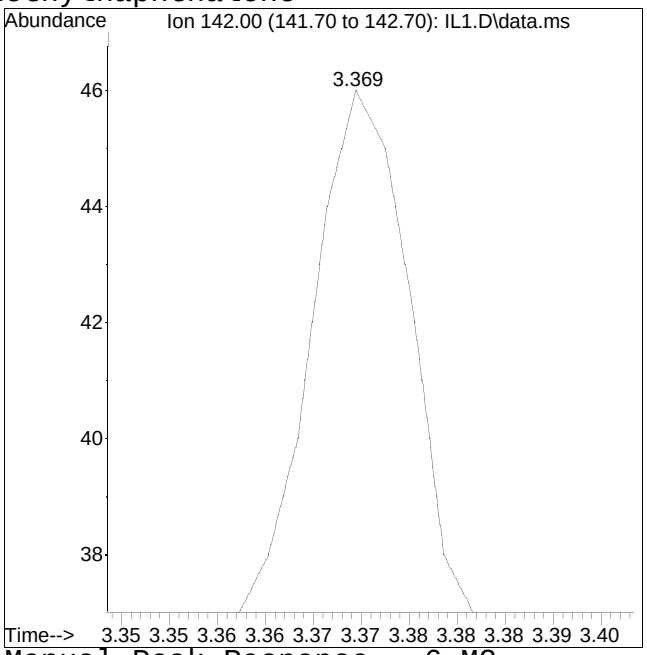
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #12: 1-Methylnaphthalene



Original Peak Response = 0



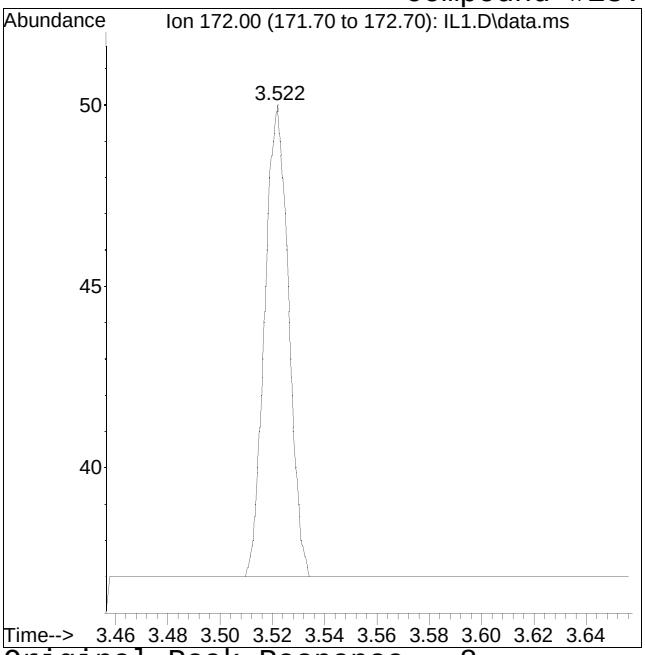
Manual Peak Response = 6 M2

M2 = Peak not found by automatic integration algorithm.

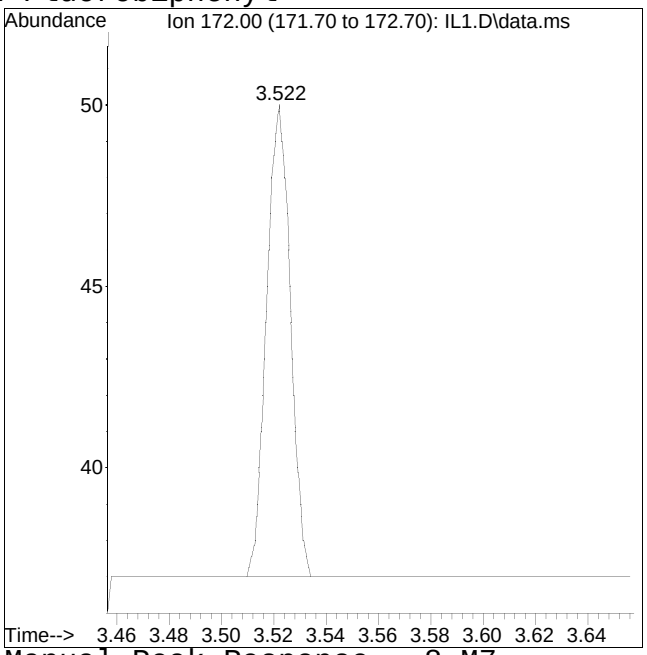
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQ
Data File : IL1.D
Date Inj'd : 8/31/2023 12:12 pm
Sample : IL1,32,, 0.005 Lot#10235
Method : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/5/2023 11:58 am

Compound #13: 2-Fluorobiphenyl



Original Peak Response = 8



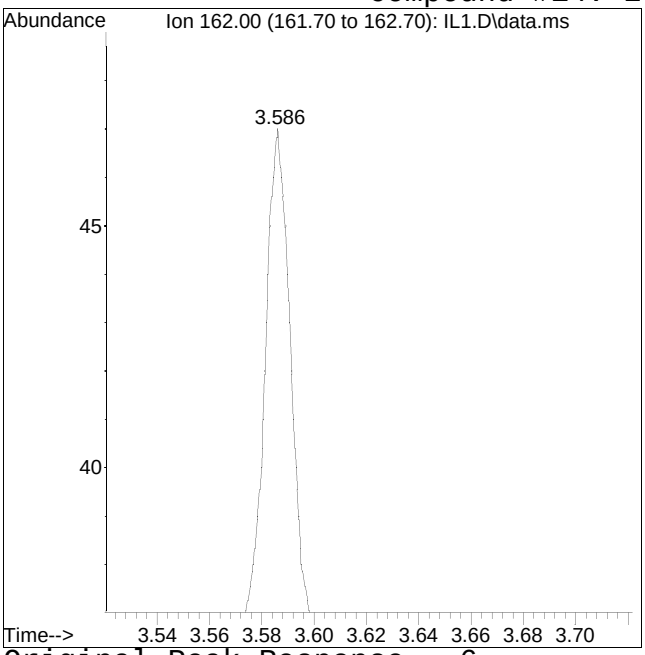
Manual Peak Response = 8 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

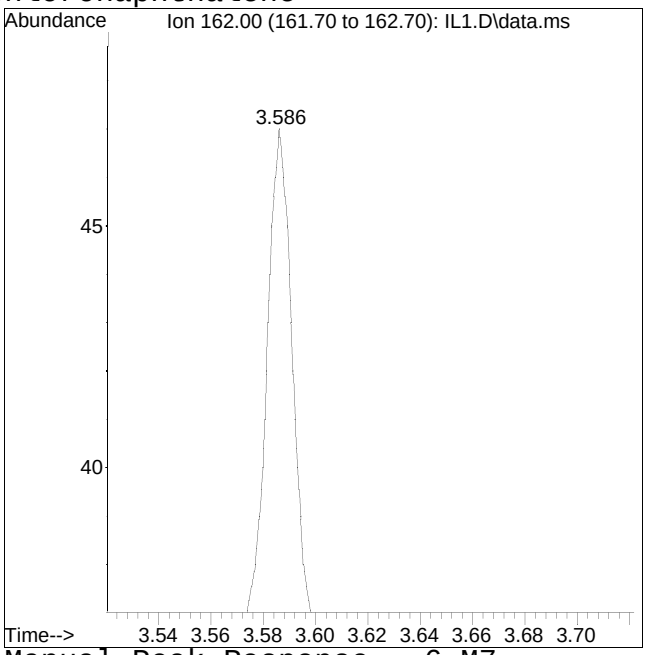
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #14: 2-Chloronaphthalene



Original Peak Response = 6



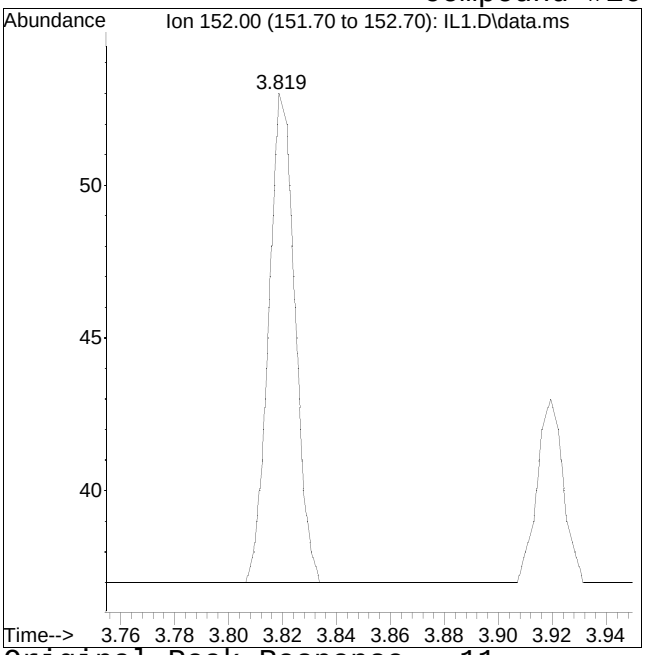
Manual Peak Response = 6 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

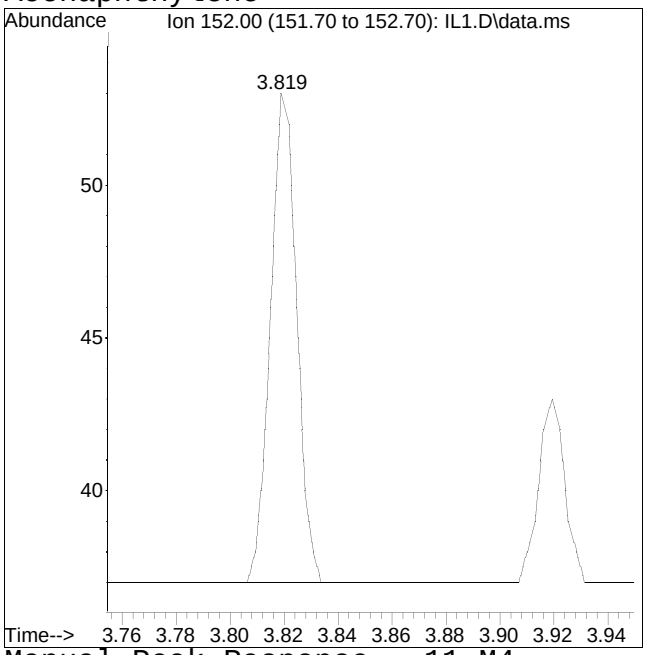
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #16: Acenaphthylene



Original Peak Response = 11



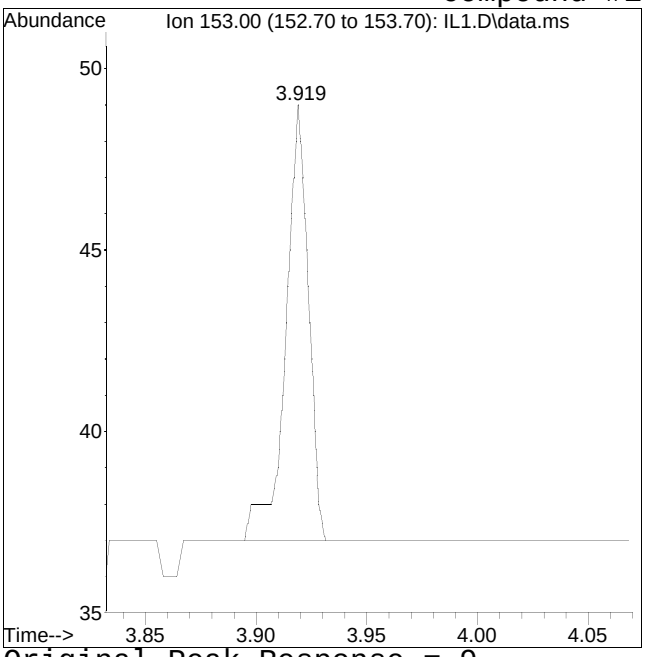
Manual Peak Response = 11 M4

M4 = Poor automated baseline construction.

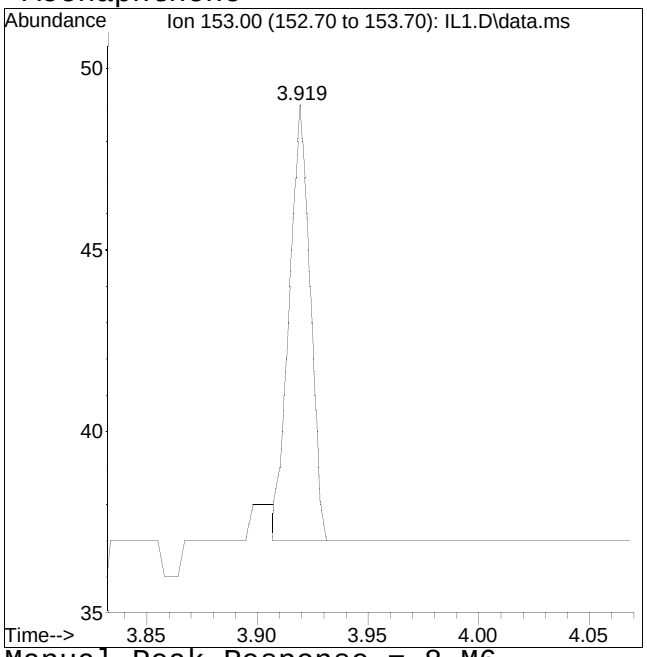
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #18: Acenaphthene



Original Peak Response = 9



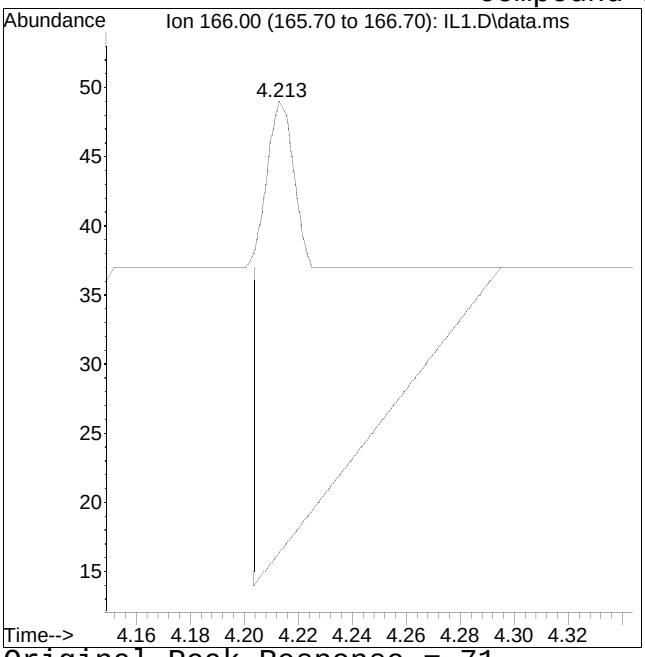
Manual Peak Response = 8 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

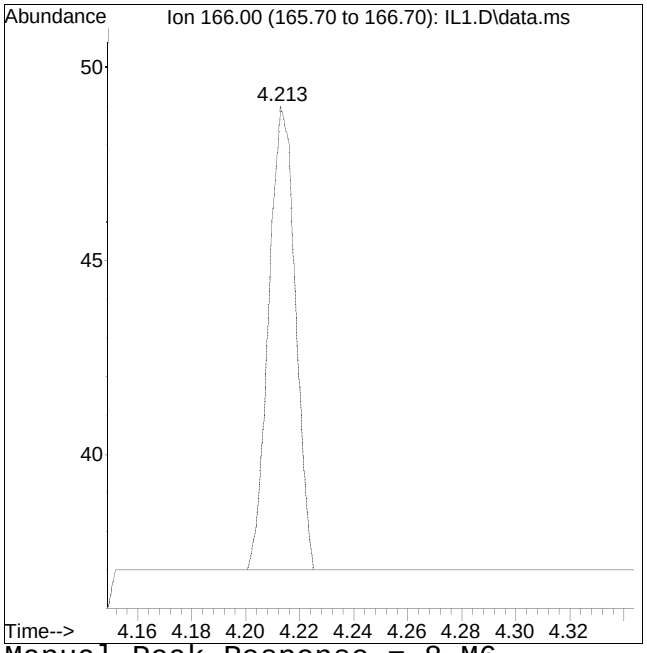
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #20: Fluorene



Original Peak Response = 71



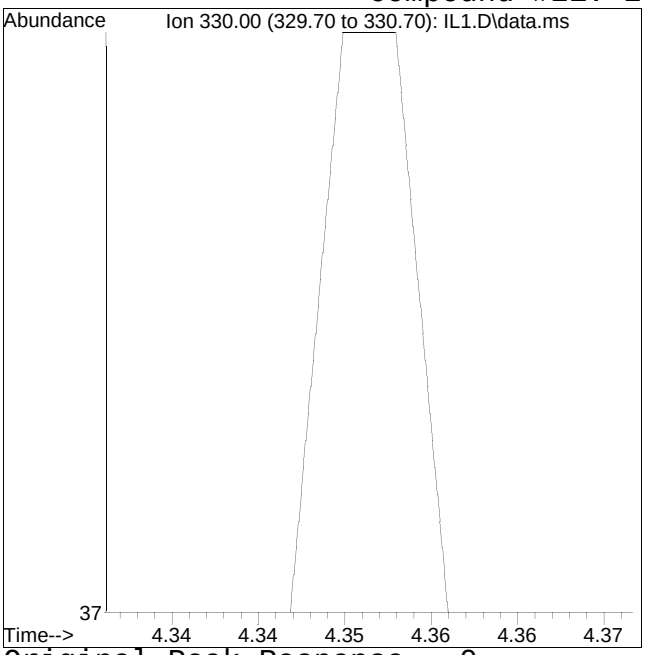
Manual Peak Response = 8 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

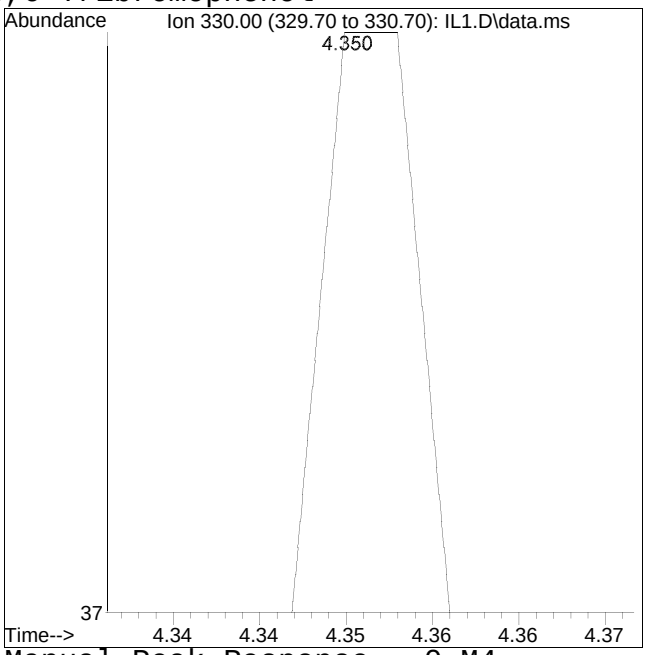
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #21: 2,4,6-Tribromophenol



Original Peak Response = 0



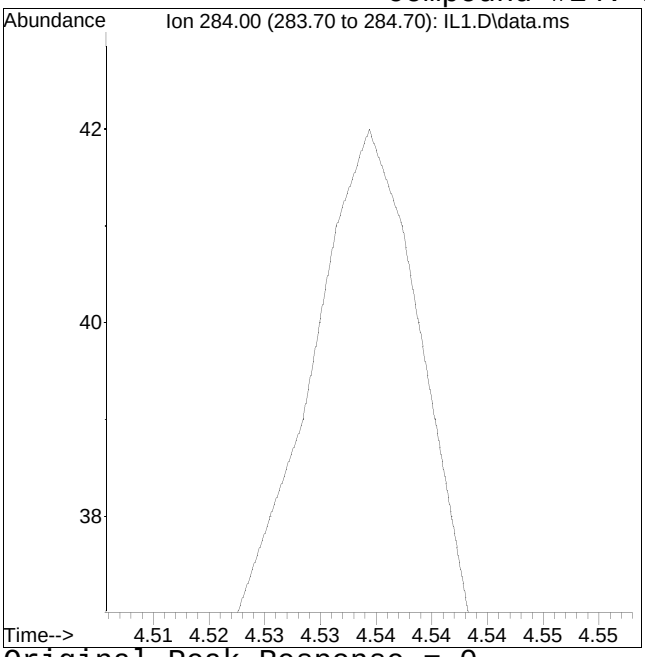
Manual Peak Response = 0 M4

M4 = Poor automated baseline construction.

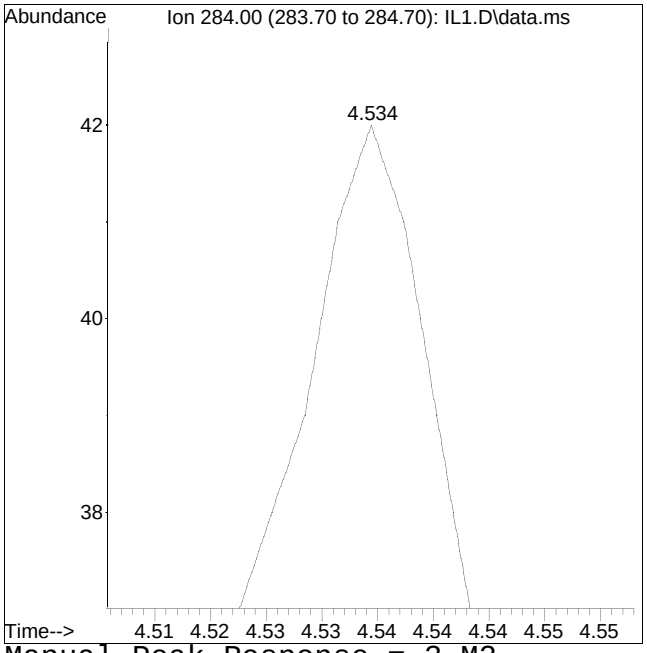
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #24: Hexachlorobenzene



Original Peak Response = 0



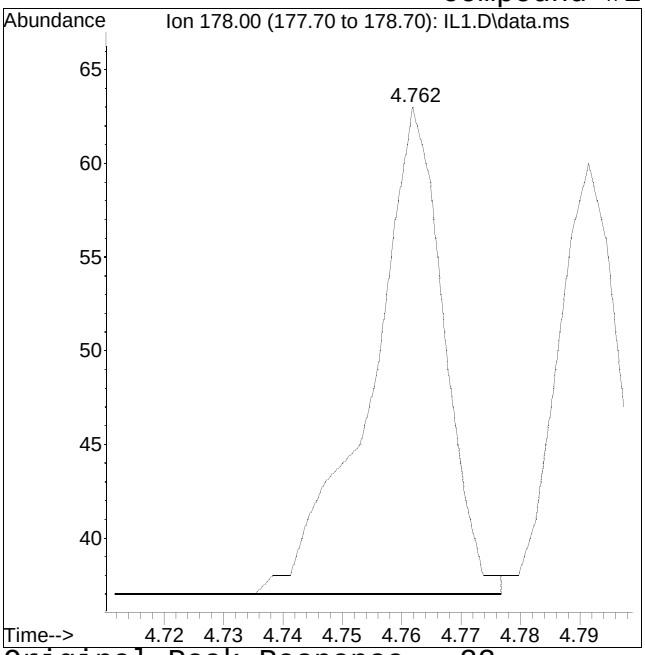
Manual Peak Response = 3 M2

M2 = Peak not found by automatic integration algorithm.

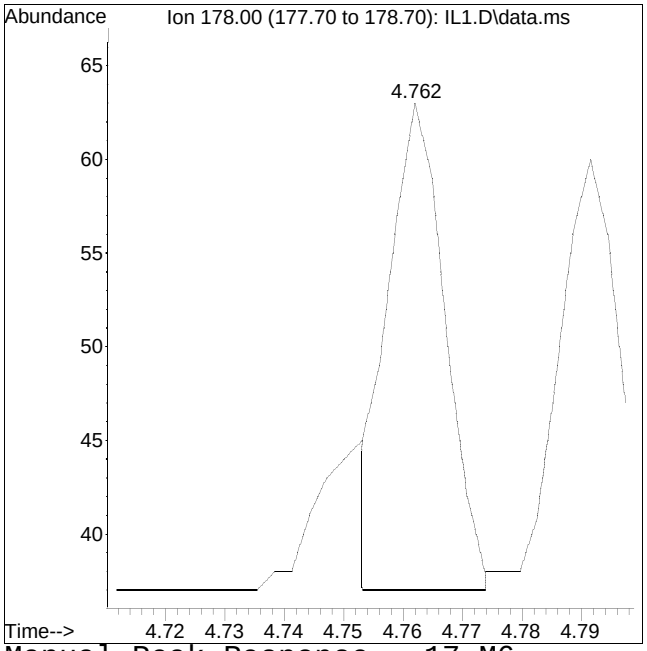
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #26: Phenanthrene



Original Peak Response = 22



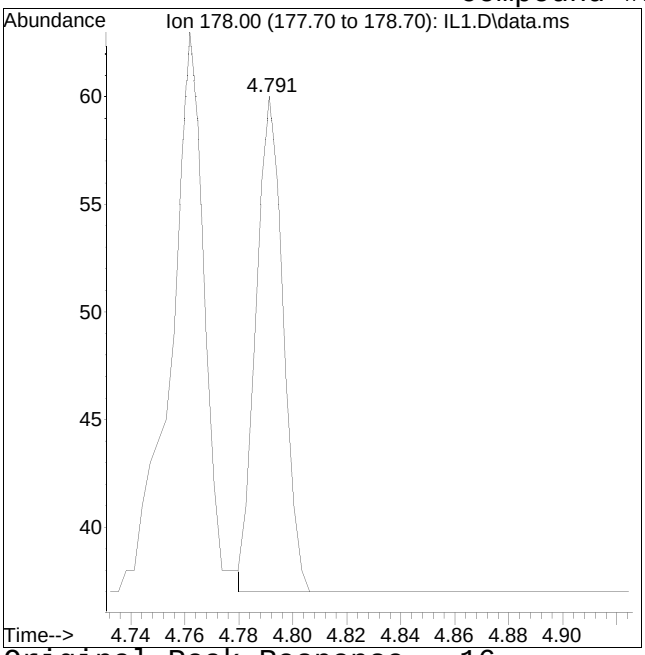
Manual Peak Response = 17 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

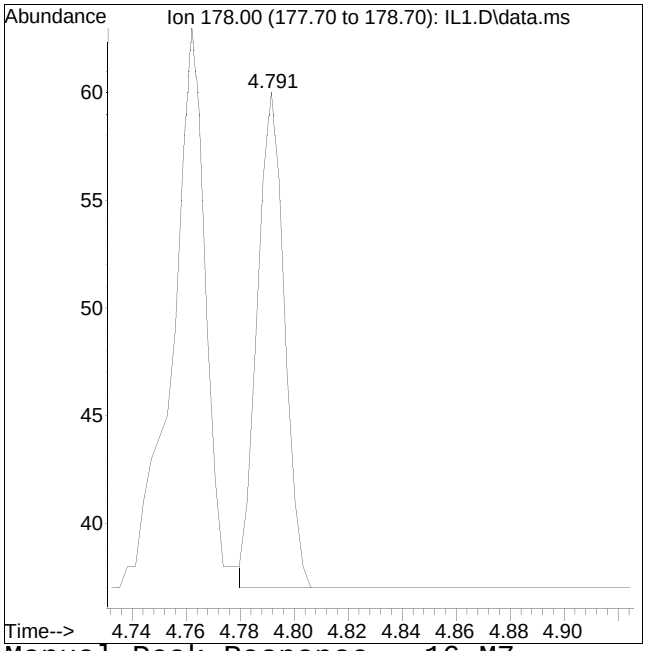
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #27: Anthracene



Original Peak Response = 16



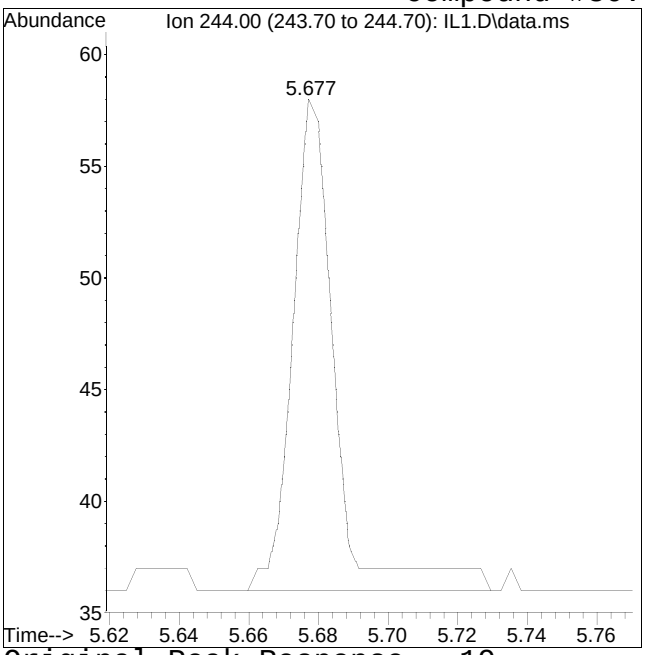
Manual Peak Response = 16 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

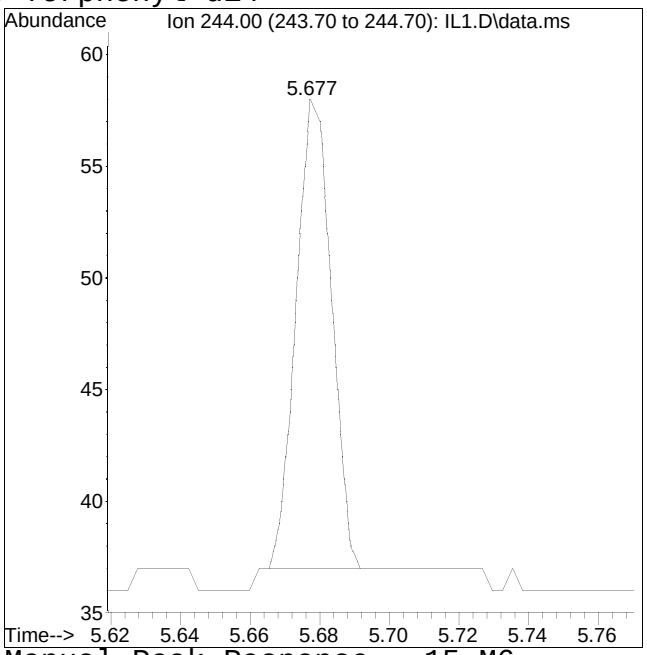
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #30: 4-Terphenyl-d14



Original Peak Response = 19



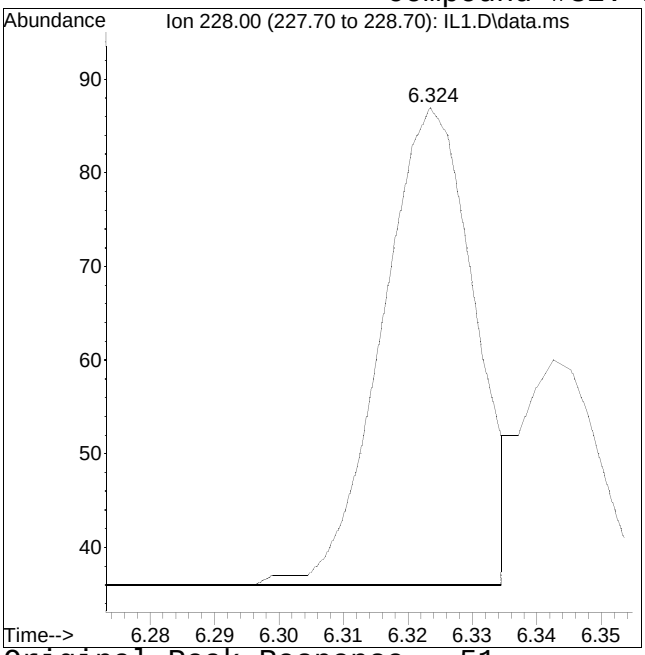
Manual Peak Response = 15 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

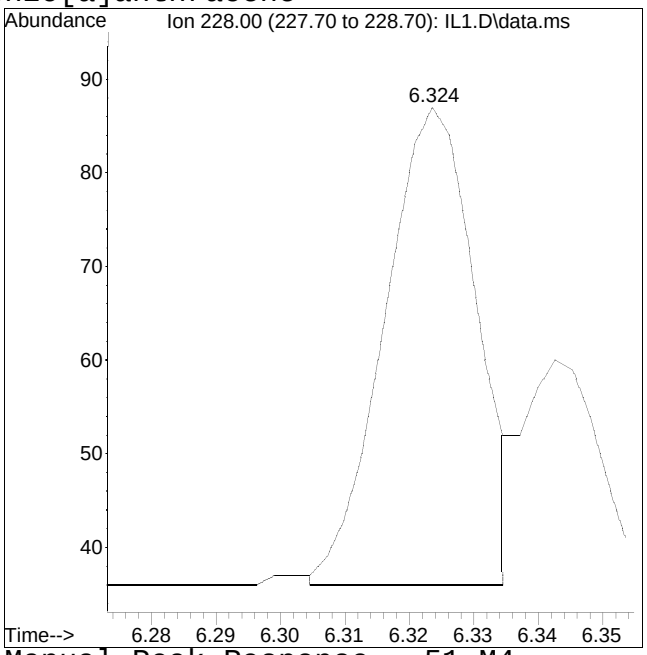
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #32: Benzo[a]anthracene



Original Peak Response = 51



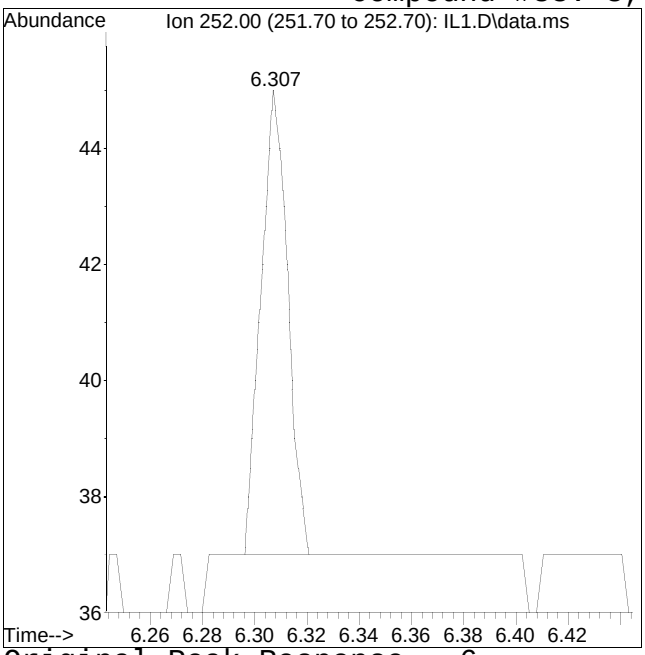
Manual Peak Response = 51 M4

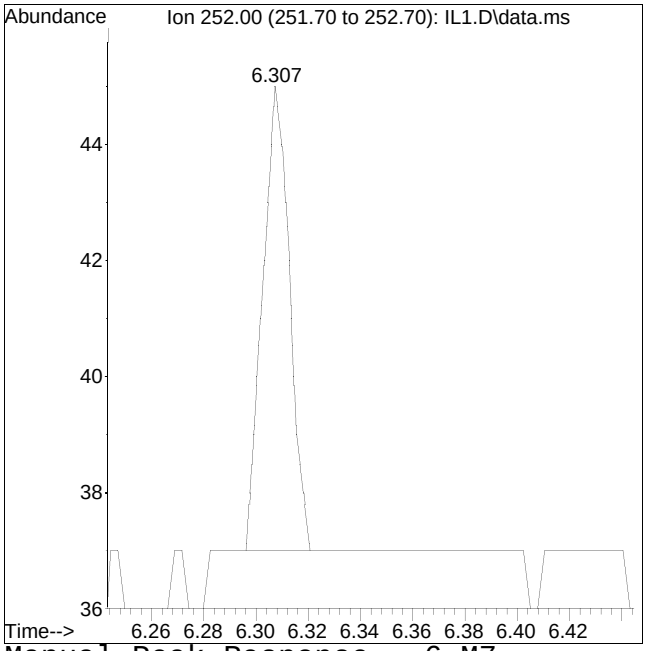
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #33: 3,3'-Dichlorobenzidine



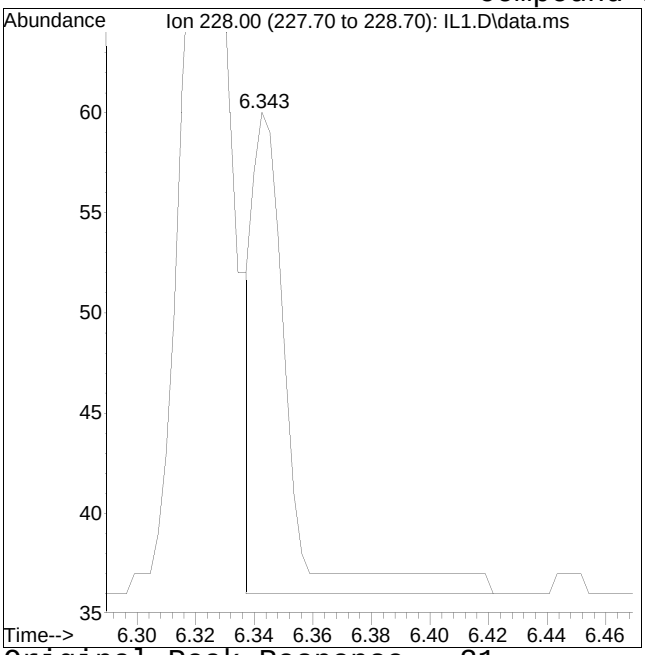


Original Peak Response = 6 Manual Peak Response = 6 M7
M7 = A qualifier ion was manually integrated (only for GC/MS data).

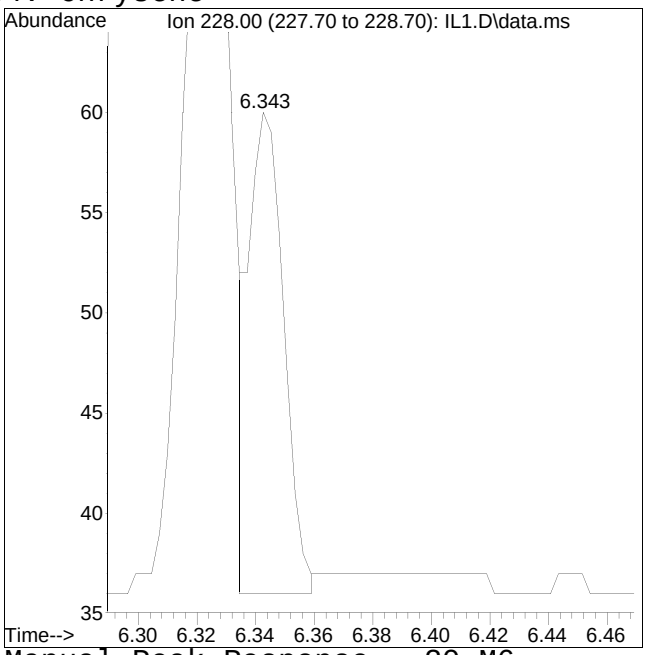
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #34: Chrysene



Original Peak Response = 21



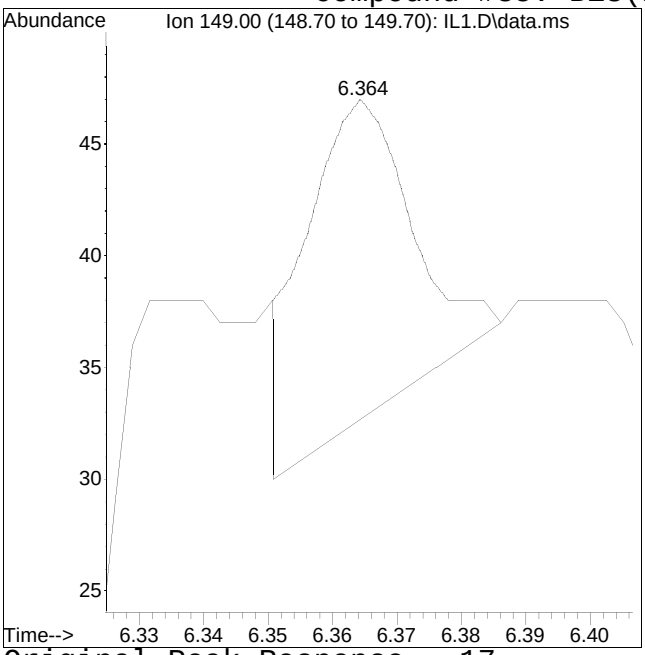
Manual Peak Response = 20 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

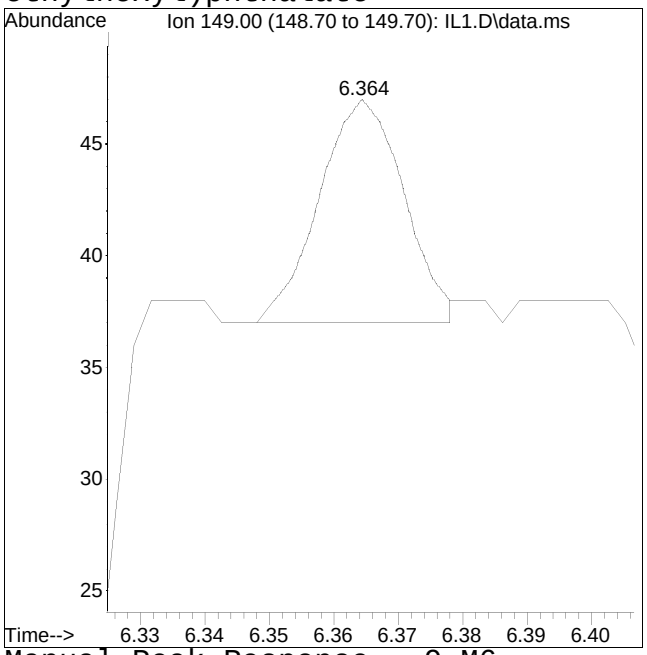
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #35: Bis(2-ethylhexyl)phthalate



Original Peak Response = 17



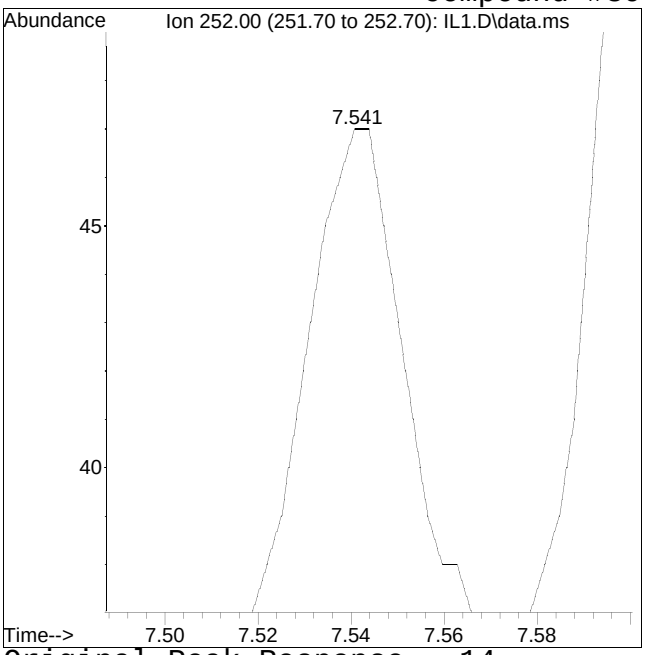
Manual Peak Response = 9 M6

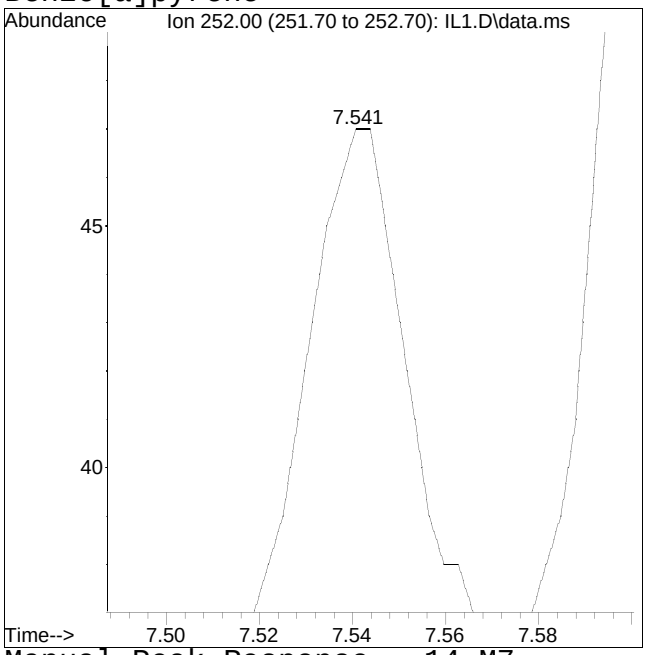
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #39: Benzo[a]pyrene



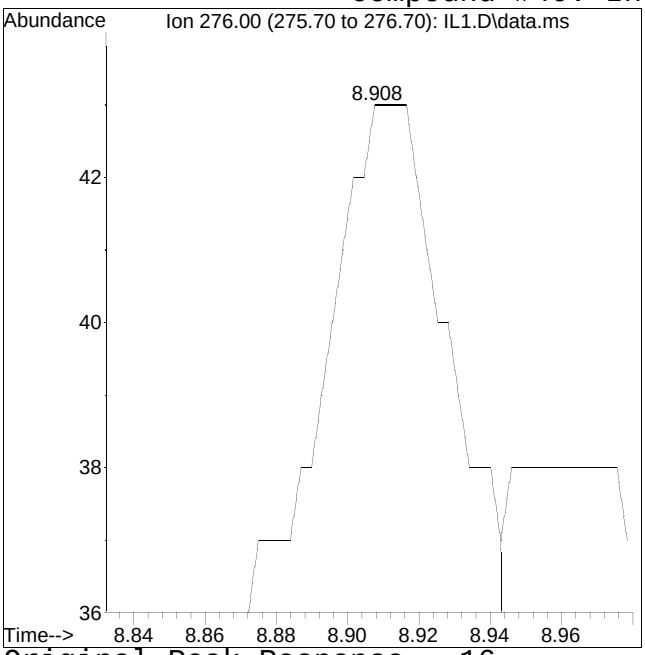


Original Peak Response = 14 Manual Peak Response = 14 M7
M7 = A qualifier ion was manually integrated (only for GC/MS data).

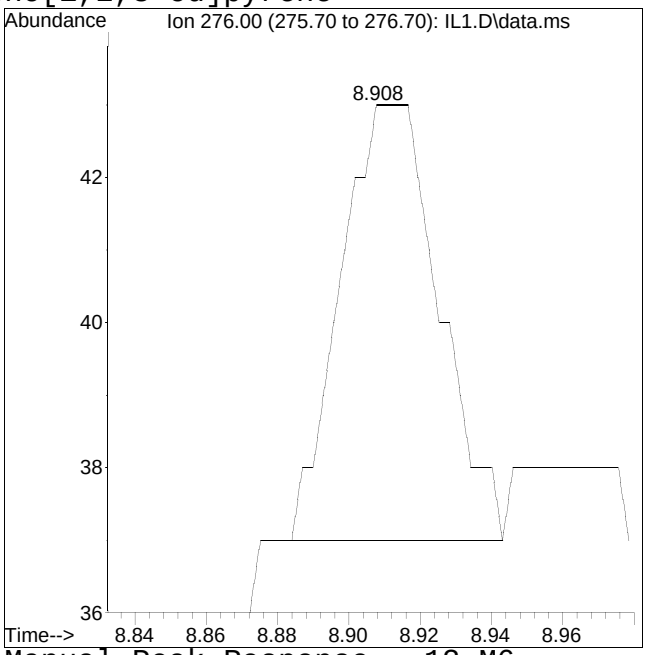
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #40: Indeno[1,2,3-cd]pyrene



Original Peak Response = 16



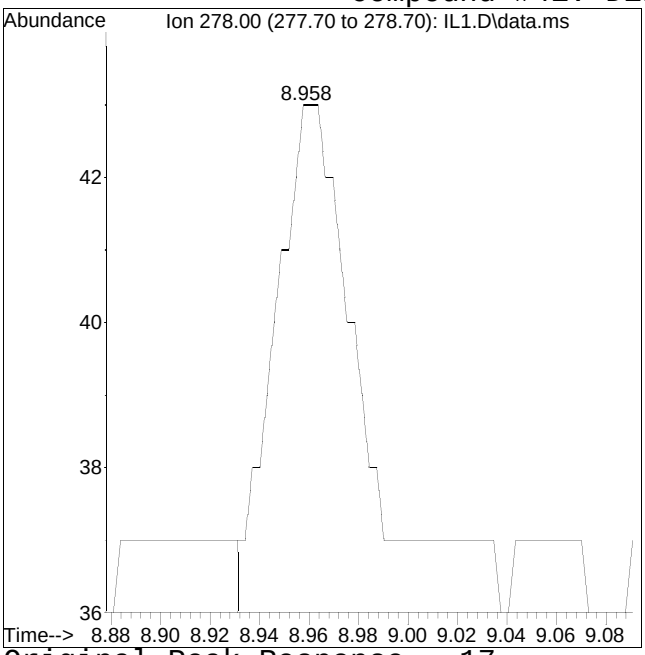
Manual Peak Response = 12 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

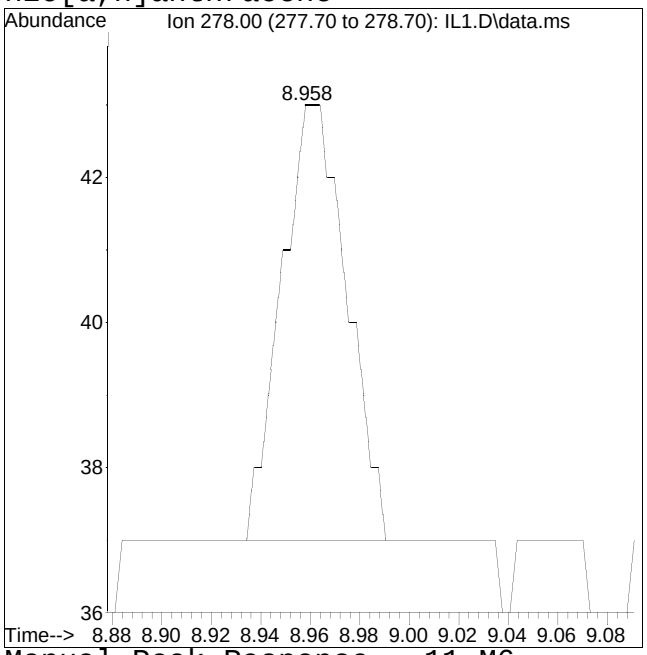
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 17

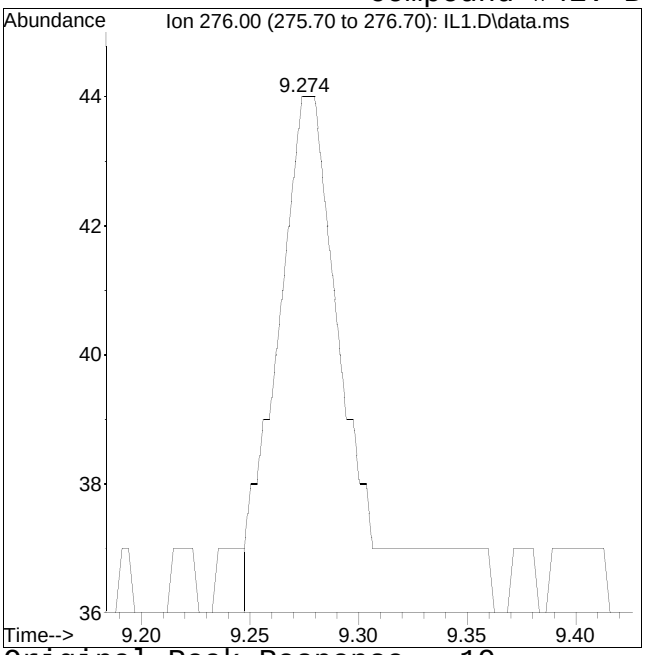


Manual Peak Response = 11 M6

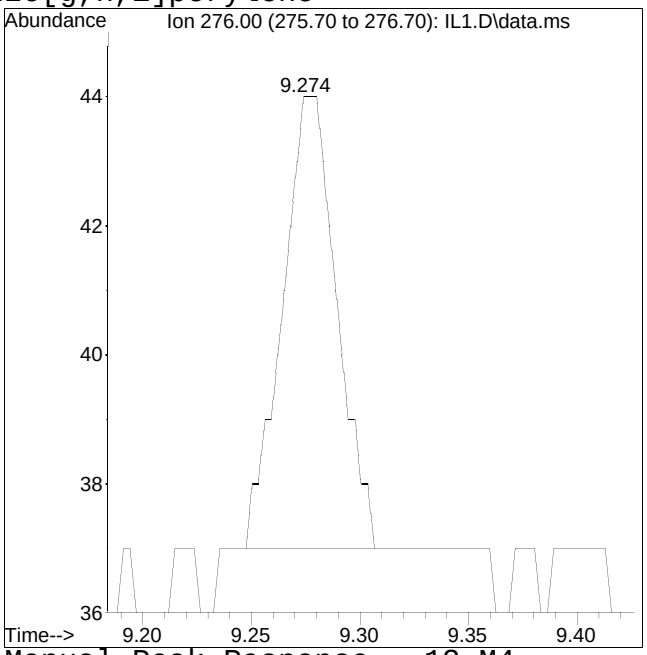
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL1.D Operator : SV128:ah
Date Inj'd : 8/31/2023 12:12 pm Instrument : SV128
Sample : IL1,32,, 0.005 Lot#10235 Quant Date : 9/5/2023 11:58 am

Compound #42: Benzo[g,h,i]perylene



Original Peak Response = 19



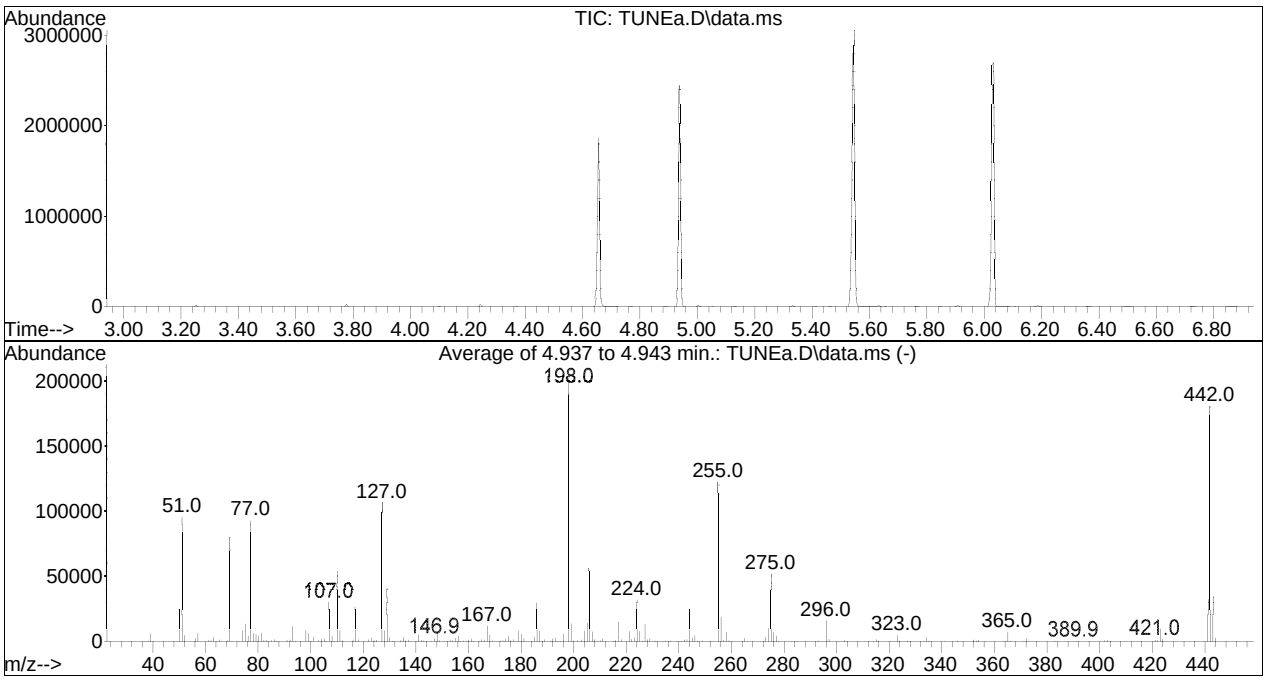
Manual Peak Response = 12 M4

M4 = Poor automated baseline construction.

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : TUNEa.D
Acq On : 05 Sep 2023 08:49 am
Operator : SV128:ah
Sample : TUNEa
Misc : WG1823727,,ical
ALS Vial : 48 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Sep 05 12:51:59 2023



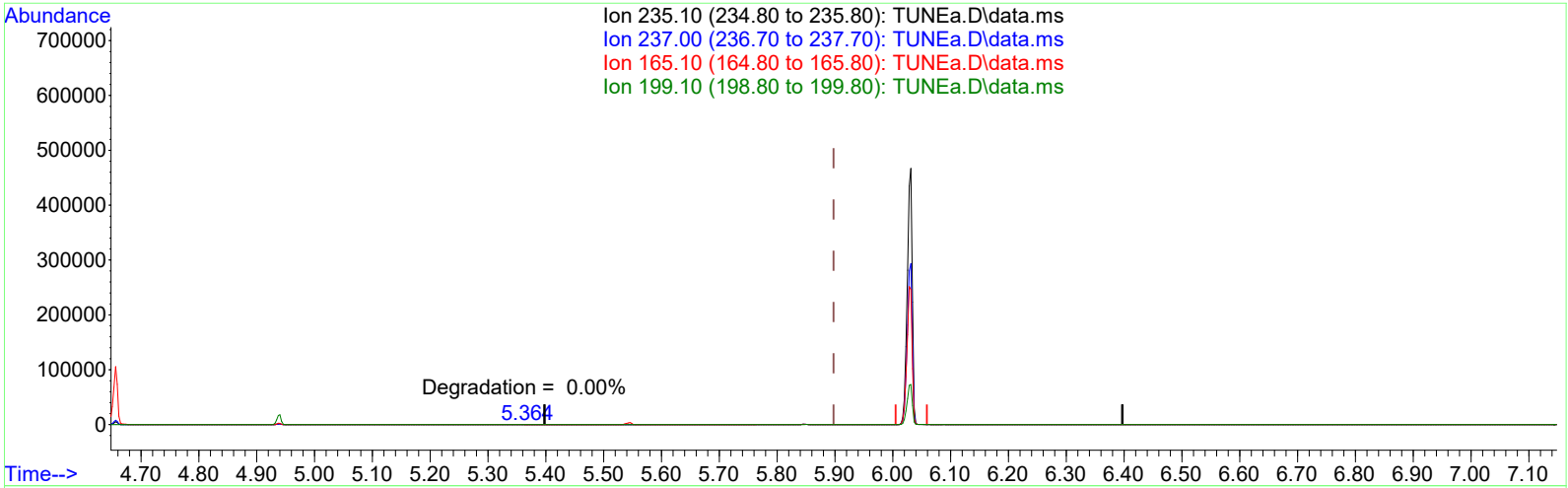
Spectrum Information: Average of 4.937 to 4.943 min.

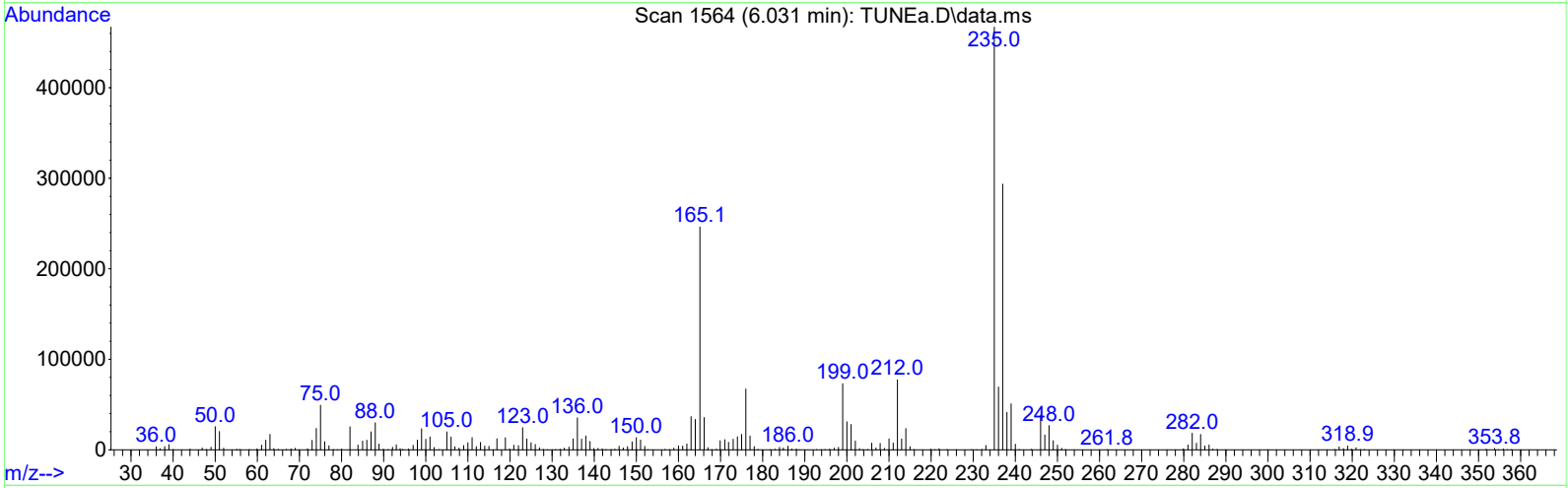
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	47.1	95459	PASS
68	69	0.00	2	1.7	1362	PASS
69	69	100	100	100.0	80005	PASS
70	69	0.00	2	0.6	448	PASS
127	198	10	80	52.6	106600	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	202499	PASS
199	198	5	9	6.7	13479	PASS
275	198	10	60	25.7	52043	PASS
365	198	1	100	3.5	7083	PASS
441	442	0.01	24	17.8	32104	PASS
442	198	50	100	89.2	180715	PASS
443	442	15	24	19.2	34731	PASS

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : TUNEa.D
Acq On : 05 Sep 2023 08:49 am
Operator : SV128:ah
Sample : TUNEa
Misc : WG1823727,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 07 11:41:52 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\dftppsv128.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Aug 12 18:40:35 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: TUNEa.D\data.ms

(6) ddt (T)

6.031min (+ 0.133) 45.96

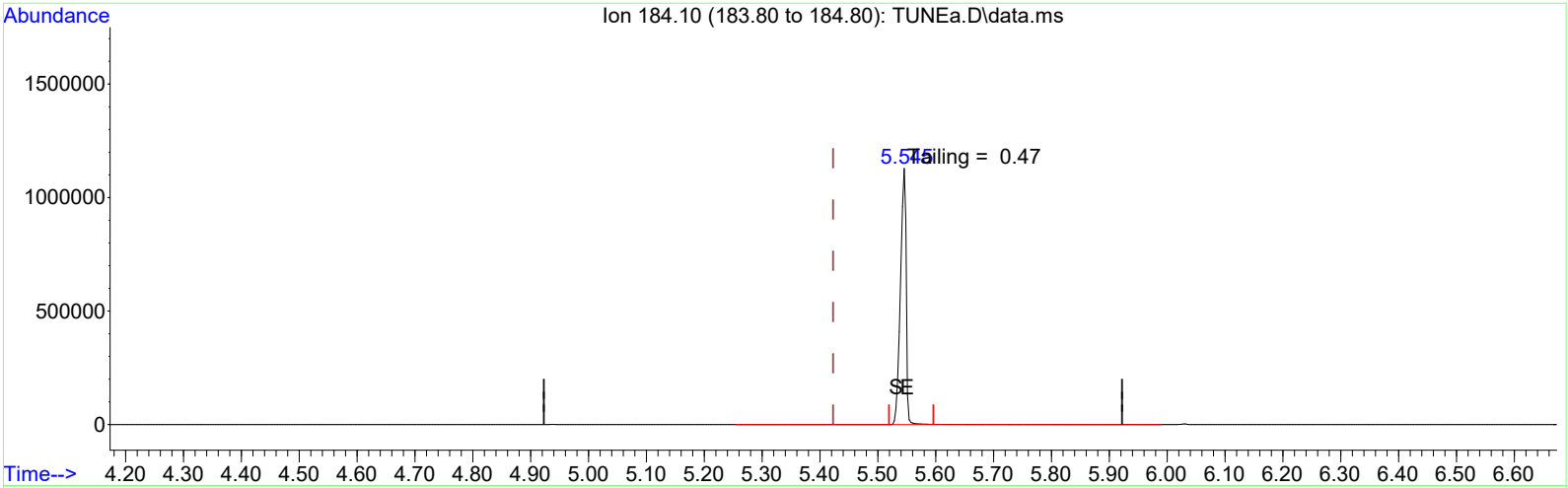
response 280185

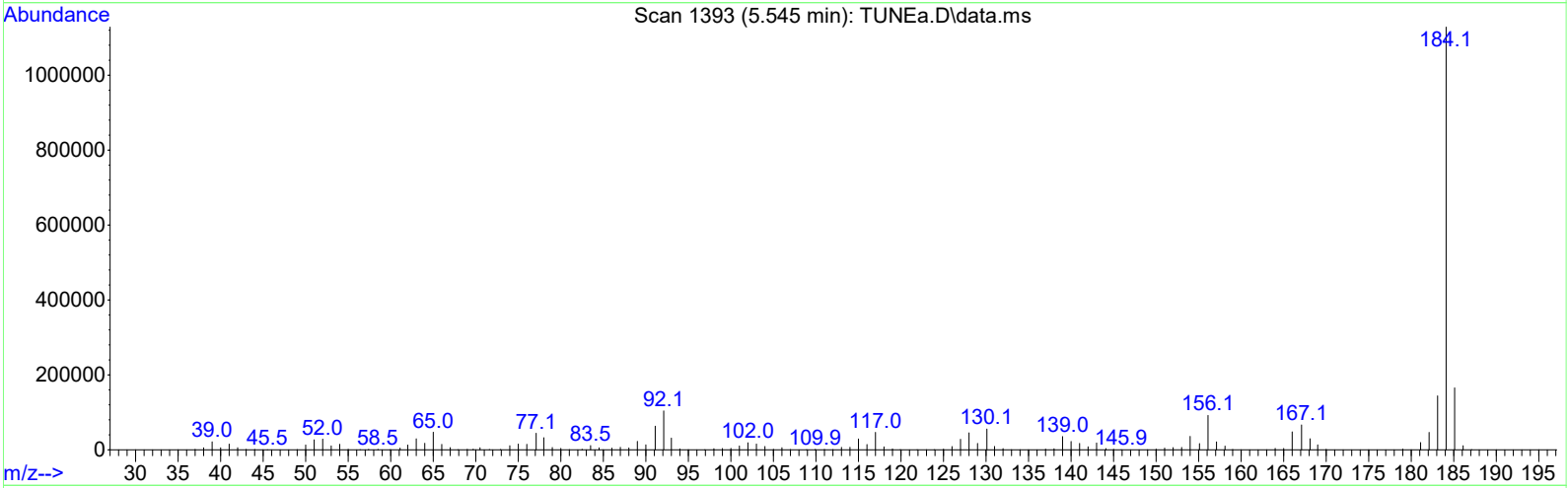
Ion	Exp%	Act%
235.10	100.00	100.00
237.00	65.60	63.69
165.10	53.30	55.22
199.10	17.10	16.48

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : TUNEa.D
Acq On : 05 Sep 2023 08:49 am
Operator : SV128:ah
Sample : TUNEa
Misc : WG1823727,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 07 11:41:52 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\dftppsv128.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Aug 12 18:40:35 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: TUNEa.D\data.ms

(3) benzidine (T)

5.545min (+ 0.122) 76.62

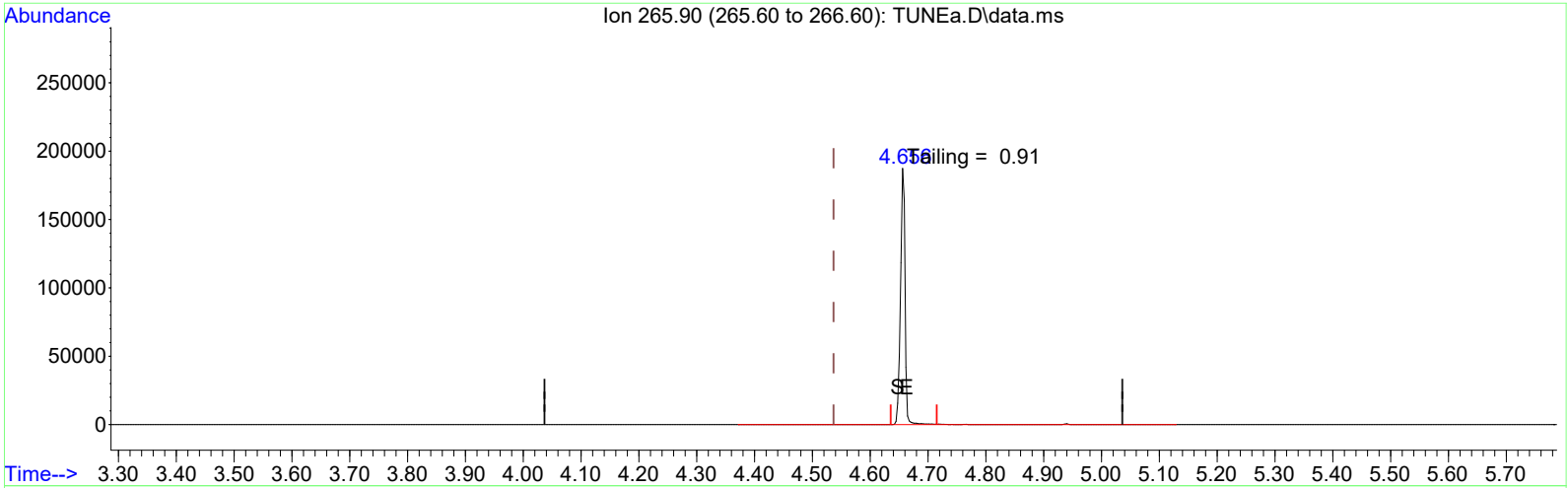
response 780043

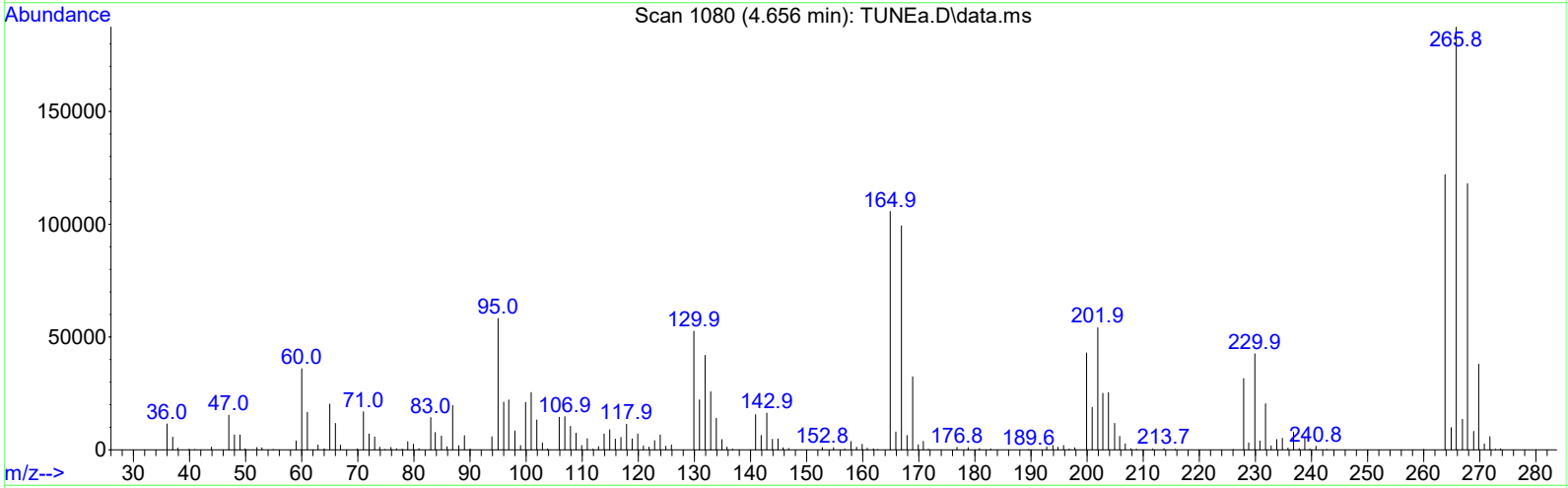
Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : TUNEa.D
Acq On : 05 Sep 2023 08:49 am
Operator : SV128:ah
Sample : TUNEa
Misc : WG1823727,,ical
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 07 11:41:52 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\dftppsv128.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Aug 12 18:40:35 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: TUNEa.D\data.ms

(1) pentachlorophenol (T)

4.656min (+ 0.119) 48.78

response 102463

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL3a.D
Acq On : 05 Sep 2023 09:24 am
Operator : SV128:ah
Sample : IL3,32,, 0.025 Lot#10233
Misc : WG1823727,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 12:50:47 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:51 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.257	152	2961	4000.000	ng/ml	0.00
Standard Area 1 = 2292			Recovery = 129.19%			
8) Naphthalene-d8	2.923	136	11695	4000.000	ng/ml	0.00
Standard Area 1 = 8982			Recovery = 130.20%			
17) Acenaphthene-d10	3.904	164	7154	4000.000	ng/ml	0.00
Standard Area 1 = 5319			Recovery = 134.50%			
22) Phenanthrene-d10	4.753	188	17977	4000.000	ng/ml	0.00
Standard Area 1 = 12548			Recovery = 143.27%			
31) Chrysene-d12	6.331	240	17368	4000.000	ng/ml	0.00
Standard Area 1 = 11983			Recovery = 144.94%			
36) Perylene-d12	7.622	264	19236	4000.000	ng/ml	0.02
Standard Area 1 = 13430			Recovery = 143.23%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.654	112	15	19.824	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.40%#			
3) Phenol-d6	2.064	99	18M4	19.441	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.39%#			
7) Nitrobenzene-d5	2.538	82	15	19.113	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.76%#			
13) 2-Fluorobiphenyl	3.522	172	47	19.595	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.78%#			
21) 2,4,6-Tribromophenol	4.353	330	5M2	16.645	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 0.33%#			
30) 4-Terphenyl-d14	5.683	244	65	17.110	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 0.68%#			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.120	93	16M7	20.054	ng/ml	
5) n-nitrosodi-n-propylamine	2.459	70	12M4	20.050	ng/ml	
6) Hexachloroethane	2.520	117	8M2	22.474	ng/ml	
9) Naphthalene	2.935	128	57M7	19.948	ng/ml	
10) Hexachlorobutadiene	3.009	225	11M4	20.473	ng/ml	
11) 2-Methylnaphthalene	3.317	142	38M7	19.924	ng/ml	
12) 1-Methylnaphthalene	3.372	142	34	19.241	ng/ml	87
14) 2-Chloronaphthalene	3.589	162	39	19.724	ng/ml	96
15) 2,6-Dinitrotoluene	3.782	165	6M4	15.194	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL3a.D
Acq On : 05 Sep 2023 09:24 am
Operator : SV128:ah
Sample : IL3,32,, 0.025 Lot#10233
Misc : WG1823727,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 12:50:47 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:51 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
16) Acenaphthylene	3.821	152	59	18.737	ng/ml	99
18) Acenaphthene	3.922	153	44M6	19.411	ng/ml	
19) 2,4-Dinitrotoluene	4.011	165	8	14.722	ng/ml	89
20) Fluorene	4.216	166	46M6	18.597	ng/ml	
23) 4,6-Dinitro-o-cresol	0.000		0	N.D.	d	
24) Hexachlorobenzene	4.537	284	18	18.645	ng/ml	100
25) Pentachlorophenol	4.646	266	6M4	31.130	ng/ml	
26) Phenanthrene	4.765	178	80M6	17.849	ng/ml	
27) Anthracene	4.794	178	74	16.966	ng/ml	98
28) Fluoranthene	5.456	202	90	17.284	ng/ml	97
29) Pyrene	5.584	202	92	17.070	ng/ml	99
32) Benzo[a]anthracene	6.326	228	144	18.526	ng/ml#	88
33) 3,3'-Dichlorobenzidine	6.312	252	30M7	13.850	ng/ml	
34) Chrysene	6.351	228	93	17.356	ng/ml	97
35) Bis(2-ethylhexyl)phtha...	6.370	149	39	11.531	ng/ml	95
37) Benzo[b]fluoranthene	7.220	252	92	16.975	ng/ml	100
38) Benzo[k]fluoranthene	7.245	252	80	15.950	ng/ml	96
39) Benzo[a]pyrene	7.550	252	72	15.468	ng/ml	95
40) Indeno[1,2,3-cd]pyrene	8.928	276	83	17.818	ng/ml	95
41) Dibenzo[a,h]anthracene	8.978	278	76M4	16.950	ng/ml	
42) Benzo[g,h,i]perylene	9.285	276	105M4	21.955	ng/ml	

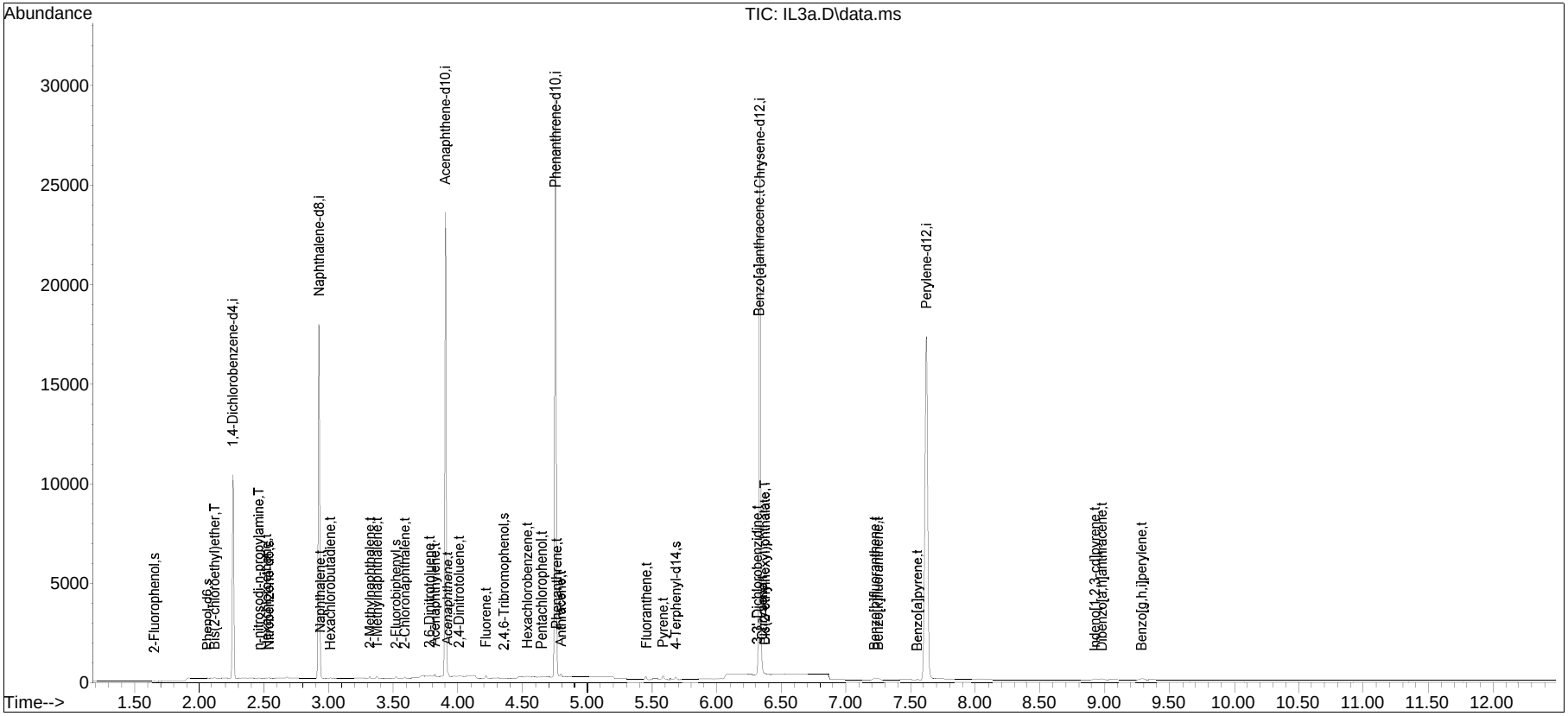
(#) = qualifier out of range (m) = manual integration (+) = signals summed

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : IL3a.D
Acq On : 05 Sep 2023 09:24 am
Operator : SV128:ah
Sample : IL3,32,, 0.025 Lot#10233
Misc : WG1823727,,ical
ALS Vial : 2 Sample Multiplier: 1

Quant Time: Sep 05 12:50:47 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:51 2023
Response via : Initial Calibration

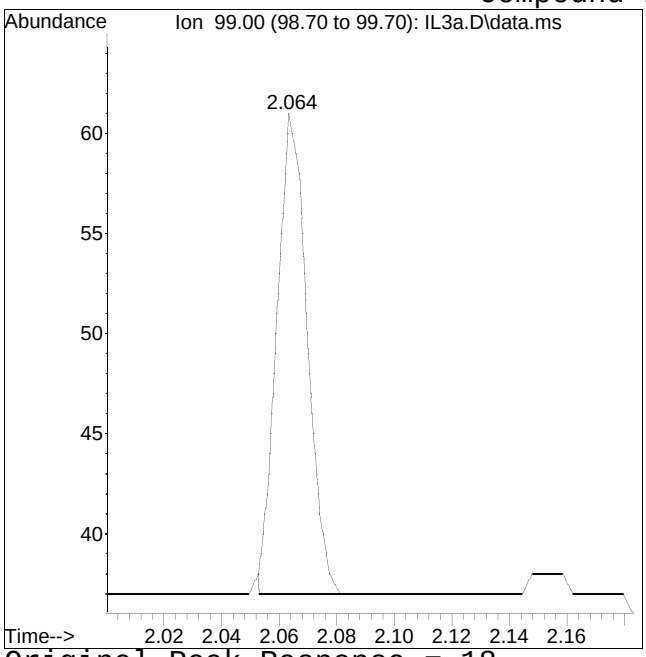
Sub List : Default - All compounds listedIical\IL7.D•



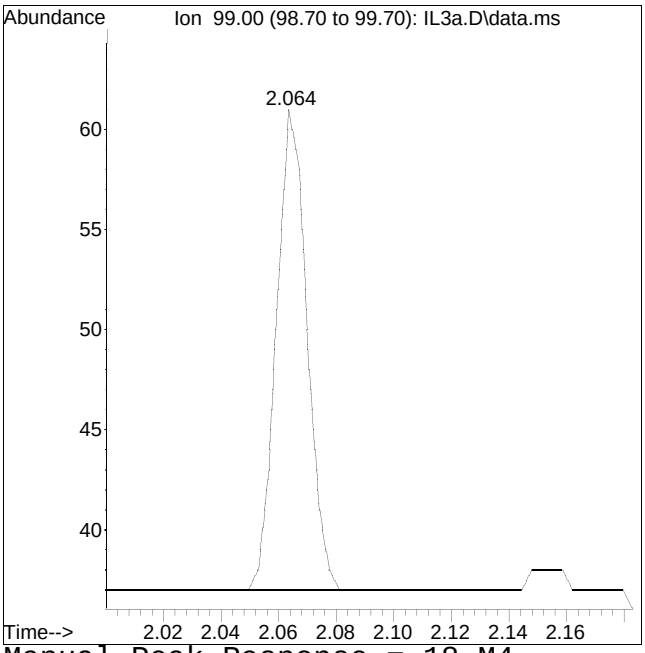
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQ
Data File : IL3a.D
Date Inj'd : 9/5/2023 9:24 am
Sample : IL3,32,, 0.025 Lot#10233
Method : SIM-LVI_230831_sv128.M
Operator : SV128:ah
Instrument : SV128
Quant Date : 9/5/2023 11:58 am

Compound #3: Phenol-d6



Original Peak Response = 18



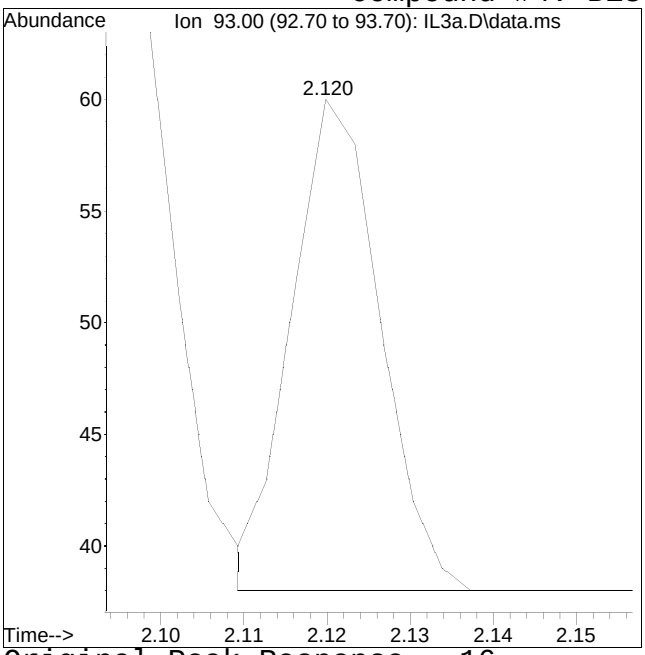
Manual Peak Response = 18 M4

M4 = Poor automated baseline construction.

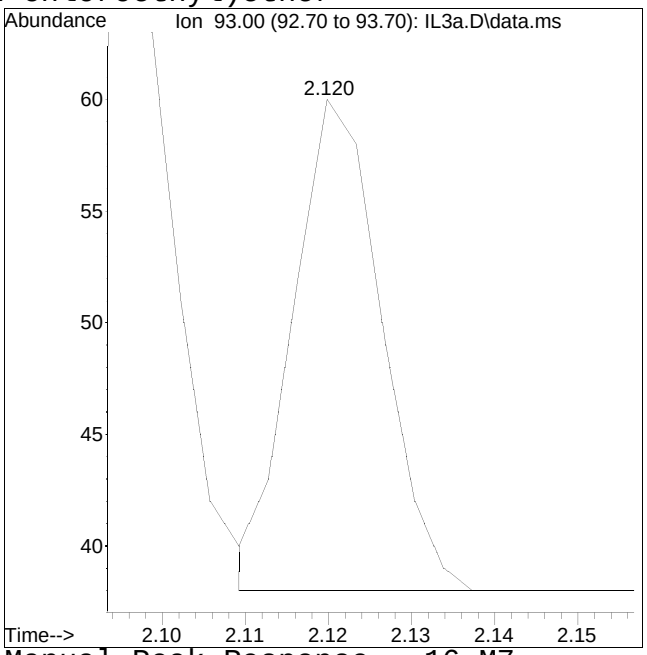
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #4: Bis(2-chloroethyl)ether



Original Peak Response = 16



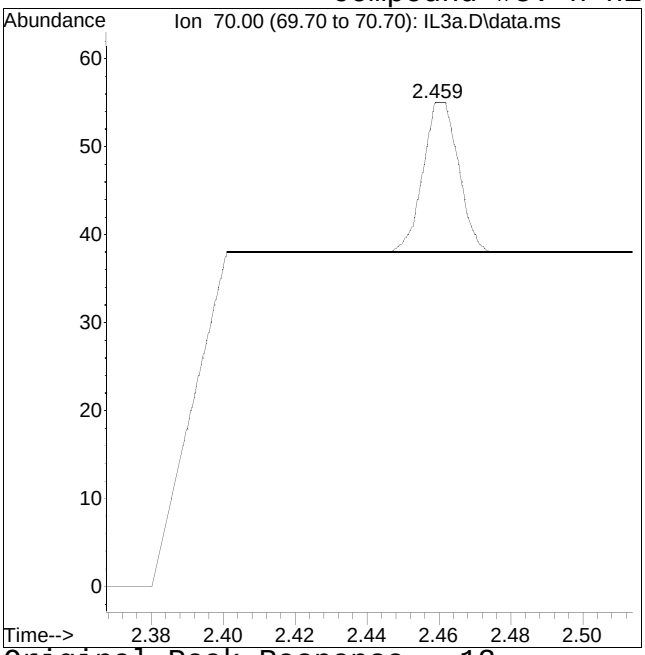
Manual Peak Response = 16 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

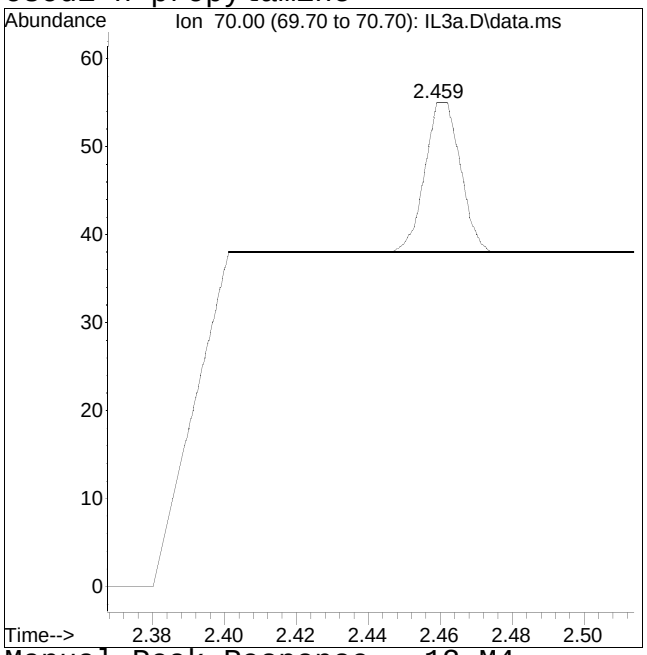
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #5: n-nitrosodi-n-propylamine



Original Peak Response = 12



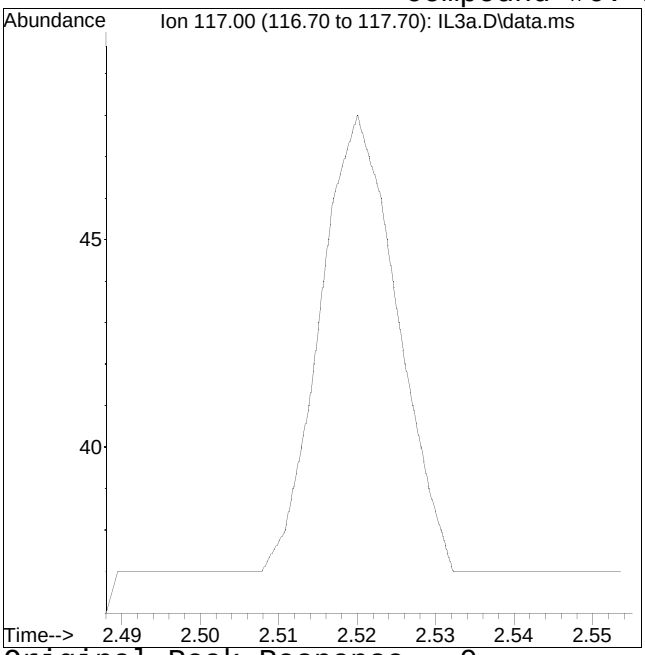
Manual Peak Response = 12 M4

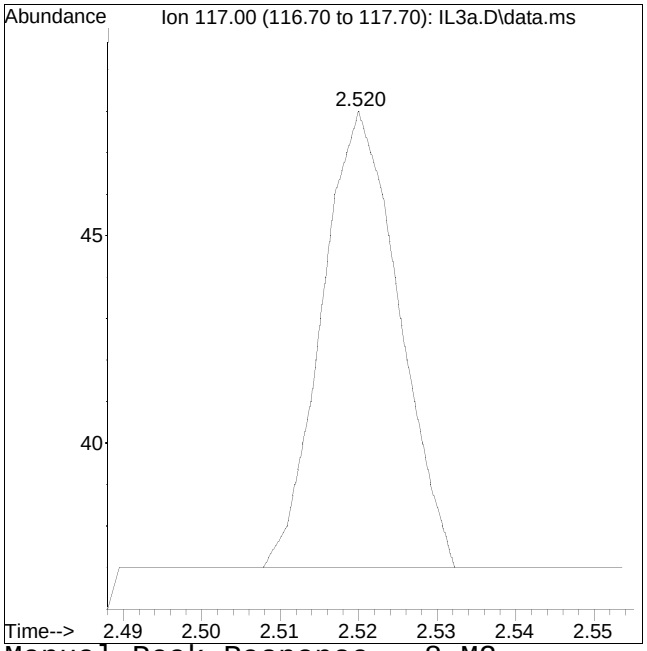
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #6: Hexachloroethane



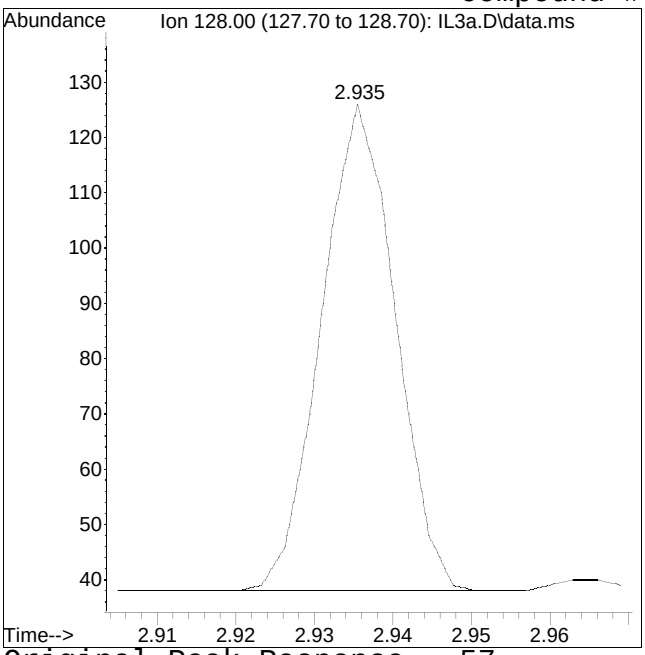


Original Peak Response = 0 Manual Peak Response = 8 M2
M2 = Peak not found by automatic integration algorithm.

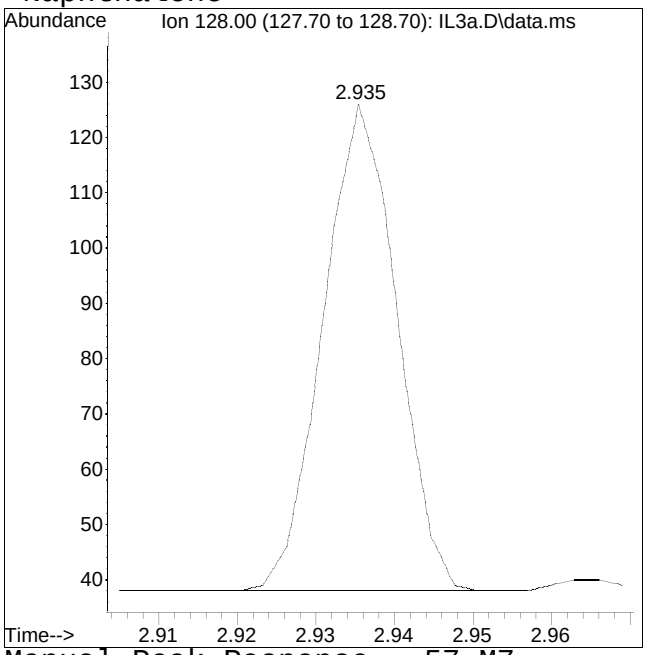
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #9: Naphthalene



Original Peak Response = 57



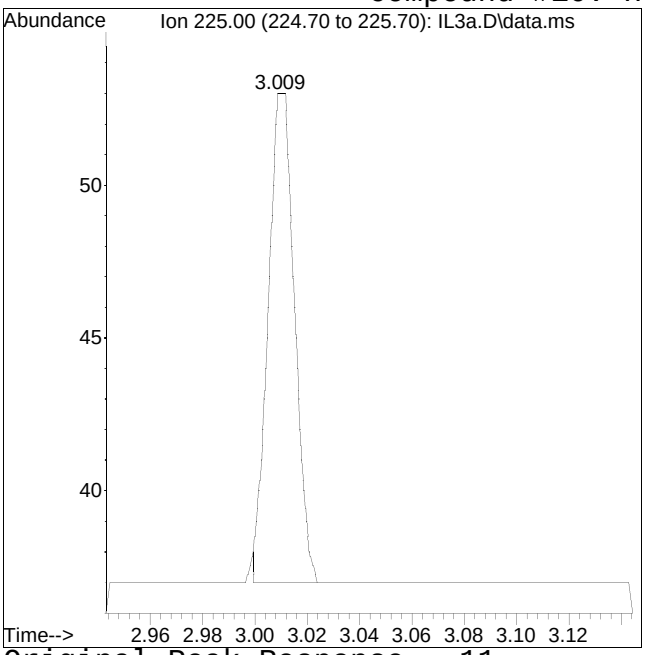
Manual Peak Response = 57 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

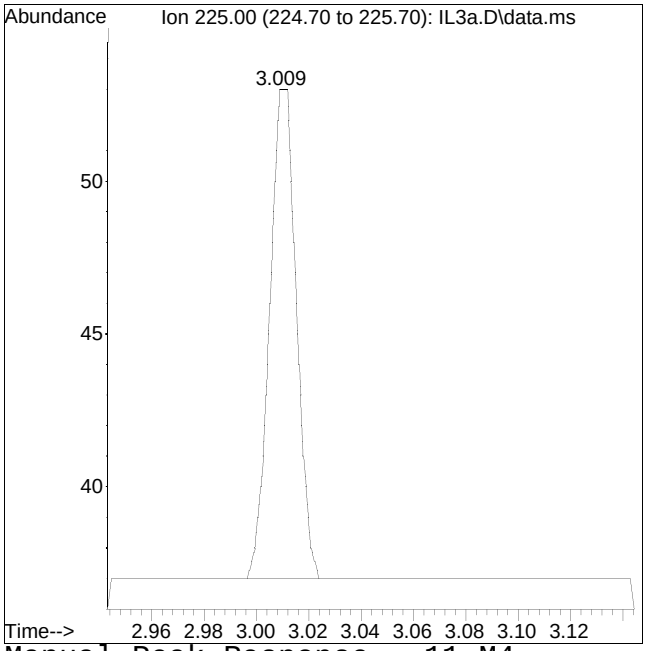
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #10: Hexachlorobutadiene



Original Peak Response = 11



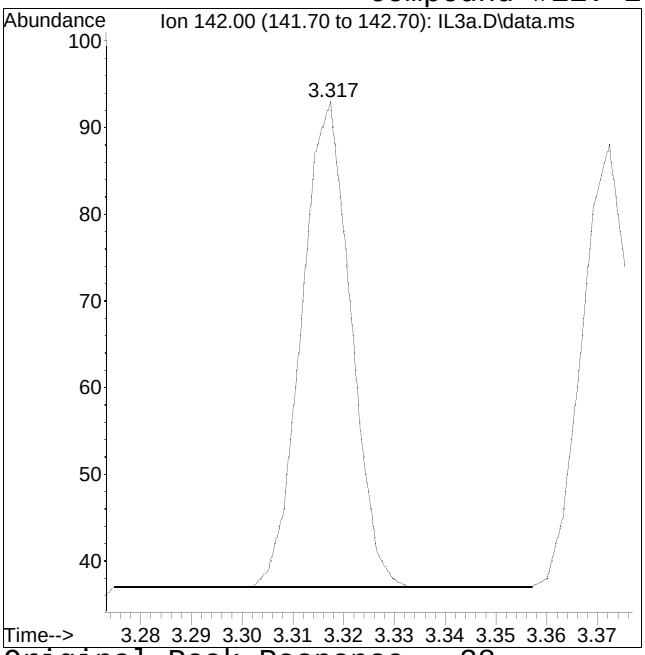
Manual Peak Response = 11 M4

M4 = Poor automated baseline construction.

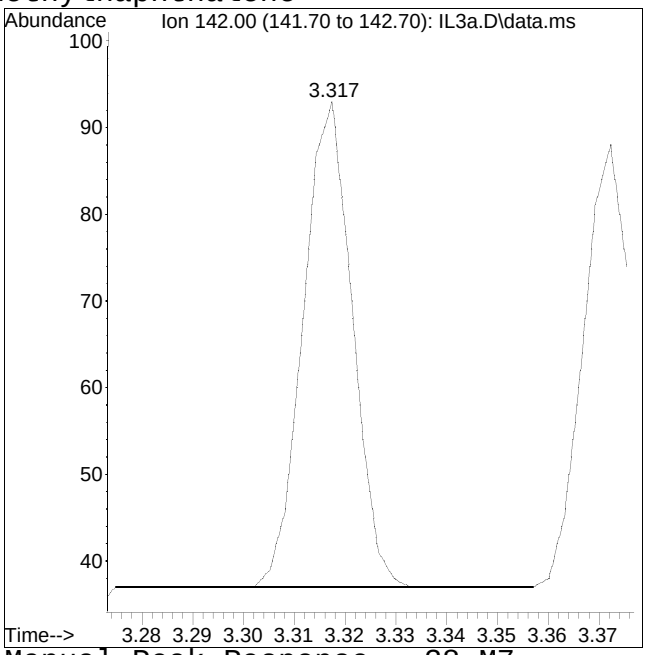
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #11: 2-Methylnaphthalene



Original Peak Response = 38



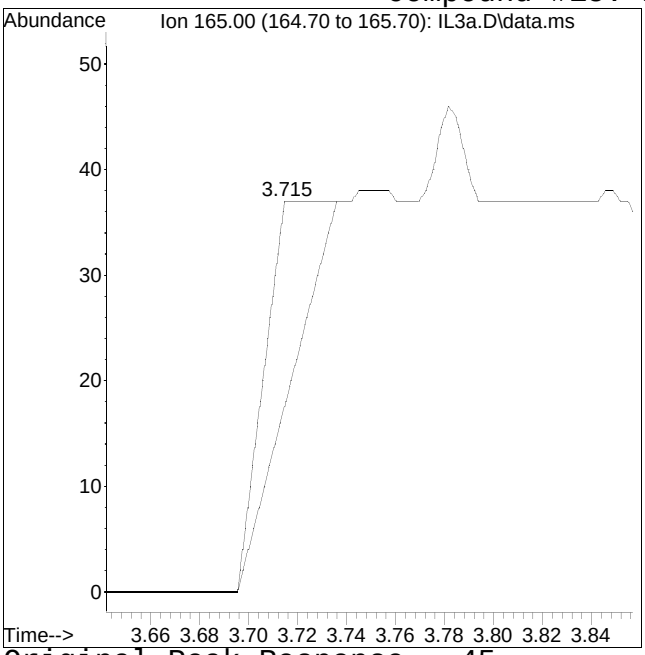
Manual Peak Response = 38 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

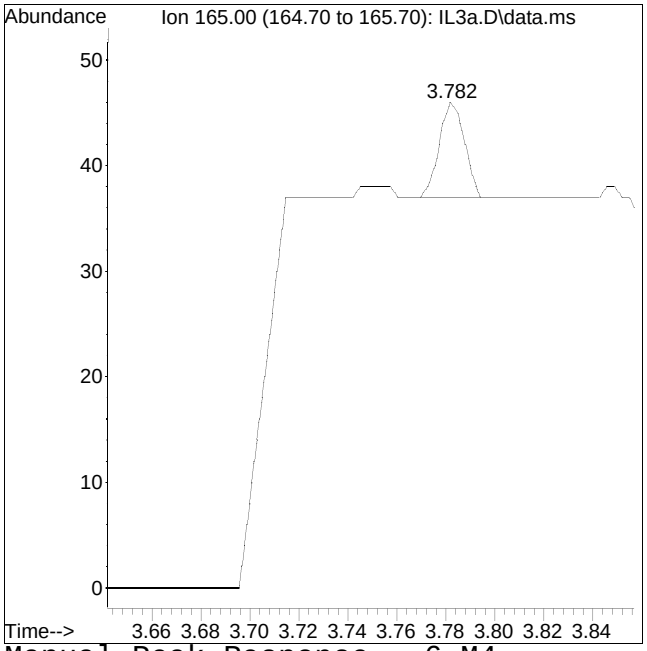
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #15: 2,6-Dinitrotoluene



Original Peak Response = 45



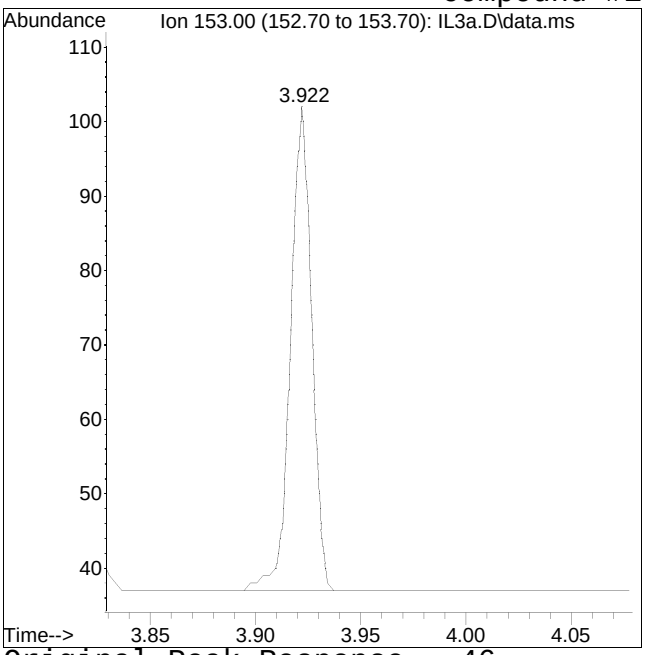
Manual Peak Response = 6 M4

M4 = Poor automated baseline construction.

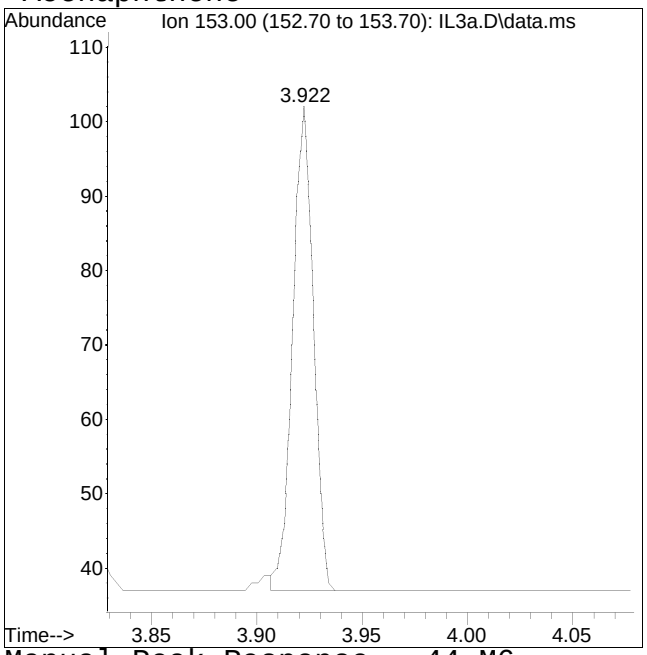
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #18: Acenaphthene



Original Peak Response = 46



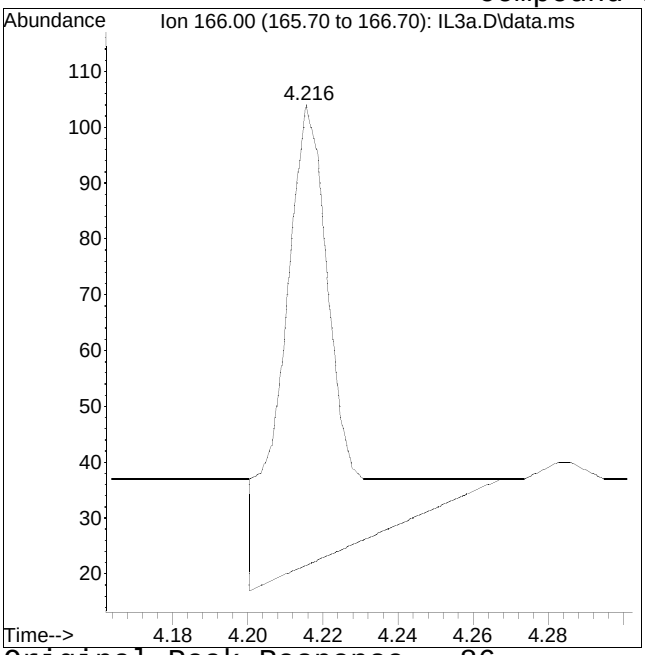
Manual Peak Response = 44 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

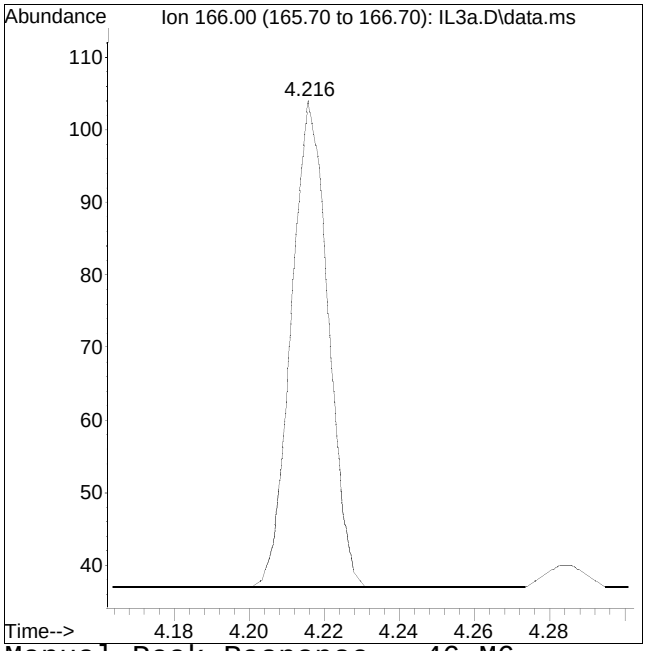
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #20: Fluorene



Original Peak Response = 86



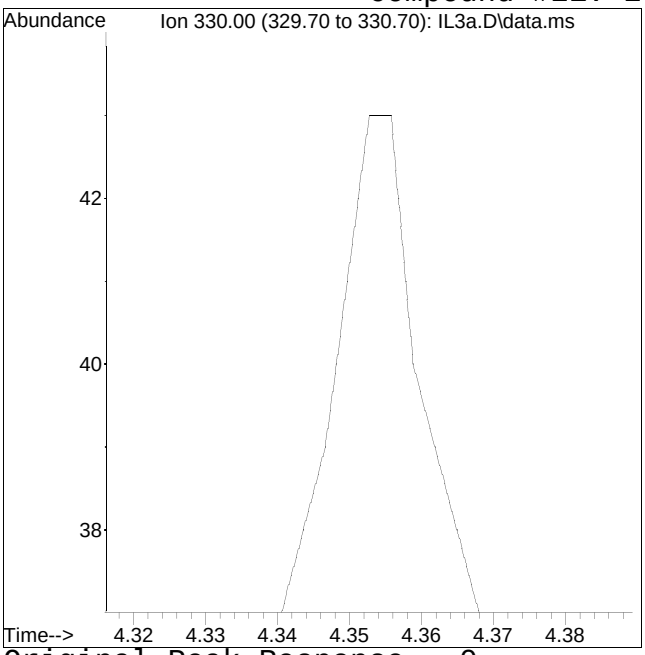
Manual Peak Response = 46 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

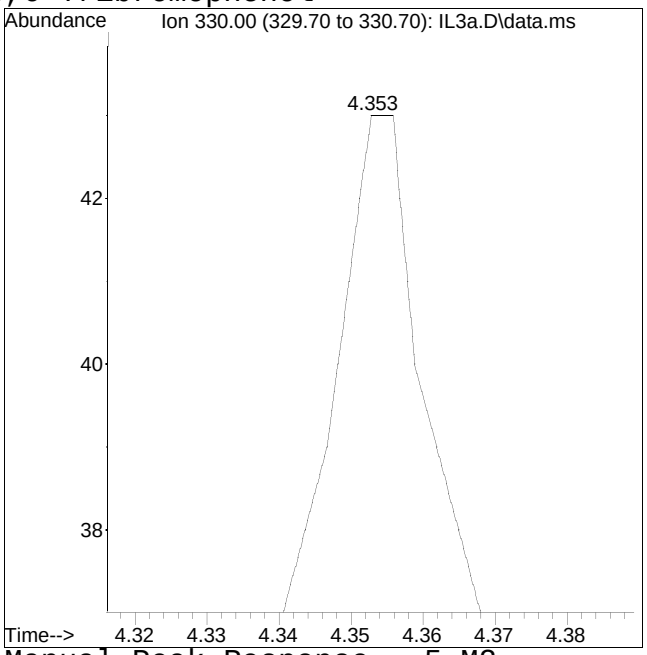
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #21: 2,4,6-Tribromophenol



Original Peak Response = 0



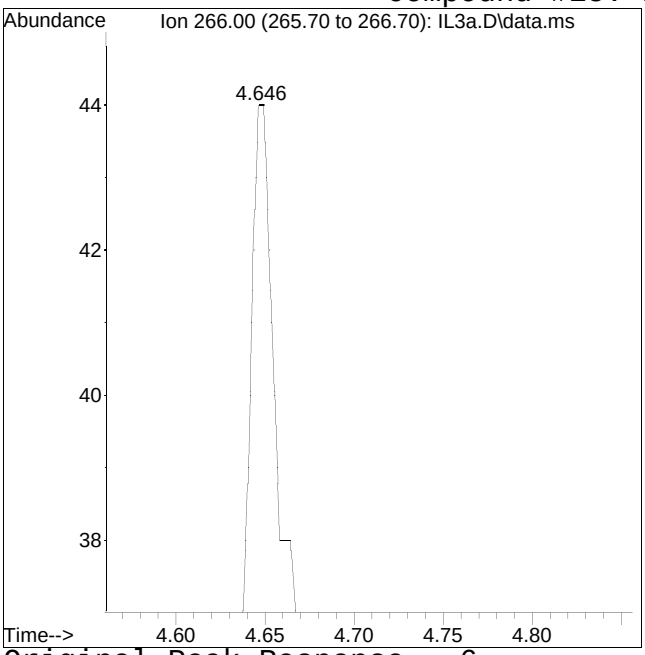
Manual Peak Response = 5 M2

M2 = Peak not found by automatic integration algorithm.

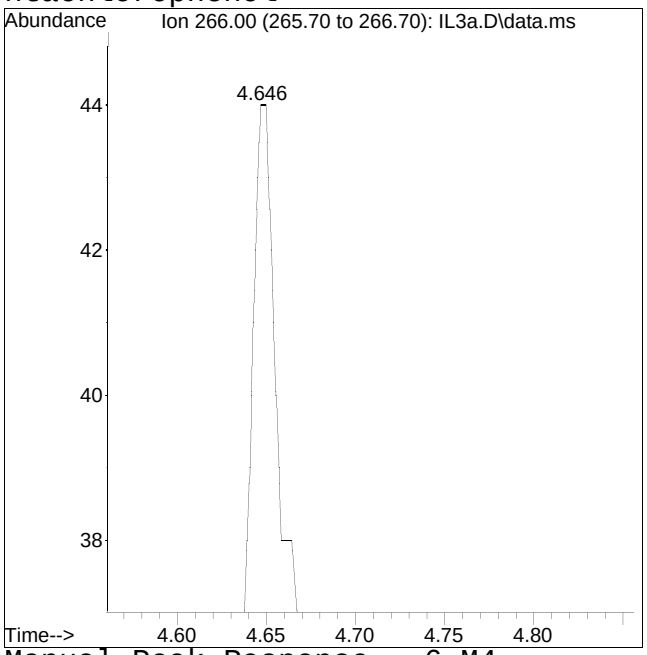
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #25: Pentachlorophenol



Original Peak Response = 6



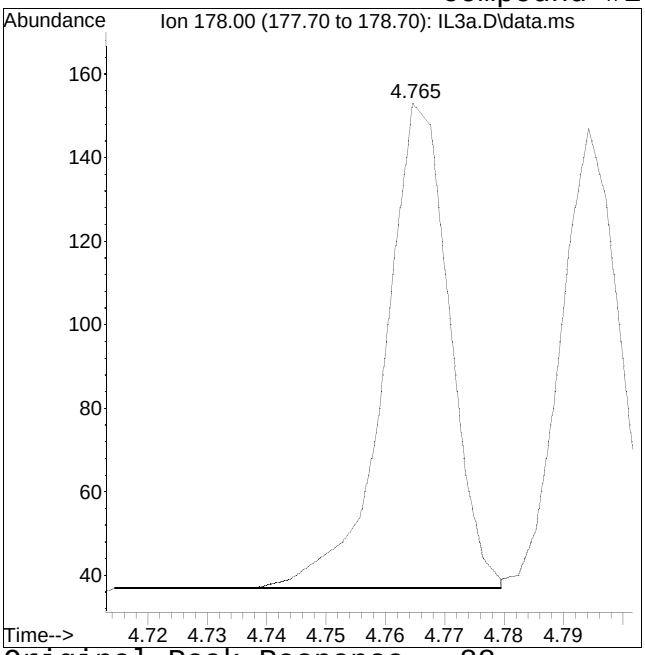
Manual Peak Response = 6 M4

M4 = Poor automated baseline construction.

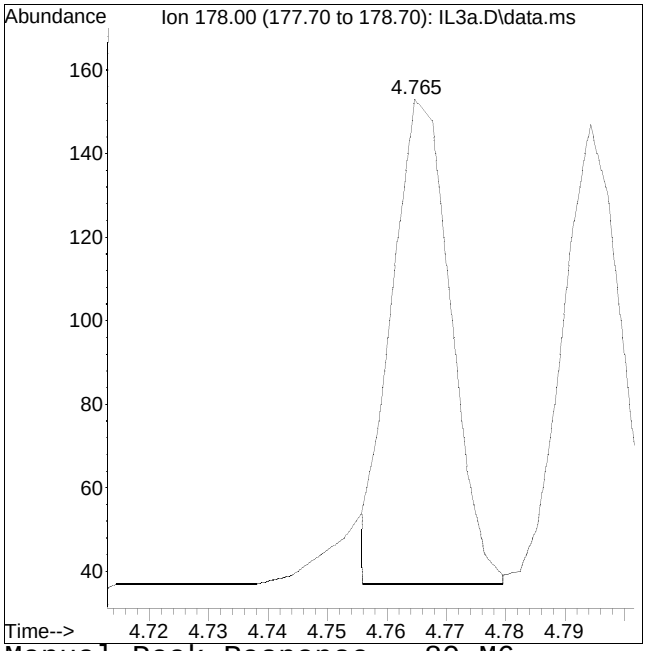
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #26: Phenanthrene



Original Peak Response = 88



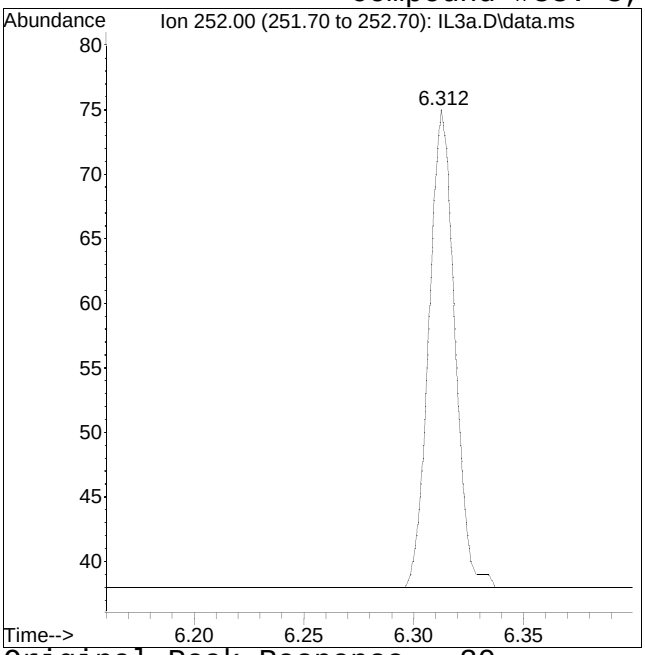
Manual Peak Response = 80 M6

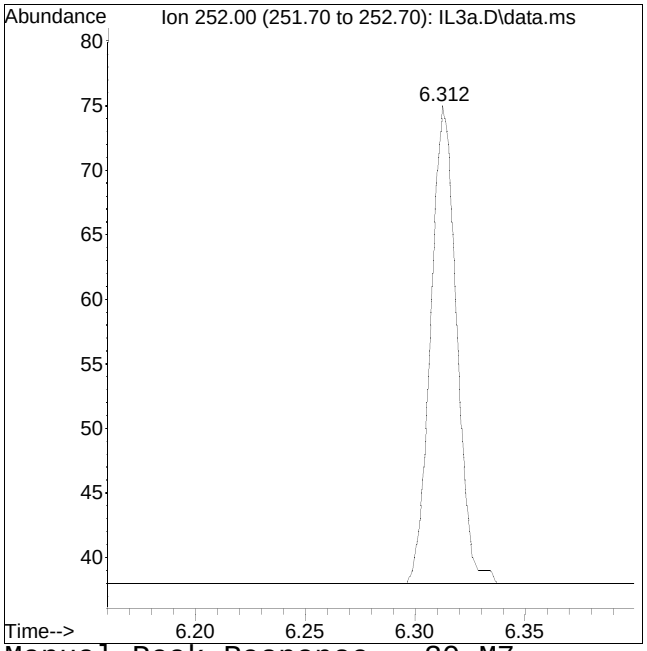
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #33: 3,3'-Dichlorobenzidine



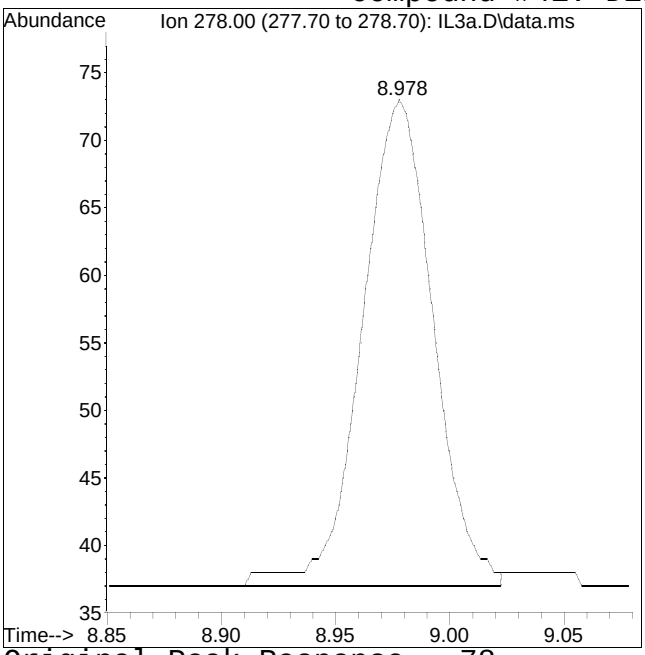


Original Peak Response = 30 Manual Peak Response = 30 M7
M7 = A qualifier ion was manually integrated (only for GC/MS data).

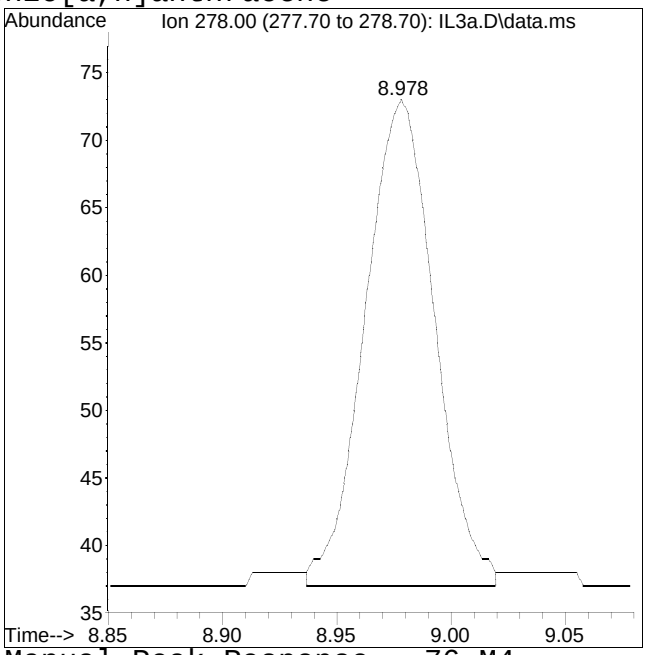
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 78



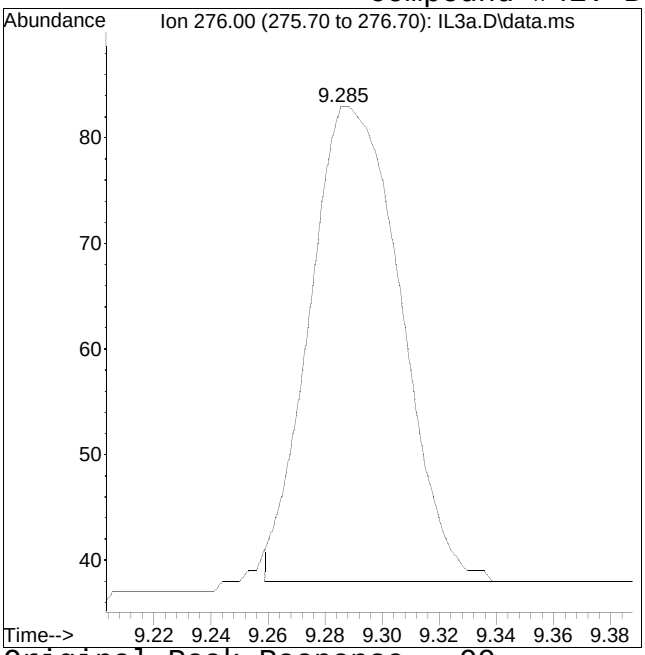
Manual Peak Response = 76 M4

M4 = Poor automated baseline construction.

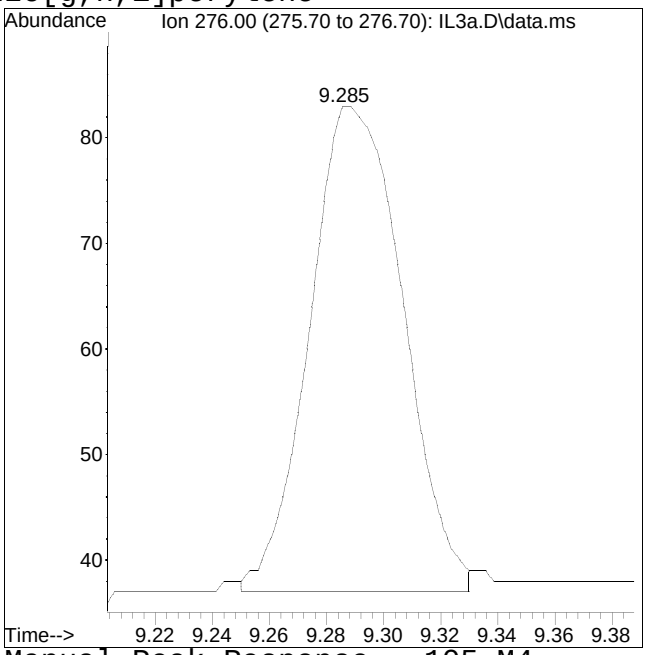
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : IL3a.D Operator : SV128:ah
Date Inj'd : 9/5/2023 9:24 am Instrument : SV128
Sample : IL3,32,, 0.025 Lot#10233 Quant Date : 9/5/2023 11:58 am

Compound #42: Benzo[g,h,i]perylene



Original Peak Response = 99



Manual Peak Response = 105 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : ICVa.D
Acq On : 05 Sep 2023 11:08 am
Operator : SV128:ah
Sample : CQICV,32,, 1.0 Lot#10193
Misc : WG1823727,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 12:56:42 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:23 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.255	152	2092	4000.000	ng/ml	0.00
Standard Area 1 = 2292			Recovery = 91.27%			
8) Naphthalene-d8	2.922	136	8088	4000.000	ng/ml	0.00
Standard Area 1 = 8982			Recovery = 90.05%			
17) Acenaphthene-d10	3.902	164	4918	4000.000	ng/ml	0.00
Standard Area 1 = 5319			Recovery = 92.46%			
22) Phenanthrene-d10	4.751	188	12055	4000.000	ng/ml	0.00
Standard Area 1 = 12548			Recovery = 96.07%			
31) Chrysene-d12	6.330	240	11986	4000.000	ng/ml	0.00
Standard Area 1 = 11983			Recovery = 100.03%			
36) Perylene-d12	7.612	264	13738	4000.000	ng/ml	0.00
Standard Area 1 = 13430			Recovery = 102.29%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.648	112	555	1038.191	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 20.76%			
3) Phenol-d6	2.058	99	665	1016.574	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 20.33%			
7) Nitrobenzene-d5	2.534	82	548	988.316	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 39.53%			
13) 2-Fluorobiphenyl	3.520	172	1660	1000.726	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 40.03%			
21) 2,4,6-Tribromophenol	4.351	330	198	958.853	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 19.18%			
30) 4-Terphenyl-d14	5.681	244	2387M6	936.994	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 37.48%			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.114	93	581	1030.714	ng/ml	99
5) n-nitrosodi-n-propylamine	2.454	70	422M7	997.962	ng/ml	
6) Hexachloroethane	2.515	117	252	1002.018	ng/ml	91
9) Naphthalene	2.931	128	2016	1020.174	ng/ml#	100
10) Hexachlorobutadiene	3.007	225	383	1030.721	ng/ml	99
11) 2-Methylnaphthalene	3.313	142	1329	1007.550	ng/ml	99
12) 1-Methylnaphthalene	3.368	142	1302	1065.414	ng/ml	100
14) 2-Chloronaphthalene	3.584	162	1428	1044.275	ng/ml	95
15) 2,6-Dinitrotoluene	3.780	165	251M4	919.074	ng/ml	
16) Acenaphthylene	3.820	152	2292	1052.490	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : ICVa.D
Acq On : 05 Sep 2023 11:08 am
Operator : SV128:ah
Sample : CQICV,32,, 1.0 Lot#10193
Misc : WG1823727,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 12:56:42 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:23 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270SIM\SV128\230831aLVIical\IL7.D
Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
18) Acenaphthene	3.920	153	1560	1001.123	ng/ml	95
19) 2,4-Dinitrotoluene	4.009	165	333	891.393	ng/ml	97
20) Fluorene	4.214	166	1745	1026.246	ng/ml	97
23) 4,6-Dinitro-o-cresol	4.241	198	147M6	724.005	ng/ml	
24) Hexachlorobenzene	4.535	284	617M6	953.086	ng/ml	
25) Pentachlorophenol	4.645	266	283	703.084	ng/ml	99
26) Phenanthrene	4.763	178	2946	980.203	ng/ml	100
27) Anthracene	4.793	178	2885M6	986.356	ng/ml	
28) Fluoranthene	5.454	202	3391M6	971.114	ng/ml	
29) Pyrene	5.585	202	3622	1002.198	ng/ml	100
32) Benzo[a]anthracene	6.321	228	3629	914.461	ng/ml	100
33) 3,3'-Dichlorobenzidine	6.311	252	1268	848.249	ng/ml#	98
34) Chrysene	6.346	228	3482	941.592	ng/ml	99
35) Bis(2-ethylhexyl)phtha...	6.368	149	1783	763.859	ng/ml	100
37) Benzo[b]fluoranthene	7.216	252	3675M6	949.437	ng/ml	
38) Benzo[k]fluoranthene	7.242	252	3416	953.620	ng/ml	97
39) Benzo[a]pyrene	7.546	252	3022M6	909.056	ng/ml	
40) Indeno[1,2,3-cd]pyrene	8.928	276	3062	920.387	ng/ml	96
41) Dibenzo[a,h]anthracene	8.975	278	3200M6	999.309	ng/ml	
42) Benzo[g,h,i]perylene	9.291	276	3271	957.663	ng/ml	96

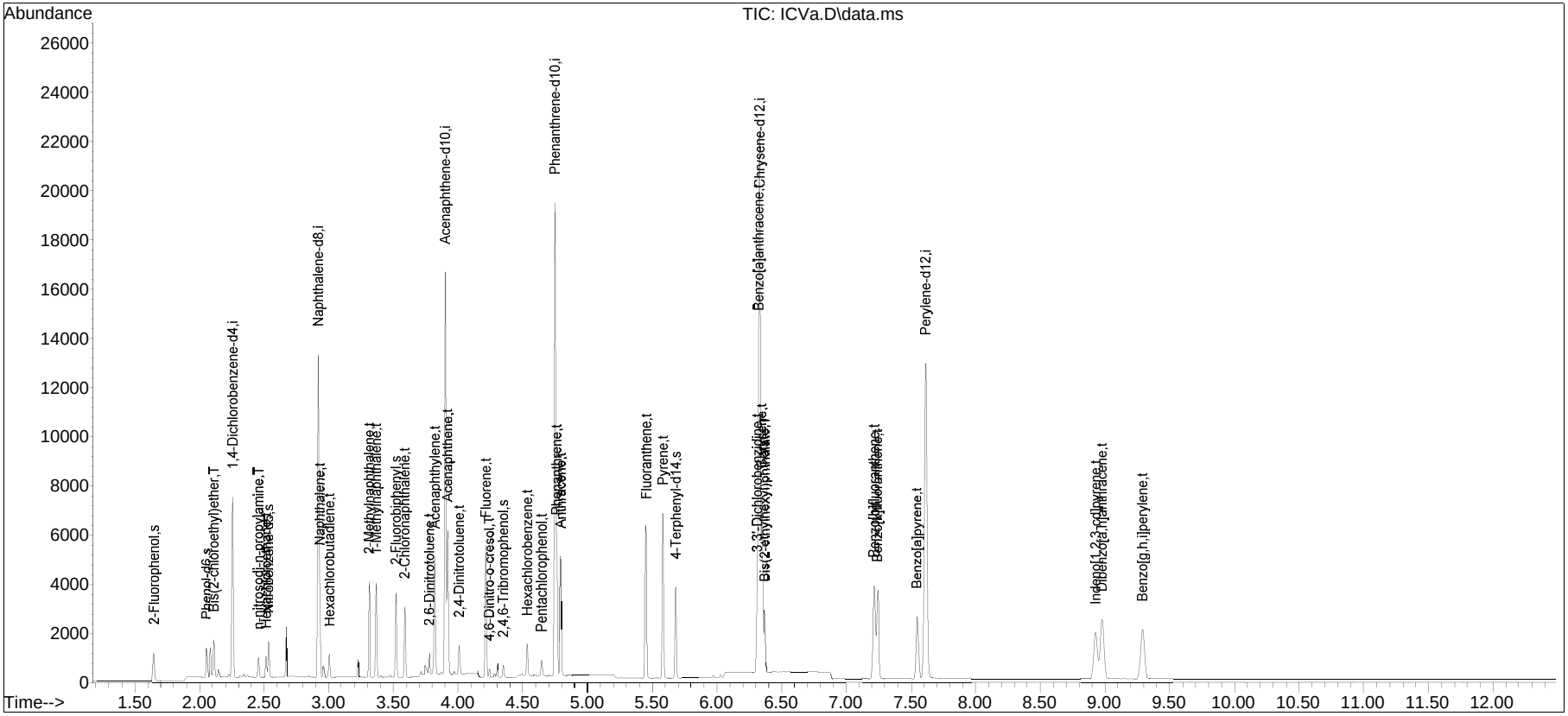
(#) = qualifier out of range (m) = manual integration (+) = signals summed

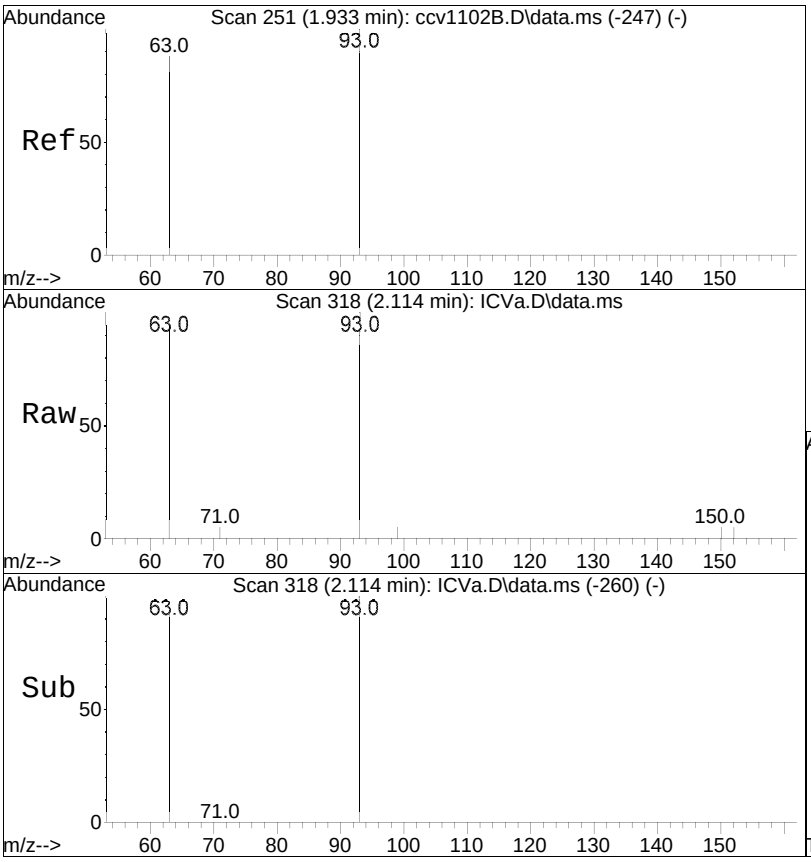
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230831aLVIical\
Data File : ICVa.D
Acq On : 05 Sep 2023 11:08 am
Operator : SV128:ah
Sample : CQICV,32,, 1.0 Lot#10193
Misc : WG1823727,,ical
ALS Vial : 3 Sample Multiplier: 1

Quant Time: Sep 05 12:56:42 2023
Quant Method : I:\8270SIM\SV128\230831aLVIical\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Tue Sep 05 11:58:23 2023
Response via : Initial Calibration

Sub List : Default - All compounds listedIical\IL7.D•

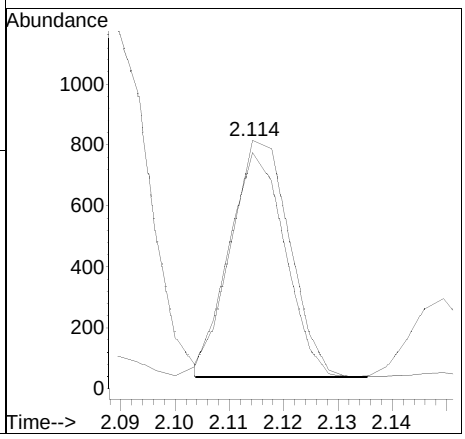


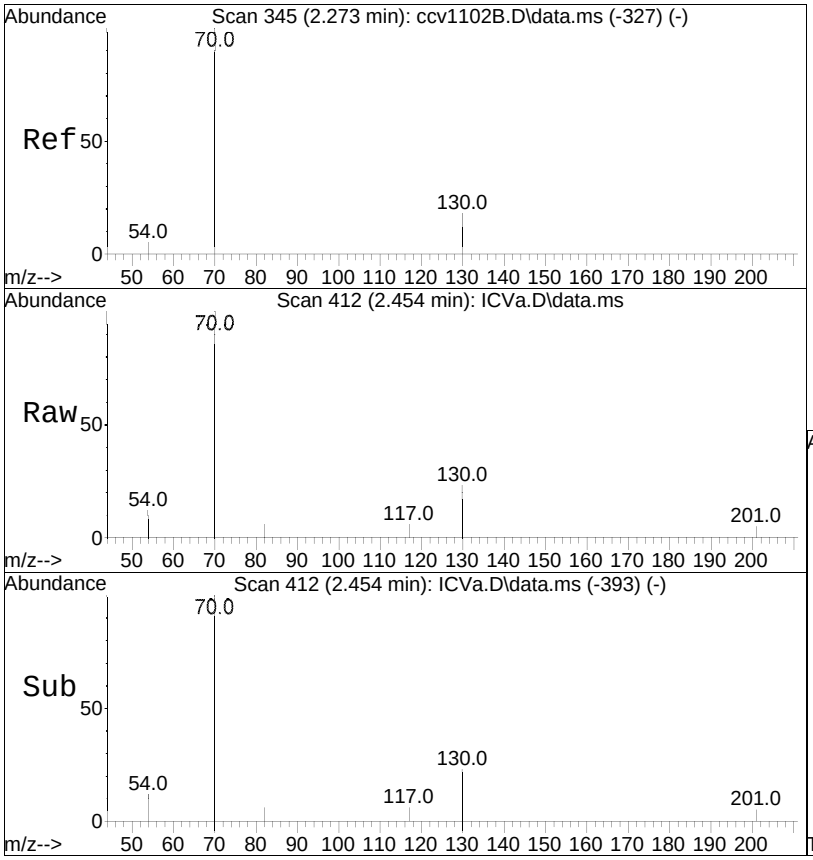


#4
Bis(2-chloroethyl)ether
Concen: 1030.71 ng/ml
RT: 2.114 min Scan# 318
Delta R.T. -0.007 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion: 93 Resp: 581

Ion	Ratio	Lower	Upper
93	100		
63	92.3	73.0	109.6

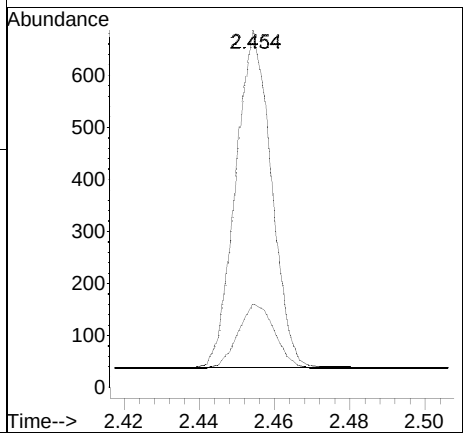


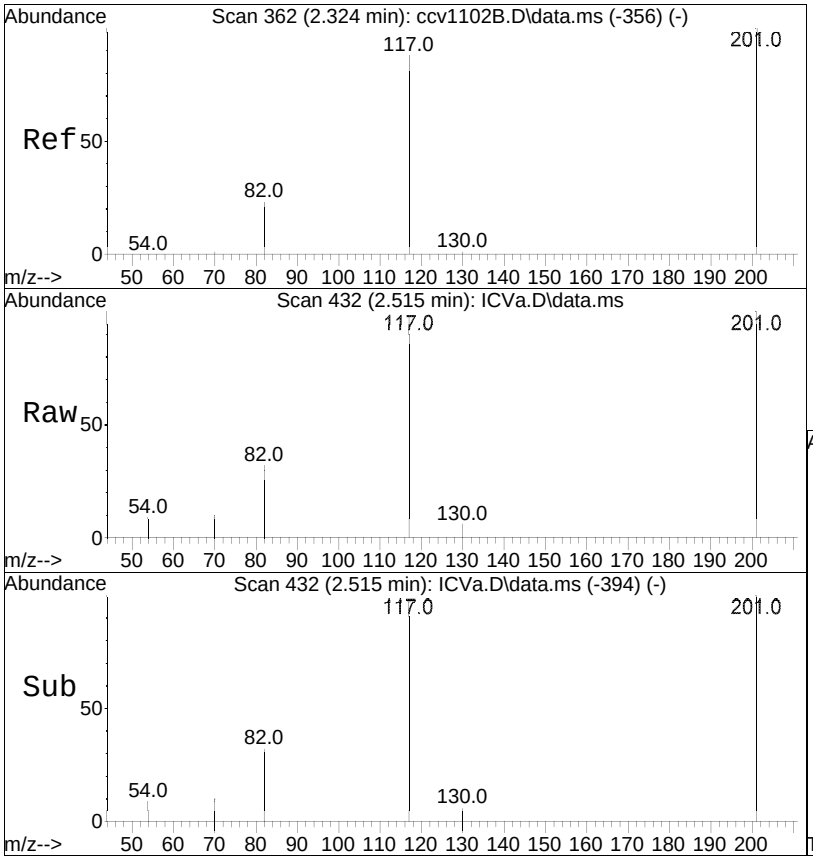


#5
n-nitrosodi-n-propylamine
Concen: 997.96 ng/ml M7
RT: 2.454 min Scan# 412
Delta R.T. -0.007 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion: 70 Resp: 422

Ion	Ratio	Lower	Upper
70	100		
130	19.4	14.6	21.8

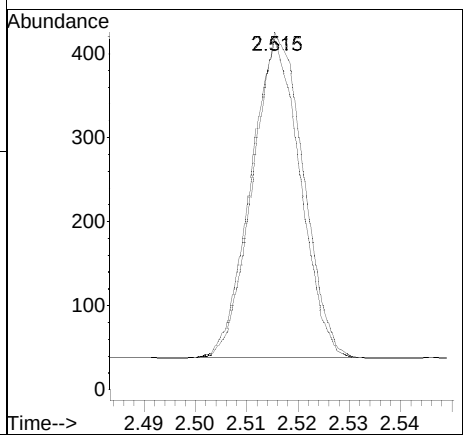


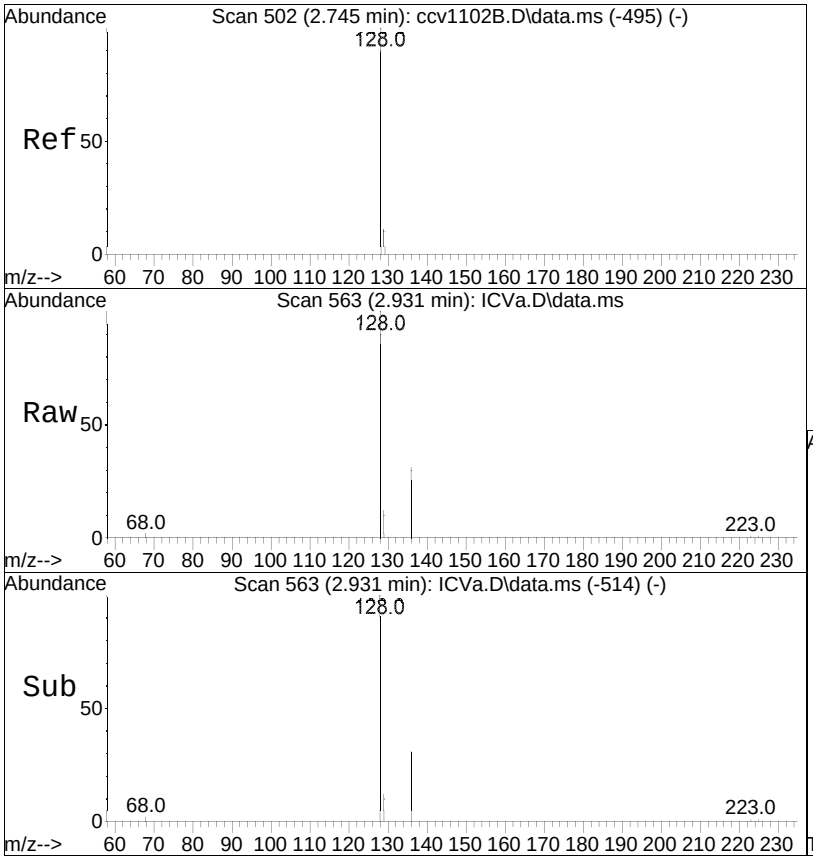


#6
Hexachloroethane
Concen: 1002.02 ng/ml
RT: 2.515 min Scan# 432
Delta R.T. -0.004 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:117 Resp: 252

Ion	Ratio	Lower	Upper
117	100		
201	104.8	91.5	137.3

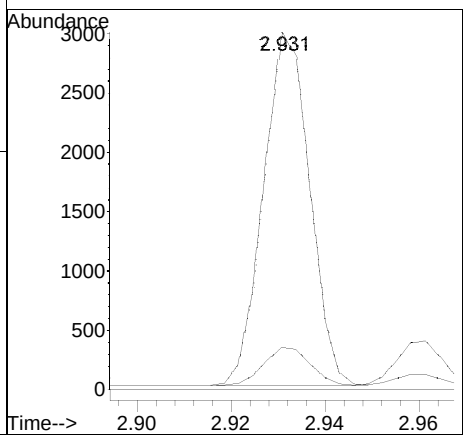


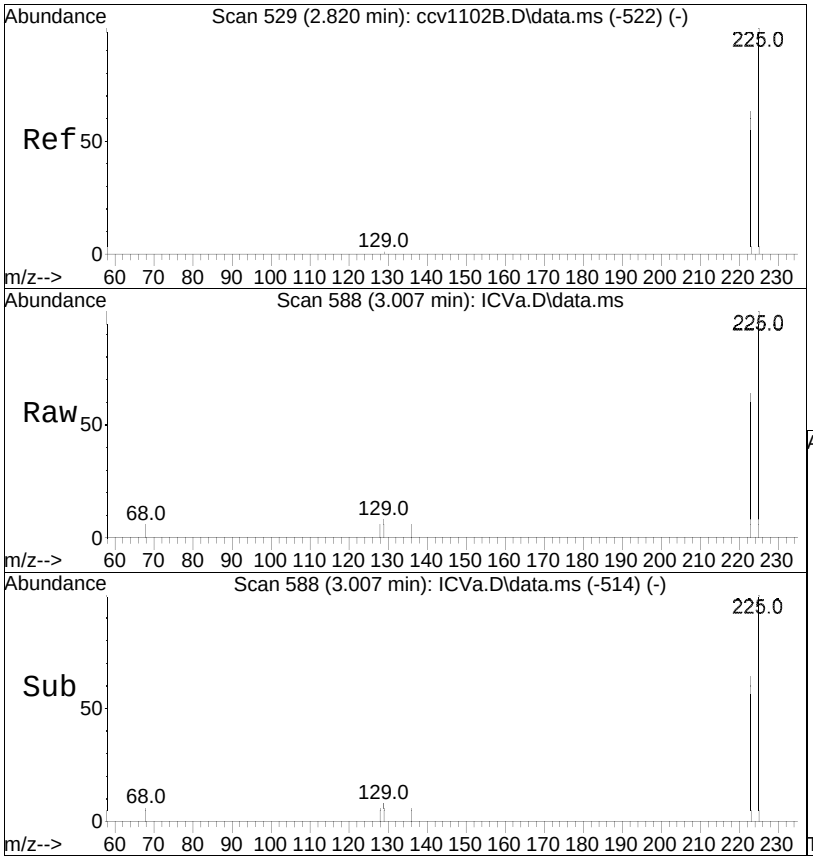


#9
Naphthalene
Concen: 1020.17 ng/ml
RT: 2.931 min Scan# 563
Delta R.T. -0.003 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:128 Resp: 2016

Ion	Ratio	Lower	Upper
128	100		
129	10.9	8.8	13.2
127	0.0	0.0	0.0

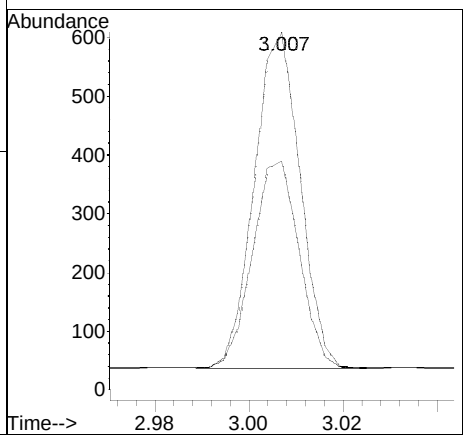


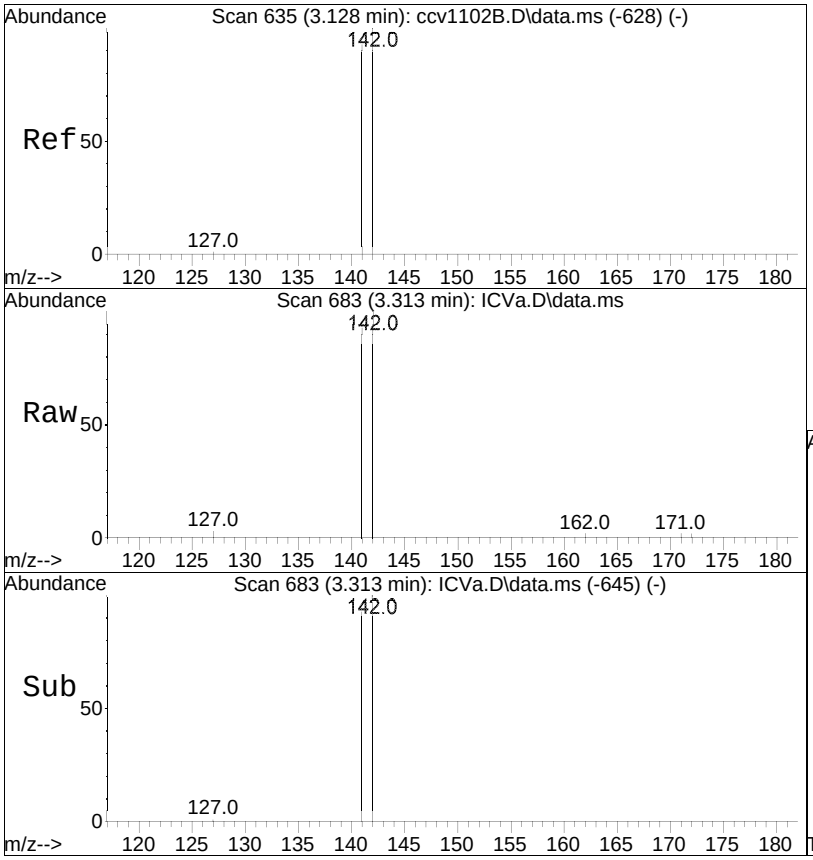


#10
Hexachlorobutadiene
Concen: 1030.72 ng/ml
RT: 3.007 min Scan# 588
Delta R.T. -0.001 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:225 Resp: 383

Ion	Ratio	Lower	Upper
225	100		
223	62.4	50.6	75.8

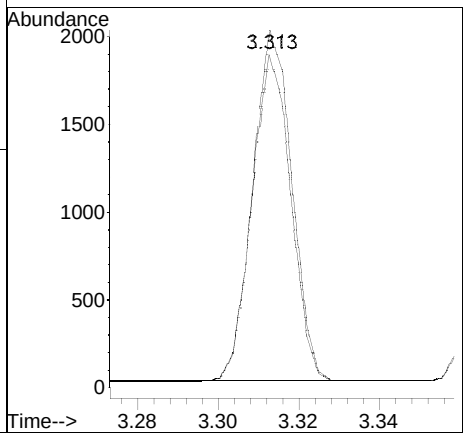


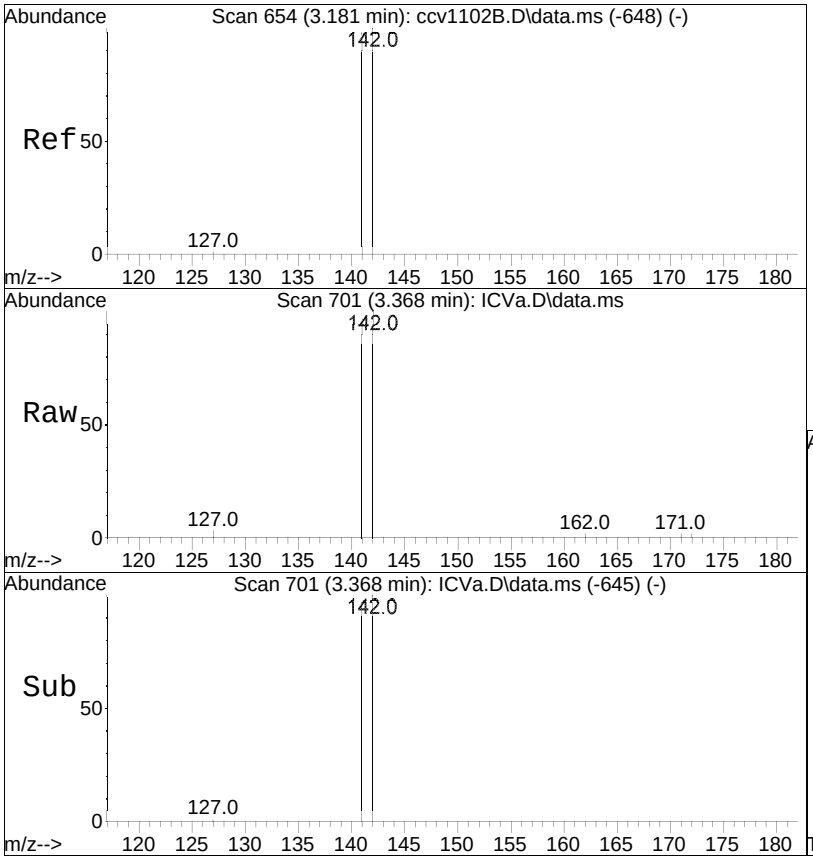


#11
2-Methylnaphthalene
Concen: 1007.55 ng/ml
RT: 3.313 min Scan# 683
Delta R.T. -0.003 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:142 Resp: 1329

Ion	Ratio	Lower	Upper
142	100		
141	92.6	75.0	112.4

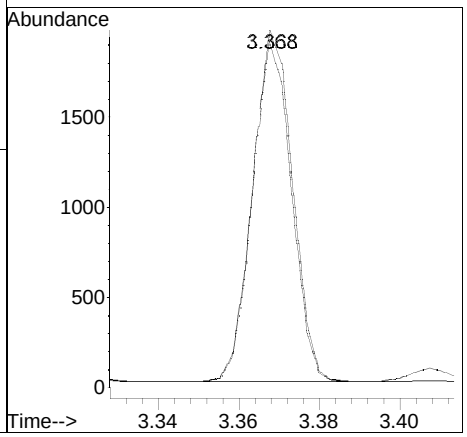


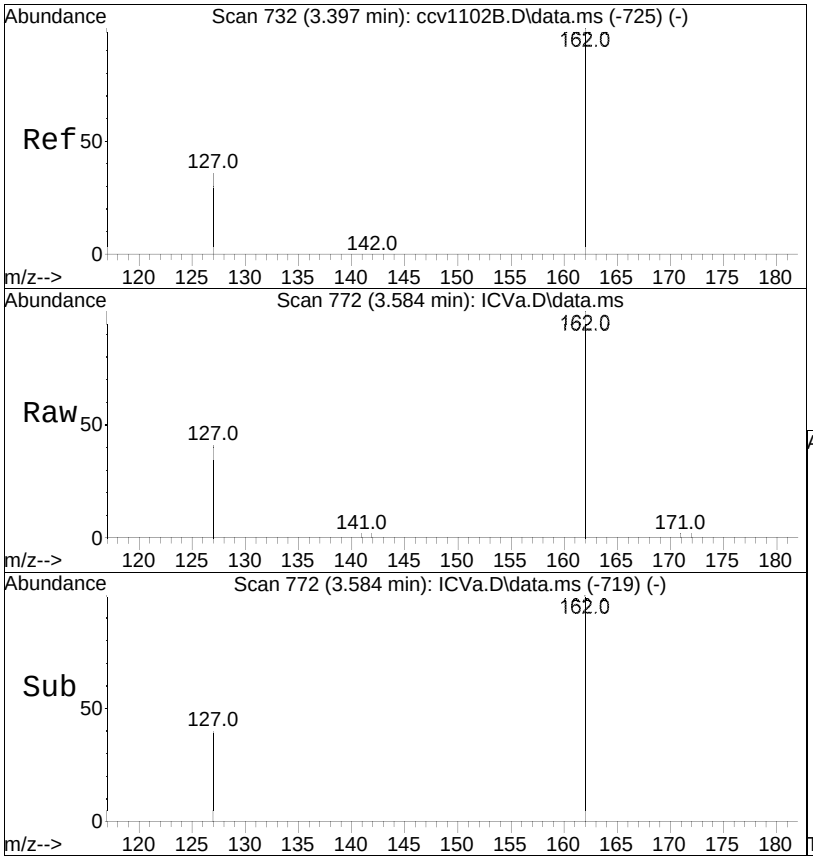


#12
1-Methylnaphthalene
Concen: 1065.41 ng/ml
RT: 3.368 min Scan# 701
Delta R.T. -0.003 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:142 Resp: 1302

Ion	Ratio	Lower	Upper
142	100		
141	96.1	76.7	115.1

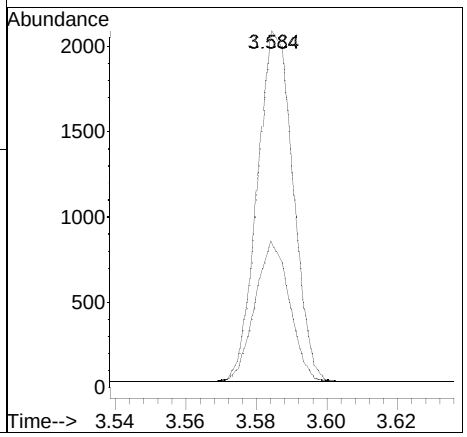


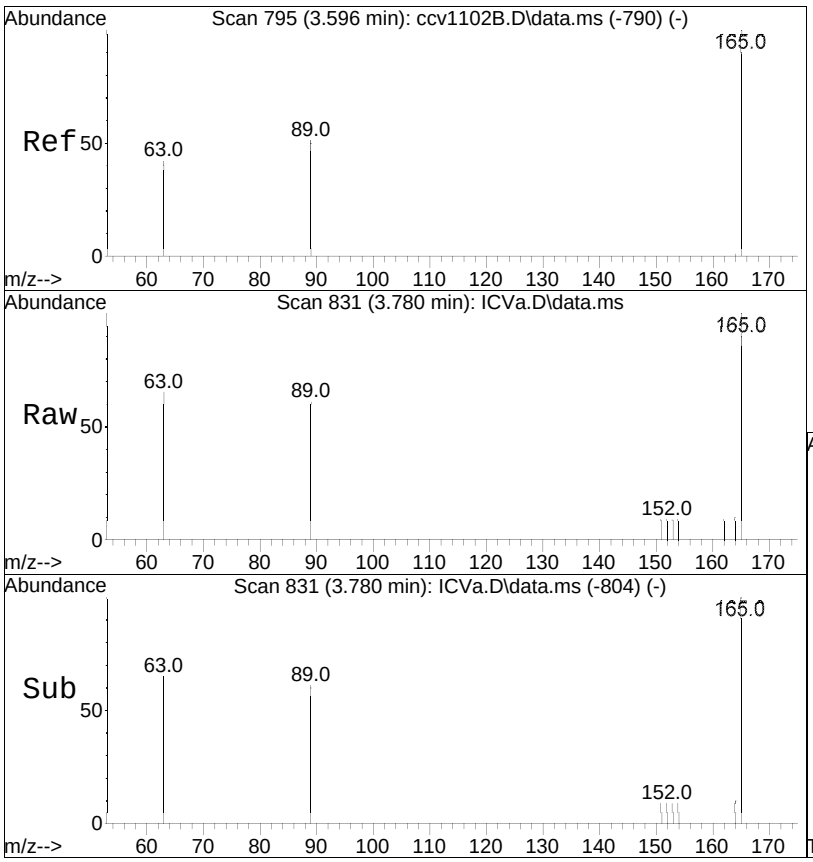


#14
2-Chloronaphthalene
Concen: 1044.28 ng/ml
RT: 3.584 min Scan# 772
Delta R.T. -0.001 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:162 Resp: 1428

Ion	Ratio	Lower	Upper
162	100		
127	38.7	28.7	43.1

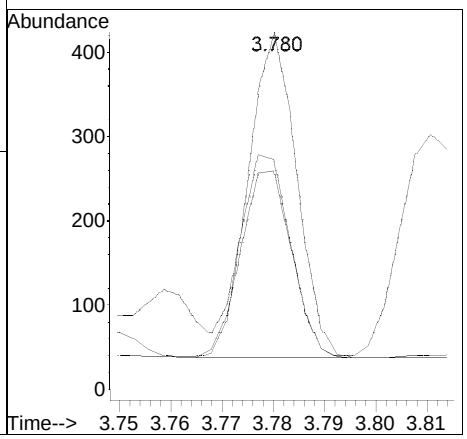


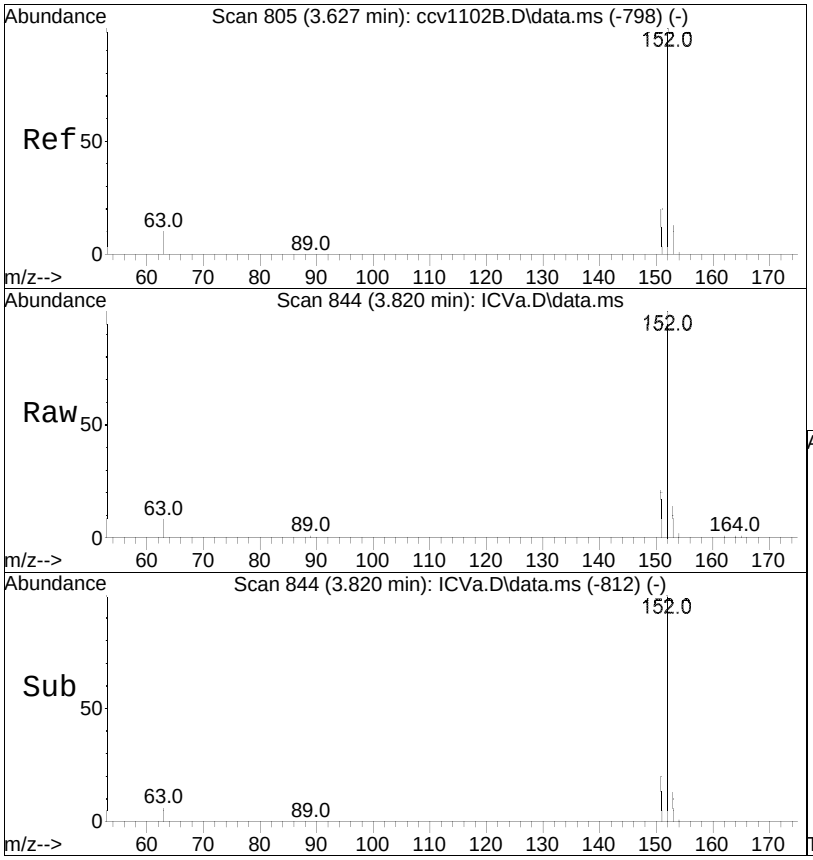


#15
2,6-Dinitrotoluene
Concen: 919.07 ng/ml M4
RT: 3.780 min Scan# 831
Delta R.T. -0.002 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:165 Resp: 251

Ion	Ratio	Lower	Upper
165	100		
89	61.0	45.0	67.6
63	64.9	46.2	69.2

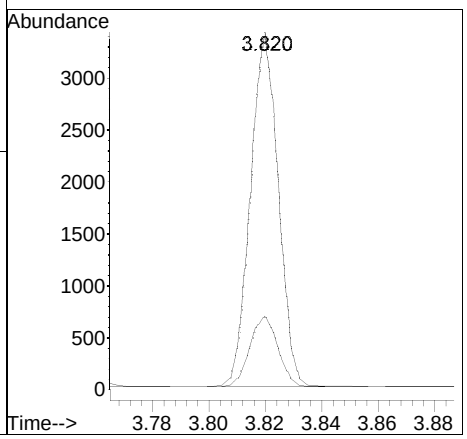


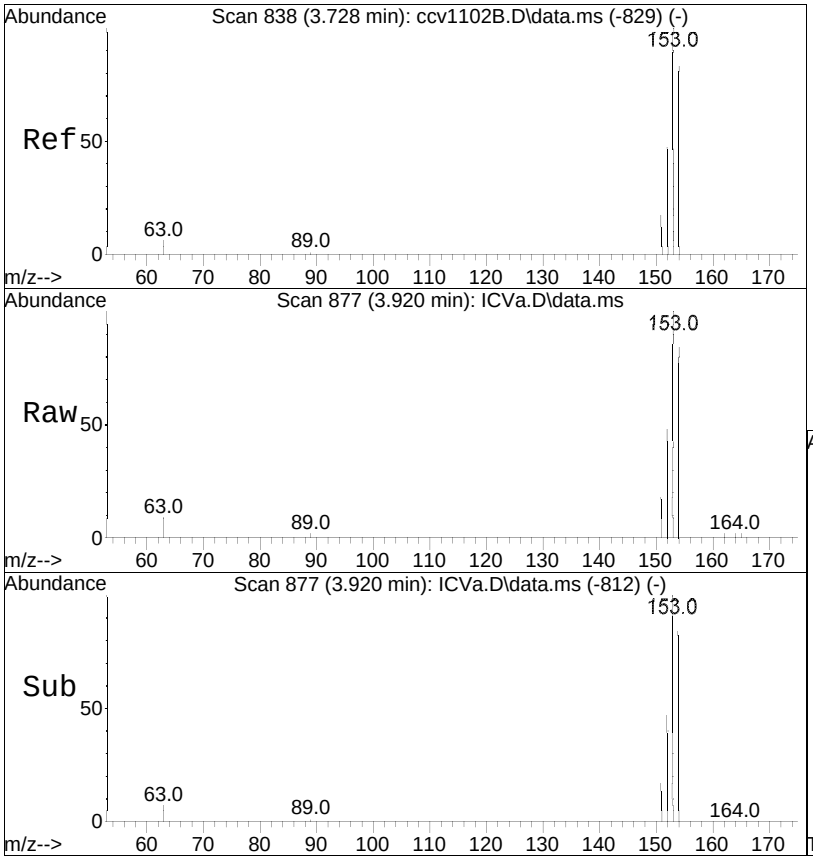


#16
Acenaphthylene
Concen: 1052.49 ng/ml
RT: 3.820 min Scan# 844
Delta R.T. -0.000 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:152 Resp: 2292

Ion	Ratio	Lower	Upper
152	100		
151	19.9	16.1	24.1

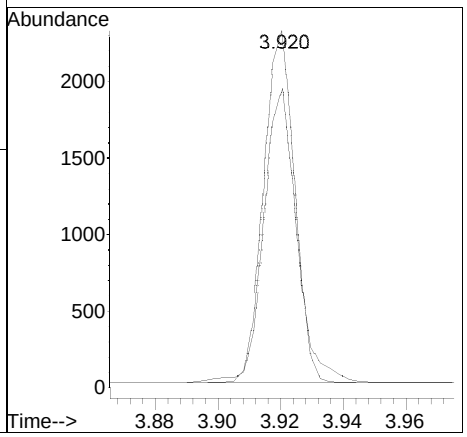


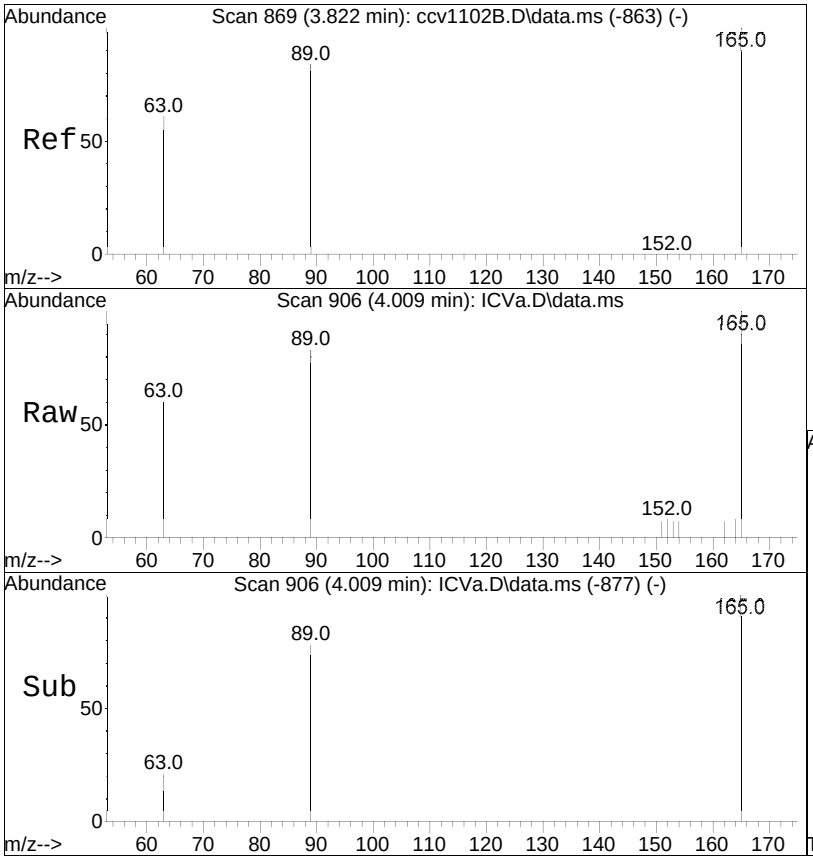


#18
Acenaphthene
Concen: 1001.12 ng/ml
RT: 3.920 min Scan# 877
Delta R.T. 0.002 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:153 Resp: 1560

Ion	Ratio	Lower	Upper
153	100		
154	89.2	67.4	101.2

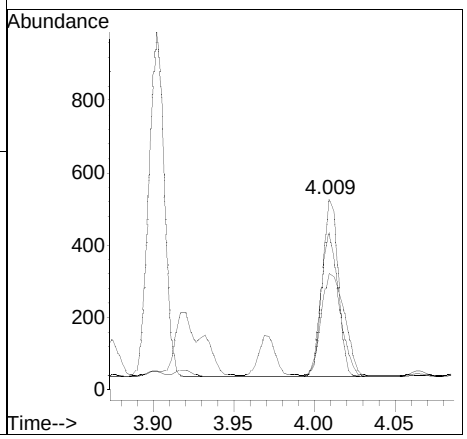


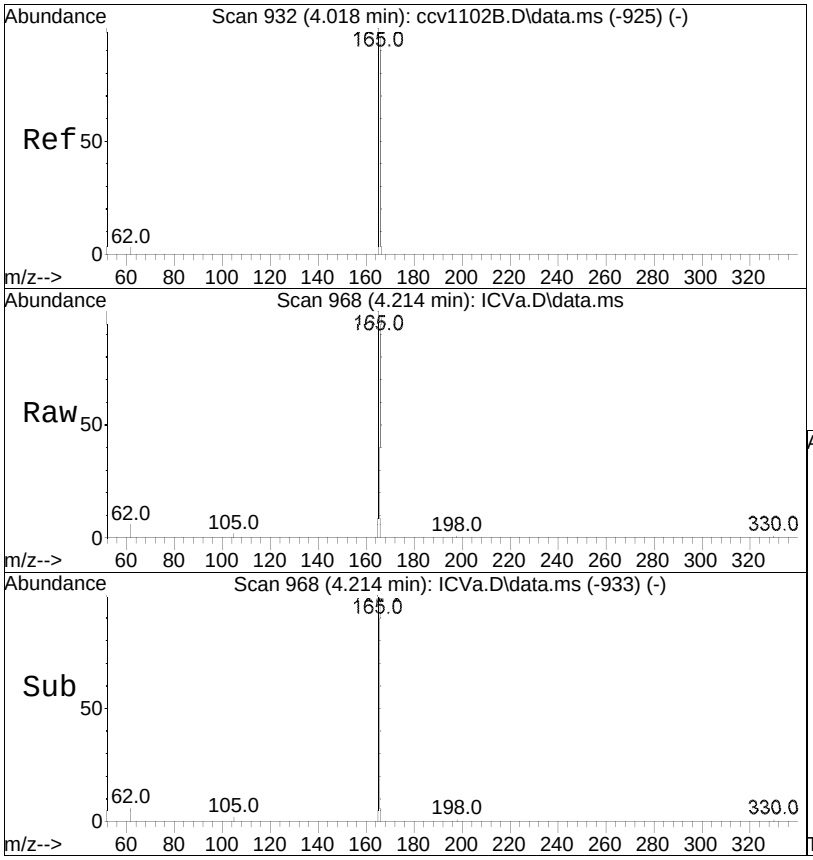


#19
2,4-Dinitrotoluene
Concen: 891.39 ng/ml
RT: 4.009 min Scan# 906
Delta R.T. -0.001 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:165 Resp: 333

Ion	Ratio	Lower	Upper
165	100		
89	93.4	71.4	107.2
63	84.1	67.9	101.9

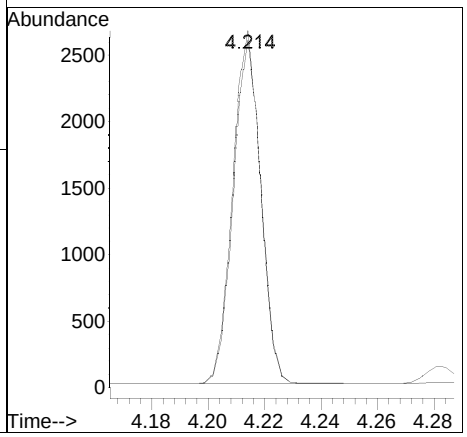


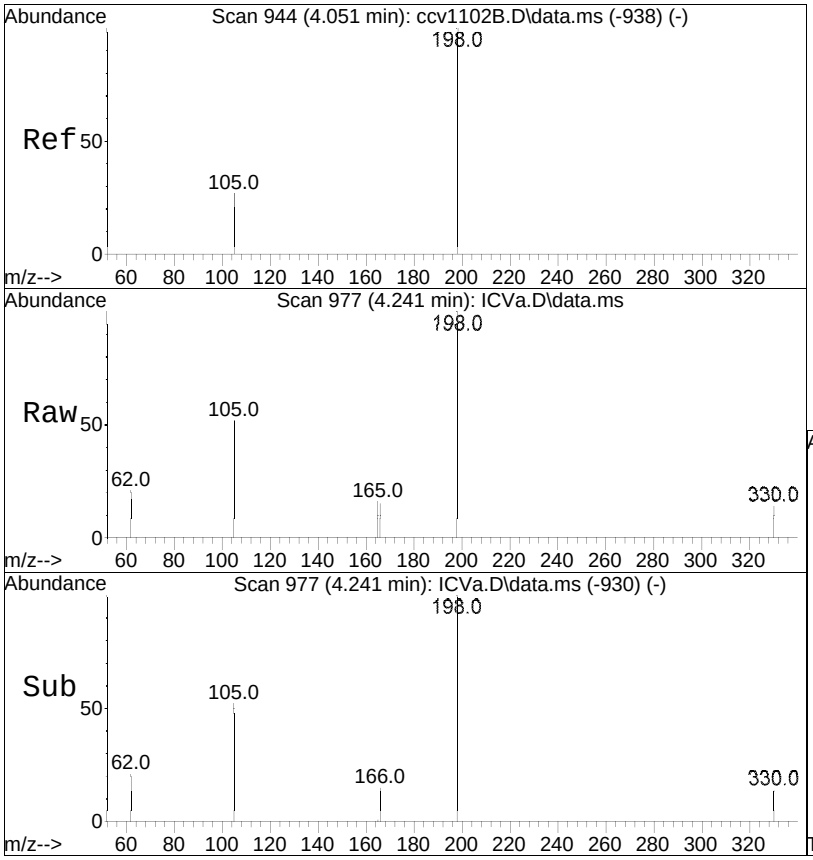


#20
Fluorene
Concen: 1026.25 ng/ml
RT: 4.214 min Scan# 968
Delta R.T. 0.002 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:166 Resp: 1745

Ion	Ratio	Lower	Upper
166	100		
165	106.5	82.7	124.1

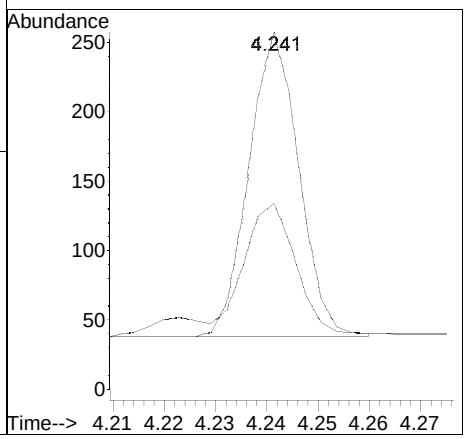


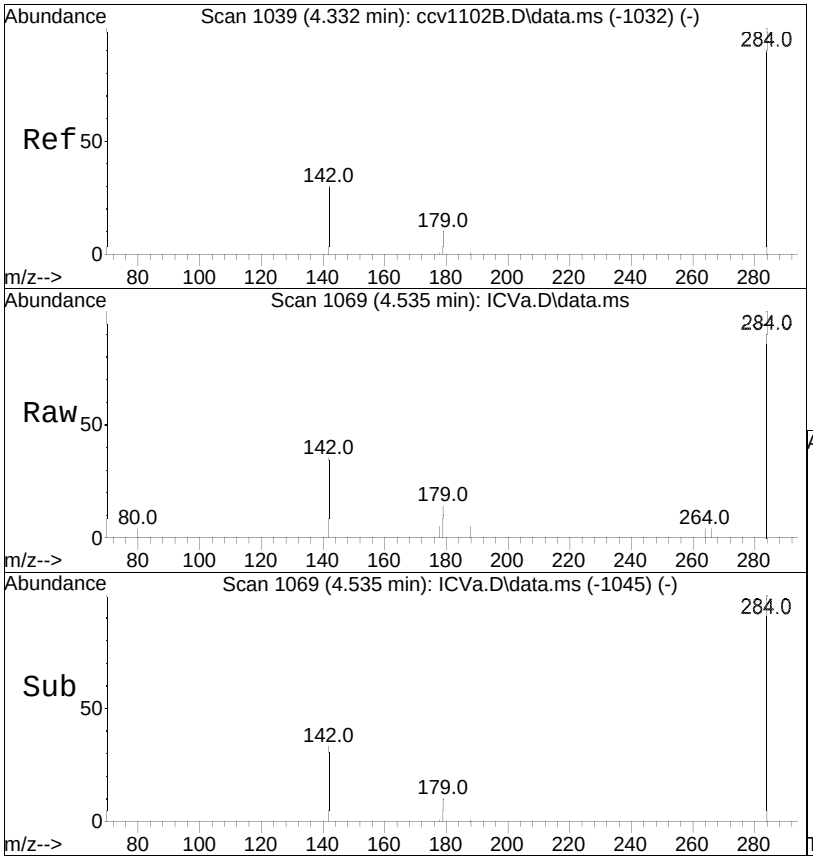


#23
4,6-Dinitro-o-cresol
Concen: 724.00 ng/ml M6
RT: 4.241 min Scan# 977
Delta R.T. -0.002 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:198 Resp: 147

Ion	Ratio	Lower	Upper
198	100		
105	43.5	26.7	40.1#

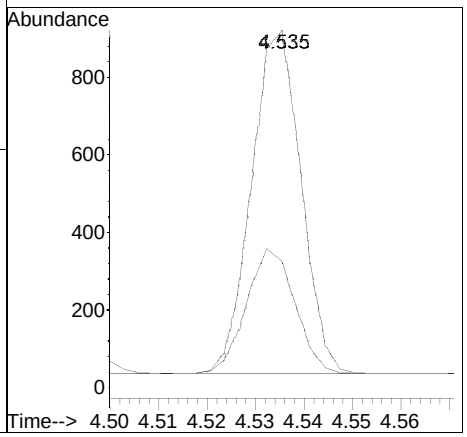


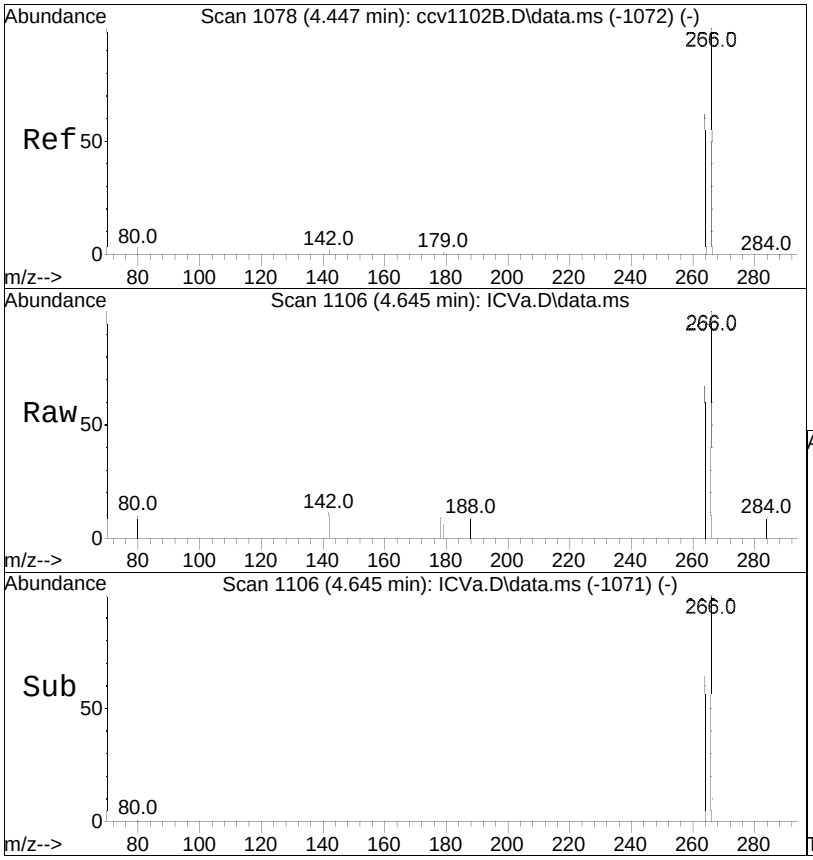


#24
Hexachlorobenzene
Concen: 953.09 ng/ml M6
RT: 4.535 min Scan# 1069
Delta R.T. 0.002 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:284 Resp: 617

Ion	Ratio	Lower	Upper
284	100		
142	35.8	26.6	40.0

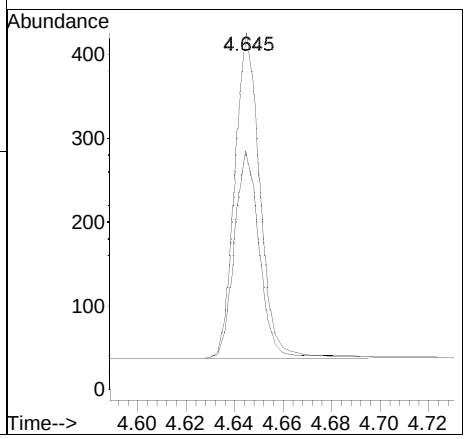


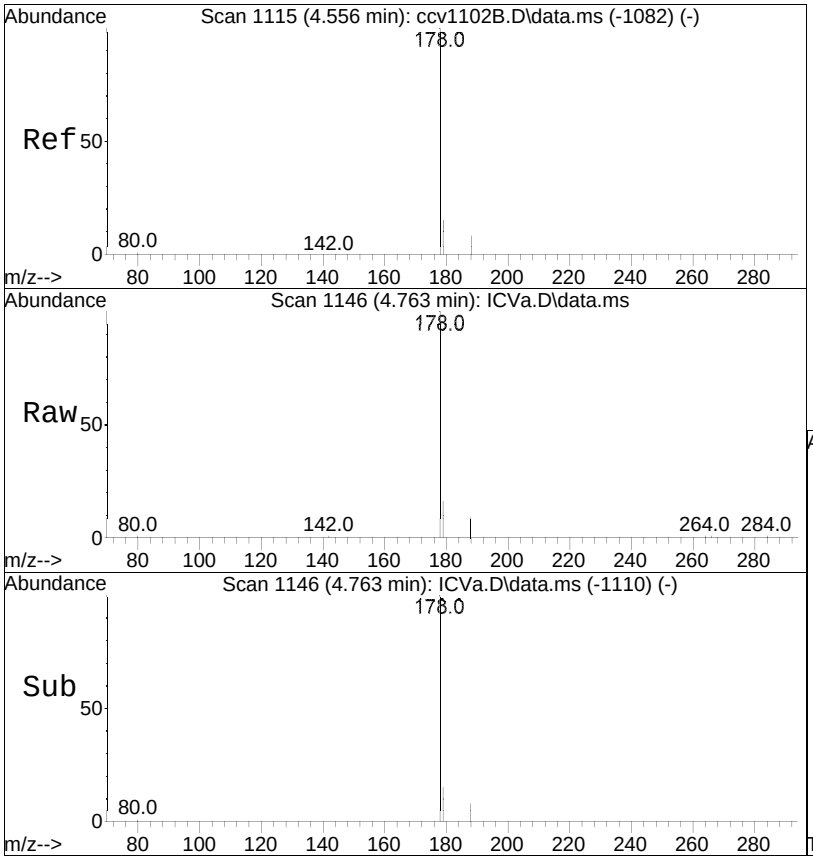


#25
Pentachlorophenol
Concen: 703.08 ng/ml
RT: 4.645 min Scan# 1106
Delta R.T. 0.002 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:266 Resp: 283

Ion	Ratio	Lower	Upper
266	100		
264	62.9	49.8	74.8

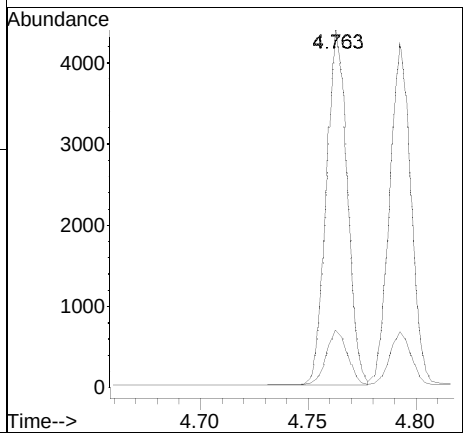


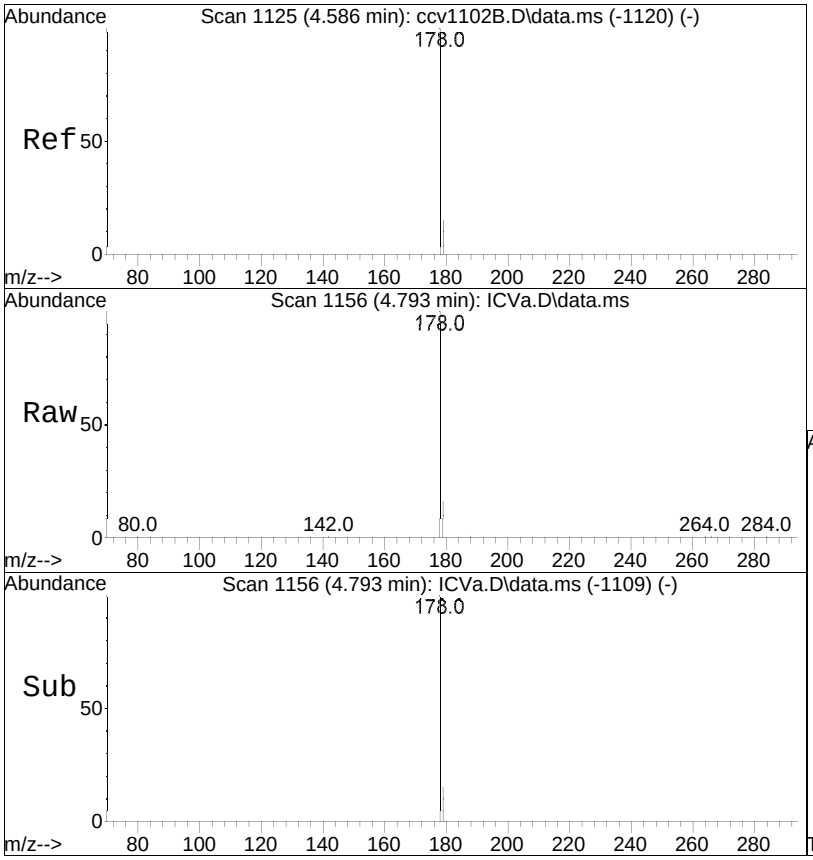


#26
Phenanthrene
Concen: 980.20 ng/ml
RT: 4.763 min Scan# 1146
Delta R.T. -0.001 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:178 Resp: 2946

Ion	Ratio	Lower	Upper
178	100		
179	15.4	12.4	18.6

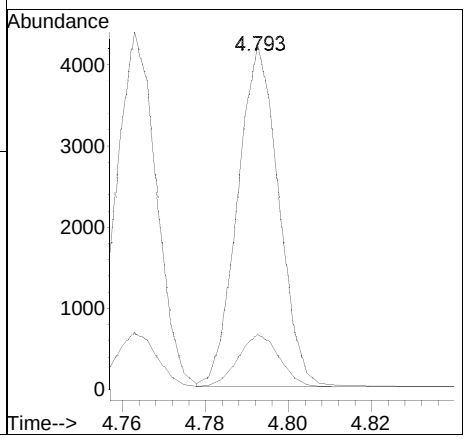


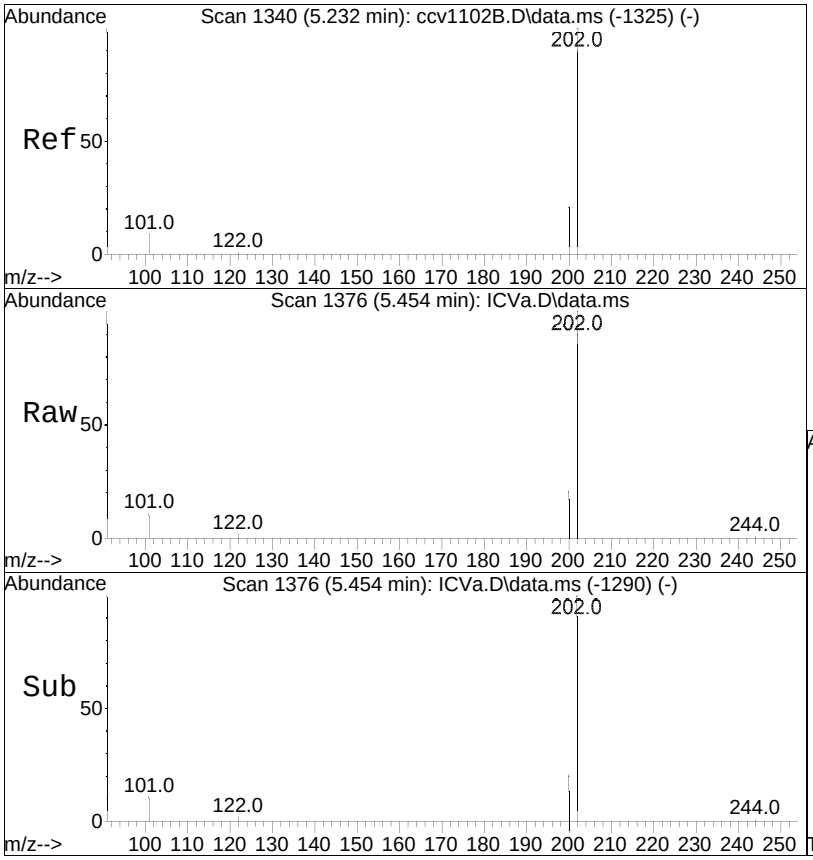


#27
Anthracene
Concen: 986.36 ng/ml M6
RT: 4.793 min Scan# 1156
Delta R.T. 0.003 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:178 Resp: 2885

Ion	Ratio	Lower	Upper
178	100		
179	15.3	12.6	19.0

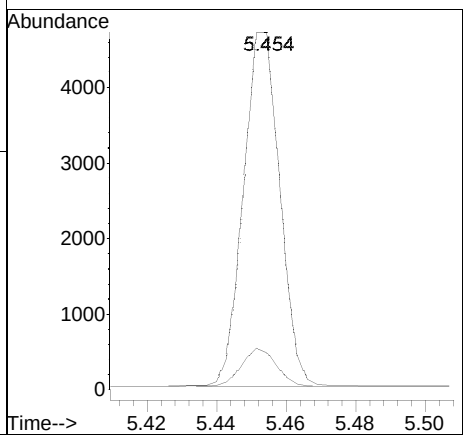


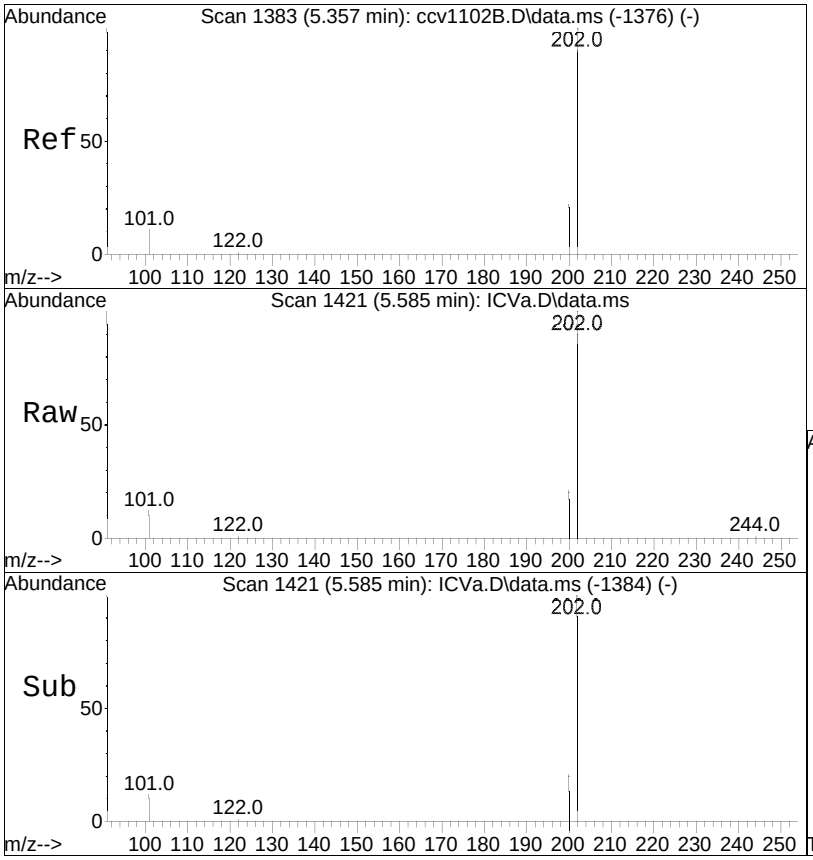


#28
Fluoranthene
Concen: 971.11 ng/ml M6
RT: 5.454 min Scan# 1376
Delta R.T. 0.005 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:202 Resp: 3391

Ion	Ratio	Lower	Upper
202	100		
101	10.5	7.0	10.6

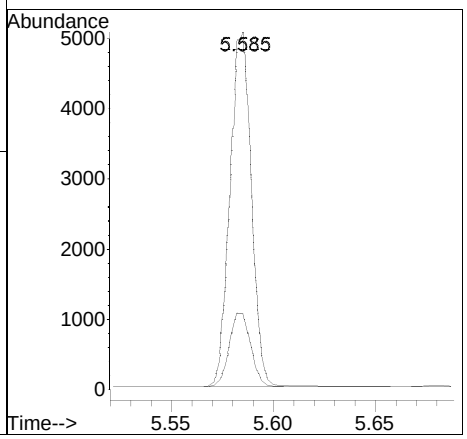


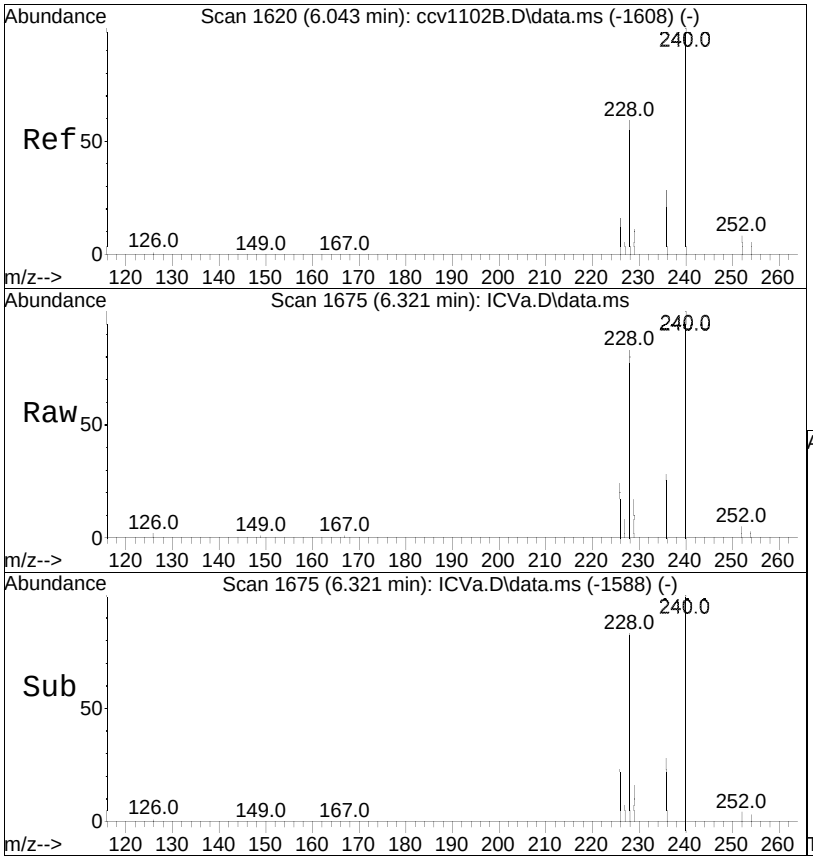


#29
Pyrene
Concen: 1002.20 ng/ml
RT: 5.585 min Scan# 1421
Delta R.T. 0.002 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:202 Resp: 3622

Ion	Ratio	Lower	Upper
202	100		
200	21.1	17.0	25.4

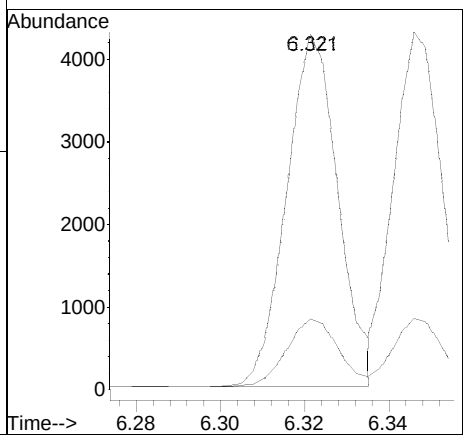


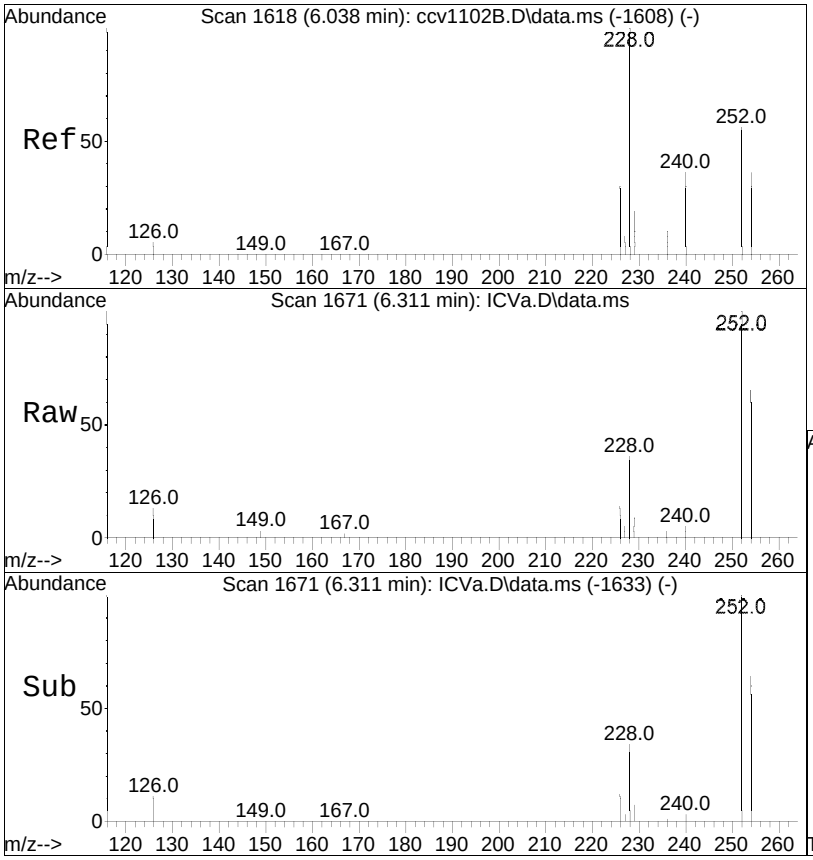


#32
Benzo[a]anthracene
Concen: 914.46 ng/ml
RT: 6.321 min Scan# 1675
Delta R.T. -0.001 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:228 Resp: 3629

Ion	Ratio	Lower	Upper
228	100		
229	19.5	15.7	23.5

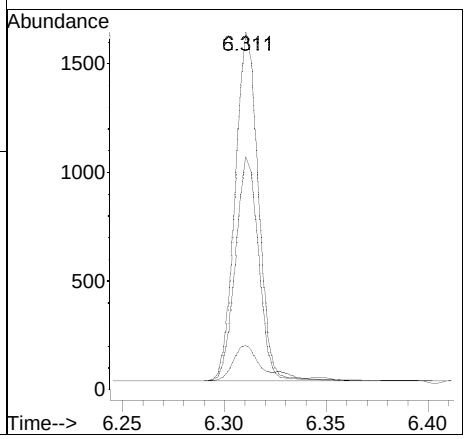


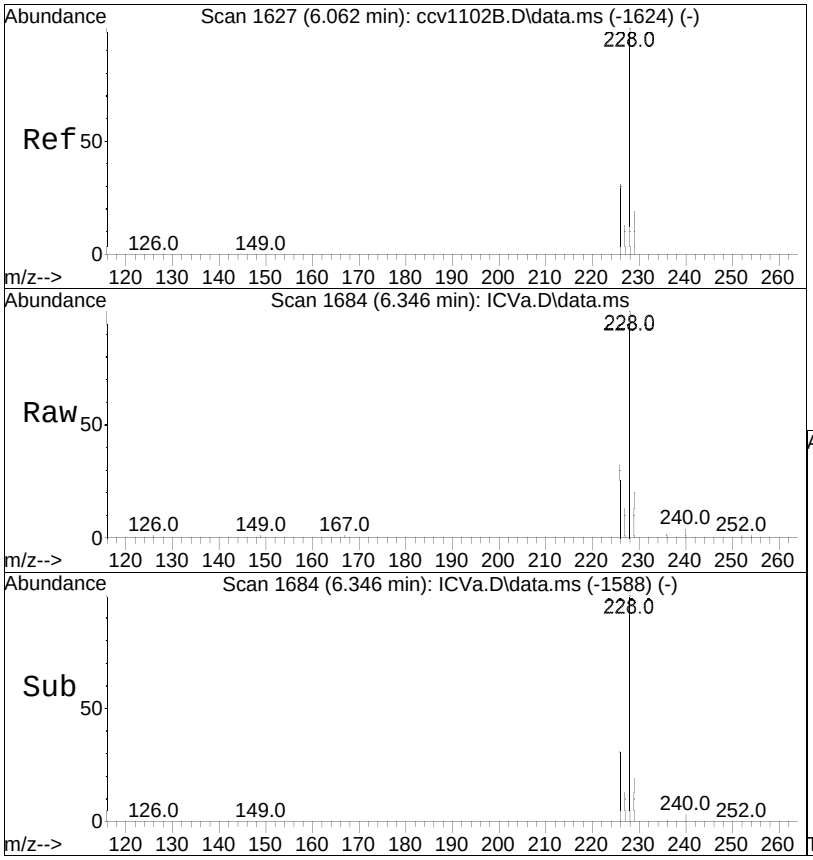


#33
3,3'-Dichlorobenzidine
Concen: 848.25 ng/ml
RT: 6.311 min Scan# 1671
Delta R.T. 0.003 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:252 Resp: 1268

Ion	Ratio	Lower	Upper
252	100		
126	14.0	9.1	13.7#
254	65.1	51.6	77.4

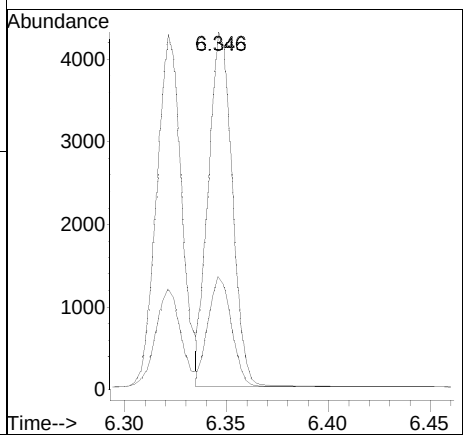


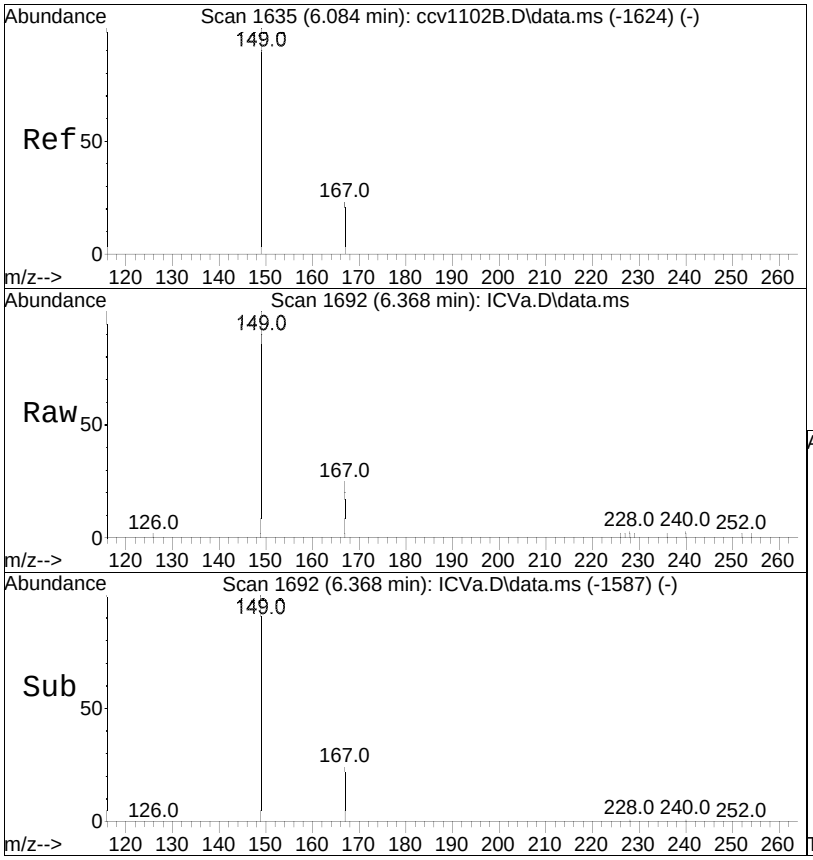


#34
Chrysene
Concen: 941.59 ng/ml
RT: 6.346 min Scan# 1684
Delta R.T. 0.002 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:228 Resp: 3482

Ion	Ratio	Lower	Upper
228	100		
226	30.5	24.6	37.0

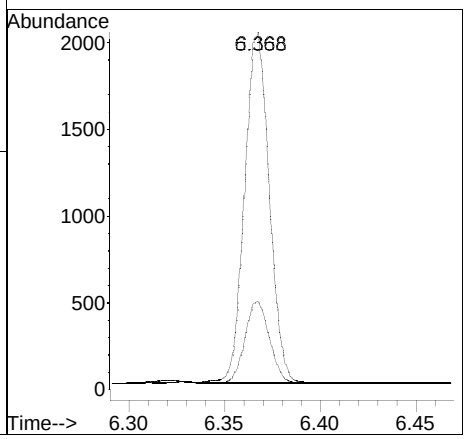


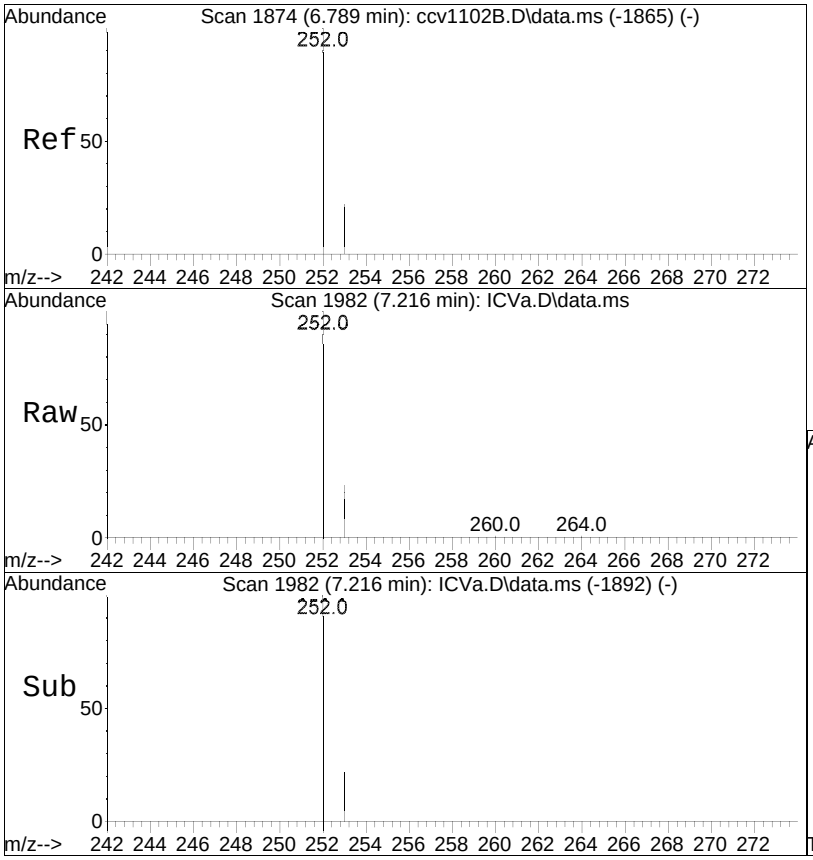


#35
Bis(2-ethylhexyl)phthalate
Concen: 763.86 ng/ml
RT: 6.368 min Scan# 1692
Delta R.T. 0.002 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:149 Resp: 1783

Ion	Ratio	Lower	Upper
149	100		
167	23.2	18.7	28.1

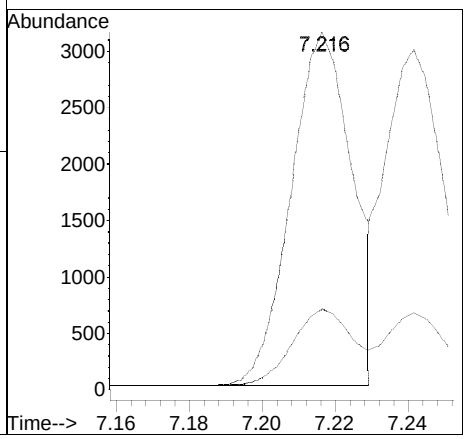


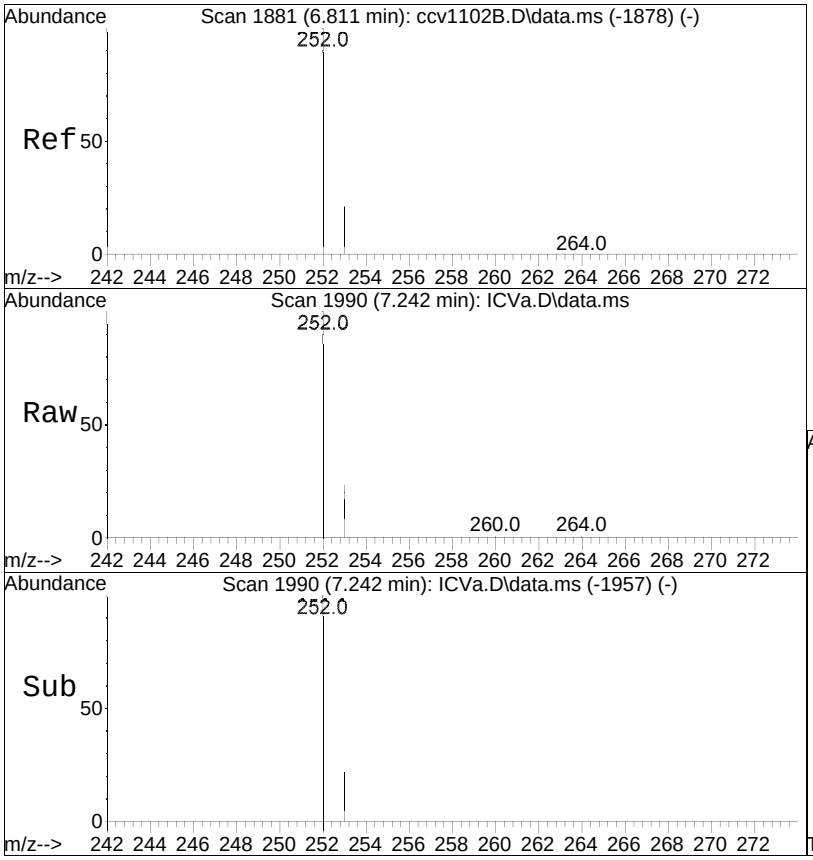


#37
Benzo[b]fluoranthene
Concen: 949.44 ng/ml M6
RT: 7.216 min Scan# 1982
Delta R.T. 0.004 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:252 Resp: 3675

Ion	Ratio	Lower	Upper
252	100		
253	21.6	17.4	26.0

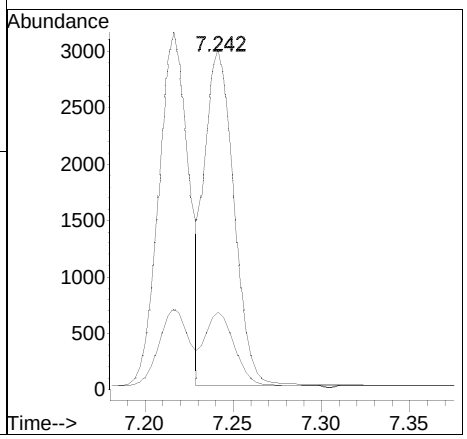


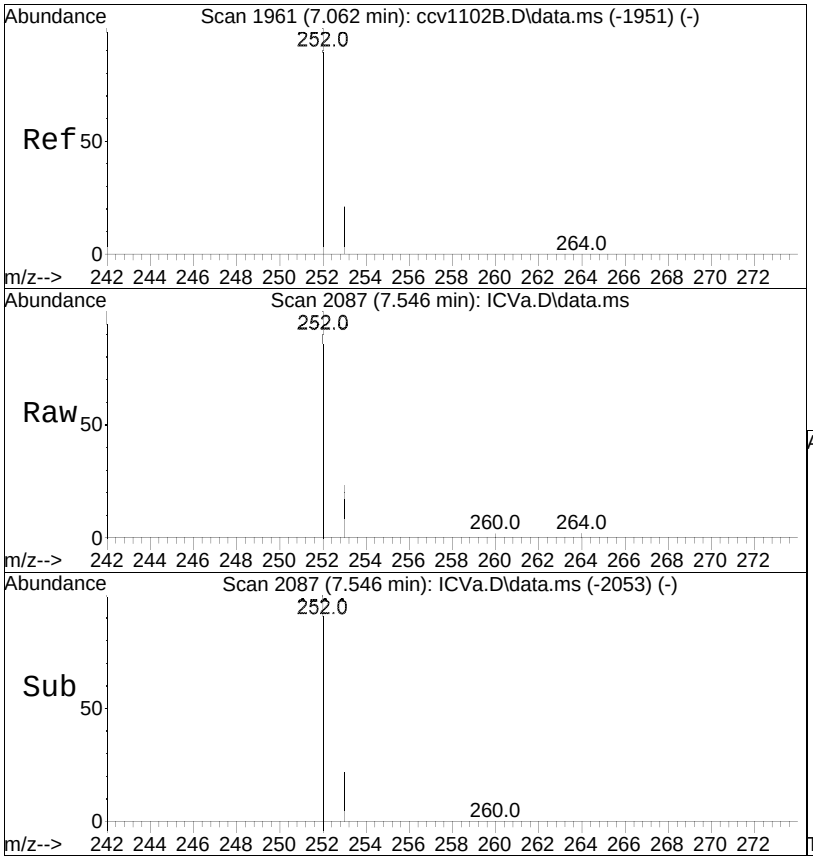


#38
Benzo[k]fluoranthene
Concen: 953.62 ng/ml
RT: 7.242 min Scan# 1990
Delta R.T. 0.005 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:252 Resp: 3416

Ion	Ratio	Lower	Upper
252	100		
253	23.4	17.4	26.2

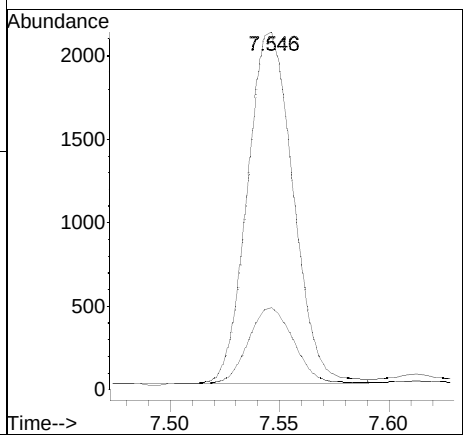


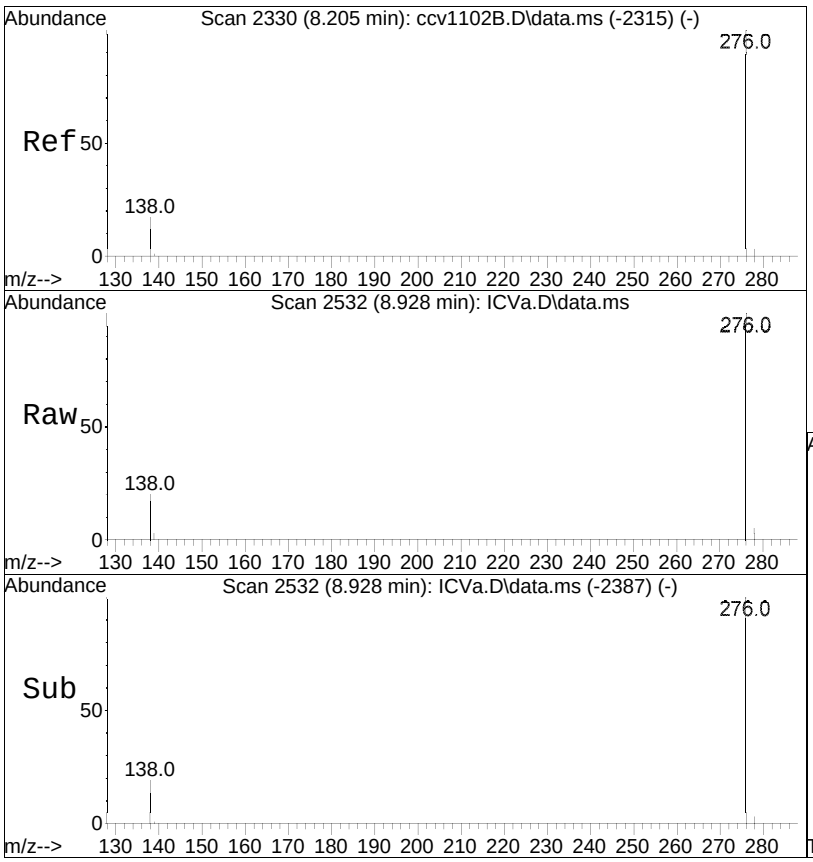


#39
Benzo[a]pyrene
Concen: 909.06 ng/ml M6
RT: 7.546 min Scan# 2087
Delta R.T. 0.008 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:252 Resp: 3022

Ion	Ratio	Lower	Upper
252	100		
253	21.5	17.3	25.9

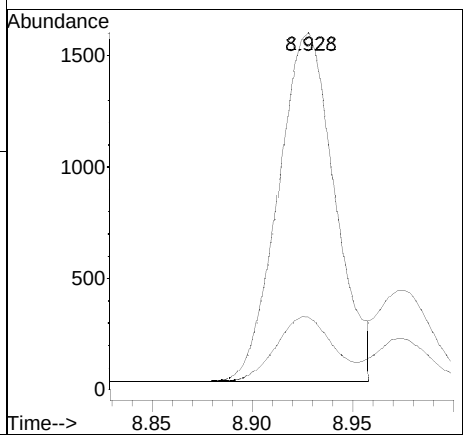


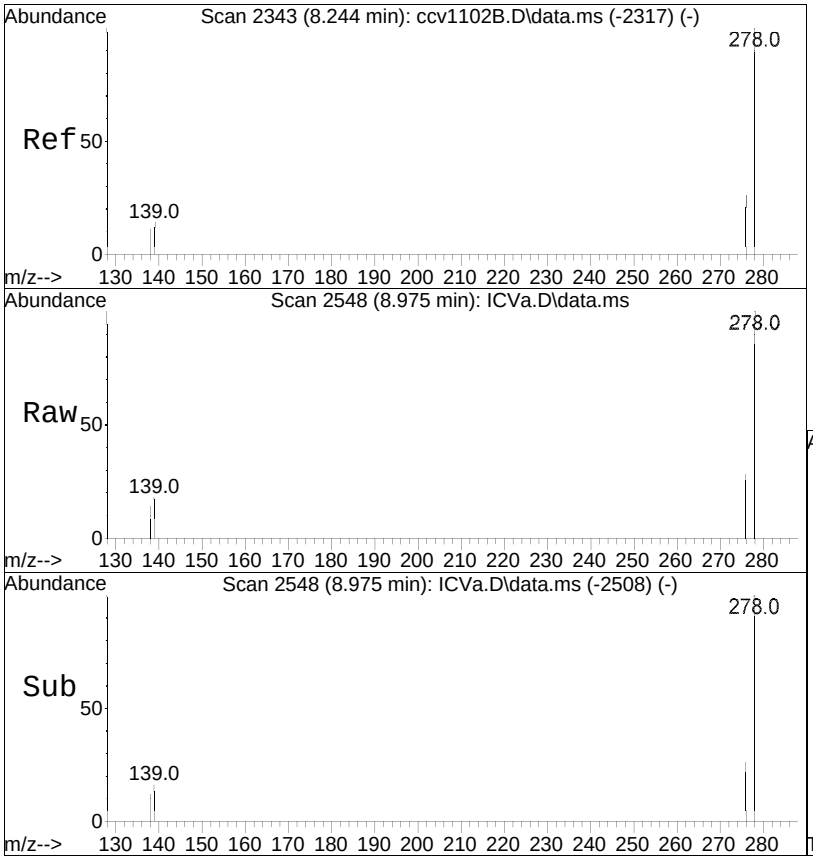


#40
Indeno[1,2,3-cd]pyrene
Concen: 920.39 ng/ml
RT: 8.928 min Scan# 2532
Delta R.T. 0.001 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:276 Resp: 3062

Ion	Ratio	Lower	Upper
276	100		
138	18.7	13.8	20.6

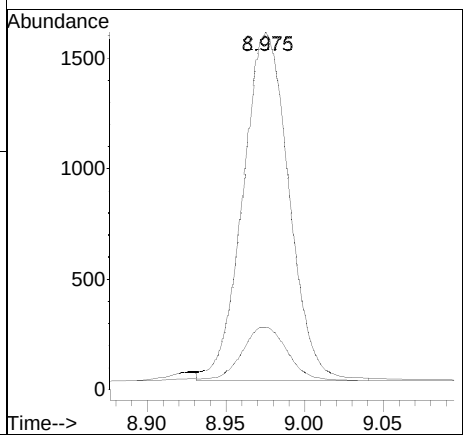


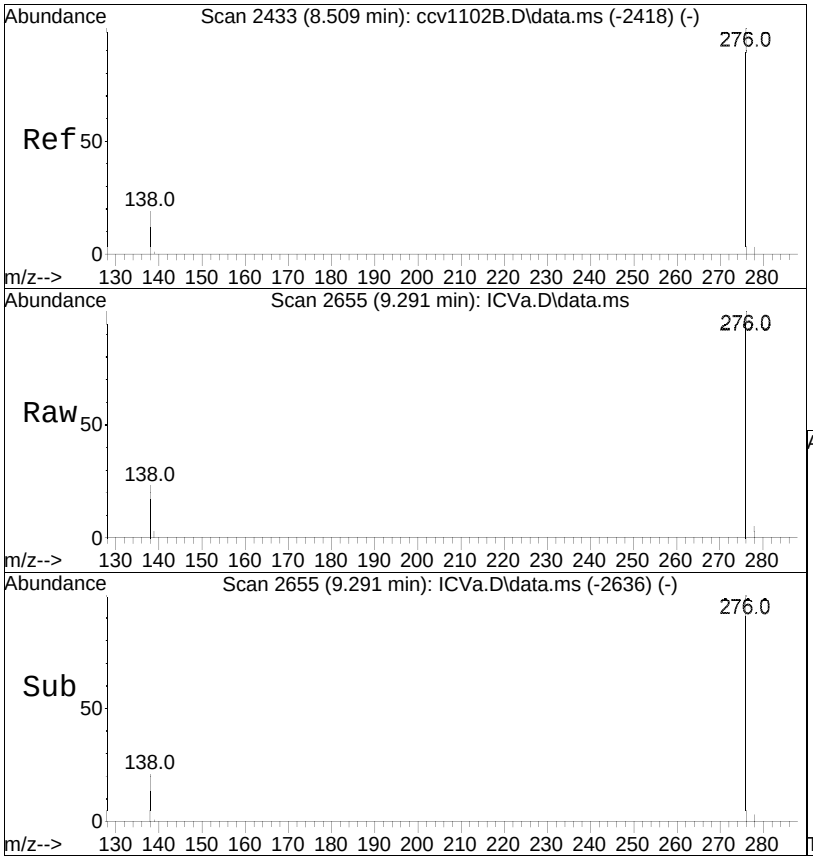


#41
Dibenzo[a,h]anthracene
Concen: 999.31 ng/ml M6
RT: 8.975 min Scan# 2548
Delta R.T. 0.019 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:278 Resp: 3200

Ion	Ratio	Lower	Upper
278	100		
139	15.4	11.2	16.8

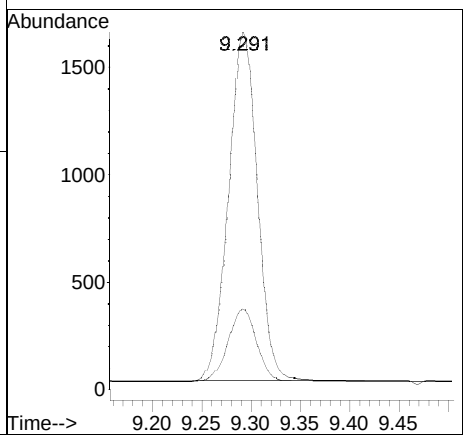




#42
Benzo[g,h,i]perylene
Concen: 957.66 ng/ml
RT: 9.291 min Scan# 2655
Delta R.T. -0.043 min
Lab File: ICVa.D
Acq: 05 Sep 2023 11:08 am

Tgt Ion:276 Resp: 3271

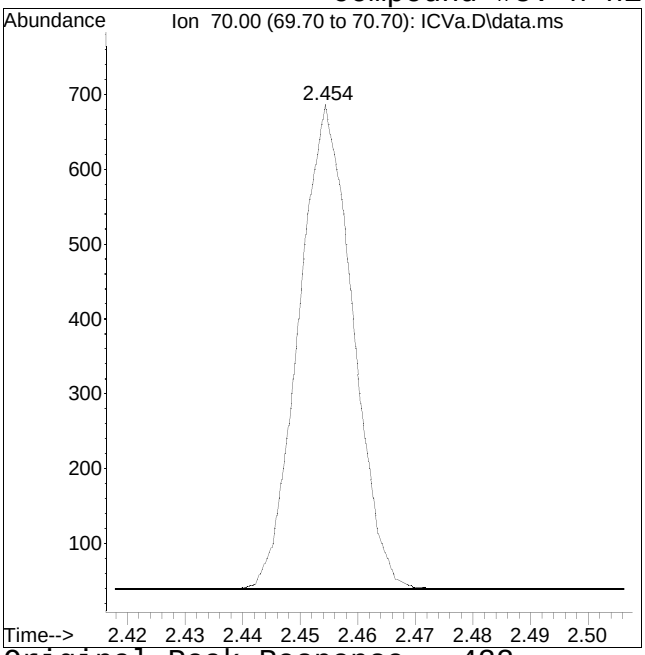
Ion	Ratio	Lower	Upper
276	100		
138	20.7	15.0	22.6



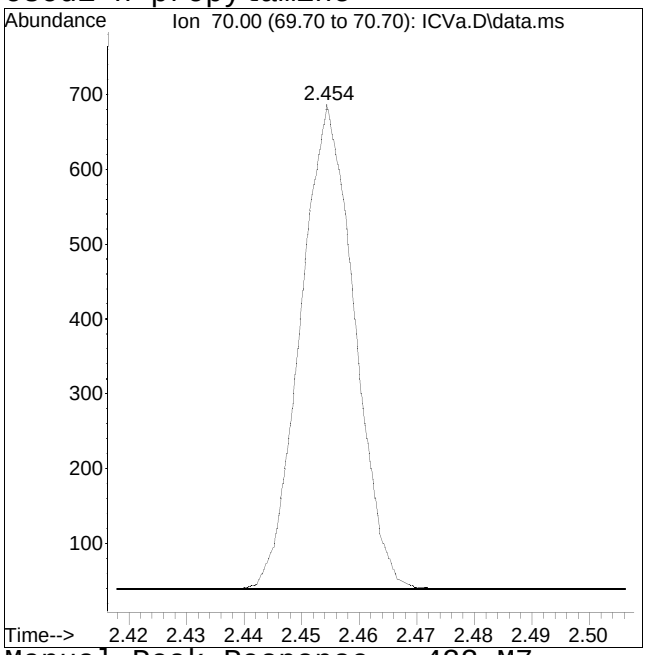
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : ICVa.D Operator : SV128:ah
Date Inj'd : 9/5/2023 11:08 am Instrument : SV128
Sample : CQICV,32,, 1.0 Lot#10193 Quant Date : 9/5/2023 11:58 am

Compound #5: n-nitrosodi-n-propylamine



Original Peak Response = 422



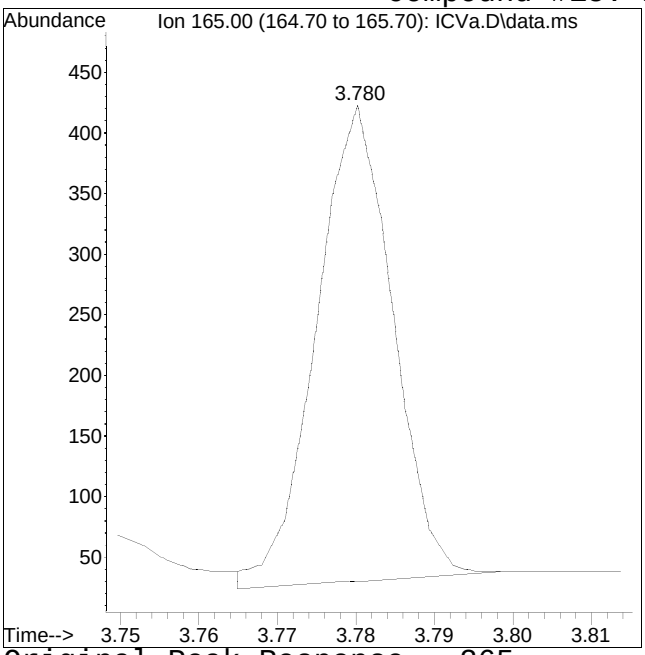
Manual Peak Response = 422 M7

M7 = A qualifier ion was manually integrated (only for GC/MS data).

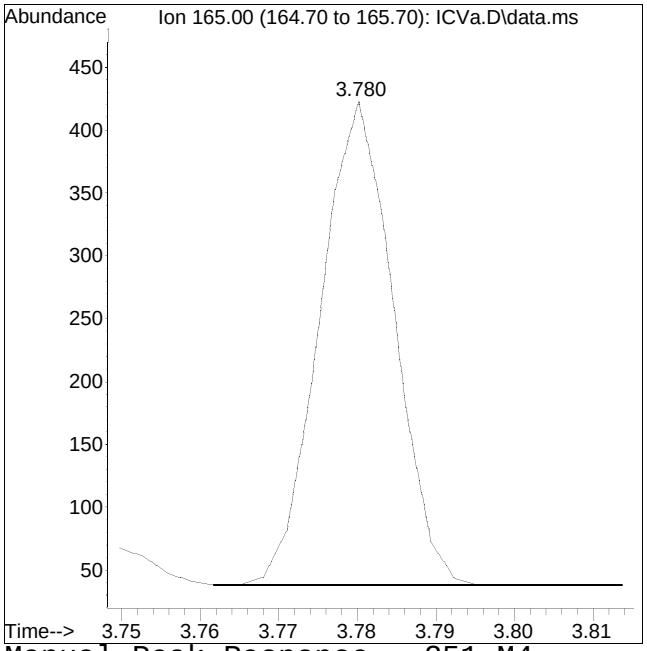
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : ICVa.D Operator : SV128:ah
Date Inj'd : 9/5/2023 11:08 am Instrument : SV128
Sample : CQICV,32,, 1.0 Lot#10193 Quant Date : 9/5/2023 11:58 am

Compound #15: 2,6-Dinitrotoluene



Original Peak Response = 265



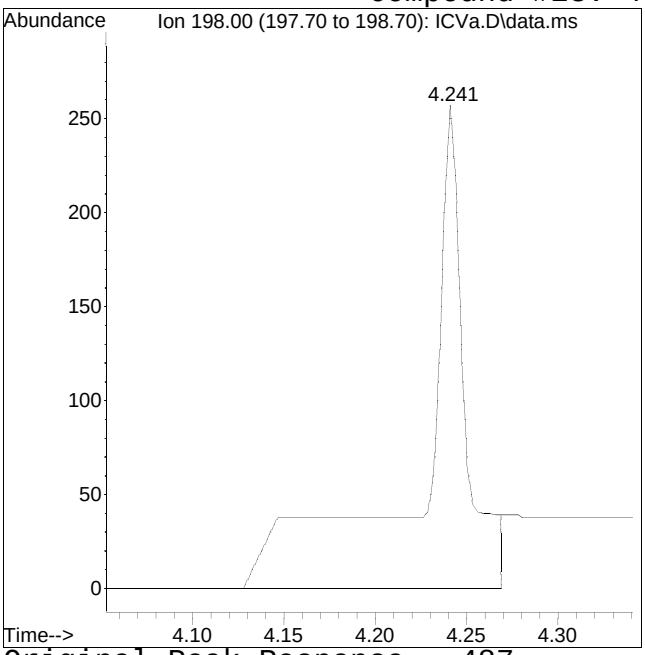
Manual Peak Response = 251 M4

M4 = Poor automated baseline construction.

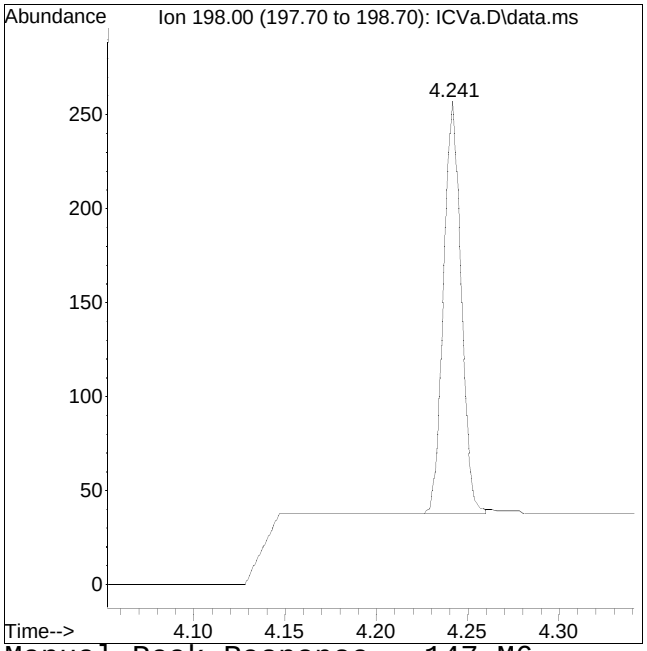
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : ICVa.D Operator : SV128:ah
Date Inj'd : 9/5/2023 11:08 am Instrument : SV128
Sample : CQICV,32,, 1.0 Lot#10193 Quant Date : 9/5/2023 11:58 am

Compound #23: 4,6-Dinitro-o-cresol



Original Peak Response = 487



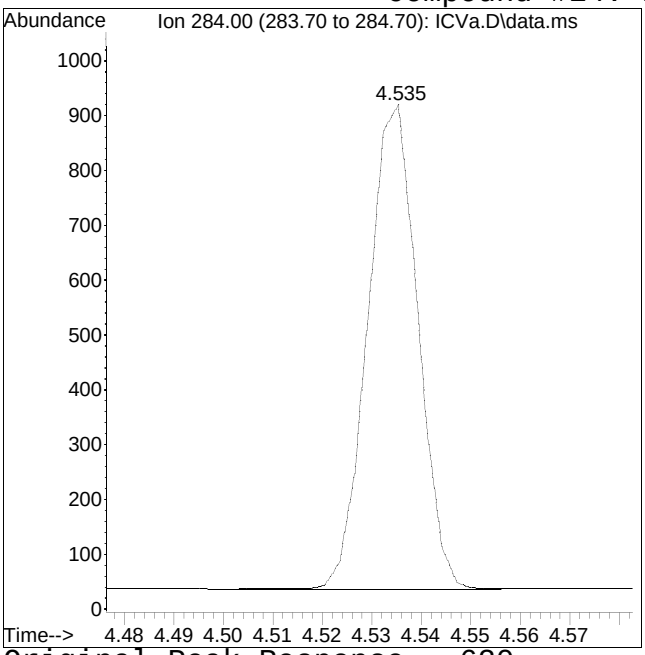
Manual Peak Response = 147 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

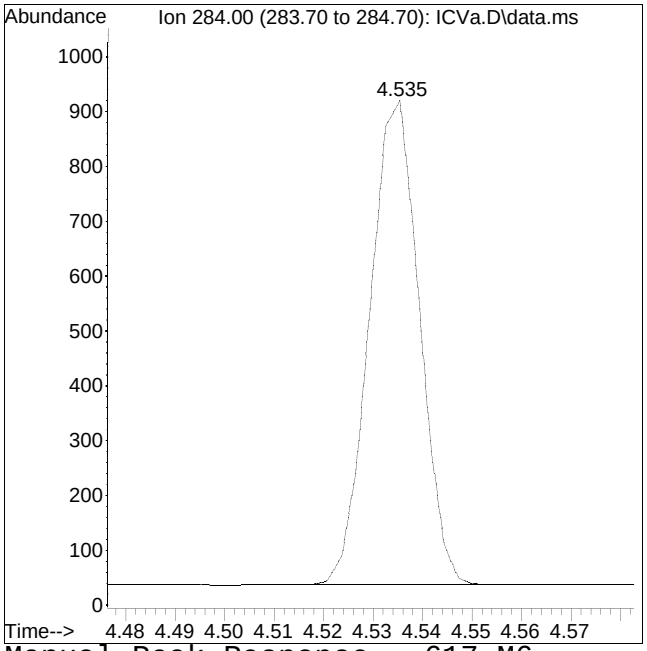
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : ICVa.D Operator : SV128:ah
Date Inj'd : 9/5/2023 11:08 am Instrument : SV128
Sample : CQICV,32,, 1.0 Lot#10193 Quant Date : 9/5/2023 11:58 am

Compound #24: Hexachlorobenzene



Original Peak Response = 620



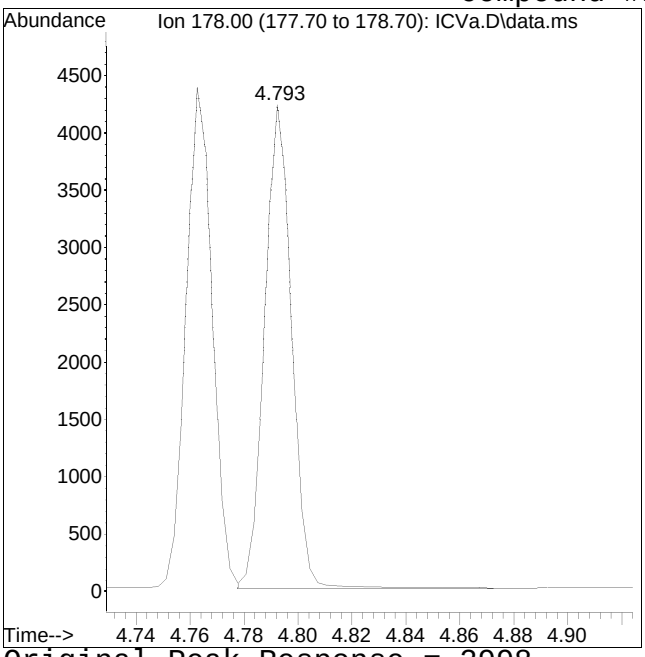
Manual Peak Response = 617 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

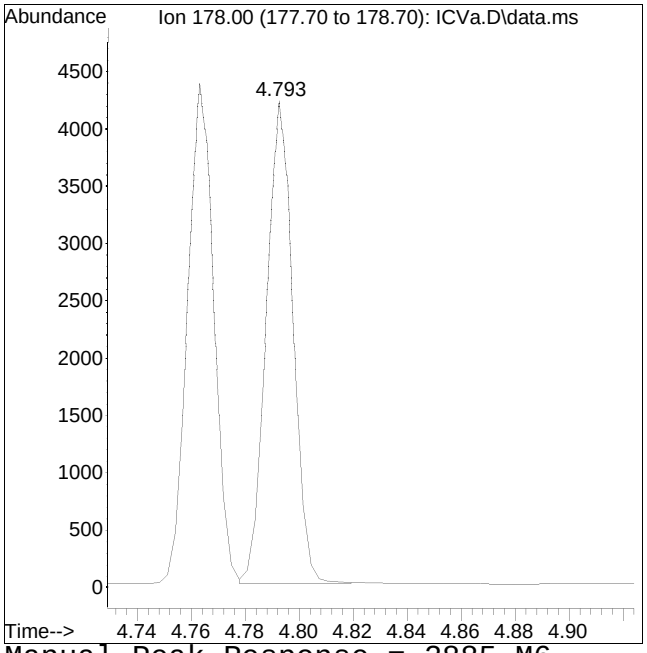
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : ICVa.D Operator : SV128:ah
Date Inj'd : 9/5/2023 11:08 am Instrument : SV128
Sample : CQICV,32,, 1.0 Lot#10193 Quant Date : 9/5/2023 11:58 am

Compound #27: Anthracene



Original Peak Response = 2998



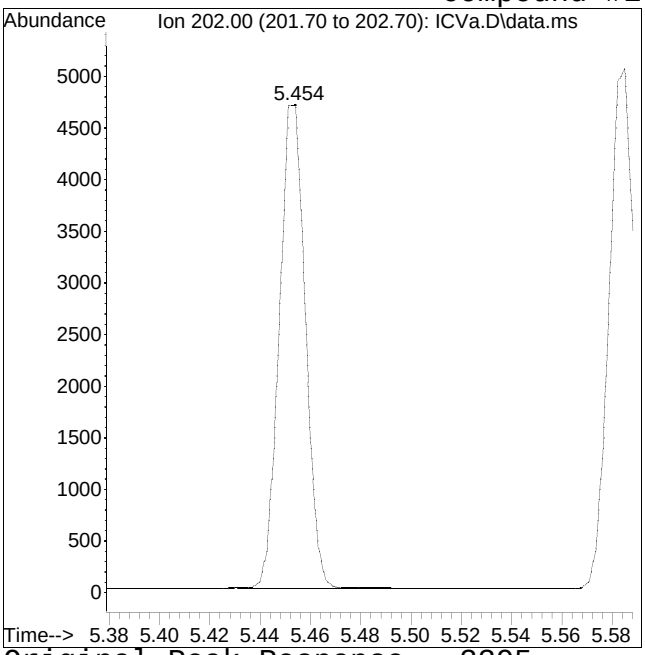
Manual Peak Response = 2885 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

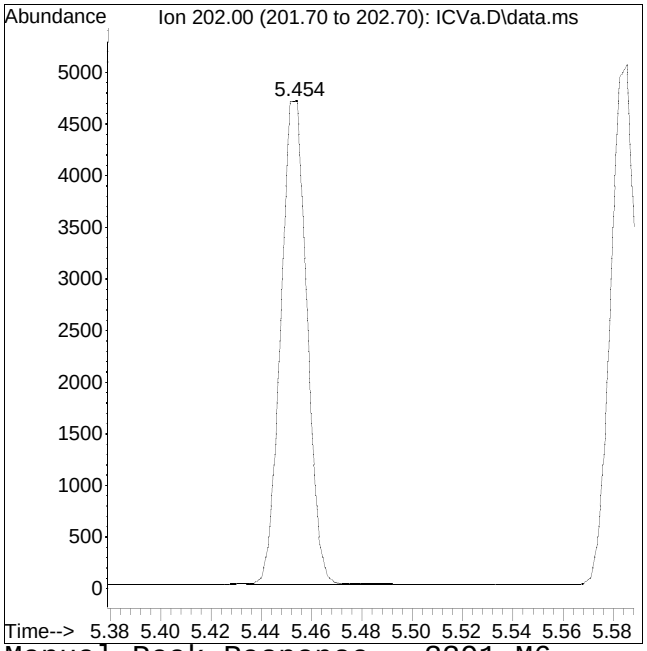
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : ICVa.D Operator : SV128:ah
Date Inj'd : 9/5/2023 11:08 am Instrument : SV128
Sample : CQICV,32,, 1.0 Lot#10193 Quant Date : 9/5/2023 11:58 am

Compound #28: Fluoranthene



Original Peak Response = 3395



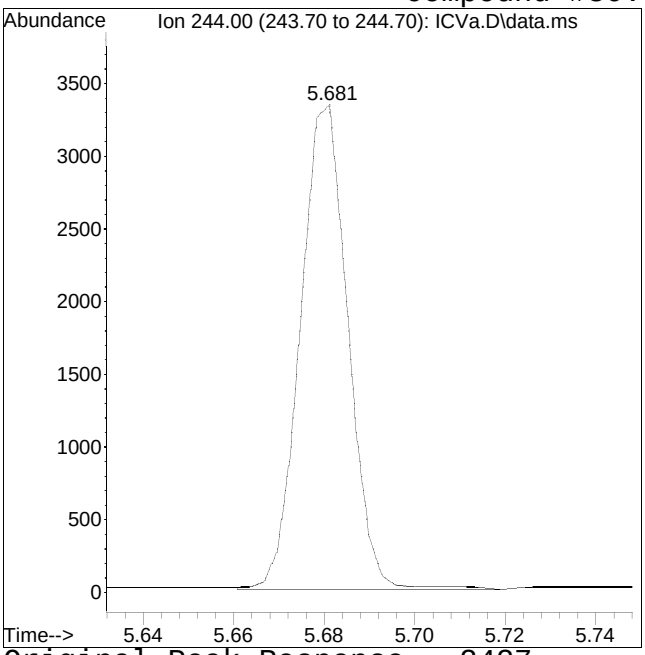
Manual Peak Response = 3391 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

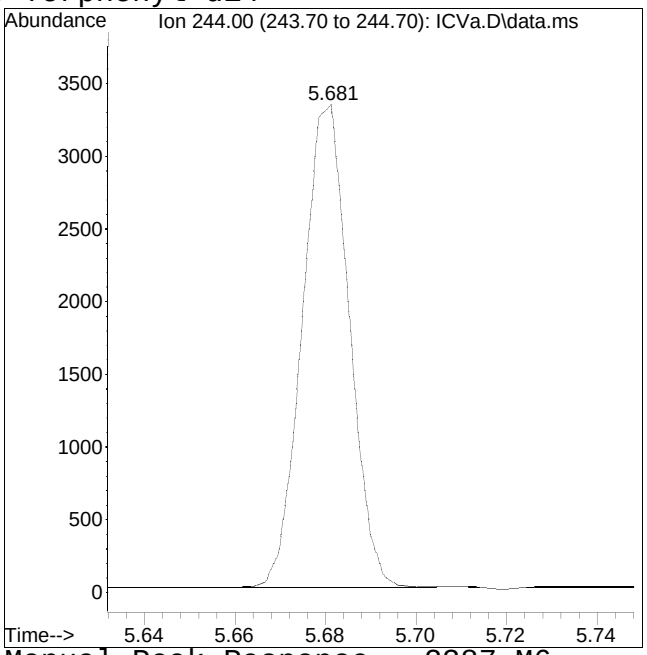
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : ICVa.D Operator : SV128:ah
Date Inj'd : 9/5/2023 11:08 am Instrument : SV128
Sample : CQICV,32,, 1.0 Lot#10193 Quant Date : 9/5/2023 11:58 am

Compound #30: 4-Terphenyl-d14



Original Peak Response = 2427



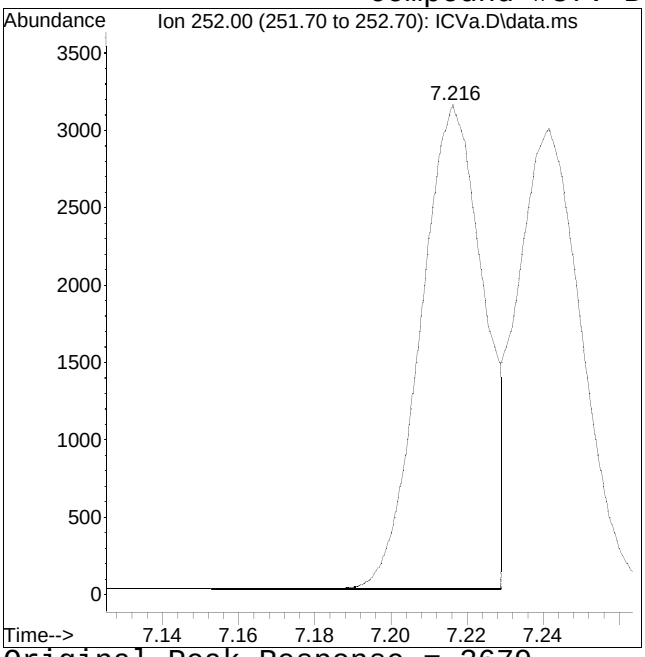
Manual Peak Response = 2387 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

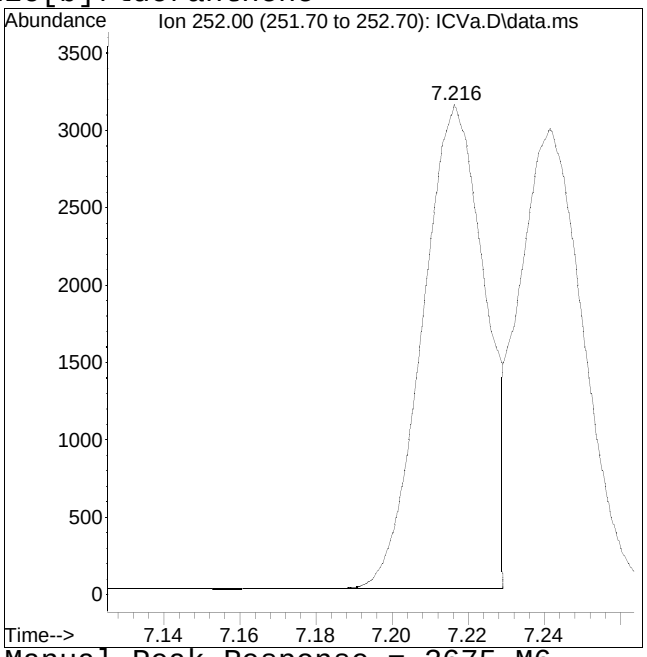
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : ICVa.D Operator : SV128:ah
Date Inj'd : 9/5/2023 11:08 am Instrument : SV128
Sample : CQICV,32,, 1.0 Lot#10193 Quant Date : 9/5/2023 11:58 am

Compound #37: Benzo[b]fluoranthene



Original Peak Response = 3679



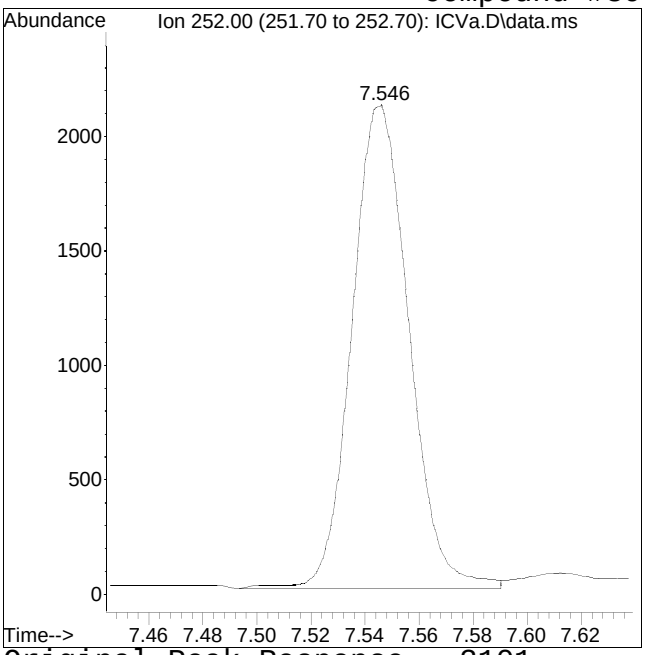
Manual Peak Response = 3675 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

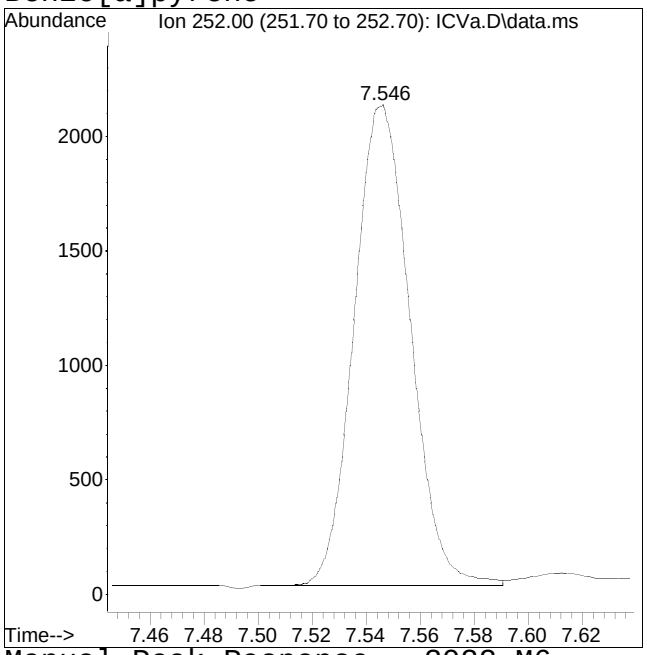
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : ICVa.D Operator : SV128:ah
Date Inj'd : 9/5/2023 11:08 am Instrument : SV128
Sample : CQICV,32,, 1.0 Lot#10193 Quant Date : 9/5/2023 11:58 am

Compound #39: Benzo[a]pyrene



Original Peak Response = 3101



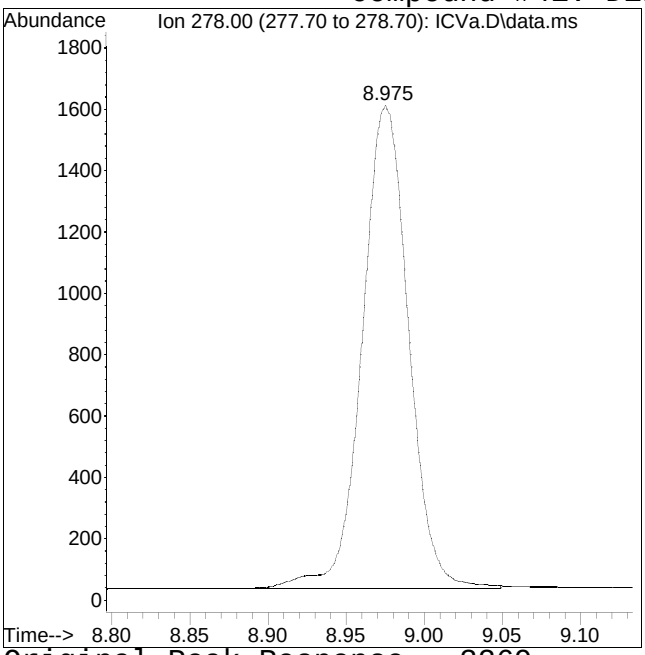
Manual Peak Response = 3022 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

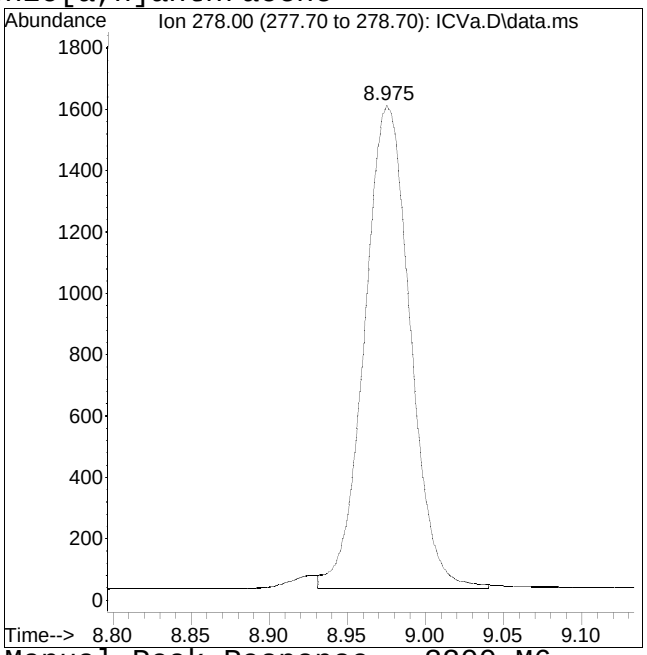
Manual Integration Report

Data Path : I:\8270SIM\SV128\230831aLVQMethod : SIM-LVI_230831_sv128.M
Data File : ICVa.D Operator : SV128:ah
Date Inj'd : 9/5/2023 11:08 am Instrument : SV128
Sample : CQICV,32,, 1.0 Lot#10193 Quant Date : 9/5/2023 11:58 am

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 3269



Manual Peak Response = 3200 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Evaluate Relative Error Report SV128

Method Path : I:\8270SIM\SV128\230831aLVIical\
Method File : SIM-LVI_230831_sv128.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Tue Sep 05 12:51:59 2023

	COMPOUND	CalFit	Units	TrueMid	MidConc	%RE	TrueLow	LowConc	%RE
23 T	4,6-Dinitro-o-cresol	Q	ng/ml	1000.0	862.661	-13.7	100.00	117.660	17.7
25 T	Pentachlorophenol	Q	ng/ml	1000.0	875.107	-12.5	25.00	31.130	24.5
32 T	Benzo[a]anthracene	Q	ng/ml	1000.0	1009.966	1.0	10.00	12.496	25.0

Calibration Correlation Report

	COMPOUND	CalFit	CoefOfDet	QuadTerm	LinTerm	Constant
23 T	4,6-Dinitro-o-cresol	Quadratic	0.999088	0.001012	0.0731408	-0.00107761
25 T	Pentachlorophenol	Quadratic	0.999103	0.000761	0.137619	-0.000737296
32 T	Benzo[a]anthracene	Quadratic	0.999634	0.081031	1.29584	0.00228663

Continuing Calibration

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: SV119	**Calibration Date**	: 08/31/23 07:21		
Lab File ID	: CCV0831	**Init. Calib. Date(s)**	: 03/06/23	03/06/23	
Sample No	: WG1822344-3	**Init. Calib. Times**	: 11:49	15:26	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene-d4	1	1	.05	0	20	68	0
2-Fluorophenol	0.984	1.225	.05	-24.5*	20	80	0
Phenol-d6	1.163	1.422	.05	-22.3*	20	81	0
Bis(2-chloroethyl)ether	1.081	1.152	.05	-6.6	20	72	0
n-nitrosodi-n-propylamine	0.623	0.742	.05	-19.1	20	77	0
Hexachloroethane	0.445	0.516	.05	-16	20	76	0
Nitrobenzene-d5	0.875	1.154	.05	-31.9*	20	83	0
Naphthalene-d8	1	1	.05	0	20	67	0
Naphthalene	0.947	0.942	.05	0.5	20	65	0
Hexachlorobutadiene	0.184	0.196	.05	-6.5	20	69	0
2-Methylnaphthalene	0.637	0.631	.05	0.9	20	64	0
1-Methylnaphthalene	0.614	0.605	.05	1.5	20	64	0
2-Fluorobiphenyl	0.822	0.758	.05	7.8	20	59	0
2-Chloronaphthalene	0.692	0.663	.05	4.2	20	62	0
2,6-Dinitrotoluene	0.121	0.138	.05	-14	20	77	0
Acenaphthylene	0.998	1.015	.05	-1.7	20	63	0
Acenaphthene-d10	1	1	.05	0	20	65	0
Acenaphthene	1.268	1.247	.05	1.7	20	61	0
2,4-Dinitrotoluene	1000	1190.675	.05	-19.1	20	75	0
Fluorene	1.458	1.448	.05	0.7	20	61	0
2,4,6-Tribromophenol	0.161	0.204	.05	-26.7*	20	75	0
Phenanthrene-d10	1	1	.05	0	20	63	0
4,6-Dinitro-o-cresol	1000	1042.248	.05	-4.2	20	74	0
Hexachlorobenzene	0.24	0.233	.05	2.9	20	58	0
Pentachlorophenol	1000	1118.126	.05	-11.8	20	67	0
Phenanthrene	1.013	0.972	.05	4	20	58	0
Anthracene	0.946	0.971	.05	-2.6	20	60	0
Fluoranthene	1.158	1.186	.05	-2.4	20	61	0
Pyrene	1.199	1.218	.05	-1.6	20	60	0
4-Terphenyl-d14	0.835	0.679	.05	18.7	20	49	0
Chrysene-d12	1	1	.05	0	20	58	0
Benzo[a]anthracene	1000	1043.685	.05	-4.4	20	60	0
3,3'-Dichlorobenzidine	0.511	0.535	.05	-4.7	20	62	0
Chrysene	1.274	1.267	.05	0.5	20	55	0
Bis(2-ethylhexyl)phthalate	1000	927.783	.05	7.2	20	58	0
Perylene-d12	1	1	.05	0	20	56	0
Benzo[b]fluoranthene	1.216	1.313	.05	-8	20	57	0
Benzo[k]fluoranthene	1.091	1.218	.05	-11.6	20	58	0
Benzo[a]pyrene	0.985	1.148	.05	-16.5	20	61	0
Indeno[1,2,3-cd]pyrene	1.129	1.347	.05	-19.3	20	65	0
Dibenzo[a,h]anthracene	1.076	1.227	.05	-14	20	59	0
Benzo[g,h,i]perylene	1.199	1.409	.05	-17.5	20	62	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: SV119	**Calibration Date**	: 09/01/23 09:36		
Lab File ID	: CCV0901	**Init. Calib. Date(s)**	: 03/06/23	03/06/23	
Sample No	: WG1822868-3	**Init. Calib. Times**	: 11:49	15:26	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene-d4	1	1	.05	0	20	81	0
2-Fluorophenol	0.984	1.223	.05	-24.3*	20	95	0
Phenol-d6	1.163	1.417	.05	-21.8*	20	96	0
Bis(2-chloroethyl)ether	1.081	1.173	.05	-8.5	20	87	0
n-nitrosodi-n-propylamine	0.623	0.758	.05	-21.7*	20	93	0
Hexachloroethane	0.445	0.518	.05	-16.4	20	91	0
Nitrobenzene-d5	0.875	1.162	.05	-32.8*	20	99	0
Naphthalene-d8	1	1	.05	0	20	80	0
Naphthalene	0.947	0.94	.05	0.7	20	77	0
Hexachlorobutadiene	0.184	0.194	.05	-5.4	20	82	0
2-Methylnaphthalene	0.637	0.64	.05	-0.5	20	78	0
1-Methylnaphthalene	0.614	0.609	.05	0.8	20	77	0
2-Fluorobiphenyl	0.822	0.772	.05	6.1	20	72	0
2-Chloronaphthalene	0.692	0.671	.05	3	20	76	0
2,6-Dinitrotoluene	0.121	0.14	.05	-15.7	20	94	0
Acenaphthylene	0.998	1.027	.05	-2.9	20	76	0
Acenaphthene-d10	1	1	.05	0	20	79	0
Acenaphthene	1.268	1.25	.05	1.4	20	75	0
2,4-Dinitrotoluene	1000	1194.674	.05	-19.5	20	92	0
Fluorene	1.458	1.476	.05	-1.2	20	75	0
2,4,6-Tribromophenol	0.161	0.205	.05	-27.3*	20	92	0
Phenanthrene-d10	1	1	.05	0	20	78	0
4,6-Dinitro-o-cresol	1000	1138.548	.05	-13.9	20	101	0
Hexachlorobenzene	0.24	0.236	.05	1.7	20	73	0
Pentachlorophenol	1000	1126.645	.05	-12.7	20	84	0
Phenanthrene	1.013	0.976	.05	3.7	20	73	0
Anthracene	0.946	0.954	.05	-0.8	20	74	0
Fluoranthene	1.158	1.188	.05	-2.6	20	76	0
Pyrene	1.199	1.216	.05	-1.4	20	75	0
4-Terphenyl-d14	0.835	0.68	.05	18.6	20	61	0
Chrysene-d12	1	1	.05	0	20	70	0
Benzo[a]anthracene	1000	1025.025	.05	-2.5	20	71	0
3,3'-Dichlorobenzidine	0.511	0.501	.05	2	20	69	0
Chrysene	1.274	1.276	.05	-0.2	20	67	0
Bis(2-ethylhexyl)phthalate	1000	864.327	.05	13.6	20	65	0
Perylene-d12	1	1	.05	0	20	63	0
Benzo[b]fluoranthene	1.216	1.339	.05	-10.1	20	66	0
Benzo[k]fluoranthene	1.091	1.215	.05	-11.4	20	65	0
Benzo[a]pyrene	0.985	1.128	.05	-14.5	20	67	0
Indeno[1,2,3-cd]pyrene	1.129	1.26	.05	-11.6	20	68	0
Dibenzo[a,h]anthracene	1.076	1.175	.05	-9.2	20	63	0
Benzo[g,h,i]perylene	1.199	1.362	.05	-13.6	20	68	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: SV119	**Calibration Date**	: 09/06/23 07:01		
Lab File ID	: CCV0906	**Init. Calib. Date(s)**	: 03/06/23	03/06/23	
Sample No	: WG1824028-3	**Init. Calib. Times**	: 11:49	15:26	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene-d4	1	1	.05	0	20	85	0
2-Fluorophenol	0.984	1.154	.05	-17.3	20	95	0
Phenol-d6	1.163	1.345	.05	-15.6	20	96	0
Bis(2-chloroethyl)ether	1.081	1.107	.05	-2.4	20	86	0
n-nitrosodi-n-propylamine	0.623	0.738	.05	-18.5	20	96	0
Hexachloroethane	0.445	0.496	.05	-11.5	20	92	0
Nitrobenzene-d5	0.875	1.122	.05	-28.2*	20	101	0
Naphthalene-d8	1	1	.05	0	20	86	0
Naphthalene	0.947	0.868	.05	8.3	20	76	0
Hexachlorobutadiene	0.184	0.181	.05	1.6	20	81	0
2-Methylnaphthalene	0.637	0.61	.05	4.2	20	79	0
1-Methylnaphthalene	0.614	0.573	.05	6.7	20	77	0
2-Fluorobiphenyl	0.822	0.729	.05	11.3	20	73	0
2-Chloronaphthalene	0.692	0.64	.05	7.5	20	77	0
2,6-Dinitrotoluene	0.121	0.143	.05	-18.2	20	102	0
Acenaphthylene	0.998	0.992	.05	0.6	20	79	0
Acenaphthene-d10	1	1	.05	0	20	88	0
Acenaphthene	1.268	1.135	.05	10.5	20	76	0
2,4-Dinitrotoluene	1000	1219.692	.05	-22*	20	105	0
Fluorene	1.458	1.395	.05	4.3	20	79	0
2,4,6-Tribromophenol	0.161	0.199	.05	-23.6*	20	100	0
Phenanthrene-d10	1	1	.05	0	20	94	0
4,6-Dinitro-o-cresol	1000	1149.81	.05	-15	20	122	0
Hexachlorobenzene	0.24	0.208	.05	13.3	20	77	0
Pentachlorophenol	1000	1061.647	.05	-6.2	20	94	0
Phenanthrene	1.013	0.877	.05	13.4	20	78	0
Anthracene	0.946	0.879	.05	7.1	20	81	0
Fluoranthene	1.158	1.169	.05	-0.9	20	90	0
Pyrene	1.199	1.2	.05	-0.1	20	88	0
4-Terphenyl-d14	0.835	0.703	.05	15.8	20	76	0
Chrysene-d12	1	1	.05	0	20	97	0
Benzo[a]anthracene	1000	952.871	.05	4.7	20	92	0
3,3'-Dichlorobenzidine	0.511	0.516	.05	-1	20	99	0
Chrysene	1.274	1.157	.05	9.2	20	84	0
Bis(2-ethylhexyl)phthalate	1000	1040.589	.05	-4.1	20	110	0
Perylene-d12	1	1	.05	0	20	87	0
Benzo[b]fluoranthene	1.216	1.254	.05	-3.1	20	85	0
Benzo[k]fluoranthene	1.091	1.159	.05	-6.2	20	86	0
Benzo[a]pyrene	0.985	1.076	.05	-9.2	20	89	0
Indeno[1,2,3-cd]pyrene	1.129	1.206	.05	-6.8	20	91	0
Dibenzo[a,h]anthracene	1.076	1.103	.05	-2.5	20	82	0
Benzo[g,h,i]perylene	1.199	1.223	.05	-2	20	84	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: SV128	**Calibration Date**	: 09/07/23 07:51		
Lab File ID	: CCV0907A	**Init. Calib. Date(s)**	: 08/31/23	09/05/23	
Sample No	: WG1824579-3	**Init. Calib. Times**	: 09:45	09:24	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene-d4	1	1	.05	0	20	99	0
2-Fluorophenol	1.022	1.042	.05	-2	20	98	0
Phenol-d6	1.251	1.261	.05	-0.8	20	96	0
Bis(2-chloroethyl)ether	1.078	1.128	.05	-4.6	20	99	0
n-nitrosodi-n-propylamine	0.809	0.779	.05	3.7	20	91	0
Hexachloroethane	0.481	0.477	.05	0.8	20	95	0
Nitrobenzene-d5	1.06	0.968	.05	8.7	20	84	0
Naphthalene-d8	1	1	.05	0	20	97	0
Naphthalene	0.977	1.002	.05	-2.6	20	96	0
Hexachlorobutadiene	0.184	0.19	.05	-3.3	20	95	0
2-Methylnaphthalene	0.652	0.641	.05	1.7	20	90	0
1-Methylnaphthalene	0.604	0.631	.05	-4.5	20	96	0
2-Fluorobiphenyl	0.82	0.798	.05	2.7	20	90	0
2-Chloronaphthalene	0.676	0.688	.05	-1.8	20	93	0
2,6-Dinitrotoluene	0.135	0.106	.05	21.5*	20	80	0
Acenaphthylene	1.077	1.073	.05	0.4	20	90	0
Acenaphthene-d10	1	1	.05	0	20	95	0
Acenaphthene	1.267	1.261	.05	0.5	20	91	0
2,4-Dinitrotoluene	0.304	0.241	.05	20.7*	20	78	0
Fluorene	1.383	1.401	.05	-1.3	20	91	0
2,4,6-Tribromophenol	0.168	0.149	.05	11.3	20	80	0
Phenanthrene-d10	1	1	.05	0	20	97	0
4,6-Dinitro-o-cresol	1000	720.47	.05	28*	20	80	0
Hexachlorobenzene	0.215	0.206	.05	4.2	20	89	0
Pentachlorophenol	1000	704.39	.05	29.6*	20	78	0
Phenanthrene	0.997	0.966	.05	3.1	20	92	0
Anthracene	0.971	0.933	.05	3.9	20	89	0
Fluoranthene	1.158	1.113	.05	3.9	20	90	0
Pyrene	1.199	1.184	.05	1.3	20	91	0
4-Terphenyl-d14	0.845	0.778	.05	7.9	20	85	0
Chrysene-d12	1	1	.05	0	20	97	0
Benzo[a]anthracene	1000	932.395	.05	6.8	20	90	0
3,3'-Dichlorobenzidine	0.499	0.415	.05	16.8	20	83	0
Chrysene	1.234	1.183	.05	4.1	20	91	0
Bis(2-ethylhexyl)phthalate	0.779	0.594	.05	23.7*	20	80	0
Perylene-d12	1	1	.05	0	20	96	0
Benzo[b]fluoranthene	1.127	1.123	.05	0.4	20	94	0
Benzo[k]fluoranthene	1.043	0.998	.05	4.3	20	83	0
Benzo[a]pyrene	0.968	0.895	.05	7.5	20	83	0
Indeno[1,2,3-cd]pyrene	0.969	0.885	.05	8.7	20	87	0
Dibenzo[a,h]anthracene	0.932	0.943	.05	-1.2	20	89	0
Benzo[g,h,i]perylene	0.992	0.964	.05	2.8	20	91	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: SV119	**Calibration Date**	: 09/07/23 10:41		
Lab File ID	: CCV0907A	**Init. Calib. Date(s)**	: 03/06/23	03/06/23	
Sample No	: WG1824714-3	**Init. Calib. Times**	: 11:49	15:26	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene-d4	1	1	.05	0	20	97	0
2-Fluorophenol	0.984	1.141	.05	-16	20	107	0
Phenol-d6	1.163	1.329	.05	-14.3	20	108	0
Bis(2-chloroethyl)ether	1.081	1.096	.05	-1.4	20	97	0
n-nitrosodi-n-propylamine	0.623	0.734	.05	-17.8	20	109	0
Hexachloroethane	0.445	0.492	.05	-10.6	20	104	0
Nitrobenzene-d5	0.875	1.107	.05	-26.5*	20	113	0
Naphthalene-d8	1	1	.05	0	20	98	0
Naphthalene	0.947	0.864	.05	8.8	20	87	0
Hexachlorobutadiene	0.184	0.188	.05	-2.2	20	97	0
2-Methylnaphthalene	0.637	0.623	.05	2.2	20	93	0
1-Methylnaphthalene	0.614	0.593	.05	3.4	20	92	0
2-Fluorobiphenyl	0.822	0.751	.05	8.6	20	86	0
2-Chloronaphthalene	0.692	0.655	.05	5.3	20	91	0
2,6-Dinitrotoluene	0.121	0.151	.05	-24.8*	20	123	0
Acenaphthylene	0.998	1.03	.05	-3.2	20	94	0
Acenaphthene-d10	1	1	.05	0	20	104	0
Acenaphthene	1.268	1.148	.05	9.5	20	90	0
2,4-Dinitrotoluene	1000	1261.975	.05	-26.2*	20	128	0
Fluorene	1.458	1.421	.05	2.5	20	95	0
2,4,6-Tribromophenol	0.161	0.217	.05	-34.8*	20	128	0
Phenanthrene-d10	1	1	.05	0	20	112	0
4,6-Dinitro-o-cresol	1000	1246.819	.05	-24.7*	20	159	0
Hexachlorobenzene	0.24	0.219	.05	8.7	20	97	0
Pentachlorophenol	1000	1254.209	.05	-25.4*	20	136	0
Phenanthrene	1.013	0.876	.05	13.5	20	94	0
Anthracene	0.946	0.871	.05	7.9	20	97	0
Fluoranthene	1.158	1.159	.05	-0.1	20	107	0
Pyrene	1.199	1.199	.05	0	20	106	0
4-Terphenyl-d14	0.835	0.703	.05	15.8	20	91	0
Chrysene-d12	1	1	.05	0	20	114	0
Benzo[a]anthracene	1000	947.756	.05	5.2	20	108	0
3,3'-Dichlorobenzidine	0.511	0.509	.05	0.4	20	115	0
Chrysene	1.274	1.151	.05	9.7	20	99	0
Bis(2-ethylhexyl)phthalate	1000	951.159	.05	4.9	20	117	0
Perylene-d12	1	1	.05	0	20	100	0
Benzo[b]fluoranthene	1.216	1.297	.05	-6.7	20	102	0
Benzo[k]fluoranthene	1.091	1.12	.05	-2.7	20	95	0
Benzo[a]pyrene	0.985	1.072	.05	-8.8	20	102	0
Indeno[1,2,3-cd]pyrene	1.129	1.166	.05	-3.3	20	101	0
Dibenzo[a,h]anthracene	1.076	1.068	.05	0.7	20	92	0
Benzo[g,h,i]perylene	1.199	1.198	.05	0.1	20	95	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Semivolatiles

Client	: Alpha Geoscience	**Lab Number**	: L2350269		
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116		
Instrument ID	: SV128	**Calibration Date**	: 09/09/23 07:57		
Lab File ID	: CCV0909	**Init. Calib. Date(s)**	: 08/31/23	09/05/23	
Sample No	: WG1825552-3	**Init. Calib. Times**	: 09:45	09:24	
Channel	:				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1,4-Dichlorobenzene-d4	1	1	.05	0	20	84	0
2-Fluorophenol	1.022	1.142	.05	-11.7	20	91	0
Phenol-d6	1.251	1.348	.05	-7.8	20	87	0
Bis(2-chloroethyl)ether	1.078	1.127	.05	-4.5	20	84	0
n-nitrosodi-n-propylamine	0.809	0.797	.05	1.5	20	79	0
Hexachloroethane	0.481	0.514	.05	-6.9	20	87	0
Nitrobenzene-d5	1.06	1.159	.05	-9.3	20	86	0
Naphthalene-d8	1	1	.05	0	20	78	0
Naphthalene	0.977	1.062	.05	-8.7	20	82	0
Hexachlorobutadiene	0.184	0.199	.05	-8.2	20	81	0
2-Methylnaphthalene	0.652	0.672	.05	-3.1	20	77	0
1-Methylnaphthalene	0.604	0.663	.05	-9.8	20	82	0
2-Fluorobiphenyl	0.82	0.826	.05	-0.7	20	75	0
2-Chloronaphthalene	0.676	0.725	.05	-7.2	20	80	0
2,6-Dinitrotoluene	0.135	0.148	.05	-9.6	20	90	0
Acenaphthylene	1.077	1.144	.05	-6.2	20	78	0
Acenaphthene-d10	1	1	.05	0	20	73	0
Acenaphthene	1.267	1.409	.05	-11.2	20	77	0
2,4-Dinitrotoluene	0.304	0.362	.05	-19.1	20	90	0
Fluorene	1.383	1.555	.05	-12.4	20	77	0
2,4,6-Tribromophenol	0.168	0.222	.05	-32.1*	20	91	0
Phenanthrene-d10	1	1	.05	0	20	71	0
4,6-Dinitro-o-cresol	1000	1046.248	.05	-4.6	20	87	0
Hexachlorobenzene	0.215	0.238	.05	-10.7	20	75	0
Pentachlorophenol	1000	884.075	.05	11.6	20	72	0
Phenanthrene	0.997	1.124	.05	-12.7	20	78	0
Anthracene	0.971	1.109	.05	-14.2	20	77	0
Fluoranthene	1.158	1.321	.05	-14.1	20	78	0
Pyrene	1.199	1.389	.05	-15.8	20	78	0
4-Terphenyl-d14	0.845	0.898	.05	-6.3	20	71	0
Chrysene-d12	1	1	.05	0	20	74	0
Benzo[a]anthracene	1000	1070.525	.05	-7.1	20	78	0
3,3'-Dichlorobenzidine	0.499	0.529	.05	-6	20	80	0
Chrysene	1.234	1.386	.05	-12.3	20	80	0
Bis(2-ethylhexyl)phthalate	0.779	0.734	.05	5.8	20	74	0
Perylene-d12	1	1	.05	0	20	72	0
Benzo[b]fluoranthene	1.127	1.326	.05	-17.7	20	84	0
Benzo[k]fluoranthene	1.043	1.166	.05	-11.8	20	73	0
Benzo[a]pyrene	0.968	1.064	.05	-9.9	20	75	0
Indeno[1,2,3-cd]pyrene	0.969	1.045	.05	-7.8	20	78	0
Dibenzo[a,h]anthracene	0.932	1.072	.05	-15	20	77	0
Benzo[g,h,i]perylene	0.992	1.096	.05	-10.5	20	78	0

*** Value outside of QC limits.**

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : ccv0831.D
Acq On : 31 Aug 2023 07:21 am
Operator : sv119:jjw
Sample : WG1822344-3,32,, ICV 10193 (0830)
Misc : WG1822344,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Aug 31 07:37:23 2023
Quant Method : I:\8270SIM\sv119\230831LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:13 2023
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	68	0.00
2	s	2-Fluorophenol	0.984	1.225	-24.5#	80	0.00
3	s	Phenol-d6	1.163	1.422	-22.3#	81	0.00
4	T	Bis(2-chloroethyl)ether	1.081	1.152	-6.6	72	0.00
5	T	n-nitrosodi-n-propylamine	0.623	0.742	-19.1	77	0.00
6	t	Hexachloroethane	0.445	0.516	-16.0	76	0.00
7	s	Nitrobenzene-d5	0.875	1.154	-31.9#	83	0.00
8	i	Naphthalene-d8	1.000	1.000	0.0	67	0.00
9	t	Naphthalene	0.947	0.942	0.5	65	0.00
10	t	Hexachlorobutadiene	0.184	0.196	-6.5	69	0.00
11	t	2-Methylnaphthalene	0.637	0.631	0.9	64	0.00
12	t	1-Methylnaphthalene	0.614	0.605	1.5	64	0.00
13	s	2-Fluorobiphenyl	0.822	0.758	7.8	59	0.00
14	t	2-Chloronaphthalene	0.692	0.663	4.2	62	0.00
15	t	2,6-Dinitrotoluene	0.121	0.138	-14.0	77	0.00
16	t	Acenaphthylene	0.998	1.015	-1.7	63	0.00
17	i	Acenaphthene-d10	1.000	1.000	0.0	65	0.00
18	t	Acenaphthene	1.268	1.247	1.7	61	0.00
19	t	2,4-Dinitrotoluene	*1000.000	1190.675	-19.1	75	0.00
20	t	Fluorene	1.458	1.448	0.7	61	0.00
21	s	2,4,6-Tribromophenol	0.161	0.204	-26.7#	75	0.00
22	i	Phenanthrene-d10	1.000	1.000	0.0	63	0.00
23	T	4,6-Dinitro-o-cresol	*1000.000	1042.248	-4.2	74	0.00
24	t	Hexachlorobenzene	0.240	0.233	2.9	58	0.00
25	t	Pentachlorophenol	*1000.000	1118.126	-11.8	67	0.00
26	t	Phenanthrene	1.013	0.972	4.0	58	0.00
27	t	Anthracene	0.946	0.971	-2.6	60	0.00
28	t	Fluoranthene	1.158	1.186	-2.4	61	0.00
29	t	Pyrene	1.199	1.218	-1.6	60	0.00
30	s	4-Terphenyl-d14	0.835	0.679	18.7	49#	0.00
31	i	Chrysene-d12	1.000	1.000	0.0	58	0.00
32	t	Benzo[a]anthracene	*1000.000	1043.685	-4.4	60	0.00
33	t	3,3'-Dichlorobenzidine	0.511	0.535	-4.7	62	0.00
34	t	Chrysene	1.274	1.267	0.5	55	0.00
35	T	Bis(2-ethylhexyl)phthalate	*1000.000	927.783	7.2	58	0.00

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Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
36	i	Perylene-d12	1.000	1.000	0.0	56	0.00
37	t	Benzo[b]fluoranthene	1.216	1.313	-8.0	57	0.00
38	t	Benzo[k]fluoranthene	1.091	1.218	-11.6	58	0.00
39	t	Benzo[a]pyrene	0.985	1.148	-16.5	61	0.00
40	t	Indeno[1,2,3-cd]pyrene	1.129	1.347	-19.3	65	0.00
41	t	Dibenzo[a,h]anthracene	1.076	1.227	-14.0	59	0.00
42	t	Benzo[g,h,i]perylene	1.199	1.409	-17.5	62	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

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Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:13 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.269	152	44950	4000.000	ng/ml	0.00
8) Naphthalene-d8	2.942	136	161376	4000.000	ng/ml	0.00
17) Acenaphthene-d10	3.925	164	81212	4000.000	ng/ml	0.00
22) Phenanthrene-d10	4.769	188	177149	4000.000	ng/ml	0.00
31) Chrysene-d12	6.332	240	152182	4000.000	ng/ml	0.00
36) Perylene-d12	7.566	264	169708	4000.000	ng/ml	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	1.656	112	13766	1244.705	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 24.89%			
3) Phenol-d6	2.074	99	15983	1223.164	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 24.46%			
7) Nitrobenzene-d5	2.553	82	12966	1318.963	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 52.76%			
13) 2-Fluorobiphenyl	3.544	172	30574	921.494	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 36.86%			
21) 2,4,6-Tribromophenol	4.373	330	4141	1265.542	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 25.31%			
30) 4-Terphenyl-d14	5.689	244	30061	813.251	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 32.53%			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.129	93	12951	1066.156	ng/ml	98
5) n-nitrosodi-n-propylamine	2.471	70	8341	1191.098	ng/ml	98
6) Hexachloroethane	2.533	117	5800	1160.978	ng/ml	97
9) Naphthalene	2.954	128	38004	994.490	ng/ml	100
10) Hexachlorobutadiene	3.027	225	7921	1066.394	ng/ml	100
11) 2-Methylnaphthalene	3.338	142	25448	990.681	ng/ml	99
12) 1-Methylnaphthalene	3.393	142	24392	984.626	ng/ml	99
14) 2-Chloronaphthalene	3.610	162	26740	958.389	ng/ml	99
15) 2,6-Dinitrotoluene	3.804	165	5585	1140.431	ng/ml	95
16) Acenaphthylene	3.845	152	40946	1017.042	ng/ml	100
18) Acenaphthene	3.943	153	25321	983.423	ng/ml	100
19) 2,4-Dinitrotoluene	4.033	165	7000	1190.675	ng/ml#	80
20) Fluorene	4.237	166	29401	993.483	ng/ml	99
23) 4,6-Dinitro-o-cresol	4.265	198	3143	1042.248	ng/ml	98
24) Hexachlorobenzene	4.554	284	10315	968.889	ng/ml	97
25) Pentachlorophenol	4.666	266	4302	1118.126	ng/ml	98
26) Phenanthrene	4.783	178	43066	959.496	ng/ml	100
27) Anthracene	4.810	178	42987	1026.579	ng/ml	100

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Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Fluoranthene	5.465	202	52538	1024.314	ng/ml	96
29) Pyrene	5.596	202	53949	1015.631	ng/ml	100
32) Benzo[a]anthracene	6.326	228	51970	1043.685	ng/ml	100
33) 3,3'-Dichlorobenzidine	6.313	252	20336	1045.102	ng/ml	99
34) Chrysene	6.349	228	48216	994.664	ng/ml	99
35) Bis(2-ethylhexyl)phtha...	6.349	149	20792	927.783	ng/ml	100
37) Benzo[b]fluoranthene	7.186	252	55694	1079.148	ng/ml	98
38) Benzo[k]fluoranthene	7.210	252	51697	1117.001	ng/ml	98
39) Benzo[a]pyrene	7.503	252	48721	1166.349	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.815	276	57128	1192.455	ng/ml	98
41) Dibenzo[a,h]anthracene	8.853	278	52037	1139.839	ng/ml	99
42) Benzo[g,h,i]perylene	9.162	276	59800	1175.974	ng/ml	97

(#) = qualifier out of range (m) = manual integration (+) = signals summed

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QLast Update : Thu Aug 31 07:37:13 2023
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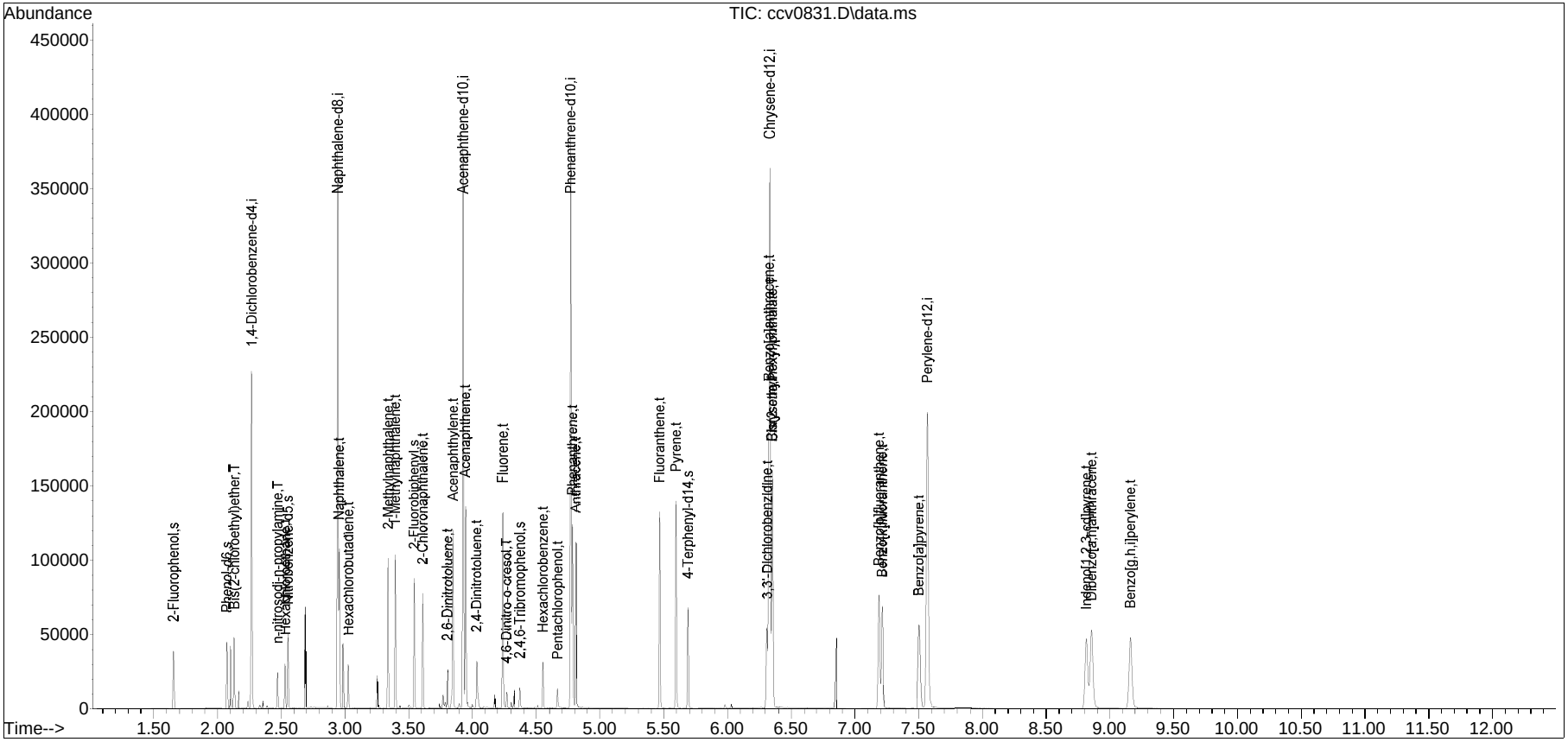
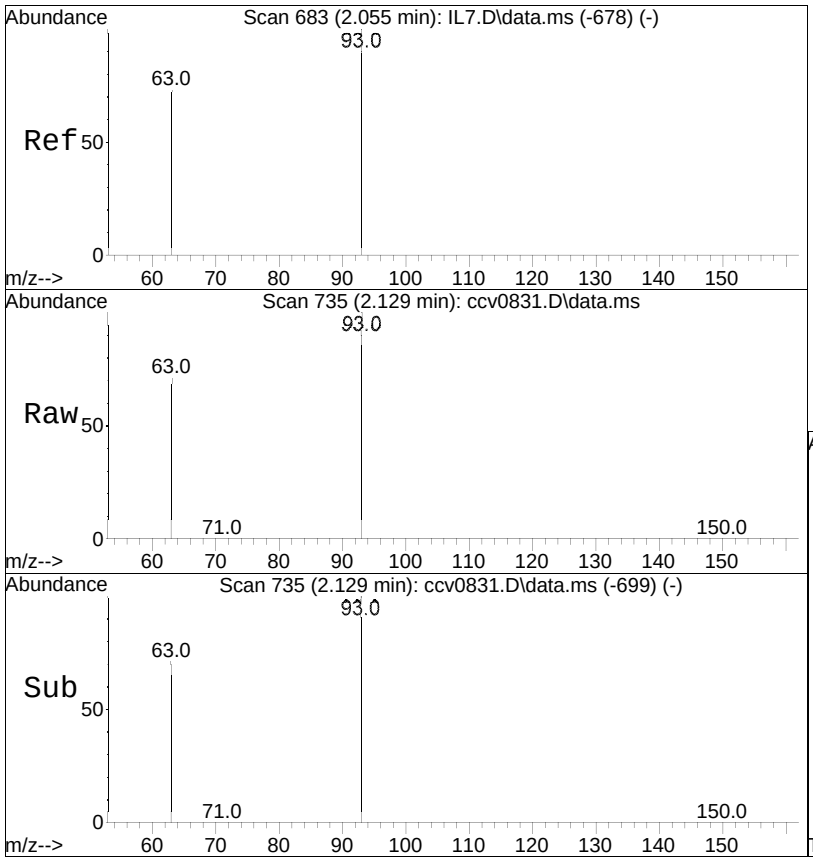
Sub List : Default - All compounds listed

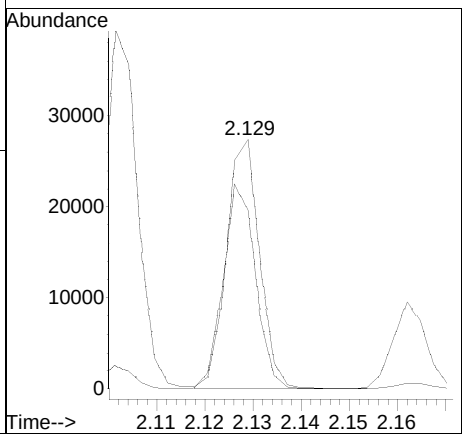


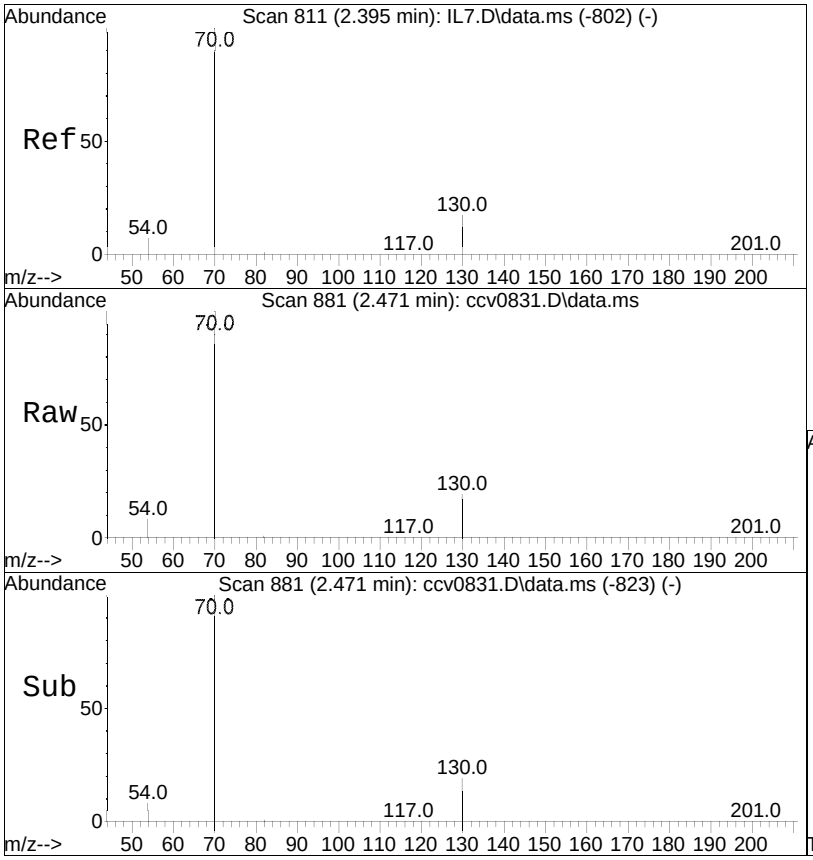


#4
Bis(2-chloroethyl)ether
Concen: 1066.16 ng/ml
RT: 2.129 min Scan# 735
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion: 93 Resp: 12951

Ion	Ratio	Lower	Upper
93	100		
63	80.3	62.6	94.0

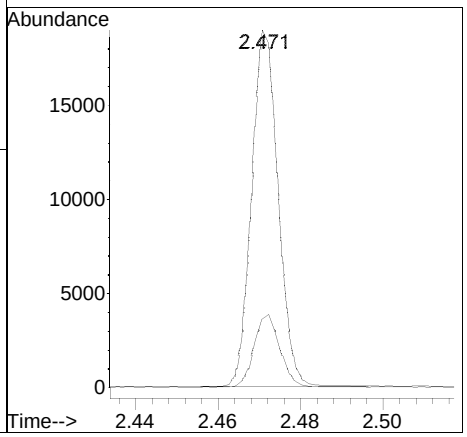


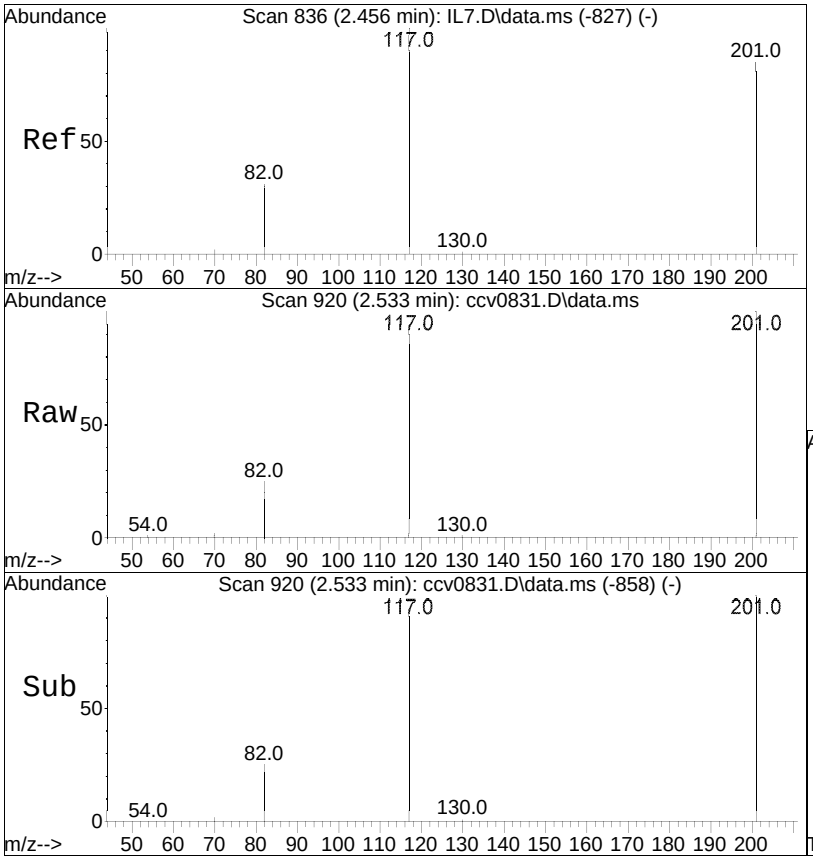


#5
n-nitrosodi-n-propylamine
Concen: 1191.10 ng/ml
RT: 2.471 min Scan# 881
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion: 70 Resp: 8341

Ion	Ratio	Lower	Upper
70	100		
130	19.7	15.0	22.6

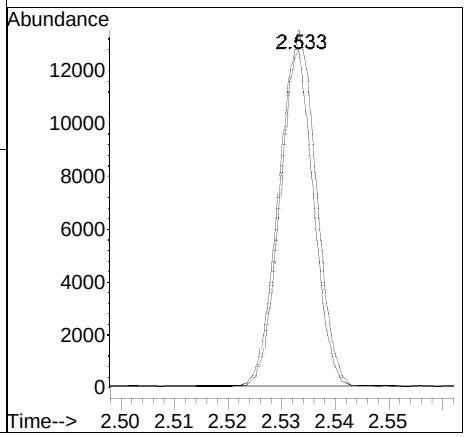


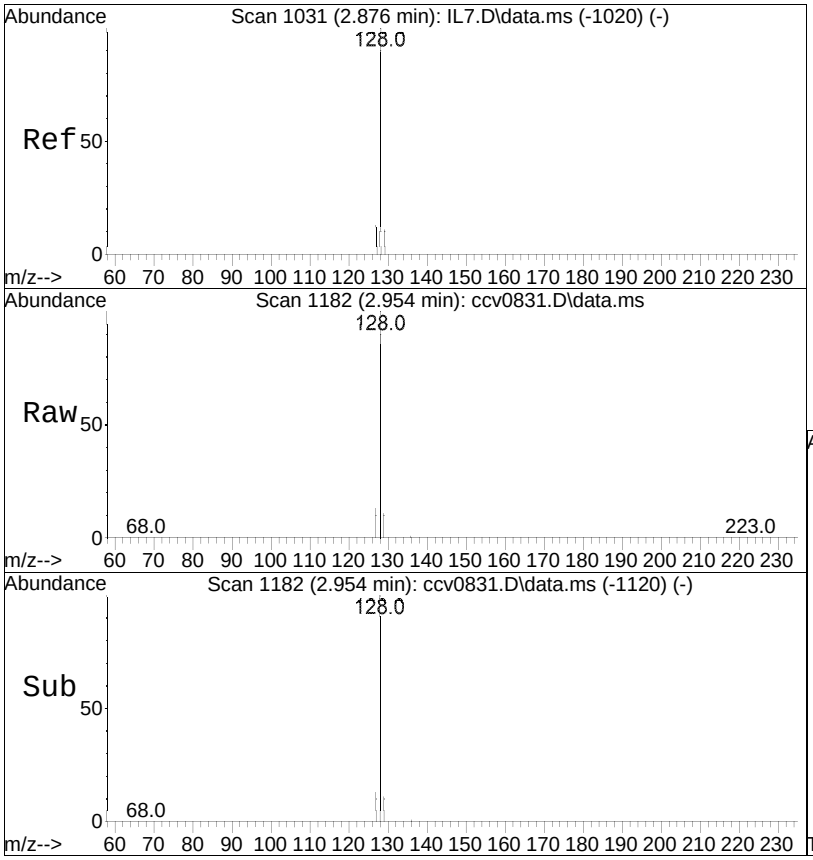


#6
Hexachloroethane
Concen: 1160.98 ng/ml
RT: 2.533 min Scan# 920
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:117 Resp: 5800

Ion	Ratio	Lower	Upper
117	100		
201	105.2	81.5	122.3

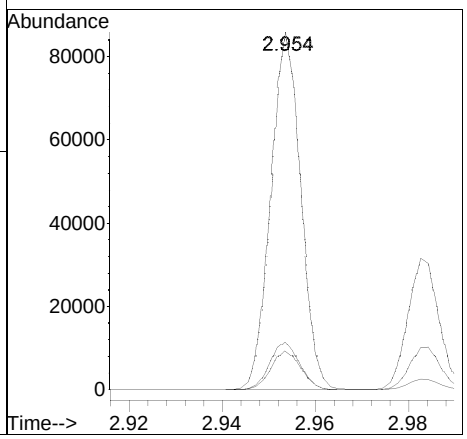


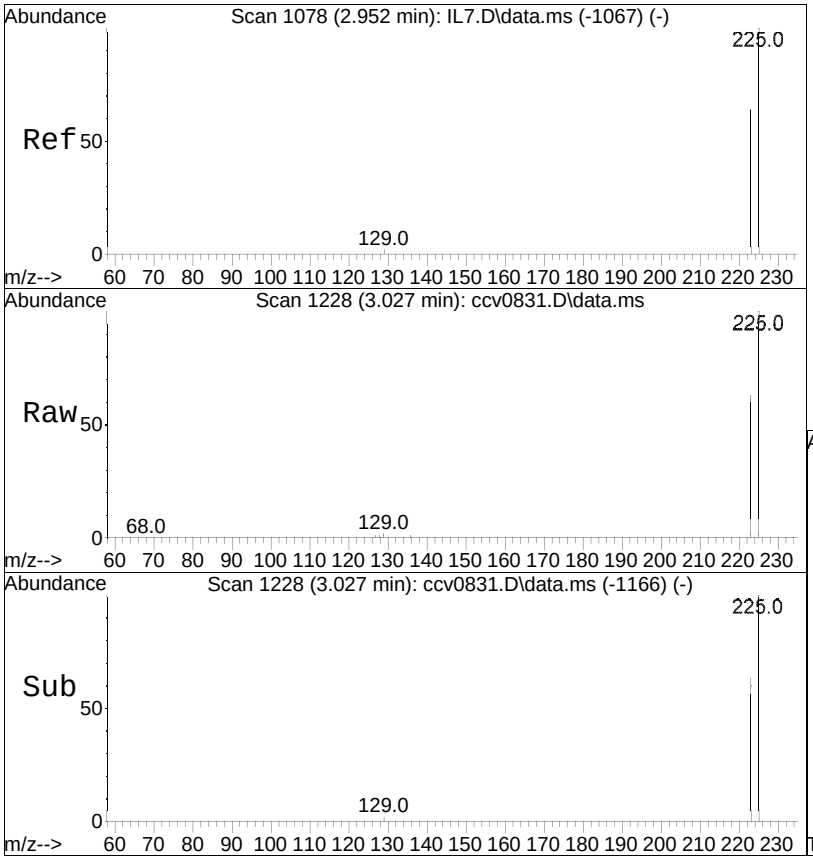


#9
Naphthalene
Concen: 994.49 ng/ml
RT: 2.954 min Scan# 1182
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:128 Resp: 38004

Ion	Ratio	Lower	Upper
128	100		
129	11.0	8.8	13.2
127	13.3	10.6	15.8

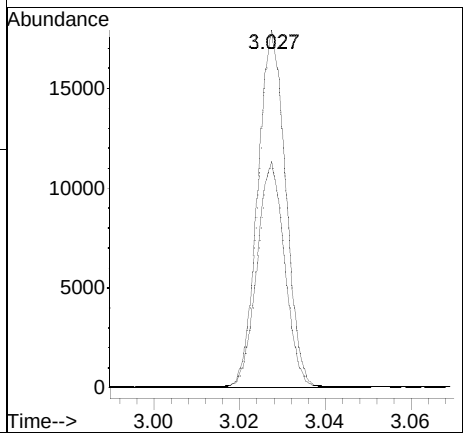


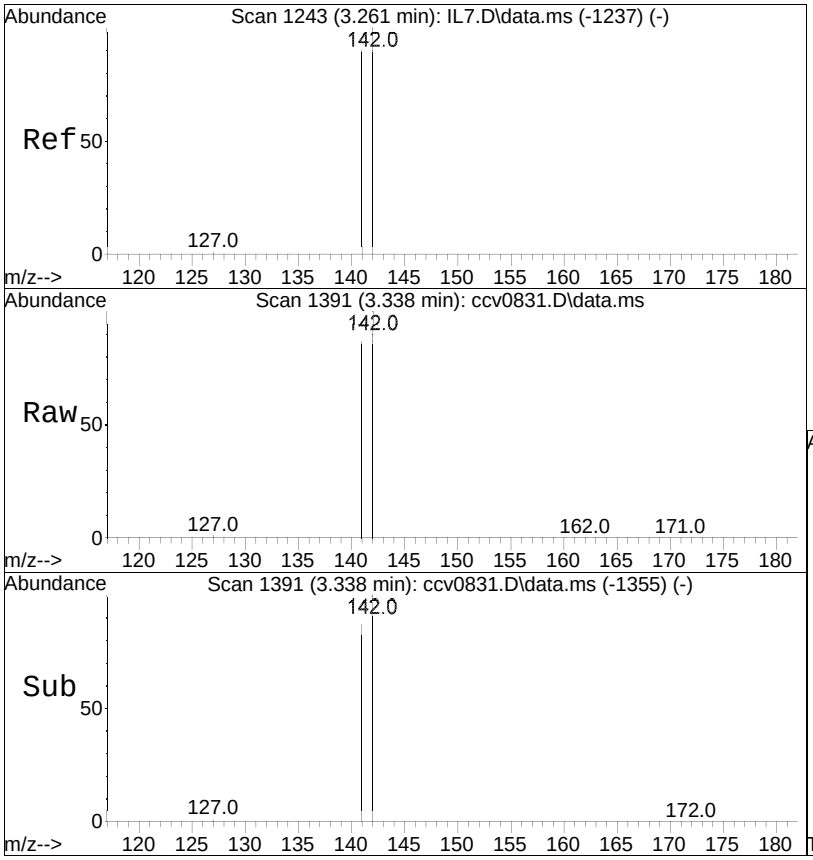


#10
Hexachlorobutadiene
Concen: 1066.39 ng/ml
RT: 3.027 min Scan# 1228
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:225 Resp: 7921

Ion	Ratio	Lower	Upper
225	100		
223	62.8	50.1	75.1

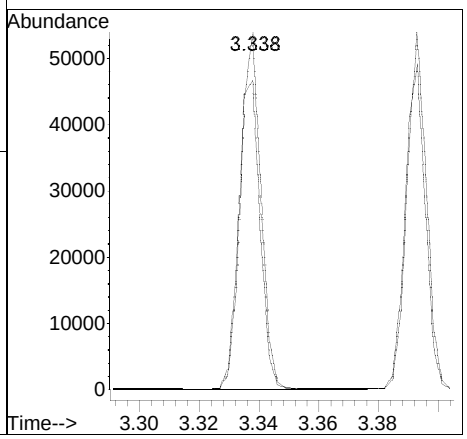


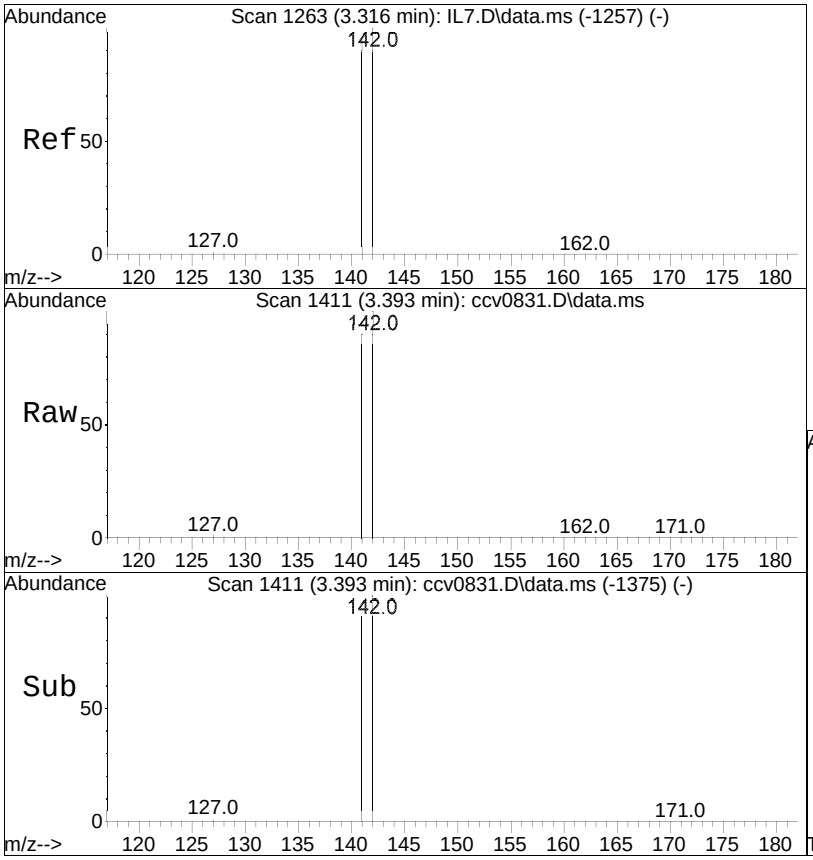


#11
2-Methylnaphthalene
Concen: 990.68 ng/ml
RT: 3.338 min Scan# 1391
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:142 Resp: 25448

Ion	Ratio	Lower	Upper
142	100		
141	92.1	74.1	111.1

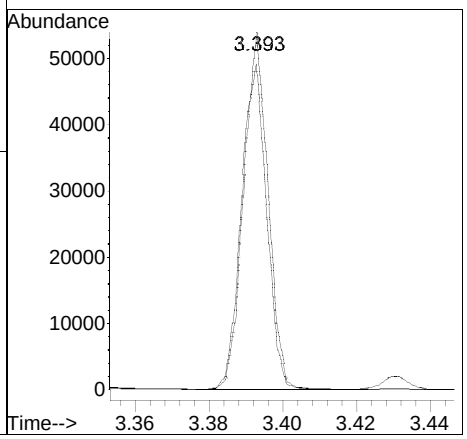


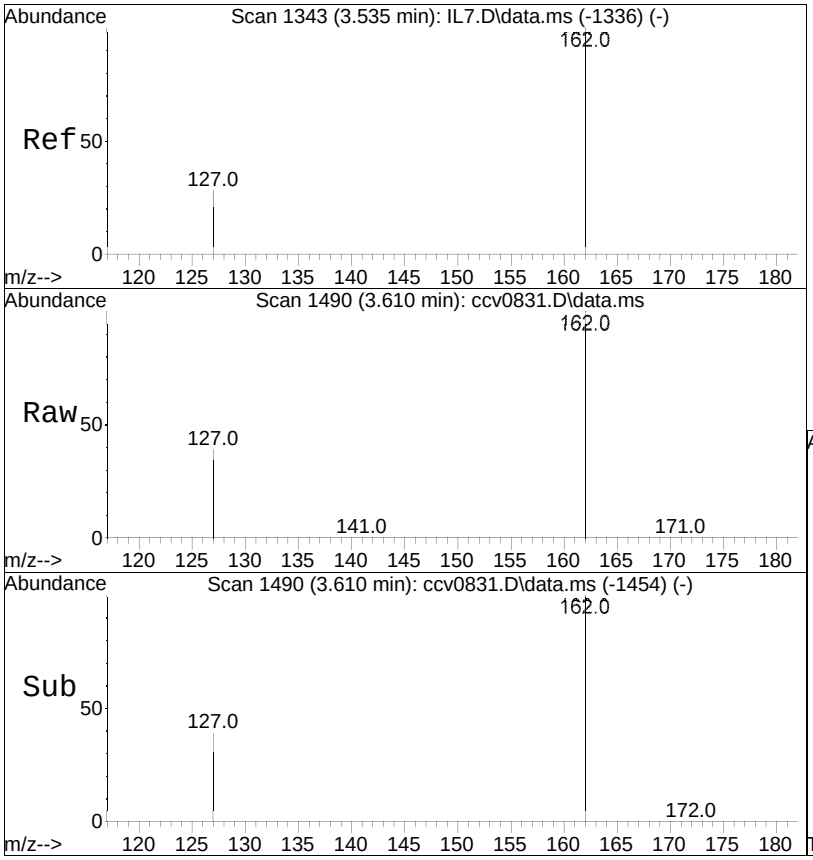


#12
1-Methylnaphthalene
Concen: 984.63 ng/ml
RT: 3.393 min Scan# 1411
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:142 Resp: 24392

Ion	Ratio	Lower	Upper
142	100		
141	94.3	76.6	114.8

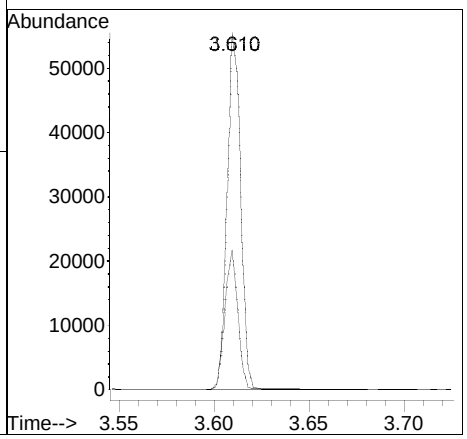


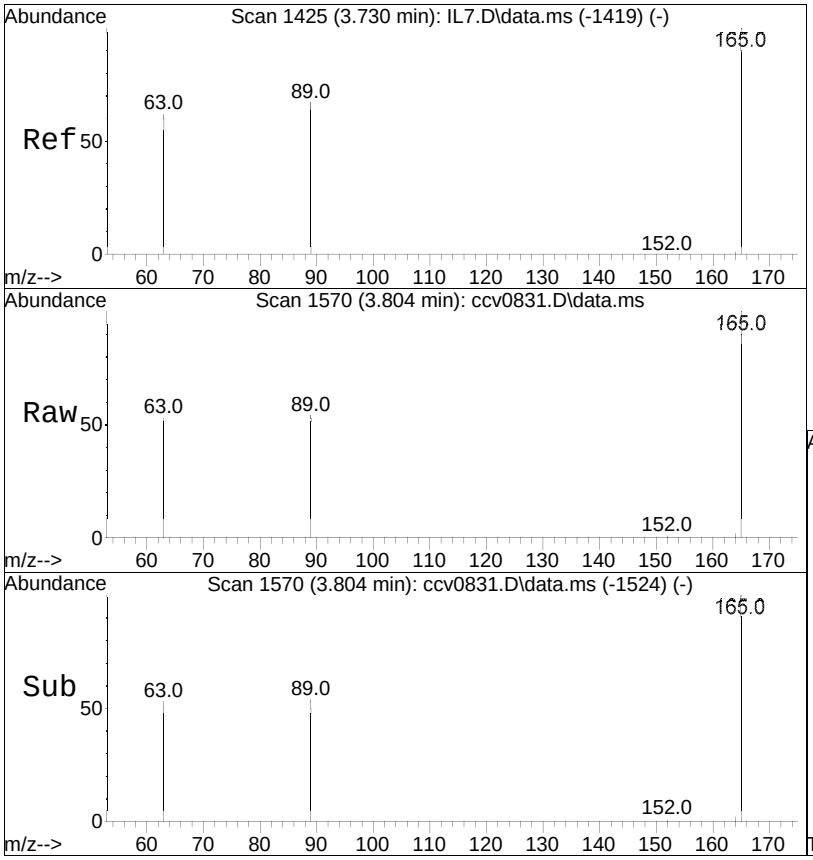


#14
2-Chloronaphthalene
Concen: 958.39 ng/ml
RT: 3.610 min Scan# 1490
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:162 Resp: 26740

Ion	Ratio	Lower	Upper
162	100		
127	37.5	29.7	44.5

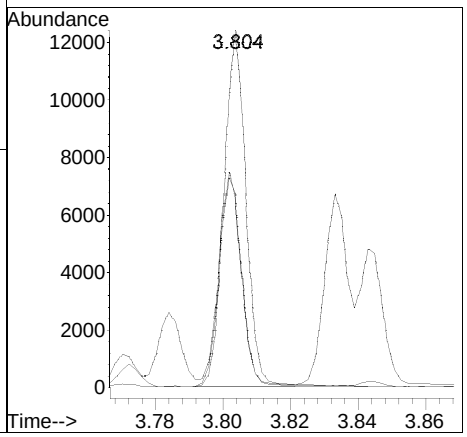


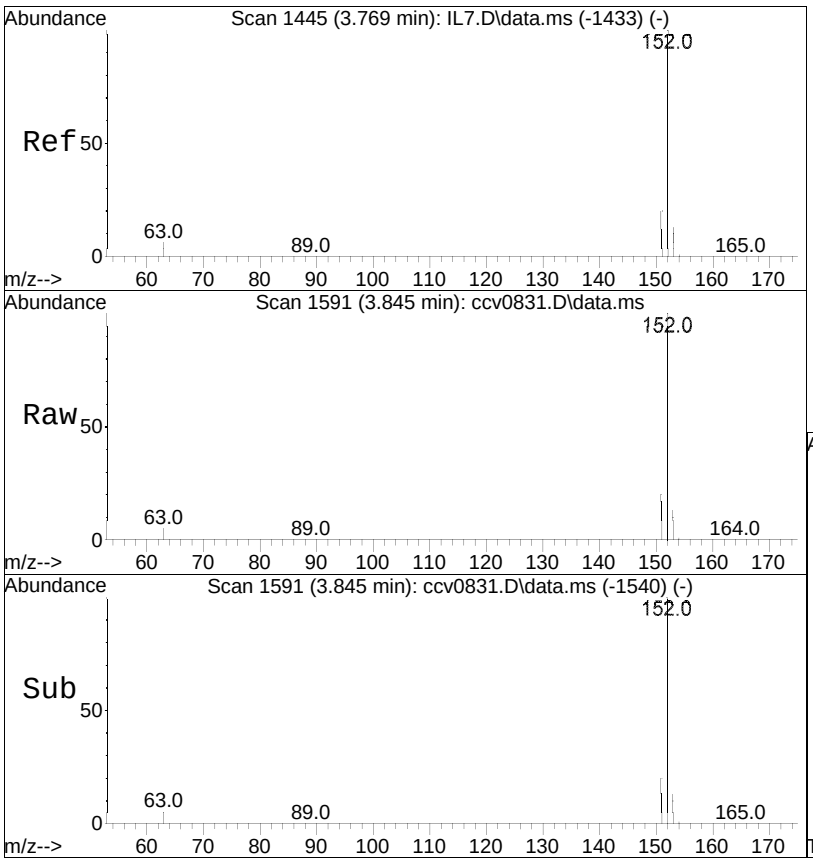


#15
2,6-Dinitrotoluene
Concen: 1140.43 ng/ml
RT: 3.804 min Scan# 1570
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:165 Resp: 5585

Ion	Ratio	Lower	Upper
165	100		
89	60.1	52.8	79.2
63	61.9	50.9	76.3

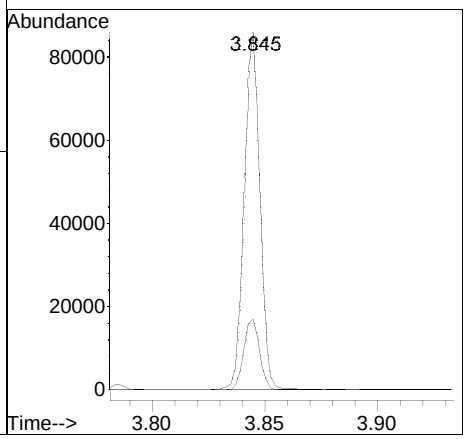


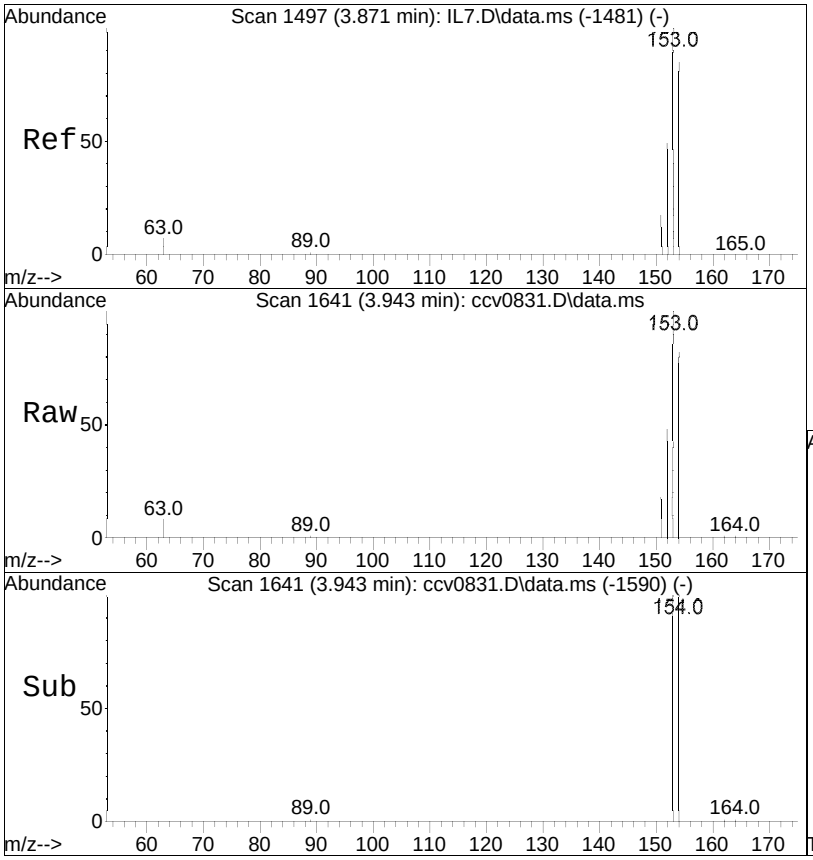


#16
Acenaphthylene
Concen: 1017.04 ng/ml
RT: 3.845 min Scan# 1591
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:152 Resp: 40946

Ion	Ratio	Lower	Upper
152	100		
151	20.2	16.0	24.0

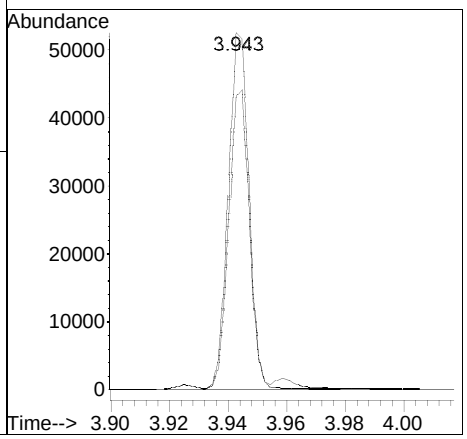


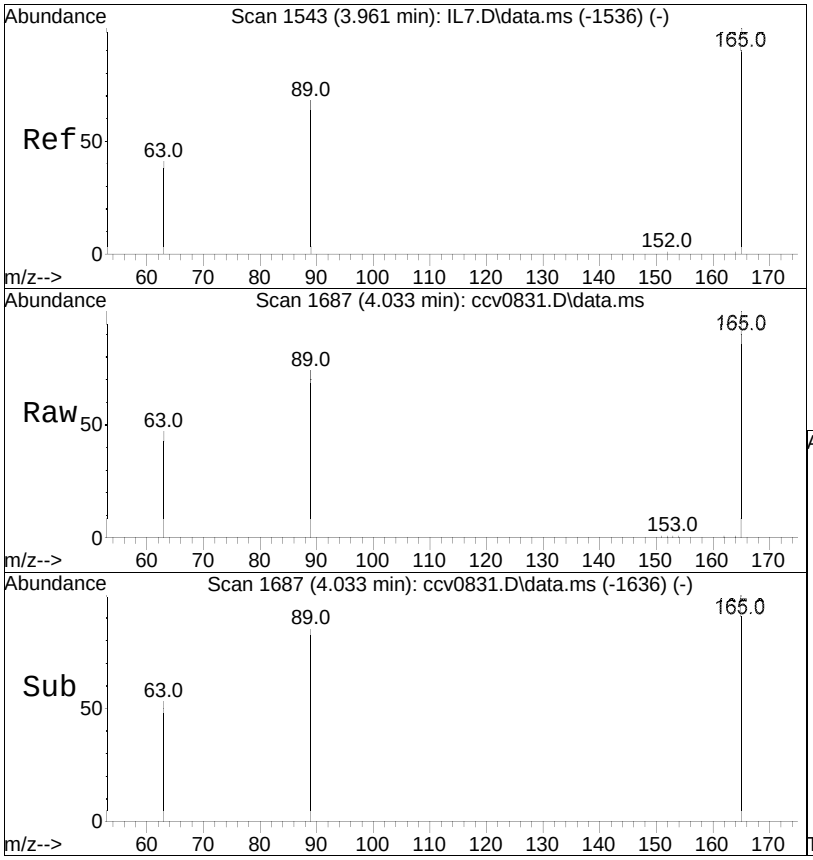


#18
Acenaphthene
Concen: 983.42 ng/ml
RT: 3.943 min Scan# 1641
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:153 Resp: 25321

Ion	Ratio	Lower	Upper
153	100		
154	83.4	66.9	100.3

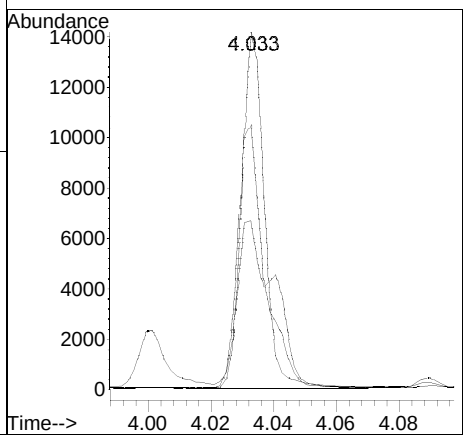


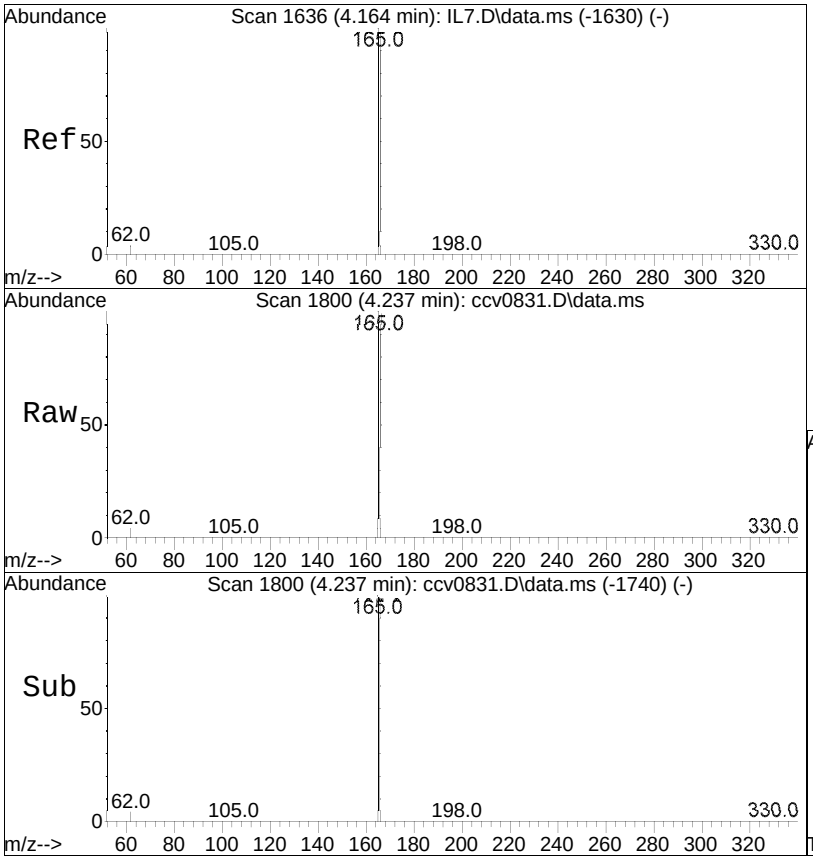


#19
2,4-Dinitrotoluene
Concen: 1190.67 ng/ml
RT: 4.033 min Scan# 1687
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:165 Resp: 7000

Ion	Ratio	Lower	Upper
165	100		
89	89.0	80.1	120.1
63	74.9	38.9	58.3#

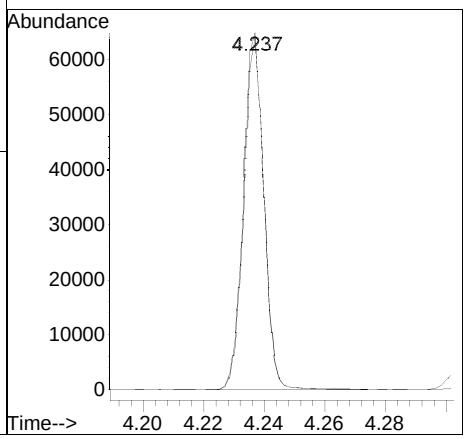


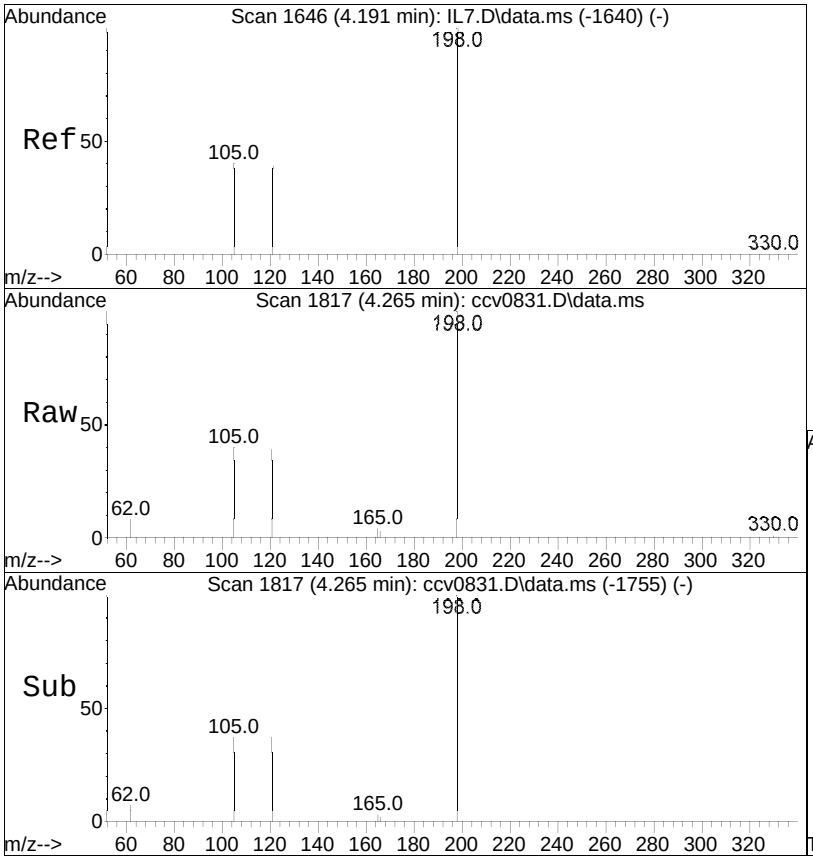


#20
Fluorene
Concen: 993.48 ng/ml
RT: 4.237 min Scan# 1800
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:166 Resp: 29401

Ion	Ratio	Lower	Upper
166	100		
165	102.8	82.9	124.3

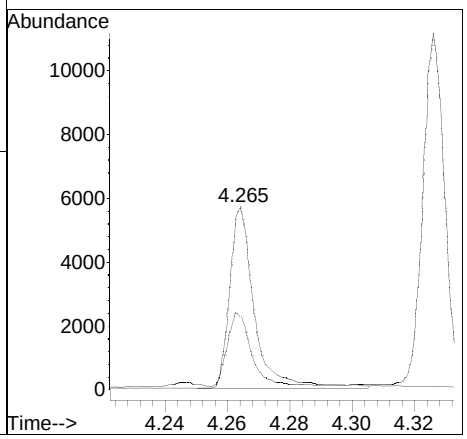


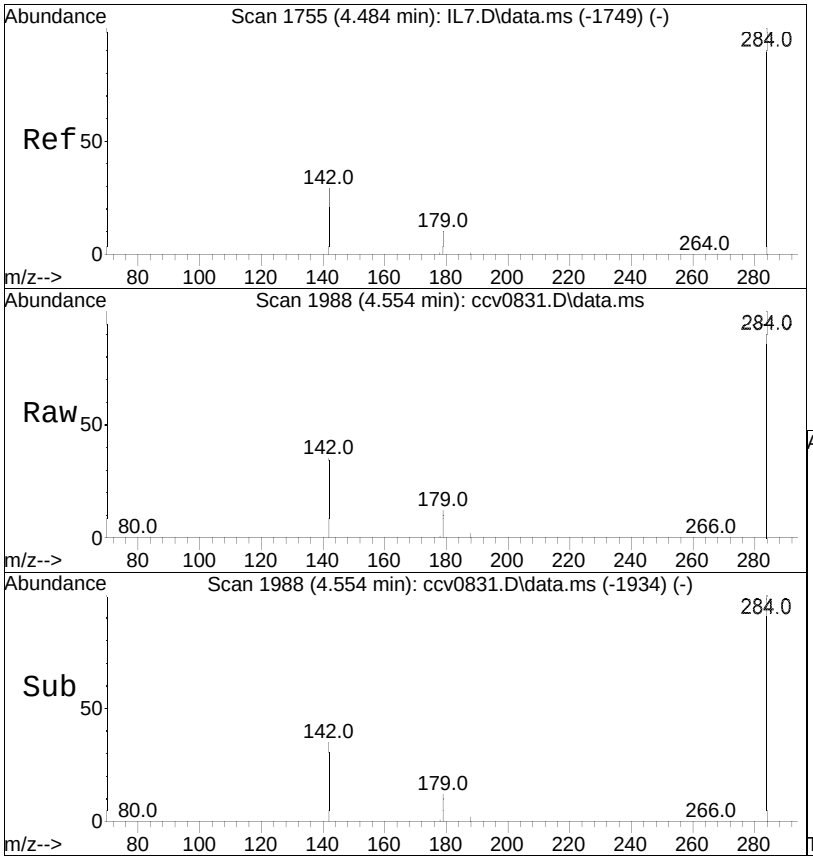


#23
4,6-Dinitro-o-cresol
Concen: 1042.25 ng/ml
RT: 4.265 min Scan# 1817
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:198 Resp: 3143

Ion	Ratio	Lower	Upper
198	100		
105	41.5	32.2	48.4

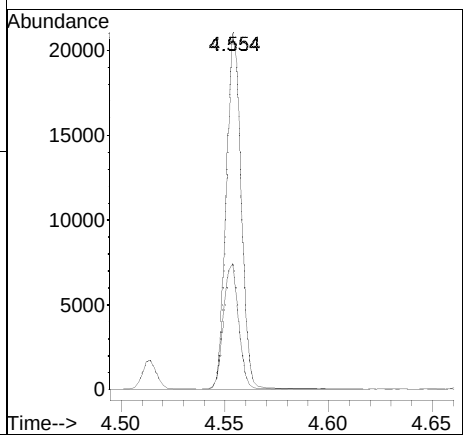


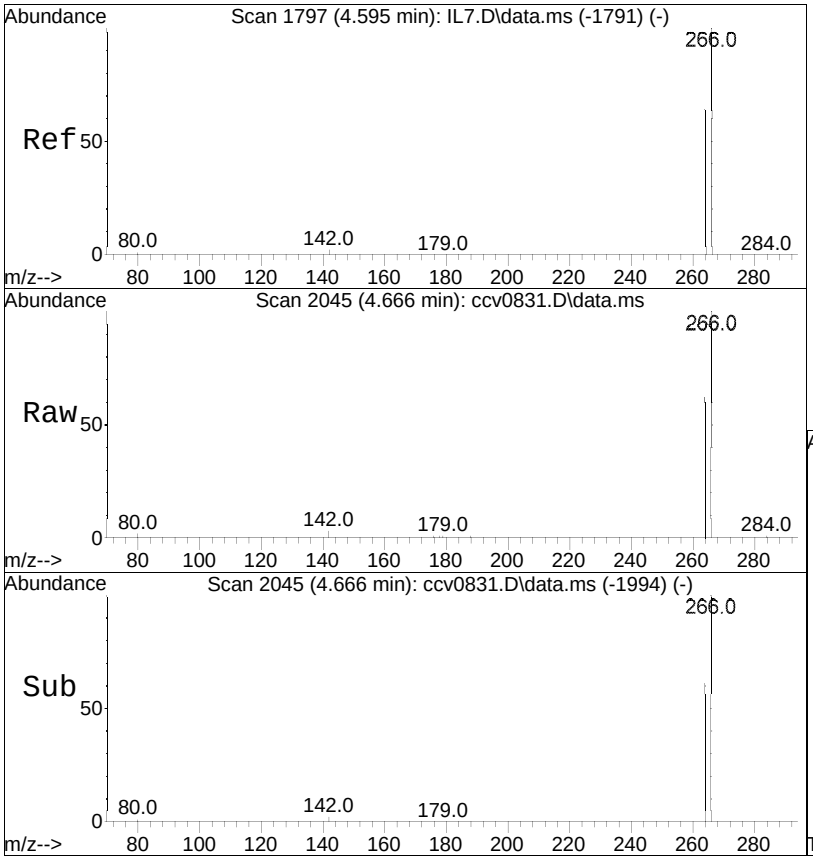


#24
Hexachlorobenzene
Concen: 968.89 ng/ml
RT: 4.554 min Scan# 1988
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:284 Resp: 10315

Ion	Ratio	Lower	Upper
284	100		
142	35.5	26.9	40.3

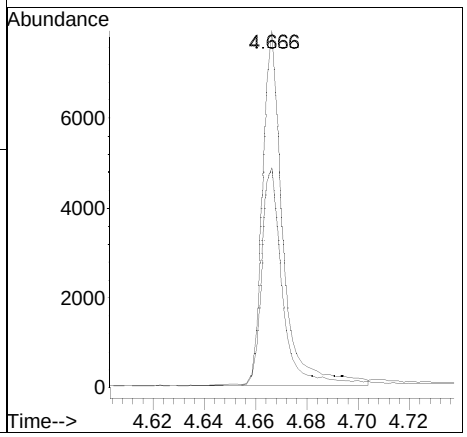


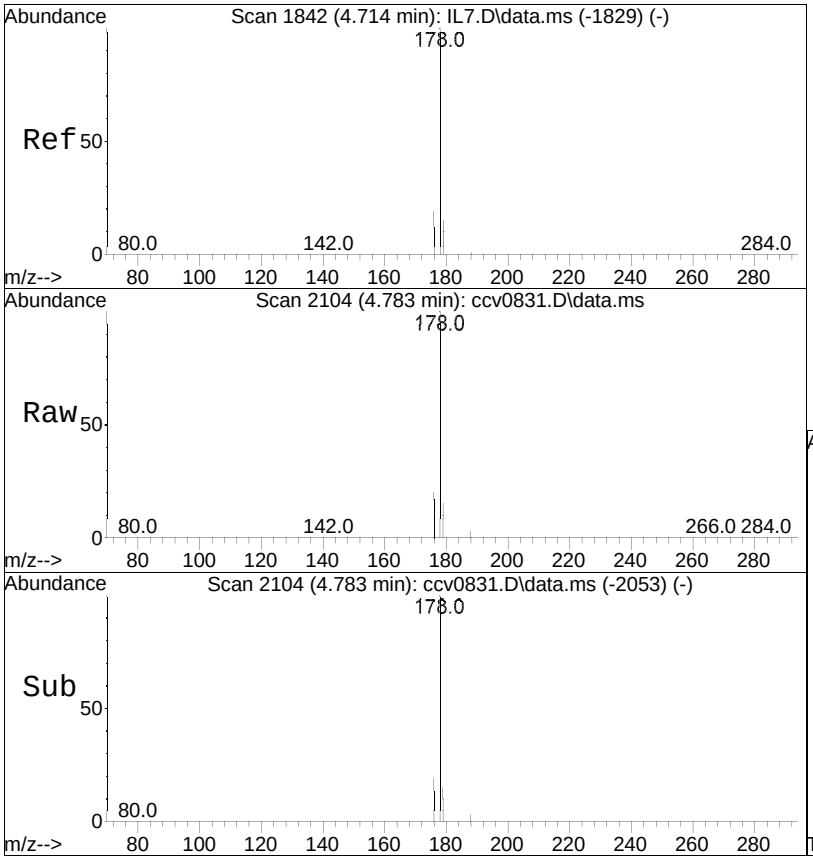


#25
Pentachlorophenol
Concen: 1118.13 ng/ml
RT: 4.666 min Scan# 2045
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:266 Resp: 4302

Ion	Ratio	Lower	Upper
266	100		
264	64.6	50.7	76.1

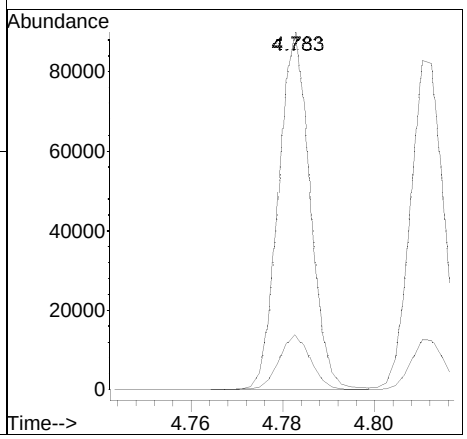


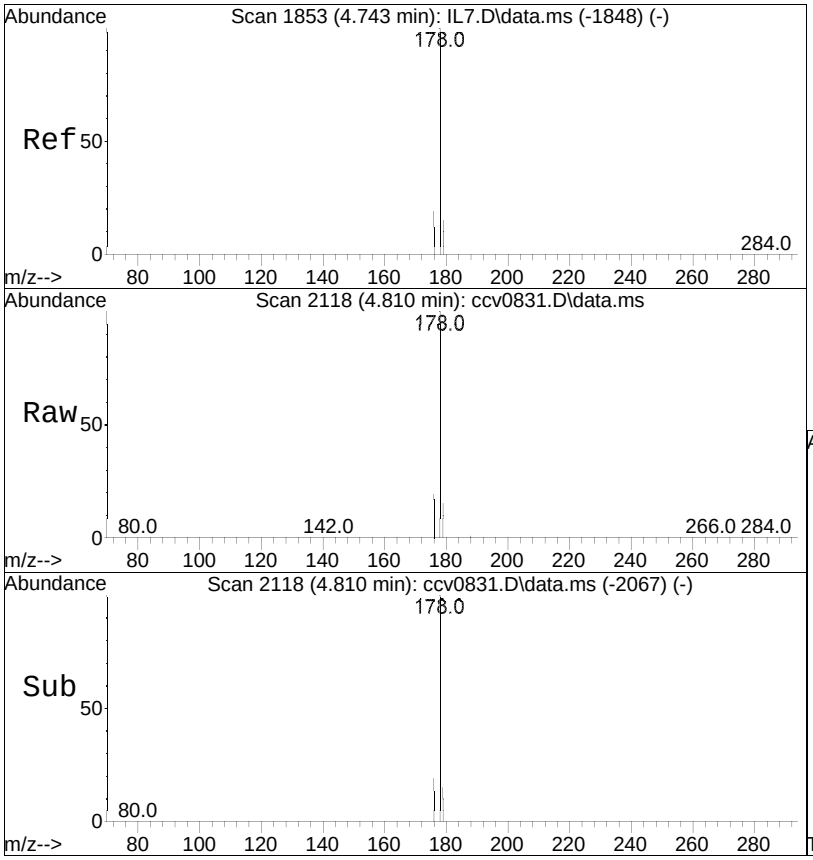


#26
Phenanthrene
Concen: 959.50 ng/ml
RT: 4.783 min Scan# 2104
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:178 Resp: 43066

Ion	Ratio	Lower	Upper
178	100		
179	15.3	12.3	18.5

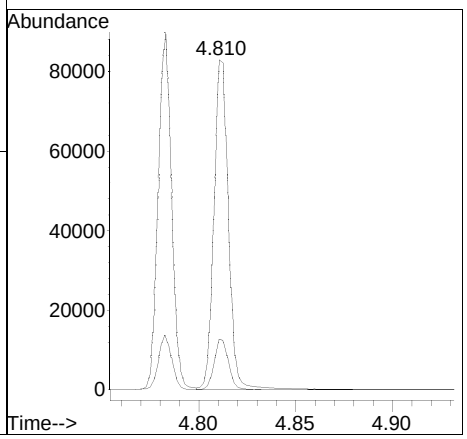


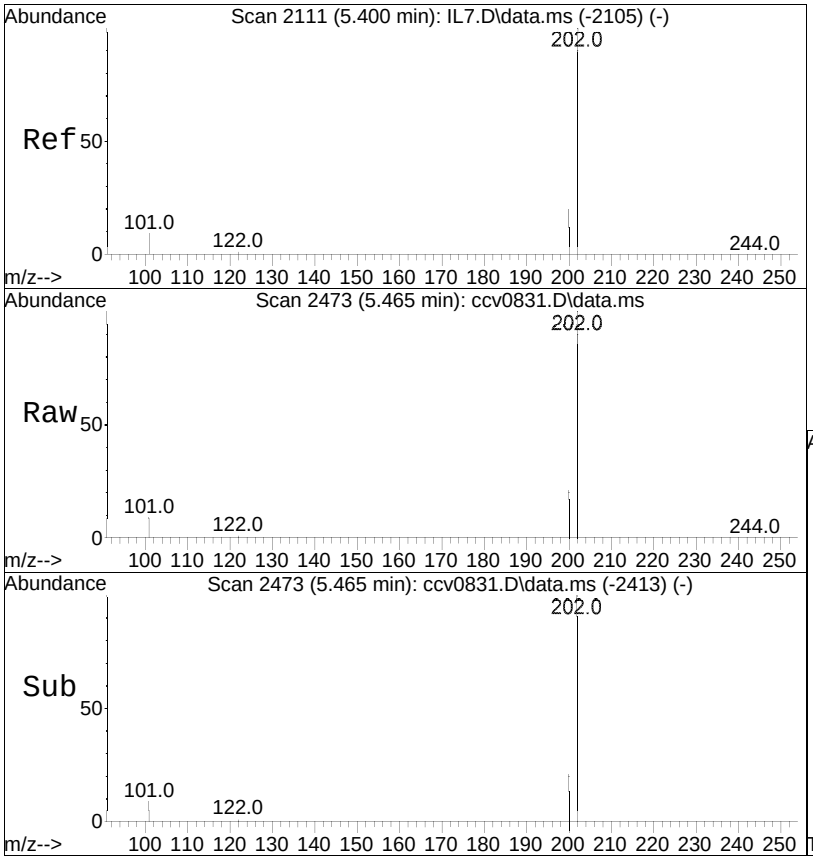


#27
Anthracene
Concen: 1026.58 ng/ml
RT: 4.810 min Scan# 2118
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:178 Resp: 42987

Ion	Ratio	Lower	Upper
178	100		
179	15.2	12.2	18.4

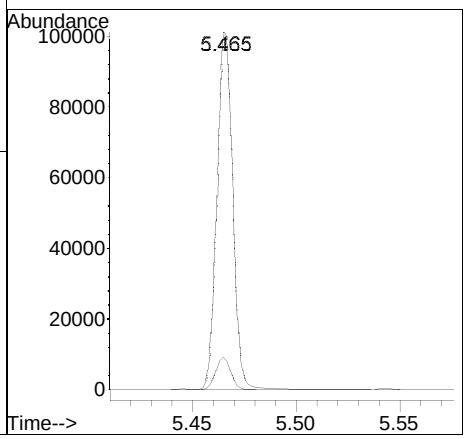


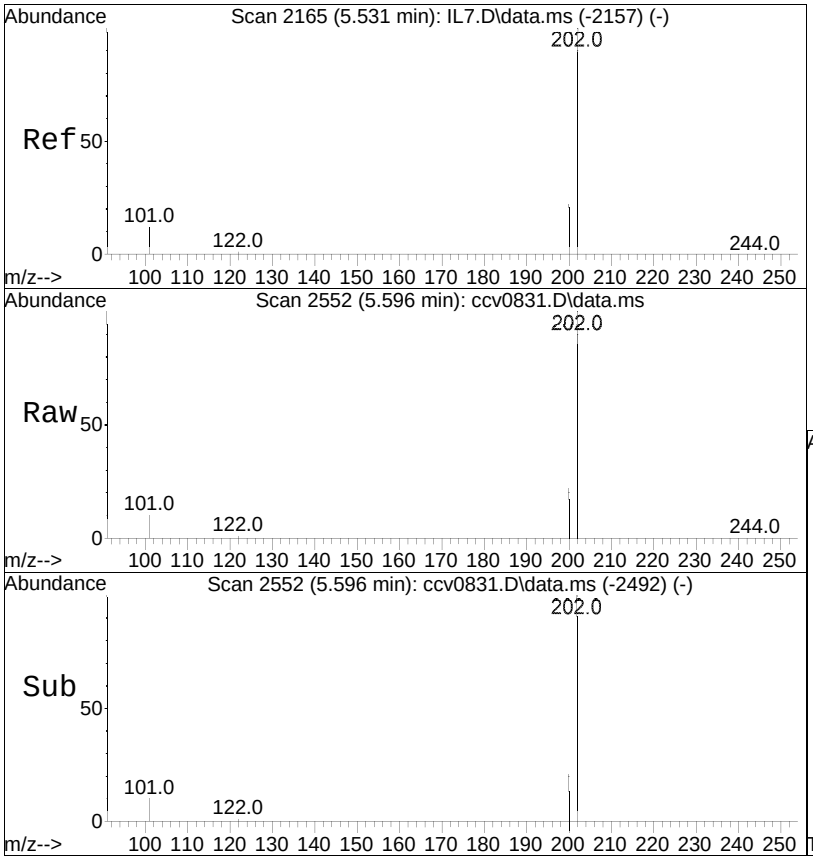


#28
Fluoranthene
Concen: 1024.31 ng/ml
RT: 5.465 min Scan# 2473
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:202 Resp: 52538

Ion	Ratio	Lower	Upper
202	100		
101	8.8	8.3	12.5

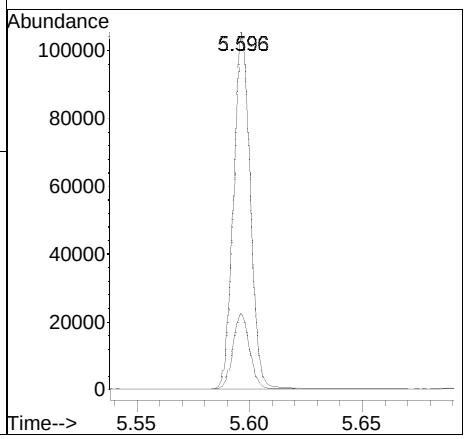


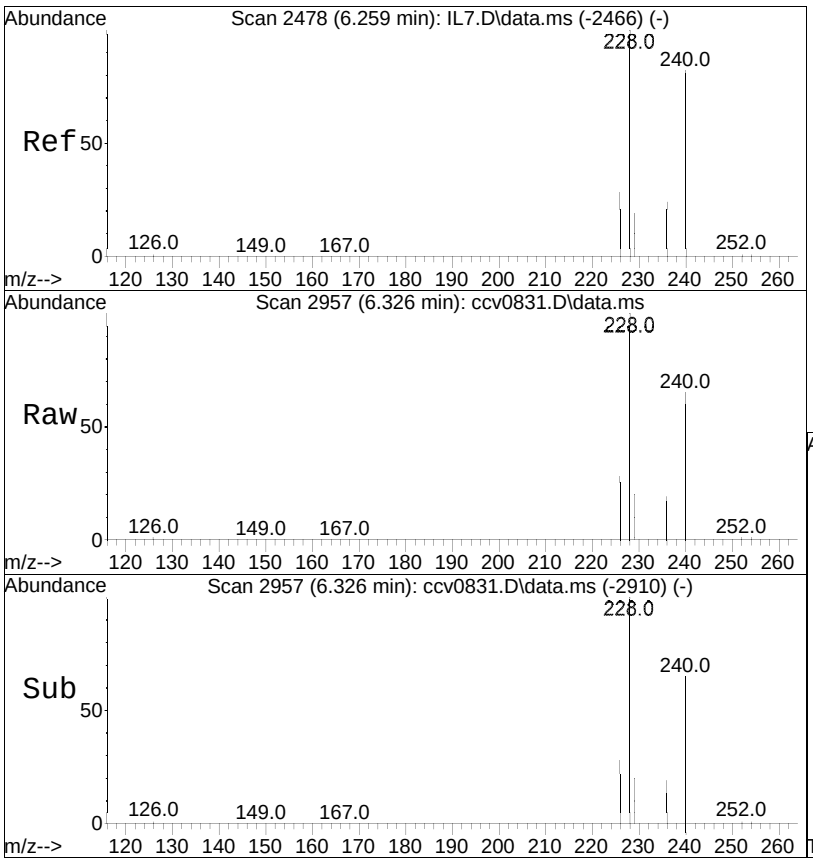


#29
Pyrene
Concen: 1015.63 ng/ml
RT: 5.596 min Scan# 2552
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:202 Resp: 53949

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.3	25.9

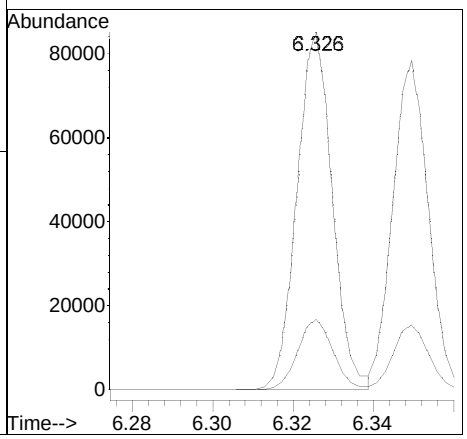


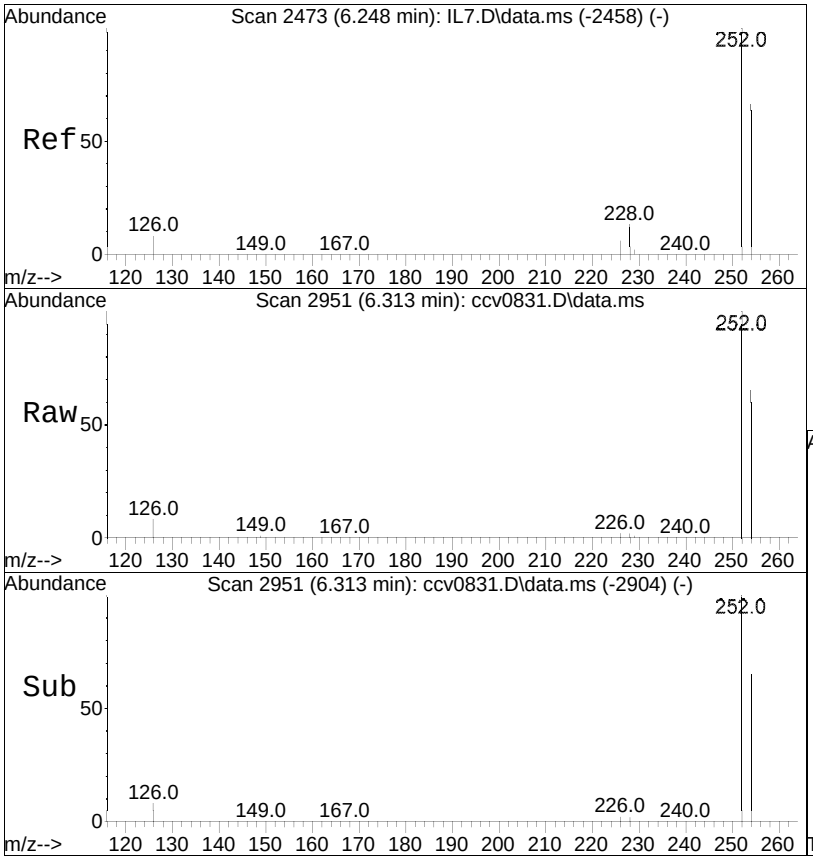


#32
Benzo[a]anthracene
Concen: 1043.69 ng/ml
RT: 6.326 min Scan# 2957
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:228 Resp: 51970

Ion	Ratio	Lower	Upper
228	100		
229	19.6	15.6	23.4

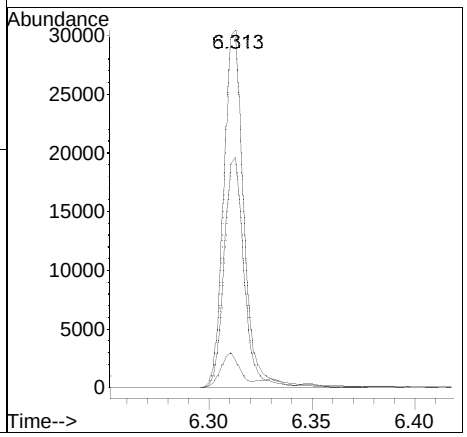


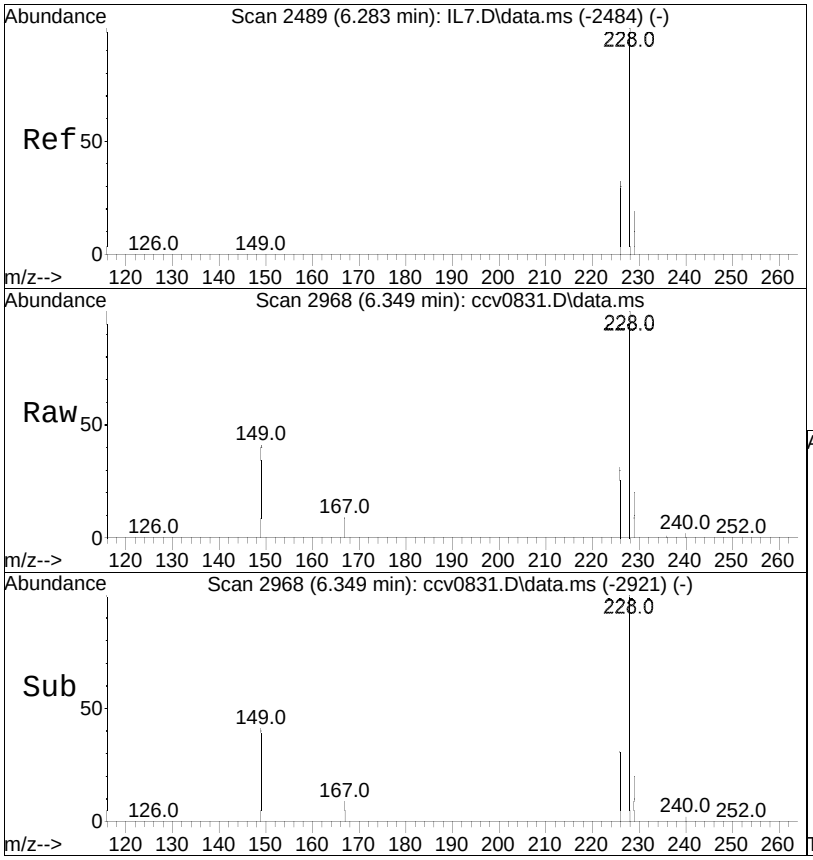


#33
3,3'-Dichlorobenzidine
Concen: 1045.10 ng/ml
RT: 6.313 min Scan# 2951
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:252 Resp: 20336

Ion	Ratio	Lower	Upper
252	100		
126	9.2	7.7	11.5
254	64.1	52.0	78.0

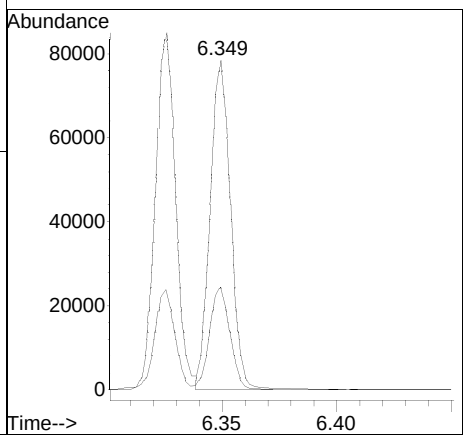


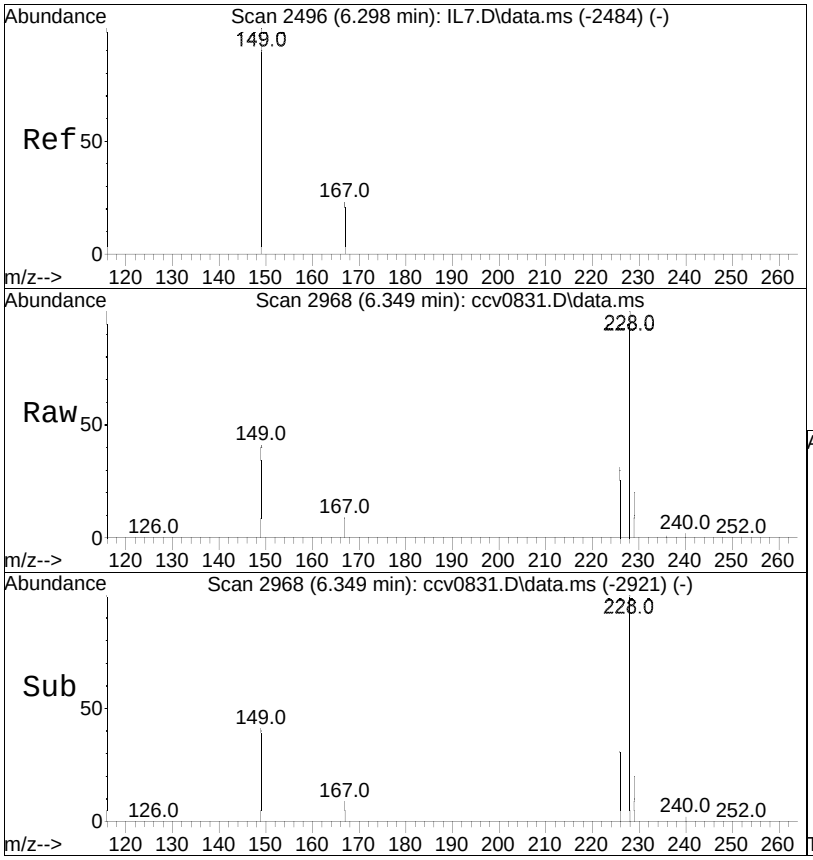


#34
Chrysene
Concen: 994.66 ng/ml
RT: 6.349 min Scan# 2968
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:228 Resp: 48216

Ion	Ratio	Lower	Upper
228	100		
226	31.2	24.5	36.7

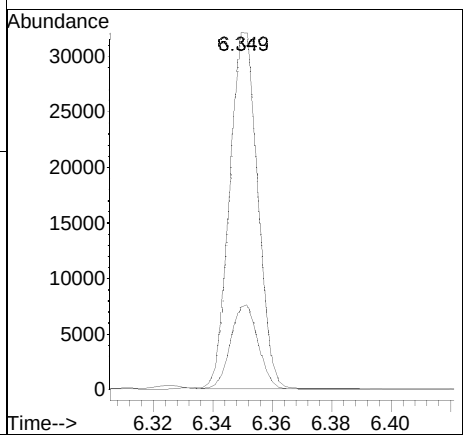


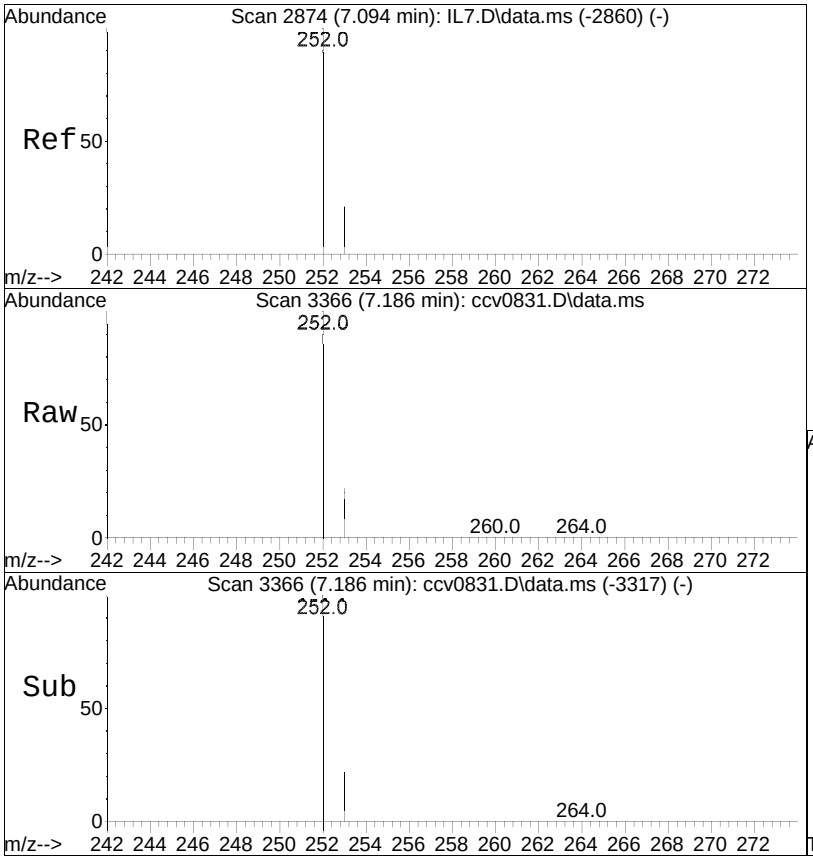


#35
Bis(2-ethylhexyl)phthalate
Concen: 927.78 ng/ml
RT: 6.349 min Scan# 2968
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:149 Resp: 20792

Ion	Ratio	Lower	Upper
149	100		
167	23.3	18.5	27.7

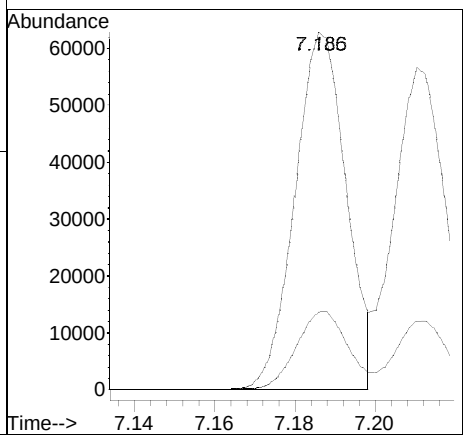


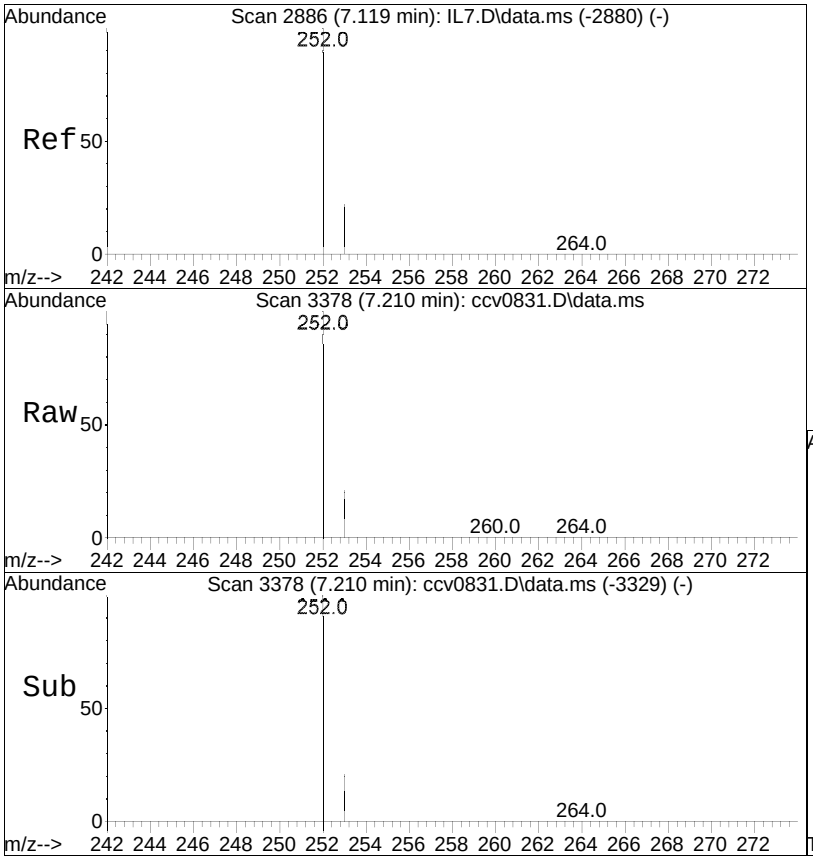


#37
Benzo[b]fluoranthene
Concen: 1079.15 ng/ml
RT: 7.186 min Scan# 3366
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:252 Resp: 55694

Ion	Ratio	Lower	Upper
252	100		
253	22.4	17.3	25.9

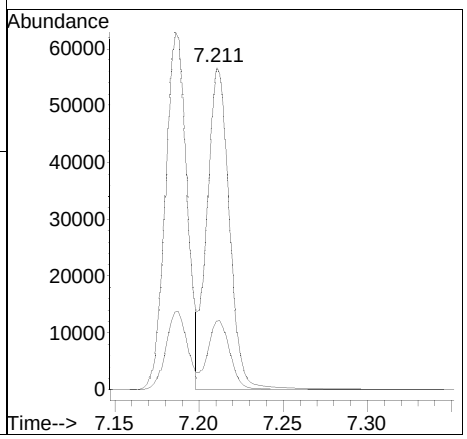


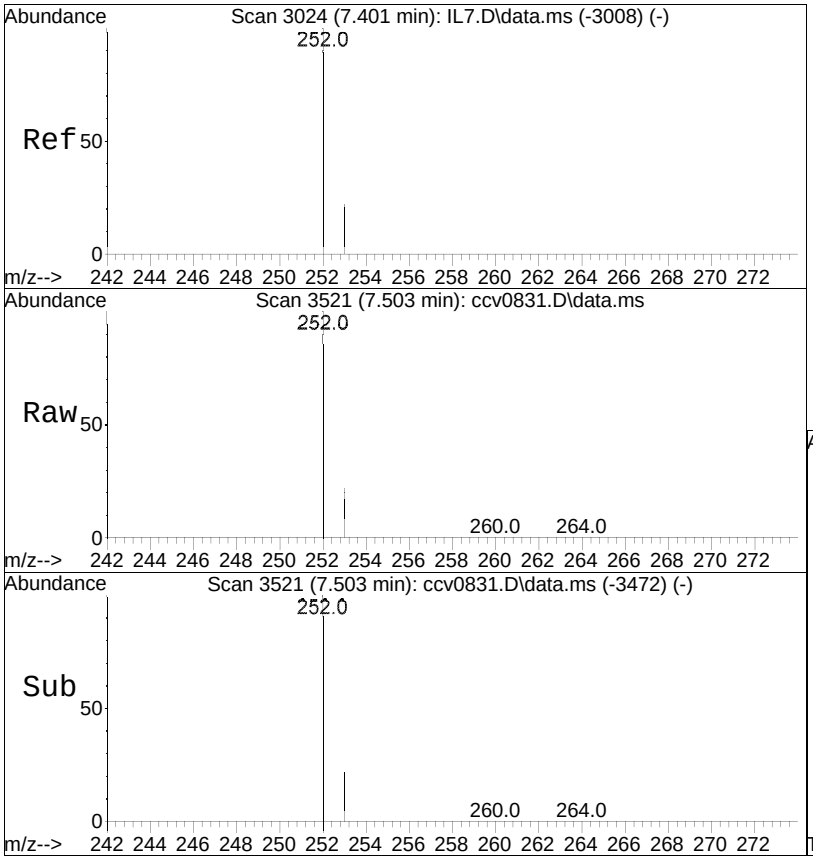


#38
Benzo[k]fluoranthene
Concen: 1117.00 ng/ml
RT: 7.210 min Scan# 3378
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:252 Resp: 51697

Ion	Ratio	Lower	Upper
252	100		
253	20.7	17.4	26.2

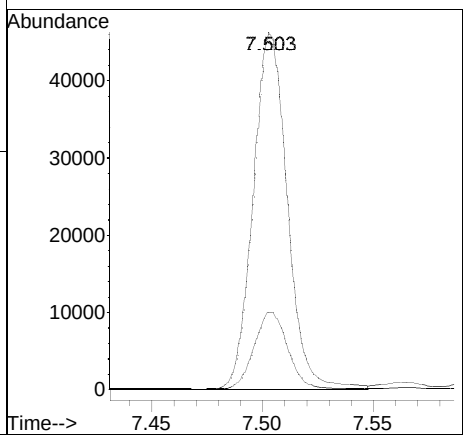


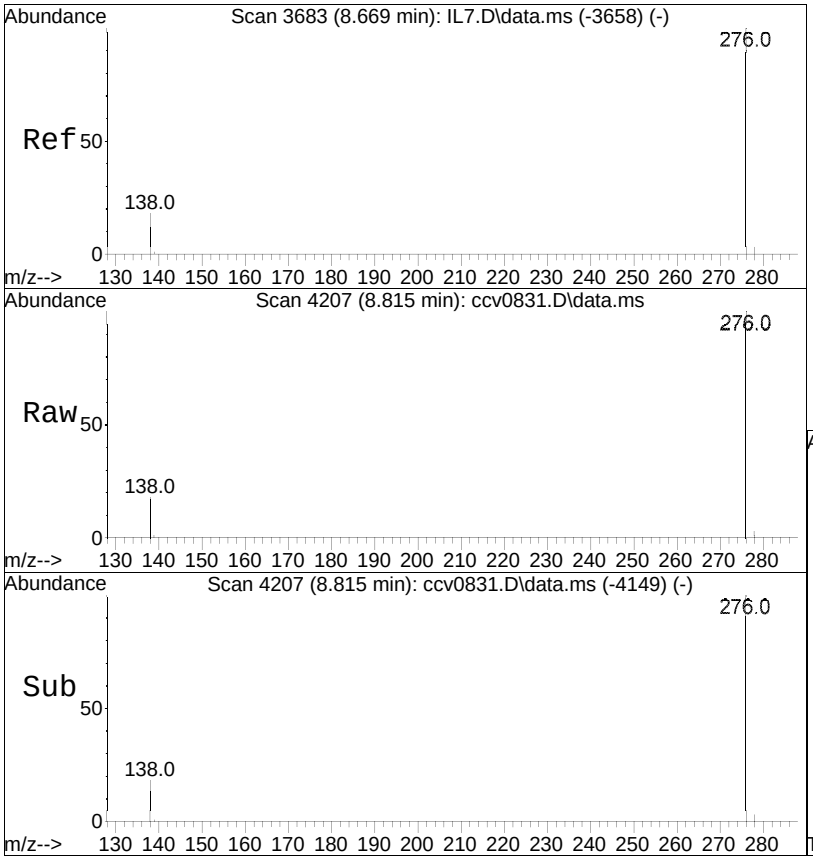


#39
Benzo[a]pyrene
Concen: 1166.35 ng/ml
RT: 7.503 min Scan# 3521
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:252 Resp: 48721

Ion	Ratio	Lower	Upper
252	100		
253	21.6	17.4	26.0

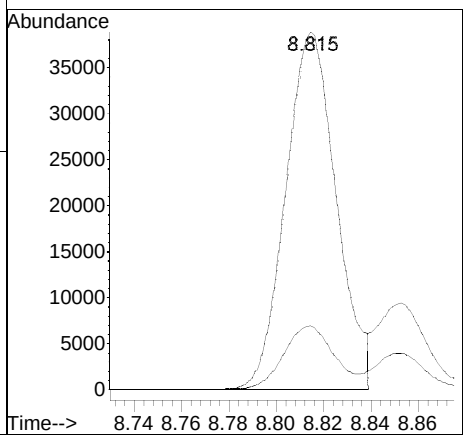


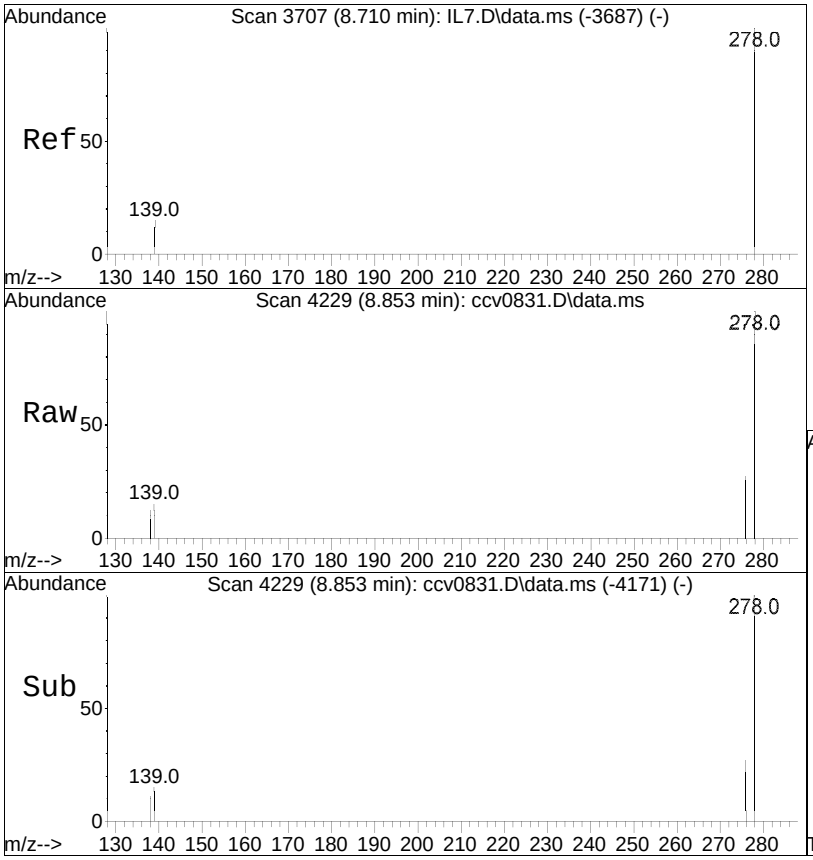


#40
Indeno[1,2,3-cd]pyrene
Concen: 1192.46 ng/ml
RT: 8.815 min Scan# 4207
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:276 Resp: 57128

Ion	Ratio	Lower	Upper
276	100		
138	17.5	14.8	22.2

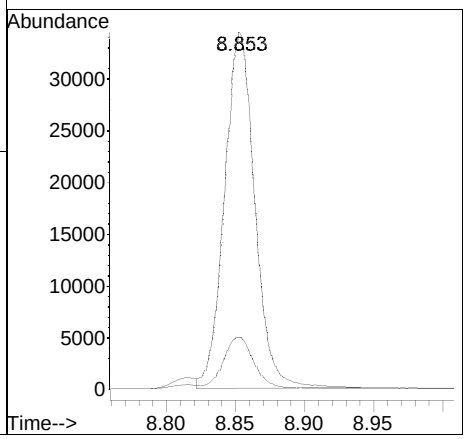


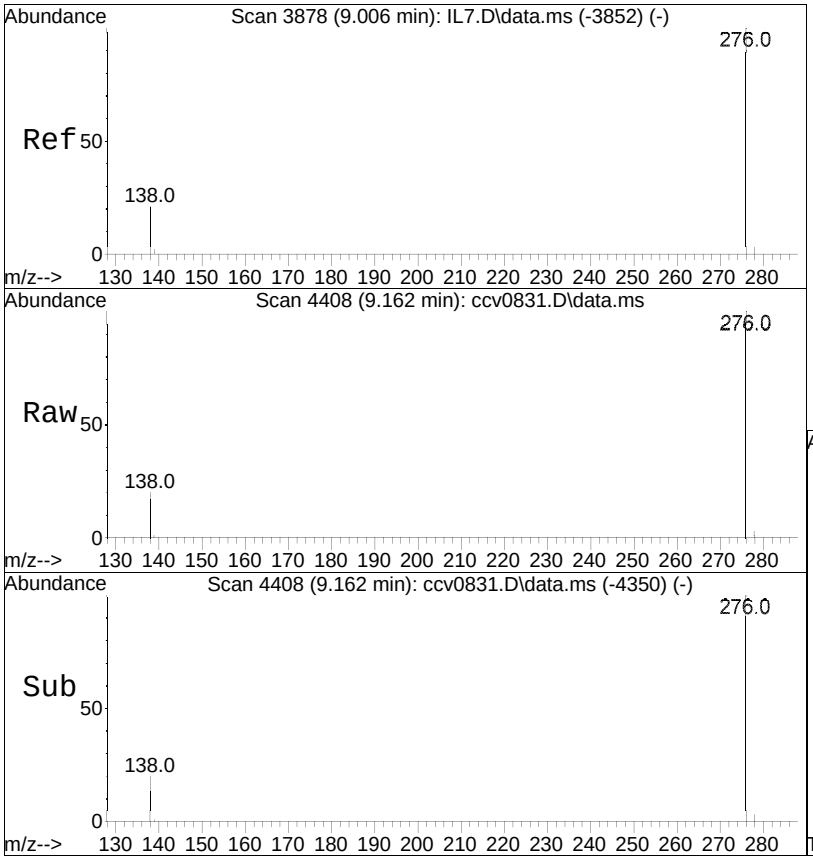


#41
Dibenzo[a,h]anthracene
Concen: 1139.84 ng/ml
RT: 8.853 min Scan# 4229
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:278 Resp: 52037

Ion	Ratio	Lower	Upper
278	100		
139	14.7	12.2	18.4

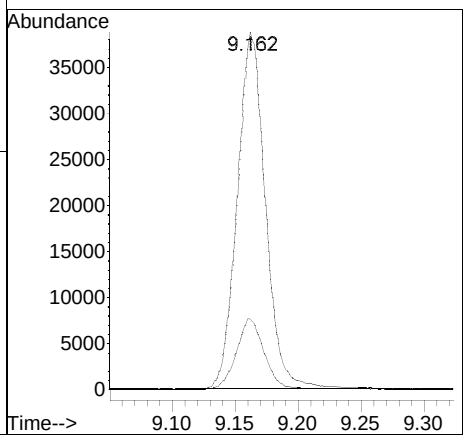




#42
Benzo[g,h,i]perylene
Concen: 1175.97 ng/ml
RT: 9.162 min Scan# 4408
Delta R.T. 0.000 min
Lab File: ccv0831.D
Acq: 31 Aug 2023 07:21 am

Tgt Ion:276 Resp: 59800

Ion	Ratio	Lower	Upper
276	100		
138	19.7	16.8	25.2



Manual Integration Report

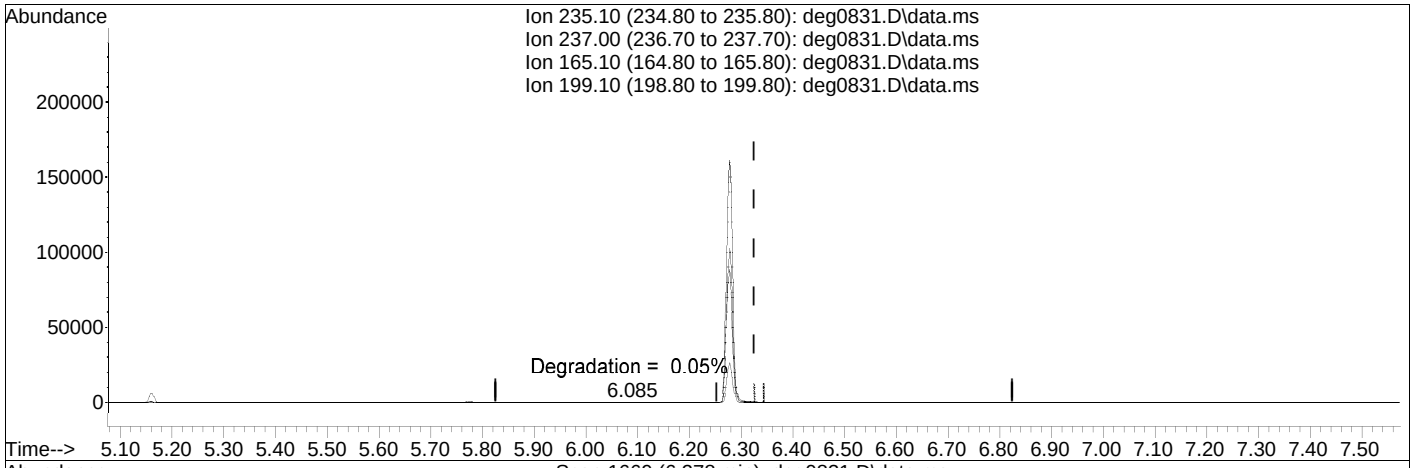
Data Path	: I:\8270SIM\sv119\230831LVI	Method	: SIM-LVI_230306_sv119.M
Data File	: ccv0831.D	Operator	: sv119:jjw
Date Inj'd	: 8/31/2023 7:21 am	Instrument	: SV119
Sample	: WG1822344-3,32,, ICV 10193	Quant Date	: 8/31/2023 7:37 am

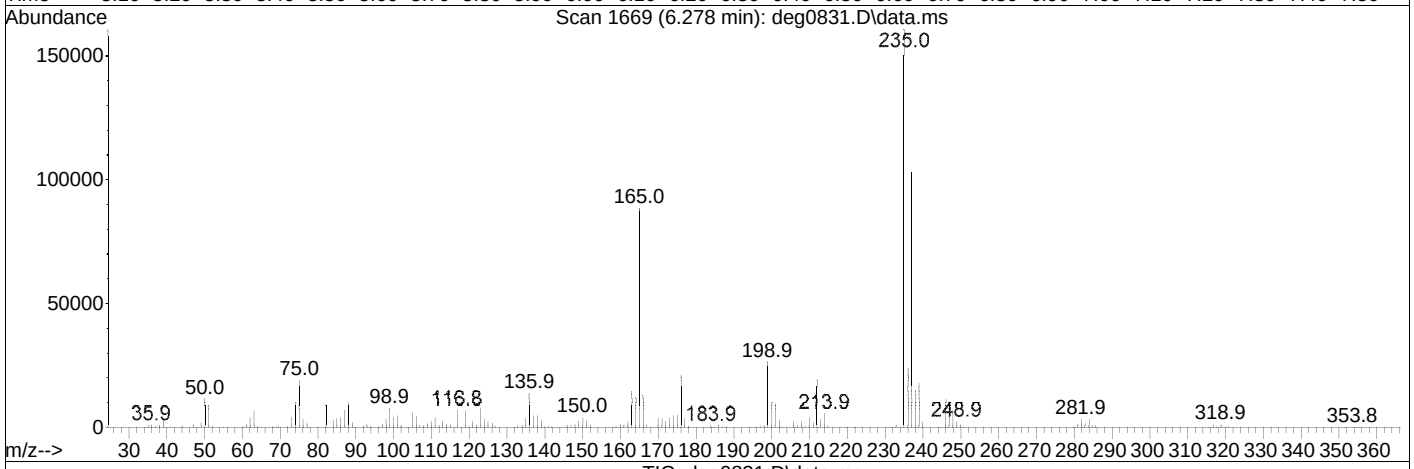
There are no manual integrations or false positives in this file.

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : deg0831.D
Acq On : 31 Aug 2023 07:05 am
Operator : sv119:jjw
Sample : WG1822344-2,32,,dftppsv119
Misc : WG1822344,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Aug 31 07:19:39 2023
Quant Method : I:\8270SIM\sv119\230831LVI\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sun Aug 27 10:42:26 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0831.D\data.ms

(6) ddt (T)

6.278min (-0.047) 20.78

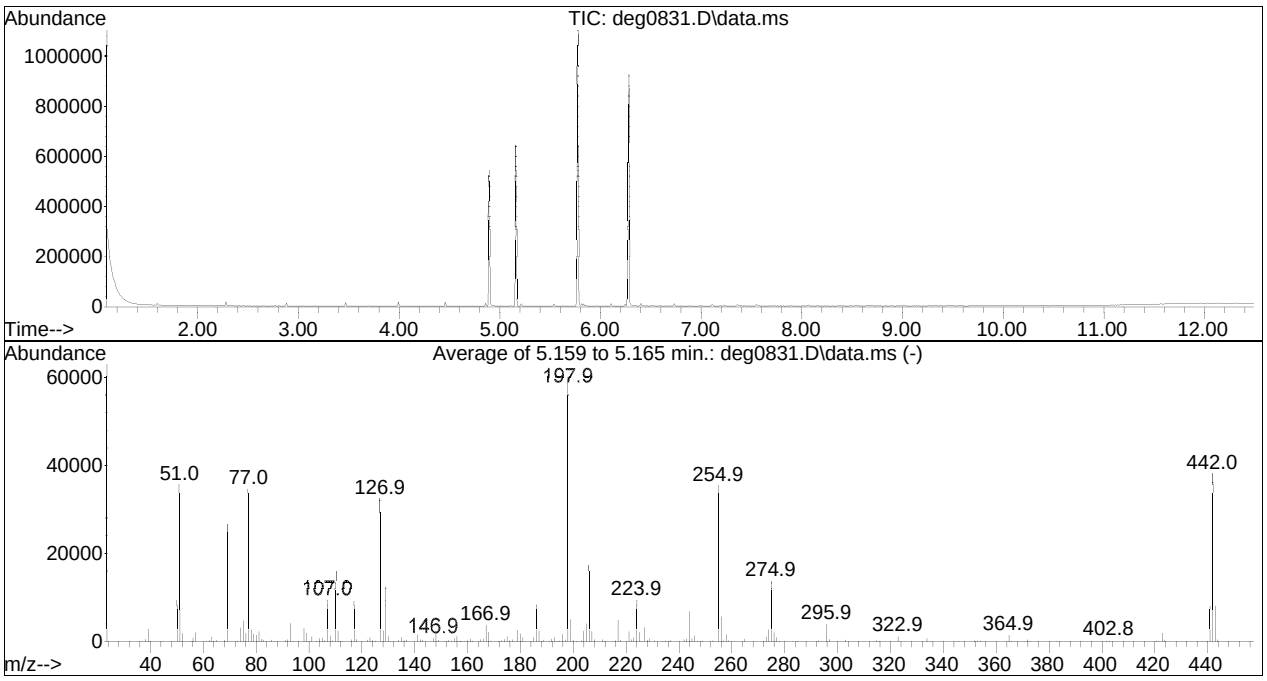
response 126664

Ion	Exp%	Act%
235.10	100.00	100.00
237.00	65.60	64.80
165.10	53.30	54.97
199.10	17.10	16.12

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : deg0831.D
Acq On : 31 Aug 2023 07:05 am
Operator : sv119:jjw
Sample : WG1822344-1,32,,dftppsv119
Misc : WG1822344,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270SIM\sv119\230831LVI\SIM-LVI_230306_sv119.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Thu Aug 31 07:37:11 2023



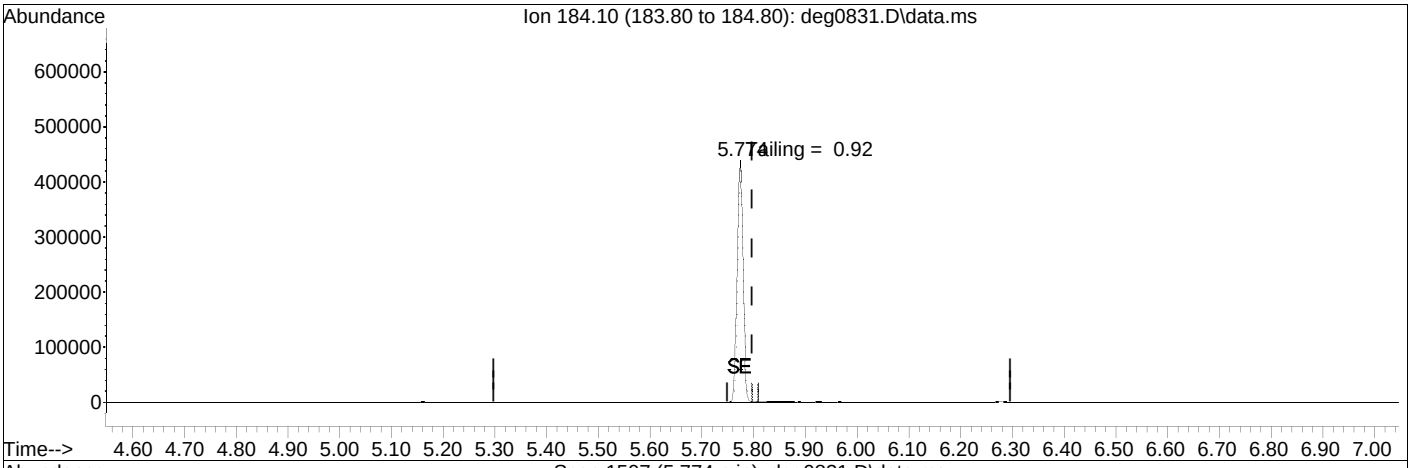
Spectrum Information: Average of 5.159 to 5.165 min.

Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	59.4	35602	PASS
68	69	0.00	2	1.6	410	PASS
69	69	100	100	100.0	26429	PASS
70	69	0.00	2	0.5	128	PASS
127	198	10	80	54.0	32376	PASS
197	198	0.00	2	0.8	478	PASS
198	198	100	100	100.0	59923	PASS
199	198	5	9	8.2	4932	PASS
275	198	10	60	22.9	13716	PASS
365	198	1	100	2.5	1520	PASS
441	442	0.01	24	20.6	7841	PASS
442	198	50	100	63.5	38075	PASS
443	442	15	24	20.7	7878	PASS

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : deg0831.D
Acq On : 31 Aug 2023 07:05 am
Operator : sv119:jjw
Sample : WG1822344-4,32,,dftppsv119
Misc : WG1822344,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Aug 31 07:19:39 2023
Quant Method : I:\8270SIM\sv119\230831LVI\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sun Aug 27 10:42:26 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D



TIC: deg0831.D\data.ms

(3) benzidine (T)

5.774min (-0.023) 32.17

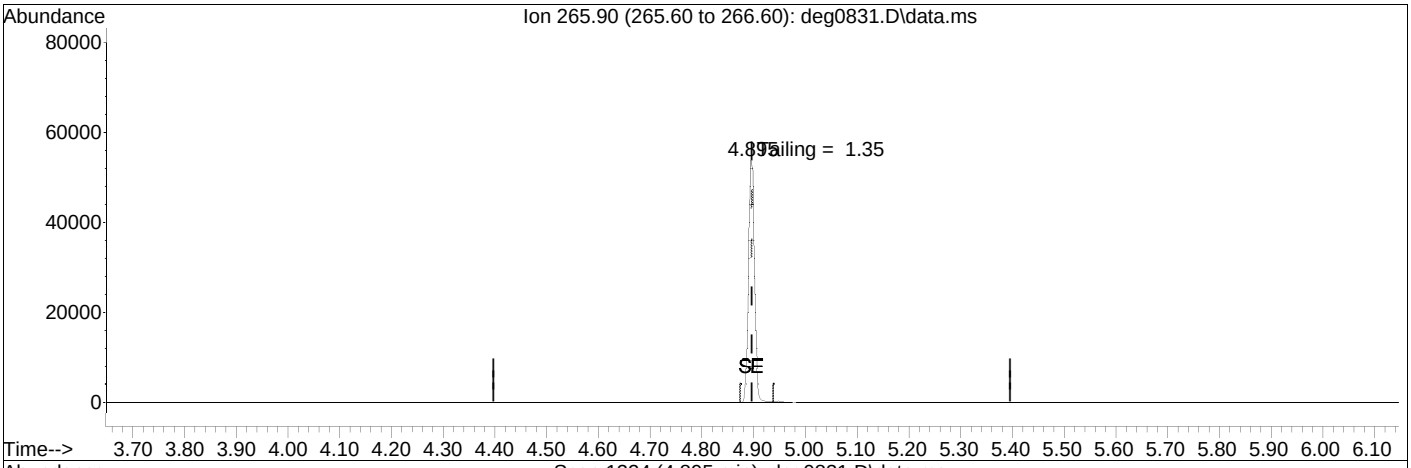
response 327537

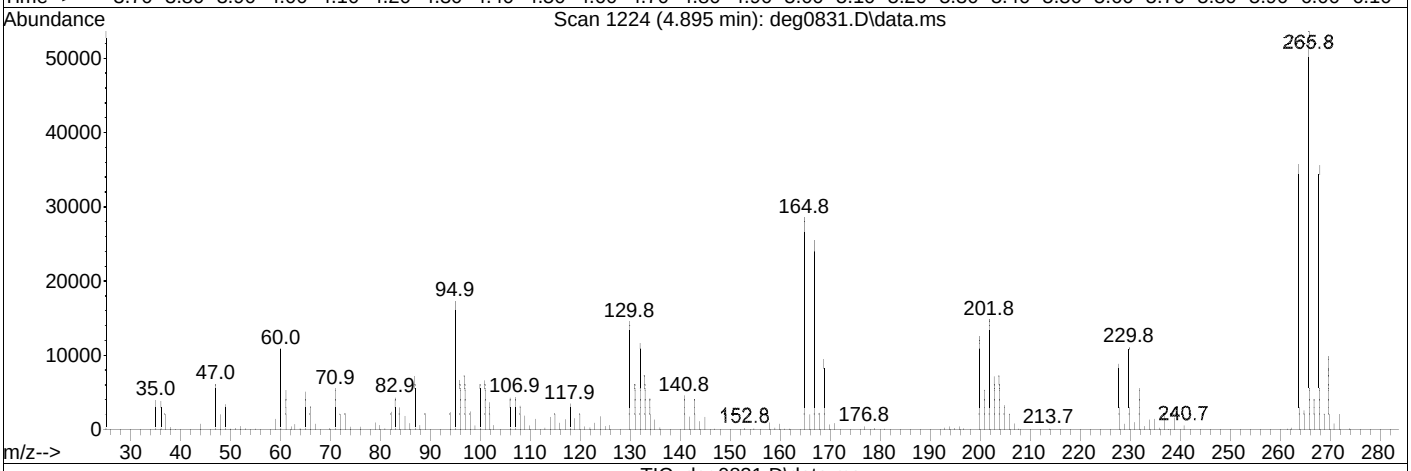
Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : deg0831.D
Acq On : 31 Aug 2023 07:05 am
Operator : sv119:jjw
Sample : WG1822344-5,32,,dftppsv119
Misc : WG1822344,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Aug 31 07:19:39 2023
Quant Method : I:\8270SIM\sv119\230831LVI\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sun Aug 27 10:42:26 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0831.D\data.ms

(1) pentachlorophenol (T)

4.895min (-0.002) 19.90

response 41802

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : ccv0901.D
Acq On : 01 Sep 2023 09:36 am
Operator : sv119:rp
Sample : WG1822868-3,32,, ICV 10193 (0830)
Misc : WG1822868,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 01 09:52:45 2023
Quant Method : I:\8270SIM\sv119\230901LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:52:29 2023
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	81	0.00
2	s	2-Fluorophenol	0.984	1.223	-24.3#	95	0.00
3	s	Phenol-d6	1.163	1.417	-21.8#	96	0.00
4	T	Bis(2-chloroethyl)ether	1.081	1.173	-8.5	87	0.00
5	T	n-nitrosodi-n-propylamine	0.623	0.758	-21.7#	93	0.00
6	t	Hexachloroethane	0.445	0.518	-16.4	91	0.00
7	s	Nitrobenzene-d5	0.875	1.162	-32.8#	99	0.00
8	i	Naphthalene-d8	1.000	1.000	0.0	80	0.00
9	t	Naphthalene	0.947	0.940	0.7	77	0.00
10	t	Hexachlorobutadiene	0.184	0.194	-5.4	82	0.00
11	t	2-Methylnaphthalene	0.637	0.640	-0.5	78	0.00
12	t	1-Methylnaphthalene	0.614	0.609	0.8	77	0.00
13	s	2-Fluorobiphenyl	0.822	0.772	6.1	72	0.00
14	t	2-Chloronaphthalene	0.692	0.671	3.0	76	0.00
15	t	2,6-Dinitrotoluene	0.121	0.140	-15.7	94	0.00
16	t	Acenaphthylene	0.998	1.027	-2.9	76	0.00
17	i	Acenaphthene-d10	1.000	1.000	0.0	79	0.00
18	t	Acenaphthene	1.268	1.250	1.4	75	0.00
19	t	2,4-Dinitrotoluene	*1000.000	1194.674	-19.5	92	0.00
20	t	Fluorene	1.458	1.476	-1.2	75	0.00
21	s	2,4,6-Tribromophenol	0.161	0.205	-27.3#	92	0.00
22	i	Phenanthrene-d10	1.000	1.000	0.0	78	0.00
23	T	4,6-Dinitro-o-cresol	*1000.000	1138.548	-13.9	101	0.00
24	t	Hexachlorobenzene	0.240	0.236	1.7	73	0.00
25	t	Pentachlorophenol	*1000.000	1126.645	-12.7	84	0.00
26	t	Phenanthrene	1.013	0.976	3.7	73	0.00
27	t	Anthracene	0.946	0.954	-0.8	74	0.00
28	t	Fluoranthene	1.158	1.188	-2.6	76	0.00
29	t	Pyrene	1.199	1.216	-1.4	75	0.00
30	s	4-Terphenyl-d14	0.835	0.680	18.6	61	0.00
31	i	Chrysene-d12	1.000	1.000	0.0	70	0.00
32	t	Benzo[a]anthracene	*1000.000	1025.025	-2.5	71	0.00
33	t	3,3'-Dichlorobenzidine	0.511	0.501	2.0	69	0.00
34	t	Chrysene	1.274	1.276	-0.2	67	0.00
35	T	Bis(2-ethylhexyl)phthalate	*1000.000	864.327	13.6	65	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : ccv0901.D
Acq On : 01 Sep 2023 09:36 am
Operator : sv119:rp
Sample : WG1822868-3,32,, ICV 10193 (0830)
Misc : WG1822868,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 01 09:52:45 2023
Quant Method : I:\8270SIM\sv119\230901LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:52:29 2023
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
36	i	Perylene-d12	1.000	1.000	0.0	63	0.00
37	t	Benzo[b]fluoranthene	1.216	1.339	-10.1	66	0.00
38	t	Benzo[k]fluoranthene	1.091	1.215	-11.4	65	0.00
39	t	Benzo[a]pyrene	0.985	1.128	-14.5	67	0.00
40	t	Indeno[1,2,3-cd]pyrene	1.129	1.260	-11.6	68	0.00
41	t	Dibenzo[a,h]anthracene	1.076	1.175	-9.2	63	0.00
42	t	Benzo[g,h,i]perylene	1.199	1.362	-13.6	68	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : ccv0901.D
Acq On : 01 Sep 2023 09:36 am
Operator : sv119:rp
Sample : WG1822868-3,32,, ICV 10193 (0830)
Misc : WG1822868,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 01 09:52:45 2023
Quant Method : I:\8270SIM\sv119\230901LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:52:29 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.256	152	53473	4000.000	ng/ml	0.00
8) Naphthalene-d8	2.932	136	193222	4000.000	ng/ml	0.00
17) Acenaphthene-d10	3.917	164	98963	4000.000	ng/ml	0.00
22) Phenanthrene-d10	4.763	188	220308	4000.000	ng/ml	0.00
31) Chrysene-d12	6.355	240	182645	4000.000	ng/ml	0.00
36) Perylene-d12	7.588	264	191472	4000.000	ng/ml	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	1.645	112	16343	1242.183	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 24.84%			
3) Phenol-d6	2.063	99	18945	1218.755	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 24.38%			
7) Nitrobenzene-d5	2.543	82	15535	1328.412	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 53.14%			
13) 2-Fluorobiphenyl	3.536	172	37300	938.926	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 37.56%			
21) 2,4,6-Tribromophenol	4.366	330	5067	1270.777	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 25.42%			
30) 4-Terphenyl-d14	5.697	244	37453	814.735	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 32.59%			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.116	93	15682	1085.211	ng/ml	98
5) n-nitrosodi-n-propylamine	2.460	70	10132	1216.241	ng/ml	98
6) Hexachloroethane	2.521	117	6926	1165.396	ng/ml	98
9) Naphthalene	2.944	128	45400	992.223	ng/ml	100
10) Hexachlorobutadiene	3.018	225	9393	1056.147	ng/ml	100
11) 2-Methylnaphthalene	3.328	142	30898	1004.599	ng/ml	99
12) 1-Methylnaphthalene	3.382	142	29430	992.194	ng/ml	99
14) 2-Chloronaphthalene	3.602	162	32426	970.635	ng/ml	99
15) 2,6-Dinitrotoluene	3.796	165	6782	1156.608	ng/ml	98
16) Acenaphthylene	3.837	152	49594	1028.819	ng/ml	100
18) Acenaphthene	3.935	153	30922	985.541	ng/ml	100
19) 2,4-Dinitrotoluene	4.025	165	8561	1194.674	ng/ml	94
20) Fluorene	4.228	166	36506	1012.302	ng/ml	99
23) 4,6-Dinitro-o-cresol	4.256	198	4291	1138.548	ng/ml	100
24) Hexachlorobenzene	4.548	284	13008	982.480	ng/ml	95
25) Pentachlorophenol	4.660	266	5395	1126.645	ng/ml	99
26) Phenanthrene	4.776	178	53749	962.913	ng/ml	100
27) Anthracene	4.806	178	52531	1008.740	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : ccv0901.D
Acq On : 01 Sep 2023 09:36 am
Operator : sv119:rp
Sample : WG1822868-3,32,, ICV 10193 (0830)
Misc : WG1822868,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 01 09:52:45 2023
Quant Method : I:\8270SIM\sv119\230901LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:52:29 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Fluoranthene	5.466	202	65418	1025.570	ng/ml	96
29) Pyrene	5.601	202	66948	1013.441	ng/ml	100
32) Benzo[a]anthracene	6.347	228	61271	1025.025	ng/ml	100
33) 3,3'-Dichlorobenzidine	6.336	252	22886	979.983	ng/ml	100
34) Chrysene	6.373	228	58272	1001.614	ng/ml	99
35) Bis(2-ethylhexyl)phtha...	6.379	149	23162	864.327	ng/ml	100
37) Benzo[b]fluoranthene	7.212	252	64095	1100.763	ng/ml	100
38) Benzo[k]fluoranthene	7.237	252	58171	1114.017	ng/ml	100
39) Benzo[a]pyrene	7.527	252	54013	1146.061	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.833	276	60315	1115.875	ng/ml	98
41) Dibenzo[a,h]anthracene	8.871	278	56251	1092.090	ng/ml	98
42) Benzo[g,h,i]perylene	9.179	276	65207	1136.548	ng/ml	97

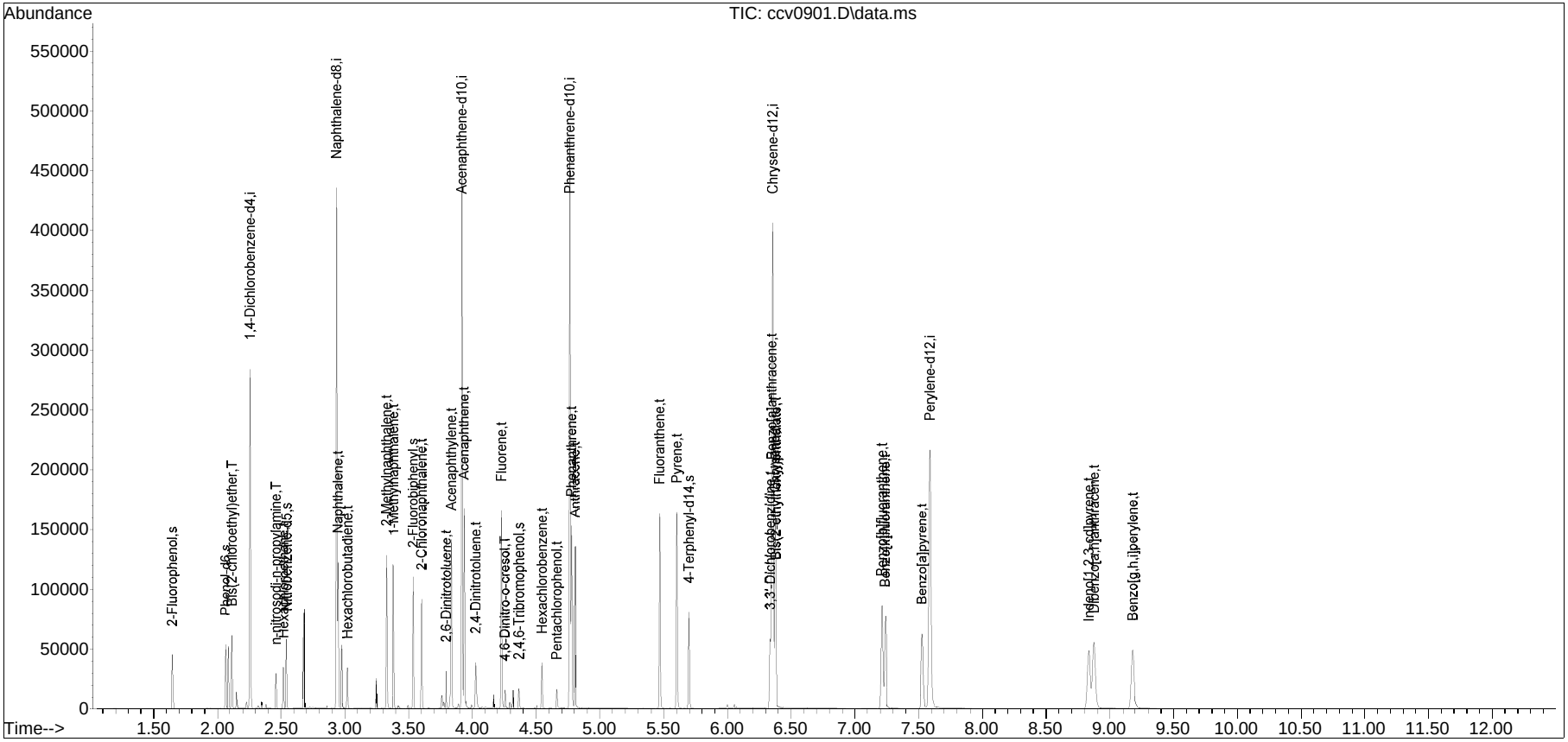
(#) = qualifier out of range (m) = manual integration (+) = signals summed

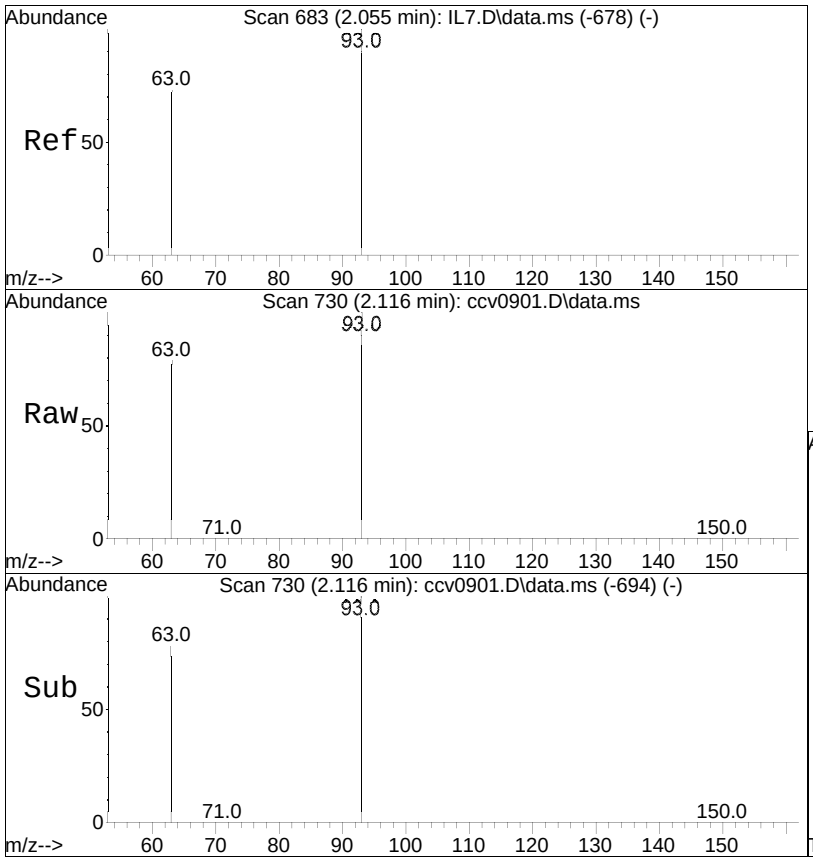
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : ccv0901.D
Acq On : 01 Sep 2023 09:36 am
Operator : sv119:rp
Sample : WG1822868-3,32,, ICV 10193 (0830)
Misc : WG1822868,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 01 09:52:45 2023
Quant Method : I:\8270SIM\sv119\230901LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:52:29 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

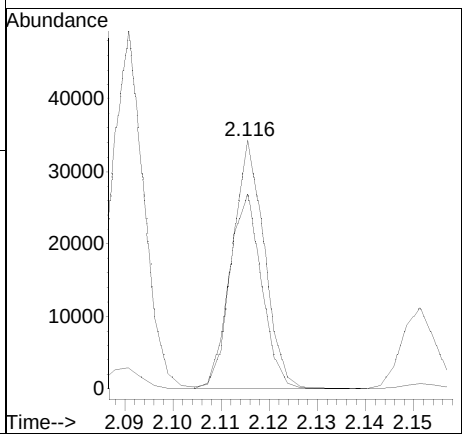


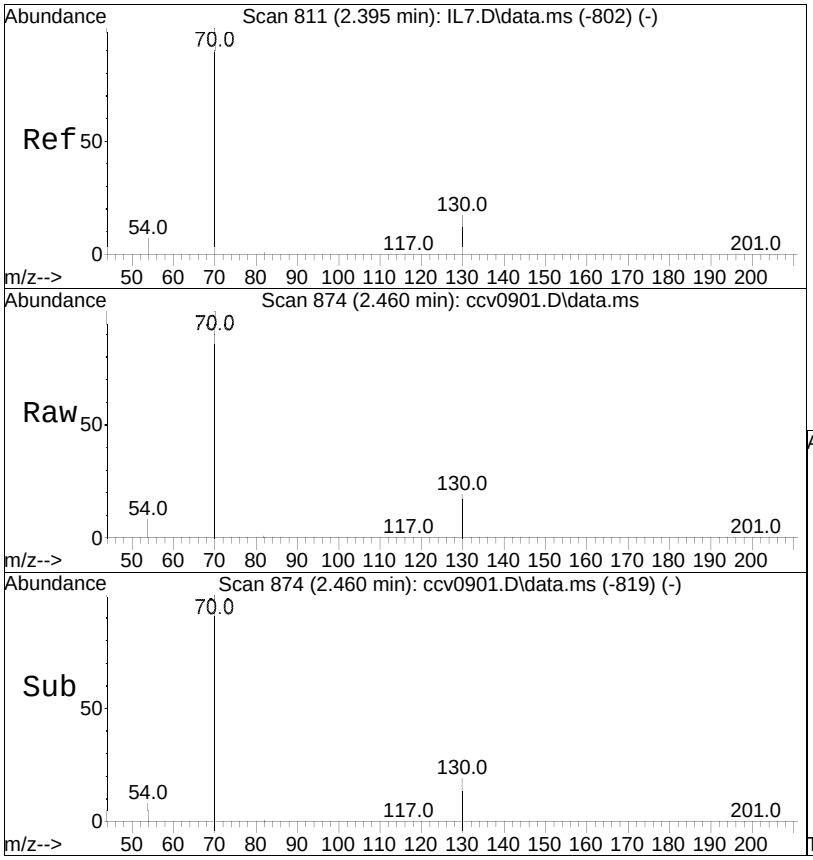


#4
Bis(2-chloroethyl)ether
Concen: 1085.21 ng/ml
RT: 2.116 min Scan# 730
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion: 93 Resp: 15682

Ion	Ratio	Lower	Upper
93	100		
63	80.4	62.6	94.0

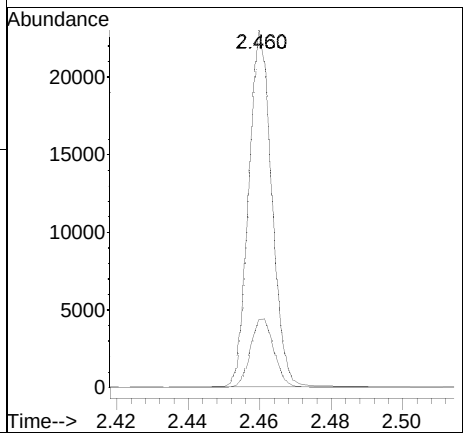


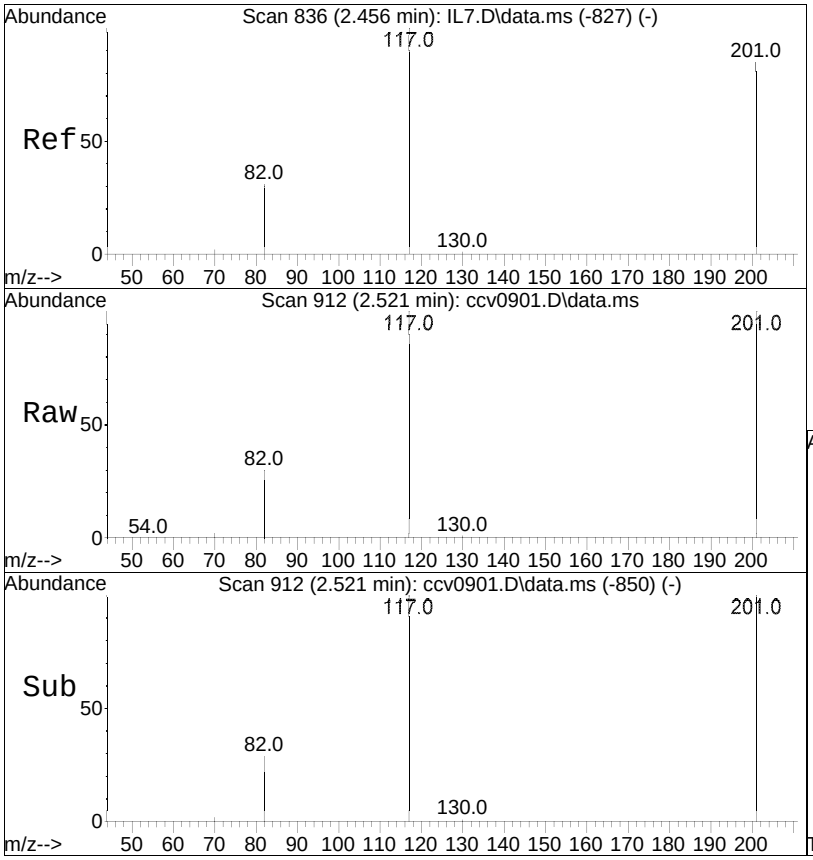


#5
n-nitrosodi-n-propylamine
Concen: 1216.24 ng/ml
RT: 2.460 min Scan# 874
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion: 70 Resp: 10132

Ion	Ratio	Lower	Upper
70	100		
130	19.5	15.0	22.6

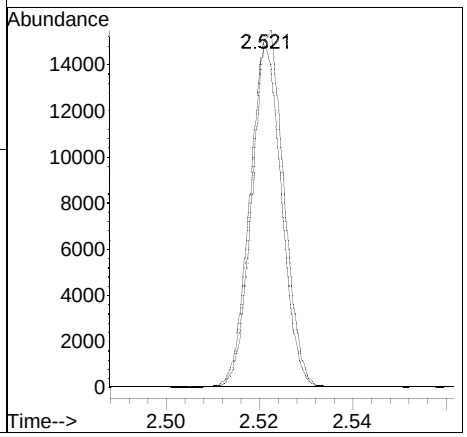


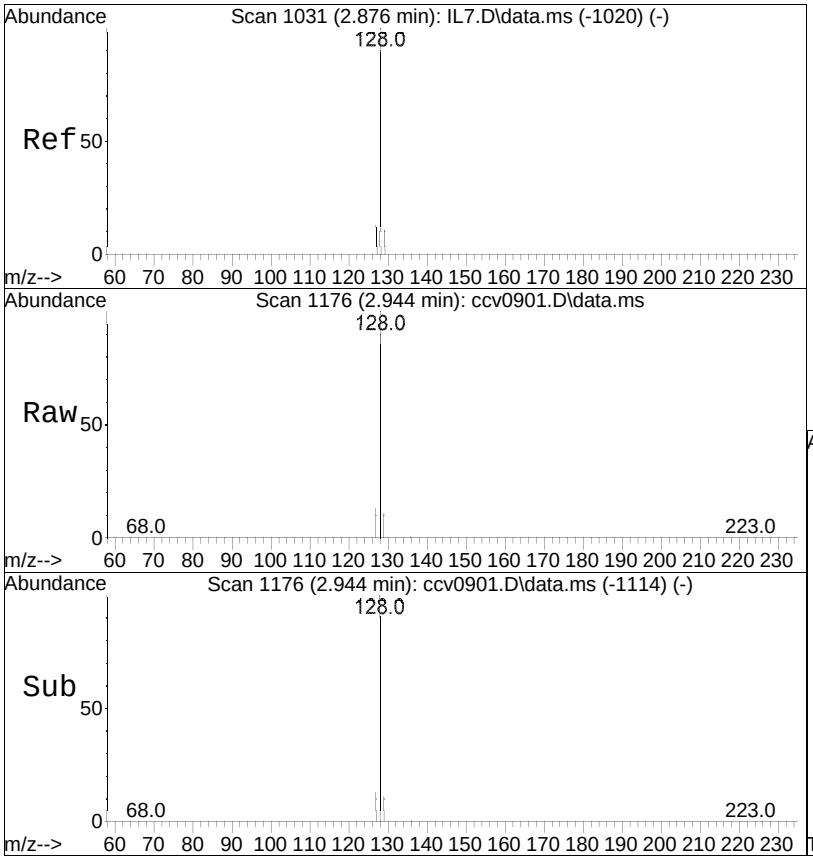


#6
Hexachloroethane
Concen: 1165.40 ng/ml
RT: 2.521 min Scan# 912
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:117 Resp: 6926

Ion	Ratio	Lower	Upper
117	100		
201	103.9	81.5	122.3

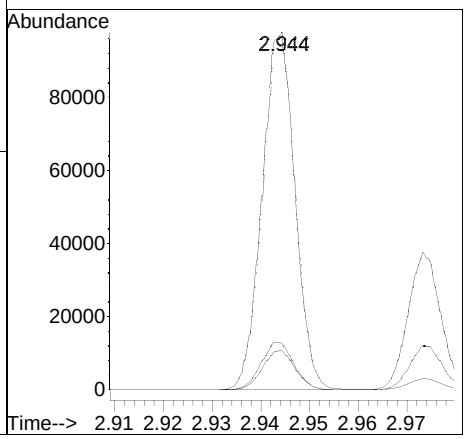


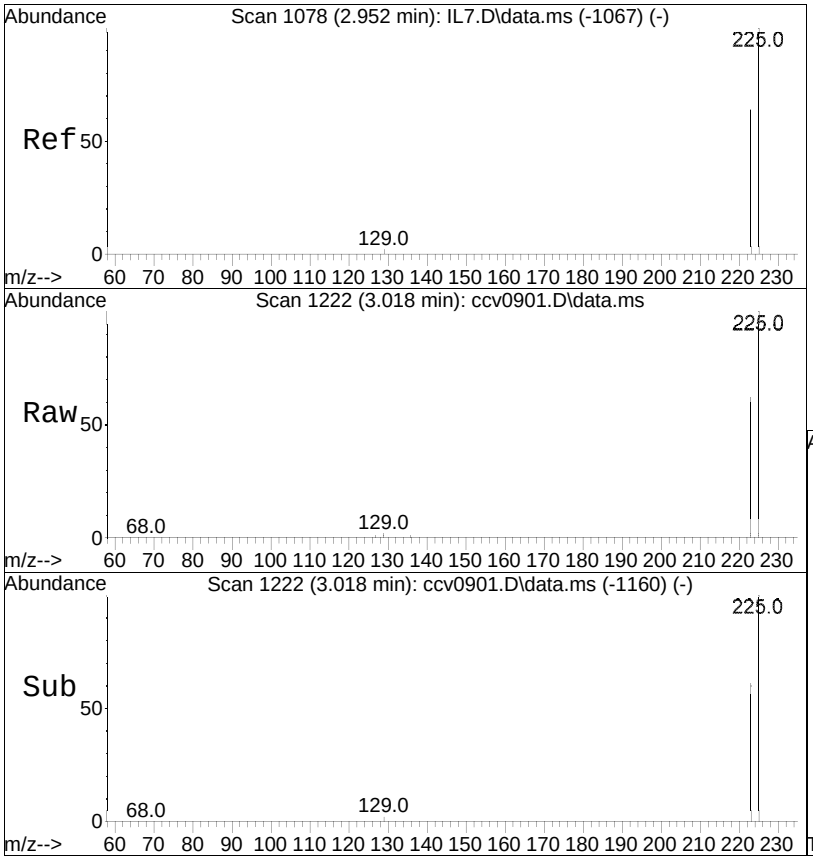


#9
Naphthalene
Concen: 992.22 ng/ml
RT: 2.944 min Scan# 1176
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:128 Resp: 45400

Ion	Ratio	Lower	Upper
128	100		
129	11.0	8.8	13.2
127	13.3	10.6	15.8

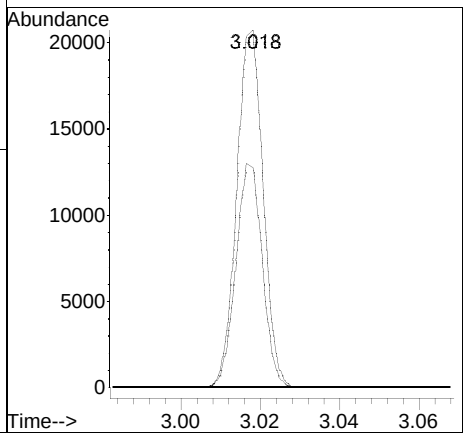


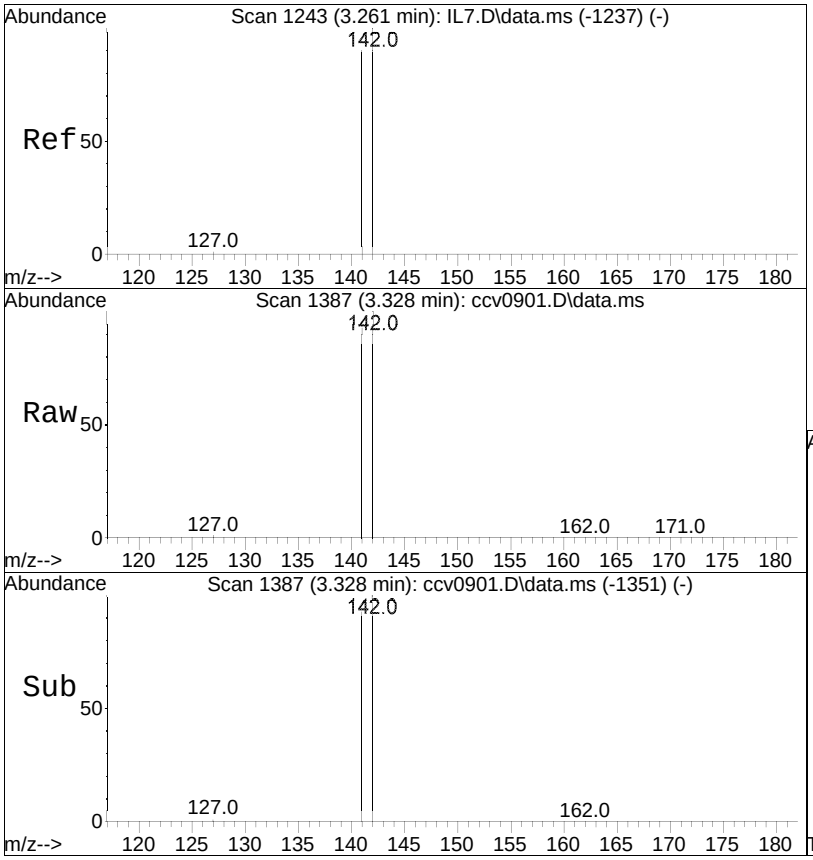


#10
Hexachlorobutadiene
Concen: 1056.15 ng/ml
RT: 3.018 min Scan# 1222
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:225 Resp: 9393

Ion	Ratio	Lower	Upper
225	100		
223	62.7	50.1	75.1

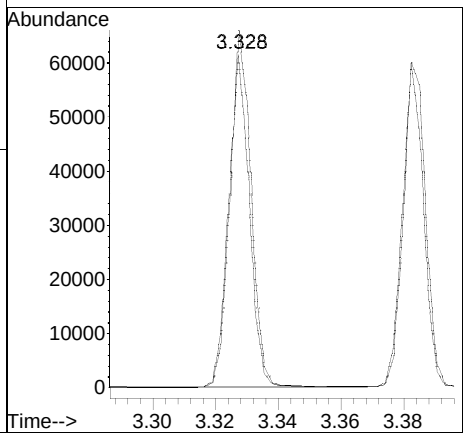


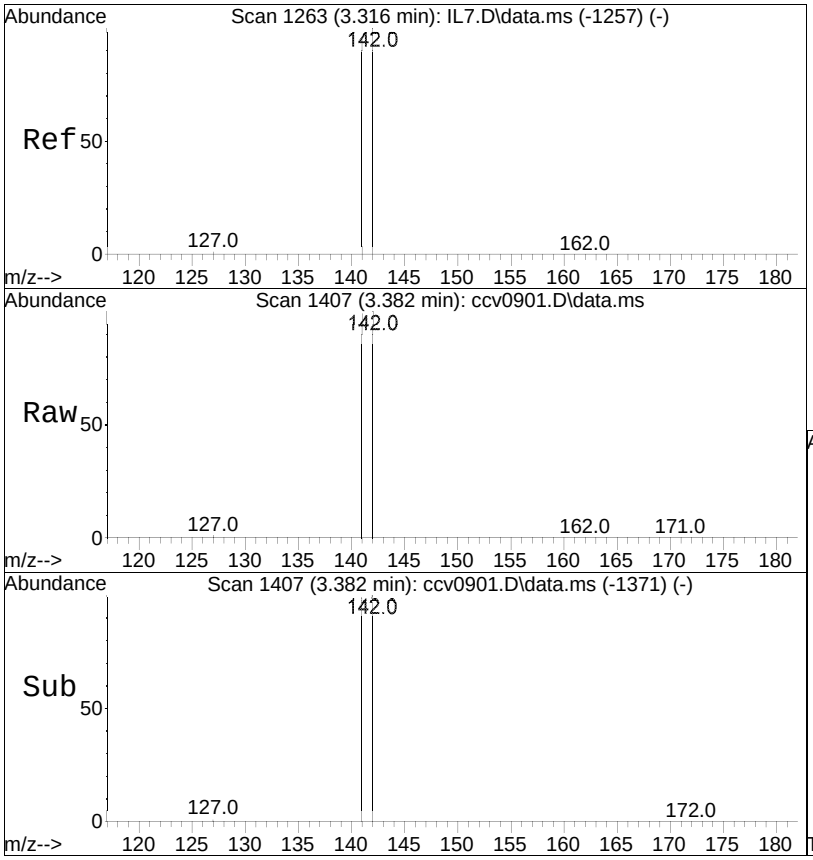


#11
2-Methylnaphthalene
Concen: 1004.60 ng/ml
RT: 3.328 min Scan# 1387
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:142 Resp: 30898

Ion	Ratio	Lower	Upper
142	100		
141	91.9	74.1	111.1

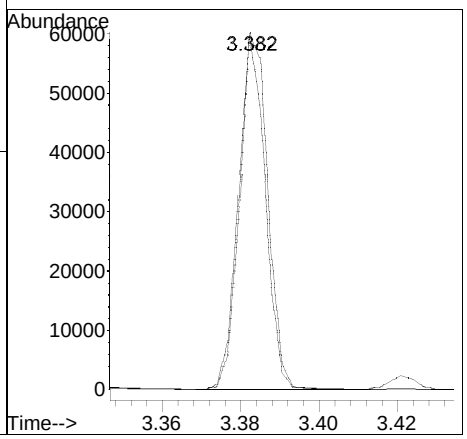


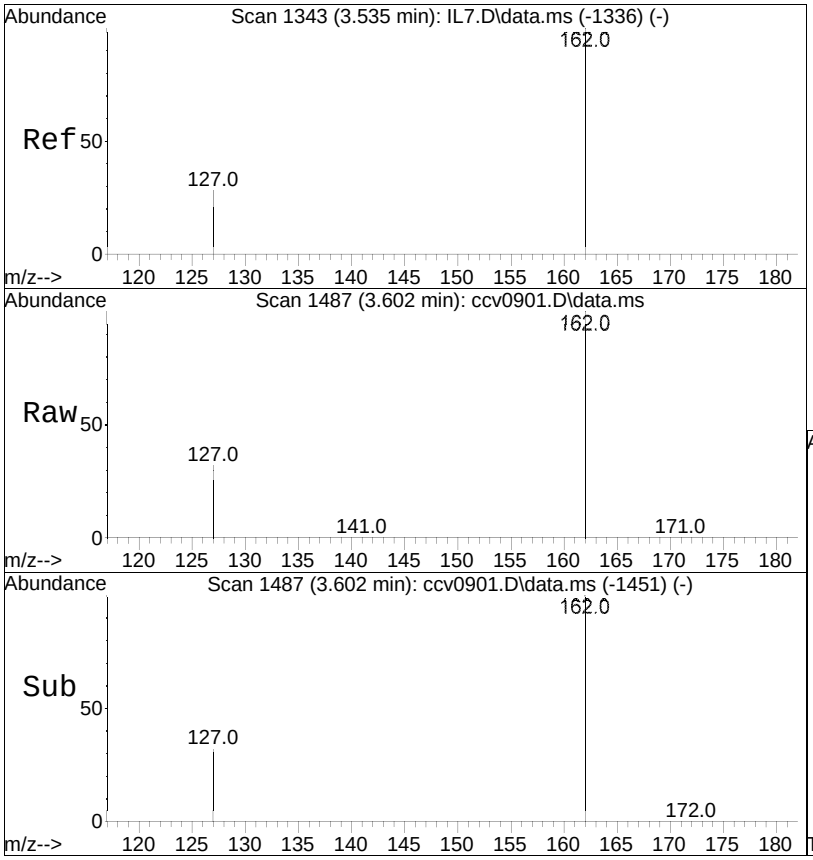


#12
1-Methylnaphthalene
Concen: 992.19 ng/ml
RT: 3.382 min Scan# 1407
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:142 Resp: 29430

Ion	Ratio	Lower	Upper
142	100		
141	94.7	76.6	114.8

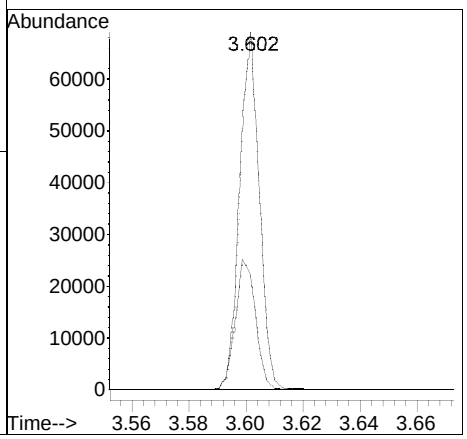


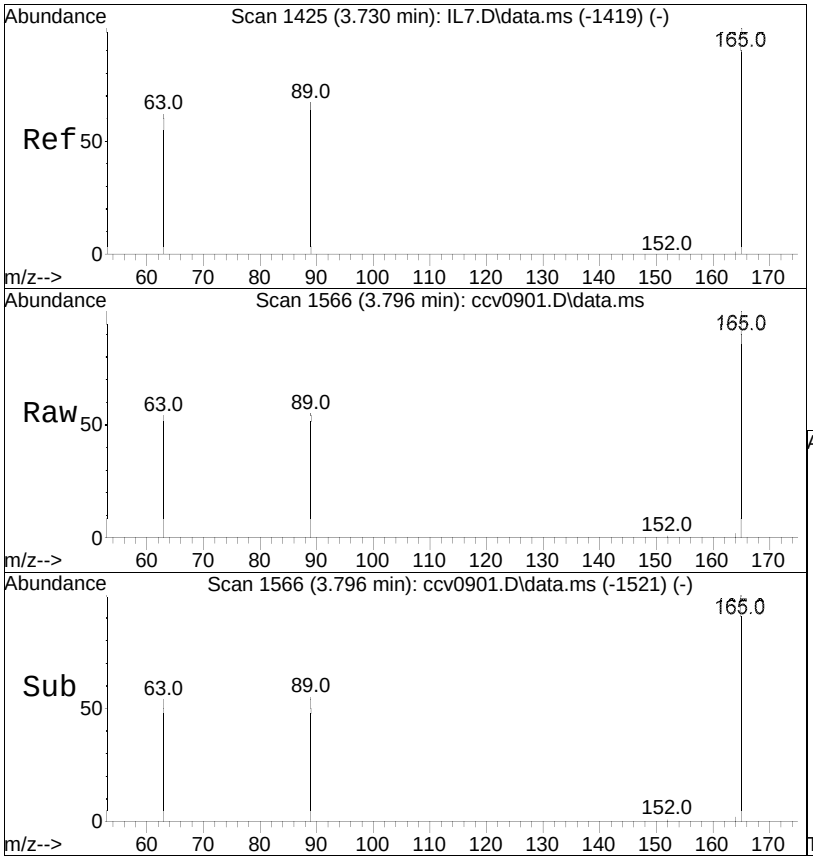


#14
2-Chloronaphthalene
Concen: 970.64 ng/ml
RT: 3.602 min Scan# 1487
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:162 Resp: 32426

Ion	Ratio	Lower	Upper
162	100		
127	37.7	29.7	44.5

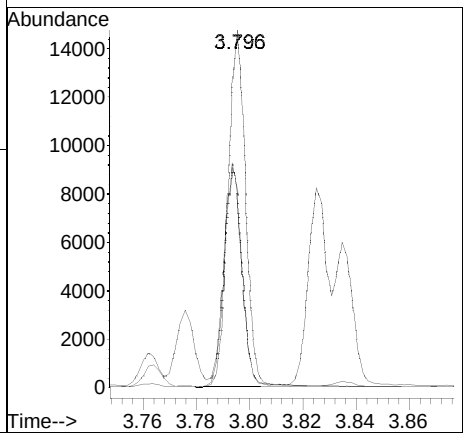


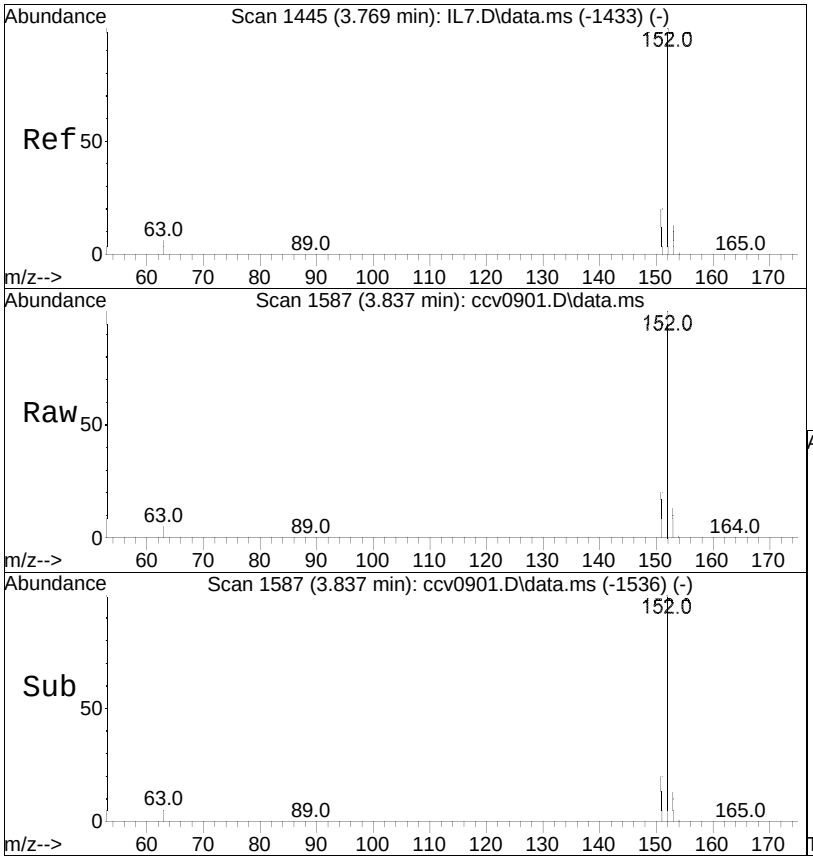


#15
2,6-Dinitrotoluene
Concen: 1156.61 ng/ml
RT: 3.796 min Scan# 1566
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:165 Resp: 6782

Ion	Ratio	Lower	Upper
165	100		
89	62.7	52.8	79.2
63	63.3	50.9	76.3

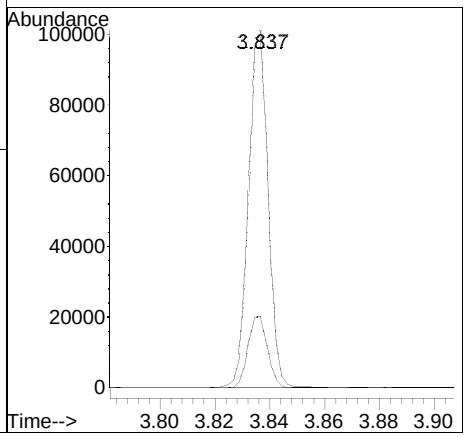


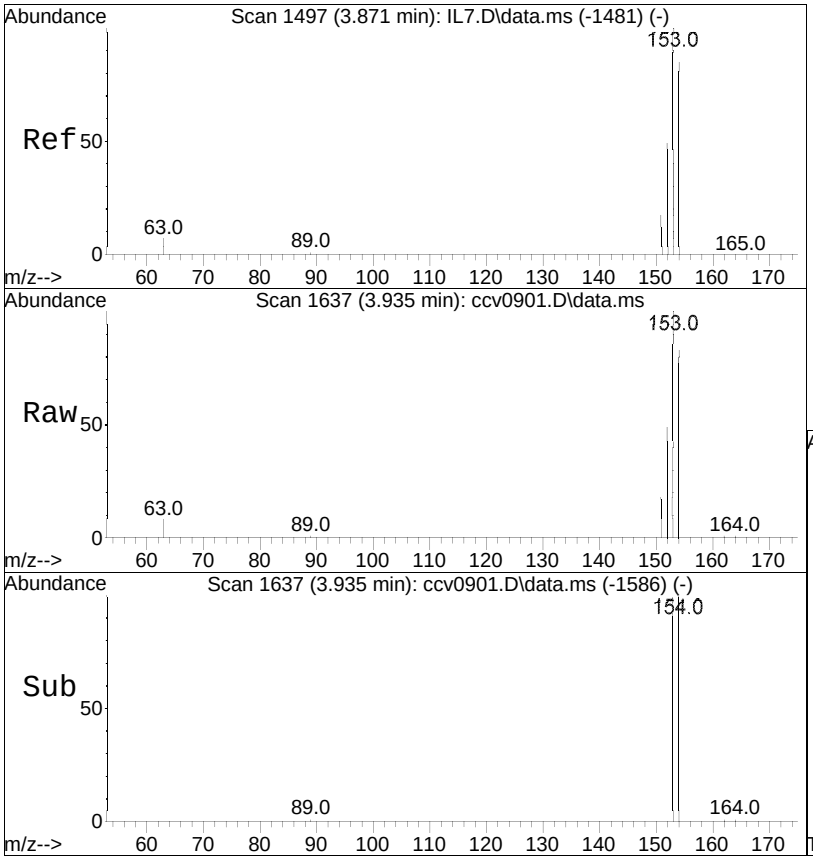


#16
Acenaphthylene
Concen: 1028.82 ng/ml
RT: 3.837 min Scan# 1587
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:152 Resp: 49594

Ion	Ratio	Lower	Upper
152	100		
151	20.2	16.0	24.0

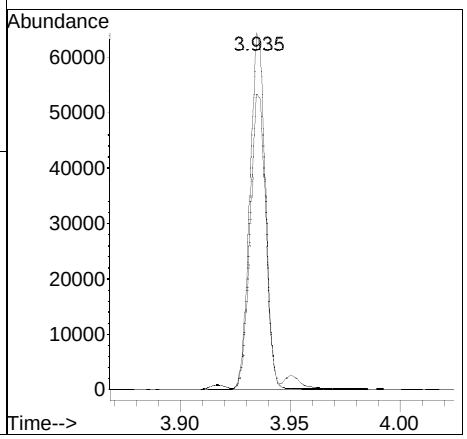


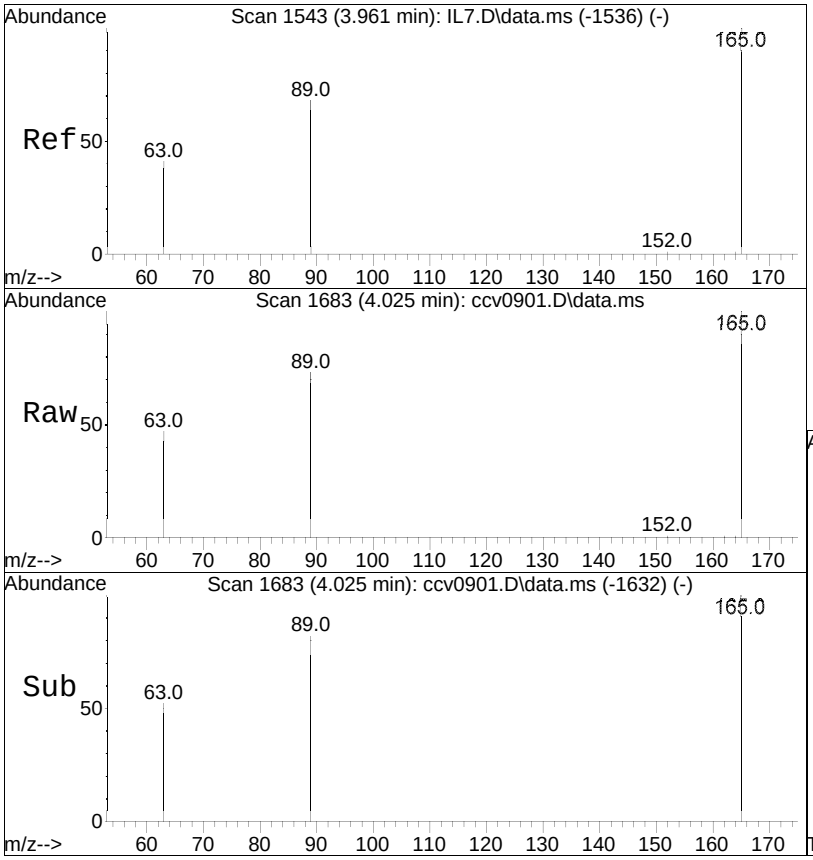


#18
Acenaphthene
Concen: 985.54 ng/ml
RT: 3.935 min Scan# 1637
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:153 Resp: 30922

Ion	Ratio	Lower	Upper
153	100		
154	83.5	66.9	100.3

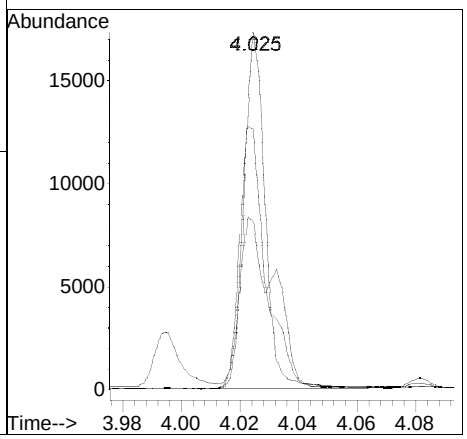


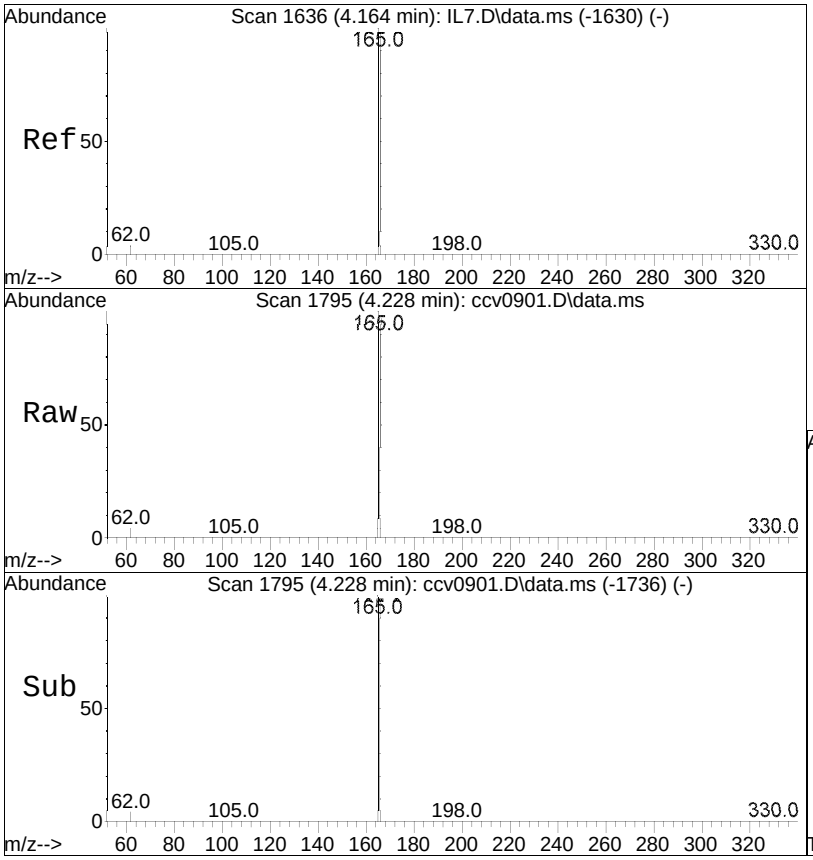


#19
2,4-Dinitrotoluene
Concen: 1194.67 ng/ml
RT: 4.025 min Scan# 1683
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:165 Resp: 8561

Ion	Ratio	Lower	Upper
165	100		
89	91.8	80.1	120.1
63	48.0	38.9	58.3

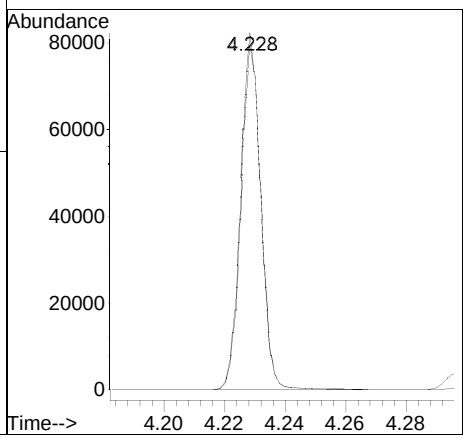


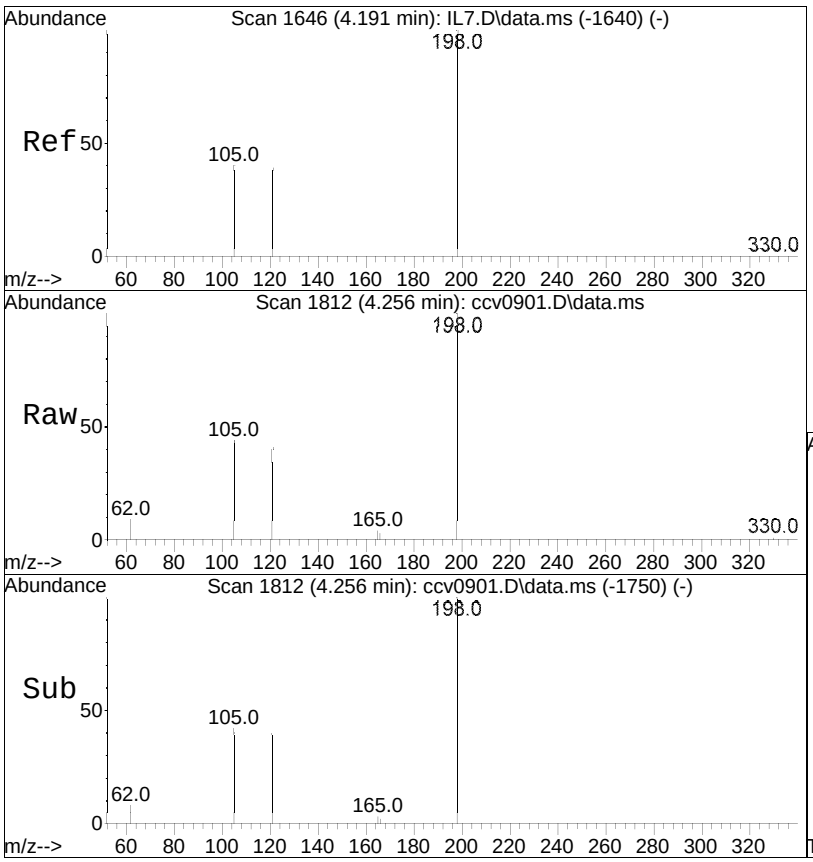


#20
Fluorene
Concen: 1012.30 ng/ml
RT: 4.228 min Scan# 1795
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:166 Resp: 36506

Ion	Ratio	Lower	Upper
166	100		
165	102.6	82.9	124.3

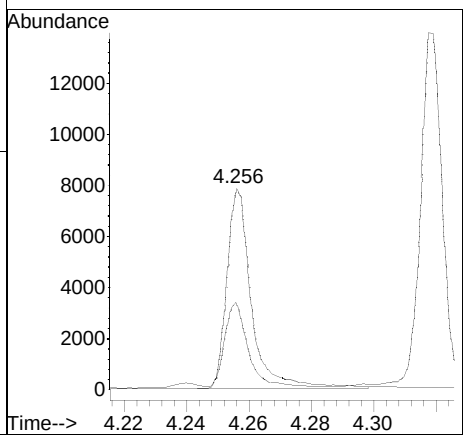


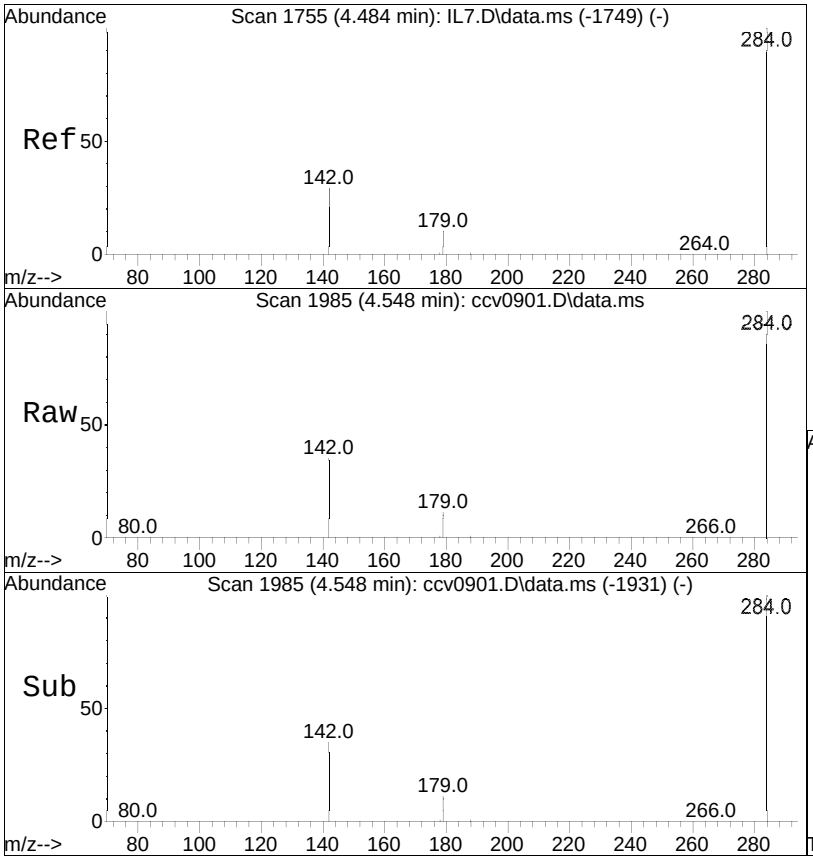


#23
4,6-Dinitro-o-cresol
Concen: 1138.55 ng/ml
RT: 4.256 min Scan# 1812
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:198 Resp: 4291

Ion	Ratio	Lower	Upper
198	100		
105	40.3	32.2	48.4

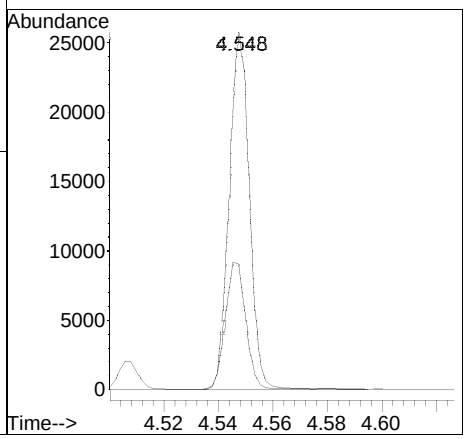


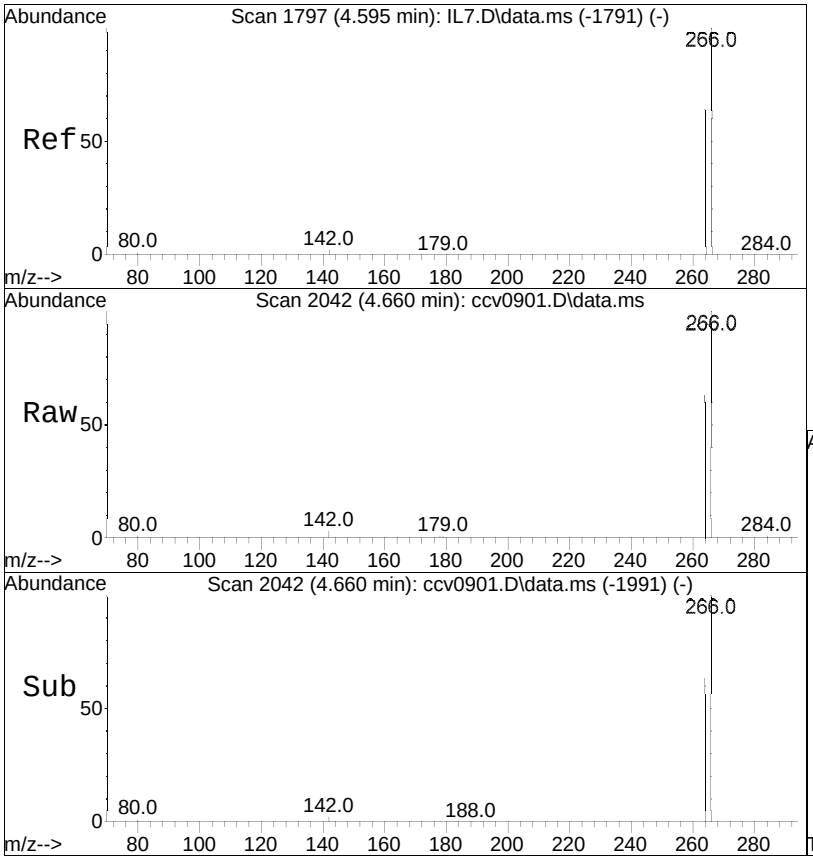


#24
Hexachlorobenzene
Concen: 982.48 ng/ml
RT: 4.548 min Scan# 1985
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:284 Resp: 13008

Ion	Ratio	Lower	Upper
284	100		
142	36.5	26.9	40.3

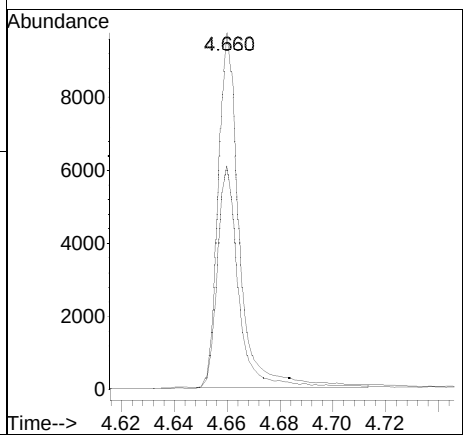


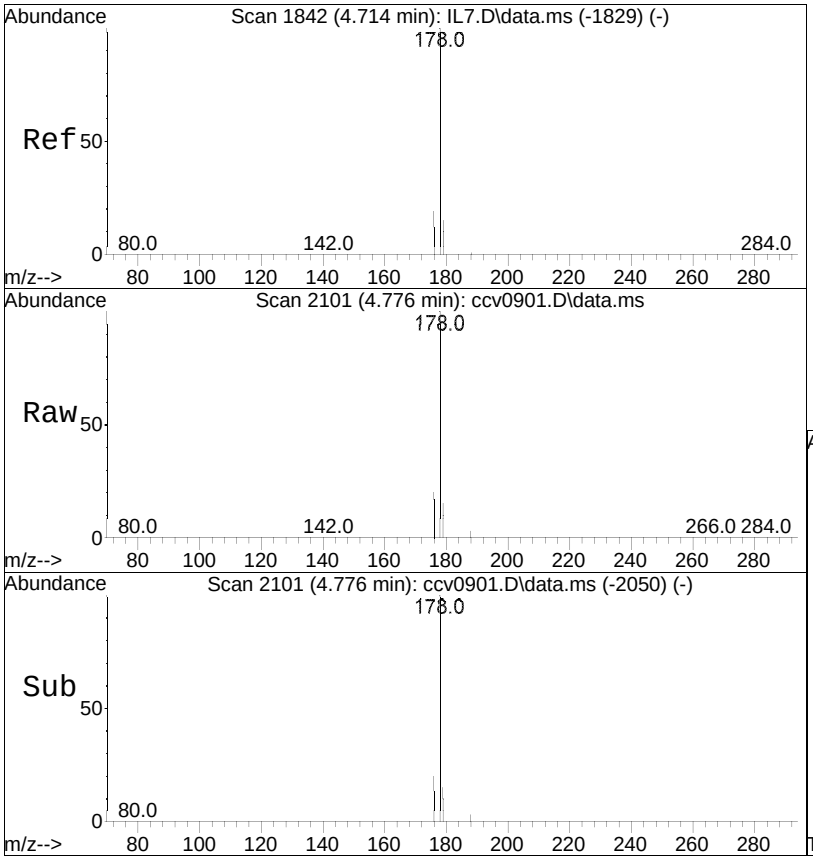


#25
Pentachlorophenol
Concen: 1126.64 ng/ml
RT: 4.660 min Scan# 2042
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:266 Resp: 5395

Ion	Ratio	Lower	Upper
266	100		
264	62.9	50.7	76.1

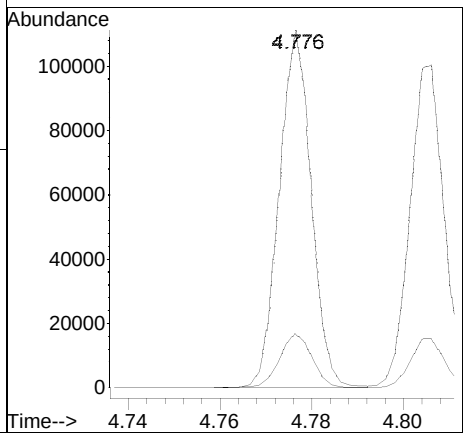


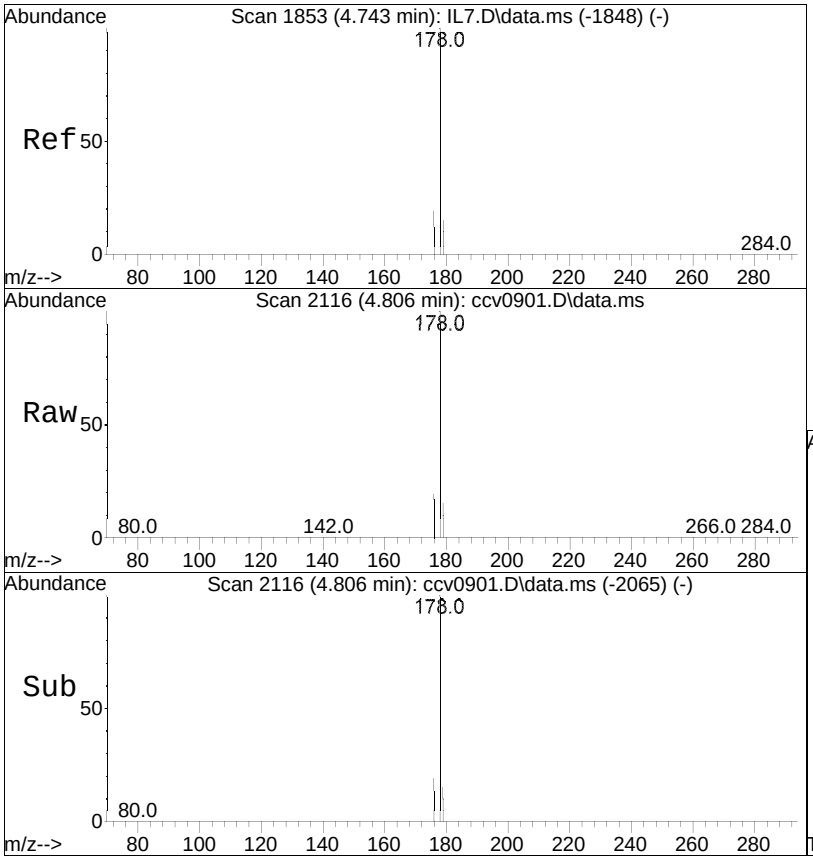


#26
Phenanthrene
Concen: 962.91 ng/ml
RT: 4.776 min Scan# 2101
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:178 Resp: 53749

Ion	Ratio	Lower	Upper
178	100		
179	15.5	12.3	18.5

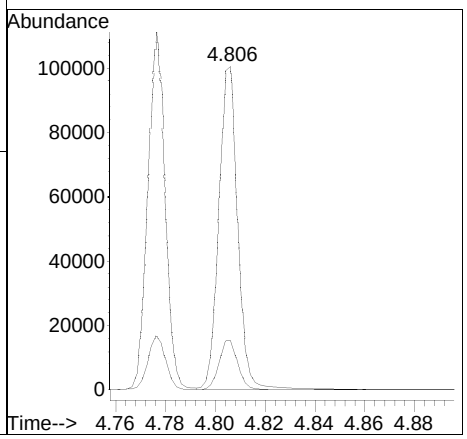


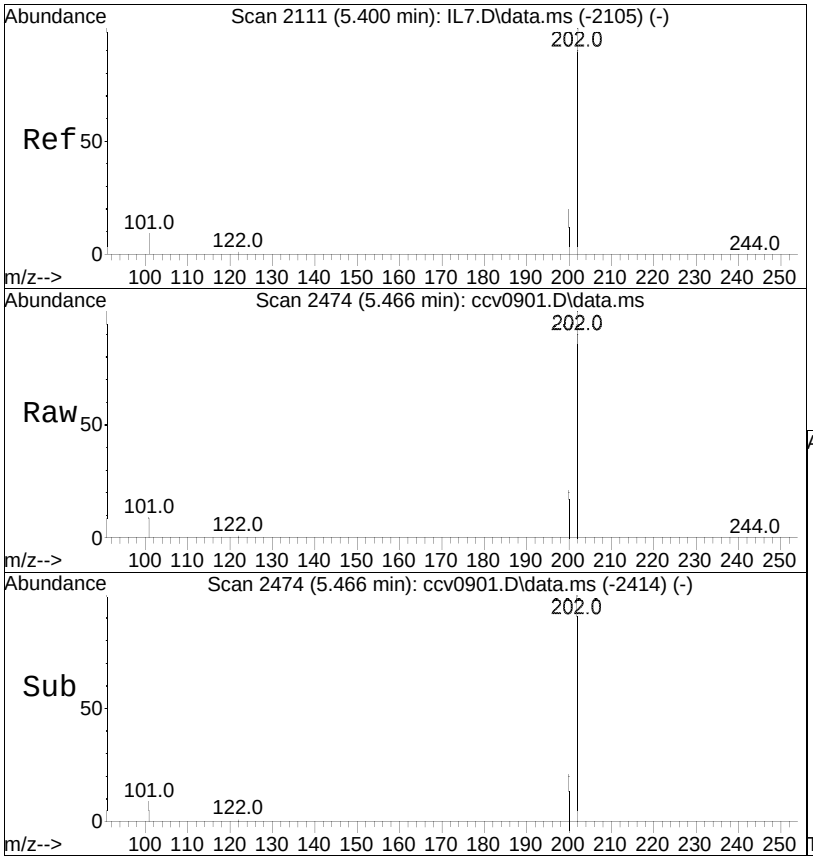


#27
Anthracene
Concen: 1008.74 ng/ml
RT: 4.806 min Scan# 2116
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:178 Resp: 52531

Ion	Ratio	Lower	Upper
178	100		
179	15.3	12.2	18.4

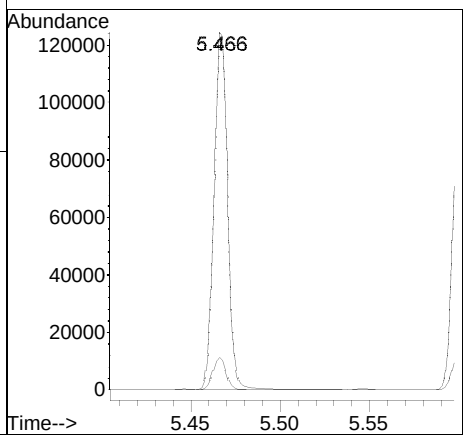


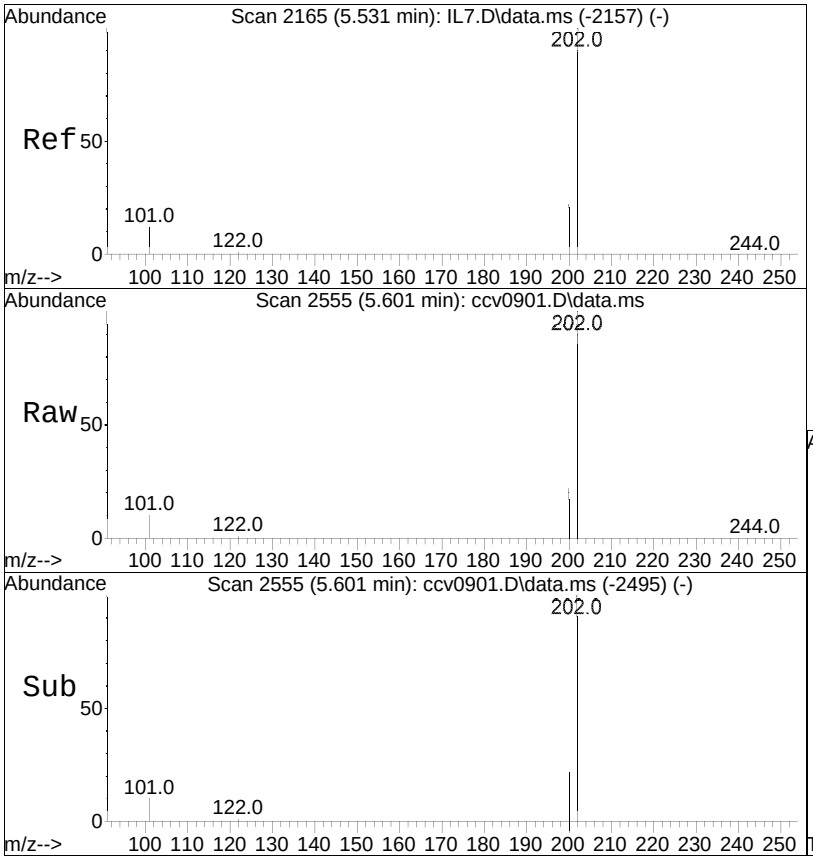


#28
Fluoranthene
Concen: 1025.57 ng/ml
RT: 5.466 min Scan# 2474
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:202 Resp: 65418

Ion	Ratio	Lower	Upper
202	100		
101	8.8	8.3	12.5

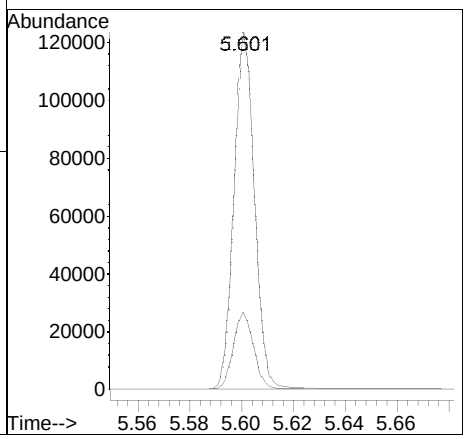


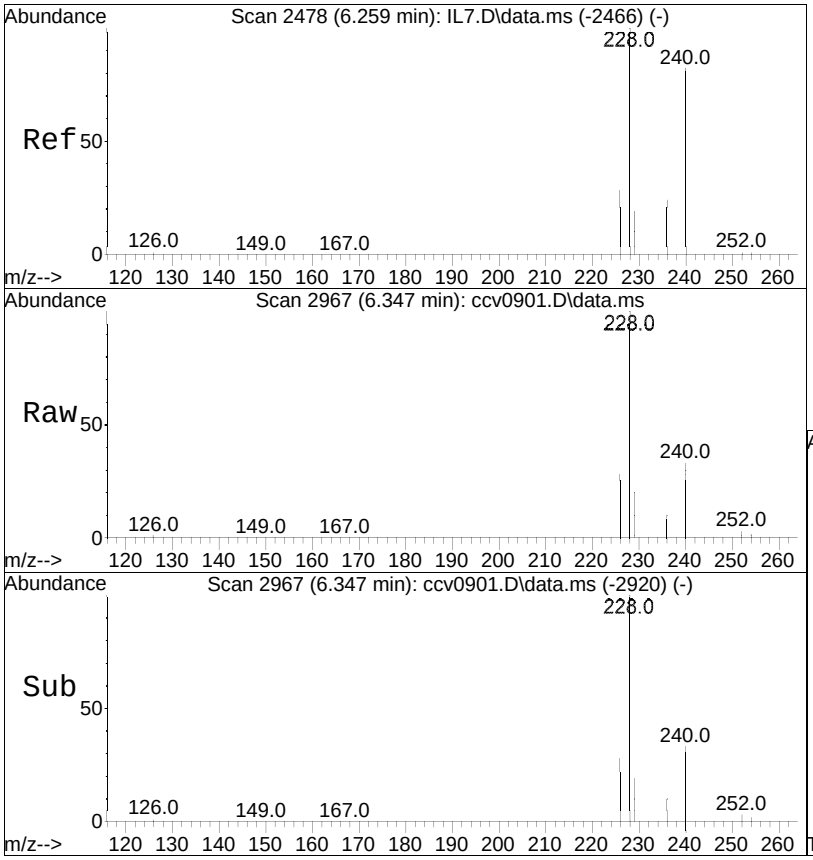


#29
Pyrene
Concen: 1013.44 ng/ml
RT: 5.601 min Scan# 2555
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:202 Resp: 66948

Ion	Ratio	Lower	Upper
202	100		
200	21.6	17.3	25.9

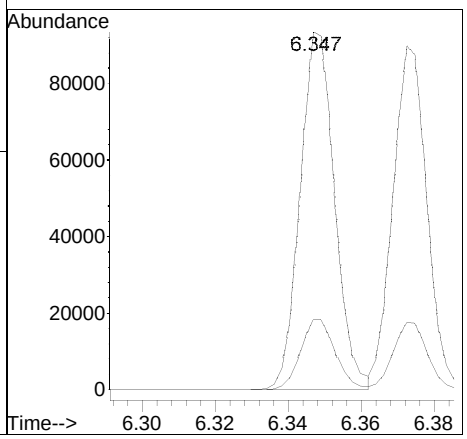


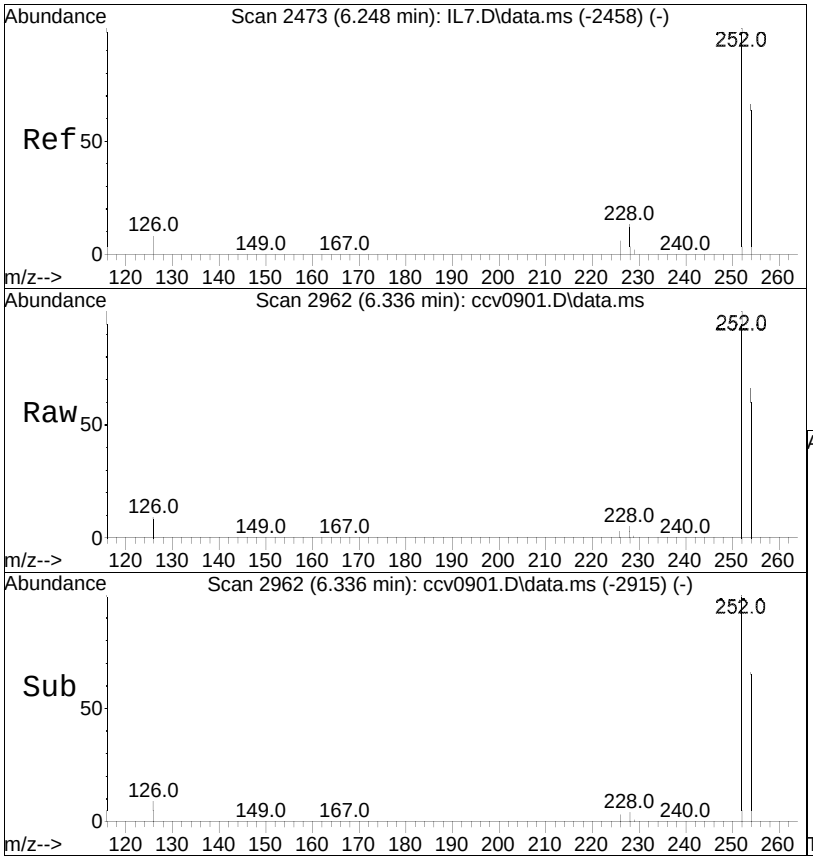


#32
Benzo[a]anthracene
Concen: 1025.03 ng/ml
RT: 6.347 min Scan# 2967
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:228 Resp: 61271

Ion	Ratio	Lower	Upper
228	100		
229	19.6	15.6	23.4

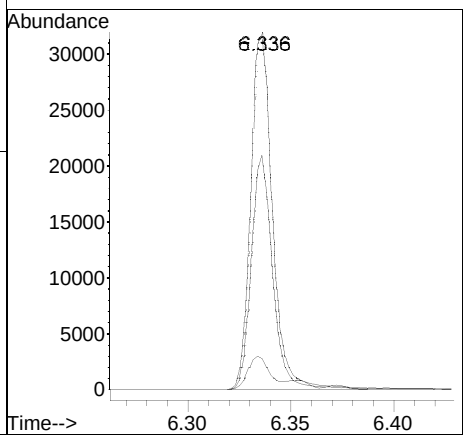


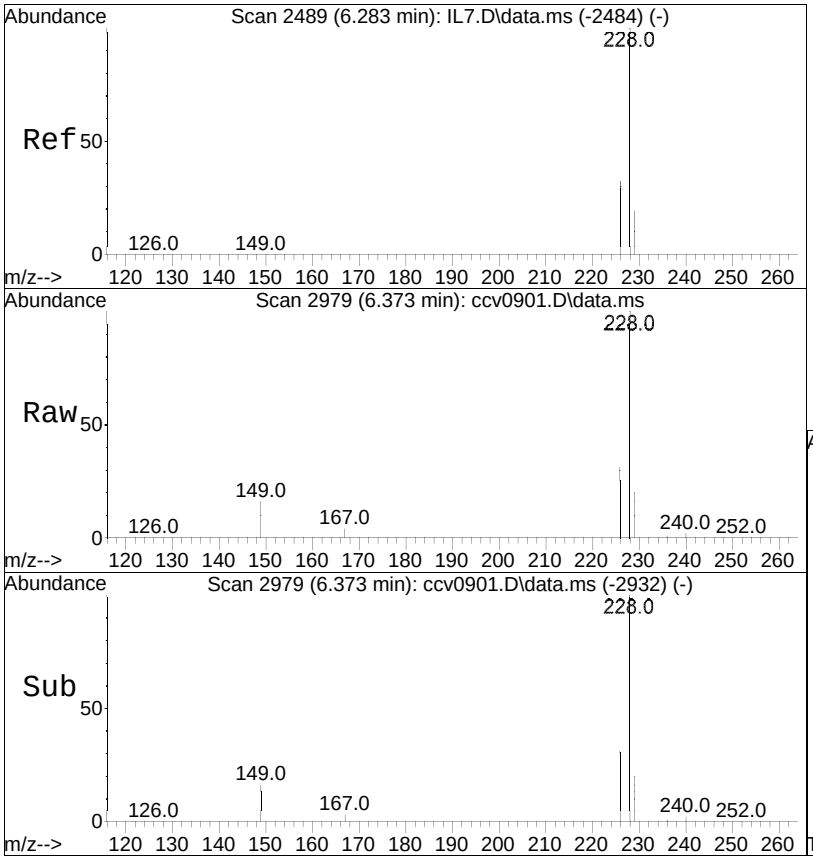


#33
3,3'-Dichlorobenzidine
Concen: 979.98 ng/ml
RT: 6.336 min Scan# 2962
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:252 Resp: 22886

Ion	Ratio	Lower	Upper
252	100		
126	9.5	7.7	11.5
254	64.8	52.0	78.0

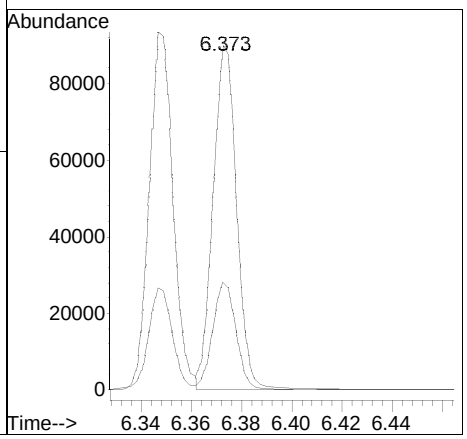


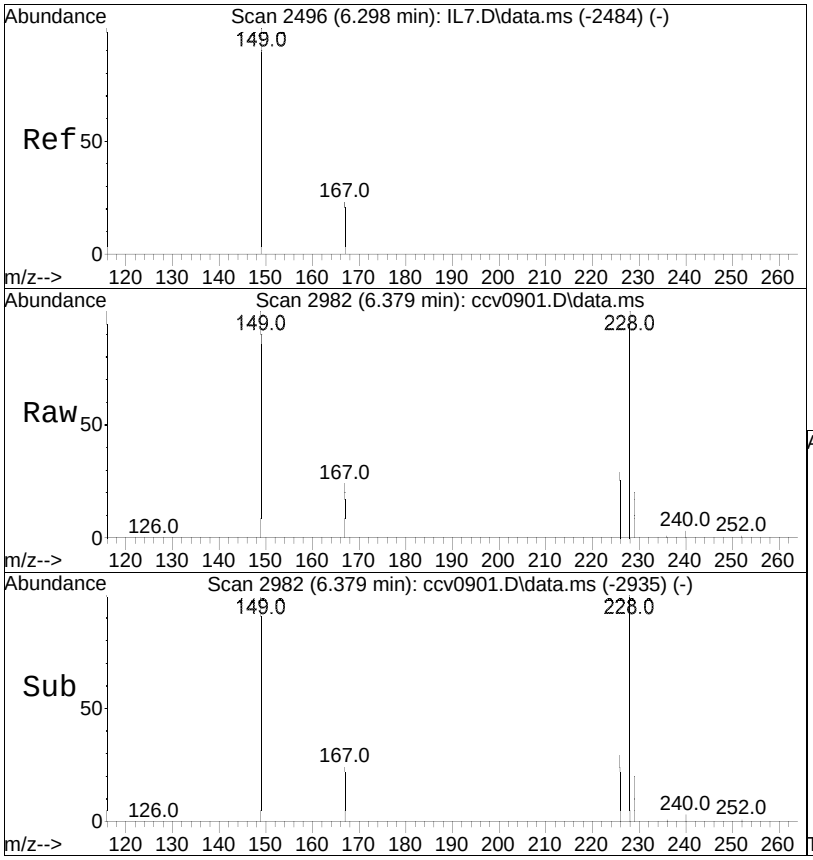


#34
Chrysene
Concen: 1001.61 ng/ml
RT: 6.373 min Scan# 2979
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:228 Resp: 58272

Ion	Ratio	Lower	Upper
228	100		
226	31.3	24.5	36.7

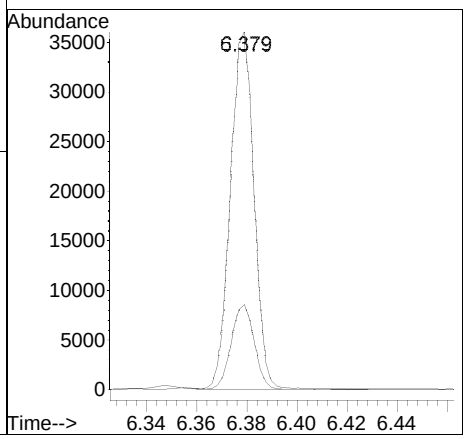


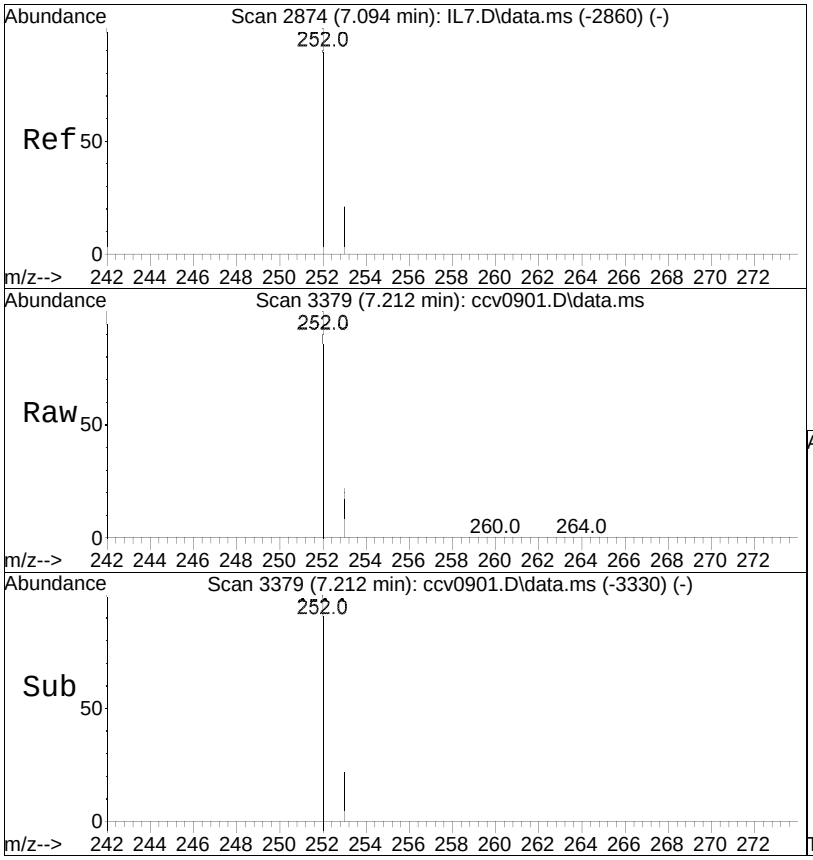


#35
Bis(2-ethylhexyl)phthalate
Concen: 864.33 ng/ml
RT: 6.379 min Scan# 2982
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:149 Resp: 23162

Ion	Ratio	Lower	Upper
149	100		
167	23.2	18.5	27.7

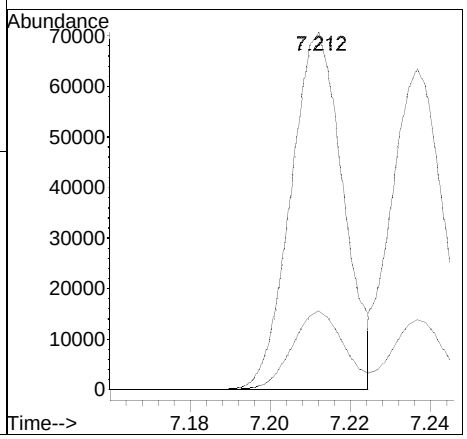


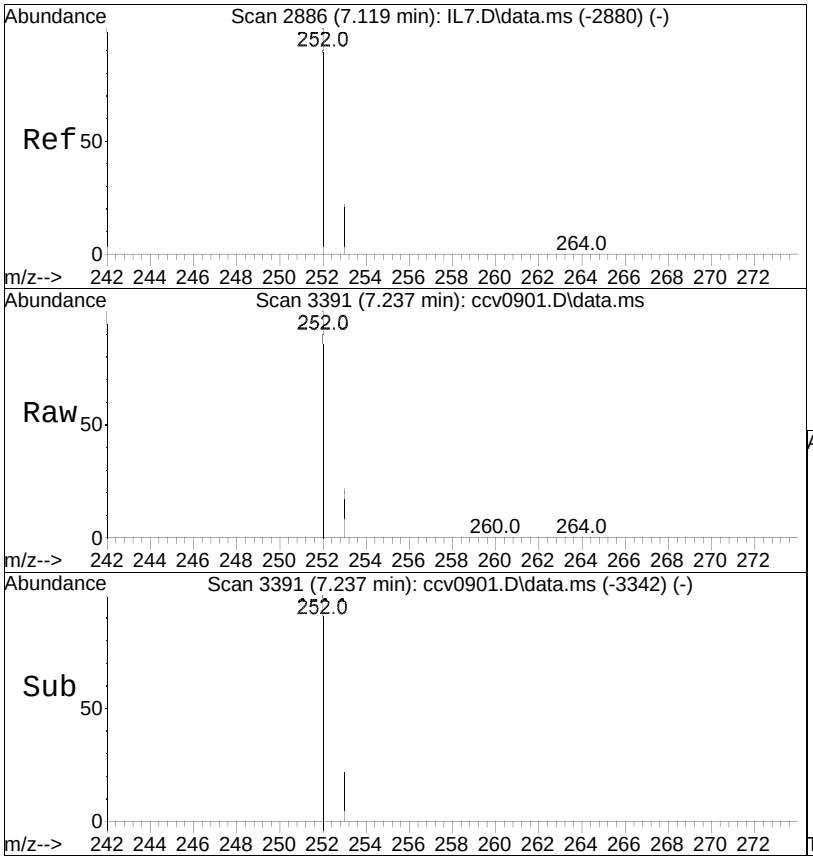


#37
Benzo[b]fluoranthene
Concen: 1100.76 ng/ml
RT: 7.212 min Scan# 3379
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:252 Resp: 64095

Ion	Ratio	Lower	Upper
252	100		
253	21.8	17.3	25.9

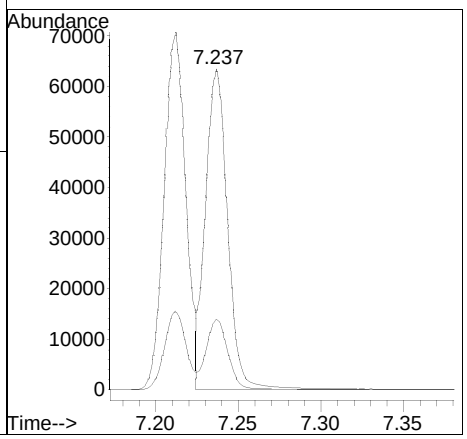


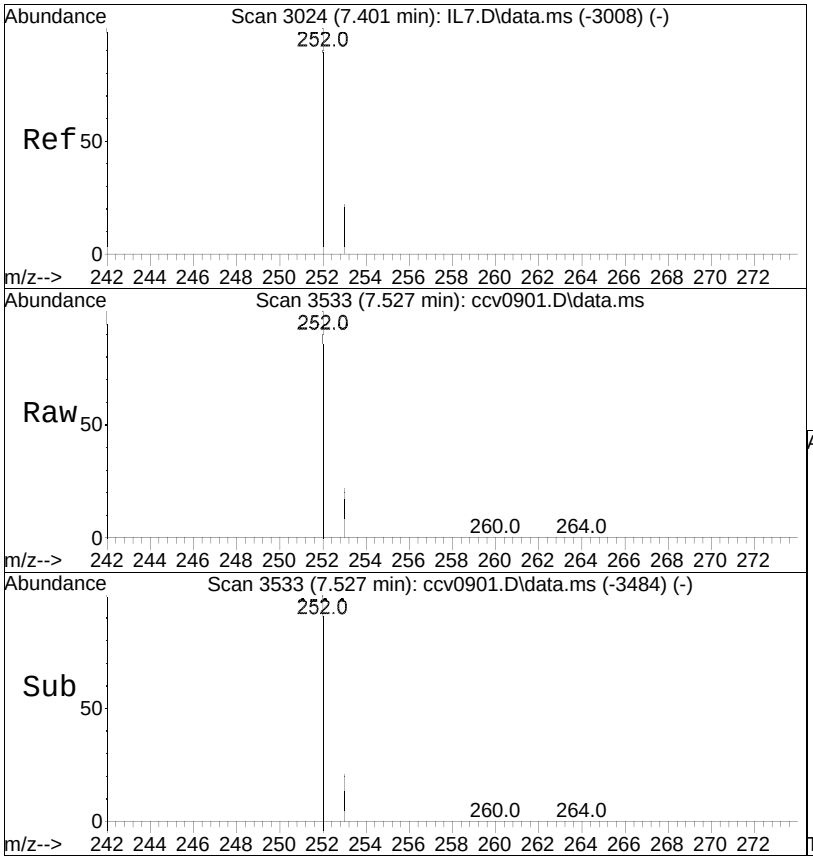


#38
Benzo[k]fluoranthene
Concen: 1114.02 ng/ml
RT: 7.237 min Scan# 3391
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:252 Resp: 58171

Ion	Ratio	Lower	Upper
252	100		
253	21.8	17.4	26.2

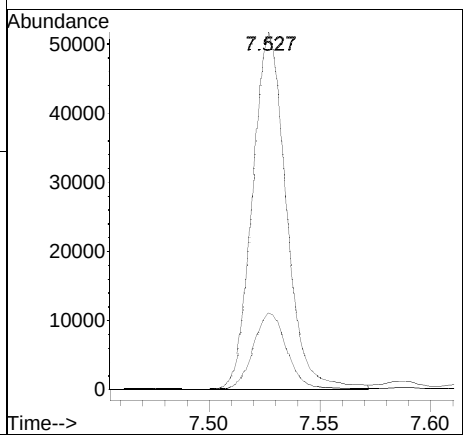


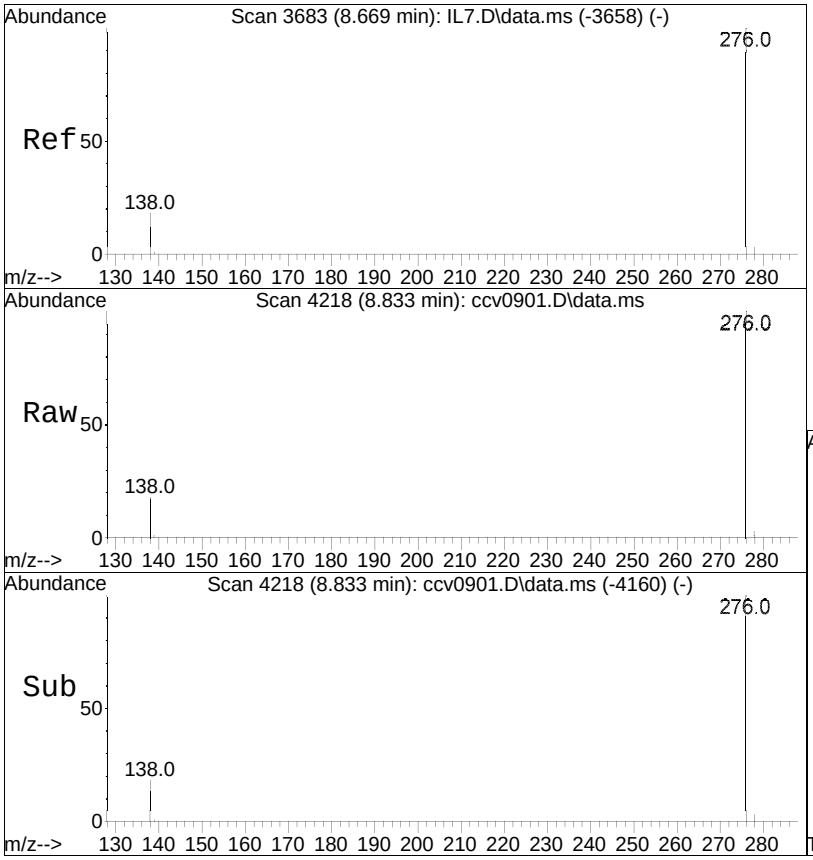


#39
Benzo[a]pyrene
Concen: 1146.06 ng/ml
RT: 7.527 min Scan# 3533
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:252 Resp: 54013

Ion	Ratio	Lower	Upper
252	100		
253	21.5	17.4	26.0

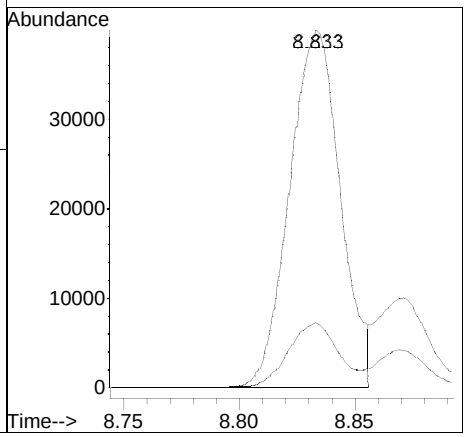


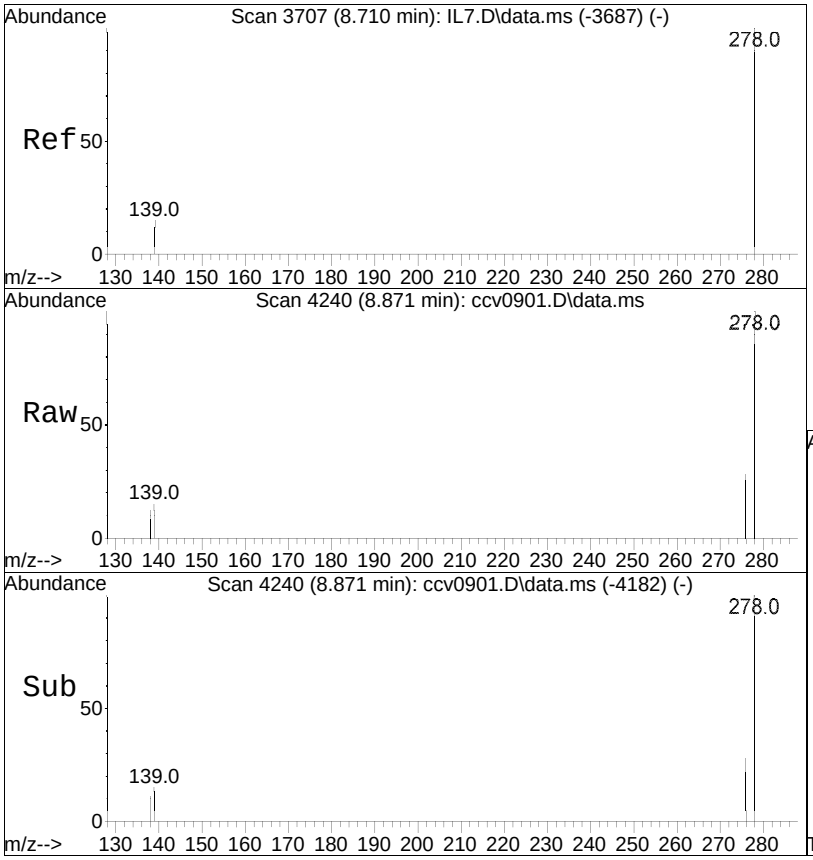


#40
Indeno[1,2,3-cd]pyrene
Concen: 1115.87 ng/ml
RT: 8.833 min Scan# 4218
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:276 Resp: 60315

Ion	Ratio	Lower	Upper
276	100		
138	17.8	14.8	22.2

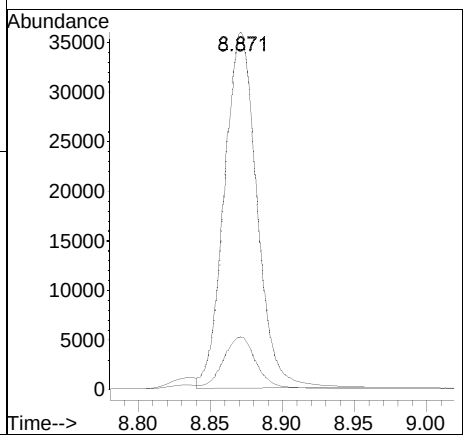


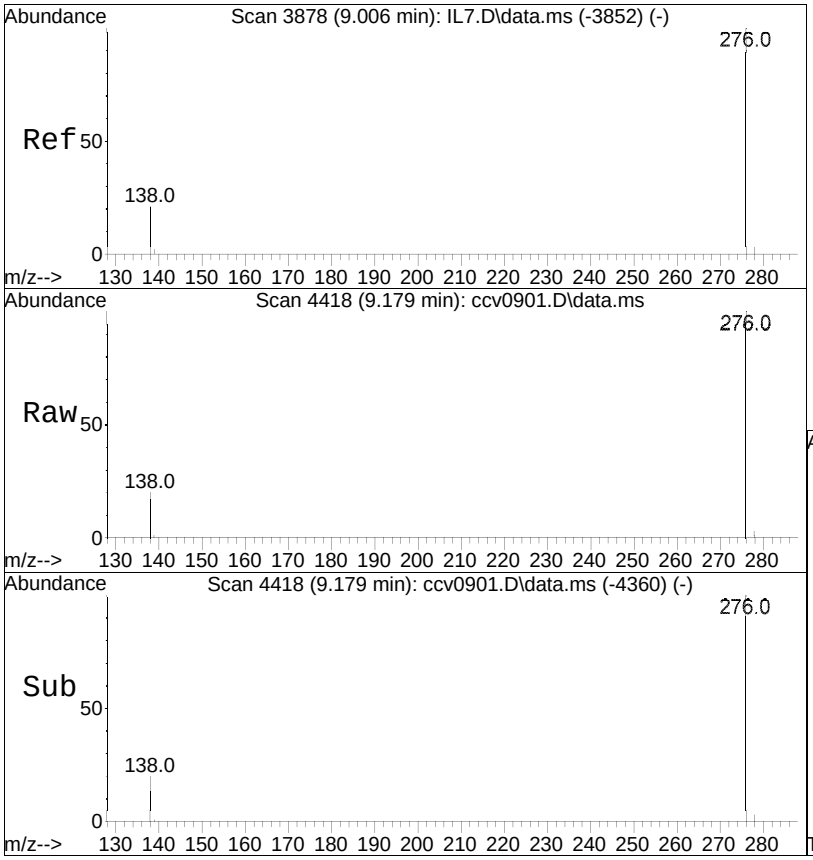


#41
Dibenzo[a,h]anthracene
Concen: 1092.09 ng/ml
RT: 8.871 min Scan# 4240
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:278 Resp: 56251

Ion	Ratio	Lower	Upper
278	100		
139	14.5	12.2	18.4

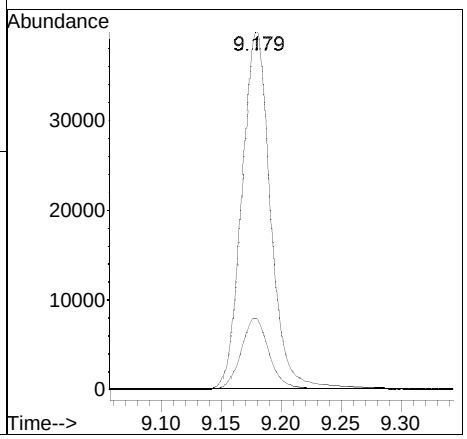




#42
Benzo[g,h,i]perylene
Concen: 1136.55 ng/ml
RT: 9.179 min Scan# 4418
Delta R.T. 0.000 min
Lab File: ccv0901.D
Acq: 01 Sep 2023 09:36 am

Tgt Ion:276 Resp: 65207

Ion	Ratio	Lower	Upper
276	100		
138	19.7	16.8	25.2



Manual Integration Report

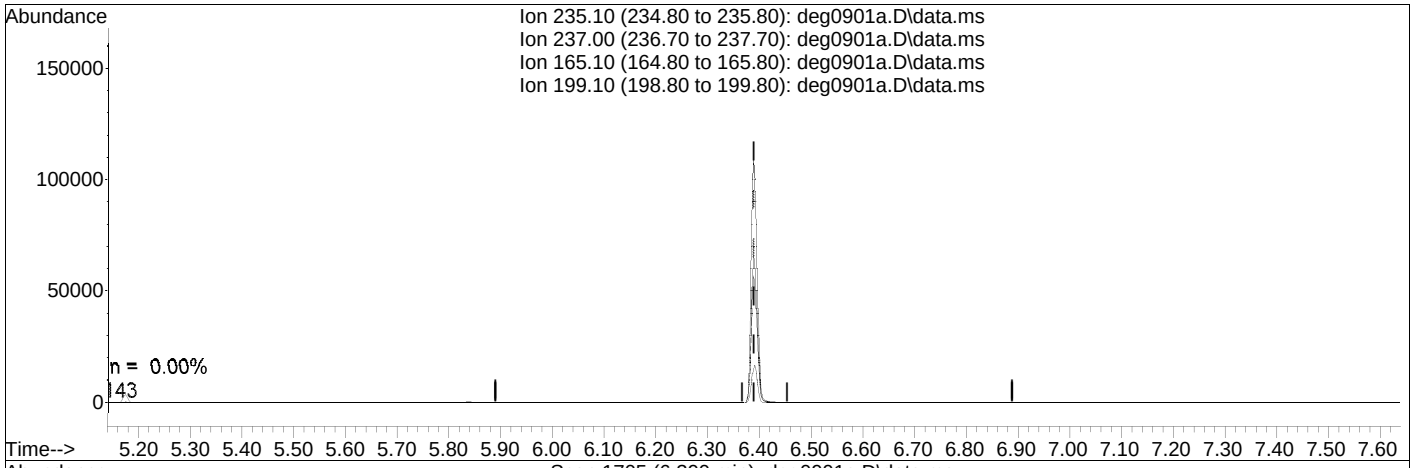
Data Path	: I:\8270SIM\sv119\230901LVI	Method	: SIM-LVI_230306_sv119.M
Data File	: ccv0901.D	Operator	: sv119:rp
Date Inj'd	: 9/1/2023 9:36 am	Instrument	: SV119
Sample	: WG1822868-3,32,, ICV 10193	Quant Date	: 9/1/2023 9:52 am

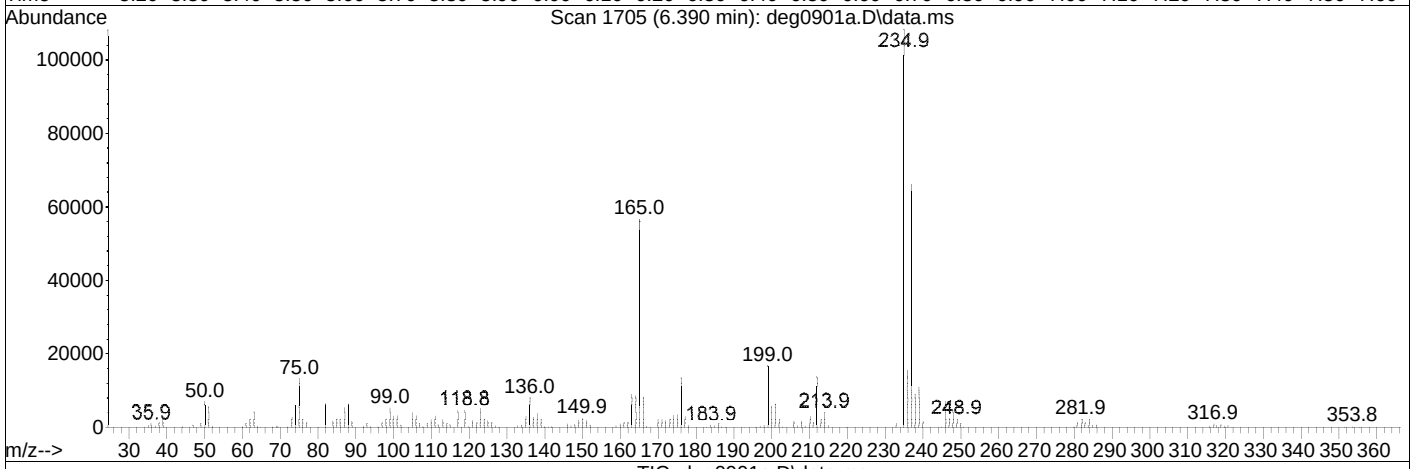
There are no manual integrations or false positives in this file.

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : deg0901a.D
Acq On : 01 Sep 2023 09:19 am
Operator : sv119:rp
Sample : WG1822868-2,32,,dftppsv119
Misc : WG1822868,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 01 09:35:41 2023
Quant Method : I:\8270SIM\sv119\230901LVI\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:35:31 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0901a.D\data.ms

(6) ddt (T)

6.390min (-0.000) 13.66

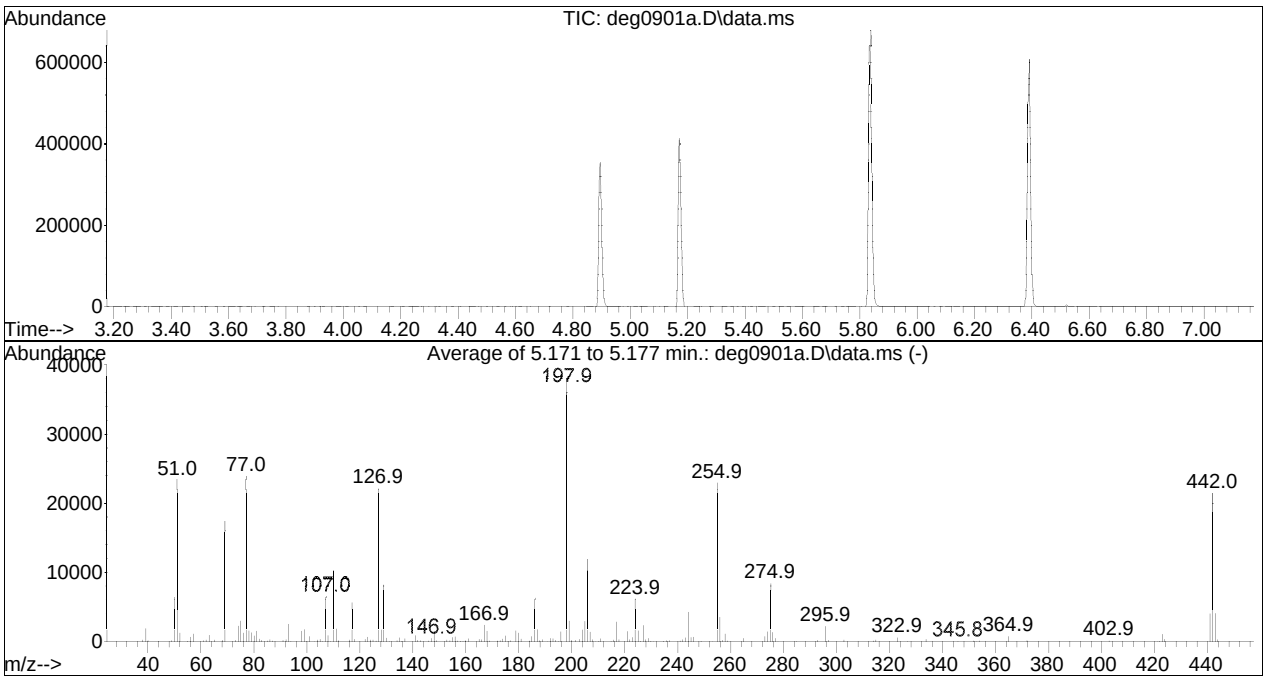
response 83290

Ion	Exp%	Act%
235.10	100.00	100.00
237.00	65.60	60.86
165.10	53.30	52.19
199.10	17.10	15.27

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : deg0901a.D
Acq On : 01 Sep 2023 09:19 am
Operator : sv119:rp
Sample : WG1822868-1,32,,dftppsv119
Misc : WG1822868,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270SIM\sv119\230901LVI\SIM-LVI_230306_sv119.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Fri Sep 01 09:52:27 2023



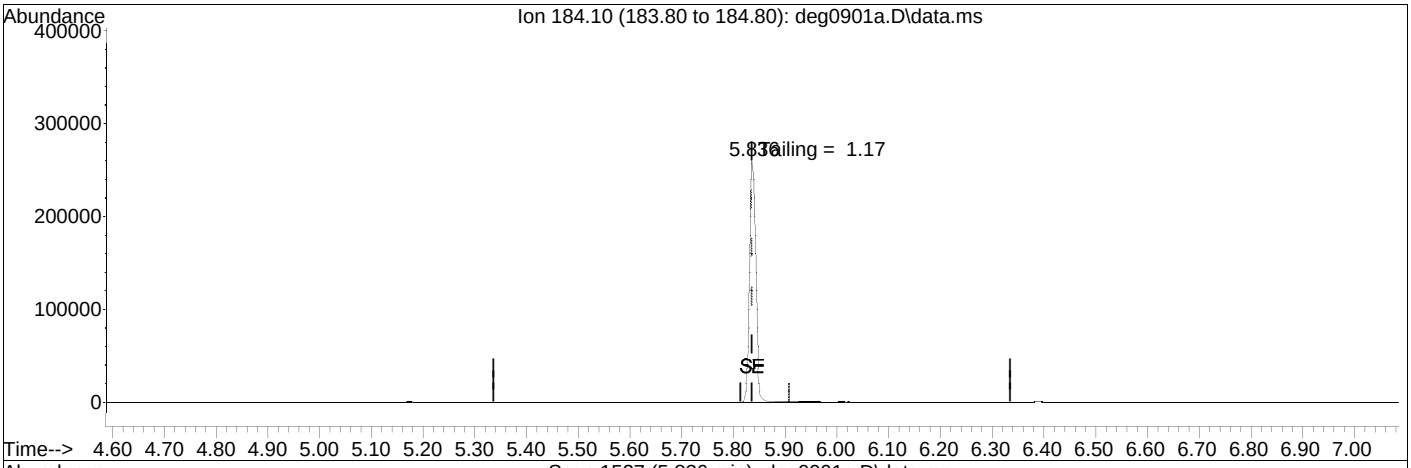
Spectrum Information: Average of 5.171 to 5.177 min.

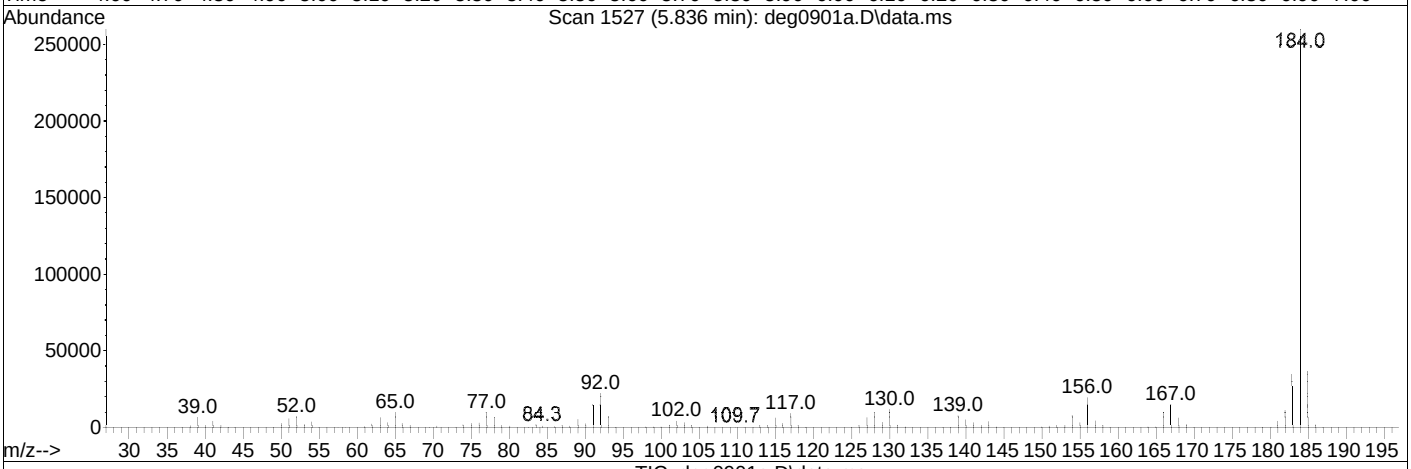
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	61.2	23352	PASS
68	69	0.00	2	1.6	275	PASS
69	69	100	100	100.0	17271	PASS
70	69	0.00	2	0.0	0	PASS
127	198	10	80	58.2	22216	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	38171	PASS
199	198	5	9	7.8	2963	PASS
275	198	10	60	22.0	8386	PASS
365	198	1	100	2.1	797	PASS
441	442	0.01	24	18.5	3974	PASS
442	198	50	100	56.2	21440	PASS
443	442	15	24	18.8	4035	PASS

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : deg0901a.D
Acq On : 01 Sep 2023 09:19 am
Operator : sv119:rp
Sample : WG1822868-4,32,,dftppsv119
Misc : WG1822868,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 01 09:35:41 2023
Quant Method : I:\8270SIM\sv119\230901LVI\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:35:31 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0901a.D\data.ms

(3) benzidine (T)

5.836min (+ 0.000) 20.52

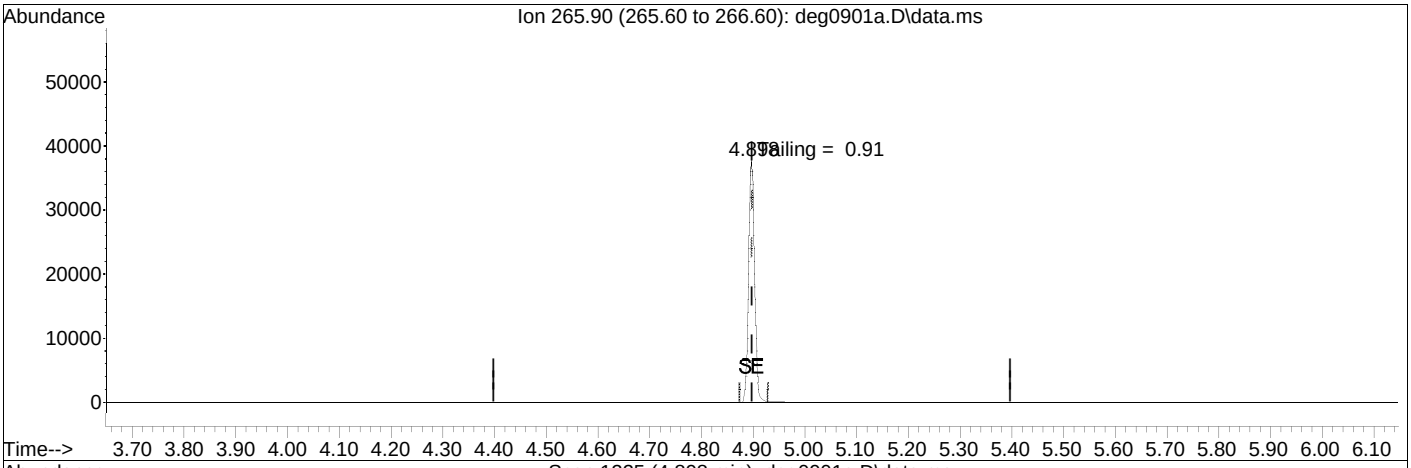
response 208919

Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : deg0901a.D
Acq On : 01 Sep 2023 09:19 am
Operator : sv119:rp
Sample : WG1822868-5,32,,dftppsv119
Misc : WG1822868,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 01 09:35:41 2023
Quant Method : I:\8270SIM\sv119\230901LVI\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:35:31 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D



TIC: deg0901a.D\data.ms

(1) pentachlorophenol (T)

4.898min (-0.000) 13.64

response 28648

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\230906LVI\
Data File : ccv0906.D
Acq On : 06 Sep 2023 07:01 am
Operator : sv119:ah
Sample : WG1824028-3,32,, ICV 10193 (0828)
Misc : WG1824028,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 06 07:22:20 2023
Quant Method : I:\8270SIM\sv119\230906LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 07:22:11 2023
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	85	0.00
2	s	2-Fluorophenol	0.984	1.154	-17.3	95	0.00
3	s	Phenol-d6	1.163	1.345	-15.6	96	0.00
4	T	Bis(2-chloroethyl)ether	1.081	1.107	-2.4	86	0.00
5	T	n-nitrosodi-n-propylamine	0.623	0.738	-18.5	96	0.00
6	t	Hexachloroethane	0.445	0.496	-11.5	92	0.00
7	s	Nitrobenzene-d5	0.875	1.122	-28.2#	101	0.00
8	i	Naphthalene-d8	1.000	1.000	0.0	86	0.00
9	t	Naphthalene	0.947	0.868	8.3	76	0.00
10	t	Hexachlorobutadiene	0.184	0.181	1.6	81	0.00
11	t	2-Methylnaphthalene	0.637	0.610	4.2	79	0.00
12	t	1-Methylnaphthalene	0.614	0.573	6.7	77	0.00
13	s	2-Fluorobiphenyl	0.822	0.729	11.3	73	0.00
14	t	2-Chloronaphthalene	0.692	0.640	7.5	77	0.00
15	t	2,6-Dinitrotoluene	0.121	0.143	-18.2	102	0.00
16	t	Acenaphthylene	0.998	0.992	0.6	79	0.00
17	i	Acenaphthene-d10	1.000	1.000	0.0	88	0.00
18	t	Acenaphthene	1.268	1.135	10.5	76	0.00
19	t	2,4-Dinitrotoluene	*1000.000	1219.692	-22.0#	105	0.00
20	t	Fluorene	1.458	1.395	4.3	79	0.00
21	s	2,4,6-Tribromophenol	0.161	0.199	-23.6#	100	0.00
22	i	Phenanthrene-d10	1.000	1.000	0.0	94	0.00
23	T	4,6-Dinitro-o-cresol	*1000.000	1149.810	-15.0	122	0.00
24	t	Hexachlorobenzene	0.240	0.208	13.3	77	0.00
25	t	Pentachlorophenol	*1000.000	1061.647	-6.2	94	0.00
26	t	Phenanthrene	1.013	0.877	13.4	78	0.00
27	t	Anthracene	0.946	0.879	7.1	81	0.00
28	t	Fluoranthene	1.158	1.169	-0.9	90	0.00
29	t	Pyrene	1.199	1.200	-0.1	88	0.00
30	s	4-Terphenyl-d14	0.835	0.703	15.8	76	0.00
31	i	Chrysene-d12	1.000	1.000	0.0	97	0.00
32	t	Benzo[a]anthracene	*1000.000	952.871	4.7	92	0.00
33	t	3,3'-Dichlorobenzidine	0.511	0.516	-1.0	99	0.00
34	t	Chrysene	1.274	1.157	9.2	84	0.00
35	T	Bis(2-ethylhexyl)phthalate	*1000.000	1040.589	-4.1	110	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\230906LVI\
Data File : ccv0906.D
Acq On : 06 Sep 2023 07:01 am
Operator : sv119:ah
Sample : WG1824028-3,32,, ICV 10193 (0828)
Misc : WG1824028,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 06 07:22:20 2023
Quant Method : I:\8270SIM\sv119\230906LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 07:22:11 2023
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
36	i	Perylene-d12	1.000	1.000	0.0	87	0.00
37	t	Benzo[b]fluoranthene	1.216	1.254	-3.1	85	0.00
38	t	Benzo[k]fluoranthene	1.091	1.159	-6.2	86	0.00
39	t	Benzo[a]pyrene	0.985	1.076	-9.2	89	0.00
40	t	Indeno[1,2,3-cd]pyrene	1.129	1.206	-6.8	91	0.00
41	t	Dibenzo[a,h]anthracene	1.076	1.103	-2.5	82	0.00
42	t	Benzo[g,h,i]perylene	1.199	1.223	-2.0	84	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230906LVI\
Data File : ccv0906.D
Acq On : 06 Sep 2023 07:01 am
Operator : sv119:ah
Sample : WG1824028-3,32,, ICV 10193 (0828)
Misc : WG1824028,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 06 07:22:20 2023
Quant Method : I:\8270SIM\sv119\230906LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 07:22:11 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.242	152	56406	4000.000	ng/ml	0.00
8) Naphthalene-d8	2.904	136	206621	4000.000	ng/ml	0.00
17) Acenaphthene-d10	3.878	164	110458	4000.000	ng/ml	0.00
22) Phenanthrene-d10	4.717	188	263512	4000.000	ng/ml	0.00
31) Chrysene-d12	6.265	240	254375	4000.000	ng/ml	0.00
36) Perylene-d12	7.463	264	265654	4000.000	ng/ml	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	1.643	112	16273	1172.548	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 23.45%			
3) Phenol-d6	2.055	99	18962	1156.419	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 23.13%			
7) Nitrobenzene-d5	2.522	82	15819	1282.360	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 51.29%			
13) 2-Fluorobiphenyl	3.500	172	37665	886.630	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 35.47%			
21) 2,4,6-Tribromophenol	4.323	330	5491	1233.803	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 24.68%			
30) 4-Terphenyl-d14	5.631	244	46299	842.037	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 33.68%			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.104	93	15608	1023.927	ng/ml	97
5) n-nitrosodi-n-propylamine	2.440	70	10403	1183.838	ng/ml	99
6) Hexachloroethane	2.501	117	6988	1114.688	ng/ml	99
9) Naphthalene	2.915	128	44839	916.414	ng/ml	100
10) Hexachlorobutadiene	2.987	225	9335	981.559	ng/ml	99
11) 2-Methylnaphthalene	3.294	142	31492	957.513	ng/ml	99
12) 1-Methylnaphthalene	3.349	142	29617	933.748	ng/ml	99
14) 2-Chloronaphthalene	3.566	162	33056	925.327	ng/ml	99
15) 2,6-Dinitrotoluene	3.759	165	7403	1180.642	ng/ml	98
16) Acenaphthylene	3.798	152	51265	994.519	ng/ml	100
18) Acenaphthene	3.896	153	31356	895.371	ng/ml	100
19) 2,4-Dinitrotoluene	3.986	165	9772	1219.692	ng/ml#	80
20) Fluorene	4.187	166	38530	957.239	ng/ml	99
23) 4,6-Dinitro-o-cresol	4.216	198	5186	1149.810	ng/ml	97
24) Hexachlorobenzene	4.502	284	13734	867.241	ng/ml	93
25) Pentachlorophenol	4.615	266	6045	1061.647	ng/ml	100
26) Phenanthrene	4.729	178	57789	865.549	ng/ml	100
27) Anthracene	4.757	178	57888	929.356	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230906LVI\
Data File : ccv0906.D
Acq On : 06 Sep 2023 07:01 am
Operator : sv119:ah
Sample : WG1824028-3,32,, ICV 10193 (0828)
Misc : WG1824028,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 06 07:22:20 2023
Quant Method : I:\8270SIM\sv119\230906LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 07:22:11 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Fluoranthene	5.406	202	76979	1008.951	ng/ml	96
29) Pyrene	5.538	202	79070	1000.697	ng/ml	100
32) Benzo[a]anthracene	6.257	228	79397	952.871	ng/ml	100
33) 3,3'-Dichlorobenzidine	6.244	252	32787	1008.054	ng/ml	99
34) Chrysene	6.280	228	73609	908.458	ng/ml	99
35) Bis(2-ethylhexyl)phtha...	6.285	149	39219	1040.589	ng/ml	99
37) Benzo[b]fluoranthene	7.094	252	83278	1030.834	ng/ml	98
38) Benzo[k]fluoranthene	7.118	252	77005	1062.902	ng/ml	99
39) Benzo[a]pyrene	7.402	252	71492	1093.341	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.679	276	80074	1067.752	ng/ml	99
41) Dibenzo[a,h]anthracene	8.719	278	73237	1024.820	ng/ml	99
42) Benzo[g,h,i]perylene	9.022	276	81199	1020.077	ng/ml	98

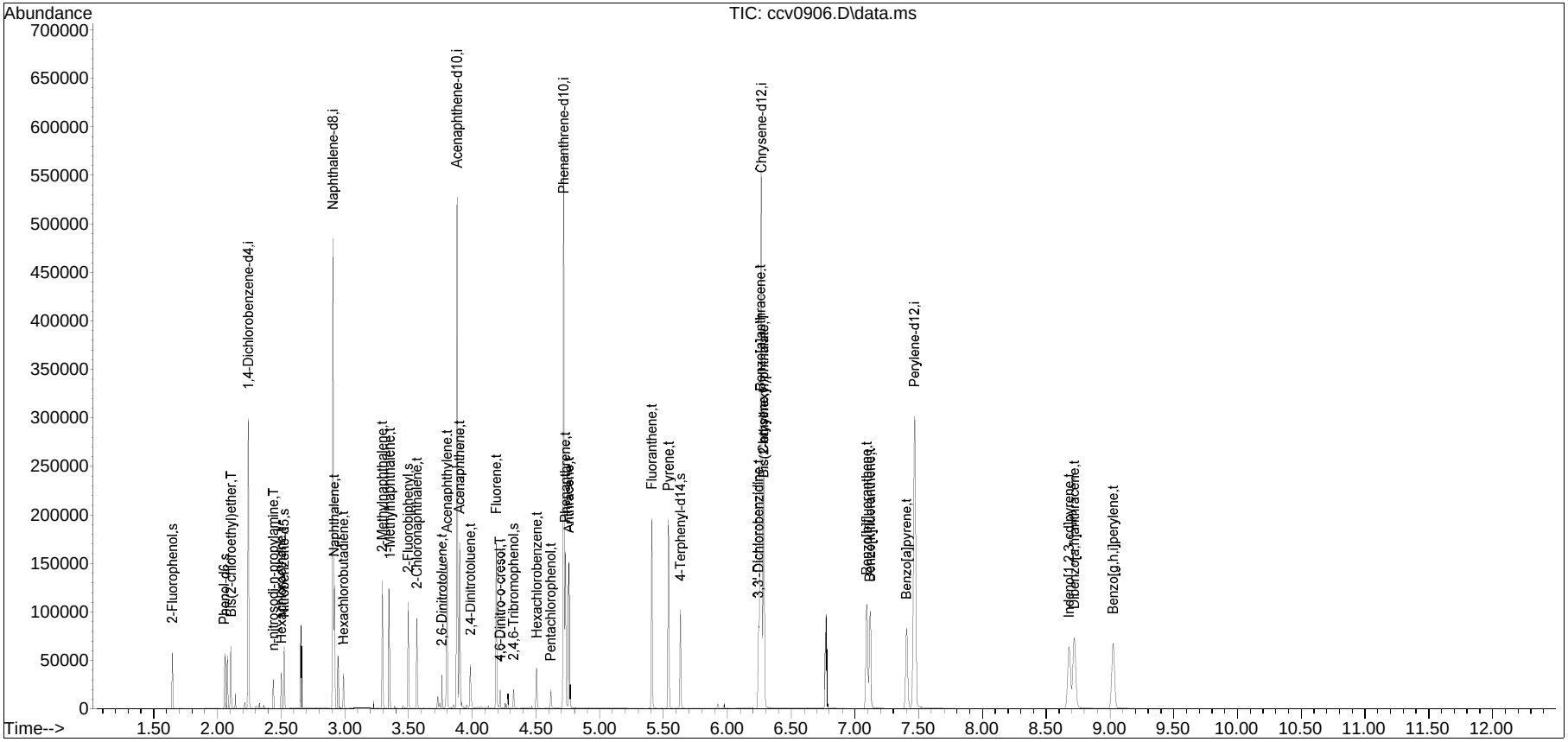
(#) = qualifier out of range (m) = manual integration (+) = signals summed

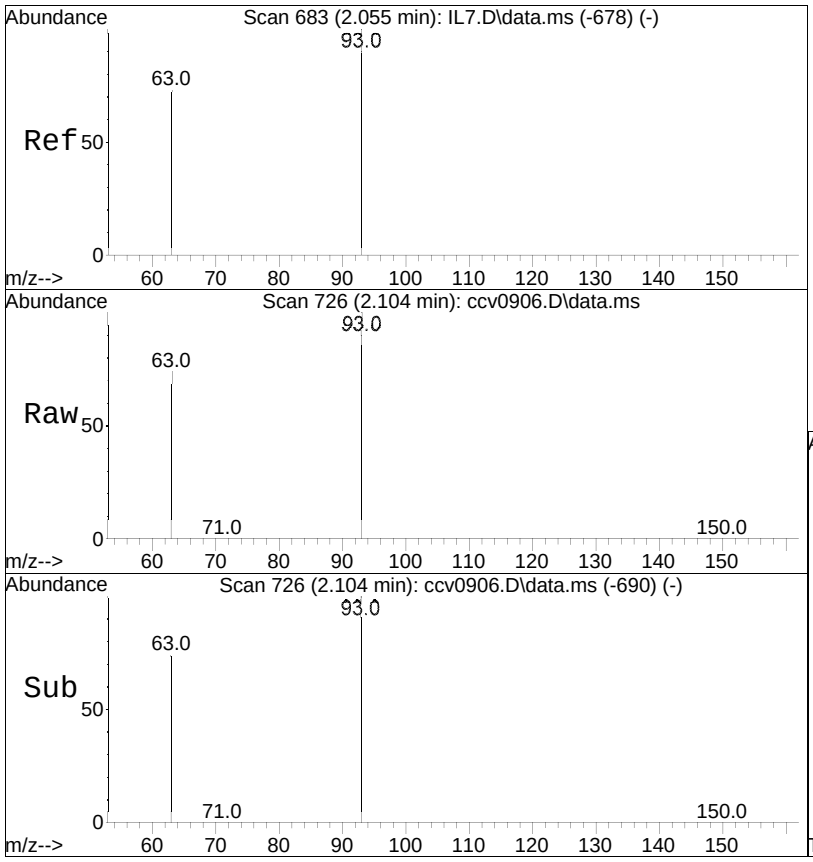
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230906LVI\
Data File : ccv0906.D
Acq On : 06 Sep 2023 07:01 am
Operator : sv119:ah
Sample : WG1824028-3,32,, ICV 10193 (0828)
Misc : WG1824028,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 06 07:22:20 2023
Quant Method : I:\8270SIM\sv119\230906LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 07:22:11 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

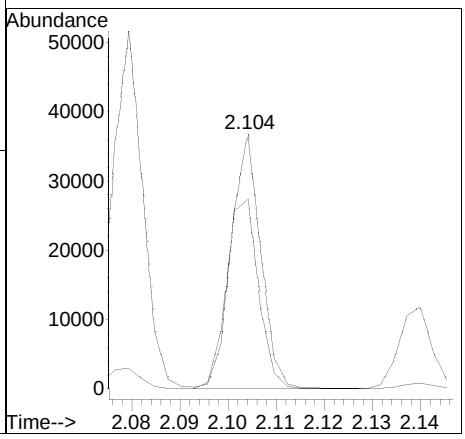


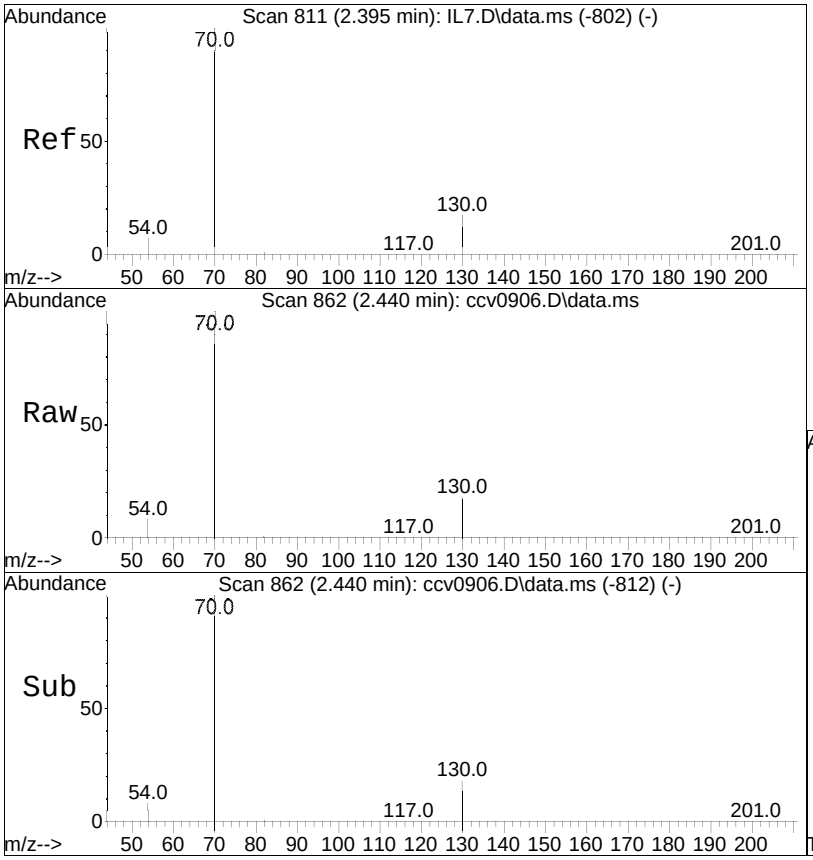


#4
Bis(2-chloroethyl)ether
Concen: 1023.93 ng/ml
RT: 2.104 min Scan# 726
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion: 93 Resp: 15608

Ion	Ratio	Lower	Upper
93	100		
63	80.7	62.6	94.0

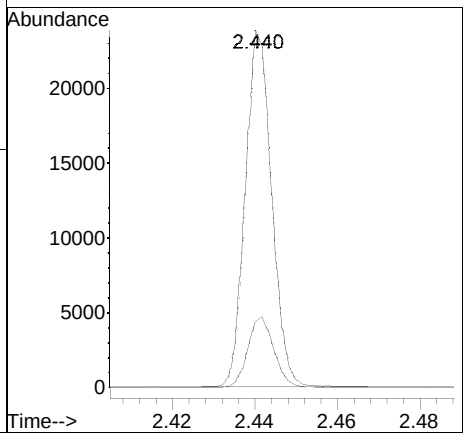


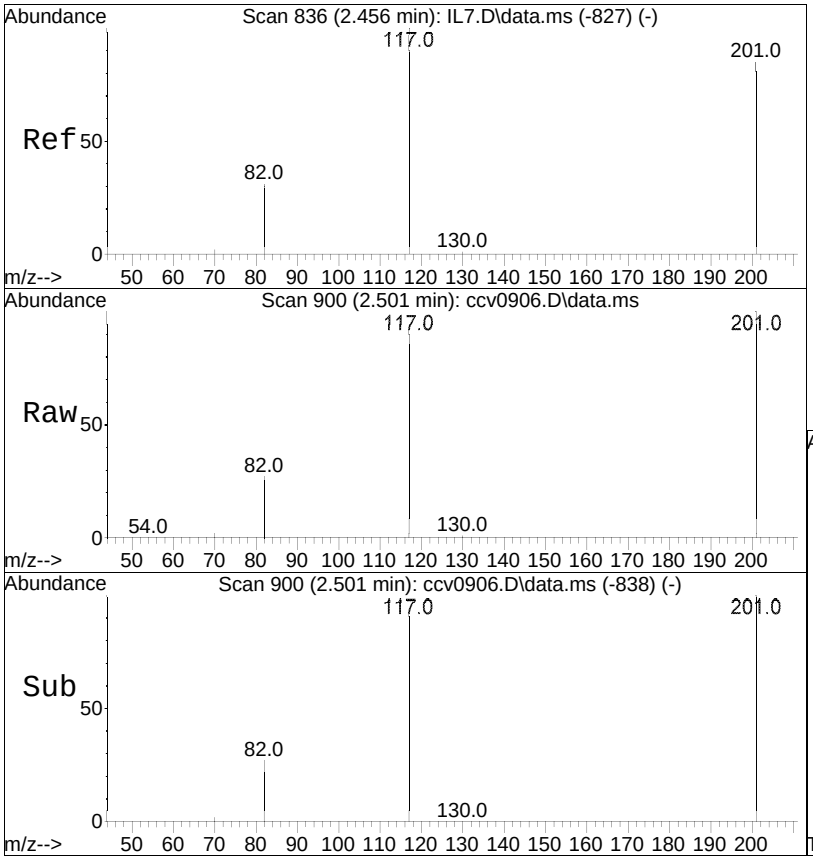


#5
n-nitrosodi-n-propylamine
Concen: 1183.84 ng/ml
RT: 2.440 min Scan# 862
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion: 70 Resp: 10403

Ion	Ratio	Lower	Upper
70	100		
130	19.3	15.0	22.6

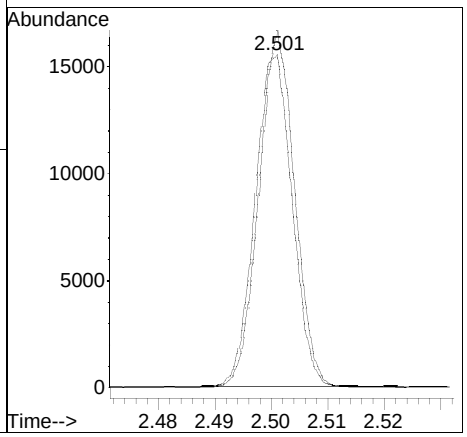


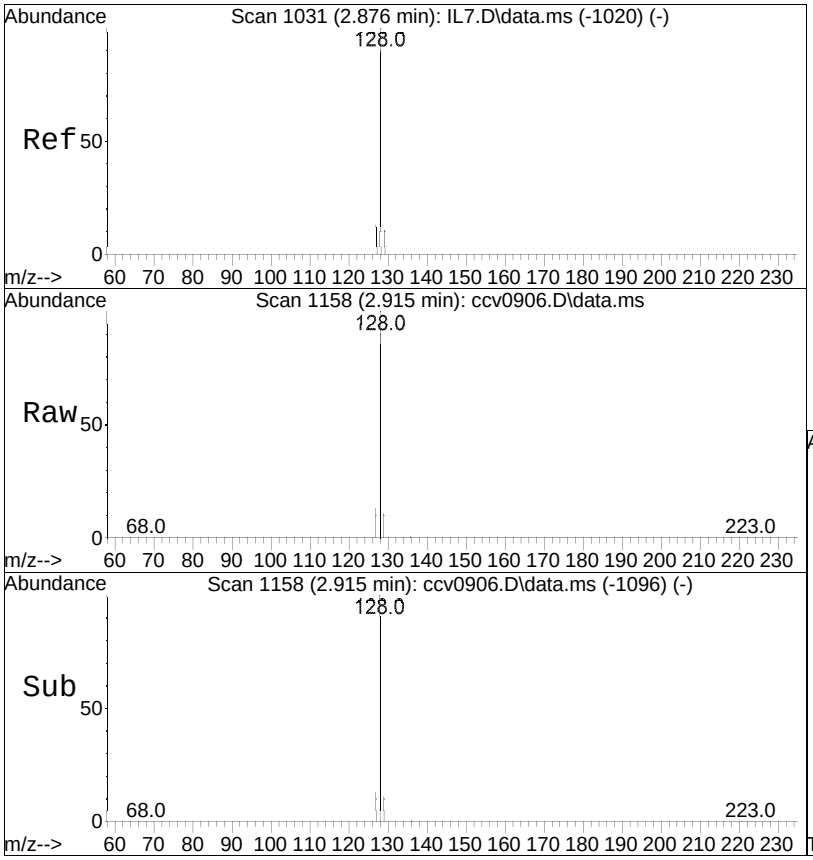


#6
Hexachloroethane
Concen: 1114.69 ng/ml
RT: 2.501 min Scan# 900
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:117 Resp: 6988

Ion	Ratio	Lower	Upper
117	100		
201	103.1	81.5	122.3

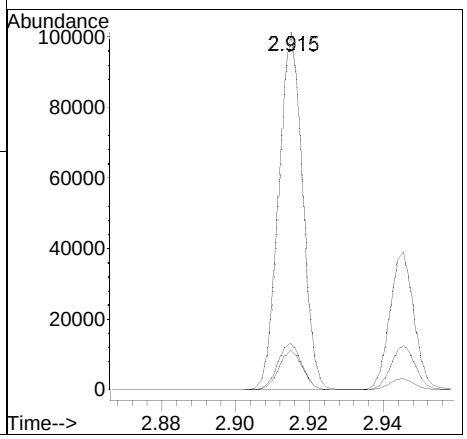


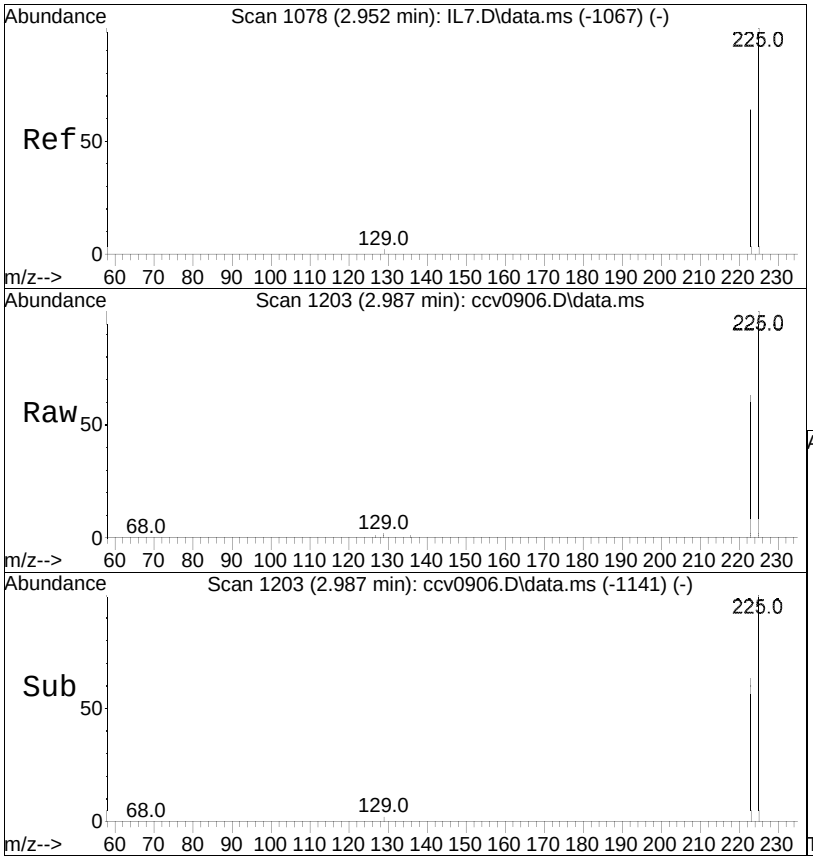


#9
Naphthalene
Concen: 916.41 ng/ml
RT: 2.915 min Scan# 1158
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:128 Resp: 44839

Ion	Ratio	Lower	Upper
128	100		
129	11.0	8.8	13.2
127	13.2	10.6	15.8

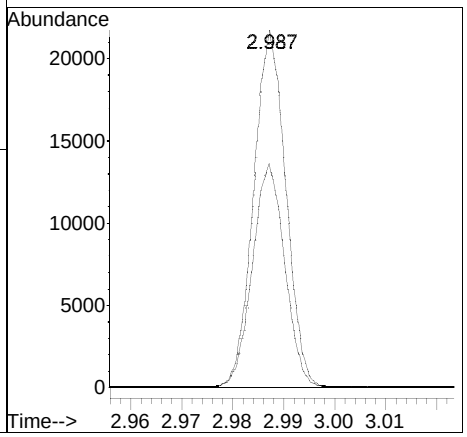


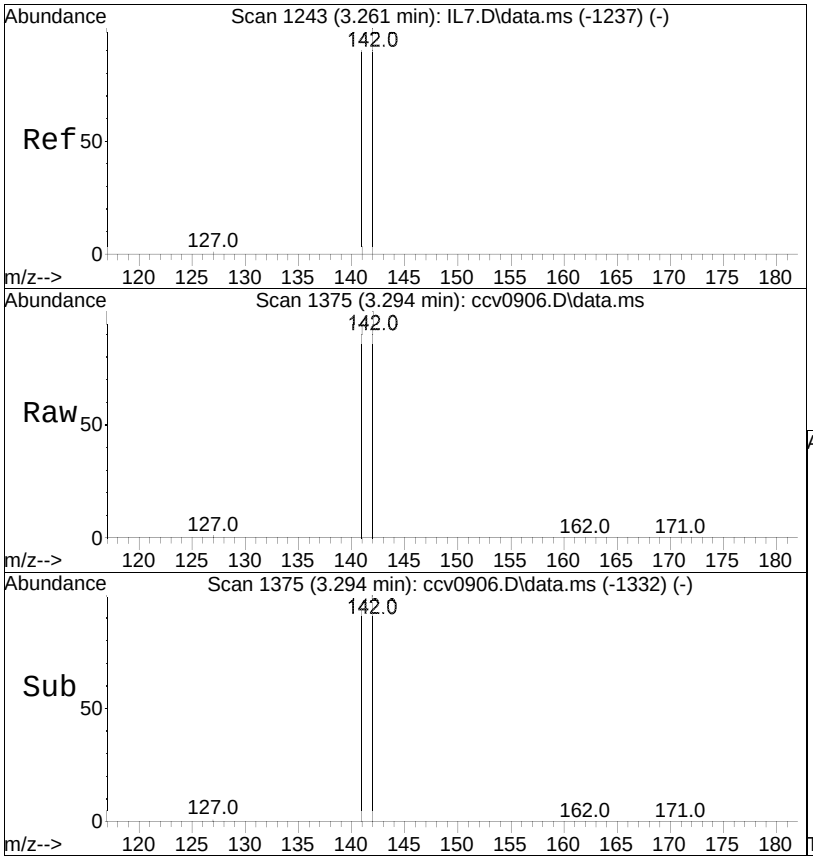


#10
Hexachlorobutadiene
Concen: 981.56 ng/ml
RT: 2.987 min Scan# 1203
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:225 Resp: 9335

Ion	Ratio	Lower	Upper
225	100		
223	63.0	50.1	75.1

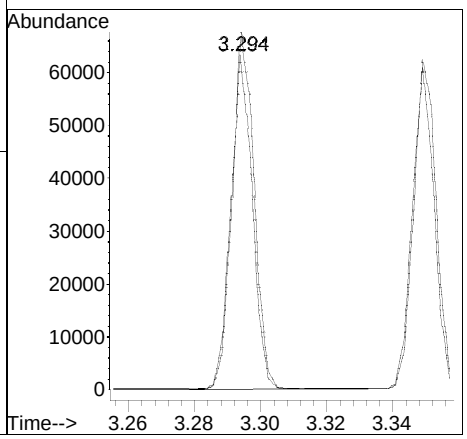


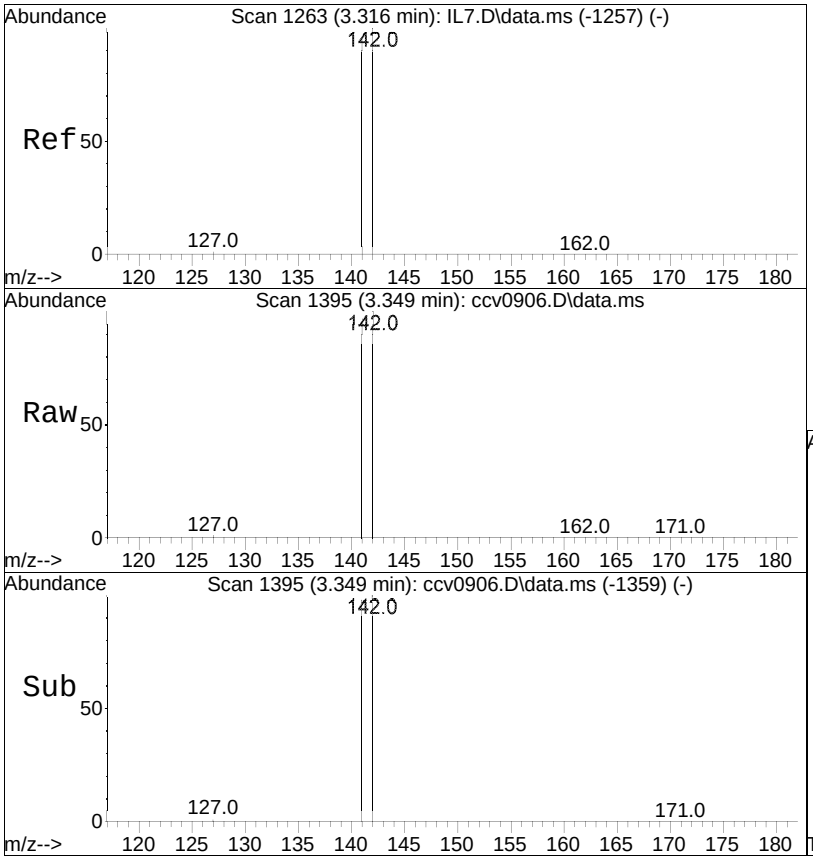


#11
2-Methylnaphthalene
Concen: 957.51 ng/ml
RT: 3.294 min Scan# 1375
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:142 Resp: 31492

Ion	Ratio	Lower	Upper
142	100		
141	91.2	74.1	111.1

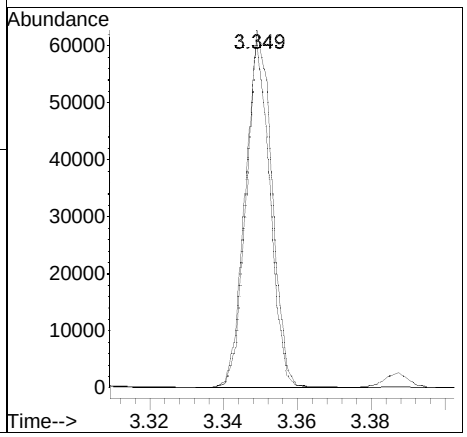


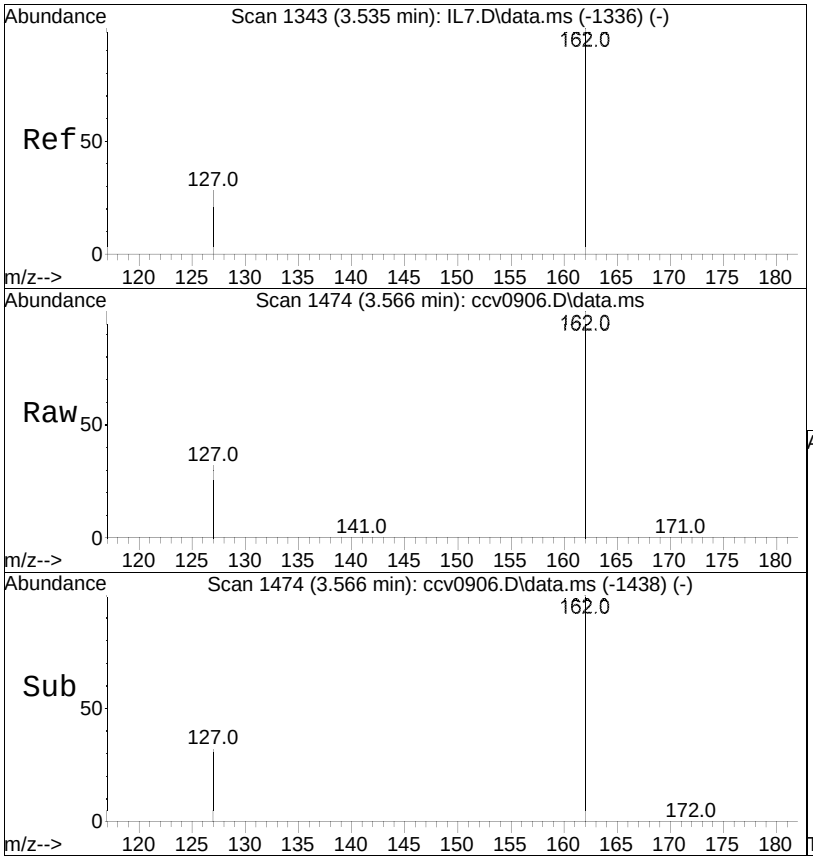


#12
1-Methylnaphthalene
Concen: 933.75 ng/ml
RT: 3.349 min Scan# 1395
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:142 Resp: 29617

Ion	Ratio	Lower	Upper
142	100		
141	94.8	76.6	114.8

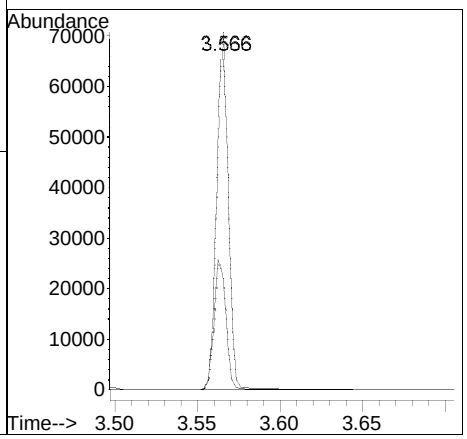


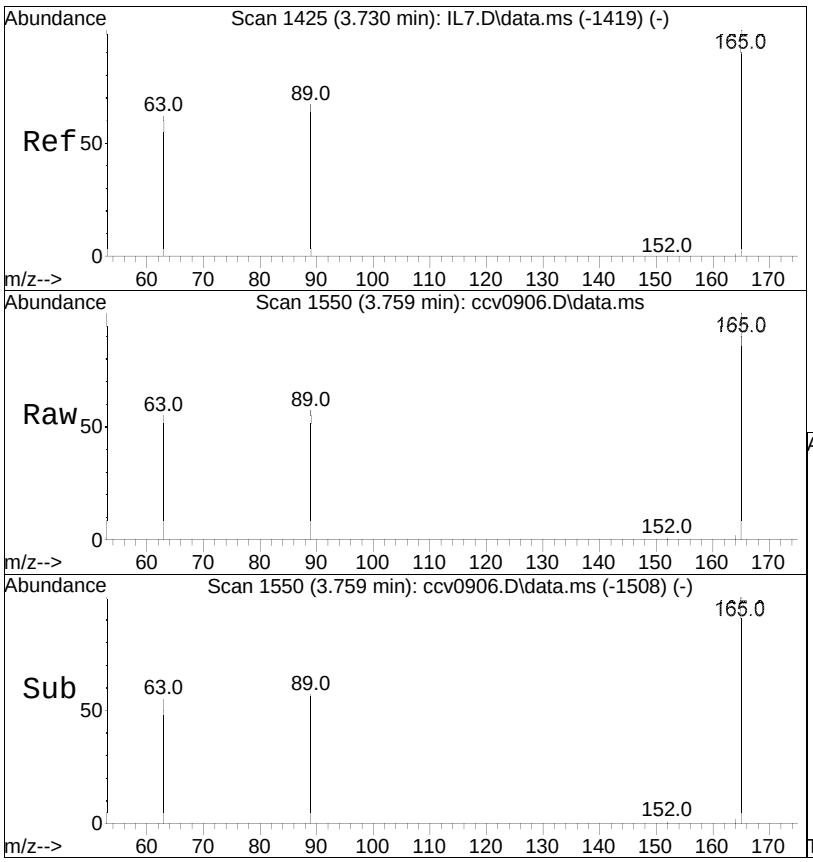


#14
2-Chloronaphthalene
Concen: 925.33 ng/ml
RT: 3.566 min Scan# 1474
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:162 Resp: 33056

Ion	Ratio	Lower	Upper
162	100		
127	37.4	29.7	44.5

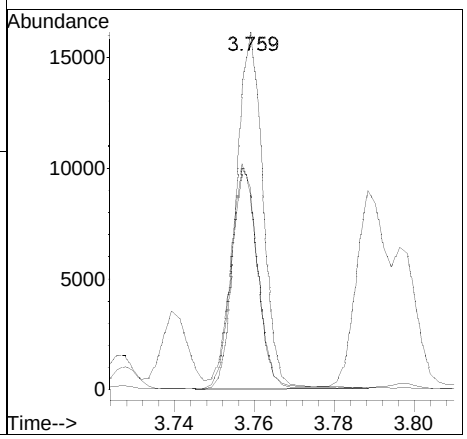


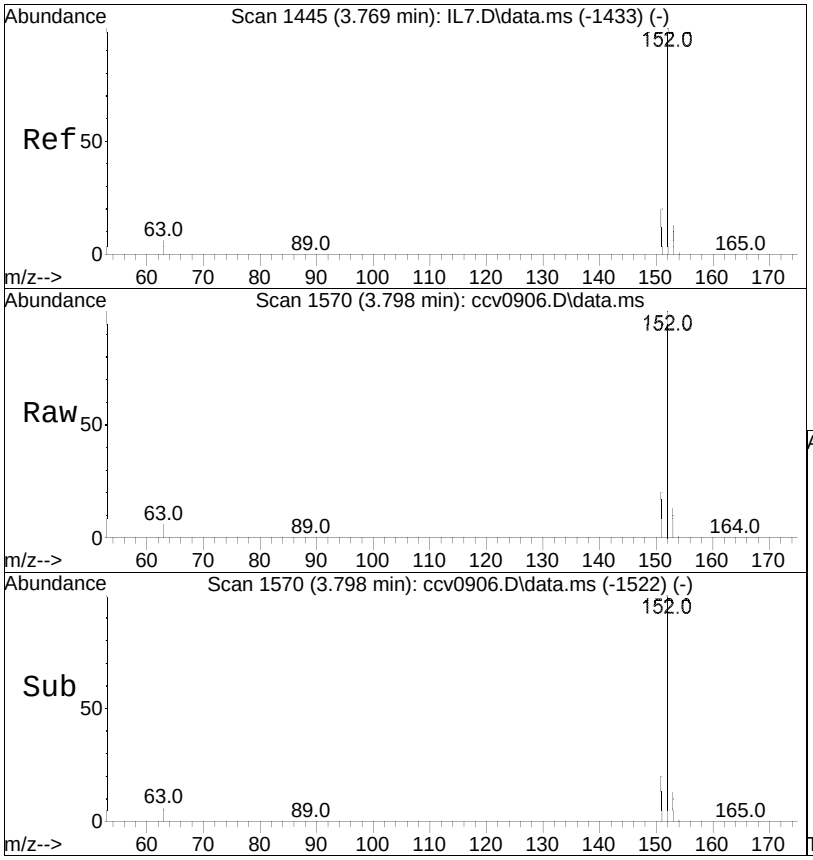


#15
2,6-Dinitrotoluene
Concen: 1180.64 ng/ml
RT: 3.759 min Scan# 1550
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:165 Resp: 7403

Ion	Ratio	Lower	Upper
165	100		
89	62.6	52.8	79.2
63	63.9	50.9	76.3

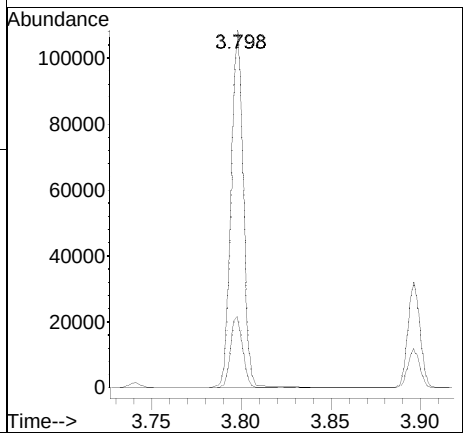


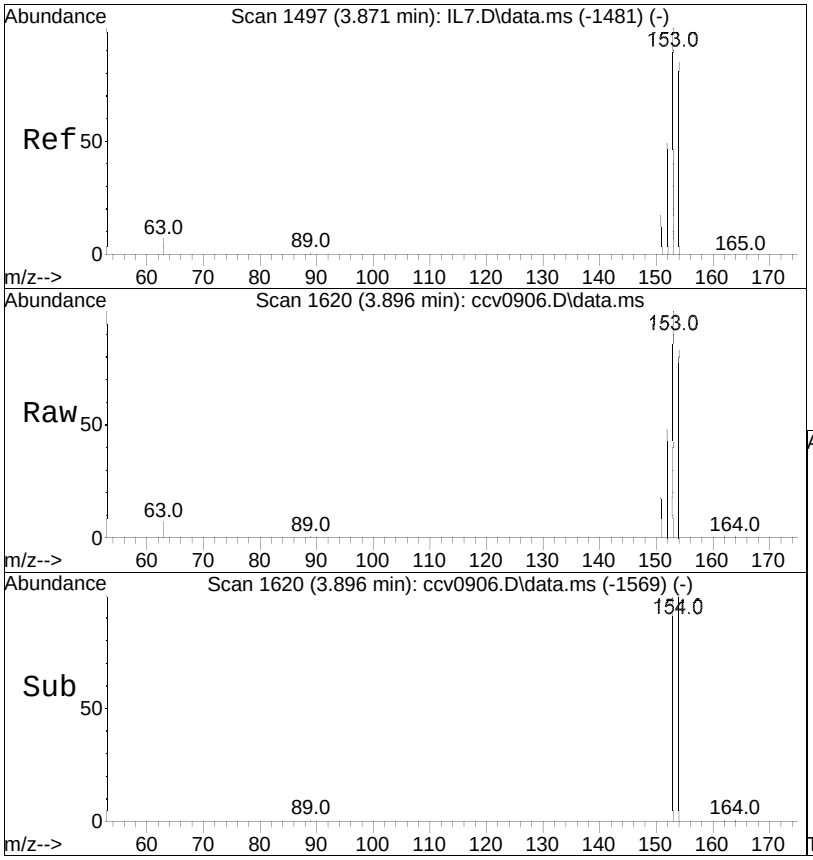


#16
Acenaphthylene
Concen: 994.52 ng/ml
RT: 3.798 min Scan# 1570
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:152 Resp: 51265

Ion	Ratio	Lower	Upper
152	100		
151	20.0	16.0	24.0

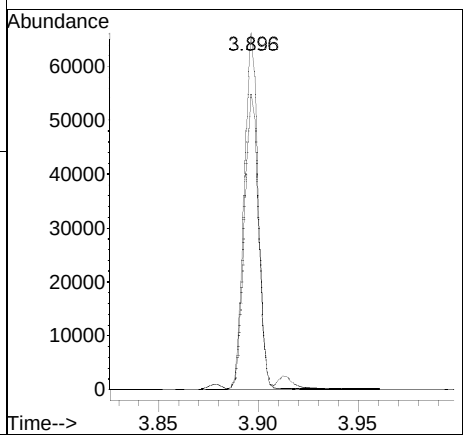


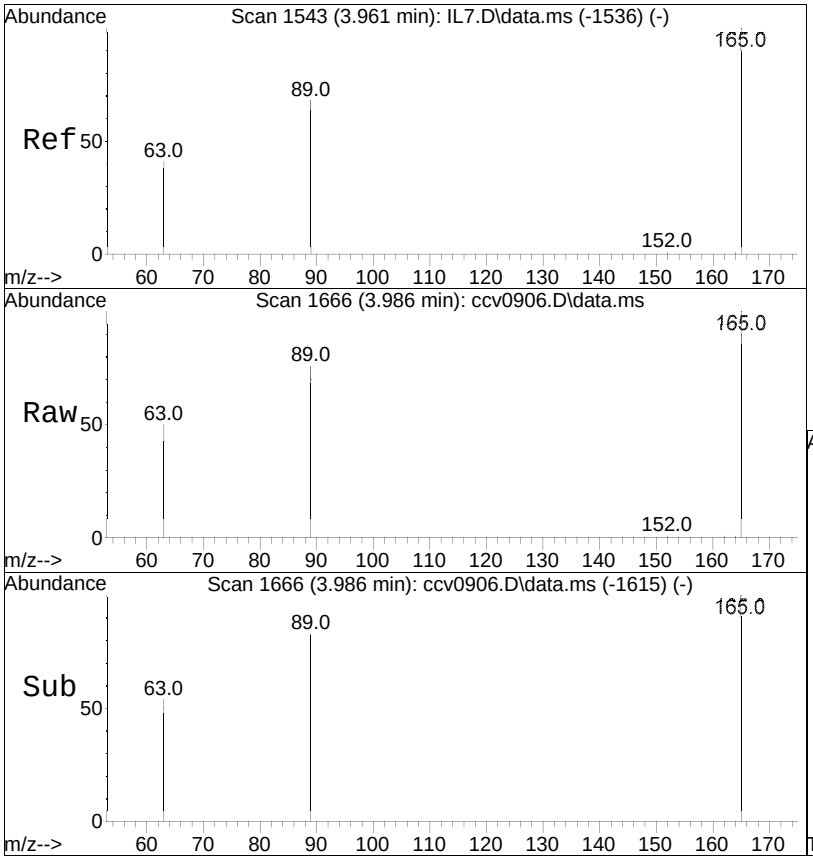


#18
Acenaphthene
Concen: 895.37 ng/ml
RT: 3.896 min Scan# 1620
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:153 Resp: 31356

Ion	Ratio	Lower	Upper
153	100		
154	83.3	66.9	100.3

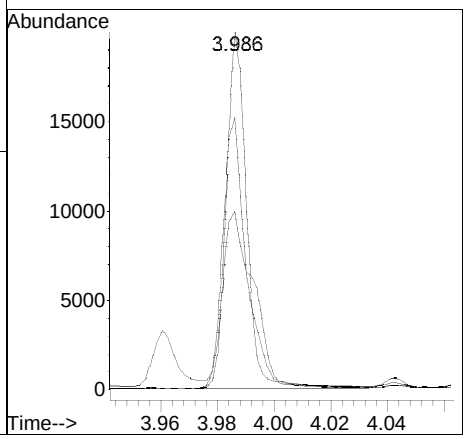


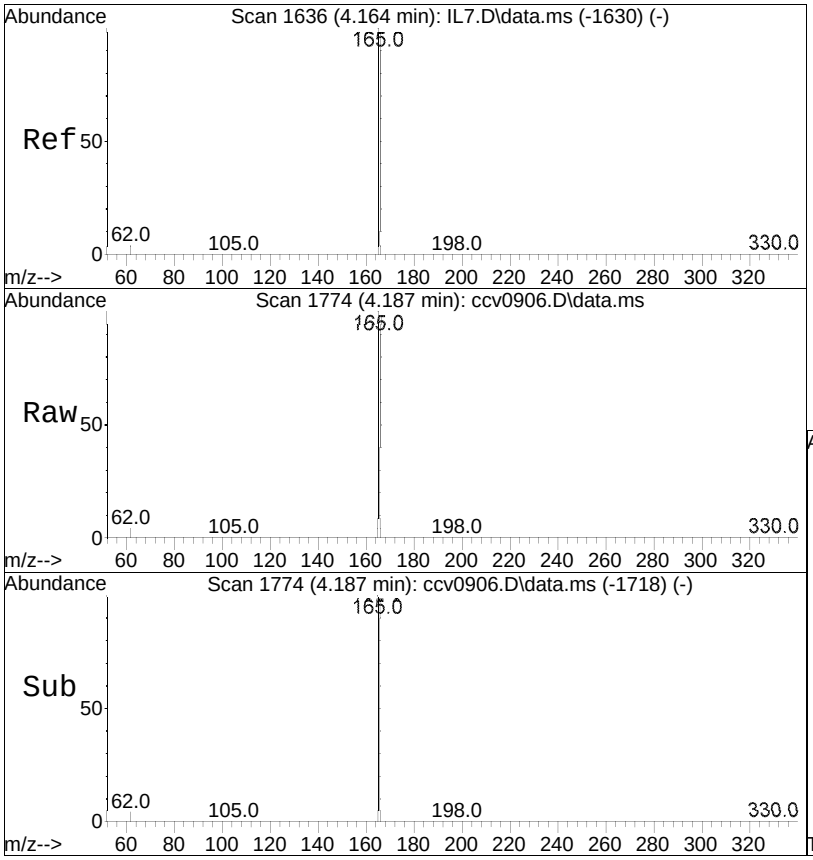


#19
2,4-Dinitrotoluene
Concen: 1219.69 ng/ml
RT: 3.986 min Scan# 1666
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:165 Resp: 9772

Ion	Ratio	Lower	Upper
165	100		
89	88.6	80.1	120.1
63	74.8	38.9	58.3#

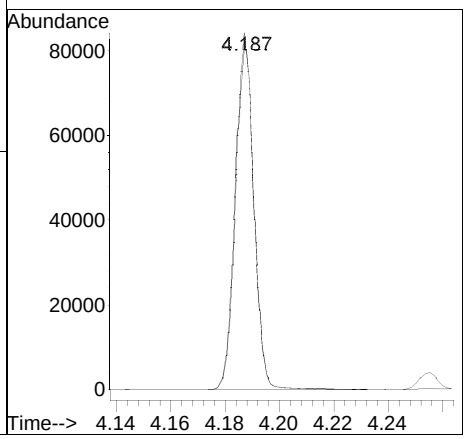


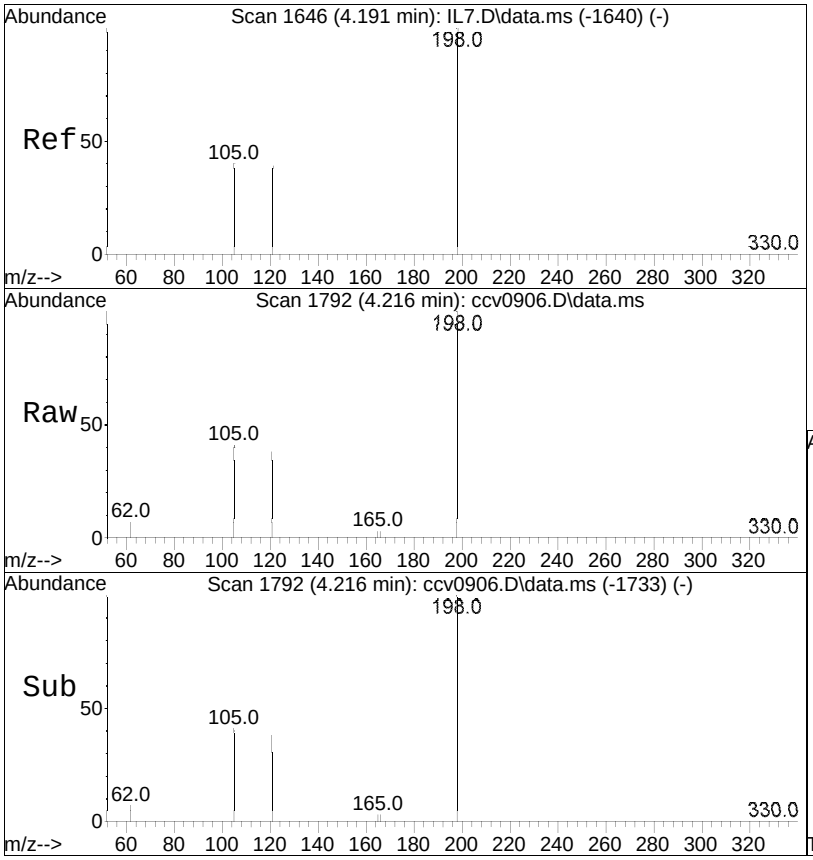


#20
Fluorene
Concen: 957.24 ng/ml
RT: 4.187 min Scan# 1774
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:166 Resp: 38530

Ion	Ratio	Lower	Upper
166	100		
165	102.4	82.9	124.3

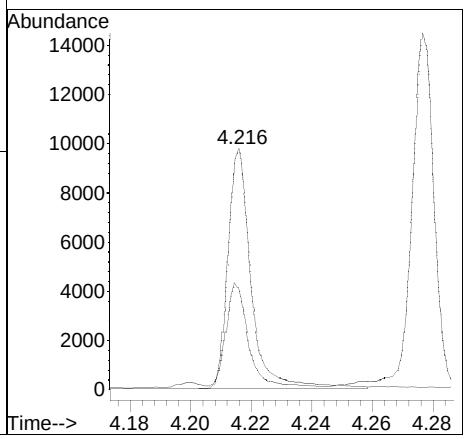


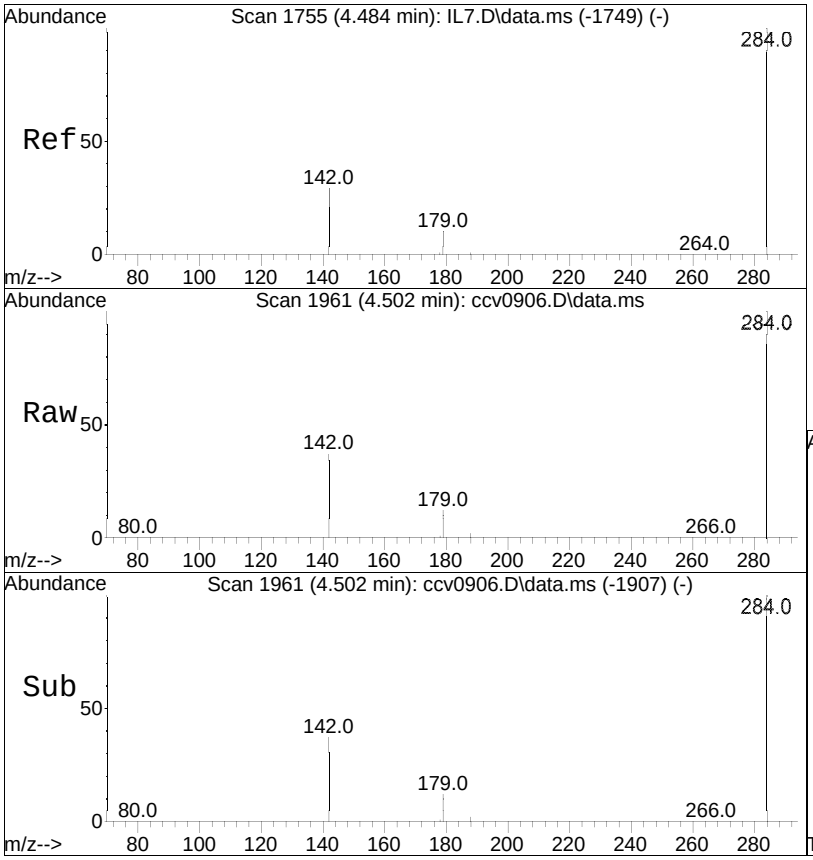


#23
4,6-Dinitro-o-cresol
Concen: 1149.81 ng/ml
RT: 4.216 min Scan# 1792
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:198 Resp: 5186

Ion	Ratio	Lower	Upper
198	100		
105	42.4	32.2	48.4

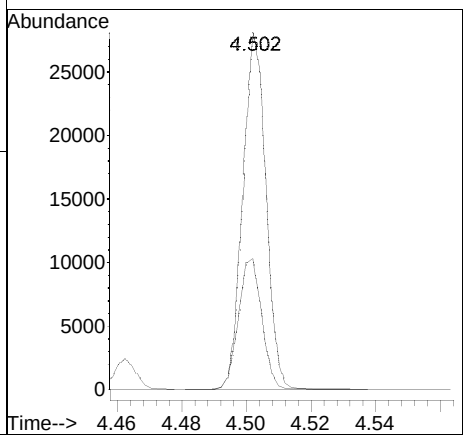


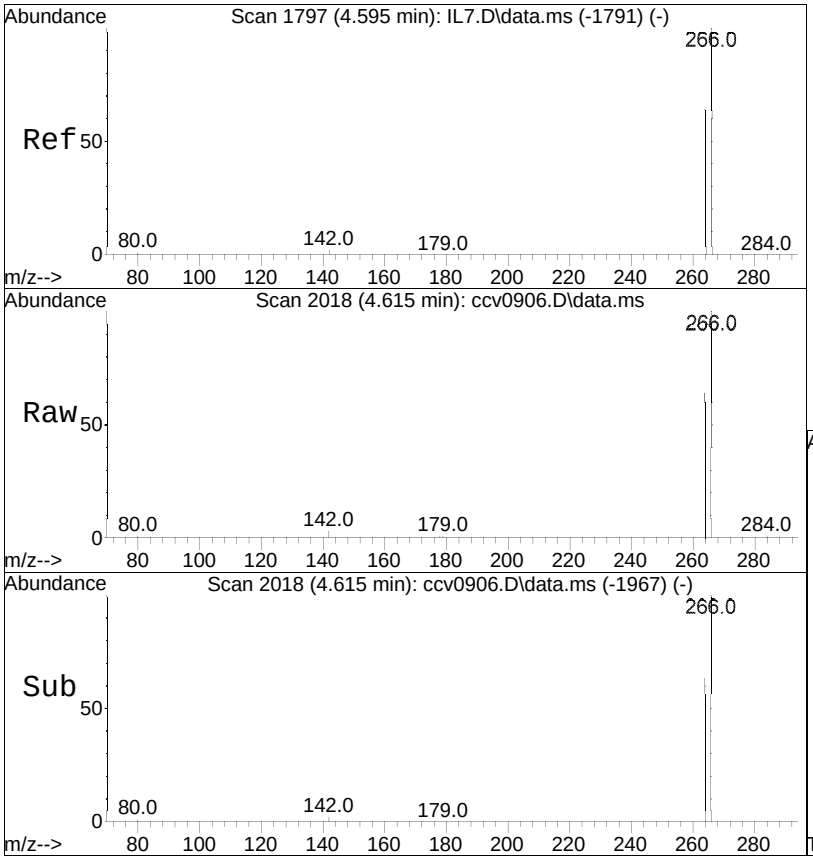


#24
Hexachlorobenzene
Concen: 867.24 ng/ml
RT: 4.502 min Scan# 1961
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:284 Resp: 13734

Ion	Ratio	Lower	Upper
284	100		
142	37.4	26.9	40.3

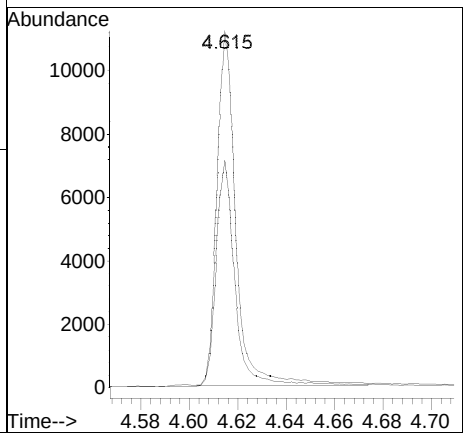


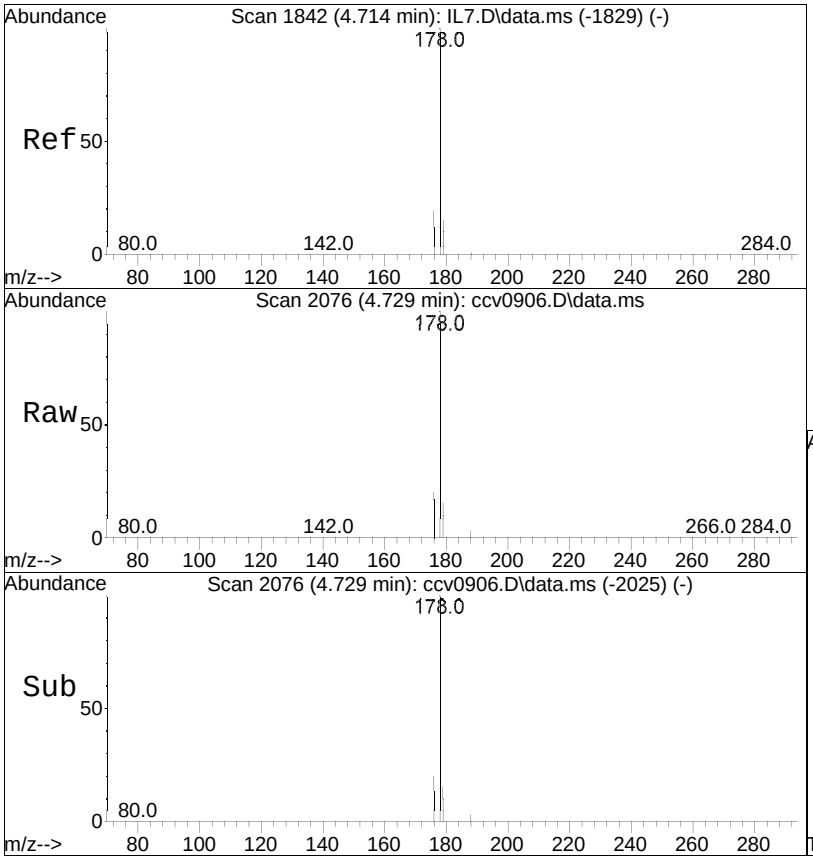


#25
Pentachlorophenol
Concen: 1061.65 ng/ml
RT: 4.615 min Scan# 2018
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:266 Resp: 6045

Ion	Ratio	Lower	Upper
266	100		
264	63.1	50.7	76.1

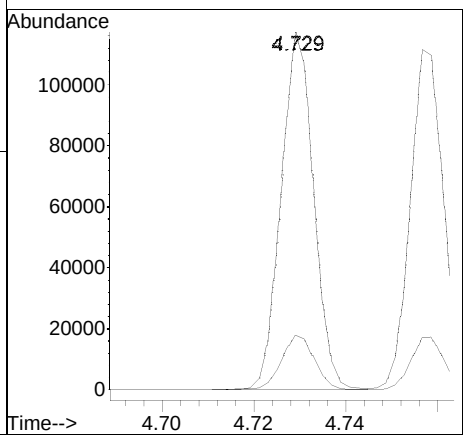


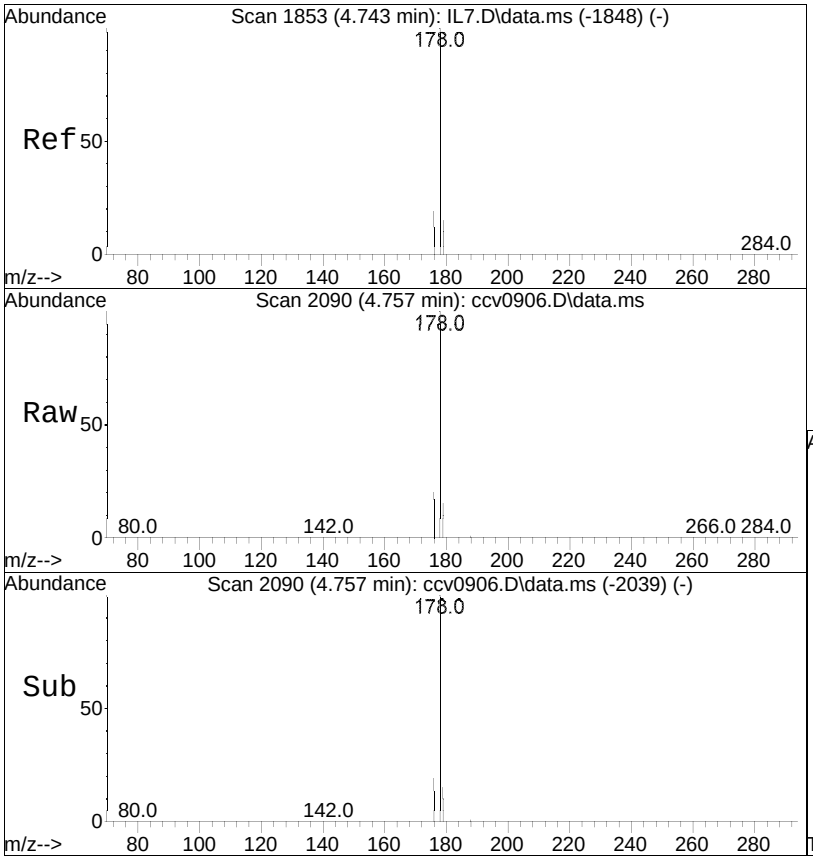


#26
Phenanthrene
Concen: 865.55 ng/ml
RT: 4.729 min Scan# 2076
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:178 Resp: 57789

Ion	Ratio	Lower	Upper
178	100		
179	15.4	12.3	18.5

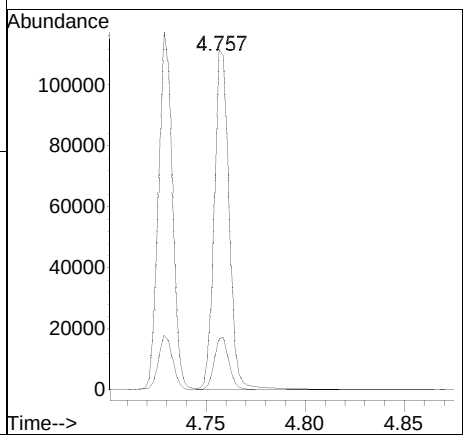


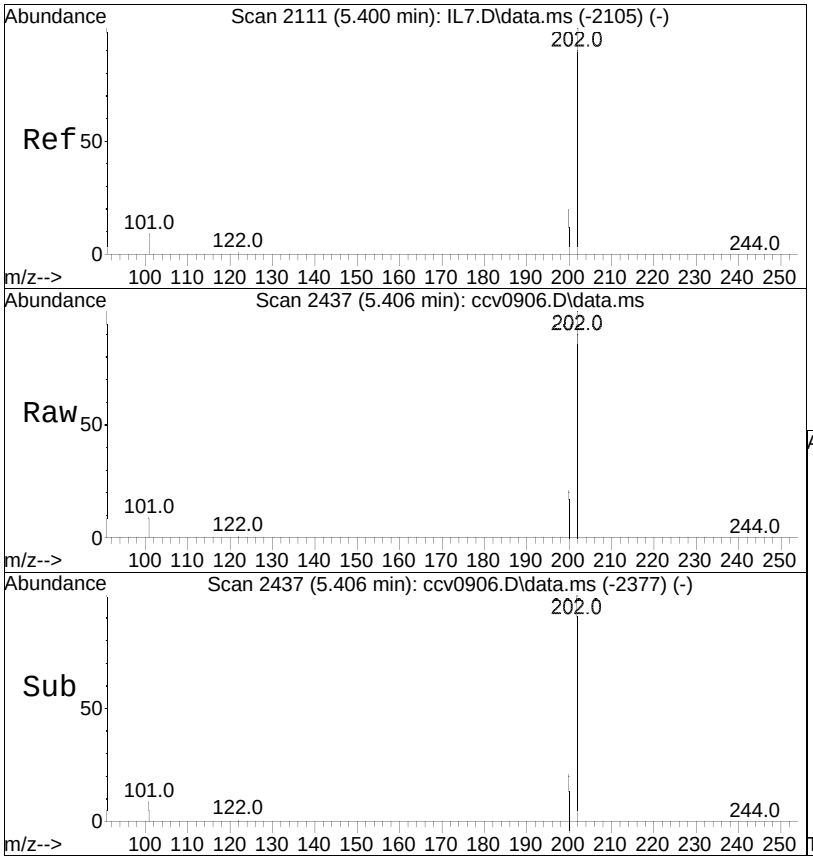


#27
Anthracene
Concen: 929.36 ng/ml
RT: 4.757 min Scan# 2090
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:178 Resp: 57888

Ion	Ratio	Lower	Upper
178	100		
179	15.3	12.2	18.4

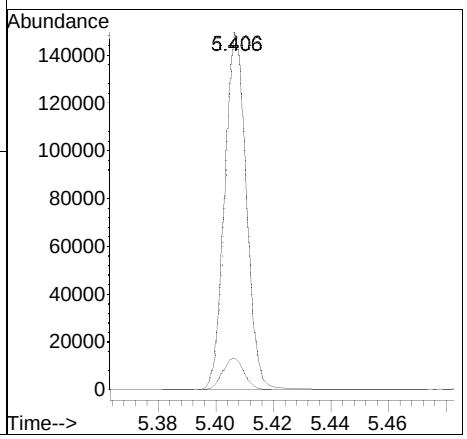


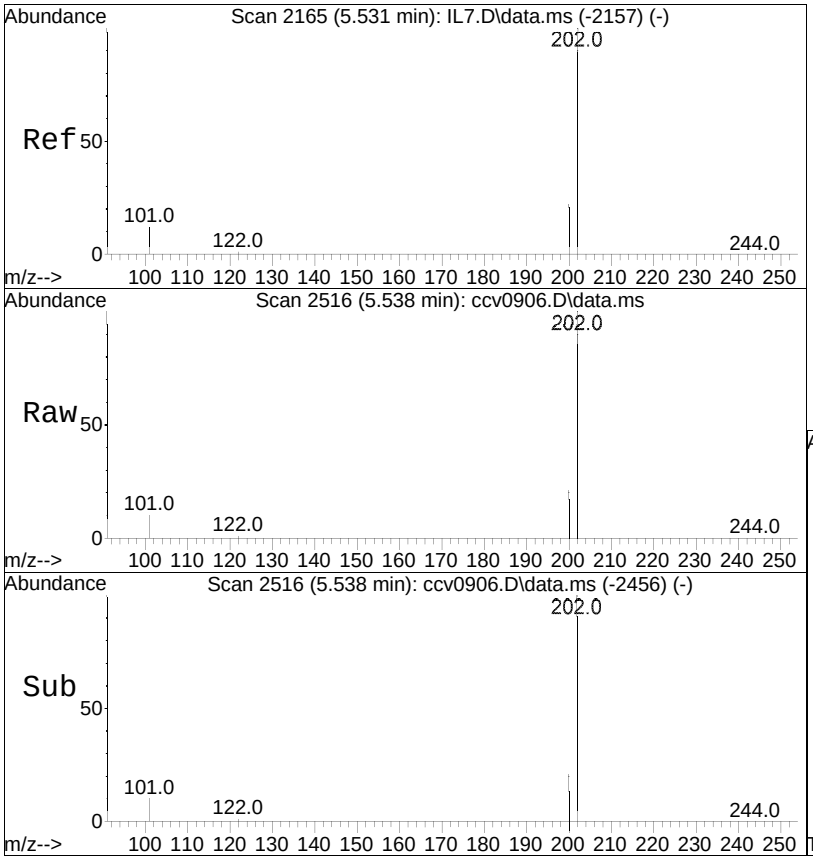


#28
Fluoranthene
Concen: 1008.95 ng/ml
RT: 5.406 min Scan# 2437
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:202 Resp: 76979

Ion	Ratio	Lower	Upper
202	100		
101	8.9	8.3	12.5

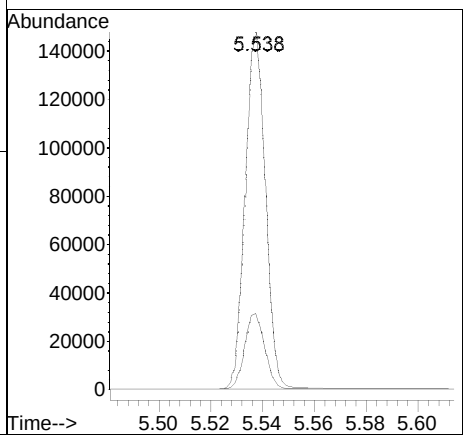


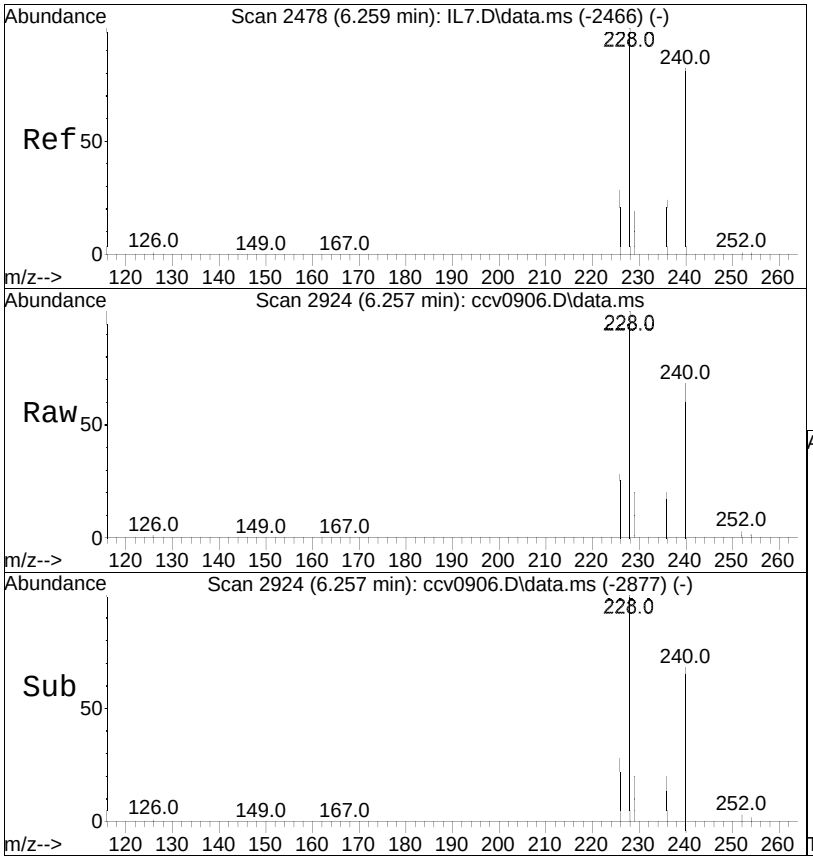


#29
Pyrene
Concen: 1000.70 ng/ml
RT: 5.538 min Scan# 2516
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:202 Resp: 79070

Ion	Ratio	Lower	Upper
202	100		
200	21.5	17.3	25.9

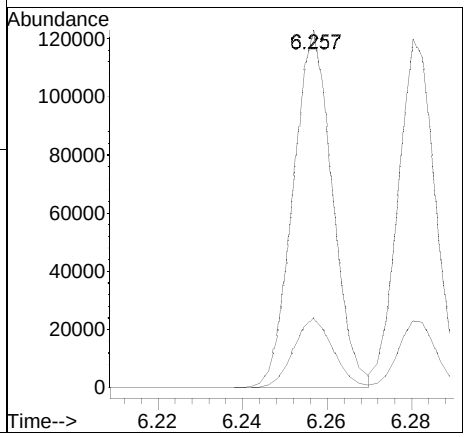


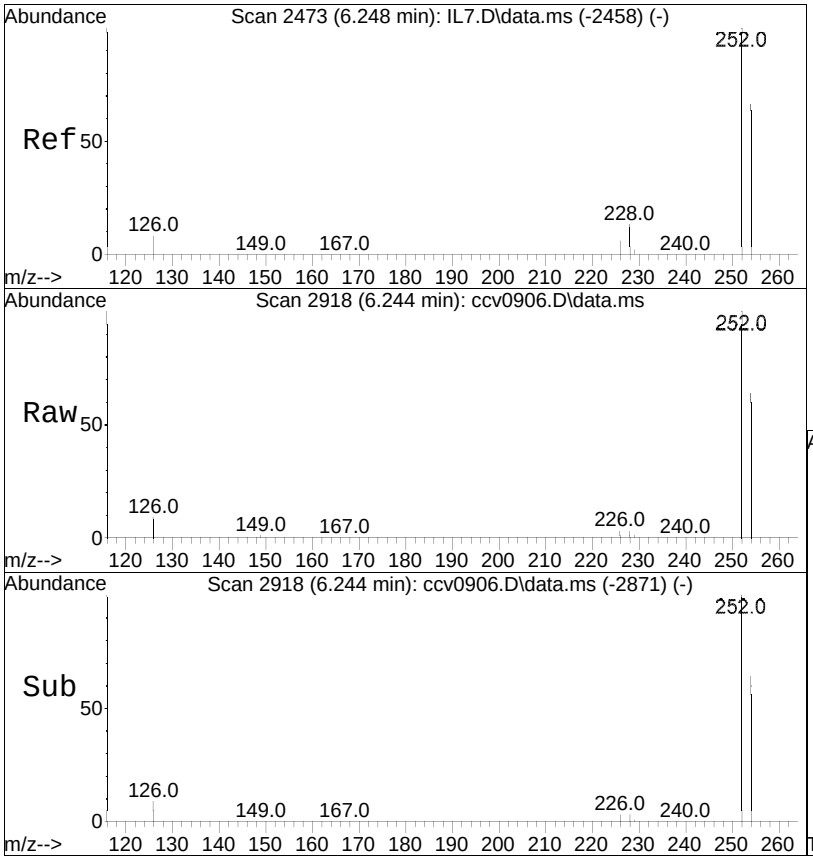


#32
Benzo[a]anthracene
Concen: 952.87 ng/ml
RT: 6.257 min Scan# 2924
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:228 Resp: 79397

Ion	Ratio	Lower	Upper
228	100		
229	19.5	15.6	23.4

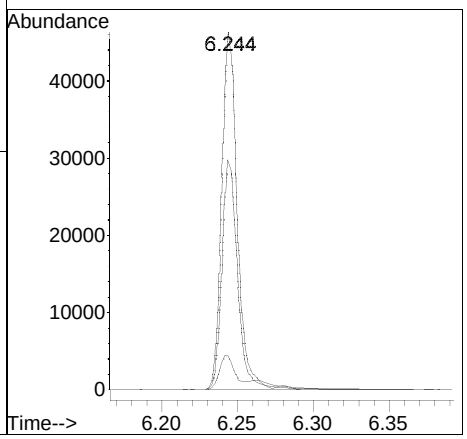


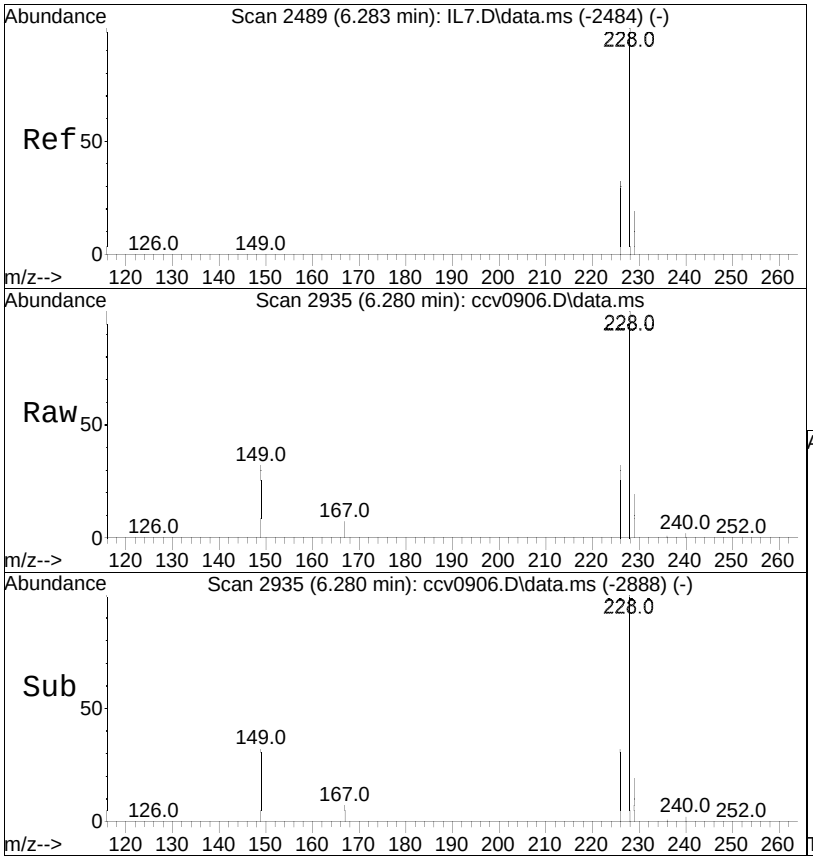


#33
3,3'-Dichlorobenzidine
Concen: 1008.05 ng/ml
RT: 6.244 min Scan# 2918
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:252 Resp: 32787

Ion	Ratio	Lower	Upper
252	100		
126	9.4	7.7	11.5
254	64.4	52.0	78.0

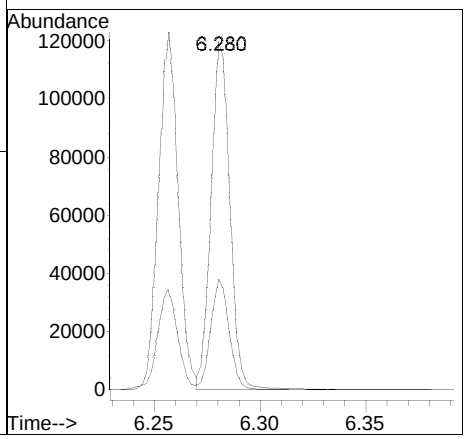


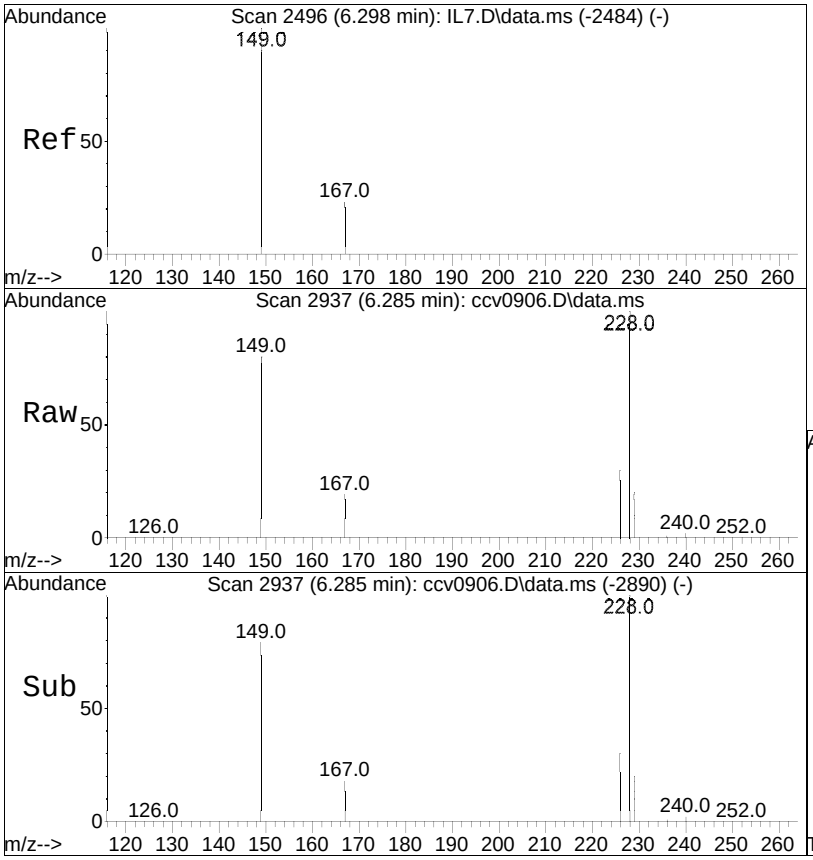


#34
Chrysene
Concen: 908.46 ng/ml
RT: 6.280 min Scan# 2935
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:228 Resp: 73609

Ion	Ratio	Lower	Upper
228	100		
226	31.1	24.5	36.7

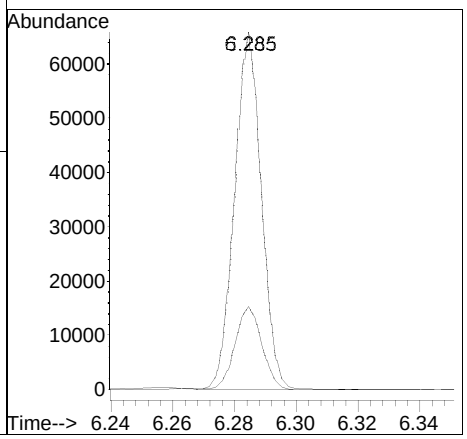


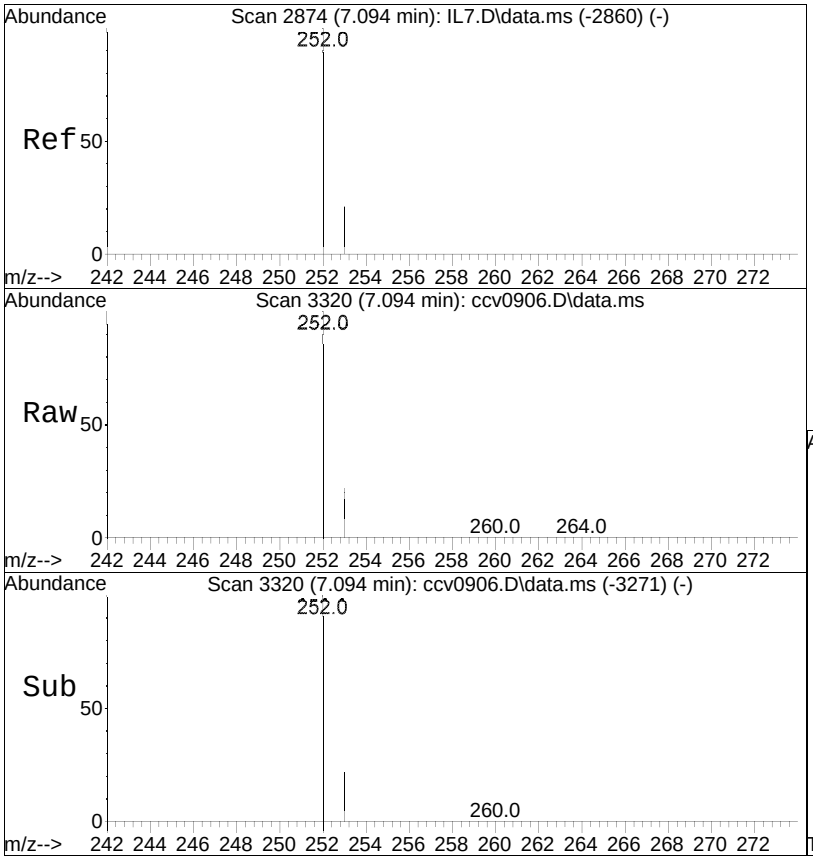


#35
Bis(2-ethylhexyl)phthalate
Concen: 1040.59 ng/ml
RT: 6.285 min Scan# 2937
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:149 Resp: 39219

Ion	Ratio	Lower	Upper
149	100		
167	23.4	18.5	27.7

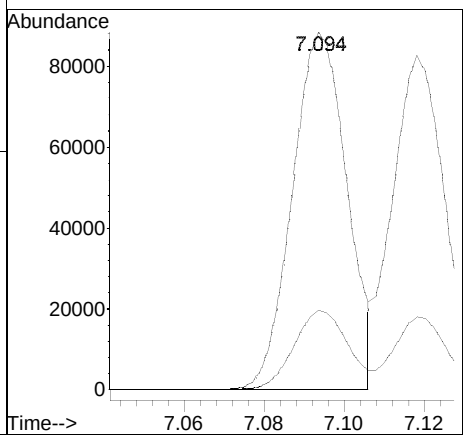


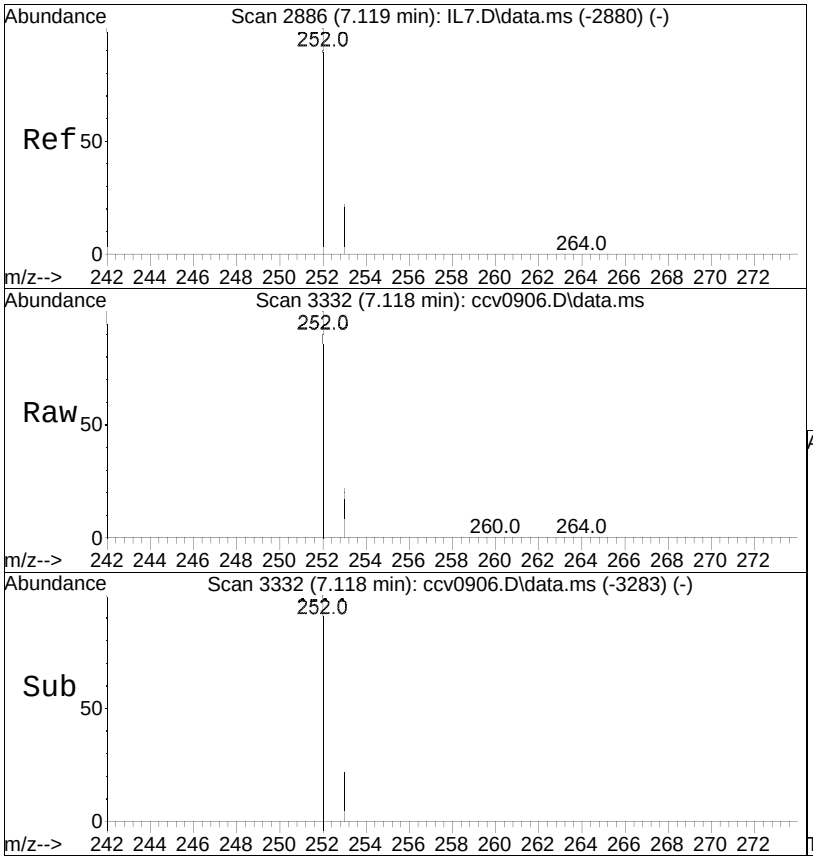


#37
Benzo[b]fluoranthene
Concen: 1030.83 ng/ml
RT: 7.094 min Scan# 3320
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:252 Resp: 83278

Ion	Ratio	Lower	Upper
252	100		
253	22.5	17.3	25.9

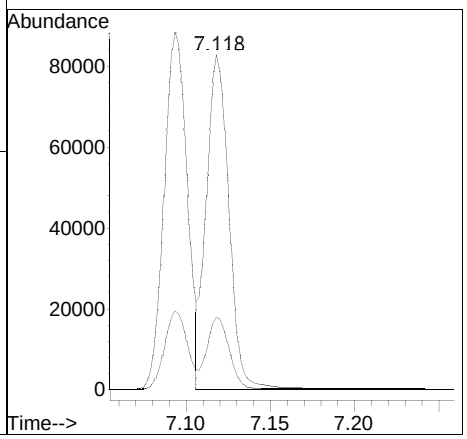


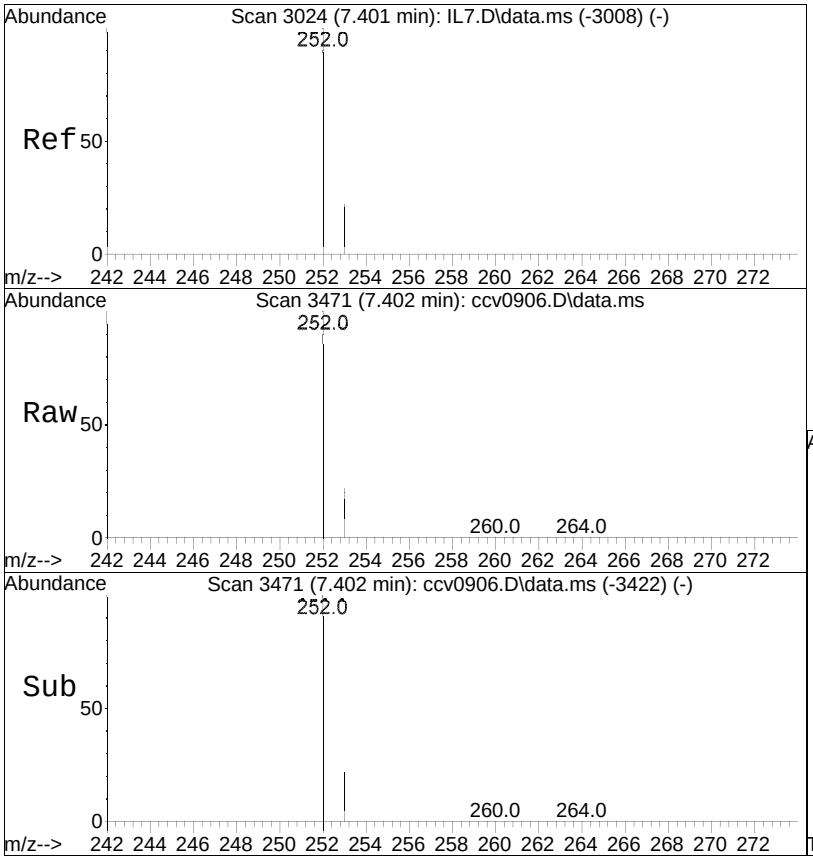


#38
Benzo[k]fluoranthene
Concen: 1062.90 ng/ml
RT: 7.118 min Scan# 3332
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:252 Resp: 77005

Ion	Ratio	Lower	Upper
252	100		
253	21.2	17.4	26.2

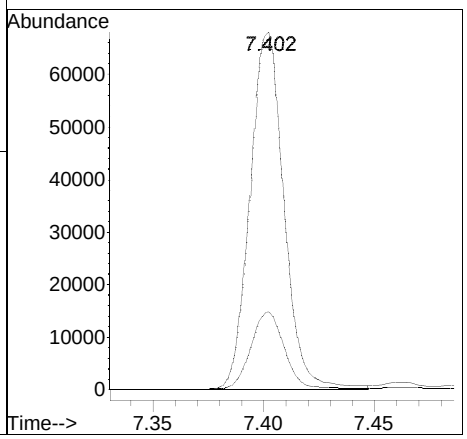


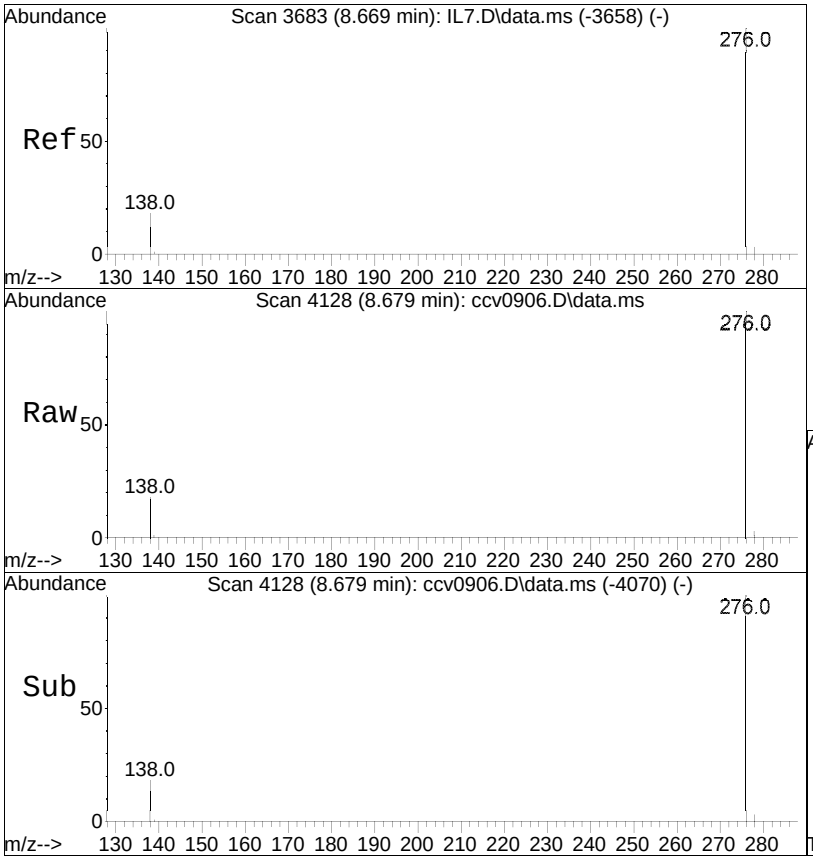


#39
Benzo[a]pyrene
Concen: 1093.34 ng/ml
RT: 7.402 min Scan# 3471
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:252 Resp: 71492

Ion	Ratio	Lower	Upper
252	100		
253	21.5	17.4	26.0

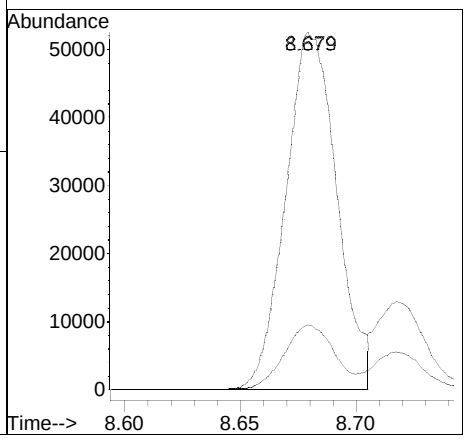


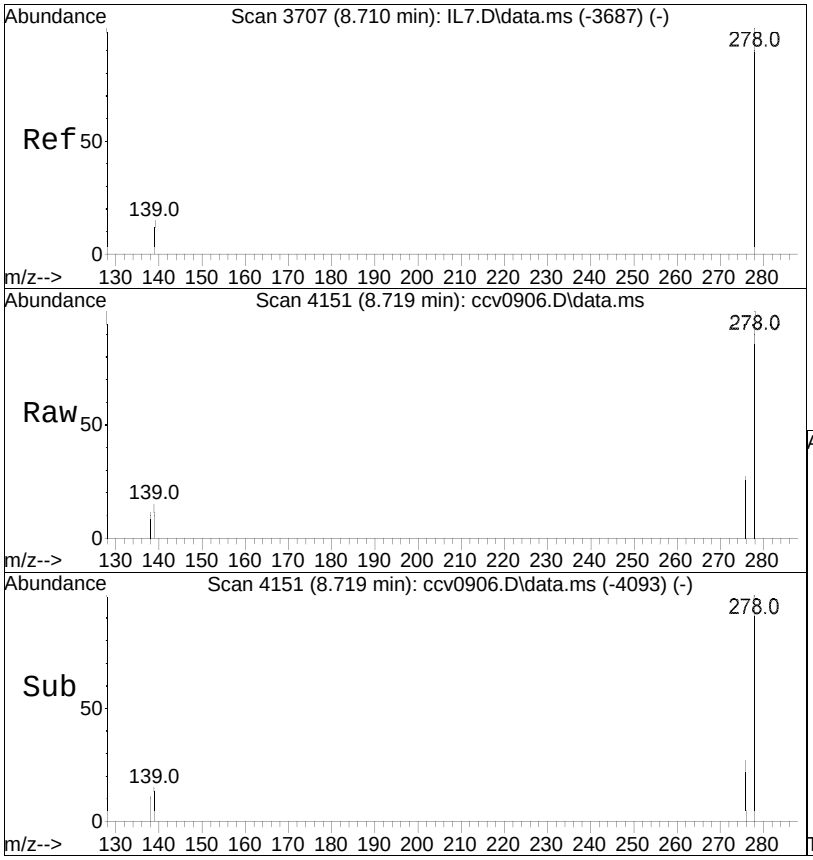


#40
Indeno[1,2,3-cd]pyrene
Concen: 1067.75 ng/ml
RT: 8.679 min Scan# 4128
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:276 Resp: 80074

Ion	Ratio	Lower	Upper
276	100		
138	17.8	14.8	22.2

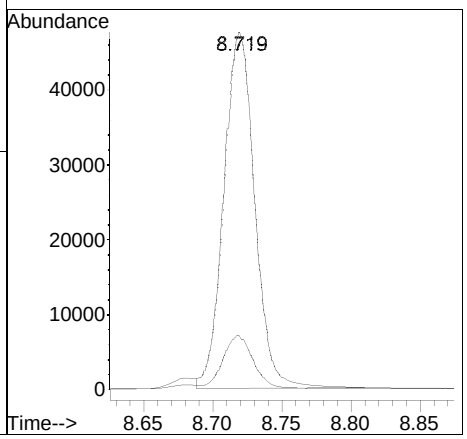


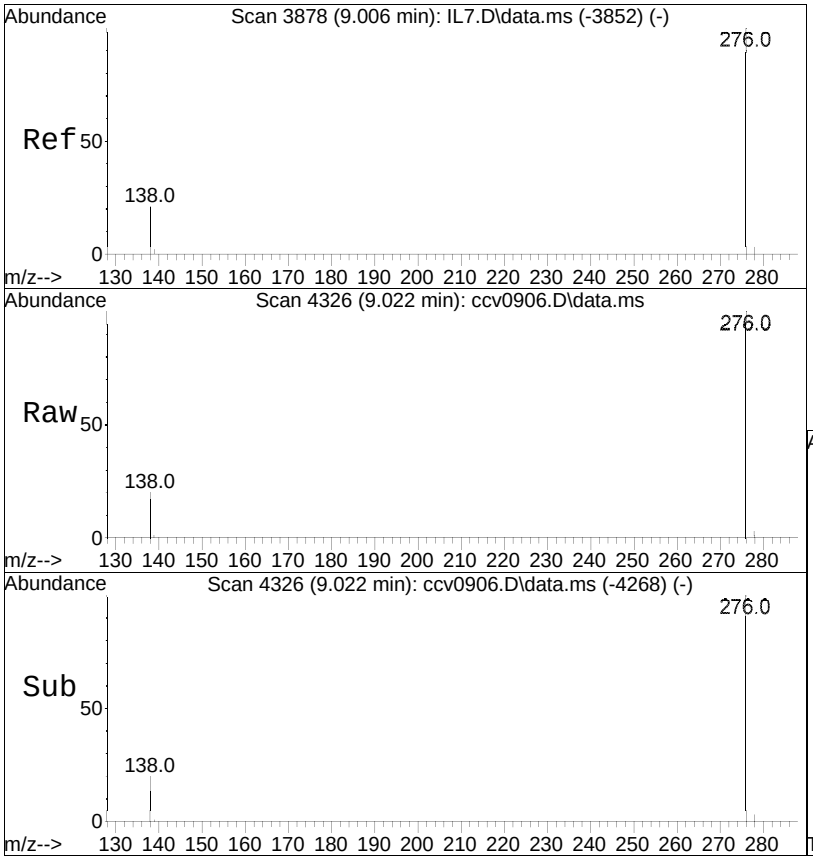


#41
Dibenzo[a,h]anthracene
Concen: 1024.82 ng/ml
RT: 8.719 min Scan# 4151
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:278 Resp: 73237

Ion	Ratio	Lower	Upper
278	100		
139	14.7	12.2	18.4

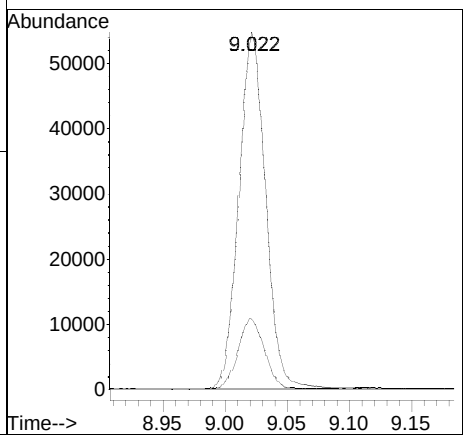




#42
Benzo[g,h,i]perylene
Concen: 1020.08 ng/ml
RT: 9.022 min Scan# 4326
Delta R.T. 0.000 min
Lab File: ccv0906.D
Acq: 06 Sep 2023 07:01 am

Tgt Ion:276 Resp: 81199

Ion	Ratio	Lower	Upper
276	100		
138	19.8	16.8	25.2



Manual Integration Report

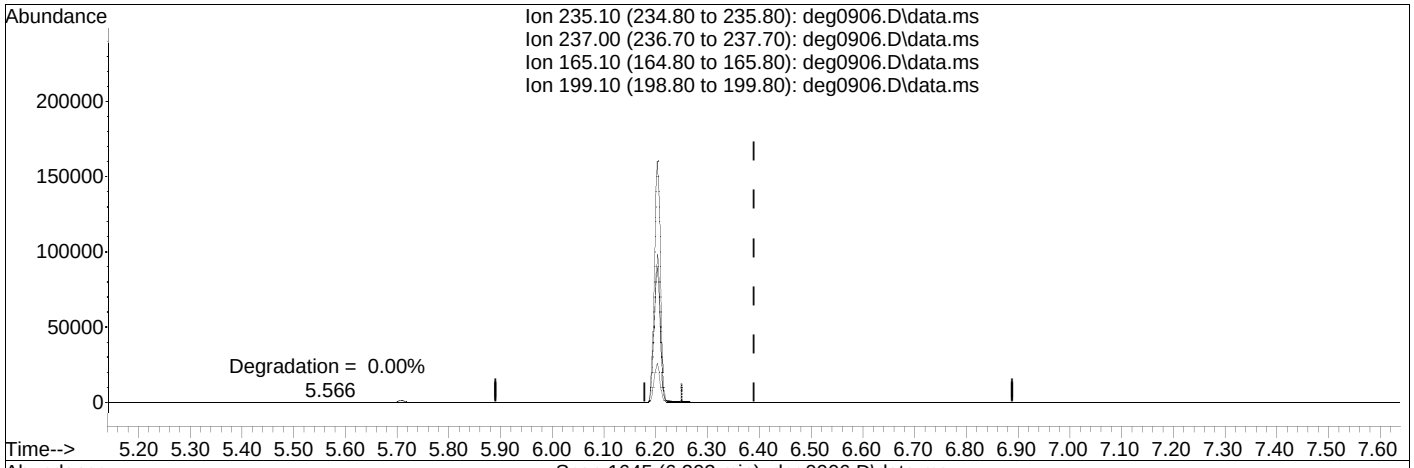
Data Path	: I:\8270SIM\sv119\230906LVI	Method	: SIM-LVI_230306_sv119.M
Data File	: ccv0906.D	Operator	: sv119:ah
Date Inj'd	: 9/6/2023 7:01 am	Instrument	: SV119
Sample	: WG1824028-3,32,, ICV 10193	Quant Date	: 9/6/2023 7:22 am

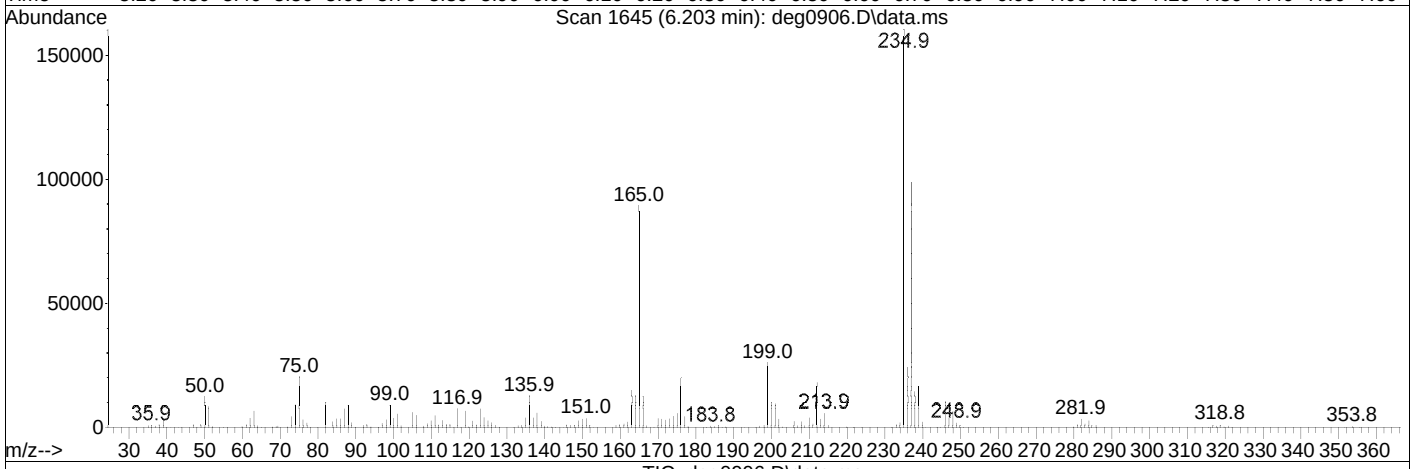
There are no manual integrations or false positives in this file.

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230906LVI\
Data File : deg0906.D
Acq On : 06 Sep 2023 06:44 am
Operator : sv119:ah
Sample : WG1824028-2,32,,dftppsv119
Misc : WG1824028,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 06 06:58:58 2023
Quant Method : I:\8270SIM\sv119\230906LVI\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:35:31 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0906.D\data.ms

(6) ddt (T)

6.203min (-0.187) 20.51

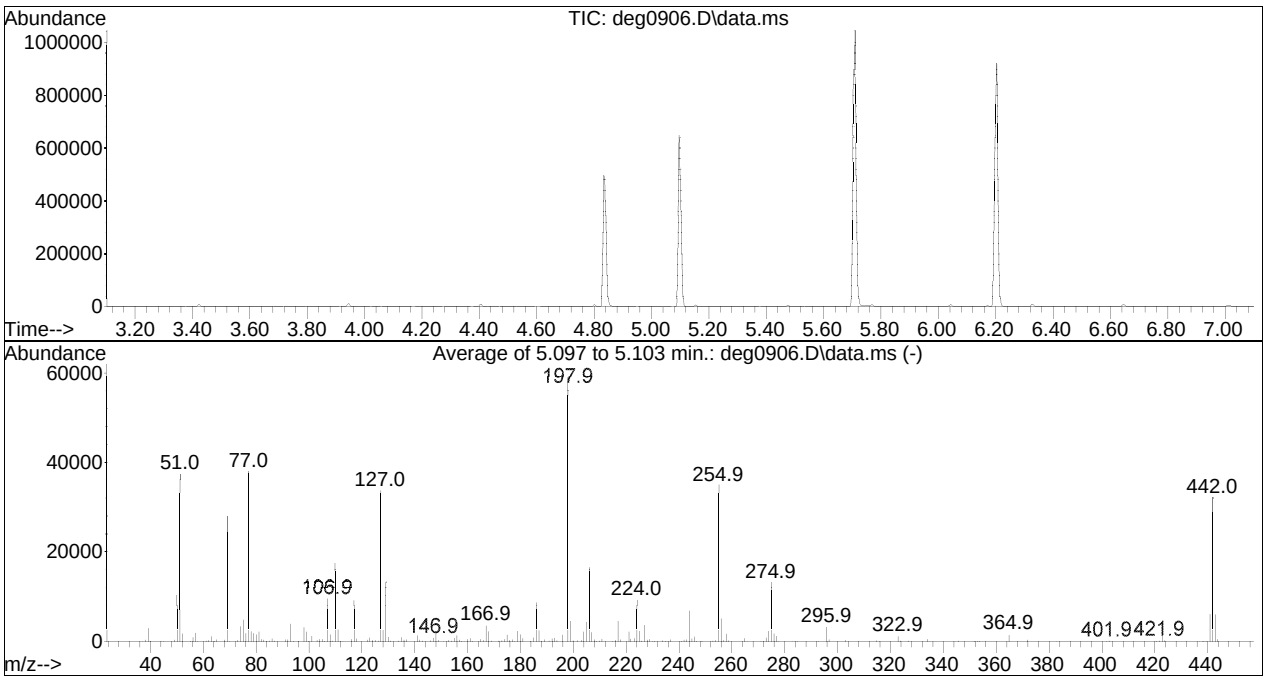
response 125028

Ion	Exp%	Act%
235.10	100.00	100.00
237.00	65.60	61.13
165.10	53.30	55.22
199.10	17.10	15.80

Data Path : I:\8270SIM\sv119\230906LVI\
Data File : deg0906.D
Acq On : 06 Sep 2023 06:44 am
Operator : sv119:ah
Sample : WG1824028-1,32,,dftppsv119
Misc : WG1824028,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270SIM\sv119\230906LVI\SIM-LVI_230306_sv119.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Wed Sep 06 07:22:10 2023



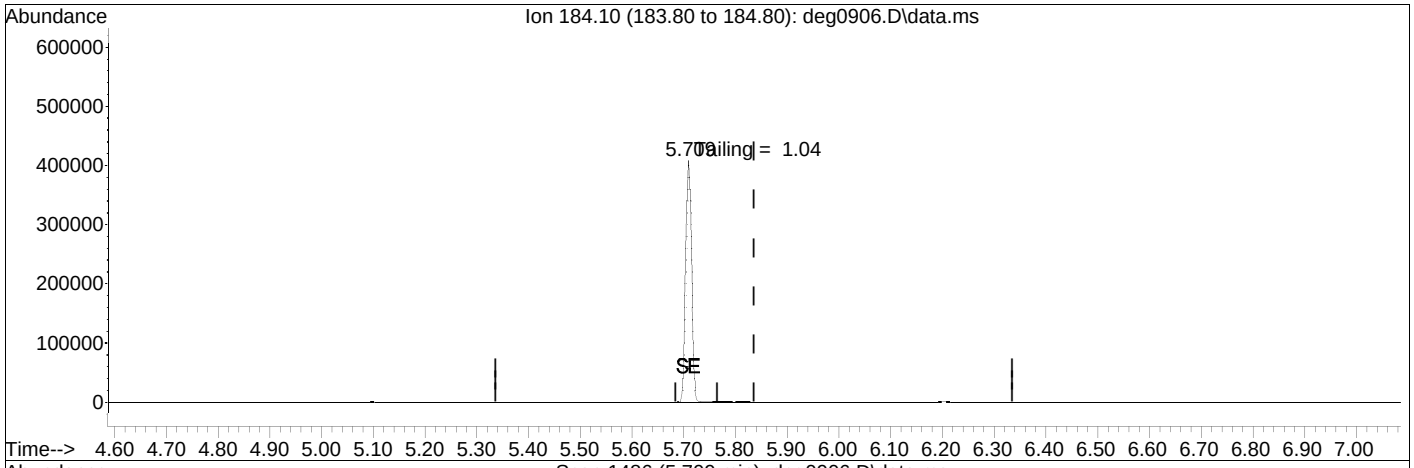
Spectrum Information: Average of 5.097 to 5.103 min.

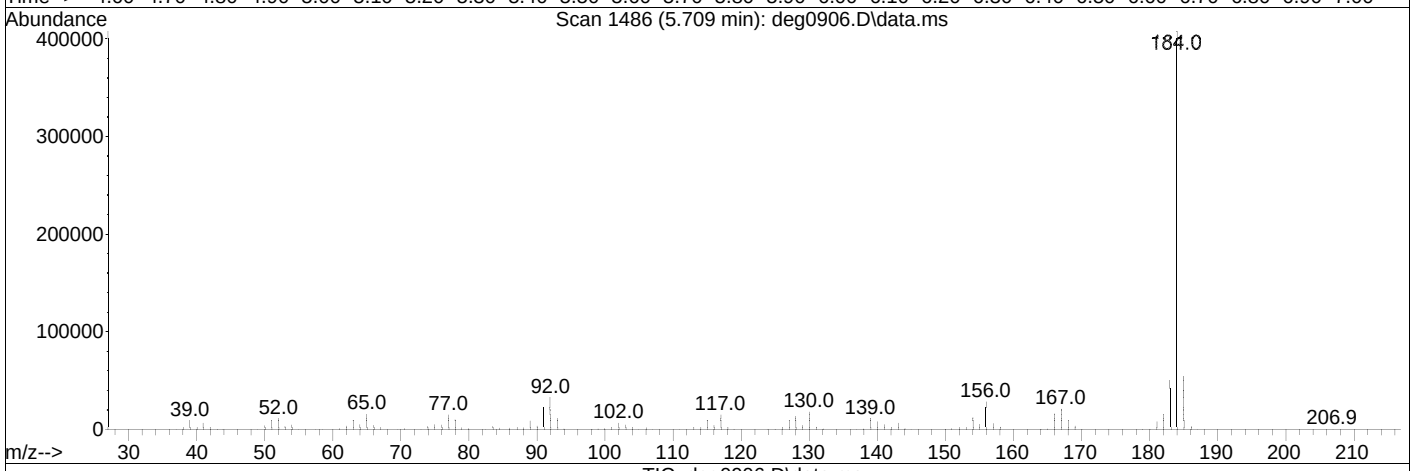
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	63.4	37365	PASS
68	69	0.00	2	1.7	467	PASS
69	69	100	100	100.0	28003	PASS
70	69	0.00	2	0.6	177	PASS
127	198	10	80	57.1	33643	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	58925	PASS
199	198	5	9	7.8	4576	PASS
275	198	10	60	22.1	13029	PASS
365	198	1	100	2.6	1507	PASS
441	442	0.01	24	18.9	6070	PASS
442	198	50	100	54.5	32133	PASS
443	442	15	24	18.5	5957	PASS

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230906LVI\
Data File : deg0906.D
Acq On : 06 Sep 2023 06:44 am
Operator : sv119:ah
Sample : WG1824028-4,32,,dftppsv119
Misc : WG1824028,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 06 06:58:58 2023
Quant Method : I:\8270SIM\sv119\230906LVI\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:35:31 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0906.D\data.ms

(3) benzidine (T)

5.709min (-0.127) 29.51

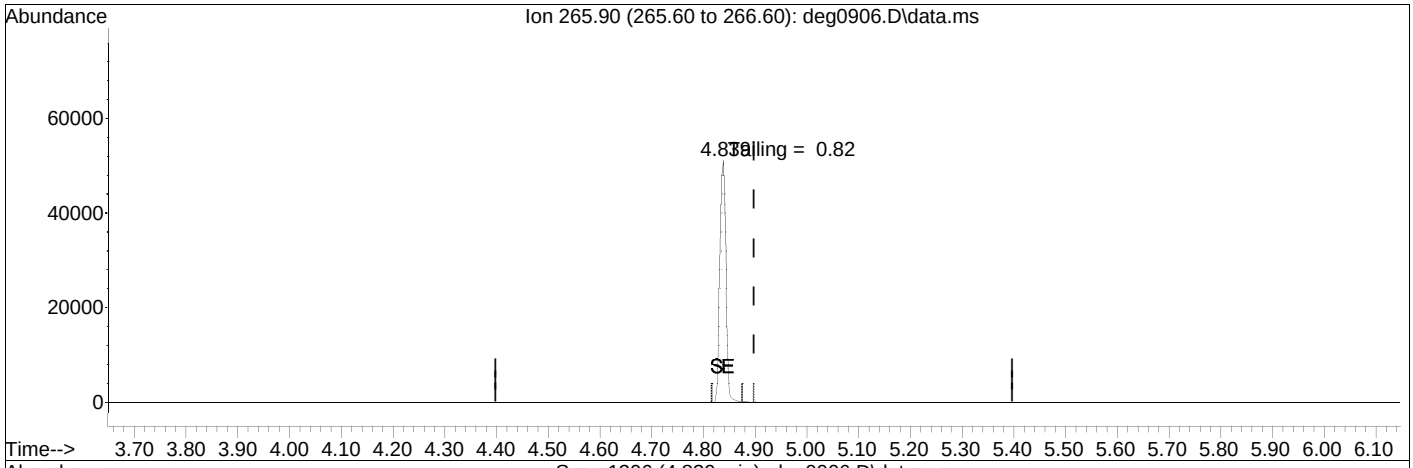
response 300413

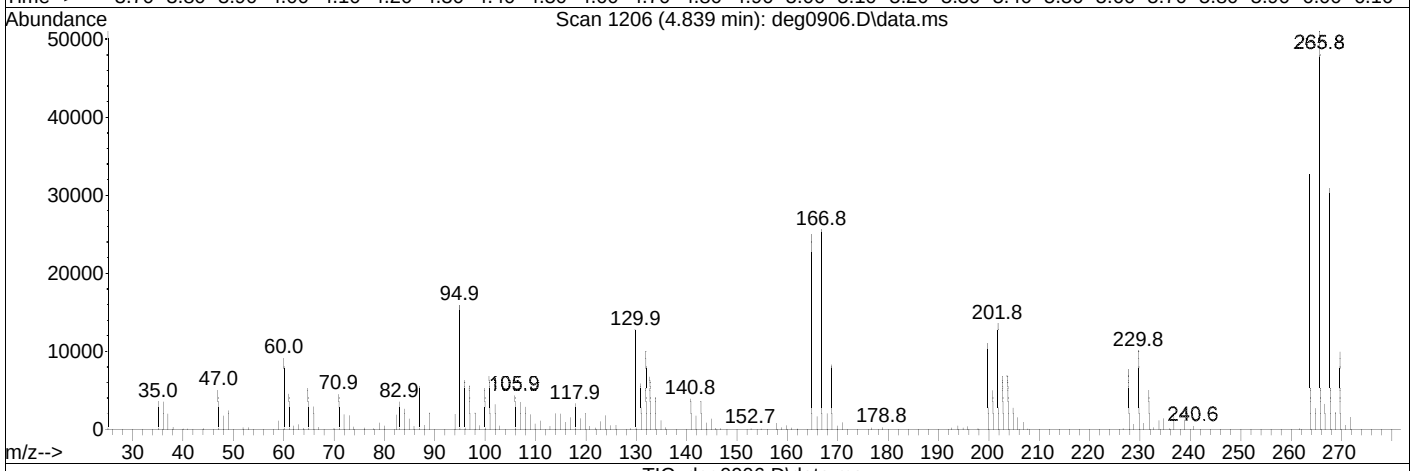
Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230906LVI\
Data File : deg0906.D
Acq On : 06 Sep 2023 06:44 am
Operator : sv119:ah
Sample : WG1824028-5,32,,dftppsv119
Misc : WG1824028,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 06 06:58:58 2023
Quant Method : I:\8270SIM\sv119\230906LVI\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:35:31 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0906.D\data.ms

(1) pentachlorophenol (T)

4.839min (-0.059) 18.33

response 38497

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\SV128\230907\
Data File : ccv0907a.D
Acq On : 07 Sep 2023 07:51 am
Operator : SV128:ah
Sample : WG1824579-3,32,,ICV 10193 (0907)
Misc : WG1824579,,ical20340
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 07 11:16:29 2023
Quant Method : I:\8270SIM\SV128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:52 2023
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	99	0.00
2	s	2-Fluorophenol	1.022	1.042	-2.0	98	0.00
3	s	Phenol-d6	1.251	1.261	-0.8	96	0.00
4	T	Bis(2-chloroethyl)ether	1.078	1.128	-4.6	99	0.00
5	T	n-nitrosodi-n-propylamine	0.809	0.779	3.7	91	0.00
6	t	Hexachloroethane	0.481	0.477	0.8	95	0.00
7	s	Nitrobenzene-d5	1.060	0.968	8.7	84	0.00
8	i	Naphthalene-d8	1.000	1.000	0.0	97	0.00
9	t	Naphthalene	0.977	1.002	-2.6	96	0.00
10	t	Hexachlorobutadiene	0.184	0.190	-3.3	95	0.00
11	t	2-Methylnaphthalene	0.652	0.641	1.7	90	0.00
12	t	1-Methylnaphthalene	0.604	0.631	-4.5	96	0.00
13	s	2-Fluorobiphenyl	0.820	0.798	2.7	90	0.00
14	t	2-Chloronaphthalene	0.676	0.688	-1.8	93	0.00
15	t	2,6-Dinitrotoluene	0.135	0.106	21.5#	80	0.00
16	t	Acenaphthylene	1.077	1.073	0.4	90	0.00
17	i	Acenaphthene-d10	1.000	1.000	0.0	95	0.00
18	t	Acenaphthene	1.267	1.261	0.5	91	0.00
19	t	2,4-Dinitrotoluene	0.304	0.241	20.7#	78	0.00
20	t	Fluorene	1.383	1.401	-1.3	91	0.00
21	s	2,4,6-Tribromophenol	0.168	0.149	11.3	80	0.00
22	i	Phenanthrene-d10	1.000	1.000	0.0	97	0.00
23	T	4,6-Dinitro-o-cresol	*1000.000	720.470	28.0#	80	0.00
24	t	Hexachlorobenzene	0.215	0.206	4.2	89	0.00
25	t	Pentachlorophenol	*1000.000	704.390	29.6#	78	0.00
26	t	Phenanthrene	0.997	0.966	3.1	92	0.00
27	t	Anthracene	0.971	0.933	3.9	89	0.00
28	t	Fluoranthene	1.158	1.113	3.9	90	0.00
29	t	Pyrene	1.199	1.184	1.3	91	0.00
30	s	4-Terphenyl-d14	0.845	0.778	7.9	85	0.00
31	i	Chrysene-d12	1.000	1.000	0.0	97	0.00
32	t	Benzo[a]anthracene	*1000.000	932.395	6.8	90	0.00
33	t	3,3'-Dichlorobenzidine	0.499	0.415	16.8	83	0.00
34	t	Chrysene	1.234	1.183	4.1	91	0.00
35	T	Bis(2-ethylhexyl)phthalate	0.779	0.594	23.7#	80	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\SV128\230907\
Data File : ccv0907a.D
Acq On : 07 Sep 2023 07:51 am
Operator : SV128:ah
Sample : WG1824579-3,32,,ICV 10193 (0907)
Misc : WG1824579,,ical20340
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 07 11:16:29 2023
Quant Method : I:\8270SIM\SV128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:52 2023
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
36	i	Perylene-d12	1.000	1.000	0.0	96	0.00
37	t	Benzo[b]fluoranthene	1.127	1.123	0.4	94	0.00
38	t	Benzo[k]fluoranthene	1.043	0.998	4.3	83	0.00
39	t	Benzo[a]pyrene	0.968	0.895	7.5	83	0.00
40	t	Indeno[1,2,3-cd]pyrene	0.969	0.885	8.7	87	0.00
41	t	Dibenzo[a,h]anthracene	0.932	0.943	-1.2	89	0.00
42	t	Benzo[g,h,i]perylene	0.992	0.964	2.8	91	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : ccv0907a.D
Acq On : 07 Sep 2023 07:51 am
Operator : SV128:ah
Sample : WG1824579-3,32,,ICV 10193 (0907)
Misc : WG1824579,,ical20340
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 07 11:16:29 2023
Quant Method : I:\8270SIM\SV128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:52 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.258	152	2265	4000.000	ng/ml	0.00
8) Naphthalene-d8	2.928	136	8686	4000.000	ng/ml	0.00
17) Acenaphthene-d10	3.915	164	5058	4000.000	ng/ml	0.00
22) Phenanthrene-d10	4.763	188	12202	4000.000	ng/ml	0.00
31) Chrysene-d12	6.338	240	11660	4000.000	ng/ml	0.00
36) Perylene-d12	7.619	264	12832	4000.000	ng/ml	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	1.646	112	590	1019.365	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 20.39%			
3) Phenol-d6	2.061	99	714	1008.113	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 20.16%			
7) Nitrobenzene-d5	2.540	82	548	912.829	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 36.51%			
13) 2-Fluorobiphenyl	3.530	172	1733	972.807	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 38.91%			
21) 2,4,6-Tribromophenol	4.364	330	189	889.916	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 17.80%			
30) 4-Terphenyl-d14	5.690	244	2372	919.873	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 36.79%			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.117	93	639	1047.023	ng/ml	100
5) n-nitrosodi-n-propylamine	2.458	70	441M6	963.238	ng/ml	
6) Hexachloroethane	2.519	117	270	991.591	ng/ml	89
9) Naphthalene	2.940	128	2176	1025.330	ng/ml#	100
10) Hexachlorobutadiene	3.013	225	412	1032.431	ng/ml	100
11) 2-Methylnaphthalene	3.322	142	1391	981.951	ng/ml	99
12) 1-Methylnaphthalene	3.377	142	1371	1044.639	ng/ml	100
14) 2-Chloronaphthalene	3.597	162	1495	1018.003	ng/ml	93
15) 2,6-Dinitrotoluene	3.790	165	231M6	787.608	ng/ml	
16) Acenaphthylene	3.829	152	2329	995.850	ng/ml	100
18) Acenaphthene	3.930	153	1594	994.605	ng/ml	94
19) 2,4-Dinitrotoluene	4.021	165	305	793.826	ng/ml	92
20) Fluorene	4.226	166	1771	1012.687	ng/ml	100
23) 4,6-Dinitro-o-cresol	4.254	198	148	720.470	ng/ml#	81
24) Hexachlorobenzene	4.548	284	627	956.865	ng/ml	96
25) Pentachlorophenol	4.657	266	287	704.390	ng/ml	99
26) Phenanthrene	4.775	178	2948	969.052	ng/ml	100
27) Anthracene	4.805	178	2847M6	961.638	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : ccv0907a.D
Acq On : 07 Sep 2023 07:51 am
Operator : SV128:ah
Sample : WG1824579-3,32,,ICV 10193 (0907)
Misc : WG1824579,,ical20340
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 07 11:16:29 2023
Quant Method : I:\8270SIM\SV128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:52 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Fluoranthene	5.463	202	3395	960.684	ng/ml	95
29) Pyrene	5.594	202	3611	987.118	ng/ml	100
32) Benzo[a]anthracene	6.330	228	3600	932.395	ng/ml	100
33) 3,3'-Dichlorobenzidine	6.319	252	1211	832.787	ng/ml#	93
34) Chrysene	6.354	228	3447	958.231	ng/ml	100
35) Bis(2-ethylhexyl)phtha...	6.371	149	1732M6	762.756	ng/ml	
37) Benzo[b]fluoranthene	7.220	252	3601	996.004	ng/ml	100
38) Benzo[k]fluoranthene	7.249	252	3200	956.394	ng/ml	100
39) Benzo[a]pyrene	7.550	252	2871	924.610	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.917	276	2840	913.930	ng/ml	95
41) Dibenzo[a,h]anthracene	8.961	278	3026M6	1011.691	ng/ml	
42) Benzo[g,h,i]perylene	9.280	276	3093	971.863	ng/ml	95

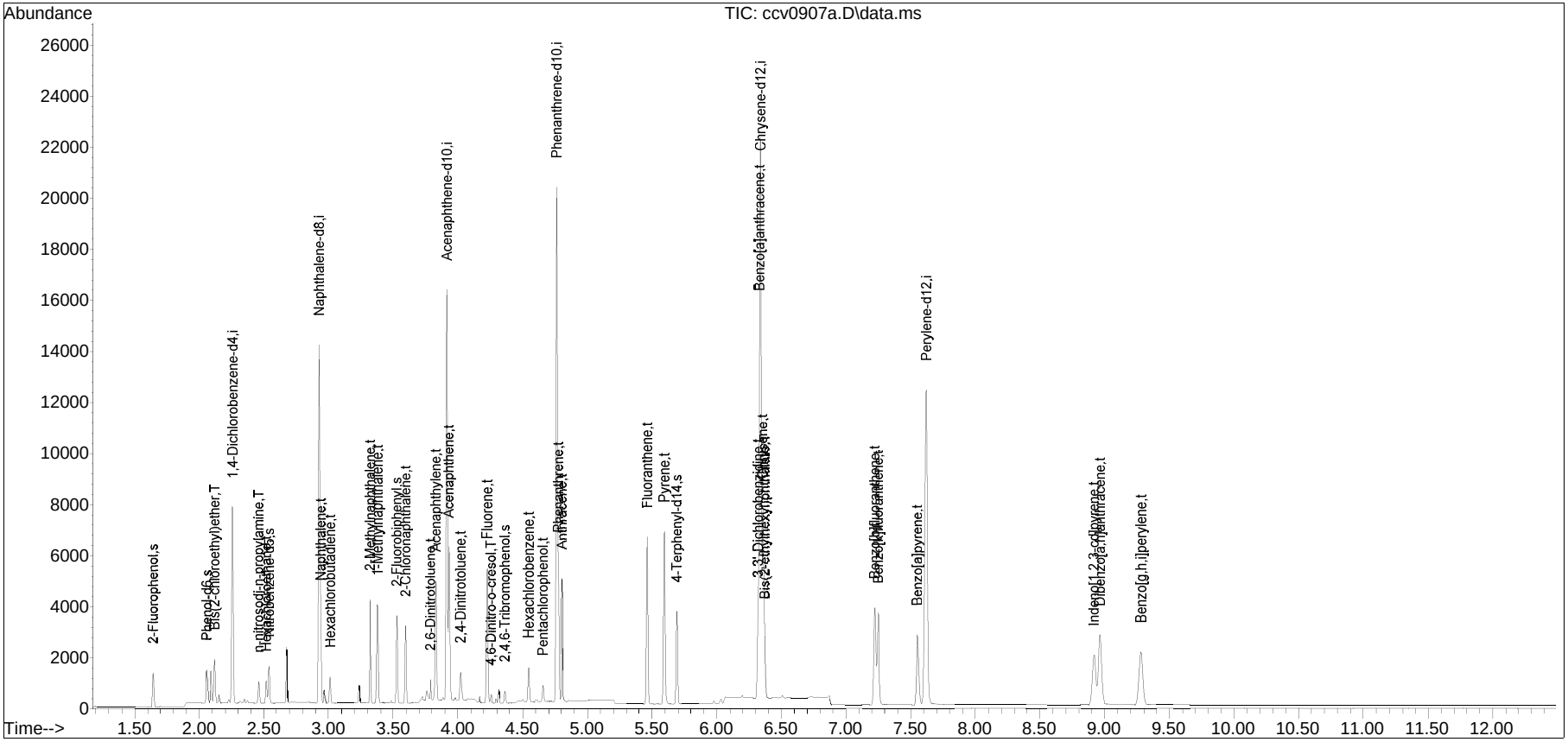
(#) = qualifier out of range (m) = manual integration (+) = signals summed

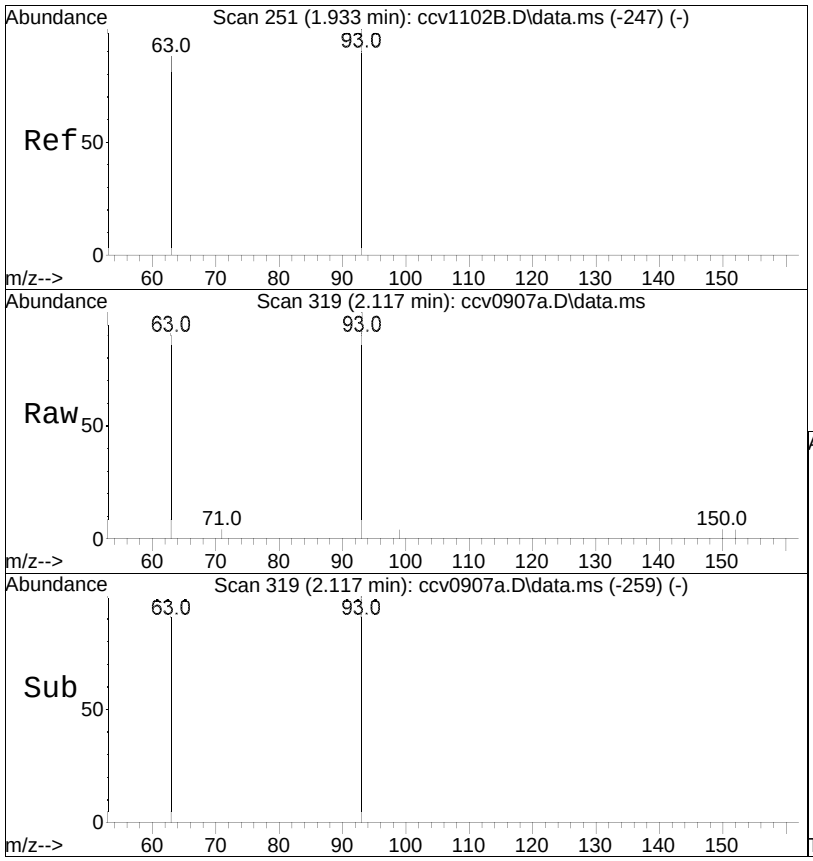
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : ccv0907a.D
Acq On : 07 Sep 2023 07:51 am
Operator : SV128:ah
Sample : WG1824579-3,32,,ICV 10193 (0907)
Misc : WG1824579,,ical20340
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 07 11:16:29 2023
Quant Method : I:\8270SIM\SV128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:52 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

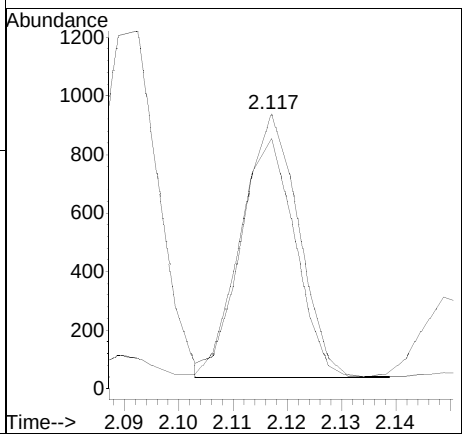


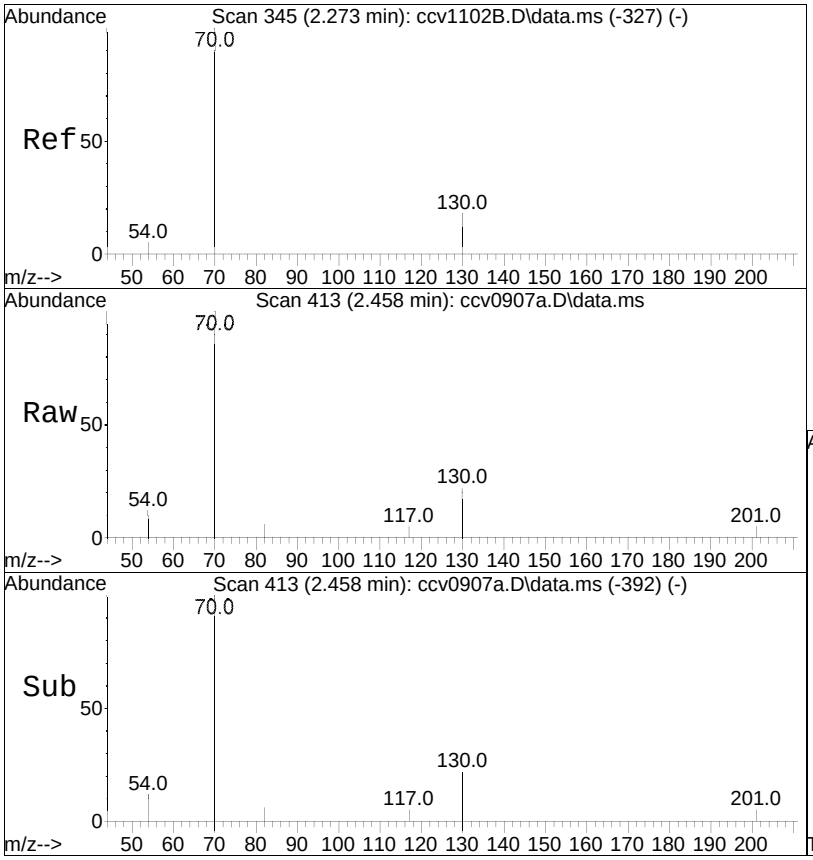


#4
Bis(2-chloroethyl)ether
Concen: 1047.02 ng/ml
RT: 2.117 min Scan# 319
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion: 93 Resp: 639

Ion	Ratio	Lower	Upper
93	100		
63	91.5	73.0	109.6

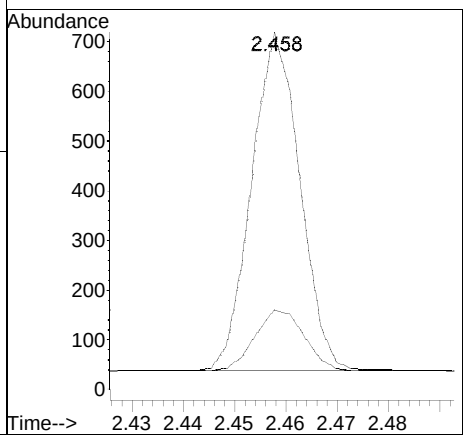


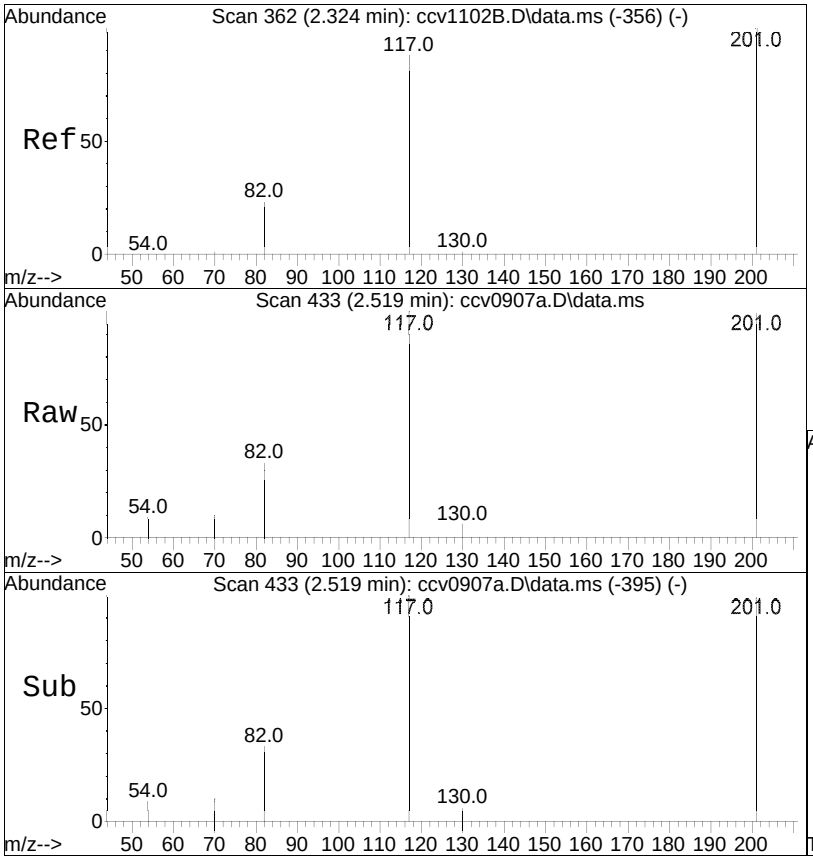


#5
n-nitrosodi-n-propylamine
Concen: 963.24 ng/ml M6
RT: 2.458 min Scan# 413
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion: 70 Resp: 441

Ion	Ratio	Lower	Upper
70	100		
130	19.0	14.6	21.8

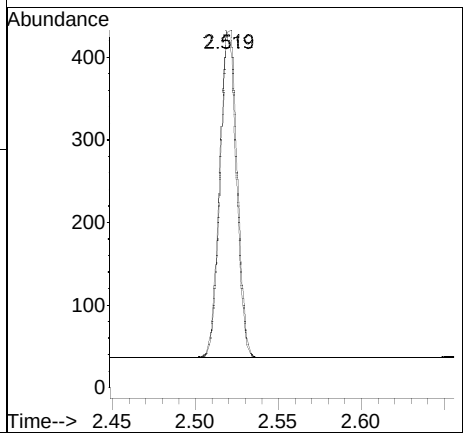


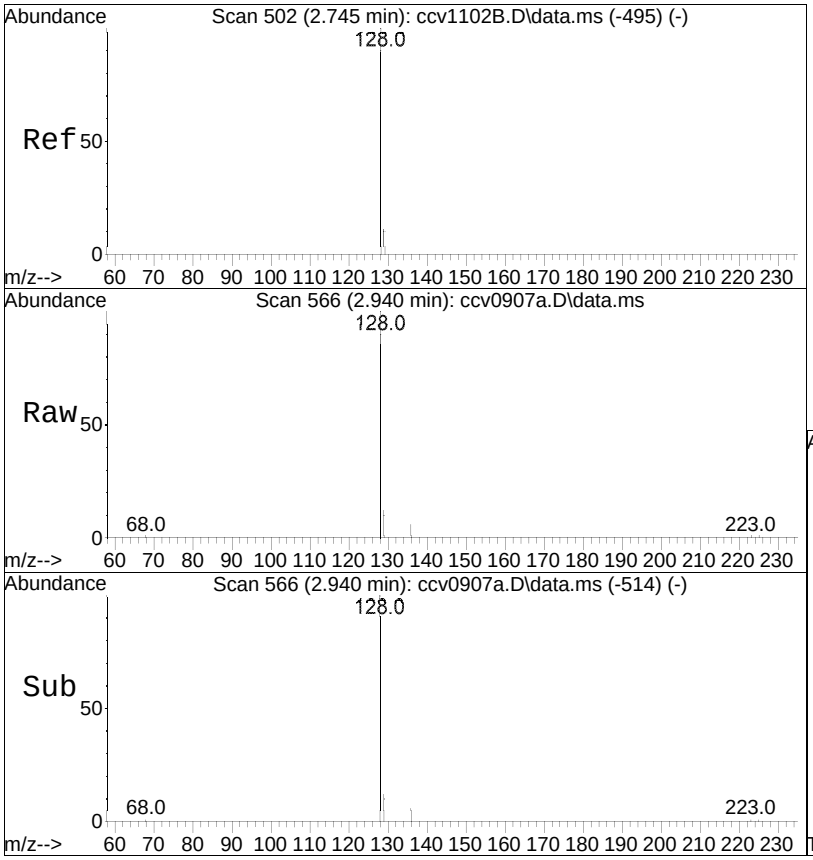


#6
Hexachloroethane
Concen: 991.59 ng/ml
RT: 2.519 min Scan# 433
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:117 Resp: 270

Ion	Ratio	Lower	Upper
117	100		
201	103.0	91.5	137.3

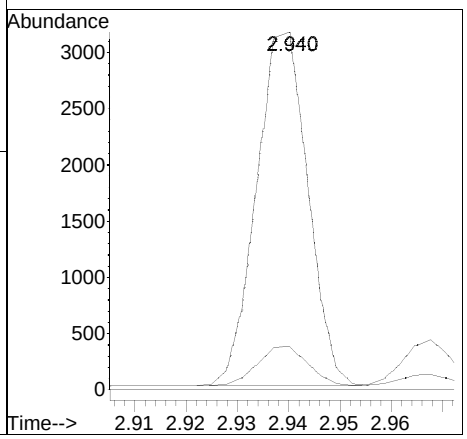


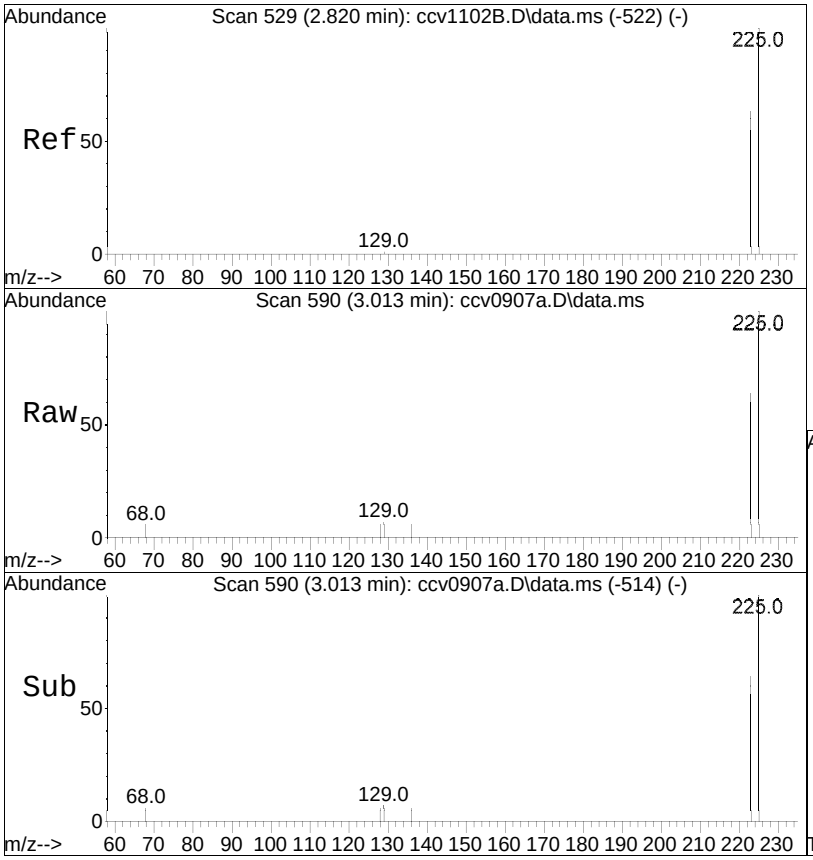


#9
Naphthalene
Concen: 1025.33 ng/ml
RT: 2.940 min Scan# 566
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:128 Resp: 2176

Ion	Ratio	Lower	Upper
128	100		
129	10.9	8.8	13.2
127	0.0	0.0	0.0

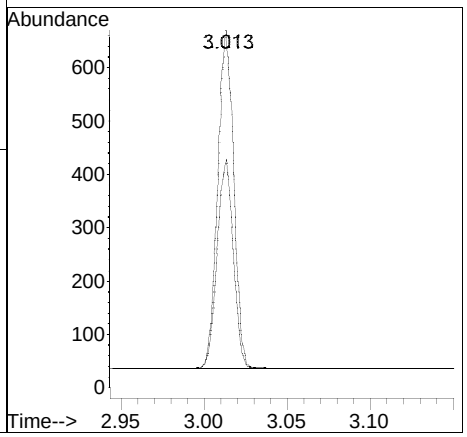


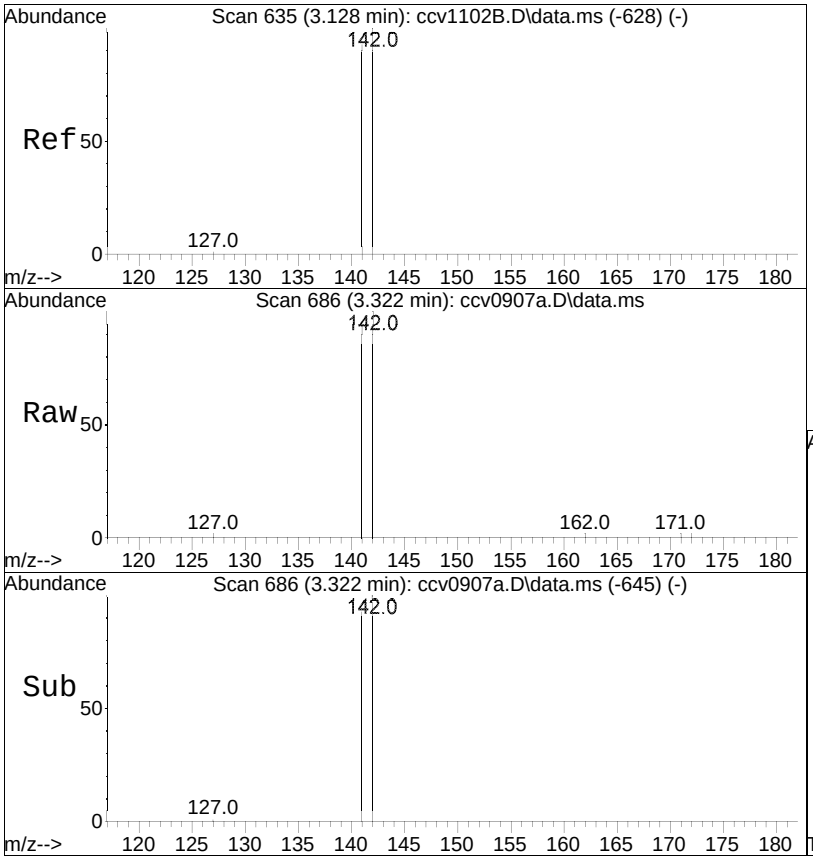


#10
Hexachlorobutadiene
Concen: 1032.43 ng/ml
RT: 3.013 min Scan# 590
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:225 Resp: 412

Ion	Ratio	Lower	Upper
225	100		
223	62.9	50.6	75.8

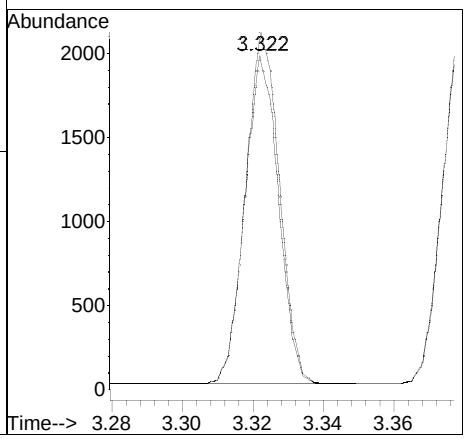


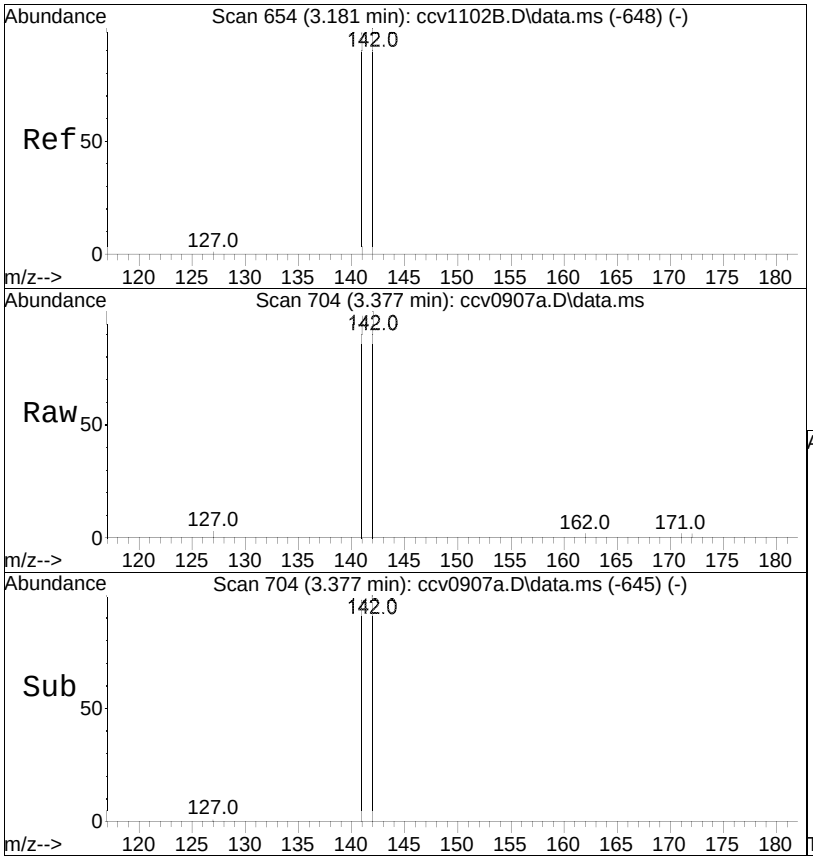


#11
2-Methylnaphthalene
Concen: 981.95 ng/ml
RT: 3.322 min Scan# 686
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:142 Resp: 1391

Ion	Ratio	Lower	Upper
142	100		
141	92.7	75.0	112.4

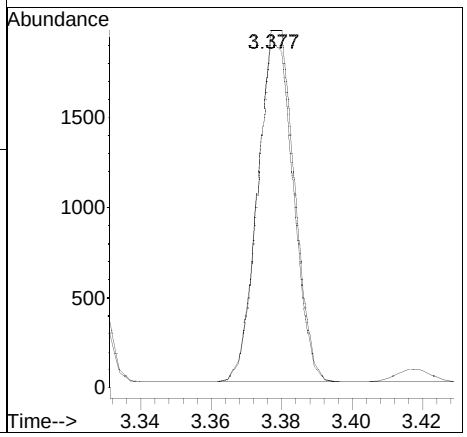


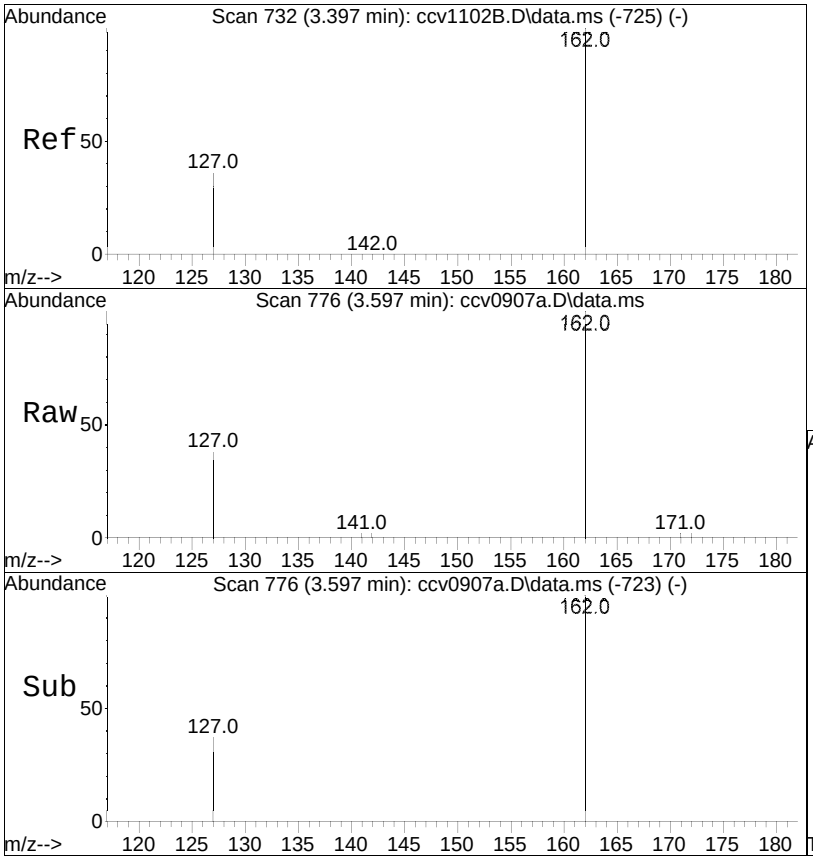


#12
1-Methylnaphthalene
Concen: 1044.64 ng/ml
RT: 3.377 min Scan# 704
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:142 Resp: 1371

Ion	Ratio	Lower	Upper
142	100		
141	95.8	76.7	115.1

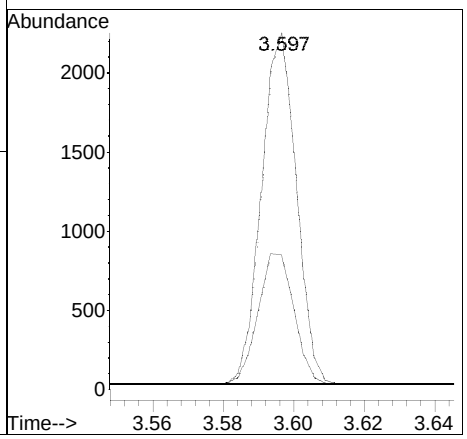


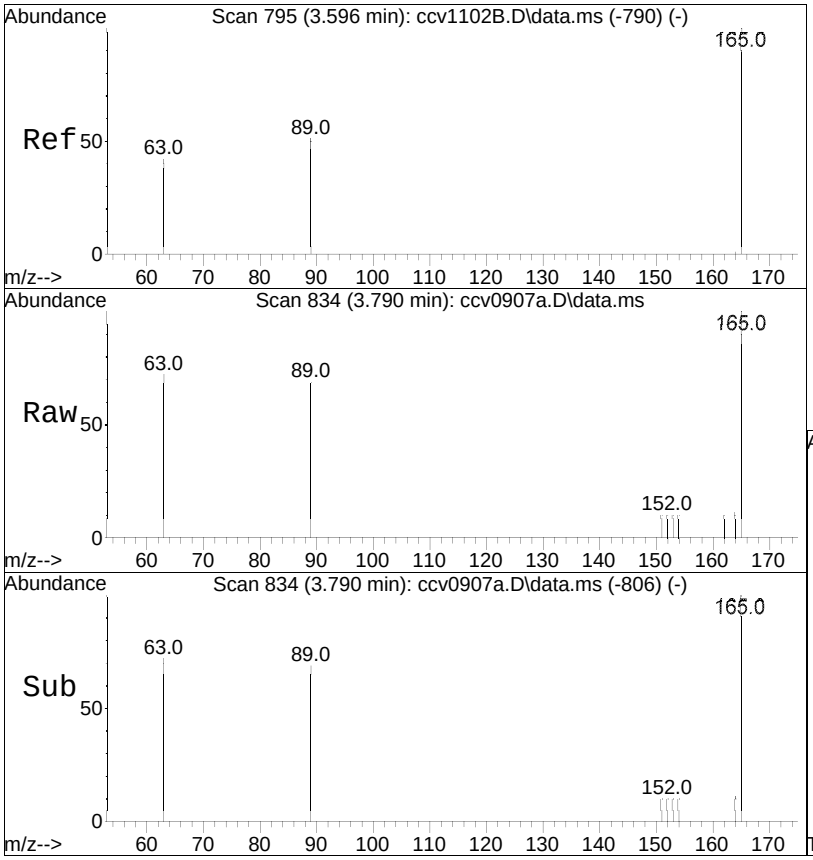


#14
2-Chloronaphthalene
Concen: 1018.00 ng/ml
RT: 3.597 min Scan# 776
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:162 Resp: 1495

Ion	Ratio	Lower	Upper
162	100		
127	39.8	28.7	43.1

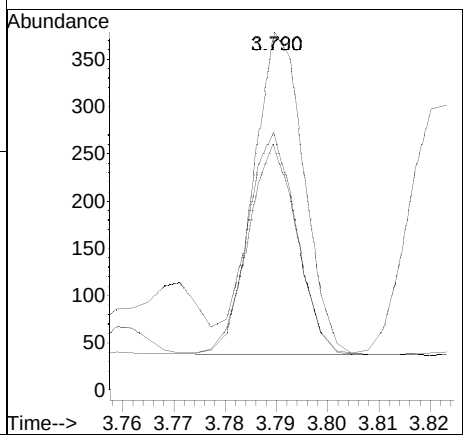


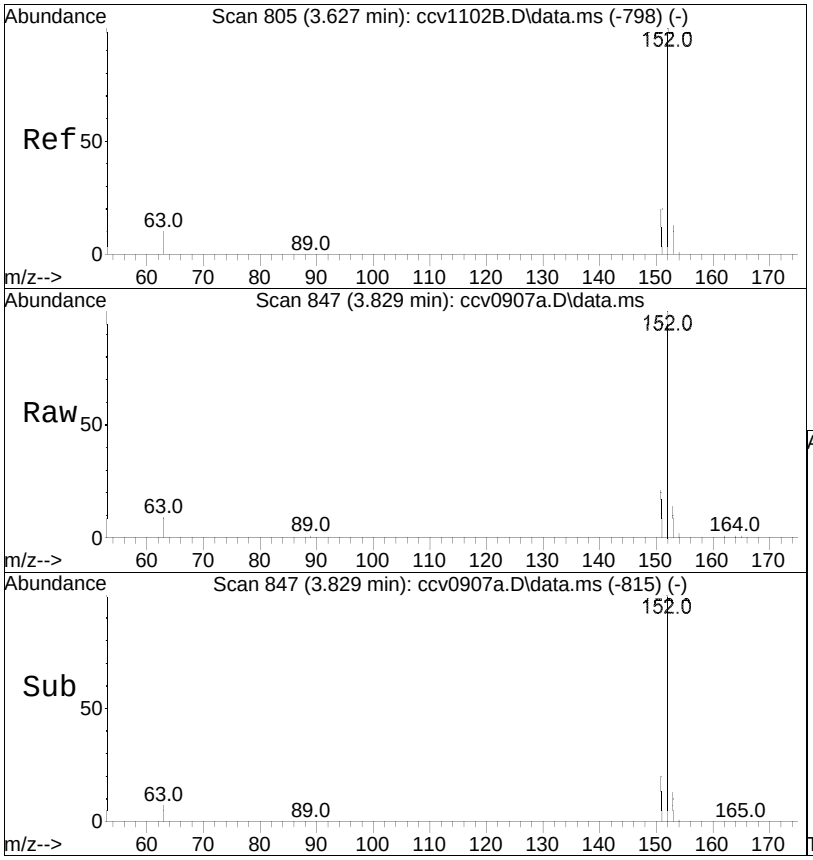


#15
2,6-Dinitrotoluene
Concen: 787.61 ng/ml M6
RT: 3.790 min Scan# 834
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:165 Resp: 231

Ion	Ratio	Lower	Upper
165	100		
89	63.6	45.0	67.6
63	79.2	46.2	69.2#

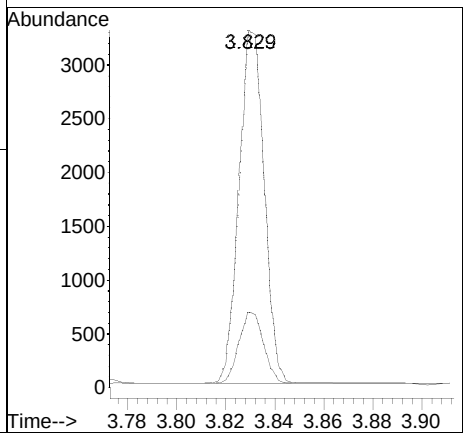


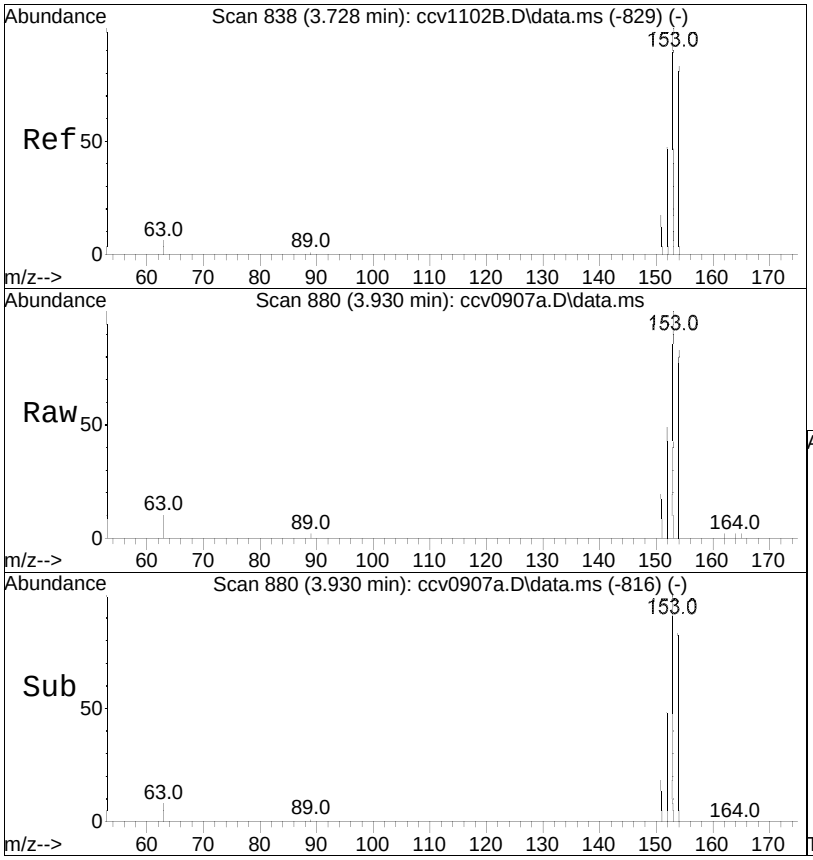


#16
Acenaphthylene
Concen: 995.85 ng/ml
RT: 3.829 min Scan# 847
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:152 Resp: 2329

Ion	Ratio	Lower	Upper
152	100		
151	20.0	16.1	24.1

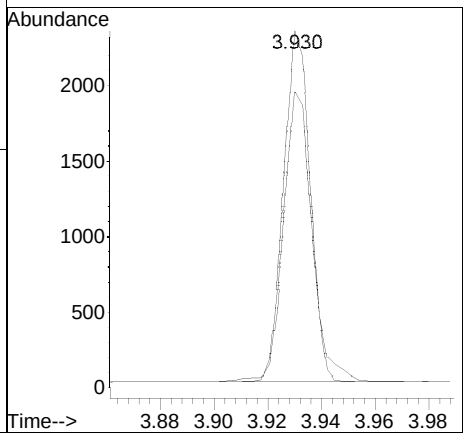


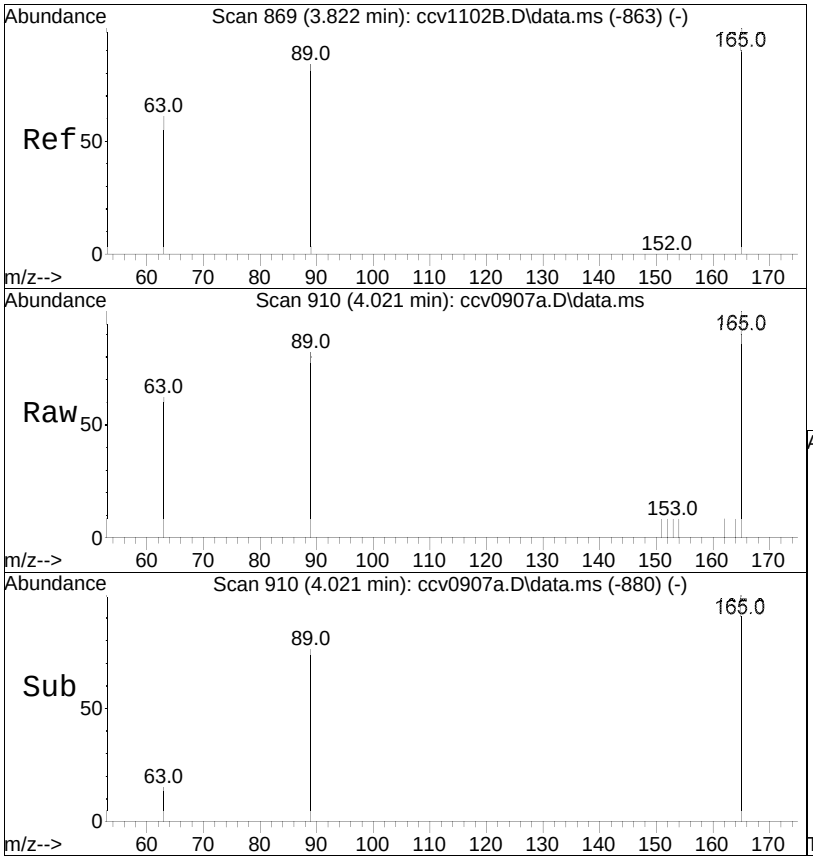


#18
Acenaphthene
Concen: 994.60 ng/ml
RT: 3.930 min Scan# 880
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:153 Resp: 1594

Ion	Ratio	Lower	Upper
153	100		
154	89.7	67.4	101.2

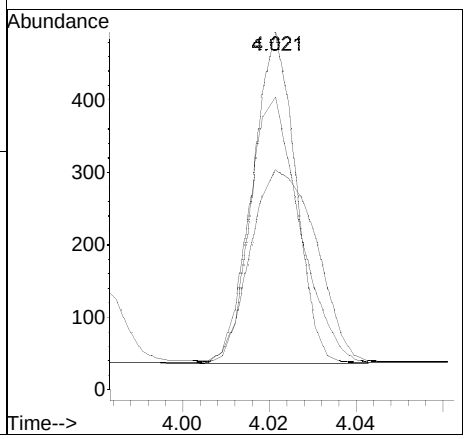


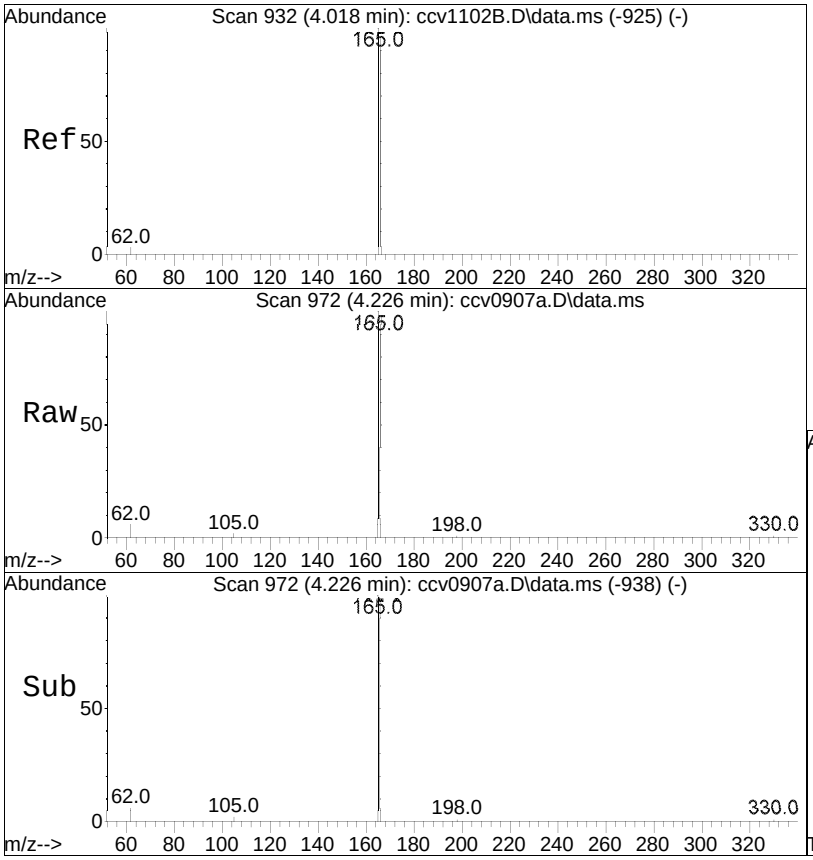


#19
2,4-Dinitrotoluene
Concen: 793.83 ng/ml
RT: 4.021 min Scan# 910
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:165 Resp: 305

Ion	Ratio	Lower	Upper
165	100		
89	98.7	71.4	107.2
63	89.8	67.9	101.9

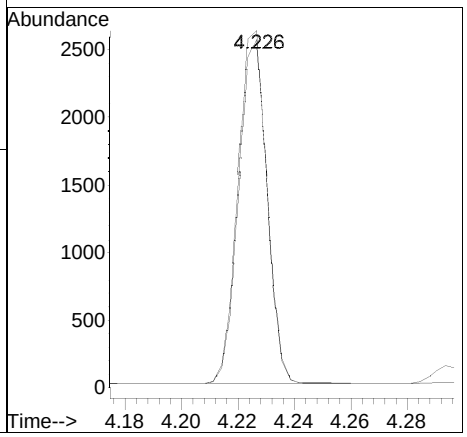


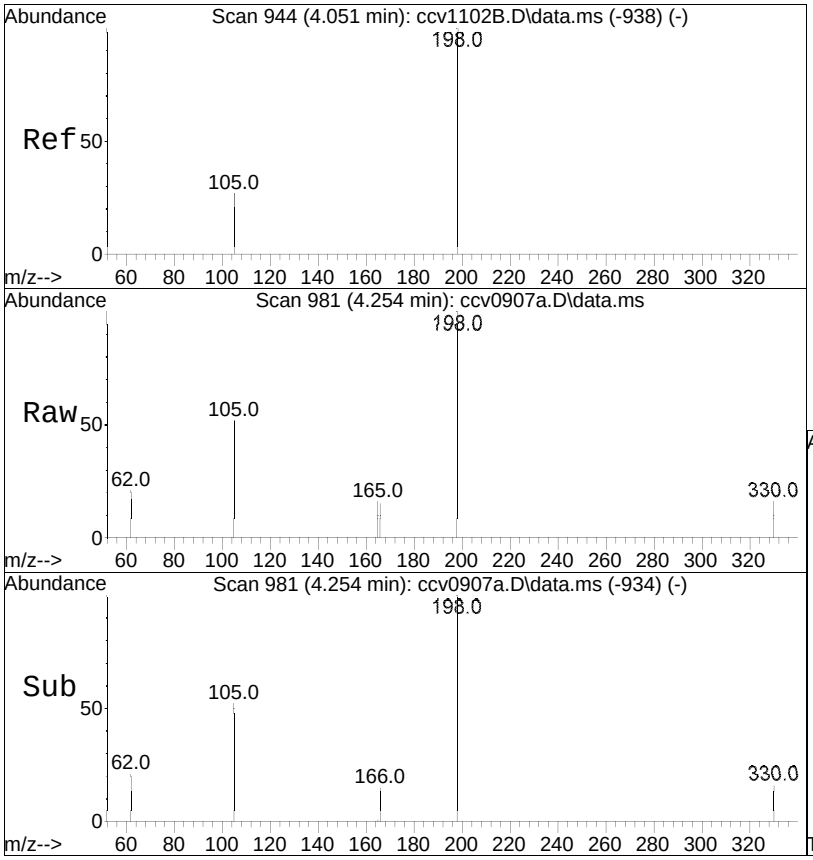


#20
Fluorene
Concen: 1012.69 ng/ml
RT: 4.226 min Scan# 972
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:166 Resp: 1771

Ion	Ratio	Lower	Upper
166	100		
165	103.8	82.7	124.1

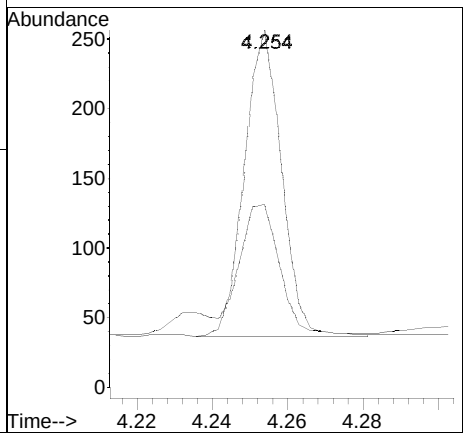


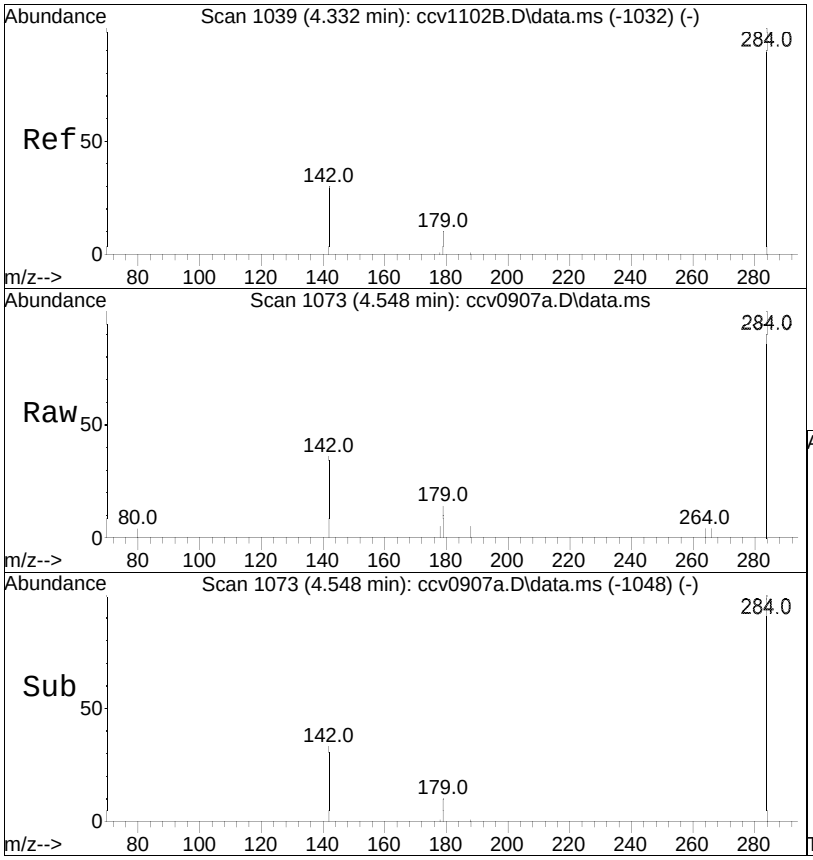


#23
4,6-Dinitro-o-cresol
Concen: 720.47 ng/ml
RT: 4.254 min Scan# 981
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:198 Resp: 148

Ion	Ratio	Lower	Upper
198	100		
105	43.9	26.7	40.1#

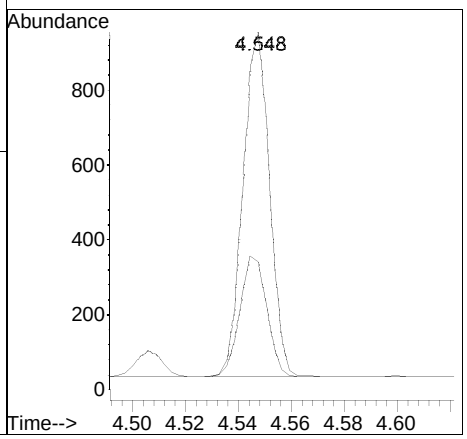


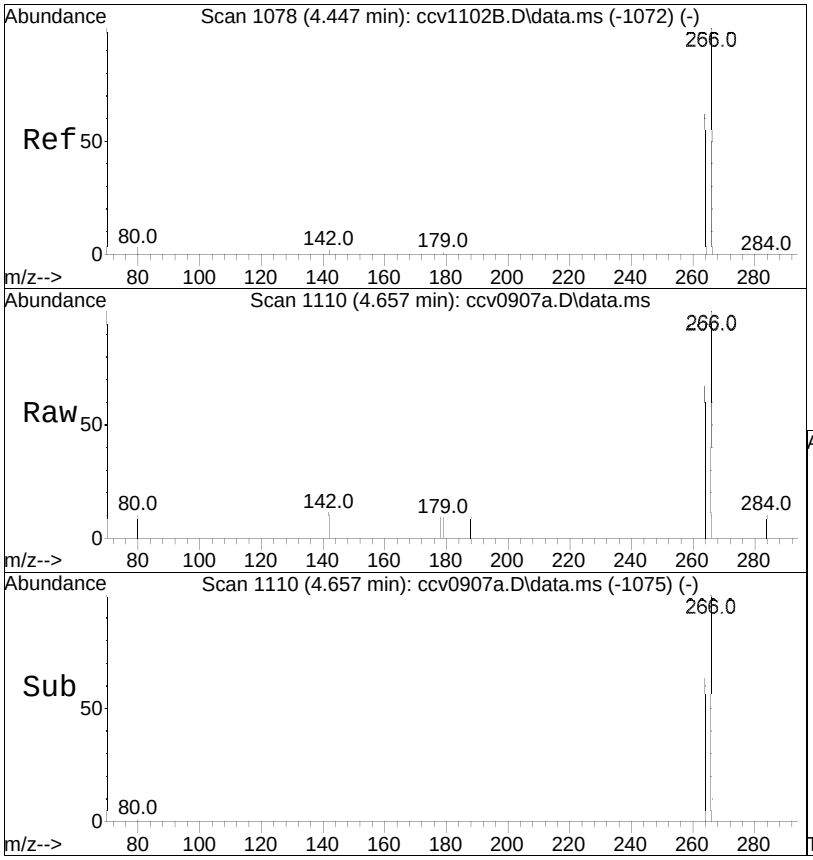


#24
Hexachlorobenzene
Concen: 956.87 ng/ml
RT: 4.548 min Scan# 1073
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:284 Resp: 627

Ion	Ratio	Lower	Upper
284	100		
142	35.4	26.6	40.0

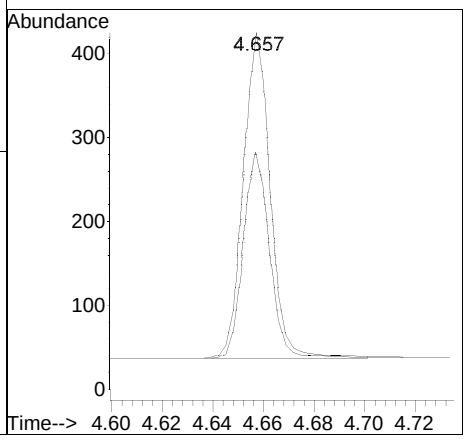


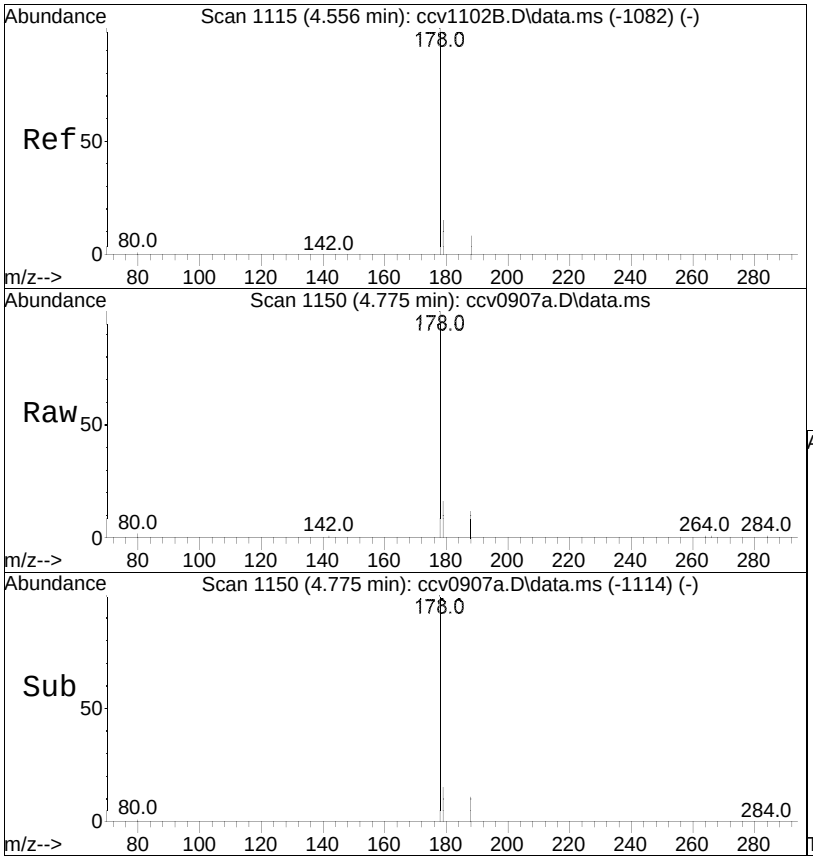


#25
Pentachlorophenol
Concen: 704.39 ng/ml
RT: 4.657 min Scan# 1110
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:266 Resp: 287

Ion	Ratio	Lower	Upper
266	100		
264	61.7	49.8	74.8

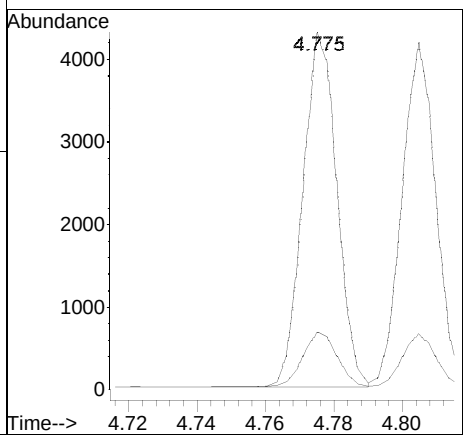


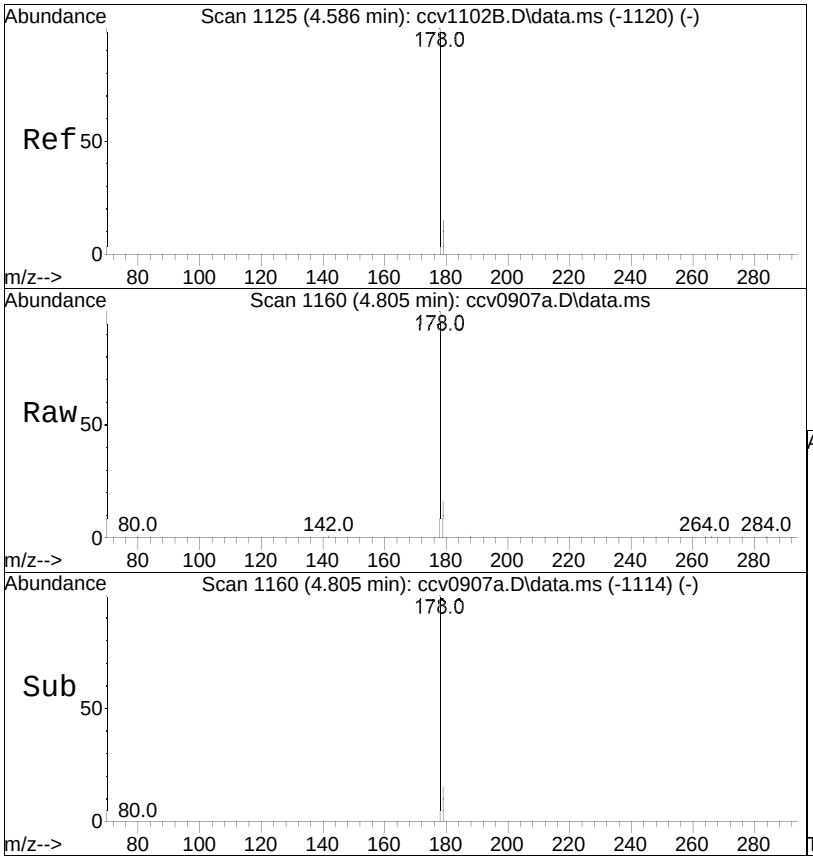


#26
Phenanthrene
Concen: 969.05 ng/ml
RT: 4.775 min Scan# 1150
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:178 Resp: 2948

Ion	Ratio	Lower	Upper
178	100		
179	15.5	12.4	18.6

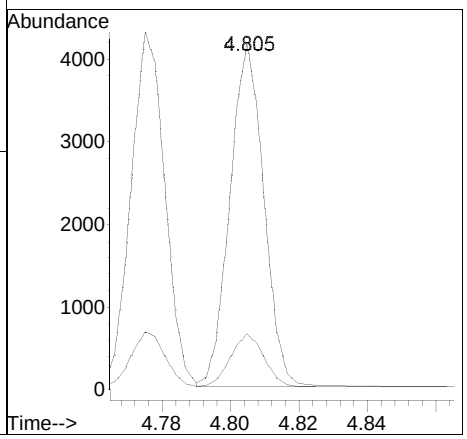


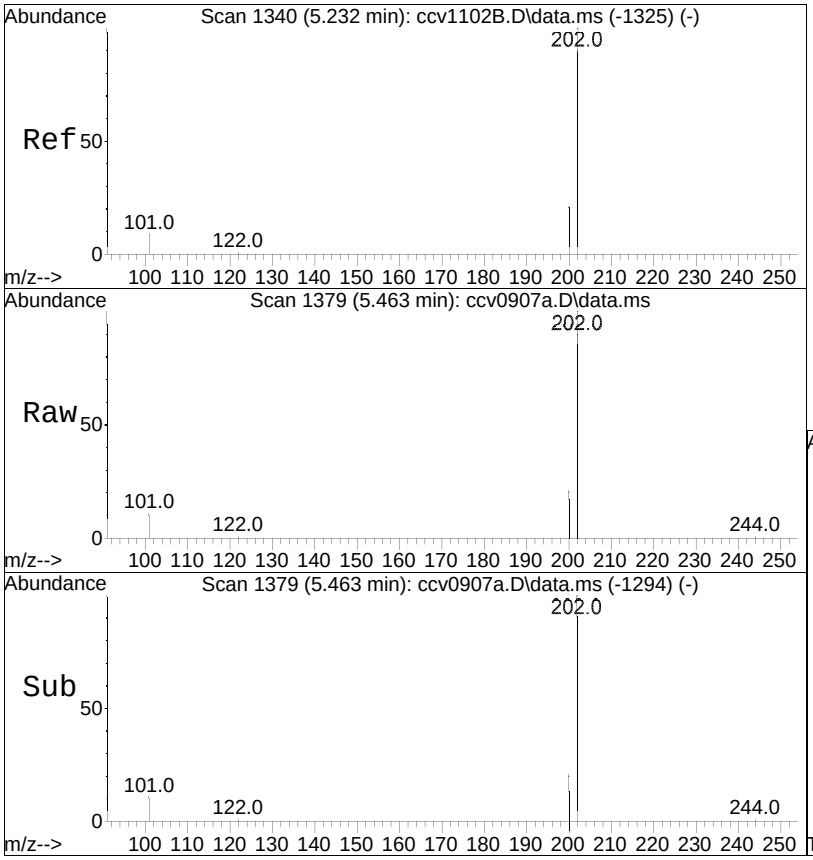


#27
Anthracene
Concen: 961.64 ng/ml M6
RT: 4.805 min Scan# 1160
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:178 Resp: 2847

Ion	Ratio	Lower	Upper
178	100		
179	15.2	12.6	19.0

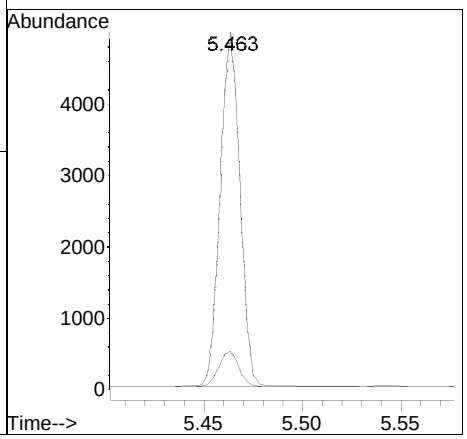


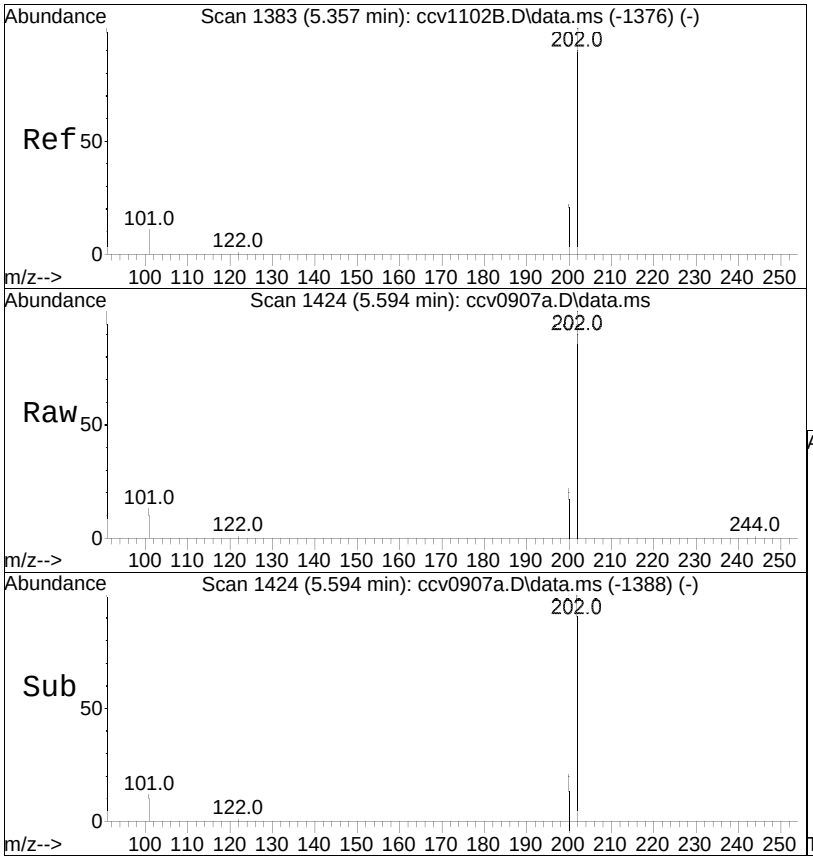


#28
Fluoranthene
Concen: 960.68 ng/ml
RT: 5.463 min Scan# 1379
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:202 Resp: 3395

Ion	Ratio	Lower	Upper
202	100		
101	10.5	7.0	10.6

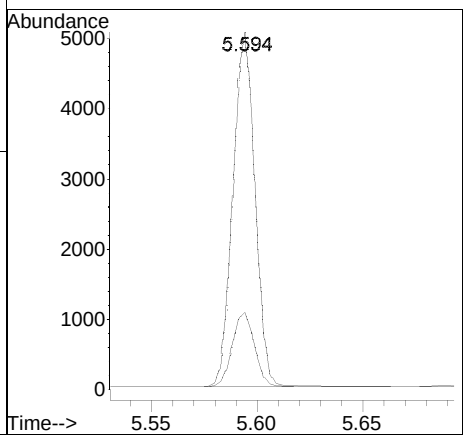


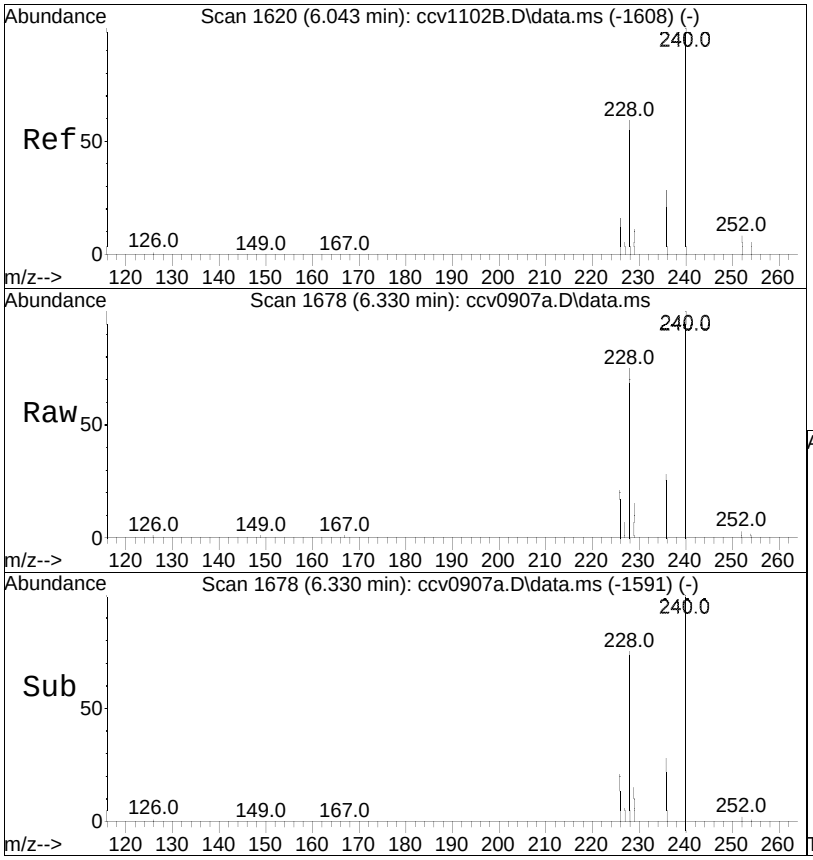


#29
Pyrene
Concen: 987.12 ng/ml
RT: 5.594 min Scan# 1424
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:202 Resp: 3611

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.0	25.4

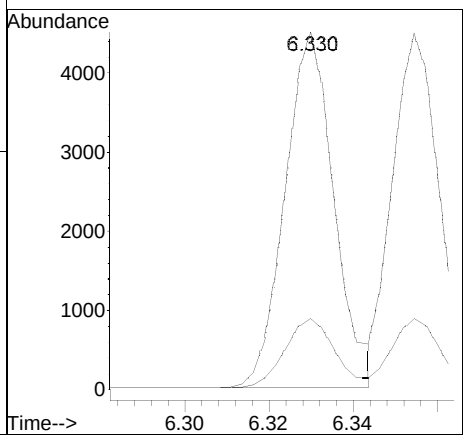


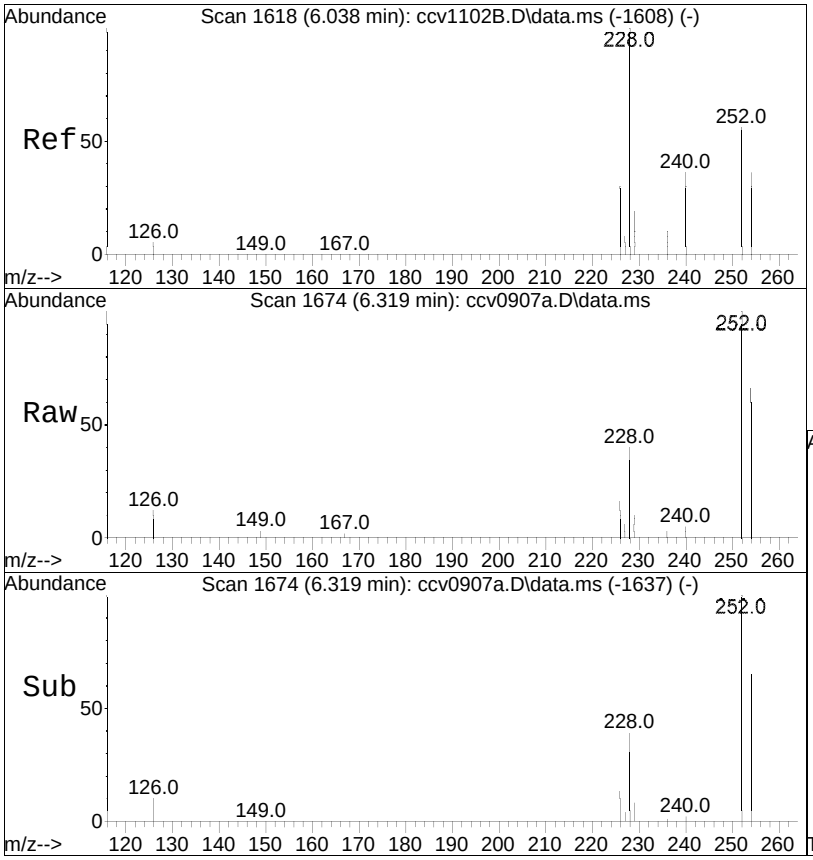


#32
Benzo[a]anthracene
Concen: 932.40 ng/ml
RT: 6.330 min Scan# 1678
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:228 Resp: 3600

Ion	Ratio	Lower	Upper
228	100		
229	19.6	15.7	23.5

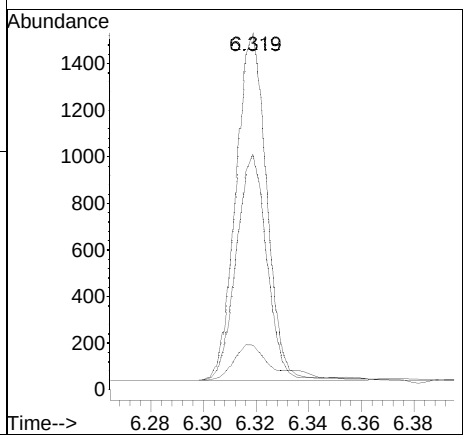


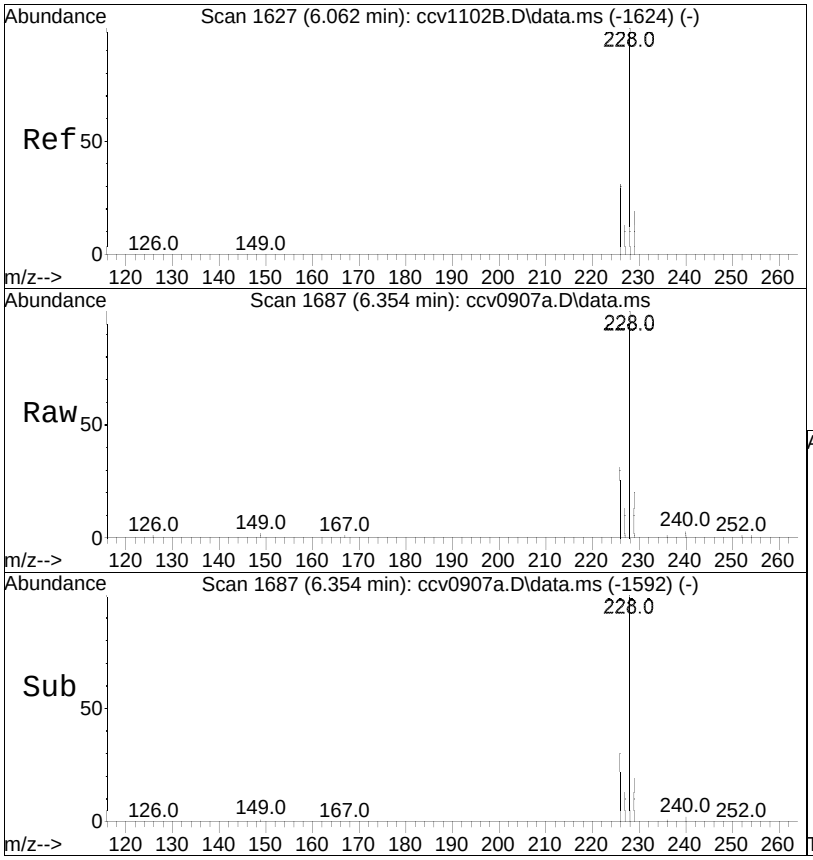


#33
3,3'-Dichlorobenzidine
Concen: 832.79 ng/ml
RT: 6.319 min Scan# 1674
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:252 Resp: 1211

Ion	Ratio	Lower	Upper
252	100		
126	13.8	9.1	13.7#
254	69.9	51.6	77.4

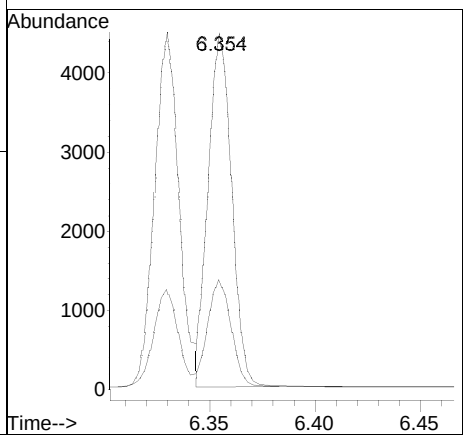


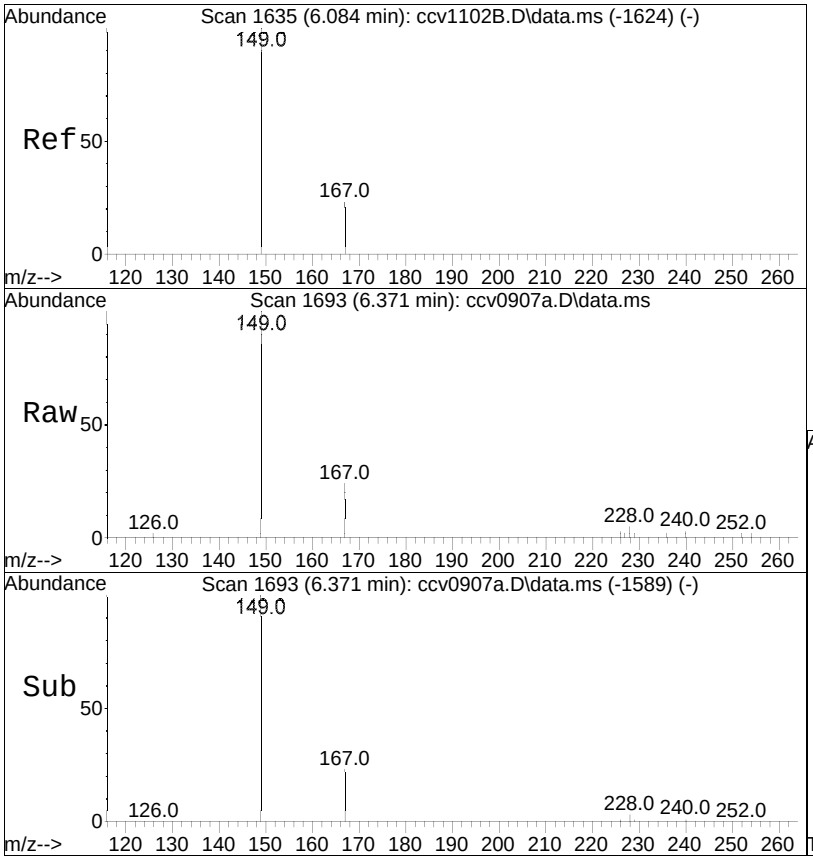


#34
Chrysene
Concen: 958.23 ng/ml
RT: 6.354 min Scan# 1687
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:228 Resp: 3447

Ion	Ratio	Lower	Upper
228	100		
226	31.0	24.6	37.0

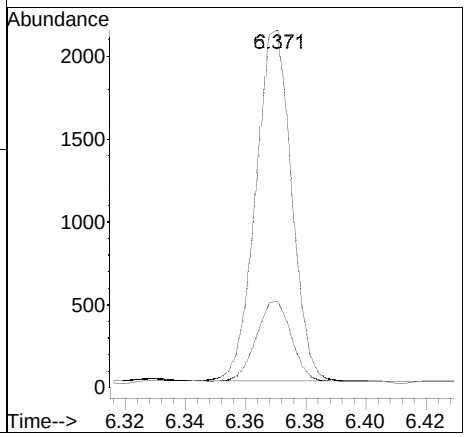


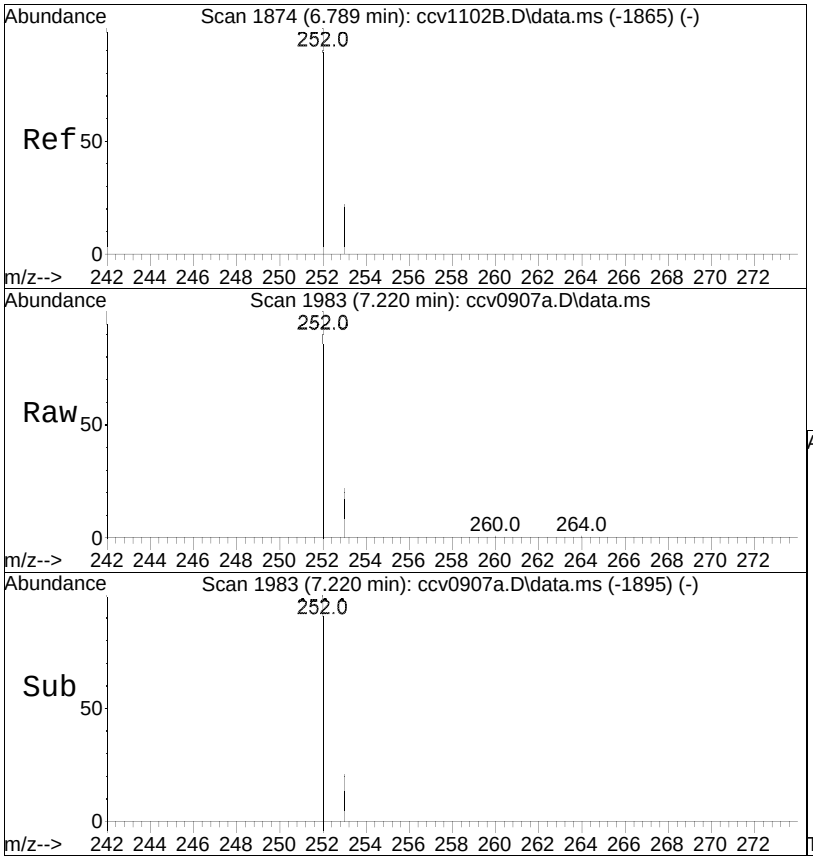


#35
Bis(2-ethylhexyl)phthalate
Concen: 762.76 ng/ml M6
RT: 6.371 min Scan# 1693
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:149 Resp: 1732

Ion	Ratio	Lower	Upper
149	100		
167	23.1	18.7	28.1

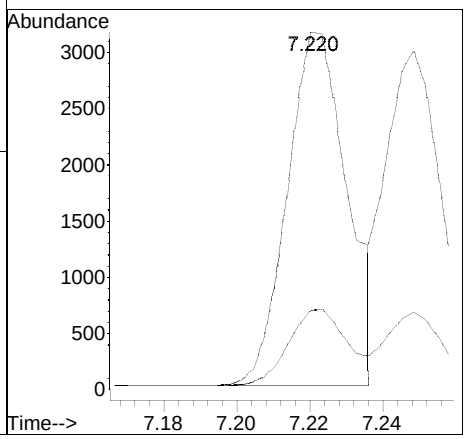


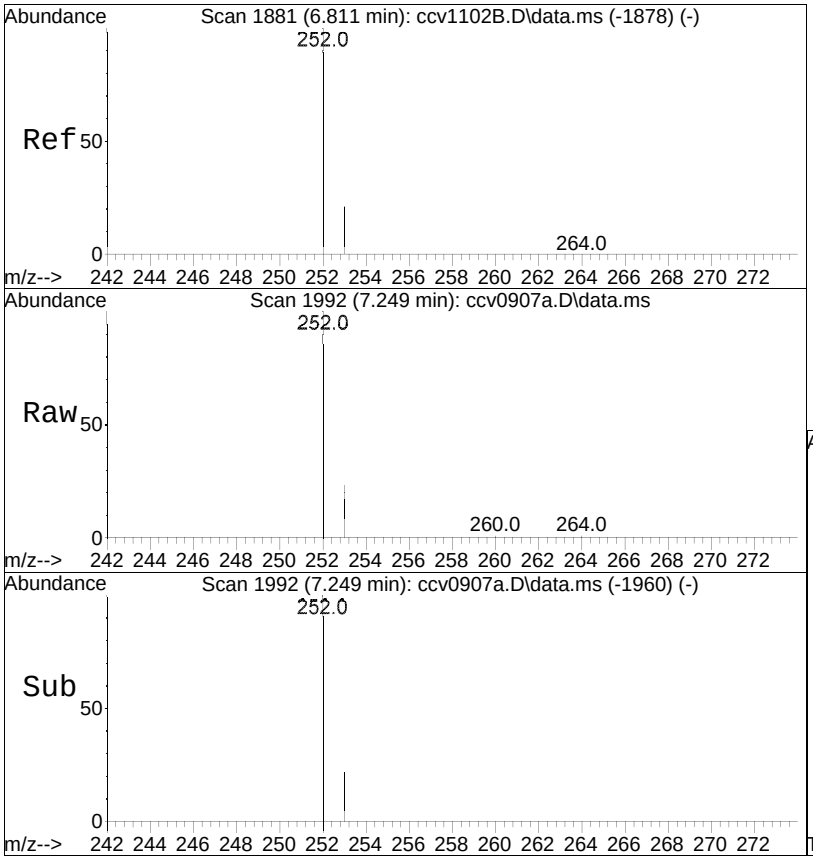


#37
Benzo[b]fluoranthene
Concen: 996.00 ng/ml
RT: 7.220 min Scan# 1983
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:252 Resp: 3601

Ion	Ratio	Lower	Upper
252	100		
253	21.5	17.4	26.0

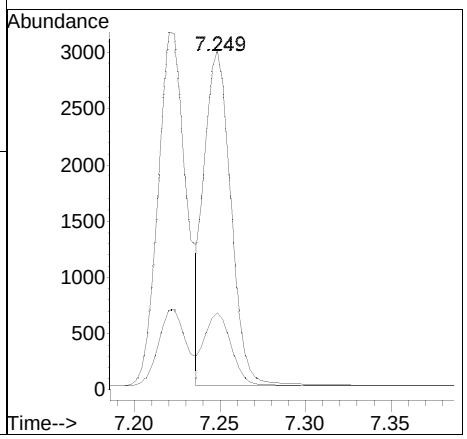


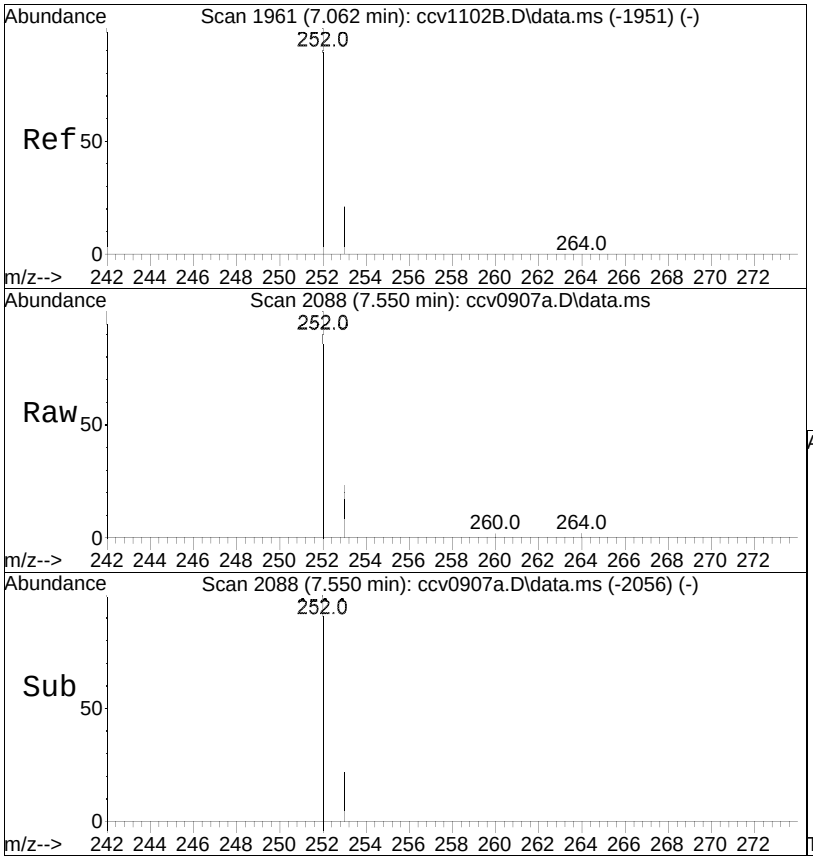


#38
Benzo[k]fluoranthene
Concen: 956.39 ng/ml
RT: 7.249 min Scan# 1992
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:252 Resp: 3200

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.4	26.2

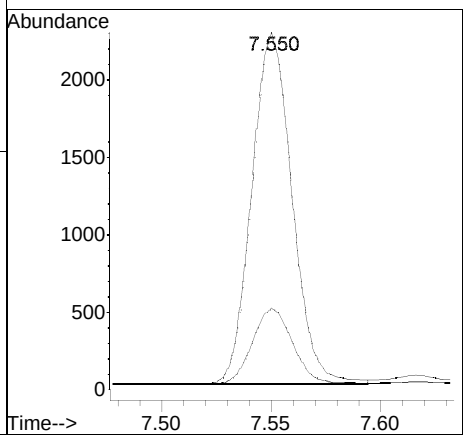


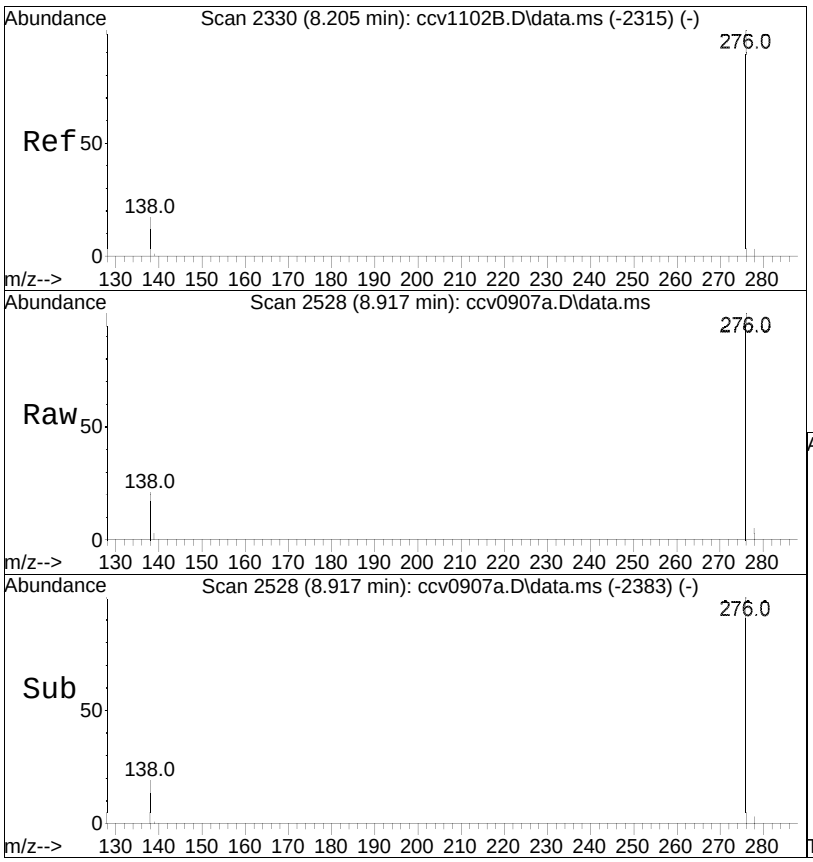


#39
Benzo[a]pyrene
Concen: 924.61 ng/ml
RT: 7.550 min Scan# 2088
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:252 Resp: 2871

Ion	Ratio	Lower	Upper
252	100		
253	21.5	17.3	25.9

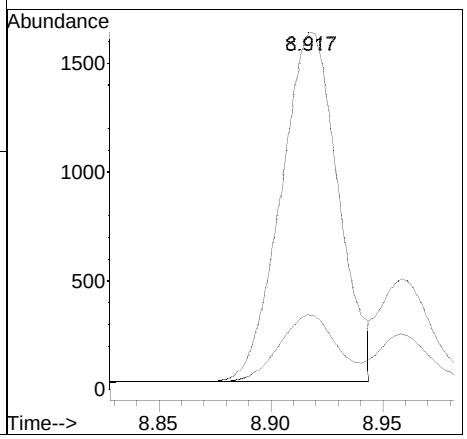


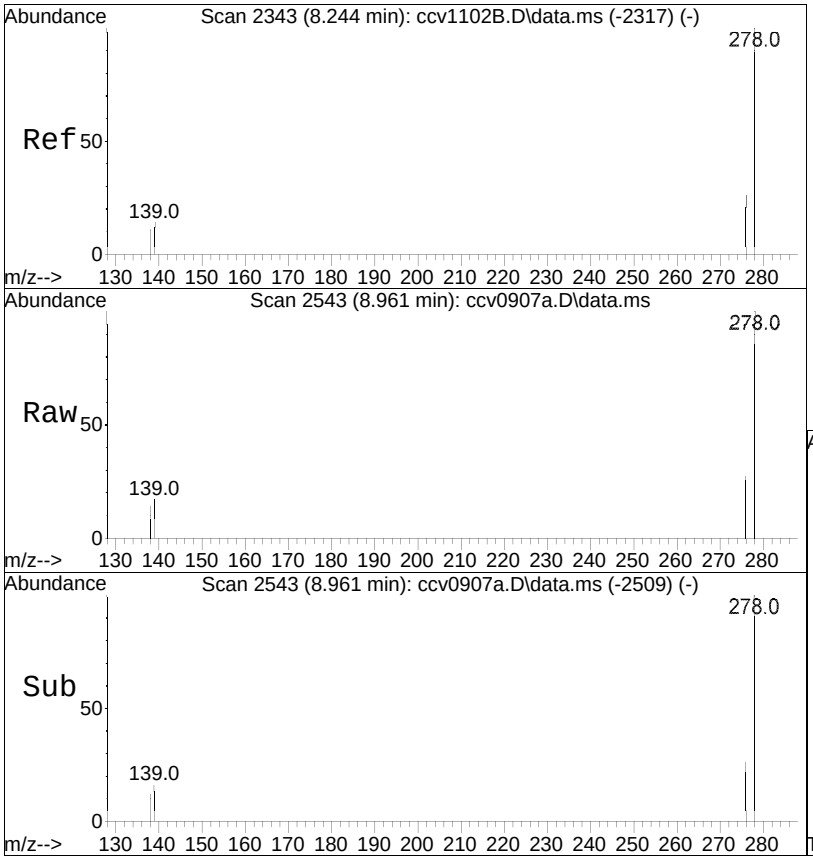


#40
Indeno[1,2,3-cd]pyrene
Concen: 913.93 ng/ml
RT: 8.917 min Scan# 2528
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:276 Resp: 2840

Ion	Ratio	Lower	Upper
276	100		
138	19.3	13.8	20.6

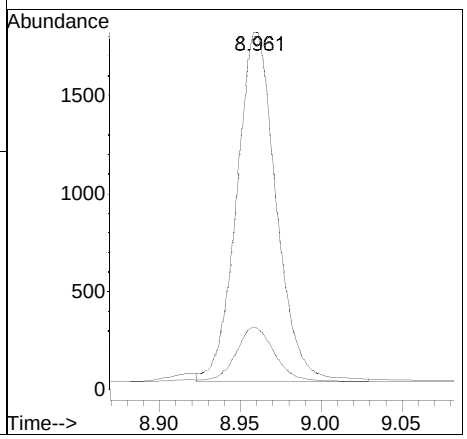


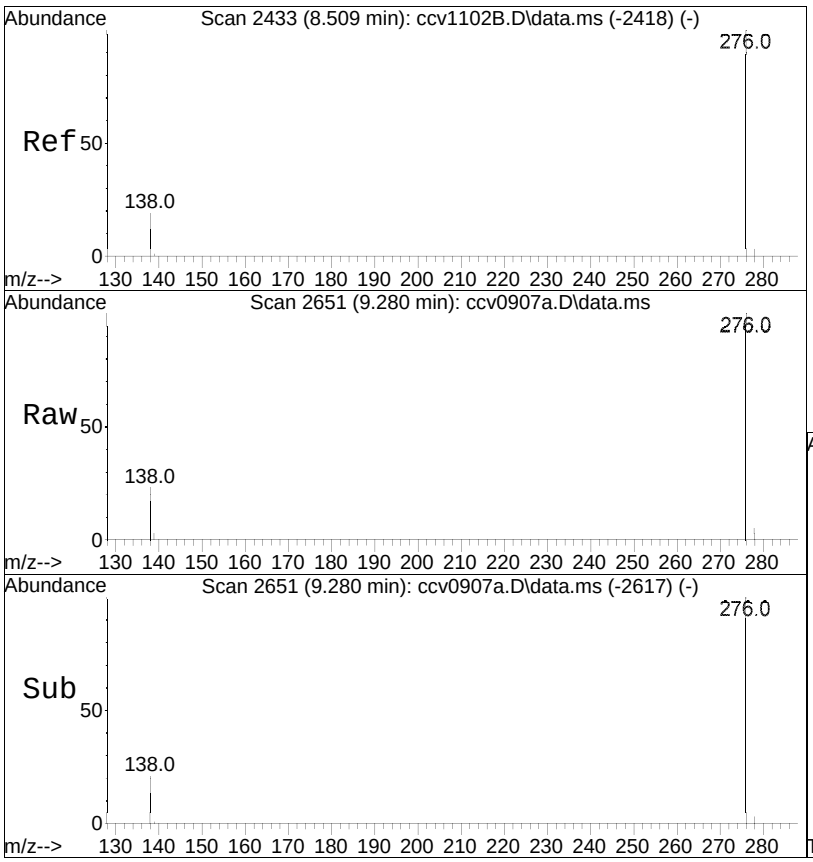


#41
Dibenzo[a,h]anthracene
Concen: 1011.69 ng/ml M6
RT: 8.961 min Scan# 2543
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:278 Resp: 3026

Ion	Ratio	Lower	Upper
278	100		
139	15.3	11.2	16.8

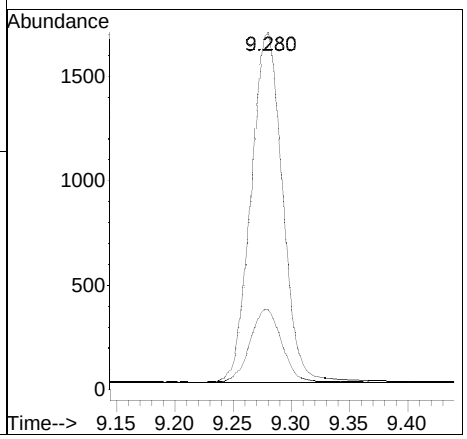




#42
Benzo[g,h,i]perylene
Concen: 971.86 ng/ml
RT: 9.280 min Scan# 2651
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 07:51 am

Tgt Ion:276 Resp: 3093

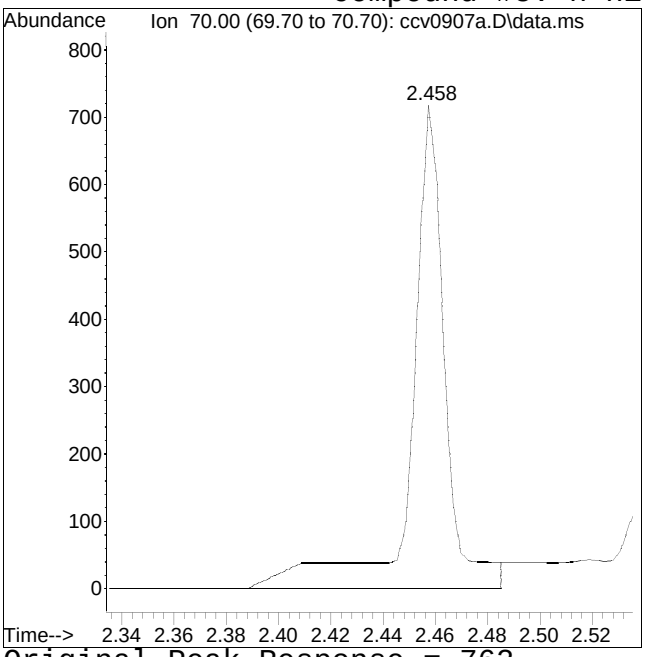
Ion	Ratio	Lower	Upper
276	100		
138	21.1	15.0	22.6



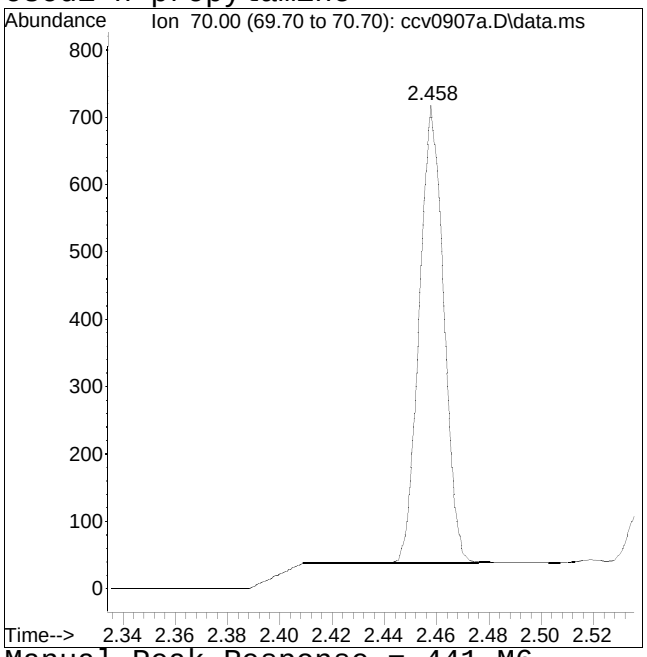
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : ccv0907a.D Operator : SV128:ah
Date Inj'd : 9/7/2023 7:51 am Instrument : SV128
Sample : WG1824579-3,32,,ICV 10193 Quant Date : 9/7/2023 8:07 am

Compound #5: n-nitrosodi-n-propylamine



Original Peak Response = 762



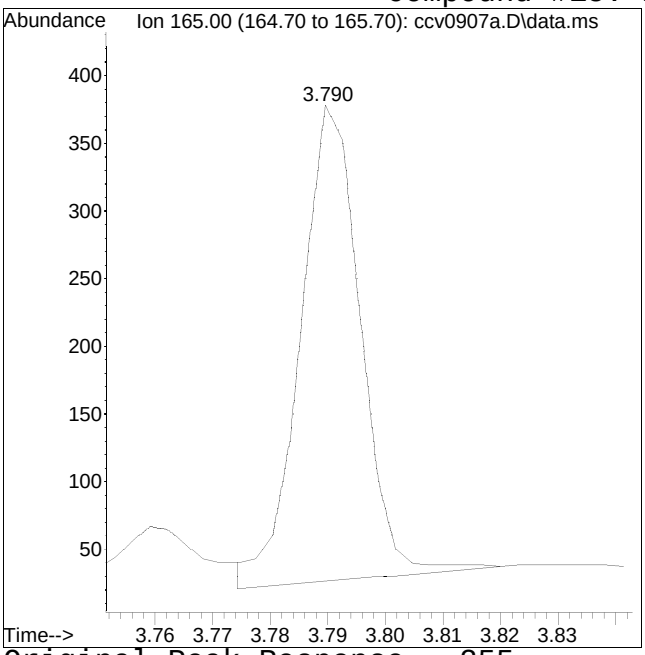
Manual Peak Response = 441 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

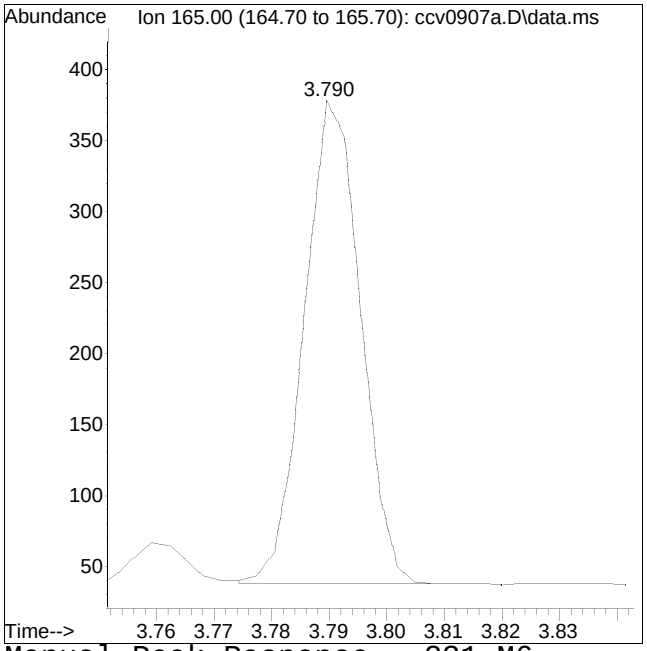
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : ccv0907a.D Operator : SV128:ah
Date Inj'd : 9/7/2023 7:51 am Instrument : SV128
Sample : WG1824579-3,32,,ICV 10193 Quant Date : 9/7/2023 8:07 am

Compound #15: 2,6-Dinitrotoluene



Original Peak Response = 255



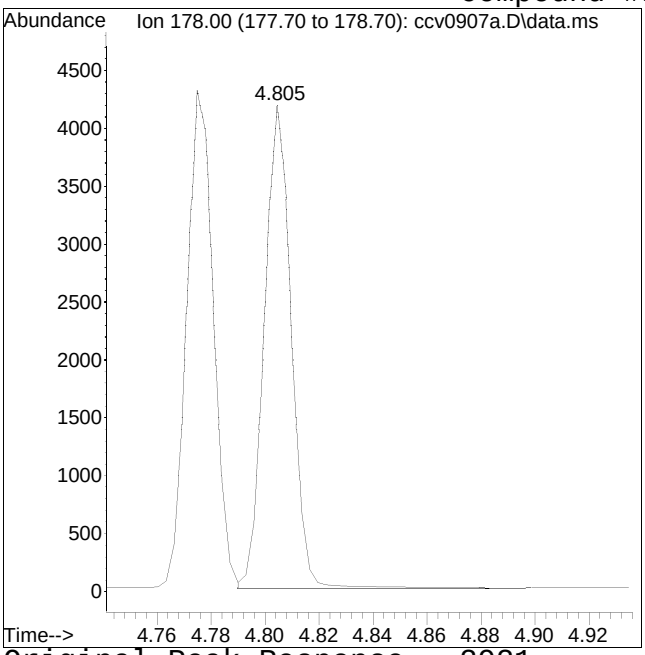
Manual Peak Response = 231 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

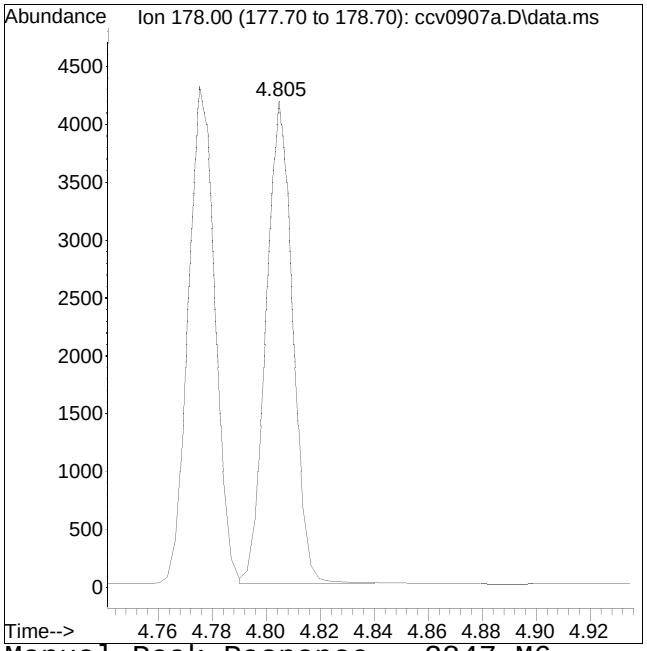
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : ccv0907a.D Operator : SV128:ah
Date Inj'd : 9/7/2023 7:51 am Instrument : SV128
Sample : WG1824579-3,32,,ICV 10193 Quant Date : 9/7/2023 8:07 am

Compound #27: Anthracene



Original Peak Response = 2921



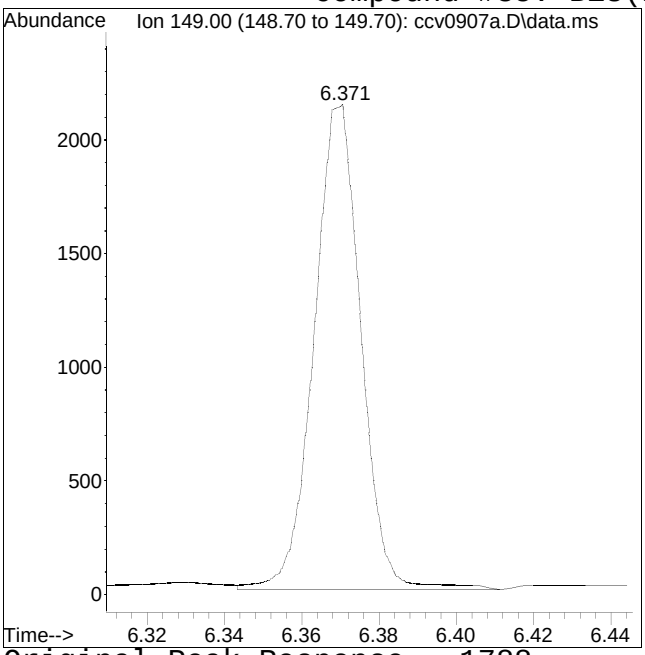
Manual Peak Response = 2847 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

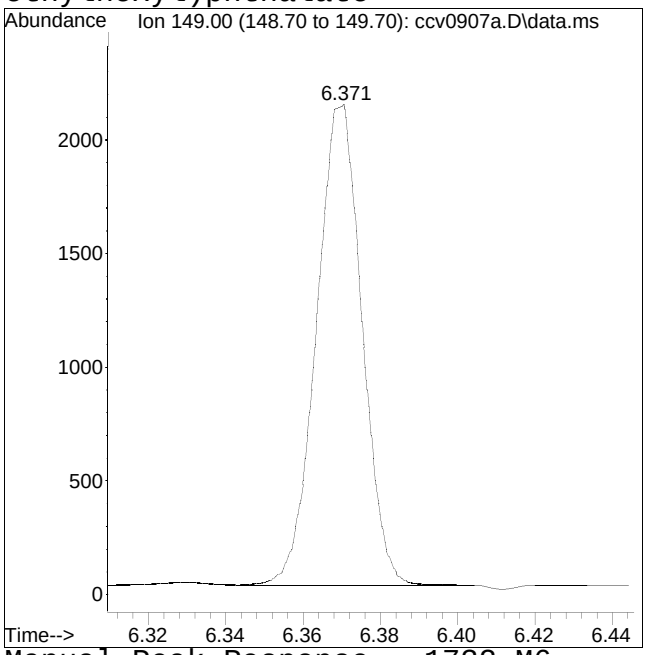
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : ccv0907a.D Operator : SV128:ah
Date Inj'd : 9/7/2023 7:51 am Instrument : SV128
Sample : WG1824579-3,32,,ICV 10193 Quant Date : 9/7/2023 8:07 am

Compound #35: Bis(2-ethylhexyl)phthalate



Original Peak Response = 1788



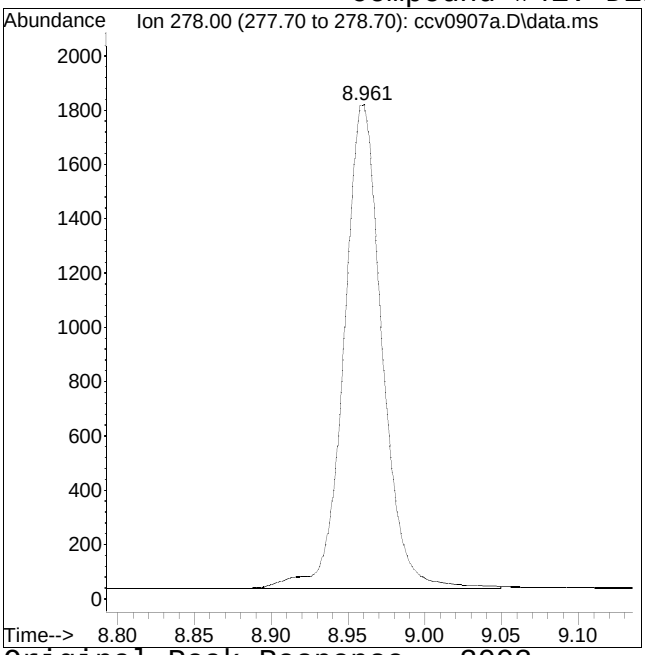
Manual Peak Response = 1732 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

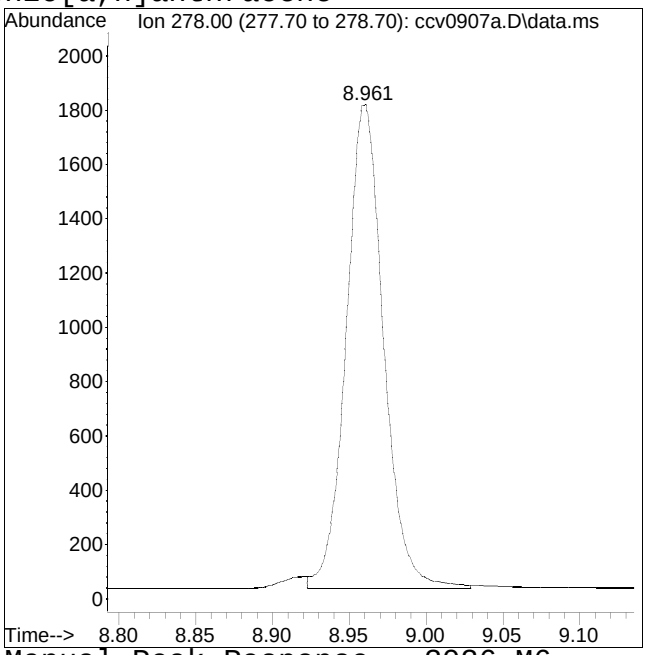
Manual Integration Report

Data Path : I:\8270SIM\SV128\230907\ QMethod : SIM-LVI_230831_sv128.M
Data File : ccv0907a.D Operator : SV128:ah
Date Inj'd : 9/7/2023 7:51 am Instrument : SV128
Sample : WG1824579-3,32,,ICV 10193 Quant Date : 9/7/2023 8:07 am

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 3093



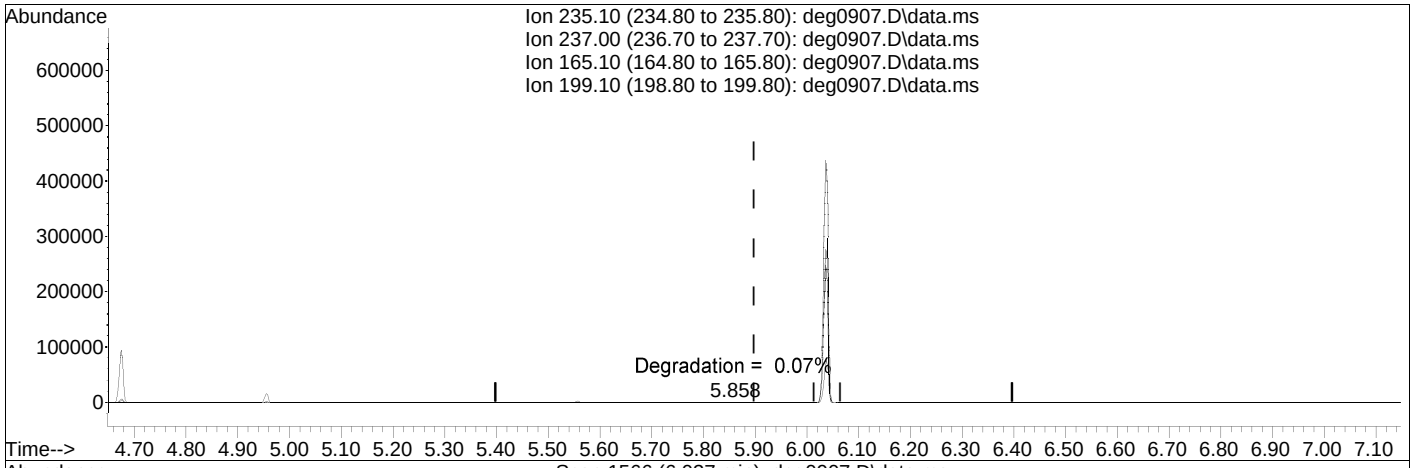
Manual Peak Response = 3026 M6

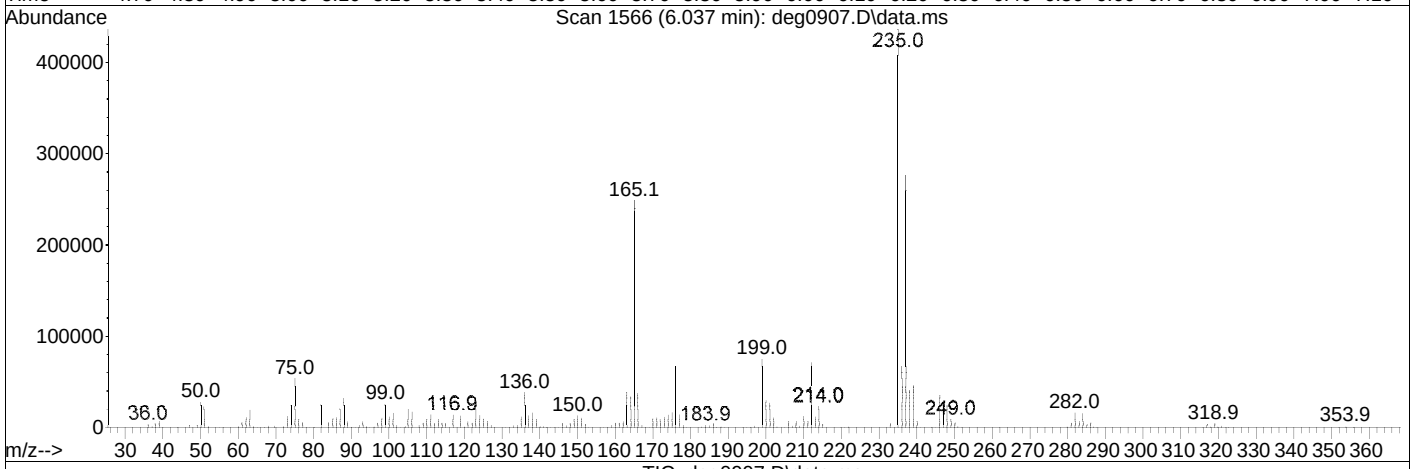
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV128\230907\
Data File : deg0907.D
Acq On : 07 Sep 2023 07:09 am
Operator : SV128:ah
Sample : WG1824579-2,32,, dftpp sv128
Misc : WG1824579,,ical20340
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 07 07:29:54 2023
Quant Method : I:\8270SIM\SV128\230907\dftppsv128.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Aug 12 18:40:35 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0907.D\data.ms

(6) ddt (T)

6.037min (+ 0.139) 42.31

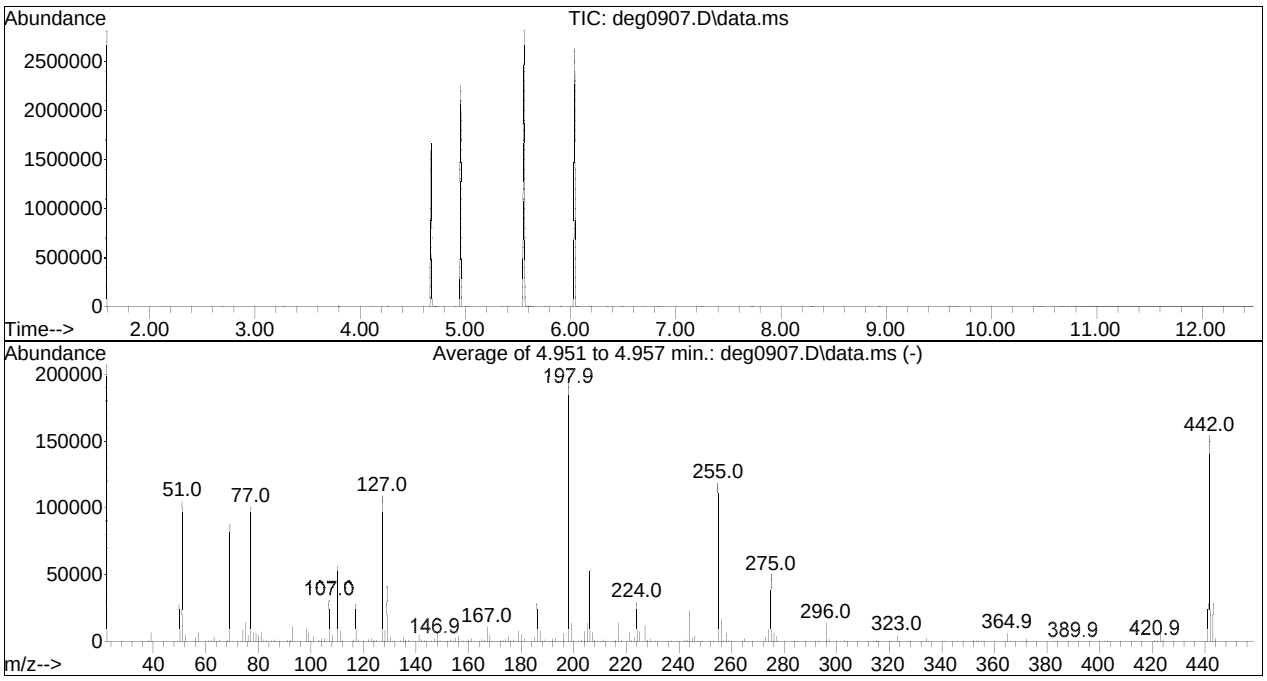
response 257929

Ion	Exp%	Act%
235.10	100.00	100.00
237.00	65.60	63.99
165.10	53.30	55.60
199.10	17.10	17.01

Data Path : I:\8270SIM\SV128\230907\
Data File : deg0907.D
Acq On : 07 Sep 2023 07:09 am
Operator : SV128:ah
Sample : WG1824579-1,32,, dftpp sv128
Misc : WG1824579,,ical20340
ALS Vial : 48 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270SIM\SV128\230907\SIM-LVI_230831_sv128.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Thu Sep 07 08:06:50 2023



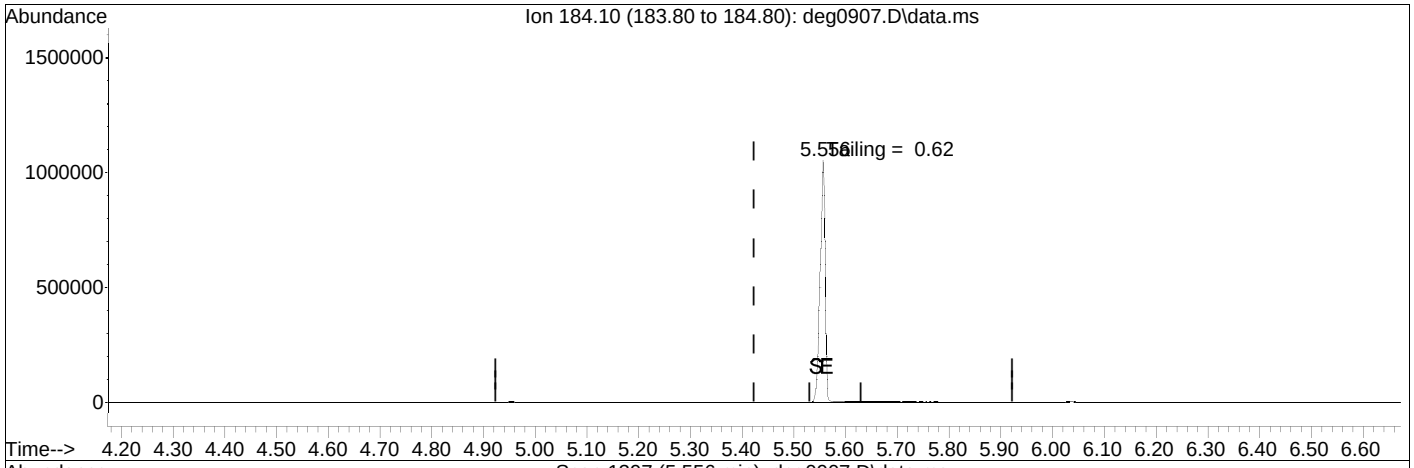
Spectrum Information: Average of 4.951 to 4.957 min.

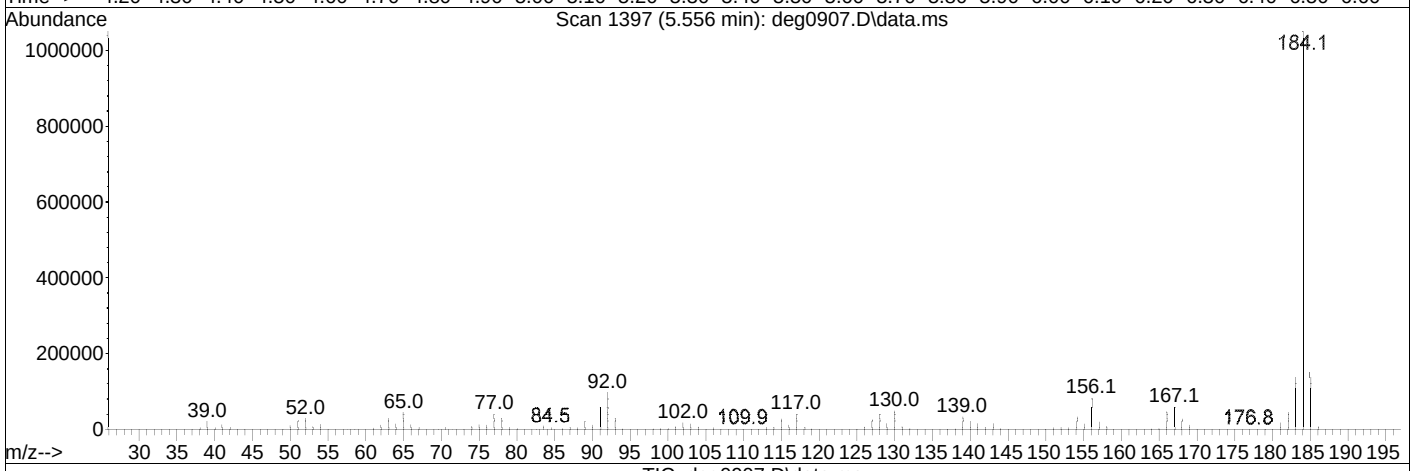
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	53.1	104819	PASS
68	69	0.00	2	1.6	1420	PASS
69	69	100	100	100.0	87741	PASS
70	69	0.00	2	0.5	449	PASS
127	198	10	80	55.0	108683	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	197461	PASS
199	198	5	9	7.0	13807	PASS
275	198	10	60	25.2	49741	PASS
365	198	1	100	3.2	6243	PASS
441	442	0.01	24	18.2	27995	PASS
442	198	50	100	77.9	153803	PASS
443	442	15	24	18.6	28578	PASS

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV128\230907\
Data File : deg0907.D
Acq On : 07 Sep 2023 07:09 am
Operator : SV128:ah
Sample : WG1824579-4,32,, dftpp sv128
Misc : WG1824579,,ical20340
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 07 07:29:54 2023
Quant Method : I:\8270SIM\SV128\230907\dftppsv128.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Aug 12 18:40:35 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0907.D\data.ms

(3) benzidine (T)

5.556min (+ 0.133) 67.07

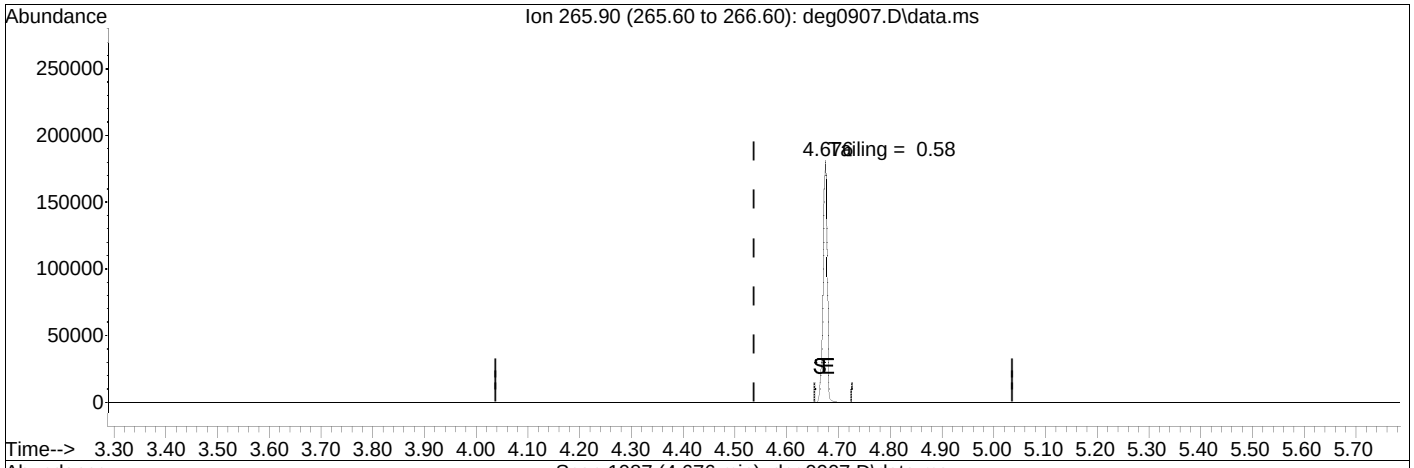
response 682807

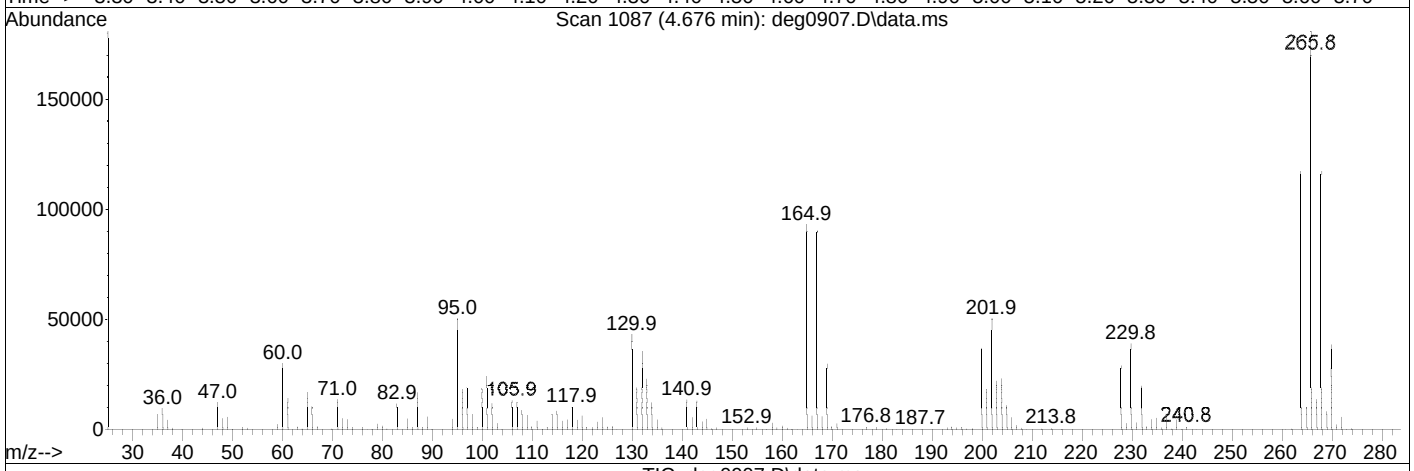
Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV128\230907\
Data File : deg0907.D
Acq On : 07 Sep 2023 07:09 am
Operator : SV128:ah
Sample : WG1824579-5,32,, dftpp sv128
Misc : WG1824579,,ical20340
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 07 07:29:54 2023
Quant Method : I:\8270SIM\SV128\230907\dftppsv128.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Aug 12 18:40:35 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0907.D\data.ms

(1) pentachlorophenol (T)

4.676min (+ 0.139) 45.65

response 95878

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : ccv0907a.D
Acq On : 07 Sep 2023 10:41 am
Operator : sv119:ah
Sample : WG1824714-3,32,, ICV 10193 (0905)
Misc : WG1824714,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 07 11:05:22 2023
Quant Method : I:\8270SIM\sv119\230907aLVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 11:05:13 2023
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	97	0.00
2	s	2-Fluorophenol	0.984	1.141	-16.0	107	0.00
3	s	Phenol-d6	1.163	1.329	-14.3	108	0.00
4	T	Bis(2-chloroethyl)ether	1.081	1.096	-1.4	97	0.00
5	T	n-nitrosodi-n-propylamine	0.623	0.734	-17.8	109	0.00
6	t	Hexachloroethane	0.445	0.492	-10.6	104	0.00
7	s	Nitrobenzene-d5	0.875	1.107	-26.5#	113	0.00
8	i	Naphthalene-d8	1.000	1.000	0.0	98	0.00
9	t	Naphthalene	0.947	0.864	8.8	87	0.00
10	t	Hexachlorobutadiene	0.184	0.188	-2.2	97	0.00
11	t	2-Methylnaphthalene	0.637	0.623	2.2	93	0.00
12	t	1-Methylnaphthalene	0.614	0.593	3.4	92	0.00
13	s	2-Fluorobiphenyl	0.822	0.751	8.6	86	0.00
14	t	2-Chloronaphthalene	0.692	0.655	5.3	91	0.00
15	t	2,6-Dinitrotoluene	0.121	0.151	-24.8#	123	0.00
16	t	Acenaphthylene	0.998	1.030	-3.2	94	0.00
17	i	Acenaphthene-d10	1.000	1.000	0.0	104	0.00
18	t	Acenaphthene	1.268	1.148	9.5	90	0.00
19	t	2,4-Dinitrotoluene	*1000.000	1261.975	-26.2#	128	0.00
20	t	Fluorene	1.458	1.421	2.5	95	0.00
21	s	2,4,6-Tribromophenol	0.161	0.217	-34.8#	128	0.00
22	i	Phenanthrene-d10	1.000	1.000	0.0	112	0.00
23	T	4,6-Dinitro-o-cresol	*1000.000	1246.819	-24.7#	159	0.00
24	t	Hexachlorobenzene	0.240	0.219	8.7	97	0.00
25	t	Pentachlorophenol	*1000.000	1254.209	-25.4#	136	0.00
26	t	Phenanthrene	1.013	0.876	13.5	94	0.00
27	t	Anthracene	0.946	0.871	7.9	97	0.00
28	t	Fluoranthene	1.158	1.159	-0.1	107	0.00
29	t	Pyrene	1.199	1.199	0.0	106	0.00
30	s	4-Terphenyl-d14	0.835	0.703	15.8	91	0.00
31	i	Chrysene-d12	1.000	1.000	0.0	114	0.00
32	t	Benzo[a]anthracene	*1000.000	947.756	5.2	108	0.00
33	t	3,3'-Dichlorobenzidine	0.511	0.509	0.4	115	0.00
34	t	Chrysene	1.274	1.151	9.7	99	0.00
35	T	Bis(2-ethylhexyl)phthalate	*1000.000	951.159	4.9	117	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : ccv0907a.D
Acq On : 07 Sep 2023 10:41 am
Operator : sv119:ah
Sample : WG1824714-3,32,, ICV 10193 (0905)
Misc : WG1824714,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 07 11:05:22 2023
Quant Method : I:\8270SIM\sv119\230907aLVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 11:05:13 2023
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
36	i	Perylene-d12	1.000	1.000	0.0	100	0.00
37	t	Benzo[b]fluoranthene	1.216	1.297	-6.7	102	0.00
38	t	Benzo[k]fluoranthene	1.091	1.120	-2.7	95	0.00
39	t	Benzo[a]pyrene	0.985	1.072	-8.8	102	0.00
40	t	Indeno[1,2,3-cd]pyrene	1.129	1.166	-3.3	101	0.00
41	t	Dibenzo[a,h]anthracene	1.076	1.068	0.7	92	0.00
42	t	Benzo[g,h,i]perylene	1.199	1.198	0.1	95	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : ccv0907a.D
Acq On : 07 Sep 2023 10:41 am
Operator : sv119:ah
Sample : WG1824714-3,32,, ICV 10193 (0905)
Misc : WG1824714,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 07 11:05:22 2023
Quant Method : I:\8270SIM\sv119\230907aLVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 11:05:13 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.170	152	64197	4000.000	ng/ml	0.00
8) Naphthalene-d8	2.829	136	236804	4000.000	ng/ml	0.00
17) Acenaphthene-d10	3.795	164	129941	4000.000	ng/ml	0.00
22) Phenanthrene-d10	4.628	188	316231	4000.000	ng/ml	0.00
31) Chrysene-d12	6.246	240	299020	4000.000	ng/ml	0.00
36) Perylene-d12	7.386	264	305793	4000.000	ng/ml	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	1.576	112	18310	1159.209	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 23.18%			
3) Phenol-d6	1.986	99	21334	1143.178	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 22.86%			
7) Nitrobenzene-d5	2.450	82	17773	1265.908	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 50.64%			
13) 2-Fluorobiphenyl	3.422	172	44440	912.776	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 36.51%			
21) 2,4,6-Tribromophenol	4.236	330	7044	1345.441	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 26.91%			
30) 4-Terphenyl-d14	5.578	244	55599	842.602	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 33.70%			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.035	93	17596	1014.253	ng/ml	97
5) n-nitrosodi-n-propylamine	2.370	70	11779	1177.749	ng/ml	98
6) Hexachloroethane	2.428	117	7901	1107.370	ng/ml	96
9) Naphthalene	2.840	128	51177	912.633	ng/ml	100
10) Hexachlorobutadiene	2.912	225	11119	1020.125	ng/ml	100
11) 2-Methylnaphthalene	3.217	142	36902	978.994	ng/ml	99
12) 1-Methylnaphthalene	3.271	142	35079	964.986	ng/ml	100
14) 2-Chloronaphthalene	3.485	162	38773	947.021	ng/ml	100
15) 2,6-Dinitrotoluene	3.675	165	8911	1240.002	ng/ml	97
16) Acenaphthylene	3.713	152	60968	1031.999	ng/ml	100
18) Acenaphthene	3.810	153	37291	905.186	ng/ml	100
19) 2,4-Dinitrotoluene	3.902	165	11928	1261.975	ng/ml#	81
20) Fluorene	4.099	166	46164	974.935	ng/ml	99
23) 4,6-Dinitro-o-cresol	4.129	198	6777	1246.819	ng/ml	97
24) Hexachlorobenzene	4.413	284	17338	912.300	ng/ml	97
25) Pentachlorophenol	4.526	266	8719	1254.209	ng/ml	98
26) Phenanthrene	4.640	178	69258	864.396	ng/ml	100
27) Anthracene	4.670	178	68825	920.737	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : ccv0907a.D
Acq On : 07 Sep 2023 10:41 am
Operator : sv119:ah
Sample : WG1824714-3,32,, ICV 10193 (0905)
Misc : WG1824714,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 07 11:05:22 2023
Quant Method : I:\8270SIM\sv119\230907aLVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 11:05:13 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Fluoranthene	5.339	202	91655	1001.037	ng/ml	96
29) Pyrene	5.475	202	94796	999.716	ng/ml	100
32) Benzo[a]anthracene	6.238	228	92837	947.756	ng/ml	100
33) 3,3'-Dichlorobenzidine	6.229	252	38033	994.757	ng/ml	99
34) Chrysene	6.261	228	86036	903.292	ng/ml	99
35) Bis(2-ethylhexyl)phtha...	6.278	149	41938	951.159	ng/ml	99
37) Benzo[b]fluoranthene	7.037	252	99145	1066.149	ng/ml	99
38) Benzo[k]fluoranthene	7.059	252	85660	1027.167	ng/ml	100
39) Benzo[a]pyrene	7.325	252	81938	1088.610	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.522	276	89112	1032.295	ng/ml	98
41) Dibenzo[a,h]anthracene	8.556	278	81669	992.803	ng/ml	98
42) Benzo[g,h,i]perylene	8.842	276	91569	999.355	ng/ml	97

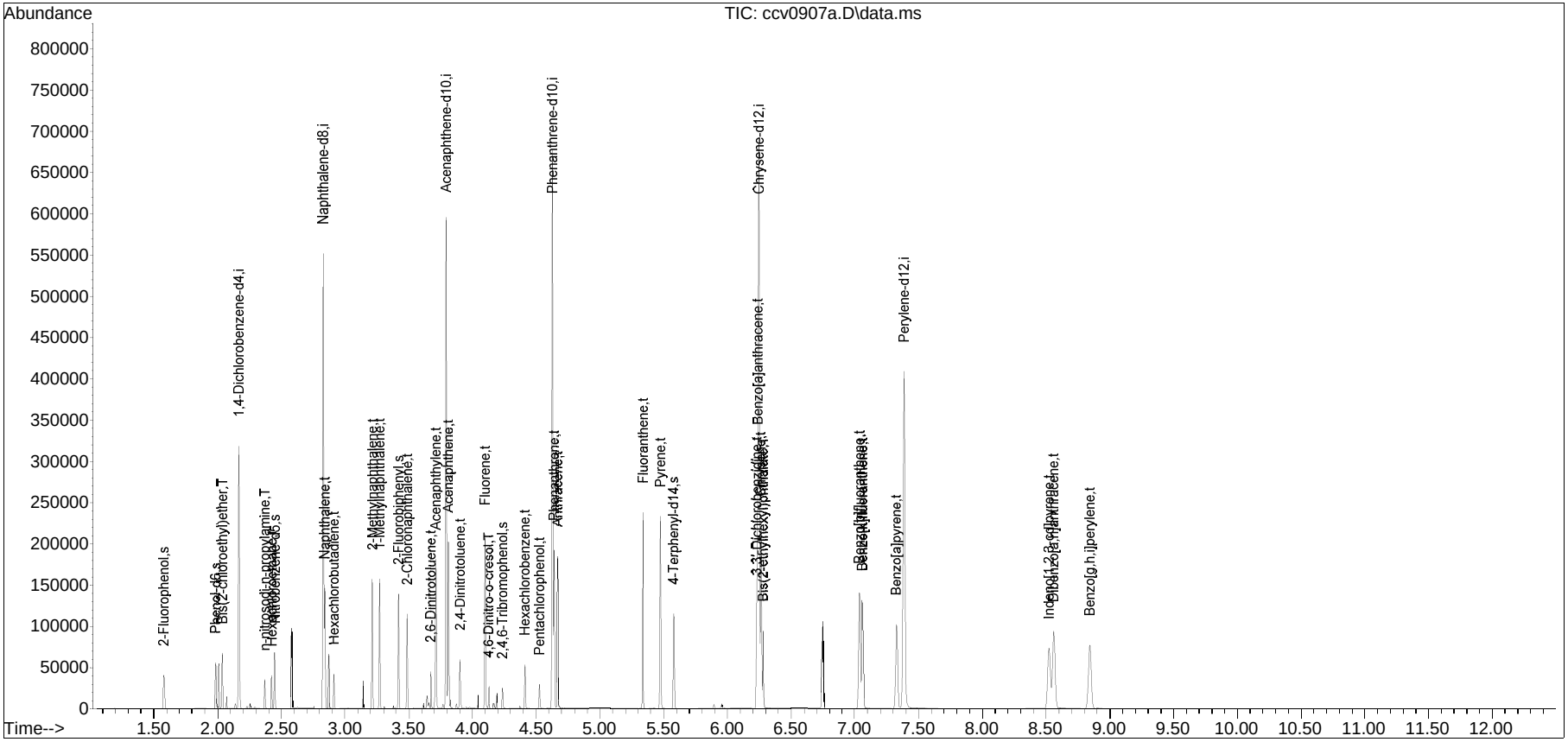
(#) = qualifier out of range (m) = manual integration (+) = signals summed

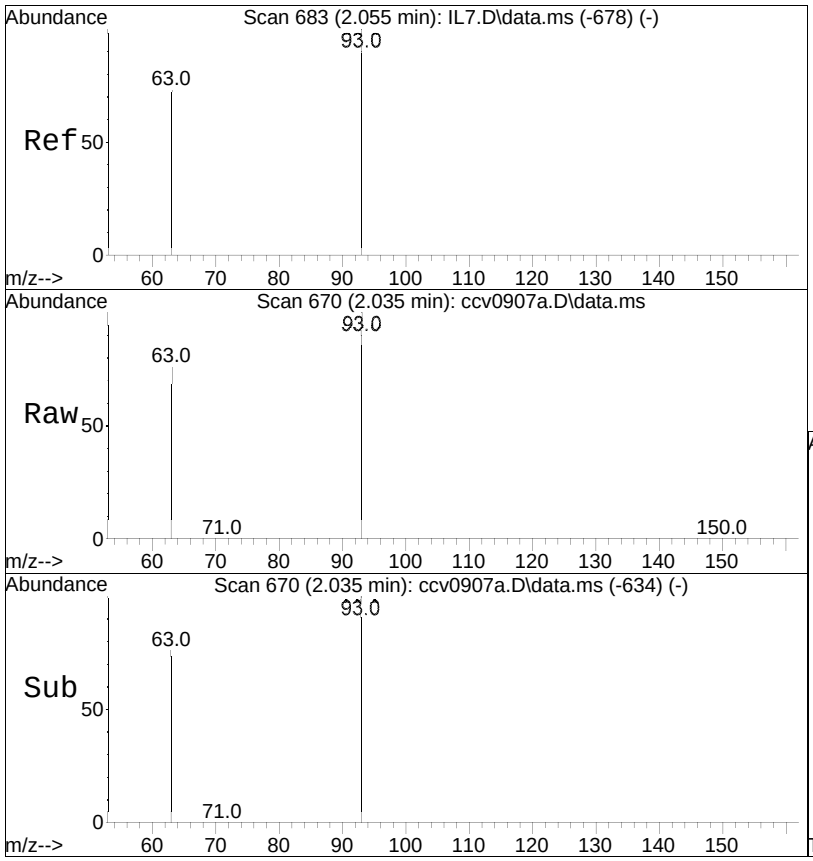
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : ccv0907a.D
Acq On : 07 Sep 2023 10:41 am
Operator : sv119:ah
Sample : WG1824714-3,32,, ICV 10193 (0905)
Misc : WG1824714,,ical19785
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 07 11:05:22 2023
Quant Method : I:\8270SIM\sv119\230907aLVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 11:05:13 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

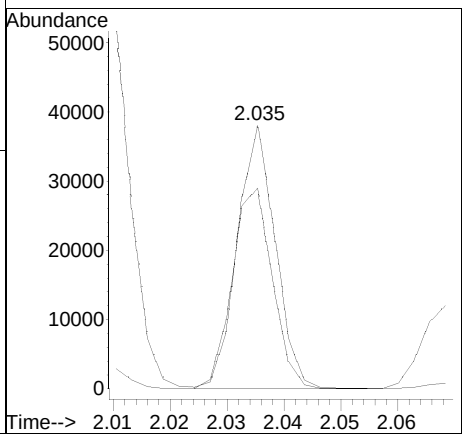


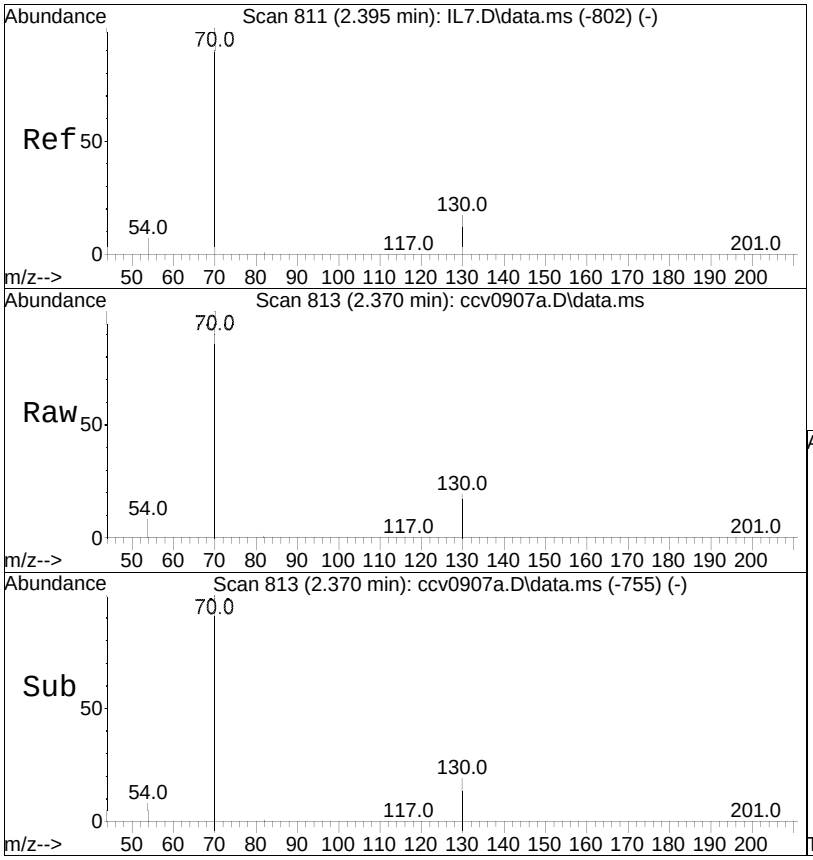


#4
Bis(2-chloroethyl)ether
Concen: 1014.25 ng/ml
RT: 2.035 min Scan# 670
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion: 93 Resp: 17596

Ion	Ratio	Lower	Upper
93	100		
63	80.5	62.6	94.0

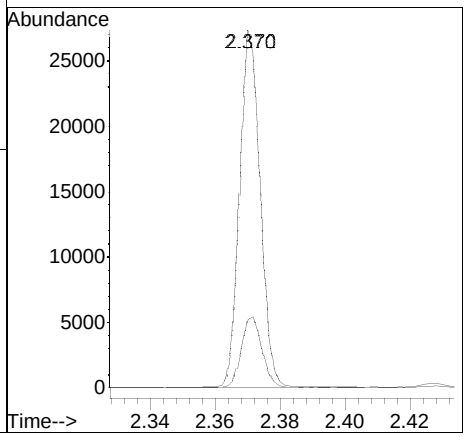


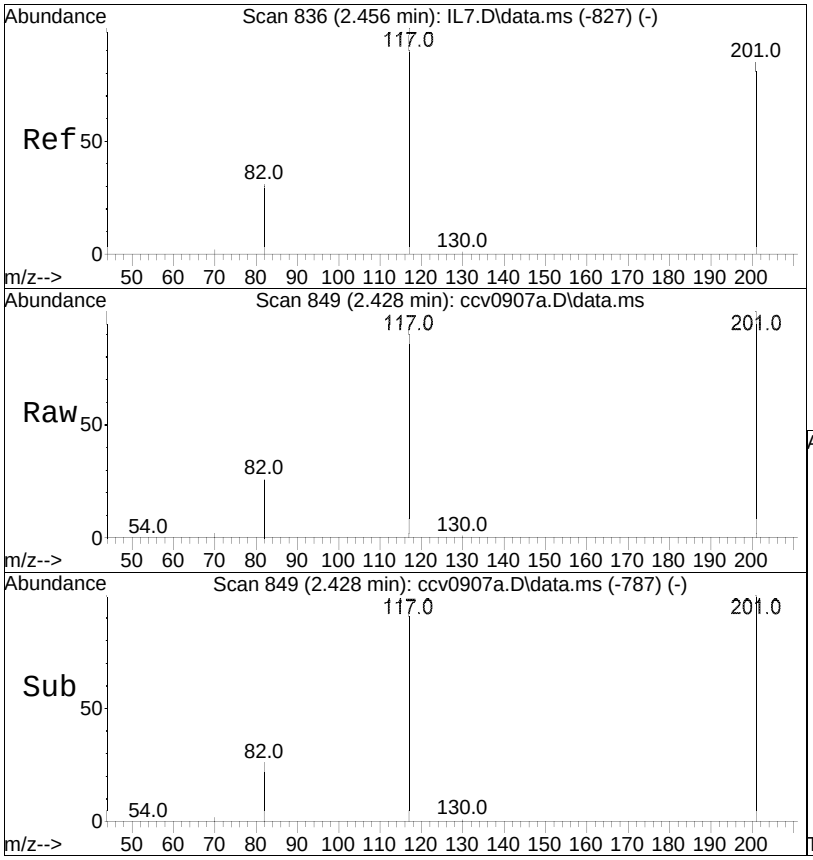


#5
n-nitrosodi-n-propylamine
Concen: 1177.75 ng/ml
RT: 2.370 min Scan# 813
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion: 70 Resp: 11779

Ion	Ratio	Lower	Upper
70	100		
130	19.8	15.0	22.6

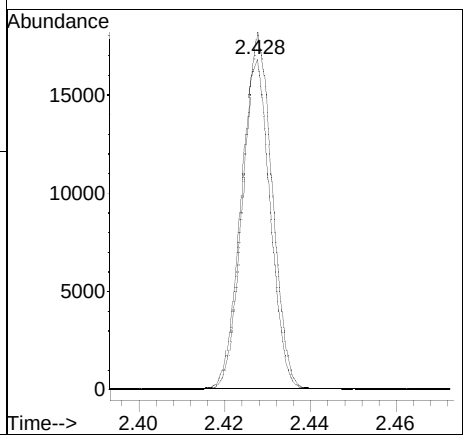


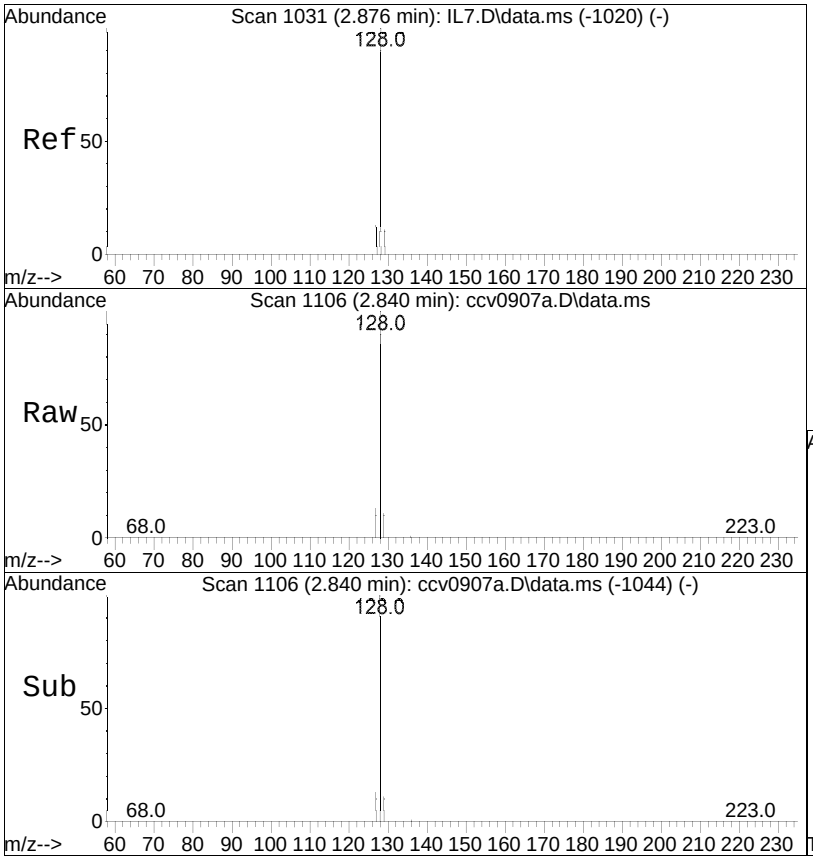


#6
Hexachloroethane
Concen: 1107.37 ng/ml
RT: 2.428 min Scan# 849
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:117 Resp: 7901

Ion	Ratio	Lower	Upper
117	100		
201	106.3	81.5	122.3

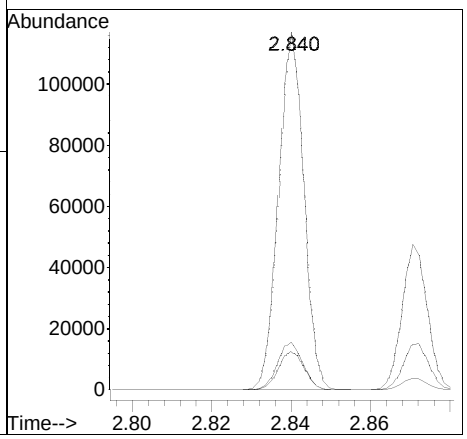


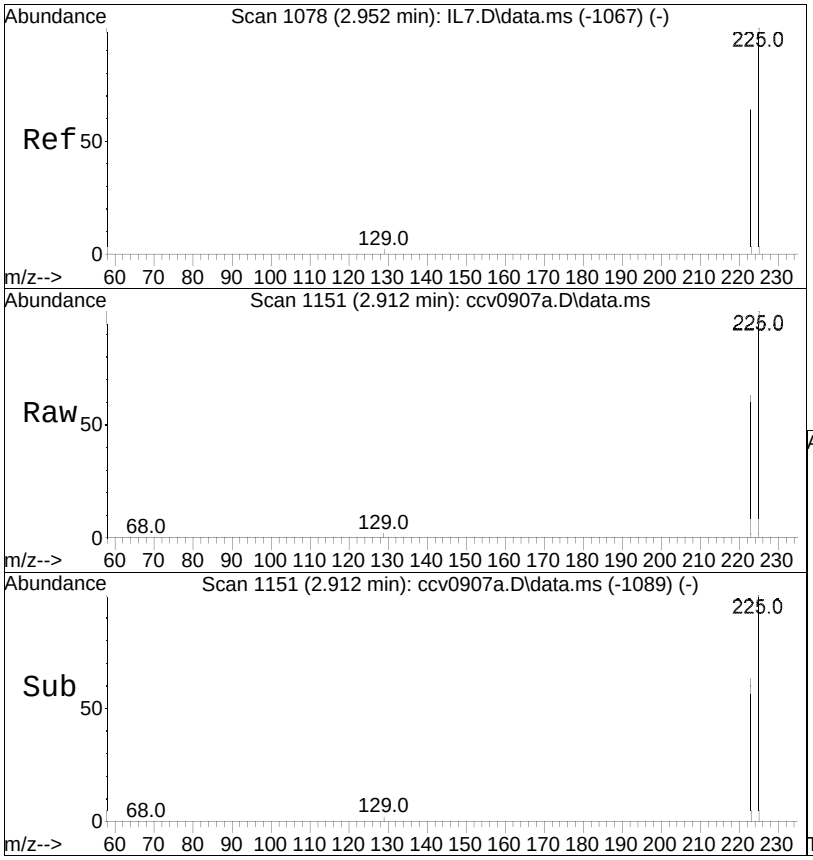


#9
Naphthalene
Concen: 912.63 ng/ml
RT: 2.840 min Scan# 1106
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:128 Resp: 51177

Ion	Ratio	Lower	Upper
128	100		
129	11.1	8.8	13.2
127	13.4	10.6	15.8

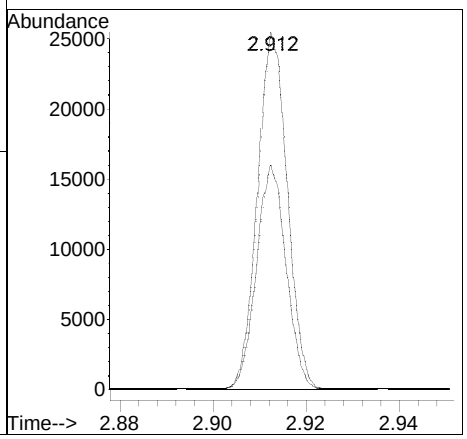


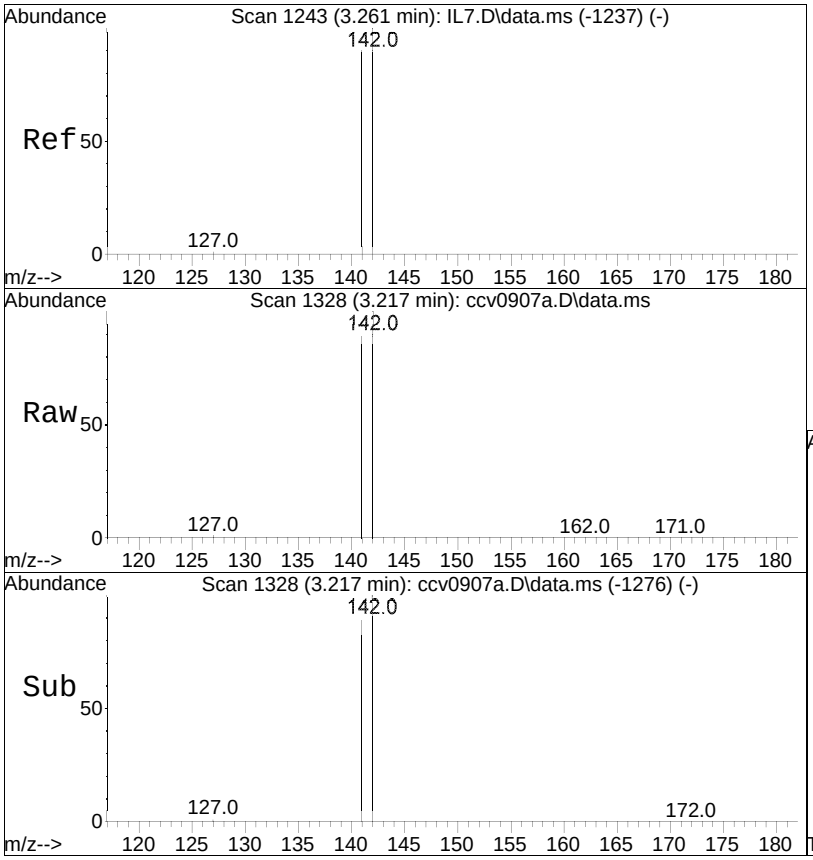


#10
Hexachlorobutadiene
Concen: 1020.12 ng/ml
RT: 2.912 min Scan# 1151
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:225 Resp: 11119

Ion	Ratio	Lower	Upper
225	100		
223	62.5	50.1	75.1

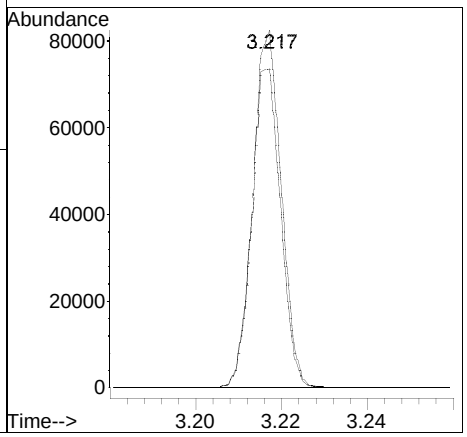


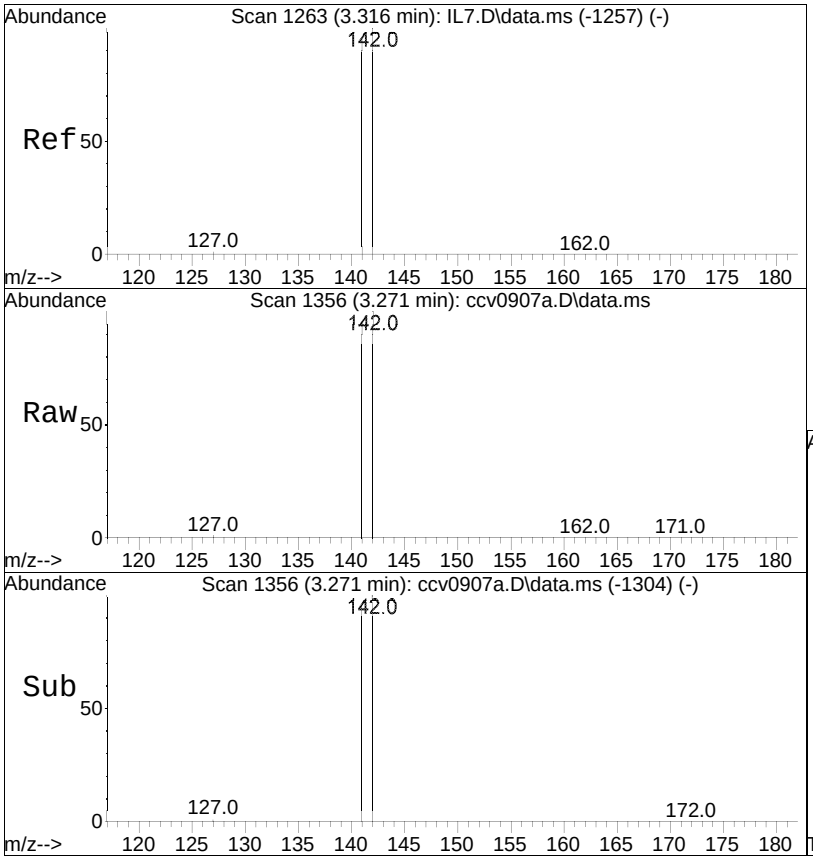


#11
2-Methylnaphthalene
Concen: 978.99 ng/ml
RT: 3.217 min Scan# 1328
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:142 Resp: 36902

Ion	Ratio	Lower	Upper
142	100		
141	91.7	74.1	111.1

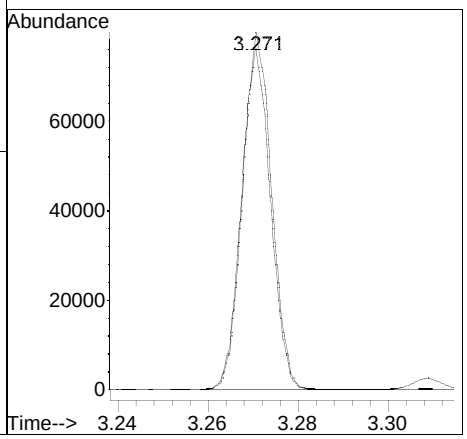


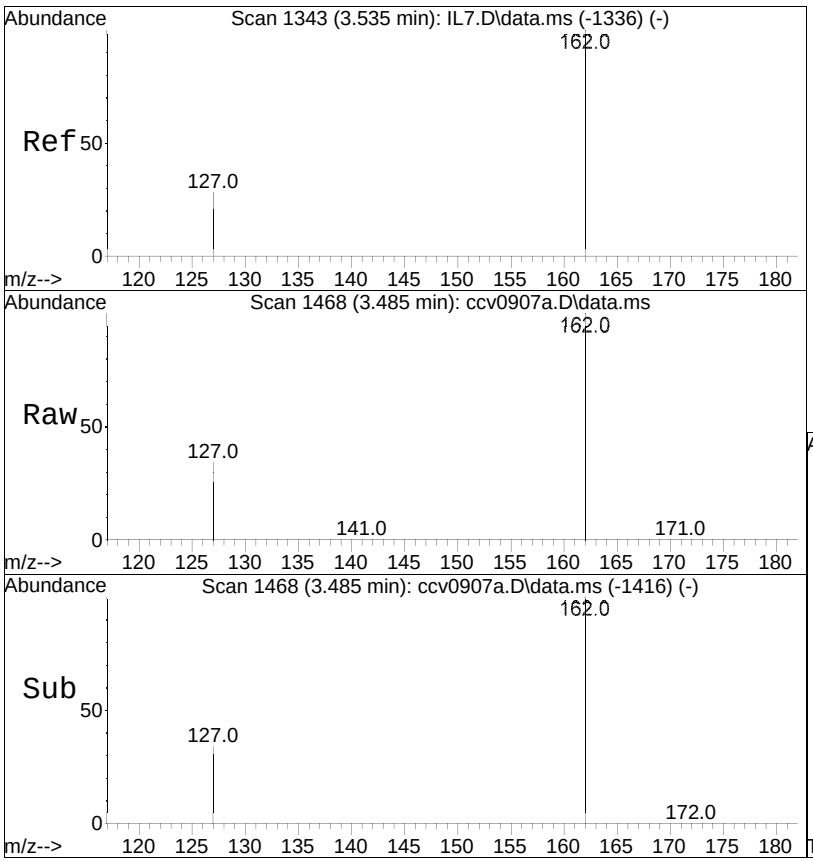


#12
1-Methylnaphthalene
Concen: 964.99 ng/ml
RT: 3.271 min Scan# 1356
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:142 Resp: 35079

Ion	Ratio	Lower	Upper
142	100		
141	95.8	76.6	114.8

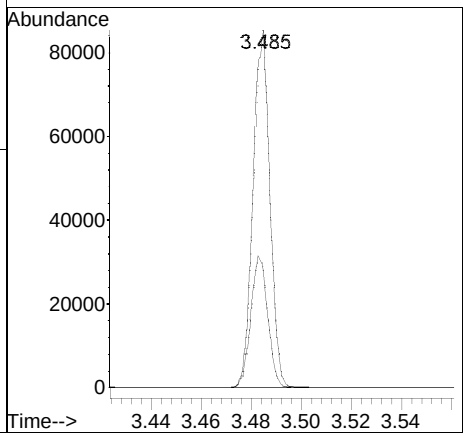


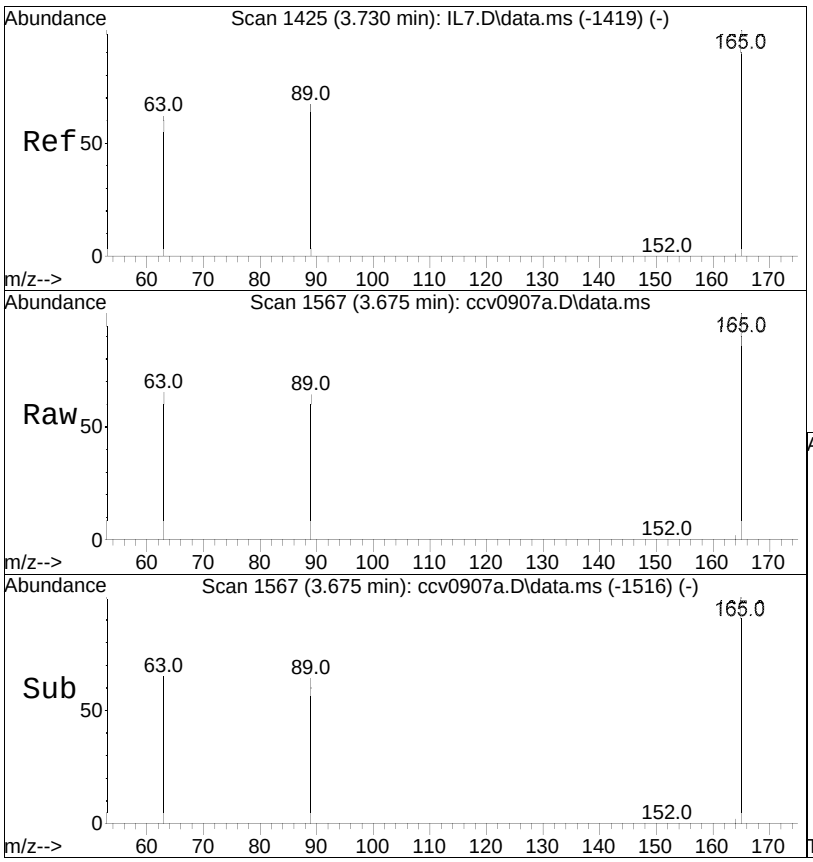


#14
2-Chloronaphthalene
Concen: 947.02 ng/ml
RT: 3.485 min Scan# 1468
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:162 Resp: 38773

Ion	Ratio	Lower	Upper
162	100		
127	37.3	29.7	44.5

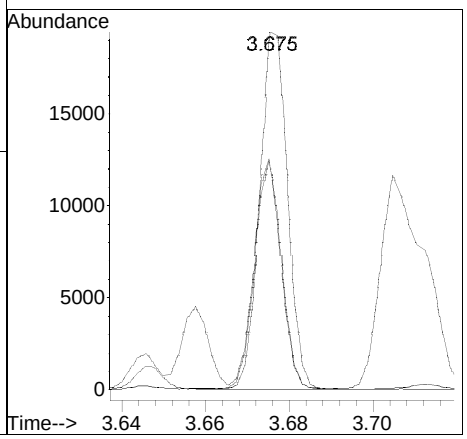


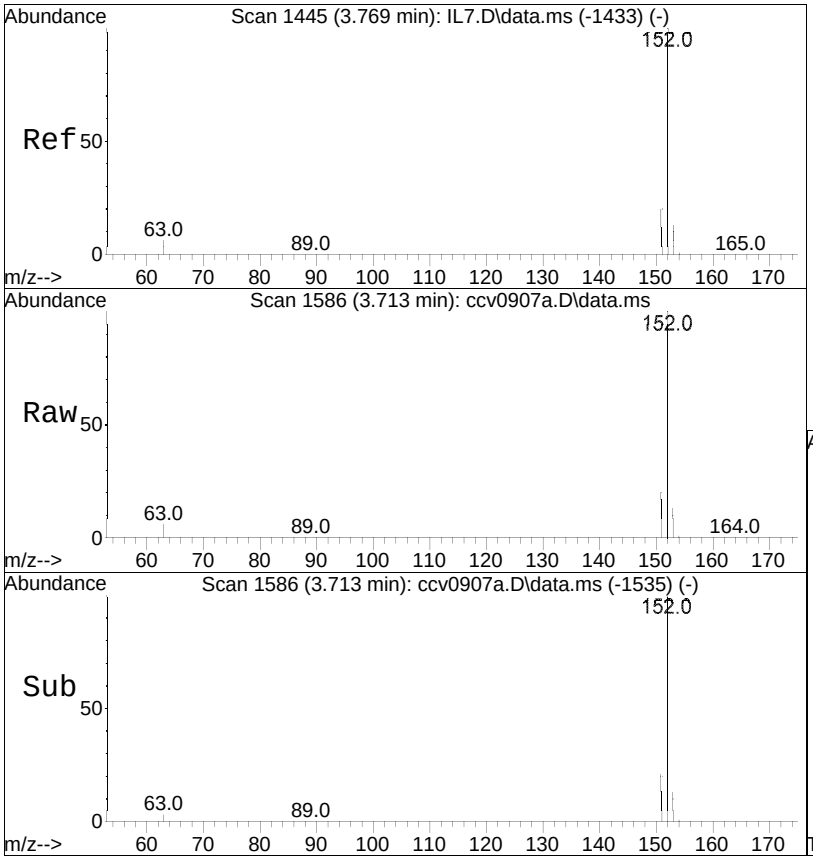


#15
2,6-Dinitrotoluene
Concen: 1240.00 ng/ml
RT: 3.675 min Scan# 1567
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:165 Resp: 8911

Ion	Ratio	Lower	Upper
165	100		
89	61.7	52.8	79.2
63	62.5	50.9	76.3

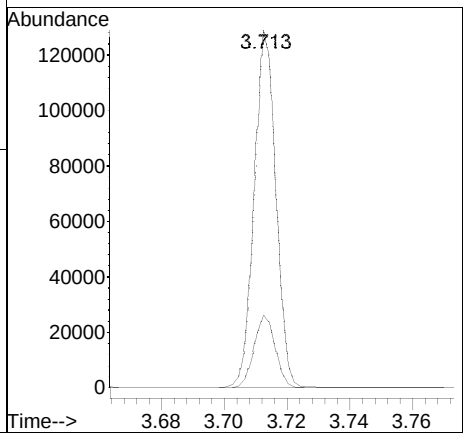


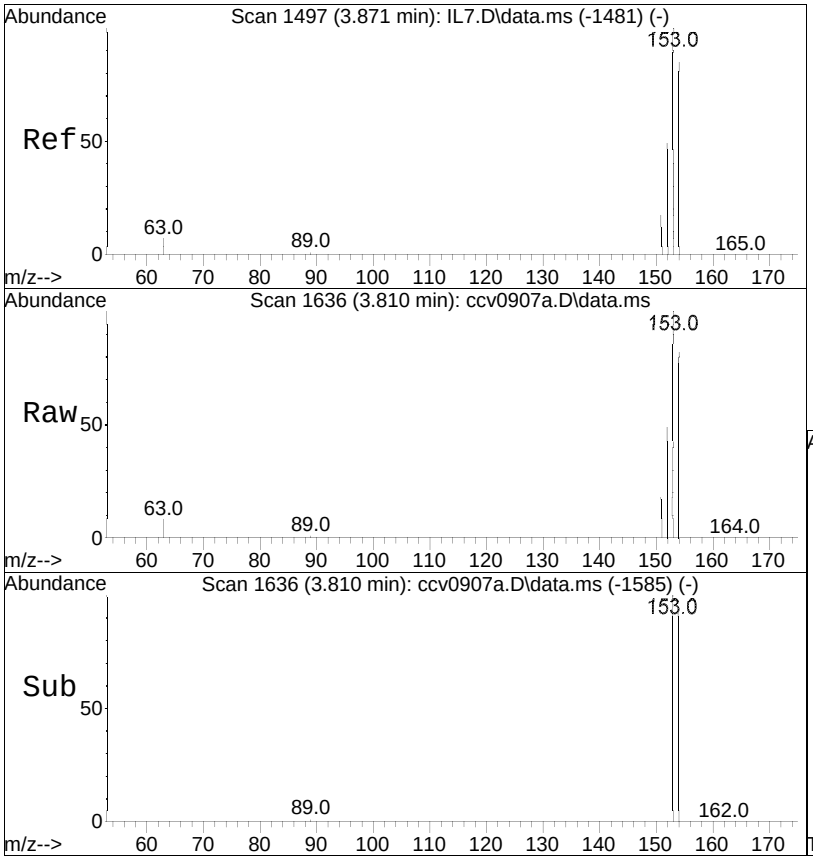


#16
Acenaphthylene
Concen: 1032.00 ng/ml
RT: 3.713 min Scan# 1586
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:152 Resp: 60968

Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.0	24.0

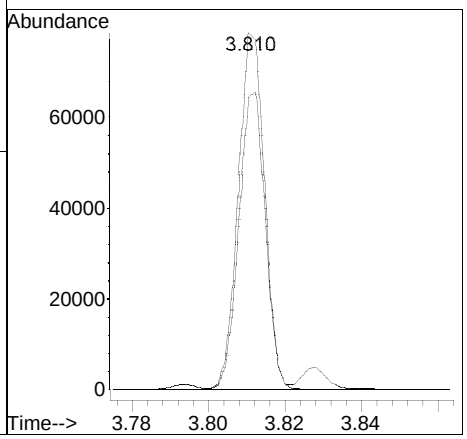


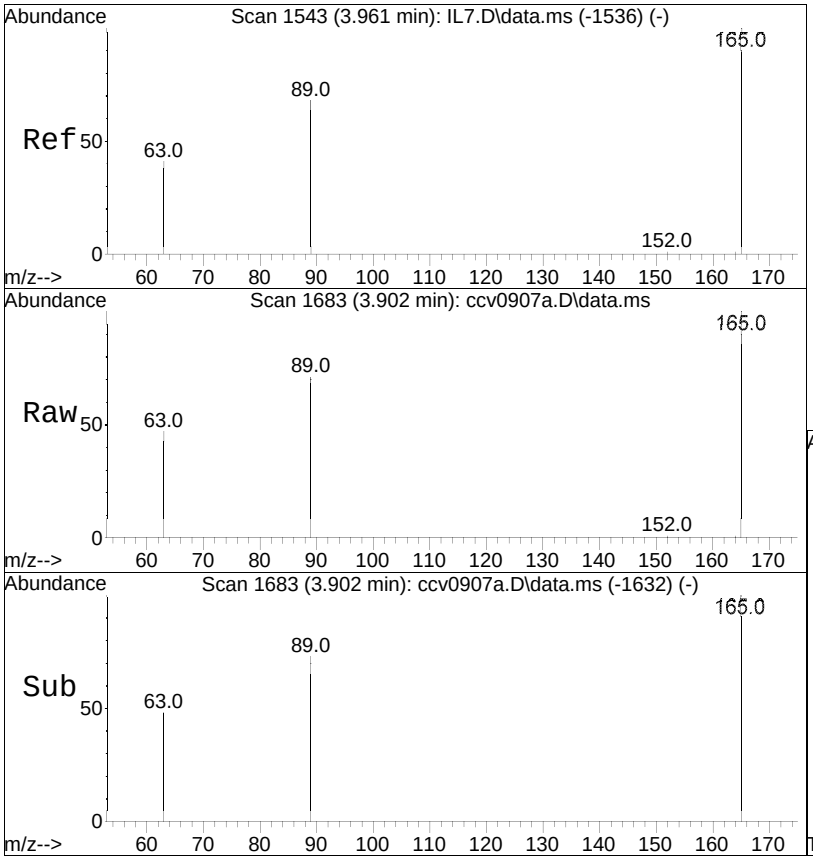


#18
Acenaphthene
Concen: 905.19 ng/ml
RT: 3.810 min Scan# 1636
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:153 Resp: 37291

Ion	Ratio	Lower	Upper
153	100		
154	83.7	66.9	100.3

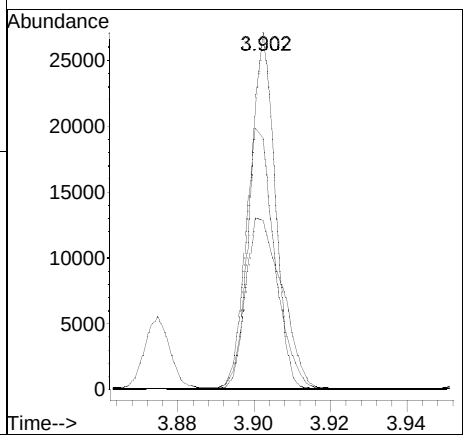


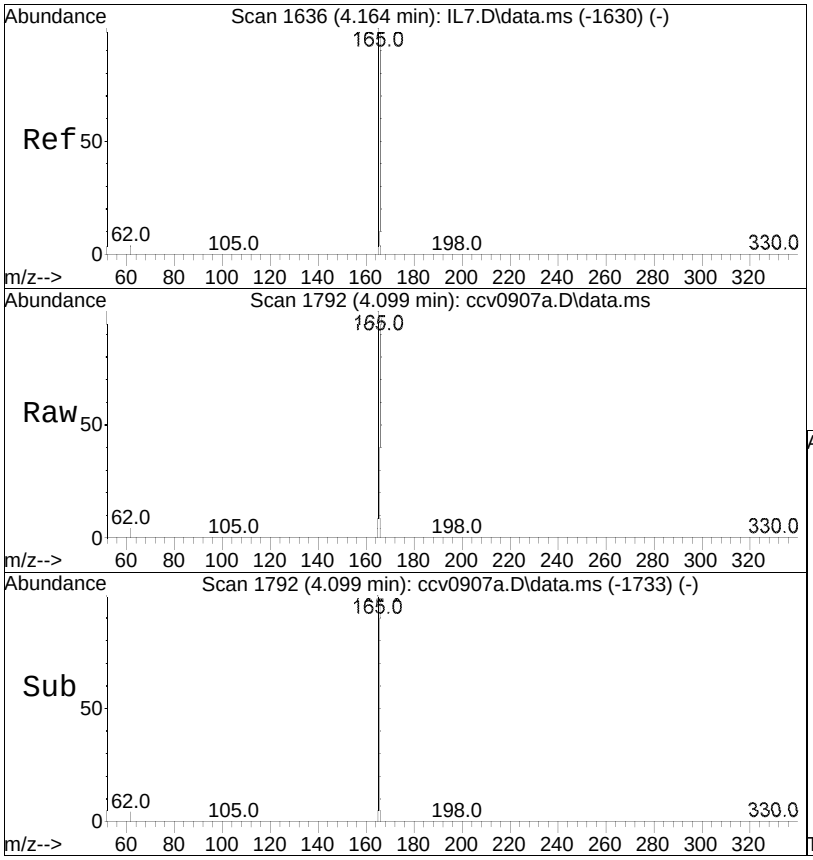


#19
2,4-Dinitrotoluene
Concen: 1261.98 ng/ml
RT: 3.902 min Scan# 1683
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:165 Resp: 11928

Ion	Ratio	Lower	Upper
165	100		
89	88.3	80.1	120.1
63	71.9	38.9	58.3#

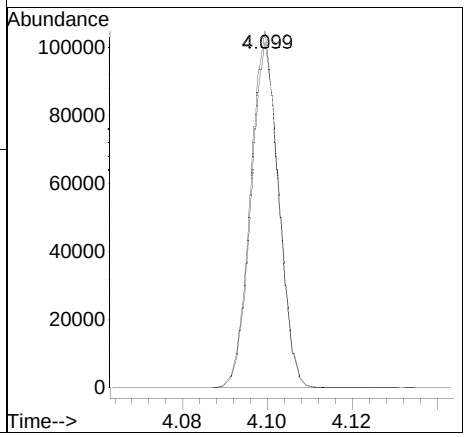


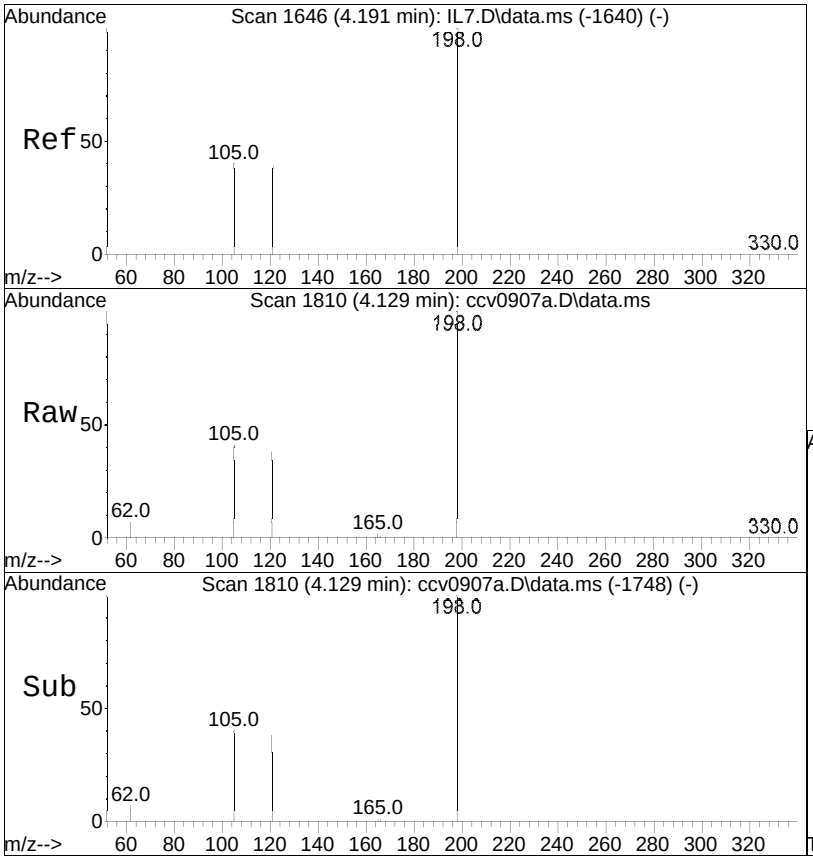


#20
Fluorene
Concen: 974.94 ng/ml
RT: 4.099 min Scan# 1792
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:166 Resp: 46164

Ion	Ratio	Lower	Upper
166	100		
165	102.9	82.9	124.3

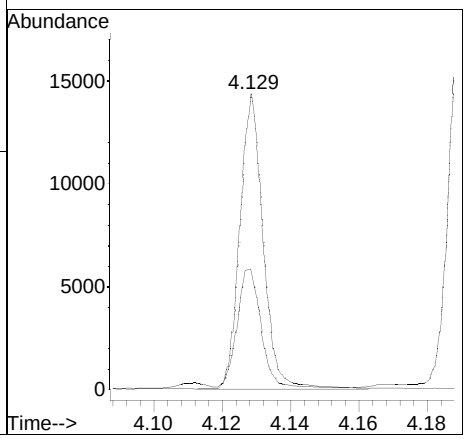


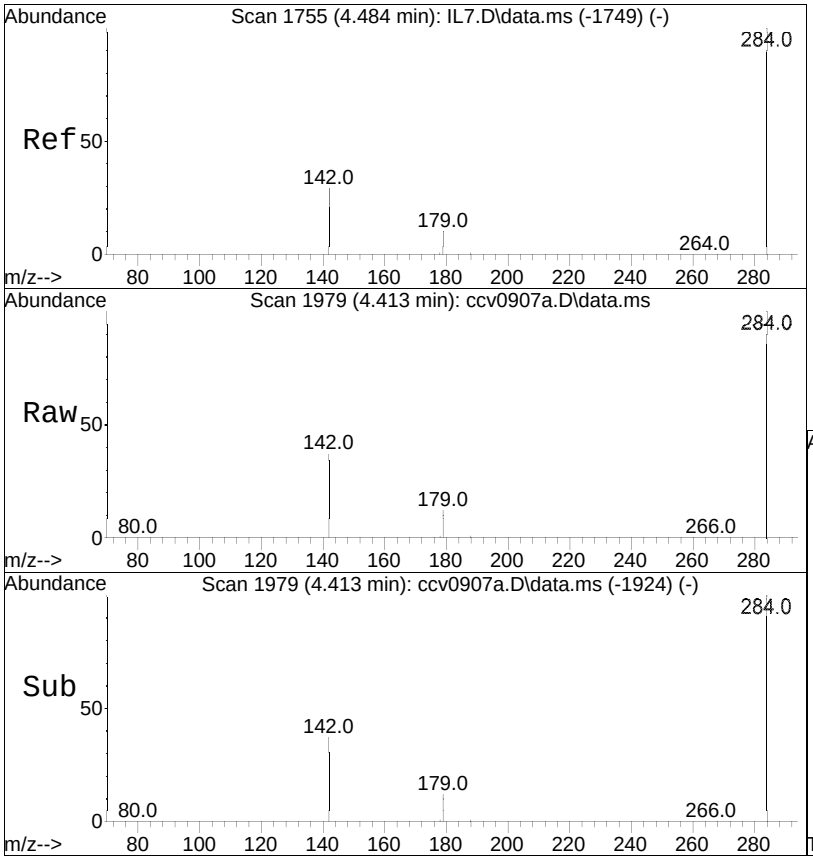


#23
4,6-Dinitro-o-cresol
Concen: 1246.82 ng/ml
RT: 4.129 min Scan# 1810
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:198 Resp: 6777

Ion	Ratio	Lower	Upper
198	100		
105	41.9	32.2	48.4

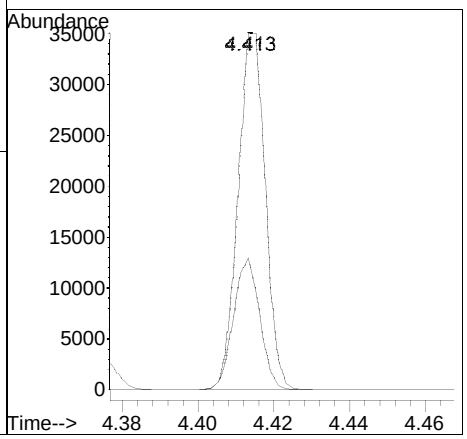


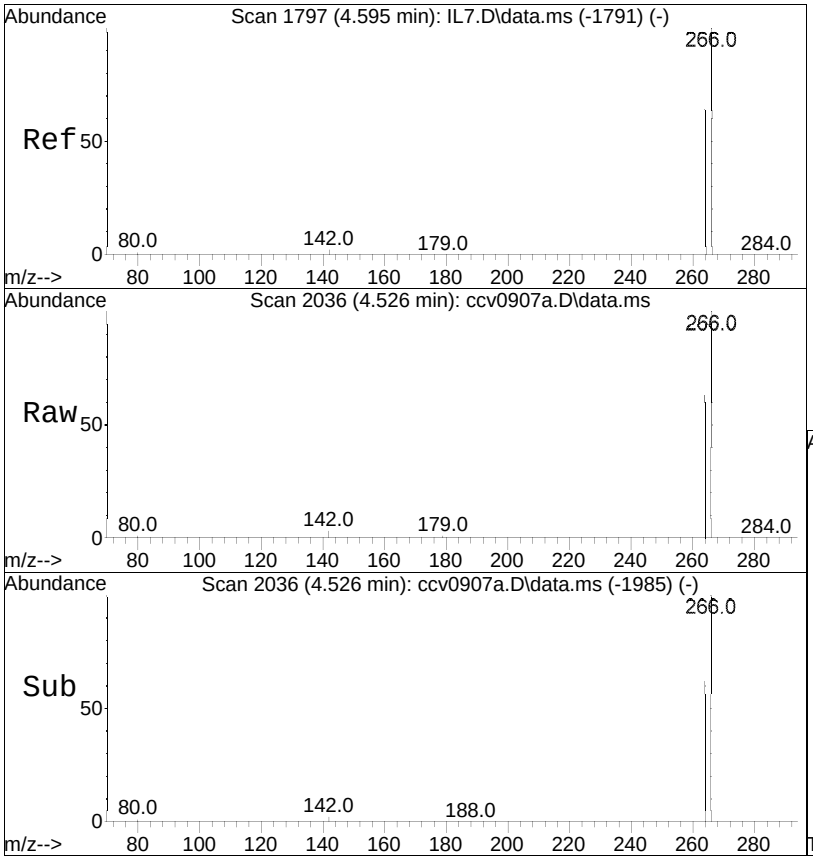


#24
Hexachlorobenzene
Concen: 912.30 ng/ml
RT: 4.413 min Scan# 1979
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:284 Resp: 17338

Ion	Ratio	Lower	Upper
284	100		
142	35.5	26.9	40.3

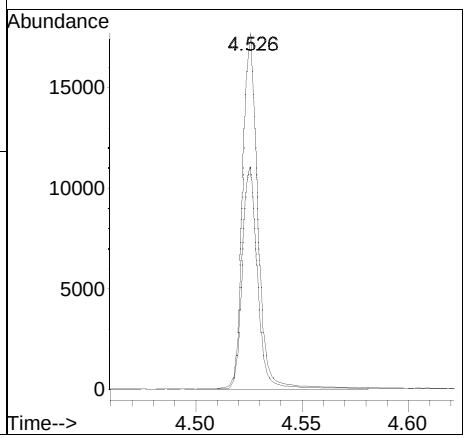


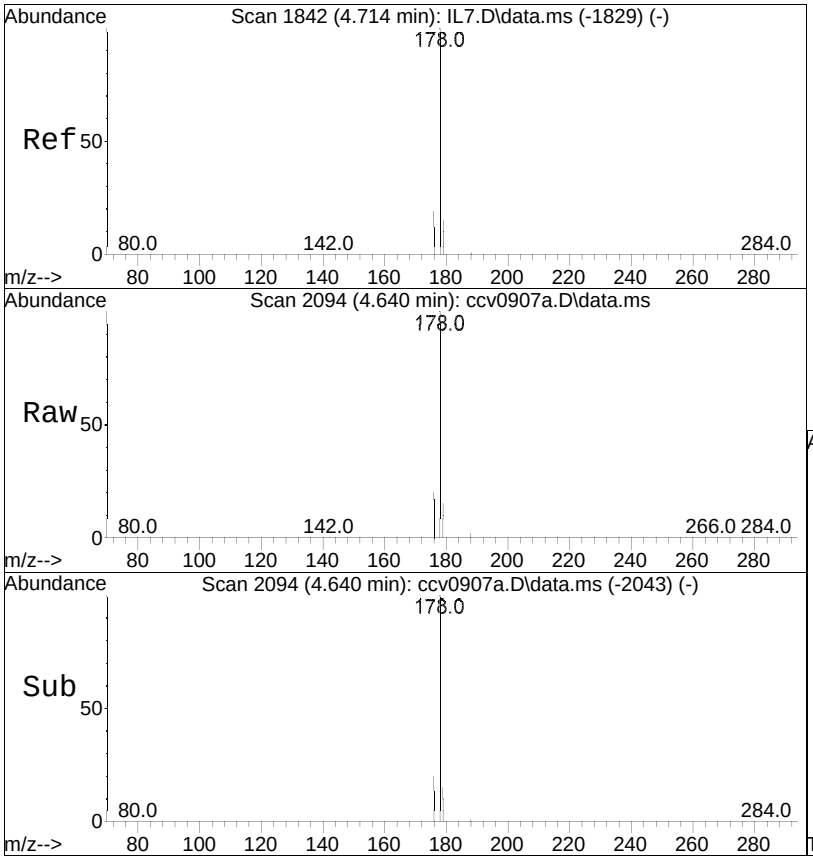


#25
Pentachlorophenol
Concen: 1254.21 ng/ml
RT: 4.526 min Scan# 2036
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:266 Resp: 8719

Ion	Ratio	Lower	Upper
266	100		
264	62.0	50.7	76.1

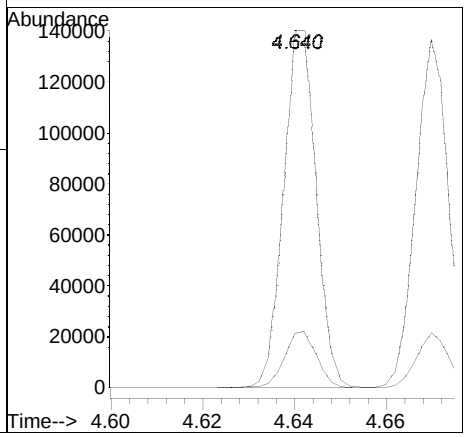


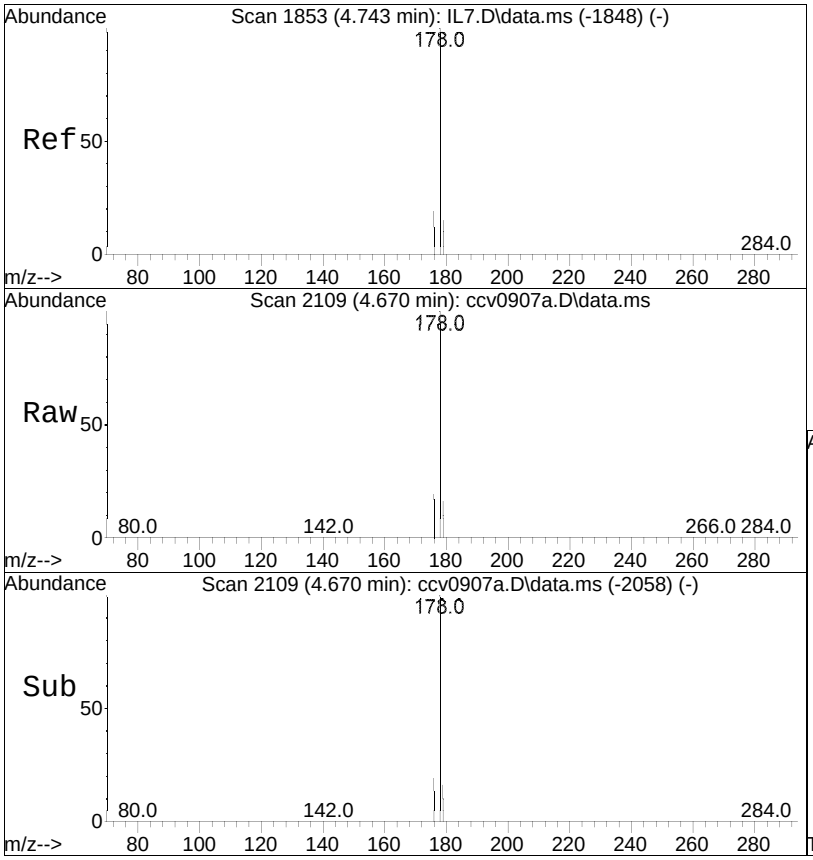


#26
Phenanthrene
Concen: 864.40 ng/ml
RT: 4.640 min Scan# 2094
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:178 Resp: 69258

Ion	Ratio	Lower	Upper
178	100		
179	15.6	12.3	18.5

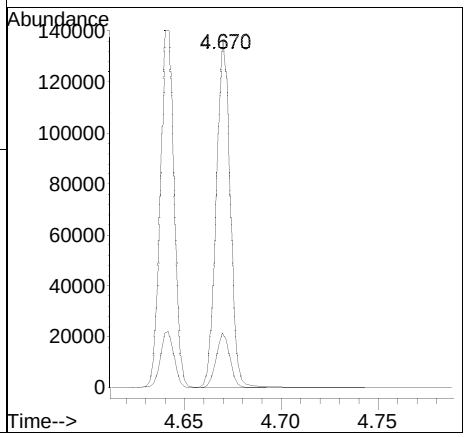


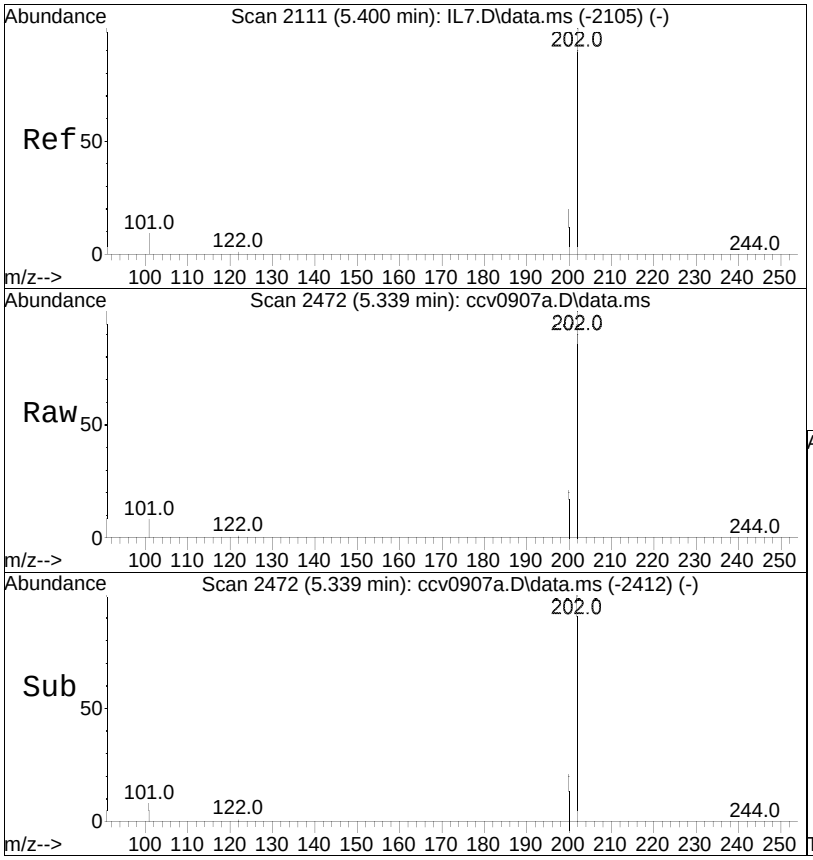


#27
Anthracene
Concen: 920.74 ng/ml
RT: 4.670 min Scan# 2109
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:178 Resp: 68825

Ion	Ratio	Lower	Upper
178	100		
179	15.3	12.2	18.4

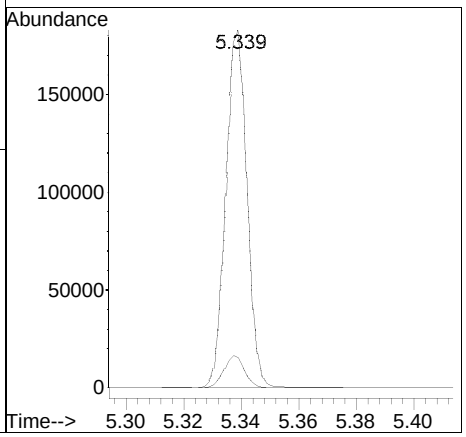


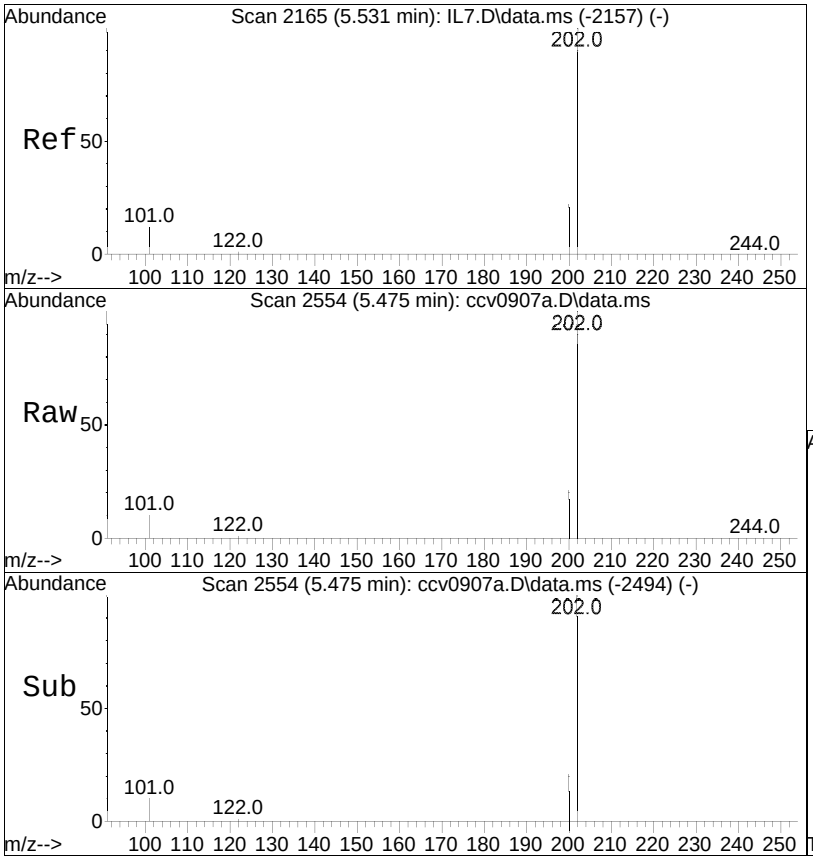


#28
Fluoranthene
Concen: 1001.04 ng/ml
RT: 5.339 min Scan# 2472
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:202 Resp: 91655

Ion	Ratio	Lower	Upper
202	100		
101	8.8	8.3	12.5

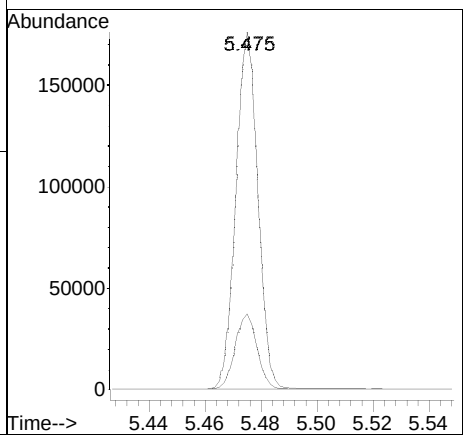


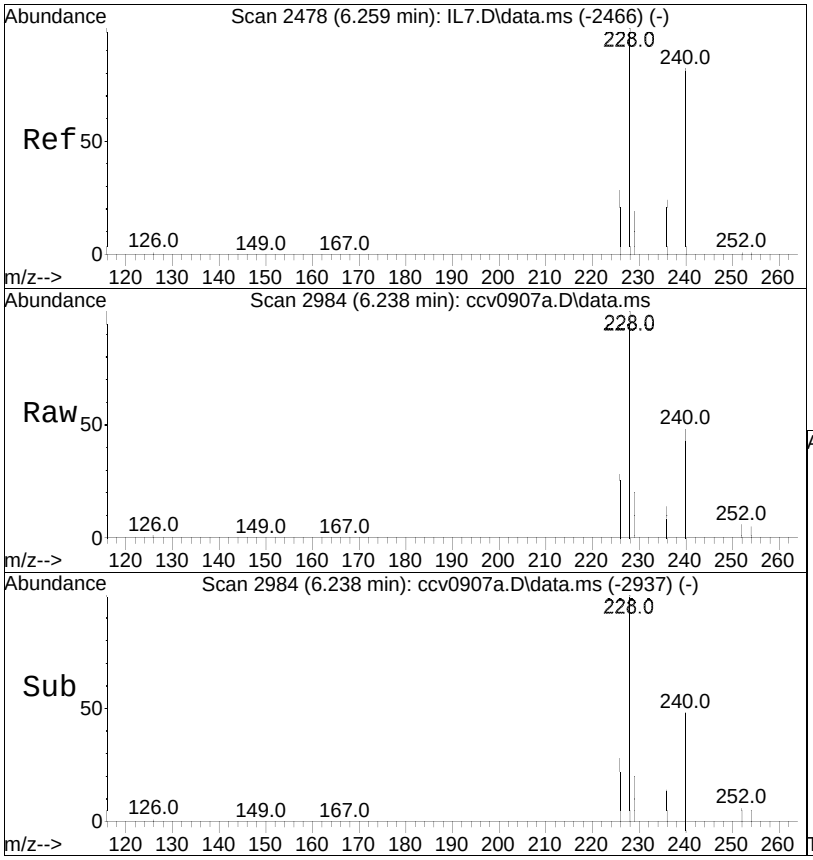


#29
Pyrene
Concen: 999.72 ng/ml
RT: 5.475 min Scan# 2554
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:202 Resp: 94796

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.3	25.9

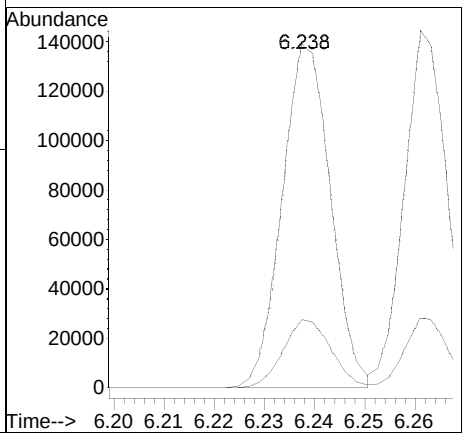


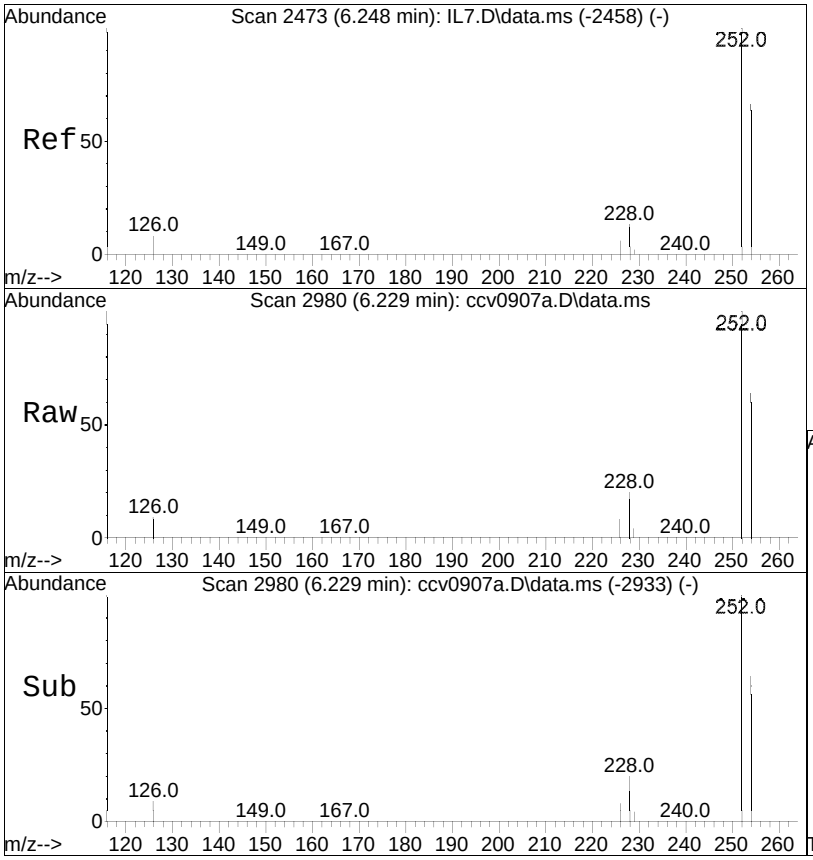


#32
Benzo[a]anthracene
Concen: 947.76 ng/ml
RT: 6.238 min Scan# 2984
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:228 Resp: 92837

Ion	Ratio	Lower	Upper
228	100		
229	19.6	15.6	23.4

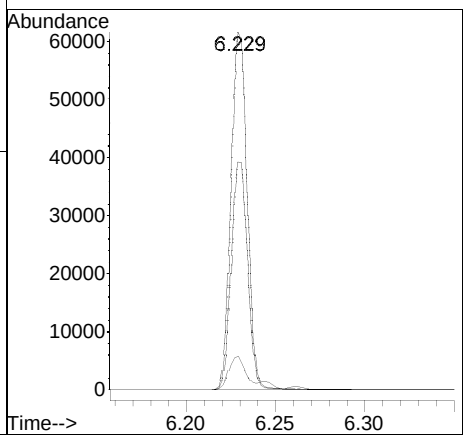


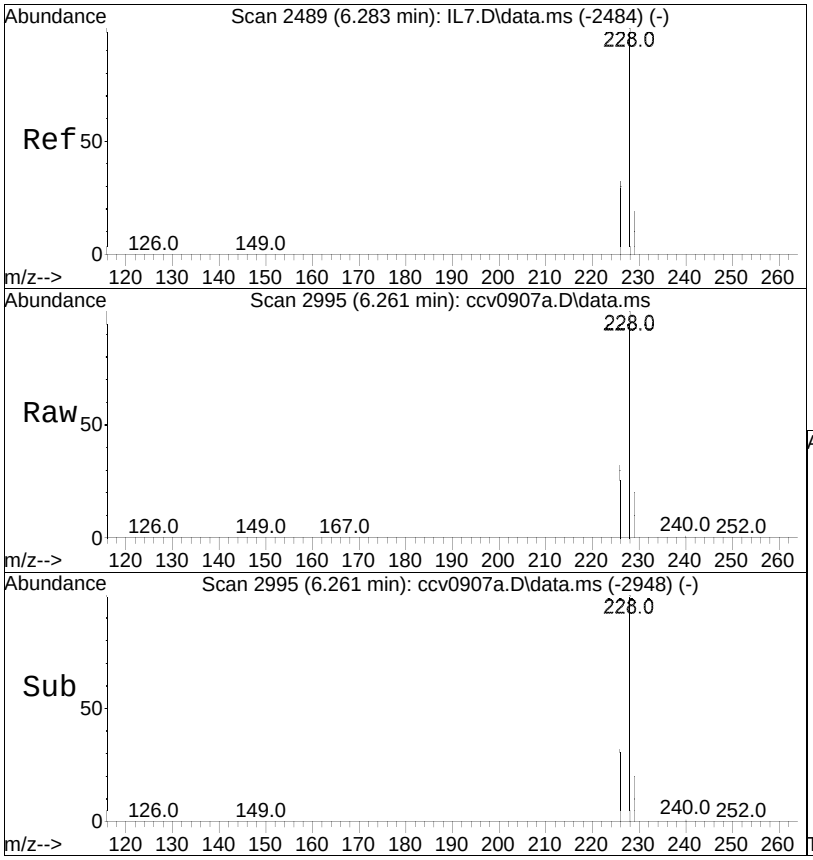


#33
3,3'-Dichlorobenzidine
Concen: 994.76 ng/ml
RT: 6.229 min Scan# 2980
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:252 Resp: 38033

Ion	Ratio	Lower	Upper
252	100		
126	10.0	7.7	11.5
254	64.3	52.0	78.0

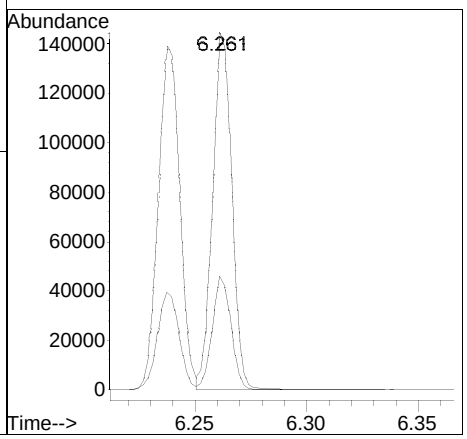


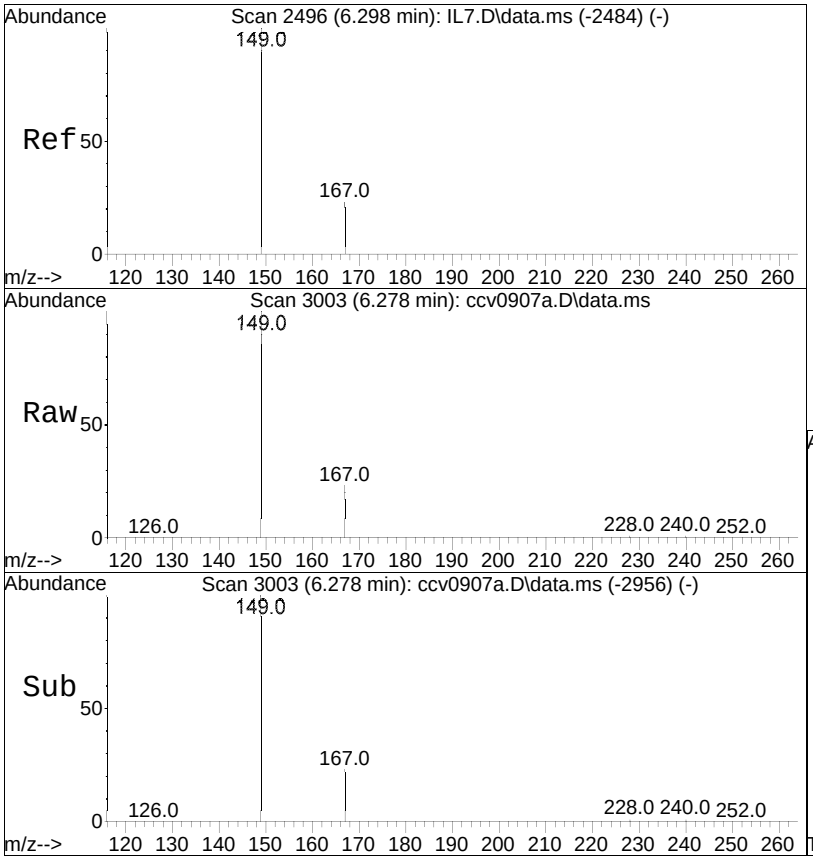


#34
Chrysene
Concen: 903.29 ng/ml
RT: 6.261 min Scan# 2995
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:228 Resp: 86036

Ion	Ratio	Lower	Upper
228	100		
226	31.2	24.5	36.7

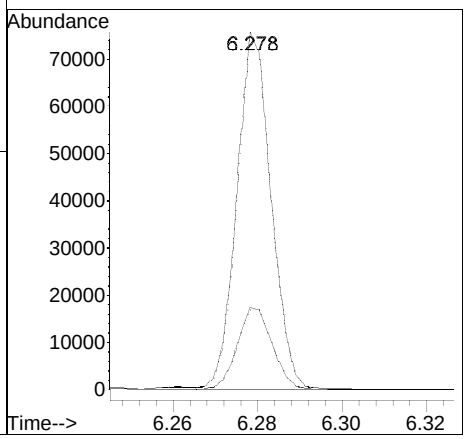


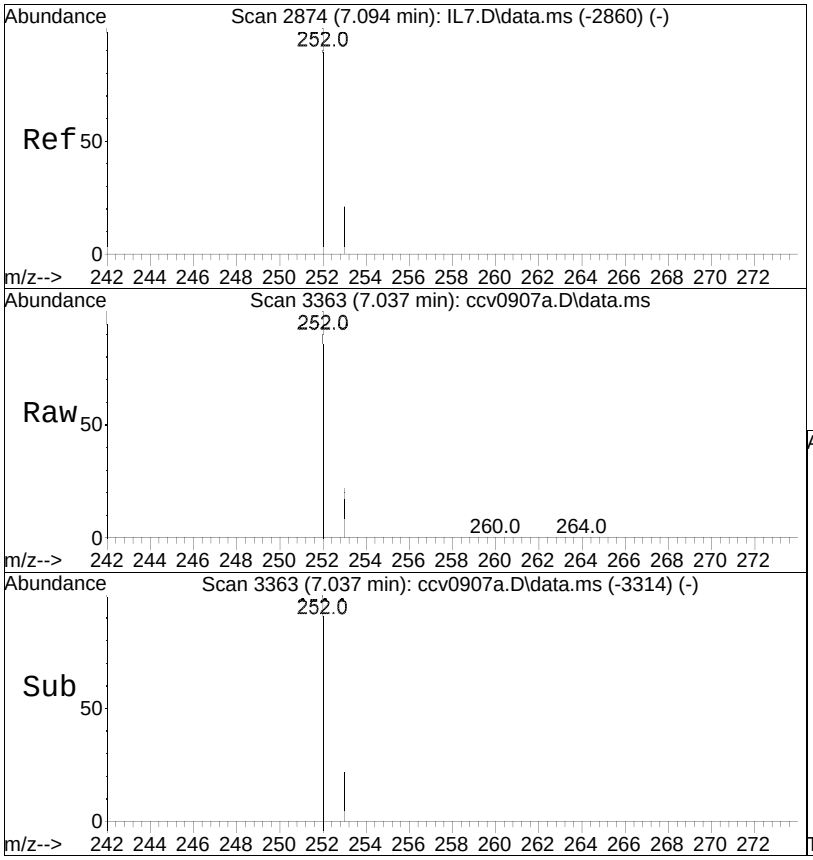


#35
Bis(2-ethylhexyl)phthalate
Concen: 951.16 ng/ml
RT: 6.278 min Scan# 3003
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:149 Resp: 41938

Ion	Ratio	Lower	Upper
149	100		
167	23.5	18.5	27.7

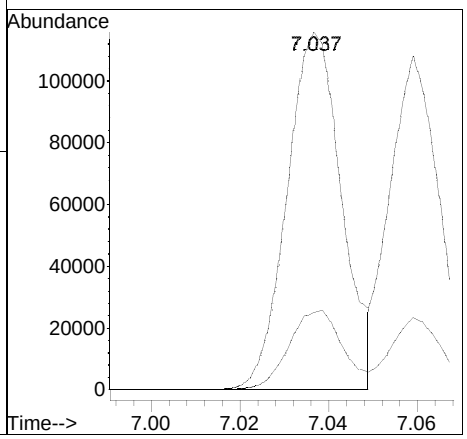


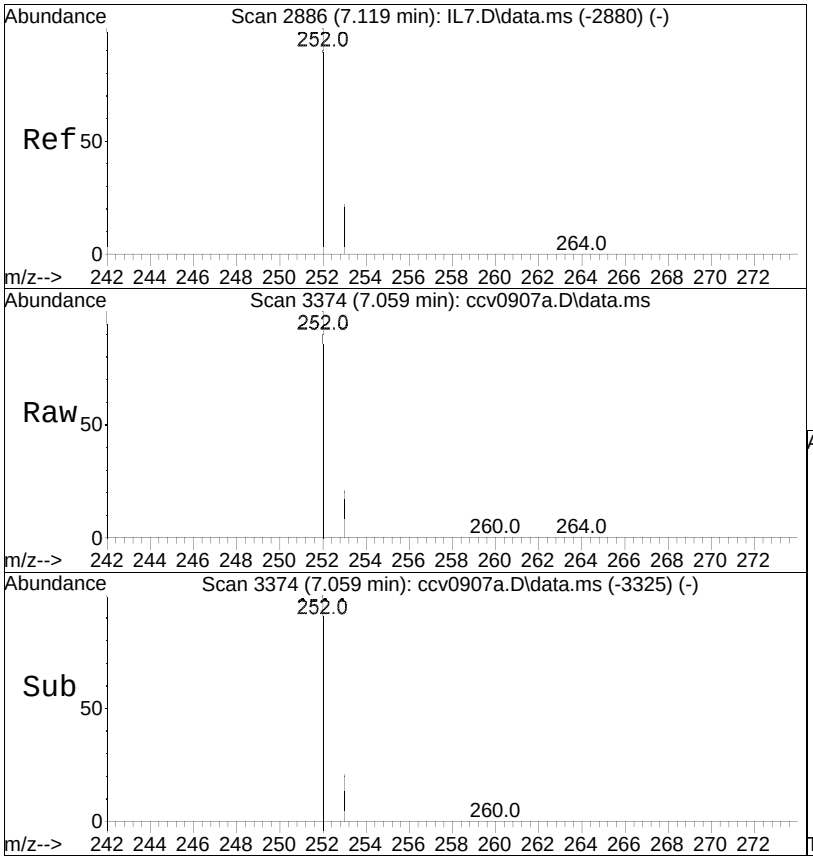


#37
Benzo[b]fluoranthene
Concen: 1066.15 ng/ml
RT: 7.037 min Scan# 3363
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:252 Resp: 99145

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.3	25.9

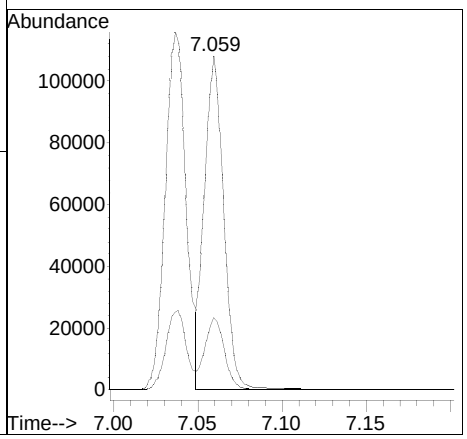


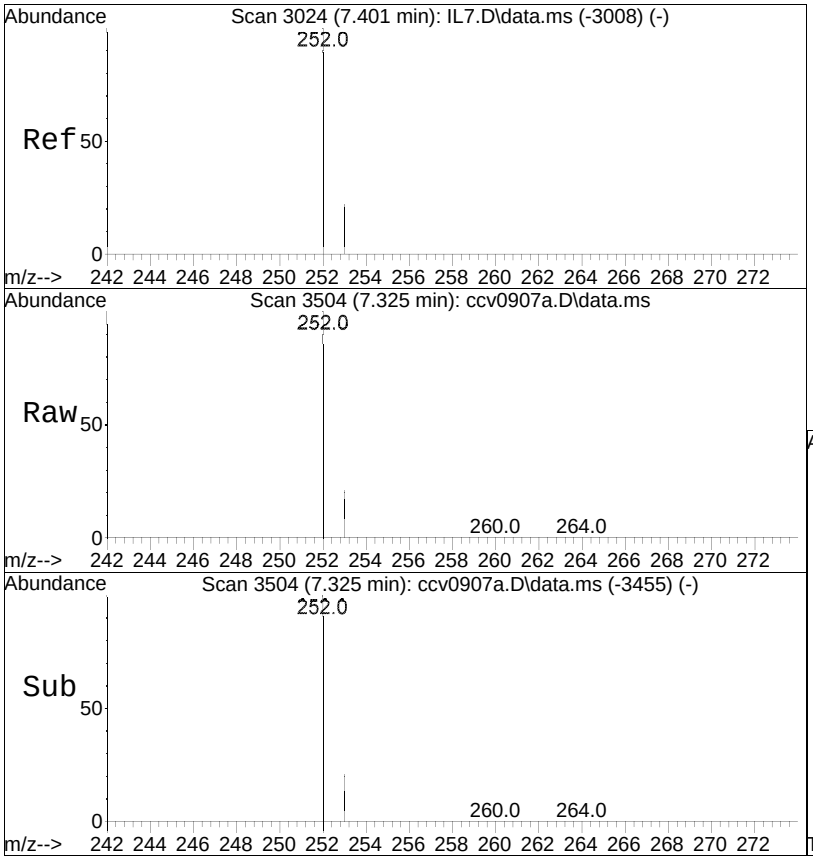


#38
Benzo[k]fluoranthene
Concen: 1027.17 ng/ml
RT: 7.059 min Scan# 3374
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:252 Resp: 85660

Ion	Ratio	Lower	Upper
252	100		
253	21.8	17.4	26.2

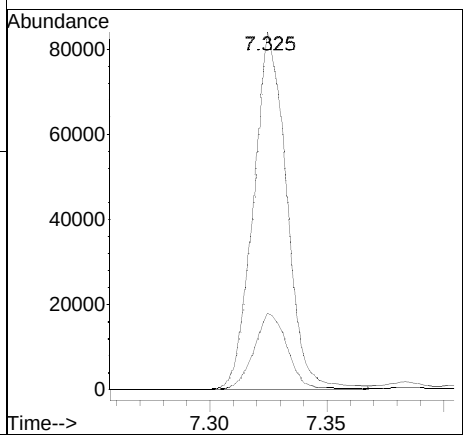


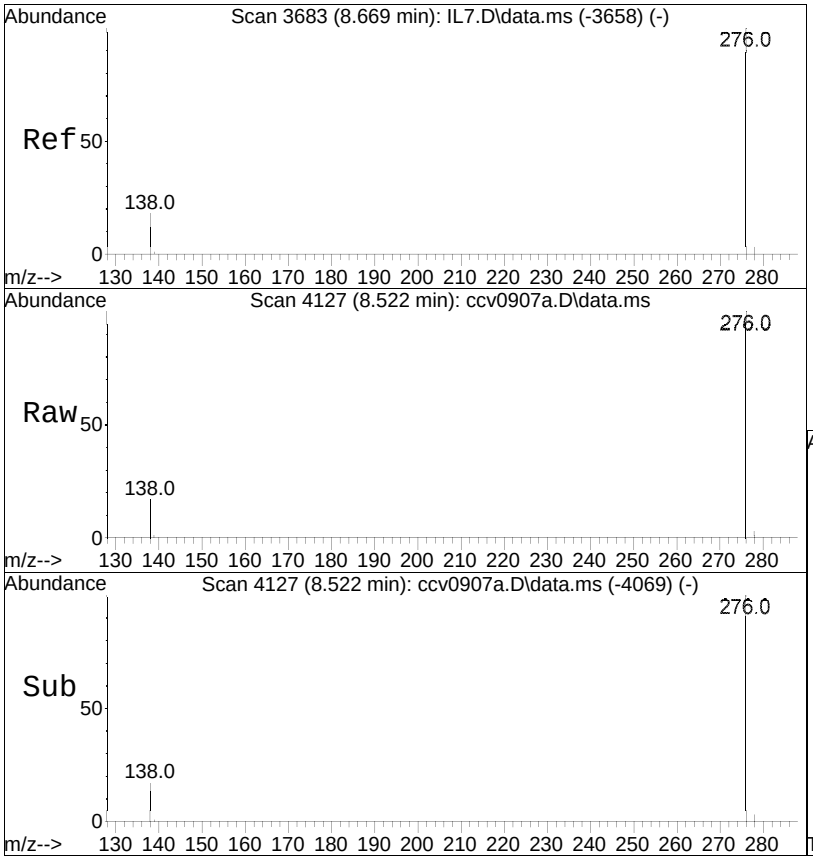


#39
Benzo[a]pyrene
Concen: 1088.61 ng/ml
RT: 7.325 min Scan# 3504
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:252 Resp: 81938

Ion	Ratio	Lower	Upper
252	100		
253	21.7	17.4	26.0

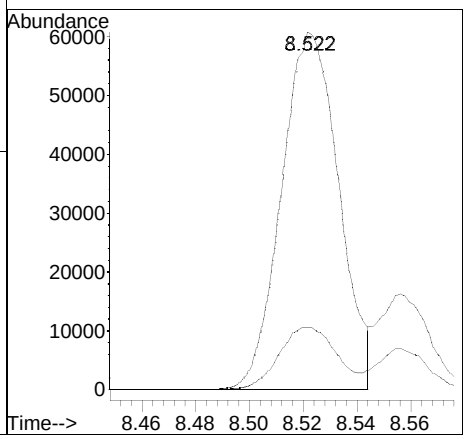


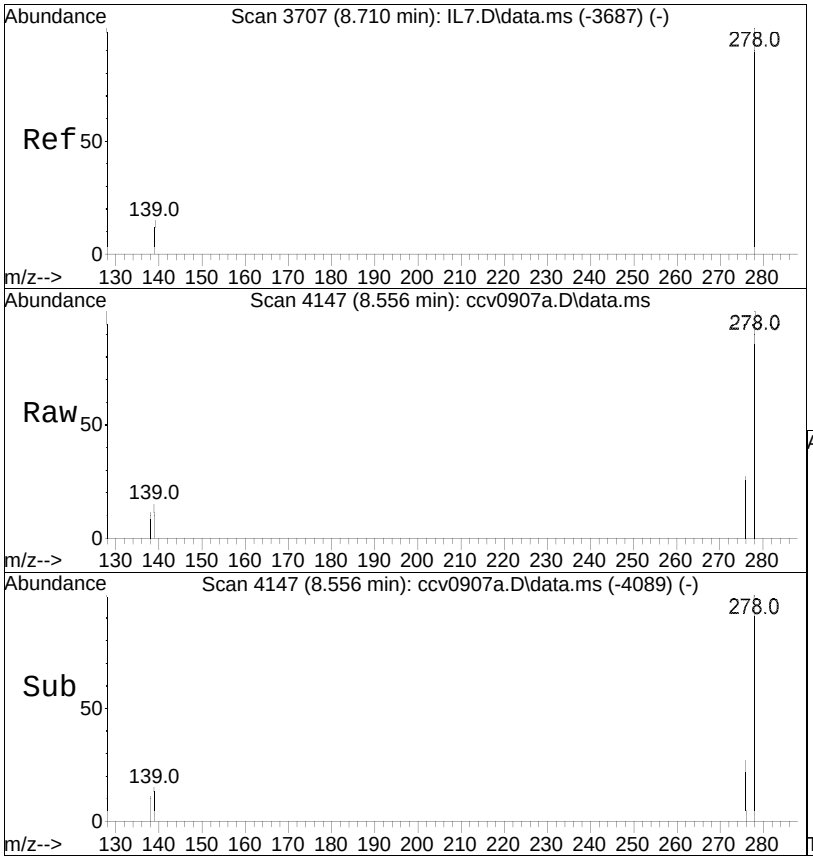


#40
Indeno[1,2,3-cd]pyrene
Concen: 1032.30 ng/ml
RT: 8.522 min Scan# 4127
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:276 Resp: 89112

Ion	Ratio	Lower	Upper
276	100		
138	17.8	14.8	22.2

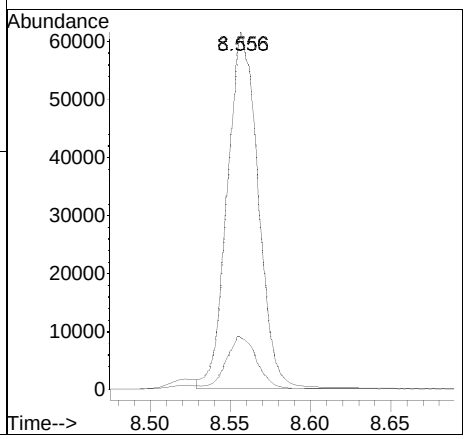


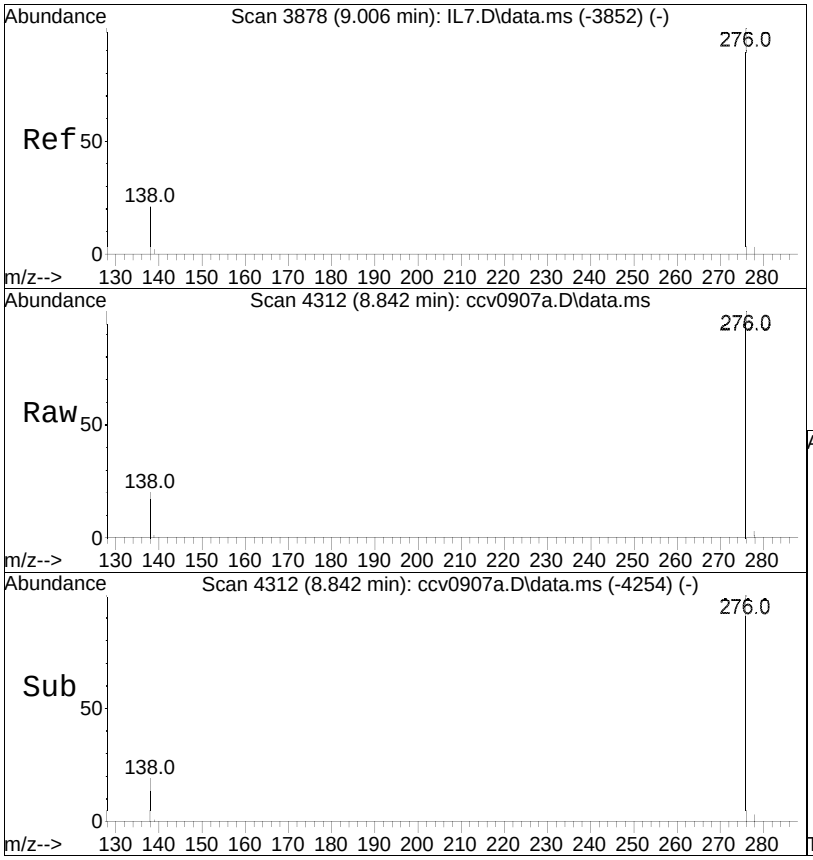


#41
Dibenzo[a,h]anthracene
Concen: 992.80 ng/ml
RT: 8.556 min Scan# 4147
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:278 Resp: 81669

Ion	Ratio	Lower	Upper
278	100		
139	14.6	12.2	18.4

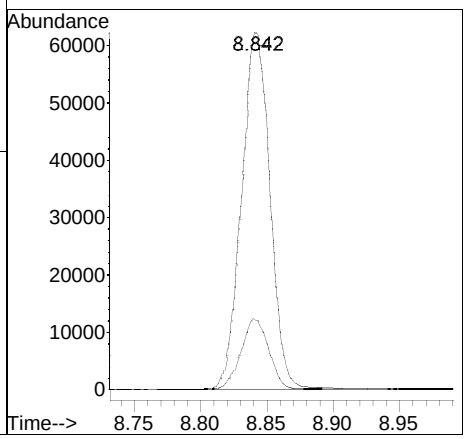




#42
Benzo[g,h,i]perylene
Concen: 999.35 ng/ml
RT: 8.842 min Scan# 4312
Delta R.T. 0.000 min
Lab File: ccv0907a.D
Acq: 07 Sep 2023 10:41 am

Tgt Ion:276 Resp: 91569

Ion	Ratio	Lower	Upper
276	100		
138	19.5	16.8	25.2



Manual Integration Report

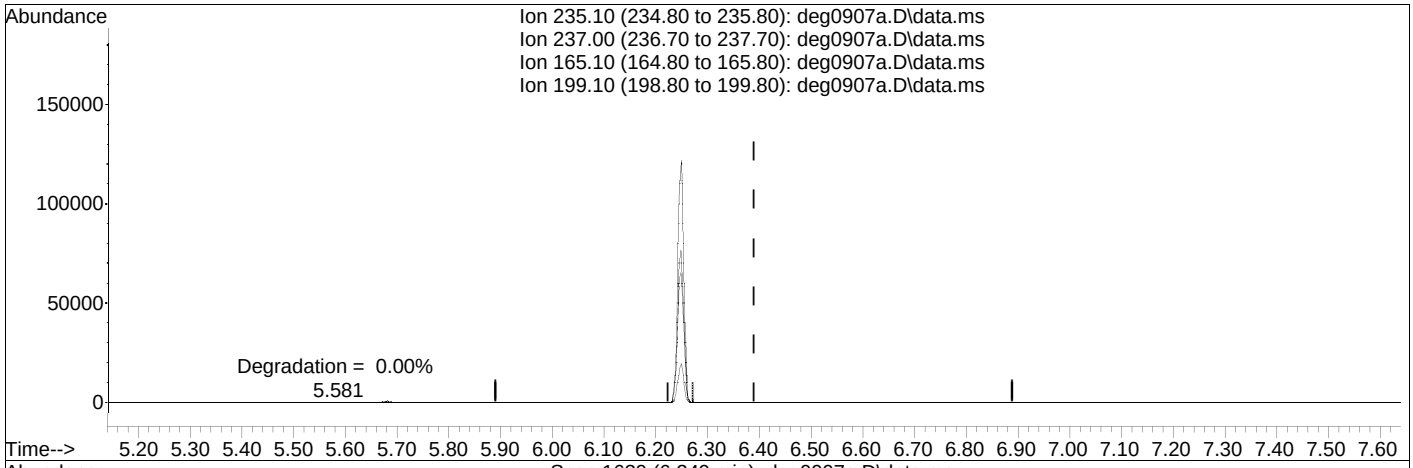
Data Path	: I:\8270SIM\sv119\230907a	LVQMethod	: SIM-LVI_230306_sv119.M
Data File	: ccv0907a.D	Operator	: sv119:ah
Date Inj'd	: 9/7/2023 10:41 am	Instrument	: SV119
Sample	: WG1824714-3,32,, ICV 10193	Quant Date	: 9/7/2023 11:05 am

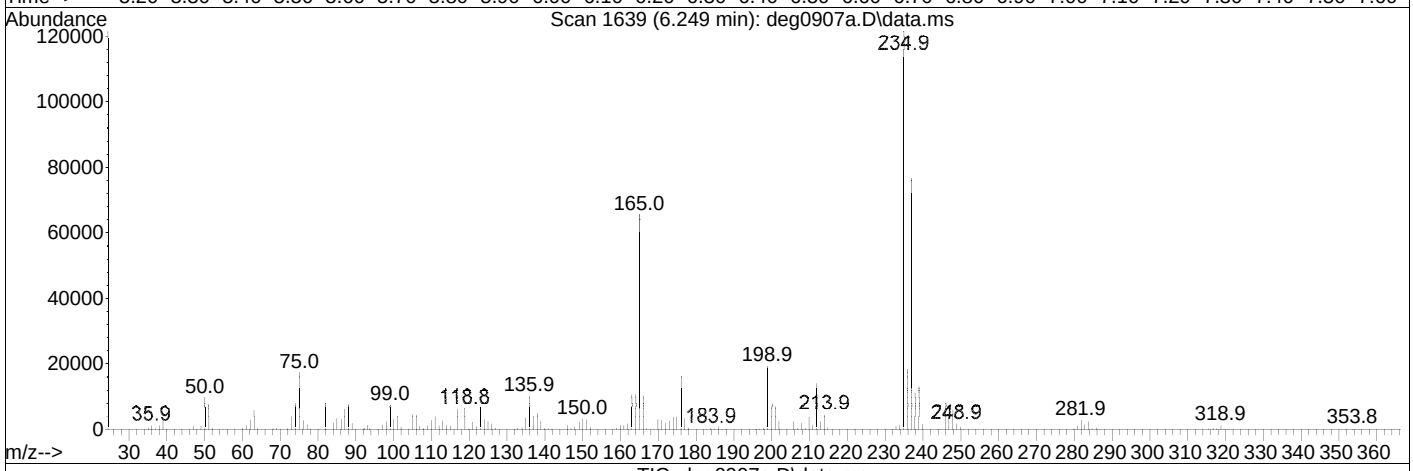
There are no manual integrations or false positives in this file.

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : deg0907a.D
Acq On : 07 Sep 2023 10:24 am
Operator : sv119:ah
Sample : WG1824714-2,32,,dftppsv119
Misc : WG1824714,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 07 10:38:34 2023
Quant Method : I:\8270SIM\sv119\230907aLVI\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:35:31 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0907a.D\data.ms

(6) ddt (T)

6.249min (-0.141) 15.33

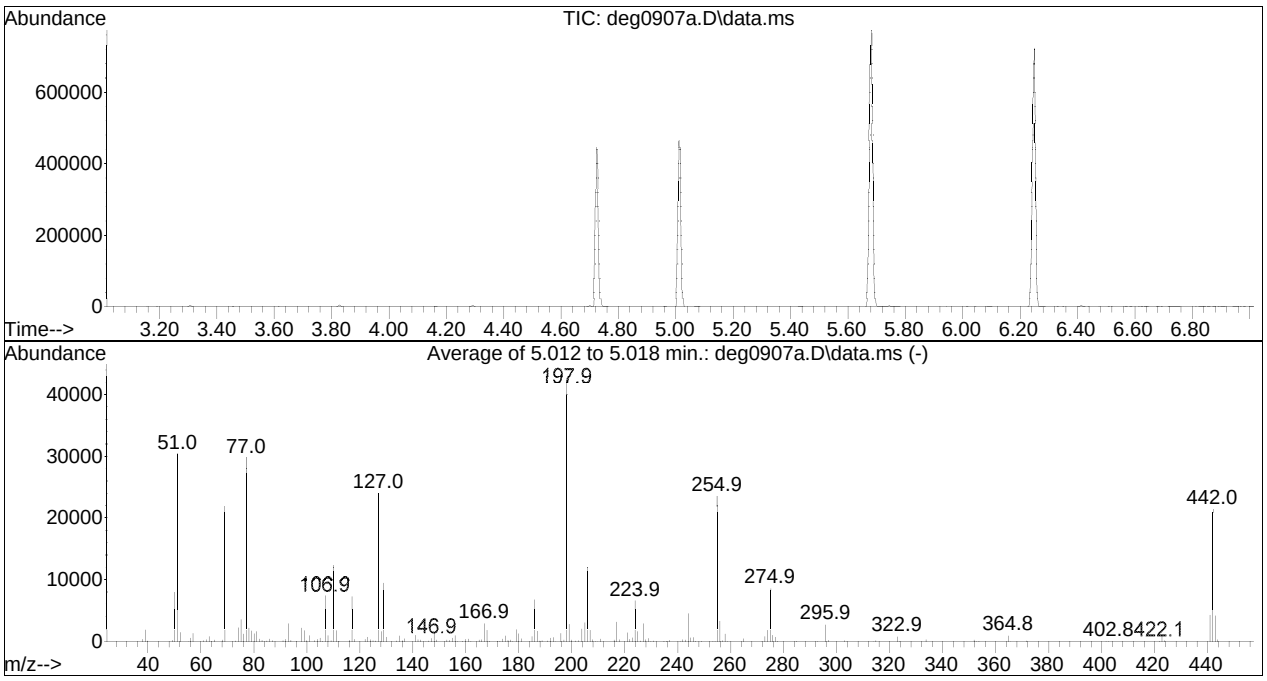
response 93455

Ion	Exp%	Act%
235.10	100.00	100.00
237.00	65.60	63.63
165.10	53.30	55.52
199.10	17.10	15.74

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : deg0907a.D
Acq On : 07 Sep 2023 10:24 am
Operator : sv119:ah
Sample : WG1824714-1,32,,dftppsv119
Misc : WG1824714,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270SIM\sv119\230907aLVI\SIM-LVI_230306_sv119.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Thu Sep 07 11:05:11 2023



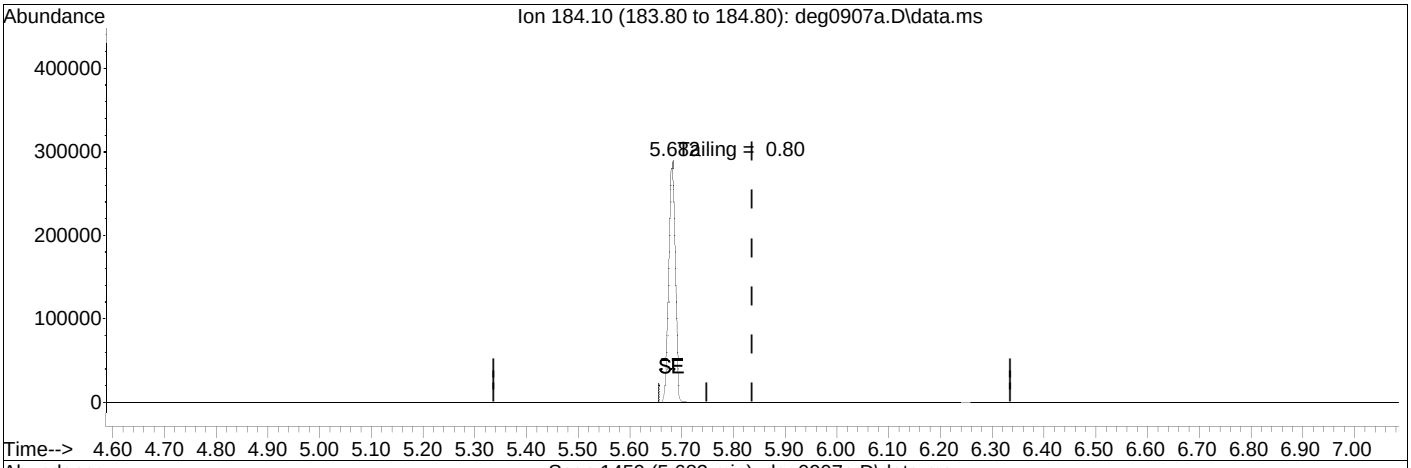
Spectrum Information: Average of 5.012 to 5.018 min.

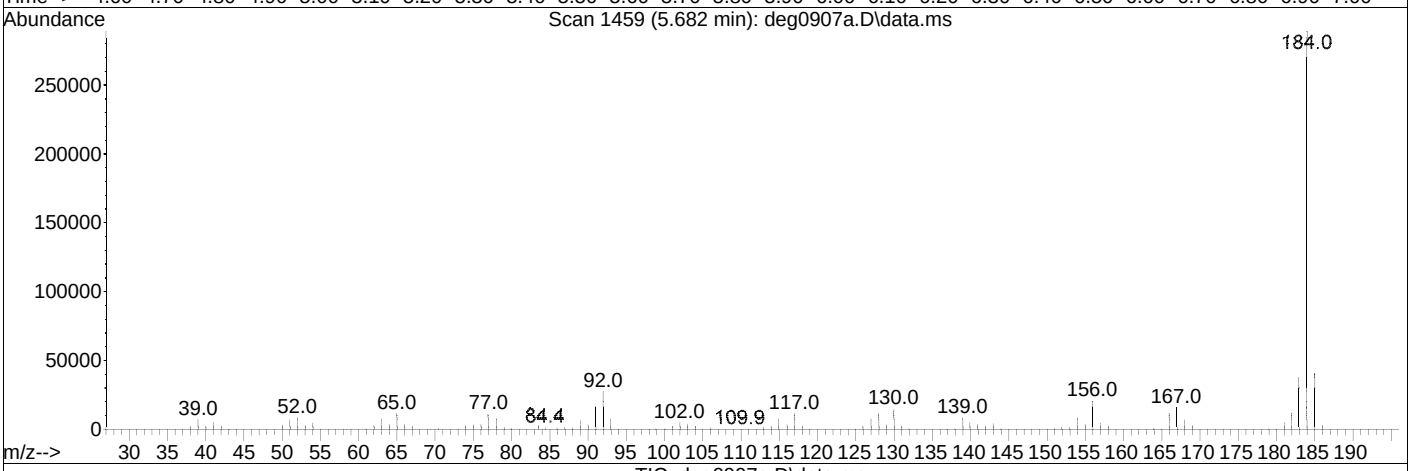
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	71.2	30435	PASS
68	69	0.00	2	1.8	387	PASS
69	69	100	100	100.0	21918	PASS
70	69	0.00	2	0.0	0	PASS
127	198	10	80	56.2	24040	PASS
197	198	0.00	2	0.8	361	PASS
198	198	100	100	100.0	42739	PASS
199	198	5	9	6.6	2834	PASS
275	198	10	60	20.1	8599	PASS
365	198	1	100	2.3	988	PASS
441	442	0.01	24	19.8	4238	PASS
442	198	50	100	50.2	21453	PASS
443	442	15	24	19.3	4138	PASS

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : deg0907a.D
Acq On : 07 Sep 2023 10:24 am
Operator : sv119:ah
Sample : WG1824714-4,32,,dftppsv119
Misc : WG1824714,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 07 10:38:34 2023
Quant Method : I:\8270SIM\sv119\230907aLVI\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:35:31 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0907a.D\data.ms

(3) benzidine (T)

5.682min (-0.154) 23.41

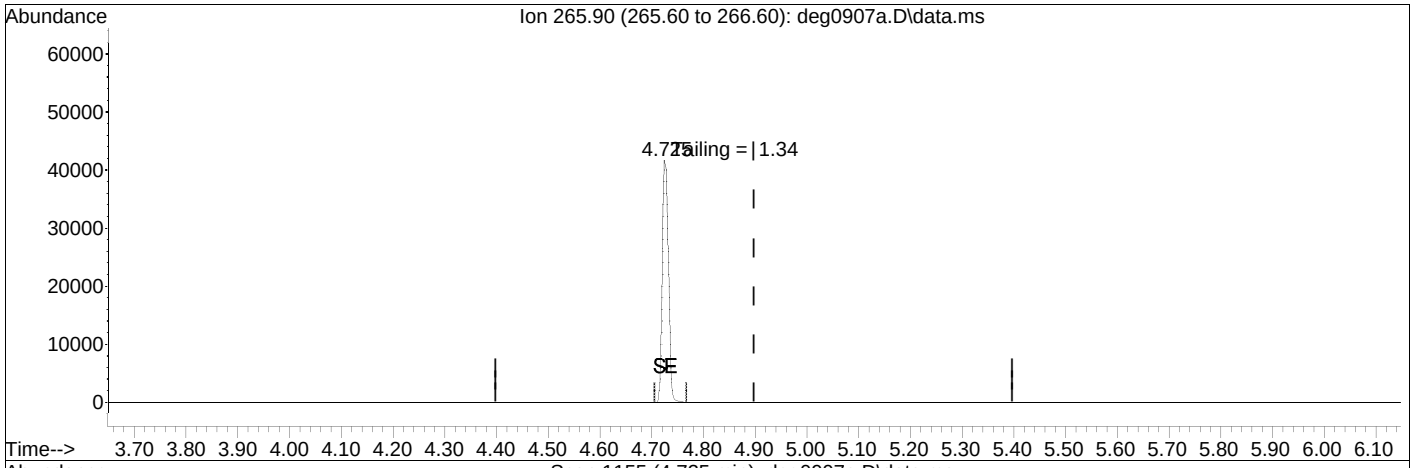
response 238321

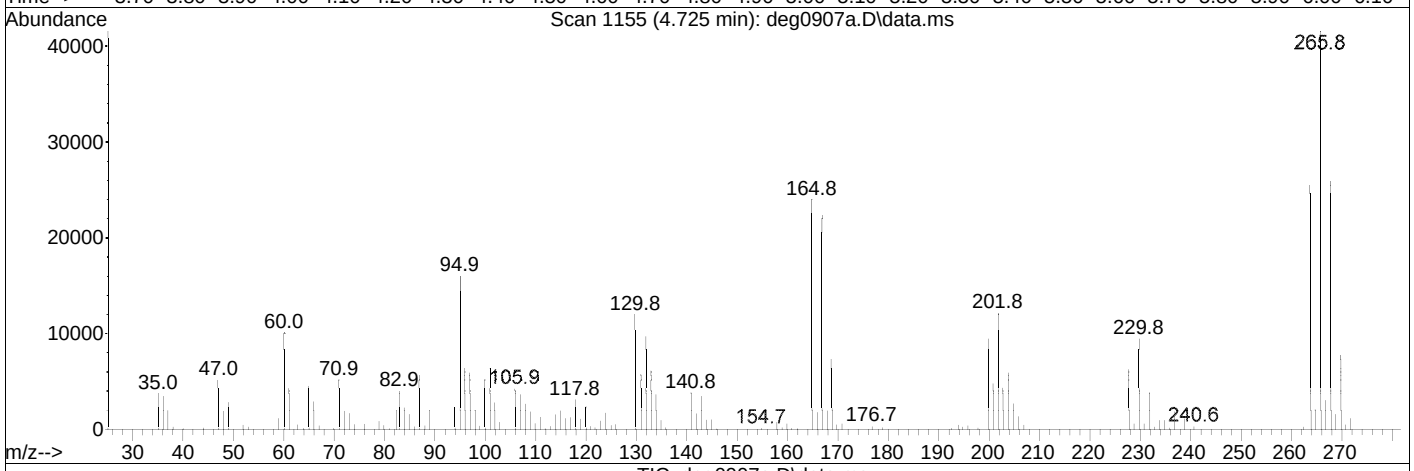
Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : deg0907a.D
Acq On : 07 Sep 2023 10:24 am
Operator : sv119:ah
Sample : WG1824714-5,32,,dftppsv119
Misc : WG1824714,,ical19785
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 07 10:38:34 2023
Quant Method : I:\8270SIM\sv119\230907aLVI\dftppsv119.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:35:31 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0907a.D\data.ms

(1) pentachlorophenol (T)

4.725min (-0.173) 15.04

response 31592

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\SV128\230909\
Data File : ccv0909.D
Acq On : 09 Sep 2023 07:57 am
Operator : SV128:jjw
Sample : wg1825552-3,32,,ICV 10193 (0905)
Misc : wg1825552,,ical20340
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 09 08:14:31 2023
Quant Method : I:\8270SIM\SV128\230909\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 09 08:13:37 2023
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
1	i	1,4-Dichlorobenzene-d4	1.000	1.000	0.0	84	0.00
2	s	2-Fluorophenol	1.022	1.142	-11.7	91	0.00
3	s	Phenol-d6	1.251	1.348	-7.8	87	0.00
4	T	Bis(2-chloroethyl)ether	1.078	1.127	-4.5	84	0.00
5	T	n-nitrosodi-n-propylamine	0.809	0.797	1.5	79	0.00
6	t	Hexachloroethane	0.481	0.514	-6.9	87	0.00
7	s	Nitrobenzene-d5	1.060	1.159	-9.3	86	0.00
8	i	Naphthalene-d8	1.000	1.000	0.0	78	0.00
9	t	Naphthalene	0.977	1.062	-8.7	82	0.00
10	t	Hexachlorobutadiene	0.184	0.199	-8.2	81	0.00
11	t	2-Methylnaphthalene	0.652	0.672	-3.1	77	0.00
12	t	1-Methylnaphthalene	0.604	0.663	-9.8	82	0.00
13	s	2-Fluorobiphenyl	0.820	0.826	-0.7	75	0.00
14	t	2-Chloronaphthalene	0.676	0.725	-7.2	80	0.00
15	t	2,6-Dinitrotoluene	0.135	0.148	-9.6	90	0.00
16	t	Acenaphthylene	1.077	1.144	-6.2	78	0.00
17	i	Acenaphthene-d10	1.000	1.000	0.0	73	0.00
18	t	Acenaphthene	1.267	1.409	-11.2	77	0.00
19	t	2,4-Dinitrotoluene	0.304	0.362	-19.1	90	0.00
20	t	Fluorene	1.383	1.555	-12.4	77	0.00
21	s	2,4,6-Tribromophenol	0.168	0.222	-32.1#	91	0.00
22	i	Phenanthrene-d10	1.000	1.000	0.0	71	0.00
23	T	4,6-Dinitro-o-cresol	*1000.000	1046.248	-4.6	87	0.00
24	t	Hexachlorobenzene	0.215	0.238	-10.7	75	0.00
25	t	Pentachlorophenol	*1000.000	884.075	11.6	72	0.00
26	t	Phenanthrene	0.997	1.124	-12.7	78	0.00
27	t	Anthracene	0.971	1.109	-14.2	77	0.00
28	t	Fluoranthene	1.158	1.321	-14.1	78	0.00
29	t	Pyrene	1.199	1.389	-15.8	78	0.00
30	s	4-Terphenyl-d14	0.845	0.898	-6.3	71	0.00
31	i	Chrysene-d12	1.000	1.000	0.0	74	0.00
32	t	Benzo[a]anthracene	*1000.000	1070.525	-7.1	78	0.00
33	t	3,3'-Dichlorobenzidine	0.499	0.529	-6.0	80	0.00
34	t	Chrysene	1.234	1.386	-12.3	80	0.00
35	T	Bis(2-ethylhexyl)phthalate	0.779	0.734	5.8	74	0.00

Evaluate Continuing Calibration Report

Data Path : I:\8270SIM\SV128\230909\
Data File : ccv0909.D
Acq On : 09 Sep 2023 07:57 am
Operator : SV128:jjw
Sample : wg1825552-3,32,,ICV 10193 (0905)
Misc : wg1825552,,ical20340
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 09 08:14:31 2023
Quant Method : I:\8270SIM\SV128\230909\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 09 08:13:37 2023
Response via : Initial Calibration

Min. RRF : 0.050 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 200%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(min)
36	i	Perylene-d12	1.000	1.000	0.0	72	0.00
37	t	Benzo[b]fluoranthene	1.127	1.326	-17.7	84	0.00
38	t	Benzo[k]fluoranthene	1.043	1.166	-11.8	73	0.00
39	t	Benzo[a]pyrene	0.968	1.064	-9.9	75	0.00
40	t	Indeno[1,2,3-cd]pyrene	0.969	1.045	-7.8	78	0.00
41	t	Dibenzo[a,h]anthracene	0.932	1.072	-15.0	77	0.00
42	t	Benzo[g,h,i]perylene	0.992	1.096	-10.5	78	0.00

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230909\
Data File : ccv0909.D
Acq On : 09 Sep 2023 07:57 am
Operator : SV128:jjw
Sample : wg1825552-3,32,,ICV 10193 (0905)
Misc : wg1825552,,ical20340
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 09 08:14:31 2023
Quant Method : I:\8270SIM\SV128\230909\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 09 08:13:37 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.262	152	1923	4000.000	ng/ml	0.00
8) Naphthalene-d8	2.931	136	7039	4000.000	ng/ml	0.00
17) Acenaphthene-d10	3.918	164	3871	4000.000	ng/ml	0.00
22) Phenanthrene-d10	4.769	188	8884	4000.000	ng/ml	0.00
31) Chrysene-d12	6.344	240	8811	4000.000	ng/ml	0.00
36) Perylene-d12	7.630	264	9706	4000.000	ng/ml	0.00
System Monitoring Compounds						
2) 2-Fluorophenol	1.656	112	549	1117.221	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 22.34%			
3) Phenol-d6	2.072	99	648	1077.643	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 21.55%			
7) Nitrobenzene-d5	2.543	82	557	1092.831	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 43.71%			
13) 2-Fluorobiphenyl	3.536	172	1453	1006.474	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 40.26%			
21) 2,4,6-Tribromophenol	4.370	330	215	1322.761	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 26.46%			
30) 4-Terphenyl-d14	5.693	244	1995	1062.622	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 42.50%			
Target Compounds						Qvalue
4) Bis(2-chloroethyl)ether	2.121	93	542	1046.029	ng/ml	97
5) n-nitrosodi-n-propylamine	2.464	70	383M6	985.332	ng/ml	
6) Hexachloroethane	2.525	117	247	1068.451	ng/ml	90
9) Naphthalene	2.943	128	1869	1086.734	ng/ml#	100
10) Hexachlorobutadiene	3.017	225	351	1085.375	ng/ml	100
11) 2-Methylnaphthalene	3.328	142	1182	1029.649	ng/ml	99
12) 1-Methylnaphthalene	3.383	142	1167	1097.257	ng/ml	100
14) 2-Chloronaphthalene	3.603	162	1276	1072.180	ng/ml	95
15) 2,6-Dinitrotoluene	3.796	165	260	1093.907	ng/ml	94
16) Acenaphthylene	3.835	152	2014	1062.656	ng/ml	99
18) Acenaphthene	3.936	153	1364	1112.070	ng/ml	95
19) 2,4-Dinitrotoluene	4.028	165	350	1190.280	ng/ml	97
20) Fluorene	4.233	166	1505M6	1124.472	ng/ml	
23) 4,6-Dinitro-o-cresol	4.260	198	161M6	1046.248	ng/ml	
24) Hexachlorobenzene	4.551	284	528	1106.725	ng/ml	98
25) Pentachlorophenol	4.666	266	264	884.075	ng/ml	96
26) Phenanthrene	4.781	178	2496	1126.903	ng/ml	100
27) Anthracene	4.811	178	2463M6	1142.644	ng/ml	

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230909\
Data File : ccv0909.D
Acq On : 09 Sep 2023 07:57 am
Operator : SV128:jjw
Sample : wg1825552-3,32,,ICV 10193 (0905)
Misc : wg1825552,,ical20340
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 09 08:14:31 2023
Quant Method : I:\8270SIM\SV128\230909\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 09 08:13:37 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
28) Fluoranthene	5.469	202	2935	1140.700	ng/ml#	95
29) Pyrene	5.600	202	3086	1158.670	ng/ml	100
32) Benzo[a]anthracene	6.336	228	3127	1070.525	ng/ml	100
33) 3,3'-Dichlorobenzidine	6.325	252	1166	1061.113	ng/ml	99
34) Chrysene	6.363	228	3052	1122.760	ng/ml	99
35) Bis(2-ethylhexyl)phtha...	6.374	149	1617M6	942.369	ng/ml	
37) Benzo[b]fluoranthene	7.234	252	3217	1176.367	ng/ml	100
38) Benzo[k]fluoranthene	7.259	252	2830	1118.220	ng/ml	100
39) Benzo[a]pyrene	7.564	252	2582	1099.349	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.935	276	2536	1078.941	ng/ml	96
41) Dibenzo[a,h]anthracene	8.983	278	2602	1150.112	ng/ml	96
42) Benzo[g,h,i]perylene	9.302	276	2660	1104.996	ng/ml	95

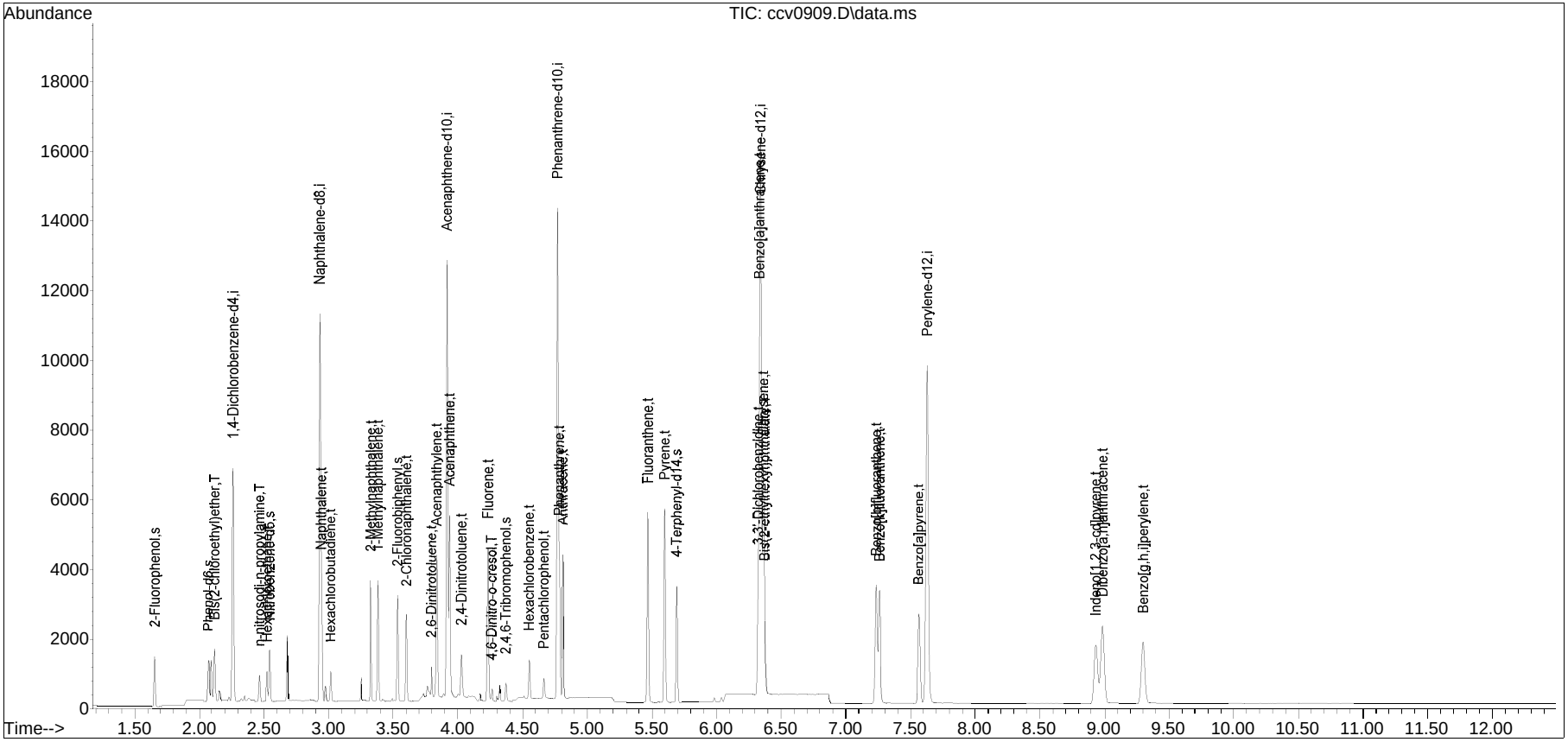
(#) = qualifier out of range (m) = manual integration (+) = signals summed

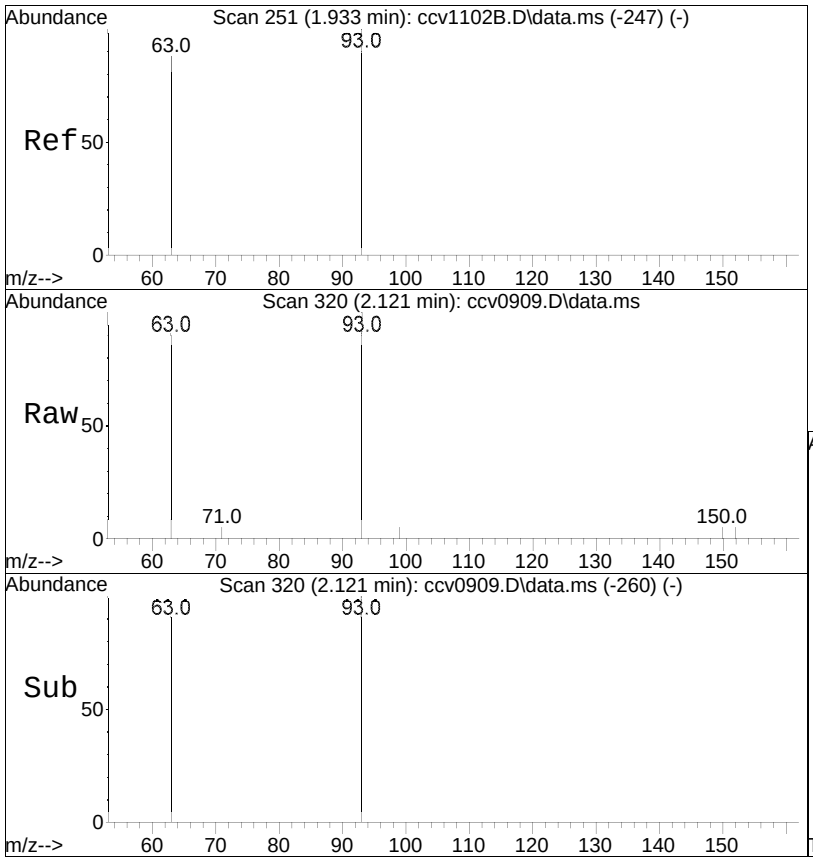
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230909\
Data File : ccv0909.D
Acq On : 09 Sep 2023 07:57 am
Operator : SV128:jjw
Sample : wg1825552-3,32,,ICV 10193 (0905)
Misc : wg1825552,,ical20340
ALS Vial : 49 Sample Multiplier: 1

Quant Time: Sep 09 08:14:31 2023
Quant Method : I:\8270SIM\SV128\230909\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Sep 09 08:13:37 2023
Response via : Initial Calibration

Sub List : Default - All compounds listed

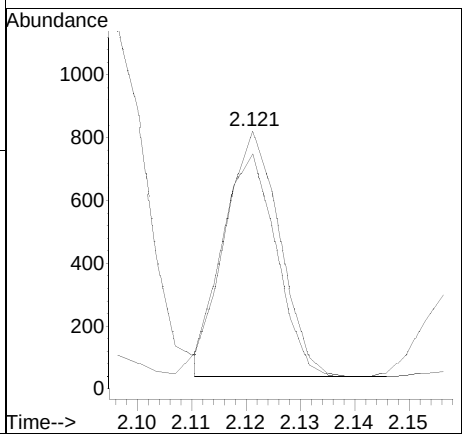


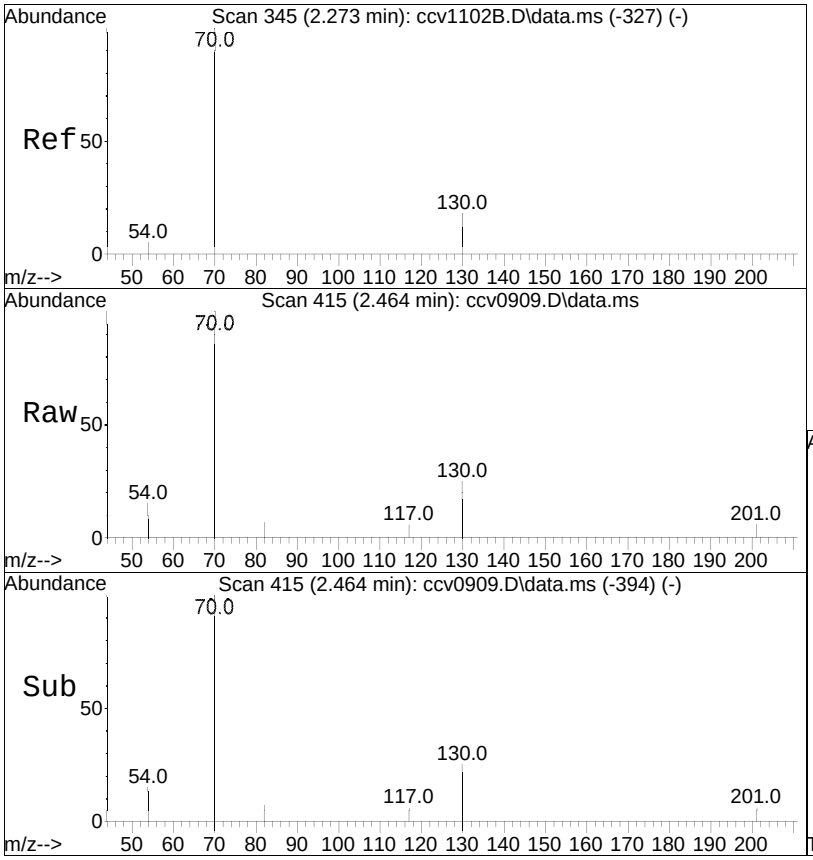


#4
Bis(2-chloroethyl)ether
Concen: 1046.03 ng/ml
RT: 2.121 min Scan# 320
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion: 93 Resp: 542

Ion	Ratio	Lower	Upper
93	100		
63	93.7	73.0	109.6

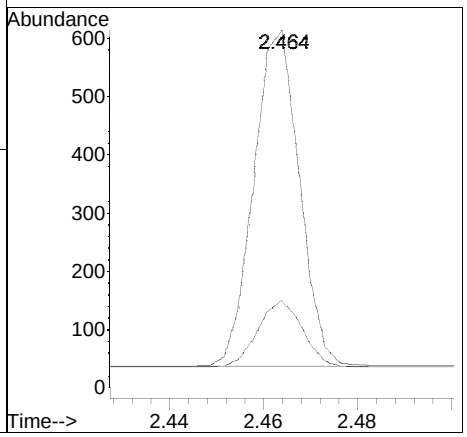


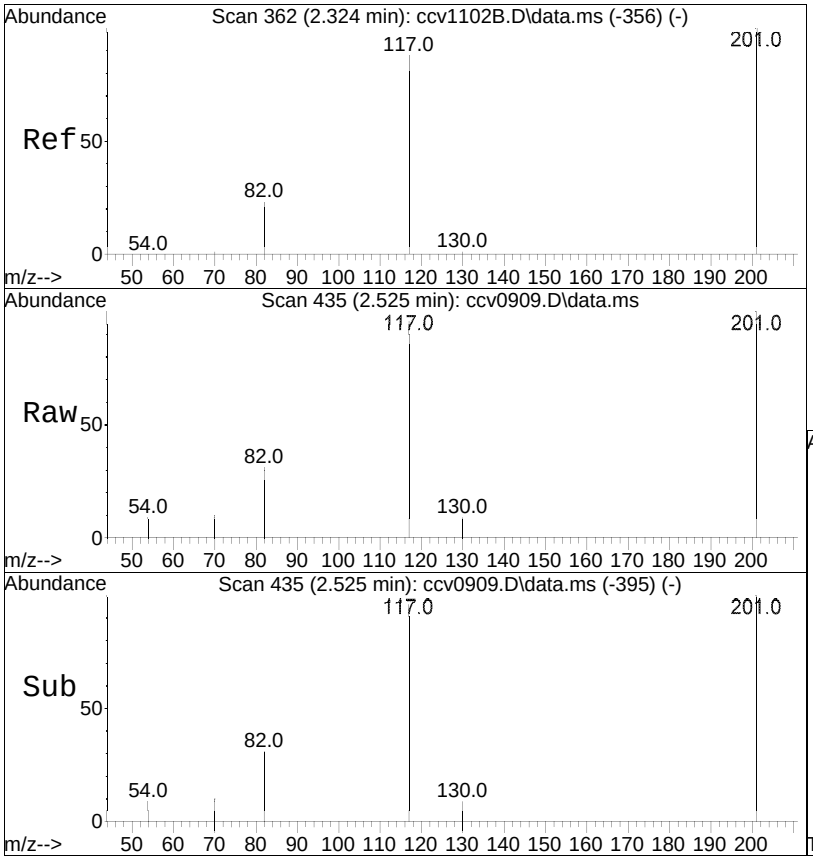


#5
n-nitrosodi-n-propylamine
Concen: 985.33 ng/ml M6
RT: 2.464 min Scan# 415
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion: 70 Resp: 383

Ion	Ratio	Lower	Upper
70	100		
130	19.1	14.6	21.8

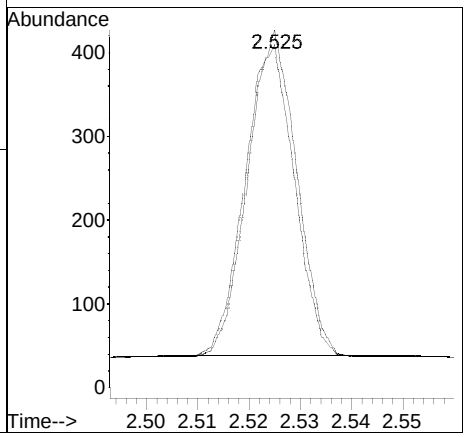


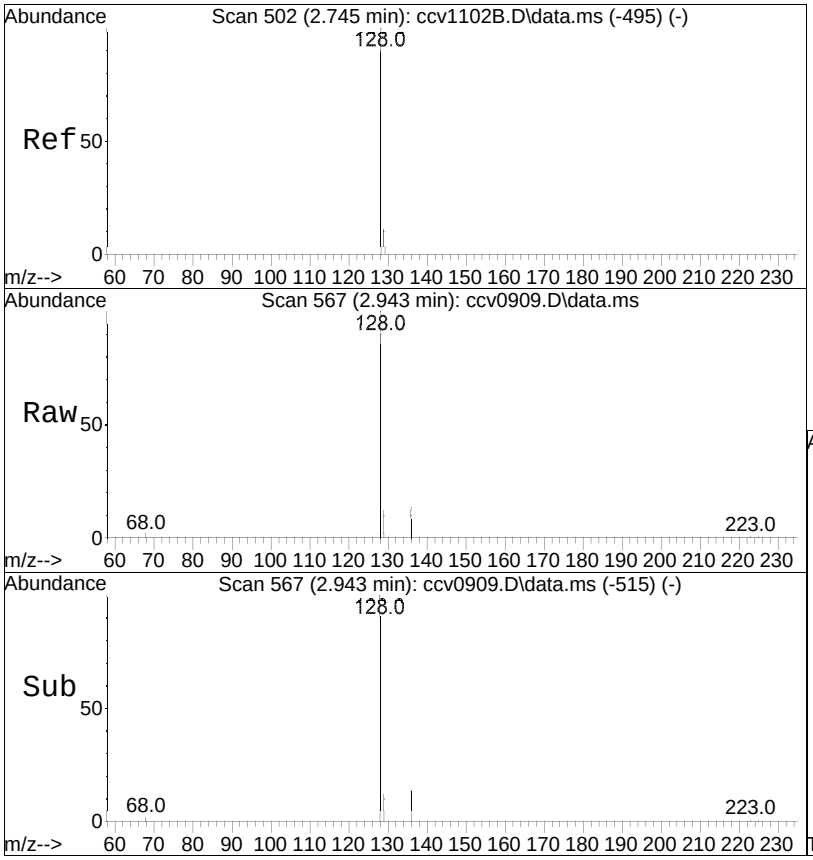


#6
Hexachloroethane
Concen: 1068.45 ng/ml
RT: 2.525 min Scan# 435
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:117 Resp: 247

Ion	Ratio	Lower	Upper
117	100		
201	103.2	91.5	137.3

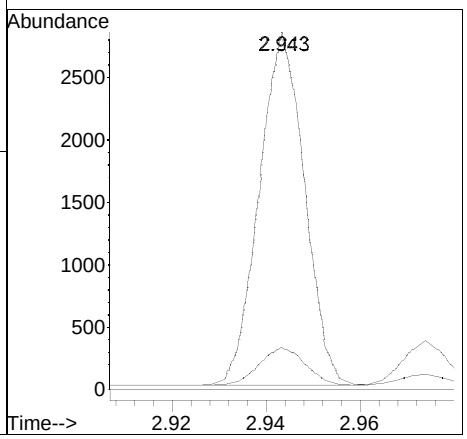


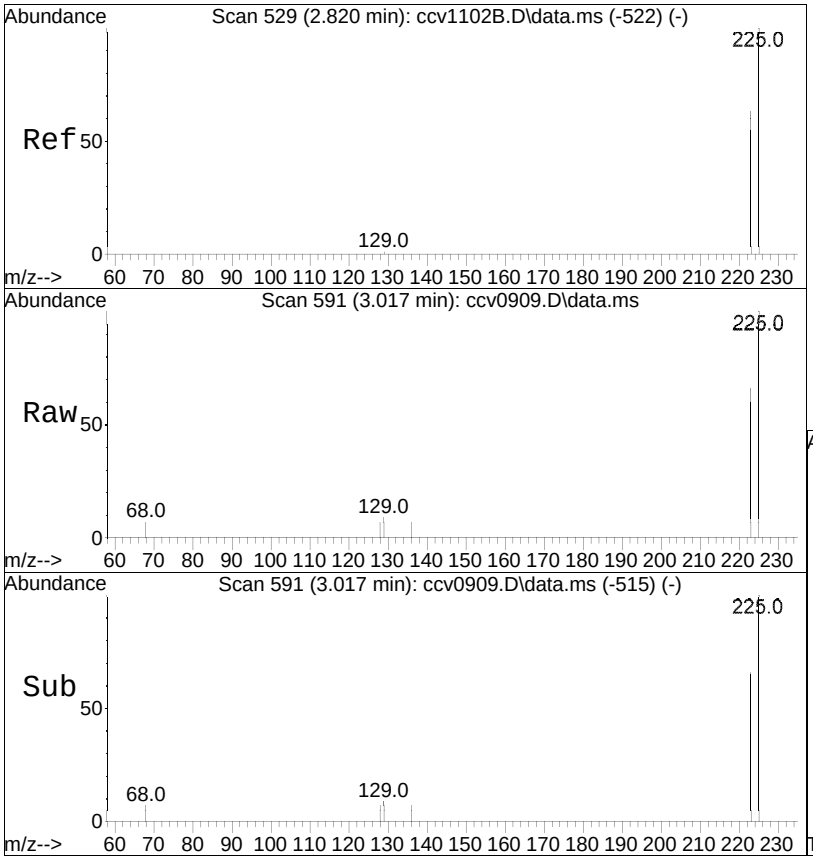


#9
Naphthalene
Concen: 1086.73 ng/ml
RT: 2.943 min Scan# 567
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:128 Resp: 1869

Ion	Ratio	Lower	Upper
128	100		
129	10.9	8.8	13.2
127	0.0	0.0	0.0

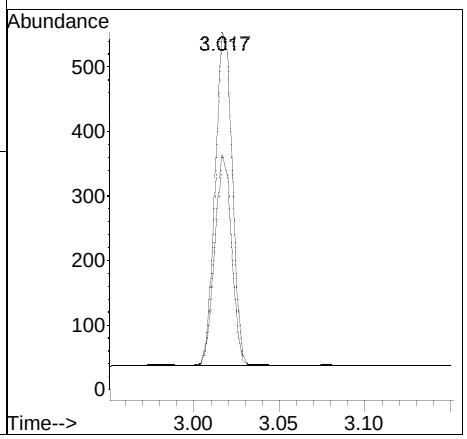


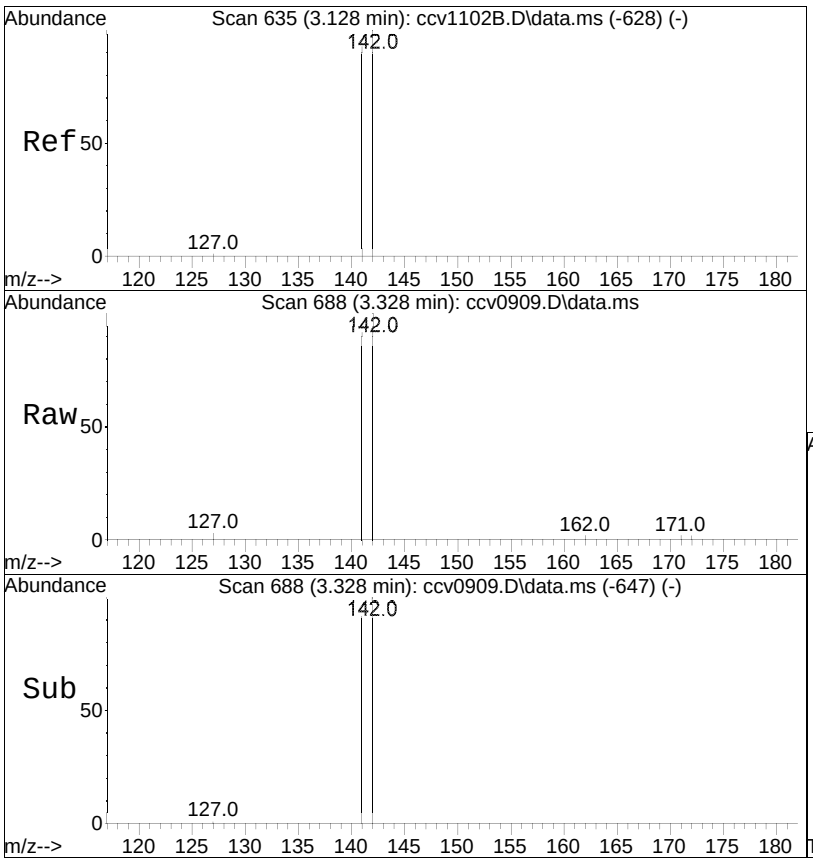


#10
Hexachlorobutadiene
Concen: 1085.37 ng/ml
RT: 3.017 min Scan# 591
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:225 Resp: 351

Ion	Ratio	Lower	Upper
225	100		
223	63.0	50.6	75.8

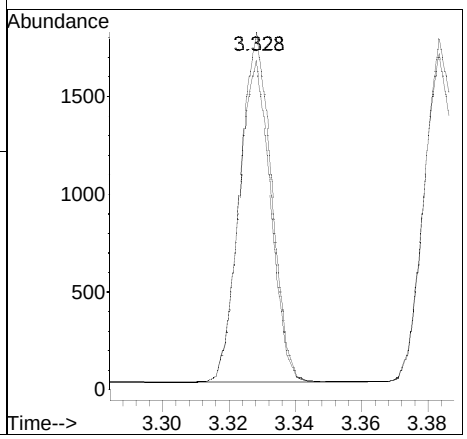


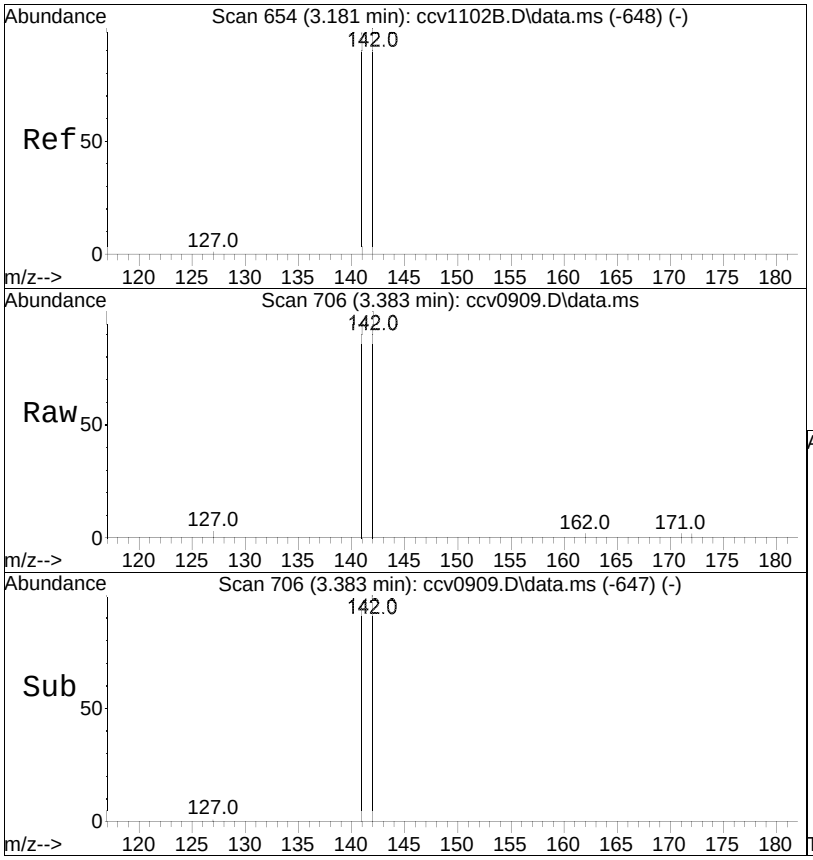


#11
2-Methylnaphthalene
Concen: 1029.65 ng/ml
RT: 3.328 min Scan# 688
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:142 Resp: 1182

Ion	Ratio	Lower	Upper
142	100		
141	92.6	75.0	112.4

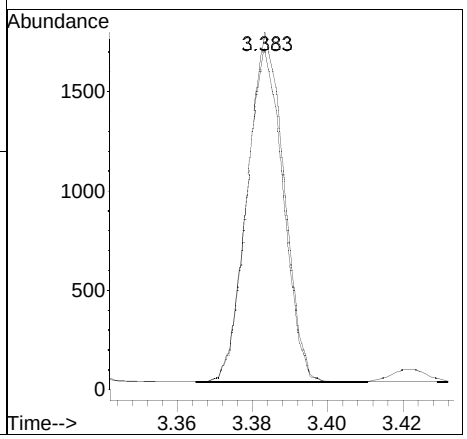


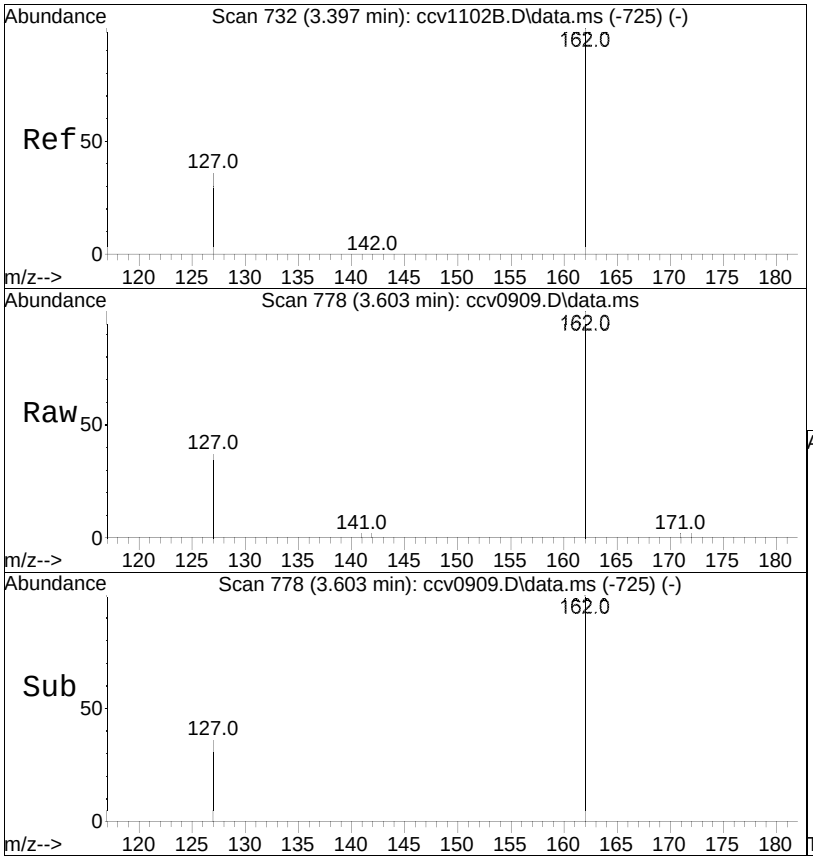


#12
1-Methylnaphthalene
Concen: 1097.26 ng/ml
RT: 3.383 min Scan# 706
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:142 Resp: 1167

Ion	Ratio	Lower	Upper
142	100		
141	95.8	76.7	115.1

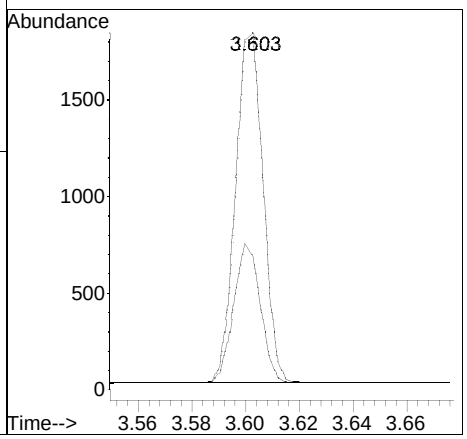


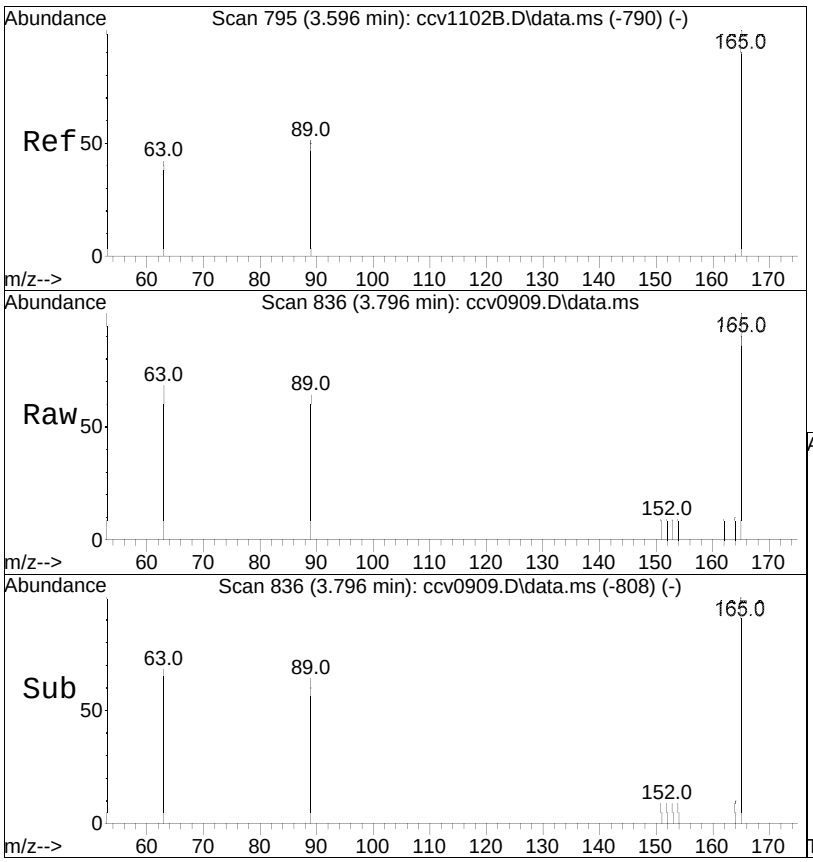


#14
2-Chloronaphthalene
Concen: 1072.18 ng/ml
RT: 3.603 min Scan# 778
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:162 Resp: 1276

Ion	Ratio	Lower	Upper
162	100		
127	38.6	28.7	43.1

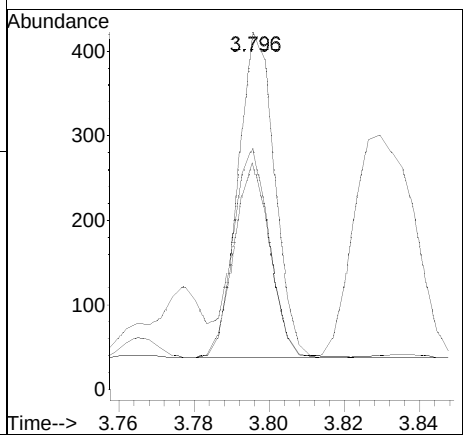


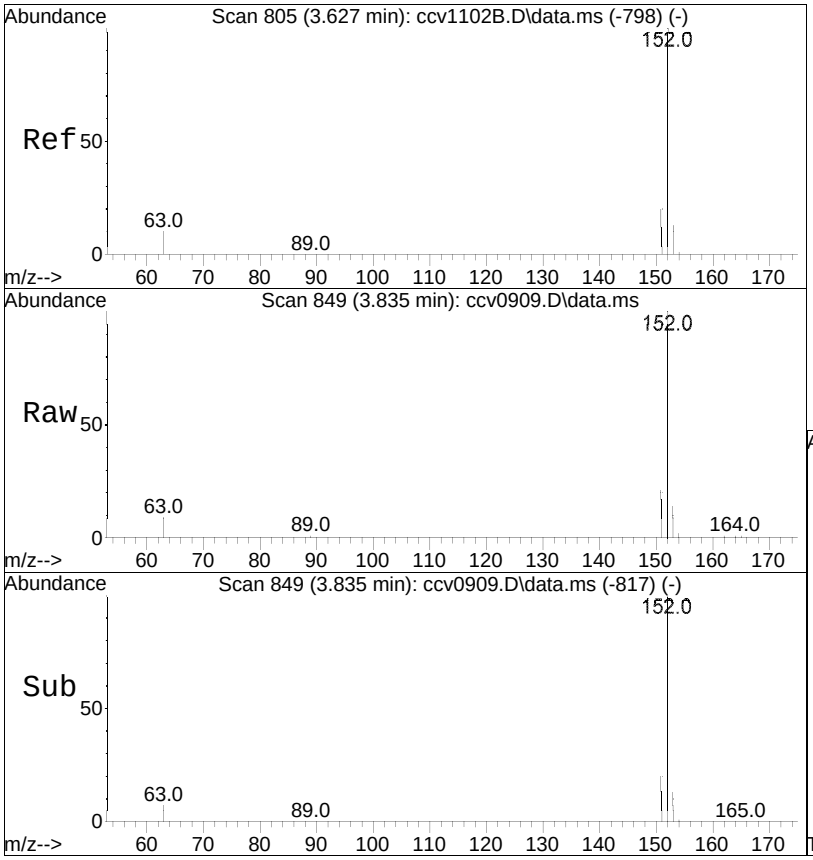


#15
2,6-Dinitrotoluene
Concen: 1093.91 ng/ml
RT: 3.796 min Scan# 836
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:165 Resp: 260

Ion	Ratio	Lower	Upper
165	100		
89	58.8	45.0	67.6
63	64.6	46.2	69.2

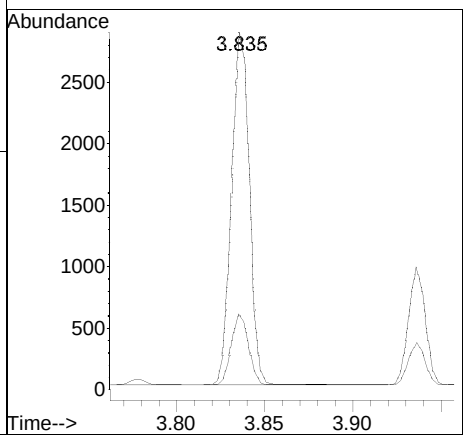


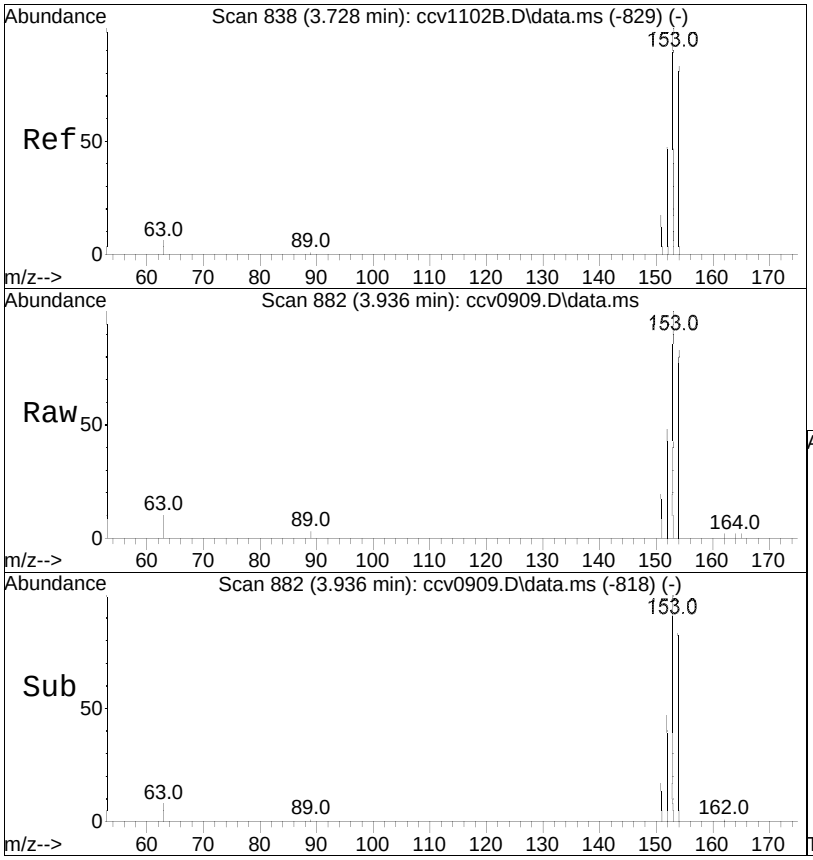


#16
Acenaphthylene
Concen: 1062.66 ng/ml
RT: 3.835 min Scan# 849
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:152 Resp: 2014

Ion	Ratio	Lower	Upper
152	100		
151	19.8	16.1	24.1

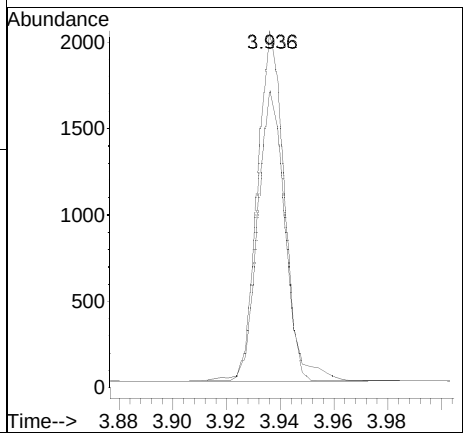


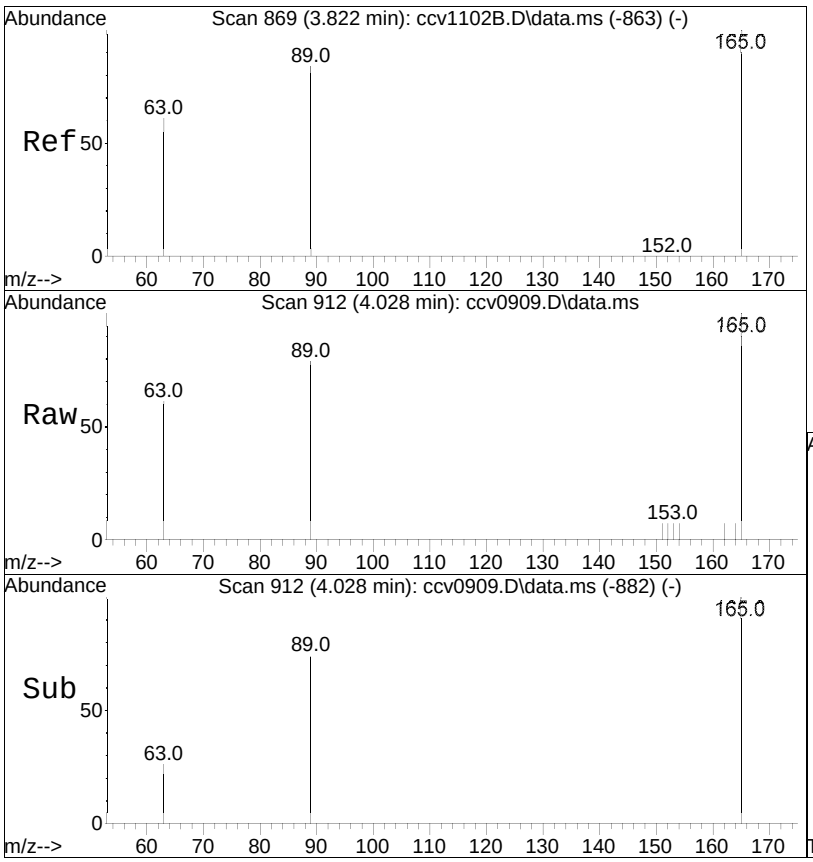


#18
Acenaphthene
Concen: 1112.07 ng/ml
RT: 3.936 min Scan# 882
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:153 Resp: 1364

Ion	Ratio	Lower	Upper
153	100		
154	88.9	67.4	101.2

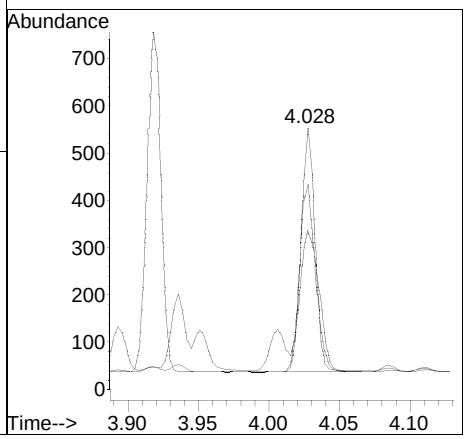


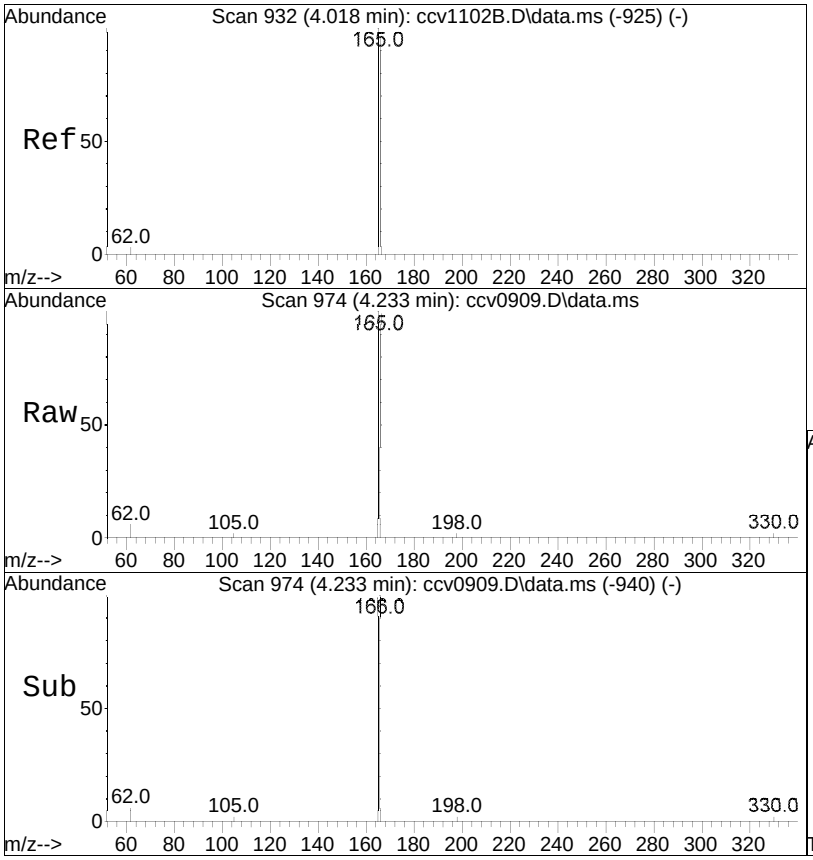


#19
2,4-Dinitrotoluene
Concen: 1190.28 ng/ml
RT: 4.028 min Scan# 912
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:165 Resp: 350

Ion	Ratio	Lower	Upper
165	100		
89	89.7	71.4	107.2
63	78.9	67.9	101.9

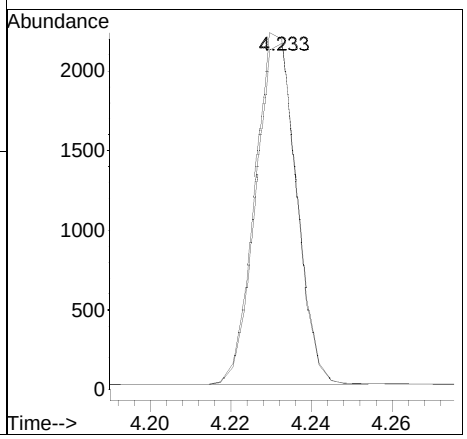


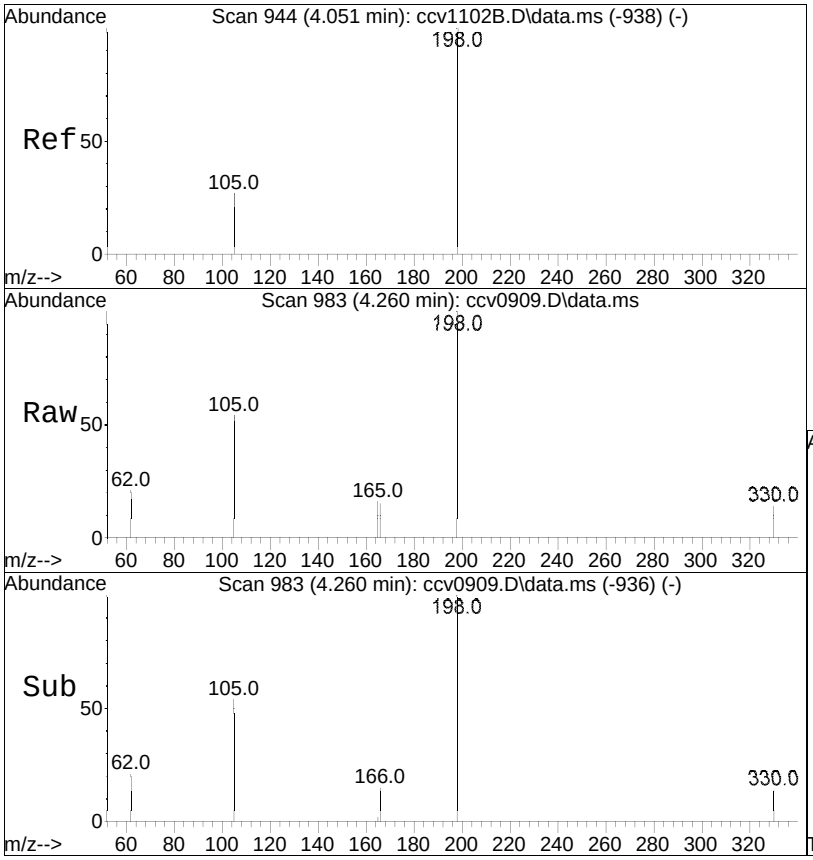


#20
Fluorene
Concen: 1124.47 ng/ml M6
RT: 4.233 min Scan# 974
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:166 Resp: 1505

Ion	Ratio	Lower	Upper
166	100		
165	103.5	82.7	124.1

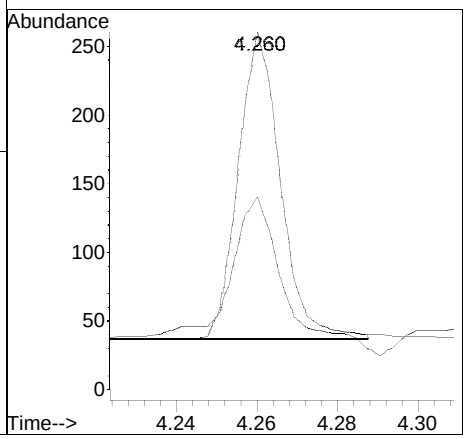


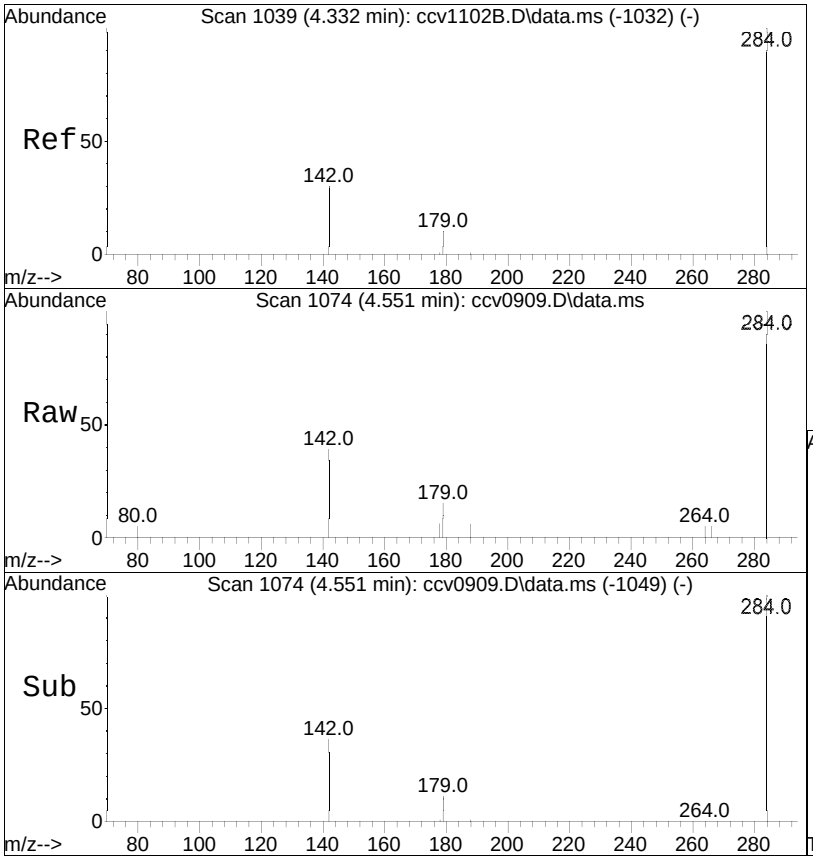


#23
4,6-Dinitro-o-cresol
Concen: 1046.25 ng/ml M6
RT: 4.260 min Scan# 983
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:198 Resp: 161

Ion	Ratio	Lower	Upper
198	100		
105	64.6	26.7	40.1#

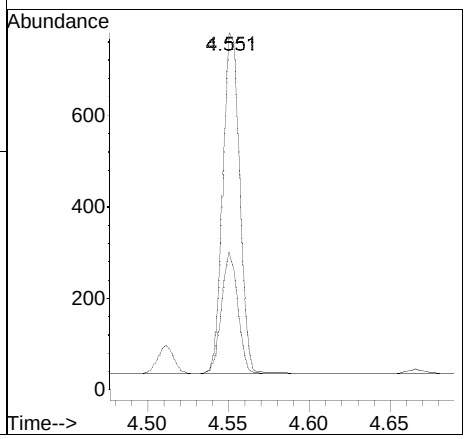


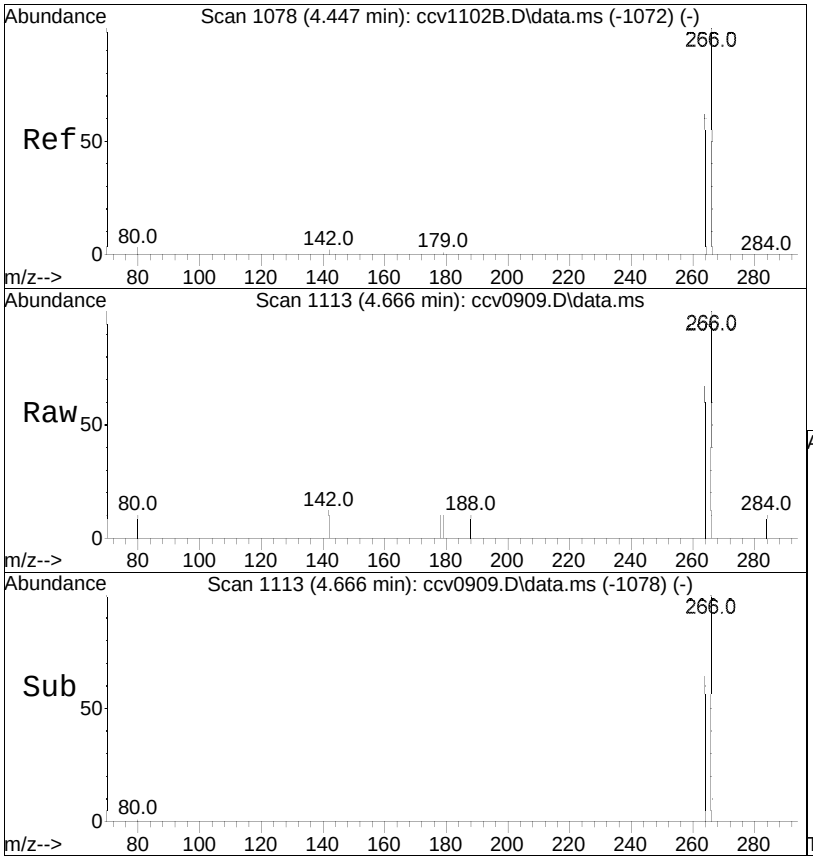


#24
Hexachlorobenzene
Concen: 1106.72 ng/ml
RT: 4.551 min Scan# 1074
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:284 Resp: 528

Ion	Ratio	Lower	Upper
284	100		
142	34.3	26.6	40.0

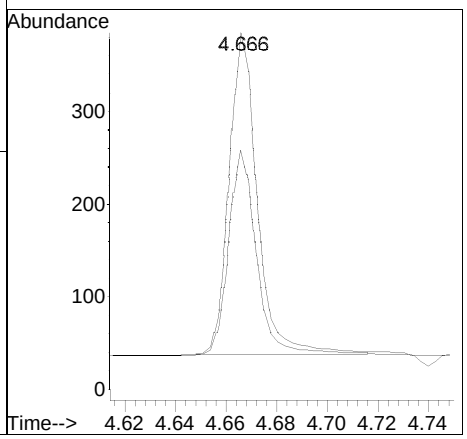


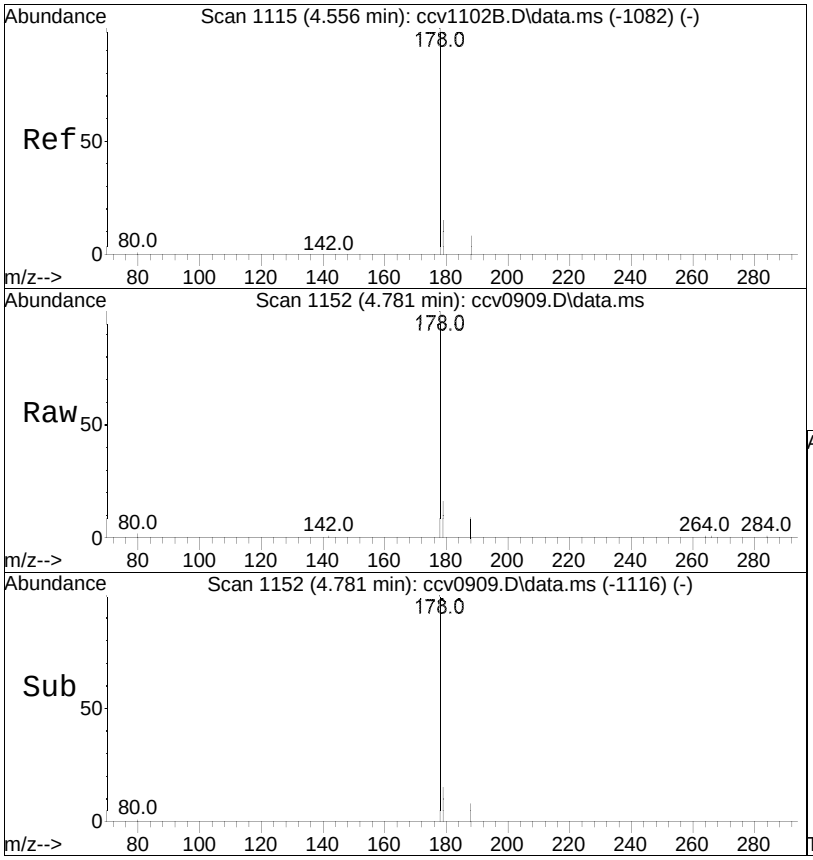


#25
Pentachlorophenol
Concen: 884.07 ng/ml
RT: 4.666 min Scan# 1113
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:266 Resp: 264

Ion	Ratio	Lower	Upper
266	100		
264	65.2	49.8	74.8

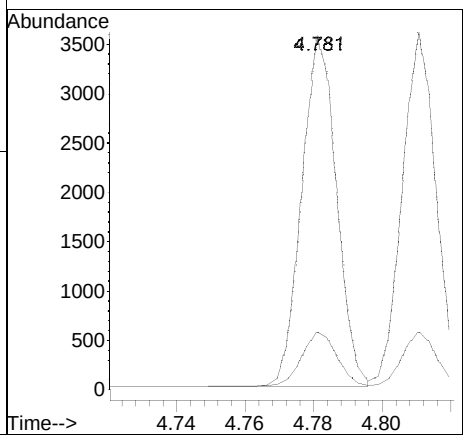


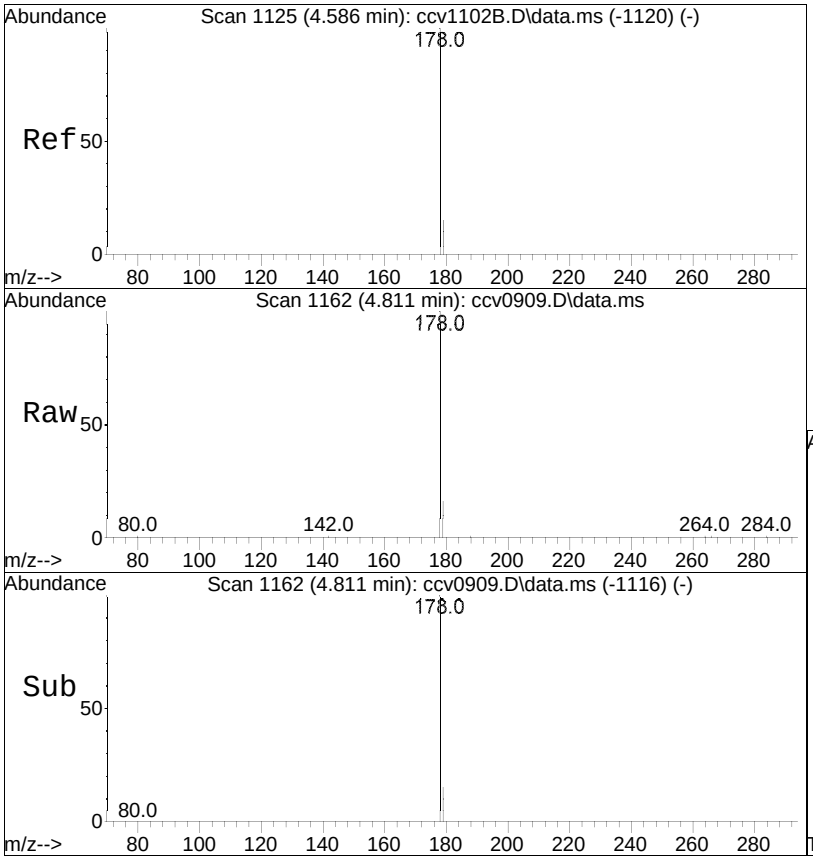


#26
Phenanthrene
Concen: 1126.90 ng/ml
RT: 4.781 min Scan# 1152
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:178 Resp: 2496

Ion	Ratio	Lower	Upper
178	100		
179	15.5	12.4	18.6

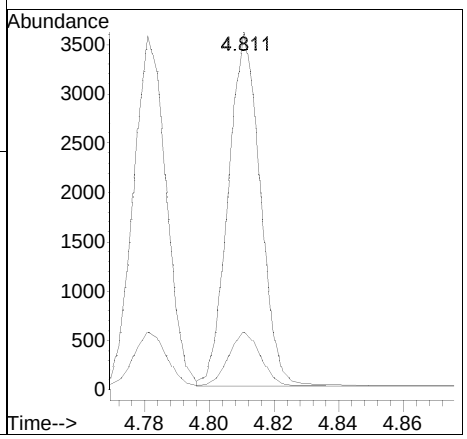


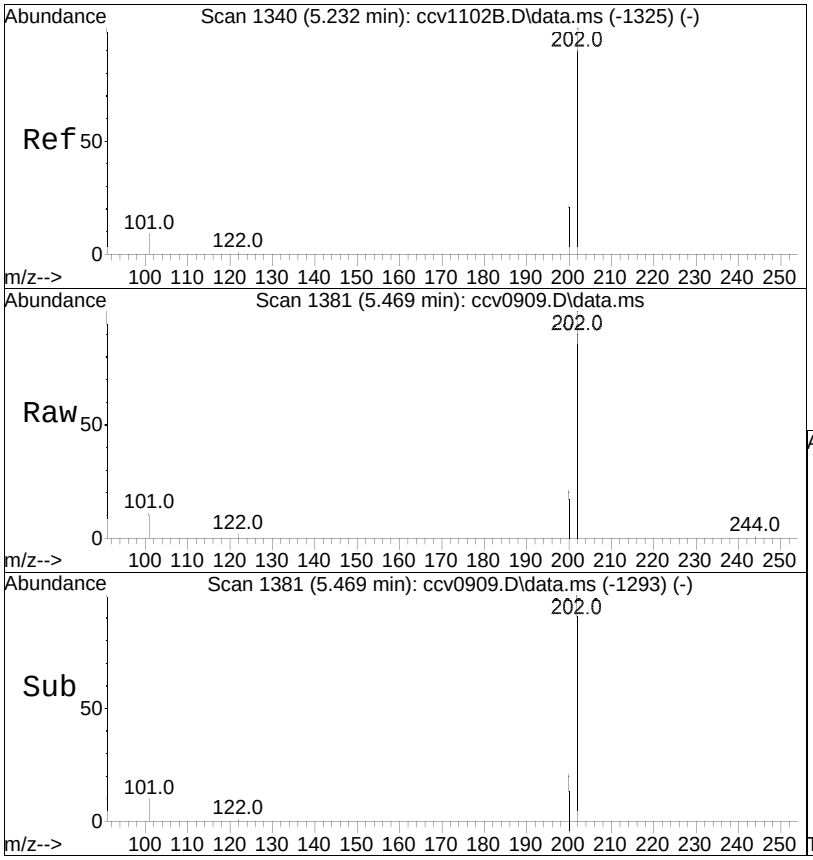


#27
Anthracene
Concen: 1142.64 ng/ml M6
RT: 4.811 min Scan# 1162
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:178 Resp: 2463

Ion	Ratio	Lower	Upper
178	100		
179	15.3	12.6	19.0

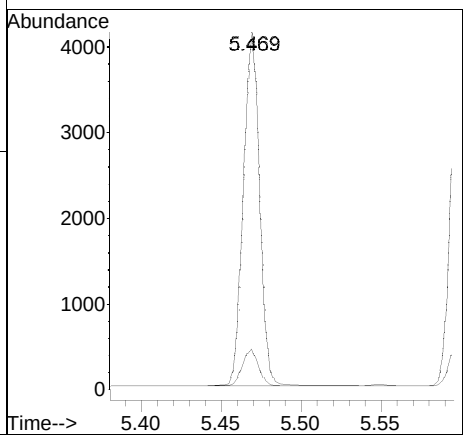


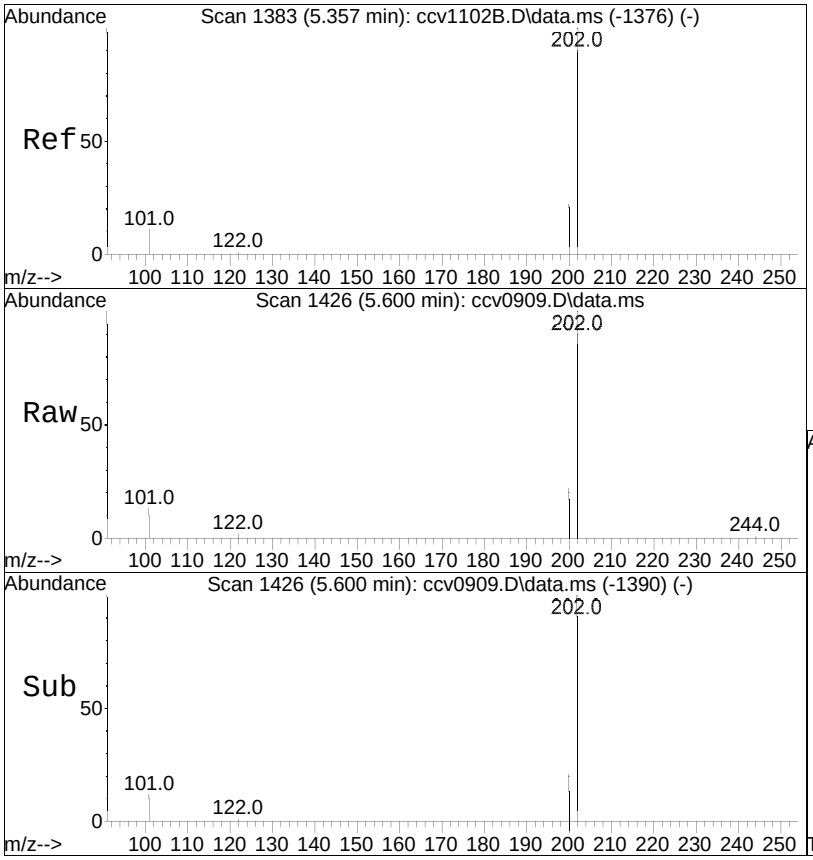


#28
Fluoranthene
Concen: 1140.70 ng/ml
RT: 5.469 min Scan# 1381
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:202 Resp: 2935

Ion	Ratio	Lower	Upper
202	100		
101	10.6	7.0	10.6#

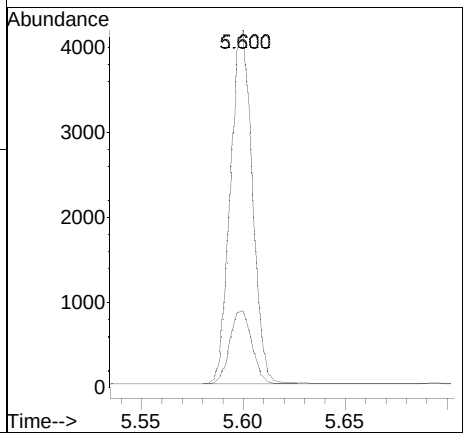


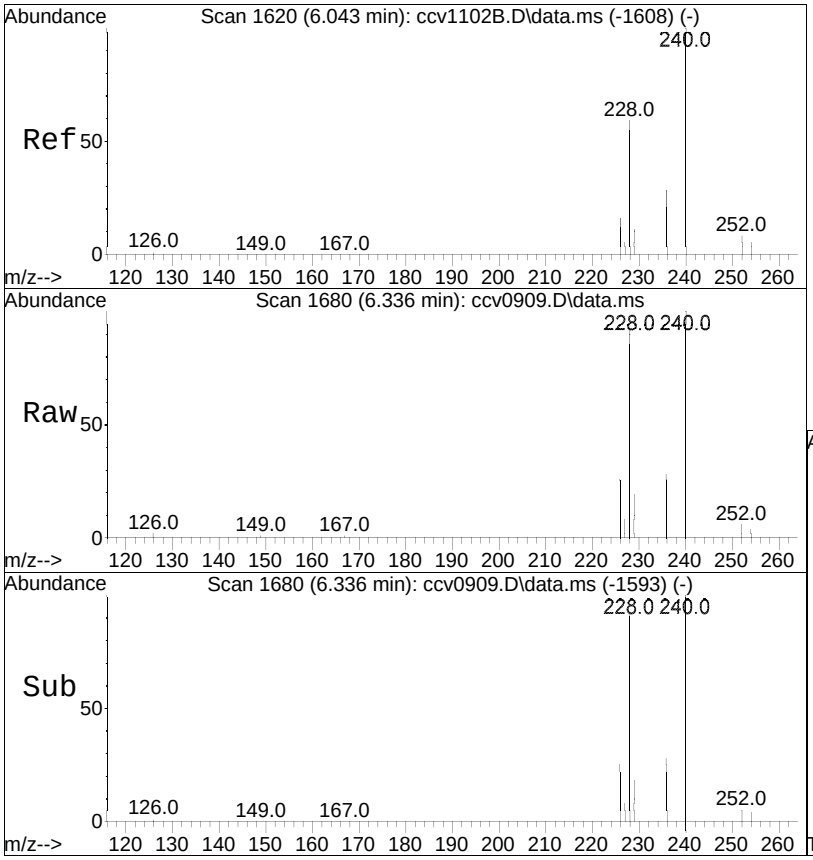


#29
Pyrene
Concen: 1158.67 ng/ml
RT: 5.600 min Scan# 1426
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:202 Resp: 3086

Ion	Ratio	Lower	Upper
202	100		
200	21.2	17.0	25.4

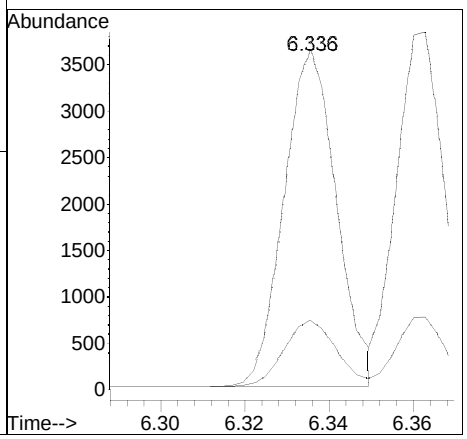


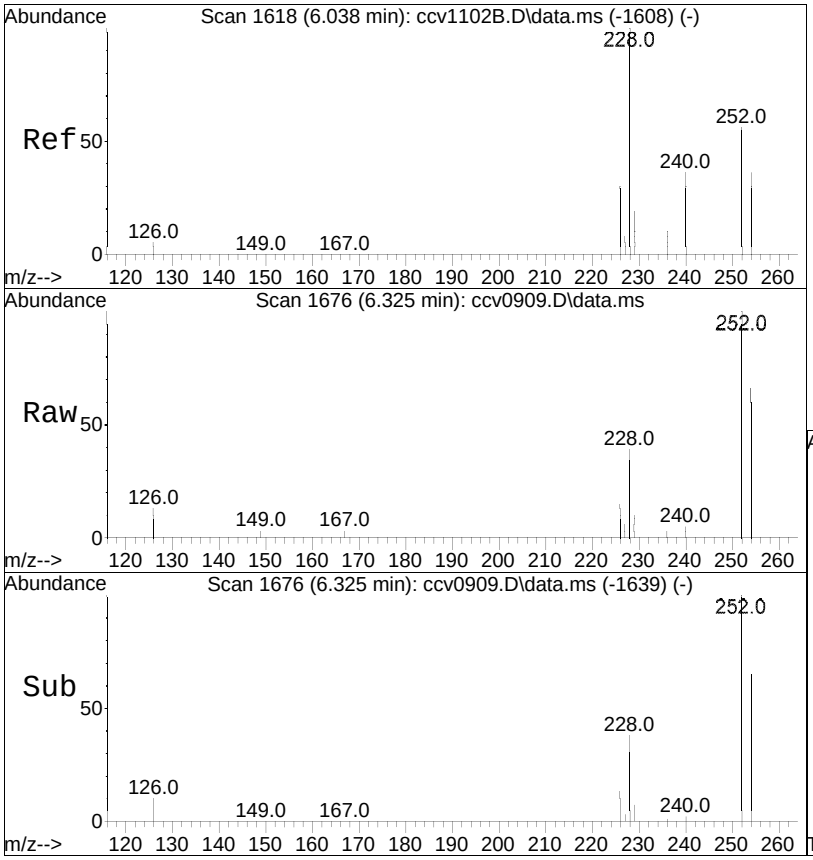


#32
Benzo[a]anthracene
Concen: 1070.52 ng/ml
RT: 6.336 min Scan# 1680
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:228 Resp: 3127

Ion	Ratio	Lower	Upper
228	100		
229	19.6	15.7	23.5

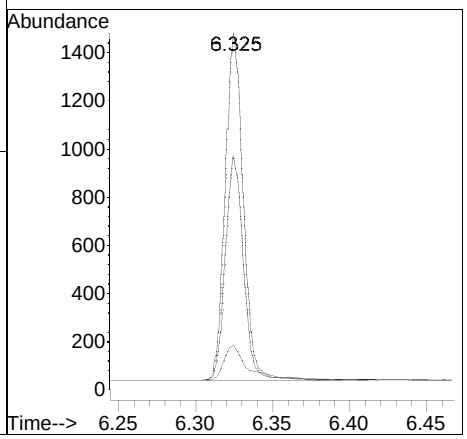


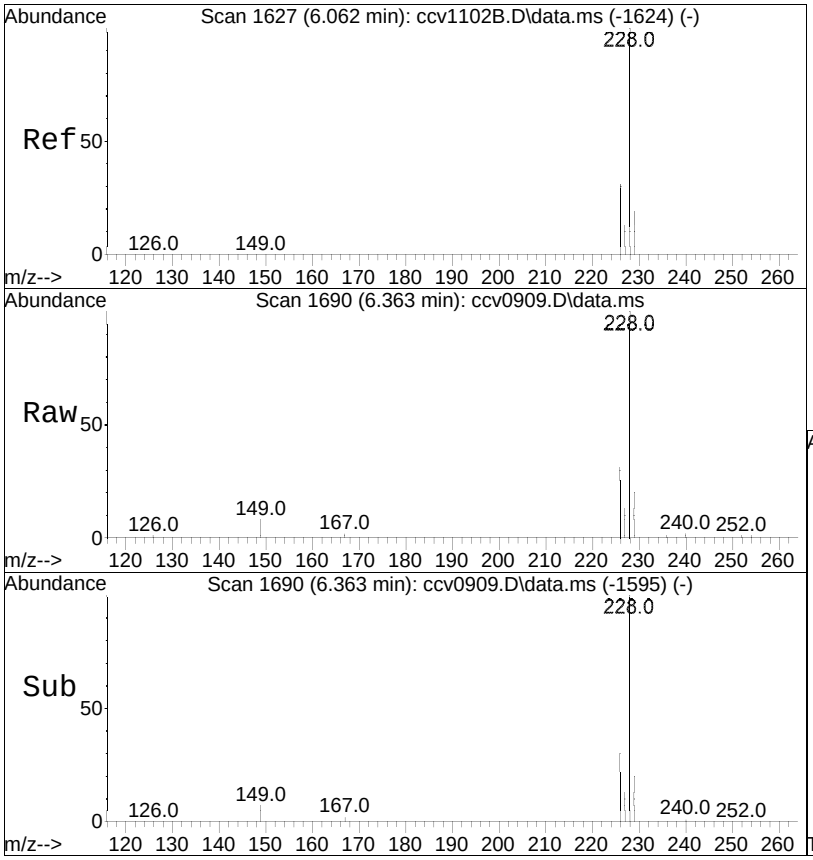


#33
3,3'-Dichlorobenzidine
Concen: 1061.11 ng/ml
RT: 6.325 min Scan# 1676
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:252 Resp: 1166

Ion	Ratio	Lower	Upper
252	100		
126	12.8	9.1	13.7
254	64.5	51.6	77.4

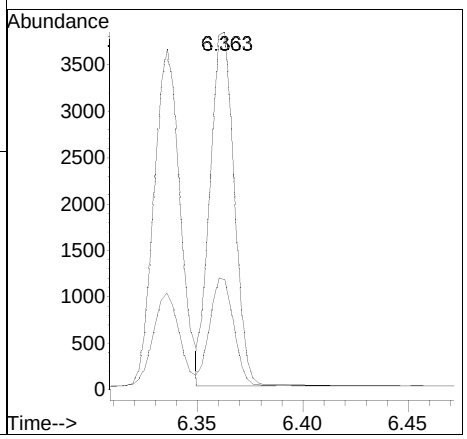


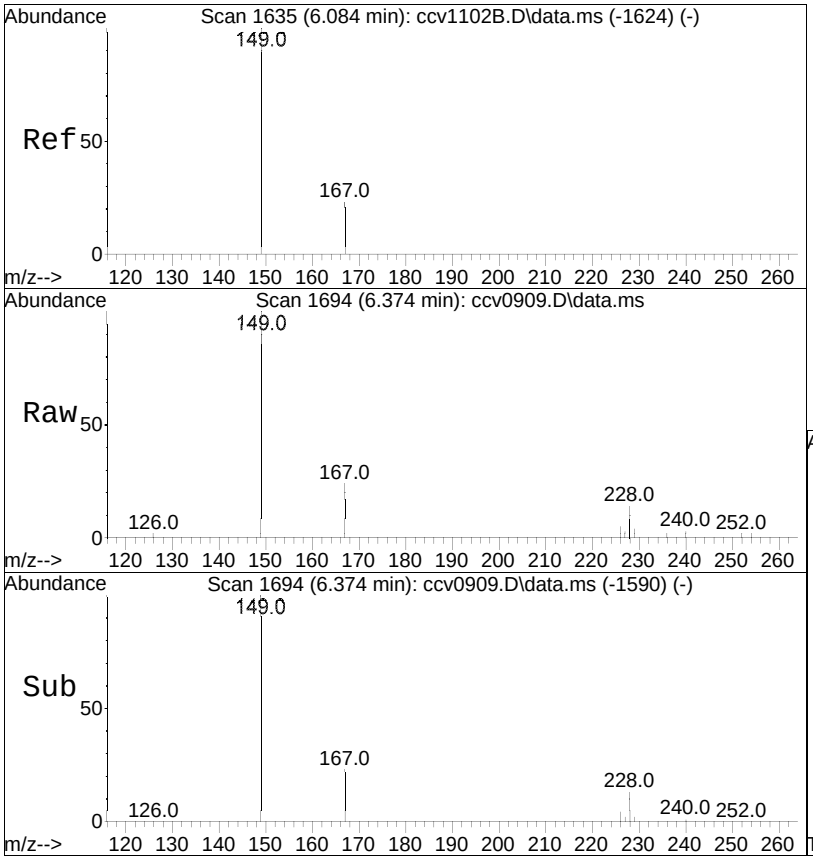


#34
Chrysene
Concen: 1122.76 ng/ml
RT: 6.363 min Scan# 1690
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:228 Resp: 3052

Ion	Ratio	Lower	Upper
228	100		
226	30.4	24.6	37.0

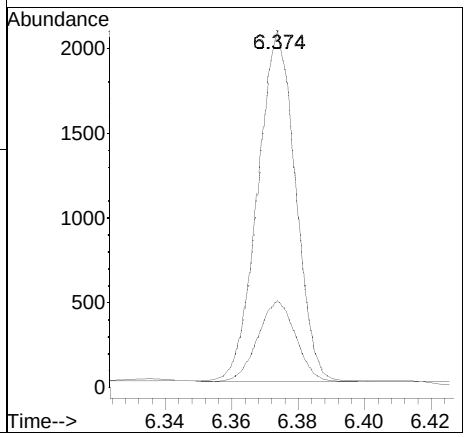


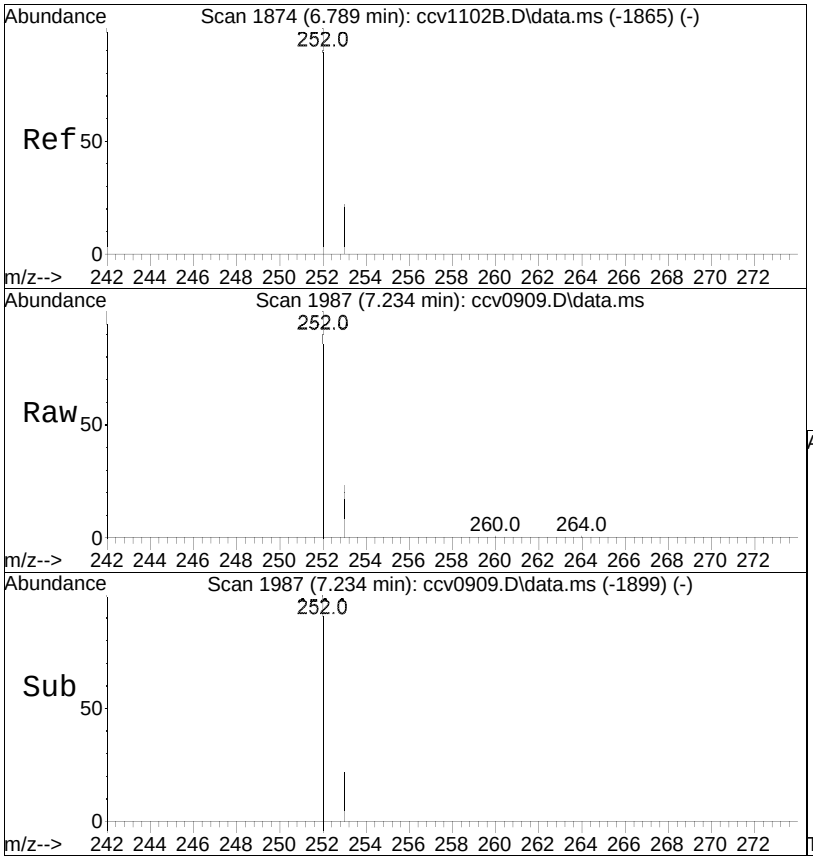


#35
Bis(2-ethylhexyl)phthalate
Concen: 942.37 ng/ml M6
RT: 6.374 min Scan# 1694
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:149 Resp: 1617

Ion	Ratio	Lower	Upper
149	100		
167	22.9	18.7	28.1

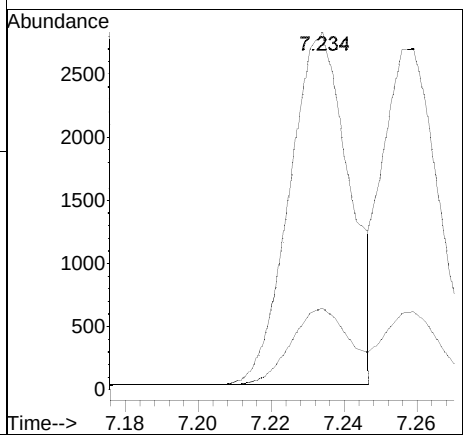


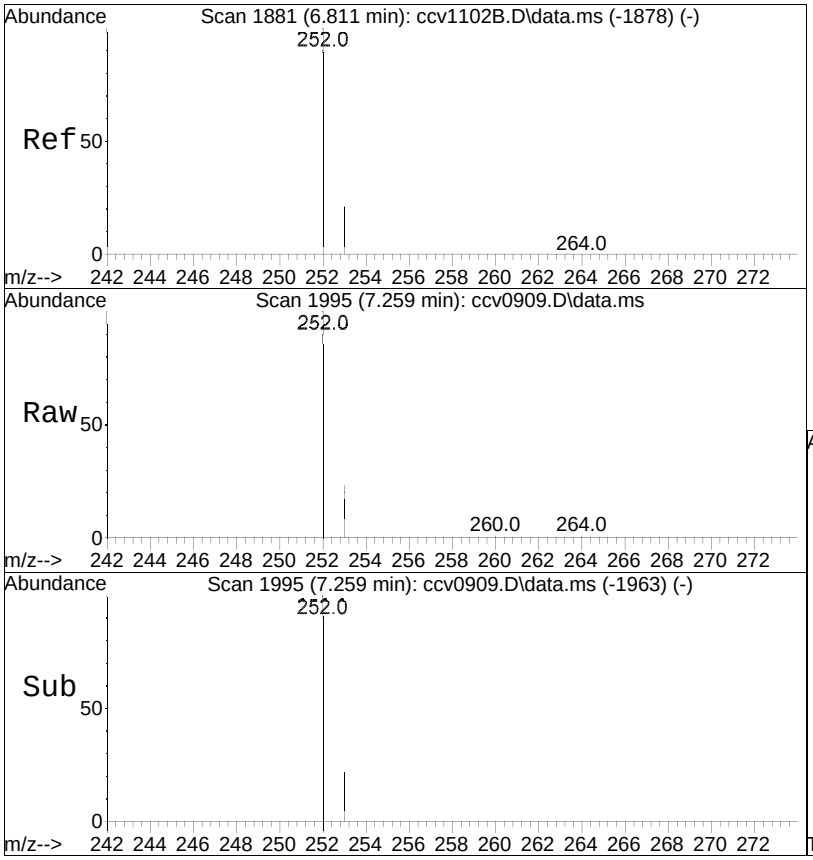


#37
Benzo[b]fluoranthene
Concen: 1176.37 ng/ml
RT: 7.234 min Scan# 1987
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:252 Resp: 3217

Ion	Ratio	Lower	Upper
252	100		
253	21.5	17.4	26.0

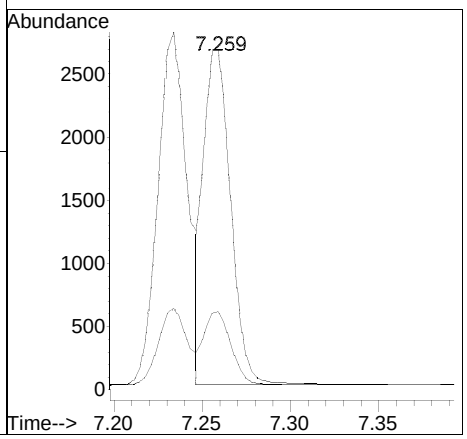


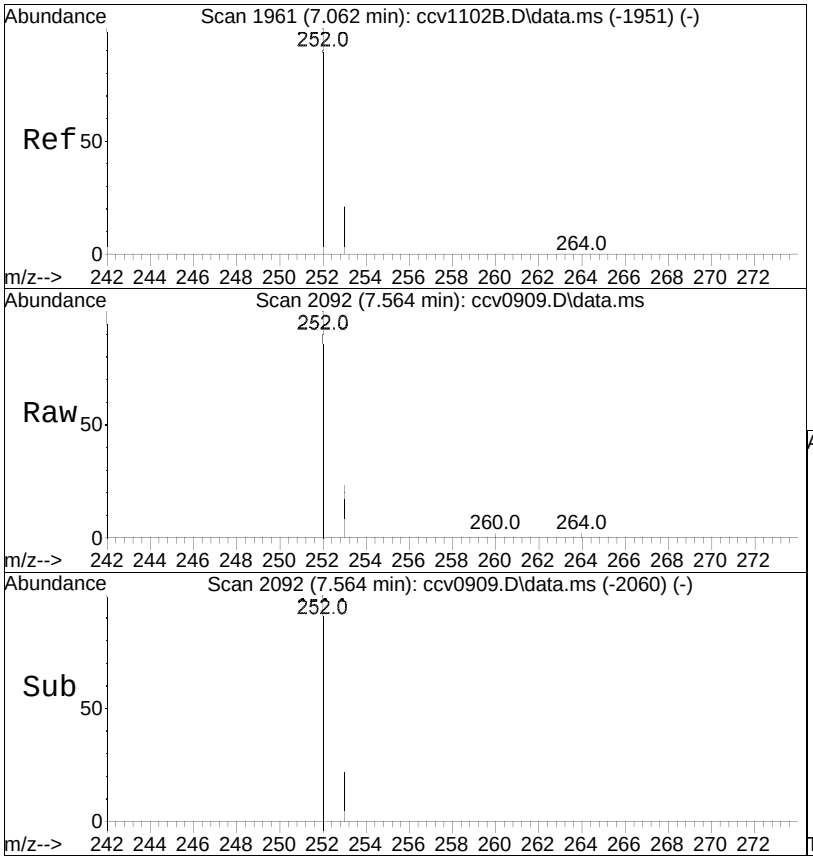


#38
Benzo[k]fluoranthene
Concen: 1118.22 ng/ml
RT: 7.259 min Scan# 1995
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:252 Resp: 2830

Ion	Ratio	Lower	Upper
252	100		
253	21.8	17.4	26.2

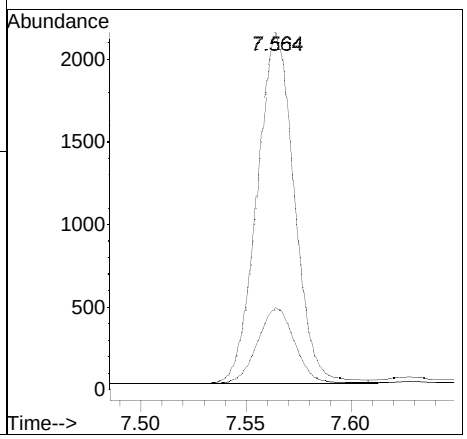


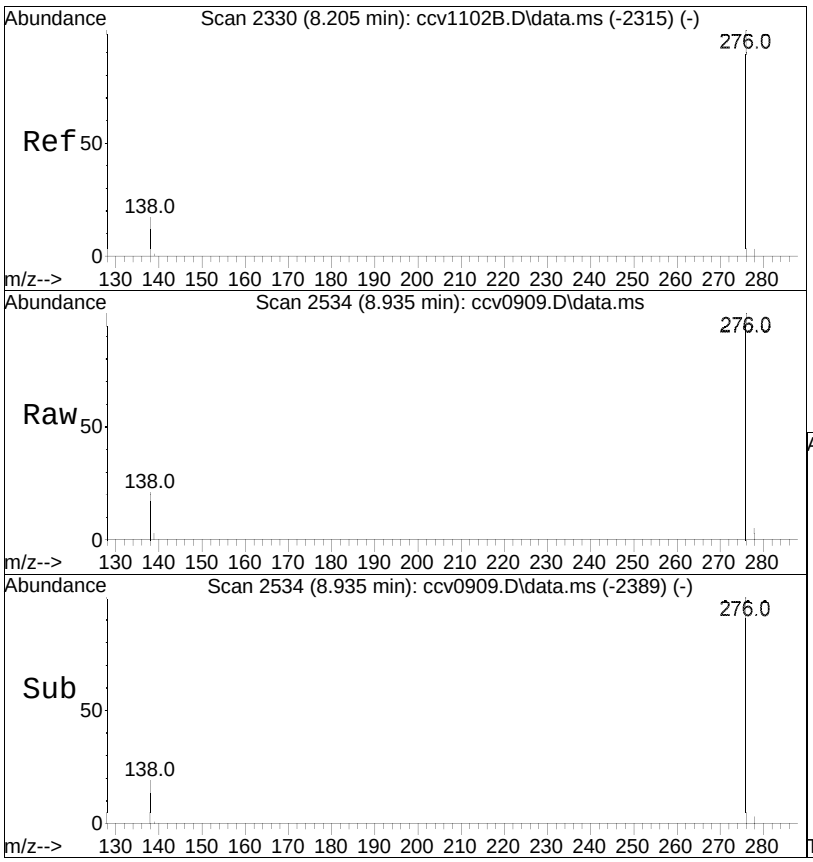


#39
Benzo[a]pyrene
Concen: 1099.35 ng/ml
RT: 7.564 min Scan# 2092
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:252 Resp: 2582

Ion	Ratio	Lower	Upper
252	100		
253	21.6	17.3	25.9

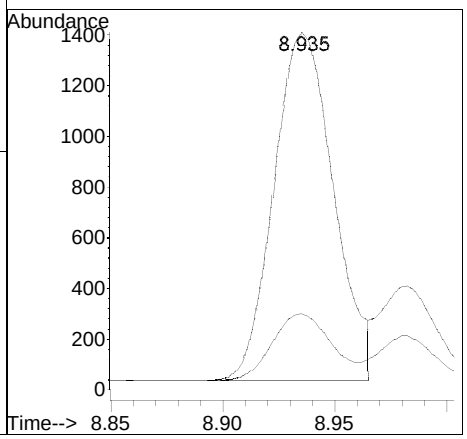


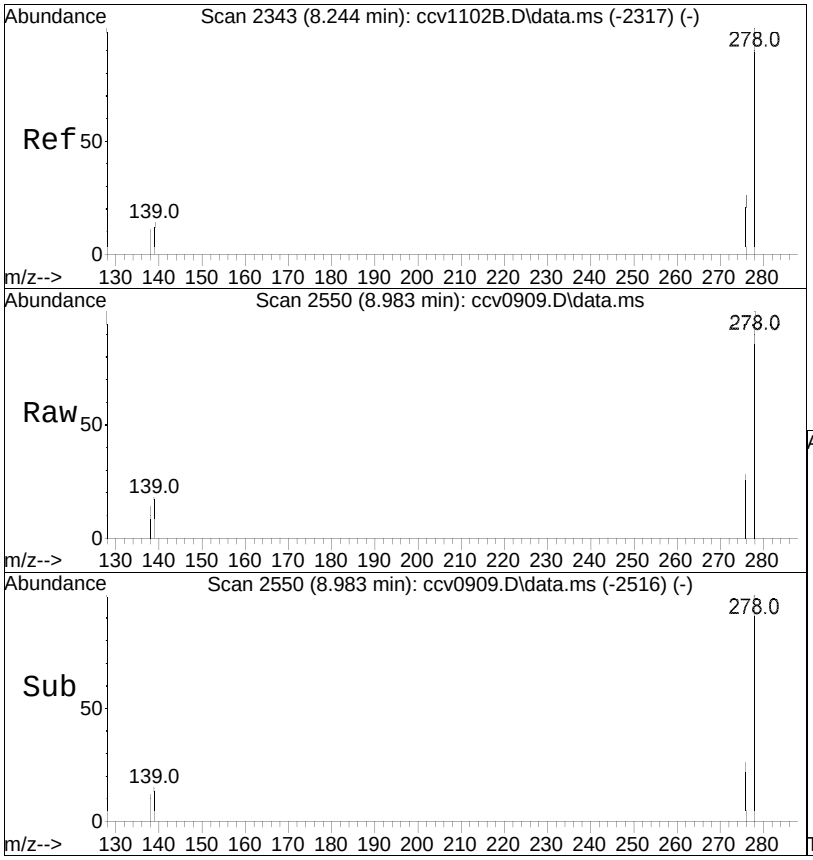


#40
Indeno[1,2,3-cd]pyrene
Concen: 1078.94 ng/ml
RT: 8.935 min Scan# 2534
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:276 Resp: 2536

Ion	Ratio	Lower	Upper
276	100		
138	18.8	13.8	20.6

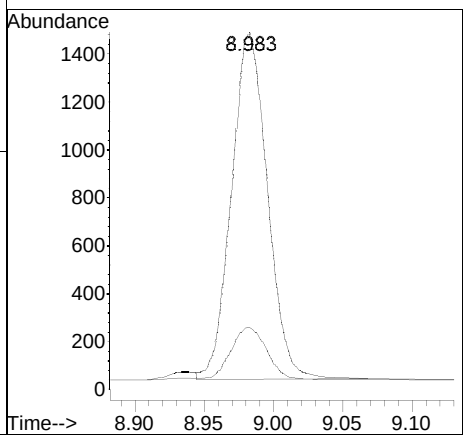


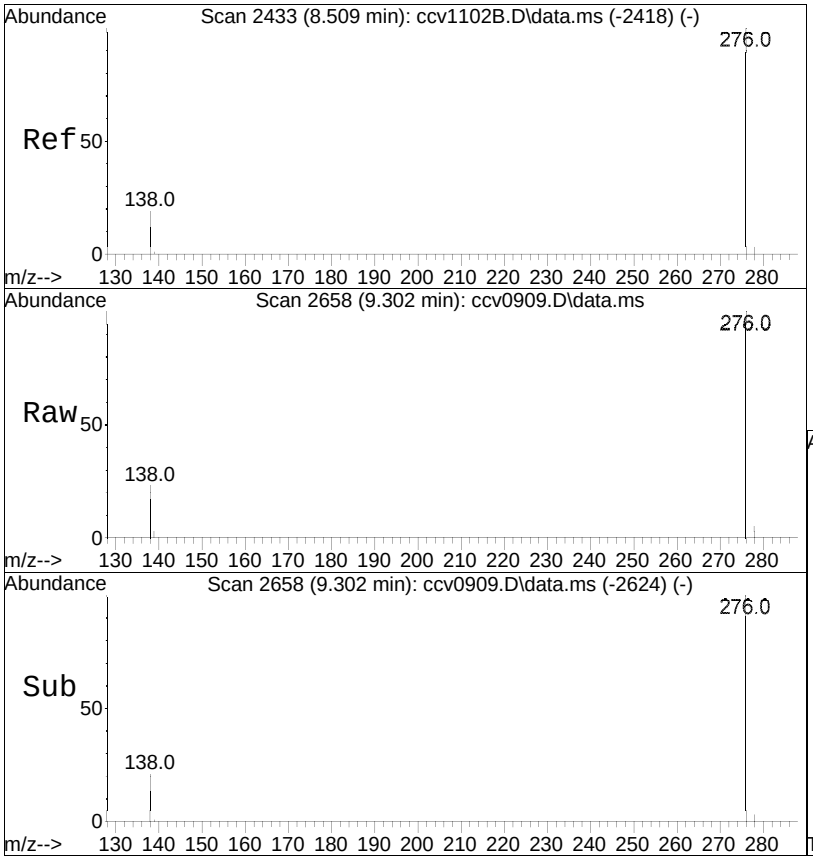


#41
Dibenzo[a,h]anthracene
Concen: 1150.11 ng/ml
RT: 8.983 min Scan# 2550
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:278 Resp: 2602

Ion	Ratio	Lower	Upper
278	100		
139	15.7	11.2	16.8

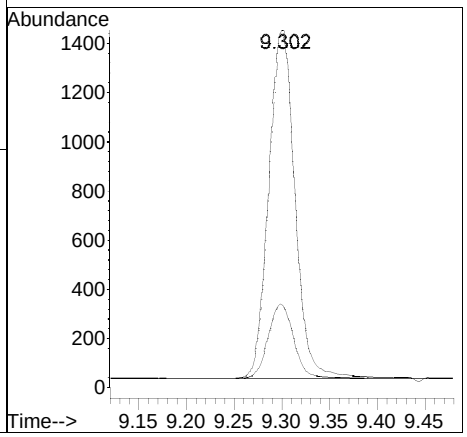




#42
Benzo[g,h,i]perylene
Concen: 1105.00 ng/ml
RT: 9.302 min Scan# 2658
Delta R.T. 0.000 min
Lab File: ccv0909.D
Acq: 09 Sep 2023 07:57 am

Tgt Ion:276 Resp: 2660

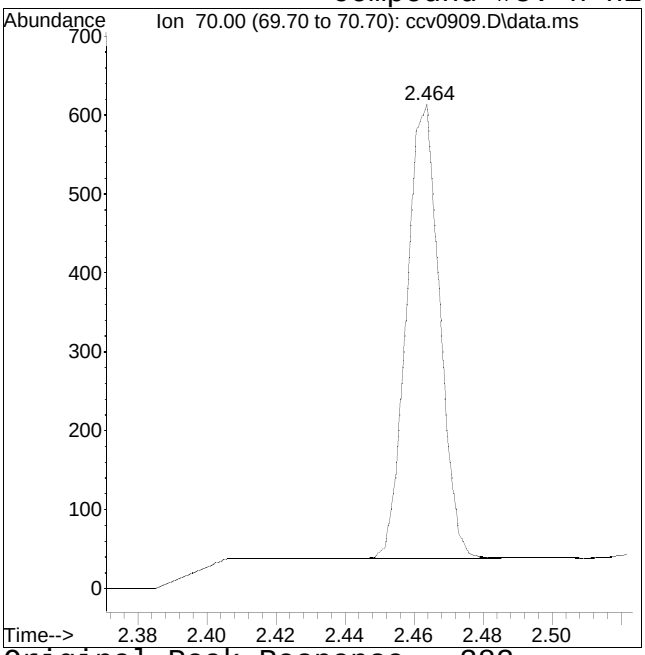
Ion	Ratio	Lower	Upper
276	100		
138	21.2	15.0	22.6



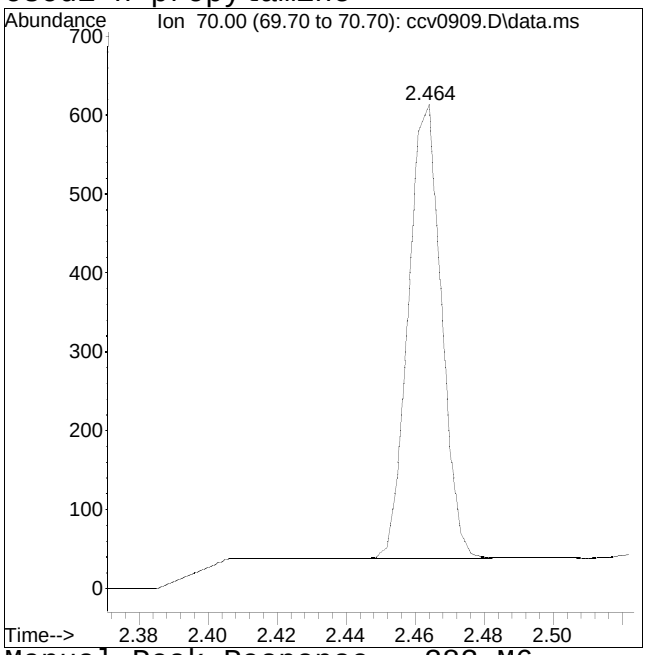
Manual Integration Report

Data Path : I:\8270SIM\SV128\230909\ QMethod : SIM-LVI_230831_sv128.M
Data File : ccv0909.D Operator : SV128:jjw
Date Inj'd : 9/9/2023 7:57 am Instrument : SV128
Sample : wg1825552-3,32,,ICV 10193 Quant Date : 9/9/2023 8:14 am

Compound #5: n-nitrosodi-n-propylamine



Original Peak Response = 383



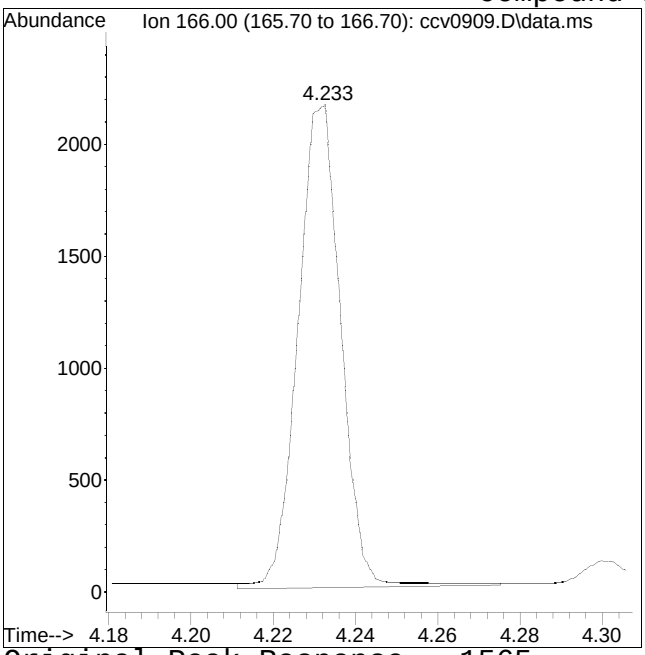
Manual Peak Response = 383 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

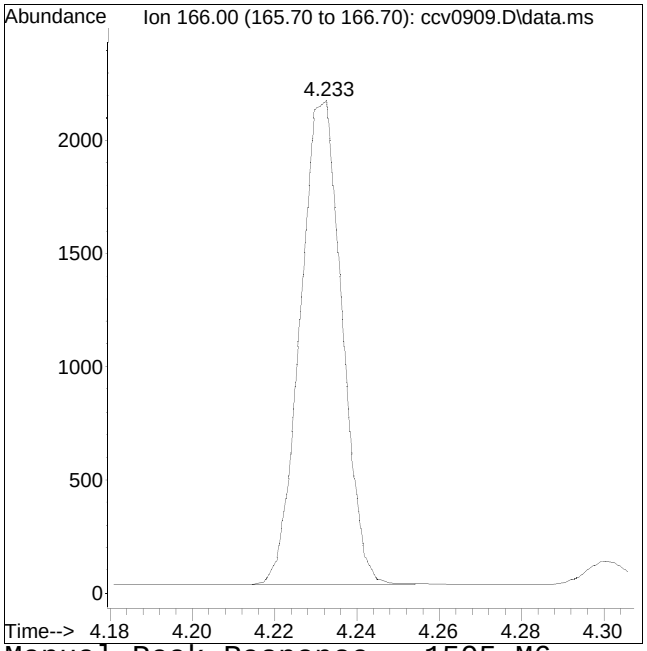
Manual Integration Report

Data Path : I:\8270SIM\SV128\230909\ QMethod : SIM-LVI_230831_sv128.M
Data File : ccv0909.D Operator : SV128:jjw
Date Inj'd : 9/9/2023 7:57 am Instrument : SV128
Sample : wg1825552-3,32,,ICV 10193 Quant Date : 9/9/2023 8:14 am

Compound #20: Fluorene



Original Peak Response = 1565



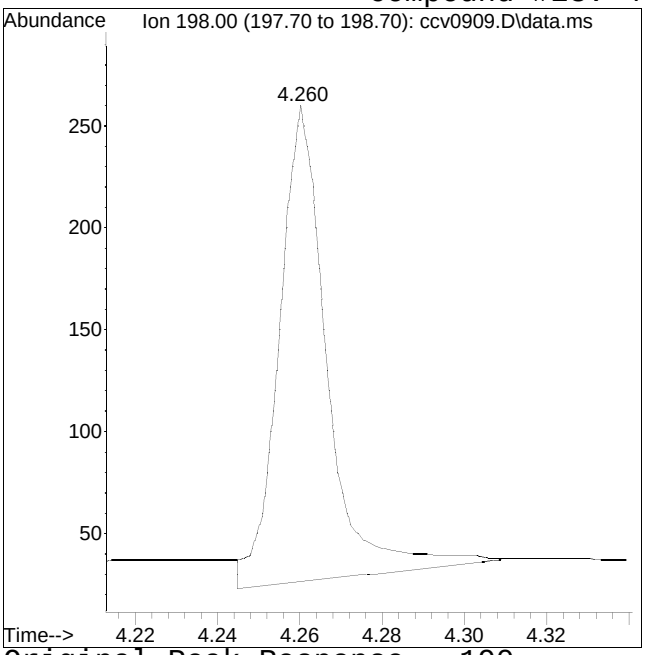
Manual Peak Response = 1505 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

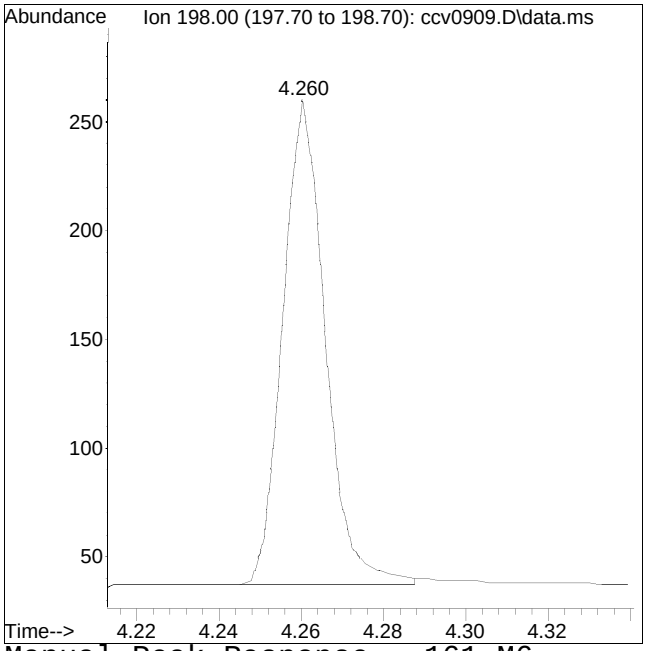
Manual Integration Report

Data Path : I:\8270SIM\SV128\230909\ QMethod : SIM-LVI_230831_sv128.M
Data File : ccv0909.D Operator : SV128:jjw
Date Inj'd : 9/9/2023 7:57 am Instrument : SV128
Sample : wg1825552-3,32,,ICV 10193 Quant Date : 9/9/2023 8:14 am

Compound #23: 4,6-Dinitro-o-cresol



Original Peak Response = 190



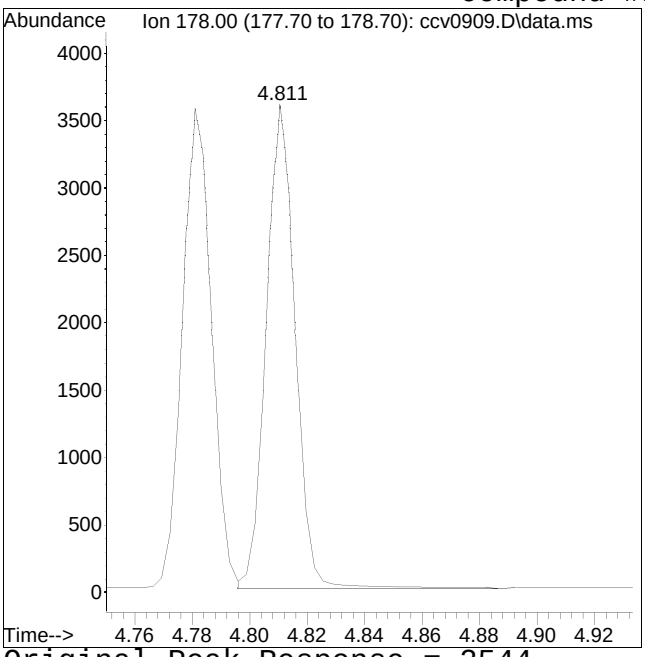
Manual Peak Response = 161 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

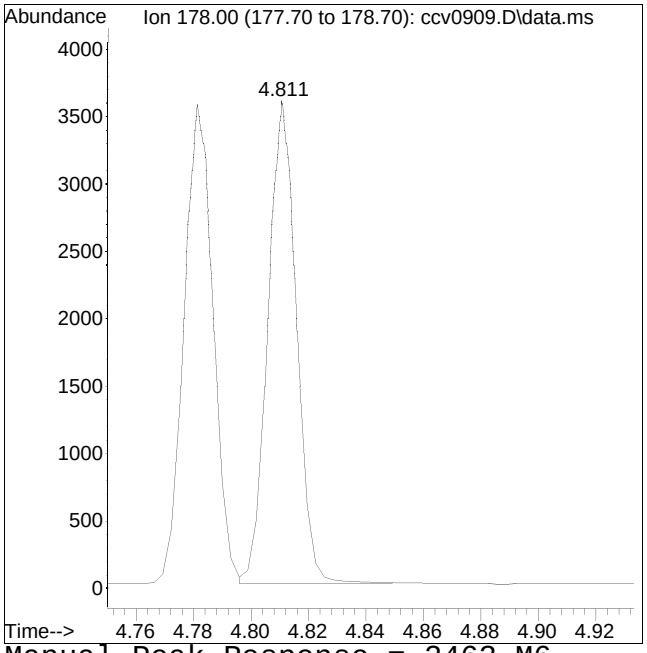
Manual Integration Report

Data Path : I:\8270SIM\SV128\230909\ QMethod : SIM-LVI_230831_sv128.M
Data File : ccv0909.D Operator : SV128:jjw
Date Inj'd : 9/9/2023 7:57 am Instrument : SV128
Sample : wg1825552-3,32,,ICV 10193 Quant Date : 9/9/2023 8:14 am

Compound #27: Anthracene



Original Peak Response = 2544



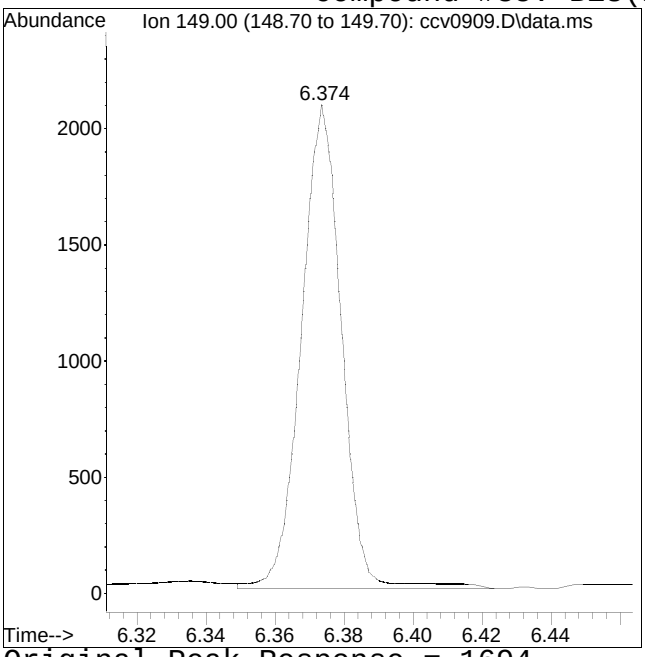
Manual Peak Response = 2463 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

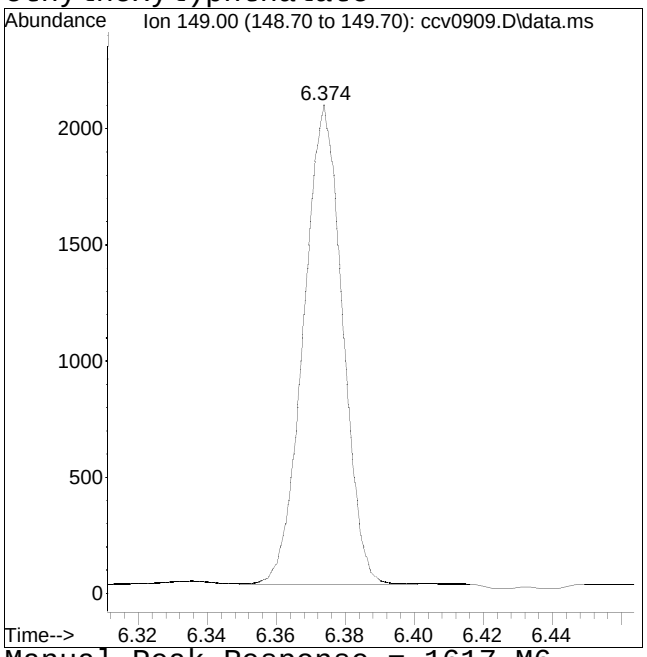
Manual Integration Report

Data Path : I:\8270SIM\SV128\230909\ QMethod : SIM-LVI_230831_sv128.M
Data File : ccv0909.D Operator : SV128:jjw
Date Inj'd : 9/9/2023 7:57 am Instrument : SV128
Sample : wg1825552-3,32,,ICV 10193 Quant Date : 9/9/2023 8:14 am

Compound #35: Bis(2-ethylhexyl)phthalate



Original Peak Response = 1694



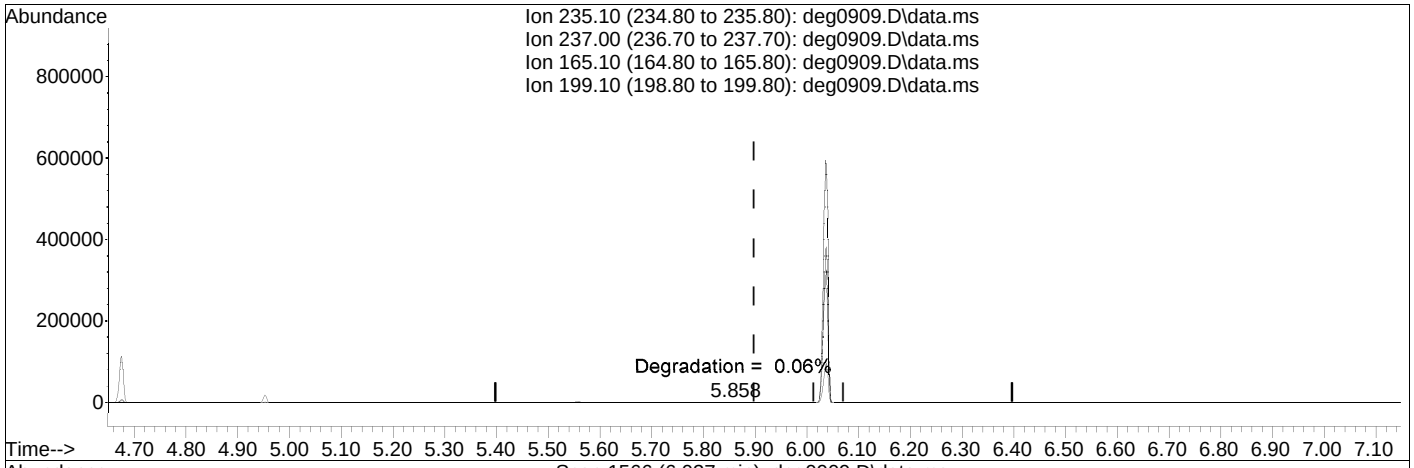
Manual Peak Response = 1617 M6

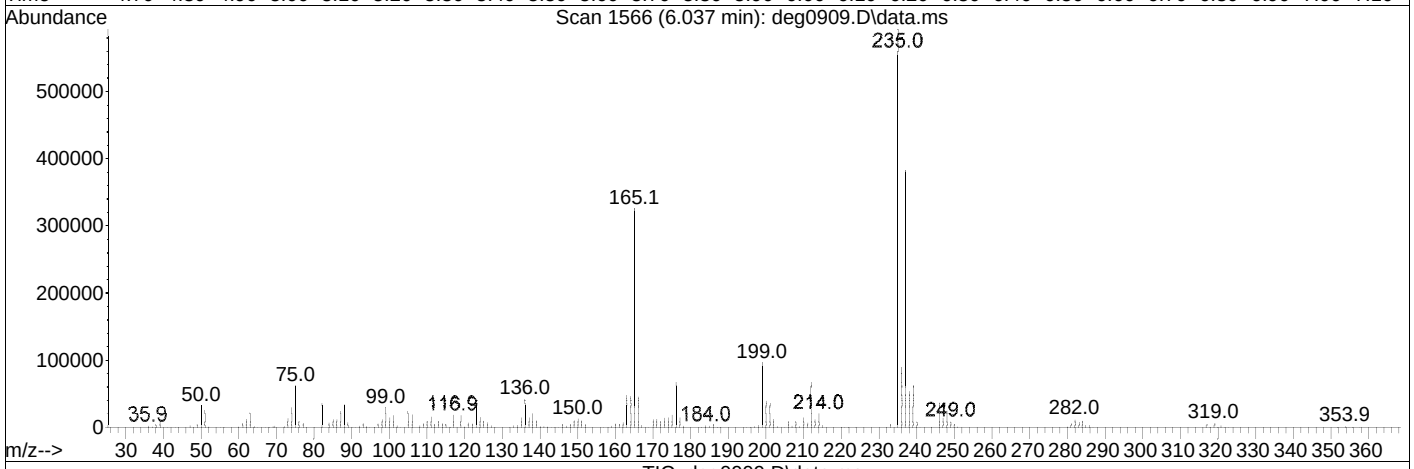
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV128\230909\
Data File : deg0909.D
Acq On : 09 Sep 2023 07:37 am
Operator : SV128:ah
Sample : WG1825552-2,32,, dftpp sv128
Misc : WG1825552,,ical20340
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 09 07:54:44 2023
Quant Method : I:\8270SIM\SV128\230909\dftppsv128.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Aug 12 18:40:35 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0909.D\data.ms

(6) ddt (T)

6.037min (+ 0.139) 59.89

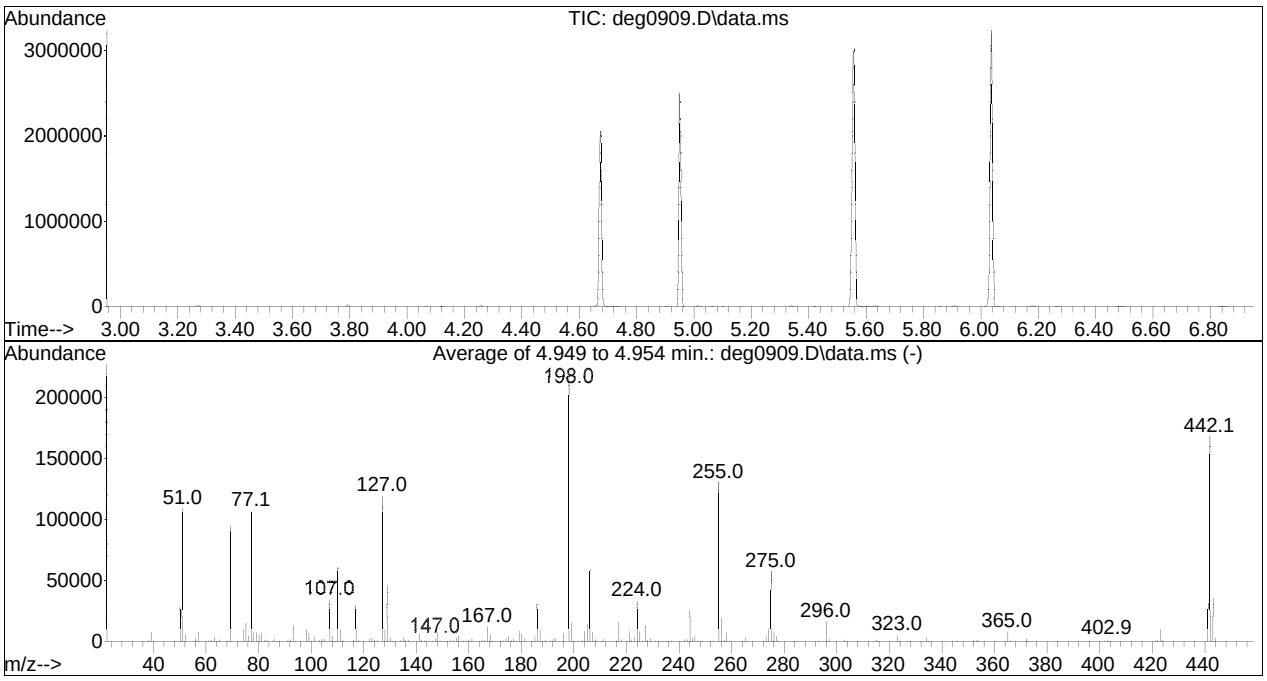
response 365075

Ion	Exp%	Act%
235.10	100.00	100.00
237.00	65.60	64.14
165.10	53.30	54.07
199.10	17.10	16.09

Data Path : I:\8270SIM\SV128\230909\
Data File : deg0909.D
Acq On : 09 Sep 2023 07:37 am
Operator : SV128:ah
Sample : WG1825552-1,32,, dftpp sv128
Misc : WG1825552,,ical20340
ALS Vial : 48 Sample Multiplier: 1

Integration File: rteint.p

Method : I:\8270SIM\SV128\230909\SIM-LVI_230831_sv128.M
Title : Semivolatiles by GC/MS by modified 8270
Last Update : Sat Sep 09 08:13:34 2023



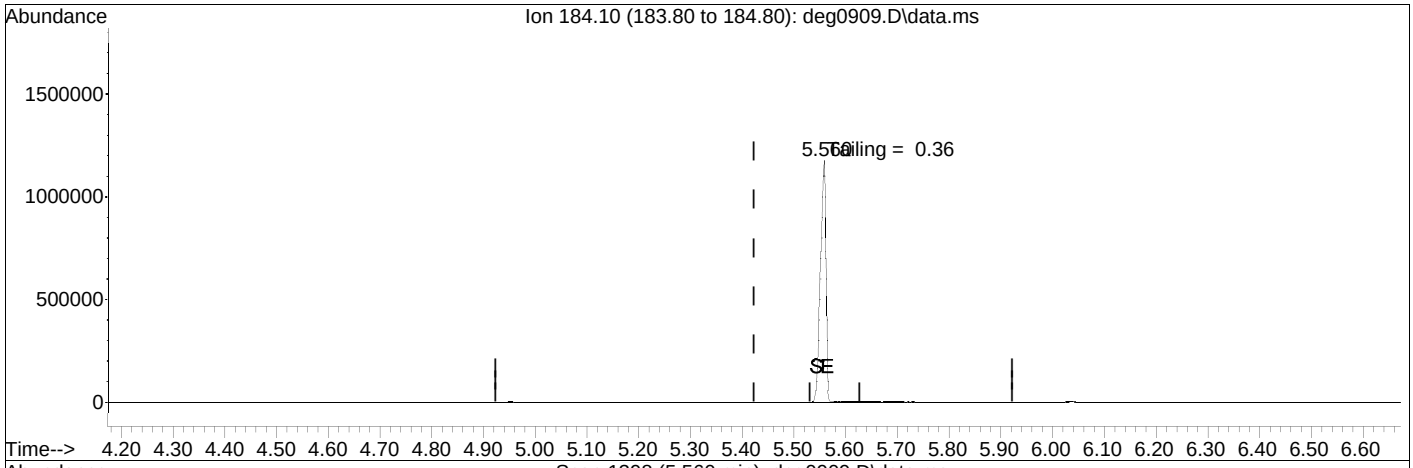
Spectrum Information: Average of 4.949 to 4.954 min.

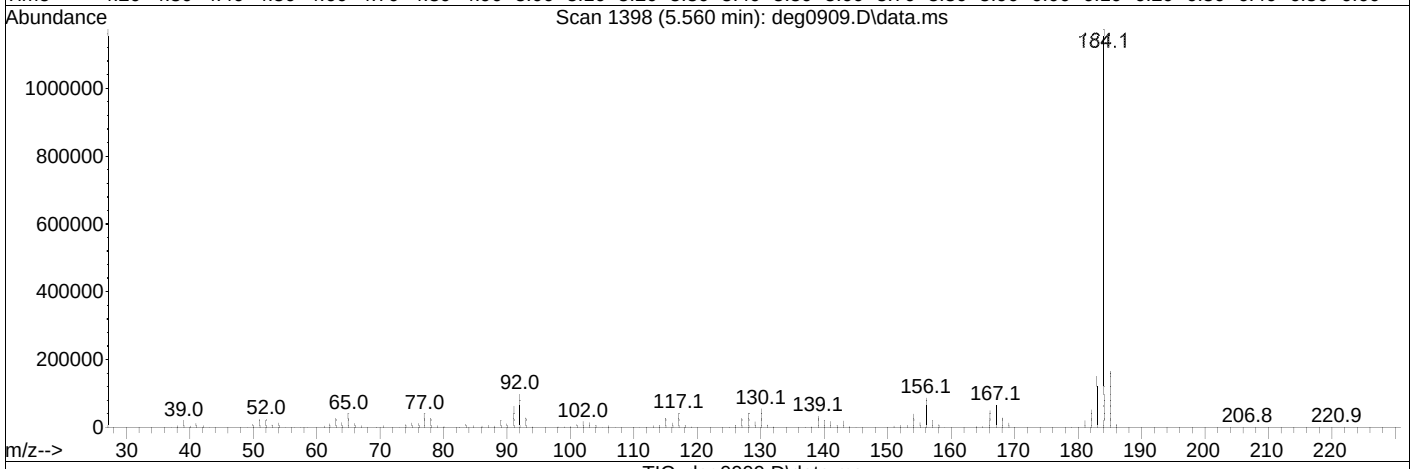
Target Mass	Rel. to Mass	Lower Limit%	Upper Limit%	Rel. Abn%	Raw Abn	Result Pass/Fail
51	198	10	80	50.4	109008	PASS
68	69	0.00	2	0.8	762	PASS
69	69	100	100	100.0	94093	PASS
70	69	0.00	2	0.6	518	PASS
127	198	10	80	55.0	118931	PASS
197	198	0.00	2	0.0	0	PASS
198	198	100	100	100.0	216384	PASS
199	198	5	9	7.0	15205	PASS
275	198	10	60	26.4	57213	PASS
365	198	1	100	3.5	7604	PASS
441	442	0.01	24	18.8	31522	PASS
442	198	50	100	77.6	167923	PASS
443	442	15	24	21.0	35221	PASS

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV128\230909\
Data File : deg0909.D
Acq On : 09 Sep 2023 07:37 am
Operator : SV128:ah
Sample : WG1825552-4,32,, dftpp sv128
Misc : WG1825552,,ical20340
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 09 07:54:44 2023
Quant Method : I:\8270SIM\SV128\230909\dftppsv128.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Aug 12 18:40:35 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0909.D\data.ms

(3) benzidine (T)

5.560min (+ 0.137) 81.39

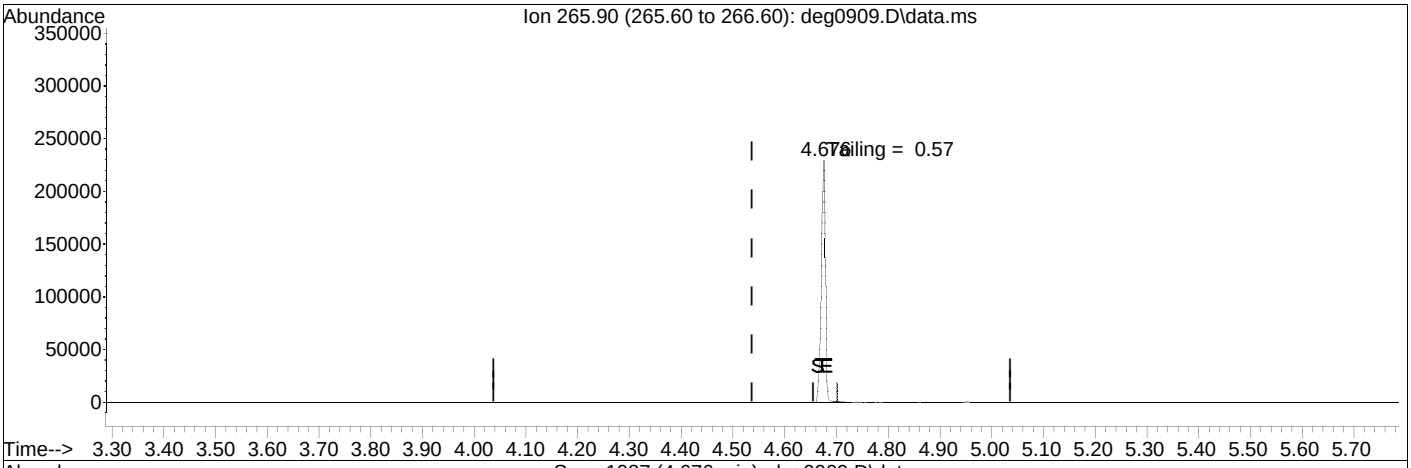
response 828581

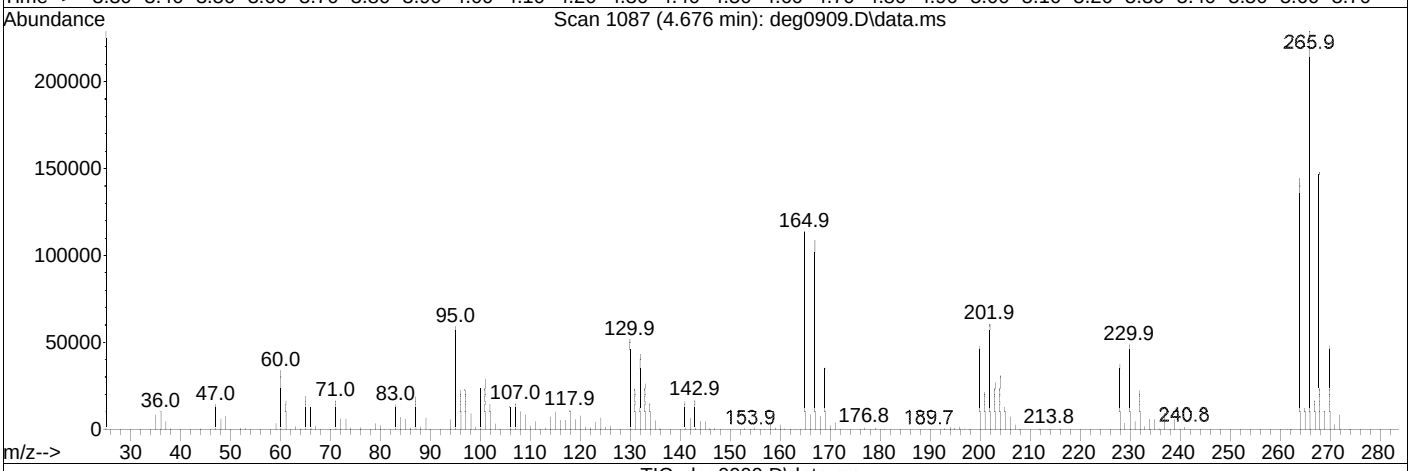
Ion	Exp%	Act%
184.10	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Quantitation Report (Qedit)

Data Path : I:\8270SIM\SV128\230909\
Data File : deg0909.D
Acq On : 09 Sep 2023 07:37 am
Operator : SV128:ah
Sample : WG1825552-5,32,, dftpp sv128
Misc : WG1825552,,ical20340
ALS Vial : 48 Sample Multiplier: 1

Quant Time: Sep 09 07:54:44 2023
Quant Method : I:\8270SIM\SV128\230909\dftppsv128.m
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Sat Aug 12 18:40:35 2023
Response via : Continuing Cal File: C:\ENVDEMO\BNADATA\DLWB002.D





TIC: deg0909.D\data.ms

(1) pentachlorophenol (T)

4.676min (+ 0.139) 56.72

response 119130

Ion	Exp%	Act%
265.90	100.00	100.00
0.00	0.00	0.00
0.00	0.00	0.00
0.00	0.00	0.00

Semivolatiles Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : 822198-1.D
Acq On : 31 Aug 2023 06:14 pm
Operator : sv119:ah
Sample : WG1822198-1,32,,ah
Misc : WG1822344,WG1822198,ical19785
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Sep 05 09:40:51 2023
Quant Method : I:\8270SIM\sv119\230831LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230831LVI\ccv0831.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.263	152	64590	4000.000	ng/ml	0.00
Standard Area 1 = 44950			Recovery = 143.69%			
8) Naphthalene-d8	2.937	136	242685	4000.000	ng/ml	0.00
Standard Area 1 = 161376			Recovery = 150.38%			
17) Acenaphthene-d10	3.921	164	129758	4000.000	ng/ml	0.00
Standard Area 1 = 81212			Recovery = 159.78%			
22) Phenanthrene-d10	4.765	188	293954	4000.000	ng/ml	0.00
Standard Area 1 = 177149			Recovery = 165.94%			
31) Chrysene-d12	6.332	240	243909	4000.000	ng/ml	0.00
Standard Area 1 = 152182			Recovery = 160.27%			
36) Perylene-d12	7.562	264	229562	4000.000	ng/ml	0.00
Standard Area 1 = 169708			Recovery = 135.27%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.655	112	60764	3823.572	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 76.47%			
3) Phenol-d6	2.071	99	65869	3508.100	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 70.16%			
7) Nitrobenzene-d5	2.548	82	38912	2754.701	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 110.19%			
13) 2-Fluorobiphenyl	3.541	172	92260	1849.054	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 73.96%			
21) 2,4,6-Tribromophenol	4.370	330	30848	5900.439	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 118.01%#			
30) 4-Terphenyl-d14	5.686	244	107305	1749.446	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 69.98%			
Target Compounds						Qvalue
6) Hexachloroethane	0.000		0	N.D.	d	
9) Naphthalene	2.949	128	174M6	3.028	ng/ml	
10) Hexachlorobutadiene	3.023	225	30M6	2.686	ng/ml	
11) 2-Methylnaphthalene	3.332	142	127M6	3.288	ng/ml	
14) 2-Chloronaphthalene	3.607	162	158	3.766	ng/ml	89
16) Acenaphthylene	0.000		0	N.D.	d	
18) Acenaphthene	0.000		0	N.D.	d	
20) Fluorene	4.234	166	176M4	3.722	ng/ml	
24) Hexachlorobenzene	4.550	284	195M7	11.038	ng/ml	
25) Pentachlorophenol	0.000		0	N.D.	d	

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : 822198-1.D
Acq On : 31 Aug 2023 06:14 pm
Operator : sv119:ah
Sample : WG1822198-1,32,,ah
Misc : WG1822344,WG1822198,ical19785
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Sep 05 09:40:51 2023
Quant Method : I:\8270SIM\sv119\230831LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230831LVI\ccv0831.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.779	178	497M4	6.673	ng/ml	
27) Anthracene	4.808	178	336M6	4.836	ng/ml	
28) Fluoranthene	5.461	202	421M6	4.947	ng/ml	
29) Pyrene	5.593	202	361	4.096	ng/ml#	88
32) Benzo[a]anthracene	6.330	228	910	2.614	ng/ml#	71
34) Chrysene	6.347	228	129M6	1.660	ng/ml	
37) Benzo[b]fluoranthene	0.000		0	N.D.	d	
38) Benzo[k]fluoranthene	0.000		0	N.D.	d	
39) Benzo[a]pyrene	0.000		0	N.D.	d	
40) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.	d	
41) Dibenzo[a,h]anthracene	0.000		0	N.D.	d	
42) Benzo[g,h,i]perylene	0.000		0	N.D.	d	

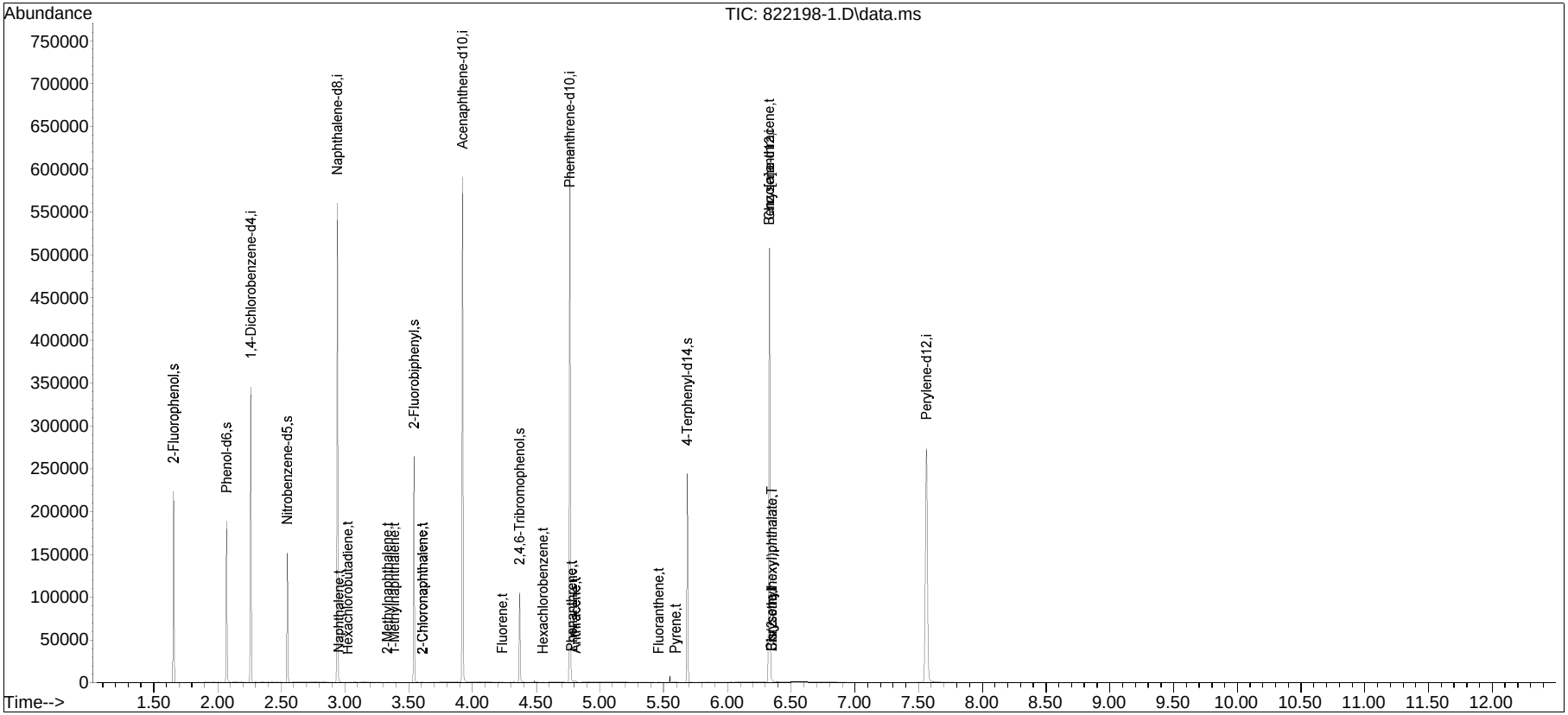
(#) = qualifier out of range (m) = manual integration (+) = signals summed

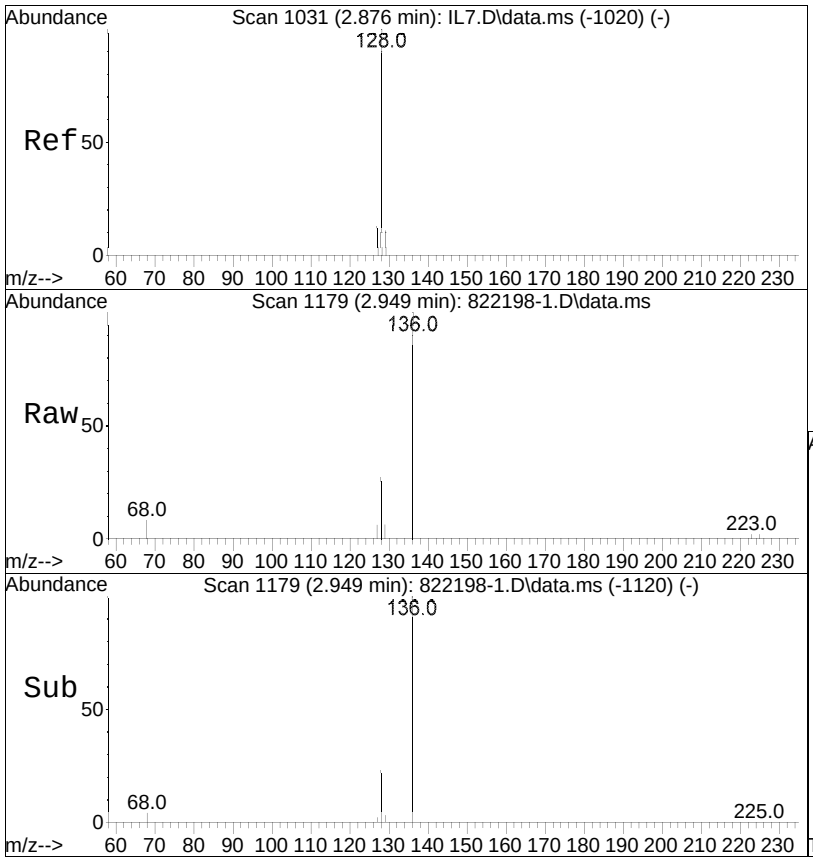
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230831LVI\
Data File : 822198-1.D
Acq On : 31 Aug 2023 06:14 pm
Operator : sv119:ah
Sample : WG1822198-1,32,,ah
Misc : WG1822344,WG1822198,ical19785
ALS Vial : 38 Sample Multiplier: 1

Quant Time: Sep 05 09:40:51 2023
Quant Method : I:\8270SIM\sv119\230831LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Aug 31 07:37:11 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0831.D•

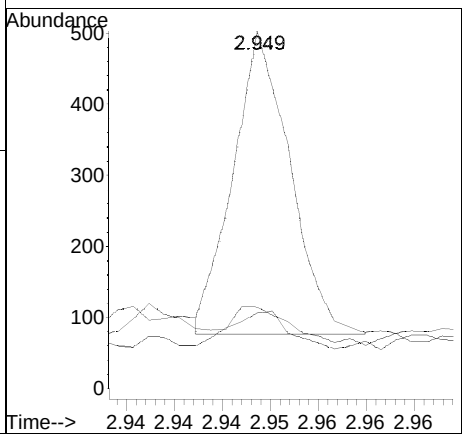


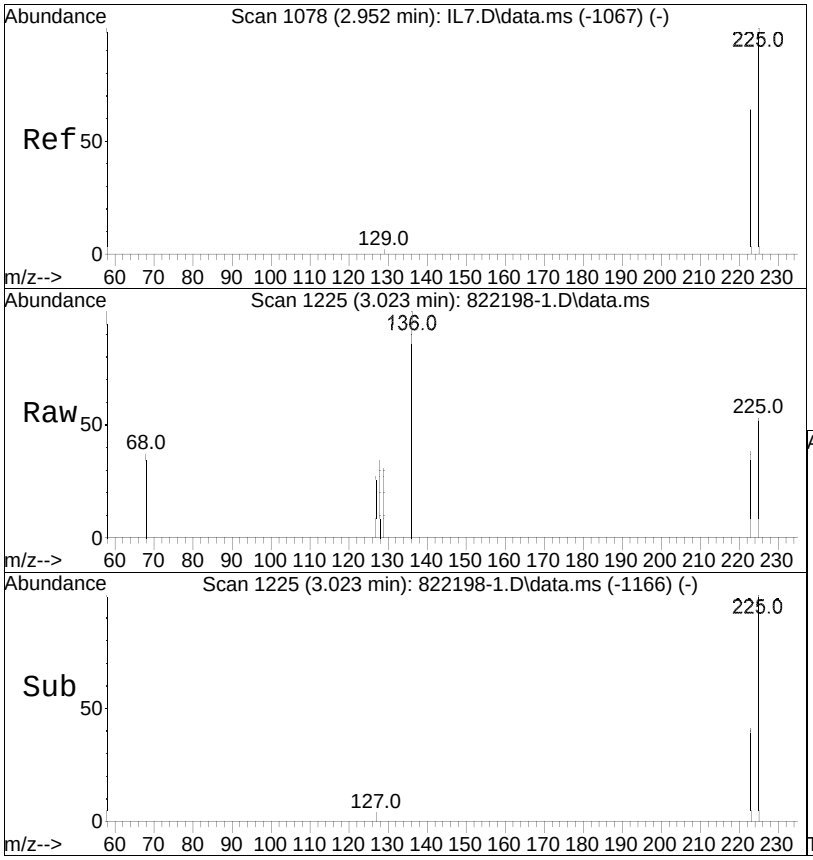


#9
Naphthalene
Concen: 3.03 ng/ml M6
RT: 2.949 min Scan# 1179
Delta R.T. -0.005 min
Lab File: 822198-1.D
Acq: 31 Aug 2023 06:14 pm

Tgt Ion:128 Resp: 174

Ion	Ratio	Lower	Upper
128	100		
129	13.8	8.8	13.2#
127	12.6	10.6	15.8

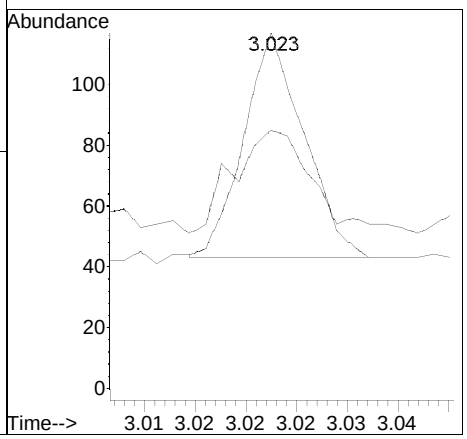


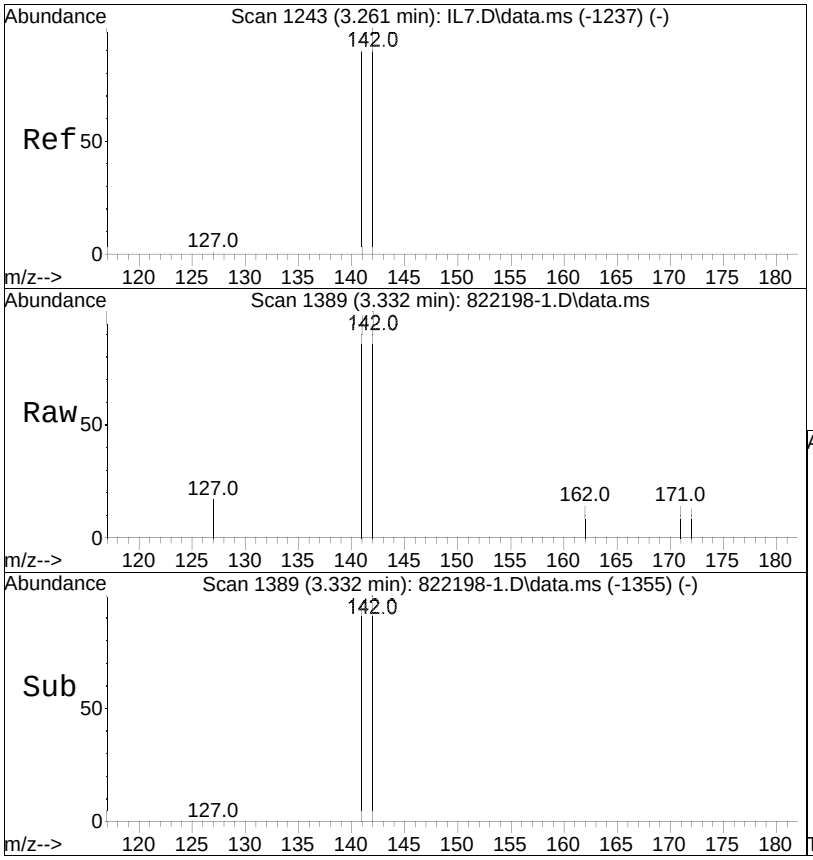


#10
Hexachlorobutadiene
Concen: 2.69 ng/ml M6
RT: 3.023 min Scan# 1225
Delta R.T. -0.005 min
Lab File: 822198-1.D
Acq: 31 Aug 2023 06:14 pm

Tgt Ion:225 Resp: 30

Ion	Ratio	Lower	Upper
225	100		
223	60.0	50.1	75.1

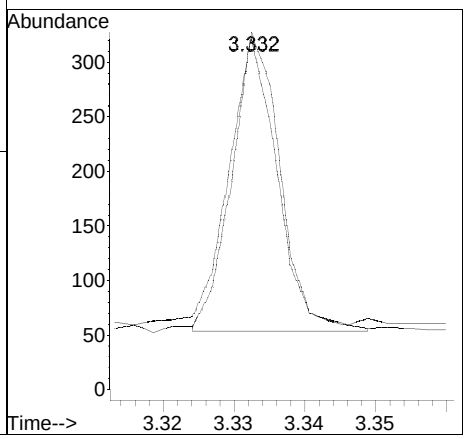


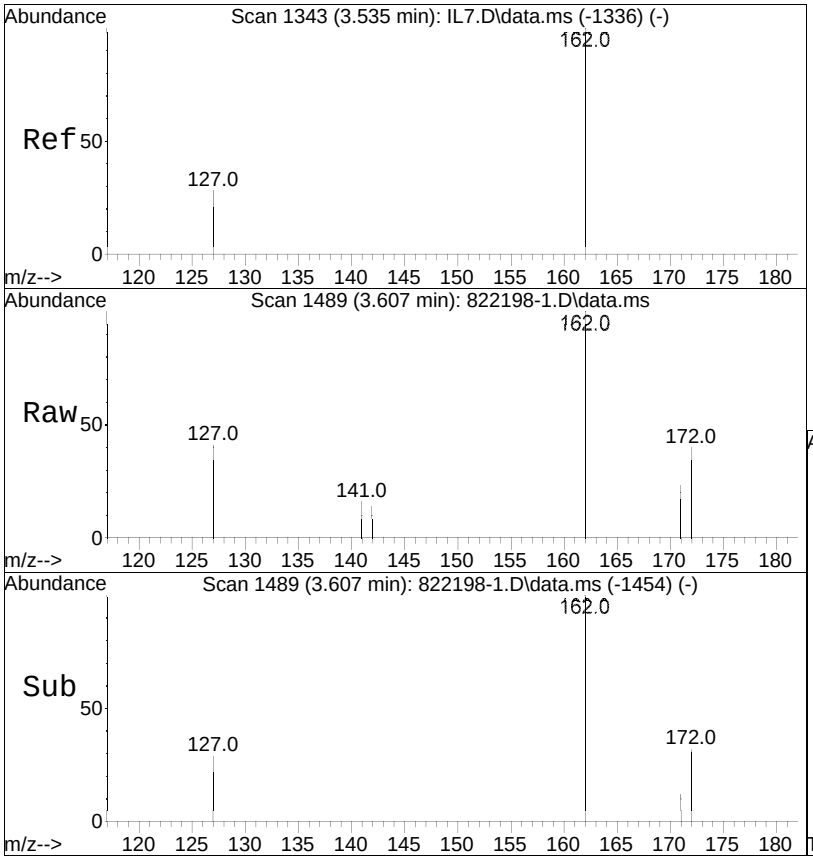


#11
2-Methylnaphthalene
Concen: 3.29 ng/ml M6
RT: 3.332 min Scan# 1389
Delta R.T. -0.006 min
Lab File: 822198-1.D
Acq: 31 Aug 2023 06:14 pm

Tgt Ion:142 Resp: 127

Ion	Ratio	Lower	Upper
142	100		
141	95.3	74.1	111.1

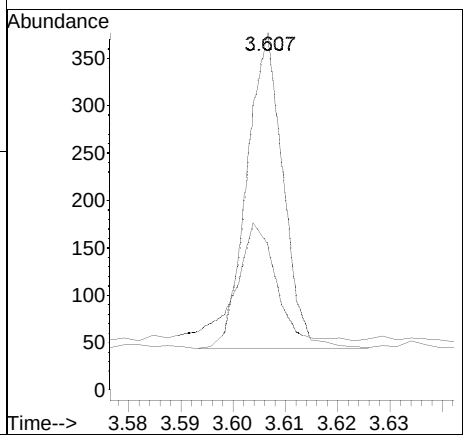


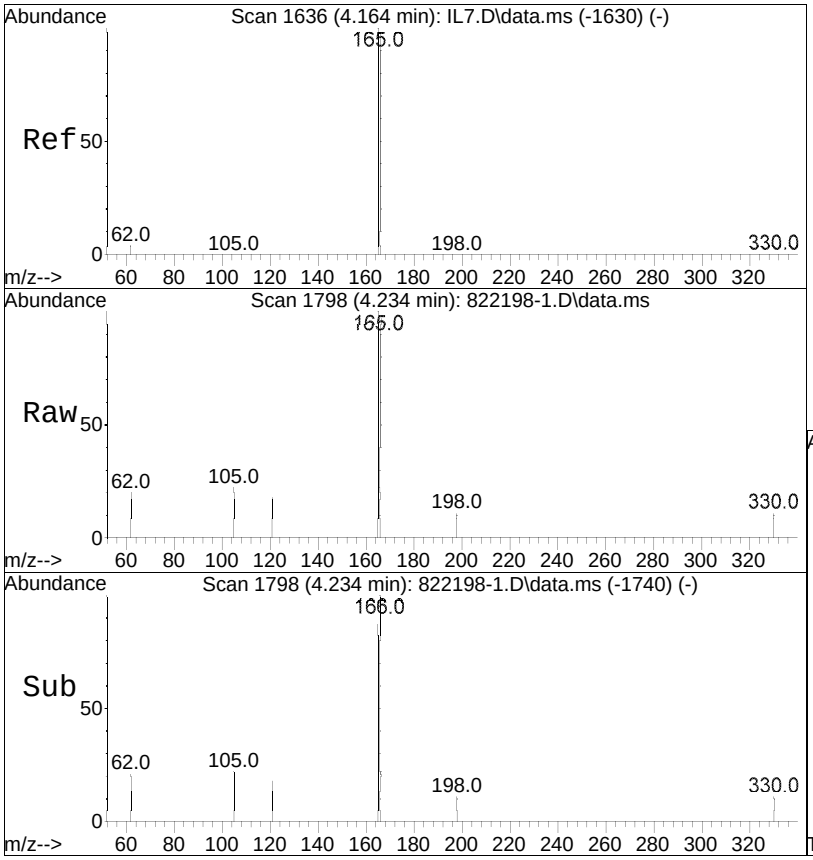


#14
2-Chloronaphthalene
Concen: 3.77 ng/ml
RT: 3.607 min Scan# 1489
Delta R.T. -0.003 min
Lab File: 822198-1.D
Acq: 31 Aug 2023 06:14 pm

Tgt Ion:162 Resp: 158

Ion	Ratio	Lower	Upper
162	100		
127	43.7	29.7	44.5

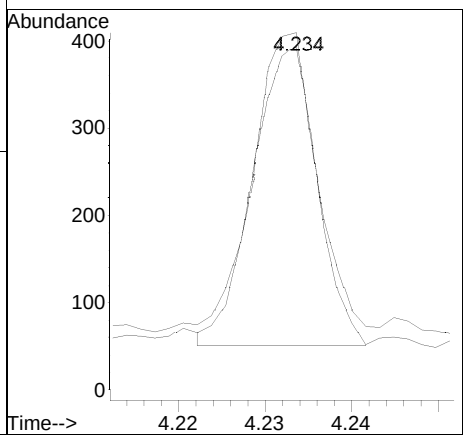


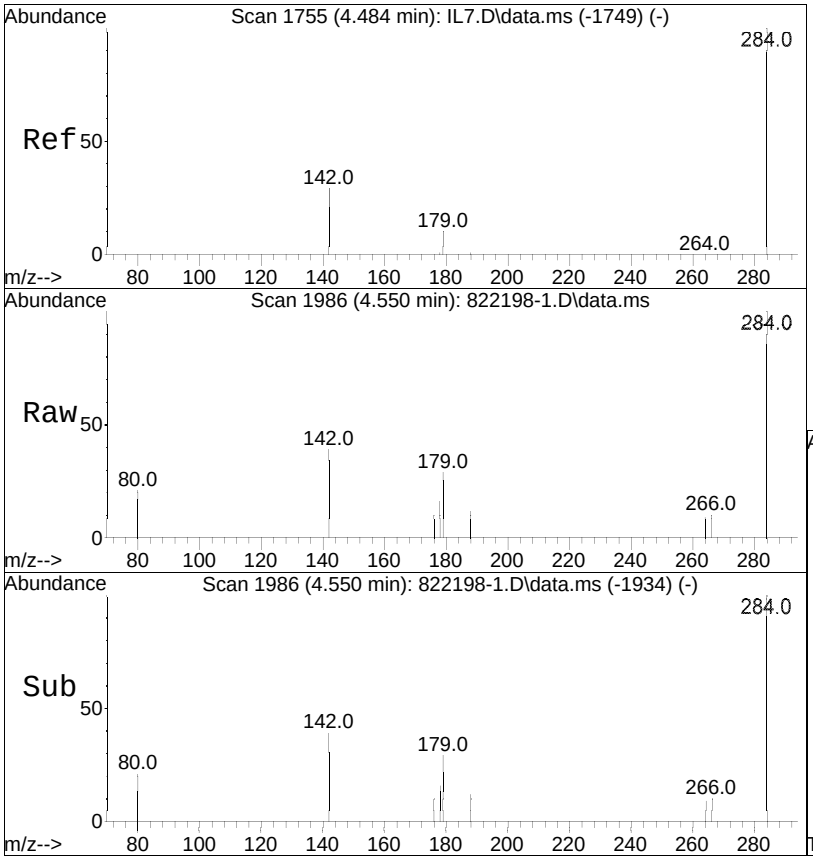


#20
Fluorene
Concen: 3.72 ng/ml M4
RT: 4.234 min Scan# 1798
Delta R.T. -0.003 min
Lab File: 822198-1.D
Acq: 31 Aug 2023 06:14 pm

Tgt Ion:166 Resp: 176

Ion	Ratio	Lower	Upper
166	100		
165	99.4	82.9	124.3

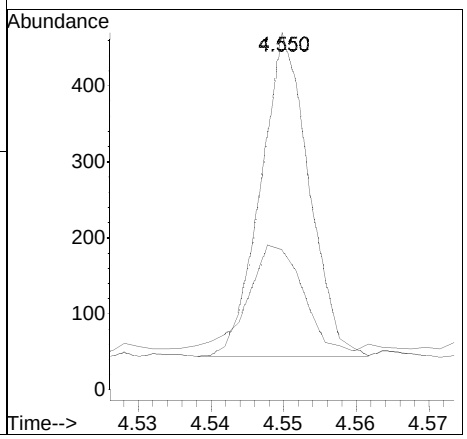


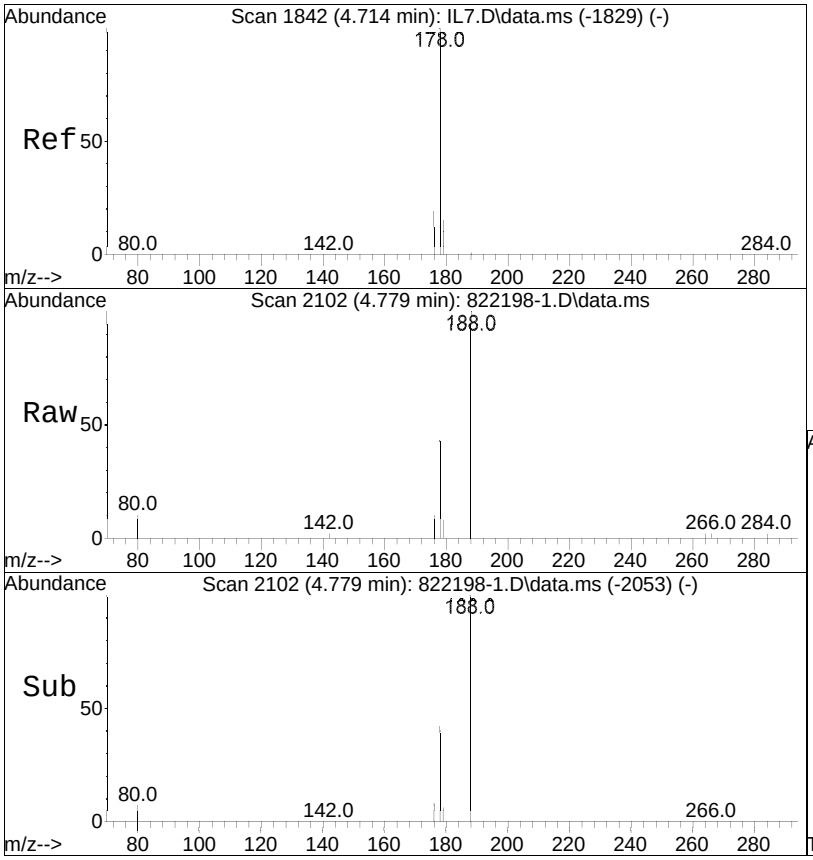


#24
Hexachlorobenzene
Concen: 11.04 ng/ml M7
RT: 4.550 min Scan# 1986
Delta R.T. -0.004 min
Lab File: 822198-1.D
Acq: 31 Aug 2023 06:14 pm

Tgt Ion:284 Resp: 195

Ion	Ratio	Lower	Upper
284	100		
142	36.9	26.9	40.3

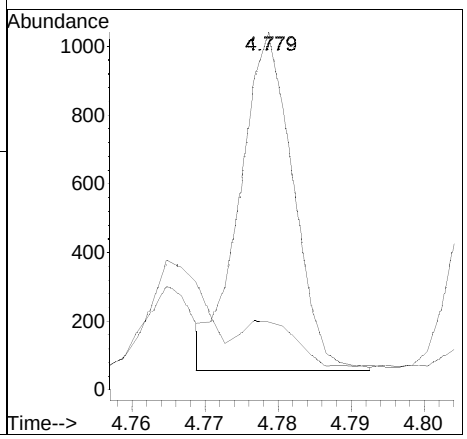


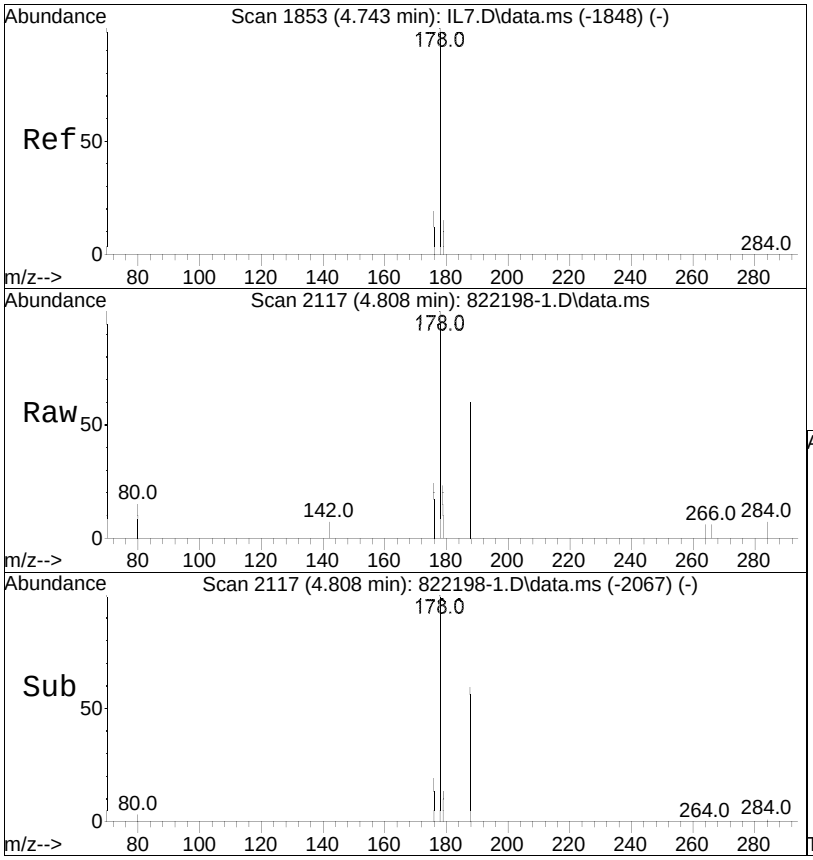


#26
Phenanthrene
Concen: 6.67 ng/ml M4
RT: 4.779 min Scan# 2102
Delta R.T. -0.004 min
Lab File: 822198-1.D
Acq: 31 Aug 2023 06:14 pm

Tgt Ion:178 Resp: 497

Ion	Ratio	Lower	Upper
178	100		
179	14.7	12.3	18.5

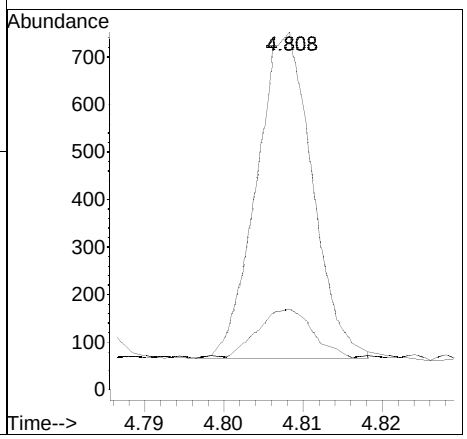


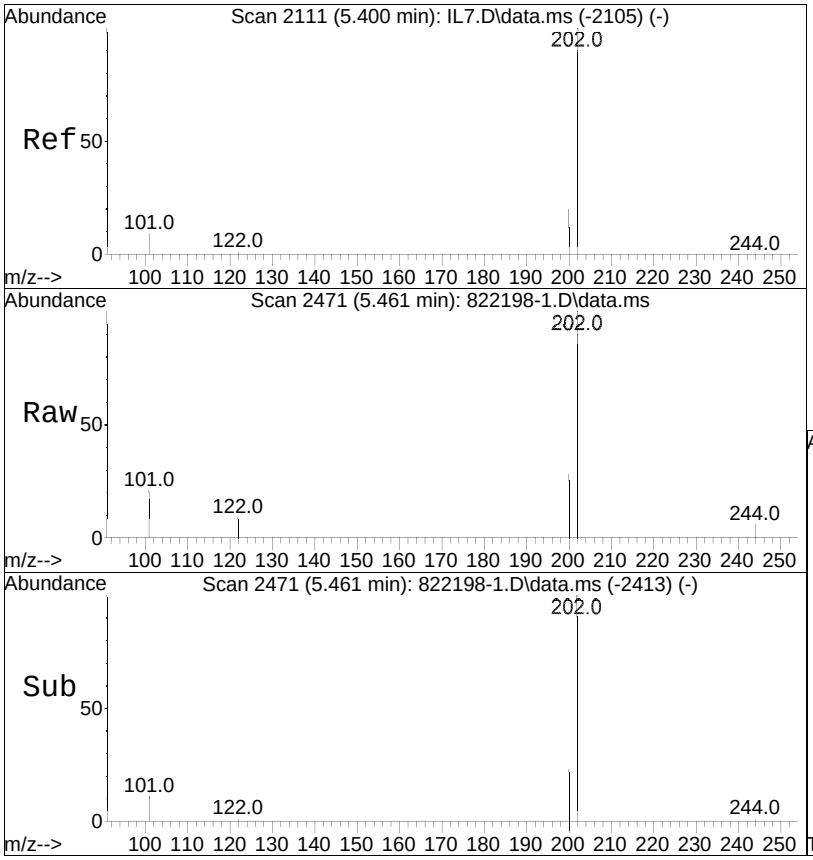


#27
Anthracene
Concen: 4.84 ng/ml M6
RT: 4.808 min Scan# 2117
Delta R.T. -0.002 min
Lab File: 822198-1.D
Acq: 31 Aug 2023 06:14 pm

Tgt Ion:178 Resp: 336

Ion	Ratio	Lower	Upper
178	100		
179	16.1	12.2	18.4

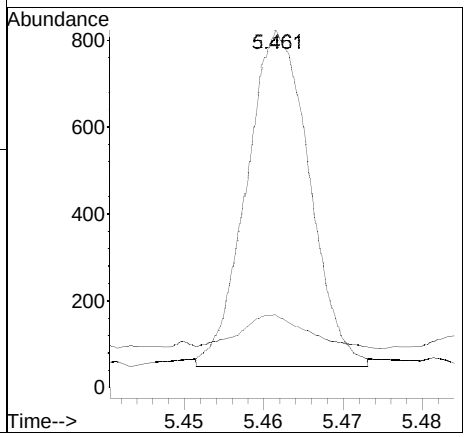


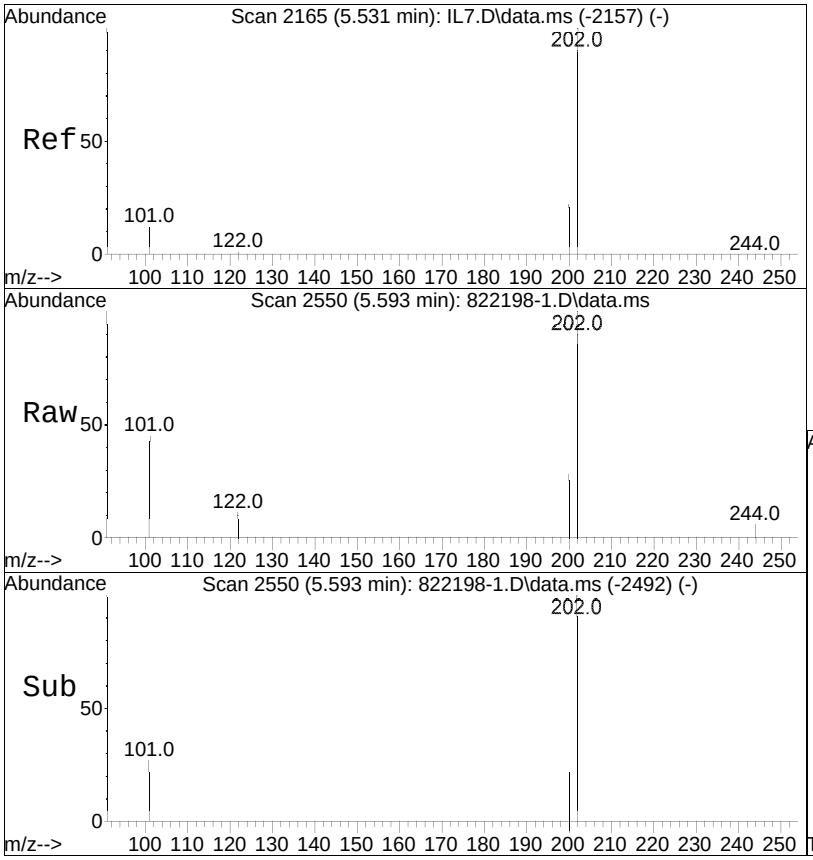


#28
Fluoranthene
Concen: 4.95 ng/ml M6
RT: 5.461 min Scan# 2471
Delta R.T. -0.003 min
Lab File: 822198-1.D
Acq: 31 Aug 2023 06:14 pm

Tgt Ion:202 Resp: 421

Ion	Ratio	Lower	Upper
202	100		
101	12.1	8.3	12.5

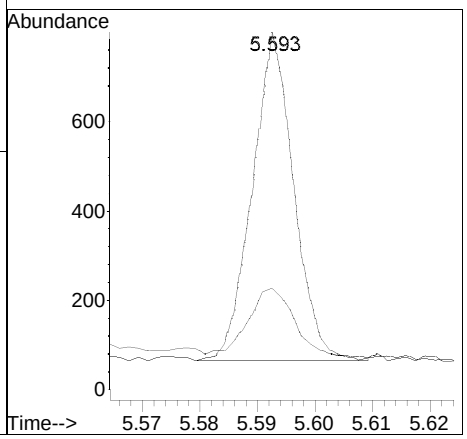


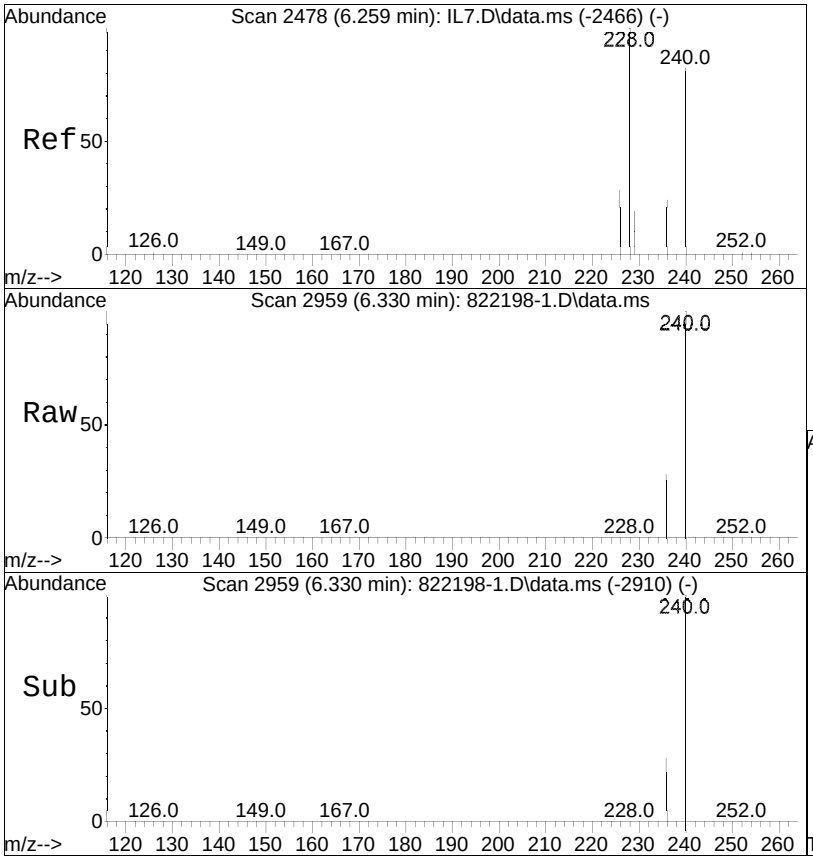


#29
Pyrene
Concen: 4.10 ng/ml
RT: 5.593 min Scan# 2550
Delta R.T. -0.003 min
Lab File: 822198-1.D
Acq: 31 Aug 2023 06:14 pm

Tgt Ion:202 Resp: 361

Ion	Ratio	Lower	Upper
202	100		
200	27.1	17.3	25.9#

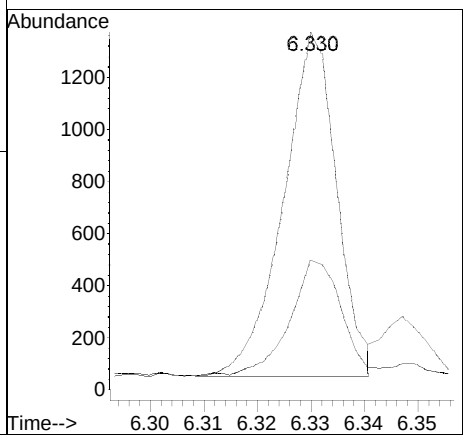


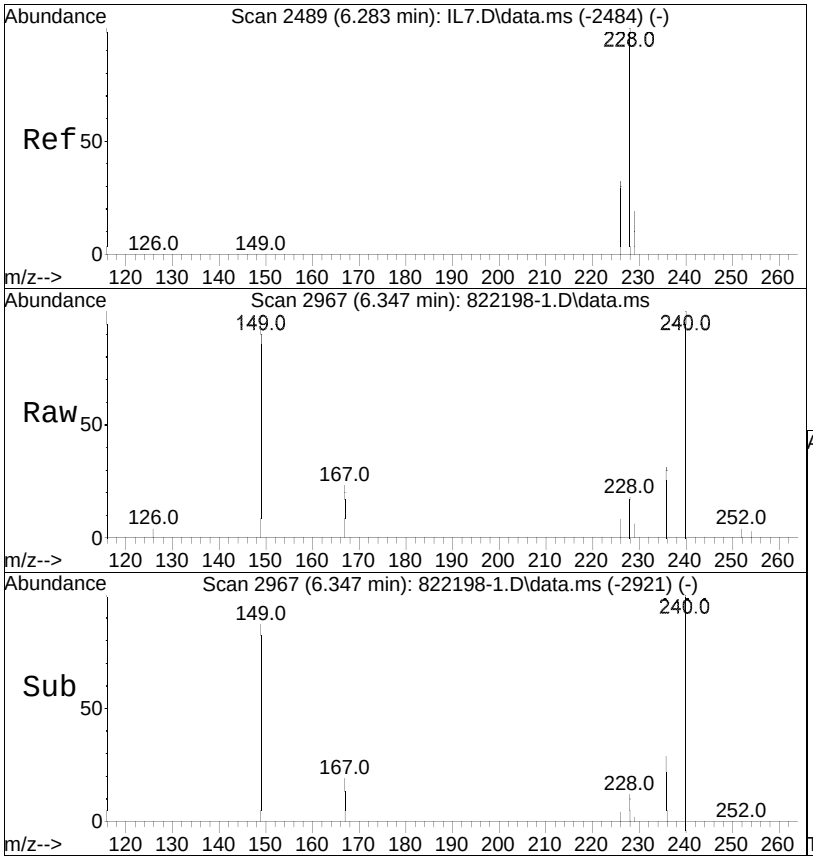


#32
Benzo[a]anthracene
Concen: 2.61 ng/ml
RT: 6.330 min Scan# 2959
Delta R.T. 0.004 min
Lab File: 822198-1.D
Acq: 31 Aug 2023 06:14 pm

Tgt Ion:228 Resp: 910

Ion	Ratio	Lower	Upper
228	100		
229	32.7	15.6	23.4#

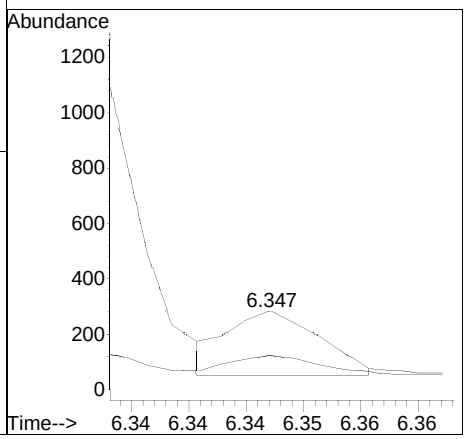




#34
Chrysene
Concen: 1.66 ng/ml M6
RT: 6.347 min Scan# 2967
Delta R.T. -0.002 min
Lab File: 822198-1.D
Acq: 31 Aug 2023 06:14 pm

Tgt Ion:228 Resp: 129

Ion	Ratio	Lower	Upper
228	100		
226	31.8	24.5	36.7

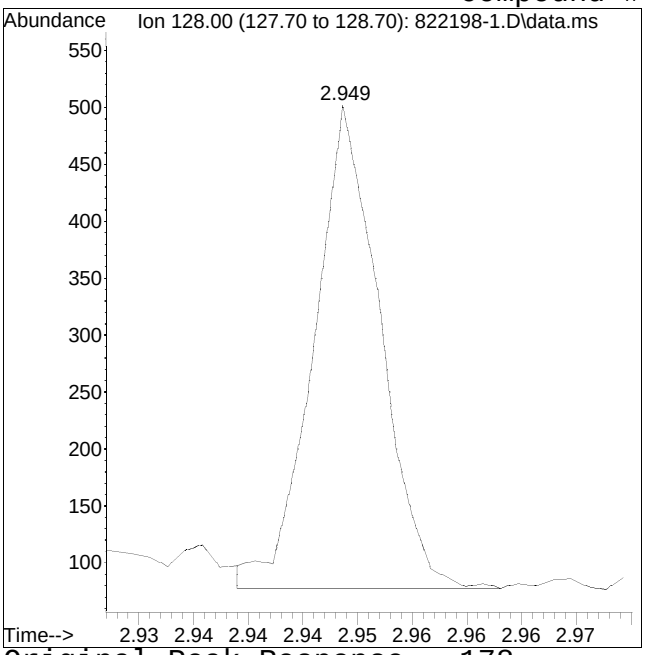


Manual Integration Report

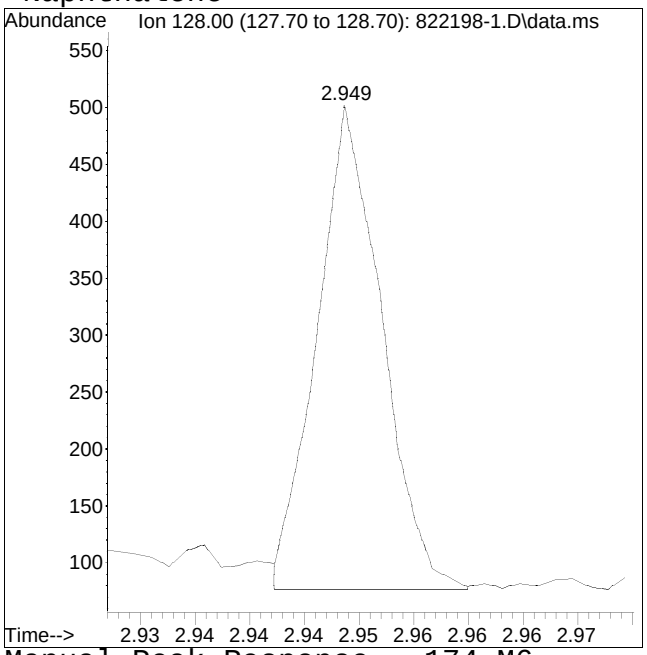
Data Path : I:\8270SIM\sv119\230831LVIQ
Data File : 822198-1.D
Date Inj'd : 8/31/2023 6:14 pm
Sample : WG1822198-1,32,,ah

Method : SIM-LVI_230306_sv119.M
Operator : sv119:ah
Instrument : SV119
Quant Date : 9/5/2023 9:36 am

Compound #9: Naphthalene



Original Peak Response = 178



Manual Peak Response = 174 M6

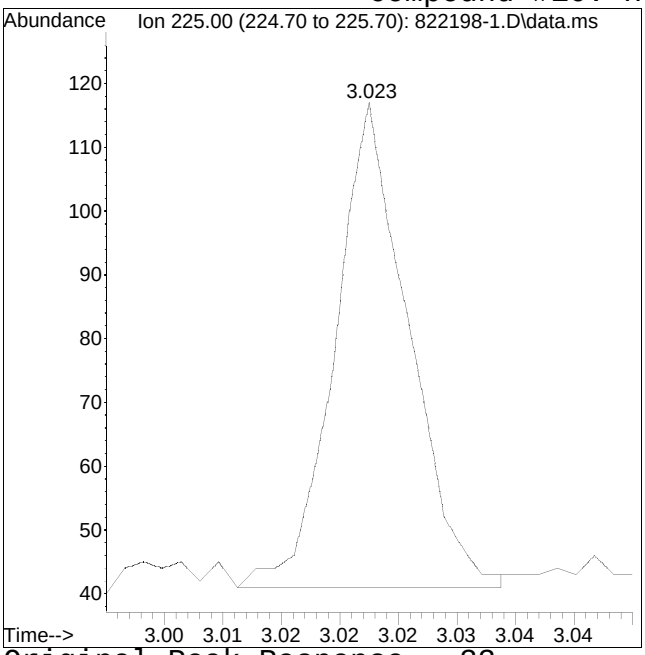
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

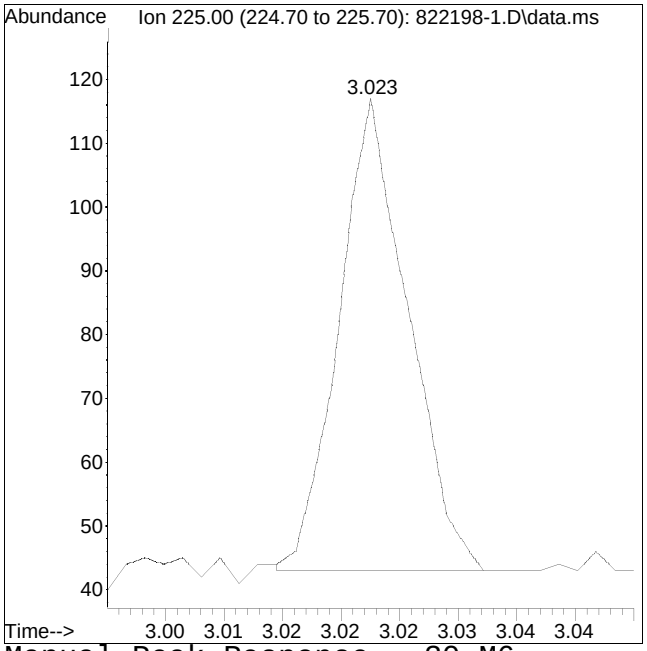
Data Path : I:\8270SIM\sv119\230831LVIQ
Data File : 822198-1.D
Date Inj'd : 8/31/2023 6:14 pm
Sample : WG1822198-1,32,,ah

Method : SIM-LVI_230306_sv119.M
Operator : sv119:ah
Instrument : SV119
Quant Date : 9/5/2023 9:36 am

Compound #10: Hexachlorobutadiene



Original Peak Response = 33



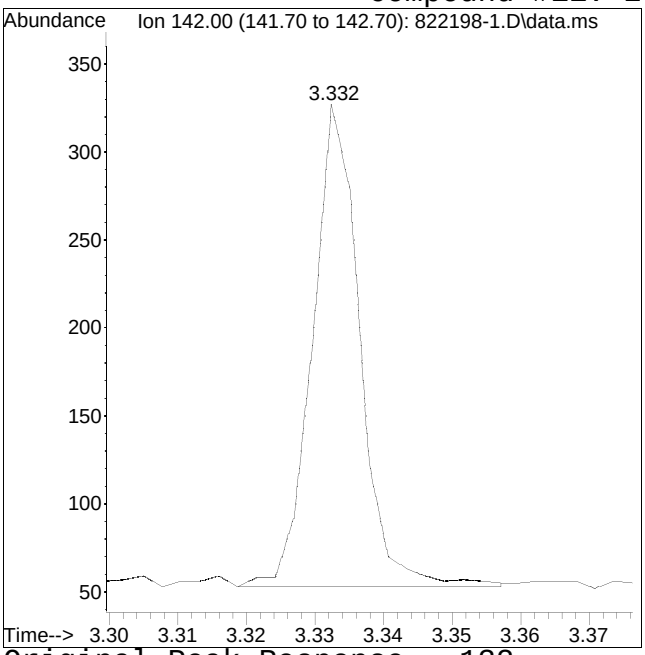
Manual Peak Response = 30 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

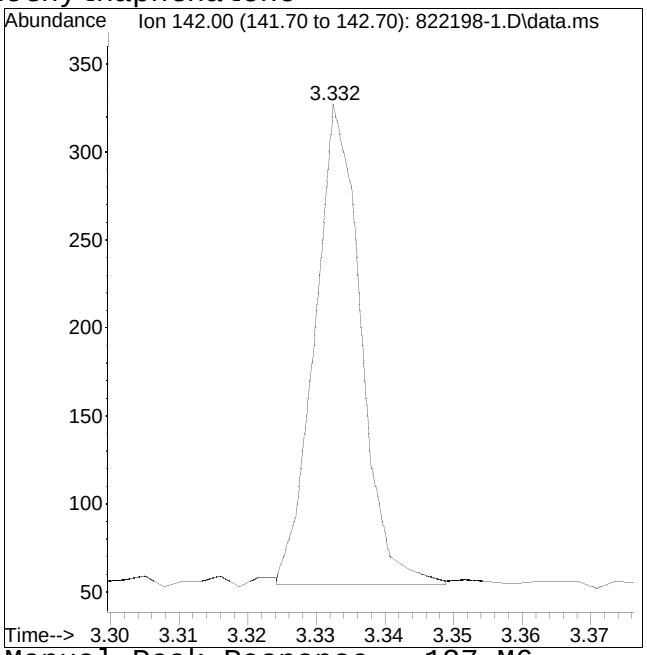
Manual Integration Report

Data Path : I:\8270SIM\sv119\230831LVIQMethod : SIM-LVI_230306_sv119.M
Data File : 822198-1.D Operator : sv119:ah
Date Inj'd : 8/31/2023 6:14 pm Instrument : SV119
Sample : WG1822198-1,32,,ah Quant Date : 9/5/2023 9:36 am

Compound #11: 2-Methylnaphthalene



Original Peak Response = 132



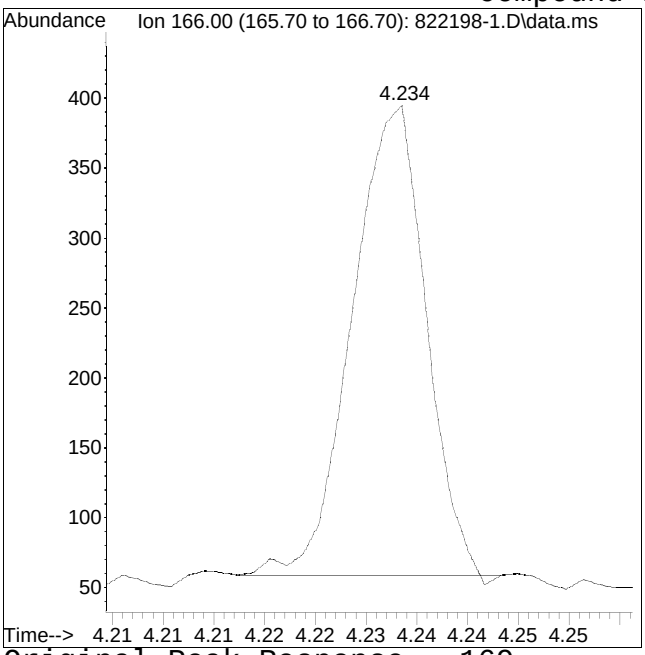
Manual Peak Response = 127 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

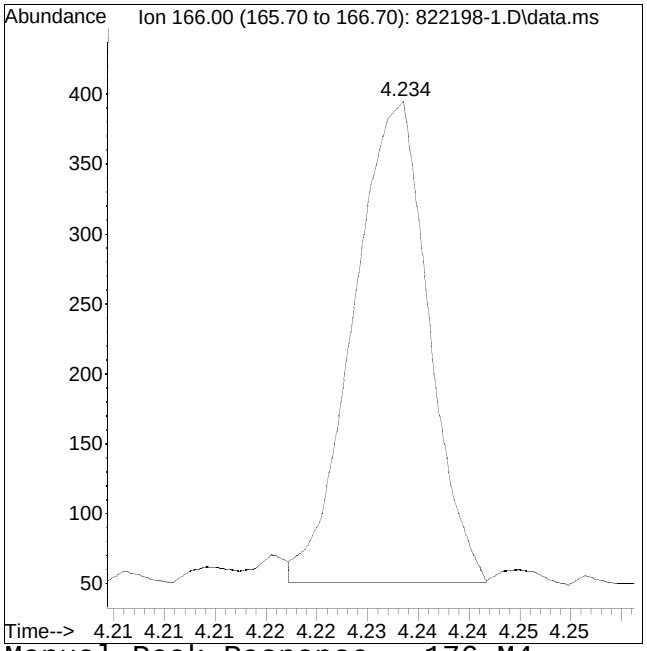
Manual Integration Report

Data Path : I:\8270SIM\sv119\230831LVIQMethod : SIM-LVI_230306_sv119.M
Data File : 822198-1.D Operator : sv119:ah
Date Inj'd : 8/31/2023 6:14 pm Instrument : SV119
Sample : WG1822198-1,32,,ah Quant Date : 9/5/2023 9:36 am

Compound #20: Fluorene



Original Peak Response = 169



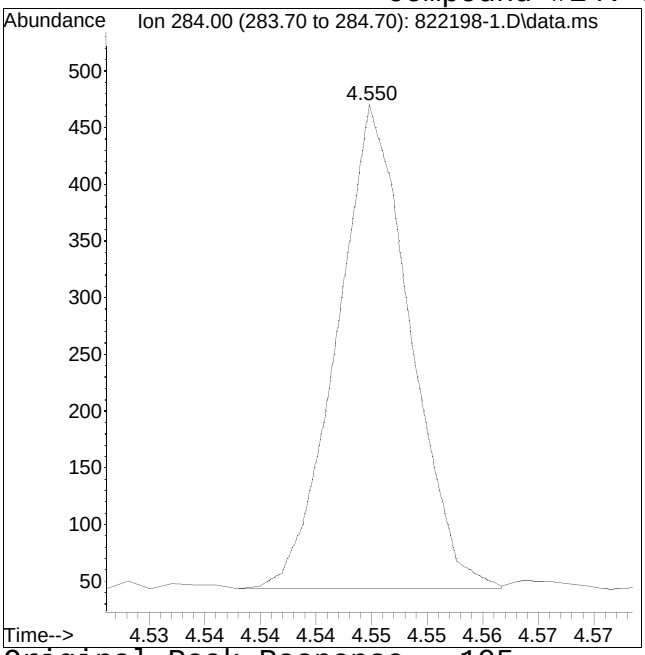
Manual Peak Response = 176 M4

M4 = Poor automated baseline construction.

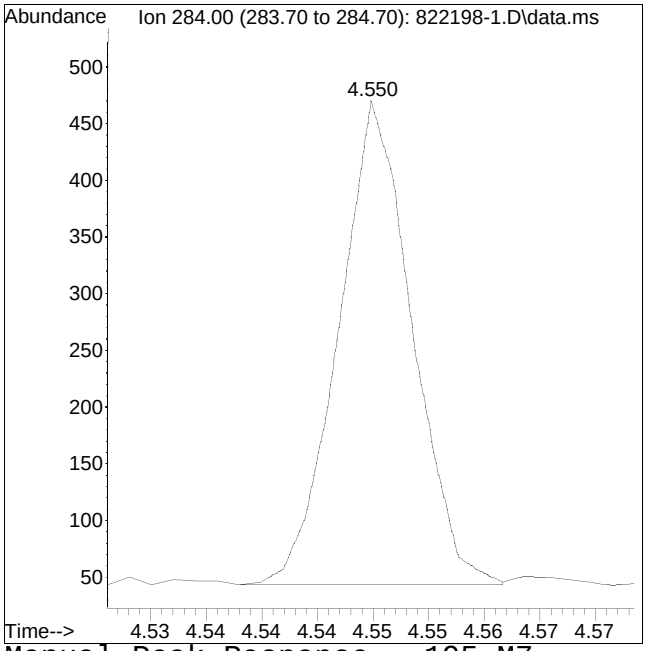
Manual Integration Report

Data Path : I:\8270SIM\sv119\230831LVIQMethod : SIM-LVI_230306_sv119.M
Data File : 822198-1.D Operator : sv119:ah
Date Inj'd : 8/31/2023 6:14 pm Instrument : SV119
Sample : WG1822198-1,32,,ah Quant Date : 9/5/2023 9:36 am

Compound #24: Hexachlorobenzene



Original Peak Response = 195



Manual Peak Response = 195 M7

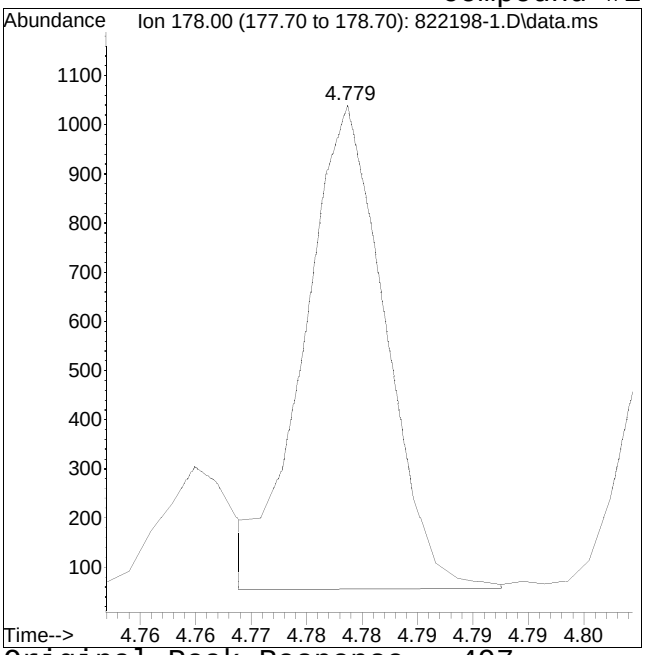
M7 = A qualifier ion was manually integrated (only for GC/MS data).

Manual Integration Report

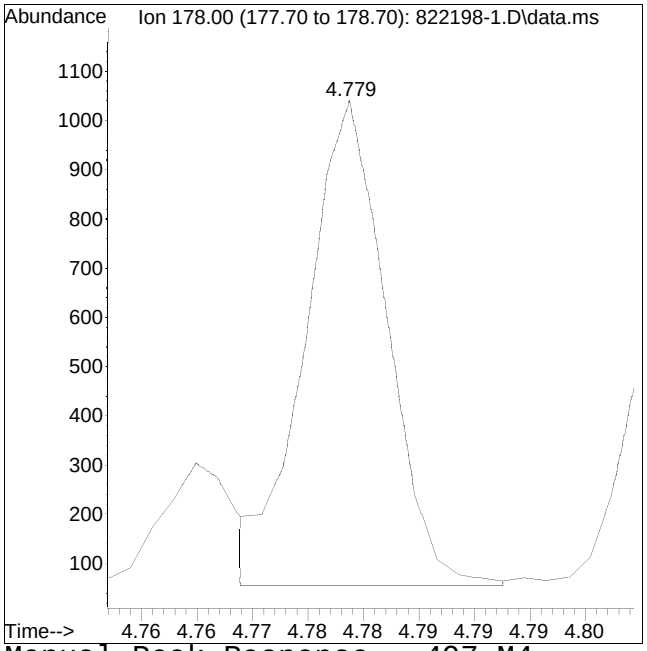
Data Path : I:\8270SIM\sv119\230831LVIQ
Data File : 822198-1.D
Date Inj'd : 8/31/2023 6:14 pm
Sample : WG1822198-1,32,,ah

Method : SIM-LVI_230306_sv119.M
Operator : sv119:ah
Instrument : SV119
Quant Date : 9/5/2023 9:36 am

Compound #26: Phenanthrene



Original Peak Response = 497



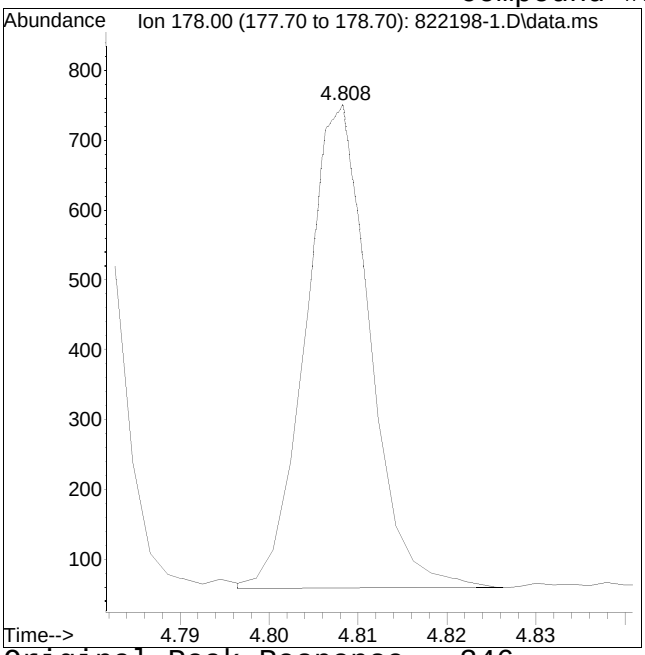
Manual Peak Response = 497 M4

M4 = Poor automated baseline construction.

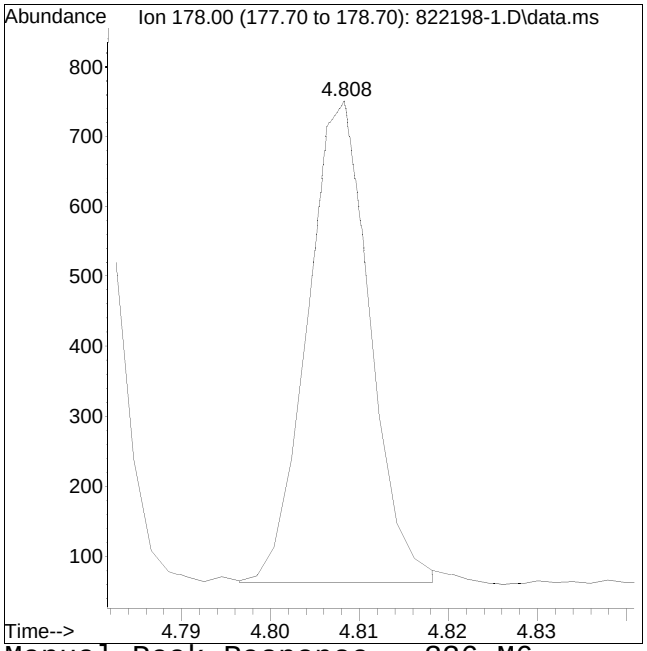
Manual Integration Report

Data Path : I:\8270SIM\sv119\230831LVIQMethod : SIM-LVI_230306_sv119.M
Data File : 822198-1.D Operator : sv119:ah
Date Inj'd : 8/31/2023 6:14 pm Instrument : SV119
Sample : WG1822198-1,32,,ah Quant Date : 9/5/2023 9:36 am

Compound #27: Anthracene



Original Peak Response = 346



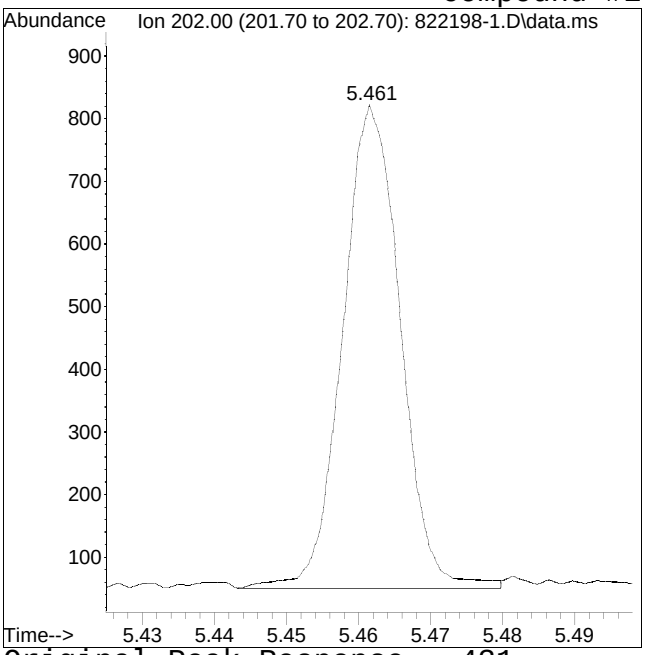
Manual Peak Response = 336 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

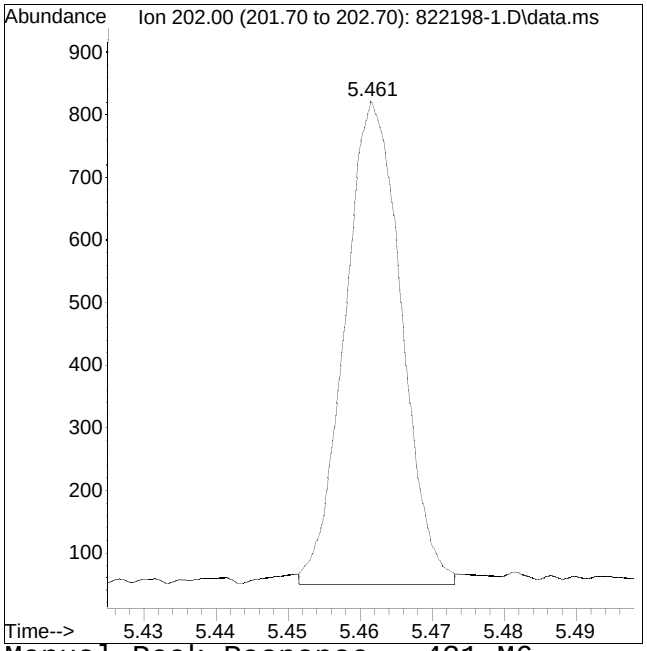
Manual Integration Report

Data Path : I:\8270SIM\sv119\230831LVIQMethod : SIM-LVI_230306_sv119.M
Data File : 822198-1.D Operator : sv119:ah
Date Inj'd : 8/31/2023 6:14 pm Instrument : SV119
Sample : WG1822198-1,32,,ah Quant Date : 9/5/2023 9:36 am

Compound #28: Fluoranthene



Original Peak Response = 431



Manual Peak Response = 421 M6

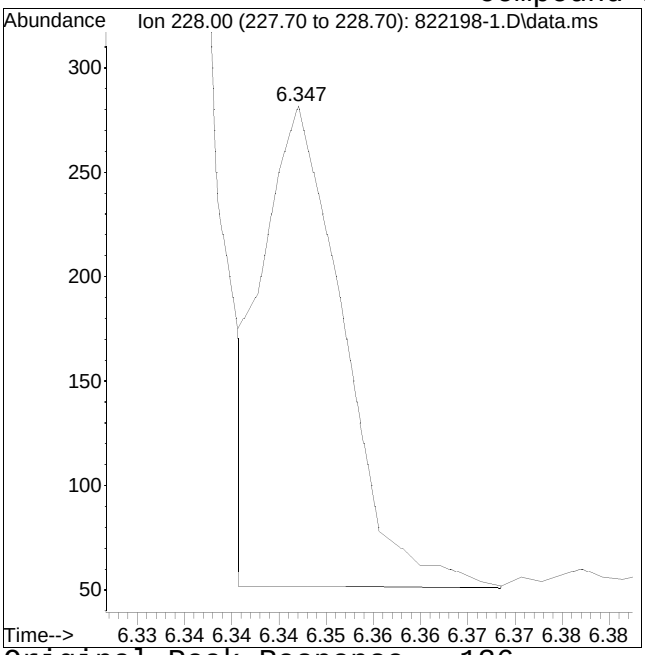
M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Manual Integration Report

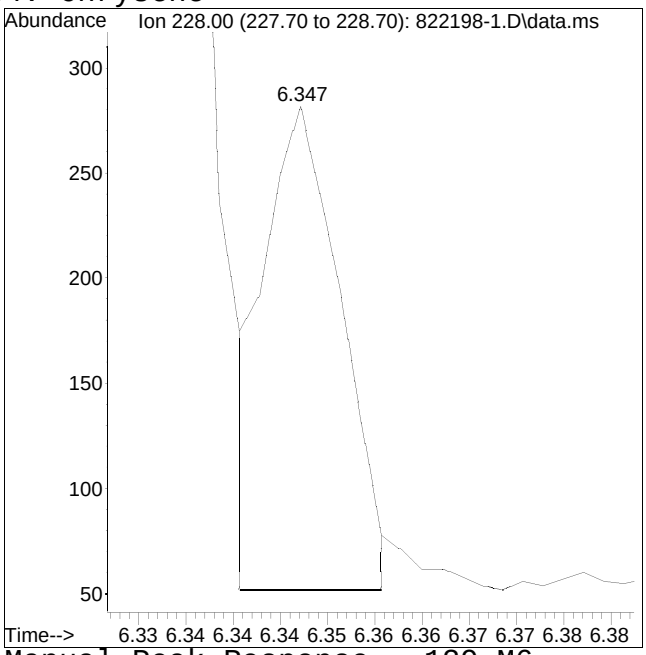
Data Path : I:\8270SIM\sv119\230831LVIQ
Data File : 822198-1.D
Date Inj'd : 8/31/2023 6:14 pm
Sample : WG1822198-1,32,,ah

Method : SIM-LVI_230306_sv119.M
Operator : sv119:ah
Instrument : SV119
Quant Date : 9/5/2023 9:36 am

Compound #34: Chrysene



Original Peak Response = 136



Manual Peak Response = 129 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230906LVI\
Data File : 823489-1.D
Acq On : 06 Sep 2023 04:58 pm
Operator : sv119:jjw
Sample : Wg1823489-1,32,,ah
Misc : WG1824028,wg1823489,ical19785
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Sep 07 13:08:55 2023
Quant Method : I:\8270sim\sv119\230906LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 07:22:10 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230906LVI\ccv0906.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.233	152	62701	4000.000	ng/ml	0.00
Standard Area 1 = 56406			Recovery = 111.16%			
8) Naphthalene-d8	2.896	136	236871	4000.000	ng/ml	0.00
Standard Area 1 = 206621			Recovery = 114.64%			
17) Acenaphthene-d10	3.873	164	129173	4000.000	ng/ml	0.00
Standard Area 1 = 110458			Recovery = 116.94%			
22) Phenanthrene-d10	4.711	188	269019	4000.000	ng/ml	0.00
Standard Area 1 = 263512			Recovery = 102.09%			
31) Chrysene-d12	6.270	240	257100	4000.000	ng/ml	0.00
Standard Area 1 = 254375			Recovery = 101.07%			
36) Perylene-d12	7.470	264	276738	4000.000	ng/ml	0.00
Standard Area 1 = 265654			Recovery = 104.17%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.638	112	52841	3425.191	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 68.50%			
3) Phenol-d6	2.049	99	55179	3027.301	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 60.55%			
7) Nitrobenzene-d5	2.514	82	39379	2871.749	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 114.87%			
13) 2-Fluorobiphenyl	3.494	172	95774	1966.594	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 78.66%			
21) 2,4,6-Tribromophenol	4.319	330	26978	5183.576	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 103.67%			
30) 4-Terphenyl-d14	5.631	244	104211	1856.481	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 74.26%			
Target Compounds						Qvalue
6) Hexachloroethane	0.000		0	N.D.	d	
9) Naphthalene	2.907	128	436M4	7.773	ng/ml	
10) Hexachlorobutadiene	0.000		0	N.D.	d	
11) 2-Methylnaphthalene	3.289	142	169M6	4.482	ng/ml	
14) 2-Chloronaphthalene	0.000		0	N.D.	d	
16) Acenaphthylene	0.000		0	N.D.	d	
18) Acenaphthene	3.890	153	83M6	2.027	ng/ml	
20) Fluorene	4.181	166	117M6	2.486	ng/ml	
24) Hexachlorobenzene	0.000		0	N.D.	d	
25) Pentachlorophenol	0.000		0	N.D.	d	

Data Path : I:\8270SIM\sv119\230906LVI\
Data File : 823489-1.D
Acq On : 06 Sep 2023 04:58 pm
Operator : sv119:jjw
Sample : Wg1823489-1,32,,ah
Misc : WG1824028,wg1823489,ical19785
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Sep 07 13:08:55 2023
Quant Method : I:\8270sim\sv119\230906LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 07:22:10 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230906LVI\ccv0906.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.723	178	295M4	4.328	ng/ml	
27) Anthracene	0.000		0	N.D.	d	
28) Fluoranthene	5.405	202	221M6	2.837	ng/ml	
29) Pyrene	5.536	202	174M1	2.157	ng/ml	
32) Benzo[a]anthracene	0.000		0	N.D.	d	
34) Chrysene	0.000		0	N.D.	d	
37) Benzo[b]fluoranthene	0.000		0	N.D.	d	
38) Benzo[k]fluoranthene	0.000		0	N.D.	d	
39) Benzo[a]pyrene	0.000		0	N.D.	d	
40) Indeno[1,2,3-cd]pyrene	0.000		0	N.D.	d	
41) Dibenzo[a,h]anthracene	0.000		0	N.D.	d	
42) Benzo[g,h,i]perylene	0.000		0	N.D.	d	

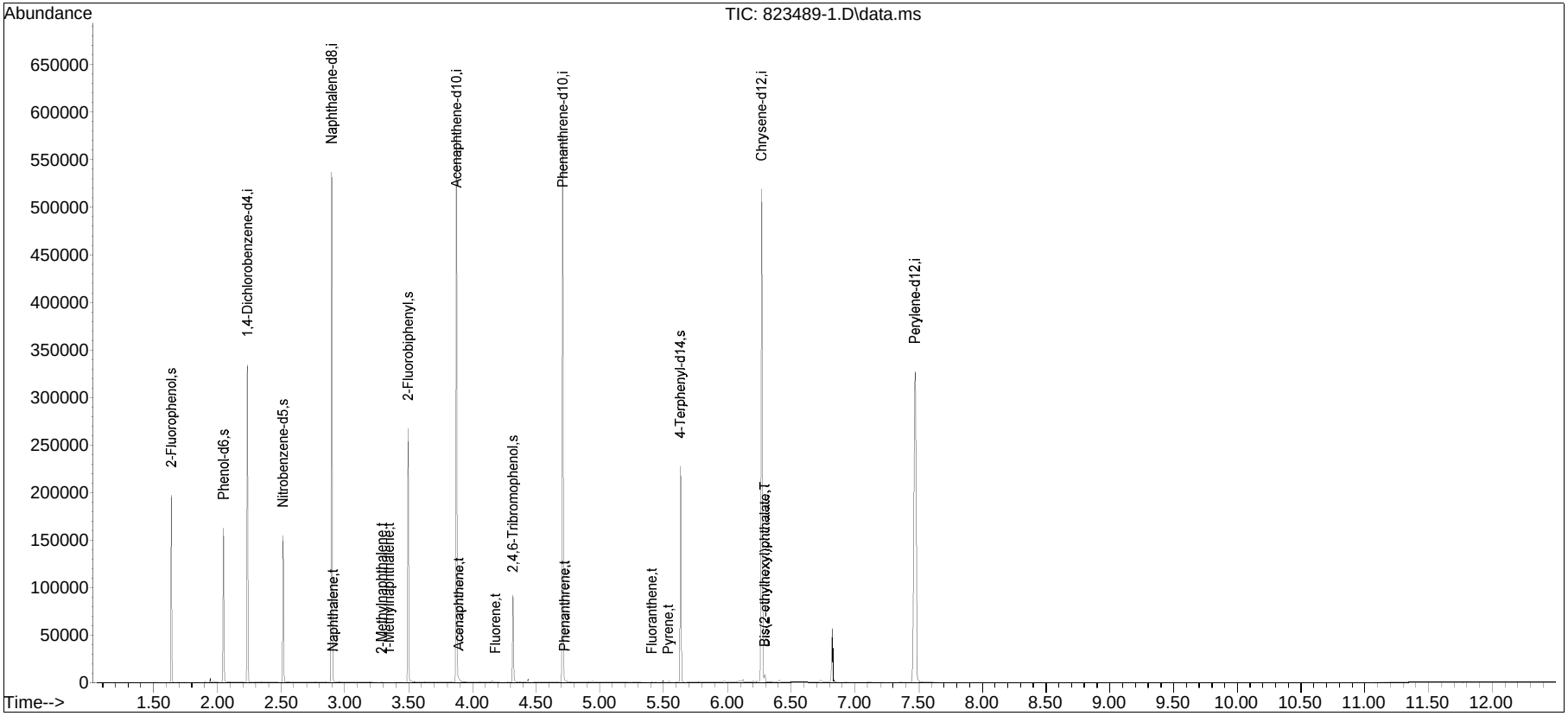
(#) = qualifier out of range (m) = manual integration (+) = signals summed

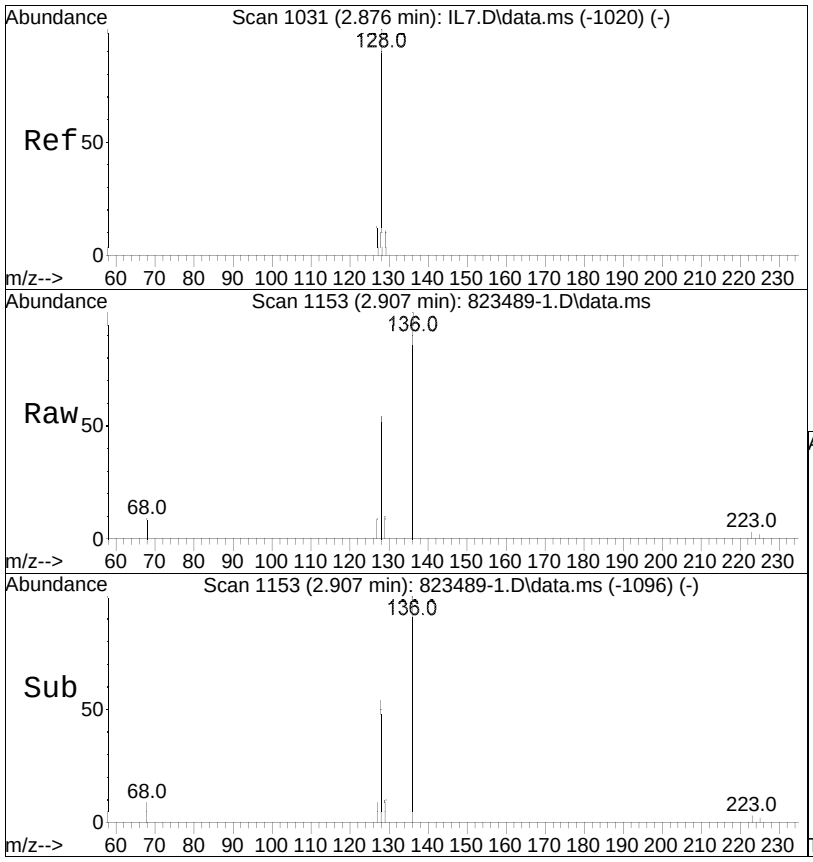
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230906LVI\
Data File : 823489-1.D
Acq On : 06 Sep 2023 04:58 pm
Operator : sv119:jjw
Sample : Wg1823489-1,32,,ah
Misc : WG1824028,wg1823489,ical19785
ALS Vial : 34 Sample Multiplier: 1

Quant Time: Sep 07 13:08:55 2023
Quant Method : I:\8270sim\sv119\230906LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Wed Sep 06 07:22:10 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0906.D•

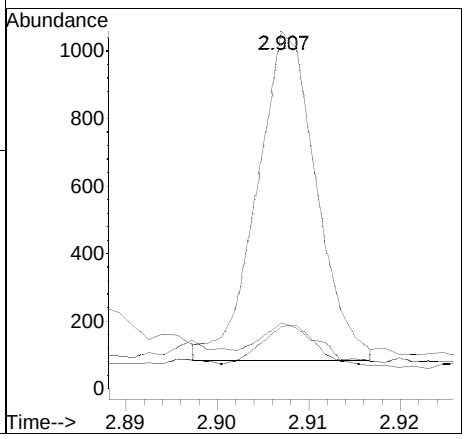


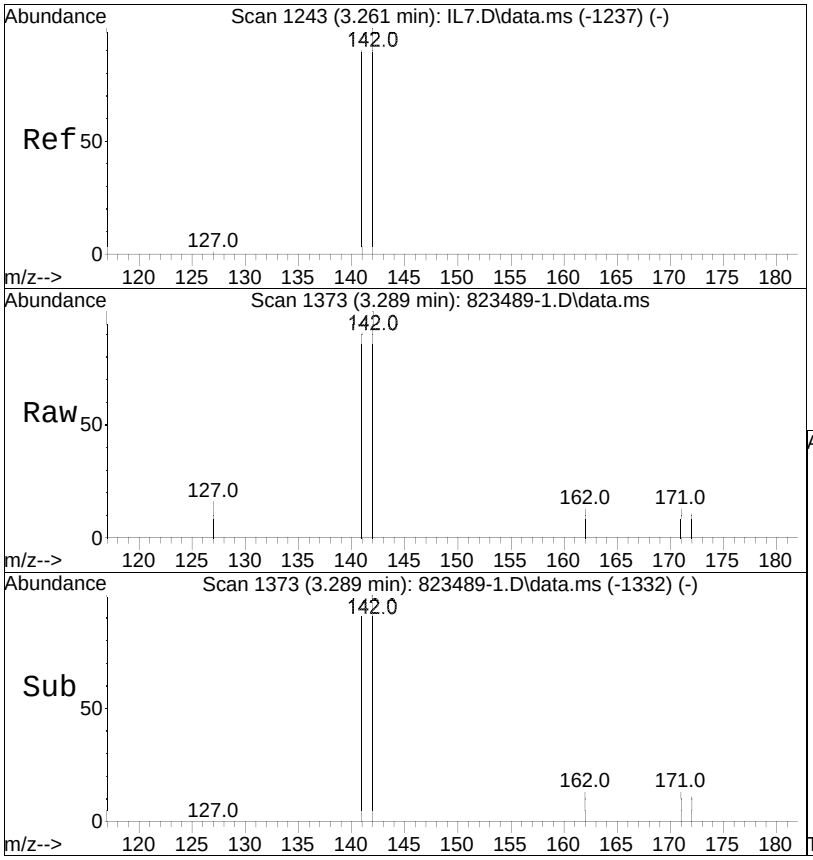


#9
Naphthalene
Concen: 7.77 ng/ml M4
RT: 2.907 min Scan# 1153
Delta R.T. -0.008 min
Lab File: 823489-1.D
Acq: 06 Sep 2023 04:58 pm

Tgt Ion:128 Resp: 436

Ion	Ratio	Lower	Upper
128	100		
129	11.7	8.8	13.2
127	13.1	10.6	15.8

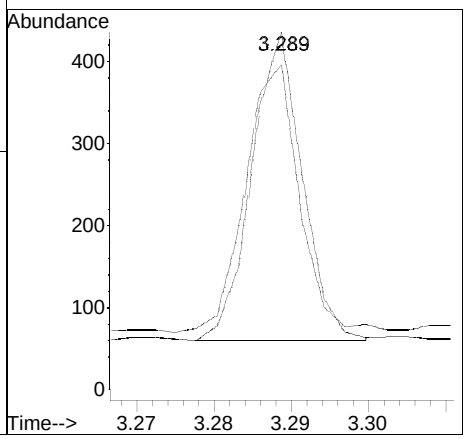


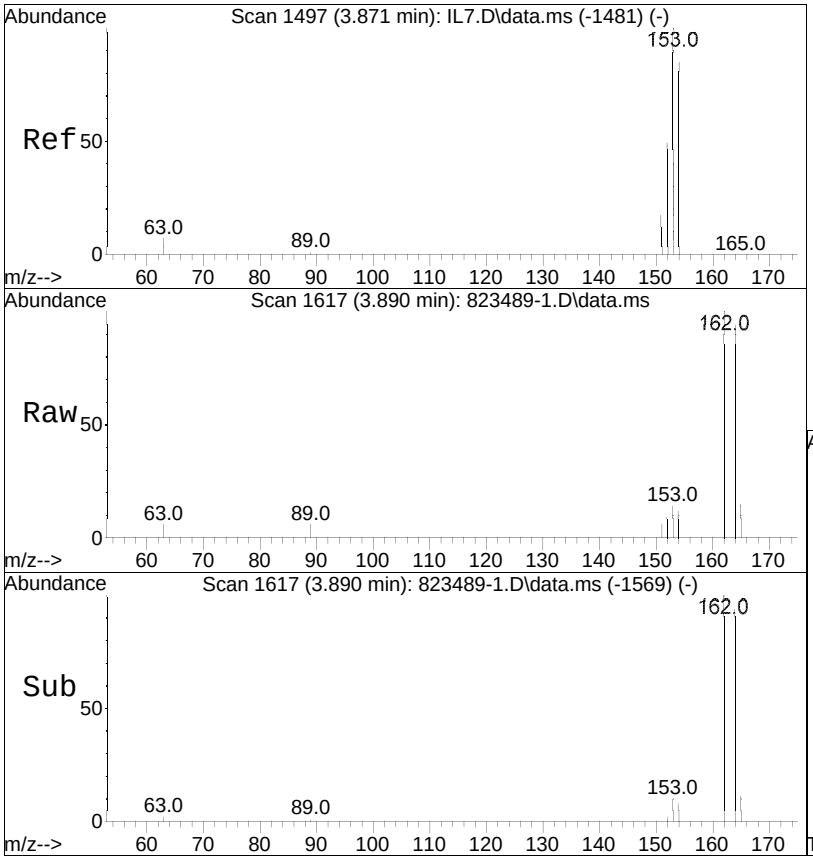


#11
2-Methylnaphthalene
Concen: 4.48 ng/ml M6
RT: 3.289 min Scan# 1373
Delta R.T. -0.005 min
Lab File: 823489-1.D
Acq: 06 Sep 2023 04:58 pm

Tgt Ion:142 Resp: 169

Ion	Ratio	Lower	Upper
142	100		
141	92.9	74.1	111.1

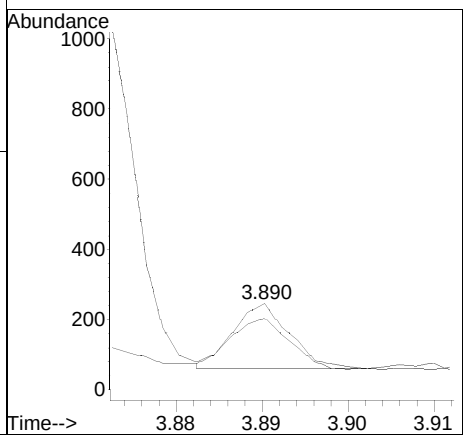


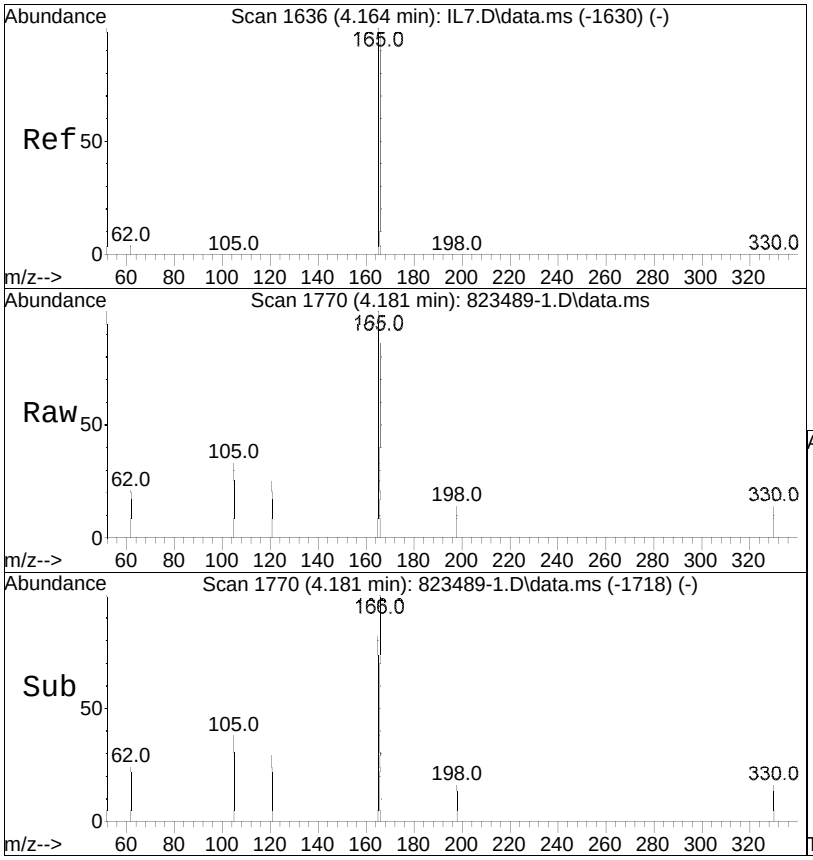


#18
Acenaphthene
Concen: 2.03 ng/ml M6
RT: 3.890 min Scan# 1617
Delta R.T. -0.006 min
Lab File: 823489-1.D
Acq: 06 Sep 2023 04:58 pm

Tgt Ion:153 Resp: 83

Ion	Ratio	Lower	Upper
153	100		
154	83.1	66.9	100.3

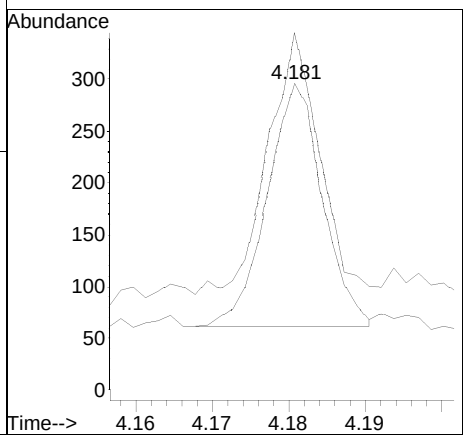


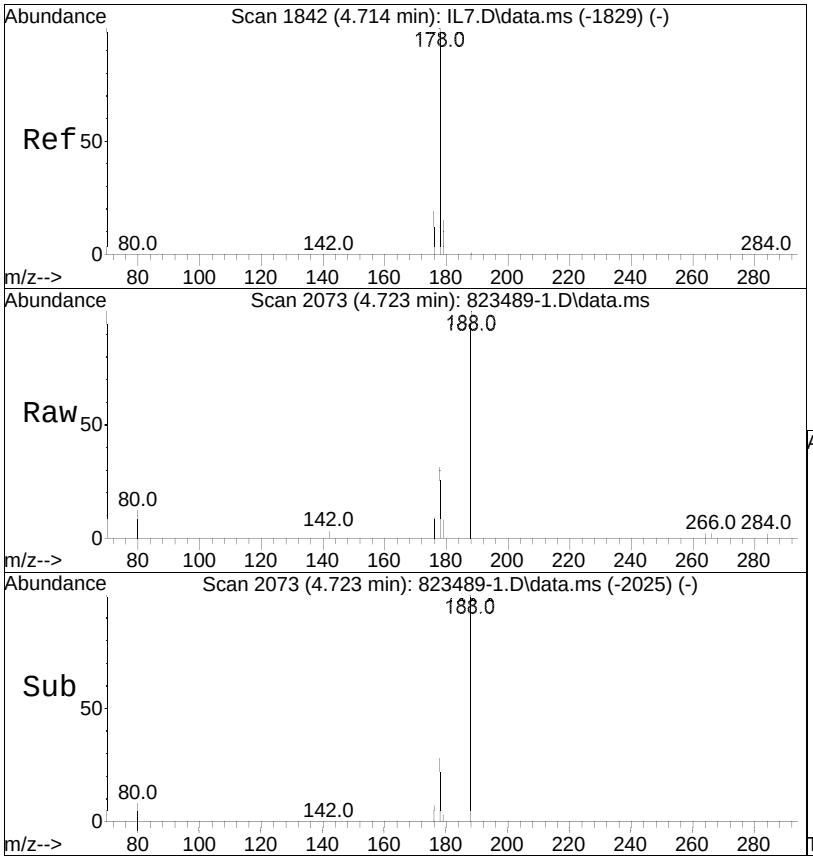


#20
Fluorene
Concen: 2.49 ng/ml M6
RT: 4.181 min Scan# 1770
Delta R.T. -0.006 min
Lab File: 823489-1.D
Acq: 06 Sep 2023 04:58 pm

Tgt Ion:166 Resp: 117

Ion	Ratio	Lower	Upper
166	100		
165	104.3	82.9	124.3

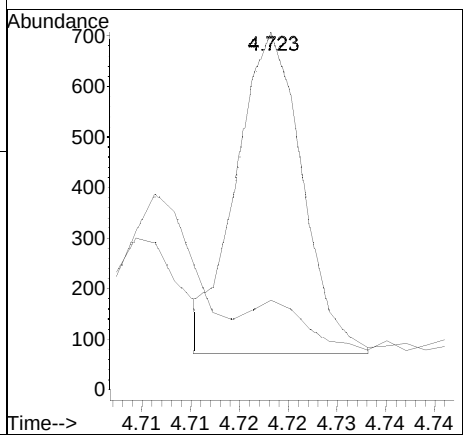


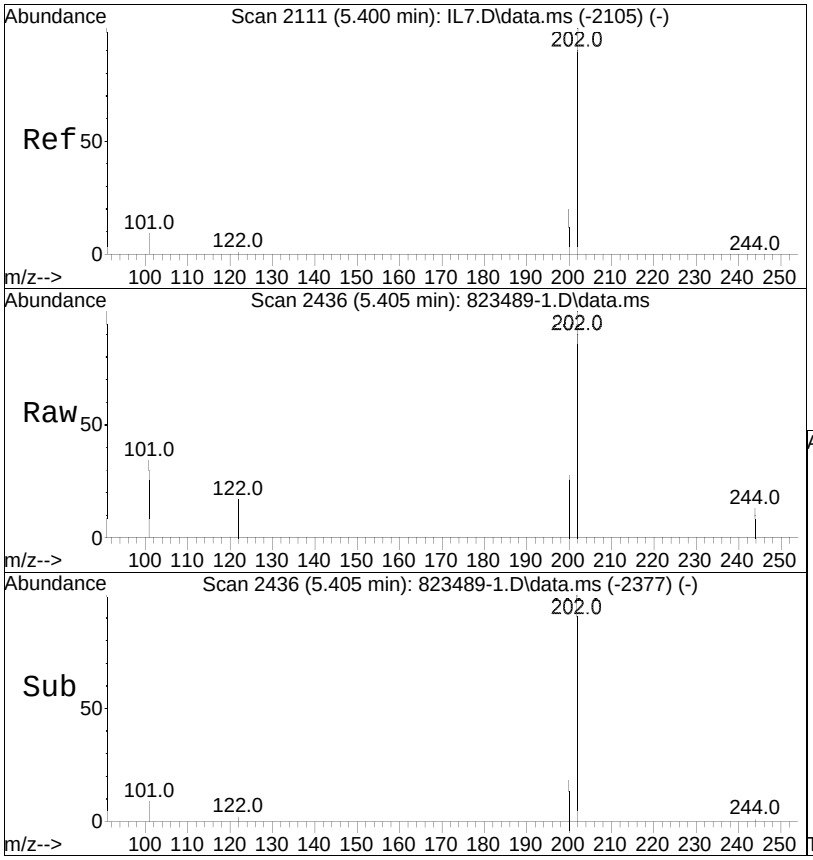


#26
Phenanthrene
Concen: 4.33 ng/ml M4
RT: 4.723 min Scan# 2073
Delta R.T. -0.006 min
Lab File: 823489-1.D
Acq: 06 Sep 2023 04:58 pm

Tgt Ion:178 Resp: 295

Ion	Ratio	Lower	Upper
178	100		
179	13.2	12.3	18.5

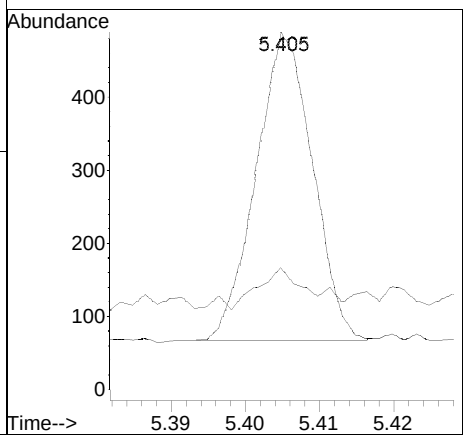


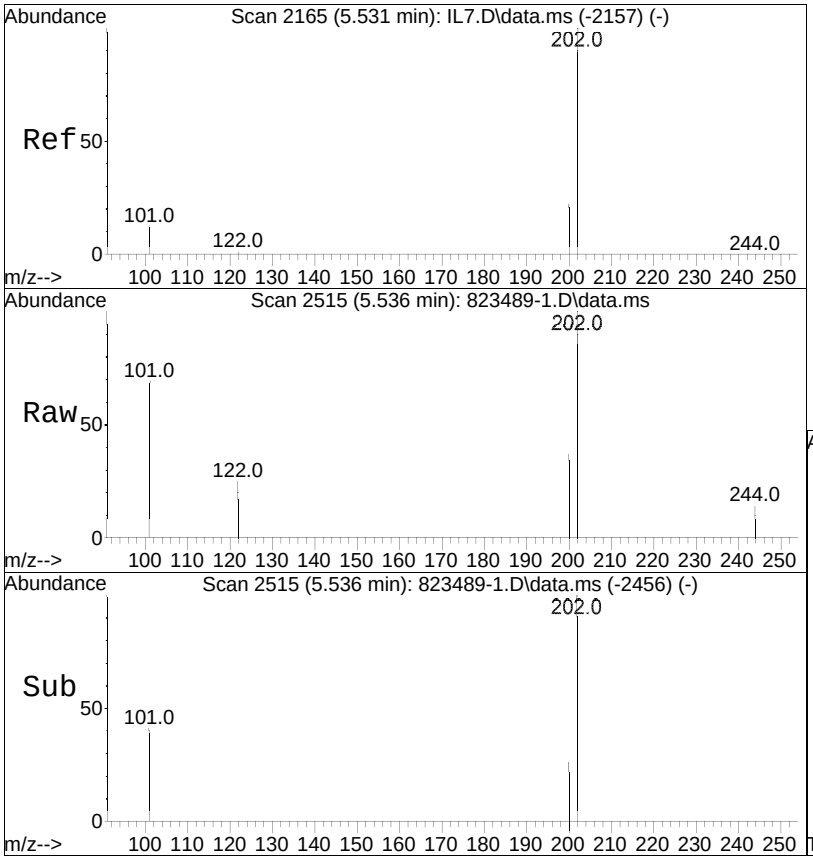


#28
Fluoranthene
Concen: 2.84 ng/ml M6
RT: 5.405 min Scan# 2436
Delta R.T. -0.002 min
Lab File: 823489-1.D
Acq: 06 Sep 2023 04:58 pm

Tgt Ion:202 Resp: 221

Ion	Ratio	Lower	Upper
202	100		
101	11.3	8.3	12.5

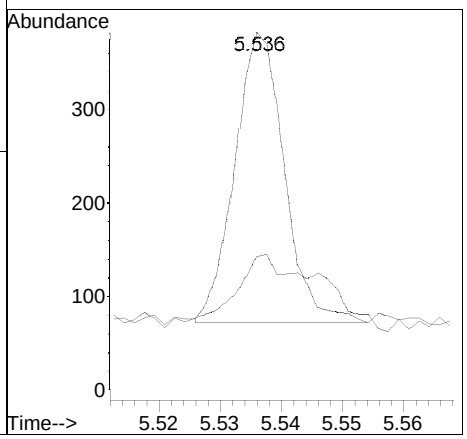




#29
Pyrene
Concen: 2.16 ng/ml M1
RT: 5.536 min Scan# 2515
Delta R.T. -0.002 min
Lab File: 823489-1.D
Acq: 06 Sep 2023 04:58 pm

Tgt Ion:202 Resp: 174

Ion	Ratio	Lower	Upper
202	100		
200	20.1	17.3	25.9

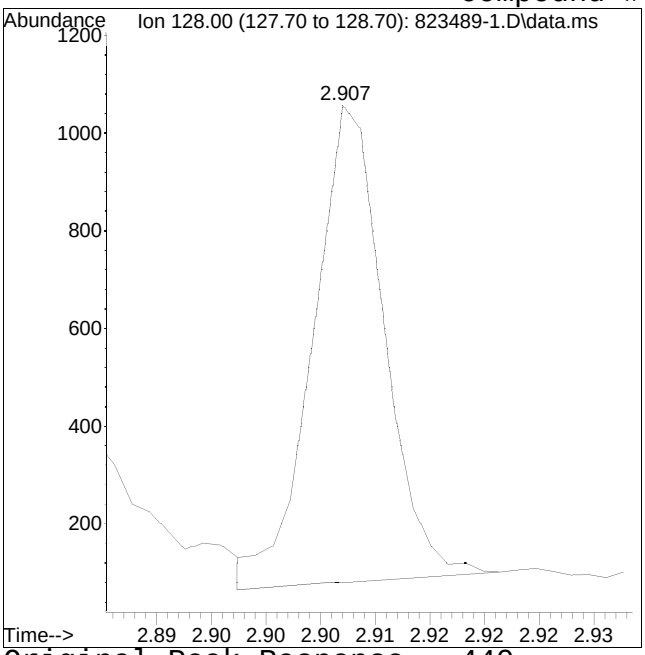


Manual Integration Report

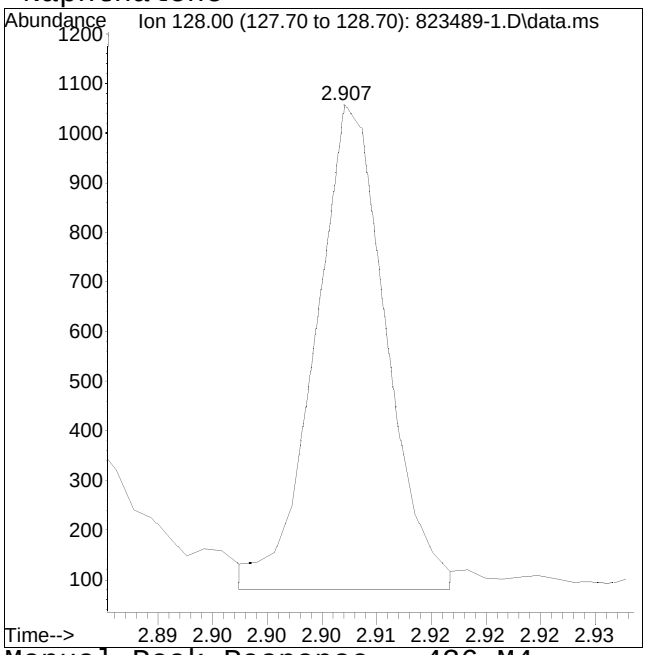
Data Path : I:\8270SIM\sv119\230906LVIQ
Data File : 823489-1.D
Date Inj'd : 9/6/2023 4:58 pm
Sample : Wg1823489-1,32,,ah

Method : SIM-LVI_230306_sv119.M
Operator : sv119:jjw
Instrument : SV119
Quant Date : 9/6/2023 5:13 pm

Compound #9: Naphthalene



Original Peak Response = 440



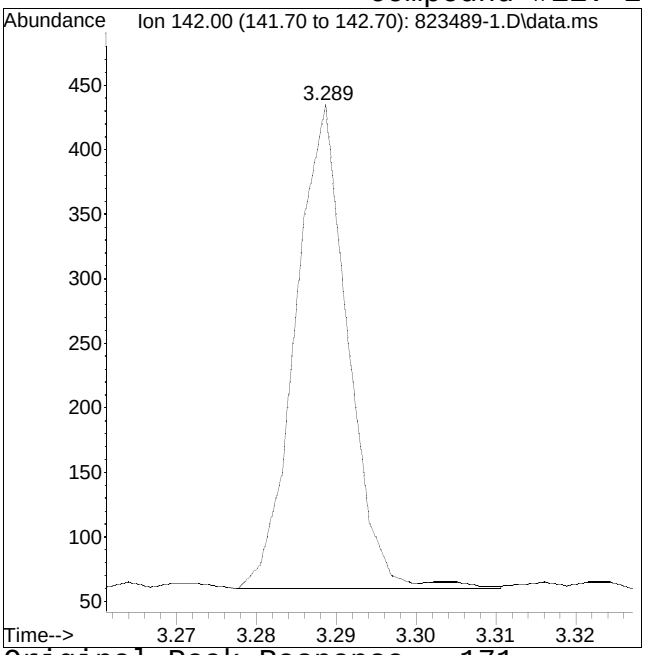
Manual Peak Response = 436 M4

M4 = Poor automated baseline construction.

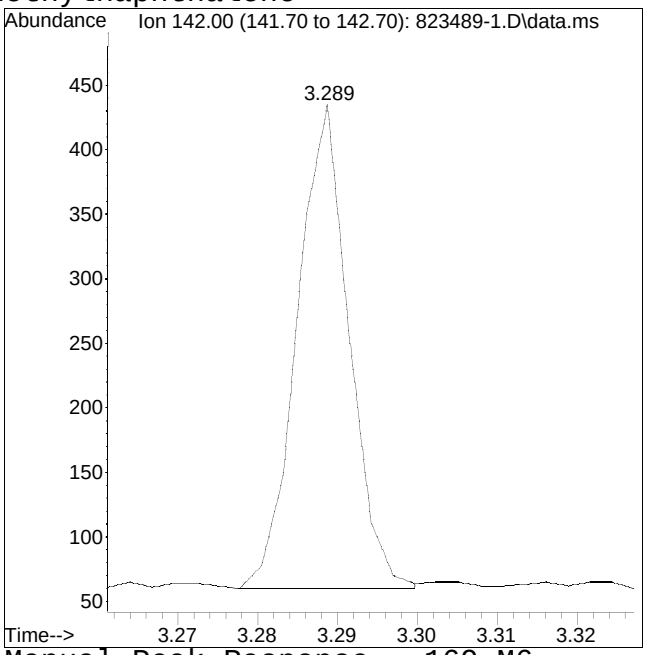
Manual Integration Report

Data Path : I:\8270SIM\sv119\230906LVIQMethod : SIM-LVI_230306_sv119.M
Data File : 823489-1.D Operator : sv119:jjw
Date Inj'd : 9/6/2023 4:58 pm Instrument : SV119
Sample : Wg1823489-1,32,,ah Quant Date : 9/6/2023 5:13 pm

Compound #11: 2-Methylnaphthalene



Original Peak Response = 171



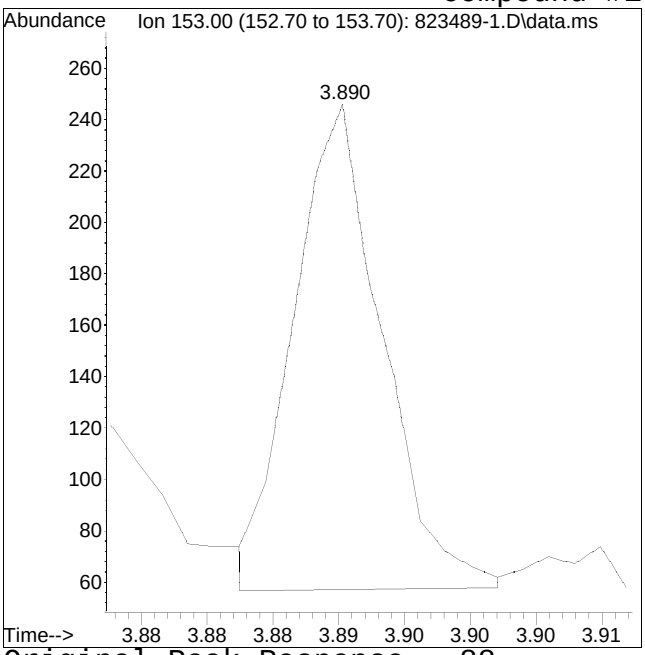
Manual Peak Response = 169 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

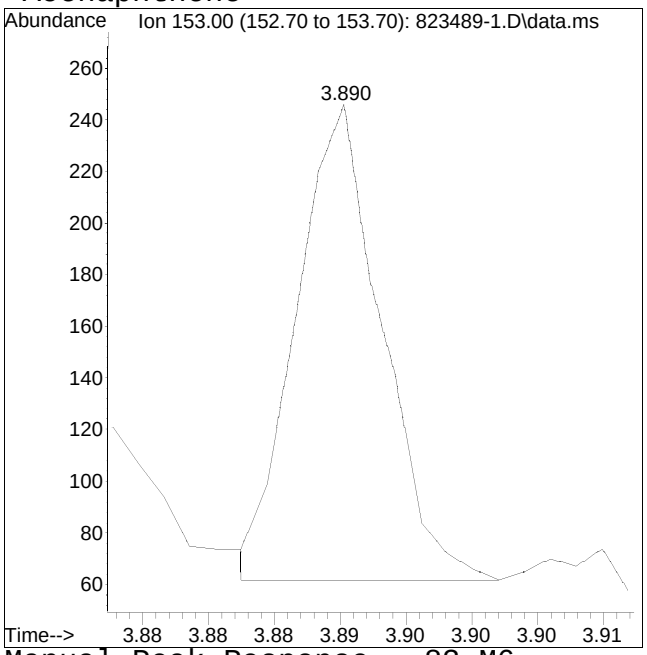
Manual Integration Report

Data Path : I:\8270SIM\sv119\230906LVIQMethod : SIM-LVI_230306_sv119.M
Data File : 823489-1.D Operator : sv119:jjw
Date Inj'd : 9/6/2023 4:58 pm Instrument : SV119
Sample : Wg1823489-1,32,,ah Quant Date : 9/6/2023 5:13 pm

Compound #18: Acenaphthene



Original Peak Response = 88



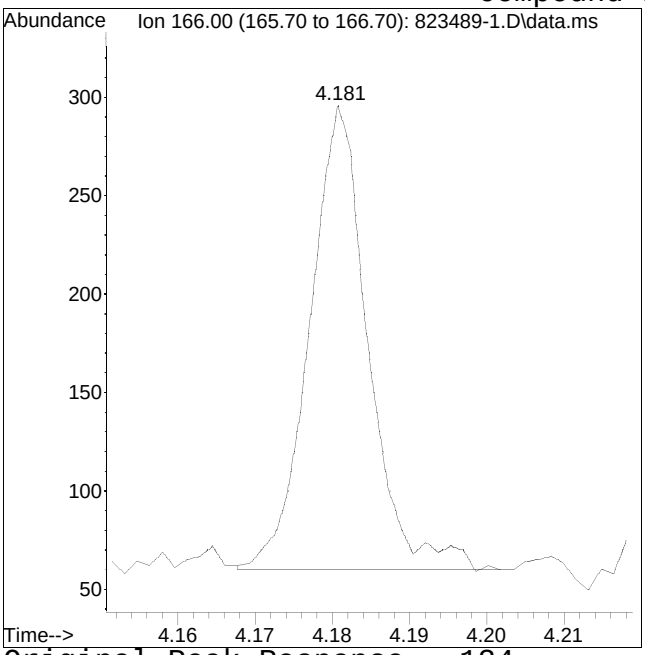
Manual Peak Response = 83 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

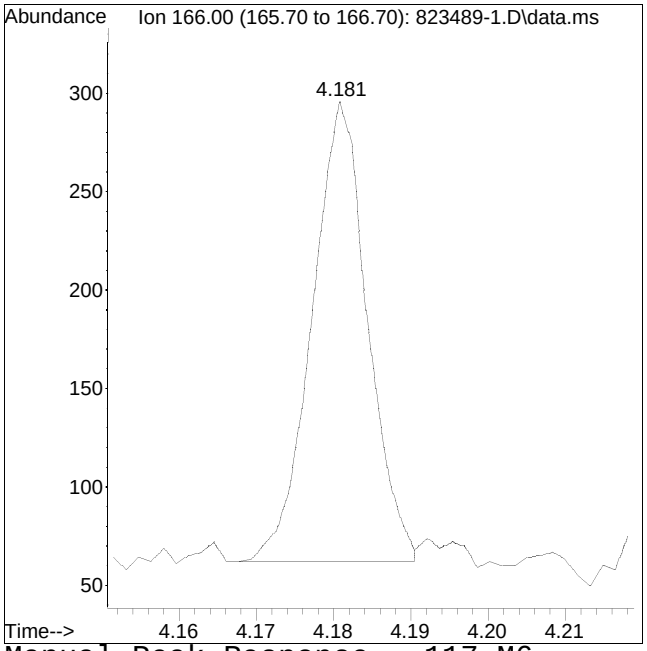
Manual Integration Report

Data Path : I:\8270SIM\sv119\230906LVIQMethod : SIM-LVI_230306_sv119.M
Data File : 823489-1.D Operator : sv119:jjw
Date Inj'd : 9/6/2023 4:58 pm Instrument : SV119
Sample : Wg1823489-1,32,,ah Quant Date : 9/6/2023 5:13 pm

Compound #20: Fluorene



Original Peak Response = 124



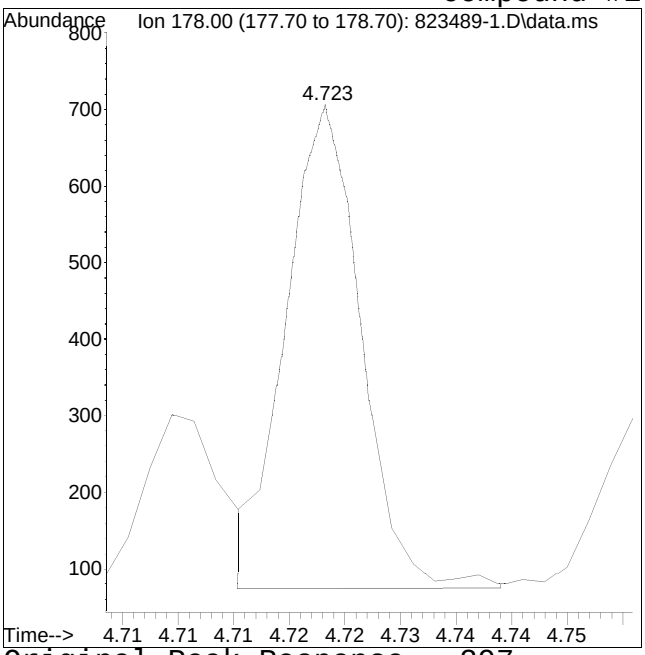
Manual Peak Response = 117 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

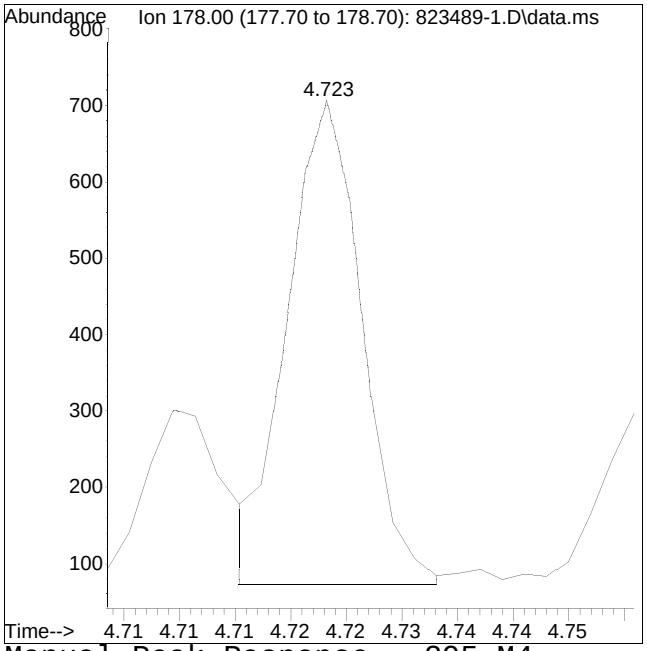
Manual Integration Report

Data Path : I:\8270SIM\sv119\230906LVIQMethod : SIM-LVI_230306_sv119.M
Data File : 823489-1.D Operator : sv119:jjw
Date Inj'd : 9/6/2023 4:58 pm Instrument : SV119
Sample : Wg1823489-1,32,,ah Quant Date : 9/6/2023 5:13 pm

Compound #26: Phenanthrene



Original Peak Response = 297



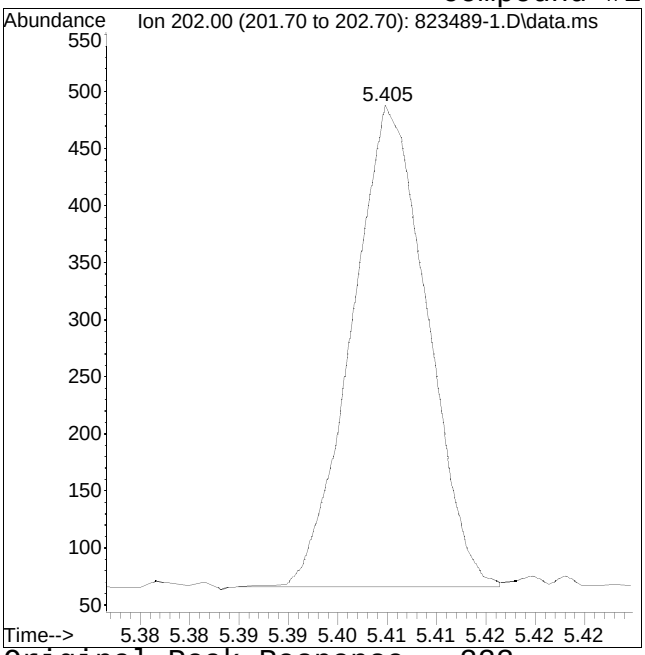
Manual Peak Response = 295 M4

M4 = Poor automated baseline construction.

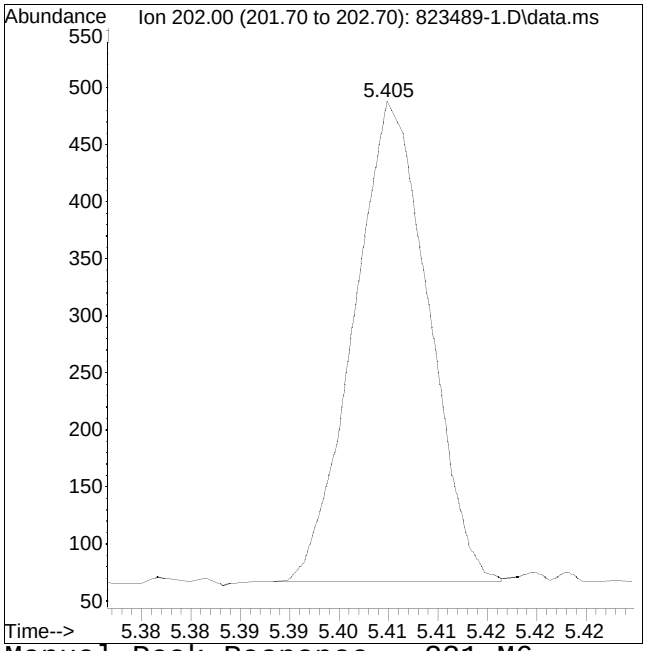
Manual Integration Report

Data Path : I:\8270SIM\sv119\230906LVIQMethod : SIM-LVI_230306_sv119.M
Data File : 823489-1.D Operator : sv119:jjw
Date Inj'd : 9/6/2023 4:58 pm Instrument : SV119
Sample : Wg1823489-1,32,,ah Quant Date : 9/6/2023 5:13 pm

Compound #28: Fluoranthene



Original Peak Response = 223



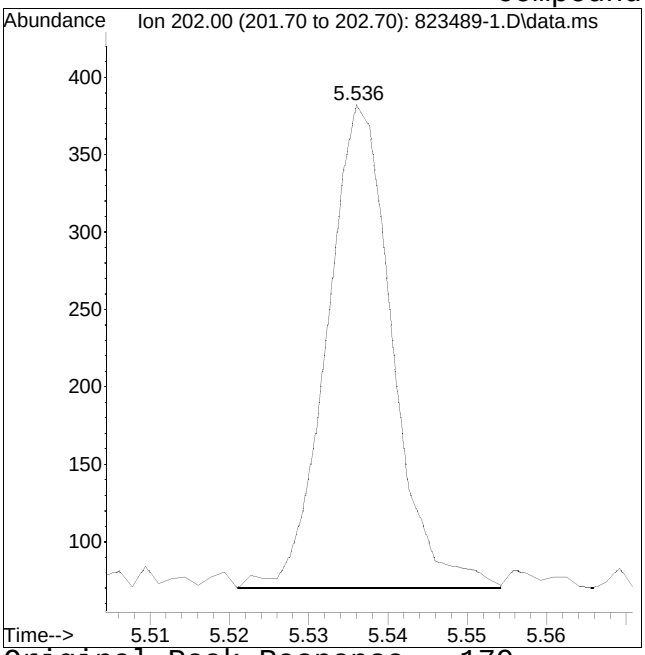
Manual Peak Response = 221 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

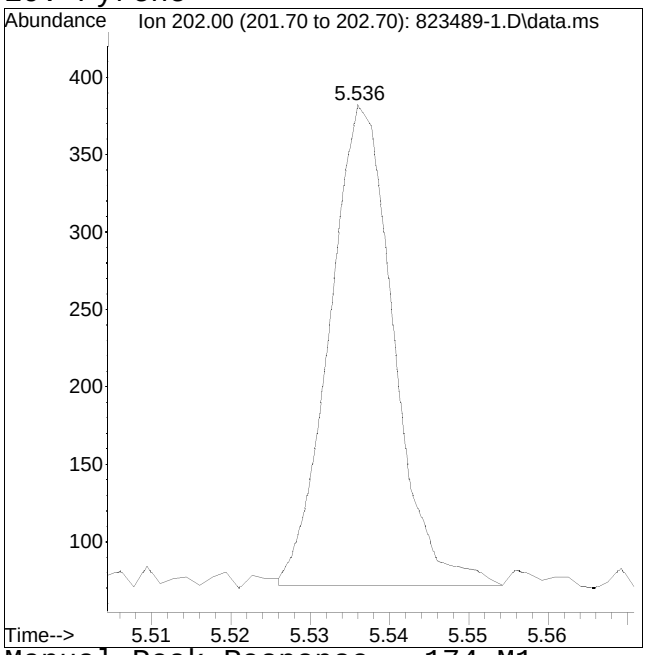
Manual Integration Report

Data Path : I:\8270SIM\sv119\230906LVIQMethod : SIM-LVI_230306_sv119.M
Data File : 823489-1.D Operator : sv119:jjw
Date Inj'd : 9/6/2023 4:58 pm Instrument : SV119
Sample : Wg1823489-1,32,,ah Quant Date : 9/6/2023 5:13 pm

Compound #29: Pyrene



Original Peak Response = 179



Manual Peak Response = 174 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : 822198-2.D
Acq On : 01 Sep 2023 05:20 pm
Operator : sv119:ah
Sample : WG1822198-2,32,2,rp
Misc : WG1822868,WG1822198,ical19785
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 01 17:35:24 2023
Quant Method : I:\8270sim\sv119\230901LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:52:27 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230901LVI\ccv0901.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.264	152	56188	4000.000	ng/ml	0.00
Standard Area 1 = 53473			Recovery = 105.08%			
8) Naphthalene-d8	2.937	136	205875	4000.000	ng/ml	0.00
Standard Area 1 = 193222			Recovery = 106.55%			
17) Acenaphthene-d10	3.921	164	100912	4000.000	ng/ml	0.00
Standard Area 1 = 98963			Recovery = 101.97%			
22) Phenanthrene-d10	4.765	188	218679	4000.000	ng/ml	0.00
Standard Area 1 = 220308			Recovery = 99.26%			
31) Chrysene-d12	6.343	240	182597	4000.000	ng/ml	-0.01
Standard Area 1 = 182645			Recovery = 99.97%			
36) Perylene-d12	7.574	264	201420	4000.000	ng/ml	-0.01
Standard Area 1 = 191472			Recovery = 105.20%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.658	112	31650	2289.382	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 45.79%			
3) Phenol-d6	2.074	99	34872	2134.959	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 42.70%			
7) Nitrobenzene-d5	2.549	82	18740	1525.043	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 61.00%			
13) 2-Fluorobiphenyl	3.541	172	44086	1041.540	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 41.66%			
21) 2,4,6-Tribromophenol	4.370	330	12596	3097.999	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 61.96%			
30) 4-Terphenyl-d14	5.691	244	46709	1023.654	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 40.95%			
Target Compounds						Qvalue
6) Hexachloroethane	2.528	117	13696	2193.187	ng/ml	98
9) Naphthalene	2.949	128	97095	1991.606	ng/ml	100
10) Hexachlorobutadiene	3.023	225	18650	1968.121	ng/ml	99
11) 2-Methylnaphthalene	3.333	142	67631	2063.770	ng/ml	99
14) 2-Chloronaphthalene	3.607	162	71430	2006.764	ng/ml	93
16) Acenaphthylene	3.841	152	114597	2231.188	ng/ml	100
18) Acenaphthene	3.939	153	68948	2155.056	ng/ml	100
20) Fluorene	4.232	166	82145	2233.865	ng/ml	99
24) Hexachlorobenzene	4.550	284	29272	2227.351	ng/ml	95
25) Pentachlorophenol	4.662	266	18846	3335.026	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : 822198-2.D
Acq On : 01 Sep 2023 05:20 pm
Operator : sv119:ah
Sample : WG1822198-2,32,2,rp
Misc : WG1822868,WG1822198,ical19785
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 01 17:35:24 2023
Quant Method : I:\8270sim\sv119\230901LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:52:27 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230901LVI\ccv0901.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.779	178	123129	2222.288	ng/ml	100
27) Anthracene	4.808	178	122413	2368.178	ng/ml	100
28) Fluoranthene	5.465	202	149819	2366.237	ng/ml	96
29) Pyrene	5.598	202	152329	2323.094	ng/ml	100
32) Benzo[a]anthracene	6.334	228	154171	2606.730	ng/ml	100
34) Chrysene	6.360	228	142449	2449.143	ng/ml	99
37) Benzo[b]fluoranthene	7.196	252	161933	2643.672	ng/ml	99
38) Benzo[k]fluoranthene	7.221	252	150984	2748.647	ng/ml	100
39) Benzo[a]pyrene	7.513	252	137812	2779.707	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.820	276	155810	2740.237	ng/ml	99
41) Dibenzo[a,h]anthracene	8.858	278	148032	2732.037	ng/ml	100
42) Benzo[g,h,i]perylene	9.167	276	172753	2862.344	ng/ml	98

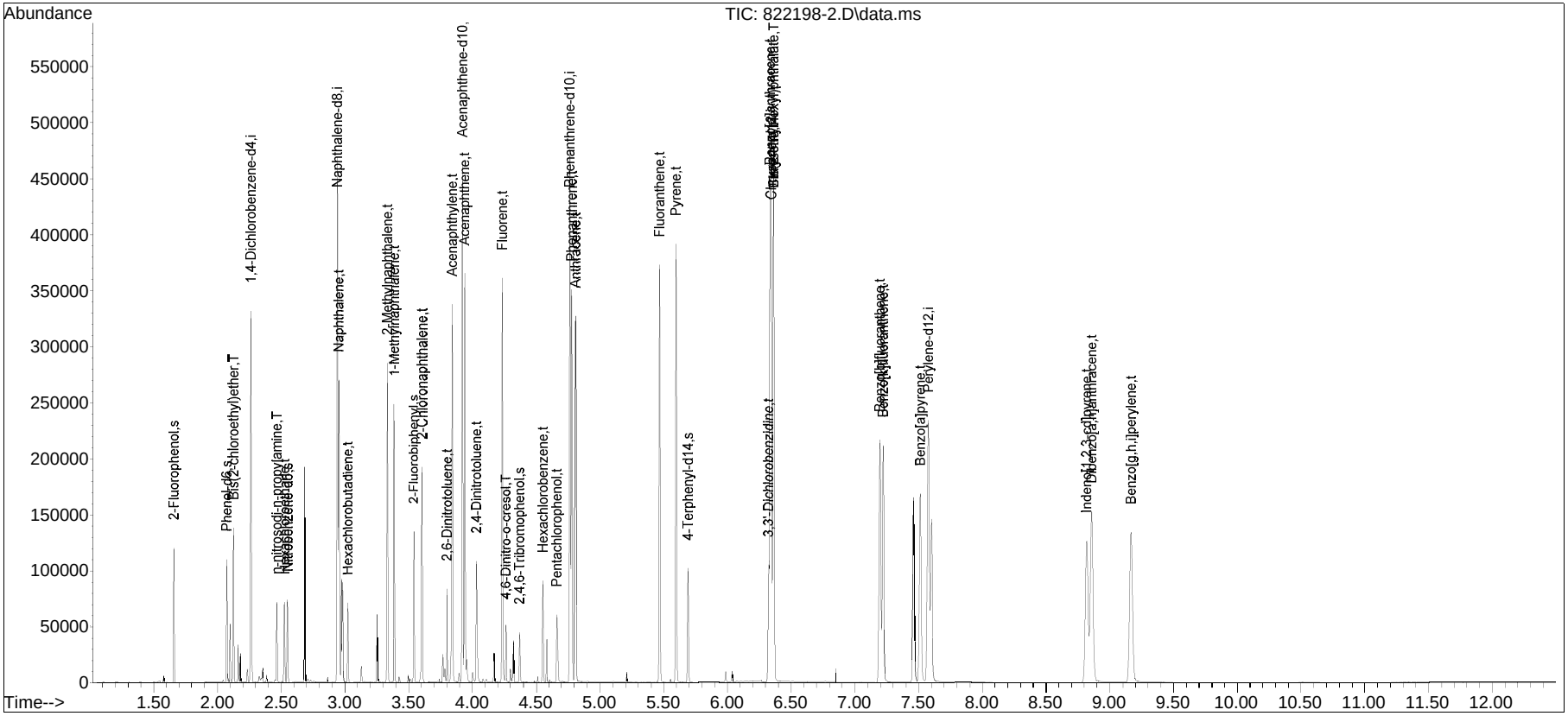
(#) = qualifier out of range (m) = manual integration (+) = signals summed

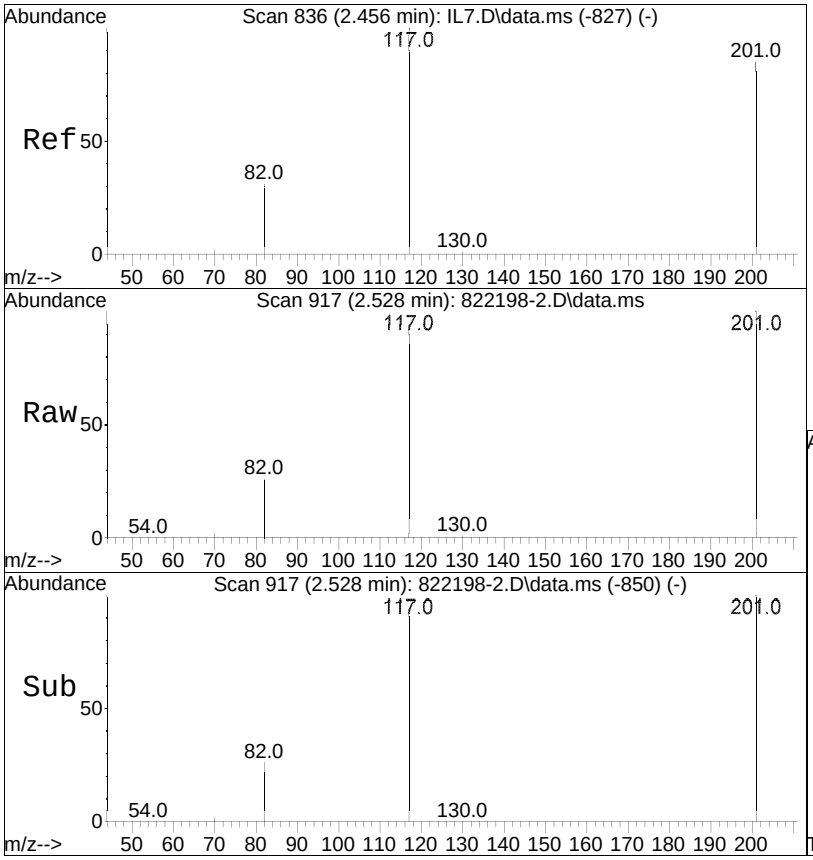
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : 822198-2.D
Acq On : 01 Sep 2023 05:20 pm
Operator : sv119:ah
Sample : WG1822198-2,32,2,rp
Misc : WG1822868,WG1822198,ical19785
ALS Vial : 27 Sample Multiplier: 1

Quant Time: Sep 01 17:35:24 2023
Quant Method : I:\8270sim\sv119\230901LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:52:27 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0901.D•

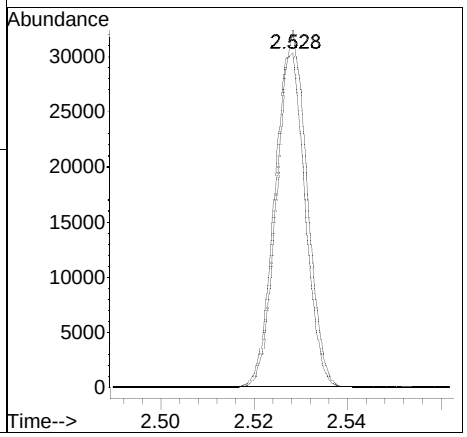


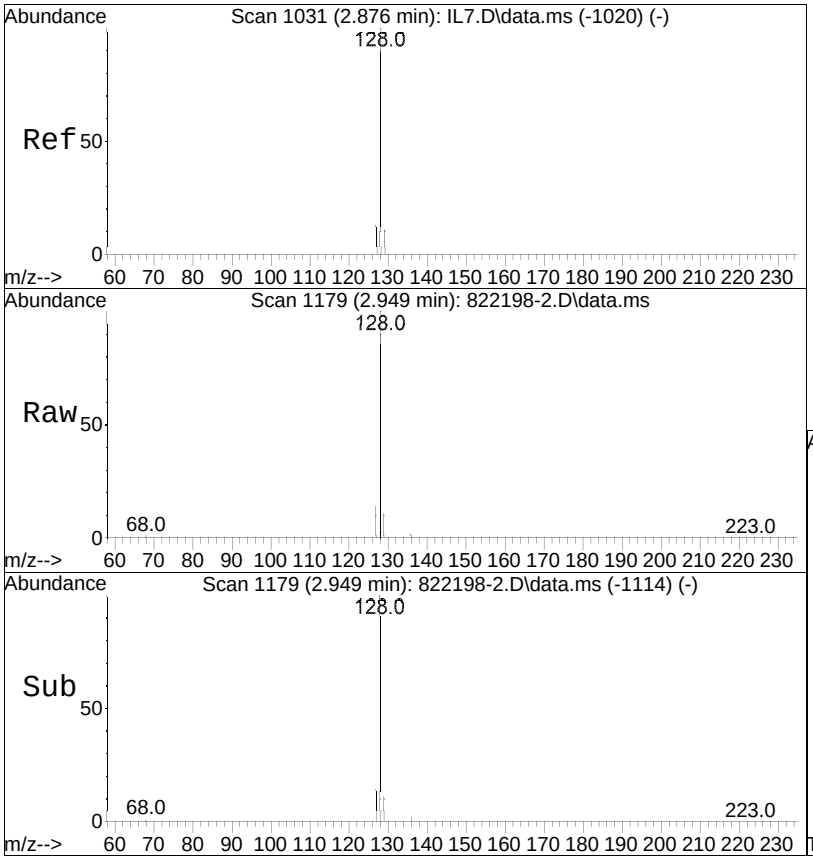


#6
Hexachloroethane
Concen: 2193.19 ng/ml
RT: 2.528 min Scan# 917
Delta R.T. 0.008 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:117 Resp: 13696

Ion	Ratio	Lower	Upper
117	100		
201	103.8	81.5	122.3

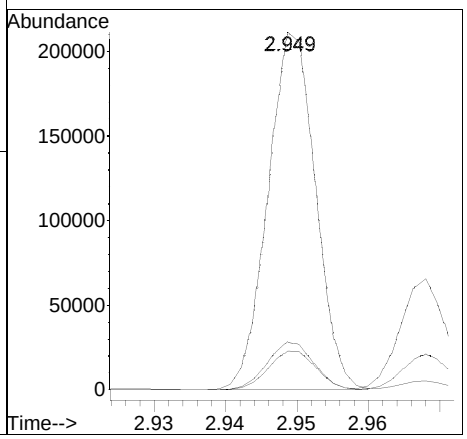


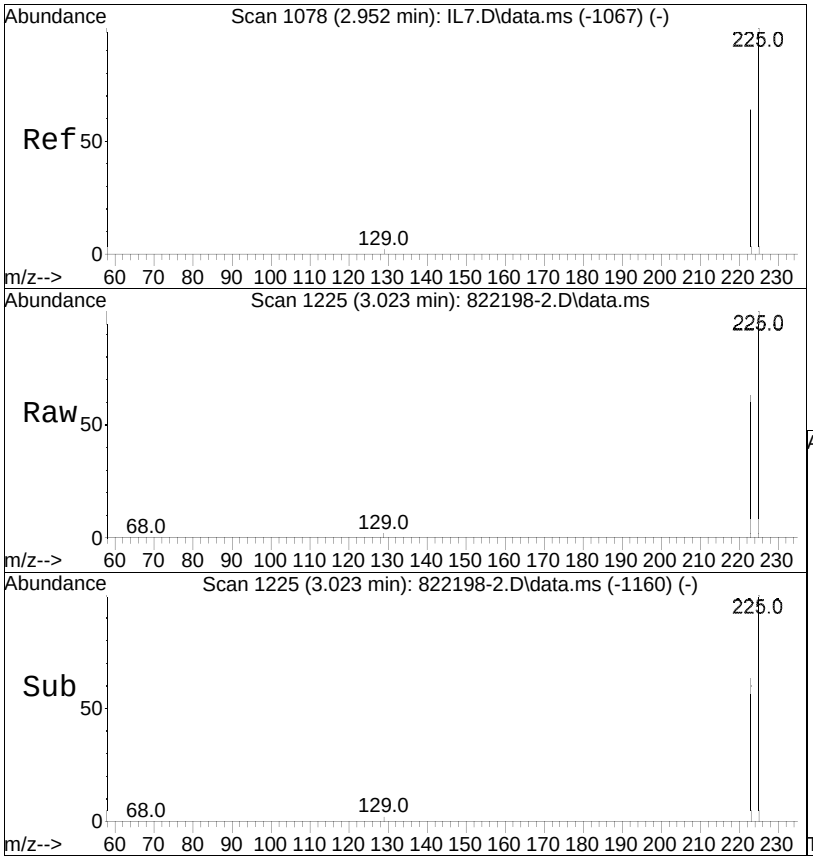


#9
Naphthalene
Concen: 1991.61 ng/ml
RT: 2.949 min Scan# 1179
Delta R.T. 0.004 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:128 Resp: 97095

Ion	Ratio	Lower	Upper
128	100		
129	11.1	8.8	13.2
127	13.3	10.6	15.8

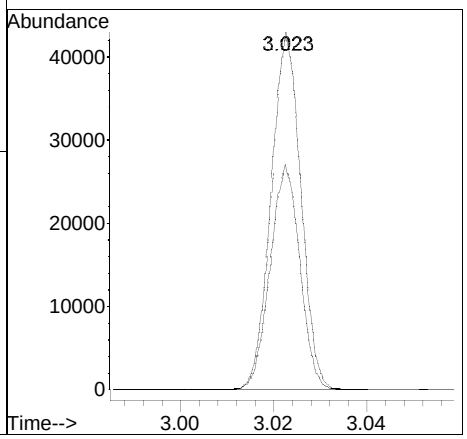


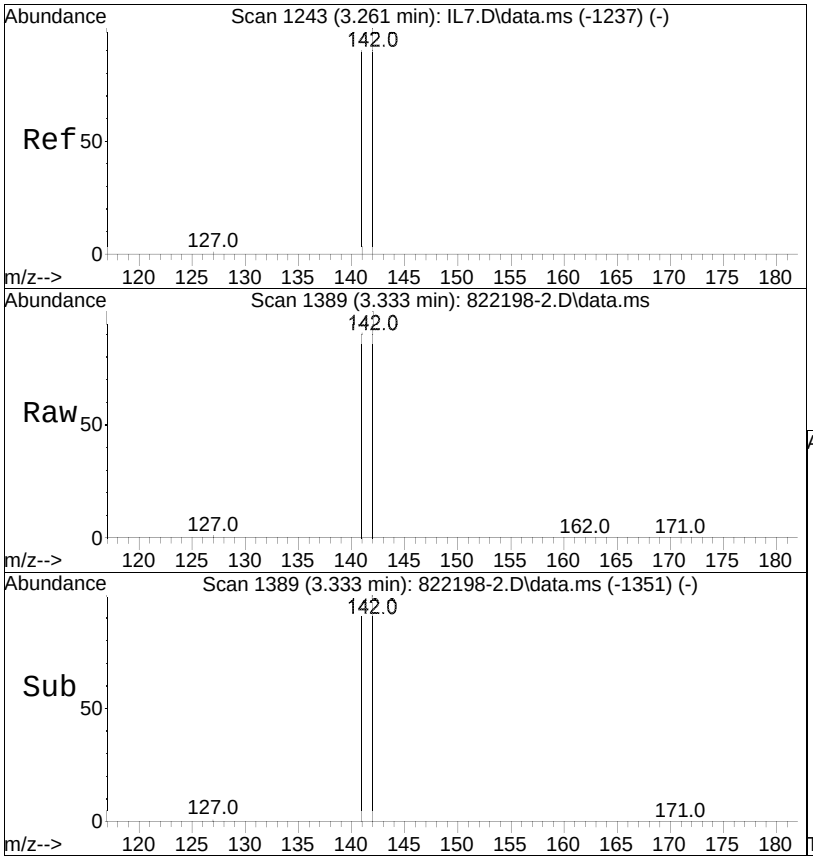


#10
Hexachlorobutadiene
Concen: 1968.12 ng/ml
RT: 3.023 min Scan# 1225
Delta R.T. 0.004 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:225 Resp: 18650

Ion	Ratio	Lower	Upper
225	100		
223	63.1	50.1	75.1

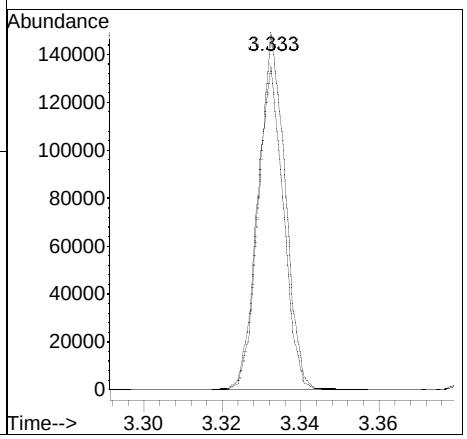


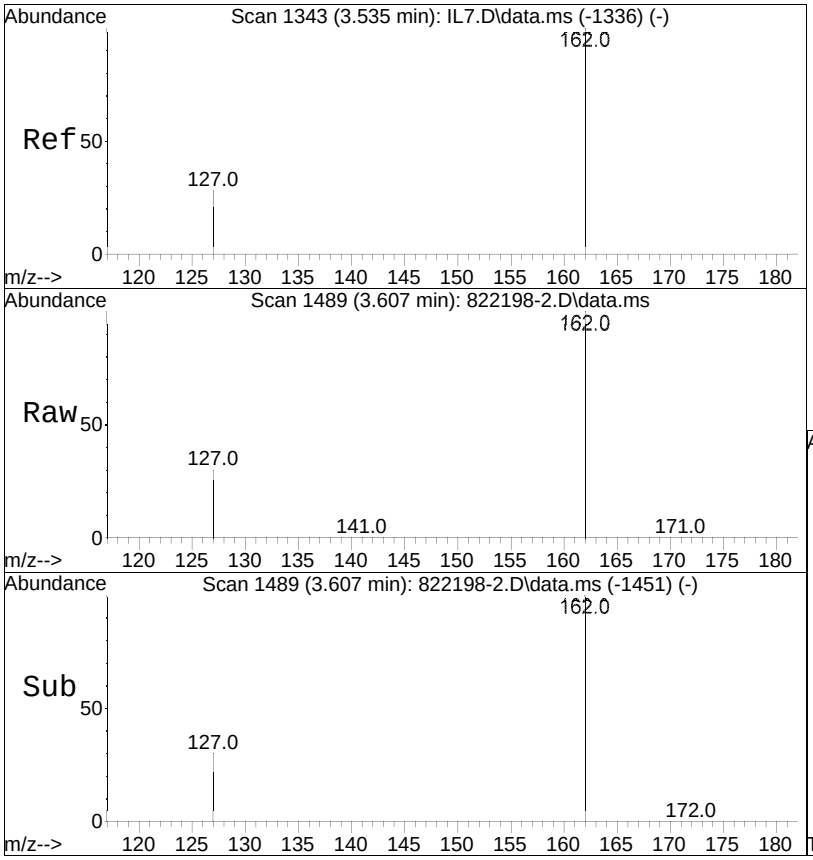


#11
2-Methylnaphthalene
Concen: 2063.77 ng/ml
RT: 3.333 min Scan# 1389
Delta R.T. 0.005 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:142 Resp: 67631

Ion	Ratio	Lower	Upper
142	100		
141	91.2	74.1	111.1

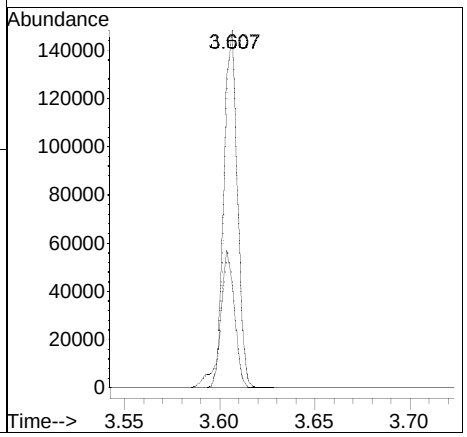


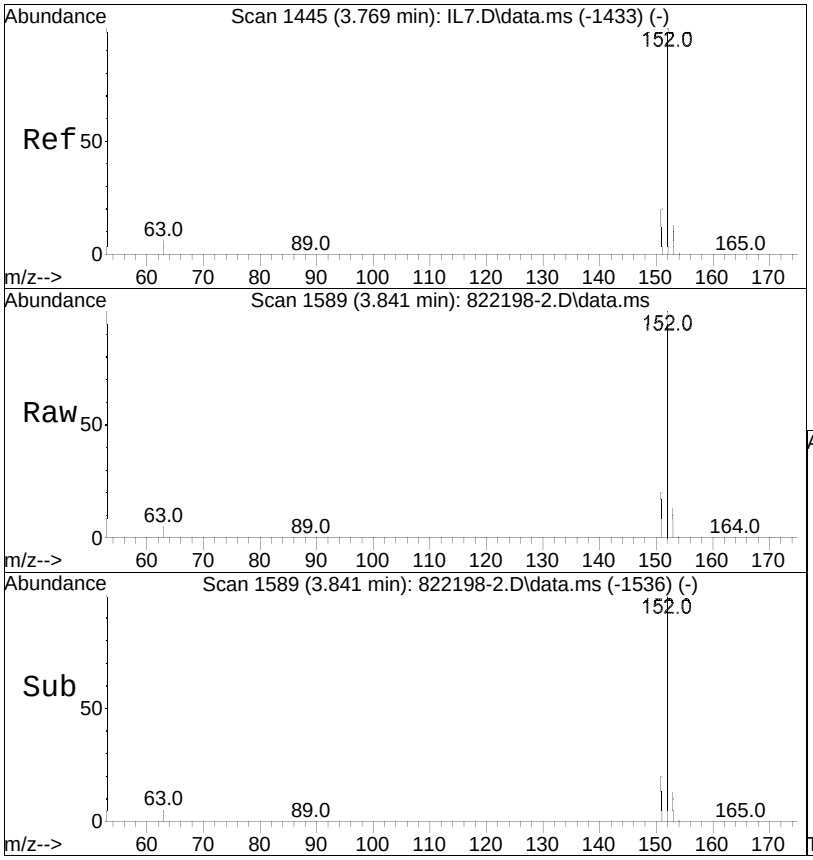


#14
2-Chloronaphthalene
Concen: 2006.76 ng/ml
RT: 3.607 min Scan# 1489
Delta R.T. 0.005 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:162 Resp: 71430

Ion	Ratio	Lower	Upper
162	100		
127	41.2	29.7	44.5

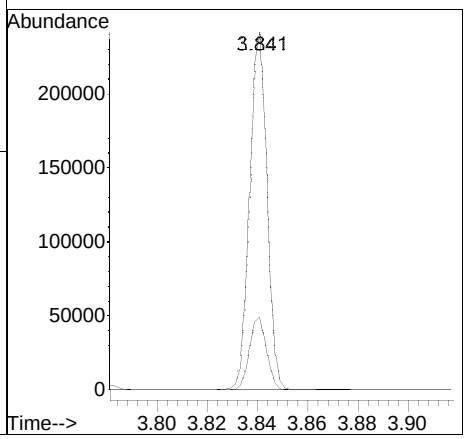


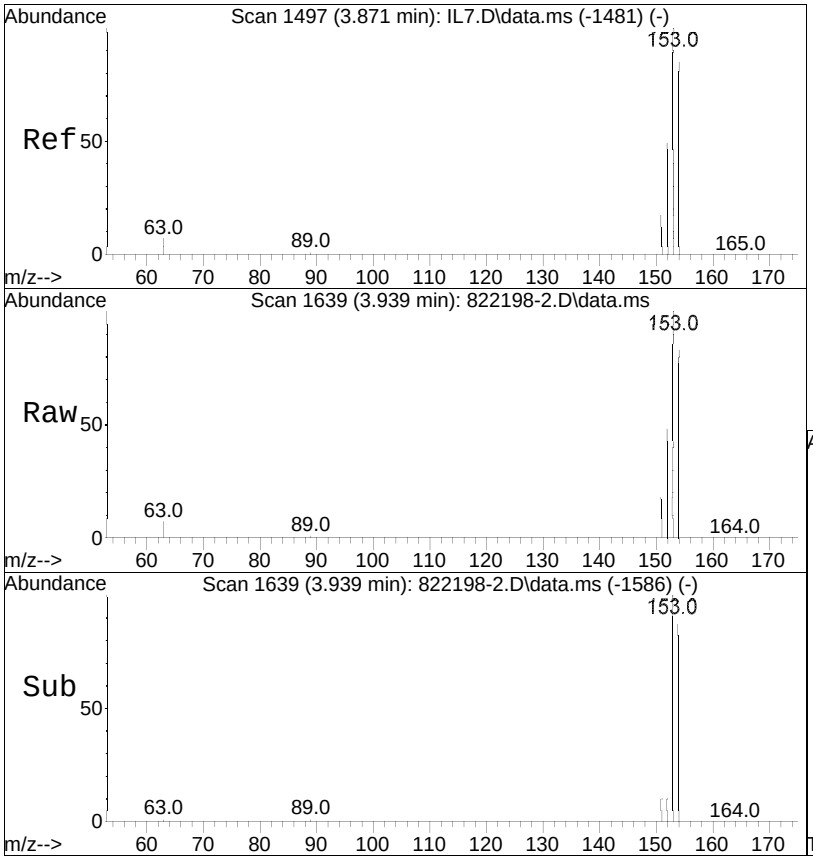


#16
Acenaphthylene
Concen: 2231.19 ng/ml
RT: 3.841 min Scan# 1589
Delta R.T. 0.004 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:152 Resp: 114597

Ion	Ratio	Lower	Upper
152	100		
151	20.2	16.0	24.0

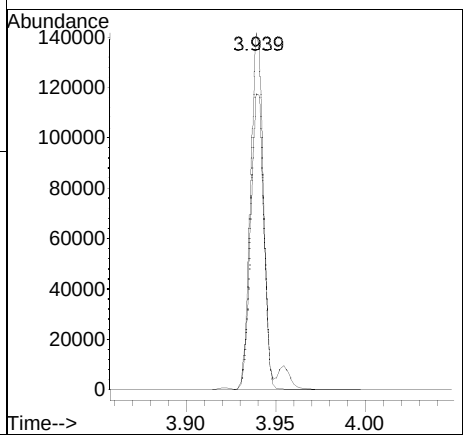


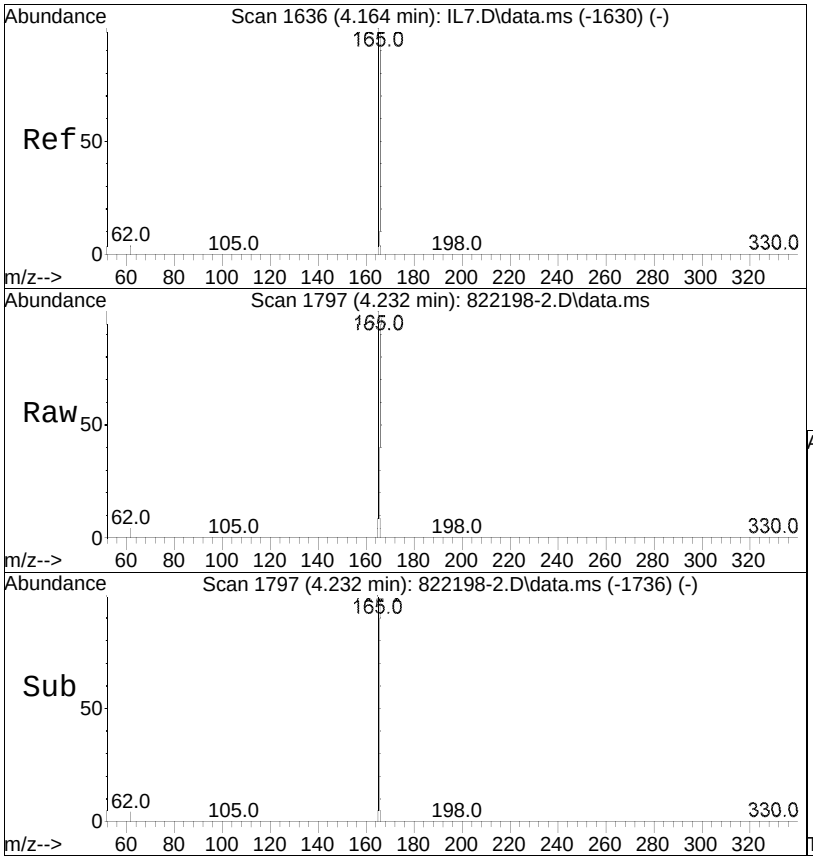


#18
Acenaphthene
Concen: 2155.06 ng/ml
RT: 3.939 min Scan# 1639
Delta R.T. 0.004 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:153 Resp: 68948

Ion	Ratio	Lower	Upper
153	100		
154	84.0	66.9	100.3

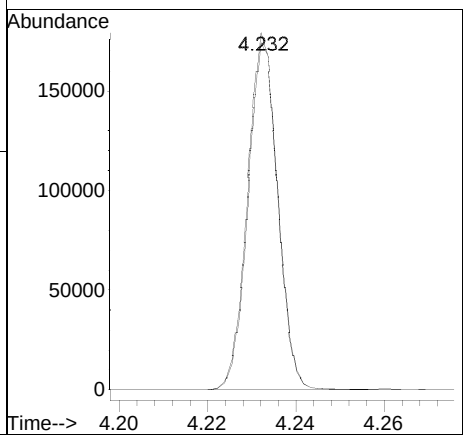


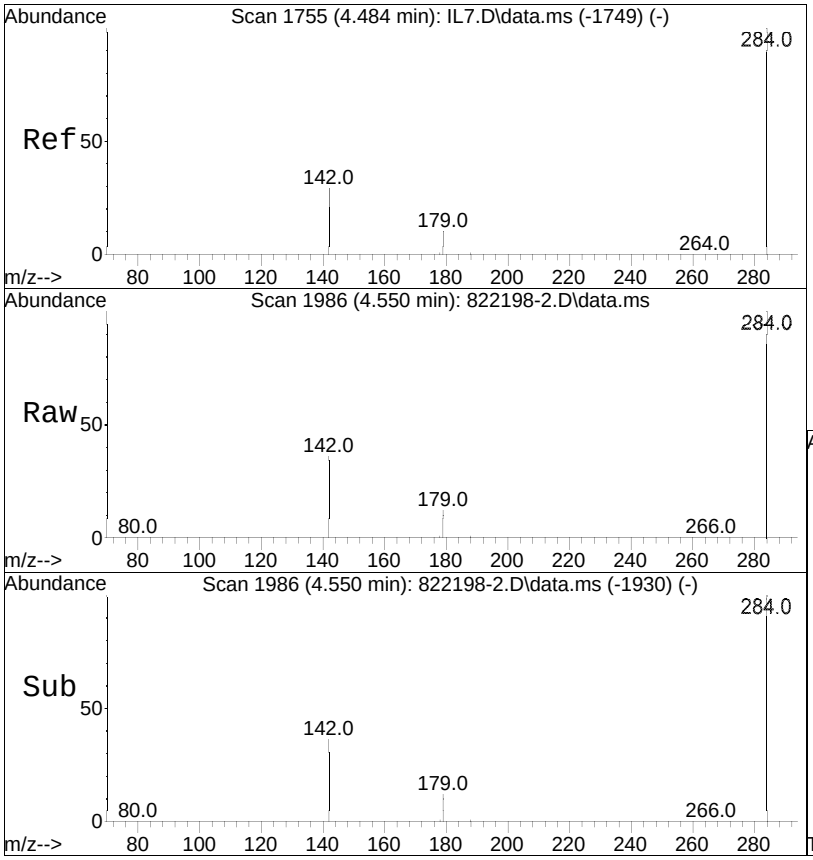


#20
Fluorene
Concen: 2233.86 ng/ml
RT: 4.232 min Scan# 1797
Delta R.T. 0.004 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:166 Resp: 82145

Ion	Ratio	Lower	Upper
166	100		
165	102.1	82.9	124.3

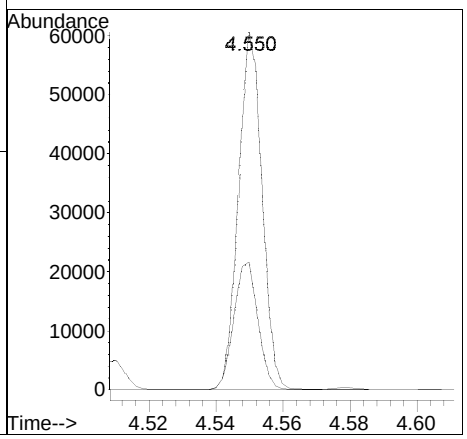


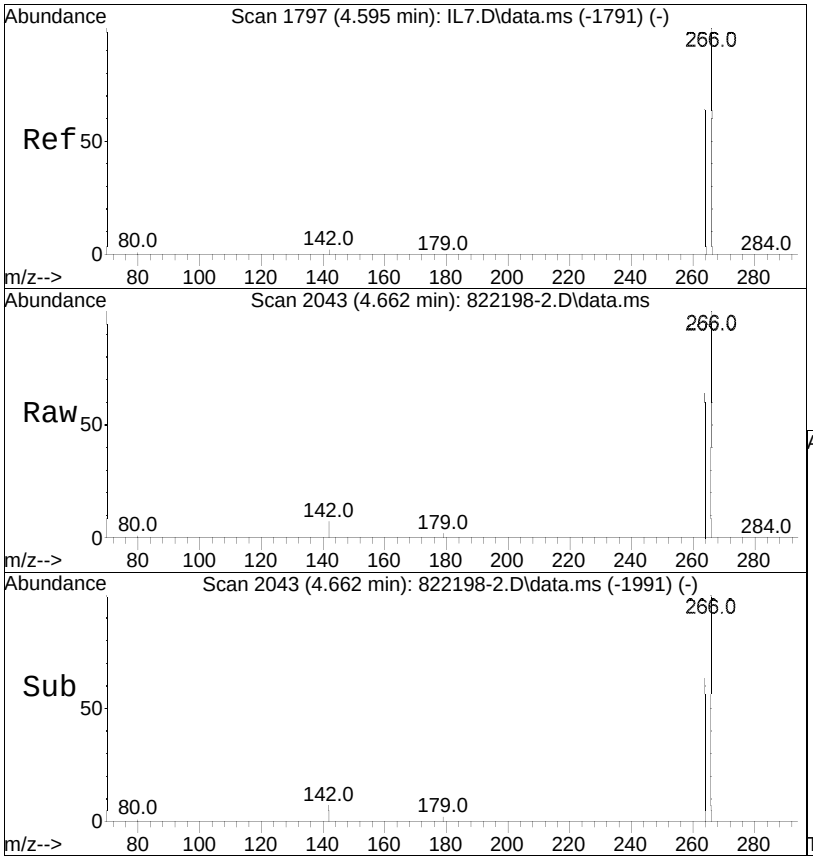


#24
Hexachlorobenzene
Concen: 2227.35 ng/ml
RT: 4.550 min Scan# 1986
Delta R.T. 0.002 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:284 Resp: 29272

Ion	Ratio	Lower	Upper
284	100		
142	36.7	26.9	40.3

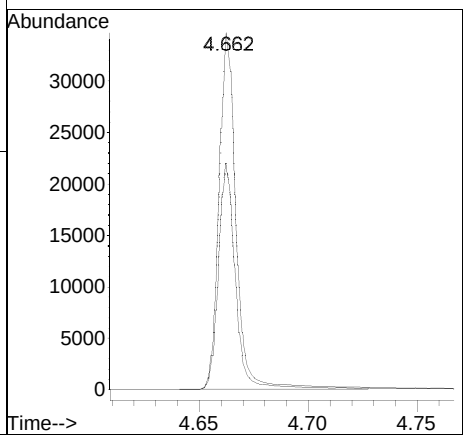


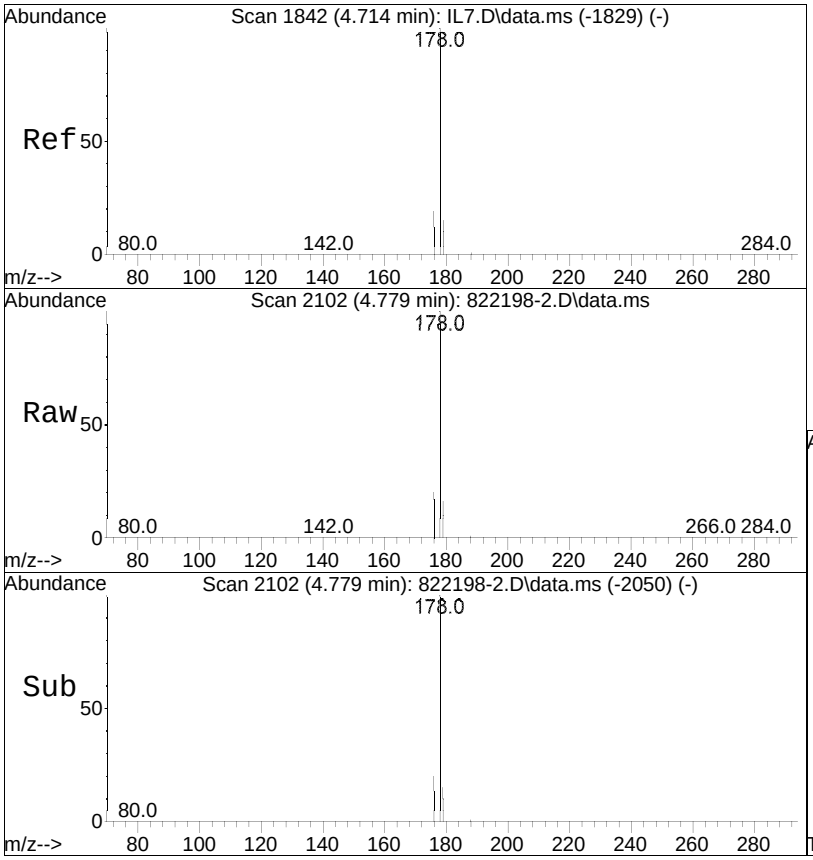


#25
Pentachlorophenol
Concen: 3335.03 ng/ml
RT: 4.662 min Scan# 2043
Delta R.T. 0.002 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:266 Resp: 18846

Ion	Ratio	Lower	Upper
266	100		
264	63.2	50.7	76.1

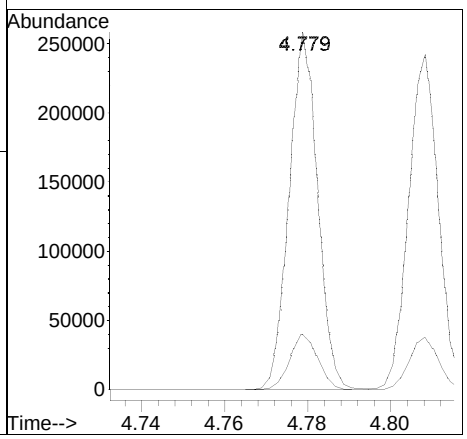


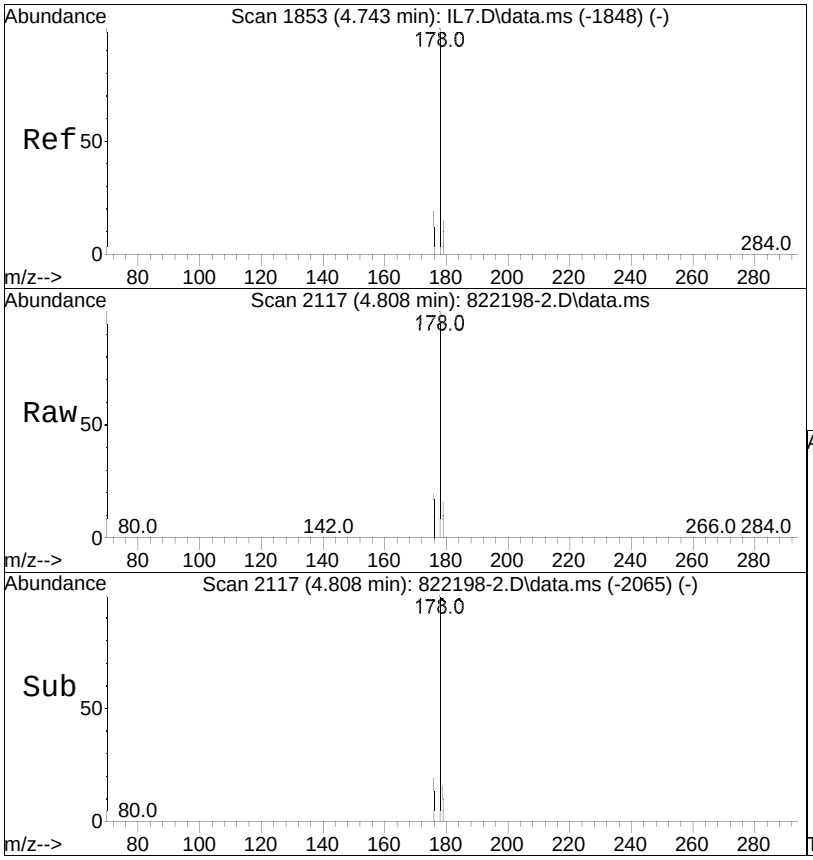


#26
Phenanthrene
Concen: 2222.29 ng/ml
RT: 4.779 min Scan# 2102
Delta R.T. 0.002 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:178 Resp: 123129

Ion	Ratio	Lower	Upper
178	100		
179	15.4	12.3	18.5

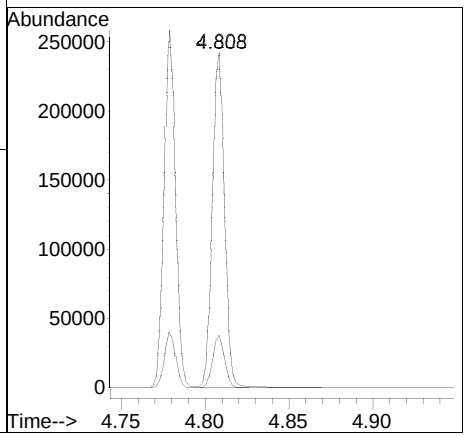


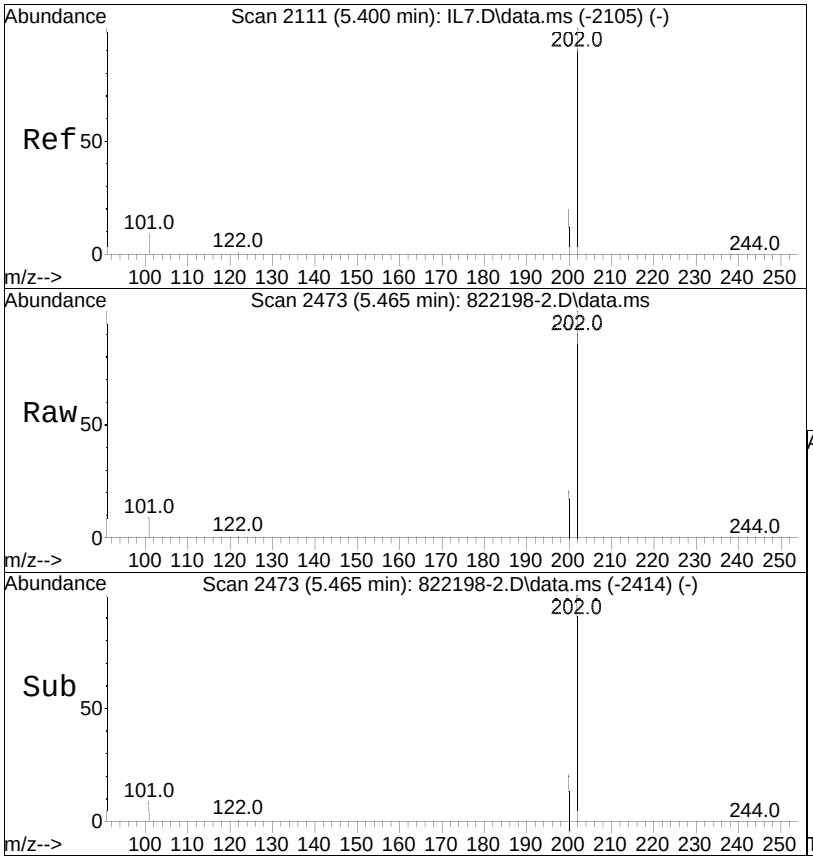


#27
Anthracene
Concen: 2368.18 ng/ml
RT: 4.808 min Scan# 2117
Delta R.T. 0.002 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:178 Resp: 122413

Ion	Ratio	Lower	Upper
178	100		
179	15.4	12.2	18.4

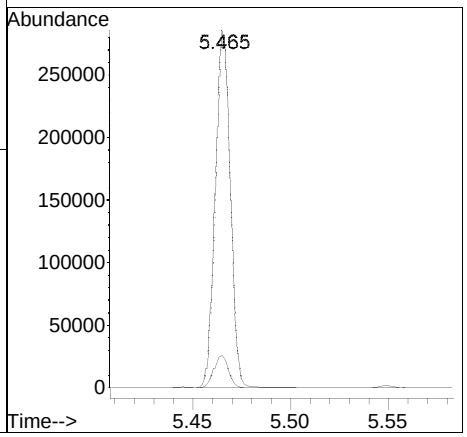


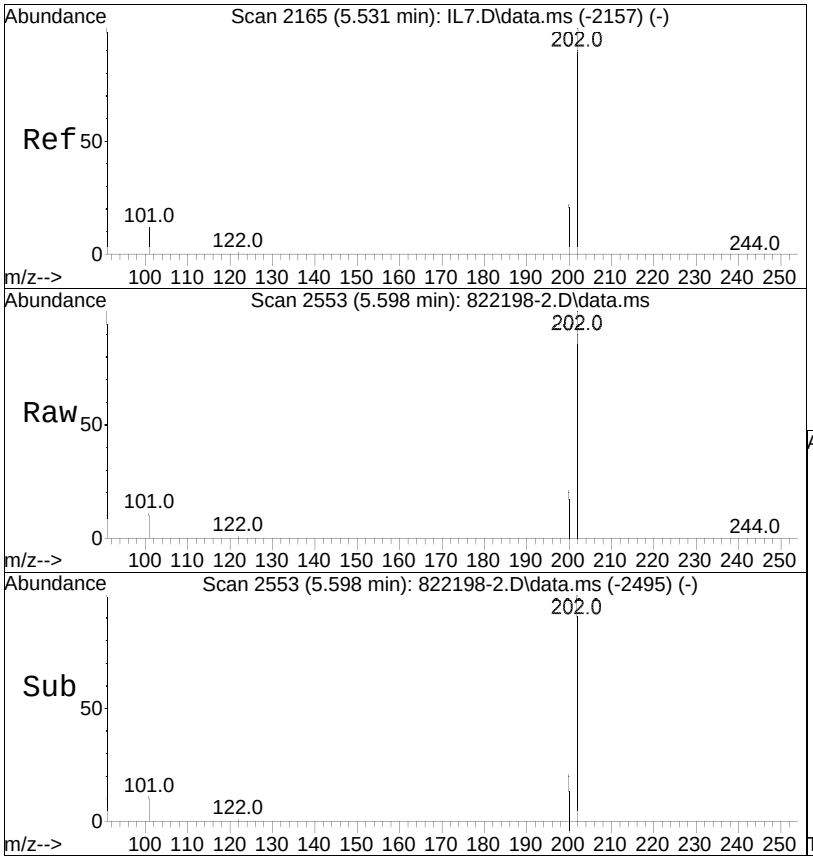


#28
Fluoranthene
Concen: 2366.24 ng/ml
RT: 5.465 min Scan# 2473
Delta R.T. -0.001 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:202 Resp: 149819

Ion	Ratio	Lower	Upper
202	100		
101	9.0	8.3	12.5

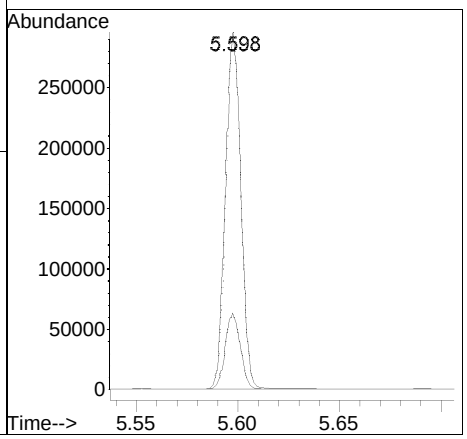


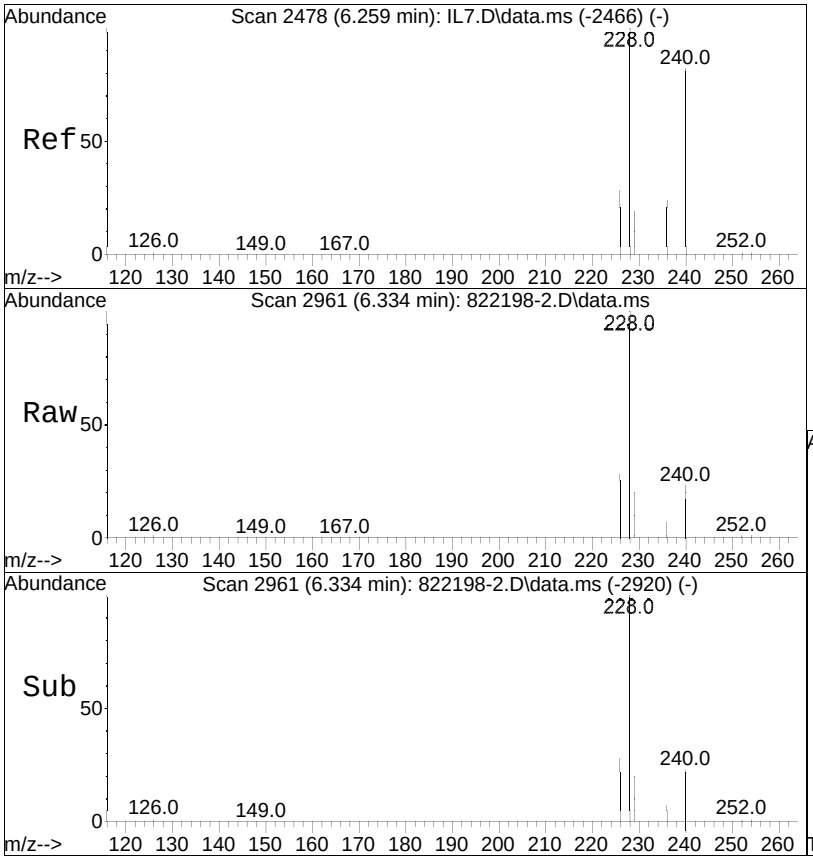


#29
Pyrene
Concen: 2323.09 ng/ml
RT: 5.598 min Scan# 2553
Delta R.T. -0.003 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:202 Resp: 152329

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.3	25.9

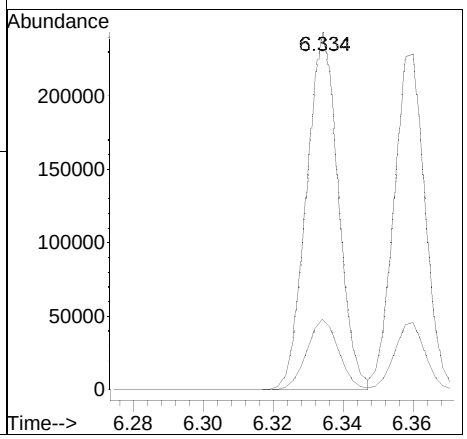


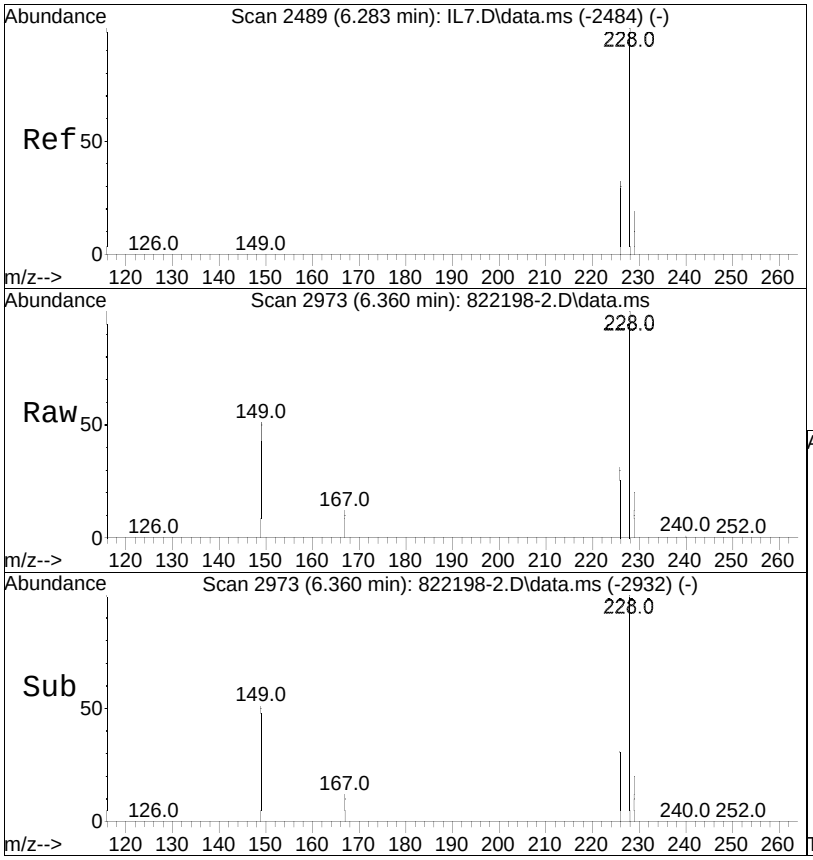


#32
Benzo[a]anthracene
Concen: 2606.73 ng/ml
RT: 6.334 min Scan# 2961
Delta R.T. -0.013 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:228 Resp: 154171

Ion	Ratio	Lower	Upper
228	100		
229	19.7	15.6	23.4

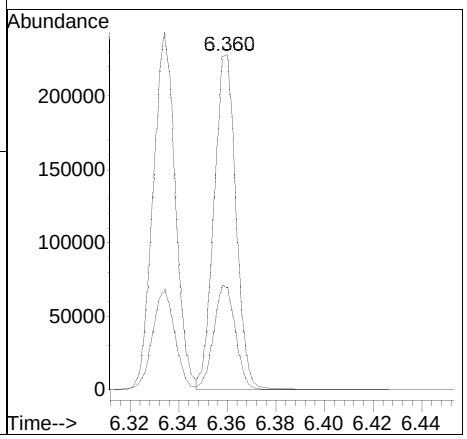


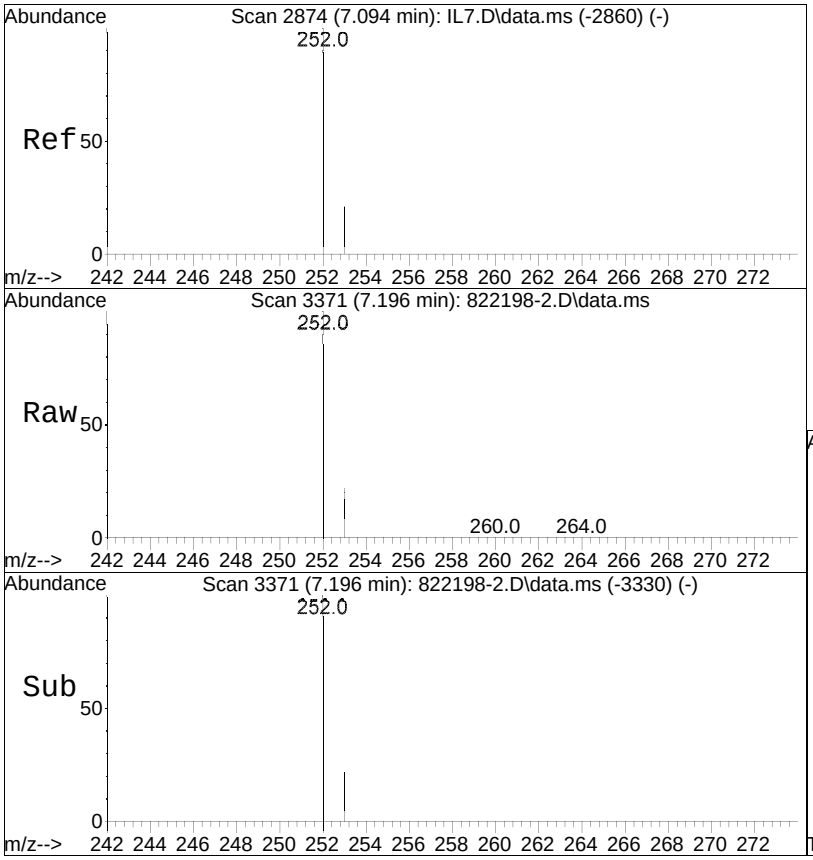


#34
Chrysene
Concen: 2449.14 ng/ml
RT: 6.360 min Scan# 2973
Delta R.T. -0.013 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:228 Resp: 142449

Ion	Ratio	Lower	Upper
228	100		
226	31.1	24.5	36.7

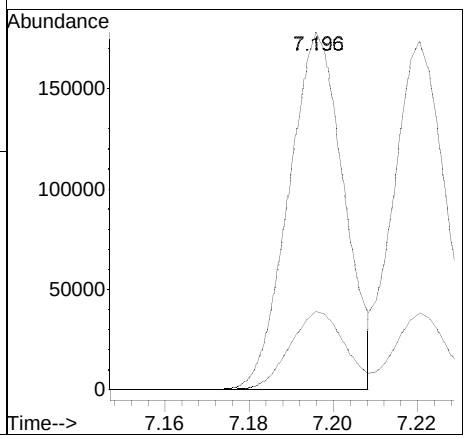


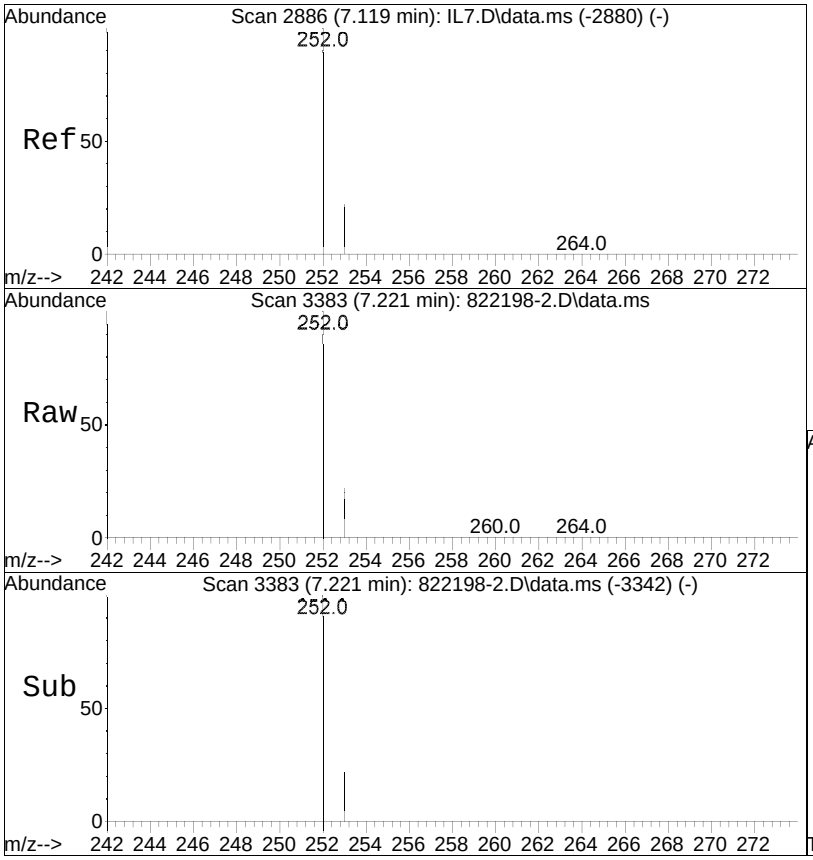


#37
Benzo[b]fluoranthene
Concen: 2643.67 ng/ml
RT: 7.196 min Scan# 3371
Delta R.T. -0.016 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:252 Resp: 161933

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.3	25.9

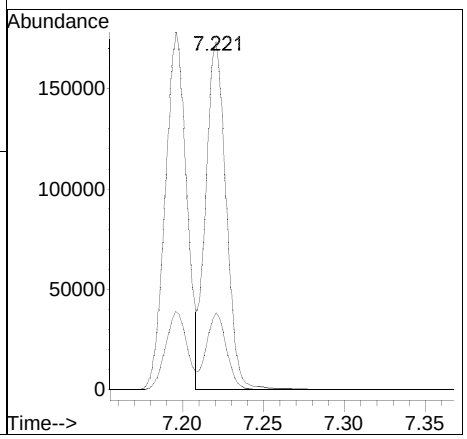


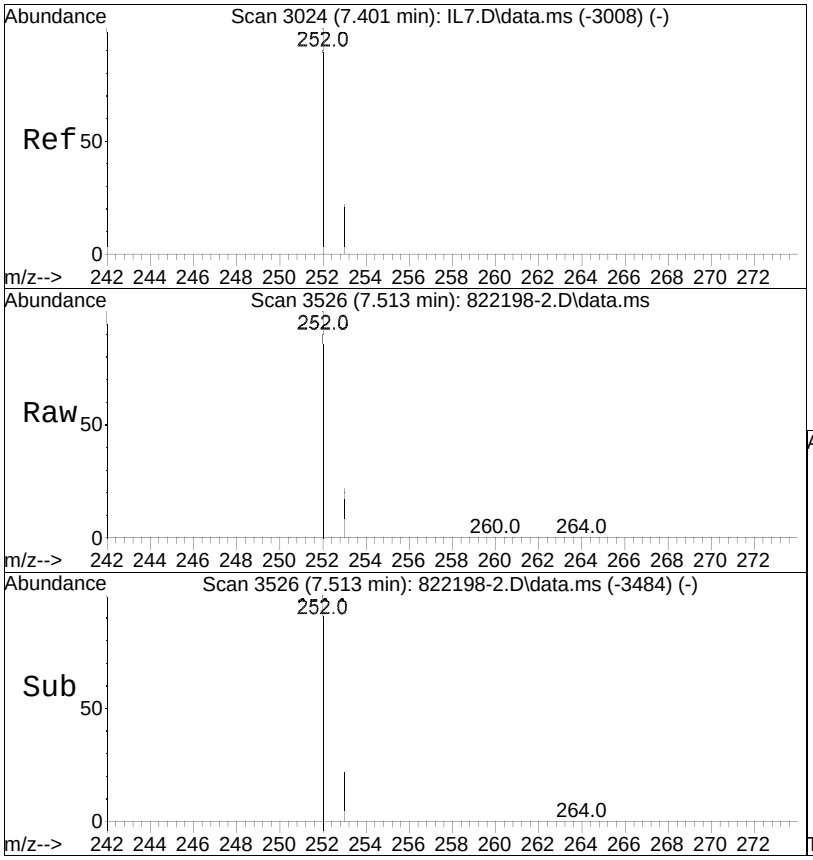


#38
Benzo[k]fluoranthene
Concen: 2748.65 ng/ml
RT: 7.221 min Scan# 3383
Delta R.T. -0.016 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:252 Resp: 150984

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.4	26.2

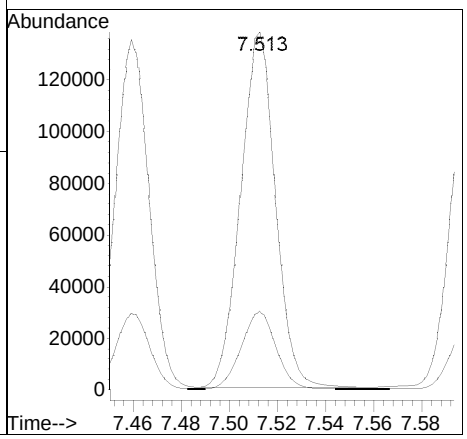


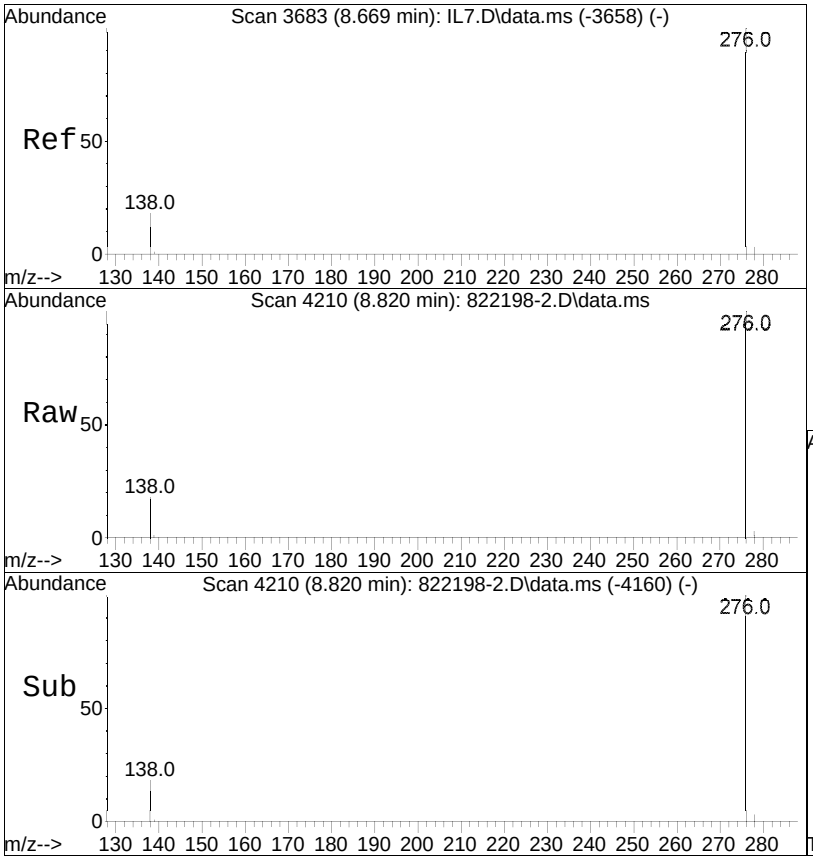


#39
Benzo[a]pyrene
Concen: 2779.71 ng/ml
RT: 7.513 min Scan# 3526
Delta R.T. -0.014 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:252 Resp: 137812

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.4	26.0

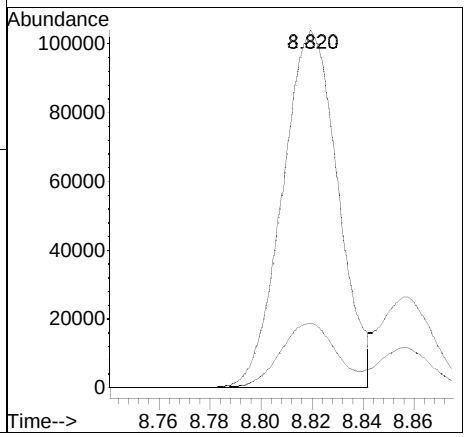


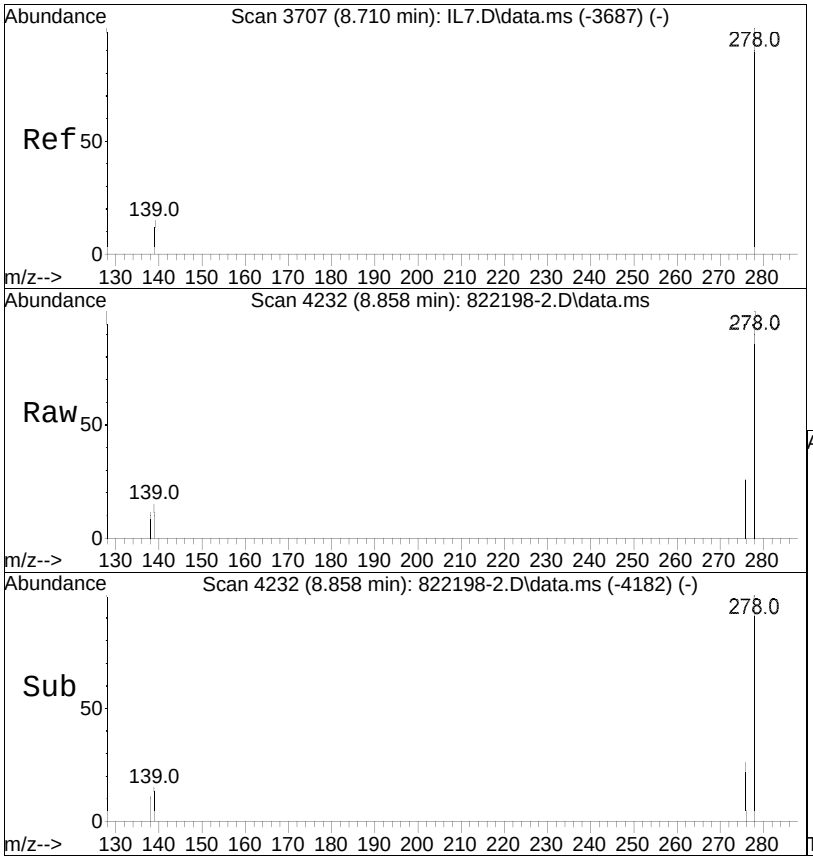


#40
Indeno[1,2,3-cd]pyrene
Concen: 2740.24 ng/ml
RT: 8.820 min Scan# 4210
Delta R.T. -0.014 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:276 Resp: 155810

Ion	Ratio	Lower	Upper
276	100		
138	18.1	14.8	22.2

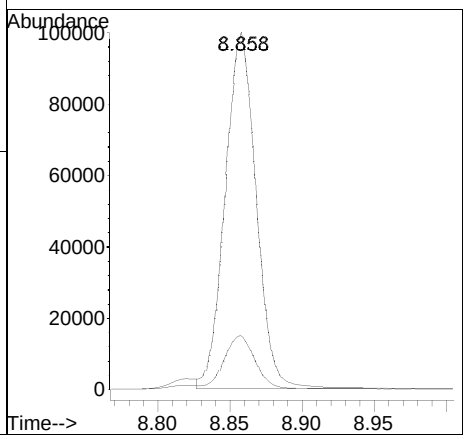


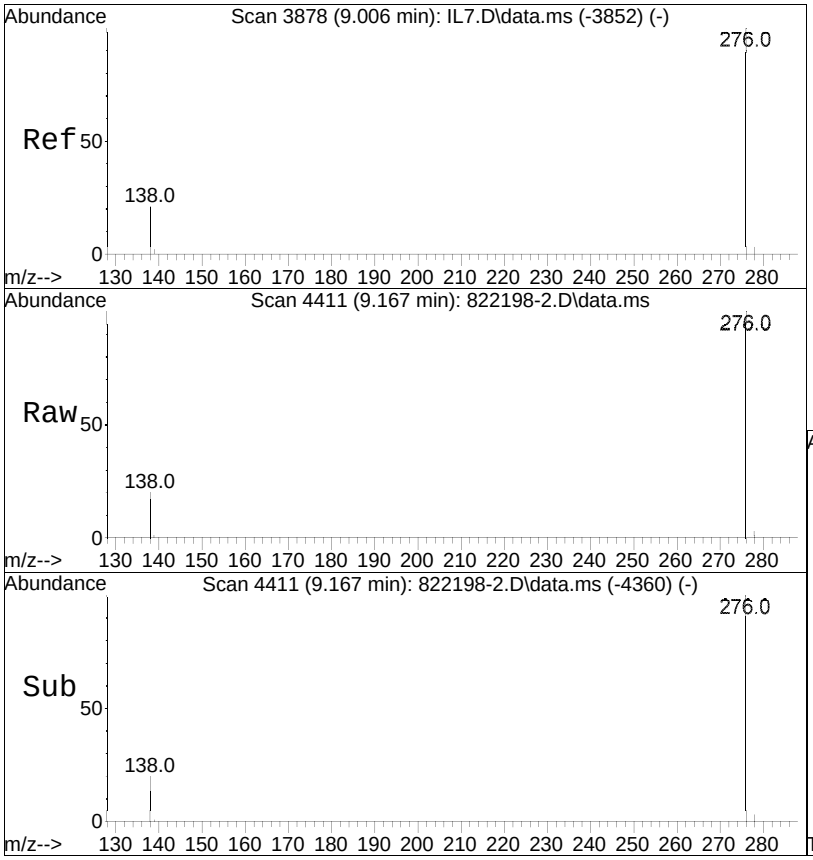


#41
Dibenzo[a,h]anthracene
Concen: 2732.04 ng/ml
RT: 8.858 min Scan# 4232
Delta R.T. -0.014 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:278 Resp: 148032

Ion	Ratio	Lower	Upper
278	100		
139	15.1	12.2	18.4

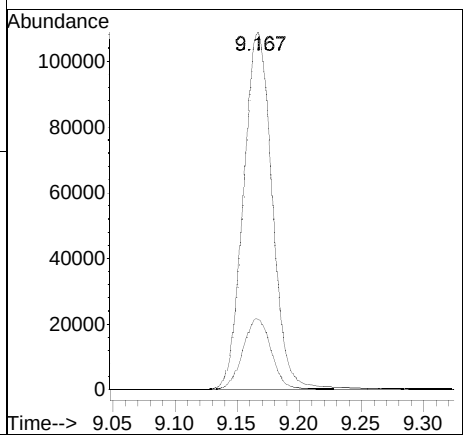




#42
Benzo[g,h,i]perylene
Concen: 2862.34 ng/ml
RT: 9.167 min Scan# 4411
Delta R.T. -0.012 min
Lab File: 822198-2.D
Acq: 01 Sep 2023 05:20 pm

Tgt Ion:276 Resp: 172753

Ion	Ratio	Lower	Upper
276	100		
138	20.0	16.8	25.2



Manual Integration Report

Data Path	: I:\8270SIM\sv119\230901LVI	QMethod	: SIM-LVI_230306_sv119.M
Data File	: 822198-2.D	Operator	: sv119:ah
Date Inj'd	: 9/1/2023 5:20 pm	Instrument	: SV119
Sample	: WG1822198-2,32,2,rp	Quant Date	: 9/1/2023 5:35 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : 823489-2.D
Acq On : 07 Sep 2023 03:19 pm
Operator : sv119:jjw
Sample : WG1823489-2,32,2,jjw
Misc : WG1824714,WG1823489,ical19785
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 08 08:51:18 2023
Quant Method : I:\8270sim\sv119\230907aLVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 11:05:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230907aLVI\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.173	152	47391	4000.000	ng/ml	0.00
Standard Area 1 = 64197			Recovery = 73.82%			
8) Naphthalene-d8	2.829	136	175185	4000.000	ng/ml	0.00
Standard Area 1 = 236804			Recovery = 73.98%			
17) Acenaphthene-d10	3.791	164	92790	4000.000	ng/ml	0.00
Standard Area 1 = 129941			Recovery = 71.41%			
22) Phenanthrene-d10	4.622	188	217185	4000.000	ng/ml	0.00
Standard Area 1 = 316231			Recovery = 68.68%			
31) Chrysene-d12	6.210	240	209214	4000.000	ng/ml	-0.04
Standard Area 1 = 299020			Recovery = 69.97%			
36) Perylene-d12	7.345	264	228162	4000.000	ng/ml	-0.04
Standard Area 1 = 305793			Recovery = 74.61%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.582	112	20811	1784.782	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 35.70%			
3) Phenol-d6	1.991	99	22219	1612.816	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 32.26%			
7) Nitrobenzene-d5	2.450	82	12313	1188.021	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 47.52%			
13) 2-Fluorobiphenyl	3.420	172	30309	841.499	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 33.66%			
21) 2,4,6-Tribromophenol	4.232	330	9954	2662.490	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 53.25%			
30) 4-Terphenyl-d14	5.556	244	40677	897.592	ng/ml	-0.02
Spiked Amount 2500.000	Range 30 - 130		Recovery = 35.90%			
Target Compounds						Qvalue
6) Hexachloroethane	2.428	117	10196	1935.796	ng/ml	95
9) Naphthalene	2.840	128	71753	1729.631	ng/ml	100
10) Hexachlorobutadiene	2.912	225	14261	1768.600	ng/ml	100
11) 2-Methylnaphthalene	3.217	142	52334	1876.749	ng/ml	99
14) 2-Chloronaphthalene	3.483	162	55407	1829.308	ng/ml	94
16) Acenaphthylene	3.712	152	90306	2066.266	ng/ml	100
18) Acenaphthene	3.808	153	54453	1850.974	ng/ml	100
20) Fluorene	4.096	166	66454	1965.344	ng/ml	99
24) Hexachlorobenzene	4.411	284	24858	1904.494	ng/ml	96
25) Pentachlorophenol	4.522	266	16286	2977.209	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : 823489-2.D
Acq On : 07 Sep 2023 03:19 pm
Operator : sv119:jjw
Sample : WG1823489-2,32,2,jjw
Misc : WG1824714,WG1823489,ical19785
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 08 08:51:18 2023
Quant Method : I:\8270sim\sv119\230907aLVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 11:05:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230907aLVI\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.636	178	102417	1861.184	ng/ml	100
27) Anthracene	4.664	178	103910	2024.051	ng/ml	100
28) Fluoranthene	5.322	202	137998	2194.529	ng/ml	96
29) Pyrene	5.457	202	141069	2166.172	ng/ml	99
32) Benzo[a]anthracene	6.203	228	152083	2240.356	ng/ml	100
34) Chrysene	6.225	228	138723	2081.642	ng/ml	99
37) Benzo[b]fluoranthene	7.000	252	162890	2347.610	ng/ml	100
38) Benzo[k]fluoranthene	7.020	252	146157	2348.913	ng/ml	100
39) Benzo[a]pyrene	7.288	252	135985	2421.376	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.487	276	148403	2304.065	ng/ml	98
41) Dibenzo[a,h]anthracene	8.523	278	139086M6	2266.072	ng/ml	
42) Benzo[g,h,i]perylene	8.805	276	156169	2284.285	ng/ml	97

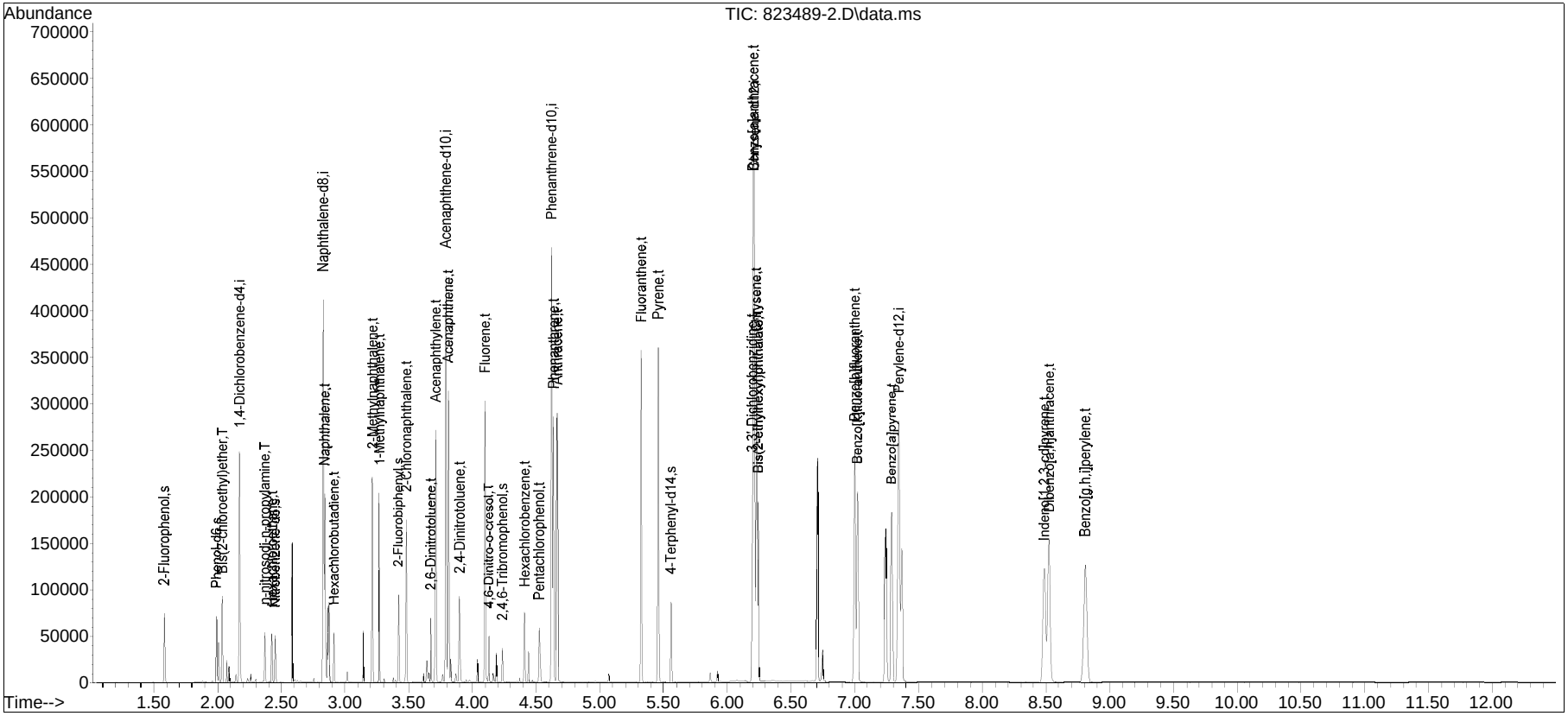
(#) = qualifier out of range (m) = manual integration (+) = signals summed

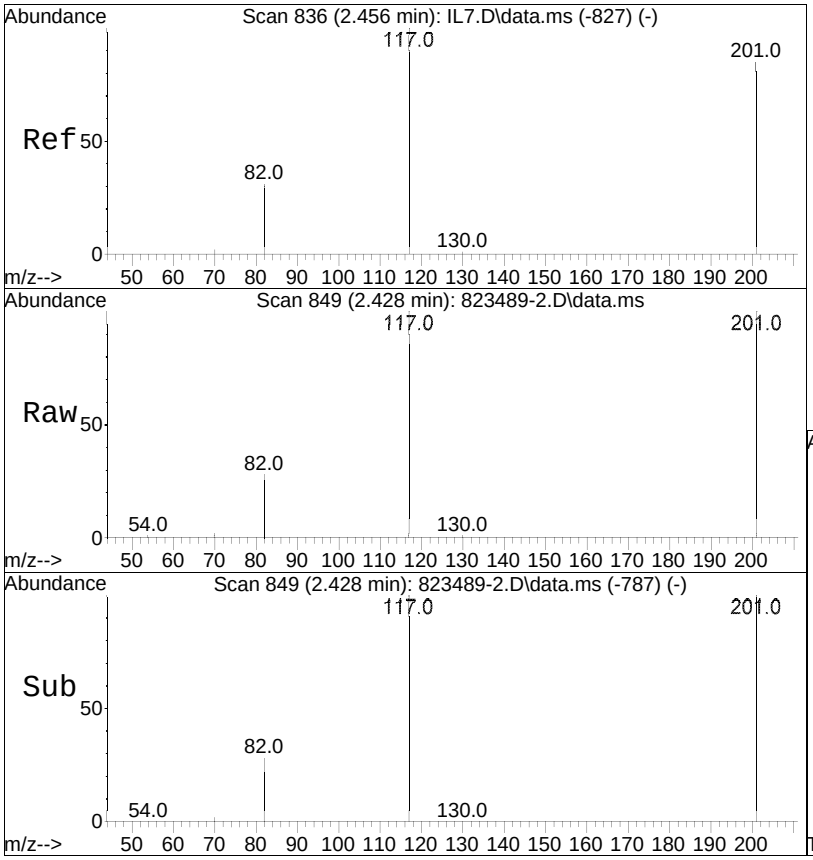
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : 823489-2.D
Acq On : 07 Sep 2023 03:19 pm
Operator : sv119:jjw
Sample : WG1823489-2,32,2,jjw
Misc : WG1824714,WG1823489,ical19785
ALS Vial : 14 Sample Multiplier: 1

Quant Time: Sep 08 08:51:18 2023
Quant Method : I:\8270sim\sv119\230907aLVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 11:05:11 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listedI\ccv0907a.D•

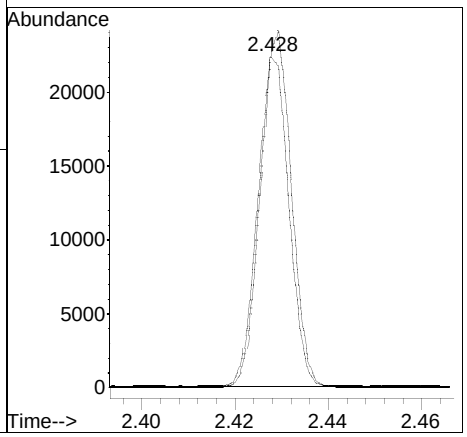


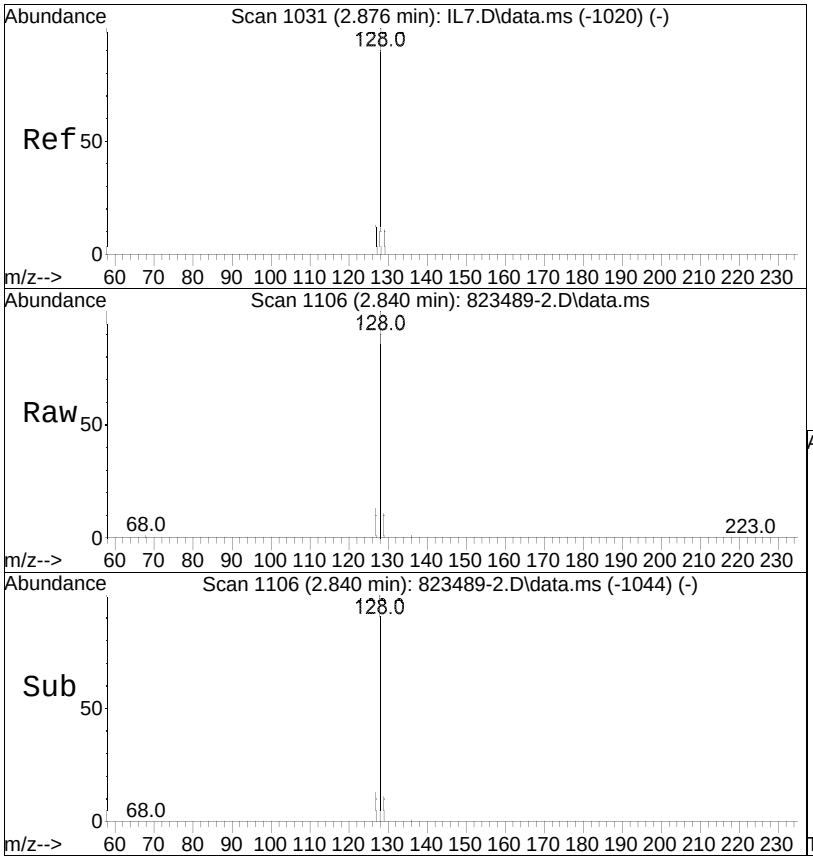


#6
Hexachloroethane
Concen: 1935.80 ng/ml
RT: 2.428 min Scan# 849
Delta R.T. -0.000 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:117 Resp: 10196

Ion	Ratio	Lower	Upper
117	100		
201	106.9	81.5	122.3

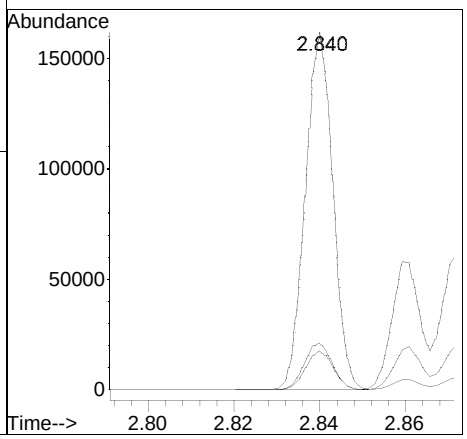


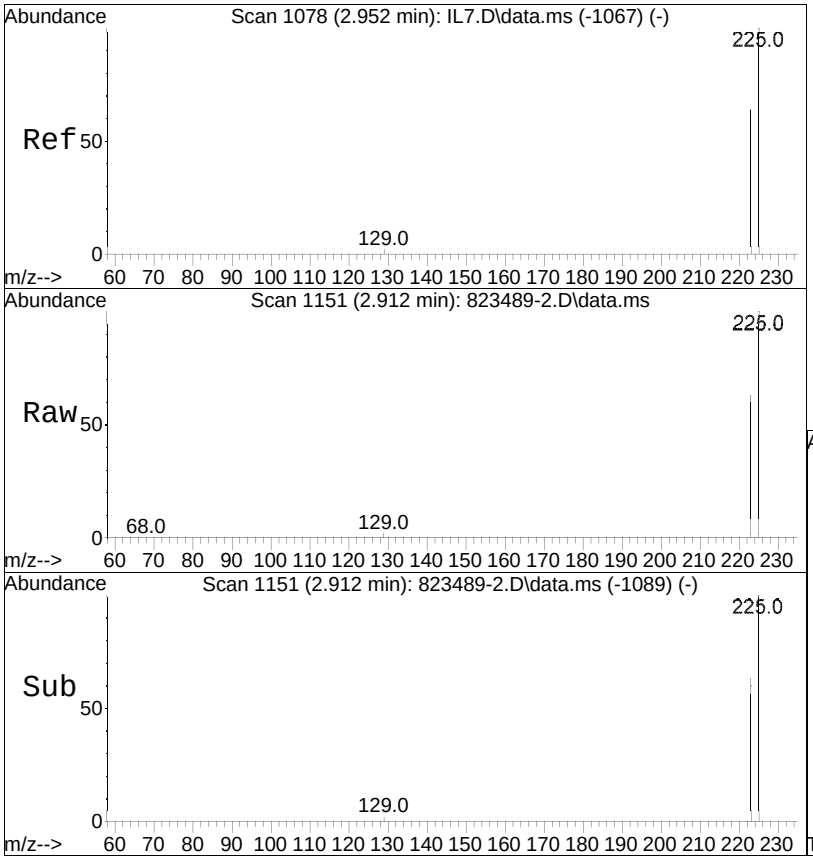


#9
Naphthalene
Concen: 1729.63 ng/ml
RT: 2.840 min Scan# 1106
Delta R.T. -0.000 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:128 Resp: 71753

Ion	Ratio	Lower	Upper
128	100		
129	11.0	8.8	13.2
127	13.3	10.6	15.8

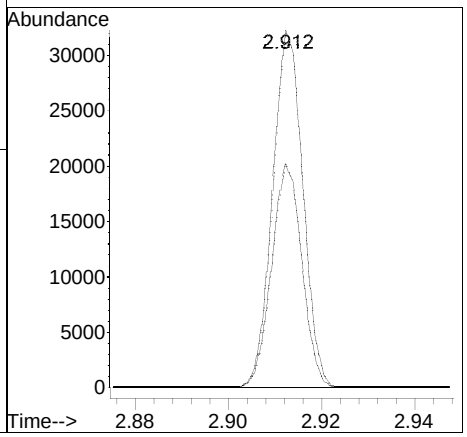


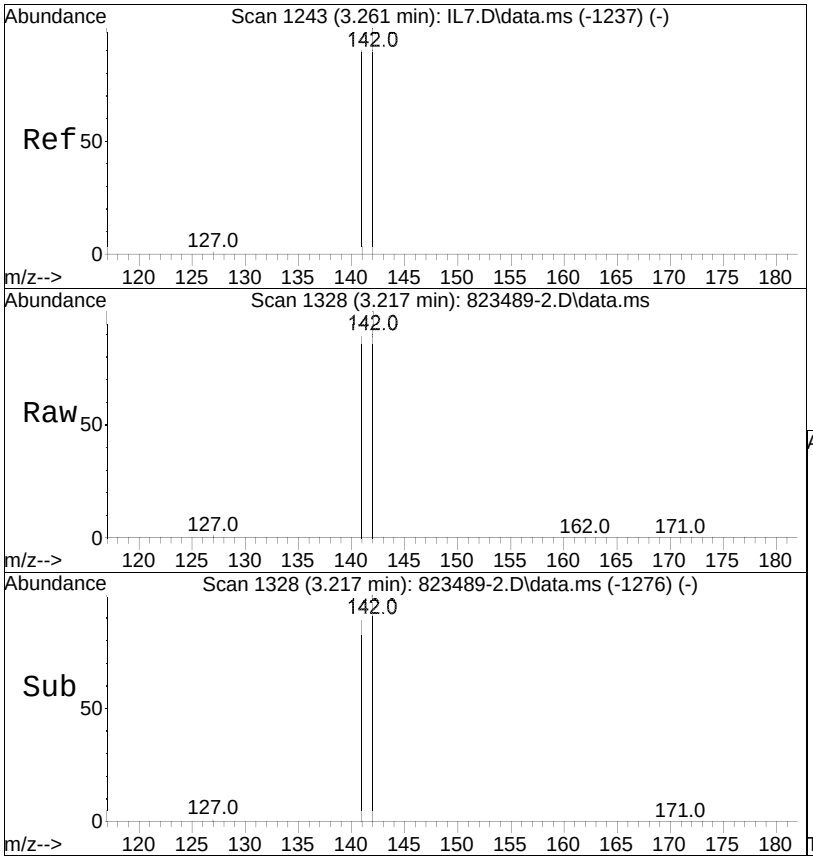


#10
Hexachlorobutadiene
Concen: 1768.60 ng/ml
RT: 2.912 min Scan# 1151
Delta R.T. -0.000 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:225 Resp: 14261

Ion	Ratio	Lower	Upper
225	100		
223	62.7	50.1	75.1

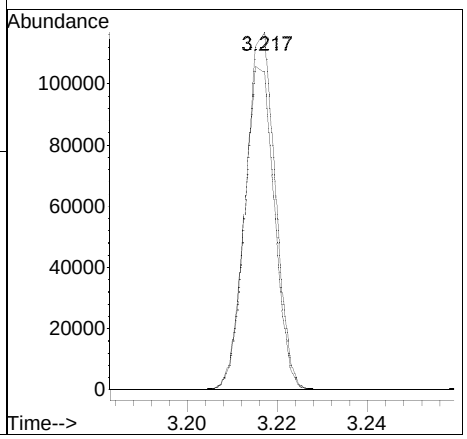


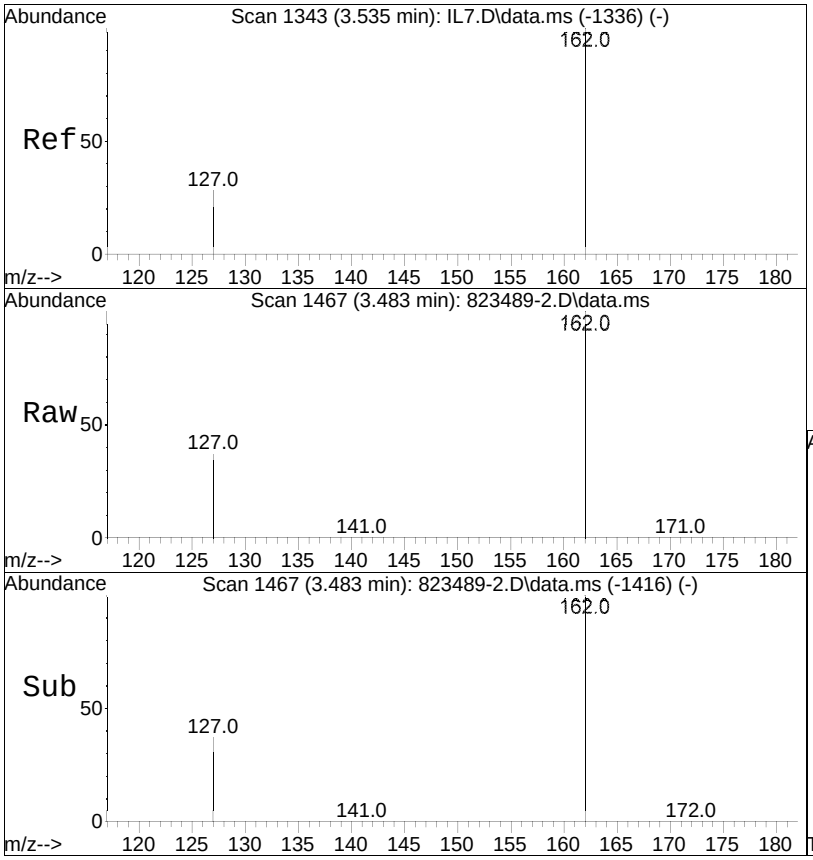


#11
2-Methylnaphthalene
Concen: 1876.75 ng/ml
RT: 3.217 min Scan# 1328
Delta R.T. -0.000 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:142 Resp: 52334

Ion	Ratio	Lower	Upper
142	100		
141	91.8	74.1	111.1

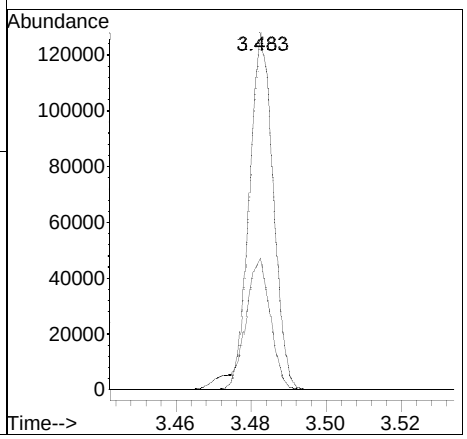


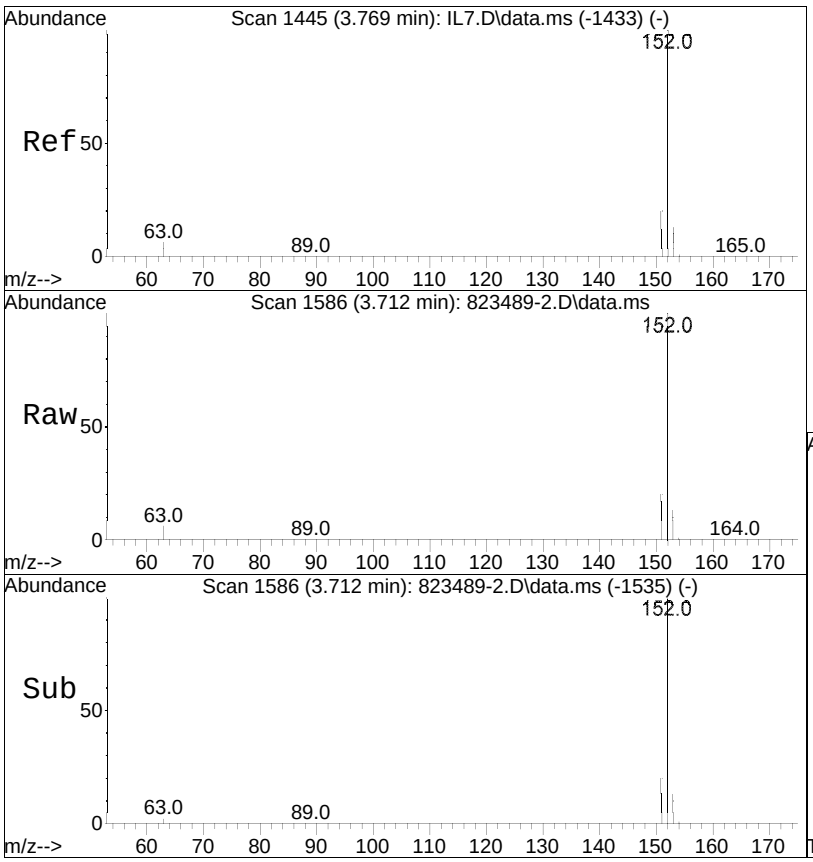


#14
2-Chloronaphthalene
Concen: 1829.31 ng/ml
RT: 3.483 min Scan# 1467
Delta R.T. -0.002 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:162 Resp: 55407

Ion	Ratio	Lower	Upper
162	100		
127	40.6	29.7	44.5

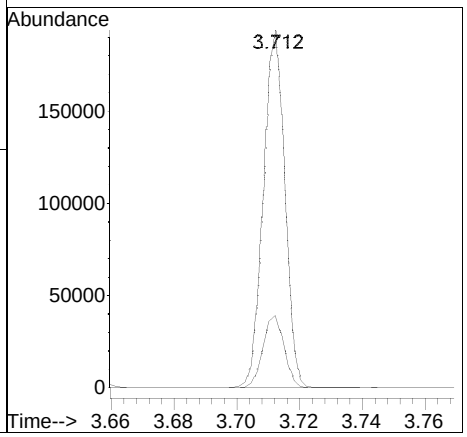


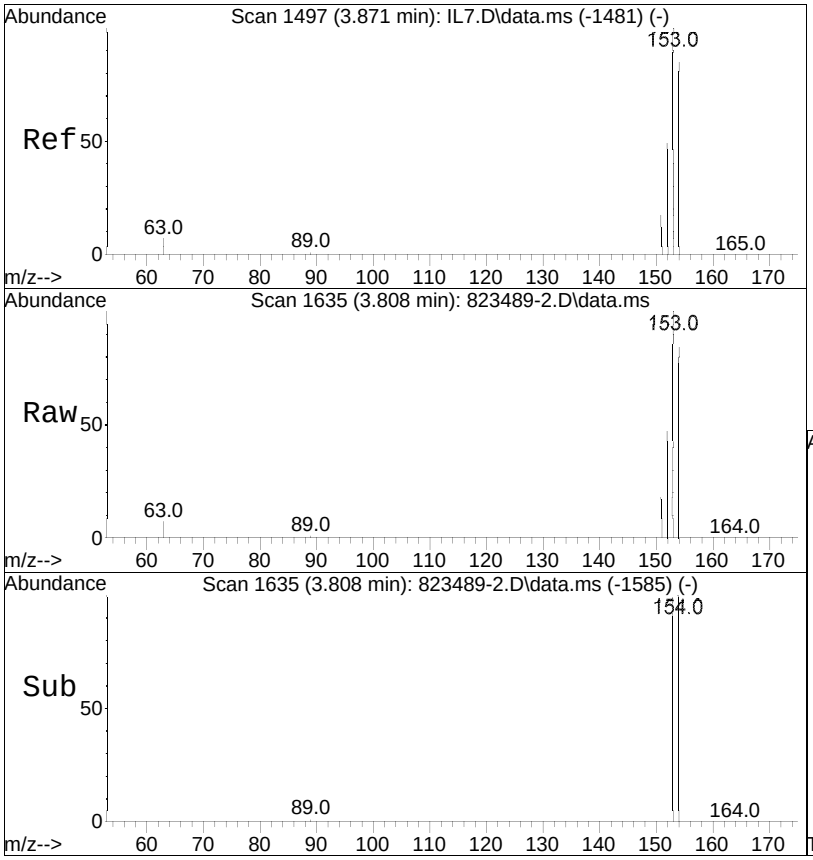


#16
Acenaphthylene
Concen: 2066.27 ng/ml
RT: 3.712 min Scan# 1586
Delta R.T. -0.000 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:152 Resp: 90306

Ion	Ratio	Lower	Upper
152	100		
151	20.2	16.0	24.0

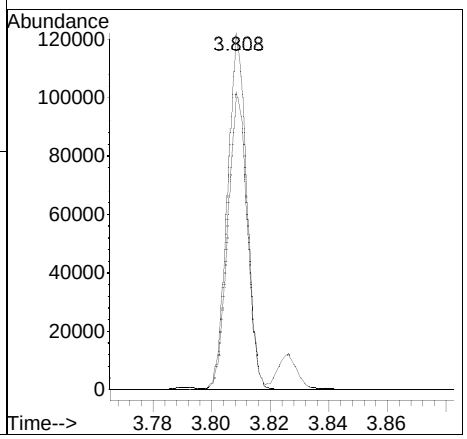


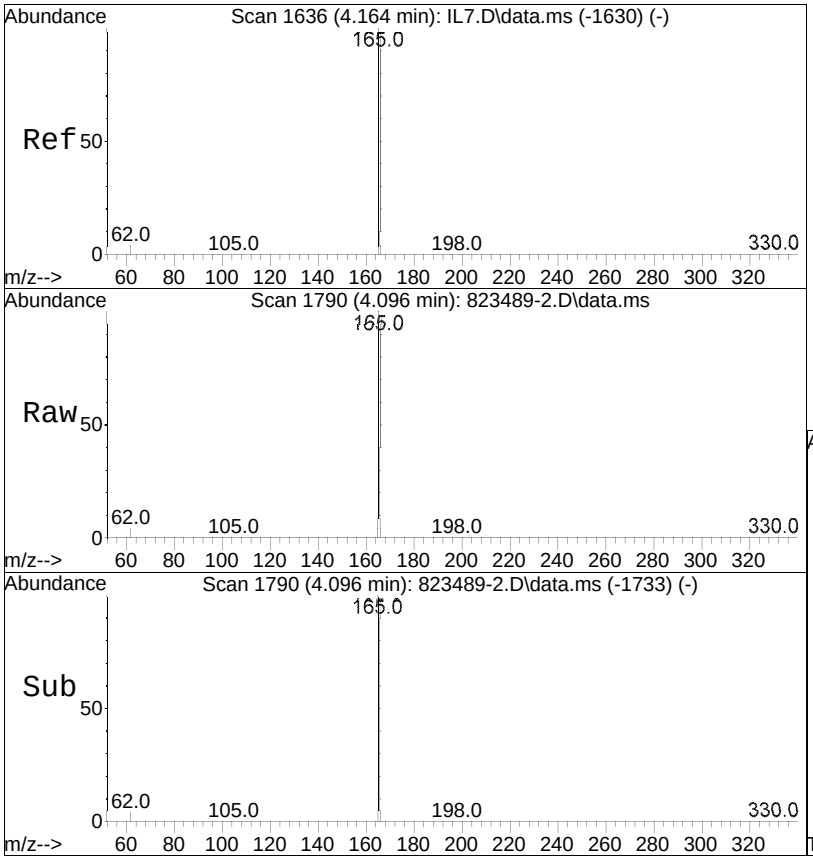


#18
Acenaphthene
Concen: 1850.97 ng/ml
RT: 3.808 min Scan# 1635
Delta R.T. -0.002 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:153 Resp: 54453

Ion	Ratio	Lower	Upper
153	100		
154	83.9	66.9	100.3

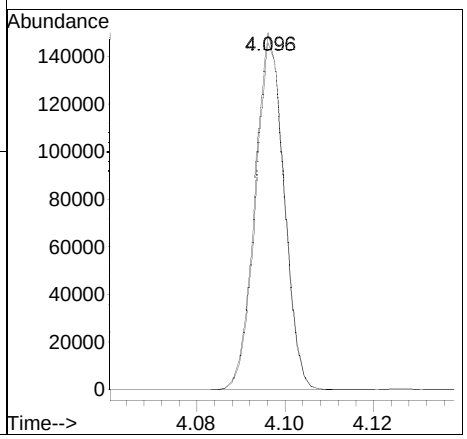


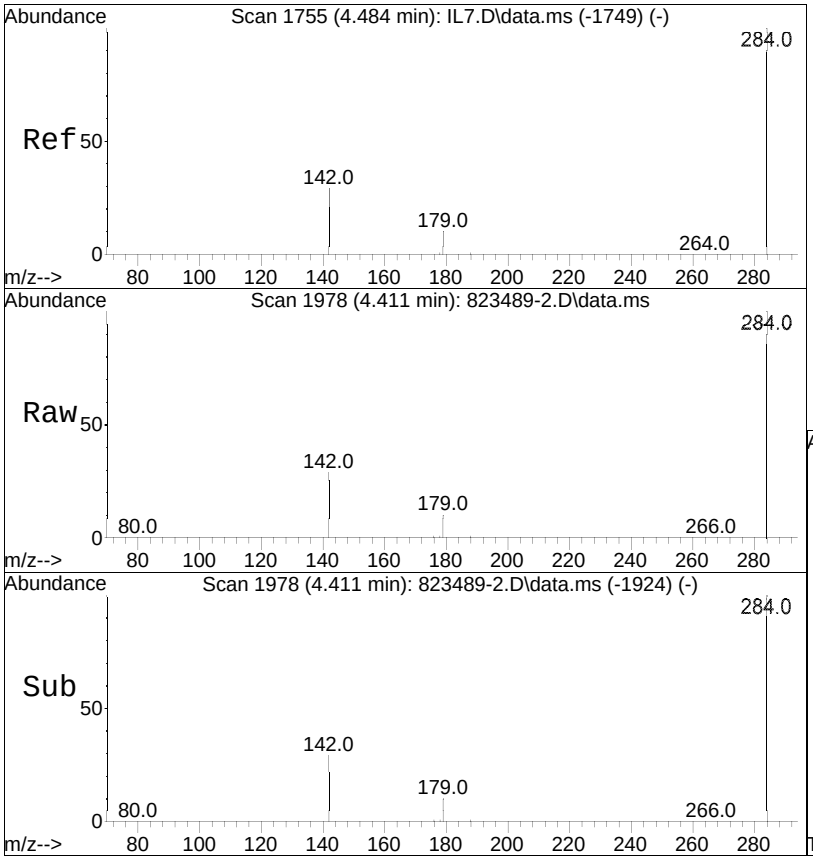


#20
Fluorene
Concen: 1965.34 ng/ml
RT: 4.096 min Scan# 1790
Delta R.T. -0.003 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:166 Resp: 66454

Ion	Ratio	Lower	Upper
166	100		
165	102.2	82.9	124.3

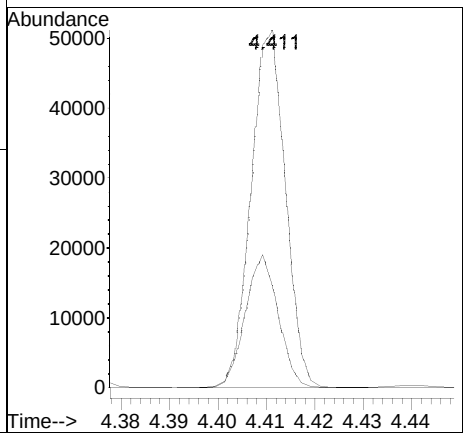


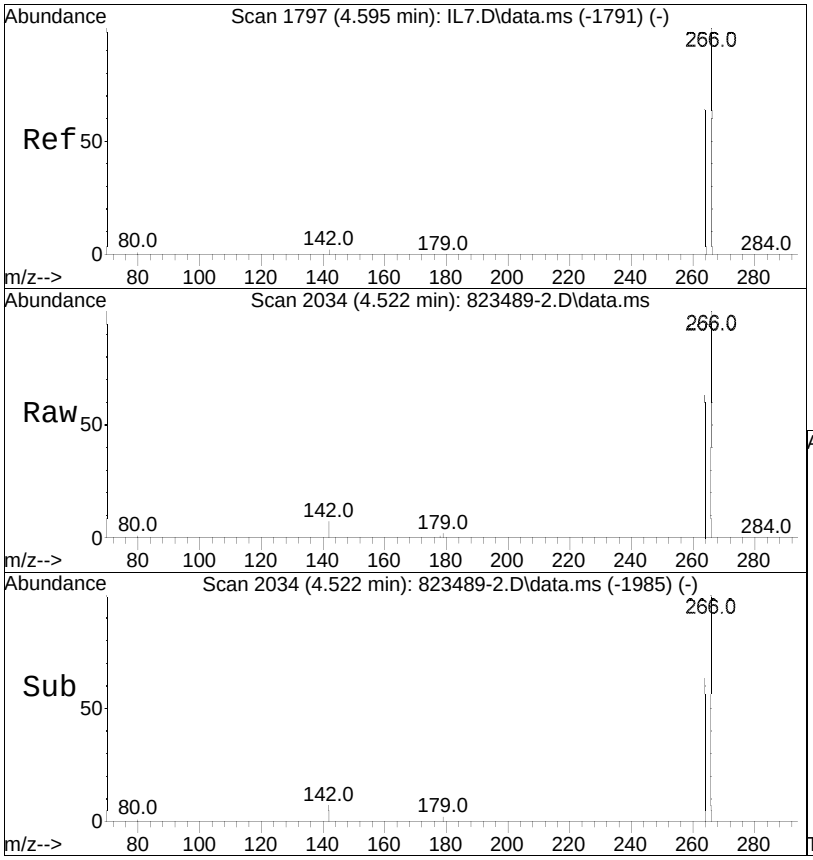


#24
Hexachlorobenzene
Concen: 1904.49 ng/ml
RT: 4.411 min Scan# 1978
Delta R.T. -0.002 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:284 Resp: 24858

Ion	Ratio	Lower	Upper
284	100		
142	35.9	26.9	40.3

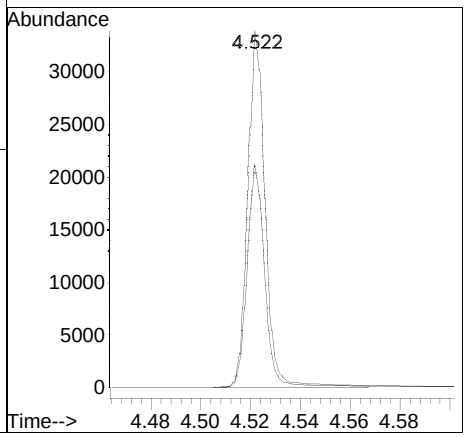


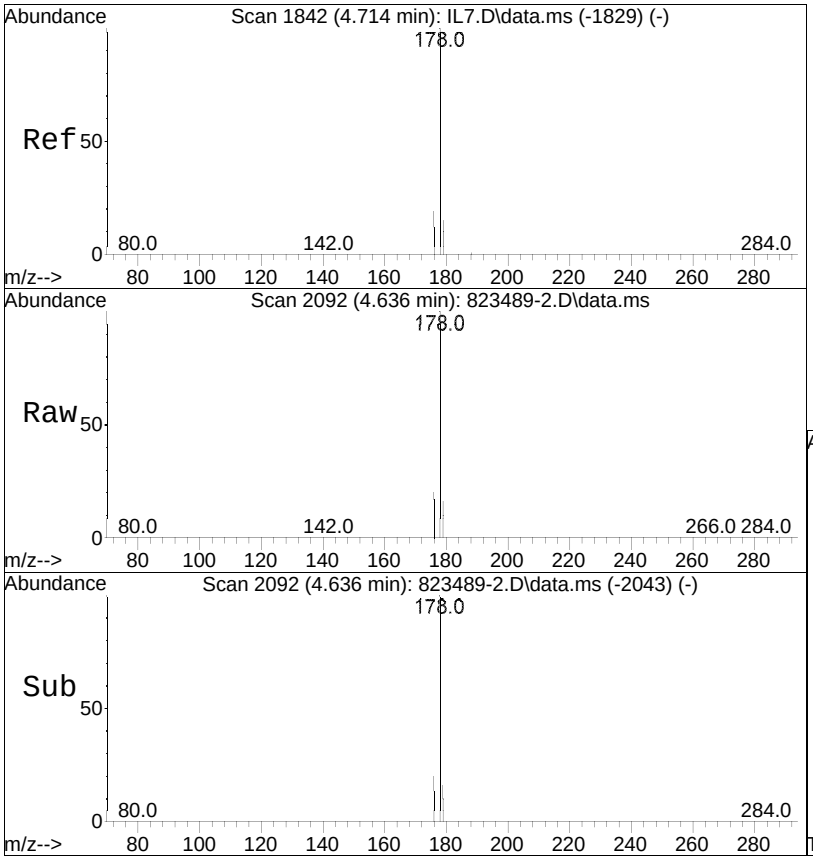


#25
Pentachlorophenol
Concen: 2977.21 ng/ml
RT: 4.522 min Scan# 2034
Delta R.T. -0.004 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:266 Resp: 16286

Ion	Ratio	Lower	Upper
266	100		
264	63.1	50.7	76.1

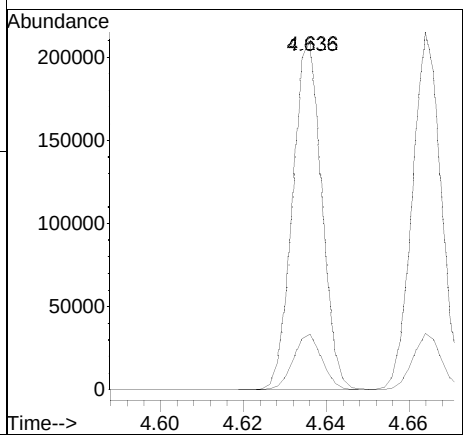


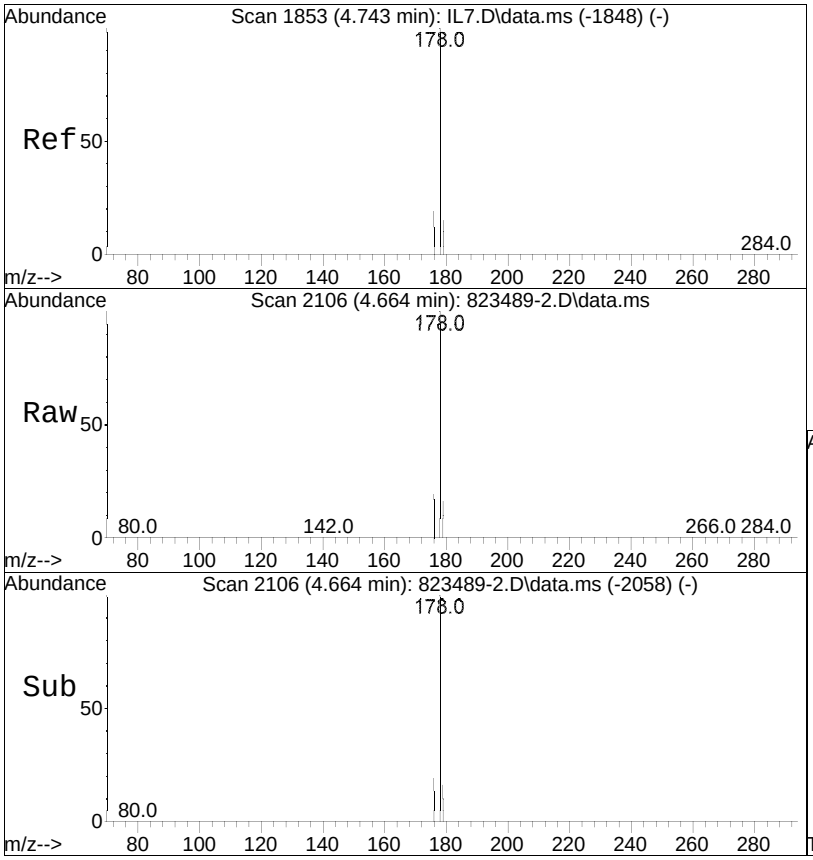


#26
Phenanthrene
Concen: 1861.18 ng/ml
RT: 4.636 min Scan# 2092
Delta R.T. -0.004 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:178 Resp: 102417

Ion	Ratio	Lower	Upper
178	100		
179	15.6	12.3	18.5

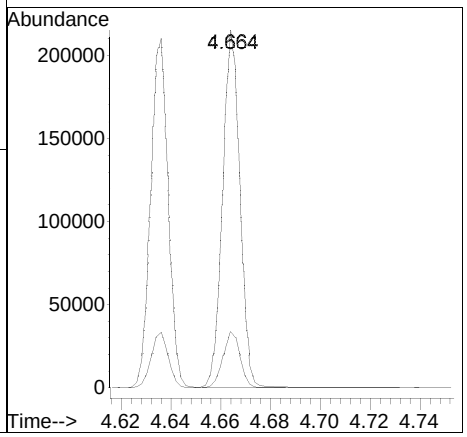


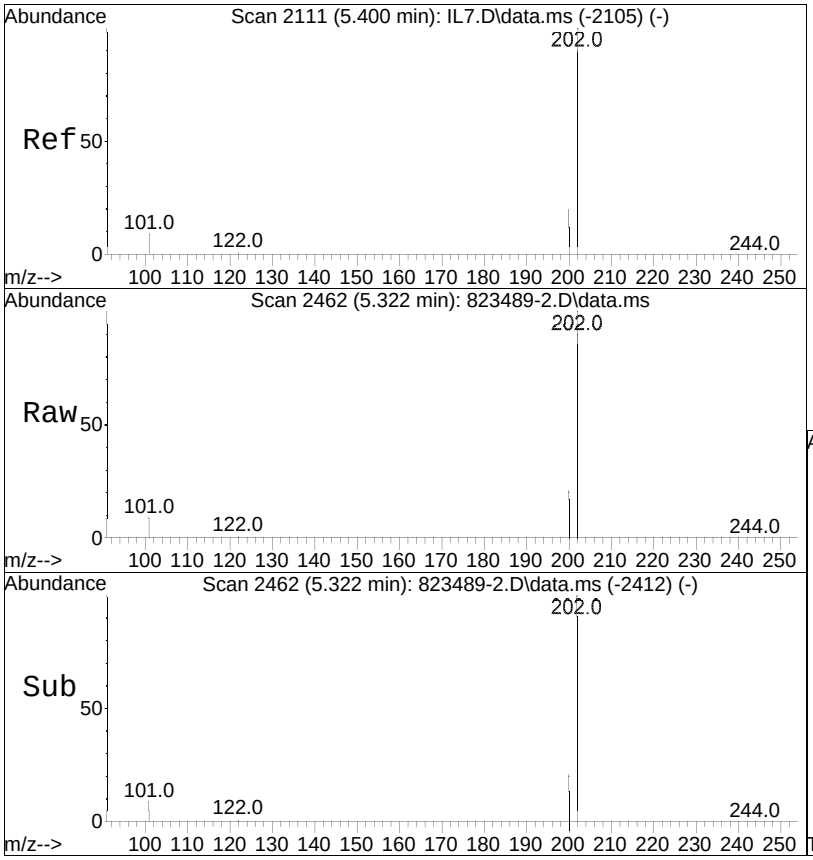


#27
Anthracene
Concen: 2024.05 ng/ml
RT: 4.664 min Scan# 2106
Delta R.T. -0.006 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:178 Resp: 103910

Ion	Ratio	Lower	Upper
178	100		
179	15.4	12.2	18.4

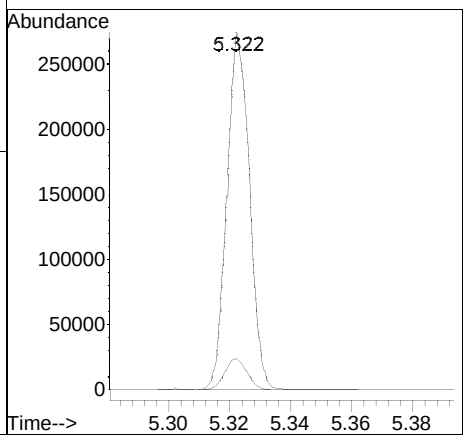


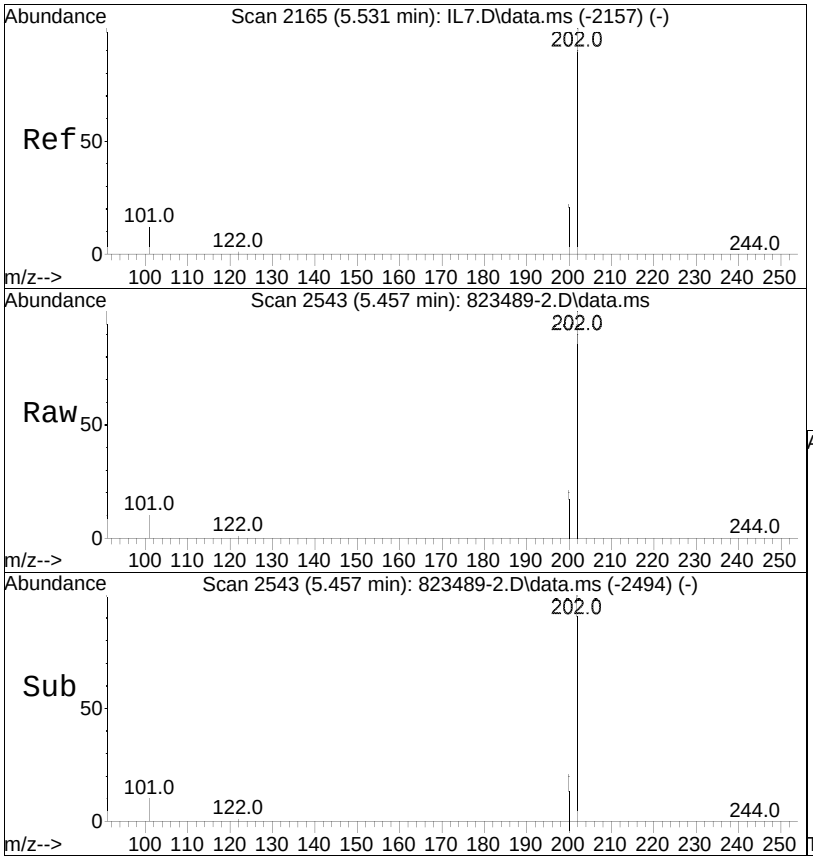


#28
Fluoranthene
Concen: 2194.53 ng/ml
RT: 5.322 min Scan# 2462
Delta R.T. -0.017 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:202 Resp: 137998

Ion	Ratio	Lower	Upper
202	100		
101	8.7	8.3	12.5

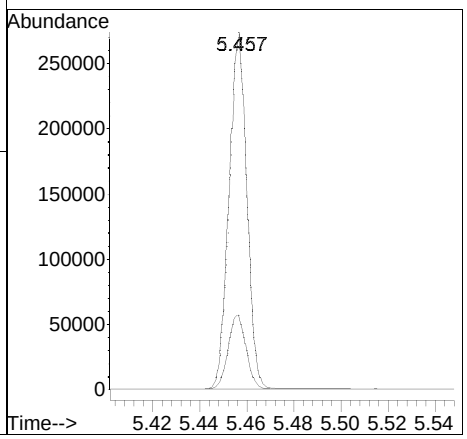


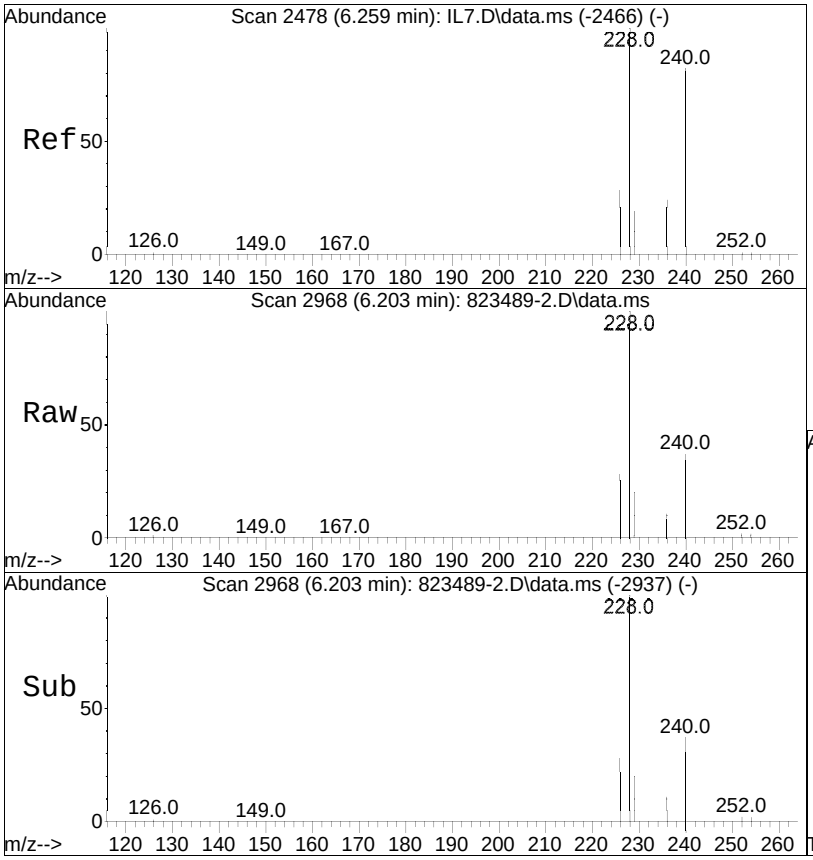


#29
Pyrene
Concen: 2166.17 ng/ml
RT: 5.457 min Scan# 2543
Delta R.T. -0.018 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:202 Resp: 141069

Ion	Ratio	Lower	Upper
202	100		
200	21.3	17.3	25.9

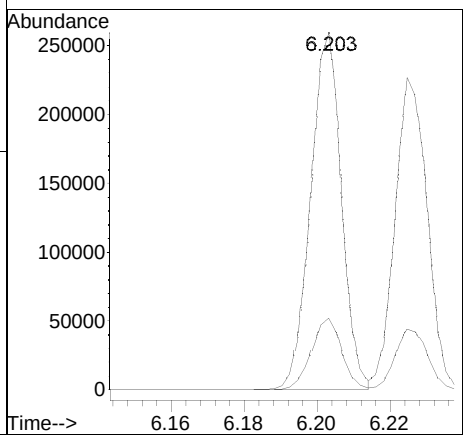


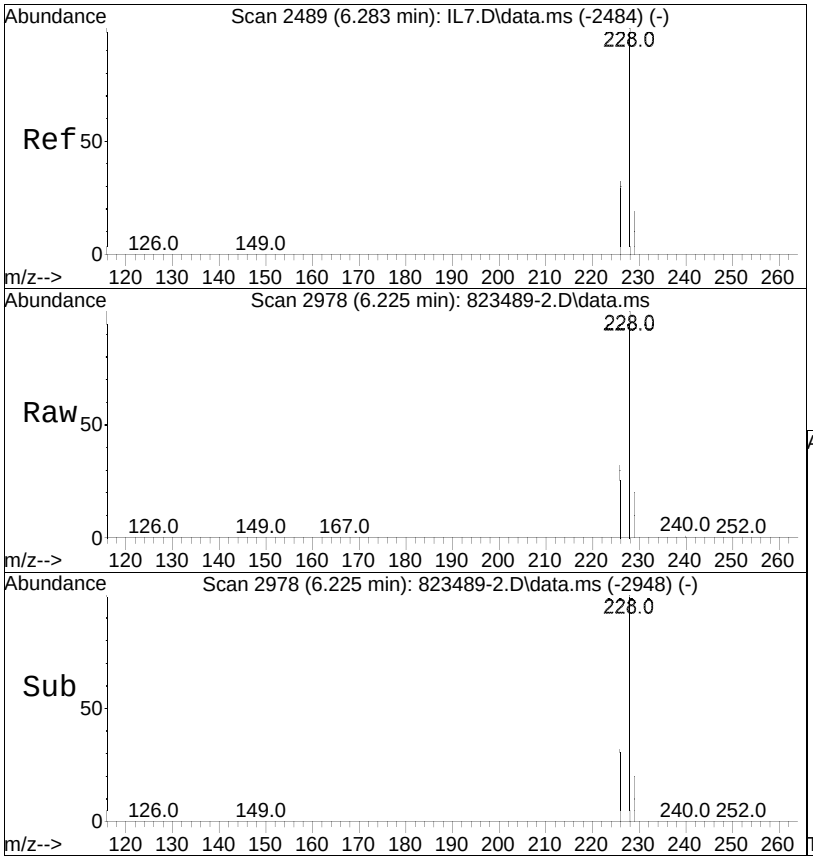


#32
Benzo[a]anthracene
Concen: 2240.36 ng/ml
RT: 6.203 min Scan# 2968
Delta R.T. -0.034 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:228 Resp: 152083

Ion	Ratio	Lower	Upper
228	100		
229	19.7	15.6	23.4

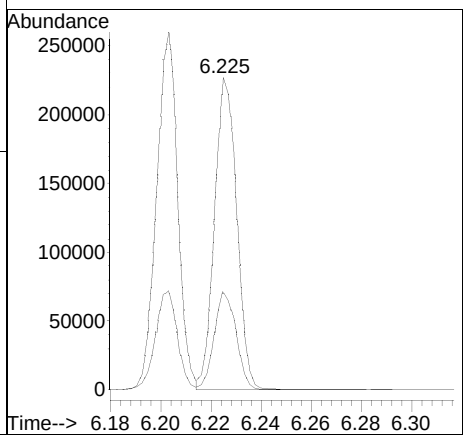


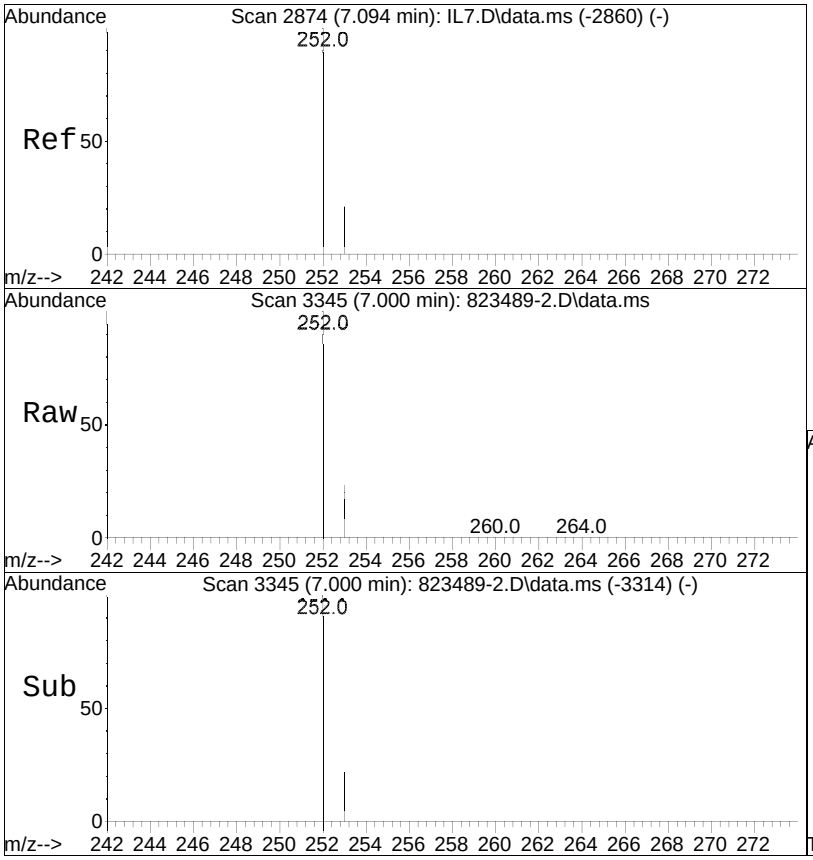


#34
Chrysene
Concen: 2081.64 ng/ml
RT: 6.225 min Scan# 2978
Delta R.T. -0.036 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:228 Resp: 138723

Ion	Ratio	Lower	Upper
228	100		
226	31.0	24.5	36.7

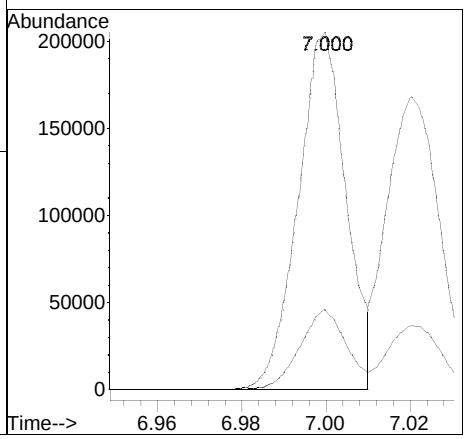


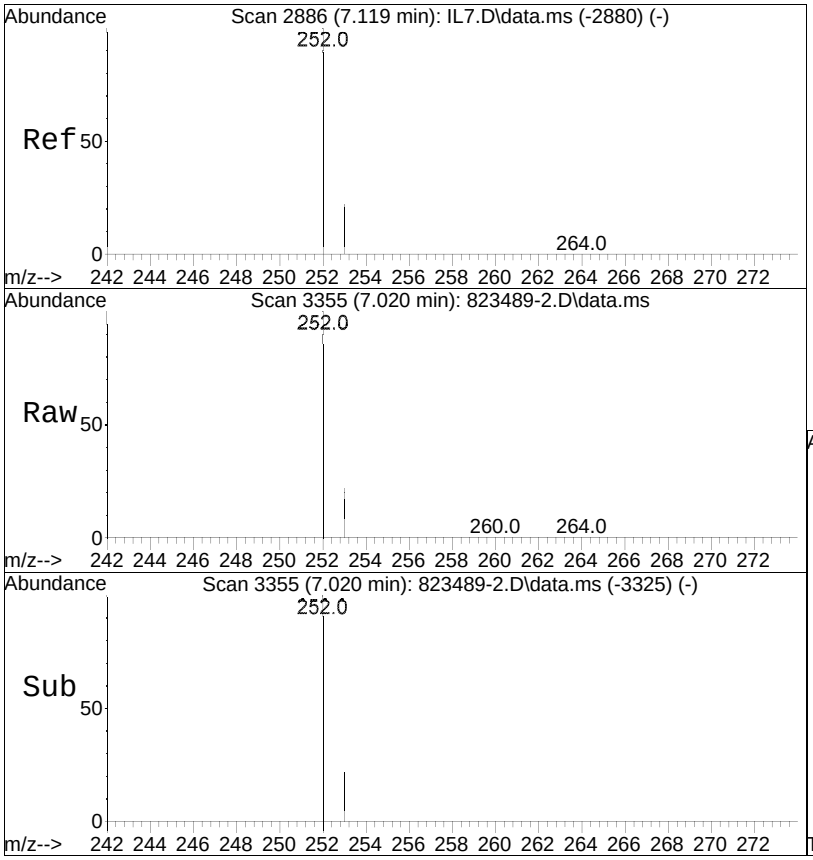


#37
Benzo[b]fluoranthene
Concen: 2347.61 ng/ml
RT: 7.000 min Scan# 3345
Delta R.T. -0.037 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:252 Resp: 162890

Ion	Ratio	Lower	Upper
252	100		
253	21.8	17.3	25.9

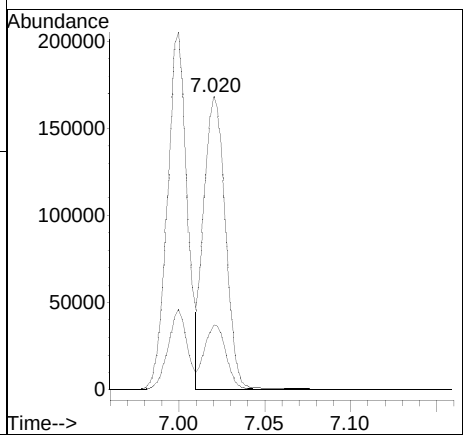


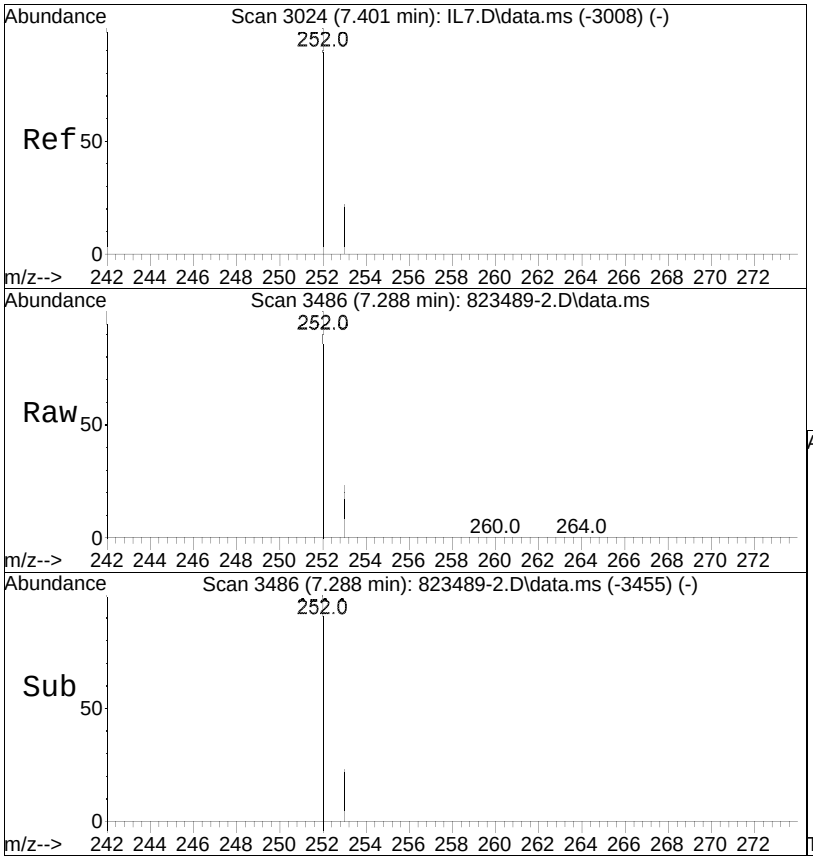


#38
Benzo[k]fluoranthene
Concen: 2348.91 ng/ml
RT: 7.020 min Scan# 3355
Delta R.T. -0.039 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:252 Resp: 146157

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.4	26.2

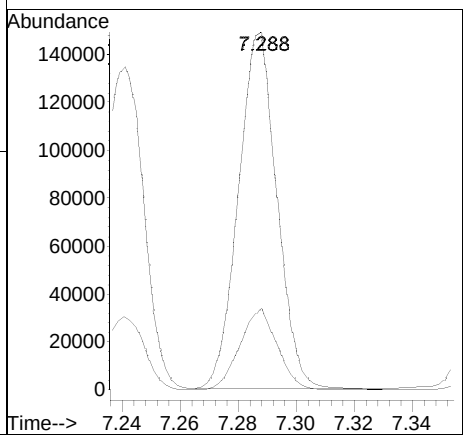


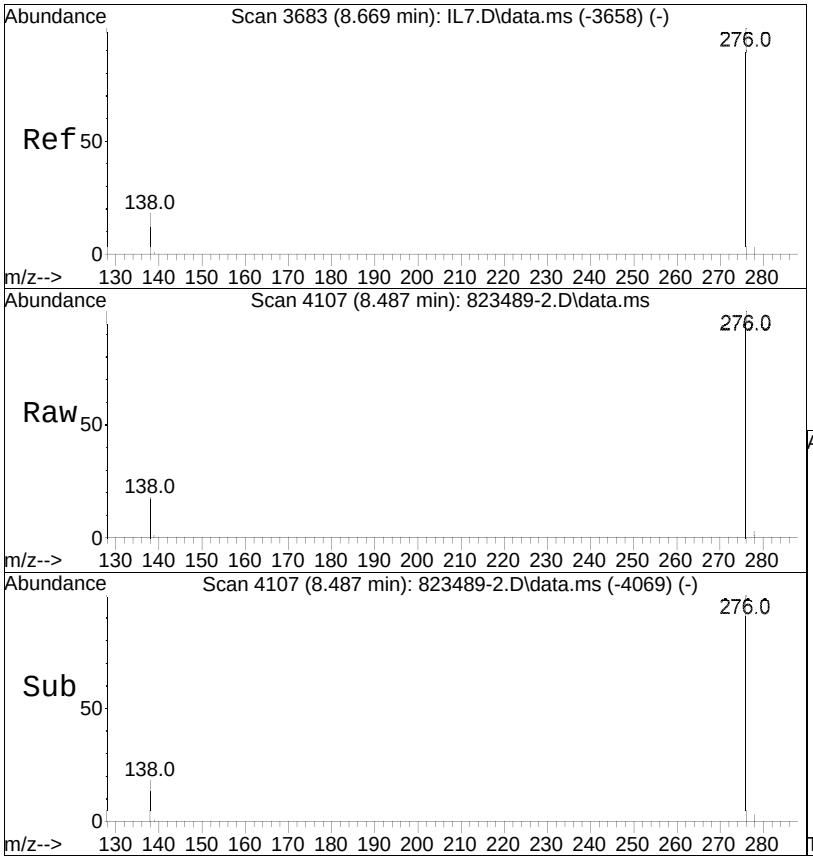


#39
Benzo[a]pyrene
Concen: 2421.38 ng/ml
RT: 7.288 min Scan# 3486
Delta R.T. -0.037 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:252 Resp: 135985

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.4	26.0

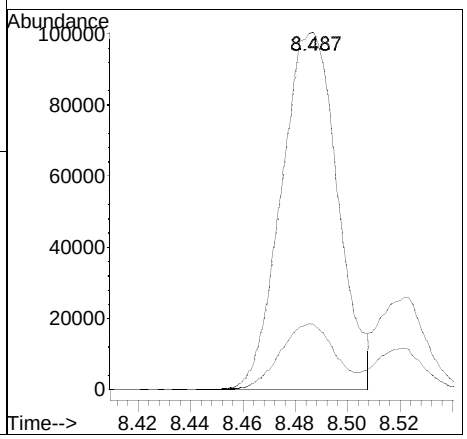


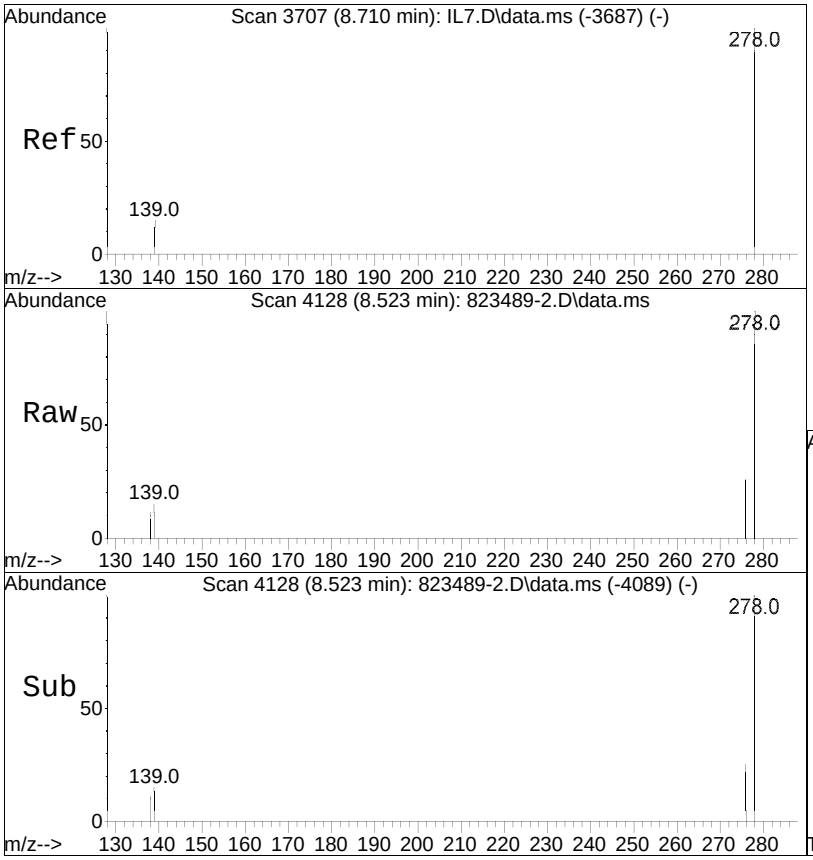


#40
Indeno[1,2,3-cd]pyrene
Concen: 2304.07 ng/ml
RT: 8.487 min Scan# 4107
Delta R.T. -0.035 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:276 Resp: 148403

Ion	Ratio	Lower	Upper
276	100		
138	17.7	14.8	22.2

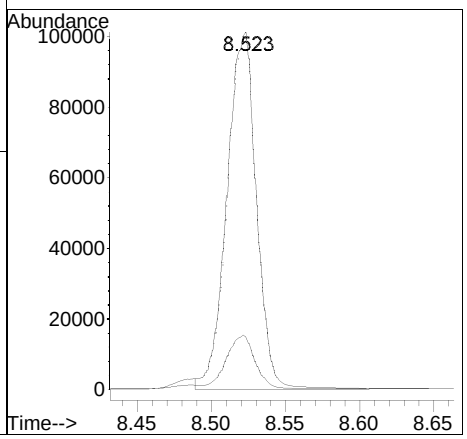


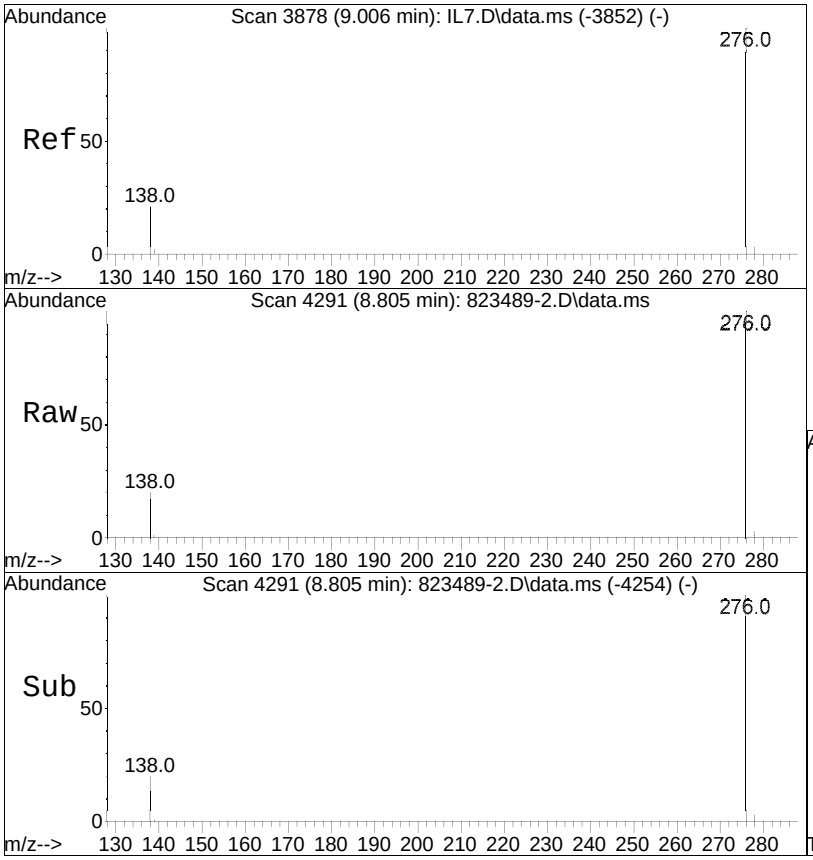


#41
Dibenzo[a,h]anthracene
Concen: 2266.07 ng/ml M6
RT: 8.523 min Scan# 4128
Delta R.T. -0.033 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:278 Resp: 139086

Ion	Ratio	Lower	Upper
278	100		
139	14.6	12.2	18.4

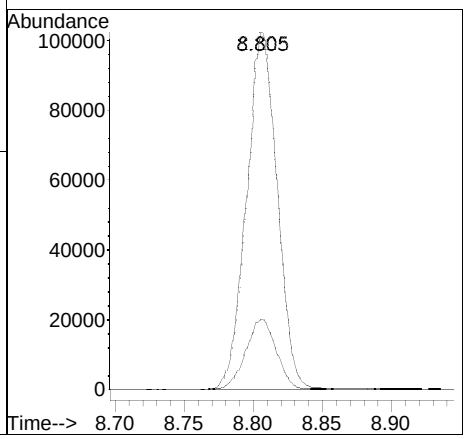




#42
Benzo[g,h,i]perylene
Concen: 2284.28 ng/ml
RT: 8.805 min Scan# 4291
Delta R.T. -0.036 min
Lab File: 823489-2.D
Acq: 07 Sep 2023 03:19 pm

Tgt Ion:276 Resp: 156169

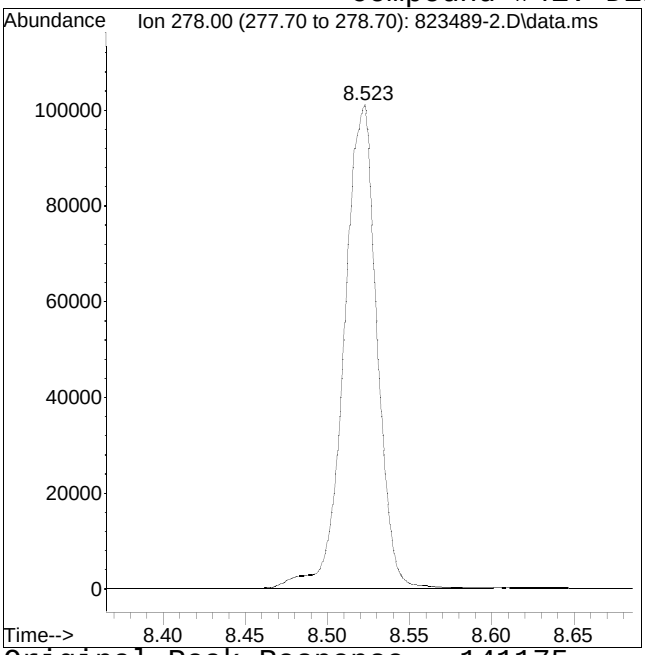
Ion	Ratio	Lower	Upper
276	100		
138	19.8	16.8	25.2



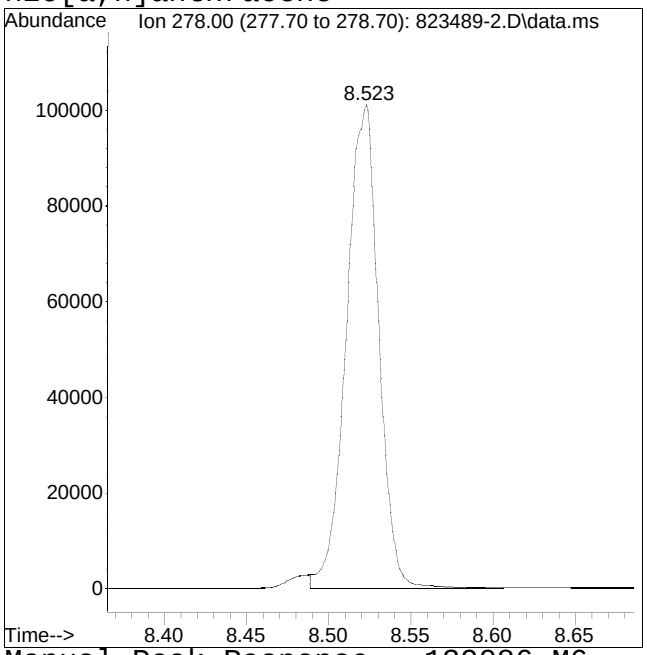
Manual Integration Report

Data Path : I:\8270SIM\sv119\230907aLVQMethod : SIM-LVI_230306_sv119.M
Data File : 823489-2.D Operator : sv119:jjw
Date Inj'd : 9/7/2023 3:19 pm Instrument : SV119
Sample : WG1823489-2,32,2,jjw Quant Date : 9/7/2023 3:33 pm

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 141175



Manual Peak Response = 139086 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : 822198-3.D
Acq On : 01 Sep 2023 05:37 pm
Operator : sv119:ah
Sample : WG1822198-3,32,2,rp
Misc : WG1822868,WG1822198,ical19785
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 01 17:51:48 2023
Quant Method : I:\8270sim\sv119\230901LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:52:27 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230901LVI\ccv0901.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.264	152	56047	4000.000	ng/ml	0.00
Standard Area 1 = 53473			Recovery = 104.81%			
8) Naphthalene-d8	2.938	136	205224	4000.000	ng/ml	0.00
Standard Area 1 = 193222			Recovery = 106.21%			
17) Acenaphthene-d10	3.922	164	101546	4000.000	ng/ml	0.00
Standard Area 1 = 98963			Recovery = 102.61%			
22) Phenanthrene-d10	4.766	188	217541	4000.000	ng/ml	0.00
Standard Area 1 = 220308			Recovery = 98.74%			
31) Chrysene-d12	6.343	240	182858	4000.000	ng/ml	-0.01
Standard Area 1 = 182645			Recovery = 100.12%			
36) Perylene-d12	7.575	264	203937	4000.000	ng/ml	-0.01
Standard Area 1 = 191472			Recovery = 106.51%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.657	112	31843	2309.138	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 46.18%			
3) Phenol-d6	2.071	99	34062	2090.615	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 41.81%			
7) Nitrobenzene-d5	2.548	82	19864	1620.580	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 64.82%			
13) 2-Fluorobiphenyl	3.541	172	46290	1097.079	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 43.88%			
21) 2,4,6-Tribromophenol	4.371	330	12972	3170.557	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 63.41%			
30) 4-Terphenyl-d14	5.691	244	46521	1024.868	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 40.99%			
Target Compounds						Qvalue
6) Hexachloroethane	2.527	117	14744	2366.947	ng/ml	97
9) Naphthalene	2.949	128	107252	2206.924	ng/ml	100
10) Hexachlorobutadiene	3.023	225	20169	2135.171	ng/ml	99
11) 2-Methylnaphthalene	3.333	142	74786	2289.345	ng/ml	98
14) 2-Chloronaphthalene	3.607	162	78829	2221.657	ng/ml	93
16) Acenaphthylene	3.840	152	125568	2452.547	ng/ml	100
18) Acenaphthene	3.940	153	75683	2350.798	ng/ml	99
20) Fluorene	4.233	166	89064	2406.900	ng/ml	99
24) Hexachlorobenzene	4.551	284	31129	2381.044	ng/ml	94
25) Pentachlorophenol	4.663	266	19795	3484.489	ng/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : 822198-3.D
Acq On : 01 Sep 2023 05:37 pm
Operator : sv119:ah
Sample : WG1822198-3,32,2,rp
Misc : WG1822868,WG1822198,ical19785
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 01 17:51:48 2023
Quant Method : I:\8270sim\sv119\230901LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:52:27 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230901LVI\ccv0901.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.780	178	129132	2342.825	ng/ml	100
27) Anthracene	4.809	178	128661	2502.071	ng/ml	100
28) Fluoranthene	5.465	202	157514	2500.785	ng/ml	96
29) Pyrene	5.598	202	161477	2475.488	ng/ml	100
32) Benzo[a]anthracene	6.335	228	162051	2737.668	ng/ml	99
34) Chrysene	6.361	228	149871	2573.073	ng/ml	99
37) Benzo[b]fluoranthene	7.197	252	172360	2779.171	ng/ml	99
38) Benzo[k]fluoranthene	7.221	252	158799	2855.238	ng/ml	100
39) Benzo[a]pyrene	7.513	252	146362	2915.727	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.820	276	167431	2908.273	ng/ml	98
41) Dibenzo[a,h]anthracene	8.858	278	157125	2864.065	ng/ml	99
42) Benzo[g,h,i]perylene	9.169	276	183526	3003.311	ng/ml	98

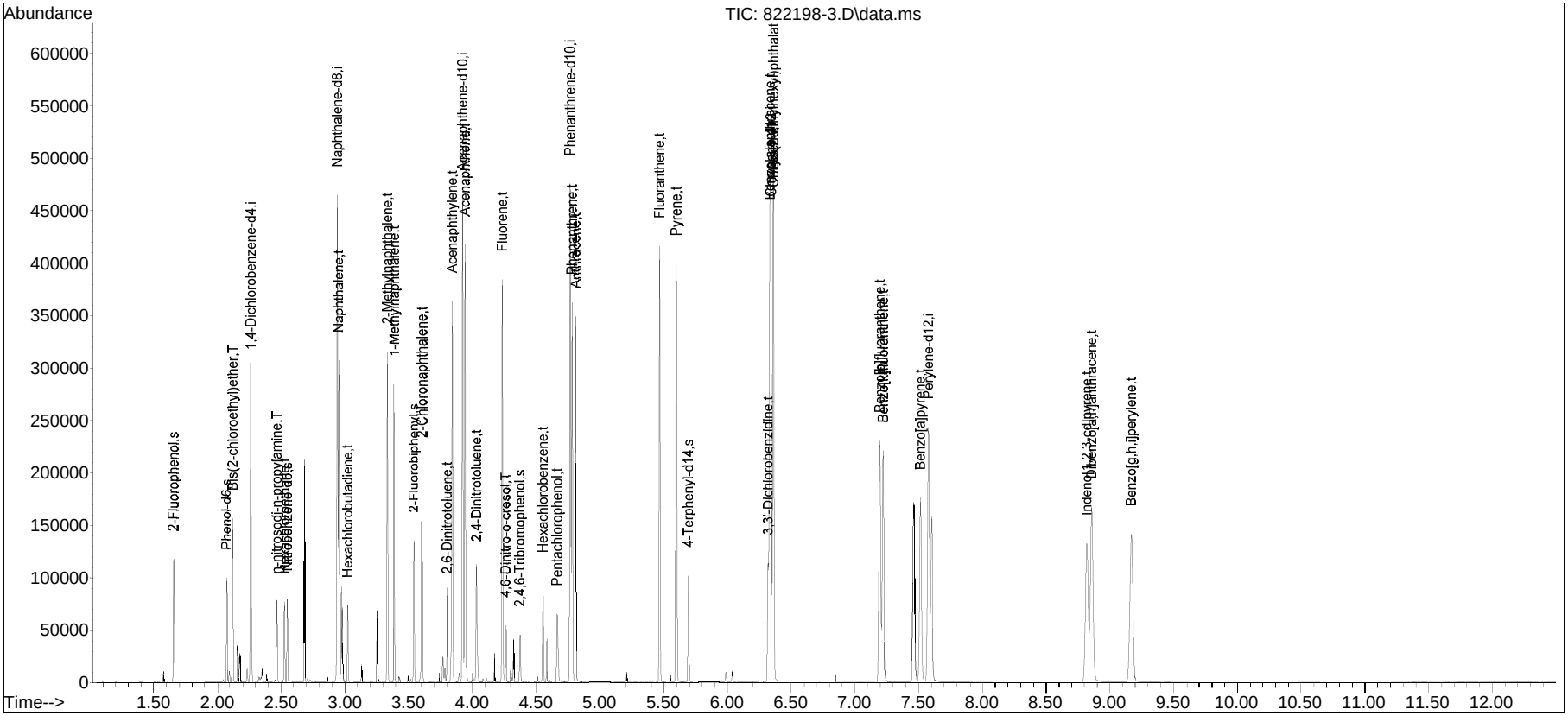
(#) = qualifier out of range (m) = manual integration (+) = signals summed

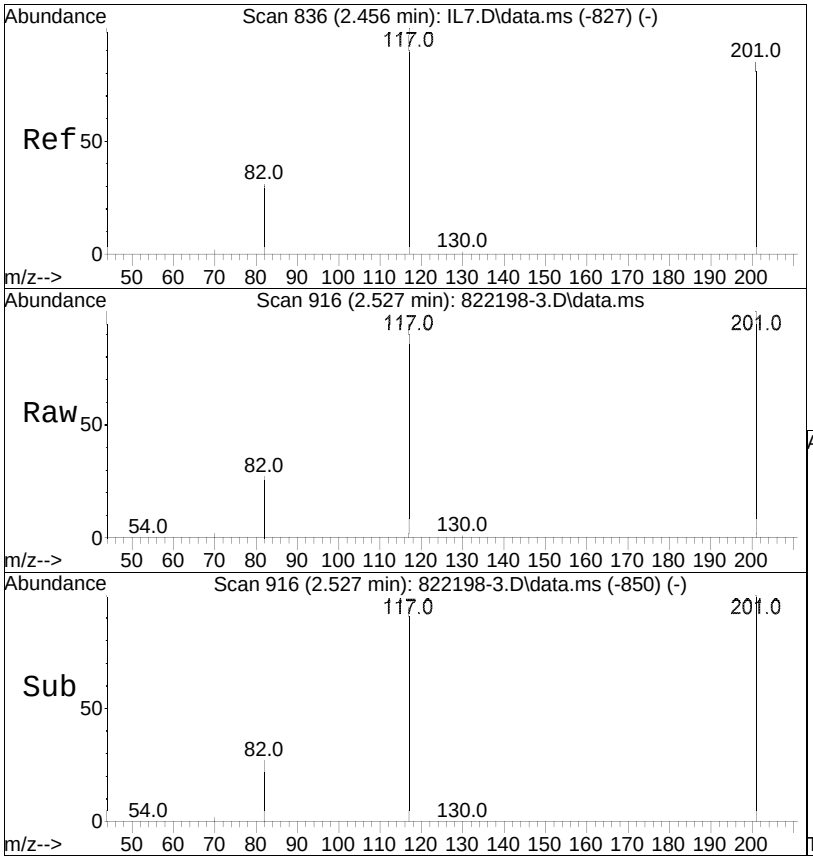
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230901LVI\
Data File : 822198-3.D
Acq On : 01 Sep 2023 05:37 pm
Operator : sv119:ah
Sample : WG1822198-3,32,2,rp
Misc : WG1822868,WG1822198,ical19785
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 01 17:51:48 2023
Quant Method : I:\8270sim\sv119\230901LVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Fri Sep 01 09:52:27 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listed\ccv0901.D•

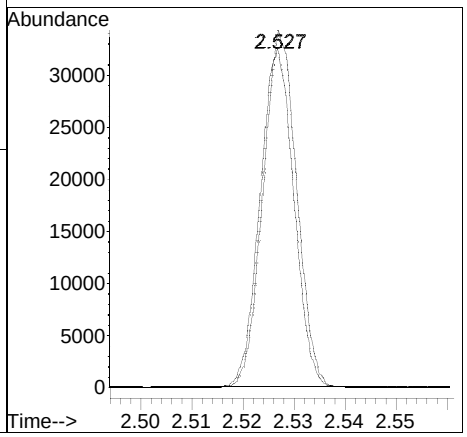


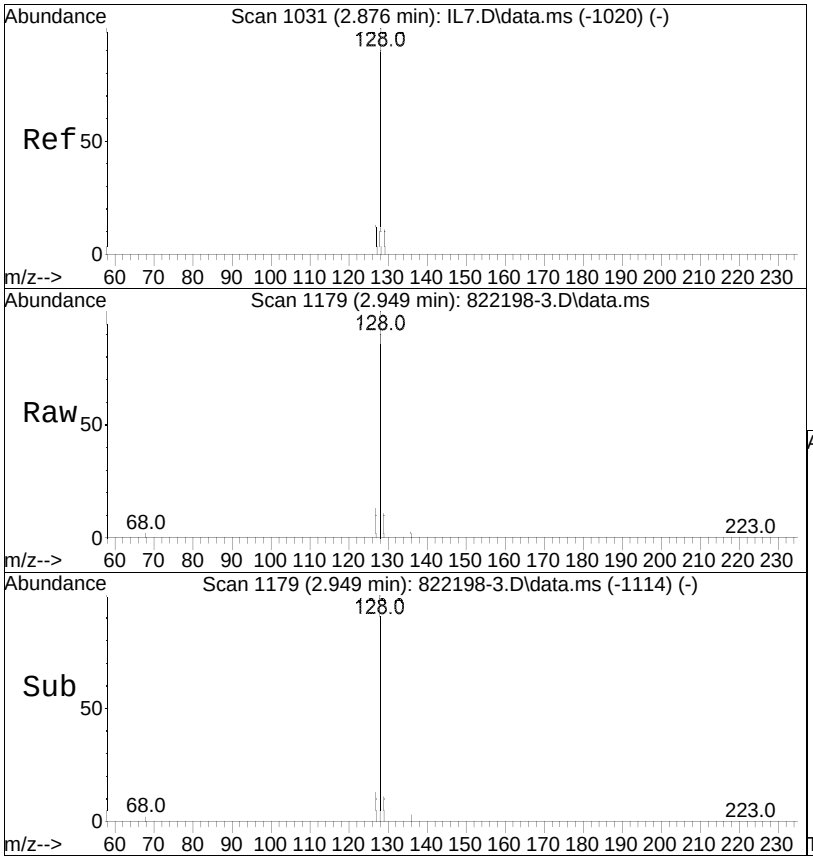


#6
Hexachloroethane
Concen: 2366.95 ng/ml
RT: 2.527 min Scan# 916
Delta R.T. 0.006 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:117 Resp: 14744

Ion	Ratio	Lower	Upper
117	100		
201	104.9	81.5	122.3

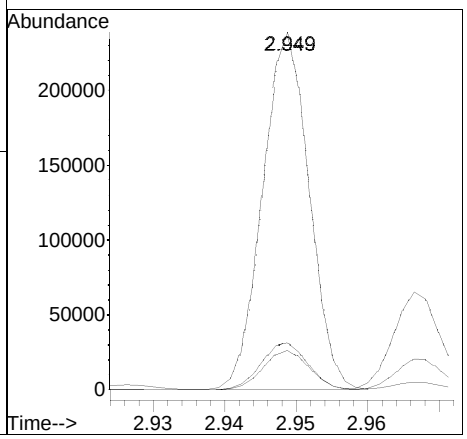


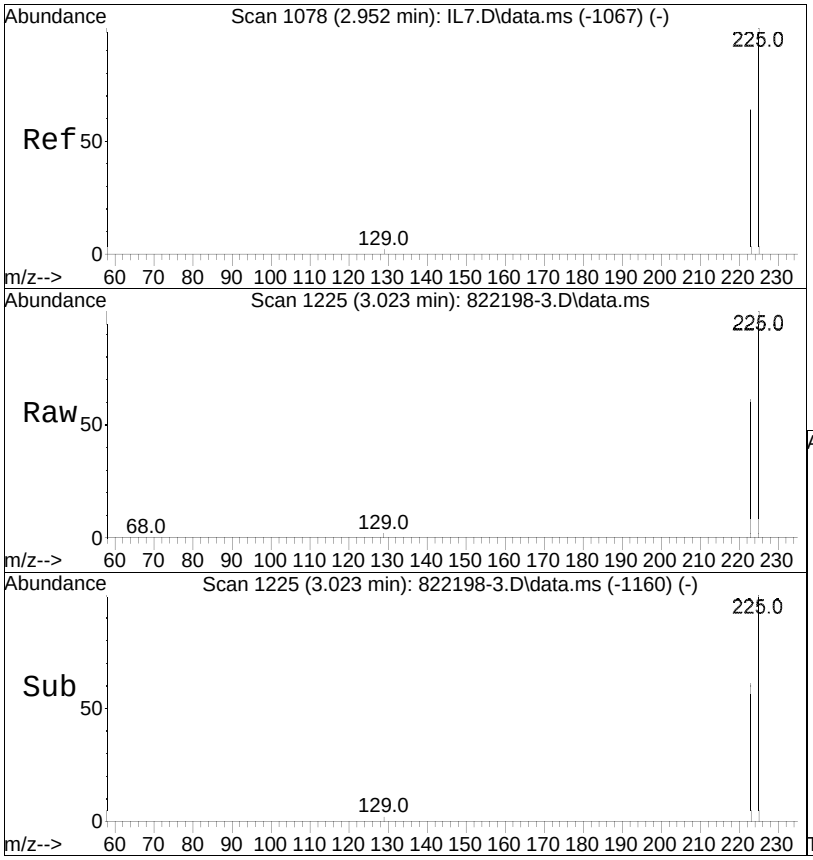


#9
Naphthalene
Concen: 2206.92 ng/ml
RT: 2.949 min Scan# 1179
Delta R.T. 0.004 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:128 Resp: 107252

Ion	Ratio	Lower	Upper
128	100		
129	11.1	8.8	13.2
127	13.3	10.6	15.8

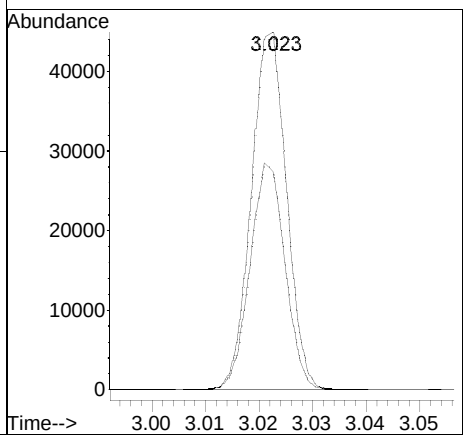


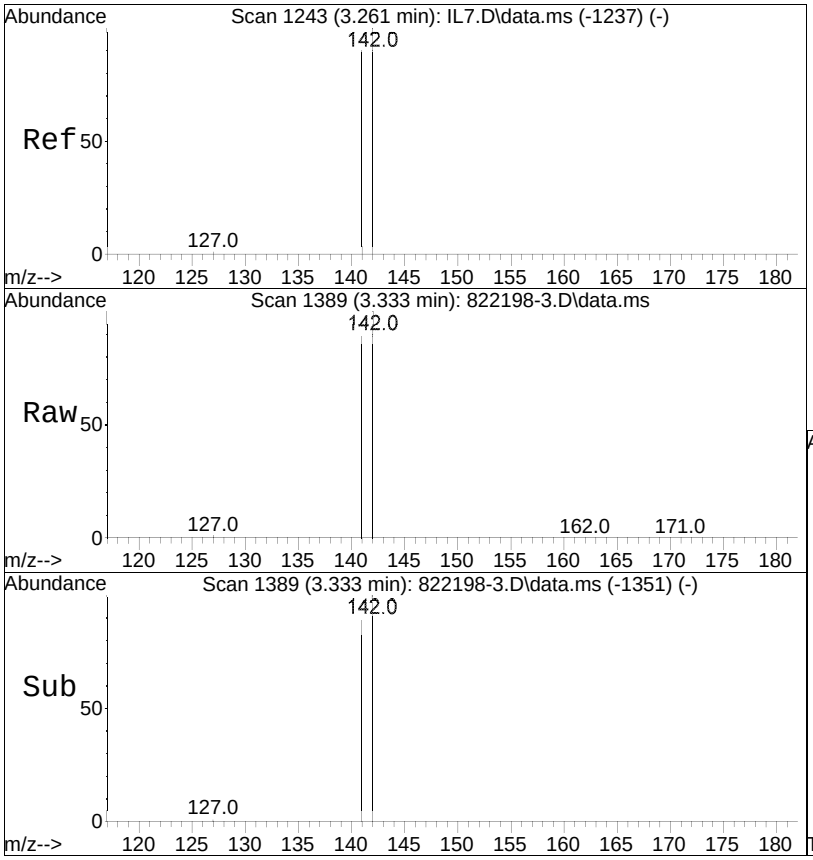


#10
Hexachlorobutadiene
Concen: 2135.17 ng/ml
RT: 3.023 min Scan# 1225
Delta R.T. 0.004 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:225 Resp: 20169

Ion	Ratio	Lower	Upper
225	100		
223	63.0	50.1	75.1

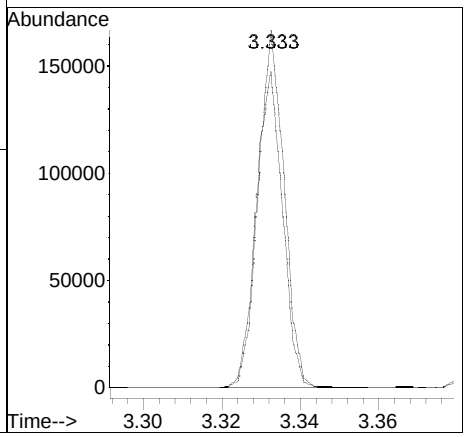


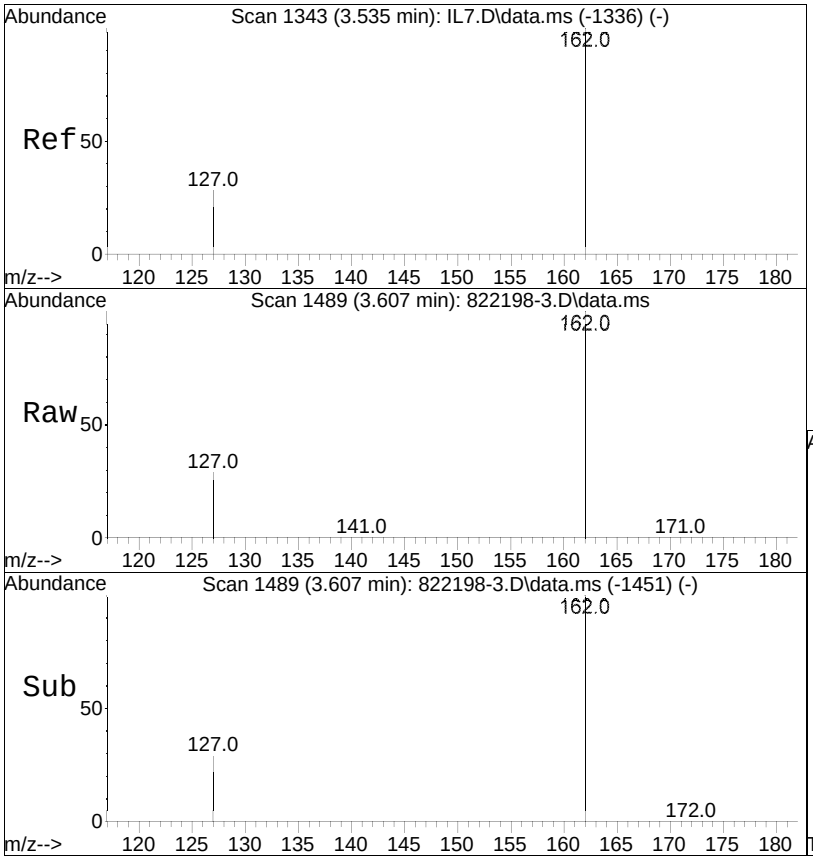


#11
2-Methylnaphthalene
Concen: 2289.35 ng/ml
RT: 3.333 min Scan# 1389
Delta R.T. 0.005 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:142 Resp: 74786

Ion	Ratio	Lower	Upper
142	100		
141	90.8	74.1	111.1

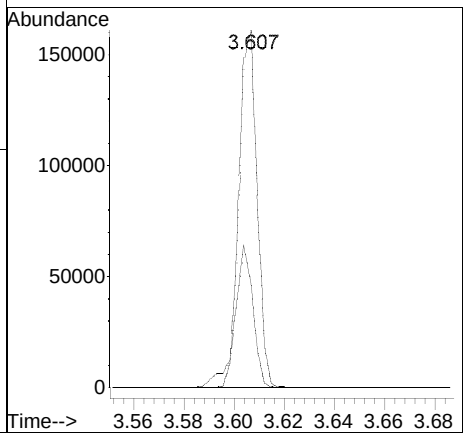


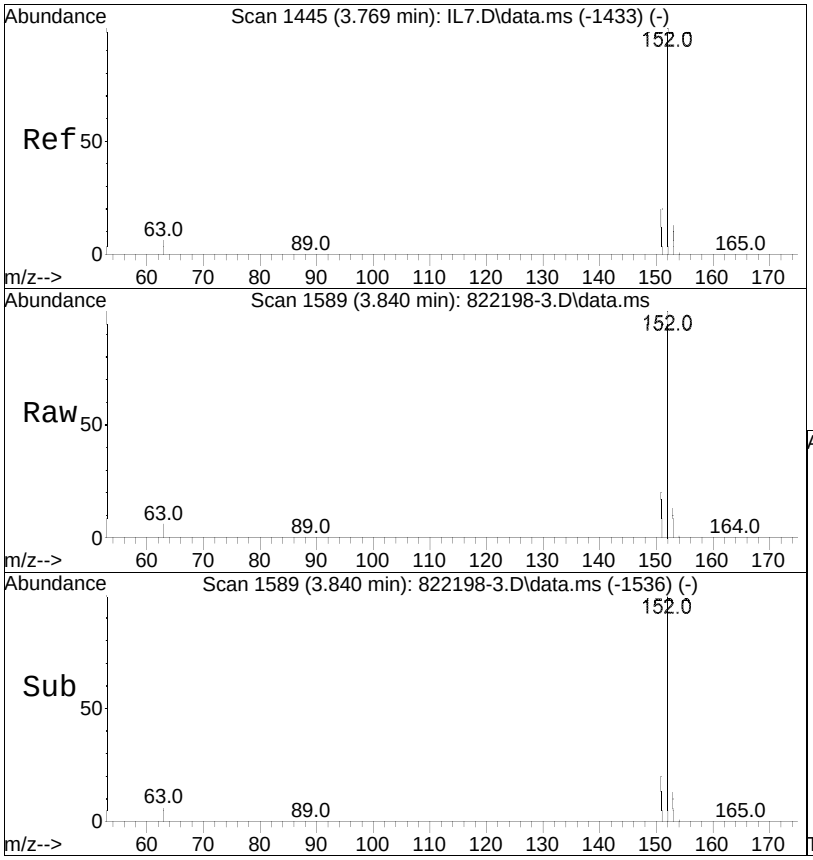


#14
2-Chloronaphthalene
Concen: 2221.66 ng/ml
RT: 3.607 min Scan# 1489
Delta R.T. 0.005 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:162 Resp: 78829

Ion	Ratio	Lower	Upper
162	100		
127	41.2	29.7	44.5

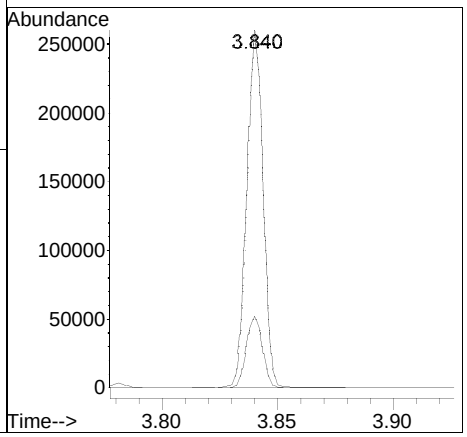


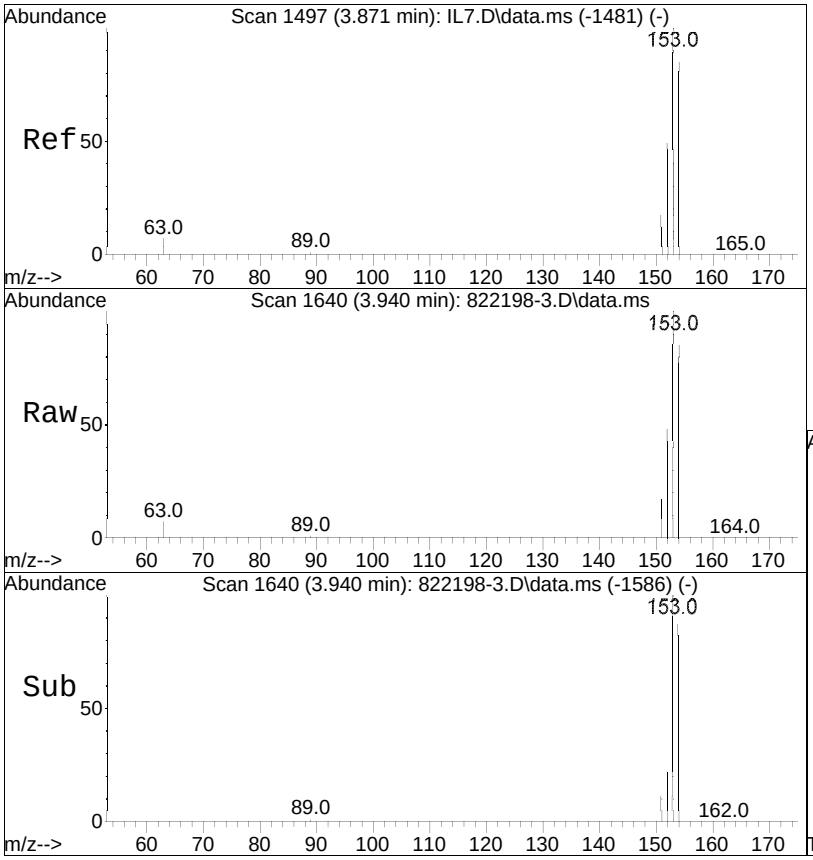


#16
Acenaphthylene
Concen: 2452.55 ng/ml
RT: 3.840 min Scan# 1589
Delta R.T. 0.004 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:152 Resp: 125568

Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.0	24.0

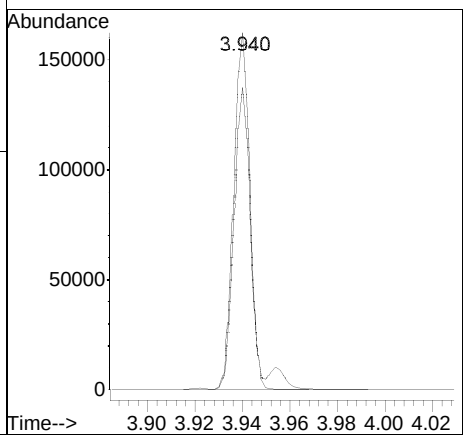


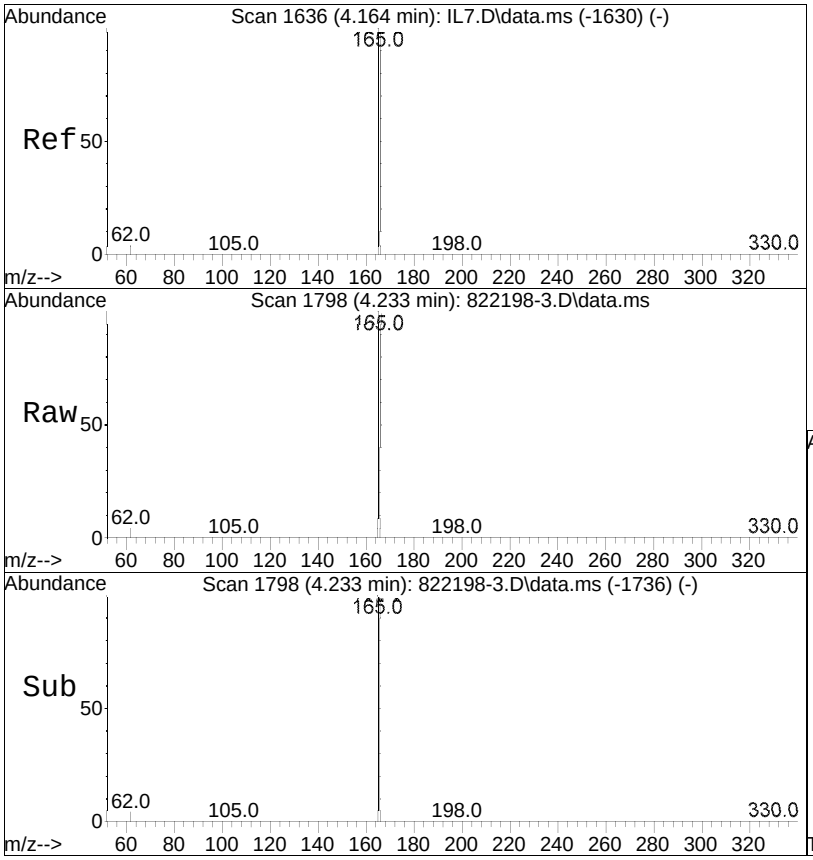


#18
Acenaphthene
Concen: 2350.80 ng/ml
RT: 3.940 min Scan# 1640
Delta R.T. 0.006 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:153 Resp: 75683

Ion	Ratio	Lower	Upper
153	100		
154	84.8	66.9	100.3

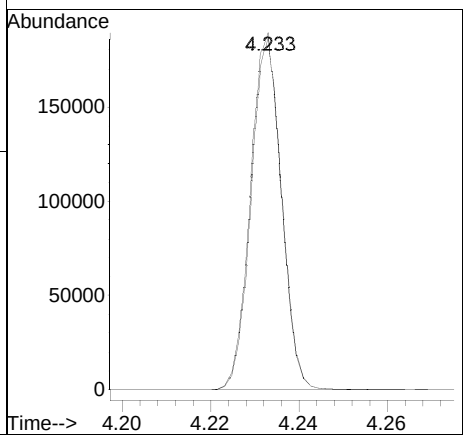


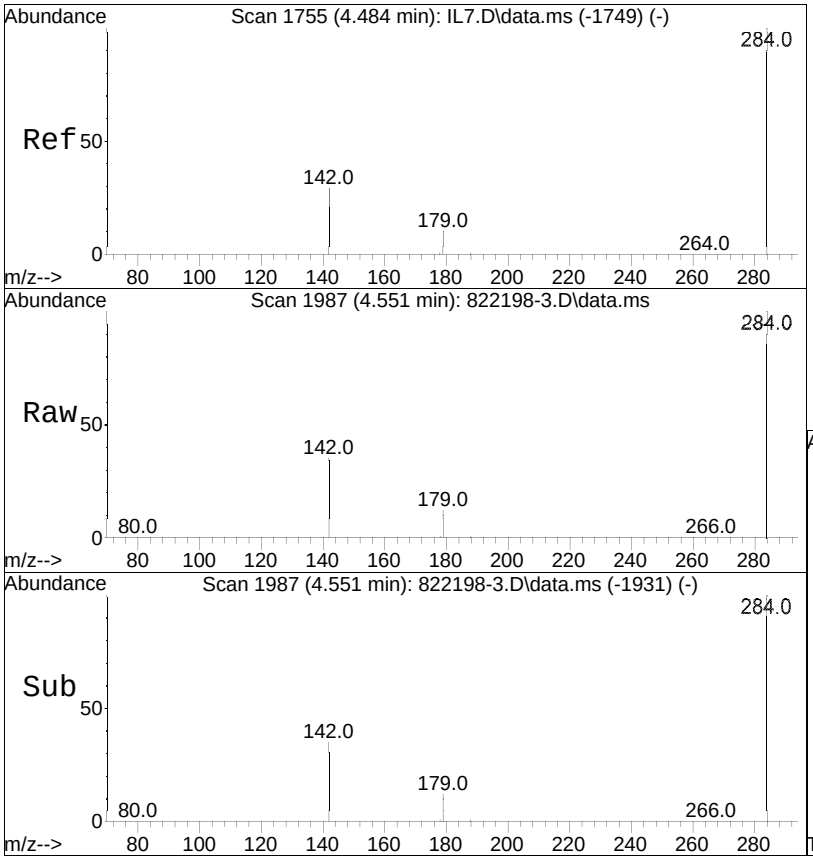


#20
Fluorene
Concen: 2406.90 ng/ml
RT: 4.233 min Scan# 1798
Delta R.T. 0.005 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:166 Resp: 89064

Ion	Ratio	Lower	Upper
166	100		
165	102.1	82.9	124.3

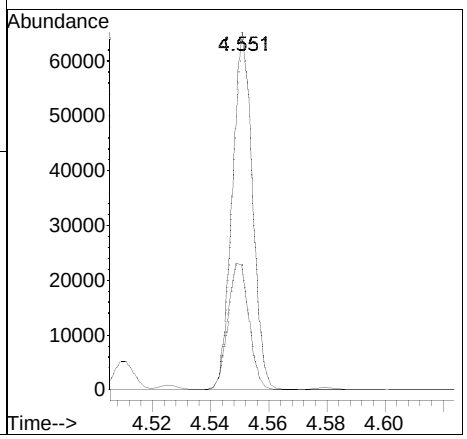


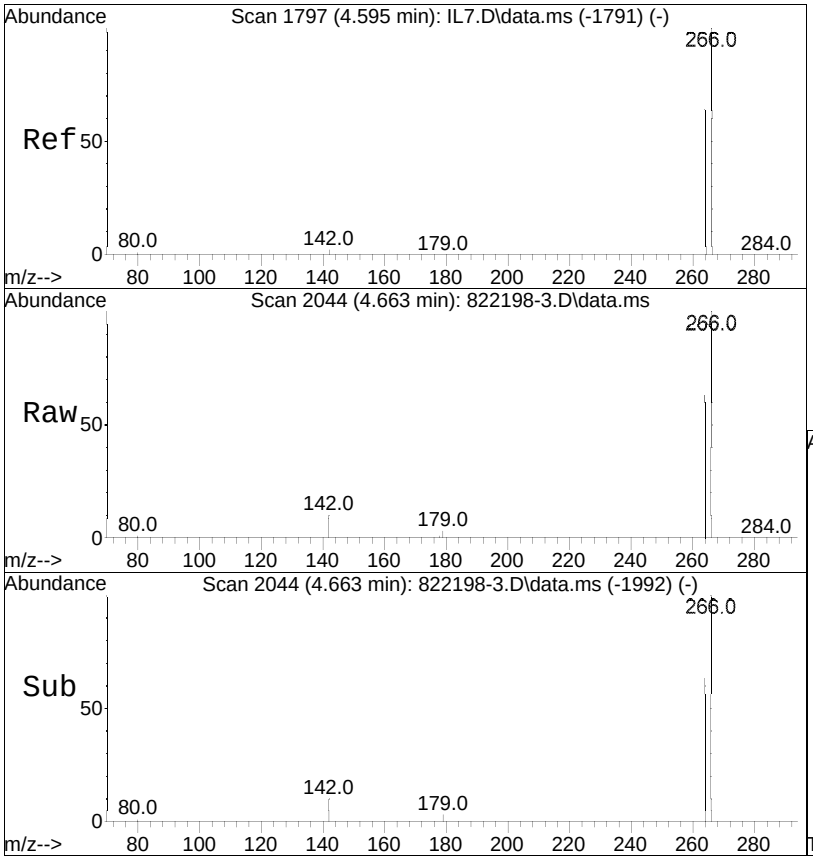


#24
Hexachlorobenzene
Concen: 2381.04 ng/ml
RT: 4.551 min Scan# 1987
Delta R.T. 0.003 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:284 Resp: 31129

Ion	Ratio	Lower	Upper
284	100		
142	37.1	26.9	40.3

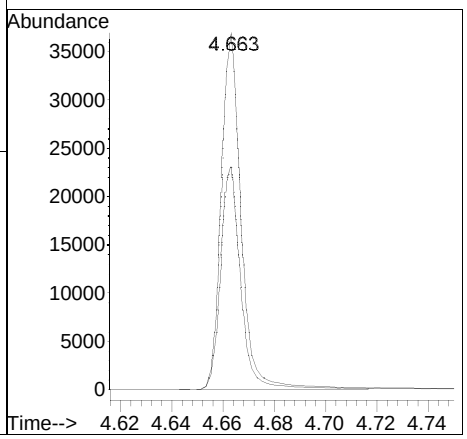


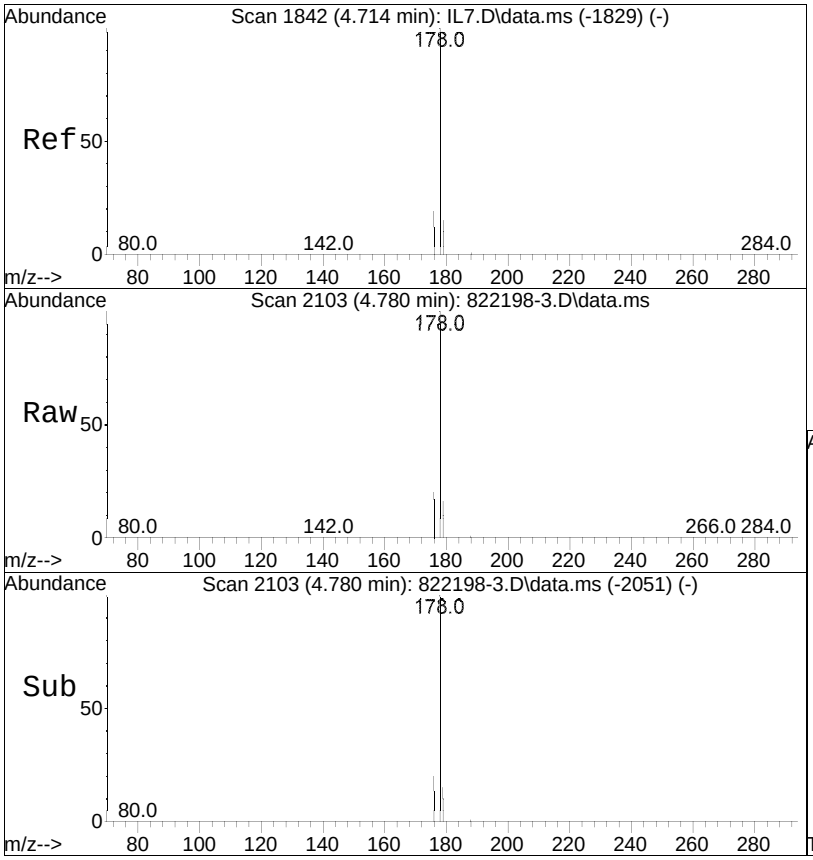


#25
Pentachlorophenol
Concen: 3484.49 ng/ml
RT: 4.663 min Scan# 2044
Delta R.T. 0.003 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:266 Resp: 19795

Ion	Ratio	Lower	Upper
266	100		
264	64.3	50.7	76.1

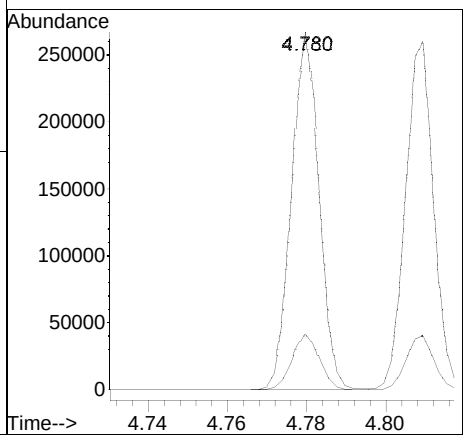


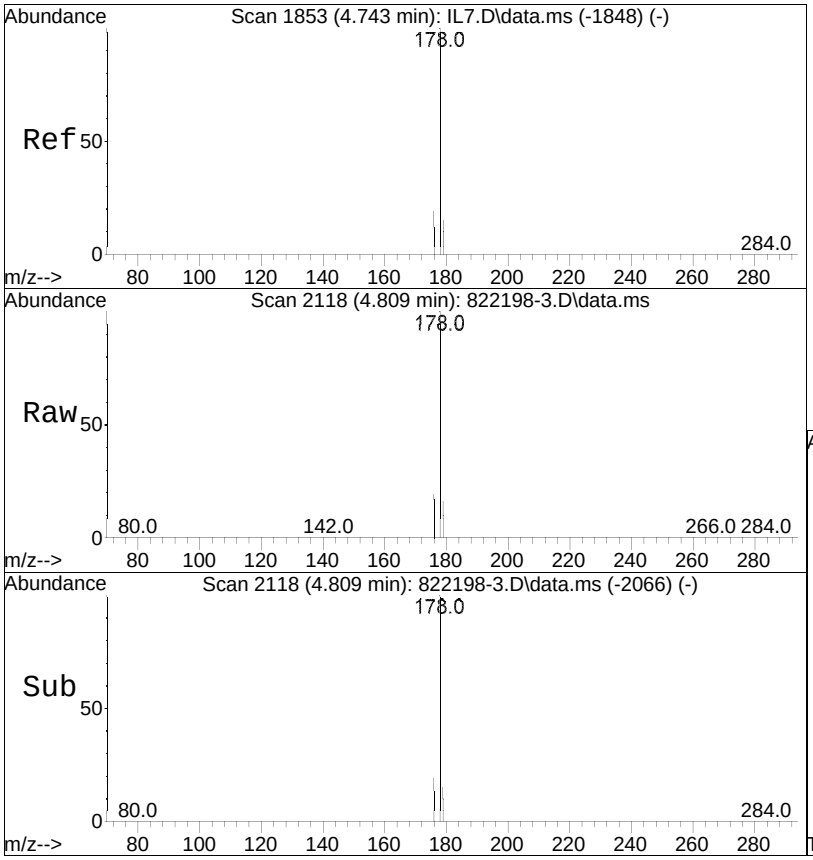


#26
Phenanthrene
Concen: 2342.83 ng/ml
RT: 4.780 min Scan# 2103
Delta R.T. 0.003 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:178 Resp: 129132

Ion	Ratio	Lower	Upper
178	100		
179	15.5	12.3	18.5

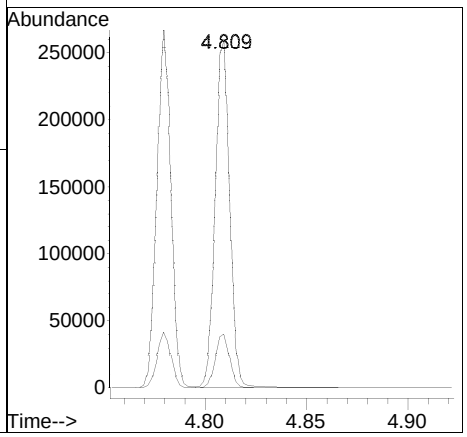


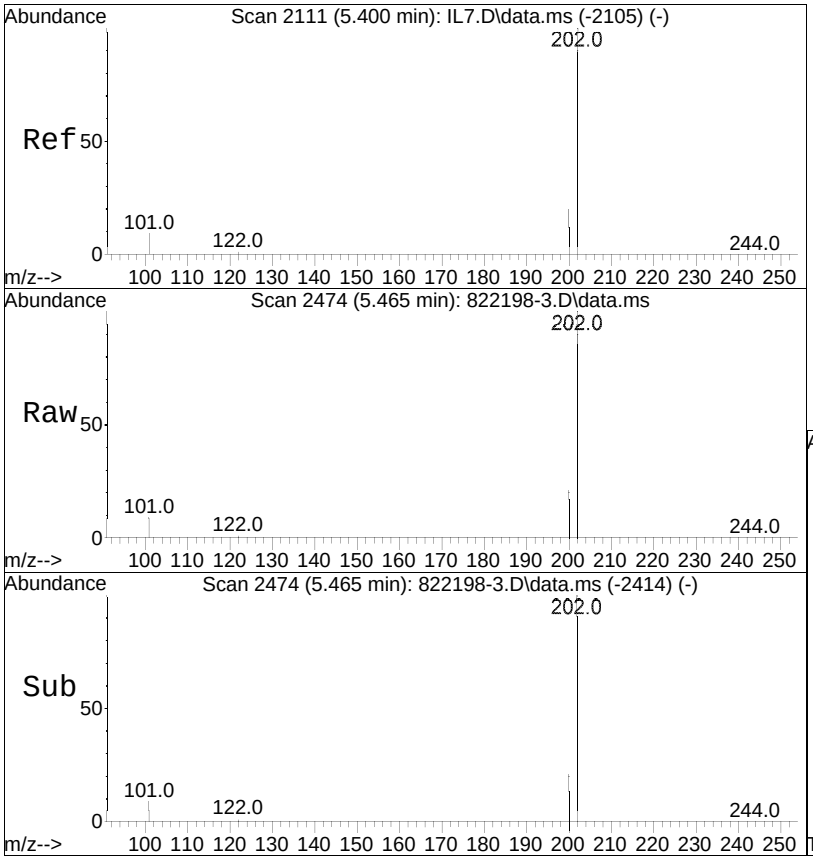


#27
Anthracene
Concen: 2502.07 ng/ml
RT: 4.809 min Scan# 2118
Delta R.T. 0.003 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:178 Resp: 128661

Ion	Ratio	Lower	Upper
178	100		
179	15.4	12.2	18.4

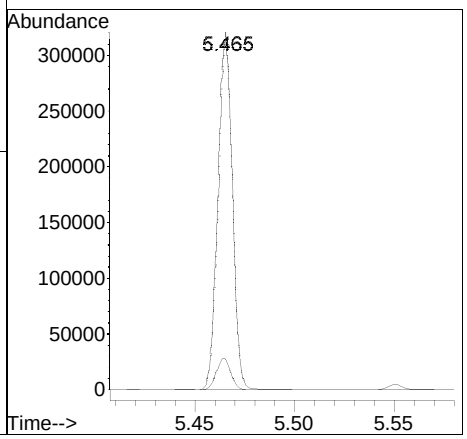


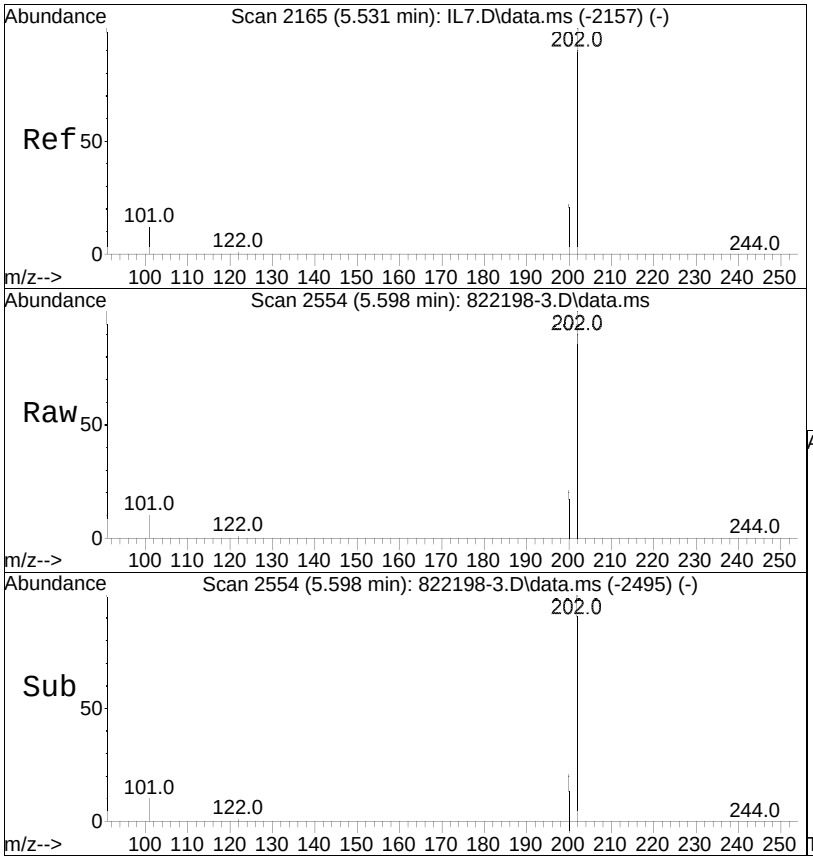


#28
Fluoranthene
Concen: 2500.79 ng/ml
RT: 5.465 min Scan# 2474
Delta R.T. -0.001 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:202 Resp: 157514

Ion	Ratio	Lower	Upper
202	100		
101	8.9	8.3	12.5

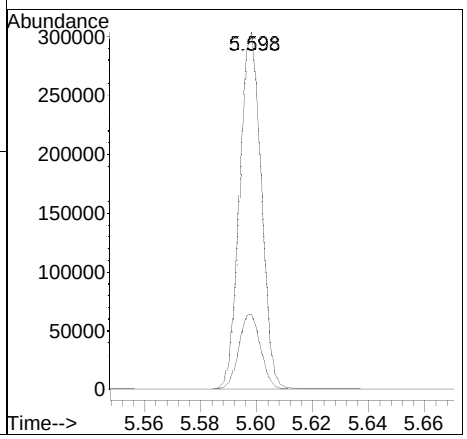


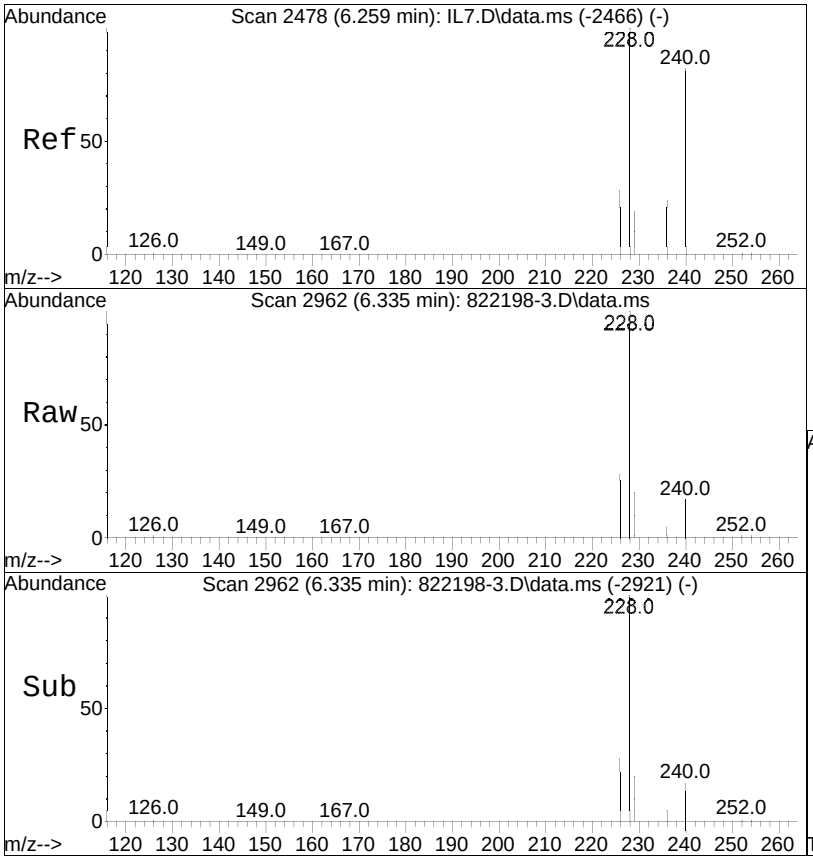


#29
Pyrene
Concen: 2475.49 ng/ml
RT: 5.598 min Scan# 2554
Delta R.T. -0.002 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:202 Resp: 161477

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.3	25.9

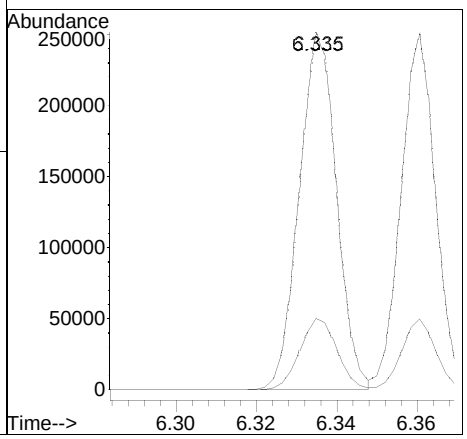


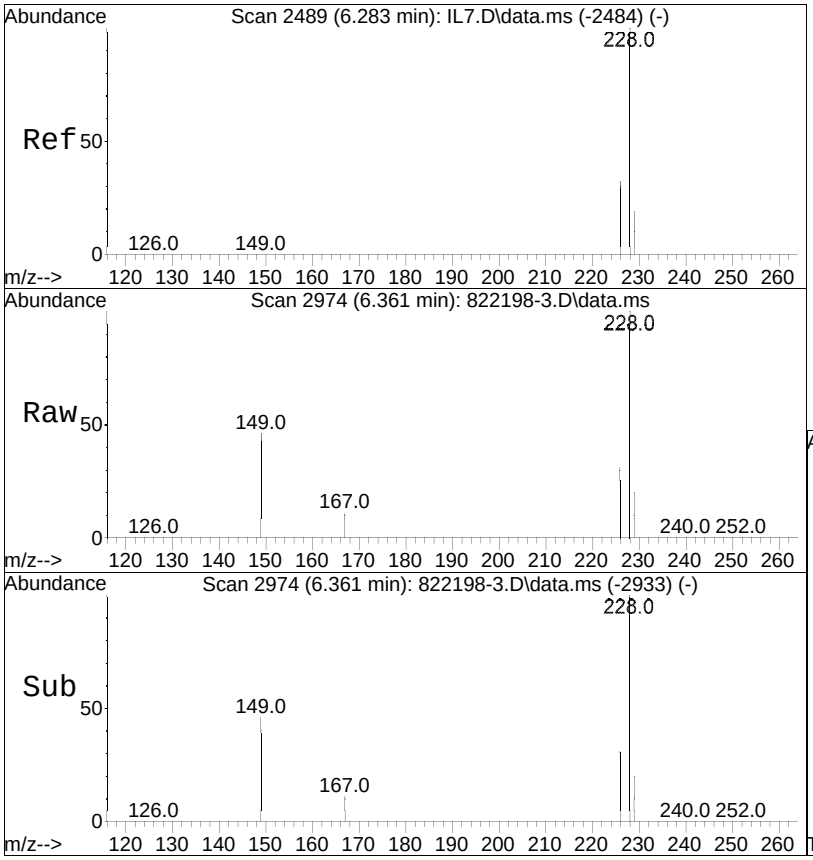


#32
Benzo[a]anthracene
Concen: 2737.67 ng/ml
RT: 6.335 min Scan# 2962
Delta R.T. -0.012 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:228 Resp: 162051

Ion	Ratio	Lower	Upper
228	100		
229	19.7	15.6	23.4

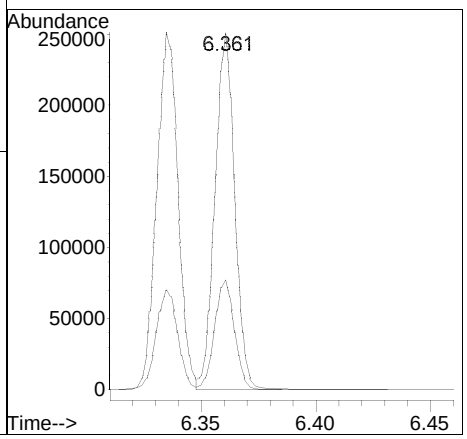


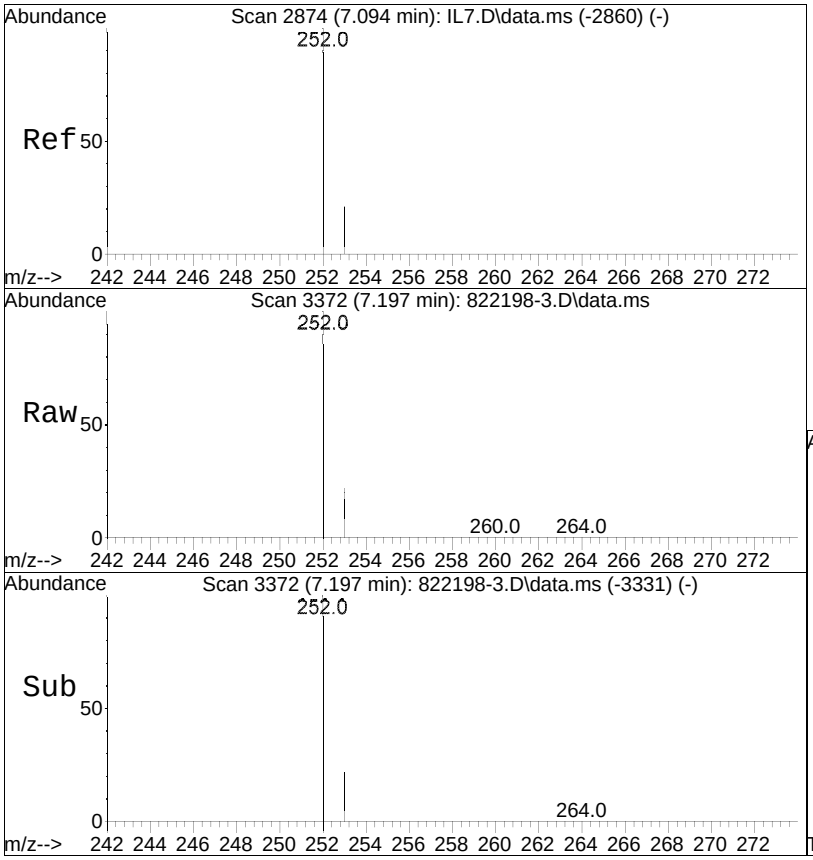


#34
Chrysene
Concen: 2573.07 ng/ml
RT: 6.361 min Scan# 2974
Delta R.T. -0.012 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:228 Resp: 149871

Ion	Ratio	Lower	Upper
228	100		
226	31.1	24.5	36.7

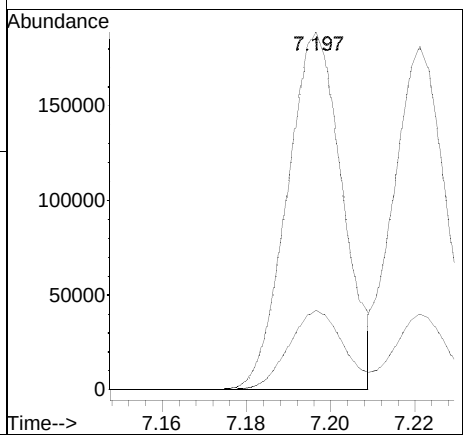


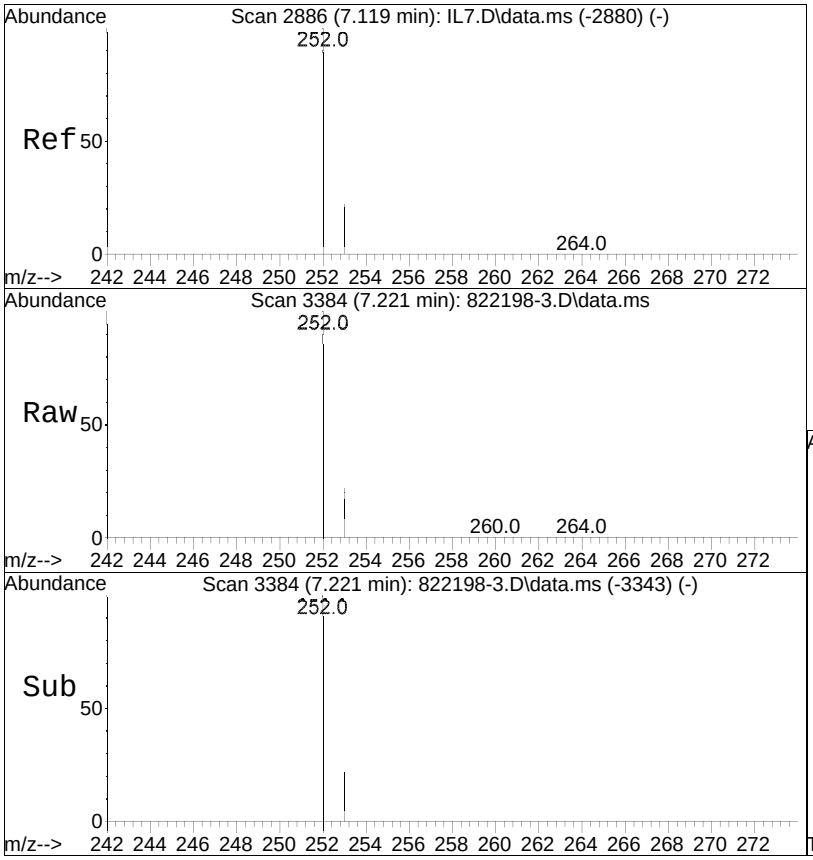


#37
Benzo[b]fluoranthene
Concen: 2779.17 ng/ml
RT: 7.197 min Scan# 3372
Delta R.T. -0.015 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:252 Resp: 172360

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.3	25.9

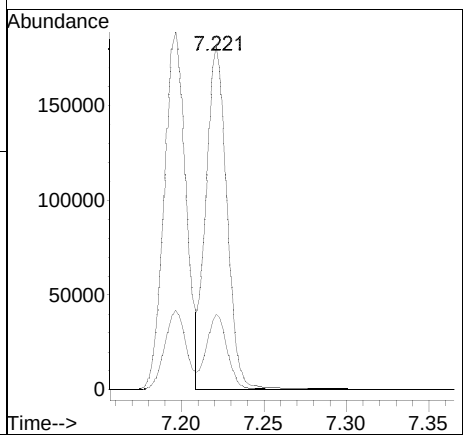


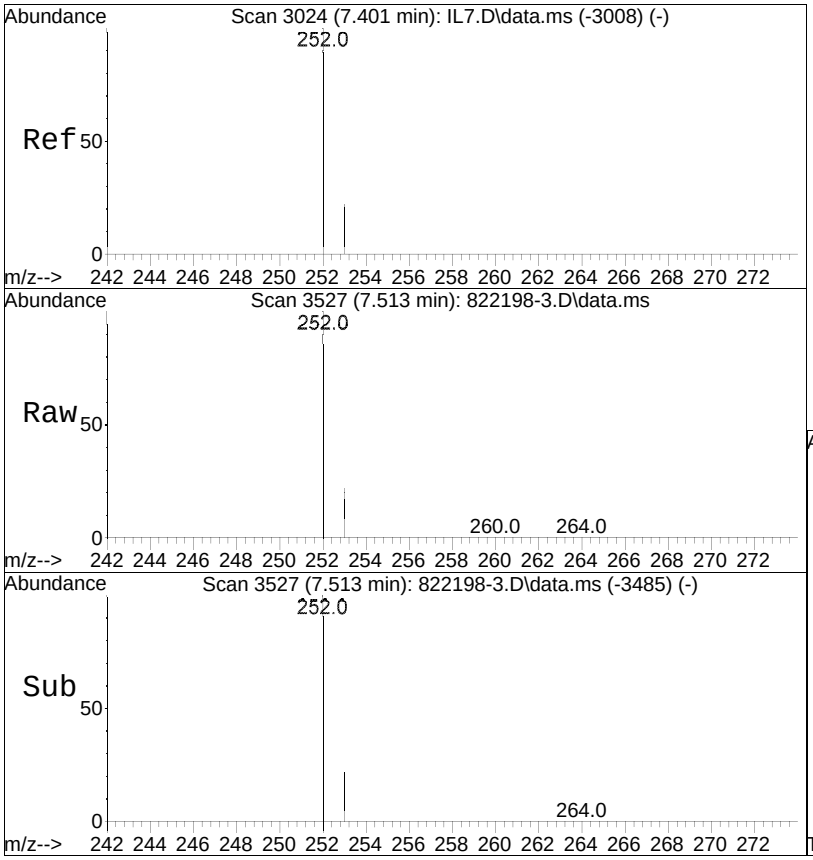


#38
Benzo[k]fluoranthene
Concen: 2855.24 ng/ml
RT: 7.221 min Scan# 3384
Delta R.T. -0.016 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:252 Resp: 158799

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.4	26.2

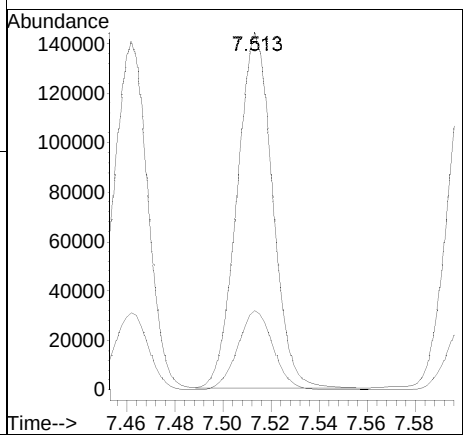


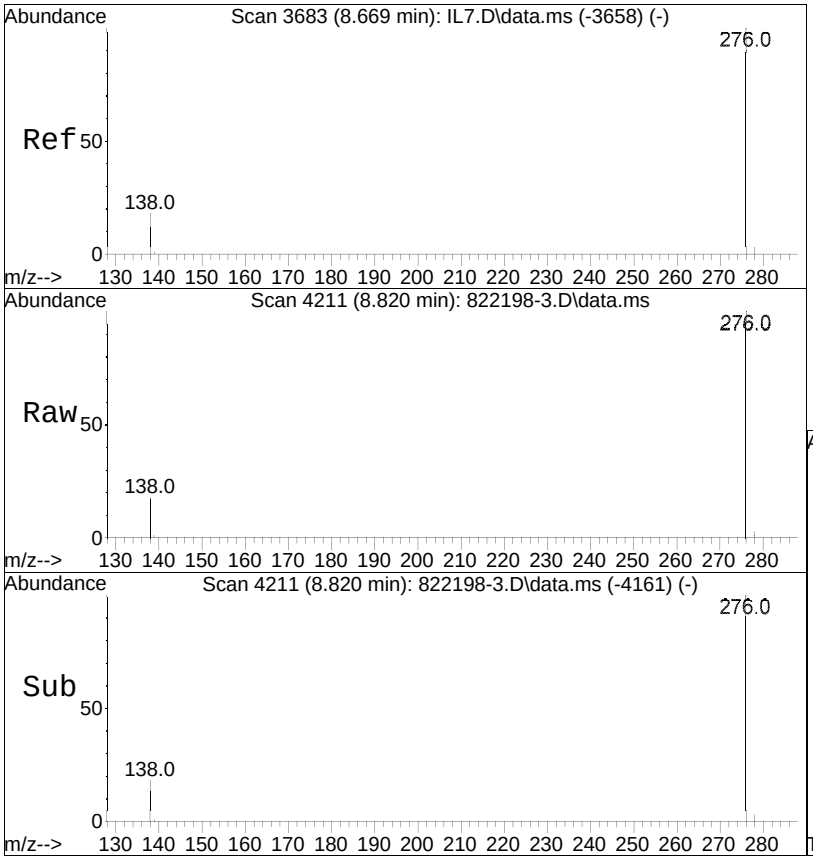


#39
Benzo[a]pyrene
Concen: 2915.73 ng/ml
RT: 7.513 min Scan# 3527
Delta R.T. -0.013 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:252 Resp: 146362

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.4	26.0

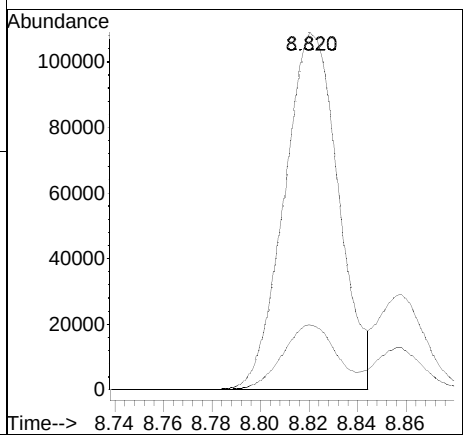


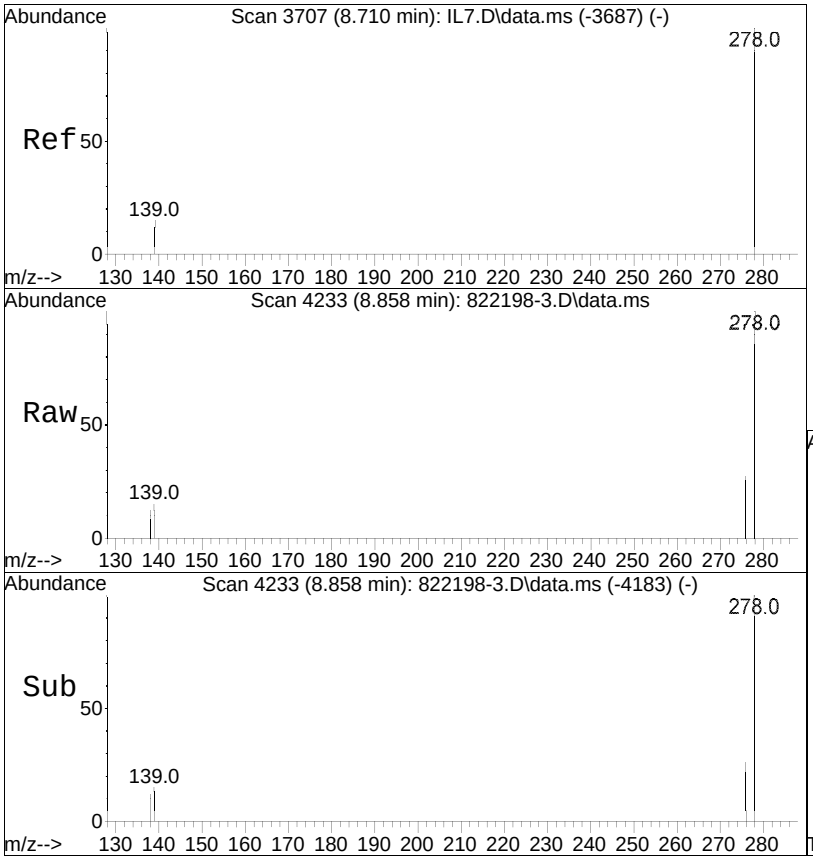


#40
Indeno[1,2,3-cd]pyrene
Concen: 2908.27 ng/ml
RT: 8.820 min Scan# 4211
Delta R.T. -0.013 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:276 Resp: 167431

Ion	Ratio	Lower	Upper
276	100		
138	17.8	14.8	22.2

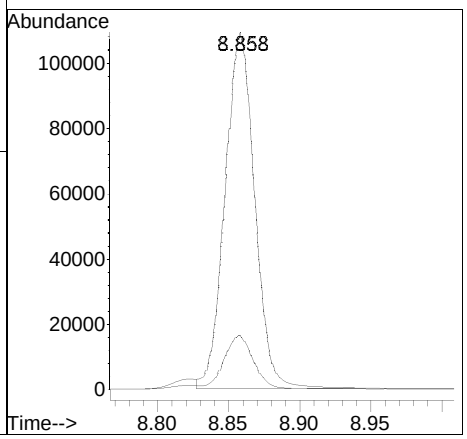


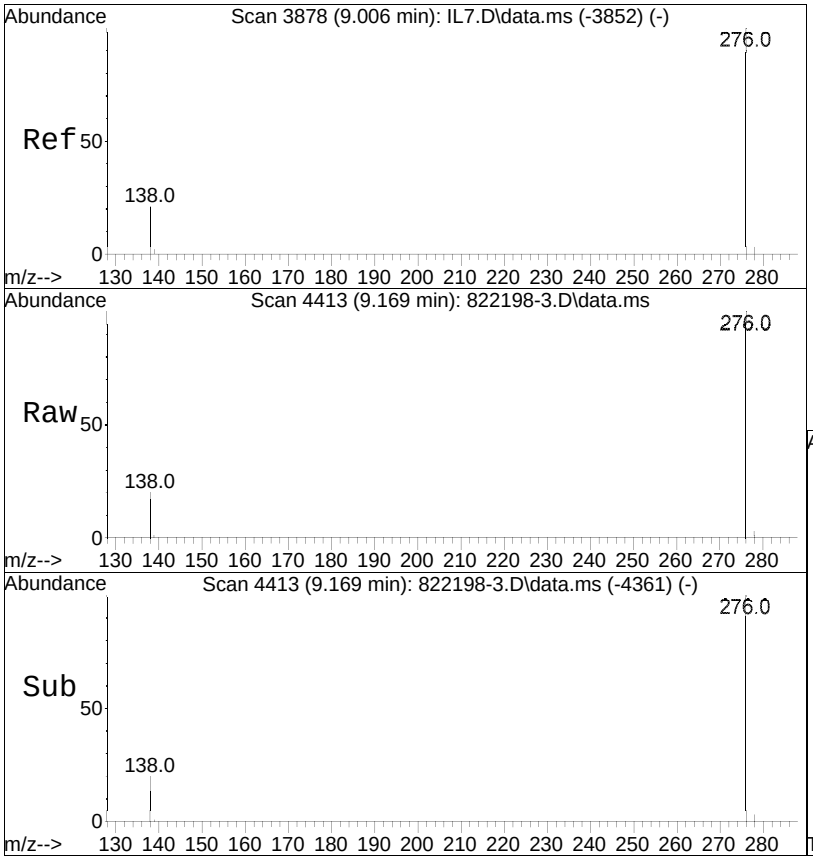


#41
Dibenzo[a,h]anthracene
Concen: 2864.06 ng/ml
RT: 8.858 min Scan# 4233
Delta R.T. -0.013 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:278 Resp: 157125

Ion	Ratio	Lower	Upper
278	100		
139	15.0	12.2	18.4

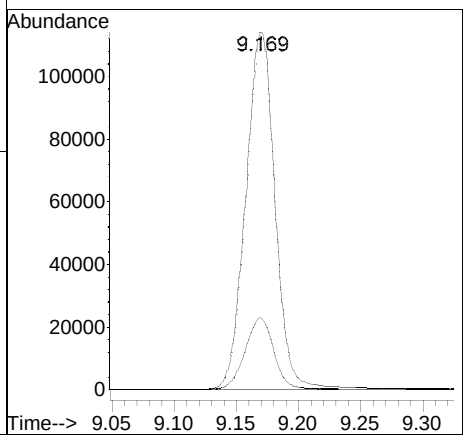




#42
Benzo[g,h,i]perylene
Concen: 3003.31 ng/ml
RT: 9.169 min Scan# 4413
Delta R.T. -0.010 min
Lab File: 822198-3.D
Acq: 01 Sep 2023 05:37 pm

Tgt Ion:276 Resp: 183526

Ion	Ratio	Lower	Upper
276	100		
138	20.0	16.8	25.2



Manual Integration Report

Data Path	: I:\8270SIM\sv119\230901LVI	QMethod	: SIM-LVI_230306_sv119.M
Data File	: 822198-3.D	Operator	: sv119:ah
Date Inj'd	: 9/1/2023 5:37 pm	Instrument	: SV119
Sample	: WG1822198-3,32,2,rp	Quant Date	: 9/1/2023 5:51 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : 823489-3.D
Acq On : 07 Sep 2023 03:36 pm
Operator : sv119:jjw
Sample : WG1823489-3,32,2,jjw
Misc : WG1824714,WG1823489,ical19785
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 08 08:52:09 2023
Quant Method : I:\8270sim\sv119\230907aLVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 11:05:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230907aLVI\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.170	152	45880	4000.000	ng/ml	0.00
Standard Area 1 = 64197			Recovery = 71.47%			
8) Naphthalene-d8	2.829	136	170253	4000.000	ng/ml	0.00
Standard Area 1 = 236804			Recovery = 71.90%			
17) Acenaphthene-d10	3.793	164	89504	4000.000	ng/ml	0.00
Standard Area 1 = 129941			Recovery = 68.88%			
22) Phenanthrene-d10	4.620	188	212093	4000.000	ng/ml	0.00
Standard Area 1 = 316231			Recovery = 67.07%			
31) Chrysene-d12	6.192	240	207547	4000.000	ng/ml	-0.05
Standard Area 1 = 299020			Recovery = 69.41%			
36) Perylene-d12	7.322	264	221845	4000.000	ng/ml	-0.06
Standard Area 1 = 305793			Recovery = 72.55%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.582	112	21374	1893.436	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 37.87%			
3) Phenol-d6	1.991	99	23342	1750.132	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 35.00%			
7) Nitrobenzene-d5	2.450	82	12508	1246.581	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 49.86%			
13) 2-Fluorobiphenyl	3.420	172	30986	885.217	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 35.41%			
21) 2,4,6-Tribromophenol	4.232	330	10318	2861.176	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 57.22%			
30) 4-Terphenyl-d14	5.548	244	42817	967.497	ng/ml	-0.03
Spiked Amount 2500.000	Range 30 - 130		Recovery = 38.70%			
Target Compounds						Qvalue
6) Hexachloroethane	2.428	117	11028	2162.713	ng/ml	96
9) Naphthalene	2.840	128	77943	1933.270	ng/ml	100
10) Hexachlorobutadiene	2.912	225	15408	1966.201	ng/ml	99
11) 2-Methylnaphthalene	3.215	142	56823	2096.759	ng/ml	99
14) 2-Chloronaphthalene	3.483	162	59556	2023.252	ng/ml	94
16) Acenaphthylene	3.710	152	97988	2306.984	ng/ml	100
18) Acenaphthene	3.810	153	59583	2099.712	ng/ml	100
20) Fluorene	4.096	166	72905	2235.288	ng/ml	99
24) Hexachlorobenzene	4.409	284	26880	2108.853	ng/ml	95
25) Pentachlorophenol	4.520	266	17810	3265.591	ng/ml	100

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : 823489-3.D
Acq On : 07 Sep 2023 03:36 pm
Operator : sv119:jjw
Sample : WG1823489-3,32,2,jjw
Misc : WG1824714,WG1823489,ical19785
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 08 08:52:09 2023
Quant Method : I:\8270sim\sv119\230907aLVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 11:05:11 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv119\230907aLVI\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.634	178	112977	2102.378	ng/ml	100
27) Anthracene	4.662	178	113566	2265.249	ng/ml	100
28) Fluoranthene	5.317	202	152072	2476.403	ng/ml	96
29) Pyrene	5.450	202	156023	2453.316	ng/ml	99
32) Benzo[a]anthracene	6.186	228	167197	2485.740	ng/ml	99
34) Chrysene	6.207	228	152601	2308.284	ng/ml	99
37) Benzo[b]fluoranthene	6.977	252	174847	2591.691	ng/ml	99
38) Benzo[k]fluoranthene	6.999	252	159162	2630.755	ng/ml	99
39) Benzo[a]pyrene	7.267	252	146451	2681.991	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.464	276	161098	2572.384	ng/ml	99
41) Dibenzo[a,h]anthracene	8.502	278	150335M3	2519.092	ng/ml	
42) Benzo[g,h,i]perylene	8.789	276	169368	2547.889	ng/ml	97

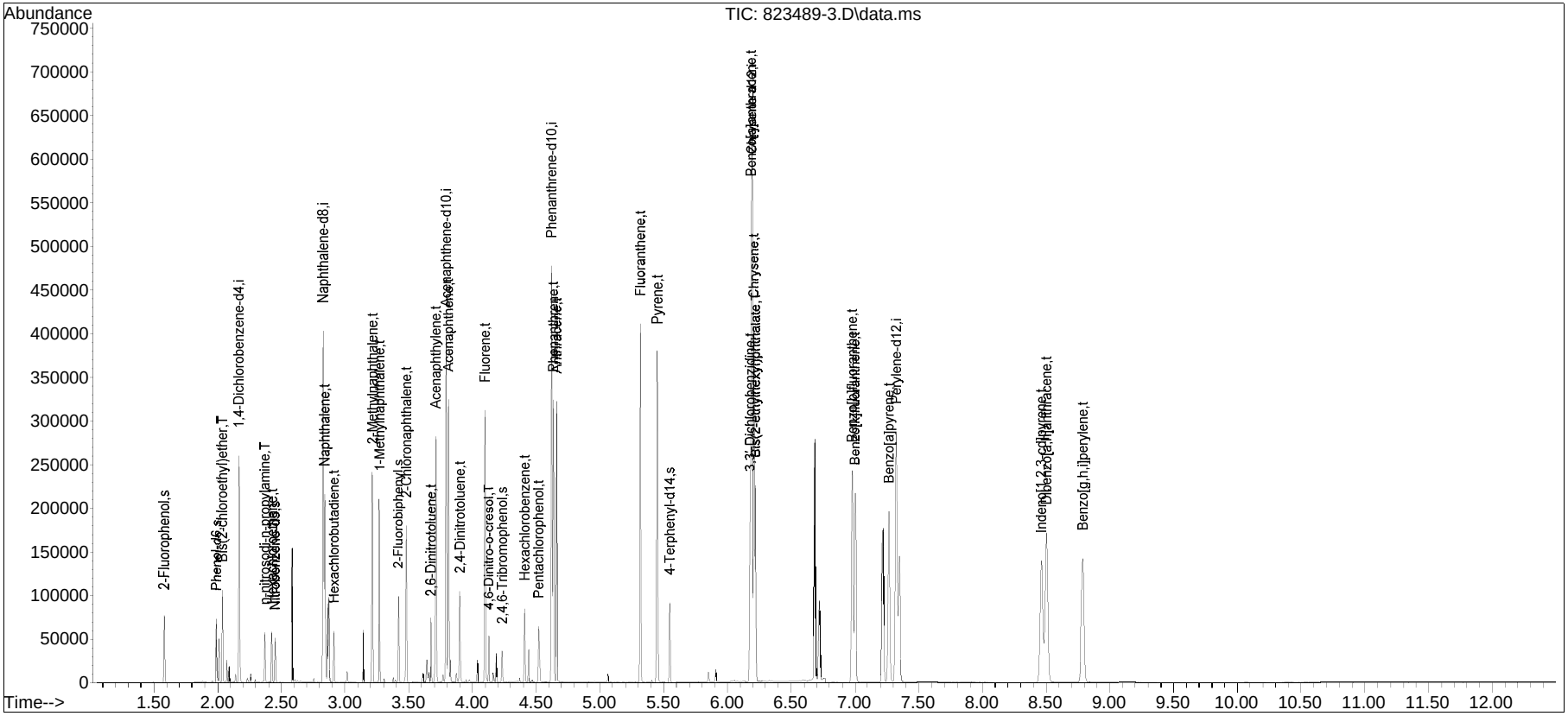
(#) = qualifier out of range (m) = manual integration (+) = signals summed

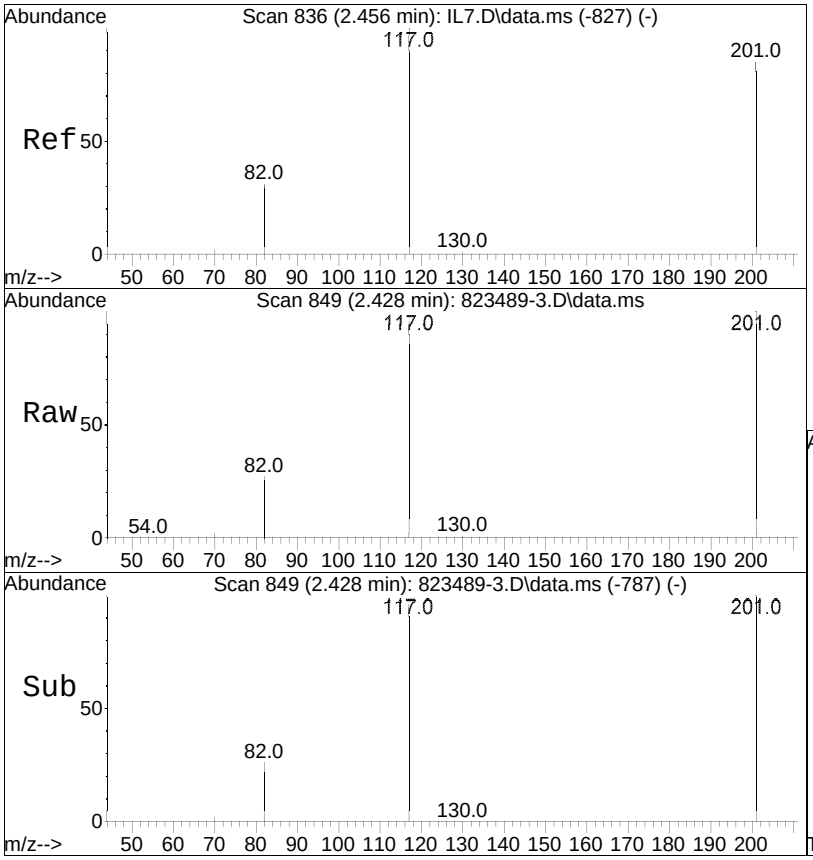
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\sv119\230907aLVI\
Data File : 823489-3.D
Acq On : 07 Sep 2023 03:36 pm
Operator : sv119:jjw
Sample : WG1823489-3,32,2,jjw
Misc : WG1824714,WG1823489,ical19785
ALS Vial : 15 Sample Multiplier: 1

Quant Time: Sep 08 08:52:09 2023
Quant Method : I:\8270sim\sv119\230907aLVI\SIM-LVI_230306_sv119.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 11:05:11 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listedI\ccv0907a.D•

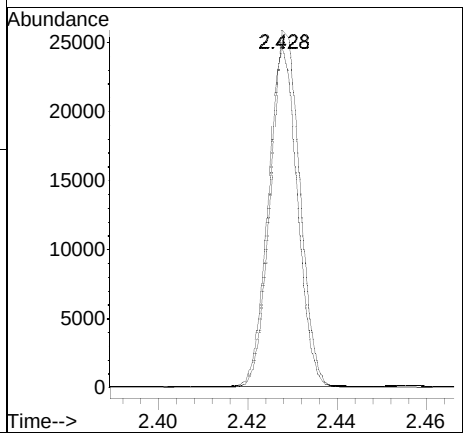


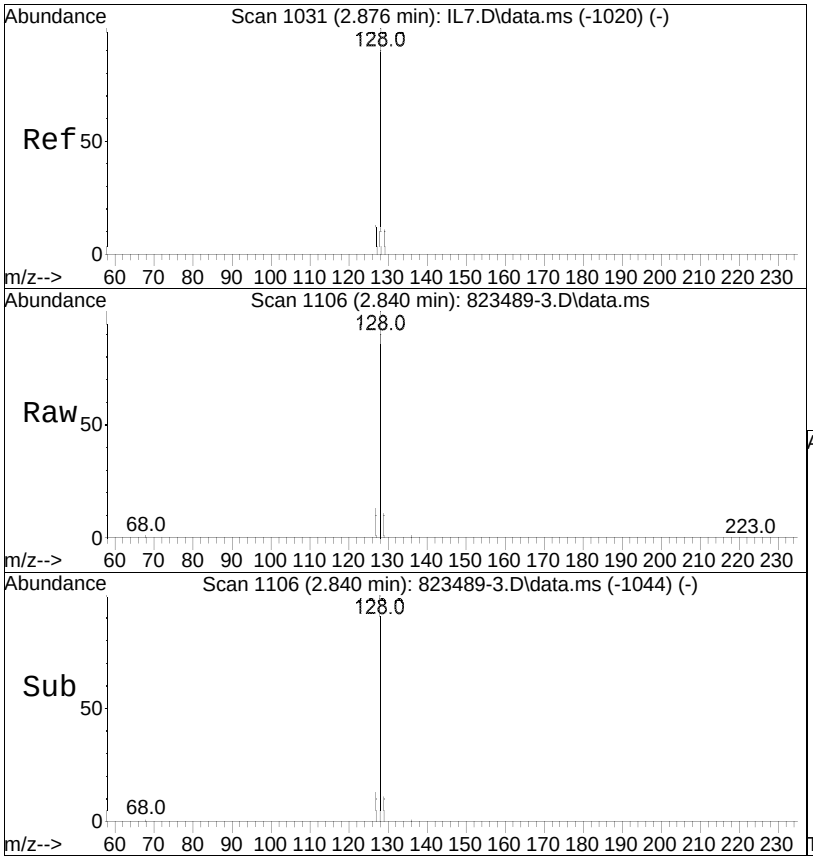


#6
Hexachloroethane
Concen: 2162.71 ng/ml
RT: 2.428 min Scan# 849
Delta R.T. -0.000 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:117 Resp: 11028

Ion	Ratio	Lower	Upper
117	100		
201	105.7	81.5	122.3

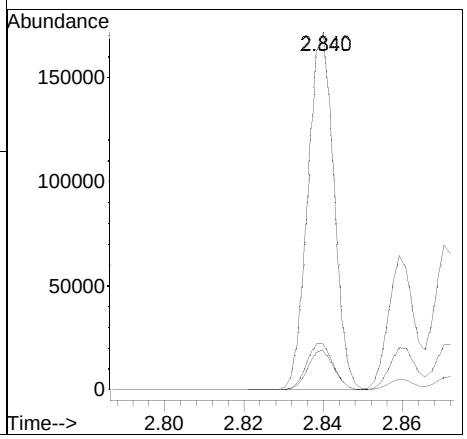


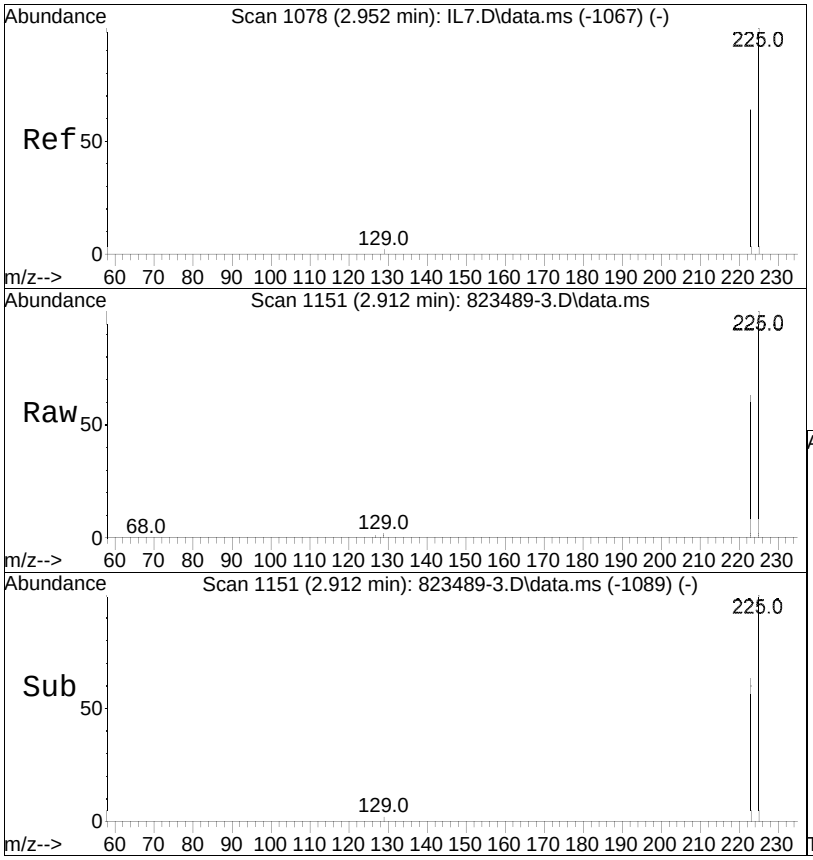


#9
Naphthalene
Concen: 1933.27 ng/ml
RT: 2.840 min Scan# 1106
Delta R.T. -0.000 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:128 Resp: 77943

Ion	Ratio	Lower	Upper
128	100		
129	11.0	8.8	13.2
127	13.3	10.6	15.8

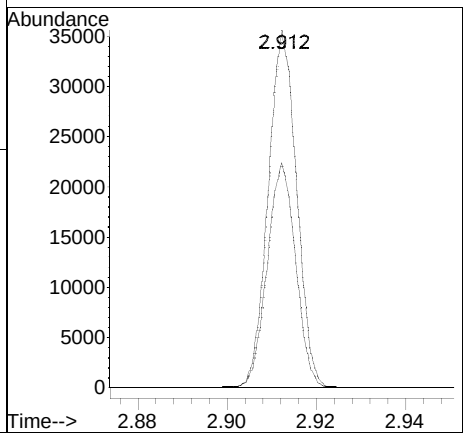


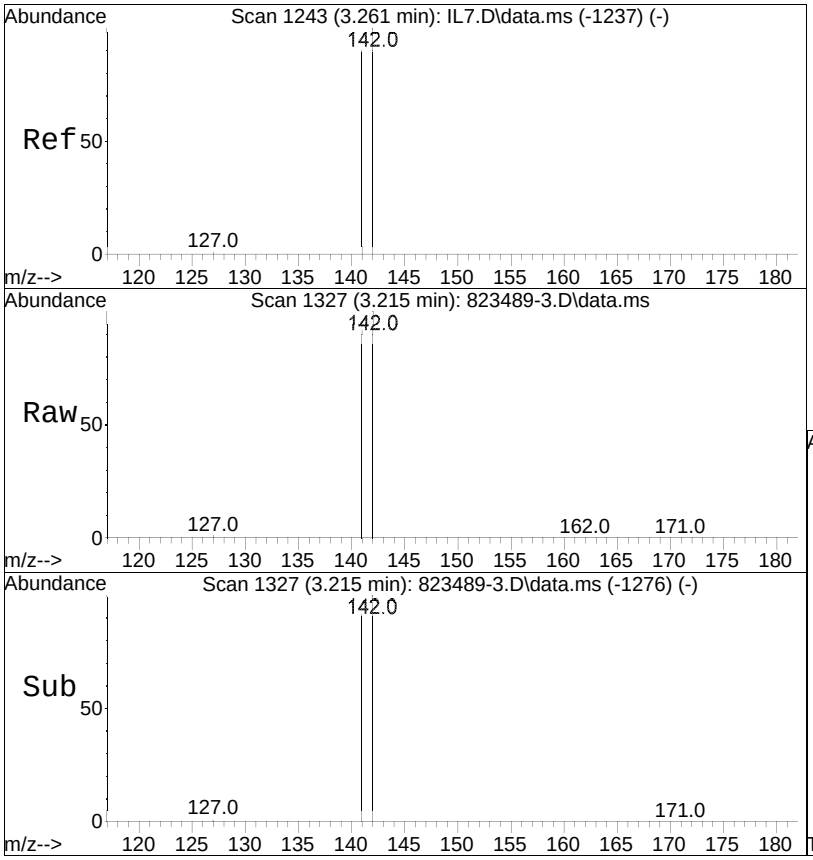


#10
Hexachlorobutadiene
Concen: 1966.20 ng/ml
RT: 2.912 min Scan# 1151
Delta R.T. -0.000 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:225 Resp: 15408

Ion	Ratio	Lower	Upper
225	100		
223	63.0	50.1	75.1

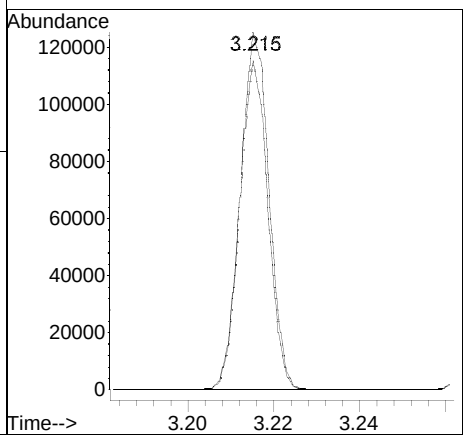


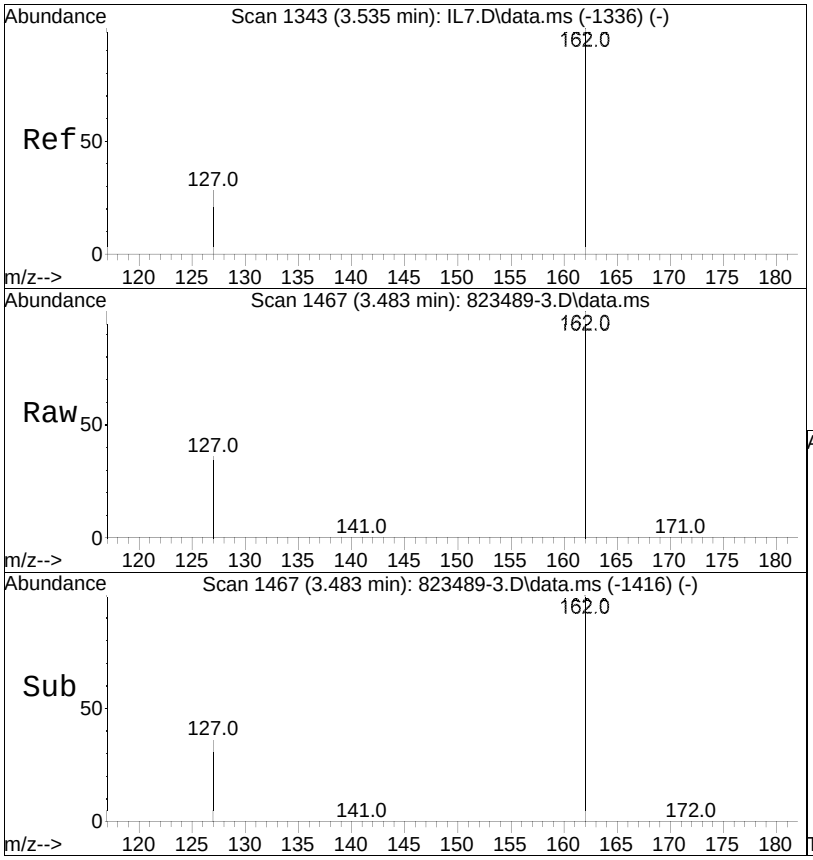


#11
2-Methylnaphthalene
Concen: 2096.76 ng/ml
RT: 3.215 min Scan# 1327
Delta R.T. -0.002 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:142 Resp: 56823

Ion	Ratio	Lower	Upper
142	100		
141	91.7	74.1	111.1

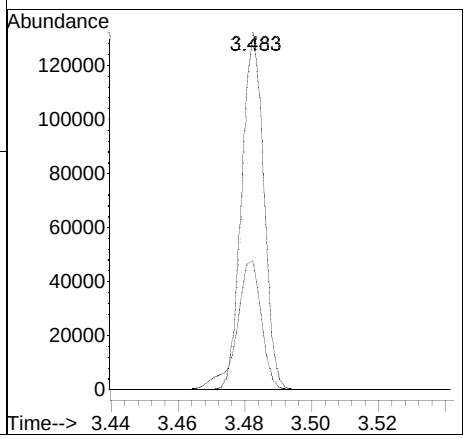


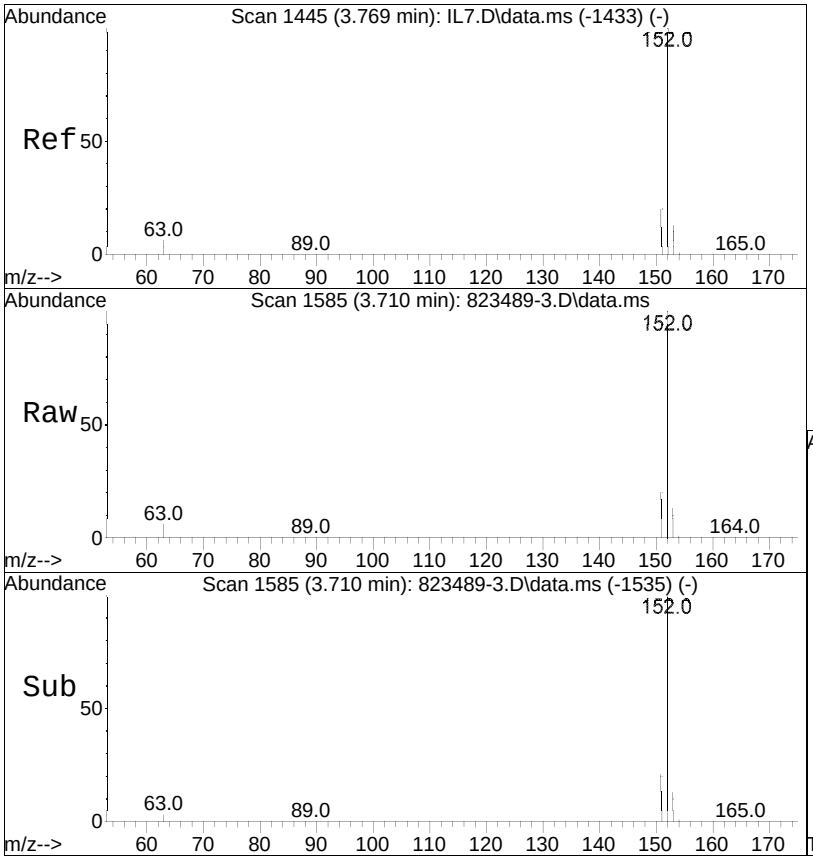


#14
2-Chloronaphthalene
Concen: 2023.25 ng/ml
RT: 3.483 min Scan# 1467
Delta R.T. -0.002 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:162 Resp: 59556

Ion	Ratio	Lower	Upper
162	100		
127	40.9	29.7	44.5

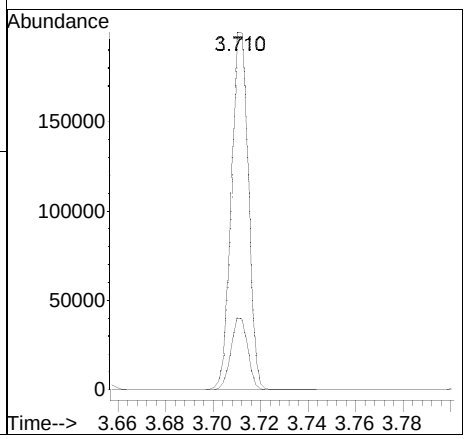


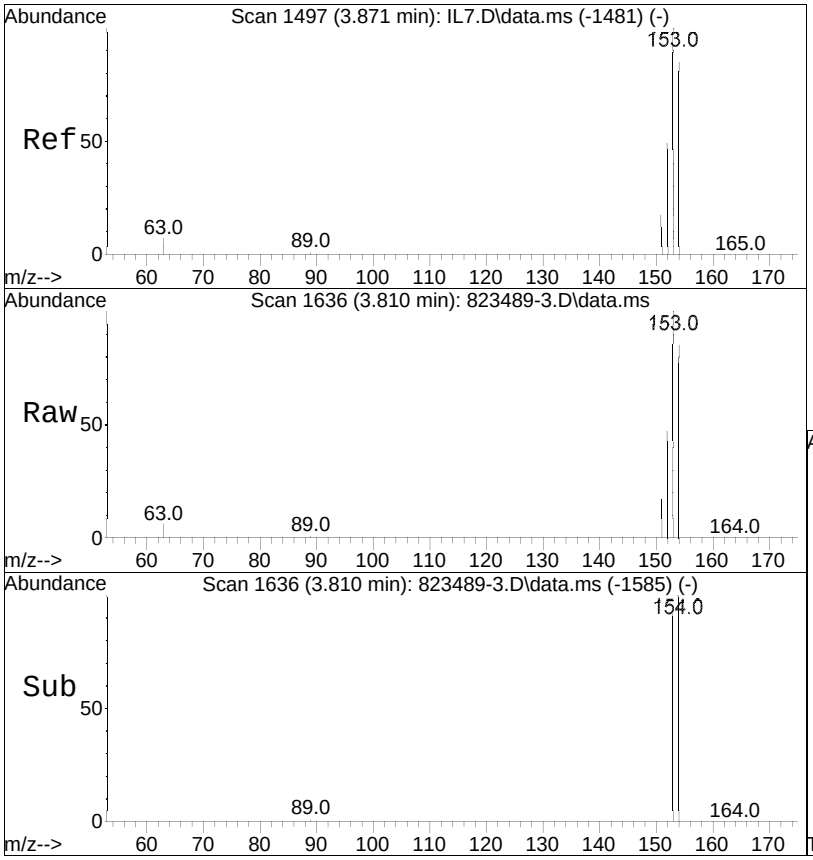


#16
Acenaphthylene
Concen: 2306.98 ng/ml
RT: 3.710 min Scan# 1585
Delta R.T. -0.002 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:152 Resp: 97988

Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.0	24.0

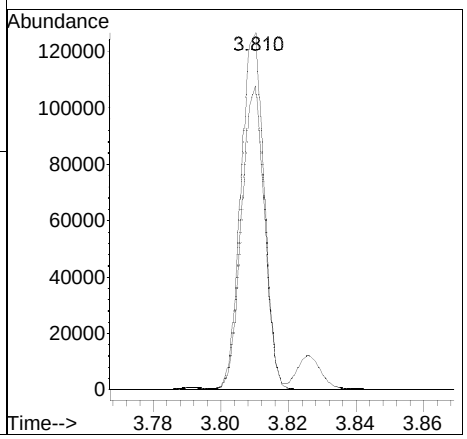


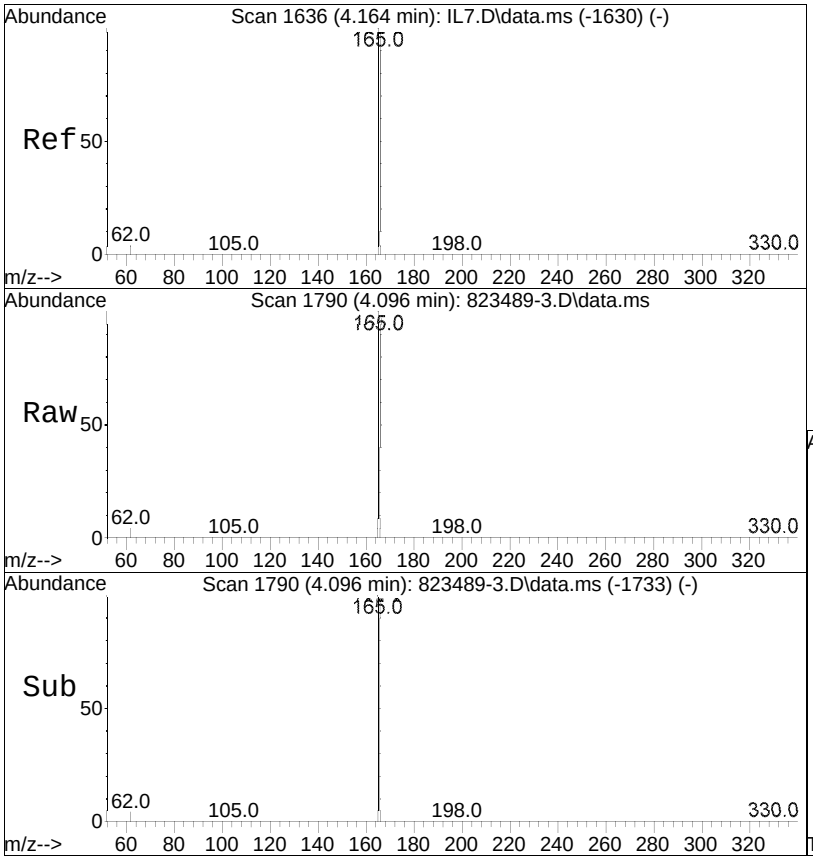


#18
Acenaphthene
Concen: 2099.71 ng/ml
RT: 3.810 min Scan# 1636
Delta R.T. -0.000 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:153 Resp: 59583

Ion	Ratio	Lower	Upper
153	100		
154	83.7	66.9	100.3

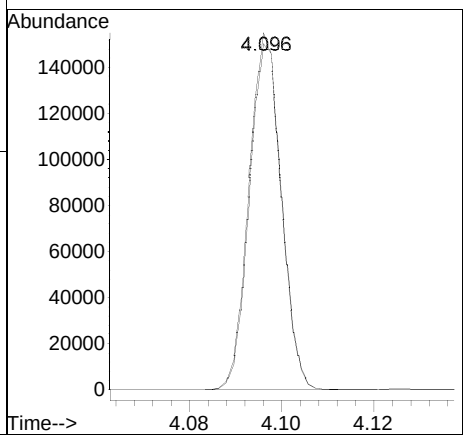


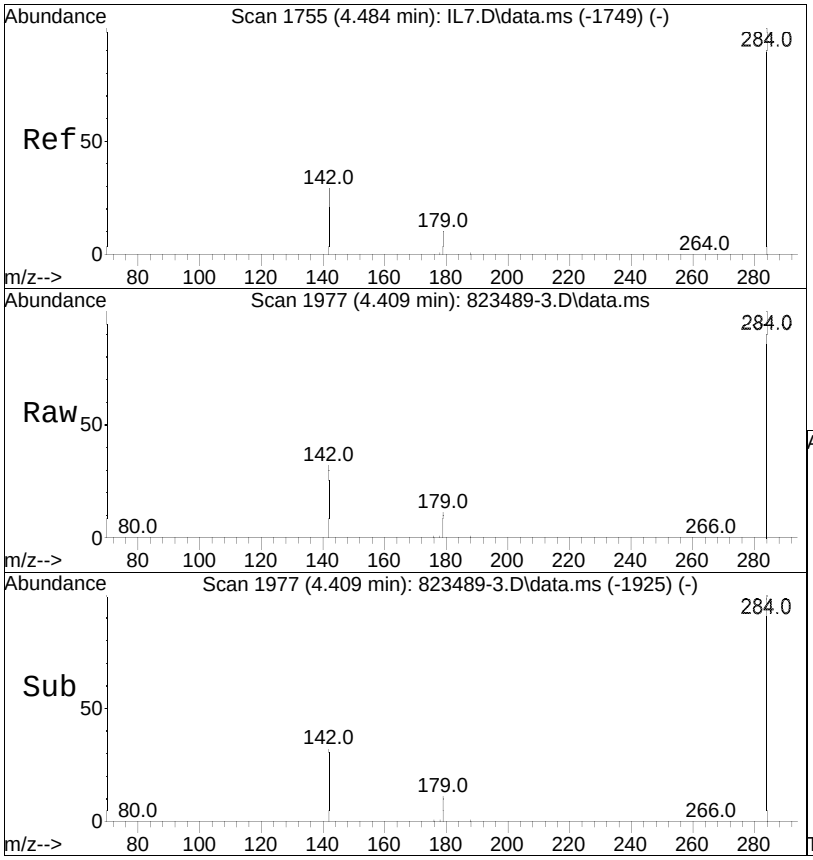


#20
Fluorene
Concen: 2235.29 ng/ml
RT: 4.096 min Scan# 1790
Delta R.T. -0.003 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:166 Resp: 72905

Ion	Ratio	Lower	Upper
166	100		
165	102.2	82.9	124.3

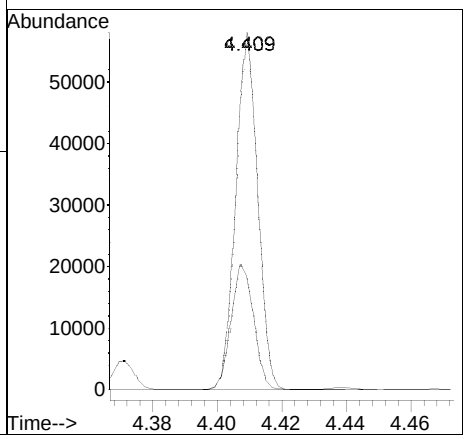


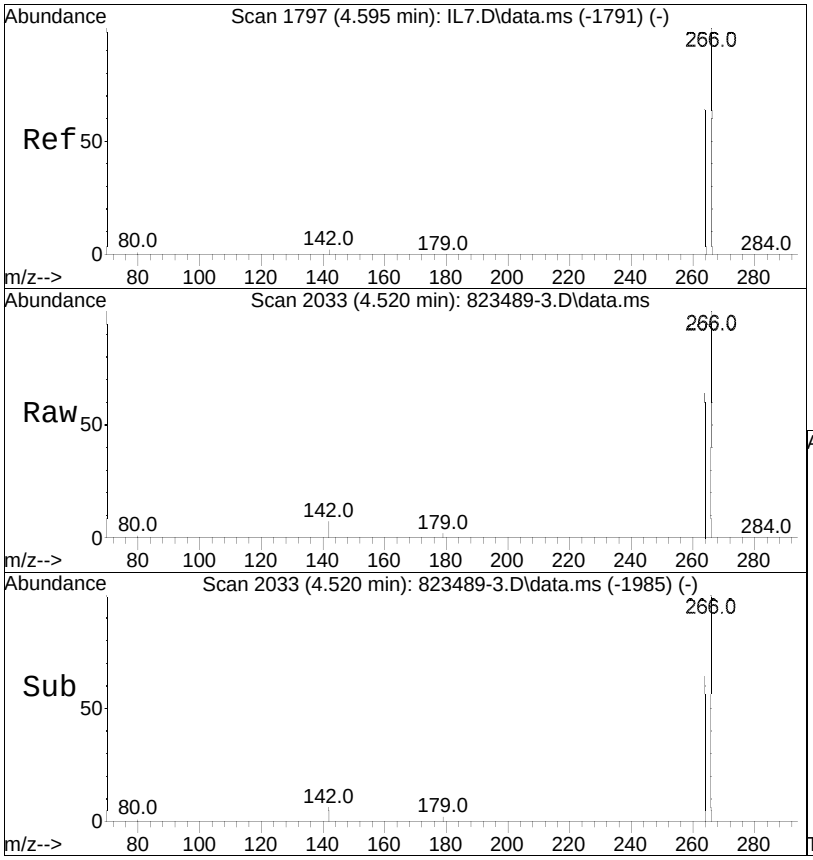


#24
Hexachlorobenzene
Concen: 2108.85 ng/ml
RT: 4.409 min Scan# 1977
Delta R.T. -0.004 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:284 Resp: 26880

Ion	Ratio	Lower	Upper
284	100		
142	36.4	26.9	40.3

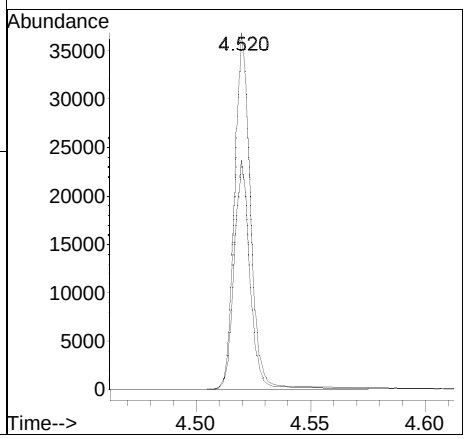


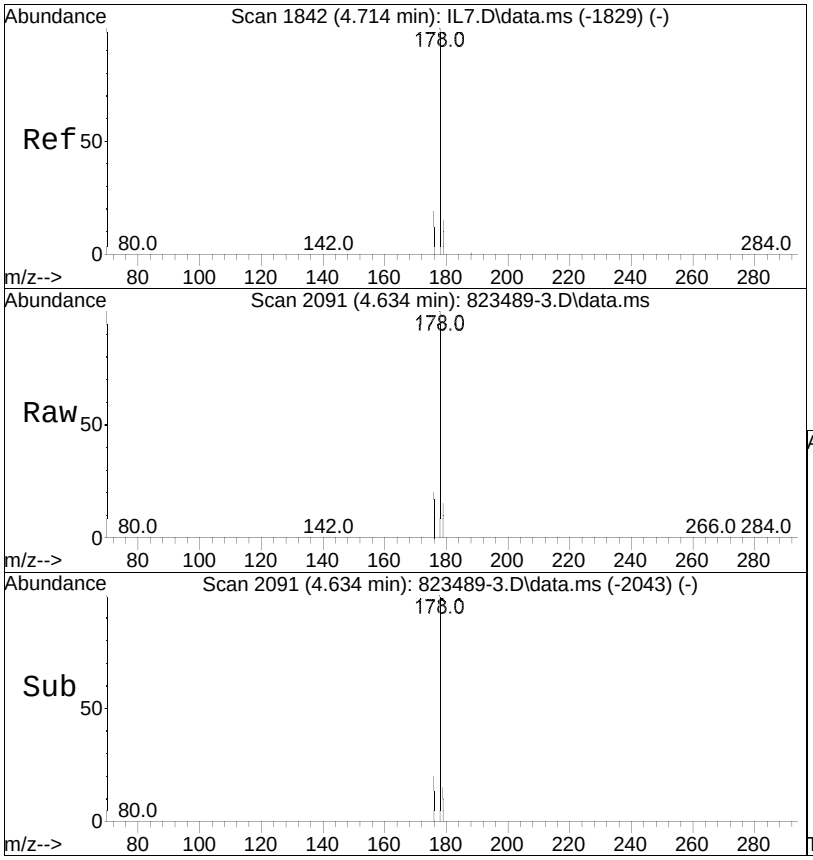


#25
Pentachlorophenol
Concen: 3265.59 ng/ml
RT: 4.520 min Scan# 2033
Delta R.T. -0.006 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:266 Resp: 17810

Ion	Ratio	Lower	Upper
266	100		
264	63.4	50.7	76.1

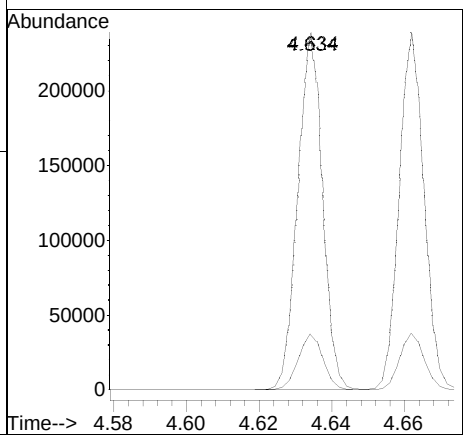


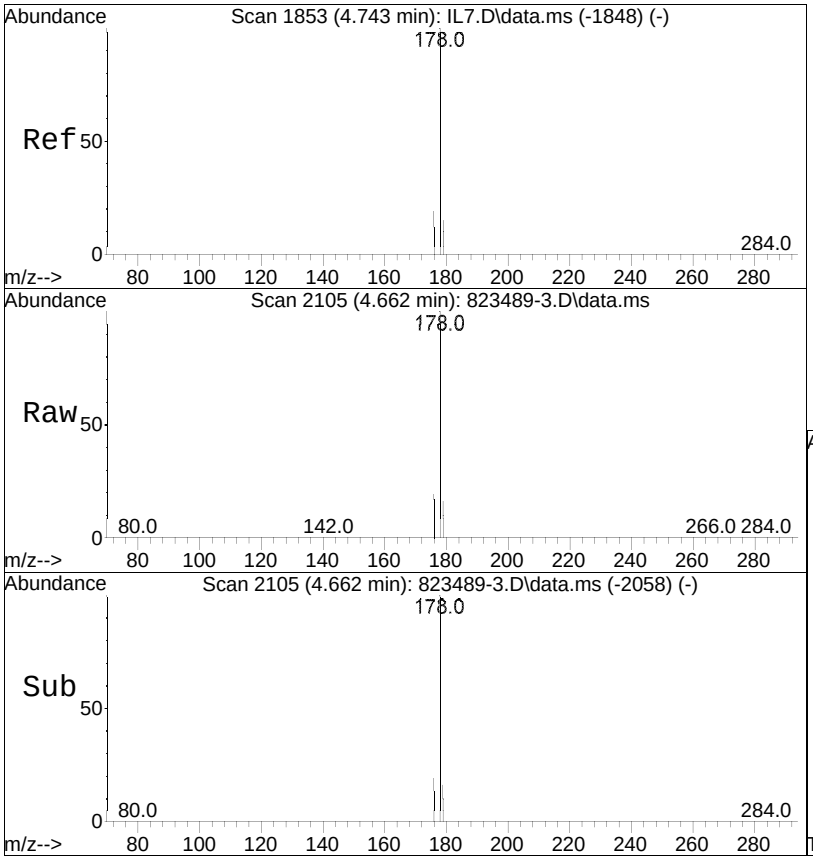


#26
Phenanthrene
Concen: 2102.38 ng/ml
RT: 4.634 min Scan# 2091
Delta R.T. -0.006 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:178 Resp: 112977

Ion	Ratio	Lower	Upper
178	100		
179	15.6	12.3	18.5

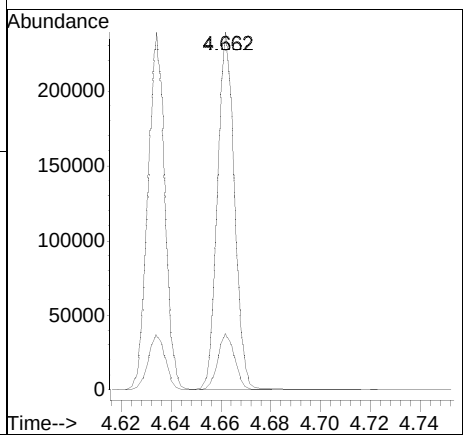


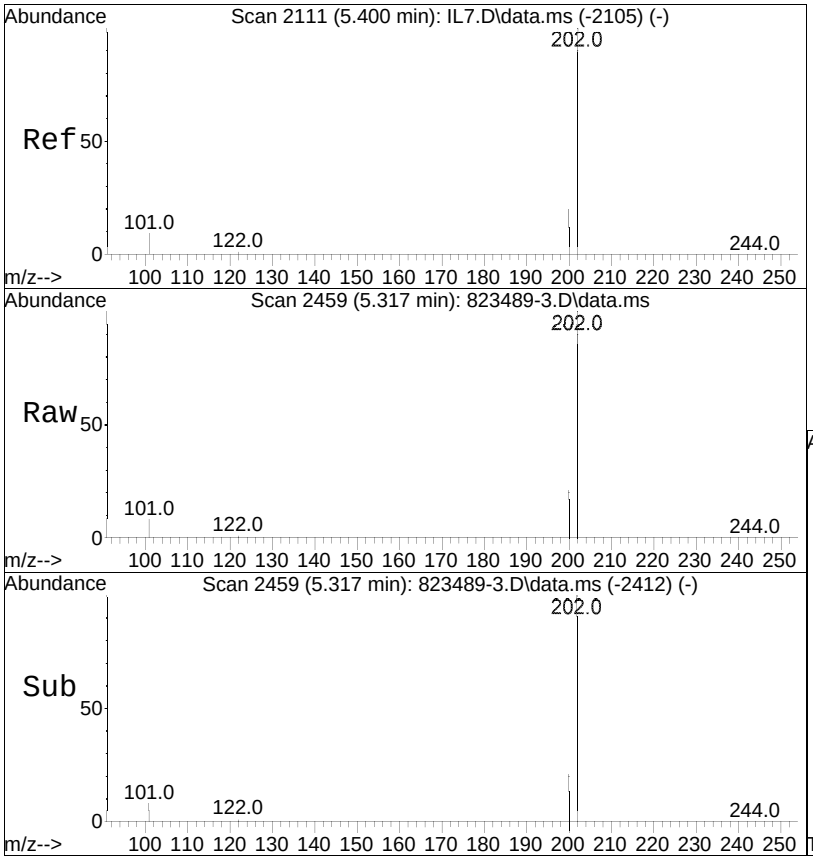


#27
Anthracene
Concen: 2265.25 ng/ml
RT: 4.662 min Scan# 2105
Delta R.T. -0.008 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:178 Resp: 113566

Ion	Ratio	Lower	Upper
178	100		
179	15.4	12.2	18.4

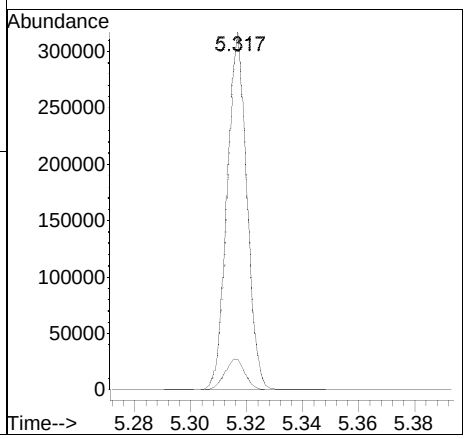


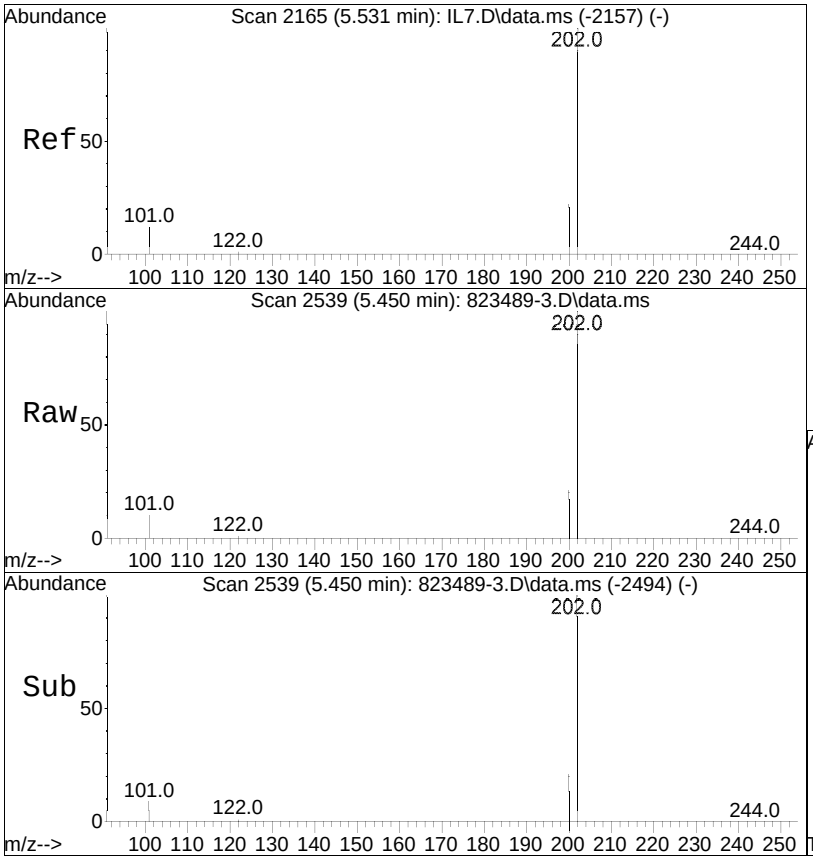


#28
Fluoranthene
Concen: 2476.40 ng/ml
RT: 5.317 min Scan# 2459
Delta R.T. -0.022 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:202 Resp: 152072

Ion	Ratio	Lower	Upper
202	100		
101	8.9	8.3	12.5

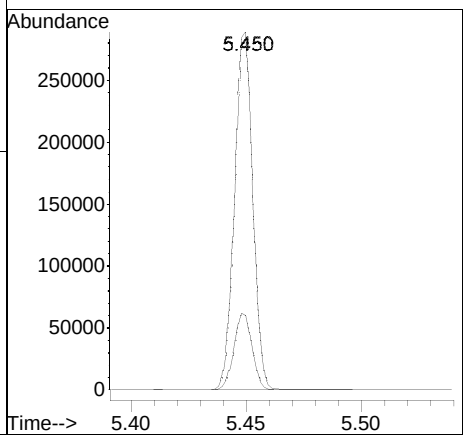


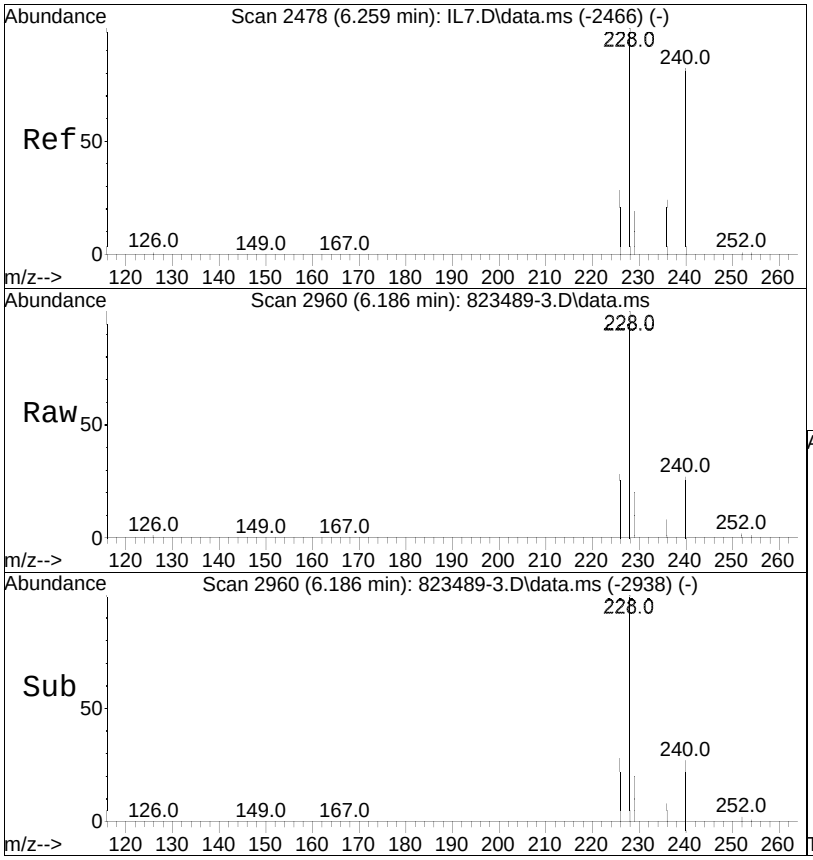


#29
Pyrene
Concen: 2453.32 ng/ml
RT: 5.450 min Scan# 2539
Delta R.T. -0.025 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:202 Resp: 156023

Ion	Ratio	Lower	Upper
202	100		
200	21.3	17.3	25.9

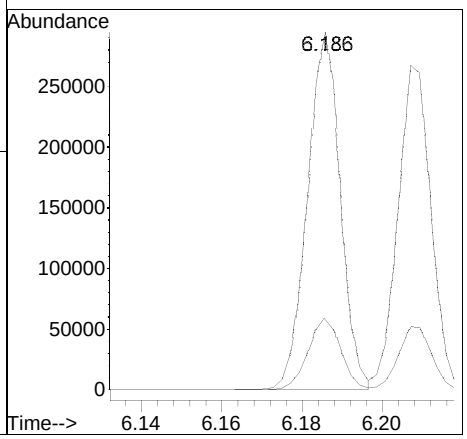


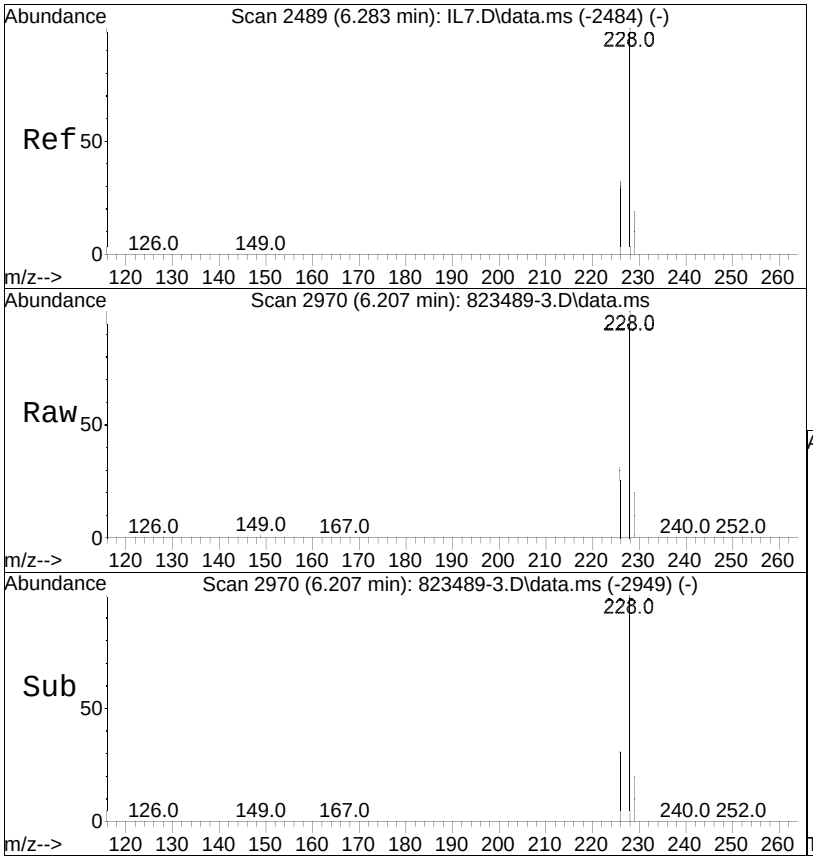


#32
Benzo[a]anthracene
Concen: 2485.74 ng/ml
RT: 6.186 min Scan# 2960
Delta R.T. -0.052 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:228 Resp: 167197

Ion	Ratio	Lower	Upper
228	100		
229	19.9	15.6	23.4

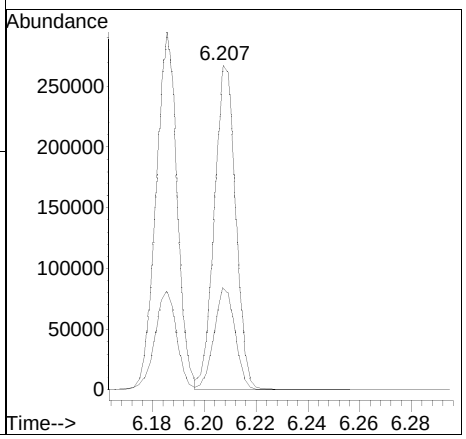


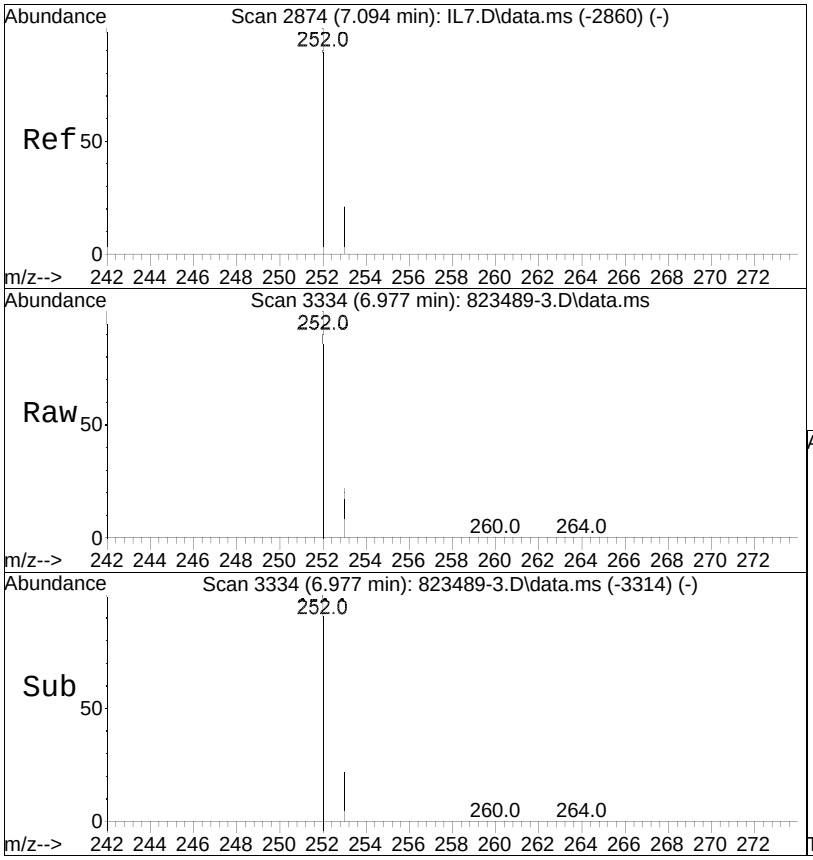


#34
Chrysene
Concen: 2308.28 ng/ml
RT: 6.207 min Scan# 2970
Delta R.T. -0.054 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:228 Resp: 152601

Ion	Ratio	Lower	Upper
228	100		
226	31.1	24.5	36.7

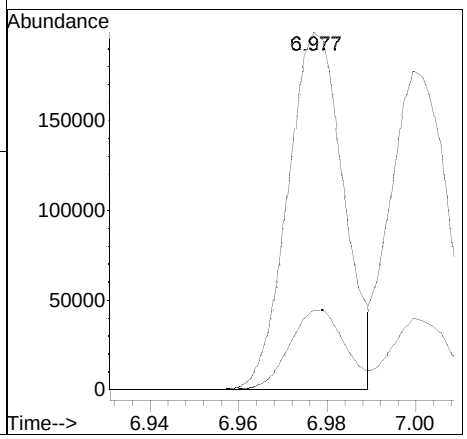


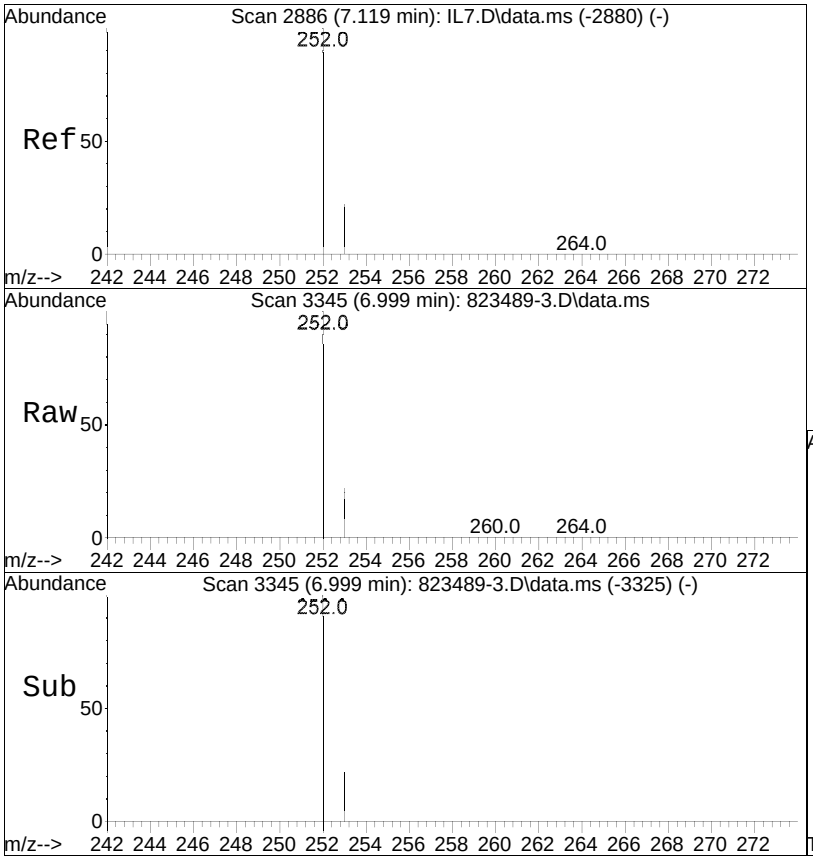


#37
Benzo[b]fluoranthene
Concen: 2591.69 ng/ml
RT: 6.977 min Scan# 3334
Delta R.T. -0.060 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:252 Resp: 174847

Ion	Ratio	Lower	Upper
252	100		
253	22.1	17.3	25.9

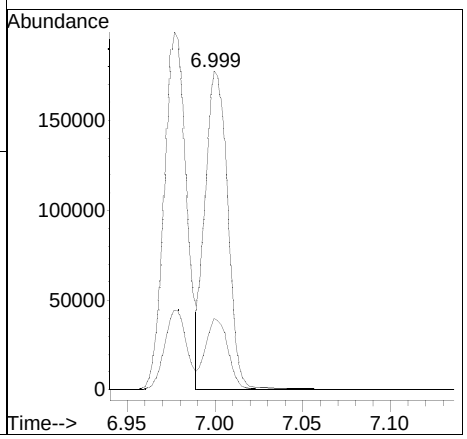


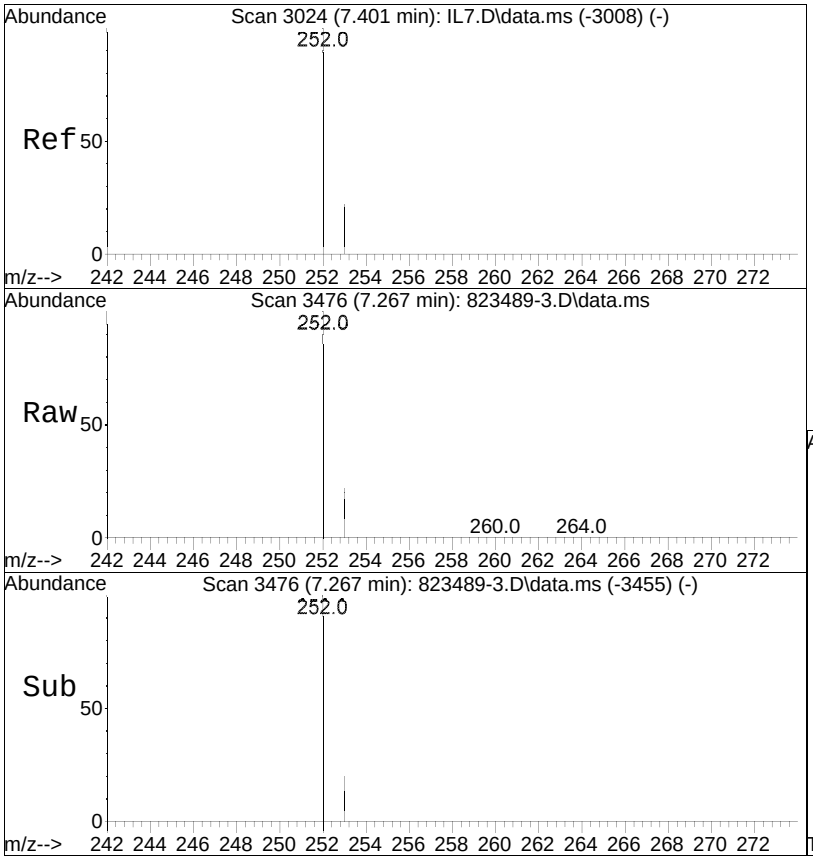


#38
Benzo[k]fluoranthene
Concen: 2630.75 ng/ml
RT: 6.999 min Scan# 3345
Delta R.T. -0.060 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:252 Resp: 159162

Ion	Ratio	Lower	Upper
252	100		
253	22.1	17.4	26.2

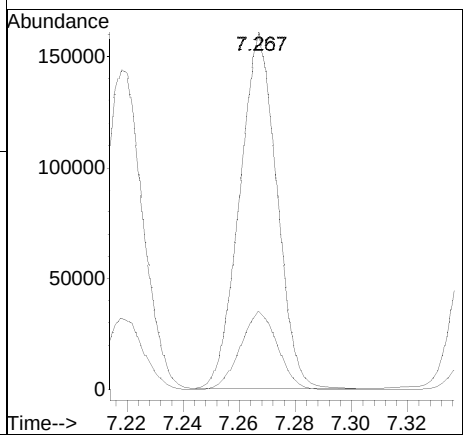


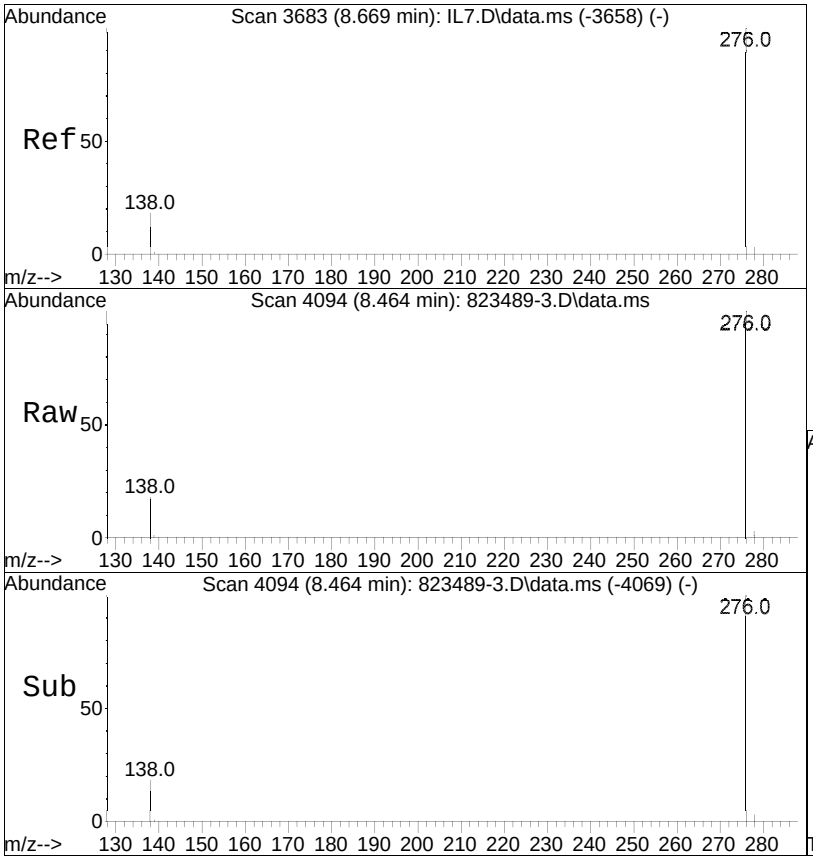


#39
Benzo[a]pyrene
Concen: 2681.99 ng/ml
RT: 7.267 min Scan# 3476
Delta R.T. -0.058 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:252 Resp: 146451

Ion	Ratio	Lower	Upper
252	100		
253	21.9	17.4	26.0

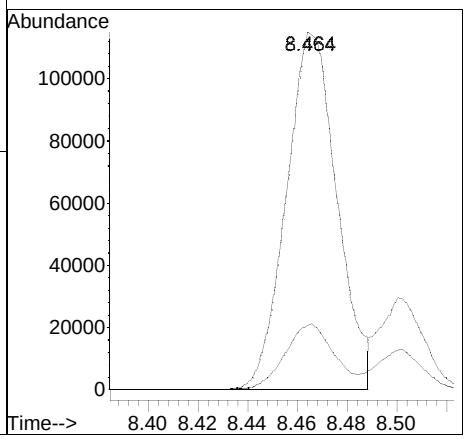


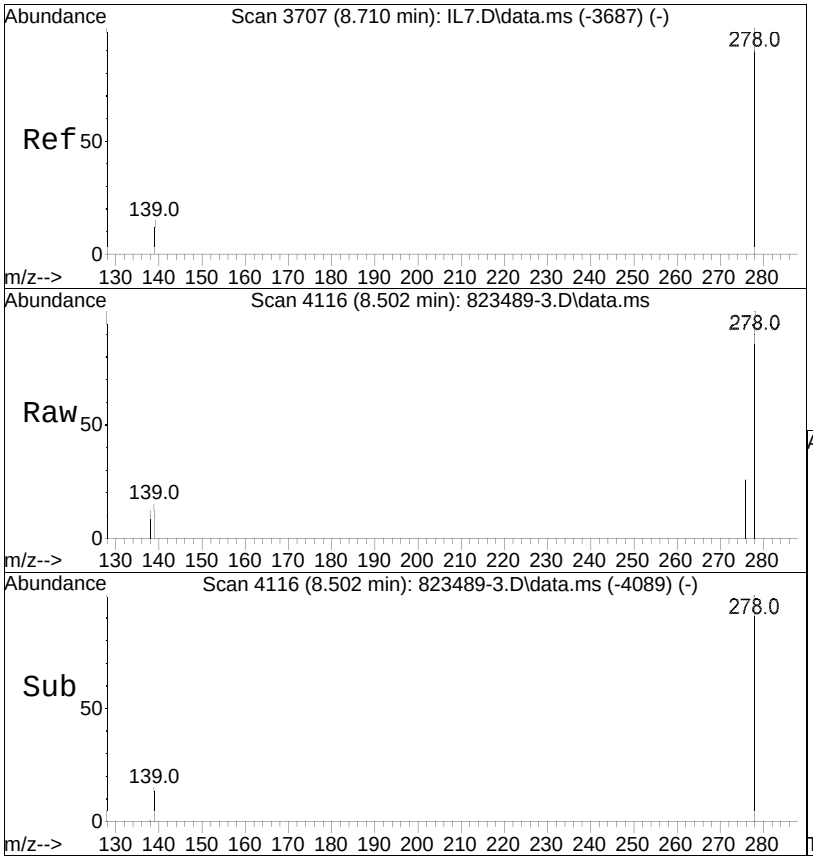


#40
Indeno[1,2,3-cd]pyrene
Concen: 2572.38 ng/ml
RT: 8.464 min Scan# 4094
Delta R.T. -0.057 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:276 Resp: 161098

Ion	Ratio	Lower	Upper
276	100		
138	18.0	14.8	22.2

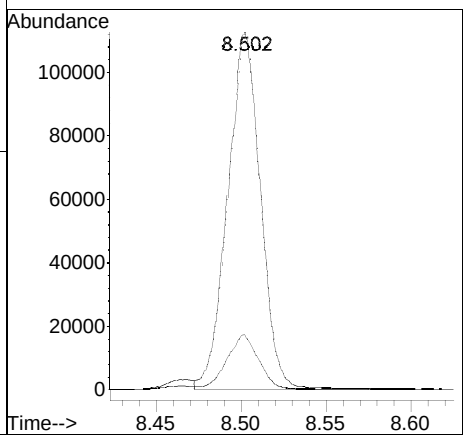


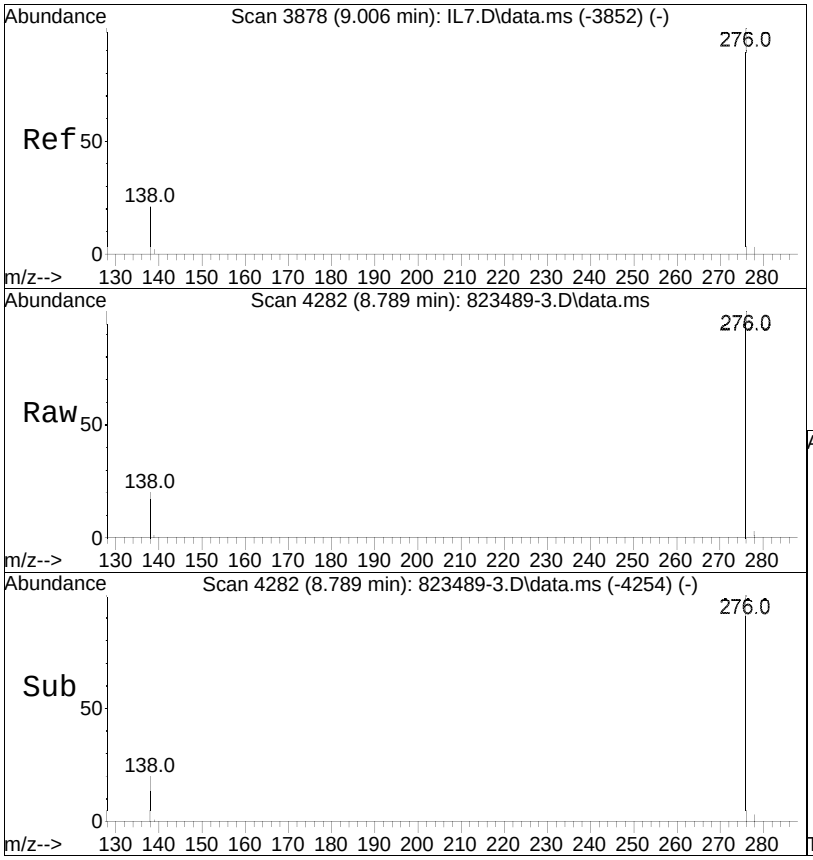


#41
Dibenzo[a,h]anthracene
Concen: 2519.09 ng/ml M3
RT: 8.502 min Scan# 4116
Delta R.T. -0.054 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:278 Resp: 150335

Ion	Ratio	Lower	Upper
278	100		
139	15.2	12.2	18.4

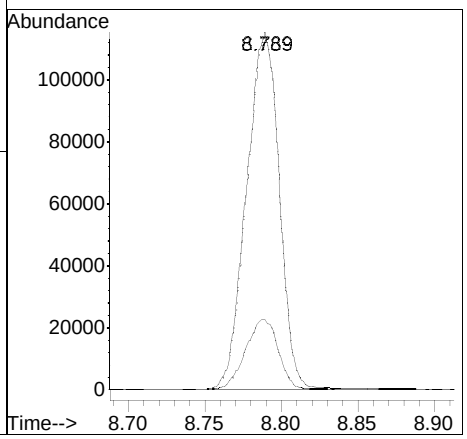




#42
Benzo[g,h,i]perylene
Concen: 2547.89 ng/ml
RT: 8.789 min Scan# 4282
Delta R.T. -0.052 min
Lab File: 823489-3.D
Acq: 07 Sep 2023 03:36 pm

Tgt Ion:276 Resp: 169368

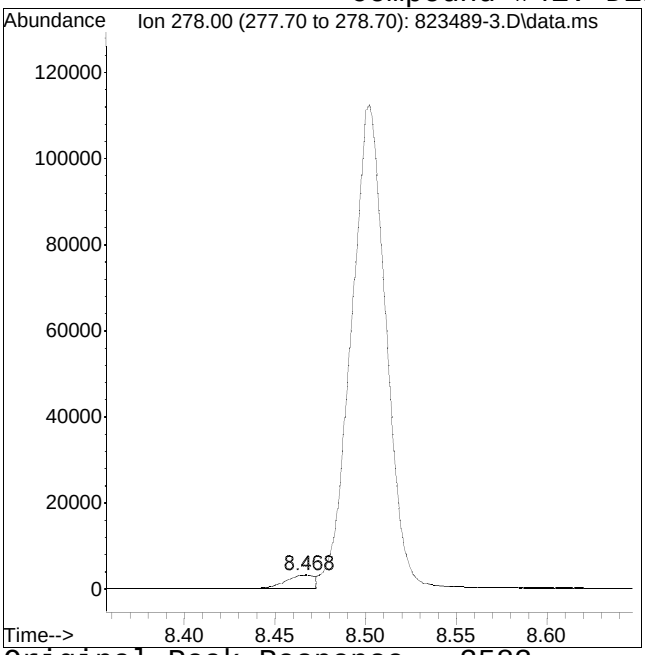
Ion	Ratio	Lower	Upper
276	100		
138	19.7	16.8	25.2

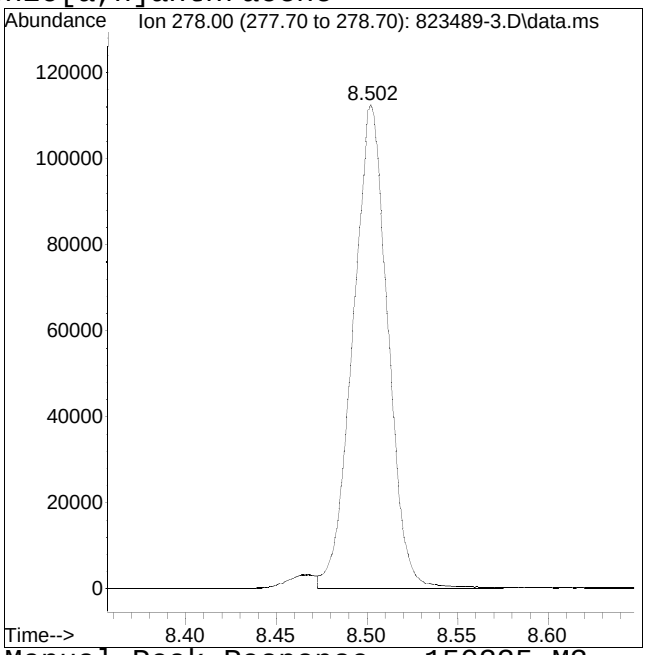


Manual Integration Report

Data Path : I:\8270SIM\sv119\230907aLVQMethod : SIM-LVI_230306_sv119.M
Data File : 823489-3.D Operator : sv119:jjw
Date Inj'd : 9/7/2023 3:36 pm Instrument : SV119
Sample : WG1823489-3,32,2,jjw Quant Date : 9/7/2023 3:51 pm

Compound #41: Dibenzo[a,h]anthracene





Original Peak Response = 3583 Manual Peak Response = 150335 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 822198-4.D
Acq On : 07 Sep 2023 04:15 pm
Operator : SV128:jjw
Sample : WG1822198-4,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 10 14:23:28 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.262	152	3659	4000.000	ng/ml	0.00
Standard Area 1 = 2265			Recovery = 161.55%			
8) Naphthalene-d8	2.930	136	14983	4000.000	ng/ml	0.00
Standard Area 1 = 8686			Recovery = 172.50%			
17) Acenaphthene-d10	3.914	164	7269	4000.000	ng/ml	0.00
Standard Area 1 = 5058			Recovery = 143.71%			
22) Phenanthrene-d10	4.763	188	13775	4000.000	ng/ml	0.00
Standard Area 1 = 12202			Recovery = 112.89%			
31) Chrysene-d12	6.333	240	9810	4000.000	ng/ml	0.00
Standard Area 1 = 11660			Recovery = 84.13%			
36) Perylene-d12	7.608	264	10203	4000.000	ng/ml	-0.01
Standard Area 1 = 12832			Recovery = 79.51%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.673	112	3586	3835.251	ng/ml	0.03
Spiked Amount 5000.000	Range 15 - 110		Recovery = 76.71%			
3) Phenol-d6	2.075	99	3847	3362.319	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 67.25%			
7) Nitrobenzene-d5	2.542	82	2222	2291.177	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 91.65%			
13) 2-Fluorobiphenyl	3.532	172	6150	2001.356	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 80.05%			
21) 2,4,6-Tribromophenol	4.363	330	1300	4259.267	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 85.19%			
30) 4-Terphenyl-d14	5.684	244	5635	1935.738	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 77.43%			
Target Compounds						Qvalue
6) Hexachloroethane	2.521	117	1701	3867.041	ng/ml	89
9) Naphthalene	2.940	128	14437	3943.691	ng/ml#	100
10) Hexachlorobutadiene	3.013	225	2538	3687.028	ng/ml	100
11) 2-Methylnaphthalene	3.325	142	9670	3957.404	ng/ml	99
14) 2-Chloronaphthalene	3.596	162	9707	3831.900	ng/ml	88
16) Acenaphthylene	3.832	152	15563	3857.793	ng/ml	100
18) Acenaphthene	3.932	153	10099	4384.748	ng/ml	99
20) Fluorene	4.226	166	10902	4337.773	ng/ml	99
24) Hexachlorobenzene	4.544	284	3374	4561.079	ng/ml	94
25) Pentachlorophenol	4.659	266	1368	2896.355	ng/ml	99

Data Path : I:\8270SIM\SV128\230907\
Data File : 822198-4.D
Acq On : 07 Sep 2023 04:15 pm
Operator : SV128:jjw
Sample : WG1822198-4,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 10 14:23:28 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.775	178	15352	4470.169	ng/ml	100
27) Anthracene	4.804	178	14675	4390.780	ng/ml	99
28) Fluoranthene	5.460	202	15913	3988.707	ng/ml	95
29) Pyrene	5.591	202	16384	3967.352	ng/ml	100
32) Benzo[a]anthracene	6.324	228	14702	4326.439	ng/ml	100
34) Chrysene	6.349	228	13658	4512.794	ng/ml	99
37) Benzo[b]fluoranthene	7.215	252	14141	4919.085	ng/ml	100
38) Benzo[k]fluoranthene	7.240	252	14197	5336.418	ng/ml	100
39) Benzo[a]pyrene	7.545	252	11711	4743.356	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.908	276	12217	4944.535	ng/ml	95
41) Dibenzo[a,h]anthracene	8.956	278	13135M4	5523.004	ng/ml	
42) Benzo[g,h,i]perylene	9.275	276	13394	5292.999	ng/ml	96

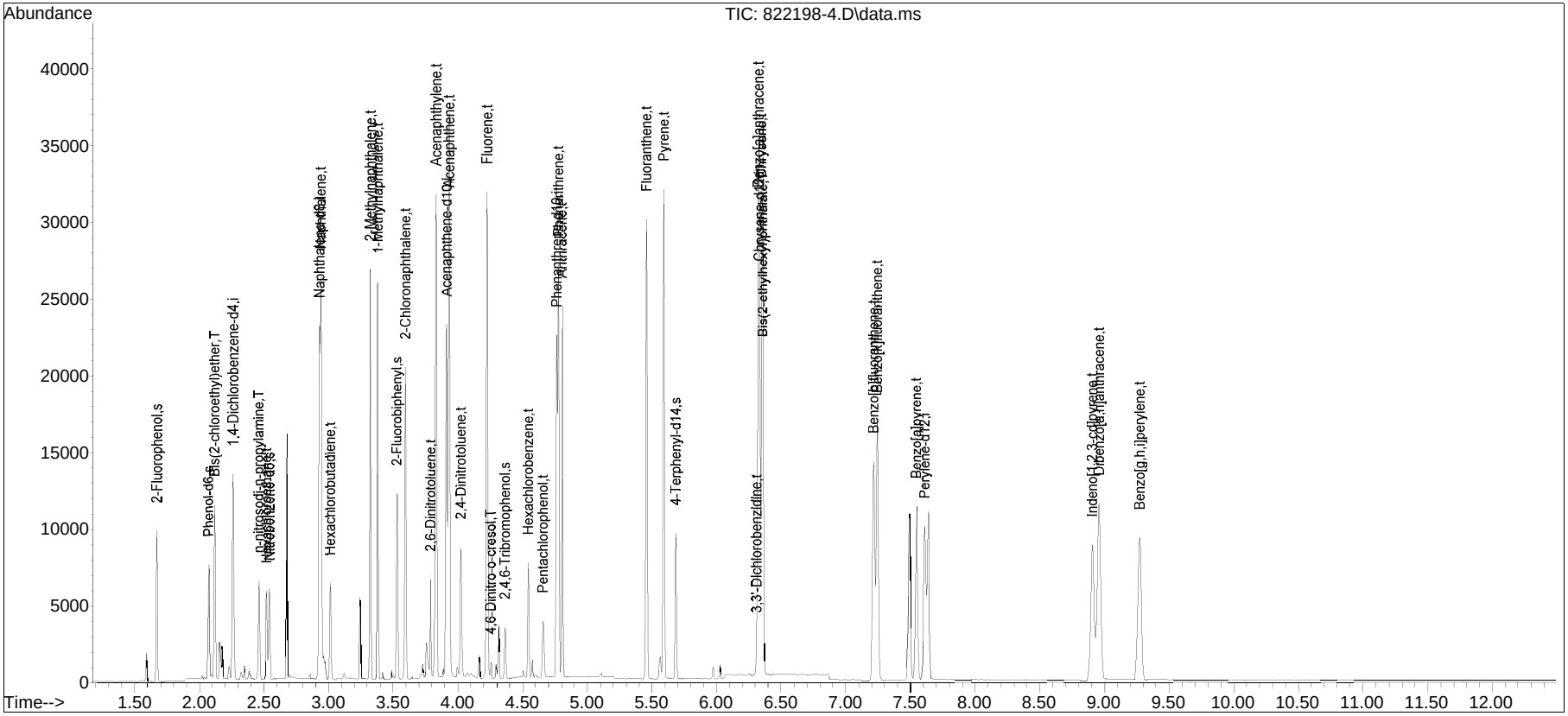
(#) = qualifier out of range (m) = manual integration (+) = signals summed

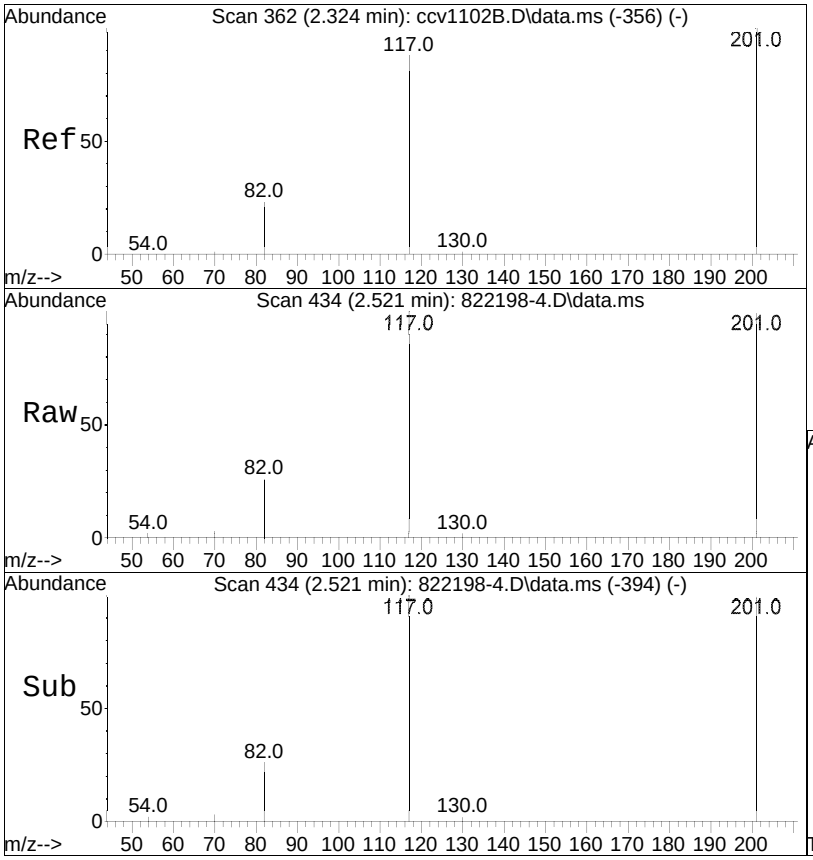
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 822198-4.D
Acq On : 07 Sep 2023 04:15 pm
Operator : SV128:jjw
Sample : WG1822198-4,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 28 Sample Multiplier: 1

Quant Time: Sep 10 14:23:28 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listedv0907a.D•

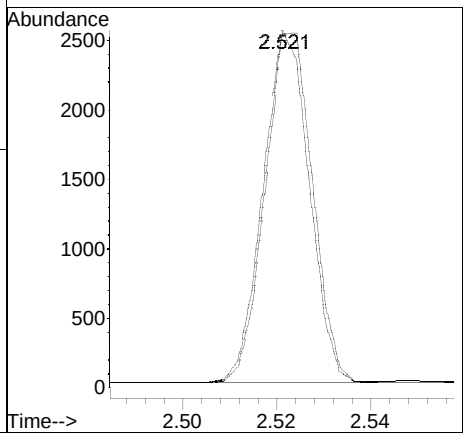


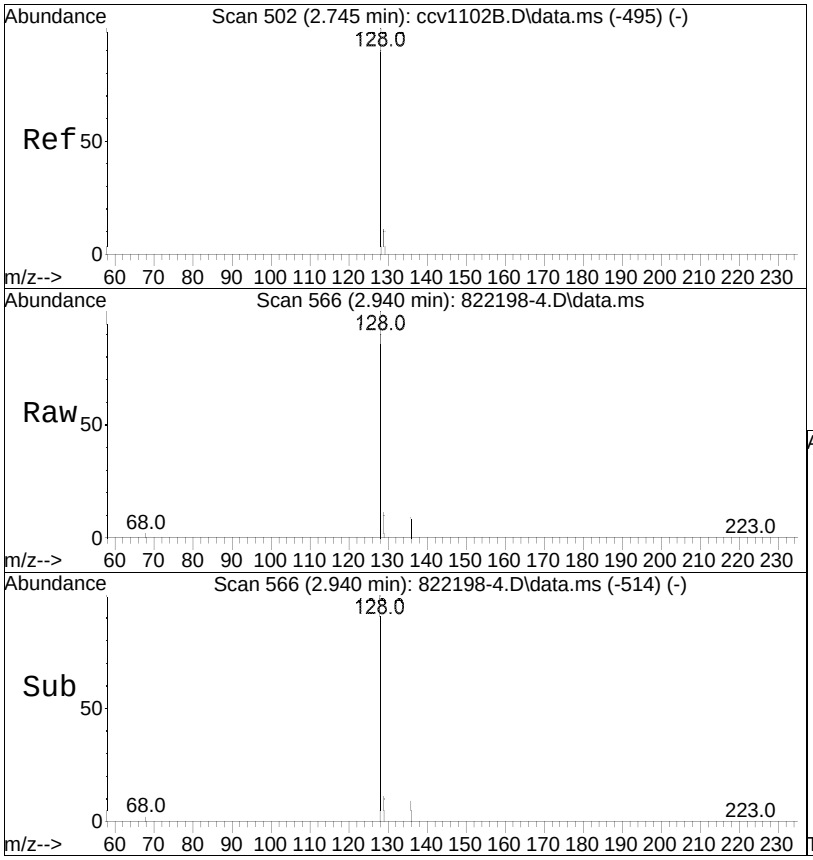


#6
Hexachloroethane
Concen: 3867.04 ng/ml
RT: 2.521 min Scan# 434
Delta R.T. 0.002 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:117 Resp: 1701

Ion	Ratio	Lower	Upper
117	100		
201	102.5	91.5	137.3

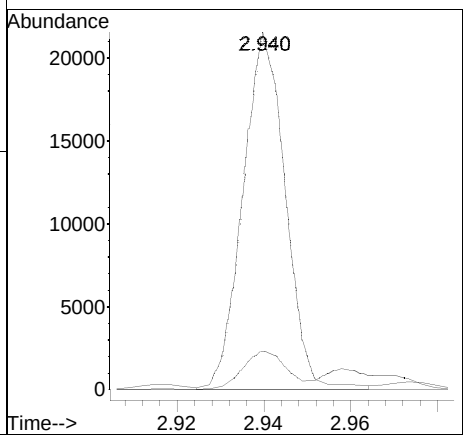


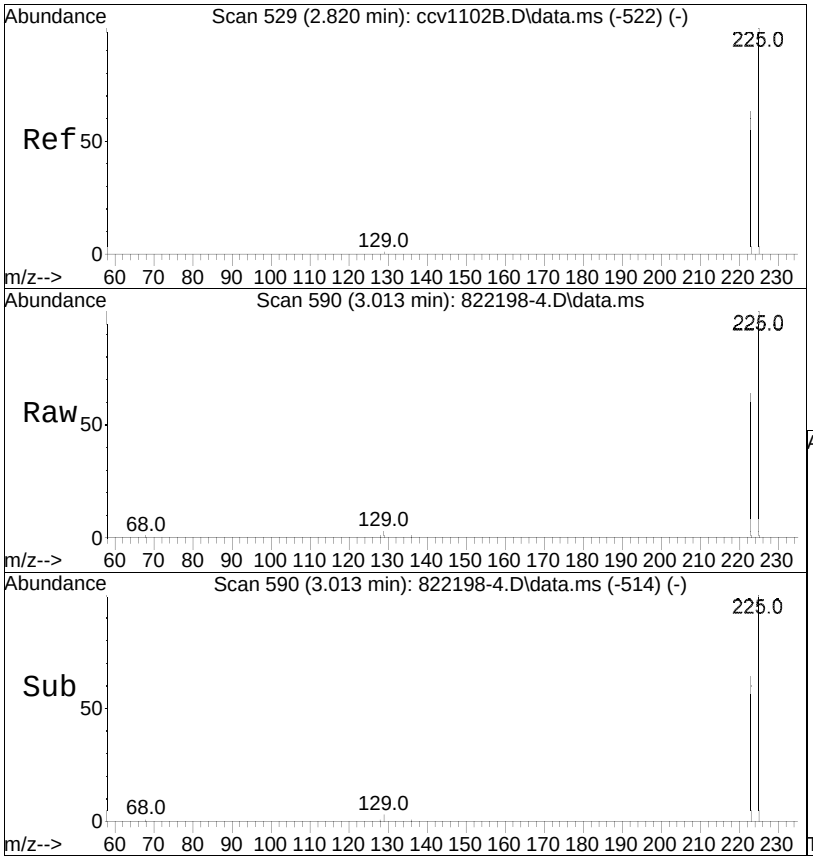


#9
Naphthalene
Concen: 3943.69 ng/ml
RT: 2.940 min Scan# 566
Delta R.T. -0.001 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:128 Resp: 14437

Ion	Ratio	Lower	Upper
128	100		
129	10.9	8.8	13.2
127	0.0	0.0	0.0

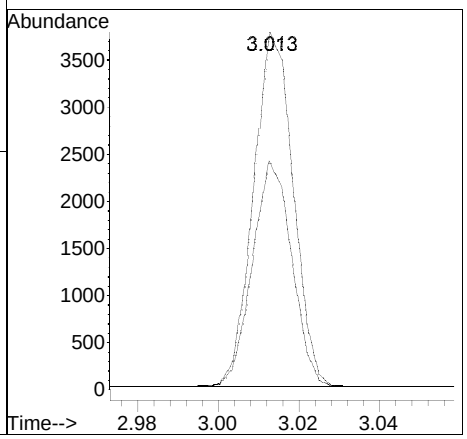


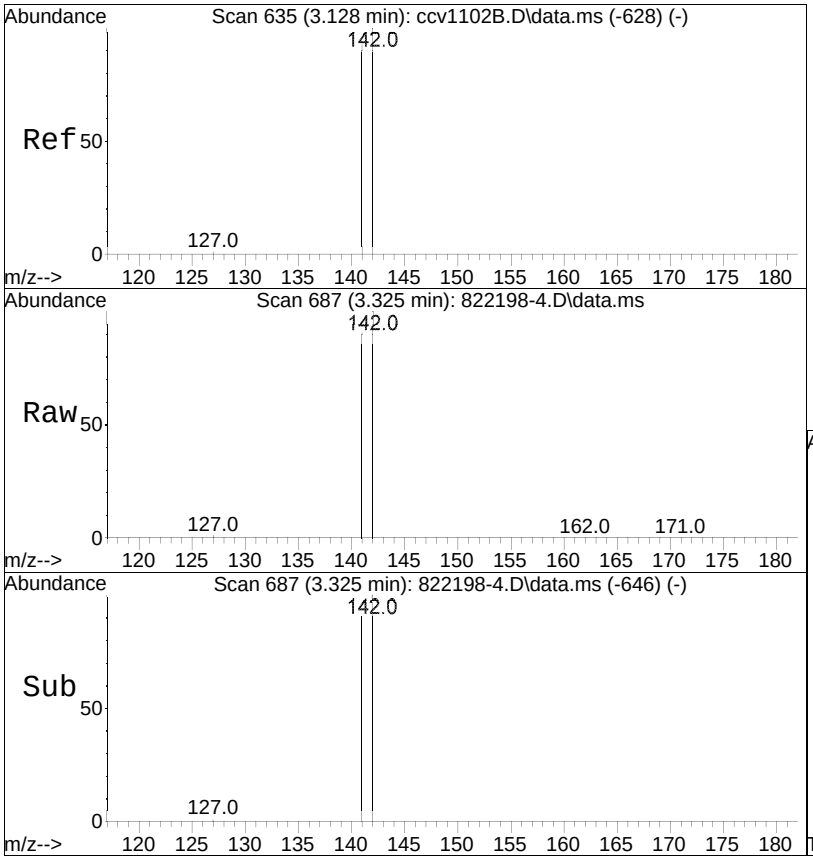


#10
Hexachlorobutadiene
Concen: 3687.03 ng/ml
RT: 3.013 min Scan# 590
Delta R.T. -0.001 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:225 Resp: 2538

Ion	Ratio	Lower	Upper
225	100		
223	63.0	50.6	75.8

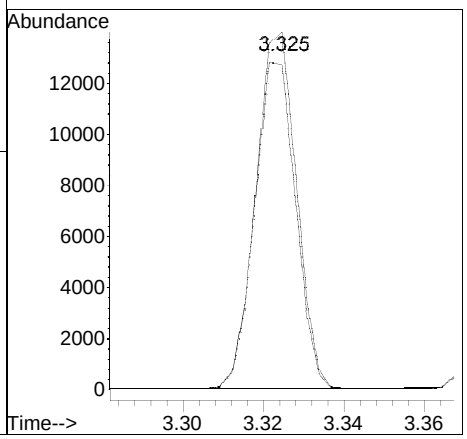


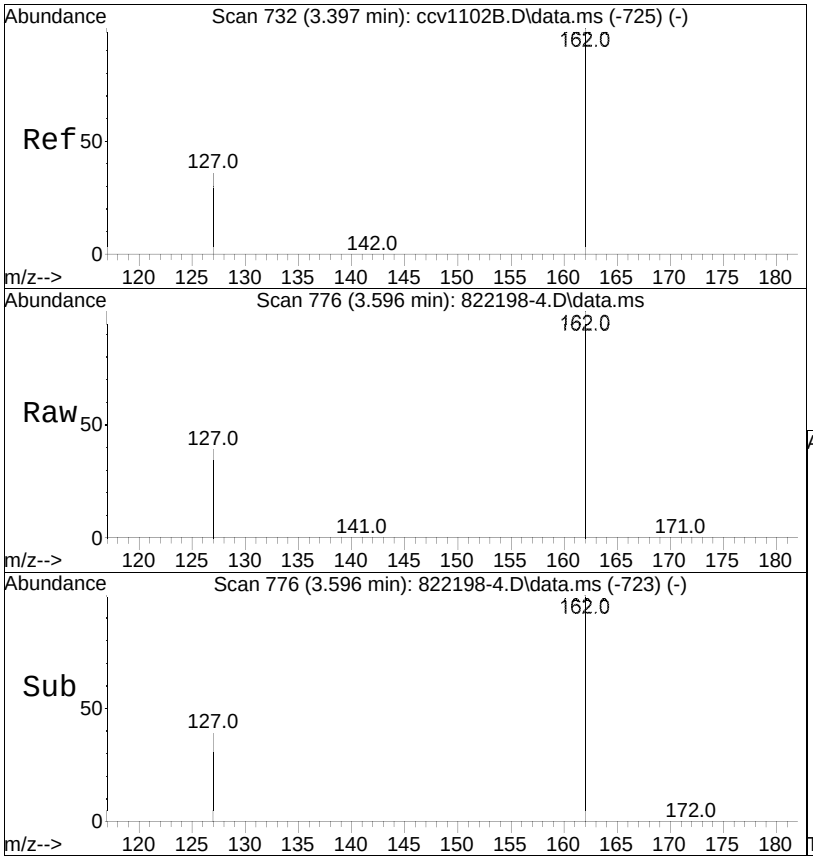


#11
2-Methylnaphthalene
Concen: 3957.40 ng/ml
RT: 3.325 min Scan# 687
Delta R.T. 0.002 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:142 Resp: 9670

Ion	Ratio	Lower	Upper
142	100		
141	92.6	75.0	112.4

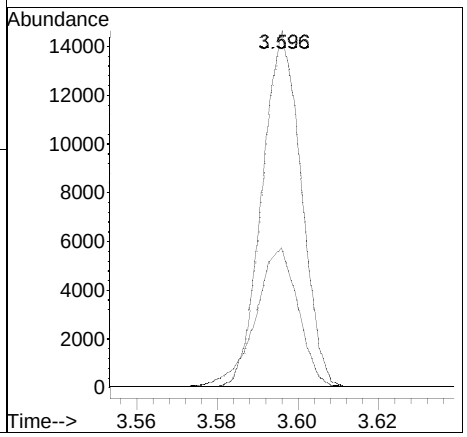


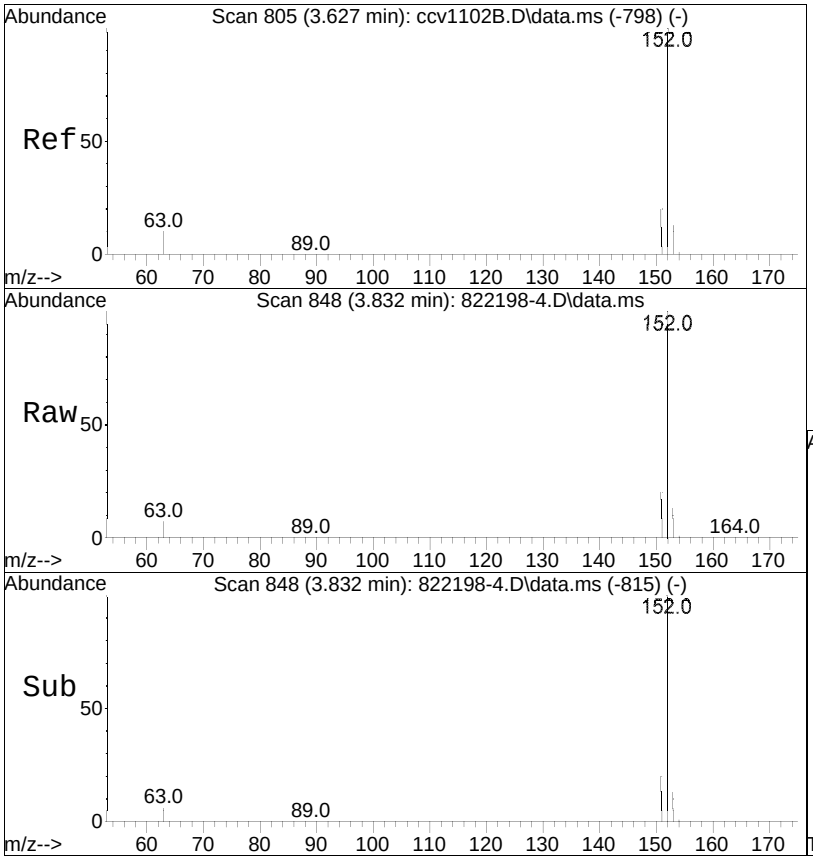


#14
2-Chloronaphthalene
Concen: 3831.90 ng/ml
RT: 3.596 min Scan# 776
Delta R.T. -0.001 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:162 Resp: 9707

Ion	Ratio	Lower	Upper
162	100		
127	42.9	28.7	43.1

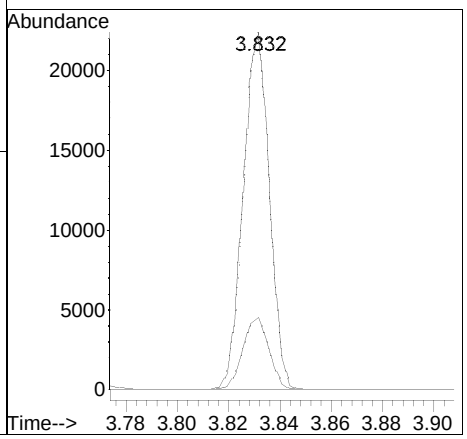


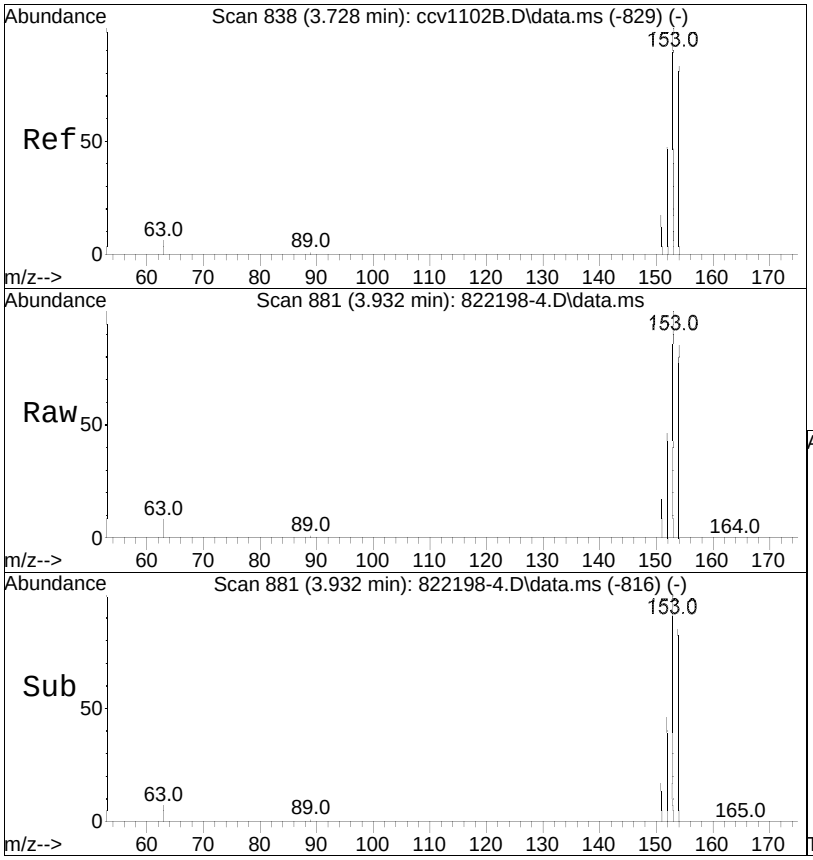


#16
Acenaphthylene
Concen: 3857.79 ng/ml
RT: 3.832 min Scan# 848
Delta R.T. 0.002 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:152 Resp: 15563

Ion	Ratio	Lower	Upper
152	100		
151	20.1	16.1	24.1

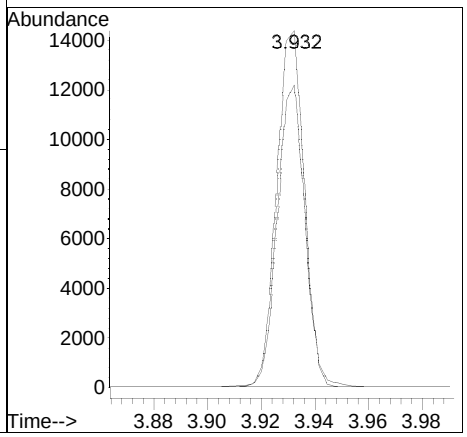


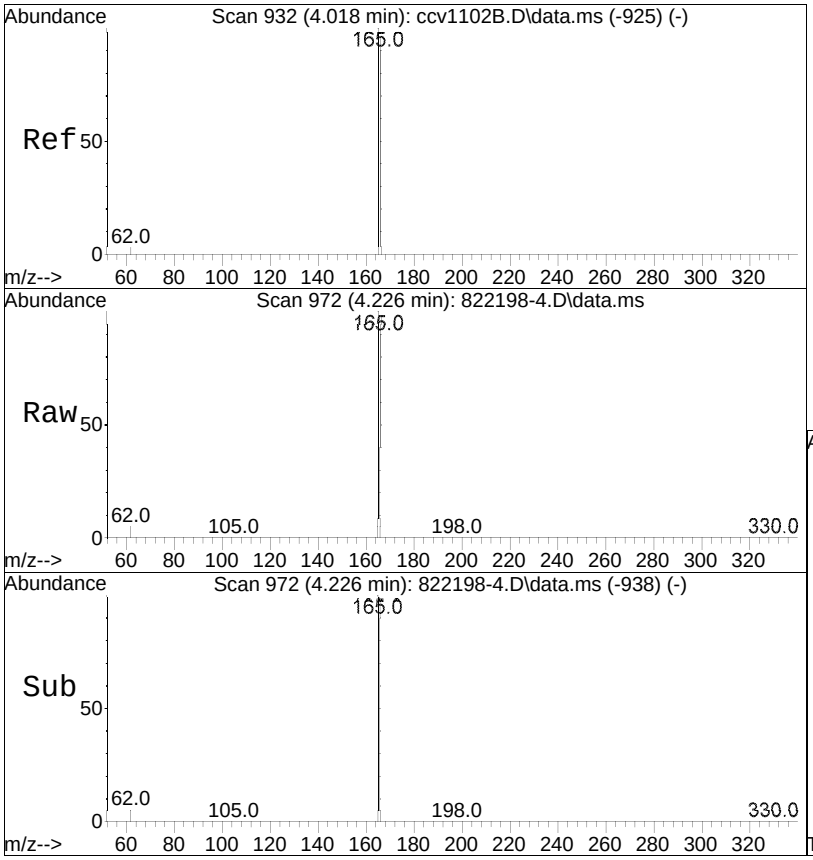


#18
Acenaphthene
Concen: 4384.75 ng/ml
RT: 3.932 min Scan# 881
Delta R.T. 0.002 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:153 Resp: 10099

Ion	Ratio	Lower	Upper
153	100		
154	85.4	67.4	101.2

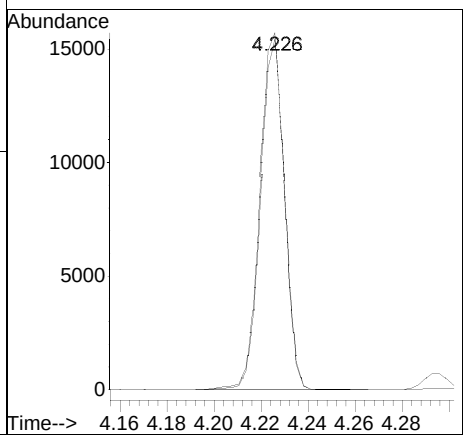


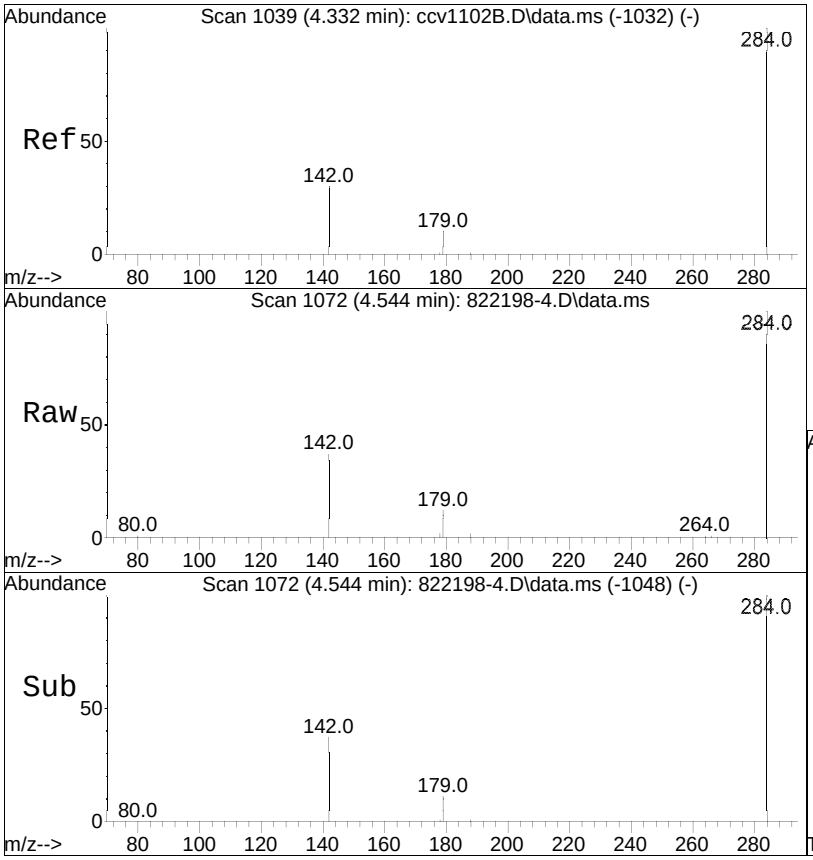


#20
Fluorene
Concen: 4337.77 ng/ml
RT: 4.226 min Scan# 972
Delta R.T. -0.001 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:166 Resp: 10902

Ion	Ratio	Lower	Upper
166	100		
165	102.4	82.7	124.1

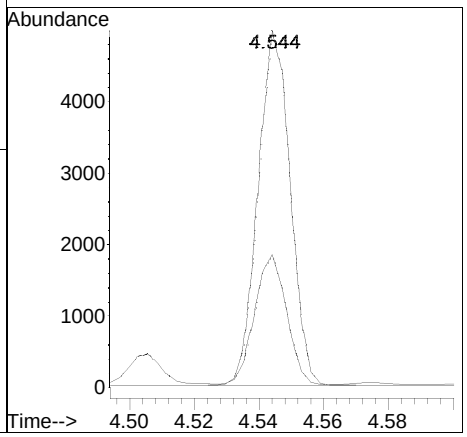


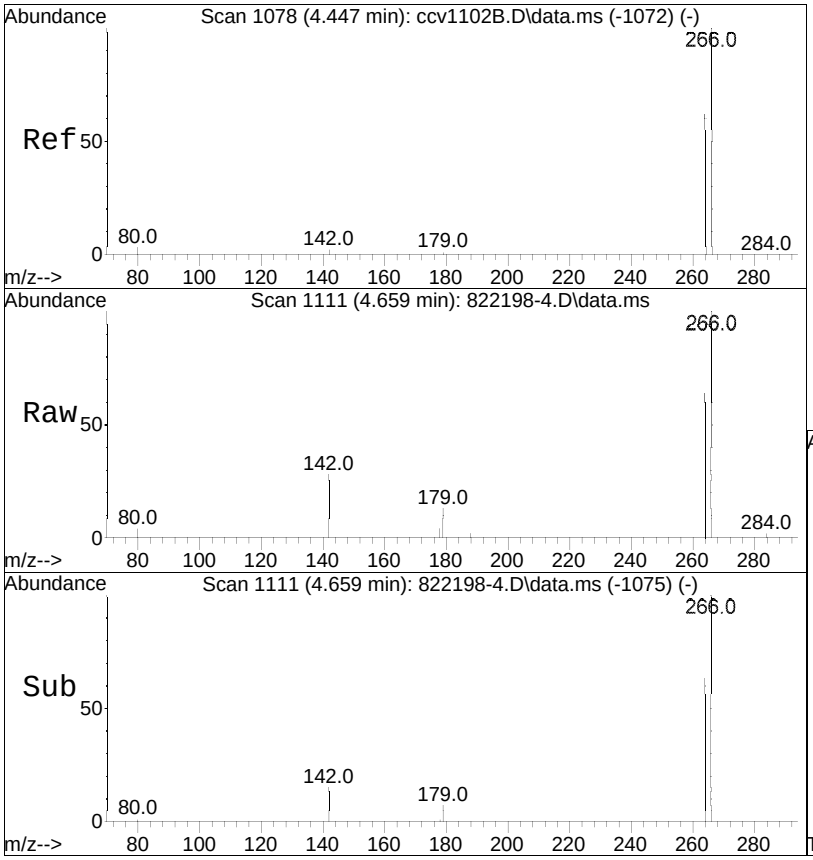


#24
Hexachlorobenzene
Concen: 4561.08 ng/ml
RT: 4.544 min Scan# 1072
Delta R.T. -0.003 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:284 Resp: 3374

Ion	Ratio	Lower	Upper
284	100		
142	36.4	26.6	40.0

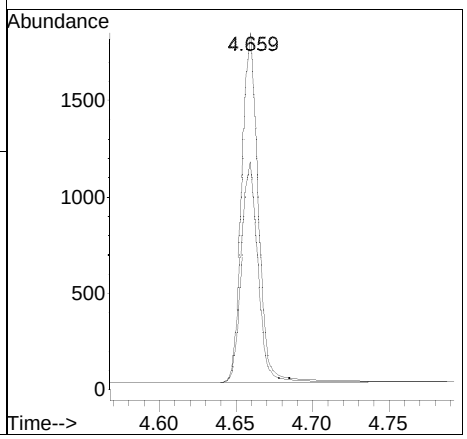


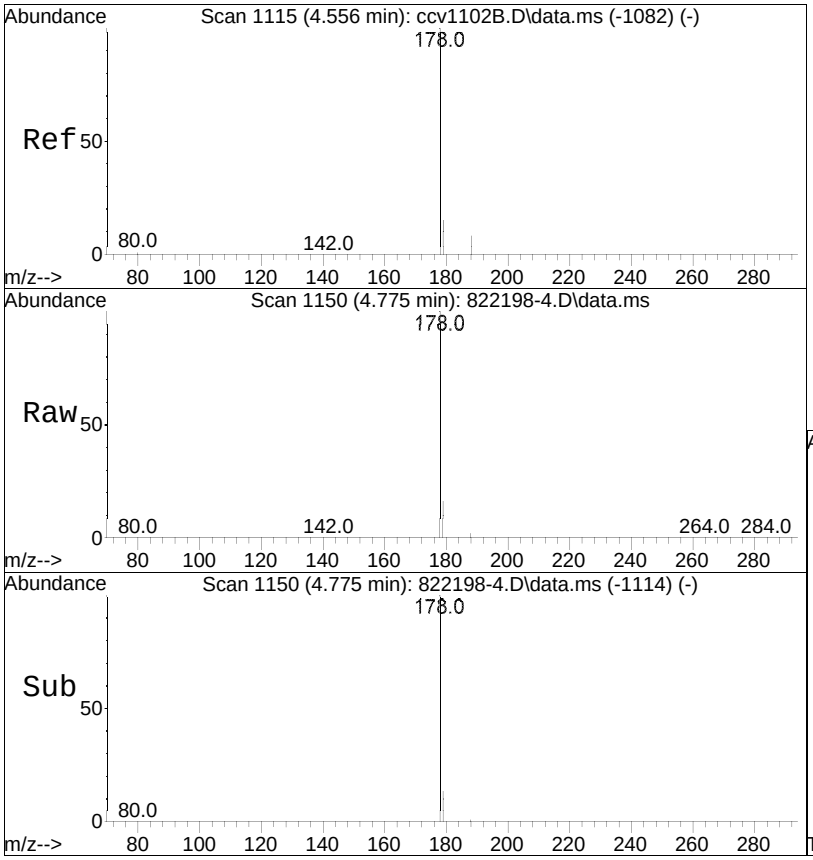


#25
Pentachlorophenol
Concen: 2896.36 ng/ml
RT: 4.659 min Scan# 1111
Delta R.T. 0.002 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:266 Resp: 1368

Ion	Ratio	Lower	Upper
266	100		
264	63.2	49.8	74.8

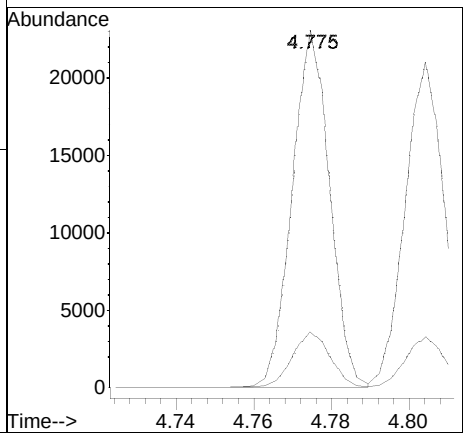


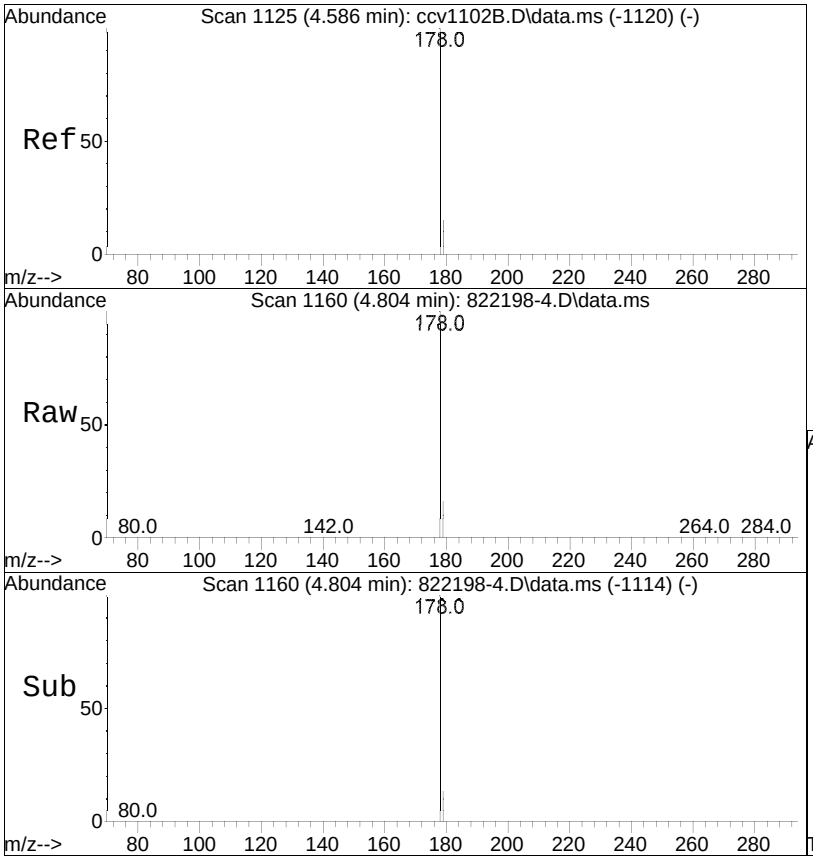


#26
Phenanthrene
Concen: 4470.17 ng/ml
RT: 4.775 min Scan# 1150
Delta R.T. -0.001 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:178 Resp: 15352

Ion	Ratio	Lower	Upper
178	100		
179	15.4	12.4	18.6

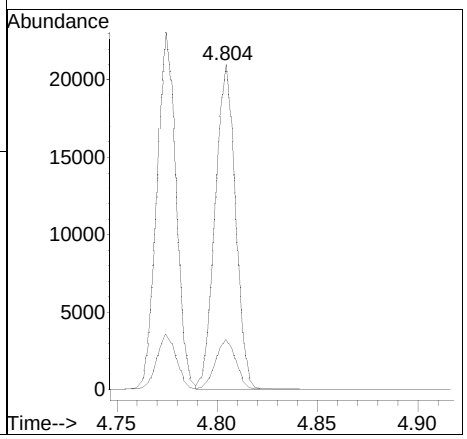


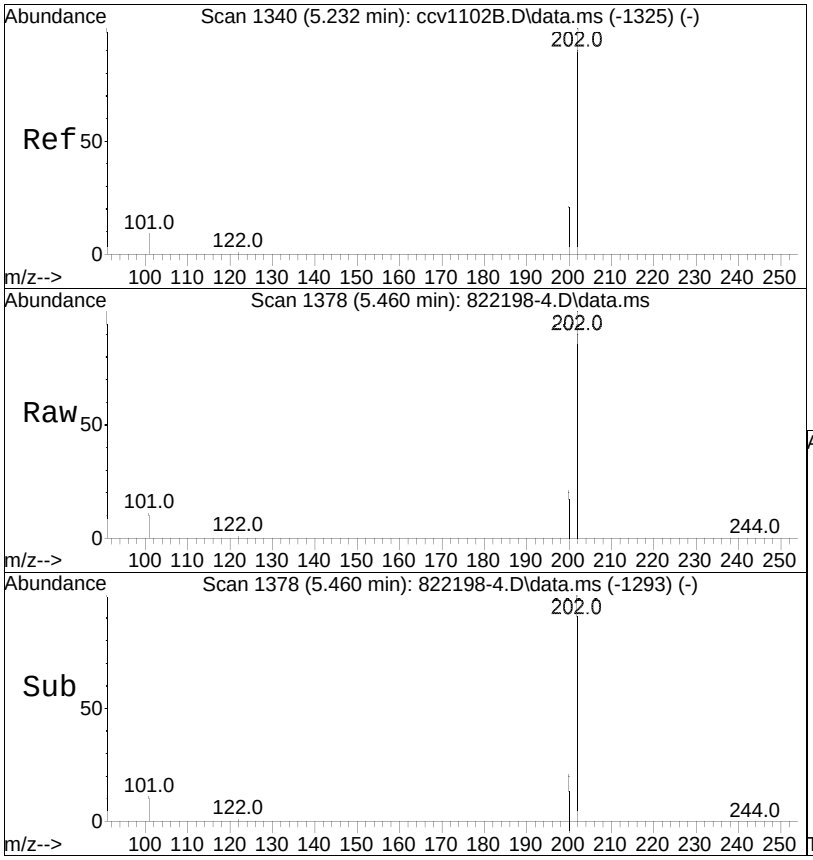


#27
Anthracene
Concen: 4390.78 ng/ml
RT: 4.804 min Scan# 1160
Delta R.T. -0.001 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:178 Resp: 14675

Ion	Ratio	Lower	Upper
178	100		
179	15.3	12.6	19.0

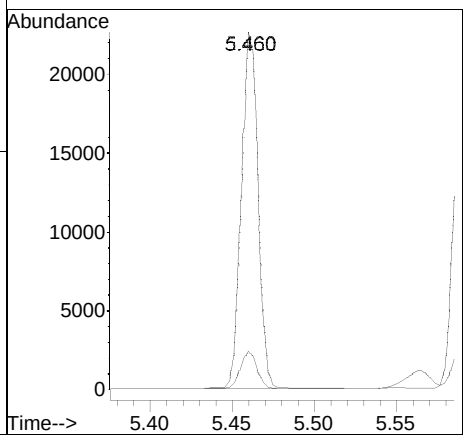


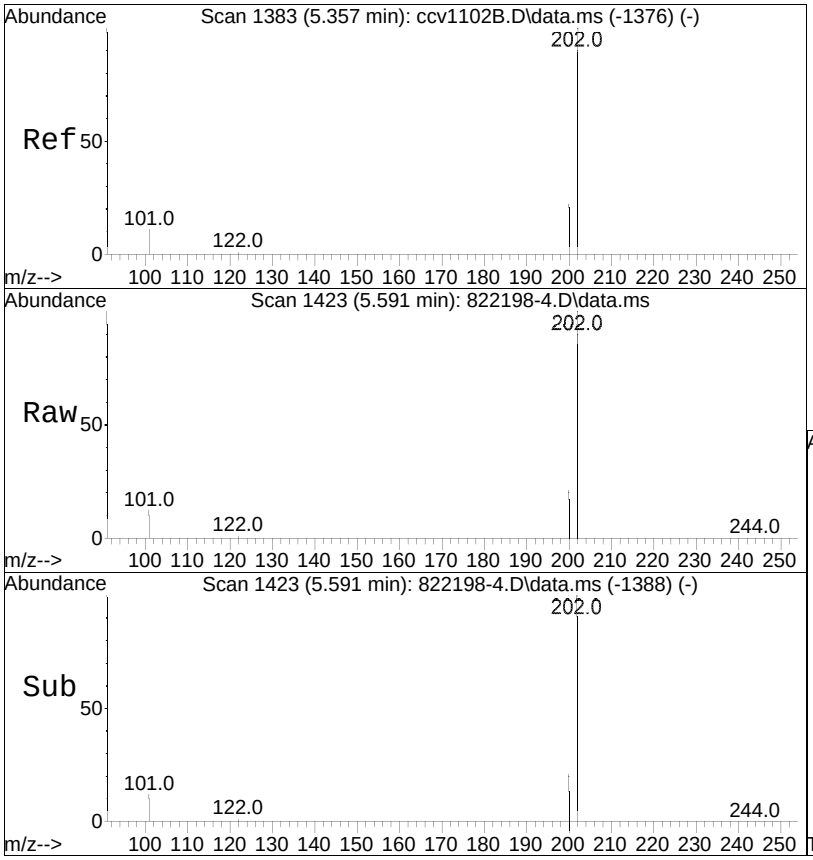


#28
Fluoranthene
Concen: 3988.71 ng/ml
RT: 5.460 min Scan# 1378
Delta R.T. -0.003 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:202 Resp: 15913

Ion	Ratio	Lower	Upper
202	100		
101	10.5	7.0	10.6

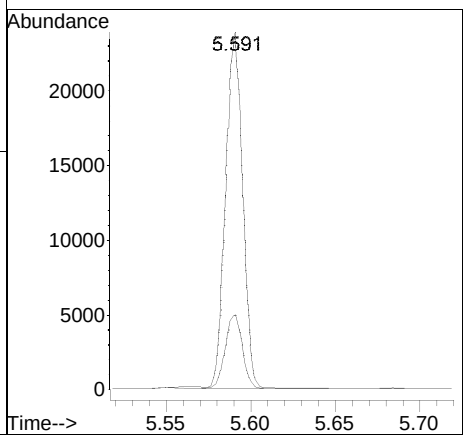


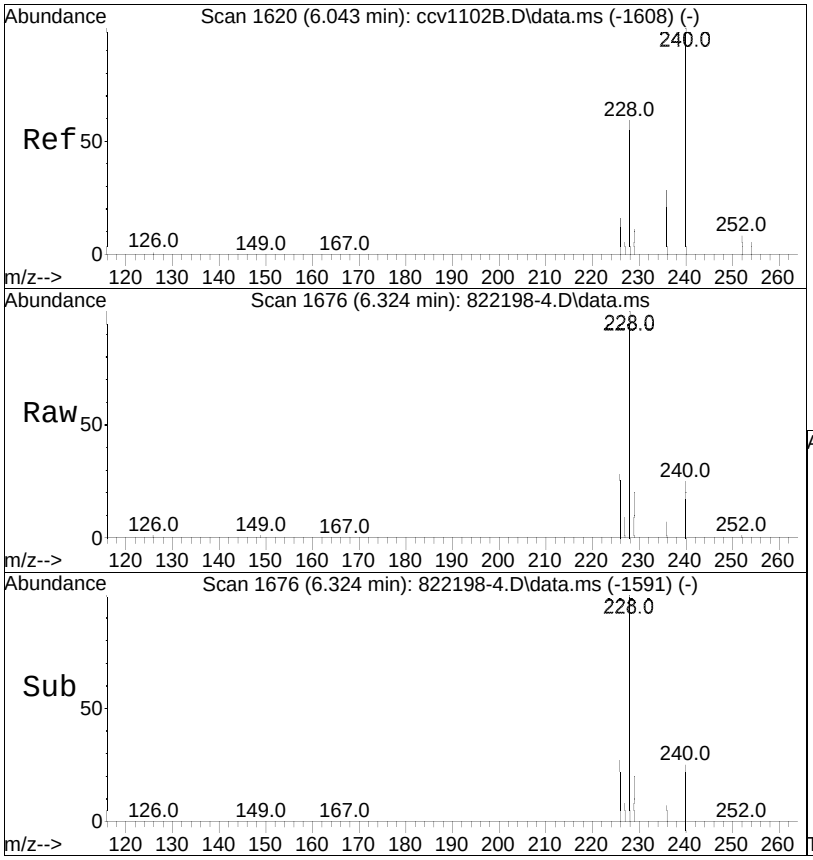


#29
Pyrene
Concen: 3967.35 ng/ml
RT: 5.591 min Scan# 1423
Delta R.T. -0.003 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:202 Resp: 16384

Ion	Ratio	Lower	Upper
202	100		
200	21.4	17.0	25.4

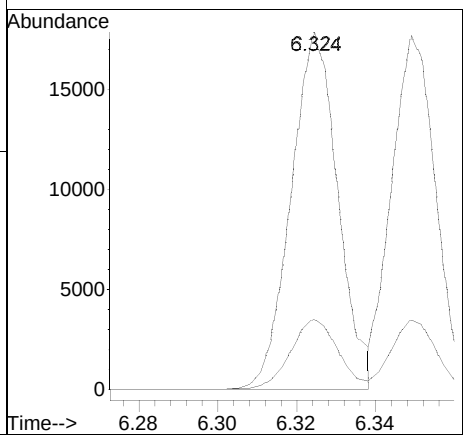


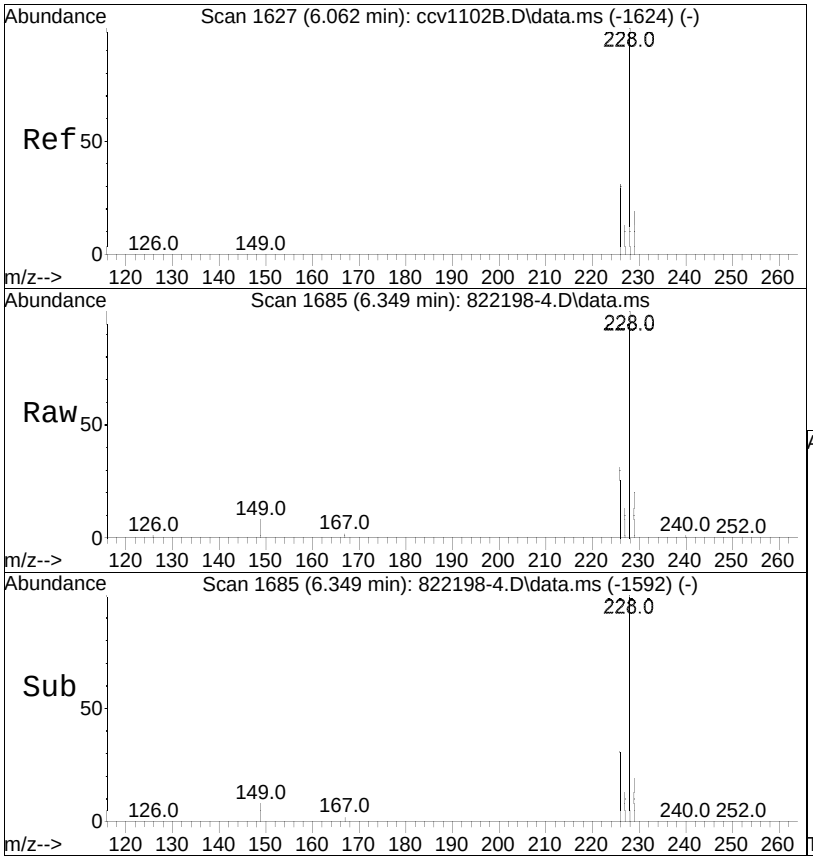


#32
Benzo[a]anthracene
Concen: 4326.44 ng/ml
RT: 6.324 min Scan# 1676
Delta R.T. -0.005 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:228 Resp: 14702

Ion	Ratio	Lower	Upper
228	100		
229	19.6	15.7	23.5

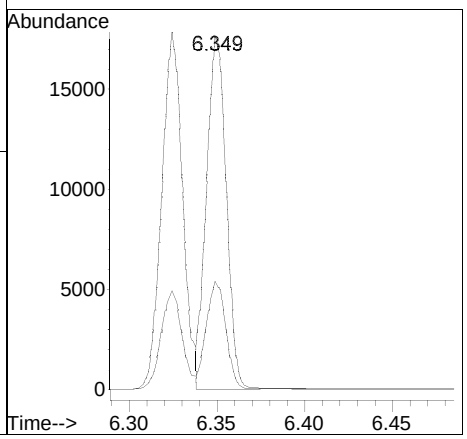


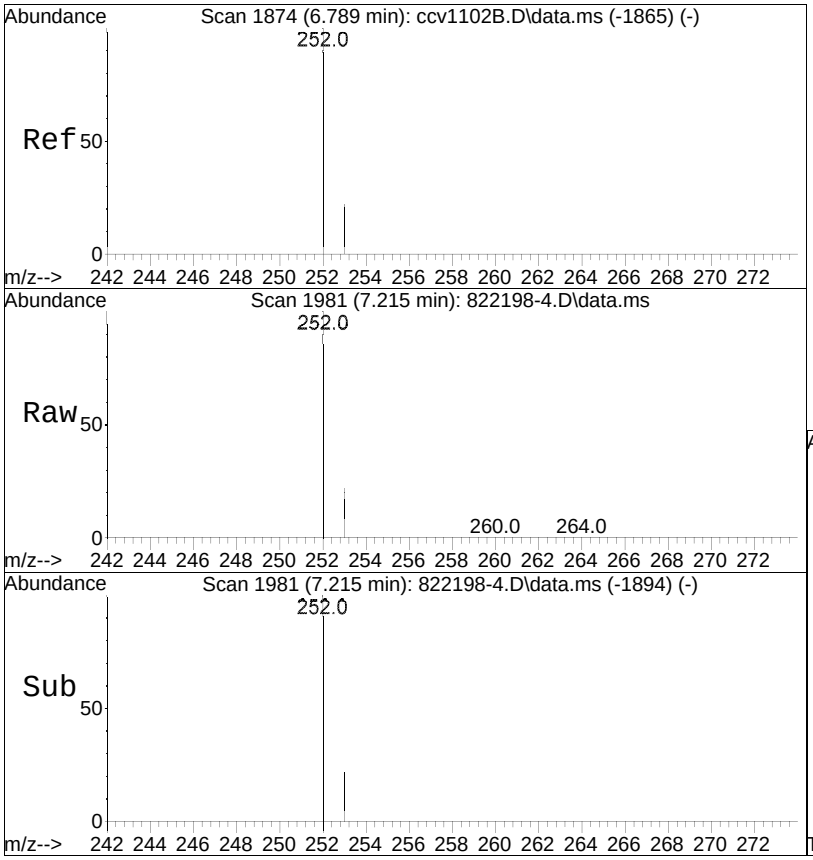


#34
Chrysene
Concen: 4512.79 ng/ml
RT: 6.349 min Scan# 1685
Delta R.T. -0.005 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:228 Resp: 13658

Ion	Ratio	Lower	Upper
228	100		
226	30.3	24.6	37.0

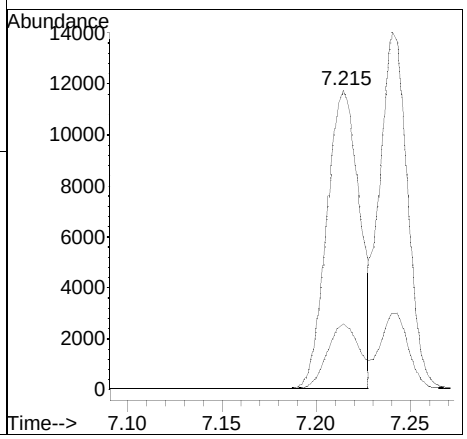


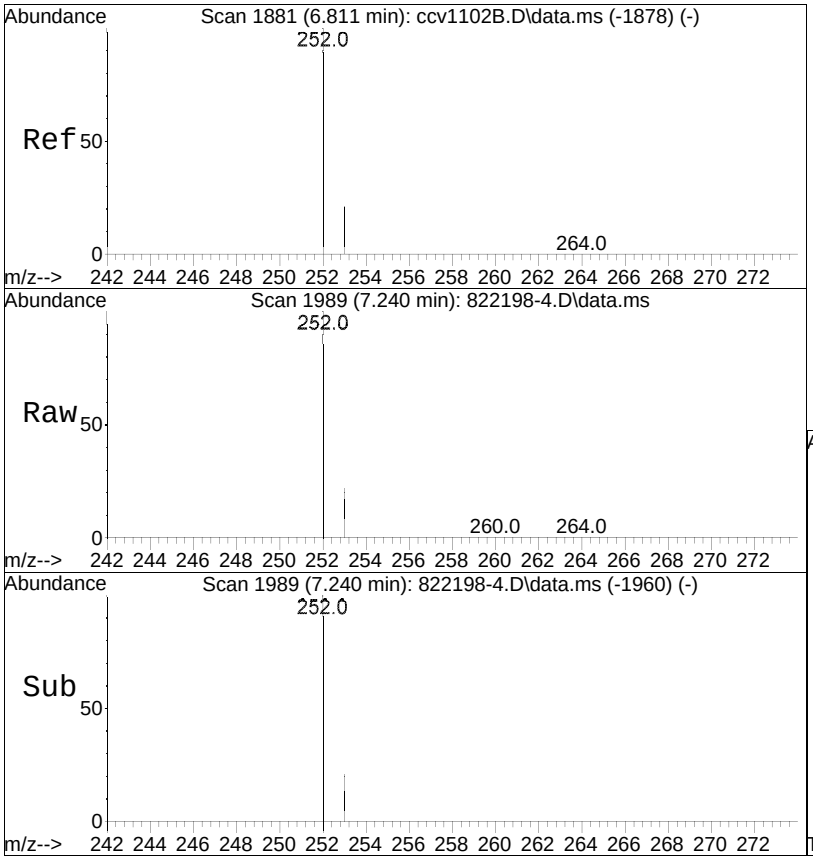


#37
Benzo[b]fluoranthene
Concen: 4919.09 ng/ml
RT: 7.215 min Scan# 1981
Delta R.T. -0.005 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:252 Resp: 14141

Ion	Ratio	Lower	Upper
252	100		
253	21.5	17.4	26.0

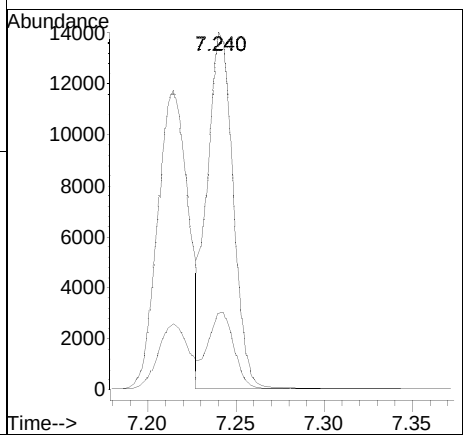


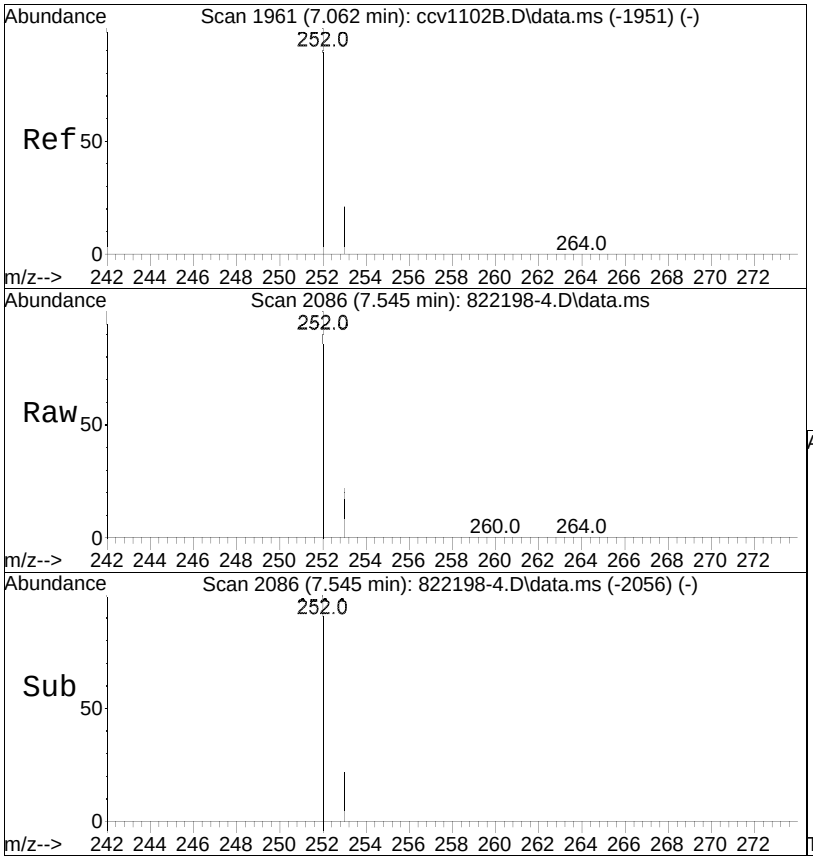


#38
Benzo[k]fluoranthene
Concen: 5336.42 ng/ml
RT: 7.240 min Scan# 1989
Delta R.T. -0.009 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:252 Resp: 14197

Ion	Ratio	Lower	Upper
252	100		
253	21.8	17.4	26.2

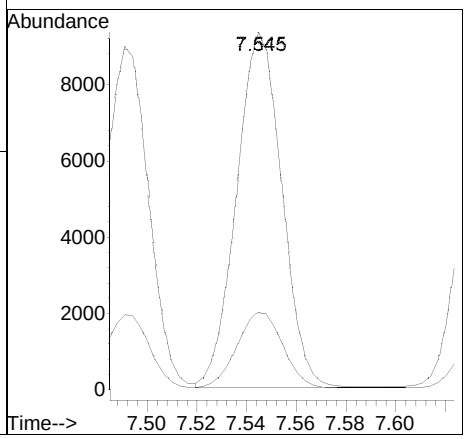


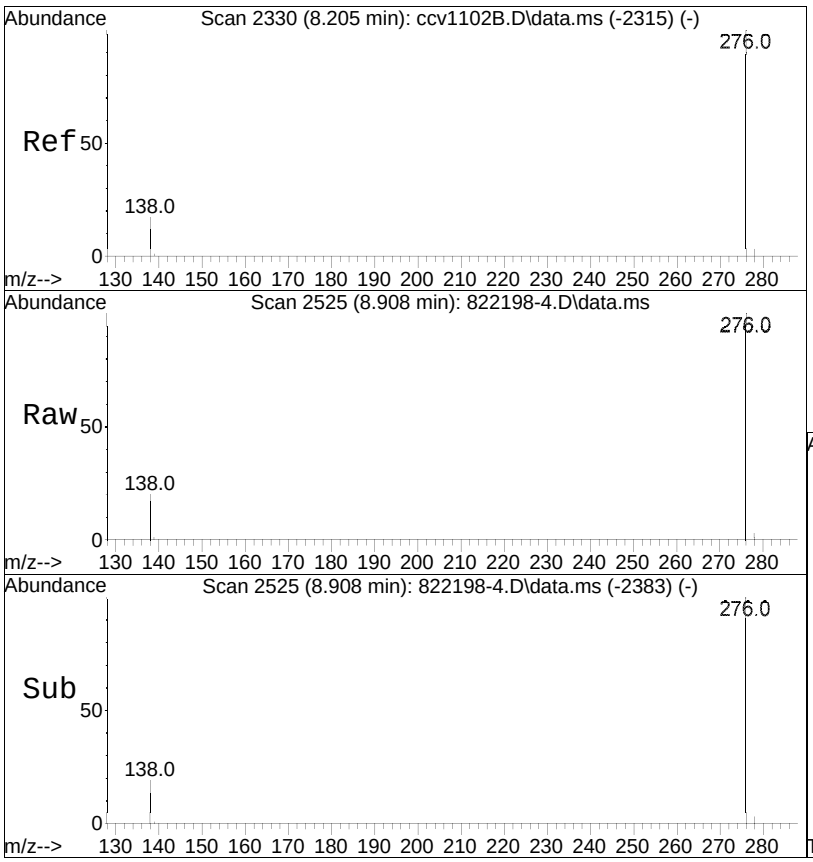


#39
Benzo[a]pyrene
Concen: 4743.36 ng/ml
RT: 7.545 min Scan# 2086
Delta R.T. -0.005 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:252 Resp: 11711

Ion	Ratio	Lower	Upper
252	100		
253	21.6	17.3	25.9

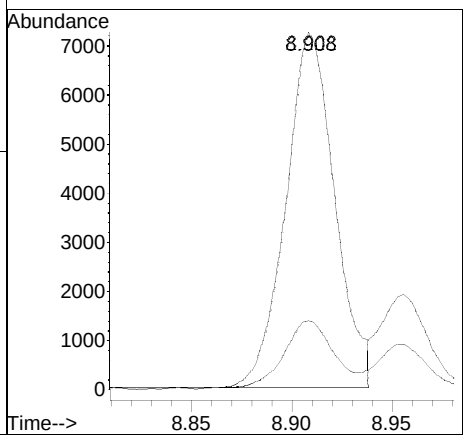


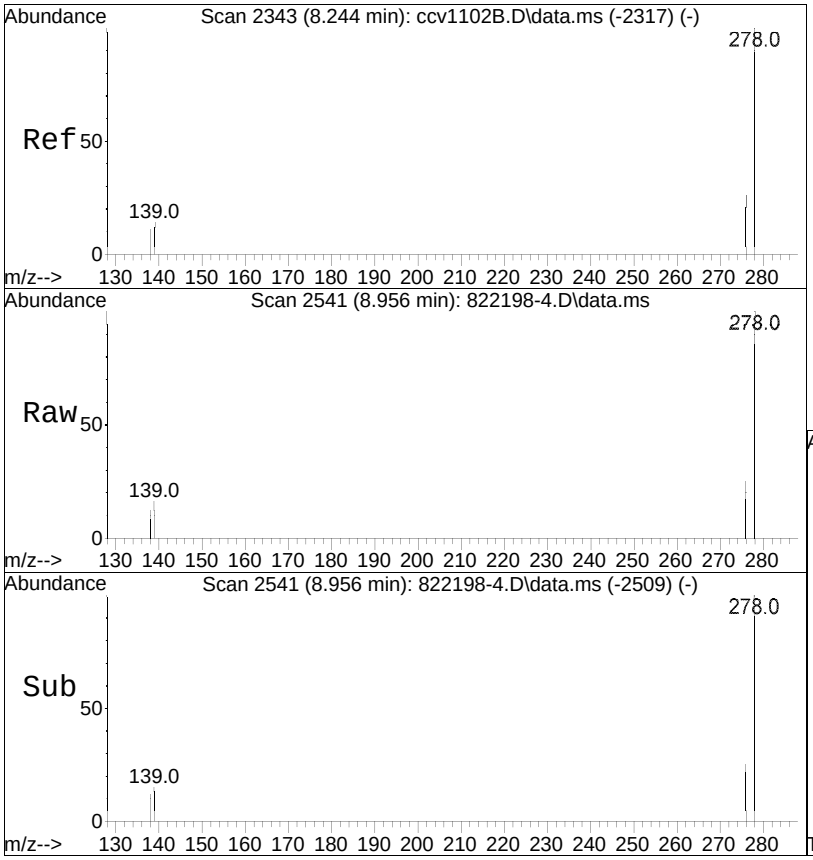


#40
Indeno[1,2,3-cd]pyrene
Concen: 4944.54 ng/ml
RT: 8.908 min Scan# 2525
Delta R.T. -0.008 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:276 Resp: 12217

Ion	Ratio	Lower	Upper
276	100		
138	19.4	13.8	20.6

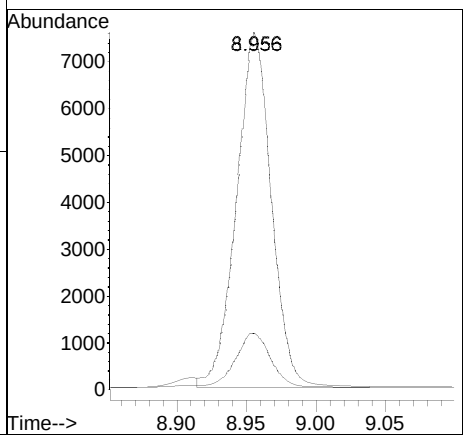


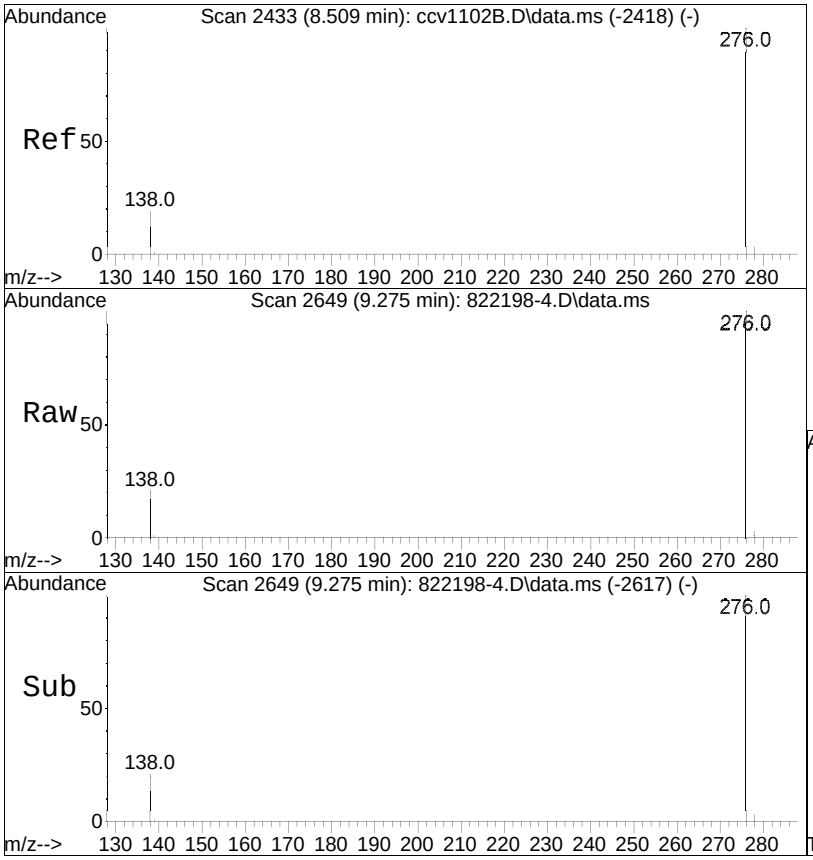


#41
Dibenzo[a,h]anthracene
Concen: 5523.00 ng/ml M4
RT: 8.956 min Scan# 2541
Delta R.T. -0.005 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:278 Resp: 13135

Ion	Ratio	Lower	Upper
278	100		
139	15.4	11.2	16.8

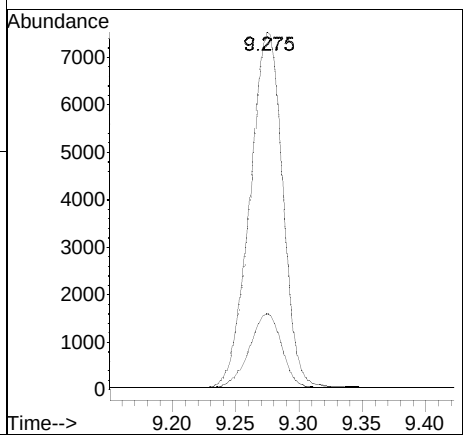




#42
Benzo[g,h,i]perylene
Concen: 5293.00 ng/ml
RT: 9.275 min Scan# 2649
Delta R.T. -0.005 min
Lab File: 822198-4.D
Acq: 07 Sep 2023 04:15 pm

Tgt Ion:276 Resp: 13394

Ion	Ratio	Lower	Upper
276	100		
138	20.8	15.0	22.6

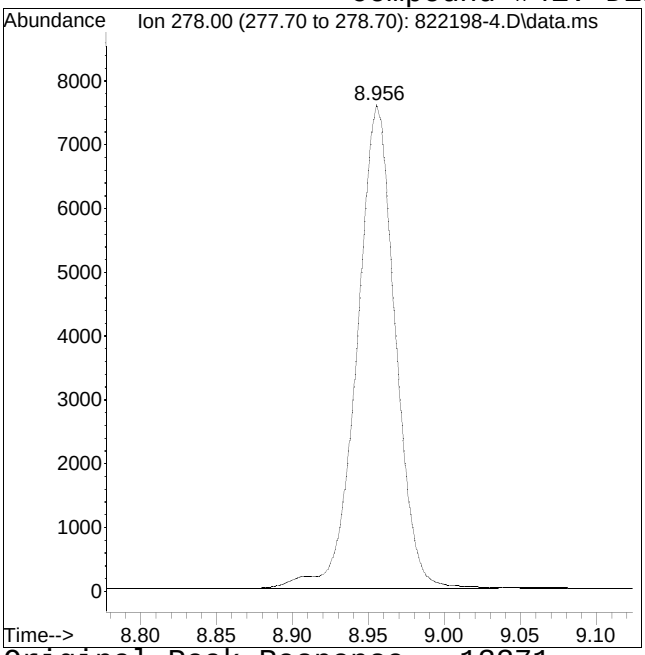


Manual Integration Report

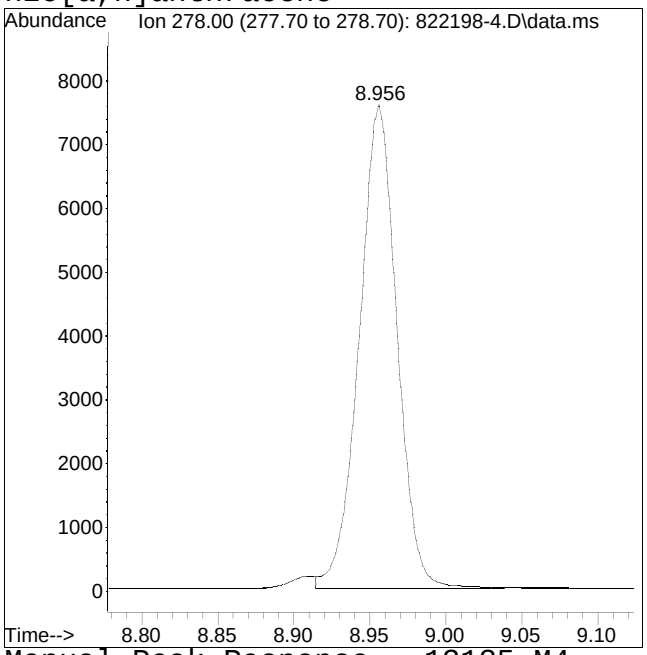
Data Path : I:\8270SIM\SV128\230907\
Data File : 822198-4.D
Date Inj'd : 9/7/2023 4:15 pm
Sample : WG1822198-4,32,,ah

QMethod : SIM-LVI_230831_sv128.M
Operator : SV128:jjw
Instrument : SV128
Quant Date : 9/7/2023 4:29 pm

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 13371



Manual Peak Response = 13135 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 822198-5.D
Acq On : 07 Sep 2023 04:32 pm
Operator : SV128:jjw
Sample : WG1822198-5,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 10 14:24:38 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
Internal Standards						
1) 1,4-Dichlorobenzene-d4	2.258	152	3546	4000.000	ng/ml	0.00
Standard Area 1 = 2265			Recovery = 156.56%			
8) Naphthalene-d8	2.928	136	14058	4000.000	ng/ml	0.00
Standard Area 1 = 8686			Recovery = 161.85%			
17) Acenaphthene-d10	3.911	164	6944	4000.000	ng/ml	0.00
Standard Area 1 = 5058			Recovery = 137.29%			
22) Phenanthrene-d10	4.760	188	12985	4000.000	ng/ml	0.00
Standard Area 1 = 12202			Recovery = 106.42%			
31) Chrysene-d12	6.330	240	9302	4000.000	ng/ml	0.00
Standard Area 1 = 11660			Recovery = 79.78%			
36) Perylene-d12	7.608	264	10795	4000.000	ng/ml	-0.01
Standard Area 1 = 12832			Recovery = 84.13%			
System Monitoring Compounds						
2) 2-Fluorophenol	1.665	112	2044	2255.735	ng/ml	0.02
Spiked Amount 5000.000	Range 15 - 110		Recovery = 45.11%			
3) Phenol-d6	2.072	99	2273	2049.934	ng/ml	0.01
Spiked Amount 5000.000	Range 15 - 110		Recovery = 41.00%			
7) Nitrobenzene-d5	2.543	82	1303	1386.381	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 55.46%			
13) 2-Fluorobiphenyl	3.529	172	3676	1274.970	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 51.00%			
21) 2,4,6-Tribromophenol	4.363	330	697	2390.503	ng/ml	0.00
Spiked Amount 5000.000	Range 15 - 110		Recovery = 47.81%			
30) 4-Terphenyl-d14	5.684	244	3419	1245.953	ng/ml	0.00
Spiked Amount 2500.000	Range 30 - 130		Recovery = 49.84%			
Target Compounds						Qvalue
6) Hexachloroethane	2.521	117	1017	2385.718	ng/ml	90
9) Naphthalene	2.940	128	8635	2513.990	ng/ml#	99
10) Hexachlorobutadiene	3.013	225	1560	2415.375	ng/ml	100
11) 2-Methylnaphthalene	3.322	142	5866	2558.593	ng/ml	99
14) 2-Chloronaphthalene	3.596	162	5971	2512.184	ng/ml	89
16) Acenaphthylene	3.832	152	9474	2502.962	ng/ml	100
18) Acenaphthene	3.930	153	6257	2843.789	ng/ml	98
20) Fluorene	4.223	166	6748	2810.611	ng/ml	99
24) Hexachlorobenzene	4.544	284	2085	2990.049	ng/ml	94
25) Pentachlorophenol	4.660	266	1139	2561.898	ng/ml	99

Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 822198-5.D
Acq On : 07 Sep 2023 04:32 pm
Operator : SV128:jjw
Sample : WG1822198-5,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 10 14:24:38 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

CCAL FILE(s) : 1 - I:\8270sim\sv128\230907\ccv0907a.D
Sub List : DEFAULT - All compounds listed

Compound	R.T.	QIon	Response	Conc	Units	Dev(Min)
26) Phenanthrene	4.775	178	9634	2975.879	ng/ml	100
27) Anthracene	4.804	178	9187	2915.996	ng/ml	99
28) Fluoranthene	5.460	202	10009	2661.463	ng/ml	96
29) Pyrene	5.588	202	10082	2589.865	ng/ml	100
32) Benzo[a]anthracene	6.322	228	9291	2940.889	ng/ml	100
34) Chrysene	6.346	228	8800	3066.435	ng/ml	99
37) Benzo[b]fluoranthene	7.215	252	10050	3304.270	ng/ml	100
38) Benzo[k]fluoranthene	7.240	252	9034	3209.509	ng/ml	100
39) Benzo[a]pyrene	7.542	252	8176	3129.953	ng/ml	100
40) Indeno[1,2,3-cd]pyrene	8.909	276	8970	3431.299	ng/ml	97
41) Dibenzo[a,h]anthracene	8.953	278	9617M6	3821.995	ng/ml	
42) Benzo[g,h,i]perylene	9.272	276	9910	3701.438	ng/ml	96

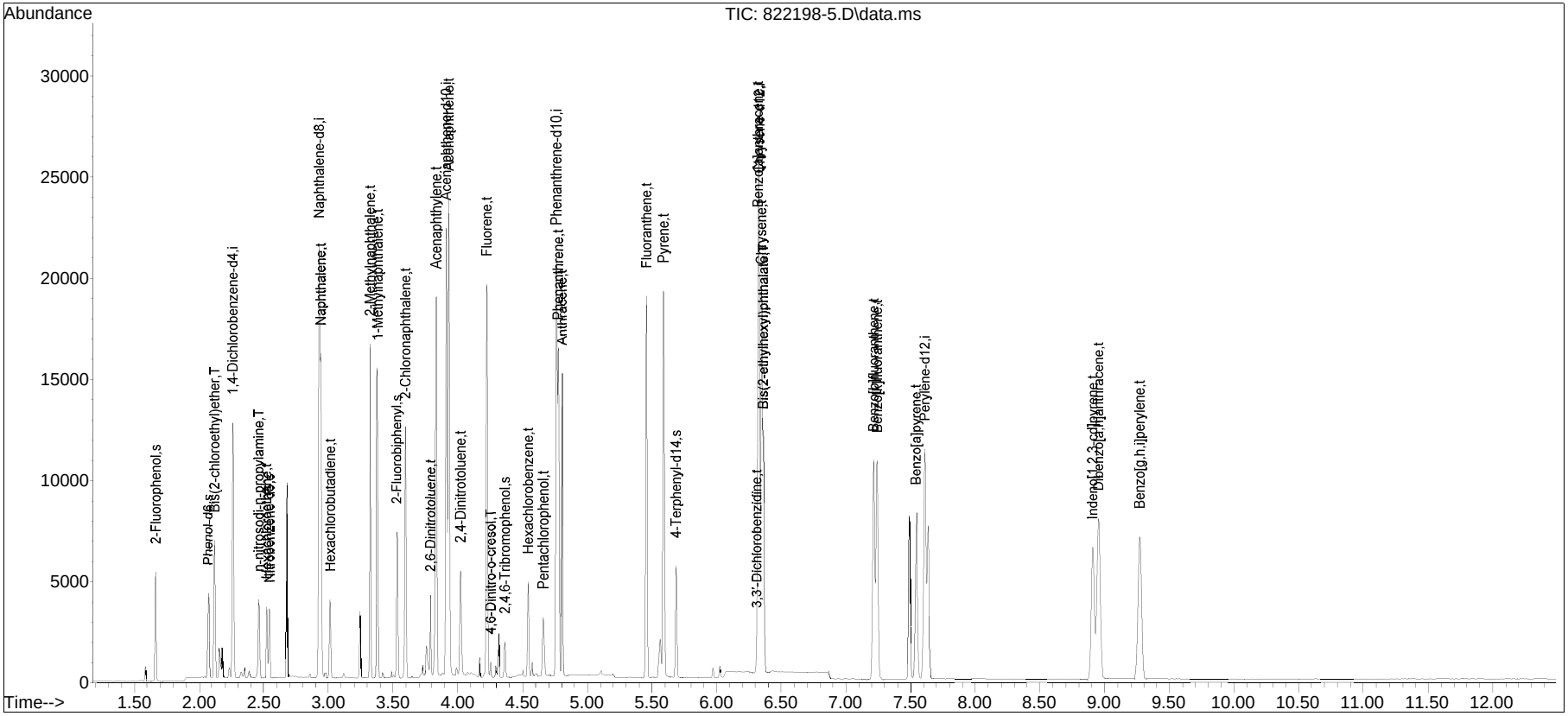
(#) = qualifier out of range (m) = manual integration (+) = signals summed

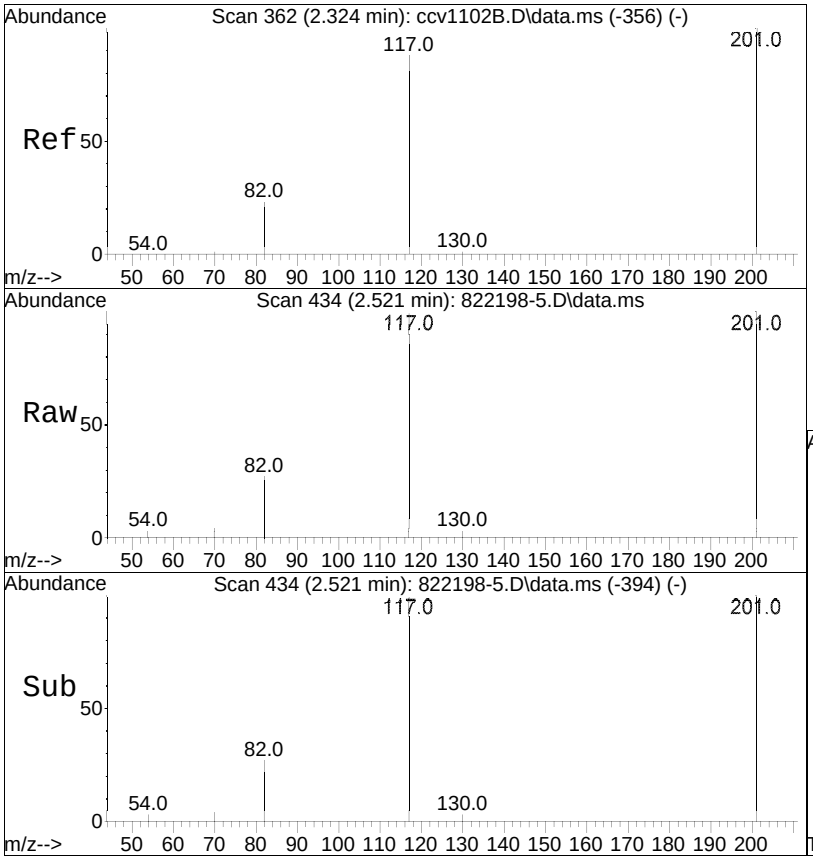
Quantitation Report (QT Reviewed)

Data Path : I:\8270SIM\SV128\230907\
Data File : 822198-5.D
Acq On : 07 Sep 2023 04:32 pm
Operator : SV128:jjw
Sample : WG1822198-5,32,,ah
Misc : WG1824579,WG1822198,ical20340
ALS Vial : 29 Sample Multiplier: 1

Quant Time: Sep 10 14:24:38 2023
Quant Method : I:\8270sim\sv128\230907\SIM-LVI_230831_sv128.M
Quant Title : Semivolatiles by GC/MS by modified 8270
QLast Update : Thu Sep 07 08:06:50 2023
Response via : Initial Calibration

Sub List : DEFAULT - All compounds listedv0907a.D•

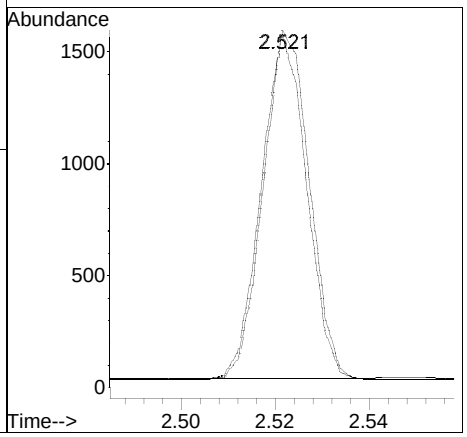


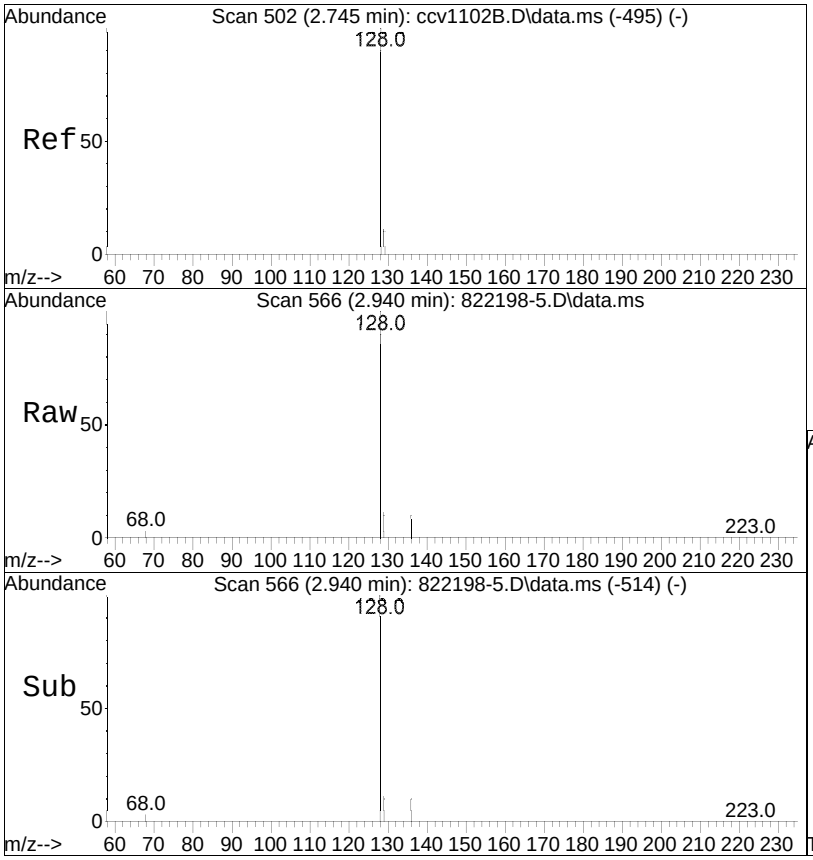


#6
Hexachloroethane
Concen: 2385.72 ng/ml
RT: 2.521 min Scan# 434
Delta R.T. 0.003 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:117 Resp: 1017

Ion	Ratio	Lower	Upper
117	100		
201	103.1	91.5	137.3

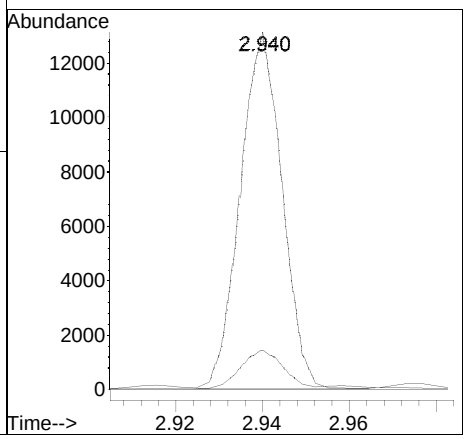


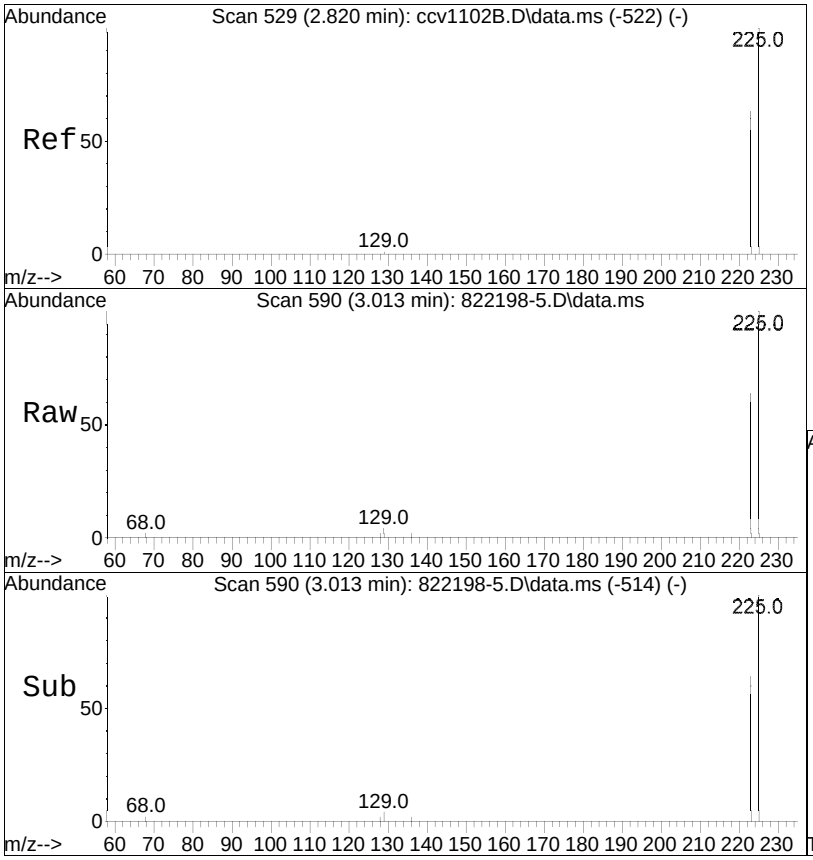


#9
Naphthalene
Concen: 2513.99 ng/ml
RT: 2.940 min Scan# 566
Delta R.T. -0.000 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:128 Resp: 8635

Ion	Ratio	Lower	Upper
128	100		
129	11.2	8.8	13.2
127	0.0	0.0	0.0

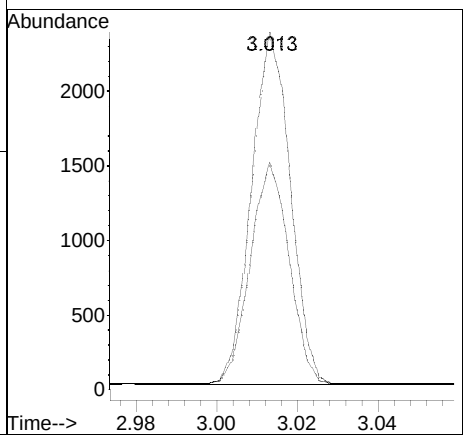


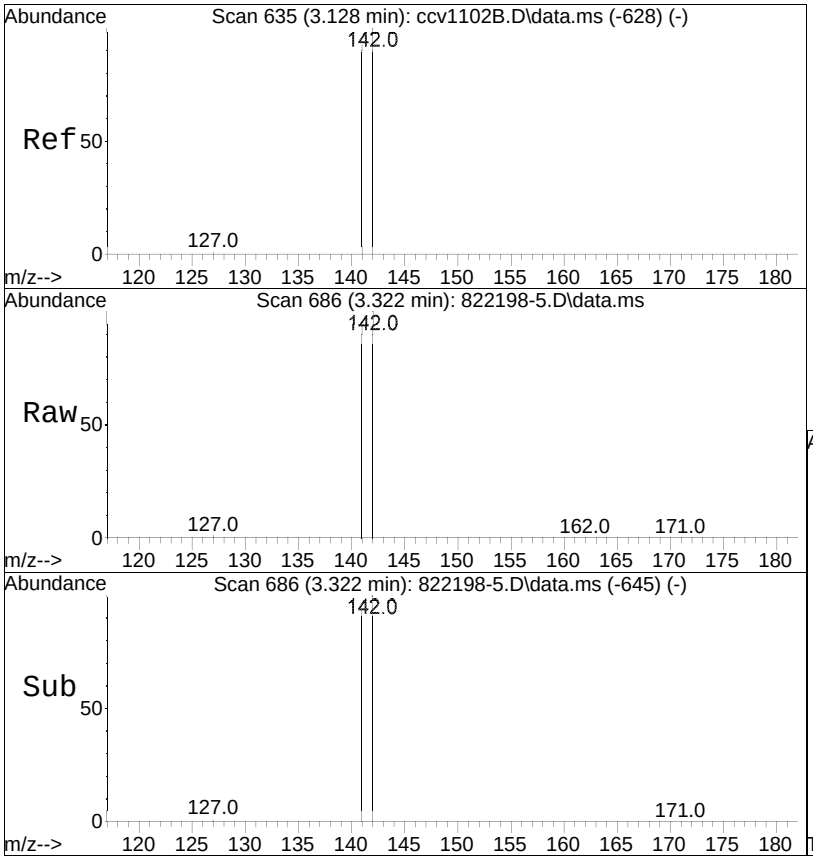


#10
Hexachlorobutadiene
Concen: 2415.38 ng/ml
RT: 3.013 min Scan# 590
Delta R.T. -0.000 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:225 Resp: 1560

Ion	Ratio	Lower	Upper
225	100		
223	62.9	50.6	75.8

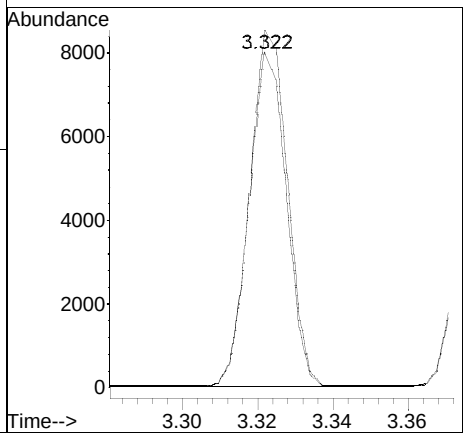


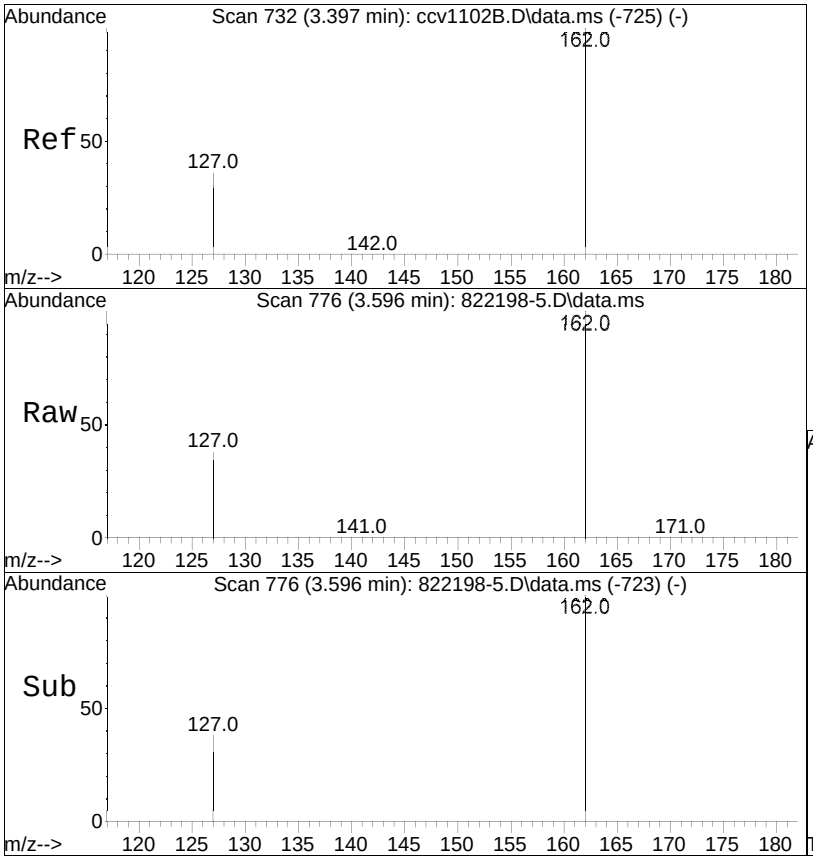


#11
2-Methylnaphthalene
Concen: 2558.59 ng/ml
RT: 3.322 min Scan# 686
Delta R.T. -0.000 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:142 Resp: 5866

Ion	Ratio	Lower	Upper
142	100		
141	92.5	75.0	112.4

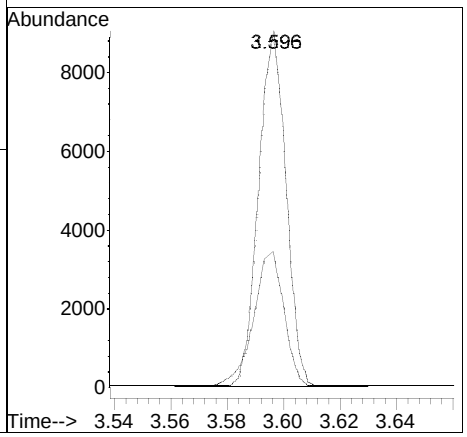


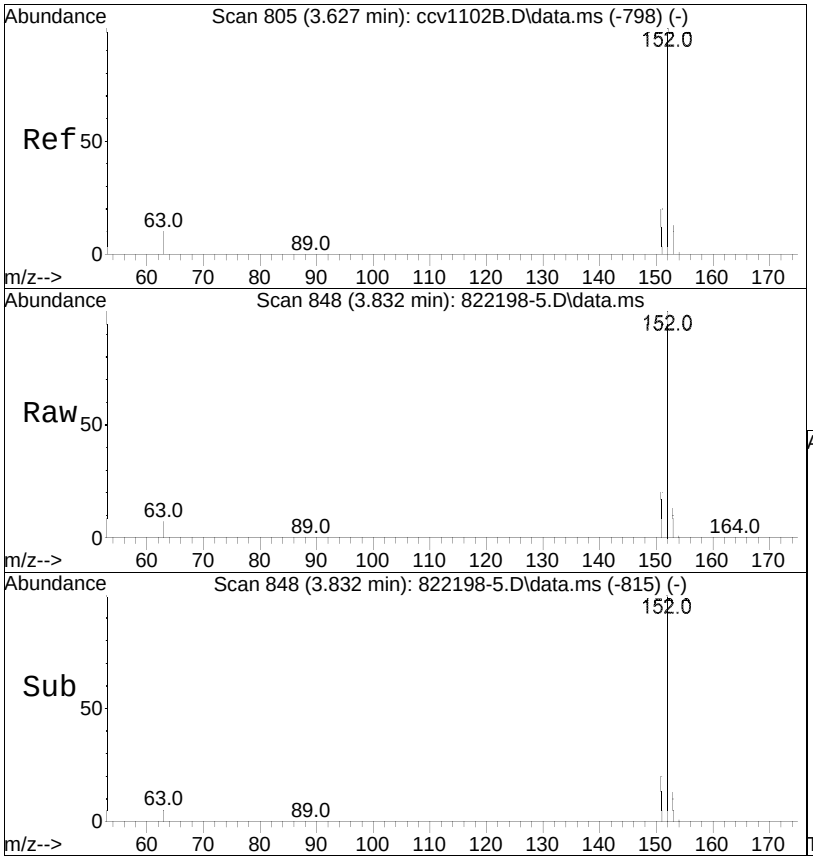


#14
2-Chloronaphthalene
Concen: 2512.18 ng/ml
RT: 3.596 min Scan# 776
Delta R.T. -0.000 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:162 Resp: 5971

Ion	Ratio	Lower	Upper
162	100		
127	42.4	28.7	43.1

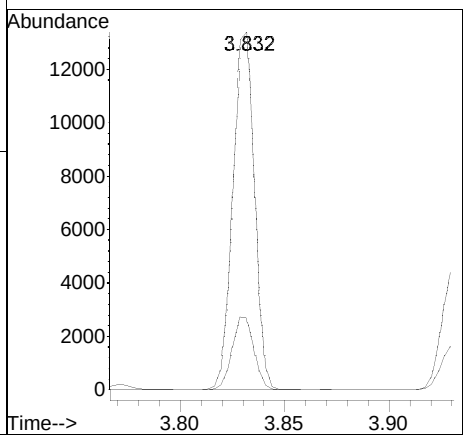


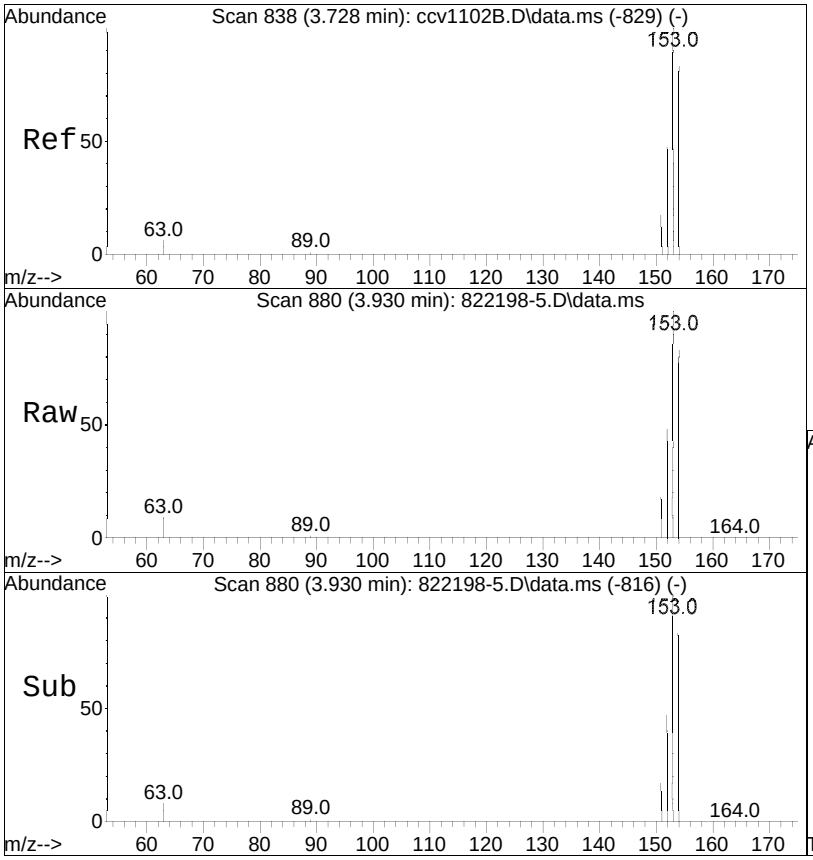


#16
Acenaphthylene
Concen: 2502.96 ng/ml
RT: 3.832 min Scan# 848
Delta R.T. 0.003 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:152 Resp: 9474

Ion	Ratio	Lower	Upper
152	100		
151	20.2	16.1	24.1

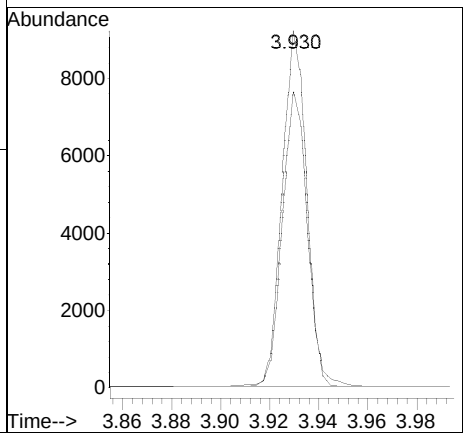


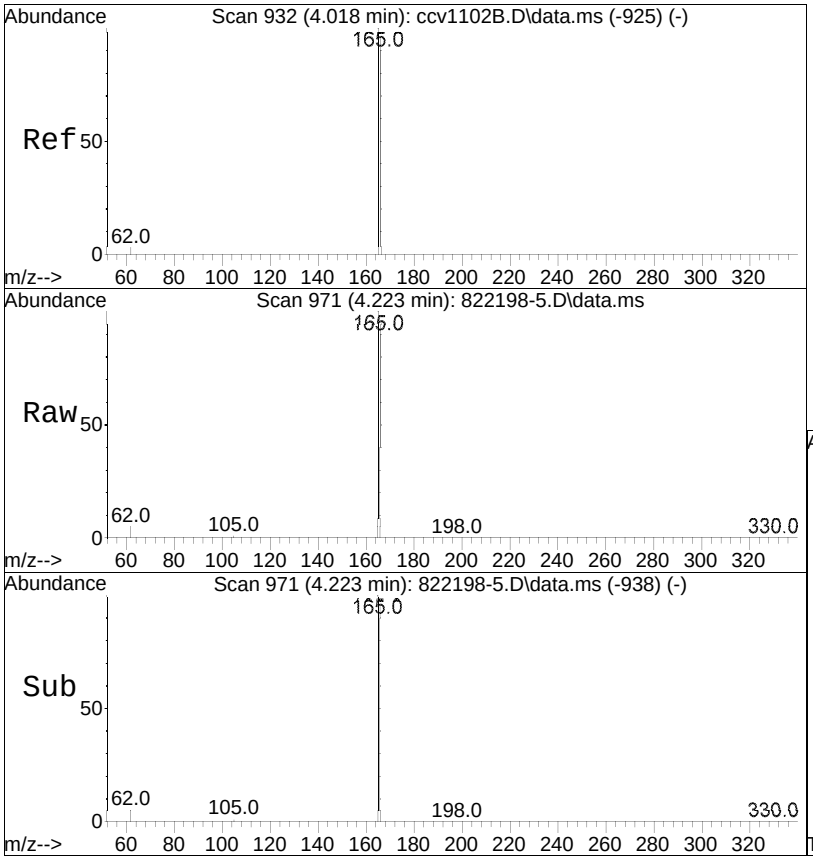


#18
Acenaphthene
Concen: 2843.79 ng/ml
RT: 3.930 min Scan# 880
Delta R.T. -0.000 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:153 Resp: 6257

Ion	Ratio	Lower	Upper
153	100		
154	85.9	67.4	101.2

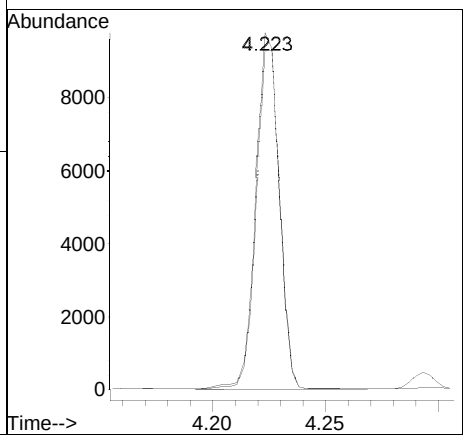


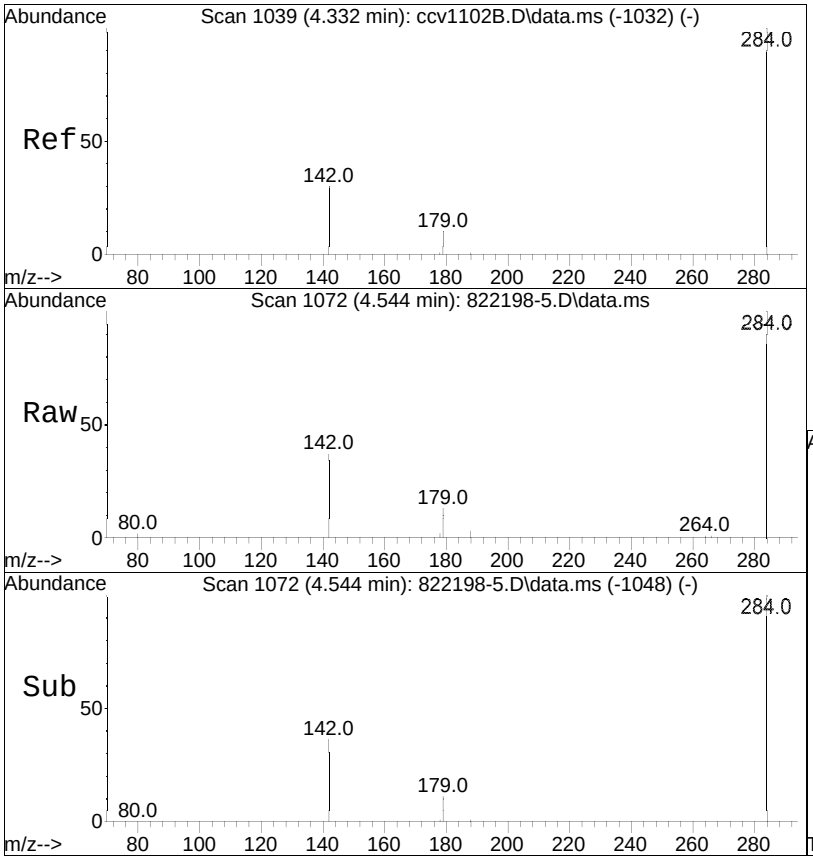


#20
Fluorene
Concen: 2810.61 ng/ml
RT: 4.223 min Scan# 971
Delta R.T. -0.003 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:166 Resp: 6748

Ion	Ratio	Lower	Upper
166	100		
165	102.4	82.7	124.1

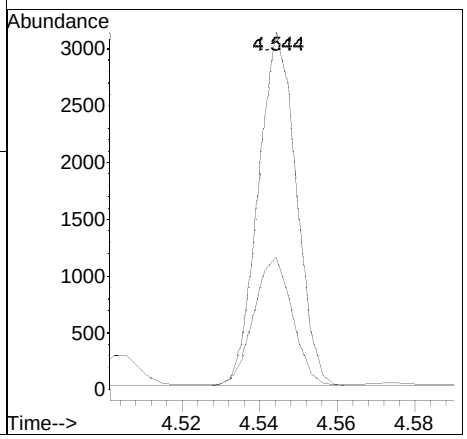


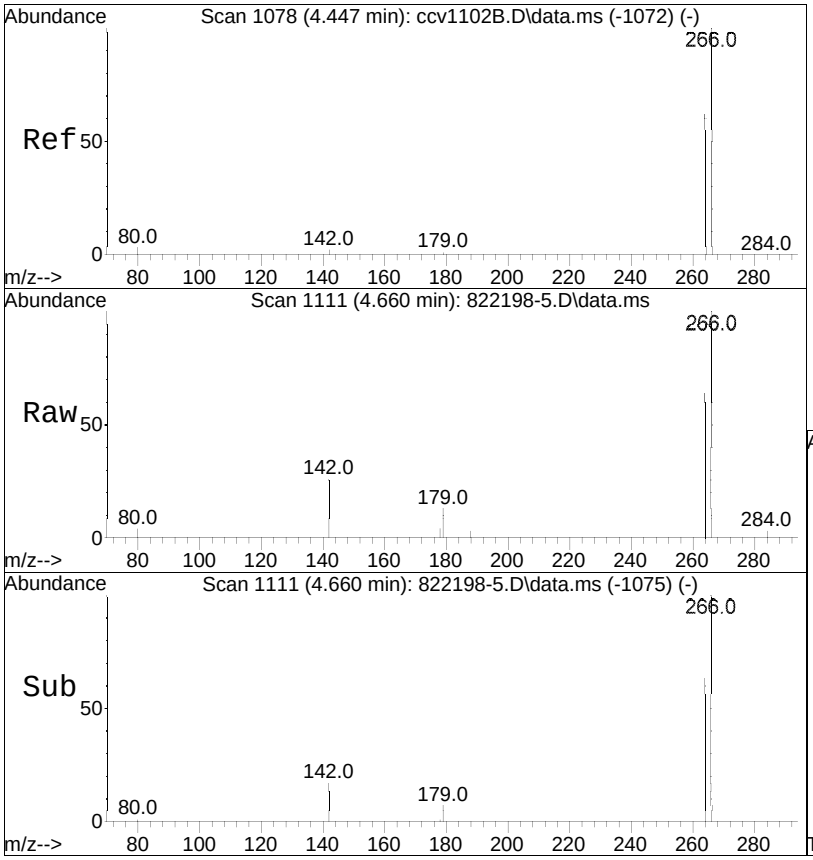


#24
Hexachlorobenzene
Concen: 2990.05 ng/ml
RT: 4.544 min Scan# 1072
Delta R.T. -0.003 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:284 Resp: 2085

Ion	Ratio	Lower	Upper
284	100		
142	36.5	26.6	40.0

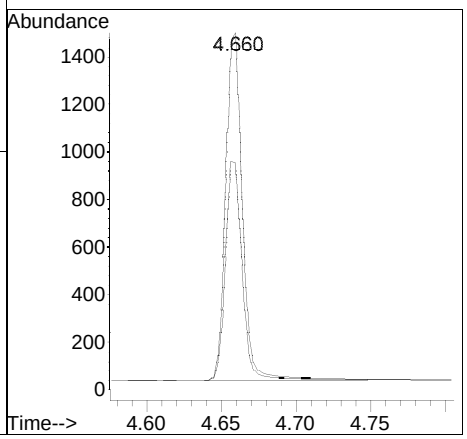


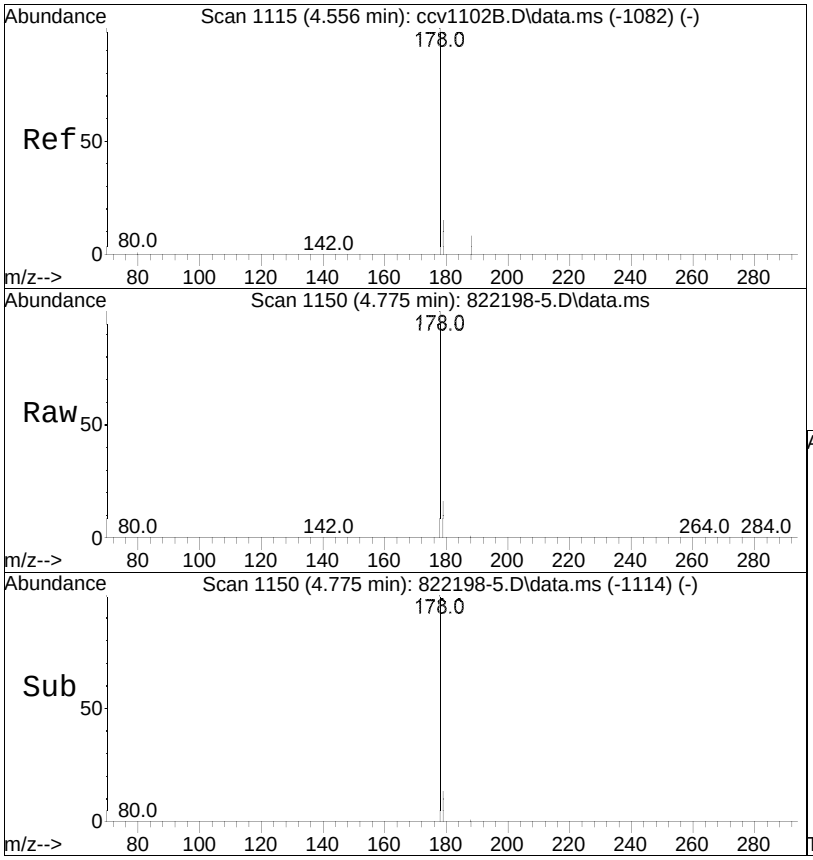


#25
Pentachlorophenol
Concen: 2561.90 ng/ml
RT: 4.660 min Scan# 1111
Delta R.T. 0.003 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:266 Resp: 1139

Ion	Ratio	Lower	Upper
266	100		
264	63.2	49.8	74.8

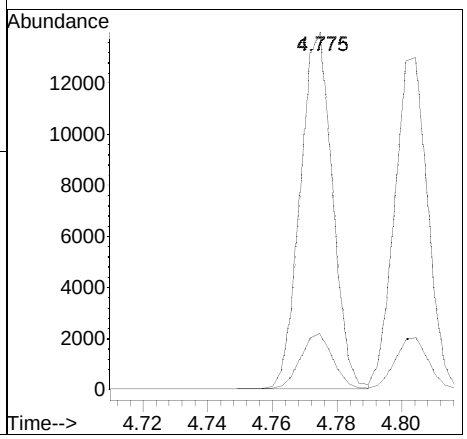


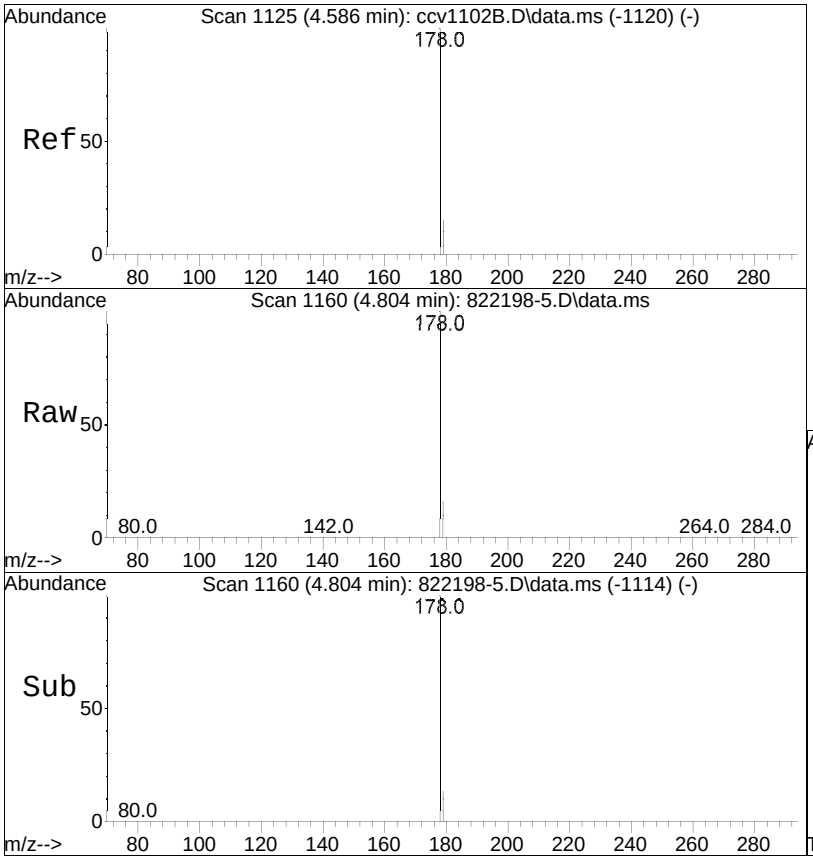


#26
Phenanthrene
Concen: 2975.88 ng/ml
RT: 4.775 min Scan# 1150
Delta R.T. -0.000 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:178 Resp: 9634

Ion	Ratio	Lower	Upper
178	100		
179	15.4	12.4	18.6

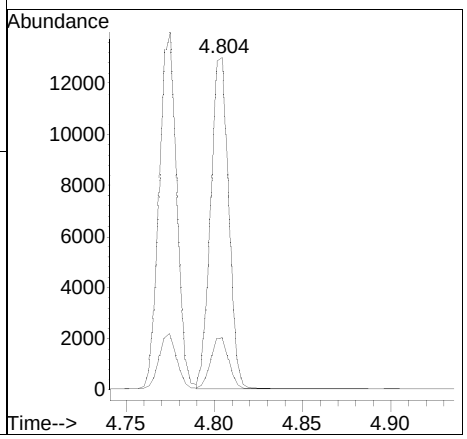


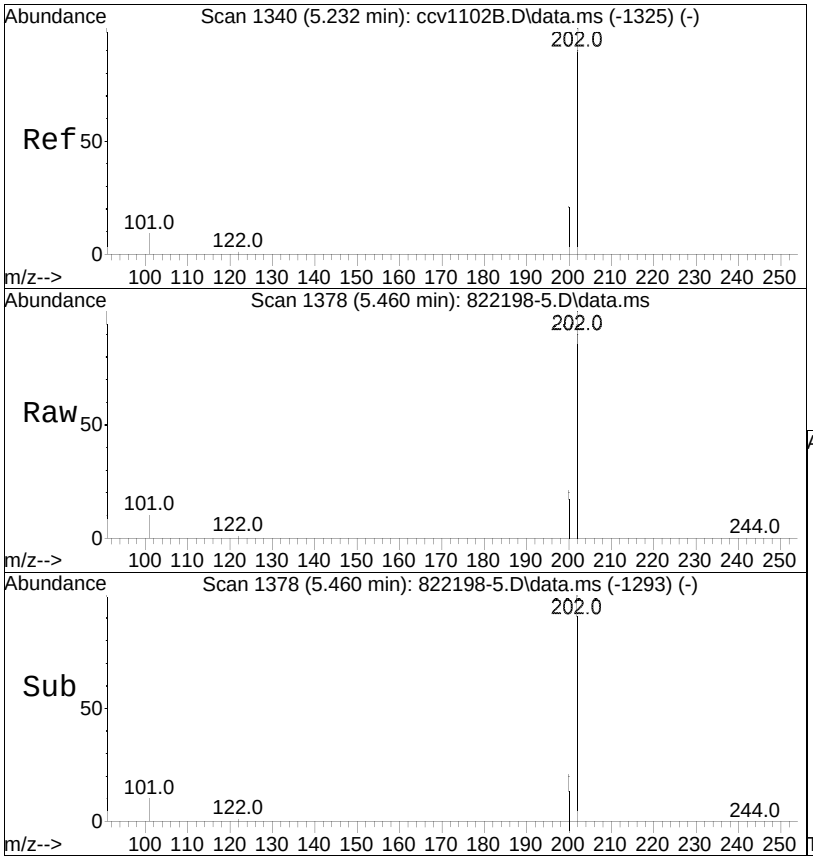


#27
Anthracene
Concen: 2916.00 ng/ml
RT: 4.804 min Scan# 1160
Delta R.T. -0.000 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:178 Resp: 9187

Ion	Ratio	Lower	Upper
178	100		
179	15.3	12.6	19.0

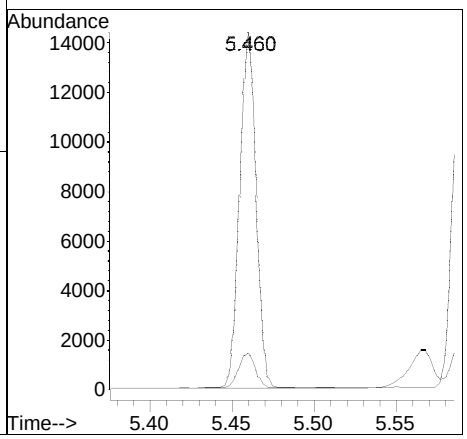


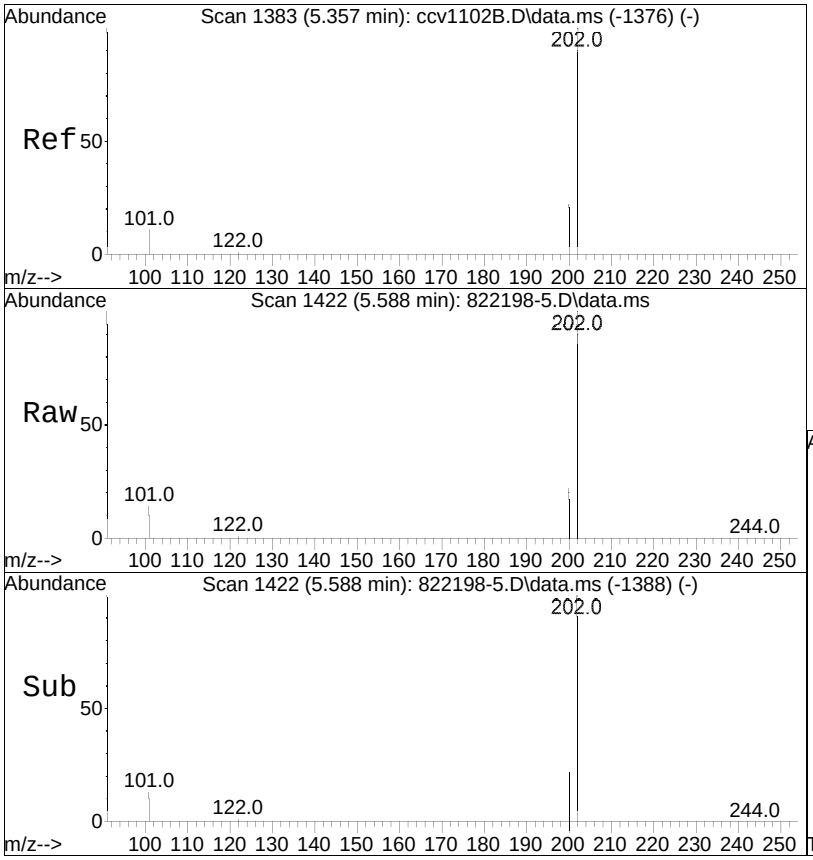


#28
Fluoranthene
Concen: 2661.46 ng/ml
RT: 5.460 min Scan# 1378
Delta R.T. -0.003 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:202 Resp: 10009

Ion	Ratio	Lower	Upper
202	100		
101	10.2	7.0	10.6

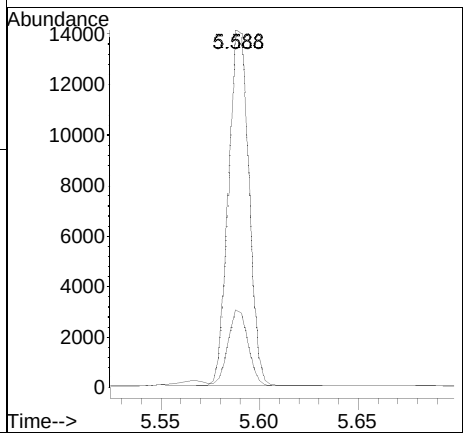


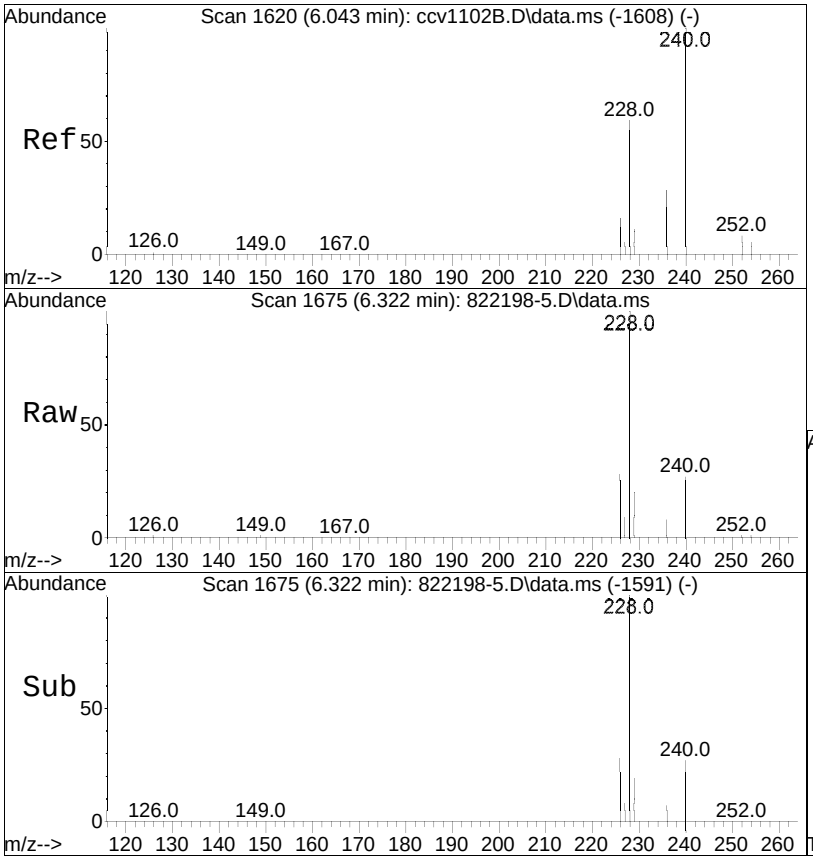


#29
Pyrene
Concen: 2589.87 ng/ml
RT: 5.588 min Scan# 1422
Delta R.T. -0.006 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:202 Resp: 10082

Ion	Ratio	Lower	Upper
202	100		
200	21.3	17.0	25.4

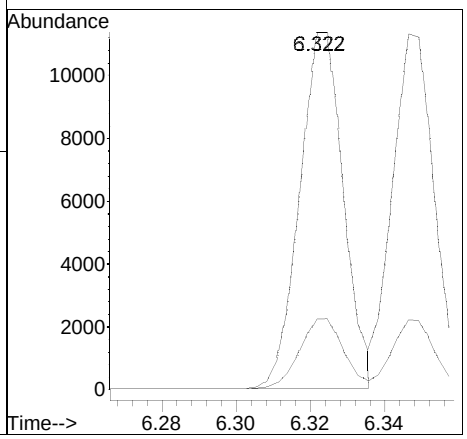


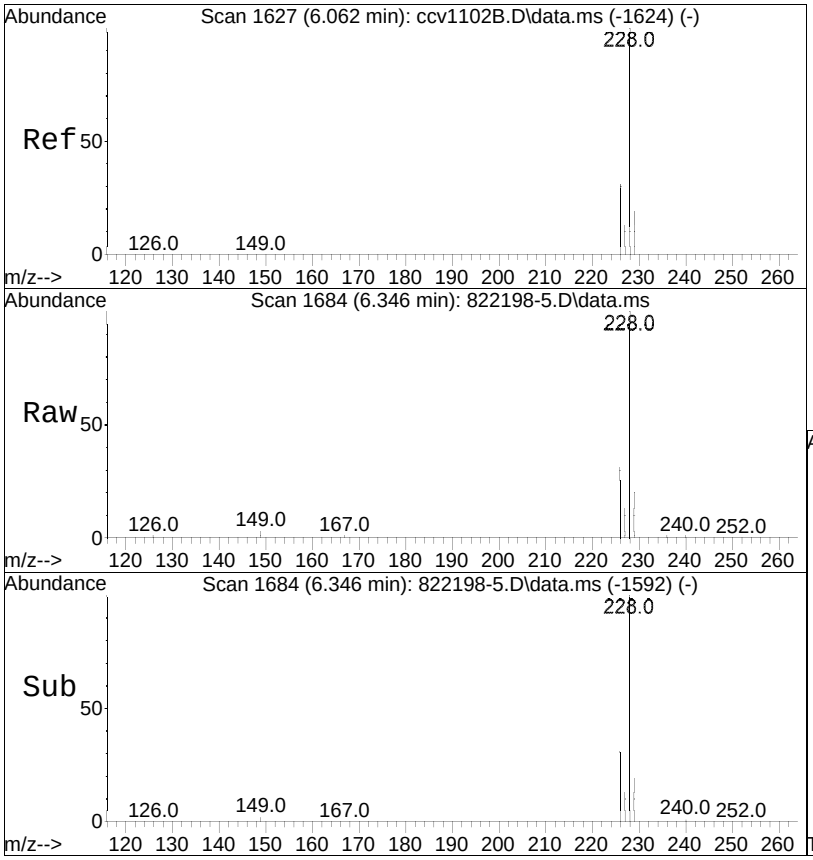


#32
Benzo[a]anthracene
Concen: 2940.89 ng/ml
RT: 6.322 min Scan# 1675
Delta R.T. -0.008 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:228 Resp: 9291

Ion	Ratio	Lower	Upper
228	100		
229	19.6	15.7	23.5

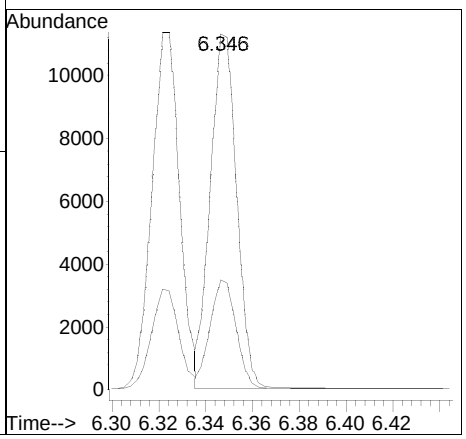


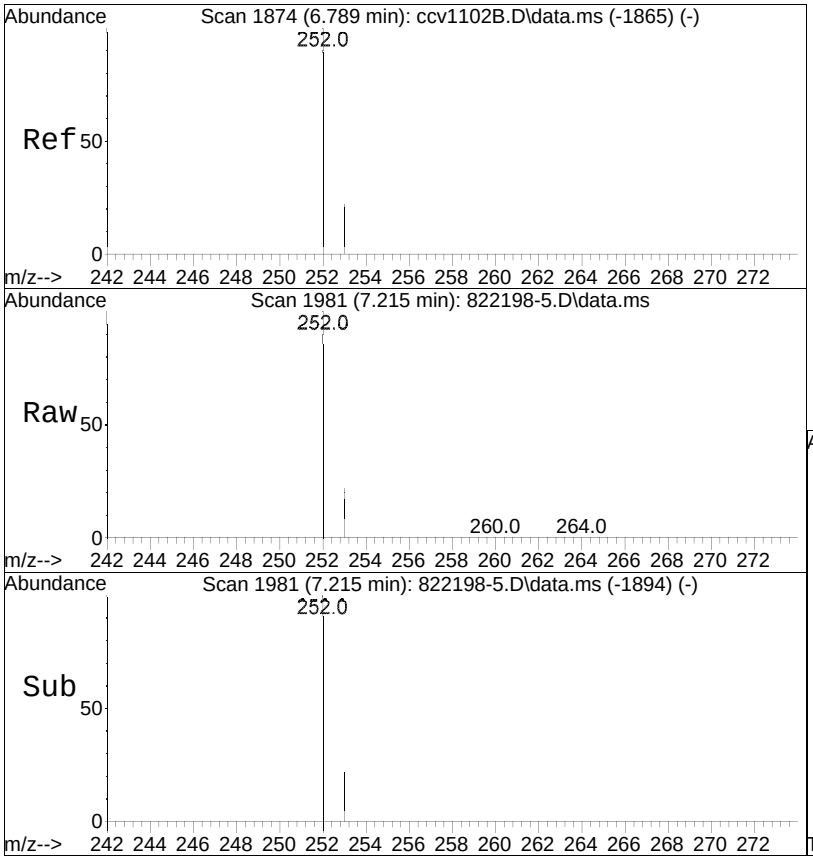


#34
Chrysene
Concen: 3066.44 ng/ml
RT: 6.346 min Scan# 1684
Delta R.T. -0.008 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:228 Resp: 8800

Ion	Ratio	Lower	Upper
228	100		
226	30.5	24.6	37.0

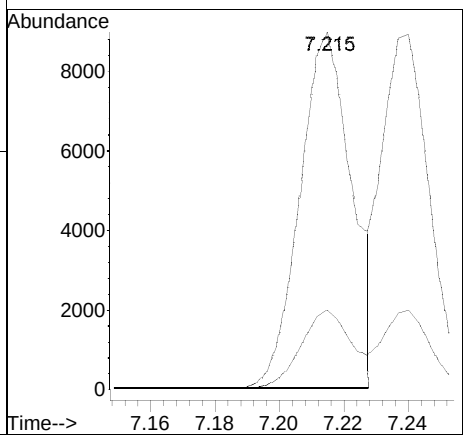


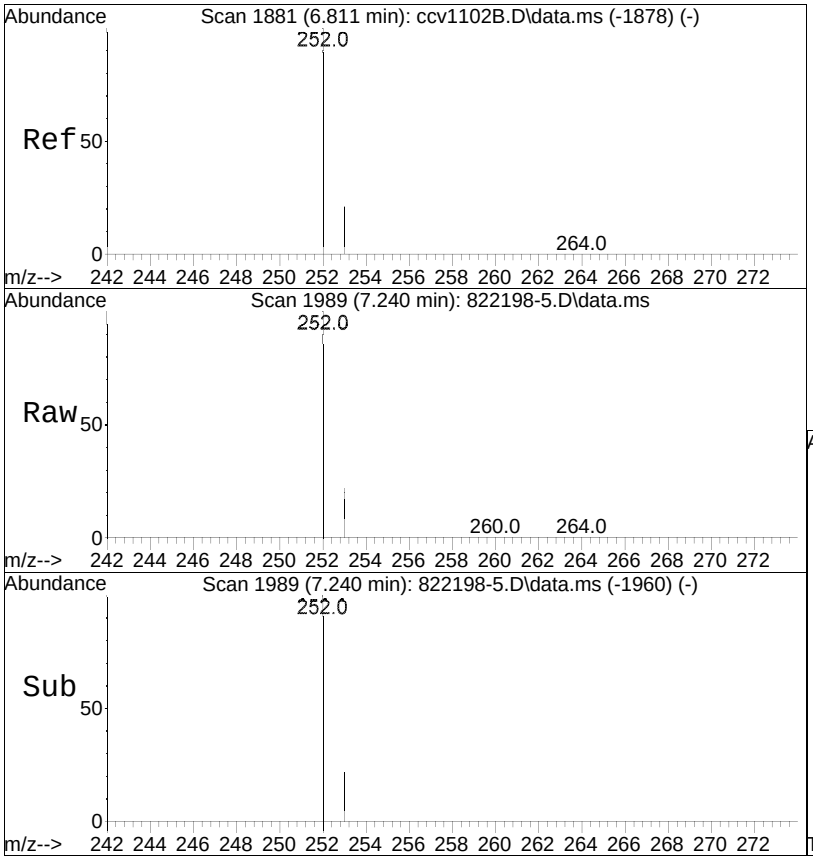


#37
Benzo[b]fluoranthene
Concen: 3304.27 ng/ml
RT: 7.215 min Scan# 1981
Delta R.T. -0.005 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:252 Resp: 10050

Ion	Ratio	Lower	Upper
252	100		
253	21.6	17.4	26.0

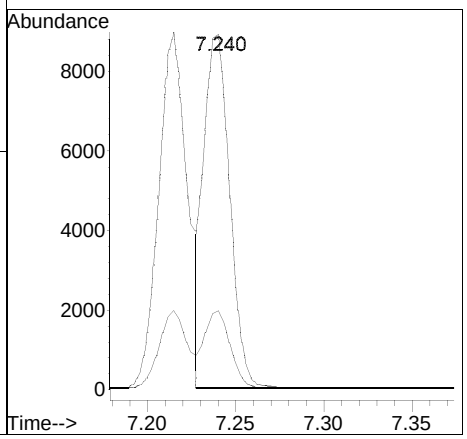


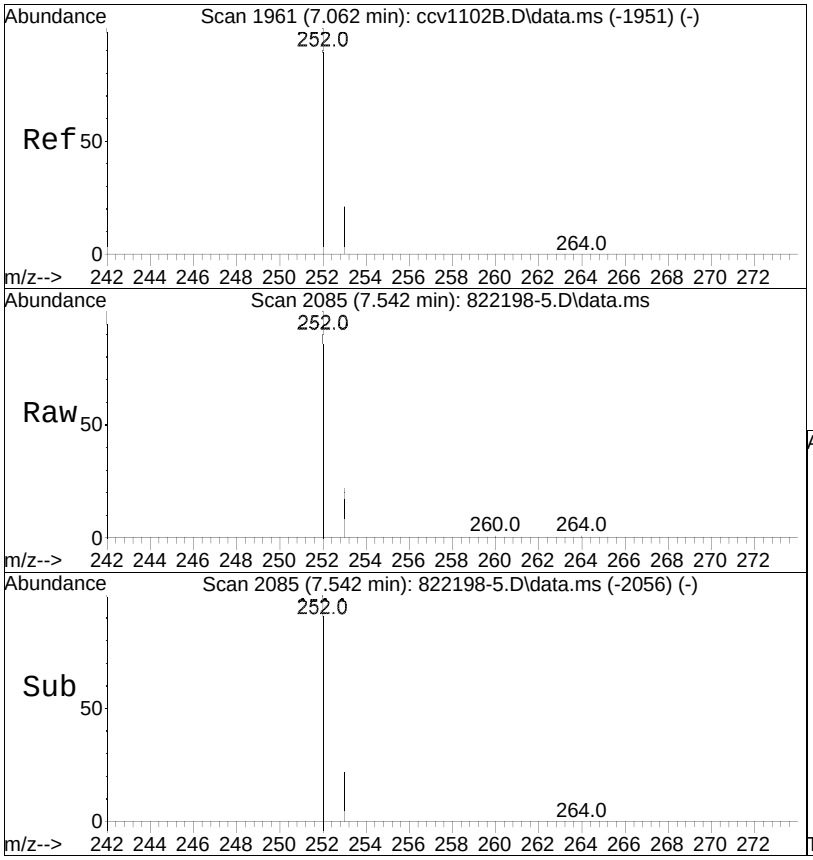


#38
Benzo[k]fluoranthene
Concen: 3209.51 ng/ml
RT: 7.240 min Scan# 1989
Delta R.T. -0.008 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:252 Resp: 9034

Ion	Ratio	Lower	Upper
252	100		
253	21.8	17.4	26.2

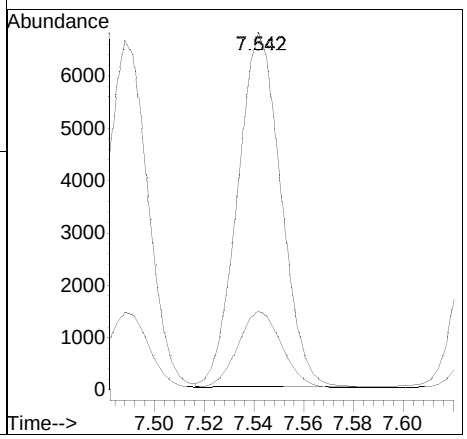


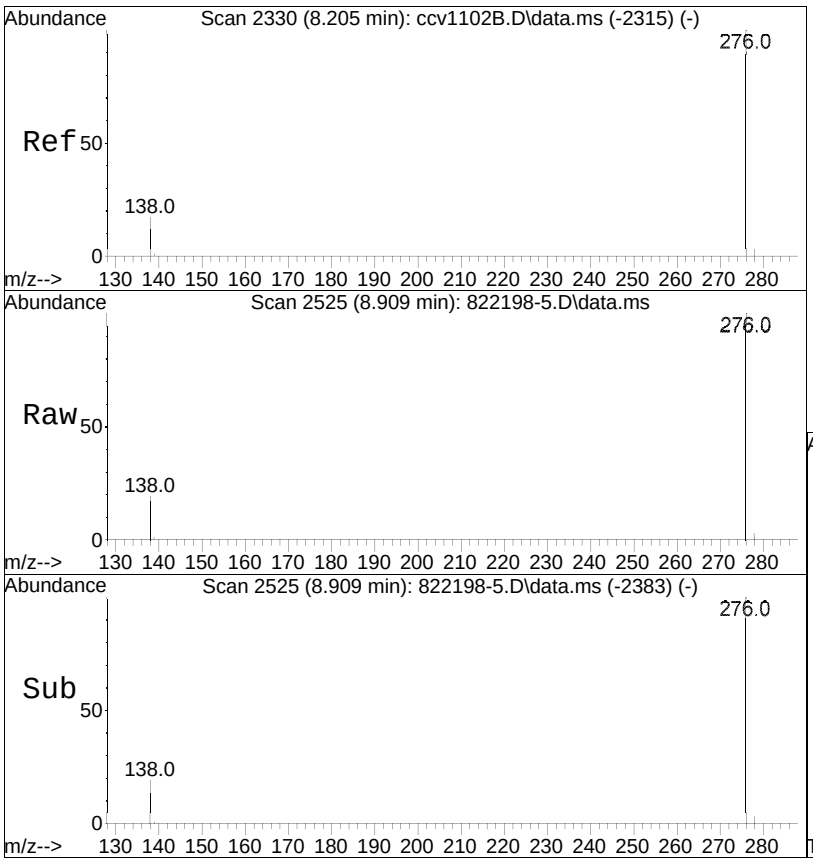


#39
Benzo[a]pyrene
Concen: 3129.95 ng/ml
RT: 7.542 min Scan# 2085
Delta R.T. -0.008 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:252 Resp: 8176

Ion	Ratio	Lower	Upper
252	100		
253	21.7	17.3	25.9

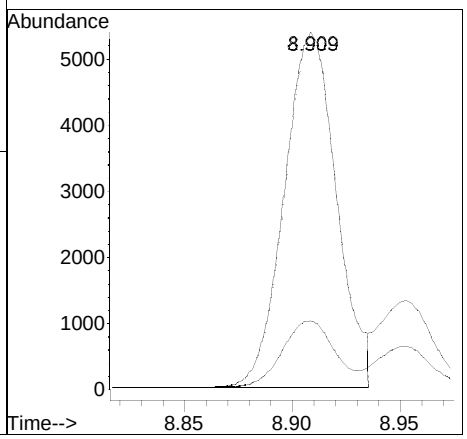


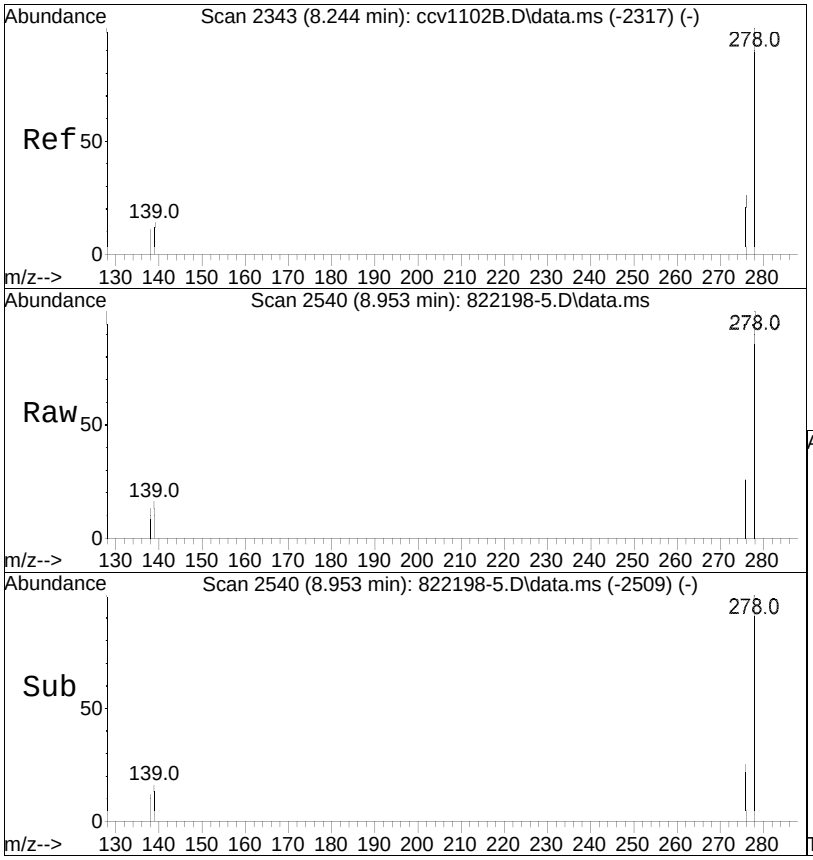


#40
Indeno[1,2,3-cd]pyrene
Concen: 3431.30 ng/ml
RT: 8.909 min Scan# 2525
Delta R.T. -0.008 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:276 Resp: 8970

Ion	Ratio	Lower	Upper
276	100		
138	18.5	13.8	20.6

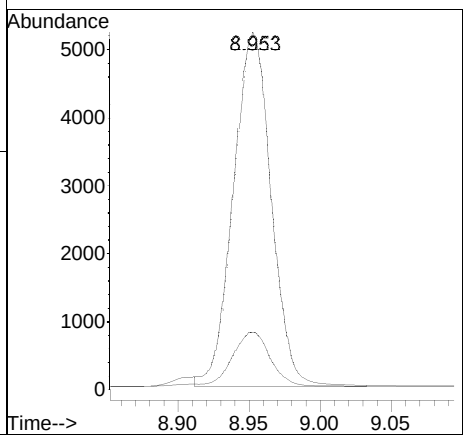


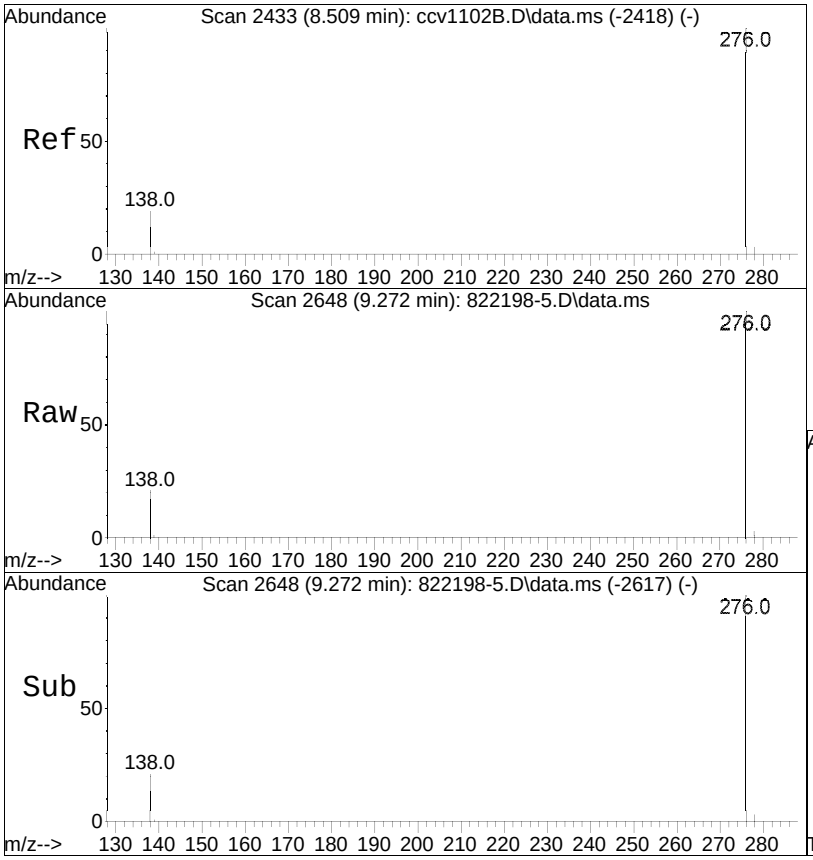


#41
Dibenzo[a,h]anthracene
Concen: 3822.00 ng/ml M6
RT: 8.953 min Scan# 2540
Delta R.T. -0.008 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:278 Resp: 9617

Ion	Ratio	Lower	Upper
278	100		
139	15.8	11.2	16.8

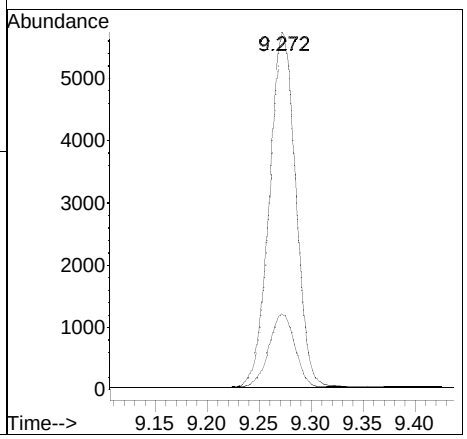




#42
Benzo[g,h,i]perylene
Concen: 3701.44 ng/ml
RT: 9.272 min Scan# 2648
Delta R.T. -0.008 min
Lab File: 822198-5.D
Acq: 07 Sep 2023 04:32 pm

Tgt Ion:276 Resp: 9910

Ion	Ratio	Lower	Upper
276	100		
138	20.8	15.0	22.6

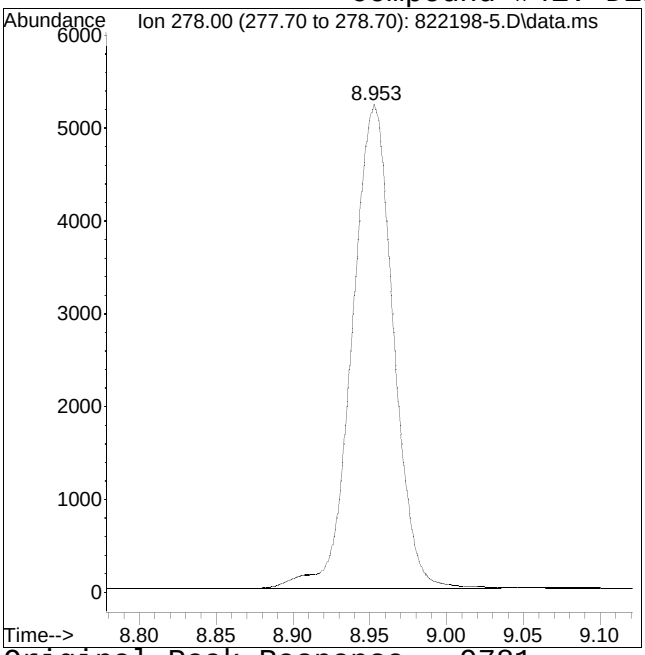


Manual Integration Report

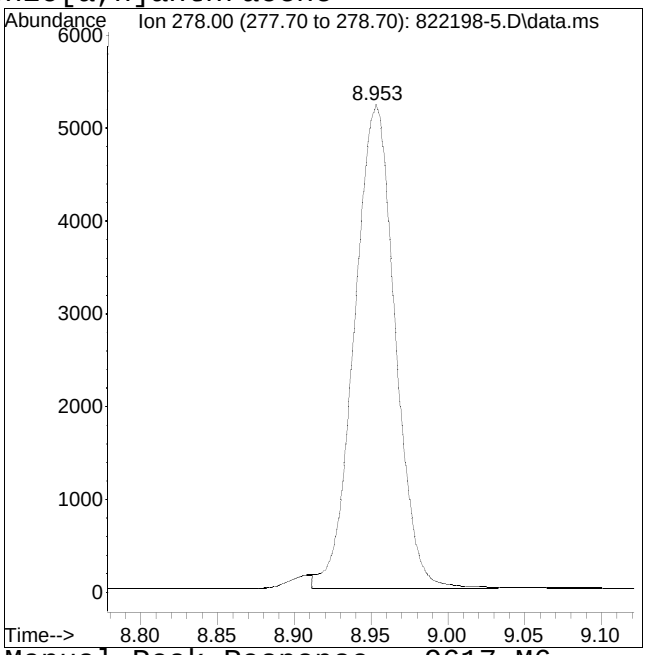
Data Path : I:\8270SIM\SV128\230907\
Data File : 822198-5.D
Date Inj'd : 9/7/2023 4:32 pm
Sample : WG1822198-5,32,,ah

QMethod : SIM-LVI_230831_sv128.M
Operator : SV128:jjw
Instrument : SV128
Quant Date : 9/7/2023 4:46 pm

Compound #41: Dibenzo[a,h]anthracene



Original Peak Response = 9781



Manual Peak Response = 9617 M6

M6 = Misassignment of peak valley by automated integration (poor split of 2 peaks).

Calculation of Semi Volatile Organic Compounds

Aqueous Concentration Formula: Amt * DF * 1000 * (1/Vo) * Vf

Where:
DF = Dilution Factor
Vo = Volume of Sample (mL)
Vf = Extraction Lab Final Volume (mL)

Soil Concentration Formula: Amt * DF * 1000 * (1/Wt) * Vf * (100/TS)
Where:
DF = Dilution Factor
Wt = Weight of Sample (g)
Vf = Extraction Lab Final Volume (mL)
TS = Total Solids

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 11 2023, 02:36 pm

Work Group: WG1822198 for Department: 2 Organic Preparation

Created: 30-AUG-23 Due: Operator: DDG

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2350148-01	MW-11S	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0905	0906	S0	Amber-A.25
L2350148-02	MW-11D	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0905	0906	S0	Amber-A.25
L2350148-03	MW-1SR	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0905	0906	S0	Amber-A.25
L2350148-04	MW-1DR2	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0905	0906	S0	Amber-A.25
L2350269-01	MW-1S	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
L2350269-02	MW-2S	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
L2350269-03	MW-3S	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
L2350269-04	MW-4D	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0905	0913	S0	Amber-A.25
L2350269-05	MW-5S	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0905	0913	S0	Amber-A.25
L2350269-06	MW-6D	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
L2350269-07	MW-7S	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
L2350269-08	MW-8S	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
L2350269-09	DUP	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0904	0913	S0	Amber-A.25
WG1822198-1	Laboratory Method Bl	S	NYTCL-8270-SIM-LVI	WATER	DONE	U				
WG1822198-2	Laboratory Control S	S	NYTCL-8270-SIM-LVI	WATER	DONE	U				
WG1822198-3	LCS Duplicate	S	NYTCL-8270-SIM-LVI	WATER	DONE	U				
WG1822198-4	Matrix Spike	S	NYTCL-8270-SIM-LVI	WATER	DONE	U				
WG1822198-5	Matrix Spike Duplica	S	NYTCL-8270-SIM-LVI	WATER	DONE	U				

Comments:

WG1822198-3	WG1822198-2
WG1822198-4	L2350269-08
WG1822198-5	L2350269-08

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 11 2023, 02:36 pm

Work Group: WG1823489 for Department: 2 Organic Preparation

Created: 05-SEP-23 Due: Operator: EMI

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2350269-11	EQUIPMENT BLANK	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0905	0913	S0	Amber-A.25
L2350946-01	SCDOH-DR	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0908	0911	S0	Amber-A.25
L2350946-02	MW-10S	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0908	0911	S0	Amber-A.25
L2350946-03	MW-10D	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0908	0911	S0	Amber-A.25
L2350946-04	DUP_09012023	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0908	0911	S0	Amber-A.25
L2350946-06	EB_09012023	C	NYTCL-8270-SIM-LVI	WATER	DONE	U	0908	0911	S0	Amber-A.25
WG1823489-1	Laboratory Method Bl	S	NYTCL-8270-SIM-LVI	WATER	DONE	U				
WG1823489-2	Laboratory Control S	S	NYTCL-8270-SIM-LVI	WATER	DONE	U				
WG1823489-3	LCS Duplicate	S	NYTCL-8270-SIM-LVI	WATER	DONE	U				

Comments:

WG1823489-3 WG1823489-2

Analysis log File

Total Files Reported in Log : 13
Log Generated From Directory: I:\8270SIM\sv119\230306nLVIical\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	TUNE.D	DFTPPRUN.M	TUNE	WG1752279,,ical	3/6/2023 11:20 am
2	IL10.D	SIM-LVI-fast	IL10,32,,20 Lot#9991	WG1752279,,ical	3/6/2023 11:49 am
3	IL9.D	SIM-LVI-fast	IL9,32,,10 Lot#9992	WG1752279,,ical	3/6/2023 12:55 pm
4	IL8.D	SIM-LVI-fast	IL8,32,,5 Lot#9993	WG1752279,,ical	3/6/2023 1:29 pm
5	IL7.D	SIM-LVI-fast	IL7,32,,1 Lot#9994	WG1752279,,ical	3/6/2023 1:46 pm
6	IL6.D	SIM-LVI-fast	IL6,32,,0.25 Lot#9995	WG1752279,,ical	3/6/2023 2:03 pm
7	IL5.D	SIM-LVI-fast	IL5,32,,0.1 Lot# 9996	WG1752279,,ical	3/6/2023 2:19 pm
8	IL4.D	SIM-LVI-fast	IL4,32,,0.05 Lot#9997	WG1752279,,ical	3/6/2023 2:36 pm
9	IL3.D	SIM-LVI-fast	IL3,32,,0.025 Lot#9998	WG1752279,,ical	3/6/2023 2:52 pm
10	IL2.D	SIM-LVI-fast	IL2,32,,0.01 Lot#9999	WG1752279,,ical	3/6/2023 3:09 pm
11	IL1.D	SIM-LVI-fast	IL1,32,, 0.005 Lot#1000	WG1752279,,ical	3/6/2023 3:26 pm
12	ICV.D	SIM-LVI-fast	CQICV,32,,1.0 Lot#9919	WG1752279,,ical	3/6/2023 3:42 pm
13	insblk.D	SIM-LVI-fast			3/6/2023 3:59 pm

SeqLog 1.0 - (c) 2009 Abacus Database Applications

Analysis log File

Total Files Reported in Log : 17
Log Generated From Directory: I:\8270SIM\SV128\230831aLVIical\

No.	DATA FILE	INJ METH	SAMPLE NAME	MISC	DATE INJ'D
1	TUNE.D	DFTPPfast.M	TUNE	WG1823727,,ical	8/31/2023 9:28 am
2	IL10.D	fast-SIM-LVI	IL10,32,, 20.0 Lot#1018	WG1823727,,ical	8/31/2023 9:45 am
3	IL9.D	fast-SIM-LVI	IL9,32,, 10.0 Lot#10227	WG1823727,,ical	8/31/2023 10:01 am
4	IL8.D	fast-SIM-LVI	IL8,32,, 5.0 Lot#10228	WG1823727,,ical	8/31/2023 10:17 am
5	IL7.D	fast-SIM-LVI	IL7,32,, 1.0 Lot#10229	WG1823727,,ical	8/31/2023 10:34 am
6	IL6.D	fast-SIM-LVI	IL6,32,, 0.25 Lot#10230	WG1823727,,ical	8/31/2023 10:50 am
7	IL5.D	fast-SIM-LVI	IL5,32,, 0.1 Lot#10231	WG1823727,,ical	8/31/2023 11:06 am
8	IL4.D	fast-SIM-LVI	IL4,32,, 0.05 Lot#10232	WG1823727,,ical	8/31/2023 11:23 am
9	IL3.D	fast-SIM-LVI	ot#10233		8/31/2023 11:39 am
10	IL2.D	fast-SIM-LVI	IL2,32,, 0.01 Lot#10234	WG1823727,,ical	8/31/2023 11:56 am
11	IL1.D	fast-SIM-LVI	IL1,32,, 0.005 Lot#1023	WG1823727,,ical	8/31/2023 12:12 pm
12	ICV.D	fast-SIM-LVI	ot#10193		8/31/2023 12:29 pm
13	insblk.D	fast-SIM-LVI			8/31/2023 12:45 pm
14	TUNEa.D	DFTPPfast.M	TUNEa	WG1823727,,ical	9/5/2023 8:49 am
15	IL3a.D	fast-SIM-LVI	IL3,32,, 0.025 Lot#1023	WG1823727,,ical	9/5/2023 9:24 am
16	ICVa.D	fast-SIM-LVI	CQICV,32,, 1.0 Lot#1019	WG1823727,,ical	9/5/2023 11:08 am
17	insblka.D	fast-SIM-LVI			9/5/2023 11:25 am

	Type	Method File	Vial	Name	Data File	Comment
	Sample	DFTPPRUN.M	48	wg-1,32,,dftppsv119	deg0831	wg,,ical19785
	Sample	SIM-LVI-fast.M	49	wg-3,32,, ICV 10193 (0830)	ccv0831	wg,,ical19785
	Sample	SIM-LVI-fast.M	50	instrument blank	blank0831	wg,,ical19785
	Keyword					
	Sample	SIM-LVI-fast.M	1	WG1813365-1,32,,ah	813365-1	WG1822344,WG1813365,ical19785
	Sample	SIM-LVI-fast.M	2	WG1813365-2,32,,ah	813365-2	WG1822344,WG1813365,ical19785
	Sample	SIM-LVI-fast.M	3	L2336761-18,32,,ah	36761-18	WG1822344,WG1813365,ical19785
	Sample	SIM-LVI-fast.M	4	WG1821732-1,32,,ah	821732-1	WG1822344,WG1821732,ical19785
	Sample	SIM-LVI-fast.M	5	WG1821732-2,32,,ah	821732-2	WG1822344,WG1821732,ical19785
	Sample	SIM-LVI-fast.M	6	WG1821732-3,32,,ah	821732-3	WG1822344,WG1821732,ical19785
	Sample	SIM-LVI-fast.M	7	L2349927-01,32,,ah	49927-01	WG1822344,WG1821732,ical19785
	Sample	SIM-LVI-fast.M	8	L2349986-10,32,,ah	49986-10	WG1822344,WG1821732,ical19785
	Sample	SIM-LVI-fast.M	9	L2349870-04,32,,ah	49870-04	WG1822344,WG1821714,ical19785
	Sample	SIM-LVI-fast.M	10	L2349870-05,32,,ah	49870-05	WG1822344,WG1821714,ical19785
	Sample	SIM-LVI-fast.M	11	L2349899-01,32,,ah	49899-01	WG1822344,WG1821714,ical19785
	Sample	SIM-LVI-fast.M	12	L2349899-02,32,,ah	49899-02	WG1822344,WG1821714,ical19785
	Sample	SIM-LVI-fast.M	13	WG1821732-2,32,,RV,jjw	21732-2	WG1822344,WG1821732,ical19785
	Sample	SIM-LVI-fast.M	14	L2349899-03,32,,ah	49899-03	WG1822344,WG1821714,ical19785
	Sample	SIM-LVI-fast.M	15	L2349877-01,32,,ah	49877-01	WG1822344,WG1821732,ical19785
	Sample	SIM-LVI-fast.M	16	WG1821890-2,32,,ah	821890-2	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	17	WG1821890-3,32,,ah	821890-3	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	18	WG1821890-1,32,,ah	821890-1	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	19	L2349951-01,32,,ah	49951-01	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	20	L2349951-02,32,,ah	49951-02	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	21	L2349951-03,32,,ah	49951-03	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	22	L2349951-04,32,,ah	49951-04	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	23	L2349951-05,32,,ah	49951-05	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	24	L2349951-06,32,,ah	49951-06	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	25	L2349942-07,32,,ah	49942-07	WG1822344,WG1821361,ical19785
	Sample	SIM-LVI-fast.M	26	L2349942-09,32,,ah	49942-09	WG1822344,WG1821361,ical19785
	Sample	SIM-LVI-fast.M	27	L2350202-01,32,,ah	50202-01	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	28	L2350202-02,32,,ah	50202-02	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	29	L2350202-03,32,,ah	50202-03	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	30	L2350202-04,32,,ah	50202-04	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	31	L2350202-05,32,,ah	50202-05	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	32	L2350202-06,32,,ah	50202-06	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	33	L2350202-07,32,,ah	50202-07	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	34	L2350202-08,32,,ah	50202-08	WG1822344,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	35	L2350202-09,32,,ah	50202-09	WG1822344,WG1821890,ical19785

	Type	Method File	Vial	Name	Data File	Comment
	Sample	SIM-LVI-fast.M	36	WG1822198-2,32,,ah	822198-2	WG1822344,WG1822198,ical19785
	Sample	SIM-LVI-fast.M	37	WG1822198-3,32,,ah	822198-3	WG1822344,WG1822198,ical19785
	Sample	SIM-LVI-fast.M	38	WG1822198-1,32,,ah	822198-1	WG1822344,WG1822198,ical19785
	Sample	SIM-LVI-fast.M	39	L2350269-02,32,,ah	50269-02	WG1822344,WG1822198,ical19785
	Sample	SIM-LVI-fast.M	40	L2350269-03,32,,ah	50269-03	WG1822344,WG1822198,ical19785
	Sample	SIM-LVI-fast.M	41	L2350269-06,32,,ah	50269-06	WG1822344,WG1822198,ical19785

	Type	Method File	Vial	Name	Data File	Comment
	Sample	SIM-LVI-fast.M	49	wg-3,32,, ICV 10193 (0830)	ccvtest	wg,,ical19785
	Sample	DFTPPRUN.M	48	wg-1,32,,dftppsv119	deg0901a	wg,,ical19785
	Sample	SIM-LVI-fast.M	49	wg-3,32,, ICV 10193 (0830)	ccv0901	wg,,ical19785
	Sample	SIM-LVI-fast.M	50	instrument blank	blank0901	wg,,ical19785
	Keyword					
	Sample	SIM-LVI-fast.M	1	WG1822455-1,32,,rp	822455-1	WG1822868,WG1822455,ical19785
	Sample	SIM-LVI-fast.M	2	WG1822455-2,32,,rp	822455-2	WG1822868,WG1822455,ical19785
	Sample	SIM-LVI-fast.M	3	WG1822455-3,32,,rp	822455-3	WG1822868,WG1822455,ical19785
	Sample	SIM-LVI-fast.M	4	WG1822343/1-2,32,,rp	822343-2	WG1822868,WG1822343,ical19785
	Sample	SIM-LVI-fast.M	5	WG1822343/1-3,32,,rp	822343-3	WG1822868,WG1822343,ical19785
	Sample	SIM-LVI-fast.M	6	L2350768-11,32,,R1A,rp	50768-11	WG1822868,WG1822455,ical19785
	Sample	SIM-LVI-fast.M	7	WG1822573-2,32,,rp	822573-2	WG1822868,WG1822573,ical19785
	Sample	SIM-LVI-fast.M	8	WG1822573-3,32,,rp	822573-3	WG1822868,WG1822573,ical19785
	Sample	SIM-LVI-fast.M	9	WG1822573-1,32,,rp	822573-1	WG1822868,WG1822573,ical19785
	Sample	SIM-LVI-fast.M	10	L2350664-20,32,,R1B,rp	50664-20	WG1822868,WG1822573,ical19785
	Sample	SIM-LVI-fast.M	11	WG1822343/1-1,32,,rp	822343-1	WG1822868,WG1822343,ical19785
	Sample	SIM-LVI-fast.M	12	WG1822635-2,32,,rp	822635-2	WG1822868,WG1822635,ical19785
	Sample	SIM-LVI-fast.M	13	WG1822635-3,32,,rp	822635-3	WG1822868,WG1822635,ical19785
	Sample	SIM-LVI-fast.M	14	WG1822635-1,32,,rp	822635-1	WG1822868,WG1822635,ical19785
	Sample	SIM-LVI-fast.M	15	L2350229-01,32,,rp	50229-01	WG1822868,WG1822455,ical19785
	Sample	SIM-LVI-fast.M	16	L2350229-02,32,,rp	50229-02	WG1822868,WG1822455,ical19785
	Sample	SIM-LVI-fast.M	17	L2350229-03,32,,rp	50229-03	WG1822868,WG1822455,ical19785
	Sample	SIM-LVI-fast.M	18	L2350228-01,32,,rp	50228-01	WG1822868,WG1822341,ical19785
	Sample	SIM-LVI-fast.M	19	L2350228-02,32,,rp	50228-02	WG1822868,WG1822341,ical19785
	Sample	SIM-LVI-fast.M	20	L2350228-03,32,,rp	50228-03	WG1822868,WG1822341,ical19785
	Sample	SIM-LVI-fast.M	21	L2350228-04,32,,rp	50228-04	WG1822868,WG1822341,ical19785
	Sample	SIM-LVI-fast.M	22	L2350228-05,32,,rp	50228-05	WG1822868,WG1822341,ical19785
	Sample	SIM-LVI-fast.M	23	L2350228-06,32,,rp	50228-06	WG1822868,WG1822341,ical19785
	Sample	SIM-LVI-fast.M	24	L2348749-03,32,,rp	48749-03	WG1822868,WG1822343,ical19785
	Sample	SIM-LVI-fast.M	25	WG1821890-2,32,2,rp	821890-2	WG1822868,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	26	WG1821890-3,32,2,rp	821890-3	WG1822868,WG1821890,ical19785
	Sample	SIM-LVI-fast.M	27	WG1822198-2,32,2,rp	822198-2	WG1822868,WG1822198,ical19785
	Sample	SIM-LVI-fast.M	28	WG1822198-3,32,2,rp	822198-3	WG1822868,WG1822198,ical19785
	Sample	SIM-LVI-fast.M	29	L2350148-01,32,,rp	50148-01	WG1822868,WG1822198,ical19785
	Sample	SIM-LVI-fast.M	30	L2350148-02,32,,rp	50148-02	WG1822868,WG1822198,ical19785
	Sample	SIM-LVI-fast.M	31	L2350148-03,32,,rp	50148-03	WG1822868,WG1822198,ical19785
	Sample	SIM-LVI-fast.M	32	L2350148-04,32,,rp	50148-04	WG1822868,WG1822198,ical19785
	Sample	SIM-LVI-fast.M	33	L2350283-01,32,,rp	50283-01	WG1822868,WG1822573,ical19785
	Sample	SIM-LVI-fast.M	34	L2350486-01,32,,rp	50486-01	WG1822868,WG1822573,ical19785

	Type	Method File	Vial	Name	Data File	Comment
	Sample	SIM-LVI-fast.M	35	L2350486-02,32,,rp	50486-02	WG1822868,WG1822573,ical19785
	Sample	SIM-LVI-fast.M	36	WG1822573-4,32,,rp	822573-4	WG1822868,WG1822573,ical19785
	Sample	SIM-LVI-fast.M	37	WG1822573-5,32,,rp	822573-5	WG1822868,WG1822573,ical19785
	Sample	SIM-LVI-fast.M	38	L2350486-03,32,,rp	50486-03	WG1822868,WG1822573,ical19785
	Sample	SIM-LVI-fast.M	39	L2350486-05,32,,rp	50486-05	WG1822868,WG1822573,ical19785
	Sample	SIM-LVI-fast.M	40	L2350486-06,32,,rp	50486-06	WG1822868,WG1822573,ical19785

	Type	Method File	Vial	Name	Data File	Comment
	Sample	DFTPPRUN.M	48	wg-1,32,,dftppsv119	deg0906	wg,,ical19785
	Sample	SIM-LVI-fast.M	49	wg-3,32,, ICV 10193 (0828)	ccv0906	wg,,ical19785
	Sample	SIM-LVI-fast.M	50	instrument blank	blank0906	wg,,ical19785
	Keyword					
	Sample	SIM-LVI-fast.M	1	WG1823798/97-1,32,,ah	823798-1	WG1824028,WG1823798,ical19785
	Sample	SIM-LVI-fast.M	2	WG1823798/97-2,32,,ah	823798-2	WG1824028,WG1823798,ical19785
	Sample	SIM-LVI-fast.M	3	WG1823798/97-3,32,,ah	823798-3	WG1824028,WG1823798,ical19785
	Sample	SIM-LVI-fast.M	4	L2348885-02,32,,ah	48885-02	WG1824028,WG1819904,ical19785
	Sample	SIM-LVI-fast.M	5	L2348791-09,32,,ah	48791-09	WG1824028,WG1819204,ical19785
	Sample	SIM-LVI-fast.M	6	L2351330-01,32,,R3B,ah	51330-01	WG1824028,WG1823798,ical19785
	Sample	SIM-LVI-fast.M	7	L2351330-02,32,,R3B,ah	51330-02	WG1824028,WG1823798,ical19785
	Sample	SIM-LVI-fast.M	8	L2351330-03,32,,R3B,ah	51330-03	WG1824028,WG1823798,ical19785
	Sample	SIM-LVI-fast.M	9	L2350461-08,32,,RV,ah	50461-08	WG1824028,WG1822239,ical19785
	Sample	SIM-LVI-fast.M	10	Wg1823332-2,32,2,ah	823332-2	WG1824028,wg1823332,ical19785
	Sample	SIM-LVI-fast.M	11	Wg1823332-3,32,2,ah	823332-3	WG1824028,wg1823332,ical19785
	Sample	SIM-LVI-fast.M	12	L2350508-01d,32,5,MD,ah	508-01d1	WG1824028,wg1822239,ical19785
	Sample	SIM-LVI-fast.M	13	L2350658-01,32,,ah	50658-01	WG1824028,WG1823348,ical19785
	Sample	SIM-LVI-fast.M	14	L2351330-01d,32,10,r3b,ah	330-01d1	WG1824028,wg1823798,ical19785
	Sample	SIM-LVI-fast.M	15	L2350658-02,32,,ah	50658-02	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	16	Wg1823348-4,32,,ah	823348-4	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	17	Wg1823348-5,32,,ah	823348-5	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	18	L2350658-03,32,,ah	50658-03	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	19	Wg1823348-6,32,,ah	823348-6	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	20	Wg1823348-7,32,,ah	823348-7	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	21	L2350658-04,32,,ah	50658-04	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	22	L2350658-05,32,,ah	50658-05	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	23	L2350658-06,32,,ah	50658-06	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	24	L2350658-07,32,,ah	50658-07	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	25	L2350658-08,32,,ah	50658-08	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	26	L2350654-03,32,,r2f,ah	50654-03	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	27	L2350658-09,32,,ah	50658-09	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	28	L2350658-10,32,,ah	50658-10	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	29	L2350787-16,32,,ah	50787-16	WG1824028,wg1823348,ical19785
	Sample	SIM-LVI-fast.M	30	WG1823348-1,32,,RR,jjw	823348-1	WG1824028,WG1823348,ical19785
	Sample	SIM-LVI-fast.M	31	L2350734-01,32,,ah	50734-01	WG1824028,wg1823117,ical19785
	Sample	SIM-LVI-fast.M	32	Wg1823489-2,32,,ah	823489-2	WG1824028,wg1823489,ical19785
	Sample	SIM-LVI-fast.M	33	Wg1823489-3,32,,ah	823489-3	WG1824028,wg1823489,ical19785
	Sample	SIM-LVI-fast.M	34	Wg1823489-1,32,,ah	823489-1	WG1824028,wg1823489,ical19785
	Sample	SIM-LVI-fast.M	35	L2350946-01,32,,ah	50946-01	WG1824028,wg1823489,ical19785

	Type	Method File	Vial	Name	Data File	Comment
	Sample	SIM-LVI-fast.M	36	L2350946-02,32,,ah	50946-02	WG1824028,wg1823489,ical19785
	Sample	SIM-LVI-fast.M	37	L2350946-03,32,,ah	50946-03	WG1824028,wg1823489,ical19785
	Sample	SIM-LVI-fast.M	38	L2350946-04,32,,ah	50946-04	WG1824028,wg1823489,ical19785
	Sample	SIM-LVI-fast.M	39	L2350946-06,32,,ah	50946-06	WG1824028,wg1823489,ical19785
	Sample	SIM-LVI-fast.M	40	L2349813-05,32,,RV,ah	49813-05	WG1824028,wg1820854,ical19785

	Type	Method File	Vial	Name	Data File	Comment
	Sample	DFTPPfast.M	48	wg-1,32,, dftpp sv128	deg0907	wg,,ical20340
	Sample	fast-SIM-LVI.M	49	wg-3,32,,ICV 10193 (0907)	ccv0907	wg,,ical20340
	Sample	fast-SIM-LVI.M	49	wg-3,32,,ICV 10193 (0907)	ccv0907a	wg,,ical20340
	Sample	fast-SIM-LVI.M	50	instrument blank	blk0907	wg,,ical20340
	Keyword					
	Sample	fast-SIM-LVI.M	1	WG1813181-1,32,,ah	813181-1	WG1824579,WG1813181,ical20340
	Sample	fast-SIM-LVI.M	2	WG1813181-2,32,,ah	813181-2	WG1824579,WG1813181,ical20340
	Sample	fast-SIM-LVI.M	3	WG1813181-3,32,,ah	813181-3	WG1824579,WG1813181,ical20340
	Sample	fast-SIM-LVI.M	4	is test	test	is test
	Sample	fast-SIM-LVI.M	5	L2336761-17,32,,ah	36761-17	WG1824579,WG1813181,ical20340
	Sample	fast-SIM-LVI.M	6	WG1822504-1,32,,ah	822504-1	WG1824579,WG1822504,ical20340
	Sample	fast-SIM-LVI.M	7	WG1824277-2,32,,ah	824277-2	WG1824579,WG1824277,ical20340
	Sample	fast-SIM-LVI.M	8	WG1824277-3,32,,ah	824277-3	WG1824579,WG1824277,ical20340
	Sample	fast-SIM-LVI.M	9	WG1824277-1,32,,ah	824277-1	WG1824579,WG1824277,ical20340
	Sample	fast-SIM-LVI.M	10	L2349121-17,32,,ah	49121-17	WG1824579,WG1824277,ical20340
	Sample	fast-SIM-LVI.M	11	WG1822504-2,32,,ah	822504-2	WG1824579,WG1822504,ical20340
	Sample	fast-SIM-LVI.M	12	WG1822504-3,32,,ah	822504-3	WG1824579,WG1822504,ical20340
	Sample	fast-SIM-LVI.M	13	L2350285-05,32,,ah	50285-05	WG1824579,WG1822504,ical20340
	Sample	fast-SIM-LVI.M	14	L2350285-06,32,,ah	50285-06	WG1824579,WG1822504,ical20340
	Sample	fast-SIM-LVI.M	15	WG1822944-2,32,,ah	822944-2	WG1824579,WG1822944,ical20340
	Sample	fast-SIM-LVI.M	16	WG1822944-3,32,,ah	822944-3	WG1824579,WG1822944,ical20340
	Sample	fast-SIM-LVI.M	17	WG1822944-1,32,,ah	822944-1	WG1824579,WG1822944,ical20340
	Sample	fast-SIM-LVI.M	18	L2350235-03,32,,ah	50235-03	WG1824579,WG1822944,ical20340
	Sample	fast-SIM-LVI.M	19	L2350269-11,32,,ah	50269-11	WG1824579,WG1823489,ical20340
	Sample	fast-SIM-LVI.M	20	L2350067-03,32,,ah	50067-03	WG1824579,WG1822239,ical20340
	Sample	fast-SIM-LVI.M	21	L2350067-04,32,,ah	50067-04	WG1824579,WG1822239,ical20340
	Sample	fast-SIM-LVI.M	22	L2350246-01,32,,ah	50246-01	WG1824579,WG1822635,ical20340
	Sample	fast-SIM-LVI.M	23	L2350269-01,32,,ah	50269-01	WG1824579,WG1822198,ical20340
	Sample	fast-SIM-LVI.M	24	L2350269-04,32,,ah	50269-04	WG1824579,WG1822198,ical20340
	Sample	fast-SIM-LVI.M	25	L2350269-05,32,,ah	50269-05	WG1824579,WG1822198,ical20340
	Sample	fast-SIM-LVI.M	26	L2350269-07,32,,ah	50269-07	WG1824579,WG1822198,ical20340
	Sample	fast-SIM-LVI.M	27	L2350269-08,32,,ah	50269-08	WG1824579,WG1822198,ical20340
	Sample	fast-SIM-LVI.M	28	WG1822198-4,32,,ah	822198-4	WG1824579,WG1822198,ical20340
	Sample	fast-SIM-LVI.M	29	WG1822198-5,32,,ah	822198-5	WG1824579,WG1822198,ical20340
	Sample	fast-SIM-LVI.M	30	L2350269-09,32,,ah	50269-09	WG1824579,WG1822188,ical20340
	Sample	fast-SIM-LVI.M	31	L2350235-04,32,,ah	50235-04	WG1824579,WG1822944,ical20340
	Sample	fast-SIM-LVI.M	32	WG1823204-2,32,,ah	823204-2	WG1824579,WG1823204,ical20340
	Sample	fast-SIM-LVI.M	33	Wg1823204-3,32,,ah	823204-3	WG1824579,WG1823204,ical20340
	Sample	fast-SIM-LVI.M	34	Wg1823204-1,32,,ah	823204-1	WG1824579,WG1823204,ical20340

	Type	Method File	Vial	Name	Data File	Comment
	Sample	fast-SIM-LVI.M	35	L2350521-09,32,,ah	50521-09	WG1824579,WG1823204,ical20340
	Sample	fast-SIM-LVI.M	36	Wg1823099-2,32,,ah	823099-2	WG1824579,WG1823099,ical20340
	Sample	fast-SIM-LVI.M	37	Wg1823099-3,32,,ah	823099-3	WG1824579,WG1823099,ical20340
	Sample	fast-SIM-LVI.M	38	Wg1823099-1,32,,ah	823099-1	WG1824579,WG1823099,ical20340
	Sample	fast-SIM-LVI.M	39	L2350435-01,32,,ah	50435-01	WG1824579,WG1822926,ical20340
	Sample	fast-SIM-LVI.M	40	L2350435-02,32,,ah	50435-02	WG1824579,WG1822926,ical20340

	Type	Method File	Vial	Name	Data File	Comment
	Sample	DFTPPRUN.M	48	wg-1,32,,dftppsv119	deg0907a	wg,,ical19785
	Sample	SIM-LVI-fast.M	49	wg-3,32,, ICV 10193 (0905)	ccv0907a	wg,,ical19785
	Sample	SIM-LVI-fast.M	50	instrument blank	blank0907a	wg,,ical19785
	Keyword					
	Sample	SIM-LVI-fast.M	1	WG1822573-4,32,2,ah	822573-4	WG1824714,WG1822573,ical19785
	Sample	SIM-LVI-fast.M	2	WG1822573-5,32,2,ah	822573-5	WG1824714,WG1822573,ical19785
	Sample	SIM-LVI-fast.M	3	L2351424-27,32,,R3C,ah	51424-27	WG1824714,WG1823728,ical19785
	Sample	SIM-LVI-fast.M	4	WG1823494-2,32,,ah	823494-2	WG1824714,WG1823494,ical19785
	Sample	SIM-LVI-fast.M	5	WG1823494-3,32,,ah	823494-3	WG1824714,WG1823494,ical19785
	Sample	SIM-LVI-fast.M	6	WG1823494-1,32,,ah	823494-1	WG1824714,WG1823494,ical19785
	Sample	SIM-LVI-fast.M	7	WG1824415-2,32,,ah	824415-2	WG1824714,WG1824415,ical19785
	Sample	SIM-LVI-fast.M	8	WG1824415-3,32,,ah	824415-3	WG1824714,WG1824415,ical19785
	Sample	SIM-LVI-fast.M	9	WG1824415-1,32,,ah	824415-1	WG1824714,WG1824415,ical19785
	Sample	SIM-LVI-fast.M	10	L2351491-01,32,,R3B,ah	51491-01	WG1824714,WG1824415,ical19785
	Sample	SIM-LVI-fast.M	11	L2351491-02,32,,R3B,ah	51491-02	WG1824714,WG1824415,ical19785
	Sample	SIM-LVI-fast.M	12	L2350970-01,32,,ah	50970-01	WG1824714,WG1823494,ical19785
	Sample	SIM-LVI-fast.M	13	L2350970-02,32,,ah	50970-02	WG1824714,WG1823494,ical19785
	Sample	SIM-LVI-fast.M	14	WG1823489-2,32,2,jjw	823489-2	WG1824714,WG1823489,ical19785
	Sample	SIM-LVI-fast.M	15	WG1823489-3,32,2,jjw	823489-3	WG1824714,WG1823489,ical19785
	Sample	SIM-LVI-fast.M	16	L2350970-03,32,,ah	50970-03	WG1824714,WG1823494,ical19785
	Sample	SIM-LVI-fast.M	17	L2350970-04,32,,ah	50970-04	WG1824714,WG1823494,ical19785
	Sample	SIM-LVI-fast.M	18	L2350970-05,32,,ah	50970-05	WG1824714,WG1823494,ical19785
	Sample	SIM-LVI-fast.M	19	L2350970-06,32,,ah	50970-06	WG1824714,WG1823494,ical19785
	Sample	SIM-LVI-fast.M	20	L2350970-08,32,,ah	50970-08	WG1824714,WG1823494,ical19785
	Sample	SIM-LVI-fast.M	21	L2350970-09,32,,ah	50970-09	WG1824714,WG1823494,ical19785
	Sample	SIM-LVI-fast.M	22	L2349877-02d,32,20,ah	877-02d1	WG1824714,WG1821732,ical19785
	Sample	SIM-LVI-fast.M	23	WG1822926-2,32,,ah	822926-2	WG1824714,WG1822926,ical19785
	Sample	SIM-LVI-fast.M	24	WG1822926-3,32,,ah	822926-3	WG1824714,WG1822926,ical19785
	Sample	SIM-LVI-fast.M	25	WG1822926-1,32,,ah	822926-1	WG1824714,WG1822926,ical19785
	Sample	SIM-LVI-fast.M	26	WG1823728-2,32,,rp	823728-2	WG1824714,WG1823728,ical19785
	Sample	SIM-LVI-fast.M	27	WG1823728-3,32,,rp	823728-3	WG1824714,WG1823728,ical19785
	Sample	SIM-LVI-fast.M	28	WG1823728-1,32,,rp	823728-1	WG1824714,WG1823728,ical19785
	Sample	SIM-LVI-fast.M	29	WG1824415-2,32,2,rp	24415-2	WG1824714,WG1824415,ical19785
	Sample	SIM-LVI-fast.M	30	WG1824415-3,32,2,rp	24415-3	WG1824714,WG1824415,ical19785
	Sample	SIM-LVI-fast.M	31	L2350235-08,32,,ah	50235-08	WG1824714,WG1822926,ical19785
	Sample	SIM-LVI-fast.M	32	WG1821863-2,32,,ah	821863-2	WG1824714,WG1821863,ical19785
	Sample	SIM-LVI-fast.M	33	WG1821863-3,32,,ah	821863-3	WG1824714,WG1821863,ical19785
	Sample	SIM-LVI-fast.M	34	WG1821863-1,32,,ah	821863-1	WG1824714,WG1821863,ical19785
	Sample	SIM-LVI-fast.M	35	L2350160-01,32,,ah	50160-01	WG1824714,WG1821863,ical19785

	Type	Method File	Vial	Name	Data File	Comment
	Sample	SIM-LVI-fast.M	36	L2350160-02,32,,ah	50160-02	WG1824714,WG1821863,ical19785
	Sample	SIM-LVI-fast.M	37	L2350160-04,32,,ah	50160-04	WG1824714,WG1821863,ical19785
	Sample	SIM-LVI-fast.M	38	L2350160-05,32,,ah	50160-05	WG1824714,WG1821863,ical19785
	Sample	SIM-LVI-fast.M	39	L2350160-06,32,,rp	50160-06	WG1824714,WG1821863,ical19785
	Sample	SIM-LVI-fast.M	40	L2350160-07,32,,rp	50160-07	WG1824714,WG1821863,ical19785

	Type	Method File	Vial	Name	Data File	Comment
	Sample	DFTPPfast.M	48	wg-1,32,, dftpp sv128	deg0909	wg,,ical20340
	Sample	fast-SIM-LVI.M	49	wg-3,32,,ICV 10193 (0905)	ccv0909	wg,,ical20340
	Sample	fast-SIM-LVI.M	50	instrument blank	blk0909	wg,,ical20340
	Keyword					
	Sample	fast-SIM-LVI.M	1	WG1813365-1,32,,ah	813365-1	WG1825552,WG1813365,ical20340
	Sample	fast-SIM-LVI.M	2	WG1813365-2,32,,ah	813365-2	WG1825552,WG1813365,ical20340
	Sample	fast-SIM-LVI.M	3	L2336761-18,32,,ah	36761-18	WG1825552,WG1813365,ical20340
	Sample	fast-SIM-LVI.M	4	WG1823099-1,32,,ah	823099-1	WG1825552,WG1823099,ical20340
	Sample	fast-SIM-LVI.M	5	L2349877-02d,32,20,ah	877-02d1	WG1825552,WG1821732,ical20340
	Sample	fast-SIM-LVI.M	6	WG1823328-2,32,,ah	823328-2	WG1825552,WG1823328,ical20340
	Sample	fast-SIM-LVI.M	7	WG1823328-3,32,,ah	823328-3	WG1825552,WG1823328,ical20340
	Sample	fast-SIM-LVI.M	8	WG1823328-1,32,,ah	823328-1	WG1825552,WG1823328,ical20340
	Sample	fast-SIM-LVI.M	9	L2350160-01,32,,ah	50160-01	WG1825552,wg1821863,ical20340
	Sample	fast-SIM-LVI.M	10	L2350160-07,32,,ah	50160-07	WG1825552,wg1821863,ical20340
	Sample	fast-SIM-LVI.M	11	L2350269-05,32,,ah	50269-05	WG1825552,wg1822198,ical20340
	Sample	fast-SIM-LVI.M	12	L2350235-01,32,,ah	50235-01	WG1825552,wg1822944,ical20340
	Sample	fast-SIM-LVI.M	13	L2350235-02,32,,ah	50235-02	WG1825552,wg1822944,ical20340
	Sample	fast-SIM-LVI.M	14	L2350235-05,32,,ah	50235-05	WG1825552,wg1822944,ical20340
	Sample	fast-SIM-LVI.M	15	L2350235-06,32,,ah	50235-06	WG1825552,wg1822944,ical20340
	Sample	fast-SIM-LVI.M	16	L2350235-07,32,,ah	50235-07	WG1825552,wg1822944,ical20340
	Sample	fast-SIM-LVI.M	17	L2350405-01,32,,ah	50405-01	WG1825552,wg1823328,ical20340
	Sample	fast-SIM-LVI.M	18	L2350405-02,32,,ah	50405-02	WG1825552,WG1823033,ical20340
	Sample	fast-SIM-LVI.M	19	L2350405-03,32,,ah	50405-03	WG1825552,wg1823328,ical20340
	Sample	fast-SIM-LVI.M	20	L2350405-04,32,,ah	50405-04	WG1825552,wg1823328,ical20340

ORGANIC ELN REPORT

Workgroup: WG1823489

Prep Method: EPA 3510C
Solvent Type: DCM **Lot #:** EH108
Surrogate Type: ABN **Lot #:** 10212u-020224,
Spike Type: ABN-SIM **Lot #:** 10208s-012824,10214p-02092
Spike Verify by: EMI / TBC
Lims Spikelot: 8270-LVI

Additional Reagents/Stds

H2SO4	2023061363
Na2SO4	23d0756233
NaOH	10nnaoh081023

Conc.Method: Buchi
Solvent Type: DCM
Lot #: EH108

Additional Reagents/Stds

Cleanup 1

Cleanup Method 1:
Cleanup Method 2:
Solvent Type: **Lot #:**

Additional Reagents/Stds

Sample/ Type	Extraction: Extract Date	Analyst	Sample Vol ml	Ph	Surr Amt ml	Spike Amt ml	Concentration: Conc Date	Analyst	Final Vol ml	Conc Unit
L2350269-11 WATER	09/05/23 09:25	Tian-Long Chheou	275	<2, >12	1		09/05/23 20:09	Anita Ofori	1	H
L2350946-01 SAMP	09/05/23 02:46	Emmanuel Ilori	275	<2,>12	1		09/05/23 10:14	Caroline Doiron	1	H
L2350946-02 SAMP	09/05/23 02:46	Emmanuel Ilori	275	<2,>12	1		09/05/23 10:14	Caroline Doiron	1	H
L2350946-03 SAMP	09/05/23 02:46	Emmanuel Ilori	275	<2,>12	1		09/05/23 10:14	Caroline Doiron	1	H
L2350946-04 SAMP	09/05/23 02:46	Emmanuel Ilori	275	<2,>12	1		09/05/23 10:14	Caroline Doiron	1	H
L2350946-06 SAMP	09/05/23 02:46	Emmanuel Ilori	275	<2,>12	1		09/05/23 10:14	Caroline Doiron	1	H
WG1823489-1 BLANK	09/05/23 02:46 **WG1823488**	Emmanuel Ilori	275	<2,>12	1		09/05/23 10:14	Caroline Doiron	1	H

Reported: 11-SEP-23 02:36 PM

ORGANIC ELN REPORT

Workgroup: WG1823489

Sample/ Type	Extraction						Concentration			
	Extract Date	Analyst	Sample Vol **ml**	Ph	Surr Amt **ml**	Spike Amt **ml**	Conc Date	Analyst	Final Vol **ml**	Conc Unit
WG1823489-2 LCS	09/05/23 02:46 **WG1823488**	Emmanuel Ilori	275	<2,>12	1	1	09/05/23 10:14	Caroline Doiron	1	H
WG1823489-3 LCSD	09/05/23 02:46 **WG1823488**	Emmanuel Ilori	275	<2,>12	1	1	09/05/23 10:14	Caroline Doiron	1	H

Reported: 11-SEP-23 02:36 PM

ORGANIC ELN REPORT

Workgroup: WG1822198

Prep Method: EPA 3510C
Solvent Type: DCM
Surrogate Type: ABN
Spike Type: ABN-SIM
Spike Verify by: DDG/FMM
Lims Spikelot: 8270-LVI

Lot #: EG858
Lot #: 10212e-020224,
Lot #: 10208m-012824,10214i-02092

Additional Reagents/Stds

H2SO4	A072523
Na2SO4	23A1161008
NaOH	10NNaOH081023

Conc.Method: Buchi
Solvent Type: DCM
Lot #: EG858

Additional Reagents/Stds

Cleanup 1

Cleanup Method 1:
Cleanup Method 2:
Solvent Type: **Lot #:**

Additional Reagents/Stds

Sample/ Type	Extraction: Extract Date	Analyst	Sample Vol ml	Ph	Surr Amt ml	Spike Amt ml	Concentration: Conc Date	Analyst	Final Vol ml	Conc Unit
L2350148-01 WATER	08/31/23 04:16	Francis Mbro-Menyah	275	<2,>12	1		08/31/23 18:28	Victor Kono	1	H
L2350148-02 WATER	08/31/23 04:16	Francis Mbro-Menyah	275	<2,>12	1		08/31/23 18:28	Victor Kono	1	H
L2350148-03 WATER	08/31/23 04:16	Francis Mbro-Menyah	275	<2,>12	1		08/31/23 18:28	Victor Kono	1	H
L2350148-04 WATER	08/31/23 04:16	Francis Mbro-Menyah	275	<2,>12	1		08/31/23 18:28	Victor Kono	1	H
L2350269-01 WATER	08/30/23 20:39	Daniel Gyedu	275	<2,>12	1		08/31/23 18:28	Victor Kono	1	H
	SAMPLE BROKE ON BUCHI CONC.									
L2350269-02 WATER	08/30/23 20:39	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H

Reported: 11-SEP-23 02:36 PM

ORGANIC ELN REPORT

Workgroup: WG1822198

Sample/ Type	Extraction						Concentration			
	Extract Date	Analyst	Sample Vol ml	Ph	Surr Amt ml	Spike Amt ml	Conc Date	Analyst	Final Vol ml	Conc Unit
L2350269-03 WATER	08/30/23 20:39	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H
L2350269-04 WATER	08/31/23 19:26	Daniel Gyedu	275	<2,>12	1		09/01/23 04:03	Annabella Sarfo	1	H
L2350269-05 WATER	08/31/23 19:26	Daniel Gyedu	275	<2,>12	1		09/01/23 04:03	Annabella Sarfo	1	H
L2350269-06 WATER	08/30/23 20:39	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H
L2350269-07 WATER	08/30/23 20:39	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H
L2350269-08 WATER	08/30/23 20:39	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H
L2350269-09 WATER	08/30/23 20:39	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H
WG1822198-1 BLANK	08/30/23 19:43 **WG1822188**	Daniel Gyedu	275	<2,>12	1		08/31/23 02:13	Annabella Sarfo	1	H
WG1822198-2 LCS	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1	1	08/31/23 02:13	Annabella Sarfo	1	H
WG1822198-3 LCSD	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1	1	08/31/23 02:13	Annabella Sarfo	1	H

Reported: 11-SEP-23 02:36 PM

ORGANIC ELN REPORT

Workgroup: WG1822198

Sample/ Type	Extraction						Concentration			
	Extract Date	Analyst	Sample Vol **ml**	Ph	Surr Amt **ml**	Spike Amt **ml**	Conc Date	Analyst	Final Vol **ml**	Conc Unit
WG1822198-4 MS	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1	1	08/31/23 02:13	Annabella Sarfo	1	H
WG1822198-5 MSD	08/30/23 19:43	Daniel Gyedu	275	<2,>12	1	1	08/31/23 02:13	Annabella Sarfo	1	H

Reported: 11-SEP-23 02:36 PM

GC Extractable Analysis Polychlorinated Biphenyls (PCB)

Aroclor QC Summary

Surrogate Recovery Summary
Form 2
PCBs

Client: Alpha Geoscience
Project Name: HUNTINGTON READY MIX

Lab Number: L2350269
Project Number: 20116
Matrix: Water

GC Column 1: CLP-Pesticide
GC Column 2: CLP-PesticideII

CLIENT ID (LAB SAMPLE NO.)	TCX 1 %REC	TCX 2 %REC	DCB 1 %REC	DCB 2 %REC	OTHER (1)	OTHER (2)	TOT OUT
MW-1S (L2350269-01)	61	64	65	70			0
MW-2S (L2350269-02)	54	60	67	74			0
MW-3S (L2350269-03)	64	70	71	86			0
MW-4D (L2350269-04)	52	58	59	69			0
MW-5S (L2350269-05)	57	61	70	83			0
MW-6D (L2350269-06)	61	68	73	81			0
MW-7S (L2350269-07)	54	60	69	77			0
MW-8S (L2350269-08)	49	58	63	69			0
DUP (L2350269-09)	65	64	75	79			0
EQUIPMENT BLANK (L2350269-11)	58	64	34	39			0
WG1823569-1BLANK	49	55	62	69			0
WG1823569-2LCS	37	41	51	57			0
WG1823569-3LCSD	40	45	54	61			0
MW-8SMS	49	59	63	71			0
MW-8SMSD	54	58	66	72			0

QC LIMITS
(30-150) TCX = 2,4,5,6-TETRACHLORO-M-XYLENE
(30-150) DCBP = DECACHLOROBIPHENYL

*** Values outside of QC limits**

Laboratory Control Sample Summary
Form 3
PCBs

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1823569-2 **Analysis Date** : 09/05/23 17:38	**File ID**	: P2230905a-38
LCSD Sample ID	: WG1823569-3 **Analysis Date** : 09/05/23 17:47	**File ID**	: P2230905a-39

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Aroclor 1016	1.78	0.801	45	1.78	0.899	50	11	40-140	50
Aroclor 1260	1.78	0.821	46	1.78	0.892	50	8	40-140	50

Matrix Spike Sample Summary
Form 3
PCBs

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2350269-08	**Analysis Date**	: 09/05/23 17:57
Matrix Spike	: WG1823569-4	**MS Analysis Date**	: 09/05/23 18:06
Matrix Spike Dup	: WG1823569-5	**MSD Analysis Date**	: 09/05/23 18:15

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Aroclor 1016	ND	1.78	1.08	60	1.78	0.999	56	8	40-140	50
Aroclor 1260	ND	1.78	0.988	55	1.78	0.943	53	5	40-140	50

Method Blank Summary
Form 4
PCBs

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: WG1823569-1	**Lab File ID**	: P2230905a-37
Matrix	: WATER	**Extraction Date**	: 09/05/23
Sulfur Cleanup	: Y		
Analysis Date (1)	: 09/05/23 17:28	**Analysis Date (2)**	: 09/05/23 17:28
Instrument ID (1)	: PEST2	**Instrument ID (2)**	: PEST2

Client Sample No.	Lab Sample ID	Analysis Date 1	Analysis Date 2
WG1823569-2LCS	WG1823569-2	09/05/23 17:38	09/05/23 17:38
WG1823569-3LCSD	WG1823569-3	09/05/23 17:47	09/05/23 17:47
MW-8S	L2350269-08	09/05/23 17:57	09/05/23 17:57
MW-8SMS	WG1823569-4	09/05/23 18:06	09/05/23 18:06
MW-8SMSD	WG1823569-5	09/05/23 18:15	09/05/23 18:15
MW-1S	L2350269-01	09/05/23 18:25	09/05/23 18:25
MW-2S	L2350269-02	09/05/23 18:34	09/05/23 18:34
MW-3S	L2350269-03	09/05/23 18:44	09/05/23 18:44
MW-4D	L2350269-04	09/05/23 18:53	09/05/23 18:53
MW-5S	L2350269-05	09/05/23 19:02	09/05/23 19:02
MW-6D	L2350269-06	09/05/23 19:12	09/05/23 19:12
MW-7S	L2350269-07	09/05/23 19:21	09/05/23 19:21
DUP	L2350269-09	09/05/23 19:31	09/05/23 19:31
EQUIPMENT BLANK	L2350269-11	09/05/23 23:02	09/05/23 23:02

Analytical Sequence
Form 8b
PCBs

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: PEST2	**Initial Calib. Date(s)**	: 08/21/23 08/22/23

Client ID	Lab ID	Date/Time Analyzed
1242/1268 L4 (250ug/L)	R1733052-1	08/21/23 20:35
1221/1254 L4 (250ug/L)	R1733052-2	08/21/23 21:03
1016/1260 L1 (10ug/L)	R1733052-3	08/21/23 21:13
1016/1260 L2 (50ug/L)	R1733052-7	08/21/23 21:22
1016/1260 L3 (100ug/L)	R1733052-6	08/21/23 21:33
1016/1260 L4 (250ug/L)	R1733052-4	08/21/23 21:43
1016/1260 L5 (500ug/L)	R1733052-9	08/21/23 21:52
1016/1260 L6 (1000ug/L)	R1733052-8	08/21/23 22:01
R1733052-5 ICV	R1733052-5	08/21/23 22:11
R1733052-10 ICV	R1733052-10	08/21/23 22:39
R1733052-12 ICV	R1733052-12	08/21/23 22:48
1232/1262 L4 (250ug/L)	R1733052-13	08/22/23 17:57
1248 L4 (250ug/L)	R1733052-14	08/22/23 18:06
R1733052-11 ICV	R1733052-11	08/22/23 18:18
R1733052-15 ICV	R1733052-15	08/22/23 18:28
WG1823542-5 CCAL	WG1823542-5	09/05/23 13:48
WG1823569-1 BLANK	WG1823569-1	09/05/23 17:28
WG1823569-2 LCS	WG1823569-2	09/05/23 17:38
WG1823569-3 LCSD	WG1823569-3	09/05/23 17:47
MW-8S	L2350269-08	09/05/23 17:57
MW-8S MS	WG1823569-4	09/05/23 18:06
MW-8S MSD	WG1823569-5	09/05/23 18:15
MW-1S	L2350269-01	09/05/23 18:25
MW-2S	L2350269-02	09/05/23 18:34
MW-3S	L2350269-03	09/05/23 18:44
MW-4D	L2350269-04	09/05/23 18:53
MW-5S	L2350269-05	09/05/23 19:02
MW-6D	L2350269-06	09/05/23 19:12
MW-7S	L2350269-07	09/05/23 19:21
DUP	L2350269-09	09/05/23 19:31
WG1823542-9 CCAL	WG1823542-9	09/05/23 19:40
EQUIPMENT BLANK	L2350269-11	09/05/23 23:02

Date Created: 03/07/23
Created By: Jason Hebert
File: PM14021-1
Page: 1

PCB - EPA 8082A (WATER)

Holding Time: 365 days
Container/Sample Preservation: 2 - Amber 1000ml unpreserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Aroclor 1016	12674-11-2	0.25	0.0156	ug/l	40-140	50	40-140	50	50			
Aroclor 1221	11104-28-2	0.25	0.0221	ug/l	40-140	50	40-140	50	50			
Aroclor 1232	11141-16-5	0.25	0.046	ug/l	40-140	50	40-140	50	50			
Aroclor 1242	53469-21-9	0.25	0.0362	ug/l	40-140	50	40-140	50	50			
Aroclor 1248	12672-29-6	0.25	0.0455	ug/l	40-140	50	40-140	50	50			
Aroclor 1254	11097-69-1	0.25	0.0168	ug/l	40-140	50	40-140	50	50			
Aroclor 1260	11096-82-5	0.25	0.0344	ug/l	40-140	50	40-140	50	50			
Aroclor 1262	37324-23-5	0.25	0.033	ug/l	40-140	30	40-140	50	50			
Aroclor 1268	11100-14-4	0.25	0.0317	ug/l	40-140	30	40-140	50	50			
PCBs, Total	1336-36-3	0.25	0.0156	ug/l				50	50			
2,4,5,6-Tetrachloro-m-xylene	*877-09-8*									*30-150*		
Decachlorobiphenyl	*2051-24-3*									*30-150*		

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 03/07/23
Created By: Jason Hebert
File: PM14022-1
Page: 1

PCB - EPA 8082A (SOIL)

Holding Time: 365 days
Container/Sample Preservation: 1 - Glass 250ml/8oz unpreserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Aroclor 1016	12674-11-2	50	4.44	ug/kg	40-140	50	40-140	50	50			
Aroclor 1221	11104-28-2	50	5.01	ug/kg	40-140	50	40-140	50	50			
Aroclor 1232	11141-16-5	50	10.6	ug/kg	40-140	50	40-140	50	50			
Aroclor 1242	53469-21-9	50	6.74	ug/kg	40-140	50	40-140	50	50			
Aroclor 1248	12672-29-6	50	7.5	ug/kg	40-140	50	40-140	50	50			
Aroclor 1254	11097-69-1	50	5.47	ug/kg	40-140	50	40-140	50	50			
Aroclor 1260	11096-82-5	50	9.24	ug/kg	40-140	50	40-140	50	50			
Aroclor 1262	37324-23-5	50	6.35	ug/kg	40-140	30	40-140	50	50			
Aroclor 1268	11100-14-4	50	5.18	ug/kg	40-140	30	40-140	50	50			
PCBs, Total	1336-36-3	50	4.44	ug/kg				50	50			
2,4,5,6-Tetrachloro-m-xylene	*877-09-8*									*30-150*		
Decachlorobiphenyl	*2051-24-3*									*30-150*		

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Aroclor Sample Data

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 18:25
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-43	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 18:34
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-44	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 18:44
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-45	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 18:53
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-46	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 19:02
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-47	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 19:02
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-47	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-PesticideII
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 19:12
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-48	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 19:21
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-49	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 17:57
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-40	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 19:31
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-50	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 23:02
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-56	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Results Summary
Form 1
Polychlorinated Biphenyls by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823569-1	**Date Collected**	: NA
Client ID	: WG1823569-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/05/23 17:28
Sample Matrix	: WATER	**Date Extracted**	: 09/05/23
Analytical Method	: 1,8082A	**Dilution Factor**	: 1
Lab File ID	: P2230905a-37	**Analyst**	: MEO
Sample Amount	: 140 ml	**Instrument ID**	: PEST2
Extraction Method	: EPA 3510C	**GC Column**	: CLP-Pesticide
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: Y		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
12674-11-2	Aroclor 1016	ND	0.071	0.061	U
11104-28-2	Aroclor 1221	ND	0.071	0.061	U
11141-16-5	Aroclor 1232	ND	0.071	0.061	U
53469-21-9	Aroclor 1242	ND	0.071	0.061	U
12672-29-6	Aroclor 1248	ND	0.071	0.061	U
11097-69-1	Aroclor 1254	ND	0.071	0.061	U
11096-82-5	Aroclor 1260	ND	0.071	0.061	U
37324-23-5	Aroclor 1262	ND	0.071	0.061	U
11100-14-4	Aroclor 1268	ND	0.071	0.061	U
1336-36-3	PCBs, Total	ND	0.071	0.061	U

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-40.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 5:57 pm
Operator : pest2:meo
Sample : L2350269-08,42,, p
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 40 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:29:11 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards						
1) i 1660_1br2nb	1.156	1.227	270.2E6	161.7E6	25.000	25.000
Standard Area 1 : #1 = 277861669				Recovery =	97.23%	
Standard Area 1 : #2 = 177277303				Recovery =	91.20%	
14) i 2154_1br2nb	1.156	1.227	270.2E6	161.7E6	25.000	25.000
23) i 4268_1br2nb	1.156	1.227	270.2E6	161.7E6	25.000	25.000
34) i 1248_1br2nb	1.156	1.227	270.2E6	161.7E6	25.000	25.000
40) i 3262_1br2nb	1.156	1.227	270.2E6	161.7E6	25.000	25.000
System Monitoring Compounds						
2) s 2,4,5,6-Tetr	1.439	1.601	157.1E6	110.8E6	9.897	11.549
Spiked Amount 20.000	Range 30 - 150		Recovery =	49.48%	57.75%	
3) s Decachlorobi	4.002	4.535	162.1E6	93331054	12.628	13.780
Spiked Amount 20.000	Range 30 - 150		Recovery =	63.14%	68.90%	
Target Compounds						
4) l1 1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1 1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1 1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1 1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1 1016-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1016-1			0	0	N.D.	N.D.
Average 1016-1					0.000	0.000
9) l2 1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2 1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2 1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2 1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2 1260-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1260-1			0	0	N.D.	N.D.
Average 1260-1					0.000	0.000
15) l3 1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3 1221-3	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-40.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 5:57 pm
Operator : pest2:meo
Sample : L2350269-08,42,, p
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 40 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:29:11 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
17) l3 1221-4	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
18) l4 1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4 1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4 1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4 1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4 1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
24) l6 1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6 1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6 1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6 1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6 1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
29) l9 1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9 1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9 1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9 1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9 1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
35) l7 1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7 1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7 1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7 1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7 1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-40.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 5:57 pm
Operator : pest2:meo
Sample : L2350269-08,42,, p
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 40 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:29:11 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

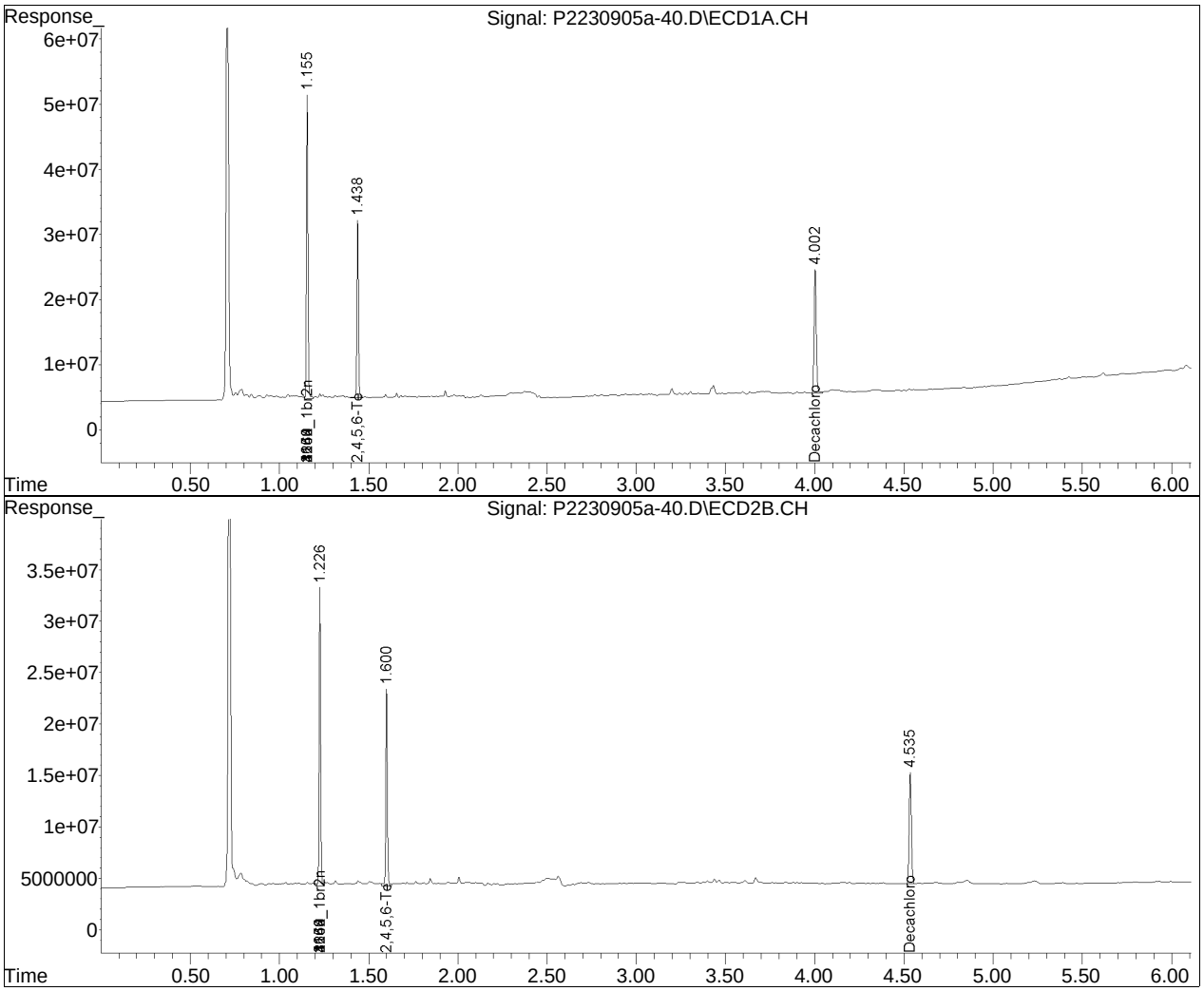
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedP2230905a-27.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-40.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 5:57 pm
Operator : pest2:meo
Sample : L2350269-08,42,, p
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 40 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:29:11 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PCB\Pest2\2023\230905a\	QMethod	: P2_pcb_08_21_23_LVI_ugL_
Data File	: P2230905a-40.D	Operator	: pest2:meo
Date Inj'd	: 9/5/2023 5:57 pm	Instrument	: Pest 2
Sample	: L2350269-08,42,, p	Quant Date	: 9/6/2023 3:31 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-43.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:25 pm
Operator : pest2:meo
Sample : L2350269-01,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 43 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:31:05 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1660_1br2nb	1.155	1.226	304.6E6	178.8E6	25.000M4	25.000
	Standard Area 1 : #1 = 277861669				Recovery = 109.61%		
	Standard Area 1 : #2 = 177277303				Recovery = 100.88%		
14) i	2154_1br2nb	1.155	1.226	304.6E6	178.8E6	25.000M4	25.000
23) i	4268_1br2nb	1.155	1.226	304.6E6	178.8E6	25.000M4	25.000
34) i	1248_1br2nb	1.155	1.226	304.6E6	178.8E6	25.000M4	25.000
40) i	3262_1br2nb	1.155	1.226	304.6E6	178.8E6	25.000M4	25.000
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.438	1.600	219.0E6	135.9E6	12.238	12.798
	Spiked Amount 20.000	Range 30 - 150		Recovery = 61.19%		63.99%	
3) s	Decachlorobi	4.001	4.531	187.5E6	105.6E6	12.952	14.090
	Spiked Amount 20.000	Range 30 - 150		Recovery = 64.76%		70.45%	
Target Compounds							
4) l1	1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1	1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1	1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1	1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1	1016-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1016-1			0	0	N.D.	N.D.
	Average 1016-1					0.000	0.000
9) l2	1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2	1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2	1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2	1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2	1260-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1260-1			0	0	N.D.	N.D.
	Average 1260-1					0.000	0.000
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-43.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:25 pm
Operator : pest2:meo
Sample : L2350269-01,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 43 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:31:05 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
17) l3 1221-4	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
18) l4 1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4 1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4 1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4 1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4 1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
24) l6 1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6 1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6 1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6 1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6 1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
29) l9 1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9 1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9 1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9 1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9 1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
35) l7 1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7 1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7 1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7 1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7 1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-43.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:25 pm
Operator : pest2:meo
Sample : L2350269-01,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 43 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:31:05 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

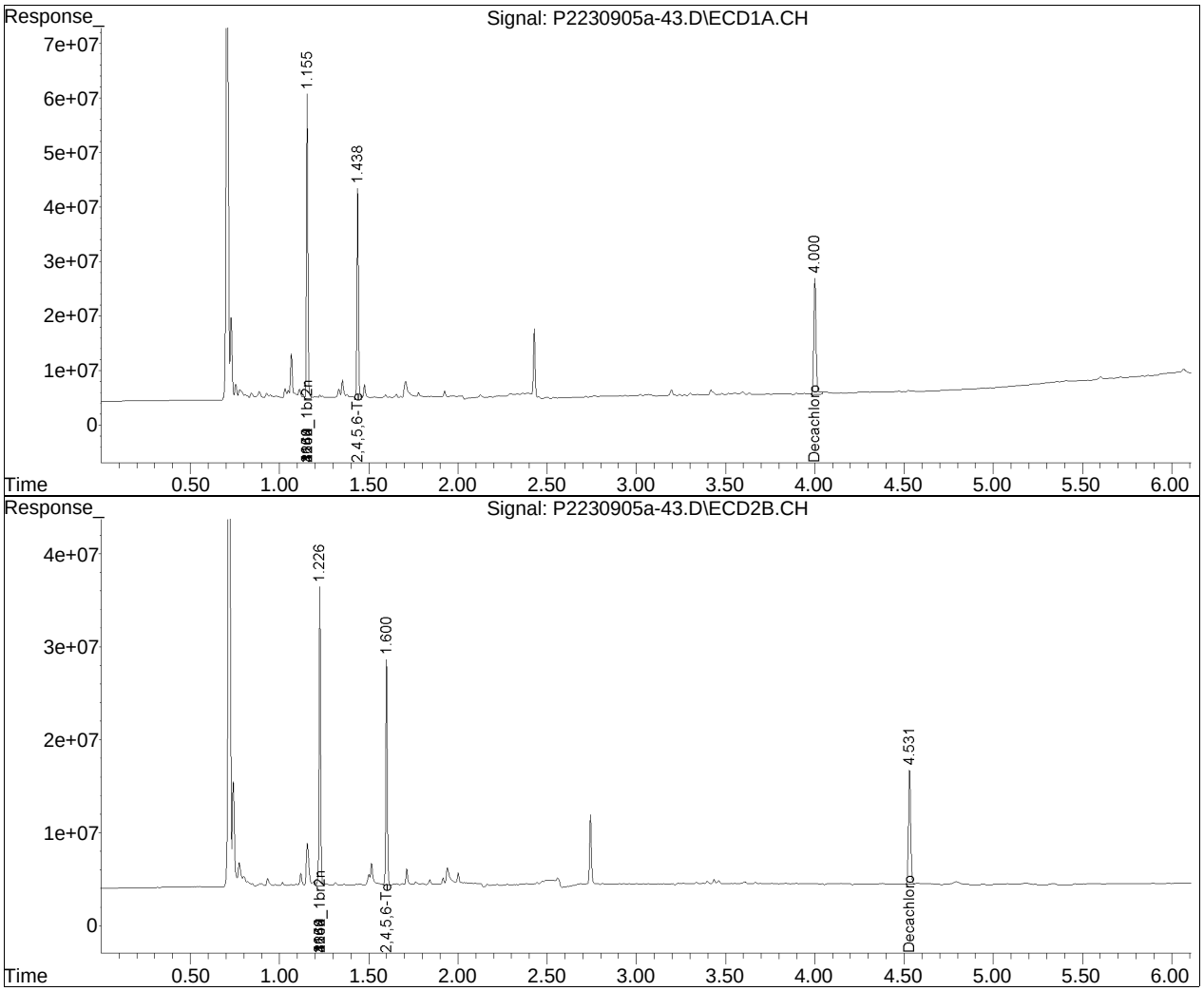
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedP2230905a-27.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-43.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:25 pm
Operator : pest2:meo
Sample : L2350269-01,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 43 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:31:05 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

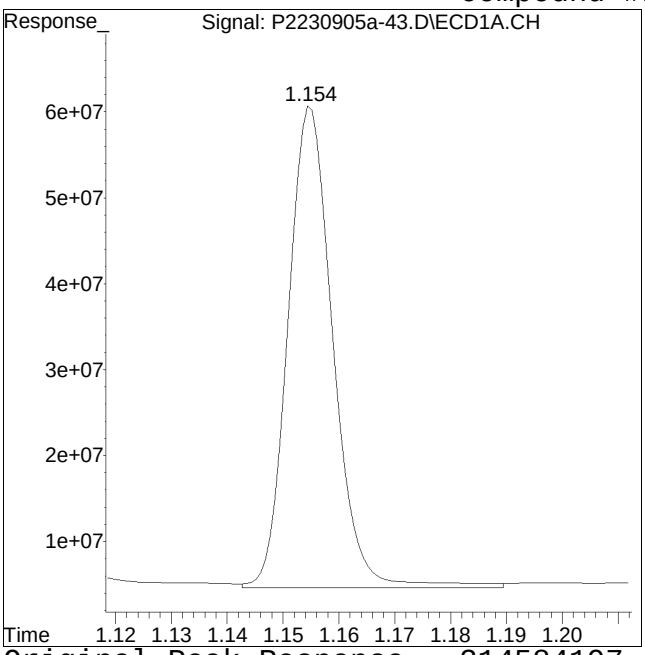
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

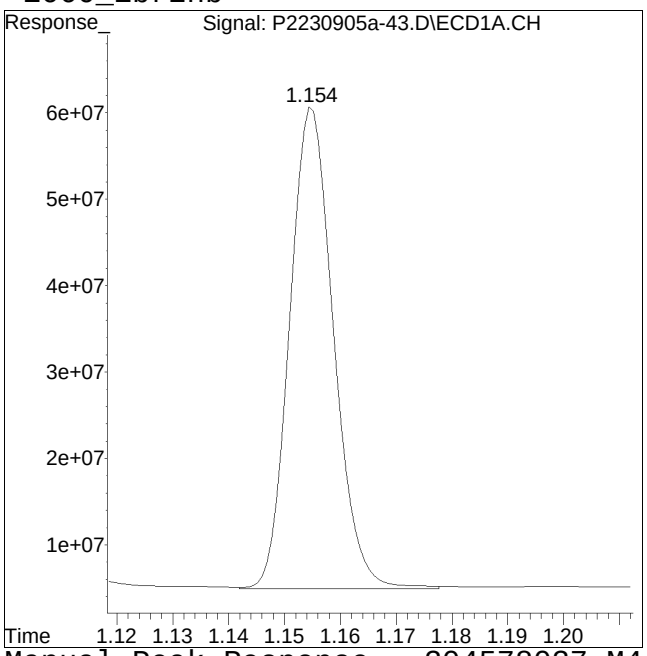


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-43.D Operator : pest2:meo
Date Inj'd : 9/5/2023 6:25 pm Instrument : Pest 2
Sample : L2350269-01,42,, Quant Date : 9/6/2023 3:32 pm

Compound #1: 1660_1br2nb





Original Peak Response = 314584197 Manual Peak Response = 304578037 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-44.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:34 pm
Operator : pest2:meo
Sample : L2350269-02,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 44 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:31:19 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards						
1) i 1660_1br2nb	1.155	1.227	278.8E6	152.8E6	25.000	25.000
Standard Area 1 : #1 = 277861669				Recovery =	100.36%	
Standard Area 1 : #2 = 177277303				Recovery =	86.19%	
14) i 2154_1br2nb	1.155	1.227	278.8E6	152.8E6	25.000	25.000
23) i 4268_1br2nb	1.155	1.227	278.8E6	152.8E6	25.000	25.000
34) i 1248_1br2nb	1.155	1.227	278.8E6	152.8E6	25.000	25.000
40) i 3262_1br2nb	1.155	1.227	278.8E6	152.8E6	25.000	25.000
System Monitoring Compounds						
2) s 2,4,5,6-Tetr	1.439	1.600	177.2E6	108.8E6	10.818	11.999
Spiked Amount 20.000	Range 30 - 150		Recovery =	54.09%	59.99%	
3) s Decachlorobi	4.001	4.532	176.3E6	95027017	13.303	14.846
Spiked Amount 20.000	Range 30 - 150		Recovery =	66.52%	74.23%	
Target Compounds						
4) l1 1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1 1016-2	0.000	0.000	0	0	N.D.	N.D.
6) l1 1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1 1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1 1016-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1016-1			0	0	N.D.	N.D.
Average 1016-1					0.000	0.000
9) l2 1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2 1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2 1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2 1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2 1260-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1260-1			0	0	N.D.	N.D.
Average 1260-1					0.000	0.000
15) l3 1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3 1221-3	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-44.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:34 pm
Operator : pest2:meo
Sample : L2350269-02,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 44 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:31:19 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
17) l3 1221-4	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
18) l4 1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4 1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4 1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4 1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4 1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
24) l6 1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6 1242-2	0.000	0.000	0	0	N.D.	N.D.
26) l6 1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6 1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6 1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
29) l9 1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9 1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9 1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9 1268-4	0.000	0.000	0	0	N.D.	N.D.
33) l9 1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
35) l7 1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7 1248-2	0.000	0.000	0	0	N.D.	N.D.
37) l7 1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7 1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7 1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-44.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:34 pm
Operator : pest2:meo
Sample : L2350269-02,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 44 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:31:19 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D.	N.D.
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

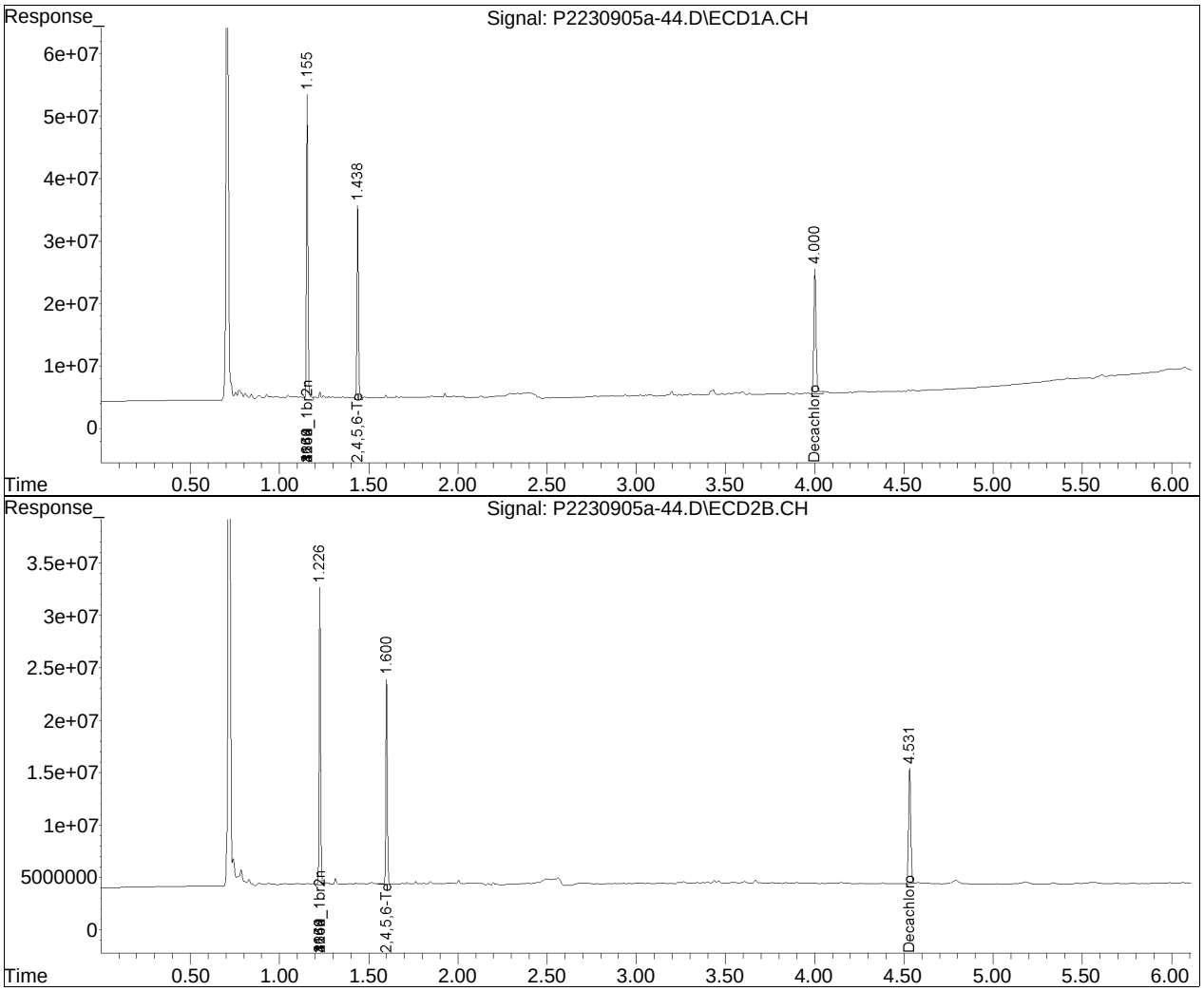
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedP2230905a-27.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-44.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:34 pm
Operator : pest2:meo
Sample : L2350269-02,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 44 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:31:19 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PCB\Pest2\2023\230905a\	QMethod	: P2_pcb_08_21_23_LVI_ugL_
Data File	: P2230905a-44.D	Operator	: pest2:meo
Date Inj'd	: 9/5/2023 6:34 pm	Instrument	: Pest 2
Sample	: L2350269-02,42,,	Quant Date	: 9/6/2023 3:32 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-45.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:44 pm
Operator : pest2:meo
Sample : L2350269-03,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 45 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:31:58 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards						
1) i 1660_1br2nb	1.155	1.227	301.5E6	170.1E6	25.000M4	25.000
Standard Area 1 : #1 = 277861669					Recovery =	108.51%
Standard Area 1 : #2 = 177277303					Recovery =	95.96%
14) i 2154_1br2nb	1.155	1.227	301.5E6	170.1E6	25.000M4	25.000
23) i 4268_1br2nb	1.155	1.227	301.5E6	170.1E6	25.000M4	25.000
34) i 1248_1br2nb	1.155	1.227	301.5E6	170.1E6	25.000M4	25.000
40) i 3262_1br2nb	1.155	1.227	301.5E6	170.1E6	25.000M4	25.000
System Monitoring Compounds						
2) s 2,4,5,6-Tetr	1.439	1.600	227.7E6	140.5E6	12.855	13.916
Spiked Amount 20.000	Range 30 - 150				Recovery =	64.28% 69.58%
3) s Decachlorobi	4.001	4.532	204.4E6	122.9E6	14.262	17.252
Spiked Amount 20.000	Range 30 - 150				Recovery =	71.31% 86.26%
Target Compounds						
4) l1 1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1 1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1 1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1 1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1 1016-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1016-1			0	0	N.D.	N.D.
Average 1016-1					0.000	0.000
9) l2 1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2 1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2 1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2 1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2 1260-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1260-1			0	0	N.D.	N.D.
Average 1260-1					0.000	0.000
15) l3 1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3 1221-3	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-45.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:44 pm
Operator : pest2:meo
Sample : L2350269-03,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 45 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:31:58 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
17) l3 1221-4	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
18) l4 1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4 1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4 1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4 1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4 1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
24) l6 1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6 1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6 1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6 1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6 1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
29) l9 1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9 1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9 1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9 1268-4	0.000	0.000	0	0	N.D.	N.D.
33) l9 1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
35) l7 1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7 1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7 1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7 1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7 1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-45.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:44 pm
Operator : pest2:meo
Sample : L2350269-03,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 45 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:31:58 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D.	N.D.
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

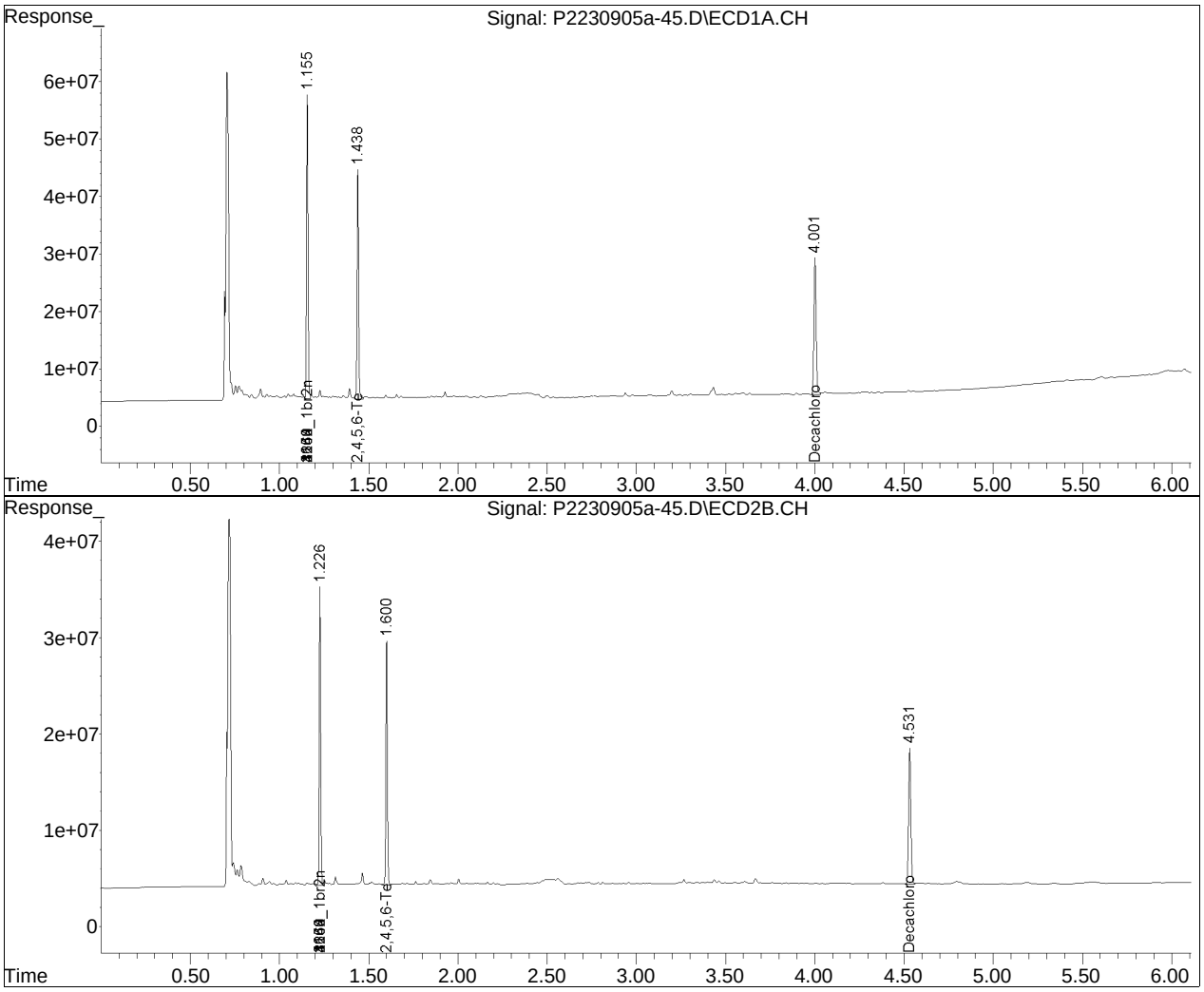
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedP2230905a-27.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-45.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:44 pm
Operator : pest2:meo
Sample : L2350269-03,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 45 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:31:58 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

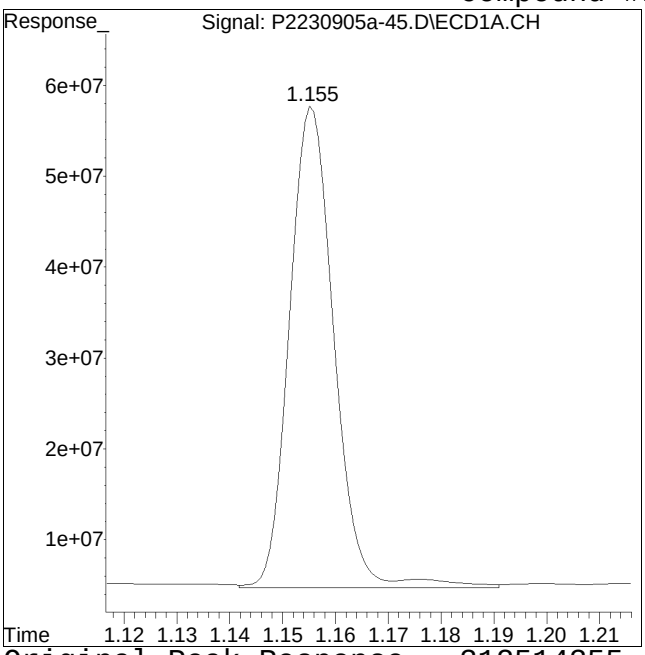
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

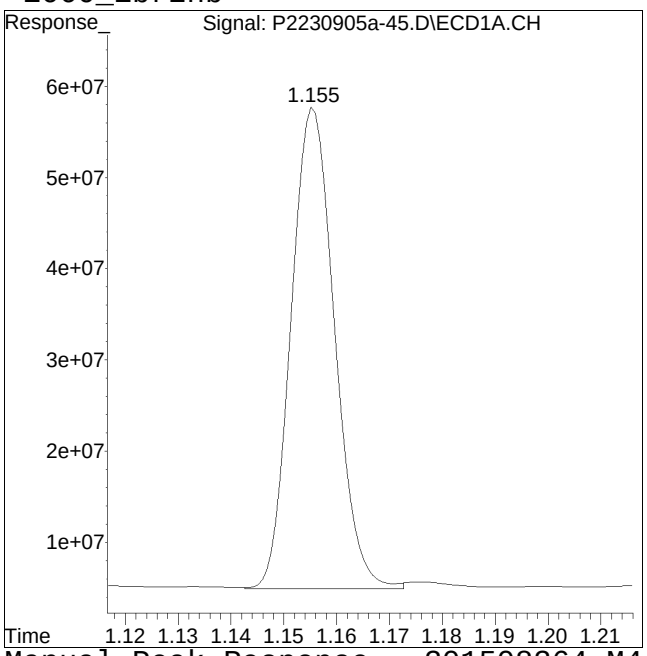


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-45.D Operator : pest2:meo
Date Inj'd : 9/5/2023 6:44 pm Instrument : Pest 2
Sample : L2350269-03,42,, Quant Date : 9/6/2023 3:32 pm

Compound #1: 1660_1br2nb





Original Peak Response = 312514355 Manual Peak Response = 301508364 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-46.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:53 pm
Operator : pest2:meo
Sample : L2350269-04,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 46 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:32:16 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards						
1) i 1660_1br2nb	1.156	1.227	274.1E6	157.2E6	25.000	25.000
Standard Area 1 : #1 = 277861669				Recovery =	98.66%	
Standard Area 1 : #2 = 177277303				Recovery =	88.70%	
14) i 2154_1br2nb	1.156	1.227	274.1E6	157.2E6	25.000	25.000
23) i 4268_1br2nb	1.156	1.227	274.1E6	157.2E6	25.000	25.000
34) i 1248_1br2nb	1.156	1.227	274.1E6	157.2E6	25.000	25.000
40) i 3262_1br2nb	1.156	1.227	274.1E6	157.2E6	25.000	25.000
System Monitoring Compounds						
2) s 2,4,5,6-Tetr	1.439	1.601	168.7E6	108.7E6	10.475	11.646
Spiked Amount 20.000	Range 30 - 150		Recovery =	52.37%	58.23%	
3) s Decachlorobi	4.001	4.532	152.5E6	90902211	11.704	13.799
Spiked Amount 20.000	Range 30 - 150		Recovery =	58.52%	68.99%	
Target Compounds						
4) l1 1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1 1016-2	0.000	0.000	0	0	N.D.	N.D.
6) l1 1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1 1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1 1016-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1016-1			0	0	N.D.	N.D.
Average 1016-1					0.000	0.000
9) l2 1260-1	0.000	0.000	0	0	N.D.	N.D.
10) l2 1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2 1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2 1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2 1260-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1260-1			0	0	N.D.	N.D.
Average 1260-1					0.000	0.000
15) l3 1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3 1221-3	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-46.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:53 pm
Operator : pest2:meo
Sample : L2350269-04,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 46 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:32:16 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
17) l3 1221-4	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
18) l4 1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4 1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4 1254-3	0.000	0.000	0	0	N.D.	N.D.
21) l4 1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4 1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
24) l6 1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6 1242-2	0.000	0.000	0	0	N.D.	N.D.
26) l6 1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6 1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6 1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
29) l9 1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9 1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9 1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9 1268-4	0.000	0.000	0	0	N.D.	N.D.
33) l9 1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
35) l7 1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7 1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7 1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7 1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7 1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-46.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:53 pm
Operator : pest2:meo
Sample : L2350269-04,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 46 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:32:16 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D.	N.D.
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

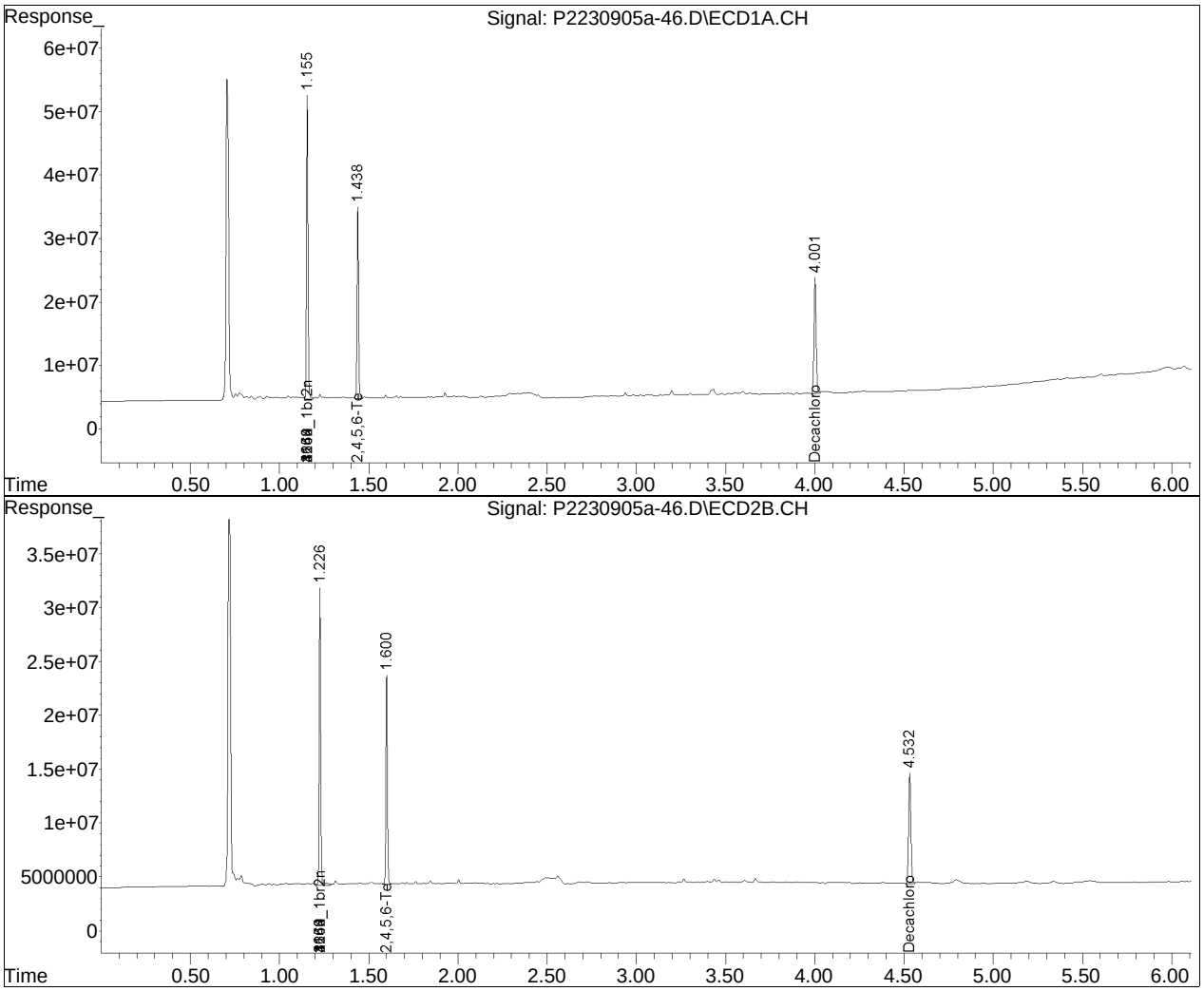
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedP2230905a-27.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-46.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:53 pm
Operator : pest2:meo
Sample : L2350269-04,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 46 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:32:16 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PCB\Pest2\2023\230905a\	QMethod	: P2_pcb_08_21_23_LVI_ugL_
Data File	: P2230905a-46.D	Operator	: pest2:meo
Date Inj'd	: 9/5/2023 6:53 pm	Instrument	: Pest 2
Sample	: L2350269-04,42,,	Quant Date	: 9/6/2023 3:32 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-47.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:02 pm
Operator : pest2:meo
Sample : L2350269-05,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 47 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:35:05 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1660_1br2nb	1.155	1.226	309.0E6	170.1E6	25.000M4	25.000M4
	Standard Area 1 : #1 = 277861669				Recovery =	111.22%	
	Standard Area 1 : #2 = 177277303				Recovery =	95.98%	
14) i	2154_1br2nb	1.155	1.226	309.0E6	170.1E6	25.000M4	25.000M4
23) i	4268_1br2nb	1.155	1.226	309.0E6	170.1E6	25.000M4	25.000M4
34) i	1248_1br2nb	1.155	1.226	309.0E6	170.1E6	25.000M4	25.000M4
40) i	3262_1br2nb	1.155	1.226	309.0E6	170.1E6	25.000M4	25.000M4
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.439	1.600	208.2E6	123.6E6	11.470	12.232
	Spiked Amount 20.000	Range 30 - 150			Recovery =	57.35%	61.16%
3) s	Decachlorobi	4.000	4.530	205.3E6	117.9E6	13.980	16.539
	Spiked Amount 20.000	Range 30 - 150			Recovery =	69.90%	82.70%
Target Compounds							
4) l1	1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1	1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1	1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1	1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1	1016-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1016-1			0	0	N.D.	N.D.
	Average 1016-1					0.000	0.000
9) l2	1260-1	2.670	0.000	2145257	0	2.437M4	N.D. d
10) l2	1260-2	2.800	3.154	4195301	2007717	3.097M4	3.439M4
11) l2	1260-3	0.000	3.546	0	1538965	N.D. d	3.155M4
12) l2	1260-4	3.269	0.000	4812556	0	2.537M4	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-47.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:02 pm
Operator : pest2:meo
Sample : L2350269-05,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 47 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:35:05 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
13) l2 1260-5	0.000	3.877	0	1654667	N.D. d	2.415
Sum 1260-1			11153115	5201349	8.071	9.009
Average 1260-1					2.690	3.003
15) l3 1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3 1221-3	0.000	0.000	0	0	N.D. d	N.D. d
17) l3 1221-4	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
18) l4 1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4 1254-2	2.405	2.729	1829049	1279120	1.598M4	2.811M4
20) l4 1254-3	2.585	2.956	1217606	689247	1.032M4	1.009M2
21) l4 1254-4	2.717	3.066	1353154	523548	1.509M4	1.133M2
22) l4 1254-5	0.000	3.341	0	3660871	N.D. d	5.793
Sum 1254-1			4399809	6152786	4.139	10.746 D
Average 1254-1					1.380	2.687 D
24) l6 1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6 1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6 1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6 1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6 1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
29) l9 1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9 1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9 1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9 1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9 1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
35) l7 1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7 1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7 1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7 1248-4	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-47.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:02 pm
Operator : pest2:meo
Sample : L2350269-05,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 47 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:35:05 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
39) l7 1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

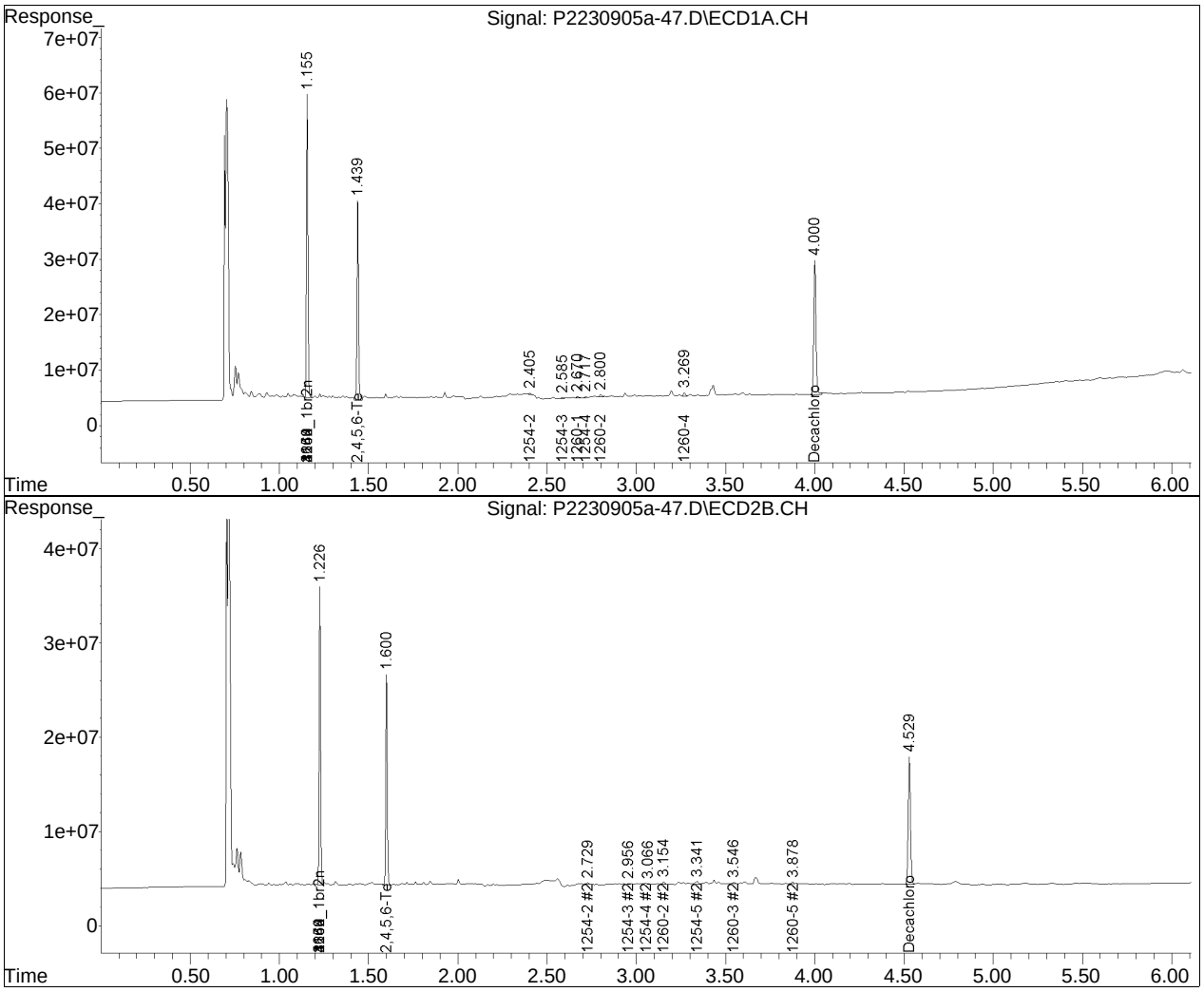
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedP2230905a-27.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-47.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:02 pm
Operator : pest2:meo
Sample : L2350269-05,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 47 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:35:05 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

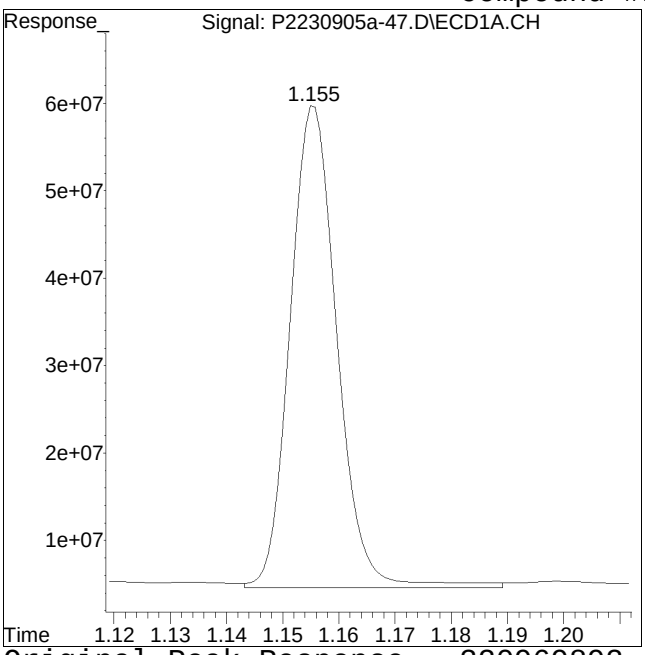
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

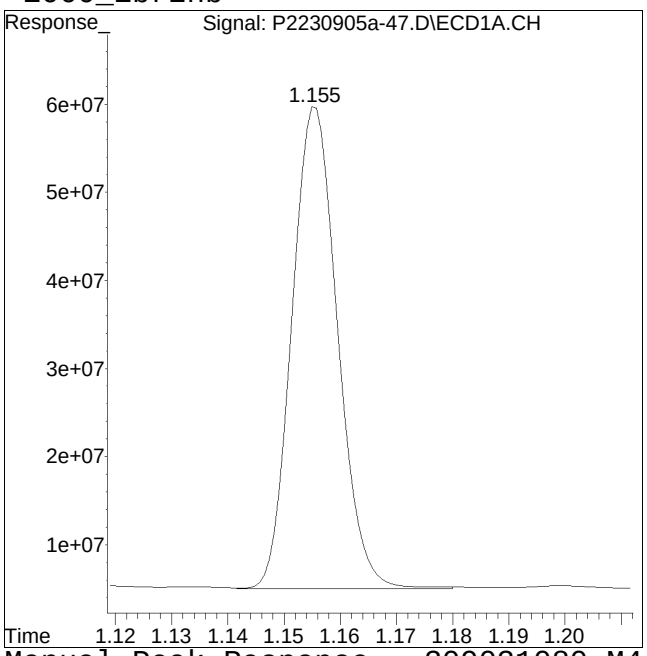


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-47.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:02 pm Instrument : Pest 2
Sample : L2350269-05,42,, Quant Date : 9/6/2023 3:32 pm

Compound #1: 1660_1br2nb



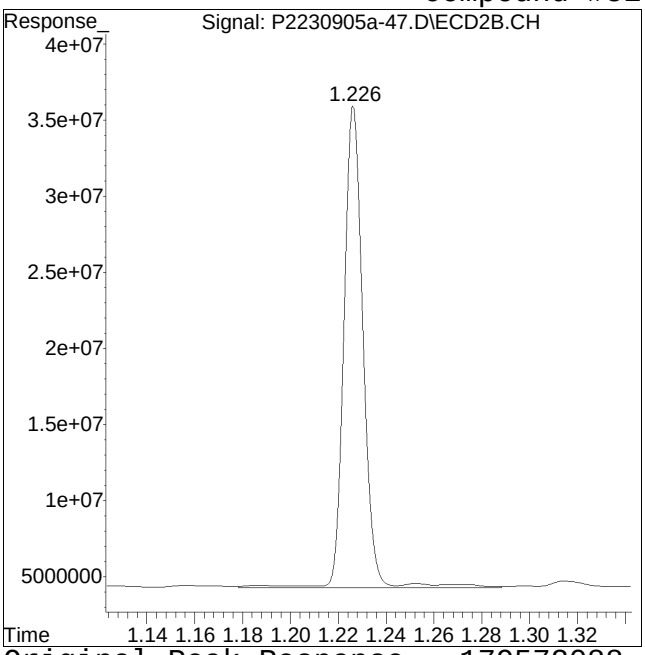


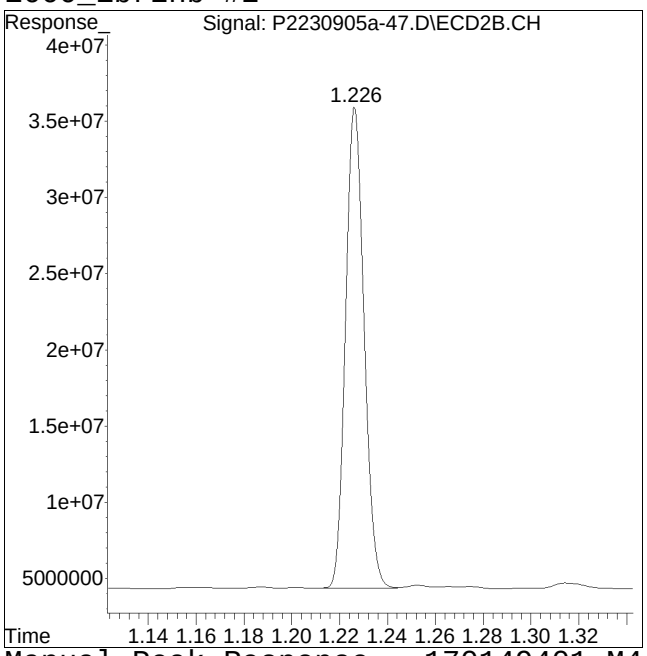
Original Peak Response = 320969892 Manual Peak Response = 309031080 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-47.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:02 pm Instrument : Pest 2
Sample : L2350269-05,42,, Quant Date : 9/6/2023 3:32 pm

Compound #52: 1660_1br2nb #2



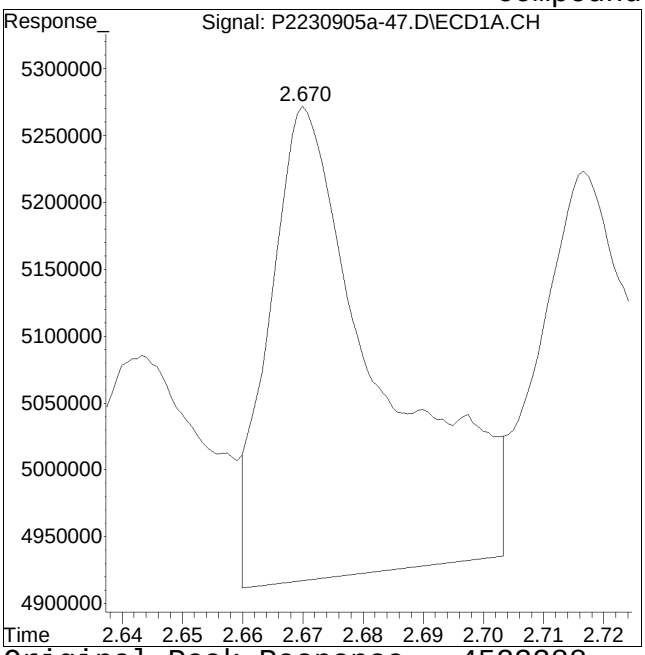


Original Peak Response = 179572088 Manual Peak Response = 170149401 M4
M4 = Poor automated baseline construction.

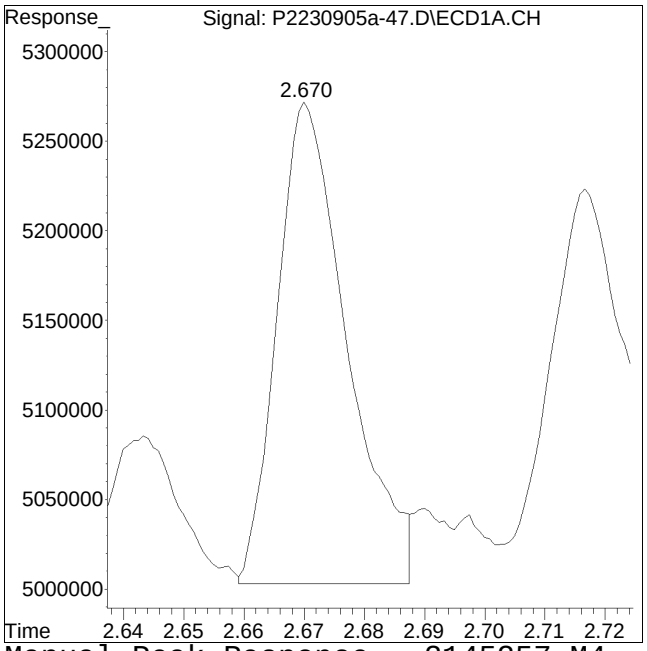
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-47.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:02 pm Instrument : Pest 2
Sample : L2350269-05,42,, Quant Date : 9/6/2023 3:32 pm

Compound #9: 1260-1



Original Peak Response = 4523388



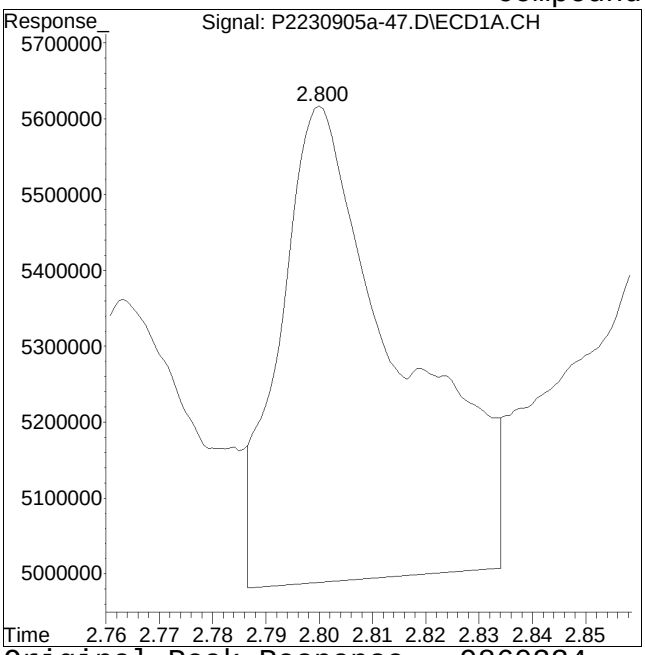
Manual Peak Response = 2145257 M4

M4 = Poor automated baseline construction.

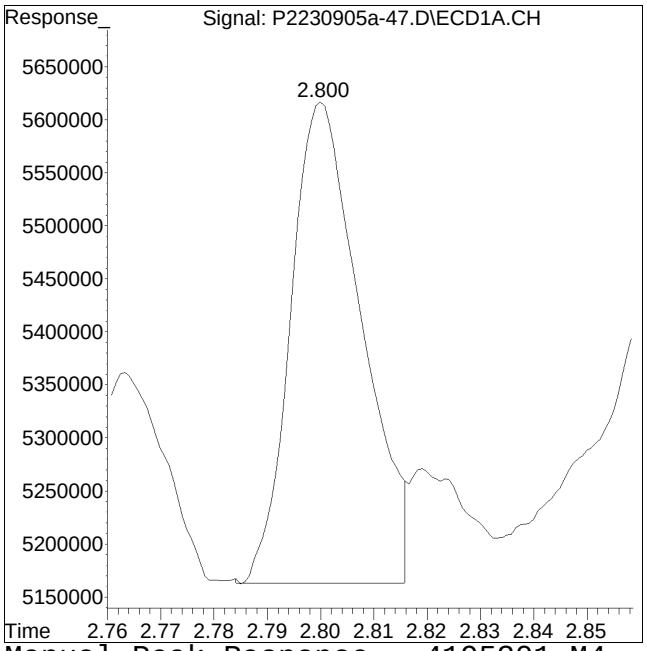
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-47.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:02 pm Instrument : Pest 2
Sample : L2350269-05,42,, Quant Date : 9/6/2023 3:32 pm

Compound #10: 1260-2



Original Peak Response = 9860334



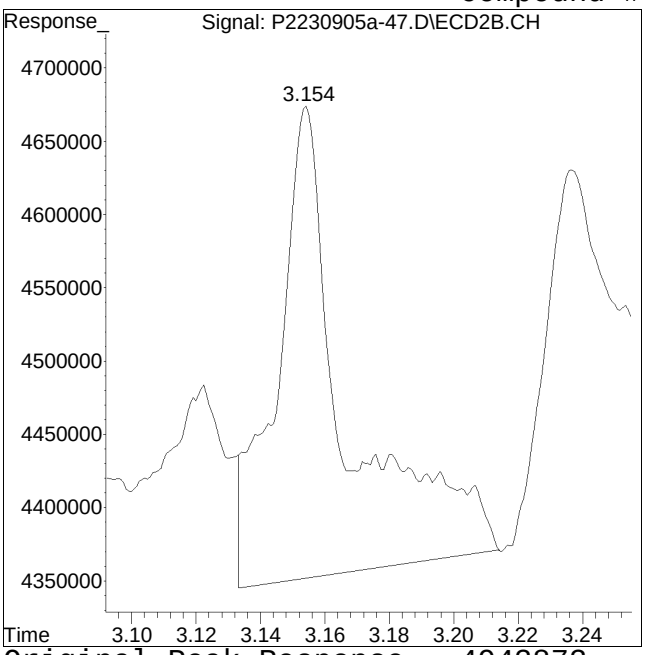
Manual Peak Response = 4195301 M4

M4 = Poor automated baseline construction.

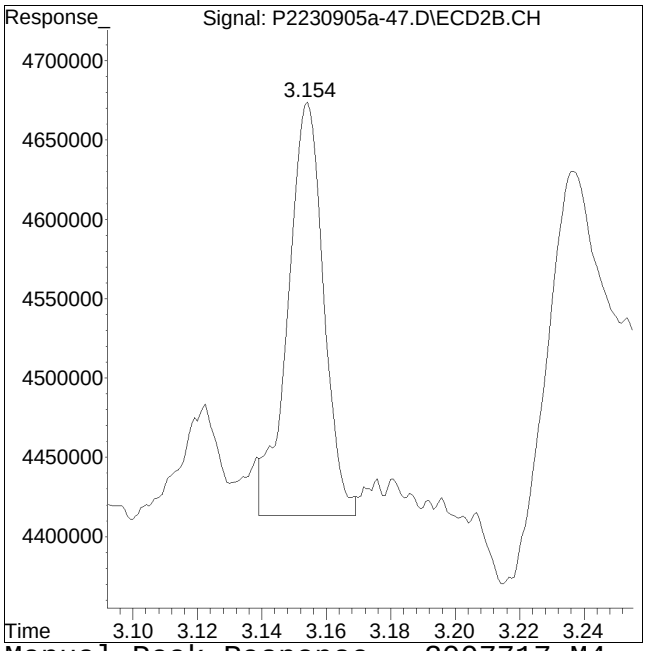
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-47.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:02 pm Instrument : Pest 2
Sample : L2350269-05,42,, Quant Date : 9/6/2023 3:32 pm

Compound #61: 1260-2 #2



Original Peak Response = 4943873



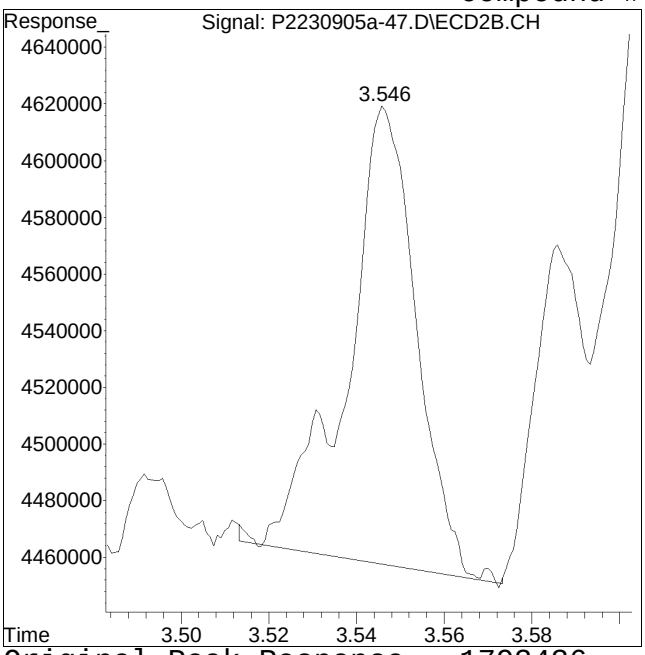
Manual Peak Response = 2007717 M4

M4 = Poor automated baseline construction.

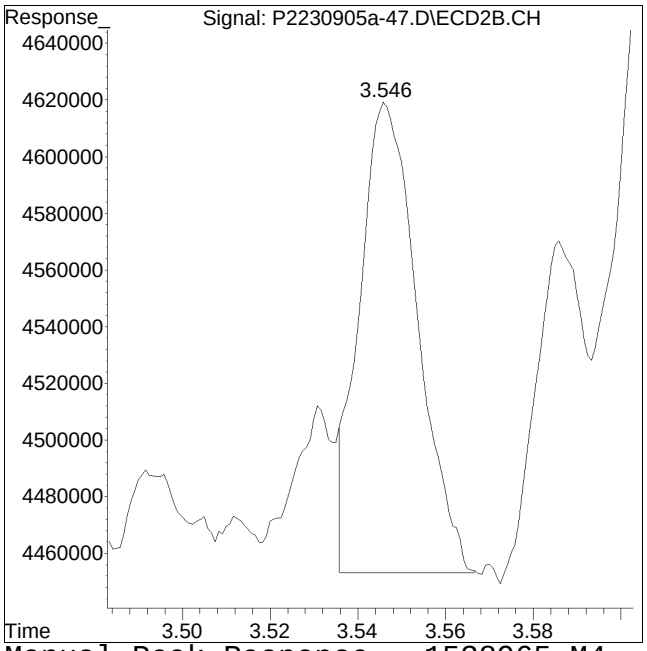
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-47.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:02 pm Instrument : Pest 2
Sample : L2350269-05,42,, Quant Date : 9/6/2023 3:32 pm

Compound #62: 1260-3 #2



Original Peak Response = 1793436



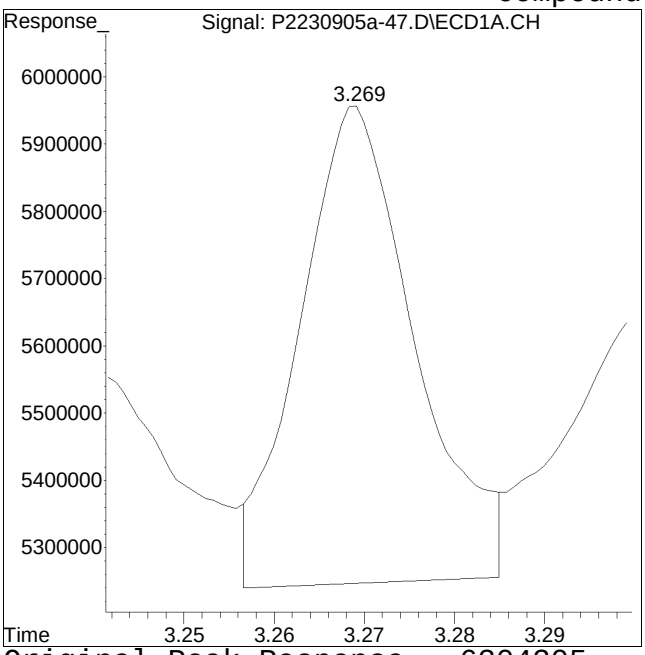
Manual Peak Response = 1538965 M4

M4 = Poor automated baseline construction.

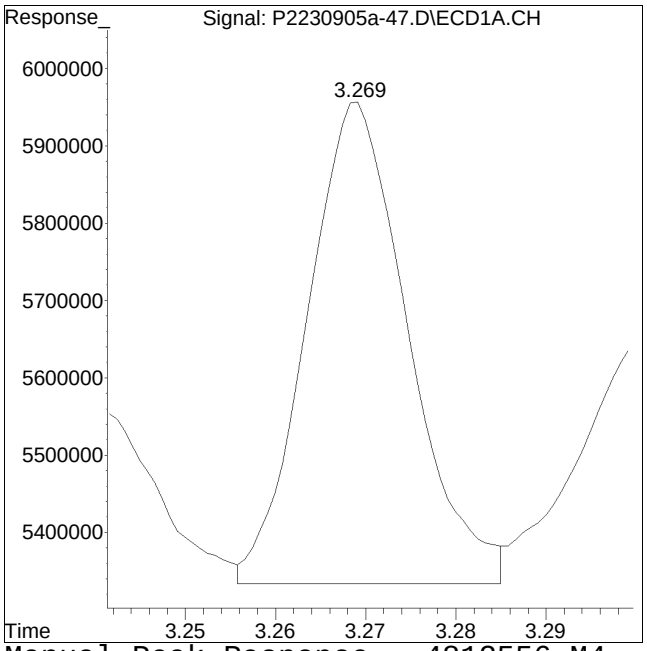
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-47.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:02 pm Instrument : Pest 2
Sample : L2350269-05,42,, Quant Date : 9/6/2023 3:32 pm

Compound #12: 1260-4



Original Peak Response = 6304305



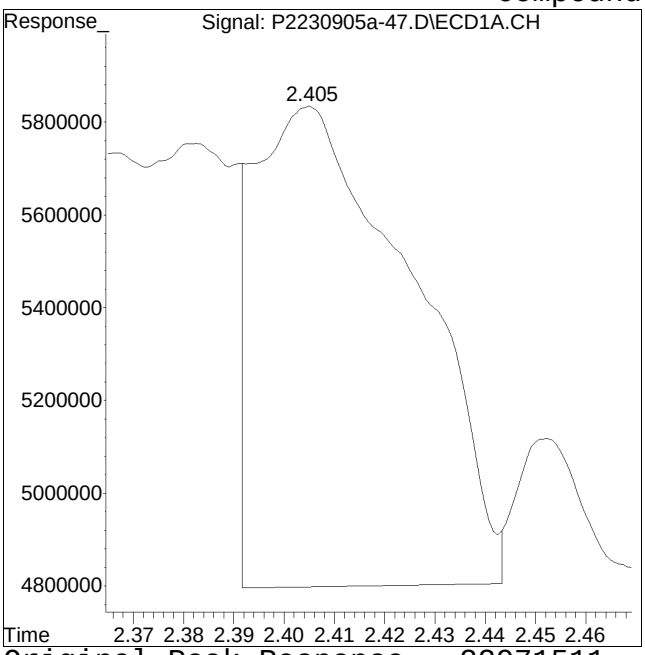
Manual Peak Response = 4812556 M4

M4 = Poor automated baseline construction.

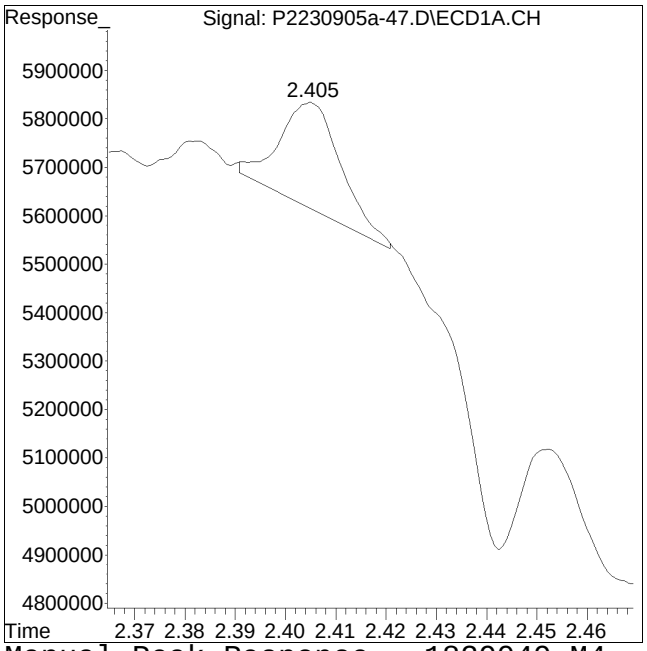
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-47.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:02 pm Instrument : Pest 2
Sample : L2350269-05,42,, Quant Date : 9/6/2023 3:32 pm

Compound #19: 1254-2



Original Peak Response = 22971511



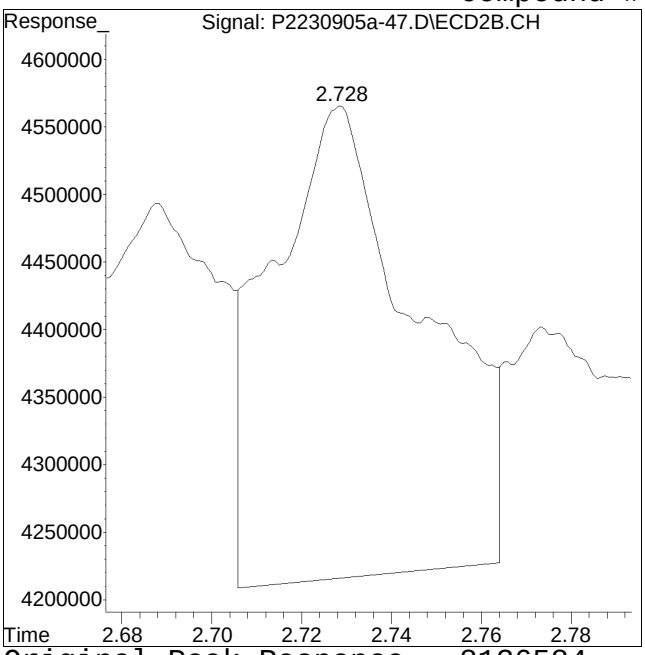
Manual Peak Response = 1829049 M4

M4 = Poor automated baseline construction.

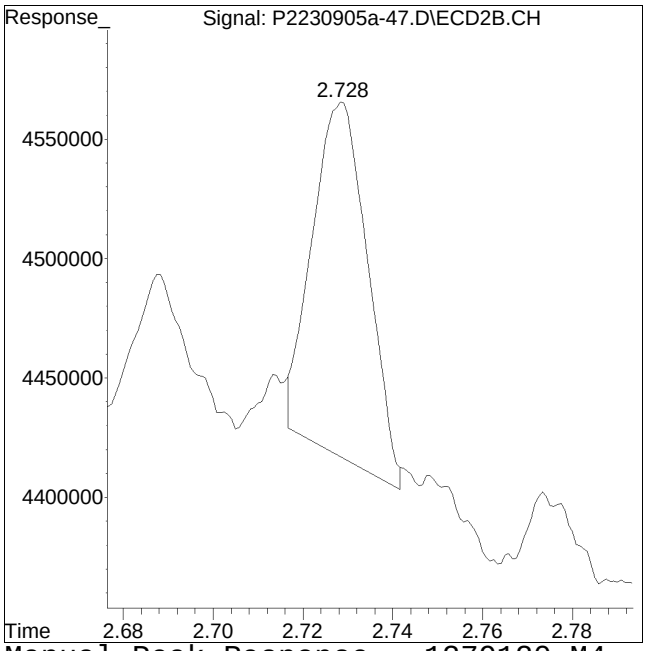
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-47.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:02 pm Instrument : Pest 2
Sample : L2350269-05,42,, Quant Date : 9/6/2023 3:32 pm

Compound #70: 1254-2 #2



Original Peak Response = 8136584



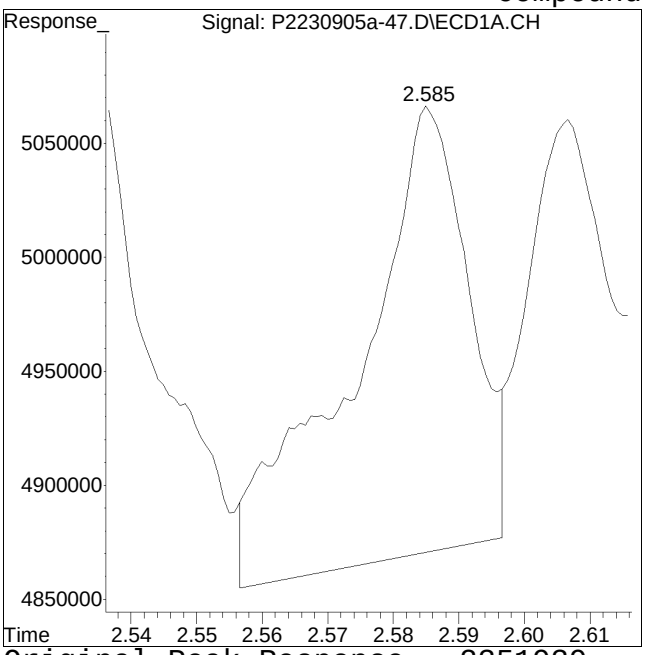
Manual Peak Response = 1279120 M4

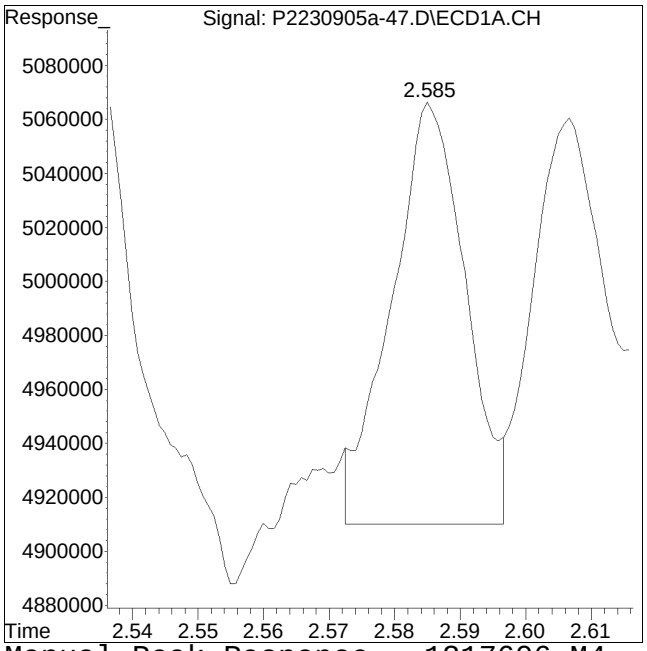
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-47.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:02 pm Instrument : Pest 2
Sample : L2350269-05,42,, Quant Date : 9/6/2023 3:32 pm

Compound #20: 1254-3



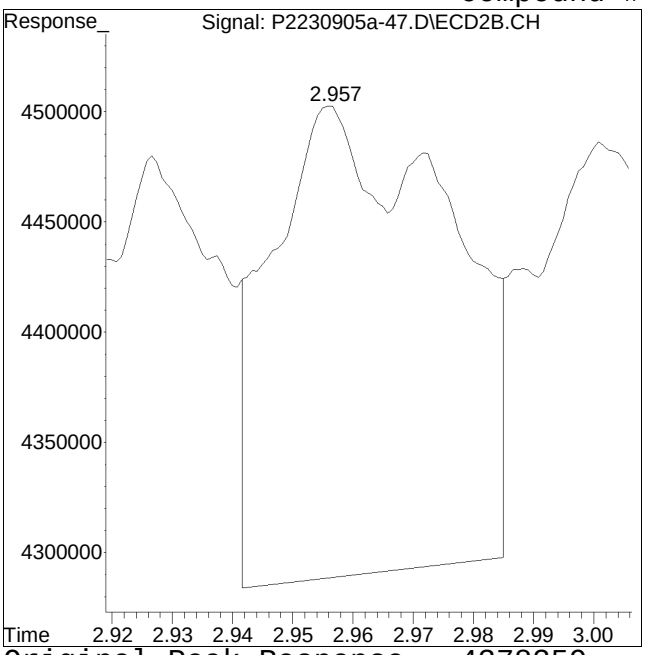


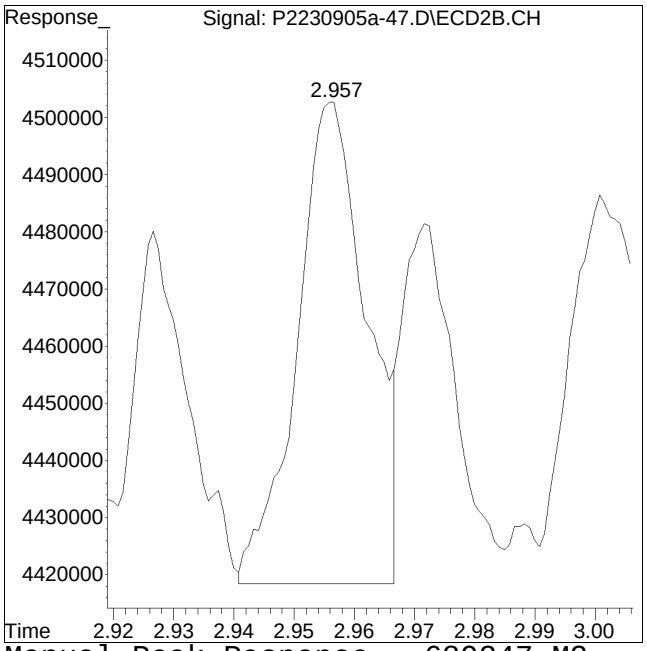
Original Peak Response = 2351939 Manual Peak Response = 1217606 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-47.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:02 pm Instrument : Pest 2
Sample : L2350269-05,42,, Quant Date : 9/6/2023 3:32 pm

Compound #71: 1254-3 #2



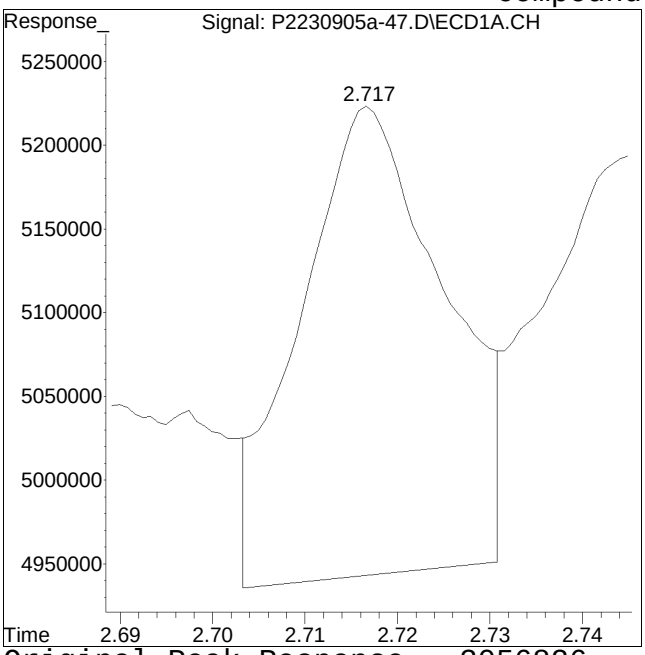


Original Peak Response = 4378359 Manual Peak Response = 689247 M2
M2 = Peak not found by automatic integration algorithm.

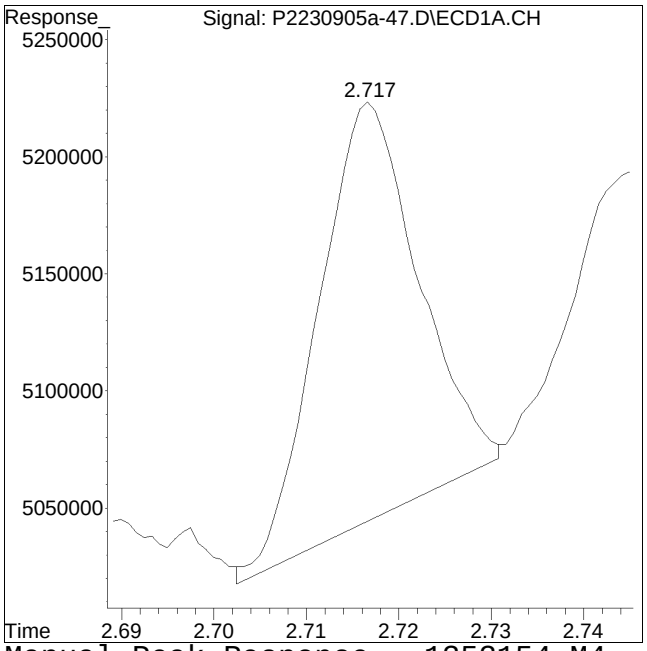
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-47.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:02 pm Instrument : Pest 2
Sample : L2350269-05,42,, Quant Date : 9/6/2023 3:32 pm

Compound #21: 1254-4



Original Peak Response = 3056826



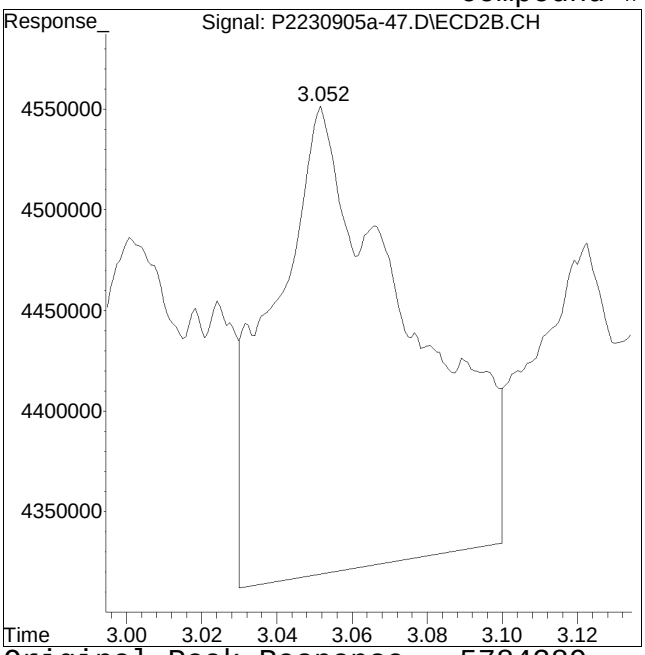
Manual Peak Response = 1353154 M4

M4 = Poor automated baseline construction.

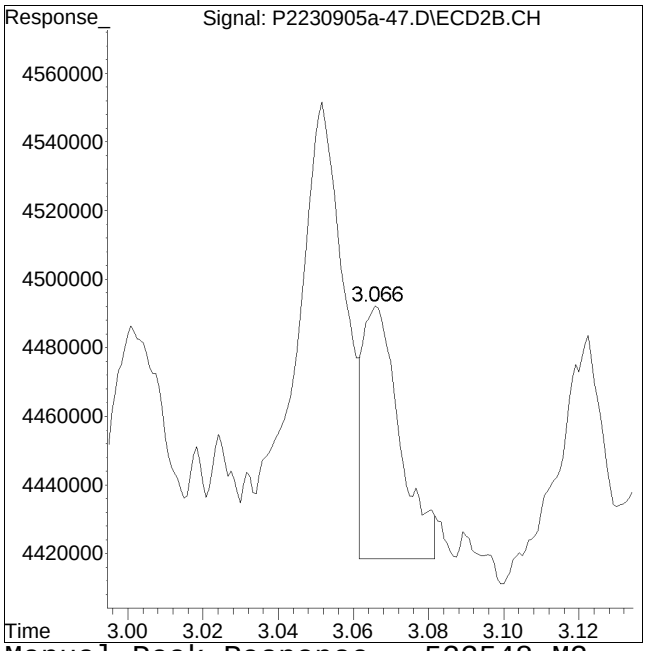
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-47.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:02 pm Instrument : Pest 2
Sample : L2350269-05,42,, Quant Date : 9/6/2023 3:32 pm

Compound #72: 1254-4 #2



Original Peak Response = 5784389



Manual Peak Response = 523548 M2

M2 = Peak not found by automatic integration algorithm.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-48.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:12 pm
Operator : pest2:meo
Sample : L2350269-06,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 48 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:35:38 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1660_1br2nb	1.155	1.226	309.2E6	171.7E6	25.000M4	25.000
	Standard Area 1 : #1 = 277861669				Recovery =	111.29%	
	Standard Area 1 : #2 = 177277303				Recovery =	96.83%	
14) i	2154_1br2nb	1.155	1.226	309.2E6	171.7E6	25.000M4	25.000
23) i	4268_1br2nb	1.155	1.226	309.2E6	171.7E6	25.000M4	25.000
34) i	1248_1br2nb	1.155	1.226	309.2E6	171.7E6	25.000M4	25.000
40) i	3262_1br2nb	1.155	1.226	309.2E6	171.7E6	25.000M4	25.000
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.438	1.600	223.3E6	138.3E6	12.293M4	13.574
	Spiked Amount 20.000	Range 30 - 150			Recovery =	61.46%	67.87%
3) s	Decachlorobi	4.001	4.529	215.7E6	117.1E6	14.679	16.279
	Spiked Amount 20.000	Range 30 - 150			Recovery =	73.39%	81.39%
Target Compounds							
4) l1	1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1	1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1	1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1	1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1	1016-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1016-1			0	0	N.D.	N.D.
	Average 1016-1					0.000	0.000
9) l2	1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2	1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2	1260-3	0.000	0.000	0	0	N.D.	N.D.
12) l2	1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2	1260-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1260-1			0	0	N.D.	N.D.
	Average 1260-1					0.000	0.000
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-48.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:12 pm
Operator : pest2:meo
Sample : L2350269-06,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 48 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:35:38 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
17) l3 1221-4	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
18) l4 1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4 1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4 1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4 1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4 1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
24) l6 1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6 1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6 1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6 1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6 1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
29) l9 1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9 1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9 1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9 1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9 1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
35) l7 1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7 1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7 1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7 1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7 1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-48.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:12 pm
Operator : pest2:meo
Sample : L2350269-06,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 48 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:35:38 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D.	N.D.
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

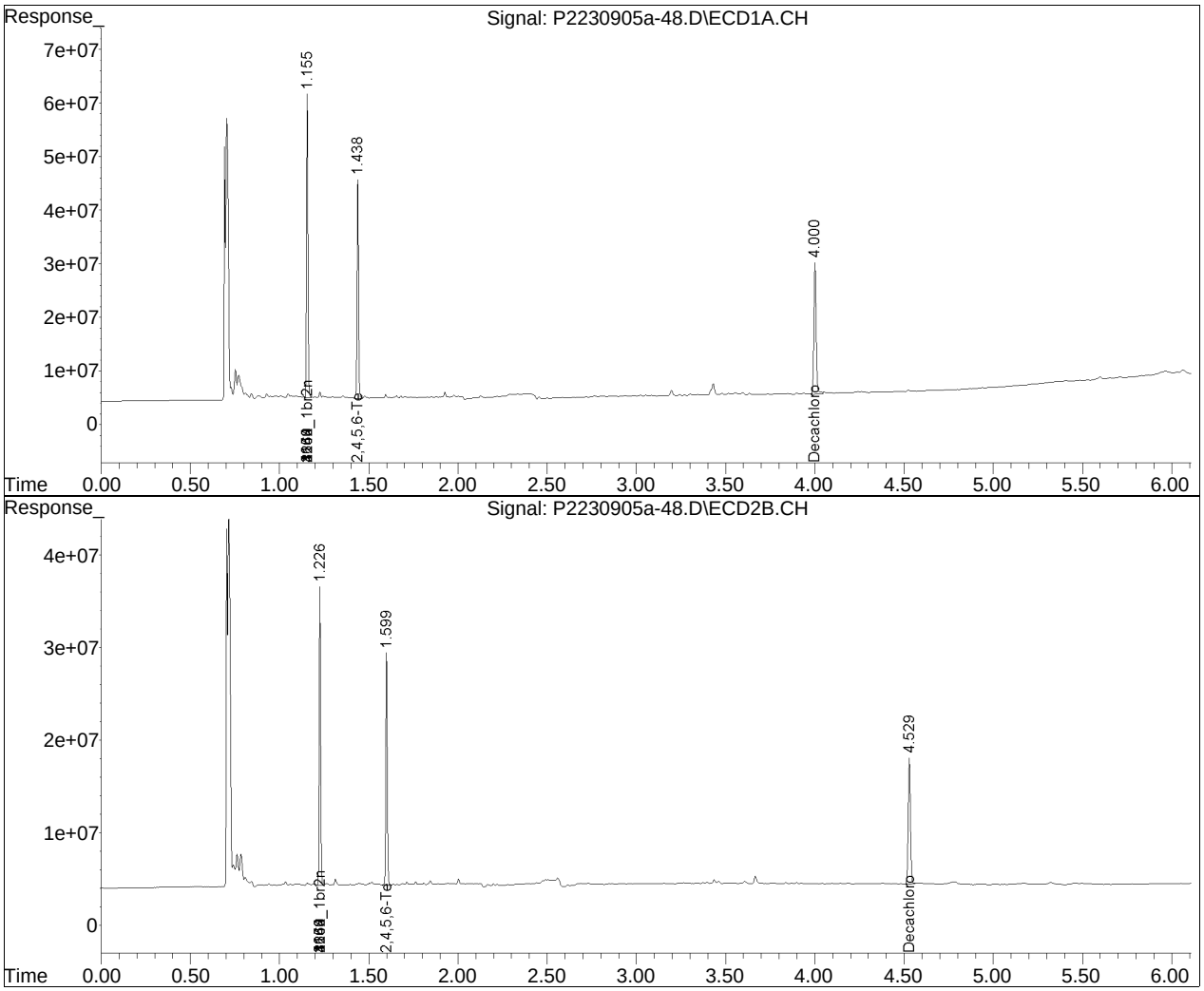
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedP2230905a-27.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-48.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:12 pm
Operator : pest2:meo
Sample : L2350269-06,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 48 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:35:38 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

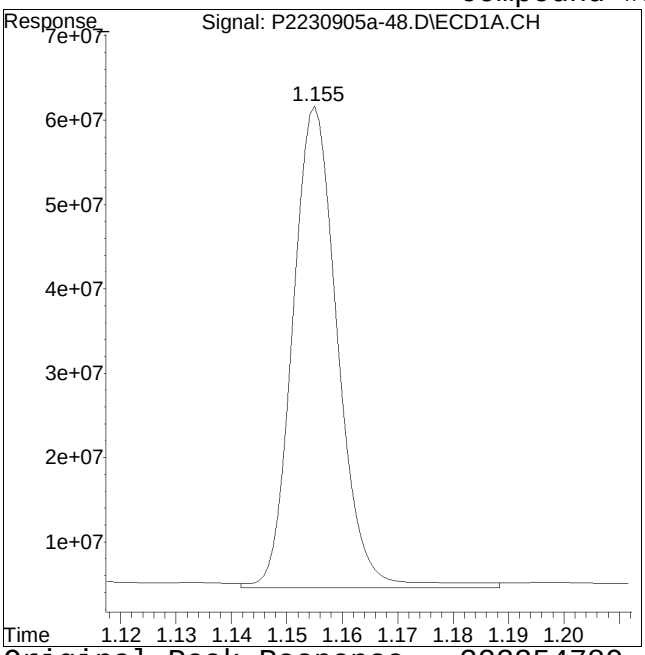
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

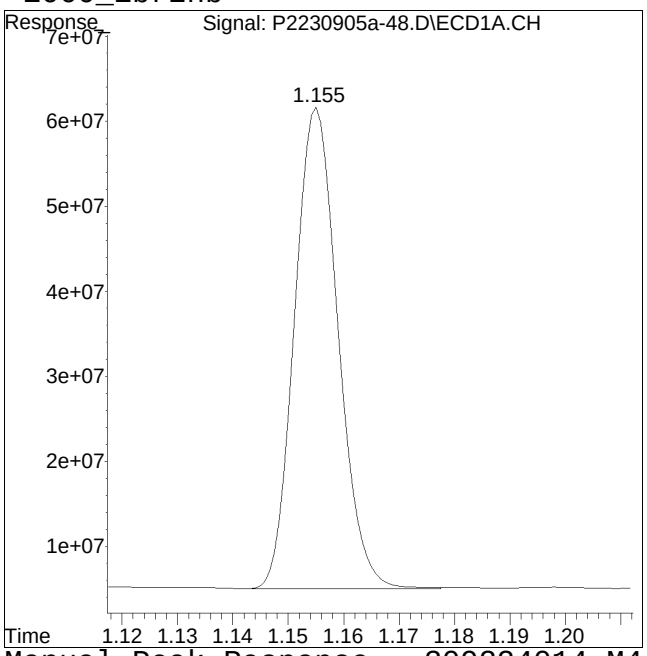


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-48.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:12 pm Instrument : Pest 2
Sample : L2350269-06,42,, Quant Date : 9/6/2023 3:32 pm

Compound #1: 1660_1br2nb



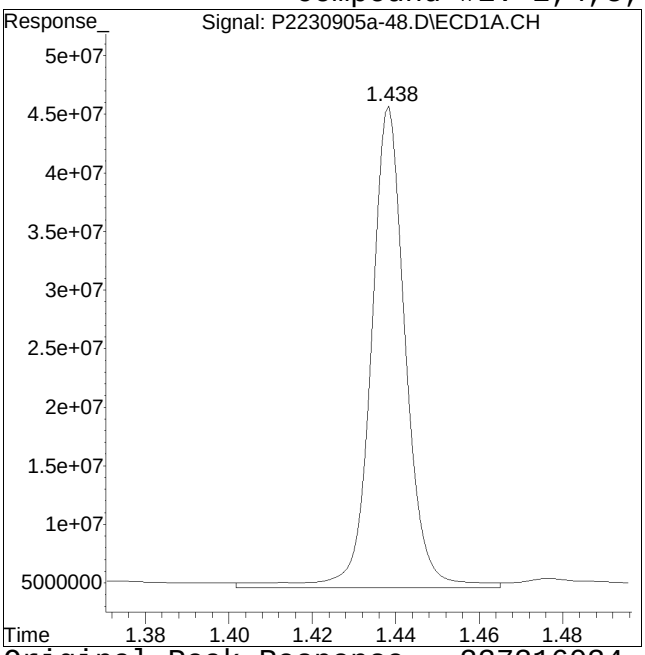


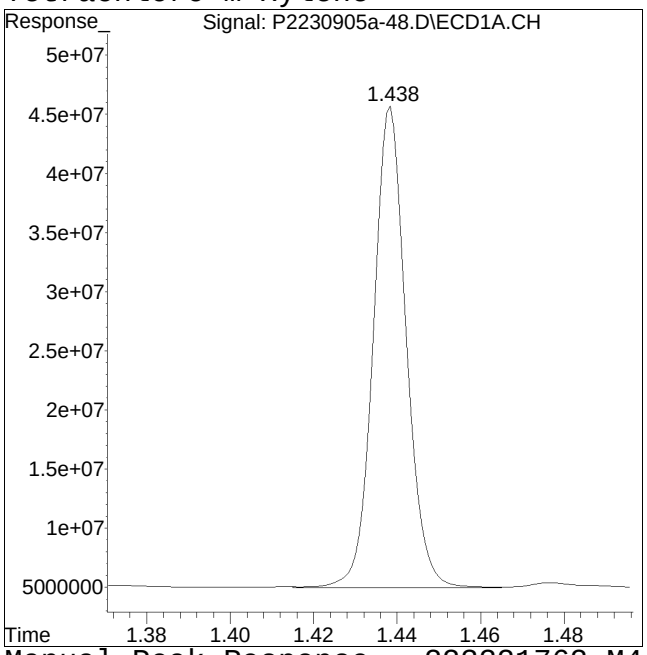
Original Peak Response = 323354789 Manual Peak Response = 309224014 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-48.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:12 pm Instrument : Pest 2
Sample : L2350269-06,42,, Quant Date : 9/6/2023 3:32 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene





Original Peak Response = 237316034 Manual Peak Response = 223321762 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-49.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:21 pm
Operator : pest2:meo
Sample : L2350269-07,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 49 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:38:05 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards						
1) i 1660_1br2nb	1.155	1.226	324.7E6	186.1E6	25.000	25.000
Standard Area 1 : #1 = 277861669				Recovery =	116.84%	
Standard Area 1 : #2 = 177277303				Recovery =	105.00%	
14) i 2154_1br2nb	1.155	1.226	324.7E6	186.1E6	25.000	25.000
23) i 4268_1br2nb	1.155	1.226	324.7E6	186.1E6	25.000	25.000
34) i 1248_1br2nb	1.155	1.226	324.7E6	186.1E6	25.000	25.000
40) i 3262_1br2nb	1.155	1.226	324.7E6	186.1E6	25.000	25.000
System Monitoring Compounds						
2) s 2,4,5,6-Tetr	1.438	1.600	206.8E6	131.7E6	10.842	11.919
Spiked Amount 20.000	Range 30 - 150		Recovery =	54.21%	59.59%	
3) s Decachlorobi	4.001	4.530	213.3E6	120.1E6	13.826	15.403
Spiked Amount 20.000	Range 30 - 150		Recovery =	69.13%	77.02%	
Target Compounds						
4) l1 1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1 1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1 1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1 1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1 1016-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1016-1			0	0	N.D.	N.D.
Average 1016-1					0.000	0.000
9) l2 1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2 1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2 1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2 1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2 1260-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1260-1			0	0	N.D.	N.D.
Average 1260-1					0.000	0.000
15) l3 1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3 1221-3	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-49.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:21 pm
Operator : pest2:meo
Sample : L2350269-07,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 49 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:38:05 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
17) l3 1221-4	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
18) l4 1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4 1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4 1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4 1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4 1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
24) l6 1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6 1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6 1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6 1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6 1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
29) l9 1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9 1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9 1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9 1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9 1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
35) l7 1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7 1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7 1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7 1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7 1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-49.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:21 pm
Operator : pest2:meo
Sample : L2350269-07,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 49 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:38:05 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

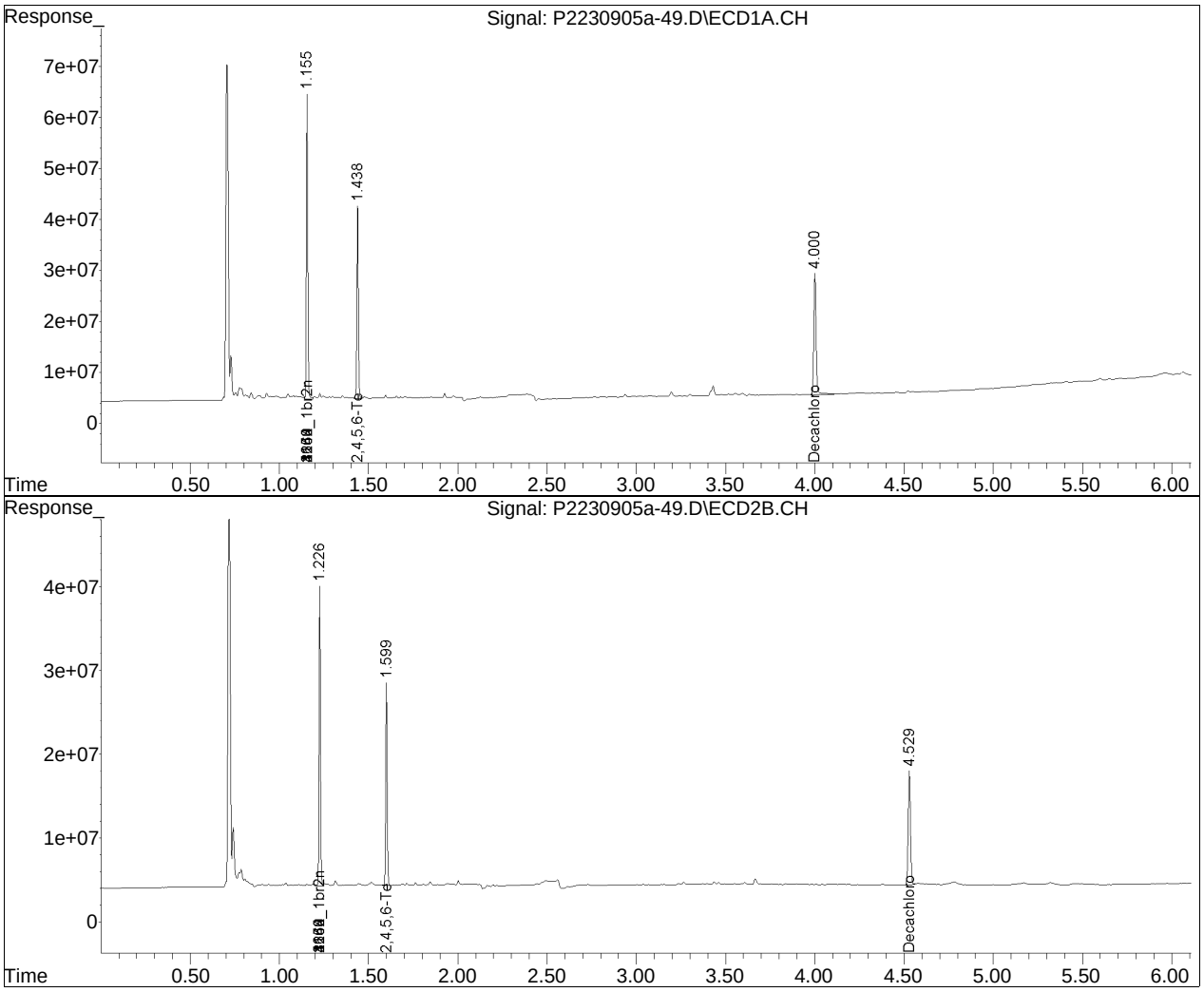
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedP2230905a-27.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-49.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:21 pm
Operator : pest2:meo
Sample : L2350269-07,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 49 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:38:05 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PCB\Pest2\2023\230905a\	QMethod	: P2_pcb_08_21_23_LVI_ugL_
Data File	: P2230905a-49.D	Operator	: pest2:meo
Date Inj'd	: 9/5/2023 7:21 pm	Instrument	: Pest 2
Sample	: L2350269-07,42,,	Quant Date	: 9/6/2023 3:32 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-50.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:31 pm
Operator : pest2:meo
Sample : L2350269-09,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 50 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:39:44 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards						
1) i 1660_1br2nb	1.155	1.226	286.7E6	182.0E6	25.000M4	25.000
Standard Area 1 : #1 = 277861669				Recovery = 103.20%		
Standard Area 1 : #2 = 177277303				Recovery = 102.65%		
14) i 2154_1br2nb	1.155	1.226	286.7E6	182.0E6	25.000M4	25.000
23) i 4268_1br2nb	1.155	1.226	286.7E6	182.0E6	25.000M4	25.000
34) i 1248_1br2nb	1.155	1.226	286.7E6	182.0E6	25.000M4	25.000
40) i 3262_1br2nb	1.155	1.226	286.7E6	182.0E6	25.000M4	25.000
System Monitoring Compounds						
2) s 2,4,5,6-Tetr	1.439	1.600	220.1E6	139.0E6	13.065	12.869
Spiked Amount 20.000	Range 30 - 150		Recovery = 65.33%		64.34%	
3) s Decachlorobi	4.000	4.529	204.6E6	120.1E6	15.012M4	15.760
Spiked Amount 20.000	Range 30 - 150		Recovery = 75.06%		78.80%	
Target Compounds						
4) l1 1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1 1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1 1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1 1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1 1016-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1016-1			0	0	N.D.	N.D.
Average 1016-1					0.000	0.000
9) l2 1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2 1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2 1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2 1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2 1260-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1260-1			0	0	N.D.	N.D.
Average 1260-1					0.000	0.000
15) l3 1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3 1221-3	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-50.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:31 pm
Operator : pest2:meo
Sample : L2350269-09,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 50 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:39:44 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
17) l3 1221-4	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
18) l4 1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4 1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4 1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4 1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4 1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
24) l6 1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6 1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6 1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6 1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6 1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
29) l9 1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9 1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9 1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9 1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9 1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
35) l7 1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7 1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7 1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7 1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7 1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-50.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:31 pm
Operator : pest2:meo
Sample : L2350269-09,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 50 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:39:44 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

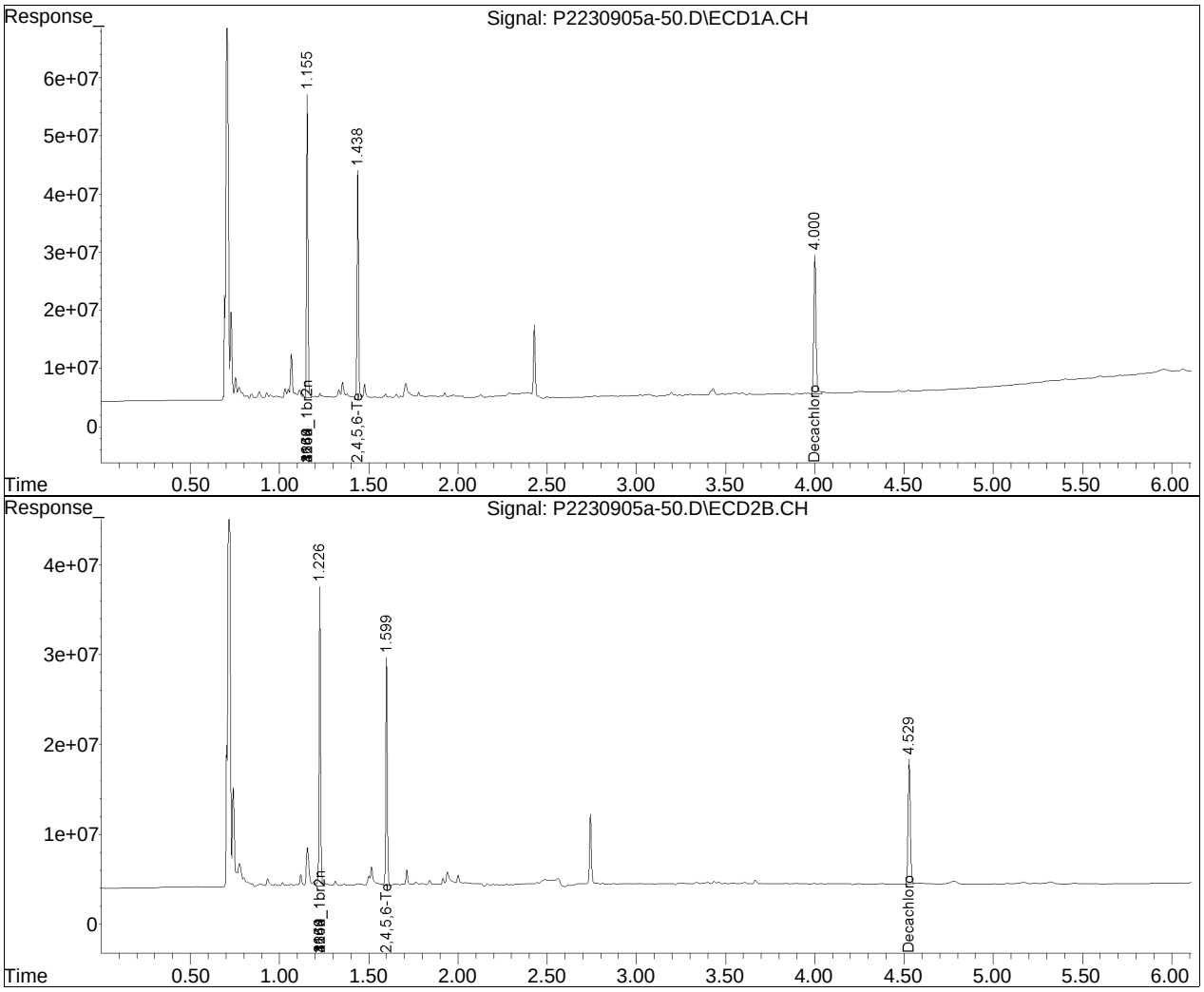
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedP2230905a-27.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-50.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:31 pm
Operator : pest2:meo
Sample : L2350269-09,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 50 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:39:44 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

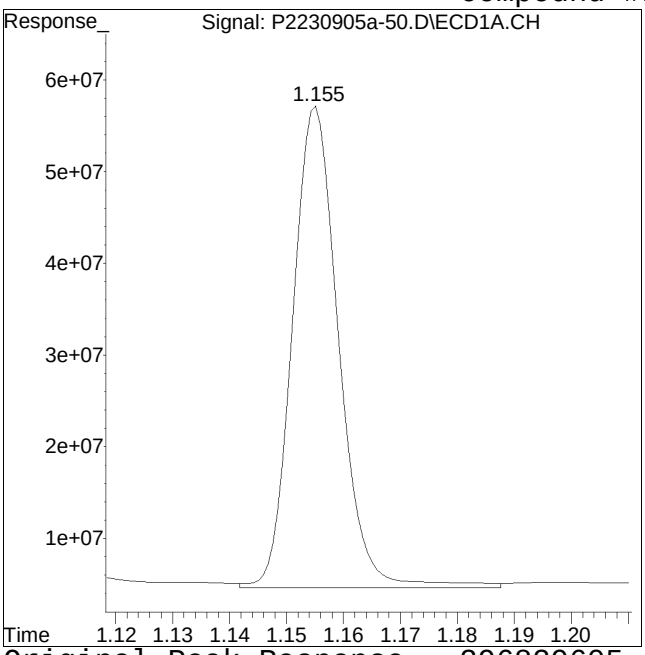
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



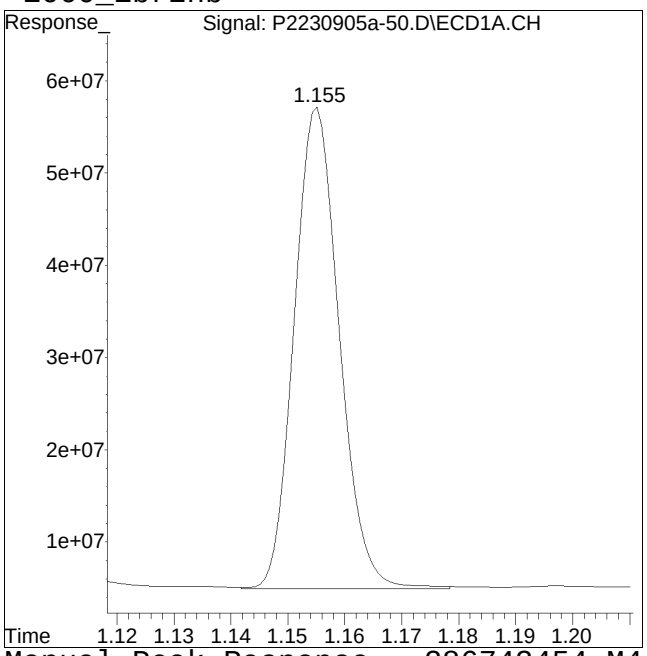
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-50.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:31 pm Instrument : Pest 2
Sample : L2350269-09,42,, Quant Date : 9/6/2023 3:32 pm

Compound #1: 1660_1br2nb



Original Peak Response = 296829605



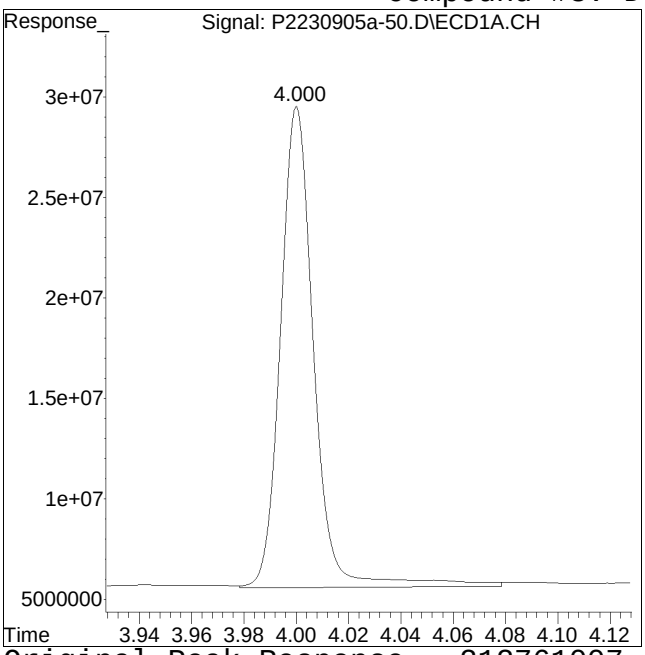
Manual Peak Response = 286743454 M4

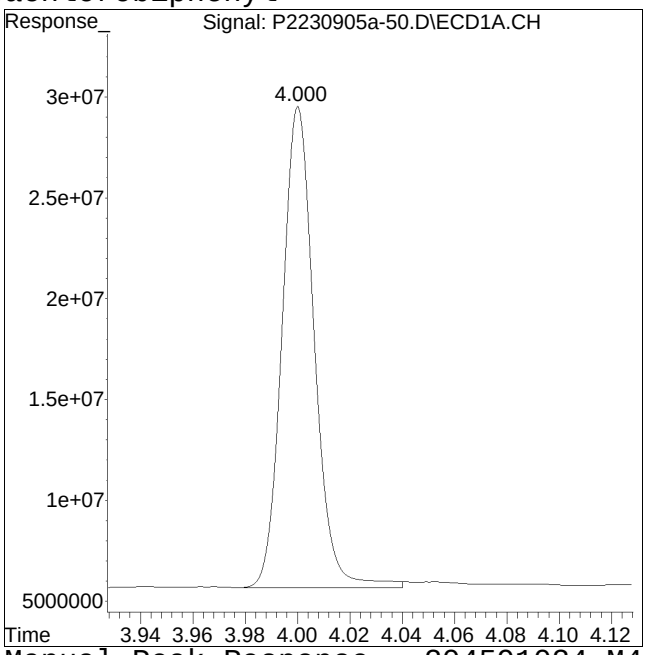
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-50.D Operator : pest2:meo
Date Inj'd : 9/5/2023 7:31 pm Instrument : Pest 2
Sample : L2350269-09,42,, Quant Date : 9/6/2023 3:32 pm

Compound #3: Decachlorobiphenyl





Original Peak Response = 212761007 Manual Peak Response = 204591024 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-56.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 11:02 pm
Operator : pest2:meo
Sample : L2350269-11,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 56 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:41:31 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-51.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards						
1) i 1660_1br2nb	1.153	1.224	297.7E6	186.7E6	25.000M4	25.000
Standard Area 1 : #1 = 307336975				Recovery =	96.87%	
Standard Area 1 : #2 = 207219286				Recovery =	90.10%	
14) i 2154_1br2nb	1.153	1.224	297.7E6	186.7E6	25.000M4	25.000
23) i 4268_1br2nb	1.153	1.224	297.7E6	186.7E6	25.000M4	25.000
34) i 1248_1br2nb	1.153	1.224	297.7E6	186.7E6	25.000M4	25.000
40) i 3262_1br2nb	1.153	1.224	297.7E6	186.7E6	25.000M4	25.000
System Monitoring Compounds						
2) s 2,4,5,6-Tetr	1.436	1.598	201.3E6	141.3E6	11.506M4	12.750
Spiked Amount 20.000	Range 30 - 150		Recovery =	57.53%	63.75%	
3) s Decachlorobi	3.999	4.526	96408279	61581437	6.813M4	7.873
Spiked Amount 20.000	Range 30 - 150		Recovery =	34.06%	39.37%	
Target Compounds						
4) l1 1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1 1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1 1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1 1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1 1016-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1016-1			0	0	N.D.	N.D.
Average 1016-1					0.000	0.000
9) l2 1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2 1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2 1260-3	0.000	0.000	0	0	N.D.	N.D.
12) l2 1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2 1260-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1260-1			0	0	N.D.	N.D.
Average 1260-1					0.000	0.000
15) l3 1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3 1221-3	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-56.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 11:02 pm
Operator : pest2:meo
Sample : L2350269-11,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 56 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:41:31 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-51.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
17) l3 1221-4	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
18) l4 1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4 1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4 1254-3	0.000	0.000	0	0	N.D.	N.D.
21) l4 1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4 1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
24) l6 1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6 1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6 1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6 1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6 1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
29) l9 1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9 1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9 1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9 1268-4	0.000	0.000	0	0	N.D.	N.D.
33) l9 1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
35) l7 1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7 1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7 1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7 1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7 1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-56.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 11:02 pm
Operator : pest2:meo
Sample : L2350269-11,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 56 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:41:31 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-51.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D.	N.D.
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D.	N.D.
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

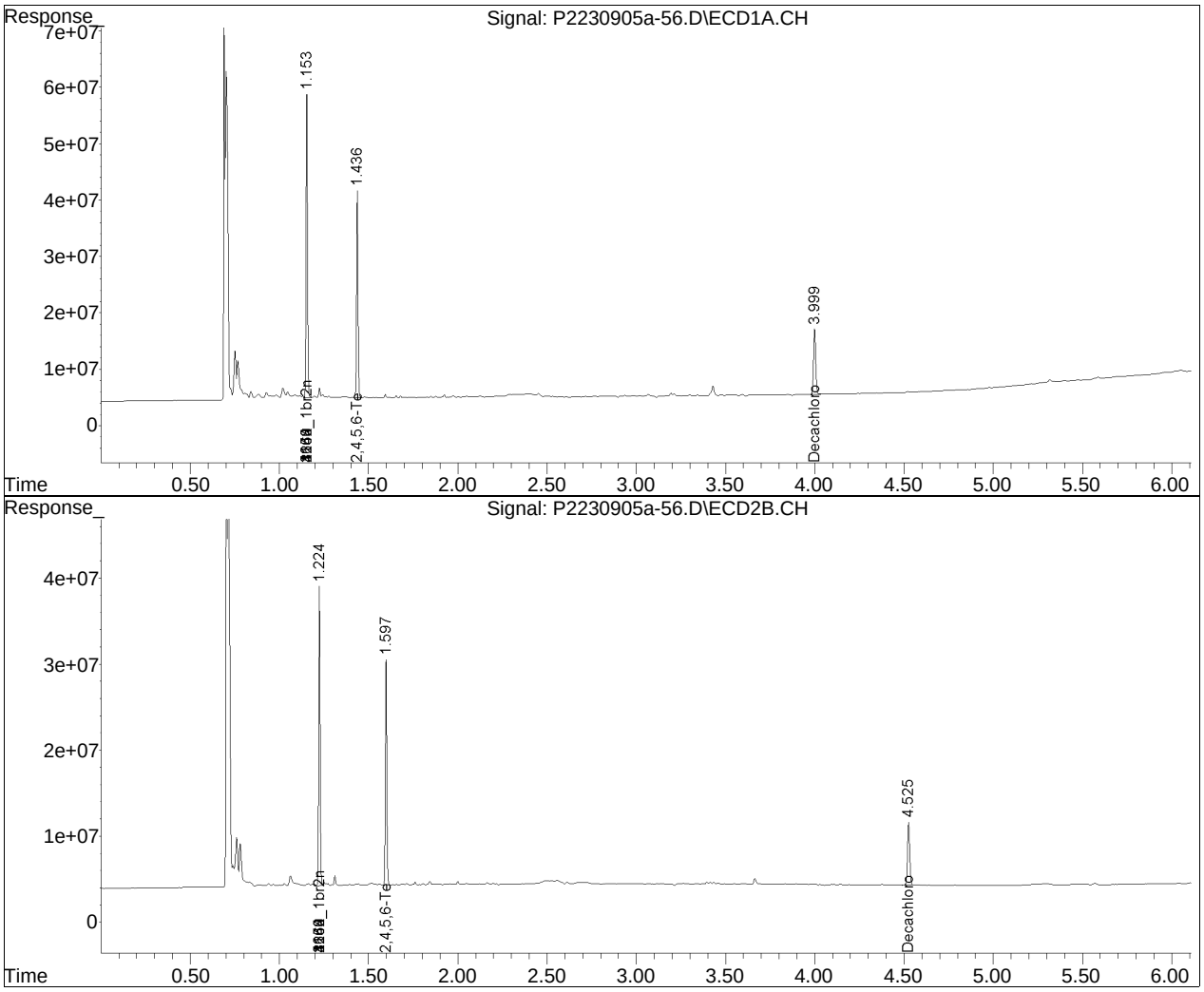
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedP2230905a-51.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-56.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 11:02 pm
Operator : pest2:meo
Sample : L2350269-11,42,,
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 56 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:41:31 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

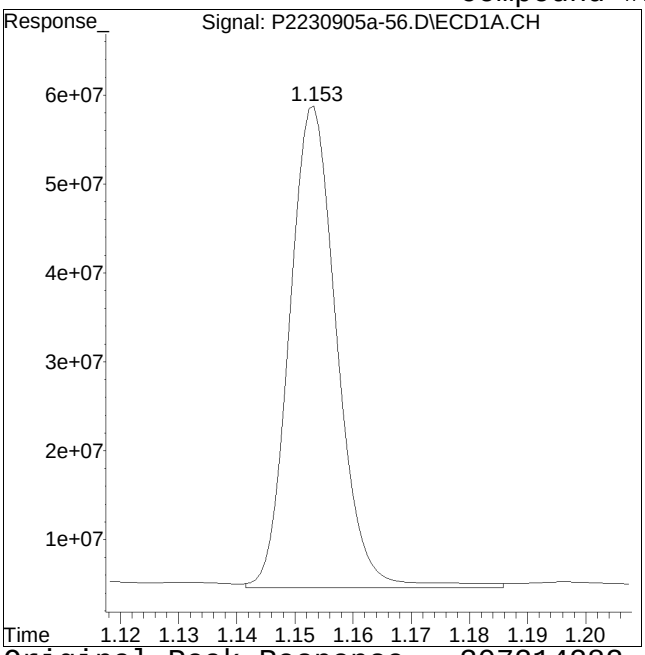
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

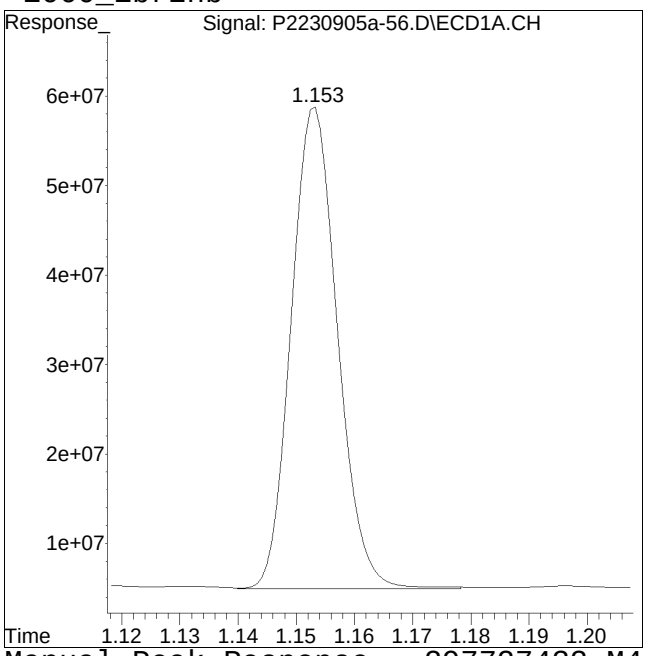


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-56.D Operator : pest2:meo
Date Inj'd : 9/5/2023 11:02 pm Instrument : Pest 2
Sample : L2350269-11,42,, Quant Date : 9/6/2023 3:32 pm

Compound #1: 1660_1br2nb



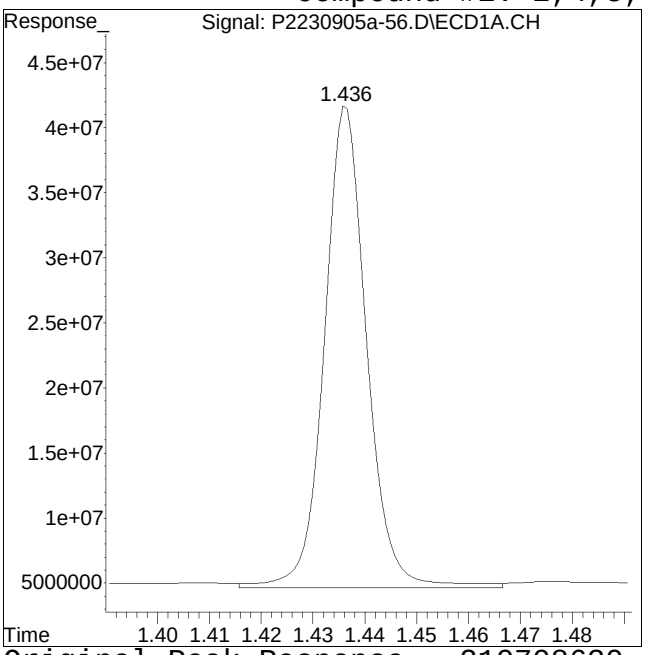


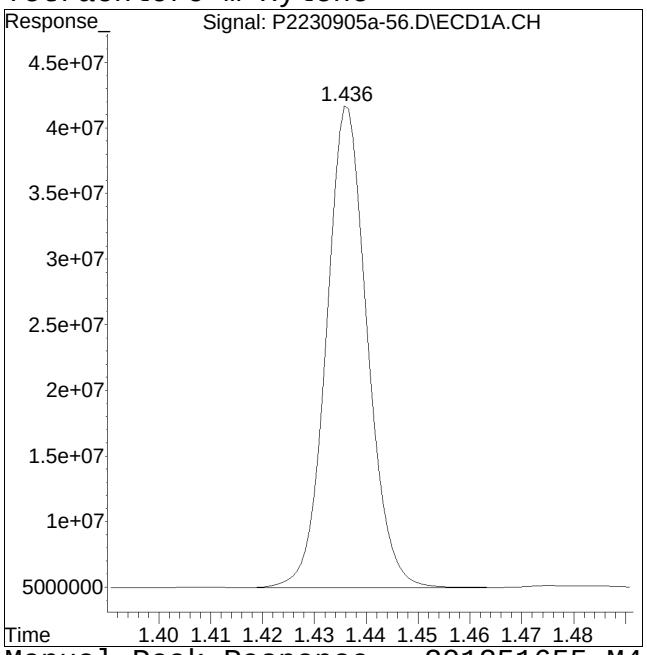
Original Peak Response = 307214282 Manual Peak Response = 297727432 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-56.D Operator : pest2:meo
Date Inj'd : 9/5/2023 11:02 pm Instrument : Pest 2
Sample : L2350269-11,42,, Quant Date : 9/6/2023 3:32 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



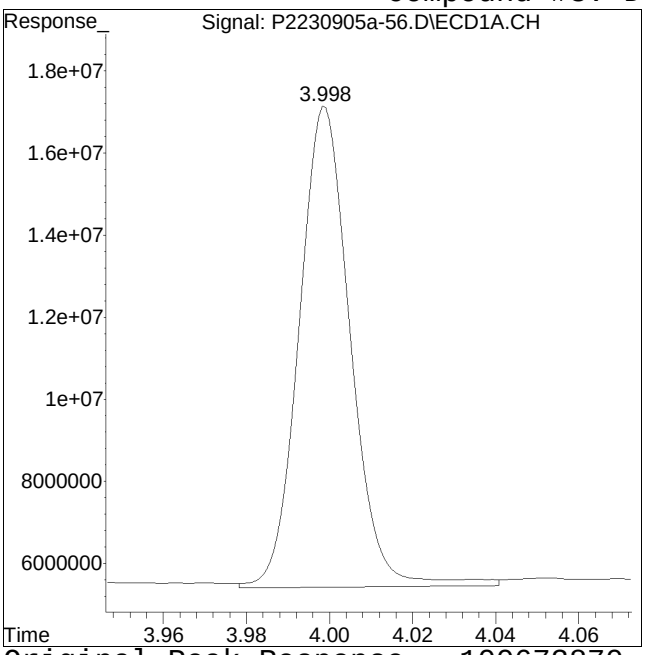


Original Peak Response = 210708630 Manual Peak Response = 201251655 M4
M4 = Poor automated baseline construction.

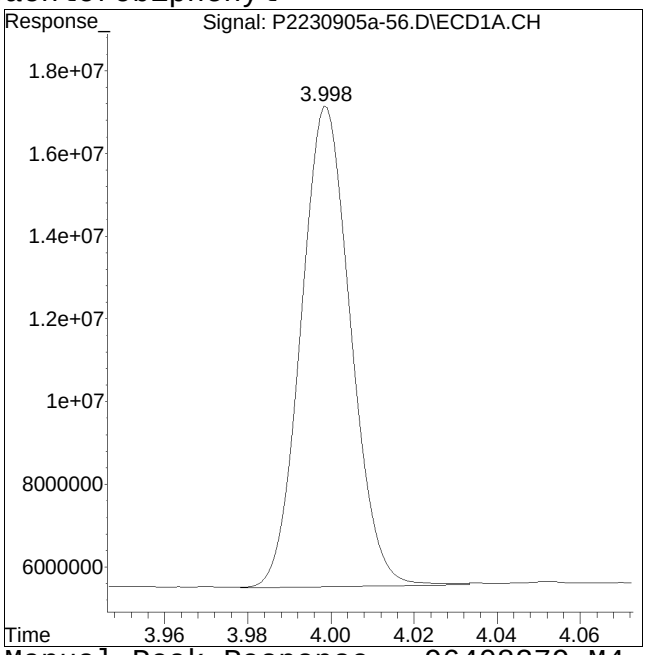
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-56.D Operator : pest2:meo
Date Inj'd : 9/5/2023 11:02 pm Instrument : Pest 2
Sample : L2350269-11,42,, Quant Date : 9/6/2023 3:32 pm

Compound #3: Decachlorobiphenyl



Original Peak Response = 100673870



Manual Peak Response = 96408279 M4

M4 = Poor automated baseline construction.

Aroclor Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
PCBs

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: PEST2**	**Ical Ref**	**: ICAL20286**
Calibration dates	**: 08/21/23 20:35 08/22/23 18:06**		

Calibration Files
1 =P2230821i-07.D 2 =P2230821i-08.D 3 =P2230821i-09.D 4 =P2230821i-20.D 5 =P2230821i-11.D
6 =P2230821i-12.D

		Compound	1	2	3	4	5	6	Avg	%RSD
1)	i	1660_1br2nb	----------ISTD----------							
2)	s	2,4,5,6-Tetra	1.276	1.366	1.401	1.559	1.539	1.672	1.469	9.96
3)	s	Decachlorobip	1.184	1.188	1.162	1.215	1.158	1.223	1.188	2.24
4)	l1	1016-1	0.025	0.026	0.025	0.026	0.024	0.025	0.025	2.44
5)	l1	1016-2	0.054	0.053	0.052	0.054	0.050	0.051	0.052	2.69
6)	l1	1016-3	0.106	0.109	0.110	0.119	0.116	0.124	0.114	5.95
7)	l1	1016-4	0.045	0.047	0.047	0.049	0.047	0.049	0.047	3.90
8)	l1	1016-5	0.051	0.050	0.048	0.051	0.048	0.050	0.050	3.29
9)	l2	1260-1	0.067	0.072	0.069	0.075	0.071	0.074	0.071	4.07
10)	l2	1260-2	0.104	0.109	0.107	0.114	0.109	0.115	0.110	3.94
11)	l2	1260-3	0.066	0.070	0.068	0.074	0.071	0.075	0.071	4.92
12)	l2	1260-4	0.141	0.145	0.146	0.162	0.158	0.168	0.153	7.00
13)	l2	1260-5	0.104	0.107	0.108	0.113	0.112	0.119	0.111	4.76
14)	i	2154_1br2nb	----------ISTD----------							
15)	l3	1221-2				0.014			0.014	0.00
16)	l3	1221-3				0.009			0.009	0.00
17)	l3	1221-4				0.036			0.036	0.00
18)	l4	1254-1				0.050			0.050	0.00
19)	l4	1254-2				0.093			0.093	0.00
20)	l4	1254-3				0.095			0.095	0.00
21)	l4	1254-4				0.073			0.073	0.00
22)	l4	1254-5				0.101			0.101	0.00
23)	i	4268_1br2nb	----------ISTD----------							
24)	l6	1242-1				0.021			0.021	0.00
25)	l6	1242-2				0.044			0.044	0.00
26)	l6	1242-3				0.097			0.097	0.00
27)	l6	1242-4				0.042			0.042	0.00
28)	l6	1242-5				0.032			0.032	0.00
29)	l9	1268-1				0.224			0.224	0.00
30)	l9	1268-2				0.208			0.208	0.00
31)	l9	1268-3				0.165			0.165	0.00
32)	l9	1268-4				0.072			0.072	0.00
33)	l9	1268-5				0.513			0.513	0.00
34)	i	1248_1br2nb	----------ISTD----------							
35)	l7	1248-1				0.052			0.052	0.00
36)	l7	1248-2				0.066			0.066	0.00

Initial Calibration Summary
Form 6
PCBs

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: PEST2**	**Ical Ref**	**: ICAL20286**
Calibration dates	**: 08/21/23 20:35 08/22/23 18:06**		

Calibration Files
1 =P2230821i-07.D 2 =P2230821i-08.D 3 =P2230821i-09.D 4 =P2230821i-20.D 5 =P2230821i-11.D
6 =P2230821i-12.D

	Compound	1	2	3	4	5	6	Avg	%RSD
37) l7	1248-3				0.060			0.060	0.00
38) l7	1248-4				0.054			0.054	0.00
39) l7	1248-5				0.048			0.048	0.00
40) i	3262_1br2nb				----------ISTD----------				
41) l5	1232-1				0.028			0.028	0.00
42) l5	1232-2				0.025			0.025	0.00
43) l5	1232-3				0.053			0.053	0.00
44) l5	1232-4				0.022			0.022	0.00
45) l5	1232-5				0.016			0.016	0.00
46) l8	1262-1				0.078			0.078	0.00
47) l8	1262-2				0.100			0.100	0.00
48) l8	1262-3				0.090			0.090	0.00
49) l8	1262-4				0.181			0.181	0.00
50) l8	1262-5				0.058			0.058	0.00

Initial Calibration Summary
Form 6
PCBs

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: PEST2**	**Ical Ref**	**: ICAL20286**
Calibration dates	**: 08/21/23 20:35 08/22/23 18:06**		

Signal #2 Calibration Files

1 =P2230821i-07.D 2 =P2230821i-08.D 3 =P2230821i-09.D 4 =P2230821i-20.D 5 =P2230821i-11.D

6 =P2230821i-12.D

	Compound	1	2	3	4	5	6	Avg	%RSD
1) i	1660_1br2nb	----------ISTD----------							
2) s	2,4,5,6-Tetra	1.478	1.475	1.467	1.528	1.476	1.480	1.484	1.49
3) s	Decachlorobip	1.142	1.111	1.081	1.043	0.982	0.925	1.047	7.79
4) l1	1016-1	0.030	0.029	0.027	0.027	0.025	0.024	0.027	8.89
5) l1	1016-2	0.064	0.064	0.060	0.059	0.054	0.052	0.059	8.68
6) l1	1016-3	0.122	0.120	0.115	0.119	0.111	0.109	0.116	4.38
7) l1	1016-4	0.048	0.049	0.048	0.048	0.045	0.044	0.047	4.80
8) l1	1016-5	0.044	0.040	0.040	0.039	0.036	0.035	0.039	8.61
9) l2	1260-1	0.074	0.075	0.074	0.073	0.069	0.067	0.072	4.74
10) l2	1260-2	0.090	0.090	0.087	0.087	0.081	0.080	0.086	5.04
11) l2	1260-3	0.078	0.075	0.072	0.072	0.067	0.067	0.072	5.92
12) l2	1260-4	0.151	0.149	0.147	0.147	0.139	0.138	0.145	3.71
13) l2	1260-5	0.107	0.103	0.101	0.103	0.095	0.095	0.101	4.56
14) i	2154_1br2nb	----------ISTD----------							
15) l3	1221-2				0.015			0.015	0.00
16) l3	1221-3				0.010			0.010	0.00
17) l3	1221-4				0.036			0.036	0.00
18) l4	1254-1				0.057			0.057	0.00
19) l4	1254-2				0.067			0.067	0.00
20) l4	1254-3				0.100			0.100	0.00
21) l4	1254-4				0.068			0.068	0.00
22) l4	1254-5				0.093			0.093	0.00
23) i	4268_1br2nb	----------ISTD----------							
24) l6	1242-1				0.022			0.022	0.00
25) l6	1242-2				0.049			0.049	0.00
26) l6	1242-3				0.097			0.097	0.00
27) l6	1242-4				0.039			0.039	0.00
28) l6	1242-5				0.032			0.032	0.00
29) l9	1268-1				0.199			0.199	0.00
30) l9	1268-2				0.184			0.184	0.00
31) l9	1268-3				0.144			0.144	0.00
32) l9	1268-4				0.068			0.068	0.00
33) l9	1268-5				0.430			0.430	0.00
34) i	1248_1br2nb	----------ISTD----------							
35) l7	1248-1				0.055			0.055	0.00
36) l7	1248-2				0.037			0.037	0.00

Initial Calibration Summary
Form 6
PCBs

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: PEST2**	**Ical Ref**	**: ICAL20286**
Calibration dates	**: 08/21/23 20:35 08/22/23 18:06**		

Signal #2 Calibration Files

1 =P2230821i-07.D 2 =P2230821i-08.D 3 =P2230821i-09.D 4 =P2230821i-20.D 5 =P2230821i-11.D

6 =P2230821i-12.D

	Compound	1	2	3	4	5	6	Avg	%RSD
37) l7	1248-3				0.046			0.046	0.00
38) l7	1248-4				0.052			0.052	0.00
39) l7	1248-5				0.060			0.060	0.00
40) i	3262_1br2nb				----------ISTD----------				
41) l5	1232-1				0.029			0.029	0.00
42) l5	1232-2				0.029			0.029	0.00
43) l5	1232-3				0.055			0.055	0.00
44) l5	1232-4				0.023			0.023	0.00
45) l5	1232-5				0.017			0.017	0.00
46) l8	1262-1				0.066			0.066	0.00
47) l8	1262-2				0.090			0.090	0.00
48) l8	1262-3				0.084			0.084	0.00
49) l8	1262-4				0.159			0.159	0.00
50) l8	1262-5				0.056			0.056	0.00

Response Factor Report Pest 2

Method Path : I:\PCB\Pest2\2023\230821I\
Method File : P2_pcb_08_21_23_LVI_ugL_ICAL.m
Title : pcb
Last Update : Wed Aug 23 13:46:31 2023
Response Via : Initial Calibration

Calibration Files
1 =P2230821i-07.D 2 =P2230821i-08.D 3 =P2230821i-09.D 4 =P2230821i-20.D 5 =P2230821i-11.D
6 =P2230821i-12.D

		Compound	1	2	3	4	5	6	Avg	%RSD
1)	i	1660_1br2nb	----------ISTD----------							
2)	s	2,4,5,6-Tetra...	1.276	1.366	1.401	1.559	1.539	1.672	1.469	9.96
3)	s	Decachlorobip...	1.184	1.188	1.162	1.215	1.158	1.223	1.188	2.24
4)	l1	1016-1	0.025	0.026	0.025	0.026	0.024	0.025	0.025	2.44
5)	l1	1016-2	0.054	0.053	0.052	0.054	0.050	0.051	0.052	2.69
6)	l1	1016-3	0.106	0.109	0.110	0.119	0.116	0.124	0.114	5.95
7)	l1	1016-4	0.045	0.047	0.047	0.049	0.047	0.049	0.047	3.90
8)	l1	1016-5	0.051	0.050	0.048	0.051	0.048	0.050	0.050	3.29
9)	l2	1260-1	0.067	0.072	0.069	0.075	0.071	0.074	0.071	4.07
10)	l2	1260-2	0.104	0.109	0.107	0.114	0.109	0.115	0.110	3.94
11)	l2	1260-3	0.066	0.070	0.068	0.074	0.071	0.075	0.071	4.92
12)	l2	1260-4	0.141	0.145	0.146	0.162	0.158	0.168	0.153	7.00
13)	l2	1260-5	0.104	0.107	0.108	0.113	0.112	0.119	0.111	4.76
14)	i	2154_1br2nb	----------ISTD----------							
15)	l3	1221-2				0.014			0.014	0.00
16)	l3	1221-3				0.009			0.009	0.00
17)	l3	1221-4				0.036			0.036	0.00
18)	l4	1254-1				0.050			0.050	0.00
19)	l4	1254-2				0.093			0.093	0.00
20)	l4	1254-3				0.095			0.095	0.00
21)	l4	1254-4				0.073			0.073	0.00
22)	l4	1254-5				0.101			0.101	0.00
23)	i	4268_1br2nb	----------ISTD----------							
24)	l6	1242-1				0.021			0.021	0.00
25)	l6	1242-2				0.044			0.044	0.00
26)	l6	1242-3				0.097			0.097	0.00
27)	l6	1242-4				0.042			0.042	0.00
28)	l6	1242-5				0.032			0.032	0.00
29)	l9	1268-1				0.224			0.224	0.00

Response Factor Report Pest 2

Method Path : I:\PCB\Pest2\2023\230821I\
Method File : P2_pcb_08_21_23_LVI_ugL_ICAL.m
Title : pcb
Last Update : Wed Aug 23 13:46:31 2023
Response Via : Initial Calibration

Calibration Files
1 =P2230821i-07.D 2 =P2230821i-08.D 3 =P2230821i-09.D 4 =P2230821i-20.D 5 =P2230821i-11.D
6 =P2230821i-12.D

	Compound	1	2	3	4	5	6	Avg	%RSD
30) l9	1268-2				0.208			0.208	0.00
31) l9	1268-3				0.165			0.165	0.00
32) l9	1268-4				0.072			0.072	0.00
33) l9	1268-5				0.513			0.513	0.00
34) i	1248_1br2nb	----------ISTD----------							
35) l7	1248-1				0.052			0.052	0.00
36) l7	1248-2				0.066			0.066	0.00
37) l7	1248-3				0.060			0.060	0.00
38) l7	1248-4				0.054			0.054	0.00
39) l7	1248-5				0.048			0.048	0.00
40) i	3262_1br2nb	----------ISTD----------							
41) l5	1232-1				0.028			0.028	0.00
42) l5	1232-2				0.025			0.025	0.00
43) l5	1232-3				0.053			0.053	0.00
44) l5	1232-4				0.022			0.022	0.00
45) l5	1232-5				0.016			0.016	0.00
46) l8	1262-1				0.078			0.078	0.00
47) l8	1262-2				0.100			0.100	0.00
48) l8	1262-3				0.090			0.090	0.00
49) l8	1262-4				0.181			0.181	0.00
50) l8	1262-5				0.058			0.058	0.00

Signal #2 Calibration Files
1 =P2230821i-07.D 2 =P2230821i-08.D 3 =P2230821i-09.D 4 =P2230821i-20.D 5 =P2230821i-11.D
6 =P2230821i-12.D

	Compound	1	2	3	4	5	6	Avg	%RSD
1) i	1660_1br2nb	----------ISTD----------							
2) s	2,4,5,6-Tetra...	1.478	1.475	1.467	1.528	1.476	1.480	1.484	1.49

Response Factor Report Pest 2

Method Path : I:\PCB\Pest2\2023\230821I\
Method File : P2_pcb_08_21_23_LVI_ugL_ICAL.m
Title : pcb
Last Update : Wed Aug 23 13:46:31 2023
Response Via : Initial Calibration

Calibration Files
1 =P2230821i-07.D 2 =P2230821i-08.D 3 =P2230821i-09.D 4 =P2230821i-20.D 5 =P2230821i-11.D
6 =P2230821i-12.D

		Compound	1	2	3	4	5	6	Avg	%RSD
3)	s	Decachlorobip...	1.142	1.111	1.081	1.043	0.982	0.925	1.047	7.79
4)	l1	1016-1	0.030	0.029	0.027	0.027	0.025	0.024	0.027	8.89
5)	l1	1016-2	0.064	0.064	0.060	0.059	0.054	0.052	0.059	8.68
6)	l1	1016-3	0.122	0.120	0.115	0.119	0.111	0.109	0.116	4.38
7)	l1	1016-4	0.048	0.049	0.048	0.048	0.045	0.044	0.047	4.80
8)	l1	1016-5	0.044	0.040	0.040	0.039	0.036	0.035	0.039	8.61
9)	l2	1260-1	0.074	0.075	0.074	0.073	0.069	0.067	0.072	4.74
10)	l2	1260-2	0.090	0.090	0.087	0.087	0.081	0.080	0.086	5.04
11)	l2	1260-3	0.078	0.075	0.072	0.072	0.067	0.067	0.072	5.92
12)	l2	1260-4	0.151	0.149	0.147	0.147	0.139	0.138	0.145	3.71
13)	l2	1260-5	0.107	0.103	0.101	0.103	0.095	0.095	0.101	4.56
14)	i	2154_1br2nb	----------ISTD----------							
15)	l3	1221-2				0.015			0.015	0.00
16)	l3	1221-3				0.010			0.010	0.00
17)	l3	1221-4				0.036			0.036	0.00
18)	l4	1254-1				0.057			0.057	0.00
19)	l4	1254-2				0.067			0.067	0.00
20)	l4	1254-3				0.100			0.100	0.00
21)	l4	1254-4				0.068			0.068	0.00
22)	l4	1254-5				0.093			0.093	0.00
23)	i	4268_1br2nb	----------ISTD----------							
24)	l6	1242-1				0.022			0.022	0.00
25)	l6	1242-2				0.049			0.049	0.00
26)	l6	1242-3				0.097			0.097	0.00
27)	l6	1242-4				0.039			0.039	0.00
28)	l6	1242-5				0.032			0.032	0.00
29)	l9	1268-1				0.199			0.199	0.00
30)	l9	1268-2				0.184			0.184	0.00
31)	l9	1268-3				0.144			0.144	0.00
32)	l9	1268-4				0.068			0.068	0.00
33)	l9	1268-5				0.430			0.430	0.00

Response Factor Report Pest 2

Method Path : I:\PCB\Pest2\2023\230821I\
Method File : P2_pcb_08_21_23_LVI_ugL_ICAL.m
Title : pcb
Last Update : Wed Aug 23 13:46:31 2023
Response Via : Initial Calibration

Calibration Files
1 =P2230821i-07.D 2 =P2230821i-08.D 3 =P2230821i-09.D 4 =P2230821i-20.D 5 =P2230821i-11.D
6 =P2230821i-12.D

		Compound	1	2	3	4	5	6	Avg	%RSD
34)	i	1248_1br2nb	----------ISTD----------							
35)	l7	1248-1				0.055			0.055	0.00
36)	l7	1248-2				0.037			0.037	0.00
37)	l7	1248-3				0.046			0.046	0.00
38)	l7	1248-4				0.052			0.052	0.00
39)	l7	1248-5				0.060			0.060	0.00
40)	i	3262_1br2nb	----------ISTD----------							
41)	l5	1232-1				0.029			0.029	0.00
42)	l5	1232-2				0.029			0.029	0.00
43)	l5	1232-3				0.055			0.055	0.00
44)	l5	1232-4				0.023			0.023	0.00
45)	l5	1232-5				0.017			0.017	0.00
46)	l8	1262-1				0.066			0.066	0.00
47)	l8	1262-2				0.090			0.090	0.00
48)	l8	1262-3				0.084			0.084	0.00
49)	l8	1262-4				0.159			0.159	0.00
50)	l8	1262-5				0.056			0.056	0.00

(#) = Out of Range

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-03.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 8:35 pm
Operator : pest2:kb
Sample : il44268,42,, 11149
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:40:09 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:39:12 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
14) i	2154_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
23) i	4268_1br2nb	1.154	1.224	231.9E6	144.4E6	25.000	25.000
34) i	1248_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
40) i	3262_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	20.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
3) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	20.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
4) l1	1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1	1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1	1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1	1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1	1016-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1016-1			0	0	N.D.	N.D.
	Average 1016-1					0.000	0.000
9) l2	1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2	1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2	1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2	1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2	1260-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1260-1			0	0	N.D.	N.D.
	Average 1260-1					0.000	0.000
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d
17) l3	1221-4	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-03.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 8:35 pm
Operator : pest2:kb
Sample : il44268,42,, 11149
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:40:09 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:39:12 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum	1221-2			0	0	N.D.	N.D.
Average	1221-2					0.000	0.000
18) l4	1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4	1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4	1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4	1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4	1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1254-1			0	0	N.D.	N.D.
Average	1254-1					0.000	0.000
24) l6	1242-1	1.576	1.798	49372459	32353395	227.305	255.547
25) l6	1242-2	1.718	1.969	101.3E6	70689589	239.671	253.132
26) l6	1242-3	1.906	2.170	225.7E6	139.4E6	251.250	254.390
27) l6	1242-4	1.960	2.229	98251716	56932181	256.512	250.954
28) l6	1242-5	2.311	2.615	73947756	46341051	237.567	256.479
Sum	1242-1			548.5E6	345.7E6	1212.305	1270.502
Average	1242-1					242.461	254.100
29) l9	1268-1	3.436	3.869	518.4E6	286.8E6	254.087	254.852
30) l9	1268-2	3.457	3.895	482.8E6	266.4E6	268.796	260.472
31) l9	1268-3	3.558	4.037	382.8E6	208.5E6	260.539	259.229
32) l9	1268-4	3.745	4.191	165.8E6	98802879	257.683M4	262.869
33) l9	1268-5	3.900	4.376	1188.9E6	621.4E6	255.551M4	254.574
Sum	1268-1			2738.7E6	1481.9E6	NoCal	NoCal D
Average	1268-1					259.331	258.399
35) l7	1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7	1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7	1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7	1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7	1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1248-1			0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-03.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 8:35 pm
Operator : pest2:kb
Sample : il44268,42,, 11149
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:40:09 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:39:12 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

Compound		RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average	1248-1					0.000	0.000
41) l5	1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) l5	1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5	1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5	1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5	1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1232-1			0	0	N.D.	N.D.
Average	1232-1					0.000	0.000
46) l8	1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8	1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8	1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8	1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8	1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument							
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000

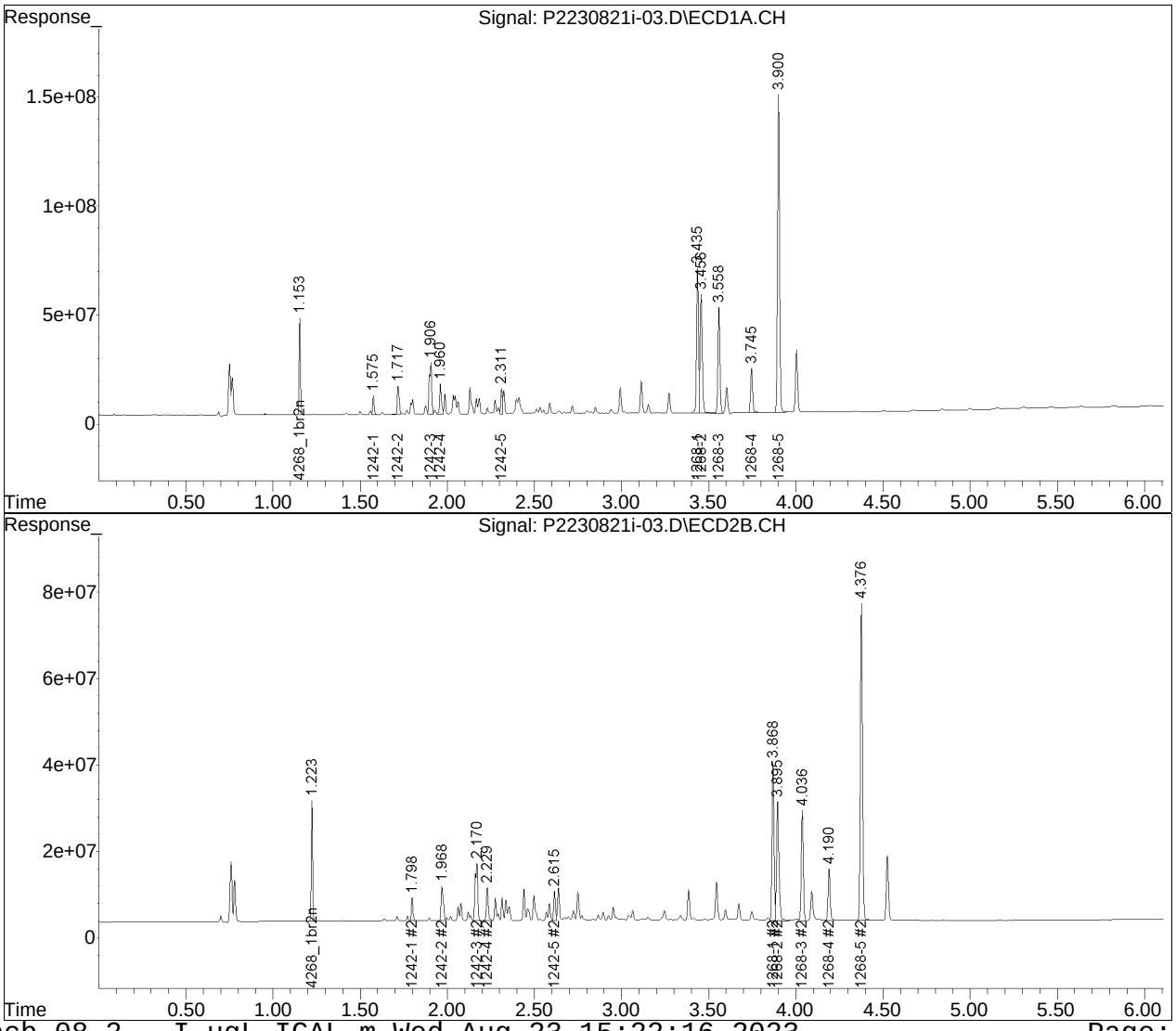
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-03.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 8:35 pm
Operator : pest2:kb
Sample : il44268,42,, 11149
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:40:09 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:39:12 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

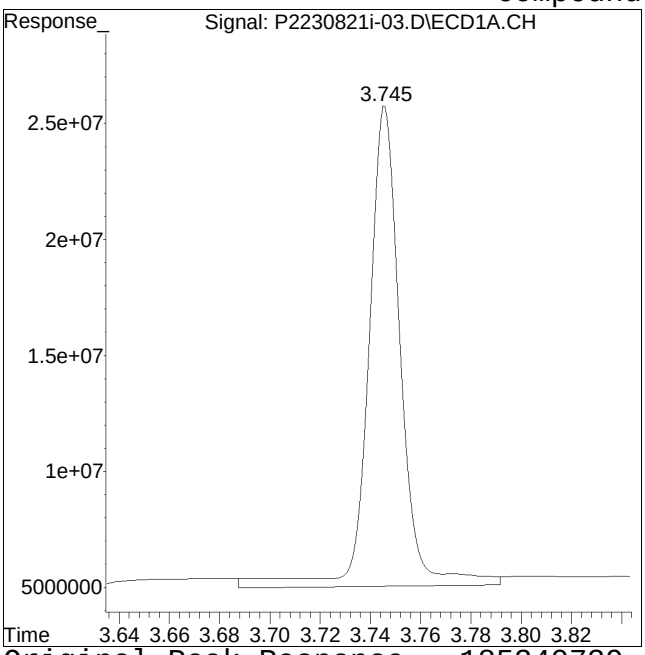
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

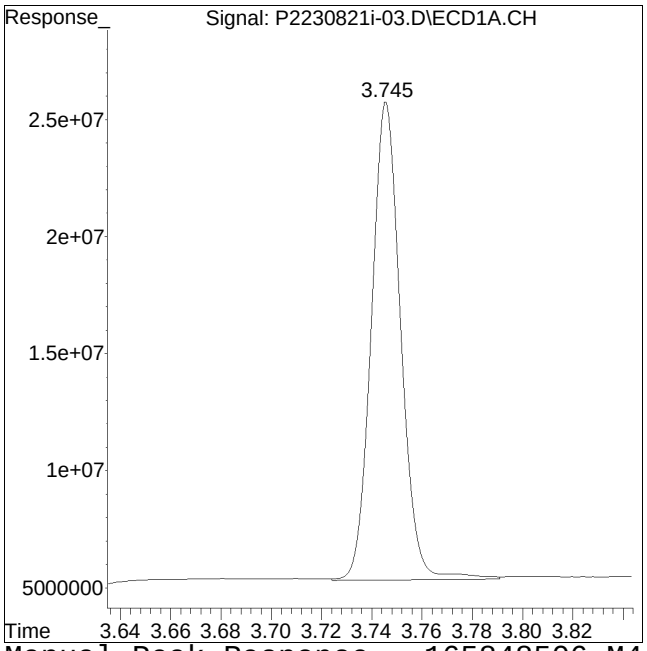


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-03.D Operator : pest2:kb
Date Inj'd : 8/21/2023 8:35 pm Instrument : Pest 2
Sample : il44268,42,, 11149 Quant Date : 8/22/2023 8:39 am

Compound #32: 1268-4



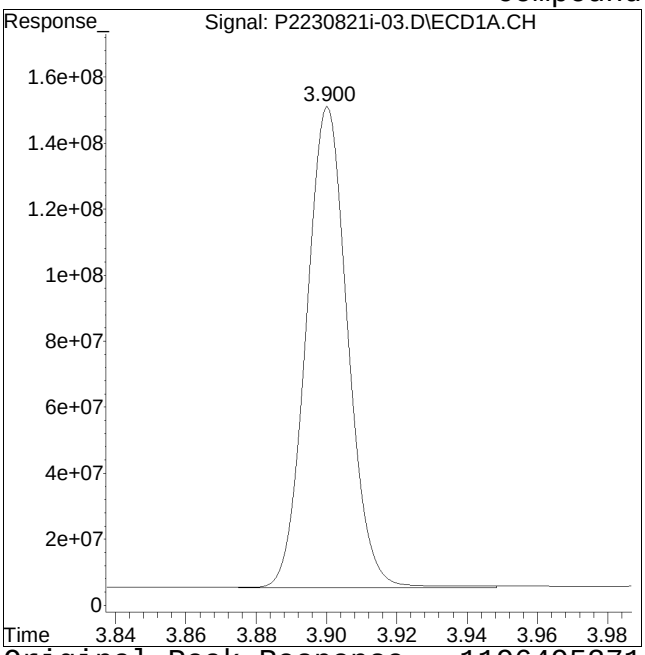


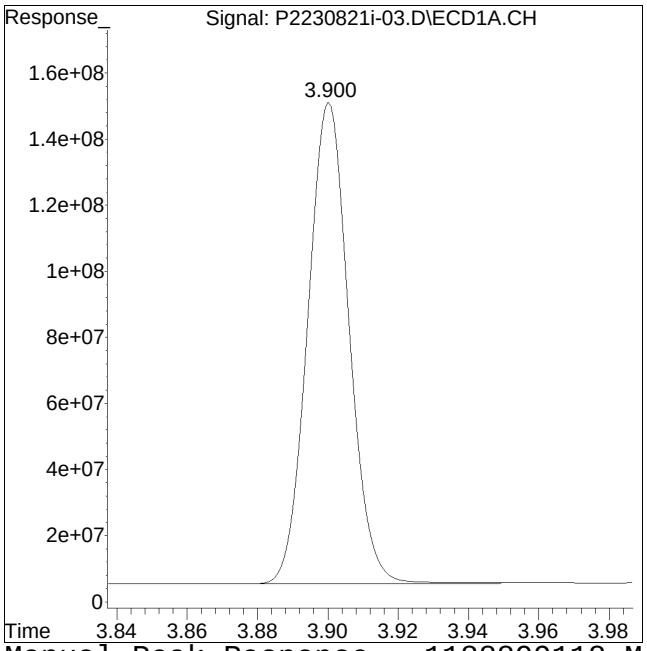
Original Peak Response = 185340739 Manual Peak Response = 165848506 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-03.D Operator : pest2:kb
Date Inj'd : 8/21/2023 8:35 pm Instrument : Pest 2
Sample : il44268,42,, 11149 Quant Date : 8/22/2023 8:39 am

Compound #33: 1268-5





Original Peak Response = 1196495271 Manual Peak Response = 1188899118 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-06.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:03 pm
Operator : pest2:kb
Sample : il42154,42,, 11161
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:50:22 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:49:48 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
14) i	2154_1br2nb	1.155	1.225	245.9E6	159.4E6	25.000	25.000
23) i	4268_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
34) i	1248_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
40) i	3262_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	20.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
3) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	20.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
4) l1	1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1	1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1	1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1	1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1	1016-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1016-1			0	0	N.D.	N.D.
	Average 1016-1					0.000	0.000
9) l2	1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2	1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2	1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2	1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2	1260-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1260-1			0	0	N.D.	N.D.
	Average 1260-1					0.000	0.000
15) l3	1221-2	1.501	1.714	35042358	24164302	233.086	238.612
16) l3	1221-3	1.560	1.774	21884893	15523998	227.291	226.944
17) l3	1221-4	1.577	1.800	87971466	56687538	240.128	236.281

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-06.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:03 pm
Operator : pest2:kb
Sample : il42154,42,, 11161
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:50:22 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:49:48 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l	
Sum	1221-2			144.9E6	96375838	700.506	701.837	
Average	1221-2					233.502	233.946	
18) l4	1254-1	2.294	2.638	123.4E6	91108419	249.230	209.258	
19) l4	1254-2	2.407	2.725	227.7E6	106.6E6	258.792	235.960	
20) l4	1254-3	2.589	2.954	234.8E6	159.9E6	227.398	228.495	
21) l4	1254-4	2.718	3.065	178.4E6	108.2E6	234.448	250.976	
22) l4	1254-5	2.939	3.341	249.2E6	148.0E6	239.966	238.512	
Sum	1254-1			1013.6E6	613.7E6	N.D.	N.D.	D
Average	1254-1					241.967	232.640	
24) l6	1242-1	0.000	0.000	0	0	N.D. d	N.D. d	
25) l6	1242-2	0.000	0.000	0	0	N.D. d	N.D. d	
26) l6	1242-3	0.000	0.000	0	0	N.D. d	N.D. d	
27) l6	1242-4	0.000	0.000	0	0	N.D. d	N.D. d	
28) l6	1242-5	0.000	0.000	0	0	N.D. d	N.D. d	
Sum	1242-1			0	0	N.D.	N.D.	
Average	1242-1					0.000	0.000	
29) l9	1268-1	0.000	0.000	0	0	N.D. d	N.D. d	
30) l9	1268-2	0.000	0.000	0	0	N.D. d	N.D. d	
31) l9	1268-3	0.000	0.000	0	0	N.D. d	N.D. d	
32) l9	1268-4	0.000	0.000	0	0	N.D. d	N.D. d	
33) l9	1268-5	0.000	0.000	0	0	N.D. d	N.D. d	
Sum	1268-1			0	0	N.D.	N.D.	
Average	1268-1					0.000	0.000	
35) l7	1248-1	0.000	0.000	0	0	N.D. d	N.D. d	
36) l7	1248-2	0.000	0.000	0	0	N.D. d	N.D. d	
37) l7	1248-3	0.000	0.000	0	0	N.D. d	N.D. d	
38) l7	1248-4	0.000	0.000	0	0	N.D. d	N.D. d	
39) l7	1248-5	0.000	0.000	0	0	N.D. d	N.D. d	
Sum	1248-1			0	0	N.D.	N.D.	

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-06.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:03 pm
Operator : pest2:kb
Sample : il42154,42,, 11161
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:50:22 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:49:48 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

Compound		RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average	1248-1					0.000	0.000
41) l5	1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) l5	1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5	1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5	1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5	1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1232-1			0	0	N.D.	N.D.
Average	1232-1					0.000	0.000
46) l8	1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8	1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8	1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8	1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8	1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument							
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000

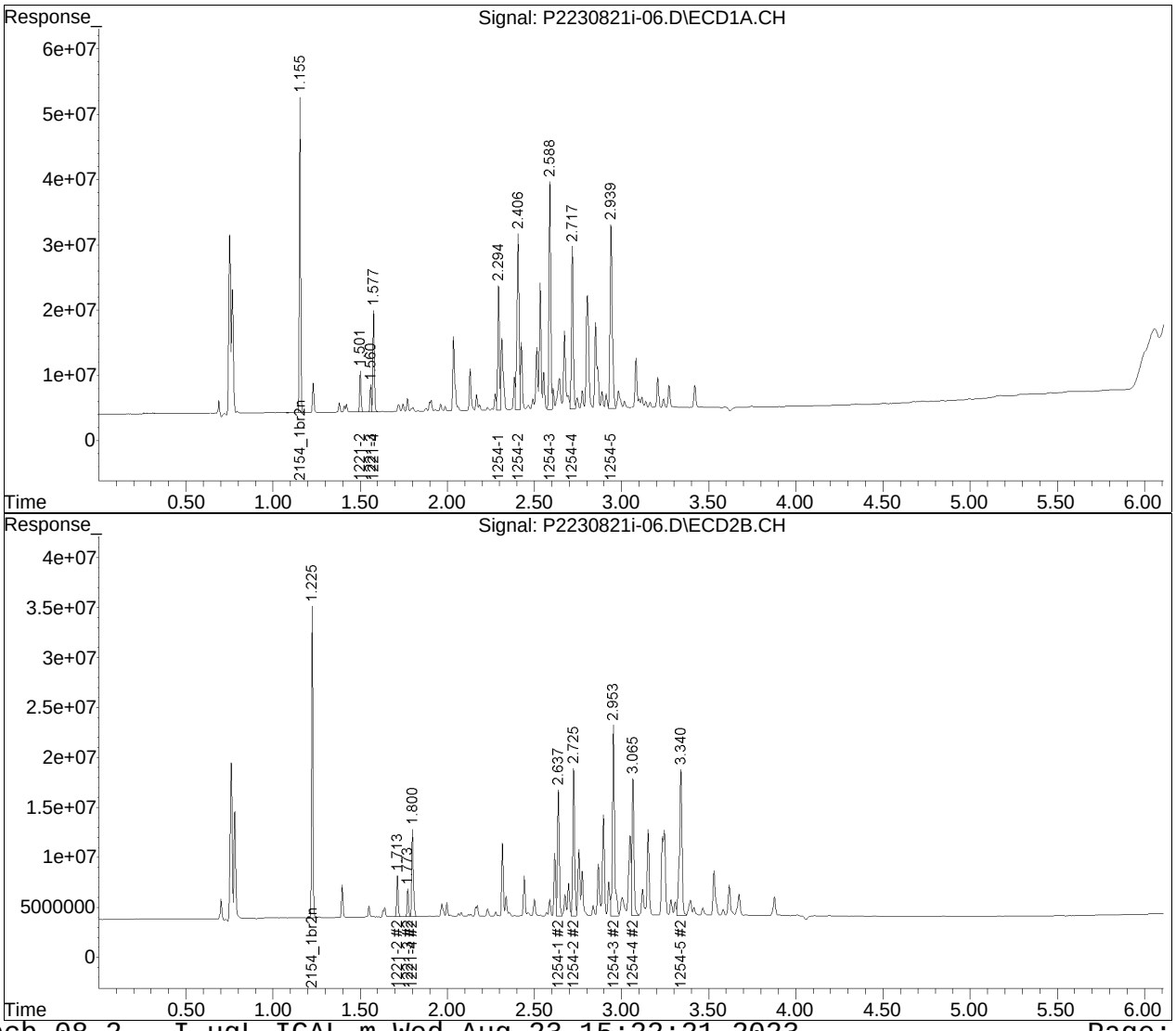
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-06.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:03 pm
Operator : pest2:kb
Sample : il42154,42,, 11161
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:50:22 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:49:48 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PCB\Pest2\2023\230821I\	QMethod	: P2_pcb_08_21_23_LVI_ugL_
Data File	: P2230821i-06.D	Operator	: pest2:kb
Date Inj'd	: 8/21/2023 9:03 pm	Instrument	: Pest 2
Sample	: il42154,42,, 11161	Quant Date	: 8/22/2023 8:49 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-07.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:13 pm
Operator : pest2:kb
Sample : il11660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 15:00:35 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:19:38 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	1.155	1.226	279.7E6	172.8E6	25.000	25.000
14) i	2154_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
23) i	4268_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
34) i	1248_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
40) i	3262_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.439	1.599	9133950	6539761	0.526	0.616M4
Spiked Amount	20.000	Range 30 - 150		Recovery =		2.63%#	3.08%#
3) s	Decachlorobi	4.005	4.527	16687257	9941518	1.232	1.400
Spiked Amount	20.000	Range 30 - 150		Recovery =		6.16%#	7.00%#
	Target Compounds						
4) l1	1016-1	1.578	1.800	2784560	2063592	8.994	9.649M4
5) l1	1016-2	1.719	1.970	6031740	4446605	9.823	9.886M4
6) l1	1016-3	1.907	2.172	11826248	8424487	8.739	10.215M4
7) l1	1016-4	1.962	2.231	4994019	3432643	9.437	10.182M1
8) l1	1016-5	2.132	2.442	5738072	3046868	10.231	12.170M4
Sum	1016-1			31374639	21414195	47.223	52.103
Average	1016-1					9.445	10.421
9) l2	1260-1	2.673	3.050	7505225	5141468	8.284M4	9.551M4
10) l2	1260-2	2.803	3.153	11599454	6187022	8.539M4	10.265M4
11) l2	1260-3	3.117	3.545	7416612	5374510	9.475M4	11.210
12) l2	1260-4	3.273	3.675	15761542	10449972	8.002	10.337
13) l2	1260-5	3.420	3.876	11674077	7402881	9.507M1	10.143
Sum	1260-1			53956911	34555854	NoCal	NoCal D
Average	1260-1					8.762	10.301
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-07.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:13 pm
Operator : pest2:kb
Sample : il11660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 15:00:35 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:19:38 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d
17) l3	1221-4	0.000	0.000	0	0	N.D.	N.D.
Sum	1221-2			0	0	N.D.	N.D.
Average	1221-2					0.000	0.000
18) l4	1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4	1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4	1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4	1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4	1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1254-1			0	0	N.D.	N.D.
Average	1254-1					0.000	0.000
24) l6	1242-1	0.000	0.000	0	0	N.D.	N.D.
25) l6	1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6	1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6	1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6	1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1242-1			0	0	N.D.	N.D.
Average	1242-1					0.000	0.000
29) l9	1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9	1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9	1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9	1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9	1268-5	0.000	0.000	0	0	N.D.	N.D.
Sum	1268-1			0	0	N.D.	N.D.
Average	1268-1					0.000	0.000
35) l7	1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7	1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7	1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7	1248-4	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-07.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:13 pm
Operator : pest2:kb
Sample : il11660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 15:00:35 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:19:38 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
39) l7	1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1248-1			0	0	N.D.	N.D.
Average	1248-1					0.000	0.000
41) l5	1232-1	0.000	0.000	0	0	N.D.	N.D.
42) l5	1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5	1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5	1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5	1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1232-1			0	0	N.D.	N.D.
Average	1232-1					0.000	0.000
46) l8	1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8	1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8	1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8	1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8	1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000

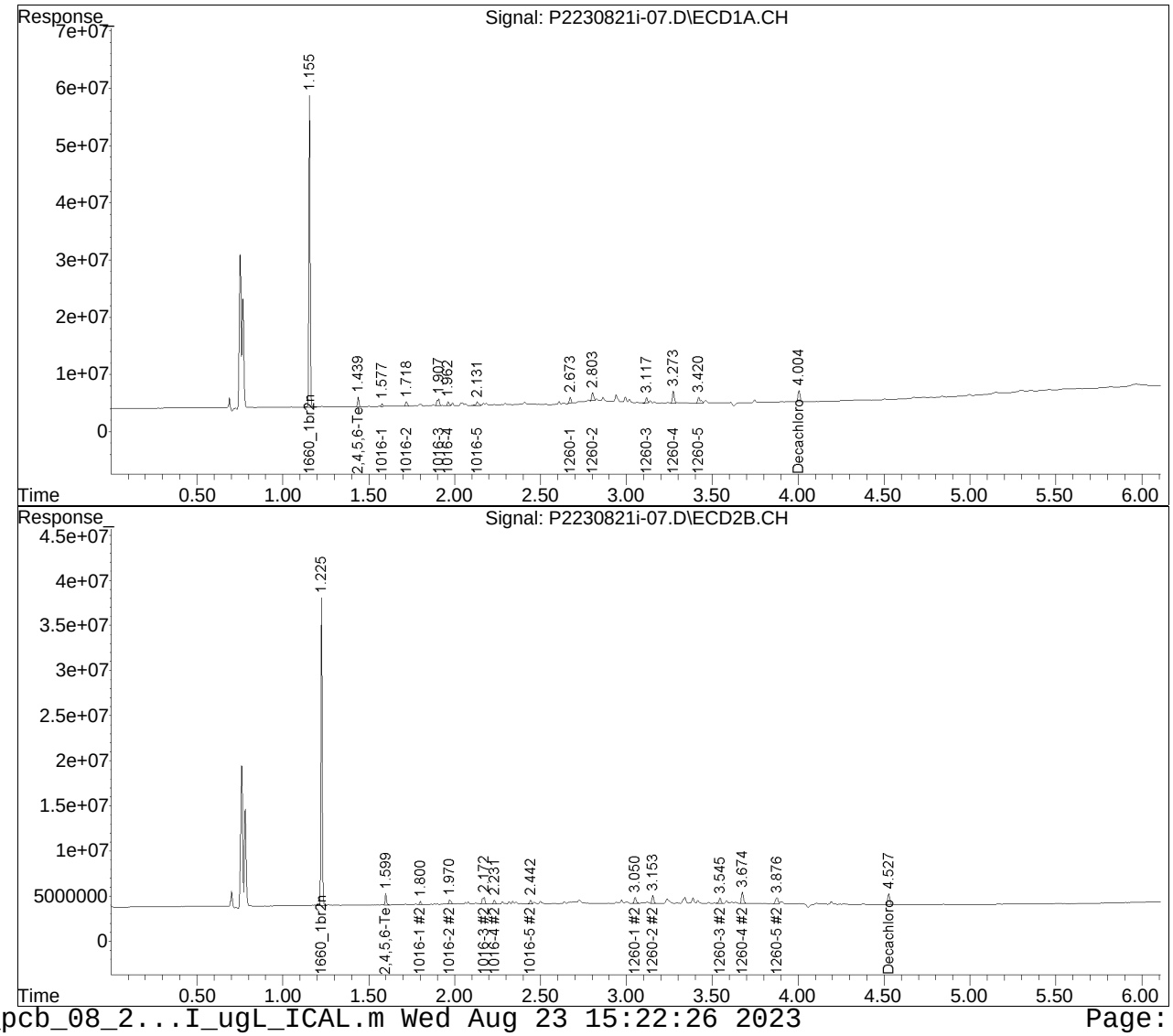
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-07.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:13 pm
Operator : pest2:kb
Sample : il11660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 15:00:35 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:19:38 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

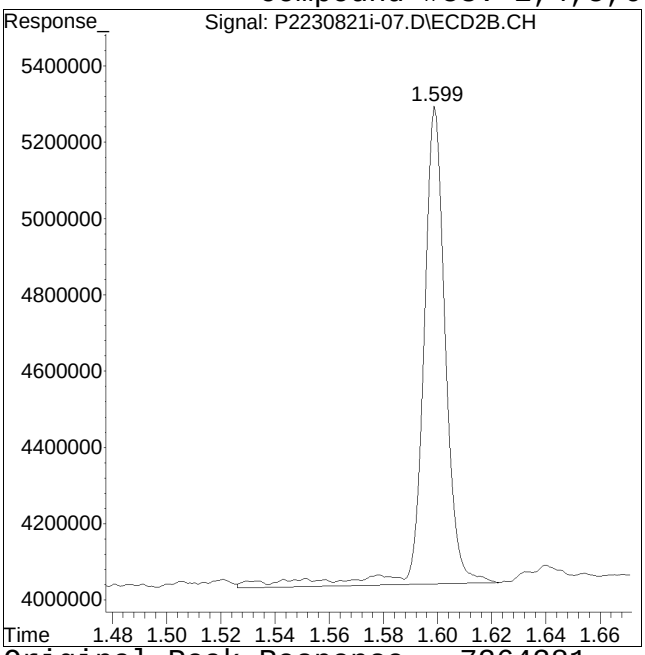
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



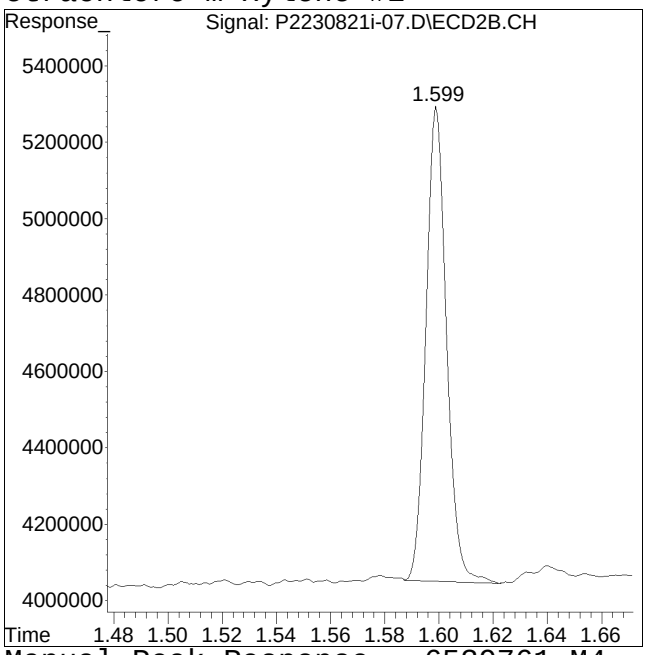
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-07.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:13 pm Instrument : Pest 2
Sample : il11660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #53: 2,4,5,6-Tetrachloro-m-xylene #2



Original Peak Response = 7264381



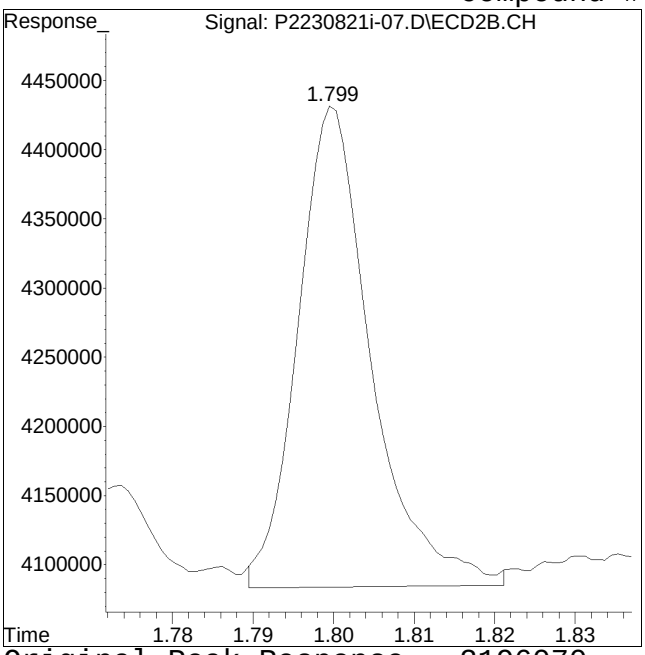
Manual Peak Response = 6539761 M4

M4 = Poor automated baseline construction.

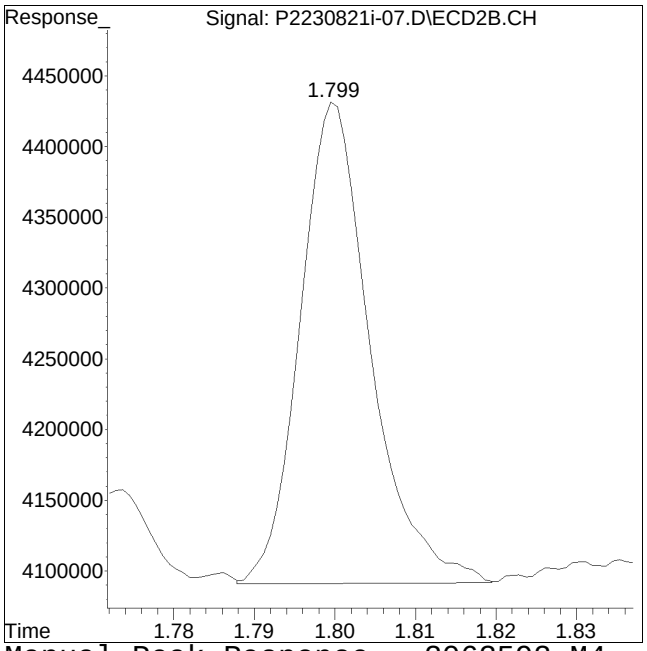
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-07.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:13 pm Instrument : Pest 2
Sample : il11660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #55: 1016-1 #2



Original Peak Response = 2196070



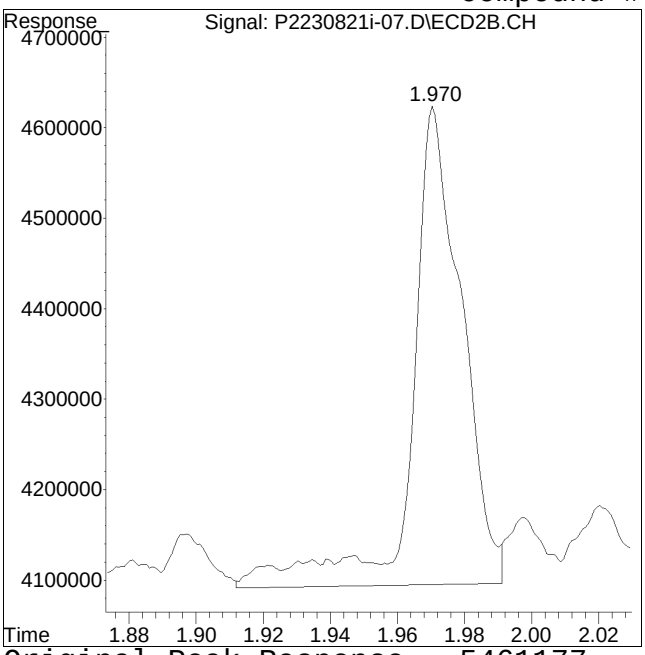
Manual Peak Response = 2063592 M4

M4 = Poor automated baseline construction.

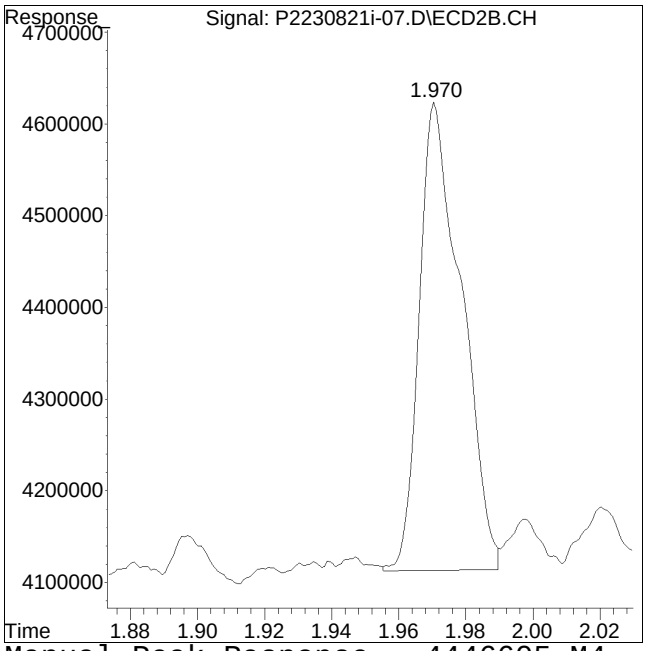
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-07.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:13 pm Instrument : Pest 2
Sample : il11660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #56: 1016-2 #2



Original Peak Response = 5461177



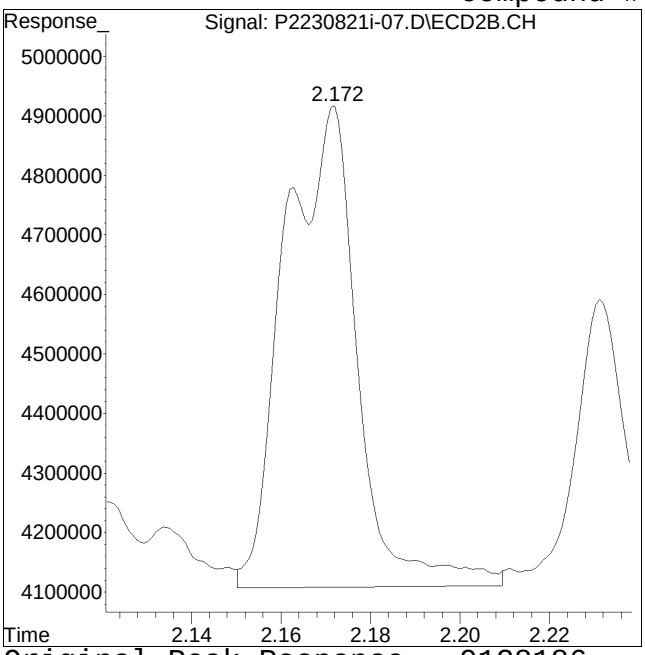
Manual Peak Response = 4446605 M4

M4 = Poor automated baseline construction.

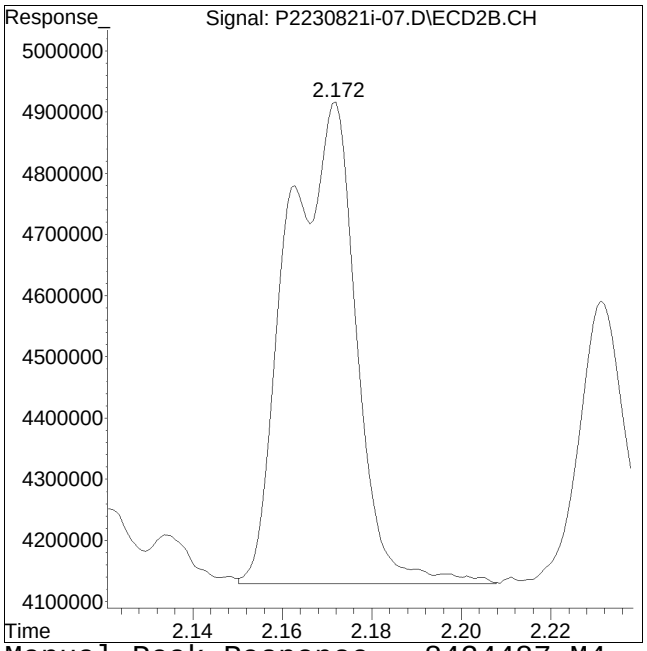
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-07.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:13 pm Instrument : Pest 2
Sample : il11660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #57: 1016-3 #2



Original Peak Response = 9128186



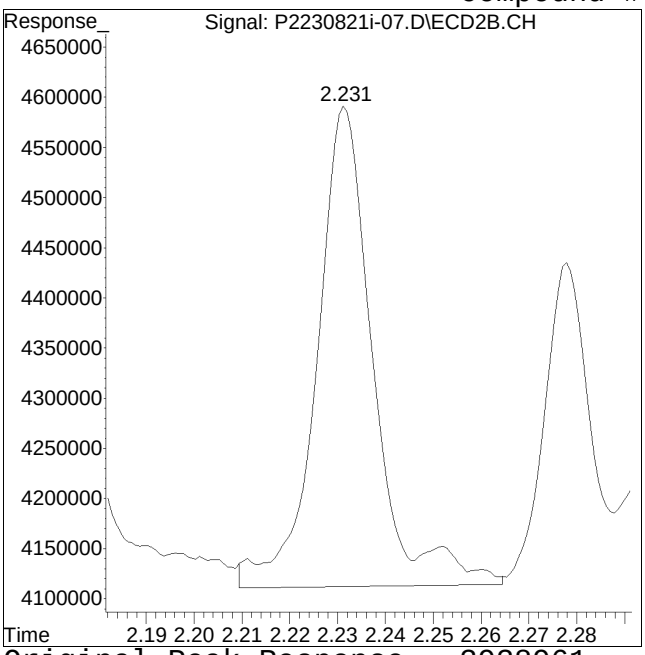
Manual Peak Response = 8424487 M4

M4 = Poor automated baseline construction.

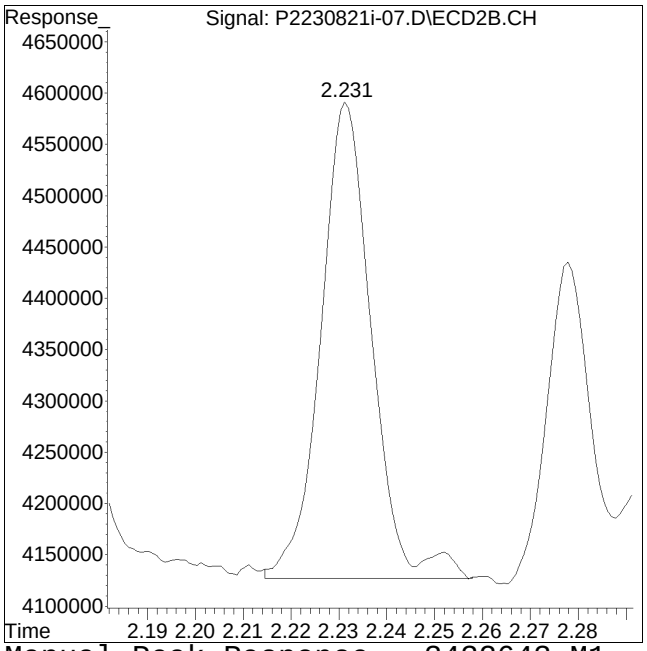
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-07.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:13 pm Instrument : Pest 2
Sample : il11660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #58: 1016-4 #2



Original Peak Response = 3938961



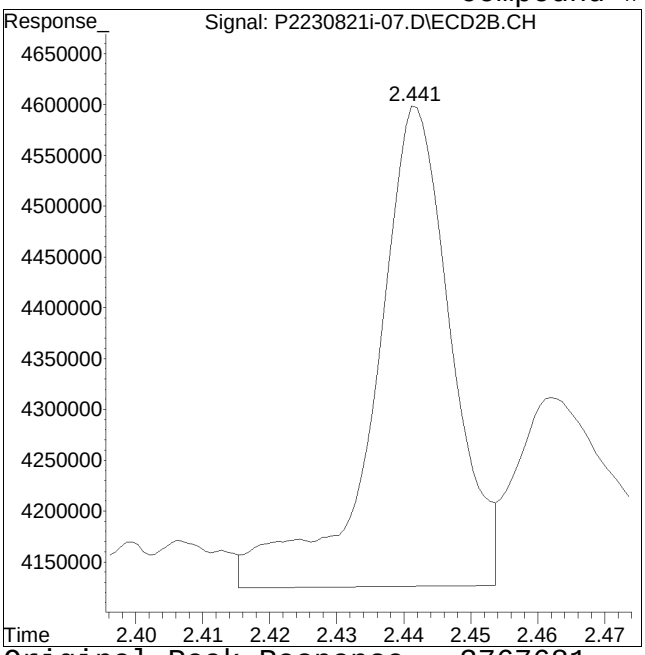
Manual Peak Response = 3432643 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

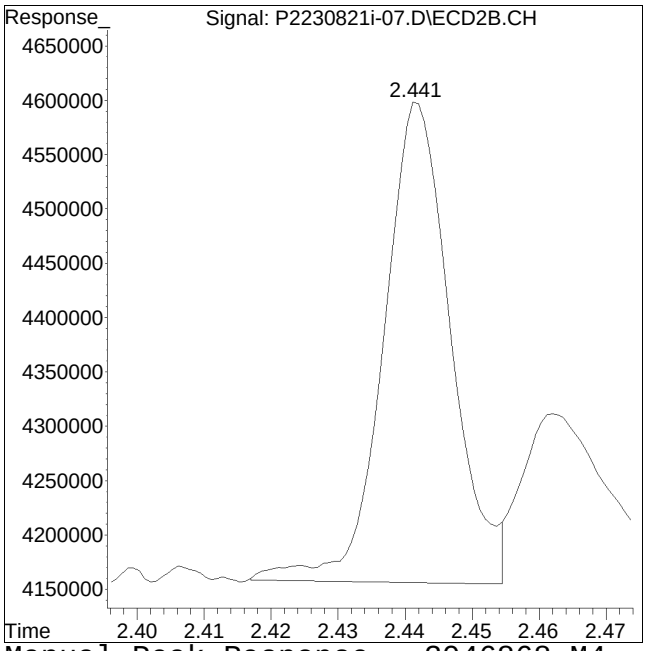
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-07.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:13 pm Instrument : Pest 2
Sample : il11660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #59: 1016-5 #2



Original Peak Response = 3767681



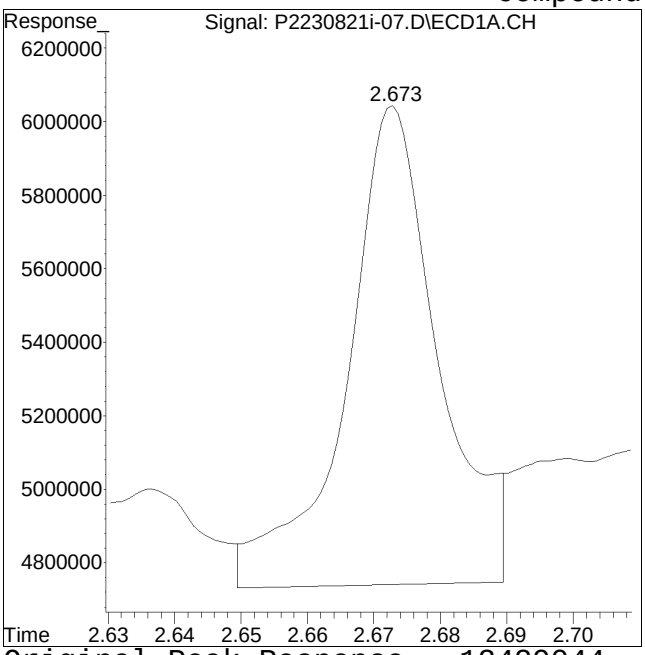
Manual Peak Response = 3046868 M4

M4 = Poor automated baseline construction.

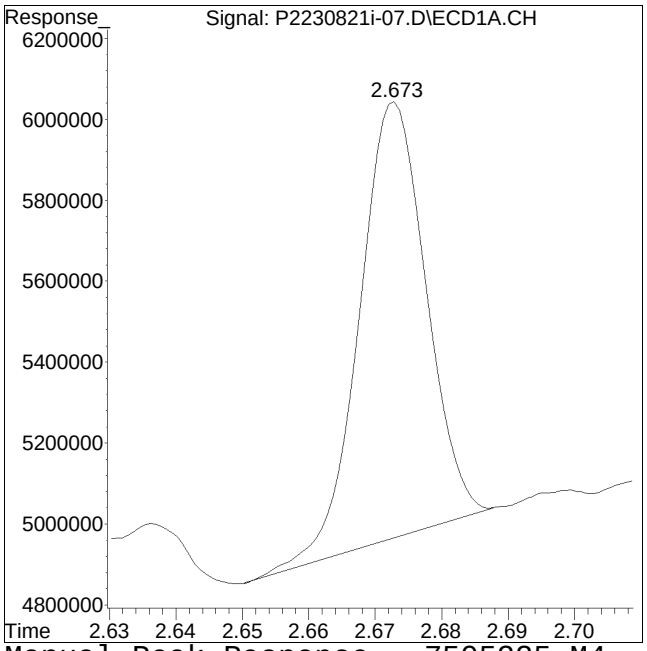
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-07.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:13 pm Instrument : Pest 2
Sample : il11660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #9: 1260-1



Original Peak Response = 12429044



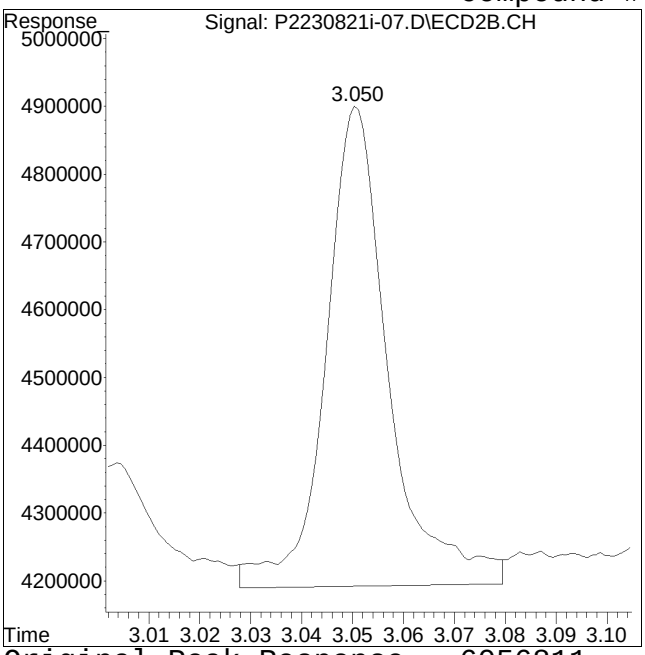
Manual Peak Response = 7505225 M4

M4 = Poor automated baseline construction.

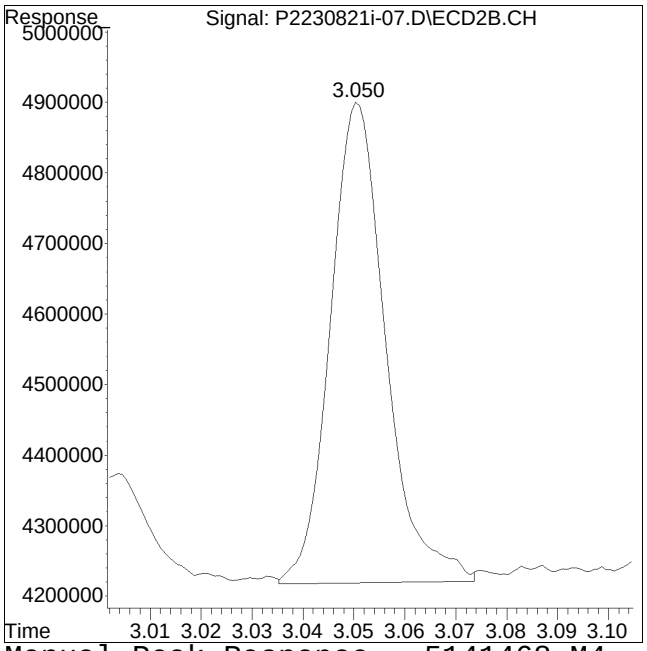
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-07.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:13 pm Instrument : Pest 2
Sample : il11660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #60: 1260-1 #2



Original Peak Response = 6056811



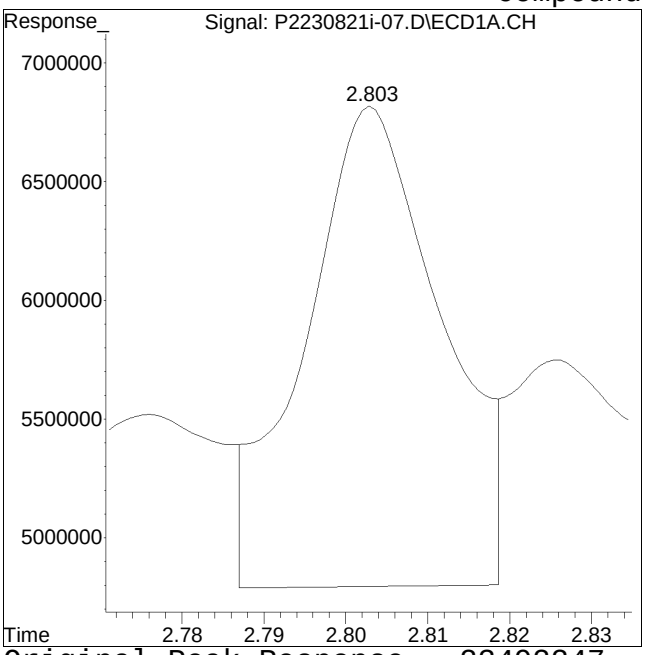
Manual Peak Response = 5141468 M4

M4 = Poor automated baseline construction.

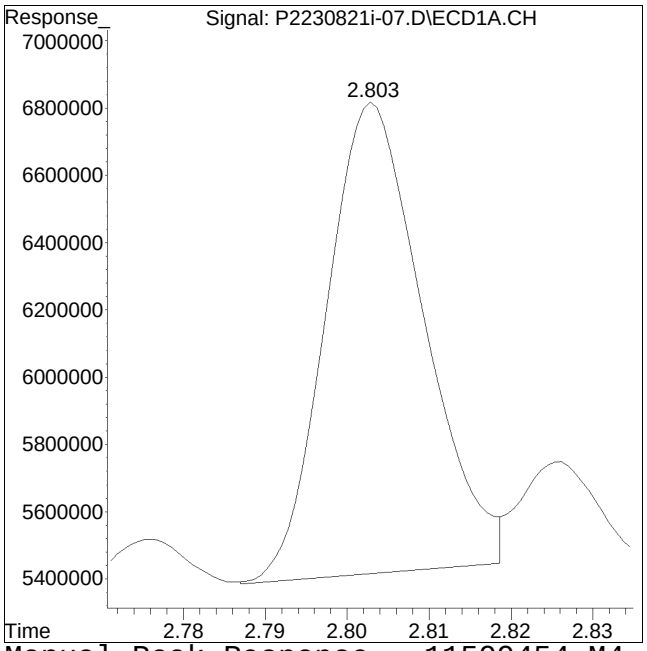
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-07.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:13 pm Instrument : Pest 2
Sample : il11660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #10: 1260-2



Original Peak Response = 23492247



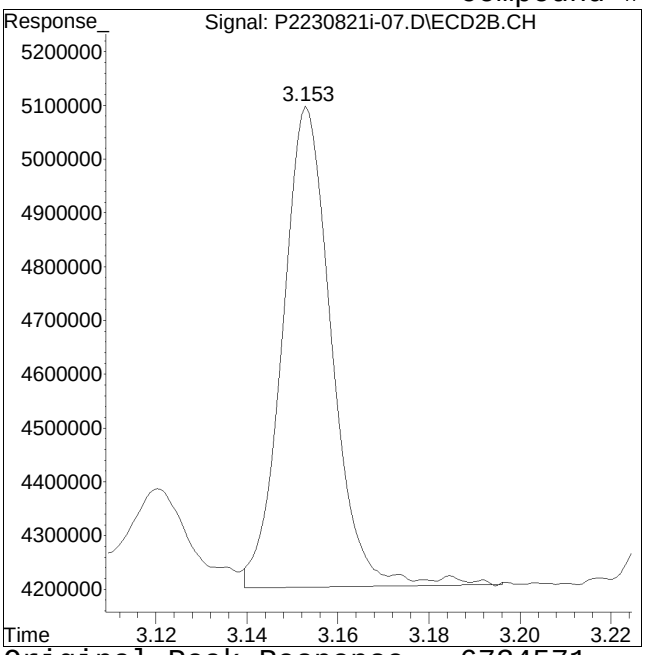
Manual Peak Response = 11599454 M4

M4 = Poor automated baseline construction.

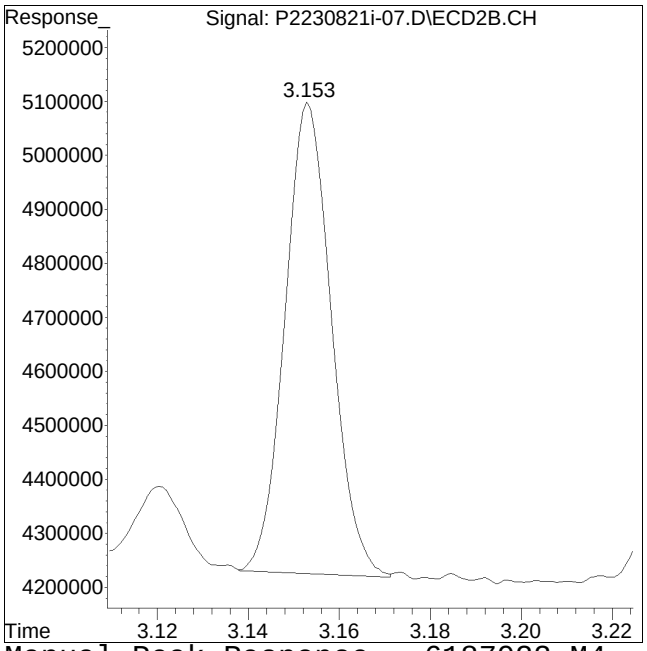
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-07.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:13 pm Instrument : Pest 2
Sample : il11660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #61: 1260-2 #2



Original Peak Response = 6734571



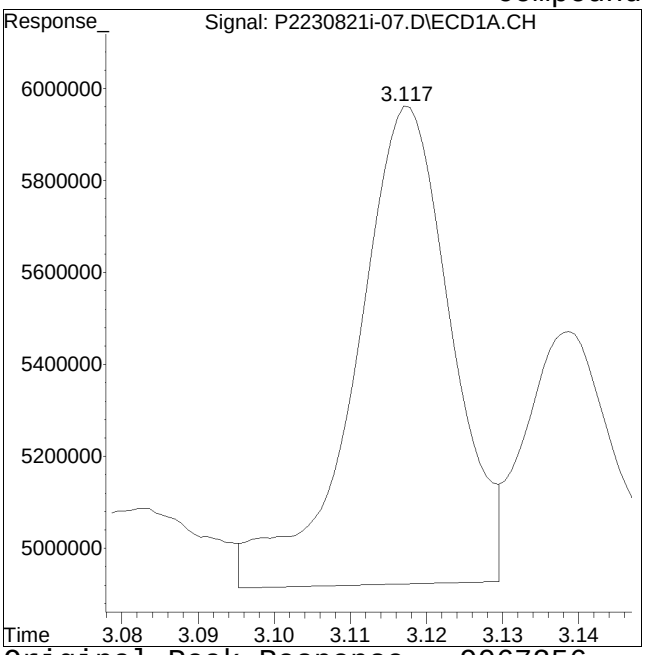
Manual Peak Response = 6187022 M4

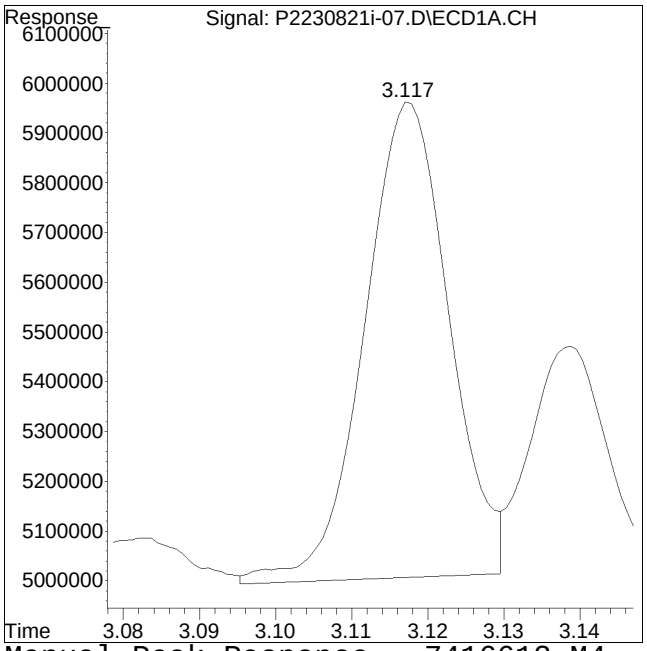
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-07.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:13 pm Instrument : Pest 2
Sample : il11660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #11: 1260-3



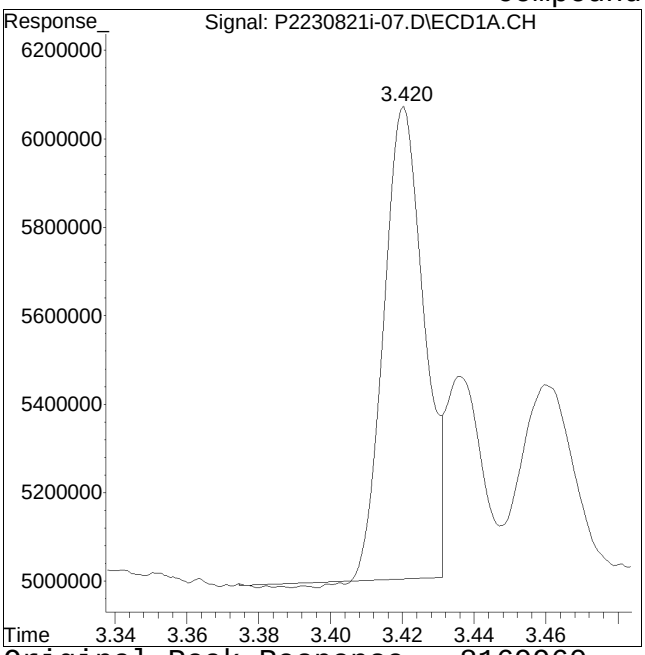


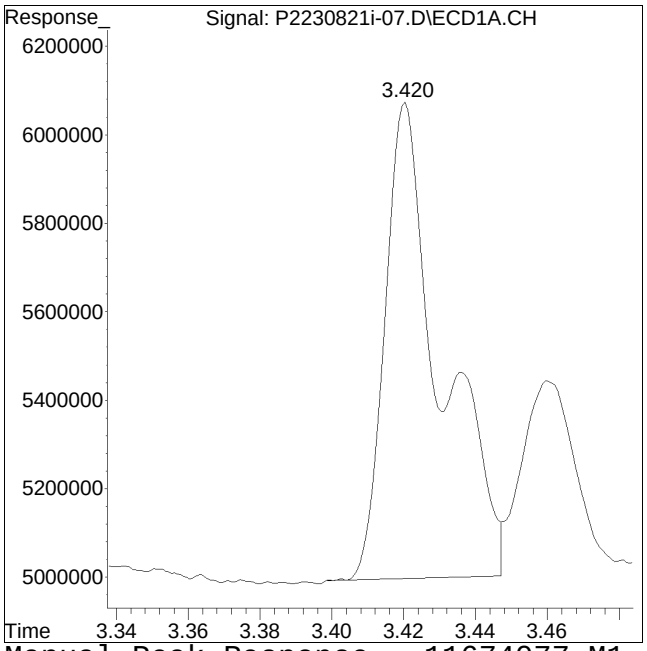
Original Peak Response = 9067256 Manual Peak Response = 7416612 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-07.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:13 pm Instrument : Pest 2
Sample : il11660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #13: 1260-5





Original Peak Response = 8169960 Manual Peak Response = 11674077 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:22 pm
Operator : pest2:kb
Sample : il21660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:30:11 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:10 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	1.156	1.225	262.8E6	168.3E6	25.000	25.000M4
14) i	2154_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
23) i	4268_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
34) i	1248_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
40) i	3262_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.439	1.600	45949954	31781054	3.092	2.970
	Spiked Amount 20.000	Range 30 - 150		Recovery =		15.46%#	14.85%#
3) s	Decachlorobi	4.005	4.528	79927285	47855311	6.351M4	6.556
	Spiked Amount 20.000	Range 30 - 150		Recovery =		31.75%	32.78%
	Target Compounds						
4) l1	1016-1	1.578	1.801	13573976	9785722	49.129	46.361
5) l1	1016-2	1.720	1.971	27789041	21605087	48.591	44.550
6) l1	1016-3	1.908	2.173	57533575	40485895	48.288	47.850
7) l1	1016-4	1.963	2.232	24775872	16481873	51.267	46.302
8) l1	1016-5	2.132	2.443	26058750	13536171	48.883	44.326
	Sum 1016-1			149.7E6	101.9E6	246.158	229.389
	Average 1016-1					49.232	45.878
9) l2	1260-1	2.673	3.051	37600364	25250409	37.243	45.328
10) l2	1260-2	2.803	3.154	57452431	30292112	32.981	48.745
11) l2	1260-3	3.118	3.545	36637090	25075604	46.157	50.640
12) l2	1260-4	3.273	3.676	76389466	50024600	45.855	49.967
13) l2	1260-5	3.420	3.877	56290893	34533765	58.589M1	48.240M4
	Sum 1260-1			264.4E6	165.2E6	NoCal	NoCal D
	Average 1260-1					44.165	48.584
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:22 pm
Operator : pest2:kb
Sample : il21660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:30:11 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:10 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
17) l3	1221-4	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1221-2			0	0	N.D.	N.D.
Average	1221-2					0.000	0.000
18) l4	1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4	1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4	1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4	1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4	1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1254-1			0	0	N.D.	N.D.
Average	1254-1					0.000	0.000
24) l6	1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6	1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6	1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6	1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6	1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1242-1			0	0	N.D.	N.D.
Average	1242-1					0.000	0.000
29) l9	1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9	1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9	1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9	1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9	1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1268-1			0	0	N.D.	N.D.
Average	1268-1					0.000	0.000
35) l7	1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7	1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7	1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7	1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7	1248-5	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:22 pm
Operator : pest2:kb
Sample : il21660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:30:11 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:10 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum	1248-1			0	0	N.D.	N.D.
Average	1248-1					0.000	0.000
41) l5	1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) l5	1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5	1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5	1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5	1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1232-1			0	0	N.D.	N.D.
Average	1232-1					0.000	0.000
46) l8	1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8	1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8	1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8	1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8	1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000

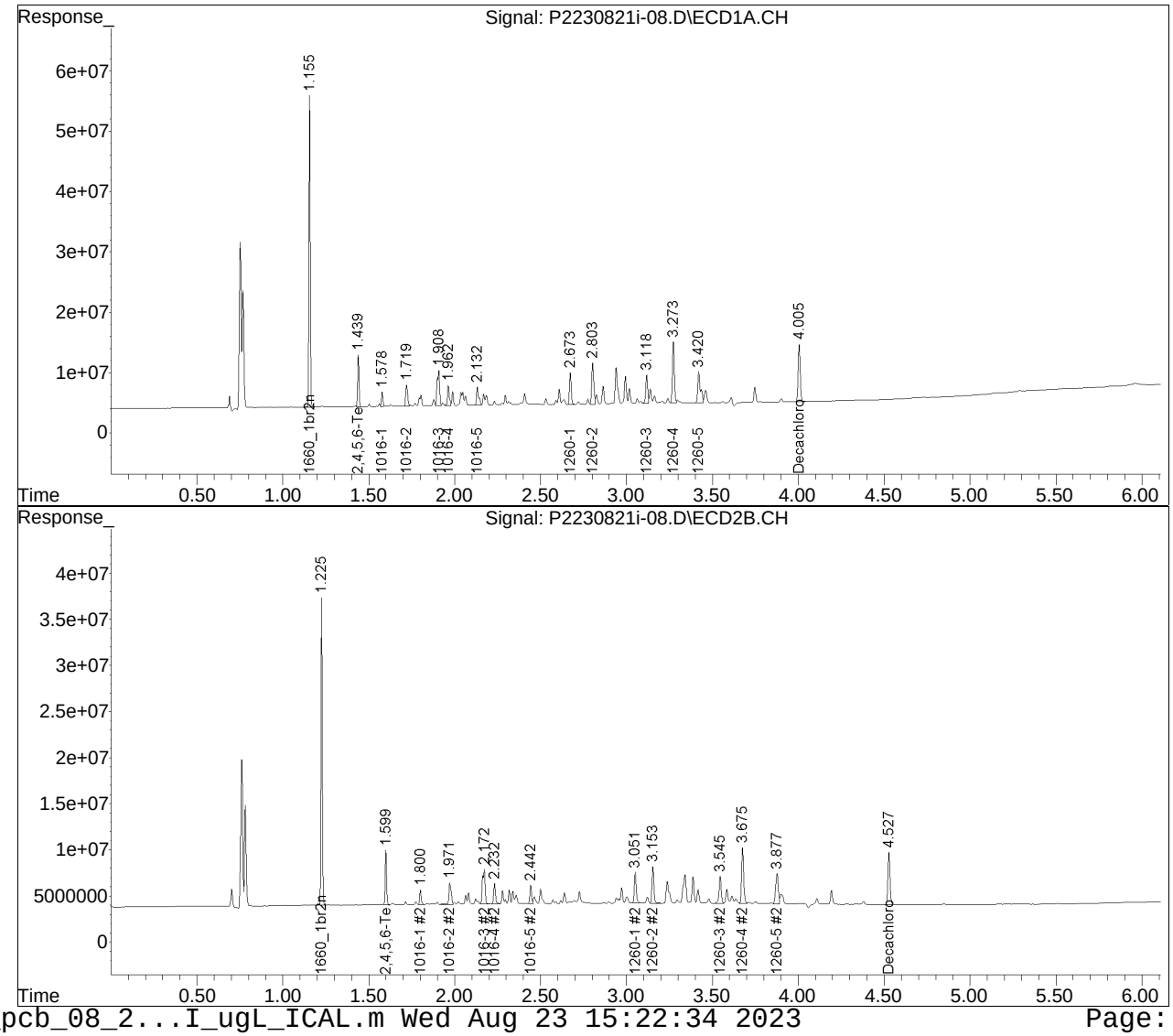
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-08.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:22 pm
Operator : pest2:kb
Sample : il21660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:30:11 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:10 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

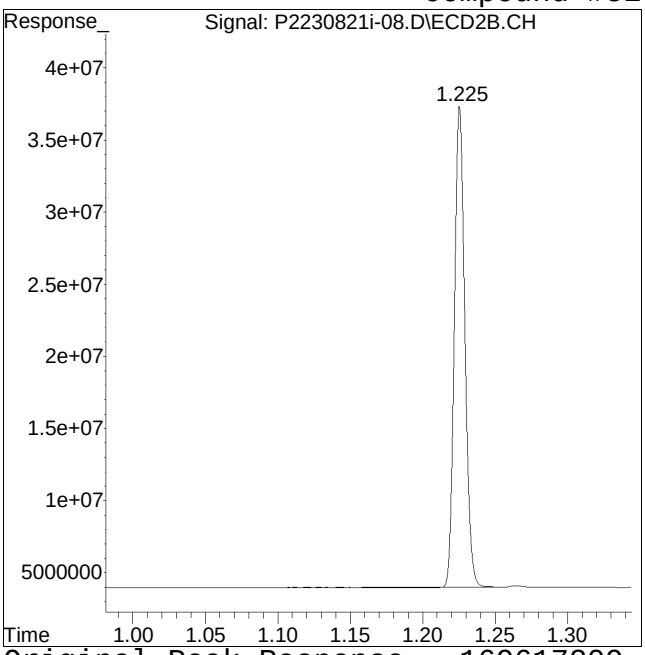
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



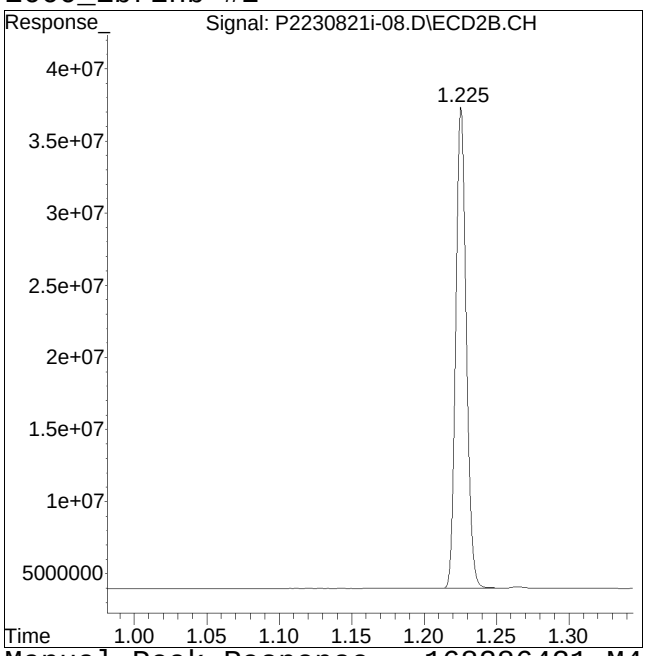
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-08.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:22 pm Instrument : Pest 2
Sample : il21660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #52: 1660_1br2nb #2



Original Peak Response = 169617209



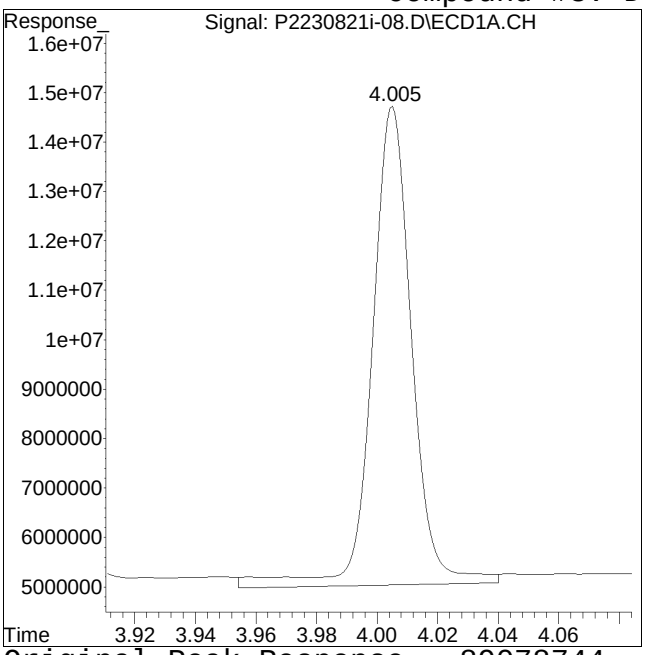
Manual Peak Response = 168286421 M4

M4 = Poor automated baseline construction.

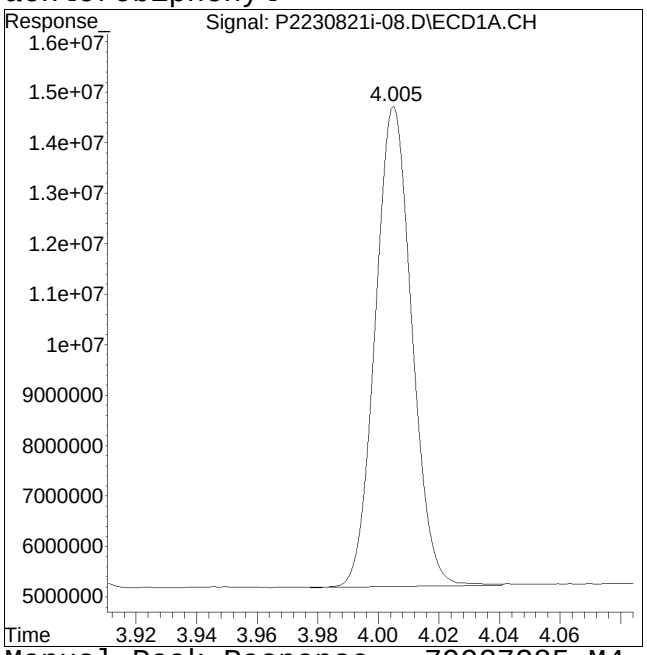
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-08.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:22 pm Instrument : Pest 2
Sample : il21660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #3: Decachlorobiphenyl



Original Peak Response = 89078744



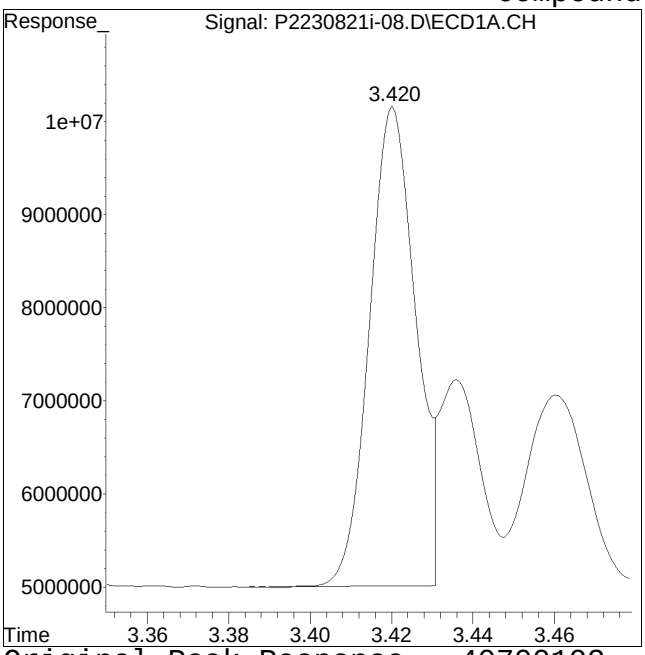
Manual Peak Response = 79927285 M4

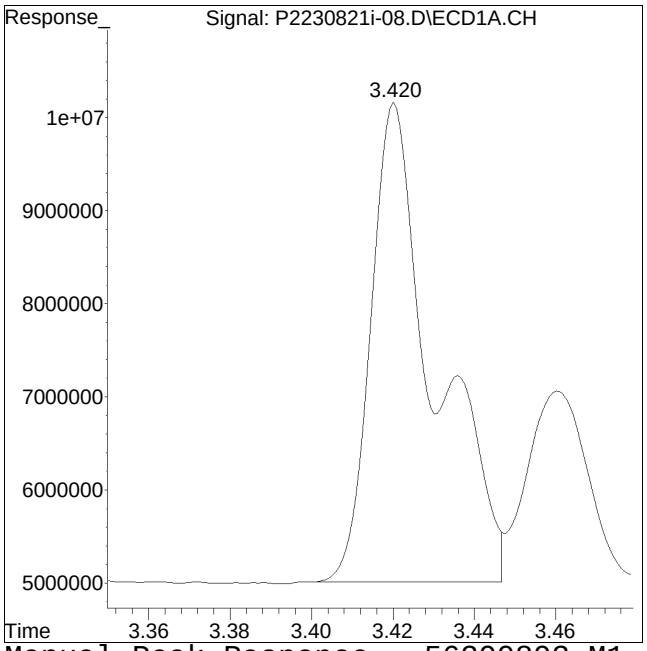
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-08.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:22 pm Instrument : Pest 2
Sample : il21660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #13: 1260-5



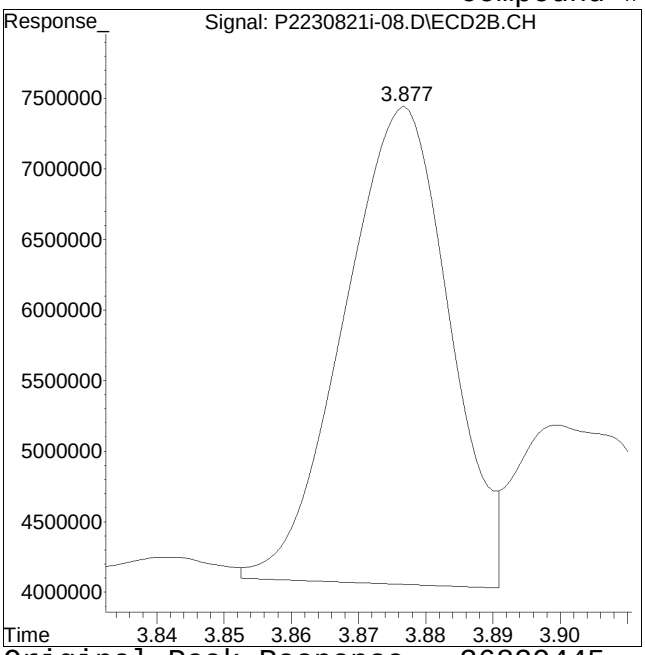


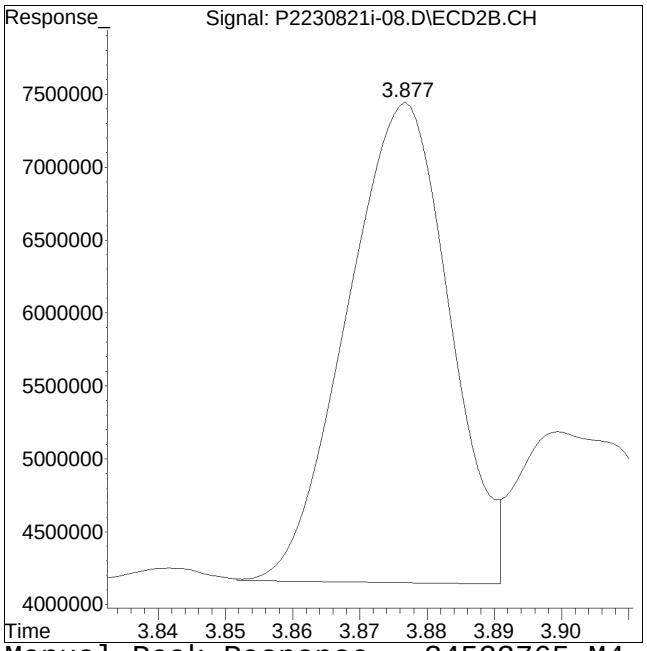
Original Peak Response = 40700192 Manual Peak Response = 56290893 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-08.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:22 pm Instrument : Pest 2
Sample : il21660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #64: 1260-5 #2





Original Peak Response = 36829445 Manual Peak Response = 34533765 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-09.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:33 pm
Operator : pest2:kb
Sample : il31660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:28:34 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:22 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	1.157	1.227	253.9E6	161.9E6	25.000	25.000
14) i	2154_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
23) i	4268_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
34) i	1248_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
40) i	3262_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.441	1.600	91072450	60809393	6.415M3	6.065M4
	Spiked Amount	20.000	Range 30 - 150		Recovery =	32.07%	30.33%
3) s	Decachlorobi	4.009	4.530	151.0E6	89603229	11.998	12.686
	Spiked Amount	20.000	Range 30 - 150		Recovery =	59.99%	63.43%
	Target Compounds						
4) l1	1016-1	1.581	1.802	25771185	17650973	97.107	89.278
5) l1	1016-2	1.723	1.974	52519156	38597934	95.952	86.031
6) l1	1016-3	1.912	2.175	111.6E6	74374911	98.042	92.907
7) l1	1016-4	1.967	2.235	47337761	31242401	100.535	93.740
8) l1	1016-5	2.136	2.445	48578164	25689256	95.026	91.071
	Sum 1016-1			285.8E6	187.6E6	486.662	453.027
	Average 1016-1					97.332	90.605
9) l2	1260-1	2.678	3.054	70281041	47680277	78.749	92.027
10) l2	1260-2	2.808	3.157	108.3E6	56410750	72.611	95.368
11) l2	1260-3	3.123	3.548	68922349	46715819	92.236	97.876
12) l2	1260-4	3.278	3.679	148.6E6	94960268	94.979	98.843
13) l2	1260-5	3.426	3.879	109.3E6	65439343	124.079	94.333
	Sum 1260-1			505.5E6	311.2E6	NoCal	NoCal D
	Average 1260-1					92.531	95.689
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-09.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:33 pm
Operator : pest2:kb
Sample : il31660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:28:34 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:22 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
17) l3	1221-4	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1221-2			0	0	N.D.	N.D.
Average	1221-2					0.000	0.000
18) l4	1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4	1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4	1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4	1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4	1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1254-1			0	0	N.D.	N.D.
Average	1254-1					0.000	0.000
24) l6	1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6	1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6	1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6	1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6	1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1242-1			0	0	N.D.	N.D.
Average	1242-1					0.000	0.000
29) l9	1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9	1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9	1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9	1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9	1268-5	0.000	0.000	0	0	N.D.	N.D.
Sum	1268-1			0	0	N.D.	N.D.
Average	1268-1					0.000	0.000
35) l7	1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7	1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7	1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7	1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7	1248-5	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-09.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:33 pm
Operator : pest2:kb
Sample : il31660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:28:34 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:22 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum	1248-1			0	0	N.D.	N.D.
Average	1248-1					0.000	0.000
41) l5	1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) l5	1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5	1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5	1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5	1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1232-1			0	0	N.D.	N.D.
Average	1232-1					0.000	0.000
46) l8	1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8	1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8	1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8	1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8	1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000

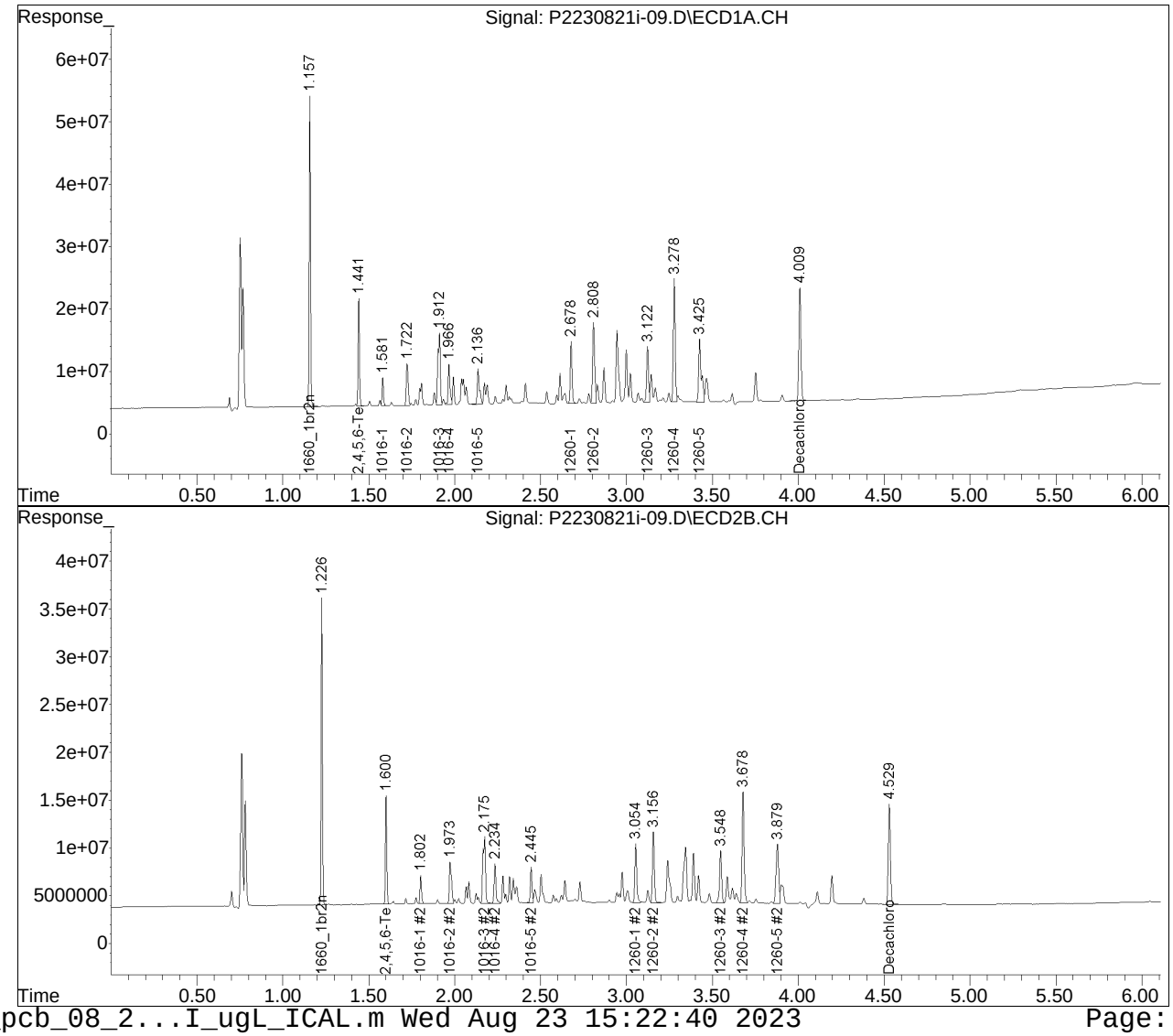
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-09.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:33 pm
Operator : pest2:kb
Sample : il31660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:28:34 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:22 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

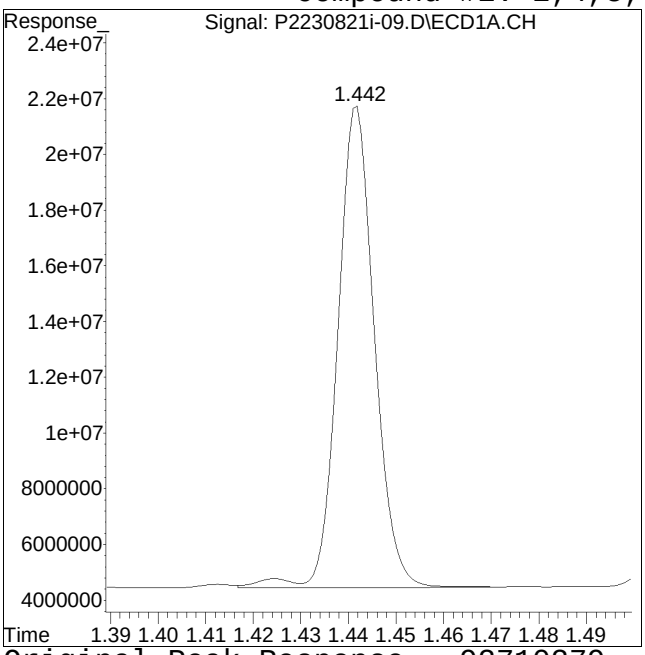
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

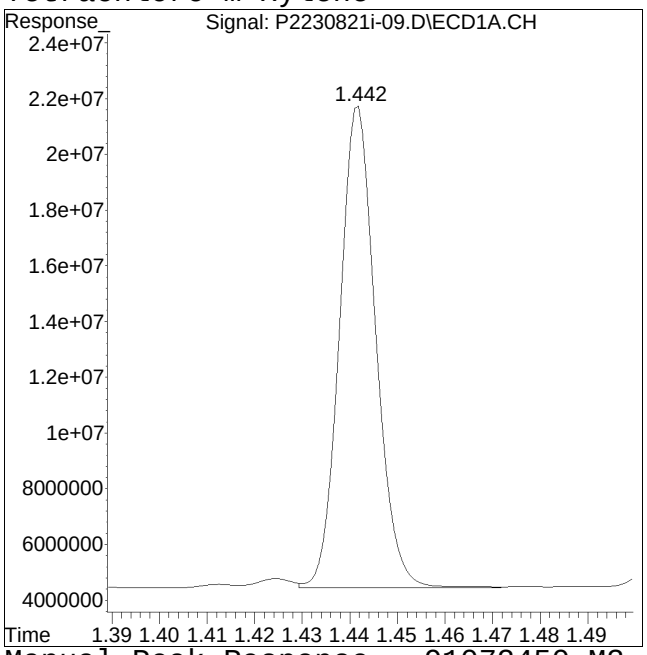


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-09.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:33 pm Instrument : Pest 2
Sample : il31660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



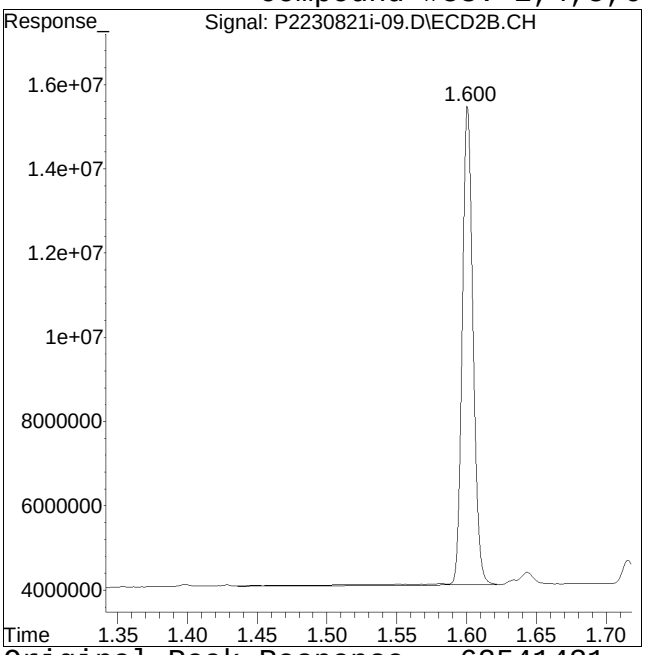


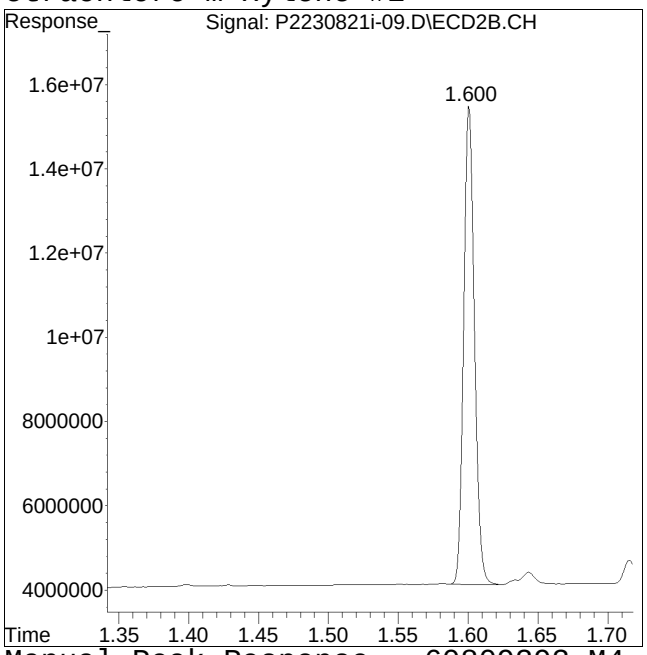
Original Peak Response = 92710279 Manual Peak Response = 91072450 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-09.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:33 pm Instrument : Pest 2
Sample : il31660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #53: 2,4,5,6-Tetrachloro-m-xylene #2





Original Peak Response = 62541431 Manual Peak Response = 60809393 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-10.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:43 pm
Operator : pest2:kb
Sample : il41660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:27:18 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:34 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	1.156	1.226	249.2E6	159.8E6	25.000	25.000M4
14) i	2154_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
23) i	4268_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
34) i	1248_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
40) i	3262_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.440	1.600	248.7E6	156.3E6	17.759	15.902
Spiked Amount		20.000	Range 30 - 150	Recovery =		88.80%	79.51%
3) s	Decachlorobi	4.005	4.527	387.5E6	213.4E6	31.863	30.693
Spiked Amount		20.000	Range 30 - 150	Recovery =		159.32%#	153.47%#
	Target Compounds						
4) l1	1016-1	1.578	1.800	64898438	42955173	250.980	226.275
5) l1	1016-2	1.720	1.971	133.6E6	93849980	251.267	219.687
6) l1	1016-3	1.908	2.173	296.0E6	189.8E6	266.339	244.619
7) l1	1016-4	1.963	2.232	123.3E6	76951059	266.486	237.733
8) l1	1016-5	2.132	2.443	128.3E6	62008917	259.024	227.892
Sum	1016-1			746.2E6	465.5E6	1294.096	1156.206
Average	1016-1					258.819	231.241
9) l2	1260-1	2.674	3.052	185.7E6	117.1E6	223.952	233.637
10) l2	1260-2	2.804	3.154	283.8E6	139.3E6	208.069	241.513
11) l2	1260-3	3.118	3.546	185.4E6	114.6E6	257.813	244.740
12) l2	1260-4	3.274	3.676	404.6E6	234.6E6	266.757	248.178
13) l2	1260-5	3.421	3.877	282.6E6	164.0E6	308.331M1	242.999
Sum	1260-1			1342.2E6	769.5E6	NoCal	NoCal D
Average	1260-1					252.984	242.213
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d
17) l3	1221-4	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-10.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:43 pm
Operator : pest2:kb
Sample : il41660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:27:18 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:34 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum	1221-2			0	0	N.D.	N.D.
Average	1221-2					0.000	0.000
18) l4	1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4	1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4	1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4	1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4	1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1254-1			0	0	N.D.	N.D.
Average	1254-1					0.000	0.000
24) l6	1242-1	0.000	0.000	0	0	N.D.	N.D.
25) l6	1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6	1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6	1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6	1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1242-1			0	0	N.D.	N.D.
Average	1242-1					0.000	0.000
29) l9	1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9	1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9	1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9	1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9	1268-5	0.000	0.000	0	0	N.D.	N.D.
Sum	1268-1			0	0	N.D.	N.D.
Average	1268-1					0.000	0.000
35) l7	1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7	1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7	1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7	1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7	1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1248-1			0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-10.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:43 pm
Operator : pest2:kb
Sample : il41660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:27:18 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:34 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average	1248-1					0.000	0.000
41) l5	1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) l5	1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5	1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5	1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5	1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1232-1			0	0	N.D.	N.D.
Average	1232-1					0.000	0.000
46) l8	1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8	1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8	1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8	1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8	1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument							
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000

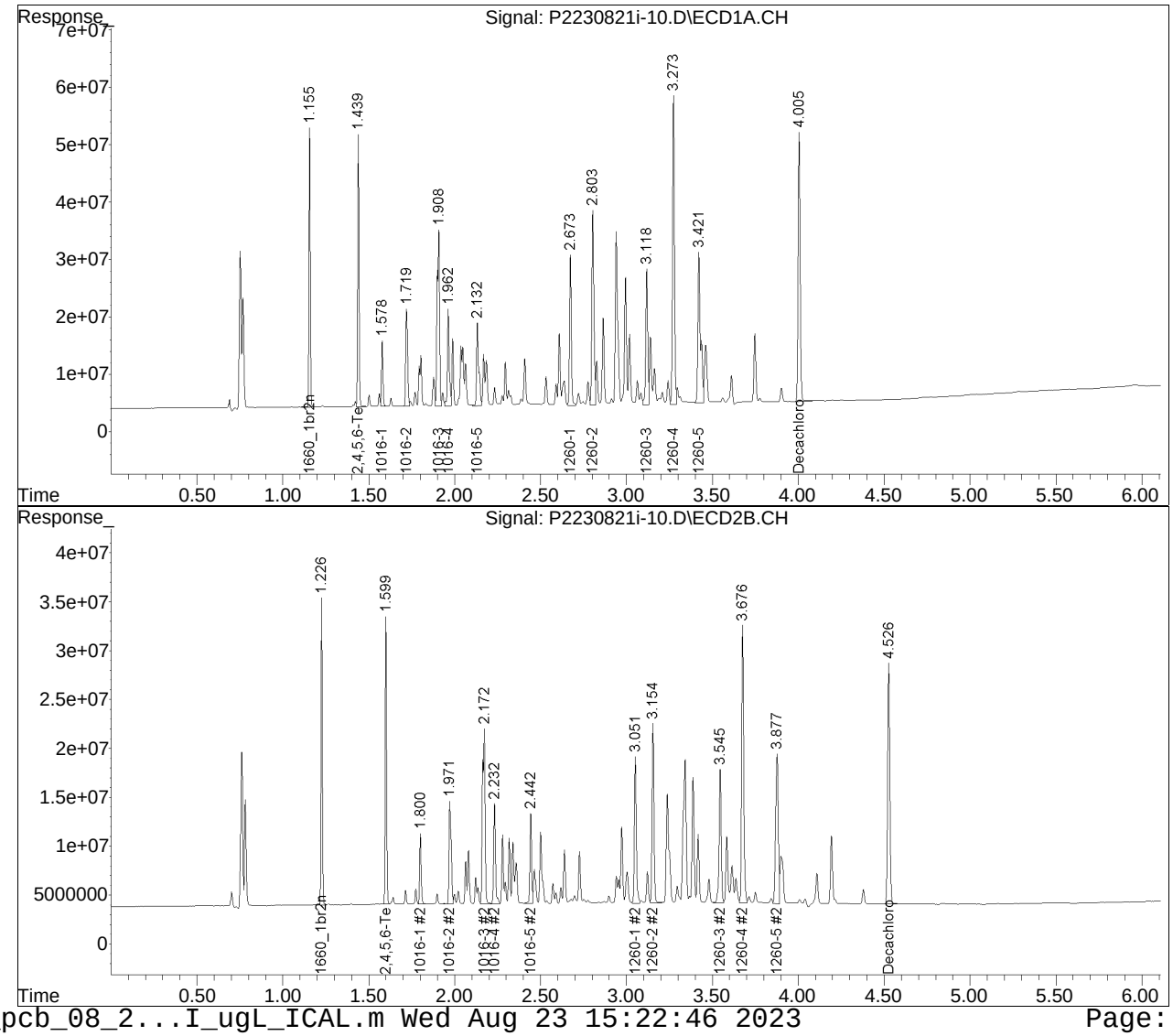
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-10.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:43 pm
Operator : pest2:kb
Sample : il41660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:27:18 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:34 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

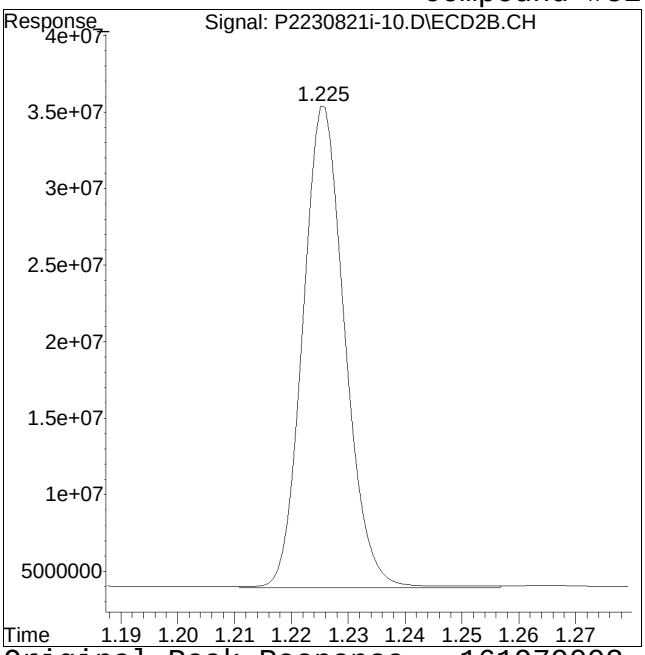
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

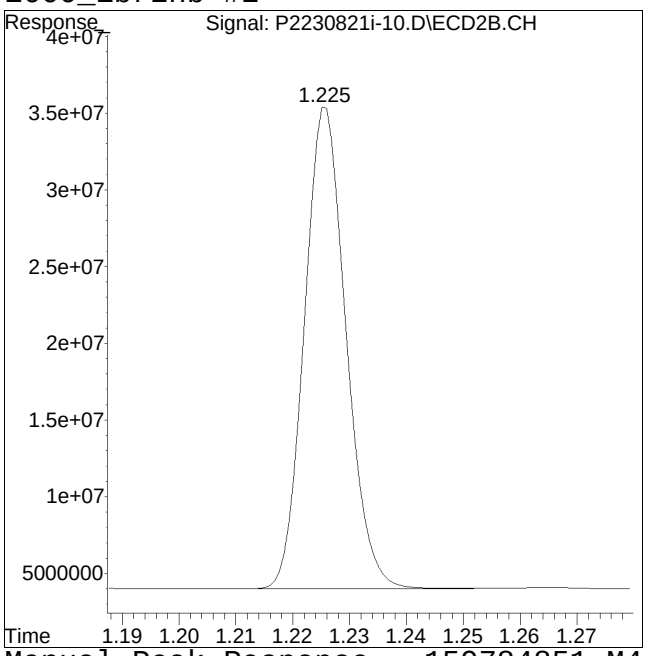


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-10.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:43 pm Instrument : Pest 2
Sample : il41660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #52: 1660_1br2nb #2



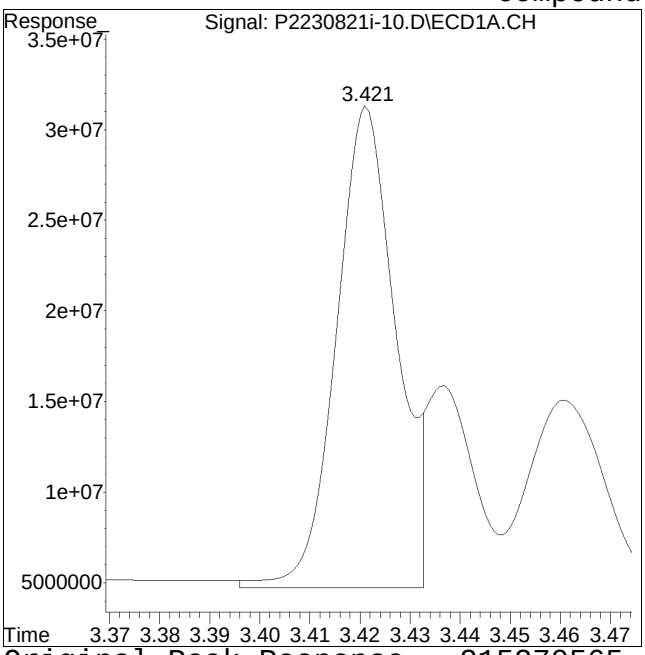


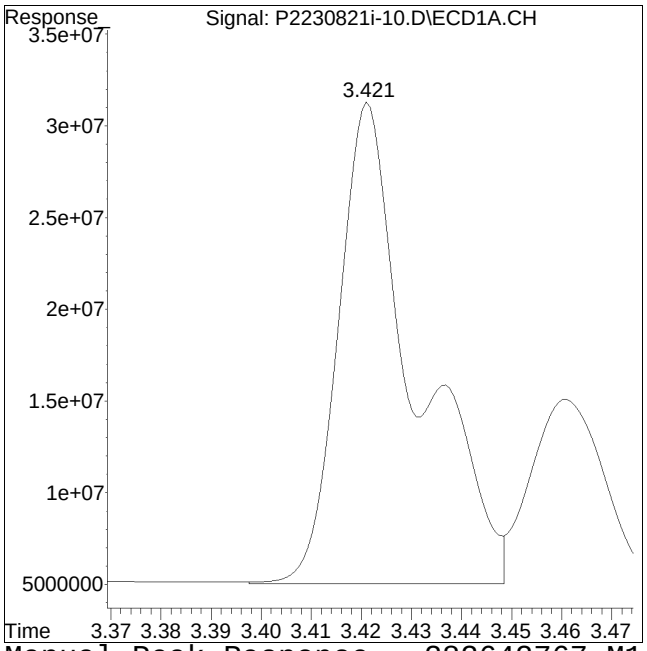
Original Peak Response = 161979003 Manual Peak Response = 159784851 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-10.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:43 pm Instrument : Pest 2
Sample : il41660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #13: 1260-5





Original Peak Response = 215270565 Manual Peak Response = 282642767 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-11.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:52 pm
Operator : pest2:kb
Sample : il51660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:26:24 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:45 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	1.156	1.226	244.5E6	155.4E6	25.000	25.000
14) i	2154_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
23) i	4268_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
34) i	1248_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
40) i	3262_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.440	1.600	481.6E6	293.7E6	35.004	30.868
Spiked Amount	20.000	Range 30 - 150		Recovery =		175.02%#	154.34%#
3) s	Decachlorobi	4.005	4.527	725.0E6	390.9E6	60.715	57.773
Spiked Amount	20.000	Range 30 - 150		Recovery =		303.58%#	288.87%#
	Target Compounds						
4) l1	1016-1	1.578	1.800	119.1E6	76935105	476.883	432.776
5) l1	1016-2	1.719	1.971	245.8E6	166.9E6	473.892	412.598
6) l1	1016-3	1.907	2.173	565.4E6	345.5E6	521.101	459.943
7) l1	1016-4	1.962	2.232	229.3E6	138.3E6	499.129	442.191
8) l1	1016-5	2.132	2.443	233.7E6	110.7E6	477.530	413.374
Sum	1016-1			1393.2E6	838.4E6	2448.535	2160.881
Average	1016-1					489.707	432.176
9) l2	1260-1	2.673	3.052	345.7E6	213.1E6	433.210	445.287
10) l2	1260-2	2.803	3.154	532.8E6	252.1E6	403.639	450.797
11) l2	1260-3	3.118	3.546	347.8E6	207.7E6	485.520	453.691
12) l2	1260-4	3.274	3.676	774.2E6	431.2E6	532.298	470.257
13) l2	1260-5	3.421	3.877	548.8E6	296.7E6	651.664M1	456.771
Sum	1260-1			2549.3E6	1400.8E6	NoCal	NoCal D
Average	1260-1					501.266	455.361
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d
17) l3	1221-4	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-11.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:52 pm
Operator : pest2:kb
Sample : il51660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:26:24 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:45 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum	1221-2			0	0	N.D.	N.D.
Average	1221-2					0.000	0.000
18) l4	1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4	1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4	1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4	1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4	1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1254-1			0	0	N.D.	N.D.
Average	1254-1					0.000	0.000
24) l6	1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6	1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6	1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6	1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6	1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1242-1			0	0	N.D.	N.D.
Average	1242-1					0.000	0.000
29) l9	1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9	1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9	1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9	1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9	1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1268-1			0	0	N.D.	N.D.
Average	1268-1					0.000	0.000
35) l7	1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7	1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7	1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7	1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7	1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1248-1			0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-11.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:52 pm
Operator : pest2:kb
Sample : il51660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:26:24 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:45 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

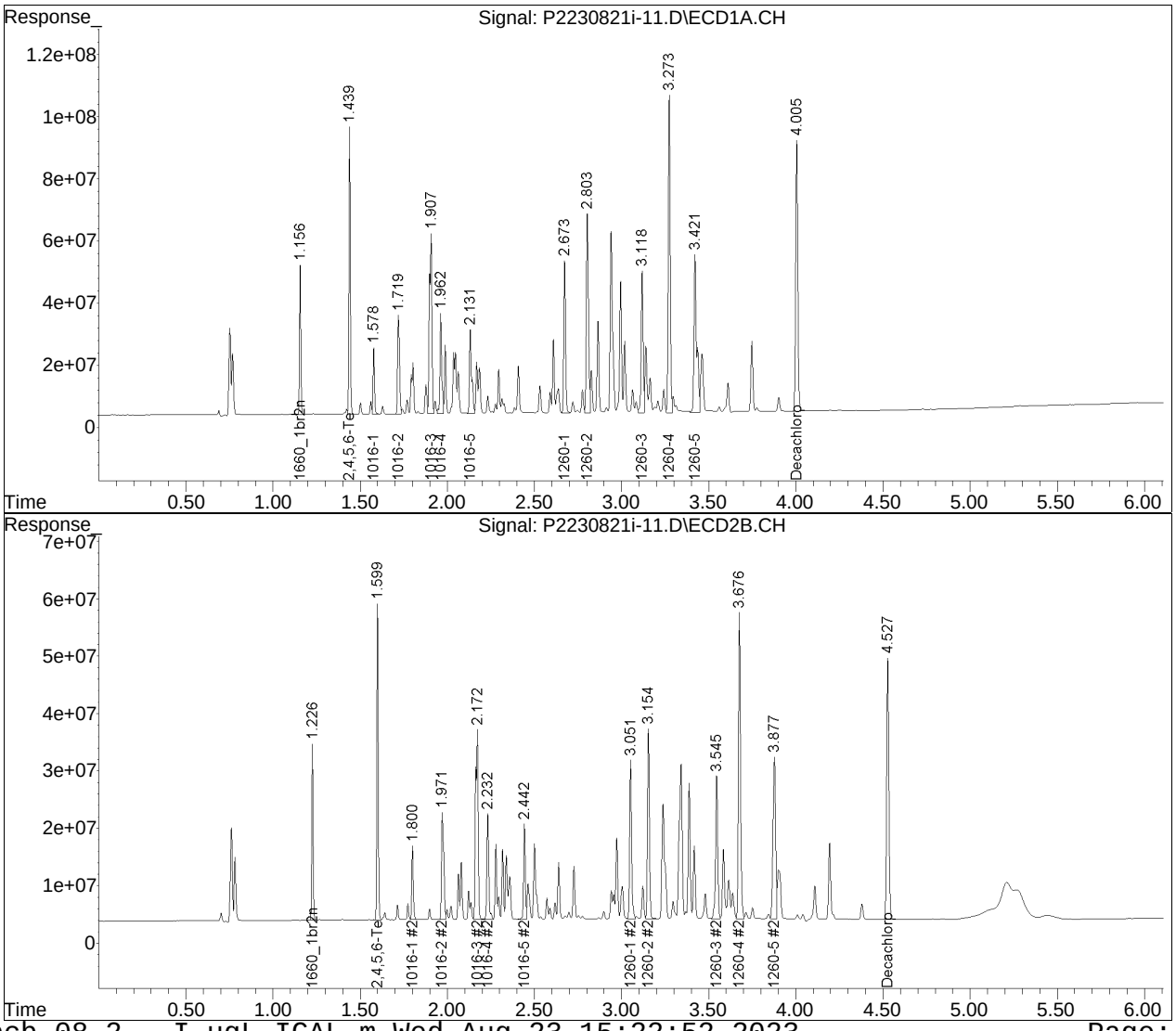
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-11.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 9:52 pm
Operator : pest2:kb
Sample : il51660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:26:24 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:45 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

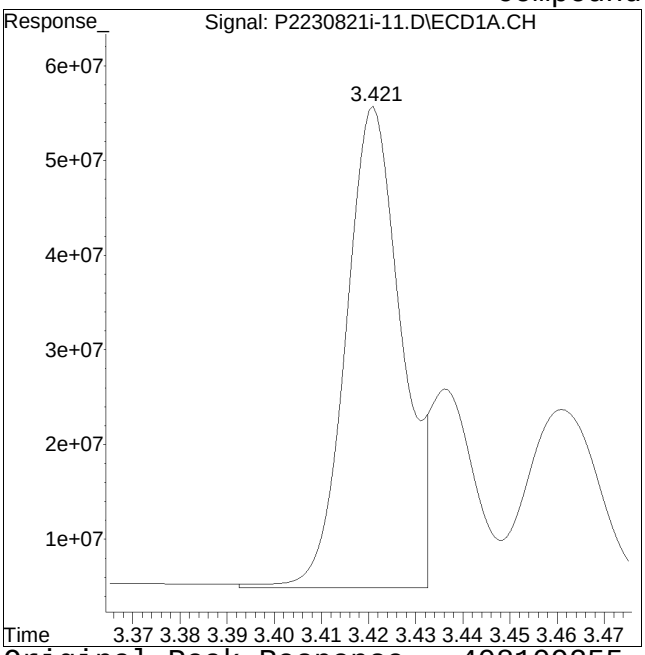
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

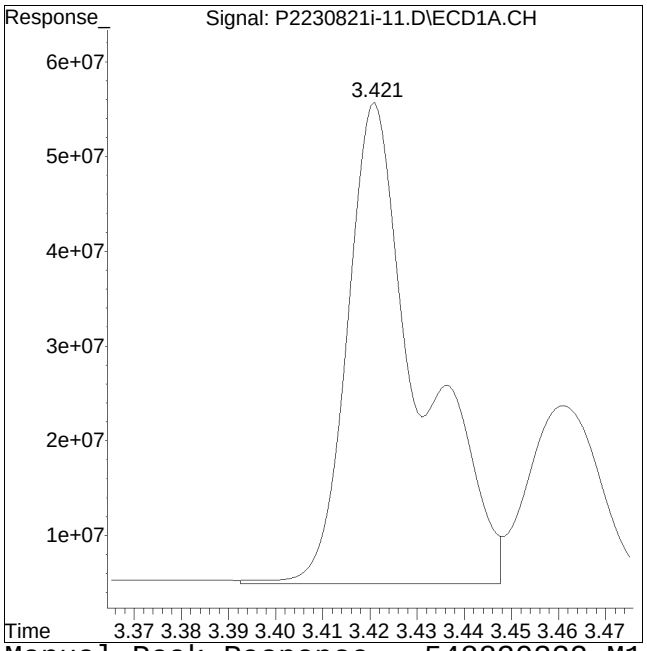


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-11.D Operator : pest2:kb
Date Inj'd : 8/21/2023 9:52 pm Instrument : Pest 2
Sample : il51660,42,, 11287 Quant Date : 8/22/2023 8:20 am

Compound #13: 1260-5





Original Peak Response = 408109255 Manual Peak Response = 548830332 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-12.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:01 pm
Operator : pest2:kb
Sample : il61660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:21:07 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	1.156	1.226	233.3E6	154.5E6	25.000	25.000
14) i	2154_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
23) i	4268_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
34) i	1248_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
40) i	3262_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.440	1.600	998.7E6	585.1E6	74.683	62.315
Spiked Amount	20.000	Range 30 - 150		Recovery =		373.42%#	311.57%#
3) s	Decachlorobi	4.005	4.527	1460.8E6	731.4E6	129.545	110.917
Spiked Amount	20.000	Range 30 - 150		Recovery =		647.73%#	554.58%#
	Target Compounds						
4) l1	1016-1	1.578	1.800	237.0E6	146.2E6	1004.252	850.543
5) l1	1016-2	1.720	1.972	480.1E6	322.4E6	980.623	831.237
6) l1	1016-3	1.908	2.173	1155.7E6	675.9E6	1107.038	919.917
7) l1	1016-4	1.962	2.232	461.2E6	269.2E6	1052.885	886.124
8) l1	1016-5	2.132	2.443	470.0E6	215.5E6	1015.621	838.640
Sum	1016-1			2804.0E6	1629.2E6	5160.418	4326.460
Average	1016-1					1032.084	865.292
9) l2	1260-1	2.673	3.051	693.1E6	412.6E6	935.485	886.786
10) l2	1260-2	2.803	3.154	1074.1E6	492.8E6	887.176	904.417
11) l2	1260-3	3.118	3.546	699.4E6	414.3E6	1029.333	927.851
12) l2	1260-4	3.274	3.676	1563.7E6	853.1E6	1112.482	947.273
13) l2	1260-5	3.421	3.877	1108.8E6	588.7E6	1388.479	927.989
Sum	1260-1			5139.1E6	2761.4E6	NoCal	NoCal D
Average	1260-1					1070.591	918.863
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d
17) l3	1221-4	0.000	0.000	0	0	N.D.	N.D.

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-12.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:01 pm
Operator : pest2:kb
Sample : il61660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:21:07 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum	1221-2			0	0	N.D.	N.D.
Average	1221-2					0.000	0.000
18) l4	1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4	1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4	1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4	1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4	1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1254-1			0	0	N.D.	N.D.
Average	1254-1					0.000	0.000
24) l6	1242-1	0.000	0.000	0	0	N.D.	N.D.
25) l6	1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6	1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6	1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6	1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1242-1			0	0	N.D.	N.D.
Average	1242-1					0.000	0.000
29) l9	1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9	1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9	1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9	1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9	1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1268-1			0	0	N.D.	N.D.
Average	1268-1					0.000	0.000
35) l7	1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7	1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7	1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7	1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7	1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1248-1			0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-12.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:01 pm
Operator : pest2:kb
Sample : il61660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:21:07 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

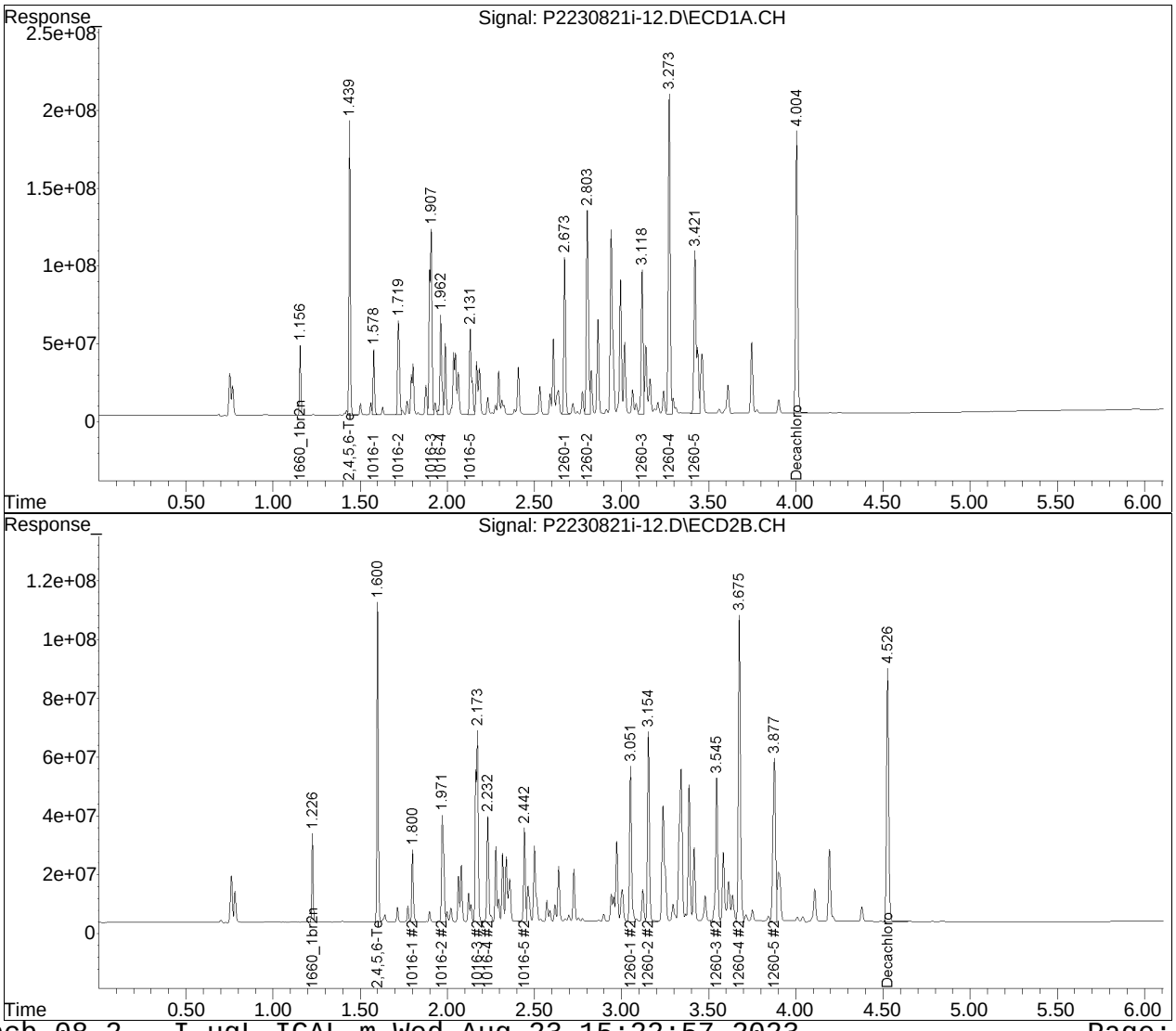
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-12.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:01 pm
Operator : pest2:kb
Sample : il61660,42,, 11287
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:21:07 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:20:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PCB\Pest2\2023\230821I\	QMethod	: P2_pcb_08_21_23_LVI_ugL_
Data File	: P2230821i-12.D	Operator	: pest2:kb
Date Inj'd	: 8/21/2023 10:01 pm	Instrument	: Pest 2
Sample	: il61660,42,, 11287	Quant Date	: 8/22/2023 8:20 am

There are no manual integrations or false positives in this file.

Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-13.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 21 Aug 2023 10:11 pm
Operator : pest2:kb
Sample   : cicv4268,42,, 11176
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:57:12 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1660_1br2nb	^	1.000	1.000	0.0	92	0.00
2	s	2,4,5,6-Tetrachloro-m-xylen		1.469	1.623	-10.5	98	0.00
3	s	Decachlorobiphenyl		1.188	1.993	-67.8#	154#	0.00
14	i	2154_1br2nb	^	1.000	1.000	0.0	95	0.00
23	i	4268_1br2nb	^	1.000	1.000	0.0	101	0.00
24	l6	1242-1		0.021	0.022	-4.8	105	0.00
25	l6	1242-2		0.044	0.046	-4.5	106	0.00
26	l6	1242-3		0.097	0.100	-3.1	104	0.00
27	l6	1242-4		0.042	0.042	0.0	99	0.00
28	l6	1242-5		0.032	0.032	0.0	102	0.00
29	l9	1268-1		0.224	0.244	-8.9	110	0.00
30	l9	1268-2		0.208	0.221	-6.3	107	0.00
31	l9	1268-3		0.165	0.164	0.6	101	0.00
32	l9	1268-4		0.072	0.078	-8.3	111	0.00
33	l9	1268-5		0.513	0.485	5.5	96	0.00
34	i	1248_1br2nb	^	1.000	1.000	0.0	89	0.00
40	i	3262_1br2nb	^	1.000	1.000	0.0	97	0.00

Signal #2

1	i	1660_1br2nb	^	1.000	1.000	0.0	93	0.00
2	s	2,4,5,6-Tetrachloro-m-xyl		1.484	1.559	-5.1	97	0.00
3	s	Decachlorobiphenyl		1.047	1.640	-56.6#	149	0.00
14	i	2154_1br2nb	^	1.000	1.000	0.0	95	0.00

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-13.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 21 Aug 2023 10:11 pm
Operator : pest2:kb
Sample   : cicv4268,42,, 11176
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:57:12 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
23	i	4268_1br2nb	^	1.000	1.000	0.0	105	0.00
24	l6	1242-1		0.022	0.023	-4.5	106	0.00
25	l6	1242-2		0.049	0.050	-2.0	108	0.00
26	l6	1242-3		0.097	0.100	-3.1	109	0.00
27	l6	1242-4		0.039	0.041	-5.1	108	0.00
28	l6	1242-5		0.032	0.033	-3.1	109	0.00
29	l9	1268-1		0.199	0.216	-8.5	114	0.00
30	l9	1268-2		0.184	0.195	-6.0	111	0.00
31	l9	1268-3		0.144	0.145	-0.7	105	0.00
32	l9	1268-4		0.068	0.070	-2.9	107	0.00
33	l9	1268-5		0.430	0.402	6.5	98	0.00
34	i	1248_1br2nb	^	1.000	1.000	0.0	87	0.00
40	i	3262_1br2nb	^	1.000	1.000	0.0	92	0.00

Evaluate Continuing Calibration Report - Not Founds

4	l1	1016-1	213.805	0.000 E3	100.0#	0#	-1.58#
5	l1	1016-2	442.626	0.000 E3	100.0#	0#	-1.72#
6	l1	1016-3	0.957	0.000 E6	100.0#	0#	-1.91#
7	l1	1016-4	398.006	0.000 E3	100.0#	0#	-1.96#
8	l1	1016-5	419.705	0.000 E3	100.0#	0#	-2.13#
9	l2	1260-1	598.300	0.000 E3	100.0#	0#	-2.67#
10	l2	1260-2	0.923	0.000 E6	100.0#	0#	-2.80#
11	l2	1260-3	593.115	0.000 E3	100.0#	0#	-3.12#
12	l2	1260-4	1.285	0.000 E6	100.0#	0#	-3.27#
13	l2	1260-5	0.933	0.000 E6	100.0#	0#	-3.42#
15	l3	1221-2	0.00085	0.00000	100.0#	0#	-1.50#
16	l3	1221-3	0.00053	0.00000	100.0#	0#	-1.56#
17	l3	1221-4	0.00213	0.00000	100.0#	0#	-1.58#

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-13.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 21 Aug 2023 10:11 pm
Operator : pest2:kb
Sample   : cicv4268,42,, 11176
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:57:12 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(Min)
18	l4	1254-1	0.00299	0.00000		100.0#	0#	-2.29#
19	l4	1254-2	0.00552	0.00000		100.0#	0#	-2.41#
20	l4	1254-3	0.00569	0.00000		100.0#	0#	-2.59#
21	l4	1254-4	0.00432	0.00000		100.0#	0#	-2.72#
22	l4	1254-5	0.00604	0.00000		100.0#	0#	-2.94#
35	l7	1248-1	0.00330	0.00000		100.0#	0#	-1.91#
36	l7	1248-2	0.00417	0.00000		100.0#	0#	-2.03#
37	l7	1248-3	0.00378	0.00000		100.0#	0#	-2.13#
38	l7	1248-4	0.00343	0.00000		100.0#	0#	-2.31#
39	l7	1248-5	0.00308	0.00000		100.0#	0#	-2.32#
41	l5	1232-1	0.00165	0.00000		100.0#	0#	-1.58#
42	l5	1232-2	0.00145	0.00000		100.0#	0#	-1.72#
43	l5	1232-3	0.00308	0.00000		100.0#	0#	-1.91#
44	l5	1232-4	0.00129	0.00000		100.0#	0#	-1.96#
45	l5	1232-5	0.00093	0.00000		100.0#	0#	-2.31#
46	l8	1262-1	0.00457	0.00000		100.0#	0#	-2.80#
47	l8	1262-2	0.00582	0.00000		100.0#	0#	-3.00#
48	l8	1262-3	0.00522	0.00000		100.0#	0#	-3.12#
49	l8	1262-4	0.011	0.000		100.0#	0#	-3.27#
50	l8	1262-5	0.00340	0.00000		100.0#	0#	-3.75#
Signal #2								
4	l1	1016-1	175.085	0.000	E3	100.0#	0#	-1.80#
5	l1	1016-2	382.384	0.000	E3	100.0#	0#	-1.97#
6	l1	1016-3	753.661	0.000	E3	100.0#	0#	-2.17#
7	l1	1016-4	304.398	0.000	E3	100.0#	0#	-2.23#
8	l1	1016-5	252.886	0.000	E3	100.0#	0#	-2.44#
9	l2	1260-1	467.154	0.000	E3	100.0#	0#	-3.05#
10	l2	1260-2	557.144	0.000	E3	100.0#	0#	-3.15#
11	l2	1260-3	465.738	0.000	E3	100.0#	0#	-3.55#

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-13.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 21 Aug 2023 10:11 pm
Operator : pest2:kb
Sample   : cicv4268,42,, 11176
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:57:12 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
12 l2	1260-4	0.941	0.000 E6	100.0#	0#	-3.68#
13 l2	1260-5	653.870	0.000 E3	100.0#	0#	-3.88#
15 l3	1221-2	96.657	0.000 E3	100.0#	0#	-1.71#
16 l3	1221-3	62.096	0.000 E3	100.0#	0#	-1.77#
17 l3	1221-4	226.750	0.000 E3	100.0#	0#	-1.80#
18 l4	1254-1	364.434	0.000 E3	100.0#	0#	-2.64#
19 l4	1254-2	426.273	0.000 E3	100.0#	0#	-2.73#
20 l4	1254-3	639.592	0.000 E3	100.0#	0#	-2.95#
21 l4	1254-4	432.790	0.000 E3	100.0#	0#	-3.07#
22 l4	1254-5	591.909	0.000 E3	100.0#	0#	-3.34#
35 l7	1248-1	383.922	0.000 E3	100.0#	0#	-2.16#
36 l7	1248-2	255.942	0.000 E3	100.0#	0#	-2.31#
37 l7	1248-3	322.154	0.000 E3	100.0#	0#	-2.44#
38 l7	1248-4	364.968	0.000 E3	100.0#	0#	-2.61#
39 l7	1248-5	420.483	0.000 E3	100.0#	0#	-2.64#
41 l5	1232-1	193.078	0.000 E3	100.0#	0#	-1.80#
42 l5	1232-2	191.398	0.000 E3	100.0#	0#	-1.97#
43 l5	1232-3	360.232	0.000 E3	100.0#	0#	-2.17#
44 l5	1232-4	149.540	0.000 E3	100.0#	0#	-2.23#
45 l5	1232-5	114.017	0.000 E3	100.0#	0#	-2.62#
46 l8	1262-1	435.610	0.000 E3	100.0#	0#	-3.15#
47 l8	1262-2	595.127	0.000 E3	100.0#	0#	-3.39#
48 l8	1262-3	554.537	0.000 E3	100.0#	0#	-3.54#
49 l8	1262-4	1.052	0.000 E6	100.0#	0#	-3.67#
50 l8	1262-5	368.238	0.000 E3	100.0#	0#	-4.19#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-13.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:11 pm
Operator : pest2:kb
Sample : cicv4268,42,, 11176
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:57:12 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	1.156	1.227	234.3E6	151.5E6	25.000	25.000
14) i	2154_1br2nb	1.156	1.227	234.3E6	151.5E6	25.000	25.000
23) i	4268_1br2nb	1.156	1.227	234.3E6	151.5E6	25.000	25.000
34) i	1248_1br2nb	1.156	1.227	234.3E6	151.5E6	25.000	25.000
40) i	3262_1br2nb	1.156	1.227	234.3E6	151.5E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.440	1.600	243.3E6	151.2E6	17.678	16.806
	Spiked Amount 20.000	Range 30 - 150		Recovery =		88.39%	84.03%
3) s	Decachlorobi	4.005	4.527	597.7E6	318.1E6	53.677	50.115
	Spiked Amount 20.000	Range 30 - 150		Recovery =		268.38%#	250.57%#
	Target Compounds						
4) l1	1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1	1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1	1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1	1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1	1016-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1016-1			0	0	N.D.	N.D.
	Average 1016-1					0.000	0.000
9) l2	1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2	1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2	1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2	1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2	1260-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1260-1			0	0	N.D.	N.D.
	Average 1260-1					0.000	0.000
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d
17) l3	1221-4	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-13.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:11 pm
Operator : pest2:kb
Sample : cicv4268,42,, 11176
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:57:12 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum	1221-2			0	0	N.D.	N.D.
Average	1221-2					0.000	0.000
18) l4	1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4	1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4	1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4	1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4	1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1254-1			0	0	N.D.	N.D.
Average	1254-1					0.000	0.000
24) l6	1242-1	1.579	1.801	51696751	34313179	259.105	252.709
25) l6	1242-2	1.720	1.972	107.0E6	76307438	261.363	257.212
26) l6	1242-3	1.908	2.173	234.1E6	151.8E6	256.748	259.476
27) l6	1242-4	1.963	2.233	97690363	61703127	246.041	258.244
28) l6	1242-5	2.314	2.619	75780649	50281756	253.589	258.538
Sum	1242-1			566.3E6	374.4E6	1276.846	1286.179
Average	1242-1					255.369	257.236
29) l9	1268-1	3.436	3.872	572.3E6	327.6E6	273.192M1	272.224
30) l9	1268-2	3.458	3.898	517.5E6	295.0E6	265.242	263.855
31) l9	1268-3	3.560	4.040	384.7E6	219.3E6	248.713	250.578
32) l9	1268-4	3.747	4.194	183.4E6	106.0E6	273.602	255.635
33) l9	1268-5	3.901	4.379	1137.4E6	609.5E6	236.740	233.711
Sum	1268-1			2795.3E6	1557.4E6	1297.489	1276.003
Average	1268-1					259.498	255.201
35) l7	1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7	1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7	1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7	1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7	1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1248-1			0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-13.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:11 pm
Operator : pest2:kb
Sample : cicv4268,42,, 11176
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:57:12 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

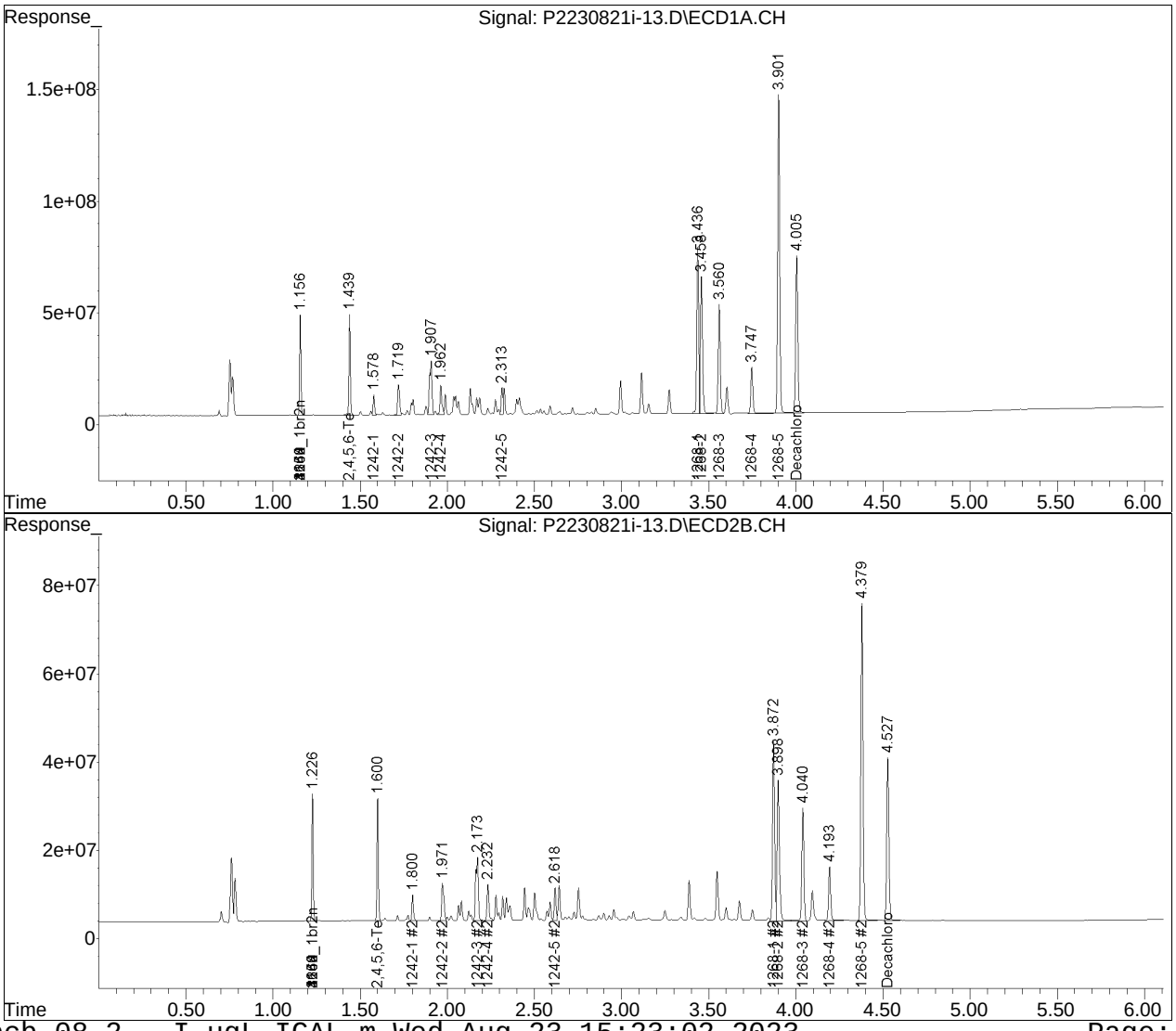
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-13.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:11 pm
Operator : pest2:kb
Sample : cicv4268,42,, 11176
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:57:12 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

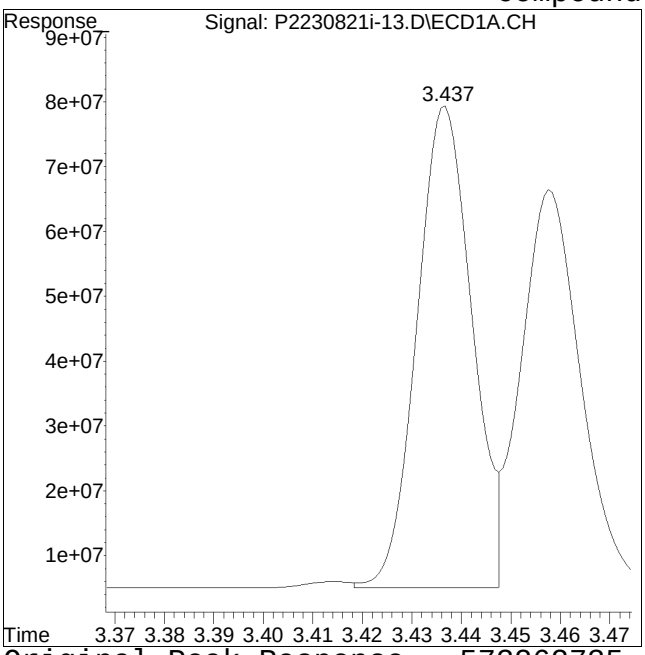
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

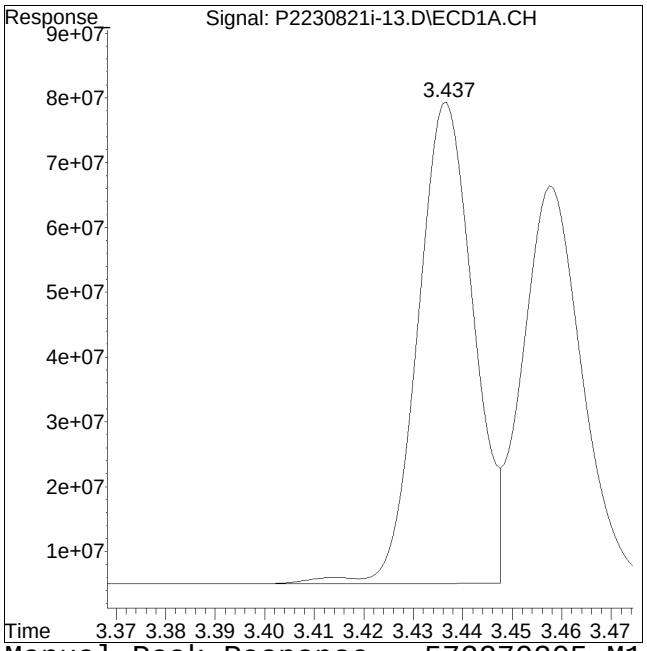


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-13.D Operator : pest2:kb
Date Inj'd : 8/21/2023 10:11 pm Instrument : Pest 2
Sample : cicv4268,42,, 11176 Quant Date : 8/22/2023 8:51 am

Compound #29: 1268-1





Original Peak Response = 573262735 Manual Peak Response = 572270205 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-16.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 21 Aug 2023 10:39 pm
Operator : pest2:kb
Sample   : cicv2154,42,, 11186
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:56:38 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1660_1br2nb	^	1.000	1.000	0.0	100	0.00
2	s	2,4,5,6-Tetrachloro-m-xylen		1.469	1.646	-12.0	108	0.00
3	s	Decachlorobiphenyl		1.188	1.379	-16.1	116	0.00
14	i	2154_1br2nb	^	1.000	1.000	0.0	103	0.00
15	l3	1221-2		0.014	0.015	-7.1	110	0.00
16	l3	1221-3		0.00890	0.00927	-4.2	108	0.00
17	l3	1221-4		0.036	0.039	-8.3	113	0.00
18	l4	1254-1		0.050	0.057	-14.0	117	0.00
19	l4	1254-2		0.093	0.108	-16.1	121	0.00
20	l4	1254-3		0.095	0.112	-17.9	122	0.00
21	l4	1254-4		0.073	0.084	-15.1	120	0.00
22	l4	1254-5		0.101	0.108	-6.9	111	0.00
23	i	4268_1br2nb	^	1.000	1.000	0.0	110	0.00
34	i	1248_1br2nb	^	1.000	1.000	0.0	97	0.00
40	i	3262_1br2nb	^	1.000	1.000	0.0	106	0.00

Signal #2

1	i	1660_1br2nb	^	1.000	1.000	0.0	105	0.00
2	s	2,4,5,6-Tetrachloro-m-xyl		1.484	1.559	-5.1	109	0.00
3	s	Decachlorobiphenyl		1.047	1.134	-8.3	116	0.00
14	i	2154_1br2nb	^	1.000	1.000	0.0	107	0.00
15	l3	1221-2		0.015	0.016	-6.7	114	0.00
16	l3	1221-3		0.00974	0.01038	-6.6	114	0.00
17	l3	1221-4		0.036	0.038	-5.6	113	0.00

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-16.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 21 Aug 2023 10:39 pm
Operator : pest2:kb
Sample   : cicv2154,42,, 11186
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:56:38 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF		%Dev	Area%	Dev(Min)
18	l4	1254-1		0.057	0.067		-17.5	125	0.00
19	l4	1254-2		0.067	0.074		-10.4	119	0.00
20	l4	1254-3		0.100	0.114		-14.0	122	0.00
21	l4	1254-4		0.068	0.078		-14.7	123	0.00
22	l4	1254-5		0.093	0.101		-8.6	116	0.00
23	i	4268_1br2nb	^	1.000	1.000		0.0	118	0.00
34	i	1248_1br2nb	^	1.000	1.000		0.0	98	0.00
40	i	3262_1br2nb	^	1.000	1.000		0.0	104	0.00

Evaluate Continuing Calibration Report - Not Founds

4	l1	1016-1		213.805	0.000	E3	100.0#	0#	-1.58#
5	l1	1016-2		442.626	0.000	E3	100.0#	0#	-1.72#
6	l1	1016-3		0.957	0.000	E6	100.0#	0#	-1.91#
7	l1	1016-4		398.006	0.000	E3	100.0#	0#	-1.96#
8	l1	1016-5		419.705	0.000	E3	100.0#	0#	-2.13#
9	l2	1260-1		598.300	0.000	E3	100.0#	0#	-2.67#
10	l2	1260-2		0.923	0.000	E6	100.0#	0#	-2.80#
11	l2	1260-3		593.115	0.000	E3	100.0#	0#	-3.12#
12	l2	1260-4		1.285	0.000	E6	100.0#	0#	-3.27#
13	l2	1260-5		0.933	0.000	E6	100.0#	0#	-3.42#
24	l6	1242-1		0.00120	0.00000		100.0#	0#	-1.58#
25	l6	1242-2		0.00245	0.00000		100.0#	0#	-1.72#
26	l6	1242-3		0.00547	0.00000		100.0#	0#	-1.91#
27	l6	1242-4		0.00238	0.00000		100.0#	0#	-1.96#
28	l6	1242-5		0.00179	0.00000		100.0#	0#	-2.31#
29	l9	1268-1		0.013	0.000		100.0#	0#	-3.44#
30	l9	1268-2		0.012	0.000		100.0#	0#	-3.46#

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-16.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 21 Aug 2023 10:39 pm
Operator : pest2:kb
Sample   : cicv2154,42,, 11186
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:56:38 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
31	l9	1268-3	0.00927	0.00000	100.0#	0#	-3.56#
32	l9	1268-4	0.00402	0.00000	100.0#	0#	-3.75#
33	l9	1268-5	0.029	0.000	100.0#	0#	-3.90#
35	l7	1248-1	0.00330	0.00000	100.0#	0#	-1.91#
36	l7	1248-2	0.00417	0.00000	100.0#	0#	-2.03#
37	l7	1248-3	0.00378	0.00000	100.0#	0#	-2.13#
38	l7	1248-4	0.00343	0.00000	100.0#	0#	-2.31#
39	l7	1248-5	0.00308	0.00000	100.0#	0#	-2.32#
41	l5	1232-1	0.00165	0.00000	100.0#	0#	-1.58#
42	l5	1232-2	0.00145	0.00000	100.0#	0#	-1.72#
43	l5	1232-3	0.00308	0.00000	100.0#	0#	-1.91#
44	l5	1232-4	0.00129	0.00000	100.0#	0#	-1.96#
45	l5	1232-5	0.00093	0.00000	100.0#	0#	-2.31#
46	l8	1262-1	0.00457	0.00000	100.0#	0#	-2.80#
47	l8	1262-2	0.00582	0.00000	100.0#	0#	-3.00#
48	l8	1262-3	0.00522	0.00000	100.0#	0#	-3.12#
49	l8	1262-4	0.011	0.000	100.0#	0#	-3.27#
50	l8	1262-5	0.00340	0.00000	100.0#	0#	-3.75#

Signal #2

4	l1	1016-1	175.085	0.000 E3	100.0#	0#	-1.80#
5	l1	1016-2	382.384	0.000 E3	100.0#	0#	-1.97#
6	l1	1016-3	753.661	0.000 E3	100.0#	0#	-2.17#
7	l1	1016-4	304.398	0.000 E3	100.0#	0#	-2.23#
8	l1	1016-5	252.886	0.000 E3	100.0#	0#	-2.44#
9	l2	1260-1	467.154	0.000 E3	100.0#	0#	-3.05#
10	l2	1260-2	557.144	0.000 E3	100.0#	0#	-3.15#
11	l2	1260-3	465.738	0.000 E3	100.0#	0#	-3.55#
12	l2	1260-4	0.941	0.000 E6	100.0#	0#	-3.68#
13	l2	1260-5	653.870	0.000 E3	100.0#	0#	-3.88#

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-16.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 21 Aug 2023 10:39 pm
Operator : pest2:kb
Sample   : cicv2154,42,, 11186
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:56:38 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
24 l6	1242-1	129.414	0.000 E3	100.0#	0#	-1.80#
25 l6	1242-2	282.758	0.000 E3	100.0#	0#	-1.97#
26 l6	1242-3	557.676	0.000 E3	100.0#	0#	-2.17#
27 l6	1242-4	227.729	0.000 E3	100.0#	0#	-2.23#
28 l6	1242-5	185.364	0.000 E3	100.0#	0#	-2.62#
29 l9	1268-1	1.147	0.000 E6	100.0#	0#	-3.87#
30 l9	1268-2	1.066	0.000 E6	100.0#	0#	-3.90#
31 l9	1268-3	834.030	0.000 E3	100.0#	0#	-4.04#
32 l9	1268-4	395.212	0.000 E3	100.0#	0#	-4.19#
33 l9	1268-5	2.486	0.000 E6	100.0#	0#	-4.38#
35 l7	1248-1	383.922	0.000 E3	100.0#	0#	-2.16#
36 l7	1248-2	255.942	0.000 E3	100.0#	0#	-2.31#
37 l7	1248-3	322.154	0.000 E3	100.0#	0#	-2.44#
38 l7	1248-4	364.968	0.000 E3	100.0#	0#	-2.61#
39 l7	1248-5	420.483	0.000 E3	100.0#	0#	-2.64#
41 l5	1232-1	193.078	0.000 E3	100.0#	0#	-1.80#
42 l5	1232-2	191.398	0.000 E3	100.0#	0#	-1.97#
43 l5	1232-3	360.232	0.000 E3	100.0#	0#	-2.17#
44 l5	1232-4	149.540	0.000 E3	100.0#	0#	-2.23#
45 l5	1232-5	114.017	0.000 E3	100.0#	0#	-2.62#
46 l8	1262-1	435.610	0.000 E3	100.0#	0#	-3.15#
47 l8	1262-2	595.127	0.000 E3	100.0#	0#	-3.39#
48 l8	1262-3	554.537	0.000 E3	100.0#	0#	-3.54#
49 l8	1262-4	1.052	0.000 E6	100.0#	0#	-3.67#
50 l8	1262-5	368.238	0.000 E3	100.0#	0#	-4.19#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-16.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:39 pm
Operator : pest2:kb
Sample : cicv2154,42,, 11186
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:56:38 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	1.156	1.226	254.5E6	170.9E6	25.000	25.000
14) i	2154_1br2nb	1.156	1.226	254.5E6	170.9E6	25.000	25.000
23) i	4268_1br2nb	1.156	1.226	254.5E6	170.9E6	25.000	25.000
34) i	1248_1br2nb	1.156	1.226	254.5E6	170.9E6	25.000	25.000
40) i	3262_1br2nb	1.156	1.226	254.5E6	170.9E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.439	1.600	268.1E6	170.6E6	17.927M3	16.810
	Spiked Amount	20.000	Range 30 - 150		Recovery =	89.63%	84.05%
3) s	Decachlorobi	4.004	4.528	449.3E6	248.0E6	37.144	34.637
	Spiked Amount	20.000	Range 30 - 150		Recovery =	185.72%#	173.19%#
	Target Compounds						
4) l1	1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1	1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1	1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1	1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1	1016-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1016-1			0	0	N.D.	N.D.
	Average 1016-1					0.000	0.000
9) l2	1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2	1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2	1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2	1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2	1260-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1260-1			0	0	N.D.	N.D.
	Average 1260-1					0.000	0.000
15) l3	1221-2	1.502	1.715	38654424	27482683	266.488	265.142
16) l3	1221-3	1.561	1.774	23602914	17748422	260.551	266.532M4
17) l3	1221-4	1.578	1.800	99486555	64249079	273.209	264.224M4

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-16.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:39 pm
Operator : pest2:kb
Sample : cicv2154,42,, 11186
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:56:38 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Sum 1221-2			161.7E6	109.5E6	800.248	795.898
	Average 1221-2					266.749	265.299
18)	l4 1254-1	2.294	2.640	144.7E6	113.7E6	283.194	290.833
19)	l4 1254-2	2.407	2.727	275.7E6	126.8E6	292.455	277.277
20)	l4 1254-3	2.589	2.955	285.7E6	195.4E6	293.870	284.913
21)	l4 1254-4	2.718	3.067	213.3E6	133.2E6	288.824	286.948
22)	l4 1254-5	2.940	3.342	275.9E6	172.4E6	267.482	271.539
	Sum 1254-1			1195.2E6	741.4E6	1425.825	1411.511
	Average 1254-1					285.165	282.302
24)	l6 1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25)	l6 1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26)	l6 1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27)	l6 1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28)	l6 1242-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1242-1			0	0	N.D.	N.D.
	Average 1242-1					0.000	0.000
29)	l9 1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30)	l9 1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31)	l9 1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32)	l9 1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33)	l9 1268-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1268-1			0	0	N.D.	N.D.
	Average 1268-1					0.000	0.000
35)	l7 1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36)	l7 1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37)	l7 1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38)	l7 1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39)	l7 1248-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1248-1			0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-16.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:39 pm
Operator : pest2:kb
Sample : cicv2154,42,, 11186
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:56:38 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

Compound		RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average	1248-1					0.000	0.000
41) l5	1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) l5	1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5	1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5	1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5	1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1232-1			0	0	N.D.	N.D.
Average	1232-1					0.000	0.000
46) l8	1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8	1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8	1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8	1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8	1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument							
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000

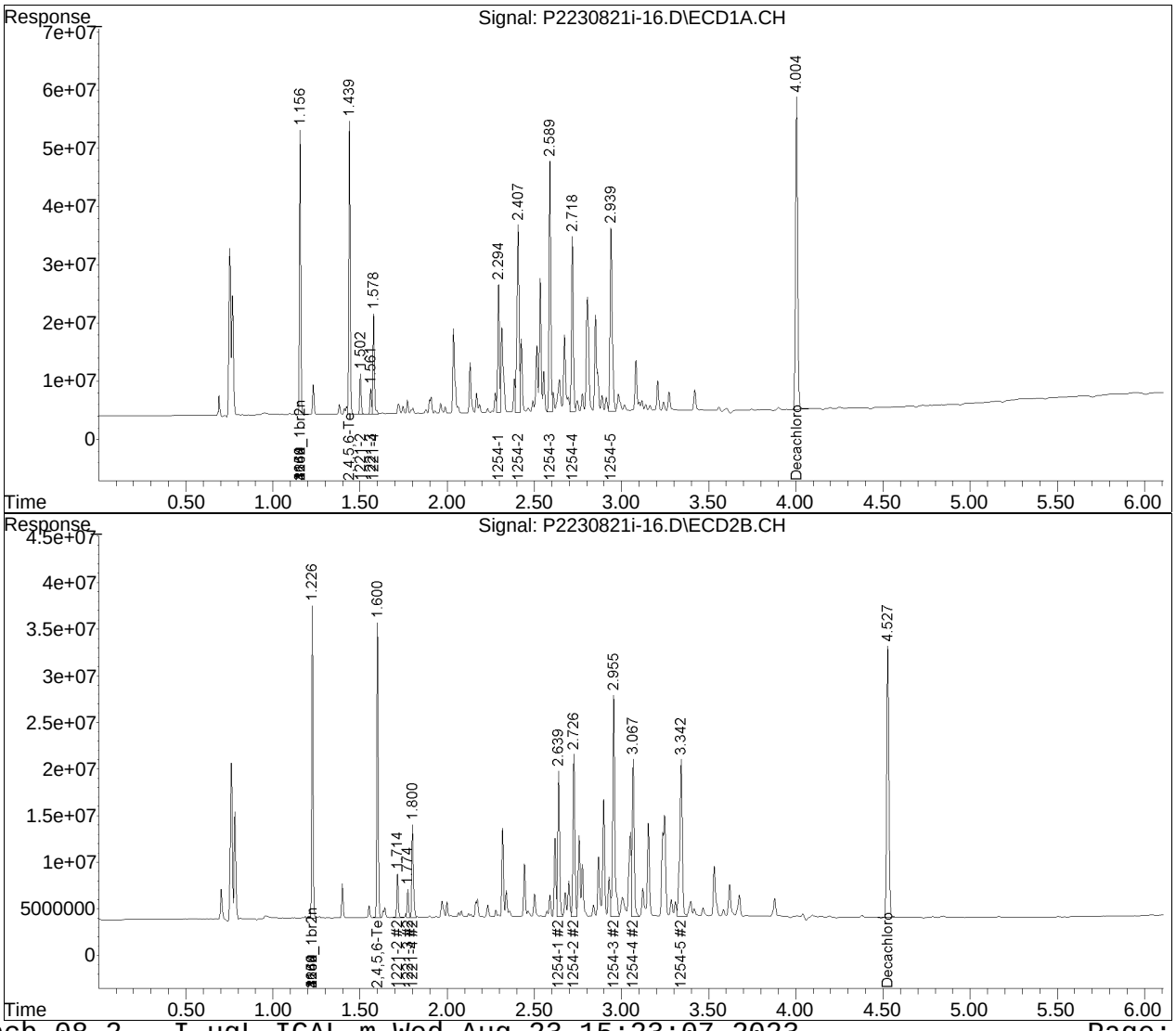
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-16.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:39 pm
Operator : pest2:kb
Sample : cicv2154,42,, 11186
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 22 08:56:38 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

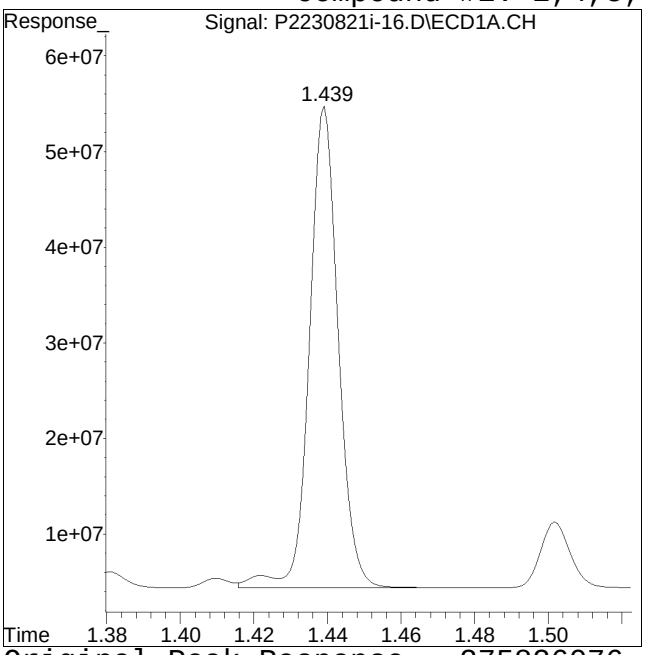
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

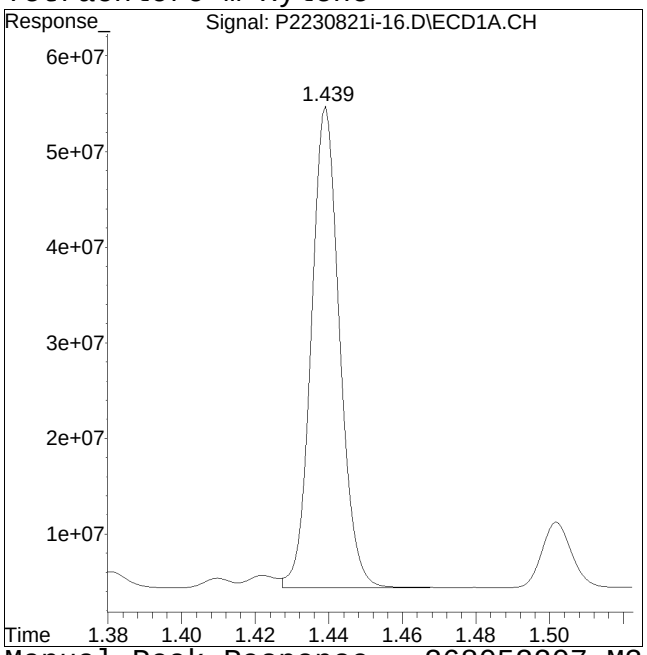


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-16.D Operator : pest2:kb
Date Inj'd : 8/21/2023 10:39 pm Instrument : Pest 2
Sample : cicv2154,42,, 11186 Quant Date : 8/22/2023 8:55 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



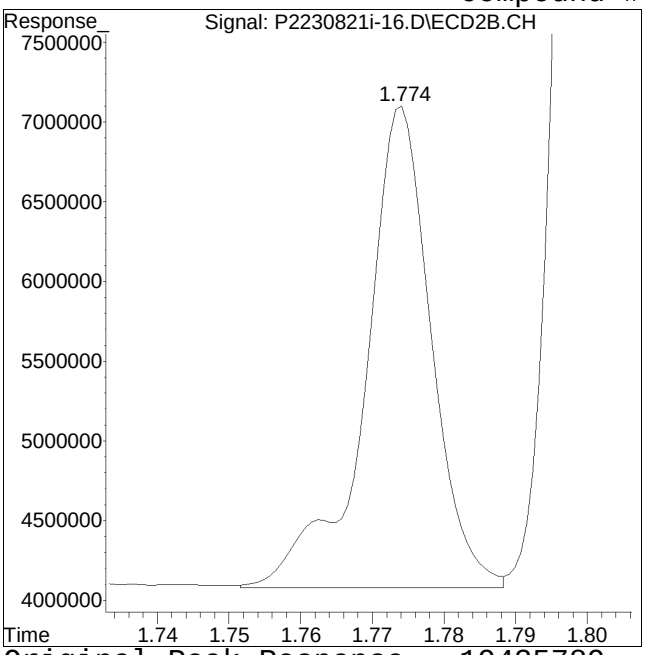


Original Peak Response = 275826076 Manual Peak Response = 268052207 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

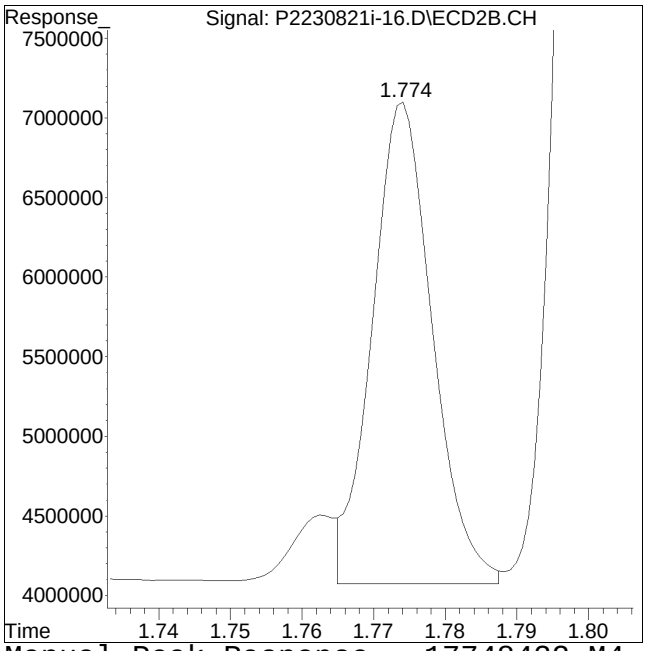
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-16.D Operator : pest2:kb
Date Inj'd : 8/21/2023 10:39 pm Instrument : Pest 2
Sample : cicv2154,42,, 11186 Quant Date : 8/22/2023 8:55 am

Compound #67: 1221-3 #2



Original Peak Response = 19435789



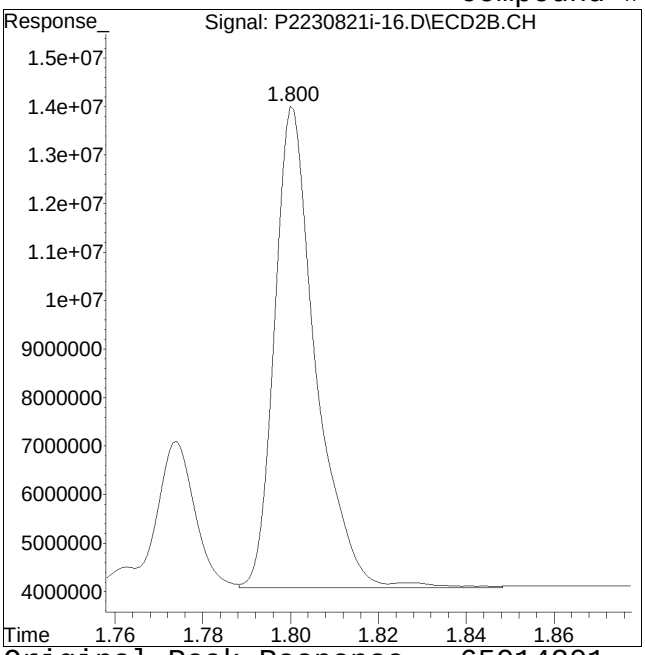
Manual Peak Response = 17748422 M4

M4 = Poor automated baseline construction.

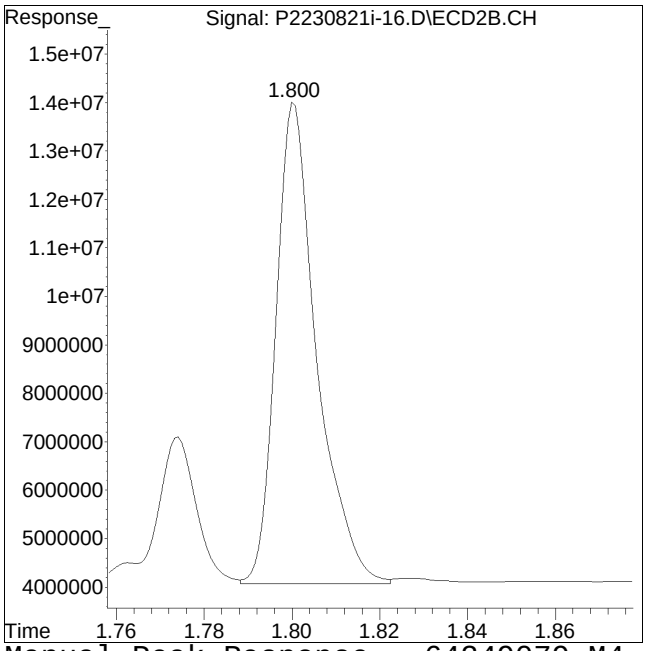
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-16.D Operator : pest2:kb
Date Inj'd : 8/21/2023 10:39 pm Instrument : Pest 2
Sample : cicv2154,42,, 11186 Quant Date : 8/22/2023 8:55 am

Compound #68: 1221-4 #2



Original Peak Response = 65014201



Manual Peak Response = 64249079 M4

M4 = Poor automated baseline construction.

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-17.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 21 Aug 2023 10:48 pm
Operator : pest2:kb
Sample   : cicv1660,42,, 11173
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 15:03:03 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1660_1br2nb	^	1.000	1.000	0.0	115	0.00
2	s	2,4,5,6-Tetrachloro-m-xylen		1.469	1.288	12.3	97	0.00
3	s	Decachlorobiphenyl		1.188	1.106	6.9	107	0.00
4	l1	1016-1		0.025	0.024	4.0	109	0.00
5	l1	1016-2		0.052	0.048	7.7	106	0.00
6	l1	1016-3		0.114	0.108	5.3	107	0.00
7	l1	1016-4		0.047	0.045	4.3	107	0.00
8	l1	1016-5		0.050	0.046	8.0	104	0.00
9	l2	1260-1		0.071	0.066	7.0	104	0.00
10	l2	1260-2		0.110	0.105	4.5	109	0.00
11	l2	1260-3		0.071	0.057	19.7	90	0.00
12	l2	1260-4		0.153	0.125	18.3	90	0.00
13	l2	1260-5		0.111	0.094	15.3	98	0.00
14	i	2154_1br2nb	^	1.000	1.000	0.0	119	0.00
23	i	4268_1br2nb	^	1.000	1.000	0.0	126	0.00
34	i	1248_1br2nb	^	1.000	1.000	0.0	112	0.00
40	i	3262_1br2nb	^	1.000	1.000	0.0	122	0.00

Signal #2

1	i	1660_1br2nb	^	1.000	1.000	0.0	113	0.00
2	s	2,4,5,6-Tetrachloro-m-xyl		1.484	1.292	12.9	97	0.00
3	s	Decachlorobiphenyl		1.047	0.949	9.4	104	0.00
4	l1	1016-1		0.027	0.023	14.8	96	0.00
5	l1	1016-2		0.059	0.053	10.2	104	0.00
6	l1	1016-3		0.116	0.109	6.0	106	0.00

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-17.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 21 Aug 2023 10:48 pm
Operator : pest2:kb
Sample   : cicv1660,42,, 11173
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 15:03:03 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
7	l1	1016-4		0.047	0.044	6.4	105	0.00
8	l1	1016-5		0.039	0.035	10.3	105	0.00
9	l2	1260-1		0.072	0.075	-4.2	117	0.00
10	l2	1260-2		0.086	0.081	5.8	106	0.00
11	l2	1260-3		0.072	0.061	15.3	98	0.00
12	l2	1260-4		0.145	0.118	18.6	92	0.00
13	l2	1260-5		0.101	0.086	14.9	96	0.00
14	i	2154_1br2nb	^	1.000	1.000	0.0	115	0.00
23	i	4268_1br2nb	^	1.000	1.000	0.0	127	0.00
34	i	1248_1br2nb	^	1.000	1.000	0.0	105	0.00
40	i	3262_1br2nb	^	1.000	1.000	0.0	111	0.00

Evaluate Continuing Calibration Report - Not Founds

15	l3	1221-2	0.00085	0.00000	100.0#	0#	-1.50#
16	l3	1221-3	0.00053	0.00000	100.0#	0#	-1.56#
17	l3	1221-4	0.00213	0.00000	100.0#	0#	-1.58#
18	l4	1254-1	0.00299	0.00000	100.0#	0#	-2.29#
19	l4	1254-2	0.00552	0.00000	100.0#	0#	-2.41#
20	l4	1254-3	0.00569	0.00000	100.0#	0#	-2.59#
21	l4	1254-4	0.00432	0.00000	100.0#	0#	-2.72#
22	l4	1254-5	0.00604	0.00000	100.0#	0#	-2.94#
24	l6	1242-1	0.00120	0.00000	100.0#	0#	-1.58#
25	l6	1242-2	0.00245	0.00000	100.0#	0#	-1.72#
26	l6	1242-3	0.00547	0.00000	100.0#	0#	-1.91#
27	l6	1242-4	0.00238	0.00000	100.0#	0#	-1.96#
28	l6	1242-5	0.00179	0.00000	100.0#	0#	-2.31#

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-17.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 21 Aug 2023 10:48 pm
Operator : pest2:kb
Sample   : cicv1660,42,, 11173
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 15:03:03 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound	AvgRF	CCRF		%Dev	Area%	Dev(Min)
29	l9	1268-1	0.013	0.000		100.0#	0#	-3.44#
30	l9	1268-2	0.012	0.000		100.0#	0#	-3.46#
31	l9	1268-3	0.00927	0.00000		100.0#	0#	-3.56#
32	l9	1268-4	0.00402	0.00000		100.0#	0#	-3.75#
33	l9	1268-5	0.029	0.000		100.0#	0#	-3.90#
35	l7	1248-1	0.00330	0.00000		100.0#	0#	-1.91#
36	l7	1248-2	0.00417	0.00000		100.0#	0#	-2.03#
37	l7	1248-3	0.00378	0.00000		100.0#	0#	-2.13#
38	l7	1248-4	0.00343	0.00000		100.0#	0#	-2.31#
39	l7	1248-5	0.00308	0.00000		100.0#	0#	-2.32#
41	l5	1232-1	0.00165	0.00000		100.0#	0#	-1.58#
42	l5	1232-2	0.00145	0.00000		100.0#	0#	-1.72#
43	l5	1232-3	0.00308	0.00000		100.0#	0#	-1.91#
44	l5	1232-4	0.00129	0.00000		100.0#	0#	-1.96#
45	l5	1232-5	0.00093	0.00000		100.0#	0#	-2.31#
46	l8	1262-1	0.00457	0.00000		100.0#	0#	-2.80#
47	l8	1262-2	0.00582	0.00000		100.0#	0#	-3.00#
48	l8	1262-3	0.00522	0.00000		100.0#	0#	-3.12#
49	l8	1262-4	0.011	0.000		100.0#	0#	-3.27#
50	l8	1262-5	0.00340	0.00000		100.0#	0#	-3.75#
Signal #2								
15	l3	1221-2	96.657	0.000	E3	100.0#	0#	-1.71#
16	l3	1221-3	62.096	0.000	E3	100.0#	0#	-1.77#
17	l3	1221-4	226.750	0.000	E3	100.0#	0#	-1.80#
18	l4	1254-1	364.434	0.000	E3	100.0#	0#	-2.64#
19	l4	1254-2	426.273	0.000	E3	100.0#	0#	-2.73#
20	l4	1254-3	639.592	0.000	E3	100.0#	0#	-2.95#
21	l4	1254-4	432.790	0.000	E3	100.0#	0#	-3.07#
22	l4	1254-5	591.909	0.000	E3	100.0#	0#	-3.34#

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-17.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 21 Aug 2023 10:48 pm
Operator : pest2:kb
Sample   : cicv1660,42,, 11173
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 15:03:03 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
24 l6	1242-1	129.414	0.000 E3	100.0#	0#	-1.80#
25 l6	1242-2	282.758	0.000 E3	100.0#	0#	-1.97#
26 l6	1242-3	557.676	0.000 E3	100.0#	0#	-2.17#
27 l6	1242-4	227.729	0.000 E3	100.0#	0#	-2.23#
28 l6	1242-5	185.364	0.000 E3	100.0#	0#	-2.62#
29 l9	1268-1	1.147	0.000 E6	100.0#	0#	-3.87#
30 l9	1268-2	1.066	0.000 E6	100.0#	0#	-3.90#
31 l9	1268-3	834.030	0.000 E3	100.0#	0#	-4.04#
32 l9	1268-4	395.212	0.000 E3	100.0#	0#	-4.19#
33 l9	1268-5	2.486	0.000 E6	100.0#	0#	-4.38#
35 l7	1248-1	383.922	0.000 E3	100.0#	0#	-2.16#
36 l7	1248-2	255.942	0.000 E3	100.0#	0#	-2.31#
37 l7	1248-3	322.154	0.000 E3	100.0#	0#	-2.44#
38 l7	1248-4	364.968	0.000 E3	100.0#	0#	-2.61#
39 l7	1248-5	420.483	0.000 E3	100.0#	0#	-2.64#
41 l5	1232-1	193.078	0.000 E3	100.0#	0#	-1.80#
42 l5	1232-2	191.398	0.000 E3	100.0#	0#	-1.97#
43 l5	1232-3	360.232	0.000 E3	100.0#	0#	-2.17#
44 l5	1232-4	149.540	0.000 E3	100.0#	0#	-2.23#
45 l5	1232-5	114.017	0.000 E3	100.0#	0#	-2.62#
46 l8	1262-1	435.610	0.000 E3	100.0#	0#	-3.15#
47 l8	1262-2	595.127	0.000 E3	100.0#	0#	-3.39#
48 l8	1262-3	554.537	0.000 E3	100.0#	0#	-3.54#
49 l8	1262-4	1.052	0.000 E6	100.0#	0#	-3.67#
50 l8	1262-5	368.238	0.000 E3	100.0#	0#	-4.19#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-17.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:48 pm
Operator : pest2:kb
Sample : cicv1660,42,, 11173
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 15:03:03 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	1.156	1.227	292.7E6	183.3E6	25.000M4	25.000
14) i	2154_1br2nb	1.156	1.227	292.7E6	183.3E6	25.000M4	25.000
23) i	4268_1br2nb	1.156	1.227	292.7E6	183.3E6	25.000M4	25.000
34) i	1248_1br2nb	1.156	1.227	292.7E6	183.3E6	25.000M4	25.000
40) i	3262_1br2nb	1.156	1.227	292.7E6	183.3E6	25.000M4	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.439	1.600	241.3E6	151.6E6	14.034M4	13.927
	Spiked Amount	20.000	Range 30 - 150		Recovery =	70.17%	69.64%
3) s	Decachlorobi	4.004	4.527	414.3E6	222.8E6	29.781	29.007
	Spiked Amount	20.000	Range 30 - 150		Recovery =	148.91%	145.04%
	Target Compounds						
4) l1	1016-1	1.579	1.801	70606842	41302619	238.239	209.278
5) l1	1016-2	1.719	1.972	141.6E6	97276072	231.242M3	225.660
6) l1	1016-3	1.908	2.173	315.5E6	200.4E6	236.598	235.449
7) l1	1016-4	1.963	2.233	132.1E6	81130570	238.286	236.009
8) l1	1016-5	2.132	2.444	133.8E6	64960938	229.804	227.858
	Sum 1016-1			793.6E6	485.0E6	1174.168	1134.254
	Average 1016-1					234.834	226.851
9) l2	1260-1	2.673	3.052	193.2E6	137.3E6	231.748	260.312
10) l2	1260-2	2.804	3.154	308.0E6	148.3E6	240.037	235.792
11) l2	1260-3	3.118	3.546	166.1E6	112.6E6	200.598	214.283
12) l2	1260-4	3.273	3.676	365.9E6	216.8E6	203.651	203.929
13) l2	1260-5	3.420	3.877	276.6E6	157.7E6	213.633M1	213.609
	Sum 1260-1			1309.9E6	772.8E6	1089.667	1127.923
	Average 1260-1					217.933	225.585
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d
17) l3	1221-4	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-17.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:48 pm
Operator : pest2:kb
Sample : cicv1660,42,, 11173
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 15:03:03 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum	1221-2			0	0	N.D.	N.D.
Average	1221-2					0.000	0.000
18) l4	1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4	1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4	1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4	1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4	1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1254-1			0	0	N.D.	N.D.
Average	1254-1					0.000	0.000
24) l6	1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6	1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6	1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6	1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6	1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1242-1			0	0	N.D.	N.D.
Average	1242-1					0.000	0.000
29) l9	1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9	1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9	1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9	1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9	1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1268-1			0	0	N.D.	N.D.
Average	1268-1					0.000	0.000
35) l7	1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7	1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7	1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7	1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7	1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1248-1			0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-17.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:48 pm
Operator : pest2:kb
Sample : cicv1660,42,, 11173
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 15:03:03 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

Compound		RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average	1248-1					0.000	0.000
41) l5	1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) l5	1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5	1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5	1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5	1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1232-1			0	0	N.D.	N.D.
Average	1232-1					0.000	0.000
46) l8	1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8	1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8	1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8	1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8	1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument							
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000

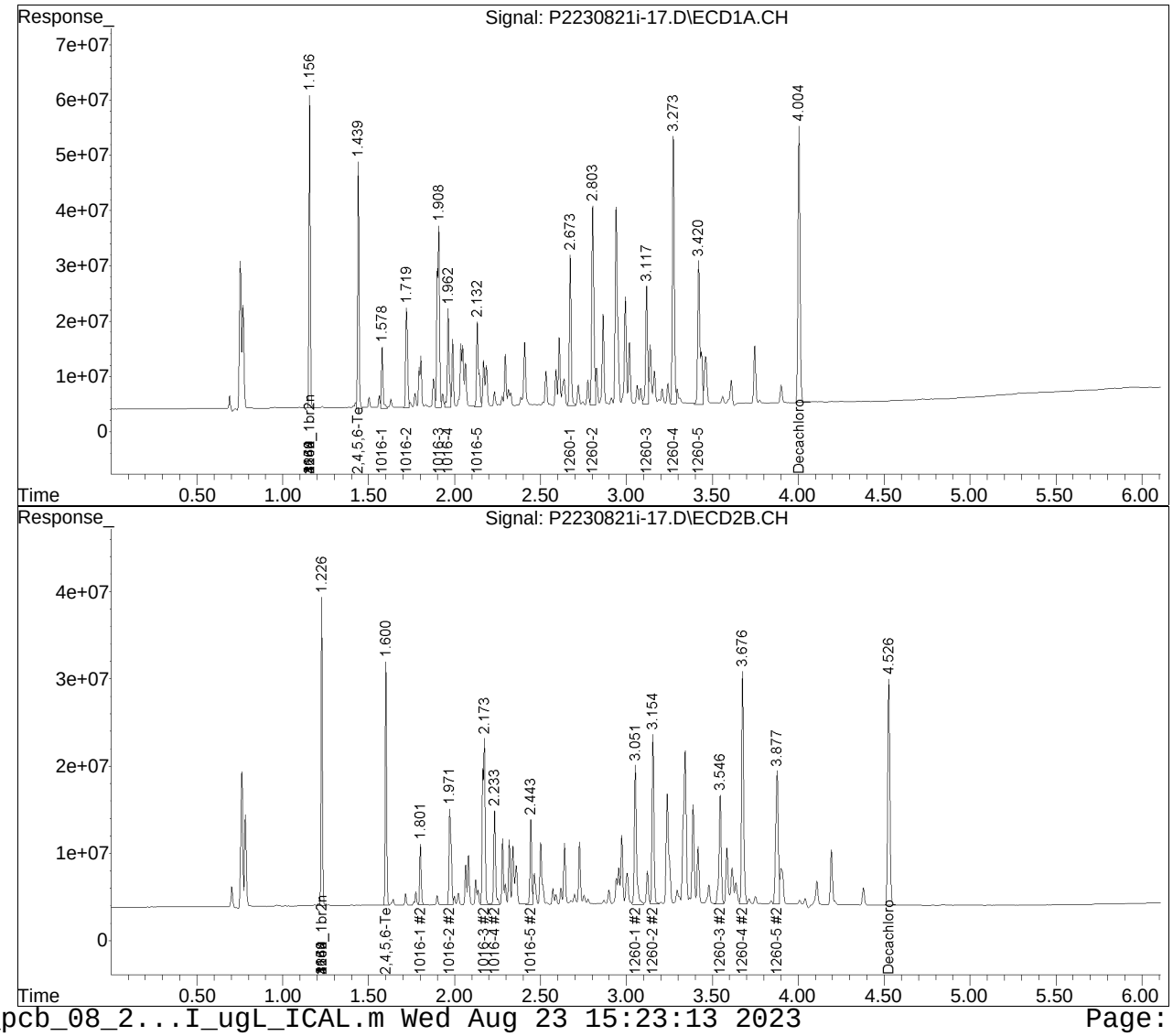
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-17.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 21 Aug 2023 10:48 pm
Operator : pest2:kb
Sample : cicv1660,42,, 11173
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 15:03:03 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

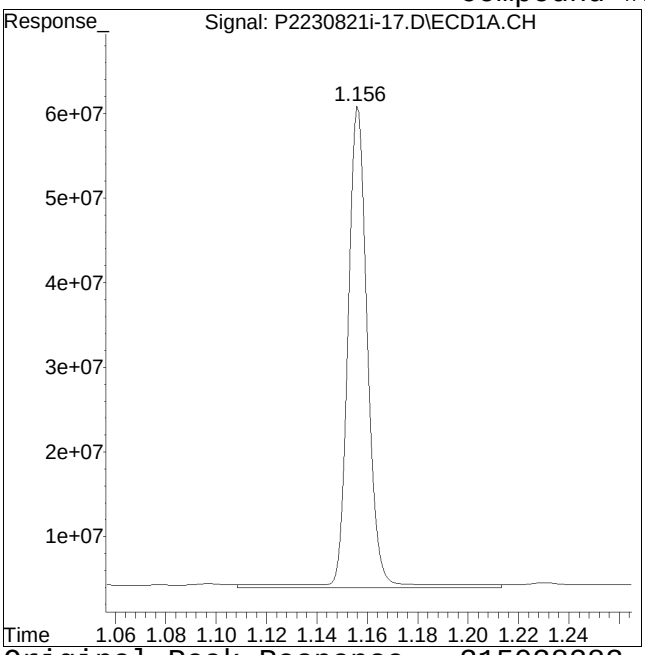
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



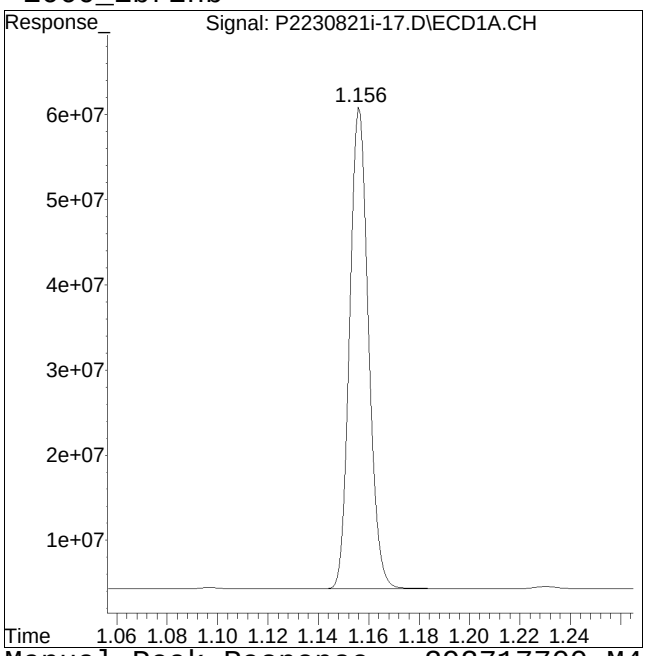
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-17.D Operator : pest2:kb
Date Inj'd : 8/21/2023 10:48 pm Instrument : Pest 2
Sample : cicv1660,42,, 11173 Quant Date : 8/22/2023 8:57 am

Compound #1: 1660_1br2nb



Original Peak Response = 315038383



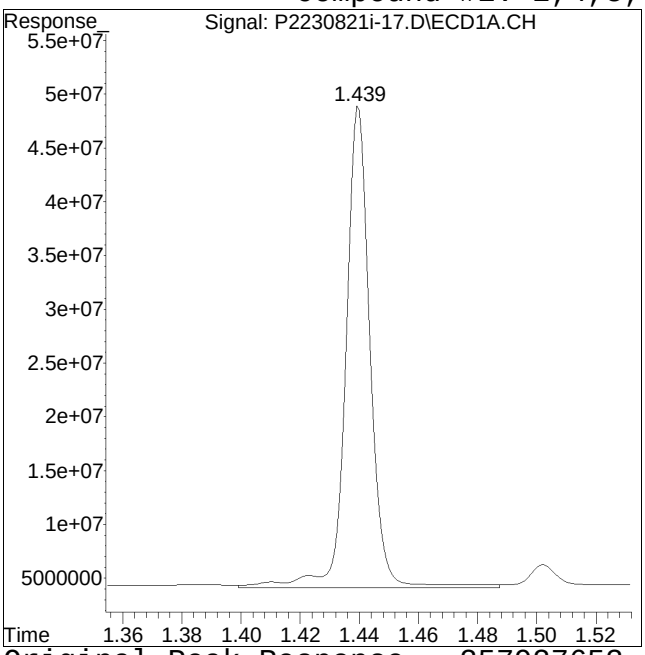
Manual Peak Response = 292717700 M4

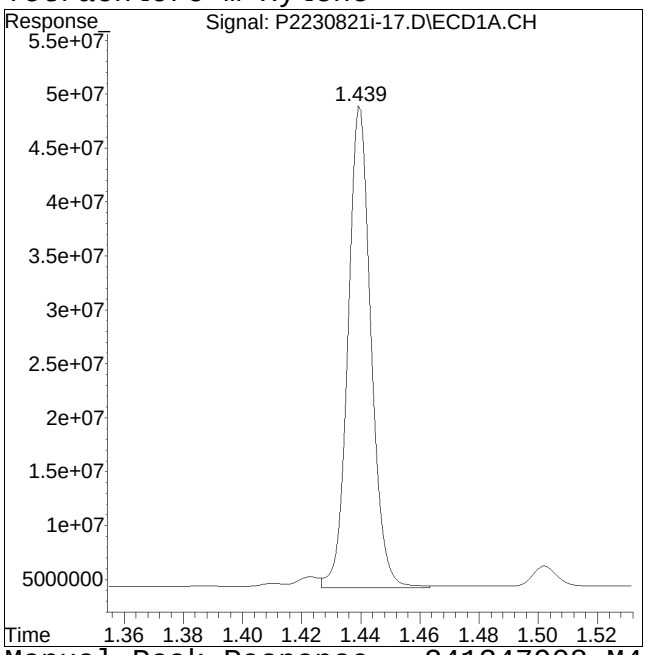
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-17.D Operator : pest2:kb
Date Inj'd : 8/21/2023 10:48 pm Instrument : Pest 2
Sample : cicv1660,42,, 11173 Quant Date : 8/22/2023 8:57 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



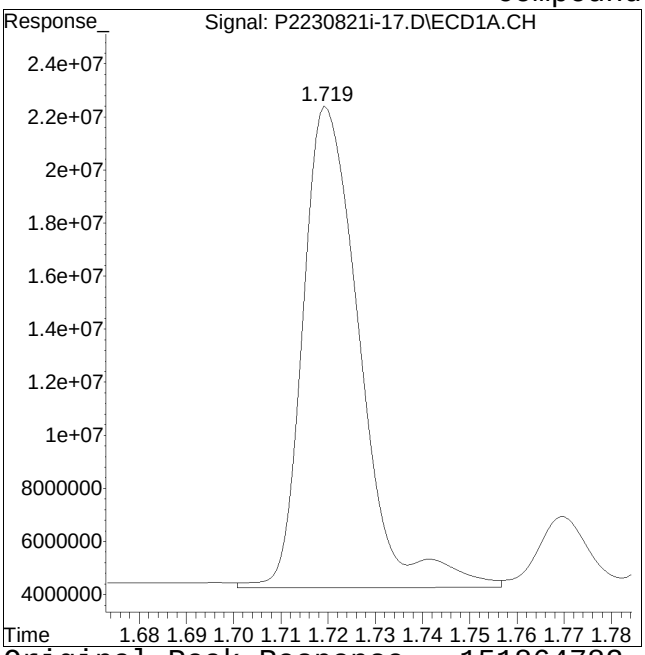


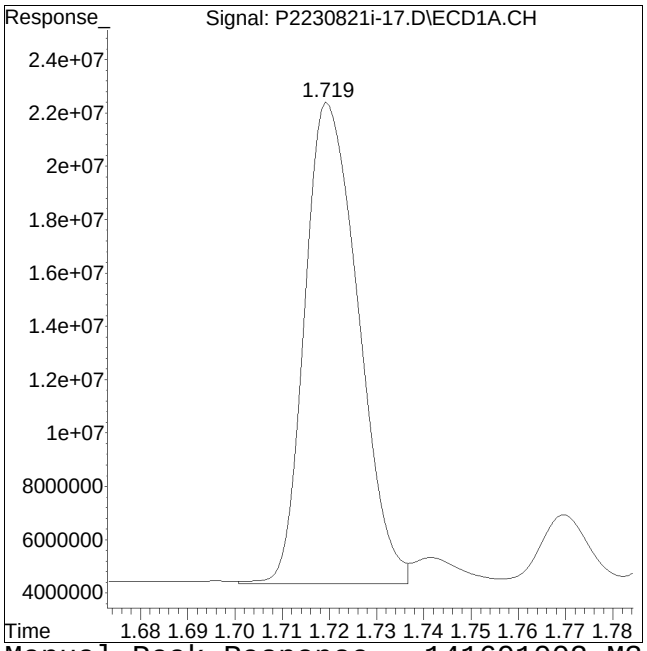
Original Peak Response = 257927653 Manual Peak Response = 241347908 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-17.D Operator : pest2:kb
Date Inj'd : 8/21/2023 10:48 pm Instrument : Pest 2
Sample : cicv1660,42,, 11173 Quant Date : 8/22/2023 8:57 am

Compound #5: 1016-2



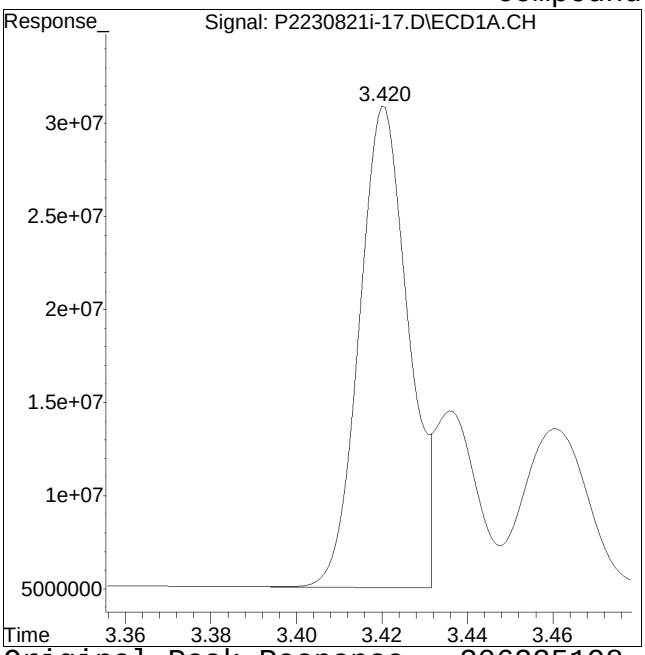


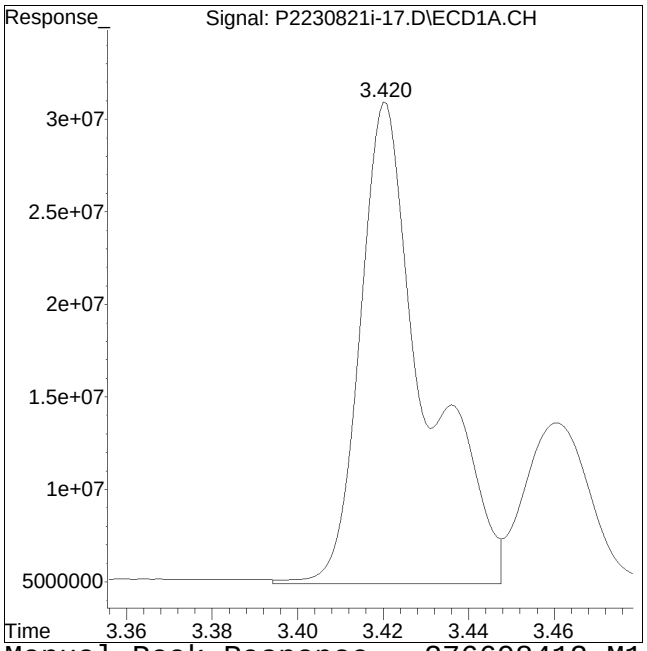
Original Peak Response = 151864782 Manual Peak Response = 141601002 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-17.D Operator : pest2:kb
Date Inj'd : 8/21/2023 10:48 pm Instrument : Pest 2
Sample : cicv1660,42,, 11173 Quant Date : 8/22/2023 8:57 am

Compound #13: 1260-5





Original Peak Response = 206225198 Manual Peak Response = 276608412 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-19.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 5:57 pm
Operator : pest2:kb
Sample : il43262,42,, 11189
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 13:44:26 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
14) i	2154_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
23) i	4268_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
34) i	1248_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
40) i	3262_1br2nb	1.153	1.222	240.7E6	165.1E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	20.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
3) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	20.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
4) l1	1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1	1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1	1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1	1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1	1016-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1016-1			0	0	N.D.	N.D.
	Average 1016-1					0.000	0.000
9) l2	1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2	1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2	1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2	1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2	1260-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1260-1			0	0	N.D.	N.D.
	Average 1260-1					0.000	0.000
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d
17) l3	1221-4	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-19.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 5:57 pm
Operator : pest2:kb
Sample : il43262,42,, 11189
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 13:44:26 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum	1221-2			0	0	N.D.	N.D.
Average	1221-2					0.000	0.000
18) l4	1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4	1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4	1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4	1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4	1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1254-1			0	0	N.D.	N.D.
Average	1254-1					0.000	0.000
24) l6	1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6	1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6	1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6	1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6	1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1242-1			0	0	N.D.	N.D.
Average	1242-1					0.000	0.000
29) l9	1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9	1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9	1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9	1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9	1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1268-1			0	0	N.D.	N.D.
Average	1268-1					0.000	0.000
35) l7	1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7	1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7	1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7	1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7	1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1248-1			0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-19.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 5:57 pm
Operator : pest2:kb
Sample : il43262,42,, 11189
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 13:44:26 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average	1248-1					0.000	0.000
41) l5	1232-1	1.576	1.799	68144387	48269511	252.043	240.359
42) l5	1232-2	1.719	1.971	59729024	47849456	248.118	239.544
43) l5	1232-3	1.909	2.172	127.1E6	90057993	249.888	242.303
44) l5	1232-4	1.964	2.232	53271499	37385051	251.167	244.782
45) l5	1232-5	2.315	2.618	38486548	28504255	251.573	243.356
Sum	1232-1			346.7E6	252.1E6	1252.788	1210.345
Average	1232-1					250.558	242.069
46) l8	1262-1	2.805	3.153	188.5E6	108.9E6	252.779	230.254M4
47) l8	1262-2	2.996	3.386	240.1E6	148.8E6	254.741	230.014M4
48) l8	1262-3	3.119	3.544	215.6E6	138.6E6	254.977	237.980M4
49) l8	1262-4	3.275	3.674	435.1E6	263.0E6	249.691	236.181M4
50) l8	1262-5	3.748	4.192	140.4E6	92059583	249.684M4	231.310M4
Sum	1262-1			1219.7E6	751.4E6	1261.872	1165.739
Average	1262-1					252.374	233.148

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	1262-1			1219.7E6	751.4E6	1261.872	1165.739
Average	1262-1					252.374	233.148

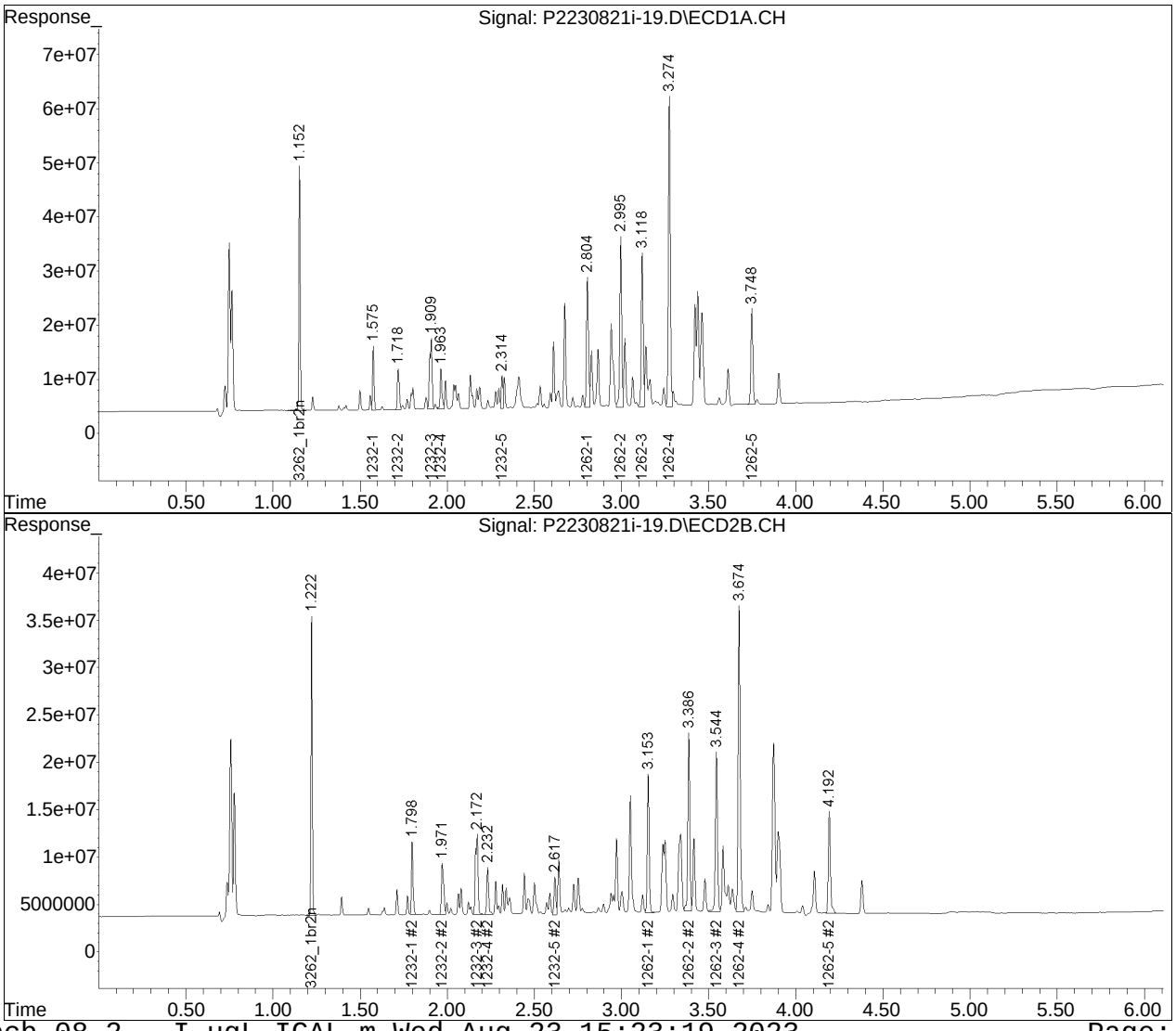
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-19.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 5:57 pm
Operator : pest2:kb
Sample : il43262,42,, 11189
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 13:44:26 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Tue Aug 22 08:51:03 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

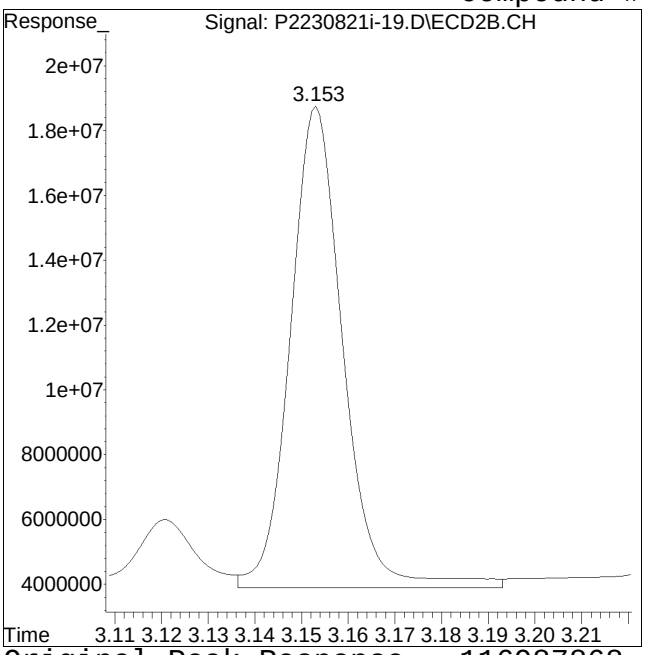
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

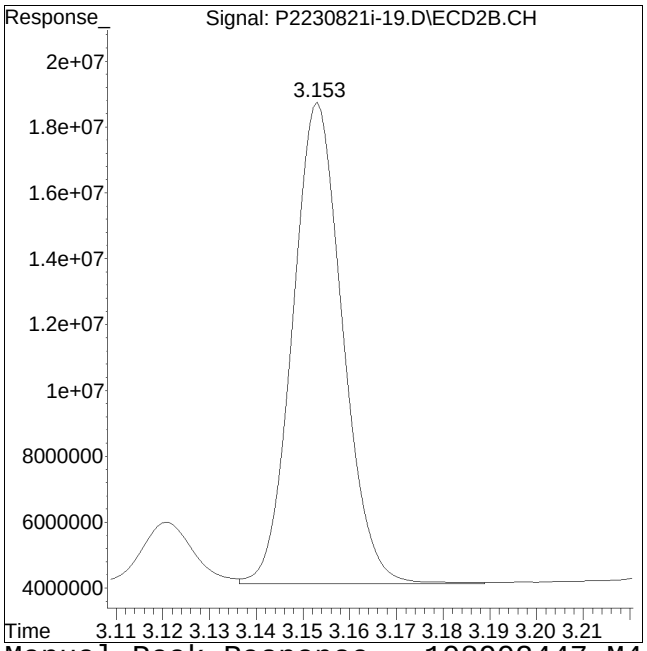


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-19.D Operator : pest2:kb
Date Inj'd : 8/22/2023 5:57 pm Instrument : Pest 2
Sample : il43262,42,, 11189 Quant Date : 8/23/2023 1:42 pm

Compound #97: 1262-1 #2



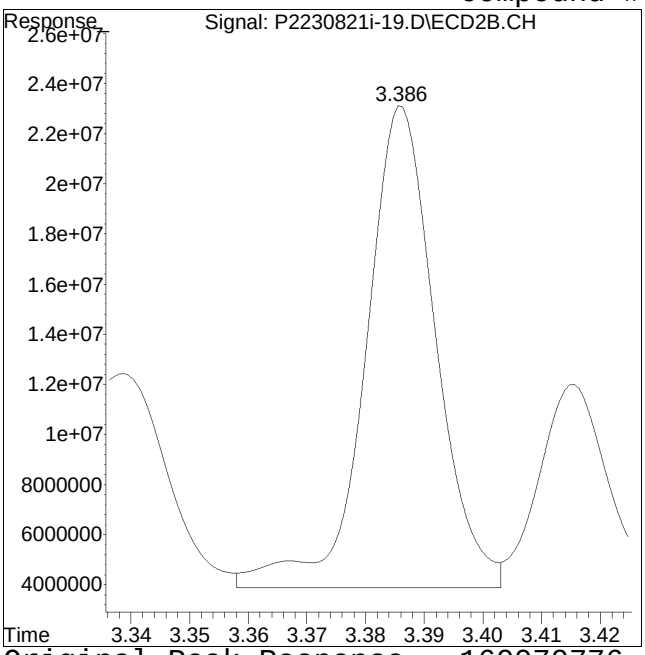


Original Peak Response = 116987868 Manual Peak Response = 108902447 M4
M4 = Poor automated baseline construction.

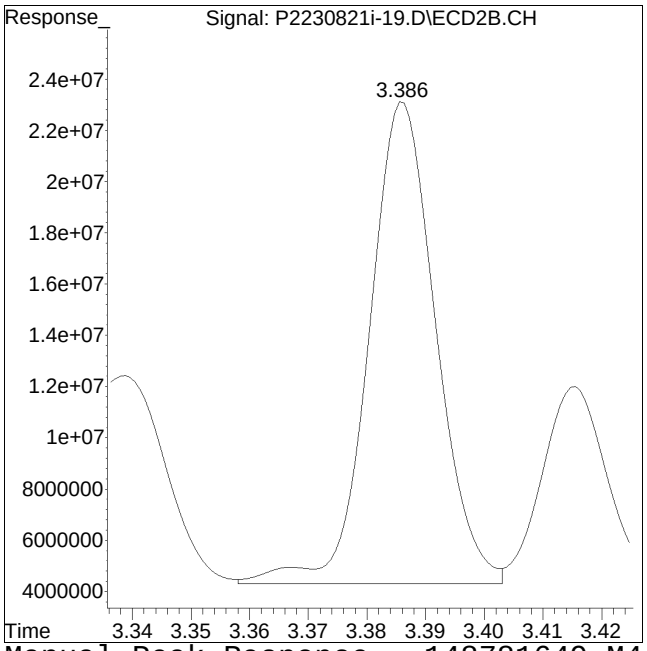
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-19.D Operator : pest2:kb
Date Inj'd : 8/22/2023 5:57 pm Instrument : Pest 2
Sample : il43262,42,, 11189 Quant Date : 8/23/2023 1:42 pm

Compound #98: 1262-2 #2



Original Peak Response = 160070776



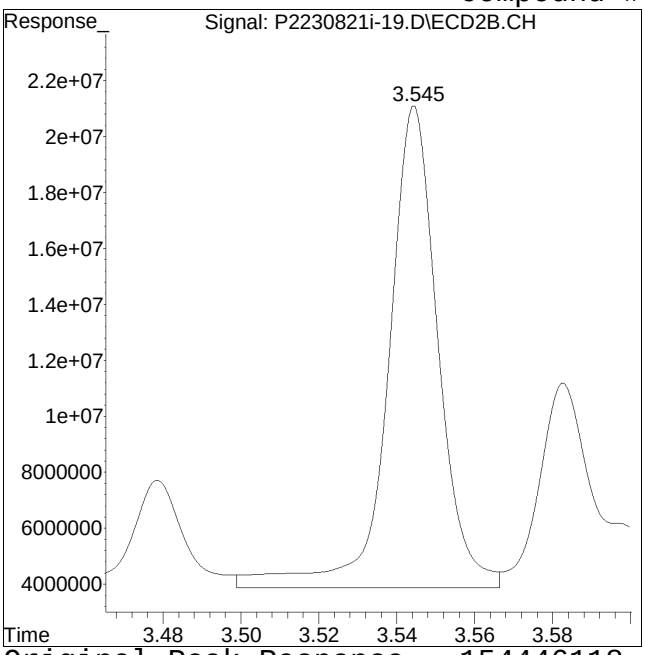
Manual Peak Response = 148781649 M4

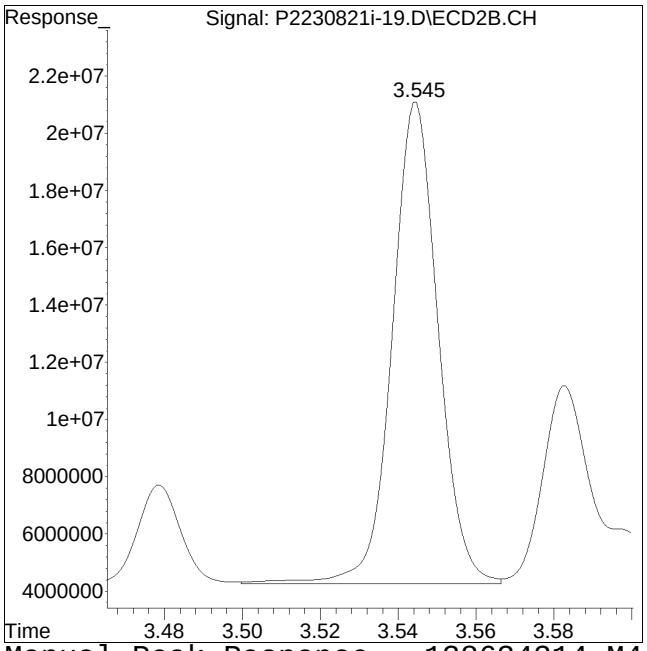
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-19.D Operator : pest2:kb
Date Inj'd : 8/22/2023 5:57 pm Instrument : Pest 2
Sample : il43262,42,, 11189 Quant Date : 8/23/2023 1:42 pm

Compound #99: 1262-3 #2



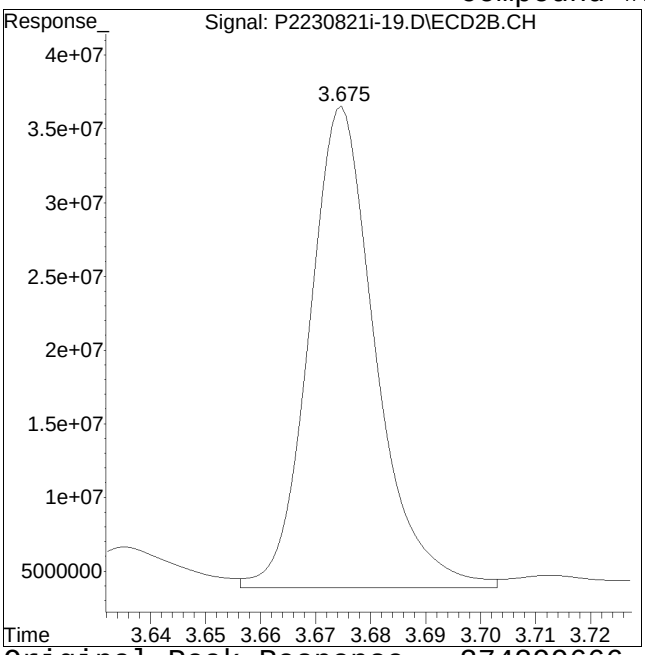


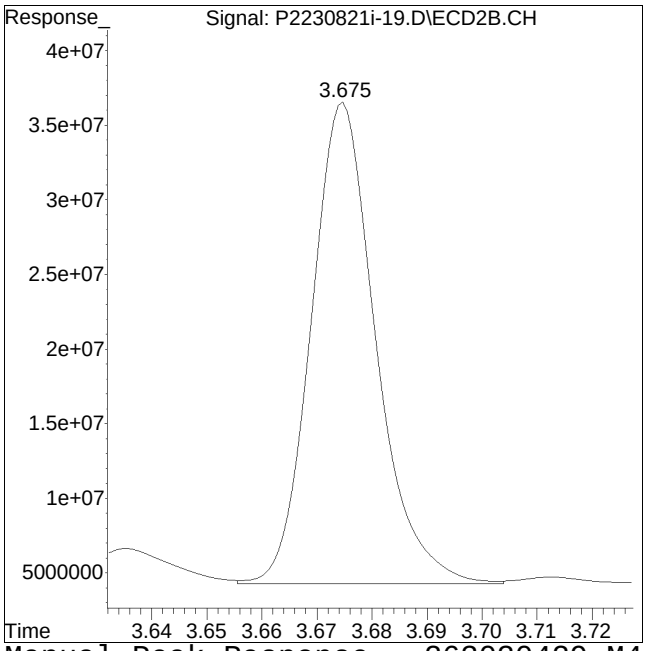
Original Peak Response = 154446118 Manual Peak Response = 138634314 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-19.D Operator : pest2:kb
Date Inj'd : 8/22/2023 5:57 pm Instrument : Pest 2
Sample : il43262,42,, 11189 Quant Date : 8/23/2023 1:42 pm

Compound #100: 1262-4 #2



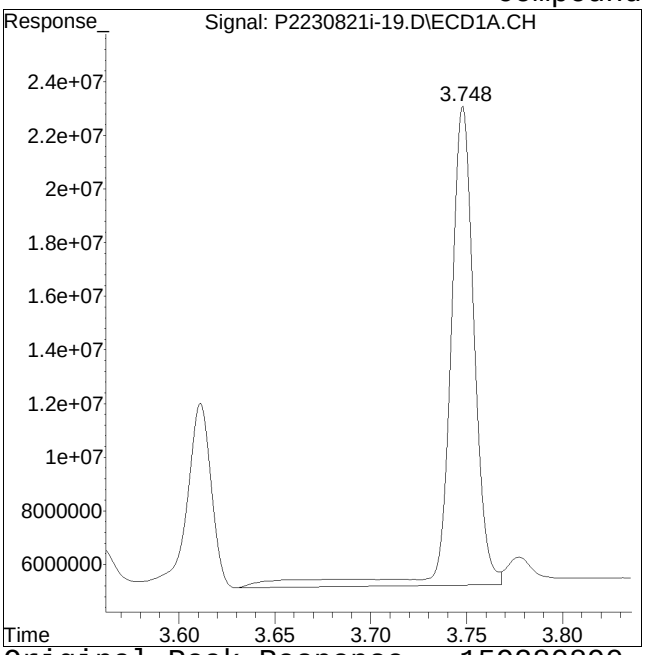


Original Peak Response = 274299666 Manual Peak Response = 263030429 M4
M4 = Poor automated baseline construction.

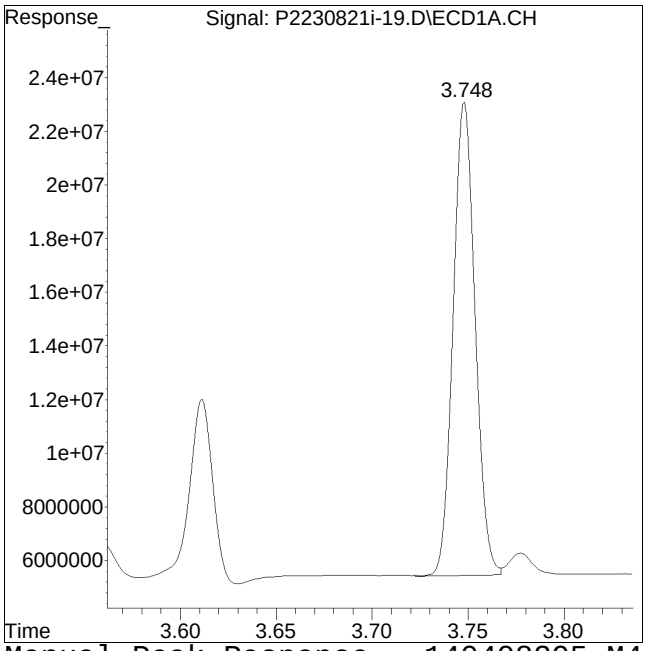
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-19.D Operator : pest2:kb
Date Inj'd : 8/22/2023 5:57 pm Instrument : Pest 2
Sample : il43262,42,, 11189 Quant Date : 8/23/2023 1:42 pm

Compound #50: 1262-5



Original Peak Response = 159280890



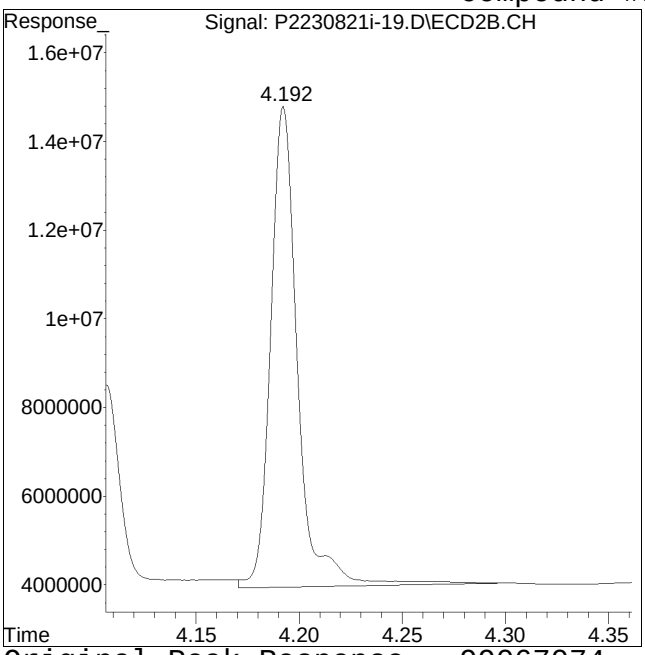
Manual Peak Response = 140408295 M4

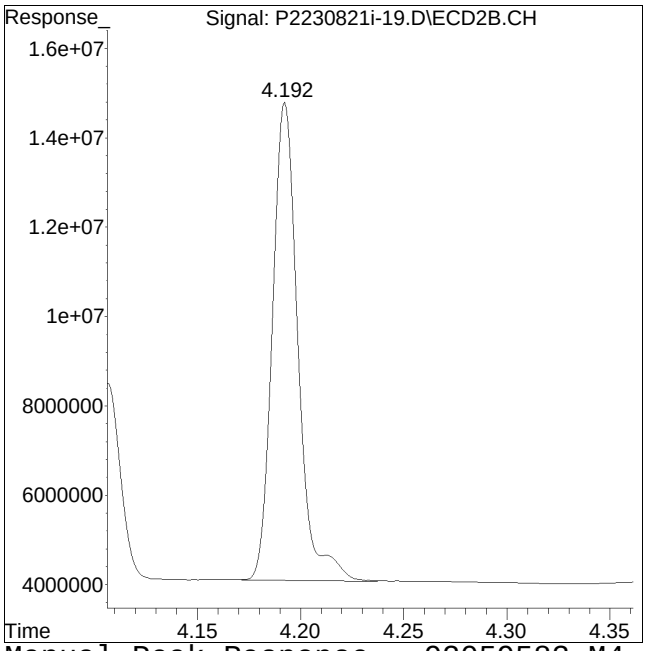
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-19.D Operator : pest2:kb
Date Inj'd : 8/22/2023 5:57 pm Instrument : Pest 2
Sample : il43262,42,, 11189 Quant Date : 8/23/2023 1:42 pm

Compound #101: 1262-5 #2





Original Peak Response = 99067074 Manual Peak Response = 92059583 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-20.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 6:06 pm
Operator : pest2:kb
Sample : il41248,42,, 11159
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 13:46:20 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:45:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
14) i	2154_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
23) i	4268_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
34) i	1248_1br2nb	1.153	1.223	262.1E6	174.6E6	25.000	25.000
40) i	3262_1br2nb	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D.	N.D.
	Spiked Amount	20.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
3) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	20.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
4) l1	1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1	1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1	1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1	1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1	1016-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1016-1			0	0	N.D.	N.D.
	Average 1016-1					0.000	0.000
9) l2	1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2	1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2	1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2	1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2	1260-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1260-1			0	0	N.D.	N.D.
	Average 1260-1					0.000	0.000
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d
17) l3	1221-4	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-20.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 6:06 pm
Operator : pest2:kb
Sample : il41248,42,, 11159
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 13:46:20 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:45:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum	1221-2			0	0	N.D.	N.D.
Average	1221-2					0.000	0.000
18) l4	1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4	1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4	1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4	1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4	1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1254-1			0	0	N.D.	N.D.
Average	1254-1					0.000	0.000
24) l6	1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6	1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6	1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6	1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6	1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1242-1			0	0	N.D.	N.D.
Average	1242-1					0.000	0.000
29) l9	1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9	1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9	1268-3	0.000	0.000	0	0	N.D.	N.D.
32) l9	1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9	1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1268-1			0	0	N.D.	N.D.
Average	1268-1					0.000	0.000
35) l7	1248-1	1.905	2.161	136.4E6	95980403	471.733	459.827
36) l7	1248-2	2.033	2.315	172.3E6	63985482	467.897M1	441.570
37) l7	1248-3	2.129	2.440	156.0E6	80538557	470.616	442.847
38) l7	1248-4	2.311	2.615	141.7E6	91241960	476.697	450.528
39) l7	1248-5	2.323	2.638	127.1E6	105.1E6	467.711	452.443
Sum	1248-1			733.5E6	436.9E6	N.D.	N.D. D

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-20.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 6:06 pm
Operator : pest2:kb
Sample : il41248,42,, 11159
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 13:46:20 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:45:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average 1248-1					470.931	449.443
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

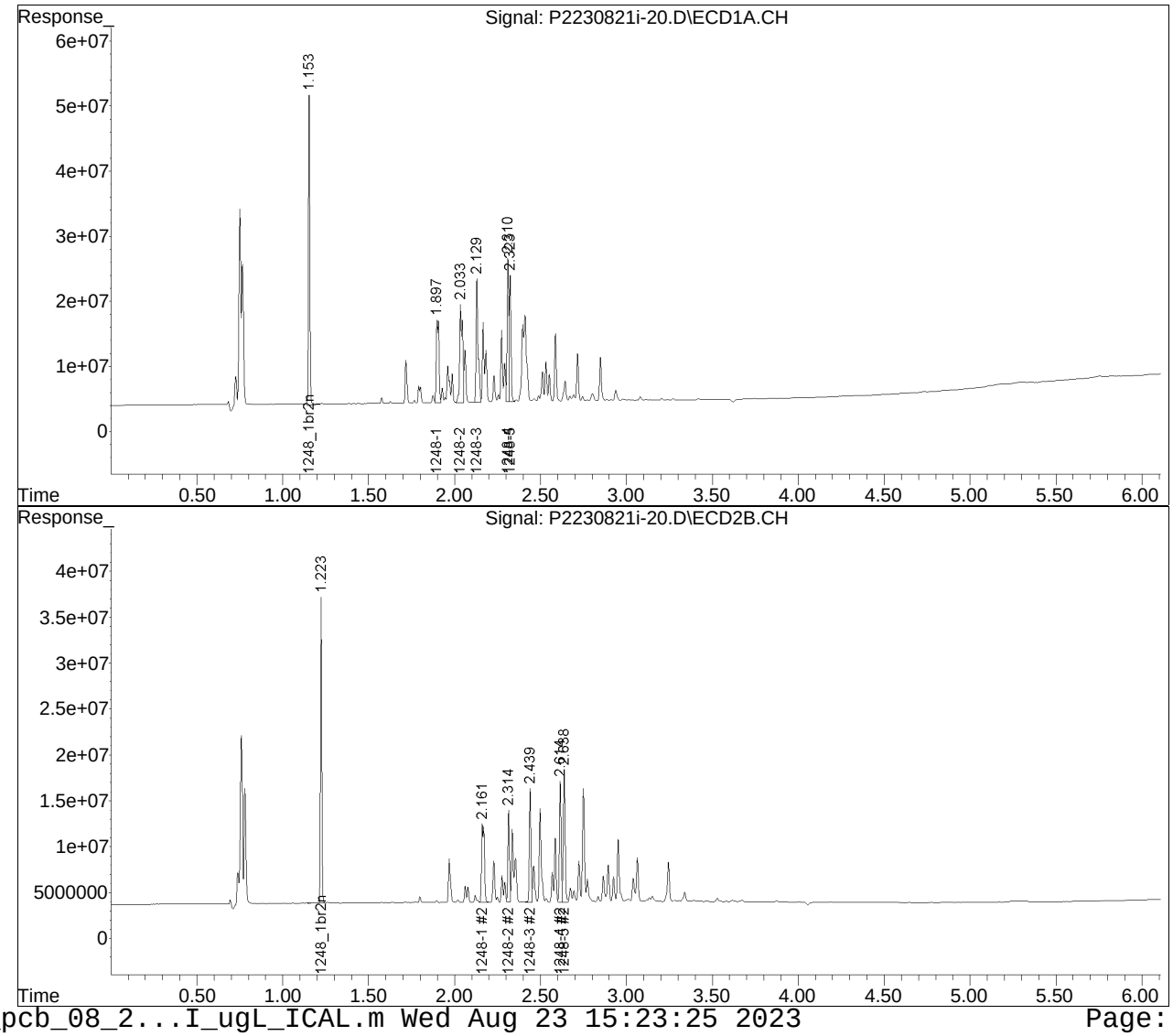
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-20.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 6:06 pm
Operator : pest2:kb
Sample : il41248,42,, 11159
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 13:46:20 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:45:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

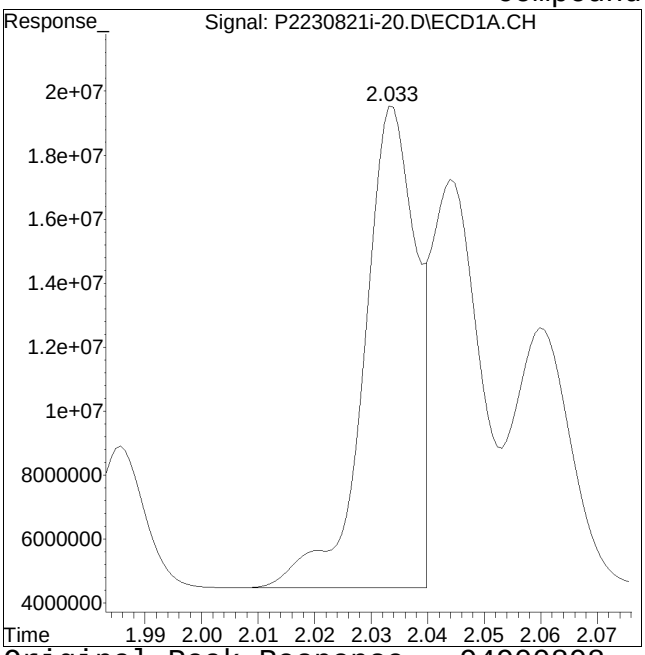
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

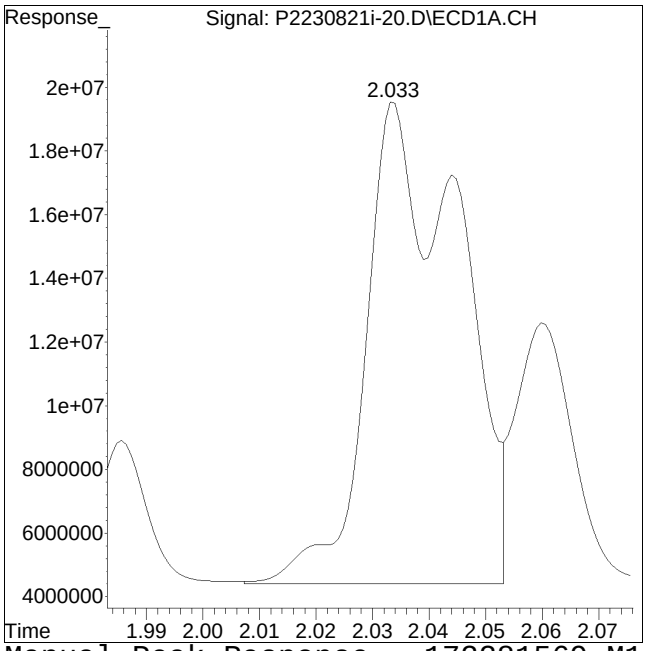


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-20.D Operator : pest2:kb
Date Inj'd : 8/22/2023 6:06 pm Instrument : Pest 2
Sample : il41248,42,, 11159 Quant Date : 8/23/2023 1:45 pm

Compound #36: 1248-2





Original Peak Response = 94900898 Manual Peak Response = 172281569 M1
M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-21.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 22 Aug 2023   6:18 pm
Operator : pest2:kb
Sample   : cicv3262,42,, 11290
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:20:01 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1660_1br2nb	^	1.000	1.000	0.0	93	0.00
2	s	2,4,5,6-Tetrachloro-m-xylen		1.469	1.968	-34.0#	119	0.00
3	s	Decachlorobiphenyl		1.188	1.538	-29.5#	120	0.00
14	i	2154_1br2nb	^	1.000	1.000	0.0	96	0.00
23	i	4268_1br2nb	^	1.000	1.000	0.0	102	0.00
34	i	1248_1br2nb	^	1.000	1.000	0.0	90	0.00
40	i	3262_1br2nb	^	1.000	1.000	0.0	98	0.00
41	l5	1232-1		0.028	0.030	-7.1	105	0.00
42	l5	1232-2		0.025	0.023	8.0	92	0.00
43	l5	1232-3		0.053	0.052	1.9	96	0.00
44	l5	1232-4		0.022	0.023	-4.5	100	0.00
45	l5	1232-5		0.016	0.016	0.0	99	0.00
46	l8	1262-1		0.078	0.075	3.8	93	0.00
47	l8	1262-2		0.100	0.095	5.0	94	0.00
48	l8	1262-3		0.090	0.086	4.4	94	0.00
49	l8	1262-4		0.181	0.165	8.8	89	0.00
50	l8	1262-5		0.058	0.055	5.2	92	0.00

Signal #2

1	i	1660_1br2nb	^	1.000	1.000	0.0	106	0.00
2	s	2,4,5,6-Tetrachloro-m-xyl		1.484	1.772	-19.4	125	0.00
3	s	Decachlorobiphenyl		1.047	1.185	-13.2	122	0.00
14	i	2154_1br2nb	^	1.000	1.000	0.0	108	0.00

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-21.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 22 Aug 2023   6:18 pm
Operator : pest2:kb
Sample   : cicv3262,42,, 11290
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:20:01 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
23	i	4268_1br2nb	^	1.000	1.000	0.0	119	0.00
34	i	1248_1br2nb	^	1.000	1.000	0.0	98	0.00
40	i	3262_1br2nb	^	1.000	1.000	0.0	104	0.00
41	l5	1232-1		0.029	0.029	0.0	102	0.00
42	l5	1232-2		0.029	0.027	6.9	98	0.00
43	l5	1232-3		0.055	0.051	7.3	98	0.00
44	l5	1232-4		0.023	0.023	0.0	104	0.00
45	l5	1232-5		0.017	0.017	0.0	105	0.00
46	l8	1262-1		0.066	0.057	13.6	90	0.00
47	l8	1262-2		0.090	0.080	11.1	92	0.00
48	l8	1262-3		0.084	0.074	11.9	91	0.00
49	l8	1262-4		0.159	0.137	13.8	90	0.00
50	l8	1262-5		0.056	0.050	10.7	94	0.00

Evaluate Continuing Calibration Report - Not Founds

4	l1	1016-1	213.805	0.000	E3	100.0#	0#	-1.58#
5	l1	1016-2	442.626	0.000	E3	100.0#	0#	-1.72#
6	l1	1016-3	0.957	0.000	E6	100.0#	0#	-1.91#
7	l1	1016-4	398.006	0.000	E3	100.0#	0#	-1.96#
8	l1	1016-5	419.705	0.000	E3	100.0#	0#	-2.13#
9	l2	1260-1	598.300	0.000	E3	100.0#	0#	-2.67#
10	l2	1260-2	0.923	0.000	E6	100.0#	0#	-2.80#
11	l2	1260-3	593.115	0.000	E3	100.0#	0#	-3.12#
12	l2	1260-4	1.285	0.000	E6	100.0#	0#	-3.27#
13	l2	1260-5	0.933	0.000	E6	100.0#	0#	-3.42#
15	l3	1221-2	0.00085	0.00000		100.0#	0#	-1.50#
16	l3	1221-3	0.00053	0.00000		100.0#	0#	-1.56#
17	l3	1221-4	0.00213	0.00000		100.0#	0#	-1.58#

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-21.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 22 Aug 2023   6:18 pm
Operator : pest2:kb
Sample   : cicv3262,42,, 11290
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:20:01 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
18 l4	1254-1	0.00299	0.00000	100.0#	0#	-2.29#
19 l4	1254-2	0.00552	0.00000	100.0#	0#	-2.41#
20 l4	1254-3	0.00569	0.00000	100.0#	0#	-2.59#
21 l4	1254-4	0.00432	0.00000	100.0#	0#	-2.72#
22 l4	1254-5	0.00604	0.00000	100.0#	0#	-2.94#
24 l6	1242-1	0.00120	0.00000	100.0#	0#	-1.58#
25 l6	1242-2	0.00245	0.00000	100.0#	0#	-1.72#
26 l6	1242-3	0.00547	0.00000	100.0#	0#	-1.91#
27 l6	1242-4	0.00238	0.00000	100.0#	0#	-1.96#
28 l6	1242-5	0.00179	0.00000	100.0#	0#	-2.31#
29 l9	1268-1	0.013	0.000	100.0#	0#	-3.44#
30 l9	1268-2	0.012	0.000	100.0#	0#	-3.46#
31 l9	1268-3	0.00927	0.00000	100.0#	0#	-3.56#
32 l9	1268-4	0.00402	0.00000	100.0#	0#	-3.75#
33 l9	1268-5	0.029	0.000	100.0#	0#	-3.90#
35 l7	1248-1	0.00330	0.00000	100.0#	0#	-1.91#
36 l7	1248-2	0.00417	0.00000	100.0#	0#	-2.03#
37 l7	1248-3	0.00378	0.00000	100.0#	0#	-2.13#
38 l7	1248-4	0.00343	0.00000	100.0#	0#	-2.31#
39 l7	1248-5	0.00308	0.00000	100.0#	0#	-2.32#

Signal #2

4 l1	1016-1	175.085	0.000 E3	100.0#	0#	-1.80#
5 l1	1016-2	382.384	0.000 E3	100.0#	0#	-1.97#
6 l1	1016-3	753.661	0.000 E3	100.0#	0#	-2.17#
7 l1	1016-4	304.398	0.000 E3	100.0#	0#	-2.23#
8 l1	1016-5	252.886	0.000 E3	100.0#	0#	-2.44#
9 l2	1260-1	467.154	0.000 E3	100.0#	0#	-3.05#
10 l2	1260-2	557.144	0.000 E3	100.0#	0#	-3.15#
11 l2	1260-3	465.738	0.000 E3	100.0#	0#	-3.55#

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-21.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 22 Aug 2023   6:18 pm
Operator : pest2:kb
Sample   : cicv3262,42,, 11290
Misc   : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:20:01 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
12 l2	1260-4	0.941	0.000 E6	100.0#	0#	-3.68#
13 l2	1260-5	653.870	0.000 E3	100.0#	0#	-3.88#
15 l3	1221-2	96.657	0.000 E3	100.0#	0#	-1.71#
16 l3	1221-3	62.096	0.000 E3	100.0#	0#	-1.77#
17 l3	1221-4	226.750	0.000 E3	100.0#	0#	-1.80#
18 l4	1254-1	364.434	0.000 E3	100.0#	0#	-2.64#
19 l4	1254-2	426.273	0.000 E3	100.0#	0#	-2.73#
20 l4	1254-3	639.592	0.000 E3	100.0#	0#	-2.95#
21 l4	1254-4	432.790	0.000 E3	100.0#	0#	-3.07#
22 l4	1254-5	591.909	0.000 E3	100.0#	0#	-3.34#
24 l6	1242-1	129.414	0.000 E3	100.0#	0#	-1.80#
25 l6	1242-2	282.758	0.000 E3	100.0#	0#	-1.97#
26 l6	1242-3	557.676	0.000 E3	100.0#	0#	-2.17#
27 l6	1242-4	227.729	0.000 E3	100.0#	0#	-2.23#
28 l6	1242-5	185.364	0.000 E3	100.0#	0#	-2.62#
29 l9	1268-1	1.147	0.000 E6	100.0#	0#	-3.87#
30 l9	1268-2	1.066	0.000 E6	100.0#	0#	-3.90#
31 l9	1268-3	834.030	0.000 E3	100.0#	0#	-4.04#
32 l9	1268-4	395.212	0.000 E3	100.0#	0#	-4.19#
33 l9	1268-5	2.486	0.000 E6	100.0#	0#	-4.38#
35 l7	1248-1	383.922	0.000 E3	100.0#	0#	-2.16#
36 l7	1248-2	255.942	0.000 E3	100.0#	0#	-2.31#
37 l7	1248-3	322.154	0.000 E3	100.0#	0#	-2.44#
38 l7	1248-4	364.968	0.000 E3	100.0#	0#	-2.61#
39 l7	1248-5	420.483	0.000 E3	100.0#	0#	-2.64#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-21.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 6:18 pm
Operator : pest2:kb
Sample : cicv3262,42,, 11290
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:20:01 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	1.156	1.225	235.5E6	171.9E6	25.000	25.000
14) i	2154_1br2nb	1.156	1.225	235.5E6	171.9E6	25.000	25.000
23) i	4268_1br2nb	1.156	1.225	235.5E6	171.9E6	25.000	25.000
34) i	1248_1br2nb	1.156	1.225	235.5E6	171.9E6	25.000	25.000
40) i	3262_1br2nb	1.156	1.225	235.5E6	171.9E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.441	1.600	296.6E6	194.9E6	21.434	19.101
	Spiked Amount 20.000	Range 30 - 150		Recovery =		107.17%	95.50%
3) s	Decachlorobi	4.010	4.533	463.5E6	260.6E6	41.408	36.197
	Spiked Amount 20.000	Range 30 - 150		Recovery =		207.04%#	180.99%#
	Target Compounds						
4) l1	1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1	1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1	1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1	1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1	1016-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1016-1			0	0	N.D.	N.D.
	Average 1016-1					0.000	0.000
9) l2	1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2	1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2	1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2	1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2	1260-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1260-1			0	0	N.D.	N.D.
	Average 1260-1					0.000	0.000
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d
17) l3	1221-4	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-21.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 6:18 pm
Operator : pest2:kb
Sample : cicv3262,42,, 11290
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:20:01 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum	1221-2			0	0	N.D.	N.D.
Average	1221-2					0.000	0.000
18) l4	1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4	1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4	1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4	1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4	1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1254-1			0	0	N.D.	N.D.
Average	1254-1					0.000	0.000
24) l6	1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6	1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6	1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6	1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6	1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1242-1			0	0	N.D.	N.D.
Average	1242-1					0.000	0.000
29) l9	1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9	1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9	1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9	1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9	1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1268-1			0	0	N.D.	N.D.
Average	1268-1					0.000	0.000
35) l7	1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7	1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7	1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7	1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7	1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1248-1			0	0	N.D.	N.D.

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-21.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 6:18 pm
Operator : pest2:kb
Sample : cicv3262,42,, 11290
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:20:01 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average	1248-1					0.000	0.000
41) l5	1232-1	1.580	1.802	71414204	49117581	267.742M3	244.353
42) l5	1232-2	1.722	1.974	54851730	47086395	234.621M4	236.305
43) l5	1232-3	1.913	2.176	121.7E6	88266072	244.672	235.356
44) l5	1232-4	1.968	2.235	53371740	38786049	255.964	249.133
45) l5	1232-5	2.319	2.621	38142395	29941238	253.198	252.240
Sum	1232-1			339.5E6	253.2E6	1256.196	1217.389
Average	1232-1					251.239	243.478
46) l8	1262-1	2.809	3.156	176.2E6	97701438	238.766	215.436M4
47) l8	1262-2	3.000	3.390	224.8E6	136.8E6	239.248	220.838M4
48) l8	1262-3	3.123	3.548	202.4E6	126.6E6	239.908	219.257M4
49) l8	1262-4	3.279	3.678	388.4E6	235.9E6	228.073	215.363M4
50) l8	1262-5	3.752	4.196	129.6E6	86221776	235.879M4	224.907
Sum	1262-1			1121.5E6	683.2E6	1181.874	1095.800
Average	1262-1					236.375	219.160

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	1262-1			1121.5E6	683.2E6	1181.874	1095.800
Average	1262-1					236.375	219.160

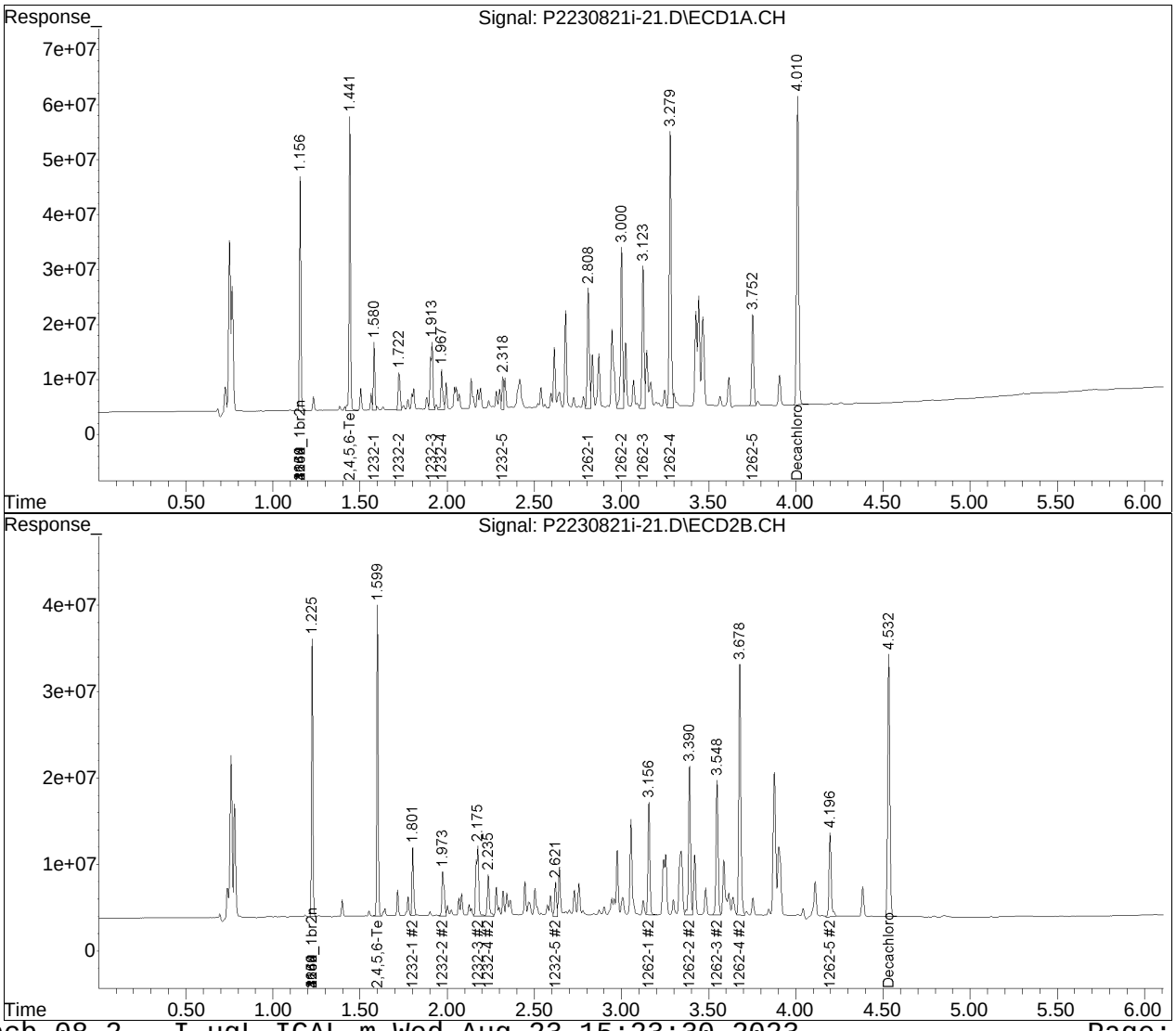
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-21.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 6:18 pm
Operator : pest2:kb
Sample : cicv3262,42,, 11290
Misc : WG1819306,, (Sig #1); ,,ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:20:01 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

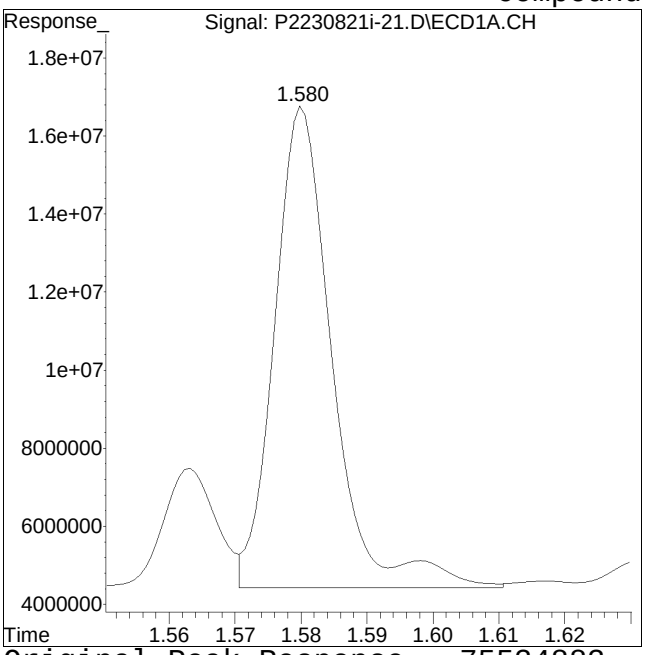
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

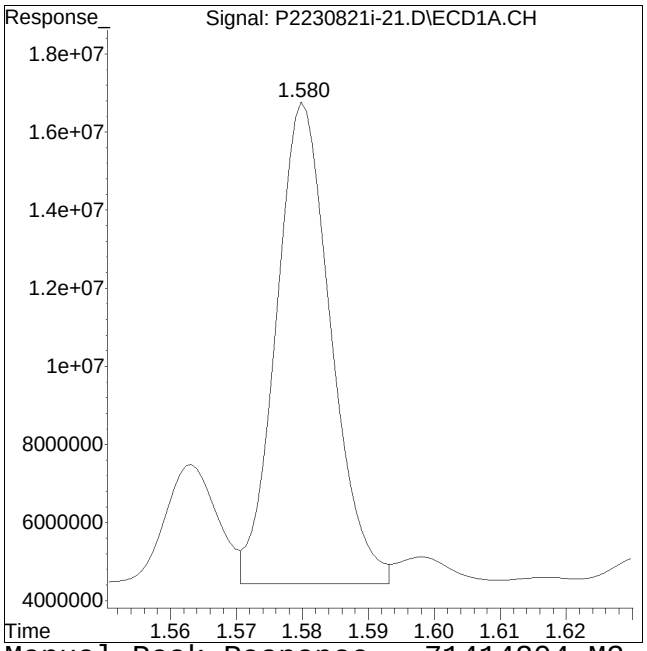


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-21.D Operator : pest2:kb
Date Inj'd : 8/22/2023 6:18 pm Instrument : Pest 2
Sample : cicv3262,42,, 11290 Quant Date : 8/23/2023 1:46 pm

Compound #41: 1232-1



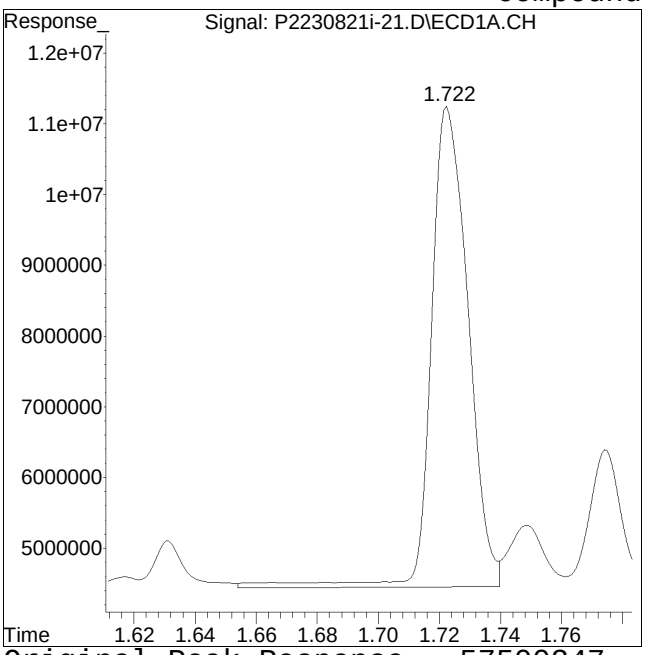


Original Peak Response = 75534883 Manual Peak Response = 71414204 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

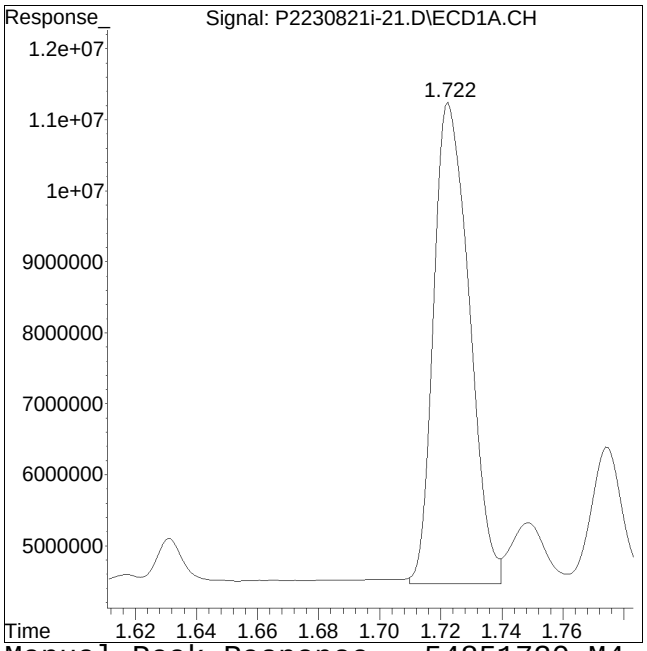
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-21.D Operator : pest2:kb
Date Inj'd : 8/22/2023 6:18 pm Instrument : Pest 2
Sample : cicv3262,42,, 11290 Quant Date : 8/23/2023 1:46 pm

Compound #42: 1232-2



Original Peak Response = 57500247



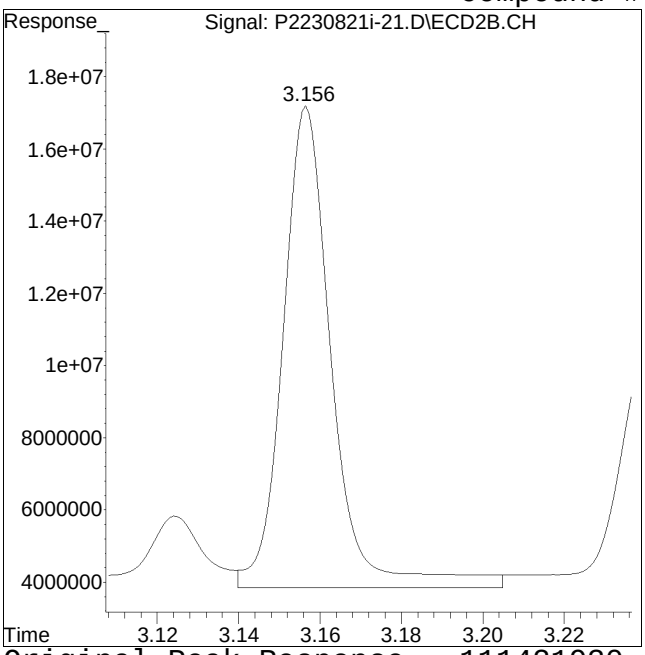
Manual Peak Response = 54851730 M4

M4 = Poor automated baseline construction.

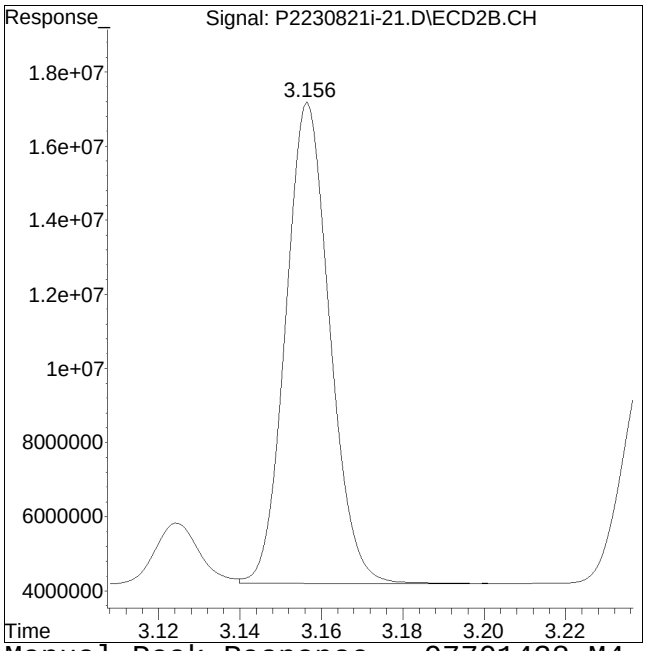
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-21.D Operator : pest2:kb
Date Inj'd : 8/22/2023 6:18 pm Instrument : Pest 2
Sample : cicv3262,42,, 11290 Quant Date : 8/23/2023 1:46 pm

Compound #97: 1262-1 #2



Original Peak Response = 111421930



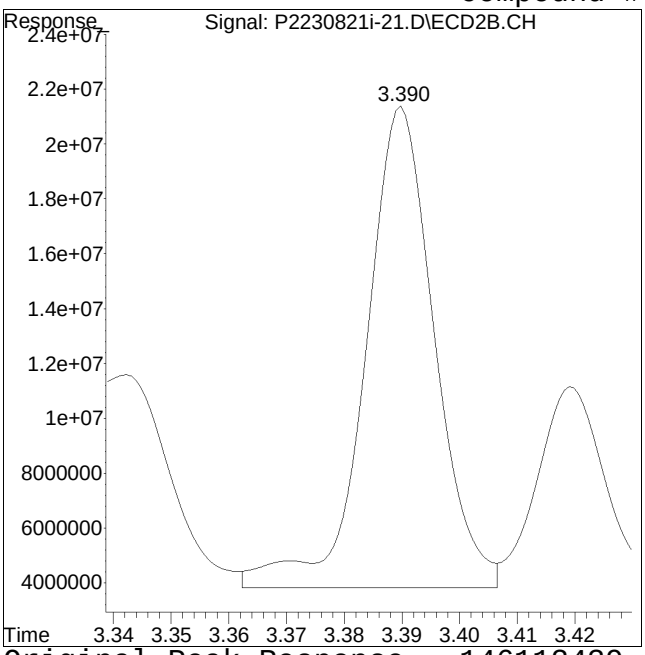
Manual Peak Response = 97701438 M4

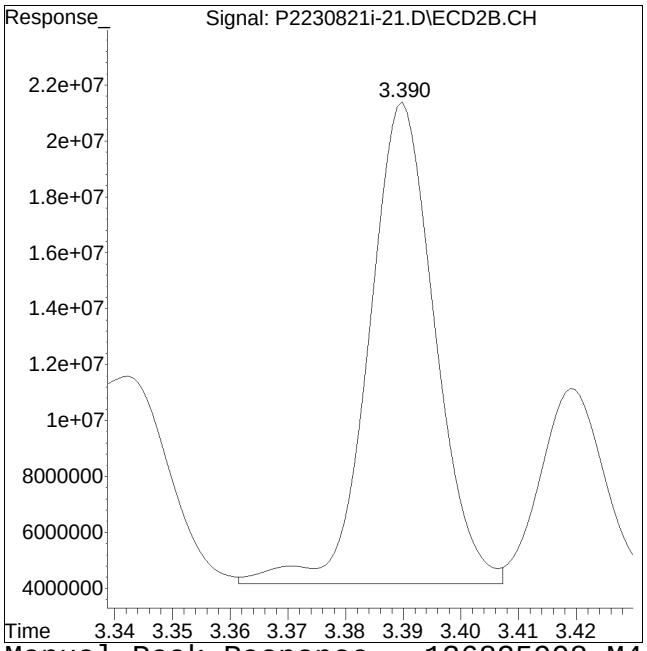
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-21.D Operator : pest2:kb
Date Inj'd : 8/22/2023 6:18 pm Instrument : Pest 2
Sample : cicv3262,42,, 11290 Quant Date : 8/23/2023 1:46 pm

Compound #98: 1262-2 #2



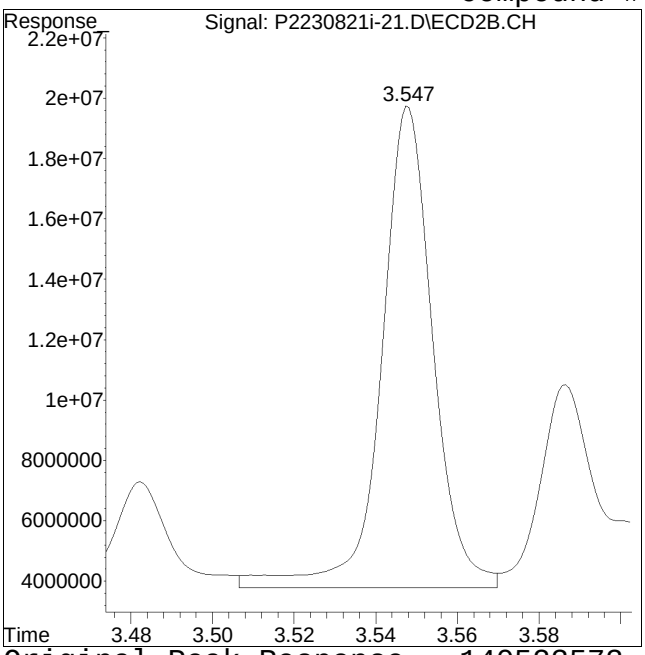


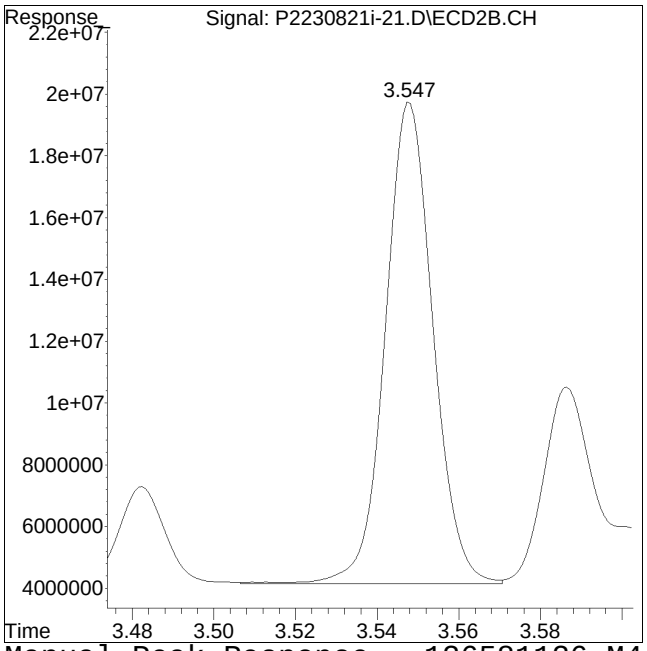
Original Peak Response = 146112439 Manual Peak Response = 136825998 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-21.D Operator : pest2:kb
Date Inj'd : 8/22/2023 6:18 pm Instrument : Pest 2
Sample : cicv3262,42,, 11290 Quant Date : 8/23/2023 1:46 pm

Compound #99: 1262-3 #2



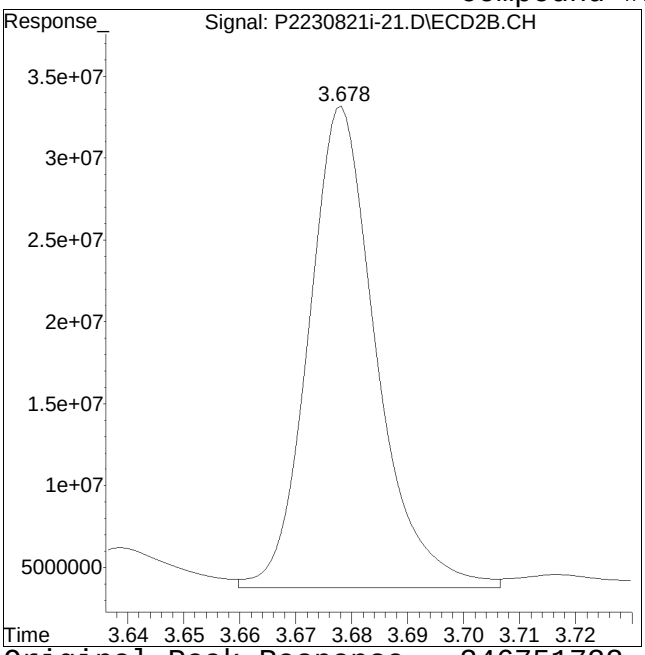


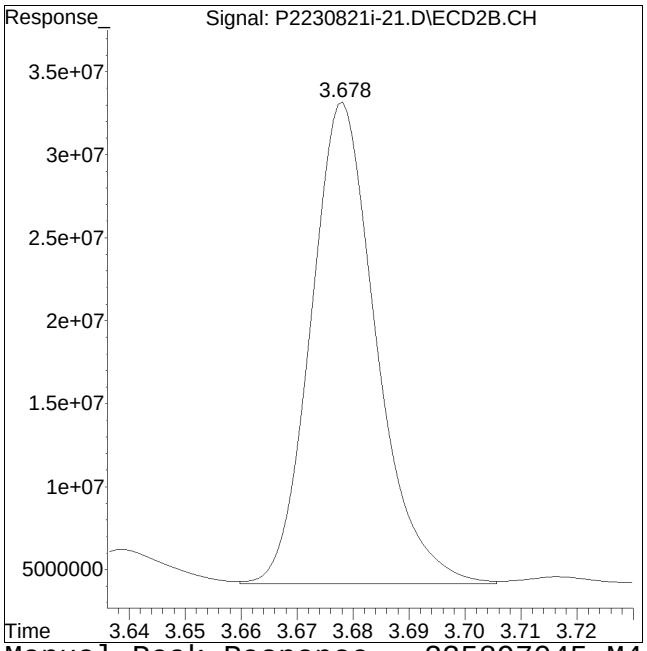
Original Peak Response = 140523573 Manual Peak Response = 126581126 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-21.D Operator : pest2:kb
Date Inj'd : 8/22/2023 6:18 pm Instrument : Pest 2
Sample : cicv3262,42,, 11290 Quant Date : 8/23/2023 1:46 pm

Compound #100: 1262-4 #2



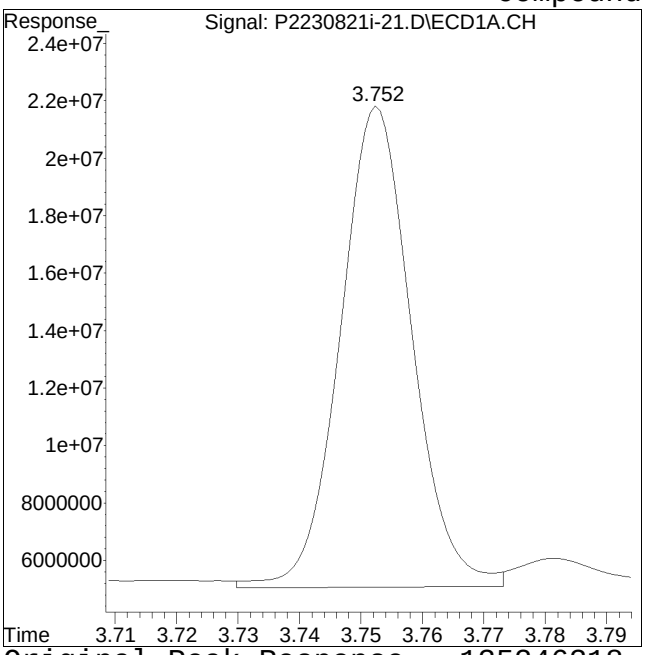


Original Peak Response = 246751722 Manual Peak Response = 235897045 M4
M4 = Poor automated baseline construction.

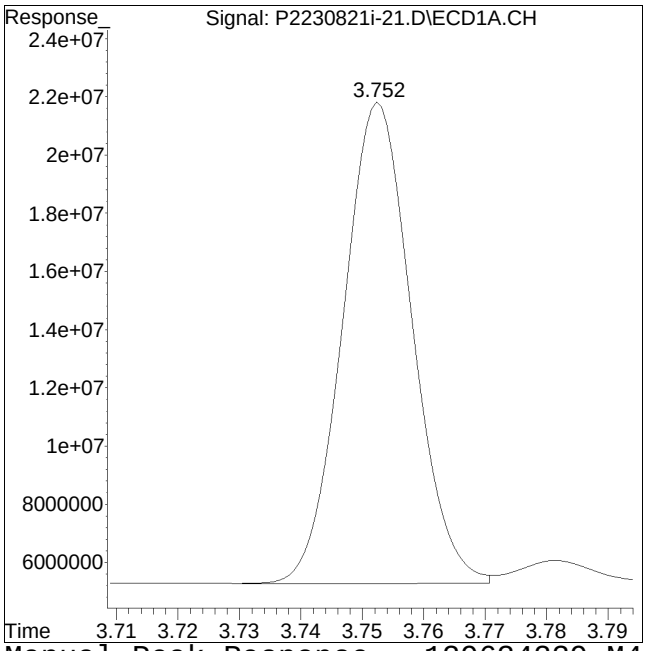
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-21.D Operator : pest2:kb
Date Inj'd : 8/22/2023 6:18 pm Instrument : Pest 2
Sample : cicv3262,42,, 11290 Quant Date : 8/23/2023 1:46 pm

Compound #50: 1262-5



Original Peak Response = 135246318



Manual Peak Response = 129634239 M4

M4 = Poor automated baseline construction.

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-22.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 22 Aug 2023   6:28 pm
Operator : pest2:kb
Sample   : cicv1248,42,, 11175
Misc   : WG1819306,,
ALS Vial : 22 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:21:08 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1660_1br2nb	^	1.000	1.000	0.0	102	0.00
2	s	2,4,5,6-Tetrachloro-m-xylen		1.469	1.345	8.4	90	0.00
3	s	Decachlorobiphenyl		1.188	1.122	5.6	96	0.00
14	i	2154_1br2nb	^	1.000	1.000	0.0	105	0.00
23	i	4268_1br2nb	^	1.000	1.000	0.0	112	0.00
34	i	1248_1br2nb	^	1.000	1.000	0.0	99	0.00
35	l7	1248-1		0.052	0.051	1.9	97	0.00
36	l7	1248-2		0.066	0.061	7.6	92	0.00
37	l7	1248-3		0.060	0.057	5.0	94	0.00
38	l7	1248-4		0.054	0.052	3.7	96	0.00
39	l7	1248-5		0.048	0.047	2.1	96	0.00
40	i	3262_1br2nb	^	1.000	1.000	0.0	108	0.00

Signal #2

1	i	1660_1br2nb	^	1.000	1.000	0.0	112	0.00
2	s	2,4,5,6-Tetrachloro-m-xyl		1.484	1.313	11.5	98	0.00
3	s	Decachlorobiphenyl		1.047	0.900	14.0	98	0.00
14	i	2154_1br2nb	^	1.000	1.000	0.0	114	0.00
23	i	4268_1br2nb	^	1.000	1.000	0.0	126	0.00
34	i	1248_1br2nb	^	1.000	1.000	0.0	104	0.00
35	l7	1248-1		0.055	0.052	5.5	98	0.00
36	l7	1248-2		0.037	0.034	8.1	97	0.00

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-22.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 22 Aug 2023   6:28 pm
Operator : pest2:kb
Sample   : cicv1248,42,, 11175
Misc   : WG1819306,,
ALS Vial : 22 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:21:08 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
37	l7	1248-3		0.046	0.043	6.5	97	0.00
38	l7	1248-4		0.052	0.049	5.8	98	0.00
39	l7	1248-5		0.060	0.056	6.7	97	0.00
40	i	3262_1br2nb	^	1.000	1.000	0.0	110	0.00

Evaluate Continuing Calibration Report - Not Founds

4	l1	1016-1		213.805	0.000 E3	100.0#	0#	-1.58#
5	l1	1016-2		442.626	0.000 E3	100.0#	0#	-1.72#
6	l1	1016-3		0.957	0.000 E6	100.0#	0#	-1.91#
7	l1	1016-4		398.006	0.000 E3	100.0#	0#	-1.96#
8	l1	1016-5		419.705	0.000 E3	100.0#	0#	-2.13#
9	l2	1260-1		598.300	0.000 E3	100.0#	0#	-2.67#
10	l2	1260-2		0.923	0.000 E6	100.0#	0#	-2.80#
11	l2	1260-3		593.115	0.000 E3	100.0#	0#	-3.12#
12	l2	1260-4		1.285	0.000 E6	100.0#	0#	-3.27#
13	l2	1260-5		0.933	0.000 E6	100.0#	0#	-3.42#
15	l3	1221-2		0.00085	0.00000	100.0#	0#	-1.50#
16	l3	1221-3		0.00053	0.00000	100.0#	0#	-1.56#
17	l3	1221-4		0.00213	0.00000	100.0#	0#	-1.58#
18	l4	1254-1		0.00299	0.00000	100.0#	0#	-2.29#
19	l4	1254-2		0.00552	0.00000	100.0#	0#	-2.41#
20	l4	1254-3		0.00569	0.00000	100.0#	0#	-2.59#
21	l4	1254-4		0.00432	0.00000	100.0#	0#	-2.72#
22	l4	1254-5		0.00604	0.00000	100.0#	0#	-2.94#
24	l6	1242-1		0.00120	0.00000	100.0#	0#	-1.58#
25	l6	1242-2		0.00245	0.00000	100.0#	0#	-1.72#
26	l6	1242-3		0.00547	0.00000	100.0#	0#	-1.91#
27	l6	1242-4		0.00238	0.00000	100.0#	0#	-1.96#
28	l6	1242-5		0.00179	0.00000	100.0#	0#	-2.31#

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-22.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 22 Aug 2023   6:28 pm
Operator : pest2:kb
Sample   : cicv1248,42,, 11175
Misc   : WG1819306,,
ALS Vial : 22 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:21:08 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

	Compound	AvgRF	CCRF		%Dev	Area%	Dev(Min)
29 l9	1268-1	0.013	0.000		100.0#	0#	-3.44#
30 l9	1268-2	0.012	0.000		100.0#	0#	-3.46#
31 l9	1268-3	0.00927	0.00000		100.0#	0#	-3.56#
32 l9	1268-4	0.00402	0.00000		100.0#	0#	-3.75#
33 l9	1268-5	0.029	0.000		100.0#	0#	-3.90#
41 l5	1232-1	0.00165	0.00000		100.0#	0#	-1.58#
42 l5	1232-2	0.00145	0.00000		100.0#	0#	-1.72#
43 l5	1232-3	0.00308	0.00000		100.0#	0#	-1.91#
44 l5	1232-4	0.00129	0.00000		100.0#	0#	-1.96#
45 l5	1232-5	0.00093	0.00000		100.0#	0#	-2.31#
46 l8	1262-1	0.00457	0.00000		100.0#	0#	-2.80#
47 l8	1262-2	0.00582	0.00000		100.0#	0#	-3.00#
48 l8	1262-3	0.00522	0.00000		100.0#	0#	-3.12#
49 l8	1262-4	0.011	0.000		100.0#	0#	-3.27#
50 l8	1262-5	0.00340	0.00000		100.0#	0#	-3.75#
Signal #2							
4 l1	1016-1	175.085	0.000	E3	100.0#	0#	-1.80#
5 l1	1016-2	382.384	0.000	E3	100.0#	0#	-1.97#
6 l1	1016-3	753.661	0.000	E3	100.0#	0#	-2.17#
7 l1	1016-4	304.398	0.000	E3	100.0#	0#	-2.23#
8 l1	1016-5	252.886	0.000	E3	100.0#	0#	-2.44#
9 l2	1260-1	467.154	0.000	E3	100.0#	0#	-3.05#
10 l2	1260-2	557.144	0.000	E3	100.0#	0#	-3.15#
11 l2	1260-3	465.738	0.000	E3	100.0#	0#	-3.55#
12 l2	1260-4	0.941	0.000	E6	100.0#	0#	-3.68#
13 l2	1260-5	653.870	0.000	E3	100.0#	0#	-3.88#
15 l3	1221-2	96.657	0.000	E3	100.0#	0#	-1.71#
16 l3	1221-3	62.096	0.000	E3	100.0#	0#	-1.77#
17 l3	1221-4	226.750	0.000	E3	100.0#	0#	-1.80#

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-22.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 22 Aug 2023   6:28 pm
Operator : pest2:kb
Sample   : cicv1248,42,, 11175
Misc   : WG1819306,,
ALS Vial : 22 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:21:08 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

	Compound	AvgRF	CCRF	%Dev	Area%	Dev(Min)
18 l4	1254-1	364.434	0.000 E3	100.0#	0#	-2.64#
19 l4	1254-2	426.273	0.000 E3	100.0#	0#	-2.73#
20 l4	1254-3	639.592	0.000 E3	100.0#	0#	-2.95#
21 l4	1254-4	432.790	0.000 E3	100.0#	0#	-3.07#
22 l4	1254-5	591.909	0.000 E3	100.0#	0#	-3.34#
24 l6	1242-1	129.414	0.000 E3	100.0#	0#	-1.80#
25 l6	1242-2	282.758	0.000 E3	100.0#	0#	-1.97#
26 l6	1242-3	557.676	0.000 E3	100.0#	0#	-2.17#
27 l6	1242-4	227.729	0.000 E3	100.0#	0#	-2.23#
28 l6	1242-5	185.364	0.000 E3	100.0#	0#	-2.62#
29 l9	1268-1	1.147	0.000 E6	100.0#	0#	-3.87#
30 l9	1268-2	1.066	0.000 E6	100.0#	0#	-3.90#
31 l9	1268-3	834.030	0.000 E3	100.0#	0#	-4.04#
32 l9	1268-4	395.212	0.000 E3	100.0#	0#	-4.19#
33 l9	1268-5	2.486	0.000 E6	100.0#	0#	-4.38#
41 l5	1232-1	193.078	0.000 E3	100.0#	0#	-1.80#
42 l5	1232-2	191.398	0.000 E3	100.0#	0#	-1.97#
43 l5	1232-3	360.232	0.000 E3	100.0#	0#	-2.17#
44 l5	1232-4	149.540	0.000 E3	100.0#	0#	-2.23#
45 l5	1232-5	114.017	0.000 E3	100.0#	0#	-2.62#
46 l8	1262-1	435.610	0.000 E3	100.0#	0#	-3.15#
47 l8	1262-2	595.127	0.000 E3	100.0#	0#	-3.39#
48 l8	1262-3	554.537	0.000 E3	100.0#	0#	-3.54#
49 l8	1262-4	1.052	0.000 E6	100.0#	0#	-3.67#
50 l8	1262-5	368.238	0.000 E3	100.0#	0#	-4.19#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-22.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 6:28 pm
Operator : pest2:kb
Sample : cicv1248,42,, 11175
Misc : WG1819306,,
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:21:08 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	1.155	1.225	259.0E6	182.0E6	25.000	25.000
14) i	2154_1br2nb	1.155	1.225	259.0E6	182.0E6	25.000	25.000
23) i	4268_1br2nb	1.155	1.225	259.0E6	182.0E6	25.000	25.000
34) i	1248_1br2nb	1.155	1.225	259.0E6	182.0E6	25.000	25.000
40) i	3262_1br2nb	1.155	1.225	259.0E6	182.0E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.438	1.598	222.9E6	153.0E6	14.654	14.154
	Spiked Amount 20.000	Range 30 - 150		Recovery =		73.27%	70.77%
3) s	Decachlorobi	4.003	4.526	372.0E6	209.8E6	30.224M4	27.510
	Spiked Amount 20.000	Range 30 - 150		Recovery =		151.12%#	137.55%
	Target Compounds						
4) l1	1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1	1016-2	0.000	0.000	0	0	N.D. d	N.D. d
6) l1	1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1	1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1	1016-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1016-1			0	0	N.D.	N.D.
	Average 1016-1					0.000	0.000
9) l2	1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2	1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2	1260-3	0.000	0.000	0	0	N.D. d	N.D. d
12) l2	1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2	1260-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1260-1			0	0	N.D.	N.D.
	Average 1260-1					0.000	0.000
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d
17) l3	1221-4	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-22.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 6:28 pm
Operator : pest2:kb
Sample : cicv1248,42,, 11175
Misc : WG1819306,,
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:21:08 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum	1221-2			0	0	N.D.	N.D.
Average	1221-2					0.000	0.000
18) l4	1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4	1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4	1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4	1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4	1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1254-1			0	0	N.D.	N.D.
Average	1254-1					0.000	0.000
24) l6	1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6	1242-2	0.000	0.000	0	0	N.D. d	N.D. d
26) l6	1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6	1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6	1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1242-1			0	0	N.D.	N.D.
Average	1242-1					0.000	0.000
29) l9	1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9	1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9	1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9	1268-4	0.000	0.000	0	0	N.D. d	N.D. d
33) l9	1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1268-1			0	0	N.D.	N.D.
Average	1268-1					0.000	0.000
35) l7	1248-1	1.898	2.163	132.3E6	94500712	245.392	236.044
36) l7	1248-2	2.034	2.316	158.1E6	62057922	232.186M1	232.518
37) l7	1248-3	2.130	2.441	146.9E6	78244055	238.167	232.910
38) l7	1248-4	2.312	2.617	135.6E6	89466798	242.189	235.076
39) l7	1248-5	2.325	2.640	122.4E6	101.7E6	243.823	231.879
Sum	1248-1			695.3E6	425.9E6	1201.756	1168.427

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-22.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 6:28 pm
Operator : pest2:kb
Sample : cicv1248,42,, 11175
Misc : WG1819306,,
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:21:08 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average	1248-1					240.351	233.685
41) l5	1232-1	0.000	0.000	0	0	N.D. d	N.D. d
42) l5	1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5	1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5	1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5	1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1232-1			0	0	N.D.	N.D.
Average	1232-1					0.000	0.000
46) l8	1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8	1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8	1262-3	0.000	0.000	0	0	N.D. d	N.D. d
49) l8	1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8	1262-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	1262-1			0	0	N.D.	N.D.
Average	1262-1					0.000	0.000

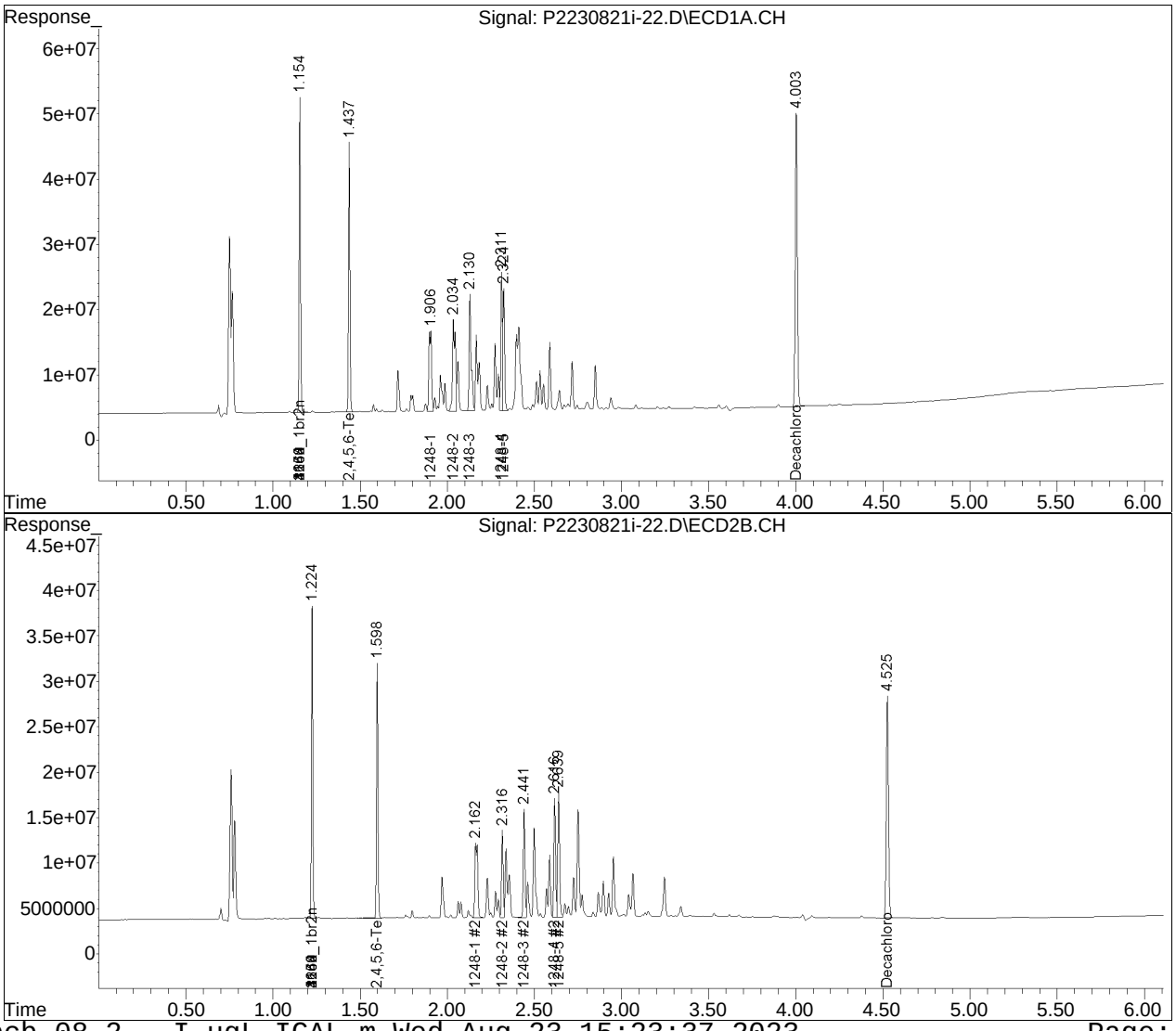
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PCB\Pest2\2023\230821I\
Data File : P2230821i-22.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 22 Aug 2023 6:28 pm
Operator : pest2:kb
Sample : cicv1248,42,, 11175
Misc : WG1819306,,
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Aug 23 14:21:08 2023
Quant Method : I:\PCB\Pest2\2023\230821I\P2_pcb_08_21_23_LVI_ugL_ICAL.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

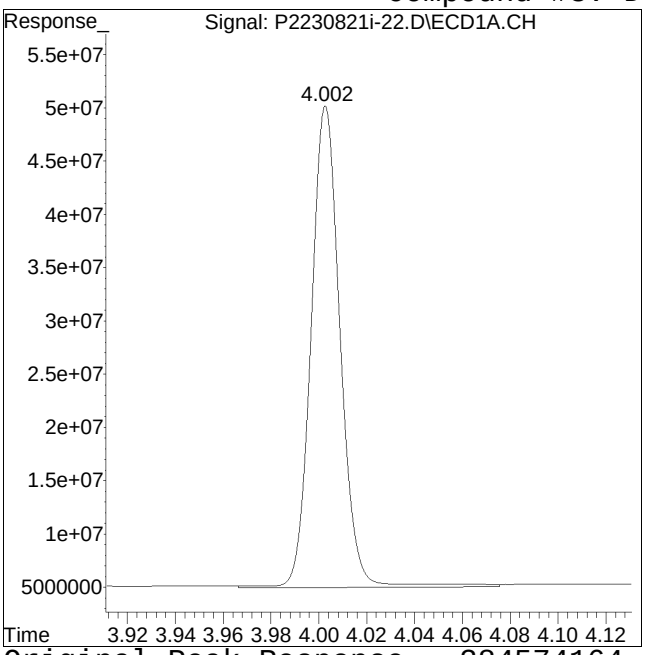
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



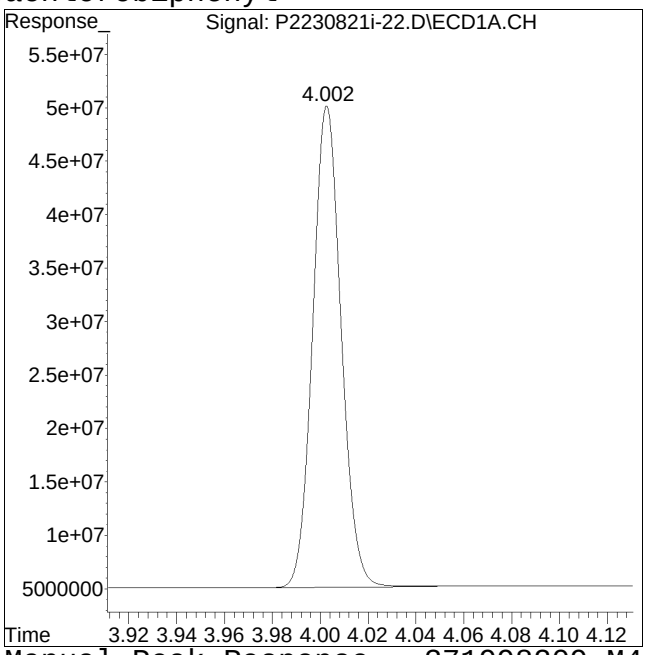
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-22.D Operator : pest2:kb
Date Inj'd : 8/22/2023 6:28 pm Instrument : Pest 2
Sample : cicv1248,42,, 11175 Quant Date : 8/23/2023 2:20 pm

Compound #3: Decachlorobiphenyl



Original Peak Response = 384574164



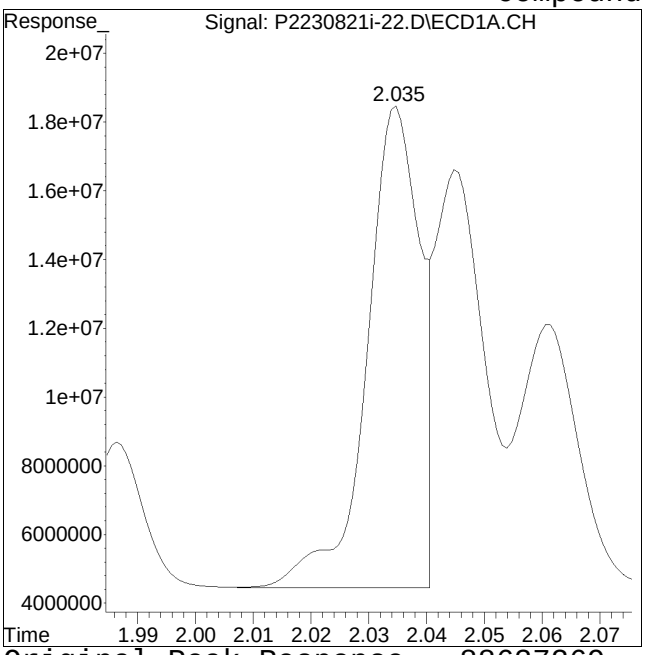
Manual Peak Response = 371998209 M4

M4 = Poor automated baseline construction.

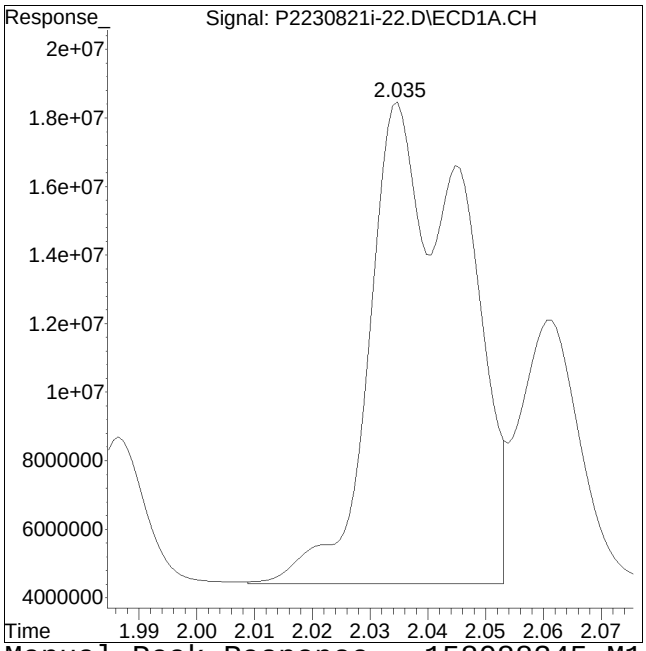
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230821I\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230821i-22.D Operator : pest2:kb
Date Inj'd : 8/22/2023 6:28 pm Instrument : Pest 2
Sample : cicv1248,42,, 11175 Quant Date : 8/23/2023 2:20 pm

Compound #36: 1248-2



Original Peak Response = 88637269



Manual Peak Response = 158088345 M1

M1 = Split or tailing peak, auto integration stopped early resulting in false low area count.

Continuing Calibration

Calibration Verification Summary
Form 7
PCBs

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST2		**Calibration Date**	: 09/05/23 13:48	
Lab File ID	: P2230905a-27		**Init. Calib. Date(s)**	: 08/21/23	08/22/23
Sample No	: WG1823542-5		**Init. Calib. Times**	: 20:35	18:06
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1660_1br2nb	1	1	-	0	20	109	0
2,4,5,6-Tetrachloro-m-xylen	1.469	1.655	-	-12.7	20	118	0
Decachlorobiphenyl	1.188	1.461	-	-23*	20	134	0
1016-1	0.025	0.024	-	4	20	103	0
1016-2	0.052	0.047	-	9.6	20	98	0
1016-3	0.114	0.106	-	7	20	99	0
1016-4	0.047	0.046	-	2.1	20	104	0
1016-5	0.05	0.044	-	12	20	95	0
1260-1	0.071	0.065	-	8.5	20	98	0
1260-2	0.11	0.106	-	3.6	20	104	0
1260-3	0.071	0.055	-	22.5*	20	83	0
1260-4	0.153	0.123	-	19.6	20	84	0
1260-5	0.111	0.095	-	14.4	20	94	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
PCBs

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST2		**Calibration Date**	: 09/05/23 13:48	
Lab File ID	: P2230905a-27		**Init. Calib. Date(s)**	: 08/21/23	08/22/23
Sample No	: WG1823542-5		**Init. Calib. Times**	: 20:35	18:06
Channel	: B				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1660_1br2nb #2	1	1	-	0	20	109	0
2,4,5,6-Tetrachloro-m-xylen	1.484	1.812	-	-22.1*	20	132	0
Decachlorobiphenyl #2	1.047	1.407	-	-34.4*	20	150	0
1016-1 #2	0.027	0.025	-	7.4	20	102	0
1016-2 #2	0.059	0.058	-	1.7	20	109	0
1016-3 #2	0.116	0.121	-	-4.3	20	113	0
1016-4 #2	0.047	0.051	-	-8.5	20	117	0
1016-5 #2	0.039	0.035	-	10.3	20	100	0
1260-1 #2	0.072	0.071	-	1.4	20	107	0
1260-2 #2	0.086	0.088	-	-2.3	20	112	0
1260-3 #2	0.072	0.069	-	4.2	20	106	0
1260-4 #2	0.145	0.134	-	7.6	20	101	0
1260-5 #2	0.101	0.1	-	1	20	108	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
PCBs

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST2		**Calibration Date**	: 09/05/23 19:40	
Lab File ID	: P2230905a-51		**Init. Calib. Date(s)**	: 08/21/23	08/22/23
Sample No	: WG1823542-9		**Init. Calib. Times**	: 20:35	18:06
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1660_1br2nb	1	1	-	0	20	121	0
2,4,5,6-Tetrachloro-m-xylen	1.469	1.681	-	-14.4	20	133	0
Decachlorobiphenyl	1.188	1.426	-	-20	20	145	0
1016-1	0.025	0.022	-	12	20	106	0
1016-2	0.052	0.046	-	11.5	20	106	0
1016-3	0.114	0.108	-	5.3	20	112	0
1016-4	0.047	0.043	-	8.5	20	108	0
1016-5	0.05	0.043	-	14	20	103	0
1260-1	0.071	0.064	-	9.9	20	106	0
1260-2	0.11	0.102	-	7.3	20	111	0
1260-3	0.071	0.054	-	23.9*	20	90	0
1260-4	0.153	0.122	-	20.3*	20	93	0
1260-5	0.111	0.091	-	18	20	99	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
PCBs

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST2		**Calibration Date**	: 09/05/23 19:40	
Lab File ID	: P2230905a-51		**Init. Calib. Date(s)**	: 08/21/23	08/22/23
Sample No	: WG1823542-9		**Init. Calib. Times**	: 20:35	18:06
Channel	: B				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1660_1br2nb #2	1	1	-	0	20	128	0
2,4,5,6-Tetrachloro-m-xylen	1.484	1.647	-	-11	20	140	0
Decachlorobiphenyl #2	1.047	1.218	-	-16.3	20	151	0
1016-1 #2	0.027	0.022	-	18.5	20	108	0
1016-2 #2	0.059	0.057	-	3.4	20	126	0
1016-3 #2	0.116	0.109	-	6	20	119	0
1016-4 #2	0.047	0.045	-	4.3	20	123	0
1016-5 #2	0.039	0.033	-	15.4	20	112	0
1260-1 #2	0.072	0.056	-	22.2*	20	98	0
1260-2 #2	0.086	0.078	-	9.3	20	115	0
1260-3 #2	0.072	0.061	-	15.3	20	110	0
1260-4 #2	0.145	0.117	-	19.3	20	103	0
1260-5 #2	0.101	0.086	-	14.9	20	108	0

*** Value outside of QC limits.**

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-27.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 1:48 pm
Operator : pest2:lmr
Sample : wg1823542-5,42,, +1660 pp11282 lvi (Sig #1); +1660 pp11282 lvi (Sig #2)
Misc : wg1823542,,ical20286 (Sig #1); wg1823542,WG1823483,ical20286 (Sig #2)
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 11:03:36 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Min. RRF : 0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20% Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1660_1br2nb	^	1.000	1.000	0.0	109	0.00
2	s	2,4,5,6-Tetrachloro-m-xylen		1.469	1.655	-12.7	118	0.00
3	s	Decachlorobiphenyl		1.188	1.461	-23.0#	134	0.00
4	l1	1016-1		0.025	0.024	4.0	103	0.00
5	l1	1016-2		0.052	0.047	9.6	98	0.00
6	l1	1016-3		0.114	0.106	7.0	99	0.00
7	l1	1016-4		0.047	0.046	2.1	104	0.00
8	l1	1016-5		0.050	0.044	12.0	95	0.00
9	l2	1260-1		0.071	0.065	8.5	98	0.00
10	l2	1260-2		0.110	0.106	3.6	104	0.00
11	l2	1260-3		0.071	0.055	22.5#	83	0.00
12	l2	1260-4		0.153	0.123	19.6	84	0.00
13	l2	1260-5		0.111	0.095	14.4	94	0.00
52	i	1660_1br2nb #2	^	1.000	1.000	0.0	109	0.00
53	s	2,4,5,6-Tetrachloro-m-xylen		1.484	1.812	-22.1#	132	0.00
54	s	Decachlorobiphenyl #2		1.047	1.407	-34.4#	150	0.00
55	l1	1016-1 #2		0.027	0.025	7.4	102	0.00
56	l1	1016-2 #2		0.059	0.058	1.7	109	0.00
57	l1	1016-3 #2		0.116	0.121	-4.3	113	0.00
58	l1	1016-4 #2		0.047	0.051	-8.5	117	0.00
59	l1	1016-5 #2		0.039	0.035	10.3	100	0.00
60	l2	1260-1 #2		0.072	0.071	1.4	107	0.00
61	l2	1260-2 #2		0.086	0.088	-2.3	112	0.00
62	l2	1260-3 #2		0.072	0.069	4.2	106	0.00
63	l2	1260-4 #2		0.145	0.134	7.6	101	0.00
64	l2	1260-5 #2		0.101	0.100	1.0	108	0.00

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-27.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 05 Sep 2023   1:48 pm
Operator : pest2:lmr
Sample   : wg1823542-5,42,, +1660 pp11282 lvi (Sig #1); +1660 pp11282 lvi (Sig #2)
Misc   : wg1823542,,ical20286 (Sig #1); wg1823542,WG1823483,ical20286 (Sig #2)
ALS Vial : 27 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 11:03:36 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

Compound	AvgRF	CCRF	%Dev	Area% Dev(Min)

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-27.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 1:48 pm
Operator : pest2:lmr
Sample : wg1823542-5,42,, +1660 pp11282 lvi (Sig #1); +1660 pp11282 lvi (Sig #2)
Misc : wg1823542,,ical20286 (Sig #1); wg1823542,WG1823483,ical20286 (Sig #2)
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 11:03:36 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : 1660 - 1660

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	1.154	1.223	277.9E6	177.3E6	25.000M4	25.000M4
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.438	1.598	294.3E6	205.6E6	18.031M4	19.531M4
	Spiked Amount	20.000	Range 30 - 150		Recovery =	90.16%	97.65%
3) s	Decachlorobi	4.002	4.535	519.5E6	319.3E6	39.337	42.994
	Spiked Amount	20.000	Range 30 - 150		Recovery =	196.69%#	214.97%#
	Target Compounds						
4) l1	1016-1	1.576	1.800	66551151	43917391	236.560M4	230.119M4
5) l1	1016-2	1.719	1.973	131.5E6	102.5E6	226.166M3	245.977M4
6) l1	1016-3	1.909	2.174	294.0E6	214.5E6	232.302M4	260.689M4
7) l1	1016-4	1.964	2.234	127.7E6	90222752	242.663M4	271.412M4
8) l1	1016-5	2.132	2.444	122.5E6	62296868	221.688M4	225.968M4
	Sum 1016-1			742.3E6	513.5E6	1159.378	1234.163
	Average 1016-1					231.876	246.833
9) l2	1260-1	2.673	3.052	181.4E6	125.1E6	229.161M4	245.186M4
10) l2	1260-2	2.803	3.154	293.8E6	156.4E6	241.192M4	257.095M4
11) l2	1260-3	3.116	3.545	154.1E6	121.6E6	196.090M4	239.228M4

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-27.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 1:48 pm
Operator : pest2:lmr
Sample : wg1823542-5,42,, +1660 pp11282 lvi (Sig #1); +1660 pp11282 lvi (Sig #2)
Misc : wg1823542,,ical20286 (Sig #1); wg1823542,WG1823483,ical20286 (Sig #2)
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 11:03:36 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : 1660 - 1660

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
12) l2 1260-4	3.271	3.676	341.7E6	237.1E6	200.361M4	230.627M4
13) l2 1260-5	3.418	3.877	264.9E6	177.3E6	215.547M4	248.362M4
Sum 1260-1			1236.0E6	817.5E6	1082.351	1220.498
Average 1260-1					216.470	244.100
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum 1262-1			0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-27.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 1:48 pm
Operator : pest2:lmr
Sample : wg1823542-5,42,, +1660 pp11282 lvi (Sig #1); +1660 pp11282 lvi (Sig #2)
Misc : wg1823542,,ical20286 (Sig #1); wg1823542,WG1823483,ical20286 (Sig #2)
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 11:03:36 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : 1660 - 1660

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average 1262-1					0.000	0.000

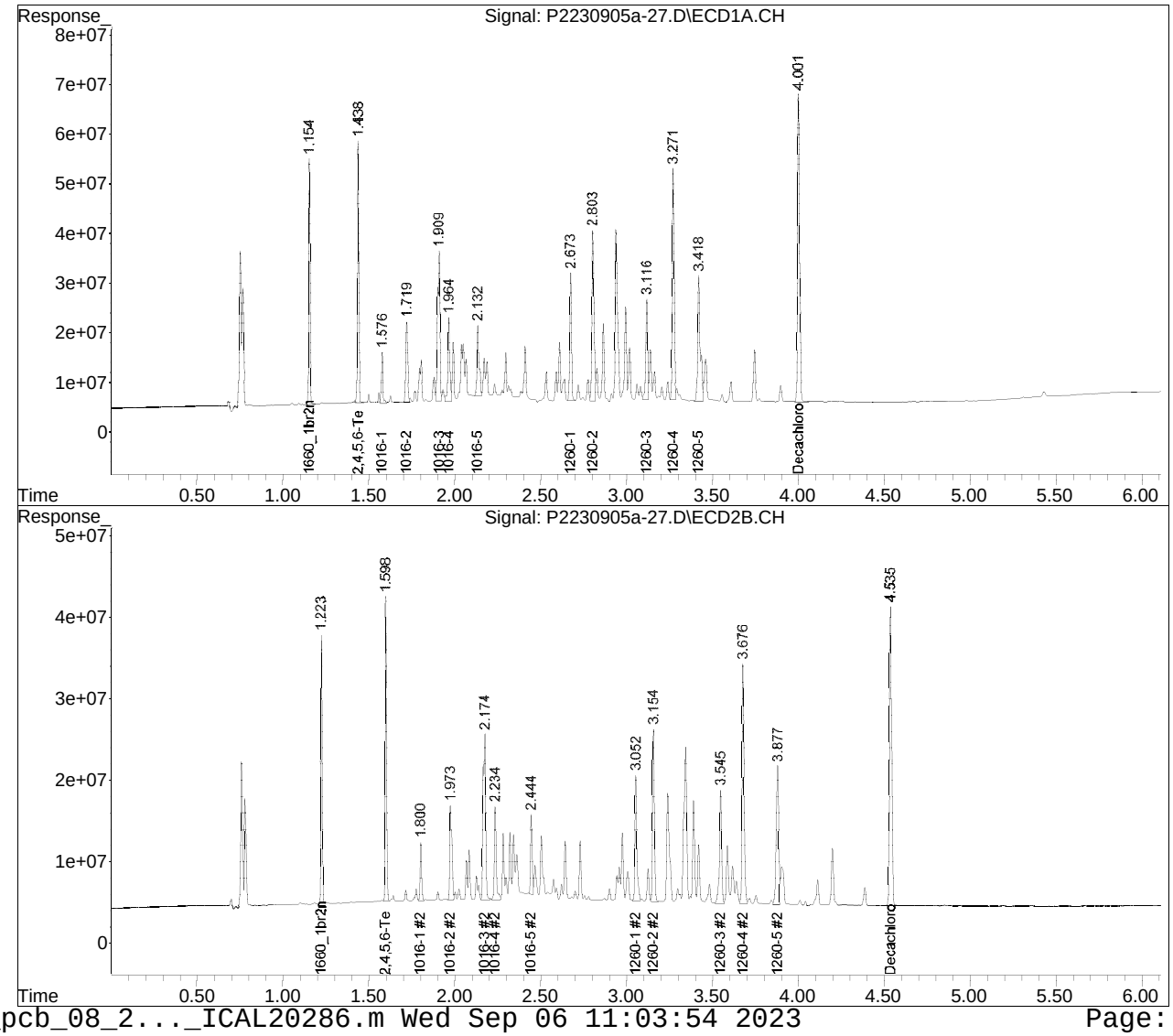
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : 1660 - 1660ation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-27.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 1:48 pm
Operator : pest2:lmr
Sample : wg1823542-5,42,, +1660 pp11282 lvi (Sig #1); +1660 pp11282 lvi (Si
Misc : wg1823542,,ical20286 (Sig #1); wg1823542,WG1823483,ical20286 (Sig
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 11:03:36 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

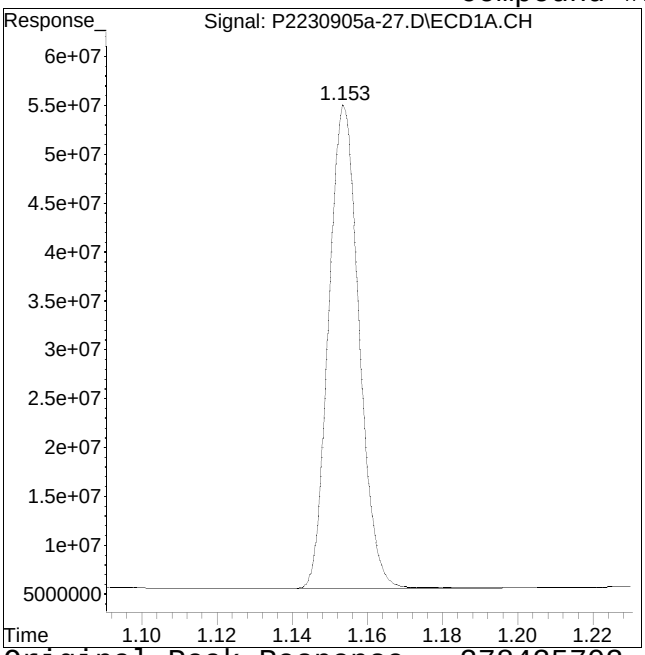
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

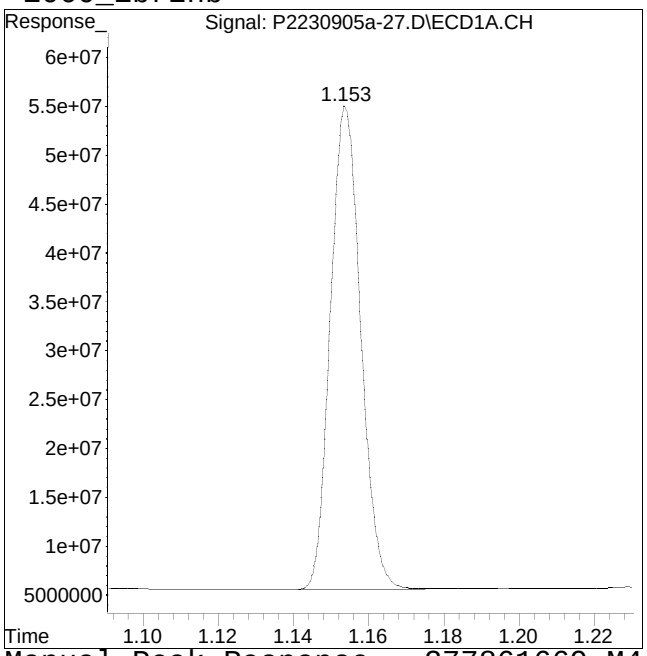


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #1: 1660_1br2nb



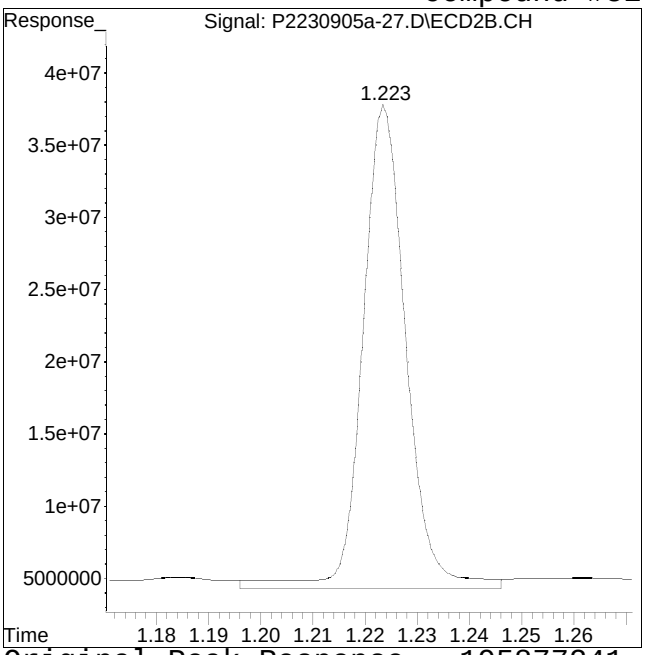


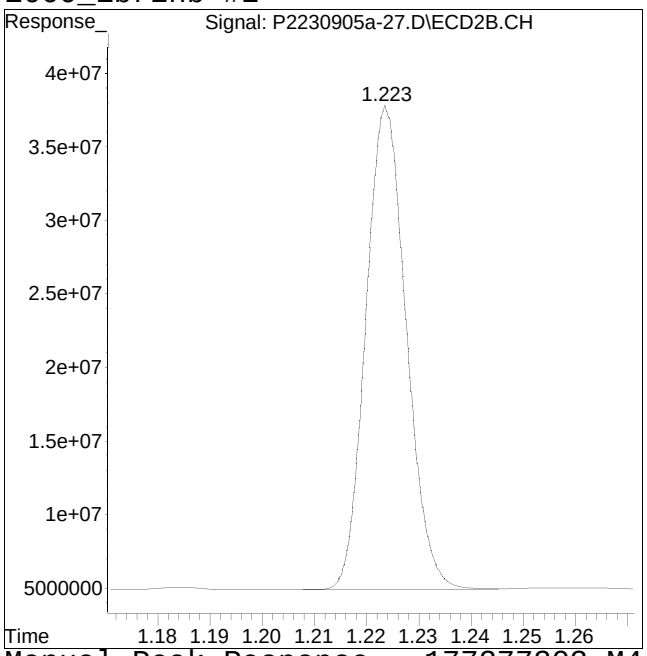
Original Peak Response = 278435703 Manual Peak Response = 277861669 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #52: 1660_1br2nb #2



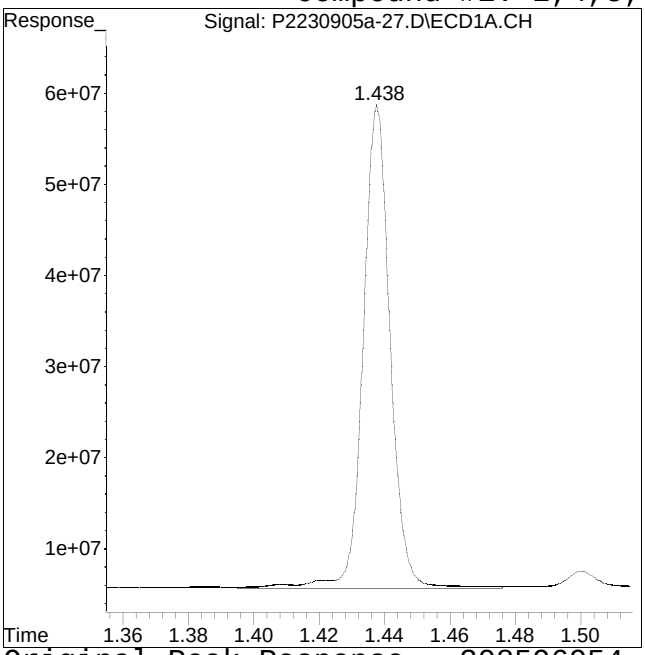


Original Peak Response = 195877241 Manual Peak Response = 177277303 M4
M4 = Poor automated baseline construction.

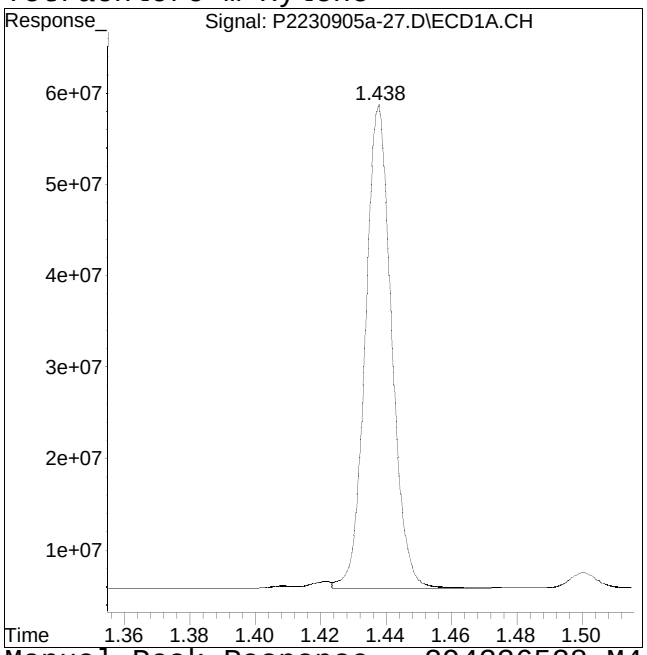
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



Original Peak Response = 308596954

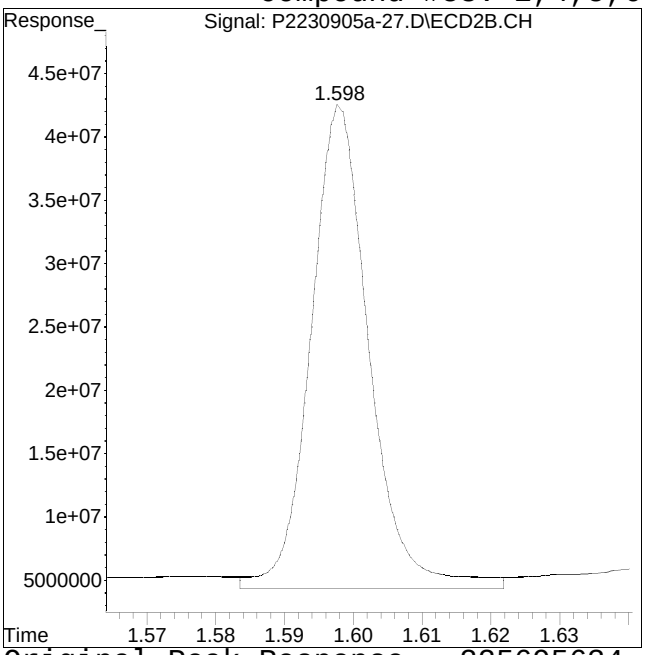


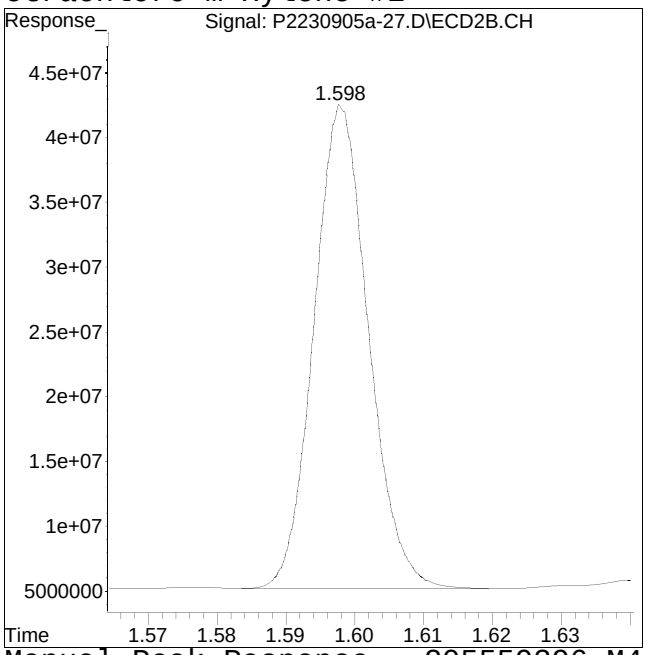
Manual Peak Response = 294336528 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #53: 2,4,5,6-Tetrachloro-m-xylene #2



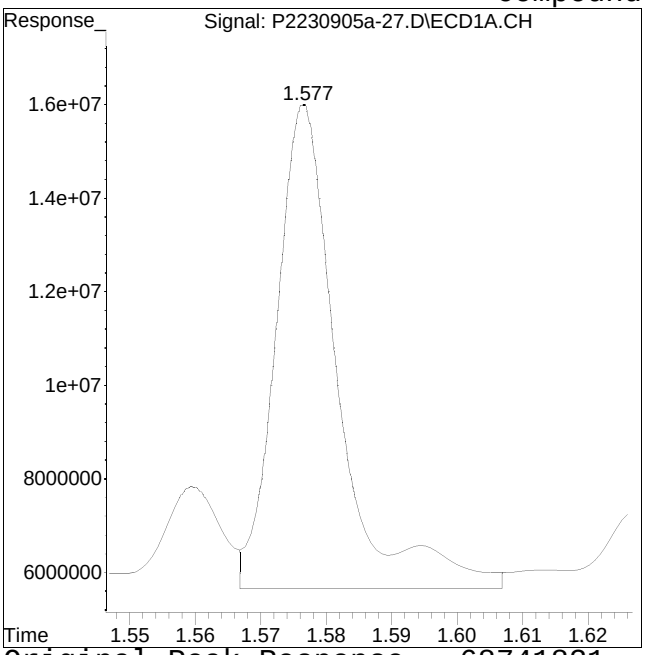


Original Peak Response = 225695634 Manual Peak Response = 205559396 M4
M4 = Poor automated baseline construction.

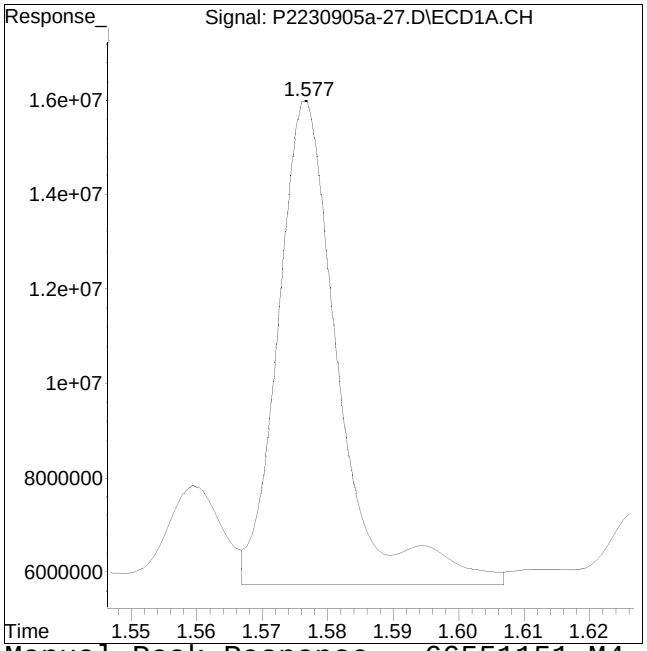
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #4: 1016-1



Original Peak Response = 68741831



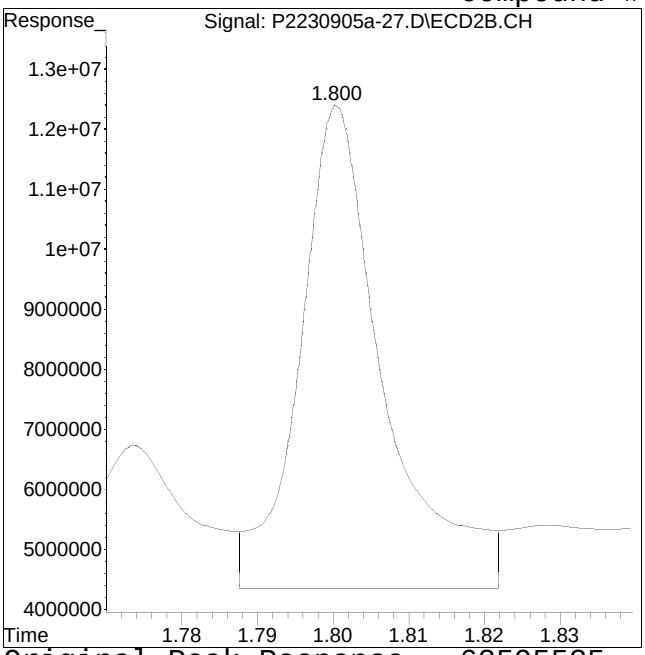
Manual Peak Response = 66551151 M4

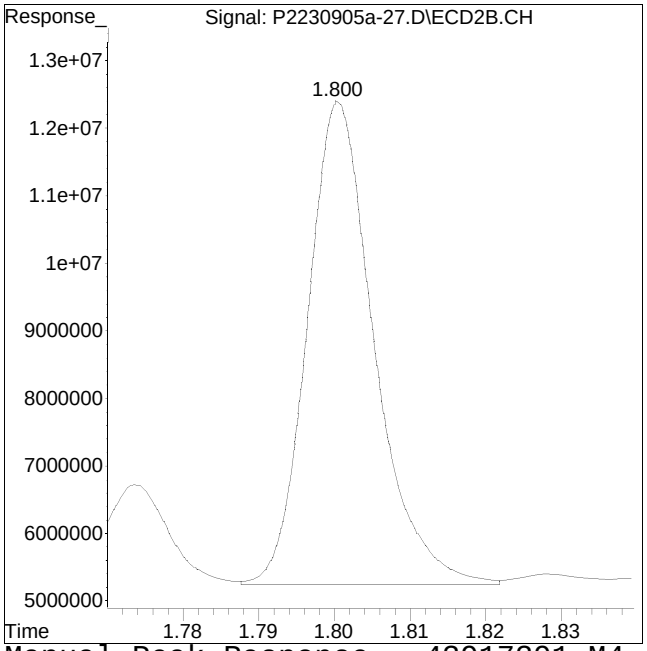
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #55: 1016-1 #2



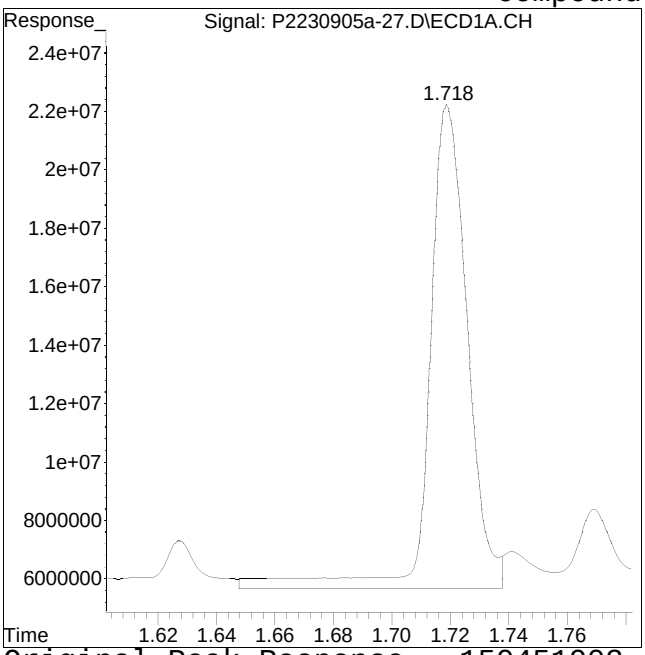


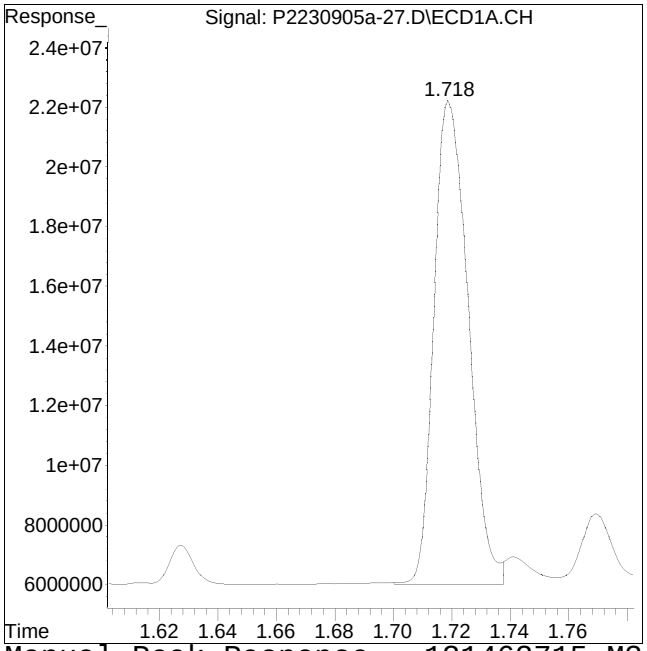
Original Peak Response = 62595535 Manual Peak Response = 43917391 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #5: 1016-2



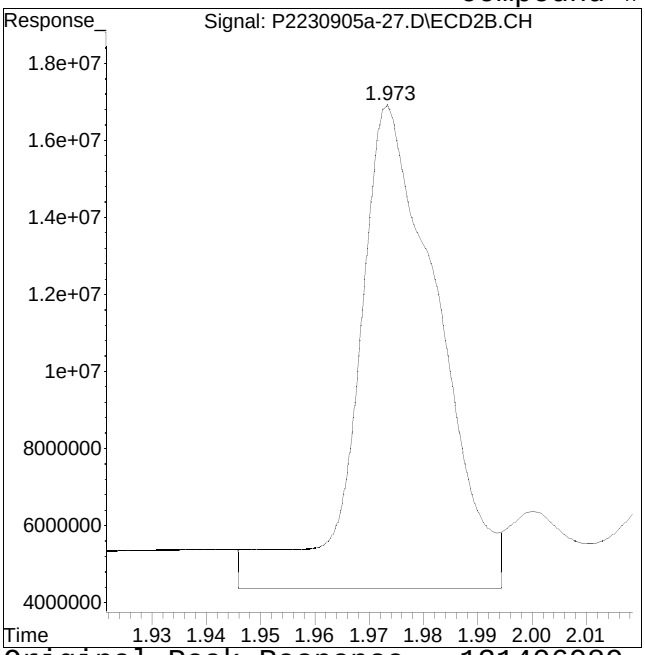


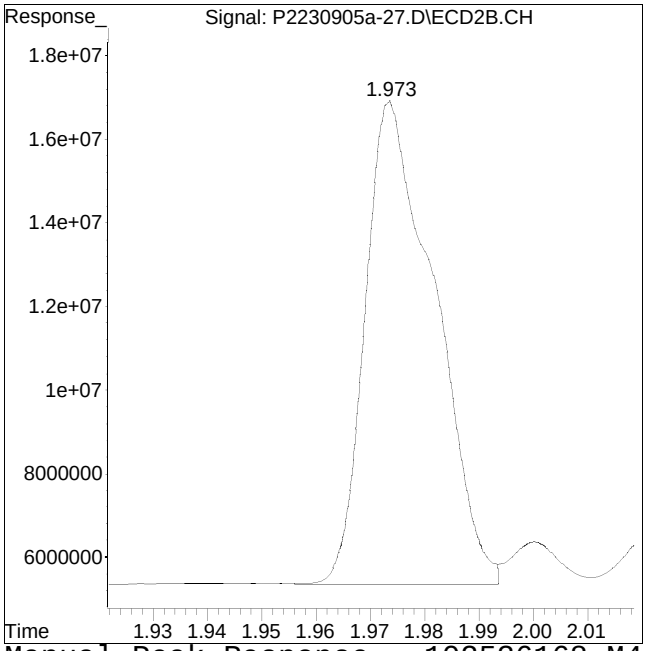
Original Peak Response = 150451903 Manual Peak Response = 131463715 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #56: 1016-2 #2



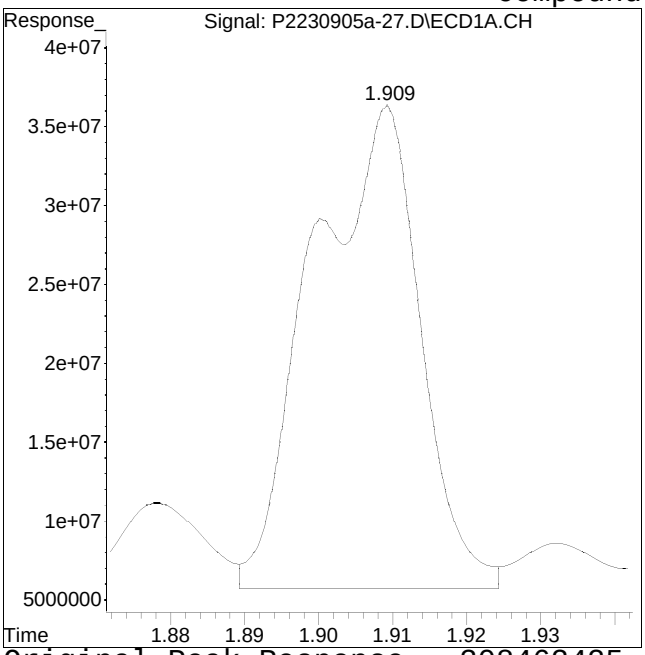


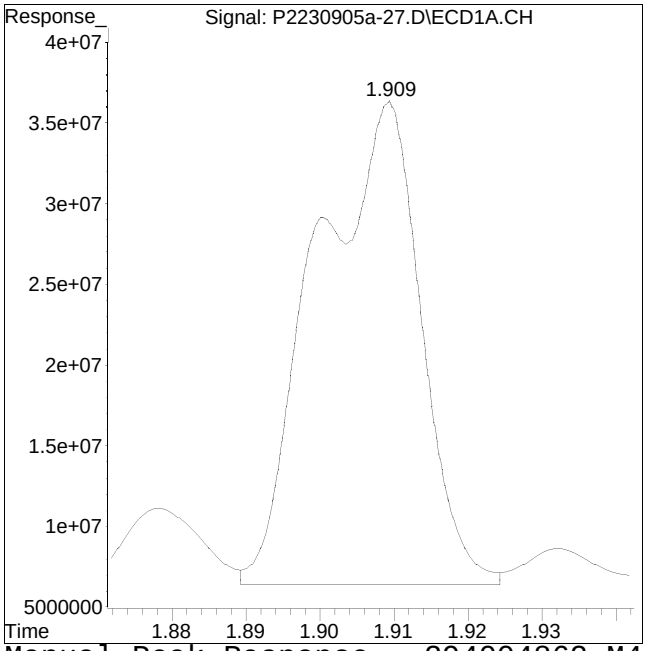
Original Peak Response = 131406989 Manual Peak Response = 102536168 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #6: 1016-3



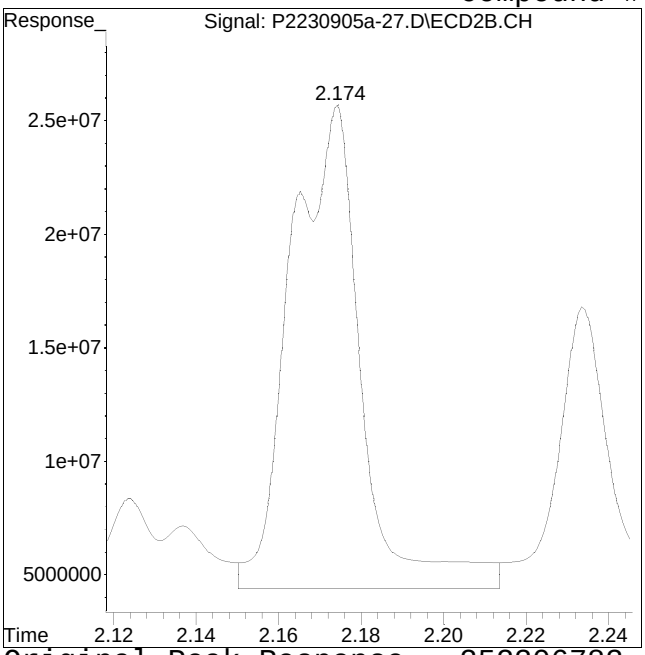


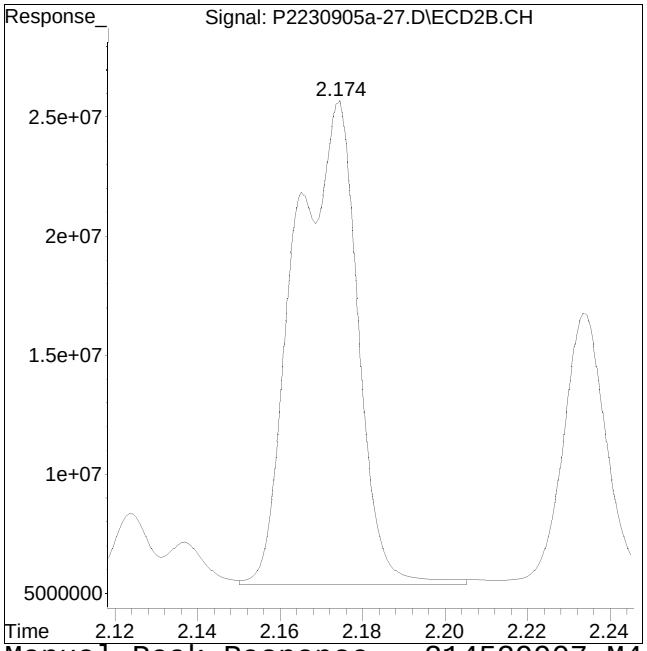
Original Peak Response = 308462425 Manual Peak Response = 294004862 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #57: 1016-3 #2



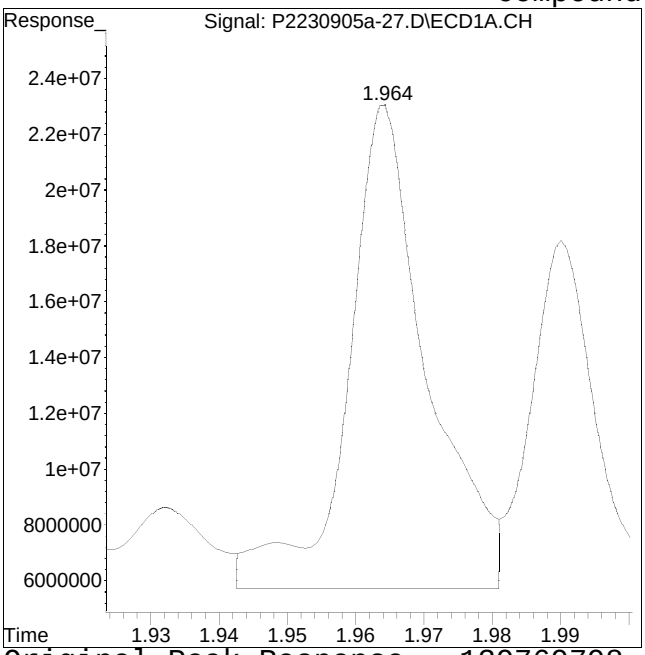


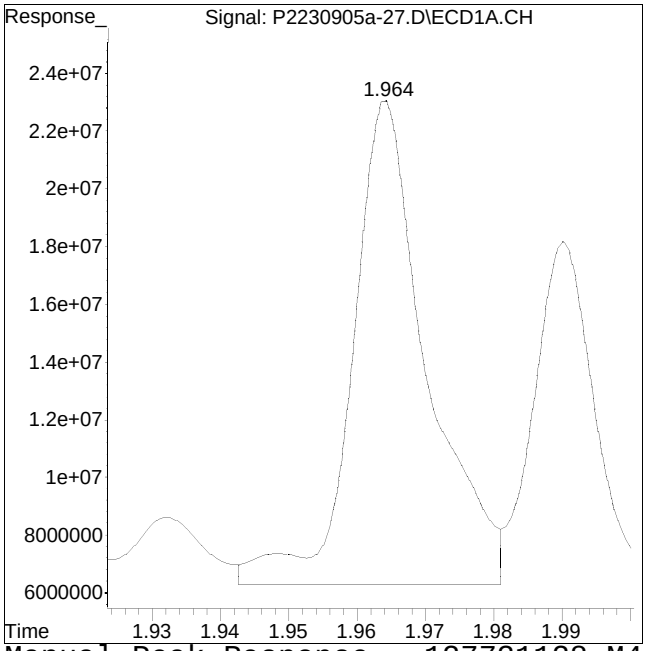
Original Peak Response = 252306783 Manual Peak Response = 214529907 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #7: 1016-4



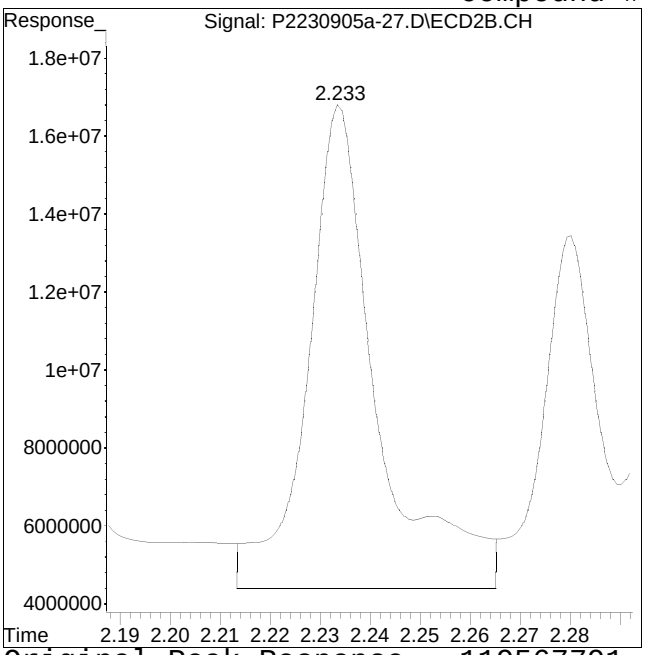


Original Peak Response = 139769798 Manual Peak Response = 127731128 M4
M4 = Poor automated baseline construction.

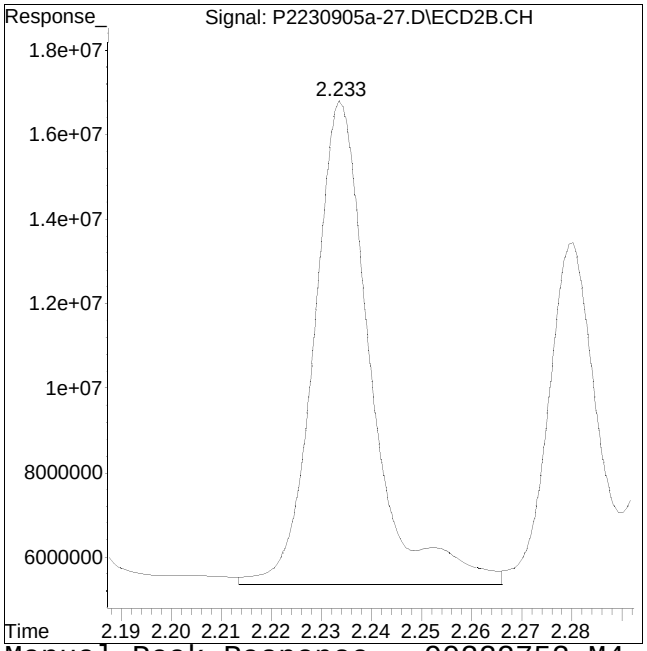
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #58: 1016-4 #2



Original Peak Response = 119567791



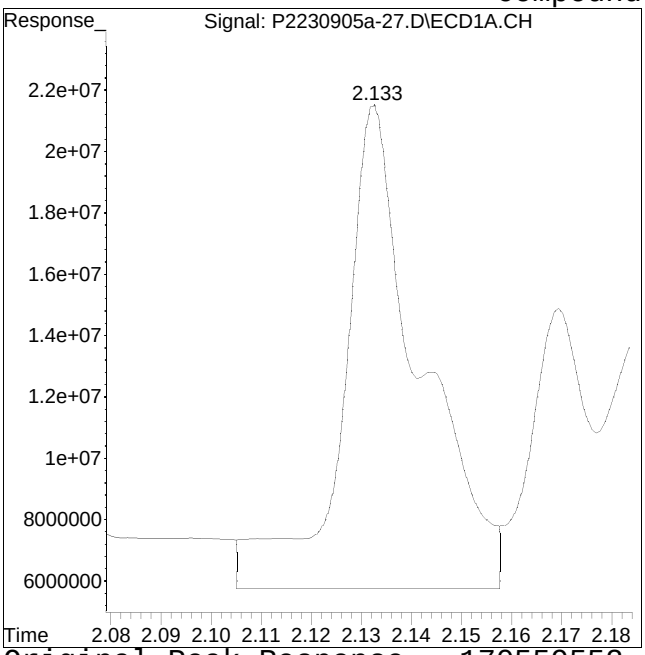
Manual Peak Response = 90222752 M4

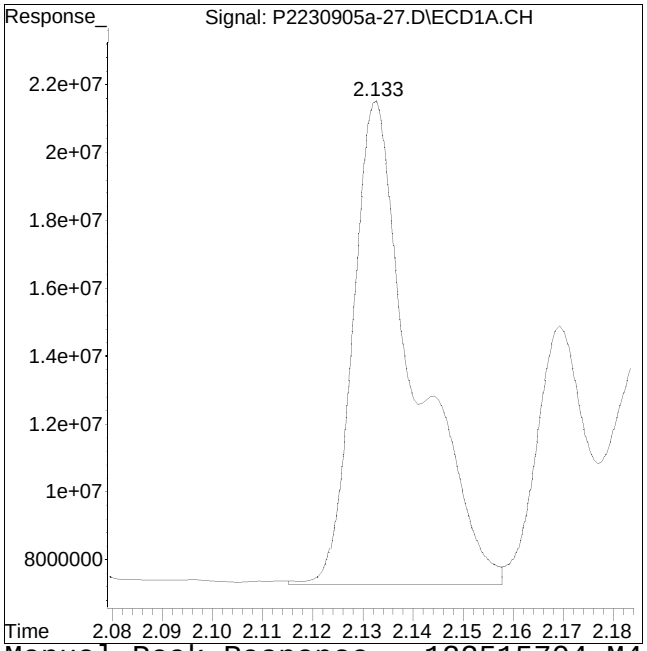
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #8: 1016-5



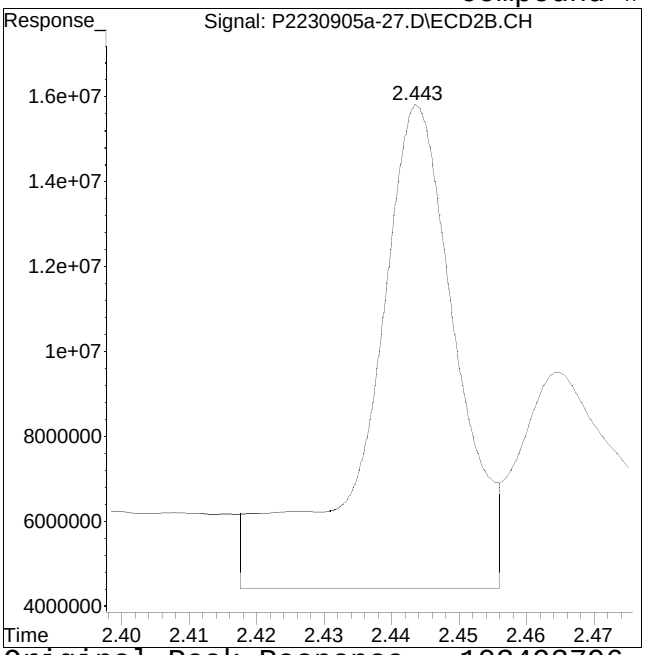


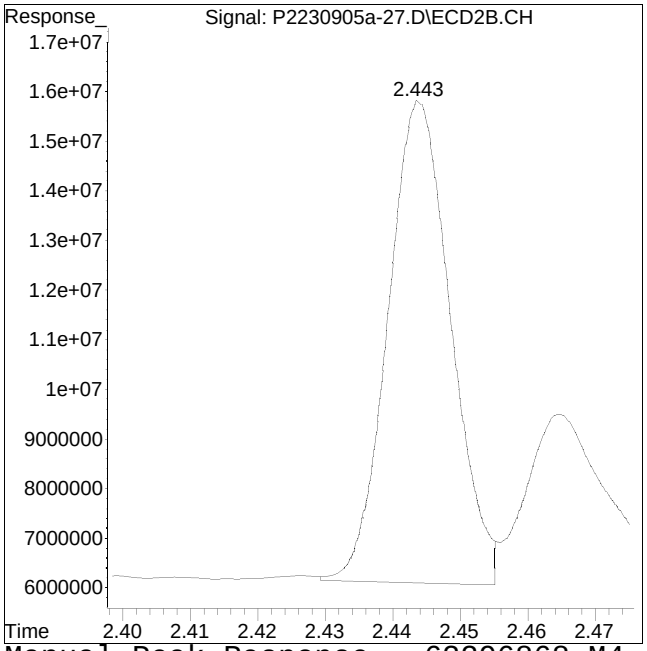
Original Peak Response = 170559552 Manual Peak Response = 122515704 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #59: 1016-5 #2



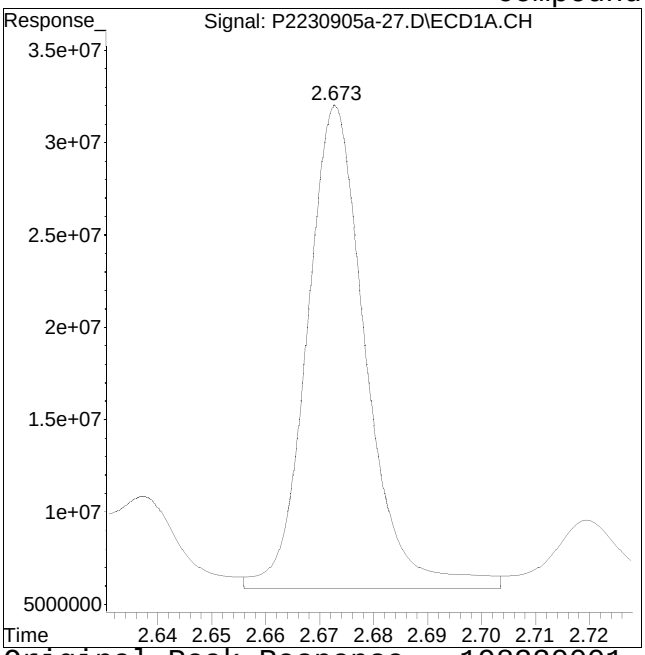


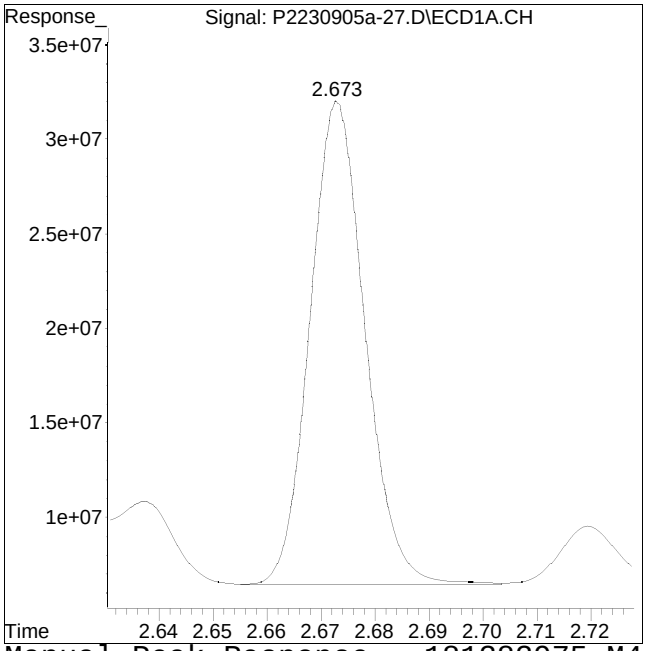
Original Peak Response = 103493796 Manual Peak Response = 62296868 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #9: 1260-1



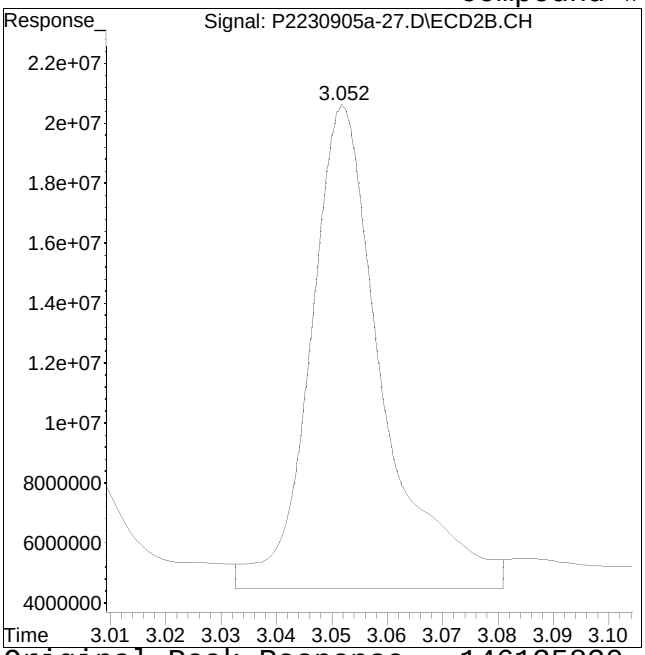


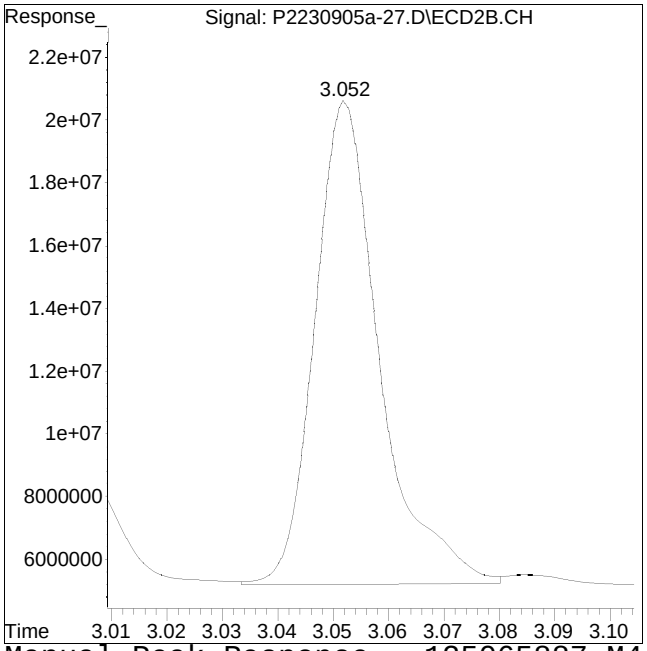
Original Peak Response = 198330001 Manual Peak Response = 181383975 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #60: 1260-1 #2



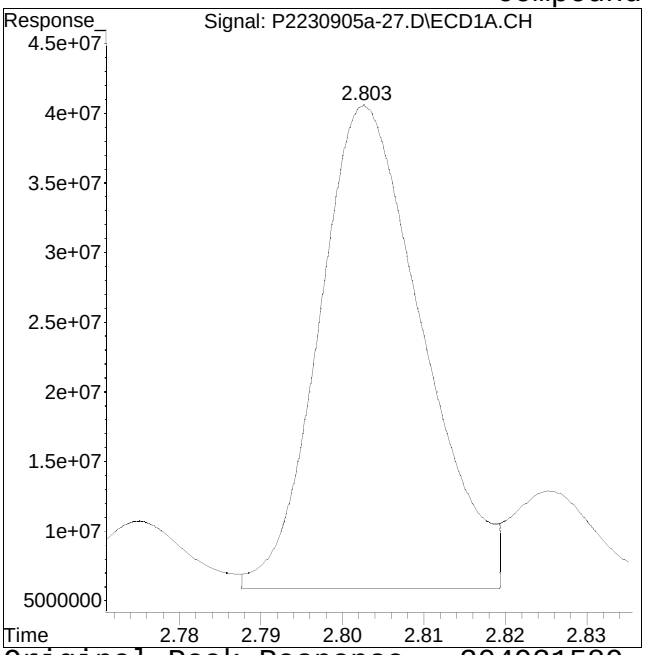


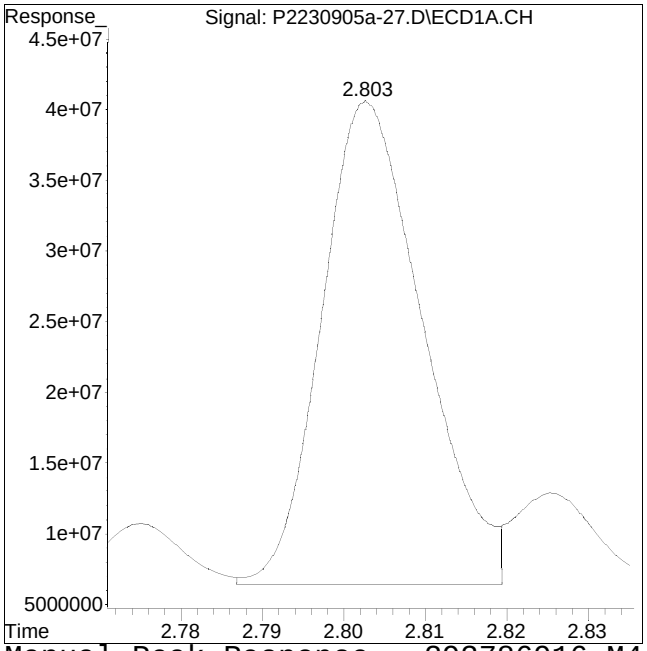
Original Peak Response = 146135830 Manual Peak Response = 125065887 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #10: 1260-2



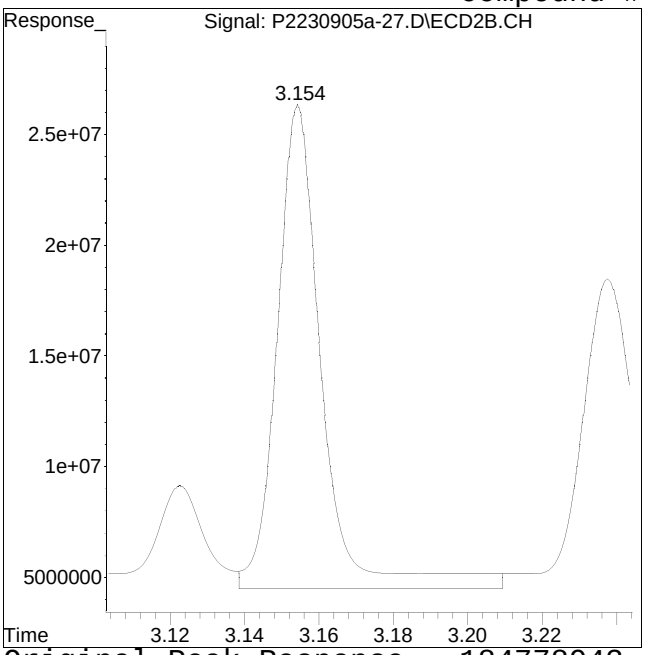


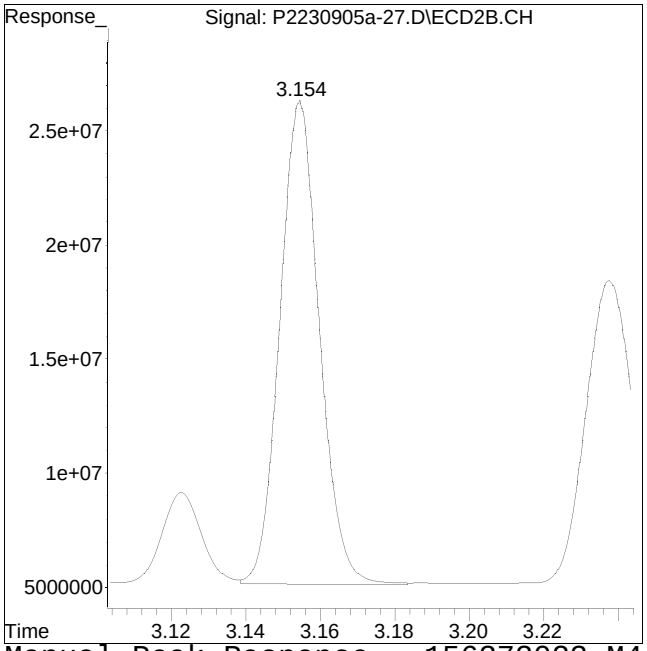
Original Peak Response = 304931589 Manual Peak Response = 293786916 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #61: 1260-2 #2



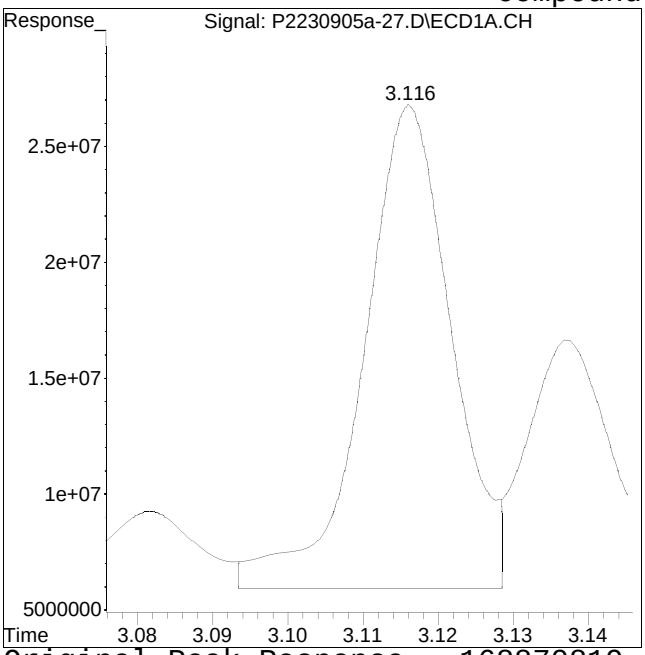


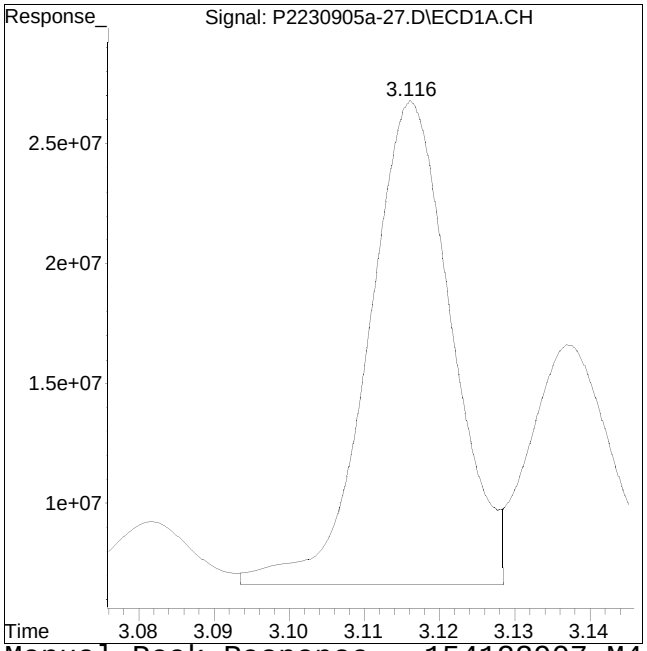
Original Peak Response = 184778943 Manual Peak Response = 156373023 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #11: 1260-3



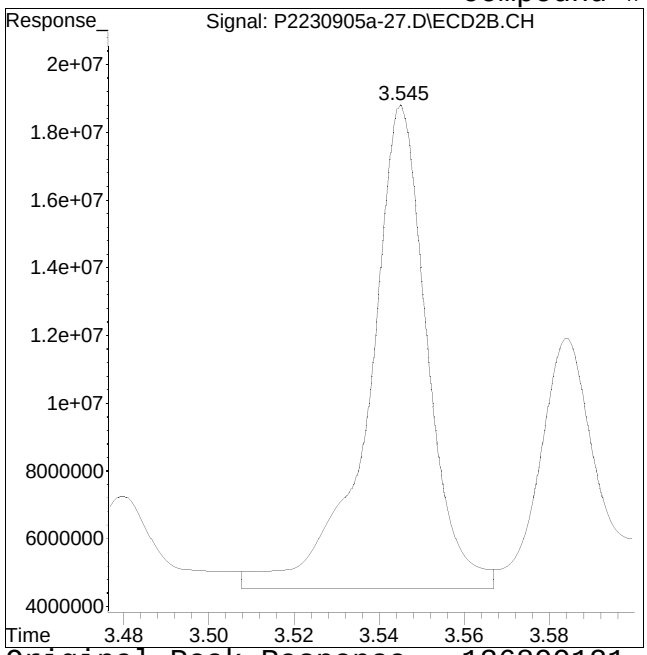


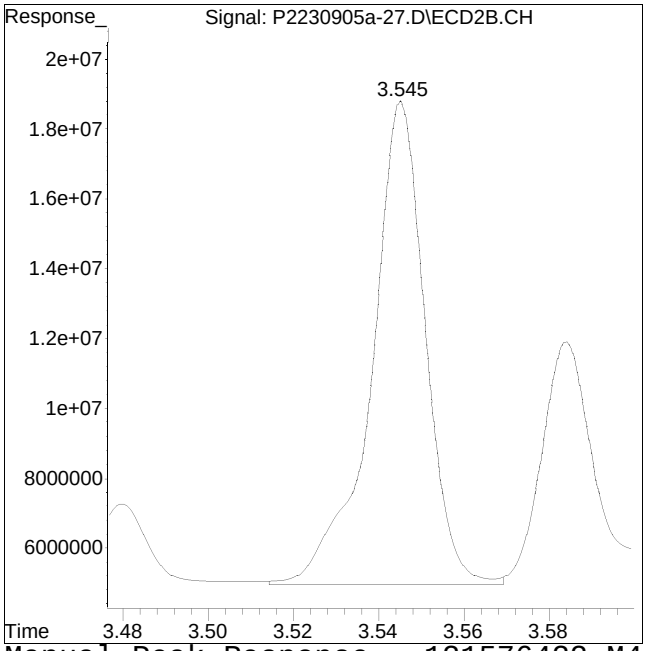
Original Peak Response = 168870819 Manual Peak Response = 154123907 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #62: 1260-3 #2



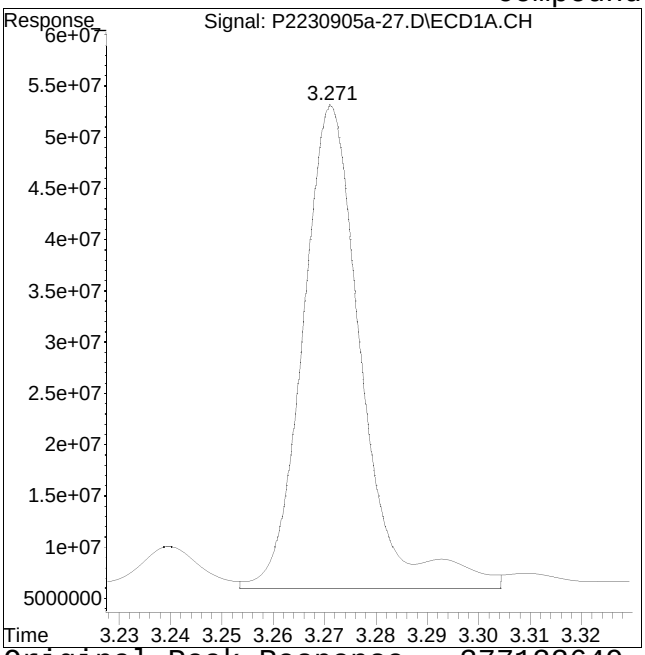


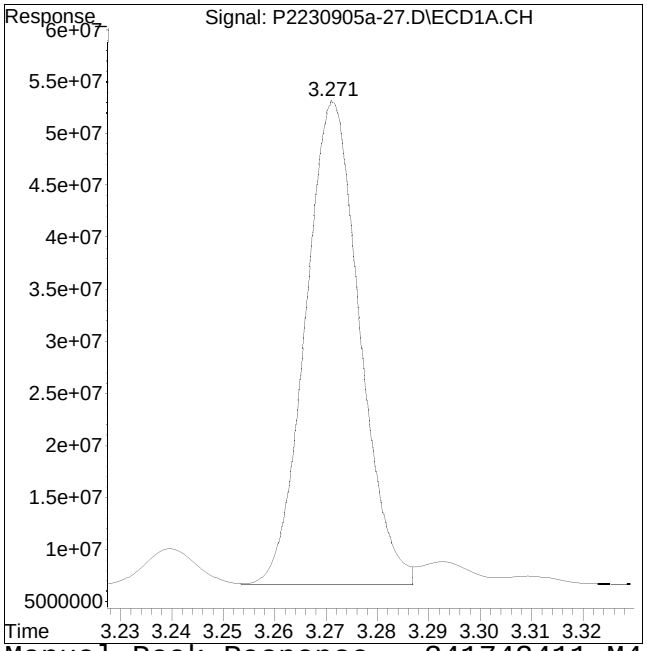
Original Peak Response = 136899121 Manual Peak Response = 121576422 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #12: 1260-4



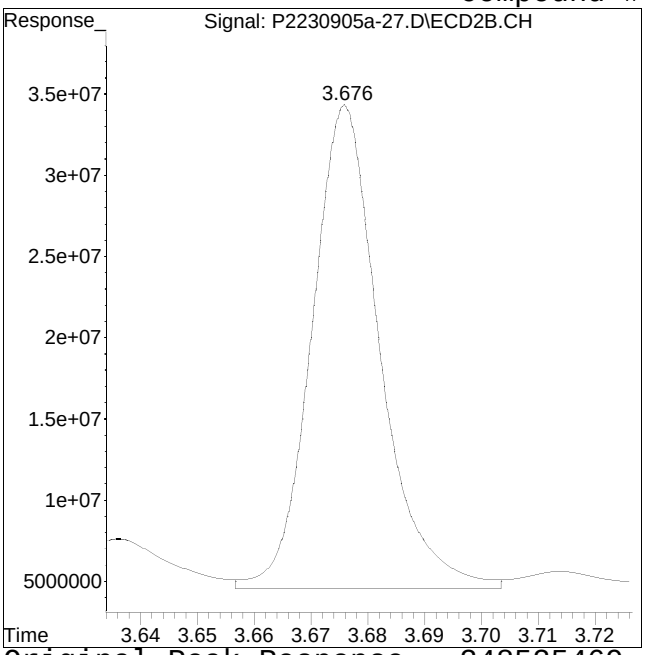


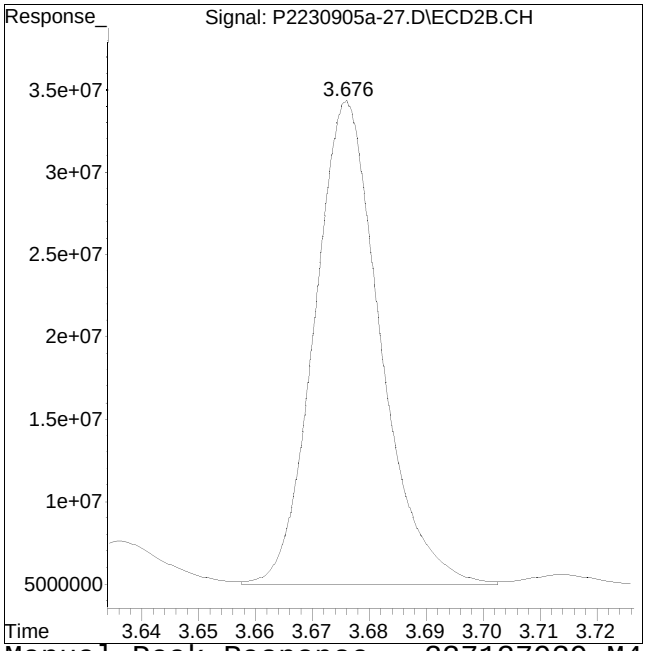
Original Peak Response = 377132649 Manual Peak Response = 341743411 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #63: 1260-4 #2



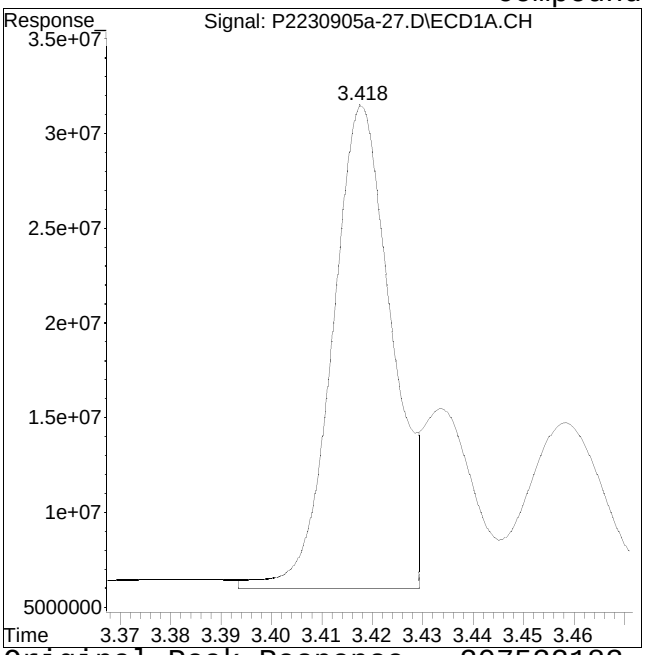


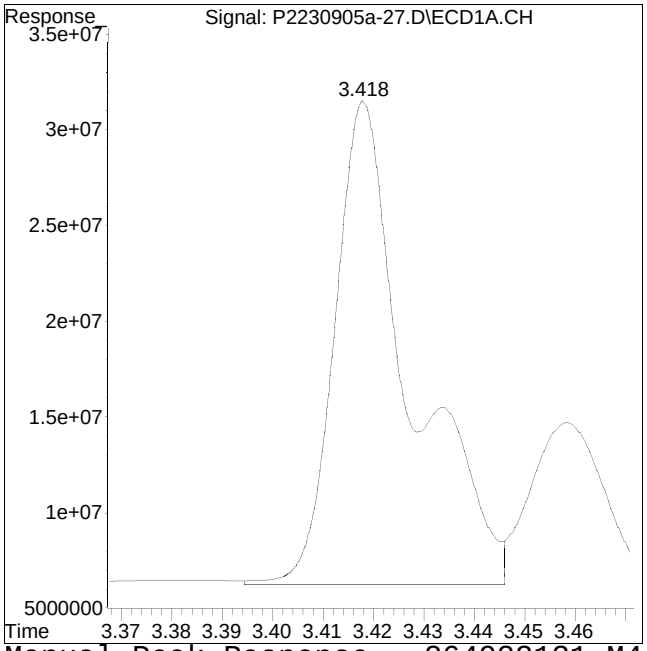
Original Peak Response = 248525469 Manual Peak Response = 237137939 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #13: 1260-5



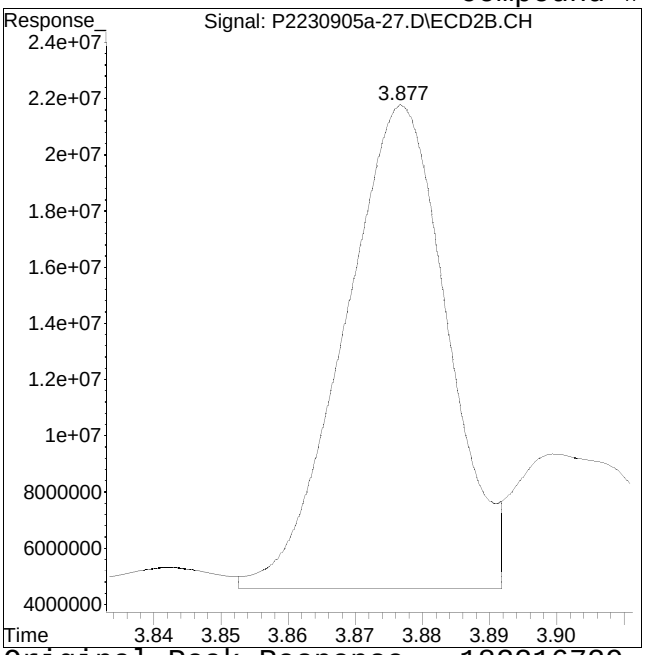


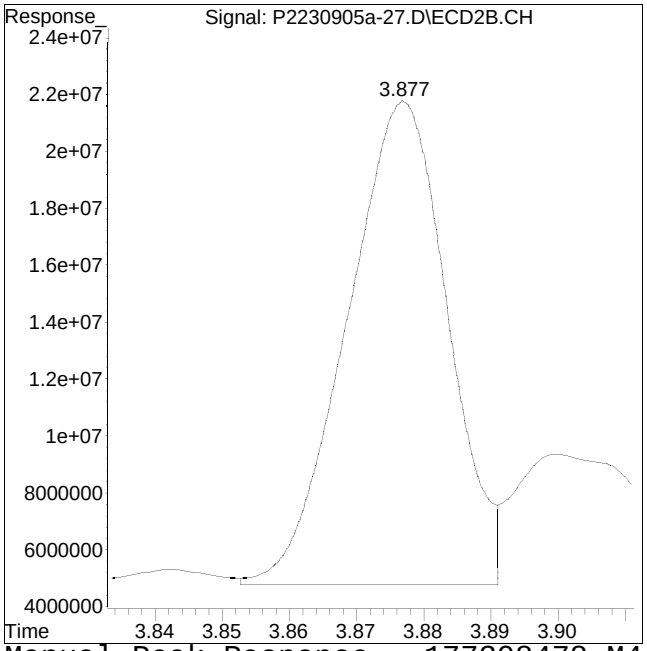
Original Peak Response = 207532183 Manual Peak Response = 264922131 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-27.D Operator : pest2:lmr
Date Inj'd : 9/5/2023 1:48 pm Instrument : Pest 2
Sample : wg1823542-5,42,, +1660 pp1Quant Date : 9/5/2023 3:48 pm

Compound #64: 1260-5 #2





Original Peak Response = 182216729 Manual Peak Response = 177308478 M4
M4 = Poor automated baseline construction.

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-51.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 05 Sep 2023   7:40 pm
Operator : pest2:ad
Sample   : wg1823542-9,42,, +1660 pp11282 lvi (Sig #1); +1660 pp11282 lvi (Sig #2)
Misc   : wg1823542,,ical20286
ALS Vial : 51 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 05 22:15:00 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1660_1br2nb	^	1.000	1.000	0.0	121	0.00
2	s	2,4,5,6-Tetrachloro-m-xylen		1.469	1.681	-14.4	133	0.00
3	s	Decachlorobiphenyl		1.188	1.426	-20.0#	145	0.00
4	l1	1016-1		0.025	0.022	12.0	106	0.00
5	l1	1016-2		0.052	0.046	11.5	106	0.00
6	l1	1016-3		0.114	0.108	5.3	112	0.00
7	l1	1016-4		0.047	0.043	8.5	108	0.00
8	l1	1016-5		0.050	0.043	14.0	103	0.00
9	l2	1260-1		0.071	0.064	9.9	106	0.00
10	l2	1260-2		0.110	0.102	7.3	111	0.00
11	l2	1260-3		0.071	0.054	23.9#	90	0.00
12	l2	1260-4		0.153	0.122	20.3#	93	0.00
13	l2	1260-5		0.111	0.091	18.0	99	0.00
52	i	1660_1br2nb #2	^	1.000	1.000	0.0	128	0.00
53	s	2,4,5,6-Tetrachloro-m-xylen		1.484	1.647	-11.0	140	0.00
54	s	Decachlorobiphenyl #2		1.047	1.218	-16.3	151#	0.00
55	l1	1016-1 #2		0.027	0.022	18.5	108	0.00
56	l1	1016-2 #2		0.059	0.057	3.4	126	0.00
57	l1	1016-3 #2		0.116	0.109	6.0	119	0.00
58	l1	1016-4 #2		0.047	0.045	4.3	123	0.00
59	l1	1016-5 #2		0.039	0.033	15.4	112	0.00
60	l2	1260-1 #2		0.072	0.056	22.2#	98	0.00
61	l2	1260-2 #2		0.086	0.078	9.3	115	0.00
62	l2	1260-3 #2		0.072	0.061	15.3	110	0.00
63	l2	1260-4 #2		0.145	0.117	19.3	103	0.00
64	l2	1260-5 #2		0.101	0.086	14.9	108	0.00

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-51.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 05 Sep 2023   7:40 pm
Operator : pest2:ad
Sample   : wg1823542-9,42,, +1660 pp11282 lvi (Sig #1); +1660 pp11282 lvi (Sig #2)
Misc   : wg1823542,,ical20286
ALS Vial : 51 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 05 22:15:00 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

Compound	AvgRF	CCRF	%Dev	Area% Dev(Min)

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-51.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:40 pm
Operator : pest2:ad
Sample : wg1823542-9,42,, +1660 pp11282 lvi (Sig #1); +1660 pp11282 lvi (Sig #2)
Misc : wg1823542,,ical20286
ALS Vial : 51 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 05 22:15:00 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : 1660 - 1660

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1660_1br2nb	1.156	1.227	307.3E6	207.2E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.439	1.600	330.6E6	218.5E6	18.310	17.760
	Spiked Amount	20.000	Range 30 - 150		Recovery =	91.55%	88.80%
3) s	Decachlorobi	4.000	4.529	561.1E6	323.2E6	38.411	37.228
	Spiked Amount	20.000	Range 30 - 150		Recovery =	192.06%#	186.14%#
	Target Compounds						
4) l1	1016-1	1.577	1.801	68755066	46193675	220.955	207.072
5) l1	1016-2	1.718	1.973	142.3E6	118.6E6	221.313	243.447
6) l1	1016-3	1.906	2.172	330.8E6	224.9E6	236.283	233.837
7) l1	1016-4	1.960	2.233	133.0E6	94283373	228.492	242.644
8) l1	1016-5	2.129	2.442	132.4E6	69152860	216.598M4	214.592M3
	Sum 1016-1			807.2E6	553.2E6	1123.641	1141.592
	Average 1016-1					224.728	228.318
9) l2	1260-1	2.669	3.051	196.8E6	115.0E6	224.849M2	192.928M3
10) l2	1260-2	2.799	3.154	314.3E6	160.9E6	233.257M3	226.280M2
11) l2	1260-3	3.114	3.546	167.1E6	125.6E6	192.247M2	211.405
12) l2	1260-4	3.269	3.676	375.1E6	242.4E6	198.803M3	201.675
13) l2	1260-5	3.416	3.877	279.4E6	177.7E6	205.526M3	212.975M4
	Sum 1260-1			1332.7E6	821.6E6	1054.682	1045.264
	Average 1260-1					210.936	209.053
	Sum 1221-2			0	0	N.D.	N.D.
	Average 1221-2					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-51.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:40 pm
Operator : pest2:ad
Sample : wg1823542-9,42,, +1660 pp11282 lvi (Sig #1); +1660 pp11282 lvi (Sig #2)
Misc : wg1823542,,ical20286
ALS Vial : 51 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 05 22:15:00 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : 1660 - 1660

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

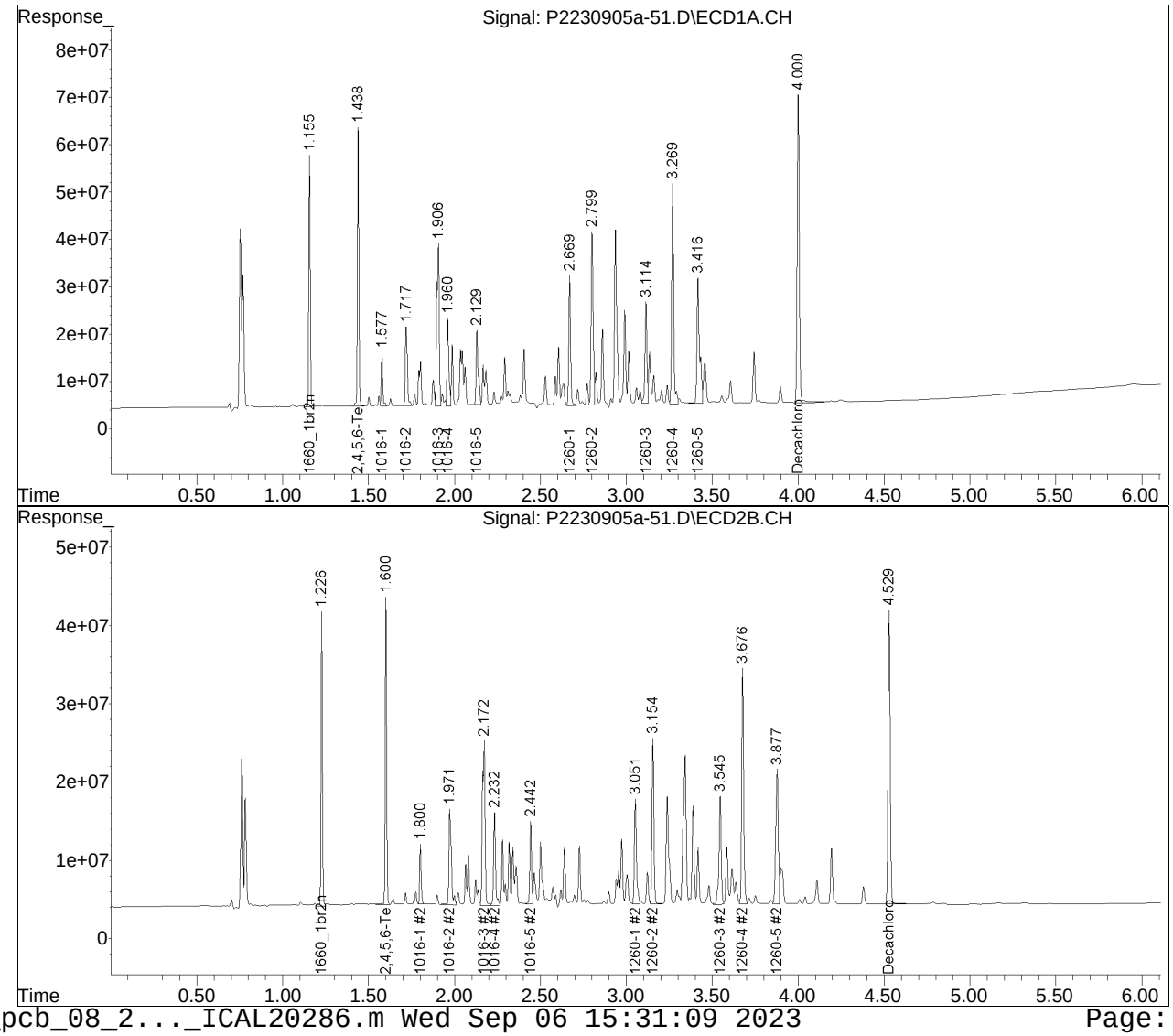
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : 1660 - 1660ation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-51.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 7:40 pm
Operator : pest2:ad
Sample : wg1823542-9,42,, +1660 pp11282 lvi (Sig #1); +1660 pp11282 lvi (Si
Misc : wg1823542,,ical20286
ALS Vial : 51 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 05 22:15:00 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

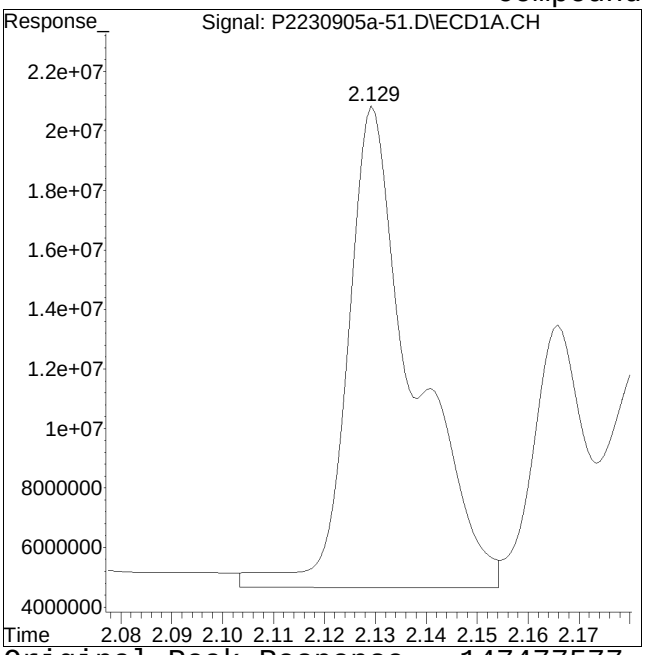
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



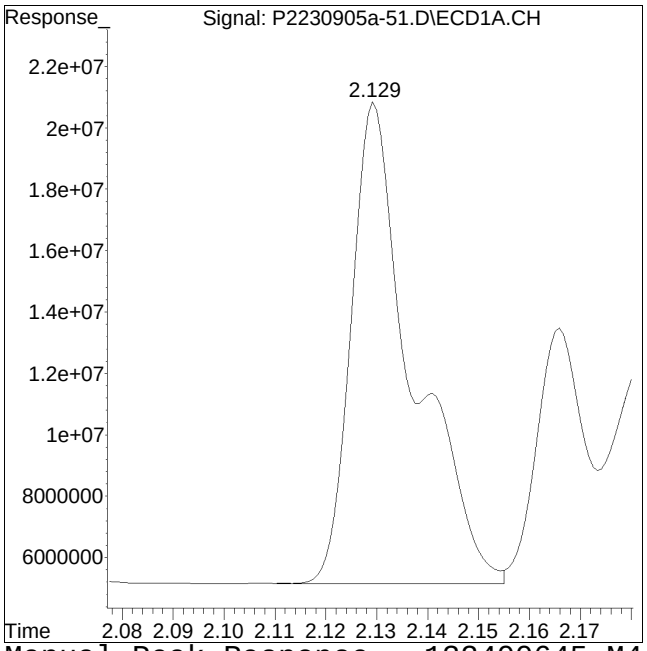
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-51.D Operator : pest2:ad
Date Inj'd : 9/5/2023 7:40 pm Instrument : Pest 2
Sample : wg1823542-9,42,, +1660 pp1Quant Date : 9/5/2023 10:11 pm

Compound #8: 1016-5



Original Peak Response = 147477577

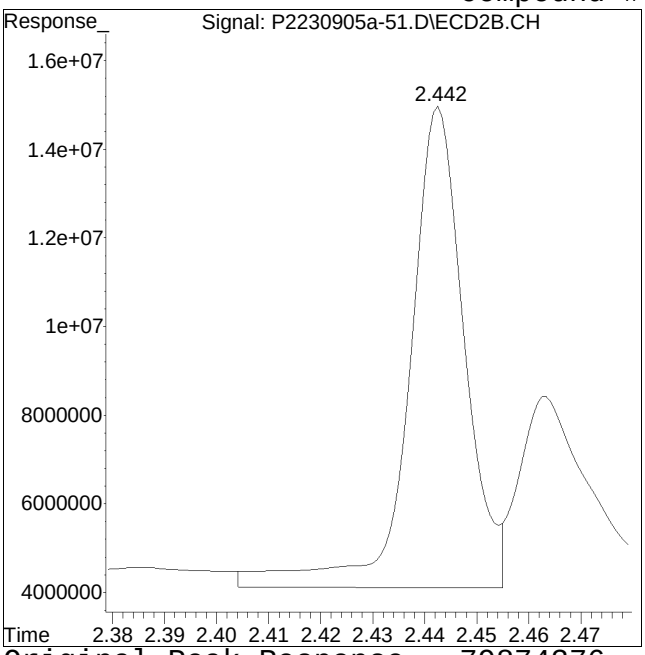


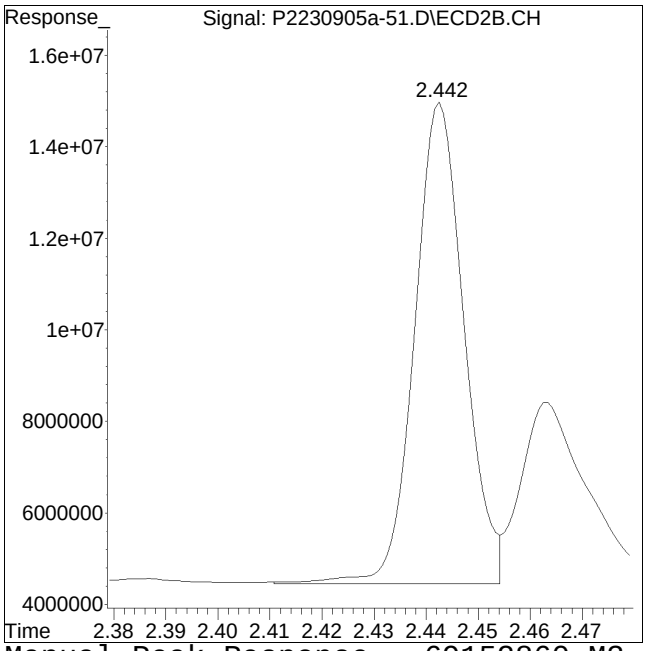
Manual Peak Response = 132400645 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-51.D Operator : pest2:ad
Date Inj'd : 9/5/2023 7:40 pm Instrument : Pest 2
Sample : wg1823542-9,42,, +1660 pp1Quant Date : 9/5/2023 10:11 pm

Compound #59: 1016-5 #2



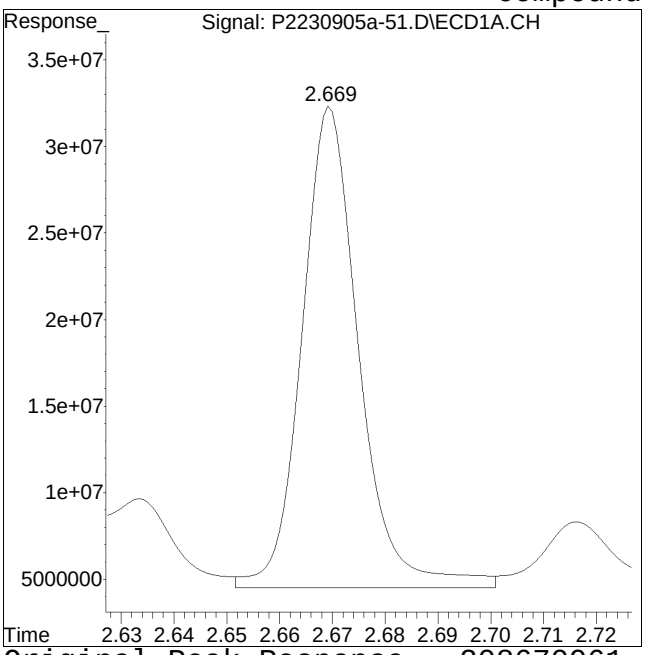


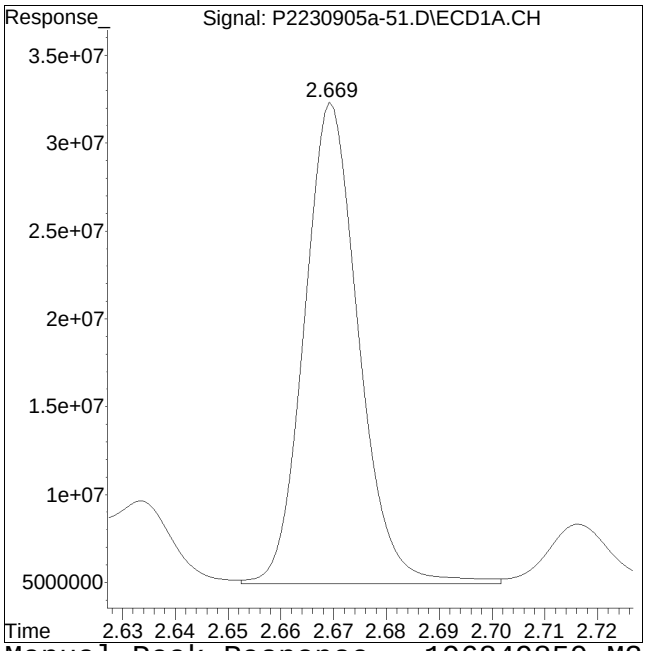
Original Peak Response = 79874376 Manual Peak Response = 69152860 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-51.D Operator : pest2:ad
Date Inj'd : 9/5/2023 7:40 pm Instrument : Pest 2
Sample : wg1823542-9,42,, +1660 pp1Quant Date : 9/5/2023 10:11 pm

Compound #9: 1260-1



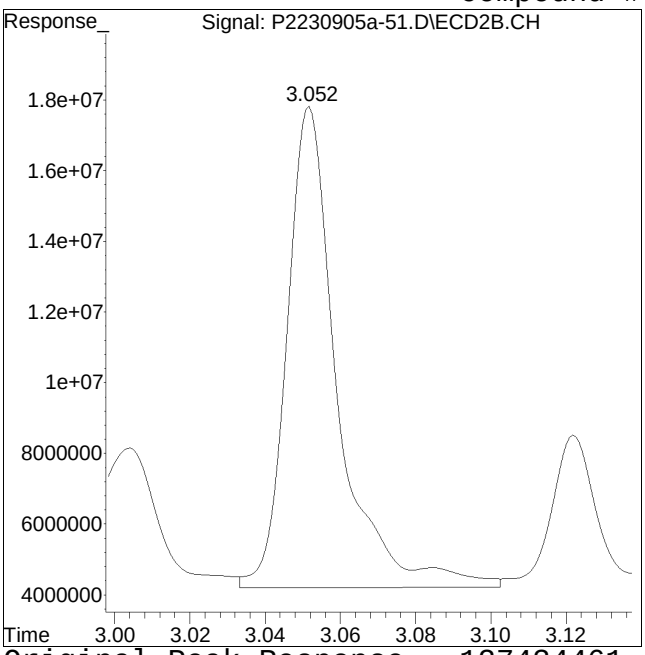


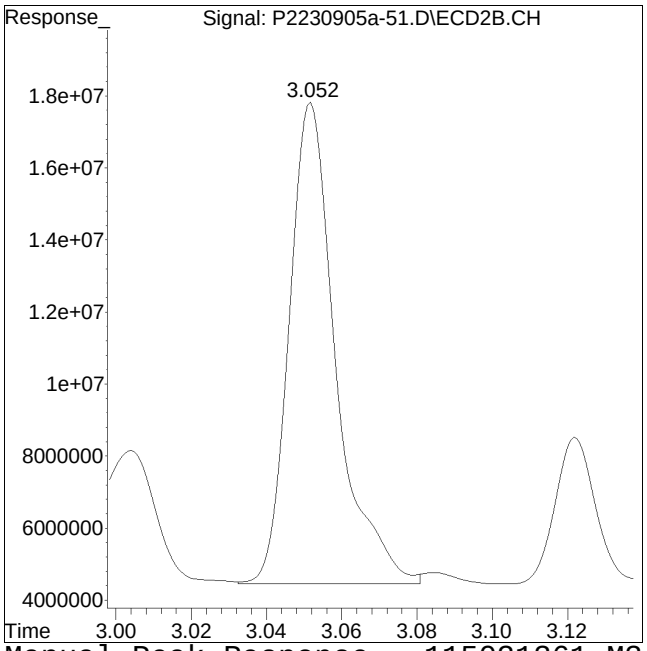
Original Peak Response = 208670961 Manual Peak Response = 196849850 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-51.D Operator : pest2:ad
Date Inj'd : 9/5/2023 7:40 pm Instrument : Pest 2
Sample : wg1823542-9,42,, +1660 pp1Quant Date : 9/5/2023 10:11 pm

Compound #60: 1260-1 #2



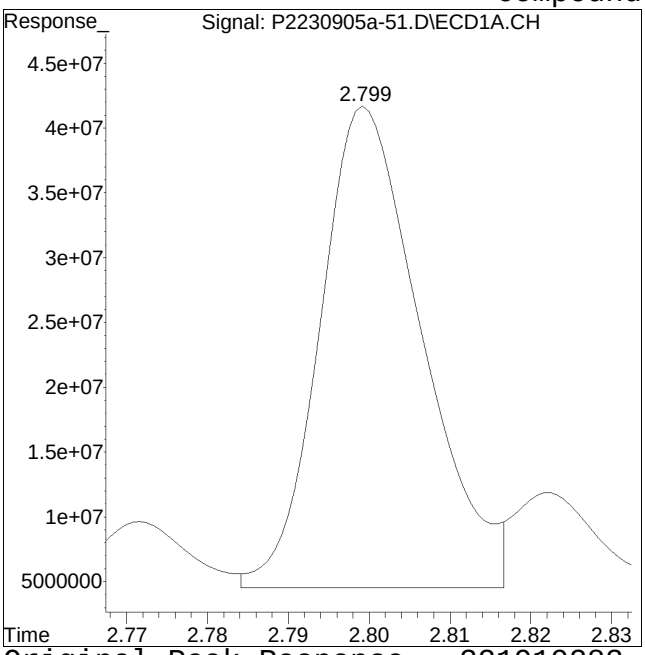


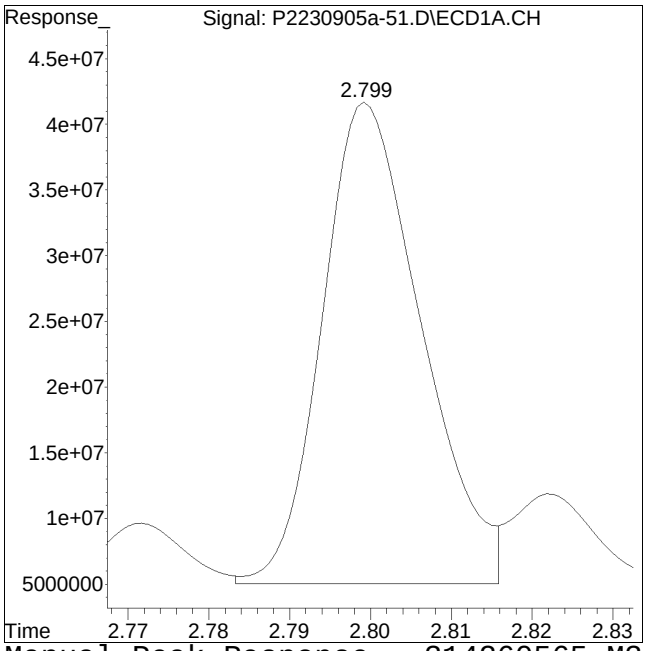
Original Peak Response = 127434461 Manual Peak Response = 115031361 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-51.D Operator : pest2:ad
Date Inj'd : 9/5/2023 7:40 pm Instrument : Pest 2
Sample : wg1823542-9,42,, +1660 pp1Quant Date : 9/5/2023 10:11 pm

Compound #10: 1260-2



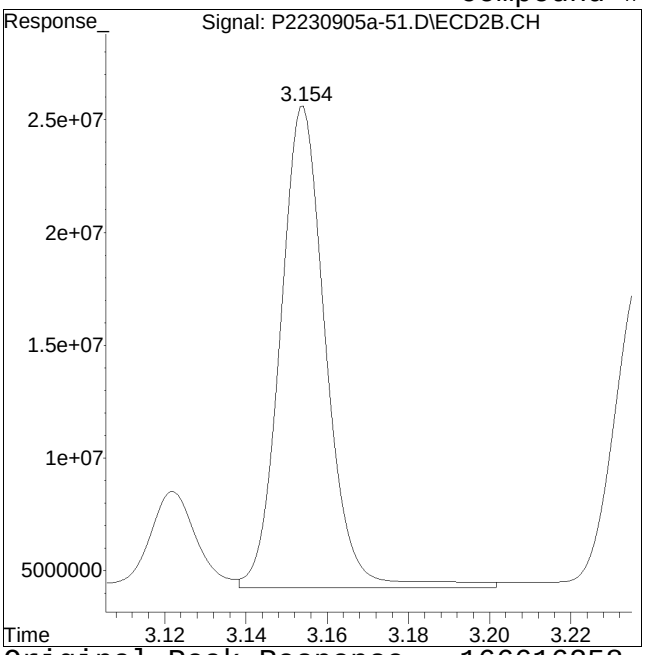


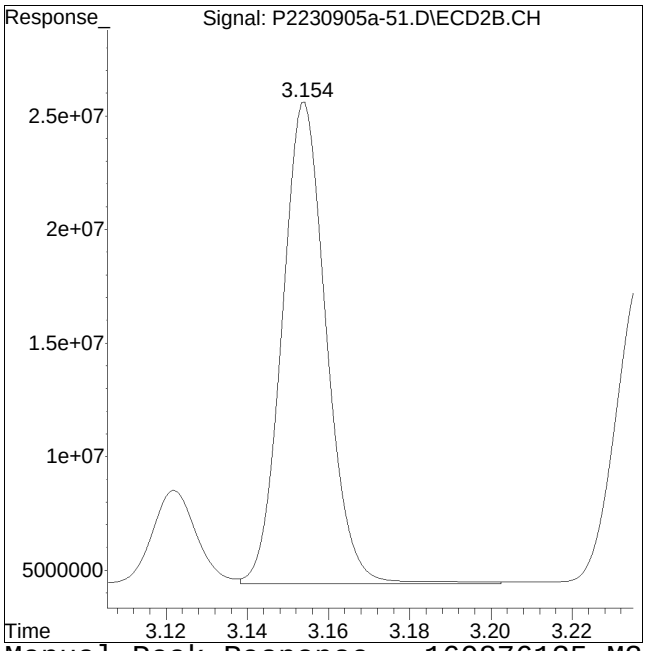
Original Peak Response = 321919283 Manual Peak Response = 314260565 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-51.D Operator : pest2:ad
Date Inj'd : 9/5/2023 7:40 pm Instrument : Pest 2
Sample : wg1823542-9,42,, +1660 pp1Quant Date : 9/5/2023 10:11 pm

Compound #61: 1260-2 #2



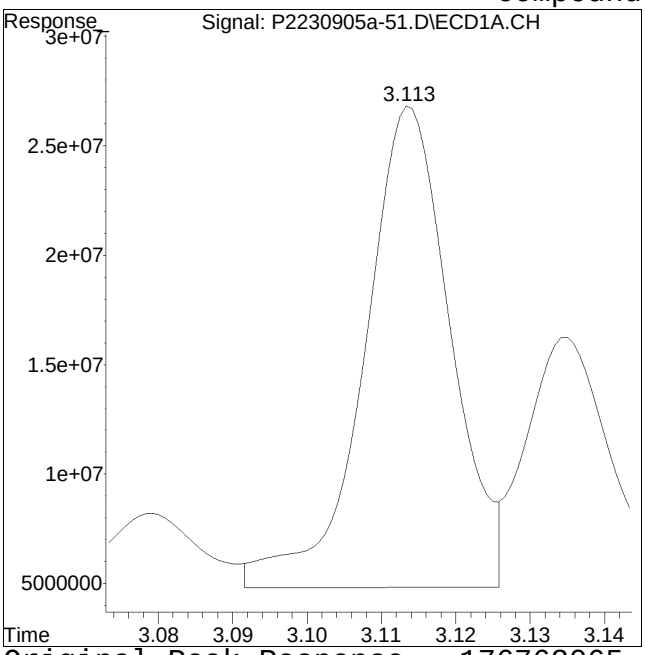


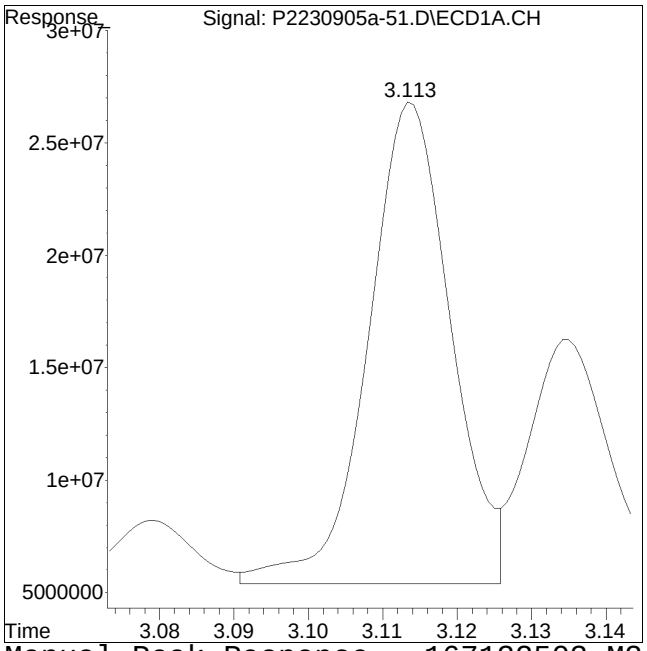
Original Peak Response = 166616258 Manual Peak Response = 160876135 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-51.D Operator : pest2:ad
Date Inj'd : 9/5/2023 7:40 pm Instrument : Pest 2
Sample : wg1823542-9,42,, +1660 pp1Quant Date : 9/5/2023 10:11 pm

Compound #11: 1260-3



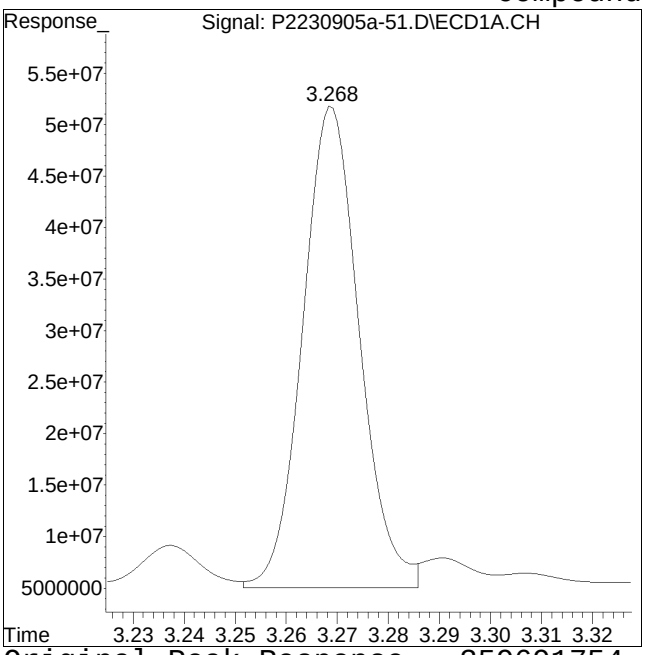


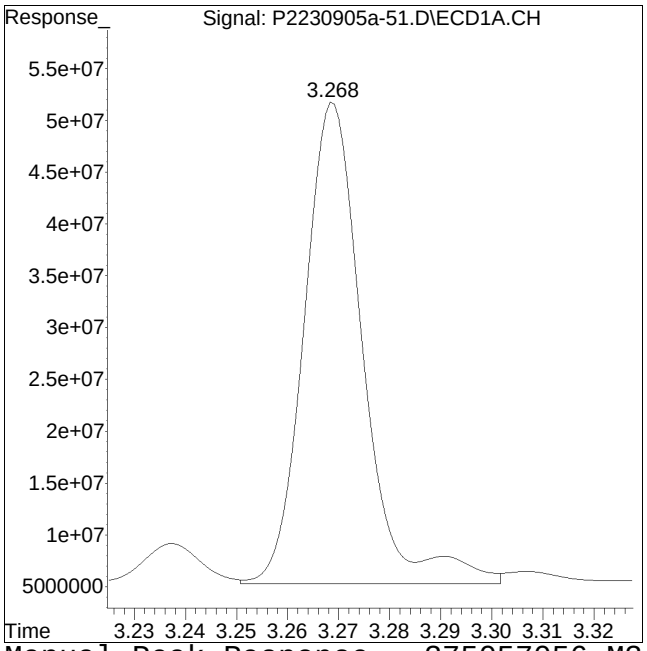
Original Peak Response = 176762065 Manual Peak Response = 167132503 M2
M2 = Peak not found by automatic integration algorithm.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-51.D Operator : pest2:ad
Date Inj'd : 9/5/2023 7:40 pm Instrument : Pest 2
Sample : wg1823542-9,42,, +1660 pp1Quant Date : 9/5/2023 10:11 pm

Compound #12: 1260-4



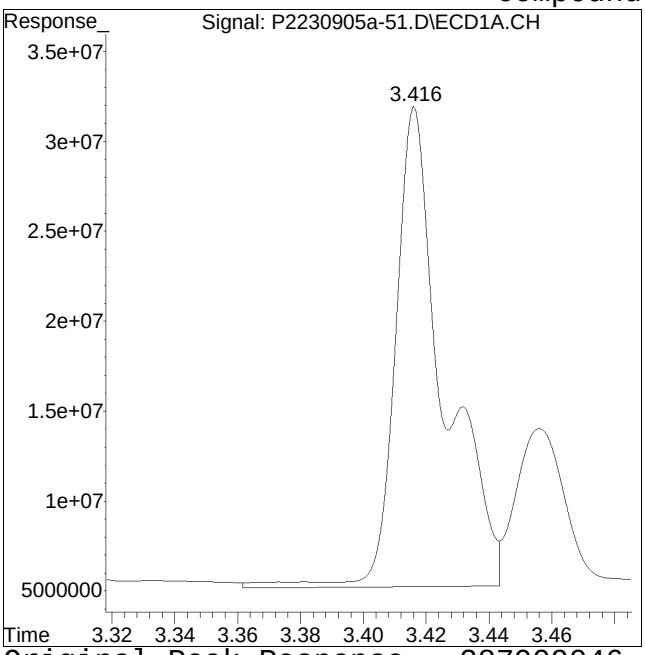


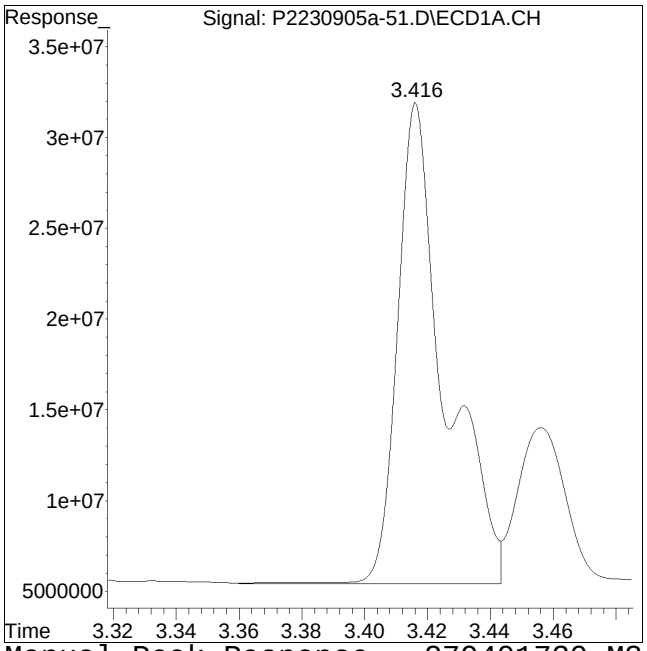
Original Peak Response = 359691754 Manual Peak Response = 375057056 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-51.D Operator : pest2:ad
Date Inj'd : 9/5/2023 7:40 pm Instrument : Pest 2
Sample : wg1823542-9,42,, +1660 pp1Quant Date : 9/5/2023 10:11 pm

Compound #13: 1260-5



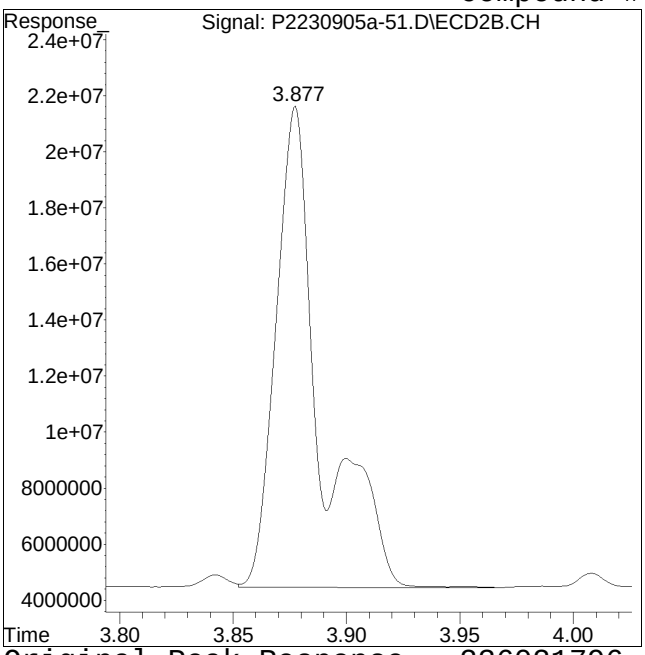


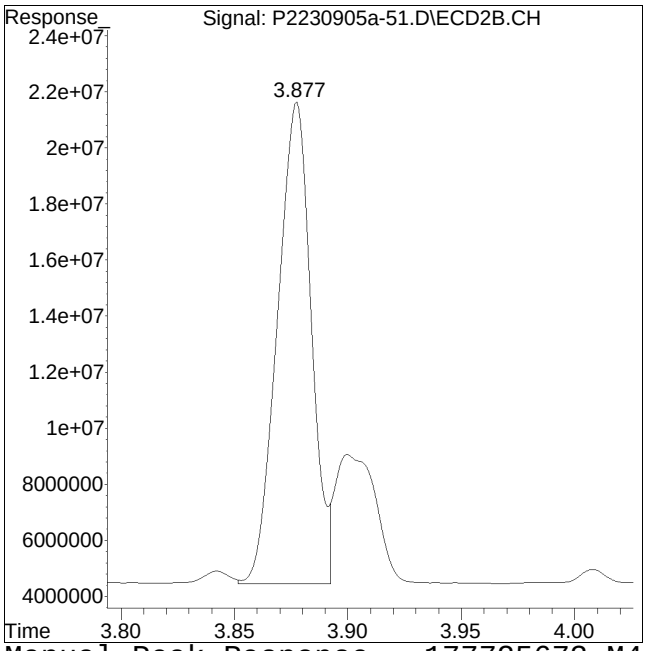
Original Peak Response = 287909046 Manual Peak Response = 279401730 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-51.D Operator : pest2:ad
Date Inj'd : 9/5/2023 7:40 pm Instrument : Pest 2
Sample : wg1823542-9,42,, +1660 pp1Quant Date : 9/5/2023 10:11 pm

Compound #64: 1260-5 #2





Original Peak Response = 236021796 Manual Peak Response = 177725673 M4
M4 = Poor automated baseline construction.

RT Shift Summary

Identification Summary
Form 10
PCBs

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**

No Detections Found

Aroclor Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-37.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 5:28 pm
Operator : pest2:meo
Sample : WG1823569-1,42,, 619
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 37 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 15:51:11 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1660_1br2nb	1.155	1.227	286.0E6	178.6E6	25.000M4	25.000
	Standard Area 1 : #1 = 277861669				Recovery = 102.93%		
	Standard Area 1 : #2 = 177277303				Recovery = 100.76%		
14) i	2154_1br2nb	1.155	1.227	286.0E6	178.6E6	25.000M4	25.000
23) i	4268_1br2nb	1.155	1.227	286.0E6	178.6E6	25.000M4	25.000
34) i	1248_1br2nb	1.155	1.227	286.0E6	178.6E6	25.000M4	25.000
40) i	3262_1br2nb	1.155	1.227	286.0E6	178.6E6	25.000M4	25.000
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.438	1.601	164.9E6	117.0E6	9.811M4	11.036
	Spiked Amount 20.000	Range 30 - 150		Recovery = 49.06%		55.18%	
3) s	Decachlorobi	4.002	4.536	168.7E6	103.5E6	12.411	13.829
	Spiked Amount 20.000	Range 30 - 150		Recovery = 62.05%		69.14%	
Target Compounds							
4) l1	1016-1	0.000	0.000	0	0	N.D. d	N.D. d
5) l1	1016-2	0.000	0.000	0	0	N.D.	N.D.
6) l1	1016-3	0.000	0.000	0	0	N.D. d	N.D. d
7) l1	1016-4	0.000	0.000	0	0	N.D. d	N.D. d
8) l1	1016-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1016-1			0	0	N.D.	N.D.
	Average 1016-1					0.000	0.000
9) l2	1260-1	0.000	0.000	0	0	N.D. d	N.D. d
10) l2	1260-2	0.000	0.000	0	0	N.D. d	N.D. d
11) l2	1260-3	0.000	0.000	0	0	N.D.	N.D.
12) l2	1260-4	0.000	0.000	0	0	N.D. d	N.D. d
13) l2	1260-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum 1260-1			0	0	N.D.	N.D.
	Average 1260-1					0.000	0.000
15) l3	1221-2	0.000	0.000	0	0	N.D. d	N.D. d
16) l3	1221-3	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-37.D
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Acq On : 05 Sep 2023 5:28 pm
Operator : pest2:meo
Sample : WG1823569-1,42,, 619
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 37 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 15:51:11 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
17) l3 1221-4	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
18) l4 1254-1	0.000	0.000	0	0	N.D. d	N.D. d
19) l4 1254-2	0.000	0.000	0	0	N.D. d	N.D. d
20) l4 1254-3	0.000	0.000	0	0	N.D. d	N.D. d
21) l4 1254-4	0.000	0.000	0	0	N.D. d	N.D. d
22) l4 1254-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
24) l6 1242-1	0.000	0.000	0	0	N.D. d	N.D. d
25) l6 1242-2	0.000	0.000	0	0	N.D.	N.D.
26) l6 1242-3	0.000	0.000	0	0	N.D. d	N.D. d
27) l6 1242-4	0.000	0.000	0	0	N.D. d	N.D. d
28) l6 1242-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
29) l9 1268-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l9 1268-2	0.000	0.000	0	0	N.D. d	N.D. d
31) l9 1268-3	0.000	0.000	0	0	N.D. d	N.D. d
32) l9 1268-4	0.000	0.000	0	0	N.D.	N.D.
33) l9 1268-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
35) l7 1248-1	0.000	0.000	0	0	N.D. d	N.D. d
36) l7 1248-2	0.000	0.000	0	0	N.D. d	N.D. d
37) l7 1248-3	0.000	0.000	0	0	N.D. d	N.D. d
38) l7 1248-4	0.000	0.000	0	0	N.D. d	N.D. d
39) l7 1248-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
41) l5 1232-1	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-37.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 5:28 pm
Operator : pest2:meo
Sample : WG1823569-1,42,, 619
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Integration File signal 2: events2.e
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Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
42) l5 1232-2	0.000	0.000	0	0	N.D. d	N.D. d
43) l5 1232-3	0.000	0.000	0	0	N.D. d	N.D. d
44) l5 1232-4	0.000	0.000	0	0	N.D. d	N.D. d
45) l5 1232-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
46) l8 1262-1	0.000	0.000	0	0	N.D. d	N.D. d
47) l8 1262-2	0.000	0.000	0	0	N.D. d	N.D. d
48) l8 1262-3	0.000	0.000	0	0	N.D.	N.D.
49) l8 1262-4	0.000	0.000	0	0	N.D. d	N.D. d
50) l8 1262-5	0.000	0.000	0	0	N.D.	N.D.
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

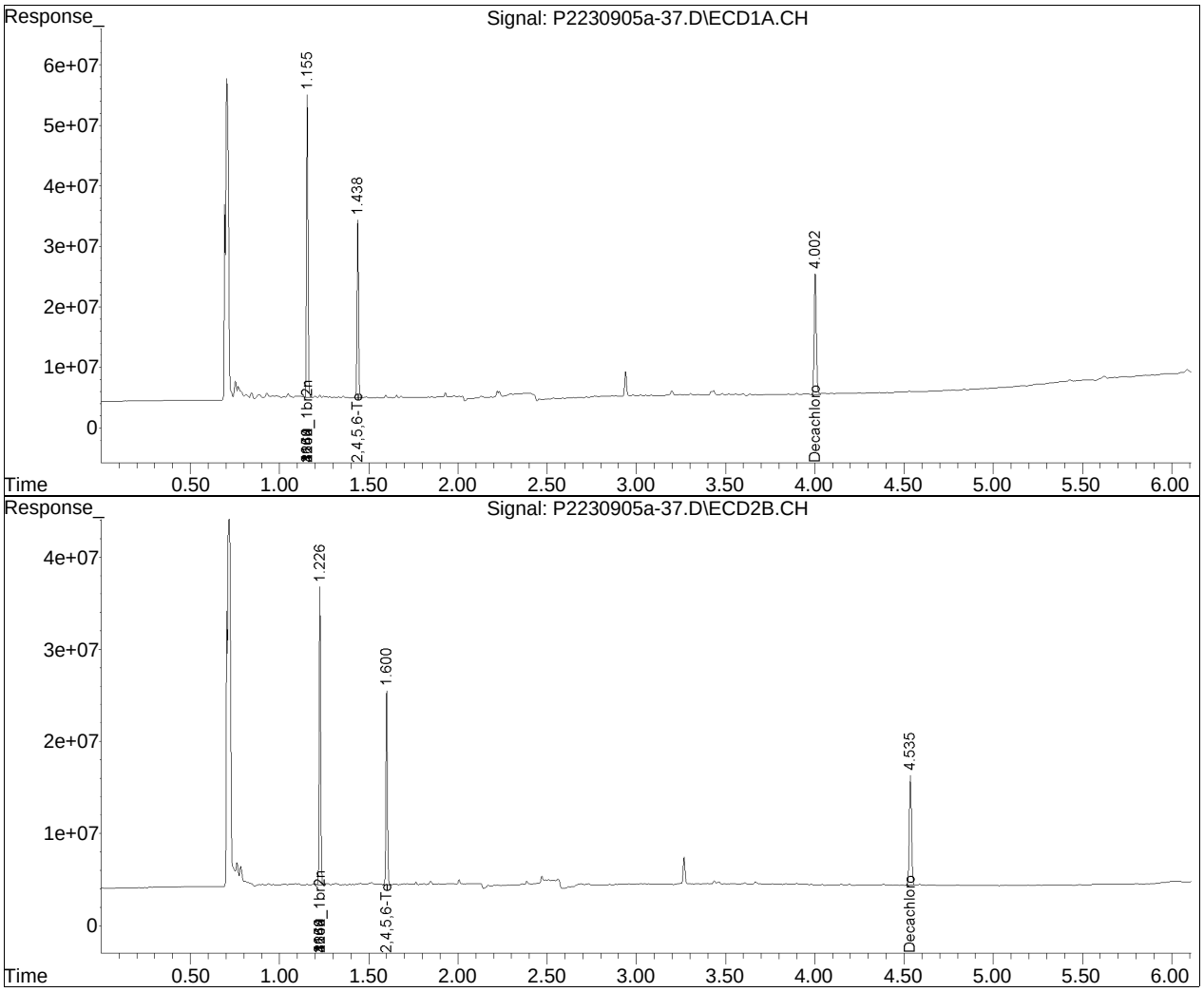
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedP2230905a-27.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-37.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 5:28 pm
Operator : pest2:meo
Sample : WG1823569-1,42,, 619
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 37 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 15:51:11 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

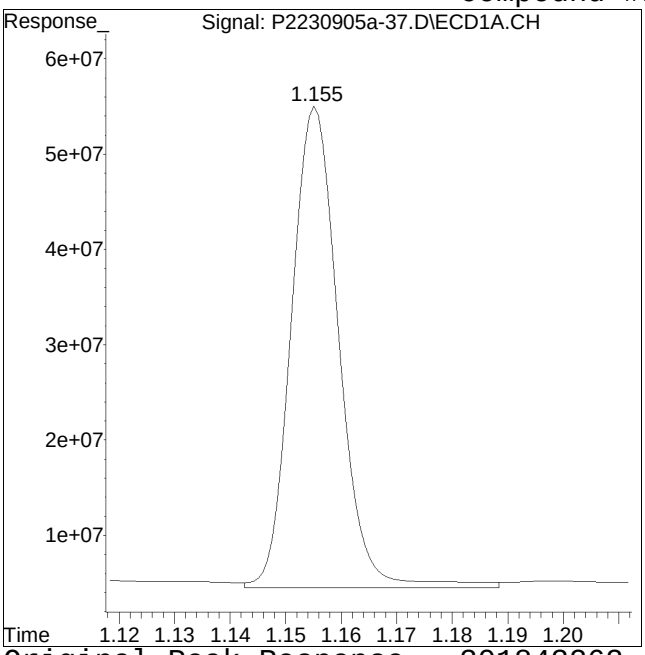
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



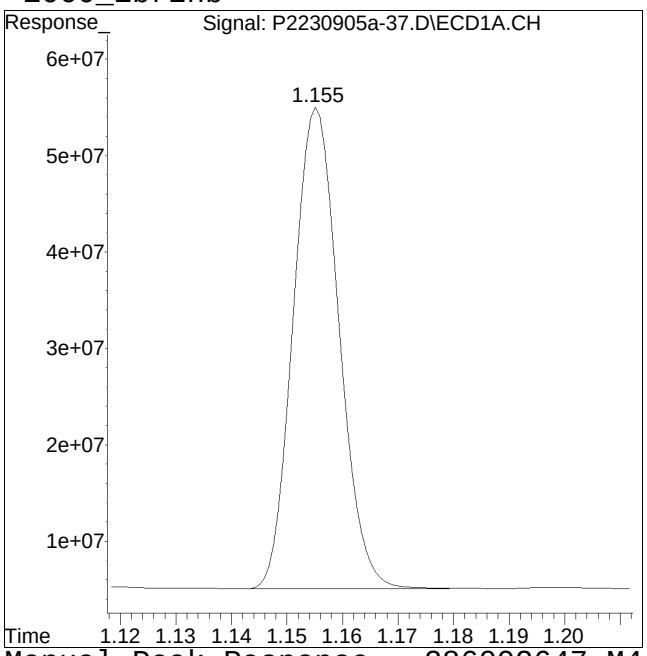
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-37.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:28 pm Instrument : Pest 2
Sample : WG1823569-1,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #1: 1660_1br2nb



Original Peak Response = 301843262



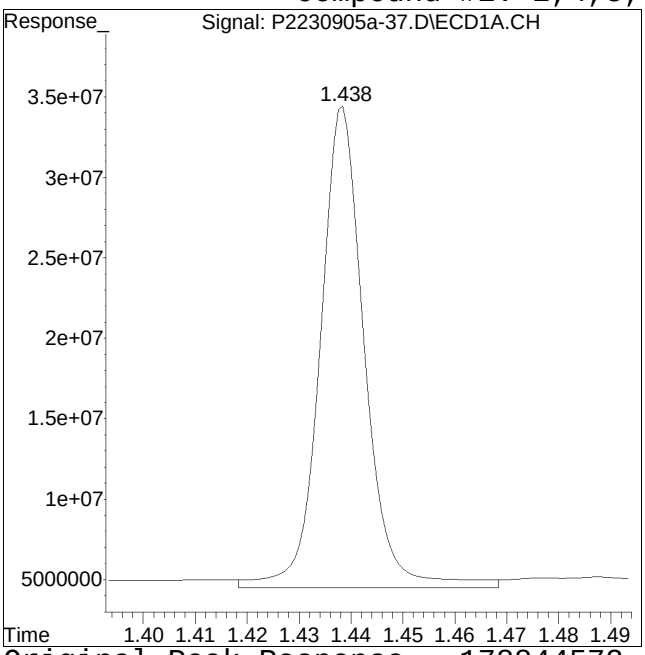
Manual Peak Response = 286002647 M4

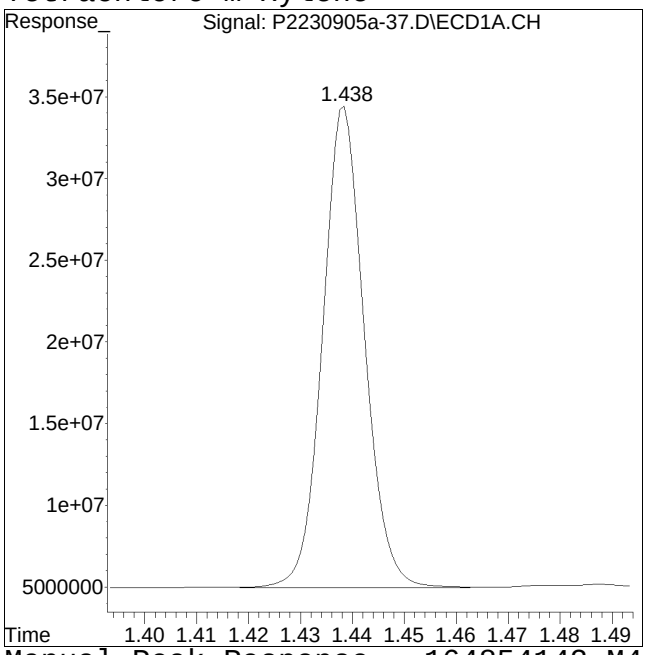
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-37.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:28 pm Instrument : Pest 2
Sample : WG1823569-1,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene





Original Peak Response = 178844572 Manual Peak Response = 164854142 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-38.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 5:38 pm
Operator : pest2:meo
Sample : WG1823569-2,42,, 619
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 38 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:27:32 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : 1660 - 1660

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards						
1) i 1660_1br2nb	1.156	1.227	266.7E6	167.7E6	25.000M4	25.000
Standard Area 1 : #1 = 277861669				Recovery =	96.00%	
Standard Area 1 : #2 = 177277303				Recovery =	94.61%	
System Monitoring Compounds						
2) s 2,4,5,6-Tetr	1.439	1.601	115.1E6	80860013	7.344M4	8.121M4
Spiked Amount	20.000	Range 30 - 150		Recovery =	36.72%	40.61%
3) s Decachlorobi	4.004	4.540	130.0E6	80692318	10.252	11.485
Spiked Amount	20.000	Range 30 - 150		Recovery =	51.26%	57.42%
Target Compounds						
4) l1 1016-1	1.578	1.803	28755378	26344150	106.474M4	145.909
5) l1 1016-2	1.720	1.976	67592575	54154282	121.132M4	137.319
6) l1 1016-3	1.910	2.176	130.2E6	85851922	107.177M4	110.272
7) l1 1016-4	1.965	2.236	57191234	42789940	113.181M4	136.062
8) l1 1016-5	2.134	2.446	59743558	32977945	112.611M4	126.440M4
Sum 1016-1			343.5E6	242.1E6	560.575	656.002
Average 1016-1					112.115	131.200
9) l2 1260-1	2.675	3.055	83782288	70724556	110.264	146.558
10) l2 1260-2	2.805	3.157	129.6E6	76198997	110.796	132.423
11) l2 1260-3	3.118	3.548	82577770	63951082	109.442	133.013
12) l2 1260-4	3.273	3.679	180.9E6	128.2E6	110.510	131.757
13) l2 1260-5	3.420	3.880	157.5E6	86436733	133.524M2	127.978
Sum 1260-1			634.4E6	425.5E6	574.536	671.728
Average 1260-1					114.907	134.346
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-38.D
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Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : 1660 - 1660

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Sum 1242-1			0	0	N.D.	N.D.
Average 1242-1					0.000	0.000
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : 1660 - 1660Pest2\2023\230905a\P2230905a-27.D••

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Data File : P2230905a-38.D
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ALS Vial : 38 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

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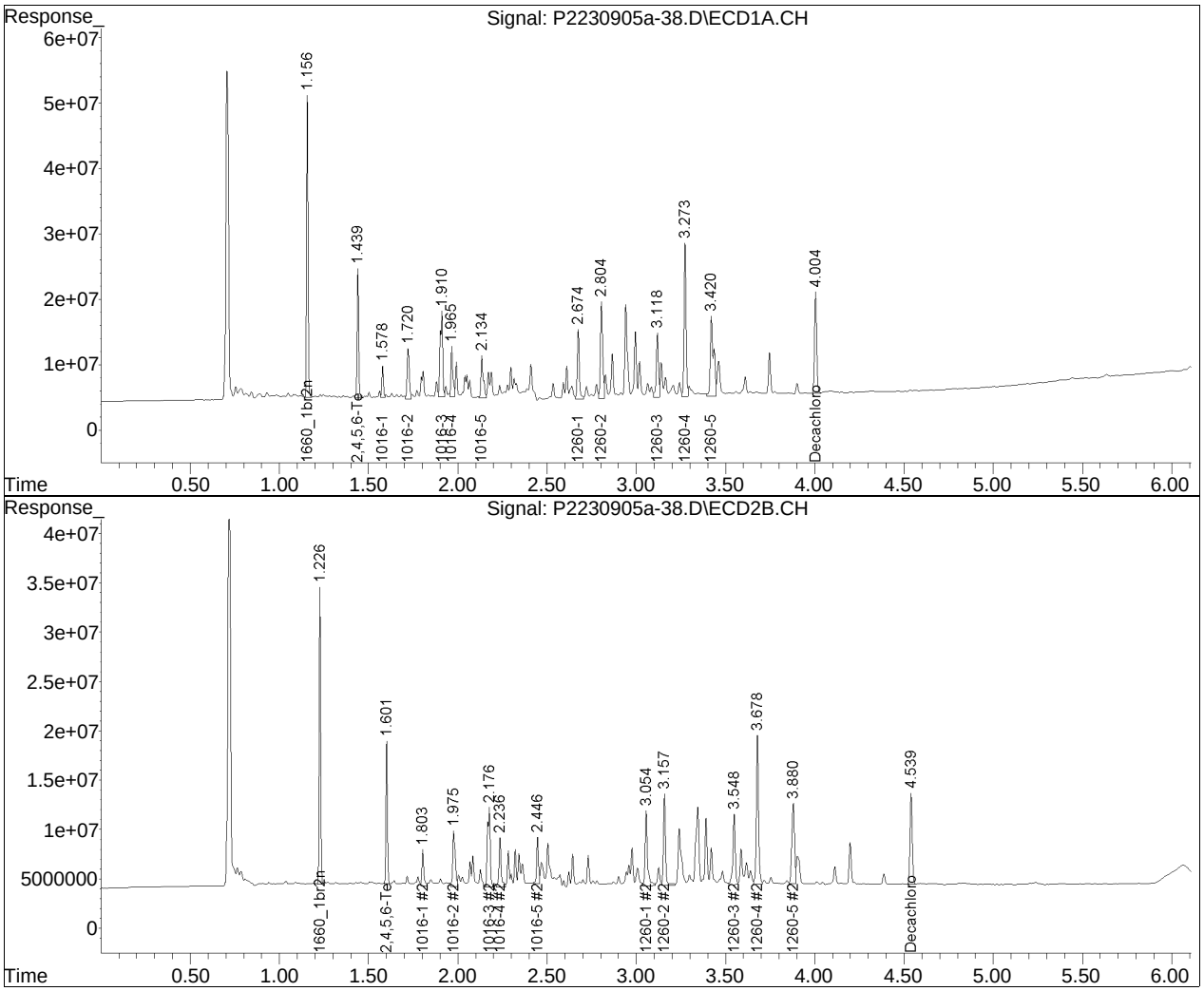
Integration File signal 2: events2.e
Quant Time: Sep 06 16:27:32 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

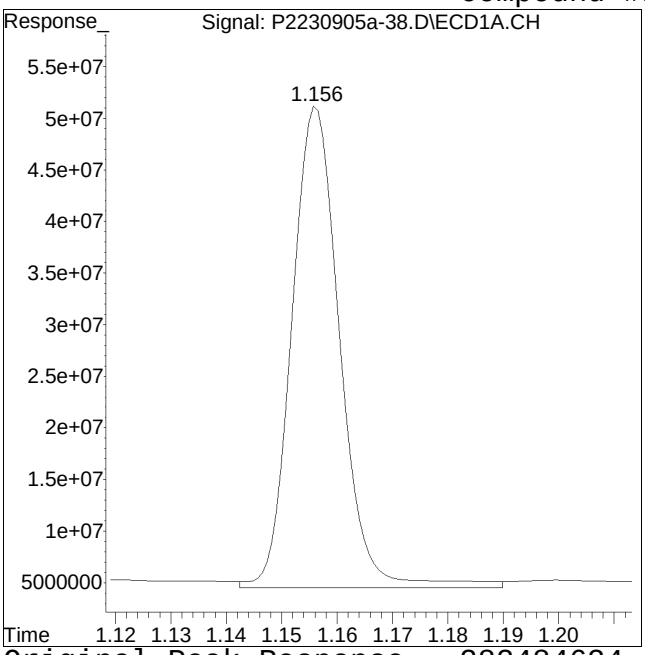
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

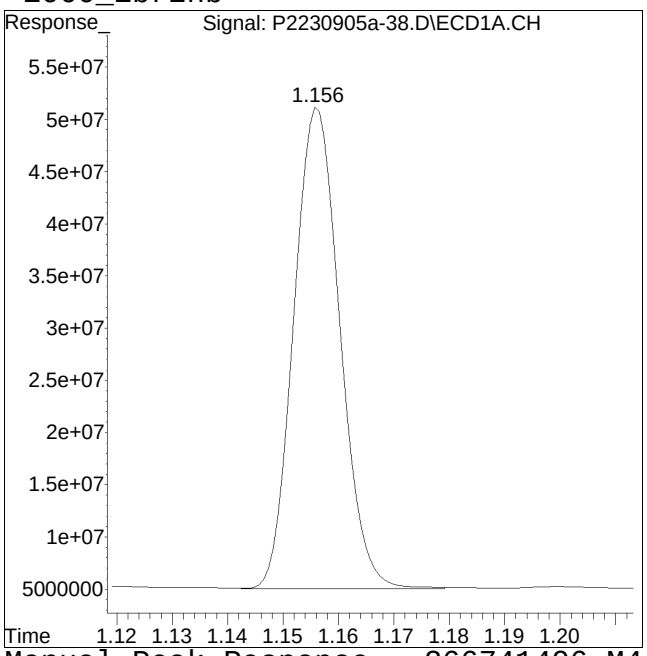


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-38.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:38 pm Instrument : Pest 2
Sample : WG1823569-2,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #1: 1660_1br2nb



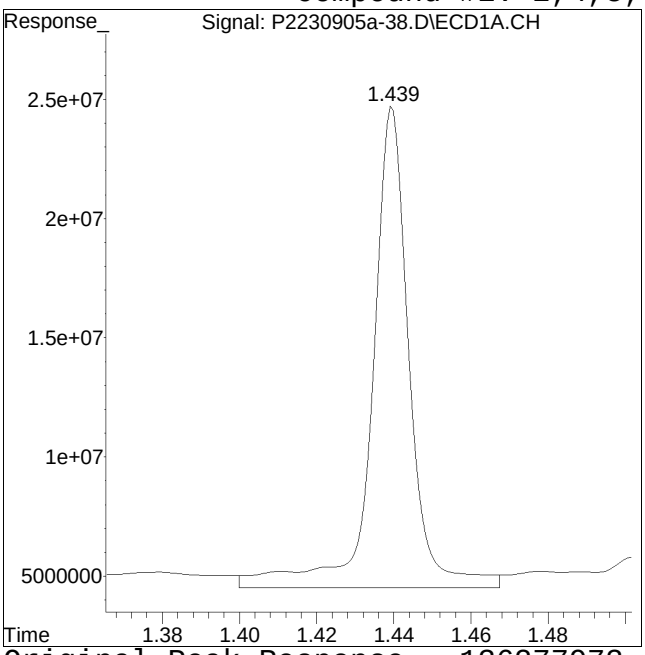


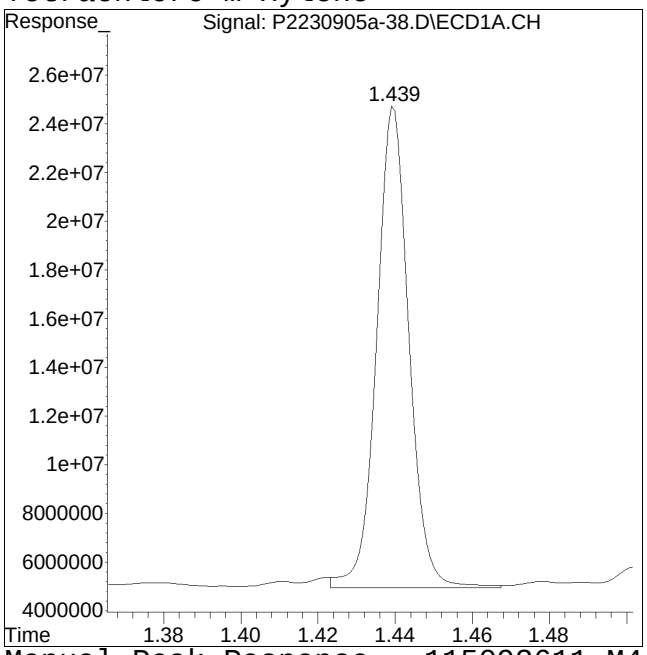
Original Peak Response = 282484624 Manual Peak Response = 266741496 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-38.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:38 pm Instrument : Pest 2
Sample : WG1823569-2,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



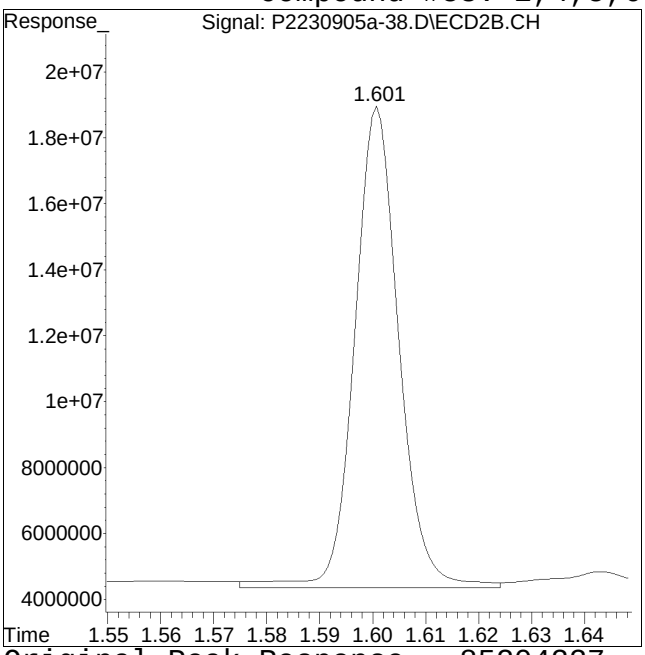


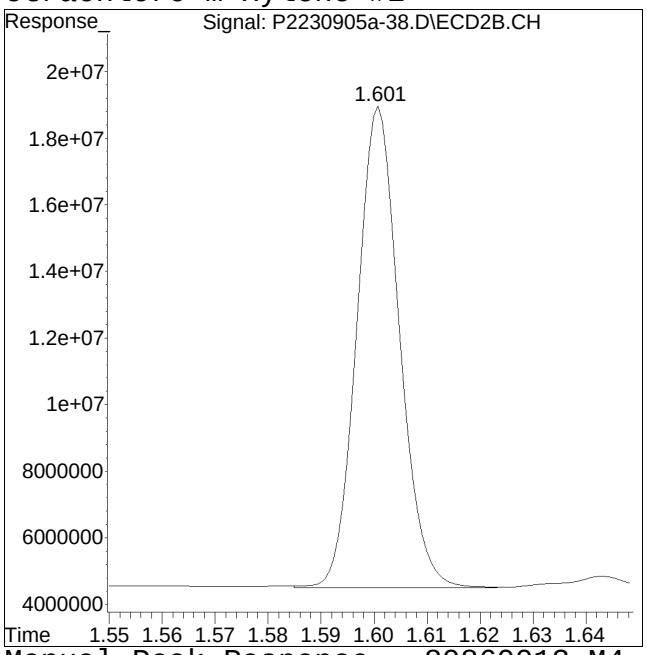
Original Peak Response = 136277973 Manual Peak Response = 115093611 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-38.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:38 pm Instrument : Pest 2
Sample : WG1823569-2,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #53: 2,4,5,6-Tetrachloro-m-xylene #2



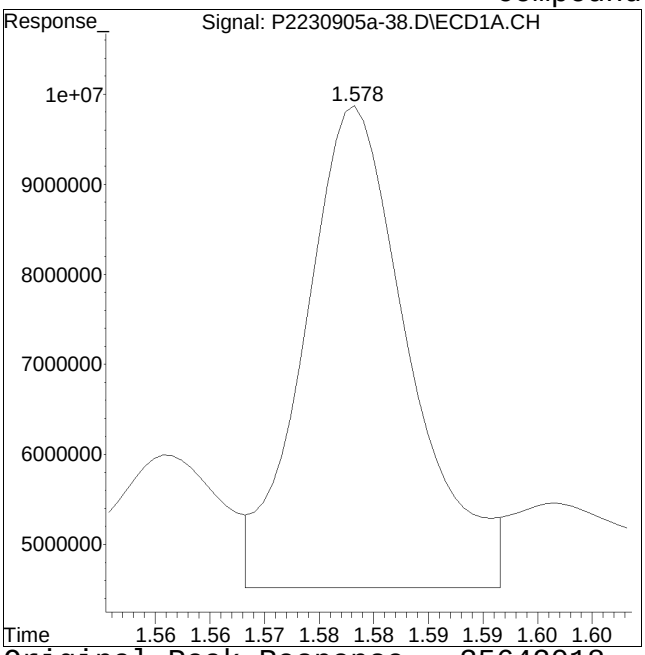


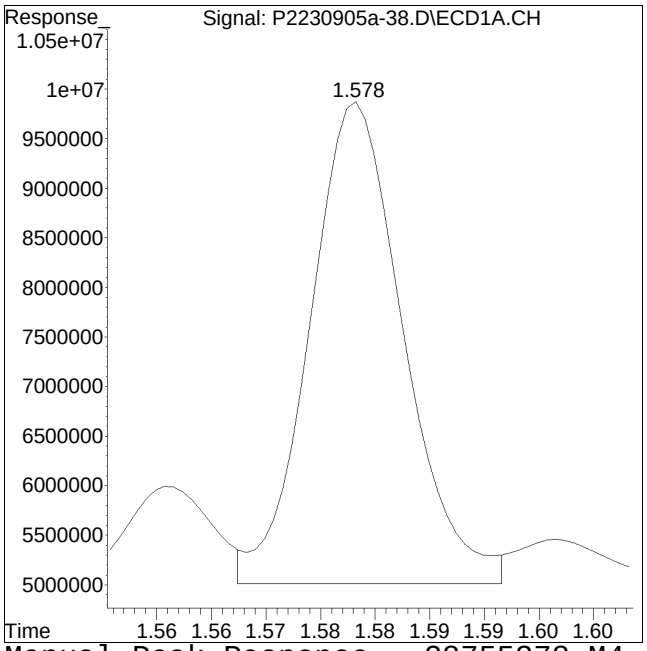
Original Peak Response = 85204237 Manual Peak Response = 80860013 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-38.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:38 pm Instrument : Pest 2
Sample : WG1823569-2,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #4: 1016-1



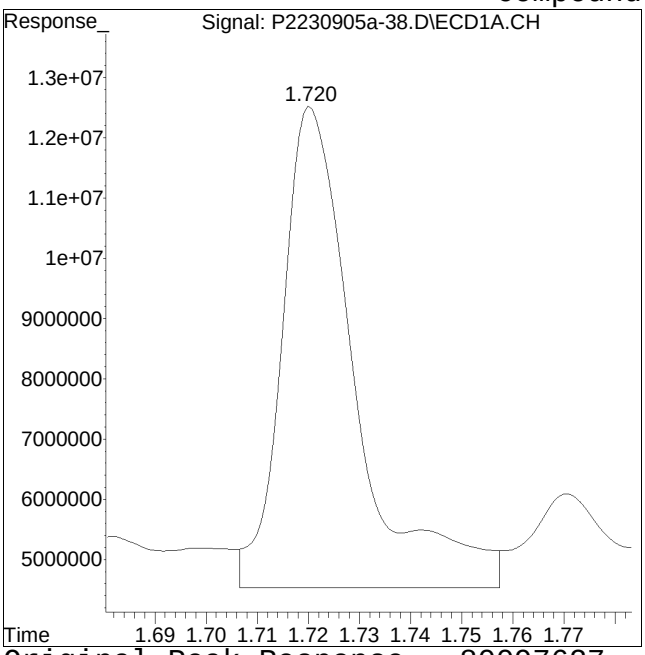


Original Peak Response = 35642018 Manual Peak Response = 28755378 M4
M4 = Poor automated baseline construction.

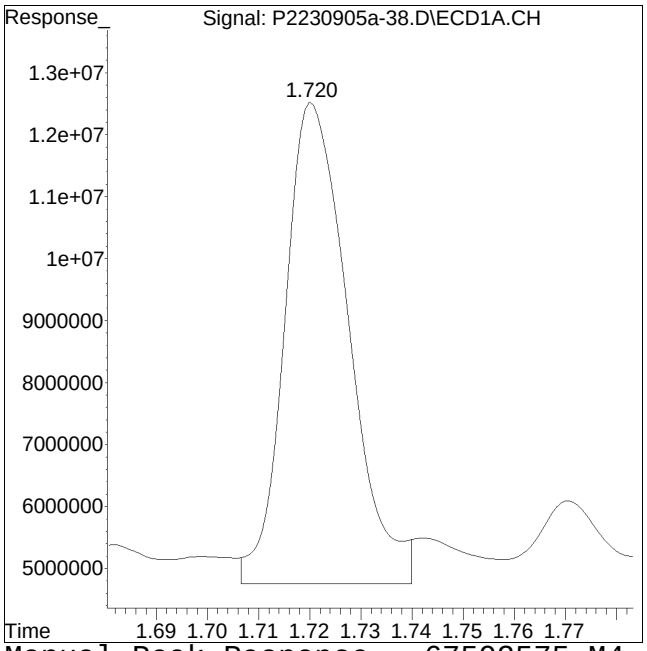
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-38.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:38 pm Instrument : Pest 2
Sample : WG1823569-2,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #5: 1016-2



Original Peak Response = 80097627



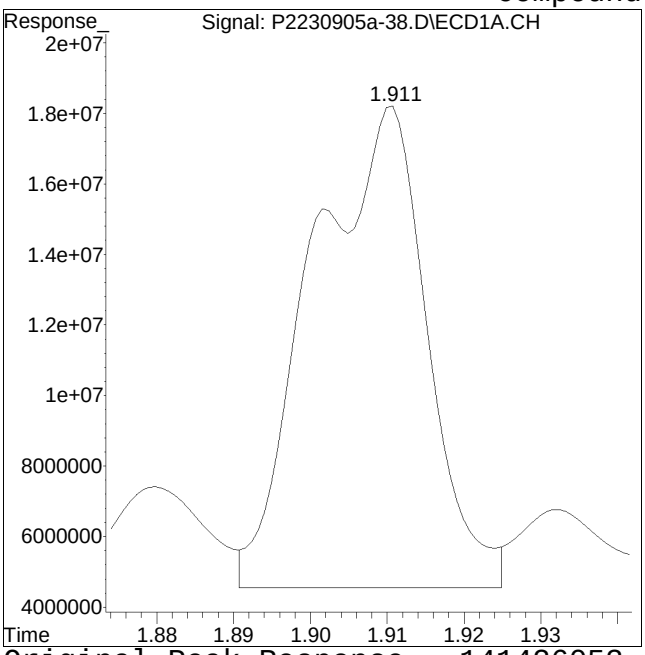
Manual Peak Response = 67592575 M4

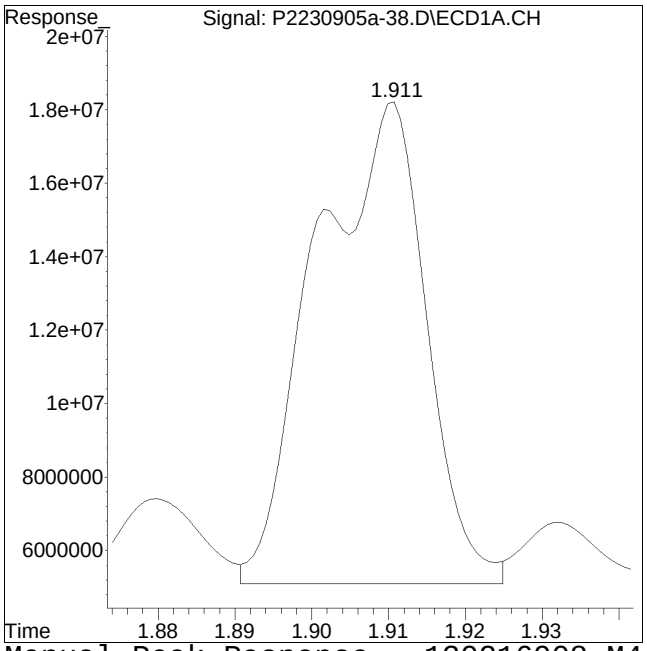
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-38.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:38 pm Instrument : Pest 2
Sample : WG1823569-2,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #6: 1016-3



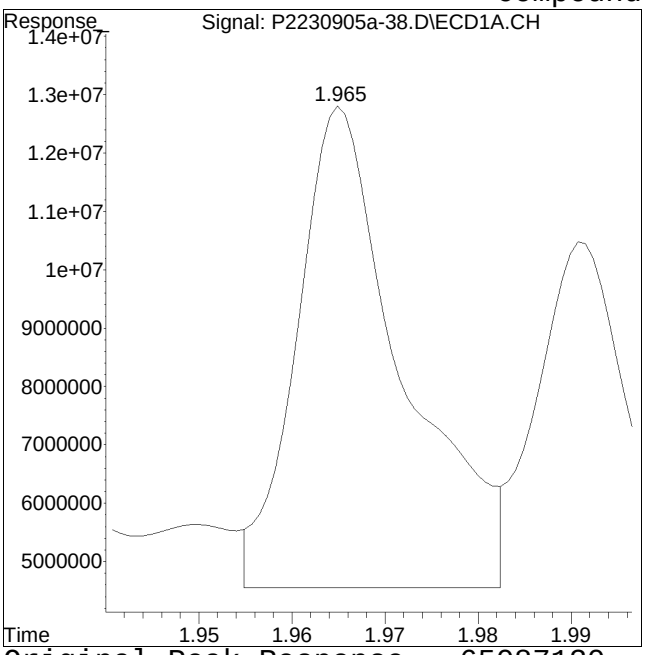


Original Peak Response = 141426053 Manual Peak Response = 130216908 M4
M4 = Poor automated baseline construction.

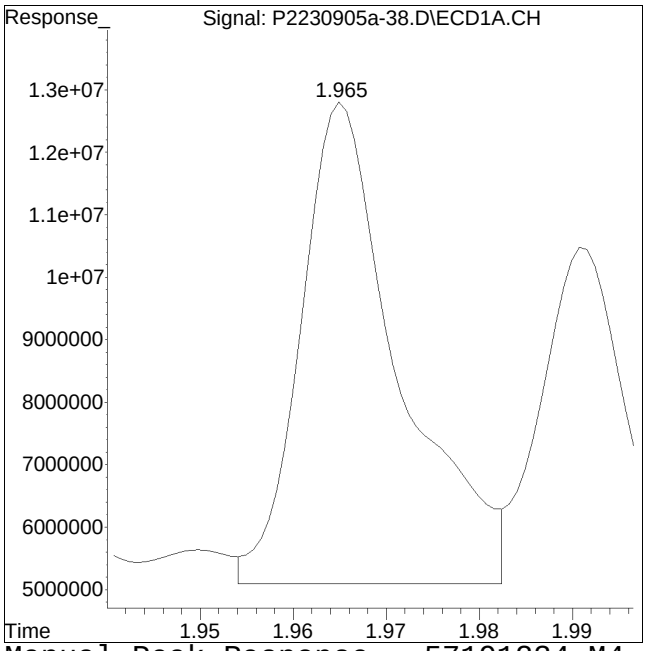
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-38.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:38 pm Instrument : Pest 2
Sample : WG1823569-2,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #7: 1016-4



Original Peak Response = 65087130



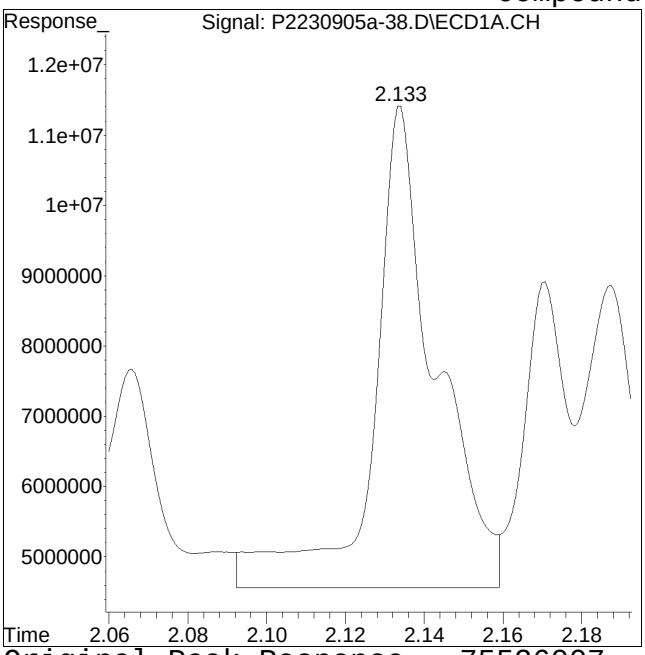
Manual Peak Response = 57191234 M4

M4 = Poor automated baseline construction.

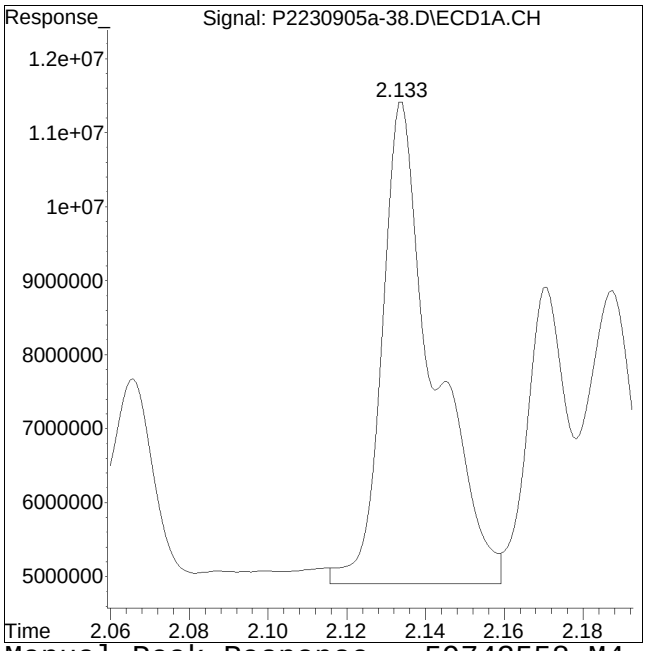
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-38.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:38 pm Instrument : Pest 2
Sample : WG1823569-2,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #8: 1016-5



Original Peak Response = 75526007



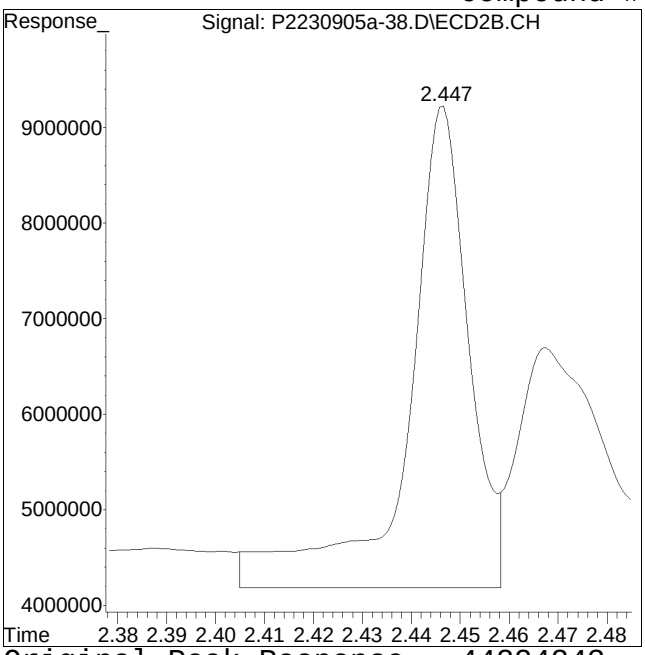
Manual Peak Response = 59743558 M4

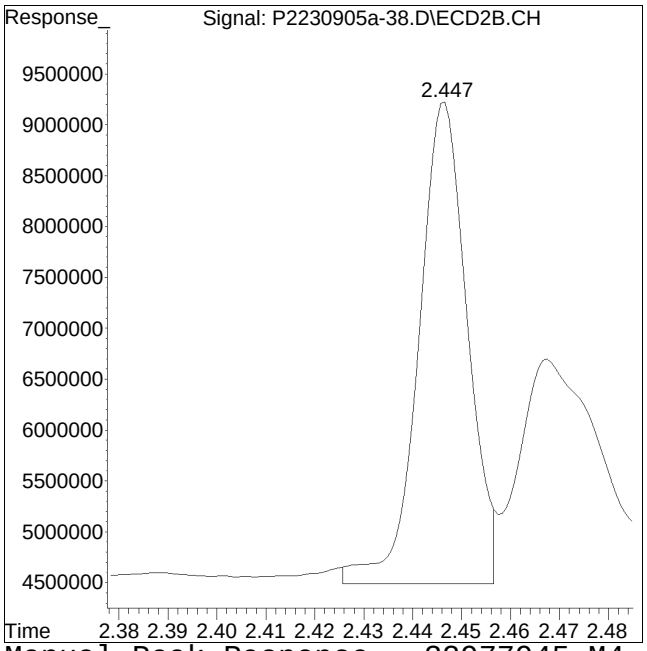
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-38.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:38 pm Instrument : Pest 2
Sample : WG1823569-2,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #59: 1016-5 #2



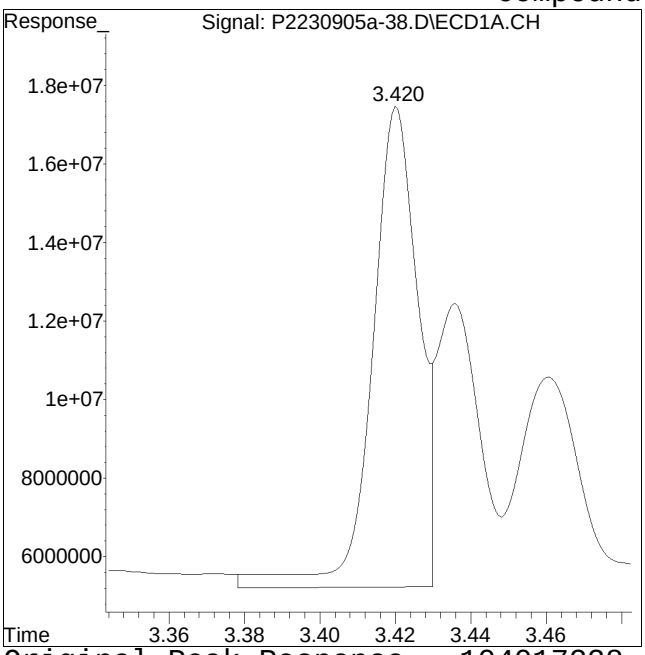


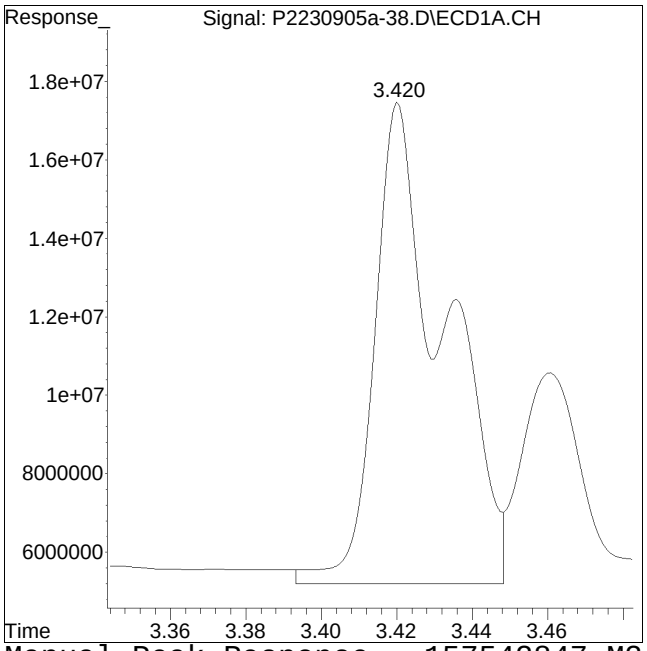
Original Peak Response = 44224243 Manual Peak Response = 32977945 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-38.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:38 pm Instrument : Pest 2
Sample : WG1823569-2,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #13: 1260-5





Original Peak Response = 104017228 Manual Peak Response = 157542847 M2
M2 = Peak not found by automatic integration algorithm.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-39.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 5:47 pm
Operator : pest2:meo
Sample : WG1823569-3,42,, 619
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 39 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:28:27 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : 1660 - 1660

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards						
1) i 1660_1br2nb	1.156	1.227	299.5E6	185.1E6	25.000M4	25.000
Standard Area 1 : #1 = 277861669				Recovery =	107.78%	
Standard Area 1 : #2 = 177277303				Recovery =	104.41%	
System Monitoring Compounds						
2) s 2,4,5,6-Tetr	1.439	1.601	142.3E6	98284798	8.089M4	8.944M4
Spiked Amount	20.000	Range 30 - 150		Recovery =	40.45%	44.72%
3) s Decachlorobi	4.004	4.540	154.6E6	94950879	10.859	12.246
Spiked Amount	20.000	Range 30 - 150		Recovery =	54.30%	61.23%
Target Compounds						
4) l1 1016-1	1.577	1.804	36539789	30098083	120.504M4	151.050
5) l1 1016-2	1.720	1.977	78281983	60139136	124.949M4	138.178
6) l1 1016-3	1.910	2.177	164.5E6	105.7E6	120.624	123.057
7) l1 1016-4	1.966	2.237	76324305	47103104	134.530	135.715
8) l1 1016-5	2.134	2.447	76809619	43014362	128.948	149.438
Sum 1016-1			432.5E6	286.1E6	629.554	697.438
Average 1016-1					125.911	139.488
9) l2 1260-1	2.674	3.055	96237656	77734040	112.807	145.960
10) l2 1260-2	2.805	3.158	184.7E6	87310541	140.681	137.488
11) l2 1260-3	3.118	3.548	98685316	76878221	116.489	144.888
12) l2 1260-4	3.272	3.679	222.0E6	151.4E6	120.745M4	141.036
13) l2 1260-5	3.420	3.879	176.9E6	103.9E6	133.530	139.340
Sum 1260-1			778.5E6	497.2E6	624.253	708.712
Average 1260-1					124.851	141.742
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
Sum 1242-1			0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-39.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 5:47 pm
Operator : pest2:meo
Sample : WG1823569-3,42,, 619
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 39 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:28:27 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : 1660 - 1660

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average 1242-1					0.000	0.000
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

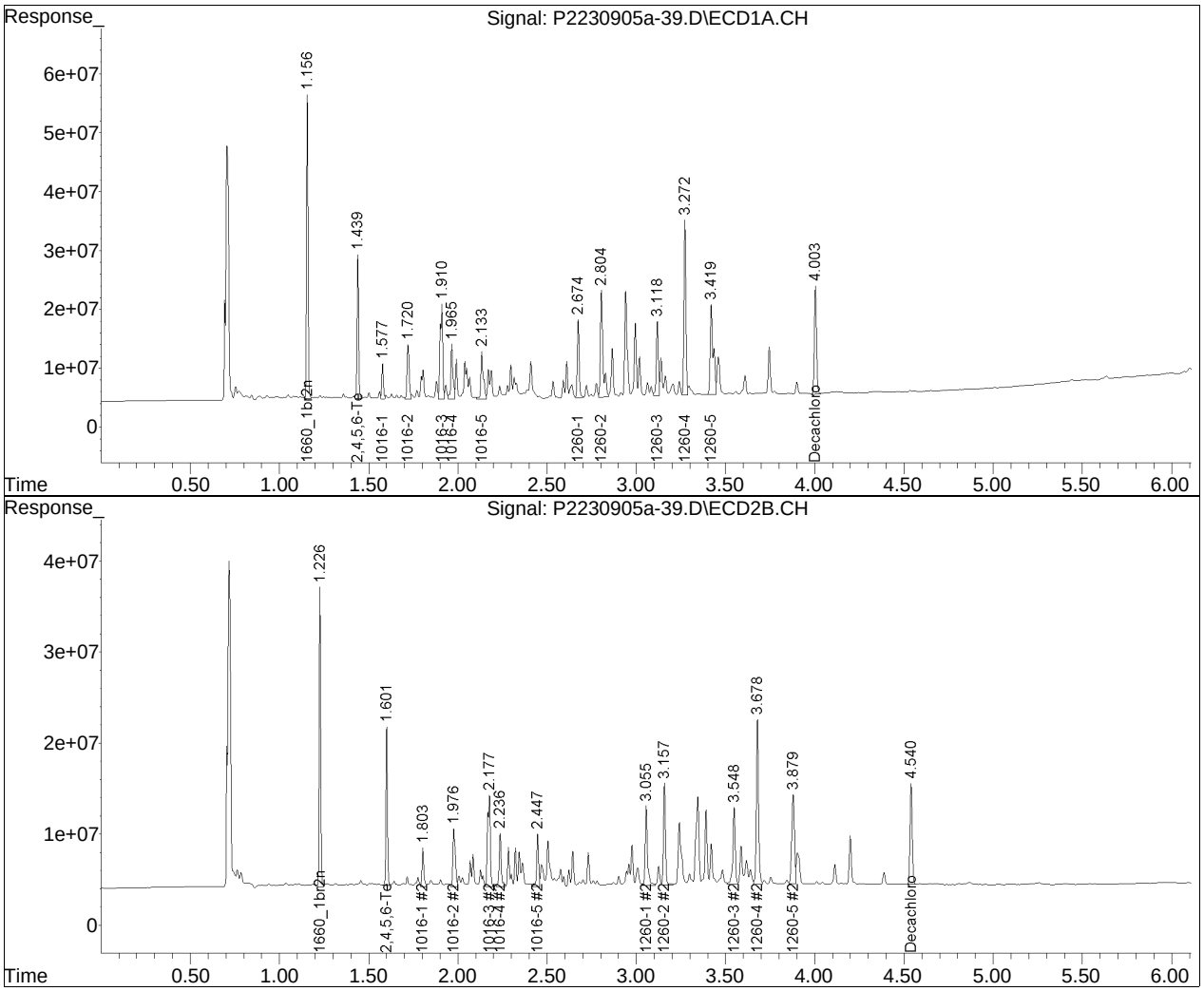
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : 1660 - 1660Pest2\2023\230905a\P2230905a-27.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-39.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 5:47 pm
Operator : pest2:meo
Sample : WG1823569-3,42,, 619
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 39 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:28:27 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

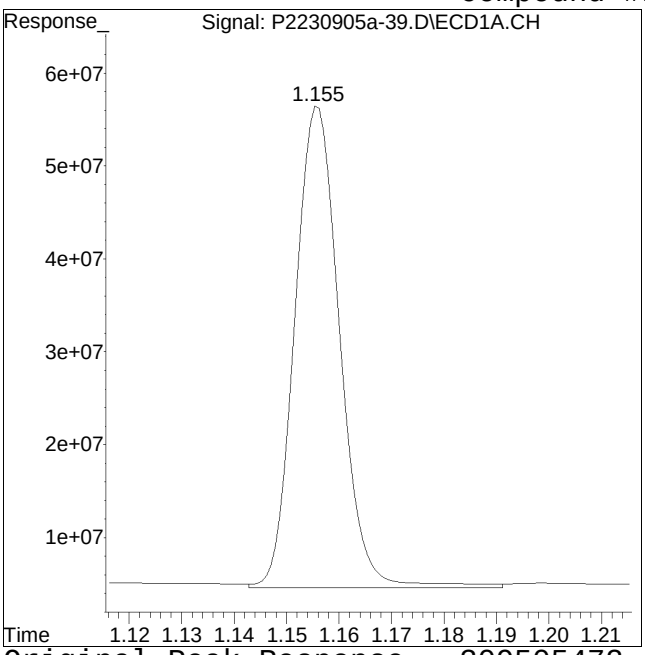
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

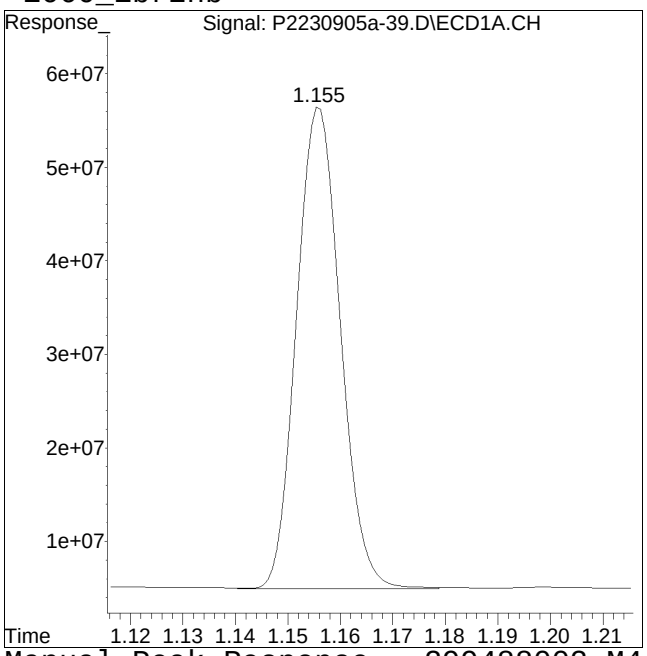


Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-39.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:47 pm Instrument : Pest 2
Sample : WG1823569-3,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #1: 1660_1br2nb



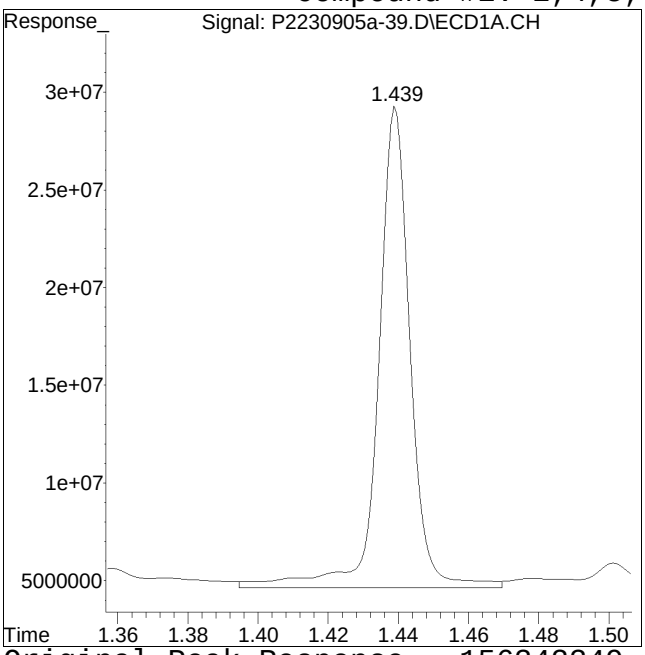


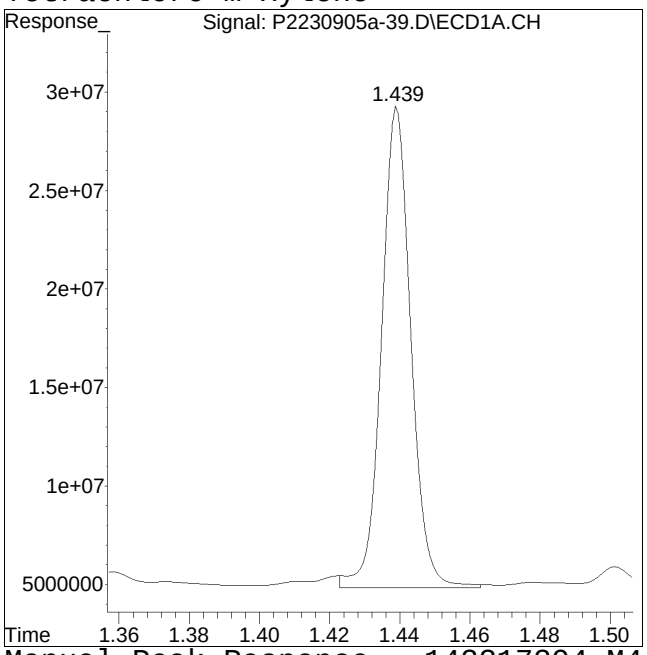
Original Peak Response = 309505472 Manual Peak Response = 299488002 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-39.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:47 pm Instrument : Pest 2
Sample : WG1823569-3,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



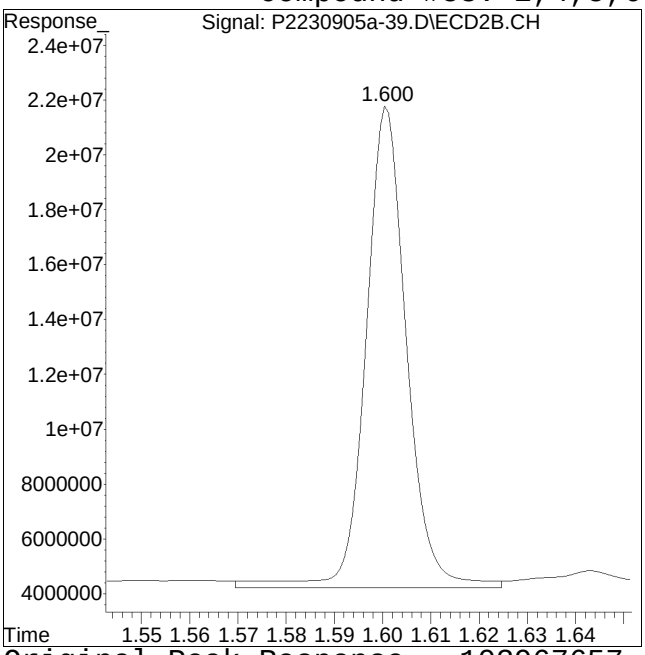


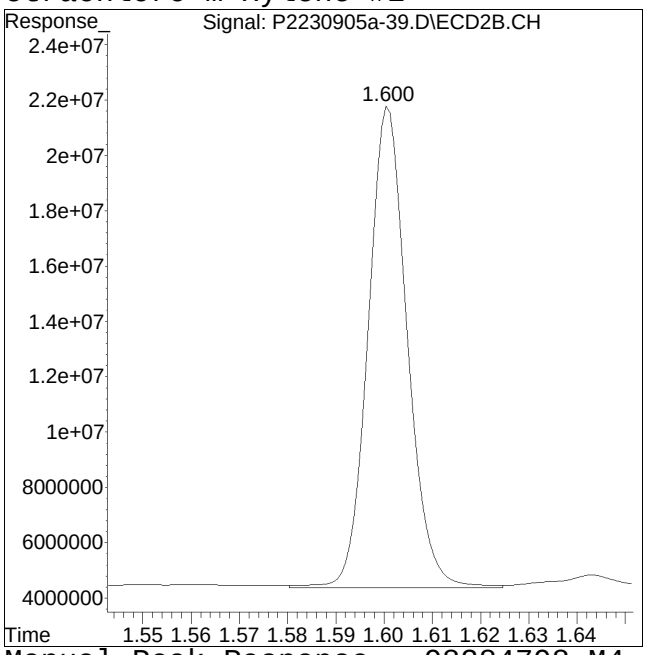
Original Peak Response = 156342349 Manual Peak Response = 142317394 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-39.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:47 pm Instrument : Pest 2
Sample : WG1823569-3,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #53: 2,4,5,6-Tetrachloro-m-xylene #2



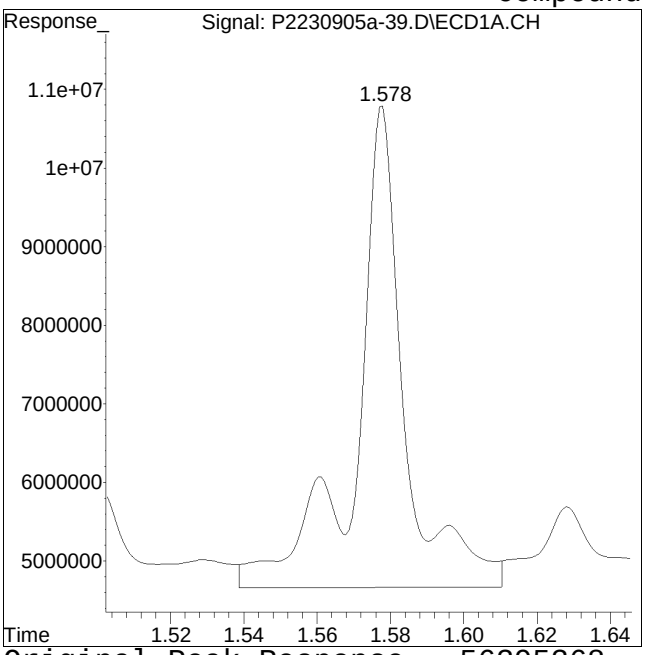


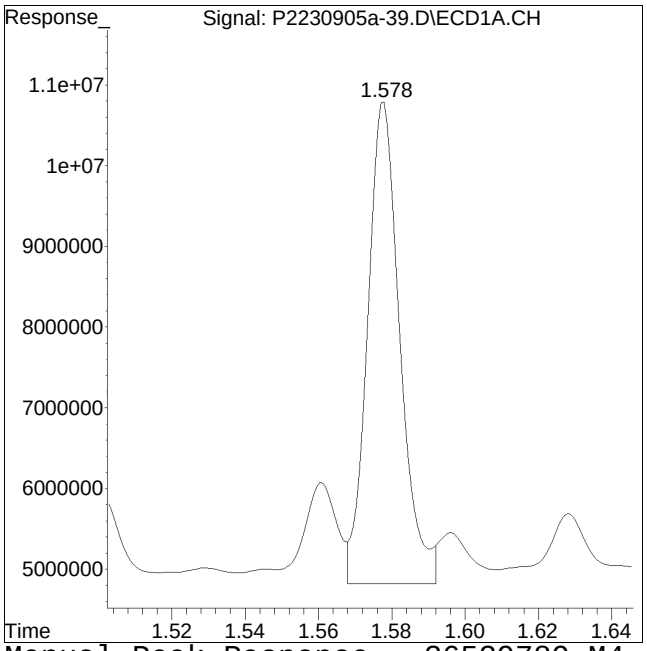
Original Peak Response = 103967657 Manual Peak Response = 98284798 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-39.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:47 pm Instrument : Pest 2
Sample : WG1823569-3,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #4: 1016-1



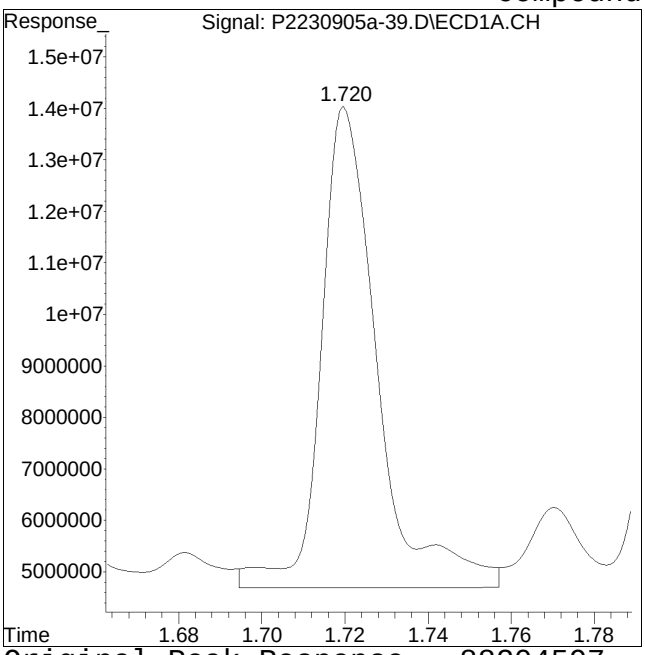


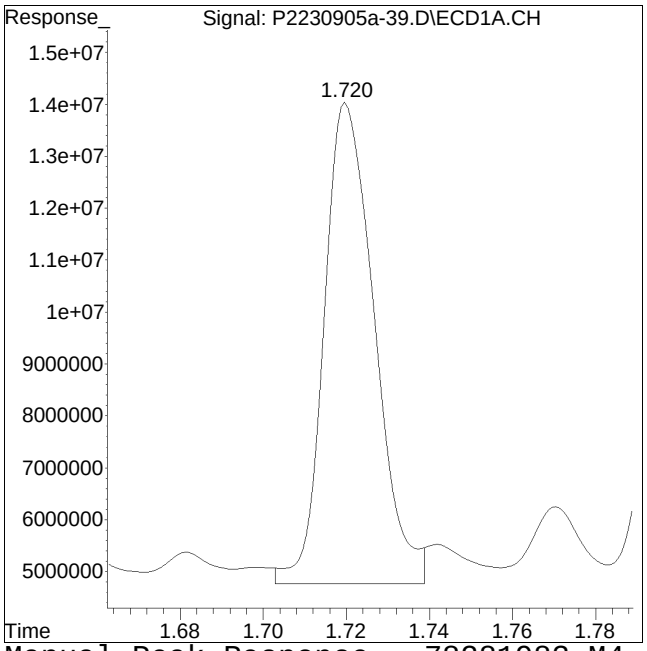
Original Peak Response = 56395368 Manual Peak Response = 36539789 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-39.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:47 pm Instrument : Pest 2
Sample : WG1823569-3,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #5: 1016-2



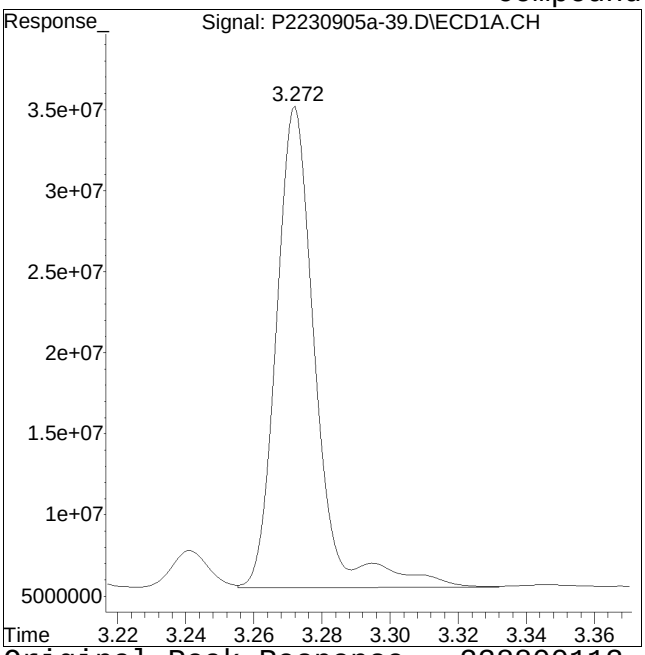


Original Peak Response = 88204597 Manual Peak Response = 78281983 M4
M4 = Poor automated baseline construction.

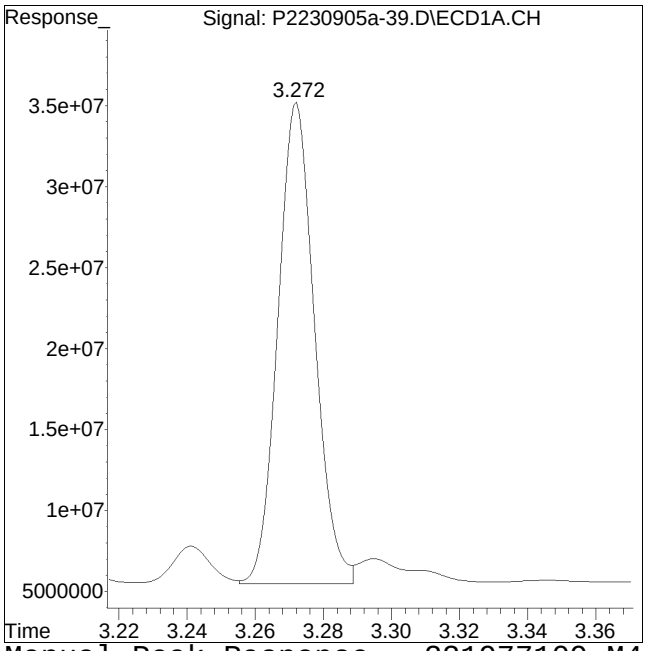
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-39.D Operator : pest2:meo
Date Inj'd : 9/5/2023 5:47 pm Instrument : Pest 2
Sample : WG1823569-3,42,, 619 Quant Date : 9/6/2023 3:31 pm

Compound #12: 1260-4



Original Peak Response = 238800113



Manual Peak Response = 221977109 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-41.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:06 pm
Operator : pest2:meo
Sample : WG1823569-4,42,, ms
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 41 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:29:49 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : 1660 - 1660

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards						
1) i 1660_1br2nb	1.155	1.226	302.0E6	174.2E6	25.000M4	25.000M4
Standard Area 1 : #1 = 277861669				Recovery =	108.70%	
Standard Area 1 : #2 = 177277303				Recovery =	98.28%	
System Monitoring Compounds						
2) s 2,4,5,6-Tetr	1.438	1.600	175.2E6	121.5E6	9.872M4	11.751
Spiked Amount	20.000	Range 30 - 150		Recovery =	49.36%	58.76%
3) s Decachlorobi	4.001	4.530	180.9E6	103.6E6	12.602	14.189
Spiked Amount	20.000	Range 30 - 150		Recovery =	63.01%	70.95%
Target Compounds						
4) l1 1016-1	1.577	1.802	45184636	33317988	147.751	177.633
5) l1 1016-2	1.719	1.973	105.2E6	68669843	166.472	167.615
6) l1 1016-3	1.907	2.174	194.7E6	115.8E6	141.521	143.133
7) l1 1016-4	1.961	2.233	84665230	52048085	147.967	159.311
8) l1 1016-5	2.130	2.444	90316350	49960301	150.339	184.389
Sum 1016-1			520.1E6	319.8E6	754.049	832.082
Average 1016-1					150.810	166.416
9) l2 1260-1	2.671	3.052	112.9E6	90888825	131.182	181.300
10) l2 1260-2	2.801	3.155	177.9E6	97549940	134.322	163.188
11) l2 1260-3	3.115	3.546	114.1E6	83612186	133.519	167.403
12) l2 1260-4	3.269	3.677	260.2E6	164.7E6	140.312M4	162.951
13) l2 1260-5	3.417	3.877	203.9E6	115.4E6	152.625M2	164.467
Sum 1260-1			868.9E6	552.1E6	691.960	839.308
Average 1260-1					138.392	167.862
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
Sum 1242-1			0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-41.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:06 pm
Operator : pest2:meo
Sample : WG1823569-4,42,, ms
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 41 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:29:49 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : 1660 - 1660

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average 1242-1					0.000	0.000
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

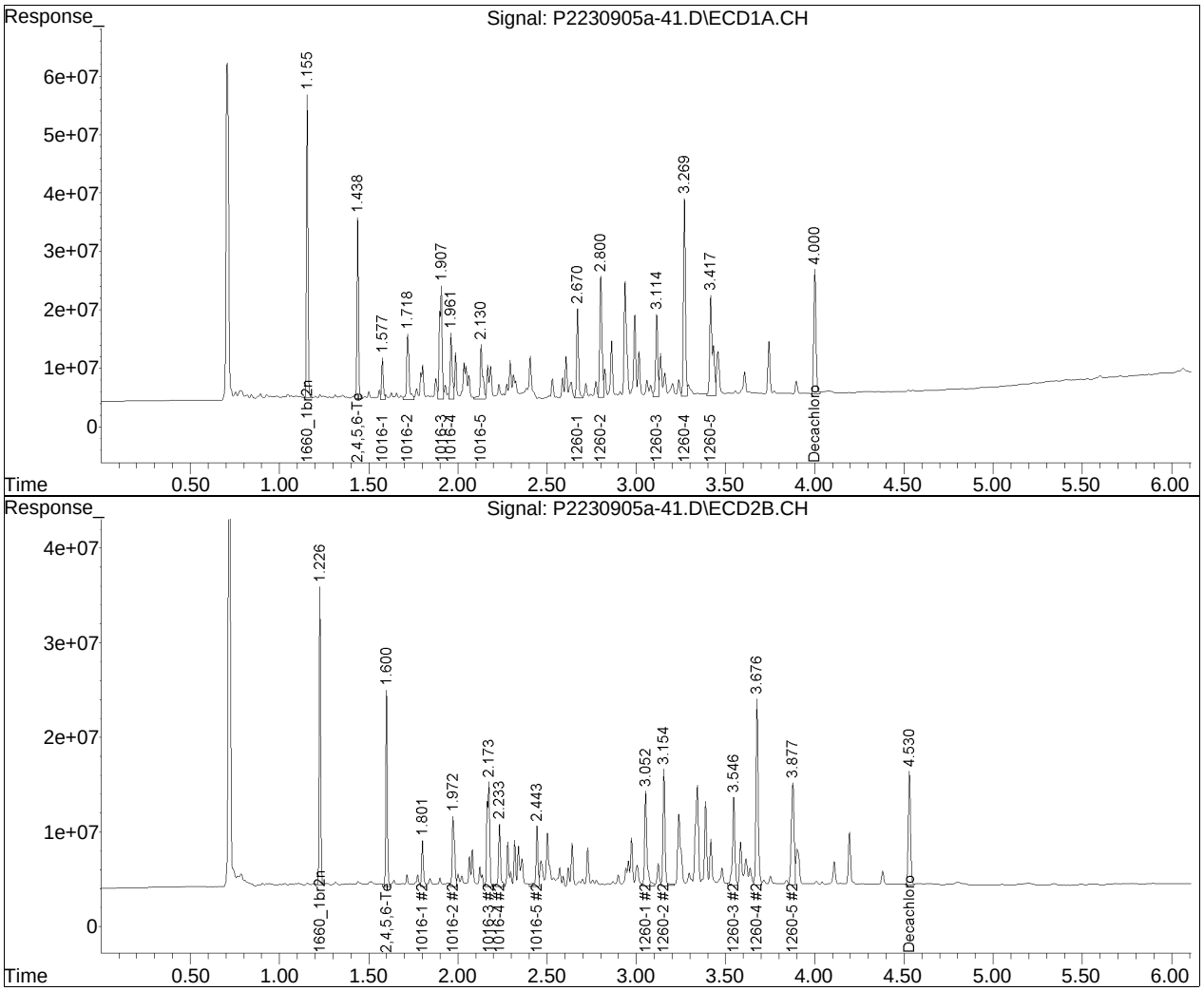
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : 1660 - 1660Pest2\2023\230905a\P2230905a-27.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-41.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:06 pm
Operator : pest2:meo
Sample : WG1823569-4,42,, ms
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 41 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:29:49 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

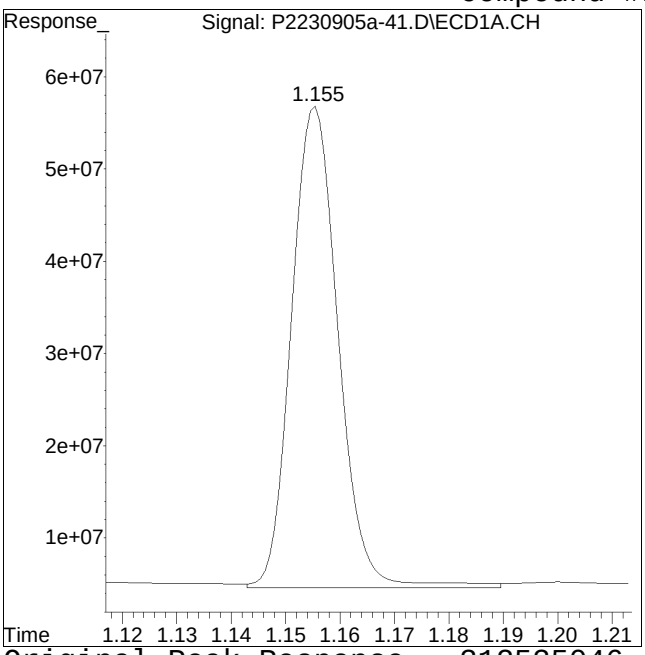
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



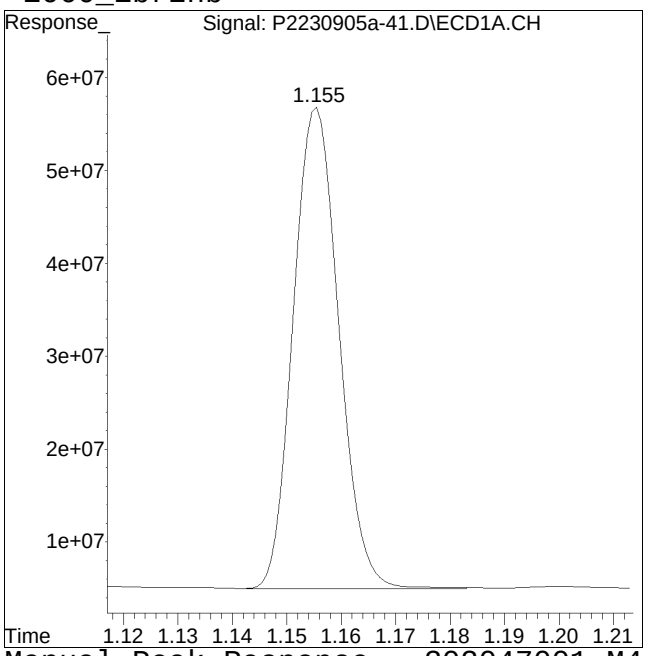
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-41.D Operator : pest2:meo
Date Inj'd : 9/5/2023 6:06 pm Instrument : Pest 2
Sample : WG1823569-4,42,, ms Quant Date : 9/6/2023 3:32 pm

Compound #1: 1660_1br2nb



Original Peak Response = 312535046

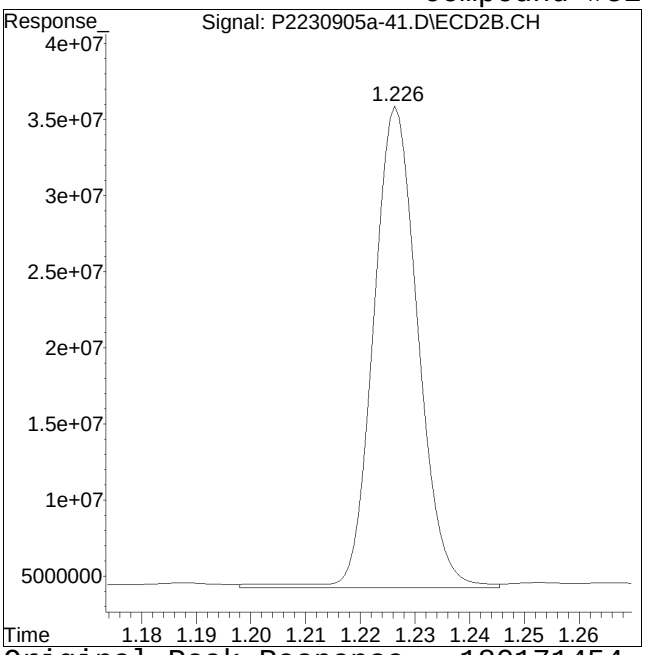


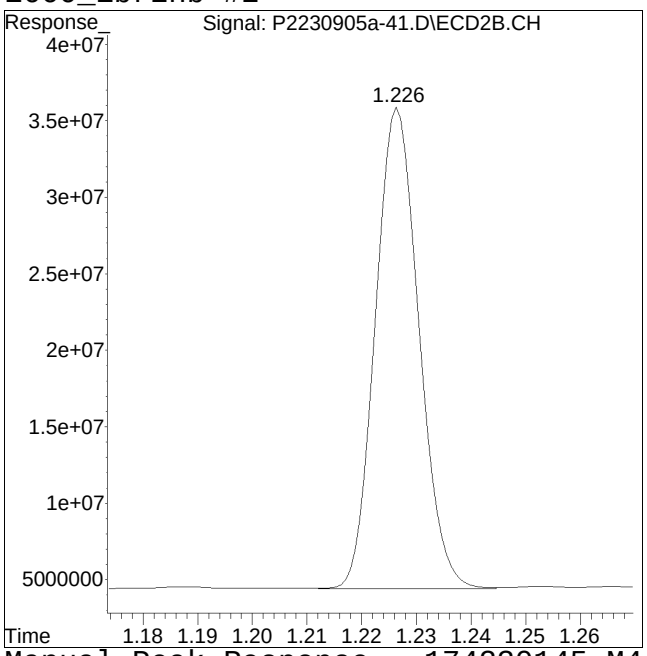
Manual Peak Response = 302047001 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-41.D Operator : pest2:meo
Date Inj'd : 9/5/2023 6:06 pm Instrument : Pest 2
Sample : WG1823569-4,42,, ms Quant Date : 9/6/2023 3:32 pm

Compound #52: 1660_1br2nb #2



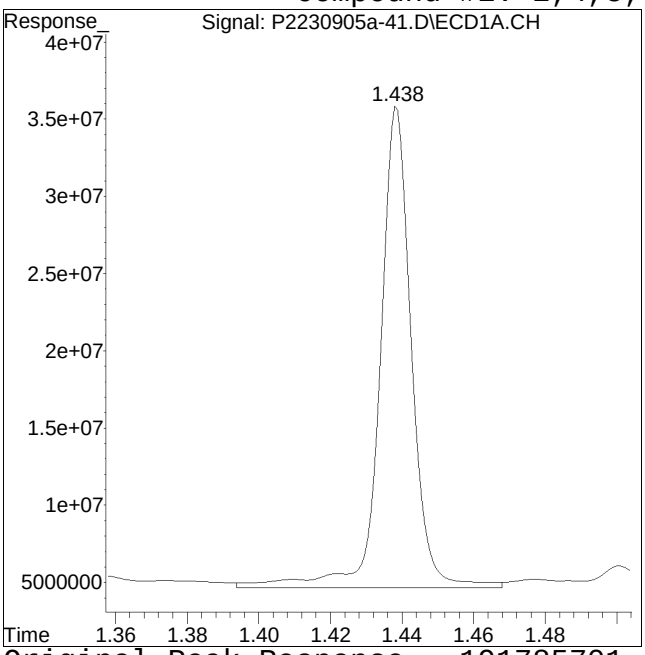


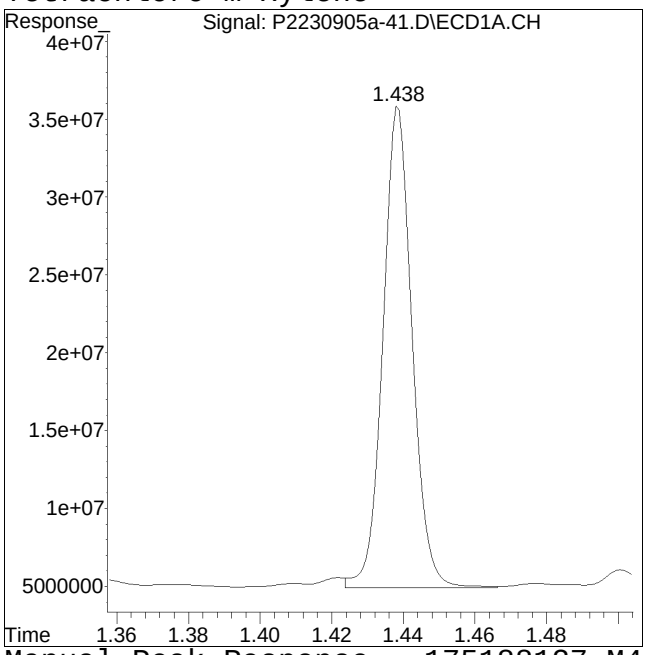
Original Peak Response = 180171454 Manual Peak Response = 174230145 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-41.D Operator : pest2:meo
Date Inj'd : 9/5/2023 6:06 pm Instrument : Pest 2
Sample : WG1823569-4,42,, ms Quant Date : 9/6/2023 3:32 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



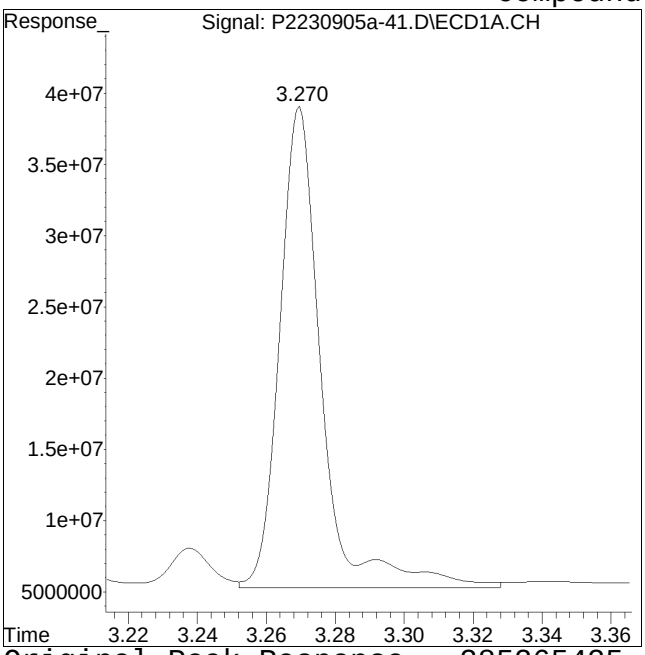


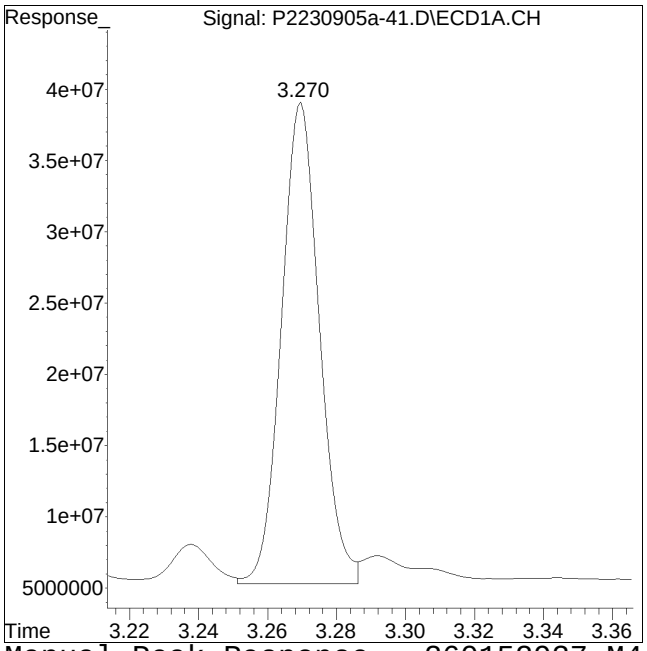
Original Peak Response = 191785701 Manual Peak Response = 175188127 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-41.D Operator : pest2:meo
Date Inj'd : 9/5/2023 6:06 pm Instrument : Pest 2
Sample : WG1823569-4,42,, ms Quant Date : 9/6/2023 3:32 pm

Compound #12: 1260-4



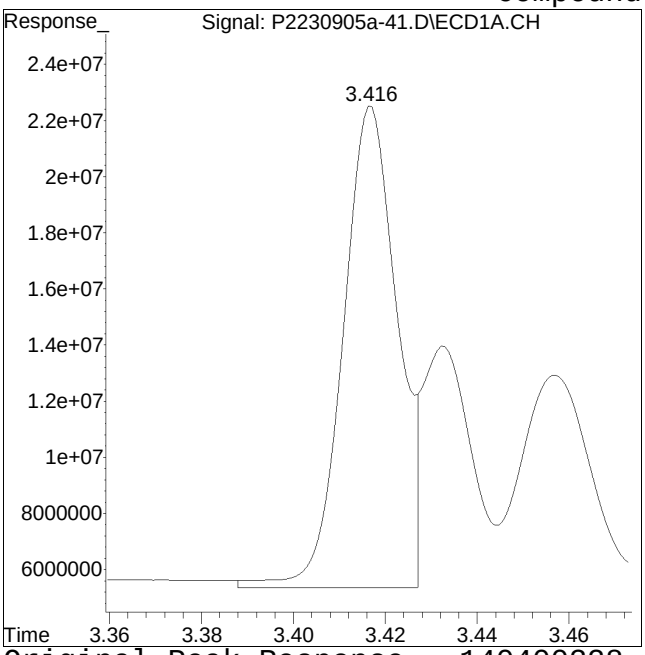


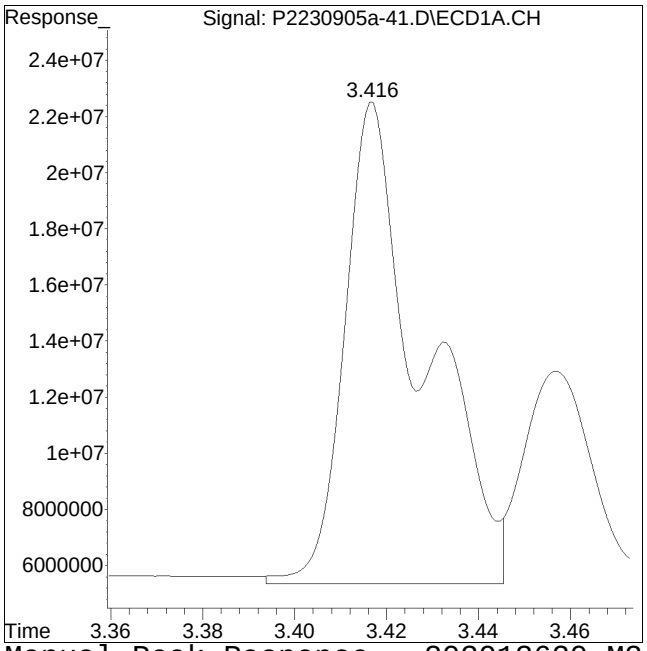
Original Peak Response = 285265425 Manual Peak Response = 260152937 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-41.D Operator : pest2:meo
Date Inj'd : 9/5/2023 6:06 pm Instrument : Pest 2
Sample : WG1823569-4,42,, ms Quant Date : 9/6/2023 3:32 pm

Compound #13: 1260-5





Original Peak Response = 140400328 Manual Peak Response = 203913620 M2
M2 = Peak not found by automatic integration algorithm.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-42.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:15 pm
Operator : pest2:meo
Sample : WG1823569-5,42,, msd
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 42 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:30:07 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : 1660 - 1660

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards						
1) i 1660_1br2nb	1.156	1.226	275.0E6	160.2E6	25.000	25.000
Standard Area 1 : #1 = 277861669				Recovery =	98.97%	
Standard Area 1 : #2 = 177277303				Recovery =	90.36%	
System Monitoring Compounds						
2) s 2,4,5,6-Tetr	1.439	1.600	173.1E6	109.8E6	10.715	11.544
Spiked Amount 20.000	Range 30 - 150		Recovery =	53.57%	57.72%	
3) s Decachlorobi	4.001	4.531	173.1E6	95959826	13.243	14.300
Spiked Amount 20.000	Range 30 - 150		Recovery =	66.22%	71.50%	
Target Compounds						
4) l1 1016-1	1.577	1.801	38860695	29400691	139.574	170.485
5) l1 1016-2	1.718	1.973	79701195	59432669	138.546M4	157.781
6) l1 1016-3	1.907	2.174	168.6E6	100.9E6	134.616	135.731
7) l1 1016-4	1.962	2.233	73273851	45981758	140.658	153.078
8) l1 1016-5	2.131	2.444	79652584	44531983	145.633	178.758
Sum 1016-1			440.1E6	280.3E6	699.027	795.833
Average 1016-1					139.805	159.167
9) l2 1260-1	2.671	3.052	98656425	78407937	125.944	170.110
10) l2 1260-2	2.801	3.155	155.7E6	86456490	129.130	157.305
11) l2 1260-3	3.115	3.547	97904918	73426511	125.863	159.893
12) l2 1260-4	3.270	3.677	223.2E6	146.9E6	132.202	158.082
13) l2 1260-5	3.417	3.878	178.9E6	102.8E6	147.093M2	159.396
Sum 1260-1			754.3E6	488.0E6	660.231	804.786
Average 1260-1					132.046	160.957
Sum 1221-2			0	0	N.D.	N.D.
Average 1221-2					0.000	0.000
Sum 1254-1			0	0	N.D.	N.D.
Average 1254-1					0.000	0.000
Sum 1242-1			0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-42.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:15 pm
Operator : pest2:meo
Sample : WG1823569-5,42,, msd
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 42 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:30:07 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PCB\Pest2\2023\230905a\P2230905a-27.D
Sub List : 1660 - 1660

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Average 1242-1					0.000	0.000
Sum 1268-1			0	0	N.D.	N.D.
Average 1268-1					0.000	0.000
Sum 1248-1			0	0	N.D.	N.D.
Average 1248-1					0.000	0.000
Sum 1232-1			0	0	N.D.	N.D.
Average 1232-1					0.000	0.000
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum 1262-1			0	0	N.D.	N.D.
Average 1262-1					0.000	0.000

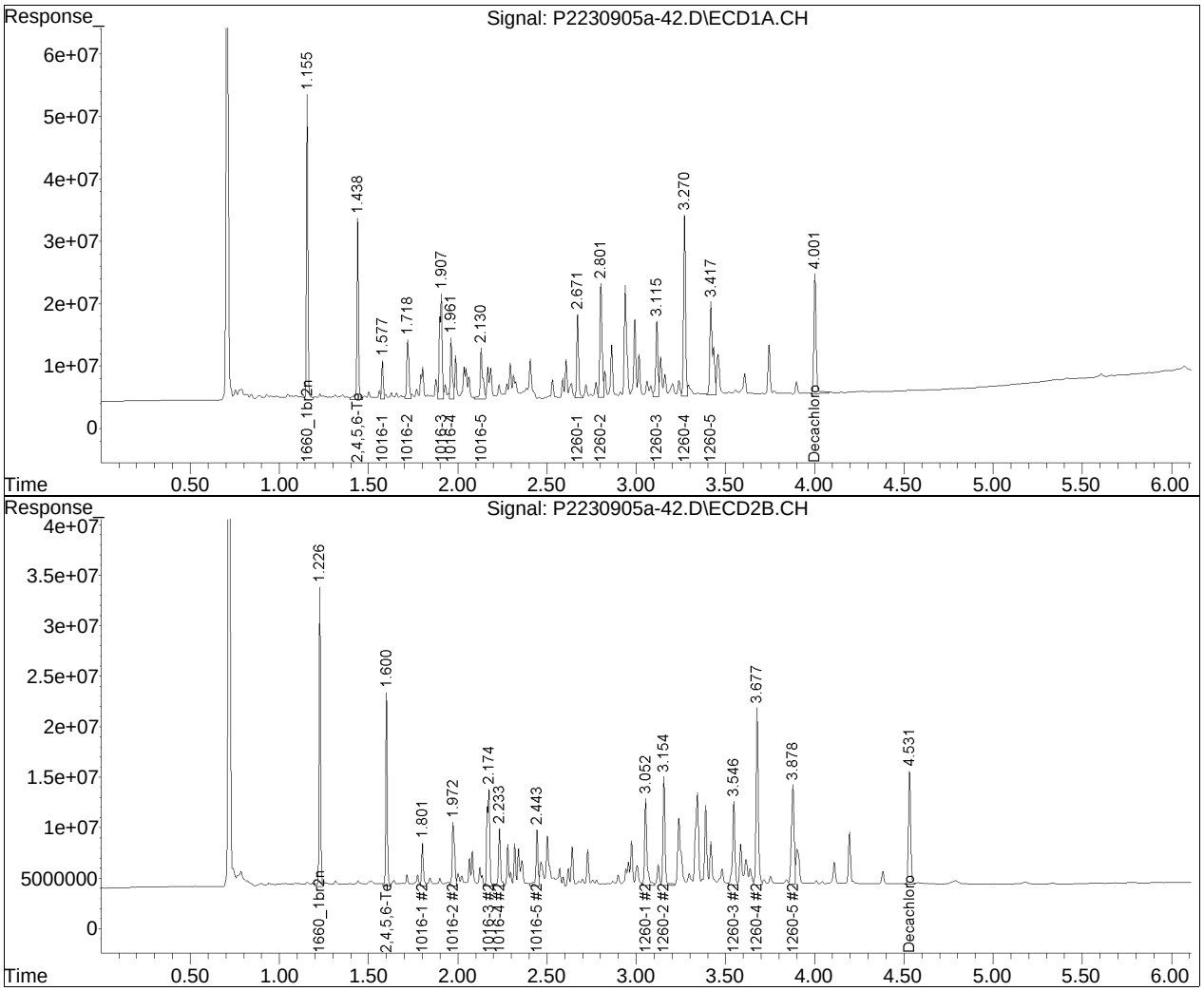
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : 1660 - 1660Pest2\2023\230905a\P2230905a-27.D••

Data Path : I:\PCB\Pest2\2023\230905a\
Data File : P2230905a-42.D
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 6:15 pm
Operator : pest2:meo
Sample : WG1823569-5,42,, msd
Misc : wg1823542,WG1823569,ical20286
ALS Vial : 42 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: events.e
Integration File signal 2: events2.e
Quant Time: Sep 06 16:30:07 2023
Quant Method : I:\PCB\Pest2\2023\230905a\P2_pcb_08_21_23_LVI_ugL_ICAL20286.m
Quant Title : pcb
QLast Update : Wed Aug 23 13:46:31 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

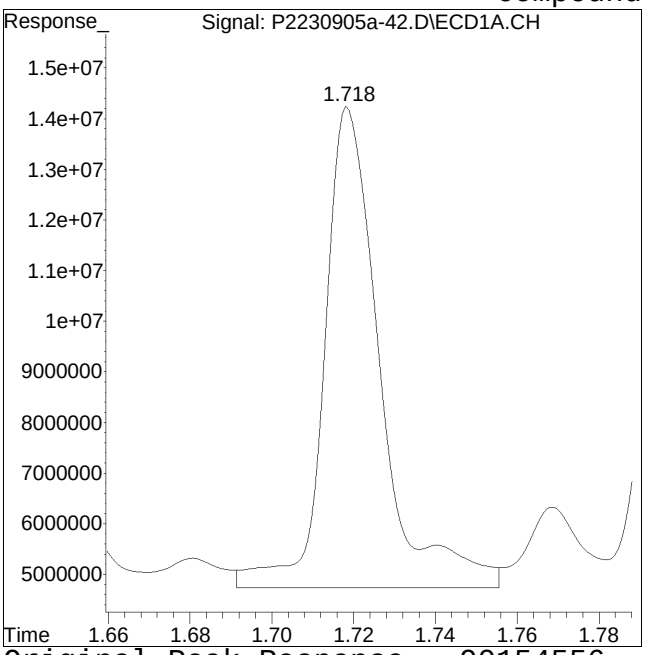
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



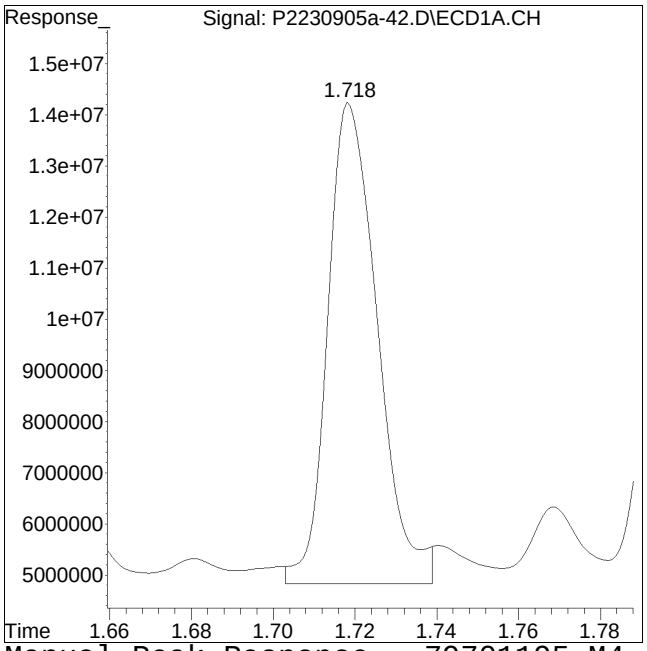
Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-42.D Operator : pest2:meo
Date Inj'd : 9/5/2023 6:15 pm Instrument : Pest 2
Sample : WG1823569-5,42,, msd Quant Date : 9/6/2023 3:32 pm

Compound #5: 1016-2



Original Peak Response = 90154556



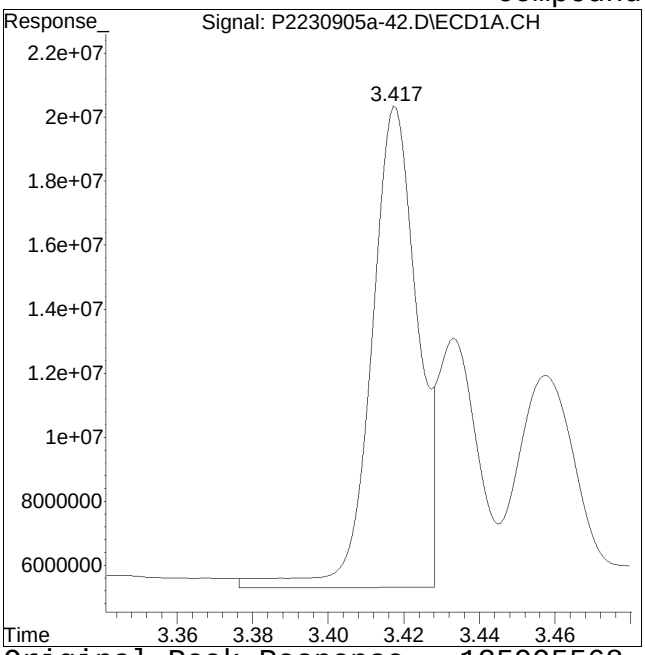
Manual Peak Response = 79701195 M4

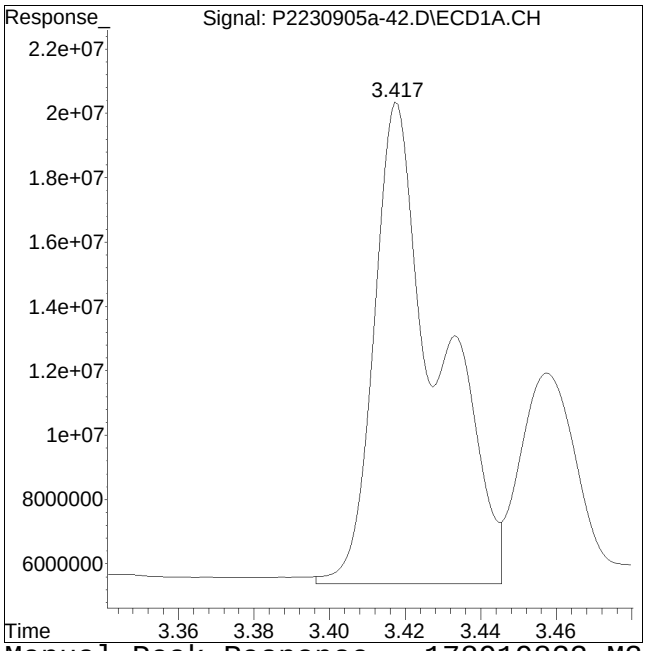
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PCB\Pest2\2023\230905a\QMethod : P2_pcb_08_21_23_LVI_ugL_
Data File : P2230905a-42.D Operator : pest2:meo
Date Inj'd : 9/5/2023 6:15 pm Instrument : Pest 2
Sample : WG1823569-5,42,, msd Quant Date : 9/6/2023 3:32 pm

Compound #13: 1260-5





Original Peak Response = 125995568 Manual Peak Response = 178919823 M2
M2 = Peak not found by automatic integration algorithm.

Calculation of PCB Aroclors & Pesticides

Aqueous Concentration Formula:
Amt * DF*(Vt/Vp)*(1000/Vo)*(Ve/1000)

Where:
DF = Dilution Factor
Vt = Extract Final Volume (mL)
Vp = Aliquot Cleaned (mL)
Vo = Volume of Sample (mL)
Ve = Extraction Lab Final Volume (mL)

Soil Concentration Formula:
Amt * DF * (Vt/Vp)*(1000/Wt)*(Ve/1000)* (100/TS)

Where:
DF = Dilution Factor
Vt = Extract Final Volume (mL)
Vp = Aliquot Cleaned (mL)
Wt = Weight of Sample (g)
Ve = Extraction Lab Final Volume (mL)
TS = Total Solids

Dep.: PCB
Inst: Pest_2
Date: **08/21/23**
Run: **I**

Method
GC: lvi

Seq: ICAL20286
IS: pp11198 LVI

Vial	Data File	Sample	CCAL	notes	initials
1	P2230821i-01	blank			
2	P2230821i-02	+1660 pp11098			
3	P2230821i-03	il44268,42,, 11149			kb rmp
4	P2230821i-04	il43262,42,, 11157			kb rmp
5	P2230821i-05	il41248,42,, 11159			kb rmp
6	P2230821i-06	il42154,42,, 11161			kb rmp
7	P2230821i-07	il11660,42,, 11287			kb rmp
8	P2230821i-08	il21660,42,, 11287			kb rmp
9	P2230821i-09	il31660,42,, 11287			kb rmp
10	P2230821i-10	il41660,42,, 11287			kb rmp
11	P2230821i-11	il51660,42,, 11287			kb rmp
12	P2230821i-12	il61660,42,, 11287			kb rmp
13	P2230821i-13	cicv4268,42,, 11176			kb rmp
14	P2230821i-14	cicv3262,42,, 11187			kb rmp
15	P2230821i-15	cicv1248,42,, 11175			kb rmp
16	P2230821i-16	cicv2154,42,, 11186			kb rmp
17	P2230821i-17	cicv1660,42,, 11173		V to F17 rmp	kb rmp
18	P2230821i-18	blank			kb rmp
19	P2230821i-19	il43262,42,, 11189			kb rmp
20	P2230821i-20	il41248,42,, 11159			kb rmp
21	P2230821i-21	cicv3262,42,, 11190			kb rmp
22	P2230821i-22	cicv1248,42,, 11175		V to F22 rmp	kb rmp

Dep.: PCB
Inst: Pest_2
Date: **09/05/23**
Run: **a**

Method
GC: lvi

Seq: wg1823542
IS: pp11198

Vial	Data File	Sample	CCAL	notes	initials
1	P2230904a-01	blank			
2	P2230904a-02	+1660 pp11282 lvi	20% 6:03AM ENT 542-1		
3	P2230904a-03	+2154 pp11186 lvi	passes -2		
4	P2230904a-04	+1248 pp11175 lvi			
5	P2230904a-05	+4268 pp11176 lvi	passes -4		
6	P2230904a-06	WG1823392-1,42,,			meo 9/5
7	P2230904a-07	WG1823392-2,42,,			meo 9/5
8	P2230904a-08	WG1823392-3,42,,			meo 9/5
9	P2230904a-09	L2350282-01,42,,			meo 9/5
10	P2230904a-10	L2350283-01,42,,			meo 9/5
11	P2230904a-11	WG1823361-1,42,,			meo 9/5
12	P2230904a-12	WG1823361-2,42,,			meo 9/5
13	P2230904a-13	WG1823361-3,42,,			meo 9/5
14	P2230904a-14	L2349792-04,42,, p			meo 9/5
15	P2230904a-15	WG1823361-4,42,, ms			meo 9/5
16	P2230905a-16	WG1823361-5,42,, dup			meo 9/5
17	P2230905a-17	L2350799-03,42,,,R3C			meo 9/5
18	P2230905a-18	L2350799-08,42,,,R3C			meo 9/5
19	P2230905a-19	L2350695-10,42,,,R3E			meo 9/5
20	P2230905a-20	L2350799-04,42,,,R3C			meo 9/5
21	P2230905a-21	L2350799-05,42,,,R3C			meo 9/5
22	P2230905a-22	L2350799-07,42,,,R3C			meo 9/5
23	P2230905a-23	L2350799-09,42,,,R3C			meo 9/5
24	P2230905a-24	L2350953-03,42,,			meo 9/5
25	P2230905a-25	L2351049-02,42,,,R3C		S to F26 rmp	meo 9/5
26	P2230905a-26	+1660 pp11282 lvi	low, bake	V to F26 ENT	
27	P2230905a-27	+1660 pp11282 lvi	15% 1:48 PM 542-5 ER		Lmr 9/6
28	P2230905a-28	+2154 pp11186 lvi			
29	P2230905a-29	+1248 pp11175 lvi			
30	P2230905a-30	+4268 pp11176 lvi			
31	P2230905a-31	WG1823483-1,42,,			Lmr 9/6
32	P2230905a-32	WG1823483-2,42,,			Lmr 9/6
33	P2230905a-33	WG1823483-3,42,,			Lmr 9/6
34	P2230905a-34	L2350505-07,42,,			Lmr 9/6
35	P2230905a-35	L2350654-03,42,,,R2F			
36	P2230905a-36	L2350787-16,42,,			
37	P2230905a-37	WG1823569-1,42,, 619			
38	P2230905a-38	WG1823569-2,42,, 619			
39	P2230905a-39	WG1823569-3,42,, 619			
40	P2230905a-40	L2350269-08,42,, p			
41	P2230905a-41	WG1823569-4,42,, ms			
42	P2230905a-42	WG1823569-5,42,, msd			
43	P2230905a-43	L2350269-01,42,,			
44	P2230905a-44	L2350269-02,42,,			

Dep.: PCB
Inst: Pest_2
Date: **09/05/23**
Run: **a**

Method
GC: lvi

Seq: wg1823542
IS: pp11198

Vial	Data File	Sample	CCAL	notes	initials
1	P2230904a-01	blank			
45	P2230905a-45	L2350269-03,42,,			
46	P2230905a-46	L2350269-04,42,,			
47	P2230905a-47	L2350269-05,42,,			
48	P2230905a-48	L2350269-06,42,,			
49	P2230905a-49	L2350269-07,42,,			
50	P2230905a-50	L2350269-09,42,,		S to F50 AD	
51	P2230905a-51	+1660 pp11282 lvi	20% 7:40 pm542-9 AD	V to F51 ER	
52	P2230905a-52	blank			
53	P2230905a-53	+2154 pp11186 lvi			
54	P2230905a-54	+1248 pp11175 lvi			
55	P2230905a-55	+4268 pp11176 lvi			
56	P2230905a-56	L2350269-11,42,,			
57	P2230905a-57	L2350484-01,42,,			
58	P2230905a-58	L2350484-02,42,,			
59	P2230905a-59	L2350484-03,42,,		S to F59 AD	

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 11 2023, 02:19 pm

Work Group: WG1823569 for Department: 2 Organic Preparation

Created: 05-SEP-23 Due: Operator: AVP

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2350269-01	MW-1S	S	NYTCL-8082-LVI	WATER	DONE	U	0827	0913	S0	Amber-A.120
L2350269-02	MW-2S	S	NYTCL-8082-LVI	WATER	DONE	U	0827	0913	S0	Amber-A.120
L2350269-03	MW-3S	S	NYTCL-8082-LVI	WATER	DONE	U	0827	0913	S0	Amber-A.120
L2350269-04	MW-4D	S	NYTCL-8082-LVI	WATER	DONE	U	0828	0913	S0	Amber-A.120
L2350269-05	MW-5S	S	NYTCL-8082-LVI	WATER	DONE	U	0828	0913	S0	Amber-A.120
L2350269-06	MW-6D	S	NYTCL-8082-LVI	WATER	DONE	U	0827	0913	S0	Amber-A.120
L2350269-07	MW-7S	S	NYTCL-8082-LVI	WATER	DONE	U	0827	0913	S0	Amber-A.120
L2350269-08	MW-8S	S	NYTCL-8082-LVI	WATER	DONE	U	0827	0913	S0	Amber-A.120
L2350269-09	DUP	S	NYTCL-8082-LVI	WATER	DONE	U	0827	0913	S0	Amber-A.120
L2350269-11	EQUIPMENT BLANK	S	NYTCL-8082-LVI	WATER	DONE	U	0828	0913	S0	Amber-A.120
WG1823569-1	Laboratory Method Bl	S	NYTCL-8082-LVI	WATER	DONE	U				
WG1823569-2	Laboratory Control S	S	NYTCL-8082-LVI	WATER	DONE	U				
WG1823569-3	LCS Duplicate	S	NYTCL-8082-LVI	WATER	DONE	U				
WG1823569-4	Matrix Spike	S	NYTCL-8082-LVI	WATER	DONE	U				
WG1823569-5	Matrix Spike Duplica	S	NYTCL-8082-LVI	WATER	DONE	U				

Comments:

WG1823569-3	WG1823569-2
WG1823569-4	L2350269-08
WG1823569-5	L2350269-08

ORGANIC ELN REPORT

Workgroup: WG1823569

Prep Method: EPA 3510C
Solvent Type: DCM **Lot #:** EH108
Surrogate Type: Pesticide/PCB **Lot #:** PP11270-C[01/18/24]
Spike Type: PCB **Lot #:** PP11272-E[01/18/24]
Spike Verify by: AVP
Lims Spikelot: PCB-LVI

Additional Reagents/Stds

Na2SO4	23A1161008

Conc.Method: S-EVAP/N-EVAP
Solvent Type: Hexane
Lot #: EH061

Additional Reagents/Stds

Cleanup 1

Cleanup Method 1: EPA 3665A
Cleanup Method 2:
Solvent Type: Hexane **Lot #:** EH061

Additional Reagents/Stds

H2SO4	2023061363

Cleanup 2

Cleanup Method 1: EPA 3660B
Cleanup Method 2:
Solvent Type: Hexane **Lot #:** EH061

Additional Reagents/Stds

Copper	2305CPRG001

Cleanup 3

Cleanup Method 1:
Solvent Type: **Lot #:**

Additional Reagents/Stds

Cleanup 4

Cleanup Method 1:
Solvent Type: **Lot #:**

Additional Reagents/Stds

Sample/ Type	Extraction: Extract Date	Analyst	Sample Vol ml	Ph	Surr Amt ml	Spike Amt ml	Concentration: Conc Date	Analyst	Final Vol ml	Conc Unit
L2350269-01 WATER	09/05/23 08:10	Alexander Pedroza	140	>5,<9	.1		09/05/23 11:59	Hieu Nguyen	5	H&G, N#3
L2350269-02 WATER	09/05/23 08:10	Alexander Pedroza	140	>5,<9	.1		09/05/23 12:05	Hieu Nguyen	5	H&G, N#3
L2350269-03 WATER	09/05/23 08:10	Alexander Pedroza	140	>5,<9	.1		09/05/23 12:05	Hieu Nguyen	5	H&G, N#3
L2350269-04 WATER	09/05/23 08:10	Alexander Pedroza	140	>5,<9	.1		09/05/23 11:59	Hieu Nguyen	5	H&G, N#3
L2350269-05 WATER	09/05/23 09:08	Alexander Pedroza	140	>5,<9	.1		09/05/23 11:59	Hieu Nguyen	5	H&G, N#3

Reported: 11-SEP-23 02:19 PM

ORGANIC ELN REPORT

Workgroup: WG1823569

Sample/ Type	Extraction						Concentration			
	Extract Date	Analyst	Sample Vol **ml**	Ph	Surr Amt **ml**	Spike Amt **ml**	Conc Date	Analyst	Final Vol **ml**	Conc Unit
L2350269-06 WATER	09/05/23 09:08	Alexander Pedroza	140	>5,<9	.1		09/05/23 12:06	Hieu Nguyen	5	H&G, N#3
L2350269-07 WATER	09/05/23 09:08	Alexander Pedroza	140	>5,<9	.1		09/05/23 12:06	Hieu Nguyen	5	H&G, N#3
L2350269-08 WATER	09/05/23 08:10	Alexander Pedroza	140	>5,<9	.1		09/05/23 11:59	Hieu Nguyen	5	H&G, N#3
L2350269-09 WATER	09/05/23 09:08	Alexander Pedroza	140	>5,<9	.1		09/05/23 12:26	Hieu Nguyen	5	H&G, N#3
L2350269-11 WATER	09/05/23 09:08	Alexander Pedroza	140	>5,<9	.1		09/05/23 12:38	Hieu Nguyen	5	H&G, N#3
WG1823569-1 BLANK	09/05/23 08:10 **WG1823619**	Alexander Pedroza	140	>5,<9	.1		09/05/23 11:49	Hieu Nguyen	5	H&G, N#3
WG1823569-2 LCS	09/05/23 08:10 **WG1823619**	Alexander Pedroza	140	>5,<9	.1	.1	09/05/23 11:49	Hieu Nguyen	5	H&G, N#3
WG1823569-3 LCSD	09/05/23 08:10 **WG1823619**	Alexander Pedroza	140	>5,<9	.1	.1	09/05/23 11:49	Hieu Nguyen	5	H&G, N#3
WG1823569-4 MS	09/05/23 08:10	Alexander Pedroza	140	>5,<9	.1	.1	09/05/23 11:58	Hieu Nguyen	5	H&G, N#3
WG1823569-5 MSD	09/05/23 08:10	Alexander Pedroza	140	>5,<9	.1	.1	09/05/23 11:50	Hieu Nguyen	5	H&G, N#3

Reported: 11-SEP-23 02:19 PM

ORGANIC ELN REPORT

Workgroup: WG1823569

Reported: 11-SEP-23 02:19 PM

ORGANIC ELN REPORT

Workgroup: WG1823569

Sample/ Type	Cleanup 1				Cleanup 2	
	Cleanup Date	Analyst	Pest Aliquot **ml**	Pest Final **ml**	Cleanup Date	Analyst
L2350269-01 WATER	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g
L2350269-02 WATER	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g
L2350269-03 WATER	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g
L2350269-04 WATER	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g
L2350269-05 WATER	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g
L2350269-06 WATER	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g
L2350269-07 WATER	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g
L2350269-08 WATER	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g
L2350269-09 WATER	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g
L2350269-11 WATER	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g
WG1823569-1 BLANK	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g

Reported: 11-SEP-23 02:19 PM

ORGANIC ELN REPORT

Workgroup: WG1823569

Sample/ Type	Cleanup 1				Cleanup 2	
	Cleanup Date	Analyst	Pest Aliquot **ml**	Pest Final **ml**	Cleanup Date	Analyst
WG1823569-2 LCS	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g
WG1823569-3 LCSD	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g
WG1823569-4 MS	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g
WG1823569-5 MSD	09/05/23 13:07	Magdalene Agyeman g	5	1	09/05/23 15:01	Magdalene Agyeman g

Reported: 11-SEP-23 02:19 PM

GC Extractable Analysis
Pesticides

Pesticide QC Summary

Surrogate Recovery Summary
Form 2
Pesticides

Client: Alpha Geoscience
Project Name: HUNTINGTON READY MIX

Lab Number: L2350269
Project Number: 20116
Matrix: Water

GC Column 1: CLPPesticides
GC Column 2: CLPPesticidesII

CLIENT ID (LAB SAMPLE NO.)	DCB 1 %REC	DCB 2 %REC	TCX 1 %REC	TCX 2 %REC	OTHER (1)	OTHER (2)	TOT OUT
MW-1S (L2350269-01)	35	35	38	41			0
MW-2S (L2350269-02)	48	47	41	44			0
MW-3S (L2350269-03)	33	30	44	45			0
MW-4D (L2350269-04)	60	59	65	69			0
MW-5S (L2350269-05)	73	71	74	79			0
MW-6D (L2350269-06)	39	40	39	41			0
MW-7S (L2350269-07)	46	46	41	44			0
MW-8S (L2350269-08)	53	56	49	54			0
DUP (L2350269-09)	49	51	45	49			0
EQUIPMENT BLANK (L2350269-11)	30	29*	60	64			1
WG1822374-1BLANK	70	65	65	69			0
WG1822374-2LCS	62	59	59	63			0
WG1822374-3LCSD	75	71	71	75			0
WG1823255-1BLANK	45	46	38	41			0
WG1823255-2LCS	49	50	37	40			0
WG1823255-3LCSD	43	43	41	43			0
MW-8SMS	47	49	41	45			0
MW-8SMSD	65	68	60	66			0

QC LIMITS
(30-150) DCBP = DECACHLOROBIPHENYL
(30-150) TCX = 2,4,5,6-TETRACHLORO-M-XYLENE

*** Values outside of QC limits**

FORM II NYTCL-8081

Laboratory Control Sample Summary
Form 3
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Matrix (Level)	: WATER (LOW)		
LCS Sample ID	: WG1822374-2	**Analysis Date** : 09/01/23 15:41	**File ID** : 10230901a-43
LCSD Sample ID	: WG1822374-3	**Analysis Date** : 09/01/23 15:52	**File ID** : 10230901a-44

	Laboratory Control Sample			Laboratory Control Duplicate						
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD		Recovery Limits	RPD Limit
Delta-BHC	0.357	0.247	69	0.357	0.288	81	15		30-150	20
Lindane	0.357	0.240	67	0.357	0.289	81	19		30-150	20
Alpha-BHC	0.357	0.237	66	0.357	0.292	82	21	Q	30-150	20
Beta-BHC	0.357	0.239	67	0.357	0.279	78	15		30-150	20
Heptachlor	0.357	0.244	68	0.357	0.289	81	17		30-150	20
Aldrin	0.357	0.230	64	0.357	0.290	81	23	Q	30-150	20
Heptachlor epoxide	0.357	0.233	65	0.357	0.289	81	21	Q	30-150	20
Endrin	0.357	0.236	66	0.357	0.288	81	20		30-150	20
Endrin aldehyde	0.357	0.172	48	0.357	0.225	63	27	Q	30-150	20
Endrin ketone	0.357	0.266	75	0.357	0.324	91	20		30-150	20
Dieldrin	0.357	0.255	71	0.357	0.314	88	21	Q	30-150	20
4,4'-DDE	0.357	0.241	68	0.357	0.292	82	19		30-150	20
4,4'-DDD	0.357	0.255	71	0.357	0.314	88	21	Q	30-150	20
4,4'-DDT	0.357	0.244	68	0.357	0.300	84	21	Q	30-150	20
Endosulfan I	0.357	0.235	66	0.357	0.286	80	20		30-150	20
Endosulfan II	0.357	0.245	69	0.357	0.299	84	20		30-150	20
Endosulfan sulfate	0.357	0.242	68	0.357	0.293	82	19		30-150	20
Methoxychlor	0.357	0.251	70	0.357	0.302	85	18		30-150	20
cis-Chlordane	0.357	0.216	61	0.357	0.263	74	20		30-150	20
trans-Chlordane	0.357	0.262	73	0.357	0.307	86	16		30-150	20

Laboratory Control Sample Summary
Form 3
Pesticides

Client : Alpha Geoscience **Lab Number** : L2350269
Project Name : HUNTINGTON READY MIX **Project Number** : 20116
Matrix (Level) : WATER (LOW)
LCS Sample ID : WG1823255-2 **Analysis Date** : 09/03/23 12:32 **File ID** : 10230903a-20
LCSD Sample ID : WG1823255-3 **Analysis Date** : 09/03/23 12:43 **File ID** : 10230903a-21

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (ug/l)	Found (ug/l)	%R	True (ug/l)	Found (ug/l)	%R	RPD	Recovery Limits	RPD Limit
Delta-BHC	0.357	0.174	49	0.357	0.169	47	3	30-150	20
Lindane	0.357	0.162	45	0.357	0.169	47	4	30-150	20
Alpha-BHC	0.357	0.157	44	0.357	0.165	46	5	30-150	20
Beta-BHC	0.357	0.180	50	0.357	0.168	47	7	30-150	20
Heptachlor	0.357	0.170	48	0.357	0.175	49	3	30-150	20
Aldrin	0.357	0.157	44	0.357	0.162	45	3	30-150	20
Heptachlor epoxide	0.357	0.175	49	0.357	0.171	48	2	30-150	20
Endrin	0.357	0.173	48	0.357	0.170	48	2	30-150	20
Endrin aldehyde	0.357	0.152	43	0.357	0.138	39	10	30-150	20
Endrin ketone	0.357	0.201	56	0.357	0.191	54	5	30-150	20
Dieldrin	0.357	0.191	54	0.357	0.185	52	3	30-150	20
4,4'-DDE	0.357	0.172	48	0.357	0.170	48	1	30-150	20
4,4'-DDD	0.357	0.192	54	0.357	0.185	52	4	30-150	20
4,4'-DDT	0.357	0.194	54	0.357	0.182	51	6	30-150	20
Endosulfan I	0.357	0.185	52	0.357	0.170	48	8	30-150	20
Endosulfan II	0.357	0.184	52	0.357	0.178	50	3	30-150	20
Endosulfan sulfate	0.357	0.183	51	0.357	0.173	48	6	30-150	20
Methoxychlor	0.357	0.218	61	0.357	0.192	54	13	30-150	20
cis-Chlordane	0.357	0.157	44	0.357	0.152	43	3	30-150	20
trans-Chlordane	0.357	0.188	53	0.357	0.181	51	4	30-150	20

Matrix Spike Sample Summary
Form 3
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2350269-08	**Analysis Date**	: 09/03/23 14:11
Matrix Spike	: WG1823255-4	**MS Analysis Date**	: 09/03/23 14:22
Matrix Spike Dup	: WG1823255-5	**MSD Analysis Date**	: 09/03/23 14:33

		Matrix Spike Sample			Matrix Spike Duplicate						
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD		Recovery Limits	RPD Limit
Delta-BHC	ND	0.357	0.172	48	0.357	0.249	70	37	Q	30-150	30
Lindane	ND	0.357	0.170	48	0.357	0.237	66	33	Q	30-150	30
Alpha-BHC	ND	0.357	0.169	47	0.357	0.258	72	42	Q	30-150	30
Beta-BHC	ND	0.357	0.172	48	0.357	0.254	71	38	Q	30-150	30
Heptachlor	ND	0.357	0.176	49	0.357	0.247	69	34	Q	30-150	30
Aldrin	ND	0.357	0.165	46	0.357	0.230	64	33	Q	30-150	30
Heptachlor epoxide	ND	0.357	0.173	48	0.357	0.242	68	33	Q	30-150	30
Endrin	ND	0.357	0.177	50	0.357	0.252	71	35	Q	30-150	30
Endrin aldehyde	ND	0.357	0.155	43	0.357	0.212	59	31	Q	30-150	30
Endrin ketone	ND	0.357	0.199	56	0.357	0.277	78	33	Q	30-150	30
Dieldrin	ND	0.357	0.194	54	0.357	0.275	77	35	Q	30-150	30
4,4'-DDE	ND	0.357	0.175	49	0.357	0.241	68	32	Q	30-150	30
4,4'-DDD	ND	0.357	0.192	54	0.357	0.268	75	33	Q	30-150	30
Endosulfan I	ND	0.357	0.186	52	0.357	0.254	71	31	Q	30-150	30
Endosulfan II	ND	0.357	0.184	52	0.357	0.259	72	34	Q	30-150	30
Endosulfan sulfate	ND	0.357	0.180	50	0.357	0.252	71	33	Q	30-150	30
Methoxychlor	ND	0.357	0.218	61	0.357	0.281	79	25		30-150	30
cis-Chlordane	ND	0.357	0.160	45	0.357	0.218	61	31	Q	30-150	30
trans-Chlordane	ND	0.357	0.187	52	0.357	0.258	72	32	Q	30-150	30

Matrix Spike Sample Summary
Form 3
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix (Level)**	: WATER (LOW)
Lab Sample ID	: L2350269-08	**Analysis Date**	: 09/03/23 14:11
Matrix Spike	: WG1823255-4	**MS Analysis Date**	: 09/03/23 14:22
Matrix Spike Dup	: WG1823255-5	**MSD Analysis Date**	: 09/03/23 14:33

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (ug/l)	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	Spike Added (ug/l)	Spike Conc. (ug/l)	%R	RPD	Recovery Limits	RPD Limit
4,4'-DDT	0.004JIP	0.357	0.182	51	0.357	0.255	71	33 Q	30-150	30

Method Blank Summary
Form 4
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: WG1822374-1	**Lab File ID**	: 10230901a-42
Matrix	: WATER	**Extraction Date**	: 08/31/23
Analysis Date (1)	: 09/01/23 15:30	**Analysis Date (2)**	: 09/01/23 15:30
Instrument ID (1)	: PEST10	**Instrument ID (2)**	: PEST10

Client Sample No.	Lab Sample ID	Analysis Date 1	Analysis Date 2
WG1822374-2LCS	WG1822374-2	09/01/23 15:41	09/01/23 15:41
WG1822374-3LCSD	WG1822374-3	09/01/23 15:52	09/01/23 15:52
MW-4D	L2350269-04	09/01/23 16:26	09/01/23 16:26
MW-5S	L2350269-05	09/01/23 16:37	09/01/23 16:37
EQUIPMENT BLANK	L2350269-11	09/01/23 16:47	09/01/23 16:47

Method Blank Summary
Form 4
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: WG1823255-1	**Lab File ID**	: 10230903a-19
Matrix	: WATER	**Extraction Date**	: 09/02/23
Analysis Date (1)	: 09/03/23 12:21	**Analysis Date (2)**	: 09/03/23 12:21
Instrument ID (1)	: PEST10	**Instrument ID (2)**	: PEST10

Client Sample No.	Lab Sample ID	Analysis Date 1	Analysis Date 2
WG1823255-2LCS	WG1823255-2	09/03/23 12:32	09/03/23 12:32
WG1823255-3LCSD	WG1823255-3	09/03/23 12:43	09/03/23 12:43
MW-1S	L2350269-01	09/03/23 13:05	09/03/23 13:05
MW-2S	L2350269-02	09/03/23 13:16	09/03/23 13:16
MW-6D	L2350269-06	09/03/23 13:38	09/03/23 13:38
MW-7S	L2350269-07	09/03/23 14:00	09/03/23 14:00
MW-8S	L2350269-08	09/03/23 14:11	09/03/23 14:11
MW-8SMS	WG1823255-4	09/03/23 14:22	09/03/23 14:22
MW-8SMSD	WG1823255-5	09/03/23 14:33	09/03/23 14:33
DUP	L2350269-09	09/03/23 14:44	09/03/23 14:44
MW-3S	L2350269-03	09/05/23 16:56	09/05/23 16:56

Analytical Sequence
Form 8b
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: PEST10	**Initial Calib. Date(s)**	: 08/28/23 08/28/23

Client ID	Lab ID	Date/Time Analyzed
R1735664-2 PEM	R1735664-2	08/28/23 12:17
Pesticides L1 (0.5ug/L)	R1735664-1	08/28/23 12:28
Pesticides L2 (1.0ug/L)	R1735664-3	08/28/23 12:39
Pesticides L3 (2.0ug/L)	R1735664-4	08/28/23 12:50
Pesticides L4 (3.0ug/L)	R1735664-6	08/28/23 13:01
Pesticides L5 (4.0ug/L)	R1735664-5	08/28/23 13:12
Pesticides L7 (10.0ug/L)	R1735664-8	08/28/23 13:23
Pesticides L8 (50.0ug/L)	R1735664-7	08/28/23 13:35
Pesticides L9 (100ug/L)	R1735664-9	08/28/23 13:46
Pesticides L10 (200ug/L)	R1735664-10	08/28/23 13:57
Pesticides L11 (400ug/L)	R1735664-11	08/28/23 14:08
R1735664-13 ICV	R1735664-13	08/28/23 14:19
Chlordane L3 (10ug/L)	R1735664-12	08/28/23 14:30
Chlordane L4 (20ug/L)	R1735664-15	08/28/23 14:41
Chlordane L5 (100ug/L)	R1735664-14	08/28/23 14:52
Chlordane L7 (500ug/L)	R1735664-18	08/28/23 15:03
Chlordane L8 (1000ug/L)	R1735664-16	08/28/23 15:14
Chlordane L9 (2000ug/L)	R1735664-17	08/28/23 15:25
Chlordane L10 (5000ug/L)	R1735664-20	08/28/23 15:36
R1735664-19 ICV	R1735664-19	08/28/23 15:47
Toxaphene L3 (20.0ug/L)	R1735664-22	08/28/23 15:58
Toxaphene L8 (2000ug/L)	R1735664-21	08/28/23 16:09
Toxaphene L9 (5000ug/L)	R1735664-23	08/28/23 16:20
R1735664-24 ICV	R1735664-24	08/28/23 16:31
R1736359-1 PEM	R1736359-1	09/01/23 06:33
WG1822821-2 CCAL	WG1822821-2	09/01/23 06:55
WG1822821-3 CCAL	WG1822821-3	09/01/23 07:17
WG1822821-4 CCAL	WG1822821-4	09/01/23 12:17
WG1822374-1 BLANK	WG1822374-1	09/01/23 15:30
WG1822374-2 LCS	WG1822374-2	09/01/23 15:41
WG1822374-3 LCSD	WG1822374-3	09/01/23 15:52
MW-4D	L2350269-04	09/01/23 16:26
MW-5S	L2350269-05	09/01/23 16:37
EQUIPMENT BLANK	L2350269-11	09/01/23 16:47
R1736873-1 PEM	R1736873-1	09/03/23 09:10
WG1823359-1 CCAL	WG1823359-1	09/03/23 09:21
WG1823359-2 CCAL	WG1823359-2	09/03/23 09:32
WG1823359-3 CCAL	WG1823359-3	09/03/23 09:43
WG1823255-1 BLANK	WG1823255-1	09/03/23 12:21
WG1823255-2 LCS	WG1823255-2	09/03/23 12:32
WG1823255-3 LCSD	WG1823255-3	09/03/23 12:43
MW-1S	L2350269-01	09/03/23 13:05

Analytical Sequence
Form 8b
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: PEST10	**Initial Calib. Date(s)**	: 08/28/23 08/28/23

Client ID	Lab ID	Date/Time Analyzed
MW-2S	L2350269-02	09/03/23 13:16
MW-6D	L2350269-06	09/03/23 13:38
WG1823359-4 CCAL	WG1823359-4	09/03/23 13:49
MW-7S	L2350269-07	09/03/23 14:00
MW-8S	L2350269-08	09/03/23 14:11
MW-8S MS	WG1823255-4	09/03/23 14:22
MW-8S MSD	WG1823255-5	09/03/23 14:33
DUP	L2350269-09	09/03/23 14:44
R1737093-1 PEM	R1737093-1	09/05/23 08:05
WG1823612-2 CCAL	WG1823612-2	09/05/23 08:27
WG1823612-3 CCAL	WG1823612-3	09/05/23 08:38
WG1823612-4 CCAL	WG1823612-4	09/05/23 13:12
MW-3S	L2350269-03	09/05/23 16:56

Date Created: 03/07/23
Created By: Jason Hebert
File: PM14022-1
Page: 1

Pesticides - EPA 8081B (SOIL)

Holding Time: 14 days
Container/Sample Preservation: 1 - Glass 250ml/8oz unpreserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Delta-BHC	319-86-8	1.6008	0.31349	ug/kg	30-150	30	30-150	50	50			
Lindane	58-89-9	0.667	0.298149	ug/kg	30-150	30	30-150	50	50			
Alpha-BHC	319-84-6	0.667	0.189428	ug/kg	30-150	30	30-150	50	50			
Beta-BHC	319-85-7	1.6008	0.60697	ug/kg	30-150	30	30-150	50	50			
Heptachlor	76-44-8	0.8004	0.358846	ug/kg	30-150	30	30-150	50	50			
Aldrin	309-00-2	1.6008	0.563615	ug/kg	30-150	30	30-150	50	50			
Heptachlor epoxide	1024-57-3	3.0015	0.90045	ug/kg	30-150	30	30-150	50	50			
Endrin	72-20-8	0.667	0.27347	ug/kg	30-150	30	30-150	50	50			
Endrin aldehyde	7421-93-4	2.001	0.70035	ug/kg	30-150	30	30-150	50	50			
Endrin ketone	53494-70-5	1.6008	0.412206	ug/kg	30-150	30	30-150	50	50			
Dieldrin	60-57-1	1.0005	0.50025	ug/kg	30-150	30	30-150	50	50			
4,4'-DDE	72-55-9	1.6008	0.370185	ug/kg	30-150	30	30-150	50	50			
4,4'-DDD	72-54-8	1.6008	0.570952	ug/kg	30-150	30	30-150	50	50			
4,4'-DDT	50-29-3	3.0015	1.28731	ug/kg	30-150	30	30-150	50	50			
Endosulfan I	959-98-8	1.6008	0.378189	ug/kg	30-150	30	30-150	50	50			
Endosulfan II	33213-65-9	1.6008	0.534934	ug/kg	30-150	30	30-150	50	50			
Endosulfan sulfate	1031-07-8	0.667	0.317492	ug/kg	30-150	30	30-150	50	50			
Methoxychlor	72-43-5	3.0015	0.9338	ug/kg	30-150	30	30-150	50	50			
Toxaphene	8001-35-2	30.015	8.4042	ug/kg	30-150	30	30-150	50	50			
Chlordane	57-74-9	13.34	5.30265	ug/kg	30-150	30	30-150	50	50			
cis-Chlordane	5103-71-9	2.001	0.557612	ug/kg	30-150	30	30-150	50	50			
trans-Chlordane	5103-74-2	2.001	0.528264	ug/kg	30-150	30	30-150	50	50			
2,4,5,6-Tetrachloro-m-xylene	*877-09-8*									*30-150*		
Decachlorobiphenyl	*2051-24-3*									*30-150*		

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 03/07/23
Created By: Jason Hebert
File: PM14021-1
Page: 1

Pesticides - EPA 8081B (WATER)

Holding Time: 7 days
Container/Sample Preservation: 2 - Amber 120ml unpreserved

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria		
Delta-BHC	319-86-8	0.02	0.00467	ug/l	30-150	20	30-150	30	30			
Lindane	58-89-9	0.02	0.00434	ug/l	30-150	20	30-150	30	30			
Alpha-BHC	319-84-6	0.02	0.00439	ug/l	30-150	20	30-150	30	30			
Beta-BHC	319-85-7	0.02	0.0056	ug/l	30-150	20	30-150	30	30			
Heptachlor	76-44-8	0.02	0.0031	ug/l	30-150	20	30-150	30	30			
Aldrin	309-00-2	0.02	0.00216	ug/l	30-150	20	30-150	30	30			
Heptachlor epoxide	1024-57-3	0.02	0.00415	ug/l	30-150	20	30-150	30	30			
Endrin	72-20-8	0.04	0.00429	ug/l	30-150	20	30-150	30	30			
Endrin aldehyde	7421-93-4	0.04	0.0081	ug/l	30-150	20	30-150	30	30			
Endrin ketone	53494-70-5	0.04	0.00477	ug/l	30-150	20	30-150	30	30			
Dieldrin	60-57-1	0.04	0.00429	ug/l	30-150	20	30-150	30	30			
4,4'-DDE	72-55-9	0.04	0.00381	ug/l	30-150	20	30-150	30	30			
4,4'-DDD	72-54-8	0.04	0.00464	ug/l	30-150	20	30-150	30	30			
4,4'-DDT	50-29-3	0.04	0.00432	ug/l	30-150	20	30-150	30	30			
Endosulfan I	959-98-8	0.02	0.00345	ug/l	30-150	20	30-150	30	30			
Endosulfan II	33213-65-9	0.04	0.00519	ug/l	30-150	20	30-150	30	30			
Endosulfan sulfate	1031-07-8	0.04	0.00481	ug/l	30-150	20	30-150	30	30			
Methoxychlor	72-43-5	0.2	0.00684	ug/l	30-150	20	30-150	30	30			
Toxaphene	8001-35-2	0.2	0.0627	ug/l	30-150	20	30-150	30	30			
Chlordane	57-74-9	0.2	0.0463	ug/l	40-140	20	30-150	30	30			
cis-Chlordane	5103-71-9	0.02	0.00666	ug/l	30-150	20	30-150	30	30			
trans-Chlordane	5103-74-2	0.02	0.00627	ug/l	30-150	20	30-150	30	30			
2,4,5,6-Tetrachloro-m-xylene	*877-09-8*									*30-150*		
Decachlorobiphenyl	*2051-24-3*									*30-150*		

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Pesticide Sample Data

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 13:05
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-23	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 13:05
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-23	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticidesII
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
50-29-3	4,4'-DDT	0.005	0.029	0.003	JIP

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 13:16
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-24	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
50-29-3	4,4'-DDT	0.004	0.029	0.003	J
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 13:16
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-24	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 16:56
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230905a-47	**Analyst**	: JAG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
50-29-3	4,4'-DDT	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 16:56
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230905a-47	**Analyst**	: JAG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 16:26
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-47	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
50-29-3	4,4'-DDT	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 16:26
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-47	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 16:37
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-48	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	UIP
72-54-8	4,4'-DDD	ND	0.029	0.003	U
50-29-3	4,4'-DDT	ND	0.029	0.003	UIP
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 16:37
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-48	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 13:38
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-26	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 13:38
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-26	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticidesII
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
50-29-3	4,4'-DDT	0.010	0.029	0.003	JIP

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 14:00
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-28	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 14:00
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-28	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticidesII
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
50-29-3	4,4'-DDT	0.003	0.029	0.003	J

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 14:11
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-29	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 14:11
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-29	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticidesII
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
50-29-3	4,4'-DDT	0.004	0.029	0.003	JIP

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 14:44
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-32	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
50-29-3	4,4'-DDT	0.005	0.029	0.003	J
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 14:44
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-32	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 16:47
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-49	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
50-29-3	4,4'-DDT	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 16:47
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-49	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822374-1	**Date Collected**	: NA
Client ID	: WG1822374-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/01/23 15:30
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-42	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
50-29-3	4,4'-DDT	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822374-1	**Date Collected**	: NA
Client ID	: WG1822374-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/01/23 15:30
Sample Matrix	: WATER	**Date Extracted**	: 08/31/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230901a-42	**Analyst**	: AR
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823255-1	**Date Collected**	: NA
Client ID	: WG1823255-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/03/23 12:21
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-19	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
319-86-8	Delta-BHC	ND	0.014	0.003	U
58-89-9	Lindane	ND	0.014	0.003	U
319-84-6	Alpha-BHC	ND	0.014	0.003	U
319-85-7	Beta-BHC	ND	0.014	0.004	U
76-44-8	Heptachlor	ND	0.014	0.002	U
309-00-2	Aldrin	ND	0.014	0.002	U
1024-57-3	Heptachlor epoxide	ND	0.014	0.003	U
72-20-8	Endrin	ND	0.029	0.003	U
7421-93-4	Endrin aldehyde	ND	0.029	0.006	U
53494-70-5	Endrin ketone	ND	0.029	0.003	U
60-57-1	Dieldrin	ND	0.029	0.003	U
72-55-9	4,4'-DDE	ND	0.029	0.003	U
72-54-8	4,4'-DDD	ND	0.029	0.003	U
50-29-3	4,4'-DDT	ND	0.029	0.003	U
959-98-8	Endosulfan I	ND	0.014	0.002	U
33213-65-9	Endosulfan II	ND	0.029	0.004	U
1031-07-8	Endosulfan sulfate	ND	0.029	0.003	U
72-43-5	Methoxychlor	ND	0.143	0.005	U
8001-35-2	Toxaphene	ND	0.143	0.045	U
5103-71-9	cis-Chlordane	ND	0.014	0.005	U
5103-74-2	trans-Chlordane	ND	0.014	0.004	U

Results Summary
Form 1
Organochlorine Pesticides by GC

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823255-1	**Date Collected**	: NA
Client ID	: WG1823255-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/03/23 12:21
Sample Matrix	: WATER	**Date Extracted**	: 09/02/23
Analytical Method	: 1,8081B	**Dilution Factor**	: 1
Lab File ID	: 10230903a-19	**Analyst**	: MMG
Sample Amount	: 140 ml	**Instrument ID**	: PEST10
Extraction Method	: EPA 3510C	**GC Column**	: CLPPesticides
Extract Volume	: 1000 uL	**%Solids**	: N/A
GPC Cleanup	: N	**Injection Volume**	: 1 uL
Sulfur Cleanup	: N		

		ug/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
57-74-9	Chlordane	ND	0.143	0.033	U

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-47.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 4:26 pm
Operator : PEST10:ar
Sample : L2350269-04,42,,
Misc : wg1822821,wg1822374,ical20332
ALS Vial : 47 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:22:30 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230901A\10230901a-29.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.279	1.348	133.8E6	148.2E6	25.000	25.000
	Standard Area 1 : #1 = 126614029				Recovery =	105.65%	
	Standard Area 1 : #2 = 137178146				Recovery =	108.01%	
28) i	1-br-2-nb_Ch	1.279	1.348	133.8E6	148.2E6	25.000	25.000
33) i	1-br-2-nb_To	1.279	1.348	133.8E6	148.2E6	25.000	25.000
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.614	1.819	175.8E6	197.2E6	32.405	34.534
	Spiked Amount 50.000	Range 30 - 150			Recovery =	64.81%	69.07%
27) s	Decachlorobi	6.238	6.889	147.2E6	160.9E6	30.031	29.374M4
	Spiked Amount 50.000	Range 30 - 150			Recovery =	60.06%	58.75%
Target Compounds							
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-47.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 4:26 pm
Operator : PEST10:ar
Sample : L2350269-04,42,,
Misc : wg1822821,wg1822374,ical20332
ALS Vial : 47 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:22:30 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230901A\10230901a-29.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument							
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

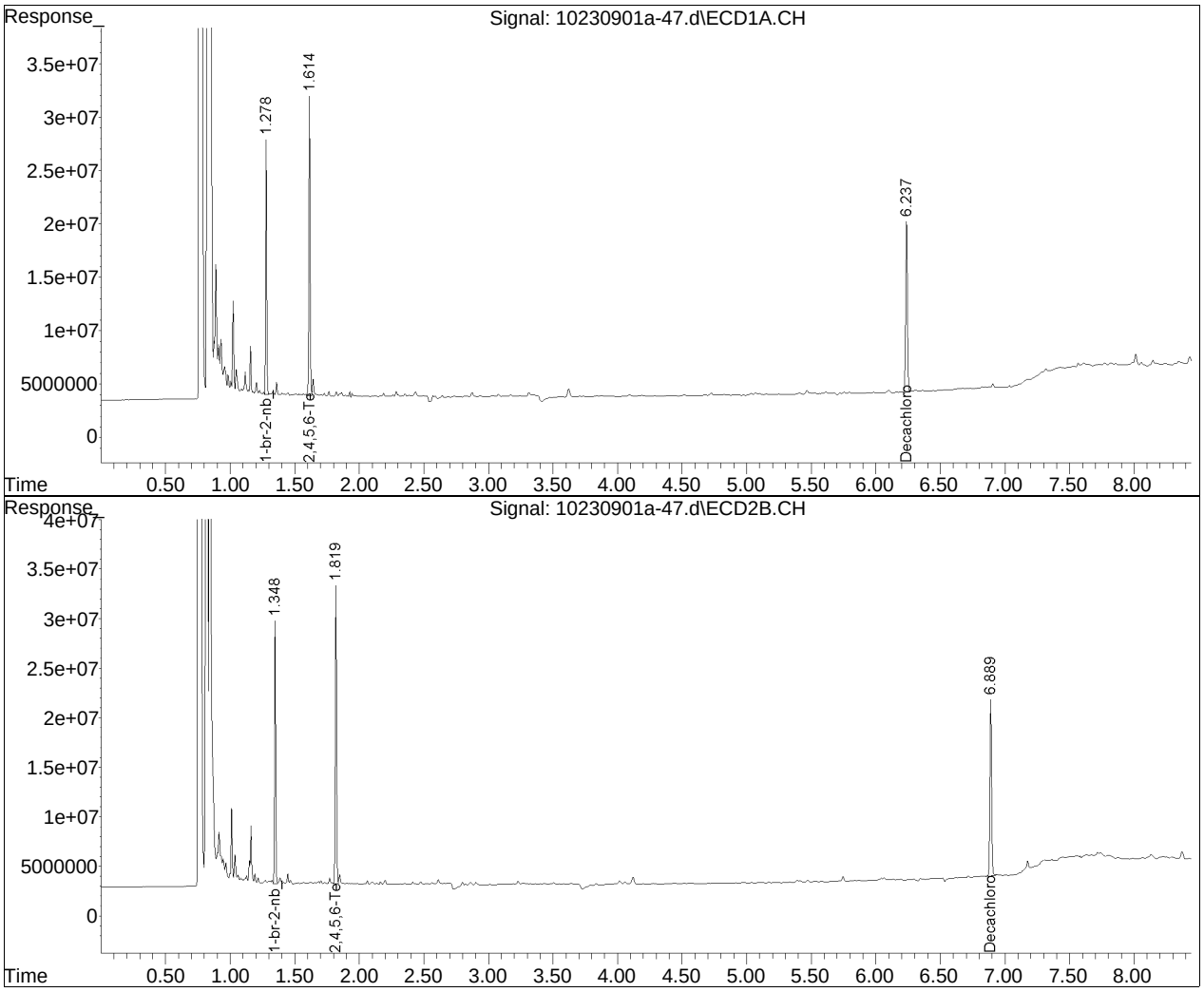
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedA\10230901a-29.d••

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-47.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 4:26 pm
Operator : PEST10:ar
Sample : L2350269-04,42,,
Misc : wg1822821,wg1822374,ical20332
ALS Vial : 47 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:22:30 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

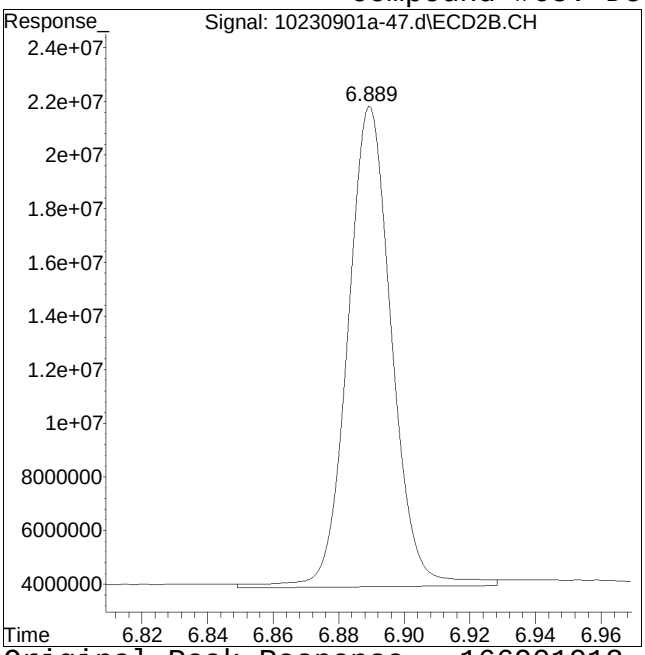
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

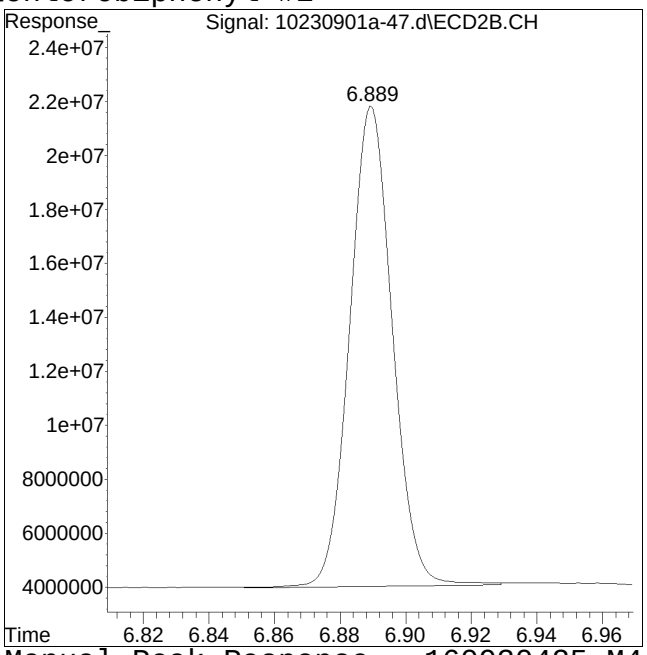


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-47.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 4:26 pm Instrument : Pest 10
Sample : L2350269-04,42,, Quant Date : 9/2/2023 6:42 am

Compound #65: Decachlorobiphenyl #2





Original Peak Response = 166901912 Manual Peak Response = 160930425 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-48.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 4:37 pm
Operator : PEST10:ar
Sample : L2350269-05,42,,
Misc : wg1822821,wg1822374,ical20332
ALS Vial : 48 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:23:50 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230901A\10230901a-29.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.279	1.348	135.7E6	148.2E6	25.000	25.000
	Standard Area 1 : #1 = 126614029				Recovery =	107.15%	
	Standard Area 1 : #2 = 137178146				Recovery =	108.00%	
28) i	1-br-2-nb_Ch	1.279	1.348	135.7E6	148.2E6	25.000	25.000
33) i	1-br-2-nb_To	1.279	1.348	135.7E6	148.2E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.615	1.819	203.5E6	224.5E6	36.999	39.320
	Spiked Amount 50.000	Range 30 - 150		Recovery =	74.00%	78.64%	
27) s	Decachlorobi	6.238	6.888	180.3E6	195.0E6	36.264	35.589
	Spiked Amount 50.000	Range 30 - 150		Recovery =	72.53%	71.18%	
	Target Compounds						
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	3.578	4.423	2044778	2380076	0.346M4I	0.686M3
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	4.544	5.286	748443	1122447	0.140 I	0.479 D
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-48.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 4:37 pm
Operator : PEST10:ar
Sample : L2350269-05,42,,
Misc : wg1822821,wg1822374,ical20332
ALS Vial : 48 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:23:50 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230901A\10230901a-29.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument							
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

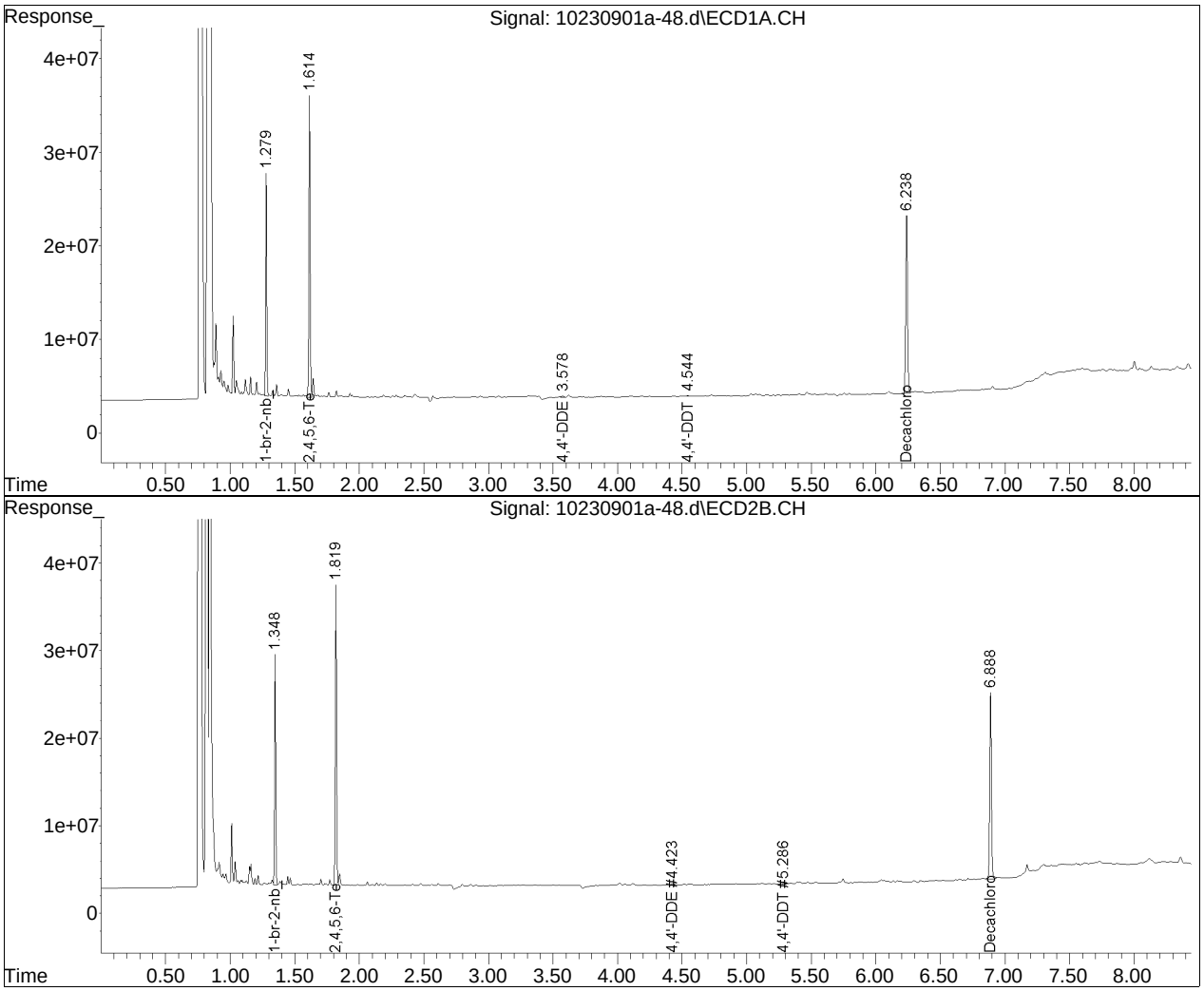
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedA\10230901a-29.d••

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-48.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 4:37 pm
Operator : PEST10:ar
Sample : L2350269-05,42,,
Misc : wg1822821,wg1822374,ical20332
ALS Vial : 48 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:23:50 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

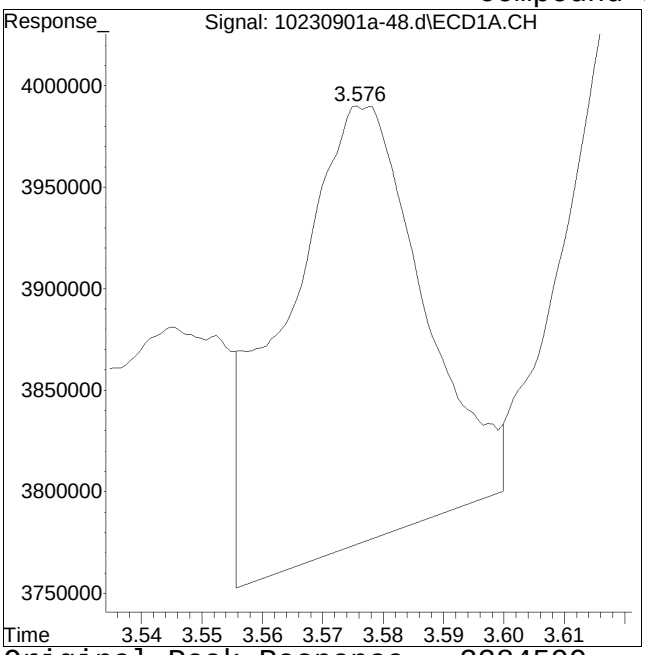
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

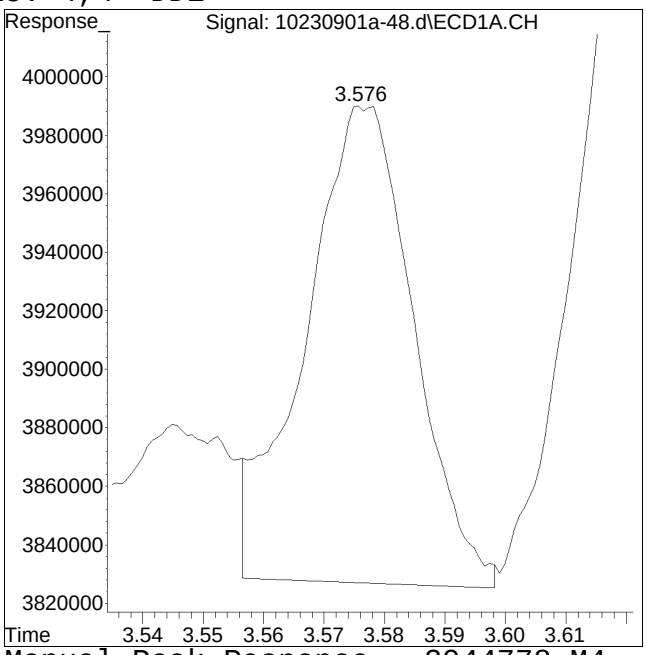


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-48.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 4:37 pm Instrument : Pest 10
Sample : L2350269-05,42,, Quant Date : 9/2/2023 6:43 am

Compound #15: 4,4'-DDE



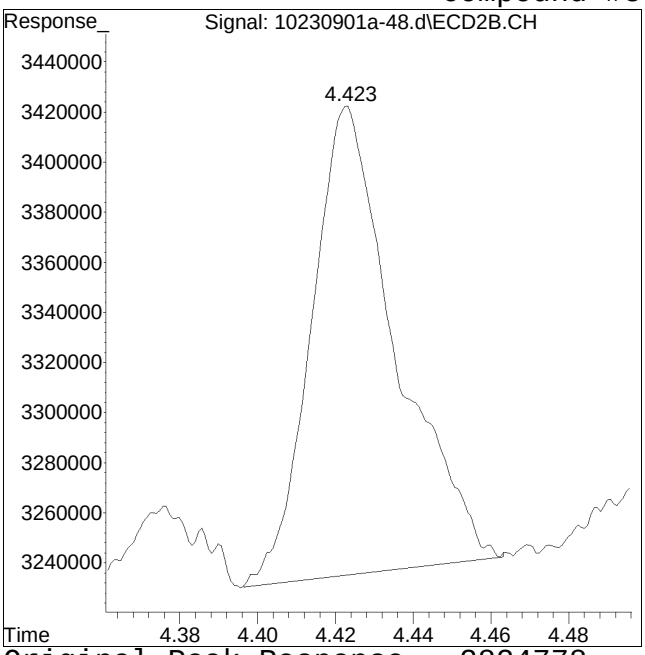


Original Peak Response = 3384599 Manual Peak Response = 2044778 M4
M4 = Poor automated baseline construction.

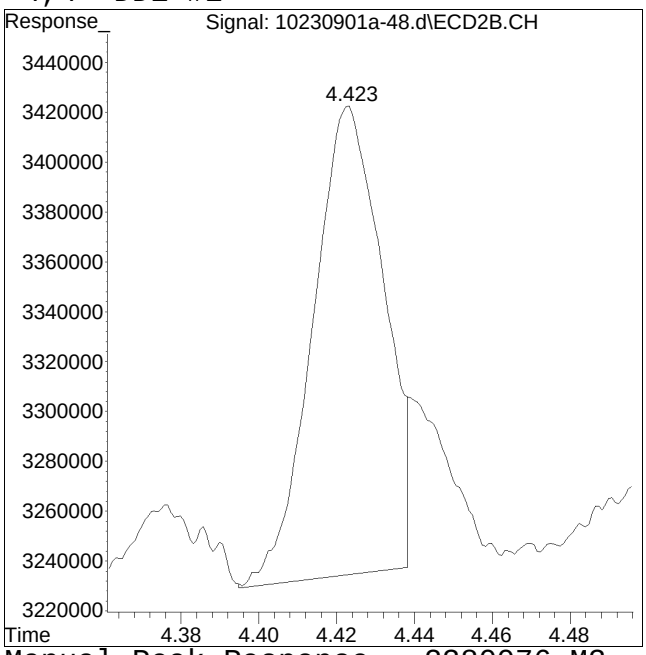
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-48.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 4:37 pm Instrument : Pest 10
Sample : L2350269-05,42,, Quant Date : 9/2/2023 6:43 am

Compound #53: 4,4'-DDE #2



Original Peak Response = 2824778



Manual Peak Response = 2380076 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-49.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 4:47 pm
Operator : PEST10:ar
Sample : L2350269-11,42,,
Misc : wg1822821,wg1822374,ical20332
ALS Vial : 49 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:24:58 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230901A\10230901a-29.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.278	1.348	134.1E6	145.6E6	25.000M4	25.000M4
	Standard Area 1 : #1 = 126614029				Recovery = 105.94%		
	Standard Area 1 : #2 = 137178146				Recovery = 106.12%		
28) i	1-br-2-nb_Ch	1.278	1.348	134.1E6	145.6E6	25.000M4	25.000M4
33) i	1-br-2-nb_To	1.278	1.348	134.1E6	145.6E6	25.000M4	25.000M4
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.614	1.819	163.0E6	178.7E6	29.973	31.850
	Spiked Amount 50.000	Range 30 - 150			Recovery = 59.95%		63.70%
27) s	Decachlorobi	6.237	6.890	72704231	79170276	14.793M4	14.707
	Spiked Amount 50.000	Range 30 - 150			Recovery = 29.59%#		29.41%#
Target Compounds							
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-49.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 4:47 pm
Operator : PEST10:ar
Sample : L2350269-11,42,,
Misc : wg1822821,wg1822374,ical20332
ALS Vial : 49 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:24:58 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230901A\10230901a-29.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument							
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

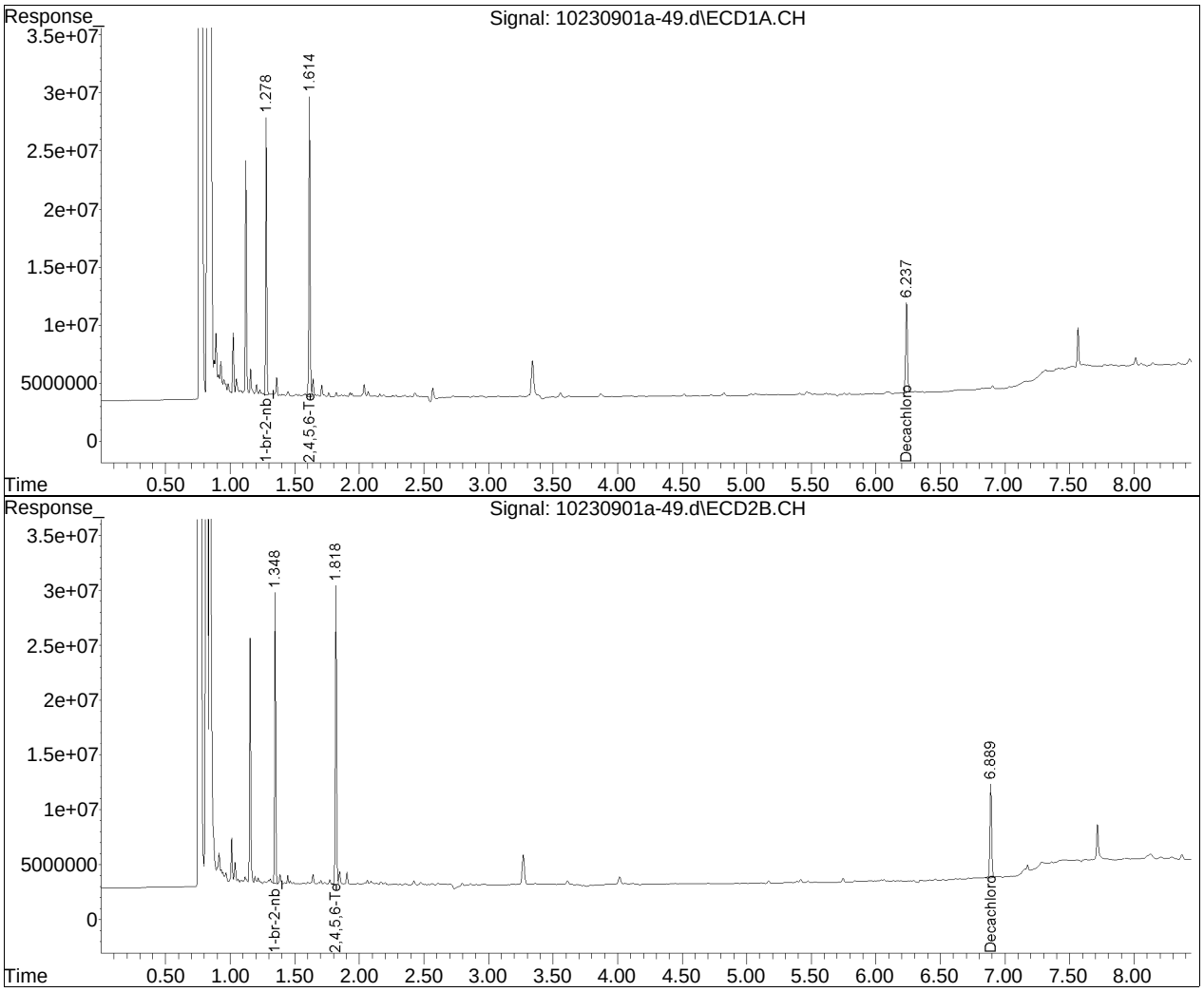
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.

Sub List : Default - All compounds listedA\10230901a-29.d••

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-49.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 4:47 pm
Operator : PEST10:ar
Sample : L2350269-11,42,,
Misc : wg1822821,wg1822374,ical20332
ALS Vial : 49 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:24:58 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

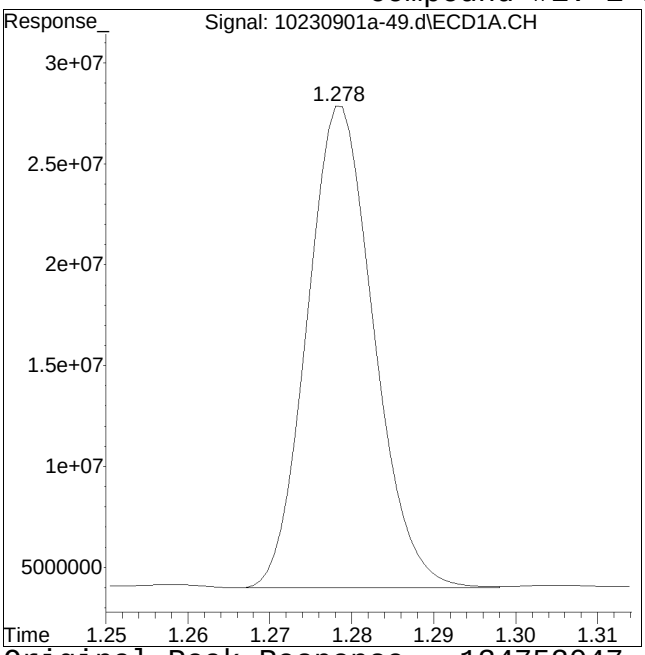
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

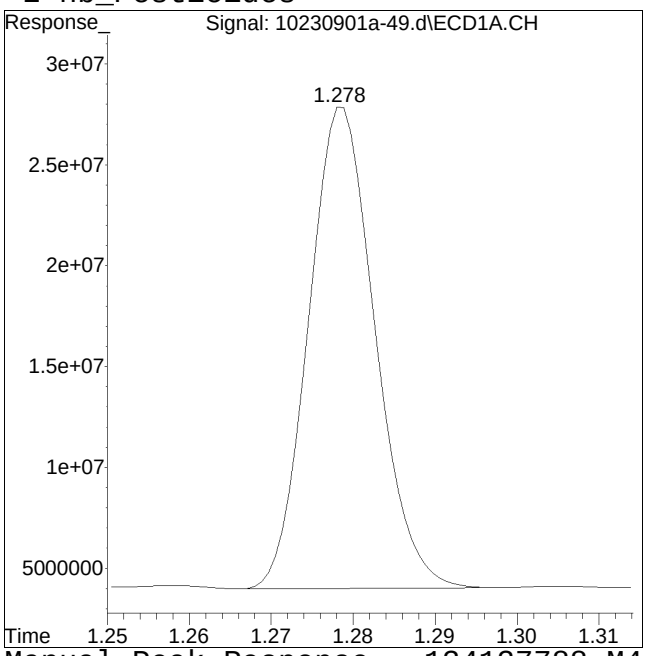


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-49.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 4:47 pm Instrument : Pest 10
Sample : L2350269-11,42,, Quant Date : 9/2/2023 6:43 am

Compound #1: 1-br-2-nb_Pesticides



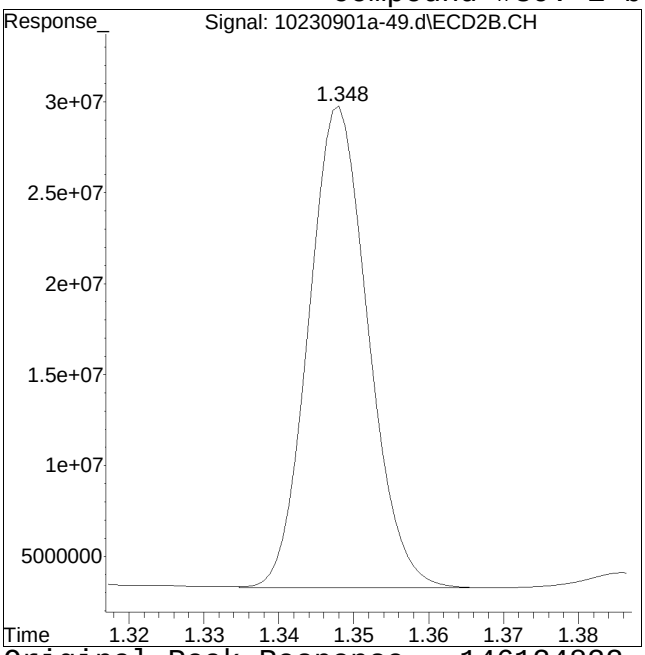


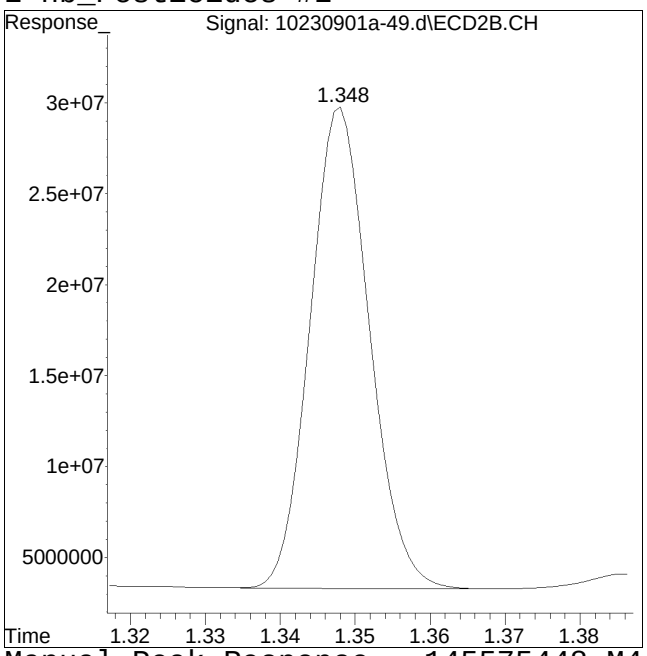
Original Peak Response = 134752047 Manual Peak Response = 134137788 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-49.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 4:47 pm Instrument : Pest 10
Sample : L2350269-11,42,, Quant Date : 9/2/2023 6:43 am

Compound #39: 1-br-2-nb_Pesticides #2



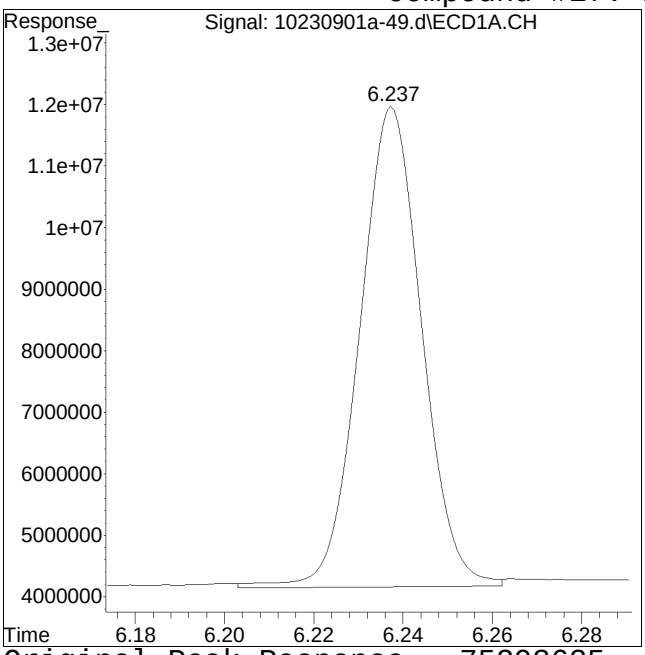


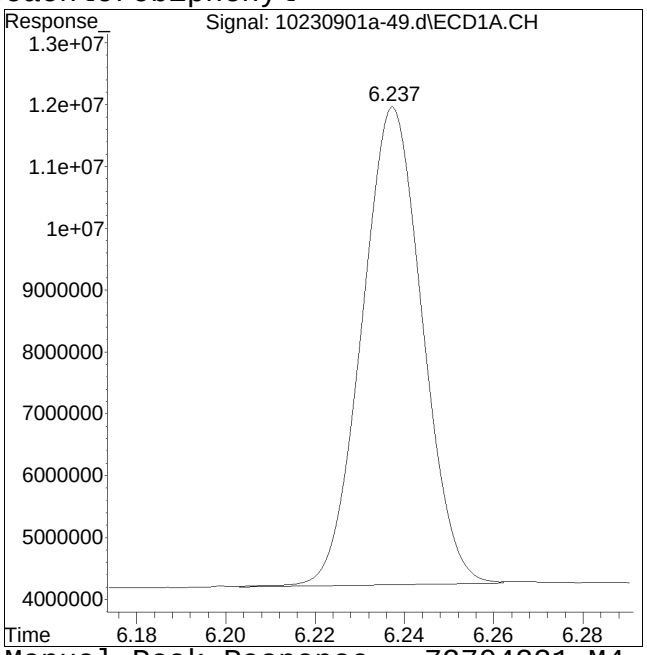
Original Peak Response = 146124822 Manual Peak Response = 145575448 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-49.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 4:47 pm Instrument : Pest 10
Sample : L2350269-11,42,, Quant Date : 9/2/2023 6:43 am

Compound #27: Decachlorobiphenyl



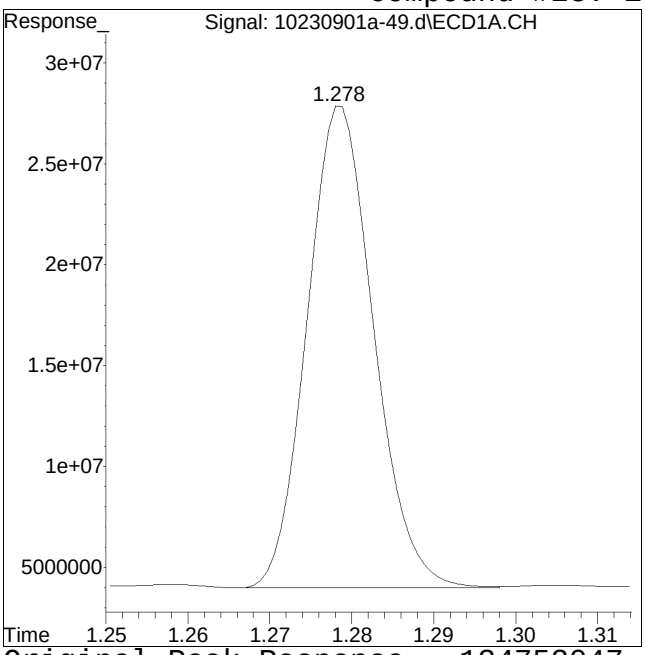


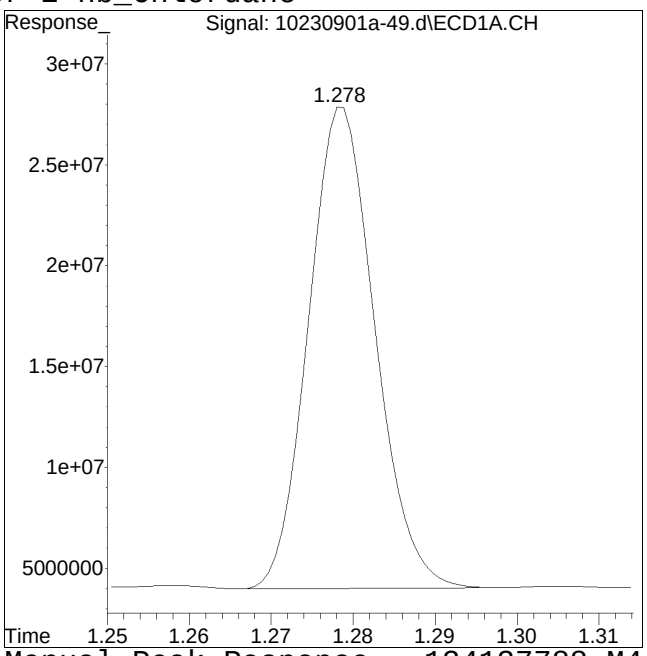
Original Peak Response = 75293635 Manual Peak Response = 72704231 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-49.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 4:47 pm Instrument : Pest 10
Sample : L2350269-11,42,, Quant Date : 9/2/2023 6:43 am

Compound #28: 1-br-2-nb_Chlordane



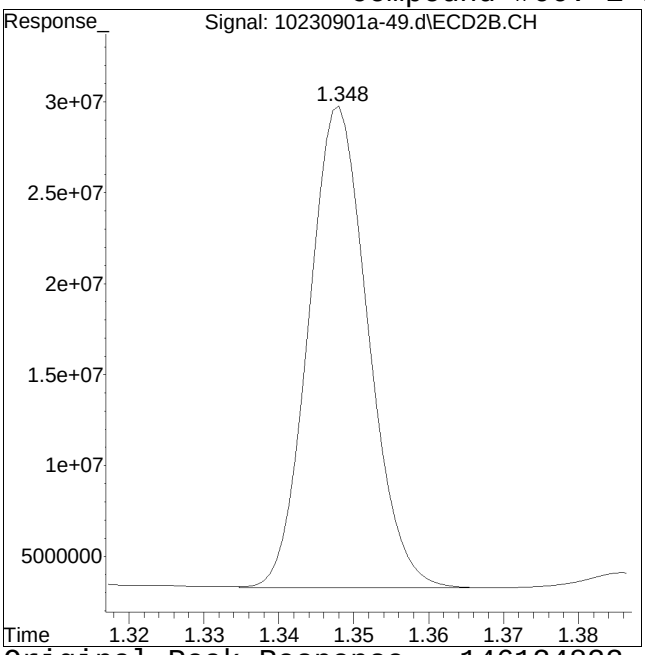


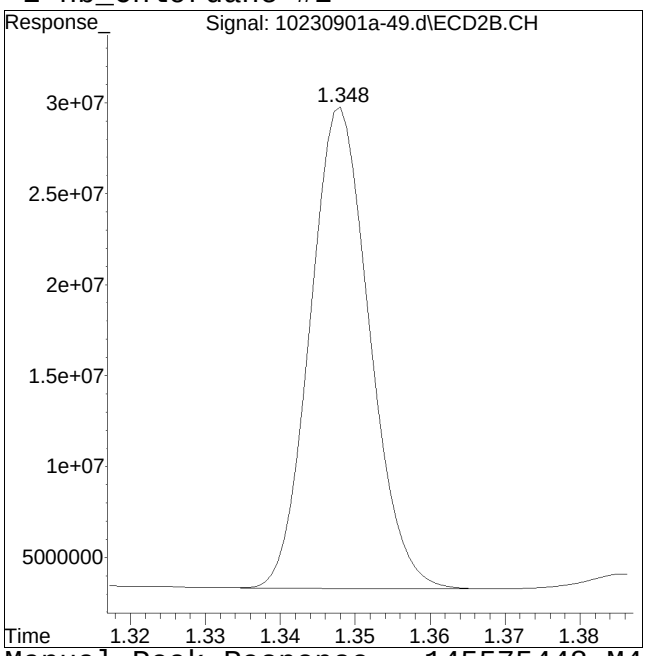
Original Peak Response = 134752047 Manual Peak Response = 134137788 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-49.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 4:47 pm Instrument : Pest 10
Sample : L2350269-11,42,, Quant Date : 9/2/2023 6:43 am

Compound #66: 1-br-2-nb_Chlordane #2



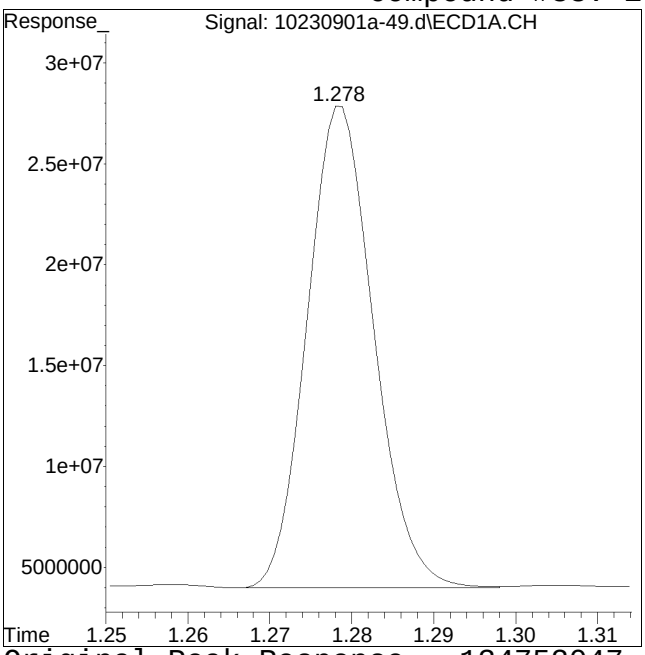


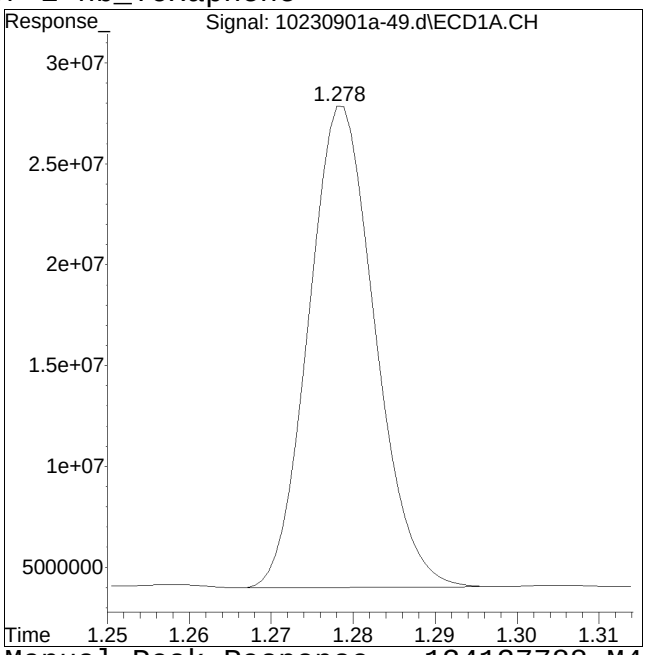
Original Peak Response = 146124822 Manual Peak Response = 145575448 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-49.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 4:47 pm Instrument : Pest 10
Sample : L2350269-11,42,, Quant Date : 9/2/2023 6:43 am

Compound #33: 1-br-2-nb_Toxaphene



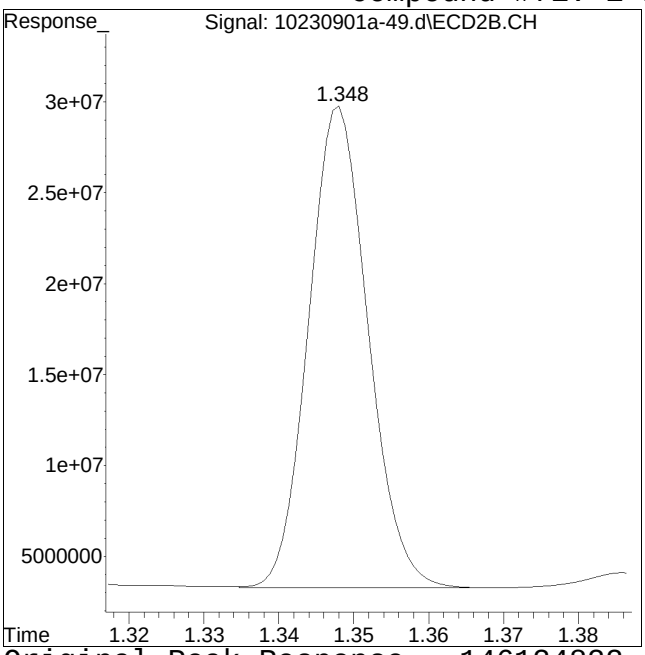


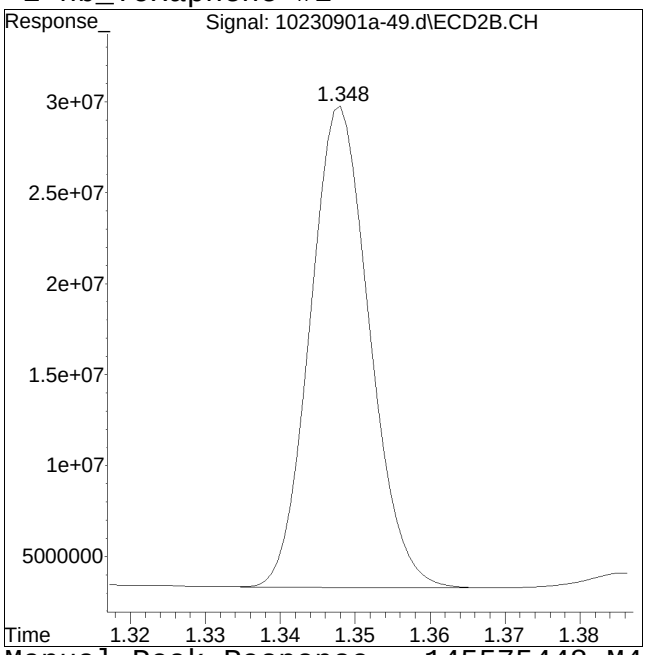
Original Peak Response = 134752047 Manual Peak Response = 134137788 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-49.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 4:47 pm Instrument : Pest 10
Sample : L2350269-11,42,, Quant Date : 9/2/2023 6:43 am

Compound #71: 1-br-2-nb_Toxaphene #2





Original Peak Response = 146124822 Manual Peak Response = 145575448 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-23.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 1:05 pm
Operator : PEST10:mmg
Sample : L2350269-01,42,, re
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 23 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:46:59 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-03.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.275	1.345	170.9E6	182.9E6	25.000	25.000M3
	Standard Area 1 : #1 = 117926644				Recovery =	144.96%	
	Standard Area 1 : #2 = 131668451				Recovery =	138.94%	
28) i	1-br-2-nb_Ch	1.275	1.345	170.9E6	182.9E6	25.000	25.000M3
33) i	1-br-2-nb_To	1.275	1.345	170.9E6	182.9E6	25.000	25.000M3
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.609	1.815	132.4E6	146.2E6	19.107M4	20.732M4
	Spiked Amount	50.000	Range 30 - 150		Recovery =	38.21%	41.46%
27) s	Decachlorobi	6.234	6.888	108.1E6	117.8E6	17.256M4	17.411M3
	Spiked Amount	50.000	Range 30 - 150		Recovery =	34.51%	34.82%
Target Compounds							
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-23.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 1:05 pm
Operator : PEST10:mmg
Sample : L2350269-01,42,, re
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 23 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:46:59 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-03.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	4.541	5.279	13928653	2726867	2.067	0.642M4ID
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum chlordane-1			0	0	N.D.	N.D.
	Average chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum toxaphene-1			0	0	N.D.	N.D.
	Average toxaphene-1					0.000	0.000
	SemiQuant Compounds - Not Calibrated on this Instrument						
	Sum toxaphene-1			0	0	N.D.	N.D.
	Average toxaphene-1					0.000	0.000

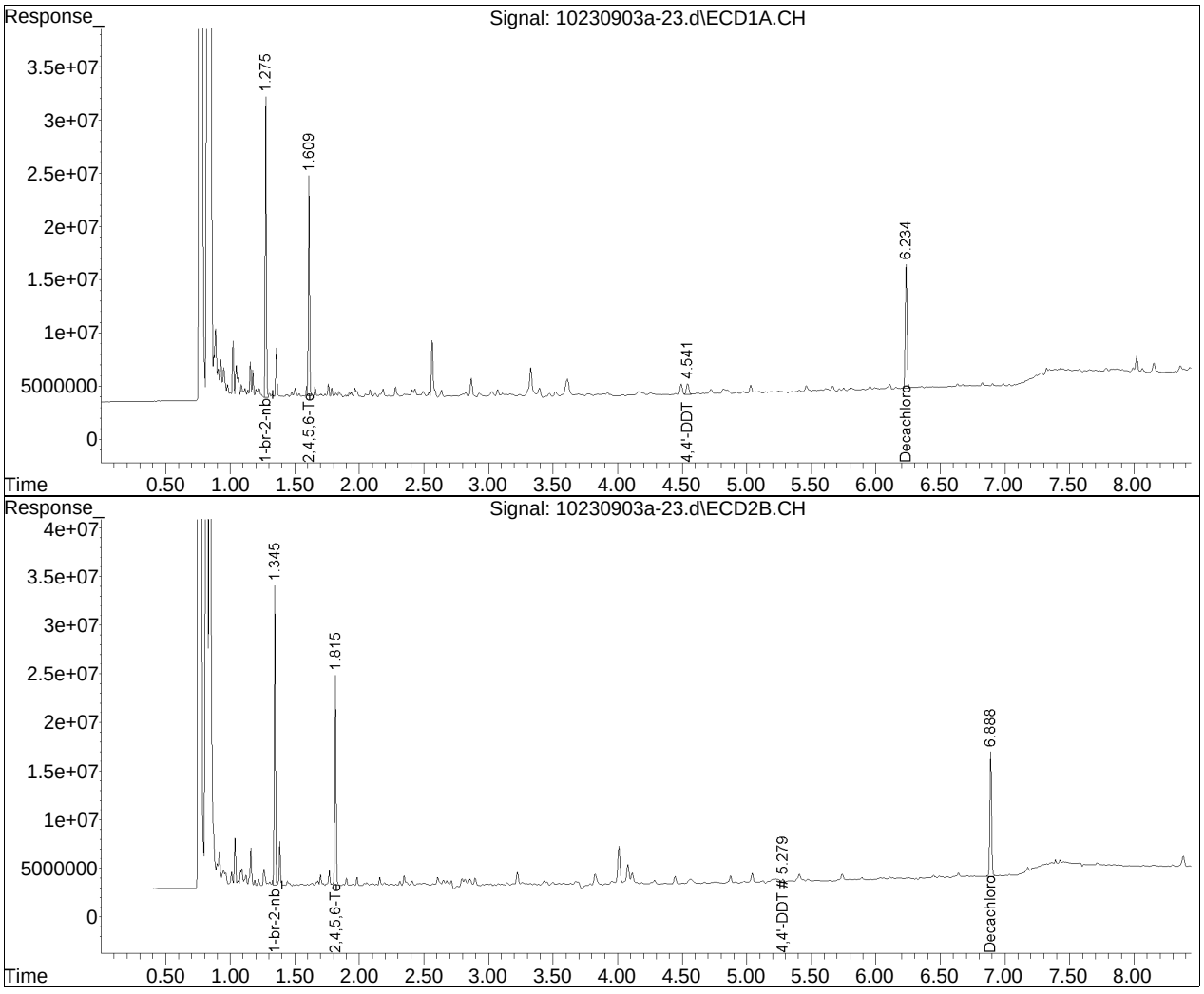
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.

Sub List : Default - All compounds listedA\10230903a-03.d••

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-23.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 1:05 pm
Operator : PEST10:mmg
Sample : L2350269-01,42,, re
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical2
ALS Vial : 23 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:46:59 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

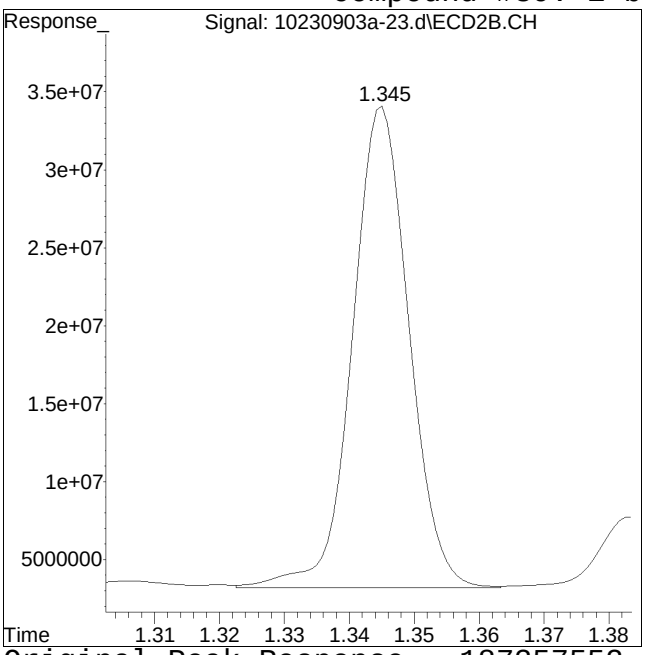
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

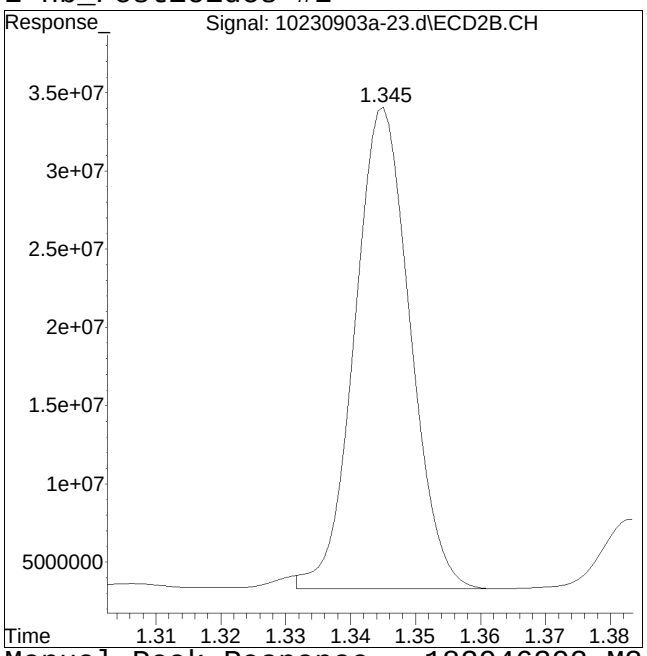


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-23.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:05 pm Instrument : Pest 10
Sample : L2350269-01,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #39: 1-br-2-nb_Pesticides #2



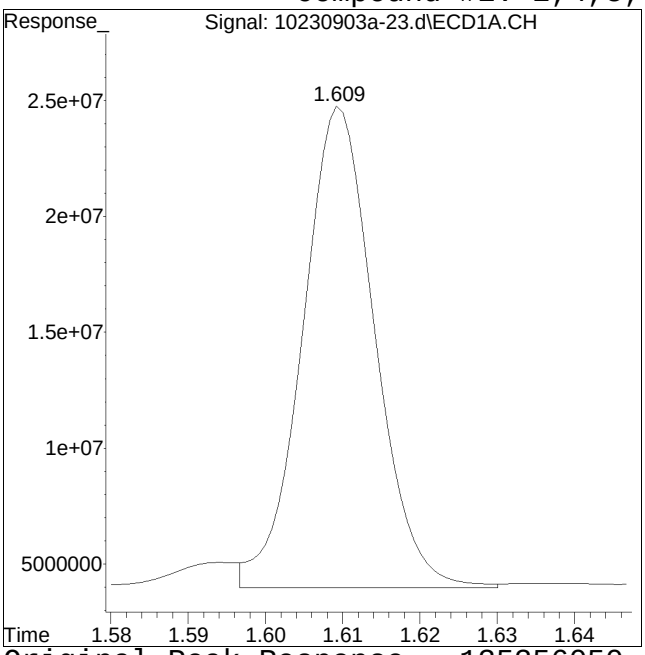


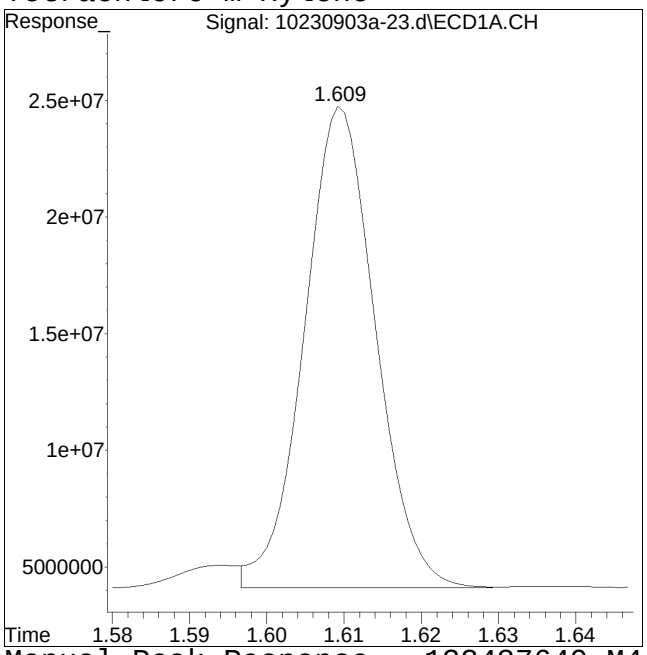
Original Peak Response = 187357552 Manual Peak Response = 182946392 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-23.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:05 pm Instrument : Pest 10
Sample : L2350269-01,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



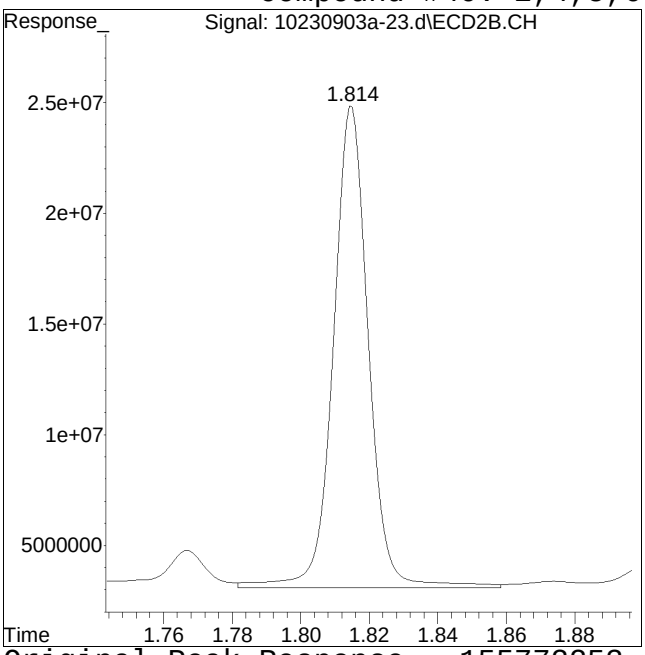


Original Peak Response = 135356050 Manual Peak Response = 132437640 M4
M4 = Poor automated baseline construction.

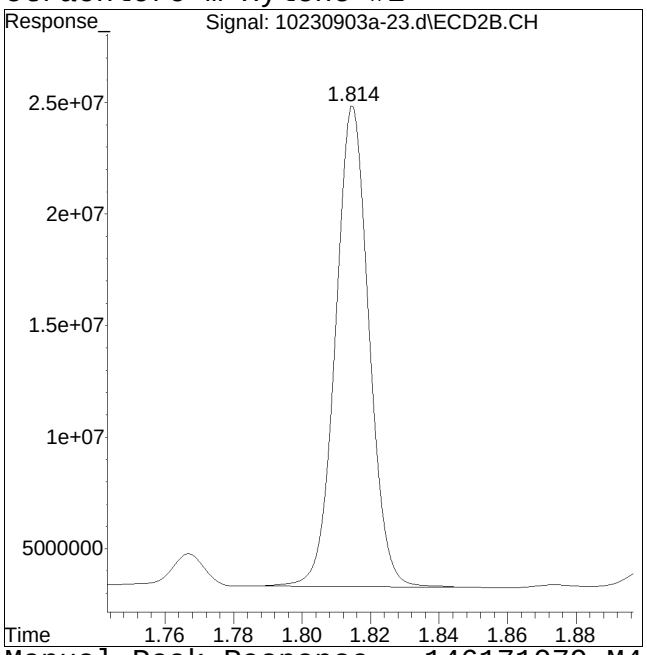
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-23.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:05 pm Instrument : Pest 10
Sample : L2350269-01,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



Original Peak Response = 155772253

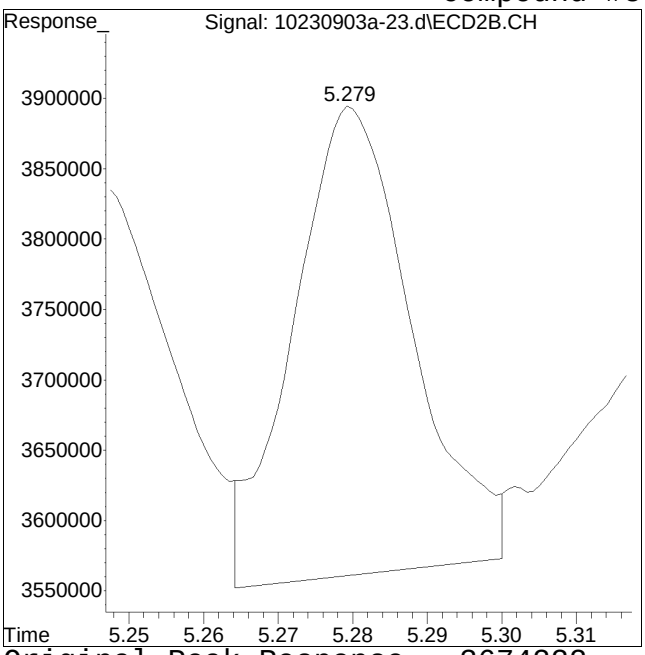


Manual Peak Response = 146171079 M4
M4 = Poor automated baseline construction.

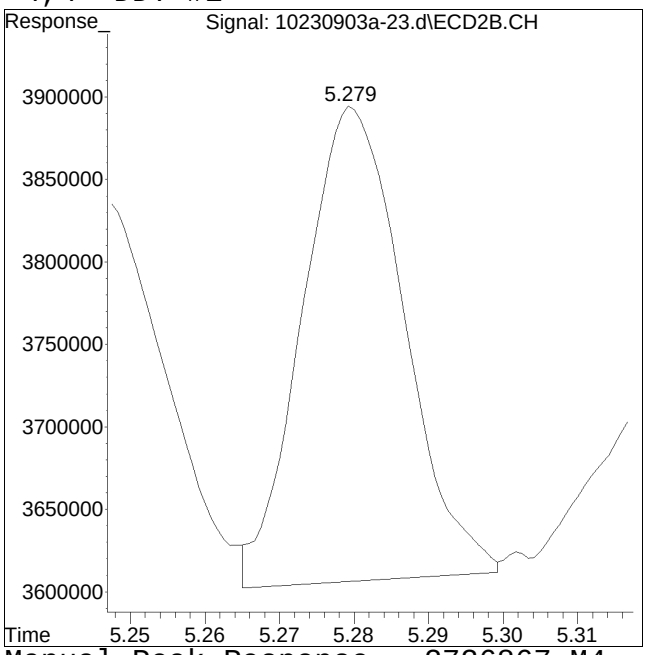
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-23.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:05 pm Instrument : Pest 10
Sample : L2350269-01,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #59: 4,4'-DDT #2



Original Peak Response = 3674222



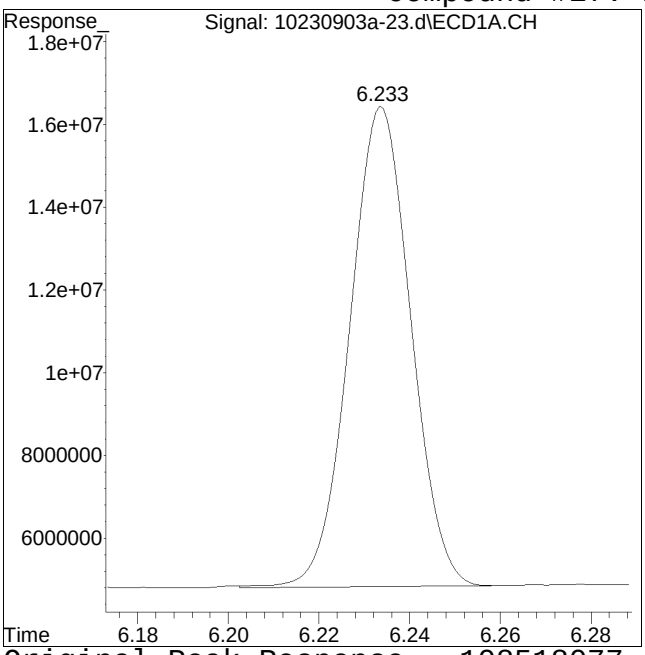
Manual Peak Response = 2726867 M4

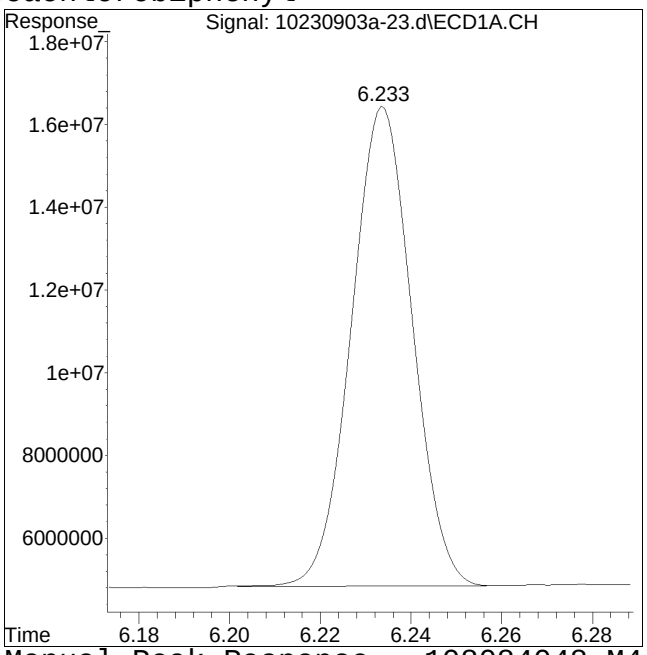
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-23.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:05 pm Instrument : Pest 10
Sample : L2350269-01,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #27: Decachlorobiphenyl



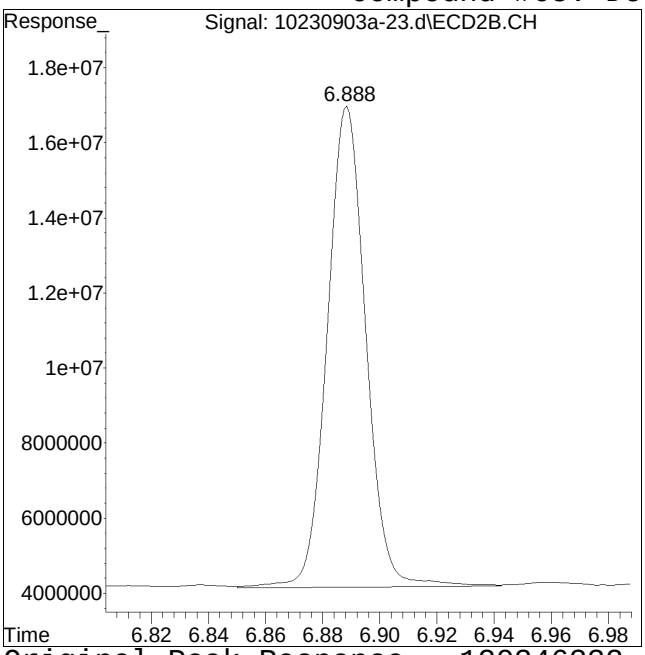


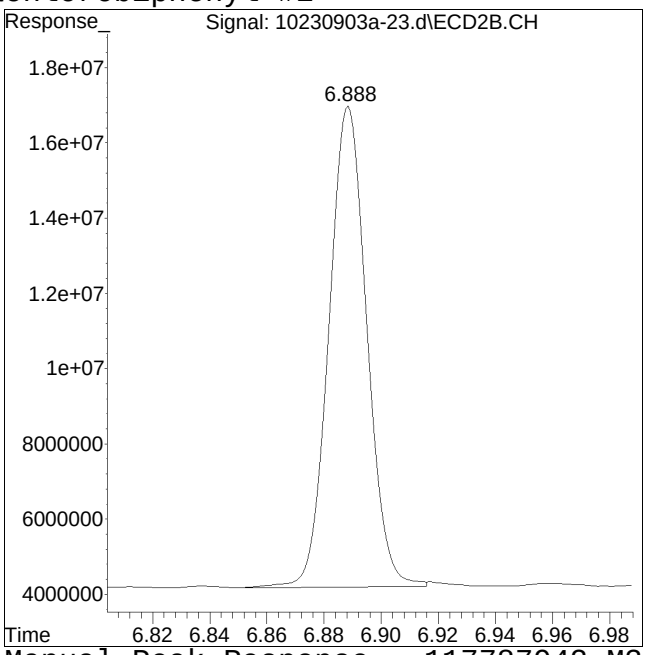
Original Peak Response = 108518077 Manual Peak Response = 108084048 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-23.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:05 pm Instrument : Pest 10
Sample : L2350269-01,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #65: Decachlorobiphenyl #2



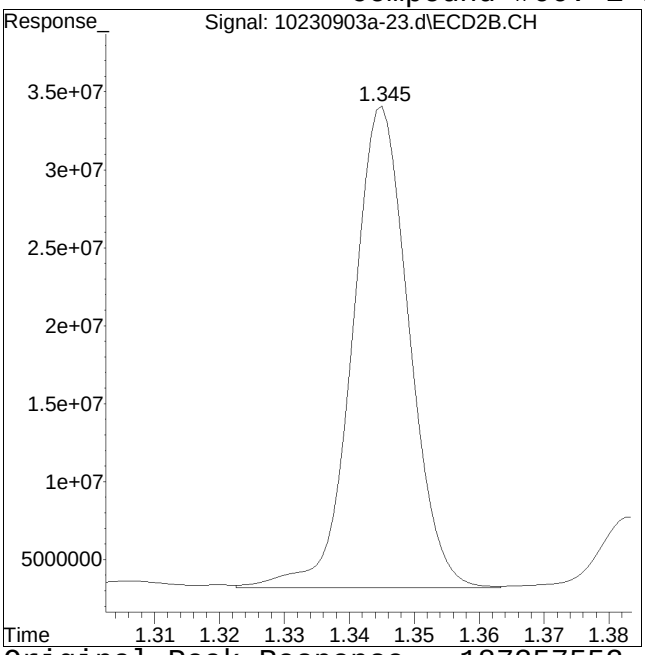


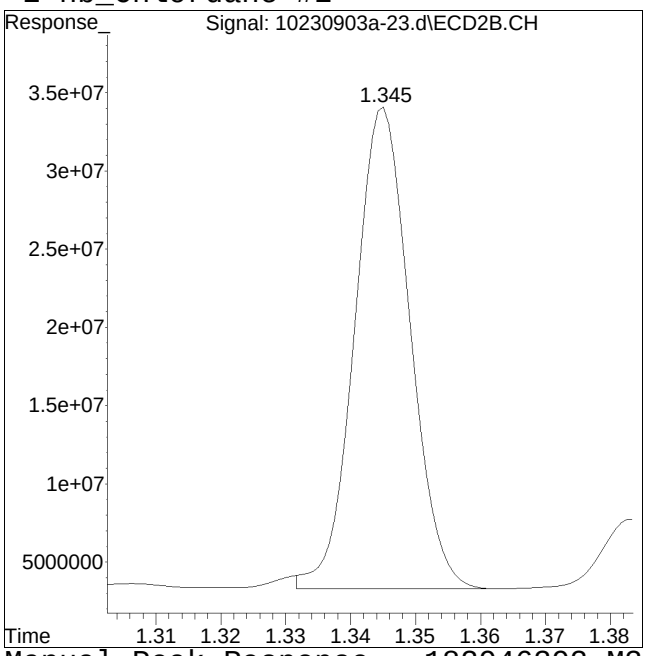
Original Peak Response = 120346332 Manual Peak Response = 117787942 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-23.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:05 pm Instrument : Pest 10
Sample : L2350269-01,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #66: 1-br-2-nb_Chlordane #2



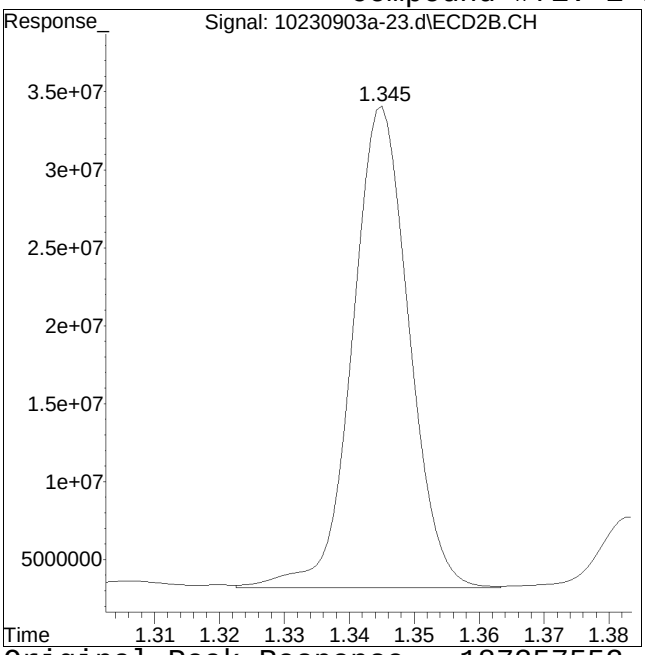


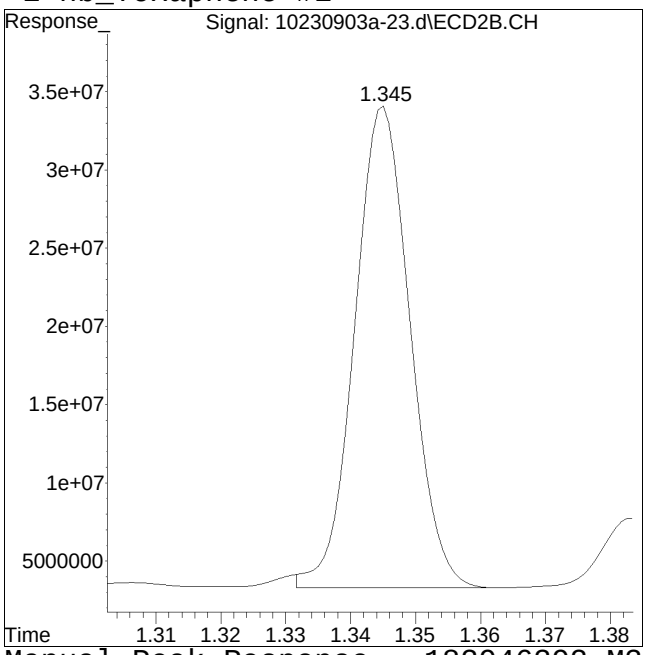
Original Peak Response = 187357552 Manual Peak Response = 182946392 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-23.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:05 pm Instrument : Pest 10
Sample : L2350269-01,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #71: 1-br-2-nb_Toxaphene #2





Original Peak Response = 187357552 Manual Peak Response = 182946392 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-24.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 1:16 pm
Operator : PEST10:mmg
Sample : L2350269-02,42,, re
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 24 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:49:01 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-03.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.274	1.343	154.3E6	170.3E6	25.000	25.000M4
	Standard Area 1 : #1 = 117926644				Recovery =	130.85%	
	Standard Area 1 : #2 = 131668451				Recovery =	129.32%	
28) i	1-br-2-nb_Ch	1.274	1.343	154.3E6	170.3E6	25.000	25.000M4
33) i	1-br-2-nb_To	1.274	1.343	154.3E6	170.3E6	25.000	25.000M4
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.608	1.814	126.9E6	144.1E6	20.278M4	21.953
	Spiked Amount	50.000	Range 30 - 150		Recovery =	40.56%	43.91%
27) s	Decachlorobi	6.233	6.886	136.8E6	149.0E6	24.193M4	23.661M4
	Spiked Amount	50.000	Range 30 - 150		Recovery =	48.39%	47.32%
Target Compounds							
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-24.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 1:16 pm
Operator : PEST10:mmg
Sample : L2350269-02,42,, re
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 24 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:49:01 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-03.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
21) t	4,4'-DDT	4.537	5.282	3734961	1664278	0.614	0.527
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum chlordane-1			0	0	N.D.	N.D.
	Average chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum toxaphene-1			0	0	N.D.	N.D.
	Average toxaphene-1					0.000	0.000
	SemiQuant Compounds - Not Calibrated on this Instrument						
	Sum toxaphene-1			0	0	N.D.	N.D.
	Average toxaphene-1					0.000	0.000

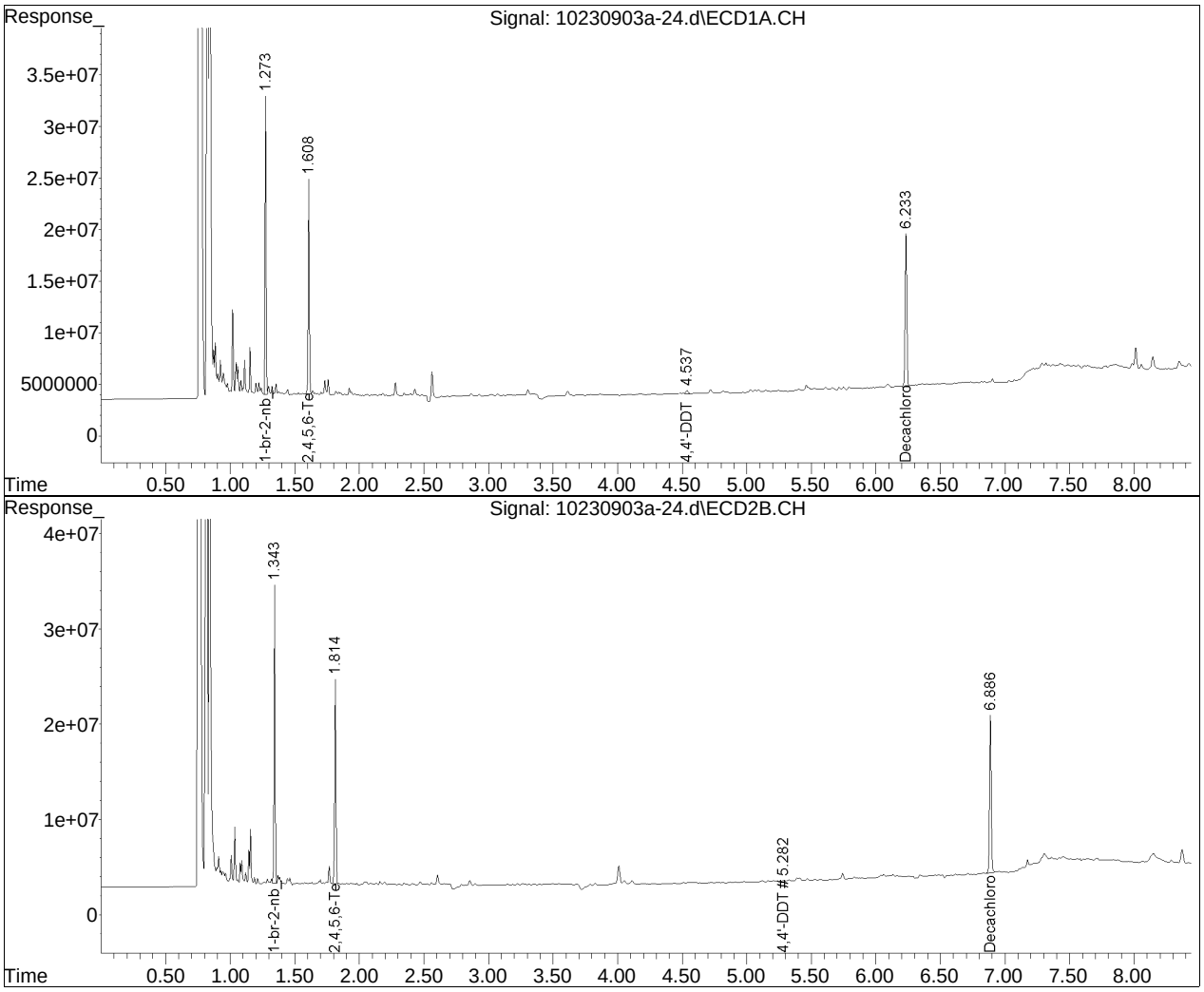
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.

Sub List : Default - All compounds listedA\10230903a-03.d••

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-24.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 1:16 pm
Operator : PEST10:mmg
Sample : L2350269-02,42,, re
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical2
ALS Vial : 24 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:49:01 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

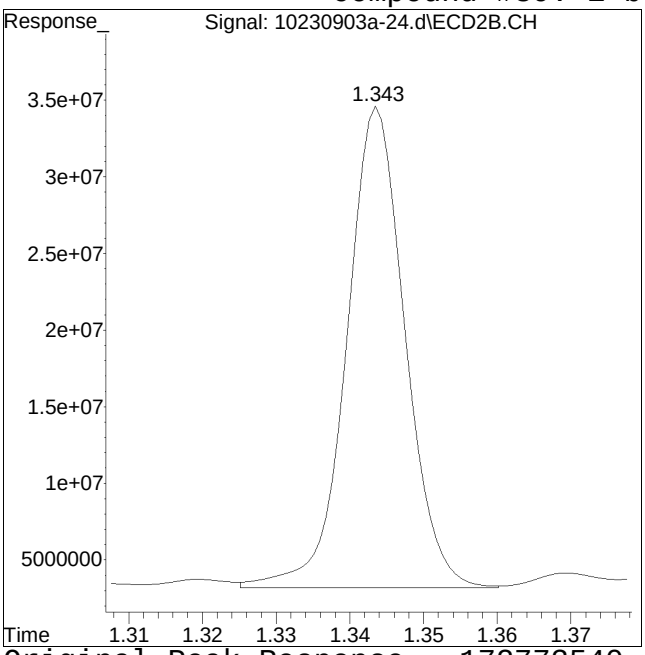
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



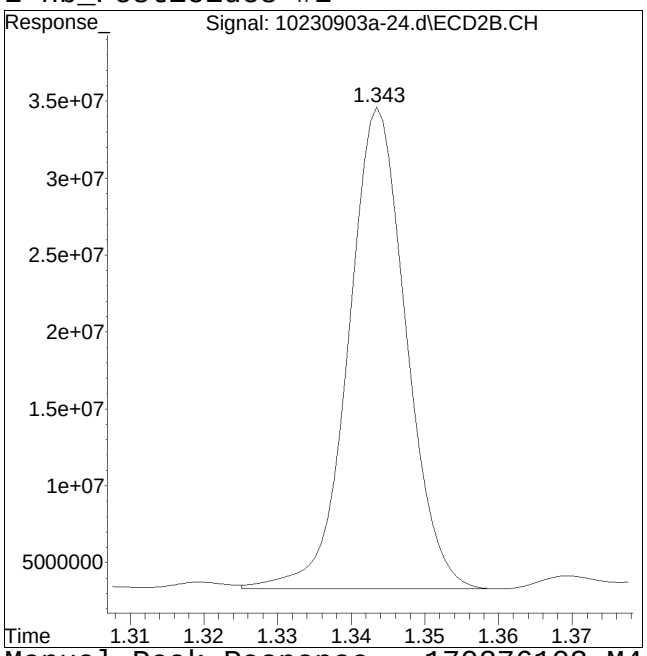
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-24.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:16 pm Instrument : Pest 10
Sample : L2350269-02,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #39: 1-br-2-nb_Pesticides #2



Original Peak Response = 172773540

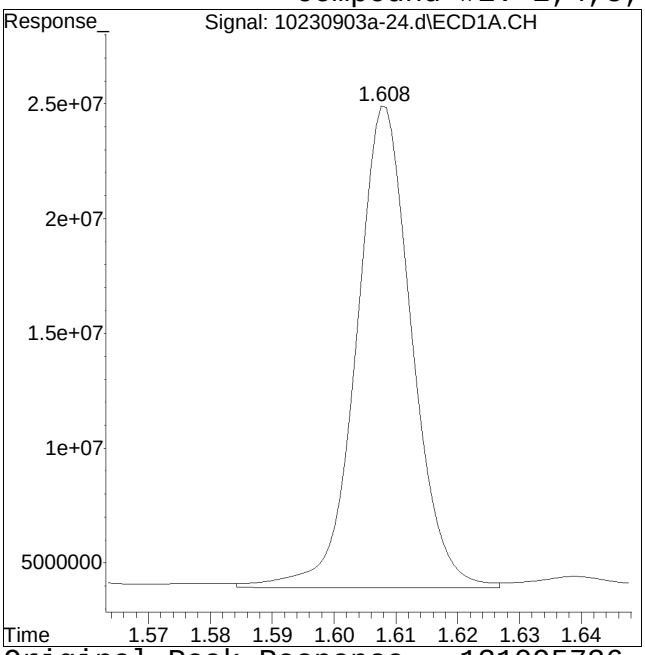


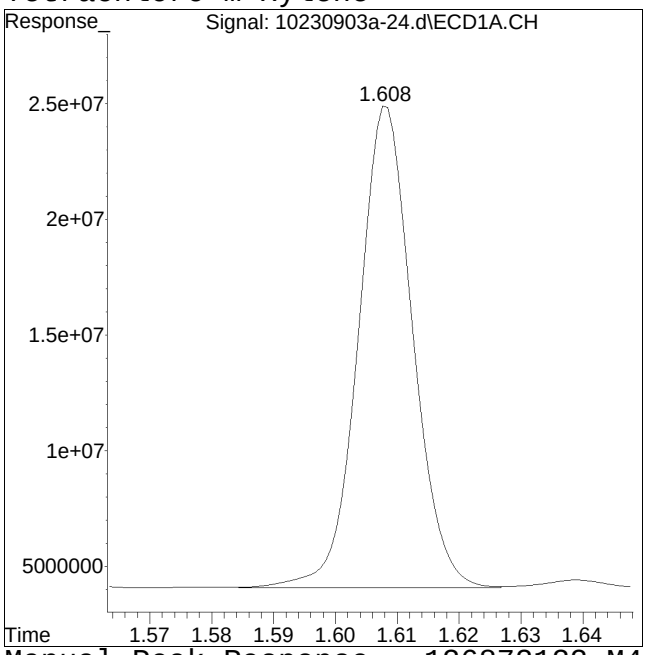
Manual Peak Response = 170276103 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-24.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:16 pm Instrument : Pest 10
Sample : L2350269-02,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



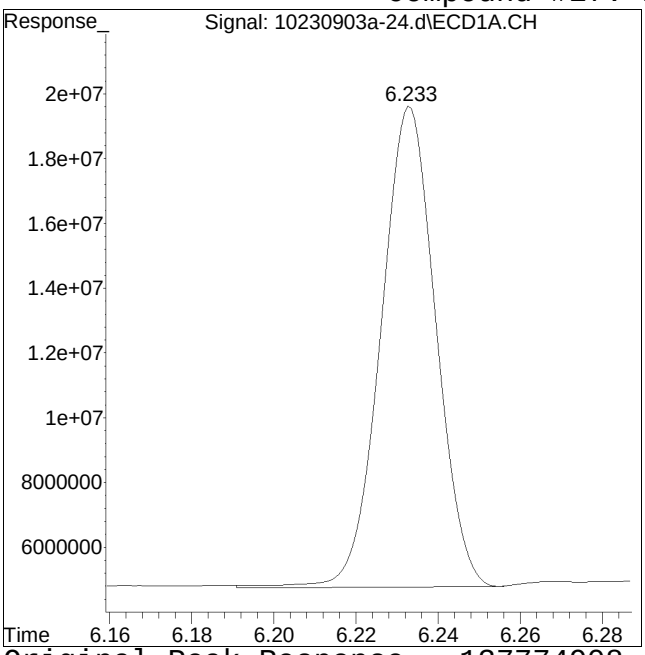


Original Peak Response = 131095736 Manual Peak Response = 126872122 M4
M4 = Poor automated baseline construction.

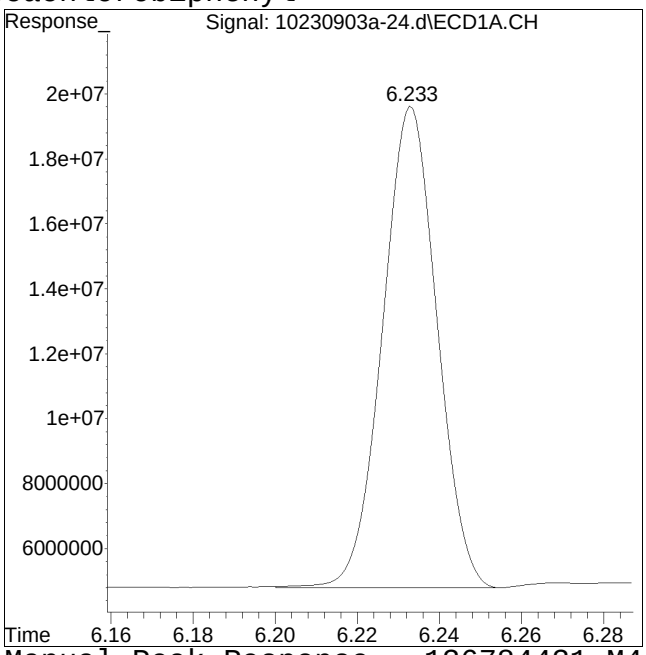
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-24.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:16 pm Instrument : Pest 10
Sample : L2350269-02,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #27: Decachlorobiphenyl



Original Peak Response = 137774908



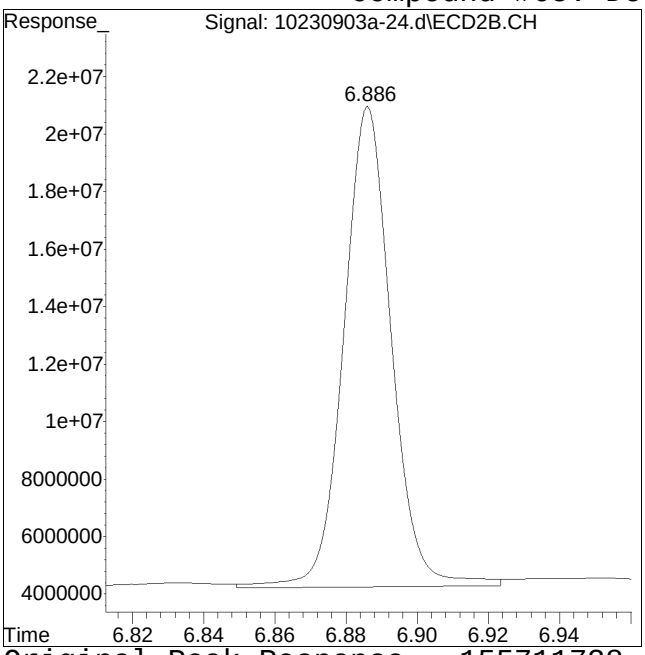
Manual Peak Response = 136784431 M4

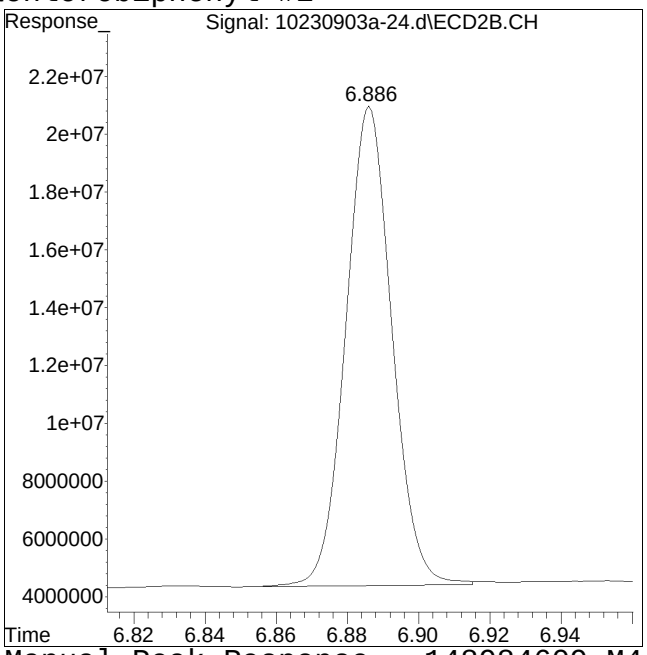
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-24.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:16 pm Instrument : Pest 10
Sample : L2350269-02,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #65: Decachlorobiphenyl #2



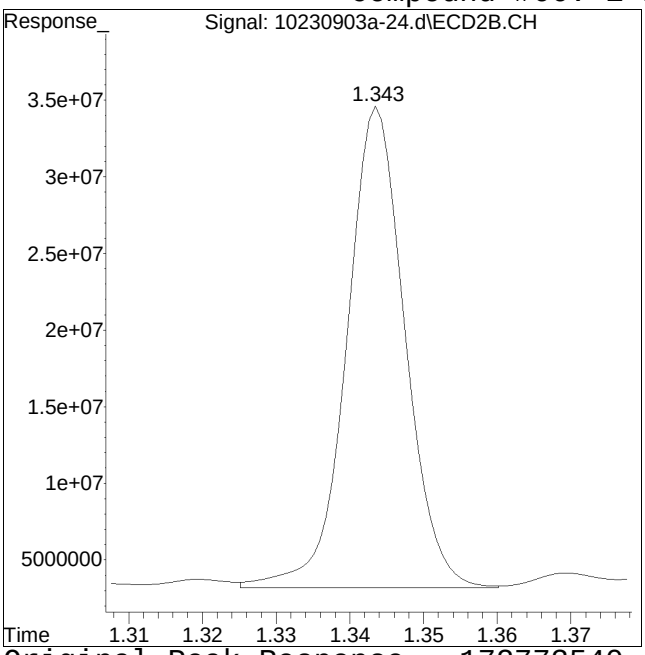


Original Peak Response = 155711728 Manual Peak Response = 148984609 M4
M4 = Poor automated baseline construction.

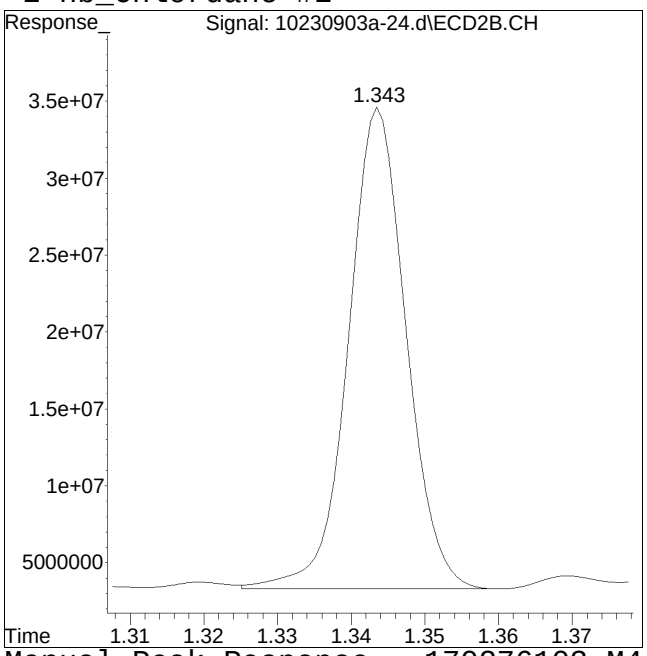
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-24.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:16 pm Instrument : Pest 10
Sample : L2350269-02,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #66: 1-br-2-nb_Chlordane #2



Original Peak Response = 172773540

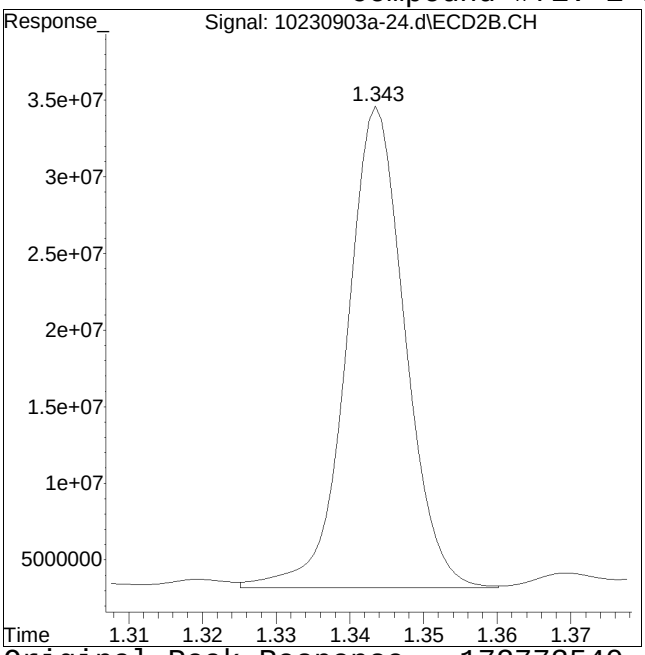


Manual Peak Response = 170276103 M4
M4 = Poor automated baseline construction.

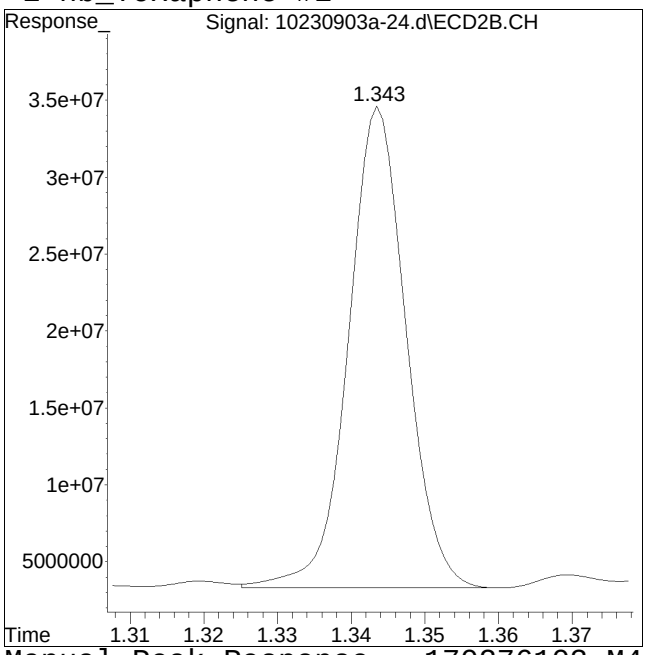
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-24.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:16 pm Instrument : Pest 10
Sample : L2350269-02,42,, re Quant Date : 9/3/2023 1:34 pm

Compound #71: 1-br-2-nb_Toxaphene #2



Original Peak Response = 172773540



Manual Peak Response = 170276103 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-26.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 1:38 pm
Operator : PEST10:mmg
Sample : L2350269-06,42,, re
Misc : wg1823359,wg1823255,ical20332
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:51:26 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-03.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.276	1.346	184.7E6	195.8E6	25.000	25.000M4
	Standard Area 1 : #1 = 117926644				Recovery = 156.64%		
	Standard Area 1 : #2 = 131668451				Recovery = 148.74%		
28) i	1-br-2-nb_Ch	1.276	1.346	184.7E6	195.8E6	25.000	25.000M4
33) i	1-br-2-nb_To	1.276	1.346	184.7E6	195.8E6	25.000	25.000M4
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.610	1.816	147.9E6	156.4E6	19.741M4	20.719M4
	Spiked Amount 50.000	Range 30 - 150			Recovery = 39.48%		41.44%
27) s	Decachlorobi	6.233	6.887	131.0E6	144.9E6	19.352M4	20.003M4
	Spiked Amount 50.000	Range 30 - 150			Recovery = 38.70%		40.01%
Target Compounds							
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-26.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 1:38 pm
Operator : PEST10:mmg
Sample : L2350269-06,42,, re
Misc : wg1823359,wg1823255,ical20332
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:51:26 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-03.d
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
21) t 4,4'-DDT	4.538	5.284	20384494	9295386	2.799M3	1.366M4I
22) t Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
25) t Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1 chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1 chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1 chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1 chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum chlordane-1			0	0	N.D.	N.D.
Average chlordane-1					0.000	0.000
34) l2 toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2 toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2 toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2 toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000

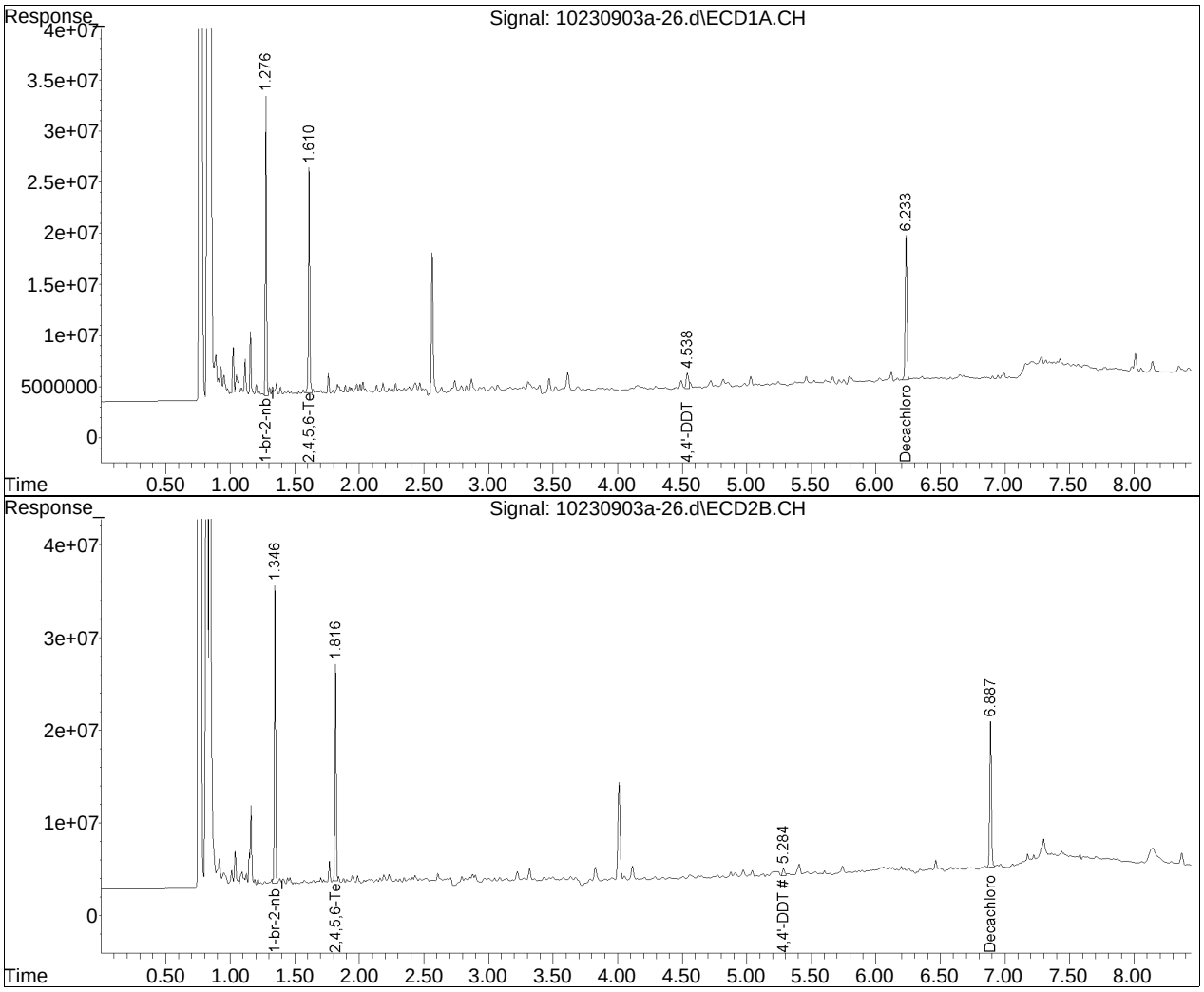
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.

Sub List : Default - All compounds listedA\10230903a-03.d••

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-26.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 1:38 pm
Operator : PEST10:mmg
Sample : L2350269-06,42,, re
Misc : wg1823359,wg1823255,ical20332
ALS Vial : 26 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:51:26 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

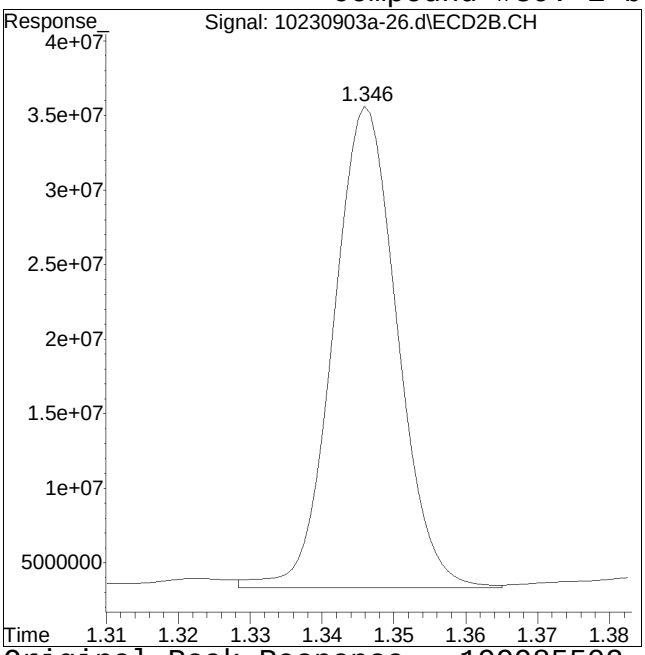
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

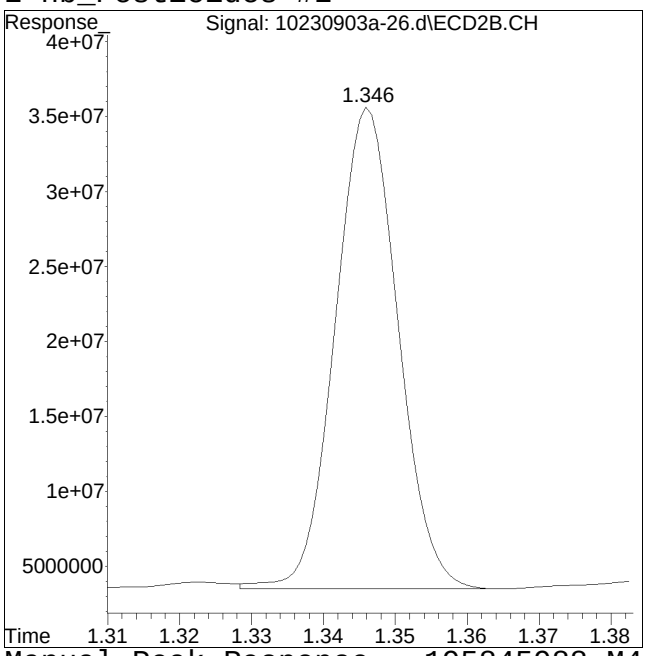


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-26.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:38 pm Instrument : Pest 10
Sample : L2350269-06,42,, re Quant Date : 9/3/2023 1:48 pm

Compound #39: 1-br-2-nb_Pesticides #2



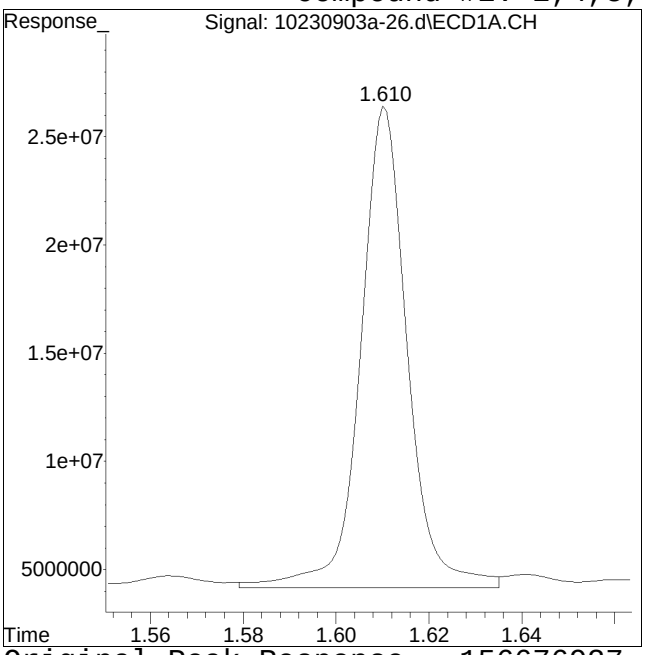


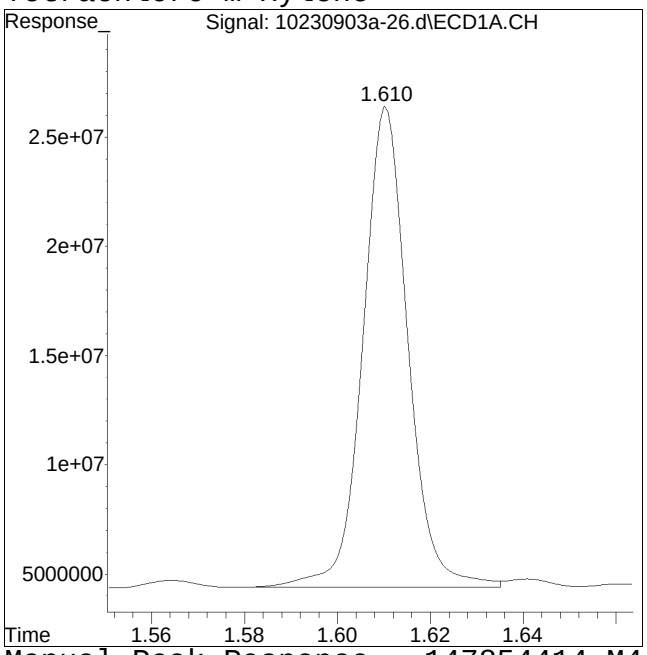
Original Peak Response = 199985502 Manual Peak Response = 195845988 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-26.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:38 pm Instrument : Pest 10
Sample : L2350269-06,42,, re Quant Date : 9/3/2023 1:48 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



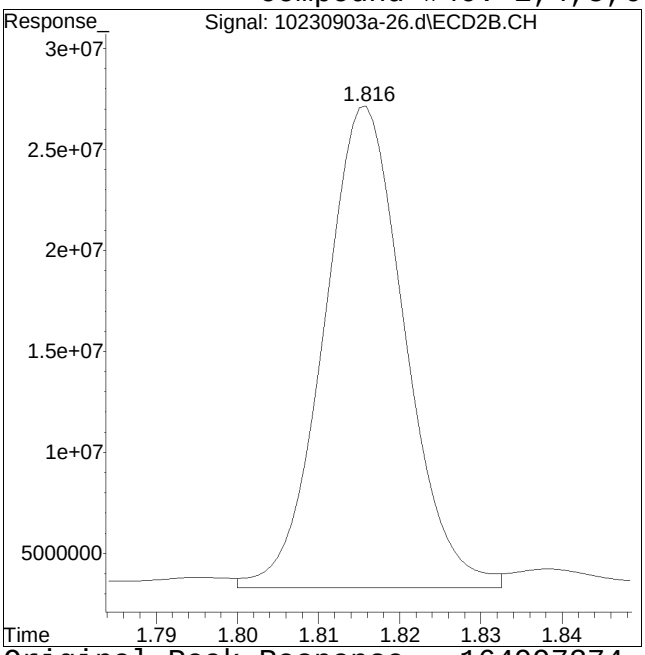


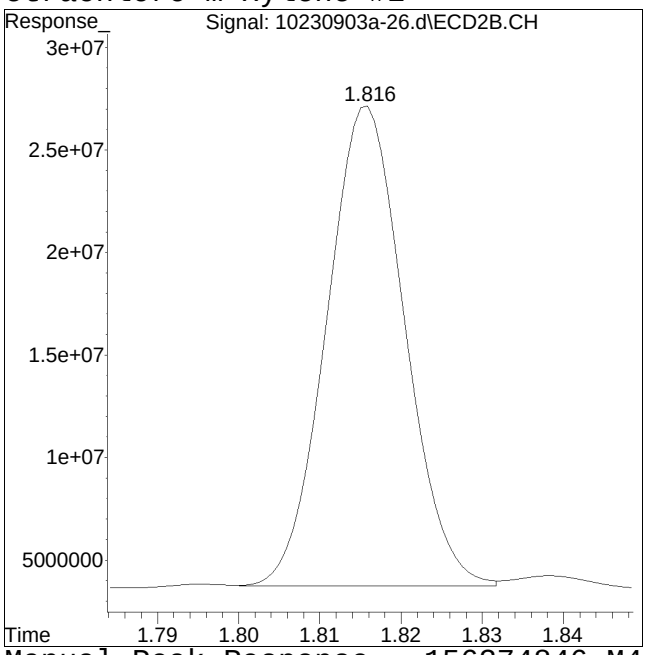
Original Peak Response = 156676927 Manual Peak Response = 147854414 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-26.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:38 pm Instrument : Pest 10
Sample : L2350269-06,42,, re Quant Date : 9/3/2023 1:48 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



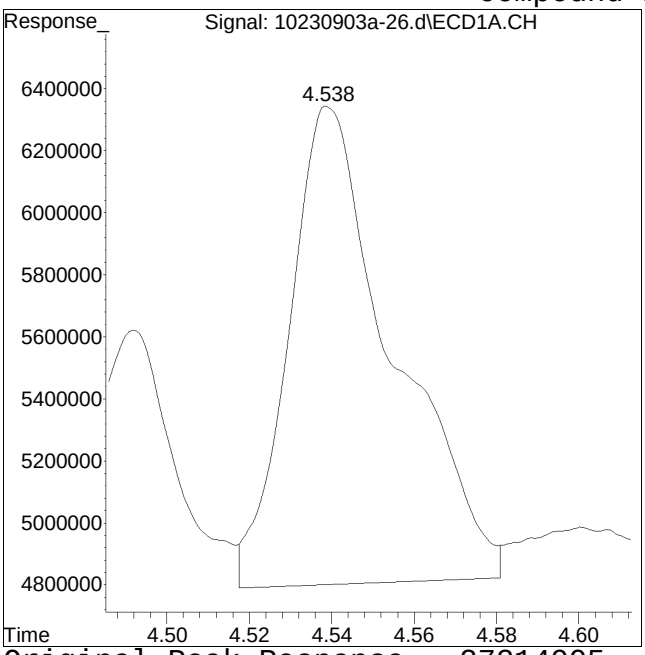


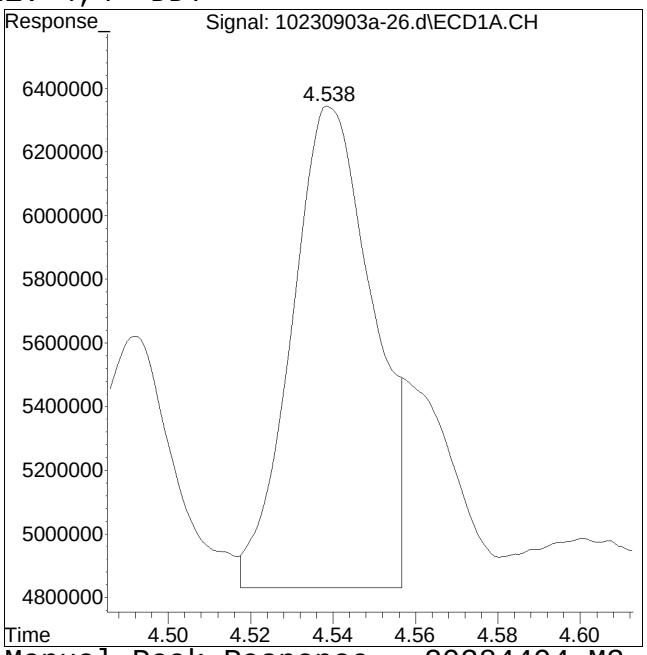
Original Peak Response = 164997374 Manual Peak Response = 156374846 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-26.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:38 pm Instrument : Pest 10
Sample : L2350269-06,42,, re Quant Date : 9/3/2023 1:48 pm

Compound #21: 4,4'-DDT



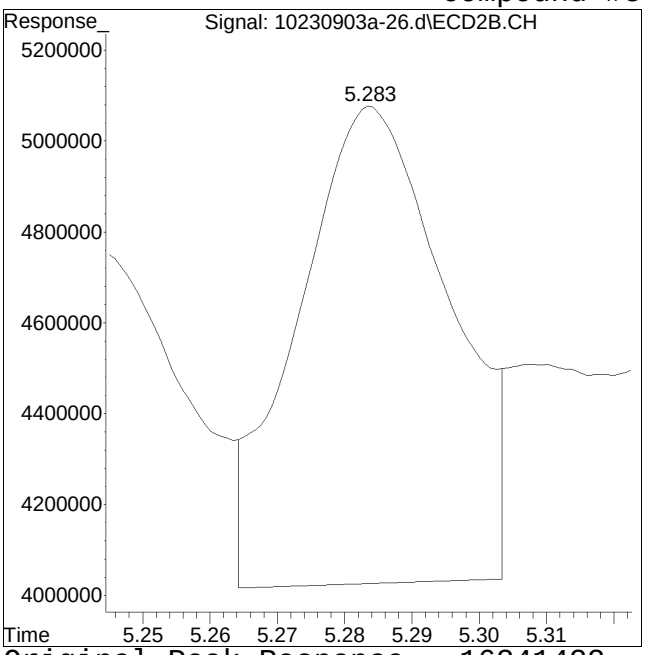


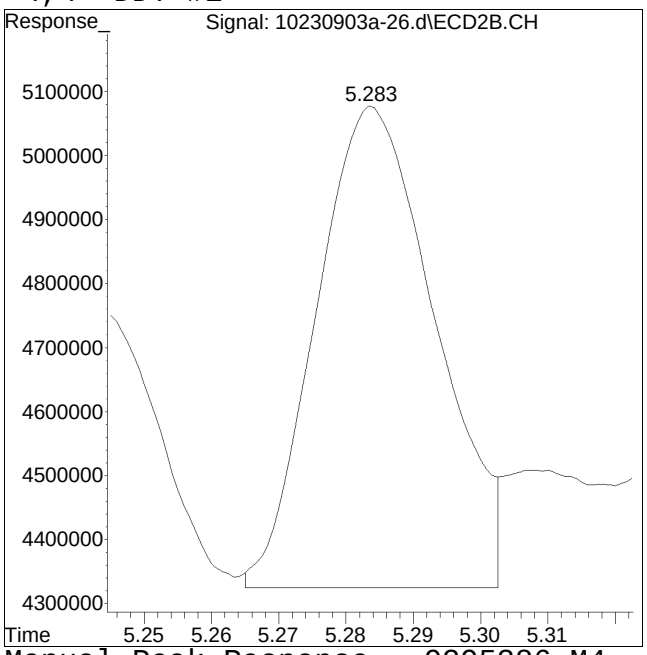
Original Peak Response = 27214995 Manual Peak Response = 20384494 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-26.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:38 pm Instrument : Pest 10
Sample : L2350269-06,42,, re Quant Date : 9/3/2023 1:48 pm

Compound #59: 4,4'-DDT #2



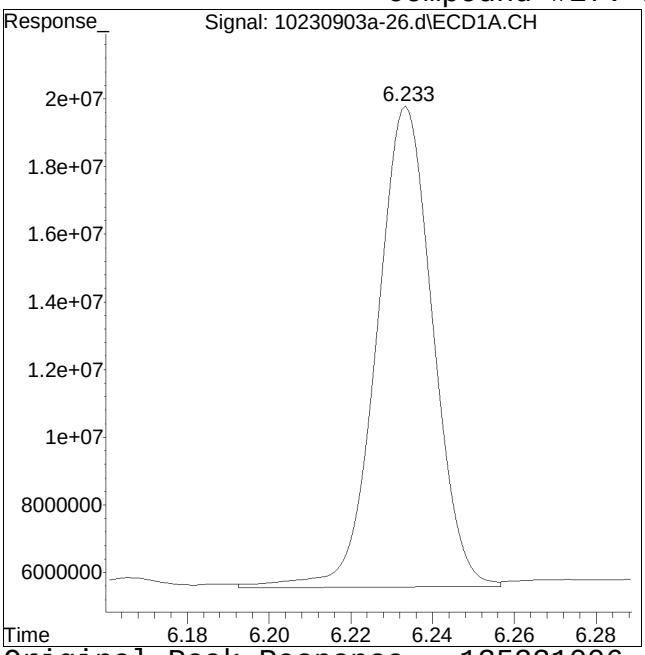


Original Peak Response = 16241422 Manual Peak Response = 9295386 M4
M4 = Poor automated baseline construction.

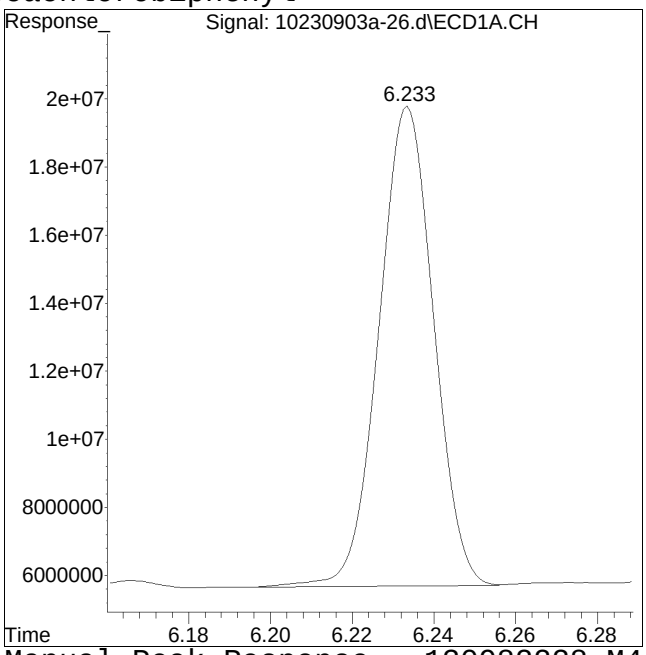
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-26.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:38 pm Instrument : Pest 10
Sample : L2350269-06,42,, re Quant Date : 9/3/2023 1:48 pm

Compound #27: Decachlorobiphenyl



Original Peak Response = 135331006



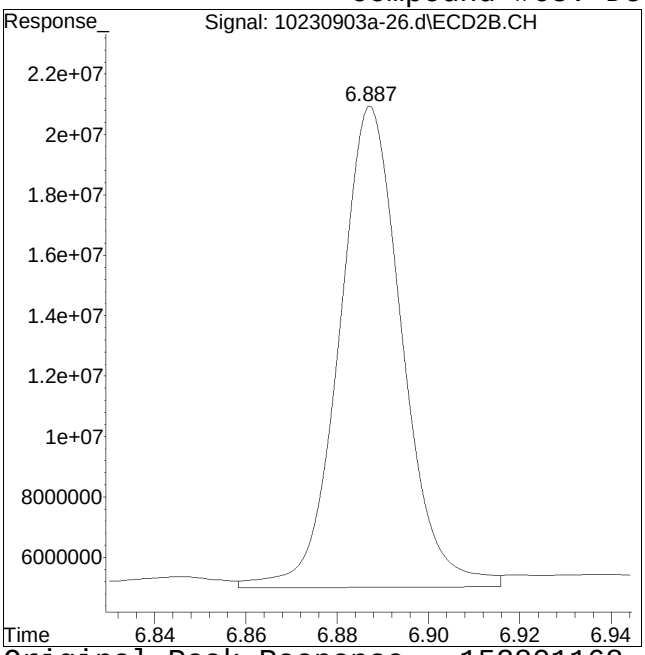
Manual Peak Response = 130982228 M4

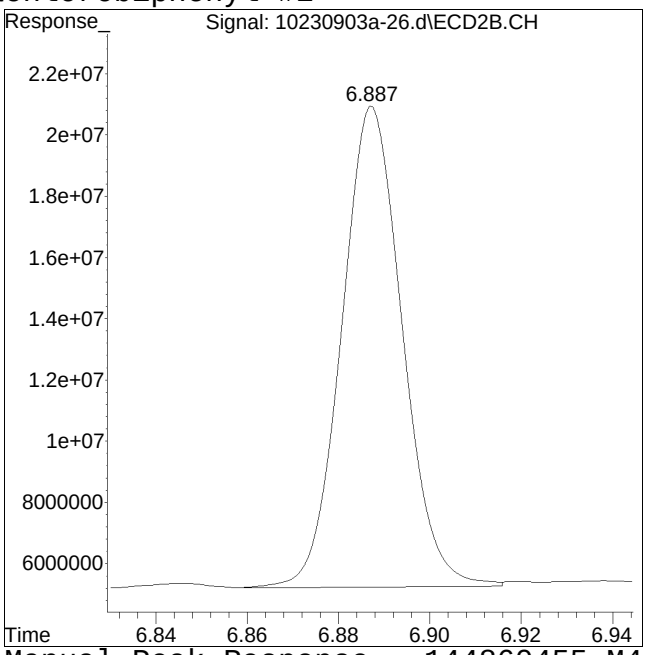
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-26.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:38 pm Instrument : Pest 10
Sample : L2350269-06,42,, re Quant Date : 9/3/2023 1:48 pm

Compound #65: Decachlorobiphenyl #2



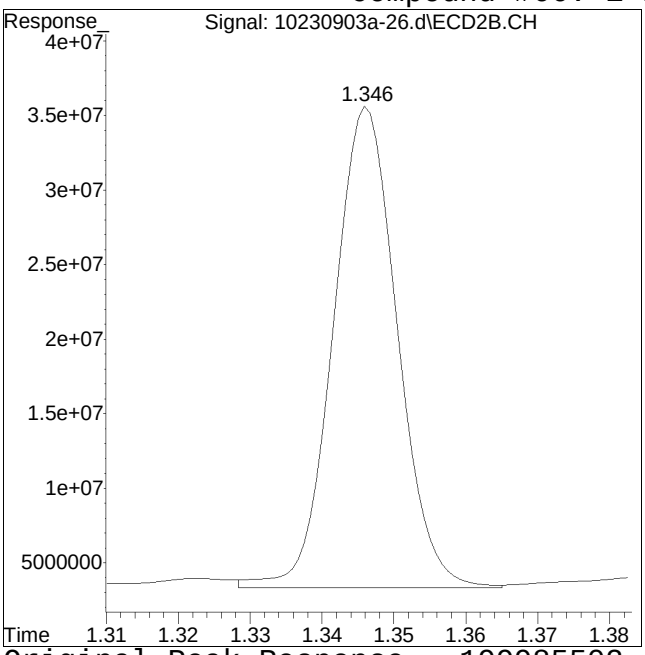


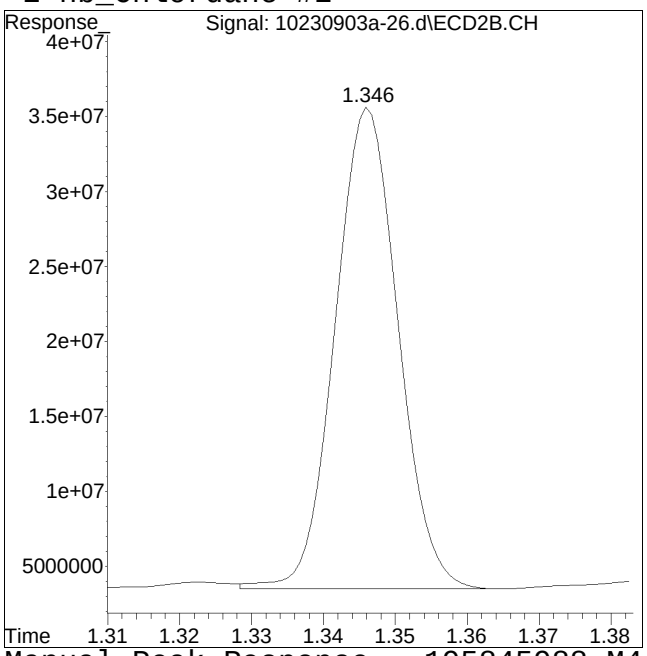
Original Peak Response = 152801168 Manual Peak Response = 144860455 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-26.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:38 pm Instrument : Pest 10
Sample : L2350269-06,42,, re Quant Date : 9/3/2023 1:48 pm

Compound #66: 1-br-2-nb_Chlordane #2



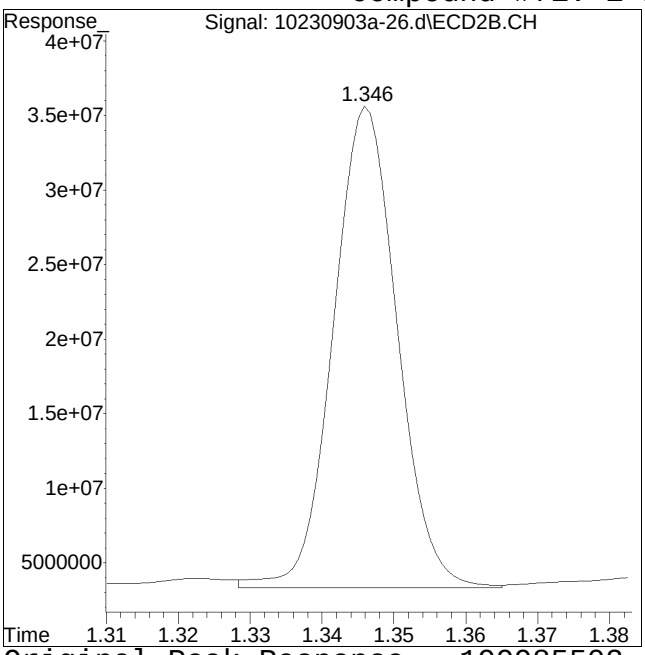


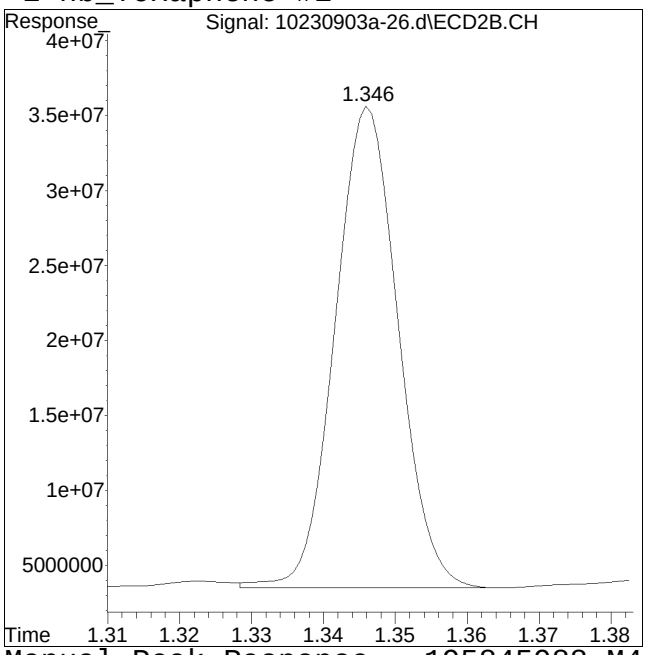
Original Peak Response = 199985502 Manual Peak Response = 195845988 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-26.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:38 pm Instrument : Pest 10
Sample : L2350269-06,42,, re Quant Date : 9/3/2023 1:48 pm

Compound #71: 1-br-2-nb_Toxaphene #2





Original Peak Response = 199985502 Manual Peak Response = 195845988 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-28.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:00 pm
Operator : PEST10:mmg
Sample : L2350269-07,42,, re
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 28 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:00:23 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-27.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.274	1.344	171.4E6	182.4E6	25.000	25.000M3
	Standard Area 1 : #1 = 128148385				Recovery =	133.75%	
	Standard Area 1 : #2 = 140314702				Recovery =	129.97%	
28) i	1-br-2-nb_Ch	1.274	1.344	171.4E6	182.4E6	25.000	25.000M3
33) i	1-br-2-nb_To	1.274	1.344	171.4E6	182.4E6	25.000	25.000M3
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.608	1.814	142.0E6	154.4E6	20.429M4	21.975M4
	Spiked Amount	50.000	Range 30 - 150		Recovery =	40.86%	43.95%
27) s	Decachlorobi	6.233	6.886	144.3E6	156.6E6	22.973M4	23.227M4
	Spiked Amount	50.000	Range 30 - 150		Recovery =	45.95%	46.45%
Target Compounds							
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-28.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:00 pm
Operator : PEST10:mmg
Sample : L2350269-07,42,, re
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 28 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:00:23 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-27.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	4.538	5.280	2233623	1055537	0.331	0.439M4
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum chlordane-1			0	0	N.D.	N.D.
	Average chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
	Sum toxaphene-1			0	0	N.D.	N.D.
	Average toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument							
	Sum toxaphene-1			0	0	N.D.	N.D.
	Average toxaphene-1					0.000	0.000

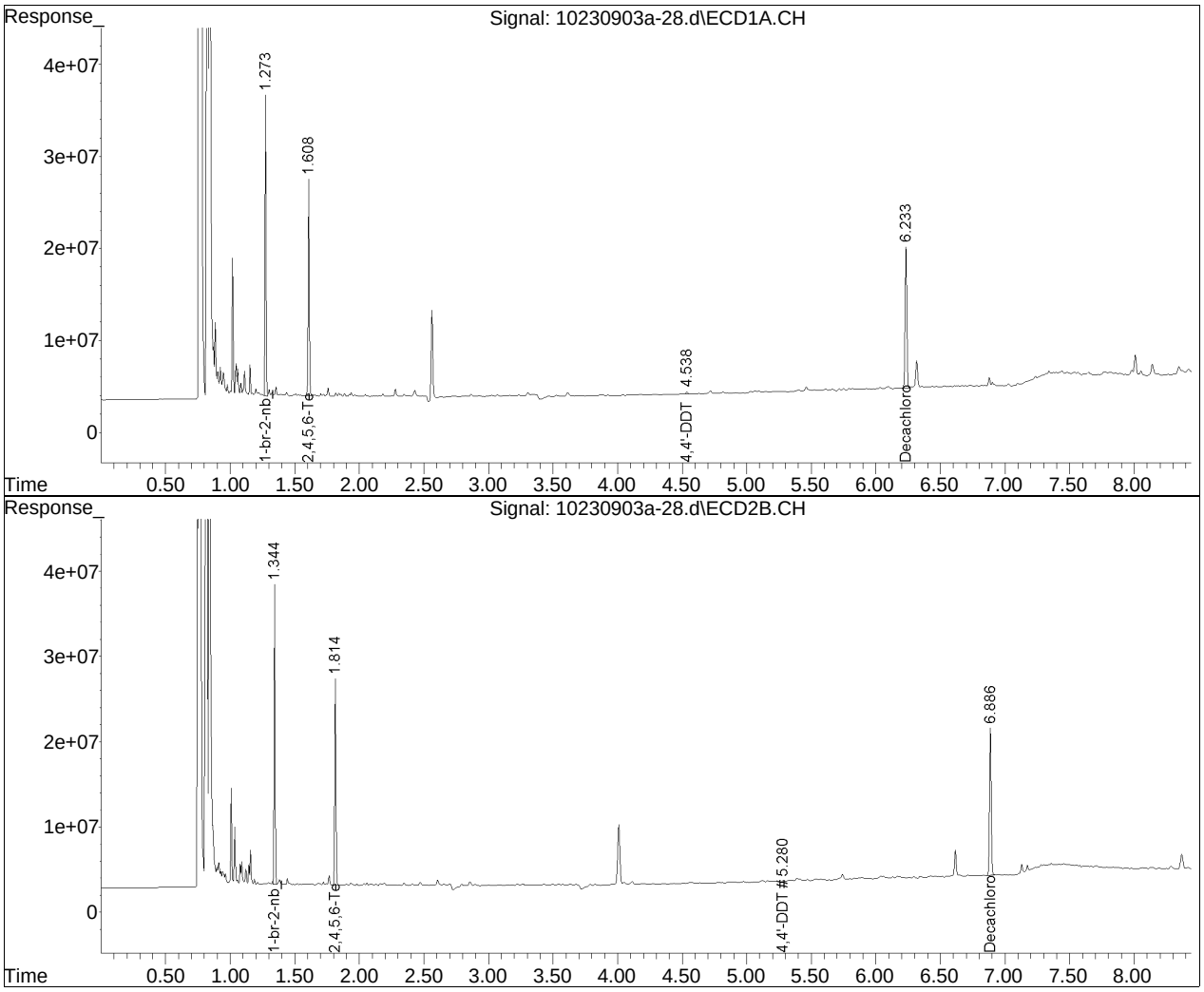
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.

Sub List : Default - All compounds listedA\10230903a-27.d••

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-28.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:00 pm
Operator : PEST10:mmg
Sample : L2350269-07,42,, re
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical2
ALS Vial : 28 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:00:23 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

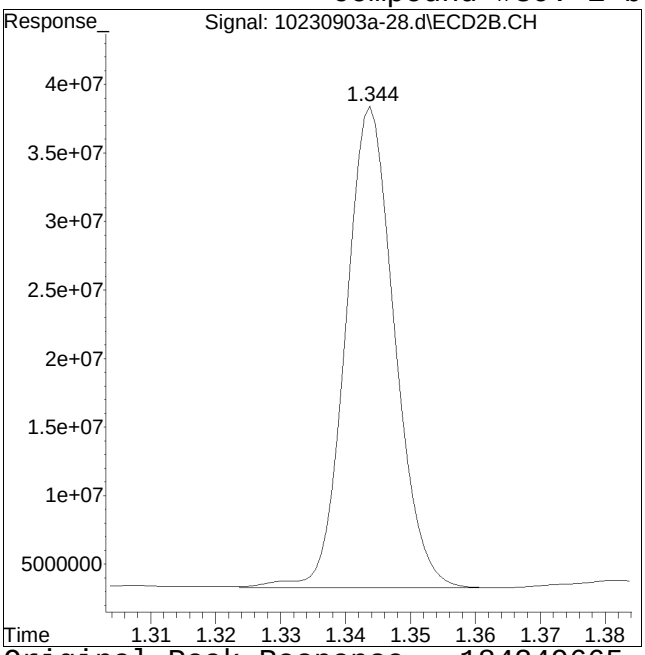
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

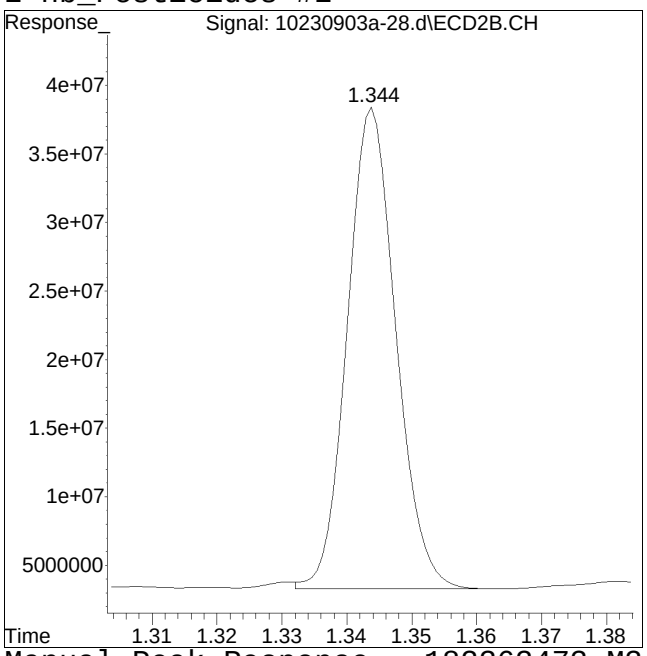


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-28.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:00 pm Instrument : Pest 10
Sample : L2350269-07,42,, re Quant Date : 9/3/2023 2:15 pm

Compound #39: 1-br-2-nb_Pesticides #2



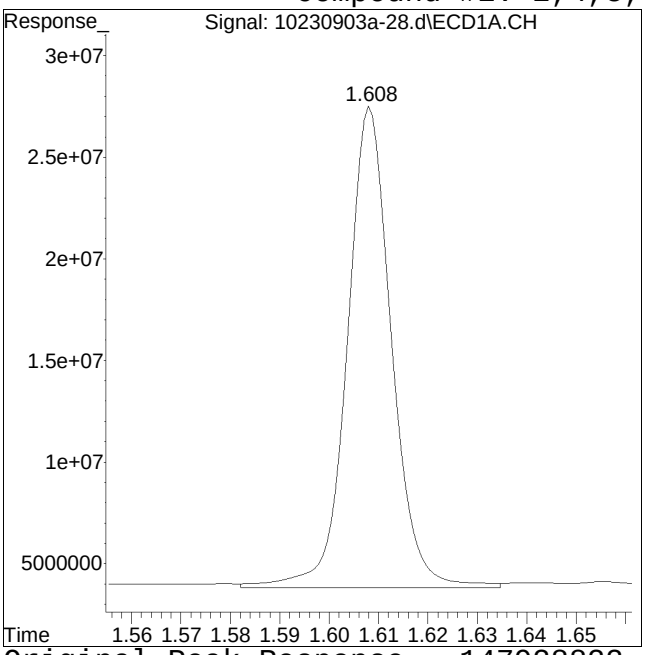


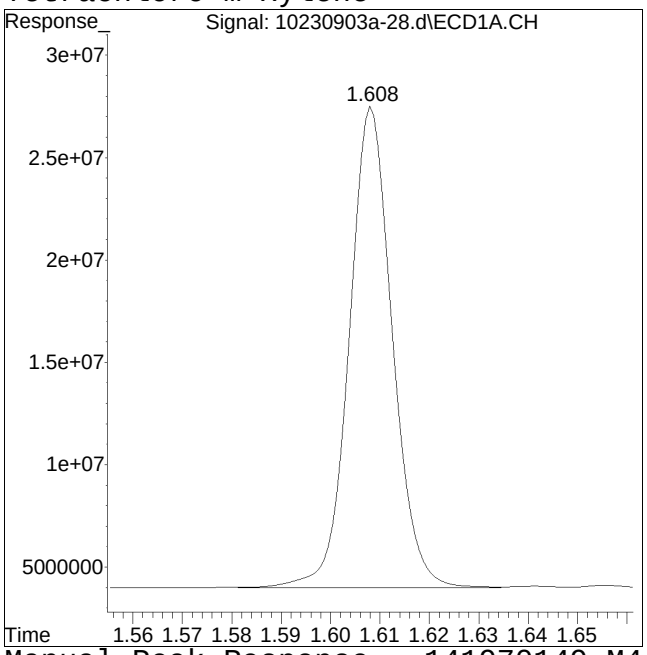
Original Peak Response = 184249665 Manual Peak Response = 182363473 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-28.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:00 pm Instrument : Pest 10
Sample : L2350269-07,42,, re Quant Date : 9/3/2023 2:15 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



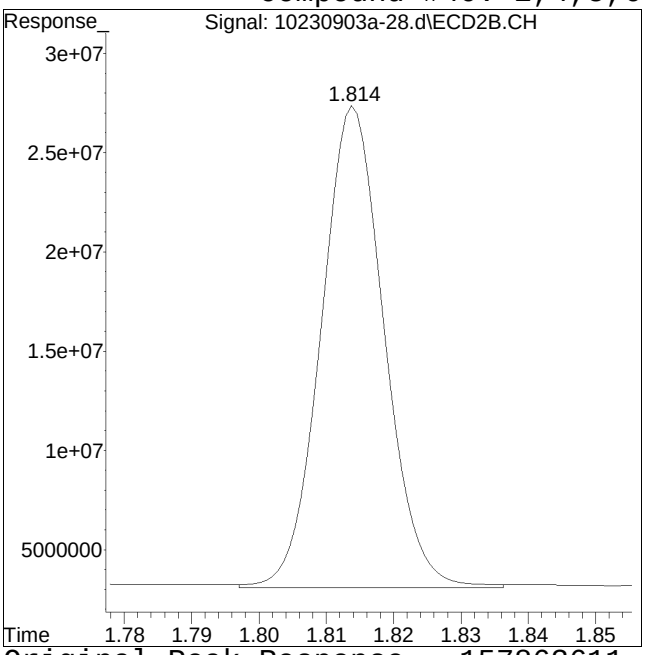


Original Peak Response = 147928822 Manual Peak Response = 141970149 M4
M4 = Poor automated baseline construction.

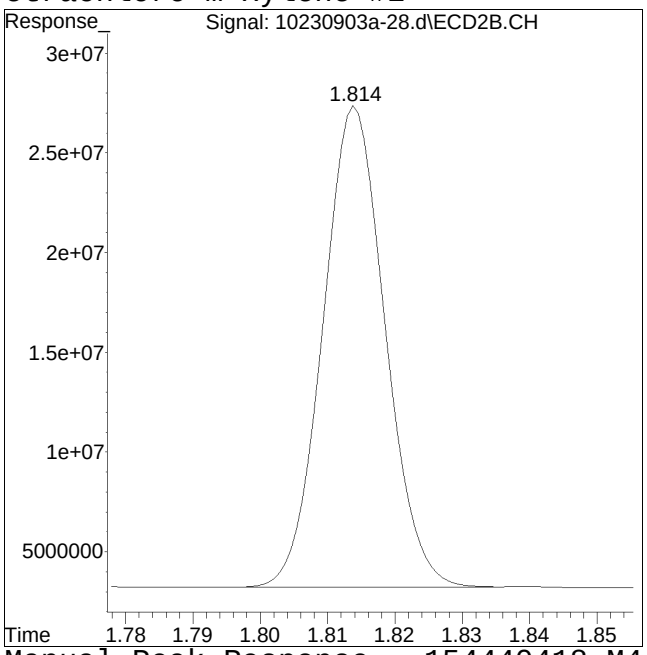
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-28.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:00 pm Instrument : Pest 10
Sample : L2350269-07,42,, re Quant Date : 9/3/2023 2:15 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



Original Peak Response = 157863611



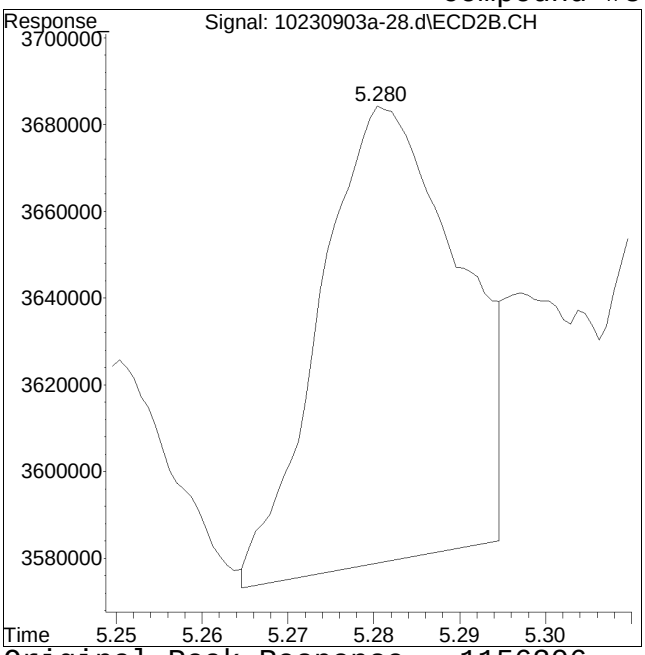
Manual Peak Response = 154440418 M4

M4 = Poor automated baseline construction.

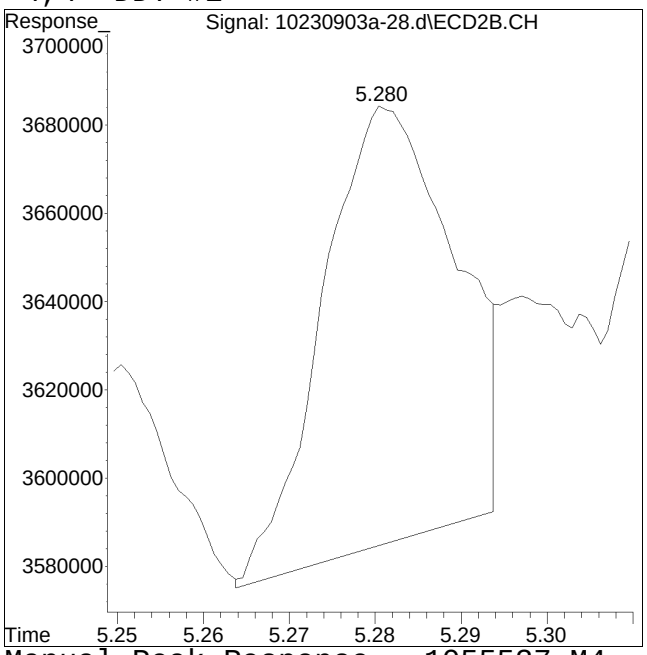
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-28.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:00 pm Instrument : Pest 10
Sample : L2350269-07,42,, re Quant Date : 9/3/2023 2:15 pm

Compound #59: 4,4'-DDT #2



Original Peak Response = 1156306



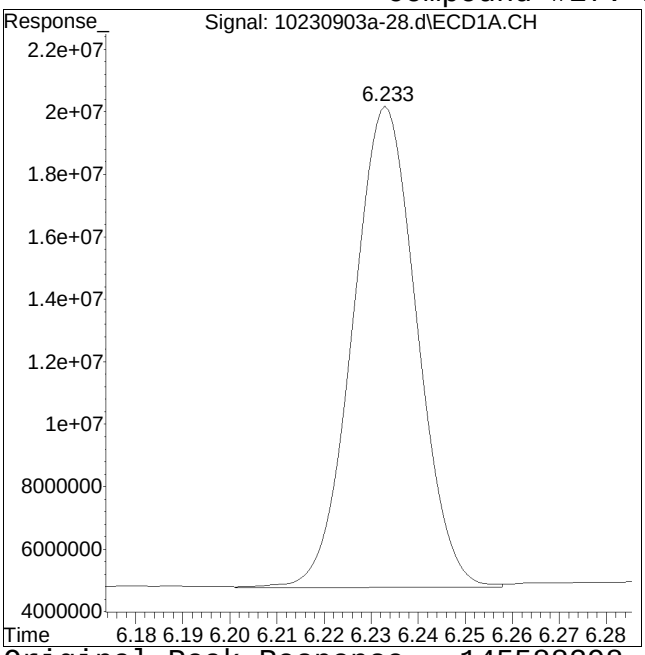
Manual Peak Response = 1055537 M4

M4 = Poor automated baseline construction.

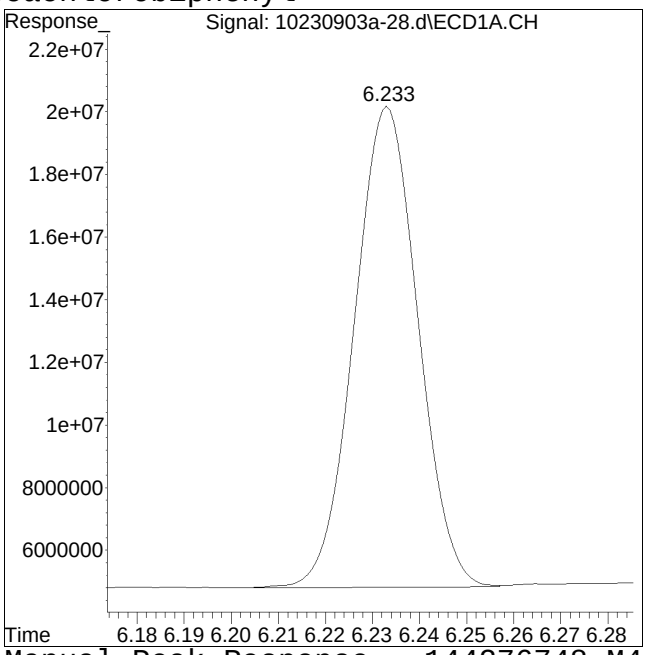
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-28.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:00 pm Instrument : Pest 10
Sample : L2350269-07,42,, re Quant Date : 9/3/2023 2:15 pm

Compound #27: Decachlorobiphenyl



Original Peak Response = 145588398



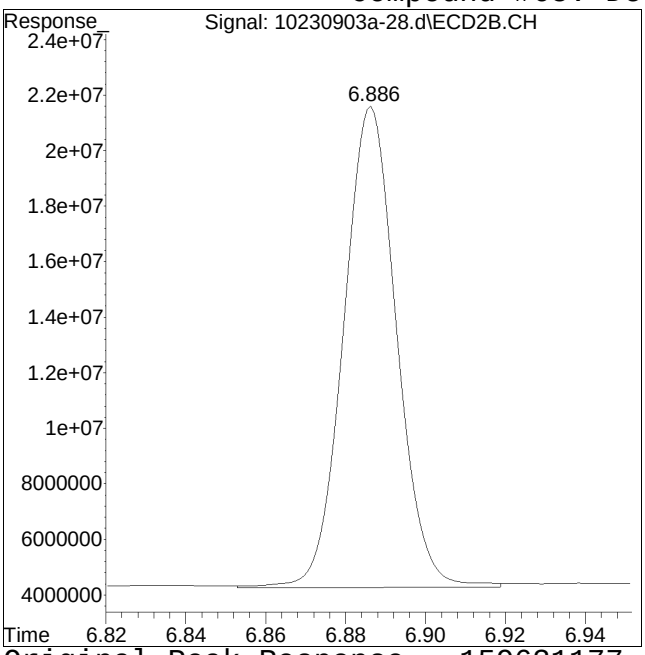
Manual Peak Response = 144276748 M4

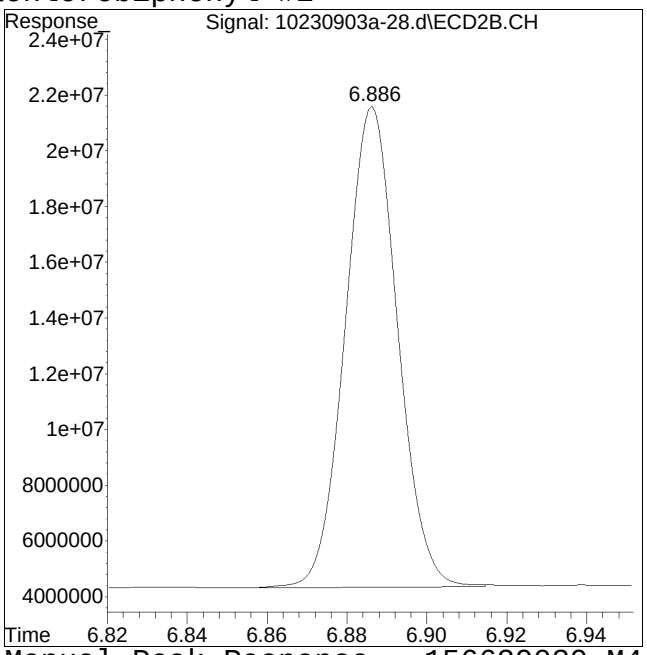
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-28.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:00 pm Instrument : Pest 10
Sample : L2350269-07,42,, re Quant Date : 9/3/2023 2:15 pm

Compound #65: Decachlorobiphenyl #2



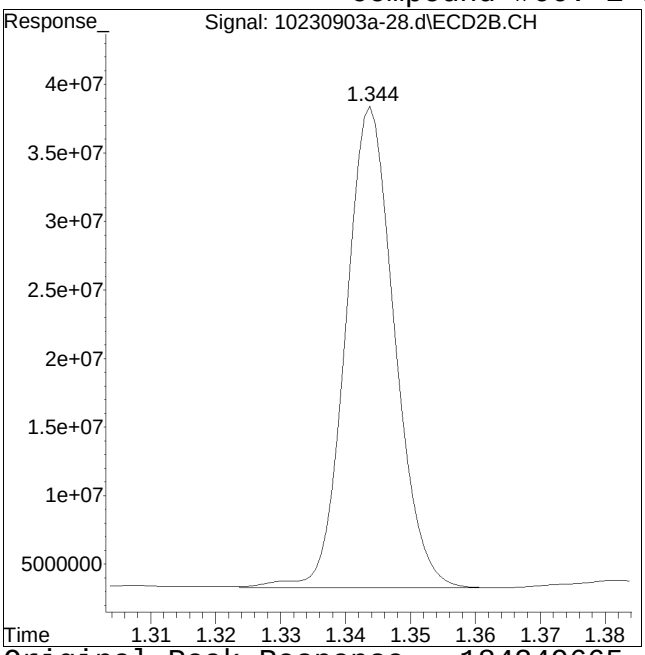


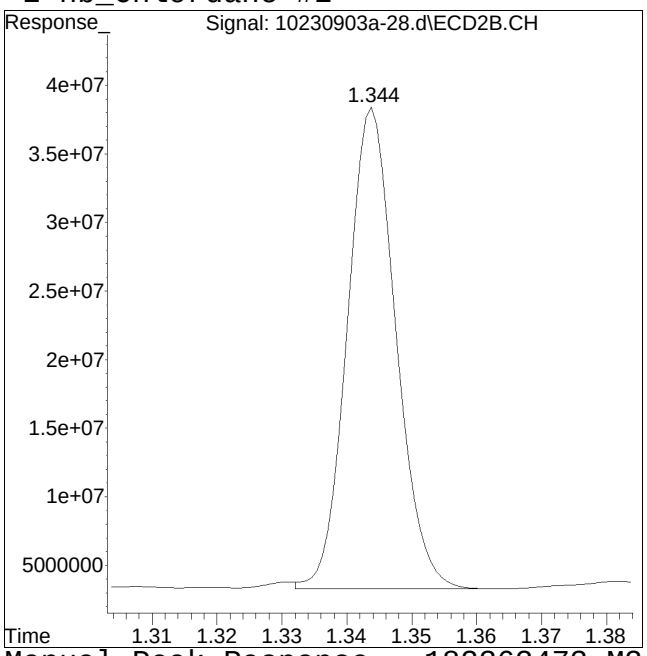
Original Peak Response = 159631177 Manual Peak Response = 156629030 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-28.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:00 pm Instrument : Pest 10
Sample : L2350269-07,42,, re Quant Date : 9/3/2023 2:15 pm

Compound #66: 1-br-2-nb_Chlordane #2



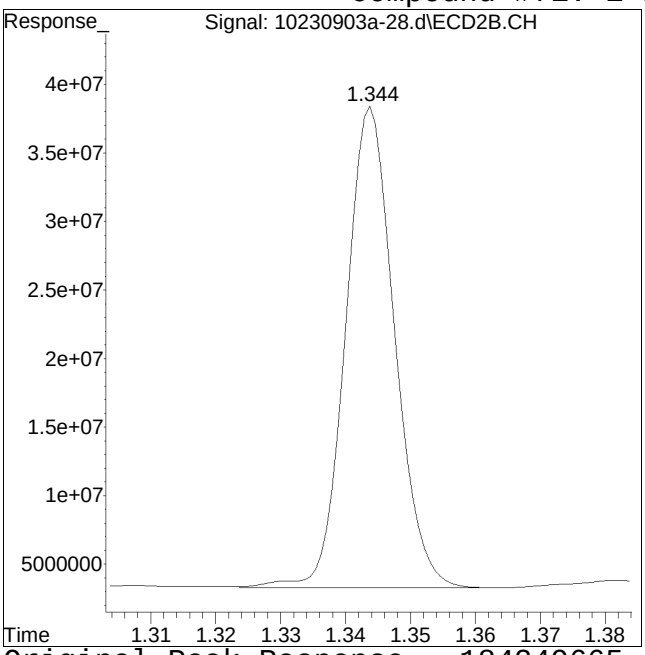


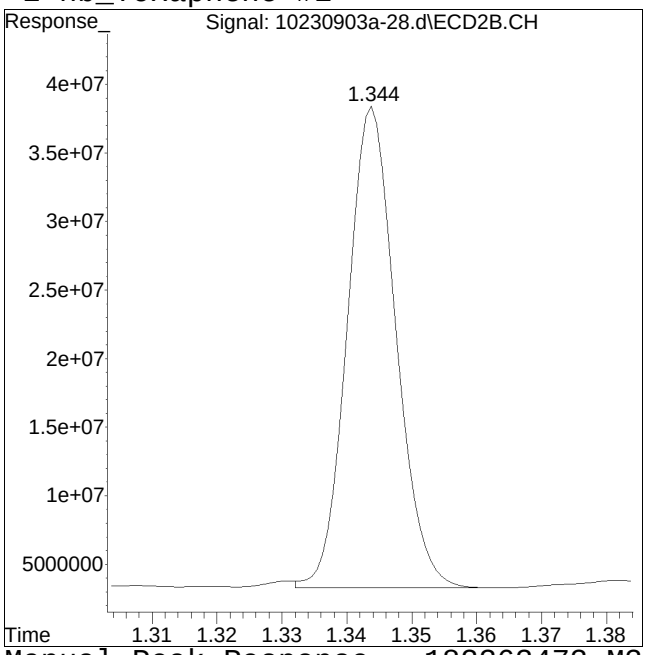
Original Peak Response = 184249665 Manual Peak Response = 182363473 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-28.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:00 pm Instrument : Pest 10
Sample : L2350269-07,42,, re Quant Date : 9/3/2023 2:15 pm

Compound #71: 1-br-2-nb_Toxaphene #2





Original Peak Response = 184249665 Manual Peak Response = 182363473 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-29.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:11 pm
Operator : PEST10:mmg
Sample : L2350269-08,42,, re
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:02:07 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-27.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.274	1.344	175.4E6	185.0E6	25.000	25.000M3
	Standard Area 1 : #1 = 128148385				Recovery =	136.88%	
	Standard Area 1 : #2 = 140314702				Recovery =	131.82%	
28) i	1-br-2-nb_Ch	1.274	1.344	175.4E6	185.0E6	25.000	25.000M3
33) i	1-br-2-nb_To	1.274	1.344	175.4E6	185.0E6	25.000	25.000M3
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.608	1.814	175.6E6	192.3E6	24.689M4	26.973M3
	Spiked Amount	50.000	Range 30 - 150		Recovery =	49.38%	53.95%
27) s	Decachlorobi	6.233	6.886	171.3E6	191.9E6	26.658M4	28.055M3
	Spiked Amount	50.000	Range 30 - 150		Recovery =	53.32%	56.11%
Target Compounds							
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-29.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:11 pm
Operator : PEST10:mmg
Sample : L2350269-08,42,, re
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:02:07 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-27.d
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
20) t Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t 4,4'-DDT	4.537	5.280	7659890	1926742	1.108M4	0.542M4I
22) t Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
25) t Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1 chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1 chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1 chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1 chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum chlordane-1			0	0	N.D.	N.D.
Average chlordane-1					0.000	0.000
34) l2 toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2 toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2 toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2 toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000

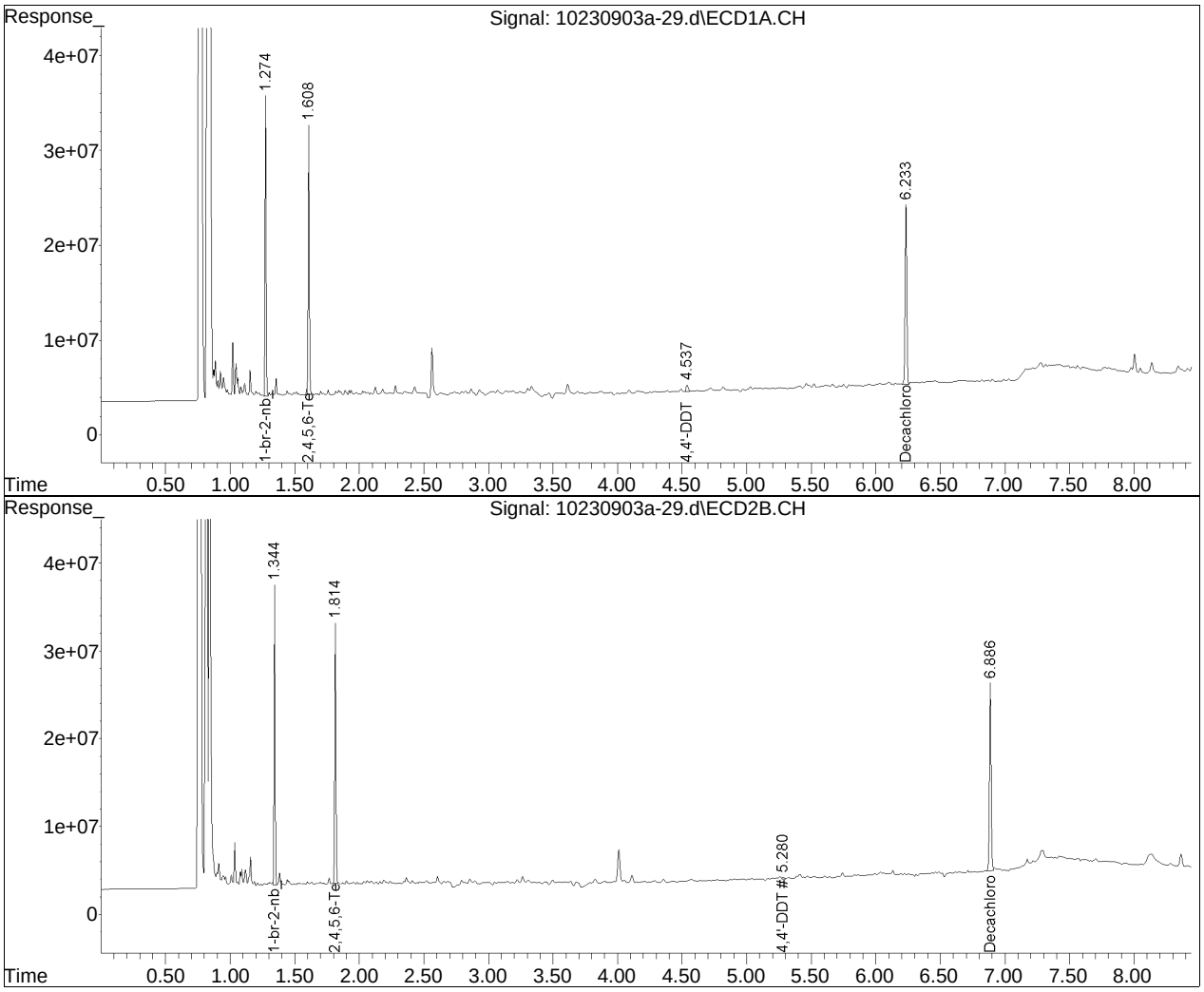
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedA\10230903a-27.d••

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-29.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:11 pm
Operator : PEST10:mmg
Sample : L2350269-08,42,, re
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical2
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:02:07 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

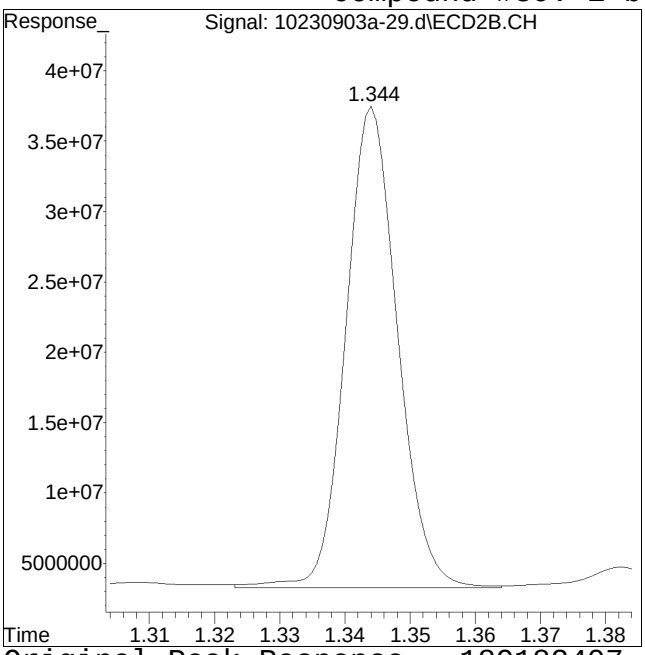
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

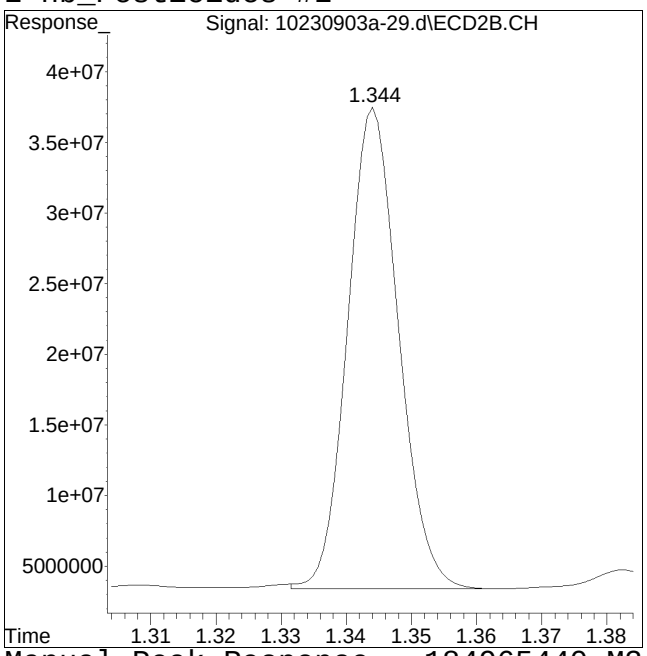


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-29.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:11 pm Instrument : Pest 10
Sample : L2350269-08,42,, re Quant Date : 9/3/2023 2:20 pm

Compound #39: 1-br-2-nb_Pesticides #2



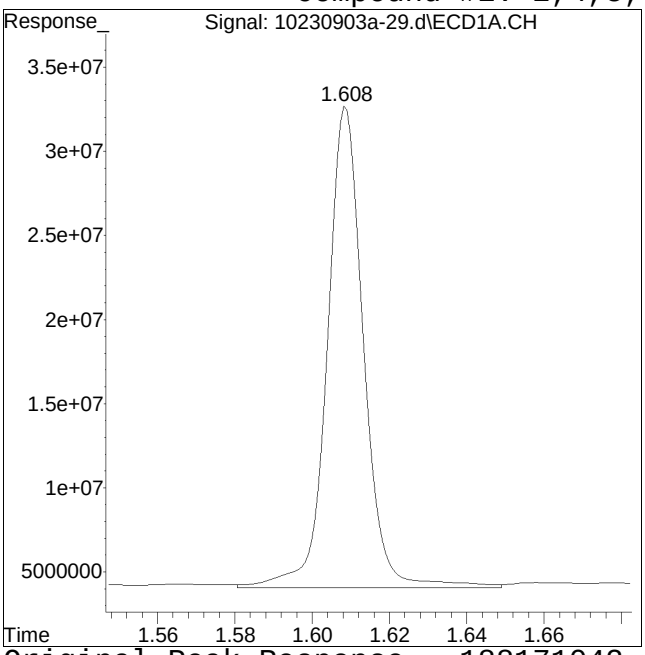


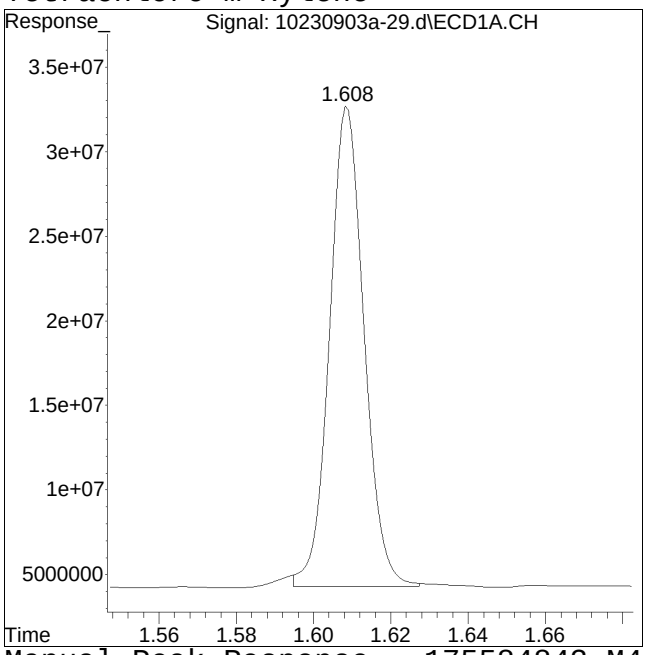
Original Peak Response = 189182407 Manual Peak Response = 184965440 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-29.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:11 pm Instrument : Pest 10
Sample : L2350269-08,42,, re Quant Date : 9/3/2023 2:20 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



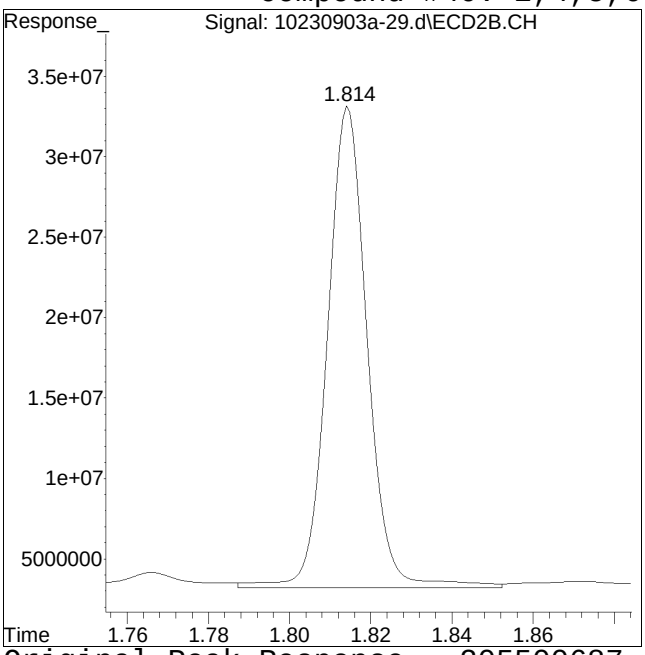


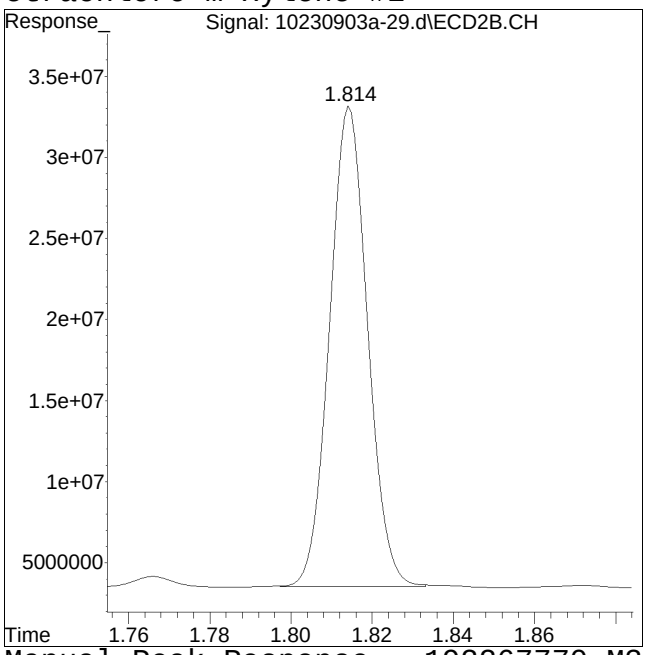
Original Peak Response = 188171042 Manual Peak Response = 175584843 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-29.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:11 pm Instrument : Pest 10
Sample : L2350269-08,42,, re Quant Date : 9/3/2023 2:20 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



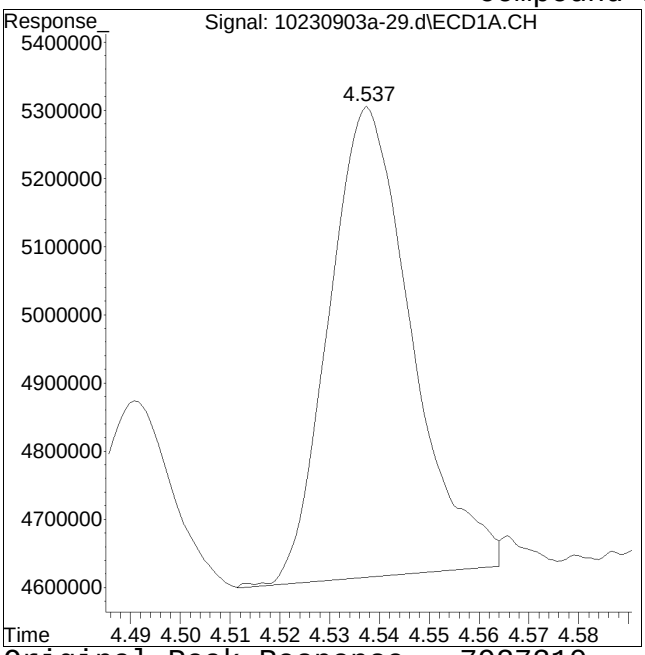


Original Peak Response = 205500687 Manual Peak Response = 192267770 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

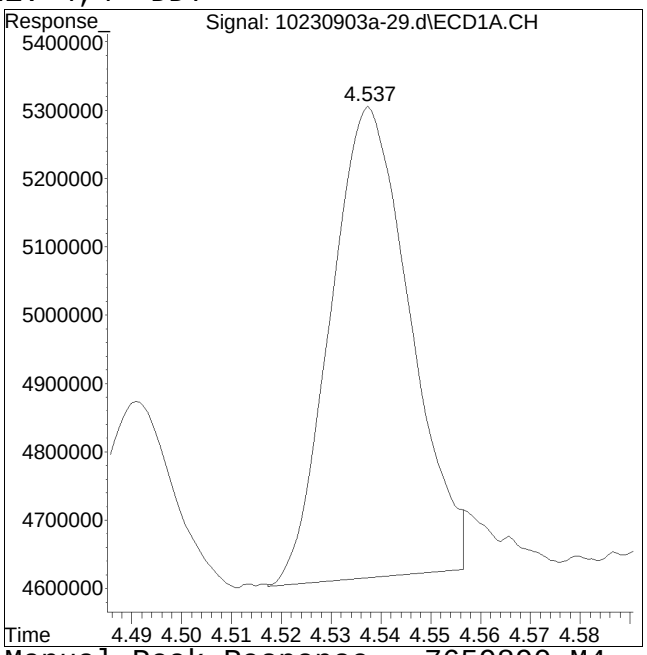
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-29.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:11 pm Instrument : Pest 10
Sample : L2350269-08,42,, re Quant Date : 9/3/2023 2:20 pm

Compound #21: 4,4'-DDT



Original Peak Response = 7927310



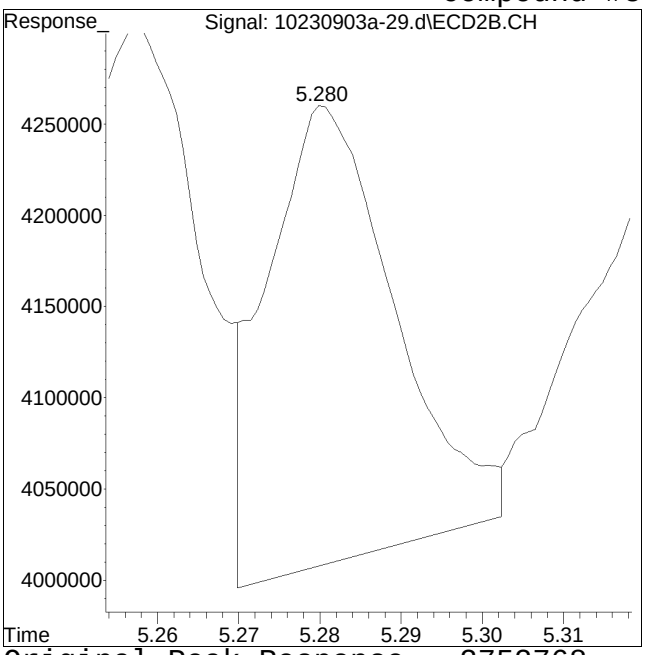
Manual Peak Response = 7659890 M4

M4 = Poor automated baseline construction.

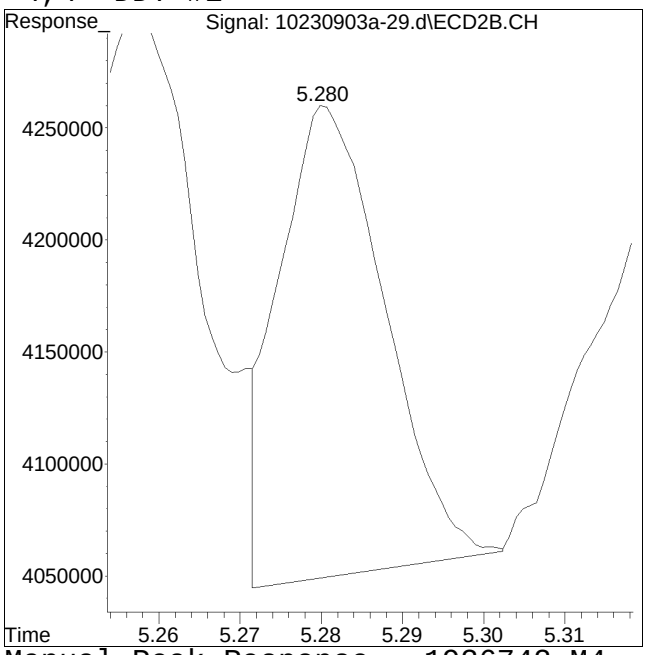
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-29.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:11 pm Instrument : Pest 10
Sample : L2350269-08,42,, re Quant Date : 9/3/2023 2:20 pm

Compound #59: 4,4'-DDT #2



Original Peak Response = 2752768



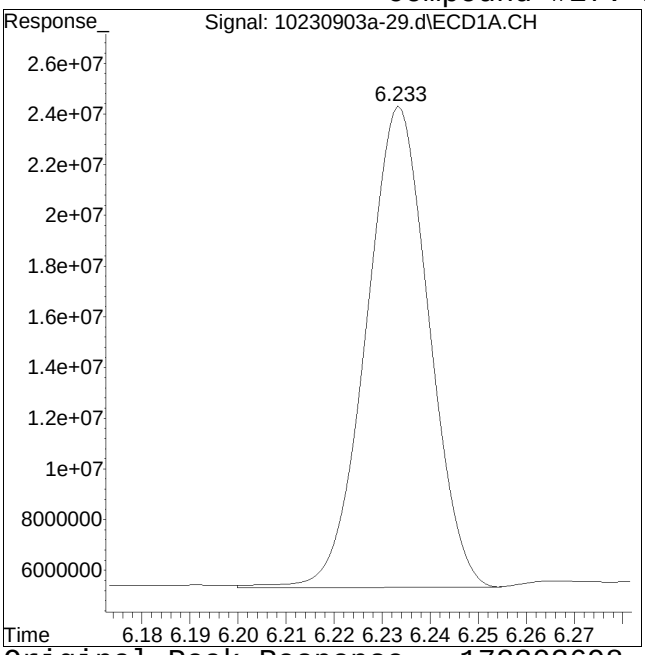
Manual Peak Response = 1926742 M4

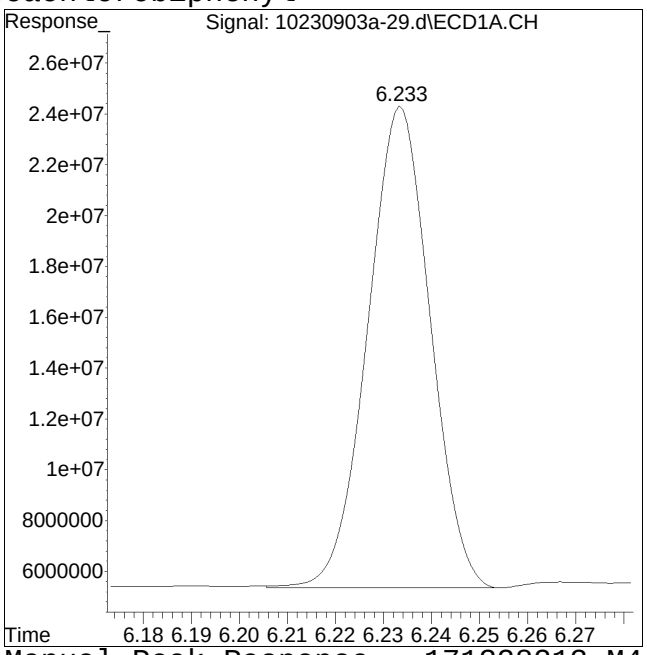
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-29.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:11 pm Instrument : Pest 10
Sample : L2350269-08,42,, re Quant Date : 9/3/2023 2:20 pm

Compound #27: Decachlorobiphenyl



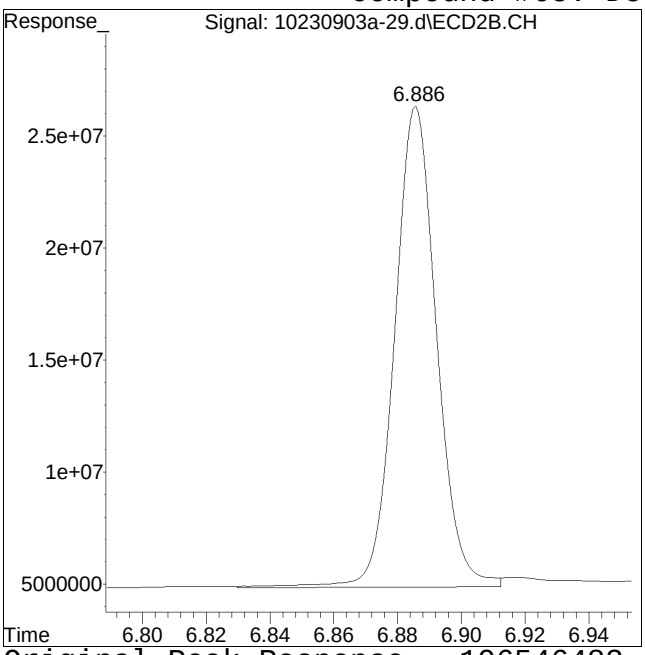


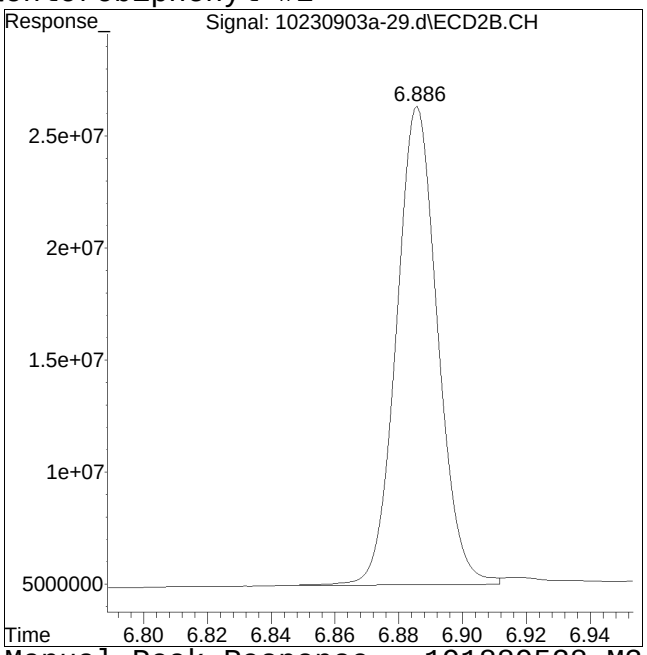
Original Peak Response = 172303698 Manual Peak Response = 171328213 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-29.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:11 pm Instrument : Pest 10
Sample : L2350269-08,42,, re Quant Date : 9/3/2023 2:20 pm

Compound #65: Decachlorobiphenyl #2



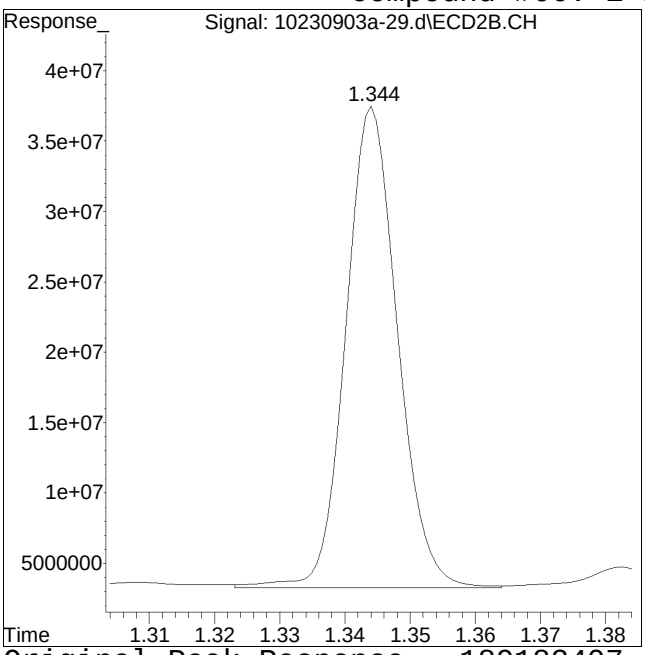


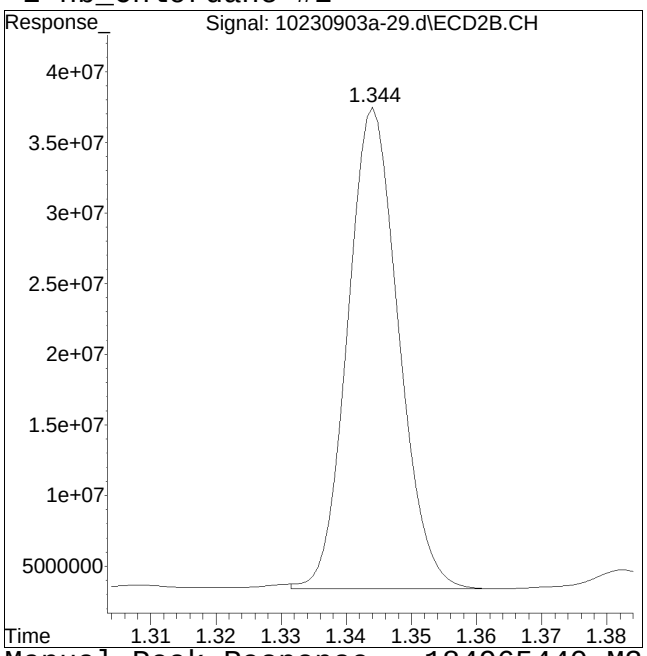
Original Peak Response = 196546483 Manual Peak Response = 191889528 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-29.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:11 pm Instrument : Pest 10
Sample : L2350269-08,42,, re Quant Date : 9/3/2023 2:20 pm

Compound #66: 1-br-2-nb_Chlordane #2



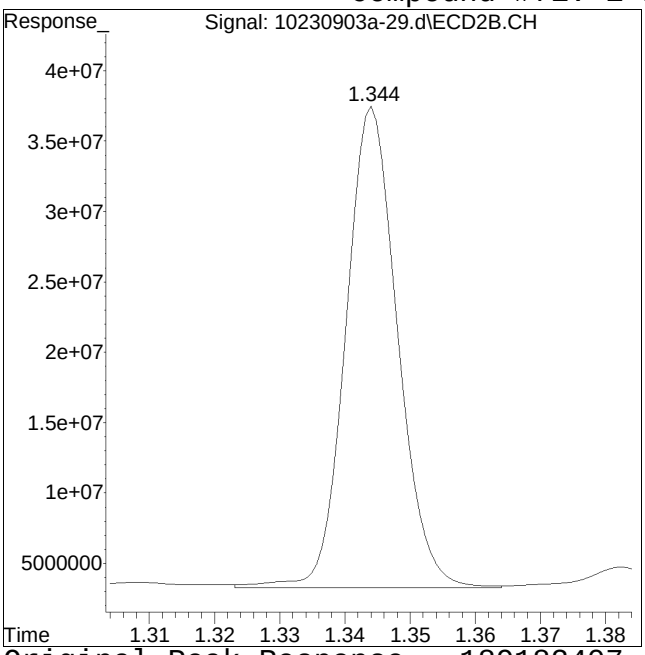


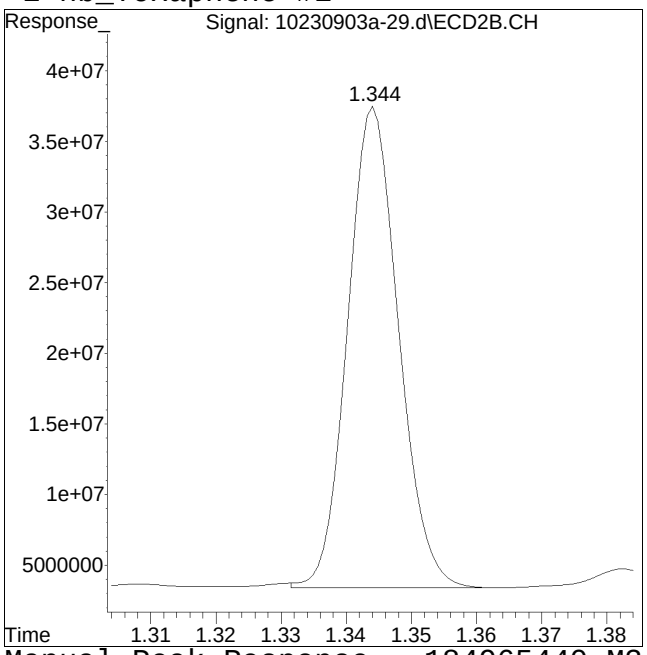
Original Peak Response = 189182407 Manual Peak Response = 184965440 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-29.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:11 pm Instrument : Pest 10
Sample : L2350269-08,42,, re Quant Date : 9/3/2023 2:20 pm

Compound #71: 1-br-2-nb_Toxaphene #2





Original Peak Response = 189182407 Manual Peak Response = 184965440 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-32.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:44 pm
Operator : PEST10:mmg
Sample : L2350269-09,42,, re
Misc : wg1823359,wg1823255,ical20332
ALS Vial : 32 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:14:13 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-27.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.274	1.344	167.8E6	179.5E6	25.000	25.000M3
	Standard Area 1 : #1 = 128148385				Recovery =	130.97%	
	Standard Area 1 : #2 = 140314702				Recovery =	127.95%	
28) i	1-br-2-nb_Ch	1.274	1.344	167.8E6	179.5E6	25.000	25.000M3
33) i	1-br-2-nb_To	1.274	1.344	167.8E6	179.5E6	25.000	25.000M3
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.608	1.814	151.9E6	169.2E6	22.318M3	24.459M4
	Spiked Amount	50.000	Range 30 - 150		Recovery =	44.64%	48.92%
27) s	Decachlorobi	6.233	6.888	151.9E6	167.7E6	24.706M4	25.266M3
	Spiked Amount	50.000	Range 30 - 150		Recovery =	49.41%	50.53%
Target Compounds							
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-32.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:44 pm
Operator : PEST10:mmg
Sample : L2350269-09,42,, re
Misc : wg1823359,wg1823255,ical20332
ALS Vial : 32 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:14:13 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-27.d
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
21) t 4,4'-DDT	4.538	5.280	4982731	1573690	0.753M3	0.505M4
22) t Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
25) t Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1 chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1 chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1 chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1 chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum chlordane-1			0	0	N.D.	N.D.
Average chlordane-1					0.000	0.000
34) l2 toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2 toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2 toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2 toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000

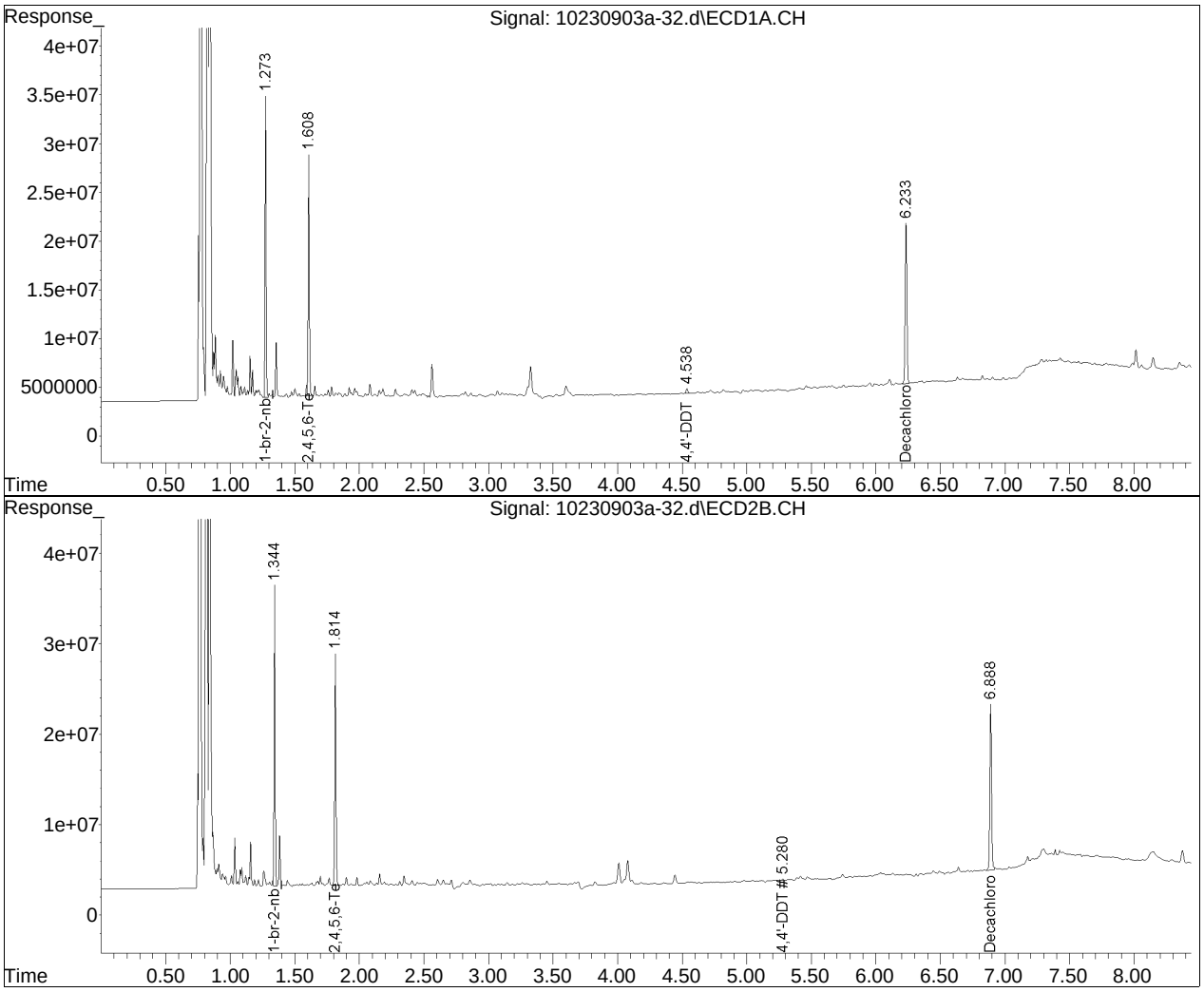
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.

Sub List : Default - All compounds listedA\10230903a-27.d••

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-32.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:44 pm
Operator : PEST10:mmg
Sample : L2350269-09,42,, re
Misc : wg1823359,wg1823255,ical20332
ALS Vial : 32 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:14:13 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

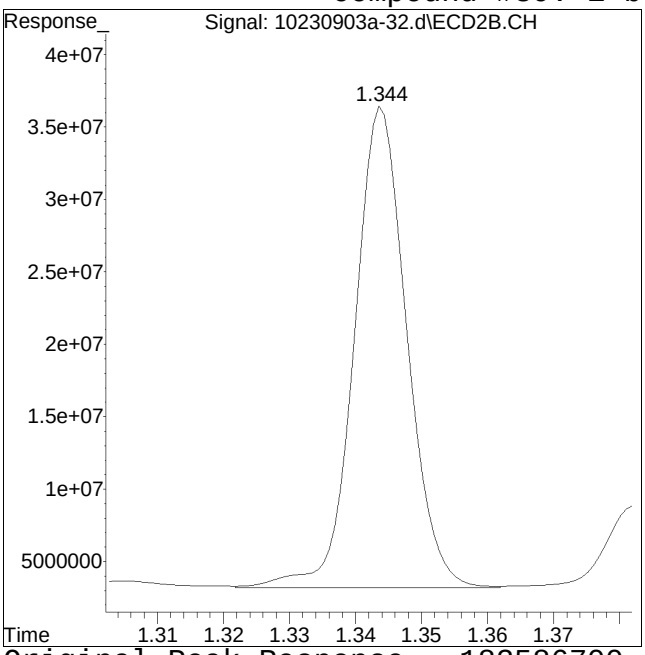
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



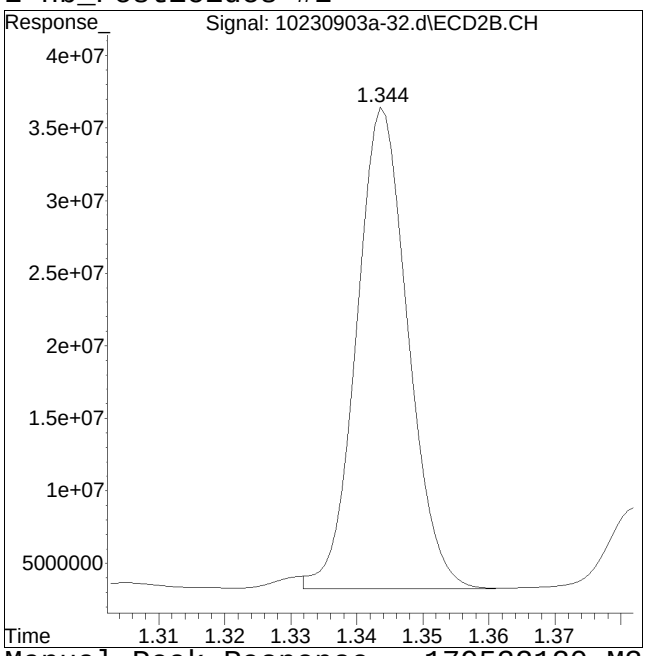
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-32.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:44 pm Instrument : Pest 10
Sample : L2350269-09,42,, re Quant Date : 9/3/2023 2:56 pm

Compound #39: 1-br-2-nb_Pesticides #2



Original Peak Response = 183586700



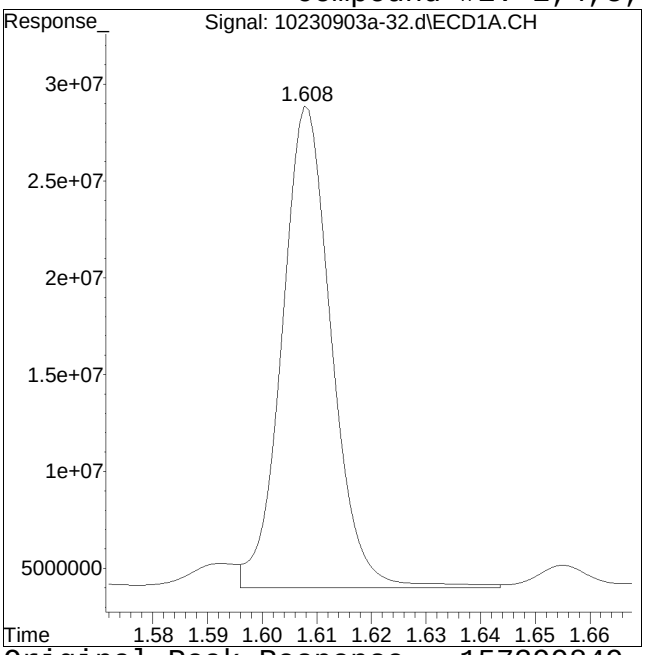
Manual Peak Response = 179532120 M3

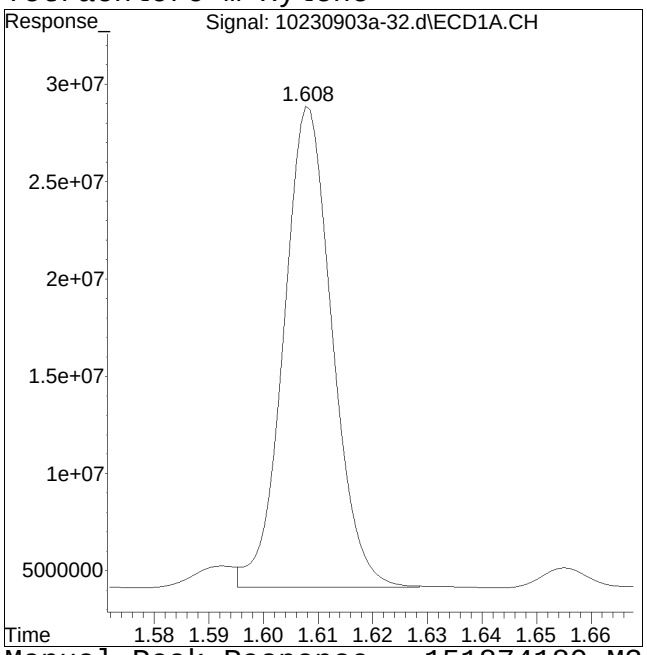
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-32.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:44 pm Instrument : Pest 10
Sample : L2350269-09,42,, re Quant Date : 9/3/2023 2:56 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



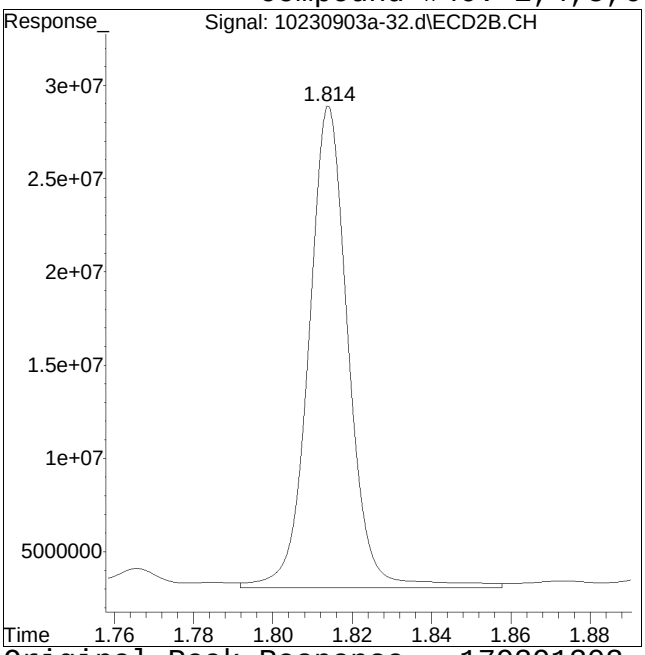


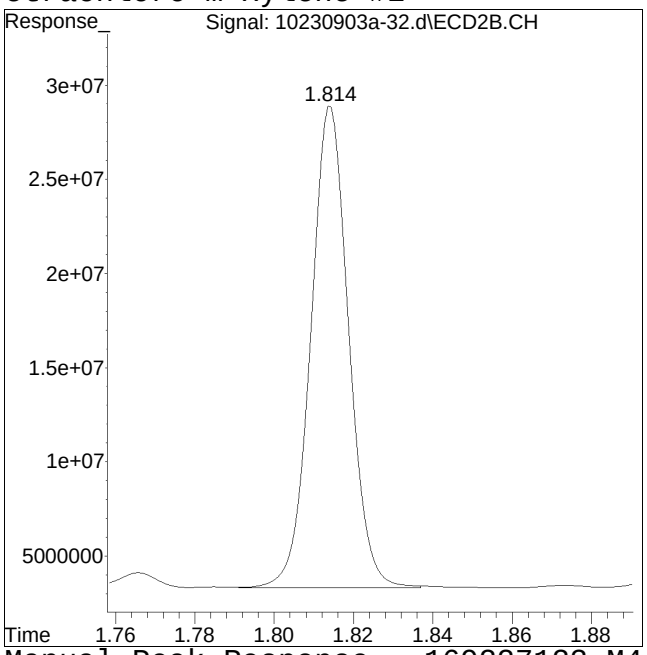
Original Peak Response = 157399849 Manual Peak Response = 151874180 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-32.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:44 pm Instrument : Pest 10
Sample : L2350269-09,42,, re Quant Date : 9/3/2023 2:56 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



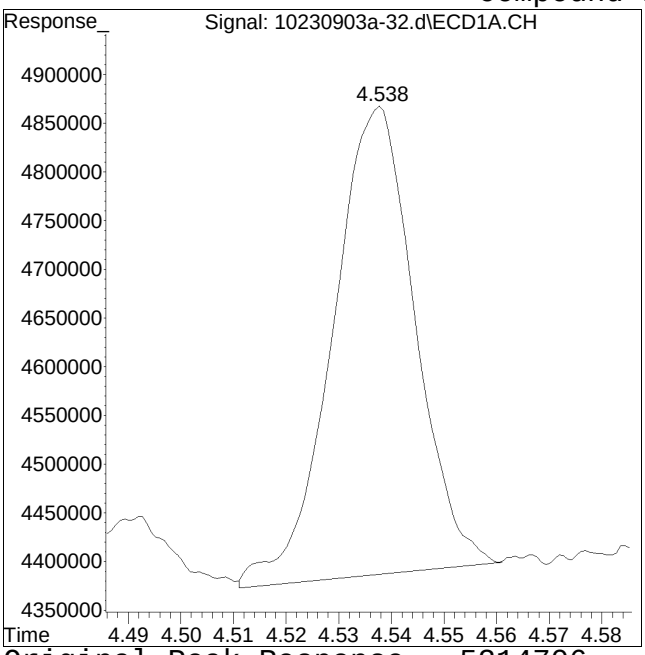


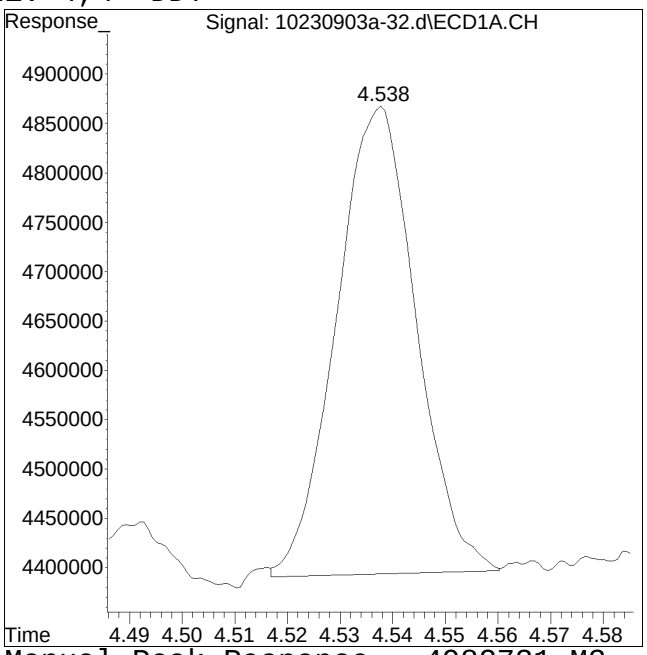
Original Peak Response = 179391303 Manual Peak Response = 169227123 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-32.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:44 pm Instrument : Pest 10
Sample : L2350269-09,42,, re Quant Date : 9/3/2023 2:56 pm

Compound #21: 4,4'-DDT



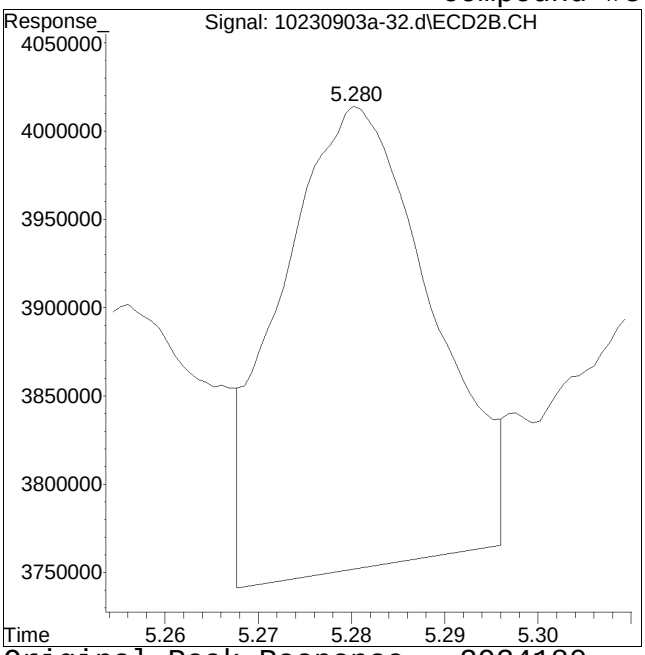


Original Peak Response = 5214706 Manual Peak Response = 4982731 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

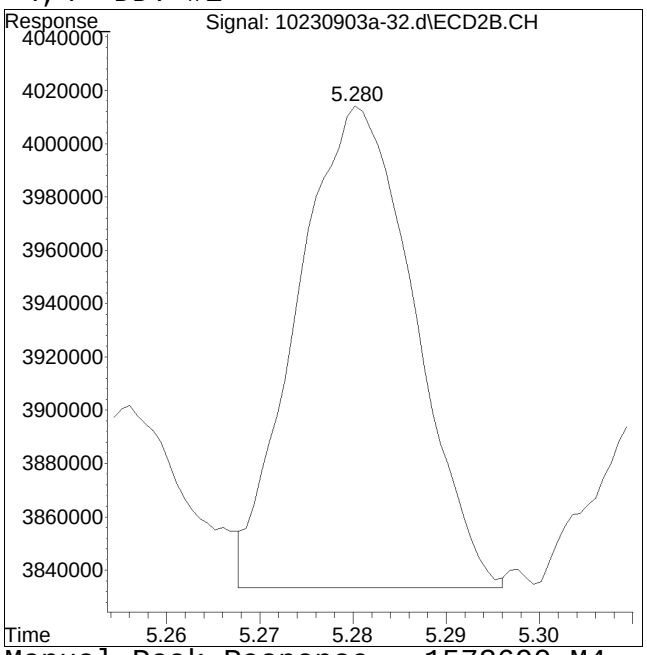
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-32.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:44 pm Instrument : Pest 10
Sample : L2350269-09,42,, re Quant Date : 9/3/2023 2:56 pm

Compound #59: 4,4'-DDT #2



Original Peak Response = 2934180



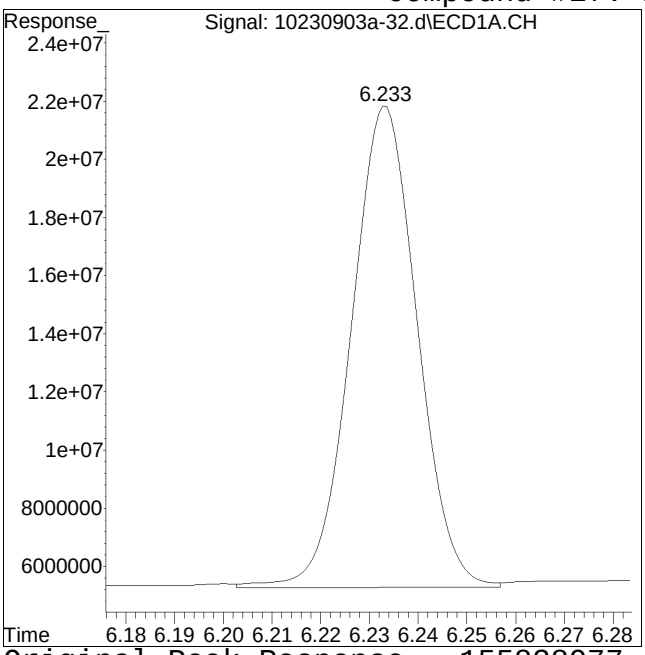
Manual Peak Response = 1573690 M4

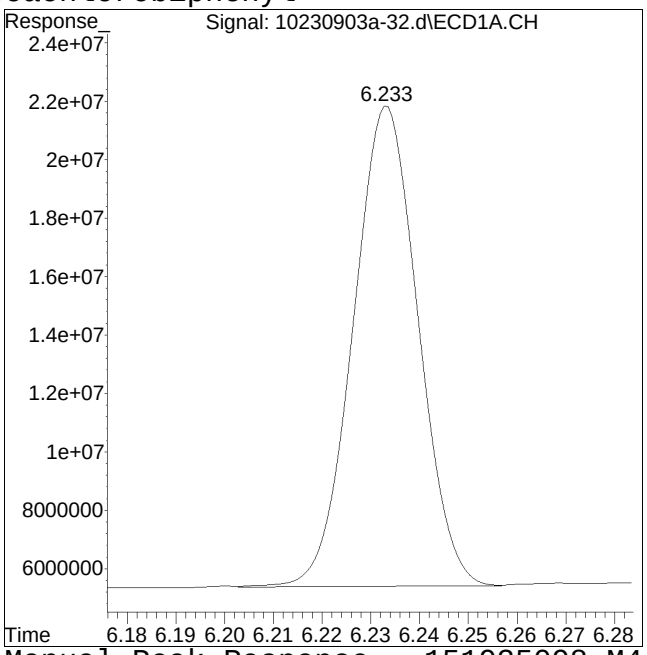
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-32.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:44 pm Instrument : Pest 10
Sample : L2350269-09,42,, re Quant Date : 9/3/2023 2:56 pm

Compound #27: Decachlorobiphenyl



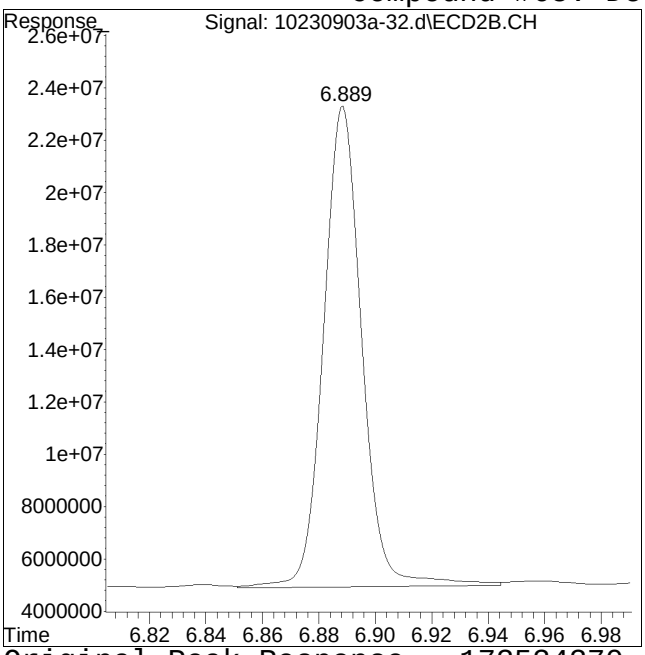


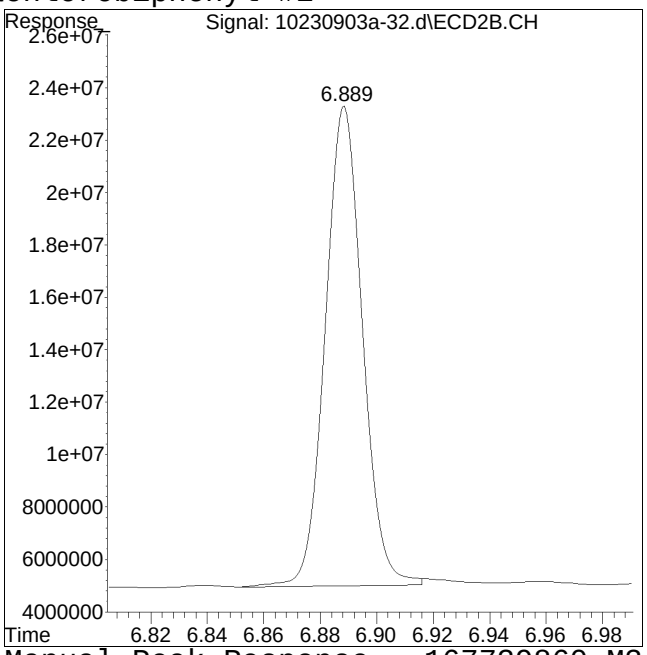
Original Peak Response = 155838977 Manual Peak Response = 151935098 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-32.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:44 pm Instrument : Pest 10
Sample : L2350269-09,42,, re Quant Date : 9/3/2023 2:56 pm

Compound #65: Decachlorobiphenyl #2



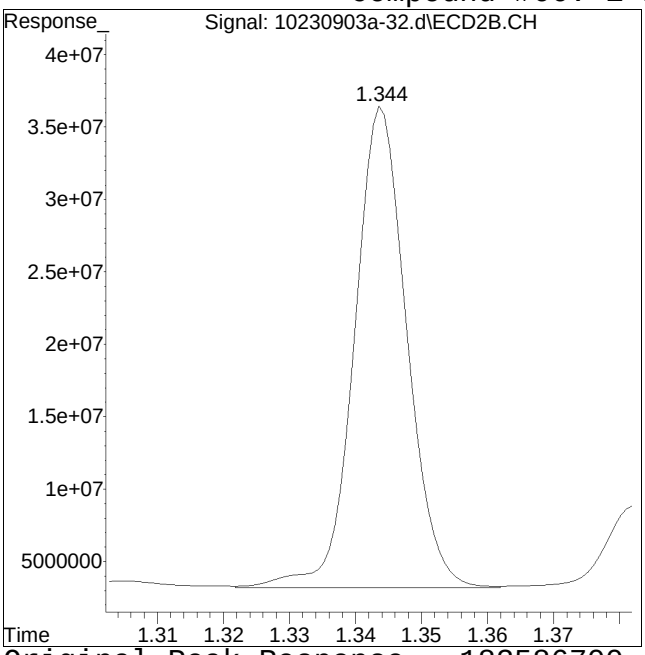


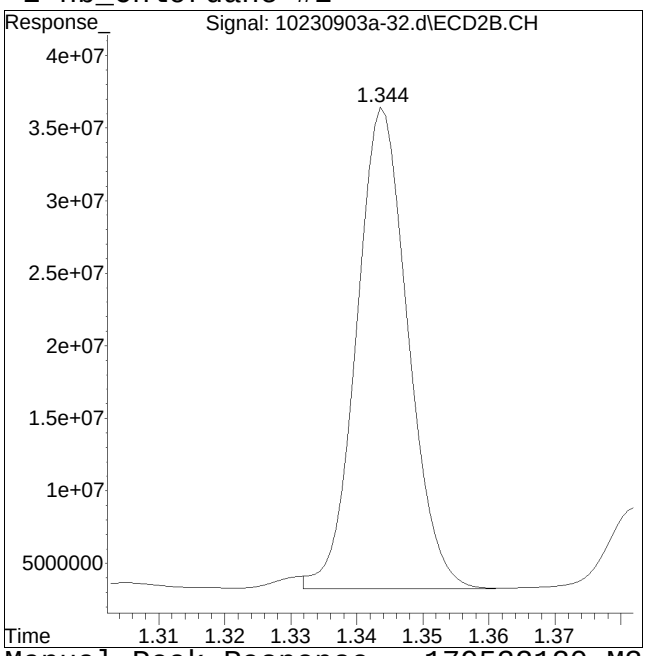
Original Peak Response = 173534370 Manual Peak Response = 167739860 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-32.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:44 pm Instrument : Pest 10
Sample : L2350269-09,42,, re Quant Date : 9/3/2023 2:56 pm

Compound #66: 1-br-2-nb_Chlordane #2



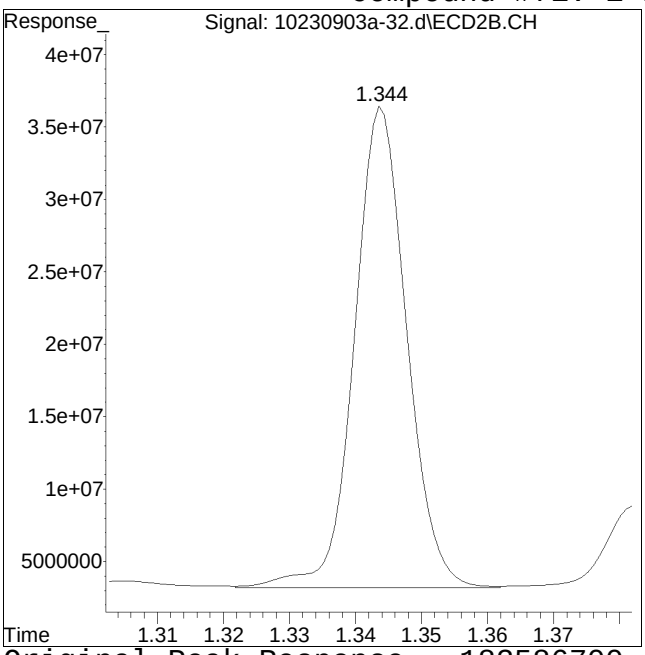


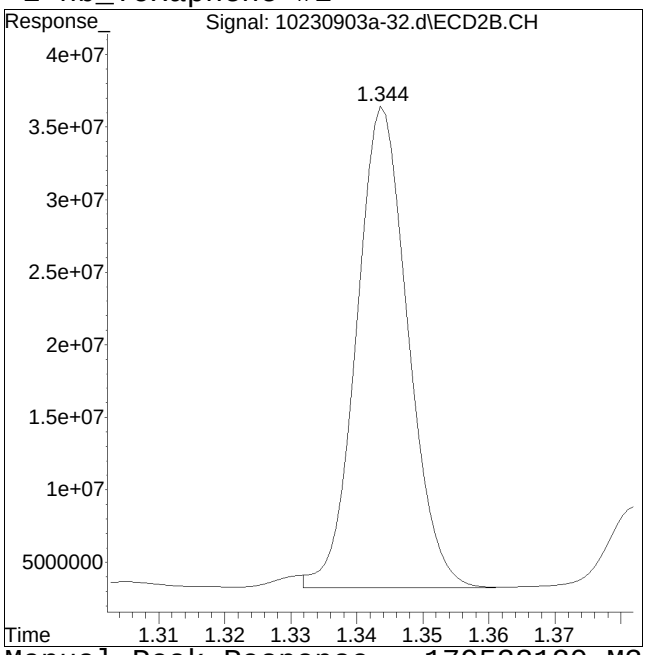
Original Peak Response = 183586700 Manual Peak Response = 179532120 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-32.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:44 pm Instrument : Pest 10
Sample : L2350269-09,42,, re Quant Date : 9/3/2023 2:56 pm

Compound #71: 1-br-2-nb_Toxaphene #2





Original Peak Response = 183586700 Manual Peak Response = 179532120 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-47.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 4:56 pm
Operator : PEST10:jag
Sample : L2350269-03,42,, re rv
Misc : wg1823612,wg1823255,ical20332
ALS Vial : 47 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 17:43:57 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230905A\10230905a-28.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.269	1.339	181.0E6	197.2E6	25.000	25.000
	Standard Area 1 : #1 = 135045236				Recovery =	134.04%	
	Standard Area 1 : #2 = 140591959				Recovery =	140.26%	
28) i	1-br-2-nb_Ch	1.269	1.339	181.0E6	197.2E6	25.000	25.000
33) i	1-br-2-nb_To	1.269	1.339	181.0E6	197.2E6	25.000	25.000
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.603	1.808	163.0E6	172.2E6	22.211	22.659
	Spiked Amount	50.000	Range 30 - 150		Recovery =	44.42%	45.32%
27) s	Decachlorobi	6.225	6.883	110.8E6	110.1E6	16.712M4	15.095M4
	Spiked Amount	50.000	Range 30 - 150		Recovery =	33.42%	30.19%
Target Compounds							
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-47.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 4:56 pm
Operator : PEST10:jag
Sample : L2350269-03,42,, re rv
Misc : wg1823612,wg1823255,ical20332
ALS Vial : 47 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 17:43:57 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230905A\10230905a-28.d
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
22) t Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
25) t Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1 chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1 chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1 chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1 chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum chlordane-1			0	0	N.D.	N.D.
Average chlordane-1					0.000	0.000
34) l2 toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2 toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2 toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2 toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000

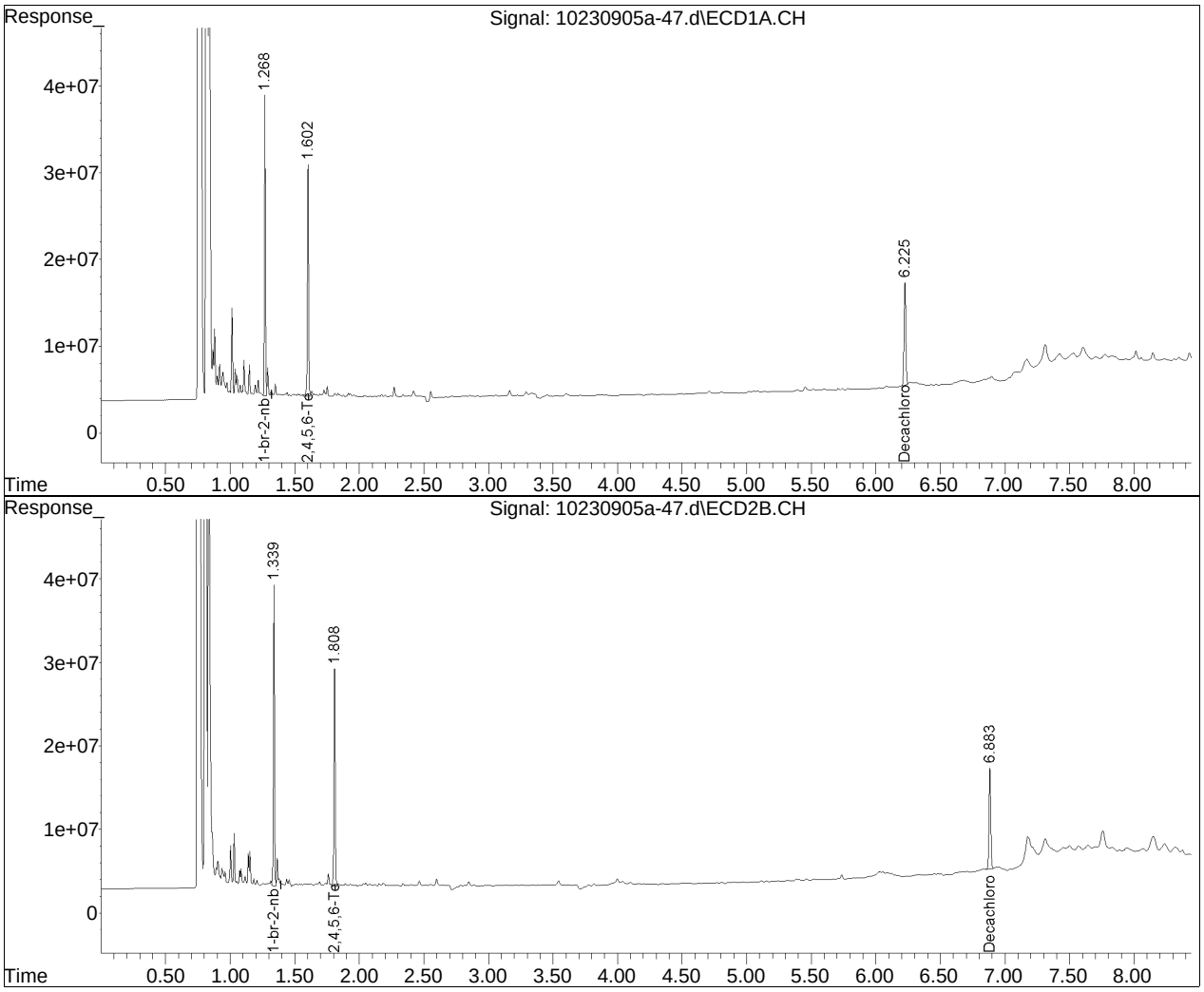
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedA\10230905a-28.d••

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-47.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 4:56 pm
Operator : PEST10:jag
Sample : L2350269-03,42,, re rv
Misc : wg1823612,wg1823255,ical20332
ALS Vial : 47 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 17:43:57 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

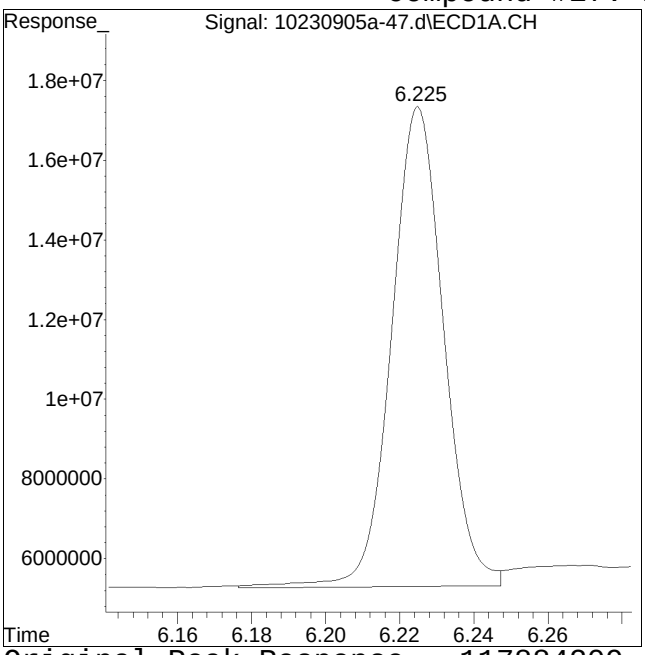
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



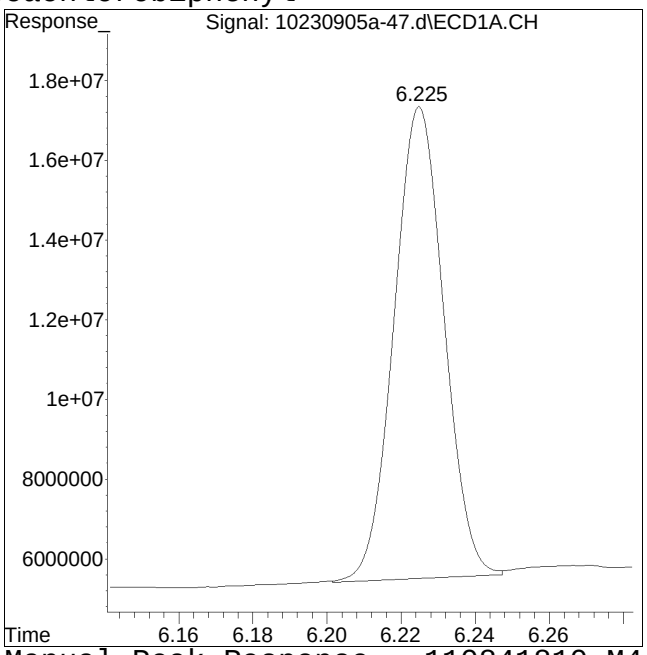
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-47.d Operator : PEST10:jag
Date Inj'd : 9/5/2023 4:56 pm Instrument : Pest 10
Sample : L2350269-03,42,, re rv Quant Date : 9/5/2023 5:09 pm

Compound #27: Decachlorobiphenyl



Original Peak Response = 117884209

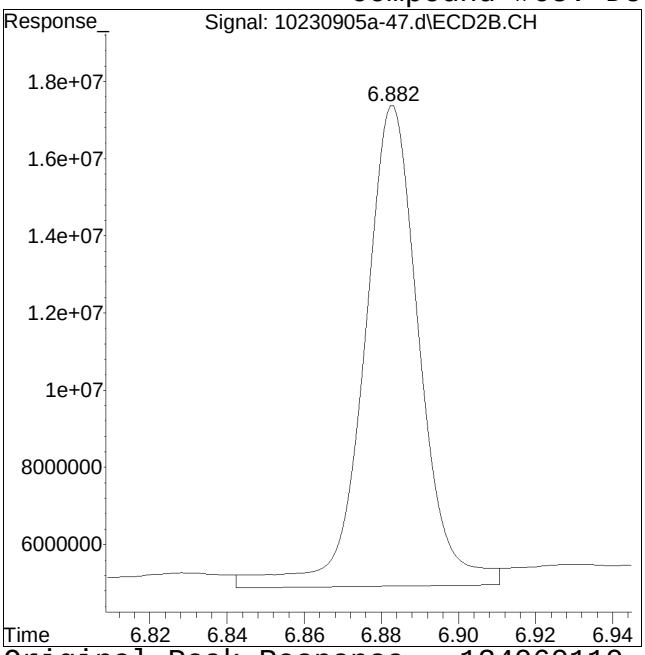


Manual Peak Response = 110841810 M4
M4 = Poor automated baseline construction.

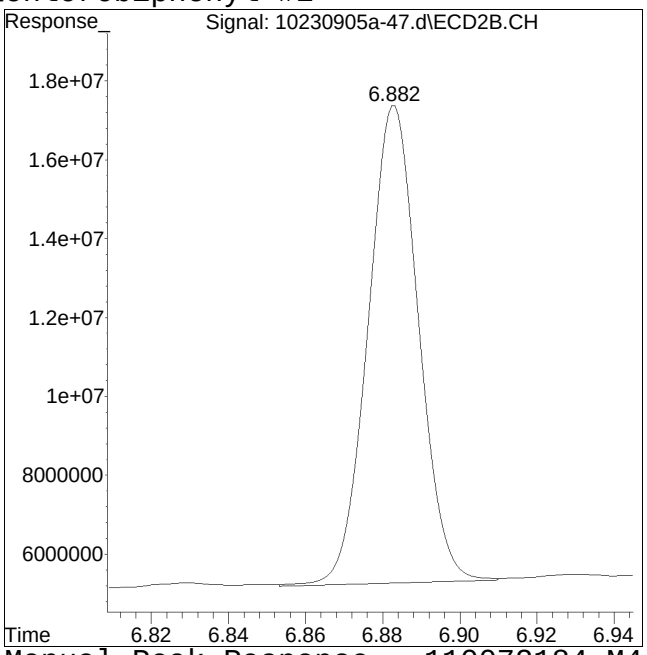
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-47.d Operator : PEST10:jag
Date Inj'd : 9/5/2023 4:56 pm Instrument : Pest 10
Sample : L2350269-03,42,, re rv Quant Date : 9/5/2023 5:09 pm

Compound #65: Decachlorobiphenyl #2



Original Peak Response = 124060110



Manual Peak Response = 110072184 M4
M4 = Poor automated baseline construction.

Pesticides Standards Data

Initial Calibration

Initial Calibration Summary
Form 6
Pesticides

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: PEST10**	**Ical Ref**	**: ICAL20332**
Calibration dates	**: 08/28/23 12:28 08/28/23 16:20**		

Calibration Files

1 =10230828i-03.d 2 =10230828i-04.d 3 =10230828i-22.d 4 =10230828i-15.d 5 =10230828i-16.d

7 =10230828i-17.d 8 =10230828i-23.d 9 =10230828i-24.d 10 =10230828i-20.d 11 =10230828i-12.d

		Compound	1	2	3	4	5	7	8	9	10	11	Avg	%RSD
1)	i	1-br-2-nb_Pesticides	----------ISTD----------											
2)	s	2,4,5,6-Tetrachloro-m-xylene		1.131	1.105	1.064	1.044	0.987	0.959	0.923	0.980	0.929	1.014	7.47
3)	t	Hexachlorobenzene		1.243	1.244	1.177	1.183	1.073	1.011	0.958	1.018	0.969	1.097	10.52
4)	t	alpha-BHC		1.324	1.368	1.322	1.309	1.297	1.380	1.363	1.484	1.432	1.364	4.50
5)	t	gamma-BHC (li	1.468	1.303	1.337	1.281	1.263	1.230	1.275	1.248	1.354	1.305	1.306	5.22
6)	t	beta-BHC		0.689	0.679	0.657	0.639	0.601	0.558	0.527	0.555	0.529	0.604	10.66
7)	t	delta-BHC		1.311	1.340	1.278	1.285	1.234	1.303	1.279	1.390	1.351	1.308	3.56
8)	t	Heptachlor		1.374	1.392	1.317	1.298	1.231	1.229	1.173	1.253	1.169	1.271	6.32
9)	t	Aldrin		1.198	1.234	1.160	1.137	1.102	1.146	1.106	1.199	1.129	1.157	3.90
10)	t	Alachlor		0.302	0.298	0.273	0.258	0.254	0.232	0.210	0.212	0.188	0.248	16.14
11)	t	Chlorpyrifos		0.796	0.808	0.760	0.731	0.675	0.593	0.528	0.529	0.475	0.655	19.37
12)	t	Heptachlor Epoxide		1.301	1.243	1.196	1.160	1.106	1.102	1.034	1.100	1.027	1.141	8.11
13)	t	gamma-Chlordane (trans)			1.355	1.212	1.228	1.065	1.012	0.940	1.017	0.972	1.100	13.38
14)	t	alpha-Chlordane (cis)			1.370	1.383	1.347	1.170	1.143	1.052	1.132	1.067	1.208	11.37
15)	t	4,4'-DDE		1.159	1.121	1.086	1.073	1.019	1.092	1.039	1.137	1.078	1.089	4.12
16)	t	Endosulfan I		1.191	1.191	1.132	1.133	1.048	1.041	0.975	1.045	0.957	1.079	8.03
17)	t	Dieldrin		1.160	1.170	1.107	1.104	1.044	1.071	1.023	1.111	1.045	1.093	4.70
18)	t	Endrin		1.169	1.205	1.157	1.139	1.088	1.119	1.058	1.142	1.078	1.128	4.21
19)	t	4,4'-DDD		0.902	0.935	0.890	0.885	0.843	0.883	0.839	0.917	0.875	0.885	3.52
20)	t	Endosulfan II		1.090	1.107	1.069	1.043	0.983	0.980	0.915	0.976		1.020	6.55
21)	t	4,4'-DDT		1.014	1.057	0.951	0.960	0.957	0.998	0.949	1.011	0.974	0.986	3.75
22)	t	Endrin Aldehyde		0.936	0.913	0.873	0.853	0.827	0.828	0.771	0.819	0.775	0.844	6.69
23)	t	Methoxychlor		0.632	0.643	0.617	0.602	0.560	0.548	0.491	0.508	0.464	0.563	11.53
24)	t	Mirex		1.030	1.066	1.014	0.987	0.905	0.851	0.758	0.796	0.742	0.905	13.70
25)	t	Endosulfan Sulfate		1.051	1.094	1.045	1.018	0.958	0.953	0.880	0.936	0.876	0.979	7.88
26)	t	Endrin Ketone		1.147	1.178	1.121	1.092	1.053	1.080	0.984	1.046		1.088	5.66
27)	s	Decachlorobiphenyl		1.039	1.056	0.994	0.982	0.901	0.890	0.780	0.828	0.775	0.916	11.72
28)	i	1-br-2-nb_Chlordane	----------ISTD----------											
29)	l1	chlordane-1			0.044	0.046	0.038	0.035	0.035	0.036	0.035		*L	0.999
8)														
30)	l1	chlordane-3			0.076	0.074	0.064	0.061	0.061	0.062	0.061		*L	0.999
8)														
31)	l1	chlordane-4			0.054	0.053	0.046	0.041	0.040	0.040	0.038		*L	0.999
1)														
32)	l1	chlordane-5			0.293	0.233	0.154	0.140	0.138	0.142	0.138		*L	0.999
8)														

Initial Calibration Summary
Form 6
Pesticides

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: PEST10**	**Ical Ref**	**: ICAL20332**
Calibration dates	**: 08/28/23 12:28 08/28/23 16:20**		

Calibration Files

1 =10230828i-03.d 2 =10230828i-04.d 3 =10230828i-22.d 4 =10230828i-15.d 5 =10230828i-16.d

7 =10230828i-17.d 8 =10230828i-23.d 9 =10230828i-24.d 10 =10230828i-20.d 11 =10230828i-12.d

	Compound	1	2	3	4	5	7	8	9	10	11	Avg	%RSD
33) i	1-br-2-nb_Toxaphene	----------ISTD----------											
34) l2	toxaphene-1			0.031				0.040	0.037			0.036	13.66
35) l2	toxaphene-2			0.031				0.037	0.035			0.035	9.15
36) l2	toxaphene-4			0.029				0.032	0.031			0.031	6.26
37) l2	toxaphene-5			0.035				0.038	0.036			0.036	4.73

Initial Calibration Summary
Form 6
Pesticides

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: PEST10**	**Ical Ref**	**: ICAL20332**
Calibration dates	**: 08/28/23 12:28 08/28/23 16:20**		

Signal #2 Calibration Files

1 =10230828i-03.d 2 =10230828i-04.d 3 =10230828i-22.d 4 =10230828i-15.d 5 =10230828i-16.d
7 =10230828i-17.d 8 =10230828i-23.d 9 =10230828i-24.d 10 =10230828i-20.d 11 =10230828i-12.d

		Compound	1	2	3	4	5	7	8	9	10	11	Avg	%RSD
1)	i	1-br-2-nb_Pesticides	----------ISTD----------											
2)	s	2,4,5,6-Tetra		0.965	0.990	0.957	0.951	0.930	0.959	0.989	0.985	0.944	0.963	2.18
3)	t	Hexachloroben		1.126	1.162	1.103	1.117	1.035	1.030	1.030	1.057	1.014	1.075	4.92
4)	t	alpha-BHC		1.220	1.279	1.244	1.238	1.287	1.457	1.509	1.584	1.544	*L	0.999
3)														
5)	t	gamma-BHC (li	1.286	1.182	1.236	1.192	1.192	1.207	1.337	1.375	1.442	1.403	1.285	7.60
6)	t	beta-BHC		0.625	0.648	0.609	0.606	0.575	0.570	0.575	0.596	0.580	0.598	4.41
7)	t	delta-BHC		1.170	1.233	1.194	1.185	1.207	1.364	1.414	1.486	1.443	*L	0.999
2)														
8)	t	Heptachlor		1.286	1.306	1.261	1.249	1.233	1.325	1.352	1.379	1.291	1.298	3.70
9)	t	Aldrin		1.139	1.196	1.132	1.134	1.135	1.268	1.293	1.359	1.290	*L	0.999
2)														
10)	t	Alachlor	0.211	0.224	0.210	0.216	0.200	0.192	0.182	0.179	0.162		0.197	10.29
11)	t	Chlorpyrifos	0.754	0.755	0.709	0.683	0.653	0.619	0.583	0.576	0.525		0.651	12.49
12)	t	Heptachlor Ep	1.210	1.210	1.195	1.147	1.119	1.202	1.203	1.237	1.153		1.186	3.20
13)	t	gamma-Chlorda		1.572	1.423	1.326	1.101	1.122	1.115	1.176	1.133		1.246	14.07
14)	t	alpha-Chlorda		1.233	1.156	1.150	1.136	1.225	1.227	1.295	1.242		1.208	4.55
15)	t	4,4'-DDE	1.046	1.096	1.057	1.045	1.060	1.223	1.232	1.308	1.248		*L	0.999
1)														
16)	t	Endosulfan I	1.085	1.128	1.069	1.062	1.046	1.133	1.133	1.175	1.080		1.101	3.86
17)	t	Dieldrin	1.043	1.076	1.044	1.035	1.046	1.169	1.182	1.242	1.171		*L	0.999
1)														
18)	t	Endrin	1.278	1.206	1.178	1.189	1.123	1.223	1.214	1.262	1.170		1.205	3.93
19)	t	4,4'-DDD	0.842	0.881	0.846	0.841	0.848	0.977	0.978	1.037	1.011		*L	0.999
3)														
20)	t	Endosulfan II	0.948	0.994	0.963	0.958	0.962	1.043	1.030	1.061			0.995	4.41
21)	t	4,4'-DDT	0.943	1.009	0.970	0.959	0.977	1.108	1.101	1.163	1.112		*L	0.999
3)														
22)	t	Endrin Aldehyde	0.807	0.826	0.793	0.799	0.797	0.862	0.847	0.874	0.830		0.826	3.61
23)	t	Methoxychlor	0.586	0.614	0.583	0.577	0.579	0.581	0.551	0.553	0.515		0.571	4.92
24)	t	Mirex	0.961	1.004	0.952	0.934	0.889	0.883	0.838	0.861	0.817		0.904	6.87
25)	t	Endosulfan Su	0.935	0.991	0.939	0.929	0.912	0.976	0.956	0.989	0.930		0.951	3.01
26)	t	Endrin Ketone	1.074	1.109	1.057	1.042	1.079	1.101	1.069	1.093			1.078	2.08
27)	s	Decachlorobip	1.026	1.019	0.971	0.965	0.903	0.916	0.840	0.862	0.818		0.924	8.19
28)	i	1-br-2-nb_Chlordane	----------ISTD----------											
29)	l1	chlordane-1		0.040	0.037	0.036	0.037	0.038	0.039	0.039			*L	0.999

Initial Calibration Summary
Form 6
Pesticides

Client	**: Alpha Geoscience**	**Lab Number**	**: L2350269**
Project Name	**: HUNTINGTON READY MIX**	**Project Number**	**: 20116**
Instrument ID	**: PEST10**	**Ical Ref**	**: ICAL20332**
Calibration dates	**: 08/28/23 12:28 08/28/23 16:20**		

Signal #2 Calibration Files

1 =10230828i-03.d 2 =10230828i-04.d 3 =10230828i-22.d 4 =10230828i-15.d 5 =10230828i-16.d
7 =10230828i-17.d 8 =10230828i-23.d 9 =10230828i-24.d 10 =10230828i-20.d 11 =10230828i-12.d

		Compound	1	2	3	4	5	7	8	9	10	11	Avg	%RSD
6)														
30)	l1	chlordane-3			0.044	0.044	0.043	0.041	0.042	0.041	0.039		*L	0.999
3)														
31)	l1	chlordane-4			0.269	0.201	0.156	0.148	0.151	0.153	0.146		*L	0.999
6)														
32)	l1	chlordane-5			0.112	0.114	0.111	0.115	0.119	0.121	0.115		*L	0.999
6)														
33)	i	1-br-2-nb_Toxaphene	----------ISTD----------											
34)	l2	toxaphene-1			0.023				0.024	0.024			0.024	2.66
35)	l2	toxaphene-2			0.032				0.037	0.035			0.034	7.42
36)	l2	toxaphene-4			0.045				0.044	0.042			0.043	3.14
37)	l2	toxaphene-5			0.038				0.039	0.038			0.038	2.15

Response Factor Report Pest 10

Method Path : I:\PEST\Pest10\2023\230828ICAL\
Method File : pest10_2023_08_28_ugL_ical.m
Title : pest
Last Update : Tue Aug 29 13:05:57 2023
Response Via : Initial Calibration

Calibration Files
1 =10230828i-03.d 2 =10230828i-04.d 3 =10230828i-22.d 4 =10230828i-15.d 5 =10230828i-16.d
7 =10230828i-17.d 8 =10230828i-23.d 9 =10230828i-24.d 10 =10230828i-20.d 11 =10230828i-12.d

		Compound	1	2	3	4	5	7	8	9	10	11	Avg	%RSD
1)	i	1-br-2-nb_Pesticides	----------ISTD----------											
2)	s	2,4,5,6-Tetra...		1.131	1.105	1.064	1.044	0.987	0.959	0.923	0.980	0.929	1.014	7.47
3)	t	Hexachloroben...		1.243	1.244	1.177	1.183	1.073	1.011	0.958	1.018	0.969	1.097	10.52
4)	t	alpha-BHC		1.324	1.368	1.322	1.309	1.297	1.380	1.363	1.484	1.432	1.364	4.50
5)	t	gamma-BHC (li...	1.468	1.303	1.337	1.281	1.263	1.230	1.275	1.248	1.354	1.305	1.306	5.22
6)	t	beta-BHC		0.689	0.679	0.657	0.639	0.601	0.558	0.527	0.555	0.529	0.604	10.66
7)	t	delta-BHC		1.311	1.340	1.278	1.285	1.234	1.303	1.279	1.390	1.351	1.308	3.56
8)	t	Heptachlor		1.374	1.392	1.317	1.298	1.231	1.229	1.173	1.253	1.169	1.271	6.32
9)	t	Aldrin		1.198	1.234	1.160	1.137	1.102	1.146	1.106	1.199	1.129	1.157	3.90
10)	t	Alachlor		0.302	0.298	0.273	0.258	0.254	0.232	0.210	0.212	0.188	0.248	16.14
11)	t	Chlorpyrifos		0.796	0.808	0.760	0.731	0.675	0.593	0.528	0.529	0.475	0.655	19.37
12)	t	Heptachlor Ep...		1.301	1.243	1.196	1.160	1.106	1.102	1.034	1.100	1.027	1.141	8.11
13)	t	gamma-Chlorda...			1.355	1.212	1.228	1.065	1.012	0.940	1.017	0.972	1.100	13.38
14)	t	alpha-Chlorda...			1.370	1.383	1.347	1.170	1.143	1.052	1.132	1.067	1.208	11.37
15)	t	4,4'-DDE		1.159	1.121	1.086	1.073	1.019	1.092	1.039	1.137	1.078	1.089	4.12
16)	t	Endosulfan I		1.191	1.191	1.132	1.133	1.048	1.041	0.975	1.045	0.957	1.079	8.03

Method Path : I:\PEST\Pest10\2023\230828ICAL\
Method File : pest10_2023_08_28_ugL_ical.m
Title : pest
Last Update : Tue Aug 29 13:05:57 2023
Response Via : Initial Calibration

Calibration Files
1 =10230828i-03.d 2 =10230828i-04.d 3 =10230828i-22.d 4 =10230828i-15.d 5 =10230828i-16.d
7 =10230828i-17.d 8 =10230828i-23.d 9 =10230828i-24.d 10 =10230828i-20.d 11 =10230828i-12.d

		Compound	1	2	3	4	5	7	8	9	10	11	Avg		%RSD
17)	t	Dieldrin	1.160	1.170	1.107	1.104	1.044	1.071	1.023	1.111	1.045		1.093		4.70
18)	t	Endrin	1.169	1.205	1.157	1.139	1.088	1.119	1.058	1.142	1.078		1.128		4.21
19)	t	4,4'-DDD	0.902	0.935	0.890	0.885	0.843	0.883	0.839	0.917	0.875		0.885		3.52
20)	t	Endosulfan II	1.090	1.107	1.069	1.043	0.983	0.980	0.915	0.976			1.020		6.55
21)	t	4,4'-DDT	1.014	1.057	0.951	0.960	0.957	0.998	0.949	1.011	0.974		0.986		3.75
22)	t	Endrin Aldehyde	0.936	0.913	0.873	0.853	0.827	0.828	0.771	0.819	0.775		0.844		6.69
23)	t	Methoxychlor	0.632	0.643	0.617	0.602	0.560	0.548	0.491	0.508	0.464		0.563		11.53
24)	t	Mirex	1.030	1.066	1.014	0.987	0.905	0.851	0.758	0.796	0.742		0.905		13.70
25)	t	Endosulfan Su...	1.051	1.094	1.045	1.018	0.958	0.953	0.880	0.936	0.876		0.979		7.88
26)	t	Endrin Ketone	1.147	1.178	1.121	1.092	1.053	1.080	0.984	1.046			1.088		5.66
27)	s	Decachlorobip...	1.039	1.056	0.994	0.982	0.901	0.890	0.780	0.828	0.775		0.916		11.72
28)	i	1-br-2-nb_Chlordane	----------ISTD----------												
29)	l1	chlordane-1		0.044	0.046	0.038	0.035	0.035	0.036	0.035				*L	0.9998
30)	l1	chlordane-3		0.076	0.074	0.064	0.061	0.061	0.062	0.061				*L	0.9998
31)	l1	chlordane-4		0.054	0.053	0.046	0.041	0.040	0.040	0.038				*L	0.9991
32)	l1	chlordane-5		0.293	0.233	0.154	0.140	0.138	0.142	0.138				*L	0.9998

Response Factor Report Pest 10

Method Path : I:\PEST\Pest10\2023\230828ICAL\
Method File : pest10_2023_08_28_ugL_ical.m
Title : pest
Last Update : Tue Aug 29 13:05:57 2023
Response Via : Initial Calibration

Calibration Files
1 =10230828i-03.d 2 =10230828i-04.d 3 =10230828i-22.d 4 =10230828i-15.d 5 =10230828i-16.d
7 =10230828i-17.d 8 =10230828i-23.d 9 =10230828i-24.d 10 =10230828i-20.d 11 =10230828i-12.d

		Compound	1	2	3	4	5	7	8	9	10	11	Avg	%RSD
33)	i	1-br-2-nb_Toxaphene	----------ISTD----------											
34)	l2	toxaphene-1			0.031				0.040	0.037			0.036	13.66
35)	l2	toxaphene-2			0.031				0.037	0.035			0.035	9.15
36)	l2	toxaphene-4			0.029				0.032	0.031			0.031	6.26
37)	l2	toxaphene-5			0.035				0.038	0.036			0.036	4.73

Signal #2 Calibration Files
1 =10230828i-03.d 2 =10230828i-04.d 3 =10230828i-22.d 4 =10230828i-15.d 5 =10230828i-16.d
7 =10230828i-17.d 8 =10230828i-23.d 9 =10230828i-24.d 10 =10230828i-20.d 11 =10230828i-12.d

		Compound	1	2	3	4	5	7	8	9	10	11	Avg	%RSD
1)	i	1-br-2-nb_Pesticides	----------ISTD----------											
2)	s	2,4,5,6-Tetra...			0.965	0.990	0.957	0.951	0.930	0.959	0.989	0.985	0.944	0.963	2.18
3)	t	Hexachloroben...			1.126	1.162	1.103	1.117	1.035	1.030	1.030	1.057	1.014	1.075	4.92
4)	t	alpha-BHC			1.220	1.279	1.244	1.238	1.287	1.457	1.509	1.584	1.544	*L	0.999
3															
5)	t	gamma-BHC (li...		1.286	1.182	1.236	1.192	1.192	1.207	1.337	1.375	1.442	1.403	1.285	7.60
6)	t	beta-BHC			0.625	0.648	0.609	0.606	0.575	0.570	0.575	0.596	0.580	0.598	4.41
7)	t	delta-BHC			1.170	1.233	1.194	1.185	1.207	1.364	1.414	1.486	1.443	*L	0.999
2															
8)	t	Heptachlor			1.286	1.306	1.261	1.249	1.233	1.325	1.352	1.379	1.291	1.298	3.70
9)	t	Aldrin			1.139	1.196	1.132	1.134	1.135	1.268	1.293	1.359	1.290	*L	0.999

Response Factor Report Pest 10

Method Path : I:\PEST\Pest10\2023\230828ICAL\
Method File : pest10_2023_08_28_ugL_ical.m
Title : pest
Last Update : Tue Aug 29 13:05:57 2023
Response Via : Initial Calibration

Calibration Files
1 =10230828i-03.d 2 =10230828i-04.d 3 =10230828i-22.d 4 =10230828i-15.d 5 =10230828i-16.d
7 =10230828i-17.d 8 =10230828i-23.d 9 =10230828i-24.d 10 =10230828i-20.d 11 =10230828i-12.d

		Compound	1	2	3	4	5	7	8	9	10	11	Avg	%RSD
10)	t	Alachlor		0.211	0.224	0.210	0.216	0.200	0.192	0.182	0.179	0.162	0.197	10.29
11)	t	Chlorpyrifos		0.754	0.755	0.709	0.683	0.653	0.619	0.583	0.576	0.525	0.651	12.49
12)	t	Heptachlor Ep...		1.210	1.210	1.195	1.147	1.119	1.202	1.203	1.237	1.153	1.186	3.20
13)	t	gamma-Chlorda...			1.572	1.423	1.326	1.101	1.122	1.115	1.176	1.133	1.246	14.07
14)	t	alpha-Chlorda...			1.233	1.156	1.150	1.136	1.225	1.227	1.295	1.242	1.208	4.55
15)	t	4,4'-DDE		1.046	1.096	1.057	1.045	1.060	1.223	1.232	1.308	1.248	*L	0.999
1														
16)	t	Endosulfan I		1.085	1.128	1.069	1.062	1.046	1.133	1.133	1.175	1.080	1.101	3.86
17)	t	Dieldrin		1.043	1.076	1.044	1.035	1.046	1.169	1.182	1.242	1.171	*L	0.999
1														
18)	t	Endrin		1.278	1.206	1.178	1.189	1.123	1.223	1.214	1.262	1.170	1.205	3.93
19)	t	4,4'-DDD		0.842	0.881	0.846	0.841	0.848	0.977	0.978	1.037	1.011	*L	0.999
3														
20)	t	Endosulfan II		0.948	0.994	0.963	0.958	0.962	1.043	1.030	1.061		0.995	4.41
21)	t	4,4'-DDT		0.943	1.009	0.970	0.959	0.977	1.108	1.101	1.163	1.112	*L	0.999
3														
22)	t	Endrin Aldehyde		0.807	0.826	0.793	0.799	0.797	0.862	0.847	0.874	0.830	0.826	3.61
23)	t	Methoxychlor		0.586	0.614	0.583	0.577	0.579	0.581	0.551	0.553	0.515	0.571	4.92
24)	t	Mirex		0.961	1.004	0.952	0.934	0.889	0.883	0.838	0.861	0.817	0.904	6.87
25)	t	Endosulfan Su...		0.935	0.991	0.939	0.929	0.912	0.976	0.956	0.989	0.930	0.951	3.01

Method Path : I:\PEST\Pest10\2023\230828ICAL\
Method File : pest10_2023_08_28_ugL_ical.m
Title : pest
Last Update : Tue Aug 29 13:05:57 2023
Response Via : Initial Calibration

Calibration Files
1 =10230828i-03.d 2 =10230828i-04.d 3 =10230828i-22.d 4 =10230828i-15.d 5 =10230828i-16.d
7 =10230828i-17.d 8 =10230828i-23.d 9 =10230828i-24.d 10 =10230828i-20.d 11 =10230828i-12.d

		Compound	1	2	3	4	5	7	8	9	10	11	Avg	%RSD
26)	t	Endrin Ketone		1.074	1.109	1.057	1.042	1.079	1.101	1.069	1.093		1.078	2.08
27)	s	Decachlorobip...		1.026	1.019	0.971	0.965	0.903	0.916	0.840	0.862	0.818	0.924	8.19
28)	i	1-br-2-nb_Chlordane	----------ISTD----------											
29)	l1	chlordane-1		0.040	0.037	0.036	0.037	0.038	0.039	0.039			*L	0.999 6
30)	l1	chlordane-3		0.044	0.044	0.043	0.041	0.042	0.041	0.039			*L	0.999 3
31)	l1	chlordane-4		0.269	0.201	0.156	0.148	0.151	0.153	0.146			*L	0.999 6
32)	l1	chlordane-5		0.112	0.114	0.111	0.115	0.119	0.121	0.115			*L	0.999 6
33)	i	1-br-2-nb_Toxaphene	----------ISTD----------											
34)	l2	toxaphene-1		0.023				0.024	0.024				0.024	2.66
35)	l2	toxaphene-2		0.032				0.037	0.035				0.034	7.42
36)	l2	toxaphene-4		0.045				0.044	0.042				0.043	3.14
37)	l2	toxaphene-5		0.038				0.039	0.038				0.038	2.15

(#) = Out of Range ### Number of calibration levels exceeded format ###

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-02.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 12:17 pm
Operator : PEST10:akm
Sample : pem10230828i-01,42,,deg11180 (Sig #1); deg11180 (Sig #2)
Misc : WG1822166,,
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:09:38 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:05:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : DEG - DDT/Endrin degradation check

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.281	1.349	110.8E6	149.0E6	25.000M3	25.000
	System Monitoring Compounds						
	Target Compounds						
15) t	4,4'-DDE	3.584	4.424	748937	958106	0.155	0.495M3 D
18) t	Endrin	4.131	4.881	327.4E6	402.2E6	65.471M4	56.004
19) t	4,4'-DDD	4.251	5.006	857205	847644	0.218M4	0.515M4 D
21) t	4,4'-DDT	4.547	5.287	567.2E6	725.9E6	129.839M4	108.648
22) t	Endrin Aldeh	4.804	5.388	88337	307233	0.024M4	0.062M2 D
26) t	Endrin Keton	5.433	6.025	570463	780239	0.118M4	0.121
	Sum chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
	Sum toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000
	SemiQuant Compounds - Not Calibrated on this Instrument						
	Sum toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

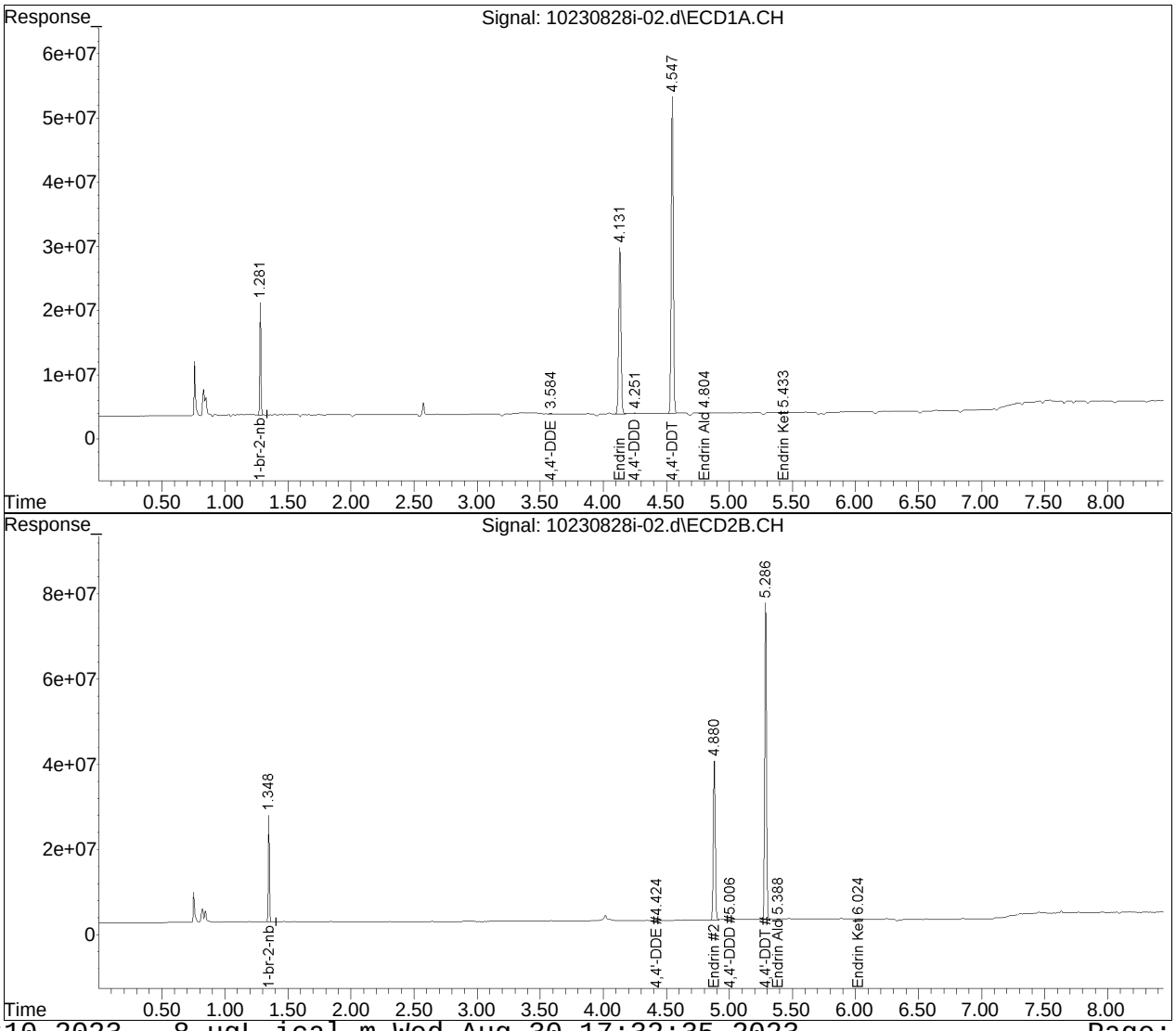
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : DEG - DDT/Endrin degradation checkiewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-02.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 12:17 pm
Operator : PEST10:akm
Sample : pem10230828i-01,42,,deg11180 (Sig #1); deg11180 (Sig #2)
Misc : WG1822166,,
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:09:38 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:05:57 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

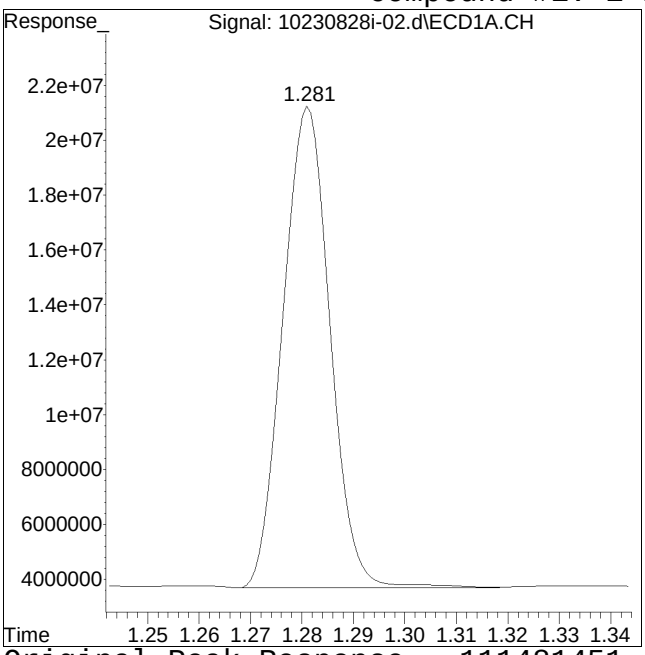
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

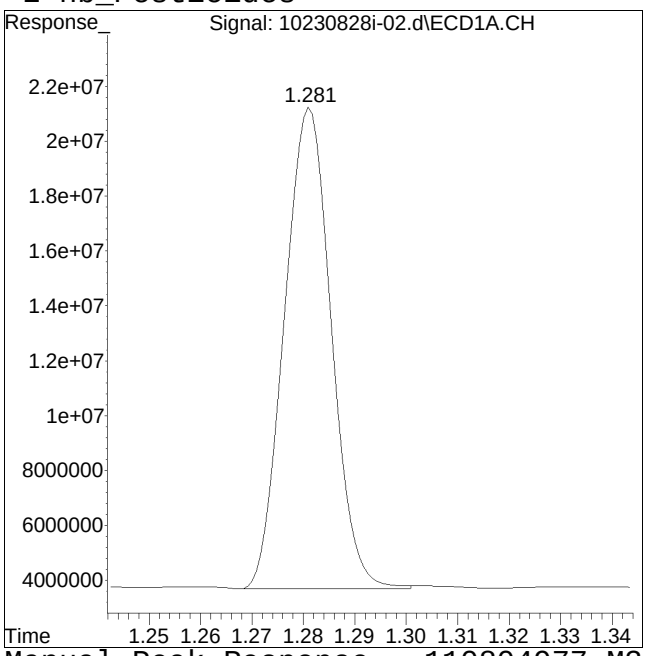


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-02.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:17 pm Instrument : Pest 10
Sample : pem10230828i-01,42,,deg111Quant Date : 8/29/2023 1:08 pm

Compound #1: 1-br-2-nb_Pesticides



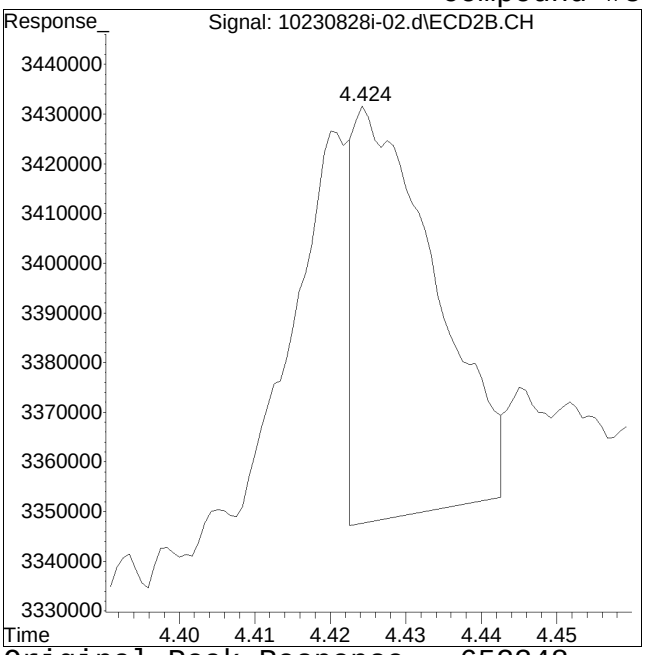


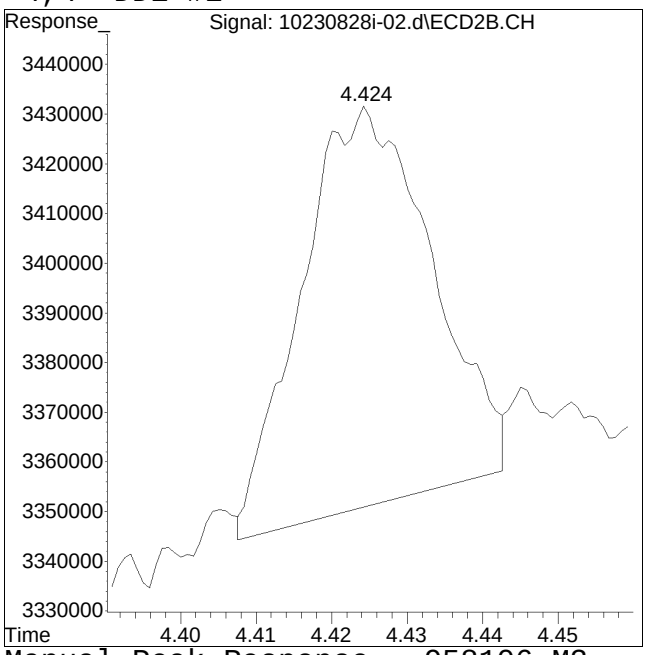
Original Peak Response = 111481451 Manual Peak Response = 110804977 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-02.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:17 pm Instrument : Pest 10
Sample : pem10230828i-01,42,,deg111Quant Date : 8/29/2023 1:08 pm

Compound #53: 4,4'-DDE #2



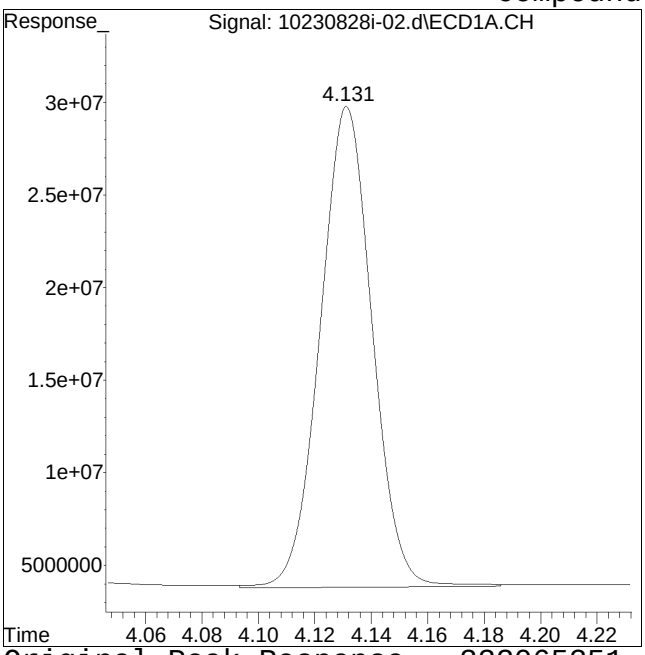


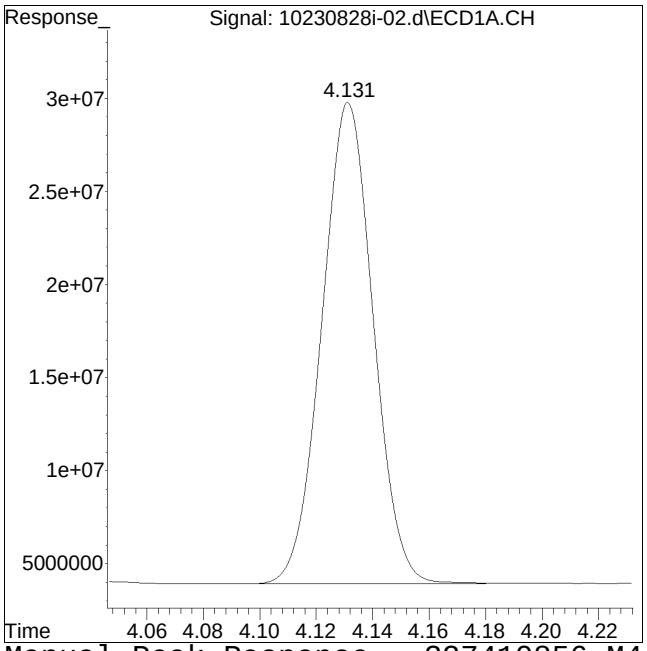
Original Peak Response = 652348 Manual Peak Response = 958106 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-02.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:17 pm Instrument : Pest 10
Sample : pem10230828i-01,42,,deg111Quant Date : 8/29/2023 1:08 pm

Compound #18: Endrin



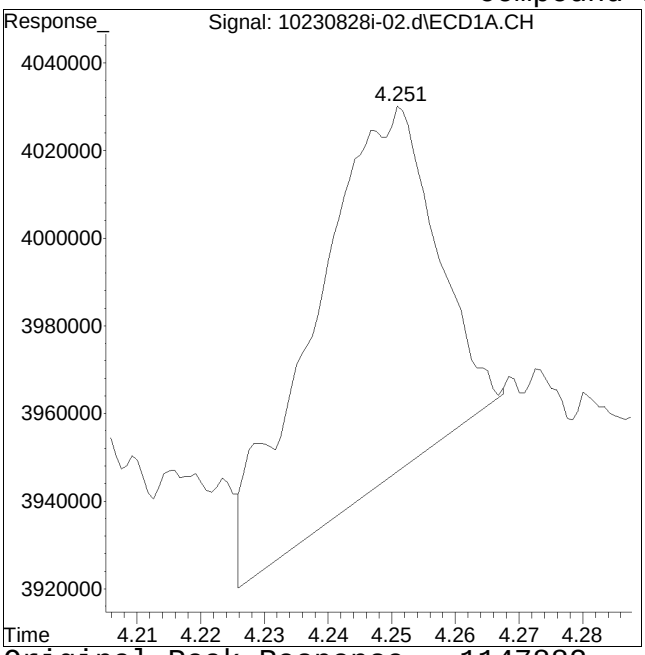


Original Peak Response = 333065351 Manual Peak Response = 327410856 M4
M4 = Poor automated baseline construction.

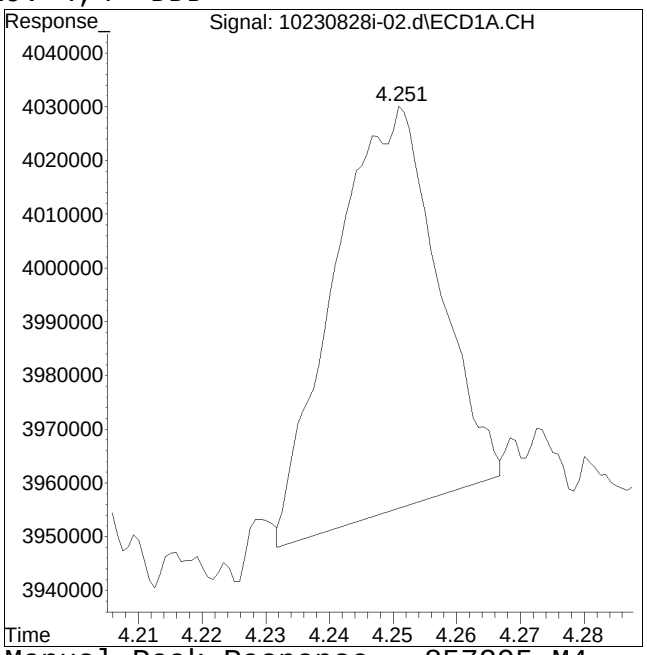
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-02.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:17 pm Instrument : Pest 10
Sample : pem10230828i-01,42,,deg111Quant Date : 8/29/2023 1:08 pm

Compound #19: 4,4'-DDD



Original Peak Response = 1147882



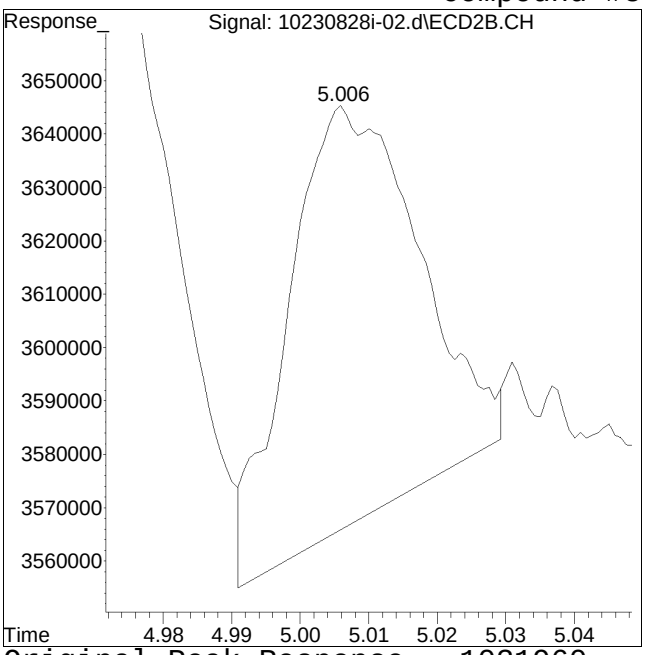
Manual Peak Response = 857205 M4

M4 = Poor automated baseline construction.

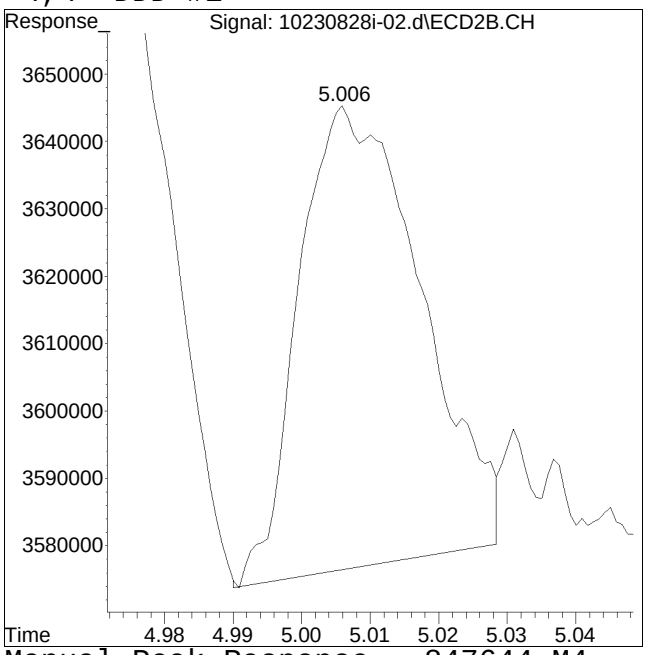
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-02.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:17 pm Instrument : Pest 10
Sample : pem10230828i-01,42,,deg111Quant Date : 8/29/2023 1:08 pm

Compound #57: 4,4'-DDD #2



Original Peak Response = 1031960



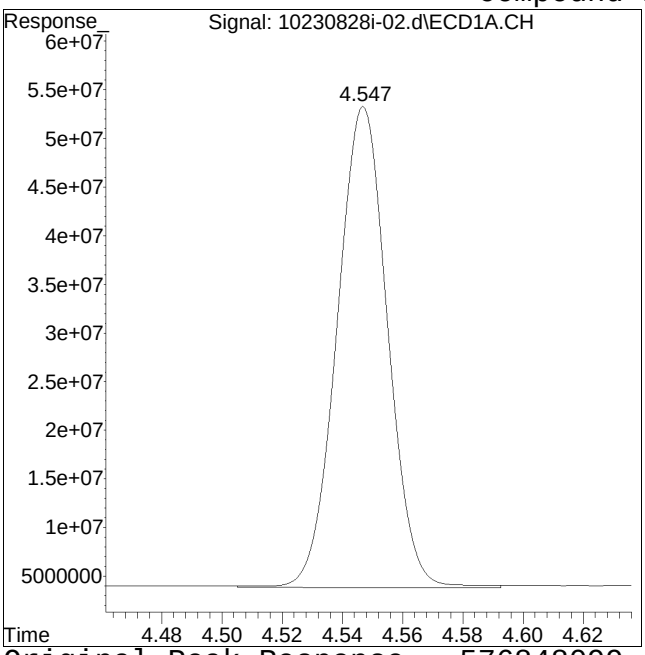
Manual Peak Response = 847644 M4

M4 = Poor automated baseline construction.

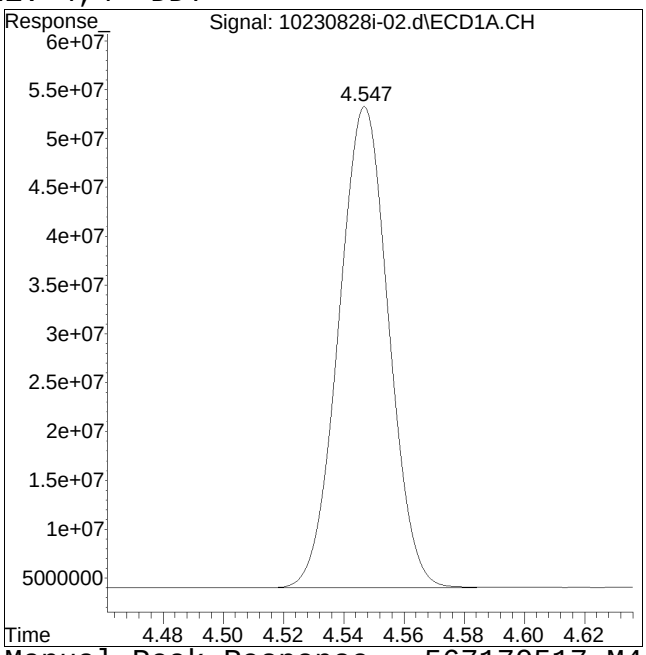
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-02.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:17 pm Instrument : Pest 10
Sample : pem10230828i-01,42,,deg111Quant Date : 8/29/2023 1:08 pm

Compound #21: 4,4'-DDT



Original Peak Response = 576848099



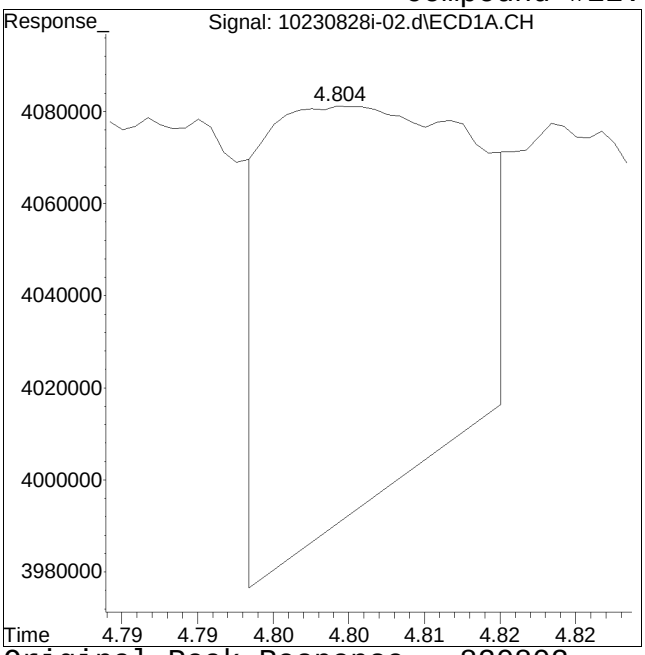
Manual Peak Response = 567170517 M4

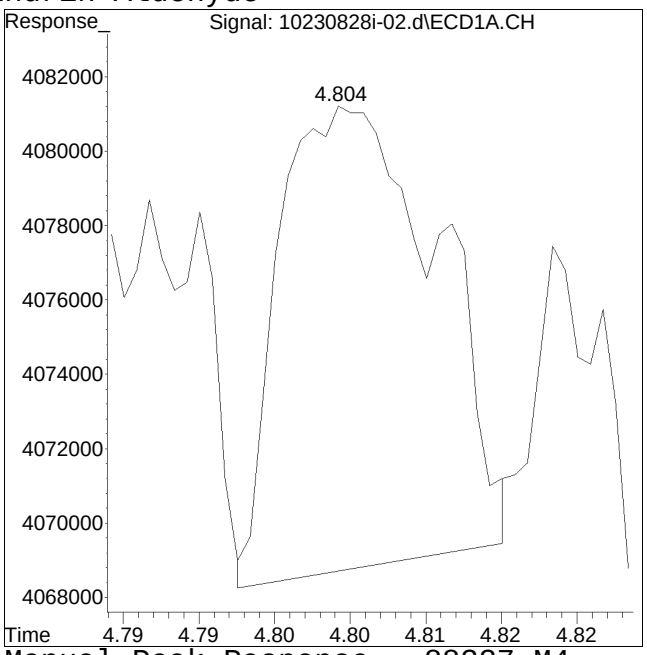
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-02.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:17 pm Instrument : Pest 10
Sample : pem10230828i-01,42,,deg111Quant Date : 8/29/2023 1:08 pm

Compound #22: Endrin Aldehyde



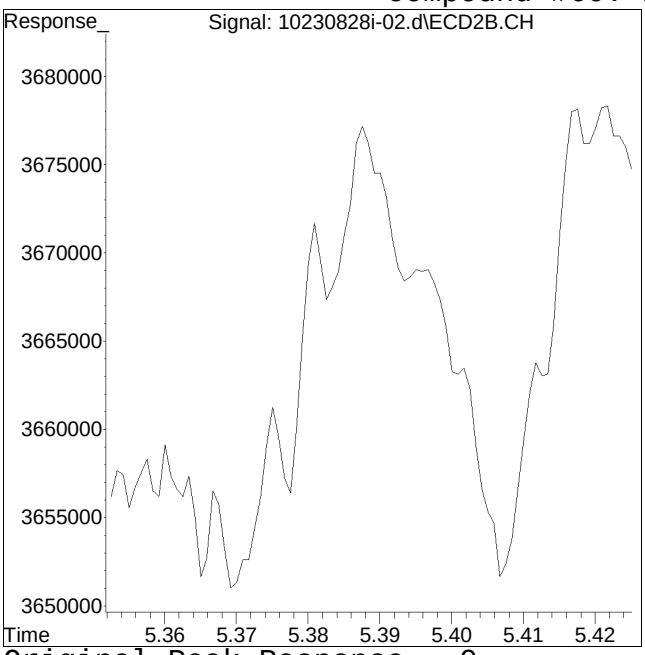


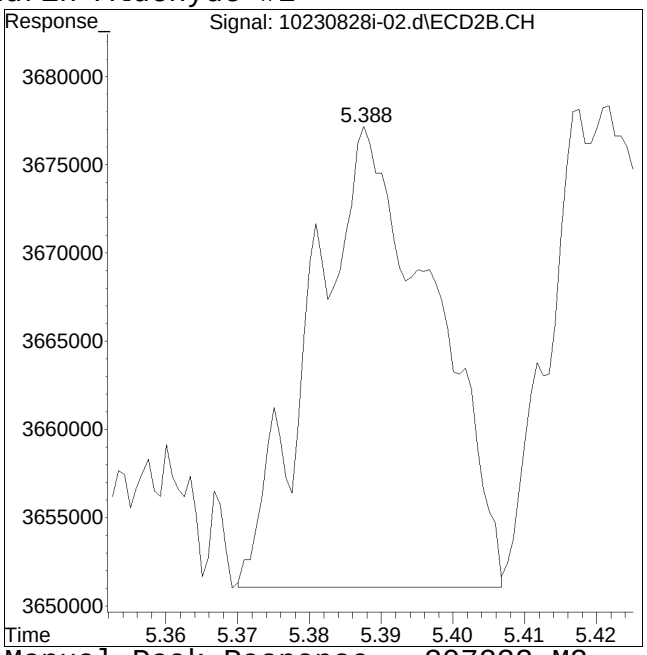
Original Peak Response = 820802 Manual Peak Response = 88337 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-02.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:17 pm Instrument : Pest 10
Sample : pem10230828i-01,42,,deg111Quant Date : 8/29/2023 1:08 pm

Compound #60: Endrin Aldehyde #2



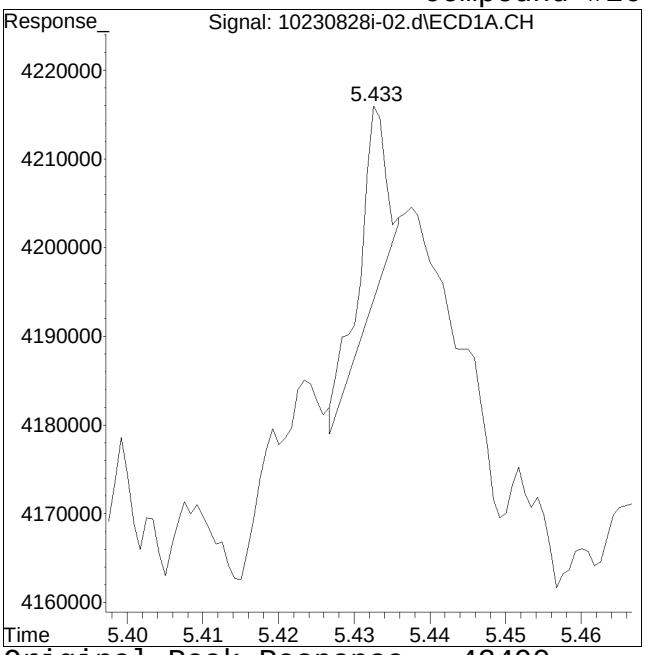


Original Peak Response = 0 Manual Peak Response = 307233 M2
M2 = Peak not found by automatic integration algorithm.

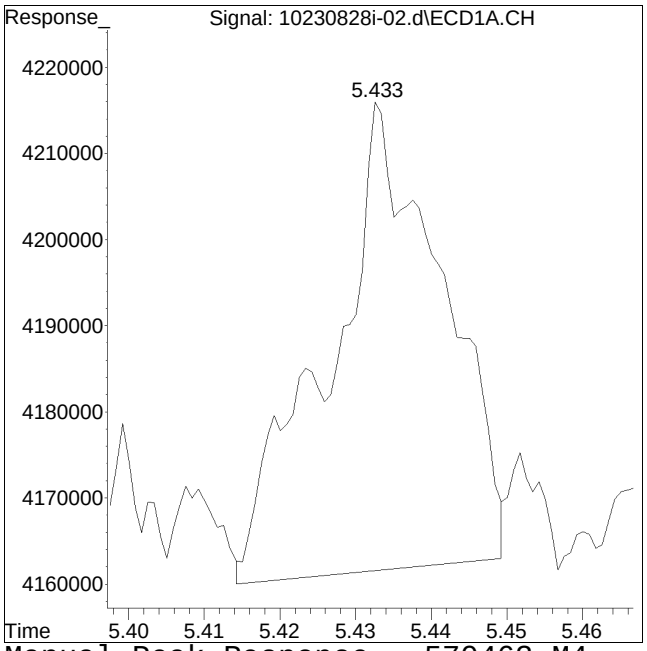
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-02.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:17 pm Instrument : Pest 10
Sample : pem10230828i-01,42,,deg111Quant Date : 8/29/2023 1:08 pm

Compound #26: Endrin Ketone



Original Peak Response = 42490



Manual Peak Response = 570463 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 12:28 pm
Operator : PEST10:akm
Sample : il1pest,42e,,pp 11230 L0.0005
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:31:32 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:30:49 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.280	1.349	130.0E6	153.3E6	25.000M3	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount 50.000	Range 30 - 150		Recovery =		0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount 50.000	Range 30 - 150		Recovery =		0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D. d	N.D. d
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	2.118	2.510	3817381	3941692	0.570	0.500
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 12:28 pm
Operator : PEST10:akm
Sample : il1pest,42e,,pp 11230 L0.0005
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:31:32 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:30:49 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D.	N.D.
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

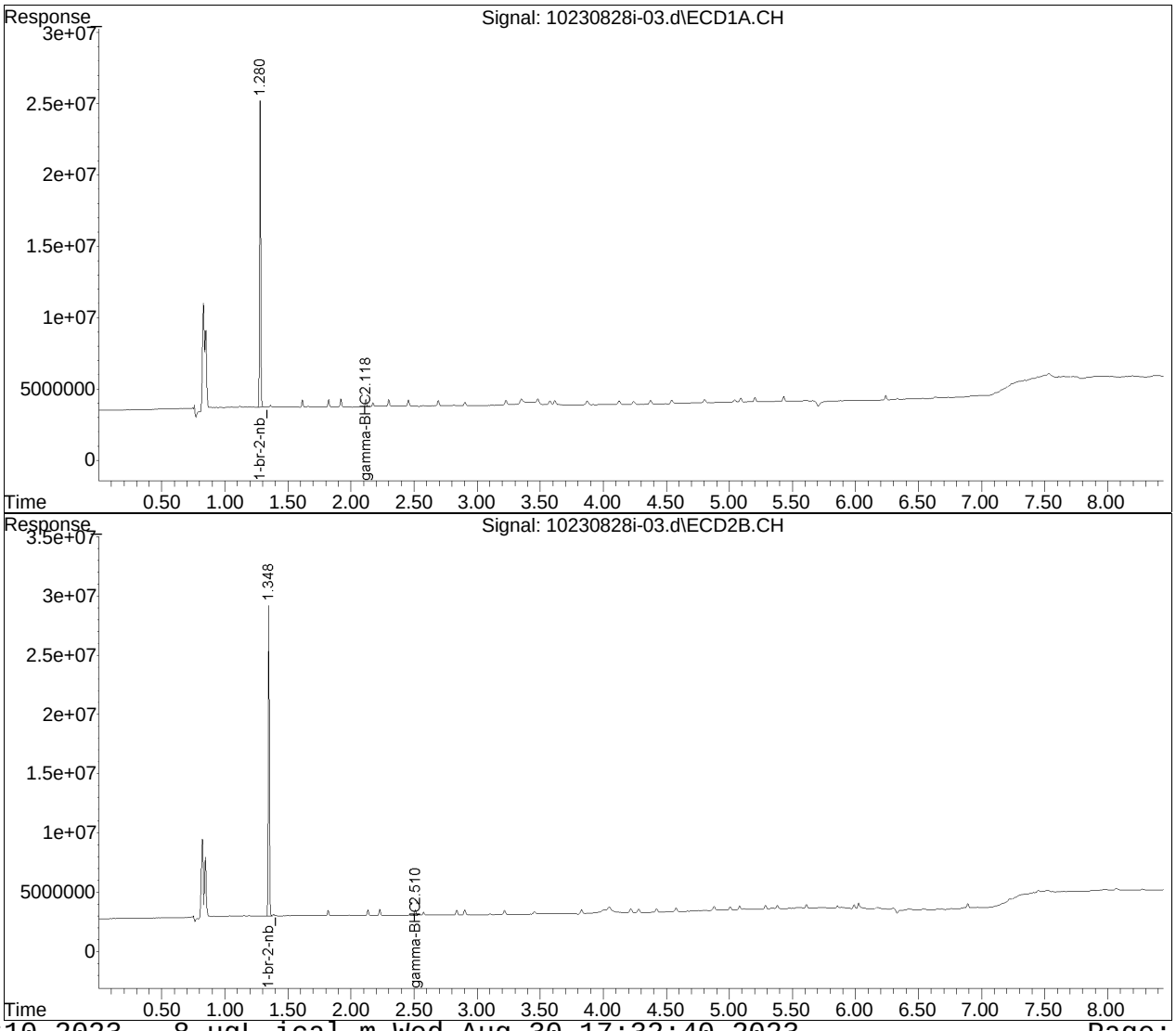
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 12:28 pm
Operator : PEST10:akm
Sample : il1pest,42e,,pp 11230 L0.0005
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:31:32 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:30:49 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

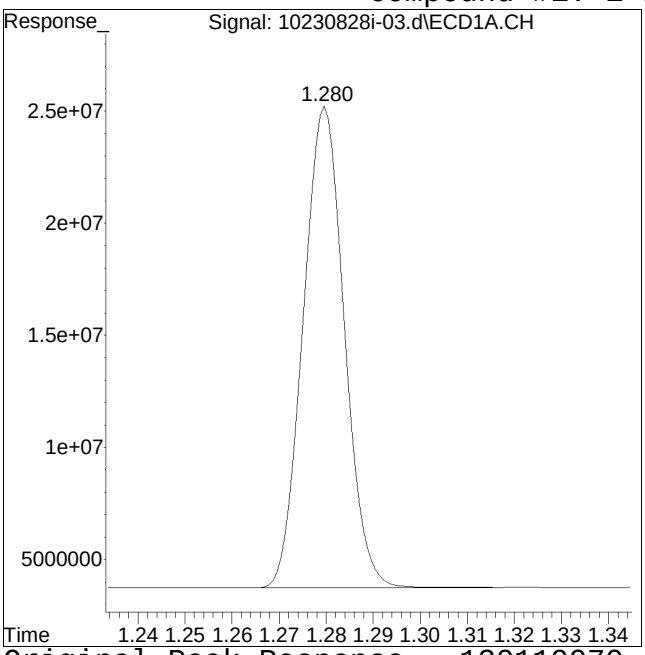
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

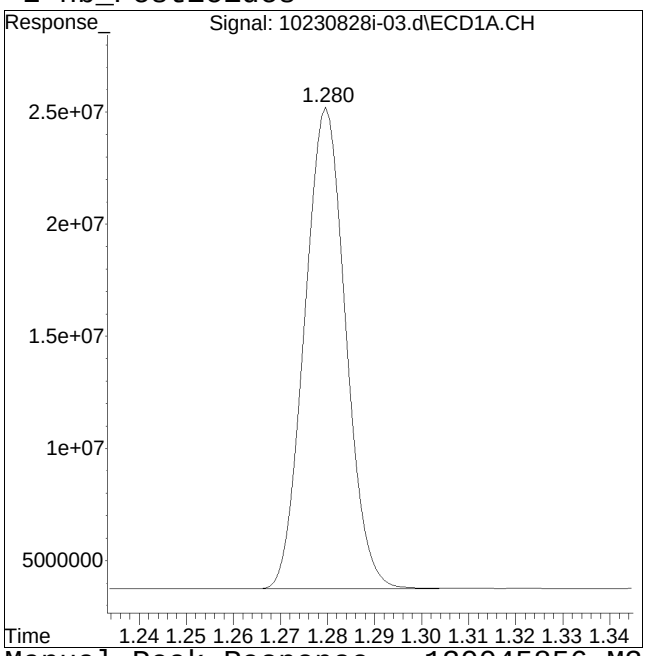


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-03.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:28 pm Instrument : Pest 10
Sample : il1pest,42e,,pp 11230 L0.0Quant Date : 8/29/2023 12:30 pm

Compound #1: 1-br-2-nb_Pesticides





Original Peak Response = 130119970 Manual Peak Response = 130045856 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 12:39 pm
Operator : PEST10:akm
Sample : il2pest,42e,,pp 11229 L0.001
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:30:39 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:27:08 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.279	1.348	128.6E6	148.8E6	25.000	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.614	1.818	5817143	5747986	1.132	1.002
	Spiked Amount 50.000	Range 30 - 150		Recovery =		2.26%#	2.00%#
27) s	Decachlorobi	6.238	6.891	5341670	6108350	1.153M3	1.125
	Spiked Amount 50.000	Range 30 - 150		Recovery =		2.31%#	2.25%#
	Target Compounds						
3) t	Hexachlorobe	1.823	2.134	6392533	6706637	1.152	1.054
4) t	alpha-BHC	1.920	2.228	6807878	7262113	0.967	0.876
5) t	gamma-BHC (l	2.118	2.510	6703573	7035848	1.013	0.910
6) t	beta-BHC	2.174	2.575	3545940	3719464	1.163	1.050
7) t	delta-BHC	2.300	2.838	6744085	6967981	1.003	0.889
8) t	Heptachlor	2.456	2.902	7067195	7656530	1.092	0.990
9) t	Aldrin	2.692	3.217	6161104	6782268	1.040	0.929
10) t	Alachlor	2.815	3.102	1554184	1254053	1.255	1.076M4
11) t	Chlorpyrifos	2.904	3.454	4092462	4491777	1.249	1.182
12) t	Heptachlor E	3.228	3.828	6691727	7206609	1.161M4	1.023
13) t	gamma-Chlord	3.349	4.046	7661868	11706369	1.354M4	1.578M4
14) t	alpha-Chlord	3.481	4.219	9070364	7034594	1.460M4	0.978
15) t	4,4'-DDE	3.578	4.421	5962372	6229245	1.073M4	0.903M4
16) t	Endosulfan I	3.617	4.281	6125133	6461377	1.118	0.984
17) t	Dieldrin	3.873	4.577	5965324	6211012	1.070	0.931M4
18) t	Endrin	4.126	4.879	6012694	7610815	1.041	1.069
19) t	4,4'-DDD	4.242	5.005	4640221	5011090	1.021M4	0.907M4
20) t	Endosulfan I	4.376	5.081	5603488	5646292	1.114	0.968

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 12:39 pm
Operator : PEST10:akm
Sample : il2pest,42e,,pp 11229 L0.001
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:30:39 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:27:08 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
21) t	4,4'-DDT	4.542	5.287	5215206	5616925	1.033M4	0.898
22) t	Endrin Aldeh	4.803	5.380	4814775	4807146	1.125M4	0.975
23) t	Methoxychlor	5.042	5.856	3250058	3488143	1.140M4	1.029M4
24) t	Mirex	5.090	5.989	5296186	5722173	1.157	1.071M4
25) t	Endosulfan S	5.203	5.611	5404914	5567276	1.083	0.981
26) t	Endrin Keton	5.431	6.024	5899962	6393643	1.077	1.004M4
29) l1	chlordane-1	0.000	0.000	0	0	N.D.	N.D.
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

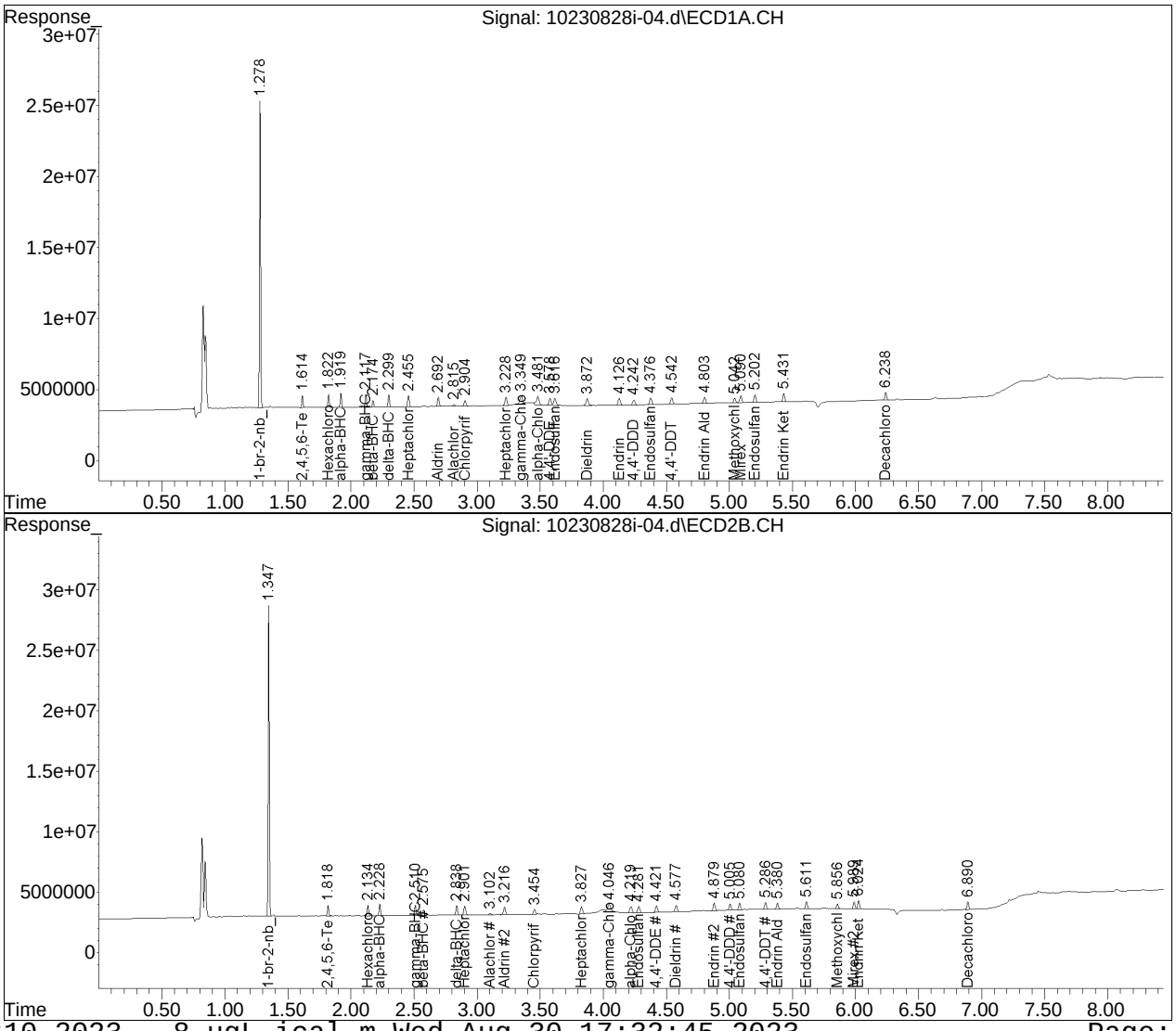
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 12:39 pm
Operator : PEST10:akm
Sample : il2pest,42e,,pp 11229 L0.001
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:30:39 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:27:08 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

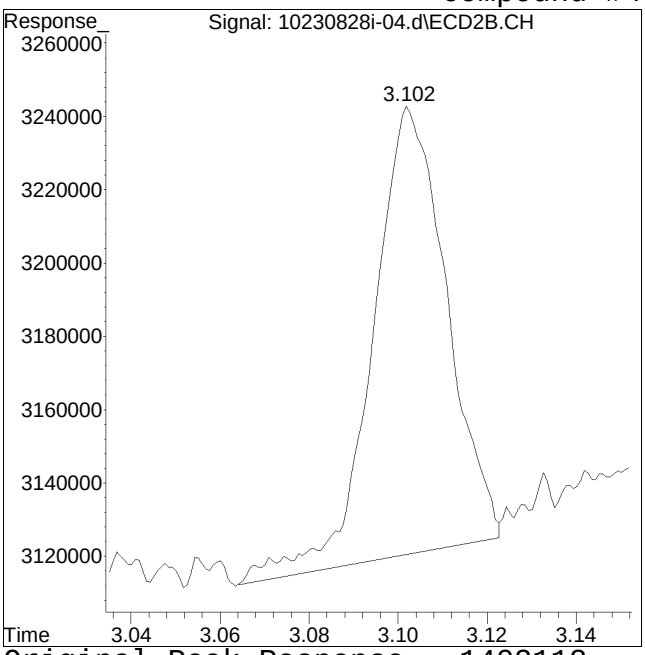
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

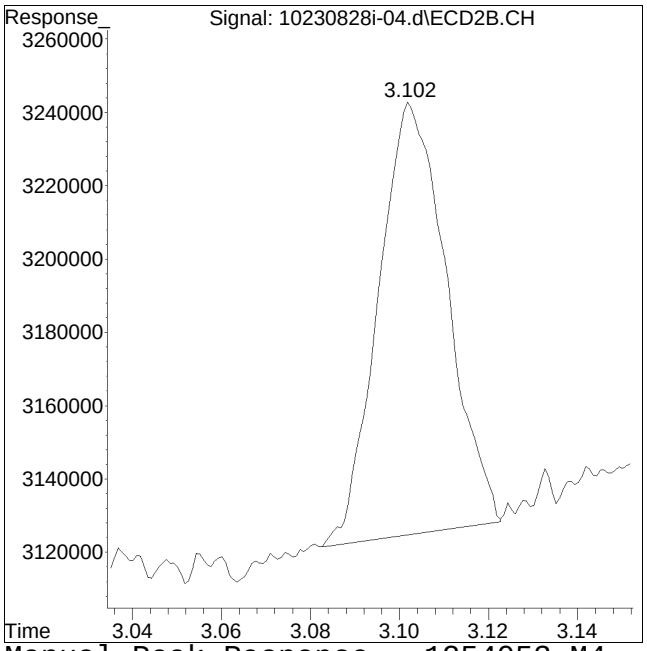


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #48: Alachlor #2



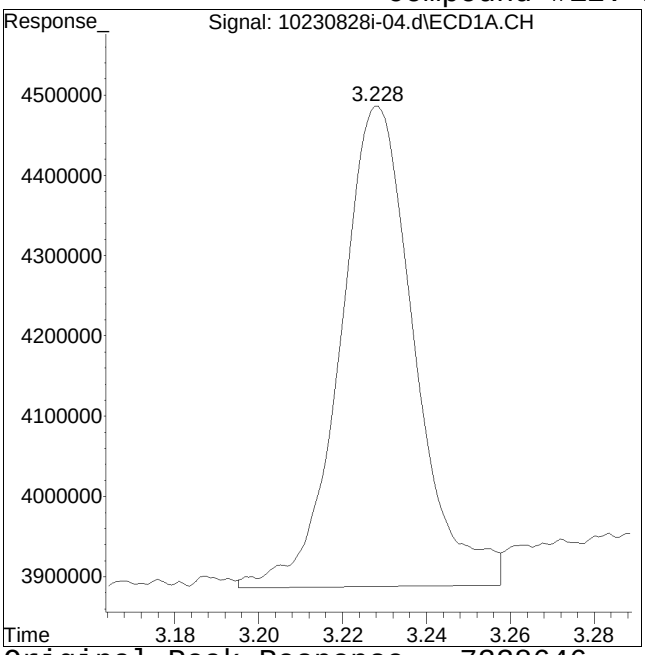


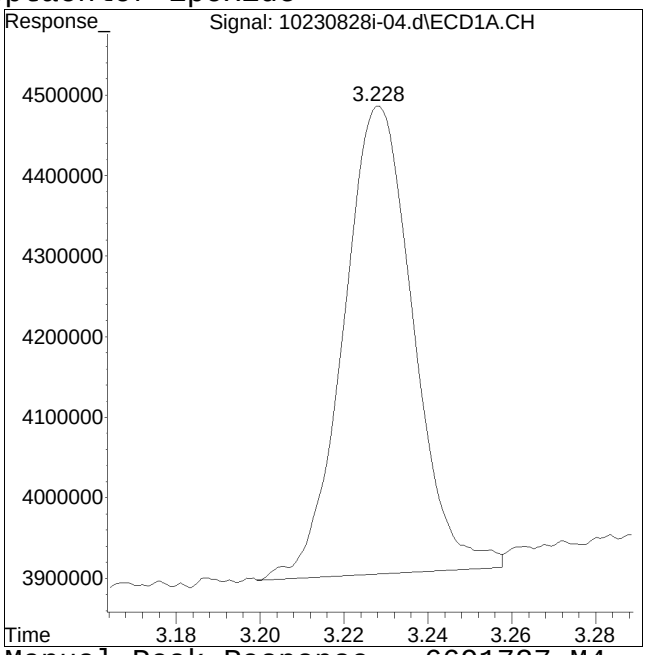
Original Peak Response = 1402112 Manual Peak Response = 1254053 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #12: Heptachlor Epoxide



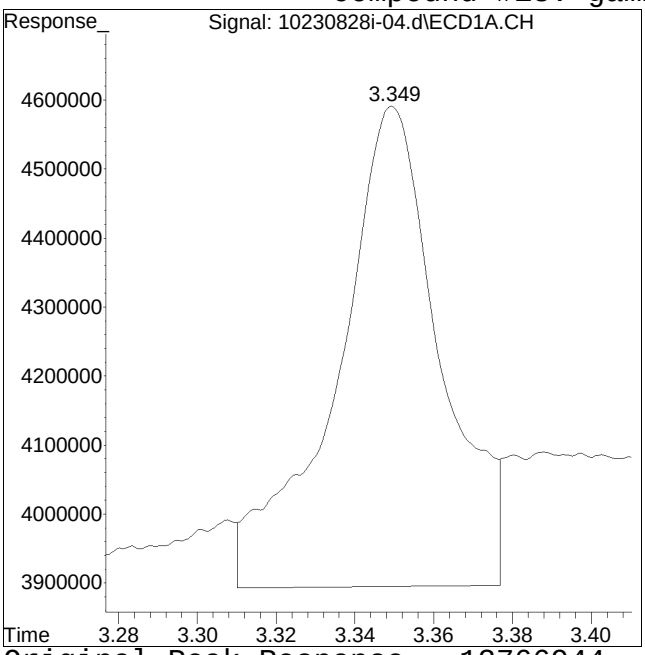


Original Peak Response = 7338646 Manual Peak Response = 6691727 M4
M4 = Poor automated baseline construction.

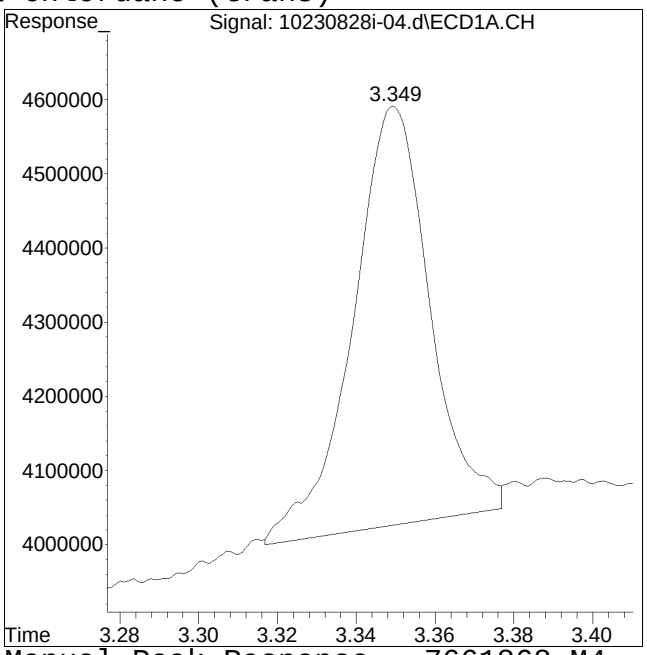
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #13: gamma-Chlordane (trans)



Original Peak Response = 12766944



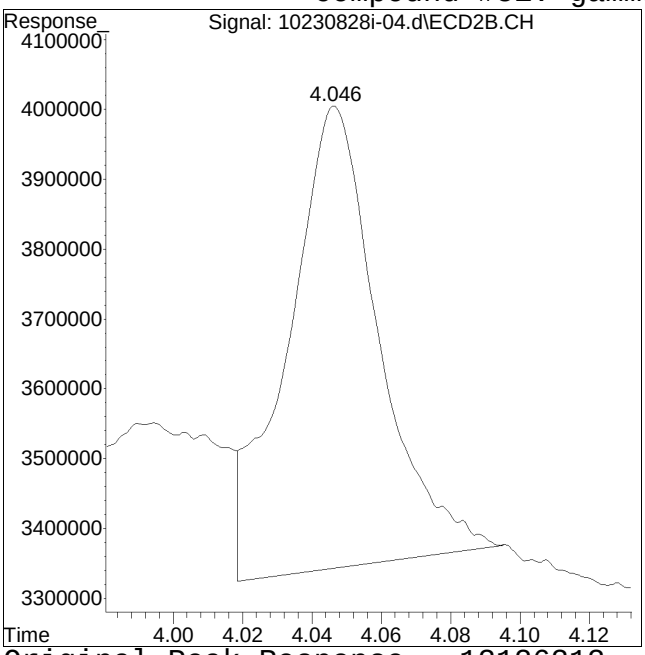
Manual Peak Response = 7661868 M4

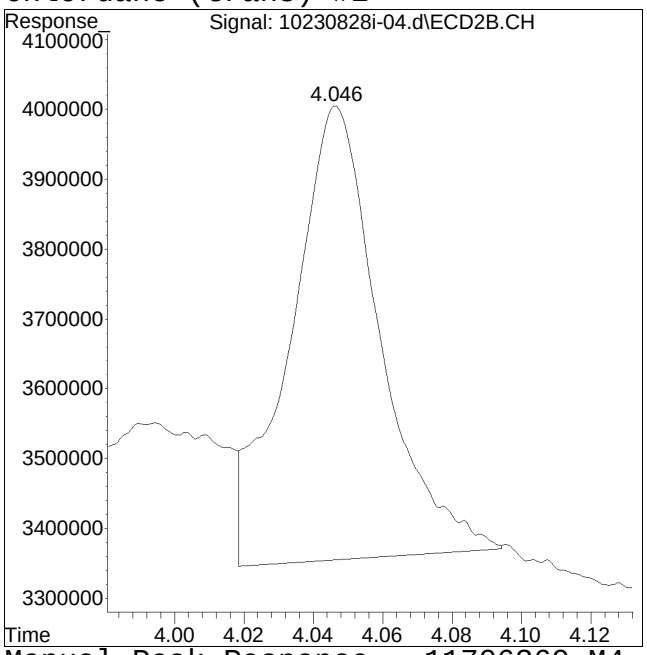
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #51: gamma-Chlordane (trans) #2



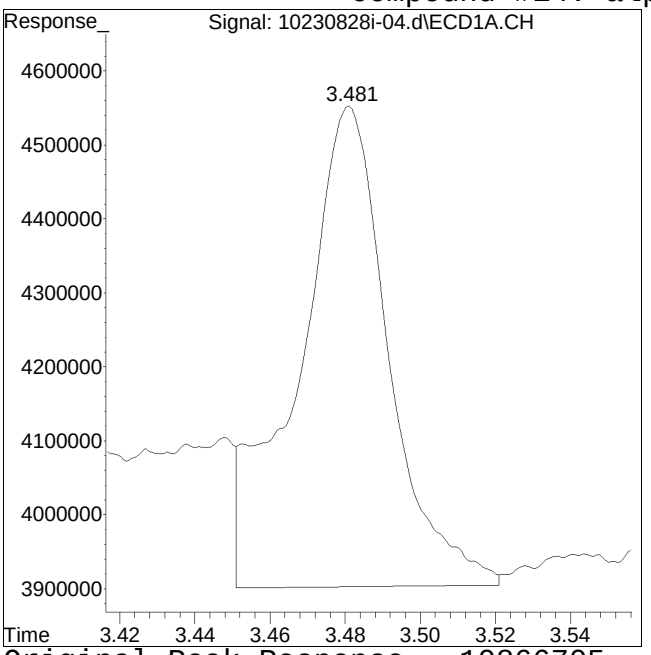


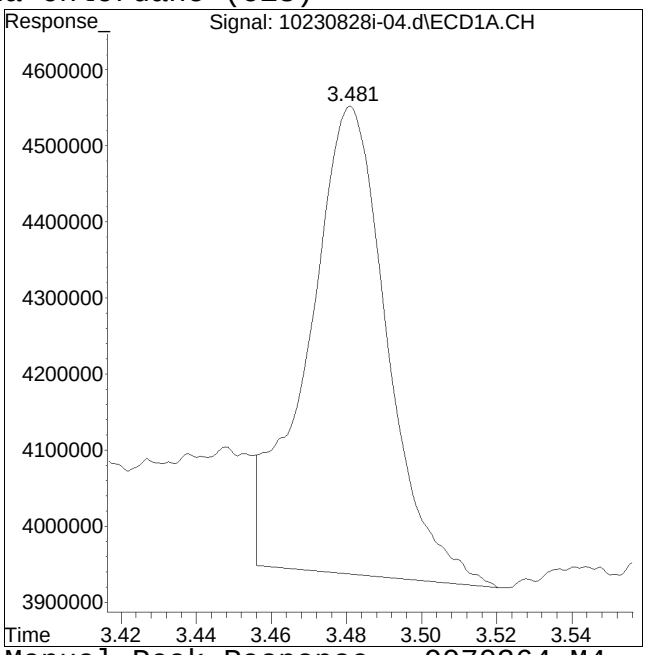
Original Peak Response = 12126212 Manual Peak Response = 11706369 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #14: alpha-Chlordane (cis)



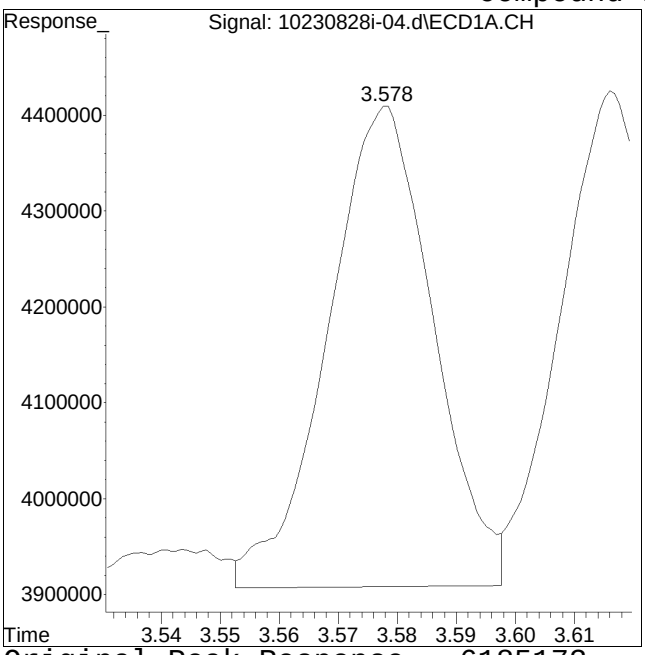


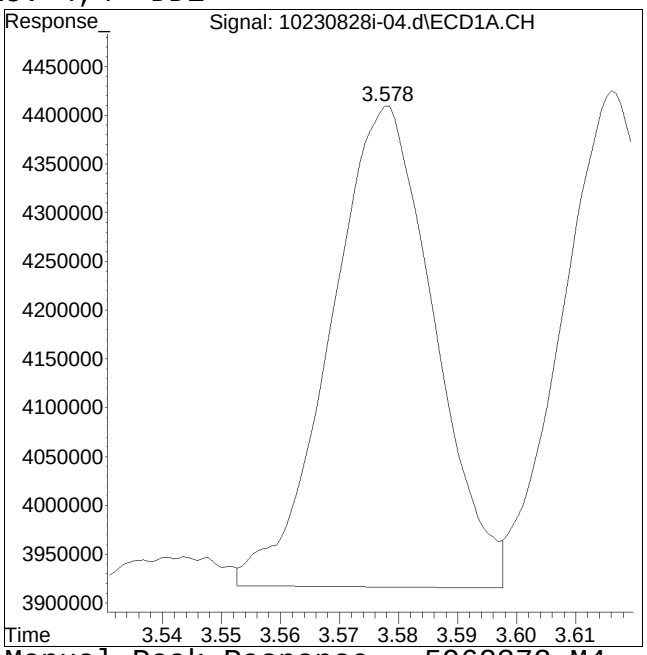
Original Peak Response = 10866705 Manual Peak Response = 9070364 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #15: 4,4'-DDE



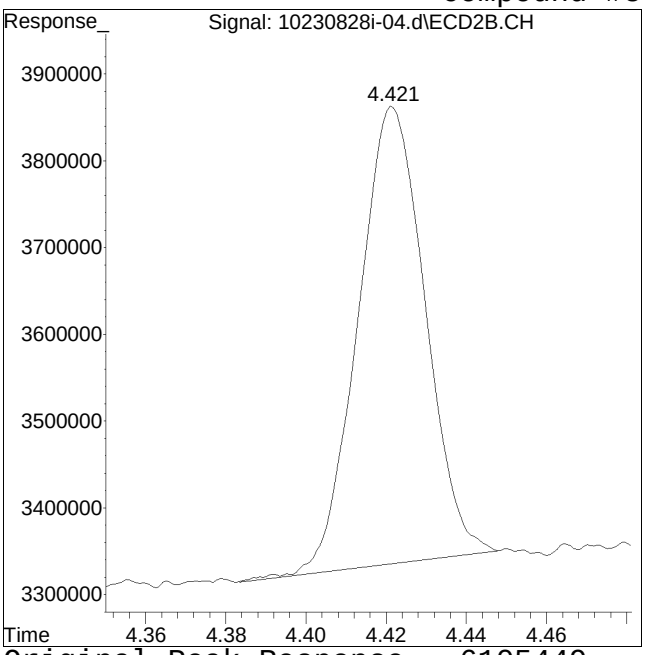


Original Peak Response = 6185173 Manual Peak Response = 5962372 M4
M4 = Poor automated baseline construction.

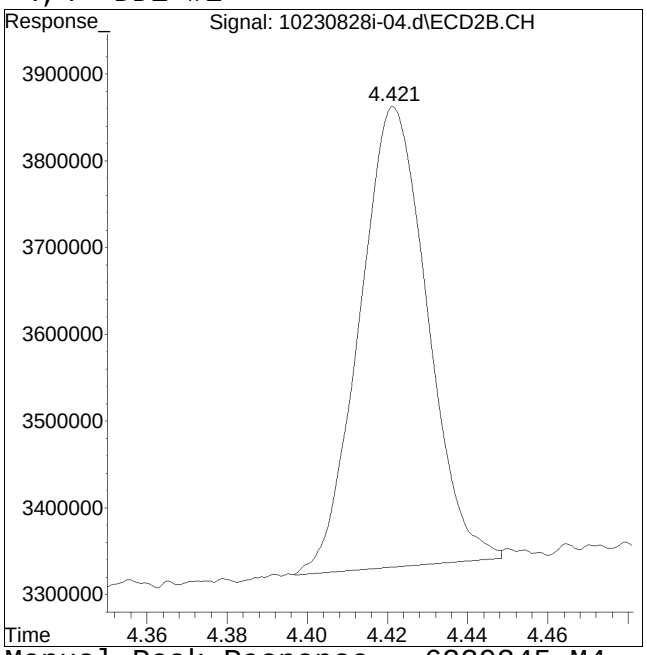
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #53: 4,4'-DDE #2



Original Peak Response = 6105449



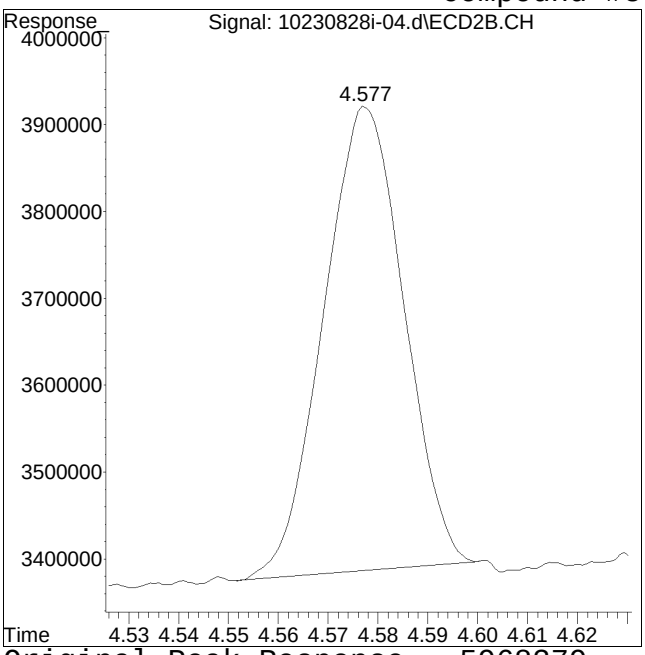
Manual Peak Response = 6229245 M4

M4 = Poor automated baseline construction.

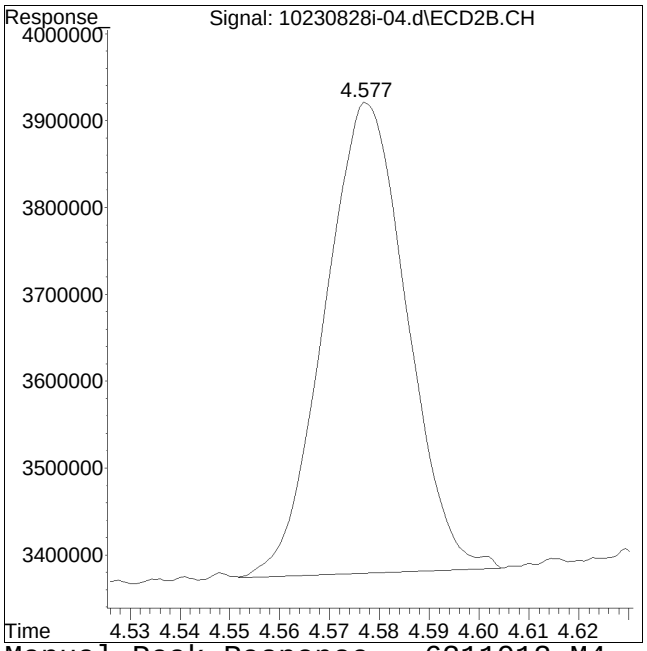
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #55: Dieldrin #2



Original Peak Response = 5968379



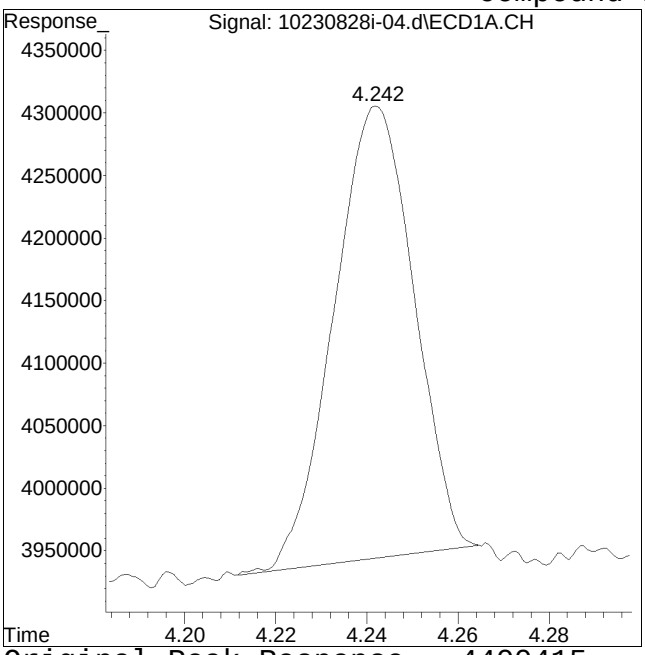
Manual Peak Response = 6211012 M4

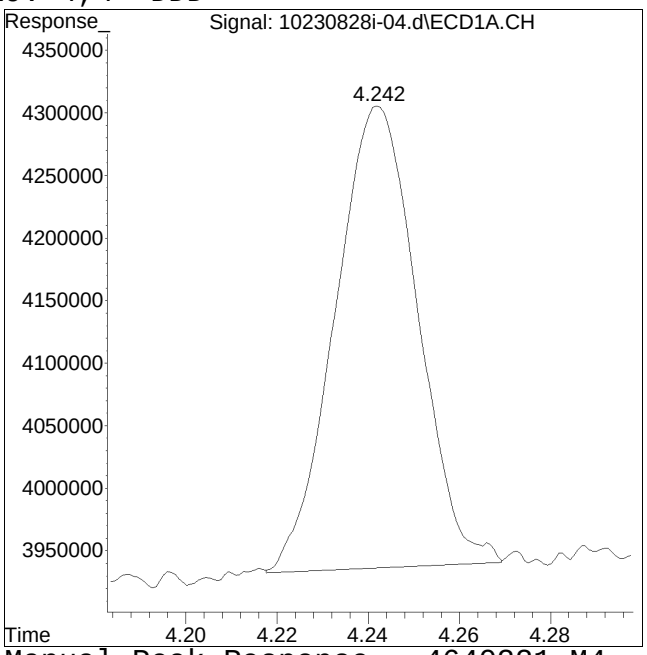
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #19: 4,4'-DDD



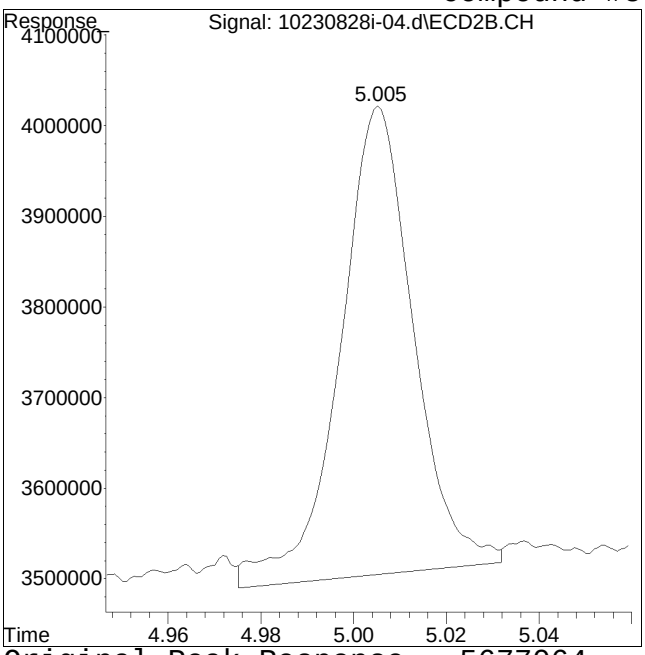


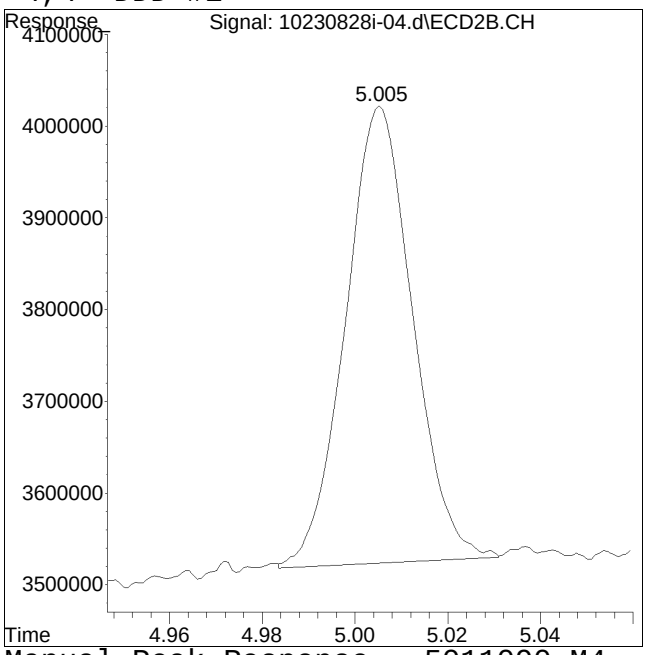
Original Peak Response = 4400415 Manual Peak Response = 4640221 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #57: 4,4'-DDD #2



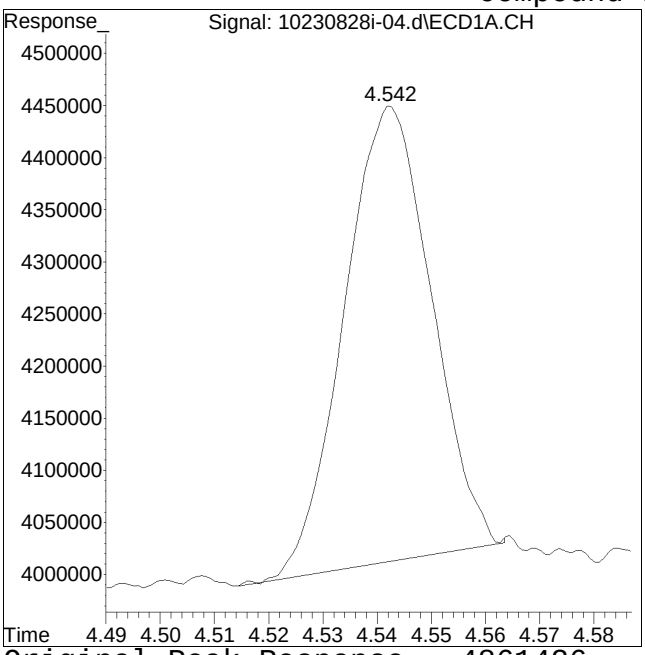


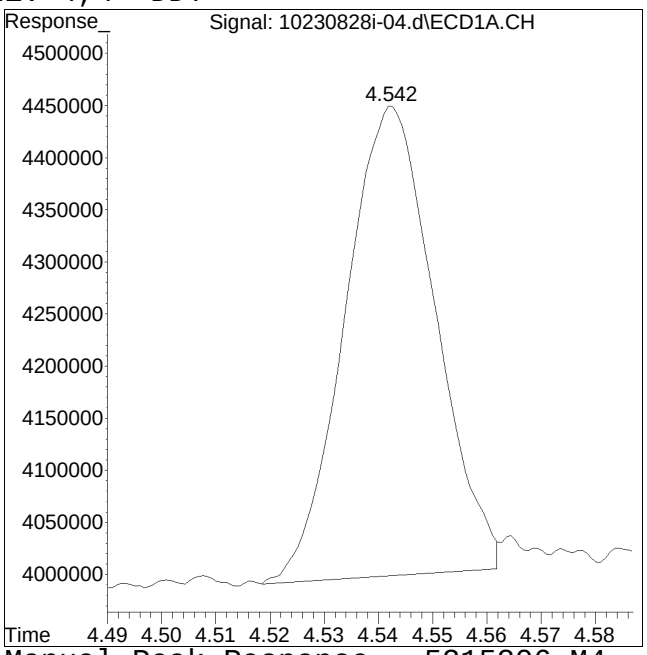
Original Peak Response = 5677064 Manual Peak Response = 5011090 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #21: 4,4'-DDT



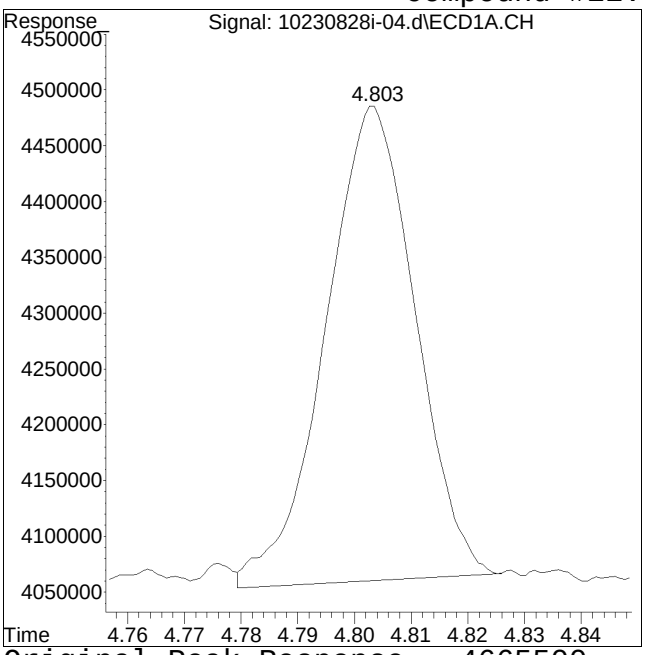


Original Peak Response = 4861426 Manual Peak Response = 5215206 M4
M4 = Poor automated baseline construction.

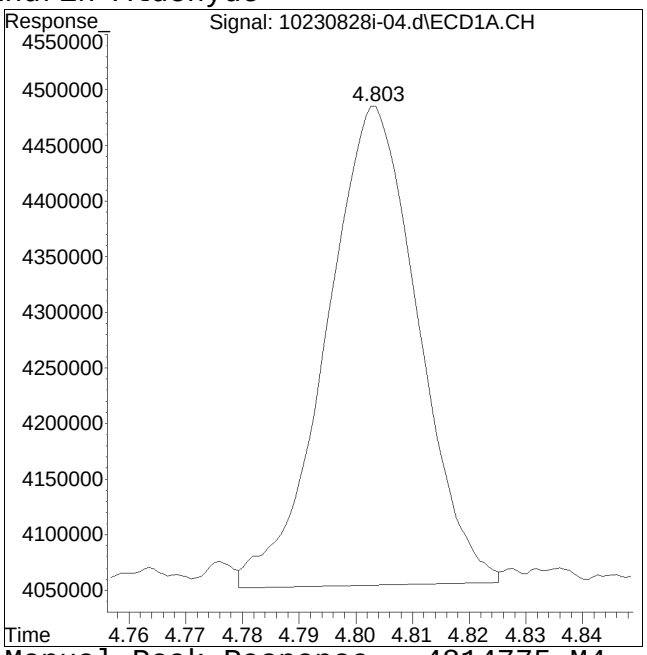
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #22: Endrin Aldehyde



Original Peak Response = 4665500



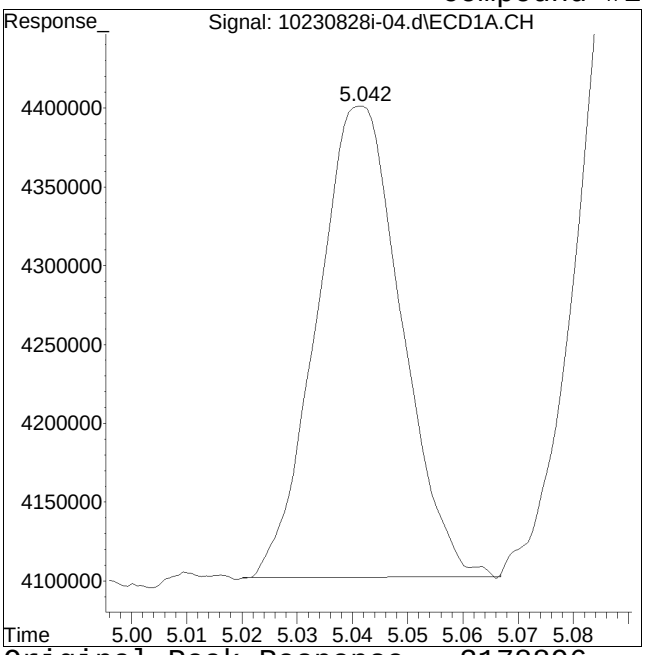
Manual Peak Response = 4814775 M4

M4 = Poor automated baseline construction.

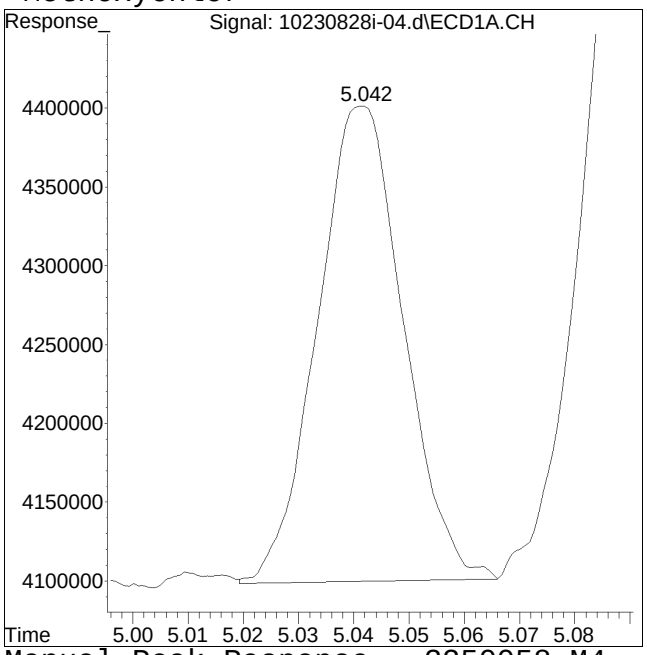
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #23: Methoxychlor



Original Peak Response = 3178896



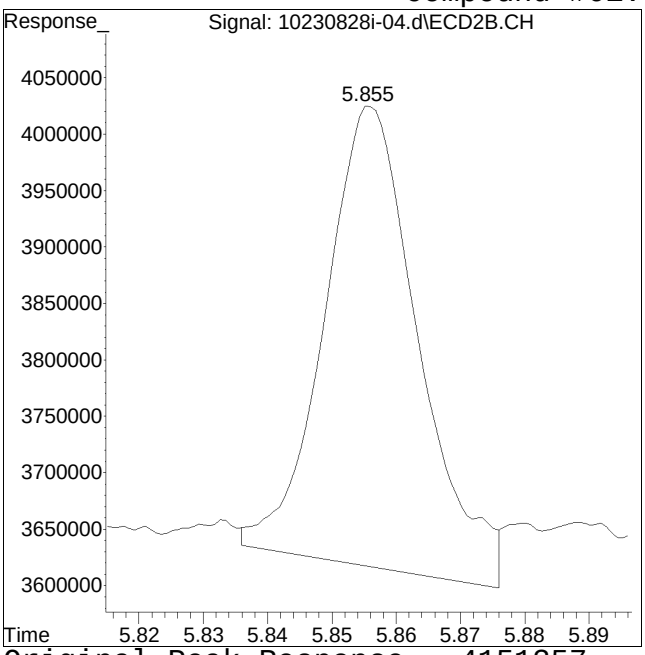
Manual Peak Response = 3250058 M4

M4 = Poor automated baseline construction.

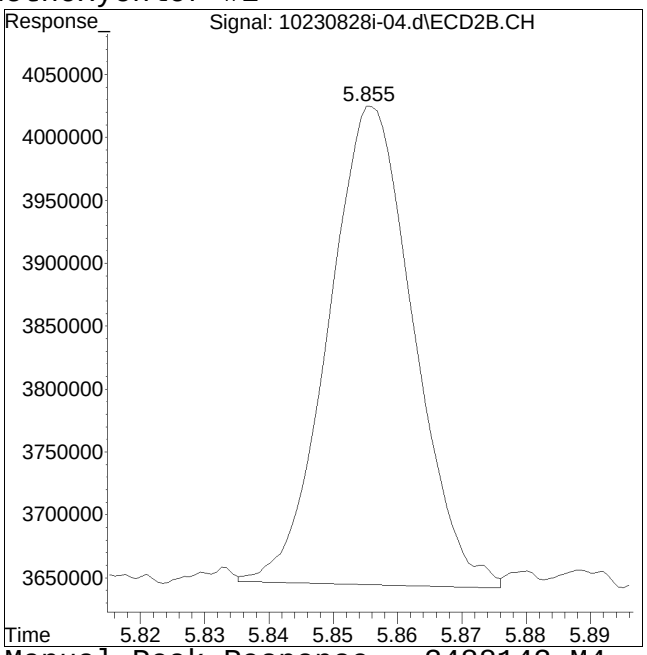
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #61: Methoxychlor #2



Original Peak Response = 4151357



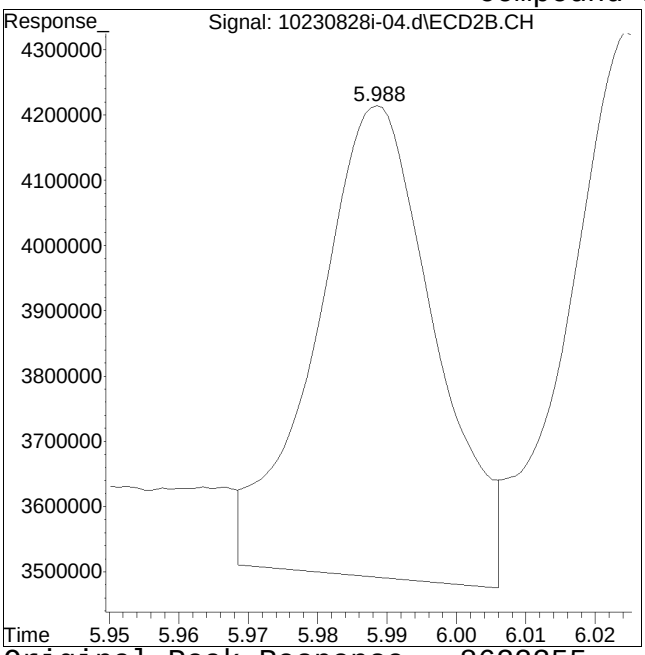
Manual Peak Response = 3488143 M4

M4 = Poor automated baseline construction.

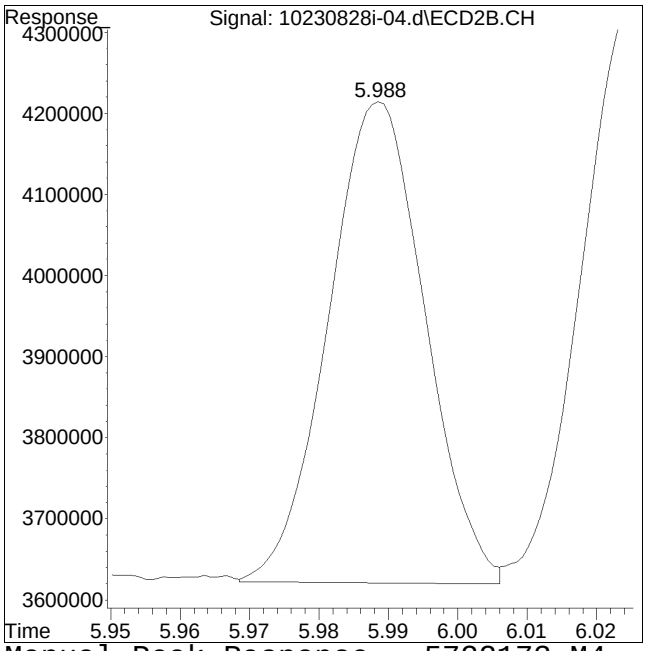
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #62: Mirex #2



Original Peak Response = 8622355



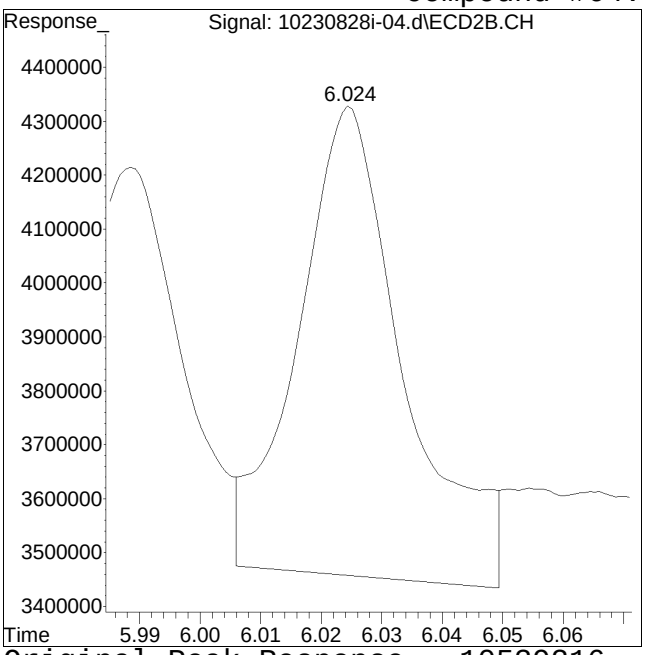
Manual Peak Response = 5722173 M4

M4 = Poor automated baseline construction.

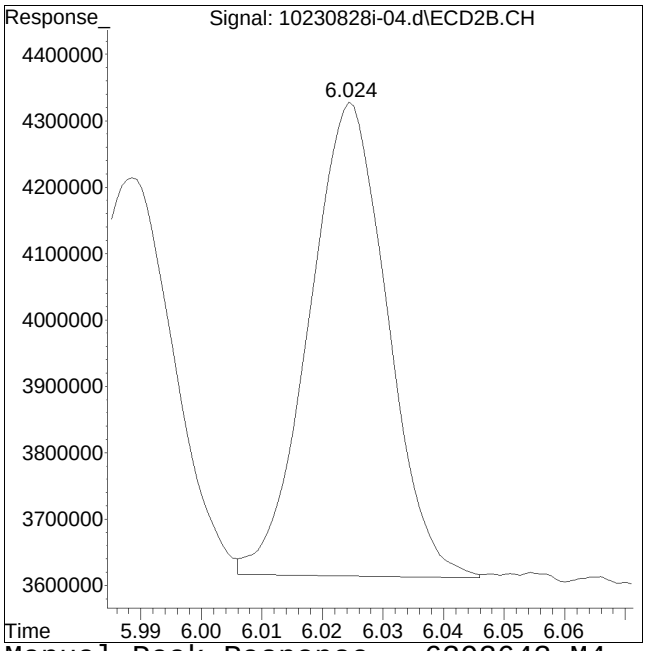
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #64: Endrin Ketone #2



Original Peak Response = 10539216



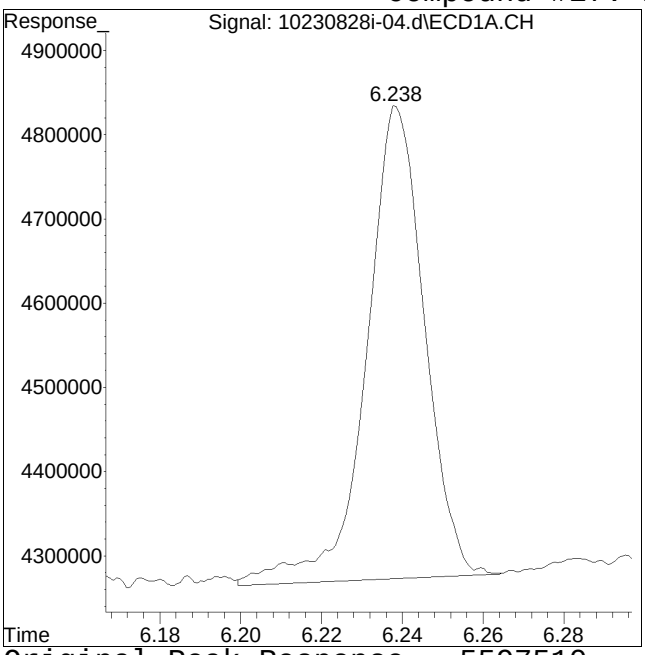
Manual Peak Response = 6393643 M4

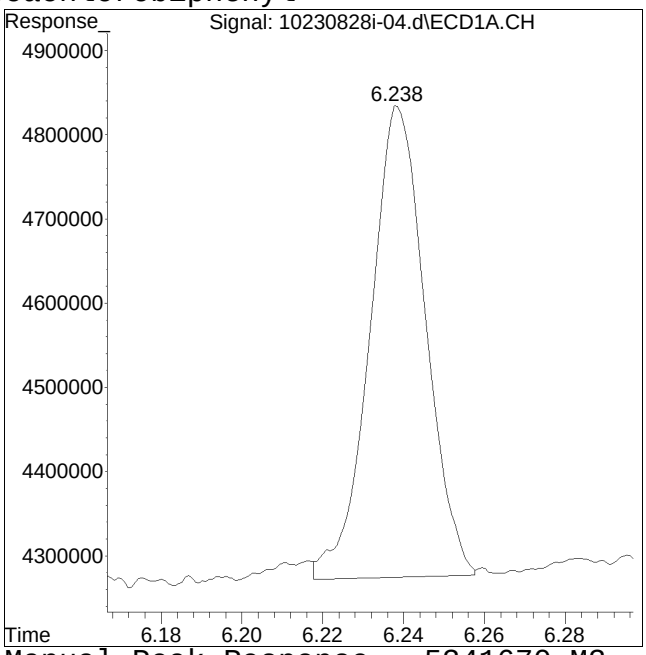
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-04.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:39 pm Instrument : Pest 10
Sample : il2pest,42e,,pp 11229 L0.0Quant Date : 8/29/2023 12:27 pm

Compound #27: Decachlorobiphenyl





Original Peak Response = 5597510 Manual Peak Response = 5341670 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 12:50 pm
Operator : PEST10:akm
Sample : il3pest,42e,,pp 11228 L0.002
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:26:53 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:24:11 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.279	1.348	129.1E6	149.0E6	25.000	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.615	1.818	11406984	11798780	2.246	2.063
	Spiked Amount 50.000	Range 30 - 150		Recovery =		4.49%#	4.13%#
27) s	Decachlorobi	6.239	6.893	10902892	12147073	2.404	2.274
	Spiked Amount 50.000	Range 30 - 150		Recovery =		4.81%#	4.55%#
	Target Compounds						
3) t	Hexachlorobe	1.823	2.135	12844319	13847903	2.357	2.202
4) t	alpha-BHC	1.921	2.229	14123317	15241290	1.998	1.815
5) t	gamma-BHC (l	2.118	2.511	13805565	14733685	2.090M3	1.892
6) t	beta-BHC	2.175	2.576	7015181	7724230	2.340	2.207
7) t	delta-BHC	2.300	2.839	13836810	14696447	2.057	1.857
8) t	Heptachlor	2.456	2.903	14366695	15568104	2.247	2.012
9) t	Aldrin	2.693	3.218	12736117	14250616	2.164	1.944
10) t	Alachlor	2.815	3.104	3080841	2675156	2.566	2.343
11) t	Chlorpyrifos	2.904	3.455	8344470	9000135	2.638	2.431
12) t	Heptachlor E	3.229	3.829	12838070	14419493	2.253	2.051
13) t	gamma-Chlord	3.350	4.047	13985780	18739756	2.547	2.622M4
14) t	alpha-Chlord	3.482	4.221	14148134	14702973	2.313	2.048
15) t	4,4'-DDE	3.578	4.423	11573475	13069611	2.086	1.878
16) t	Endosulfan I	3.617	4.282	12299108	13448344	2.275	2.052
17) t	Dieldrin	3.874	4.579	12078127	12820145	2.183	1.909
18) t	Endrin	4.127	4.880	12445633	14376064	2.169	2.020
19) t	4,4'-DDD	4.243	5.006	9648421	10506227	2.134	1.887M4
20) t	Endosulfan I	4.377	5.081	11432161	11851477	2.307	2.033
21) t	4,4'-DDT	4.543	5.286	10914635	12023184	2.177	1.911
22) t	Endrin Aldeh	4.804	5.381	9429247	9840281	2.225M4	1.992
23) t	Methoxychlor	5.042	5.856	6641741	7323311	2.376M4	2.183

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 12:50 pm
Operator : PEST10:akm
Sample : il3pest,42e,,pp 11228 L0.002
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:26:53 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:24:11 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	5.090	5.989	11004109	11962582	2.465M4	2.276
25) t	Endosulfan S	5.203	5.611	11294339	11816876	2.298	2.093
26) t	Endrin Keton	5.431	6.025	12158273	13216559	2.245	2.083
29) l1	chlordane-1	0.000	0.000	0	0	N.D.	N.D.
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

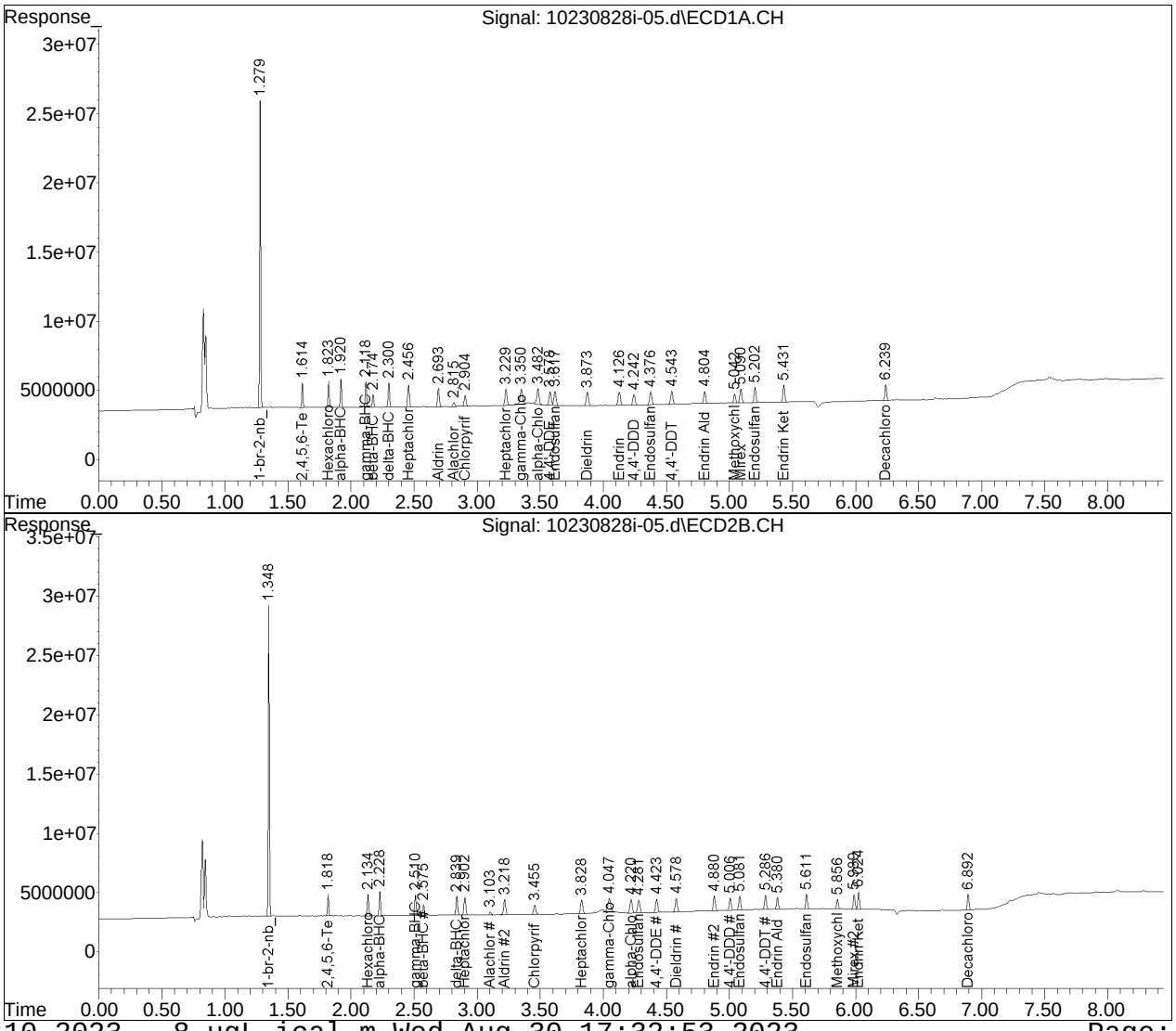
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 12:50 pm
Operator : PEST10:akm
Sample : il3pest,42e,,pp 11228 L0.002
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:26:53 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:24:11 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

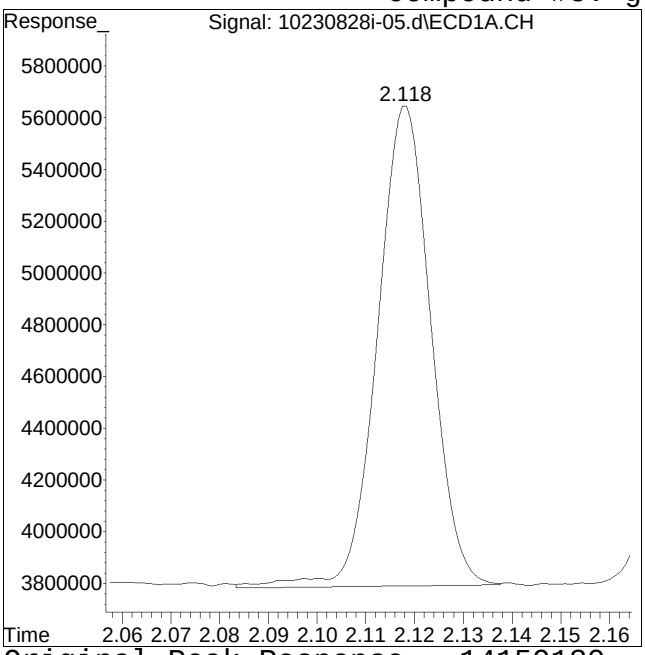
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

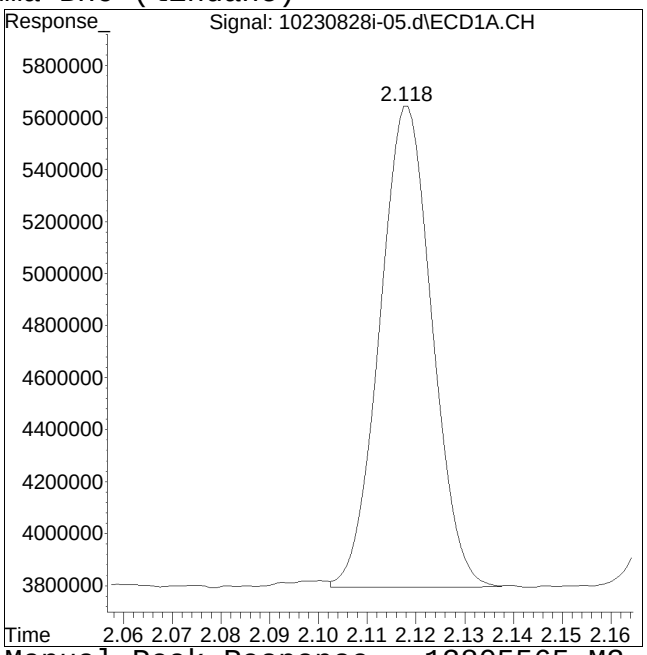


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-05.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:50 pm Instrument : Pest 10
Sample : il3pest,42e,,pp 11228 L0.0Quant Date : 8/29/2023 12:24 pm

Compound #5: gamma-BHC (lindane)



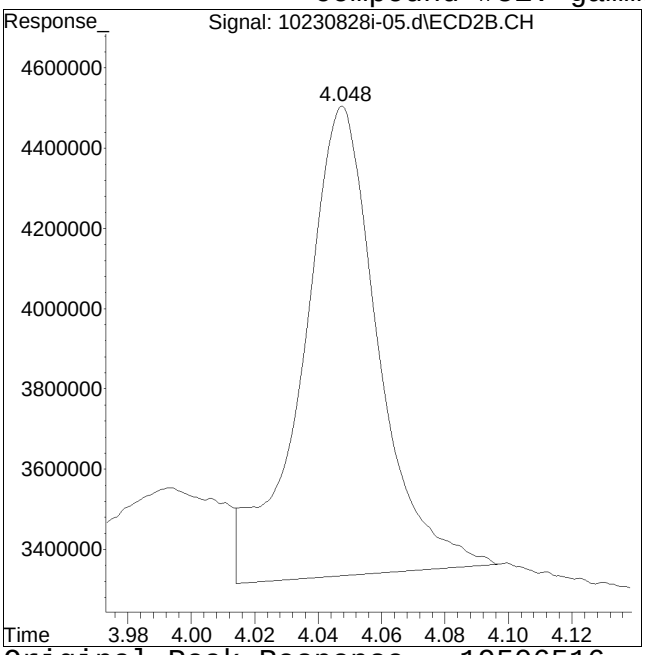


Original Peak Response = 14159130 Manual Peak Response = 13805565 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

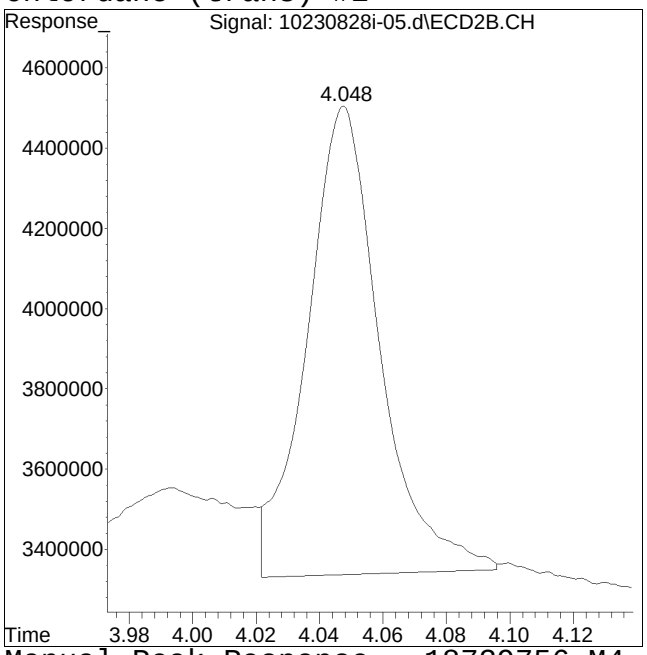
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-05.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:50 pm Instrument : Pest 10
Sample : il3pest,42e,,pp 11228 L0.0Quant Date : 8/29/2023 12:24 pm

Compound #51: gamma-Chlordane (trans) #2



Original Peak Response = 19506516



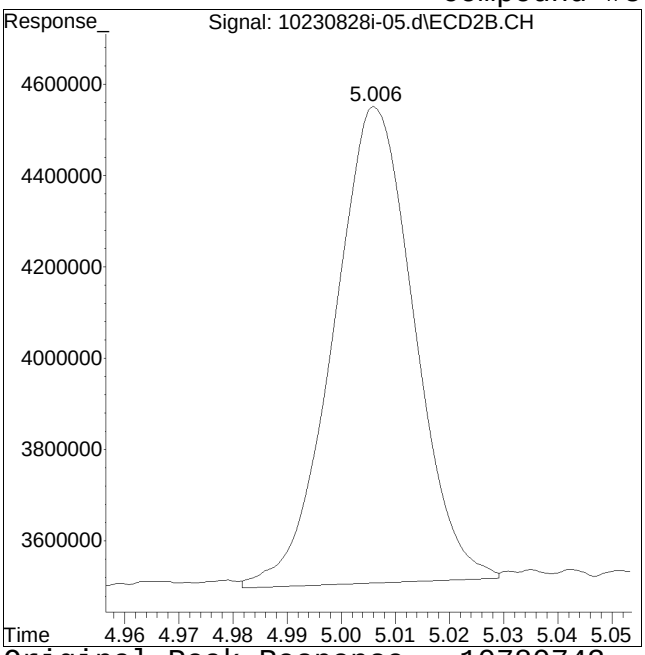
Manual Peak Response = 18739756 M4

M4 = Poor automated baseline construction.

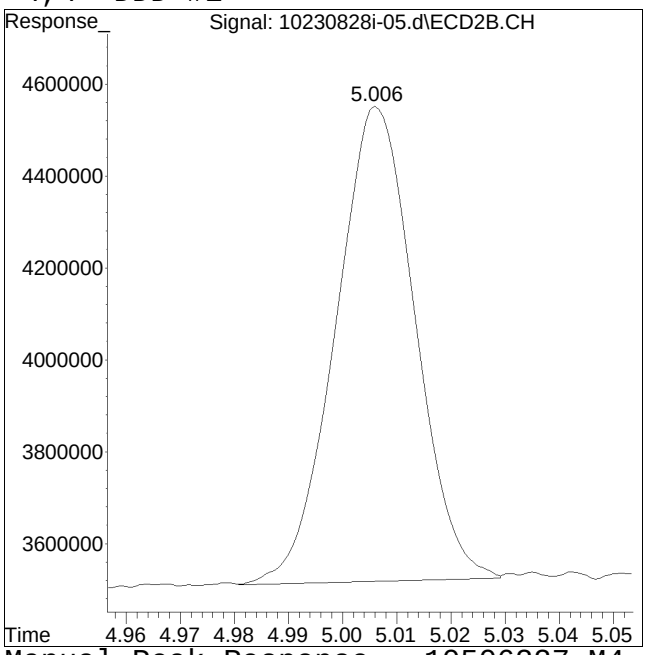
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-05.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:50 pm Instrument : Pest 10
Sample : il3pest,42e,,pp 11228 L0.0Quant Date : 8/29/2023 12:24 pm

Compound #57: 4,4'-DDD #2



Original Peak Response = 10780743



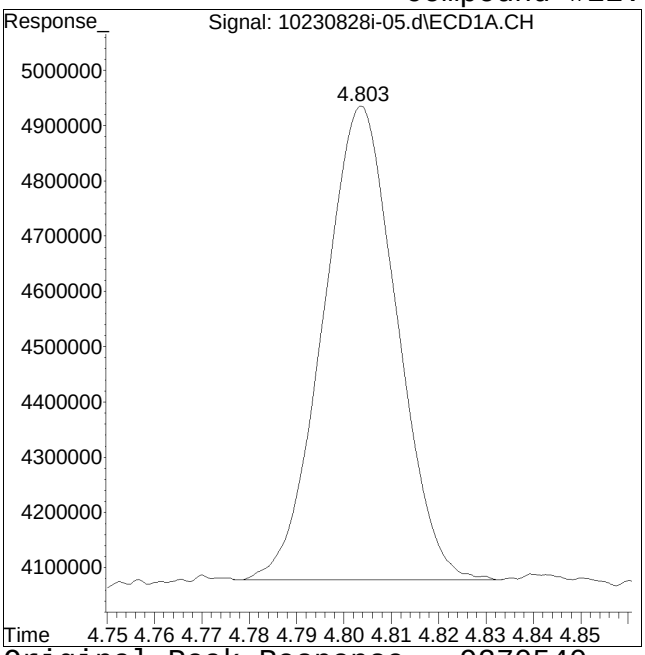
Manual Peak Response = 10506227 M4

M4 = Poor automated baseline construction.

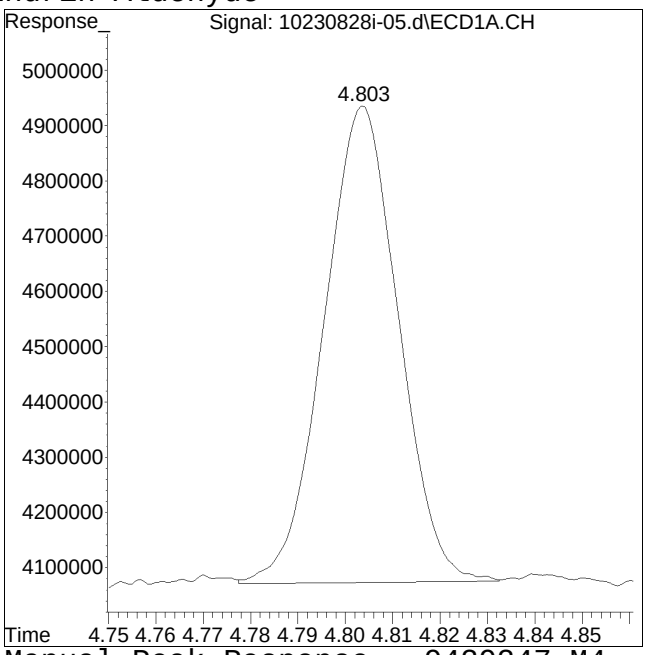
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-05.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:50 pm Instrument : Pest 10
Sample : il3pest,42e,,pp 11228 L0.0Quant Date : 8/29/2023 12:24 pm

Compound #22: Endrin Aldehyde



Original Peak Response = 9270540



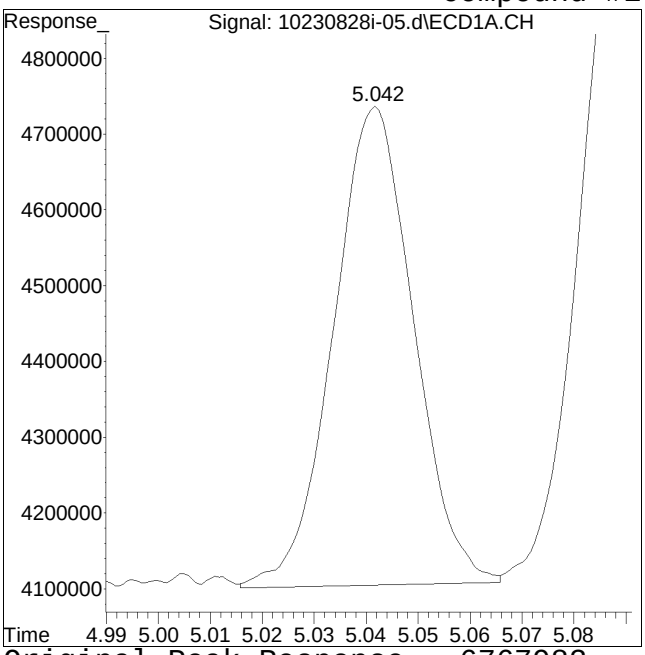
Manual Peak Response = 9429247 M4

M4 = Poor automated baseline construction.

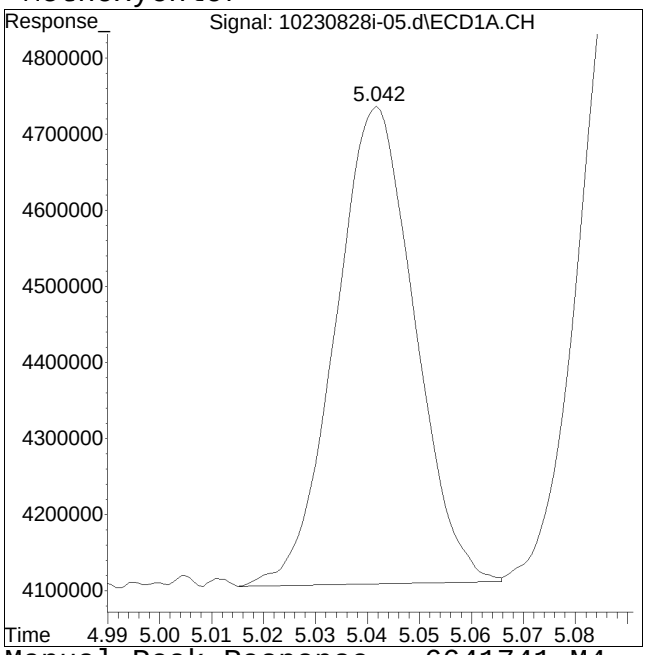
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-05.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:50 pm Instrument : Pest 10
Sample : il3pest,42e,,pp 11228 L0.0Quant Date : 8/29/2023 12:24 pm

Compound #23: Methoxychlor



Original Peak Response = 6767983



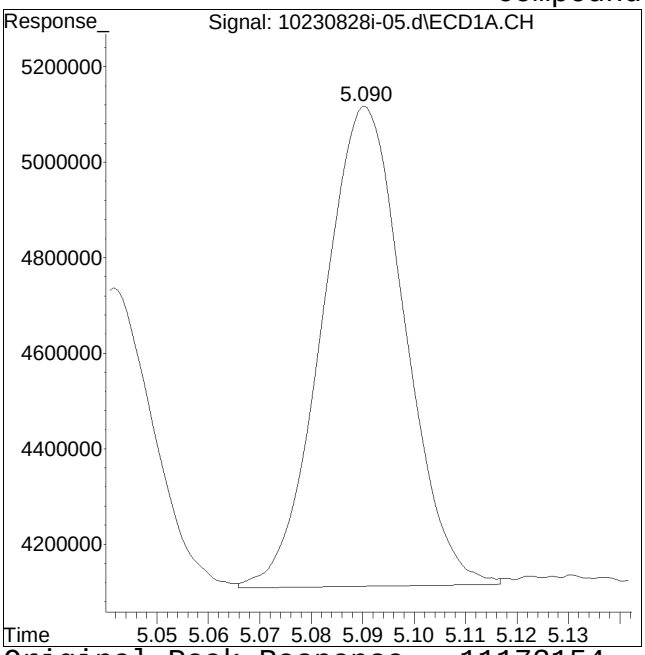
Manual Peak Response = 6641741 M4

M4 = Poor automated baseline construction.

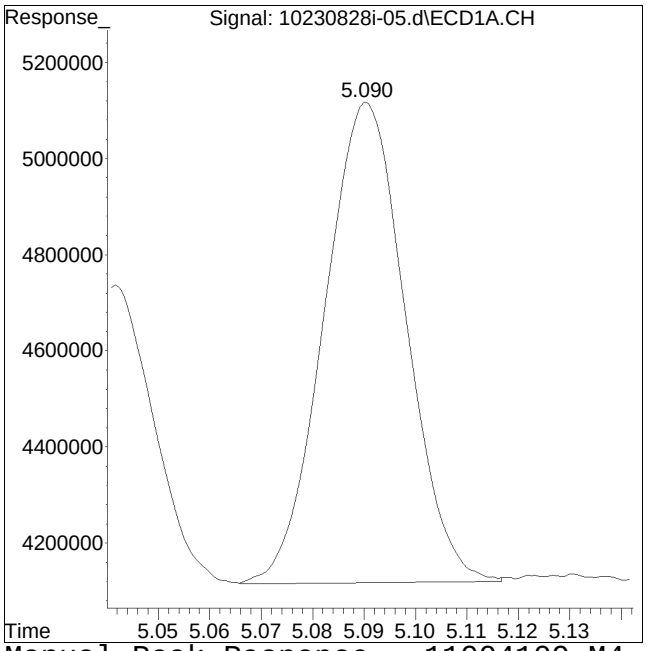
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-05.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 12:50 pm Instrument : Pest 10
Sample : il3pest,42e,,pp 11228 L0.0Quant Date : 8/29/2023 12:24 pm

Compound #24: Mirex



Original Peak Response = 11173154



Manual Peak Response = 11004109 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-06.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:01 pm
Operator : PEST10:akm
Sample : il4pest,42e,,pp 11227 L0.003
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:23:55 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:20:58 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.280	1.349	131.8E6	152.5E6	25.000	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.614	1.819	16823671	17514055	3.289	2.992
	Spiked Amount 50.000	Range 30 - 150		Recovery =		6.58%#	5.98%#
27) s	Decachlorobi	6.238	6.892	15712906	17767740	3.470	3.295
	Spiked Amount 50.000	Range 30 - 150		Recovery =		6.94%#	6.59%#
	Target Compounds						
3) t	Hexachlorobe	1.822	2.135	18612392	20174474	3.412M3	3.159
4) t	alpha-BHC	1.920	2.229	20898852	22762908	2.879	2.598
5) t	gamma-BHC (l	2.117	2.511	20257860	21809560	3.005M3	2.697
6) t	beta-BHC	2.174	2.576	10383474	11136572	3.468	3.128
7) t	delta-BHC	2.299	2.839	20212723	21848816	2.935	2.654
8) t	Heptachlor	2.455	2.902	20819380	23076628	3.223	2.900M4
9) t	Aldrin	2.691	3.218	18336258	20703787	3.061	2.724
10) t	Alachlor	2.813	3.104	4316801	3838575	3.627	3.338
11) t	Chlorpyrifos	2.902	3.455	12009811	12964159	3.873	3.504
12) t	Heptachlor E	3.227	3.829	18916449	21870827	3.298M4	3.047
13) t	gamma-Chlord	3.348	4.047	19163881	26031415	3.500M4	3.673M4
14) t	alpha-Chlord	3.480	4.220	21865983	21158801	3.602M4	2.861
15) t	4,4'-DDE	3.575	4.423	17175177	19338969	3.038M4	2.674
16) t	Endosulfan I	3.615	4.282	17901517	19561943	3.288M4	2.903
17) t	Dieldrin	3.871	4.578	17501277	19093049	3.115	2.744
18) t	Endrin	4.125	4.880	18299728	21559273	3.146	2.954
19) t	4,4'-DDD	4.241	5.006	14077168	15482119	3.058	2.676
20) t	Endosulfan I	4.374	5.081	16896362	17621606	3.404	2.946
21) t	4,4'-DDT	4.541	5.286	15032120	17747366	2.926M4	2.719
22) t	Endrin Aldeh	4.802	5.381	13801127	14502661	3.224	2.849

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-06.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:01 pm
Operator : PEST10:akm
Sample : il4pest,42e,,pp 11227 L0.003
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:23:55 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:20:58 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
23) t	Methoxychlor	5.040	5.857	9748395	10672428	3.497	3.128
24) t	Mirex	5.089	5.989	16029837	17419745	3.622	3.282
25) t	Endosulfan S	5.201	5.611	16518626	17175185	3.346	2.968
26) t	Endrin Keton	5.430	6.024	17730686	19339606	3.244	2.975M4
29) l1	chlordane-1	0.000	0.000	0	0	N.D.	N.D.
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

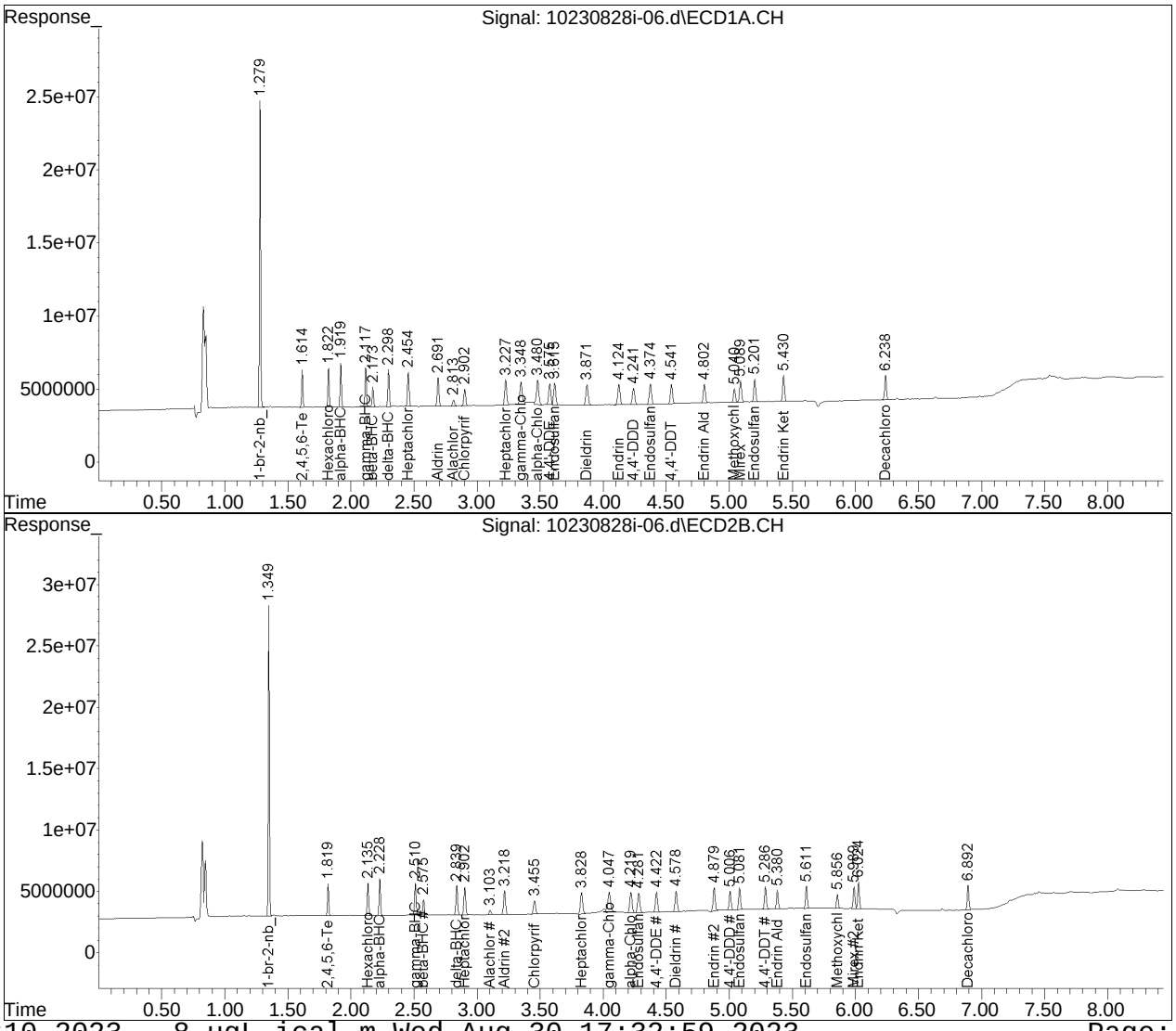
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-06.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:01 pm
Operator : PEST10:akm
Sample : il4pest,42e,,pp 11227 L0.003
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 6 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:23:55 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:20:58 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

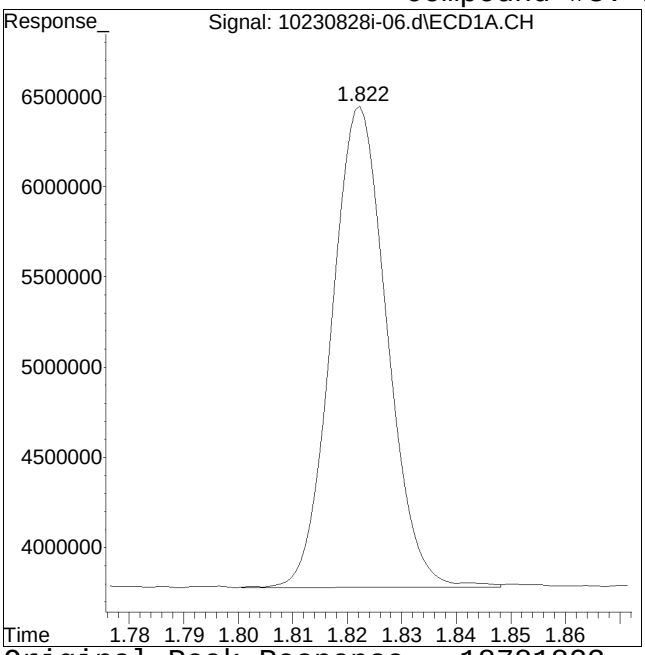
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

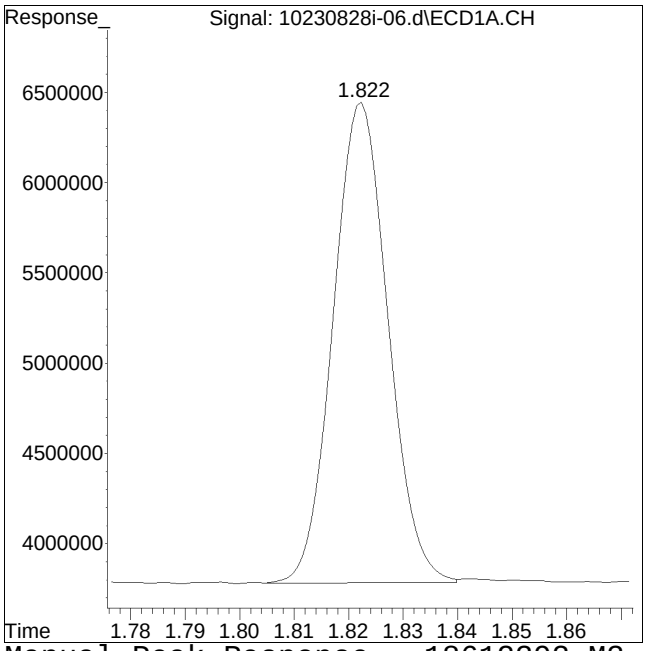


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-06.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:01 pm Instrument : Pest 10
Sample : il4pest,42e,,pp 11227 L0.0Quant Date : 8/29/2023 12:21 pm

Compound #3: Hexachlorobenzene



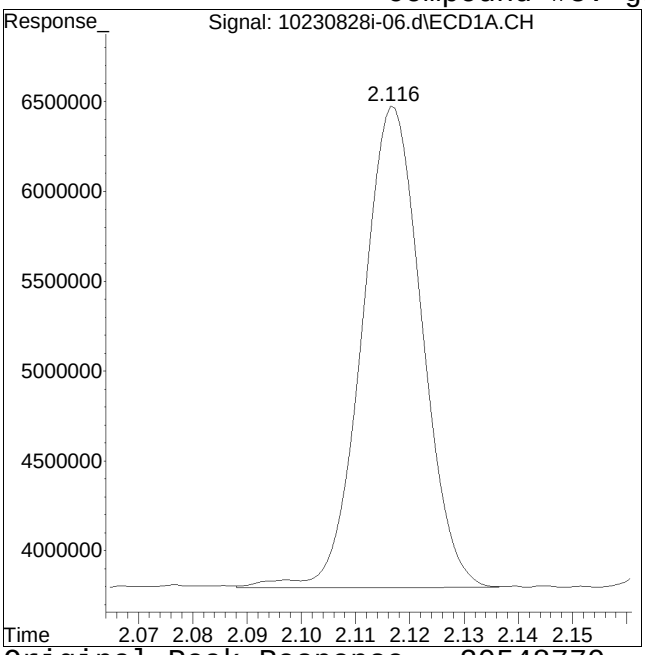


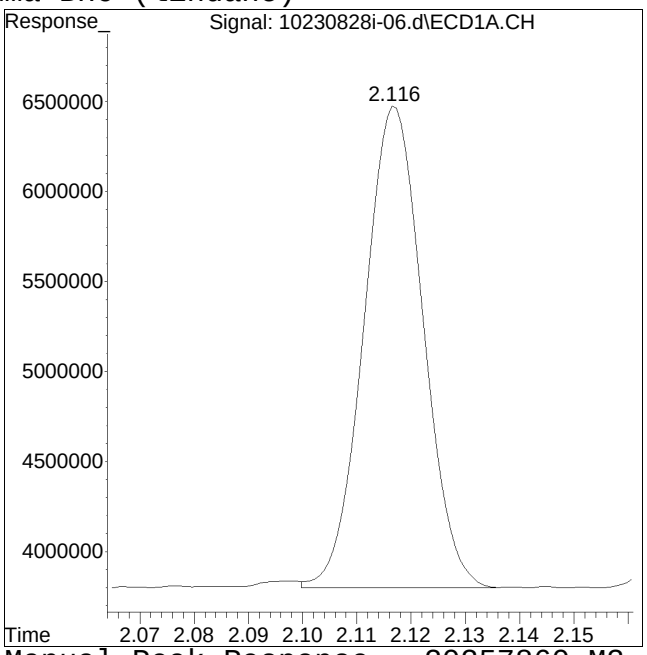
Original Peak Response = 18781823 Manual Peak Response = 18612392 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-06.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:01 pm Instrument : Pest 10
Sample : il4pest,42e,,pp 11227 L0.0Quant Date : 8/29/2023 12:21 pm

Compound #5: gamma-BHC (lindane)



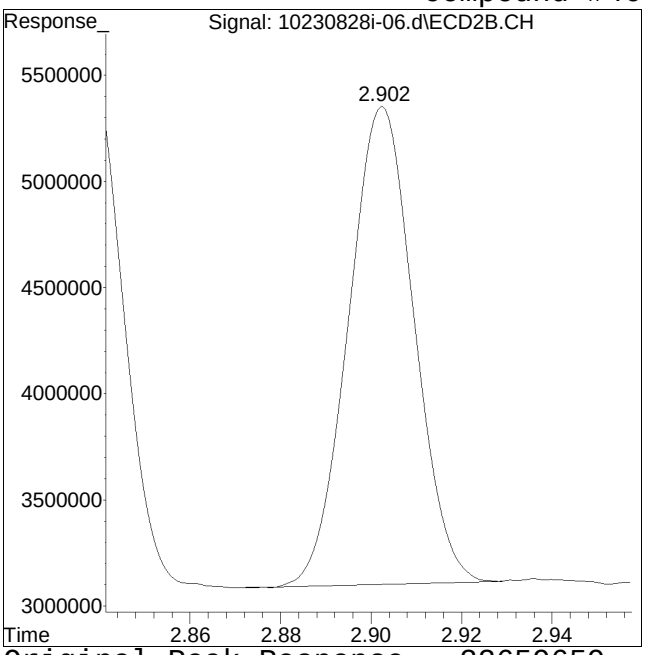


Original Peak Response = 20548770 Manual Peak Response = 20257860 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

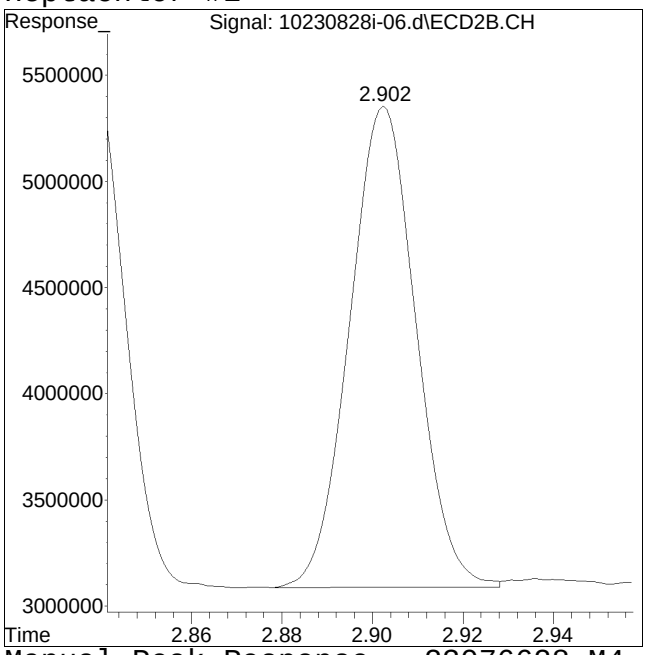
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-06.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:01 pm Instrument : Pest 10
Sample : il4pest,42e,,pp 11227 L0.0Quant Date : 8/29/2023 12:21 pm

Compound #46: Heptachlor #2



Original Peak Response = 22659659



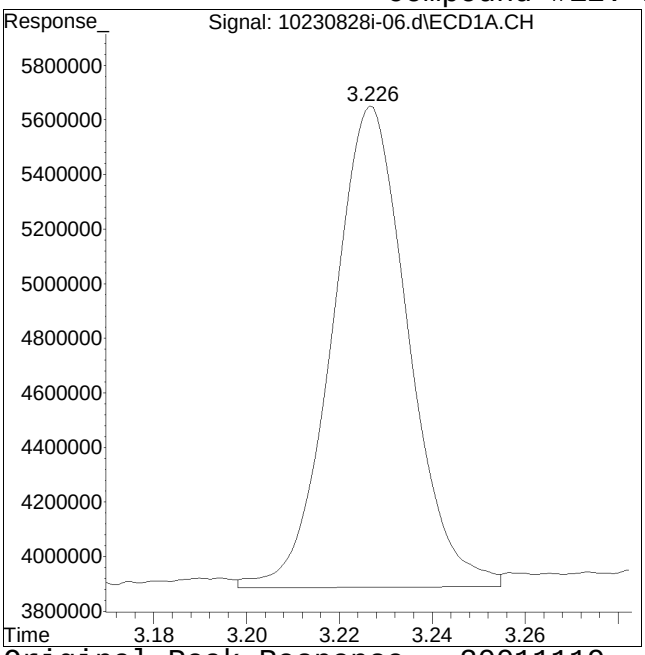
Manual Peak Response = 23076628 M4

M4 = Poor automated baseline construction.

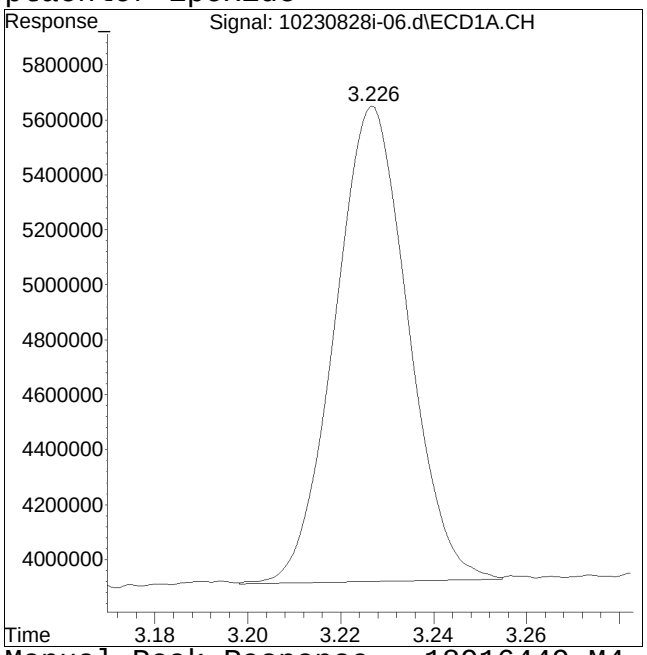
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-06.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:01 pm Instrument : Pest 10
Sample : il4pest,42e,,pp 11227 L0.0Quant Date : 8/29/2023 12:21 pm

Compound #12: Heptachlor Epoxide



Original Peak Response = 20011119

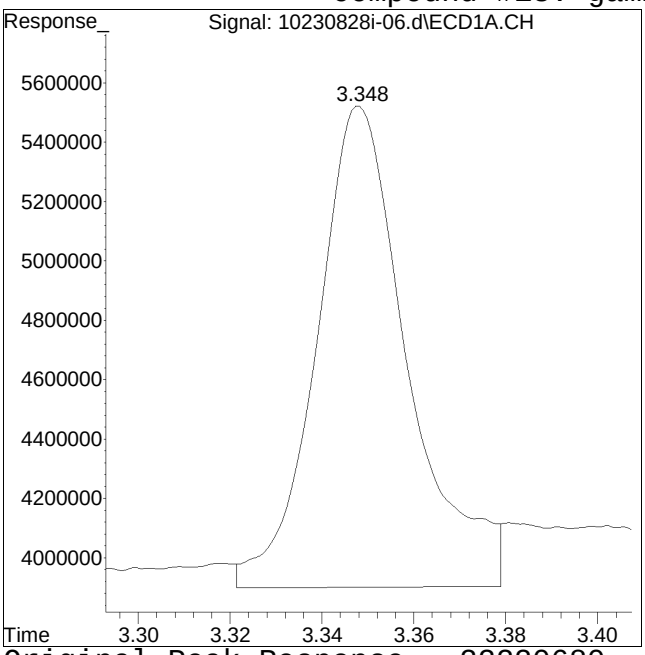


Manual Peak Response = 18916449 M4
M4 = Poor automated baseline construction.

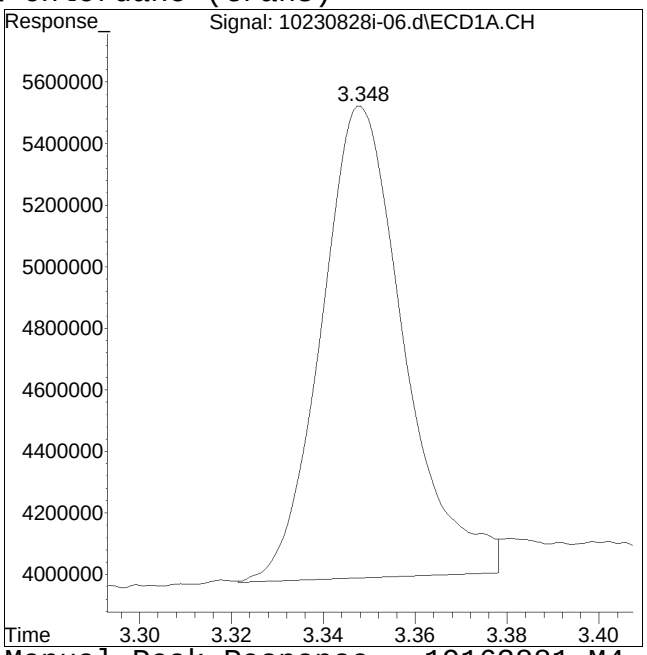
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-06.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:01 pm Instrument : Pest 10
Sample : il4pest,42e,,pp 11227 L0.0Quant Date : 8/29/2023 12:21 pm

Compound #13: gamma-Chlordane (trans)



Original Peak Response = 22220680

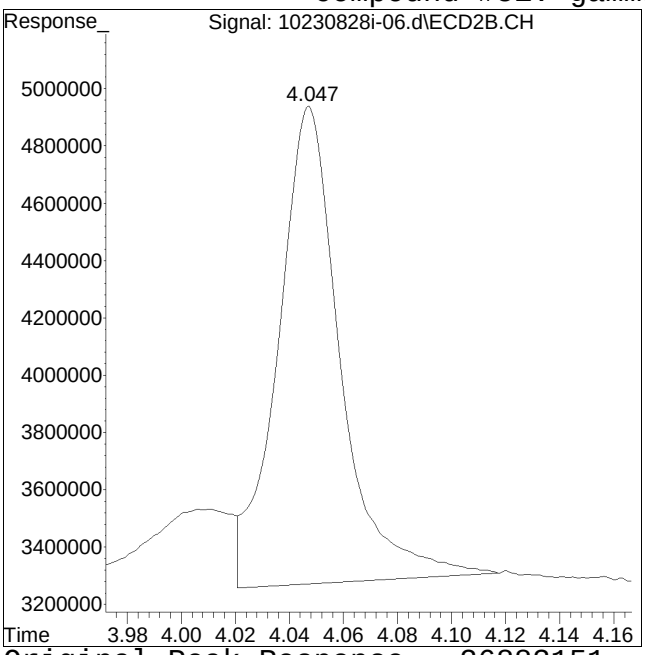


Manual Peak Response = 19163881 M4
M4 = Poor automated baseline construction.

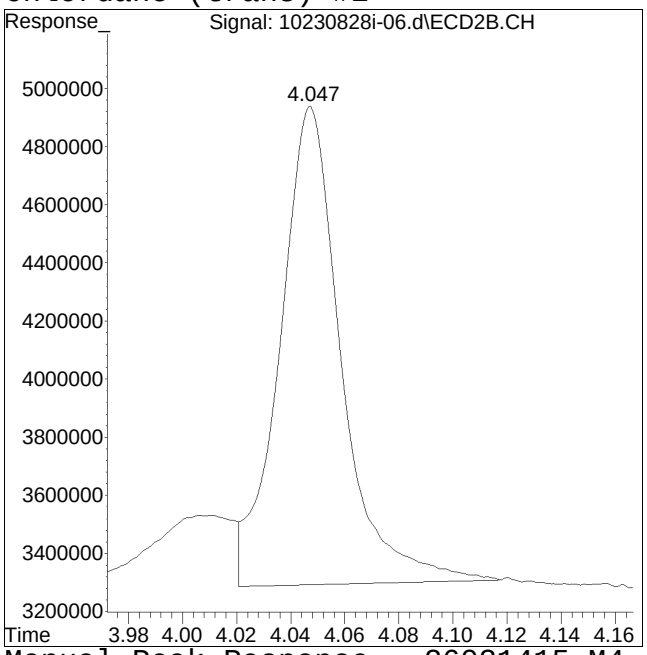
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828Q
Data File : 10230828i-06.d
Date Inj'd : 8/28/2023 1:01 pm
Sample : il4pest,42e,,pp 11227 L0.0
Method : pest10_2023_08_28_ugL_ic
Operator : PEST10:akm
Instrument : Pest 10
Quant Date : 8/29/2023 12:21 pm

Compound #51: gamma-Chlordane (trans) #2



Original Peak Response = 26883151



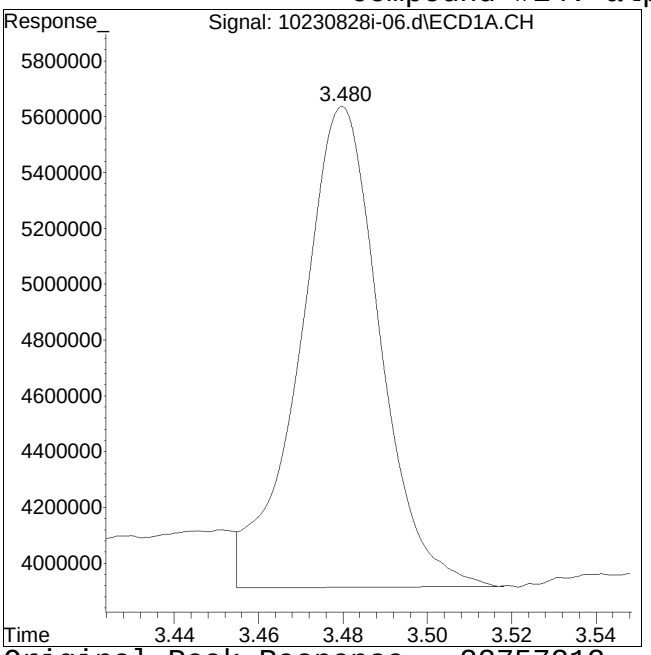
Manual Peak Response = 26031415 M4

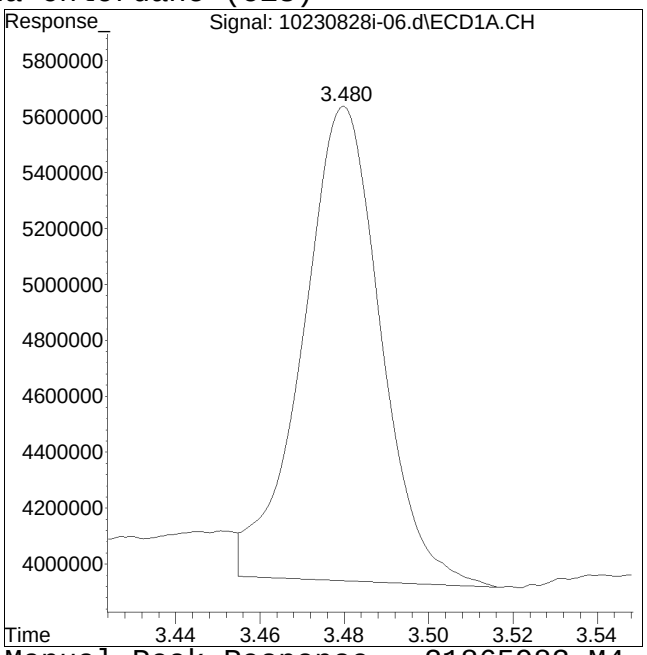
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-06.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:01 pm Instrument : Pest 10
Sample : il4pest,42e,,pp 11227 L0.0Quant Date : 8/29/2023 12:21 pm

Compound #14: alpha-Chlordane (cis)



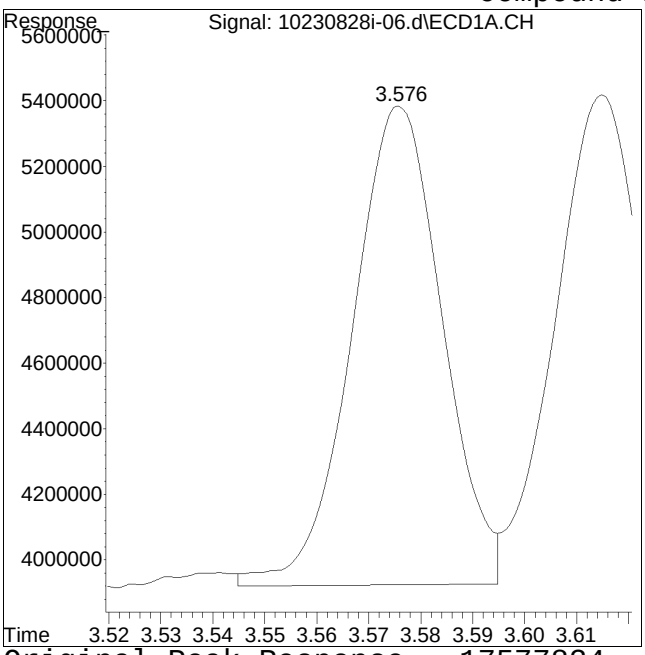


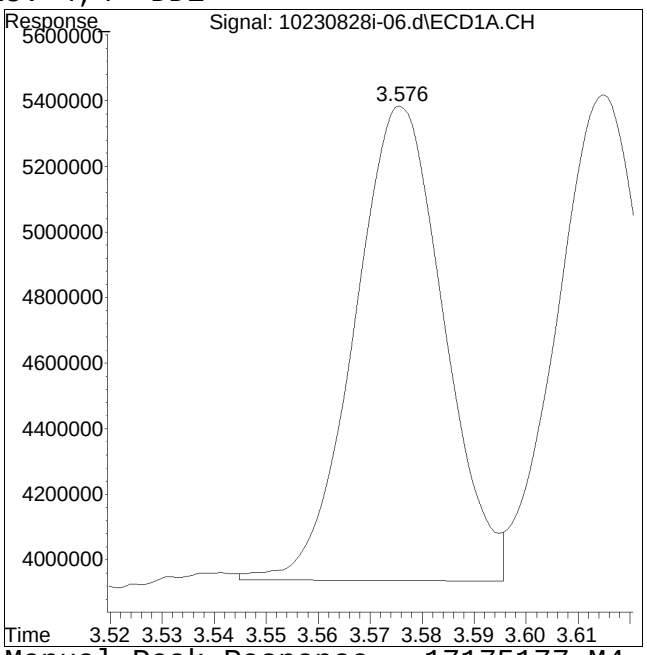
Original Peak Response = 22757212 Manual Peak Response = 21865983 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-06.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:01 pm Instrument : Pest 10
Sample : il4pest,42e,,pp 11227 L0.0Quant Date : 8/29/2023 12:21 pm

Compound #15: 4,4'-DDE



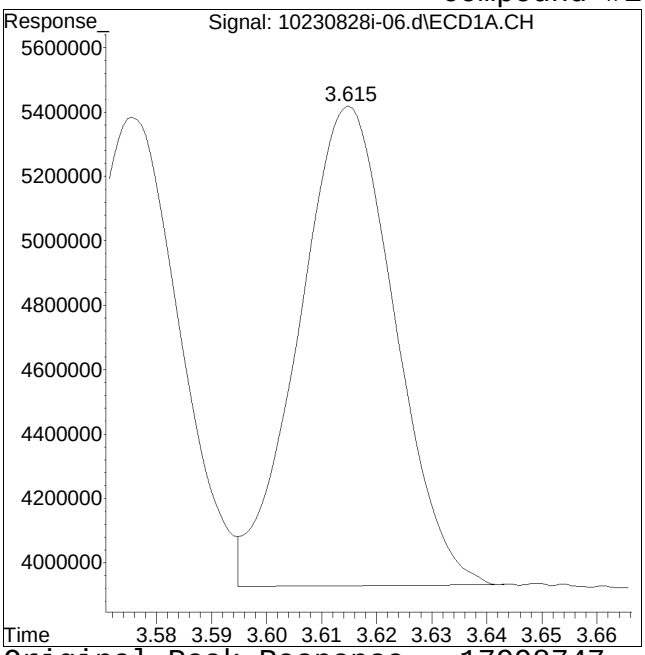


Original Peak Response = 17577834 Manual Peak Response = 17175177 M4
M4 = Poor automated baseline construction.

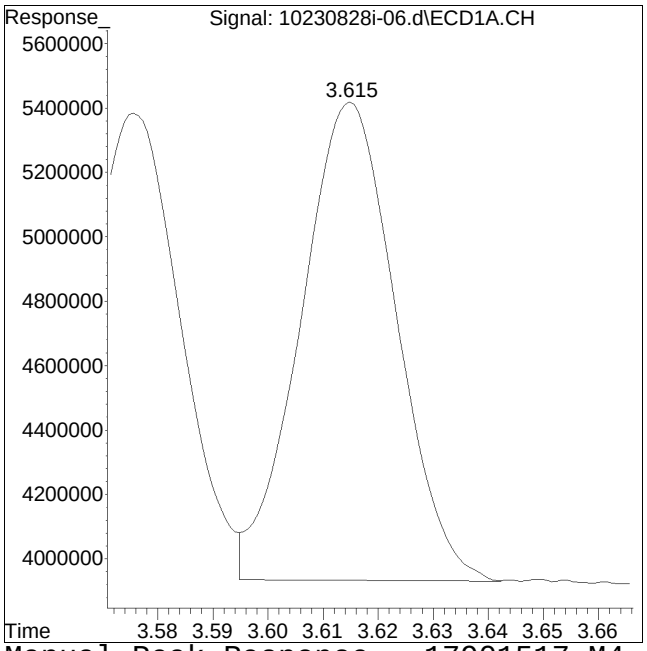
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-06.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:01 pm Instrument : Pest 10
Sample : il4pest,42e,,pp 11227 L0.0Quant Date : 8/29/2023 12:21 pm

Compound #16: Endosulfan I



Original Peak Response = 17998747



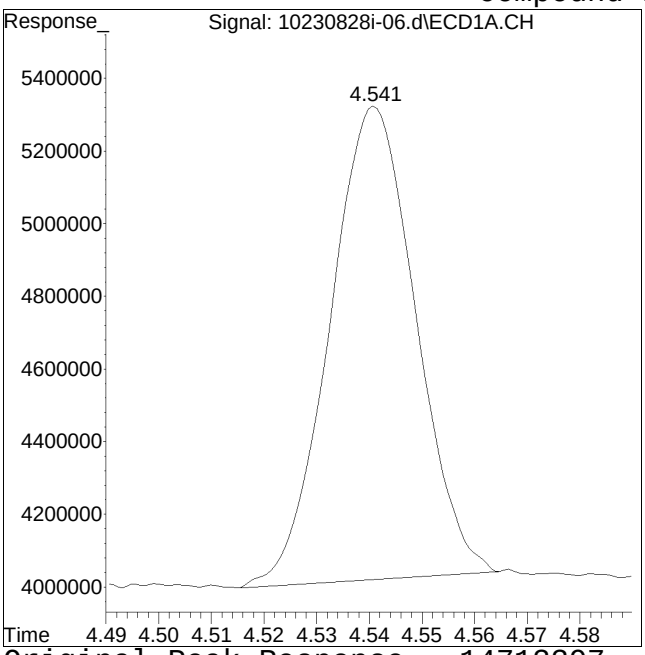
Manual Peak Response = 17901517 M4

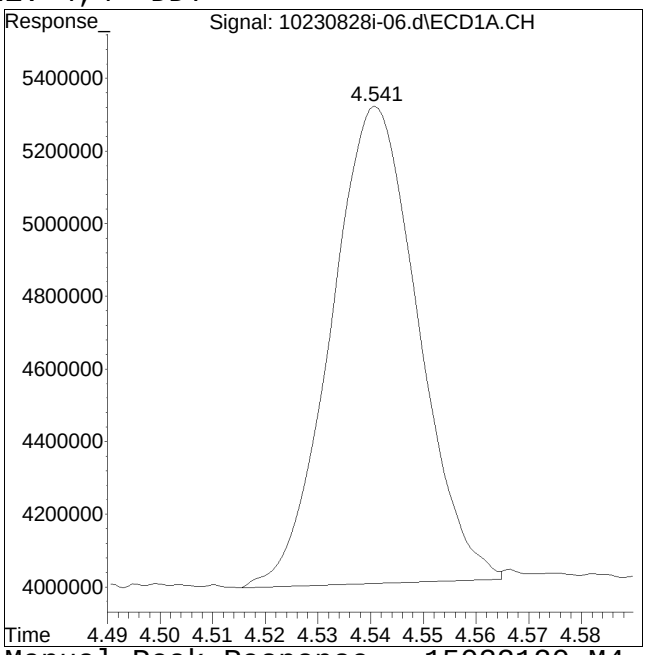
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-06.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:01 pm Instrument : Pest 10
Sample : il4pest,42e,,pp 11227 L0.0Quant Date : 8/29/2023 12:21 pm

Compound #21: 4,4'-DDT



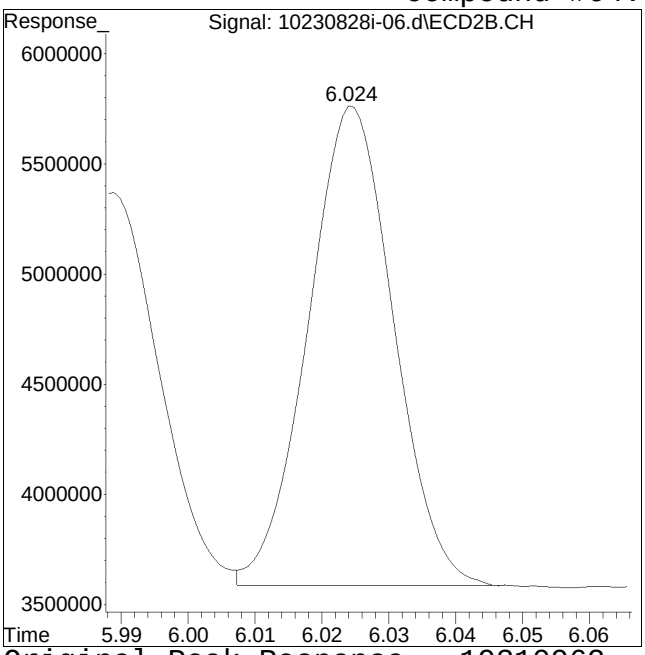


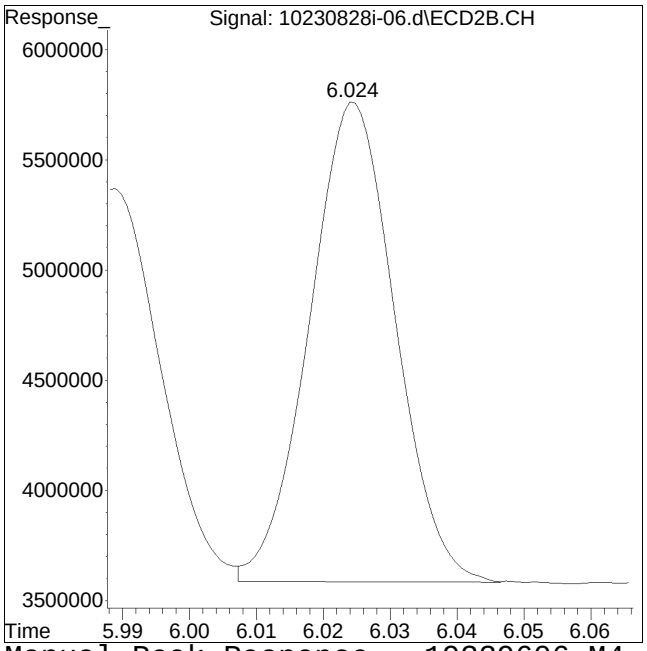
Original Peak Response = 14713397 Manual Peak Response = 15032120 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-06.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:01 pm Instrument : Pest 10
Sample : il4pest,42e,,pp 11227 L0.0Quant Date : 8/29/2023 12:21 pm

Compound #64: Endrin Ketone #2





Original Peak Response = 19310962 Manual Peak Response = 19339606 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-07.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:12 pm
Operator : PEST10:akm
Sample : il5pest,42e,,pp 11226 L0.004
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:20:22 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:18:09 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.280	1.349	128.6E6	148.6E6	25.000	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.615	1.819	21491983	22624946	4.372	3.958
	Spiked Amount 50.000	Range 30 - 150		Recovery =		8.74%#	7.92%#
27) s	Decachlorobi	6.238	6.892	20216036	22941716	4.709	4.446
	Spiked Amount 50.000	Range 30 - 150		Recovery =		9.42%#	8.89%#
	Target Compounds						
3) t	Hexachlorobe	1.822	2.135	24333910	26572832	4.704M4	4.326
4) t	alpha-BHC	1.920	2.229	26943008	29449575	3.765	3.355
5) t	gamma-BHC (l	2.118	2.511	25989970	28350405	3.940	3.525
6) t	beta-BHC	2.174	2.576	13145059	14421158	4.613	4.187
7) t	delta-BHC	2.299	2.839	26431277	28173165	3.918	3.426
8) t	Heptachlor	2.455	2.902	26716676	29698532	4.288	3.796M4
9) t	Aldrin	2.692	3.218	23402785	26960376	4.003	3.574
10) t	Alachlor	2.814	3.104	5312945	5140475	4.709	4.723
11) t	Chlorpyrifos	2.903	3.455	15038793	16247074	5.222	4.621
12) t	Heptachlor E	3.227	3.829	23876917	27283683	4.322	3.880
13) t	gamma-Chlord	3.348	4.047	25268077	31524675	4.907M4	4.695M4
14) t	alpha-Chlord	3.480	4.220	27711339	27358776	4.841M4	3.756
15) t	4,4'-DDE	3.576	4.422	22069438	24849375	3.999M4	3.443M4
16) t	Endosulfan I	3.616	4.282	23316945	25258139	4.474	3.815
17) t	Dieldrin	3.872	4.578	22712190	24611666	4.171	3.562
18) t	Endrin	4.124	4.880	23433736	28287949	4.154M4	3.971
19) t	4,4'-DDD	4.241	5.006	18201788	20008543	4.061	3.469M4
20) t	Endosulfan I	4.375	5.081	21464080	22789088	4.527	3.891M4
21) t	4,4'-DDT	4.541	5.286	19745305	22806347	3.926	3.511

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-07.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:12 pm
Operator : PEST10:akm
Sample : il5pest,42e,,pp 11226 L0.004
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:20:22 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:18:09 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
22) t	Endrin Aldeh	4.802	5.381	17555276	18989790	4.245	3.794
23) t	Methoxychlor	5.040	5.856	12388964	13726670	4.682	4.154
24) t	Mirex	5.089	5.989	20315006	22204766	4.874	4.355
25) t	Endosulfan S	5.201	5.612	20951321	22100650	4.424	3.902
26) t	Endrin Keton	5.430	6.025	22473977	24785902	4.258	3.894
29) l1	chlordane-1	0.000	0.000	0	0	N.D.	N.D.
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

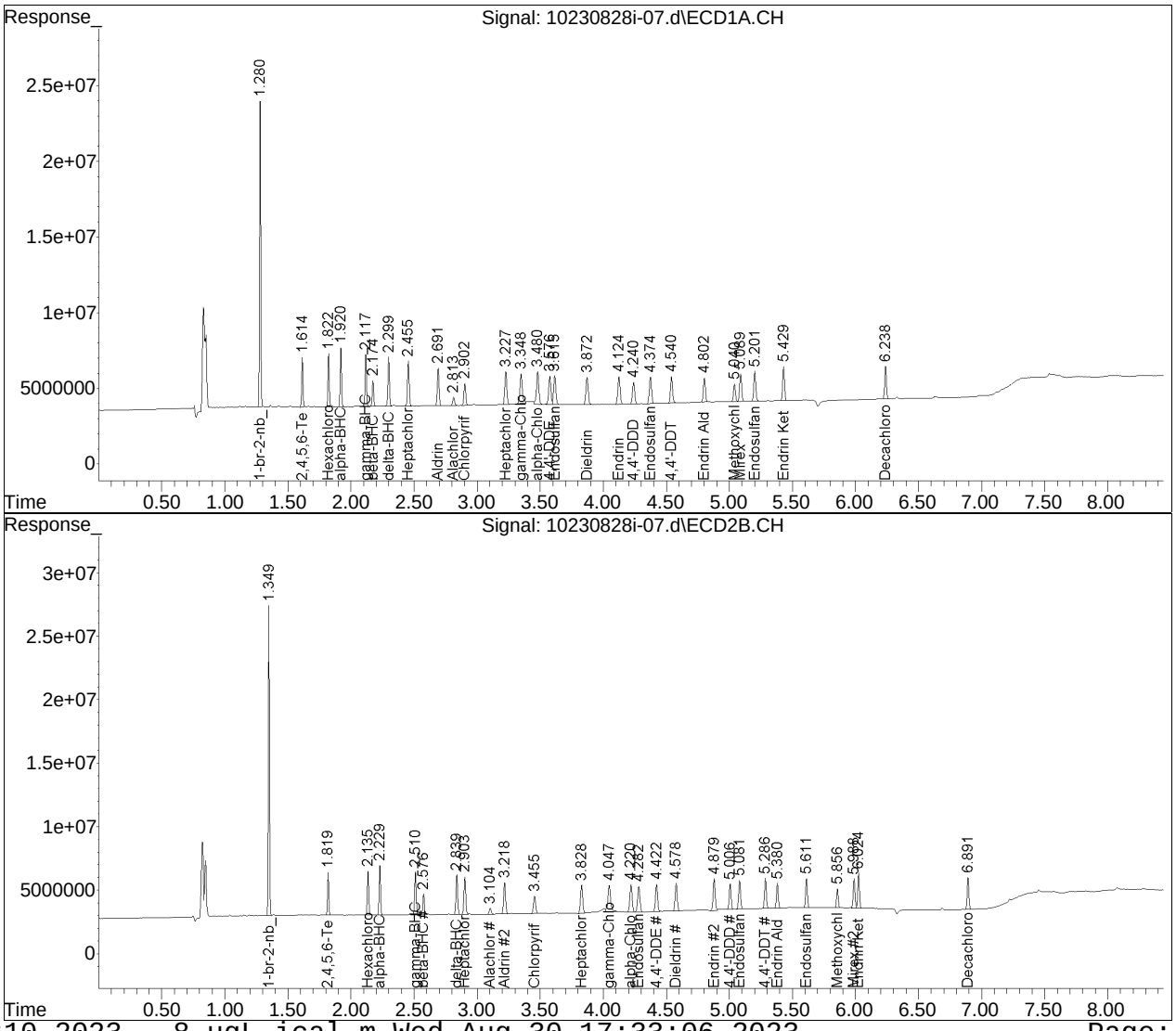
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-07.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:12 pm
Operator : PEST10:akm
Sample : il5pest,42e,,pp 11226 L0.004
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:20:22 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:18:09 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

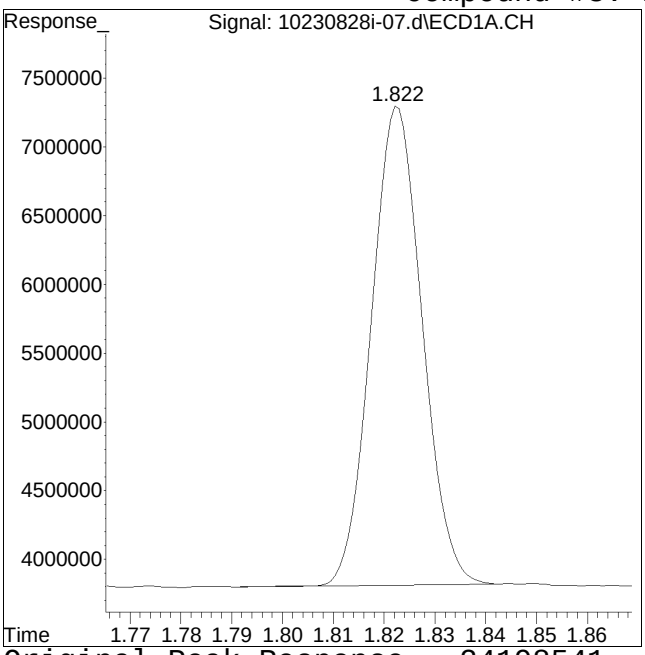
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



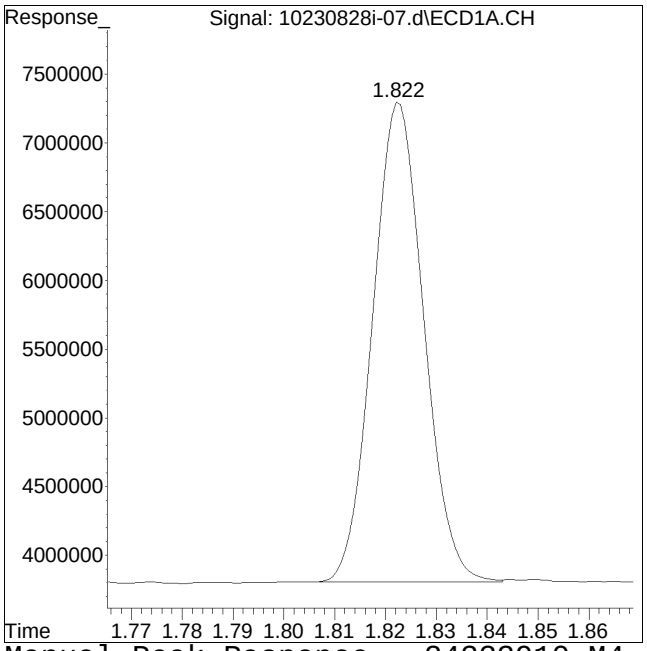
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-07.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:12 pm Instrument : Pest 10
Sample : il5pest,42e,,pp 11226 L0.0Quant Date : 8/29/2023 12:18 pm

Compound #3: Hexachlorobenzene



Original Peak Response = 24198541



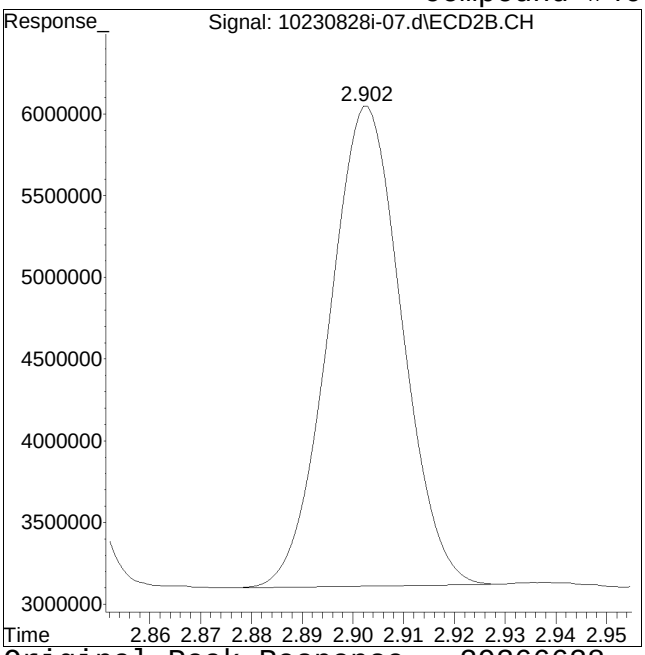
Manual Peak Response = 24333910 M4

M4 = Poor automated baseline construction.

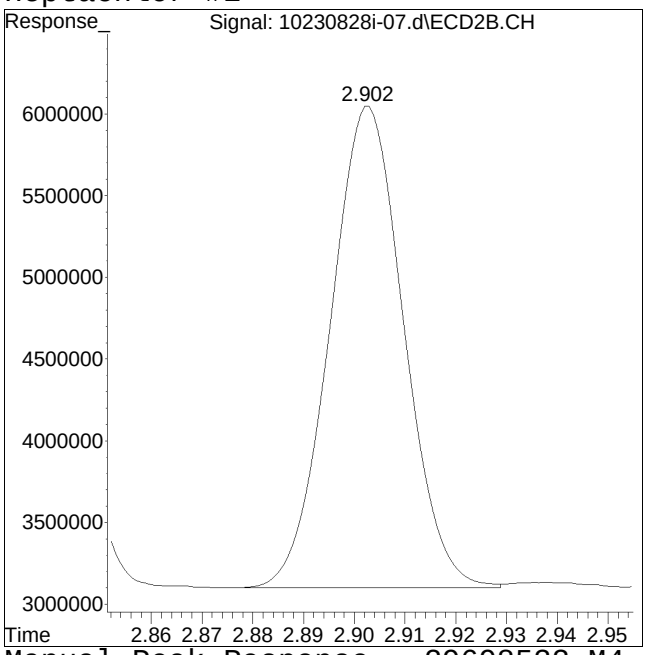
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-07.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:12 pm Instrument : Pest 10
Sample : il5pest,42e,,pp 11226 L0.0Quant Date : 8/29/2023 12:18 pm

Compound #46: Heptachlor #2



Original Peak Response = 29366638



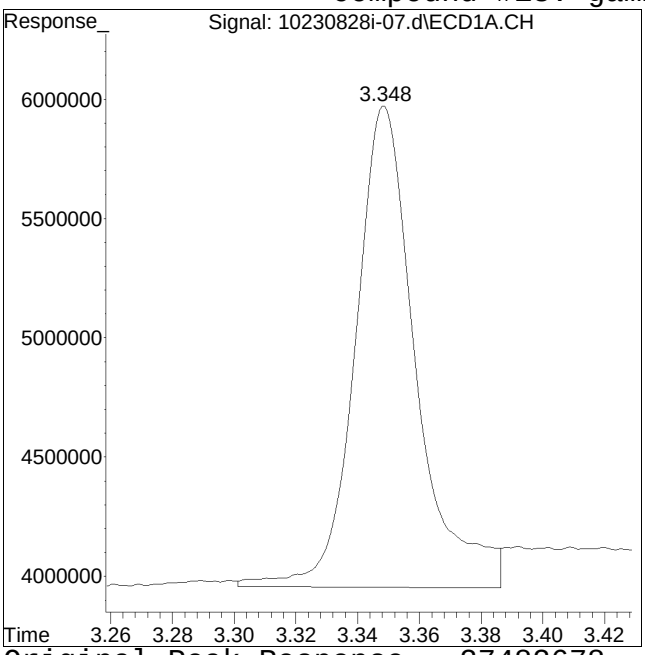
Manual Peak Response = 29698532 M4

M4 = Poor automated baseline construction.

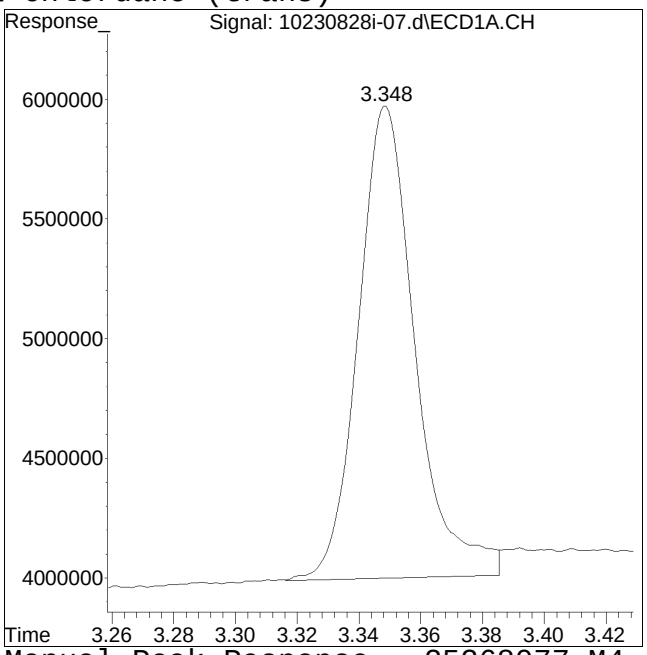
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-07.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:12 pm Instrument : Pest 10
Sample : il5pest,42e,,pp 11226 L0.0Quant Date : 8/29/2023 12:18 pm

Compound #13: gamma-Chlordane (trans)



Original Peak Response = 27482678



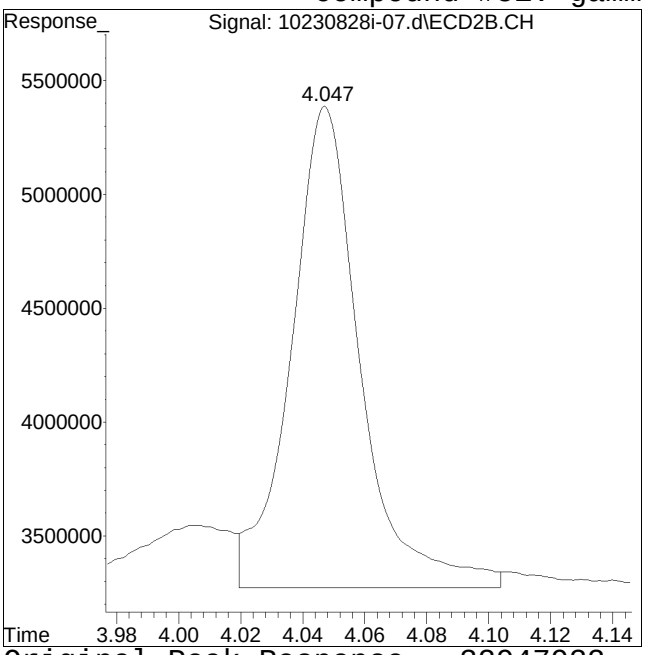
Manual Peak Response = 25268077 M4

M4 = Poor automated baseline construction.

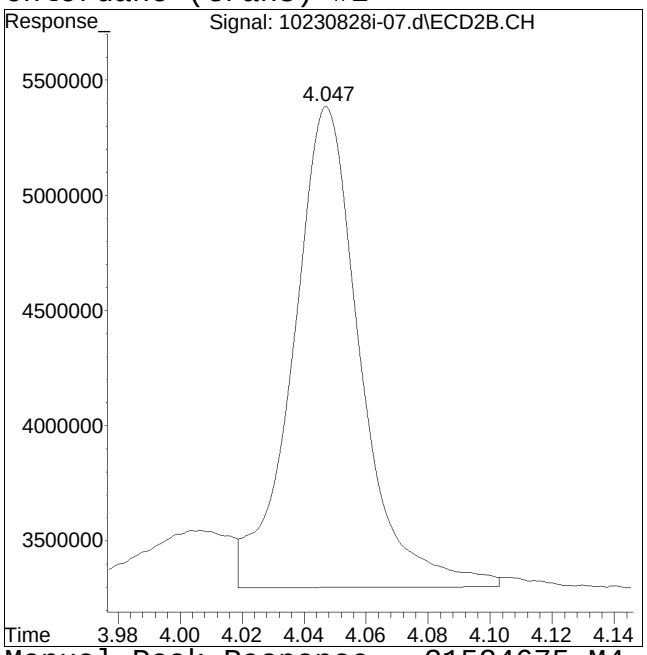
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-07.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:12 pm Instrument : Pest 10
Sample : il5pest,42e,,pp 11226 L0.0Quant Date : 8/29/2023 12:18 pm

Compound #51: gamma-Chlordane (trans) #2



Original Peak Response = 32947932



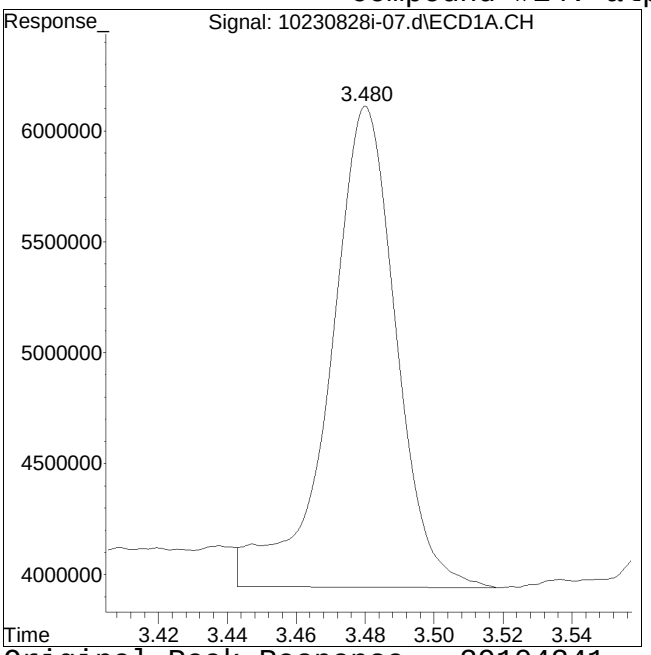
Manual Peak Response = 31524675 M4

M4 = Poor automated baseline construction.

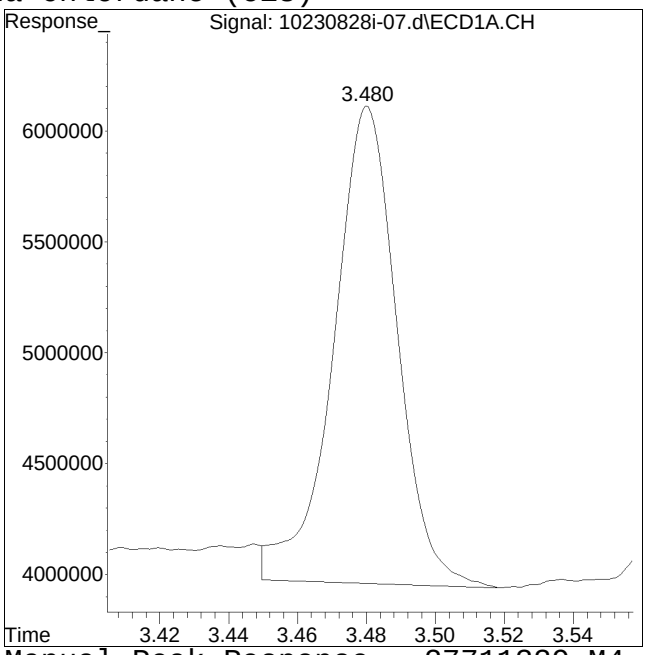
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-07.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:12 pm Instrument : Pest 10
Sample : il5pest,42e,,pp 11226 L0.0Quant Date : 8/29/2023 12:18 pm

Compound #14: alpha-Chlordane (cis)



Original Peak Response = 29104241



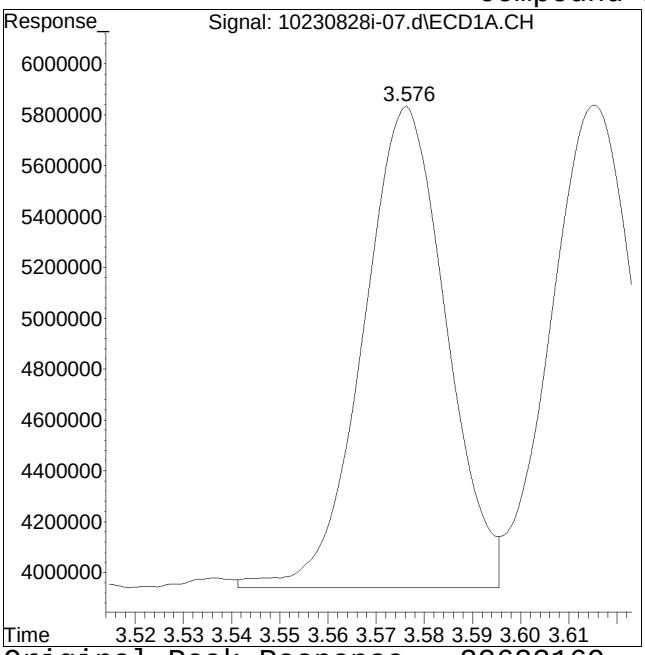
Manual Peak Response = 27711339 M4

M4 = Poor automated baseline construction.

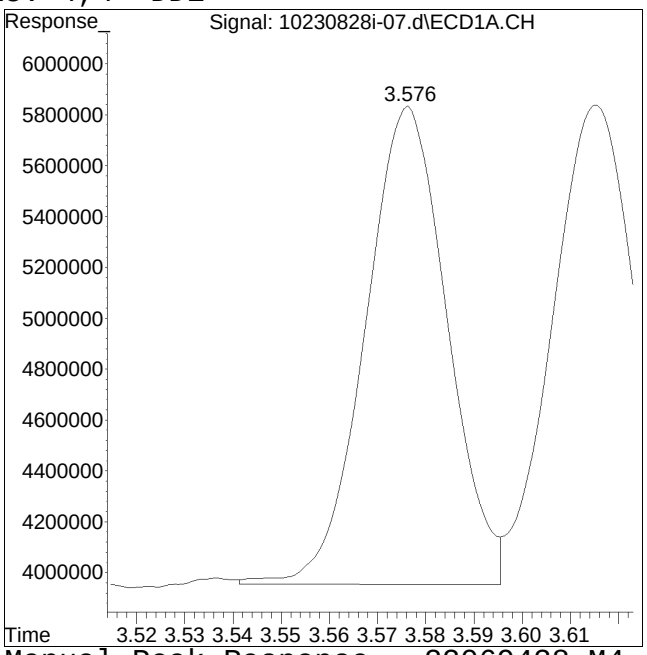
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-07.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:12 pm Instrument : Pest 10
Sample : il5pest,42e,,pp 11226 L0.0Quant Date : 8/29/2023 12:18 pm

Compound #15: 4,4'-DDE



Original Peak Response = 22622169



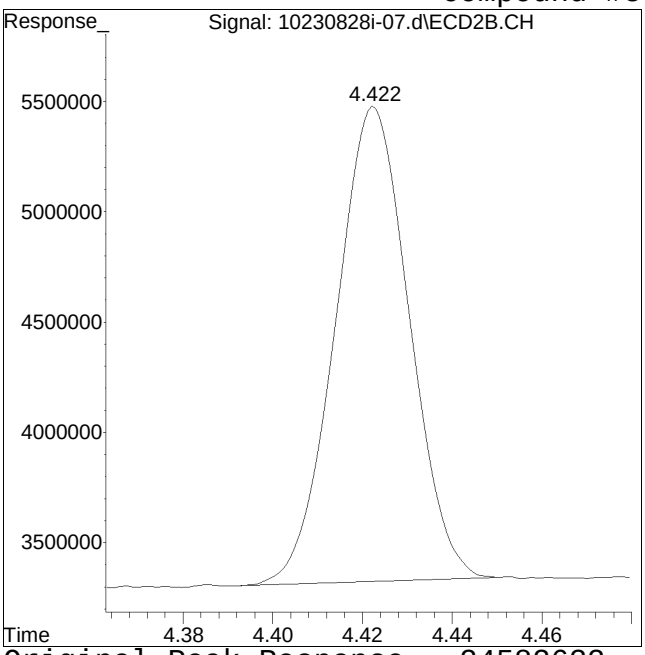
Manual Peak Response = 22069438 M4

M4 = Poor automated baseline construction.

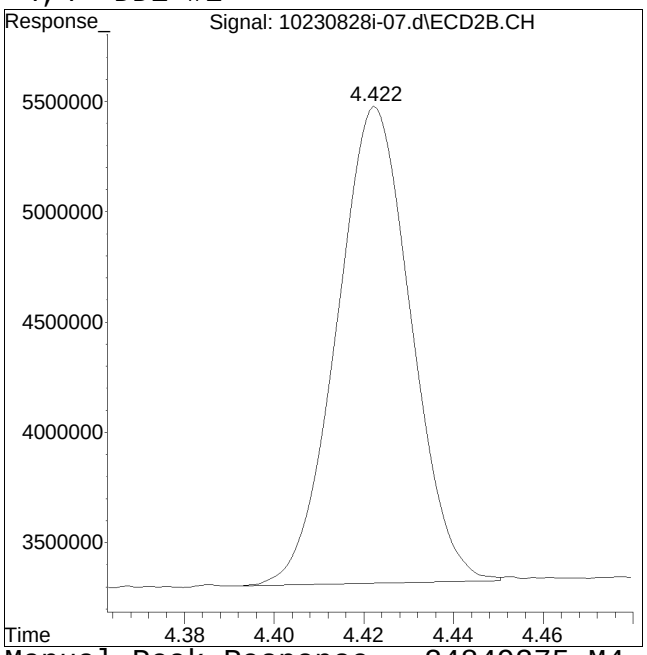
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-07.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:12 pm Instrument : Pest 10
Sample : il5pest,42e,,pp 11226 L0.0Quant Date : 8/29/2023 12:18 pm

Compound #53: 4,4'-DDE #2



Original Peak Response = 24582632



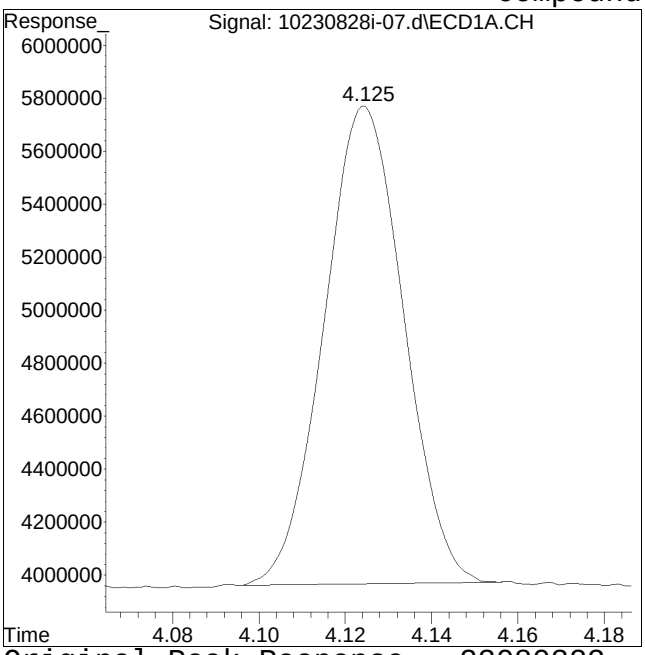
Manual Peak Response = 24849375 M4

M4 = Poor automated baseline construction.

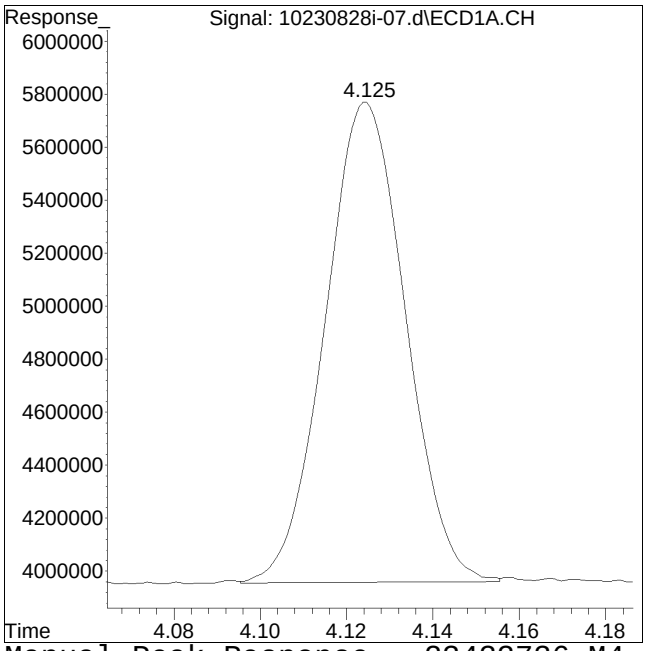
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-07.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:12 pm Instrument : Pest 10
Sample : il5pest,42e,,pp 11226 L0.0Quant Date : 8/29/2023 12:18 pm

Compound #18: Endrin



Original Peak Response = 23080322



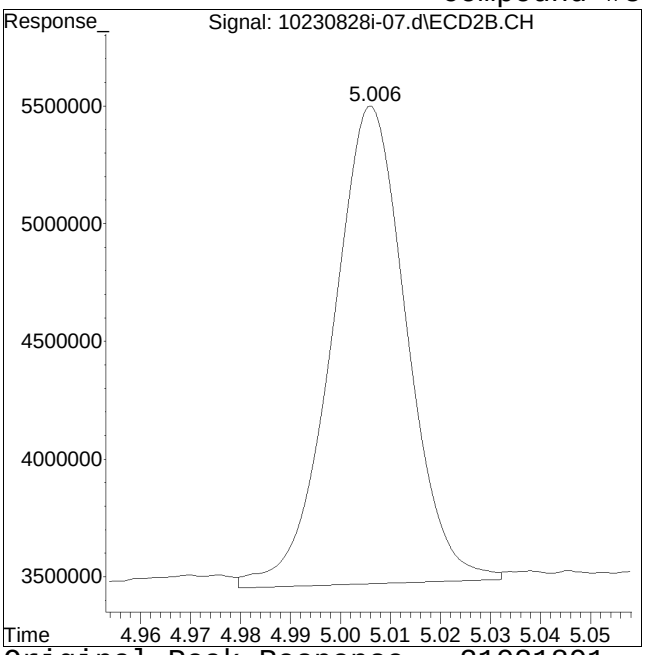
Manual Peak Response = 23433736 M4

M4 = Poor automated baseline construction.

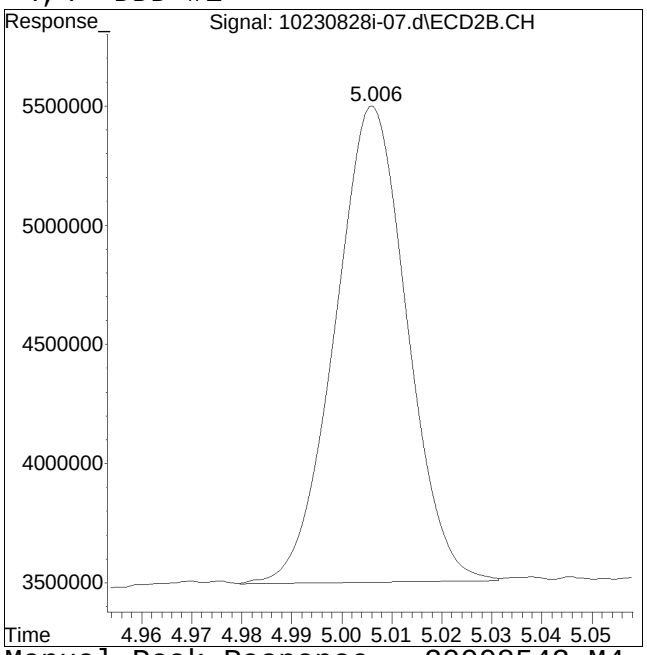
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-07.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:12 pm Instrument : Pest 10
Sample : il5pest,42e,,pp 11226 L0.0Quant Date : 8/29/2023 12:18 pm

Compound #57: 4,4'-DDD #2



Original Peak Response = 21021891



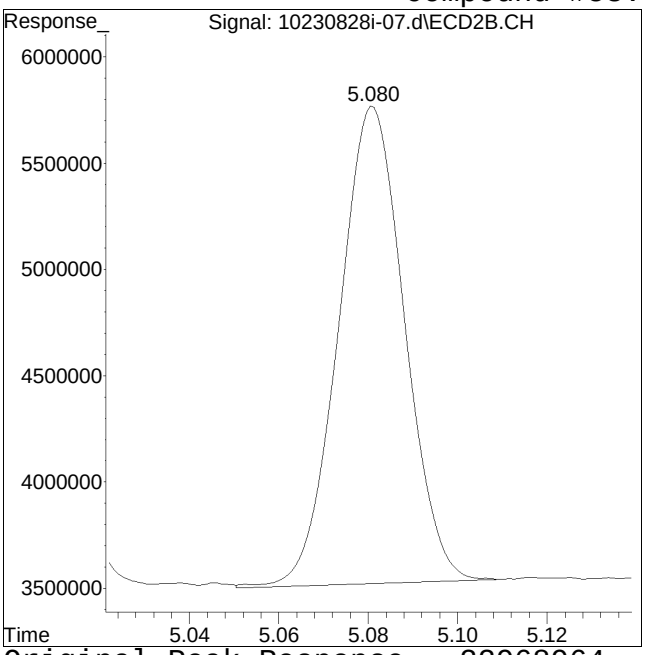
Manual Peak Response = 20008543 M4

M4 = Poor automated baseline construction.

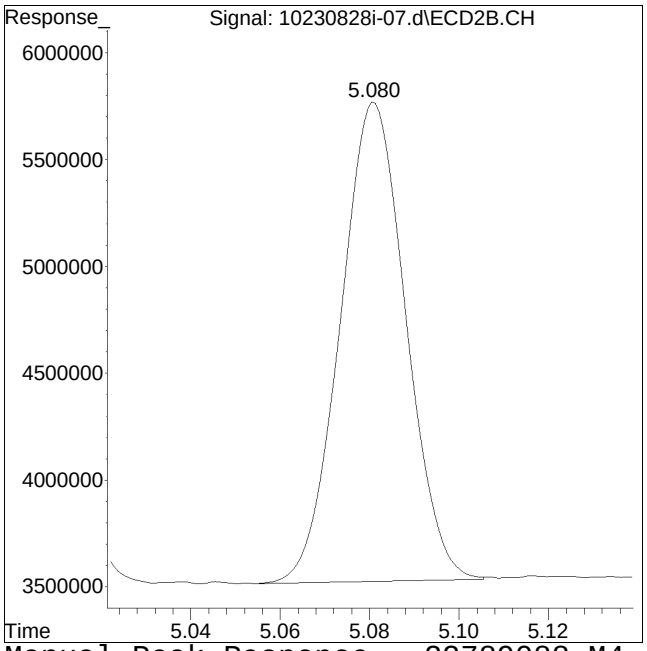
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-07.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:12 pm Instrument : Pest 10
Sample : il5pest,42e,,pp 11226 L0.0Quant Date : 8/29/2023 12:18 pm

Compound #58: Endosulfan II #2



Original Peak Response = 22968964



Manual Peak Response = 22789088 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-08.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:23 pm
Operator : PEST10:akm
Sample : il7pest,42e,,pp 11225 L0.01
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:17:58 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:13:59 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.279	1.348	127.4E6	147.0E6	25.000	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.614	1.818	50332908	54678082	10.420M3	9.592M4
	Spiked Amount 50.000	Range 30 - 150		Recovery =		20.84%#	19.18%#
27) s	Decachlorobi	6.239	6.893	45903645	53114973	11.007	10.514M4
	Spiked Amount 50.000	Range 30 - 150		Recovery =		22.01%#	21.03%#
	Target Compounds						
3) t	Hexachlorobe	1.823	2.135	54672109	60889745	10.845	10.026
4) t	alpha-BHC	1.920	2.229	66108287	75697458	9.169	8.449
5) t	gamma-BHC (l	2.118	2.511	62693354	70954632	9.494M3	8.685
6) t	beta-BHC	2.175	2.575	30634344	33804430	11.086	9.904M4
7) t	delta-BHC	2.300	2.839	62886169	70987487	9.271	8.460
8) t	Heptachlor	2.456	2.903	62750001	72515884	10.205	9.226
9) t	Aldrin	2.693	3.218	56179151	66734663	9.625	8.713
10) t	Alachlor	2.815	3.104	12957050	11783931	12.068	11.212
11) t	Chlorpyrifos	2.904	3.455	34389035	38418083	12.703	11.342M4
12) t	Heptachlor E	3.228	3.829	56391703	65788497	10.381M4	9.331
13) t	gamma-Chlord	3.350	4.048	54271698	64728254	10.808M4	9.685
14) t	alpha-Chlord	3.481	4.221	59639294	66830357	10.651M3	9.111
15) t	4,4'-DDE	3.578	4.423	51946443	62315569	9.382M4	8.460M4
16) t	Endosulfan I	3.617	4.282	53418247	61533953	10.434	9.258
17) t	Dieldrin	3.873	4.579	53206572	61530101	9.826M4	8.784
18) t	Endrin	4.127	4.881	55448603	66053492	9.898	9.229
19) t	4,4'-DDD	4.242	5.007	42992134	49886429	9.602	8.477
20) t	Endosulfan I	4.376	5.082	50109665	56594669	10.846	9.714M4
21) t	4,4'-DDT	4.542	5.287	48781949	57473522	9.737	8.716

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-08.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:23 pm
Operator : PEST10:akm
Sample : il7pest,42e,,pp 11225 L0.01
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:17:58 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:13:59 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
22) t	Endrin Aldeh	4.804	5.381	42178422	46848702	10.368	9.337
23) t	Methoxychlor	5.042	5.857	28539255	34048419	11.131	10.526M3
24) t	Mirex	5.090	5.989	46116739	52308017	11.501	10.469
25) t	Endosulfan S	5.203	5.612	48824655	53642175	10.511	9.473
26) t	Endrin Keton	5.431	6.025	53660774	63450213	10.326M4	10.098
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

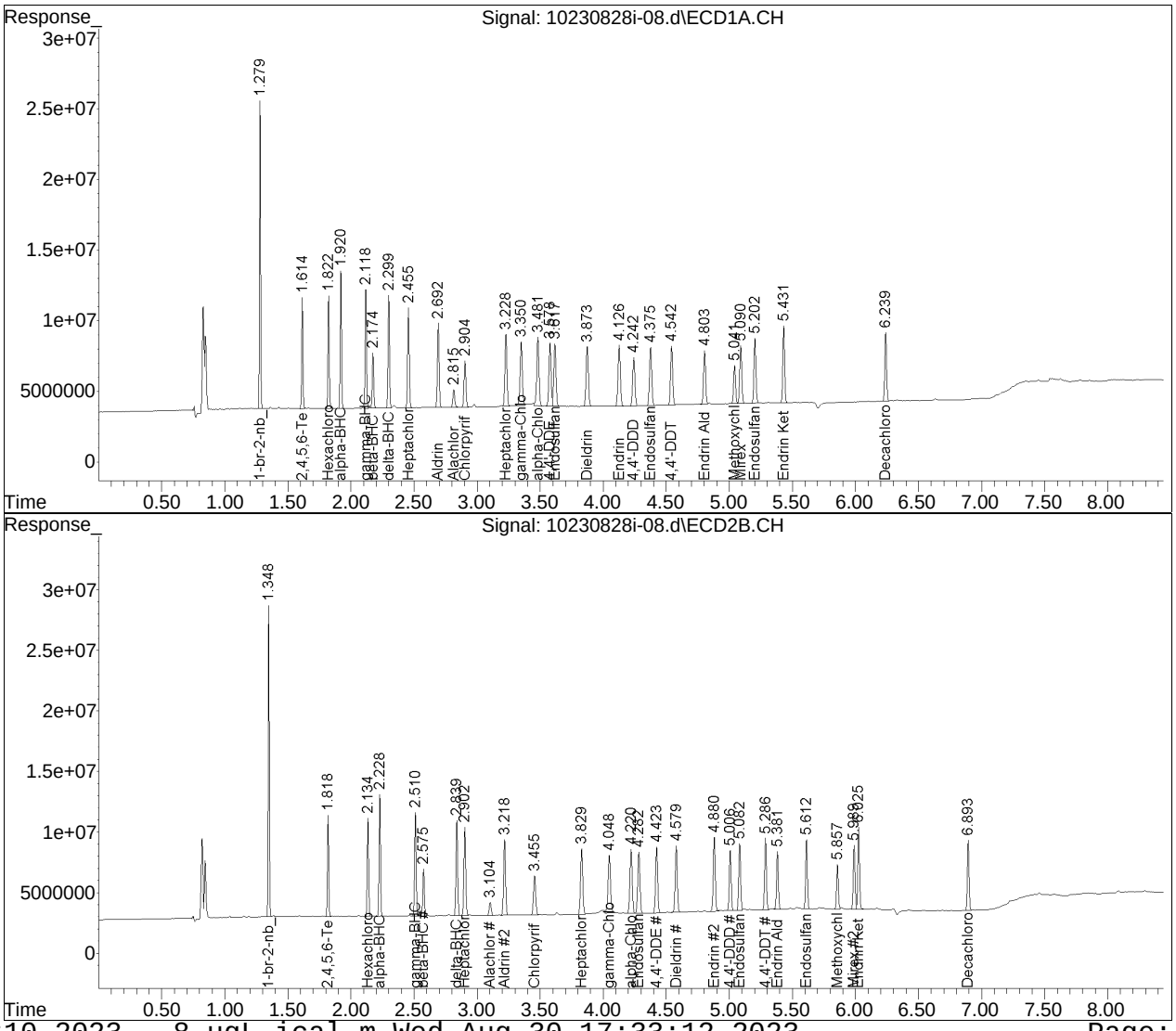
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-08.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:23 pm
Operator : PEST10:akm
Sample : il7pest,42e,,pp 11225 L0.01
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 8 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:17:58 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:13:59 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

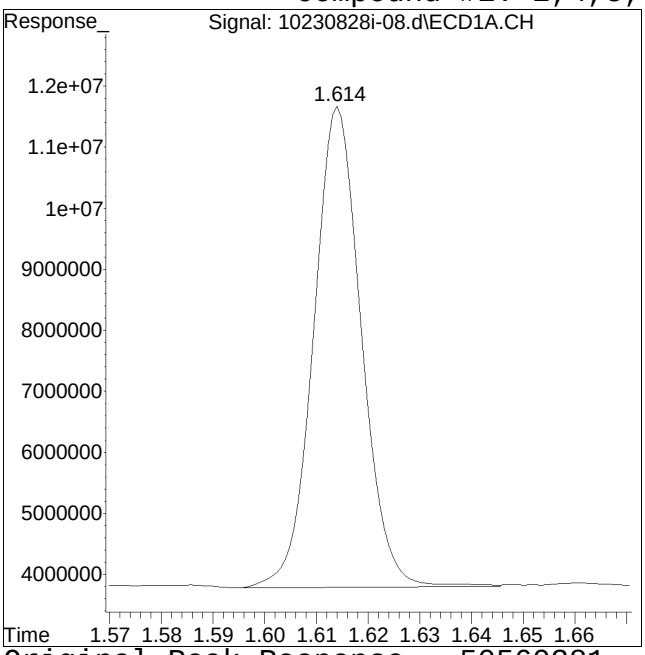
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



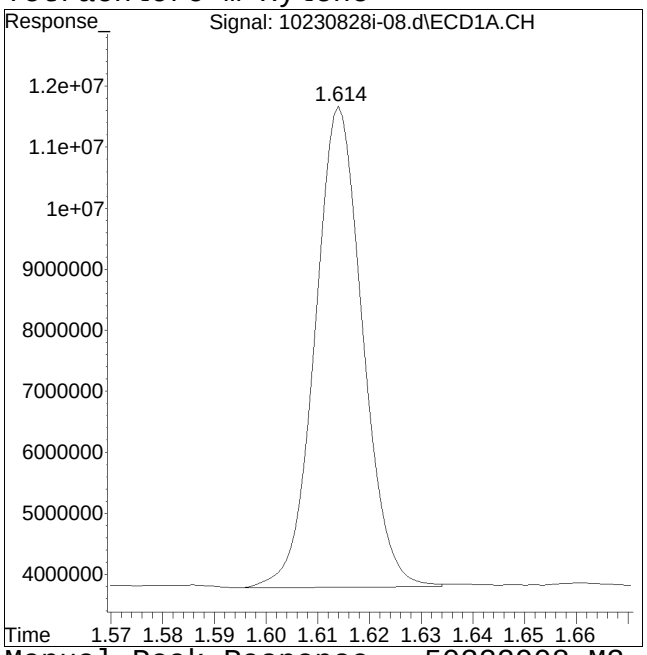
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



Original Peak Response = 50560381



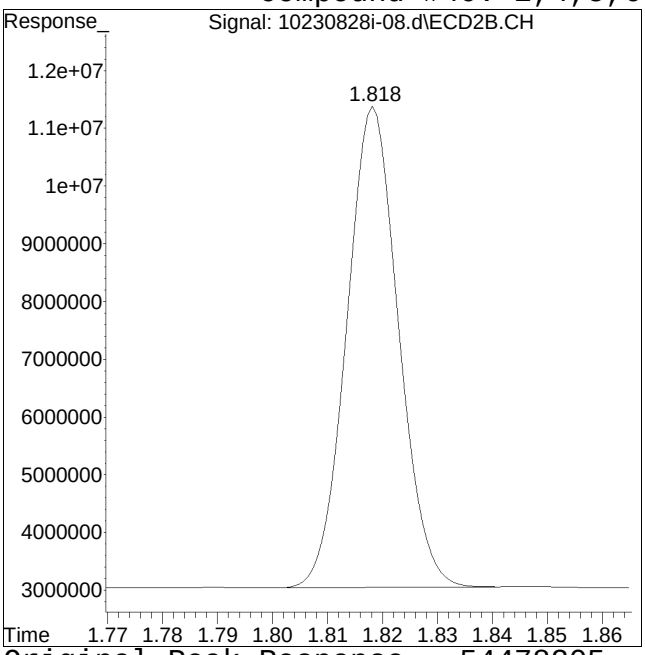
Manual Peak Response = 50332908 M3

M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

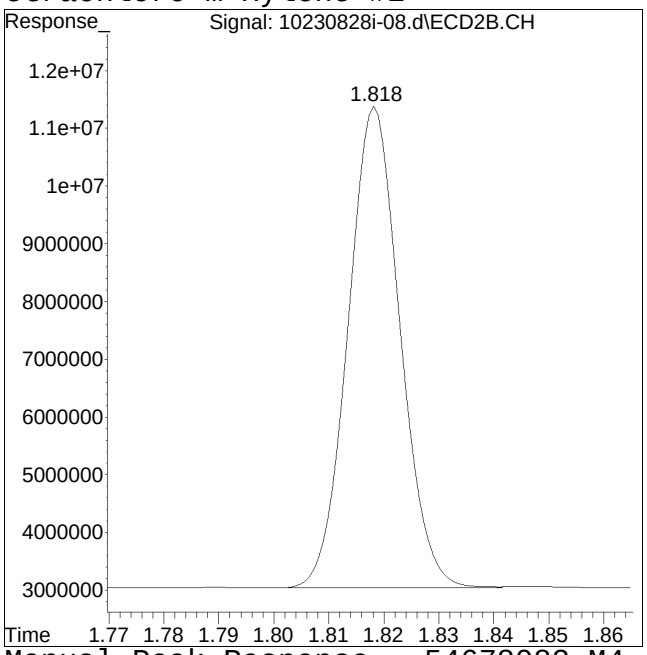
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



Original Peak Response = 54478205



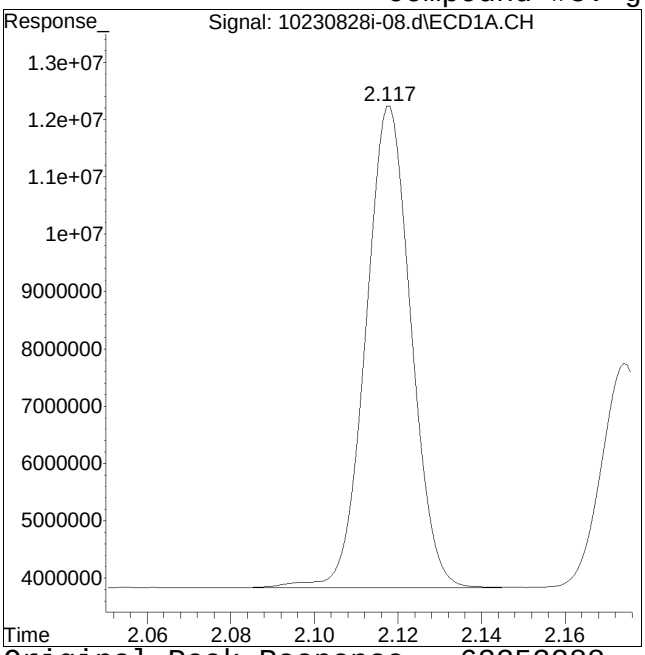
Manual Peak Response = 54678082 M4

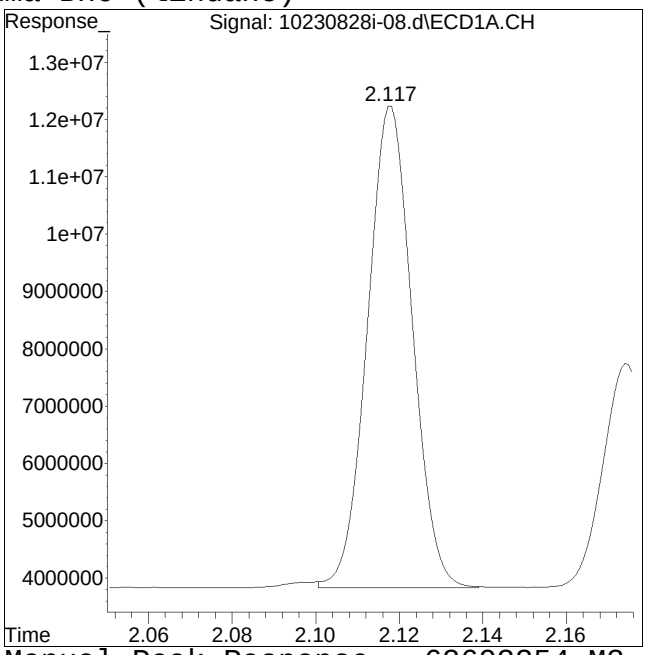
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #5: gamma-BHC (lindane)



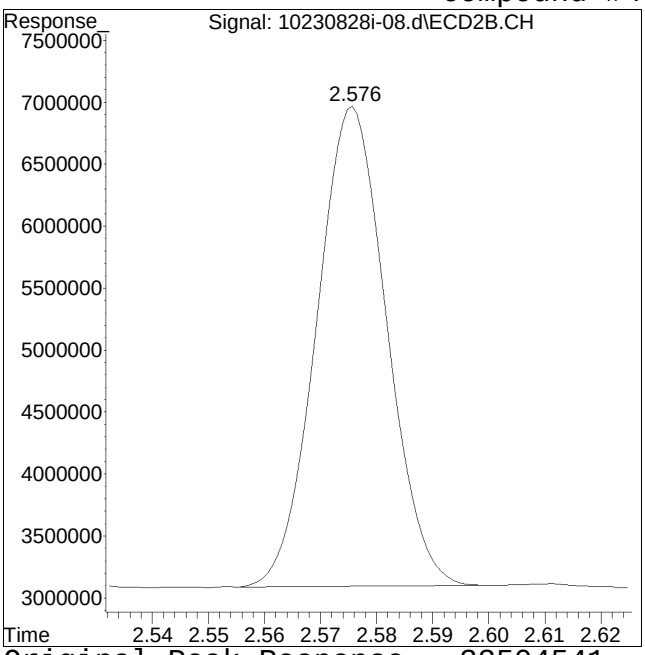


Original Peak Response = 63353288 Manual Peak Response = 62693354 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

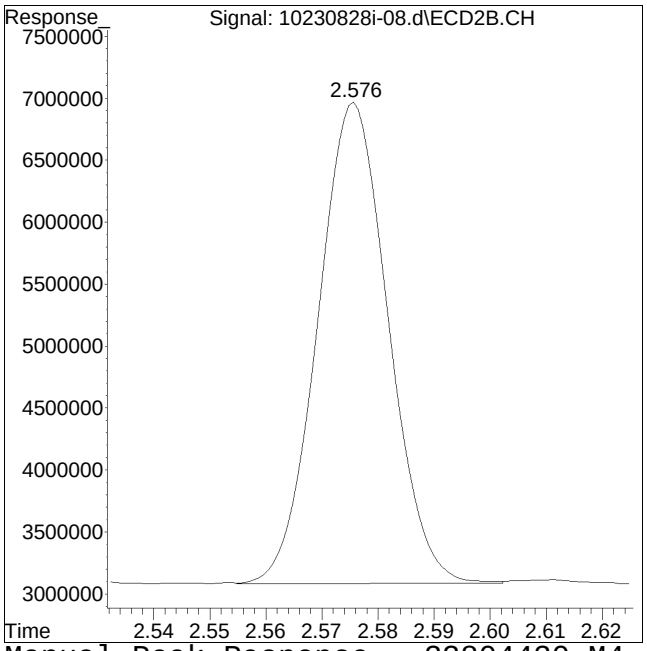
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #44: beta-BHC #2



Original Peak Response = 33504541



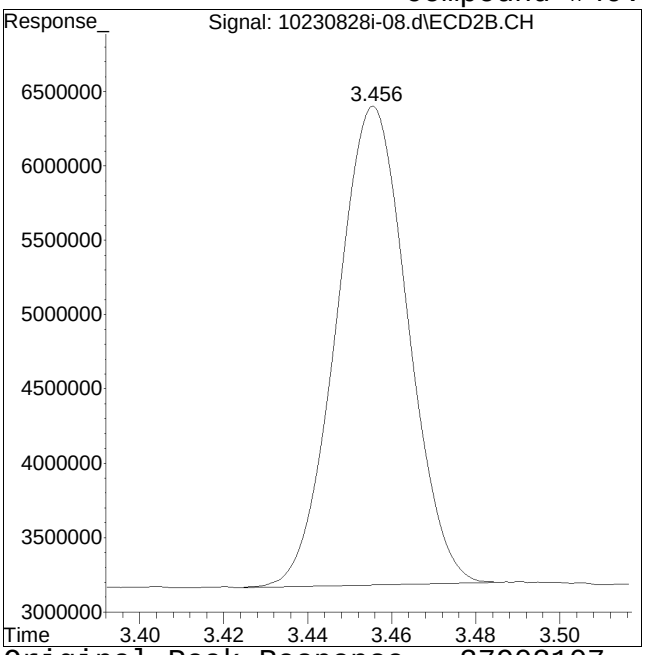
Manual Peak Response = 33804430 M4

M4 = Poor automated baseline construction.

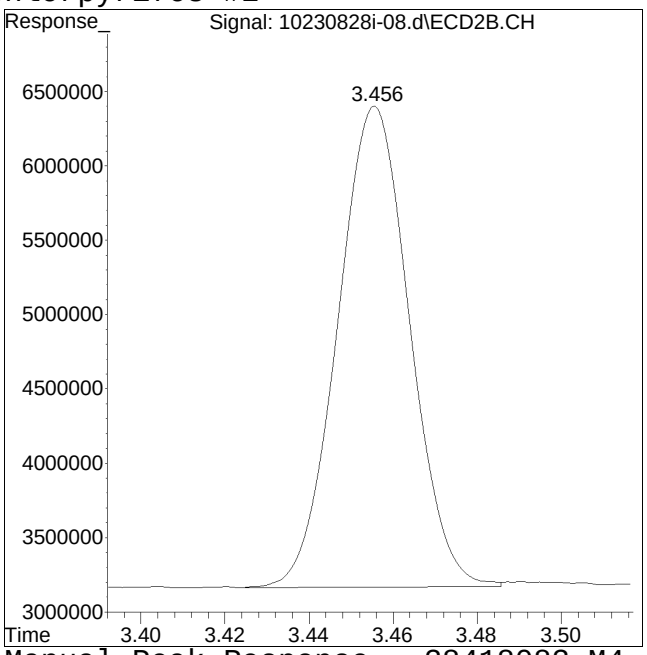
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #49: Chlorpyrifos #2



Original Peak Response = 37903107



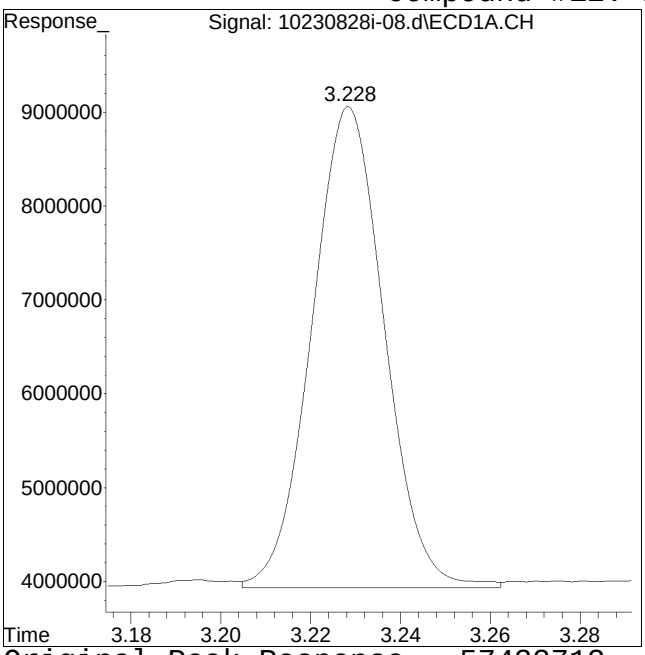
Manual Peak Response = 38418083 M4

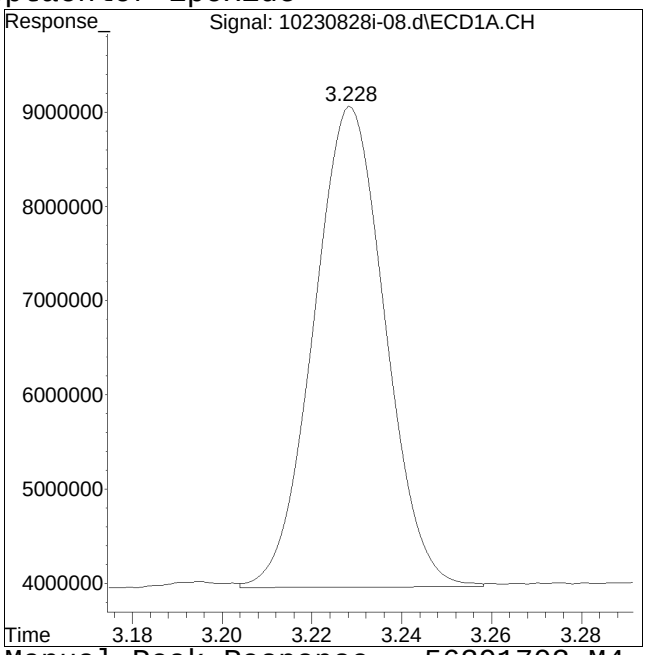
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #12: Heptachlor Epoxide



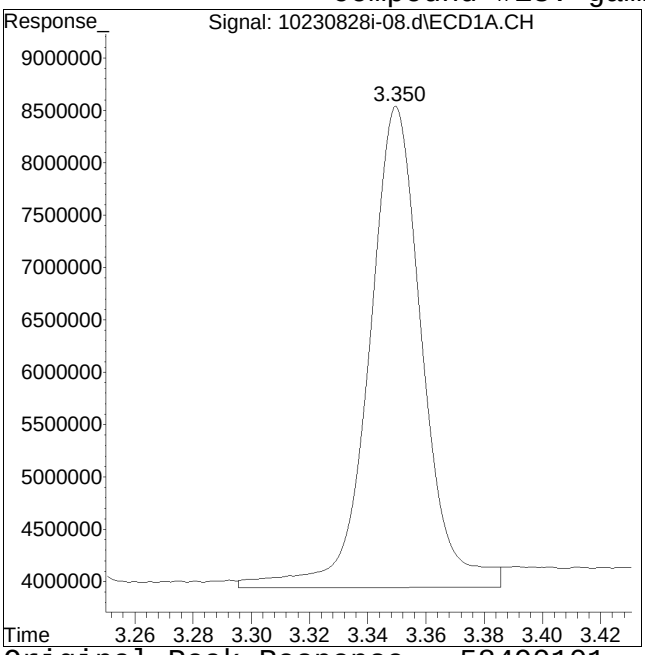


Original Peak Response = 57432712 Manual Peak Response = 56391703 M4
M4 = Poor automated baseline construction.

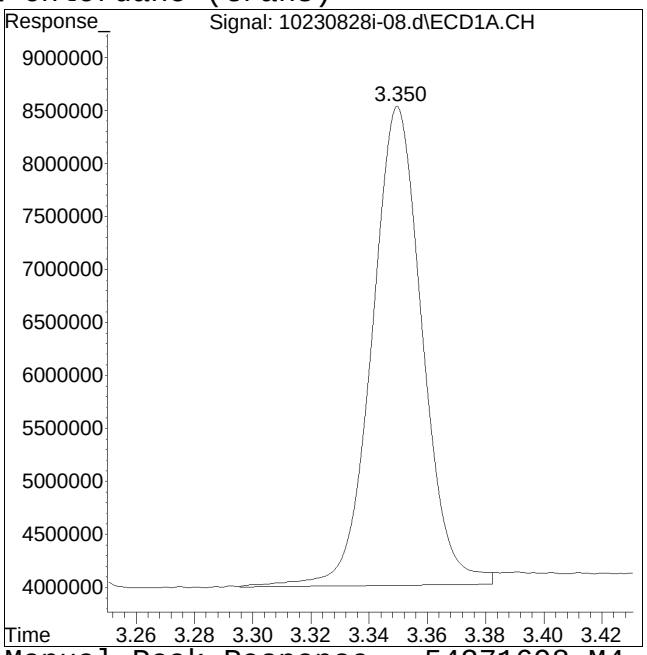
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #13: gamma-Chlordane (trans)



Original Peak Response = 58490101



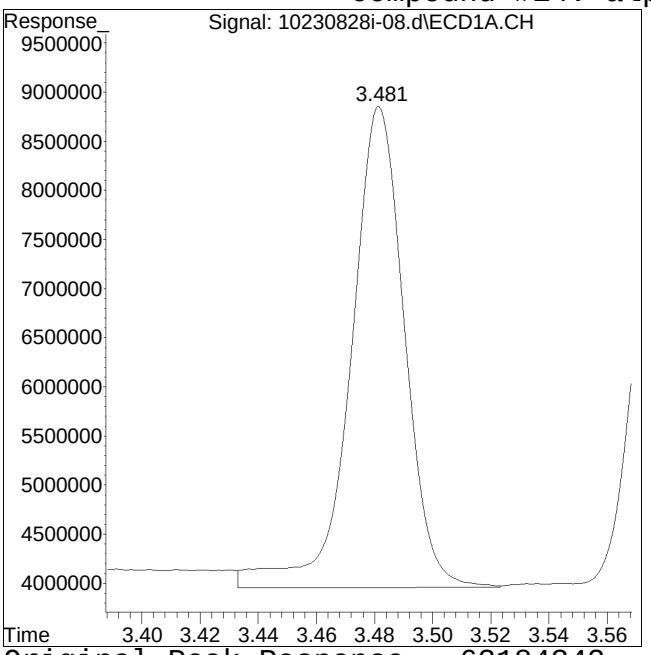
Manual Peak Response = 54271698 M4

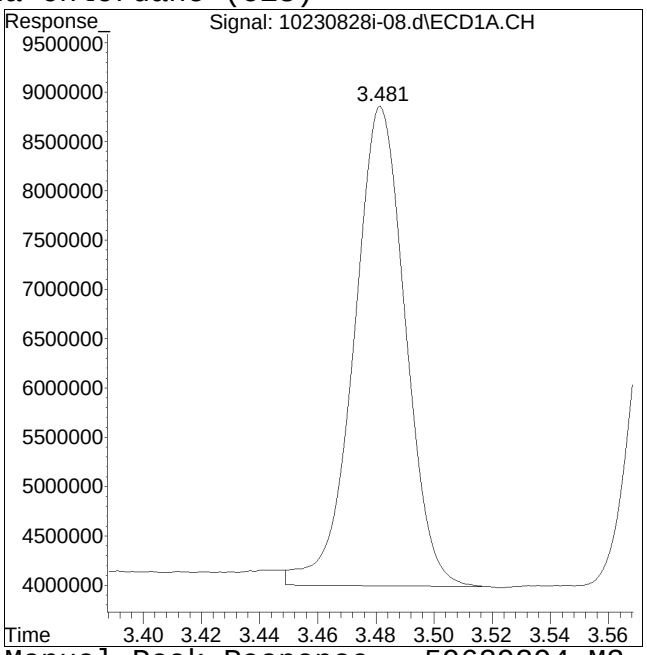
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #14: alpha-Chlordane (cis)



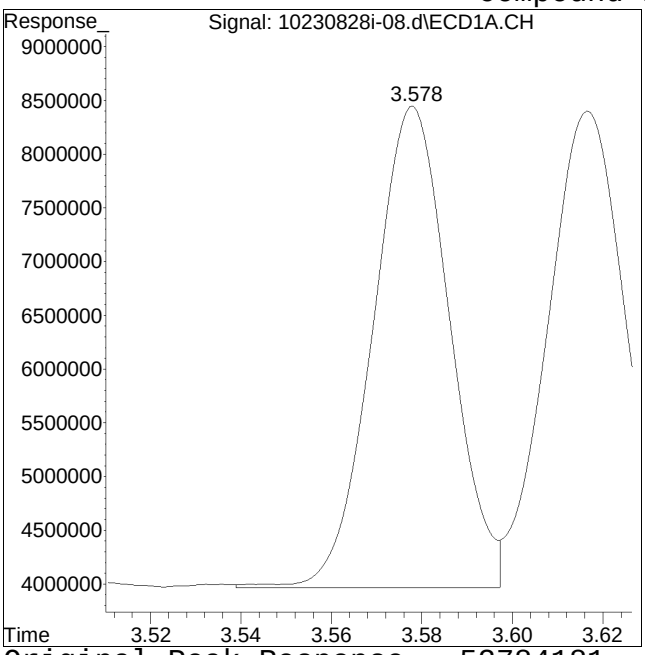


Original Peak Response = 63184342 Manual Peak Response = 59639294 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

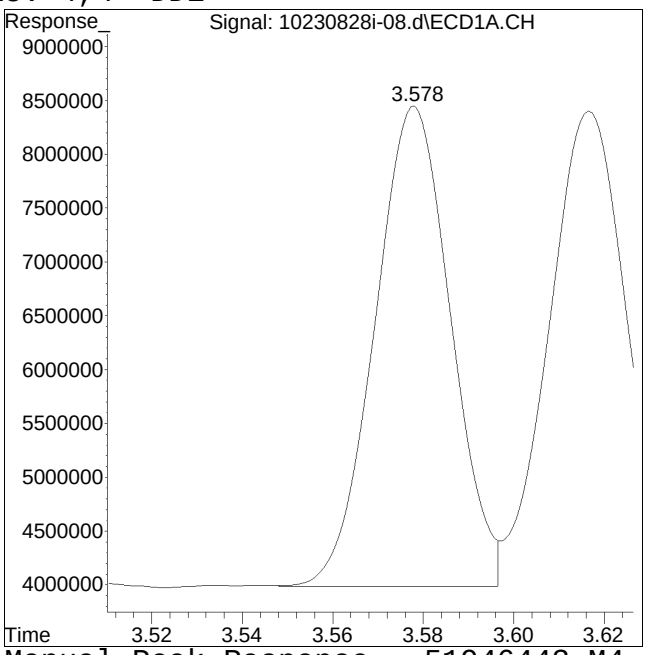
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #15: 4,4'-DDE



Original Peak Response = 52784181

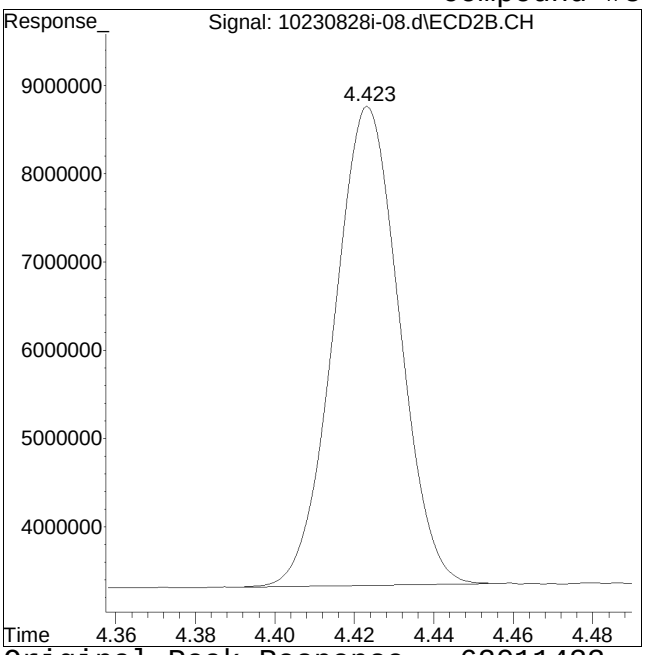


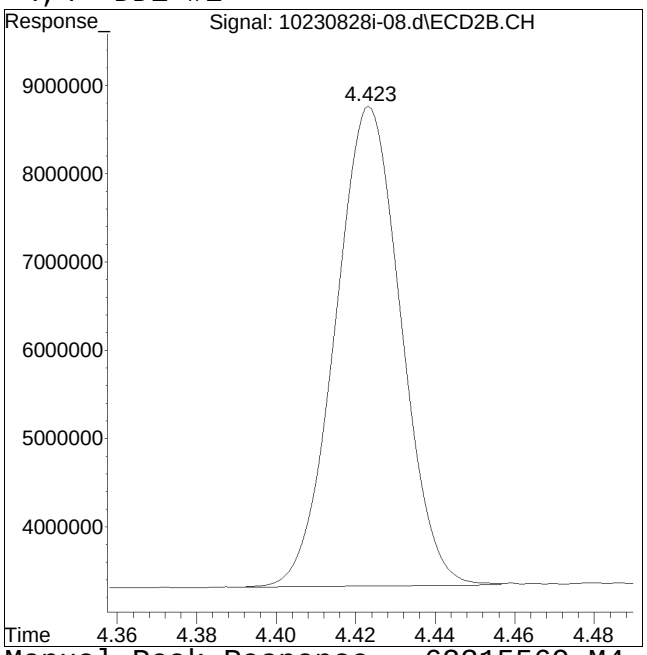
Manual Peak Response = 51946443 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #53: 4,4'-DDE #2



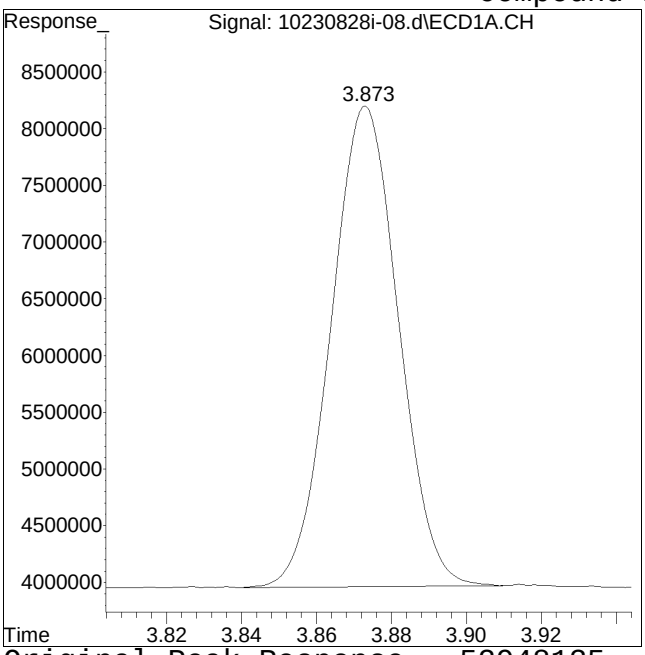


Original Peak Response = 62011433 Manual Peak Response = 62315569 M4
M4 = Poor automated baseline construction.

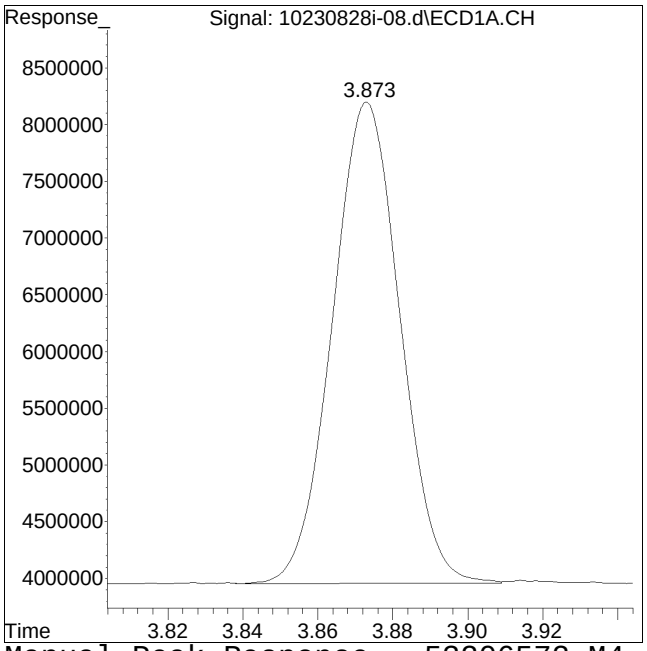
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #17: Dieldrin



Original Peak Response = 52948135



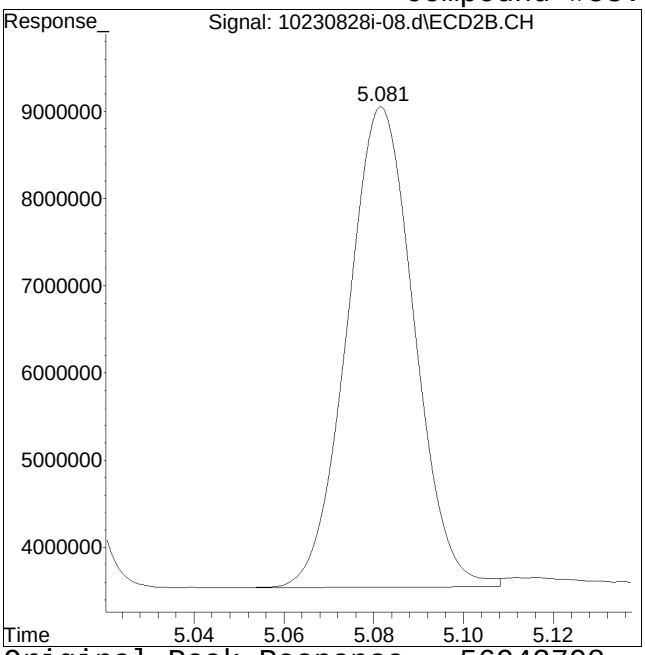
Manual Peak Response = 53206572 M4

M4 = Poor automated baseline construction.

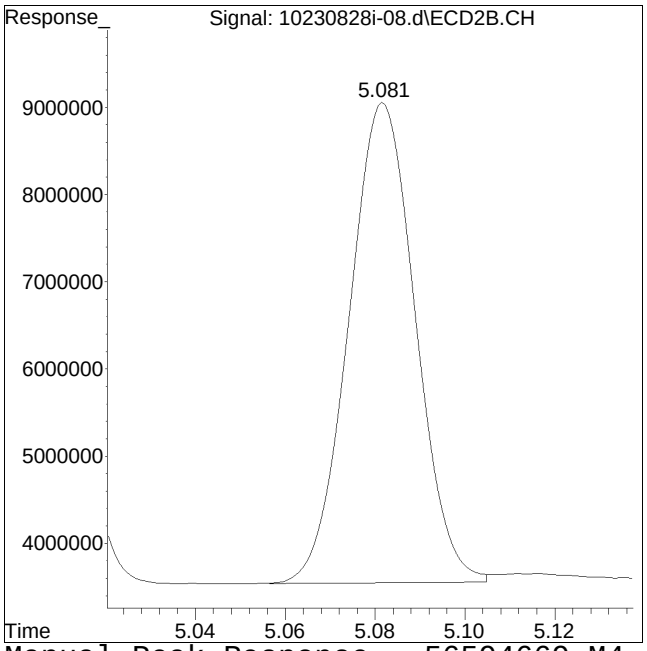
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #58: Endosulfan II #2



Original Peak Response = 56943798



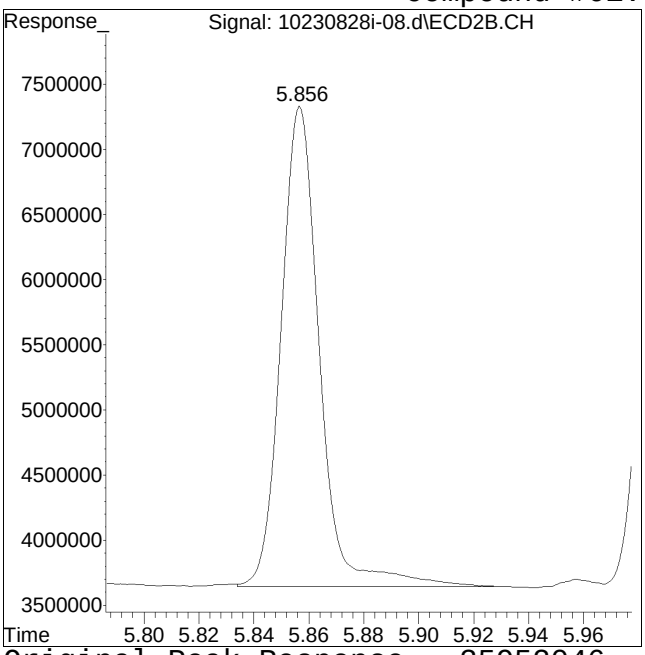
Manual Peak Response = 56594669 M4

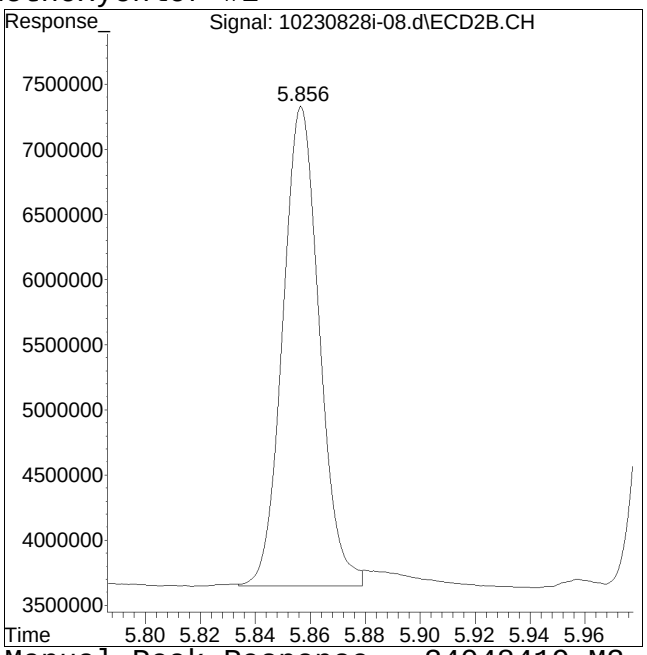
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #61: Methoxychlor #2



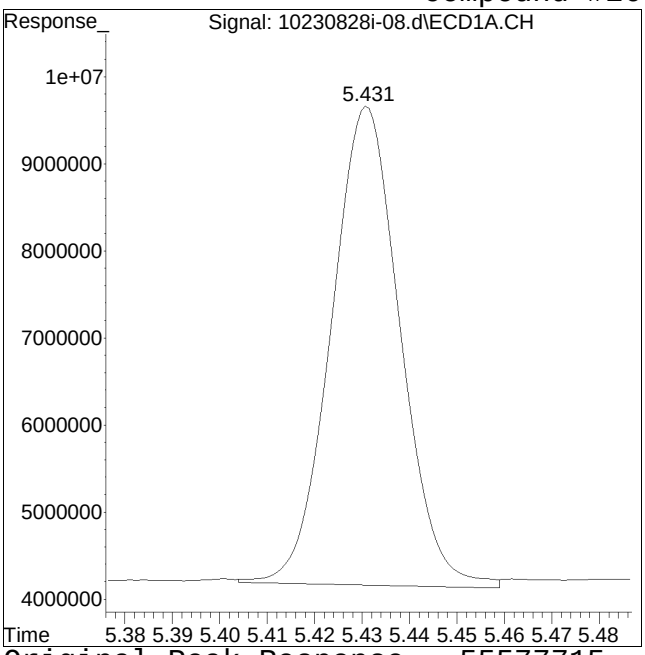


Original Peak Response = 35952046 Manual Peak Response = 34048419 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

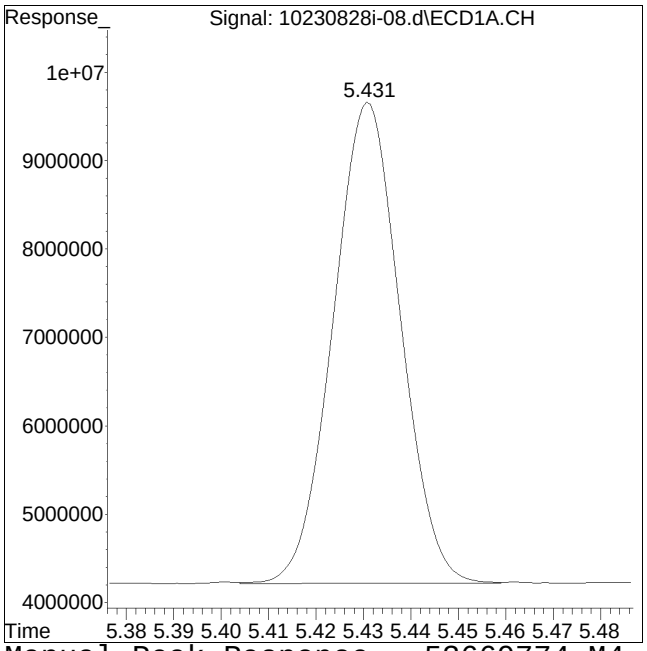
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #26: Endrin Ketone



Original Peak Response = 55577715



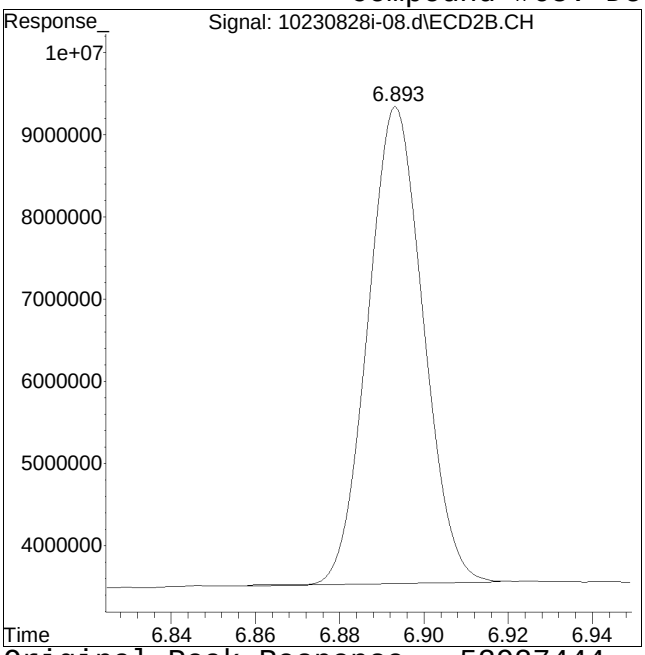
Manual Peak Response = 53660774 M4

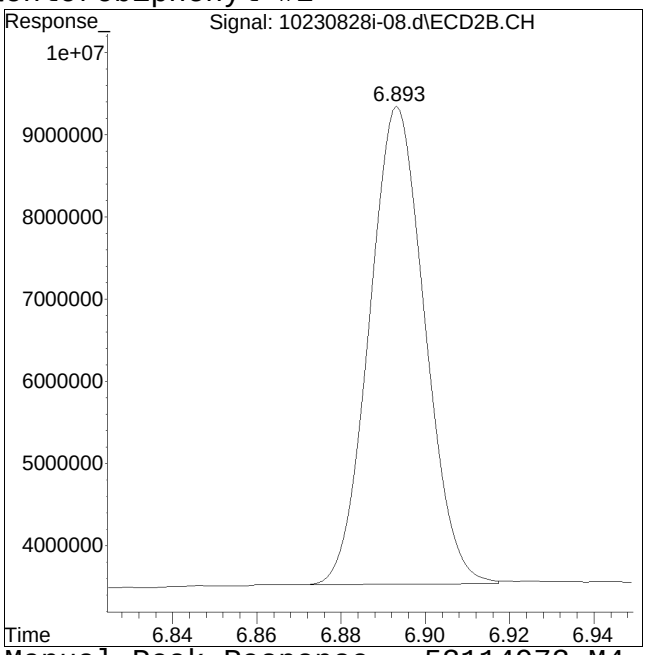
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-08.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:23 pm Instrument : Pest 10
Sample : il7pest,42e,,pp 11225 L0.0Quant Date : 8/29/2023 12:14 pm

Compound #65: Decachlorobiphenyl #2





Original Peak Response = 52927444 Manual Peak Response = 53114973 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-09.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:35 pm
Operator : PEST10:akm
Sample : il8pest,42e,,pp 11224 L0.05
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 11:56:39 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Sat Aug 26 08:42:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.278	1.347	121.0E6	138.9E6	25.000	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.613	1.818	232.2E6	266.5E6	NoCal M3	NoCal
	Spiked Amount 50.000	Range 30 - 150		Recovery =		0.00%#	0.00%#
27) s	Decachlorobi	6.239	6.893	215.3E6	254.5E6	NoCal	NoCal
	Spiked Amount 50.000	Range 30 - 150		Recovery =		0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	1.822	2.134	244.6E6	286.1E6	NoCal	NoCal
4) t	alpha-BHC	1.920	2.229	333.9E6	404.8E6	NoCal	NoCal
5) t	gamma-BHC (l	2.117	2.510	308.6E6	371.5E6	NoCal M4	NoCal
6) t	beta-BHC	2.174	2.575	134.9E6	158.3E6	NoCal M4	NoCal
7) t	delta-BHC	2.300	2.839	315.4E6	379.0E6	NoCal	NoCal
8) t	Heptachlor	2.455	2.903	297.5E6	368.1E6	NoCal	NoCal
9) t	Aldrin	2.692	3.218	277.4E6	352.4E6	NoCal	NoCal
10) t	Alachlor	2.815	3.104	56046114	53463831	NoCal	NoCal
11) t	Chlorpyrifos	2.904	3.455	143.4E6	172.0E6	NoCal	NoCal
12) t	Heptachlor E	3.228	3.828	266.7E6	334.0E6	NoCal	NoCal
13) t	gamma-Chlord	3.349	4.047	244.8E6	311.7E6	NoCal M4	NoCal M4
14) t	alpha-Chlord	3.482	4.220	276.7E6	340.4E6	NoCal	NoCal
15) t	4,4'-DDE	3.578	4.423	264.3E6	339.7E6	NoCal	NoCal
16) t	Endosulfan I	3.617	4.282	251.8E6	314.7E6	NoCal	NoCal
17) t	Dieldrin	3.873	4.579	259.1E6	324.8E6	NoCal	NoCal
18) t	Endrin	4.127	4.880	270.7E6	339.8E6	NoCal	NoCal
19) t	4,4'-DDD	4.242	5.007	213.7E6	271.5E6	NoCal	NoCal
20) t	Endosulfan I	4.376	5.082	237.0E6	289.8E6	NoCal	NoCal
21) t	4,4'-DDT	4.542	5.286	241.5E6	308.0E6	NoCal	NoCal
22) t	Endrin Aldeh	4.804	5.381	200.3E6	239.5E6	NoCal	NoCal

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-09.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:35 pm
Operator : PEST10:akm
Sample : il8pest,42e,,pp 11224 L0.05
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 11:56:39 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Sat Aug 26 08:42:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
23) t	Methoxychlor	5.042	5.857	132.7E6	161.5E6	NoCal	NoCal
24) t	Mirex	5.090	5.989	205.8E6	245.3E6	NoCal	NoCal
25) t	Endosulfan S	5.203	5.612	230.6E6	271.2E6	NoCal	NoCal
26) t	Endrin Keton	5.431	6.025	261.3E6	305.9E6	NoCal	NoCal
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

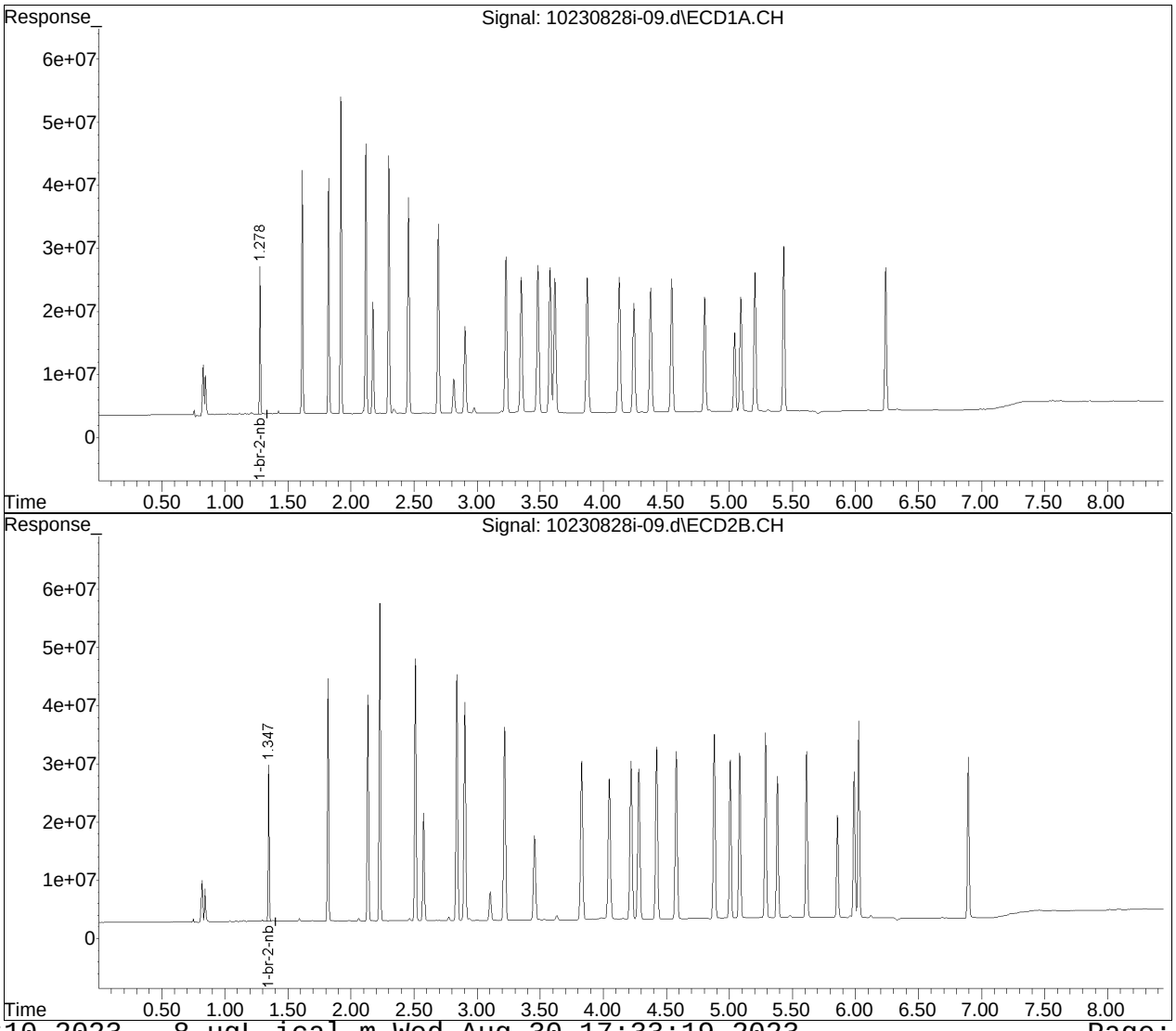
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-09.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:35 pm
Operator : PEST10:akm
Sample : il8pest,42e,,pp 11224 L0.05
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 9 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 11:56:39 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Sat Aug 26 08:42:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

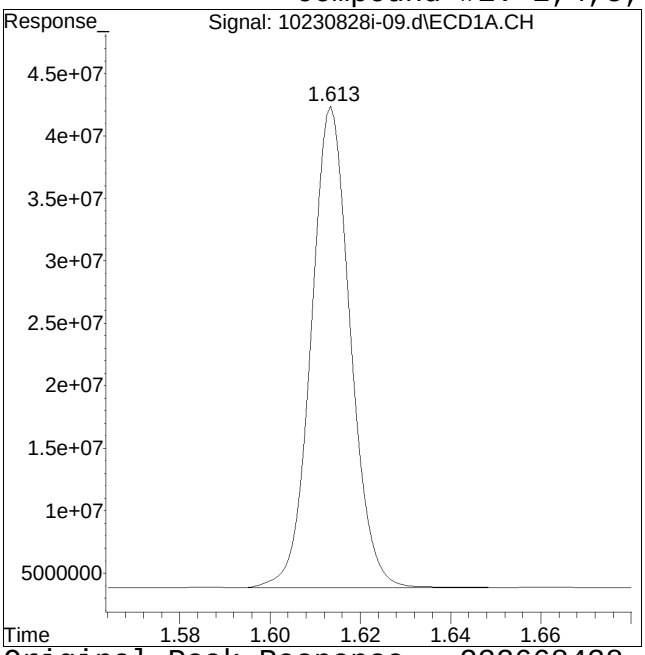
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

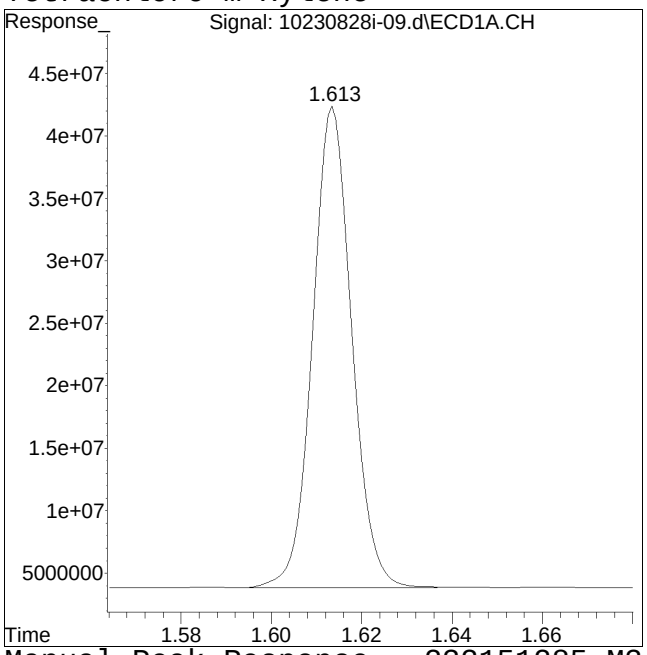


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-09.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:35 pm Instrument : Pest 10
Sample : il8pest,42e,,pp 11224 L0.0Quant Date : 8/29/2023 11:54 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



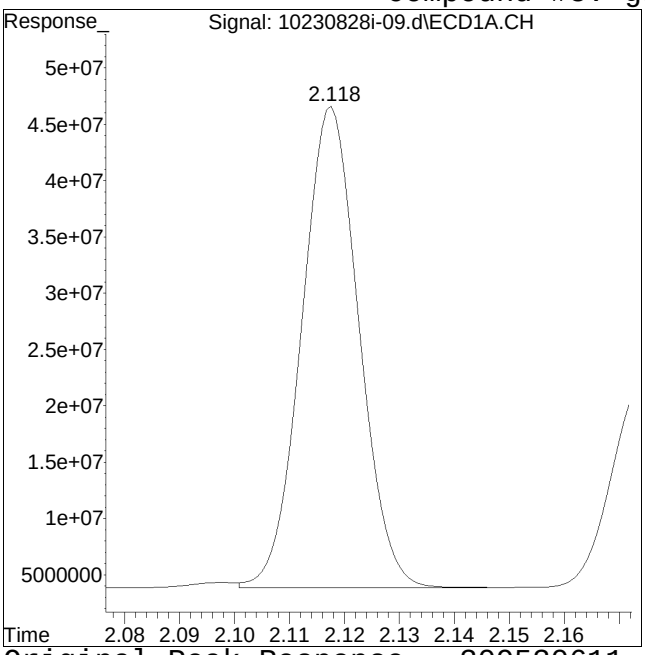


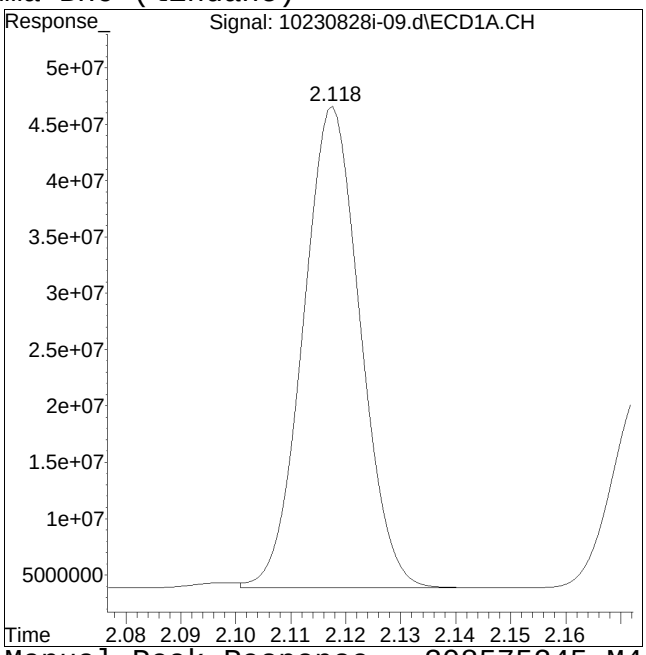
Original Peak Response = 232668438 Manual Peak Response = 232151285 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-09.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:35 pm Instrument : Pest 10
Sample : il8pest,42e,,pp 11224 L0.0Quant Date : 8/29/2023 11:54 am

Compound #5: gamma-BHC (lindane)



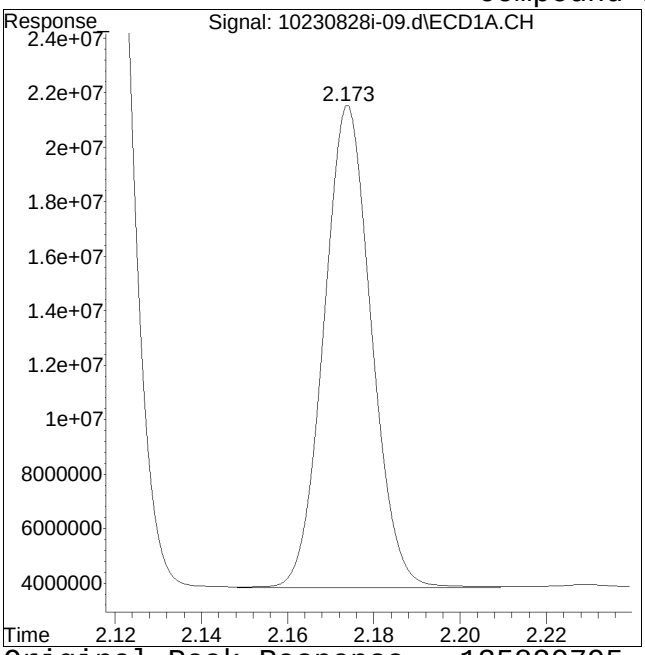


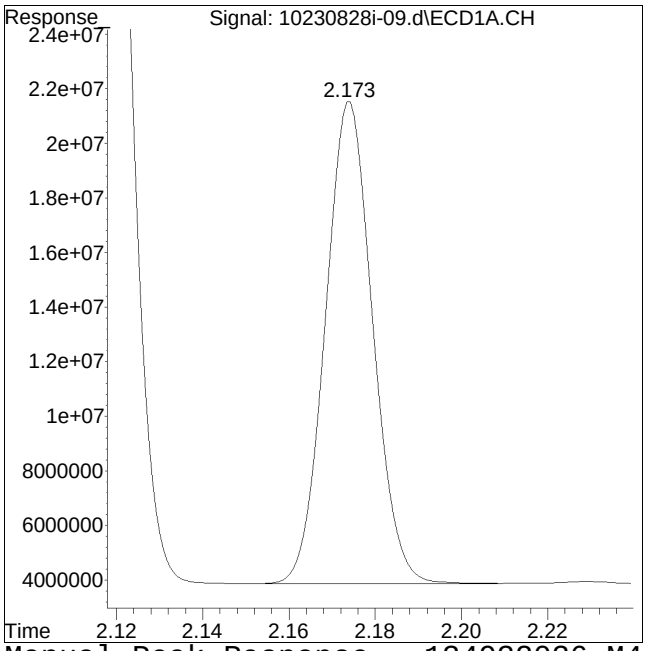
Original Peak Response = 309530611 Manual Peak Response = 308575245 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-09.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:35 pm Instrument : Pest 10
Sample : il8pest,42e,,pp 11224 L0.0Quant Date : 8/29/2023 11:54 am

Compound #6: beta-BHC



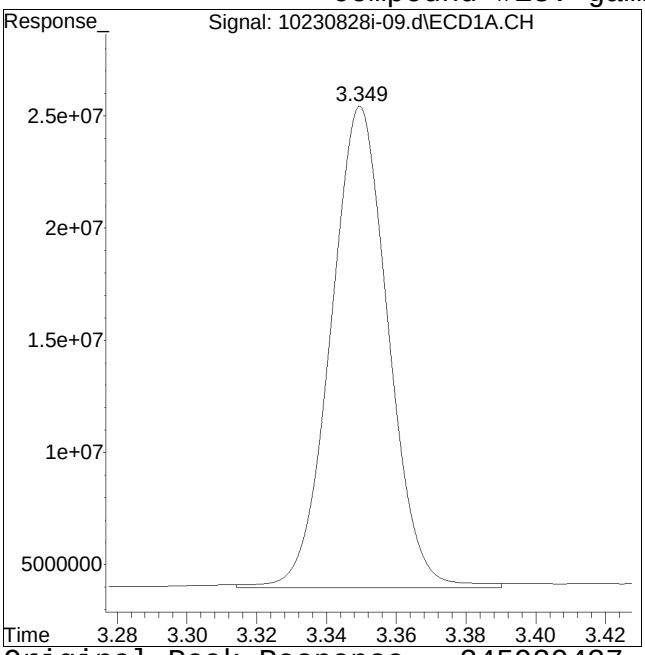


Original Peak Response = 135820795 Manual Peak Response = 134932036 M4
M4 = Poor automated baseline construction.

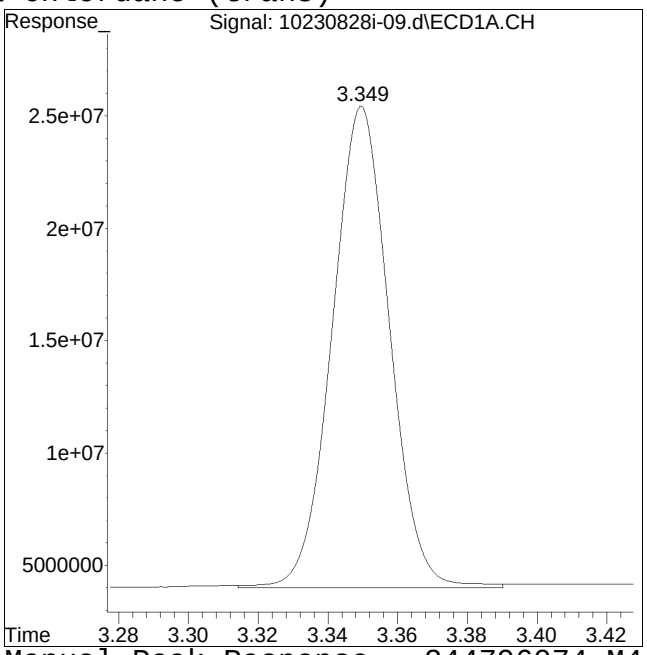
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-09.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:35 pm Instrument : Pest 10
Sample : il8pest,42e,,pp 11224 L0.0Quant Date : 8/29/2023 11:54 am

Compound #13: gamma-Chlordane (trans)



Original Peak Response = 245929437

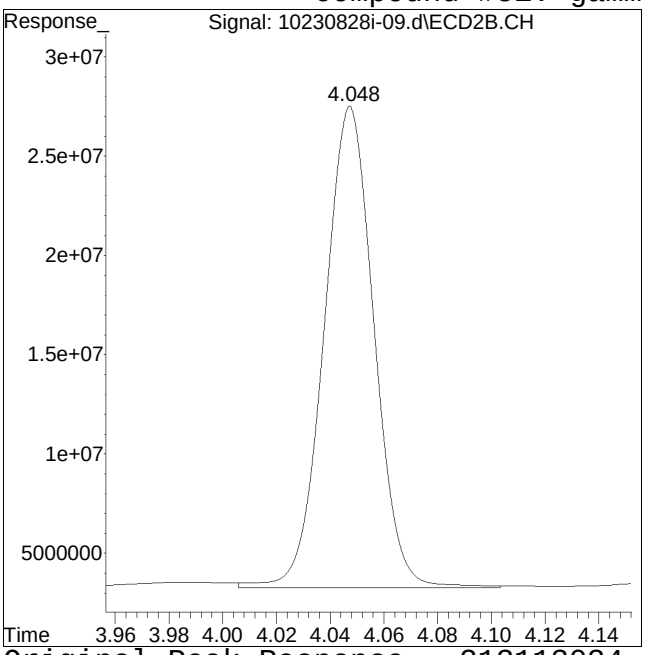


Manual Peak Response = 244796074 M4
M4 = Poor automated baseline construction.

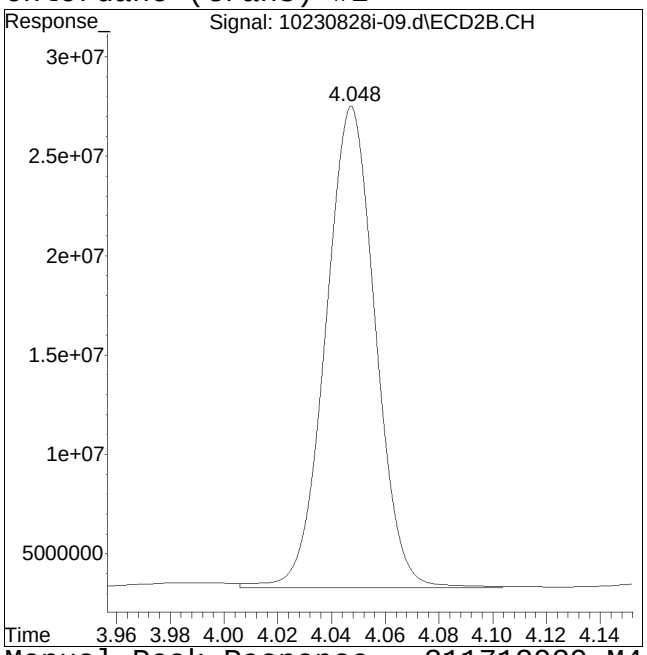
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-09.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:35 pm Instrument : Pest 10
Sample : il8pest,42e,,pp 11224 L0.0Quant Date : 8/29/2023 11:54 am

Compound #51: gamma-Chlordane (trans) #2



Original Peak Response = 313113034



Manual Peak Response = 311712929 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-10.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:46 pm
Operator : PEST10:akm
Sample : il9pest,42e,,pp 11223 L0.1
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:01:38 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 11:57:08 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.280	1.349	132.7E6	146.2E6	25.000	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.614	1.819	489.6E6	578.5E6	96.169M3	103.146
	Spiked Amount 50.000	Range 30 - 150		Recovery =		192.34%#	206.29%#
27) s	Decachlorobi	6.239	6.893	414.2E6	491.2E6	87.729	91.753
	Spiked Amount 50.000	Range 30 - 150		Recovery =		175.46%#	183.51%#
	Target Compounds						
3) t	Hexachlorobe	1.823	2.135	508.6E6	602.3E6	94.819M3	100.048
4) t	alpha-BHC	1.921	2.229	723.1E6	882.4E6	98.744	103.610
5) t	gamma-BHC (l	2.118	2.511	662.4E6	804.1E6	97.886	102.880
6) t	beta-BHC	2.175	2.576	279.6E6	336.4E6	94.486	100.970
7) t	delta-BHC	2.300	2.840	679.0E6	826.7E6	98.164	103.650
8) t	Heptachlor	2.456	2.903	622.7E6	790.2E6	95.445	102.014
9) t	Aldrin	2.693	3.219	586.8E6	755.8E6	96.459	101.932
10) t	Alachlor	2.815	3.105	111.7E6	106.4E6	90.852	94.595
11) t	Chlorpyrifos	2.904	3.455	280.0E6	340.9E6	88.990	94.223
12) t	Heptachlor E	3.229	3.829	548.9E6	703.3E6	93.843	100.079
13) t	gamma-Chlord	3.350	4.048	499.0E6	652.0E6	92.946M4	99.404M4
14) t	alpha-Chlord	3.481	4.221	558.3E6	717.4E6	92.009M3	100.161
15) t	4,4'-DDE	3.579	4.424	551.2E6	720.1E6	95.103	100.741
16) t	Endosulfan I	3.617	4.283	517.4E6	662.2E6	93.696	100.012
17) t	Dieldrin	3.873	4.580	542.9E6	691.2E6	95.540	101.139
18) t	Endrin	4.127	4.881	561.3E6	709.5E6	94.527	99.226
19) t	4,4'-DDD	4.242	5.007	445.0E6	571.8E6	94.957	100.097M4
20) t	Endosulfan I	4.376	5.082	485.7E6	601.9E6	93.434	98.702M4
21) t	4,4'-DDT	4.543	5.287	503.6E6	643.9E6	95.069	99.358M4
22) t	Endrin Aldeh	4.804	5.382	409.3E6	495.3E6	93.189	98.302

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-10.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:46 pm
Operator : PEST10:akm
Sample : il9pest,42e,,pp 11223 L0.1
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:01:38 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 11:57:08 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
23) t	Methoxychlor	5.042	5.857	260.7E6	322.1E6	89.590	94.819M3
24) t	Mirex	5.090	5.989	402.4E6	490.0E6	89.152	94.939M4
25) t	Endosulfan S	5.202	5.612	467.0E6	559.1E6	92.352	97.968
26) t	Endrin Keton	5.431	6.025	522.3E6	624.7E6	91.130	97.072M4
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

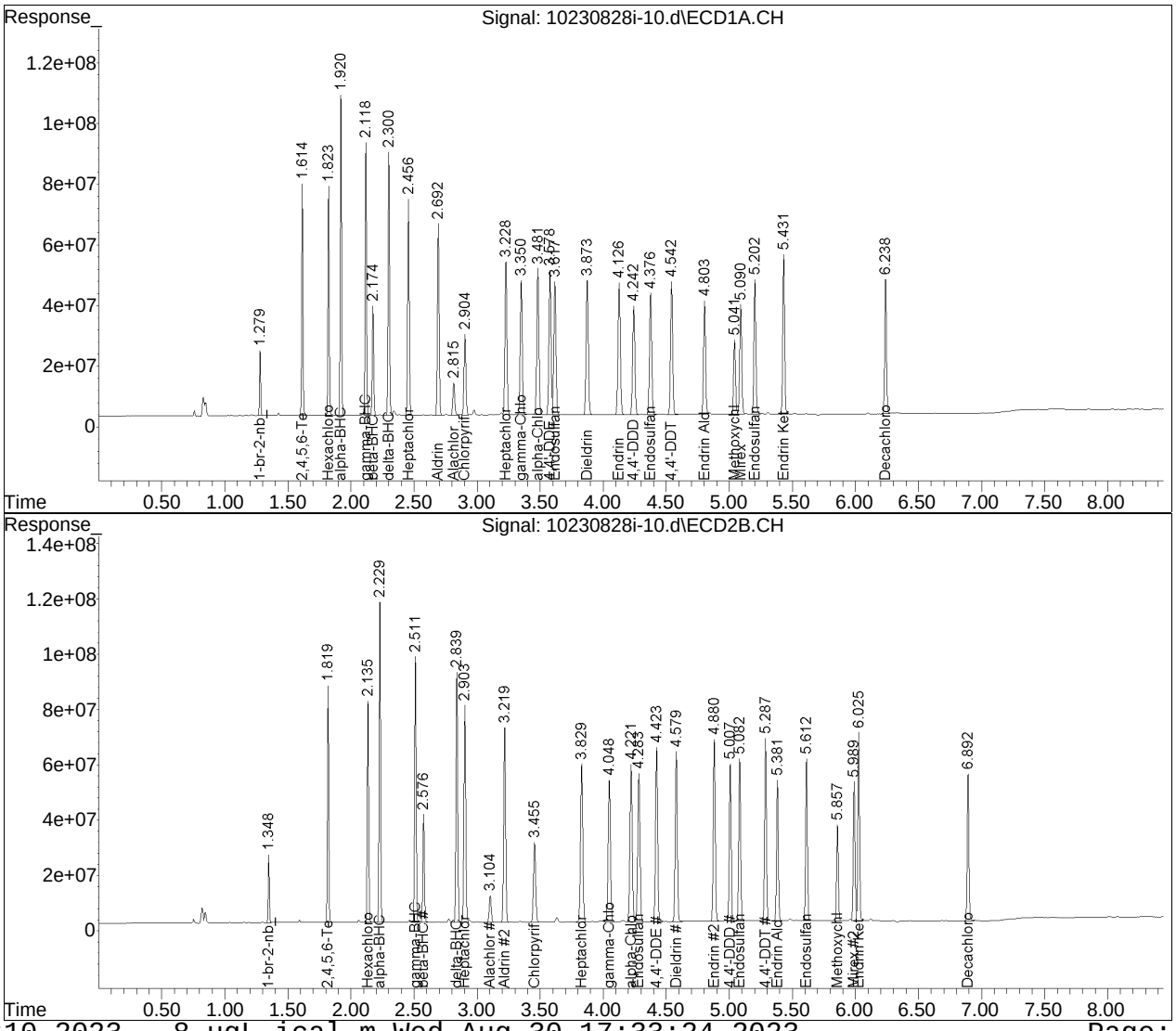
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-10.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:46 pm
Operator : PEST10:akm
Sample : il9pest,42e,,pp 11223 L0.1
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 10 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:01:38 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 11:57:08 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

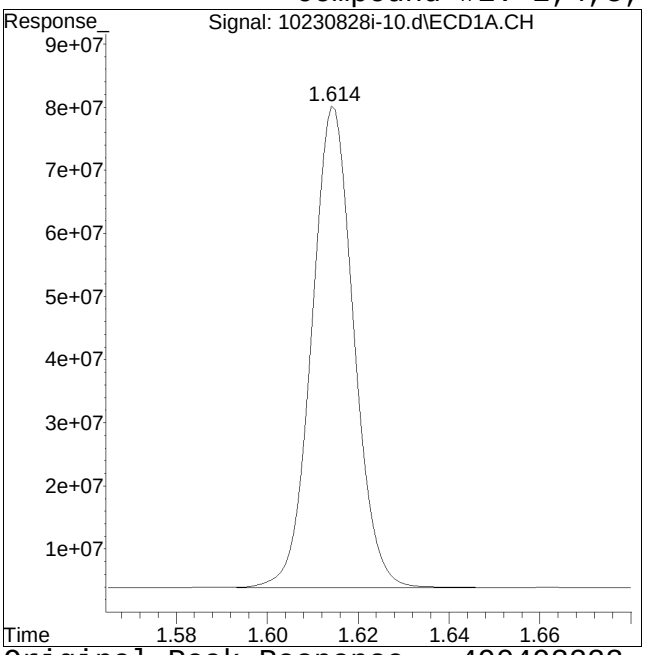
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

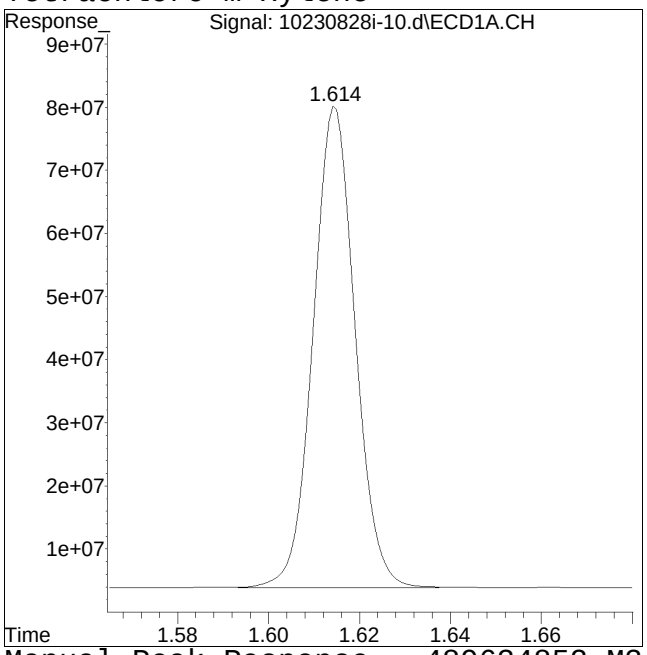


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-10.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:46 pm Instrument : Pest 10
Sample : il9pest,42e,,pp 11223 L0.1Quant Date : 8/29/2023 11:58 am

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



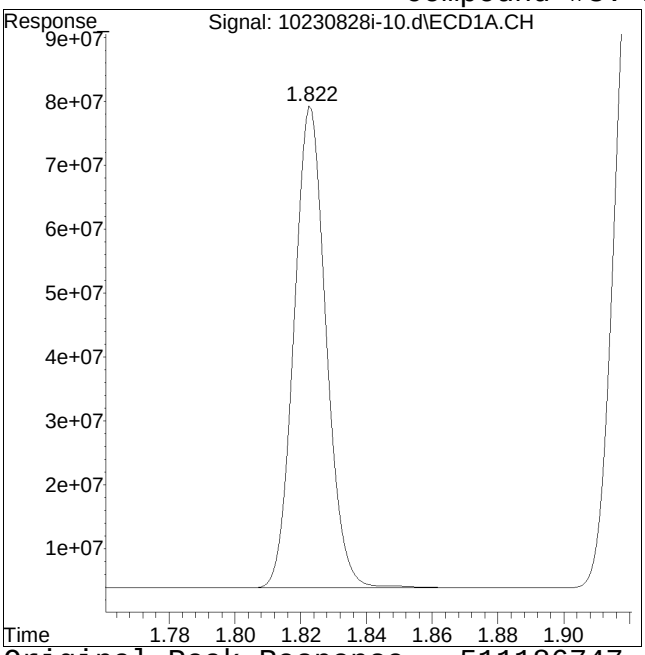


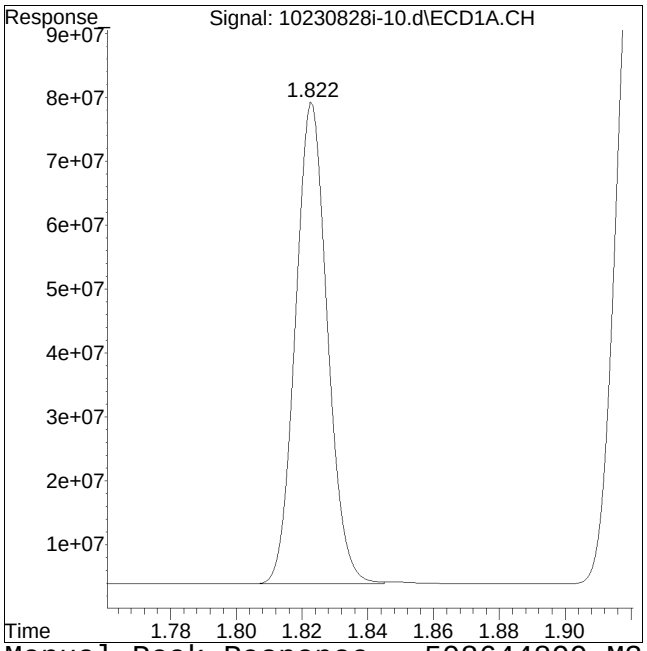
Original Peak Response = 490493323 Manual Peak Response = 489634852 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-10.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:46 pm Instrument : Pest 10
Sample : il9pest,42e,,pp 11223 L0.1Quant Date : 8/29/2023 11:58 am

Compound #3: Hexachlorobenzene



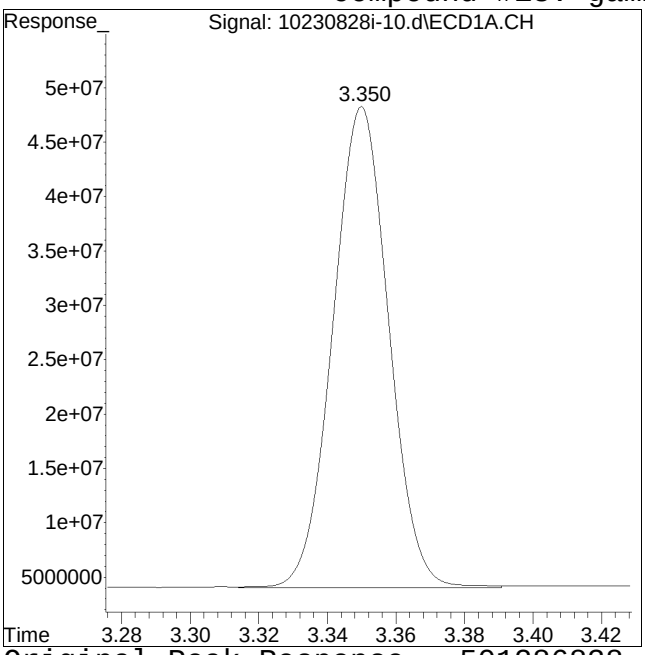


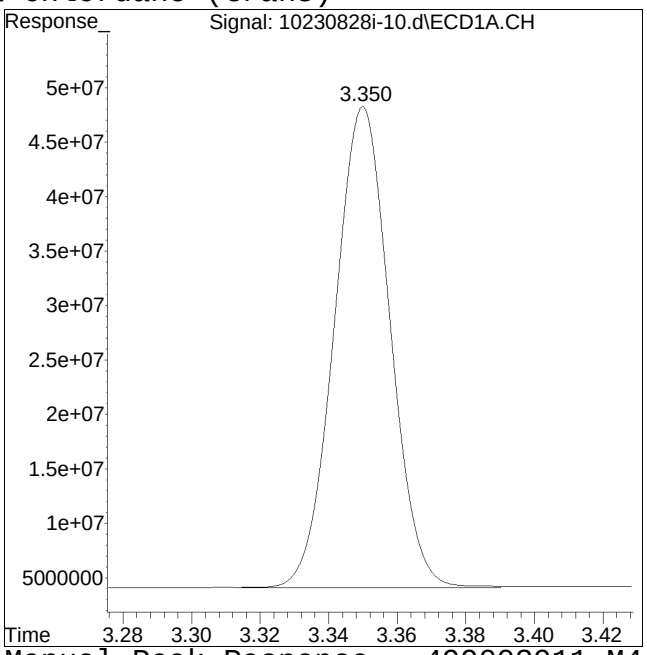
Original Peak Response = 511186747 Manual Peak Response = 508644899 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-10.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:46 pm Instrument : Pest 10
Sample : il9pest,42e,,pp 11223 L0.1Quant Date : 8/29/2023 11:58 am

Compound #13: gamma-Chlordane (trans)



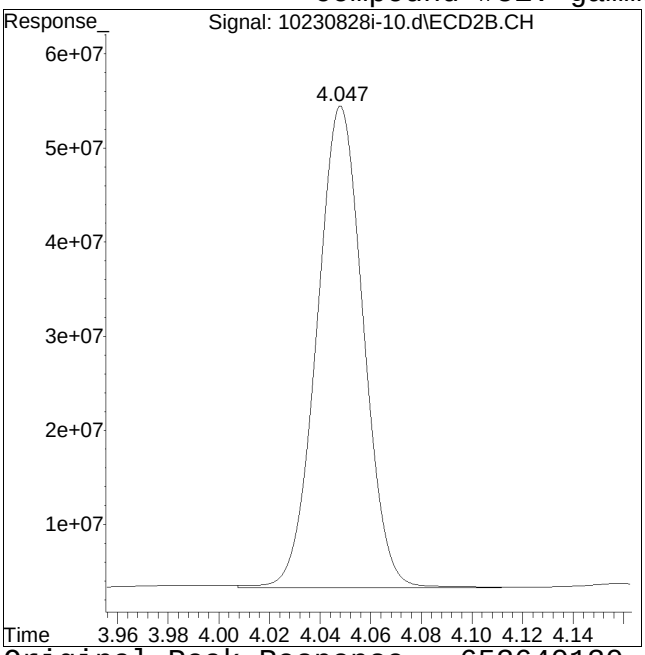


Original Peak Response = 501286838 Manual Peak Response = 499003911 M4
M4 = Poor automated baseline construction.

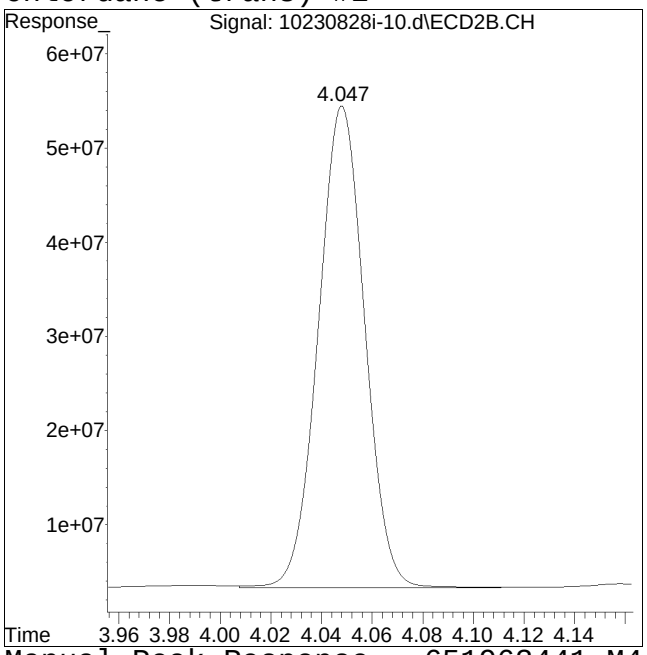
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-10.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:46 pm Instrument : Pest 10
Sample : il9pest,42e,,pp 11223 L0.1Quant Date : 8/29/2023 11:58 am

Compound #51: gamma-Chlordane (trans) #2



Original Peak Response = 653640130



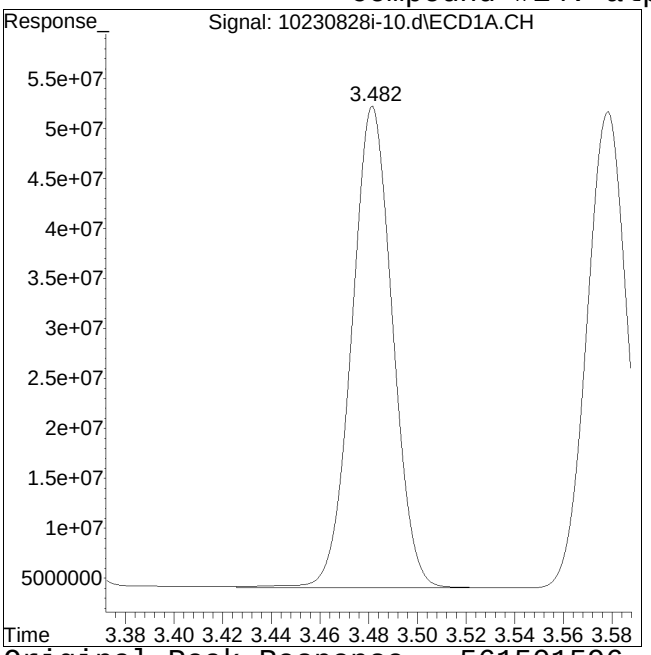
Manual Peak Response = 651963441 M4

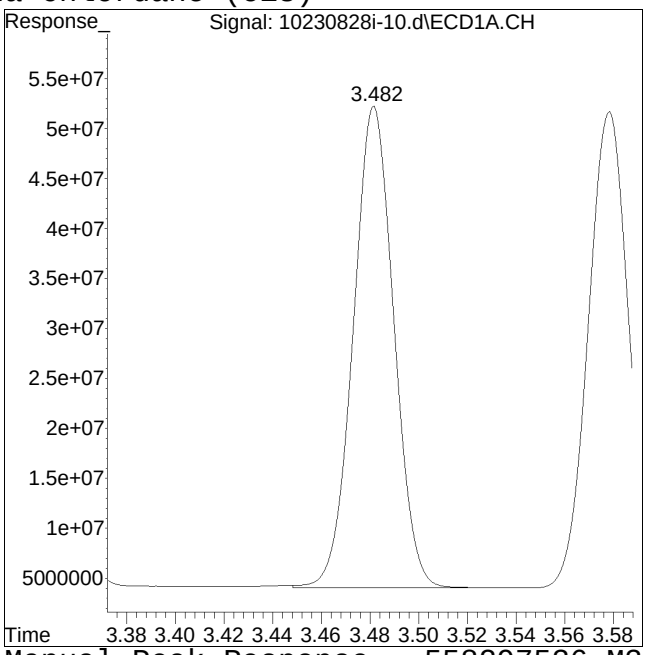
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-10.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:46 pm Instrument : Pest 10
Sample : il9pest,42e,,pp 11223 L0.1Quant Date : 8/29/2023 11:58 am

Compound #14: alpha-Chlordane (cis)



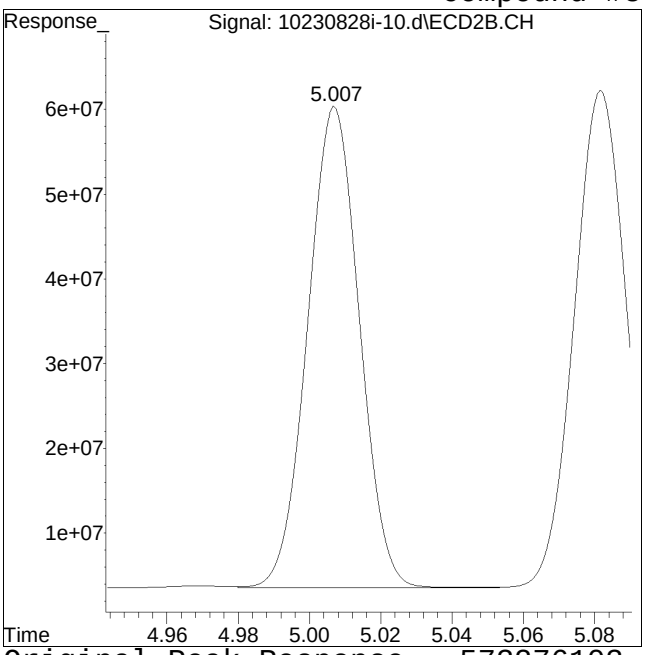


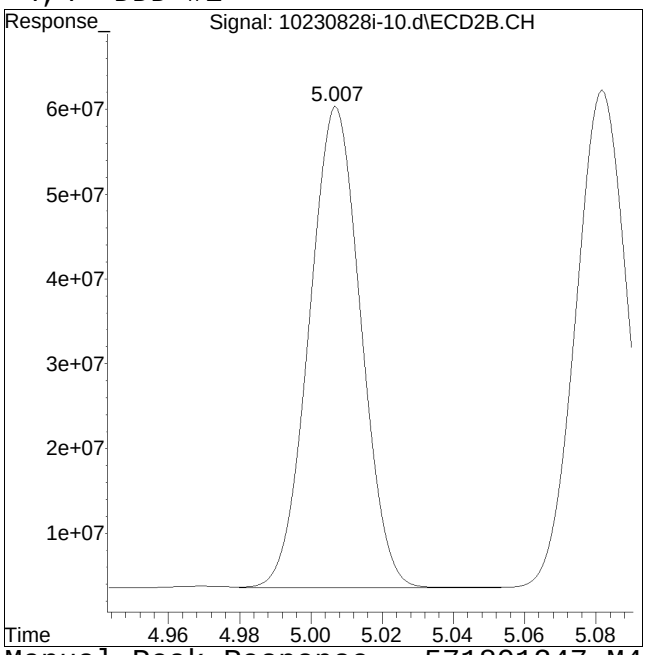
Original Peak Response = 561501596 Manual Peak Response = 558297536 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-10.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:46 pm Instrument : Pest 10
Sample : il9pest,42e,,pp 11223 L0.1Quant Date : 8/29/2023 11:58 am

Compound #57: 4,4'-DDD #2



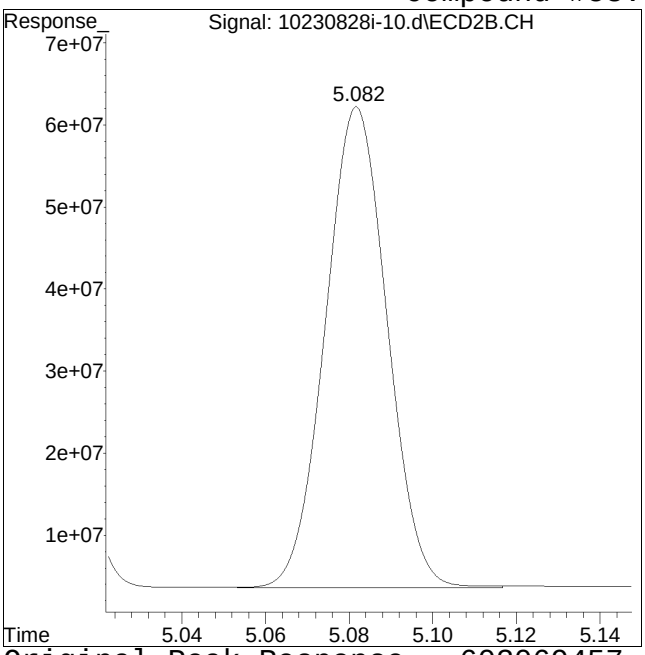


Original Peak Response = 573276103 Manual Peak Response = 571801247 M4
M4 = Poor automated baseline construction.

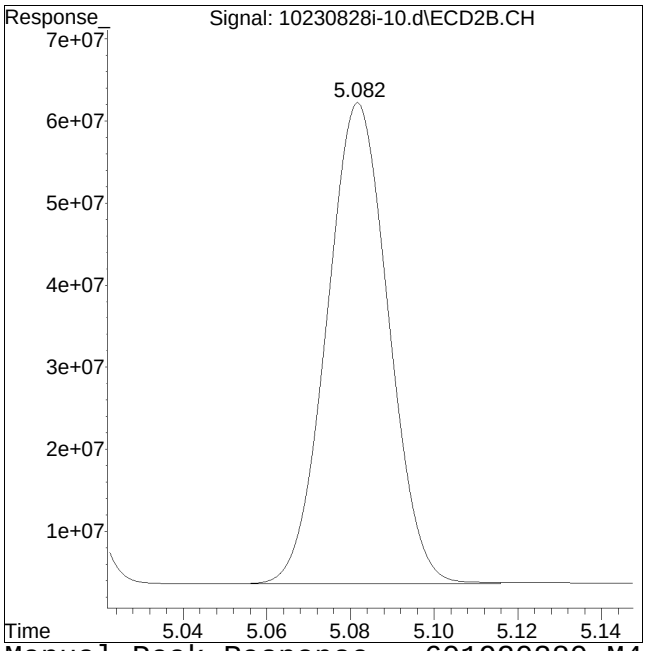
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-10.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:46 pm Instrument : Pest 10
Sample : il9pest,42e,,pp 11223 L0.1Quant Date : 8/29/2023 11:58 am

Compound #58: Endosulfan II #2



Original Peak Response = 603069457

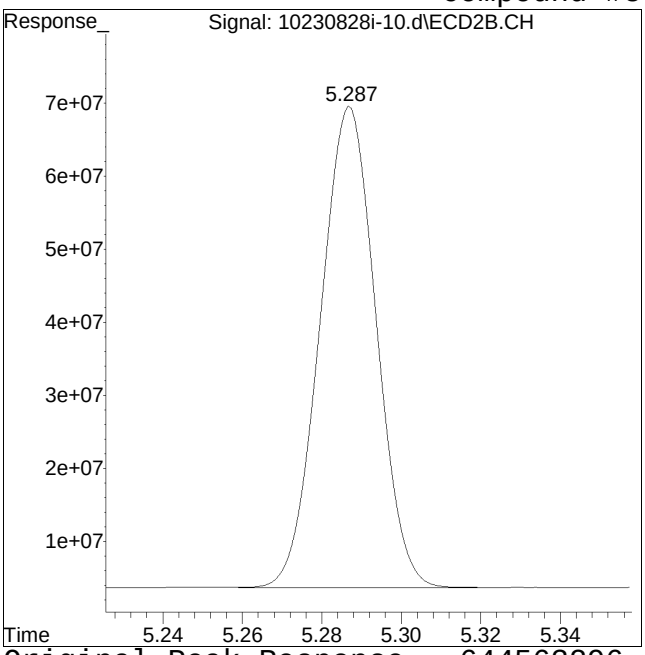


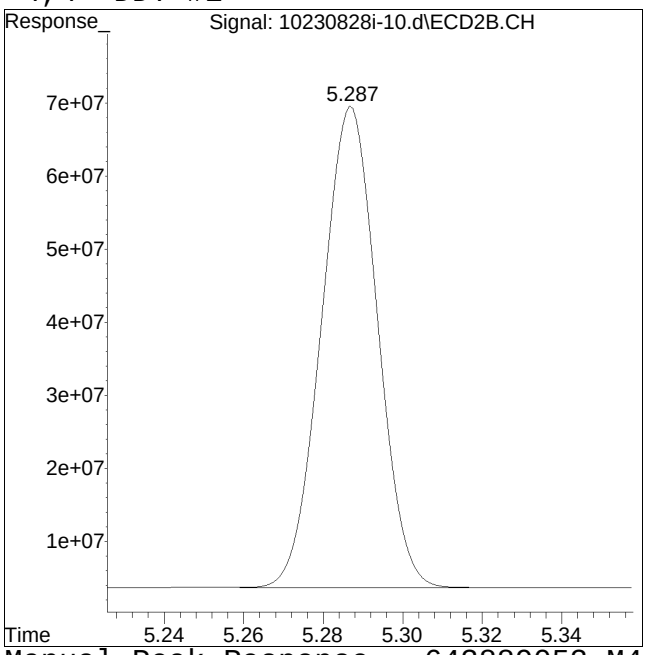
Manual Peak Response = 601920280 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-10.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:46 pm Instrument : Pest 10
Sample : il9pest,42e,,pp 11223 L0.1Quant Date : 8/29/2023 11:58 am

Compound #59: 4,4'-DDT #2



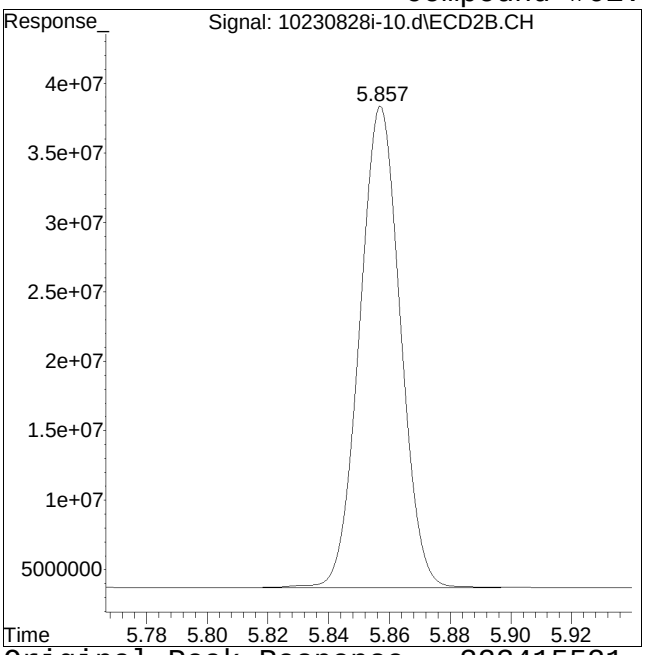


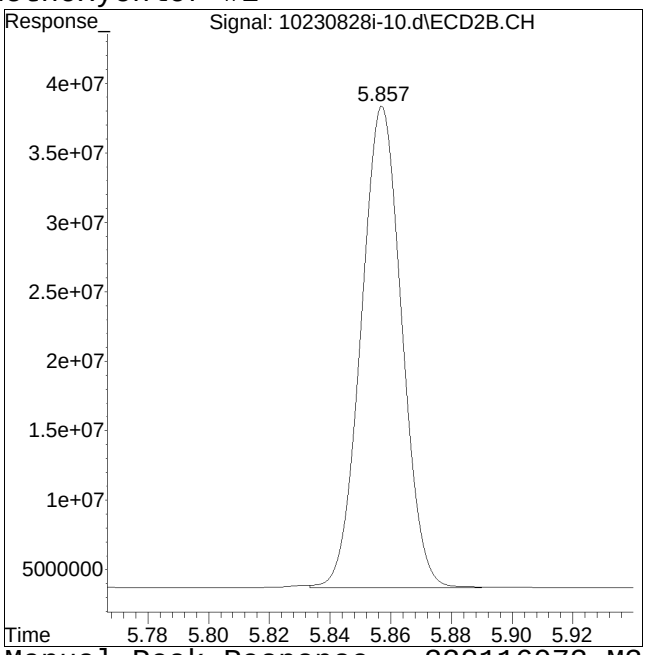
Original Peak Response = 644563296 Manual Peak Response = 643889053 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-10.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:46 pm Instrument : Pest 10
Sample : il9pest,42e,,pp 11223 L0.1Quant Date : 8/29/2023 11:58 am

Compound #61: Methoxychlor #2



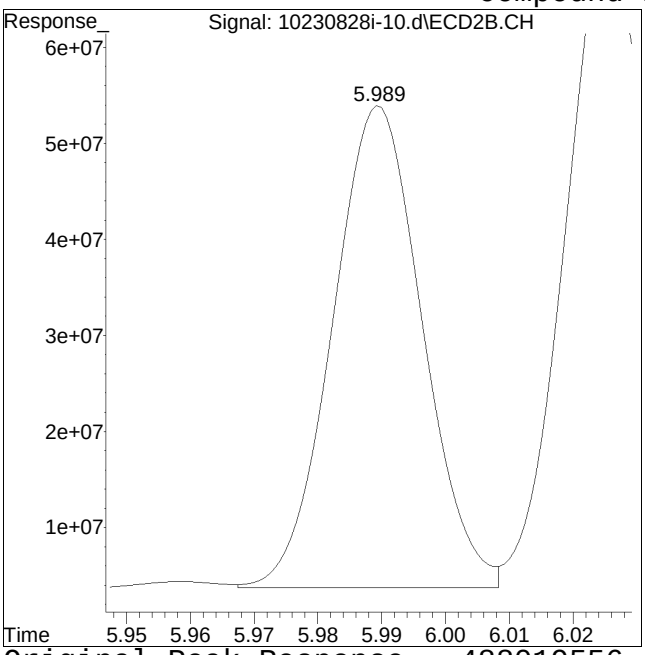


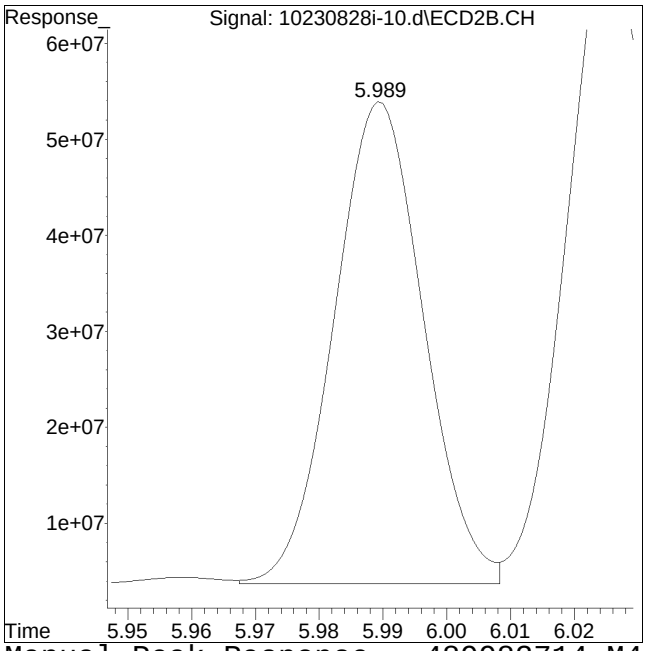
Original Peak Response = 323415521 Manual Peak Response = 322116073 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-10.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:46 pm Instrument : Pest 10
Sample : il9pest,42e,,pp 11223 L0.1Quant Date : 8/29/2023 11:58 am

Compound #62: Mirex #2



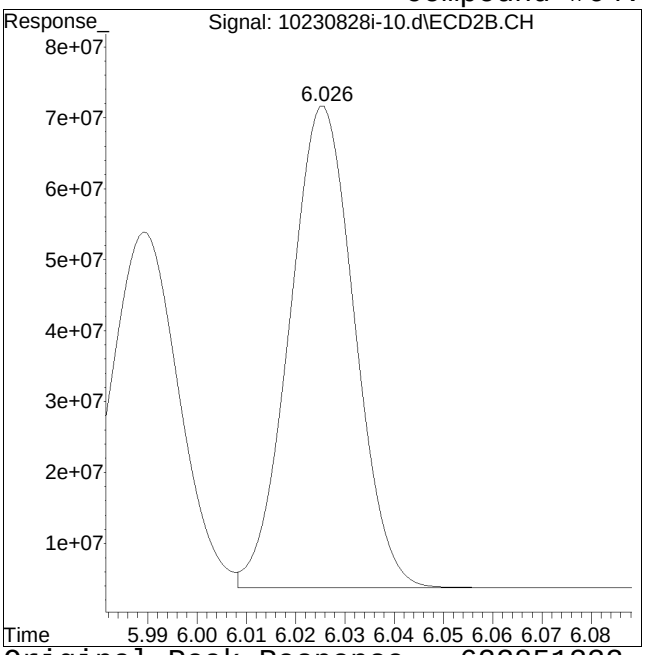


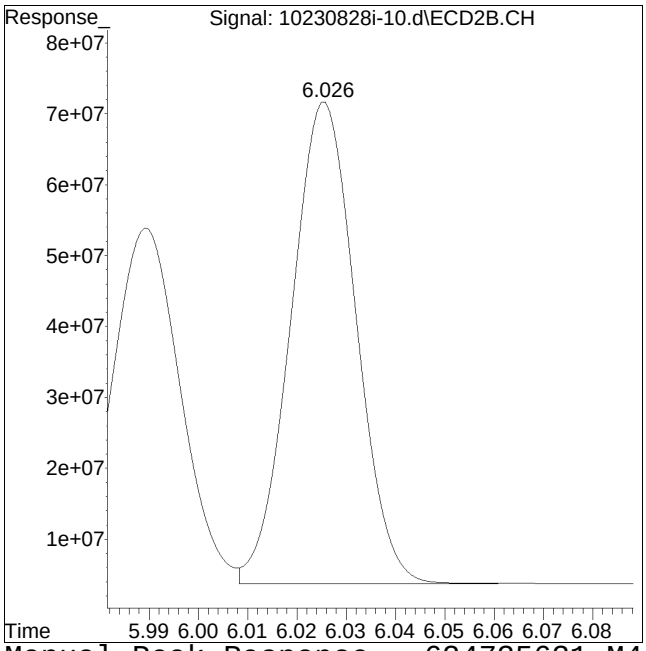
Original Peak Response = 488019556 Manual Peak Response = 489983714 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-10.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:46 pm Instrument : Pest 10
Sample : il9pest,42e,,pp 11223 L0.1Quant Date : 8/29/2023 11:58 am

Compound #64: Endrin Ketone #2





Original Peak Response = 622851332 Manual Peak Response = 624735631 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-11.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:57 pm
Operator : PEST10:akm
Sample : il10pest,42e,,pp 11222 L0.2
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:07:29 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:01:53 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.279	1.349	129.8E6	147.7E6	25.000M4	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.615	1.819	1017.7E6	1163.2E6	208.256	202.089
	Spiked Amount 50.000	Range 30 - 150		Recovery =		416.51%#	404.18%#
27) s	Decachlorobi	6.239	6.892	859.8E6	1018.7E6	198.276	196.405
	Spiked Amount 50.000	Range 30 - 150		Recovery =		396.55%#	392.81%#
	Target Compounds						
3) t	Hexachlorobe	1.823	2.135	1057.5E6	1248.9E6	206.813M3	205.261
4) t	alpha-BHC	1.921	2.229	1541.4E6	1871.6E6	216.443	213.619
5) t	gamma-BHC (l	2.118	2.511	1406.1E6	1703.9E6	214.593M3	212.685
6) t	beta-BHC	2.175	2.576	576.1E6	704.3E6	204.585	208.181
7) t	delta-BHC	2.300	2.840	1443.4E6	1755.7E6	215.229	213.948
8) t	Heptachlor	2.456	2.903	1301.8E6	1629.4E6	208.655	206.104
9) t	Aldrin	2.693	3.219	1245.6E6	1605.2E6	213.021	212.181
10) t	Alachlor	2.815	3.104	220.4E6	211.1E6	192.050	190.903
11) t	Chlorpyrifos	2.904	3.456	549.5E6	681.1E6	188.905	191.837
12) t	Heptachlor E	3.229	3.830	1142.4E6	1461.9E6	205.929	205.782
13) t	gamma-Chlord	3.351	4.048	1056.2E6	1389.4E6	208.391	210.277M4
14) t	alpha-Chlord	3.482	4.221	1175.9E6	1530.1E6	206.282M3	211.232
15) t	4,4'-DDE	3.579	4.424	1180.8E6	1545.2E6	213.424	213.124
16) t	Endosulfan I	3.618	4.283	1085.2E6	1388.6E6	207.348	207.531
17) t	Dieldrin	3.874	4.579	1153.8E6	1467.8E6	212.235	211.360M4
18) t	Endrin	4.127	4.881	1185.6E6	1491.1E6	209.795	207.187
19) t	4,4'-DDD	4.243	5.007	952.3E6	1225.1E6	213.009	212.129M4
20) t	Endosulfan I	4.376	5.082	1013.6E6	1253.7E6	206.003	204.770M4
21) t	4,4'-DDT	4.543	5.287	1049.7E6	1374.2E6	207.623	210.525M3
22) t	Endrin Aldeh	4.804	5.381	850.5E6	1032.4E6	204.848	204.498M4
23) t	Methoxychlor	5.041	5.856	527.8E6	653.6E6	195.515M4	195.465M3

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-11.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:57 pm
Operator : PEST10:akm
Sample : il10pest,42e,,pp 11222 L0.2
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:07:29 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:01:53 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	5.090	5.989	827.3E6	1016.8E6	198.028M4	200.033M4
25) t	Endosulfan S	5.202	5.611	972.7E6	1168.6E6	204.368M4	204.728M4
26) t	Endrin Keton	5.431	6.025	1086.1E6	1291.2E6	202.644M4	201.504M4
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

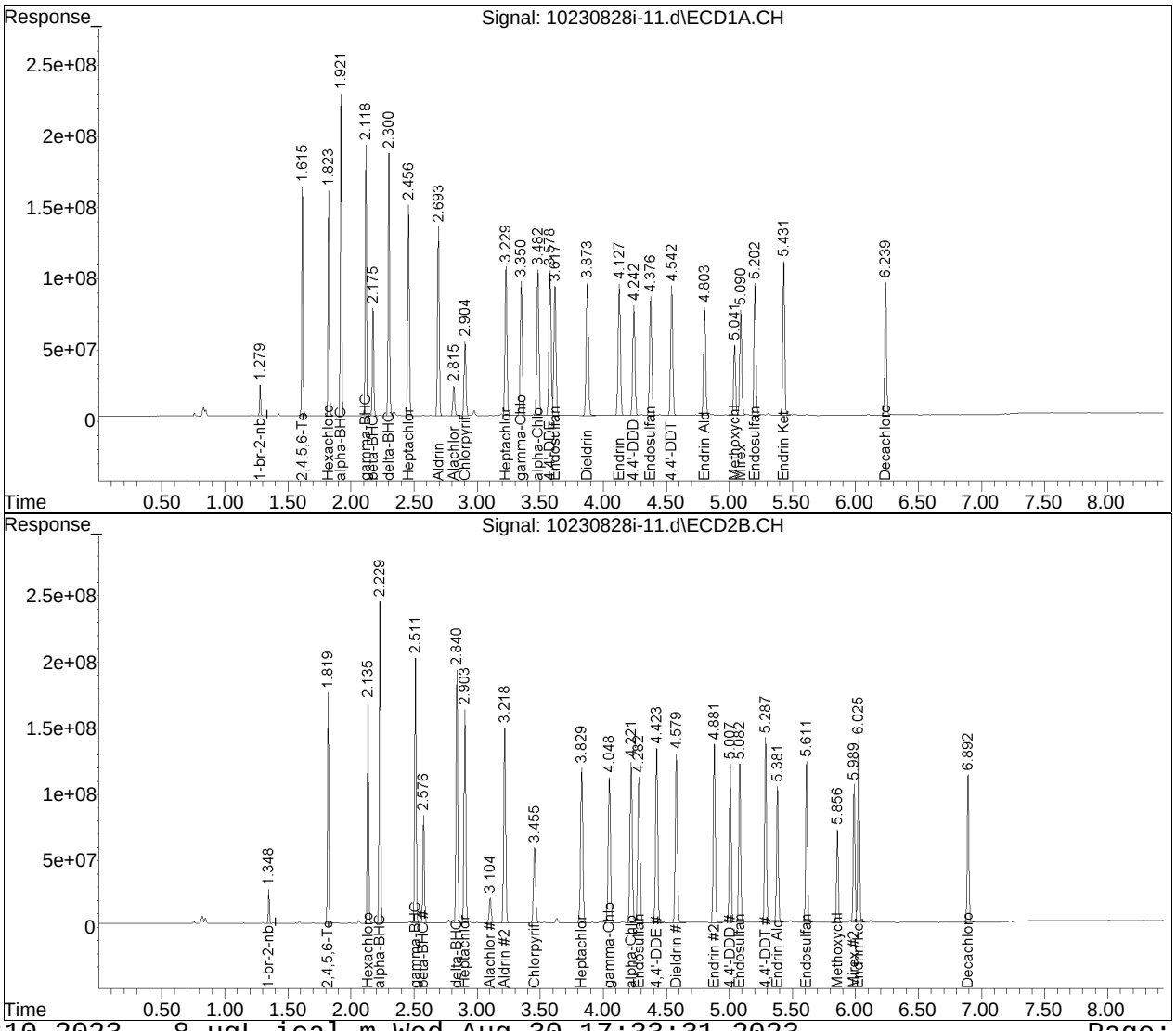
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-11.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 1:57 pm
Operator : PEST10:akm
Sample : il10pest,42e,,pp 11222 L0.2
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 11 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:07:29 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:01:53 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

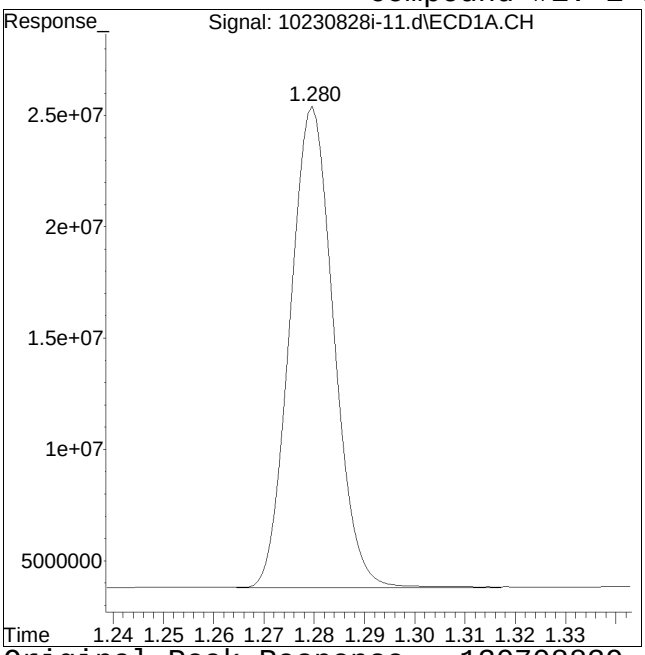
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



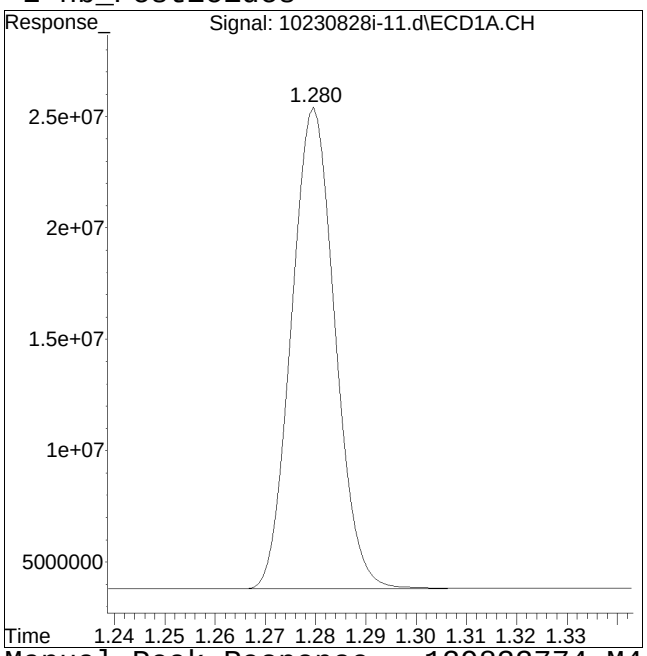
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #1: 1-br-2-nb_Pesticides



Original Peak Response = 130708839



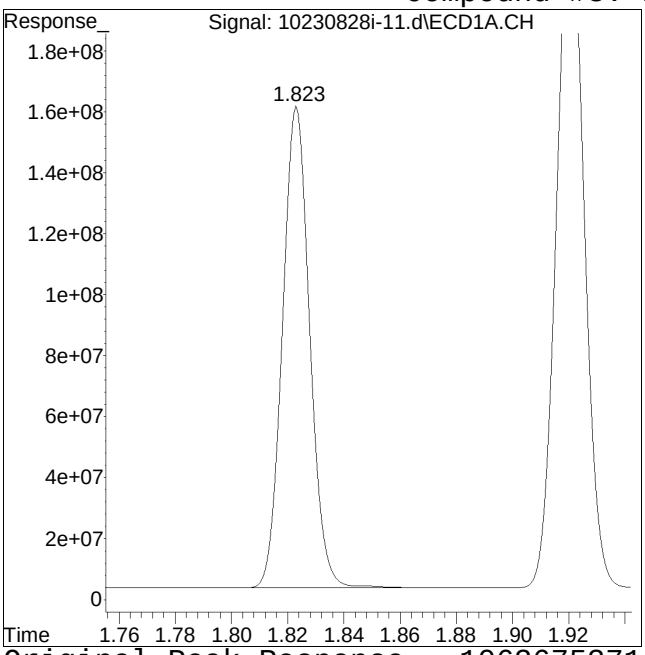
Manual Peak Response = 129833774 M4

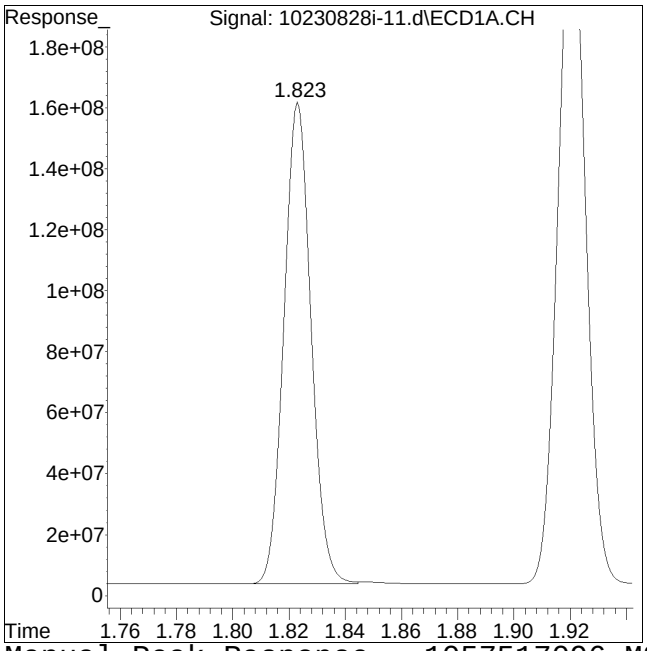
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #3: Hexachlorobenzene



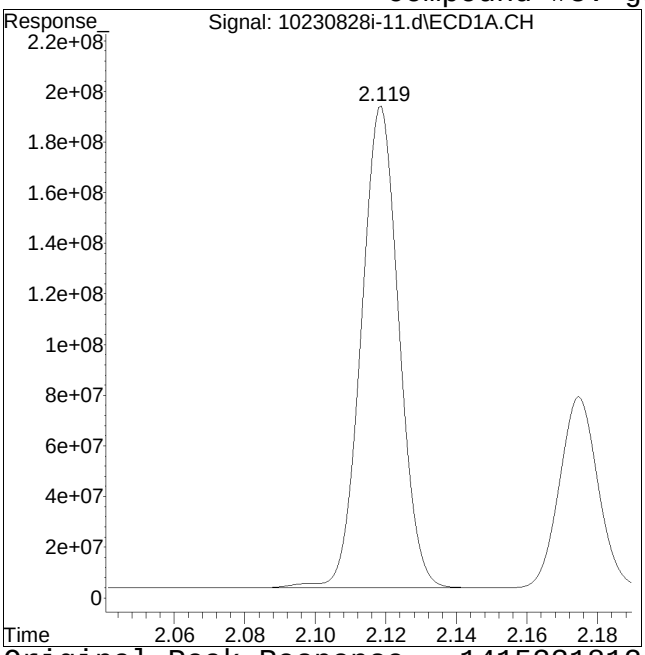


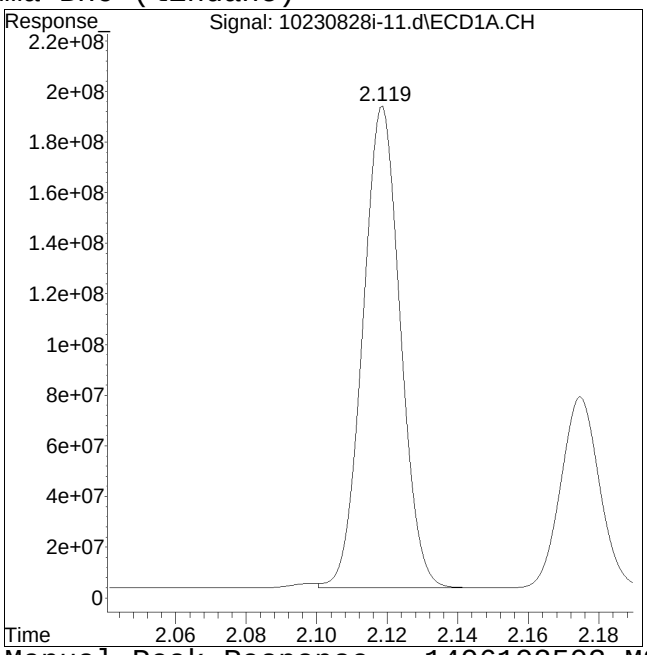
Original Peak Response = 1063675371 Manual Peak Response = 1057517096 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #5: gamma-BHC (lindane)



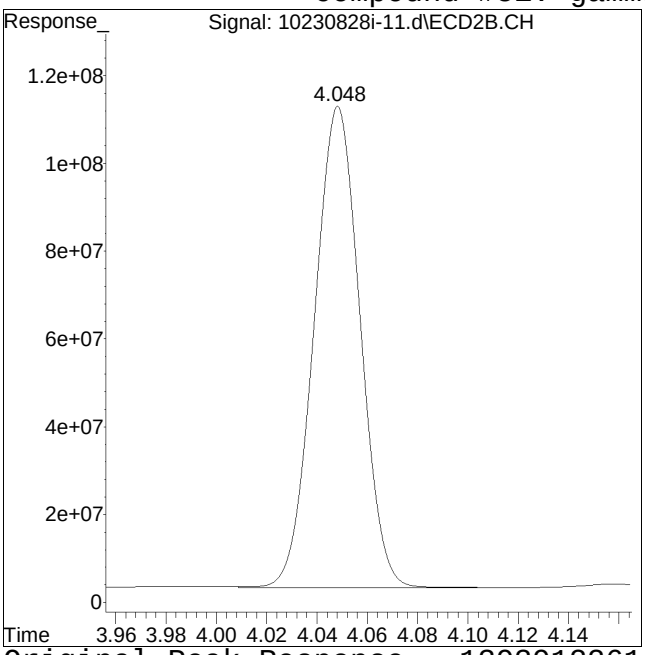


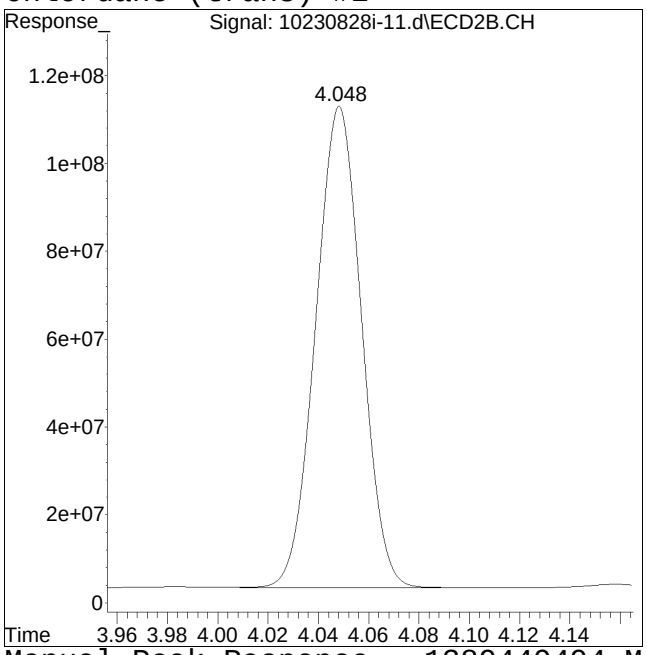
Original Peak Response = 1415331812 Manual Peak Response = 1406102503 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #51: gamma-Chlordane (trans) #2



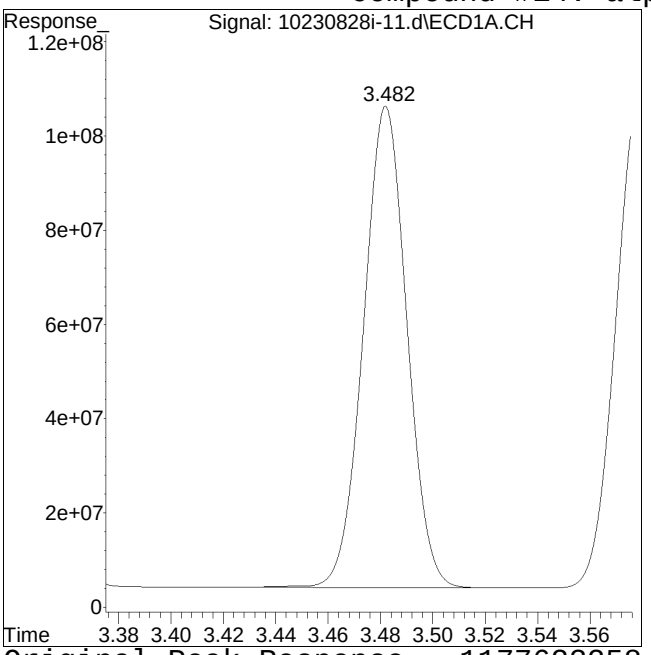


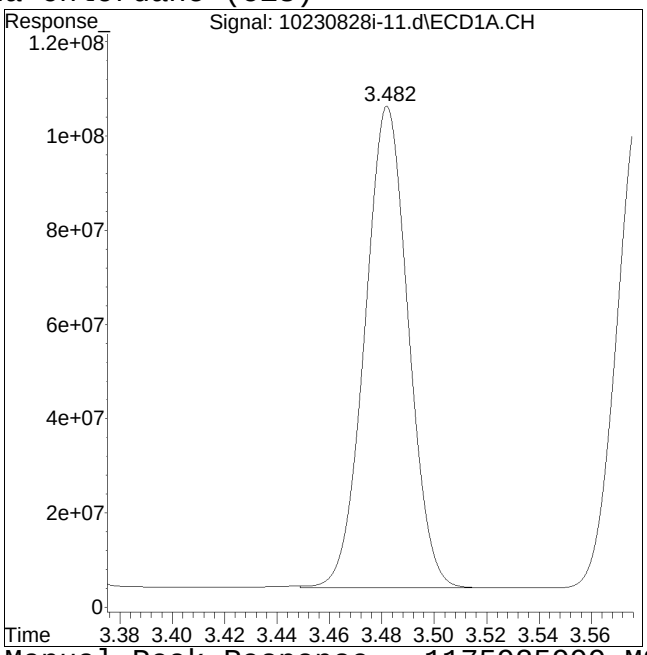
Original Peak Response = 1393912261 Manual Peak Response = 1389449494 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #14: alpha-Chlordane (cis)



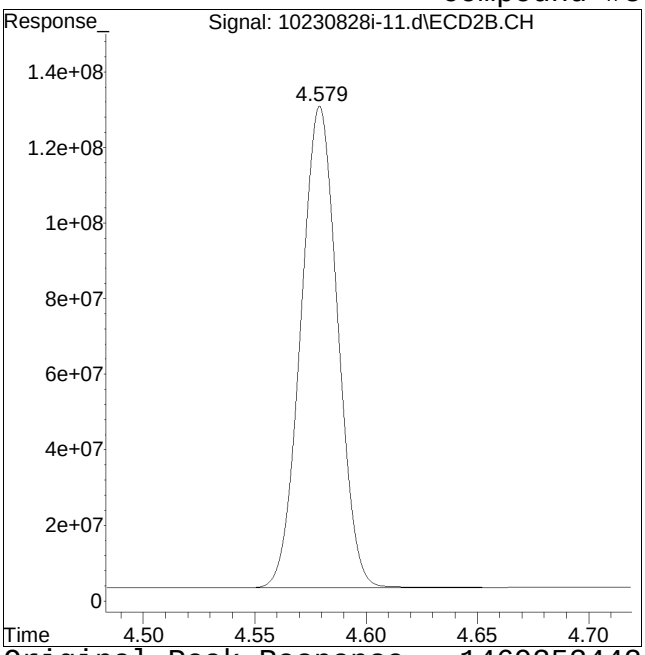


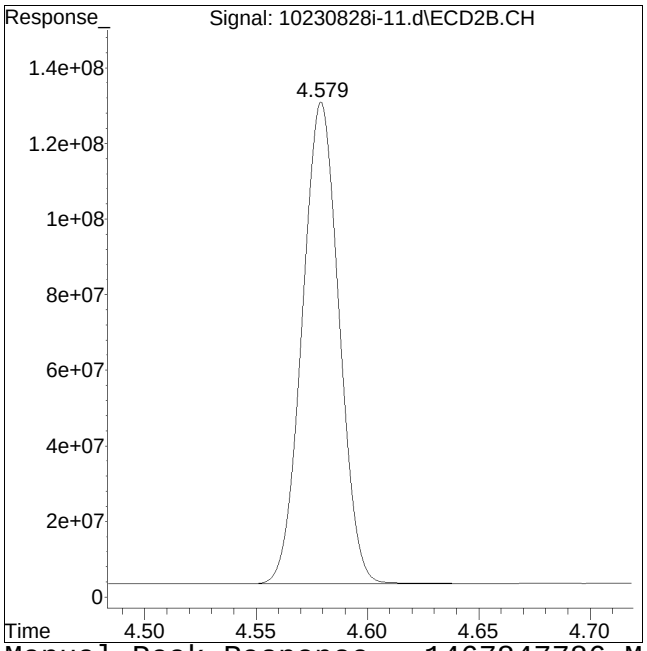
Original Peak Response = 1177623258 Manual Peak Response = 1175925999 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #55: Dieldrin #2



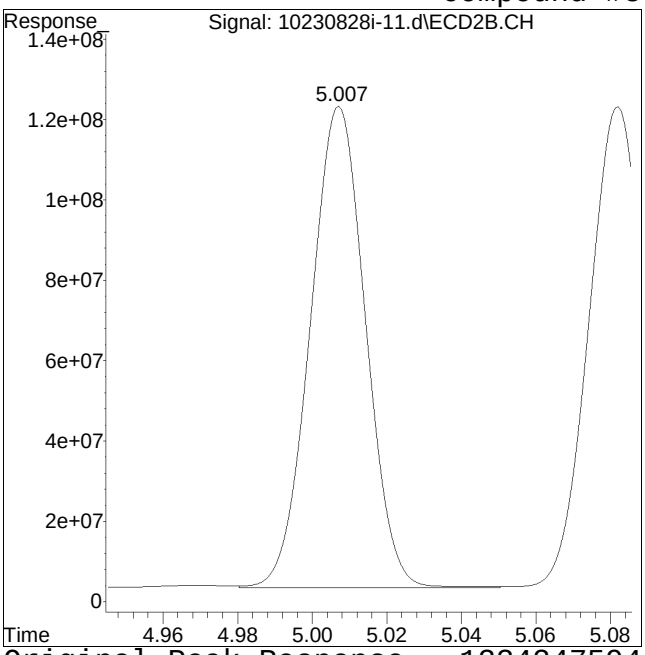


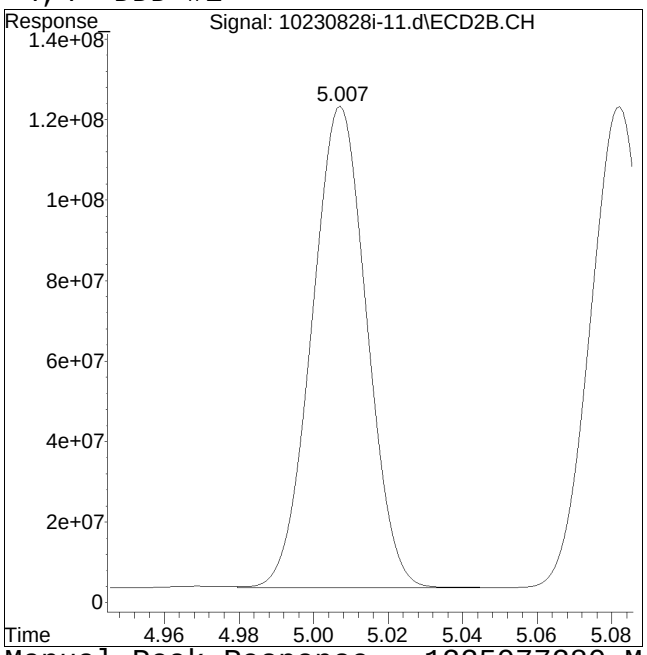
Original Peak Response = 1469353442 Manual Peak Response = 1467847786 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #57: 4,4'-DDD #2



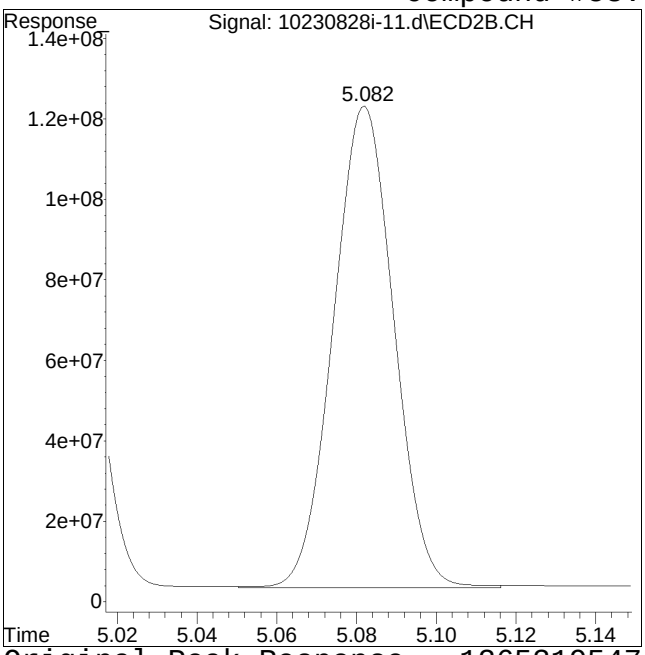


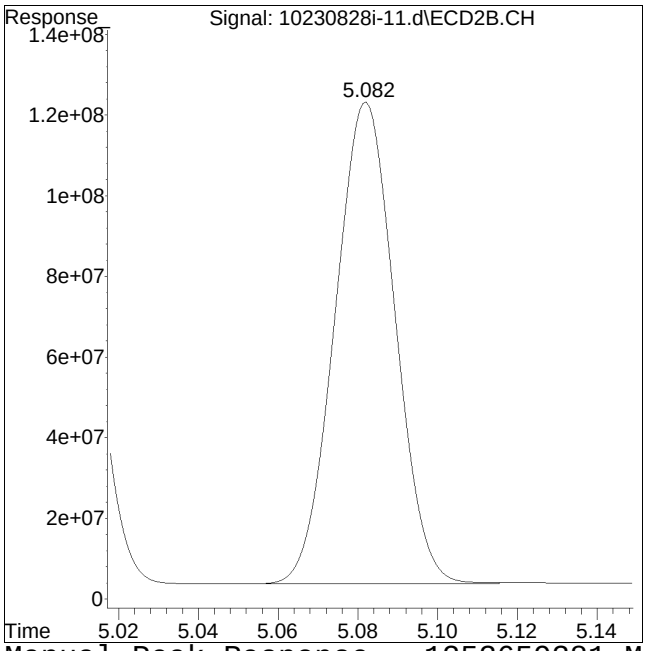
Original Peak Response = 1234247594 Manual Peak Response = 1225077280 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #58: Endosulfan II #2



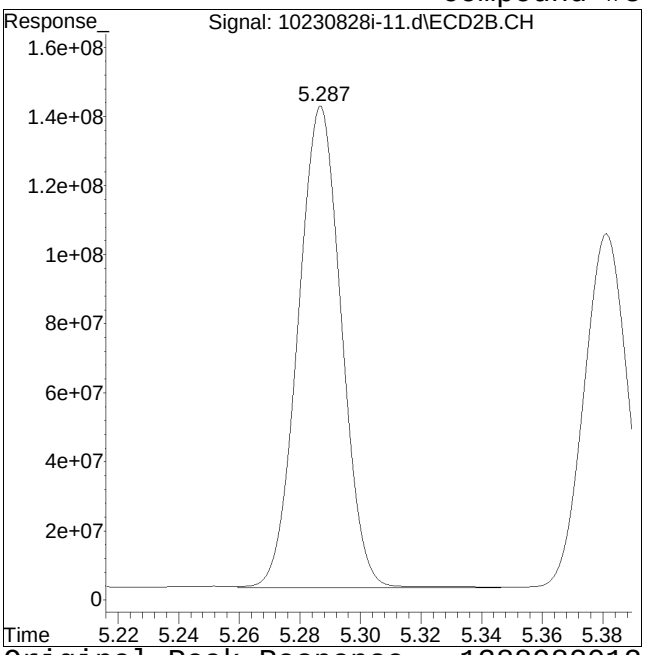


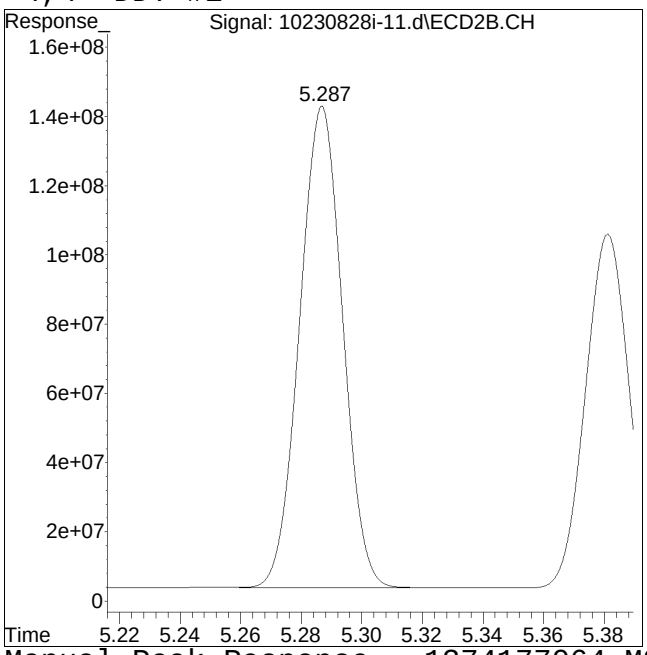
Original Peak Response = 1265319547 Manual Peak Response = 1253659381 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #59: 4,4'-DDT #2



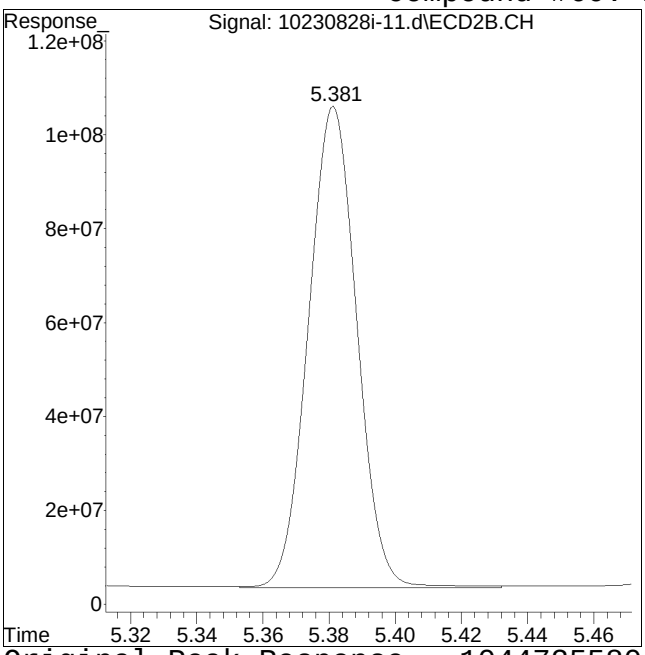


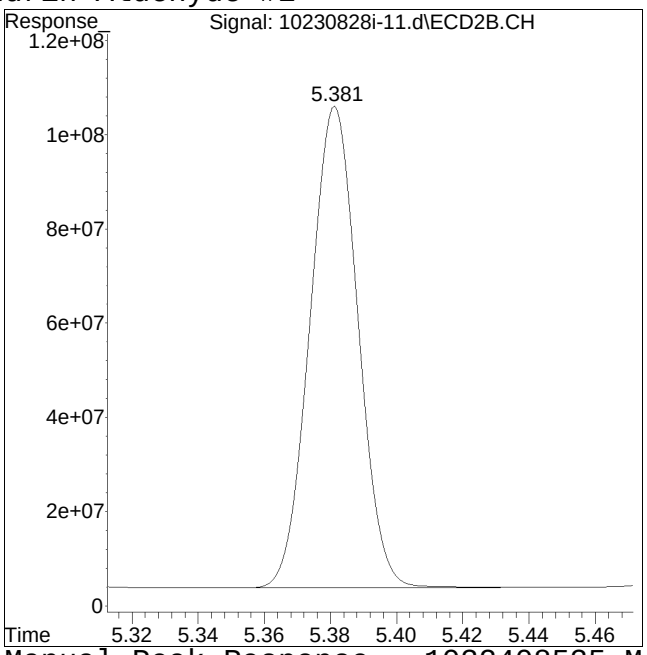
Original Peak Response = 1388982012 Manual Peak Response = 1374177064 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #60: Endrin Aldehyde #2



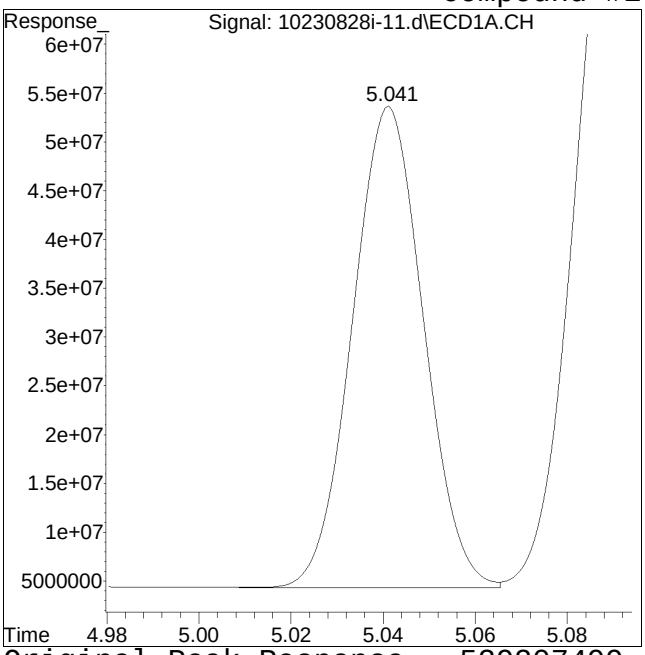


Original Peak Response = 1044725580 Manual Peak Response = 1032408535 M4
M4 = Poor automated baseline construction.

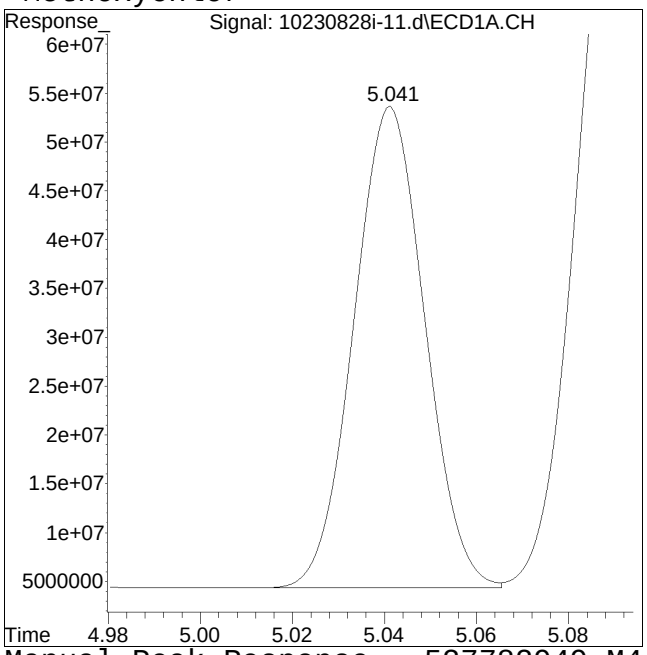
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #23: Methoxychlor



Original Peak Response = 529207499



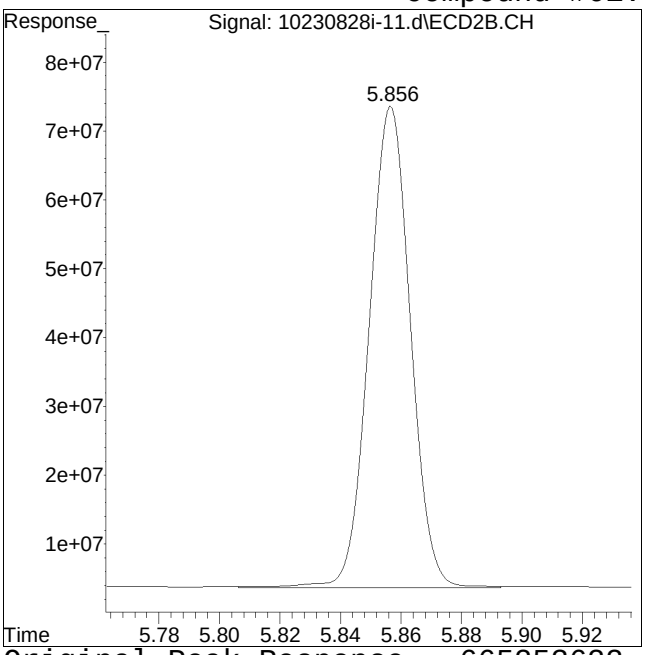
Manual Peak Response = 527782949 M4

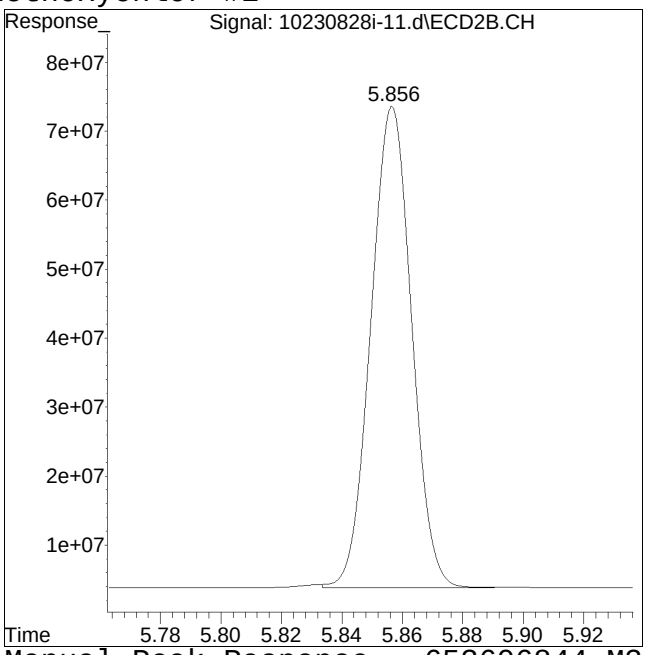
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #61: Methoxychlor #2



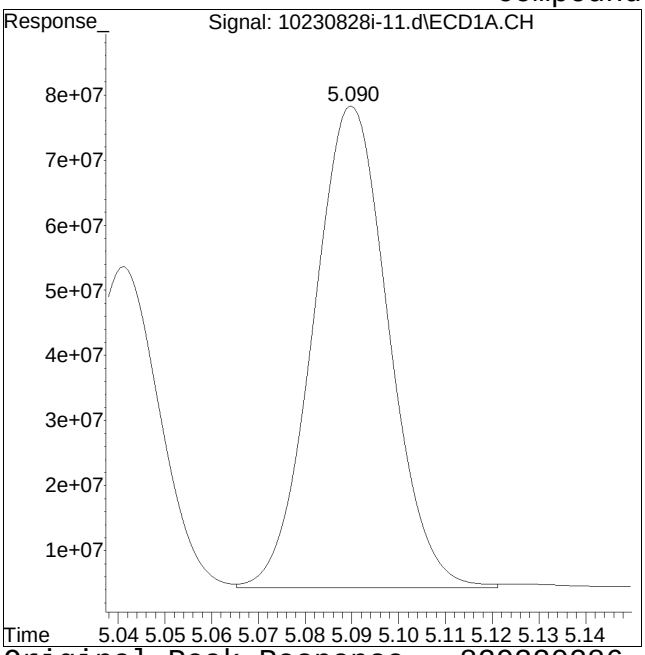


Original Peak Response = 665253622 Manual Peak Response = 653606844 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

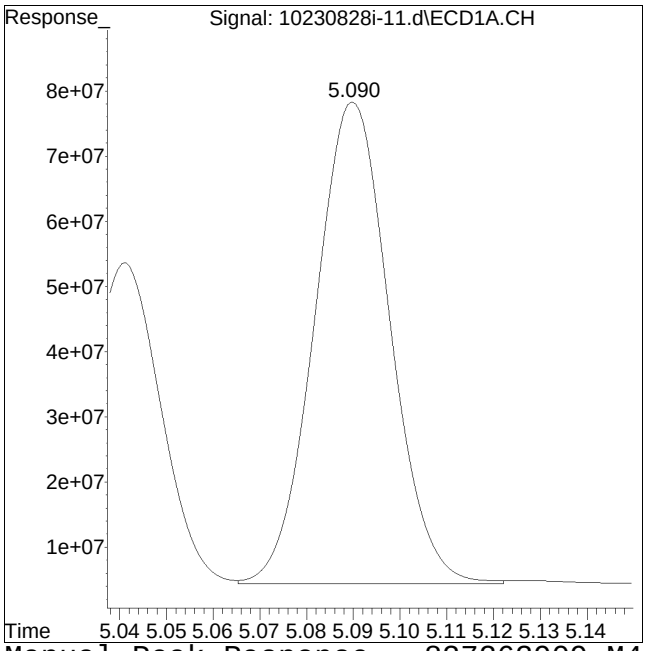
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #24: Mirex



Original Peak Response = 829320286



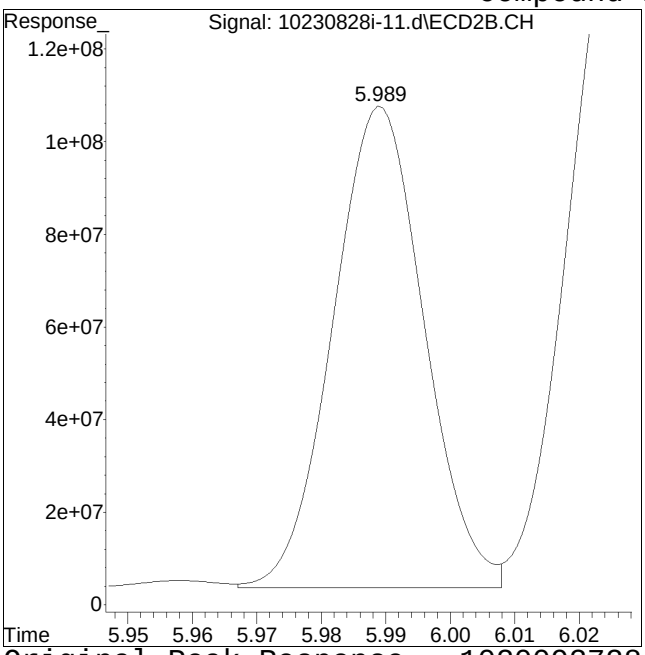
Manual Peak Response = 827263909 M4

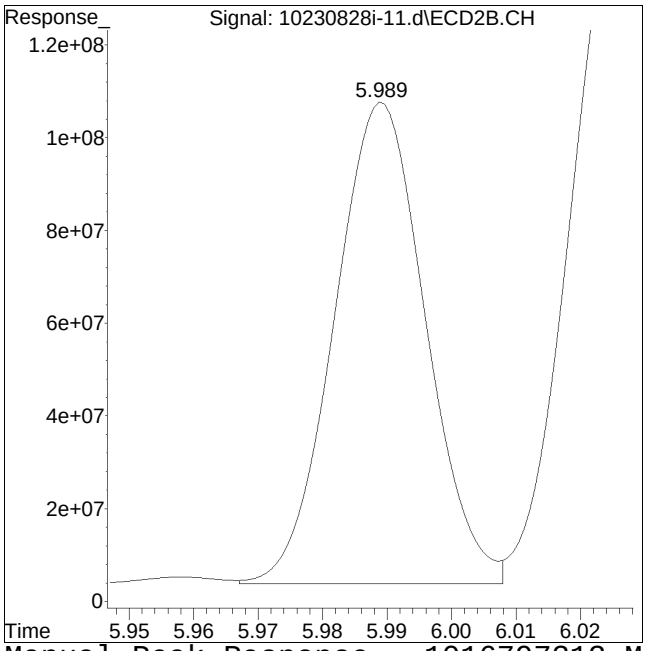
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #62: Mirex #2



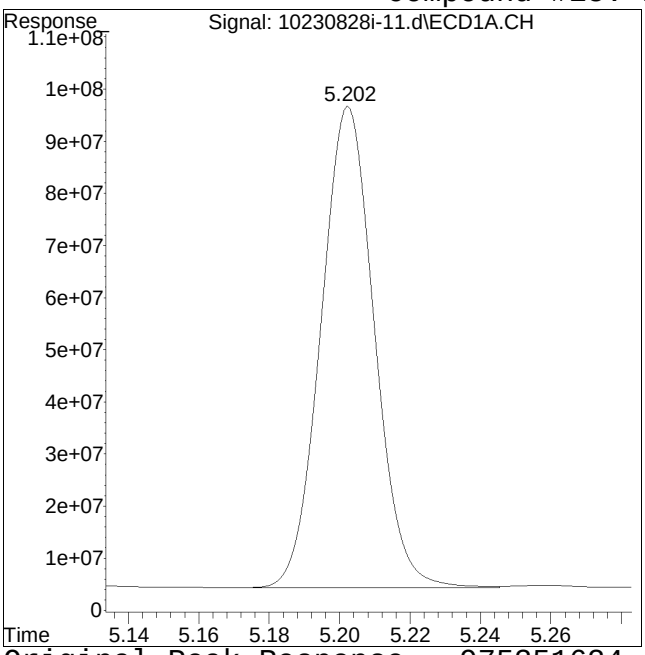


Original Peak Response = 1020093728 Manual Peak Response = 1016797313 M4
M4 = Poor automated baseline construction.

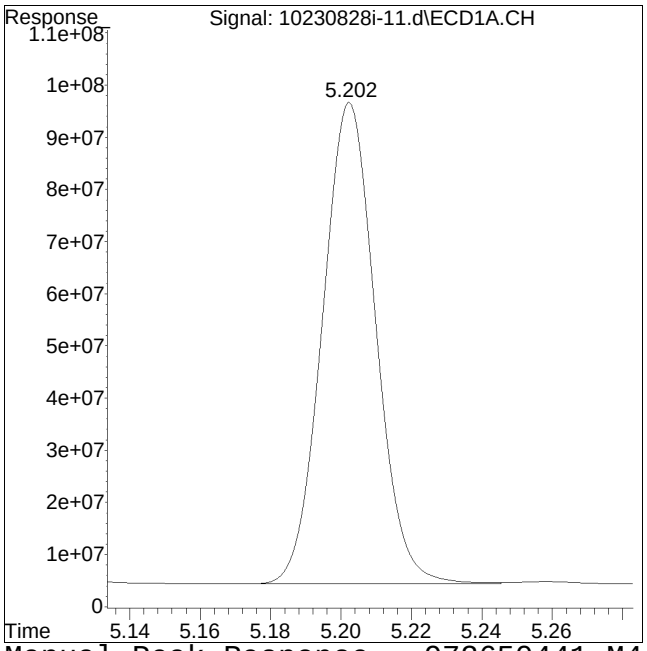
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #25: Endosulfan Sulfate



Original Peak Response = 975351624

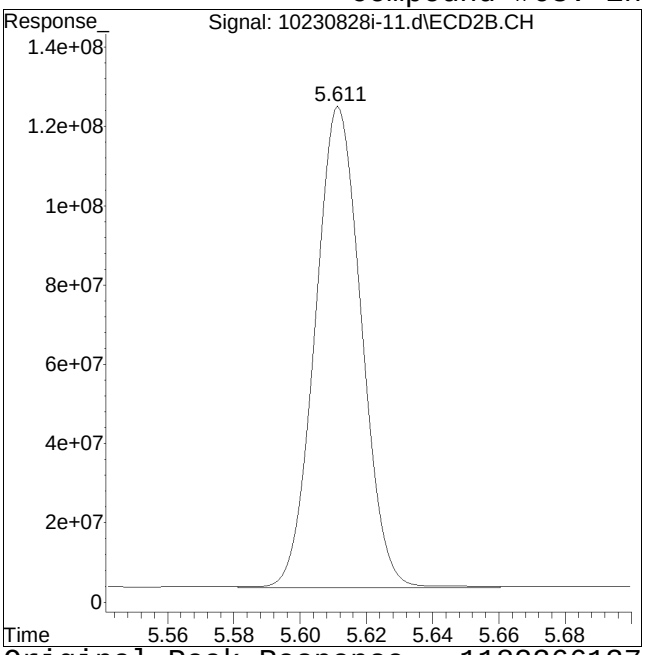


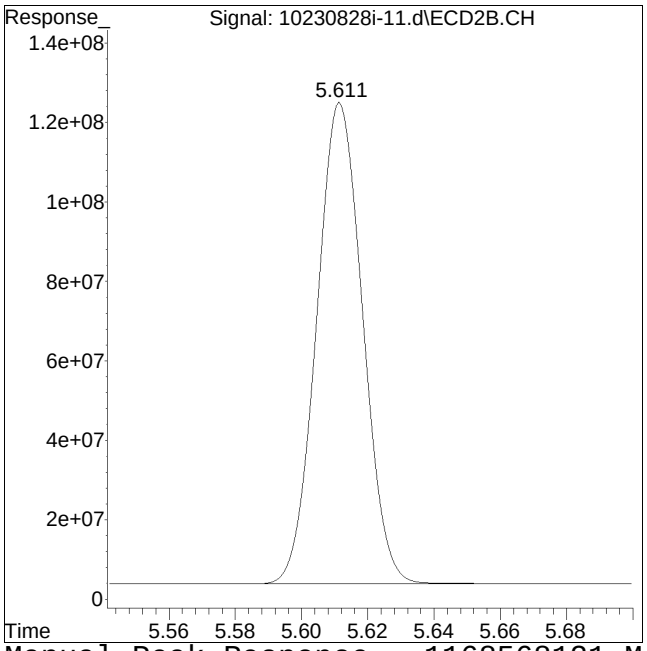
Manual Peak Response = 972650441 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #63: Endosulfan Sulfate #2



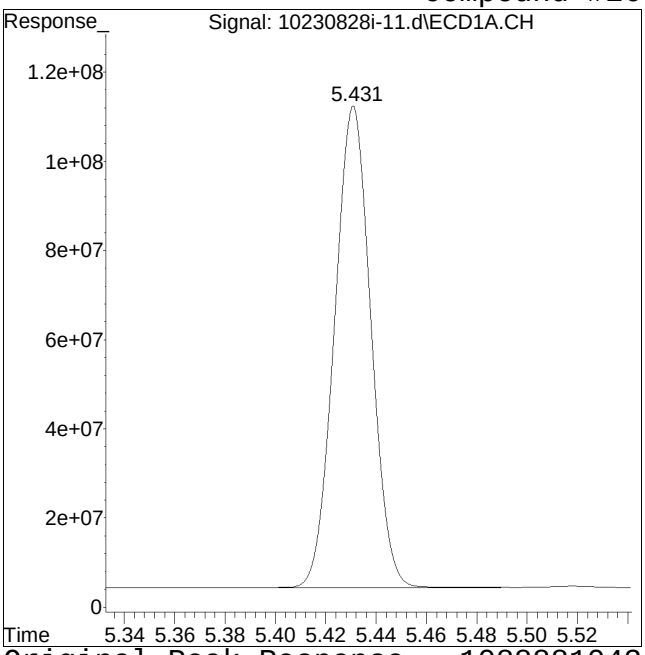


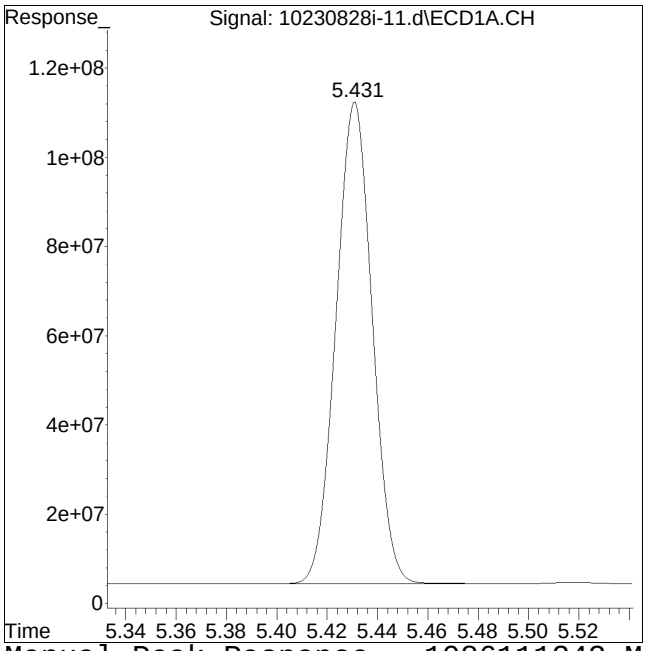
Original Peak Response = 1182366137 Manual Peak Response = 1168568121 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #26: Endrin Ketone



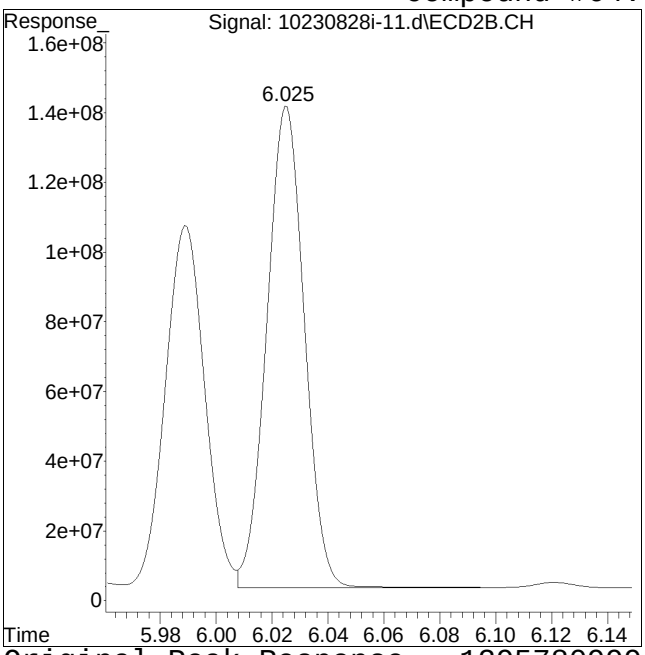


Original Peak Response = 1088881043 Manual Peak Response = 1086111243 M4
M4 = Poor automated baseline construction.

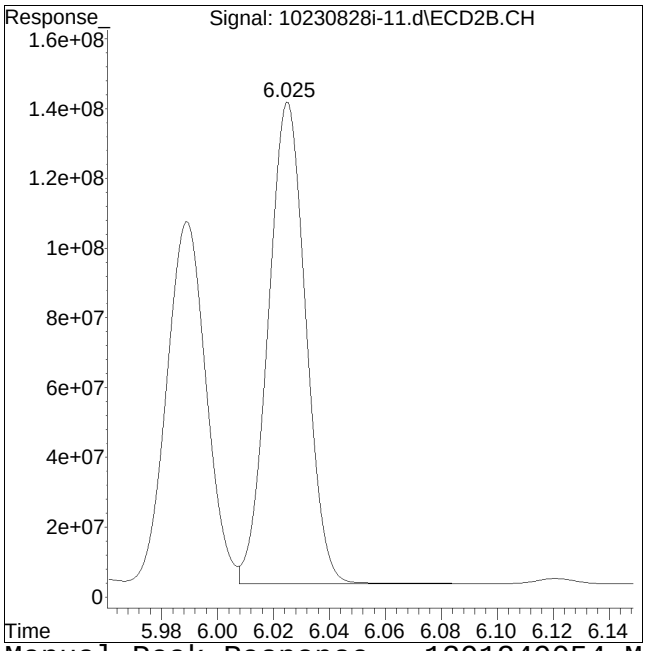
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-11.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 1:57 pm Instrument : Pest 10
Sample : il10pest,42e,,pp 11222 L0.Quant Date : 8/29/2023 12:02 pm

Compound #64: Endrin Ketone #2



Original Peak Response = 1295780999



Manual Peak Response = 1291249054 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-12.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:08 pm
Operator : PEST10:akm
Sample : il11pest,42e,,pp 11221 L0.4
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:13:49 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:07:41 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.279	1.348	132.8E6	148.2E6	25.000M3	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.615	1.819	1973.3E6	2238.5E6	389.523	386.288
	Spiked Amount 50.000	Range 30 - 150		Recovery =		779.05%#	772.58%#
27) s	Decachlorobi	6.239	6.893	1645.6E6	1939.1E6	372.178	374.870
	Spiked Amount 50.000	Range 30 - 150		Recovery =		744.36%#	749.74%#
	Target Compounds						
3) t	Hexachlorobe	1.823	2.135	2057.6E6	2403.9E6	389.104M3	390.390
4) t	alpha-BHC	1.921	2.229	3041.1E6	3660.5E6	406.469	407.199M4
5) t	gamma-BHC (l	2.119	2.511	2772.1E6	3325.5E6	403.906	405.177M4
6) t	beta-BHC	2.175	2.576	1124.4E6	1375.3E6	387.535M4	399.780M4
7) t	delta-BHC	2.300	2.840	2869.7E6	3422.0E6	408.119M4	406.203M4
8) t	Heptachlor	2.456	2.903	2484.2E6	3060.0E6	383.860M4	381.911M4
9) t	Aldrin	2.693	3.218	2399.0E6	3057.3E6	392.704	394.809M4
10) t	Alachlor	2.815	3.104	400.0E6	383.5E6	345.337	350.945M4
11) t	Chlorpyrifos	2.904	3.455	1009.1E6	1245.5E6	345.624	354.484
12) t	Heptachlor E	3.229	3.829	2180.8E6	2733.7E6	380.685	379.888
13) t	gamma-Chlord	3.350	4.048	2064.7E6	2685.9E6	392.878	398.341
14) t	alpha-Chlord	3.482	4.221	2265.8E6	2943.5E6	384.666M3	397.593
15) t	4,4'-DDE	3.578	4.424	2288.9E6	2958.1E6	395.733	397.976
16) t	Endosulfan I	3.617	4.282	2033.7E6	2561.3E6	375.419	376.816
17) t	Dieldrin	3.874	4.579	2219.9E6	2775.7E6	391.351	390.980
18) t	Endrin	4.126	4.880	2290.0E6	2773.2E6	389.902M4	379.539
19) t	4,4'-DDD	4.242	5.006	1858.6E6	2395.8E6	397.941M4	405.302M4

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-12.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:08 pm
Operator : PEST10:akm
Sample : il11pest,42e,,pp 11221 L0.4
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:13:49 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:07:41 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
20) t	Endosulfan I	4.376	5.081	1603.8E6	1965.7E6	315.607M4	317.500M4
21) t	4,4'-DDT	4.542	5.286	2069.0E6	2636.4E6	395.204M3	395.638M3
22) t	Endrin Aldeh	4.804	5.381	1646.0E6	1967.7E6	384.598	385.610M4
23) t	Methoxychlor	5.041	5.857	986.4E6	1220.9E6	360.023M4	366.703
24) t	Mirex	5.090	5.989	1575.1E6	1936.6E6	369.949M4	379.715
25) t	Endosulfan S	5.203	5.611	1860.4E6	2205.1E6	379.508M4	382.061M4
26) t	Endrin Keton	5.431	6.025	2056.8E6	2397.7E6	373.629M4	372.024M3
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-12.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:08 pm
Operator : PEST10:akm
Sample : il11pest,42e,,pp 11221 L0.4
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:13:49 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:07:41 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l

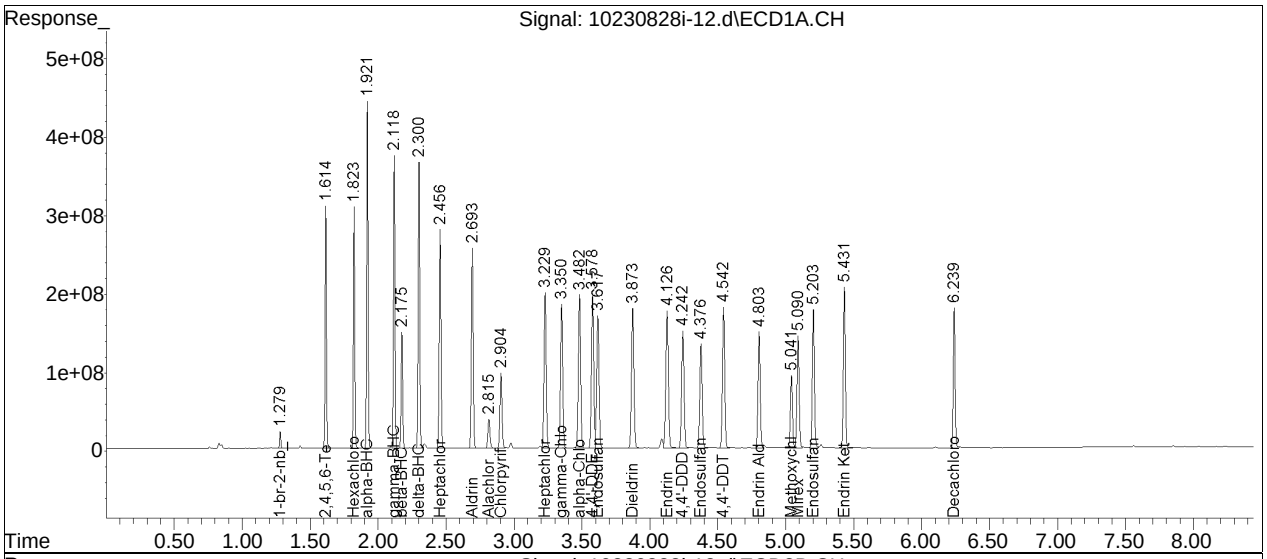
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-12.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:08 pm
Operator : PEST10:akm
Sample : il11pest,42e,,pp 11221 L0.4
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 12 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:13:49 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:07:41 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

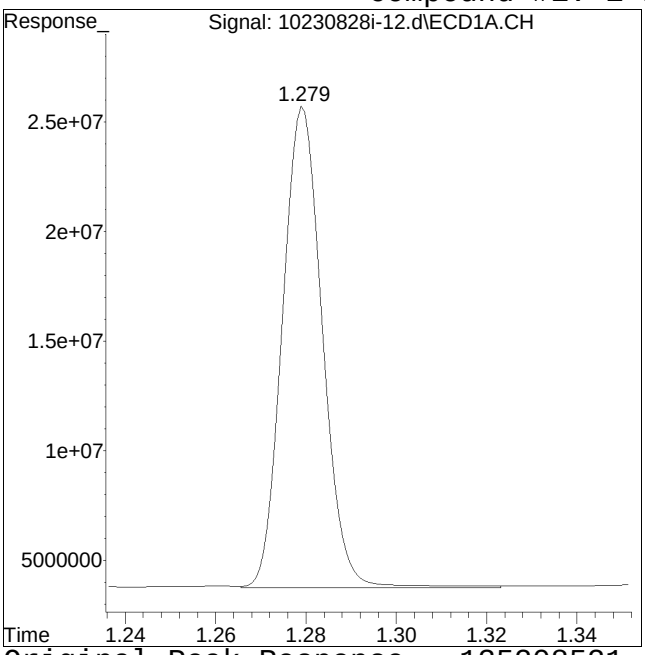
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

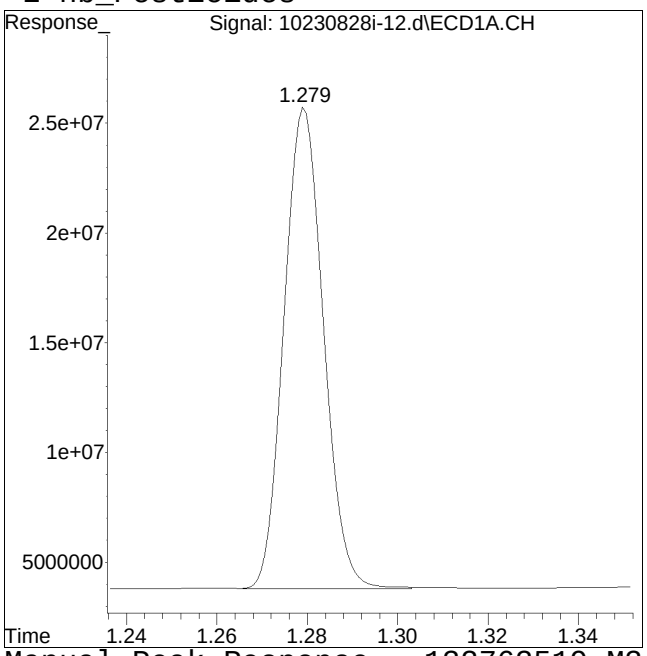


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #1: 1-br-2-nb_Pesticides



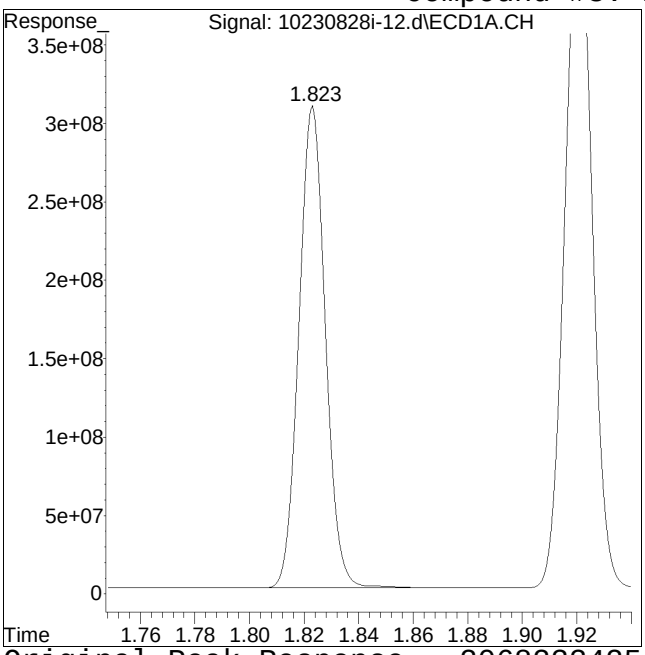


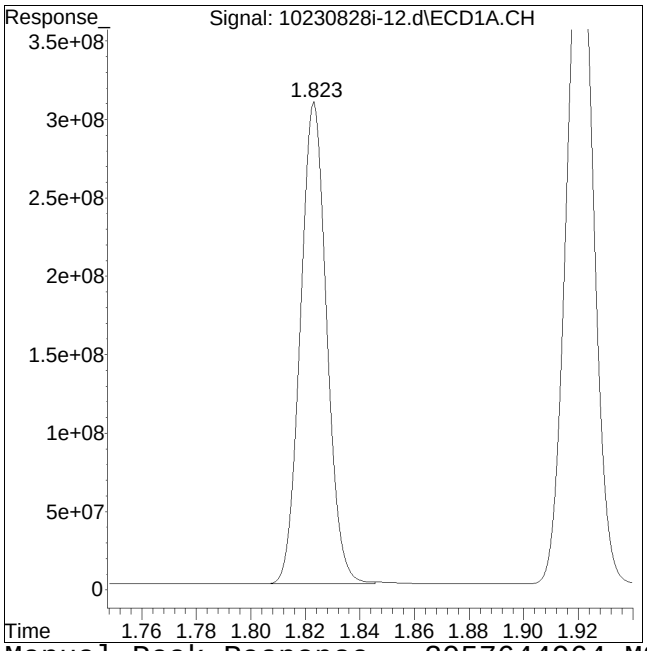
Original Peak Response = 135208521 Manual Peak Response = 132763519 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #3: Hexachlorobenzene



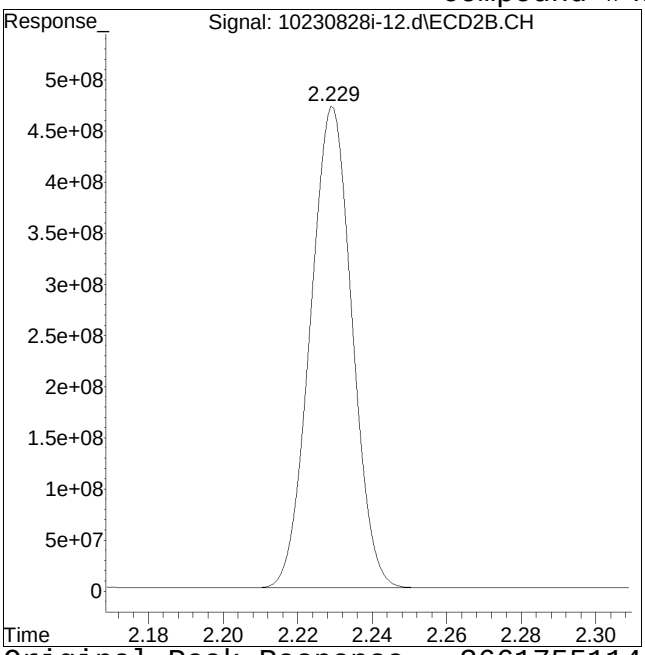


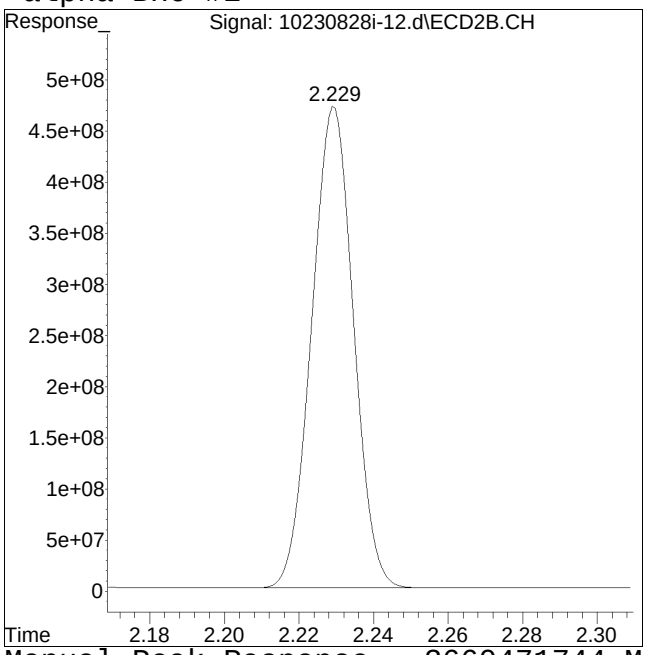
Original Peak Response = 2068233425 Manual Peak Response = 2057644964 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #42: alpha-BHC #2



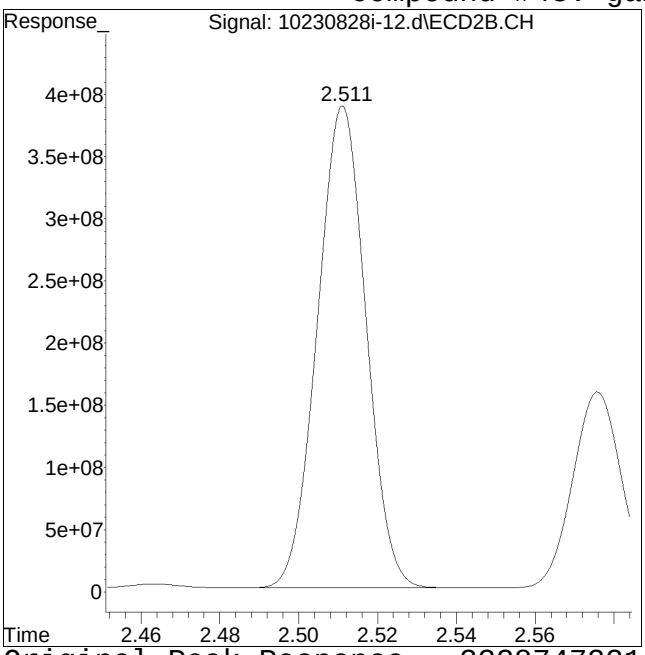


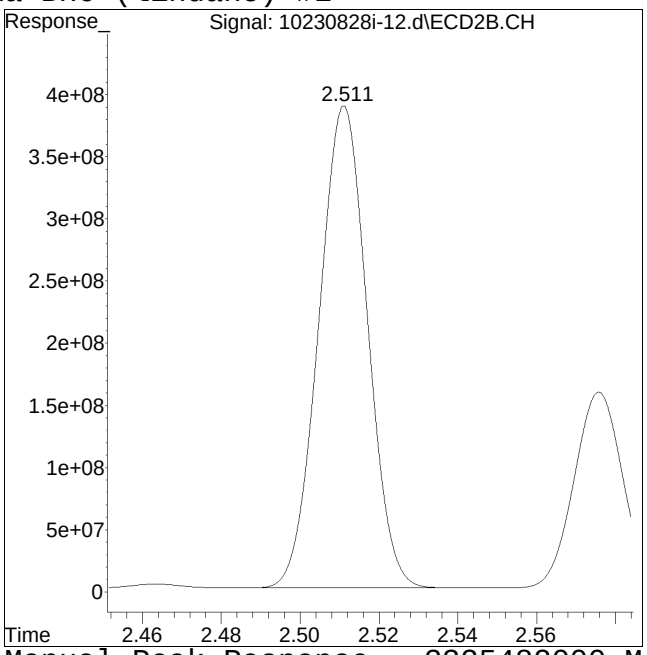
Original Peak Response = 3661755114 Manual Peak Response = 3660471744 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #43: gamma-BHC (lindane) #2



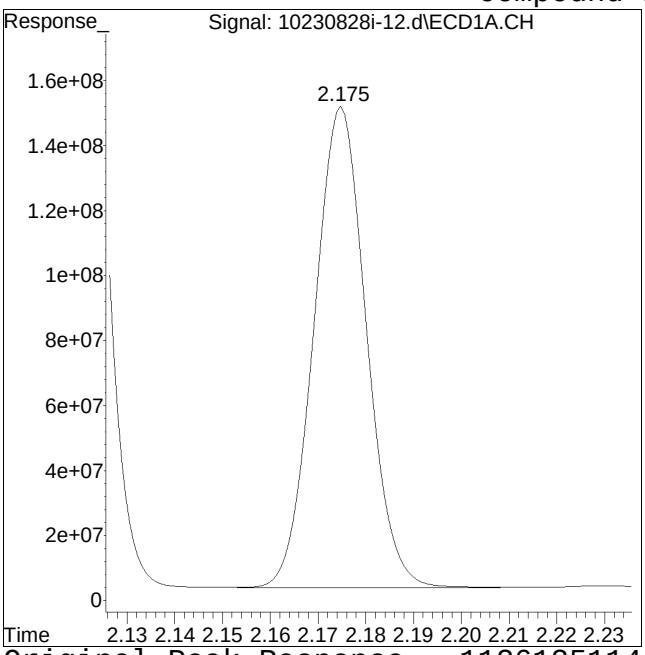


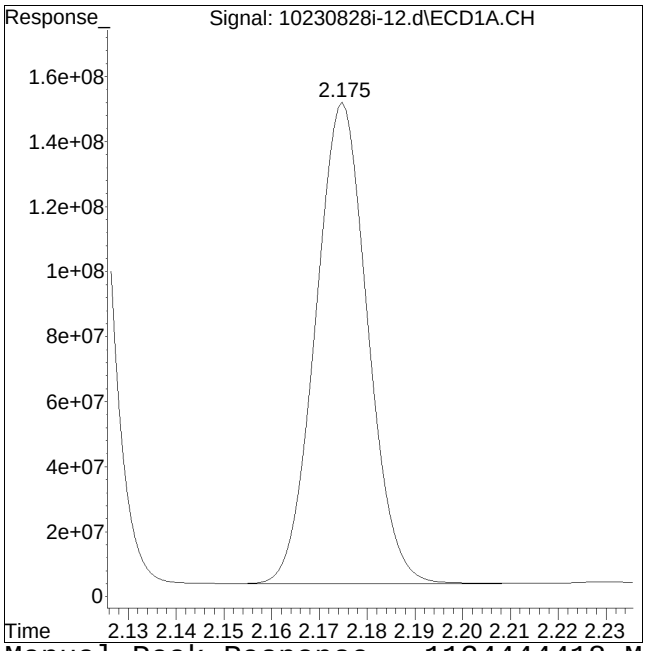
Original Peak Response = 3328747221 Manual Peak Response = 3325482000 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #6: beta-BHC



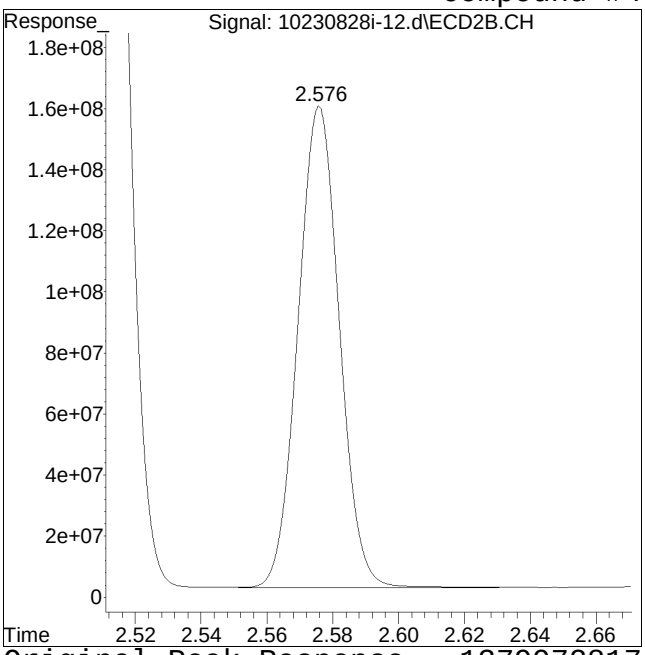


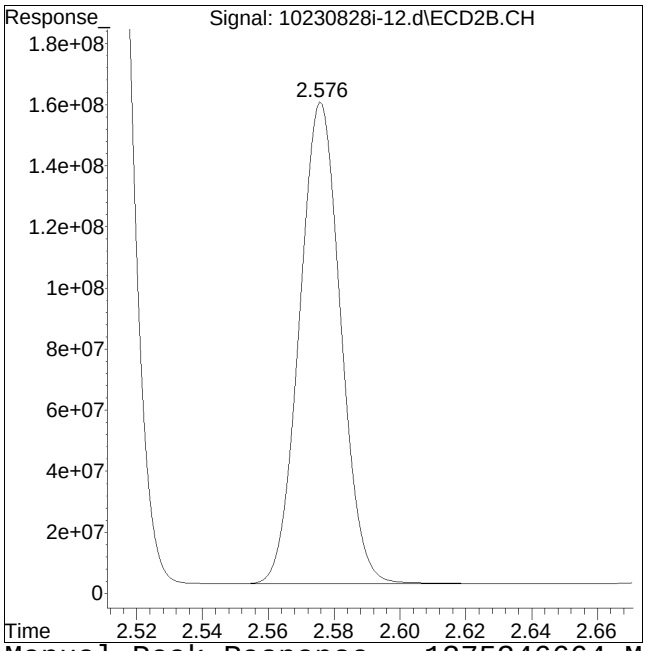
Original Peak Response = 1126125114 Manual Peak Response = 1124444418 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #44: beta-BHC #2



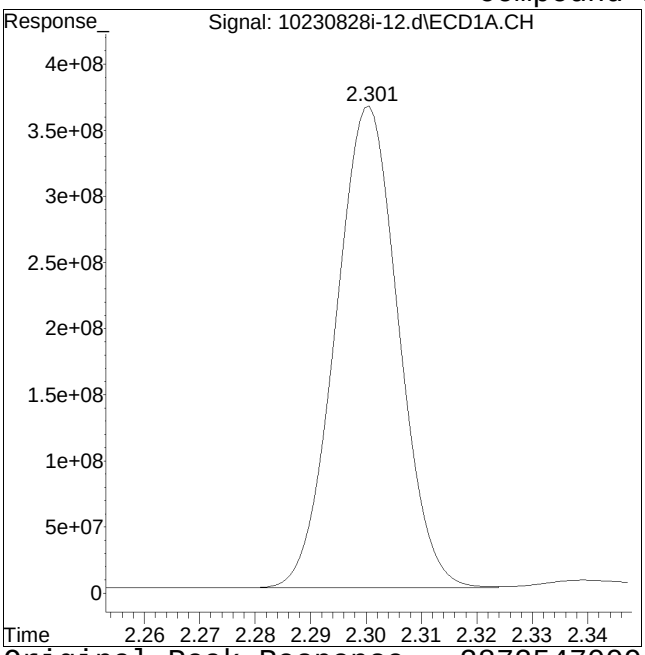


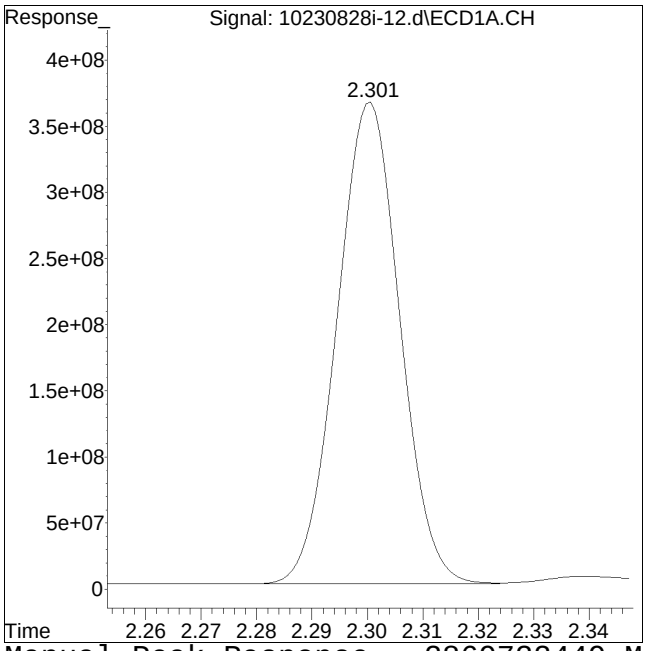
Original Peak Response = 1379972817 Manual Peak Response = 1375346664 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #7: delta-BHC



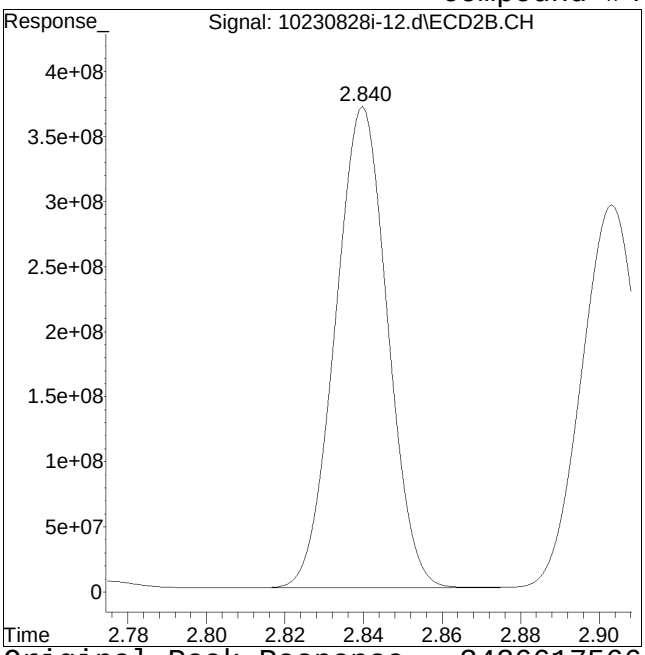


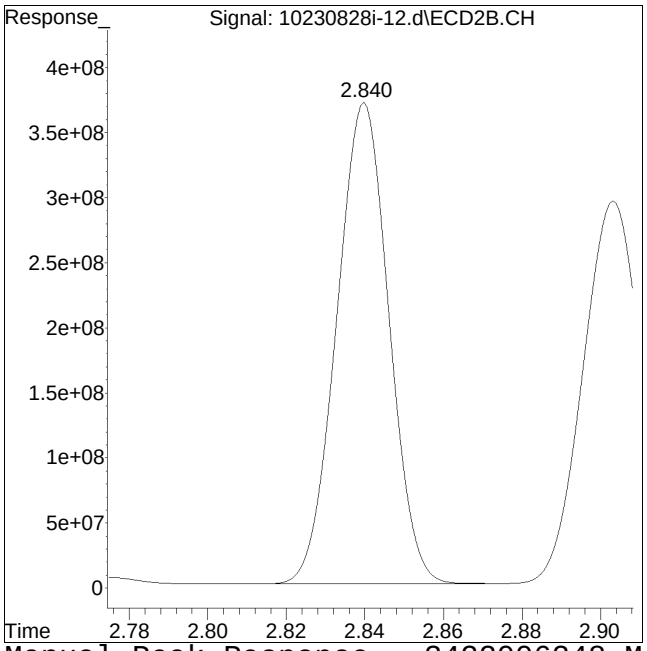
Original Peak Response = 2872547009 Manual Peak Response = 2869732449 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #45: delta-BHC #2



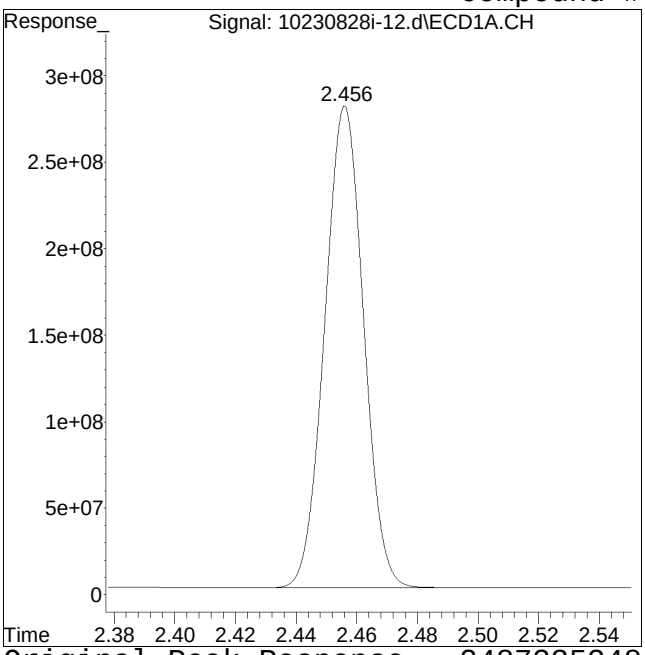


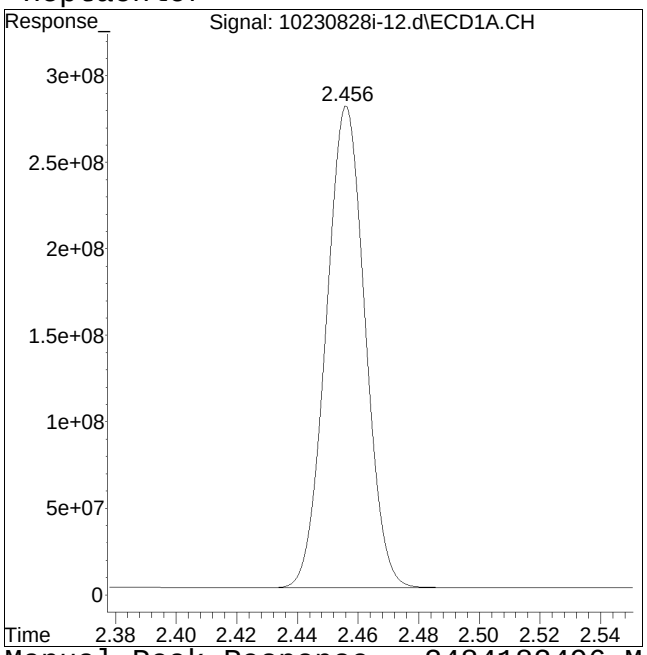
Original Peak Response = 3426617566 Manual Peak Response = 3422006248 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #8: Heptachlor



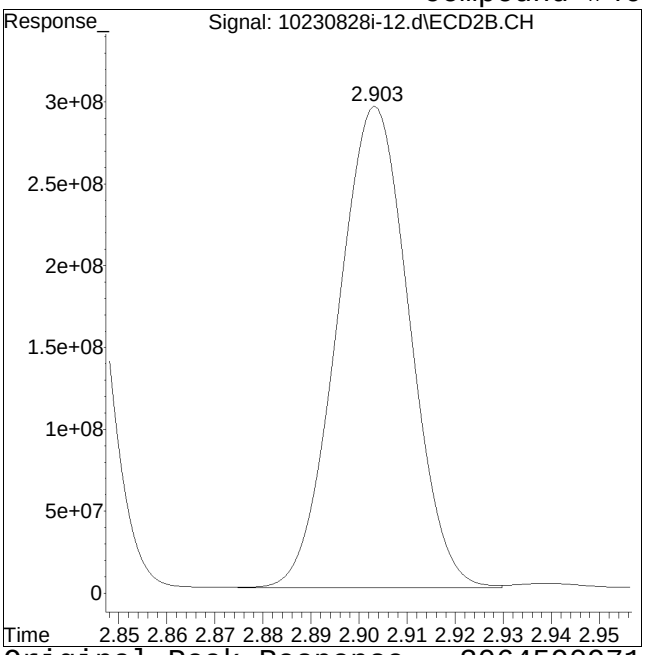


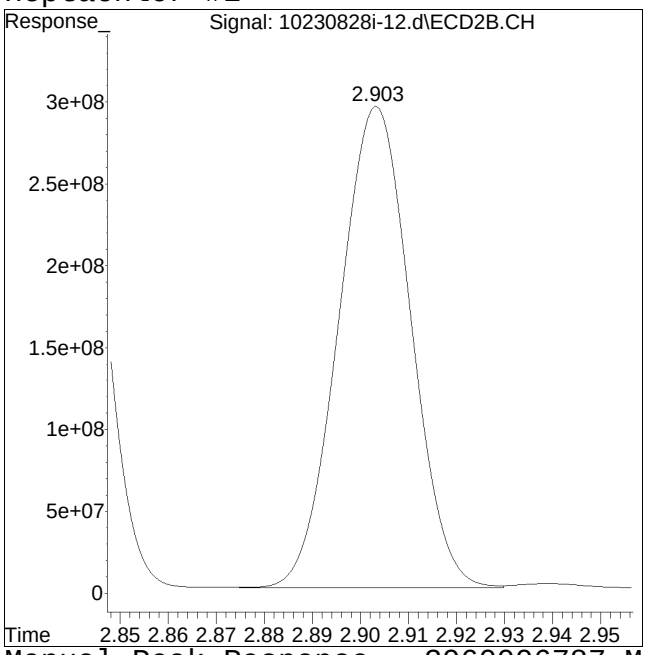
Original Peak Response = 2487335248 Manual Peak Response = 2484182496 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #46: Heptachlor #2



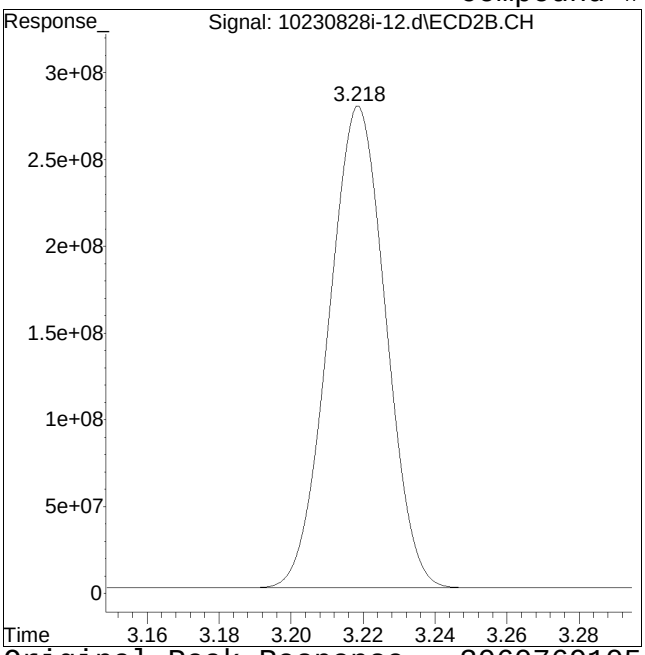


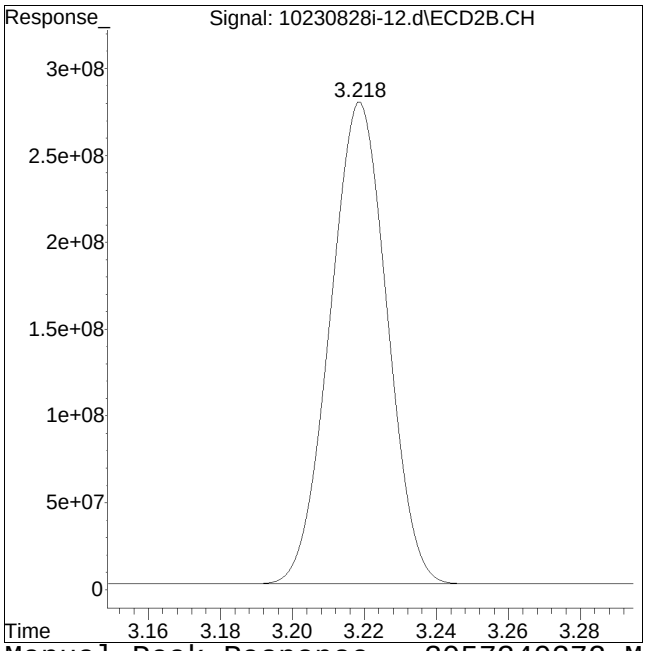
Original Peak Response = 3064590971 Manual Peak Response = 3060006787 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #47: Aldrin #2



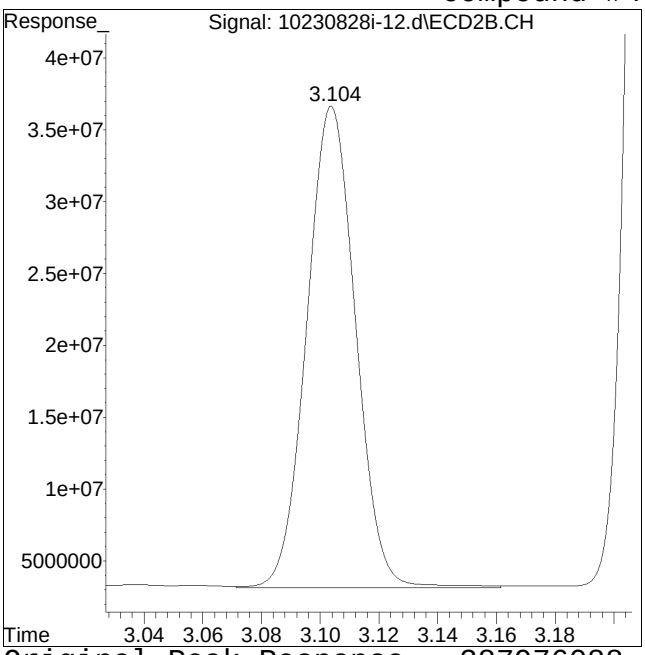


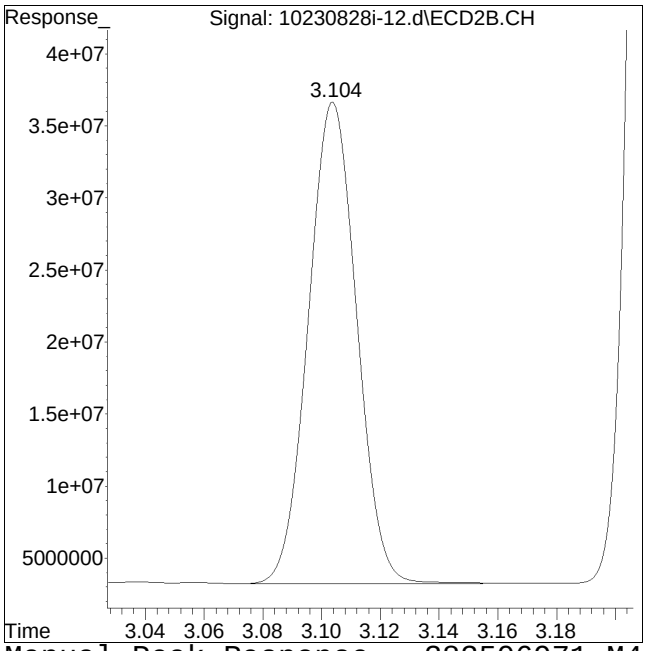
Original Peak Response = 3060769105 Manual Peak Response = 3057340372 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #48: Alachlor #2



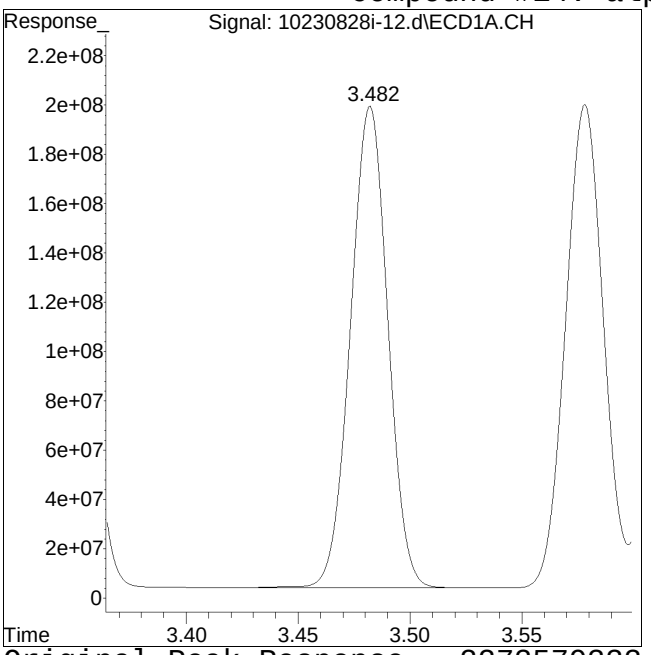


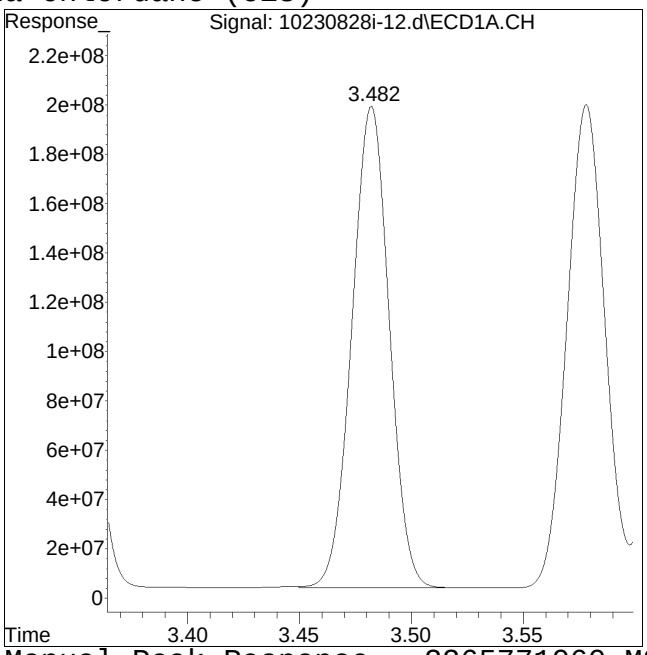
Original Peak Response = 387976088 Manual Peak Response = 383506971 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #14: alpha-Chlordane (cis)



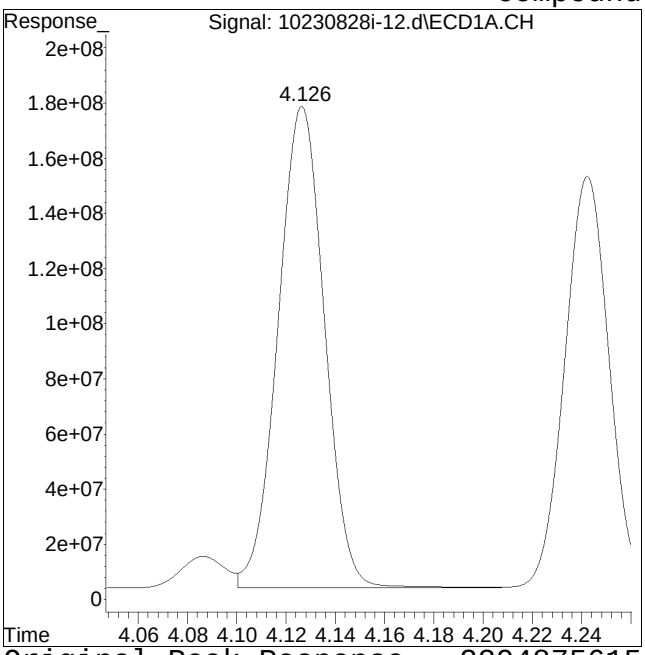


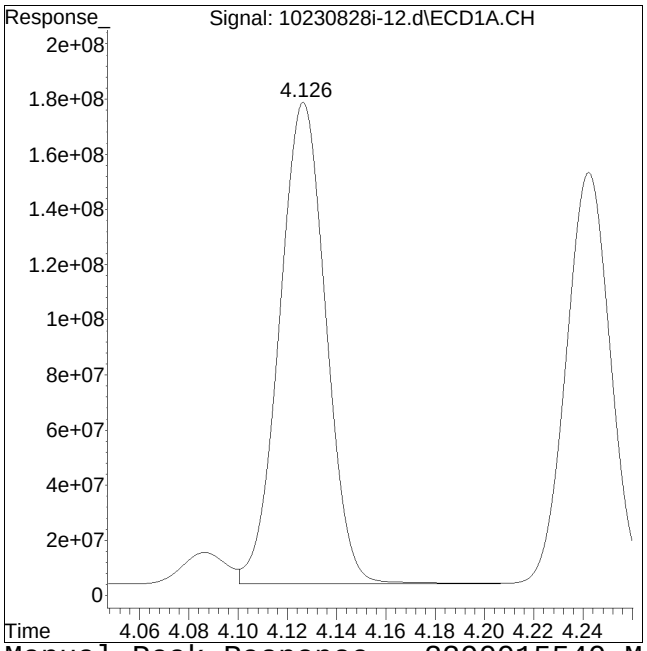
Original Peak Response = 2273579333 Manual Peak Response = 2265771060 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #18: Endrin



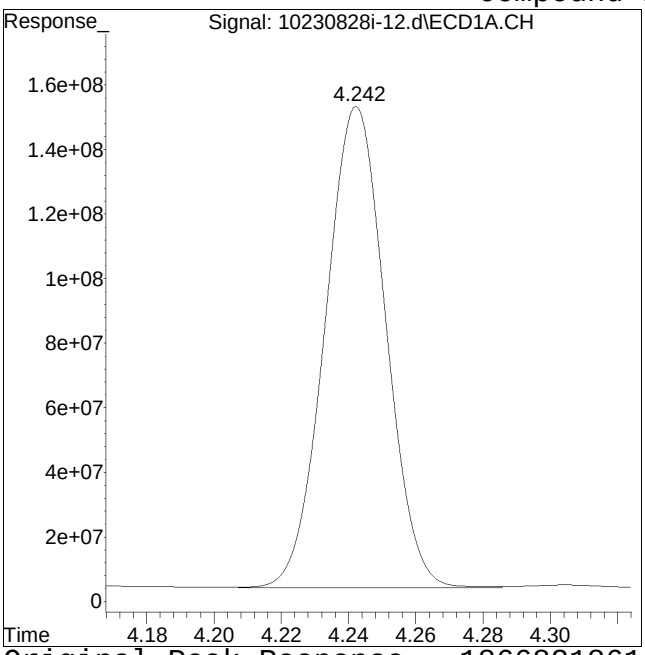


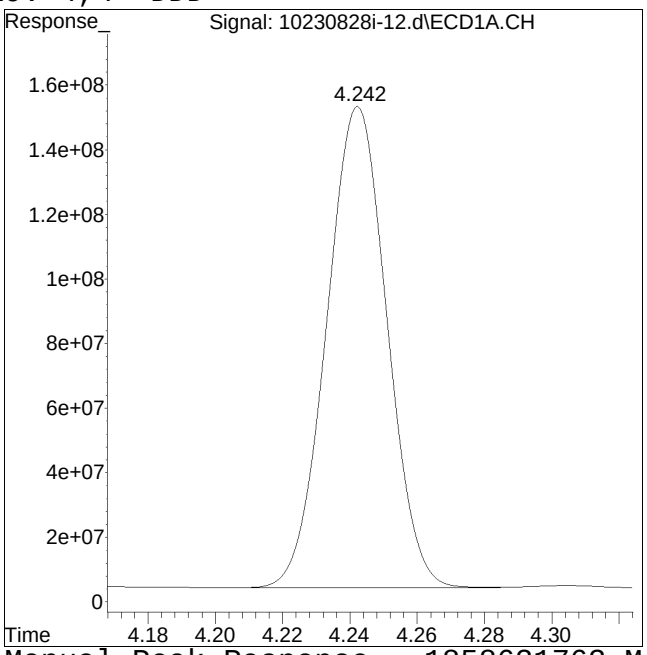
Original Peak Response = 2294875615 Manual Peak Response = 2290015540 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #19: 4,4'-DDD



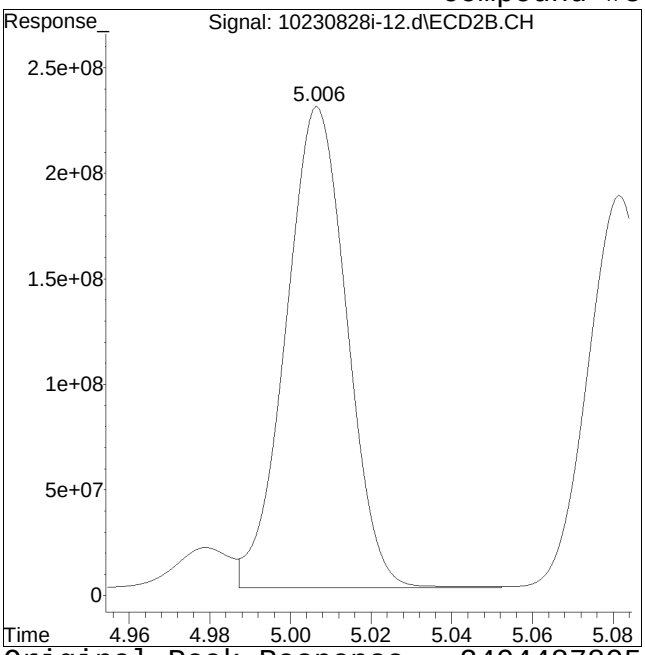


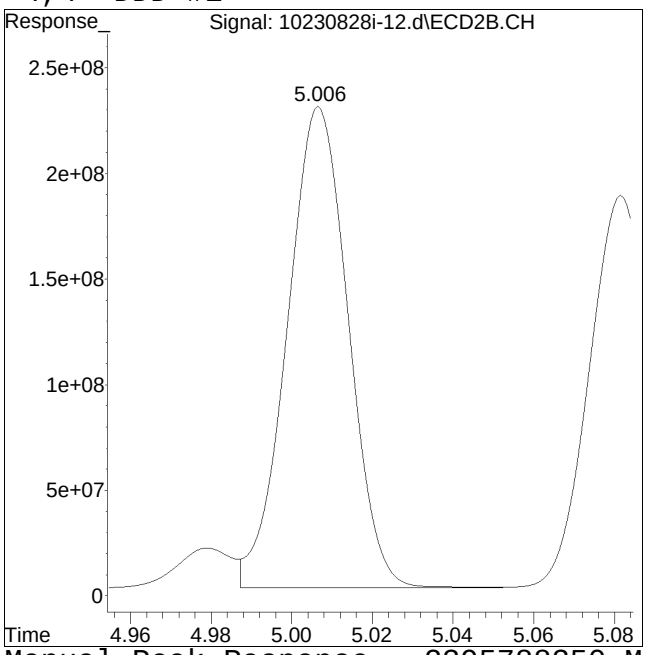
Original Peak Response = 1866821861 Manual Peak Response = 1858631763 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #57: 4,4'-DDD #2



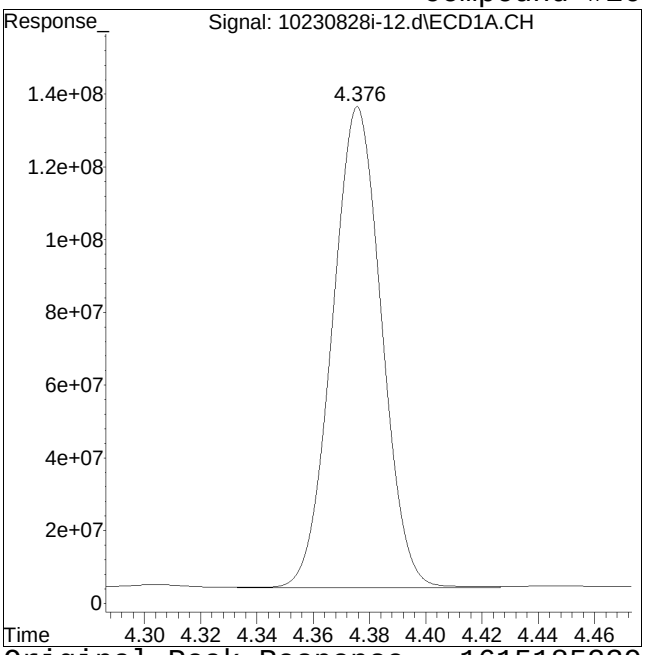


Original Peak Response = 2404487805 Manual Peak Response = 2395788350 M4
M4 = Poor automated baseline construction.

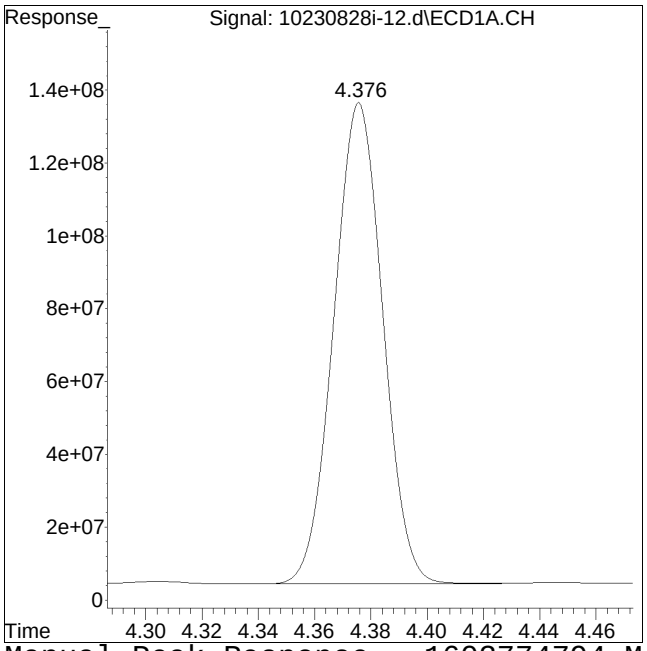
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #20: Endosulfan II



Original Peak Response = 1615185239

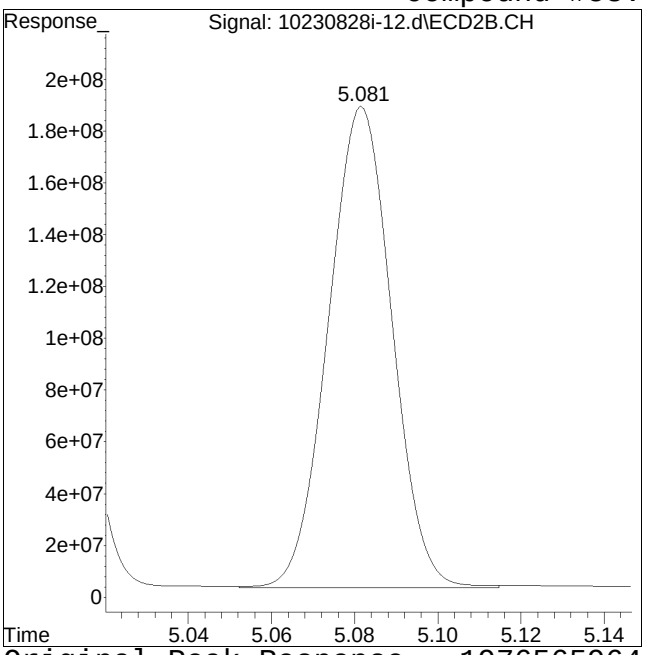


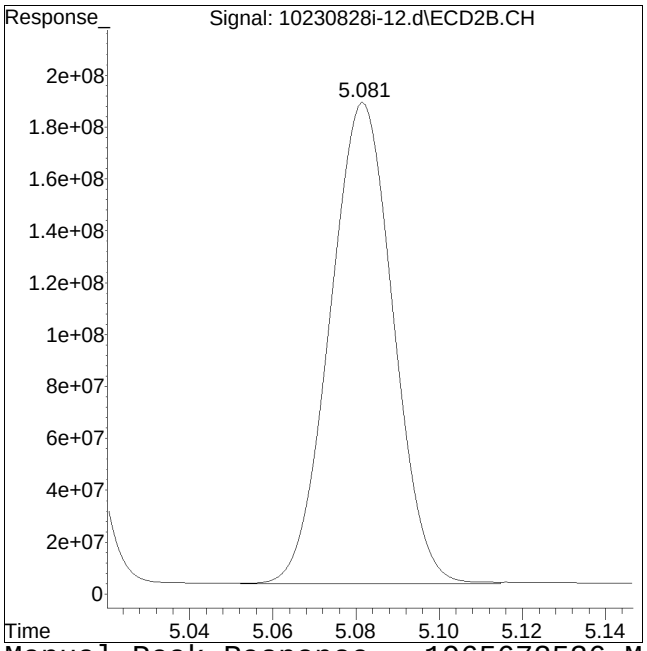
Manual Peak Response = 1603774794 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #58: Endosulfan II #2



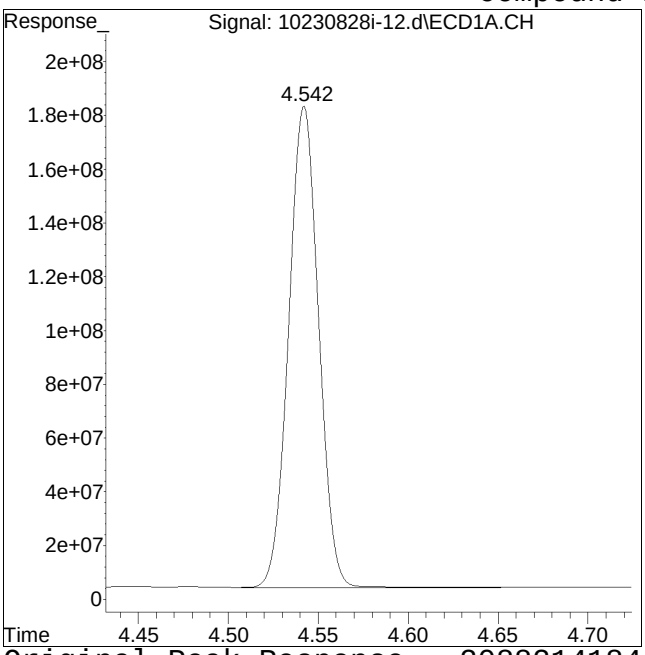


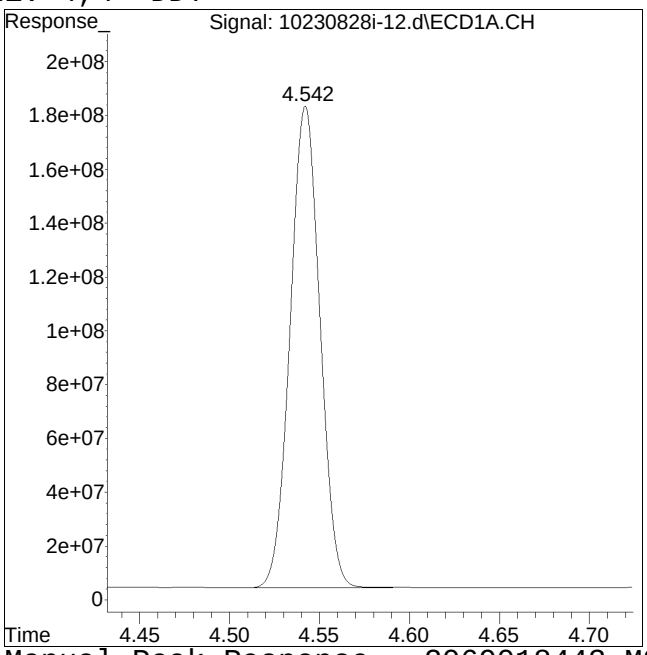
Original Peak Response = 1976565964 Manual Peak Response = 1965672536 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #21: 4,4'-DDT



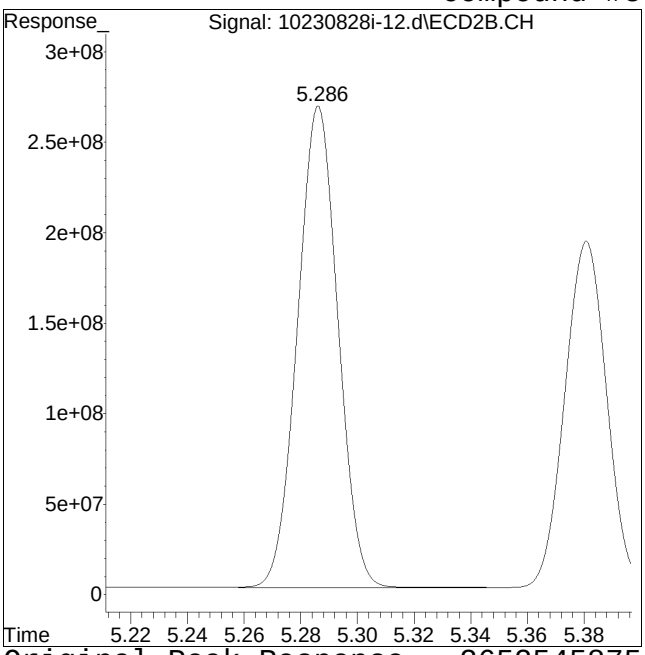


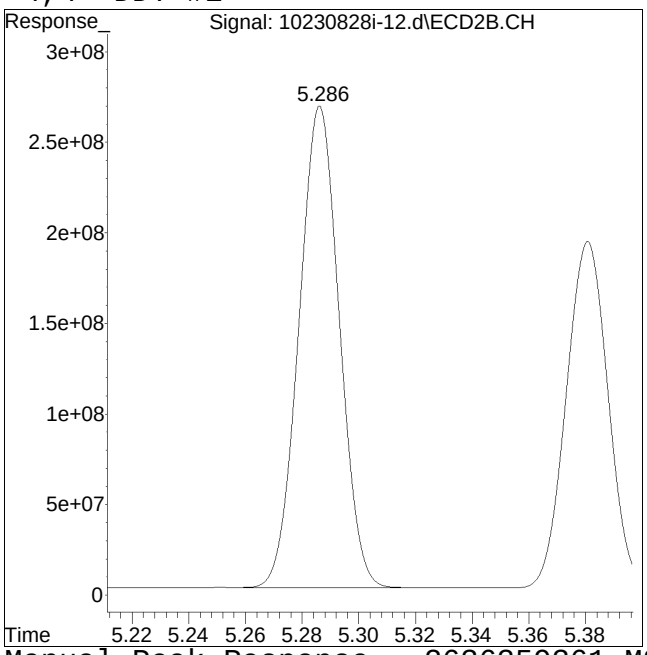
Original Peak Response = 2088214184 Manual Peak Response = 2069018443 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #59: 4,4'-DDT #2



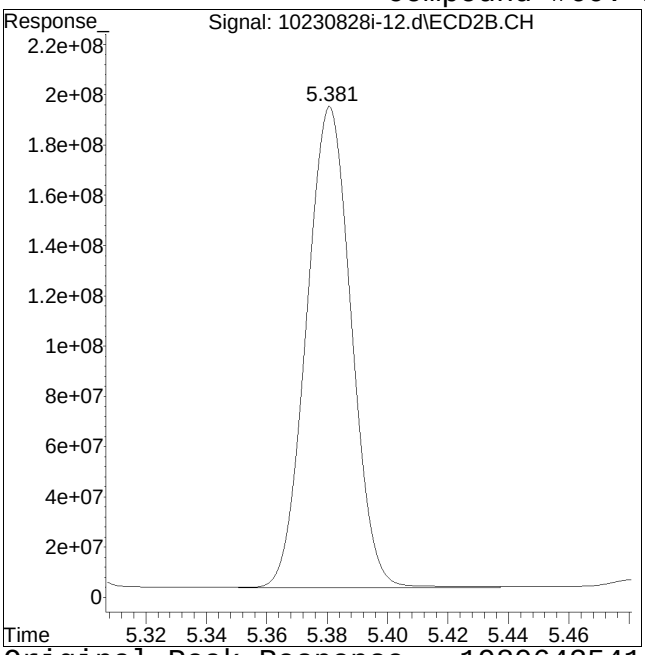


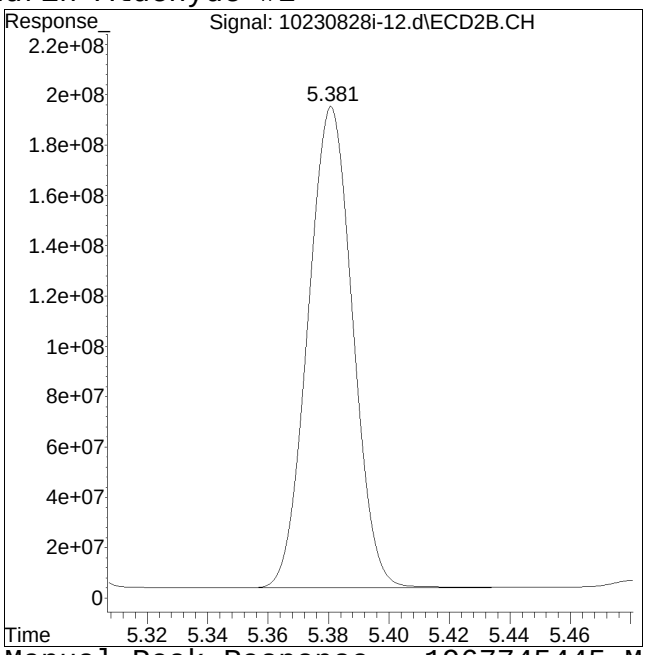
Original Peak Response = 2652545875 Manual Peak Response = 2636359361 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #60: Endrin Aldehyde #2



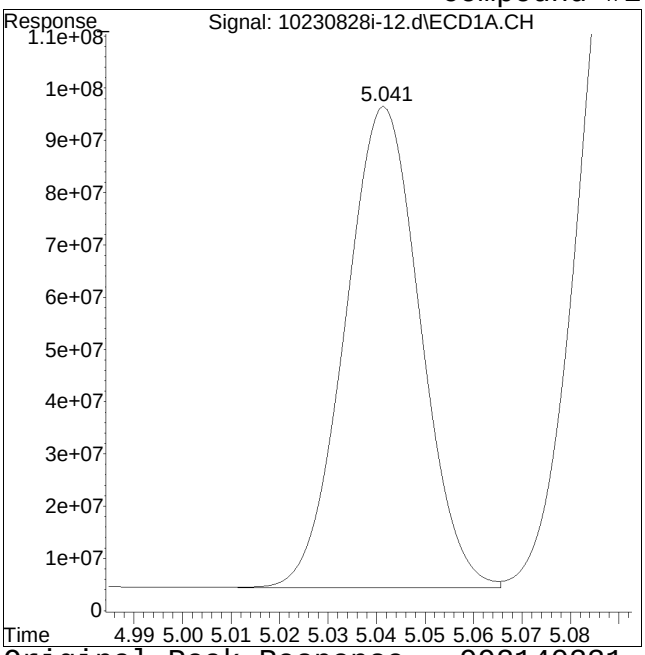


Original Peak Response = 1980643541 Manual Peak Response = 1967745445 M4
M4 = Poor automated baseline construction.

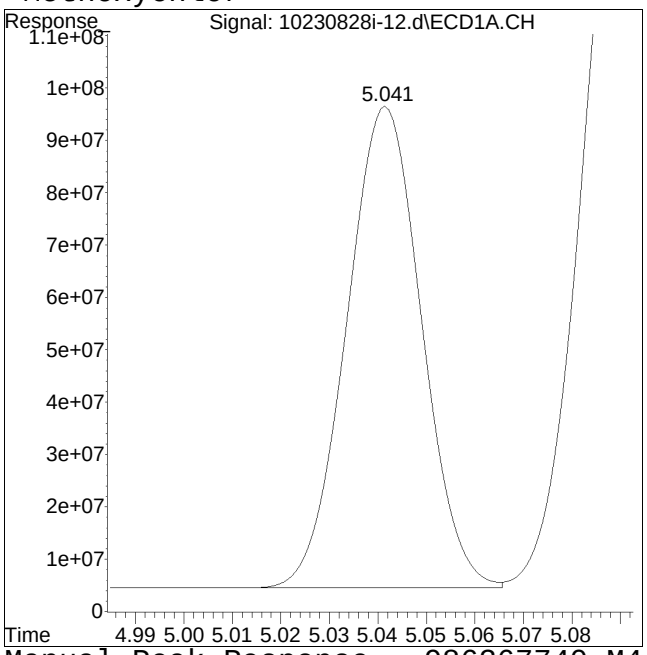
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #23: Methoxychlor



Original Peak Response = 992140331



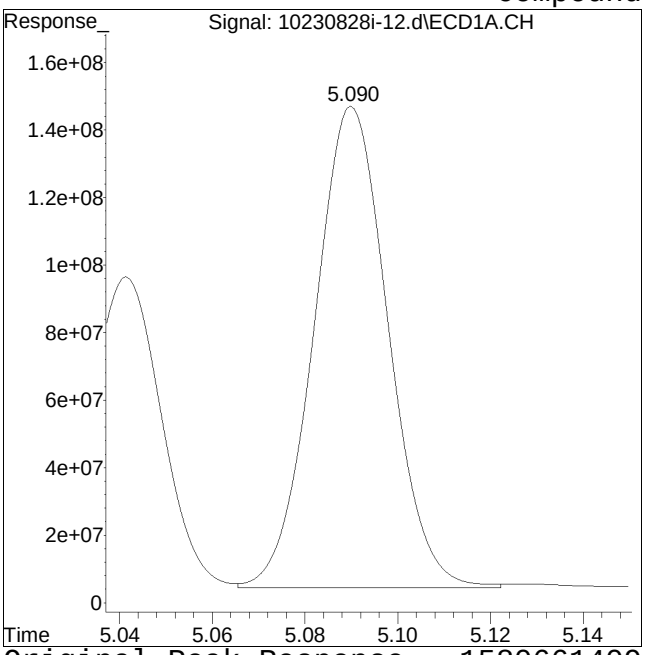
Manual Peak Response = 986367740 M4

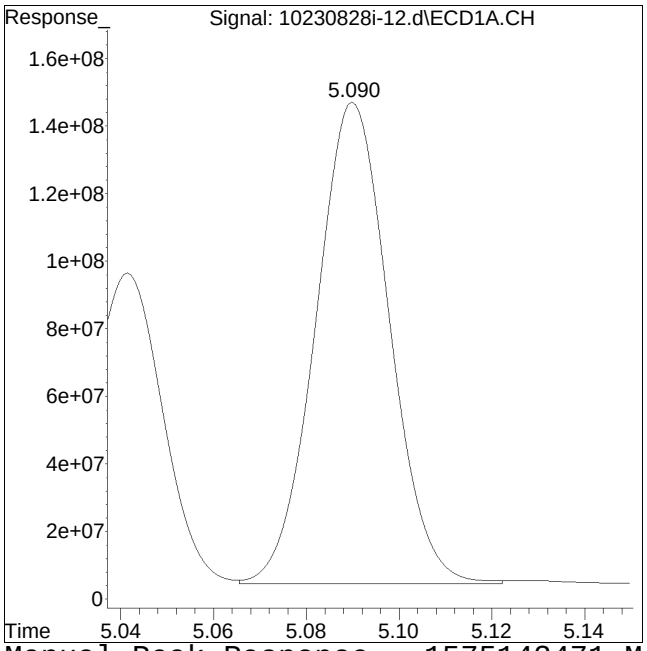
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #24: Mirex



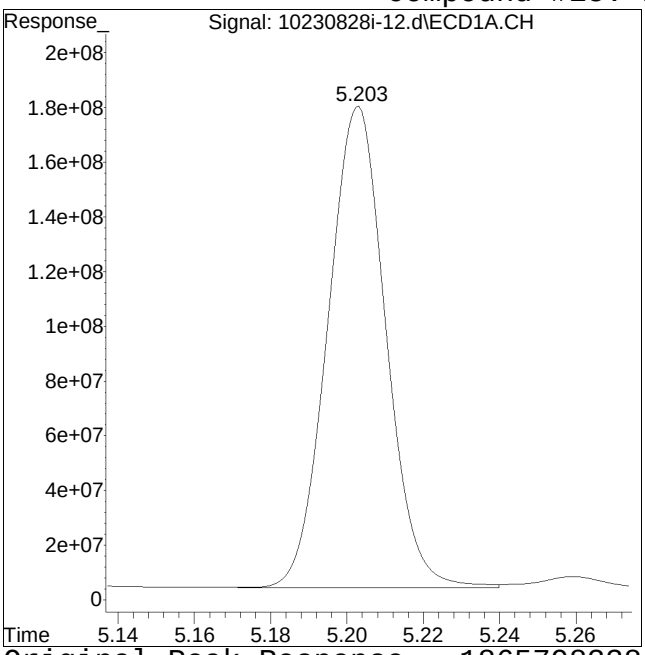


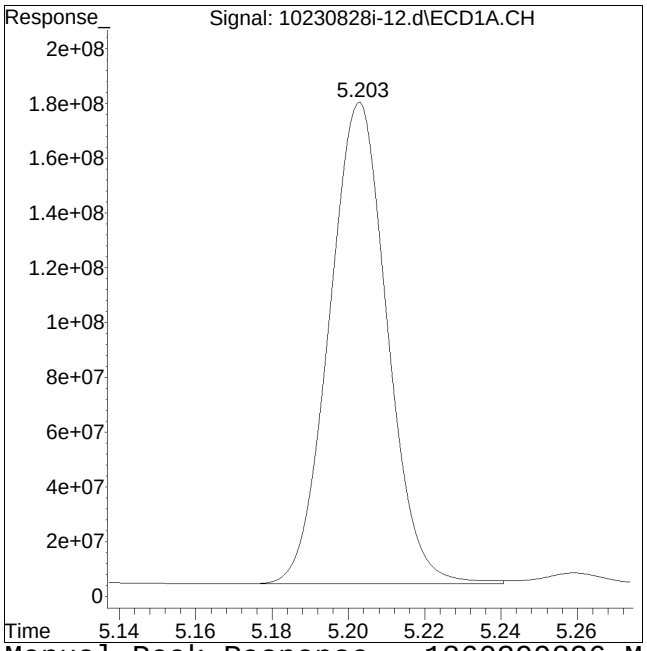
Original Peak Response = 1580661409 Manual Peak Response = 1575142471 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #25: Endosulfan Sulfate



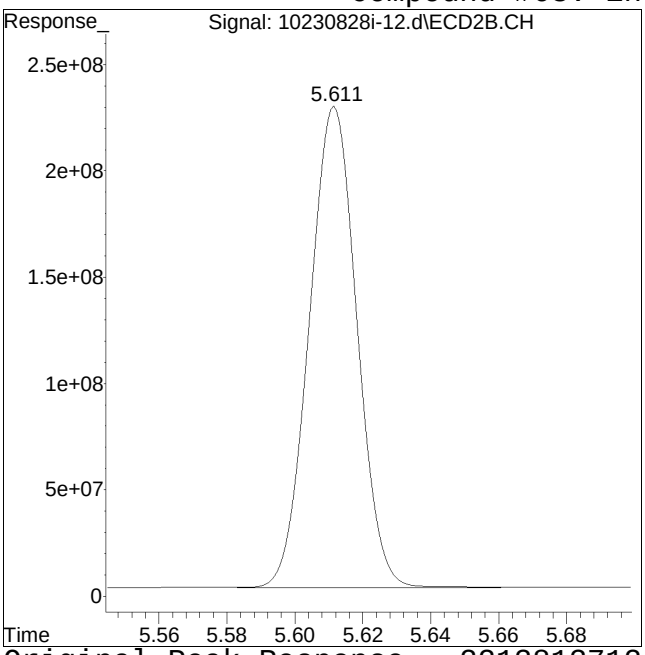


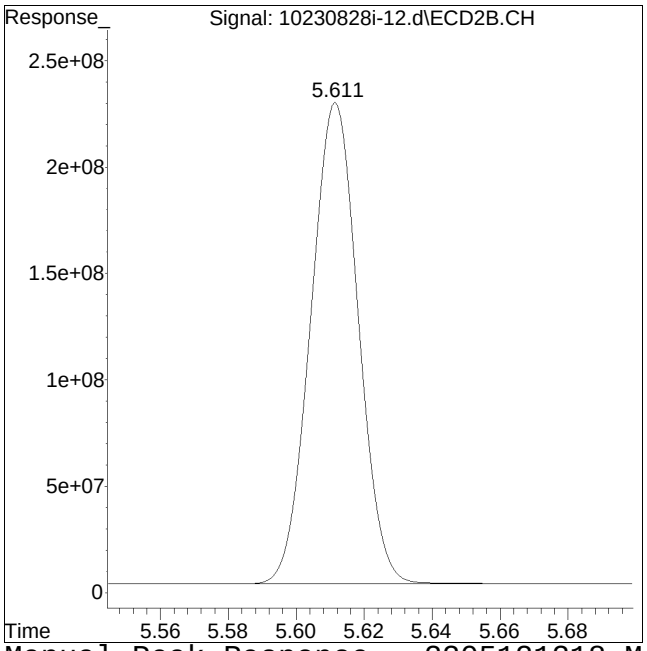
Original Peak Response = 1865798338 Manual Peak Response = 1860399836 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #63: Endosulfan Sulfate #2



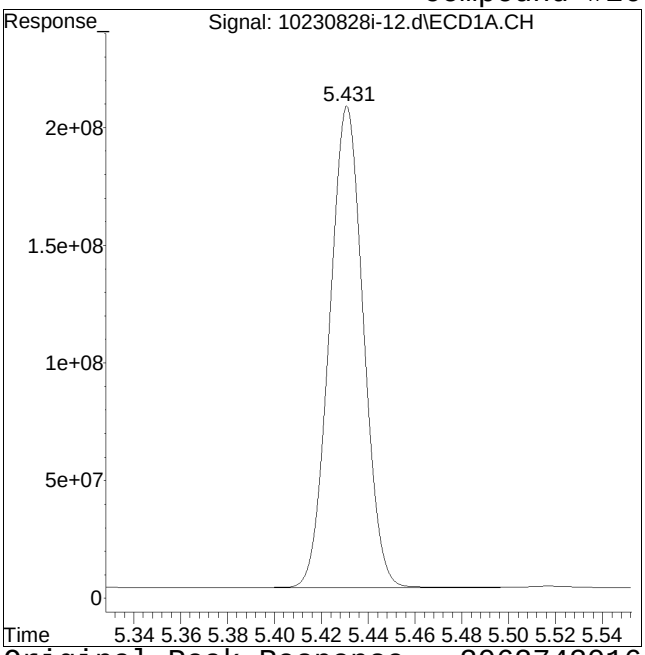


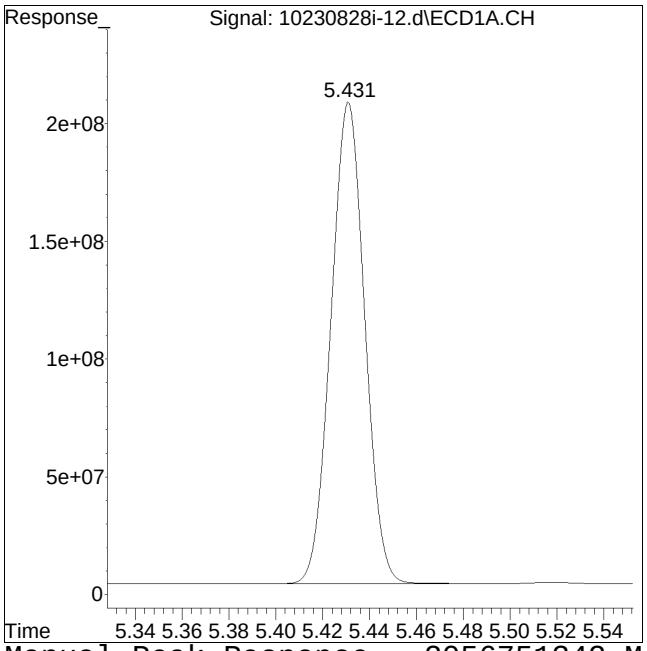
Original Peak Response = 2213813712 Manual Peak Response = 2205121218 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #26: Endrin Ketone



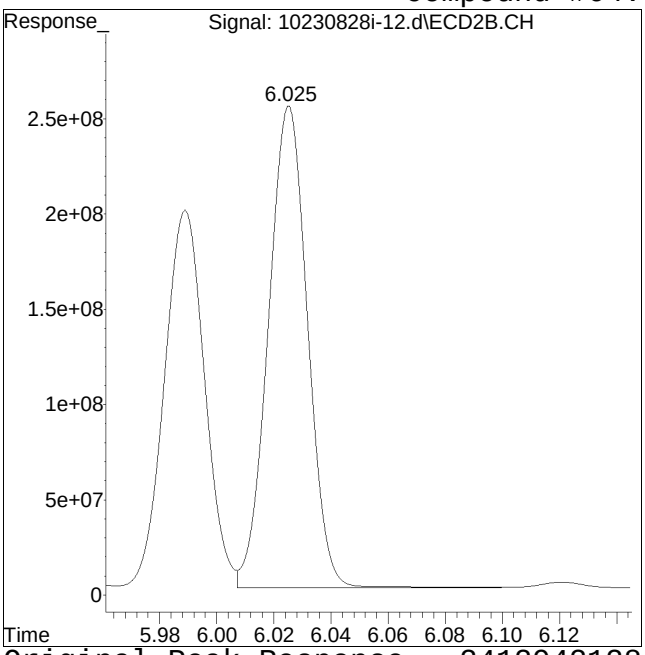


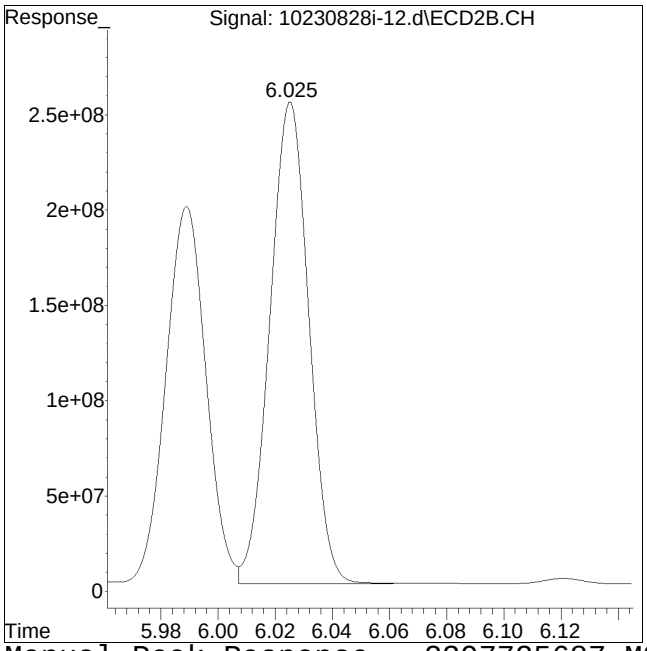
Original Peak Response = 2062743016 Manual Peak Response = 2056751342 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-12.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:08 pm Instrument : Pest 10
Sample : il11pest,42e,,pp 11221 L0.Quant Date : 8/29/2023 12:07 pm

Compound #64: Endrin Ketone #2





Original Peak Response = 2412942128 Manual Peak Response = 2397725687 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-13.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 28 Aug 2023   2:19 pm
Operator : PEST10:akm
Sample   : cicvpest,42e,,pp 11274 L0.05ICV
Misc   : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:48:50 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:43 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	102	0.00
2	s	2,4,5,6-Tetrachloro-m-xylen		1.014	0.980	3.4	112	0.00
3	t	Hexachlorobenzene		1.097	1.132	-3.2	122	0.00
4	t	alpha-BHC		1.364	1.537	-12.7	122	0.00
5	t	gamma-BHC (lindane)		1.306	1.391	-6.5	119	0.00
6	t	beta-BHC		0.604	0.571	5.5	112	0.00
7	t	delta-BHC		1.308	1.471	-12.5	123	0.00
8	t	Heptachlor		1.271	1.353	-6.5	120	0.00
9	t	Aldrin		1.157	1.262	-9.1	120	0.00
10	t	Alachlor		0.248	0.254	-2.4	120	0.00
11	t	Chlorpyrifos		0.655	0.637	2.7	117	0.00
12	t	Heptachlor Epoxide		1.141	1.179	-3.3	117	0.00
13	t	gamma-Chlordane (trans)		1.100	1.215	-10.5	131	0.00
14	t	alpha-Chlordane (cis)		1.208	1.207	0.1	115	0.00
15	t	4,4'-DDE		1.089	1.176	-8.0	118	0.00
16	t	Endosulfan I		1.079	1.119	-3.7	117	0.00
17	t	Dieldrin		1.093	1.242	-13.6	127	0.00
18	t	Endrin		1.128	1.181	-4.7	115	0.00
19	t	4,4'-DDD		0.885	1.000	-13.0	124	0.00
20	t	Endosulfan II		1.020	1.074	-5.3	120	0.00
21	t	4,4'-DDT		0.986	1.088	-10.3	119	0.00
22	t	Endrin Aldehyde		0.844	0.774	8.3	102	0.00
23	t	Methoxychlor		0.563	0.588	-4.4	117	0.00
24	t	Mirex		0.905	0.898	0.8	115	0.00
25	t	Endosulfan Sulfate		0.979	1.029	-5.1	118	0.00
26	t	Endrin Ketone		1.088	1.193	-9.7	121	0.00
27	s	Decachlorobiphenyl		0.916	0.854	6.8	105	0.00

Signal #2

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-13.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 28 Aug 2023   2:19 pm
Operator : PEST10:akm
Sample   : cicvpest,42e,,pp 11274 L0.05ICV
Misc   : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:48:50 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:43 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	101	0.00
2	s	2,4,5,6-Tetrachloro-m-xyl		0.963	0.996	-3.4	112	0.00
3	t	Hexachlorobenzene		1.075	1.177	-9.5	123	0.00
4	t	alpha-BHC	*	50.000	53.668	-7.3	122	0.00
5	t	gamma-BHC (lindane)		1.285	1.484	-15.5#	120	0.00
6	t	beta-BHC		0.598	0.595	0.5	113	0.00
7	t	delta-BHC	*	50.000	54.778	-9.6	124	0.00
8	t	Heptachlor		1.298	1.489	-14.7	121	0.00
9	t	Aldrin	*	50.000	54.533	-9.1	121	0.00
10	t	Alachlor		0.197	0.212	-7.6	119	0.00
11	t	Chlorpyrifos		0.651	0.672	-3.2	117	0.00
12	t	Heptachlor Epoxide		1.186	1.312	-10.6	118	0.00
13	t	gamma-Chlordane (trans)		1.246	1.379	-10.7	133	0.00
14	t	alpha-Chlordane (cis)		1.208	1.348	-11.6	119	0.00
15	t	4,4'-DDE	*	50.000	53.367	-6.7	118	0.00
16	t	Endosulfan I		1.101	1.239	-12.5	118	0.00
17	t	Dieldrin	*	50.000	58.200	-16.4#	127	0.00
18	t	Endrin		1.205	1.301	-8.0	115	0.00
19	t	4,4'-DDD	*	50.000	56.004	-12.0	124	0.00
20	t	Endosulfan II		0.995	1.158	-16.4#	120	0.00
21	t	4,4'-DDT	*	50.000	54.680	-9.4	119	0.00
22	t	Endrin Aldehyde		0.826	0.816	1.2	102	0.00
23	t	Methoxychlor		0.571	0.642	-12.4	119	0.00
24	t	Mirex		0.904	0.944	-4.4	115	0.00
25	t	Endosulfan Sulfate		0.951	1.085	-14.1	120	0.00
26	t	Endrin Ketone		1.078	1.259	-16.8#	123	0.00
27	s	Decachlorobiphenyl		0.924	0.885	4.2	104	0.00

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-13.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 28 Aug 2023   2:19 pm
Operator : PEST10:akm
Sample   : cicvpest,42e,,pp 11274 L0.05ICV
Misc   : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:48:50 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:43 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.28#
29	l1	chlordane-1	*	0.039	0.000	100.0#	0#	-2.39#
30	l1	chlordane-3	*	0.066	0.000	100.0#	0#	-2.46#
31	l1	chlordane-4	*	0.045	0.000	100.0#	0#	-2.80#
32	l1	chlordane-5	*	0.177	0.000	100.0#	0#	-3.35#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.28#
34	l2	toxaphene-1		0.036	0.000	100.0#	0#	-4.37#
35	l2	toxaphene-2		0.035	0.000	100.0#	0#	-4.49#
36	l2	toxaphene-4		0.031	0.000	100.0#	0#	-4.92#
37	l2	toxaphene-5		0.036	0.000	100.0#	0#	-5.10#

Signal #2

28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.35#
29	l1	chlordane-1	*	0.038	0.000	100.0#	0#	-2.77#
30	l1	chlordane-3	*	0.042	0.000	100.0#	0#	-3.37#
31	l1	chlordane-4	*	0.175	0.000	100.0#	0#	-4.05#
32	l1	chlordane-5	*	0.115	0.000	100.0#	0#	-4.22#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.35#
34	l2	toxaphene-1		0.024	0.000	100.0#	0#	-5.04#
35	l2	toxaphene-2		0.034	0.000	100.0#	0#	-5.07#
36	l2	toxaphene-4		0.043	0.000	100.0#	0#	-5.39#
37	l2	toxaphene-5		0.038	0.000	100.0#	0#	-5.80#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-13.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:19 pm
Operator : PEST10:akm
Sample : cicvpest,42e,,pp 11274 L0.05ICV
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:48:50 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:43 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.279	1.348	132.1E6	149.8E6	25.000	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.614	1.819	259.0E6	298.5E6	48.354	51.689
	Spiked Amount 50.000	Range 30 - 150		Recovery =		96.71%	103.38%
27) s	Decachlorobi	6.238	6.891	225.6E6	265.3E6	46.616	47.884
	Spiked Amount 50.000	Range 30 - 150		Recovery =		93.23%	95.77%
	Target Compounds						
3) t	Hexachlorobe	1.822	2.135	299.1E6	352.9E6	51.596	54.766
4) t	alpha-BHC	1.919	2.229	405.9E6	492.9E6	56.320	53.668
5) t	gamma-BHC (l	2.117	2.511	367.4E6	444.8E6	53.230M3	57.748
6) t	beta-BHC	2.174	2.576	150.8E6	178.4E6	47.268	49.753
7) t	delta-BHC	2.299	2.839	388.7E6	471.3E6	56.243	54.778
8) t	Heptachlor	2.455	2.903	357.3E6	446.1E6	53.215	57.347
9) t	Aldrin	2.691	3.218	333.4E6	425.0E6	54.552	54.533
10) t	Alachlor	2.814	3.104	67223314	63450143	51.383	53.636
11) t	Chlorpyrifos	2.902	3.455	168.2E6	201.3E6	48.624	51.601
12) t	Heptachlor E	3.227	3.828	311.5E6	393.3E6	51.666	55.305
13) t	gamma-Chlord	3.348	4.047	321.0E6	413.2E6	55.229	55.328
14) t	alpha-Chlord	3.480	4.220	318.9E6	404.1E6	49.967	55.797
15) t	4,4'-DDE	3.576	4.423	310.7E6	400.3E6	53.996	53.367
16) t	Endosulfan I	3.615	4.282	295.7E6	371.4E6	51.853	56.263
17) t	Dieldrin	3.872	4.578	328.0E6	413.6E6	56.815	58.200
18) t	Endrin	4.125	4.880	312.1E6	389.9E6	52.350	53.993
19) t	4,4'-DDD	4.240	5.006	264.2E6	337.2E6	56.468	56.004
20) t	Endosulfan I	4.374	5.081	283.7E6	347.1E6	52.632	58.200
21) t	4,4'-DDT	4.540	5.286	287.5E6	366.4E6	55.211	54.680
22) t	Endrin Aldeh	4.802	5.381	204.5E6	244.4E6	45.867	49.376
23) t	Methoxychlor	5.040	5.856	155.3E6	192.4E6	52.228	56.194

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-13.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:19 pm
Operator : PEST10:akm
Sample : cicvpest,42e,,pp 11274 L0.05ICV
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:48:50 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:43 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	5.089	5.988	237.3E6	283.0E6	49.614	52.223
25) t	Endosulfan S	5.201	5.611	271.9E6	325.1E6	52.564	57.030
26) t	Endrin Keton	5.430	6.024	315.3E6	377.3E6	54.864	58.398M4
29) l1	chlordane-1	0.000	0.000	0	0	N.D.	N.D.
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

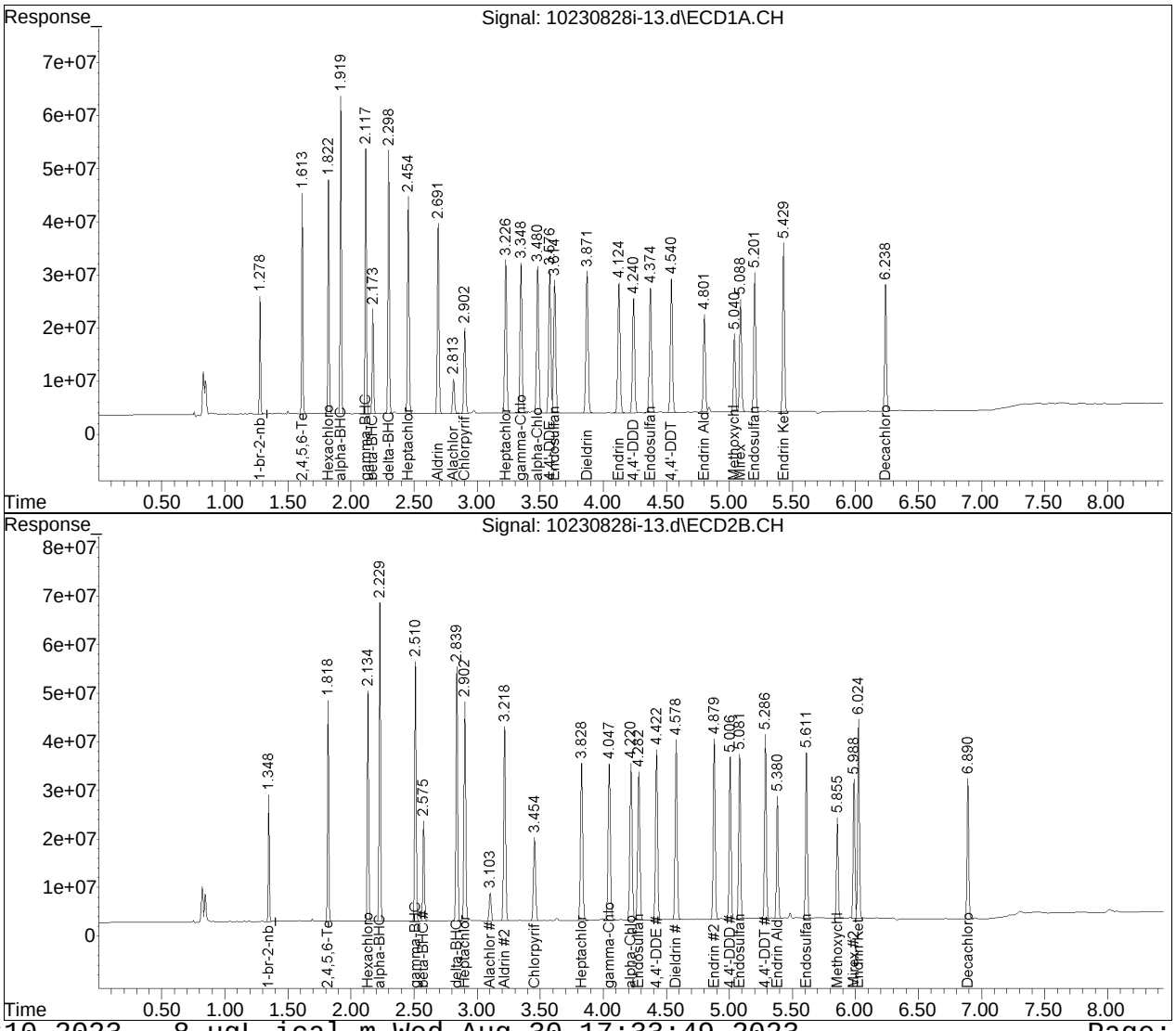
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-13.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:19 pm
Operator : PEST10:akm
Sample : cicvpest,42e,,pp 11274 L0.05ICV
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 13 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:48:50 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:43 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

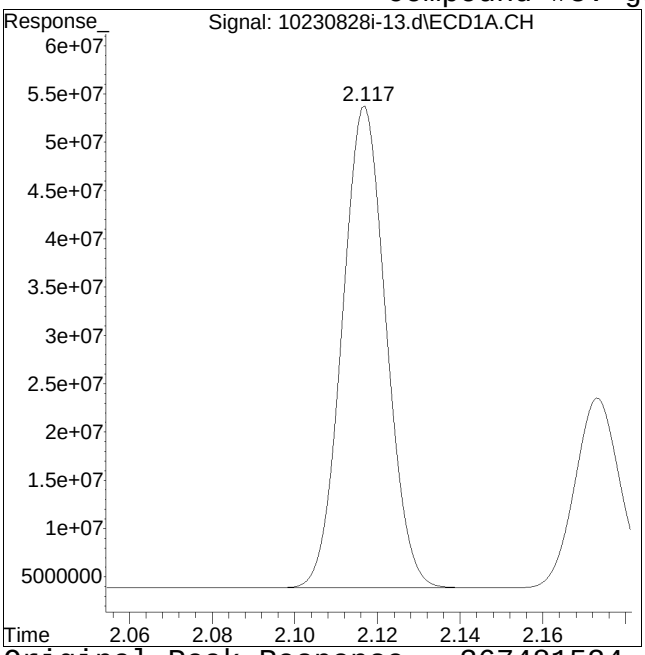
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

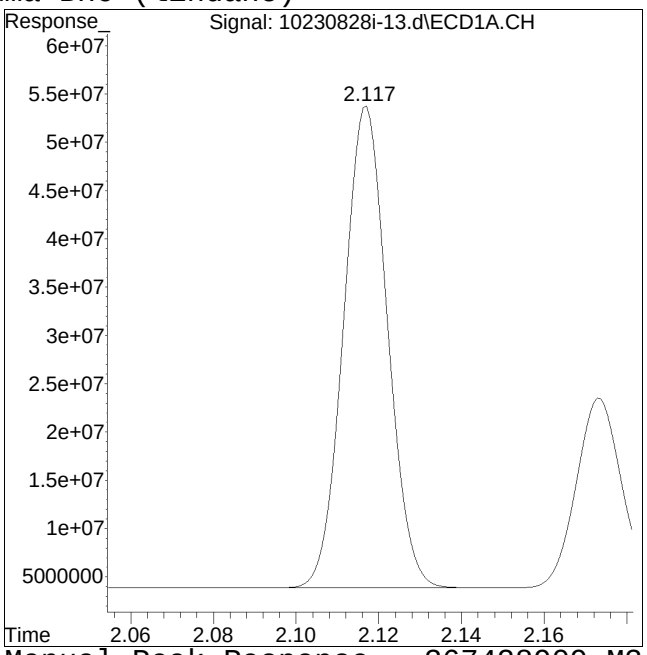


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-13.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:19 pm Instrument : Pest 10
Sample : cicvpest,42e,,pp 11274 L0.Quant Date : 8/29/2023 12:47 pm

Compound #5: gamma-BHC (lindane)



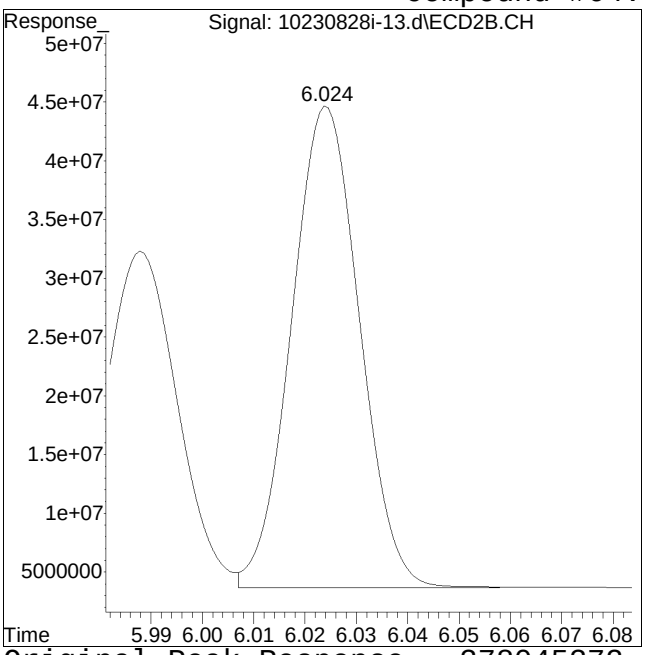


Original Peak Response = 367481524 Manual Peak Response = 367428909 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

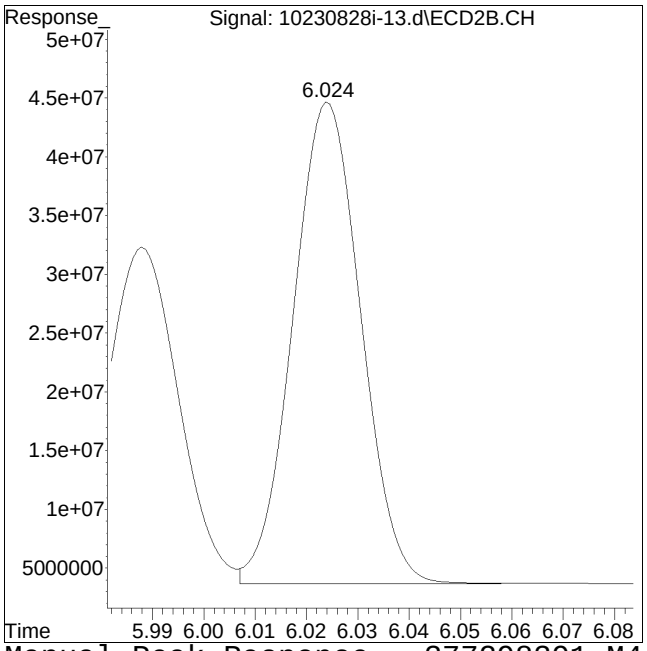
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-13.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:19 pm Instrument : Pest 10
Sample : cicvpest,42e,,pp 11274 L0.Quant Date : 8/29/2023 12:47 pm

Compound #64: Endrin Ketone #2



Original Peak Response = 378045372



Manual Peak Response = 377298391 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-14.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:30 pm
Operator : PEST10:akm
Sample : il3chlor,42e,,pp 11121 L0.01
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:57:15 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	1.279	1.349	129.8E6	149.1E6	25.000M4	25.000
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150		Recovery =	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D.	N.D.
	Spiked Amount	50.000	Range 30 - 150		Recovery =	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D.	N.D.
4) t	alpha-BHC	0.000	0.000	0	0	N.D.	N.D.
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D.	N.D.
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D.	N.D.
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D.	N.D.
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D.	N.D.
16) t	Endosulfan I	0.000	0.000	0	0	N.D.	N.D.
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-14.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:30 pm
Operator : PEST10:akm
Sample : il3chlor,42e,,pp 11121 L0.01
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:57:15 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	2.394	2.769	2298673	2381455	11.786	10.566
30) l1	chlordane-3	2.455	3.370	3961849	2652442	11.962	10.668
31) l1	chlordane-4	2.804	4.047	2809261	16066464	12.605	16.909M3
32) l1	chlordane-5	3.349	4.220	15218277	6689380	18.614	9.680
Sum	chlordane-1			24288060	27789740	NoCal	NoCal D
Average	chlordane-1					13.742	11.956
34) l2	toxaphene-1	0.000	0.000	0	0	N.D.	N.D.
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

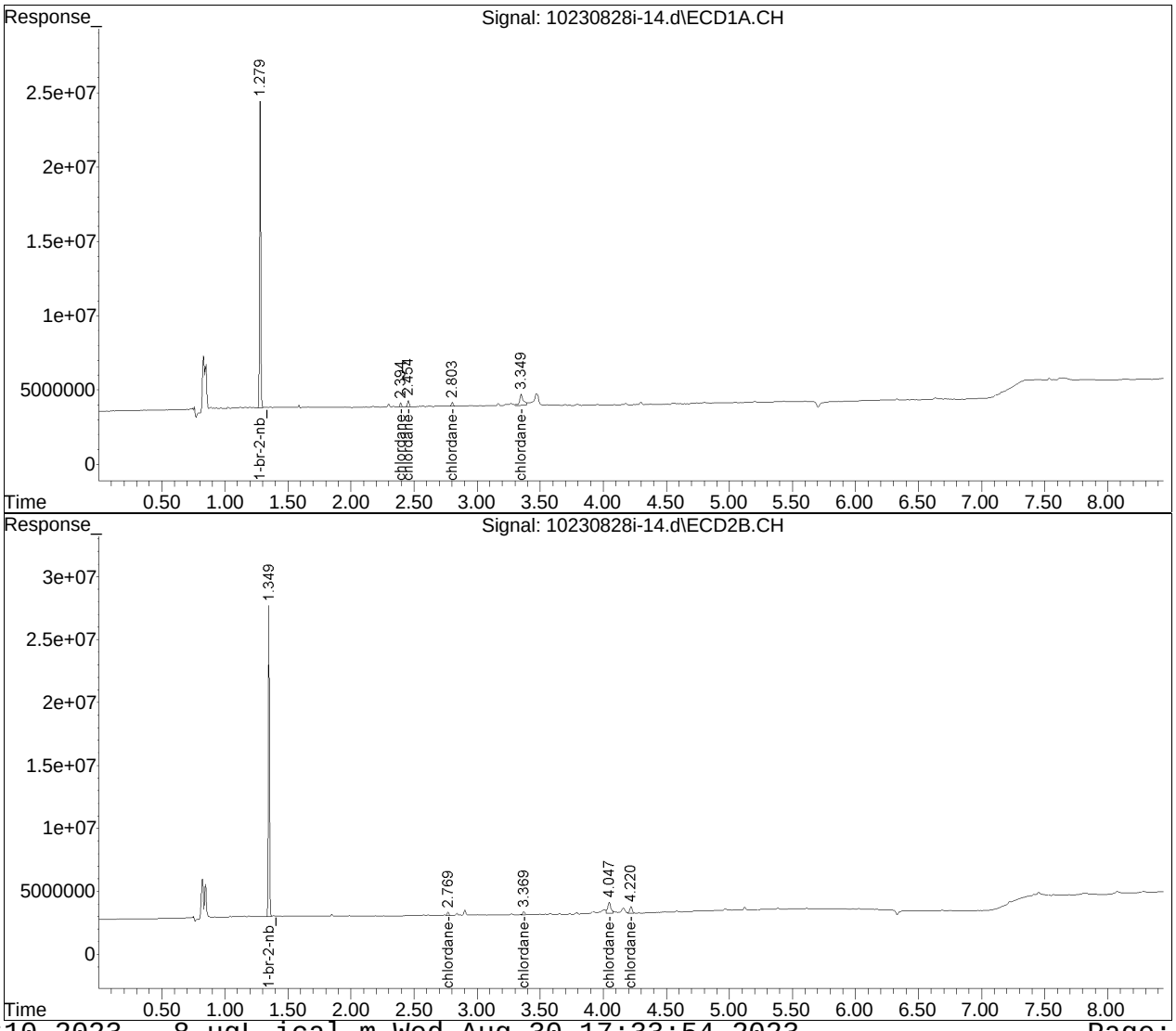
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-14.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:30 pm
Operator : PEST10:akm
Sample : il3chlor,42e,,pp 11121 L0.01
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 14 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:57:15 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

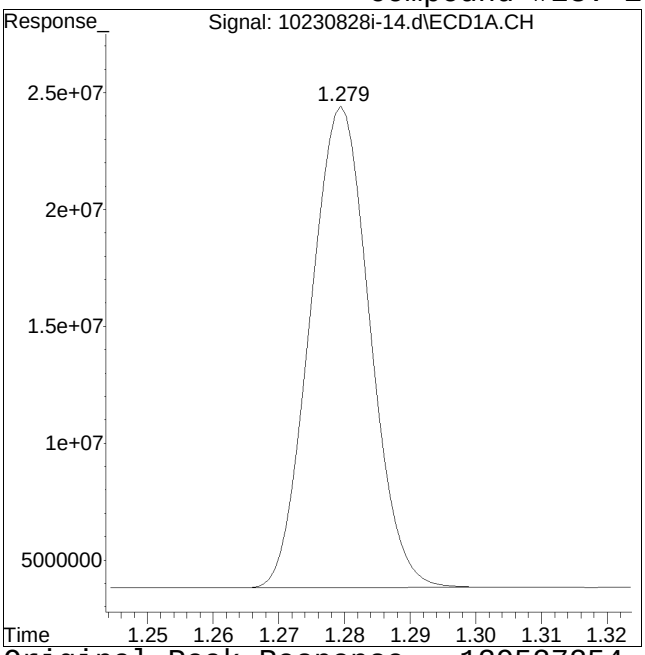
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



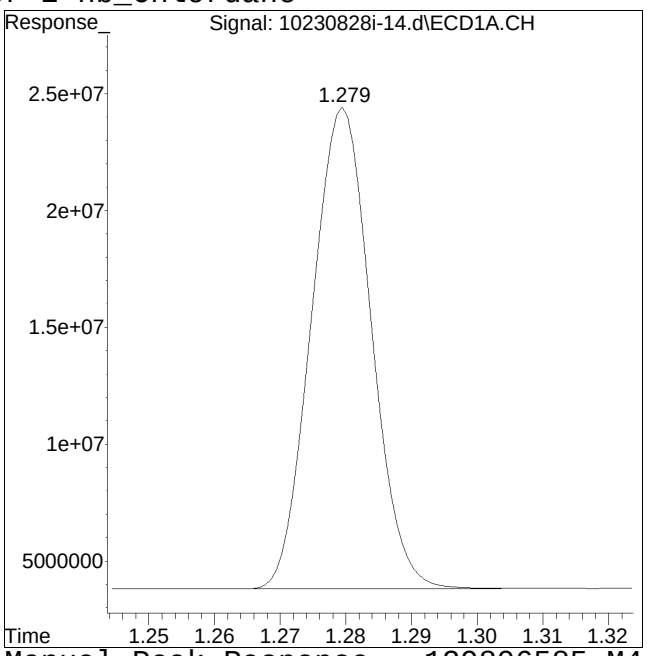
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-14.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:30 pm Instrument : Pest 10
Sample : il3chlor,42e,,pp 11121 L0.Quant Date : 8/29/2023 12:54 pm

Compound #28: 1-br-2-nb_Chlordane



Original Peak Response = 129527254



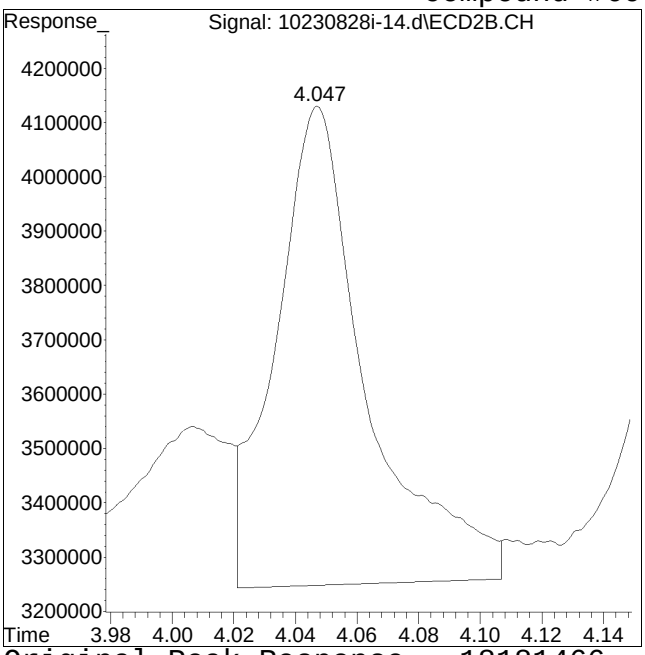
Manual Peak Response = 129806585 M4

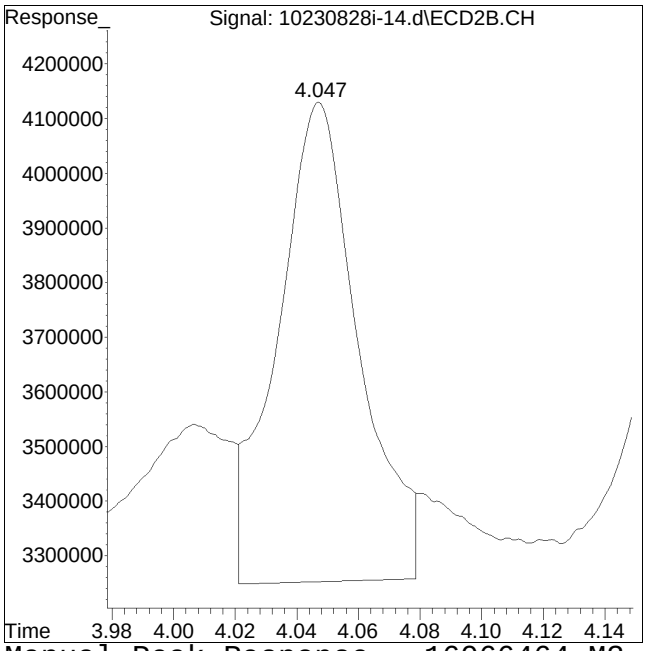
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-14.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:30 pm Instrument : Pest 10
Sample : il3chlor,42e,,pp 11121 L0.Quant Date : 8/29/2023 12:54 pm

Compound #69: chlordane-4 #2





Original Peak Response = 18181466 Manual Peak Response = 16066464 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-15.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:41 pm
Operator : PEST10:akm
Sample : il4chlor,42e,,pp 11120 L0.02
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:54:15 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	1.280	1.349	128.9E6	152.0E6	25.000M4	25.000
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D.	N.D.
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D.	N.D.
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D.	N.D.
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D.	N.D.
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D.	N.D.
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-15.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:41 pm
Operator : PEST10:akm
Sample : il4chlor,42e,,pp 11120 L0.02
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:54:15 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	2.395	2.770	4728319	4555212	25.532	19.794
30) l1	chlordane-3	2.455	3.370	7607166	5324497	23.868	21.224
31) l1	chlordane-4	2.804	4.048	5419505	24438385	25.630	26.625
32) l1	chlordane-5	3.349	4.220	23994075	13880857	32.665	19.648
Sum	chlordane-1			41749066	48198951	NoCal	NoCal D
Average	chlordane-1					26.924	21.823
34) l2	toxaphene-1	0.000	0.000	0	0	N.D.	N.D.
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D.	N.D.
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

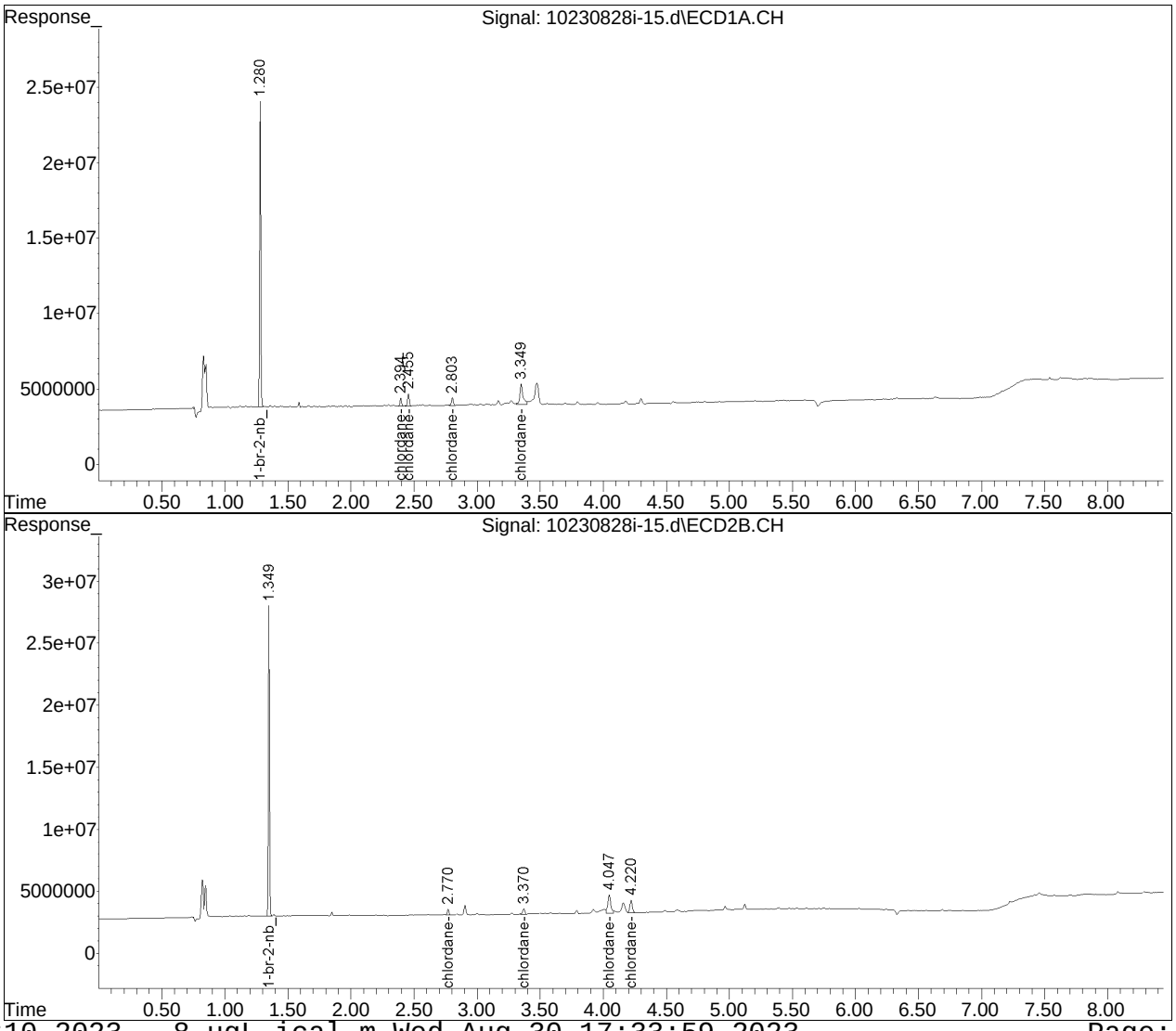
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-15.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:41 pm
Operator : PEST10:akm
Sample : il4chlor,42e,,pp 11120 L0.02
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 15 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:54:15 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

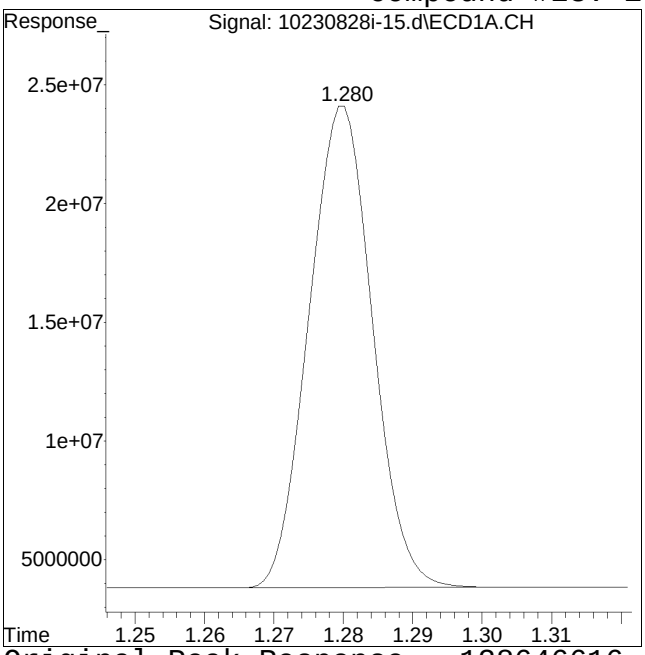
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

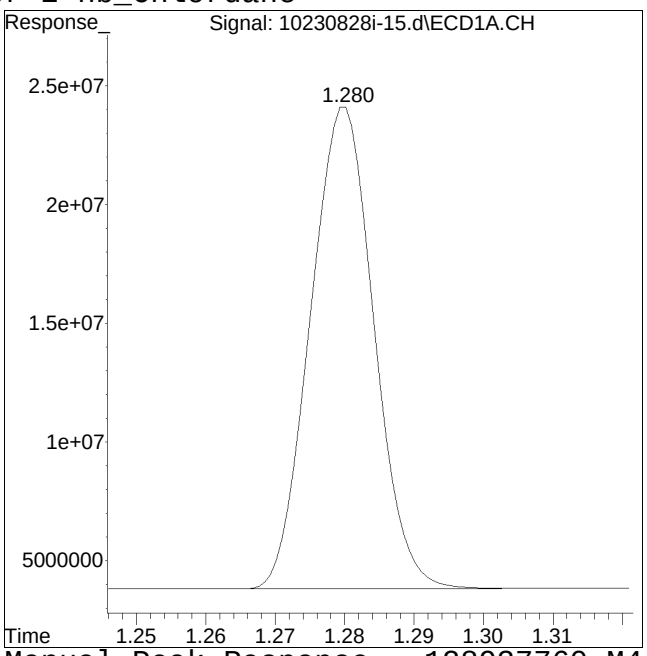


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-15.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:41 pm Instrument : Pest 10
Sample : il4chlor,42e,,pp 11120 L0.Quant Date : 8/29/2023 12:53 pm

Compound #28: 1-br-2-nb_Chlordane





Original Peak Response = 128646616 Manual Peak Response = 128937760 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-16.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:52 pm
Operator : PEST10:akm
Sample : il5chlor,42e,,pp 11119 L0.1
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:53:27 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	1.280	1.349	134.0E6	153.4E6	25.000M4	25.000
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D.	N.D.
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D.	N.D.
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D.	N.D.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-16.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:52 pm
Operator : PEST10:akm
Sample : il5chlor,42e,,pp 11119 L0.1
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:53:27 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l	
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d	
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d	
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d	
29) l1	chlordane-1	2.395	2.770	20493550	22366912	108.232	95.454	
30) l1	chlordane-3	2.456	3.371	34326315	26523680	104.577	106.057	
31) l1	chlordane-4	2.804	4.048	24503928	95794838	114.802	104.334	
32) l1	chlordane-5	3.349	4.221	82575820	68126137	110.419	94.528	
Sum	chlordane-1			161.9E6	212.8E6	NoCal	NoCal	D
Average	chlordane-1					109.507	100.094	
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d	
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d	
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d	
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d	
Sum	toxaphene-1			0	0	N.D.	N.D.	
Average	toxaphene-1					0.000	0.000	

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.	
Average	toxaphene-1					0.000	0.000	

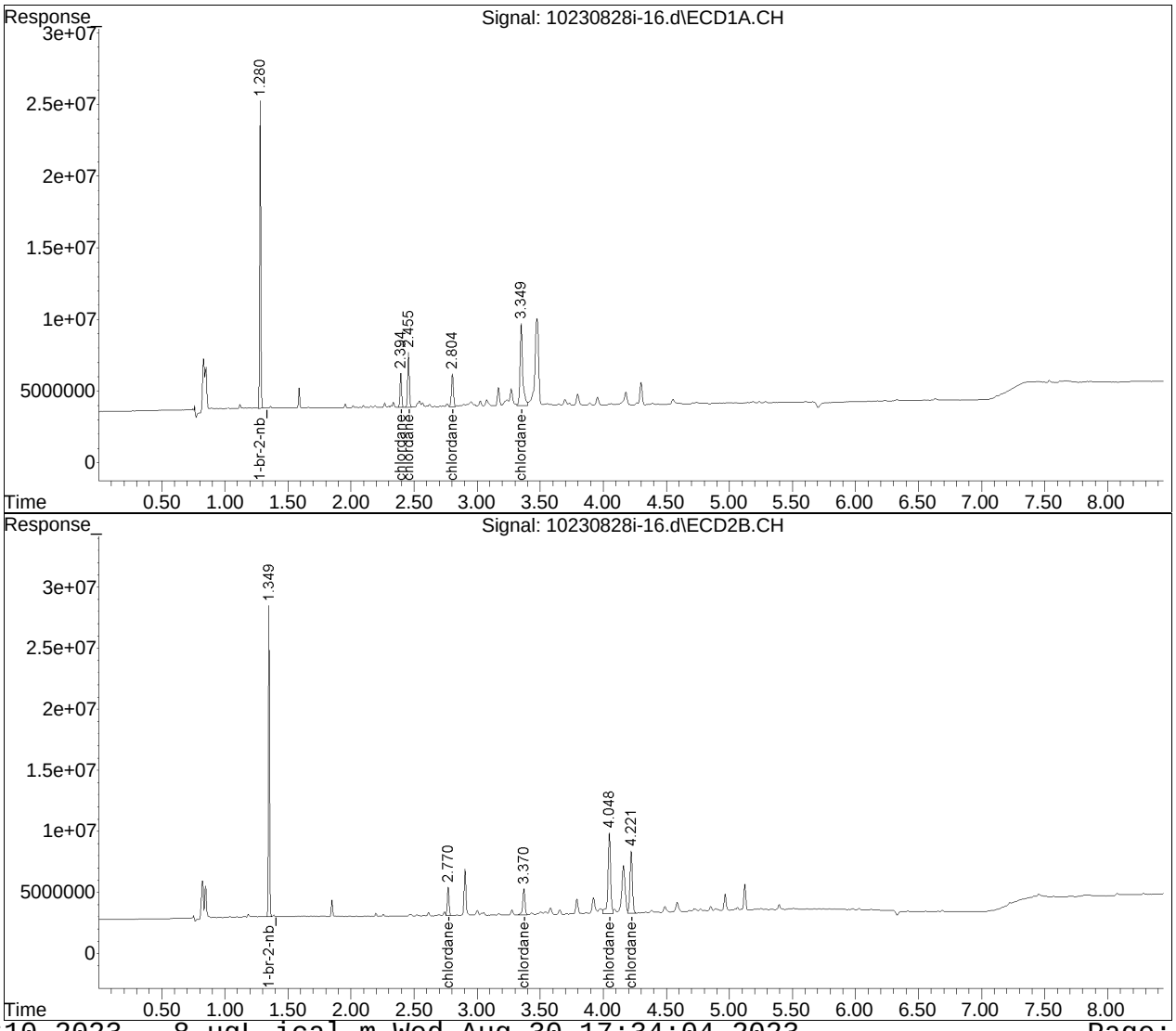
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-16.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 2:52 pm
Operator : PEST10:akm
Sample : il5chlor,42e,,pp 11119 L0.1
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 16 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:53:27 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

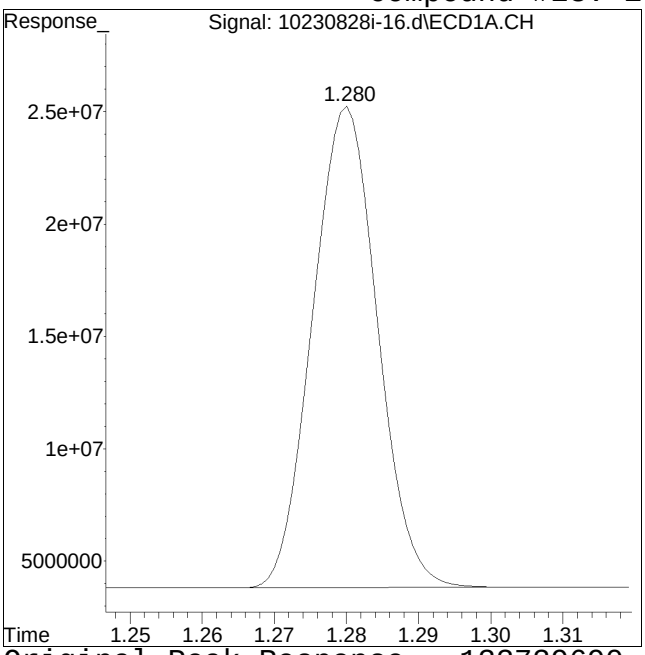
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

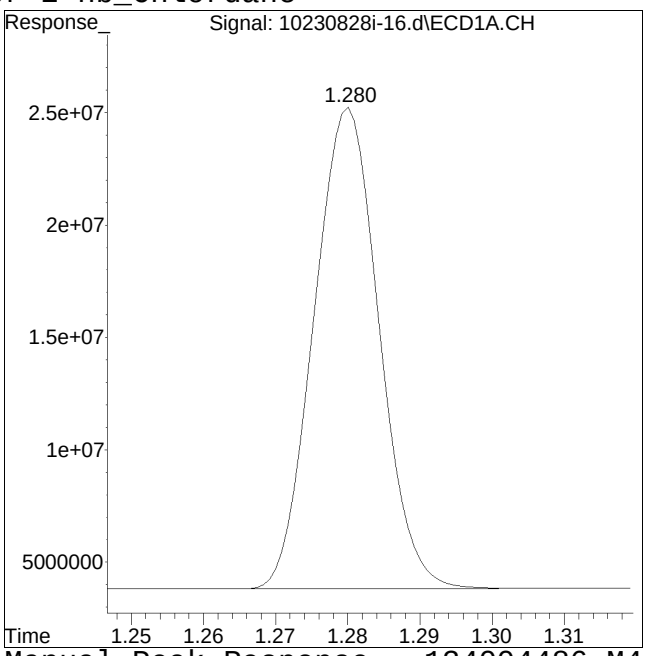


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-16.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 2:52 pm Instrument : Pest 10
Sample : il5chlor,42e,,pp 11119 L0.Quant Date : 8/29/2023 12:52 pm

Compound #28: 1-br-2-nb_Chlordane





Original Peak Response = 133739690 Manual Peak Response = 134004486 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-17.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:03 pm
Operator : PEST10:akm
Sample : il7chlor,42e,,pp 11118 L0.5
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:52:38 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	1.279	1.348	132.4E6	152.1E6	25.000M4	25.000M3
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150		Recovery =	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150		Recovery =	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D. d	N.D. d
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-17.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:03 pm
Operator : PEST10:akm
Sample : il7chlor,42e,,pp 11118 L0.5
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:52:38 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	2.394	2.770	93538149	111.3E6	499.981	472.271
30) l1	chlordane-3	2.455	3.370	161.8E6	124.1E6	498.361	500.786
31) l1	chlordane-4	2.803	4.048	109.7E6	448.9E6	526.957	490.948
32) l1	chlordane-5	3.349	4.220	370.8E6	349.0E6	502.386	484.646
Sum	chlordane-1			735.7E6	1033.3E6	NoCal	NoCal D
Average	chlordane-1					506.921	487.163
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

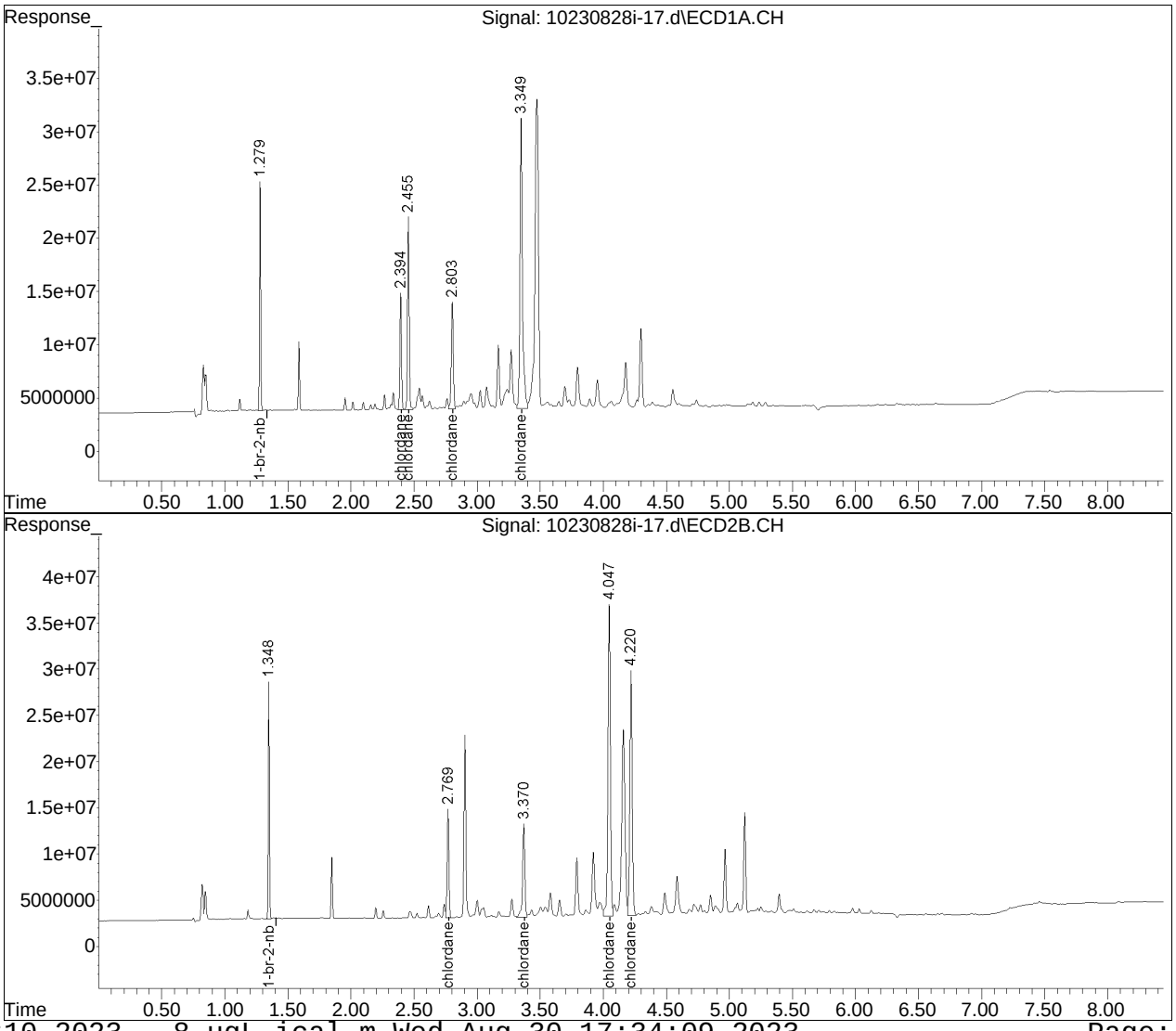
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-17.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:03 pm
Operator : PEST10:akm
Sample : il7chlor,42e,,pp 11118 L0.5
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 17 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:52:38 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

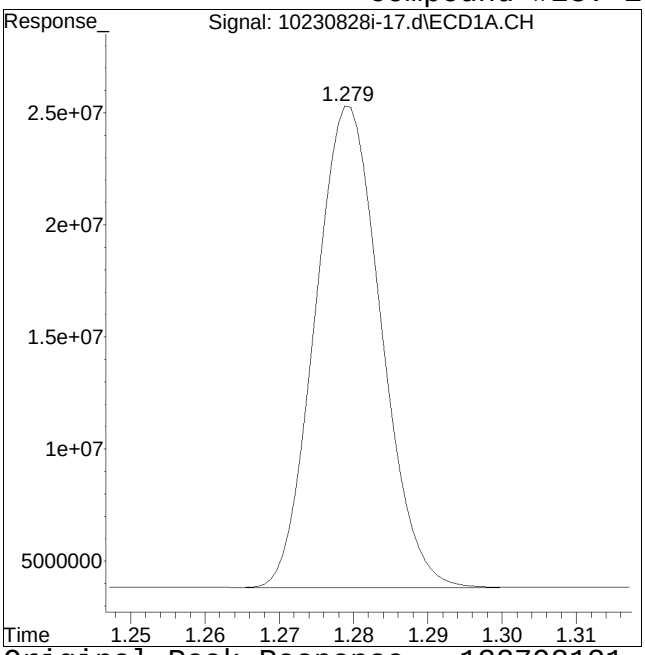
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

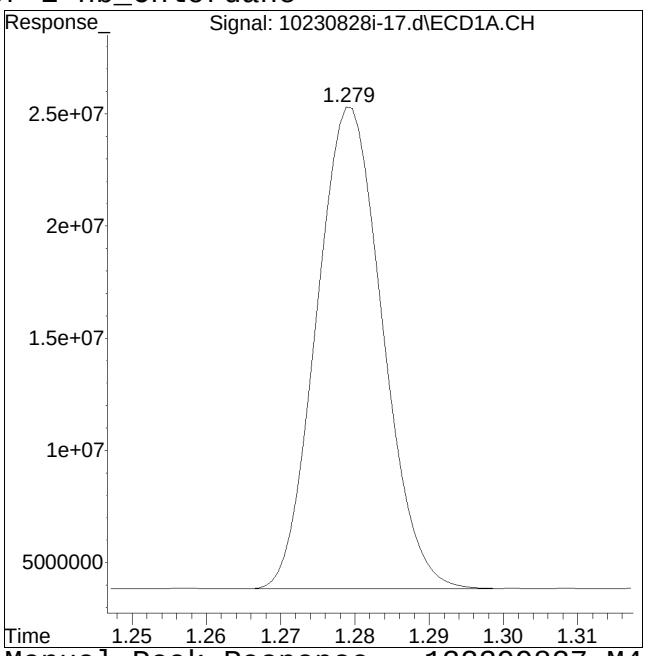


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-17.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 3:03 pm Instrument : Pest 10
Sample : il7chlor,42e,,pp 11118 L0.Quant Date : 8/29/2023 12:52 pm

Compound #28: 1-br-2-nb_Chlordane



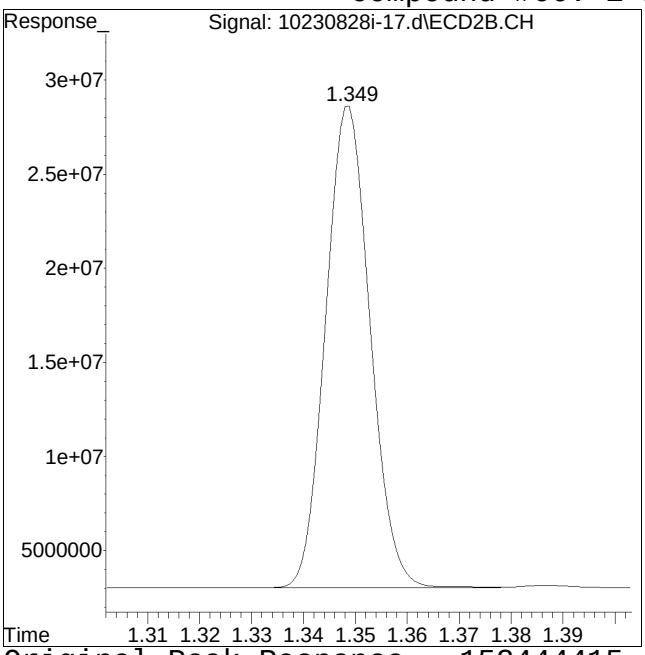


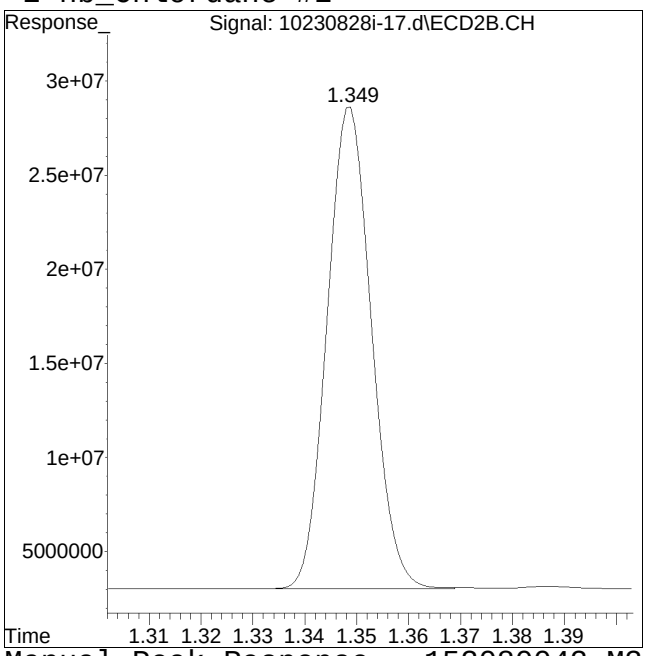
Original Peak Response = 132792121 Manual Peak Response = 132399827 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-17.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 3:03 pm Instrument : Pest 10
Sample : il7chlor,42e,,pp 11118 L0.Quant Date : 8/29/2023 12:52 pm

Compound #66: 1-br-2-nb_Chlordane #2





Original Peak Response = 152444415 Manual Peak Response = 152080042 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-18.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:14 pm
Operator : PEST10:akm
Sample : il8chlor,42e,,pp 11117 L1.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:49:48 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	1.279	1.349	132.2E6	149.6E6	25.000	25.000
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D. d	N.D. d
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-18.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:14 pm
Operator : PEST10:akm
Sample : il8chlor,42e,,pp 11117 L1.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:49:48 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	2.394	2.770	183.5E6	226.7E6	NoCal	NoCal
30) l1	chlordane-3	2.455	3.370	320.4E6	250.3E6	NoCal	NoCal
31) l1	chlordane-4	2.803	4.048	210.0E6	905.5E6	NoCal	NoCal
32) l1	chlordane-5	3.348	4.220	728.5E6	711.0E6	NoCal	NoCal
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

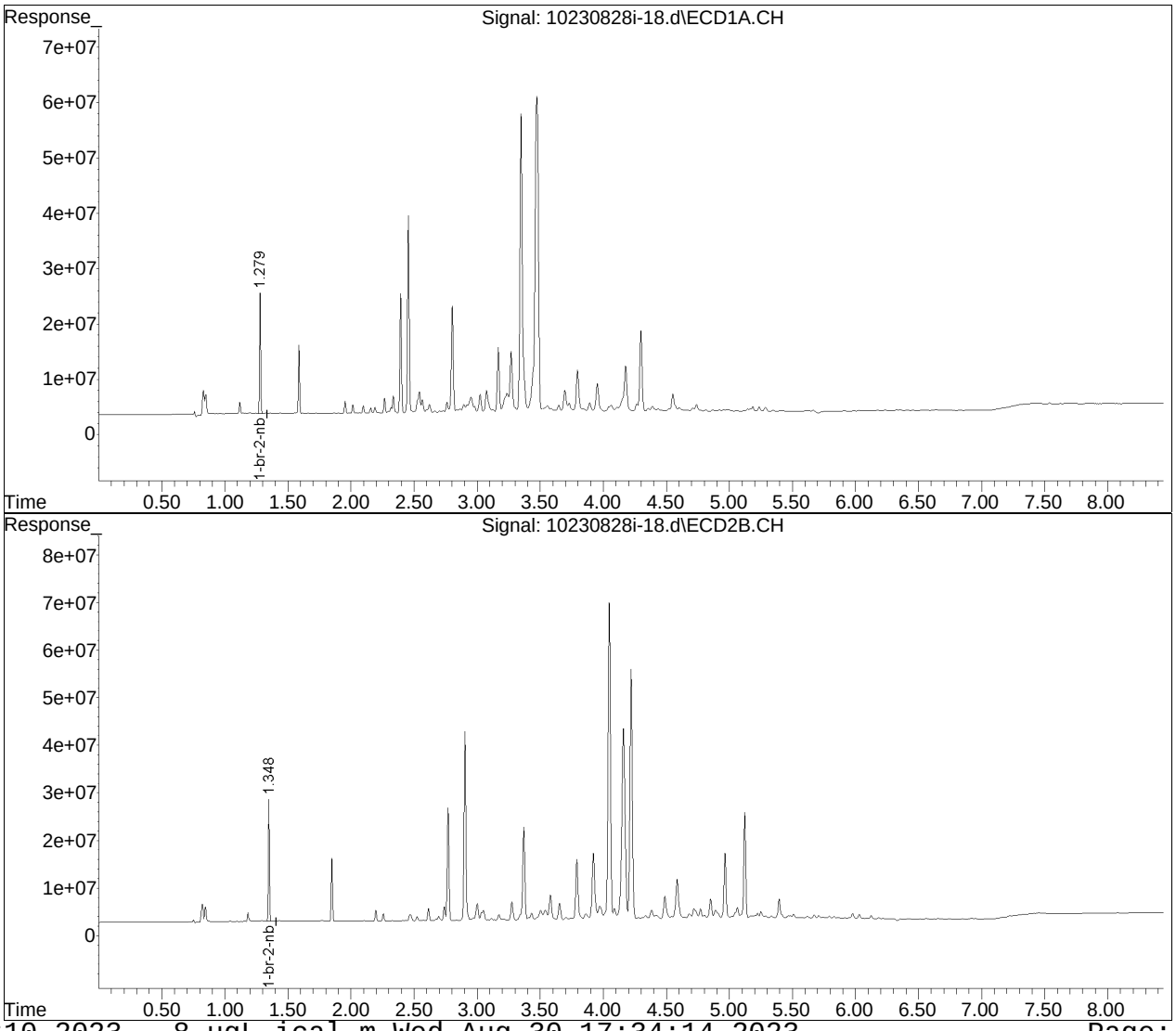
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-18.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:14 pm
Operator : PEST10:akm
Sample : il8chlor,42e,,pp 11117 L1.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 18 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:49:48 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PEST\Pest10\2023\230828	QMethod	: pest10_2023_08_28_ugL_ic
Data File	: 10230828i-18.d	Operator	: PEST10:akm
Date Inj'd	: 8/28/2023 3:14 pm	Instrument	: Pest 10
Sample	: il8chlor,42e,,pp 11117 L1	Quant Date	: 8/29/2023 12:49 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-19.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:25 pm
Operator : PEST10:akm
Sample : il9chlor,42e,,pp 11116 L2.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:50:30 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	1.279	1.349	131.3E6	149.9E6	25.000	25.000
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D. d	N.D. d
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-19.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:25 pm
Operator : PEST10:akm
Sample : il9chlor,42e,,pp 11116 L2.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:50:30 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	2.394	2.769	376.3E6	471.1E6	2065.333	2075.082
30) l1	chlordane-3	2.455	3.370	656.3E6	493.1E6	2062.468	1966.449
31) l1	chlordane-4	2.803	4.048	421.1E6	1839.8E6	2019.073	2028.367
32) l1	chlordane-5	3.348	4.221	1496.5E6	1448.7E6	2068.639	2033.977
Sum	chlordane-1			2950.2E6	4252.7E6	NoCal	NoCal D
Average	chlordane-1					2053.878	2025.969
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

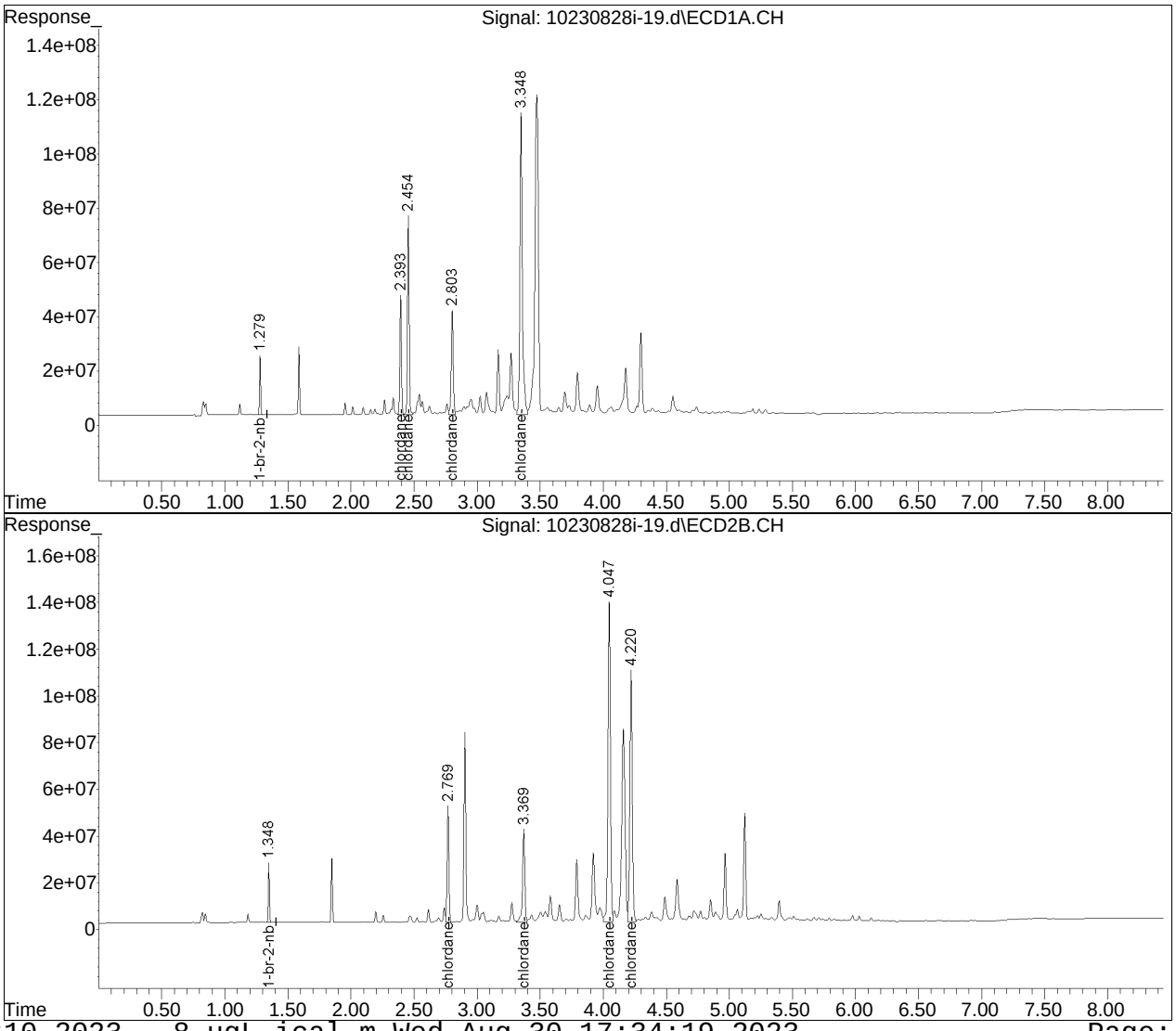
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-19.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:25 pm
Operator : PEST10:akm
Sample : il9chlor,42e,,pp 11116 L2.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:50:30 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PEST\Pest10\2023\230828	QMethod	: pest10_2023_08_28_ugL_ic
Data File	: 10230828i-19.d	Operator	: PEST10:akm
Date Inj'd	: 8/28/2023 3:25 pm	Instrument	: Pest 10
Sample	: il9chlor,42e,,pp 11116 L2.	Quant Date	: 8/29/2023 12:50 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-20.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:36 pm
Operator : PEST10:akm
Sample : il10chlor,42e,,pp 11210 L5.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:51:51 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	1.278	1.348	128.8E6	148.7E6	25.000M4	25.000M4
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150		Recovery =	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150		Recovery =	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D. d	N.D. d
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-20.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:36 pm
Operator : PEST10:akm
Sample : il10chlor,42e,,pp 11210 L5.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:51:51 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l	
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d	
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d	
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d	
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d	
29) l1	chlordane-1	2.394	2.770	913.4E6	1160.1E6	5026.176	5056.984	
30) l1	chlordane-3	2.455	3.370	1566.5E6	1167.8E6	4939.948	4735.348	
31) l1	chlordane-4	2.803	4.048	980.9E6	4347.4E6	4770.509	4798.322	
32) l1	chlordane-5	3.349	4.221	3551.6E6	3433.3E6	4918.918	4819.242	
Sum	chlordane-1			7012.4E6	10108.6E6	NoCal	NoCal	D
Average	chlordane-1					4913.888	4852.474	
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d	
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d	
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d	
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d	
Sum	toxaphene-1			0	0	N.D.	N.D.	
Average	toxaphene-1					0.000	0.000	

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.	
Average	toxaphene-1					0.000	0.000	

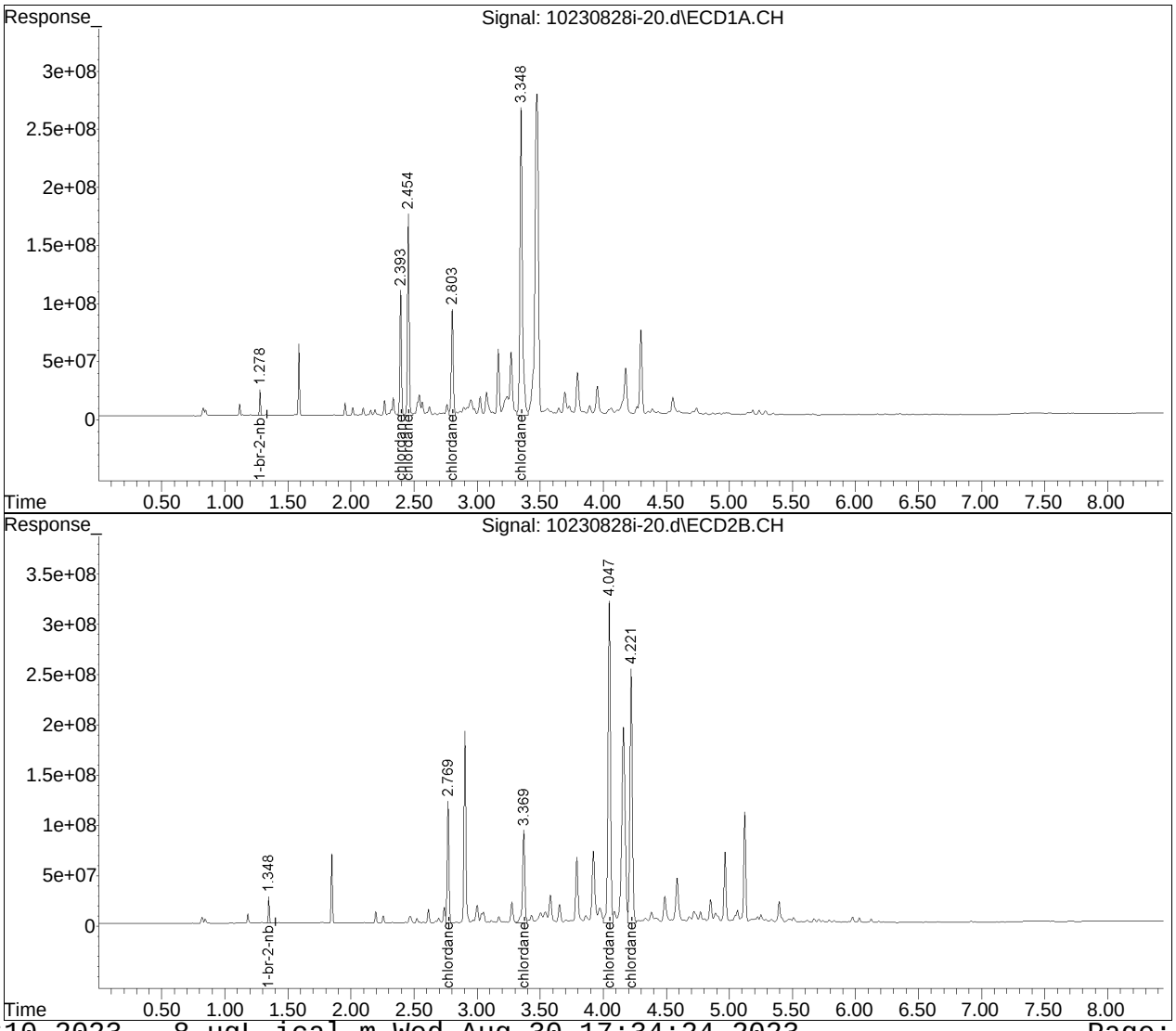
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-20.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:36 pm
Operator : PEST10:akm
Sample : il10chlor,42e,,pp 11210 L5.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 12:51:51 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:47:23 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

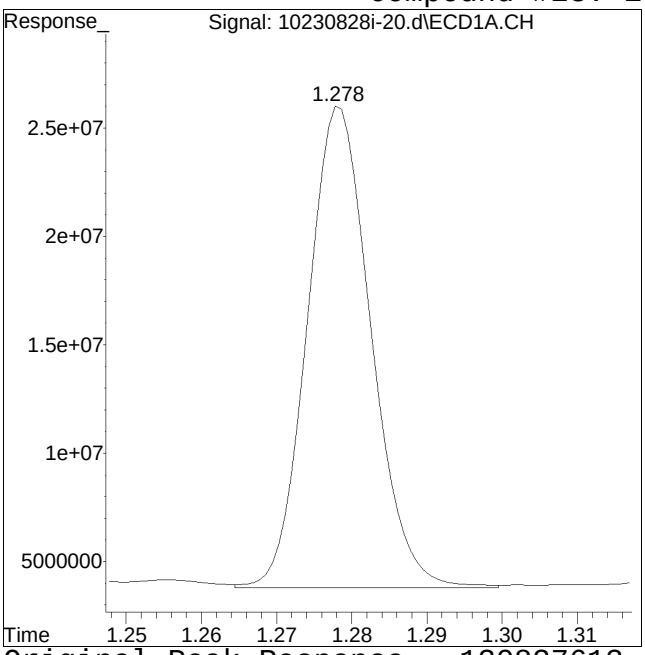
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

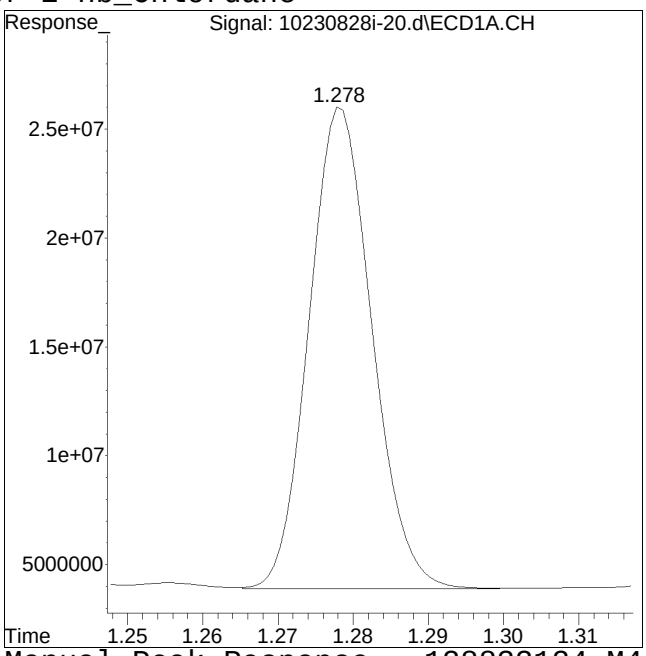


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-20.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 3:36 pm Instrument : Pest 10
Sample : il10chlor,42e,,pp 11210 L5Quant Date : 8/29/2023 12:51 pm

Compound #28: 1-br-2-nb_Chlordane



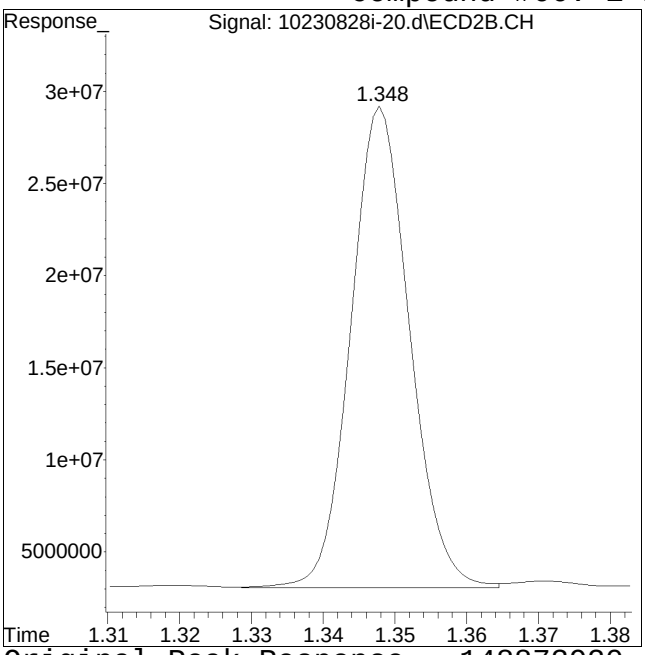


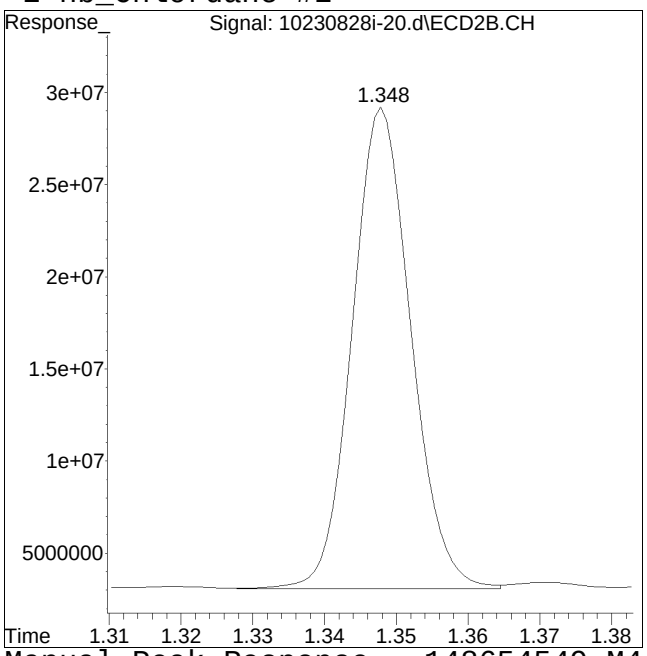
Original Peak Response = 130837613 Manual Peak Response = 128833124 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-20.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 3:36 pm Instrument : Pest 10
Sample : il10chlor,42e,,pp 11210 L5Quant Date : 8/29/2023 12:51 pm

Compound #66: 1-br-2-nb_Chlordane #2





Original Peak Response = 148873920 Manual Peak Response = 148654549 M4
M4 = Poor automated baseline construction.

Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-21.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 28 Aug 2023   3:47 pm
Operator : PEST10:akm
Sample   : cicvchlor,42e,,pp 11239 L1.0ICV
Misc   : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:00:21 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:58:18 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	101	0.00
29	l1	chlordane-1		*1000.000	865.636	13.4	89	0.00
30	l1	chlordane-3		*1000.000	765.330	23.5#	78	0.00
31	l1	chlordane-4		*1000.000	945.466	5.5	93	0.00
32	l1	chlordane-5		*1000.000	925.225	7.5	94	0.00

Signal #2

28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	101	0.00
29	l1	chlordane-1		*1000.000	851.958	14.8	88	0.00
30	l1	chlordane-3		*1000.000	959.542	4.0	93	0.00
31	l1	chlordane-4		*1000.000	918.382	8.2	92	0.00
32	l1	chlordane-5		*1000.000	889.091	11.1	89	0.00

Evaluate Continuing Calibration Report - Not Founds

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.28#
2	s	2,4,5,6-Tetrachloro-m-xylen		1.014	0.000	100.0#	0#	-1.61#
3	t	Hexachlorobenzene		1.097	0.000	100.0#	0#	-1.82#
4	t	alpha-BHC		1.364	0.000	100.0#	0#	-1.92#
5	t	gamma-BHC (lindane)		1.306	0.000	100.0#	0#	-2.12#
6	t	beta-BHC		0.604	0.000	100.0#	0#	-2.17#
7	t	delta-BHC		1.308	0.000	100.0#	0#	-2.30#
8	t	Heptachlor		1.271	0.000	100.0#	0#	-2.46#
9	t	Aldrin		1.157	0.000	100.0#	0#	-2.69#
10	t	Alachlor		0.248	0.000	100.0#	0#	-2.81#
11	t	Chlorpyrifos		0.655	0.000	100.0#	0#	-2.90#
12	t	Heptachlor Epoxide		1.141	0.000	100.0#	0#	-3.23#
13	t	gamma-Chlordane (trans)		1.100	0.000	100.0#	0#	-3.35#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-21.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 28 Aug 2023   3:47 pm
Operator : PEST10:akm
Sample   : cicvchlor,42e,,pp 11239 L1.0ICV
Misc   : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:00:21 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:58:18 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-3.48#
15	t	4,4'-DDE		1.089	0.000	100.0#	0#	-3.58#
16	t	Endosulfan I		1.079	0.000	100.0#	0#	-3.62#
17	t	Dieldrin		1.093	0.000	100.0#	0#	-3.87#
18	t	Endrin		1.128	0.000	100.0#	0#	-4.13#
19	t	4,4'-DDD		0.885	0.000	100.0#	0#	-4.24#
20	t	Endosulfan II		1.020	0.000	100.0#	0#	-4.38#
21	t	4,4'-DDT		0.986	0.000	100.0#	0#	-4.54#
22	t	Endrin Aldehyde		0.844	0.000	100.0#	0#	-4.80#
23	t	Methoxychlor		0.563	0.000	100.0#	0#	-5.04#
24	t	Mirex		0.905	0.000	100.0#	0#	-5.09#
25	t	Endosulfan Sulfate		0.979	0.000	100.0#	0#	-5.20#
26	t	Endrin Ketone		1.088	0.000	100.0#	0#	-5.43#
27	s	Decachlorobiphenyl		0.916	0.000	100.0#	0#	-6.24#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.28#
34	l2	toxaphene-1		0.036	0.000	100.0#	0#	-4.37#
35	l2	toxaphene-2		0.035	0.000	100.0#	0#	-4.49#
36	l2	toxaphene-4		0.031	0.000	100.0#	0#	-4.92#
37	l2	toxaphene-5		0.036	0.000	100.0#	0#	-5.10#

Signal #2

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.35#
2	s	2,4,5,6-Tetrachloro-m-xyl		0.963	0.000	100.0#	0#	-1.82#
3	t	Hexachlorobenzene		1.075	0.000	100.0#	0#	-2.13#
4	t	alpha-BHC	*	50.000	0.000	100.0#	0	-2.23#
5	t	gamma-BHC (lindane)		1.285	0.000	100.0#	0#	-2.51#
6	t	beta-BHC		0.598	0.000	100.0#	0#	-2.58#
7	t	delta-BHC	*	50.000	0.000	100.0#	0	-2.84#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-21.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 28 Aug 2023   3:47 pm
Operator : PEST10:akm
Sample   : cicvchlor,42e,,pp 11239 L1.0ICV
Misc   : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:00:21 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:58:18 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
8	t	Heptachlor		1.298	0.000	100.0#	0#	-2.90#
9	t	Aldrin	*	50.000	0.000	100.0#	0	-3.22#
10	t	Alachlor		0.197	0.000	100.0#	0#	-3.10#
11	t	Chlorpyrifos		0.651	0.000	100.0#	0#	-3.46#
12	t	Heptachlor Epoxide		1.186	0.000	100.0#	0#	-3.83#
13	t	gamma-Chlordane (trans)		1.246	0.000	100.0#	0#	-4.05#
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-4.22#
15	t	4,4'-DDE	*	50.000	0.000	100.0#	0	-4.42#
16	t	Endosulfan I		1.101	0.000	100.0#	0#	-4.28#
17	t	Dieldrin	*	50.000	0.000	100.0#	0	-4.58#
18	t	Endrin		1.205	0.000	100.0#	0#	-4.88#
19	t	4,4'-DDD	*	50.000	0.000	100.0#	0	-5.01#
20	t	Endosulfan II		0.995	0.000	100.0#	0#	-5.08#
21	t	4,4'-DDT	*	50.000	0.000	100.0#	0	-5.29#
22	t	Endrin Aldehyde		0.826	0.000	100.0#	0#	-5.38#
23	t	Methoxychlor		0.571	0.000	100.0#	0#	-5.86#
24	t	Mirex		0.904	0.000	100.0#	0#	-5.99#
25	t	Endosulfan Sulfate		0.951	0.000	100.0#	0#	-5.61#
26	t	Endrin Ketone		1.078	0.000	100.0#	0#	-6.03#
27	s	Decachlorobiphenyl		0.924	0.000	100.0#	0#	-6.89#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.35#
34	l2	toxaphene-1		0.024	0.000	100.0#	0#	-5.04#
35	l2	toxaphene-2		0.034	0.000	100.0#	0#	-5.07#
36	l2	toxaphene-4		0.043	0.000	100.0#	0#	-5.39#
37	l2	toxaphene-5		0.038	0.000	100.0#	0#	-5.80#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-21.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:47 pm
Operator : PEST10:akm
Sample : cicvchlor,42e,,pp 11239 L1.0ICV
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:00:21 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:58:18 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	1.278	1.348	132.2E6	151.5E6	25.000M4	25.000M4
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150		Recovery =	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150		Recovery =	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D. d	N.D. d
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-21.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:47 pm
Operator : PEST10:akm
Sample : cicvchlor,42e,,pp 11239 L1.0ICV
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:00:21 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:58:18 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	2.393	2.769	162.8E6	200.1E6	865.636	851.958
30) l1	chlordane-3	2.454	3.370	248.4E6	233.6E6	765.330	959.542
31) l1	chlordane-4	2.802	4.047	195.6E6	830.8E6	945.466	918.382
32) l1	chlordane-5	3.348	4.220	685.4E6	630.3E6	925.225	889.091
Sum	chlordane-1			1292.2E6	1894.8E6	NoCal	NoCal D
Average	chlordane-1					875.414	904.743
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

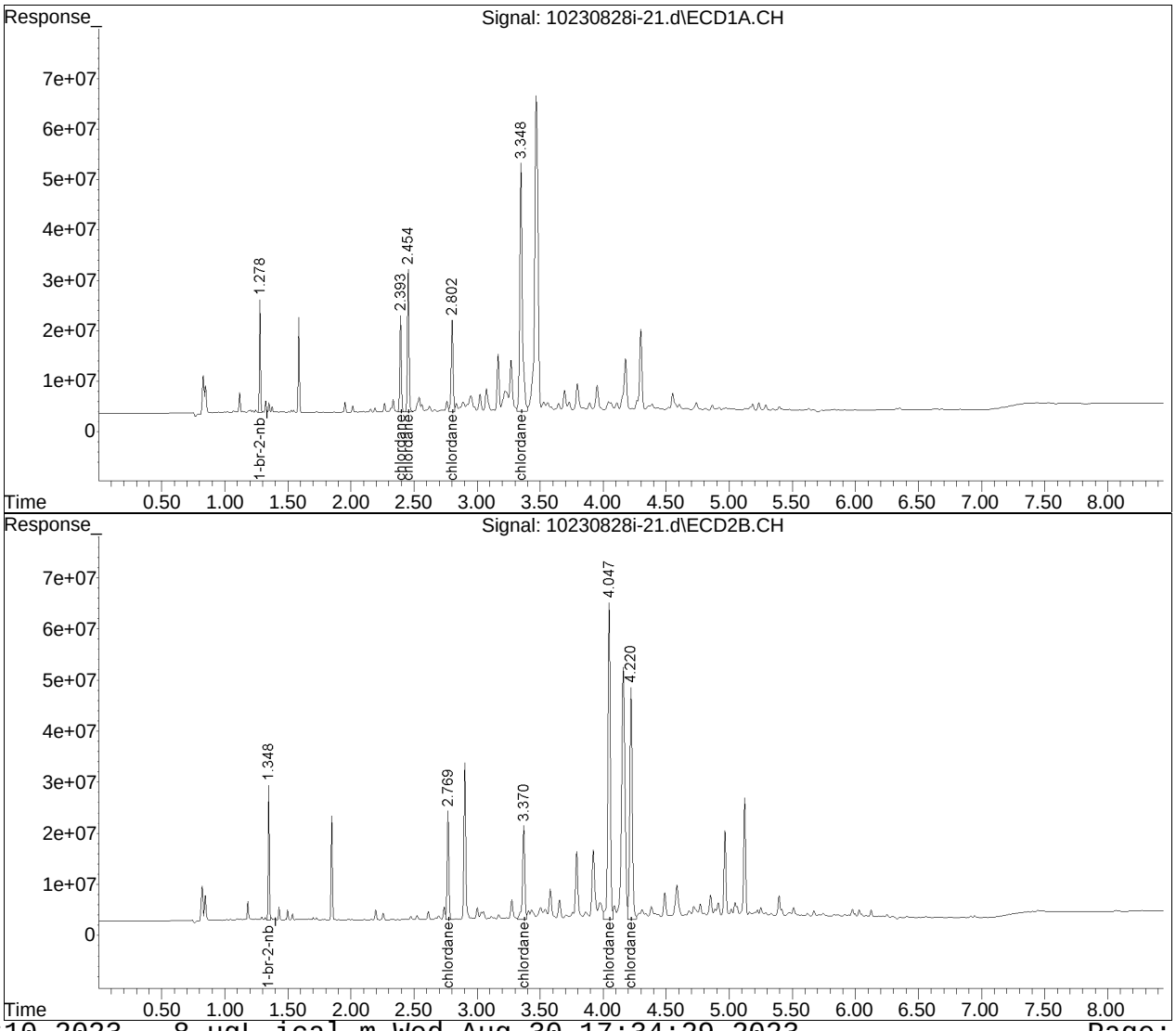
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-21.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:47 pm
Operator : PEST10:akm
Sample : cicvchlor,42e,,pp 11239 L1.0ICV
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:00:21 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:58:18 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

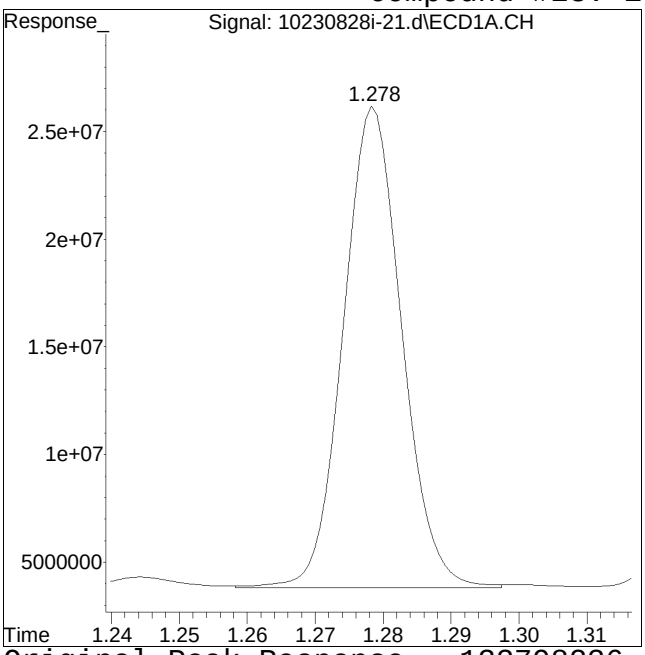
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

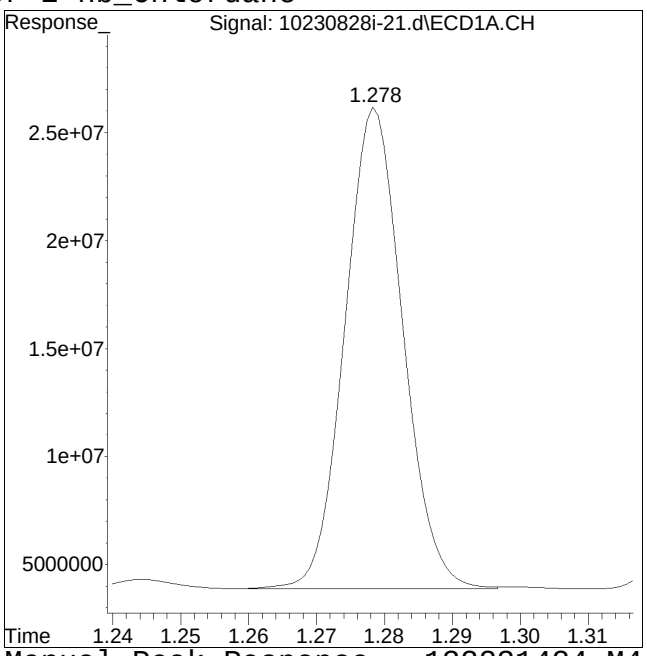


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-21.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 3:47 pm Instrument : Pest 10
Sample : cicvchlor,42e,,pp 11239 L1Quant Date : 8/29/2023 12:58 pm

Compound #28: 1-br-2-nb_Chlordane



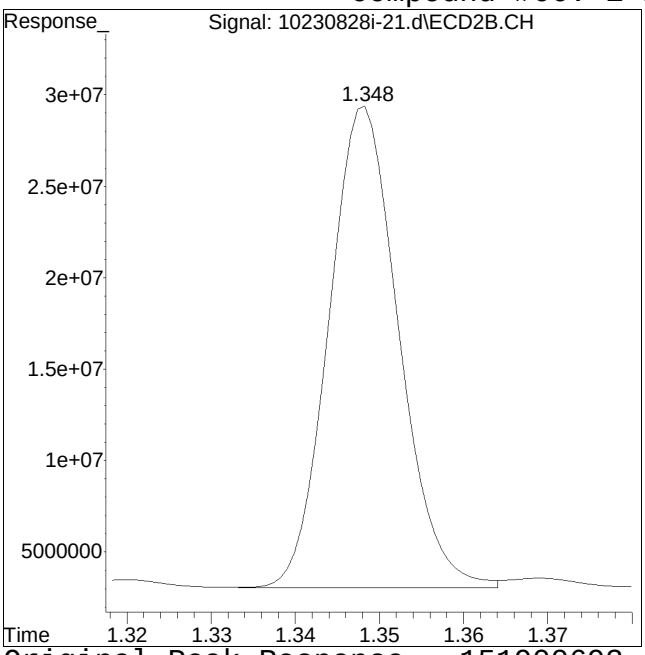


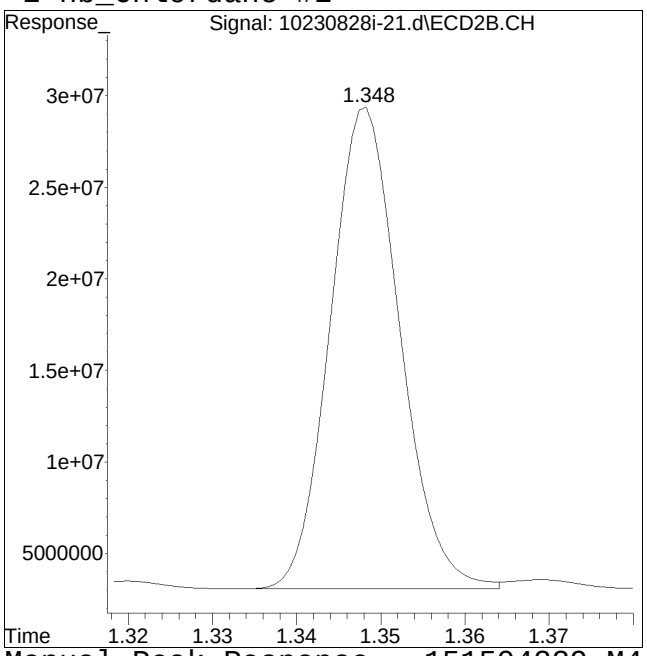
Original Peak Response = 133798236 Manual Peak Response = 132231424 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-21.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 3:47 pm Instrument : Pest 10
Sample : cicvchlor,42e,,pp 11239 L1Quant Date : 8/29/2023 12:58 pm

Compound #66: 1-br-2-nb_Chlordane #2





Original Peak Response = 151900693 Manual Peak Response = 151504229 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-22.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:58 pm
Operator : PEST10:akm
Sample : il3tox,42e,,pp 11124 L0.02
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:05:49 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:02:20 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	1.279	1.348	129.4E6	148.2E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150		Recovery =	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D.	N.D.
	Spiked Amount	50.000	Range 30 - 150		Recovery =	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D.	N.D.
4) t	alpha-BHC	0.000	0.000	0	0	N.D.	N.D.
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D.	N.D.
6) t	beta-BHC	0.000	0.000	0	0	N.D.	N.D.
7) t	delta-BHC	0.000	0.000	0	0	N.D.	N.D.
8) t	Heptachlor	0.000	0.000	0	0	N.D.	N.D.
9) t	Aldrin	0.000	0.000	0	0	N.D.	N.D.
10) t	Alachlor	0.000	0.000	0	0	N.D.	N.D.
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D.	N.D.
12) t	Heptachlor E	0.000	0.000	0	0	N.D.	N.D.
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D.	N.D.
15) t	4,4'-DDE	0.000	0.000	0	0	N.D.	N.D.
16) t	Endosulfan I	0.000	0.000	0	0	N.D.	N.D.
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-22.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:58 pm
Operator : PEST10:akm
Sample : il3tox,42e,,pp 11124 L0.02
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:05:49 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:02:20 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D.	N.D.
30) l1	chlordane-3	0.000	0.000	0	0	N.D.	N.D.
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	4.367	5.041	3162347	2738396	15.801	19.315M4
35) l2	toxaphene-2	4.491	5.068	3230706	3742570	17.153M4	17.656M4
36) l2	toxaphene-4	4.918	5.389	2963728	5305688	18.183M4	20.877M4
37) l2	toxaphene-5	5.104	5.800	3621732	4527634	18.928M4	19.824M4
Sum	toxaphene-1			12978513	16314288	70.065	77.670
Average	toxaphene-1					17.516	19.418

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			12978513	16314288	70.065	77.670
Average	toxaphene-1					17.516	19.418

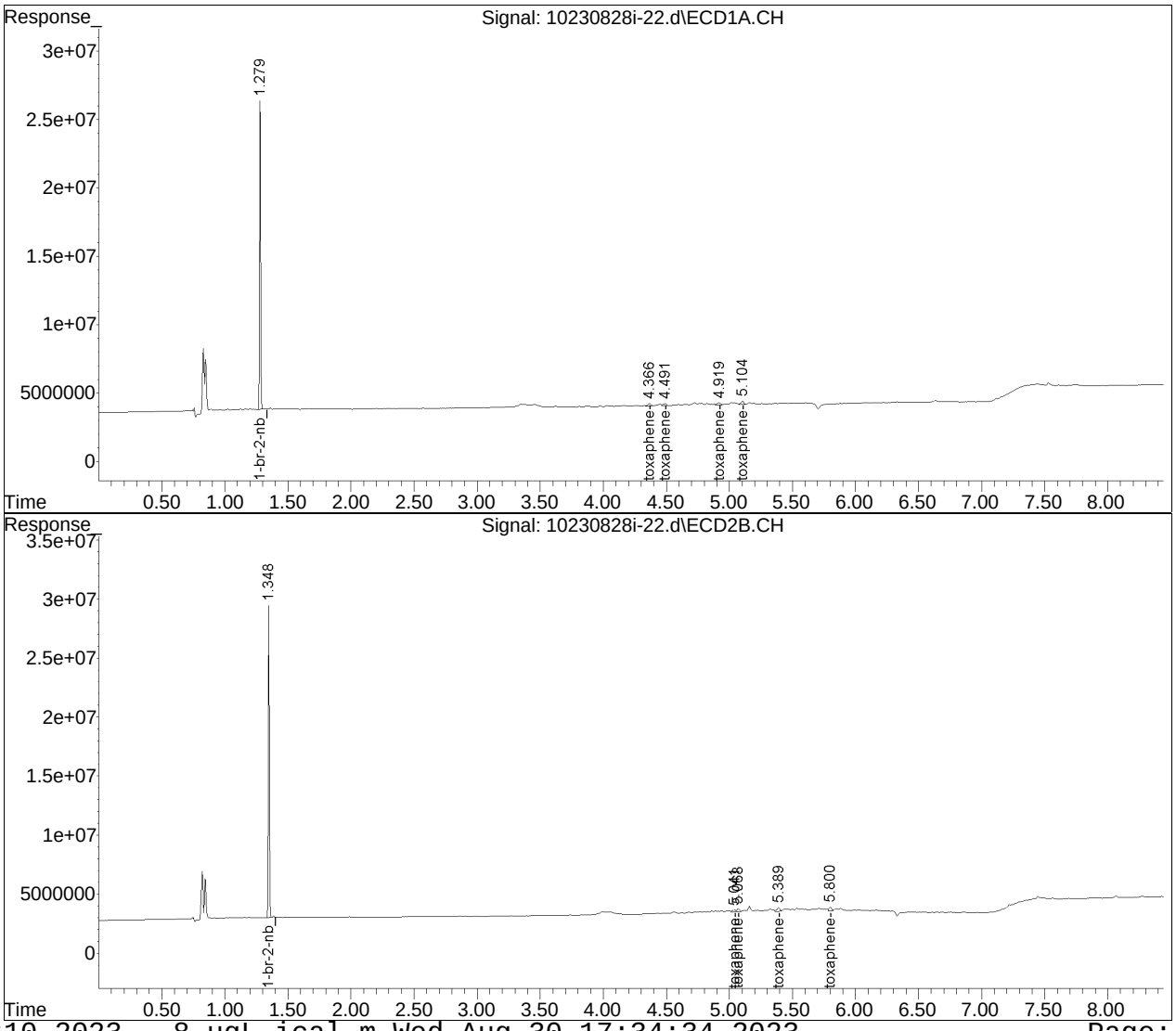
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-22.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 3:58 pm
Operator : PEST10:akm
Sample : il3tox,42e,,pp 11124 L0.02
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 22 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:05:49 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:02:20 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

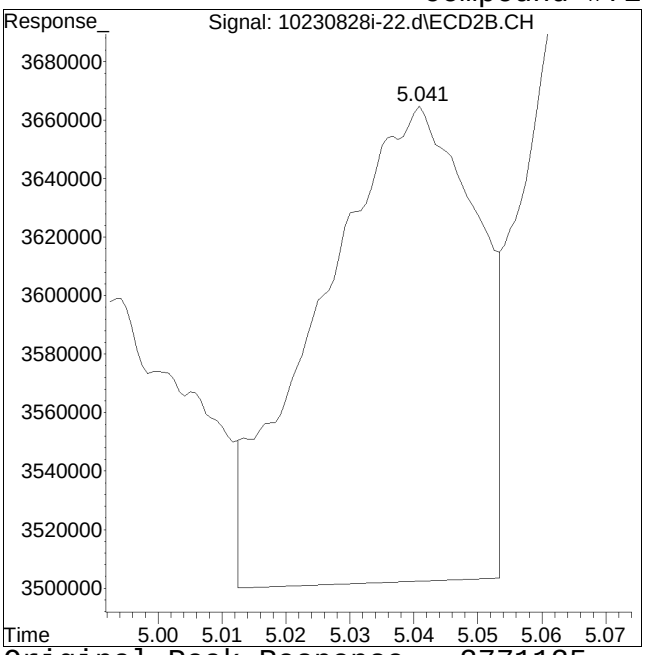
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



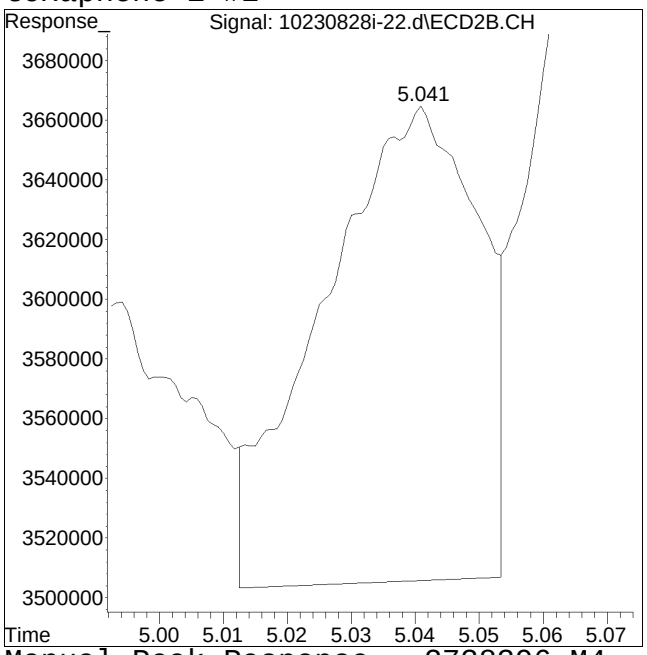
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-22.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 3:58 pm Instrument : Pest 10
Sample : il3tox,42e,,pp 11124 L0.02Quant Date : 8/29/2023 1:02 pm

Compound #72: toxaphene-1 #2



Original Peak Response = 2771125



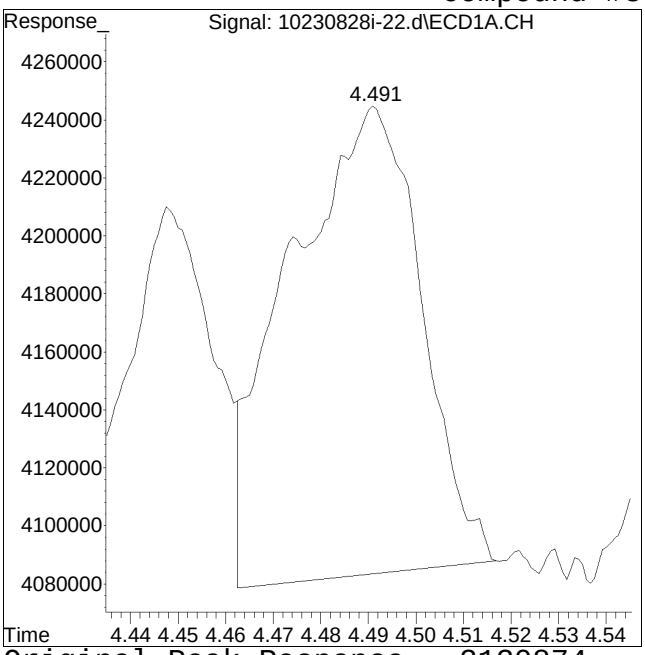
Manual Peak Response = 2738396 M4

M4 = Poor automated baseline construction.

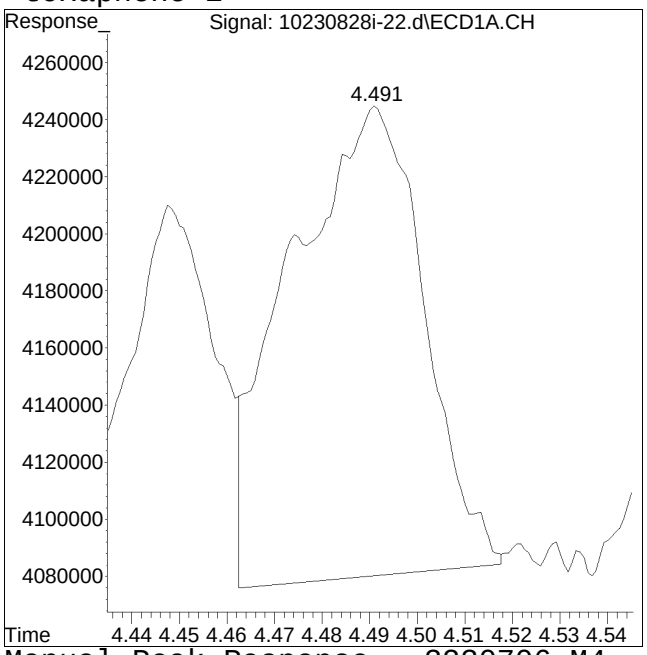
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-22.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 3:58 pm Instrument : Pest 10
Sample : il3tox,42e,,pp 11124 L0.02Quant Date : 8/29/2023 1:02 pm

Compound #35: toxaphene-2



Original Peak Response = 3130874



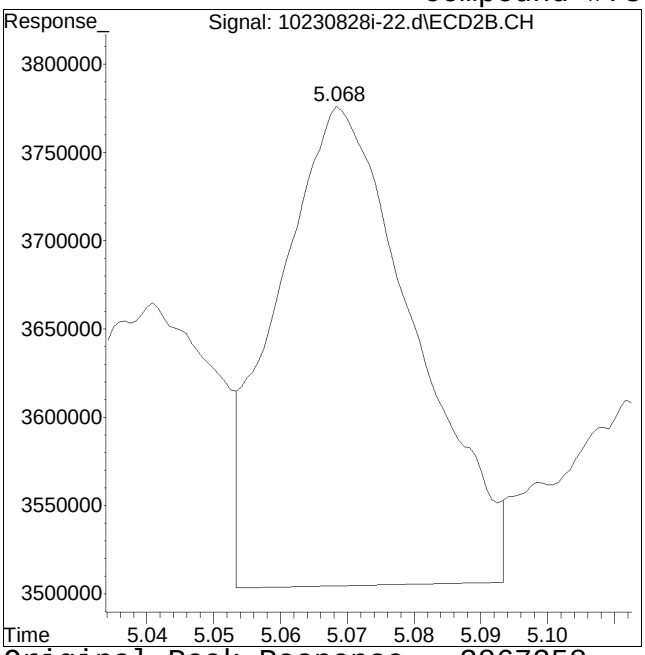
Manual Peak Response = 3230706 M4

M4 = Poor automated baseline construction.

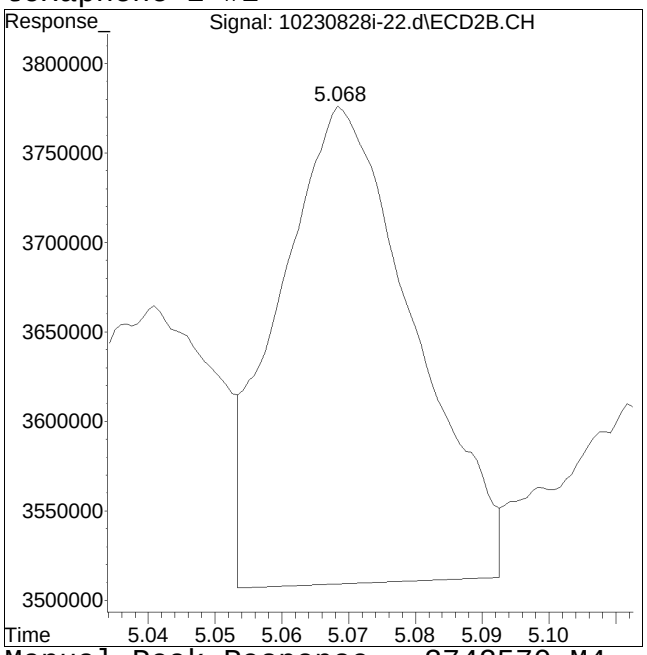
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-22.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 3:58 pm Instrument : Pest 10
Sample : il3tox,42e,,pp 11124 L0.02Quant Date : 8/29/2023 1:02 pm

Compound #73: toxaphene-2 #2



Original Peak Response = 3867258



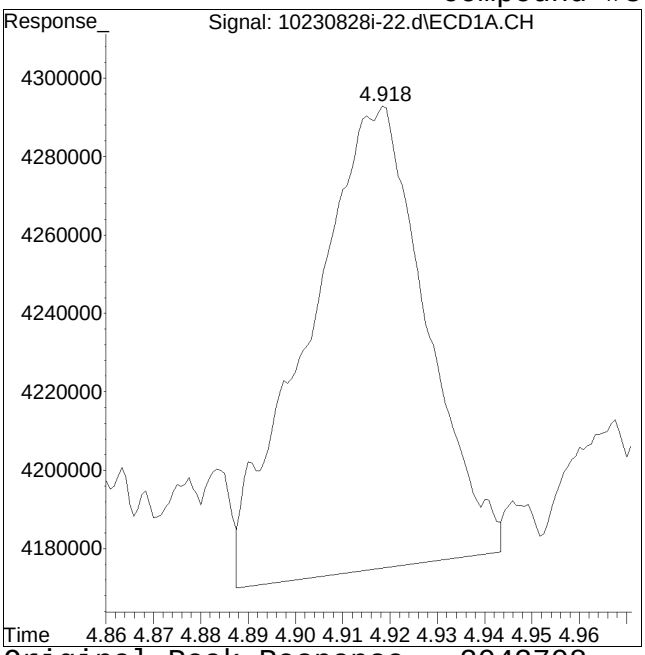
Manual Peak Response = 3742570 M4

M4 = Poor automated baseline construction.

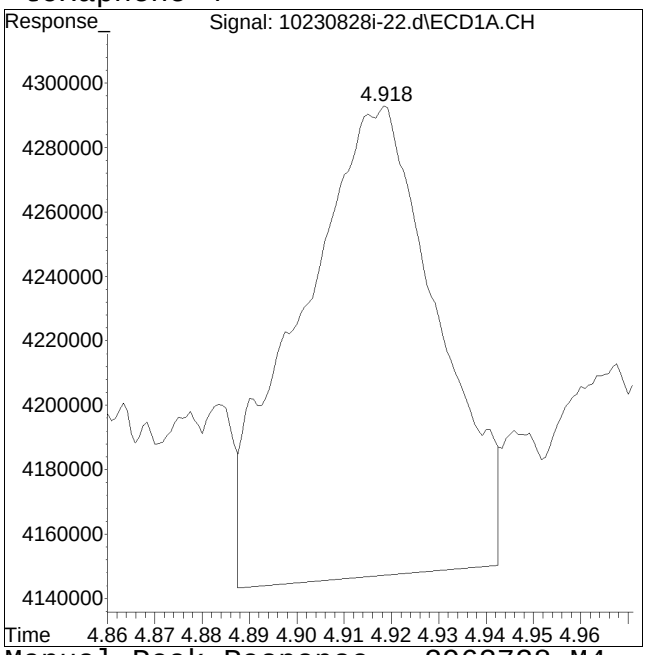
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-22.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 3:58 pm Instrument : Pest 10
Sample : il3tox,42e,,pp 11124 L0.02Quant Date : 8/29/2023 1:02 pm

Compound #36: toxaphene-4



Original Peak Response = 2043708



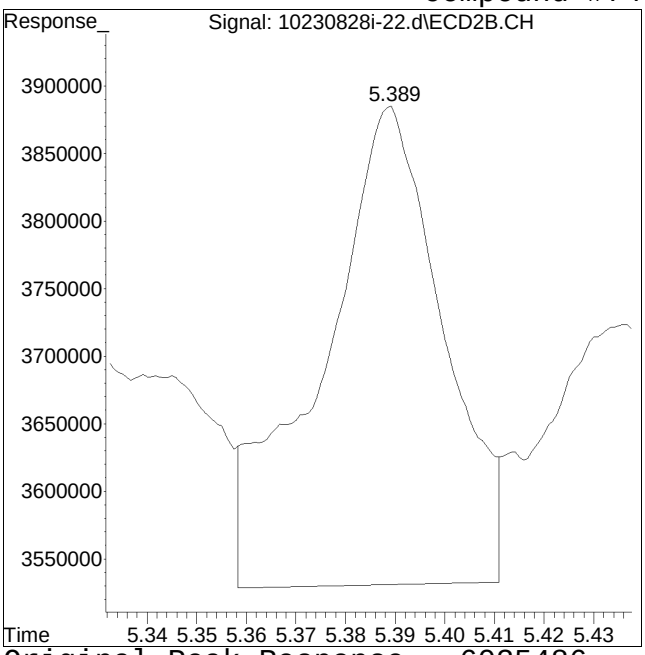
Manual Peak Response = 2963728 M4

M4 = Poor automated baseline construction.

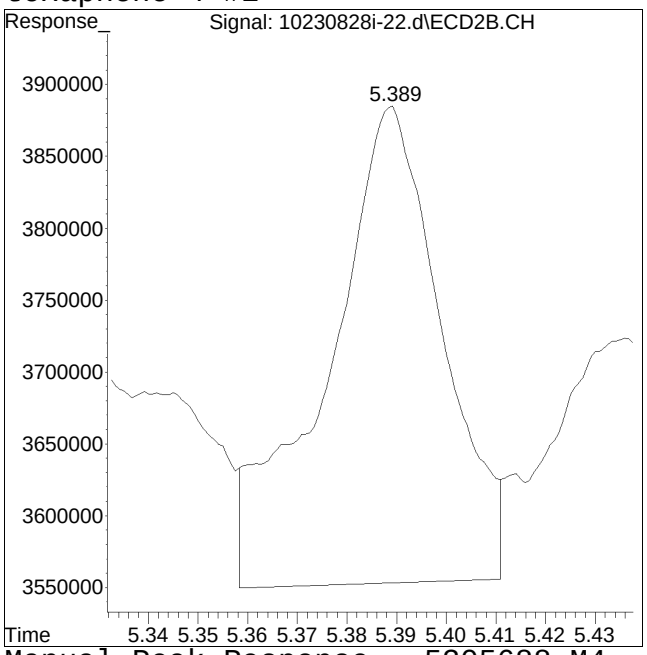
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-22.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 3:58 pm Instrument : Pest 10
Sample : il3tox,42e,,pp 11124 L0.02Quant Date : 8/29/2023 1:02 pm

Compound #74: toxaphene-4 #2



Original Peak Response = 6035486



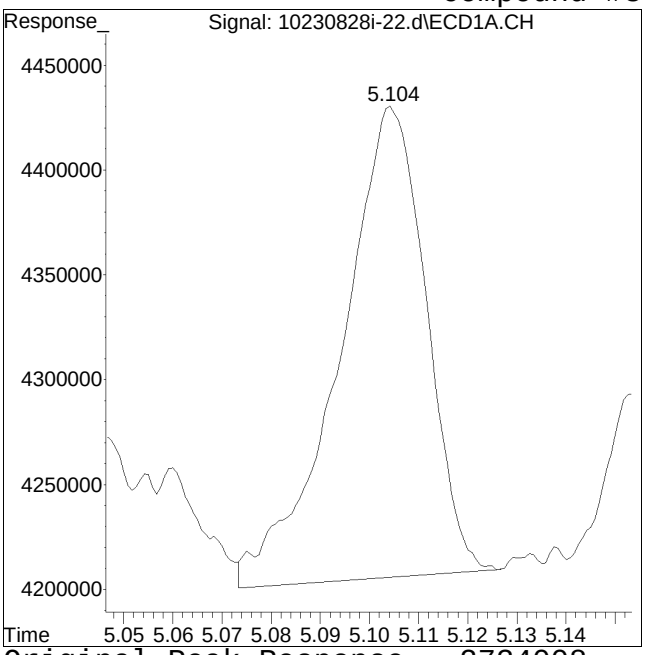
Manual Peak Response = 5305688 M4

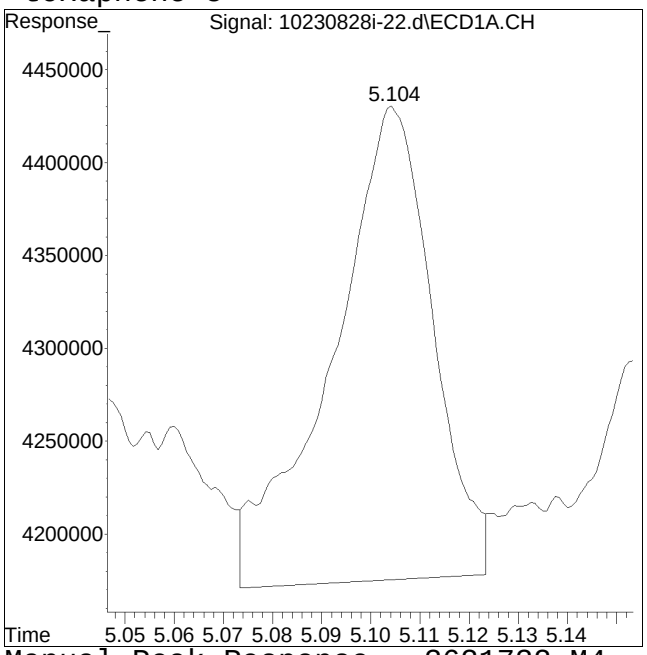
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-22.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 3:58 pm Instrument : Pest 10
Sample : il3tox,42e,,pp 11124 L0.02Quant Date : 8/29/2023 1:02 pm

Compound #37: toxaphene-5



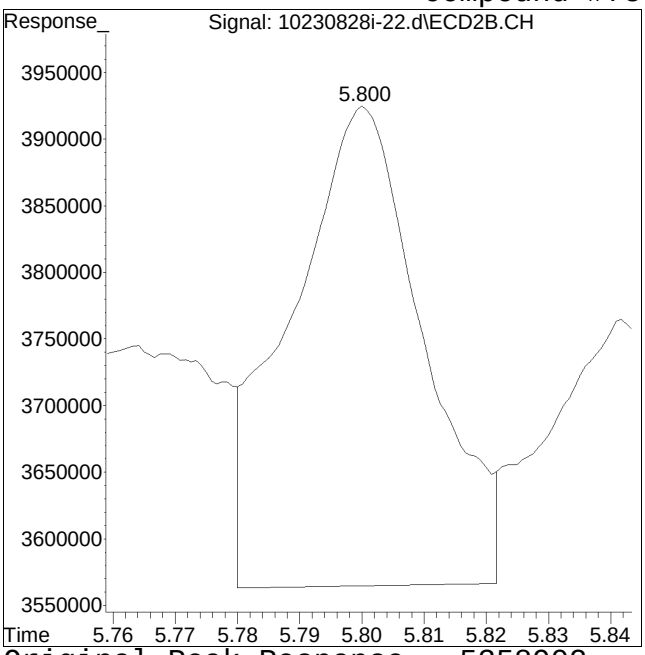


Original Peak Response = 2734008 Manual Peak Response = 3621732 M4
M4 = Poor automated baseline construction.

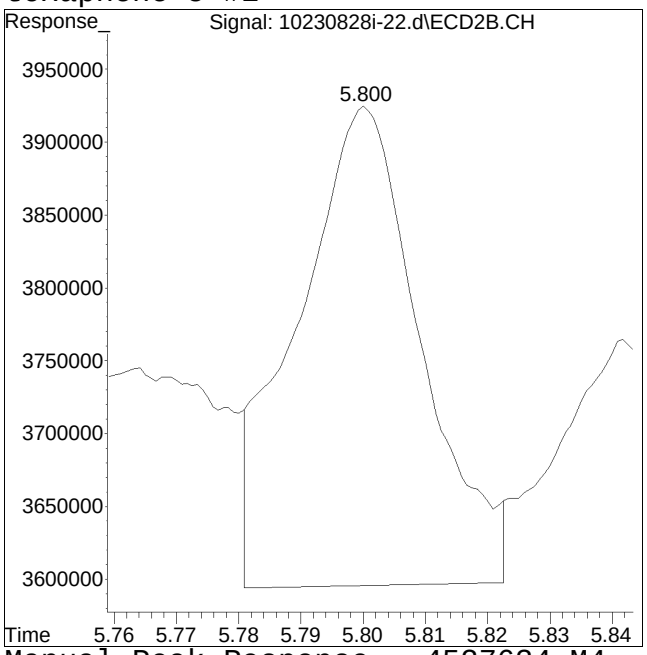
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230828QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230828i-22.d Operator : PEST10:akm
Date Inj'd : 8/28/2023 3:58 pm Instrument : Pest 10
Sample : il3tox,42e,,pp 11124 L0.02Quant Date : 8/29/2023 1:02 pm

Compound #75: toxaphene-5 #2



Original Peak Response = 5358902



Manual Peak Response = 4527634 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-23.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 4:09 pm
Operator : PEST10:akm
Sample : il8tox,42e,,pp 11123 L2.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 23 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:01:20 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:58:18 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	1.279	1.348	130.8E6	144.8E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D.	N.D.
	Spiked Amount	50.000	Range 30 - 150		Recovery =	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150		Recovery =	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D.	N.D.
4) t	alpha-BHC	0.000	0.000	0	0	N.D.	N.D.
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-23.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 4:09 pm
Operator : PEST10:akm
Sample : il8tox,42e,,pp 11123 L2.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 23 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:01:20 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:58:18 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	4.365	5.040	420.0E6	281.9E6	NoCal	NoCal
35) l2	toxaphene-2	4.491	5.069	391.8E6	423.6E6	NoCal	NoCal
36) l2	toxaphene-4	4.916	5.389	339.6E6	506.3E6	NoCal	NoCal
37) l2	toxaphene-5	5.103	5.800	400.3E6	455.7E6	NoCal	NoCal
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

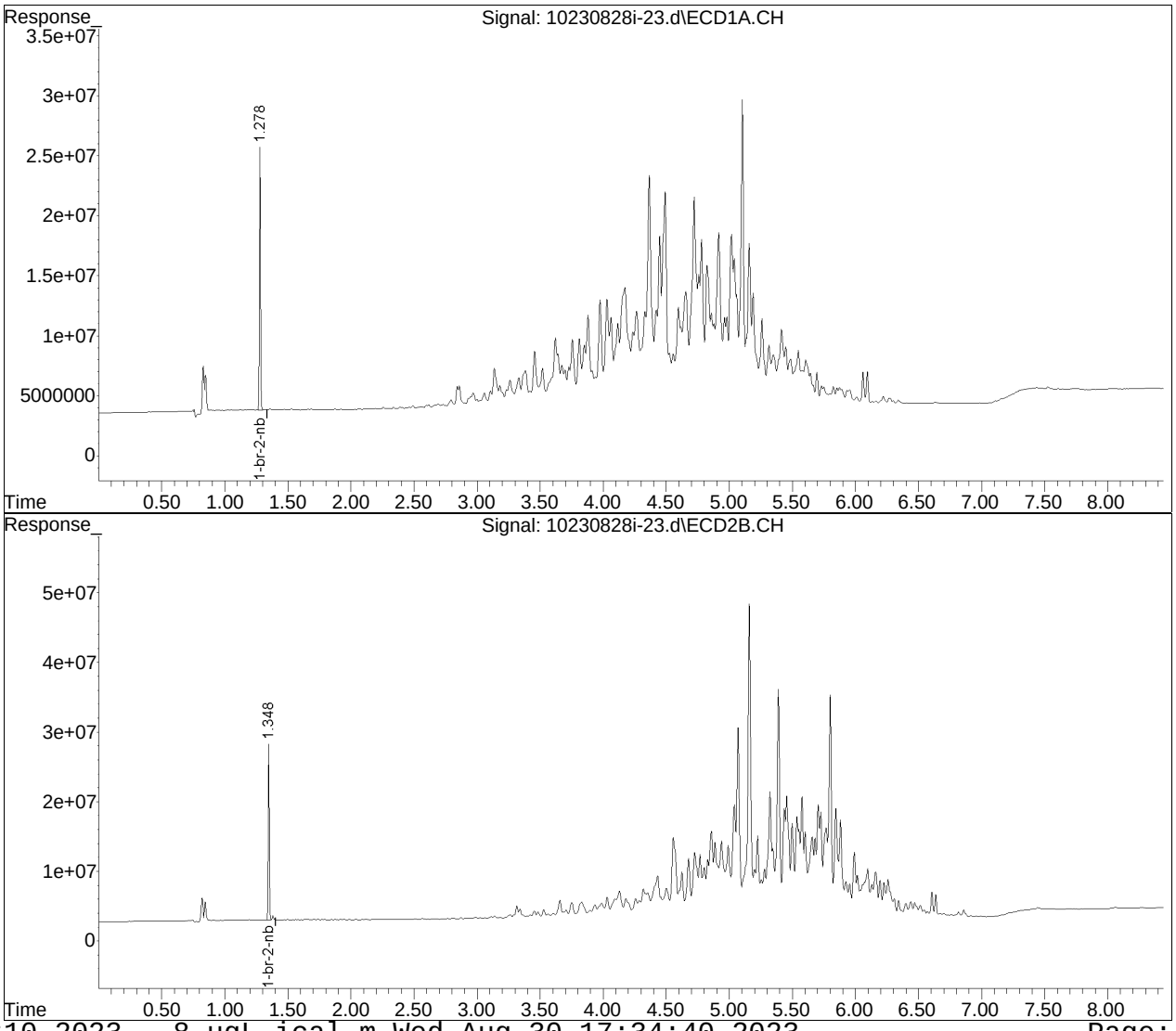
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-23.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 4:09 pm
Operator : PEST10:akm
Sample : il8tox,42e,,pp 11123 L2.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 23 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:01:20 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 12:58:18 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PEST\Pest10\2023\230828	QMethod	: pest10_2023_08_28_ugL_ic
Data File	: 10230828i-23.d	Operator	: PEST10:akm
Date Inj'd	: 8/28/2023 4:09 pm	Instrument	: Pest 10
Sample	: il8tox,42e,,pp 11123 L2.0	Quant Date	: 8/29/2023 1:01 pm

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-24.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 4:20 pm
Operator : PEST10:akm
Sample : il9tox,42e,,pp 11122 L5.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 24 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:02:02 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:01:38 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	1.278	1.348	135.9E6	146.8E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D.	N.D.
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-24.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 4:20 pm
Operator : PEST10:akm
Sample : il9tox,42e,,pp 11122 L5.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 24 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:02:02 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:01:38 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	4.365	5.040	1011.3E6	690.1E6	4635.082	4829.402
35) l2	toxaphene-2	4.490	5.069	960.5E6	1026.3E6	4718.860	4780.011
36) l2	toxaphene-4	4.915	5.389	829.8E6	1234.5E6	4702.794	4810.209
37) l2	toxaphene-5	5.103	5.800	970.0E6	1107.7E6	4664.814	4795.611
Sum	toxaphene-1			3771.5E6	4058.6E6	18721.550	19215.232
Average	toxaphene-1					4680.387	4803.808

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			3771.5E6	4058.6E6	18721.550	19215.232
Average	toxaphene-1					4680.387	4803.808

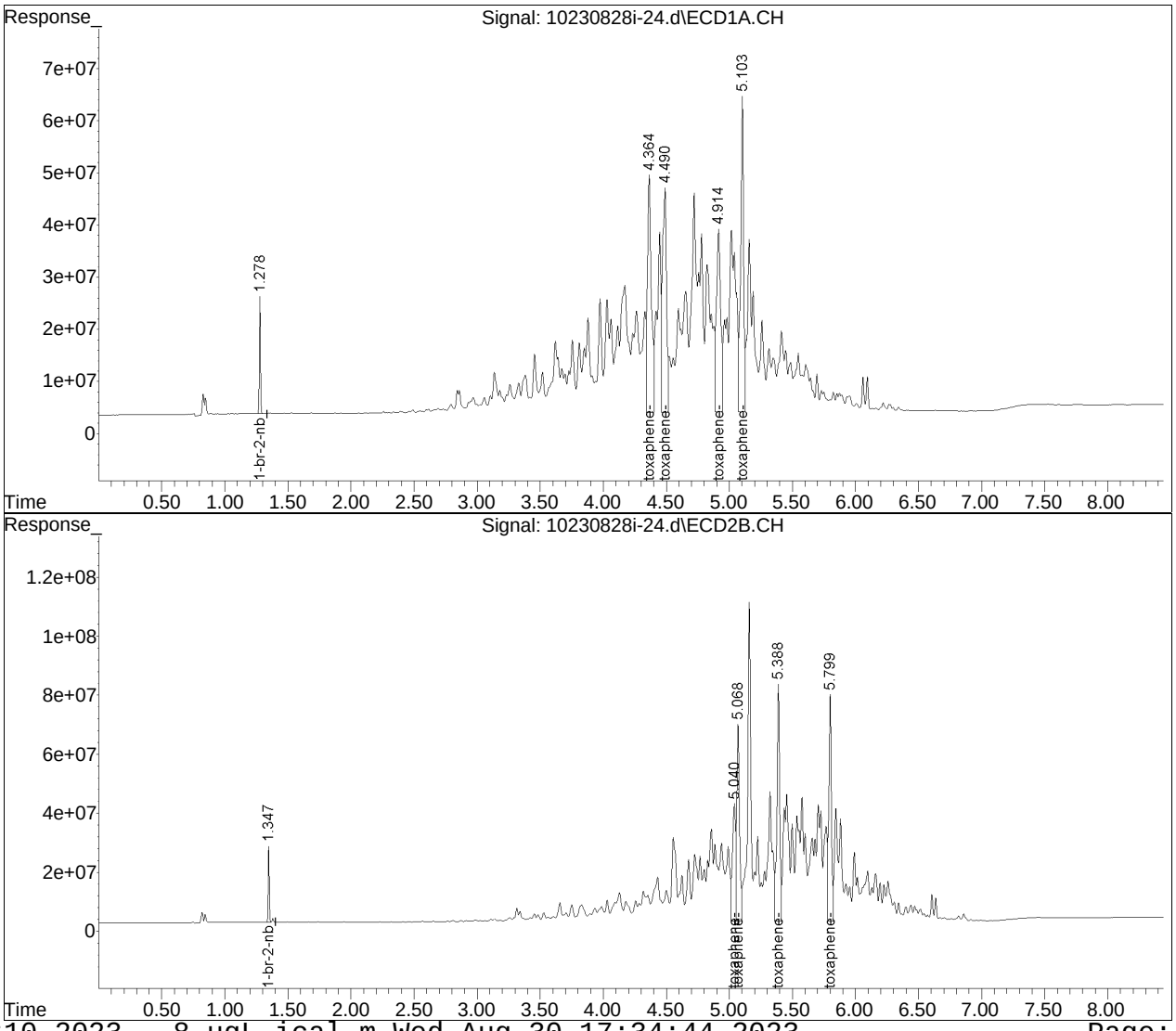
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-24.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 4:20 pm
Operator : PEST10:akm
Sample : il9tox,42e,,pp 11122 L5.0
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 24 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:02:02 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:01:38 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PEST\Pest10\2023\230828	QMethod	: pest10_2023_08_28_ugL_ic
Data File	: 10230828i-24.d	Operator	: PEST10:akm
Date Inj'd	: 8/28/2023 4:20 pm	Instrument	: Pest 10
Sample	: il9tox,42e,,pp 11122 L5.0	Quant Date	: 8/29/2023 1:01 pm

There are no manual integrations or false positives in this file.

Initial Calibration Verification

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-25.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 28 Aug 2023   4:31 pm
Operator : PEST10:akm
Sample   : cicvtox,42e,,pp 11211 L2.0ICV
Misc   : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 25 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:06:17 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:06:09 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	99	0.00
34	l2	toxaphene-1		0.036	0.037	-2.8	92	0.00
35	l2	toxaphene-2		0.035	0.035	0.0	93	0.00
36	l2	toxaphene-4		0.031	0.030	3.2	93	0.00
37	l2	toxaphene-5		0.036	0.036	0.0	93	0.00

Signal #2

33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	101	0.00
34	l2	toxaphene-1		0.024	0.022	8.3	94	0.00
35	l2	toxaphene-2		0.034	0.033	2.9	93	0.00
36	l2	toxaphene-4		0.043	0.040	7.0	93	0.00
37	l2	toxaphene-5		0.038	0.035	7.9	92	0.00

Evaluate Continuing Calibration Report - Not Founds

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.28#
2	s	2,4,5,6-Tetrachloro-m-xylen		1.014	0.000	100.0#	0#	-1.61#
3	t	Hexachlorobenzene		1.097	0.000	100.0#	0#	-1.82#
4	t	alpha-BHC		1.364	0.000	100.0#	0#	-1.92#
5	t	gamma-BHC (lindane)		1.306	0.000	100.0#	0#	-2.12#
6	t	beta-BHC		0.604	0.000	100.0#	0#	-2.17#
7	t	delta-BHC		1.308	0.000	100.0#	0#	-2.30#
8	t	Heptachlor		1.271	0.000	100.0#	0#	-2.46#
9	t	Aldrin		1.157	0.000	100.0#	0#	-2.69#
10	t	Alachlor		0.248	0.000	100.0#	0#	-2.81#
11	t	Chlorpyrifos		0.655	0.000	100.0#	0#	-2.90#
12	t	Heptachlor Epoxide		1.141	0.000	100.0#	0#	-3.23#
13	t	gamma-Chlordane (trans)		1.100	0.000	100.0#	0#	-3.35#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-25.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 28 Aug 2023   4:31 pm
Operator : PEST10:akm
Sample   : cicvtox,42e,,pp 11211 L2.0ICV
Misc   : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 25 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:06:17 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:06:09 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-3.48#
15	t	4,4'-DDE		1.089	0.000	100.0#	0#	-3.58#
16	t	Endosulfan I		1.079	0.000	100.0#	0#	-3.62#
17	t	Dieldrin		1.093	0.000	100.0#	0#	-3.87#
18	t	Endrin		1.128	0.000	100.0#	0#	-4.13#
19	t	4,4'-DDD		0.885	0.000	100.0#	0#	-4.24#
20	t	Endosulfan II		1.020	0.000	100.0#	0#	-4.38#
21	t	4,4'-DDT		0.986	0.000	100.0#	0#	-4.54#
22	t	Endrin Aldehyde		0.844	0.000	100.0#	0#	-4.80#
23	t	Methoxychlor		0.563	0.000	100.0#	0#	-5.04#
24	t	Mirex		0.905	0.000	100.0#	0#	-5.09#
25	t	Endosulfan Sulfate		0.979	0.000	100.0#	0#	-5.20#
26	t	Endrin Ketone		1.088	0.000	100.0#	0#	-5.43#
27	s	Decachlorobiphenyl		0.916	0.000	100.0#	0#	-6.24#
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.28#
29	l1	chlordane-1		*1000.000	0.000	100.0#	0	-2.39#
30	l1	chlordane-3		*1000.000	0.000	100.0#	0	-2.46#
31	l1	chlordane-4		*1000.000	0.000	100.0#	0	-2.80#
32	l1	chlordane-5		*1000.000	0.000	100.0#	0	-3.35#

Signal #2

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.35#
2	s	2,4,5,6-Tetrachloro-m-xyl		0.963	0.000	100.0#	0#	-1.82#
3	t	Hexachlorobenzene		1.075	0.000	100.0#	0#	-2.13#
4	t	alpha-BHC		* 50.000	0.000	100.0#	0	-2.23#
5	t	gamma-BHC (lindane)		1.285	0.000	100.0#	0#	-2.51#
6	t	beta-BHC		0.598	0.000	100.0#	0#	-2.58#
7	t	delta-BHC		* 50.000	0.000	100.0#	0	-2.84#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-25.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 28 Aug 2023   4:31 pm
Operator : PEST10:akm
Sample   : cicvtox,42e,,pp 11211 L2.0ICV
Misc   : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 25 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:06:17 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:06:09 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
8	t	Heptachlor		1.298	0.000	100.0#	0#	-2.90#
9	t	Aldrin	*	50.000	0.000	100.0#	0	-3.22#
10	t	Alachlor		0.197	0.000	100.0#	0#	-3.10#
11	t	Chlorpyrifos		0.651	0.000	100.0#	0#	-3.46#
12	t	Heptachlor Epoxide		1.186	0.000	100.0#	0#	-3.83#
13	t	gamma-Chlordane (trans)		1.246	0.000	100.0#	0#	-4.05#
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-4.22#
15	t	4,4'-DDE	*	50.000	0.000	100.0#	0	-4.42#
16	t	Endosulfan I		1.101	0.000	100.0#	0#	-4.28#
17	t	Dieldrin	*	50.000	0.000	100.0#	0	-4.58#
18	t	Endrin		1.205	0.000	100.0#	0#	-4.88#
19	t	4,4'-DDD	*	50.000	0.000	100.0#	0	-5.01#
20	t	Endosulfan II		0.995	0.000	100.0#	0#	-5.08#
21	t	4,4'-DDT	*	50.000	0.000	100.0#	0	-5.29#
22	t	Endrin Aldehyde		0.826	0.000	100.0#	0#	-5.38#
23	t	Methoxychlor		0.571	0.000	100.0#	0#	-5.86#
24	t	Mirex		0.904	0.000	100.0#	0#	-5.99#
25	t	Endosulfan Sulfate		0.951	0.000	100.0#	0#	-5.61#
26	t	Endrin Ketone		1.078	0.000	100.0#	0#	-6.03#
27	s	Decachlorobiphenyl		0.924	0.000	100.0#	0#	-6.89#
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.35#
29	l1	chlordane-1		*1000.000	0.000	100.0#	0	-2.77#
30	l1	chlordane-3		*1000.000	0.000	100.0#	0	-3.37#
31	l1	chlordane-4		*1000.000	0.000	100.0#	0	-4.05#
32	l1	chlordane-5		*1000.000	0.000	100.0#	0	-4.22#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-25.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 4:31 pm
Operator : PEST10:akm
Sample : cicvtox,42e,,pp 11211 L2.0ICV
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 25 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:06:17 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:06:09 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	1.279	1.348	130.2E6	147.8E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D.	N.D.
4) t	alpha-BHC	0.000	0.000	0	0	N.D.	N.D.
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-25.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 4:31 pm
Operator : PEST10:akm
Sample : cicvtox,42e,,pp 11211 L2.0ICV
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 25 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:06:17 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:06:09 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	4.366	5.040	385.9E6	265.1E6	2060.840	1895.865
35) l2	toxaphene-2	4.492	5.069	362.8E6	393.3E6	2009.840	1935.330
36) l2	toxaphene-4	4.917	5.389	314.8E6	469.0E6	1979.780	1823.103
37) l2	toxaphene-5	5.104	5.800	371.4E6	419.2E6	1964.387	1845.050
Sum	toxaphene-1			1434.9E6	1546.5E6	8014.848	7499.348
Average	toxaphene-1					2003.712	1874.837

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			1434.9E6	1546.5E6	8014.848	7499.348
Average	toxaphene-1					2003.712	1874.837

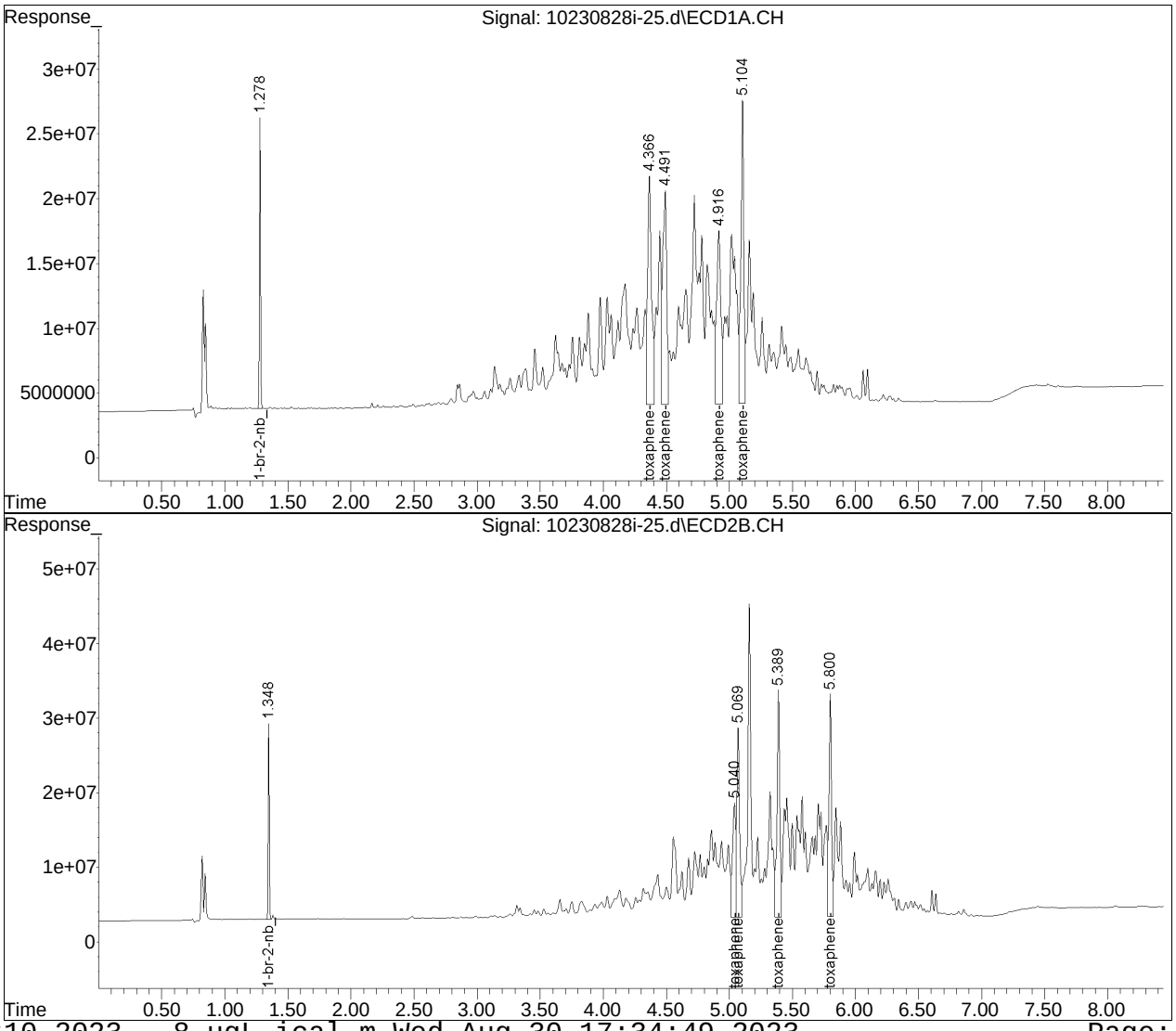
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230828ICAL\
Data File : 10230828i-25.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 28 Aug 2023 4:31 pm
Operator : PEST10:akm
Sample : cicvtox,42e,,pp 11211 L2.0ICV
Misc : WG1822166,, (Sig #1); ical (Sig #2)
ALS Vial : 25 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Aug 29 13:06:17 2023
Quant Method : I:\PEST\Pest10\2023\230828ICAL\pest10_2023_08_28_ugL_ical.m
Quant Title : pest
QLast Update : Tue Aug 29 13:06:09 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PEST\Pest10\2023\230828	QMethod	: pest10_2023_08_28_ugL_ic
Data File	: 10230828i-25.d	Operator	: PEST10:akm
Date Inj'd	: 8/28/2023 4:31 pm	Instrument	: Pest 10
Sample	: cicvtox,42e,,pp 11211 L2.0	Quant Date	: 8/29/2023 1:06 pm

There are no manual integrations or false positives in this file.

Evaluate Relative Error Report Pest 10

Method Path : I:\PEST\Pest10\2023\230828ICAL\
Method File : pest10_2023_08_28_ugL_ical.m
Title : pest
Last Update : Tue Aug 29 13:05:57 2023

	COMPOUND	CalFit	Units	TrueMid	MidConc	%RE	TrueLow	LowConc	%RE
29	L1 chlordane-1	L	ug/l	1000.0	976.346	-2.4	10.00	8.738	-12.6
30	L1 chlordane-3	L	ug/l	1000.0	988.344	-1.2	10.00	9.360	-6.4
31	L1 chlordane-4	L	ug/l	1000.0	1015.531	1.6	10.00	7.701	-23.0
32	L1 chlordane-5	L	ug/l	1000.0	984.231	-1.6	10.00	9.273	-7.3
42	T alpha-BHC #2	L	ug/l	50.0	47.589	-4.8	1.00	1.239	23.9
45	T delta-BHC #2	L	ug/l	50.0	47.577	-4.8	1.00	1.220	22.0
47	T Aldrin #2	L	ug/l	50.0	48.803	-2.4	1.00	1.154	15.4
53	T 4,4'-DDE #2	L	ug/l	50.0	48.882	-2.2	1.00	1.197	19.7
55	T Dieldrin #2	L	ug/l	50.0	49.331	-1.3	1.00	1.145	14.5
57	T 4,4'-DDD #2	L	ug/l	50.0	48.686	-2.6	1.00	1.206	20.6
59	T 4,4'-DDT #2	L	ug/l	50.0	49.612	-0.8	1.00	1.149	14.9
67	L1 chlordane-1 #2	L	ug/l	1000.0	976.792	-2.3	10.00	11.078	10.8
68	L1 chlordane-3 #2	L	ug/l	1000.0	1041.336	4.1	10.00	8.971	-10.3
69	L1 chlordane-4 #2	L	ug/l	1000.0	1014.393	1.4	10.00	10.401	4.0
70	L1 chlordane-5 #2	L	ug/l	1000.0	1015.510	1.6	10.00	10.221	2.2

Calibration Correlation Report

	COMPOUND	CalFit	CoefOfDet	QuadTerm	LinTerm	Constant
29	L1 chlordane-1	Linear	0.999834	0.000000	0.0354012	0.00533545
30	L1 chlordane-3	Linear	0.999842	0.000000	0.0611084	0.00764305
31	L1 chlordane-4	Linear	0.999103	0.000000	0.0388667	0.00967009
32	L1 chlordane-5	Linear	0.999777	0.000000	0.138278	0.0659482
42	T alpha-BHC #2	Linear	0.999253	0.000000	1.5452	-0.0278183
45	T delta-BHC #2	Linear	0.999232	0.000000	1.44619	-0.0237543
47	T Aldrin #2	Linear	0.999196	0.000000	1.30701	-0.0147514
53	T 4,4'-DDE #2	Linear	0.999141	0.000000	1.26019	-0.0185031
55	T Dieldrin #2	Linear	0.999122	0.000000	1.1913	-0.0128577
57	T 4,4'-DDD #2	Linear	0.999324	0.000000	1.01125	-0.0151254
59	T 4,4'-DDT #2	Linear	0.999341	0.000000	1.12418	-0.0139455
67	L1 chlordane-1 #2	Linear	0.999641	0.000000	0.0388004	-0.00122658
68	L1 chlordane-3 #2	Linear	0.999331	0.000000	0.0400841	0.00340013
69	L1 chlordane-4 #2	Linear	0.999574	0.000000	0.148013	0.0461421
70	L1 chlordane-5 #2	Linear	0.999565	0.000000	0.117062	-0.00300798

Continuing Calibration

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/01/23 06:55	
Lab File ID	: 10230901a-05		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1822821-2		**Init. Calib. Times**	: 12:28	16:20
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Chlordane	1	1	-	0	15	94	0
chlordane-1	1000	900.012	-	10	15	86	0
chlordane-3	1000	791.47	-	20.9*	15	74	0
chlordane-4	1000	985.703	-	1.4	15	90	0
chlordane-5	1000	956.529	-	4.3	15	90	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: PEST10	**Calibration Date**	: 09/01/23 06:55
Lab File ID	: 10230901a-05	**Init. Calib. Date(s)**	: 08/28/23 08/28/23
Sample No	: WG1822821-2	**Init. Calib. Times**	: 12:28 16:20
Channel	: B		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Chlordane	1	1	-	0	15	99	0
chlordane-1	1000	896.163	-	10.4	15	91	0
chlordane-3	1000	1002.599	-	-0.3	15	96	0
chlordane-4	1000	956.535	-	4.3	15	94	0
chlordane-5	1000	929.248	-	7.1	15	91	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/01/23 07:17	
Lab File ID	: 10230901a-07		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1822821-3		**Init. Calib. Times**	: 12:28	16:20
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Toxaphene	1	1	-	0	15	94	0
toxaphene-1	0.036	0.04	-	-11.1	15	95	0
toxaphene-2	0.035	0.042	-	-20*	15	105	0
toxaphene-4	0.031	0.033	-	-6.5	15	96	0
toxaphene-5	0.036	0.038	-	-5.6	15	95	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/01/23 07:17	
Lab File ID	: 10230901a-07		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1822821-3		**Init. Calib. Times**	: 12:28	16:20
Channel	: B				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Toxaphene	1	1	-	0	15	104	0
toxaphene-1	0.024	0.023	-	4.2	15	98	0
toxaphene-2	0.034	0.034	-	0	15	98	0
toxaphene-4	0.043	0.04	-	7	15	97	0
toxaphene-5	0.038	0.036	-	5.3	15	96	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/01/23 12:17	
Lab File ID	: 10230901a-29		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1822821-4		**Init. Calib. Times**	: 12:28	16:20
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Pesticides	1	1	-	0	15	98	0
2,4,5,6-Tetrachloro-m-xylen	1.014	0.986	-	2.8	15	108	0
Hexachlorobenzene	1.097	1.148	-	-4.6	15	119	0
alpha-BHC	1.364	1.553	-	-13.9	15	118	0
gamma-BHC (lindane)	1.306	1.416	-	-8.4	15	116	0
beta-BHC	0.604	0.593	-	1.8	15	111	0
delta-BHC	1.308	1.543	-	-18*	15	124	0
Heptachlor	1.271	1.341	-	-5.5	15	114	0
Aldrin	1.157	1.259	-	-8.8	15	115	0
Alachlor	0.248	0.298	-	-20.2*	15	134	0
Chlorpyrifos	0.655	0.635	-	3.1	15	112	0
Heptachlor Epoxide	1.141	1.192	-	-4.5	15	113	0
gamma-Chlordane (trans)	1.1	1.214	-	-10.4	15	126	0
alpha-Chlordane (cis)	1.208	1.215	-	-0.6	15	111	0
4,4'-DDE	1.089	1.174	-	-7.8	15	112	0
Endosulfan I	1.079	1.126	-	-4.4	15	113	0
Dieldrin	1.093	1.243	-	-13.7	15	121	0
Endrin	1.128	1.168	-	-3.5	15	109	0
4,4'-DDD	0.885	1.013	-	-14.5	15	120	0
Endosulfan II	1.02	1.095	-	-7.4	15	117	0
4,4'-DDT	0.986	0.981	-	0.5	15	103	0
Endrin Aldehyde	0.844	0.736	-	12.8	15	93	0
Methoxychlor	0.563	0.567	-	-0.7	15	108	0
Mirex	0.905	0.901	-	0.4	15	111	0
Endosulfan Sulfate	0.979	1.053	-	-7.6	15	116	0
Endrin Ketone	1.088	1.213	-	-11.5	15	118	0
Decachlorobiphenyl	0.916	0.847	-	7.5	15	100	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/01/23 12:17	
Lab File ID	: 10230901a-29		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1822821-4		**Init. Calib. Times**	: 12:28	16:20
Channel	: B				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Pesticides	1	1	-	0	15	93	0
2,4,5,6-Tetrachloro-m-xyl	0.963	1.004	-	-4.3	15	103	0
Hexachlorobenzene	1.075	1.189	-	-10.6	15	114	0
alpha-BHC	50	53.438	-	-6.9	15	111	0
gamma-BHC (lindane)	1.285	1.484	-	-15.5*	15	110	0
beta-BHC	0.598	0.61	-	-2	15	106	0
delta-BHC	50	56.699	-	-13.4	15	118	0
Heptachlor	1.298	1.432	-	-10.3	15	107	0
Aldrin	50	52.501	-	-5	15	106	0
Alachlor	0.197	0.237	-	-20.3*	15	122	0
Chlorpyrifos	0.651	0.642	-	1.4	15	102	0
Heptachlor Epoxide	1.186	1.269	-	-7	15	104	0
gamma-Chlordane (trans)	1.246	1.305	-	-4.7	15	115	0
alpha-Chlordane (cis)	1.208	1.296	-	-7.3	15	104	0
4,4'-DDE	50	51.001	-	-2	15	103	0
Endosulfan I	1.101	1.211	-	-10	15	106	0
Dieldrin	50	56.368	-	-12.7	15	113	0
Endrin	1.205	1.282	-	-6.4	15	104	0
4,4'-DDD	50	55.938	-	-11.9	15	114	0
Endosulfan II	0.995	1.163	-	-16.9*	15	110	0
4,4'-DDT	50	50.492	-	-1	15	101	0
Endrin Aldehyde	0.826	0.738	-	10.7	15	85	0
Methoxychlor	0.571	0.583	-	-2.1	15	99	0
Mirex	0.904	0.873	-	3.4	15	98	0
Endosulfan Sulfate	0.951	1.045	-	-9.9	15	106	0
Endrin Ketone	1.078	1.191	-	-10.5	15	107	0
Decachlorobiphenyl	0.924	0.808	-	12.6	15	87	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/03/23 09:21	
Lab File ID	: 10230903a-03		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1823359-1		**Init. Calib. Times**	: 12:28	16:20
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Pesticides	1	1	-	0	15	91	0
2,4,5,6-Tetrachloro-m-xylen	1.014	1.06	-	-4.5	15	108	0
Hexachlorobenzene	1.097	1.23	-	-12.1	15	119	0
alpha-BHC	1.364	1.666	-	-22.1*	15	118	0
gamma-BHC (lindane)	1.306	1.511	-	-15.7*	15	115	0
beta-BHC	0.604	0.619	-	-2.5	15	108	0
delta-BHC	1.308	1.606	-	-22.8*	15	120	0
Heptachlor	1.271	1.47	-	-15.7*	15	117	0
Aldrin	1.157	1.383	-	-19.5*	15	118	0
Alachlor	0.248	0.337	-	-35.9*	15	142	0
Chlorpyrifos	0.655	0.7	-	-6.9	15	115	0
Heptachlor Epoxide	1.141	1.299	-	-13.8	15	115	0
gamma-Chlordane (trans)	1.1	1.323	-	-20.3*	15	127	0
alpha-Chlordane (cis)	1.208	1.332	-	-10.3	15	114	0
4,4'-DDE	1.089	1.305	-	-19.8*	15	116	0
Endosulfan I	1.079	1.237	-	-14.6	15	116	0
Dieldrin	1.093	1.372	-	-25.5*	15	125	0
Endrin	1.128	1.295	-	-14.8	15	113	0
4,4'-DDD	0.885	1.112	-	-25.6*	15	123	0
Endosulfan II	1.02	1.184	-	-16.1*	15	118	0
4,4'-DDT	0.986	1.195	-	-21.2*	15	117	0
Endrin Aldehyde	0.844	0.849	-	-0.6	15	100	0
Methoxychlor	0.563	0.642	-	-14	15	114	0
Mirex	0.905	1.013	-	-11.9	15	116	0
Endosulfan Sulfate	0.979	1.147	-	-17.2*	15	117	0
Endrin Ketone	1.088	1.331	-	-22.3*	15	120	0
Decachlorobiphenyl	0.916	0.979	-	-6.9	15	107	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/03/23 09:21	
Lab File ID	: 10230903a-03		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1823359-1		**Init. Calib. Times**	: 12:28	16:20
Channel	: B				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Pesticides	1	1	-	0	15	89	0
2,4,5,6-Tetrachloro-m-xyl	0.963	1.072	-	-11.3	15	106	0
Hexachlorobenzene	1.075	1.264	-	-17.6*	15	116	0
alpha-BHC	50	56.979	-	-14	15	114	0
gamma-BHC (lindane)	1.285	1.579	-	-22.9*	15	112	0
beta-BHC	0.598	0.638	-	-6.7	15	106	0
delta-BHC	50	58.653	-	-17.3*	15	117	0
Heptachlor	1.298	1.548	-	-19.3*	15	111	0
Aldrin	50	57.623	-	-15.2*	15	112	0
Alachlor	0.197	0.284	-	-44.2*	15	140	0
Chlorpyrifos	0.651	0.704	-	-8.1	15	108	0
Heptachlor Epoxide	1.186	1.399	-	-18*	15	110	0
gamma-Chlordane (trans)	1.246	1.44	-	-15.6*	15	122	0
alpha-Chlordane (cis)	1.208	1.438	-	-19*	15	111	0
4,4'-DDE	50	56.941	-	-13.9	15	111	0
Endosulfan I	1.101	1.328	-	-20.6*	15	111	0
Dieldrin	50	62.4	-	-24.8*	15	120	0
Endrin	1.205	1.394	-	-15.7*	15	108	0
4,4'-DDD	50	59.836	-	-19.7*	15	117	0
Endosulfan II	0.995	1.241	-	-24.7*	15	113	0
4,4'-DDT	50	56.974	-	-13.9	15	109	0
Endrin Aldehyde	0.826	0.858	-	-3.9	15	94	0
Methoxychlor	0.571	0.667	-	-16.8*	15	109	0
Mirex	0.904	1.014	-	-12.2	15	109	0
Endosulfan Sulfate	0.951	1.159	-	-21.9*	15	113	0
Endrin Ketone	1.078	1.348	-	-25*	15	116	0
Decachlorobiphenyl	0.924	0.915	-	1	15	95	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/03/23 09:32	
Lab File ID	: 10230903a-04		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1823359-2		**Init. Calib. Times**	: 12:28	16:20
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Chlordane	1	1	-	0	15	95	0
chlordane-1	1000	914.332	-	8.6	15	88	0
chlordane-3	1000	806.569	-	19.3*	15	77	0
chlordane-4	1000	1005.297	-	-0.5	15	93	0
chlordane-5	1000	987.618	-	1.2	15	94	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/03/23 09:32	
Lab File ID	: 10230903a-04		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1823359-2		**Init. Calib. Times**	: 12:28	16:20
Channel	: B				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Chlordane	1	1	-	0	15	91	0
chlordane-1	1000	890.45	-	11	15	84	0
chlordane-3	1000	1003.2	-	-0.3	15	88	0
chlordane-4	1000	947.655	-	5.2	15	86	0
chlordane-5	1000	918.942	-	8.1	15	83	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/03/23 09:43	
Lab File ID	: 10230903a-05		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1823359-3		**Init. Calib. Times**	: 12:28	16:20
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Toxaphene	1	1	-	0	15	93	0
toxaphene-1	0.036	0.04	-	-11.1	15	93	0
toxaphene-2	0.035	0.037	-	-5.7	15	93	0
toxaphene-4	0.031	0.033	-	-6.5	15	95	0
toxaphene-5	0.036	0.038	-	-5.6	15	94	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: PEST10	**Calibration Date**	: 09/03/23 09:43
Lab File ID	: 10230903a-05	**Init. Calib. Date(s)**	: 08/28/23 08/28/23
Sample No	: WG1823359-3	**Init. Calib. Times**	: 12:28 16:20
Channel	: B		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Toxaphene	1	1	-	0	15	95	0
toxaphene-1	0.024	0.022	-	8.3	15	87	0
toxaphene-2	0.034	0.033	-	2.9	15	86	0
toxaphene-4	0.043	0.039	-	9.3	15	86	0
toxaphene-5	0.038	0.035	-	7.9	15	85	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/03/23 13:49	
Lab File ID	: 10230903a-27		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1823359-4		**Init. Calib. Times**	: 12:28	16:20
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Pesticides	1	1	-	0	15	99	0
2,4,5,6-Tetrachloro-m-xylen	1.014	1.042	-	-2.8	15	115	0
Hexachlorobenzene	1.097	1.204	-	-9.8	15	126	0
alpha-BHC	1.364	1.647	-	-20.7*	15	126	0
gamma-BHC (lindane)	1.306	1.493	-	-14.3	15	124	0
beta-BHC	0.604	0.616	-	-2	15	117	0
delta-BHC	1.308	1.614	-	-23.4*	15	131	0
Heptachlor	1.271	1.463	-	-15.1*	15	126	0
Aldrin	1.157	1.362	-	-17.7*	15	126	0
Alachlor	0.248	0.314	-	-26.6*	15	144	0
Chlorpyrifos	0.655	0.695	-	-6.1	15	124	0
Heptachlor Epoxide	1.141	1.299	-	-13.8	15	125	0
gamma-Chlordane (trans)	1.1	1.315	-	-19.5*	15	138	0
alpha-Chlordane (cis)	1.208	1.326	-	-9.8	15	123	0
4,4'-DDE	1.089	1.301	-	-19.5*	15	126	0
Endosulfan I	1.079	1.226	-	-13.6	15	125	0
Dieldrin	1.093	1.361	-	-24.5*	15	135	0
Endrin	1.128	1.287	-	-14.1	15	122	0
4,4'-DDD	0.885	1.11	-	-25.4*	15	133	0
Endosulfan II	1.02	1.175	-	-15.2*	15	127	0
4,4'-DDT	0.986	1.15	-	-16.6*	15	122	0
Endrin Aldehyde	0.844	0.866	-	-2.6	15	111	0
Methoxychlor	0.563	0.652	-	-15.8*	15	126	0
Mirex	0.905	1.002	-	-10.7	15	125	0
Endosulfan Sulfate	0.979	1.151	-	-17.6*	15	128	0
Endrin Ketone	1.088	1.336	-	-22.8*	15	131	0
Decachlorobiphenyl	0.916	0.979	-	-6.9	15	117	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/03/23 13:49	
Lab File ID	: 10230903a-27		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1823359-4		**Init. Calib. Times**	: 12:28	16:20
Channel	: B				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Pesticides	1	1	-	0	15	95	0
2,4,5,6-Tetrachloro-m-xyl	0.963	1.044	-	-8.4	15	110	0
Hexachlorobenzene	1.075	1.227	-	-14.1	15	120	0
alpha-BHC	50	56.008	-	-12	15	119	0
gamma-BHC (lindane)	1.285	1.553	-	-20.9*	15	117	0
beta-BHC	0.598	0.626	-	-4.7	15	111	0
delta-BHC	50	58.477	-	-17*	15	124	0
Heptachlor	1.298	1.539	-	-18.6*	15	117	0
Aldrin	50	56.35	-	-12.7	15	117	0
Alachlor	0.197	0.246	-	-24.9*	15	129	0
Chlorpyrifos	0.651	0.691	-	-6.1	15	113	0
Heptachlor Epoxide	1.186	1.37	-	-15.5*	15	115	0
gamma-Chlordane (trans)	1.246	1.426	-	-14.4	15	128	0
alpha-Chlordane (cis)	1.208	1.409	-	-16.6*	15	116	0
4,4'-DDE	50	55.887	-	-11.8	15	116	0
Endosulfan I	1.101	1.299	-	-18*	15	116	0
Dieldrin	50	61.145	-	-22.3*	15	125	0
Endrin	1.205	1.387	-	-15.1*	15	115	0
4,4'-DDD	50	59.324	-	-18.6*	15	123	0
Endosulfan II	0.995	1.219	-	-22.5*	15	118	0
4,4'-DDT	50	57.986	-	-16*	15	118	0
Endrin Aldehyde	0.826	0.872	-	-5.6	15	102	0
Methoxychlor	0.571	0.678	-	-18.7*	15	118	0
Mirex	0.904	1.001	-	-10.7	15	114	0
Endosulfan Sulfate	0.951	1.151	-	-21*	15	119	0
Endrin Ketone	1.078	1.349	-	-25.1*	15	124	0
Decachlorobiphenyl	0.924	0.966	-	-4.5	15	106	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/05/23 08:27	
Lab File ID	: 10230905a-04		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1823612-2		**Init. Calib. Times**	: 12:28	16:20
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Chlordane	1	1	-	0	15	100	0
chlordane-1	1000	959.252	-	4.1	15	97	0
chlordane-3	1000	856.418	-	14.4	15	86	0
chlordane-4	1000	1052.145	-	-5.2	15	102	0
chlordane-5	1000	1065.297	-	-6.5	15	107	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/05/23 08:27	
Lab File ID	: 10230905a-04		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1823612-2		**Init. Calib. Times**	: 12:28	16:20
Channel	: B				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Chlordane	1	1	-	0	15	95	0
chlordane-1	1000	913.307	-	8.7	15	89	0
chlordane-3	1000	1007.952	-	-0.8	15	92	0
chlordane-4	1000	990.536	-	0.9	15	93	0
chlordane-5	1000	952.135	-	4.8	15	89	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/05/23 08:38	
Lab File ID	: 10230905a-05		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1823612-3		**Init. Calib. Times**	: 12:28	16:20
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Toxaphene	1	1	-	0	15	102	0
toxaphene-1	0.036	0.038	-	-5.6	15	97	0
toxaphene-2	0.035	0.035	-	0	15	97	0
toxaphene-4	0.031	0.031	-	0	15	98	0
toxaphene-5	0.036	0.036	-	0	15	98	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: PEST10	**Calibration Date**	: 09/05/23 08:38
Lab File ID	: 10230905a-05	**Init. Calib. Date(s)**	: 08/28/23 08/28/23
Sample No	: WG1823612-3	**Init. Calib. Times**	: 12:28 16:20
Channel	: B		

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Toxaphene	1	1	-	0	15	99	0
toxaphene-1	0.024	0.021	-	12.5	15	86	0
toxaphene-2	0.034	0.031	-	8.8	15	85	0
toxaphene-4	0.043	0.042	-	2.3	15	96	0
toxaphene-5	0.038	0.036	-	5.3	15	91	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/05/23 13:12	
Lab File ID	: 10230905a-28		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1823612-4		**Init. Calib. Times**	: 12:28	16:20
Channel	: A				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Pesticides	1	1	-	0	20	105	0
2,4,5,6-Tetrachloro-m-xylen	1.014	0.971	-	4.2	20	113	0
Hexachlorobenzene	1.097	1.13	-	-3	20	125	0
alpha-BHC	1.364	1.556	-	-14.1	20	126	0
gamma-BHC (lindane)	1.306	1.414	-	-8.3	20	124	0
beta-BHC	0.604	0.586	-	3	20	117	0
delta-BHC	1.308	1.544	-	-18	20	132	.01
Heptachlor	1.271	1.372	-	-7.9	20	125	.01
Aldrin	1.157	1.278	-	-10.5	20	124	.01
Alachlor	0.248	0.284	-	-14.5	20	137	.01
Chlorpyrifos	0.655	0.649	-	0.9	20	122	.01
Heptachlor Epoxide	1.141	1.199	-	-5.1	20	121	.01
gamma-Chlordane (trans)	1.1	1.211	-	-10.1	20	134	.01
alpha-Chlordane (cis)	1.208	1.242	-	-2.8	20	121	.02
4,4'-DDE	1.089	1.189	-	-9.2	20	122	.02
Endosulfan I	1.079	1.135	-	-5.2	20	122	.01
Dieldrin	1.093	1.252	-	-14.5	20	131	.02
Endrin	1.128	1.191	-	-5.6	20	119	.02
4,4'-DDD	0.885	1.018	-	-15	20	129	.02
Endosulfan II	1.02	1.092	-	-7.1	20	124	.01
4,4'-DDT	0.986	0.986	-	0	20	110	.01
Endrin Aldehyde	0.844	0.682	-	19.2	20	92	.01
Methoxychlor	0.563	0.58	-	-3	20	118	.01
Mirex	0.905	0.889	-	1.8	20	117	.01
Endosulfan Sulfate	0.979	1.036	-	-5.8	20	121	.01
Endrin Ketone	1.088	1.226	-	-12.7	20	127	.01
Decachlorobiphenyl	0.916	0.782	-	14.6	20	98	0

*** Value outside of QC limits.**

Calibration Verification Summary
Form 7
Pesticides

Client	: Alpha Geoscience		**Lab Number**	: L2350269	
Project Name	: HUNTINGTON READY MIX		**Project Number**	: 20116	
Instrument ID	: PEST10		**Calibration Date**	: 09/05/23 13:12	
Lab File ID	: 10230905a-28		**Init. Calib. Date(s)**	: 08/28/23	08/28/23
Sample No	: WG1823612-4		**Init. Calib. Times**	: 12:28	16:20
Channel	: B				

Compound	Ave. RRF	RRF	Min RRF	%D	Max %D	Area%	Dev(min)
1-br-2-nb_Pesticides	1	1	-	0	20	95	0
2,4,5,6-Tetrachloro-m-xyl	0.963	0.981	-	-1.9	20	103	0
Hexachlorobenzene	1.075	1.156	-	-7.5	20	114	0
alpha-BHC	50	52.786	-	-5.6	20	112	0
gamma-BHC (lindane)	1.285	1.47	-	-14.4	20	111	0
beta-BHC	0.598	0.595	-	0.5	20	106	0
delta-BHC	50	55.857	-	-11.7	20	119	0
Heptachlor	1.298	1.45	-	-11.7	20	111	0
Aldrin	50	53.183	-	-6.4	20	110	0
Alachlor	0.197	0.213	-	-8.1	20	112	0
Chlorpyrifos	0.651	0.639	-	1.8	20	105	0
Heptachlor Epoxide	1.186	1.304	-	-9.9	20	110	0
gamma-Chlordane (trans)	1.246	1.361	-	-9.2	20	123	0
alpha-Chlordane (cis)	1.208	1.306	-	-8.1	20	108	0
4,4'-DDE	50	51.668	-	-3.3	20	107	0
Endosulfan I	1.101	1.229	-	-11.6	20	110	0
Dieldrin	50	56.192	-	-12.4	20	115	0
Endrin	1.205	1.296	-	-7.6	20	107	0
4,4'-DDD	50	53.148	-	-6.3	20	111	0
Endosulfan II	0.995	1.106	-	-11.2	20	107	0
4,4'-DDT	50	50.2	-	-0.4	20	102	0
Endrin Aldehyde	0.826	0.671	-	18.8	20	79	0
Methoxychlor	0.571	0.567	-	0.7	20	99	0
Mirex	0.904	0.835	-	7.6	20	96	0
Endosulfan Sulfate	0.951	1.028	-	-8.1	20	107	0
Endrin Ketone	1.078	1.141	-	-5.8	20	105	0
Decachlorobiphenyl	0.924	0.786	-	14.9	20	87	0

*** Value outside of QC limits.**

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 01 Sep 2023   6:55 am
Operator : PEST10:ar
Sample   : WG1822821-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc   : WG1822821,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:23:49 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:23:33 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	94	0.00
29	l1	chlordane-1		*1000.000	900.012	10.0	86	0.00
30	l1	chlordane-3		*1000.000	791.470	20.9#	74	0.00
31	l1	chlordane-4		*1000.000	985.703	1.4	90	0.00
32	l1	chlordane-5		*1000.000	956.529	4.3	90	0.00

Signal #2

28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	99	0.00
29	l1	chlordane-1		*1000.000	896.163	10.4	91	0.00
30	l1	chlordane-3		*1000.000	1002.599	-0.3	96	0.00
31	l1	chlordane-4		*1000.000	956.535	4.3	94	0.00
32	l1	chlordane-5		*1000.000	929.248	7.1	91	0.00

Evaluate Continuing Calibration Report - Not Founds

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.28#
2	s	2,4,5,6-Tetrachloro-m-xylen		1.014	0.000	100.0#	0#	-1.61#
3	t	Hexachlorobenzene		1.097	0.000	100.0#	0#	-1.82#
4	t	alpha-BHC		1.364	0.000	100.0#	0#	-1.92#
5	t	gamma-BHC (lindane)		1.306	0.000	100.0#	0#	-2.12#
6	t	beta-BHC		0.604	0.000	100.0#	0#	-2.17#
7	t	delta-BHC		1.308	0.000	100.0#	0#	-2.30#
8	t	Heptachlor		1.271	0.000	100.0#	0#	-2.46#
9	t	Aldrin		1.157	0.000	100.0#	0#	-2.69#
10	t	Alachlor		0.248	0.000	100.0#	0#	-2.81#
11	t	Chlorpyrifos		0.655	0.000	100.0#	0#	-2.90#
12	t	Heptachlor Epoxide		1.141	0.000	100.0#	0#	-3.23#
13	t	gamma-Chlordane (trans)		1.100	0.000	100.0#	0#	-3.35#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 01 Sep 2023   6:55 am
Operator : PEST10:ar
Sample   : WG1822821-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc   : WG1822821,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:23:49 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:23:33 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-3.48#
15	t	4,4'-DDE		1.089	0.000	100.0#	0#	-3.58#
16	t	Endosulfan I		1.079	0.000	100.0#	0#	-3.62#
17	t	Dieldrin		1.093	0.000	100.0#	0#	-3.87#
18	t	Endrin		1.128	0.000	100.0#	0#	-4.13#
19	t	4,4'-DDD		0.885	0.000	100.0#	0#	-4.24#
20	t	Endosulfan II		1.020	0.000	100.0#	0#	-4.38#
21	t	4,4'-DDT		0.986	0.000	100.0#	0#	-4.54#
22	t	Endrin Aldehyde		0.844	0.000	100.0#	0#	-4.80#
23	t	Methoxychlor		0.563	0.000	100.0#	0#	-5.04#
24	t	Mirex		0.905	0.000	100.0#	0#	-5.09#
25	t	Endosulfan Sulfate		0.979	0.000	100.0#	0#	-5.20#
26	t	Endrin Ketone		1.088	0.000	100.0#	0#	-5.43#
27	s	Decachlorobiphenyl		0.916	0.000	100.0#	0#	-6.24#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.28#
34	l2	toxaphene-1		0.036	0.000	100.0#	0#	-4.36#
35	l2	toxaphene-2		0.035	0.000	100.0#	0#	-4.49#
36	l2	toxaphene-4		0.031	0.000	100.0#	0#	-4.92#
37	l2	toxaphene-5		0.036	0.000	100.0#	0#	-5.10#

Signal #2

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.35#
2	s	2,4,5,6-Tetrachloro-m-xyl		0.963	0.000	100.0#	0#	-1.82#
3	t	Hexachlorobenzene		1.075	0.000	100.0#	0#	-2.13#
4	t	alpha-BHC	*	50.000	0.000	100.0#	0	-2.23#
5	t	gamma-BHC (lindane)		1.285	0.000	100.0#	0#	-2.51#
6	t	beta-BHC		0.598	0.000	100.0#	0#	-2.58#
7	t	delta-BHC	*	50.000	0.000	100.0#	0	-2.84#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 01 Sep 2023   6:55 am
Operator : PEST10:ar
Sample   : WG1822821-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc   : WG1822821,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:23:49 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:23:33 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
8	t	Heptachlor		1.298	0.000	100.0#	0#	-2.90#
9	t	Aldrin	*	50.000	0.000	100.0#	0	-3.22#
10	t	Alachlor		0.197	0.000	100.0#	0#	-3.10#
11	t	Chlorpyrifos		0.651	0.000	100.0#	0#	-3.45#
12	t	Heptachlor Epoxide		1.186	0.000	100.0#	0#	-3.83#
13	t	gamma-Chlordane (trans)		1.246	0.000	100.0#	0#	-4.05#
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-4.22#
15	t	4,4'-DDE	*	50.000	0.000	100.0#	0	-4.42#
16	t	Endosulfan I		1.101	0.000	100.0#	0#	-4.28#
17	t	Dieldrin	*	50.000	0.000	100.0#	0	-4.58#
18	t	Endrin		1.205	0.000	100.0#	0#	-4.88#
19	t	4,4'-DDD	*	50.000	0.000	100.0#	0	-5.01#
20	t	Endosulfan II		0.995	0.000	100.0#	0#	-5.08#
21	t	4,4'-DDT	*	50.000	0.000	100.0#	0	-5.29#
22	t	Endrin Aldehyde		0.826	0.000	100.0#	0#	-5.38#
23	t	Methoxychlor		0.571	0.000	100.0#	0#	-5.86#
24	t	Mirex		0.904	0.000	100.0#	0#	-5.99#
25	t	Endosulfan Sulfate		0.951	0.000	100.0#	0#	-5.61#
26	t	Endrin Ketone		1.078	0.000	100.0#	0#	-6.02#
27	s	Decachlorobiphenyl		0.924	0.000	100.0#	0#	-6.89#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.35#
34	l2	toxaphene-1		0.024	0.000	100.0#	0#	-5.04#
35	l2	toxaphene-2		0.034	0.000	100.0#	0#	-5.07#
36	l2	toxaphene-4		0.043	0.000	100.0#	0#	-5.39#
37	l2	toxaphene-5		0.038	0.000	100.0#	0#	-5.80#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 6:55 am
Operator : PEST10:ar
Sample : WG1822821-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc : WG1822821,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:23:49 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:23:33 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	1.278	1.347	122.8E6	148.5E6	25.000	25.000
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D. d	N.D. d
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 6:55 am
Operator : PEST10:ar
Sample : WG1822821-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc : WG1822821,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:23:49 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:23:33 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	2.394	2.768	157.1E6	206.3E6	900.012	896.163
30) l1	chlordane-3	2.455	3.369	238.4E6	239.2E6	791.470	1002.599
31) l1	chlordane-4	2.804	4.046	189.3E6	847.8E6	985.703	956.535
32) l1	chlordane-5	3.349	4.219	657.6E6	645.7E6	956.529	929.248
Sum	chlordane-1			1242.4E6	1939.0E6	N.D.	N.D. D
Average	chlordane-1					908.429	946.136
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

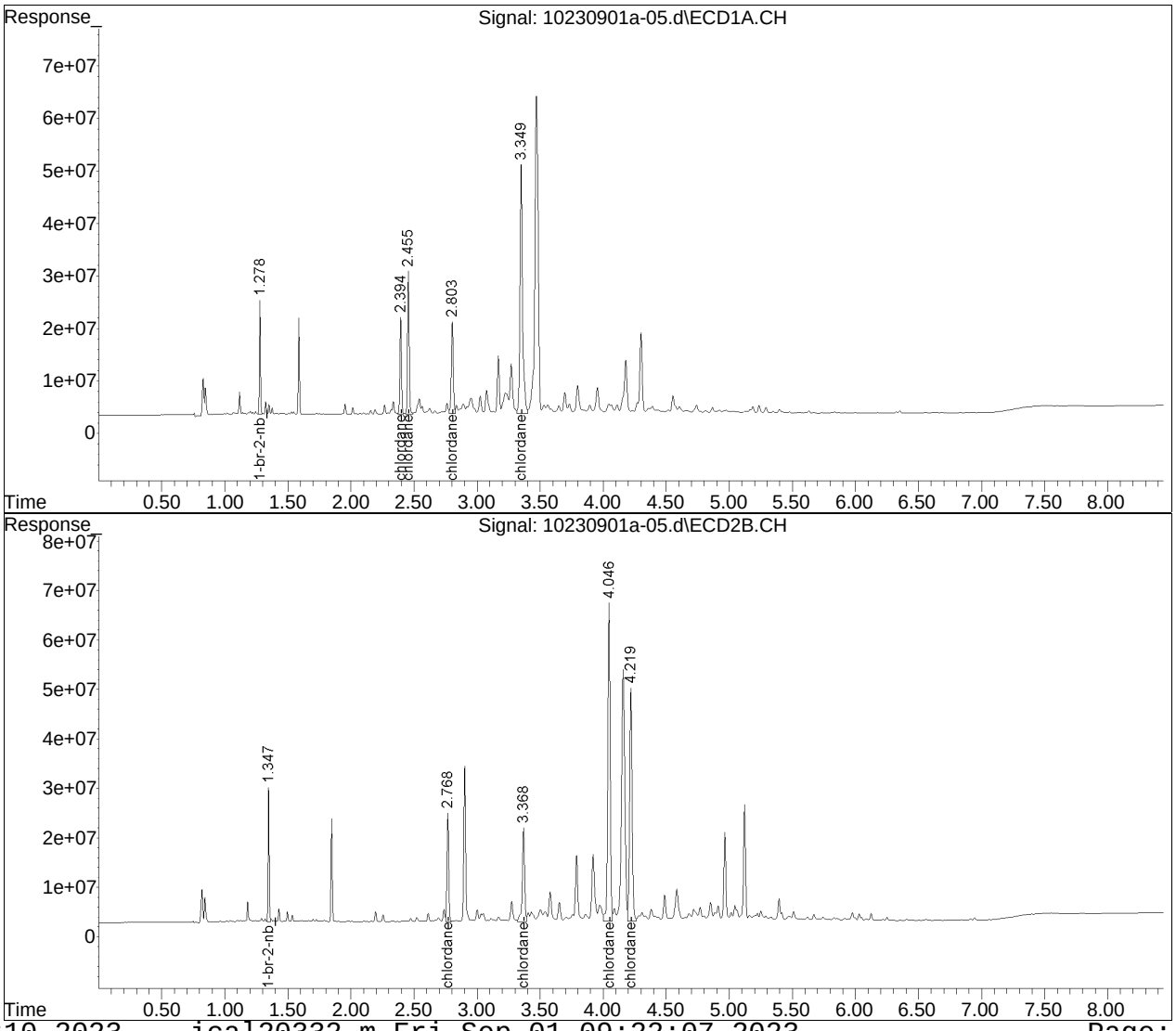
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 6:55 am
Operator : PEST10:ar
Sample : WG1822821-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc : WG1822821,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:23:49 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:23:33 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PEST\Pest10\2023\230901	QMethod	: pest10_2023_08_28_ugL_ic
Data File	: 10230901a-05.d	Operator	: PEST10:ar
Date Inj'd	: 9/1/2023 6:55 am	Instrument	: Pest 10
Sample	: WG1822821-2,42,,chlor11212	Quant Date	: 9/1/2023 7:23 am

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-07.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 01 Sep 2023   7:17 am
Operator : PEST10:ar
Sample   : WG1822821-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc   : WG1822821,,ical20332
ALS Vial : 7 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:34:41 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:26 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	94	0.00
34	l2	toxaphene-1		0.036	0.040	-11.1	95	0.00
35	l2	toxaphene-2		0.035	0.042	-20.0#	105	0.00
36	l2	toxaphene-4		0.031	0.033	-6.5	96	0.00
37	l2	toxaphene-5		0.036	0.038	-5.6	95	0.00

Signal #2

33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	104	0.00
34	l2	toxaphene-1		0.024	0.023	4.2	98	0.00
35	l2	toxaphene-2		0.034	0.034	0.0	98	0.00
36	l2	toxaphene-4		0.043	0.040	7.0	97	0.00
37	l2	toxaphene-5		0.038	0.036	5.3	96	0.00

Evaluate Continuing Calibration Report - Not Founds

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.28#
2	s	2,4,5,6-Tetrachloro-m-xylen		1.014	0.000	100.0#	0#	-1.61#
3	t	Hexachlorobenzene		1.097	0.000	100.0#	0#	-1.82#
4	t	alpha-BHC		1.364	0.000	100.0#	0#	-1.92#
5	t	gamma-BHC (lindane)		1.306	0.000	100.0#	0#	-2.12#
6	t	beta-BHC		0.604	0.000	100.0#	0#	-2.17#
7	t	delta-BHC		1.308	0.000	100.0#	0#	-2.30#
8	t	Heptachlor		1.271	0.000	100.0#	0#	-2.46#
9	t	Aldrin		1.157	0.000	100.0#	0#	-2.69#
10	t	Alachlor		0.248	0.000	100.0#	0#	-2.81#
11	t	Chlorpyrifos		0.655	0.000	100.0#	0#	-2.90#
12	t	Heptachlor Epoxide		1.141	0.000	100.0#	0#	-3.23#
13	t	gamma-Chlordane (trans)		1.100	0.000	100.0#	0#	-3.35#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-07.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 01 Sep 2023   7:17 am
Operator : PEST10:ar
Sample   : WG1822821-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc   : WG1822821,,ical20332
ALS Vial : 7 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:34:41 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:26 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-3.48#
15	t	4,4'-DDE		1.089	0.000	100.0#	0#	-3.58#
16	t	Endosulfan I		1.079	0.000	100.0#	0#	-3.62#
17	t	Dieldrin		1.093	0.000	100.0#	0#	-3.87#
18	t	Endrin		1.128	0.000	100.0#	0#	-4.13#
19	t	4,4'-DDD		0.885	0.000	100.0#	0#	-4.24#
20	t	Endosulfan II		1.020	0.000	100.0#	0#	-4.38#
21	t	4,4'-DDT		0.986	0.000	100.0#	0#	-4.54#
22	t	Endrin Aldehyde		0.844	0.000	100.0#	0#	-4.80#
23	t	Methoxychlor		0.563	0.000	100.0#	0#	-5.04#
24	t	Mirex		0.905	0.000	100.0#	0#	-5.09#
25	t	Endosulfan Sulfate		0.979	0.000	100.0#	0#	-5.20#
26	t	Endrin Ketone		1.088	0.000	100.0#	0#	-5.43#
27	s	Decachlorobiphenyl		0.916	0.000	100.0#	0#	-6.24#
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.28#
29	l1	chlordane-1		*1000.000	0.000	100.0#	0	-2.39#
30	l1	chlordane-3		*1000.000	0.000	100.0#	0	-2.46#
31	l1	chlordane-4		*1000.000	0.000	100.0#	0	-2.80#
32	l1	chlordane-5		*1000.000	0.000	100.0#	0	-3.35#

Signal #2

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.35#
2	s	2,4,5,6-Tetrachloro-m-xyl		0.963	0.000	100.0#	0#	-1.82#
3	t	Hexachlorobenzene		1.075	0.000	100.0#	0#	-2.13#
4	t	alpha-BHC		* 50.000	0.000	100.0#	0	-2.23#
5	t	gamma-BHC (lindane)		1.285	0.000	100.0#	0#	-2.51#
6	t	beta-BHC		0.598	0.000	100.0#	0#	-2.58#
7	t	delta-BHC		* 50.000	0.000	100.0#	0	-2.84#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-07.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 01 Sep 2023   7:17 am
Operator : PEST10:ar
Sample   : WG1822821-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc   : WG1822821,,ical20332
ALS Vial : 7 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:34:41 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:26 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
8	t	Heptachlor		1.298	0.000	100.0#	0#	-2.90#
9	t	Aldrin	*	50.000	0.000	100.0#	0	-3.22#
10	t	Alachlor		0.197	0.000	100.0#	0#	-3.10#
11	t	Chlorpyrifos		0.651	0.000	100.0#	0#	-3.45#
12	t	Heptachlor Epoxide		1.186	0.000	100.0#	0#	-3.83#
13	t	gamma-Chlordane (trans)		1.246	0.000	100.0#	0#	-4.05#
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-4.22#
15	t	4,4'-DDE	*	50.000	0.000	100.0#	0	-4.42#
16	t	Endosulfan I		1.101	0.000	100.0#	0#	-4.28#
17	t	Dieldrin	*	50.000	0.000	100.0#	0	-4.58#
18	t	Endrin		1.205	0.000	100.0#	0#	-4.88#
19	t	4,4'-DDD	*	50.000	0.000	100.0#	0	-5.01#
20	t	Endosulfan II		0.995	0.000	100.0#	0#	-5.08#
21	t	4,4'-DDT	*	50.000	0.000	100.0#	0	-5.29#
22	t	Endrin Aldehyde		0.826	0.000	100.0#	0#	-5.38#
23	t	Methoxychlor		0.571	0.000	100.0#	0#	-5.86#
24	t	Mirex		0.904	0.000	100.0#	0#	-5.99#
25	t	Endosulfan Sulfate		0.951	0.000	100.0#	0#	-5.61#
26	t	Endrin Ketone		1.078	0.000	100.0#	0#	-6.02#
27	s	Decachlorobiphenyl		0.924	0.000	100.0#	0#	-6.89#
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.35#
29	l1	chlordane-1	*	1000.000	0.000	100.0#	0	-2.77#
30	l1	chlordane-3	*	1000.000	0.000	100.0#	0	-3.37#
31	l1	chlordane-4	*	1000.000	0.000	100.0#	0	-4.05#
32	l1	chlordane-5	*	1000.000	0.000	100.0#	0	-4.22#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-07.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 7:17 am
Operator : PEST10:ar
Sample : WG1822821-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc : WG1822821,,ical20332
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:34:41 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:26 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	1.278	1.347	123.7E6	152.8E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D. d	N.D. d
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-07.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 7:17 am
Operator : PEST10:ar
Sample : WG1822821-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc : WG1822821,,ical20332
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:34:41 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:26 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	4.364	5.039	398.2E6	276.4E6	2237.676	1912.301
35) l2	toxaphene-2	4.491	5.068	411.5E6	415.0E6	2399.272	1975.420
36) l2	toxaphene-4	4.915	5.388	327.5E6	492.5E6	2167.541	1852.071
37) l2	toxaphene-5	5.103	5.799	380.0E6	438.1E6	2114.964	1865.532
Sum	toxaphene-1			1517.2E6	1622.0E6	8919.453	7605.324
Average	toxaphene-1					2229.863	1901.331

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			1517.2E6	1622.0E6	8919.453	7605.324
Average	toxaphene-1					2229.863	1901.331

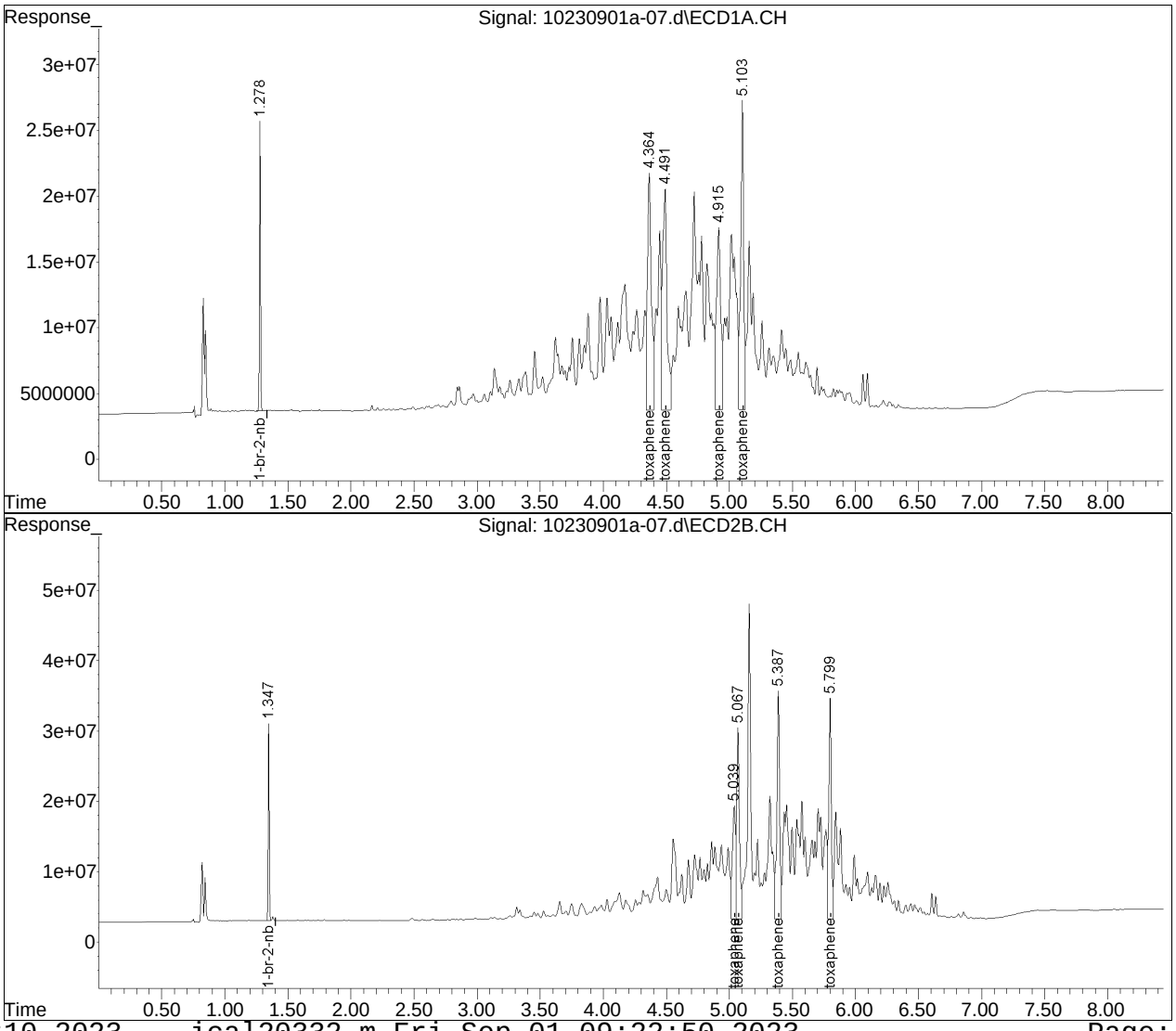
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-07.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 7:17 am
Operator : PEST10:ar
Sample : WG1822821-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc : WG1822821,,ical20332
ALS Vial : 7 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:34:41 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:26 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PEST\Pest10\2023\230901	QMethod	: pest10_2023_08_28_ugL_ic
Data File	: 10230901a-07.d	Operator	: PEST10:ar
Date Inj'd	: 9/1/2023 7:17 am	Instrument	: Pest 10
Sample	: WG1822821-3,42,,tox11211	Quant Date	: 9/1/2023 7:34 am

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-29.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 01 Sep 2023 12:17 pm
Operator : PEST10:ar
Sample   : wg1822821-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc   : wg1822821,,ical20332
ALS Vial : 29 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 12:26:52 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	98	0.00
2	s	2,4,5,6-Tetrachloro-m-xylen		1.014	0.986	2.8	108	0.00
3	t	Hexachlorobenzene		1.097	1.148	-4.6	119	0.00
4	t	alpha-BHC		1.364	1.553	-13.9	118	0.00
5	t	gamma-BHC (lindane)		1.306	1.416	-8.4	116	0.00
6	t	beta-BHC		0.604	0.593	1.8	111	0.00
7	t	delta-BHC		1.308	1.543	-18.0#	124	0.00
8	t	Heptachlor		1.271	1.341	-5.5	114	0.00
9	t	Aldrin		1.157	1.259	-8.8	115	0.00
10	t	Alachlor		0.248	0.298	-20.2#	134	0.00
11	t	Chlorpyrifos		0.655	0.635	3.1	112	0.00
12	t	Heptachlor Epoxide		1.141	1.192	-4.5	113	0.00
13	t	gamma-Chlordane (trans)		1.100	1.214	-10.4	126	0.00
14	t	alpha-Chlordane (cis)		1.208	1.215	-0.6	111	0.00
15	t	4,4'-DDE		1.089	1.174	-7.8	112	0.00
16	t	Endosulfan I		1.079	1.126	-4.4	113	0.00
17	t	Dieldrin		1.093	1.243	-13.7	121	0.00
18	t	Endrin		1.128	1.168	-3.5	109	0.00
19	t	4,4'-DDD		0.885	1.013	-14.5	120	0.00
20	t	Endosulfan II		1.020	1.095	-7.4	117	0.00
21	t	4,4'-DDT		0.986	0.981	0.5	103	0.00
22	t	Endrin Aldehyde		0.844	0.736	12.8	93	0.00
23	t	Methoxychlor		0.563	0.567	-0.7	108	0.00
24	t	Mirex		0.905	0.901	0.4	111	0.00
25	t	Endosulfan Sulfate		0.979	1.053	-7.6	116	0.00
26	t	Endrin Ketone		1.088	1.213	-11.5	118	0.00
27	s	Decachlorobiphenyl		0.916	0.847	7.5	100	0.00

Signal #2

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-29.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 01 Sep 2023 12:17 pm
Operator : PEST10:ar
Sample   : wg1822821-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc   : wg1822821,,ical20332
ALS Vial : 29 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 12:26:52 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	93	0.00
2	s	2,4,5,6-Tetrachloro-m-xyl		0.963	1.004	-4.3	103	0.00
3	t	Hexachlorobenzene		1.075	1.189	-10.6	114	0.00
4	t	alpha-BHC	*	50.000	53.438	-6.9	111	0.00
5	t	gamma-BHC (lindane)		1.285	1.484	-15.5#	110	0.00
6	t	beta-BHC		0.598	0.610	-2.0	106	0.00
7	t	delta-BHC	*	50.000	56.699	-13.4	118	0.00
8	t	Heptachlor		1.298	1.432	-10.3	107	0.00
9	t	Aldrin	*	50.000	52.501	-5.0	106	0.00
10	t	Alachlor		0.197	0.237	-20.3#	122	0.00
11	t	Chlorpyrifos		0.651	0.642	1.4	102	0.00
12	t	Heptachlor Epoxide		1.186	1.269	-7.0	104	0.00
13	t	gamma-Chlordane (trans)		1.246	1.305	-4.7	115	0.00
14	t	alpha-Chlordane (cis)		1.208	1.296	-7.3	104	0.00
15	t	4,4'-DDE	*	50.000	51.001	-2.0	103	0.00
16	t	Endosulfan I		1.101	1.211	-10.0	106	0.00
17	t	Dieldrin	*	50.000	56.368	-12.7	113	0.00
18	t	Endrin		1.205	1.282	-6.4	104	0.00
19	t	4,4'-DDD	*	50.000	55.938	-11.9	114	0.00
20	t	Endosulfan II		0.995	1.163	-16.9#	110	0.00
21	t	4,4'-DDT	*	50.000	50.492	-1.0	101	0.00
22	t	Endrin Aldehyde		0.826	0.738	10.7	85	0.00
23	t	Methoxychlor		0.571	0.583	-2.1	99	0.00
24	t	Mirex		0.904	0.873	3.4	98	0.00
25	t	Endosulfan Sulfate		0.951	1.045	-9.9	106	0.00
26	t	Endrin Ketone		1.078	1.191	-10.5	107	0.00
27	s	Decachlorobiphenyl		0.924	0.808	12.6	87	0.00

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-29.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 01 Sep 2023 12:17 pm
Operator : PEST10:ar
Sample   : wg1822821-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc   : wg1822821,,ical20332
ALS Vial : 29 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 12:26:52 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.28#
29	l1	chlordane-1		*1000.000	0.000	100.0#	0	-2.39#
30	l1	chlordane-3		*1000.000	0.000	100.0#	0	-2.46#
31	l1	chlordane-4		*1000.000	0.000	100.0#	0	-2.80#
32	l1	chlordane-5		*1000.000	0.000	100.0#	0	-3.35#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.28#
34	l2	toxaphene-1		0.036	0.000	100.0#	0#	-4.36#
35	l2	toxaphene-2		0.035	0.000	100.0#	0#	-4.49#
36	l2	toxaphene-4		0.031	0.000	100.0#	0#	-4.92#
37	l2	toxaphene-5		0.036	0.000	100.0#	0#	-5.10#

Signal #2

28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.35#
29	l1	chlordane-1		*1000.000	0.000	100.0#	0	-2.77#
30	l1	chlordane-3		*1000.000	0.000	100.0#	0	-3.37#
31	l1	chlordane-4		*1000.000	0.000	100.0#	0	-4.05#
32	l1	chlordane-5		*1000.000	0.000	100.0#	0	-4.22#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.35#
34	l2	toxaphene-1		0.024	0.000	100.0#	0#	-5.04#
35	l2	toxaphene-2		0.034	0.000	100.0#	0#	-5.07#
36	l2	toxaphene-4		0.043	0.000	100.0#	0#	-5.39#
37	l2	toxaphene-5		0.038	0.000	100.0#	0#	-5.80#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-29.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 12:17 pm
Operator : PEST10:ar
Sample : wg1822821-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc : wg1822821,,ical20332
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 12:26:52 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.279	1.348	126.6E6	137.2E6	25.000	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.614	1.819	249.6E6	275.5E6	48.629	52.106
	Spiked Amount 50.000	Range 30 - 150		Recovery =		97.26%	104.21%
27) s	Decachlorobi	6.237	6.888	214.6E6	221.8E6	46.249	43.725
	Spiked Amount 50.000	Range 30 - 150		Recovery =		92.50%	87.45%
	Target Compounds						
3) t	Hexachlorobe	1.823	2.135	290.8E6	326.3E6	52.321	55.319
4) t	alpha-BHC	1.920	2.230	393.3E6	449.3E6	56.926	53.438
5) t	gamma-BHC (l	2.118	2.512	358.5E6	407.2E6	54.185	57.747
6) t	beta-BHC	2.174	2.577	150.3E6	167.2E6	49.141	50.948
7) t	delta-BHC	2.299	2.840	390.7E6	446.7E6	58.988	56.699
8) t	Heptachlor	2.455	2.903	339.6E6	392.8E6	52.769	55.154
9) t	Aldrin	2.691	3.219	318.9E6	374.5E6	54.435	52.501
10) t	Alachlor	2.814	3.104	75362165	65084213	60.093	60.098
11) t	Chlorpyrifos	2.902	3.456	160.8E6	176.2E6	48.490	49.331
12) t	Heptachlor E	3.227	3.829	301.8E6	348.3E6	52.223	53.505
13) t	gamma-Chlord	3.348	4.048	307.4E6	358.1E6	55.174	52.387
14) t	alpha-Chlord	3.480	4.221	307.7E6	355.6E6	50.295	53.636
15) t	4,4'-DDE	3.576	4.423	297.2E6	350.1E6	53.874	51.001
16) t	Endosulfan I	3.615	4.282	285.2E6	332.2E6	52.170	54.971
17) t	Dieldrin	3.871	4.579	314.7E6	366.7E6	56.861	56.368
18) t	Endrin	4.124	4.880	295.8E6	351.8E6	51.770	53.220
19) t	4,4'-DDD	4.240	5.006	256.4E6	308.3E6	57.184	55.938
20) t	Endosulfan I	4.374	5.082	277.4E6	319.1E6	53.684	58.445
21) t	4,4'-DDT	4.541	5.286	248.4E6	309.5E6	49.769	50.492
22) t	Endrin Aldeh	4.802	5.381	186.3E6	202.6E6	43.575	44.692
23) t	Methoxychlor	5.040	5.856	143.5E6	160.1E6	50.333	51.081

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-29.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 12:17 pm
Operator : PEST10:ar
Sample : wg1822821-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc : wg1822821,,ical20332
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 12:26:52 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	5.089	5.989	228.3E6	239.6E6	49.781	48.292
25) t	Endosulfan S	5.201	5.611	266.7E6	286.6E6	53.783	54.934
26) t	Endrin Keton	5.429	6.025	307.1E6	326.8E6	55.746	55.258
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

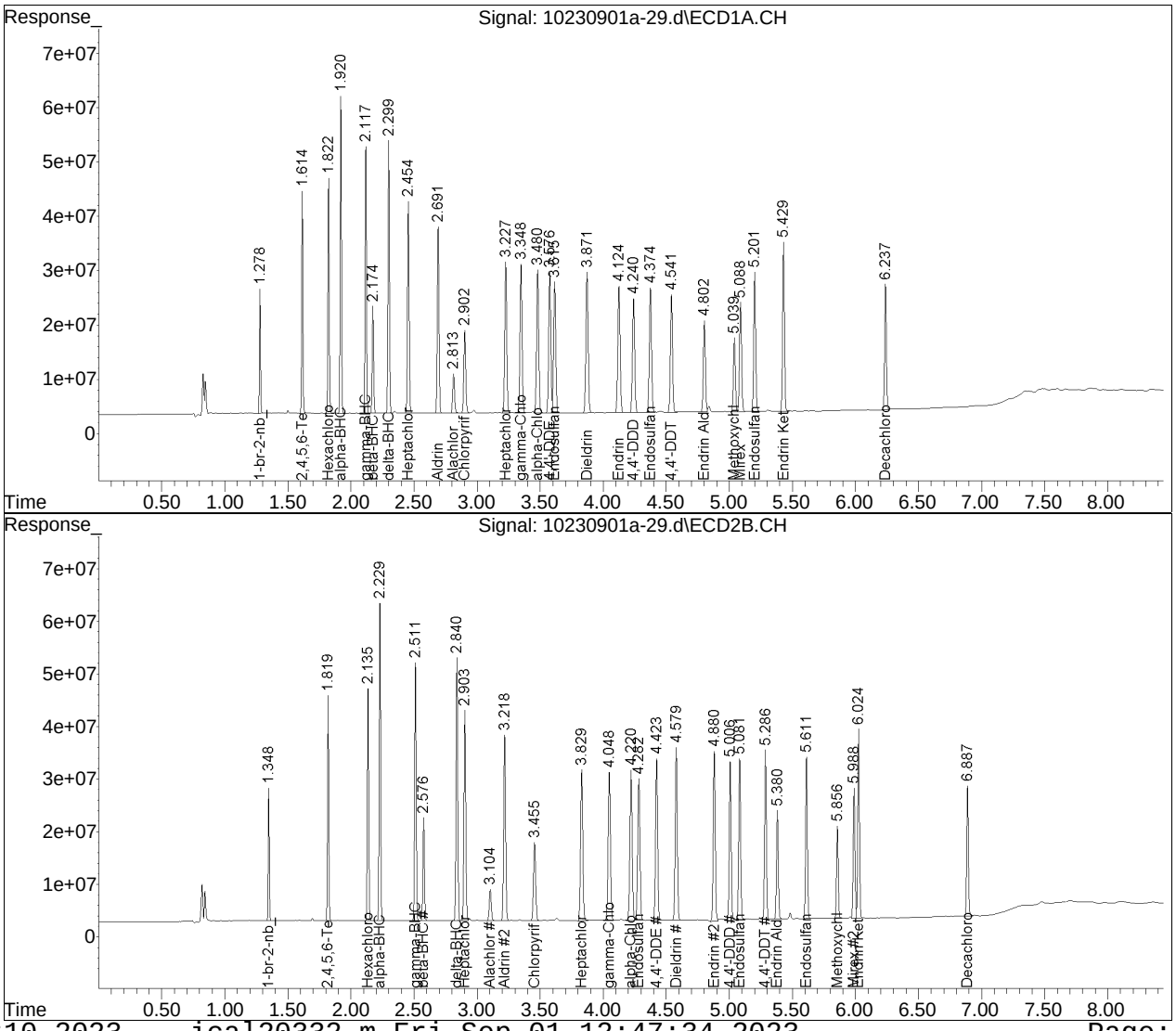
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-29.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 12:17 pm
Operator : PEST10:ar
Sample : wg1822821-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc : wg1822821,,ical20332
ALS Vial : 29 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 12:26:52 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PEST\Pest10\2023\230901	QMethod	: pest10_2023_08_28_ugL_ic
Data File	: 10230901a-29.d	Operator	: PEST10:ar
Date Inj'd	: 9/1/2023 12:17 pm	Instrument	: Pest 10
Sample	: wg1822821-4,42,,pest11274	Quant Date	: 9/1/2023 12:26 pm

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 03 Sep 2023   9:21 am
Operator : PEST10:ar
Sample   : wg1823359-1,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc   : wg1823359,,ical20332
ALS Vial : 3 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:36:54 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:36:39 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	91	0.00
2	s	2,4,5,6-Tetrachloro-m-xylen		1.014	1.060	-4.5	108	0.00
3	t	Hexachlorobenzene		1.097	1.230	-12.1	119	0.00
4	t	alpha-BHC		1.364	1.666	-22.1#	118	0.00
5	t	gamma-BHC (lindane)		1.306	1.511	-15.7#	115	0.00
6	t	beta-BHC		0.604	0.619	-2.5	108	0.00
7	t	delta-BHC		1.308	1.606	-22.8#	120	0.00
8	t	Heptachlor		1.271	1.470	-15.7#	117	0.00
9	t	Aldrin		1.157	1.383	-19.5#	118	0.00
10	t	Alachlor		0.248	0.337	-35.9#	142	0.00
11	t	Chlorpyrifos		0.655	0.700	-6.9	115	0.00
12	t	Heptachlor Epoxide		1.141	1.299	-13.8	115	0.00
13	t	gamma-Chlordane (trans)		1.100	1.323	-20.3#	127	0.00
14	t	alpha-Chlordane (cis)		1.208	1.332	-10.3	114	0.00
15	t	4,4'-DDE		1.089	1.305	-19.8#	116	0.00
16	t	Endosulfan I		1.079	1.237	-14.6	116	0.00
17	t	Dieldrin		1.093	1.372	-25.5#	125	0.00
18	t	Endrin		1.128	1.295	-14.8	113	0.00
19	t	4,4'-DDD		0.885	1.112	-25.6#	123	0.00
20	t	Endosulfan II		1.020	1.184	-16.1#	118	0.00
21	t	4,4'-DDT		0.986	1.195	-21.2#	117	0.00
22	t	Endrin Aldehyde		0.844	0.849	-0.6	100	0.00
23	t	Methoxychlor		0.563	0.642	-14.0	114	0.00
24	t	Mirex		0.905	1.013	-11.9	116	0.00
25	t	Endosulfan Sulfate		0.979	1.147	-17.2#	117	0.00
26	t	Endrin Ketone		1.088	1.331	-22.3#	120	0.00
27	s	Decachlorobiphenyl		0.916	0.979	-6.9	107	0.00

Signal #2

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 03 Sep 2023   9:21 am
Operator : PEST10:ar
Sample   : wg1823359-1,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc   : wg1823359,,ical20332
ALS Vial : 3 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:36:54 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:36:39 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	89	0.00
2	s	2,4,5,6-Tetrachloro-m-xyl		0.963	1.072	-11.3	106	0.00
3	t	Hexachlorobenzene		1.075	1.264	-17.6#	116	0.00
4	t	alpha-BHC	*	50.000	56.979	-14.0	114	0.00
5	t	gamma-BHC (lindane)		1.285	1.579	-22.9#	112	0.00
6	t	beta-BHC		0.598	0.638	-6.7	106	0.00
7	t	delta-BHC	*	50.000	58.653	-17.3#	117	0.00
8	t	Heptachlor		1.298	1.548	-19.3#	111	0.00
9	t	Aldrin	*	50.000	57.623	-15.2#	112	0.00
10	t	Alachlor		0.197	0.284	-44.2#	140	0.00
11	t	Chlorpyrifos		0.651	0.704	-8.1	108	0.00
12	t	Heptachlor Epoxide		1.186	1.399	-18.0#	110	0.00
13	t	gamma-Chlordane (trans)		1.246	1.440	-15.6#	122	0.00
14	t	alpha-Chlordane (cis)		1.208	1.438	-19.0#	111	0.00
15	t	4,4'-DDE	*	50.000	56.941	-13.9	111	0.00
16	t	Endosulfan I		1.101	1.328	-20.6#	111	0.00
17	t	Dieldrin	*	50.000	62.400	-24.8#	120	0.00
18	t	Endrin		1.205	1.394	-15.7#	108	0.00
19	t	4,4'-DDD	*	50.000	59.836	-19.7#	117	0.00
20	t	Endosulfan II		0.995	1.241	-24.7#	113	0.00
21	t	4,4'-DDT	*	50.000	56.974	-13.9	109	0.00
22	t	Endrin Aldehyde		0.826	0.858	-3.9	94	0.00
23	t	Methoxychlor		0.571	0.667	-16.8#	109	0.00
24	t	Mirex		0.904	1.014	-12.2	109	0.00
25	t	Endosulfan Sulfate		0.951	1.159	-21.9#	113	0.00
26	t	Endrin Ketone		1.078	1.348	-25.0#	116	0.00
27	s	Decachlorobiphenyl		0.924	0.915	1.0	95	0.00

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 03 Sep 2023   9:21 am
Operator : PEST10:ar
Sample   : wg1823359-1,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc   : wg1823359,,ical20332
ALS Vial : 3 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:36:54 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:36:39 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.27#
29	l1	chlordane-1		*1000.000	0.000	100.0#	0	-2.39#
30	l1	chlordane-3		*1000.000	0.000	100.0#	0	-2.45#
31	l1	chlordane-4		*1000.000	0.000	100.0#	0	-2.80#
32	l1	chlordane-5		*1000.000	0.000	100.0#	0	-3.34#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.27#
34	l2	toxaphene-1		0.036	0.000	100.0#	0#	-4.36#
35	l2	toxaphene-2		0.035	0.000	100.0#	0#	-4.49#
36	l2	toxaphene-4		0.031	0.000	100.0#	0#	-4.91#
37	l2	toxaphene-5		0.036	0.000	100.0#	0#	-5.10#

Signal #2

28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.34#
29	l1	chlordane-1		*1000.000	0.000	100.0#	0	-2.76#
30	l1	chlordane-3		*1000.000	0.000	100.0#	0	-3.36#
31	l1	chlordane-4		*1000.000	0.000	100.0#	0	-4.04#
32	l1	chlordane-5		*1000.000	0.000	100.0#	0	-4.21#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.34#
34	l2	toxaphene-1		0.024	0.000	100.0#	0#	-5.04#
35	l2	toxaphene-2		0.034	0.000	100.0#	0#	-5.06#
36	l2	toxaphene-4		0.043	0.000	100.0#	0#	-5.38#
37	l2	toxaphene-5		0.038	0.000	100.0#	0#	-5.80#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 9:21 am
Operator : PEST10:ar
Sample : wg1823359-1,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:36:54 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:36:39 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.274	1.343	117.9E6	131.7E6	25.000M4	25.000M4
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.609	1.814	250.1E6	282.3E6	52.300	55.627
	Spiked Amount 50.000	Range 30 - 150		Recovery =		104.60%	111.25%
27) s	Decachlorobi	6.235	6.886	230.9E6	241.1E6	53.446	49.512
	Spiked Amount 50.000	Range 30 - 150		Recovery =		106.89%	99.02%
	Target Compounds						
3) t	Hexachlorobe	1.818	2.129	290.1E6	332.9E6	56.044	58.802
4) t	alpha-BHC	1.915	2.223	393.0E6	460.0E6	61.077	56.979
5) t	gamma-BHC (l	2.113	2.505	356.4E6	415.7E6	57.826	61.416
6) t	beta-BHC	2.169	2.570	146.1E6	168.0E6	51.280	53.320
7) t	delta-BHC	2.294	2.833	378.7E6	443.6E6	61.386	58.653
8) t	Heptachlor	2.450	2.896	346.7E6	407.7E6	57.834	59.637
9) t	Aldrin	2.687	3.212	326.1E6	394.7E6	59.763	57.623
10) t	Alachlor	2.809	3.098	79419320	74684156	67.993	71.848
11) t	Chlorpyrifos	2.898	3.448	165.1E6	185.4E6	53.458	54.070
12) t	Heptachlor E	3.222	3.821	306.4E6	368.4E6	56.924	58.960
13) t	gamma-Chlord	3.343	4.040	312.1E6	379.1E6	60.139M4	57.771
14) t	alpha-Chlord	3.475	4.213	314.1E6	378.6E6	55.128	59.498
15) t	4,4'-DDE	3.571	4.416	307.9E6	375.5E6	59.916	56.941
16) t	Endosulfan I	3.610	4.275	291.8E6	349.8E6	57.327	60.310
17) t	Dieldrin	3.866	4.572	323.5E6	389.8E6	62.769	62.400
18) t	Endrin	4.120	4.874	305.4E6	367.1E6	57.381	57.853
19) t	4,4'-DDD	4.236	5.001	262.2E6	316.7E6	62.785	59.836
20) t	Endosulfan I	4.369	5.075	279.3E6	326.8E6	58.030	62.368
21) t	4,4'-DDT	4.536	5.281	281.8E6	335.5E6	60.611	56.974
22) t	Endrin Aldeh	4.798	5.375	200.3E6	226.0E6	50.323	51.950

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 9:21 am
Operator : PEST10:ar
Sample : wg1823359-1,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:36:54 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:36:39 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
23) t	Methoxychlor	5.037	5.852	151.4E6	175.7E6	57.015	58.410
24) t	Mirex	5.085	5.984	238.8E6	267.1E6	55.927	56.085
25) t	Endosulfan S	5.197	5.606	270.4E6	305.2E6	58.562	60.947
26) t	Endrin Keton	5.426	6.020	313.9E6	355.1E6	61.191	62.552
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

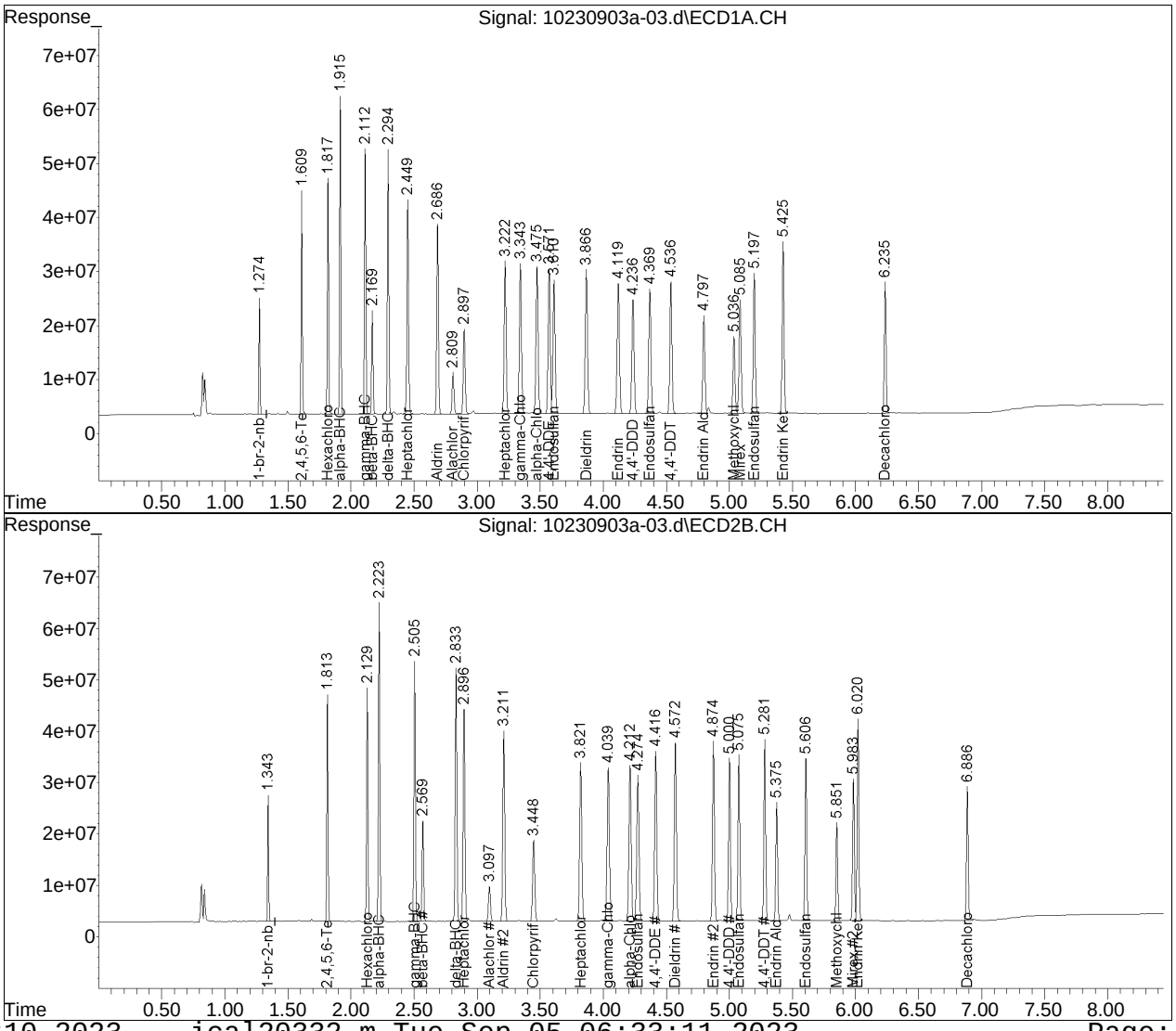
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 9:21 am
Operator : PEST10:ar
Sample : wg1823359-1,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:36:54 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:36:39 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

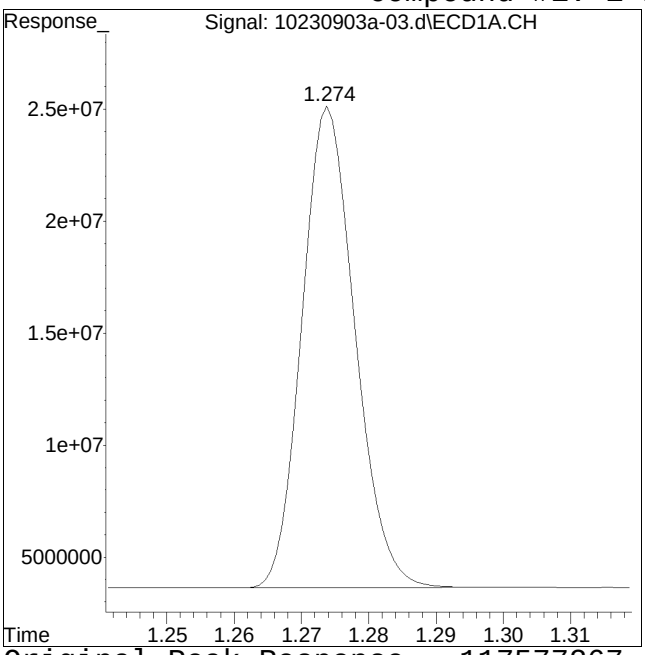
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



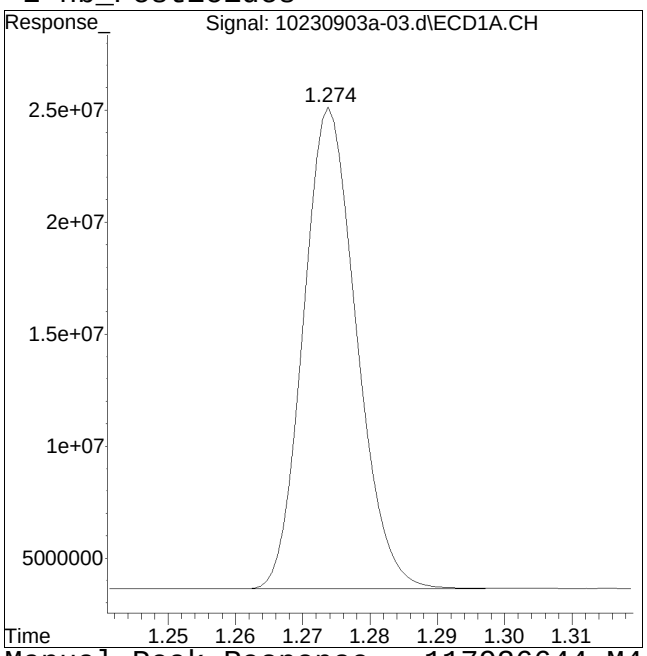
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-03.d Operator : PEST10:ar
Date Inj'd : 9/3/2023 9:21 am Instrument : Pest 10
Sample : wg1823359-1,42,,pest11274 Quant Date : 9/3/2023 9:36 am

Compound #1: 1-br-2-nb_Pesticides



Original Peak Response = 117577267



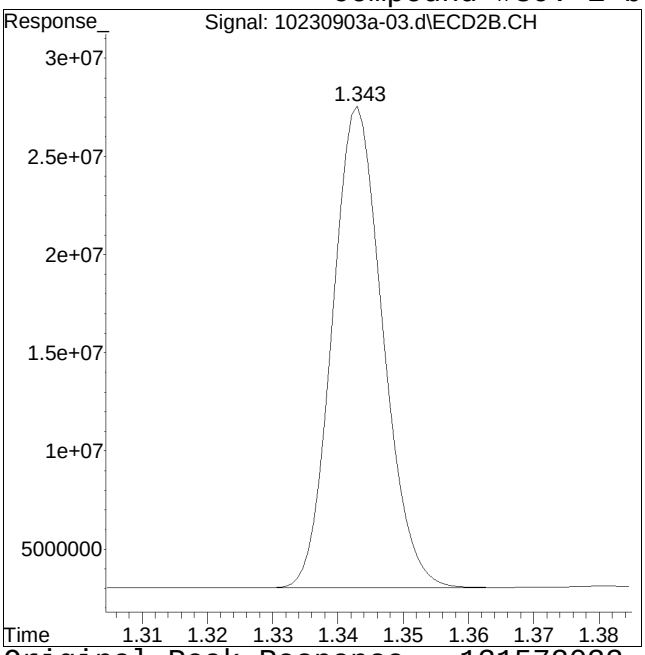
Manual Peak Response = 117926644 M4

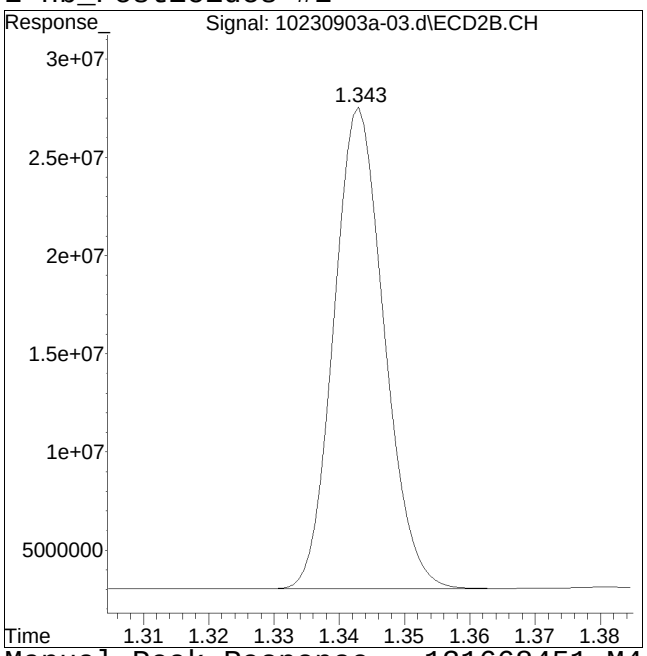
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-03.d Operator : PEST10:ar
Date Inj'd : 9/3/2023 9:21 am Instrument : Pest 10
Sample : wg1823359-1,42,,pest11274 Quant Date : 9/3/2023 9:36 am

Compound #39: 1-br-2-nb_Pesticides #2



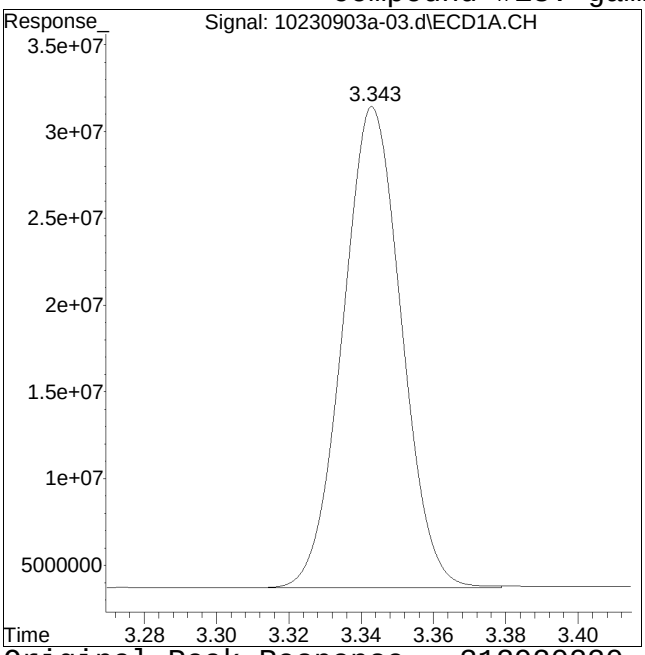


Original Peak Response = 131572033 Manual Peak Response = 131668451 M4
M4 = Poor automated baseline construction.

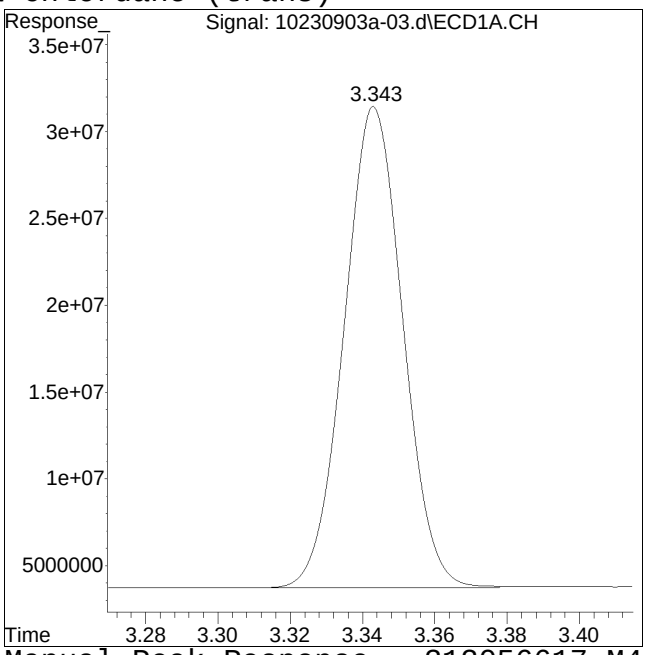
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-03.d Operator : PEST10:ar
Date Inj'd : 9/3/2023 9:21 am Instrument : Pest 10
Sample : wg1823359-1,42,,pest11274 Quant Date : 9/3/2023 9:36 am

Compound #13: gamma-Chlordane (trans)



Original Peak Response = 312920220



Manual Peak Response = 312056617 M4

M4 = Poor automated baseline construction.

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 03 Sep 2023   9:32 am
Operator : PEST10:ar
Sample   : wg1823359-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc   : wg1823359,,ical20332
ALS Vial : 4 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:43:54 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:36 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	95	0.00
29	l1	chlordane-1		*1000.000	914.332	8.6	88	0.00
30	l1	chlordane-3		*1000.000	806.569	19.3#	77	0.00
31	l1	chlordane-4		*1000.000	1005.297	-0.5	93	0.00
32	l1	chlordane-5		*1000.000	987.618	1.2	94	0.00

Signal #2

28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	91	0.00
29	l1	chlordane-1		*1000.000	890.450	11.0	84	0.00
30	l1	chlordane-3		*1000.000	1003.200	-0.3	88	0.00
31	l1	chlordane-4		*1000.000	947.655	5.2	86	0.00
32	l1	chlordane-5		*1000.000	918.942	8.1	83	0.00

Evaluate Continuing Calibration Report - Not Founds

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.27#
2	s	2,4,5,6-Tetrachloro-m-xylen		1.014	0.000	100.0#	0#	-1.61#
3	t	Hexachlorobenzene		1.097	0.000	100.0#	0#	-1.82#
4	t	alpha-BHC		1.364	0.000	100.0#	0#	-1.92#
5	t	gamma-BHC (lindane)		1.306	0.000	100.0#	0#	-2.11#
6	t	beta-BHC		0.604	0.000	100.0#	0#	-2.17#
7	t	delta-BHC		1.308	0.000	100.0#	0#	-2.29#
8	t	Heptachlor		1.271	0.000	100.0#	0#	-2.45#
9	t	Aldrin		1.157	0.000	100.0#	0#	-2.69#
10	t	Alachlor		0.248	0.000	100.0#	0#	-2.81#
11	t	Chlorpyrifos		0.655	0.000	100.0#	0#	-2.90#
12	t	Heptachlor Epoxide		1.141	0.000	100.0#	0#	-3.22#
13	t	gamma-Chlordane (trans)		1.100	0.000	100.0#	0#	-3.34#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 03 Sep 2023   9:32 am
Operator : PEST10:ar
Sample   : wg1823359-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc   : wg1823359,,ical20332
ALS Vial : 4 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:43:54 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:36 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-3.48#
15	t	4,4'-DDE		1.089	0.000	100.0#	0#	-3.57#
16	t	Endosulfan I		1.079	0.000	100.0#	0#	-3.61#
17	t	Dieldrin		1.093	0.000	100.0#	0#	-3.87#
18	t	Endrin		1.128	0.000	100.0#	0#	-4.12#
19	t	4,4'-DDD		0.885	0.000	100.0#	0#	-4.24#
20	t	Endosulfan II		1.020	0.000	100.0#	0#	-4.37#
21	t	4,4'-DDT		0.986	0.000	100.0#	0#	-4.54#
22	t	Endrin Aldehyde		0.844	0.000	100.0#	0#	-4.80#
23	t	Methoxychlor		0.563	0.000	100.0#	0#	-5.04#
24	t	Mirex		0.905	0.000	100.0#	0#	-5.08#
25	t	Endosulfan Sulfate		0.979	0.000	100.0#	0#	-5.20#
26	t	Endrin Ketone		1.088	0.000	100.0#	0#	-5.43#
27	s	Decachlorobiphenyl		0.916	0.000	100.0#	0#	-6.24#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.27#
34	l2	toxaphene-1		0.036	0.000	100.0#	0#	-4.36#
35	l2	toxaphene-2		0.035	0.000	100.0#	0#	-4.49#
36	l2	toxaphene-4		0.031	0.000	100.0#	0#	-4.91#
37	l2	toxaphene-5		0.036	0.000	100.0#	0#	-5.10#

Signal #2

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.34#
2	s	2,4,5,6-Tetrachloro-m-xyl		0.963	0.000	100.0#	0#	-1.81#
3	t	Hexachlorobenzene		1.075	0.000	100.0#	0#	-2.13#
4	t	alpha-BHC	*	50.000	0.000	100.0#	0	-2.22#
5	t	gamma-BHC (lindane)		1.285	0.000	100.0#	0#	-2.51#
6	t	beta-BHC		0.598	0.000	100.0#	0#	-2.57#
7	t	delta-BHC	*	50.000	0.000	100.0#	0	-2.83#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 03 Sep 2023   9:32 am
Operator : PEST10:ar
Sample   : wg1823359-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc   : wg1823359,,ical20332
ALS Vial : 4 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:43:54 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:36 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
8	t	Heptachlor		1.298	0.000	100.0#	0#	-2.90#
9	t	Aldrin	*	50.000	0.000	100.0#	0	-3.21#
10	t	Alachlor		0.197	0.000	100.0#	0#	-3.10#
11	t	Chlorpyrifos		0.651	0.000	100.0#	0#	-3.45#
12	t	Heptachlor Epoxide		1.186	0.000	100.0#	0#	-3.82#
13	t	gamma-Chlordane (trans)		1.246	0.000	100.0#	0#	-4.04#
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-4.21#
15	t	4,4'-DDE	*	50.000	0.000	100.0#	0	-4.42#
16	t	Endosulfan I		1.101	0.000	100.0#	0#	-4.27#
17	t	Dieldrin	*	50.000	0.000	100.0#	0	-4.57#
18	t	Endrin		1.205	0.000	100.0#	0#	-4.87#
19	t	4,4'-DDD	*	50.000	0.000	100.0#	0	-5.00#
20	t	Endosulfan II		0.995	0.000	100.0#	0#	-5.08#
21	t	4,4'-DDT	*	50.000	0.000	100.0#	0	-5.28#
22	t	Endrin Aldehyde		0.826	0.000	100.0#	0#	-5.38#
23	t	Methoxychlor		0.571	0.000	100.0#	0#	-5.85#
24	t	Mirex		0.904	0.000	100.0#	0#	-5.98#
25	t	Endosulfan Sulfate		0.951	0.000	100.0#	0#	-5.61#
26	t	Endrin Ketone		1.078	0.000	100.0#	0#	-6.02#
27	s	Decachlorobiphenyl		0.924	0.000	100.0#	0#	-6.89#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.34#
34	l2	toxaphene-1		0.024	0.000	100.0#	0#	-5.04#
35	l2	toxaphene-2		0.034	0.000	100.0#	0#	-5.06#
36	l2	toxaphene-4		0.043	0.000	100.0#	0#	-5.38#
37	l2	toxaphene-5		0.038	0.000	100.0#	0#	-5.80#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 9:32 am
Operator : PEST10:ar
Sample : wg1823359-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:43:54 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:36 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	1.273	1.343	124.0E6	137.2E6	25.000	25.000
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D. d	N.D. d
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 9:32 am
Operator : PEST10:ar
Sample : wg1823359-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:43:54 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:36 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	2.388	2.763	161.1E6	189.5E6	914.332	890.450
30) l1	chlordane-3	2.448	3.362	245.3E6	221.2E6	806.569	1003.200
31) l1	chlordane-4	2.796	4.039	194.9E6	776.3E6	1005.297	947.655
32) l1	chlordane-5	3.341	4.212	685.3E6	590.1E6	987.618	918.942
Sum	chlordane-1			1286.7E6	1777.0E6	N.D.	N.D. D
Average	chlordane-1					928.454	940.062
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

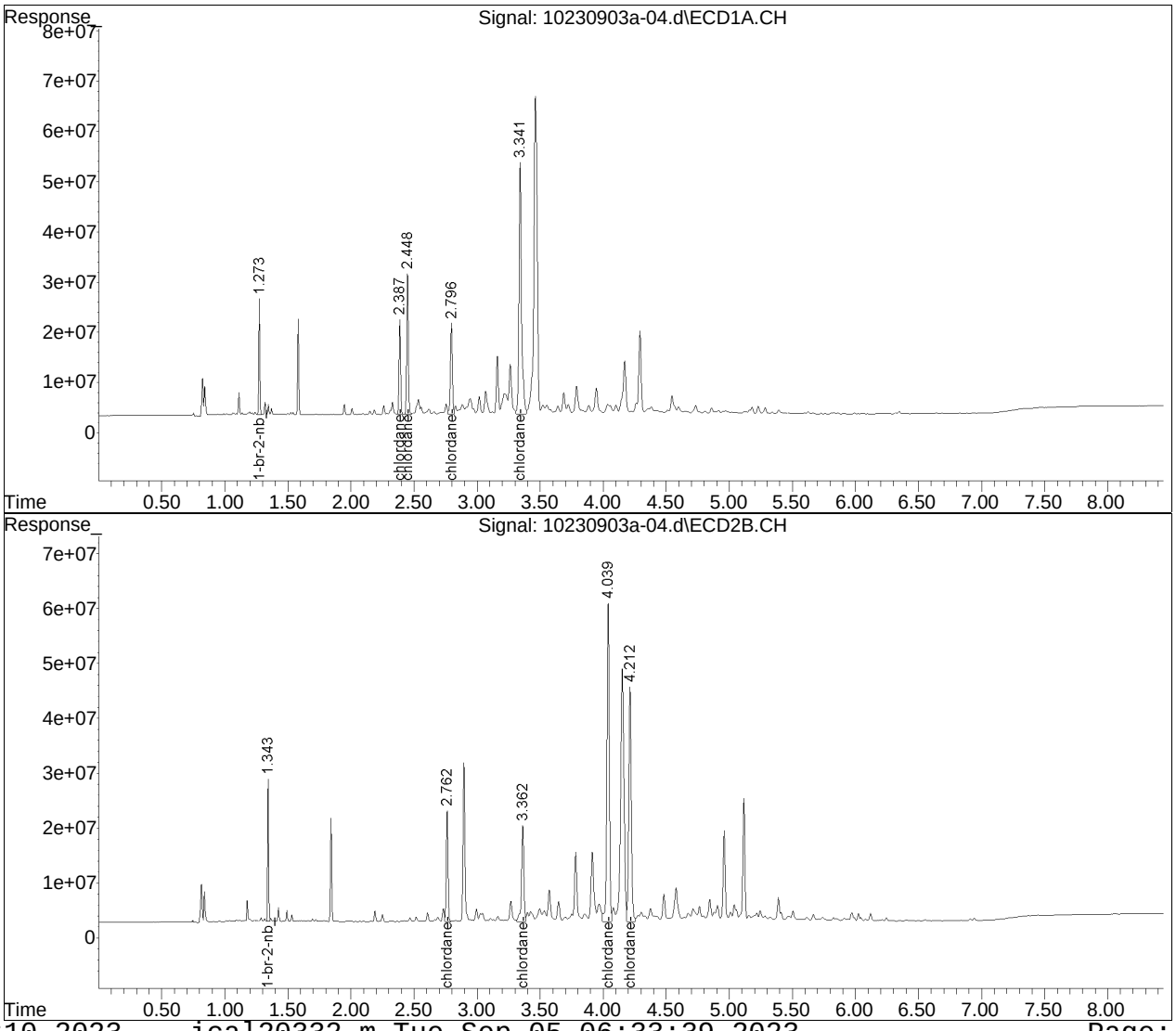
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 9:32 am
Operator : PEST10:ar
Sample : wg1823359-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:43:54 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:36 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PEST\Pest10\2023\230903Q	Method	: pest10_2023_08_28_ugL_ic
Data File	: 10230903a-04.d	Operator	: PEST10:ar
Date Inj'd	: 9/3/2023 9:32 am	Instrument	: Pest 10
Sample	: wg1823359-2,42,,chlor11212	Quant Date	: 9/3/2023 9:43 am

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 03 Sep 2023   9:43 am
Operator : PEST10:ar
Sample   : wg1823359-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc   : wg1823359,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:59:25 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	93	0.00
34	l2	toxaphene-1		0.036	0.040	-11.1	93	0.00
35	l2	toxaphene-2		0.035	0.037	-5.7	93	0.00
36	l2	toxaphene-4		0.031	0.033	-6.5	95	0.00
37	l2	toxaphene-5		0.036	0.038	-5.6	94	0.00

Signal #2

33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	95	0.00
34	l2	toxaphene-1		0.024	0.022	8.3	87	0.00
35	l2	toxaphene-2		0.034	0.033	2.9	86	0.00
36	l2	toxaphene-4		0.043	0.039	9.3	86	0.00
37	l2	toxaphene-5		0.038	0.035	7.9	85	0.00

Evaluate Continuing Calibration Report - Not Founds

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.27#
2	s	2,4,5,6-Tetrachloro-m-xylen		1.014	0.000	100.0#	0#	-1.61#
3	t	Hexachlorobenzene		1.097	0.000	100.0#	0#	-1.82#
4	t	alpha-BHC		1.364	0.000	100.0#	0#	-1.92#
5	t	gamma-BHC (lindane)		1.306	0.000	100.0#	0#	-2.11#
6	t	beta-BHC		0.604	0.000	100.0#	0#	-2.17#
7	t	delta-BHC		1.308	0.000	100.0#	0#	-2.29#
8	t	Heptachlor		1.271	0.000	100.0#	0#	-2.45#
9	t	Aldrin		1.157	0.000	100.0#	0#	-2.69#
10	t	Alachlor		0.248	0.000	100.0#	0#	-2.81#
11	t	Chlorpyrifos		0.655	0.000	100.0#	0#	-2.90#
12	t	Heptachlor Epoxide		1.141	0.000	100.0#	0#	-3.22#
13	t	gamma-Chlordane (trans)		1.100	0.000	100.0#	0#	-3.34#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 03 Sep 2023   9:43 am
Operator : PEST10:ar
Sample   : wg1823359-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc   : wg1823359,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:59:25 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-3.48#
15	t	4,4'-DDE		1.089	0.000	100.0#	0#	-3.57#
16	t	Endosulfan I		1.079	0.000	100.0#	0#	-3.61#
17	t	Dieldrin		1.093	0.000	100.0#	0#	-3.87#
18	t	Endrin		1.128	0.000	100.0#	0#	-4.12#
19	t	4,4'-DDD		0.885	0.000	100.0#	0#	-4.24#
20	t	Endosulfan II		1.020	0.000	100.0#	0#	-4.37#
21	t	4,4'-DDT		0.986	0.000	100.0#	0#	-4.54#
22	t	Endrin Aldehyde		0.844	0.000	100.0#	0#	-4.80#
23	t	Methoxychlor		0.563	0.000	100.0#	0#	-5.04#
24	t	Mirex		0.905	0.000	100.0#	0#	-5.08#
25	t	Endosulfan Sulfate		0.979	0.000	100.0#	0#	-5.20#
26	t	Endrin Ketone		1.088	0.000	100.0#	0#	-5.43#
27	s	Decachlorobiphenyl		0.916	0.000	100.0#	0#	-6.24#
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.27#
29	l1	chlordane-1		*1000.000	0.000	100.0#	0	-2.39#
30	l1	chlordane-3		*1000.000	0.000	100.0#	0	-2.45#
31	l1	chlordane-4		*1000.000	0.000	100.0#	0	-2.80#
32	l1	chlordane-5		*1000.000	0.000	100.0#	0	-3.34#

Signal #2

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.34#
2	s	2,4,5,6-Tetrachloro-m-xyl		0.963	0.000	100.0#	0#	-1.81#
3	t	Hexachlorobenzene		1.075	0.000	100.0#	0#	-2.13#
4	t	alpha-BHC		* 50.000	0.000	100.0#	0	-2.22#
5	t	gamma-BHC (lindane)		1.285	0.000	100.0#	0#	-2.51#
6	t	beta-BHC		0.598	0.000	100.0#	0#	-2.57#
7	t	delta-BHC		* 50.000	0.000	100.0#	0	-2.83#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 03 Sep 2023   9:43 am
Operator : PEST10:ar
Sample   : wg1823359-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc   : wg1823359,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:59:25 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
8	t	Heptachlor		1.298	0.000	100.0#	0#	-2.90#
9	t	Aldrin	*	50.000	0.000	100.0#	0	-3.21#
10	t	Alachlor		0.197	0.000	100.0#	0#	-3.10#
11	t	Chlorpyrifos		0.651	0.000	100.0#	0#	-3.45#
12	t	Heptachlor Epoxide		1.186	0.000	100.0#	0#	-3.82#
13	t	gamma-Chlordane (trans)		1.246	0.000	100.0#	0#	-4.04#
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-4.21#
15	t	4,4'-DDE	*	50.000	0.000	100.0#	0	-4.42#
16	t	Endosulfan I		1.101	0.000	100.0#	0#	-4.27#
17	t	Dieldrin	*	50.000	0.000	100.0#	0	-4.57#
18	t	Endrin		1.205	0.000	100.0#	0#	-4.87#
19	t	4,4'-DDD	*	50.000	0.000	100.0#	0	-5.00#
20	t	Endosulfan II		0.995	0.000	100.0#	0#	-5.08#
21	t	4,4'-DDT	*	50.000	0.000	100.0#	0	-5.28#
22	t	Endrin Aldehyde		0.826	0.000	100.0#	0#	-5.38#
23	t	Methoxychlor		0.571	0.000	100.0#	0#	-5.85#
24	t	Mirex		0.904	0.000	100.0#	0#	-5.98#
25	t	Endosulfan Sulfate		0.951	0.000	100.0#	0#	-5.61#
26	t	Endrin Ketone		1.078	0.000	100.0#	0#	-6.02#
27	s	Decachlorobiphenyl		0.924	0.000	100.0#	0#	-6.89#
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.34#
29	l1	chlordane-1	*	1000.000	0.000	100.0#	0	-2.76#
30	l1	chlordane-3	*	1000.000	0.000	100.0#	0	-3.36#
31	l1	chlordane-4	*	1000.000	0.000	100.0#	0	-4.04#
32	l1	chlordane-5	*	1000.000	0.000	100.0#	0	-4.21#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 9:43 am
Operator : PEST10:ar
Sample : wg1823359-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:59:25 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	1.274	1.343	122.8E6	139.0E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D. d	N.D. d
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 9:43 am
Operator : PEST10:ar
Sample : wg1823359-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:59:25 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	4.359	5.034	389.6E6	245.4E6	2205.525	1867.221
35) l2	toxaphene-2	4.486	5.063	363.1E6	362.9E6	2132.323	1900.132
36) l2	toxaphene-4	4.911	5.384	323.6E6	435.3E6	2157.306	1800.452
37) l2	toxaphene-5	5.098	5.795	377.1E6	389.5E6	2114.250	1823.958
Sum	toxaphene-1			1453.5E6	1433.1E6	8609.404	7391.763
Average	toxaphene-1					2152.351	1847.941

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			1453.5E6	1433.1E6	8609.404	7391.763
Average	toxaphene-1					2152.351	1847.941

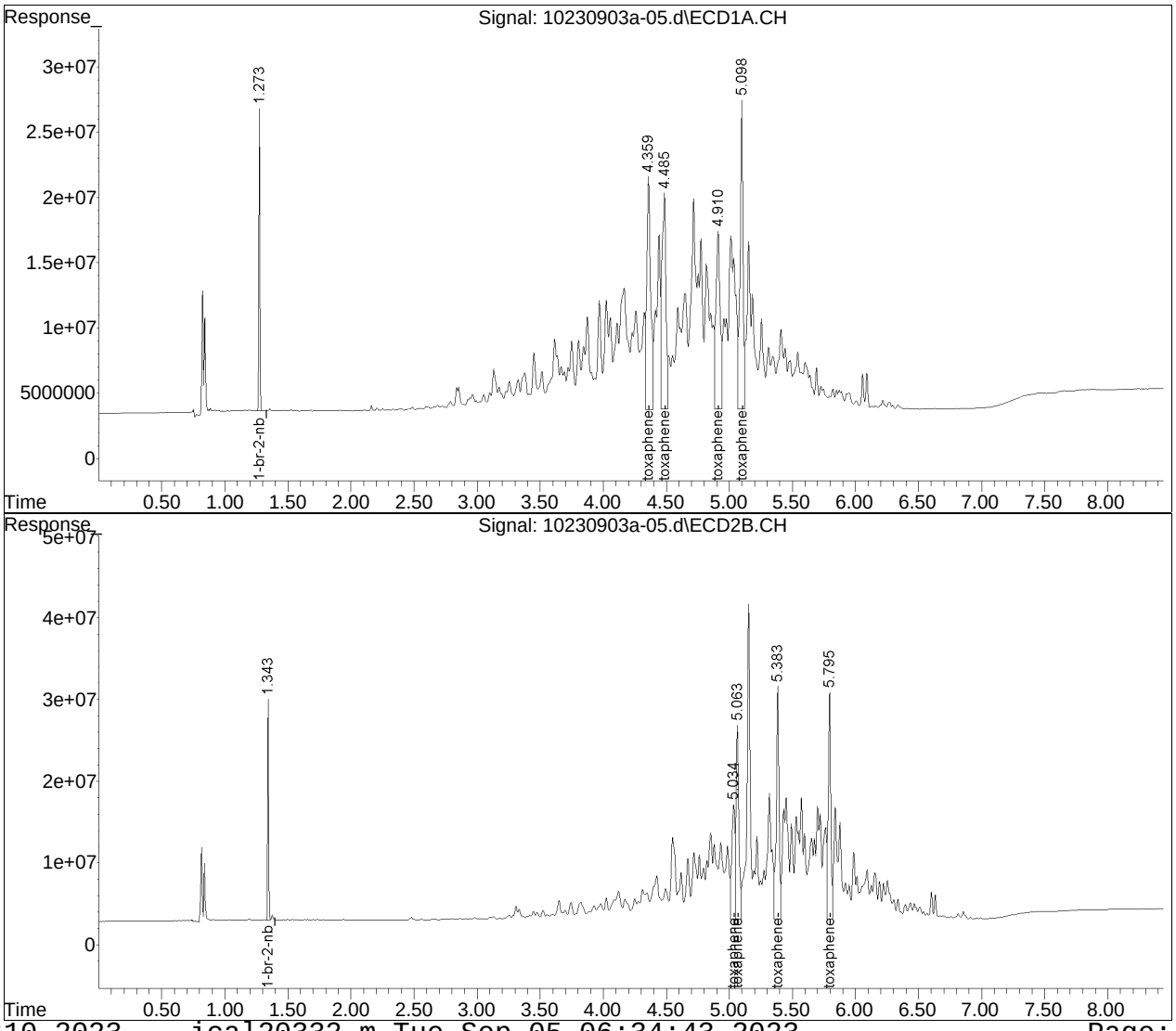
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 9:43 am
Operator : PEST10:ar
Sample : wg1823359-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:59:25 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PEST\Pest10\2023\230903	QMethod	: pest10_2023_08_28_ugL_ic
Data File	: 10230903a-05.d	Operator	: PEST10:ar
Date Inj'd	: 9/3/2023 9:43 am	Instrument	: Pest 10
Sample	: wg1823359-3,42,,tox11211	Quant Date	: 9/3/2023 9:59 am

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-27.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 03 Sep 2023   1:49 pm
Operator : PEST10:mmg
Sample   : wg1823359-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc   : wg1823359,,ical20332
ALS Vial : 27 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 14:02:07 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	99	0.00
2	s	2,4,5,6-Tetrachloro-m-xylen		1.014	1.042	-2.8	115	0.00
3	t	Hexachlorobenzene		1.097	1.204	-9.8	126	0.00
4	t	alpha-BHC		1.364	1.647	-20.7#	126	0.00
5	t	gamma-BHC (lindane)		1.306	1.493	-14.3	124	0.00
6	t	beta-BHC		0.604	0.616	-2.0	117	0.00
7	t	delta-BHC		1.308	1.614	-23.4#	131	0.00
8	t	Heptachlor		1.271	1.463	-15.1#	126	0.00
9	t	Aldrin		1.157	1.362	-17.7#	126	0.00
10	t	Alachlor		0.248	0.314	-26.6#	144	0.00
11	t	Chlorpyrifos		0.655	0.695	-6.1	124	0.00
12	t	Heptachlor Epoxide		1.141	1.299	-13.8	125	0.00
13	t	gamma-Chlordane (trans)		1.100	1.315	-19.5#	138	0.00
14	t	alpha-Chlordane (cis)		1.208	1.326	-9.8	123	0.00
15	t	4,4'-DDE		1.089	1.301	-19.5#	126	0.00
16	t	Endosulfan I		1.079	1.226	-13.6	125	0.00
17	t	Dieldrin		1.093	1.361	-24.5#	135	0.00
18	t	Endrin		1.128	1.287	-14.1	122	0.00
19	t	4,4'-DDD		0.885	1.110	-25.4#	133	0.00
20	t	Endosulfan II		1.020	1.175	-15.2#	127	0.00
21	t	4,4'-DDT		0.986	1.150	-16.6#	122	0.00
22	t	Endrin Aldehyde		0.844	0.866	-2.6	111	0.00
23	t	Methoxychlor		0.563	0.652	-15.8#	126	0.00
24	t	Mirex		0.905	1.002	-10.7	125	0.00
25	t	Endosulfan Sulfate		0.979	1.151	-17.6#	128	0.00
26	t	Endrin Ketone		1.088	1.336	-22.8#	131	0.00
27	s	Decachlorobiphenyl		0.916	0.979	-6.9	117	0.00

Signal #2

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-27.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 03 Sep 2023   1:49 pm
Operator : PEST10:mmg
Sample   : wg1823359-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc   : wg1823359,,ical20332
ALS Vial : 27 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 14:02:07 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	95	0.00
2	s	2,4,5,6-Tetrachloro-m-xyl		0.963	1.044	-8.4	110	0.00
3	t	Hexachlorobenzene		1.075	1.227	-14.1	120	0.00
4	t	alpha-BHC	*	50.000	56.008	-12.0	119	0.00
5	t	gamma-BHC (lindane)		1.285	1.553	-20.9#	117	0.00
6	t	beta-BHC		0.598	0.626	-4.7	111	0.00
7	t	delta-BHC	*	50.000	58.477	-17.0#	124	0.00
8	t	Heptachlor		1.298	1.539	-18.6#	117	0.00
9	t	Aldrin	*	50.000	56.350	-12.7	117	0.00
10	t	Alachlor		0.197	0.246	-24.9#	129	0.00
11	t	Chlorpyrifos		0.651	0.691	-6.1	113	0.00
12	t	Heptachlor Epoxide		1.186	1.370	-15.5#	115	0.00
13	t	gamma-Chlordane (trans)		1.246	1.426	-14.4	128	0.00
14	t	alpha-Chlordane (cis)		1.208	1.409	-16.6#	116	0.00
15	t	4,4'-DDE	*	50.000	55.887	-11.8	116	0.00
16	t	Endosulfan I		1.101	1.299	-18.0#	116	0.00
17	t	Dieldrin	*	50.000	61.145	-22.3#	125	0.00
18	t	Endrin		1.205	1.387	-15.1#	115	0.00
19	t	4,4'-DDD	*	50.000	59.324	-18.6#	123	0.00
20	t	Endosulfan II		0.995	1.219	-22.5#	118	0.00
21	t	4,4'-DDT	*	50.000	57.986	-16.0#	118	0.00
22	t	Endrin Aldehyde		0.826	0.872	-5.6	102	0.00
23	t	Methoxychlor		0.571	0.678	-18.7#	118	0.00
24	t	Mirex		0.904	1.001	-10.7	114	0.00
25	t	Endosulfan Sulfate		0.951	1.151	-21.0#	119	0.00
26	t	Endrin Ketone		1.078	1.349	-25.1#	124	0.00
27	s	Decachlorobiphenyl		0.924	0.966	-4.5	106	0.00

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-27.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 03 Sep 2023   1:49 pm
Operator : PEST10:mmg
Sample   : wg1823359-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc   : wg1823359,,ical20332
ALS Vial : 27 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 14:02:07 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.27#
29	l1	chlordane-1		*1000.000	0.000	100.0#	0	-2.39#
30	l1	chlordane-3		*1000.000	0.000	100.0#	0	-2.45#
31	l1	chlordane-4		*1000.000	0.000	100.0#	0	-2.80#
32	l1	chlordane-5		*1000.000	0.000	100.0#	0	-3.34#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.27#
34	l2	toxaphene-1		0.036	0.000	100.0#	0#	-4.36#
35	l2	toxaphene-2		0.035	0.000	100.0#	0#	-4.49#
36	l2	toxaphene-4		0.031	0.000	100.0#	0#	-4.91#
37	l2	toxaphene-5		0.036	0.000	100.0#	0#	-5.10#

Signal #2

28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.34#
29	l1	chlordane-1		*1000.000	0.000	100.0#	0	-2.76#
30	l1	chlordane-3		*1000.000	0.000	100.0#	0	-3.36#
31	l1	chlordane-4		*1000.000	0.000	100.0#	0	-4.04#
32	l1	chlordane-5		*1000.000	0.000	100.0#	0	-4.21#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.34#
34	l2	toxaphene-1		0.024	0.000	100.0#	0#	-5.04#
35	l2	toxaphene-2		0.034	0.000	100.0#	0#	-5.06#
36	l2	toxaphene-4		0.043	0.000	100.0#	0#	-5.38#
37	l2	toxaphene-5		0.038	0.000	100.0#	0#	-5.80#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-27.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 1:49 pm
Operator : PEST10:mmg
Sample : wg1823359-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 14:02:07 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.274	1.344	128.1E6	140.3E6	25.000M4	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.609	1.814	267.0E6	293.1E6	51.380	54.201
	Spiked Amount 50.000	Range 30 - 150		Recovery =		102.76%	108.40%
27) s	Decachlorobi	6.234	6.886	251.0E6	271.0E6	53.448	52.221
	Spiked Amount 50.000	Range 30 - 150		Recovery =		106.90%	104.44%
	Target Compounds						
3) t	Hexachlorobe	1.817	2.130	308.6E6	344.3E6	54.866	57.074
4) t	alpha-BHC	1.914	2.224	422.1E6	481.8E6	60.361M4	56.008
5) t	gamma-BHC (l	2.112	2.506	382.8E6	435.8E6	57.155	60.417
6) t	beta-BHC	2.168	2.571	157.9E6	175.6E6	51.017	52.310
7) t	delta-BHC	2.293	2.834	413.5E6	471.3E6	61.681	58.477
8) t	Heptachlor	2.449	2.897	375.0E6	431.8E6	57.567	59.273
9) t	Aldrin	2.685	3.213	349.1E6	411.3E6	58.871	56.350
10) t	Alachlor	2.808	3.099	80462832	69020884	63.392	62.308
11) t	Chlorpyrifos	2.896	3.449	178.1E6	193.9E6	53.063	53.066
12) t	Heptachlor E	3.220	3.823	332.9E6	384.4E6	56.913	57.725
13) t	gamma-Chlord	3.341	4.041	337.0E6	400.1E6	59.759M4	57.211
14) t	alpha-Chlord	3.473	4.214	339.8E6	395.5E6	54.875	58.329
15) t	4,4'-DDE	3.569	4.418	333.5E6	392.7E6	59.731	55.887
16) t	Endosulfan I	3.608	4.276	314.3E6	364.5E6	56.814	58.967
17) t	Dieldrin	3.865	4.573	348.8E6	407.0E6	62.274	61.145
18) t	Endrin	4.117	4.875	329.9E6	389.2E6	57.036	57.557
19) t	4,4'-DDD	4.234	5.002	284.6E6	334.6E6	62.699	59.324M4
20) t	Endosulfan I	4.367	5.076	301.1E6	342.1E6	57.577	61.264M4
21) t	4,4'-DDT	4.535	5.282	294.8E6	363.9E6	58.350	57.986
22) t	Endrin Aldeh	4.796	5.376	222.0E6	244.7E6	51.311	52.788
23) t	Methoxychlor	5.035	5.852	167.1E6	190.2E6	57.906	59.341

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-27.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 1:49 pm
Operator : PEST10:mmg
Sample : wg1823359-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 14:02:07 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	5.083	5.985	256.7E6	280.8E6	55.314	55.324
25) t	Endosulfan S	5.196	5.607	295.0E6	323.1E6	58.793	60.537
26) t	Endrin Keton	5.425	6.021	342.5E6	378.7E6	61.436	62.591
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

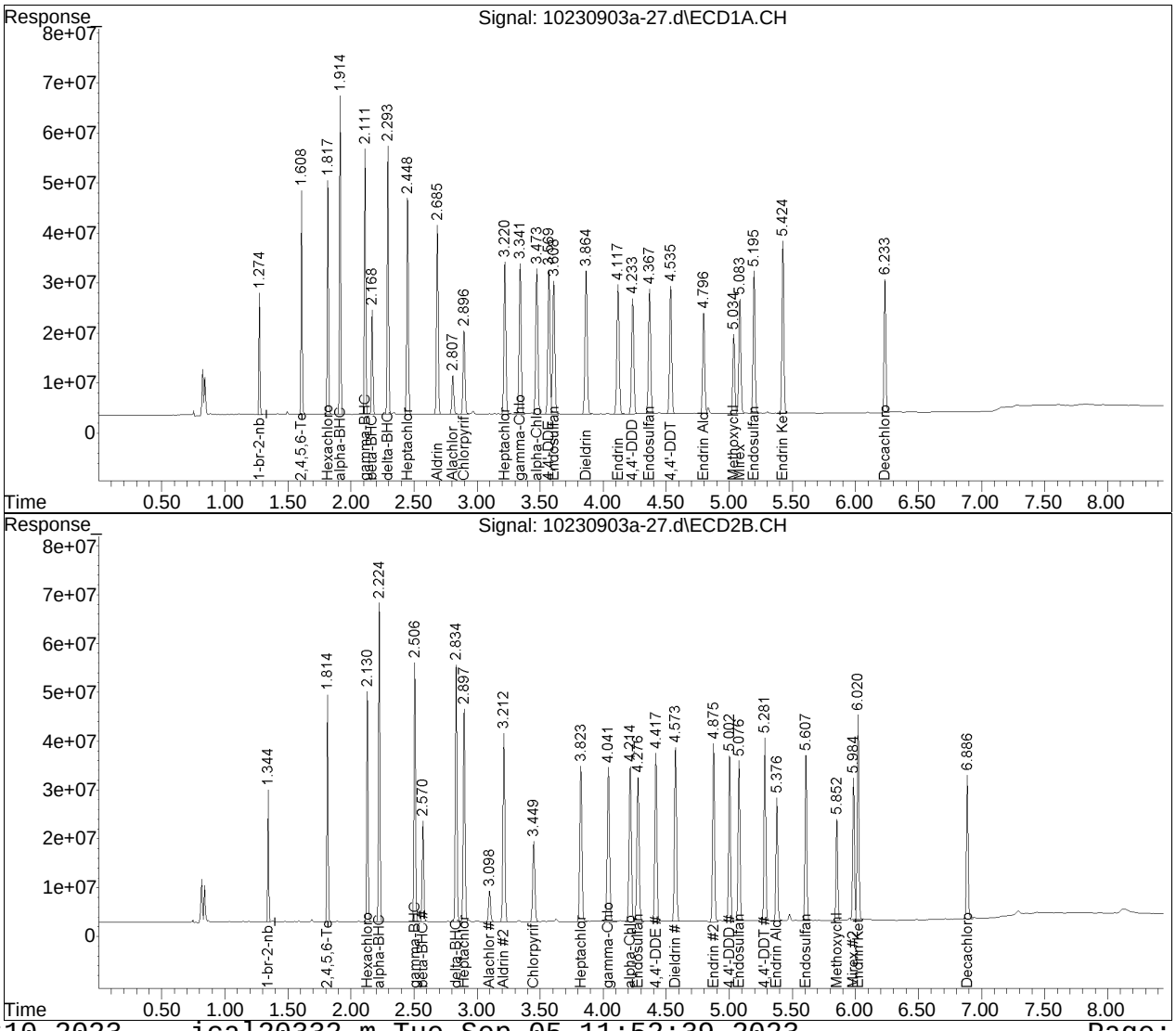
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-27.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 1:49 pm
Operator : PEST10:mmg
Sample : wg1823359-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 27 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 14:02:07 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

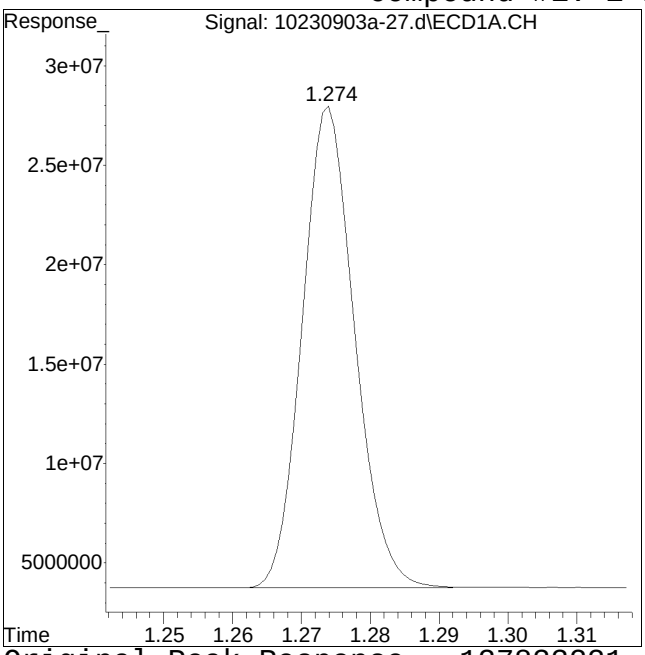
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



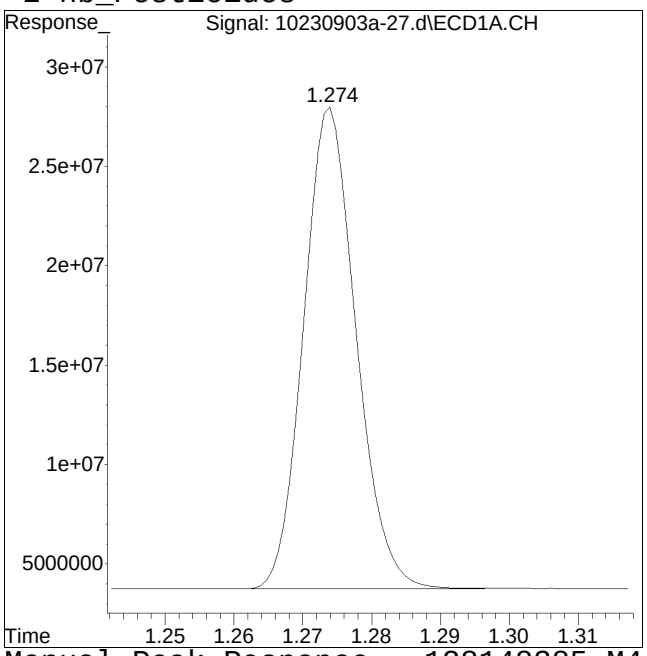
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-27.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:49 pm Instrument : Pest 10
Sample : wg1823359-4,42,,pest11274 Quant Date : 9/3/2023 2:00 pm

Compound #1: 1-br-2-nb_Pesticides



Original Peak Response = 127833221



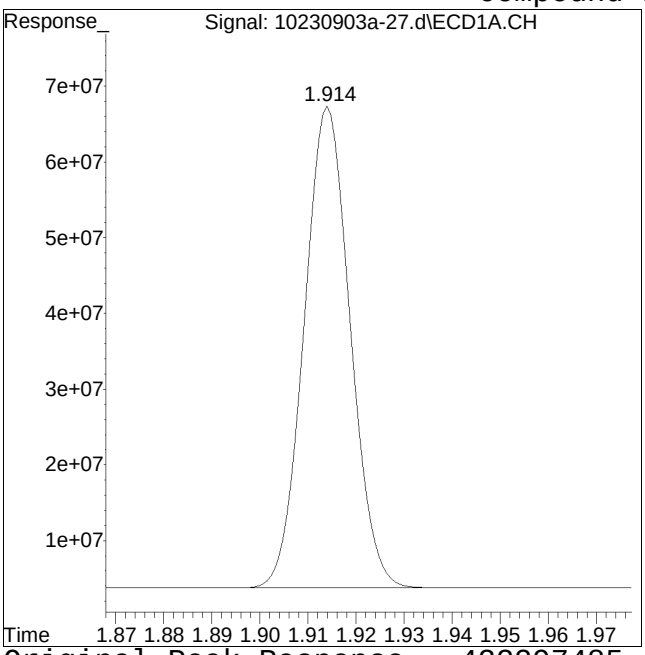
Manual Peak Response = 128148385 M4

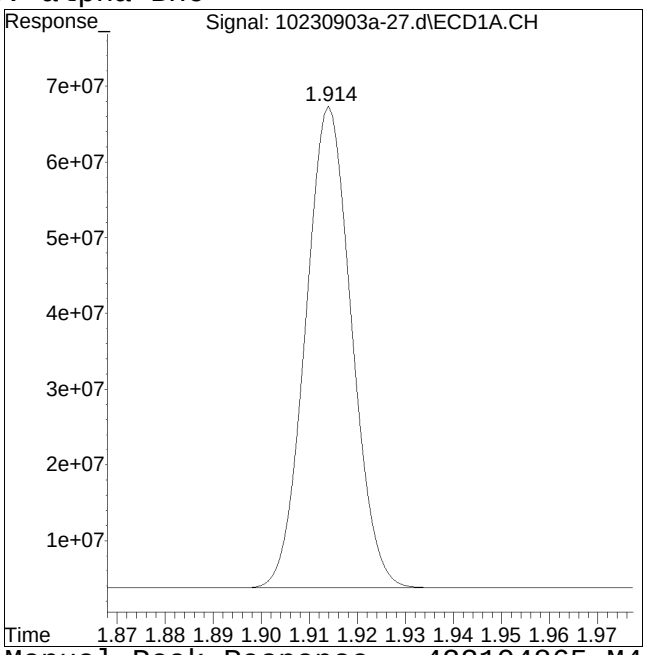
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-27.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:49 pm Instrument : Pest 10
Sample : wg1823359-4,42,,pest11274 Quant Date : 9/3/2023 2:00 pm

Compound #4: alpha-BHC



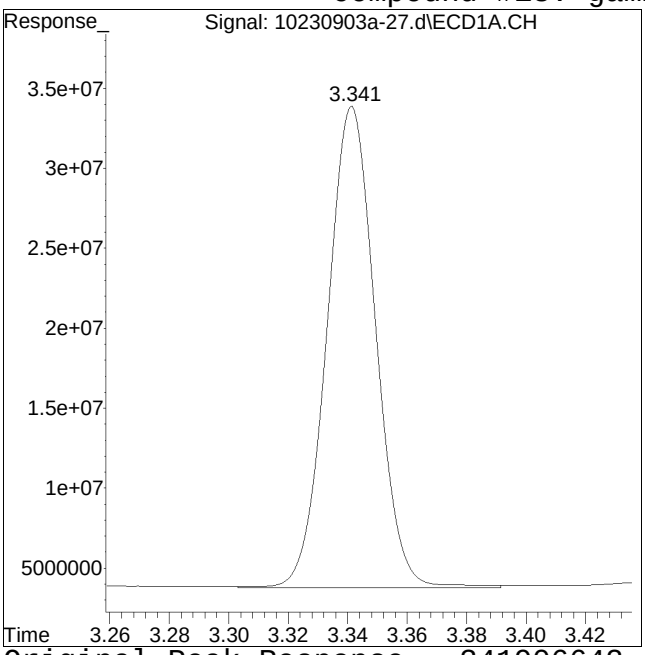


Original Peak Response = 422297485 Manual Peak Response = 422104865 M4
M4 = Poor automated baseline construction.

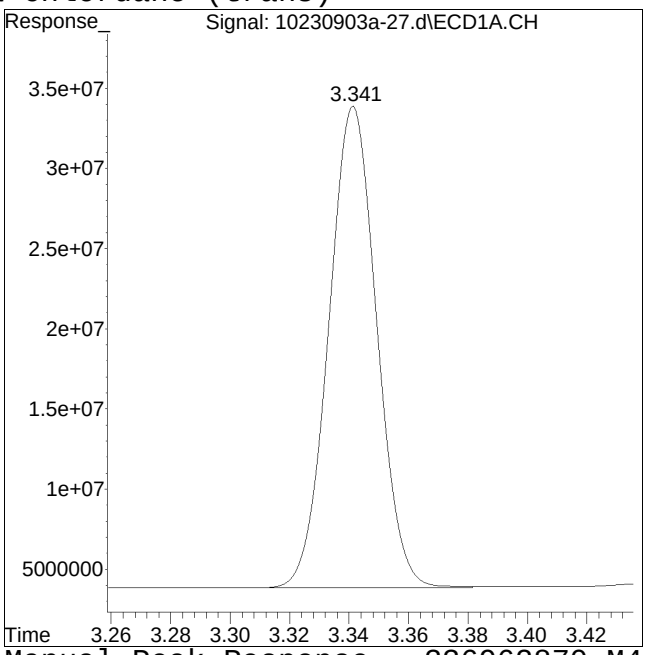
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-27.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:49 pm Instrument : Pest 10
Sample : wg1823359-4,42,,pest11274 Quant Date : 9/3/2023 2:00 pm

Compound #13: gamma-Chlordane (trans)



Original Peak Response = 341906642



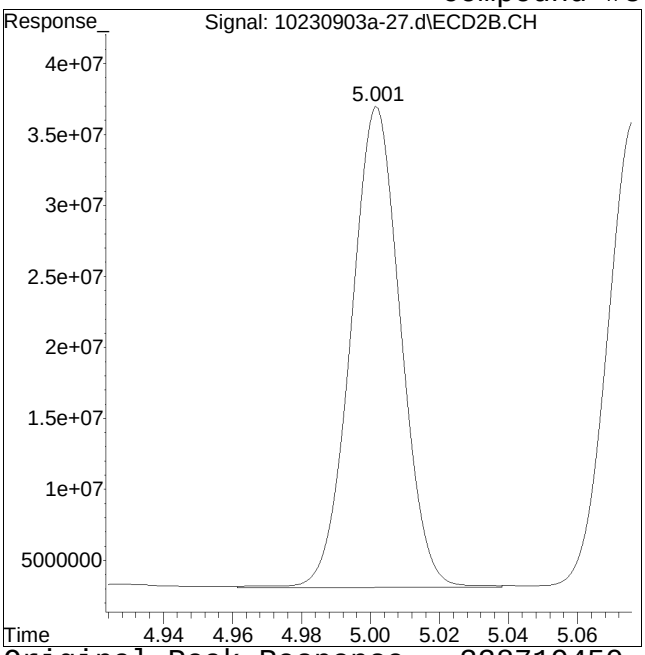
Manual Peak Response = 336962870 M4

M4 = Poor automated baseline construction.

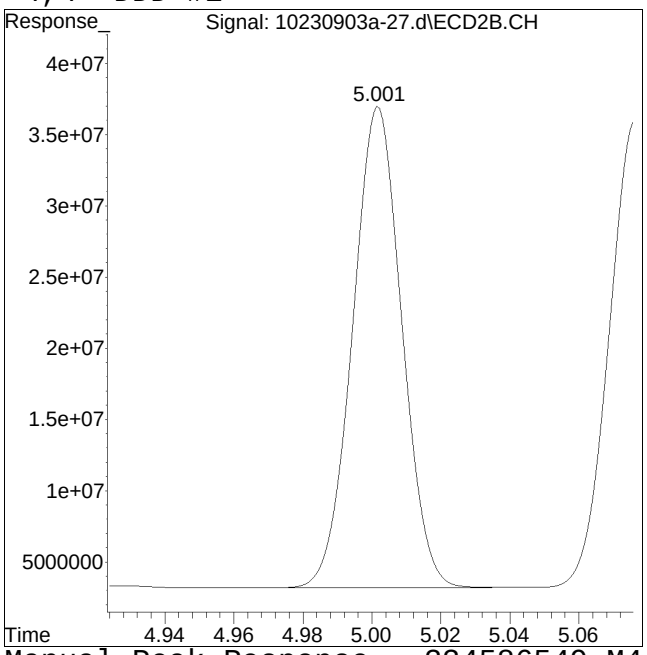
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-27.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:49 pm Instrument : Pest 10
Sample : wg1823359-4,42,,pest11274 Quant Date : 9/3/2023 2:00 pm

Compound #57: 4,4'-DDD #2



Original Peak Response = 338719450



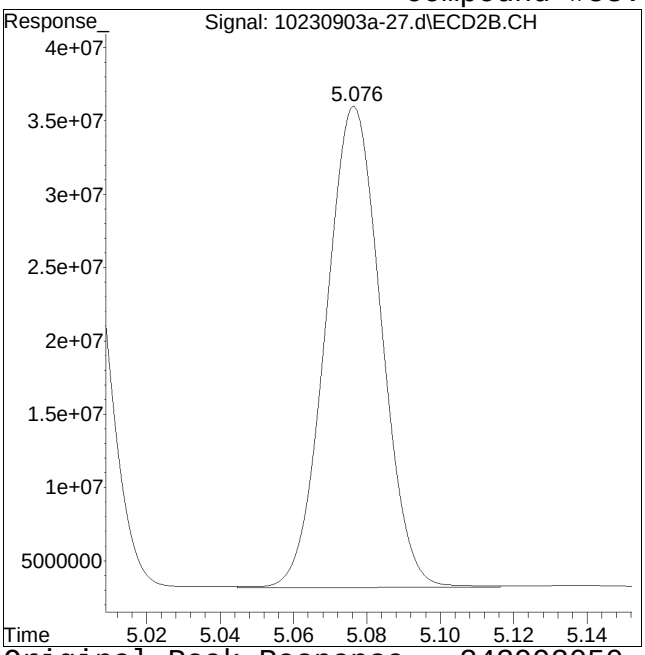
Manual Peak Response = 334586549 M4

M4 = Poor automated baseline construction.

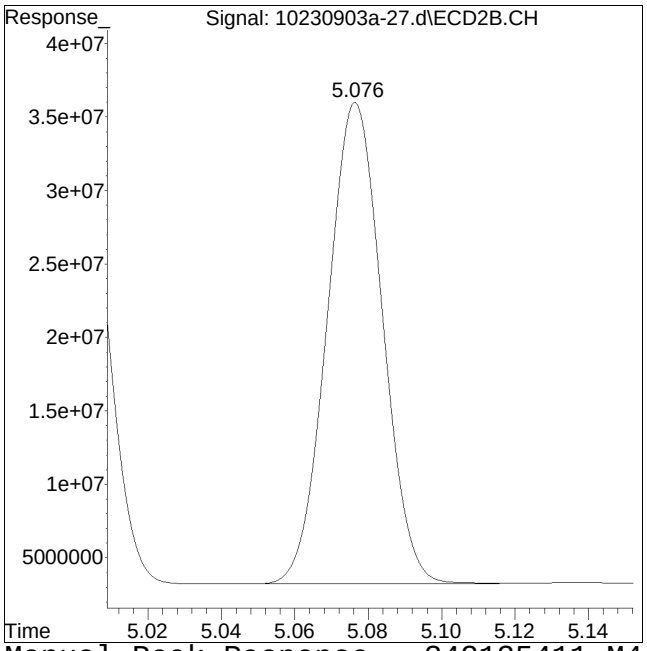
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-27.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 1:49 pm Instrument : Pest 10
Sample : wg1823359-4,42,,pest11274 Quant Date : 9/3/2023 2:00 pm

Compound #58: Endosulfan II #2



Original Peak Response = 343992050



Manual Peak Response = 342135411 M4
M4 = Poor automated baseline construction.

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 05 Sep 2023   8:27 am
Operator : PEST10:akm
Sample   : wg1823612-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc   : wg1823612,,ical20332
ALS Vial : 4 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:43:17 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:43:00 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	100	0.00
29	l1	chlordane-1		*1000.000	959.252	4.1	97	0.00
30	l1	chlordane-3		*1000.000	856.418	14.4	86	0.00
31	l1	chlordane-4		*1000.000	1052.145	-5.2	102	0.00
32	l1	chlordane-5		*1000.000	1065.297	-6.5	107	0.00

Signal #2

28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	95	0.00
29	l1	chlordane-1		*1000.000	913.307	8.7	89	0.00
30	l1	chlordane-3		*1000.000	1007.952	-0.8	92	0.00
31	l1	chlordane-4		*1000.000	990.536	0.9	93	0.00
32	l1	chlordane-5		*1000.000	952.135	4.8	89	0.00

Evaluate Continuing Calibration Report - Not Founds

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.27#
2	s	2,4,5,6-Tetrachloro-m-xylen		1.014	0.000	100.0#	0#	-1.60#
3	t	Hexachlorobenzene		1.097	0.000	100.0#	0#	-1.81#
4	t	alpha-BHC		1.364	0.000	100.0#	0#	-1.91#
5	t	gamma-BHC (lindane)		1.306	0.000	100.0#	0#	-2.10#
6	t	beta-BHC		0.604	0.000	100.0#	0#	-2.16#
7	t	delta-BHC		1.308	0.000	100.0#	0#	-2.28#
8	t	Heptachlor		1.271	0.000	100.0#	0#	-2.44#
9	t	Aldrin		1.157	0.000	100.0#	0#	-2.67#
10	t	Alachlor		0.248	0.000	100.0#	0#	-2.80#
11	t	Chlorpyrifos		0.655	0.000	100.0#	0#	-2.88#
12	t	Heptachlor Epoxide		1.141	0.000	100.0#	0#	-3.21#
13	t	gamma-Chlordane (trans)		1.100	0.000	100.0#	0#	-3.33#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 05 Sep 2023   8:27 am
Operator : PEST10:akm
Sample   : wg1823612-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc   : wg1823612,,ical20332
ALS Vial : 4 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:43:17 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:43:00 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-3.46#
15	t	4,4'-DDE		1.089	0.000	100.0#	0#	-3.55#
16	t	Endosulfan I		1.079	0.000	100.0#	0#	-3.59#
17	t	Dieldrin		1.093	0.000	100.0#	0#	-3.85#
18	t	Endrin		1.128	0.000	100.0#	0#	-4.10#
19	t	4,4'-DDD		0.885	0.000	100.0#	0#	-4.22#
20	t	Endosulfan II		1.020	0.000	100.0#	0#	-4.35#
21	t	4,4'-DDT		0.986	0.000	100.0#	0#	-4.52#
22	t	Endrin Aldehyde		0.844	0.000	100.0#	0#	-4.78#
23	t	Methoxychlor		0.563	0.000	100.0#	0#	-5.02#
24	t	Mirex		0.905	0.000	100.0#	0#	-5.07#
25	t	Endosulfan Sulfate		0.979	0.000	100.0#	0#	-5.18#
26	t	Endrin Ketone		1.088	0.000	100.0#	0#	-5.41#
27	s	Decachlorobiphenyl		0.916	0.000	100.0#	0#	-6.22#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.27#
34	l2	toxaphene-1		0.036	0.000	100.0#	0#	-4.34#
35	l2	toxaphene-2		0.035	0.000	100.0#	0#	-4.47#
36	l2	toxaphene-4		0.031	0.000	100.0#	0#	-4.90#
37	l2	toxaphene-5		0.036	0.000	100.0#	0#	-5.09#

Signal #2

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.34#
2	s	2,4,5,6-Tetrachloro-m-xyl		0.963	0.000	100.0#	0#	-1.81#
3	t	Hexachlorobenzene		1.075	0.000	100.0#	0#	-2.12#
4	t	alpha-BHC	*	50.000	0.000	100.0#	0	-2.22#
5	t	gamma-BHC (lindane)		1.285	0.000	100.0#	0#	-2.50#
6	t	beta-BHC		0.598	0.000	100.0#	0#	-2.56#
7	t	delta-BHC	*	50.000	0.000	100.0#	0	-2.82#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 05 Sep 2023   8:27 am
Operator : PEST10:akm
Sample   : wg1823612-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc   : wg1823612,,ical20332
ALS Vial : 4 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:43:17 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:43:00 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
8	t	Heptachlor		1.298	0.000	100.0#	0#	-2.89#
9	t	Aldrin	*	50.000	0.000	100.0#	0	-3.20#
10	t	Alachlor		0.197	0.000	100.0#	0#	-3.09#
11	t	Chlorpyrifos		0.651	0.000	100.0#	0#	-3.44#
12	t	Heptachlor Epoxide		1.186	0.000	100.0#	0#	-3.81#
13	t	gamma-Chlordane (trans)		1.246	0.000	100.0#	0#	-4.03#
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-4.20#
15	t	4,4'-DDE	*	50.000	0.000	100.0#	0	-4.41#
16	t	Endosulfan I		1.101	0.000	100.0#	0#	-4.26#
17	t	Dieldrin	*	50.000	0.000	100.0#	0	-4.56#
18	t	Endrin		1.205	0.000	100.0#	0#	-4.86#
19	t	4,4'-DDD	*	50.000	0.000	100.0#	0	-4.99#
20	t	Endosulfan II		0.995	0.000	100.0#	0#	-5.07#
21	t	4,4'-DDT	*	50.000	0.000	100.0#	0	-5.27#
22	t	Endrin Aldehyde		0.826	0.000	100.0#	0#	-5.37#
23	t	Methoxychlor		0.571	0.000	100.0#	0#	-5.84#
24	t	Mirex		0.904	0.000	100.0#	0#	-5.98#
25	t	Endosulfan Sulfate		0.951	0.000	100.0#	0#	-5.60#
26	t	Endrin Ketone		1.078	0.000	100.0#	0#	-6.01#
27	s	Decachlorobiphenyl		0.924	0.000	100.0#	0#	-6.88#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.34#
34	l2	toxaphene-1		0.024	0.000	100.0#	0#	-5.03#
35	l2	toxaphene-2		0.034	0.000	100.0#	0#	-5.05#
36	l2	toxaphene-4		0.043	0.000	100.0#	0#	-5.38#
37	l2	toxaphene-5		0.038	0.000	100.0#	0#	-5.79#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 8:27 am
Operator : PEST10:akm
Sample : wg1823612-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc : wg1823612,,ical20332
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:43:17 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:43:00 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	1.269	1.339	130.5E6	142.6E6	25.000M4	25.000
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D. d	N.D. d
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 8:27 am
Operator : PEST10:akm
Sample : wg1823612-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc : wg1823612,,ical20332
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:43:17 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:43:00 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l	
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d	
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d	
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d	
29) l1	chlordane-1	2.379	2.754	177.9E6	201.9E6	959.252	913.307	
30) l1	chlordane-3	2.440	3.353	274.1E6	230.9E6	856.418	1007.952	
31) l1	chlordane-4	2.787	4.029	214.6E6	842.8E6	1052.145	990.536	
32) l1	chlordane-5	3.330	4.202	777.3E6	635.3E6	1065.297	952.135	
Sum	chlordane-1			1443.9E6	1910.9E6	N.D.	N.D.	D
Average	chlordane-1					983.278	965.983	
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d	
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d	
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d	
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d	
Sum	toxaphene-1			0	0	N.D.	N.D.	
Average	toxaphene-1					0.000	0.000	

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.	
Average	toxaphene-1					0.000	0.000	

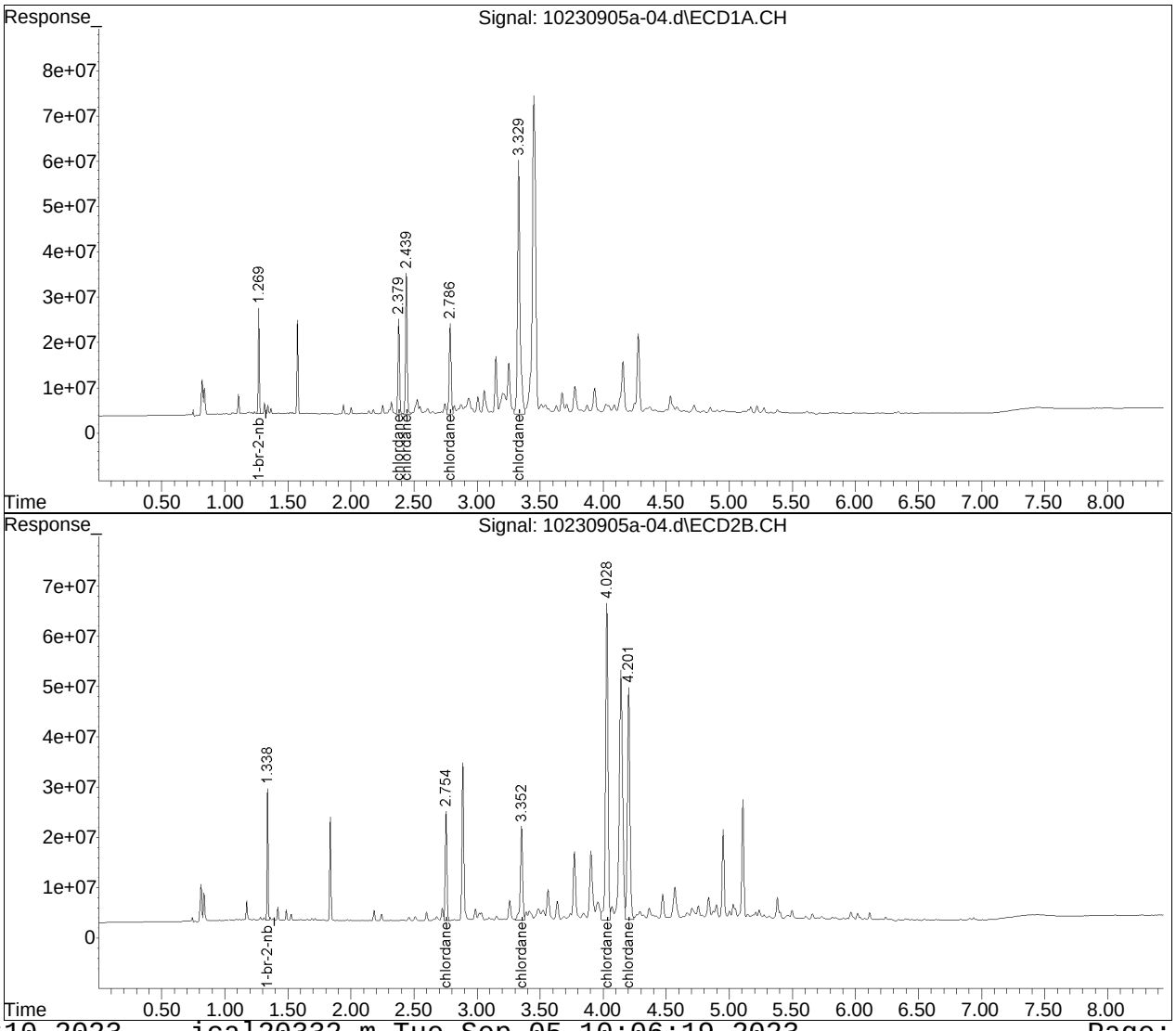
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-04.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 8:27 am
Operator : PEST10:akm
Sample : wg1823612-2,42,,chlor11212 (Sig #1); chlor11212 (Sig #2)
Misc : wg1823612,,ical20332
ALS Vial : 4 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:43:17 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:43:00 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

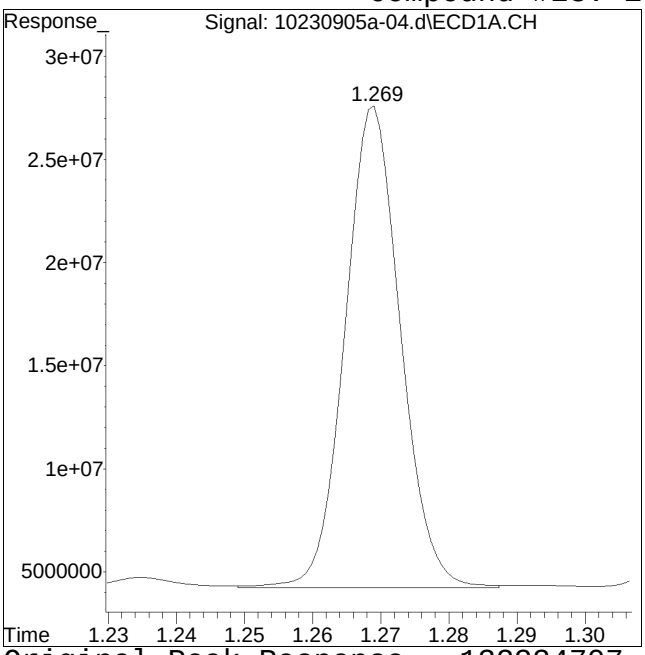
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

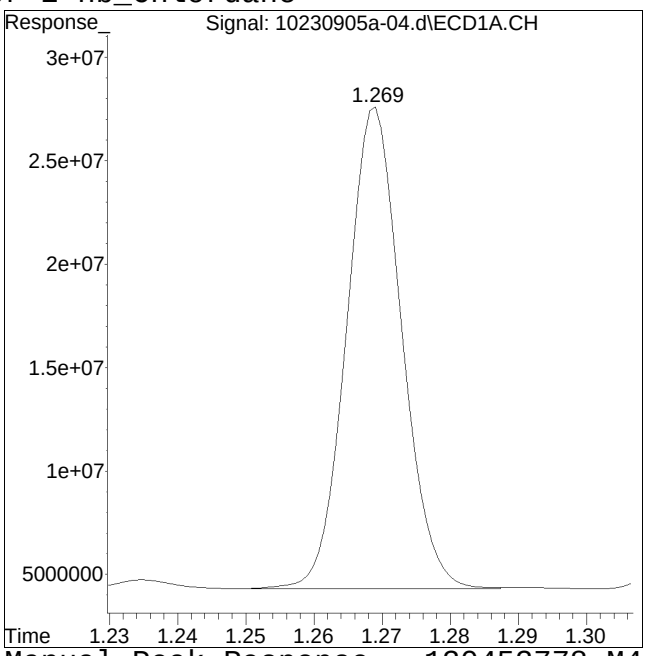


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-04.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 8:27 am Instrument : Pest 10
Sample : wg1823612-2,42,,chlor11212Quant Date : 9/5/2023 8:43 am

Compound #28: 1-br-2-nb_Chlordane





Original Peak Response = 132334707 Manual Peak Response = 130453778 M4
M4 = Poor automated baseline construction.

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 05 Sep 2023   8:38 am
Operator : PEST10:akm
Sample   : wg1823612-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc   : wg1823612,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:49:43 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	102	0.00
34	l2	toxaphene-1		0.036	0.038	-5.6	97	0.00
35	l2	toxaphene-2		0.035	0.035	0.0	97	0.00
36	l2	toxaphene-4		0.031	0.031	0.0	98	0.00
37	l2	toxaphene-5		0.036	0.036	0.0	98	0.00

Signal #2

33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	99	0.00
34	l2	toxaphene-1		0.024	0.021	12.5	86	0.00
35	l2	toxaphene-2		0.034	0.031	8.8	85	0.00
36	l2	toxaphene-4		0.043	0.042	2.3	96	0.00
37	l2	toxaphene-5		0.038	0.036	5.3	91	0.00

Evaluate Continuing Calibration Report - Not Founds

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.27#
2	s	2,4,5,6-Tetrachloro-m-xylen		1.014	0.000	100.0#	0#	-1.60#
3	t	Hexachlorobenzene		1.097	0.000	100.0#	0#	-1.81#
4	t	alpha-BHC		1.364	0.000	100.0#	0#	-1.91#
5	t	gamma-BHC (lindane)		1.306	0.000	100.0#	0#	-2.10#
6	t	beta-BHC		0.604	0.000	100.0#	0#	-2.16#
7	t	delta-BHC		1.308	0.000	100.0#	0#	-2.28#
8	t	Heptachlor		1.271	0.000	100.0#	0#	-2.44#
9	t	Aldrin		1.157	0.000	100.0#	0#	-2.67#
10	t	Alachlor		0.248	0.000	100.0#	0#	-2.80#
11	t	Chlorpyrifos		0.655	0.000	100.0#	0#	-2.88#
12	t	Heptachlor Epoxide		1.141	0.000	100.0#	0#	-3.21#
13	t	gamma-Chlordane (trans)		1.100	0.000	100.0#	0#	-3.33#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 05 Sep 2023   8:38 am
Operator : PEST10:akm
Sample   : wg1823612-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc   : wg1823612,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:49:43 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-3.46#
15	t	4,4'-DDE		1.089	0.000	100.0#	0#	-3.55#
16	t	Endosulfan I		1.079	0.000	100.0#	0#	-3.59#
17	t	Dieldrin		1.093	0.000	100.0#	0#	-3.85#
18	t	Endrin		1.128	0.000	100.0#	0#	-4.10#
19	t	4,4'-DDD		0.885	0.000	100.0#	0#	-4.22#
20	t	Endosulfan II		1.020	0.000	100.0#	0#	-4.35#
21	t	4,4'-DDT		0.986	0.000	100.0#	0#	-4.52#
22	t	Endrin Aldehyde		0.844	0.000	100.0#	0#	-4.78#
23	t	Methoxychlor		0.563	0.000	100.0#	0#	-5.02#
24	t	Mirex		0.905	0.000	100.0#	0#	-5.07#
25	t	Endosulfan Sulfate		0.979	0.000	100.0#	0#	-5.18#
26	t	Endrin Ketone		1.088	0.000	100.0#	0#	-5.41#
27	s	Decachlorobiphenyl		0.916	0.000	100.0#	0#	-6.22#
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.27#
29	l1	chlordane-1		*1000.000	0.000	100.0#	0	-2.38#
30	l1	chlordane-3		*1000.000	0.000	100.0#	0	-2.44#
31	l1	chlordane-4		*1000.000	0.000	100.0#	0	-2.79#
32	l1	chlordane-5		*1000.000	0.000	100.0#	0	-3.33#

Signal #2

1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	0	-1.34#
2	s	2,4,5,6-Tetrachloro-m-xyl		0.963	0.000	100.0#	0#	-1.81#
3	t	Hexachlorobenzene		1.075	0.000	100.0#	0#	-2.12#
4	t	alpha-BHC		* 50.000	0.000	100.0#	0	-2.22#
5	t	gamma-BHC (lindane)		1.285	0.000	100.0#	0#	-2.50#
6	t	beta-BHC		0.598	0.000	100.0#	0#	-2.56#
7	t	delta-BHC		* 50.000	0.000	100.0#	0	-2.82#

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 05 Sep 2023   8:38 am
Operator : PEST10:akm
Sample   : wg1823612-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc   : wg1823612,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:49:43 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 15%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
8	t	Heptachlor		1.298	0.000	100.0#	0#	-2.89#
9	t	Aldrin	*	50.000	0.000	100.0#	0	-3.20#
10	t	Alachlor		0.197	0.000	100.0#	0#	-3.09#
11	t	Chlorpyrifos		0.651	0.000	100.0#	0#	-3.44#
12	t	Heptachlor Epoxide		1.186	0.000	100.0#	0#	-3.81#
13	t	gamma-Chlordane (trans)		1.246	0.000	100.0#	0#	-4.03#
14	t	alpha-Chlordane (cis)		1.208	0.000	100.0#	0#	-4.20#
15	t	4,4'-DDE	*	50.000	0.000	100.0#	0	-4.41#
16	t	Endosulfan I		1.101	0.000	100.0#	0#	-4.26#
17	t	Dieldrin	*	50.000	0.000	100.0#	0	-4.56#
18	t	Endrin		1.205	0.000	100.0#	0#	-4.86#
19	t	4,4'-DDD	*	50.000	0.000	100.0#	0	-4.99#
20	t	Endosulfan II		0.995	0.000	100.0#	0#	-5.07#
21	t	4,4'-DDT	*	50.000	0.000	100.0#	0	-5.27#
22	t	Endrin Aldehyde		0.826	0.000	100.0#	0#	-5.37#
23	t	Methoxychlor		0.571	0.000	100.0#	0#	-5.84#
24	t	Mirex		0.904	0.000	100.0#	0#	-5.98#
25	t	Endosulfan Sulfate		0.951	0.000	100.0#	0#	-5.60#
26	t	Endrin Ketone		1.078	0.000	100.0#	0#	-6.01#
27	s	Decachlorobiphenyl		0.924	0.000	100.0#	0#	-6.88#
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.34#
29	l1	chlordane-1	*	1000.000	0.000	100.0#	0	-2.75#
30	l1	chlordane-3	*	1000.000	0.000	100.0#	0	-3.35#
31	l1	chlordane-4	*	1000.000	0.000	100.0#	0	-4.03#
32	l1	chlordane-5	*	1000.000	0.000	100.0#	0	-4.20#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 8:38 am
Operator : PEST10:akm
Sample : wg1823612-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc : wg1823612,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:49:43 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	0.000	0.000	0	0	N.D. d	N.D. d
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	1.268	1.339	134.4E6	145.2E6	25.000	25.000
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
27) s	Decachlorobi	0.000	0.000	0	0	N.D. d	N.D. d
	Spiked Amount	50.000	Range 30 - 150	Recovery	=	0.00%#	0.00%#
	Target Compounds						
3) t	Hexachlorobe	0.000	0.000	0	0	N.D. d	N.D. d
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
10) t	Alachlor	0.000	0.000	0	0	N.D. d	N.D. d
11) t	Chlorpyrifos	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t	Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 8:38 am
Operator : PEST10:akm
Sample : wg1823612-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc : wg1823612,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:49:43 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	0.000	0.000	0	0	N.D. d	N.D. d
25) t	Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	4.344	5.026	406.0E6	241.2E6	2098.965	1757.358
35) l2	toxaphene-2	4.471	5.054	380.2E6	360.3E6	2039.495	1805.990
36) l2	toxaphene-4	4.898	5.375	334.4E6	488.1E6	2036.290	1932.831
37) l2	toxaphene-5	5.087	5.787	391.3E6	415.5E6	2003.789	1862.921
Sum	toxaphene-1			1511.8E6	1505.2E6	8178.538	7359.101
Average	toxaphene-1					2044.635	1839.775

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			1511.8E6	1505.2E6	8178.538	7359.101
Average	toxaphene-1					2044.635	1839.775

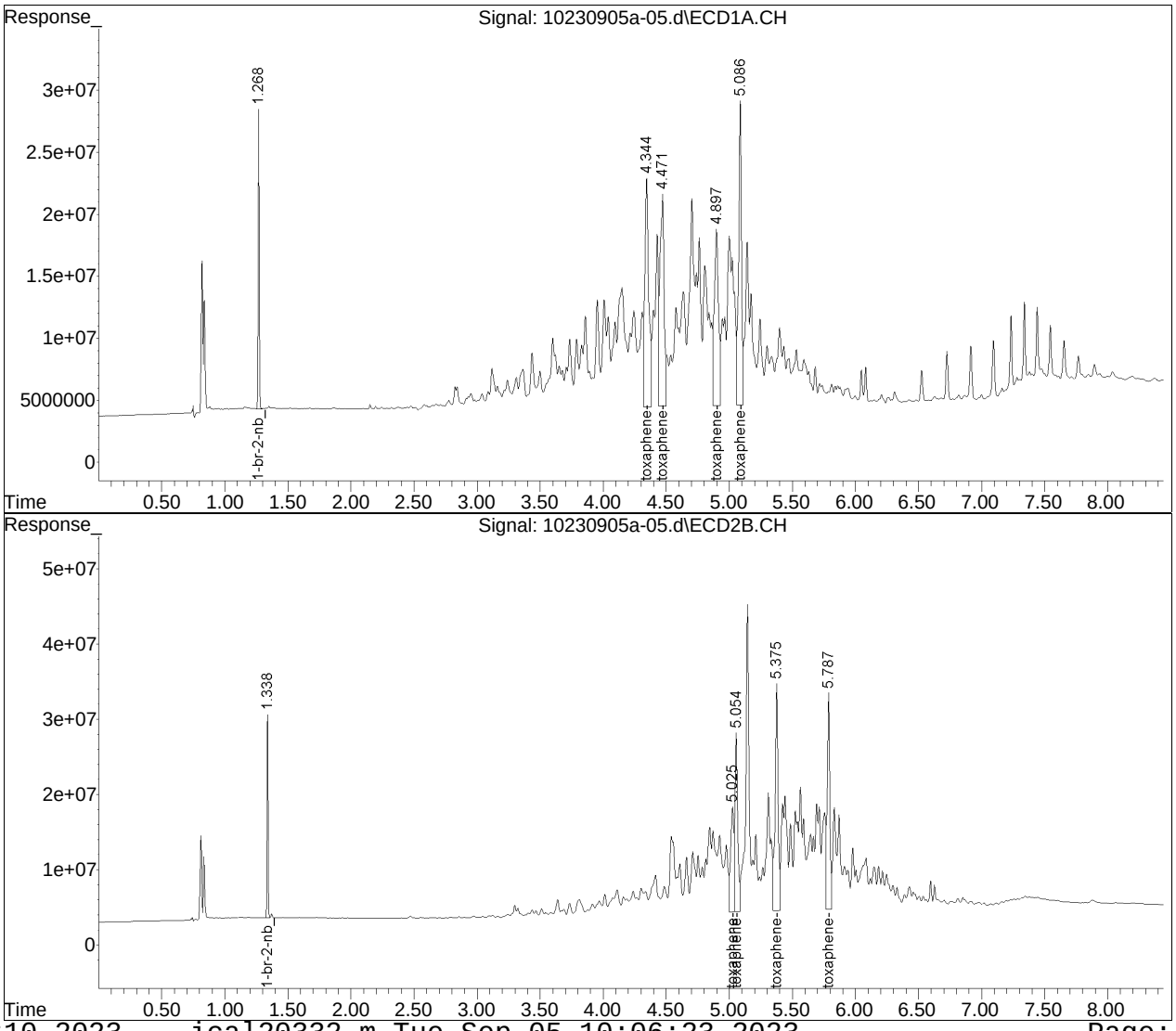
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-05.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 8:38 am
Operator : PEST10:akm
Sample : wg1823612-3,42,,tox11211 (Sig #1); tox11211 (Sig #2)
Misc : wg1823612,,ical20332
ALS Vial : 5 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:49:43 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PEST\Pest10\2023\230905QMethod		: pest10_2023_08_28_ugL_ic
Data File	: 10230905a-05.d	Operator	: PEST10:akm
Date Inj'd	: 9/5/2023 8:38 am	Instrument	: Pest 10
Sample	: wg1823612-3,42,,tox11211	Quant Date	: 9/5/2023 8:49 am

There are no manual integrations or false positives in this file.

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-28.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 05 Sep 2023   1:12 pm
Operator : PEST10:akm
Sample   : wg1823612-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc   : wg1823612,,ical20332
ALS Vial : 28 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 13:22:37 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	105	0.00
2	s	2,4,5,6-Tetrachloro-m-xylen		1.014	0.971	4.2	113	0.00
3	t	Hexachlorobenzene		1.097	1.130	-3.0	125	0.00
4	t	alpha-BHC		1.364	1.556	-14.1	126	0.00
5	t	gamma-BHC (lindane)		1.306	1.414	-8.3	124	0.00
6	t	beta-BHC		0.604	0.586	3.0	117	0.00
7	t	delta-BHC		1.308	1.544	-18.0	132	0.01
8	t	Heptachlor		1.271	1.372	-7.9	125	0.01
9	t	Aldrin		1.157	1.278	-10.5	124	0.01
10	t	Alachlor		0.248	0.284	-14.5	137	0.01
11	t	Chlorpyrifos		0.655	0.649	0.9	122	0.01
12	t	Heptachlor Epoxide		1.141	1.199	-5.1	121	0.01
13	t	gamma-Chlordane (trans)		1.100	1.211	-10.1	134	0.01
14	t	alpha-Chlordane (cis)		1.208	1.242	-2.8	121	0.02
15	t	4,4'-DDE		1.089	1.189	-9.2	122	0.02
16	t	Endosulfan I		1.079	1.135	-5.2	122	0.01
17	t	Dieldrin		1.093	1.252	-14.5	131	0.02
18	t	Endrin		1.128	1.191	-5.6	119	0.02
19	t	4,4'-DDD		0.885	1.018	-15.0	129	0.02
20	t	Endosulfan II		1.020	1.092	-7.1	124	0.01
21	t	4,4'-DDT		0.986	0.986	0.0	110	0.01
22	t	Endrin Aldehyde		0.844	0.682	19.2	92	0.01
23	t	Methoxychlor		0.563	0.580	-3.0	118	0.01
24	t	Mirex		0.905	0.889	1.8	117	0.01
25	t	Endosulfan Sulfate		0.979	1.036	-5.8	121	0.01
26	t	Endrin Ketone		1.088	1.226	-12.7	127	0.01
27	s	Decachlorobiphenyl		0.916	0.782	14.6	98	0.00

Signal #2

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-28.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 05 Sep 2023   1:12 pm
Operator : PEST10:akm
Sample   : wg1823612-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc   : wg1823612,,ical20332
ALS Vial : 28 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 13:22:37 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
1	i	1-br-2-nb_Pesticides	^	1.000	1.000	0.0	95	0.00
2	s	2,4,5,6-Tetrachloro-m-xyl		0.963	0.981	-1.9	103	0.00
3	t	Hexachlorobenzene		1.075	1.156	-7.5	114	0.00
4	t	alpha-BHC	*	50.000	52.786	-5.6	112	0.00
5	t	gamma-BHC (lindane)		1.285	1.470	-14.4	111	0.00
6	t	beta-BHC		0.598	0.595	0.5	106	0.00
7	t	delta-BHC	*	50.000	55.857	-11.7	119	0.00
8	t	Heptachlor		1.298	1.450	-11.7	111	0.00
9	t	Aldrin	*	50.000	53.183	-6.4	110	0.00
10	t	Alachlor		0.197	0.213	-8.1	112	0.00
11	t	Chlorpyrifos		0.651	0.639	1.8	105	0.00
12	t	Heptachlor Epoxide		1.186	1.304	-9.9	110	0.00
13	t	gamma-Chlordane (trans)		1.246	1.361	-9.2	123	0.00
14	t	alpha-Chlordane (cis)		1.208	1.306	-8.1	108	0.00
15	t	4,4'-DDE	*	50.000	51.668	-3.3	107	0.00
16	t	Endosulfan I		1.101	1.229	-11.6	110	0.00
17	t	Dieldrin	*	50.000	56.192	-12.4	115	0.00
18	t	Endrin		1.205	1.296	-7.6	107	0.00
19	t	4,4'-DDD	*	50.000	53.148	-6.3	111	0.00
20	t	Endosulfan II		0.995	1.106	-11.2	107	0.00
21	t	4,4'-DDT	*	50.000	50.200	-0.4	102	0.00
22	t	Endrin Aldehyde		0.826	0.671	18.8	79	0.00
23	t	Methoxychlor		0.571	0.567	0.7	99	0.00
24	t	Mirex		0.904	0.835	7.6	96	0.00
25	t	Endosulfan Sulfate		0.951	1.028	-8.1	107	0.00
26	t	Endrin Ketone		1.078	1.141	-5.8	105	0.00
27	s	Decachlorobiphenyl		0.924	0.786	14.9	87	0.00

Evaluate Continuing Calibration Report - Not Founds

Evaluate Continuing Calibration Report

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-28.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On   : 05 Sep 2023   1:12 pm
Operator : PEST10:akm
Sample   : wg1823612-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc   : wg1823612,,ical20332
ALS Vial : 28 (Sig #1); 0 (Sig #2)   Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 13:22:37 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation   6890 Scale Mode: Large solvent peaks clipped

Volume Inj.   :
Signal #1 Phase :   Signal #2 Phase:
Signal #1 Info :   Signal #2 Info :

Min. RRF   :   0.000 Min. Rel. Area : 50% Max. R.T. Dev 0.50min
Max. RRF Dev : 20%   Max. Rel. Area : 150%

		Compound		AvgRF	CCRF	%Dev	Area%	Dev(Min)
28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.27#
29	l1	chlordane-1		*1000.000	0.000	100.0#	0	-2.38#
30	l1	chlordane-3		*1000.000	0.000	100.0#	0	-2.44#
31	l1	chlordane-4		*1000.000	0.000	100.0#	0	-2.79#
32	l1	chlordane-5		*1000.000	0.000	100.0#	0	-3.33#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.27#
34	l2	toxaphene-1		0.036	0.000	100.0#	0#	-4.34#
35	l2	toxaphene-2		0.035	0.000	100.0#	0#	-4.47#
36	l2	toxaphene-4		0.031	0.000	100.0#	0#	-4.90#
37	l2	toxaphene-5		0.036	0.000	100.0#	0#	-5.09#

Signal #2

28	i	1-br-2-nb_Chlordane	^	1.000	1.000	0.0	0	-1.34#
29	l1	chlordane-1		*1000.000	0.000	100.0#	0	-2.75#
30	l1	chlordane-3		*1000.000	0.000	100.0#	0	-3.35#
31	l1	chlordane-4		*1000.000	0.000	100.0#	0	-4.03#
32	l1	chlordane-5		*1000.000	0.000	100.0#	0	-4.20#
33	i	1-br-2-nb_Toxaphene	^	1.000	1.000	0.0	0	-1.34#
34	l2	toxaphene-1		0.024	0.000	100.0#	0#	-5.03#
35	l2	toxaphene-2		0.034	0.000	100.0#	0#	-5.05#
36	l2	toxaphene-4		0.043	0.000	100.0#	0#	-5.38#
37	l2	toxaphene-5		0.038	0.000	100.0#	0#	-5.79#

* Evaluation of CC level amount vs concentration.
(#) = Out of Range SPCC's out = 0 CCC's out = 0
(^) = ISTD area calculated using ICAL average

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-28.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 1:12 pm
Operator : PEST10:akm
Sample : wg1823612-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc : wg1823612,,ical20332
ALS Vial : 28 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 13:22:37 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.272	1.339	135.0E6	140.6E6	25.000	25.000
28) i	1-br-2-nb_Ch	0.000	0.000	0	0	N.D. d	N.D. d
33) i	1-br-2-nb_To	0.000	0.000	0	0	N.D. d	N.D. d
	System Monitoring Compounds						
2) s	2,4,5,6-Tetr	1.608	1.809	262.2E6	275.7E6	47.880	50.890
	Spiked Amount 50.000	Range 30 - 150		Recovery =		95.76%	101.78%
27) s	Decachlorobi	6.232	6.886	211.1E6	221.1E6	42.663	42.520
	Spiked Amount 50.000	Range 30 - 150		Recovery =		85.33%	85.04%
	Target Compounds						
3) t	Hexachlorobe	1.816	2.124	305.2E6	325.1E6	51.485	53.771
4) t	alpha-BHC	1.914	2.218	420.2E6	454.8E6	57.024	52.786
5) t	gamma-BHC (l	2.112	2.500	382.0E6	413.3E6	54.125	57.192
6) t	beta-BHC	2.168	2.565	158.3E6	167.4E6	48.536	49.756
7) t	delta-BHC	2.293	2.828	417.1E6	450.9E6	59.039	55.857
8) t	Heptachlor	2.449	2.891	370.7E6	407.9E6	53.996	55.876
9) t	Aldrin	2.685	3.206	345.2E6	388.8E6	55.247	53.183
10) t	Alachlor	2.809	3.092	76764057	59957252	57.389	54.019
11) t	Chlorpyrifos	2.897	3.443	175.2E6	179.8E6	49.538	49.119
12) t	Heptachlor E	3.220	3.816	323.9E6	366.5E6	52.539M4	54.939
13) t	gamma-Chlord	3.341	4.034	327.0E6	382.8E6	55.030M4	54.631
14) t	alpha-Chlord	3.474	4.207	335.5E6	367.2E6	51.417	54.042
15) t	4,4'-DDE	3.570	4.411	321.3E6	363.6E6	54.598	51.668
16) t	Endosulfan I	3.608	4.269	306.7E6	345.7E6	52.603	55.818
17) t	Dieldrin	3.864	4.566	338.2E6	374.6E6	57.295	56.192M4
18) t	Endrin	4.117	4.869	321.7E6	364.3E6	52.775	53.765
19) t	4,4'-DDD	4.234	4.996	274.9E6	300.1E6	57.487	53.148M4
20) t	Endosulfan I	4.367	5.071	295.0E6	311.1E6	53.529	55.601M4
21) t	4,4'-DDT	4.535	5.277	266.4E6	315.4E6	50.036	50.200M4
22) t	Endrin Aldeh	4.795	5.371	184.2E6	188.7E6	40.412	40.616M4
23) t	Methoxychlor	5.035	5.848	156.8E6	159.5E6	51.556	49.675M4

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-28.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 1:12 pm
Operator : PEST10:akm
Sample : wg1823612-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc : wg1823612,,ical20332
ALS Vial : 28 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 13:22:37 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
24) t	Mirex	5.083	5.980	240.0E6	234.7E6	49.076	46.159
25) t	Endosulfan S	5.195	5.603	279.9E6	288.9E6	52.924M4	54.029
26) t	Endrin Keton	5.424	6.016	331.3E6	320.7E6	56.384	52.905M4
29) l1	chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1	chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1	chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1	chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
34) l2	toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2	toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2	toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2	toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

SemiQuant Compounds - Not Calibrated on this Instrument

Sum	toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

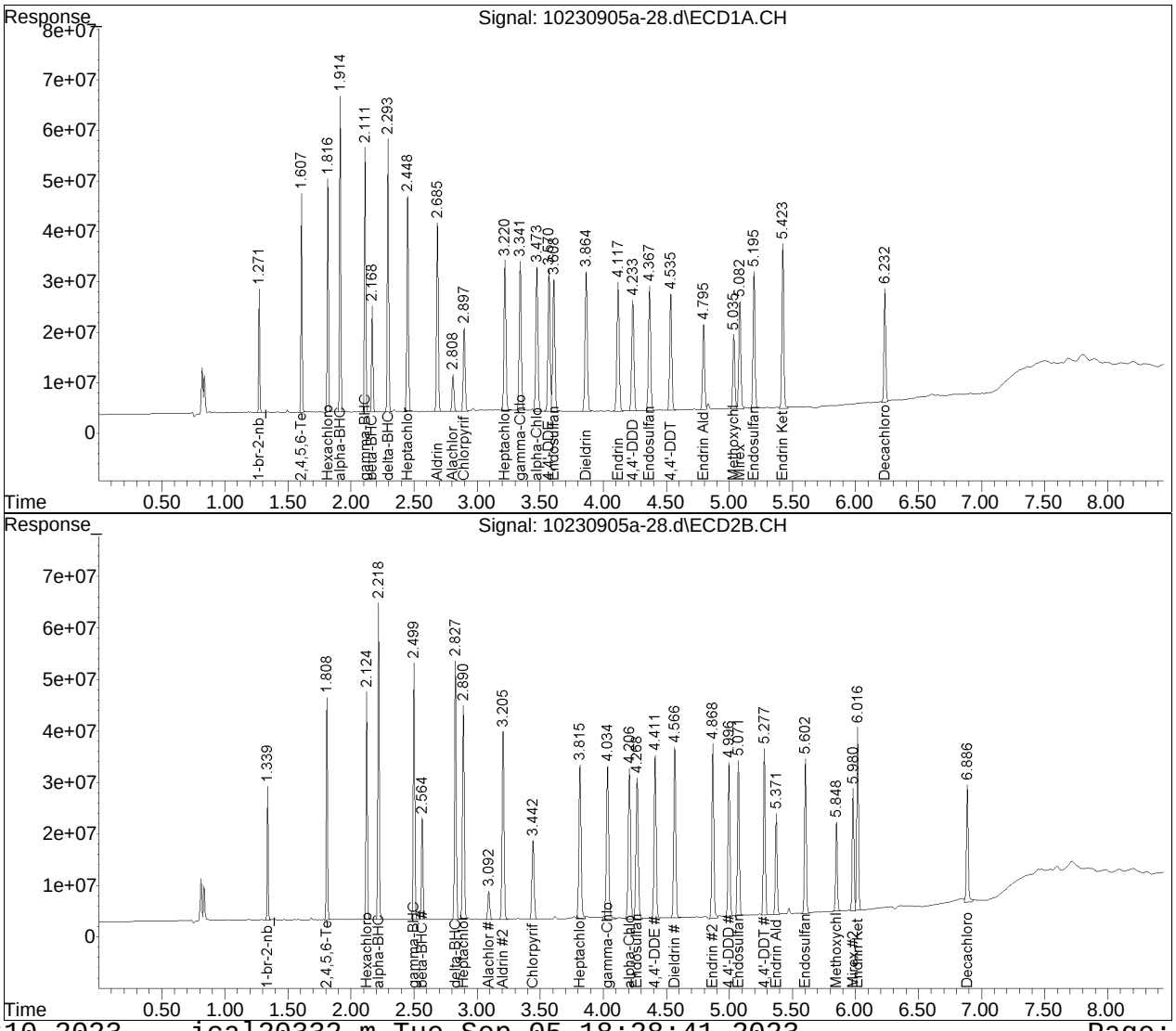
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listed Reviewed)

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-28.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 1:12 pm
Operator : PEST10:akm
Sample : wg1823612-4,42,,pest11274 (Sig #1); pest11274 (Sig #2)
Misc : wg1823612,,ical20332
ALS Vial : 28 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 13:22:37 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:49:26 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

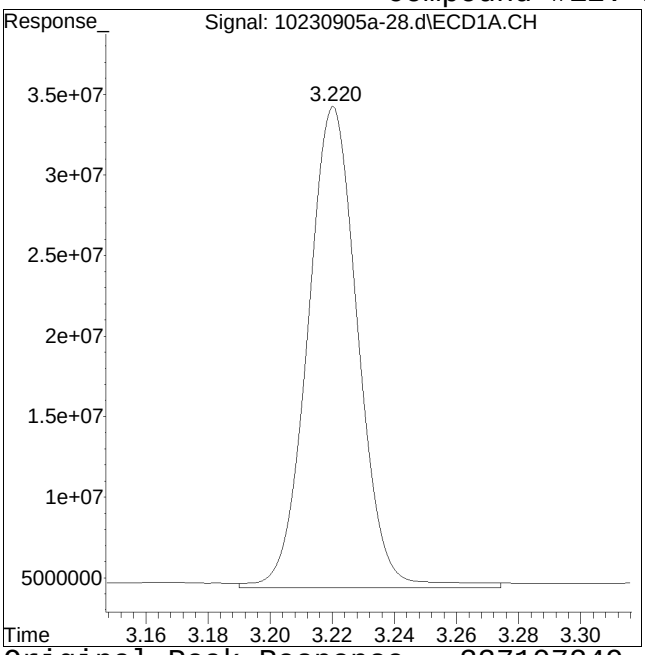
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



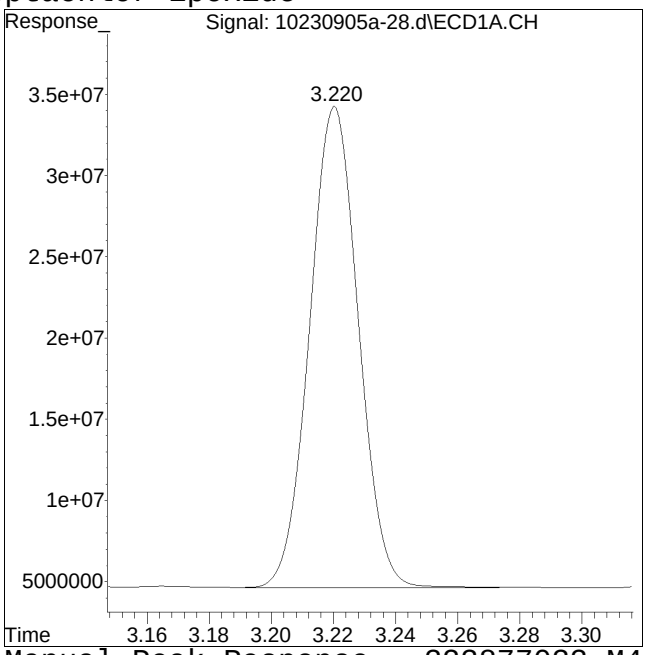
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-28.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 1:12 pm Instrument : Pest 10
Sample : wg1823612-4,42,,pest11274 Quant Date : 9/5/2023 1:21 pm

Compound #12: Heptachlor Epoxide



Original Peak Response = 337107249



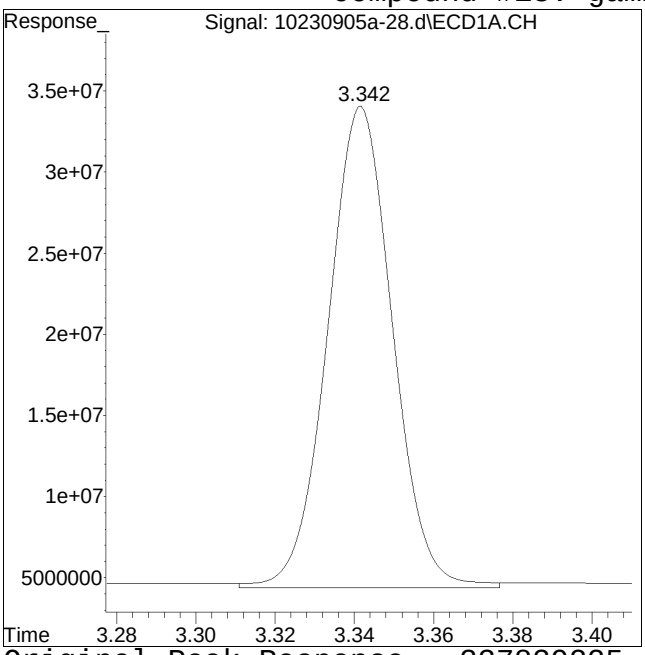
Manual Peak Response = 323877033 M4

M4 = Poor automated baseline construction.

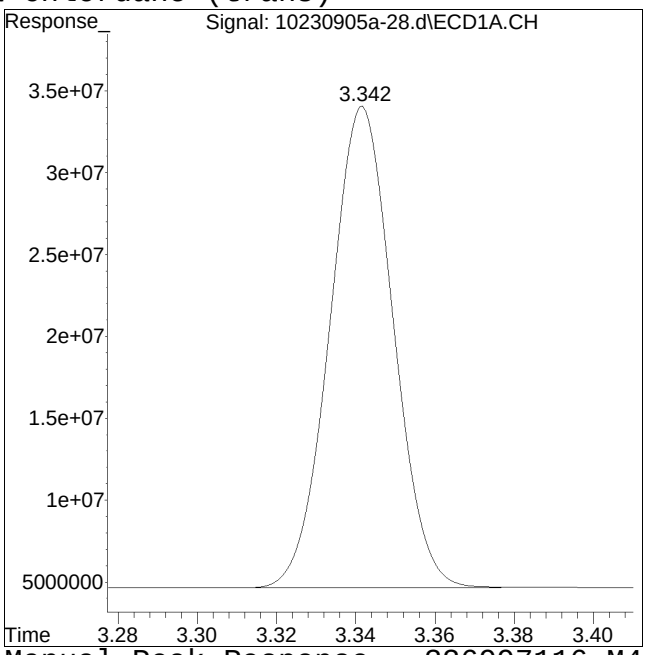
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-28.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 1:12 pm Instrument : Pest 10
Sample : wg1823612-4,42,,pest11274 Quant Date : 9/5/2023 1:21 pm

Compound #13: gamma-Chlordane (trans)



Original Peak Response = 337839225

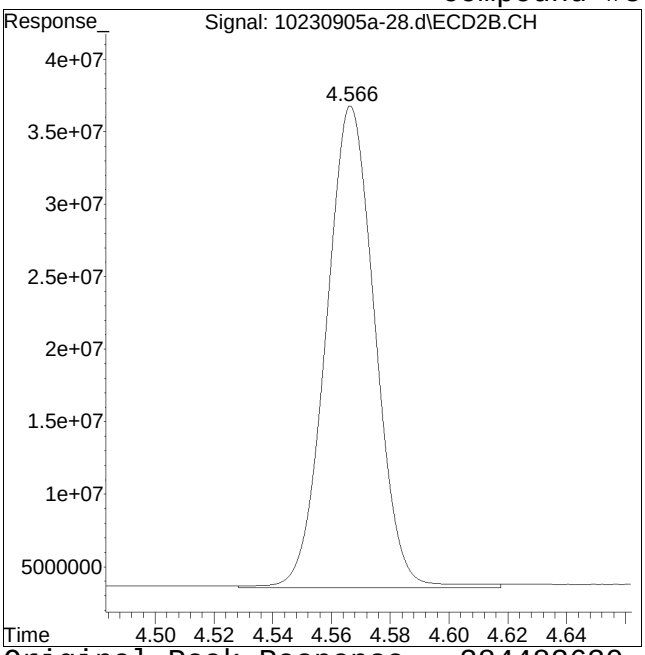


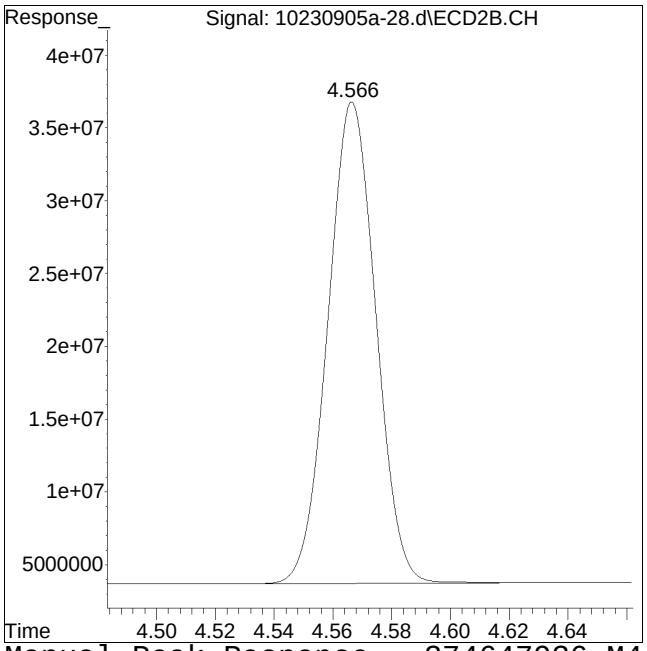
Manual Peak Response = 326997116 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-28.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 1:12 pm Instrument : Pest 10
Sample : wg1823612-4,42,,pest11274 Quant Date : 9/5/2023 1:21 pm

Compound #55: Dieldrin #2



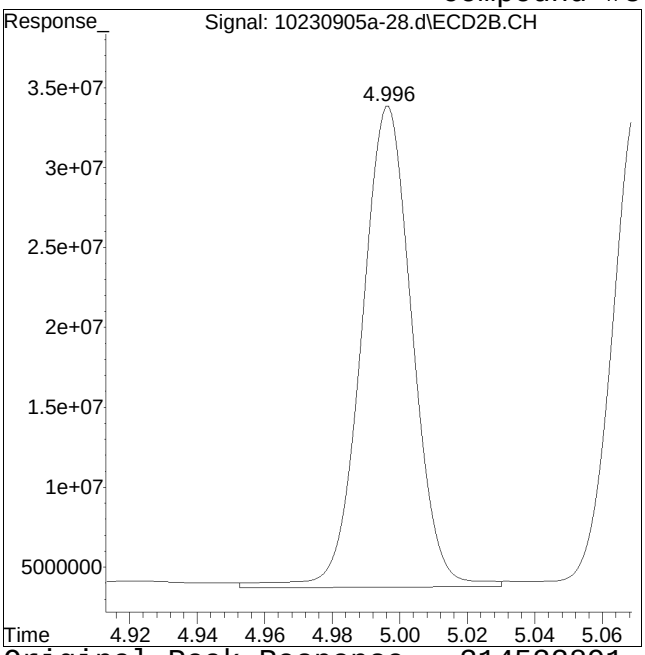


Original Peak Response = 384483630 Manual Peak Response = 374647936 M4
M4 = Poor automated baseline construction.

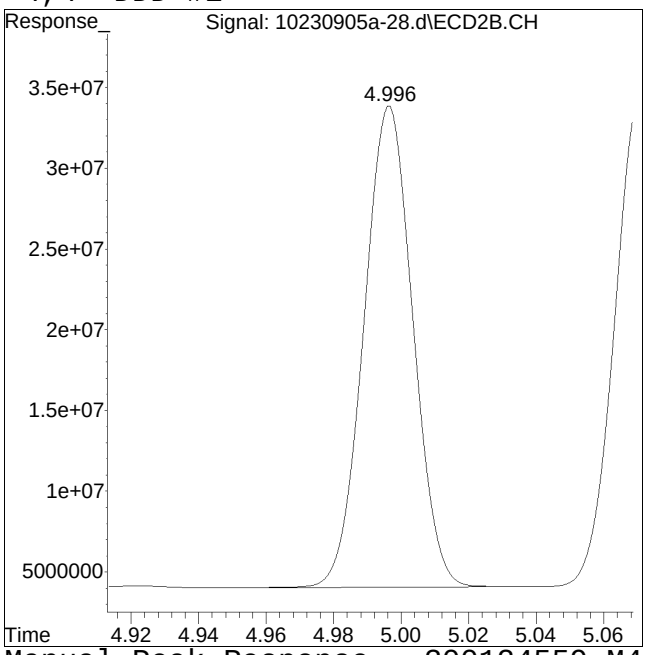
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-28.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 1:12 pm Instrument : Pest 10
Sample : wg1823612-4,42,,pest11274 Quant Date : 9/5/2023 1:21 pm

Compound #57: 4,4'-DDD #2



Original Peak Response = 314532891

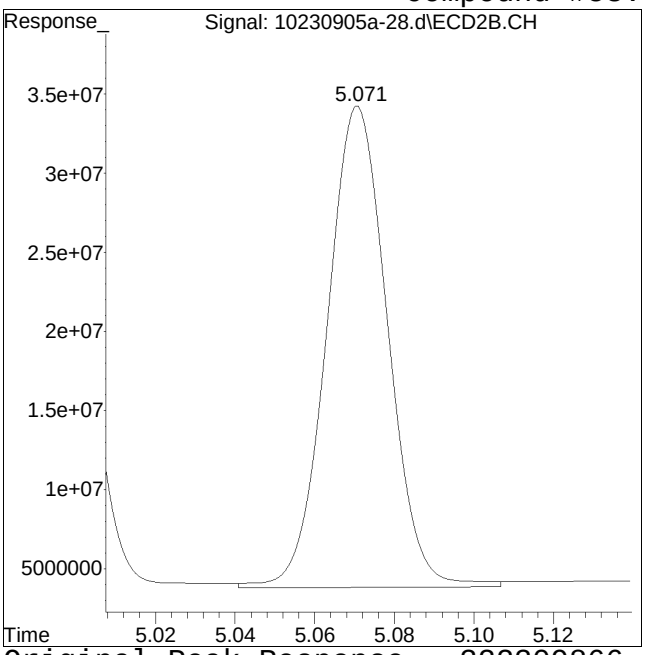


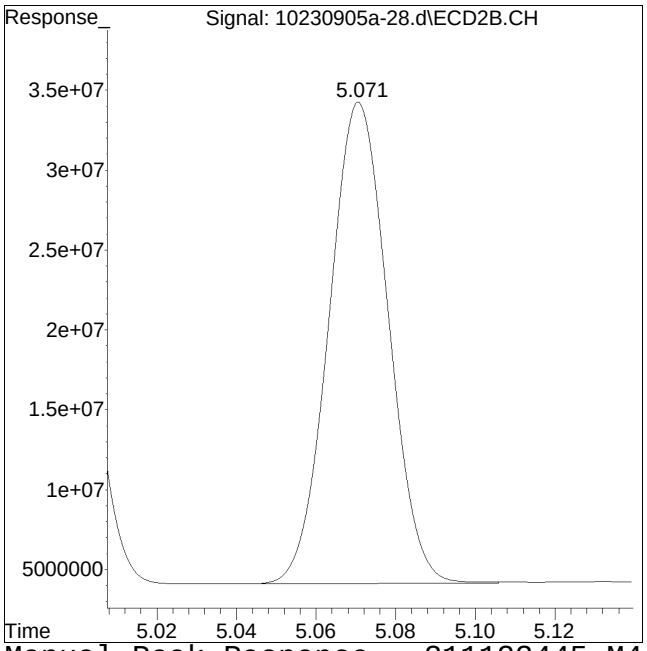
Manual Peak Response = 300124559 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-28.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 1:12 pm Instrument : Pest 10
Sample : wg1823612-4,42,,pest11274 Quant Date : 9/5/2023 1:21 pm

Compound #58: Endosulfan II #2



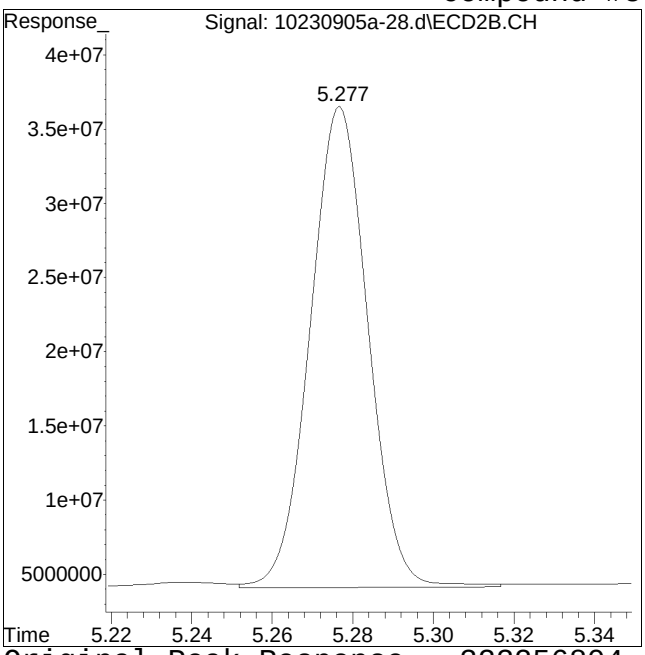


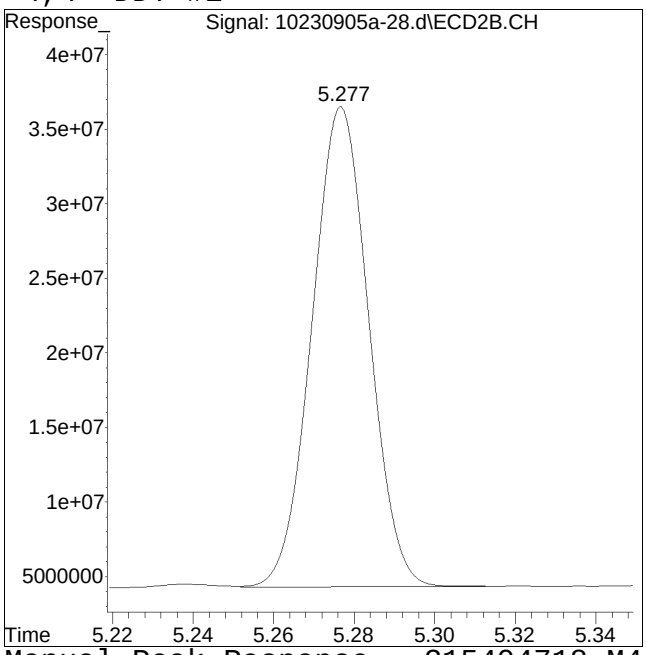
Original Peak Response = 322309866 Manual Peak Response = 311123445 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-28.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 1:12 pm Instrument : Pest 10
Sample : wg1823612-4,42,,pest11274 Quant Date : 9/5/2023 1:21 pm

Compound #59: 4,4'-DDT #2



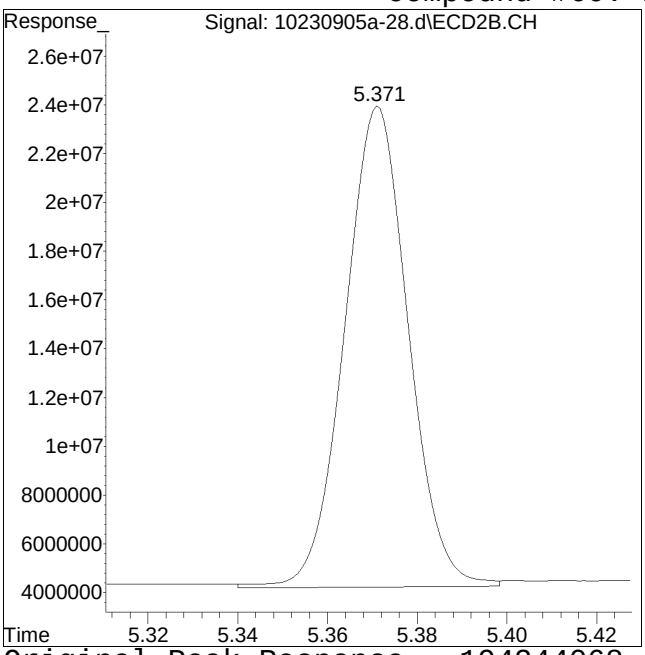


Original Peak Response = 323256804 Manual Peak Response = 315404718 M4
M4 = Poor automated baseline construction.

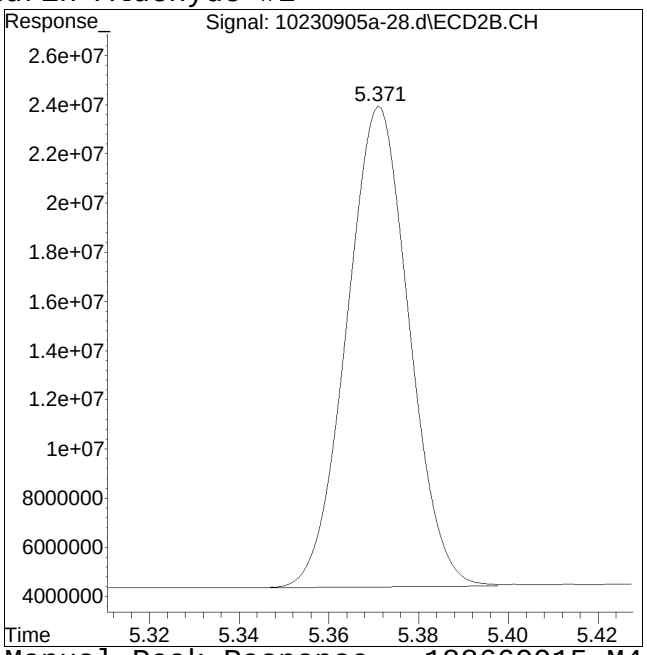
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-28.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 1:12 pm Instrument : Pest 10
Sample : wg1823612-4,42,,pest11274 Quant Date : 9/5/2023 1:21 pm

Compound #60: Endrin Aldehyde #2



Original Peak Response = 194244068



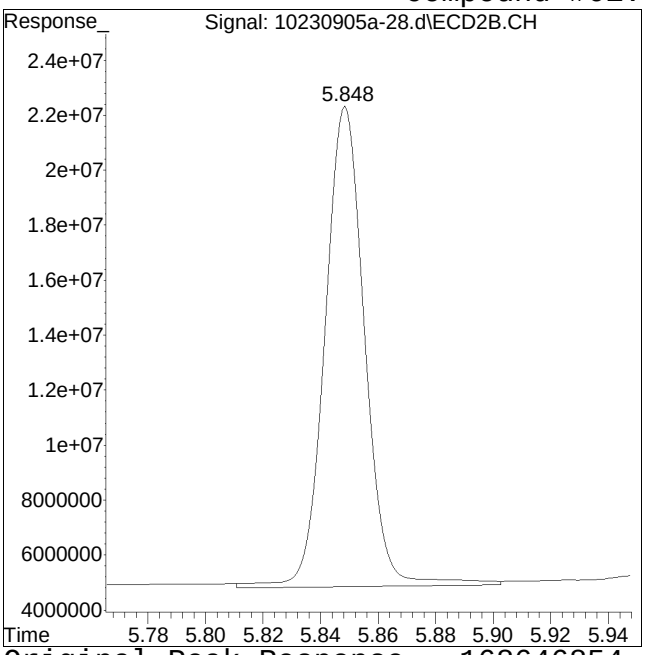
Manual Peak Response = 188660915 M4

M4 = Poor automated baseline construction.

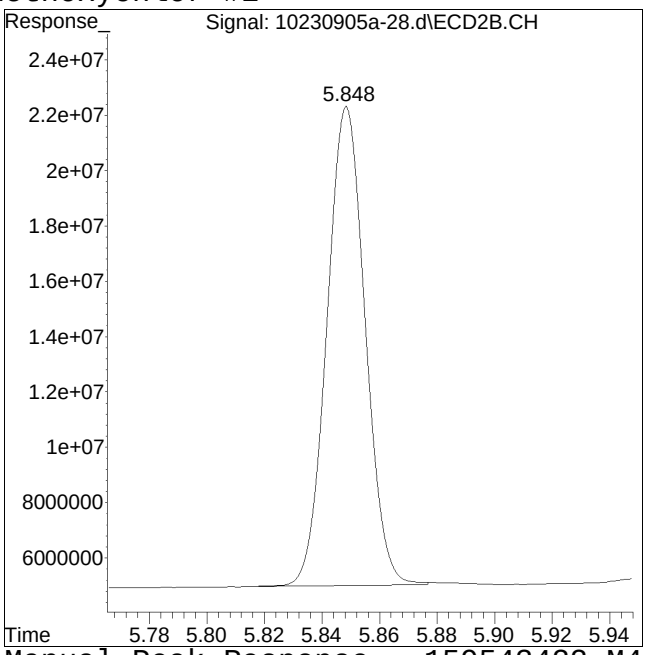
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-28.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 1:12 pm Instrument : Pest 10
Sample : wg1823612-4,42,,pest11274 Quant Date : 9/5/2023 1:21 pm

Compound #61: Methoxychlor #2



Original Peak Response = 168646854



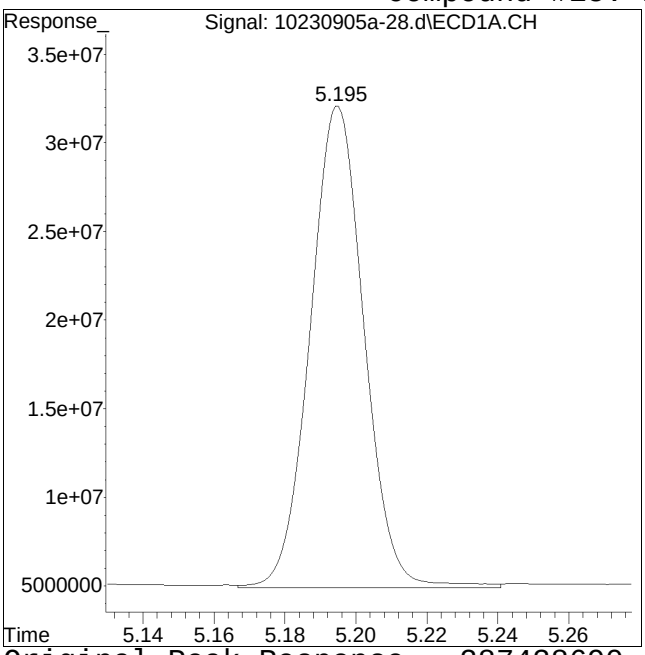
Manual Peak Response = 159543422 M4

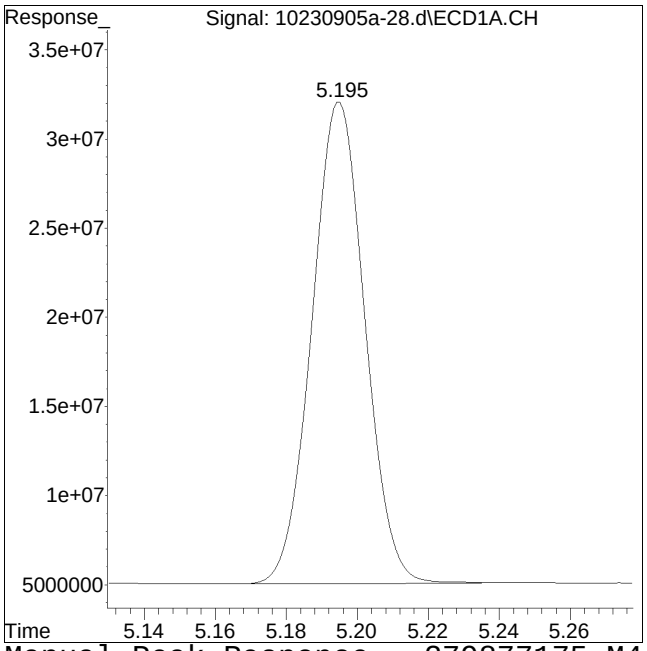
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-28.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 1:12 pm Instrument : Pest 10
Sample : wg1823612-4,42,,pest11274 Quant Date : 9/5/2023 1:21 pm

Compound #25: Endosulfan Sulfate



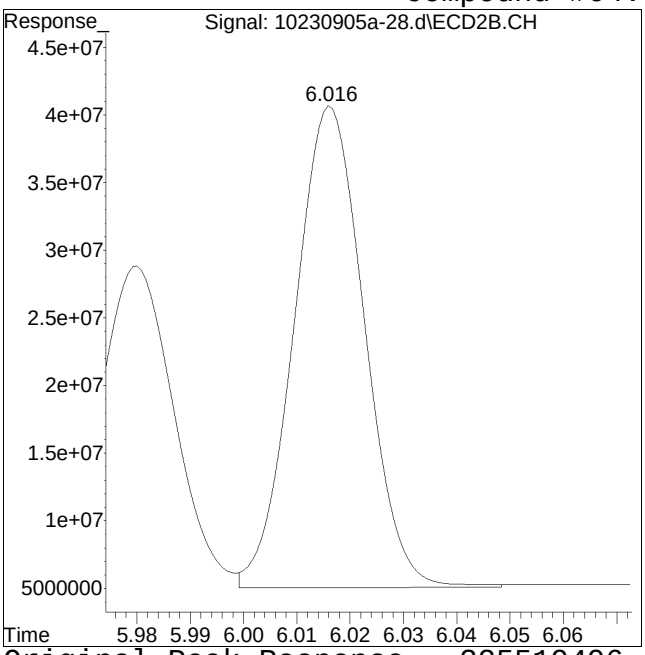


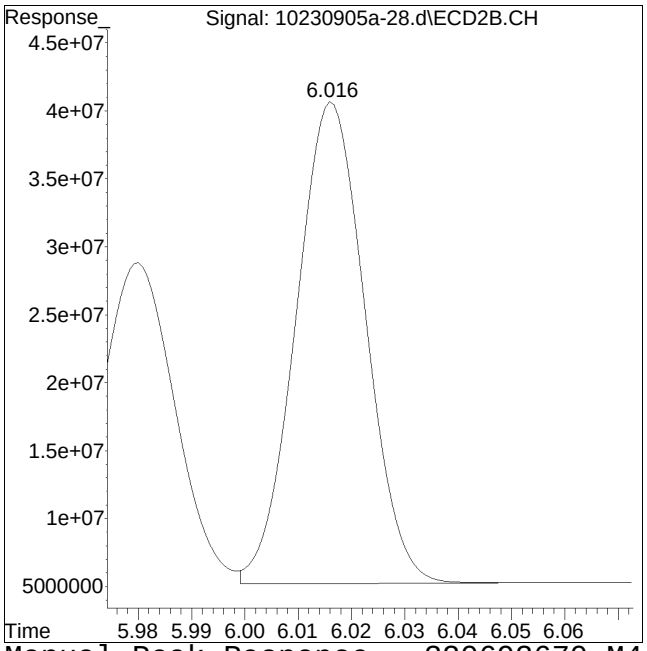
Original Peak Response = 287438690 Manual Peak Response = 279877175 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-28.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 1:12 pm Instrument : Pest 10
Sample : wg1823612-4,42,,pest11274 Quant Date : 9/5/2023 1:21 pm

Compound #64: Endrin Ketone #2





Original Peak Response = 325519496 Manual Peak Response = 320693670 M4
M4 = Poor automated baseline construction.

Degradation Check Standard

Performance Evaluation Mixture Summary
Form 15
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: PEST10	**Analysis Date**	: 09/01/23 06:33
PEM Standard	: R1736359-1		
Column 1	: RTX-5	**Column 2**	: RTX-CLPPesticides2

Parameter	Signal 1	Signal 2
4,4'-DDE	2074400.577	855801.04314
Endrin	321700354.04614	418247968.21043
4,4'-DDD	1435153.67006	1228574.5027
4,4'-DDT	546883389.53684	742938520.76204
Endrin Aldehyde	0	0
Endrin Ketone	1574755.49078	1475782.70222

Parameter	%Breakdown 1	%Breakdown 2
Endrin	0.487	0.352
DDT	0.638	0.280

Performance Evaluation Mixture Summary
Form 15
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: PEST10	**Analysis Date**	: 09/03/23 09:10
PEM Standard	: R1736873-1		
Column 1	: RTX-5	**Column 2**	: RTX-CLPPesticides2

Parameter	Signal 1	Signal 2
4,4'-DDE	820840.536	976614.0016
Endrin	327315343.71982	371535263.87922
4,4'-DDD	1249440.384	2147483.8464
4,4'-DDT	556929009.4244	659722998.23868
Endrin Aldehyde	0	0
Endrin Ketone	642180.2724	912229.89751

Parameter	%Breakdown 1	%Breakdown 2
Endrin	0.196	0.245
DDT	0.370	0.471

Performance Evaluation Mixture Summary
Form 15
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: PEST10	**Analysis Date**	: 09/05/23 08:05
PEM Standard	: R1737093-1		
Column 1	: RTX-5	**Column 2**	: RTX-CLPPesticides2

Parameter	Signal 1	Signal 2
4,4'-DDE	740435.30876	633955.14482
Endrin	334049901.51375	384897013.42148
4,4'-DDD	476573.38787	1031383.90203
4,4'-DDT	589576268.04639	684682956.48067
Endrin Aldehyde	0	0
Endrin Ketone	512314.16345	1238384.29742

Parameter	%Breakdown 1	%Breakdown 2
Endrin	0.153	0.321
DDT	0.206	0.243

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 6:33 am
Operator : PEST10:ar
Sample : PEM10230901A-1,42,,deg11180 (Sig #1); deg11180 (Sig #2)
Misc : WG1822821,,ical20332
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:21:46 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:20:49 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : DEG - DDT/Endrin degradation check

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l	
	Internal Standards							
1) i	1-br-2-nb_Pe	1.279	1.347	101.3E6	143.7E6	25.000	25.000	
	System Monitoring Compounds							
	Target Compounds							
15) t	4,4'-DDE	3.580	4.422	2074401	855801	0.470	0.485	
18) t	Endrin	4.128	4.878	321.7E6	418.2E6	70.375	60.406	
19) t	4,4'-DDD	4.247	5.005	1435154	1228575	0.400	0.585	M4
21) t	4,4'-DDT	4.544	5.285	546.9E6	742.9E6	136.961	115.310	
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d	
26) t	Endrin Keton	5.432	6.023	1574755	1475783	0.357	0.238	D
	Sum chlordane-1			0	0	N.D.	N.D.	
Average	chlordane-1					0.000	0.000	
	Sum toxaphene-1			0	0	N.D.	N.D.	
Average	toxaphene-1					0.000	0.000	
	SemiQuant Compounds - Not Calibrated on this Instrument							
	Sum toxaphene-1			0	0	N.D.	N.D.	
Average	toxaphene-1					0.000	0.000	

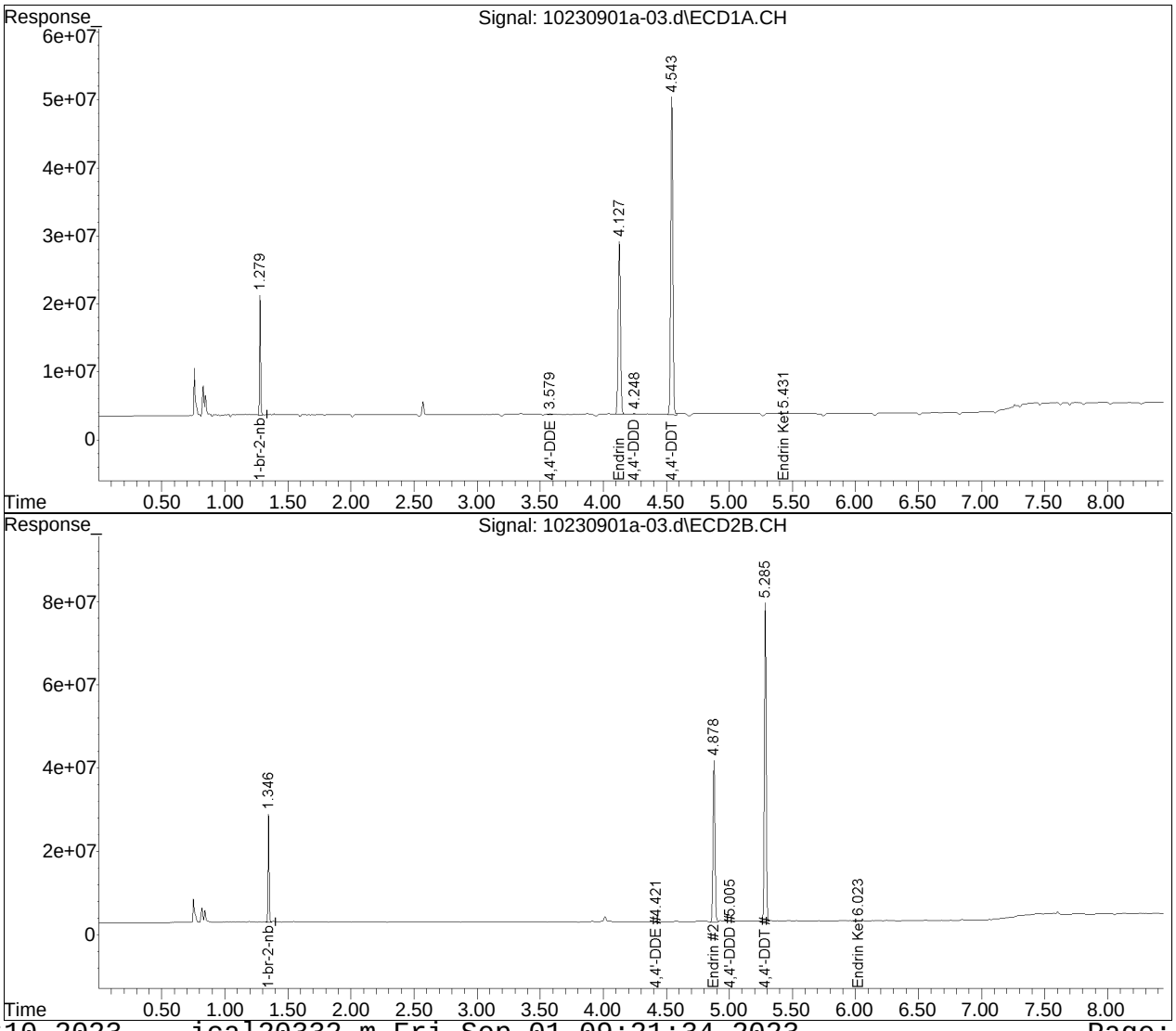
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : DEG - DDT/Endrin degradation checkiewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-03.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 6:33 am
Operator : PEST10:ar
Sample : PEM10230901A-1,42,,deg11180 (Sig #1); deg11180 (Sig #2)
Misc : WG1822821,,ical20332
ALS Vial : 3 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 01 07:21:46 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:20:49 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

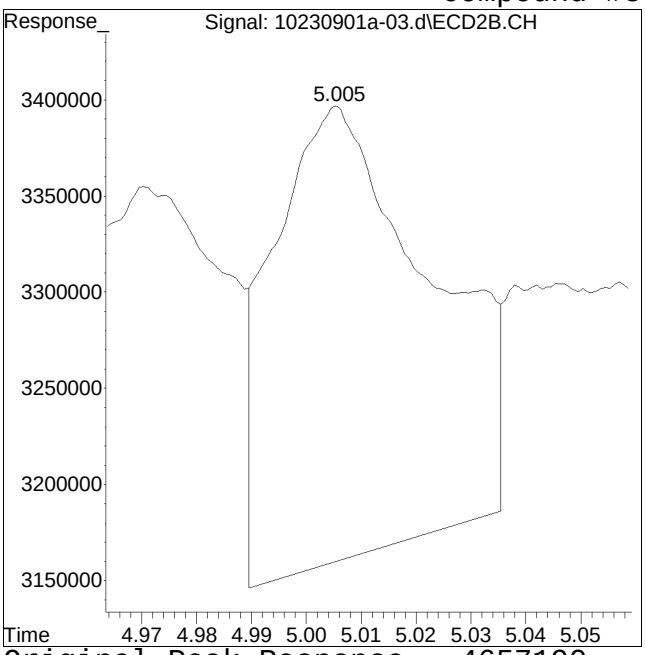
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



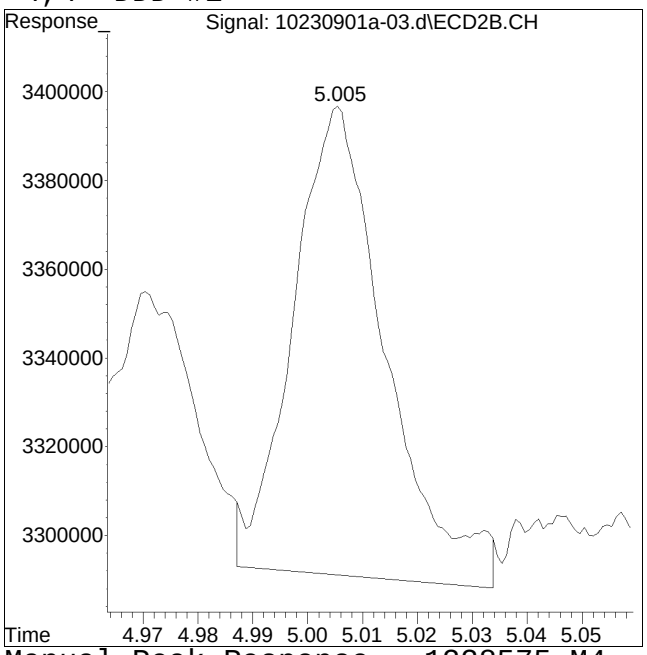
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-03.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 6:33 am Instrument : Pest 10
Sample : PEM10230901A-1,42,,deg1118Quant Date : 9/1/2023 7:21 am

Compound #57: 4,4'-DDD #2



Original Peak Response = 4657190



Manual Peak Response = 1228575 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-02.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 9:10 am
Operator : PEST10:ar
Sample : pem10230903a-1,42,,deg11180 (Sig #1); deg11180 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:37:59 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:36:38 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : DEG - DDT/Endrin degradation check

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.275	1.343	97272155	126.0E6	25.000	25.000M4
	System Monitoring Compounds						
	Target Compounds						
15) t	4,4'-DDE	3.573	4.415	820841	976614	0.194M4	0.521M4
D							
18) t	Endrin	4.122	4.873	327.3E6	371.5E6	74.558	61.181
19) t	4,4'-DDD	4.242	5.003	1249440	2147484	0.363M4	0.795M4
D							
21) t	4,4'-DDT	4.539	5.281	556.9E6	659.7E6	145.231M4	116.743
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D.
26) t	Endrin Keton	5.429	6.019	642180	912230	0.152M4	0.168
	Sum chlordane-1			0	0	N.D.	N.D.
Average	chlordane-1					0.000	0.000
	Sum toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000
	SemiQuant Compounds - Not Calibrated on this Instrument						
	Sum toxaphene-1			0	0	N.D.	N.D.
Average	toxaphene-1					0.000	0.000

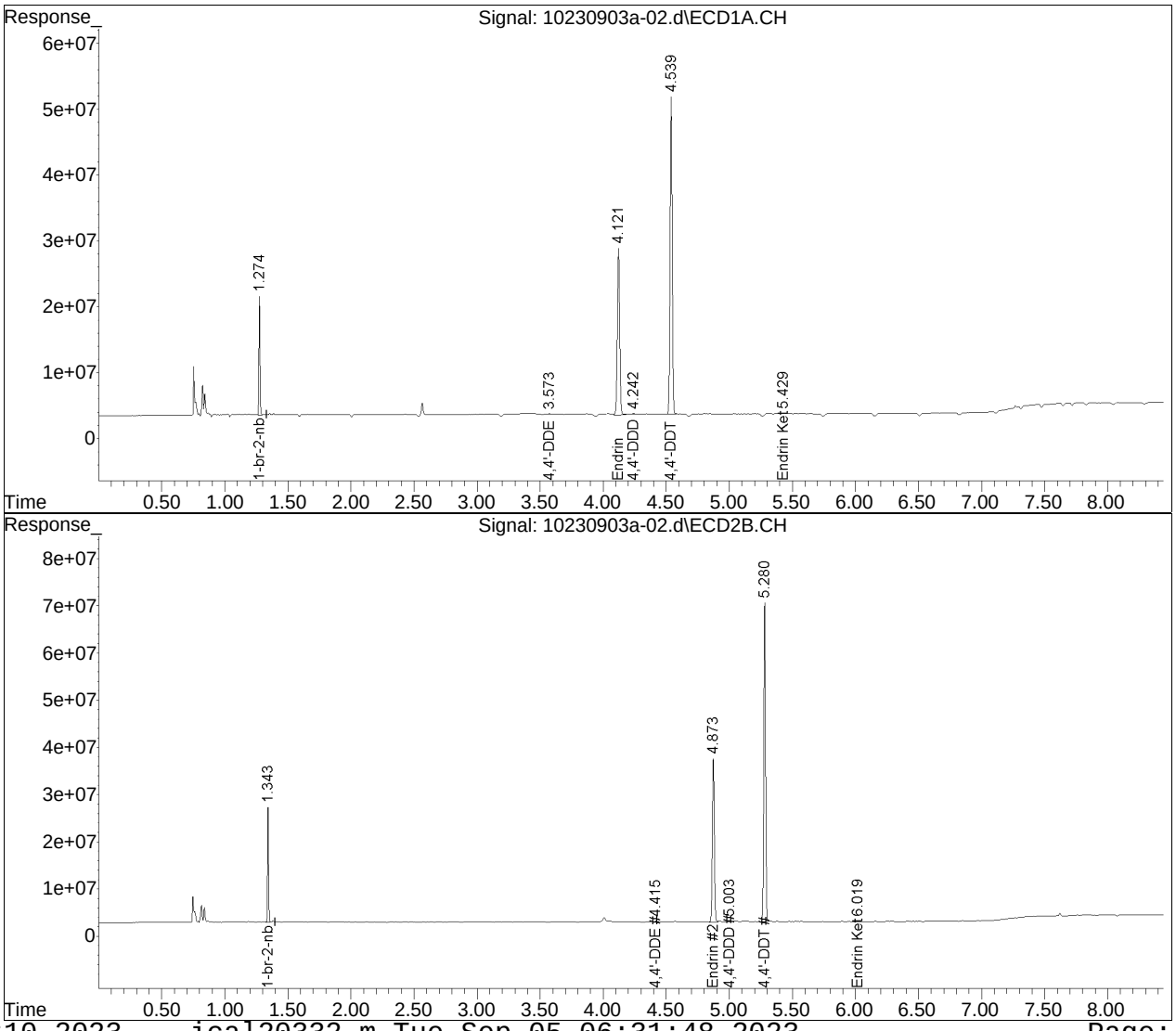
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : DEG - DDT/Endrin degradation checkiewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-02.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 9:10 am
Operator : PEST10:ar
Sample : pem10230903a-1,42,,deg11180 (Sig #1); deg11180 (Sig #2)
Misc : wg1823359,,ical20332
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 03 09:37:59 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:36:38 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

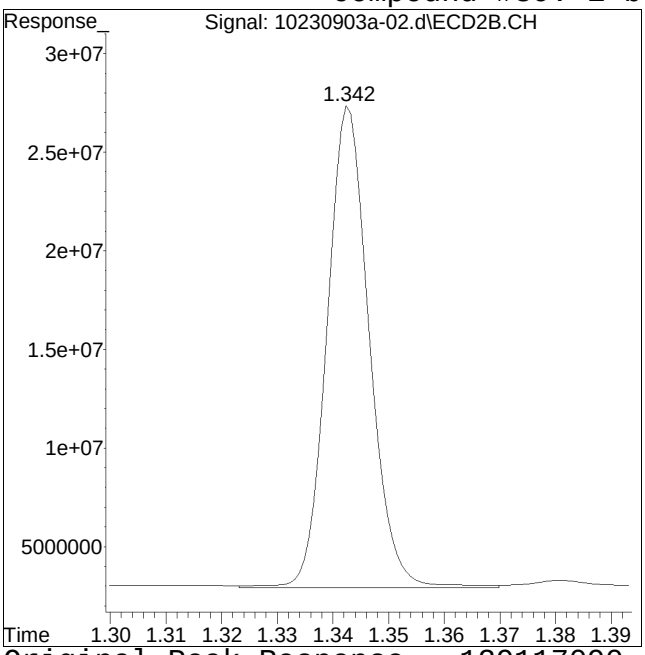
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

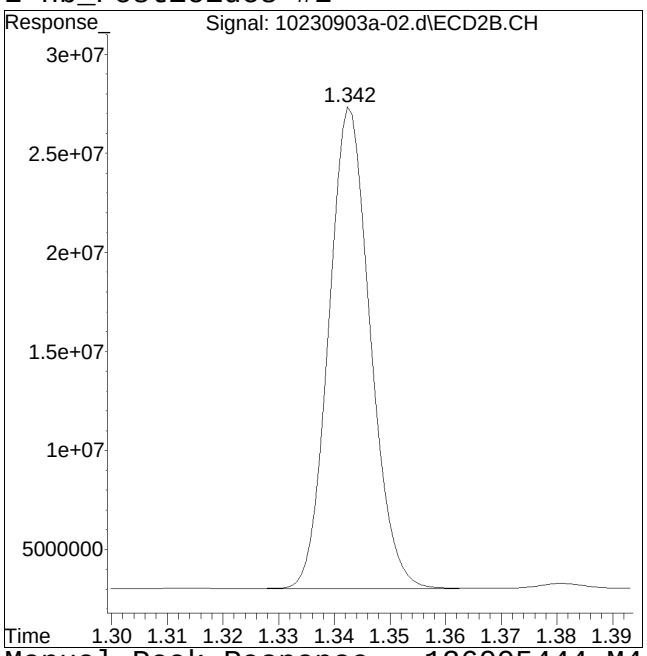


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-02.d Operator : PEST10:ar
Date Inj'd : 9/3/2023 9:10 am Instrument : Pest 10
Sample : pem10230903a-1,42,,deg1118Quant Date : 9/3/2023 9:36 am

Compound #39: 1-br-2-nb_Pesticides #2



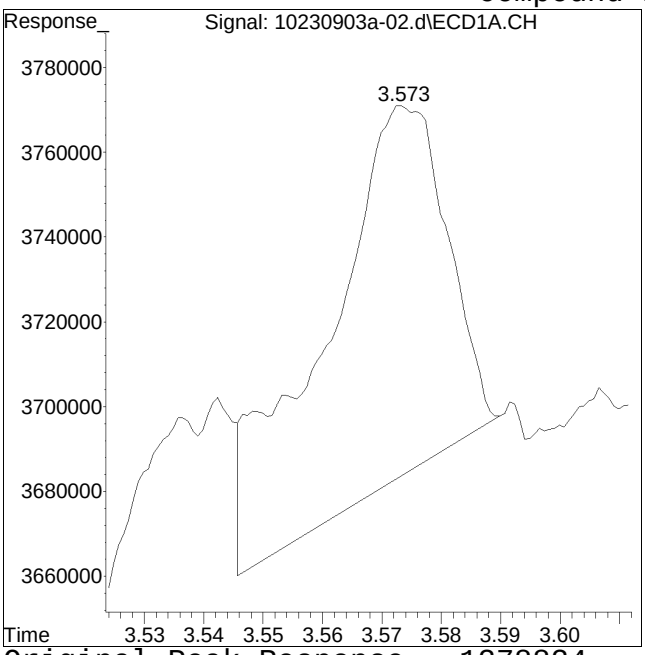


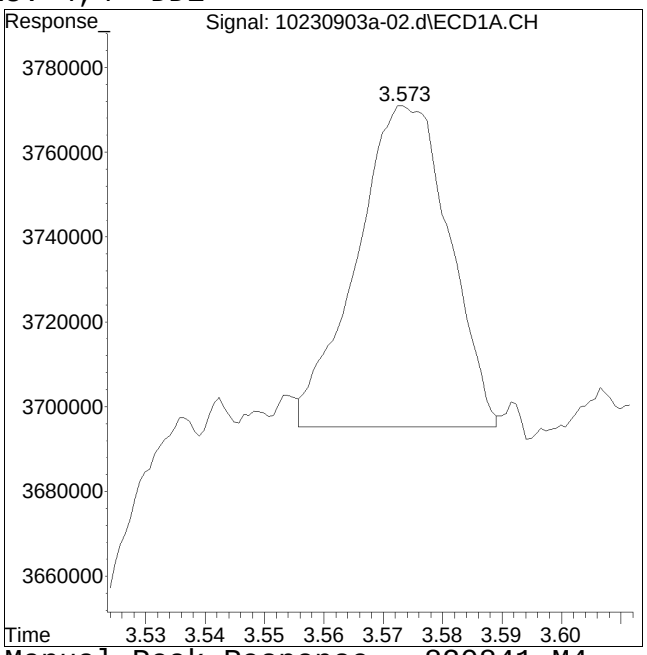
Original Peak Response = 129117090 Manual Peak Response = 126005444 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-02.d Operator : PEST10:ar
Date Inj'd : 9/3/2023 9:10 am Instrument : Pest 10
Sample : pem10230903a-1,42,,deg1118Quant Date : 9/3/2023 9:36 am

Compound #15: 4,4'-DDE



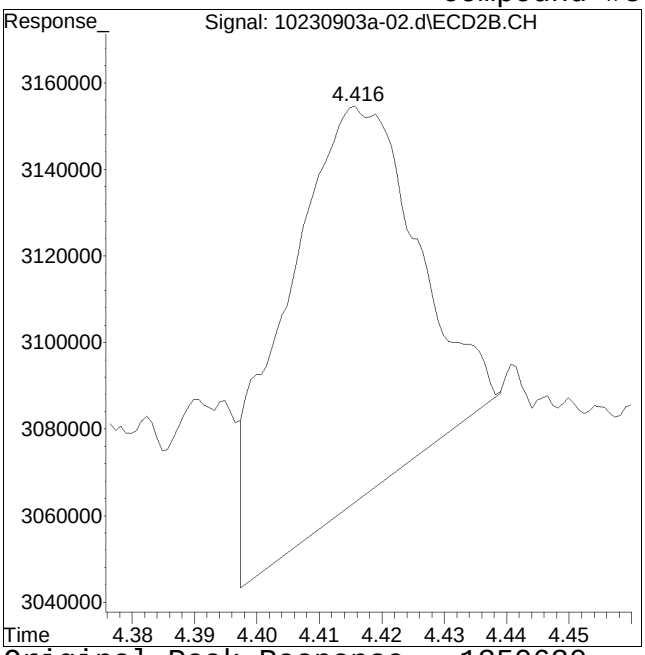


Original Peak Response = 1278824 Manual Peak Response = 820841 M4
M4 = Poor automated baseline construction.

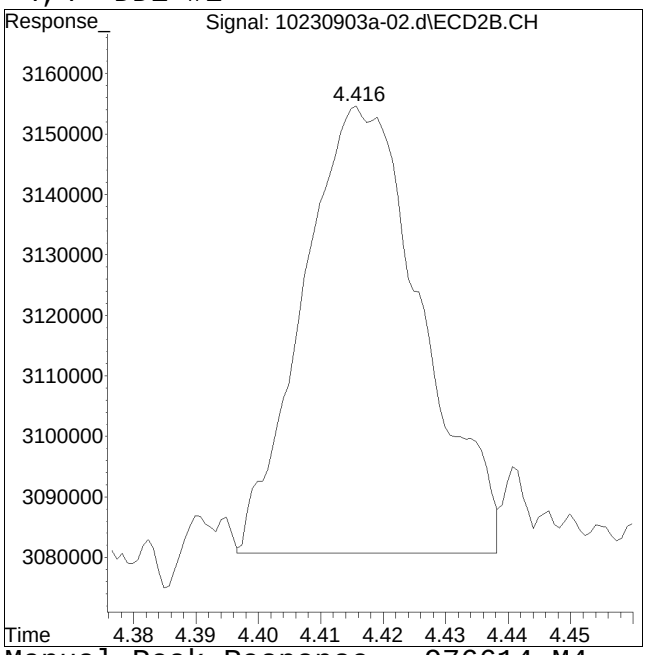
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-02.d Operator : PEST10:ar
Date Inj'd : 9/3/2023 9:10 am Instrument : Pest 10
Sample : pem10230903a-1,42,,deg1118Quant Date : 9/3/2023 9:36 am

Compound #53: 4,4'-DDE #2



Original Peak Response = 1350630



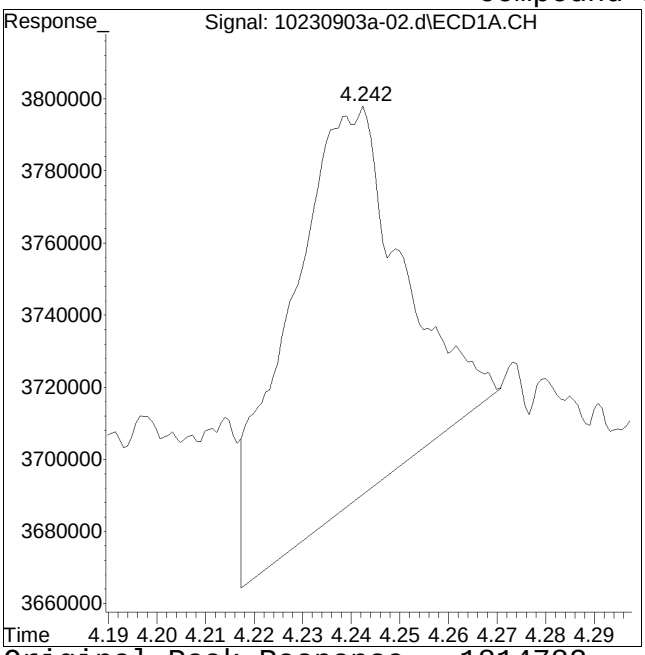
Manual Peak Response = 976614 M4

M4 = Poor automated baseline construction.

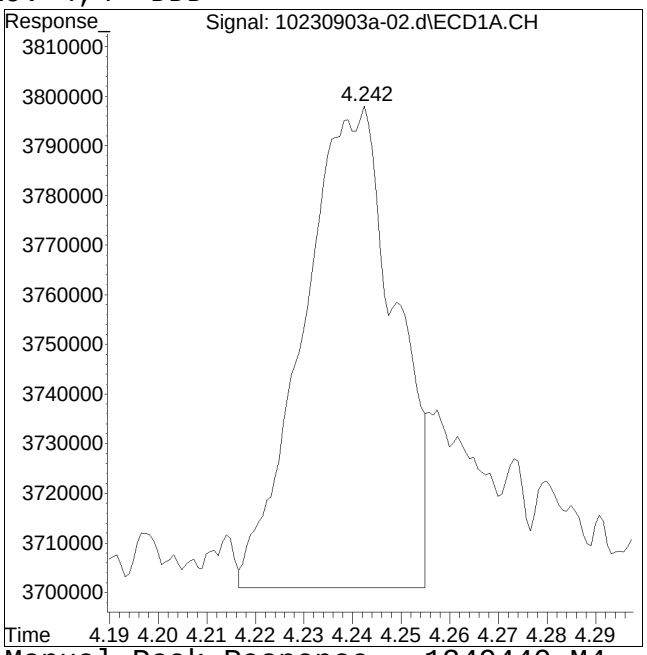
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-02.d Operator : PEST10:ar
Date Inj'd : 9/3/2023 9:10 am Instrument : Pest 10
Sample : pem10230903a-1,42,,deg1118Quant Date : 9/3/2023 9:36 am

Compound #19: 4,4'-DDD



Original Peak Response = 1814782



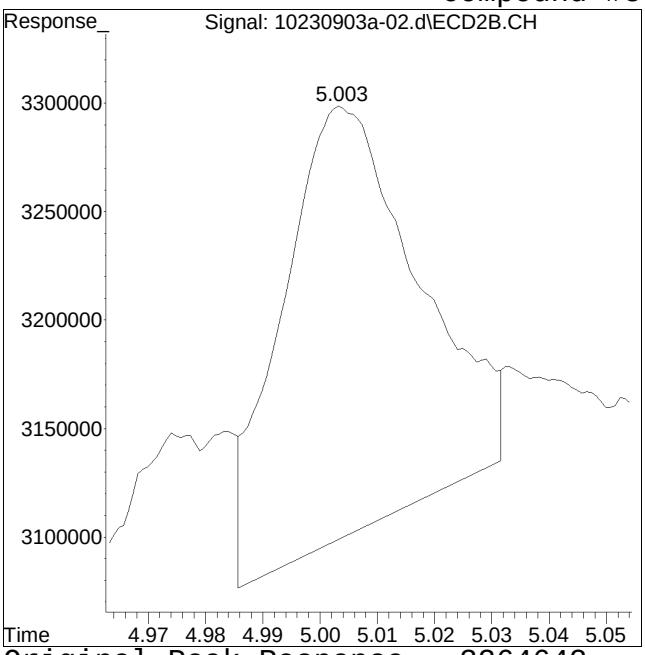
Manual Peak Response = 1249440 M4

M4 = Poor automated baseline construction.

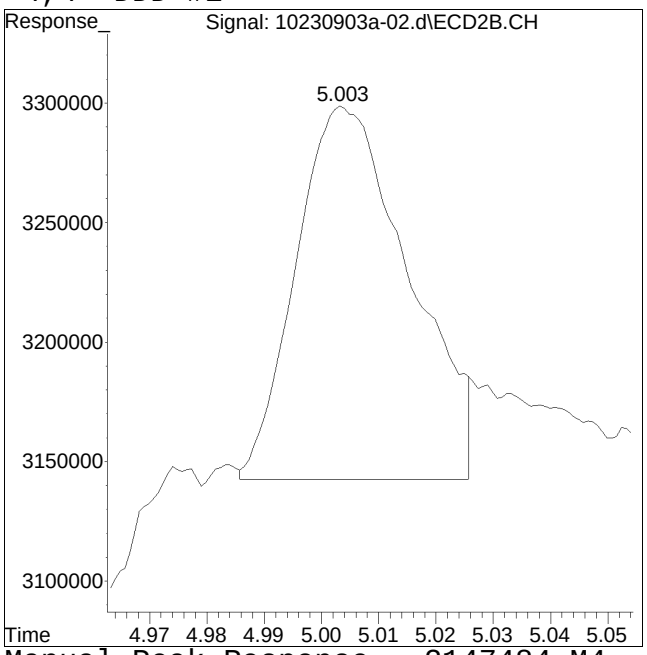
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-02.d Operator : PEST10:ar
Date Inj'd : 9/3/2023 9:10 am Instrument : Pest 10
Sample : pem10230903a-1,42,,deg1118Quant Date : 9/3/2023 9:36 am

Compound #57: 4,4'-DDD #2



Original Peak Response = 3264642



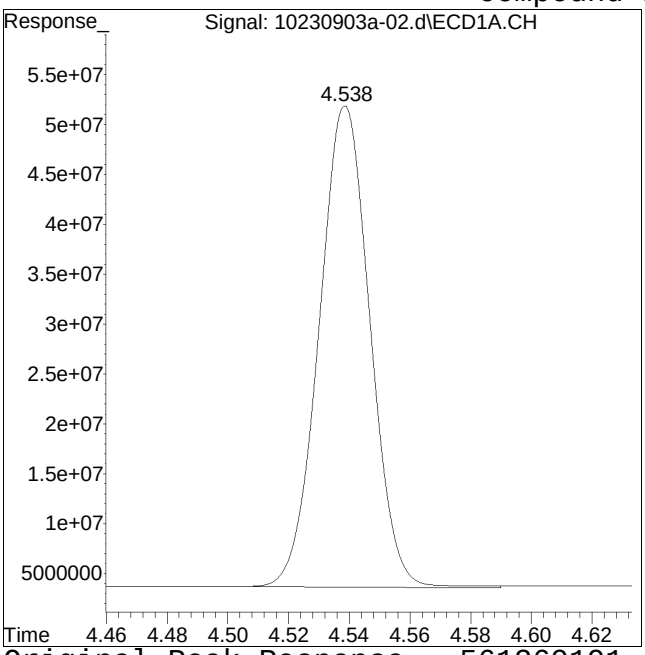
Manual Peak Response = 2147484 M4

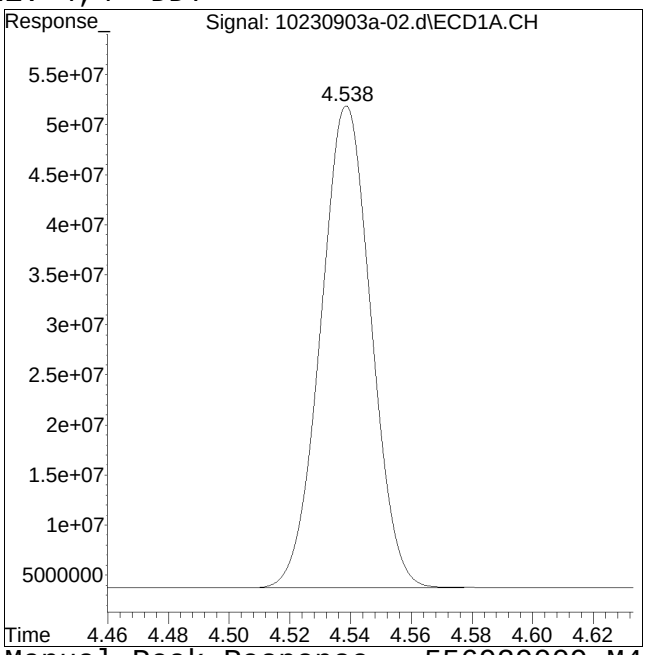
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-02.d Operator : PEST10:ar
Date Inj'd : 9/3/2023 9:10 am Instrument : Pest 10
Sample : pem10230903a-1,42,,deg1118Quant Date : 9/3/2023 9:36 am

Compound #21: 4,4'-DDT



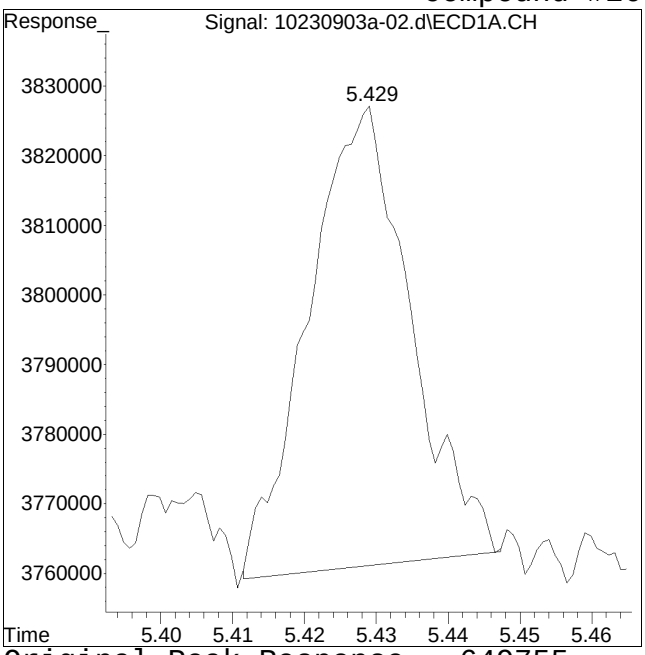


Original Peak Response = 561269191 Manual Peak Response = 556929009 M4
M4 = Poor automated baseline construction.

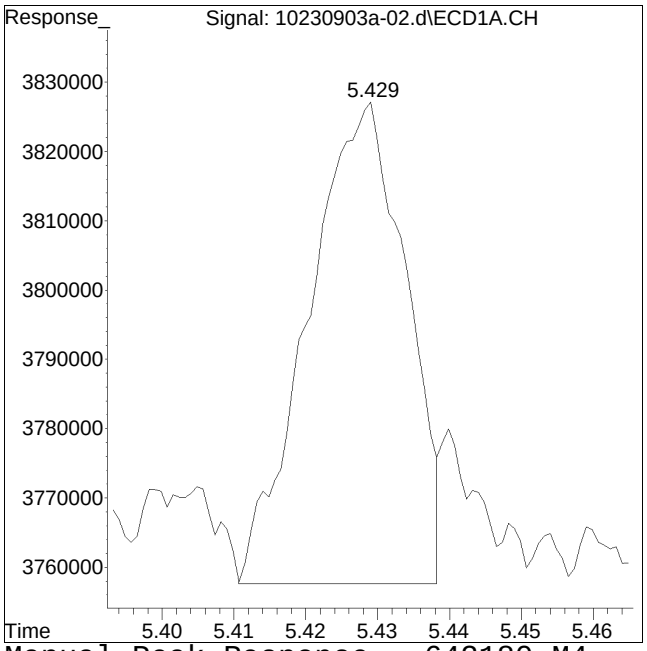
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-02.d Operator : PEST10:ar
Date Inj'd : 9/3/2023 9:10 am Instrument : Pest 10
Sample : pem10230903a-1,42,,deg1118Quant Date : 9/3/2023 9:36 am

Compound #26: Endrin Ketone



Original Peak Response = 649755



Manual Peak Response = 642180 M4

M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-02.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 8:05 am
Operator : PEST10:akm
Sample : pem10230905a-01,42,,deg11180 (Sig #1); deg11180 (Sig #2)
Misc : wg1823612,,ical20332
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:28:26 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:26:54 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

Sub List : DEG - DDT/Endrin degradation check

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
	Internal Standards						
1) i	1-br-2-nb_Pe	1.268	1.338	98301244	129.7E6	25.000M4	25.000
	System Monitoring Compounds						
	Target Compounds						
15) t	4,4'-DDE	3.555	4.405	740435	633955	0.173	0.464M4 D
18) t	Endrin	4.101	4.864	334.0E6	384.9E6	75.295	61.577
19) t	4,4'-DDD	4.222	4.993	476573	1031384	0.137	0.571M4 D
21) t	4,4'-DDT	4.521	5.273	589.6E6	684.7E6	152.135	117.709
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
26) t	Endrin Keton	5.412	6.012	512314	1238384	0.120M4	0.221M4 D
	Sum chlordane-1			0	0	N.D.	N.D.
	Average chlordane-1					0.000	0.000
	Sum toxaphene-1			0	0	N.D.	N.D.
	Average toxaphene-1					0.000	0.000
	SemiQuant Compounds - Not Calibrated on this Instrument						
	Sum toxaphene-1			0	0	N.D.	N.D.
	Average toxaphene-1					0.000	0.000

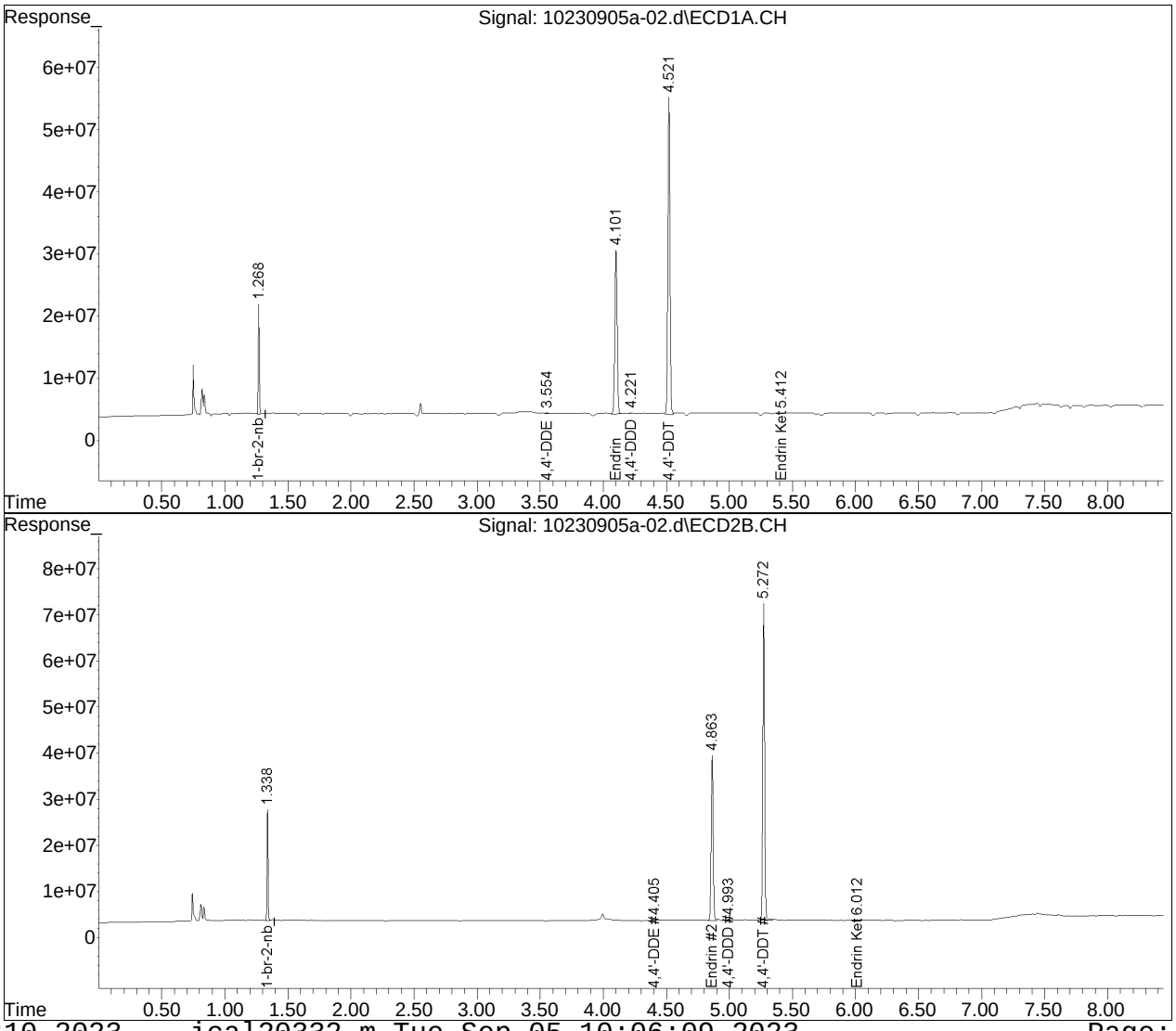
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : DEG - DDT/Endrin degradation checkiewed)

Data Path : I:\PEST\Pest10\2023\230905A\
Data File : 10230905a-02.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 05 Sep 2023 8:05 am
Operator : PEST10:akm
Sample : pem10230905a-01,42,,deg11180 (Sig #1); deg11180 (Sig #2)
Misc : wg1823612,,ical20332
ALS Vial : 2 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 08:28:26 2023
Quant Method : I:\PEST\Pest10\2023\230905A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Tue Sep 05 08:26:54 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

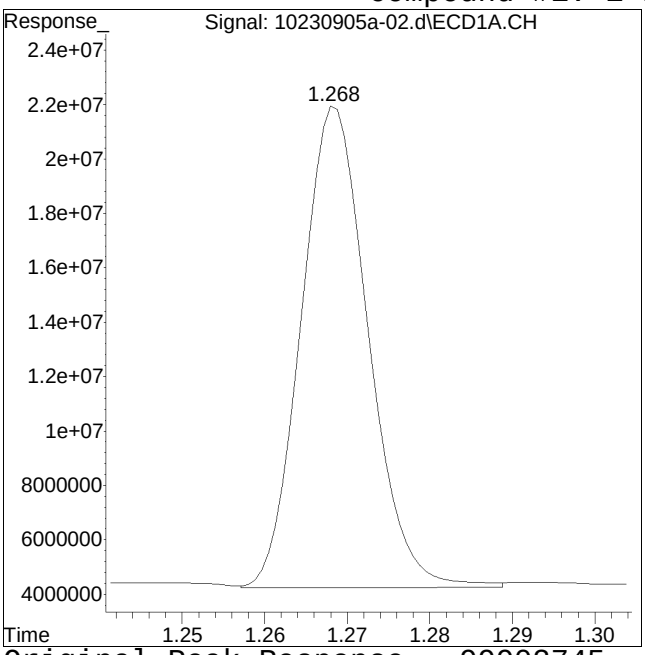
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



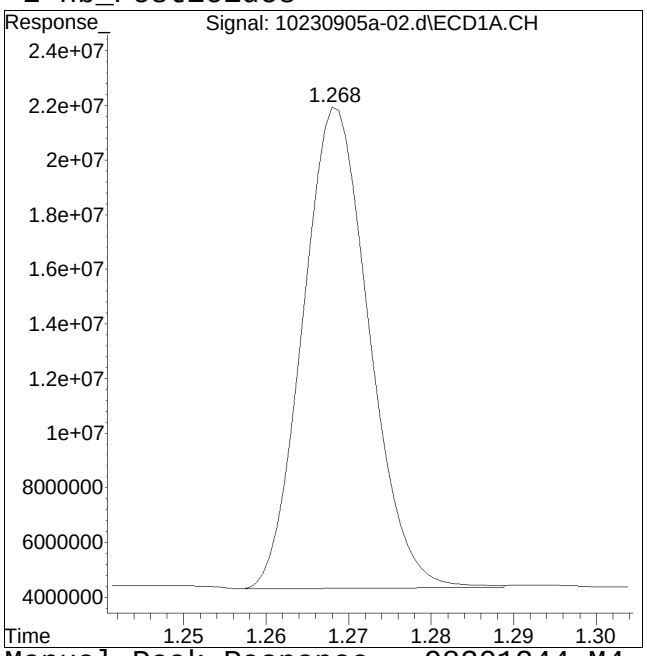
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-02.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 8:05 am Instrument : Pest 10
Sample : pem10230905a-01,42,,deg111Quant Date : 9/5/2023 8:27 am

Compound #1: 1-br-2-nb_Pesticides



Original Peak Response = 99902745



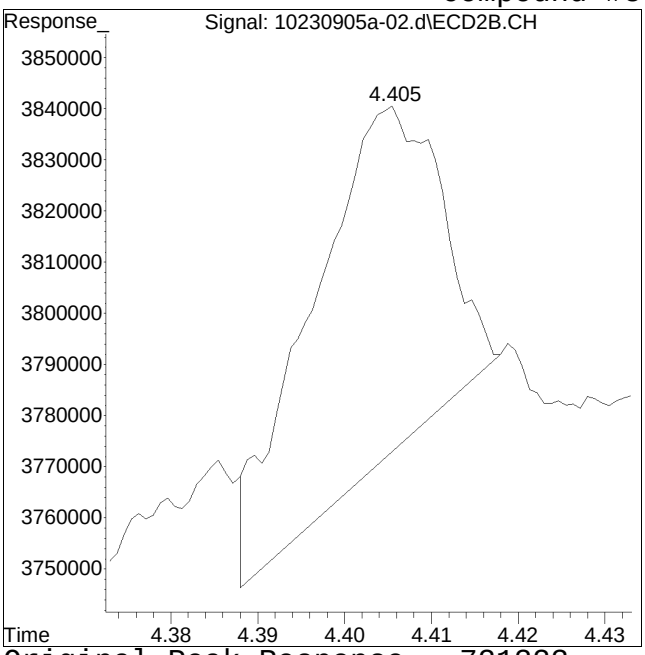
Manual Peak Response = 98301244 M4

M4 = Poor automated baseline construction.

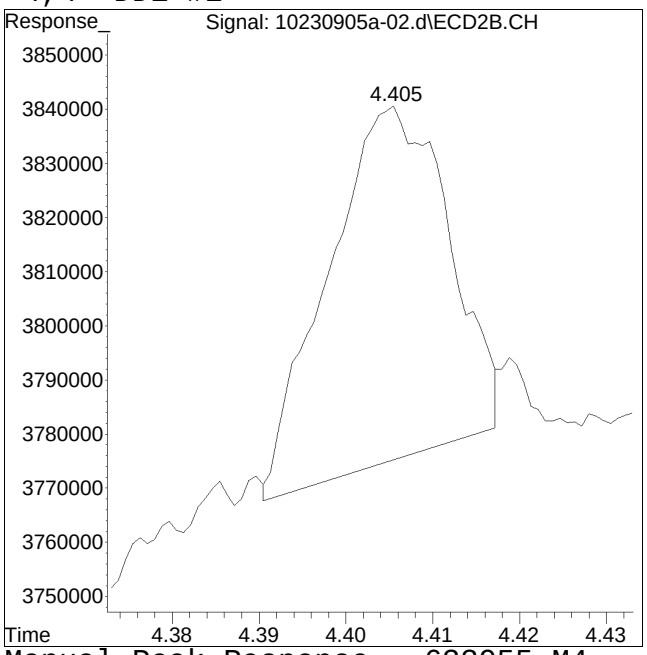
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-02.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 8:05 am Instrument : Pest 10
Sample : pem10230905a-01,42,,deg111Quant Date : 9/5/2023 8:27 am

Compound #53: 4,4'-DDE #2



Original Peak Response = 721323



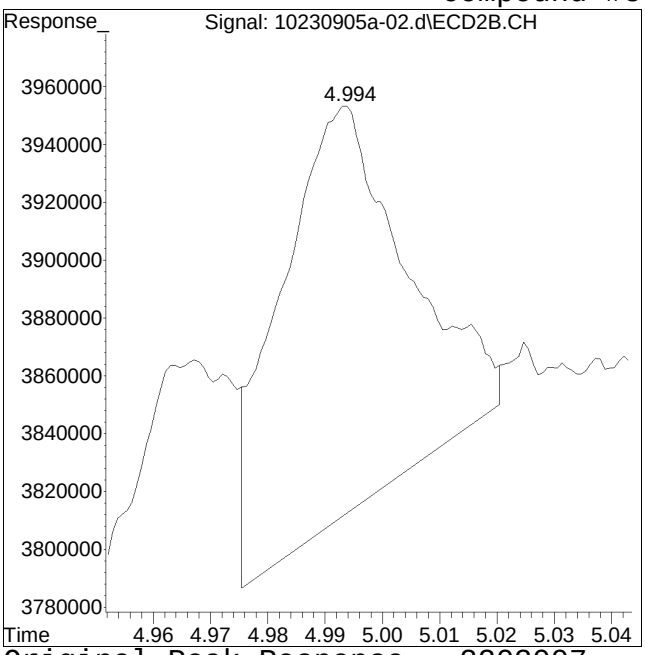
Manual Peak Response = 633955 M4

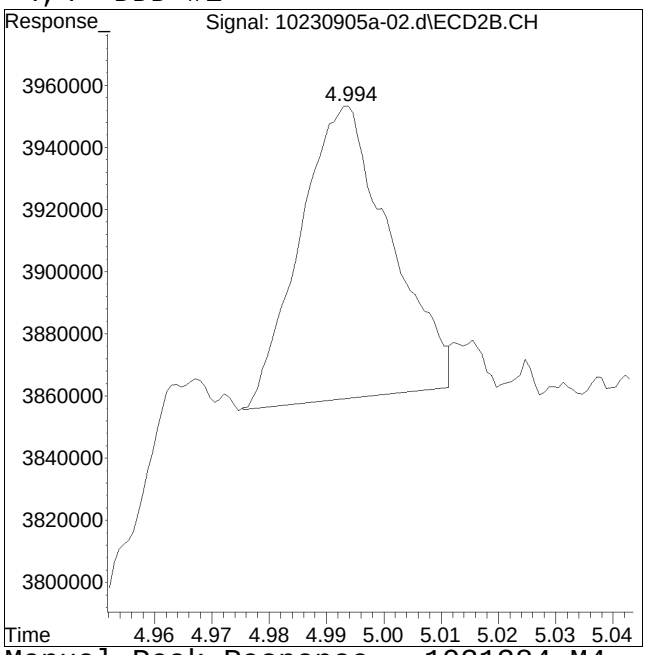
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-02.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 8:05 am Instrument : Pest 10
Sample : pem10230905a-01,42,,deg111Quant Date : 9/5/2023 8:27 am

Compound #57: 4,4'-DDD #2



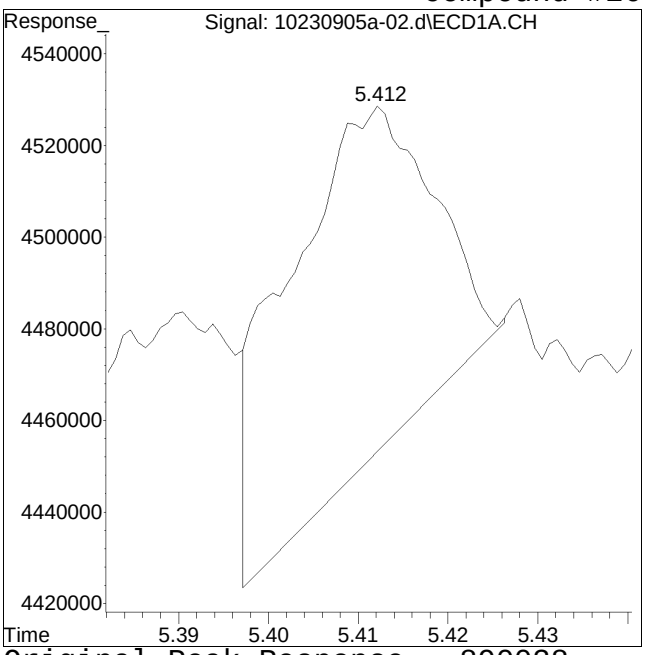


Original Peak Response = 2203007 Manual Peak Response = 1031384 M4
M4 = Poor automated baseline construction.

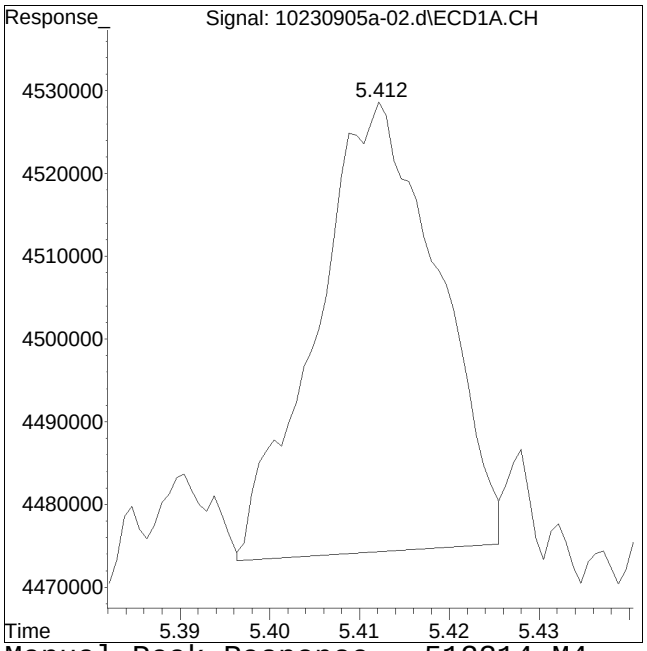
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-02.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 8:05 am Instrument : Pest 10
Sample : pem10230905a-01,42,,deg111Quant Date : 9/5/2023 8:27 am

Compound #26: Endrin Ketone



Original Peak Response = 890038



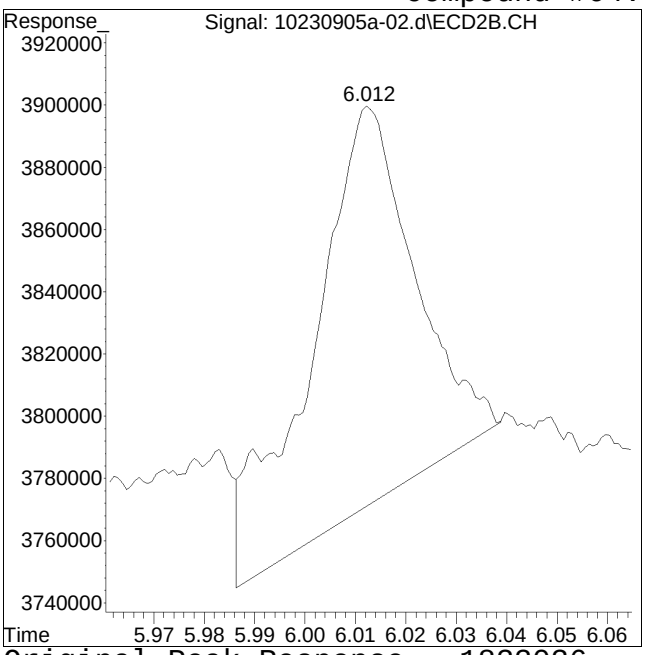
Manual Peak Response = 512314 M4

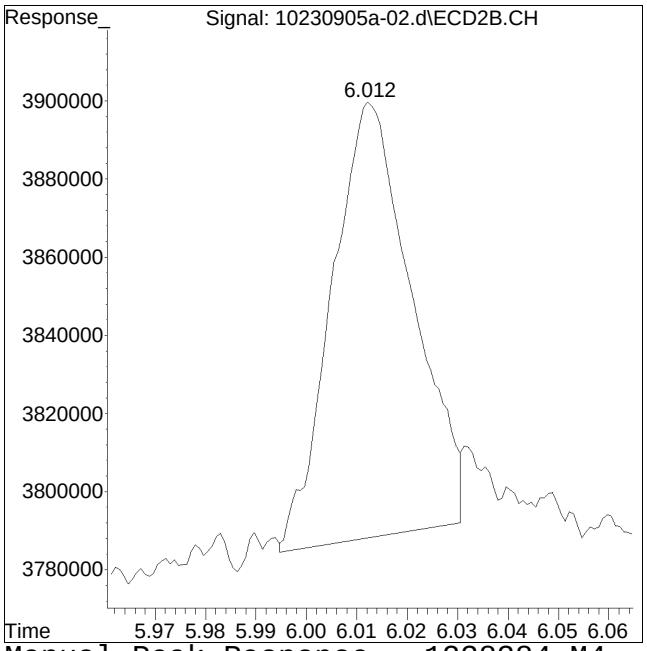
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230905QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230905a-02.d Operator : PEST10:akm
Date Inj'd : 9/5/2023 8:05 am Instrument : Pest 10
Sample : pem10230905a-01,42,,deg111Quant Date : 9/5/2023 8:27 am

Compound #64: Endrin Ketone #2





Original Peak Response = 1833036 Manual Peak Response = 1238384 M4
M4 = Poor automated baseline construction.

RT Shift Summary

Identification Summary
Form 10
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: L2350269-01		
Client ID	: MW-1S		
Date Analyzed (1)	: 09/03/23 13:05	**Date Analyzed (2)**	: 09/03/23 13:05
Instrument ID (1)	: PEST10	**Instrument ID (2)**	: PEST10
GC Column (1)	: CLPPesticides	**GC Column (2)**	: CLPPesticidesII

			RT Window			
Analyte	**Col**	**RT**	**From**	**To**	**Concentration**	**RPD**
4,4'-DDT	**1**	**4.54**	**4.49**	**4.59**	**0.0148J**	
	2	**5.28**	**5.23**	**5.33**	**0.00458J**	**NC**

Identification Summary
Form 10
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: L2350269-02		
Client ID	: MW-2S		
Date Analyzed (1)	: 09/03/23 13:16	**Date Analyzed (2)**	: 09/03/23 13:16
Instrument ID (1)	: PEST10	**Instrument ID (2)**	: PEST10
GC Column (1)	: CLPPesticides	**GC Column (2)**	: CLPPesticidesII

			RT Window			
Analyte	**Col**	**RT**	**From**	**To**	**Concentration**	**RPD**
4,4'-DDT	**1**	**4.54**	**4.49**	**4.59**	**0.00438J**	
	2	**5.28**	**5.23**	**5.33**	**0.00376J**	**NC**

Identification Summary
Form 10
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: L2350269-06		
Client ID	: MW-6D		
Date Analyzed (1)	: 09/03/23 13:38	**Date Analyzed (2)**	: 09/03/23 13:38
Instrument ID (1)	: PEST10	**Instrument ID (2)**	: PEST10
GC Column (1)	: CLPPesticides	**GC Column (2)**	: CLPPesticidesII

			RT Window			
Analyte	**Col**	**RT**	**From**	**To**	**Concentration**	**RPD**
4,4'-DDT	**1**	**4.54**	**4.49**	**4.59**	**0.02J**	
	2	**5.28**	**5.23**	**5.33**	**0.00976J**	**NC**

Identification Summary
Form 10
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: L2350269-07		
Client ID	: MW-7S		
Date Analyzed (1)	: 09/03/23 14:00	**Date Analyzed (2)**	: 09/03/23 14:00
Instrument ID (1)	: PEST10	**Instrument ID (2)**	: PEST10
GC Column (1)	: CLPPesticides	**GC Column (2)**	: CLPPesticidesII

Analyte	Col	RT	RT Window From	RT Window To	Concentration	RPD
4,4'-DDT	1	4.54	4.49	4.59	ND	
	2	5.28	5.23	5.33	0.00314J	NC

Identification Summary
Form 10
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: L2350269-08		
Client ID	: MW-8S		
Date Analyzed (1)	: 09/03/23 14:11	**Date Analyzed (2)**	: 09/03/23 14:11
Instrument ID (1)	: PEST10	**Instrument ID (2)**	: PEST10
GC Column (1)	: CLPPesticides	**GC Column (2)**	: CLPPesticidesII

Analyte	Col	RT	RT Window From	RT Window To	Concentration	RPD
4,4'-DDT	1	4.54	4.49	4.59	0.00791J	
	2	5.28	5.23	5.33	0.00387J	NC

Identification Summary
Form 10
Pesticides

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: L2350269-09		
Client ID	: DUP		
Date Analyzed (1)	: 09/03/23 14:44	**Date Analyzed (2)**	: 09/03/23 14:44
Instrument ID (1)	: PEST10	**Instrument ID (2)**	: PEST10
GC Column (1)	: CLPPesticides	**GC Column (2)**	: CLPPesticidesII

			RT Window			
Analyte	**Col**	**RT**	**From**	**To**	**Concentration**	**RPD**
4,4'-DDT	**1**	**4.54**	**4.49**	**4.59**	**0.00538J**	
	2	**5.28**	**5.23**	**5.33**	**0.00361J**	**NC**

Pesticides Raw QC Data

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-42.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 3:30 pm
Operator : PEST10:ar
Sample : wg1822374-1,42,, 74 (Sig #1); WG1822377-1,42,, 74 (Sig #2)
Misc : wg1822821,wg1822374,ical20332
ALS Vial : 42 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:11:56 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230901A\10230901a-29.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.279	1.347	138.5E6	156.2E6	25.000	25.000
	Standard Area 1 : #1 = 126614029				Recovery = 109.43%		
	Standard Area 1 : #2 = 137178146				Recovery = 113.87%		
28) i	1-br-2-nb_Ch	1.279	1.347	138.5E6	156.2E6	25.000	25.000
33) i	1-br-2-nb_To	1.279	1.347	138.5E6	156.2E6	25.000	25.000
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.615	1.818	181.2E6	206.6E6	32.252	34.317
	Spiked Amount 50.000	Range 30 - 150			Recovery = 64.50%		68.63%
27) s	Decachlorobi	6.240	6.893	177.4E6	187.3E6	34.949	32.433
	Spiked Amount 50.000	Range 30 - 150			Recovery = 69.90%		64.87%
Target Compounds							
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D. d	N.D. d
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D. d	N.D. d
20) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d
22) t	Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-42.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 3:30 pm
Operator : PEST10:ar
Sample : wg1822374-1,42,, 74 (Sig #1); WG1822377-1,42,, 74 (Sig #2)
Misc : wg1822821,wg1822374,ical20332
ALS Vial : 42 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:11:56 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230901A\10230901a-29.d
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
23) t Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
25) t Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1 chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1 chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1 chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1 chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum chlordane-1			0	0	N.D.	N.D.
Average chlordane-1					0.000	0.000
34) l2 toxaphene-1	0.000	0.000	0	0	N.D. d	N.D. d
35) l2 toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2 toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2 toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000

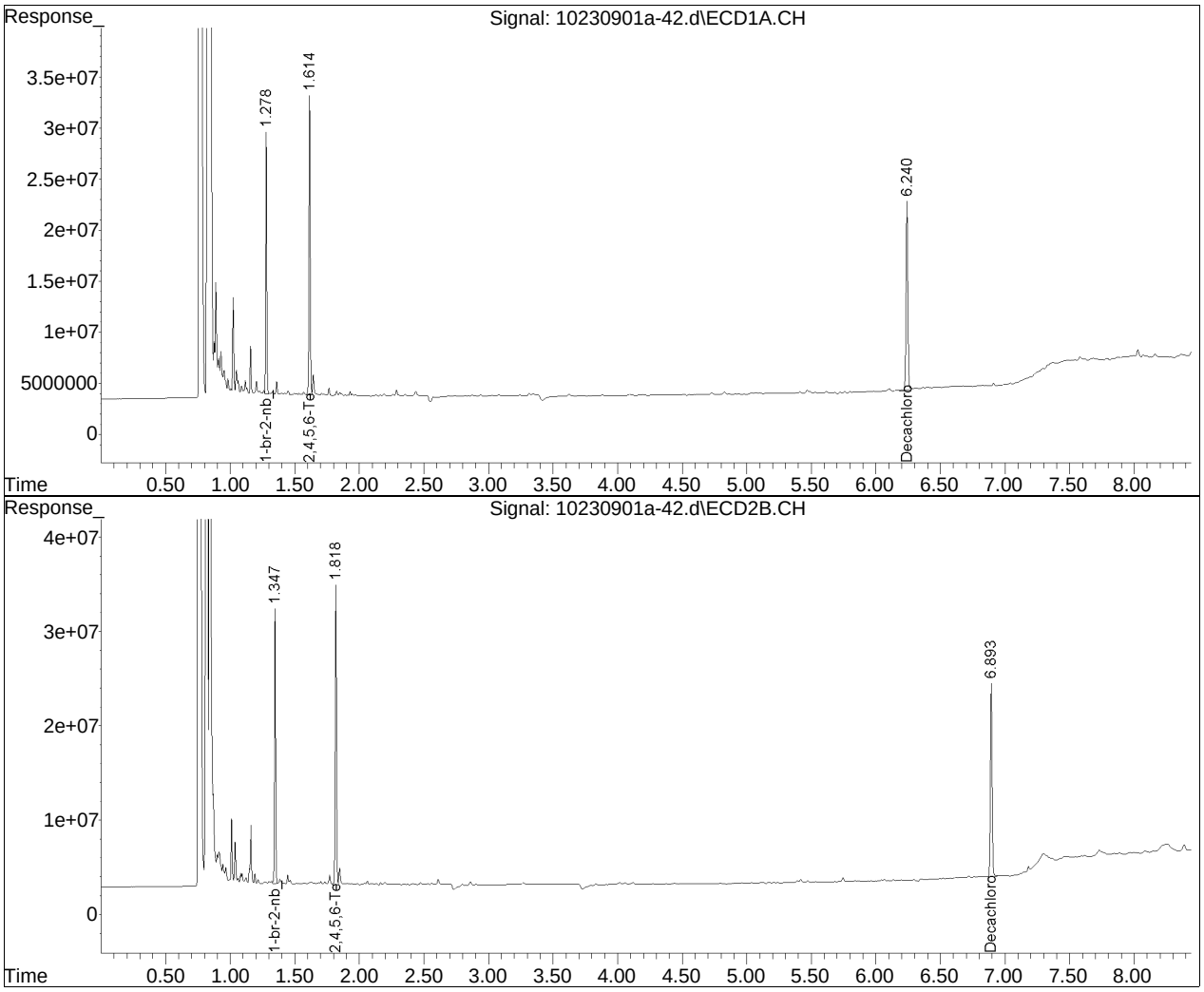
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedA\10230901a-29.d••

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-42.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 3:30 pm
Operator : PEST10:ar
Sample : wg1822374-1,42,, 74 (Sig #1); WG1822377-1,42,, 74 (Sig #2)
Misc : wg1822821,wg1822374,ical20332
ALS Vial : 42 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:11:56 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PEST\Pest10\2023\230901	QMethod	: pest10_2023_08_28_ugL_ic
Data File	: 10230901a-42.d	Operator	: PEST10:ar
Date Inj'd	: 9/1/2023 3:30 pm	Instrument	: Pest 10
Sample	: wg1822374-1,42,, 74	Quant Date	: 9/2/2023 6:39 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-19.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 12:21 pm
Operator : PEST10:mmg
Sample : WG1823255-1,42,,
Misc : wg1823359,wg1823255,ical20332
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:35:07 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-03.d
Sub List : Default - All compounds listed

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.274	1.344	134.8E6	141.8E6	25.000	25.000M3
	Standard Area 1 : #1 = 117926644				Recovery =	114.33%	
	Standard Area 1 : #2 = 131668451				Recovery =	107.68%	
28) i	1-br-2-nb_Ch	1.274	1.344	134.8E6	141.8E6	25.000	25.000M3
33) i	1-br-2-nb_To	1.274	1.344	134.8E6	141.8E6	25.000	25.000M3
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.608	1.814	104.9E6	112.4E6	19.189M4	20.565
	Spiked Amount	50.000	Range 30 - 150		Recovery =	38.38%	41.13%
27) s	Decachlorobi	6.233	6.887	112.1E6	119.6E6	22.682M4	22.813M4
	Spiked Amount	50.000	Range 30 - 150		Recovery =	45.36%	45.63%
Target Compounds							
4) t	alpha-BHC	0.000	0.000	0	0	N.D. d	N.D. d
5) t	gamma-BHC (l	0.000	0.000	0	0	N.D. d	N.D. d
6) t	beta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
7) t	delta-BHC	0.000	0.000	0	0	N.D. d	N.D. d
8) t	Heptachlor	0.000	0.000	0	0	N.D. d	N.D. d
9) t	Aldrin	0.000	0.000	0	0	N.D. d	N.D. d
12) t	Heptachlor E	0.000	0.000	0	0	N.D. d	N.D. d
13) t	gamma-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
14) t	alpha-Chlord	0.000	0.000	0	0	N.D. d	N.D. d
15) t	4,4'-DDE	0.000	0.000	0	0	N.D. d	N.D. d
16) t	Endosulfan I	0.000	0.000	0	0	N.D. d	N.D. d
17) t	Dieldrin	0.000	0.000	0	0	N.D.	N.D.
18) t	Endrin	0.000	0.000	0	0	N.D. d	N.D. d
19) t	4,4'-DDD	0.000	0.000	0	0	N.D.	N.D.
20) t	Endosulfan I	0.000	0.000	0	0	N.D.	N.D.
21) t	4,4'-DDT	0.000	0.000	0	0	N.D. d	N.D. d

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-19.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 12:21 pm
Operator : PEST10:mmg
Sample : WG1823255-1,42,,
Misc : wg1823359,wg1823255,ical20332
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:35:07 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-03.d
Sub List : Default - All compounds listed

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
22) t Endrin Aldeh	0.000	0.000	0	0	N.D. d	N.D. d
23) t Methoxychlor	0.000	0.000	0	0	N.D. d	N.D. d
25) t Endosulfan S	0.000	0.000	0	0	N.D. d	N.D. d
26) t Endrin Keton	0.000	0.000	0	0	N.D. d	N.D. d
29) l1 chlordane-1	0.000	0.000	0	0	N.D. d	N.D. d
30) l1 chlordane-3	0.000	0.000	0	0	N.D. d	N.D. d
31) l1 chlordane-4	0.000	0.000	0	0	N.D. d	N.D. d
32) l1 chlordane-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum chlordane-1			0	0	N.D.	N.D.
Average chlordane-1					0.000	0.000
34) l2 toxaphene-1	0.000	0.000	0	0	N.D.	N.D.
35) l2 toxaphene-2	0.000	0.000	0	0	N.D. d	N.D. d
36) l2 toxaphene-4	0.000	0.000	0	0	N.D. d	N.D. d
37) l2 toxaphene-5	0.000	0.000	0	0	N.D. d	N.D. d
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000

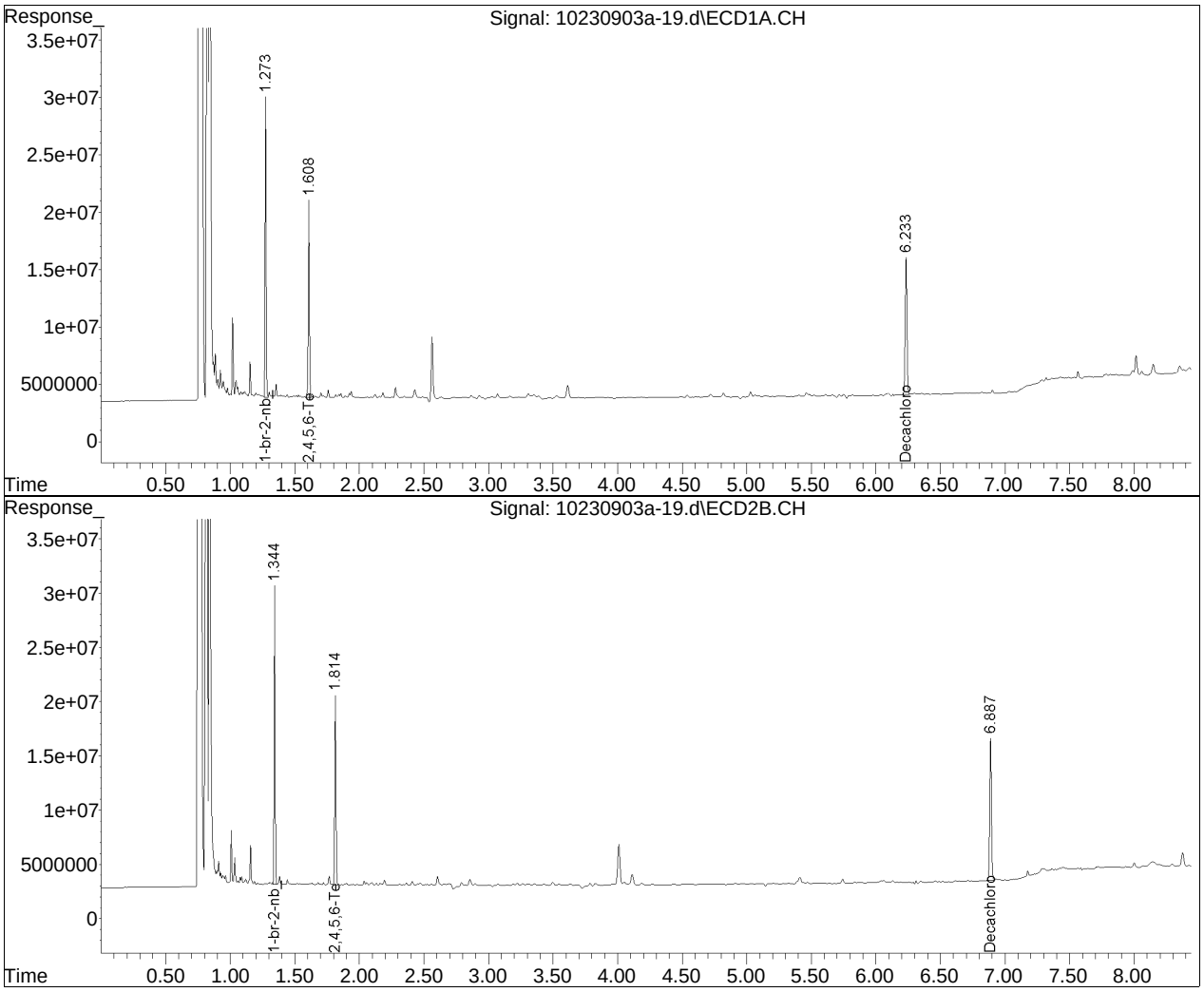
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : Default - All compounds listedA\10230903a-03.d••

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-19.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 12:21 pm
Operator : PEST10:mmg
Sample : WG1823255-1,42,,
Misc : wg1823359,wg1823255,ical20332
ALS Vial : 19 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:35:07 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

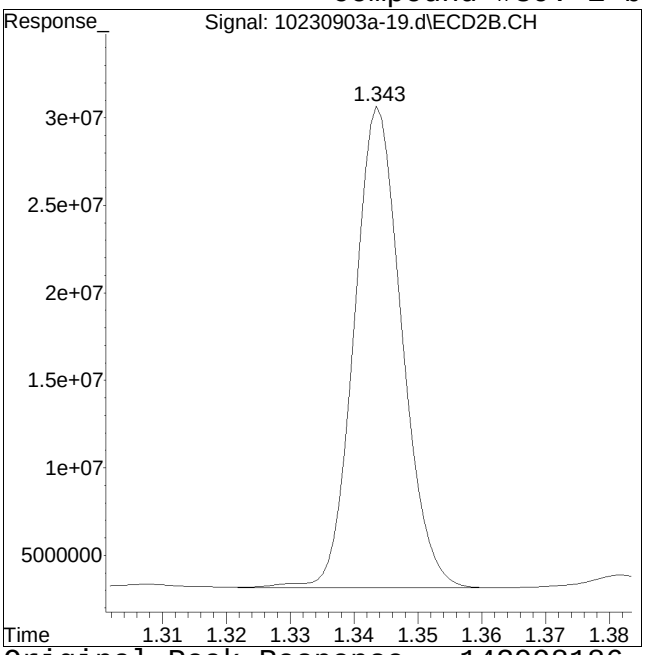
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

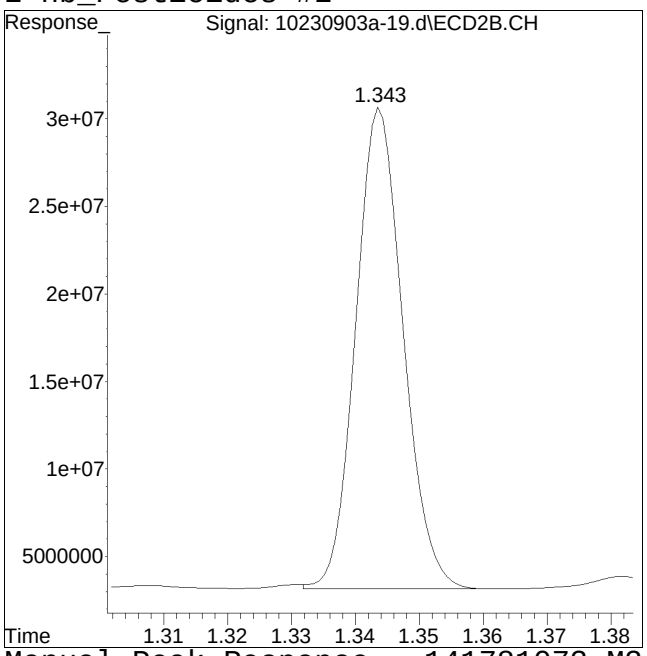


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-19.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:21 pm Instrument : Pest 10
Sample : WG1823255-1,42,, Quant Date : 9/3/2023 1:34 pm

Compound #39: 1-br-2-nb_Pesticides #2



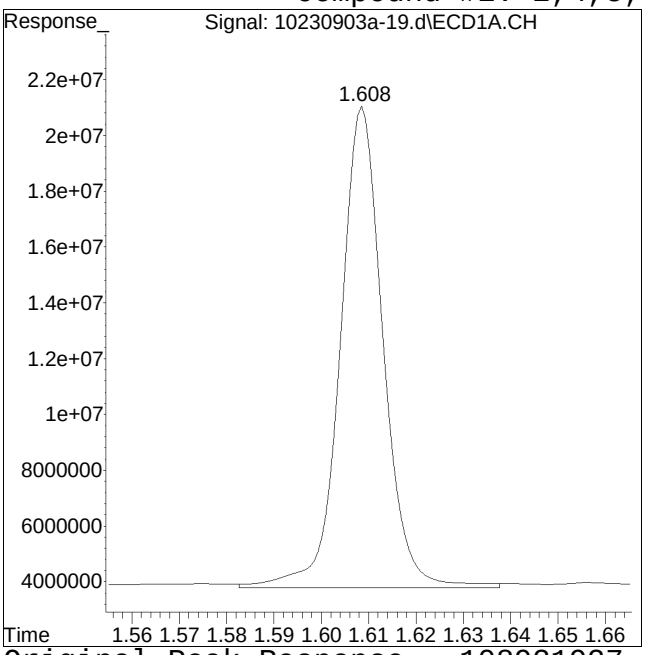


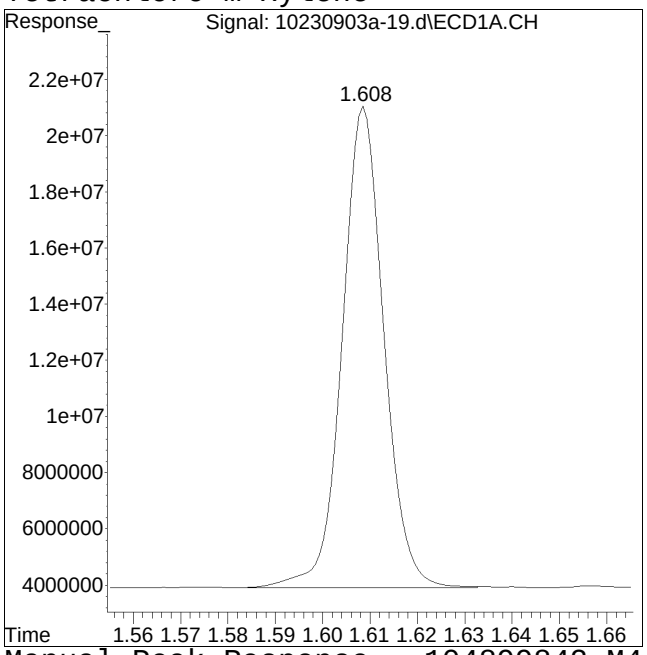
Original Peak Response = 142998186 Manual Peak Response = 141781073 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-19.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:21 pm Instrument : Pest 10
Sample : WG1823255-1,42,, Quant Date : 9/3/2023 1:34 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



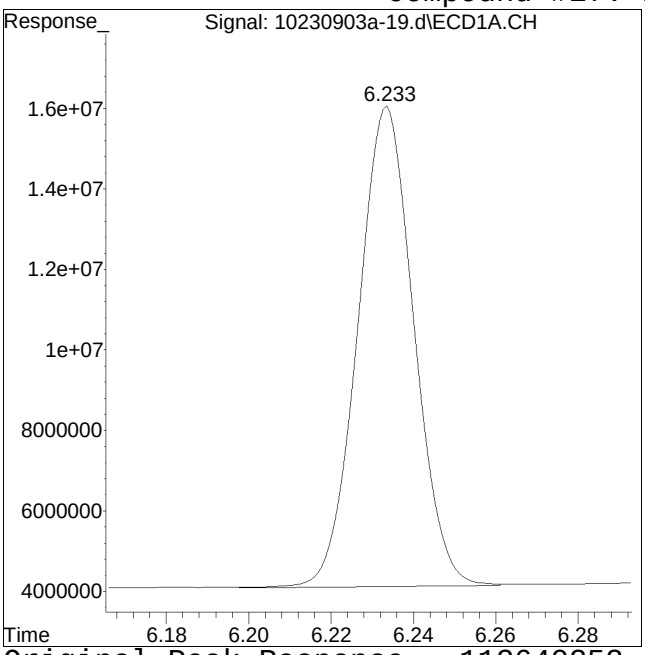


Original Peak Response = 108921927 Manual Peak Response = 104899842 M4
M4 = Poor automated baseline construction.

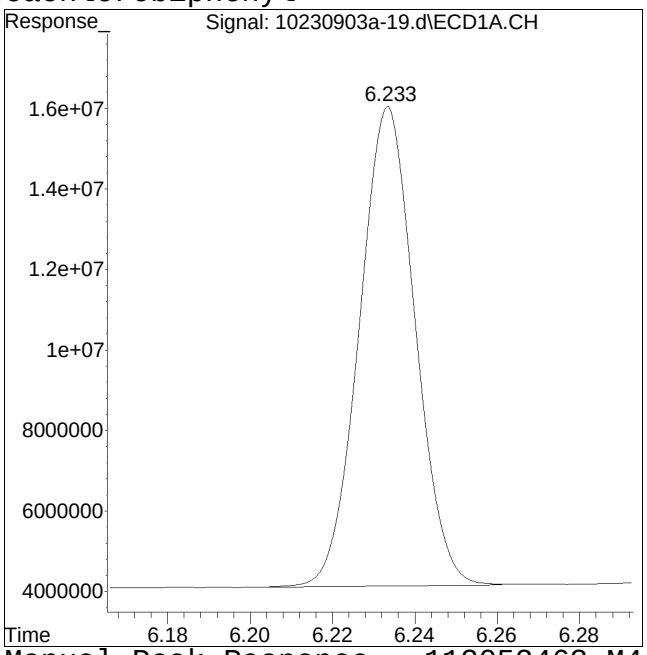
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-19.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:21 pm Instrument : Pest 10
Sample : WG1823255-1,42,, Quant Date : 9/3/2023 1:34 pm

Compound #27: Decachlorobiphenyl



Original Peak Response = 112640252



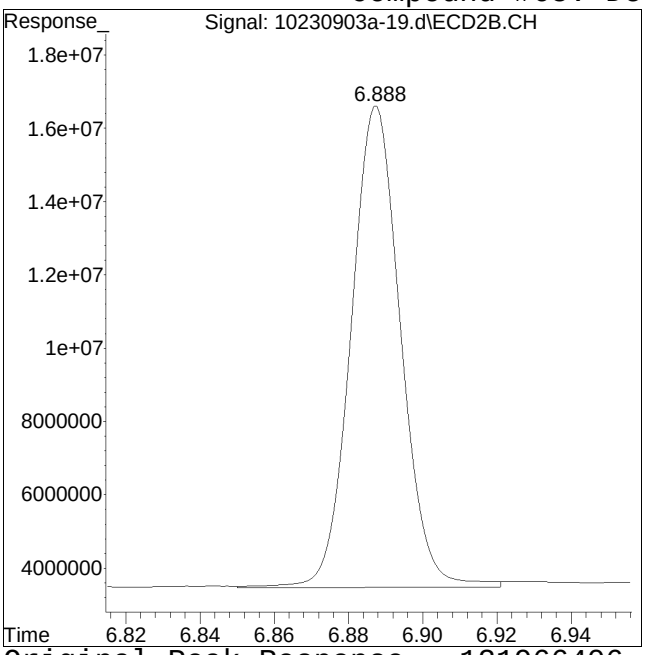
Manual Peak Response = 112052463 M4

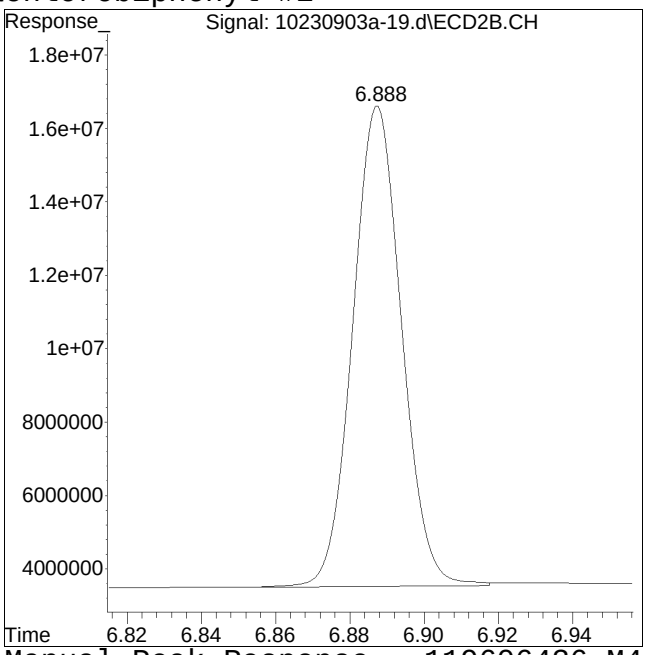
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-19.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:21 pm Instrument : Pest 10
Sample : WG1823255-1,42,, Quant Date : 9/3/2023 1:34 pm

Compound #65: Decachlorobiphenyl #2



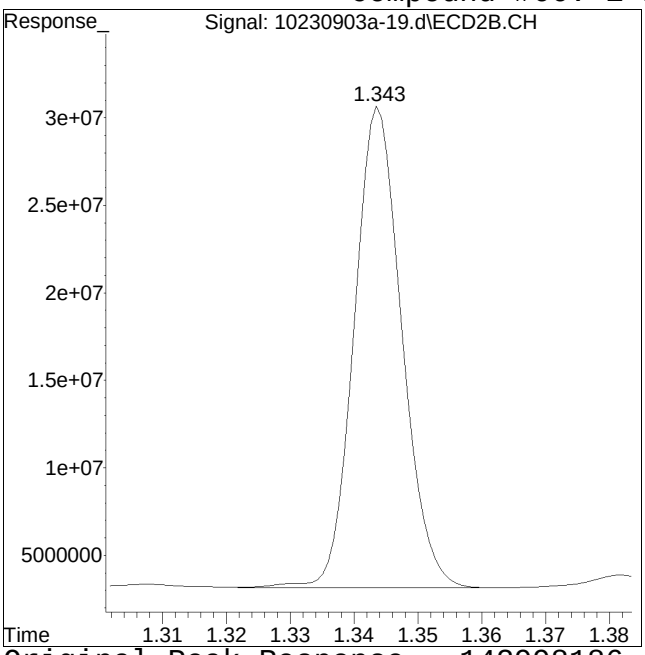


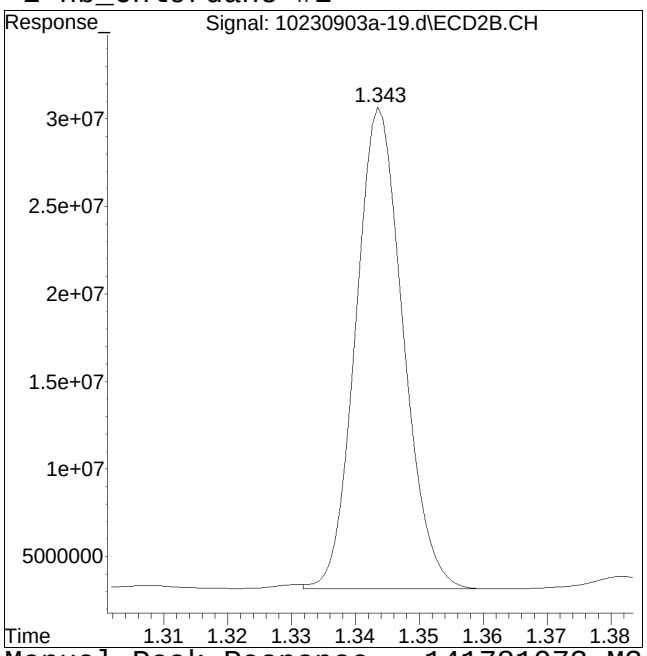
Original Peak Response = 121966406 Manual Peak Response = 119606436 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-19.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:21 pm Instrument : Pest 10
Sample : WG1823255-1,42,, Quant Date : 9/3/2023 1:34 pm

Compound #66: 1-br-2-nb_Chlordane #2



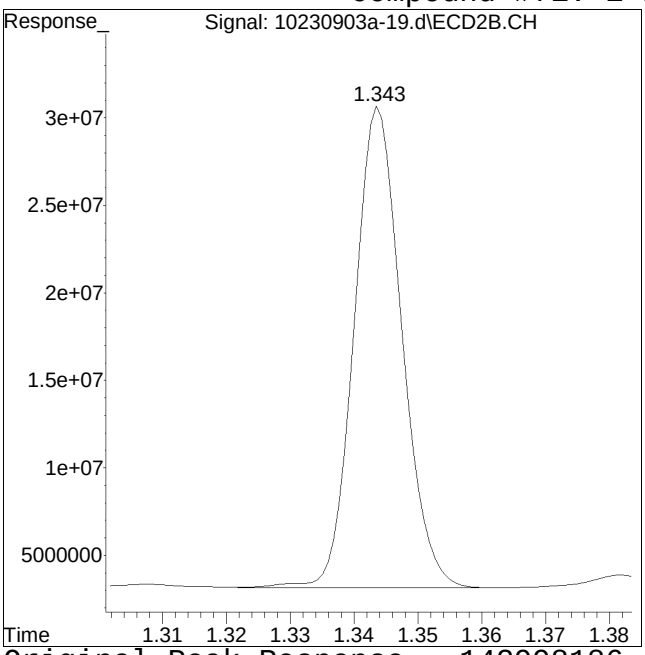


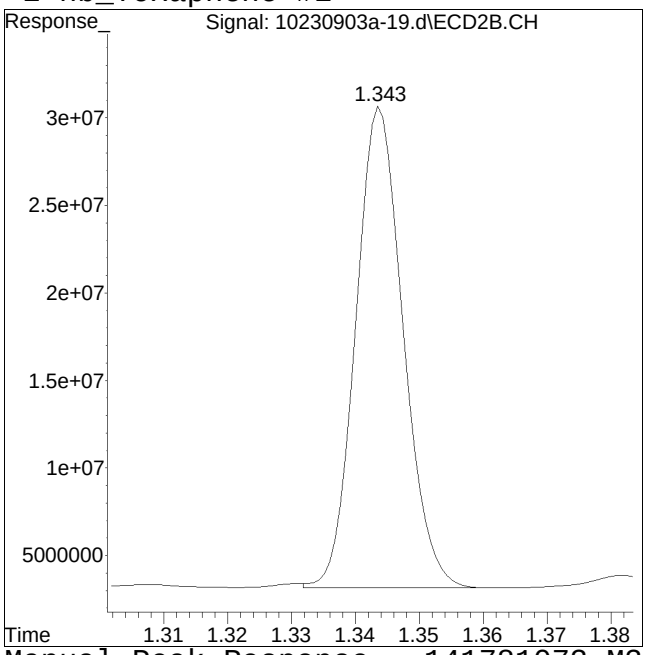
Original Peak Response = 142998186 Manual Peak Response = 141781073 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-19.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:21 pm Instrument : Pest 10
Sample : WG1823255-1,42,, Quant Date : 9/3/2023 1:34 pm

Compound #71: 1-br-2-nb_Toxaphene #2





Original Peak Response = 142998186 Manual Peak Response = 141781073 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-43.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 3:41 pm
Operator : PEST10:ar
Sample : wg1822374-2,42,, 74 (Sig #1); WG1822377-2,42,, 74 (Sig #2)
Misc : wg1822821,wg1822374,ical20332 (Sig #1); wg1822821,wg1822377,ical20332 (Sig #2)
ALS Vial : 43 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:12:49 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230901A\10230901a-29.d
Sub List : LCS_MS - spk only

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.279	1.347	138.3E6	157.2E6	25.000	25.000
	Standard Area 1 : #1 = 126614029				Recovery =	109.23%	
	Standard Area 1 : #2 = 137178146				Recovery =	114.58%	
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.614	1.818	165.1E6	190.4E6	29.446	31.434
	Spiked Amount 50.000	Range 30 - 150		Recovery =	58.89%	62.87%	
27) s	Decachlorobi	6.239	6.890	157.6E6	170.7E6	31.100	29.367
	Spiked Amount 50.000	Range 30 - 150		Recovery =	62.20%	58.73%	
Target Compounds							
4) t	alpha-BHC	1.920	2.229	250.2E6	295.5E6	33.155	30.871
5) t	gamma-BHC (l	2.118	2.510	242.3E6	288.4E6	33.532	35.691
6) t	beta-BHC	2.175	2.575	111.7E6	130.3E6	33.456	34.655
7) t	delta-BHC	2.300	2.839	249.8E6	272.7E6	34.529	30.409
8) t	Heptachlor	2.455	2.902	240.2E6	272.9E6	34.163M3	33.441
9) t	Aldrin	2.692	3.218	206.3E6	257.3E6	32.235M4	31.600
12) t	Heptachlor E	3.228	3.828	206.2E6	242.8E6	32.666M4	32.548
13) t	gamma-Chlord	3.350	4.047	222.9E6	269.3E6	36.628	34.385
14) t	alpha-Chlord	3.482	4.219	202.1E6	254.6E6	30.239	33.523
15) t	4,4'-DDE	3.578	4.423	203.5E6	249.5E6	33.778	31.859
16) t	Endosulfan I	3.617	4.281	196.7E6	240.7E6	32.943	34.760
17) t	Dieldrin	3.873	4.579	215.9E6	258.2E6	35.725	34.745
18) t	Endrin	4.126	4.879	206.7E6	242.5E6	33.119	32.010
19) t	4,4'-DDD	4.242	5.006	174.6E6	211.6E6	35.652	33.649
20) t	Endosulfan I	4.376	5.081	193.3E6	226.4E6	34.248	36.192
21) t	4,4'-DDT	4.542	5.285	186.6E6	220.3E6	34.219	31.483
22) t	Endrin Aldeh	4.803	5.380	112.3E6	126.3E6	24.044	24.327
23) t	Methoxychlor	5.041	5.856	109.4E6	120.1E6	35.127	33.436

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-43.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 3:41 pm
Operator : PEST10:ar
Sample : wg1822374-2,42,, 74 (Sig #1); WG1822377-2,42,, 74 (Sig #2)
Misc : wg1822821,wg1822374,ical20332 (Sig #1); wg1822821,wg1822377,ical20332 (Sig #2)
ALS Vial : 43 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:12:49 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230901A\10230901a-29.d
Sub List : LCS_MS - spk only

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
25) t Endosulfan S	5.202	5.611	183.7E6	199.7E6	33.923	33.410
26) t Endrin Keton	5.430	6.025	224.2E6	246.6E6	37.261	36.382
Sum chlordane-1			0	0	N.D.	N.D.
Average chlordane-1					0.000	0.000
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000

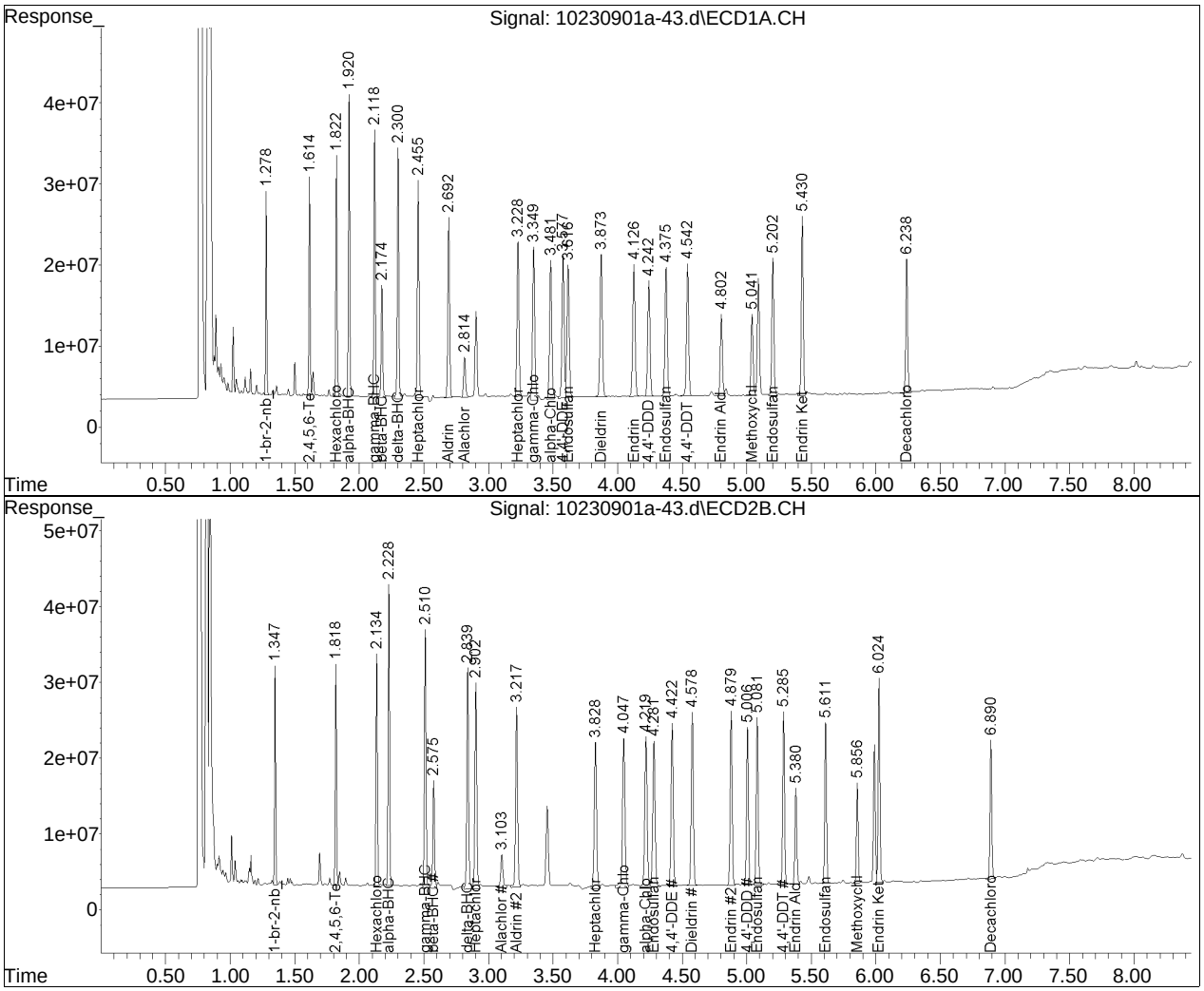
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : LCS_MS - spk only0\2023\230901A\10230901a-29.d••

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-43.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 3:41 pm
Operator : PEST10:ar
Sample : wg1822374-2,42,, 74 (Sig #1); WG1822377-2,42,, 74 (Sig #2)
Misc : wg1822821,wg1822374,ical20332 (Sig #1); wg1822821,wg1822377,ical20
ALS Vial : 43 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 11:12:49 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

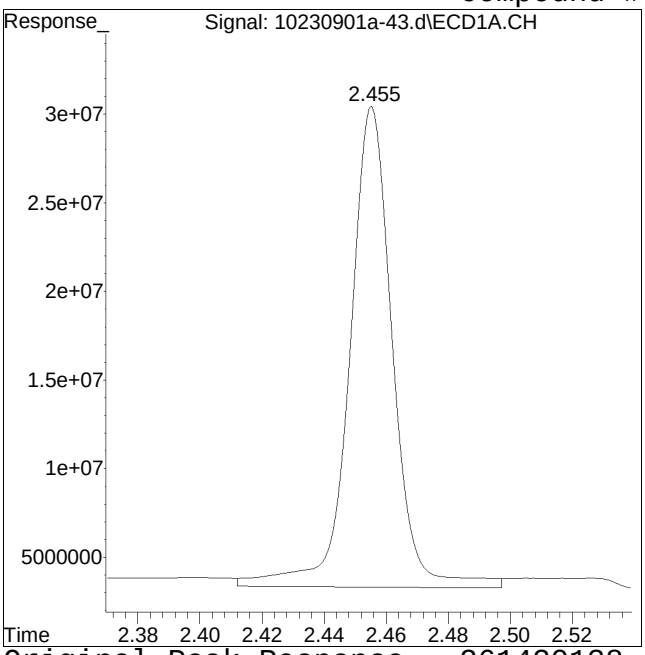
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

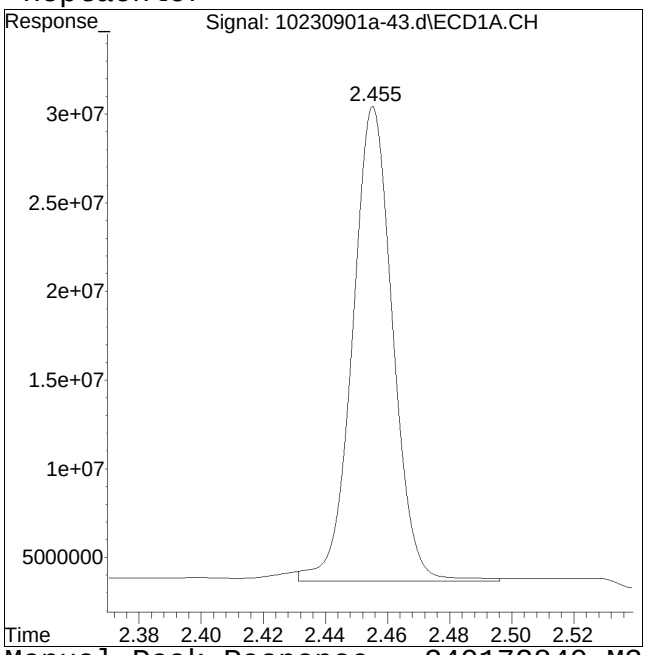


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-43.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 3:41 pm Instrument : Pest 10
Sample : wg1822374-2,42,, 74 Quant Date : 9/2/2023 6:40 am

Compound #8: Heptachlor



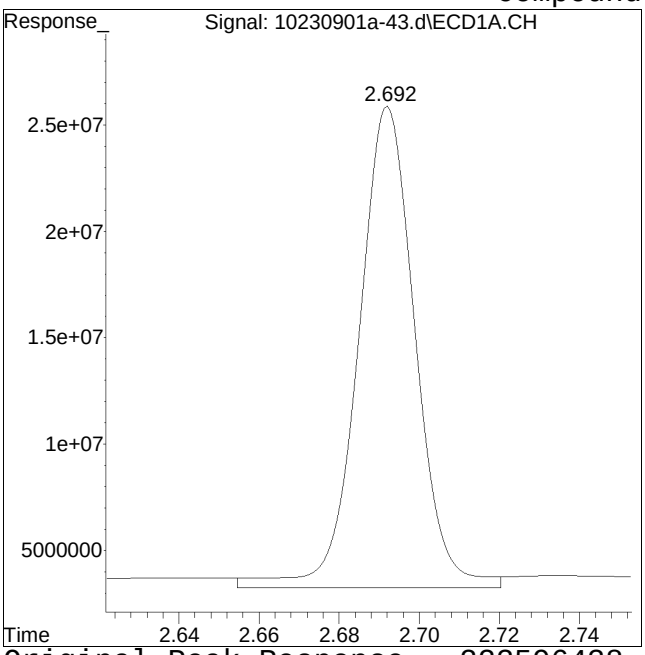


Original Peak Response = 261420138 Manual Peak Response = 240172840 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

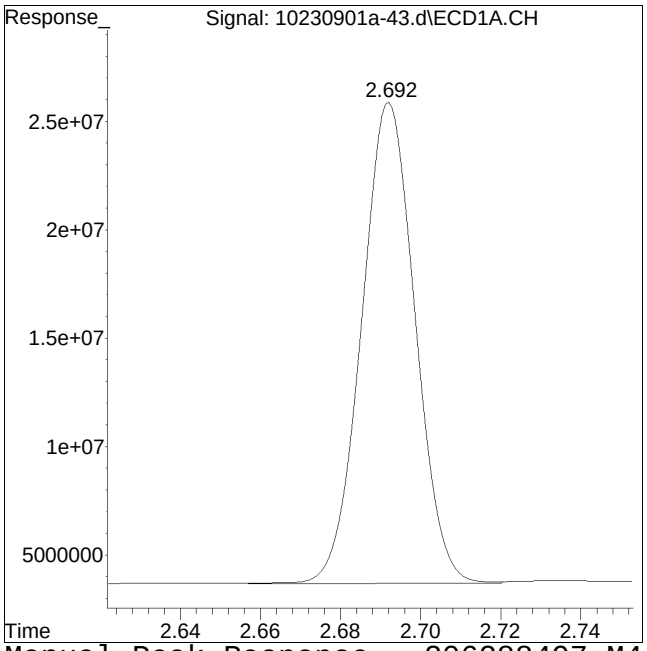
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-43.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 3:41 pm Instrument : Pest 10
Sample : wg1822374-2,42,, 74 Quant Date : 9/2/2023 6:40 am

Compound #9: Aldrin



Original Peak Response = 223596438



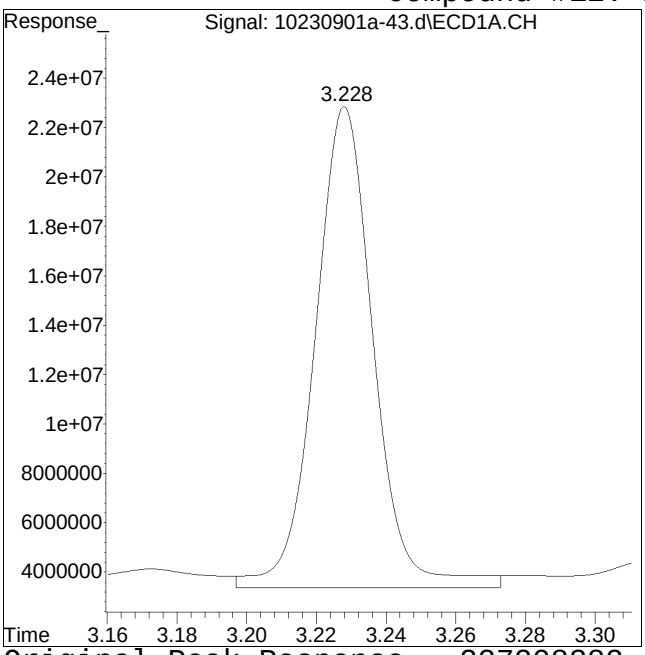
Manual Peak Response = 206288497 M4

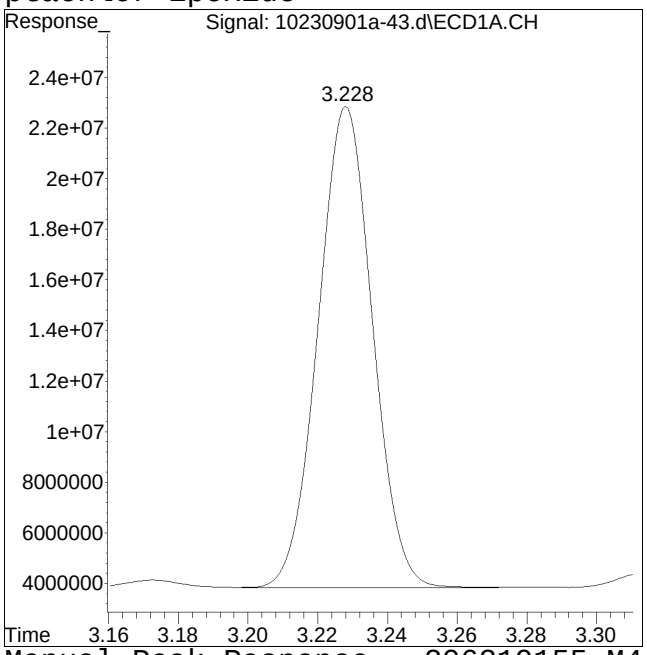
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230901QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230901a-43.d Operator : PEST10:ar
Date Inj'd : 9/1/2023 3:41 pm Instrument : Pest 10
Sample : wg1822374-2,42,, 74 Quant Date : 9/2/2023 6:40 am

Compound #12: Heptachlor Epoxide





Original Peak Response = 227208382 Manual Peak Response = 206219155 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-20.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 12:32 pm
Operator : PEST10:mmg
Sample : WG1823255-2,42,,
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:39:39 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-03.d
Sub List : LCS_MS - spk only

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.274	1.344	109.0E6	113.6E6	25.000	25.000M3
	Standard Area 1 : #1 = 117926644				Recovery =	92.44%	
	Standard Area 1 : #2 = 131668451				Recovery =	86.30%	
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.608	1.814	82129649	88183075	18.583M4	20.138M3
	Spiked Amount 50.000	Range 30 - 150		Recovery =	37.17%	40.28%	
27) s	Decachlorobi	6.233	6.888	98415933	105.2E6	24.641M4	25.046M4
	Spiked Amount 50.000	Range 30 - 150		Recovery =	49.28%	50.09%	
Target Compounds							
4) t	alpha-BHC	1.914	2.224	130.5E6	141.2E6	21.936M4	20.558M4
5) t	gamma-BHC (l	2.111	2.505	129.0E6	138.9E6	22.638M4	23.775M4
6) t	beta-BHC	2.167	2.570	66254797	63033625	25.167M4	23.182M4
7) t	delta-BHC	2.292	2.833	139.0E6	137.4E6	24.370M4	21.320M3
8) t	Heptachlor	2.448	2.897	132.1E6	140.8E6	23.832M3	23.870M4
9) t	Aldrin	2.684	3.212	110.6E6	133.8E6	21.937M4	22.808M4
12) t	Heptachlor E	3.219	3.822	121.7E6	130.7E6	24.457M4	24.232M4
13) t	gamma-Chlord	3.341	4.041	126.3E6	140.4E6	26.330M4	24.797M4
14) t	alpha-Chlord	3.472	4.213	115.9E6	141.1E6	22.005M3	25.703
15) t	4,4'-DDE	3.568	4.417	114.3E6	137.4E6	24.063M4	24.361
16) t	Endosulfan I	3.607	4.275	122.2E6	129.4E6	25.963M4	25.842
17) t	Dieldrin	3.863	4.572	127.3E6	143.8E6	26.723M4	26.827M4
18) t	Endrin	4.116	4.874	119.4E6	136.1E6	24.273M4	24.854M4
19) t	4,4'-DDD	4.232	5.001	103.7E6	119.4E6	26.868M4	26.354M3
20) t	Endosulfan I	4.366	5.076	114.9E6	126.2E6	25.834M4	27.901M4
21) t	4,4'-DDT	4.534	5.281	116.5E6	128.1E6	27.112	25.383M4

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-20.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 12:32 pm
Operator : PEST10:mmg
Sample : WG1823255-2,42,,
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:39:39 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-03.d
Sub List : LCS_MS - spk only

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
22) t Endrin Aldeh	4.795	5.375	78454773	83337334	21.320M3	22.199M4
23) t Methoxychlor	5.033	5.852	74828402	75211117	30.489M3	28.975
25) t Endosulfan S	5.195	5.606	109.2E6	115.7E6	25.584M4	26.758M4
26) t Endrin Keton	5.423	6.020	133.7E6	143.2E6	28.195M4	29.234M4
Sum chlordane-1			0	0	N.D.	N.D.
Average chlordane-1					0.000	0.000
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000

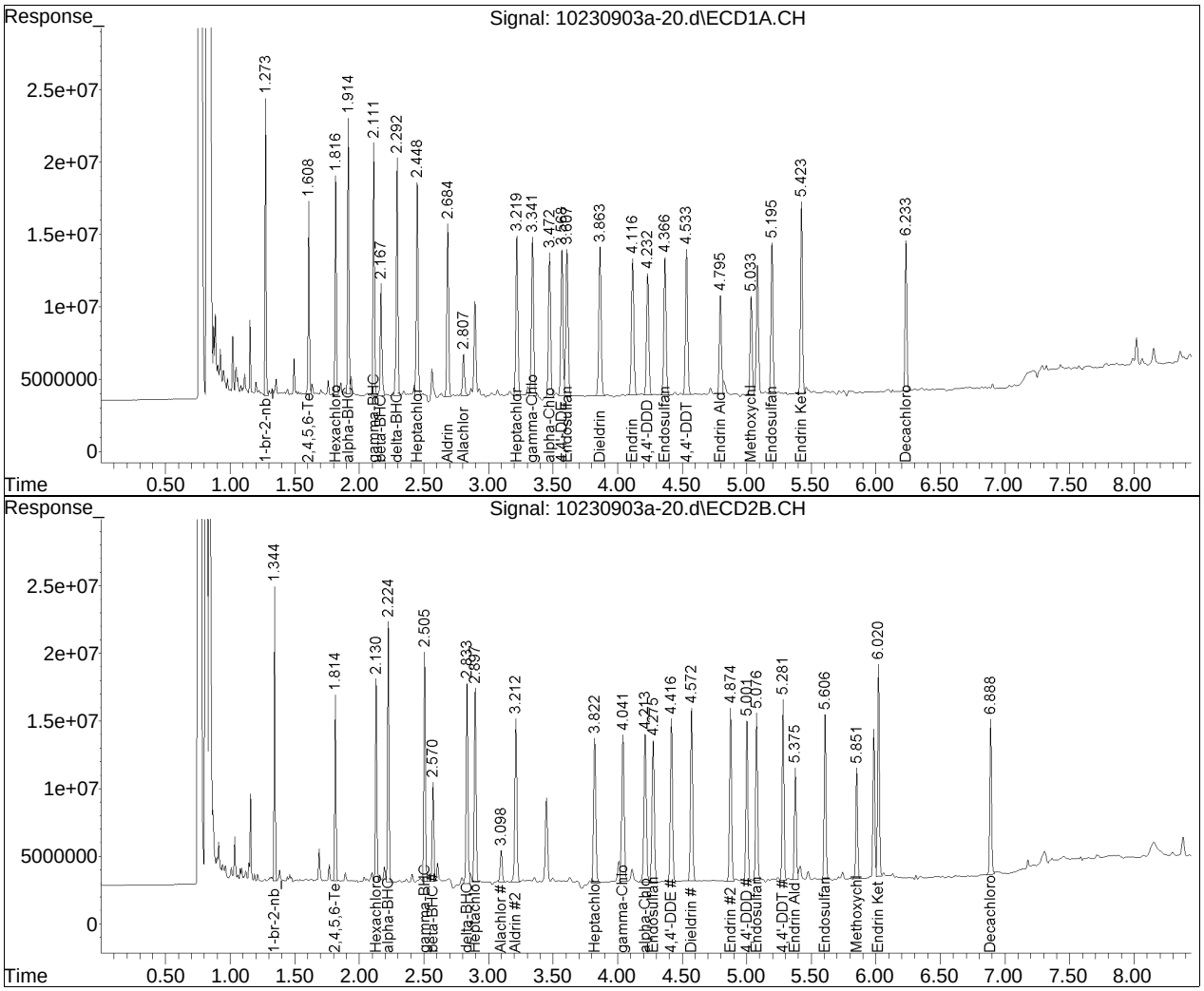
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : LCS_MS - spk only0\2023\230903A\10230903a-03.d••

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-20.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 12:32 pm
Operator : PEST10:mmg
Sample : WG1823255-2,42,,
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical2
ALS Vial : 20 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:39:39 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

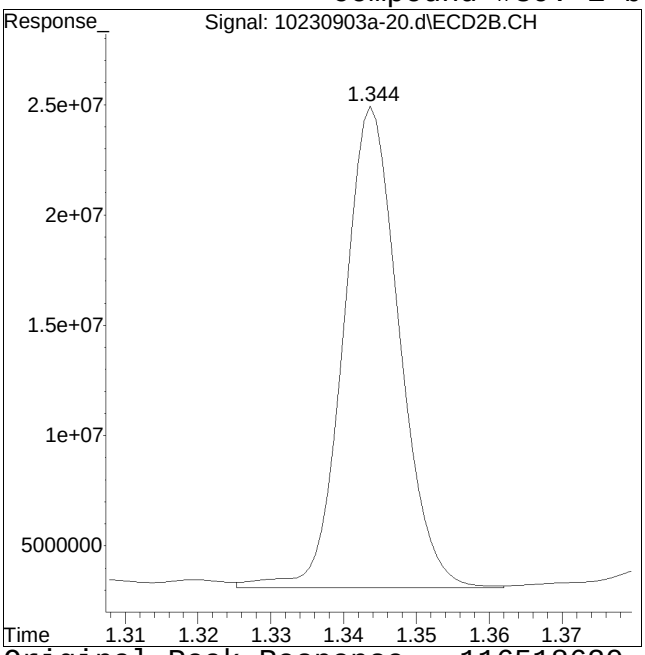
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

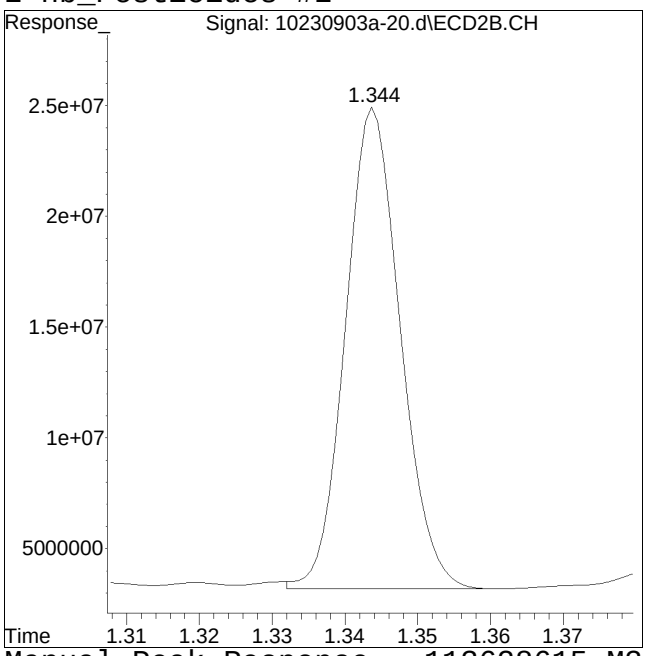


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #39: 1-br-2-nb_Pesticides #2



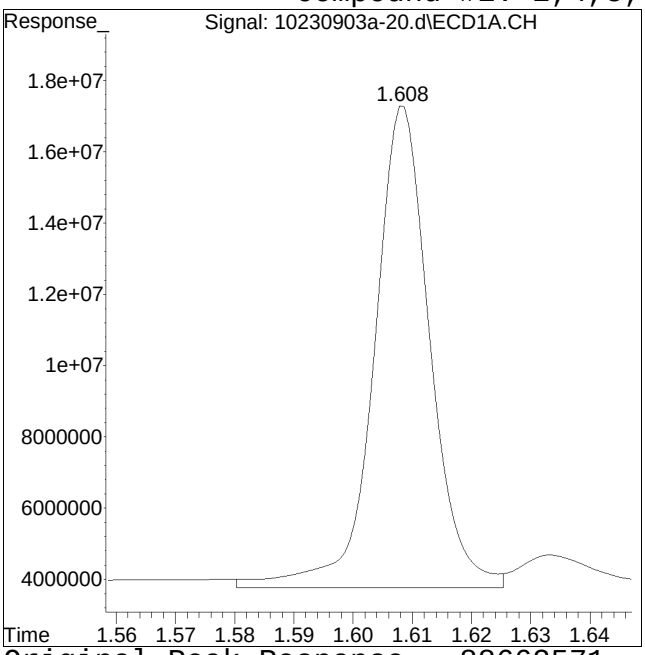


Original Peak Response = 116518620 Manual Peak Response = 113628615 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

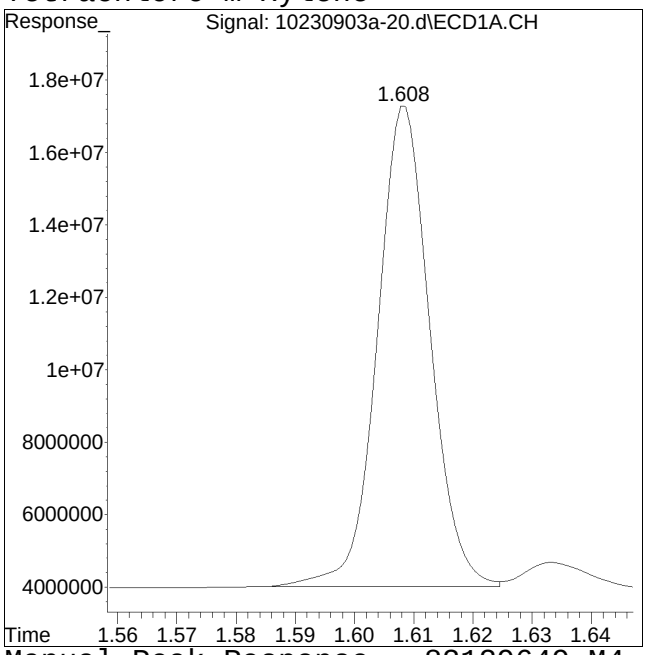
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



Original Peak Response = 88662571



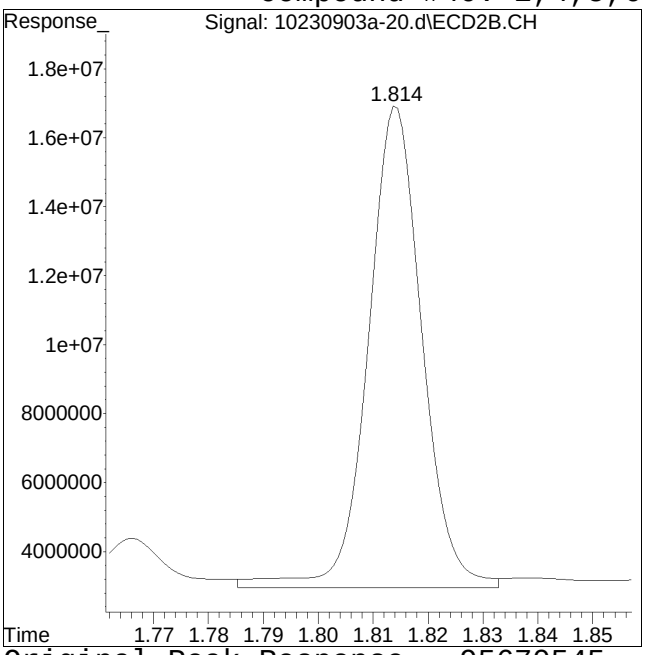
Manual Peak Response = 82129649 M4

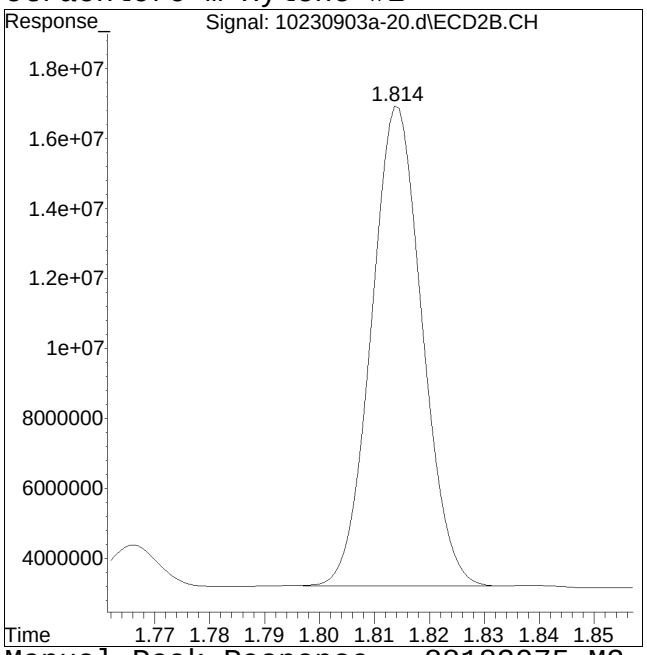
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



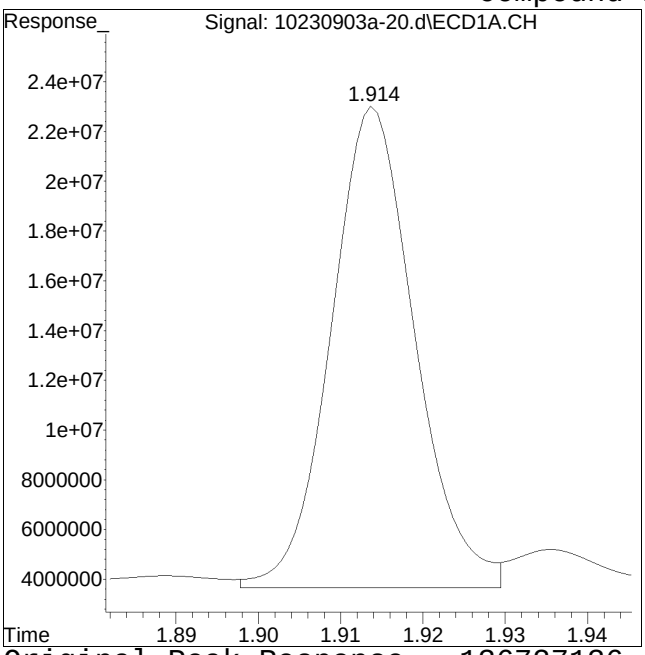


Original Peak Response = 95670545 Manual Peak Response = 88183075 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

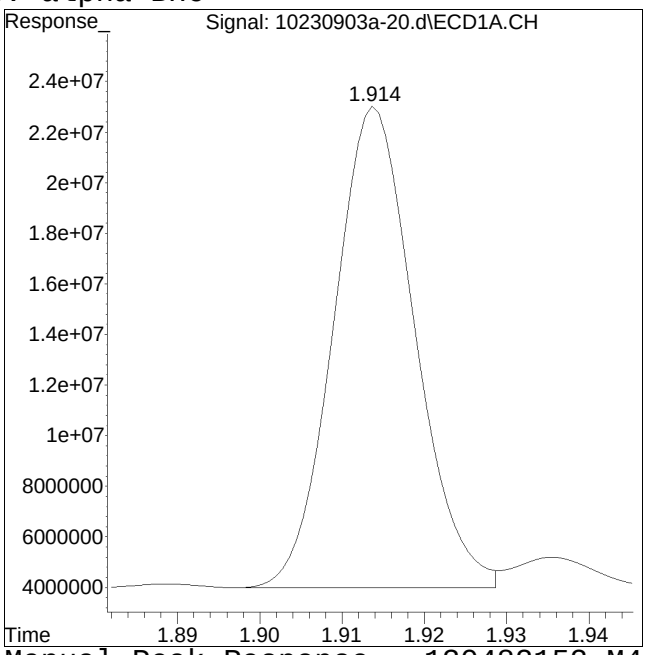
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #4: alpha-BHC



Original Peak Response = 136727136



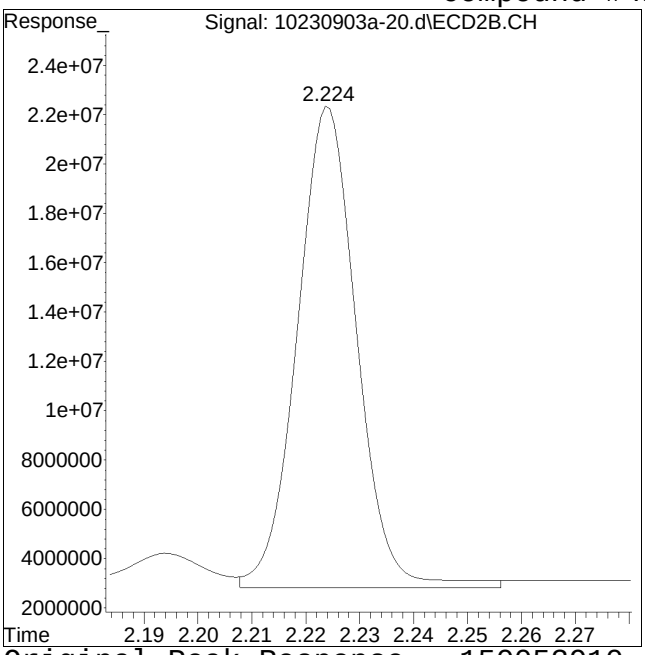
Manual Peak Response = 130482152 M4

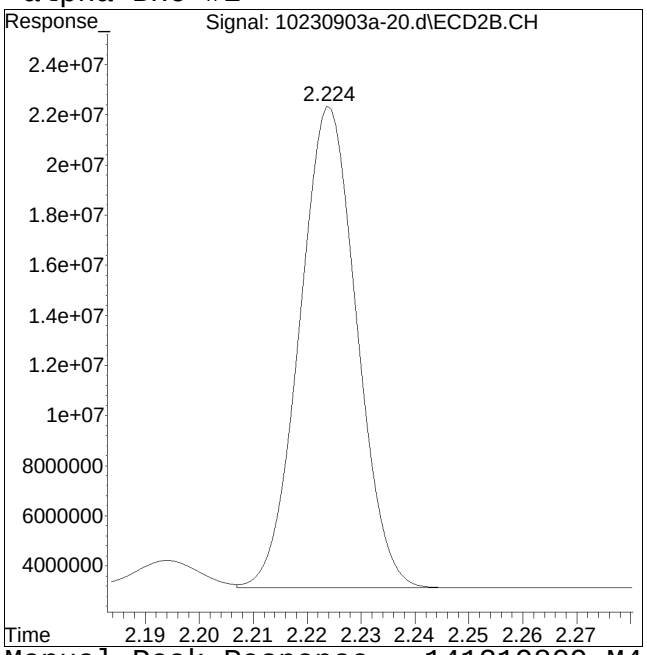
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #42: alpha-BHC #2



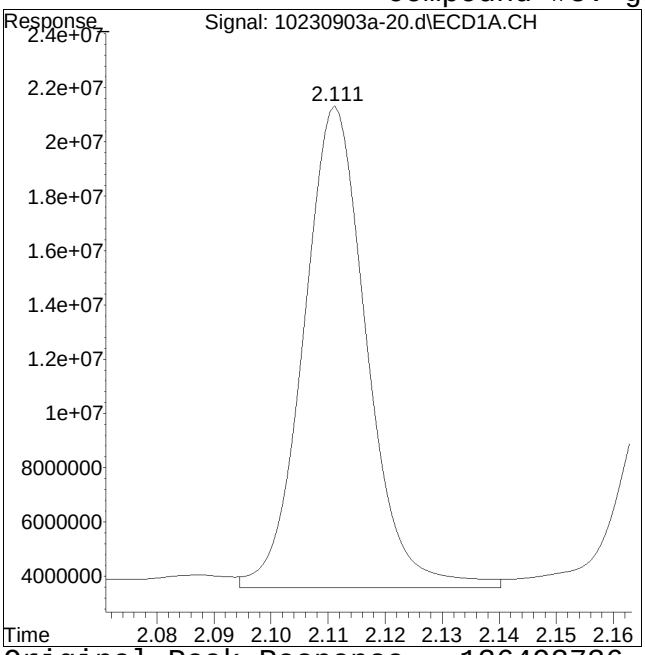


Original Peak Response = 150053910 Manual Peak Response = 141219809 M4
M4 = Poor automated baseline construction.

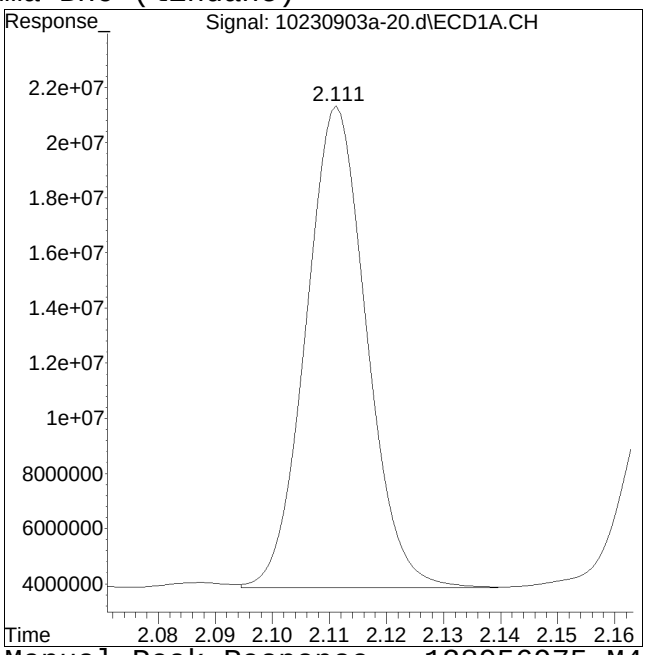
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #5: gamma-BHC (lindane)



Original Peak Response = 136493736



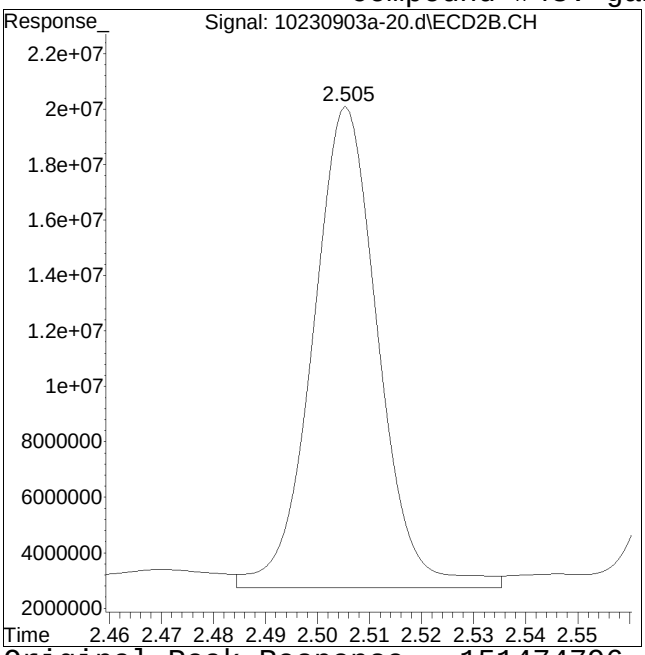
Manual Peak Response = 128956975 M4

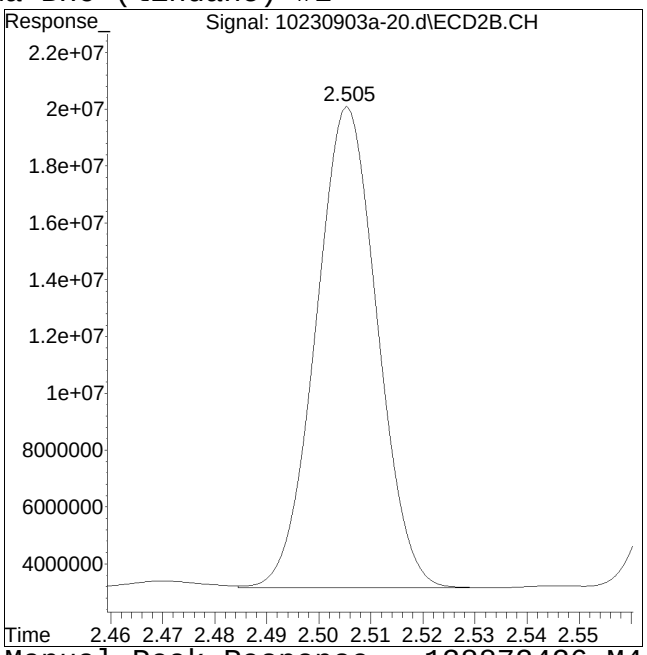
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #43: gamma-BHC (lindane) #2



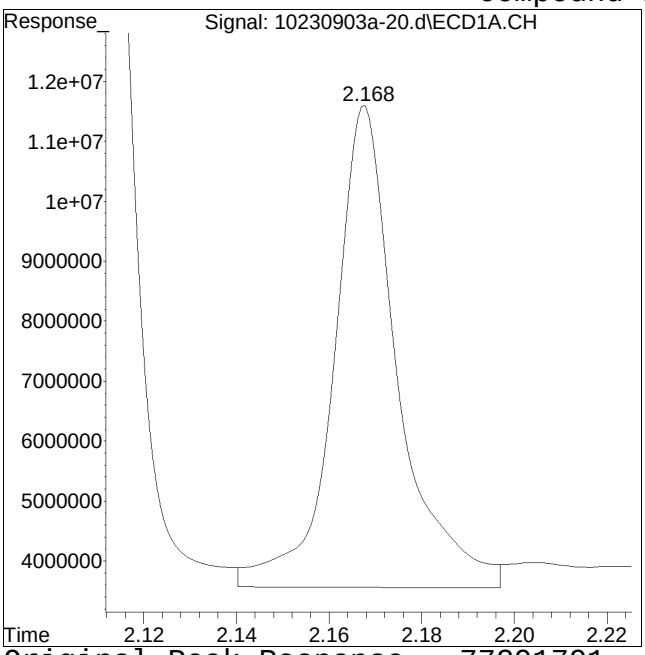


Original Peak Response = 151474796 Manual Peak Response = 138872426 M4
M4 = Poor automated baseline construction.

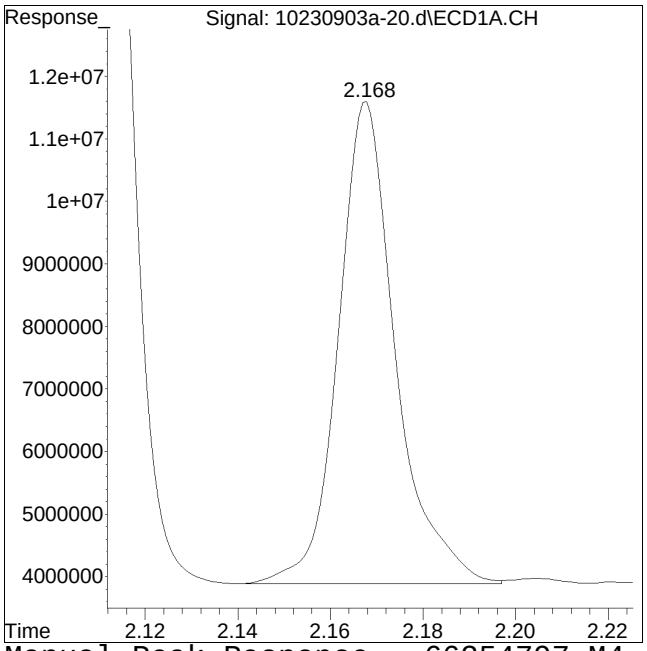
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #6: beta-BHC



Original Peak Response = 77291791



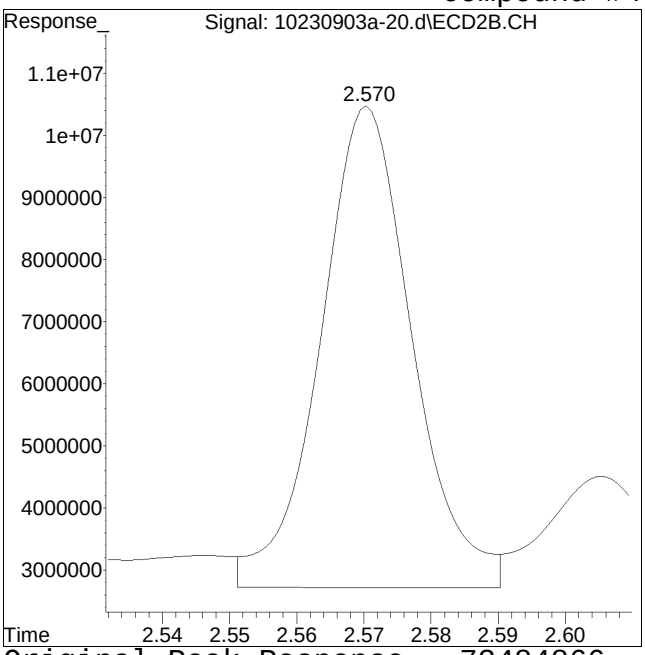
Manual Peak Response = 66254797 M4

M4 = Poor automated baseline construction.

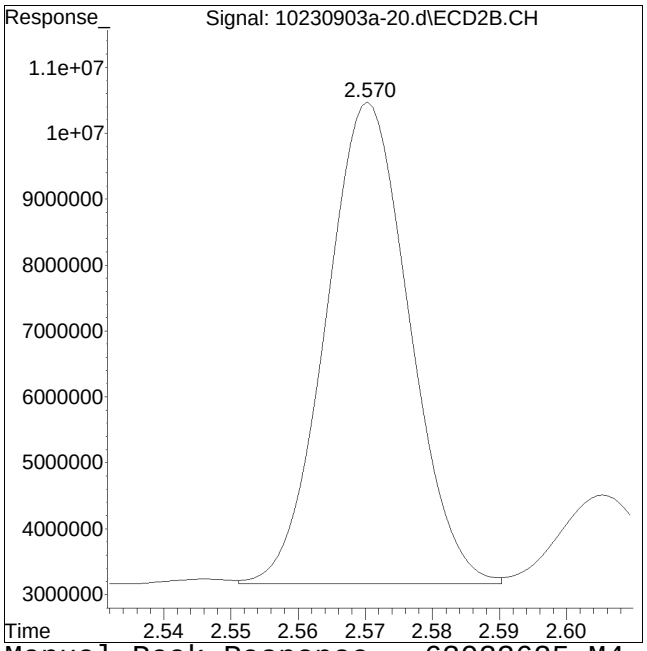
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #44: beta-BHC #2



Original Peak Response = 73484866



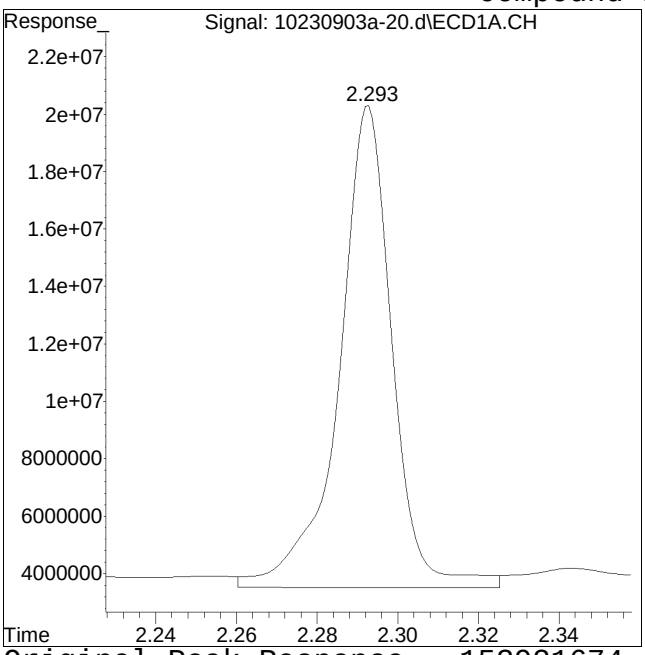
Manual Peak Response = 63033625 M4

M4 = Poor automated baseline construction.

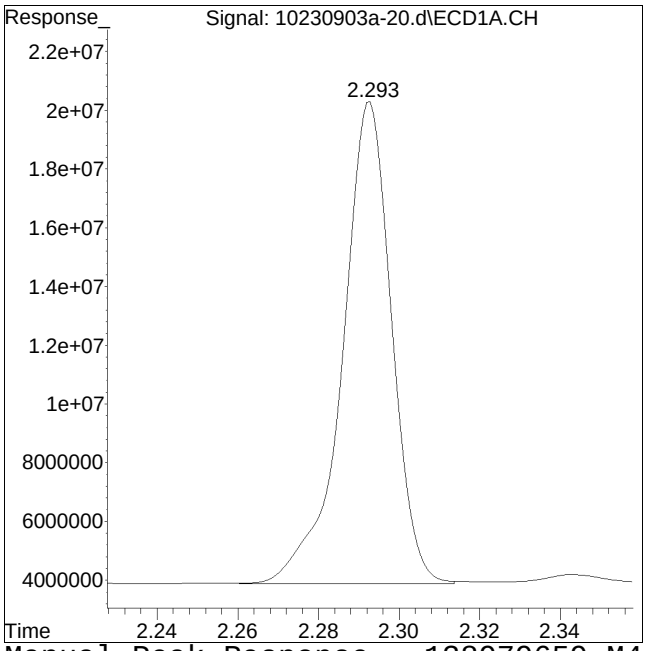
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #7: delta-BHC



Original Peak Response = 153921674



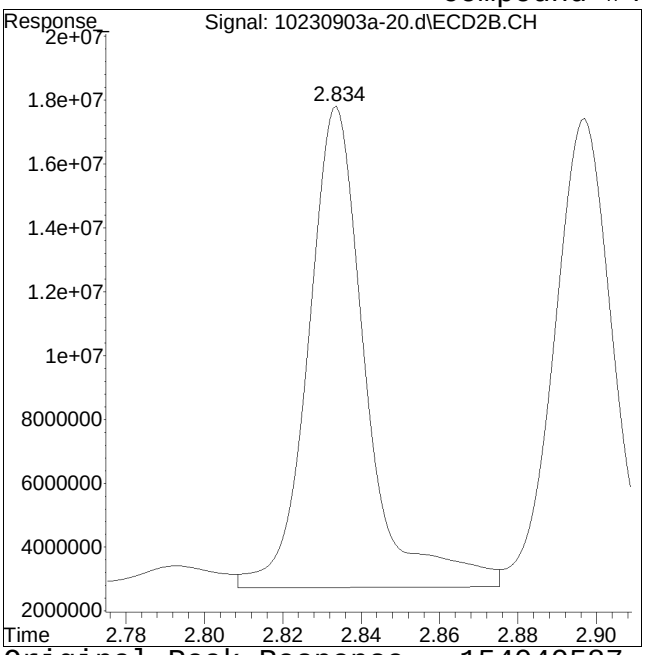
Manual Peak Response = 138979659 M4

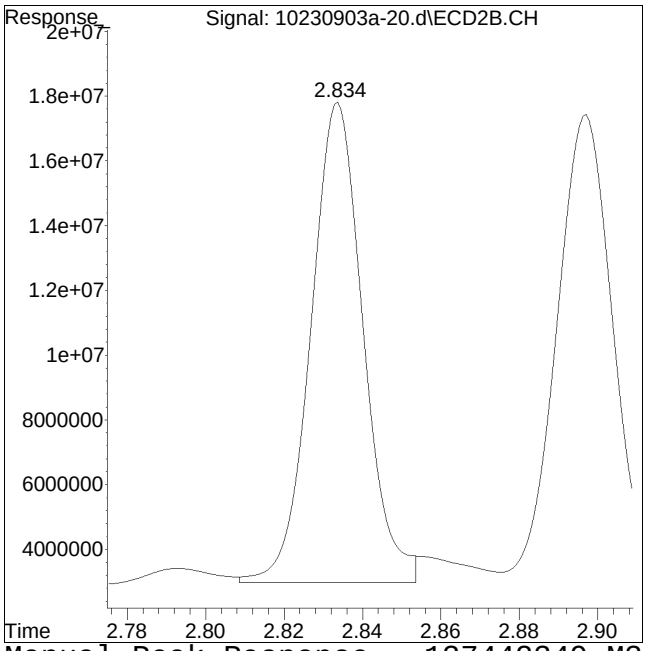
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #45: delta-BHC #2



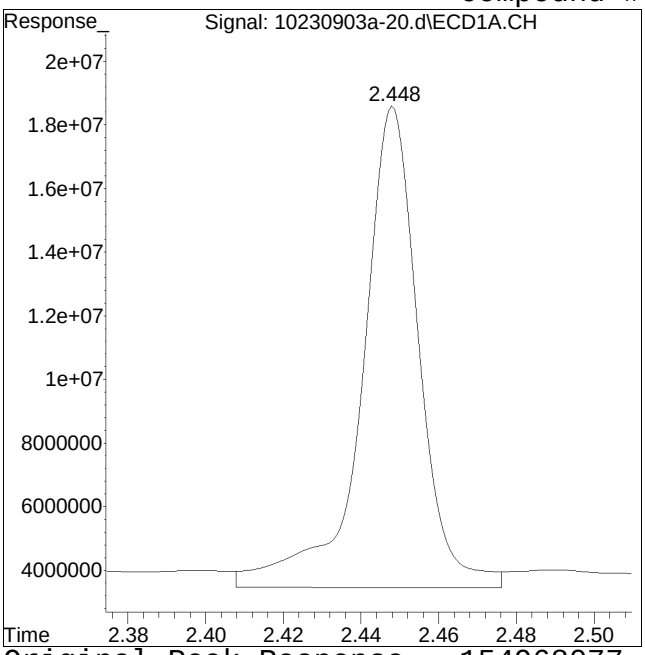


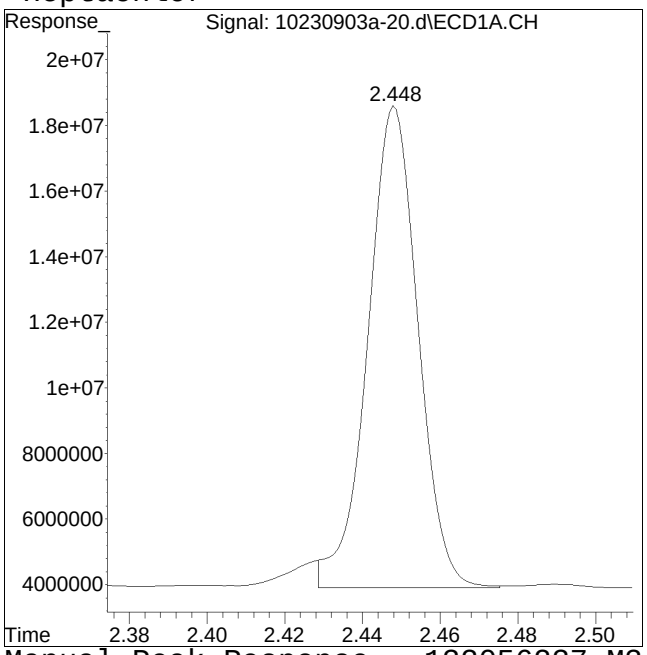
Original Peak Response = 154040587 Manual Peak Response = 137442349 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #8: Heptachlor



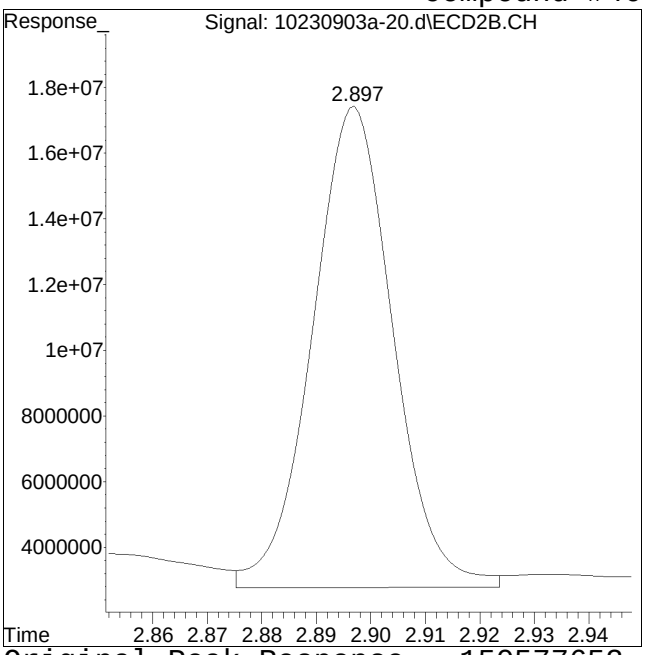


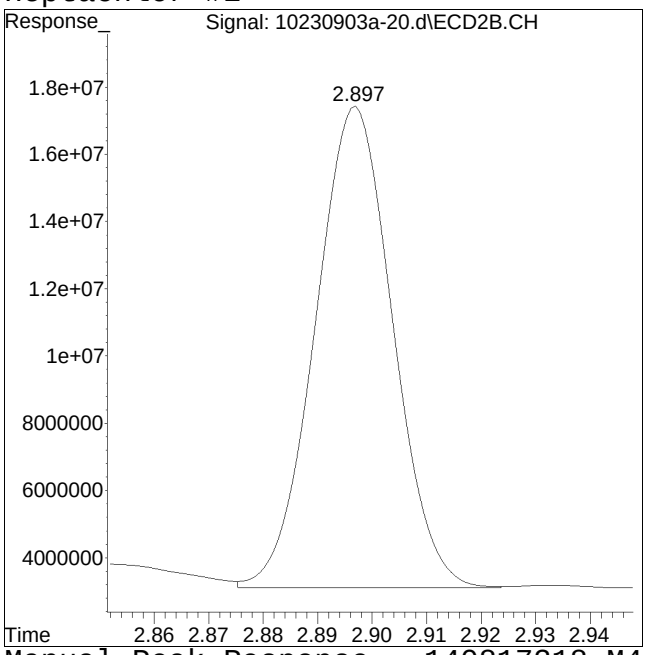
Original Peak Response = 154968077 Manual Peak Response = 132056237 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #46: Heptachlor #2



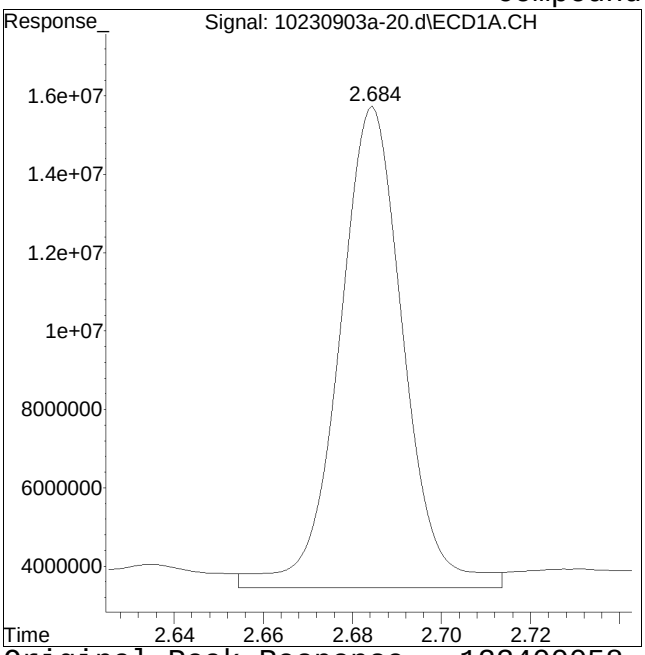


Original Peak Response = 150577652 Manual Peak Response = 140817318 M4
M4 = Poor automated baseline construction.

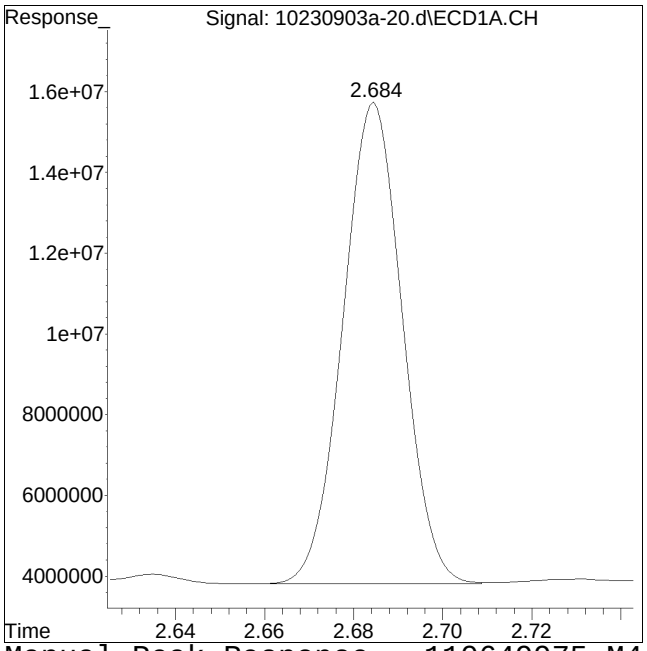
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #9: Aldrin



Original Peak Response = 123400058



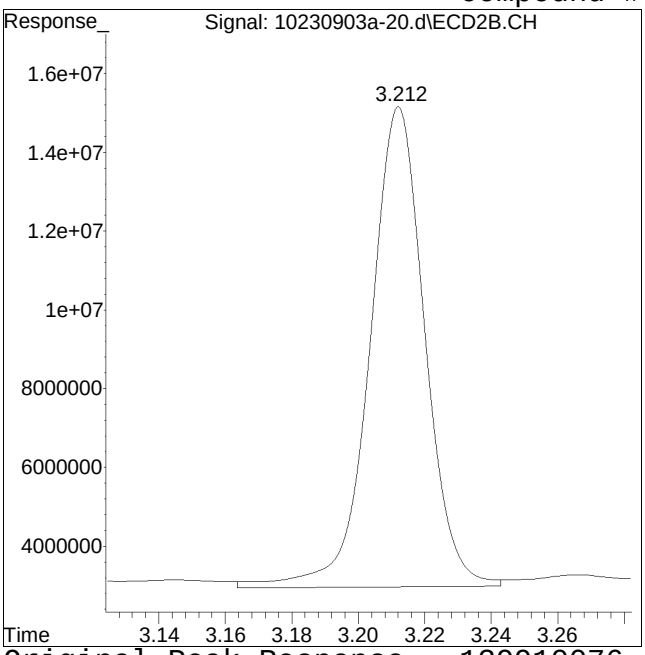
Manual Peak Response = 110649975 M4

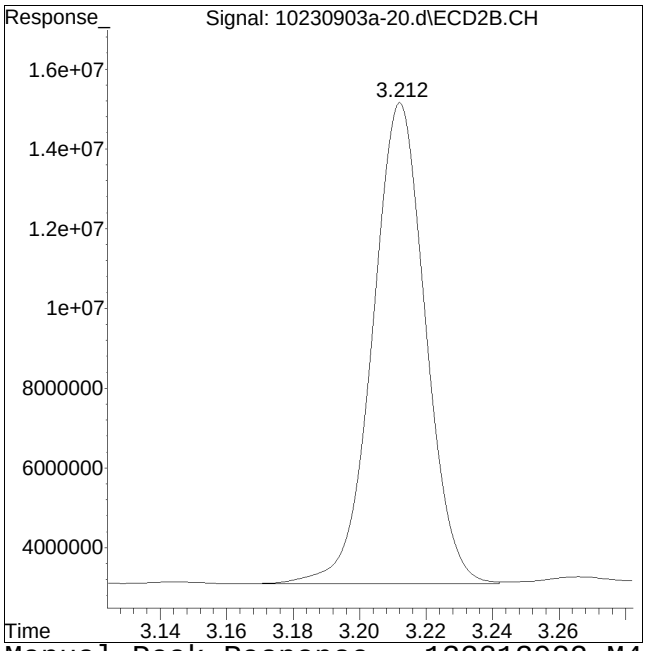
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #47: Aldrin #2



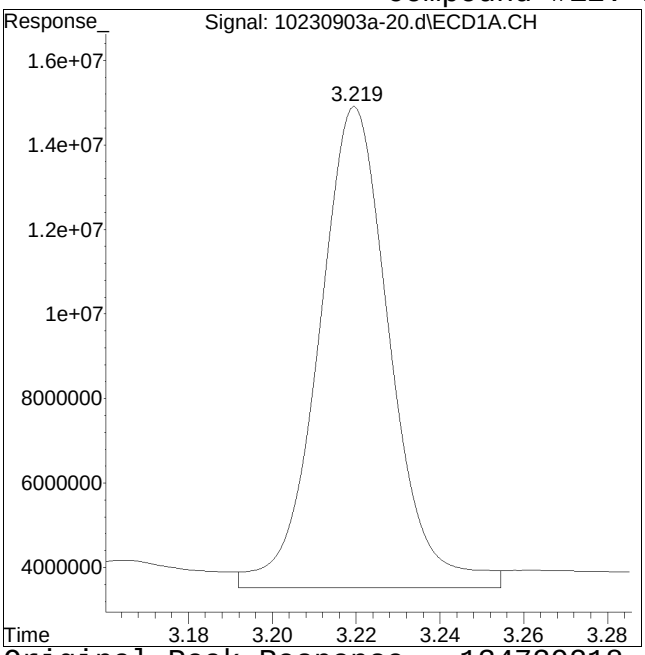


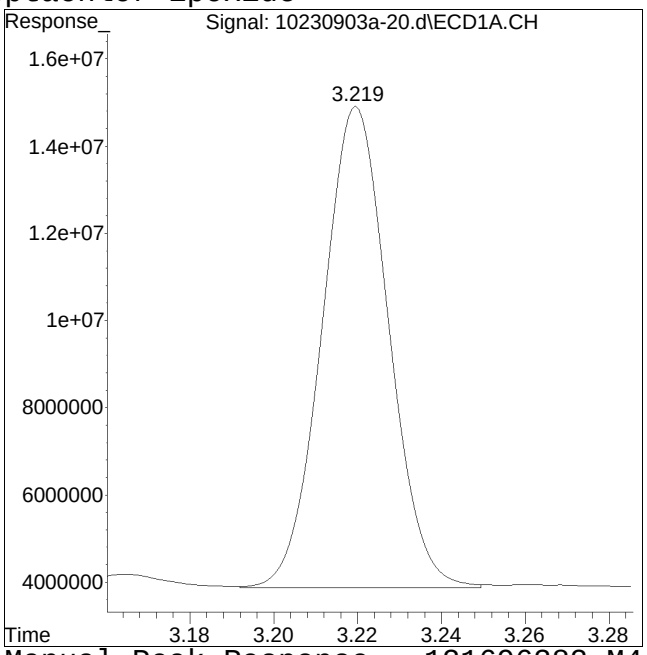
Original Peak Response = 139910076 Manual Peak Response = 133813922 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #12: Heptachlor Epoxide



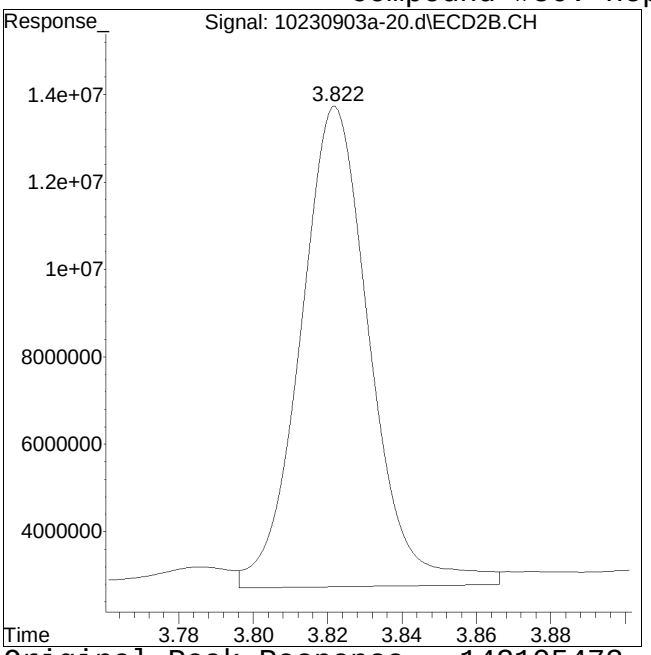


Original Peak Response = 134739218 Manual Peak Response = 121696382 M4
M4 = Poor automated baseline construction.

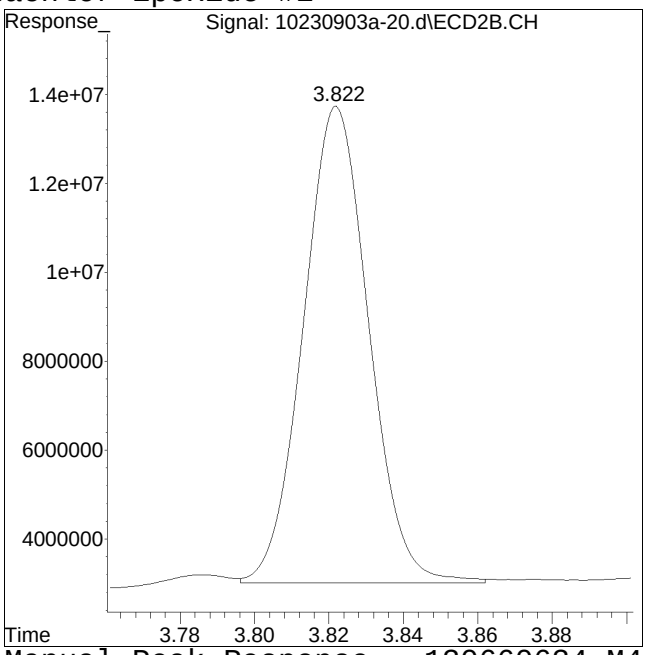
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #50: Heptachlor Epoxide #2



Original Peak Response = 142105473



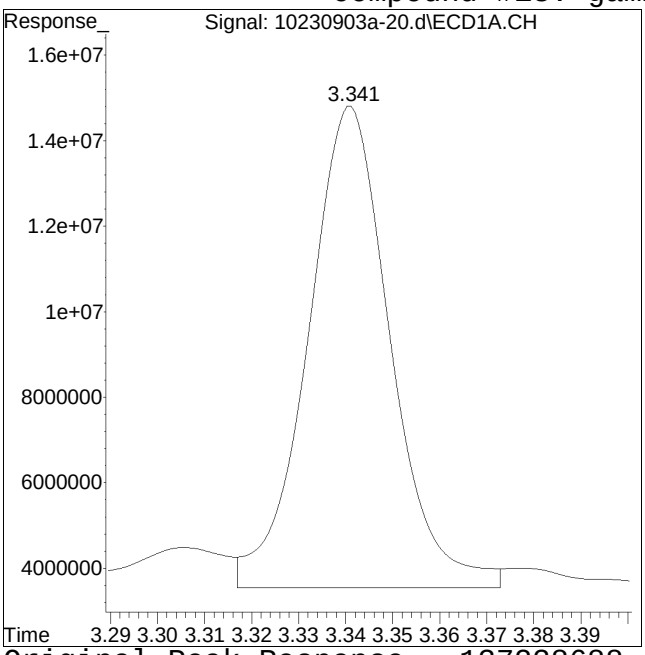
Manual Peak Response = 130660634 M4

M4 = Poor automated baseline construction.

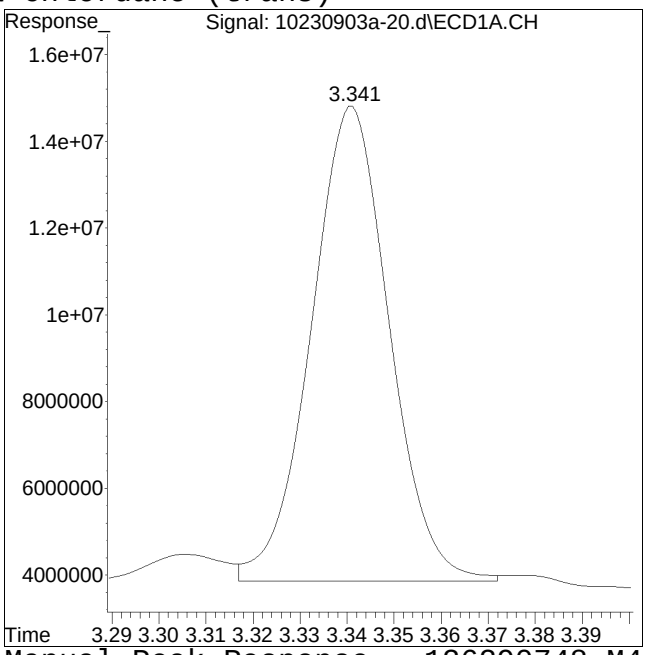
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #13: gamma-Chlordane (trans)



Original Peak Response = 137238688



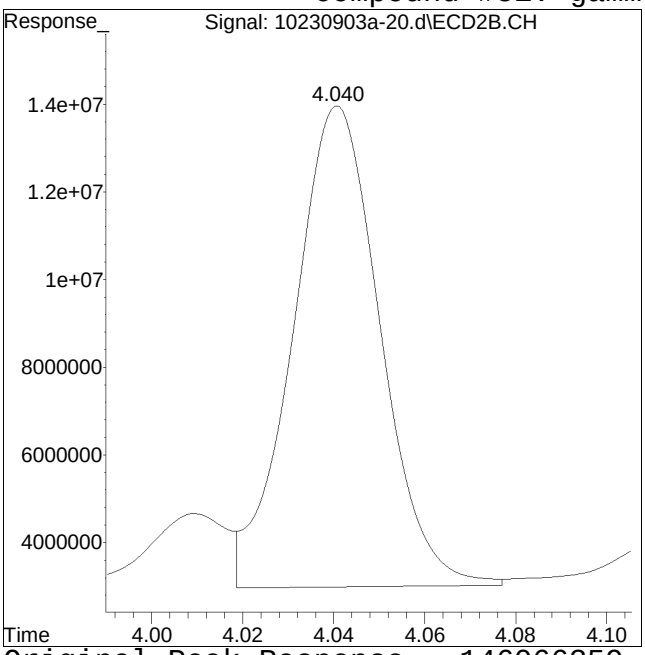
Manual Peak Response = 126290748 M4

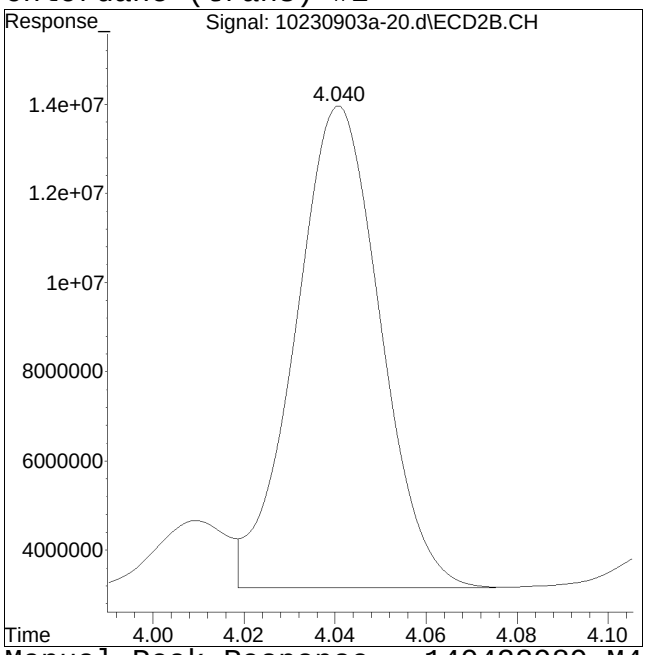
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #51: gamma-Chlordane (trans) #2



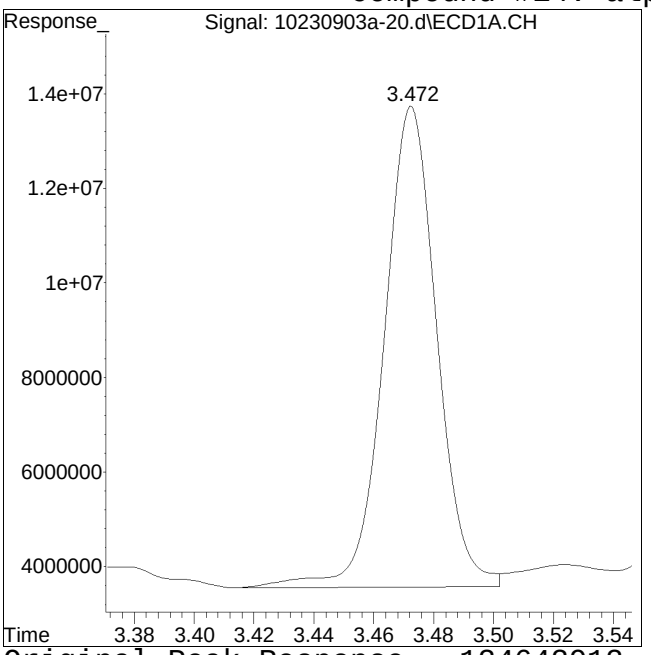


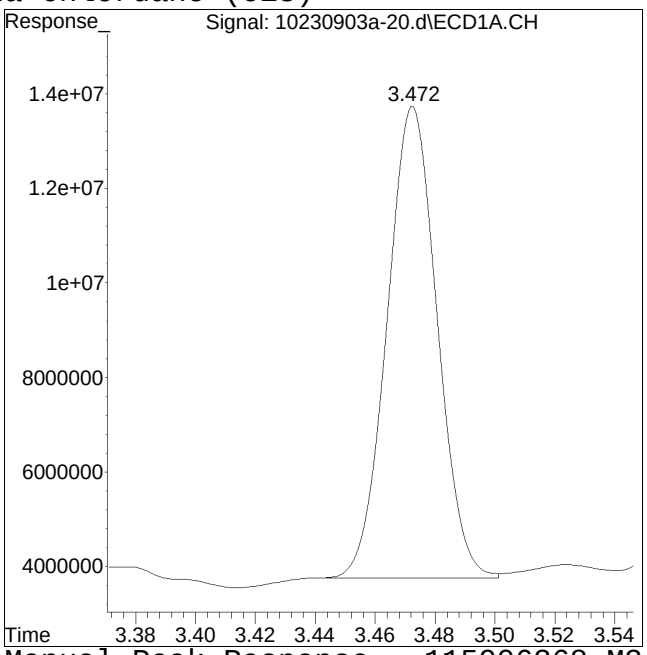
Original Peak Response = 146066359 Manual Peak Response = 140422989 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #14: alpha-Chlordane (cis)



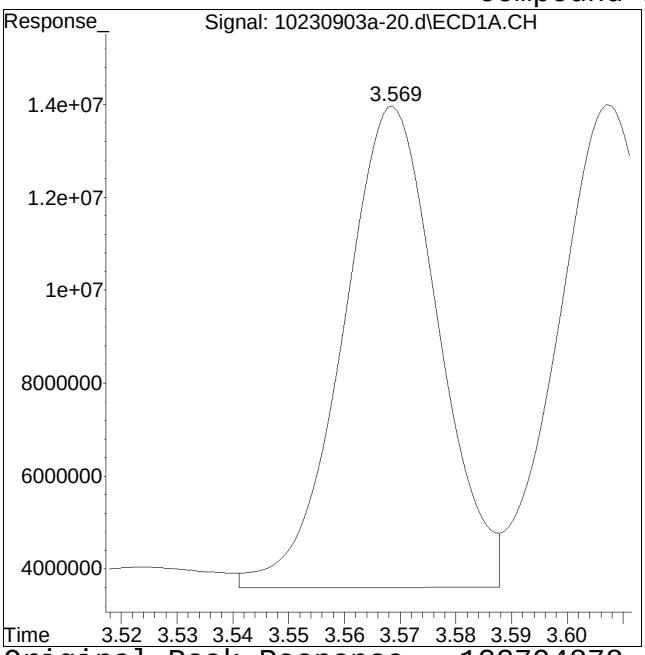


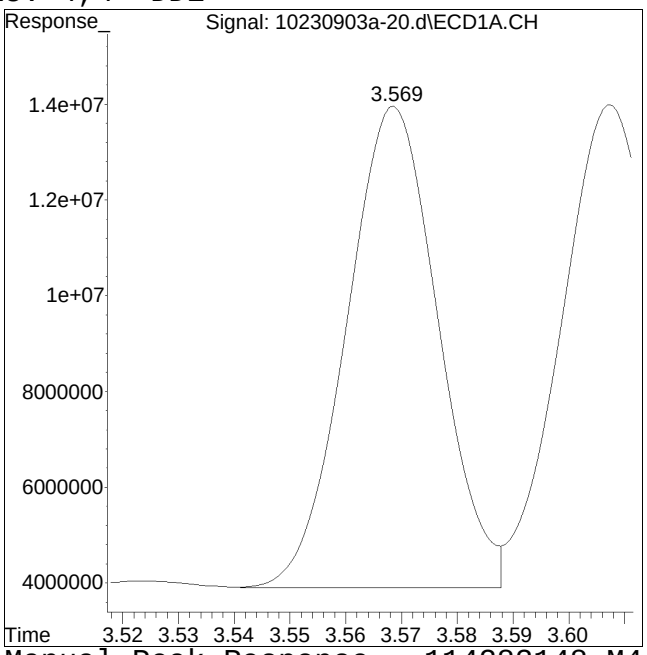
Original Peak Response = 124642912 Manual Peak Response = 115906368 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #15: 4,4'-DDE



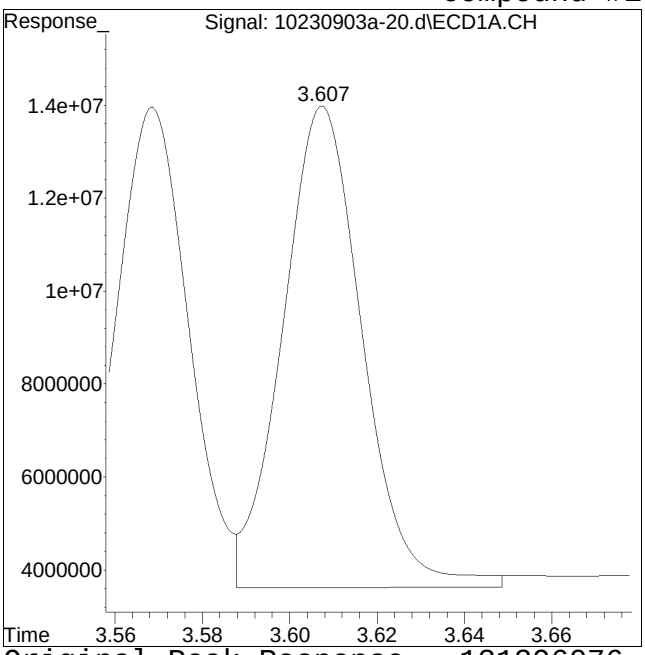


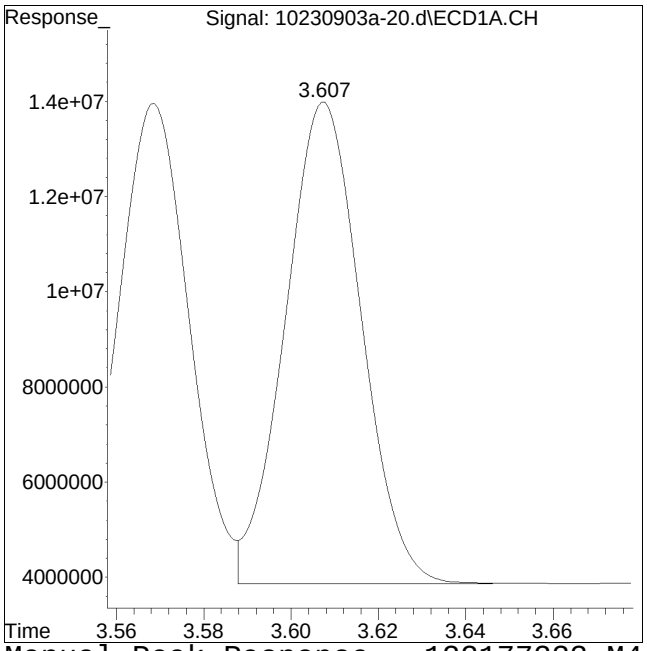
Original Peak Response = 122794878 Manual Peak Response = 114283148 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #16: Endosulfan I



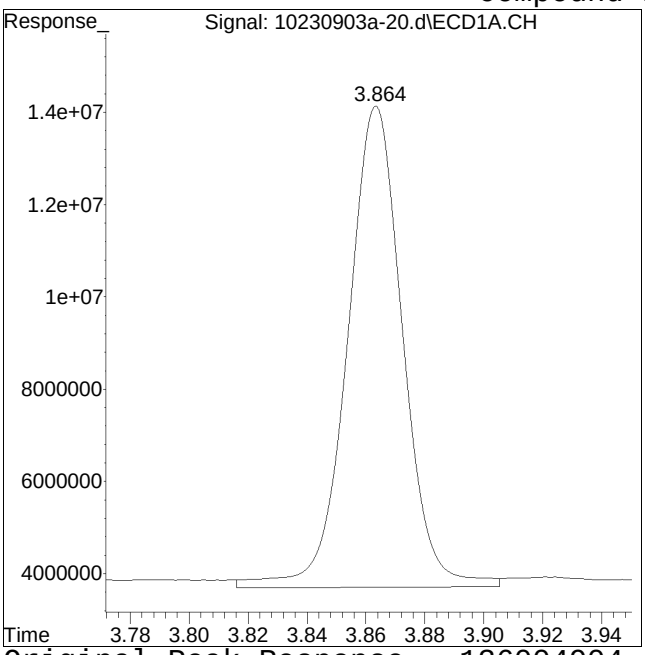


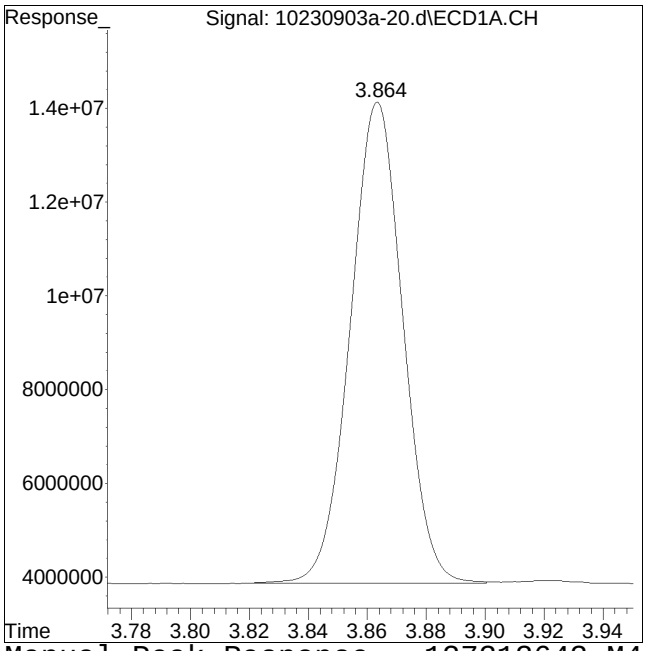
Original Peak Response = 131396076 Manual Peak Response = 122177233 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #17: Dieldrin



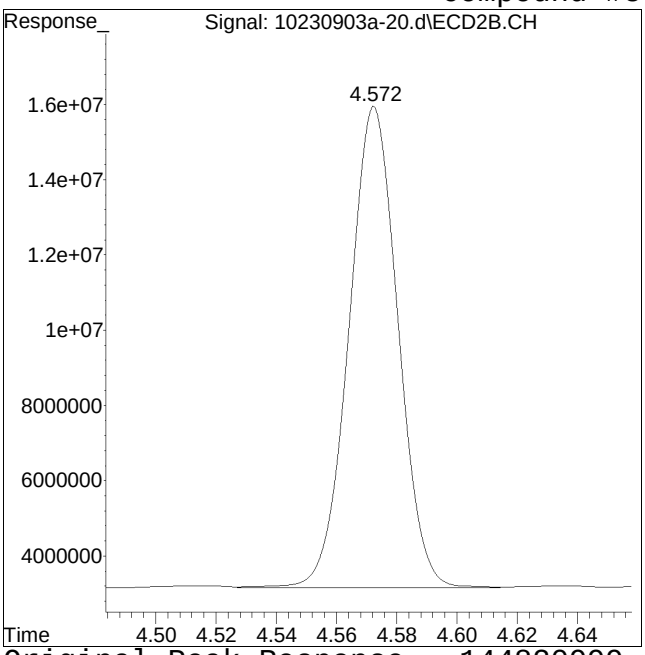


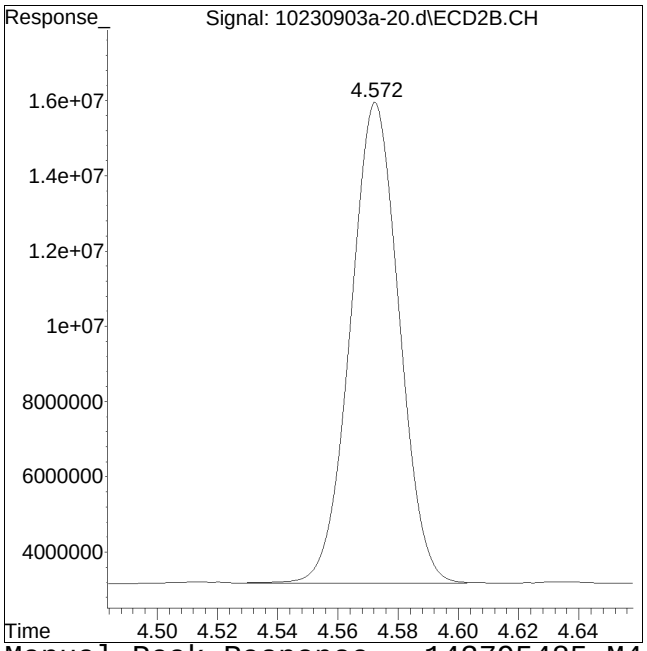
Original Peak Response = 136004904 Manual Peak Response = 127313643 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #55: Dieldrin #2



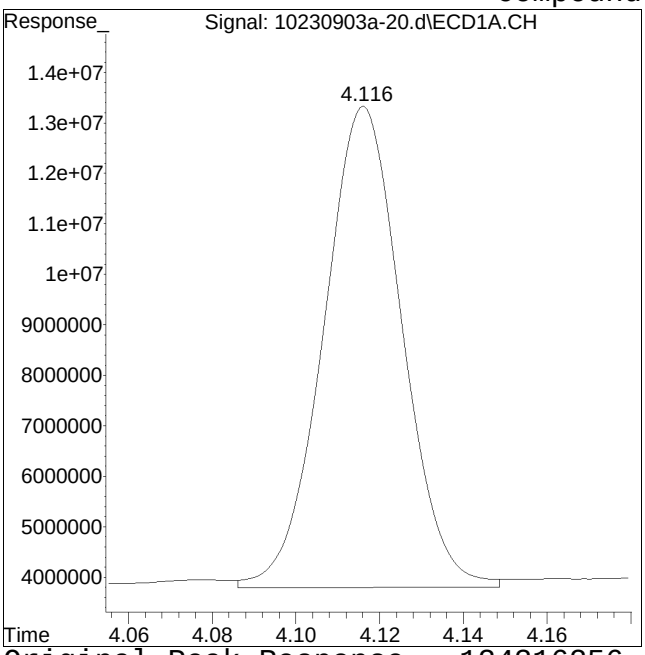


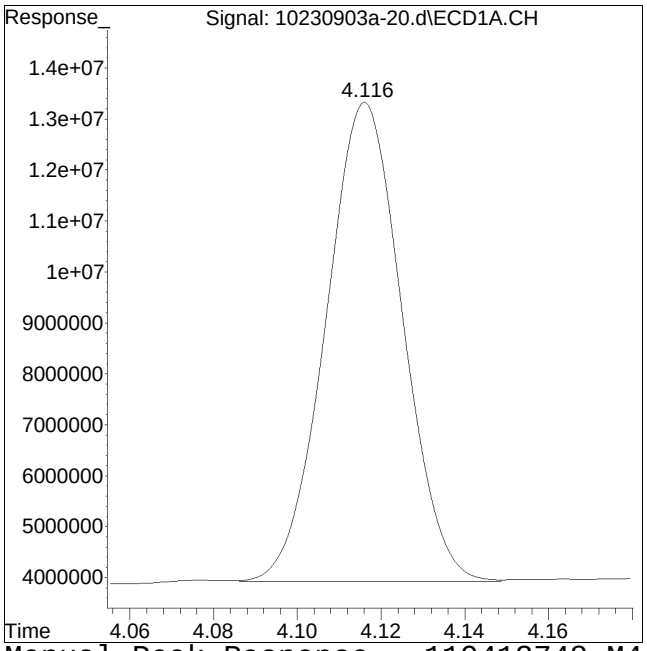
Original Peak Response = 144820999 Manual Peak Response = 143795485 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #18: Endrin



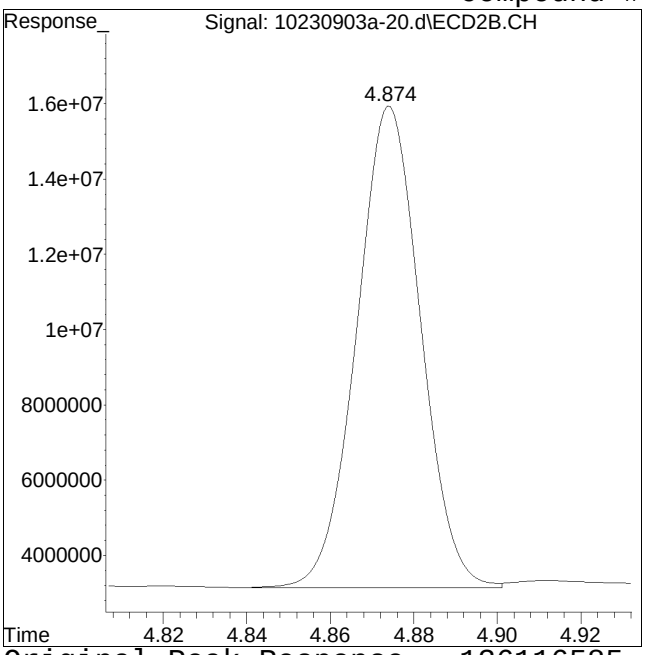


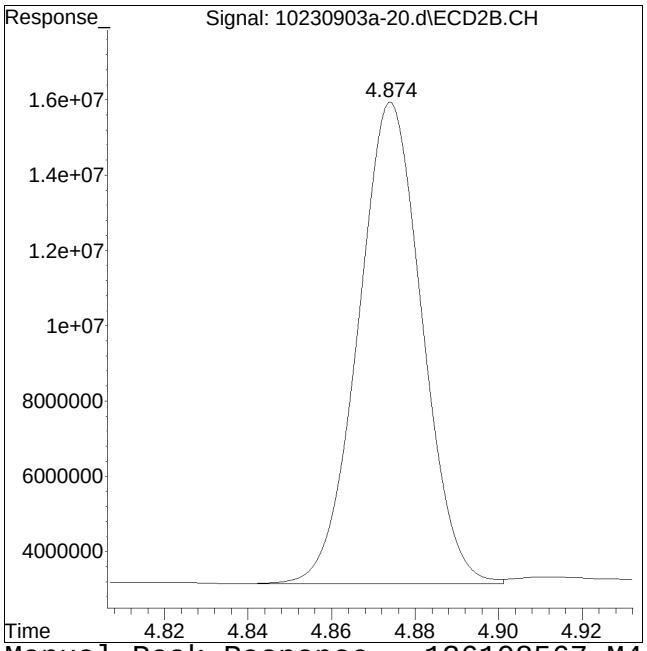
Original Peak Response = 124316256 Manual Peak Response = 119413748 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #56: Endrin #2



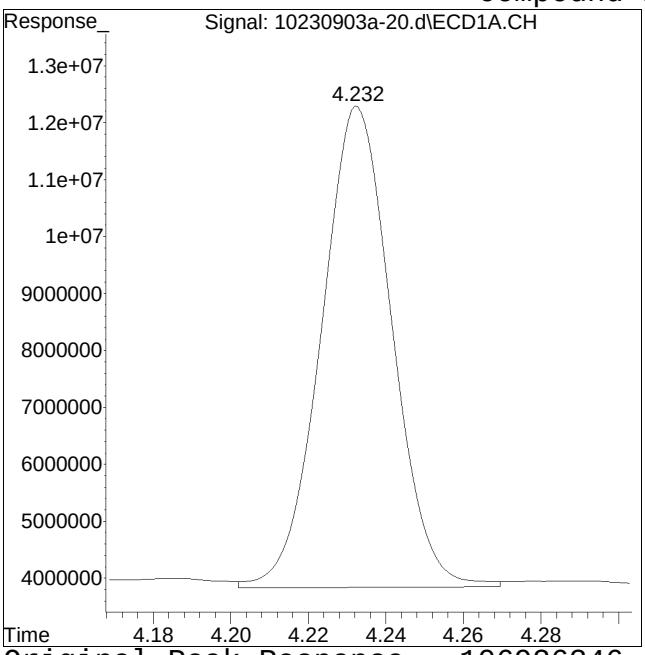


Original Peak Response = 136116585 Manual Peak Response = 136108567 M4
M4 = Poor automated baseline construction.

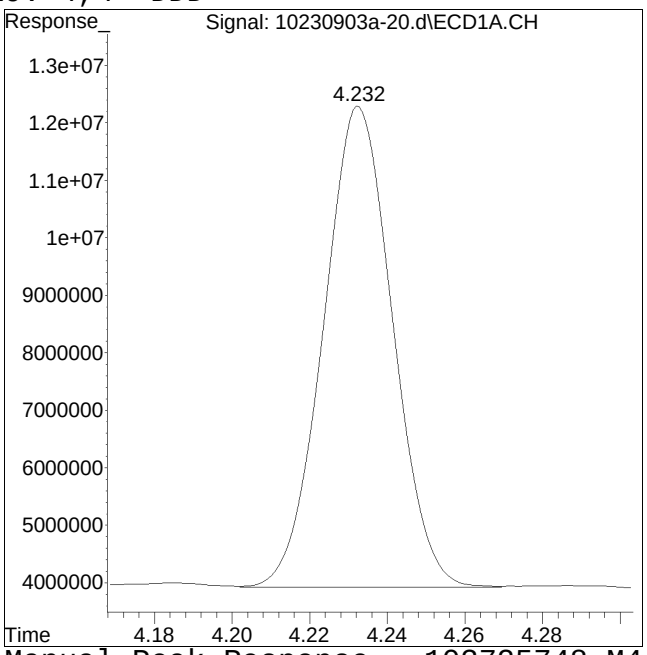
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #19: 4,4'-DDD



Original Peak Response = 106926346



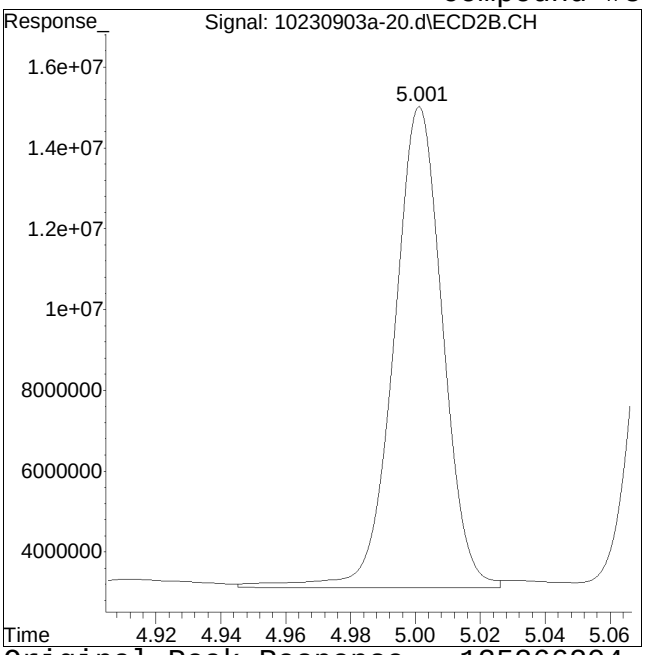
Manual Peak Response = 103725748 M4

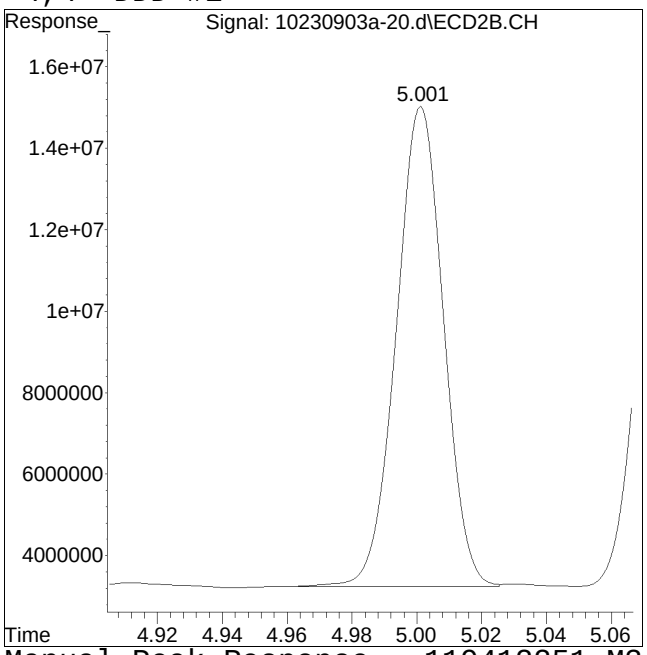
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #57: 4,4'-DDD #2



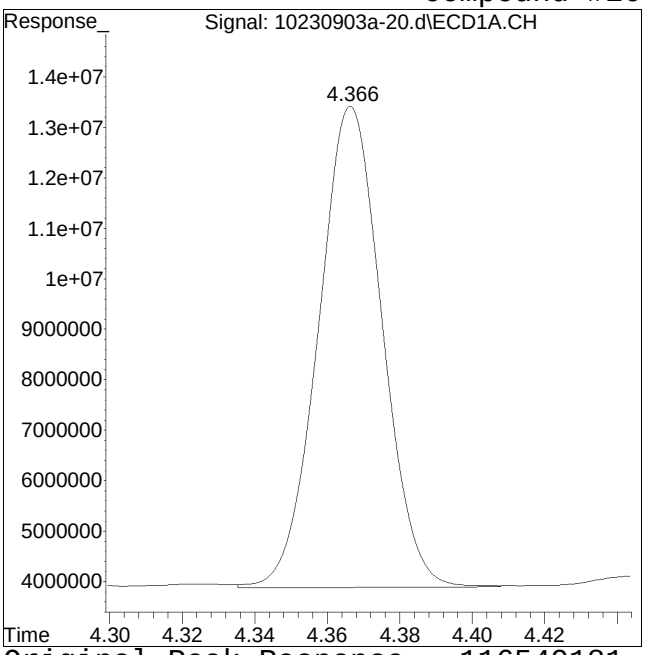


Original Peak Response = 125266204 Manual Peak Response = 119412251 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

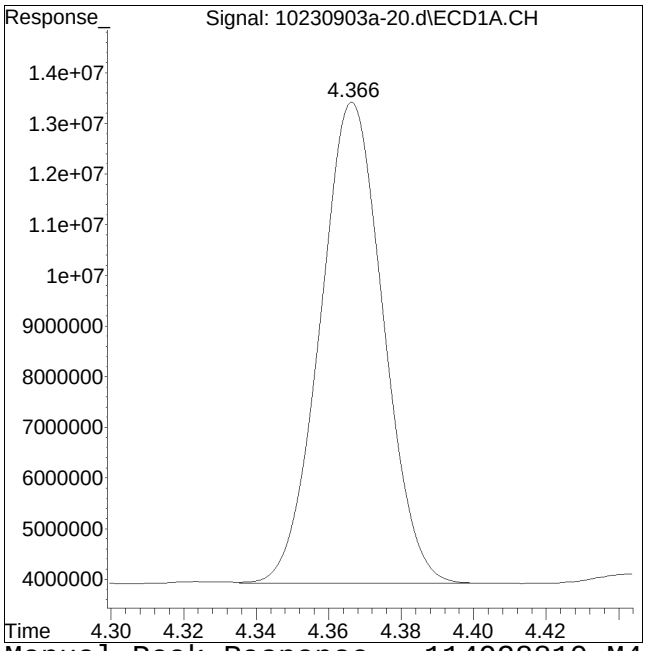
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #20: Endosulfan II



Original Peak Response = 116549181



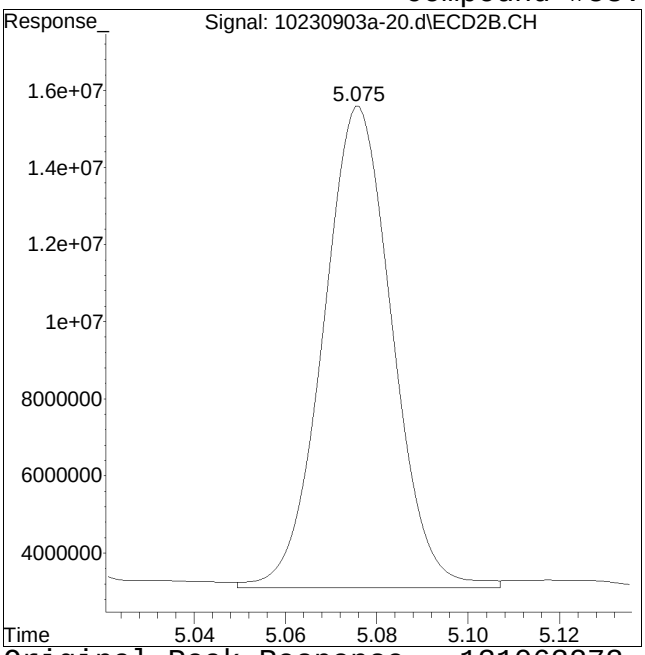
Manual Peak Response = 114928810 M4

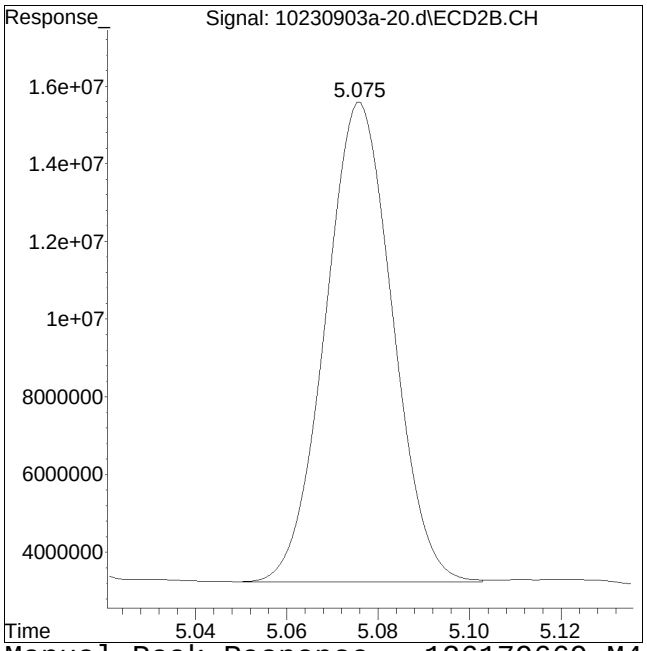
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #58: Endosulfan II #2



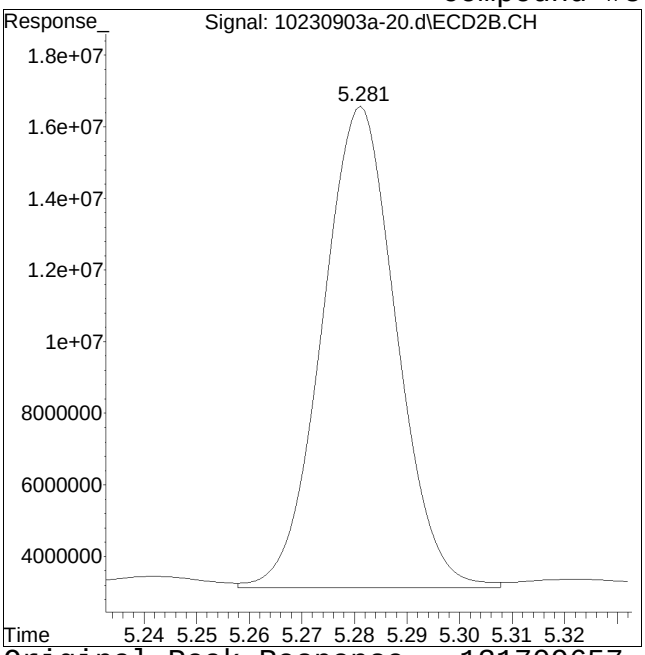


Original Peak Response = 131063273 Manual Peak Response = 126179669 M4
M4 = Poor automated baseline construction.

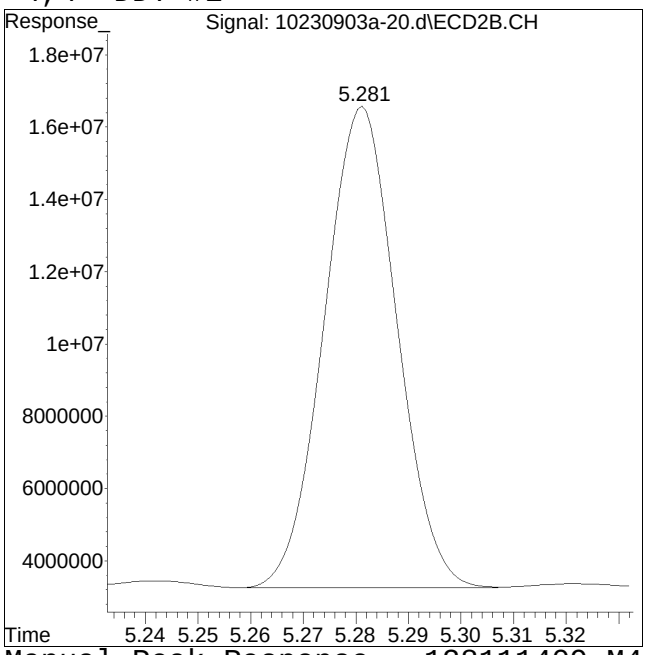
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #59: 4,4'-DDT #2



Original Peak Response = 131709657



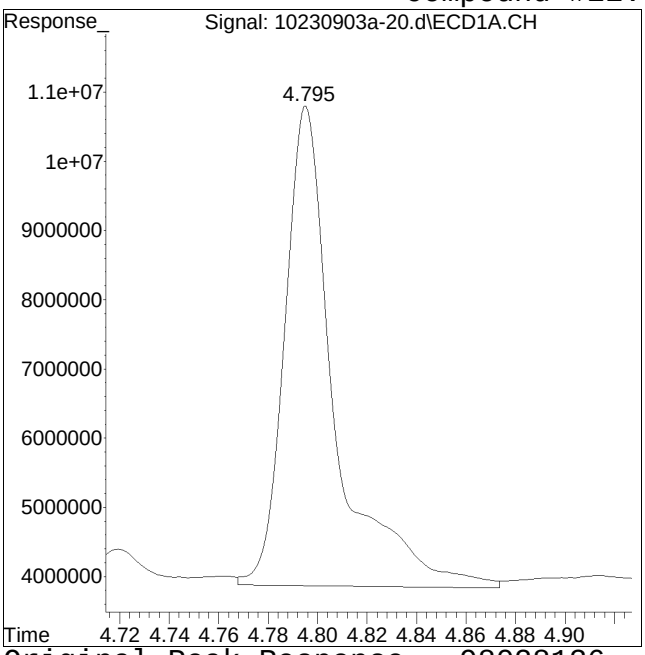
Manual Peak Response = 128111409 M4

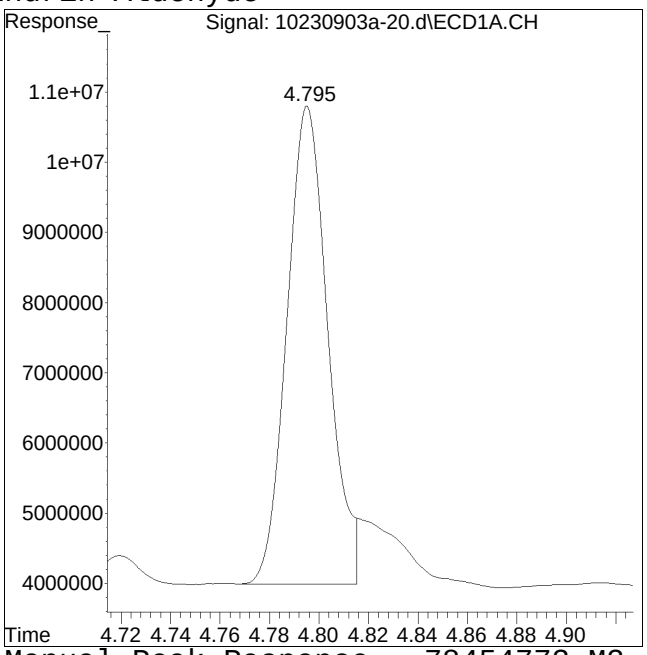
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #22: Endrin Aldehyde



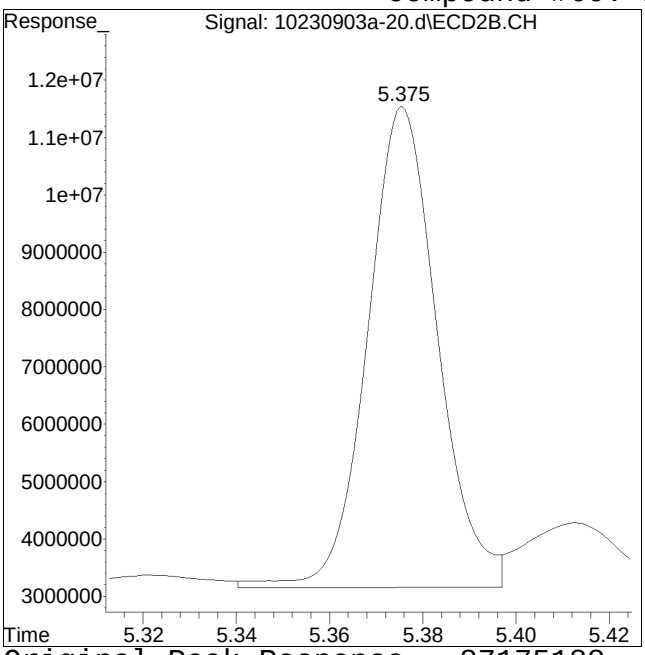


Original Peak Response = 98028136 Manual Peak Response = 78454773 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

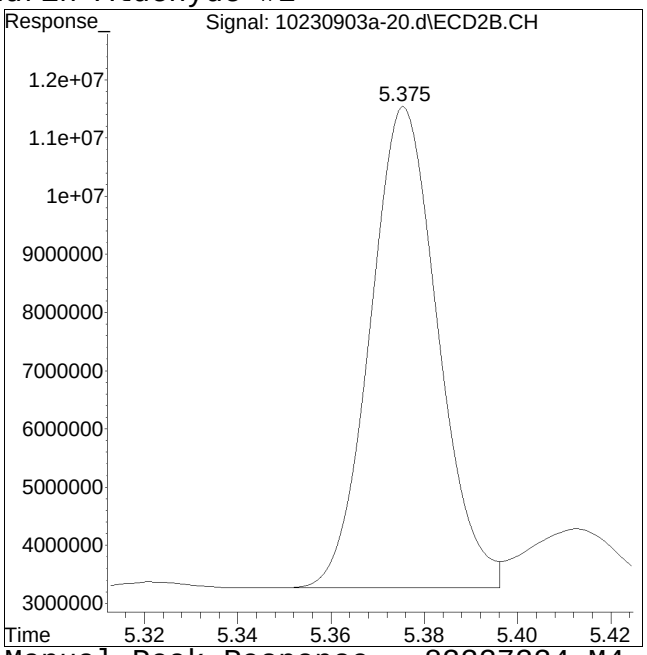
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #60: Endrin Aldehyde #2



Original Peak Response = 87175188



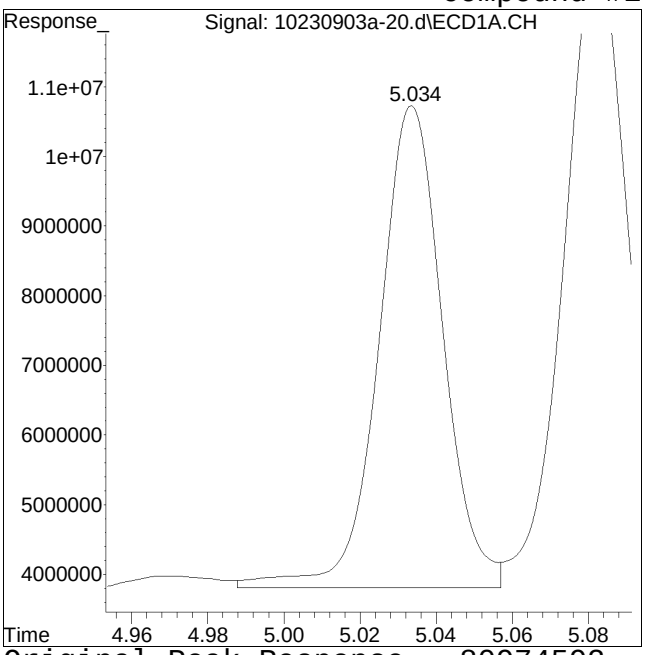
Manual Peak Response = 83337334 M4

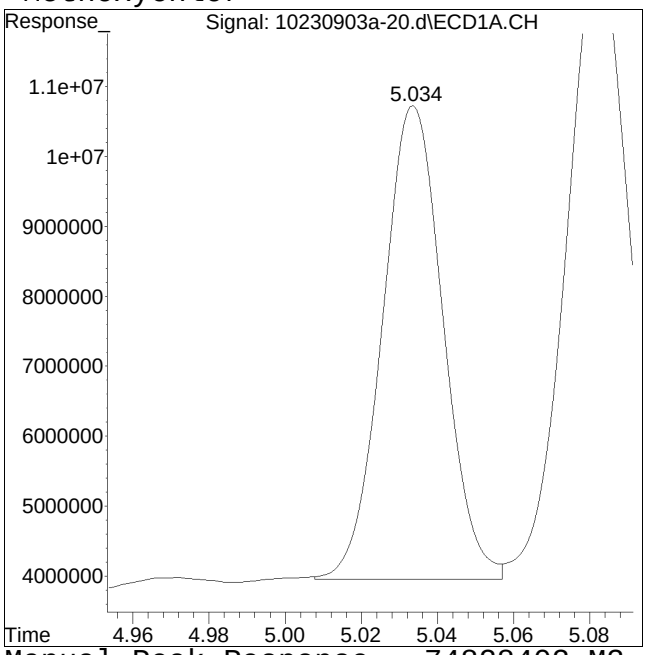
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #23: Methoxychlor



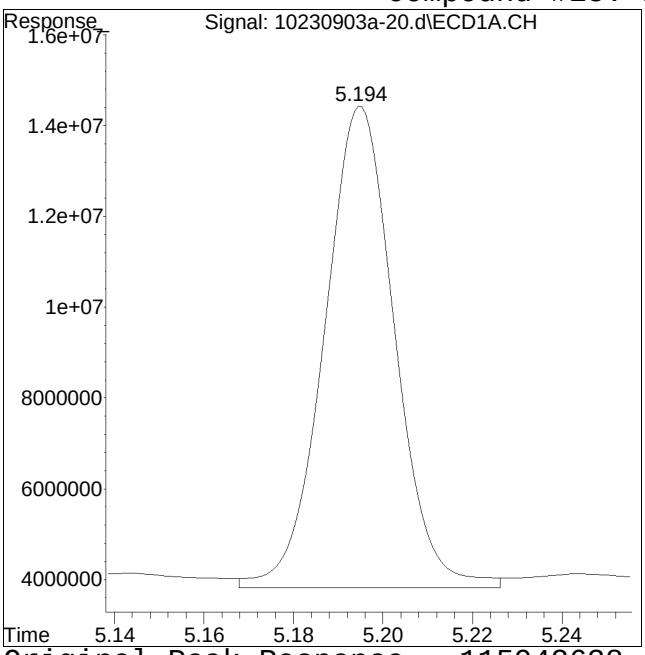


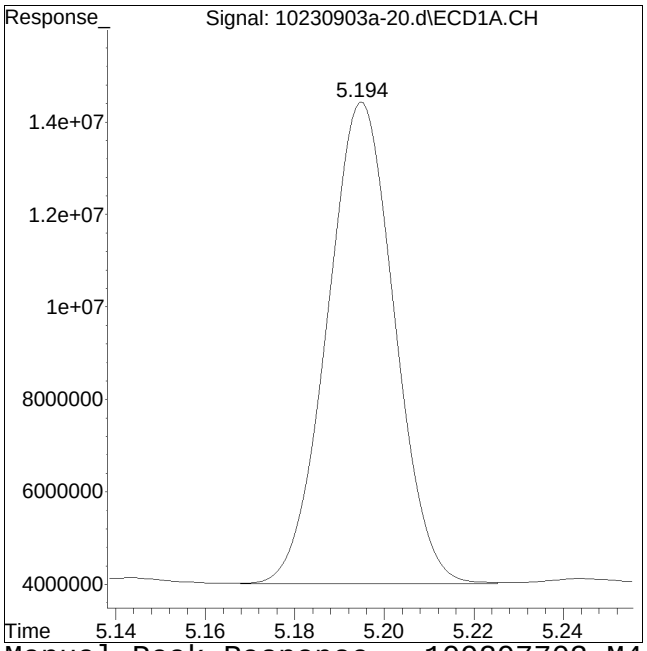
Original Peak Response = 80974592 Manual Peak Response = 74828402 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #25: Endosulfan Sulfate



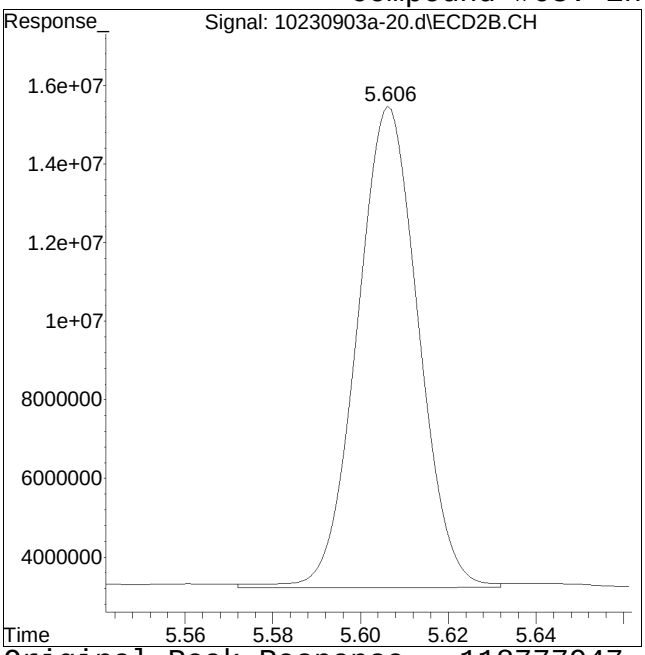


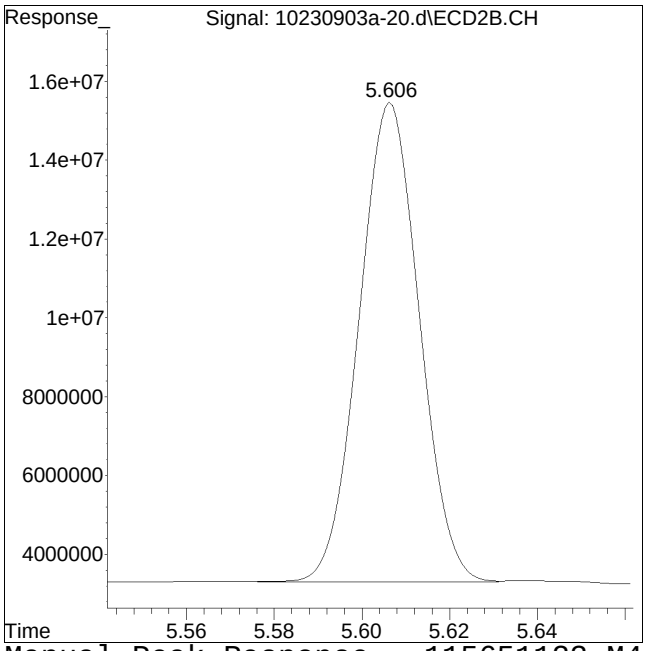
Original Peak Response = 115942638 Manual Peak Response = 109207703 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #63: Endosulfan Sulfate #2



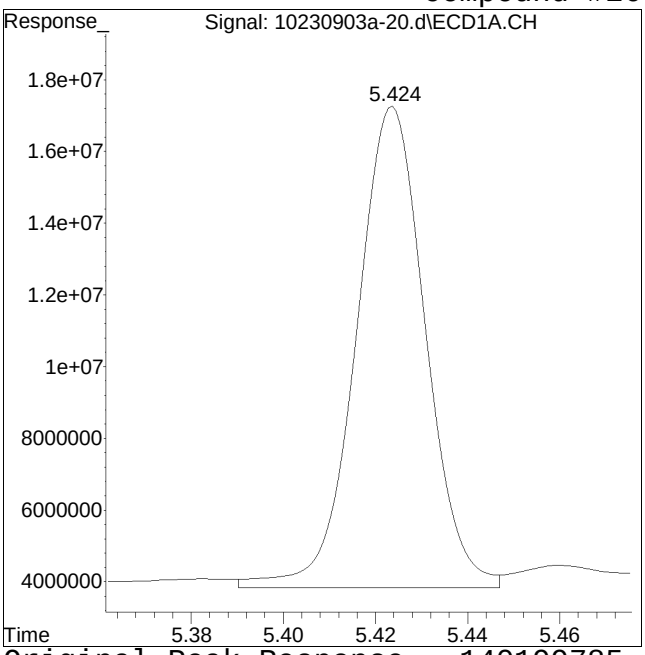


Original Peak Response = 118777947 Manual Peak Response = 115651123 M4
M4 = Poor automated baseline construction.

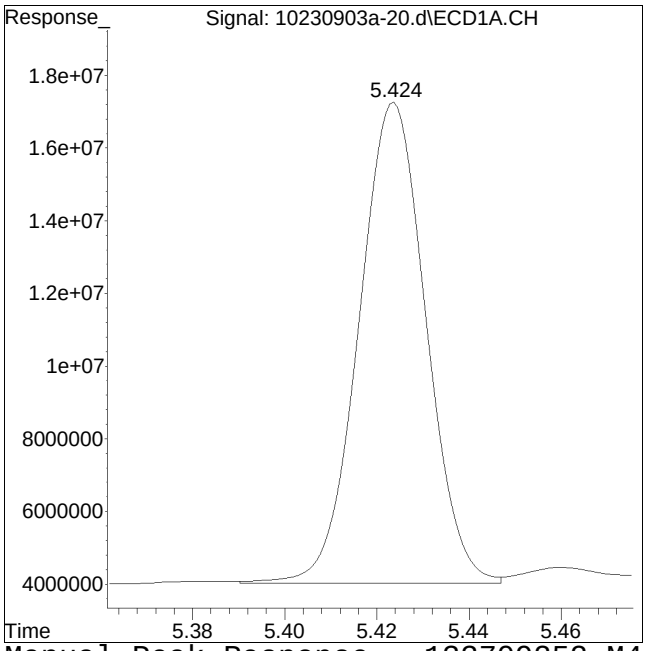
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #26: Endrin Ketone



Original Peak Response = 140199785



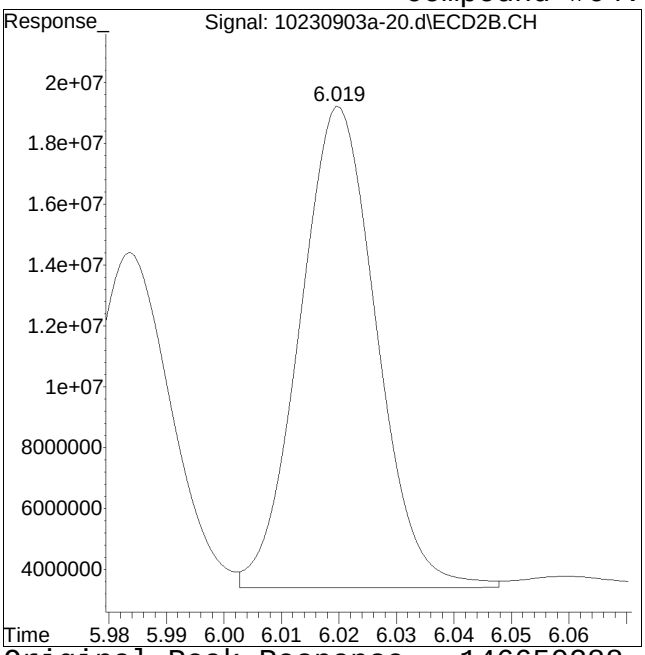
Manual Peak Response = 133709252 M4

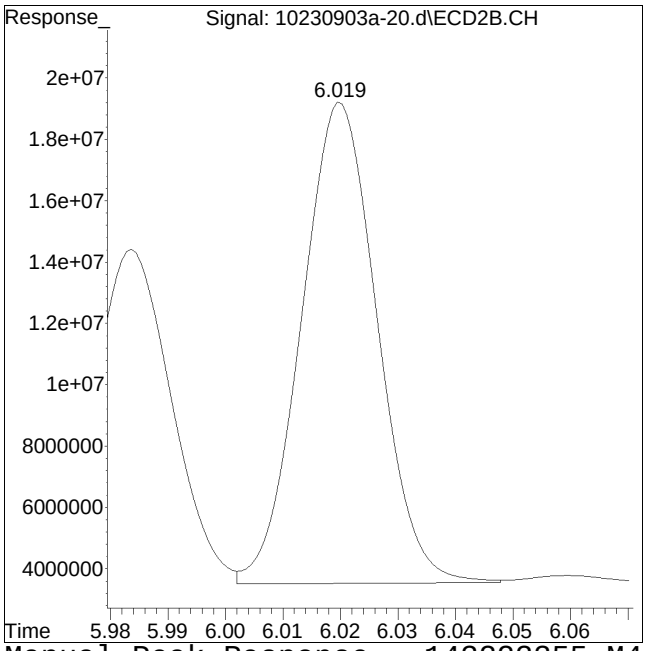
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #64: Endrin Ketone #2



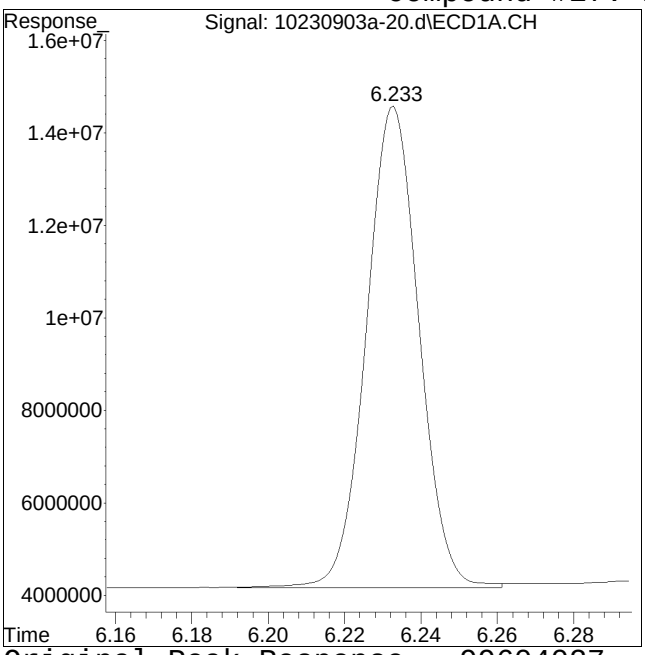


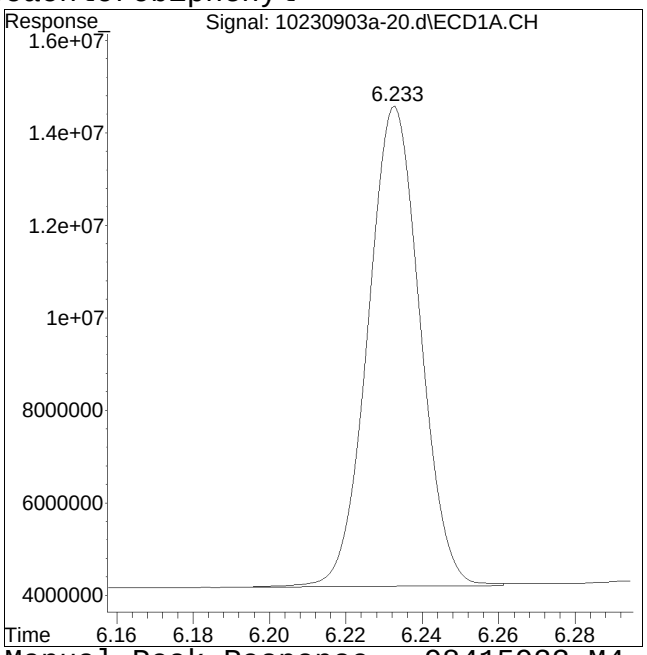
Original Peak Response = 146650288 Manual Peak Response = 143223355 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #27: Decachlorobiphenyl



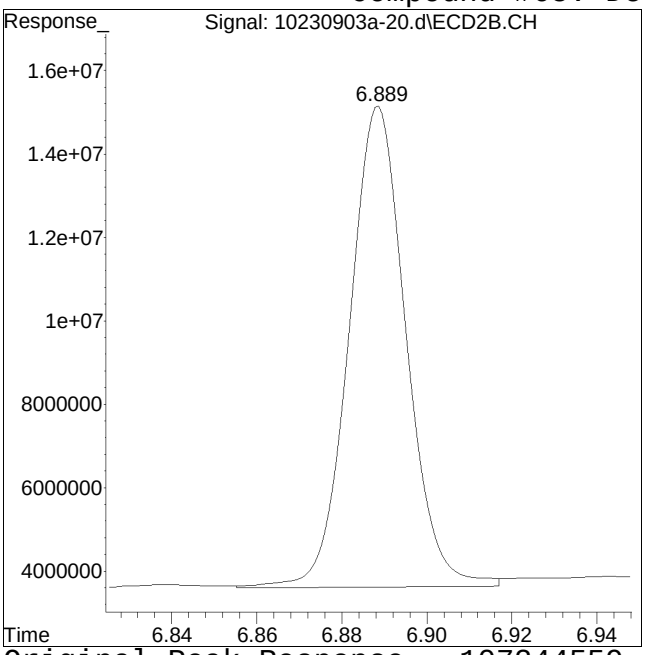


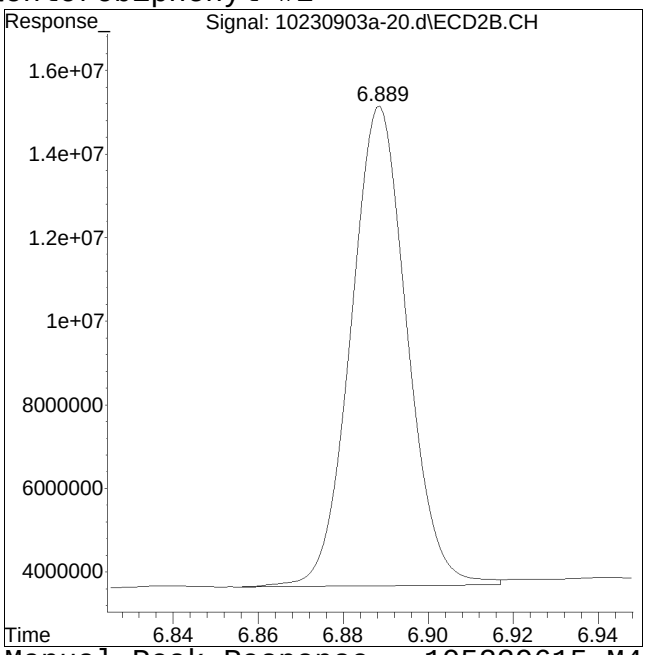
Original Peak Response = 99604027 Manual Peak Response = 98415933 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-20.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:32 pm Instrument : Pest 10
Sample : WG1823255-2,42,, Quant Date : 9/3/2023 1:34 pm

Compound #65: Decachlorobiphenyl #2





Original Peak Response = 107244559 Manual Peak Response = 105239615 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-44.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 3:52 pm
Operator : PEST10:ar
Sample : wg1822374-3,42,, 74 (Sig #1); WG1822377-3,42,, 74 (Sig #2)
Misc : wg1822821,wg1822374,ical20332 (Sig #1); wg1822821,wg1822377,ical20332 (Sig #2)
ALS Vial : 44 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 06:40:55 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230901A\10230901a-29.d
Sub List : LCS_MS - spk only

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.278	1.348	135.5E6	152.1E6	25.000	25.000
	Standard Area 1 : #1 = 126614029				Recovery = 107.04%		
	Standard Area 1 : #2 = 137178146				Recovery = 110.86%		
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.614	1.818	195.8E6	221.0E6	35.633	37.712
	Spiked Amount 50.000	Range 30 - 150		Recovery = 71.27%		75.42%	
27) s	Decachlorobi	6.238	6.889	186.6E6	199.4E6	37.575	35.457
	Spiked Amount 50.000	Range 30 - 150		Recovery = 75.15%		70.91%	
Target Compounds							
4) t	alpha-BHC	1.920	2.229	302.6E6	352.3E6	40.920	37.934
5) t	gamma-BHC (l	2.118	2.511	286.3E6	333.7E6	40.417	42.683
6) t	beta-BHC	2.174	2.576	127.9E6	143.0E6	39.085	39.302
7) t	delta-BHC	2.299	2.839	286.5E6	331.0E6	40.402	38.042
8) t	Heptachlor	2.455	2.903	278.8E6	327.4E6	40.470	41.465
9) t	Aldrin	2.692	3.218	255.1E6	318.0E6	40.672	40.281
12) t	Heptachlor E	3.228	3.828	250.1E6	293.1E6	40.423	40.614
13) t	gamma-Chlord	3.349	4.047	256.1E6	309.1E6	42.947	40.784
14) t	alpha-Chlord	3.481	4.219	241.2E6	300.1E6	36.831	40.828
15) t	4,4'-DDE	3.577	4.422	241.7E6	295.5E6	40.932	38.910
16) t	Endosulfan I	3.616	4.281	233.9E6	280.1E6	39.984	41.812
17) t	Dieldrin	3.872	4.578	260.6E6	308.8E6	43.994	42.878
18) t	Endrin	4.125	4.879	246.5E6	289.5E6	40.292	39.496
19) t	4,4'-DDD	4.241	5.006	211.3E6	253.5E6	44.015	41.579
20) t	Endosulfan I	4.375	5.081	231.8E6	268.6E6	41.911	44.380
21) t	4,4'-DDT	4.541	5.285	224.2E6	265.1E6	41.961	39.070
22) t	Endrin Aldeh	4.802	5.380	144.4E6	159.7E6	31.552	31.791
23) t	Methoxychlor	5.040	5.856	128.9E6	143.1E6	42.230	41.198

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-44.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 3:52 pm
Operator : PEST10:ar
Sample : wg1822374-3,42,, 74 (Sig #1); WG1822377-3,42,, 74 (Sig #2)
Misc : wg1822821,wg1822374,ical20332 (Sig #1); wg1822821,wg1822377,ical20332 (Sig #2)
ALS Vial : 44 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 06:40:55 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230901A\10230901a-29.d
Sub List : LCS_MS - spk only

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
25) t Endosulfan S	5.202	5.611	218.0E6	239.9E6	41.080	41.474
26) t Endrin Keton	5.430	6.024	267.2E6	295.1E6	45.319	45.003
Sum chlordane-1			0	0	N.D.	N.D.
Average chlordane-1					0.000	0.000
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000

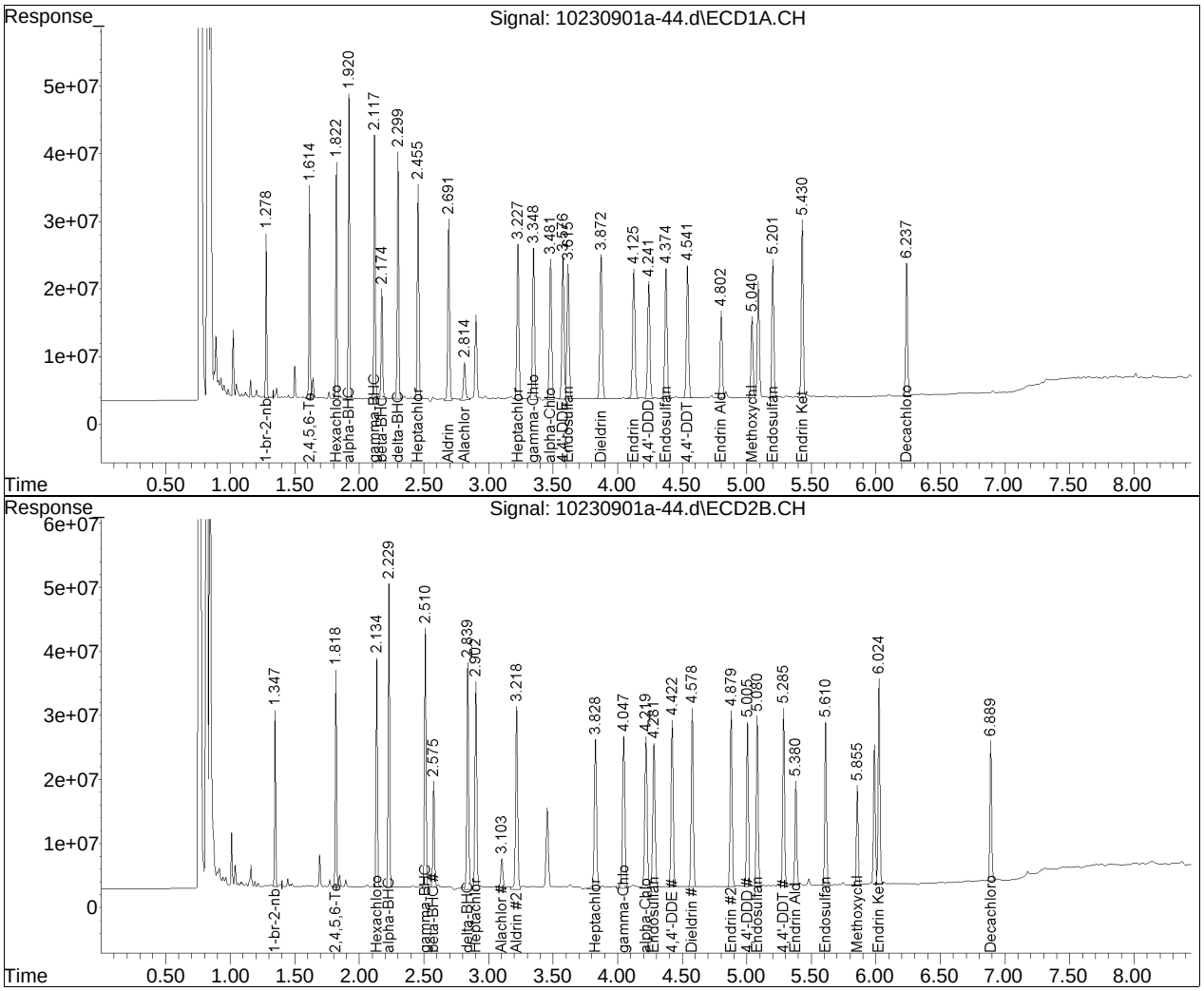
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : LCS_MS - spk only0\2023\230901A\10230901a-29.d••

Data Path : I:\PEST\Pest10\2023\230901A\
Data File : 10230901a-44.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 01 Sep 2023 3:52 pm
Operator : PEST10:ar
Sample : wg1822374-3,42,, 74 (Sig #1); WG1822377-3,42,, 74 (Sig #2)
Misc : wg1822821,wg1822374,ical20332 (Sig #1); wg1822821,wg1822377,ical20
ALS Vial : 44 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 02 06:40:55 2023
Quant Method : I:\PEST\Pest10\2023\230901A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Fri Sep 01 07:34:25 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :



Manual Integration Report

Data Path	: I:\PEST\Pest10\2023\230901	QMethod	: pest10_2023_08_28_ugL_ic
Data File	: 10230901a-44.d	Operator	: PEST10:ar
Date Inj'd	: 9/1/2023 3:52 pm	Instrument	: Pest 10
Sample	: wg1822374-3,42,, 74	Quant Date	: 9/2/2023 6:40 am

There are no manual integrations or false positives in this file.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-21.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 12:43 pm
Operator : PEST10:mmg
Sample : WG1823255-3,42,,
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:44:20 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-03.d
Sub List : LCS_MS - spk only

		Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards								
1)	i	1-br-2-nb_Pe	1.276	1.345	155.6E6	165.0E6	25.000	25.000M3
		Standard Area 1 : #1 = 117926644				Recovery = 131.98%		
		Standard Area 1 : #2 = 131668451				Recovery = 125.30%		
System Monitoring Compounds								
2)	s	2,4,5,6-Tetr	1.610	1.815	128.8E6	138.3E6	20.406M4	21.749M3
		Spiked Amount 50.000		Range 30 - 150		Recovery = 40.81%		43.50%
27)	s	Decachlorobi	6.234	6.891	123.3E6	132.4E6	21.627M4	21.699M4
		Spiked Amount 50.000		Range 30 - 150		Recovery = 43.25%		43.40%
Target Compounds								
4)	t	alpha-BHC	1.916	2.224	196.2E6	219.8E6	23.100M4	22.005M4
5)	t	gamma-BHC (l	2.113	2.506	192.5E6	211.9E6	23.662M4	24.991M4
6)	t	beta-BHC	2.169	2.571	88285895	93503593	23.487M4	23.685M4
7)	t	delta-BHC	2.294	2.834	192.9E6	195.5E6	23.686M4	20.898M3
8)	t	Heptachlor	2.450	2.897	193.9E6	209.1E6	24.508M3	24.411M4
9)	t	Aldrin	2.686	3.213	163.9E6	191.9E6	22.762M4	22.531M4
12)	t	Heptachlor E	3.222	3.822	170.4E6	182.4E6	23.979M4	23.297M4
13)	t	gamma-Chlord	3.343	4.041	173.6E6	195.2E6	25.345M3	23.743M4
14)	t	alpha-Chlord	3.475	4.214	160.5E6	197.6E6	21.341M4	24.780M4
15)	t	4,4'-DDE	3.571	4.418	161.2E6	194.0E6	23.766M4	23.701
16)	t	Endosulfan I	3.609	4.276	160.1E6	184.5E6	23.823M4	25.383
17)	t	Dieldrin	3.865	4.574	176.3E6	204.3E6	25.913M4	26.261
18)	t	Endrin	4.118	4.875	167.1E6	193.3E6	23.796M4	24.310
19)	t	4,4'-DDD	4.235	5.002	142.5E6	165.9E6	25.853	25.230M4
20)	t	Endosulfan I	4.369	5.077	157.9E6	176.6E6	24.863	26.898M4
21)	t	4,4'-DDT	4.536	5.281	156.1E6	176.2E6	25.433	24.064M4

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-21.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 12:43 pm
Operator : PEST10:mmg
Sample : WG1823255-3,42,,
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:44:20 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-03.d
Sub List : LCS_MS - spk only

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
22) t Endrin Aldeh	4.797	5.376	101.4E6	108.3E6	19.307M4	19.867M4
23) t Methoxychlor	5.035	5.852	93996640	99990442	26.824M4	26.532M4
25) t Endosulfan S	5.196	5.607	147.6E6	158.5E6	24.213M4	25.259M4
26) t Endrin Keton	5.425	6.020	181.2E6	199.0E6	26.758	27.971M4
Sum chlordane-1			0	0	N.D.	N.D.
Average chlordane-1					0.000	0.000
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000

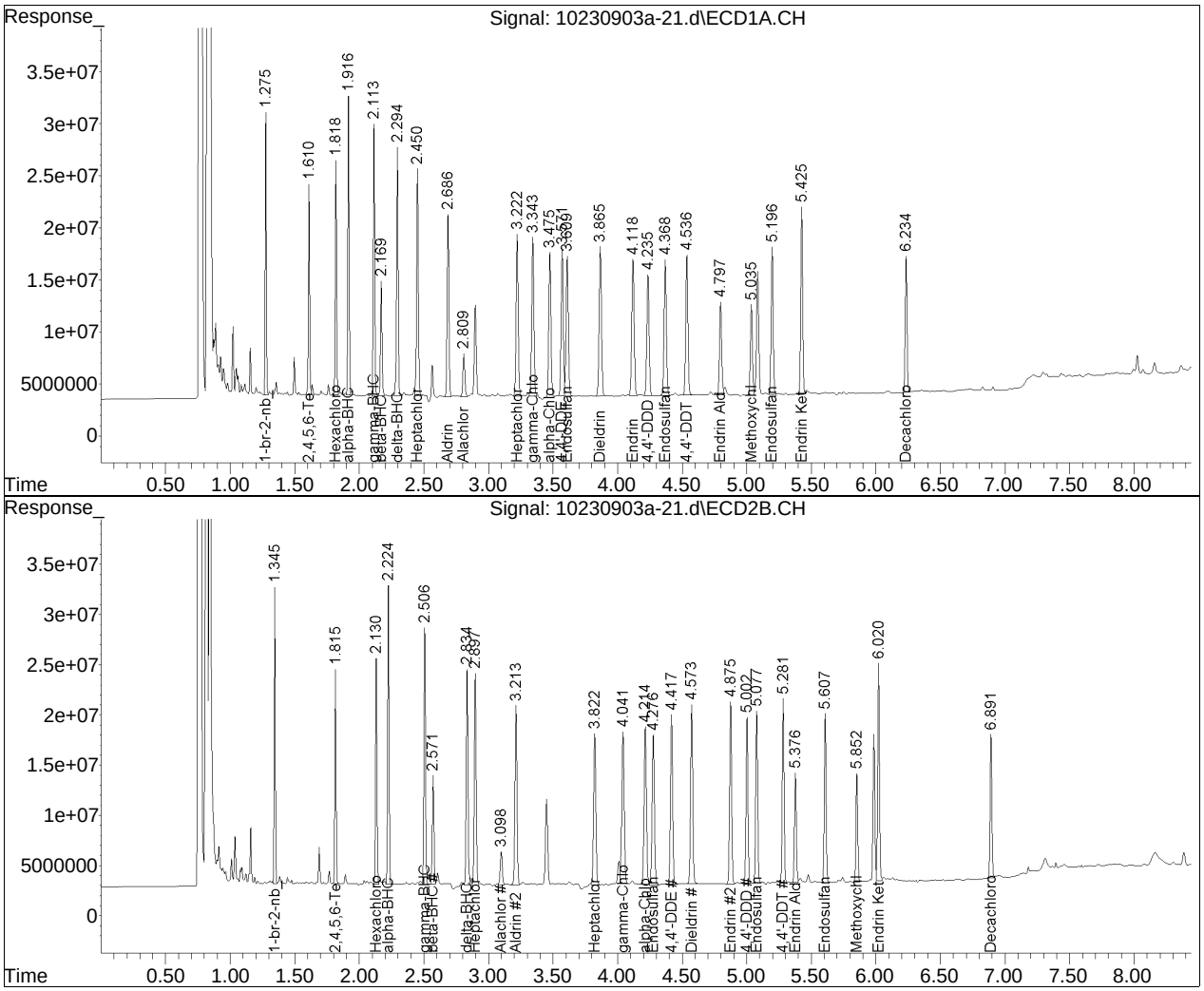
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : LCS_MS - spk only0\2023\230903A\10230903a-03.d••

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-21.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 12:43 pm
Operator : PEST10:mmg
Sample : WG1823255-3,42,,
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical2
ALS Vial : 21 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 11:44:20 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

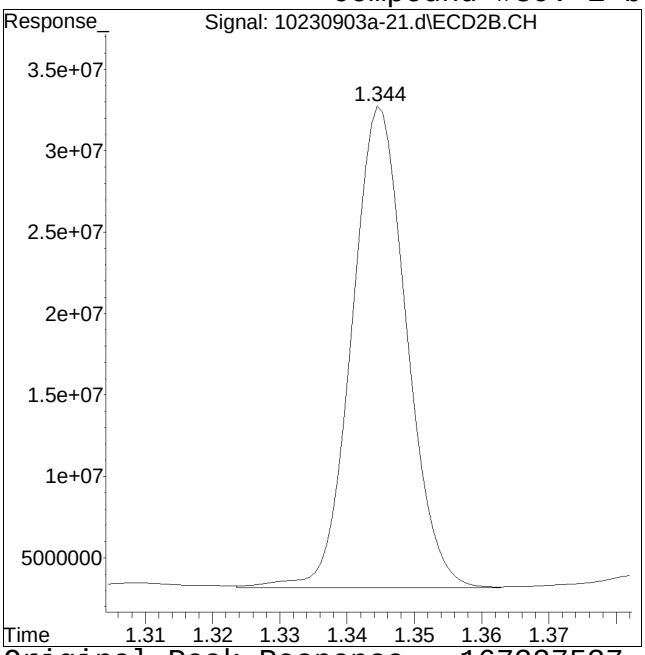
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

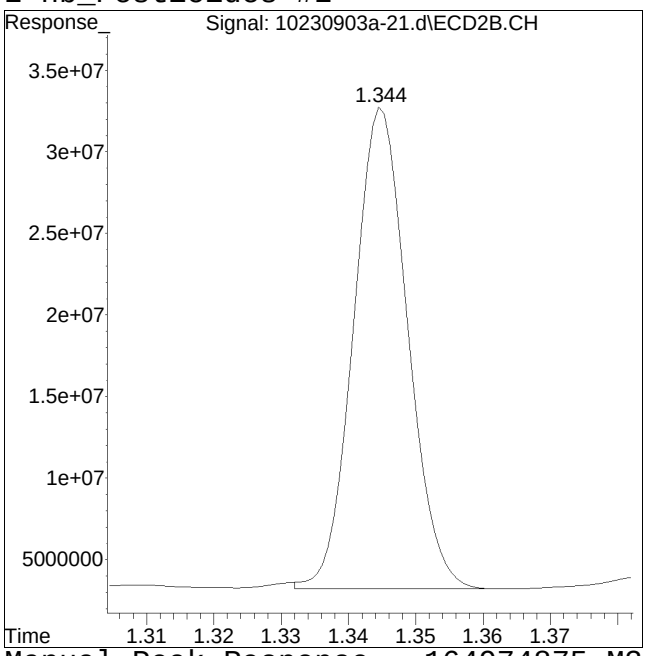


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #39: 1-br-2-nb_Pesticides #2



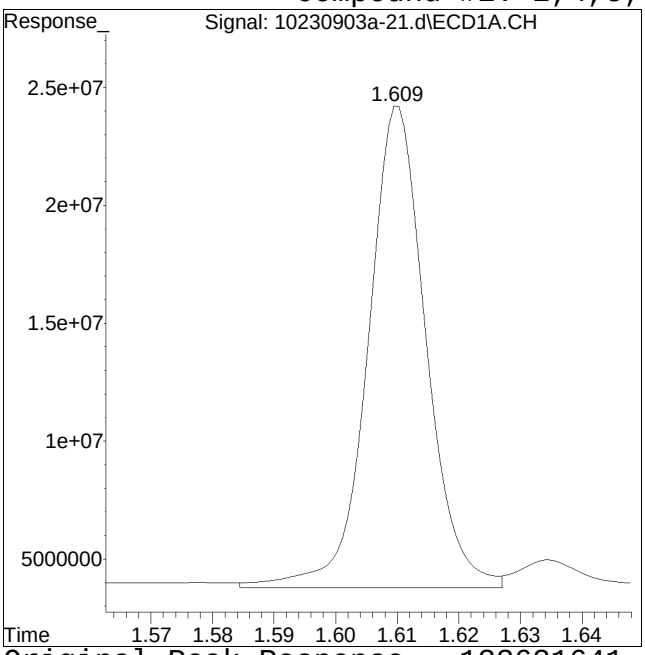


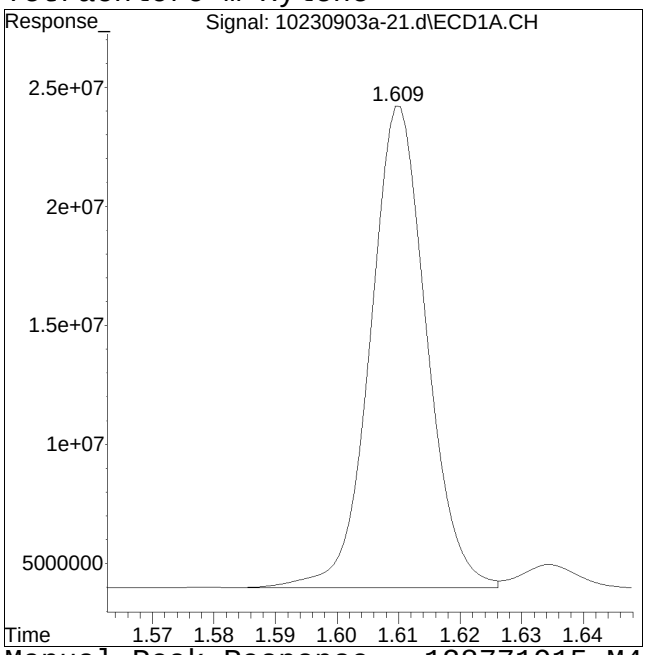
Original Peak Response = 167327537 Manual Peak Response = 164974875 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



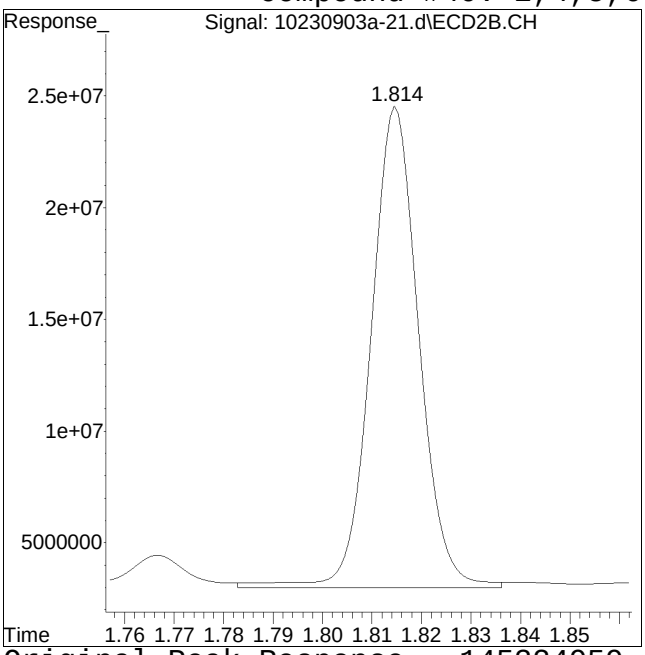


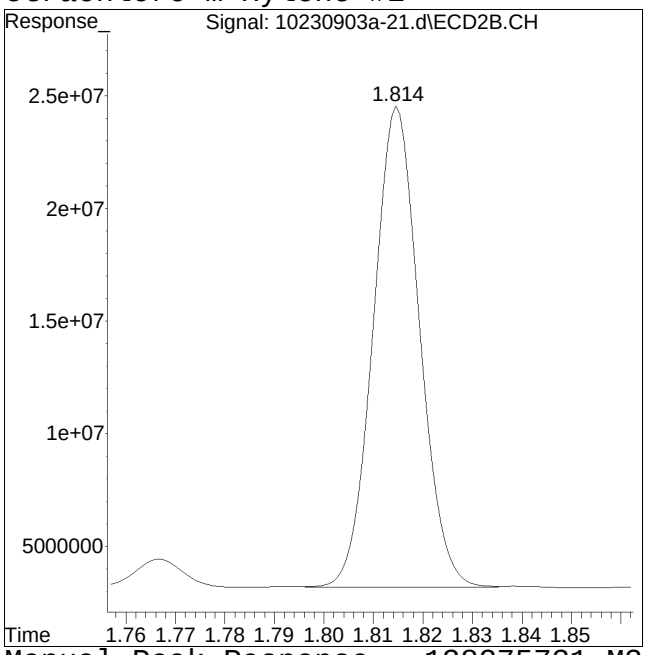
Original Peak Response = 133621641 Manual Peak Response = 128771915 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



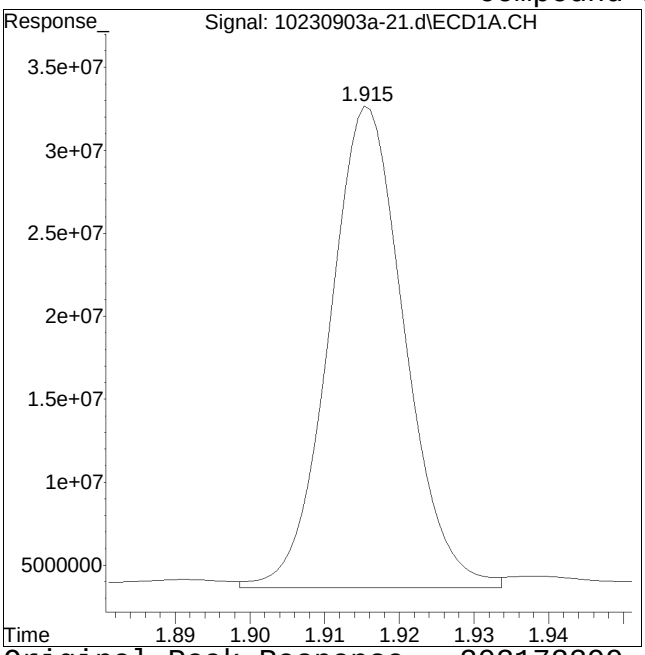


Original Peak Response = 145324959 Manual Peak Response = 138275731 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

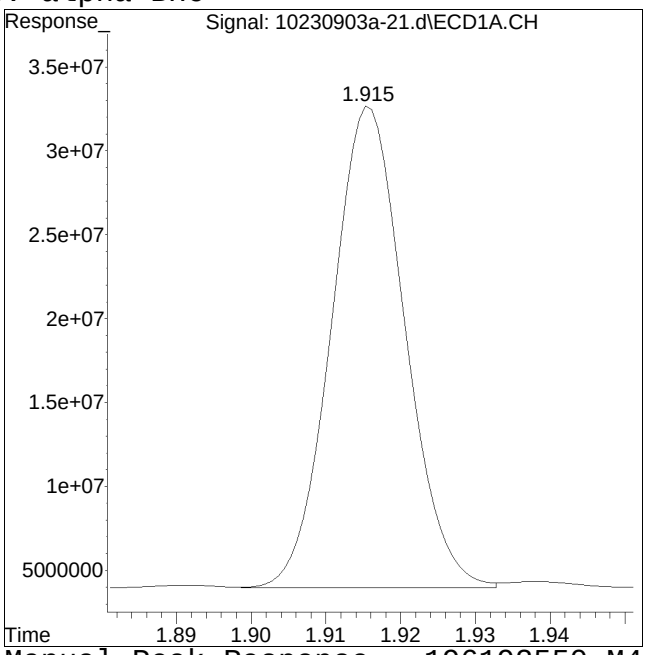
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #4: alpha-BHC



Original Peak Response = 203172399

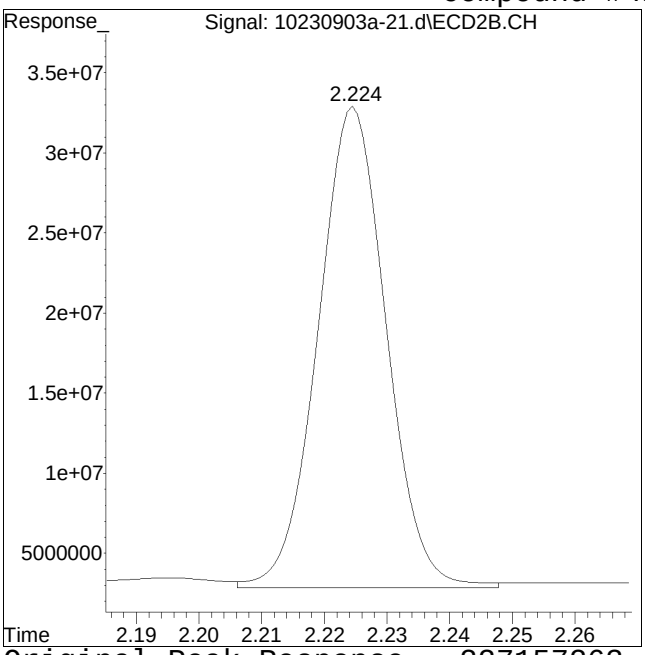


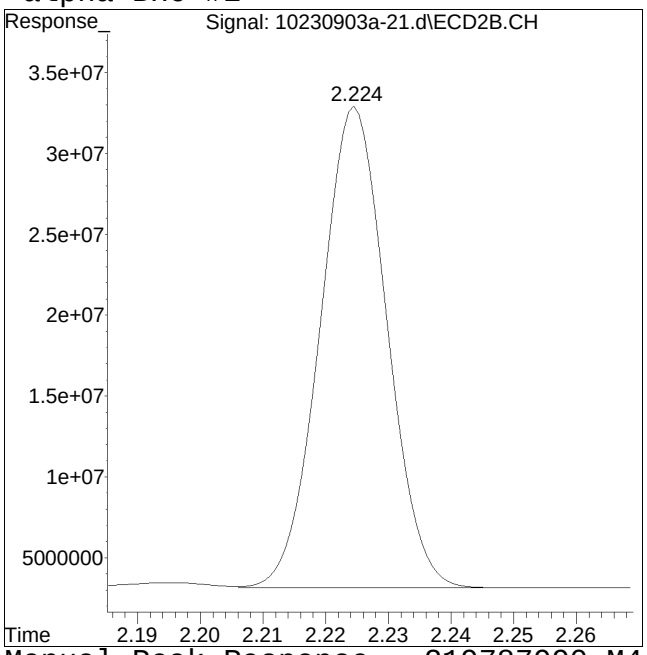
Manual Peak Response = 196192550 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #42: alpha-BHC #2



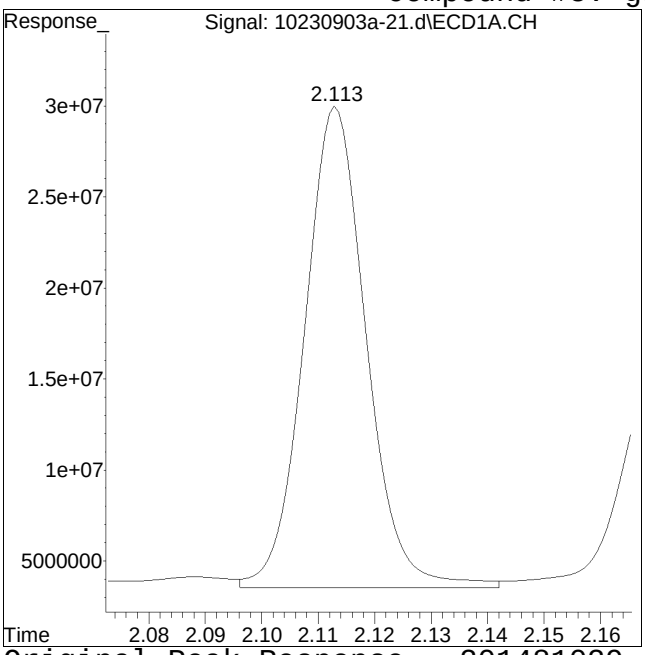


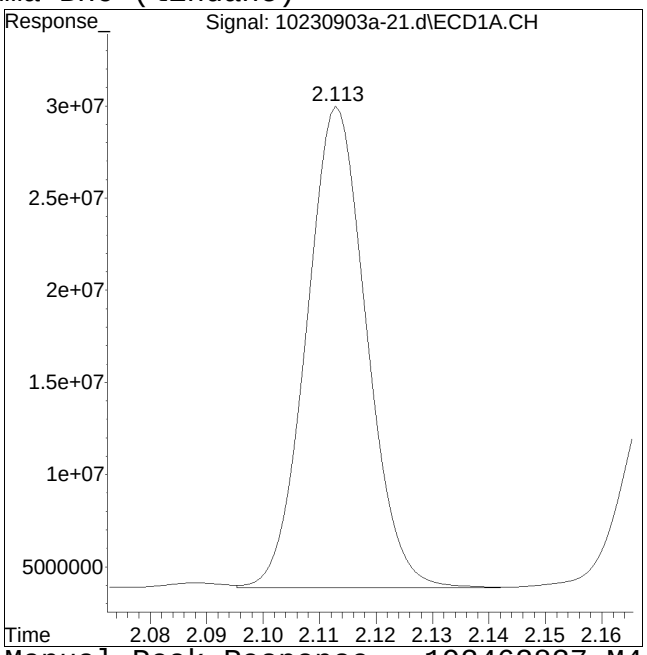
Original Peak Response = 227157263 Manual Peak Response = 219787990 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #5: gamma-BHC (lindane)



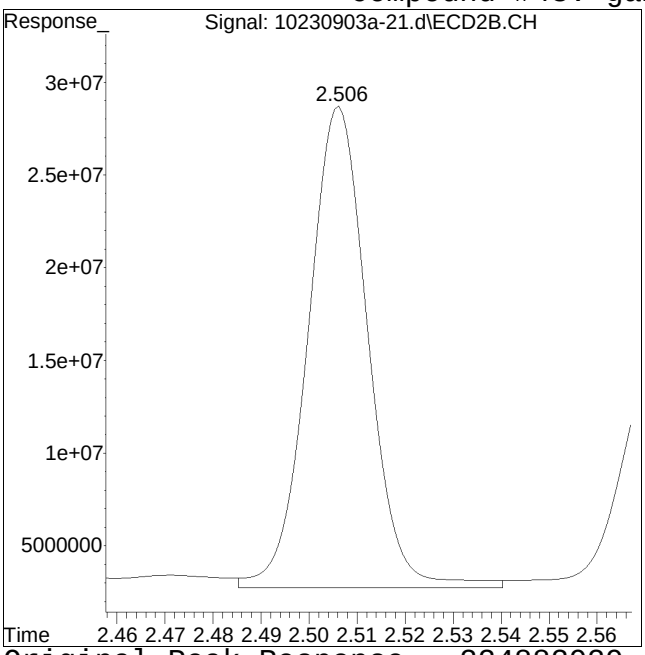


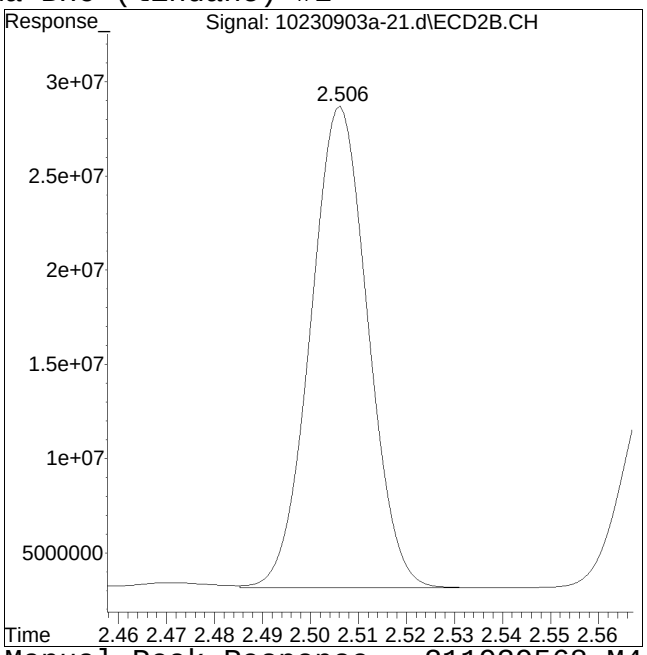
Original Peak Response = 201481029 Manual Peak Response = 192462837 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #43: gamma-BHC (lindane) #2



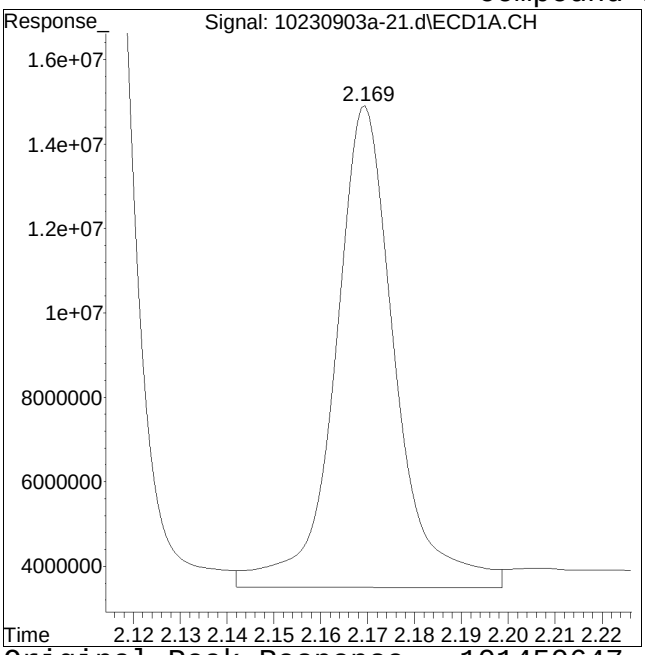


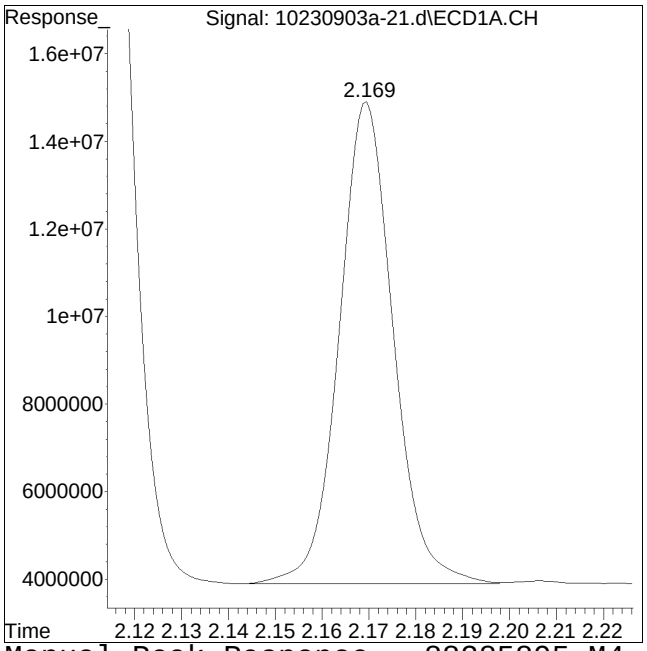
Original Peak Response = 224882929 Manual Peak Response = 211939568 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #6: beta-BHC



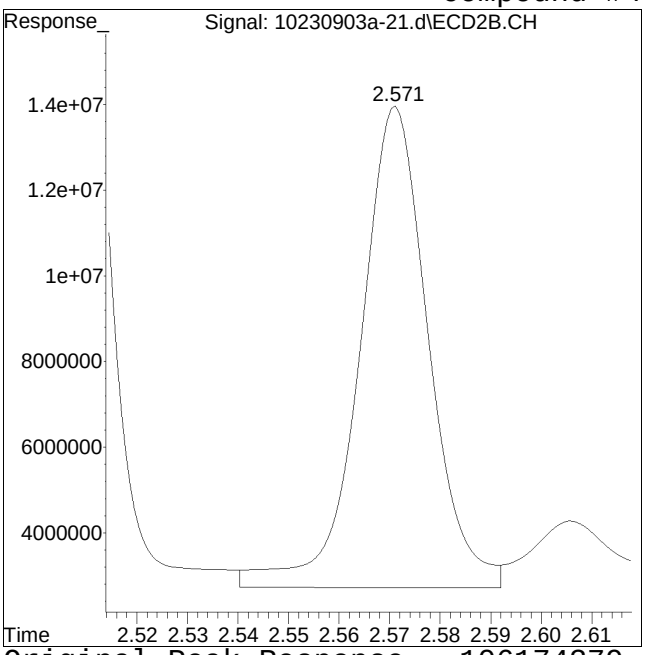


Original Peak Response = 101450647 Manual Peak Response = 88285895 M4
M4 = Poor automated baseline construction.

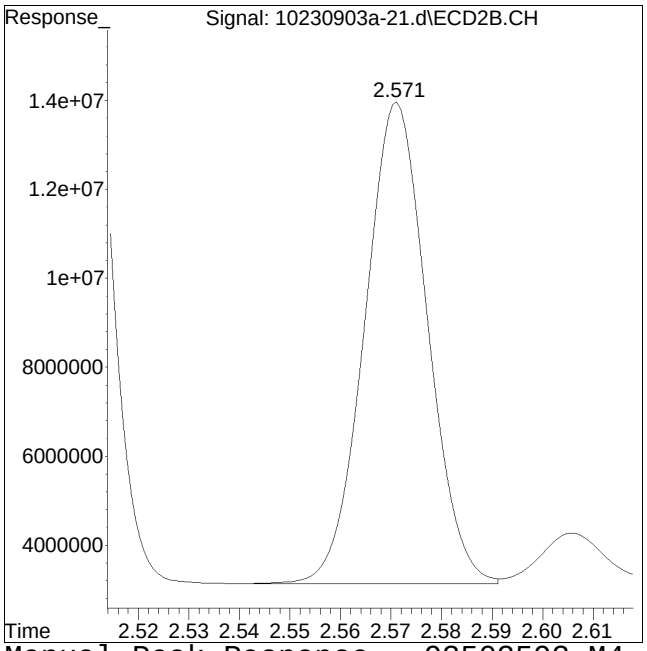
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #44: beta-BHC #2



Original Peak Response = 106174379



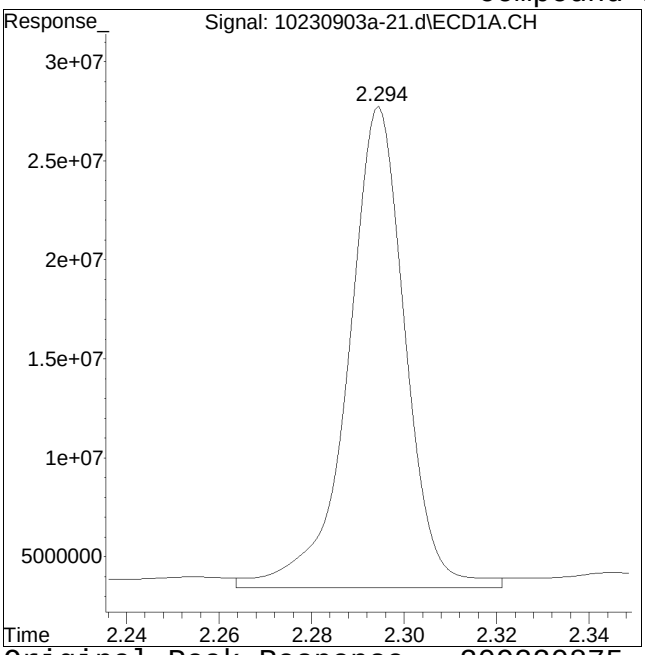
Manual Peak Response = 93503593 M4

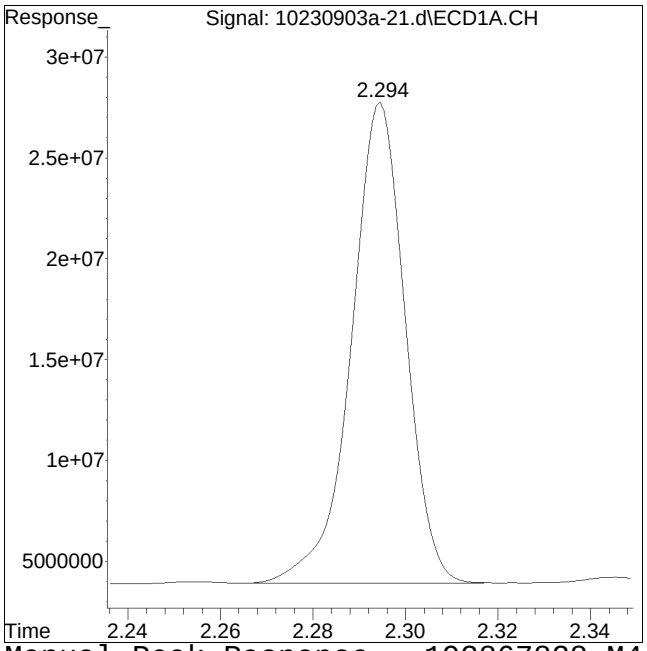
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #7: delta-BHC



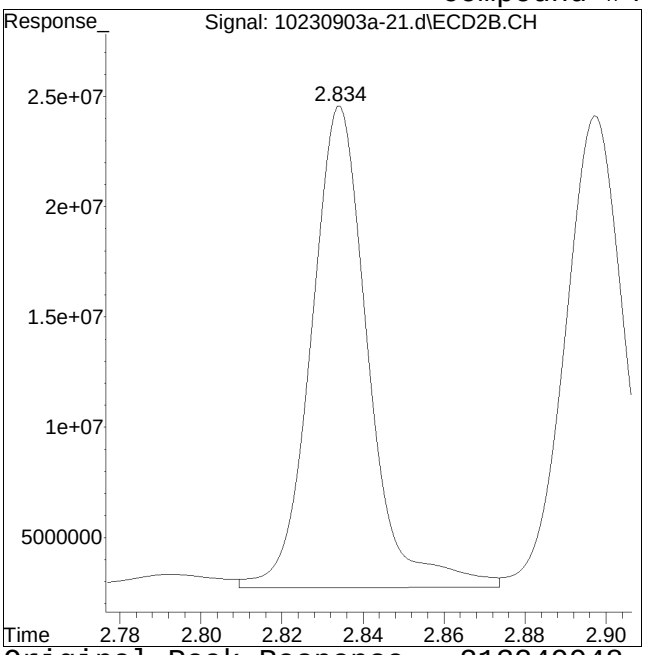


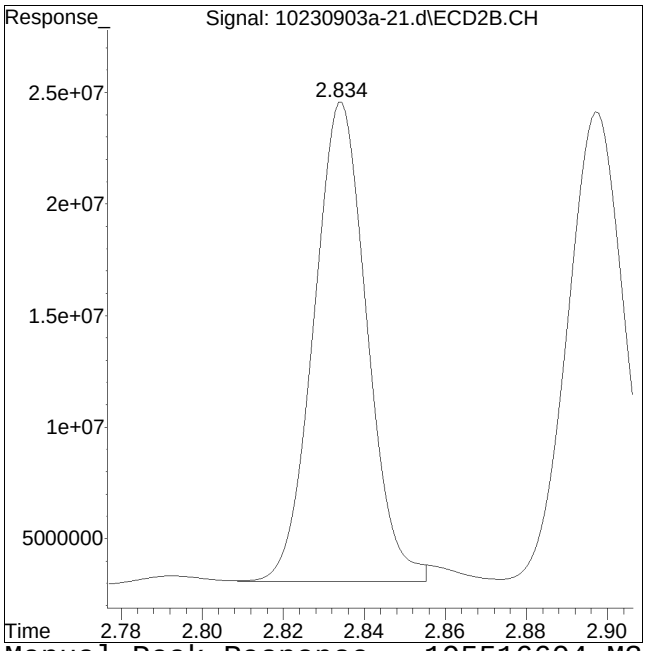
Original Peak Response = 209220875 Manual Peak Response = 192867828 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #45: delta-BHC #2



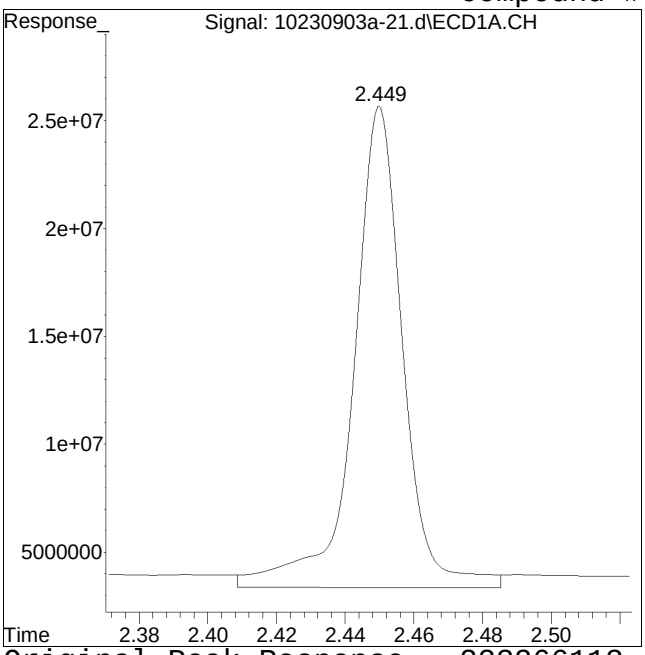


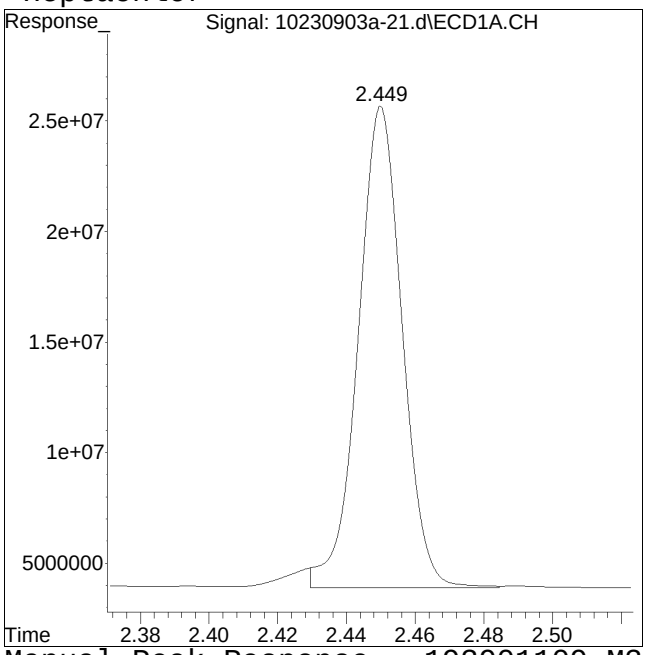
Original Peak Response = 213249948 Manual Peak Response = 195516604 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #8: Heptachlor



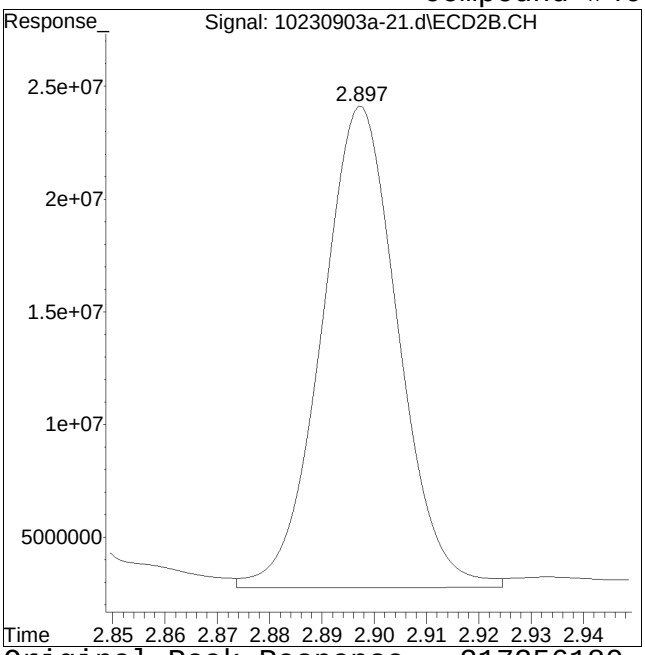


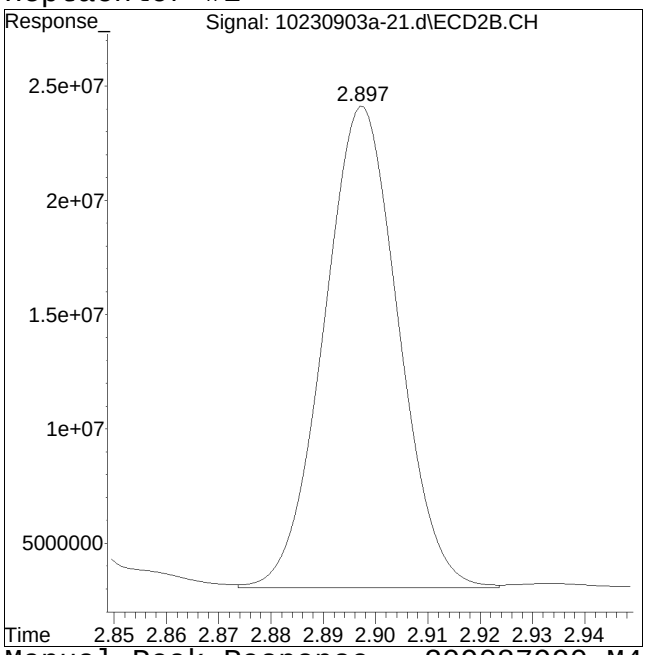
Original Peak Response = 223266113 Manual Peak Response = 193901109 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #46: Heptachlor #2



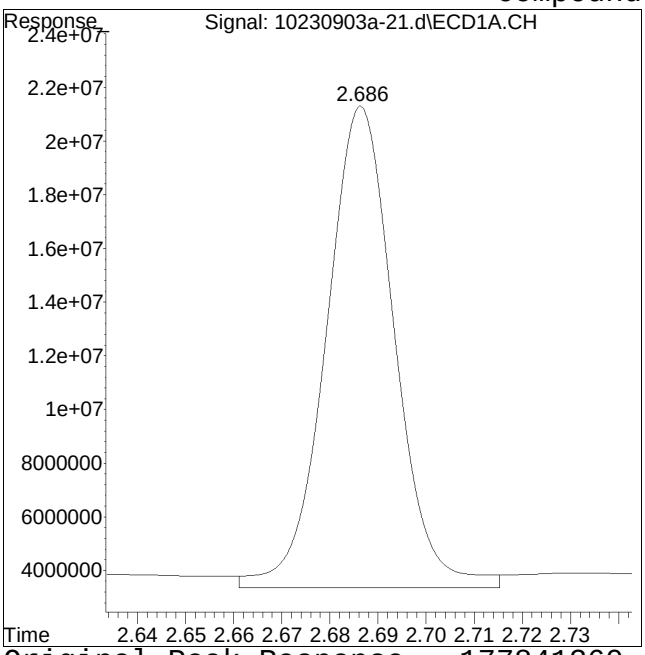


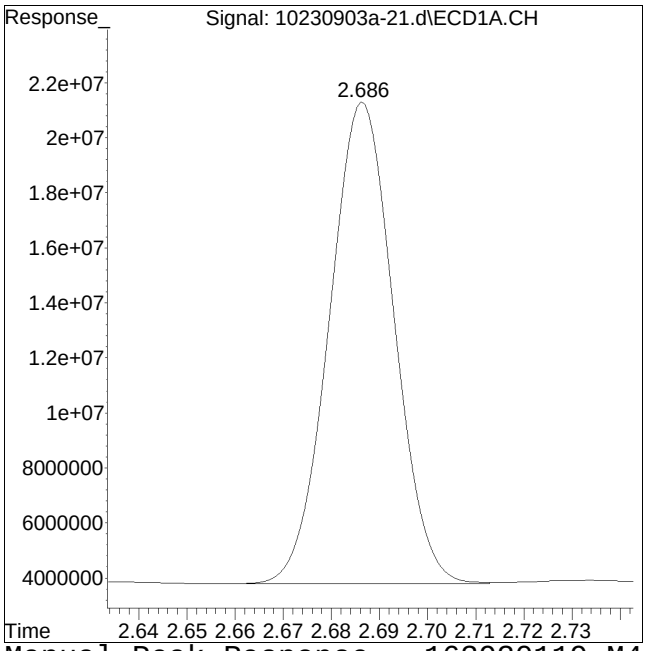
Original Peak Response = 217356180 Manual Peak Response = 209087990 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #9: Aldrin



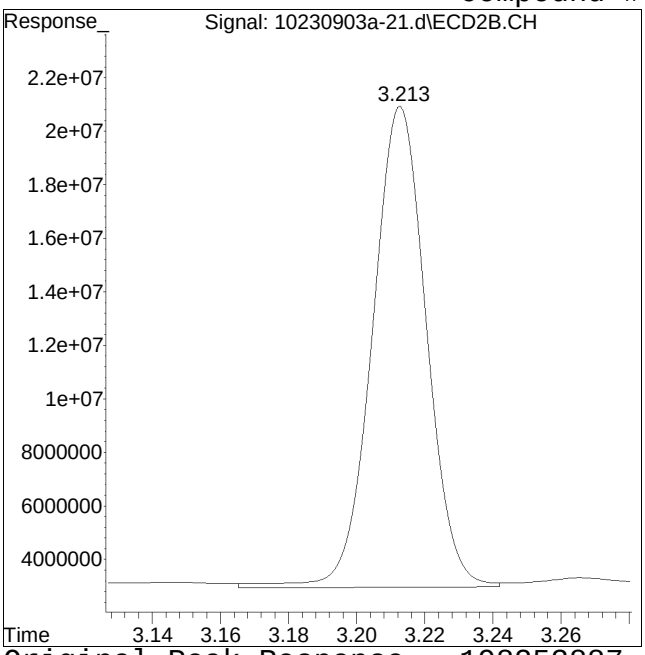


Original Peak Response = 177841360 Manual Peak Response = 163930119 M4
M4 = Poor automated baseline construction.

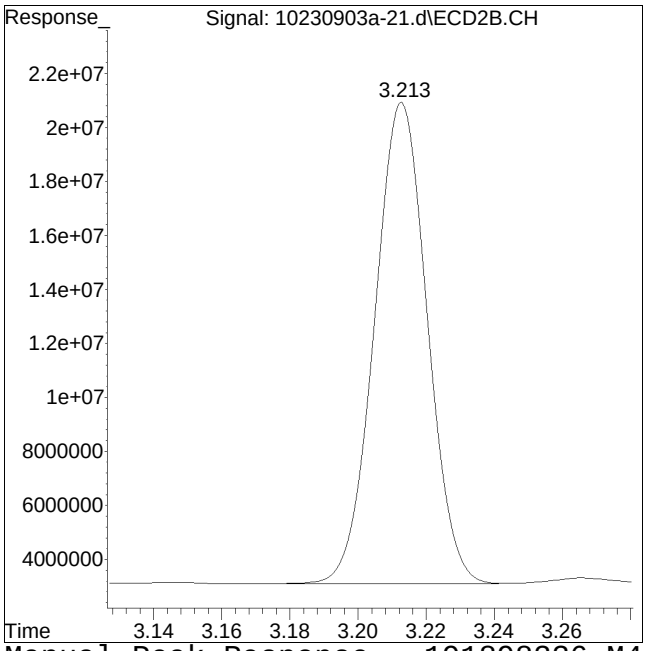
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #47: Aldrin #2



Original Peak Response = 198253887

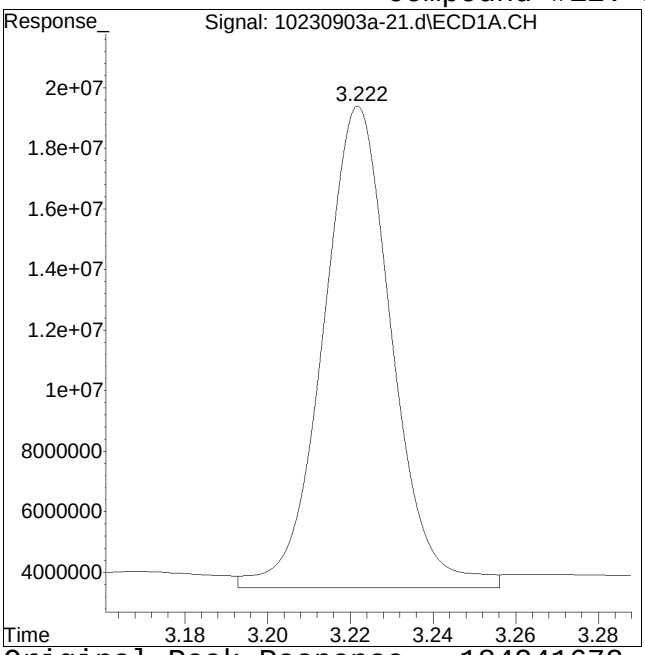


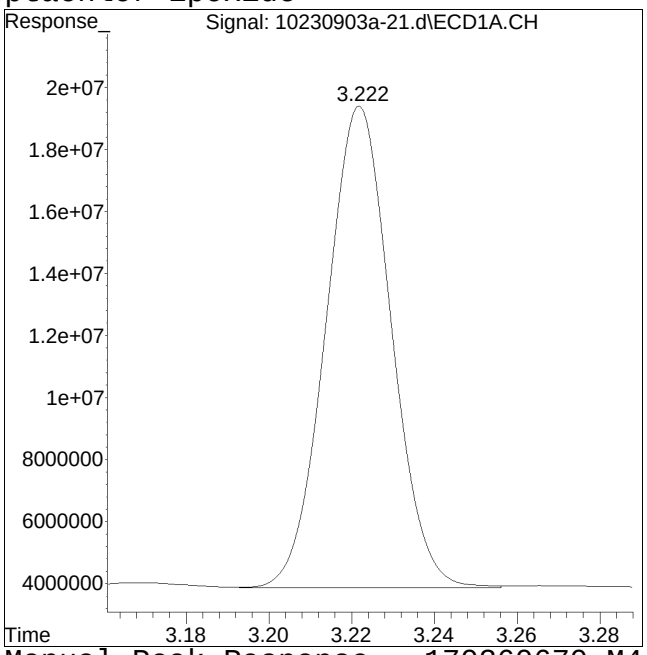
Manual Peak Response = 191898336 M4

M4 = Poor automated baseline construction.

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #12: Heptachlor Epoxide



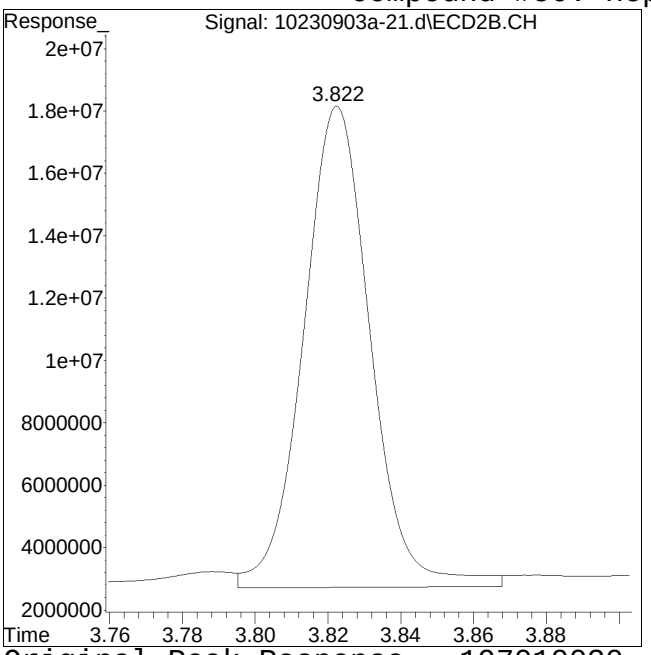


Original Peak Response = 184241672 Manual Peak Response = 170360670 M4
M4 = Poor automated baseline construction.

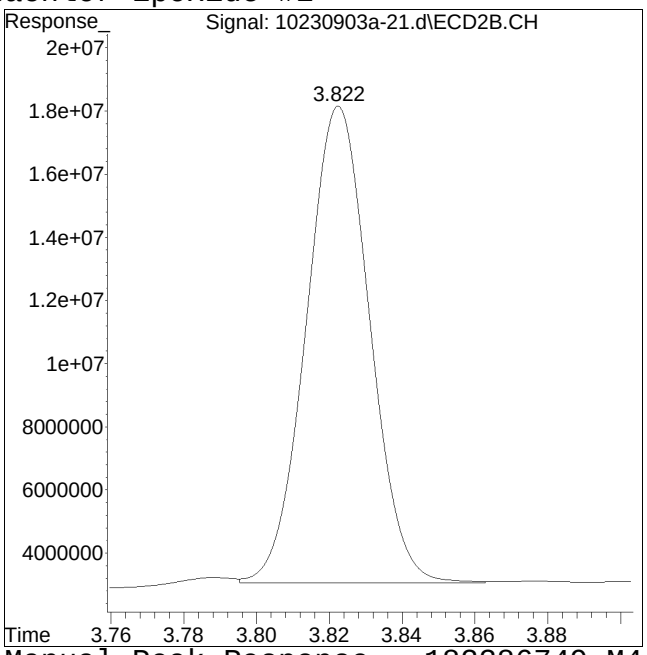
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #50: Heptachlor Epoxide #2



Original Peak Response = 197010030



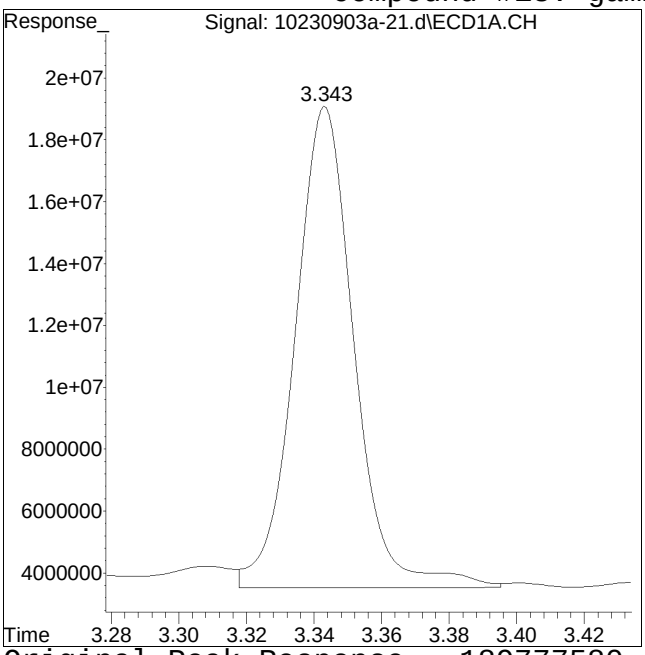
Manual Peak Response = 182386749 M4

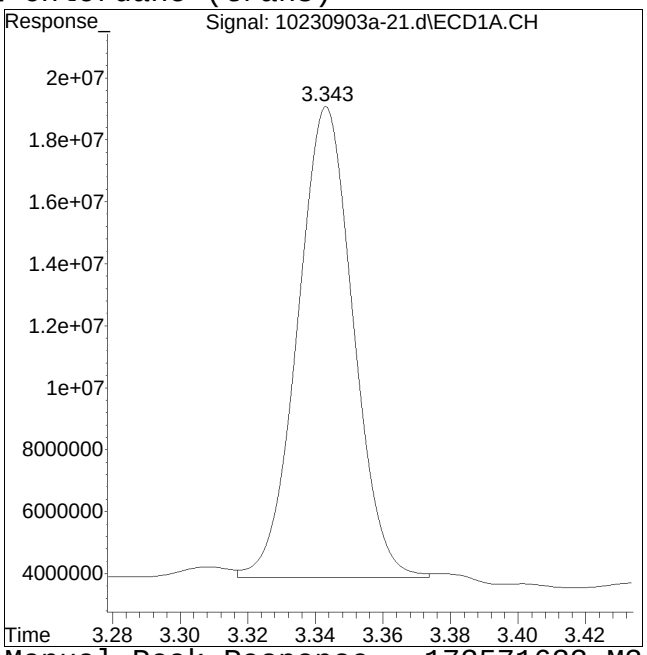
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #13: gamma-Chlordane (trans)



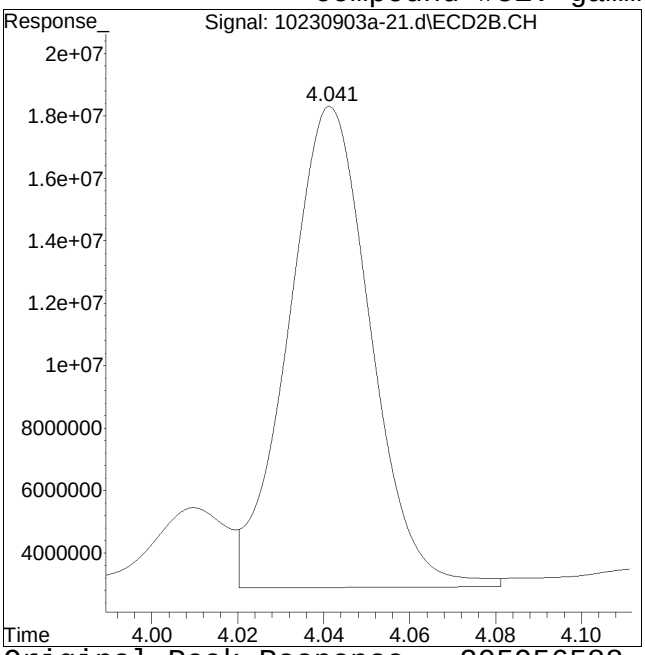


Original Peak Response = 189777580 Manual Peak Response = 173571633 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

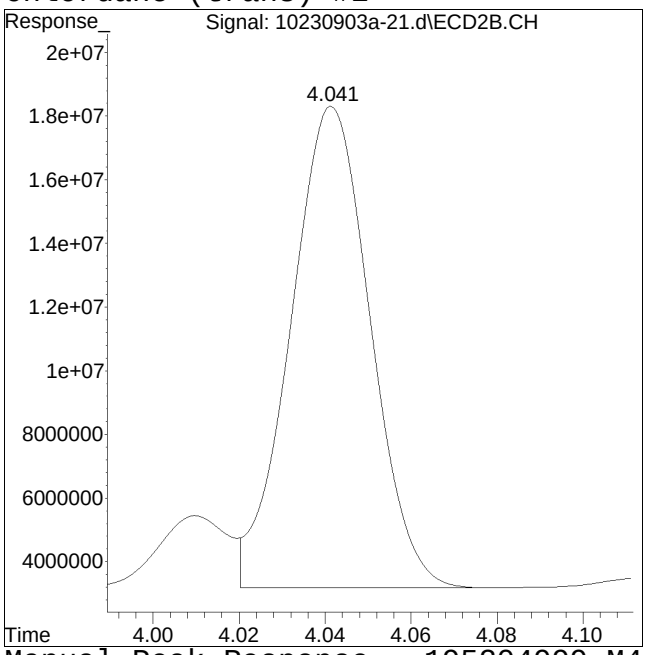
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #51: gamma-Chlordane (trans) #2



Original Peak Response = 205956588



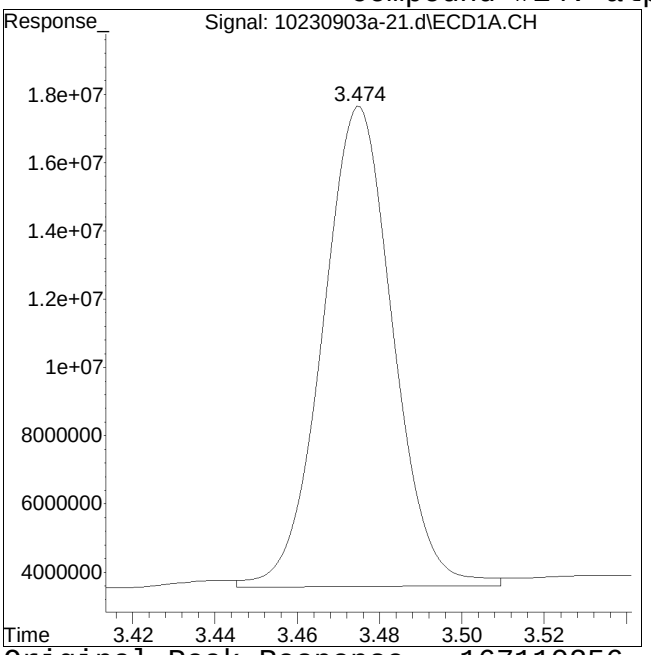
Manual Peak Response = 195204999 M4

M4 = Poor automated baseline construction.

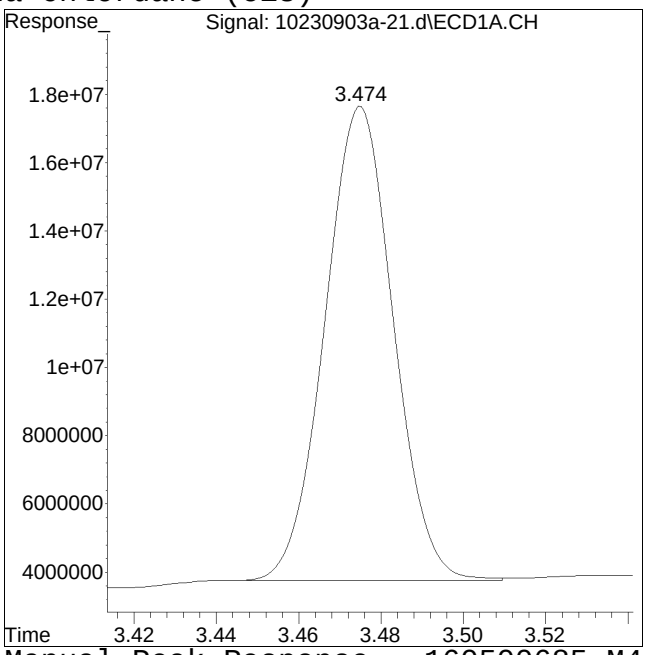
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #14: alpha-Chlordane (cis)



Original Peak Response = 167110256

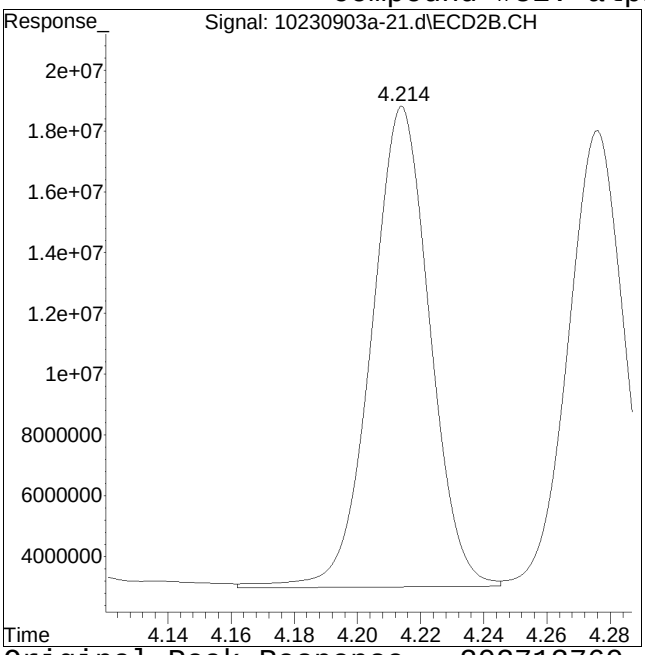


Manual Peak Response = 160500685 M4
M4 = Poor automated baseline construction.

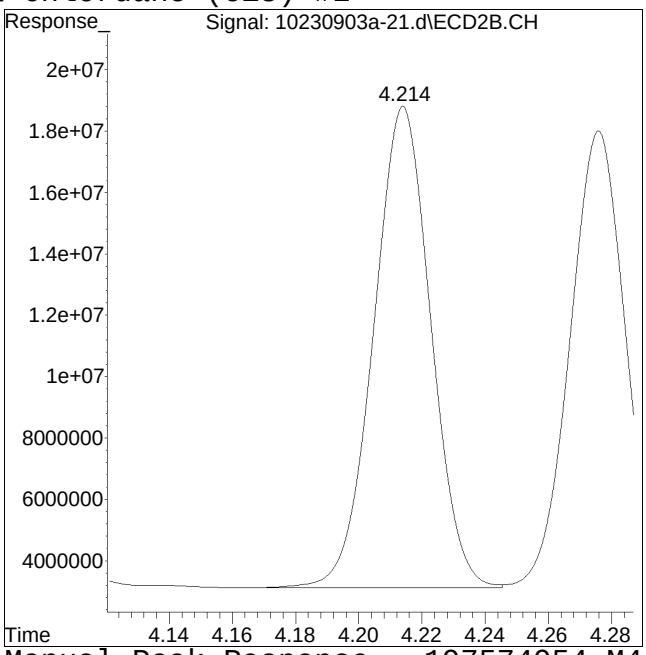
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #52: alpha-Chlordane (cis) #2



Original Peak Response = 202713760

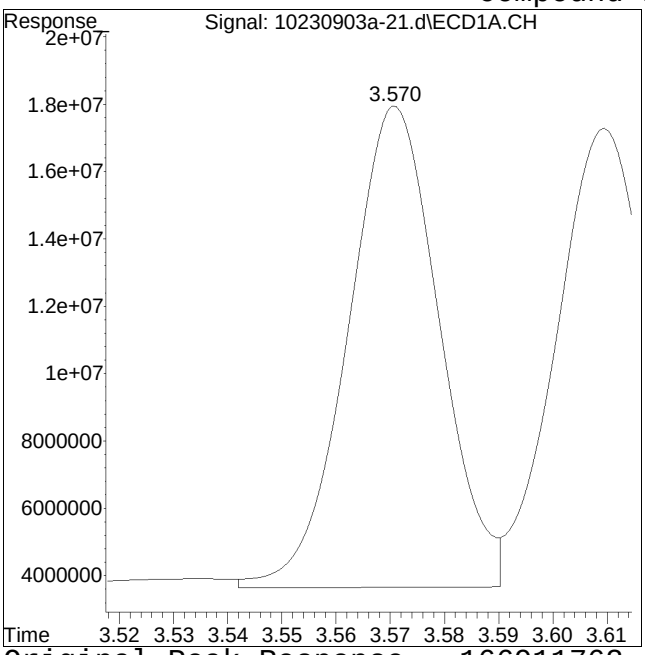


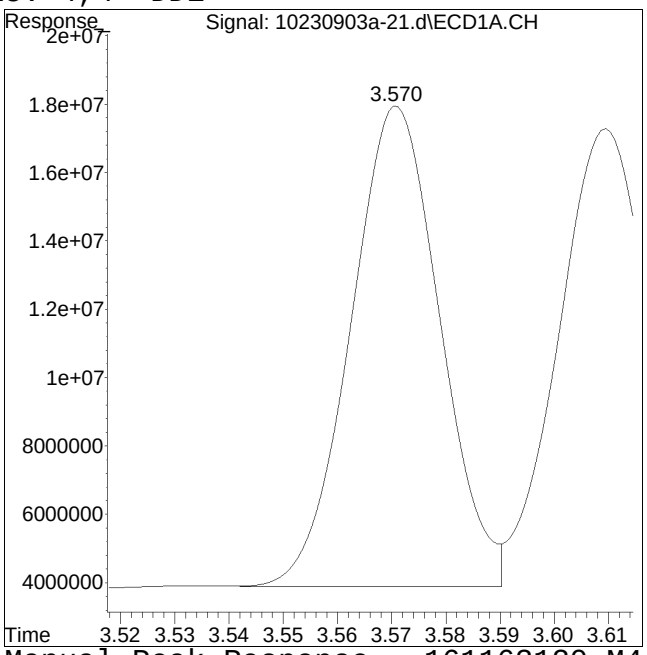
Manual Peak Response = 197574954 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #15: 4,4'-DDE



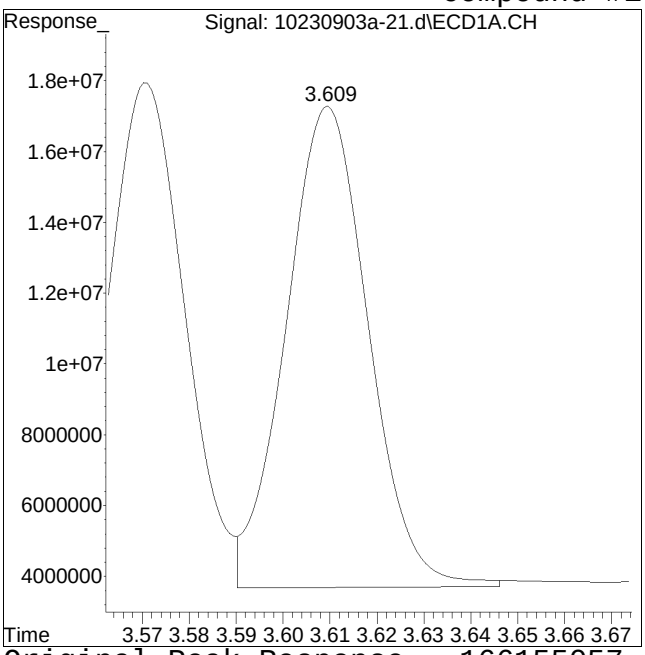


Original Peak Response = 166911762 Manual Peak Response = 161163120 M4
M4 = Poor automated baseline construction.

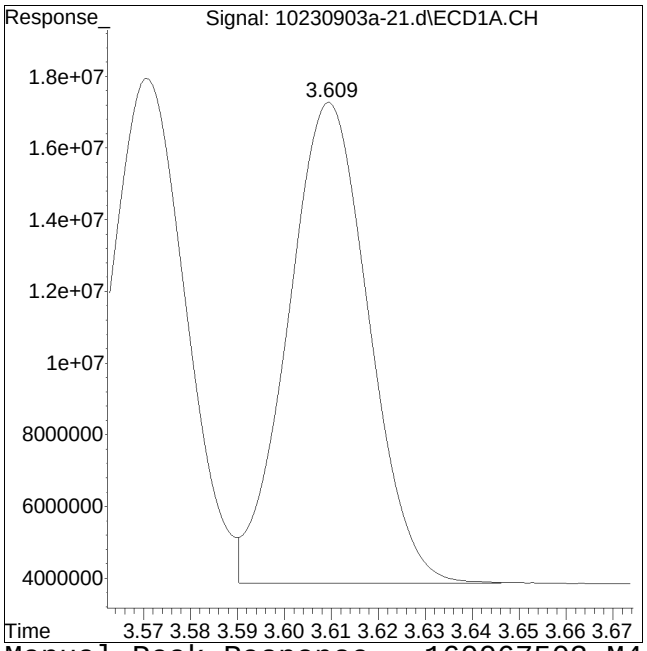
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #16: Endosulfan I



Original Peak Response = 166155057



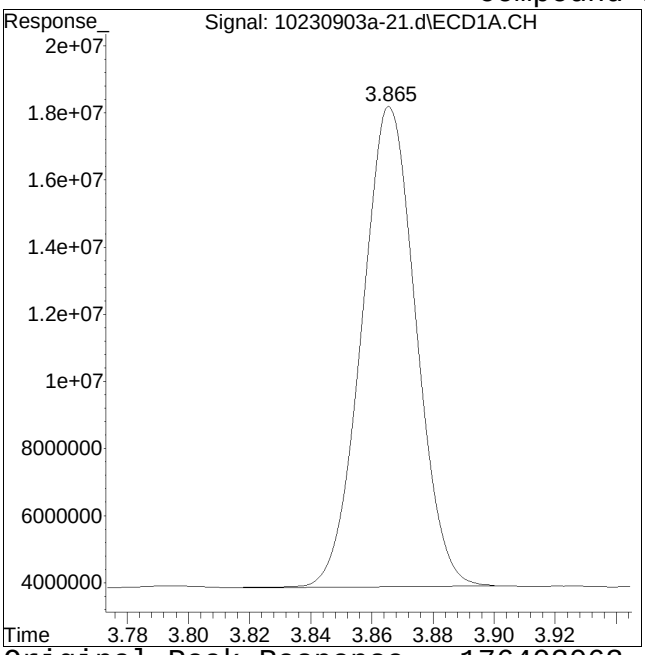
Manual Peak Response = 160067503 M4

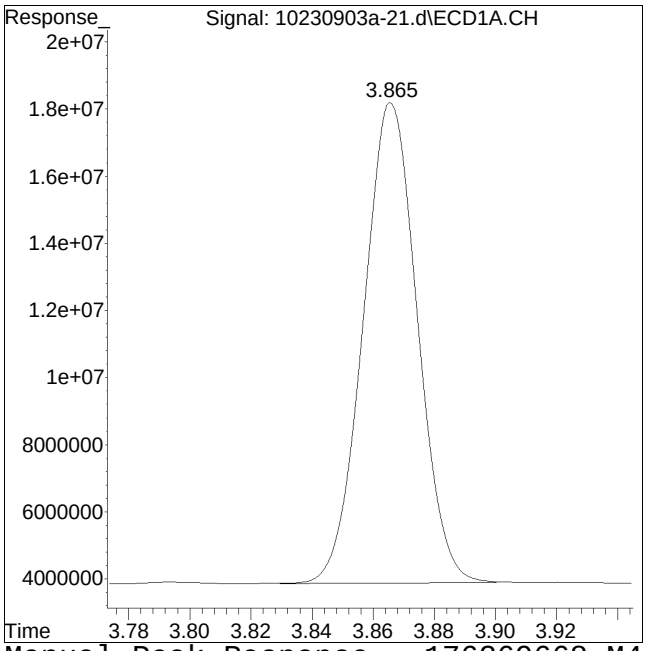
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #17: Dieldrin



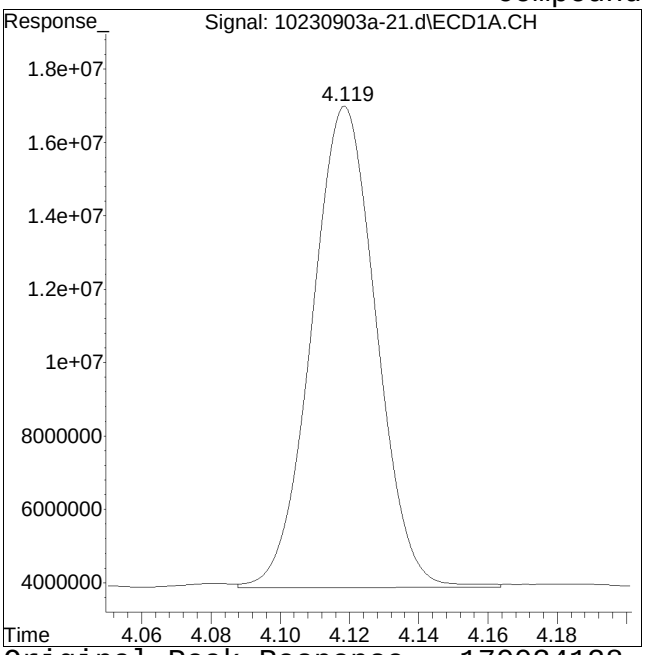


Original Peak Response = 176403063 Manual Peak Response = 176269668 M4
M4 = Poor automated baseline construction.

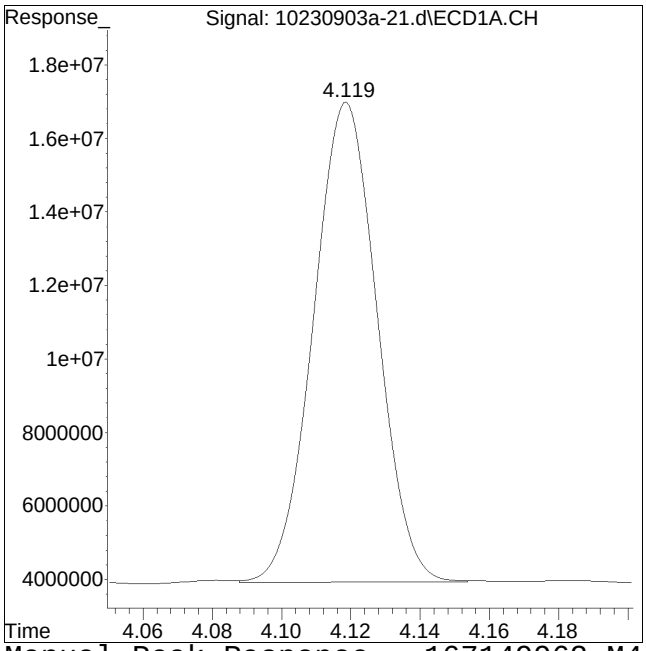
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #18: Endrin



Original Peak Response = 170034128



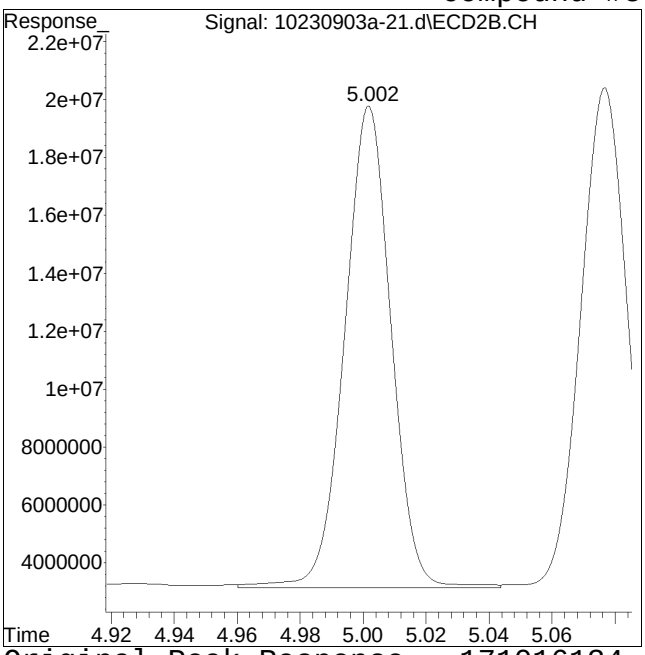
Manual Peak Response = 167149962 M4

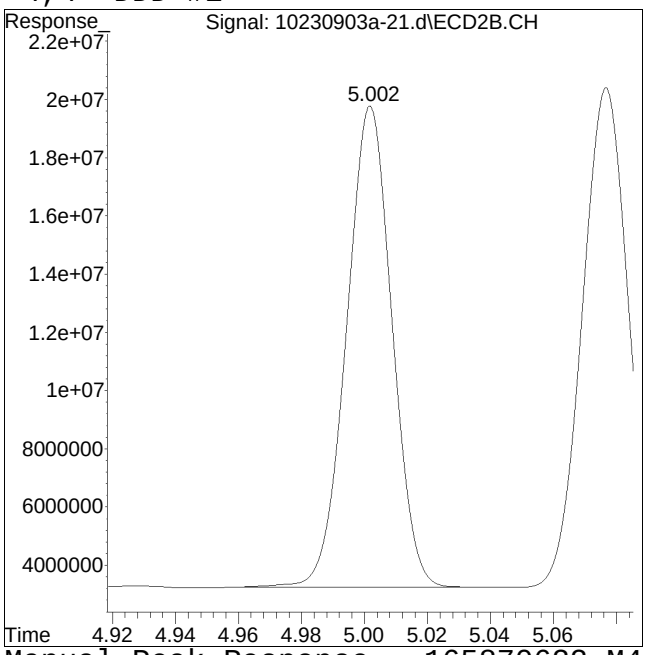
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #57: 4,4'-DDD #2



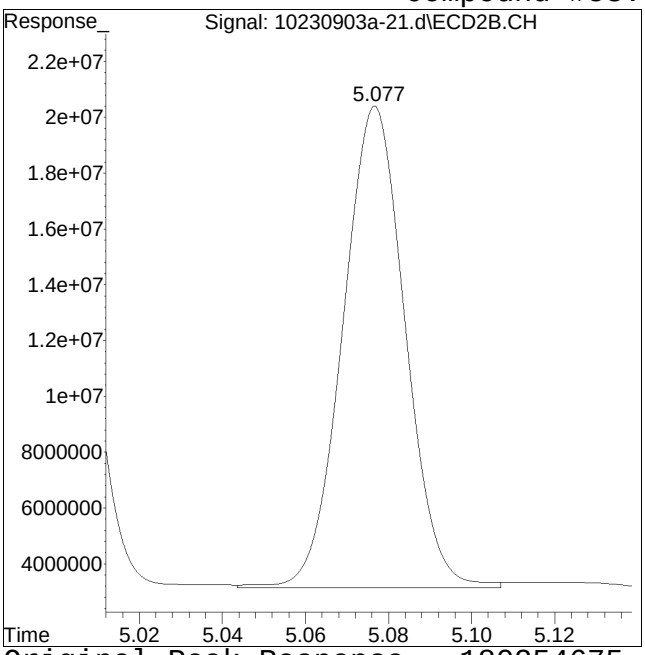


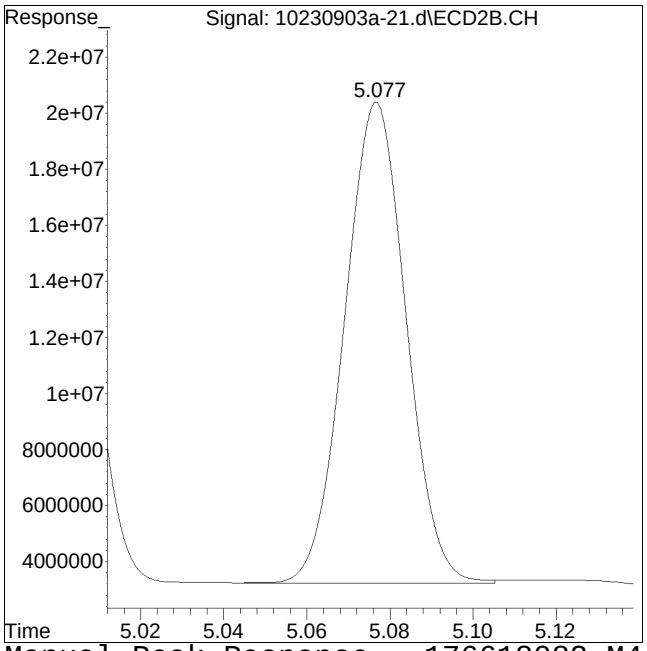
Original Peak Response = 171016134 Manual Peak Response = 165870622 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #58: Endosulfan II #2



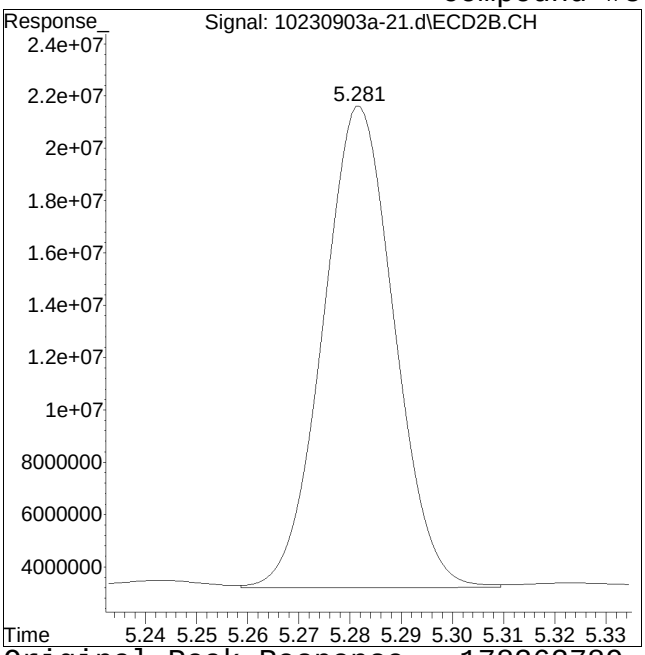


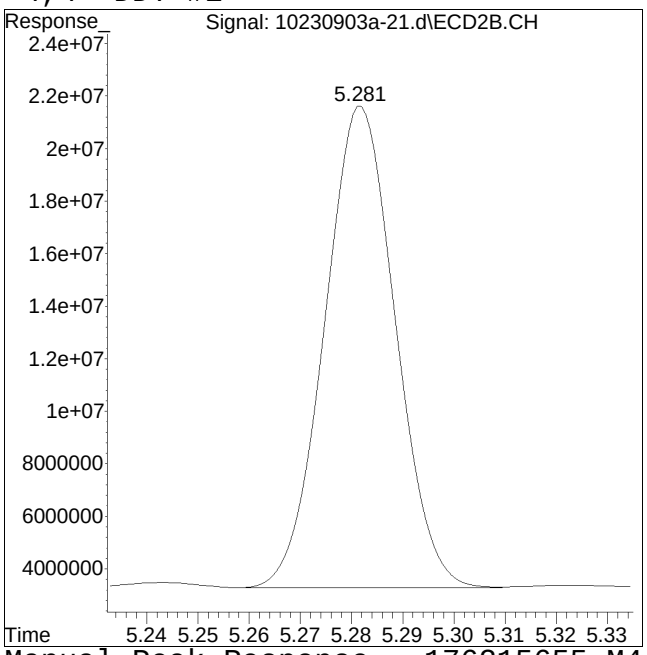
Original Peak Response = 180254675 Manual Peak Response = 176618082 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #59: 4,4'-DDT #2



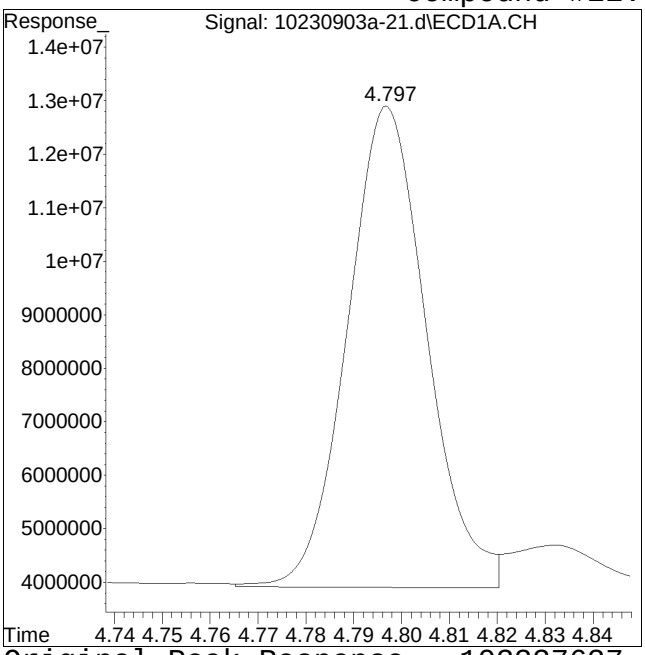


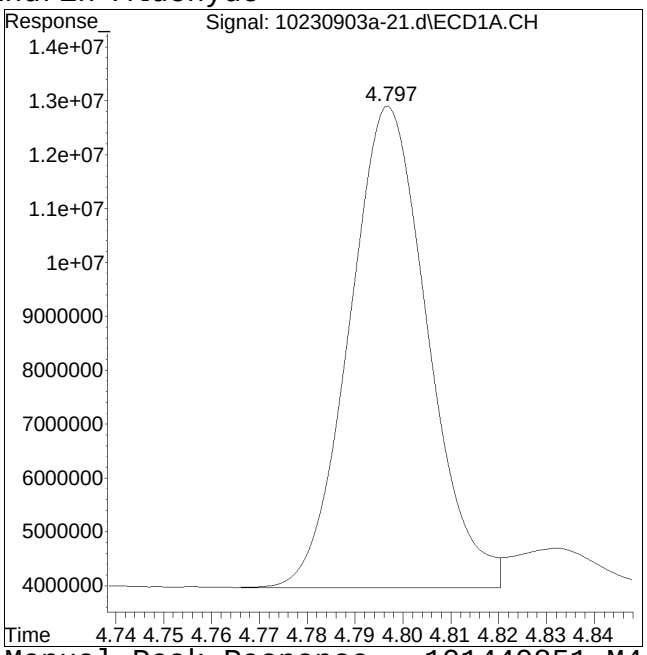
Original Peak Response = 178362789 Manual Peak Response = 176215655 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #22: Endrin Aldehyde



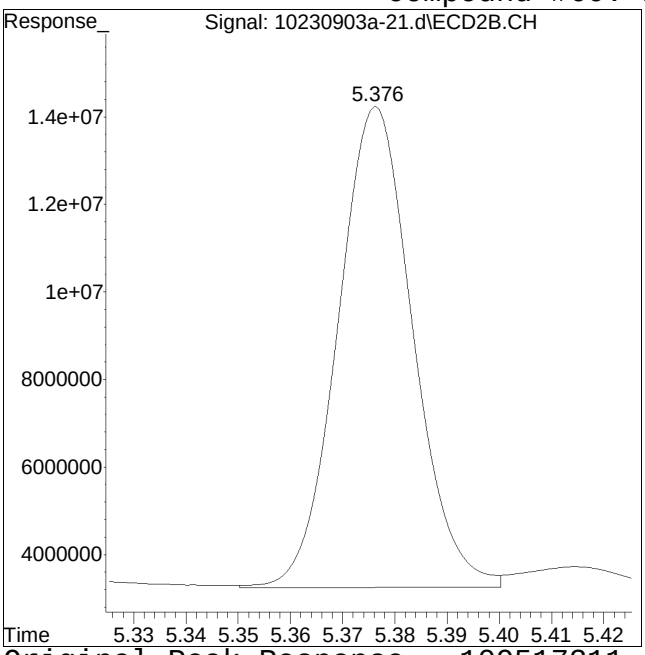


Original Peak Response = 103337637 Manual Peak Response = 101440851 M4
M4 = Poor automated baseline construction.

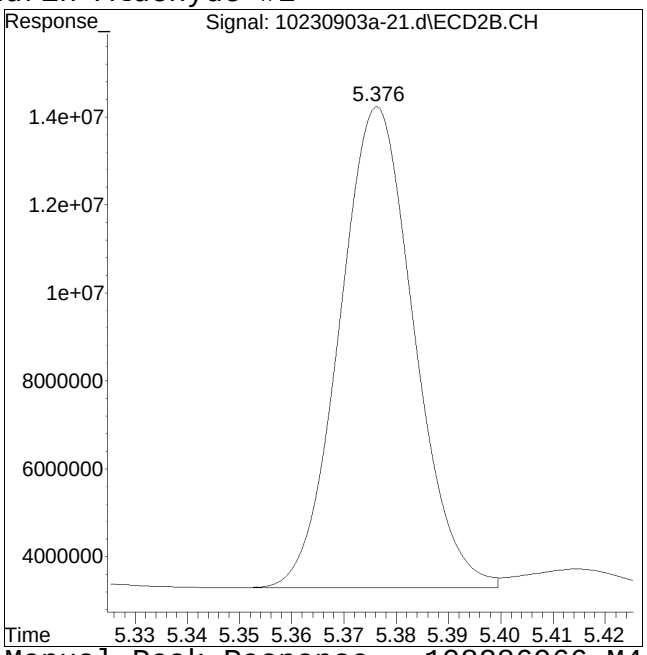
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #60: Endrin Aldehyde #2



Original Peak Response = 109517311



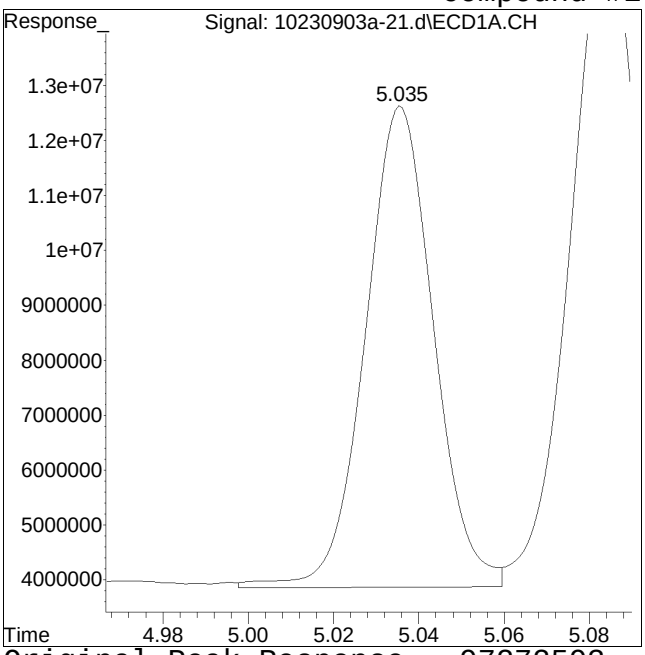
Manual Peak Response = 108286966 M4

M4 = Poor automated baseline construction.

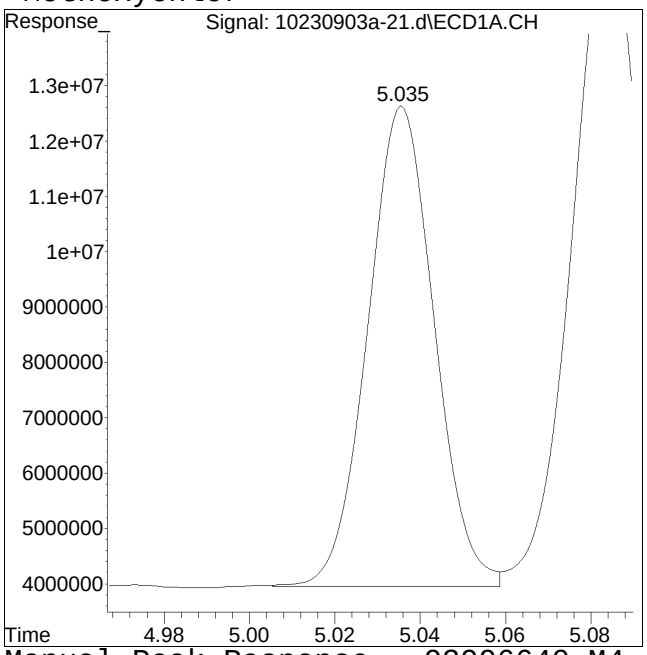
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #23: Methoxychlor



Original Peak Response = 97272593



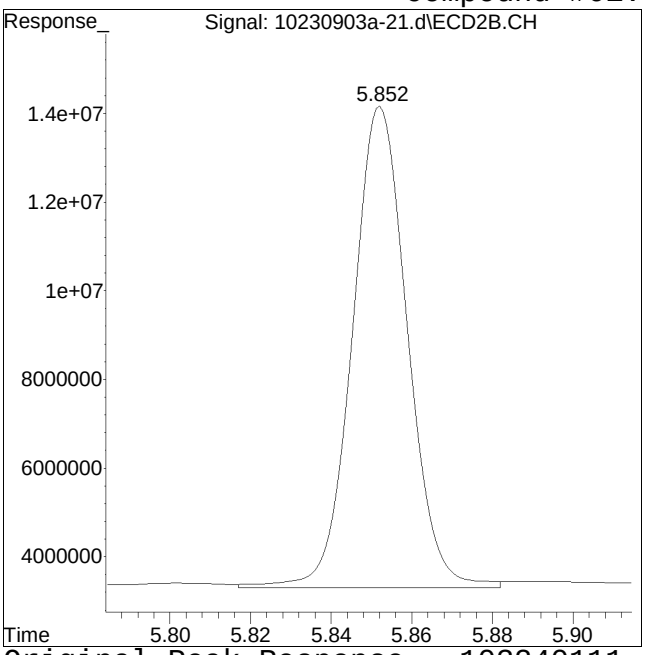
Manual Peak Response = 93996640 M4

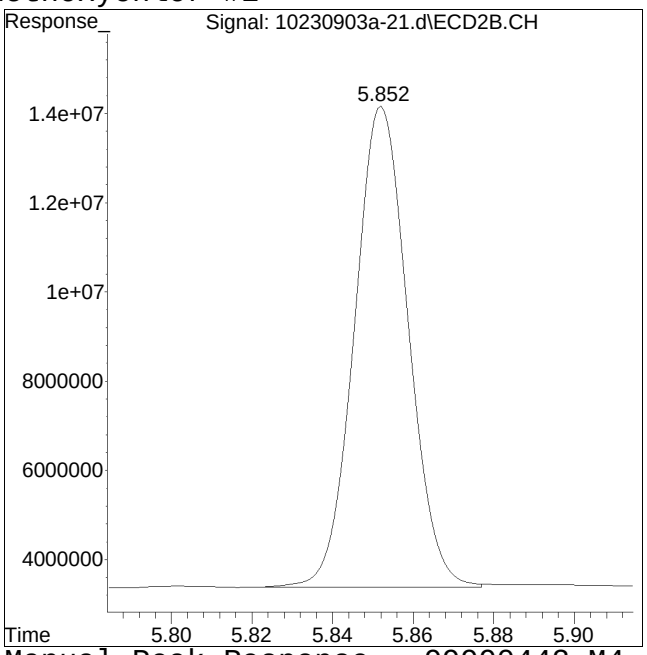
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #61: Methoxychlor #2



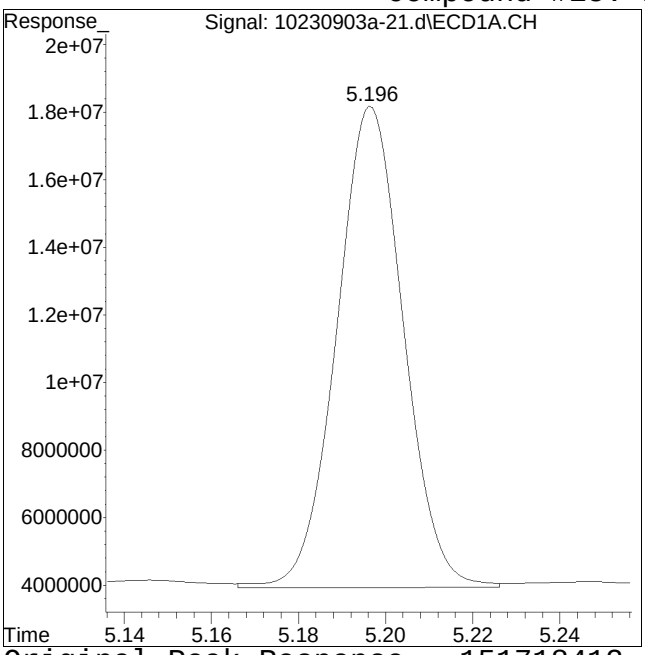


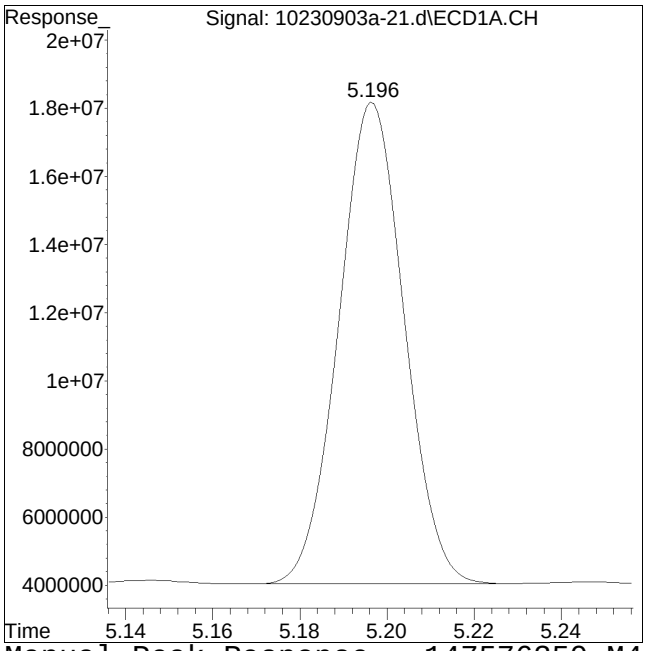
Original Peak Response = 103240111 Manual Peak Response = 99990442 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #25: Endosulfan Sulfate



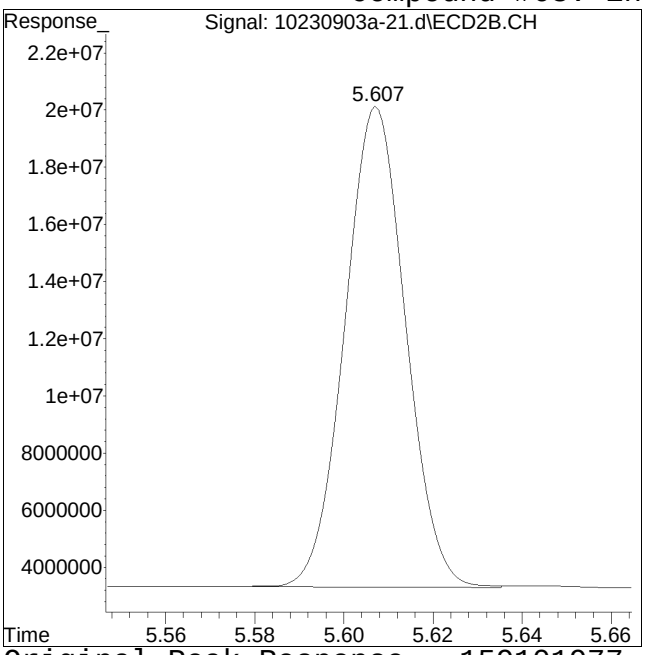


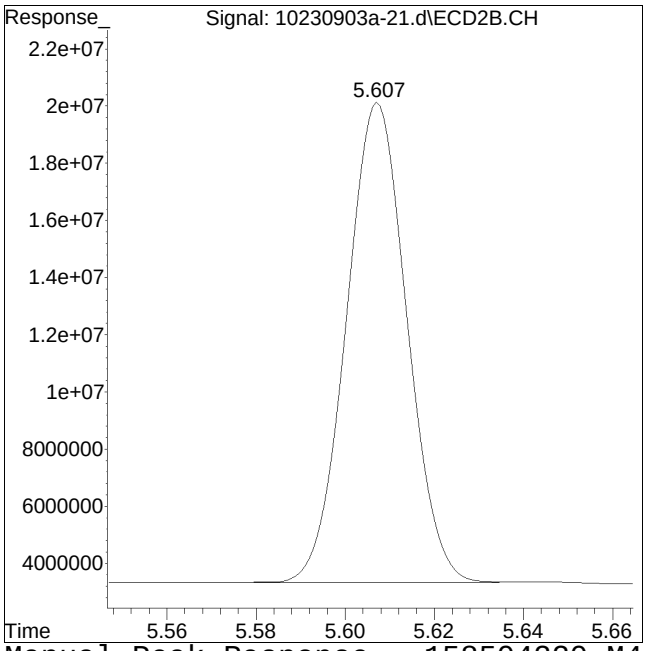
Original Peak Response = 151718412 Manual Peak Response = 147576350 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #63: Endosulfan Sulfate #2



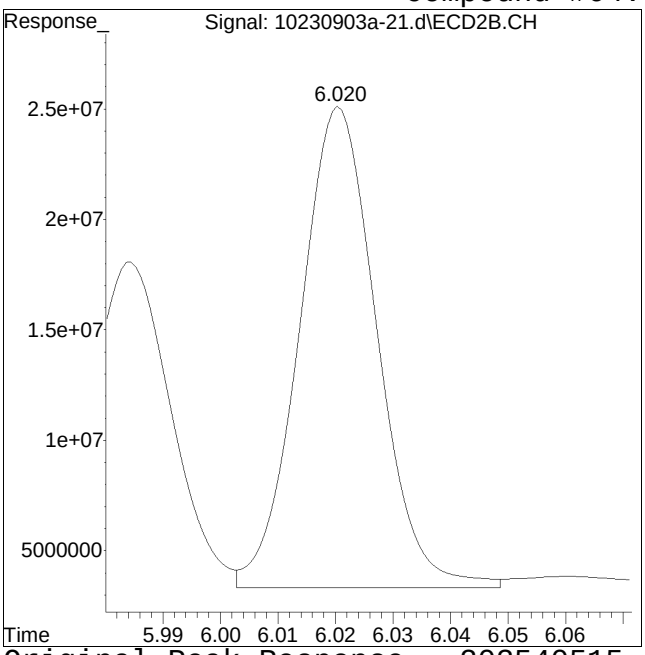


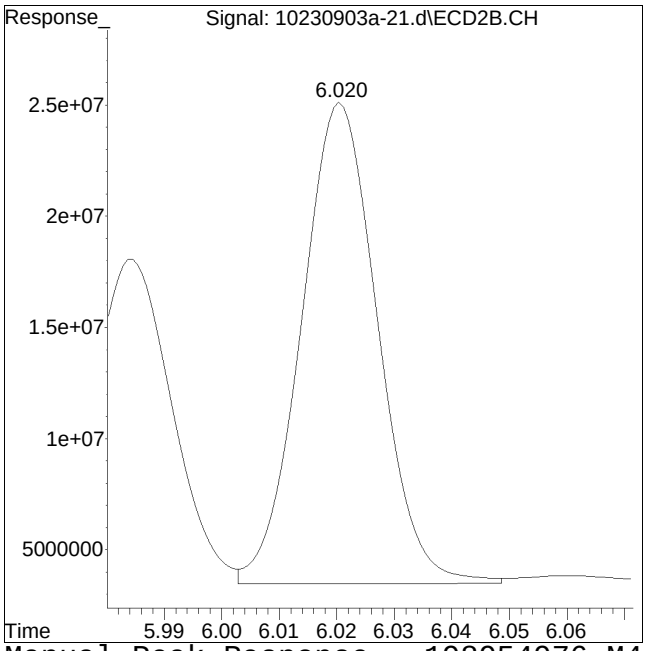
Original Peak Response = 159101977 Manual Peak Response = 158504220 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #64: Endrin Ketone #2



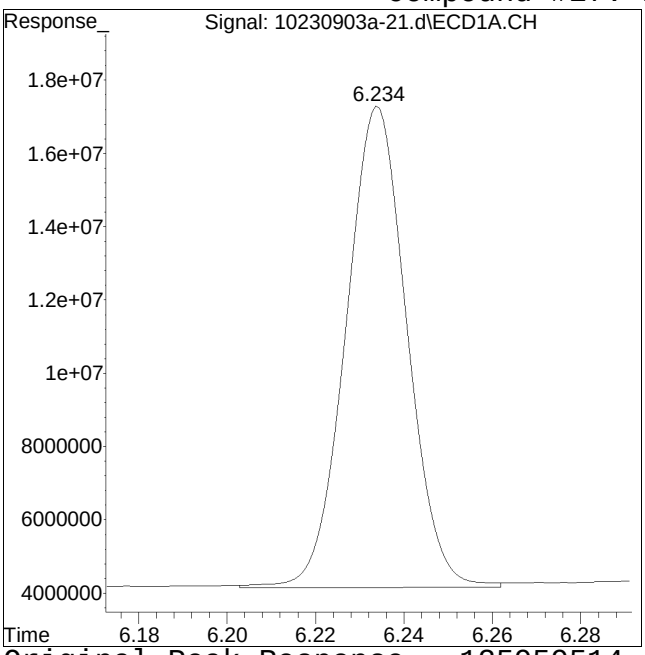


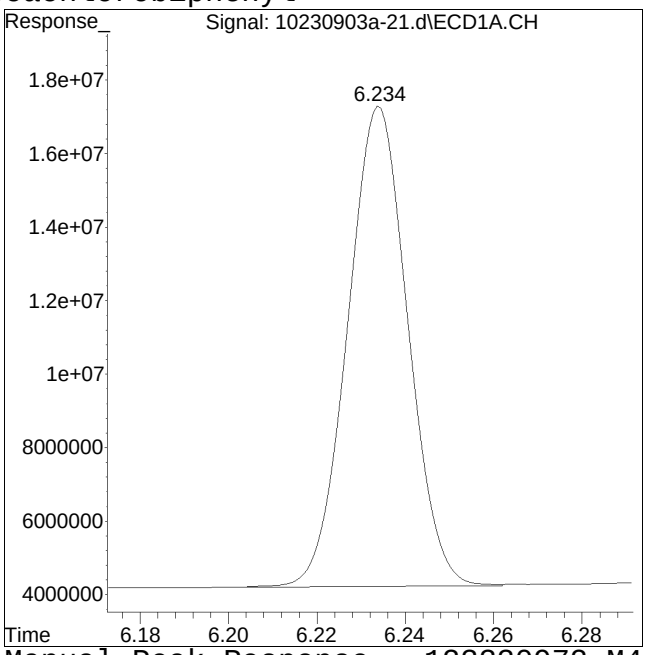
Original Peak Response = 203540515 Manual Peak Response = 198954976 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #27: Decachlorobiphenyl



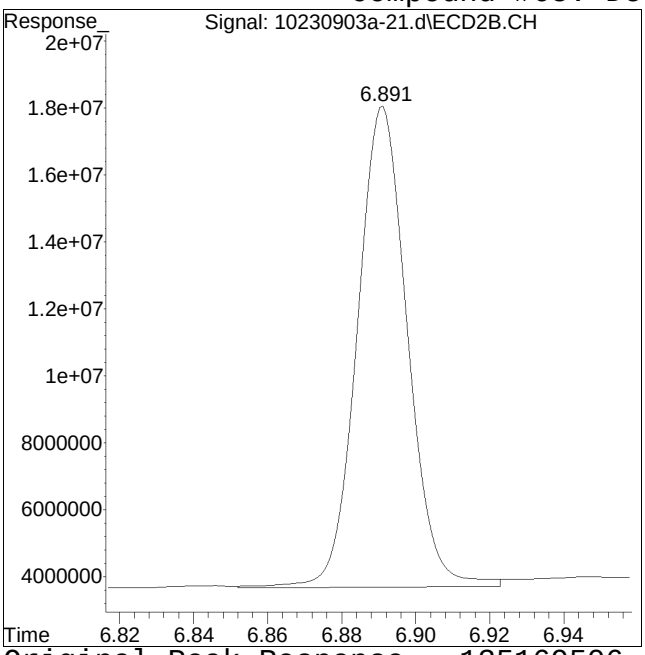


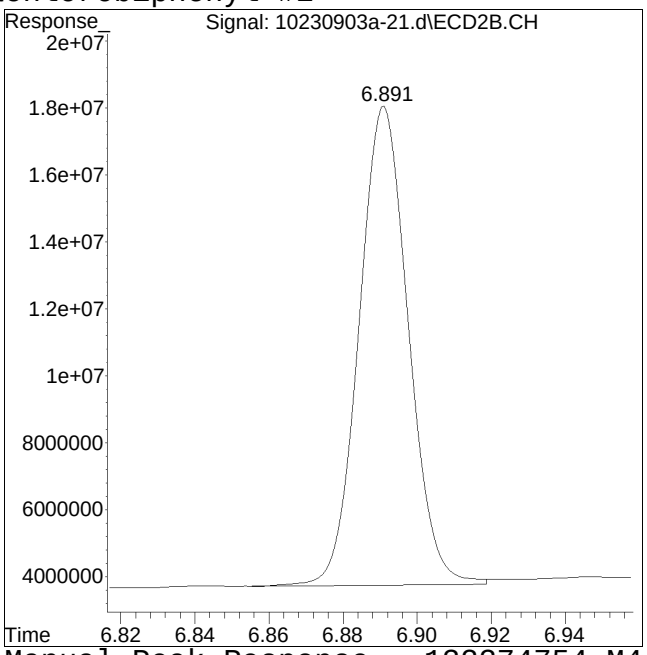
Original Peak Response = 125959514 Manual Peak Response = 123330972 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-21.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 12:43 pm Instrument : Pest 10
Sample : WG1823255-3,42,, Quant Date : 9/3/2023 1:34 pm

Compound #65: Decachlorobiphenyl #2





Original Peak Response = 135169506 Manual Peak Response = 132374754 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-30.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:22 pm
Operator : PEST10:mmg
Sample : WG1823255-4,42,, ms
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 30 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:07:23 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-27.d
Sub List : LCS_MS - spk only

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.274	1.343	150.0E6	157.7E6	25.000	25.000M3
	Standard Area 1 : #1 = 128148385				Recovery =	117.05%	
	Standard Area 1 : #2 = 140314702				Recovery =	112.40%	
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.609	1.813	123.7E6	137.1E6	20.341M3	22.556M3
	Spiked Amount 50.000	Range 30 - 150		Recovery =	40.68%	45.11%	
27) s	Decachlorobi	6.233	6.887	128.6E6	143.8E6	23.399M4	24.654M4
	Spiked Amount 50.000	Range 30 - 150		Recovery =	46.80%	49.31%	
Target Compounds							
4) t	alpha-BHC	1.914	2.224	193.8E6	217.1E6	23.681M4	22.720M4
5) t	gamma-BHC (l	2.112	2.505	186.2E6	208.3E6	23.750M4	25.691M4
6) t	beta-BHC	2.168	2.570	87104745	89699931	24.044M4	23.769M4
7) t	delta-BHC	2.293	2.833	189.3E6	194.7E6	24.117M4	21.751M3
8) t	Heptachlor	2.449	2.897	188.4E6	205.4E6	24.707M3	25.089M4
9) t	Aldrin	2.686	3.212	160.5E6	196.2E6	23.120M4	24.079M4
12) t	Heptachlor E	3.221	3.822	166.1E6	189.0E6	24.263M4	25.250M4
13) t	gamma-Chlord	3.342	4.041	173.1E6	197.7E6	26.220M4	25.157M4
14) t	alpha-Chlord	3.474	4.213	162.0E6	199.3E6	22.348M4	26.152M4
15) t	4,4'-DDE	3.570	4.417	159.9E6	192.6E6	24.473M4	24.588M4
16) t	Endosulfan I	3.609	4.275	169.1E6	184.0E6	26.108M4	26.489M4
17) t	Dieldrin	3.865	4.573	178.0E6	205.8E6	27.153M4	27.654M4
18) t	Endrin	4.118	4.874	167.6E6	194.2E6	24.754M4	25.555M4
19) t	4,4'-DDD	4.235	5.001	143.1E6	163.5E6	26.935	25.996M3
20) t	Endosulfan I	4.369	5.076	157.7E6	175.5E6	25.755	27.959M4
21) t	4,4'-DDT	4.536	5.281	159.8E6	178.7E6	27.029	25.509M4

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-30.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:22 pm
Operator : PEST10:mmg
Sample : WG1823255-4,42,, ms
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 30 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:07:23 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-27.d
Sub List : LCS_MS - spk only

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
22) t Endrin Aldeh	4.797	5.376	109.8E6	115.7E6	21.678	22.202M4
23) t Methoxychlor	5.035	5.852	103.0E6	104.2E6	30.488M4	28.920M4
25) t Endosulfan S	5.196	5.606	148.5E6	161.3E6	25.279M4	26.893M4
26) t Endrin Keton	5.425	6.020	181.7E6	199.1E6	27.851M4	29.278M4
Sum chlordane-1			0	0	N.D.	N.D.
Average chlordane-1					0.000	0.000
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000

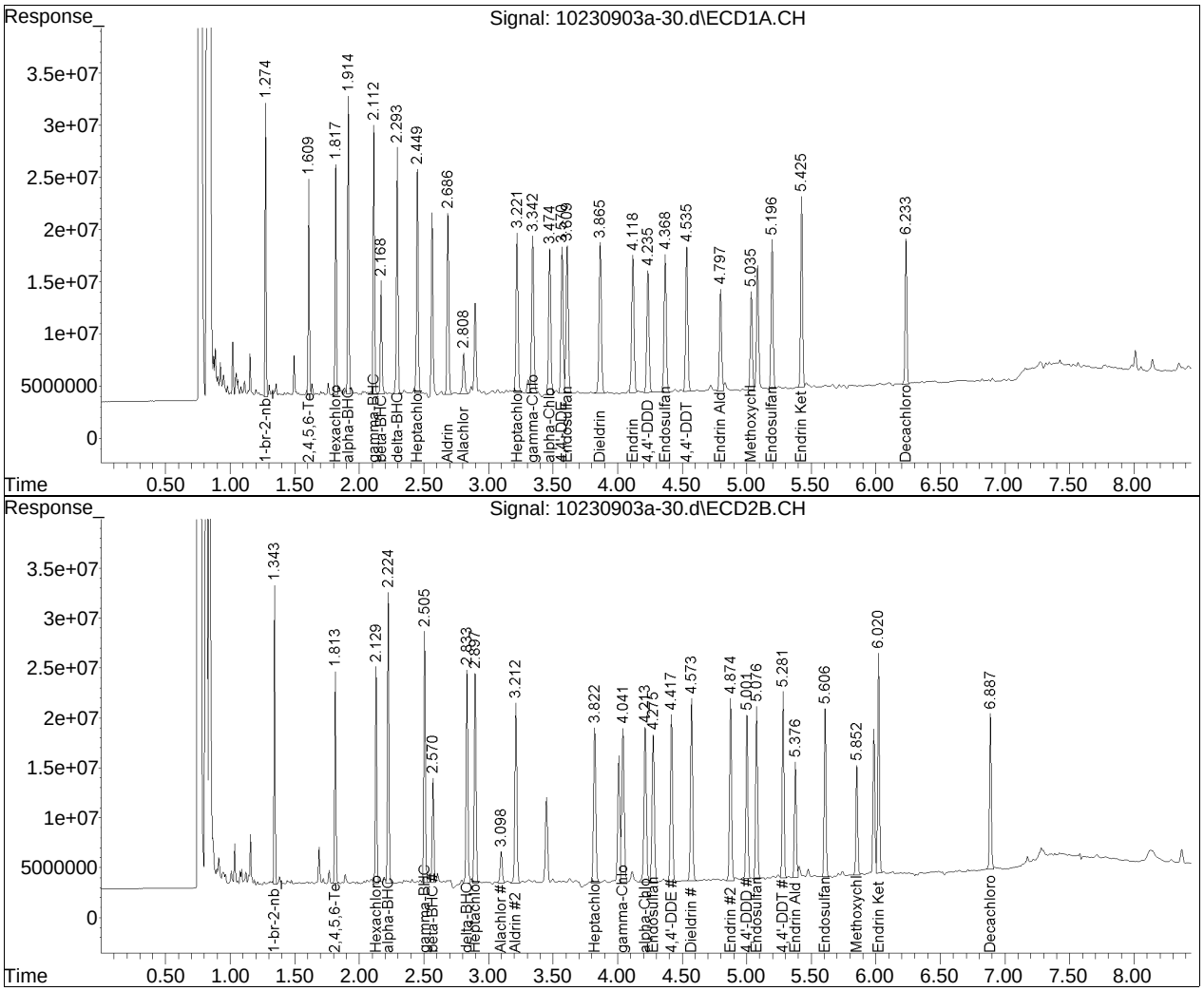
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : LCS_MS - spk only0\2023\230903A\10230903a-27.d••

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-30.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:22 pm
Operator : PEST10:mmg
Sample : WG1823255-4,42,, ms
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical2
ALS Vial : 30 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:07:23 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

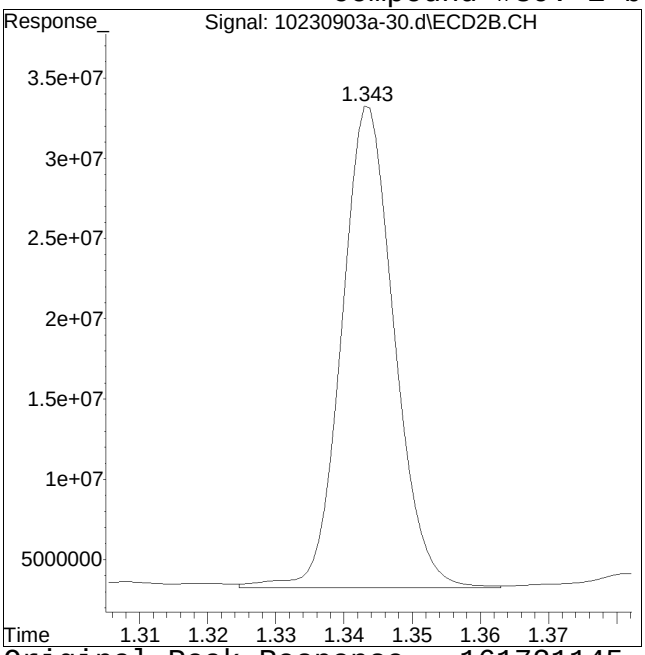
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

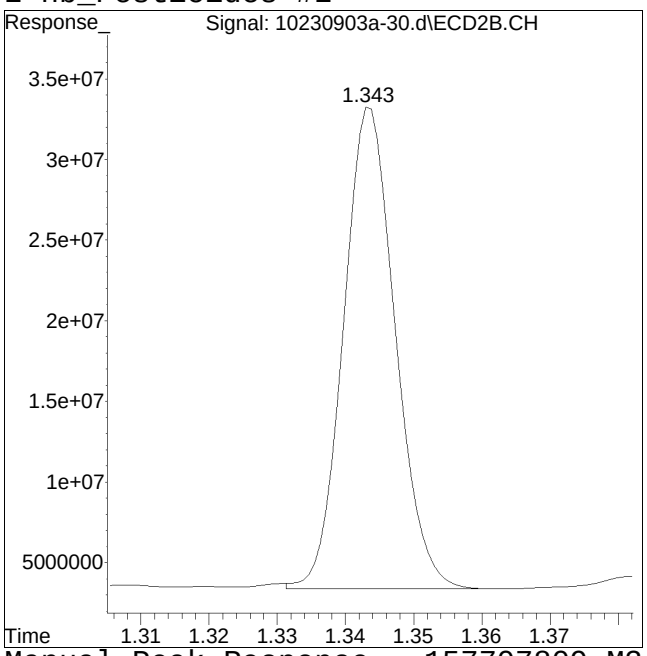


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #39: 1-br-2-nb_Pesticides #2



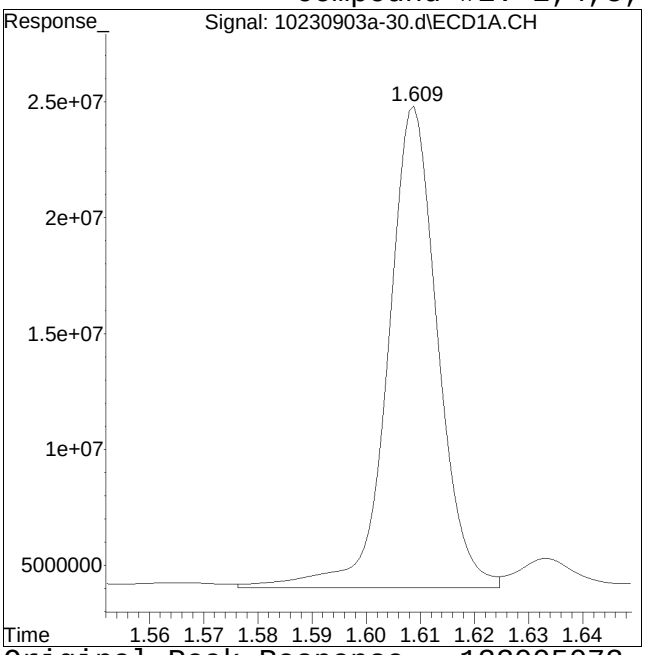


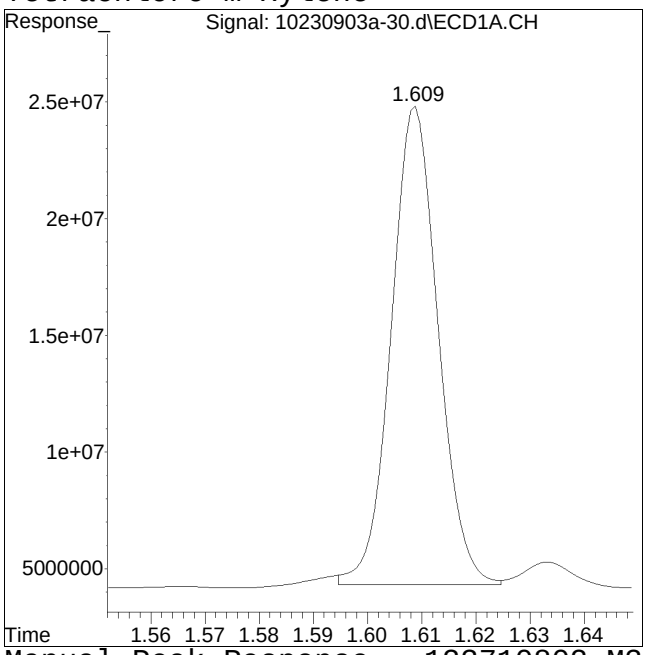
Original Peak Response = 161721145 Manual Peak Response = 157707809 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



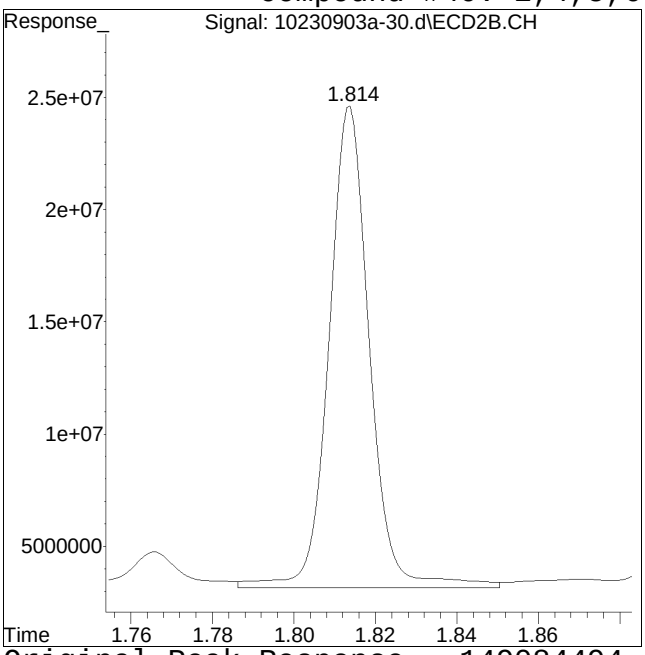


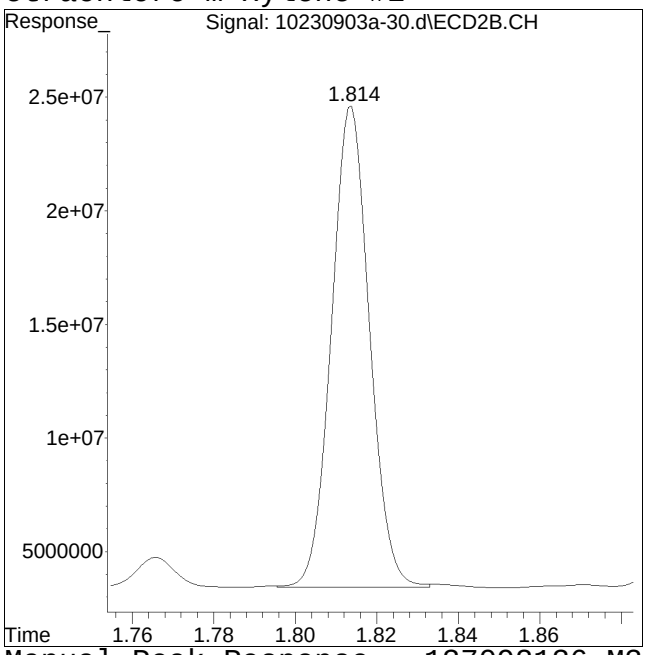
Original Peak Response = 133005073 Manual Peak Response = 123710802 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



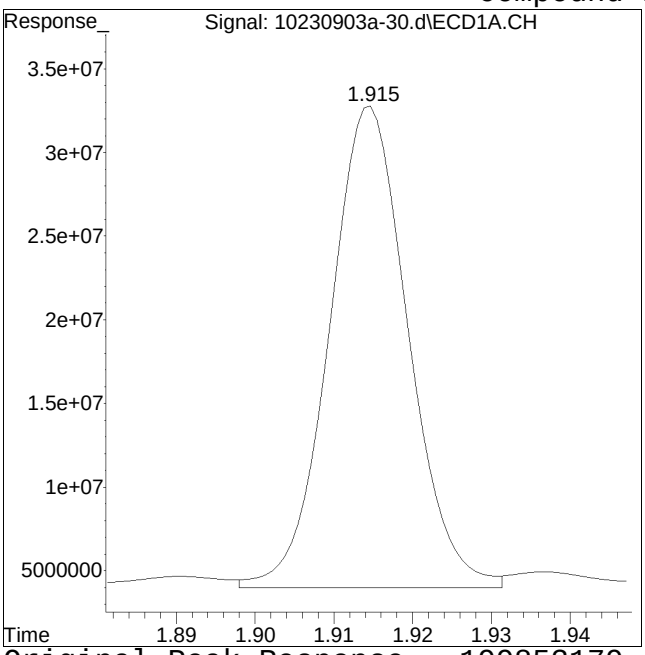


Original Peak Response = 149084494 Manual Peak Response = 137092136 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

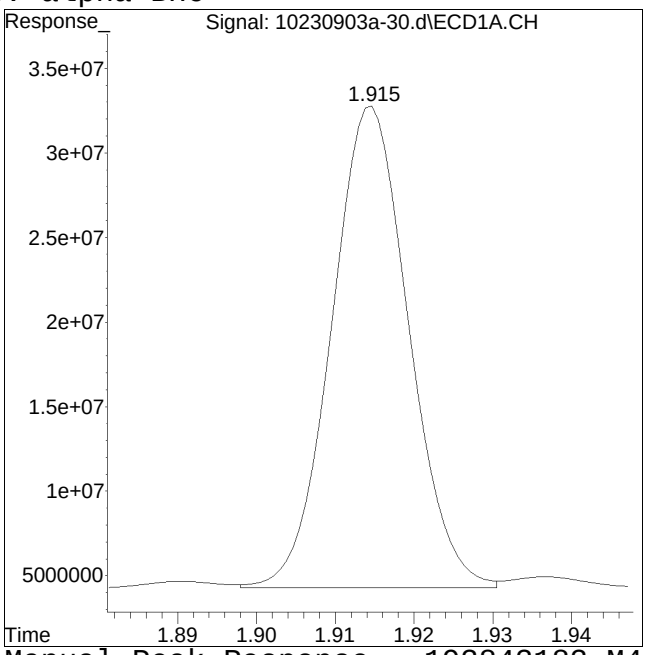
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #4: alpha-BHC



Original Peak Response = 199853179

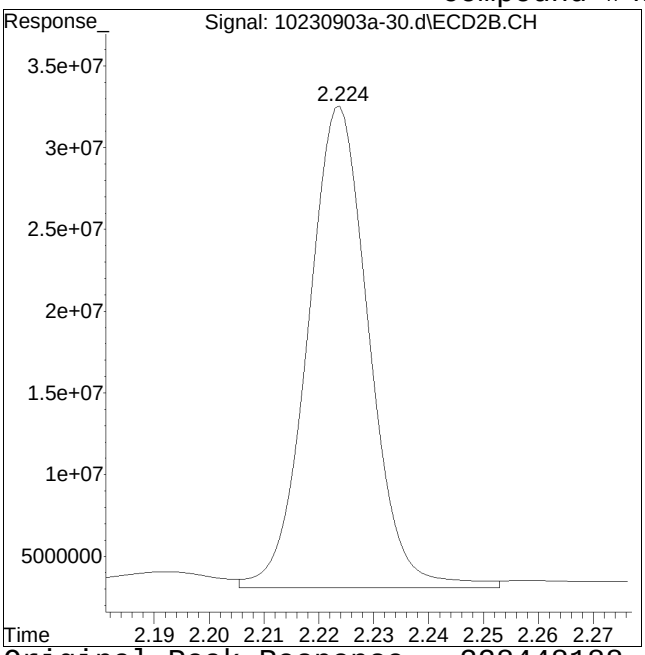


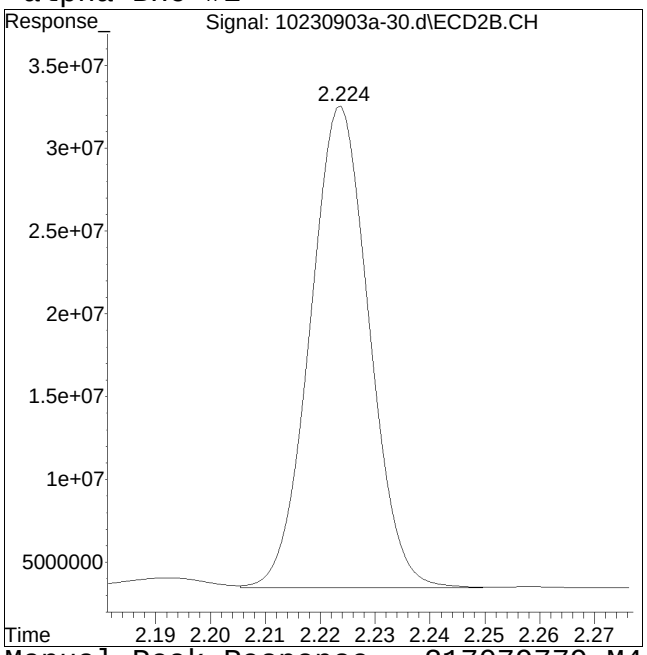
Manual Peak Response = 193843183 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #42: alpha-BHC #2



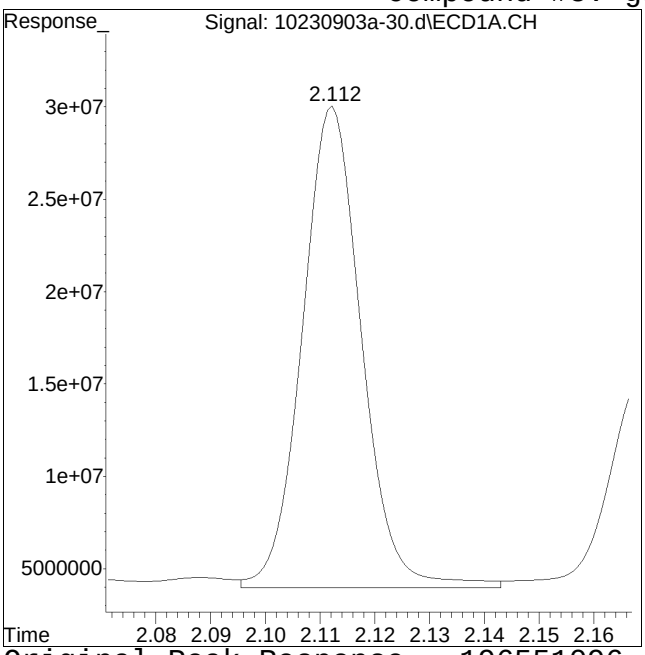


Original Peak Response = 228448188 Manual Peak Response = 217079779 M4
M4 = Poor automated baseline construction.

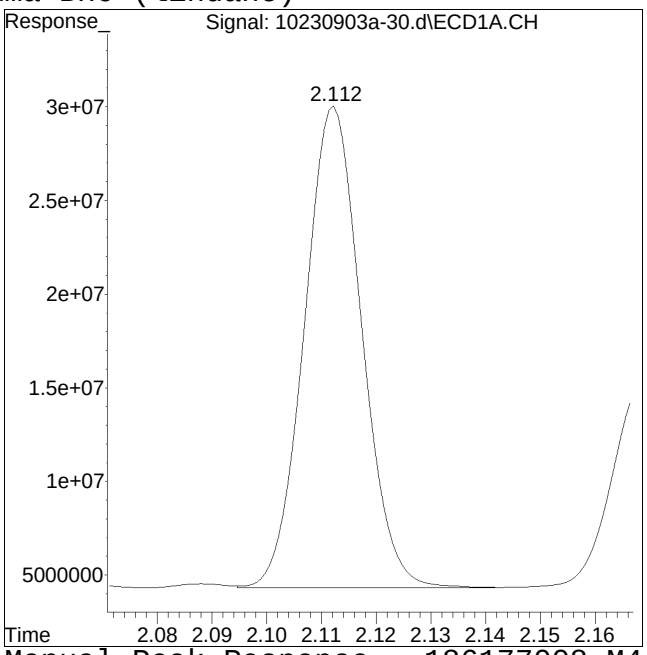
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #5: gamma-BHC (lindane)



Original Peak Response = 196551096

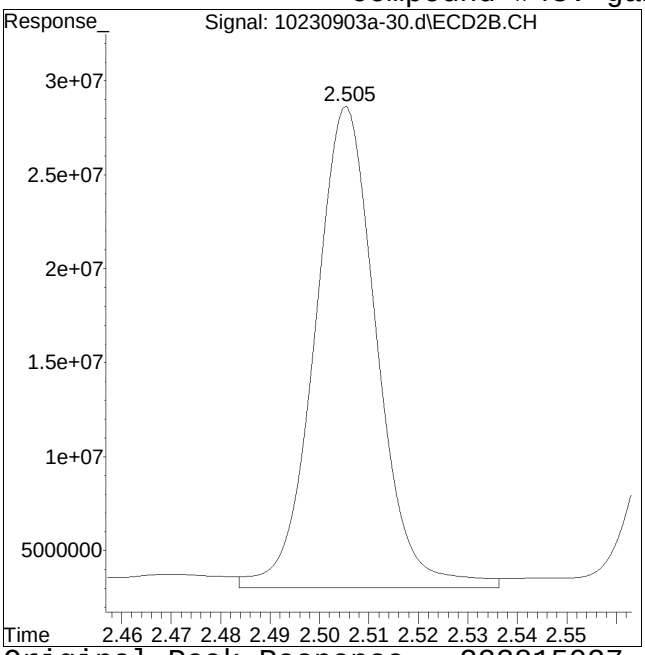


Manual Peak Response = 186177008 M4
M4 = Poor automated baseline construction.

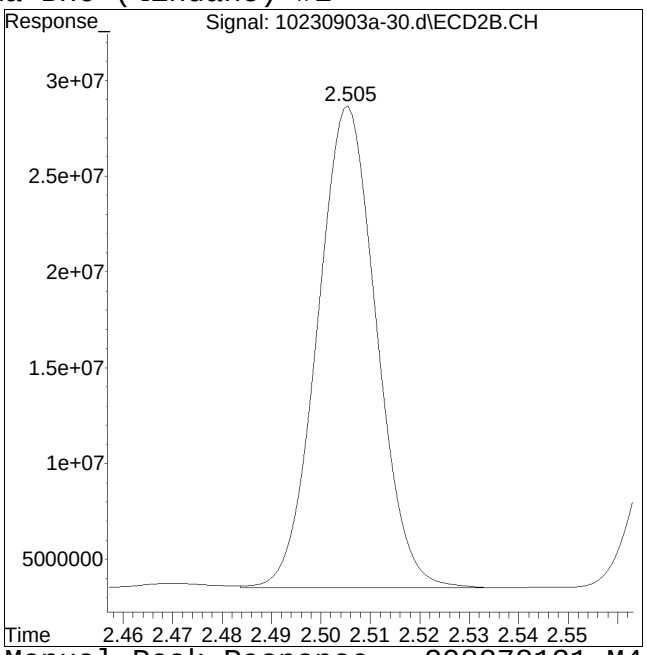
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #43: gamma-BHC (lindane) #2



Original Peak Response = 223815927



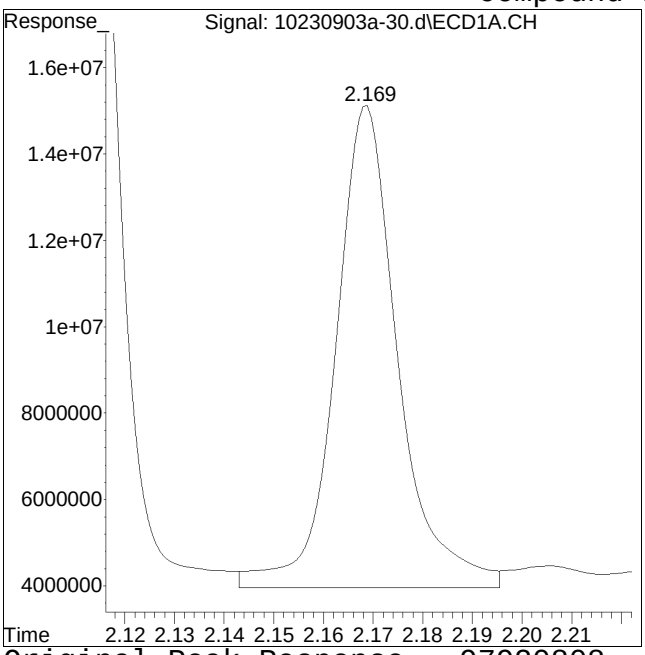
Manual Peak Response = 208278131 M4

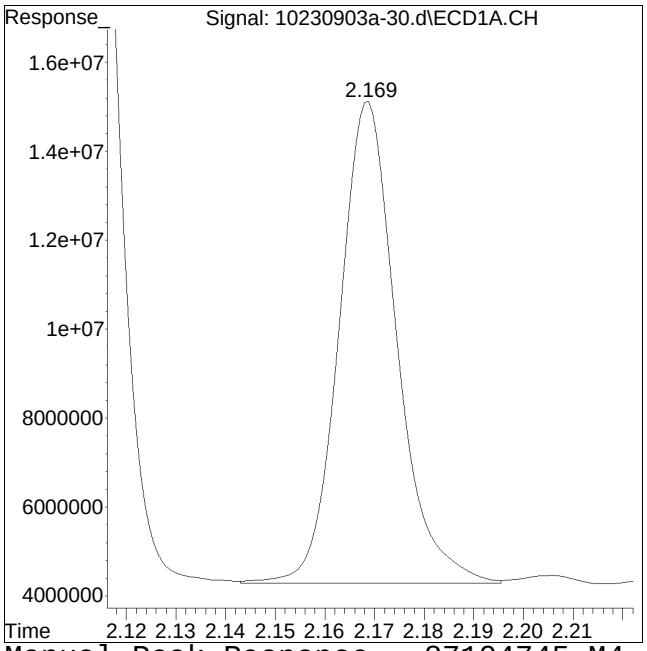
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #6: beta-BHC



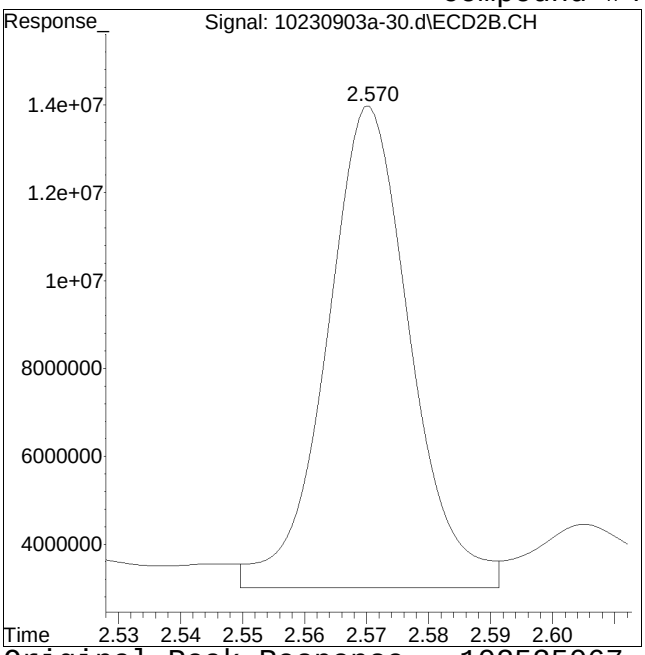


Original Peak Response = 97920808 Manual Peak Response = 87104745 M4
M4 = Poor automated baseline construction.

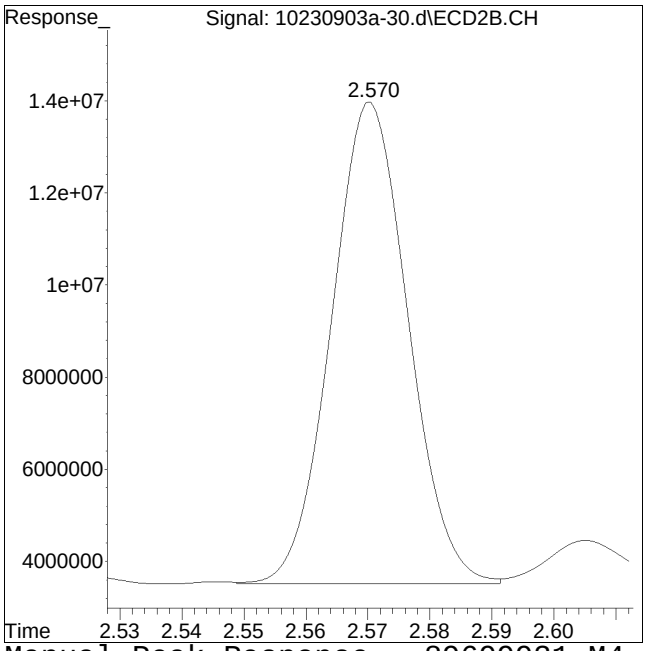
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #44: beta-BHC #2



Original Peak Response = 102535067



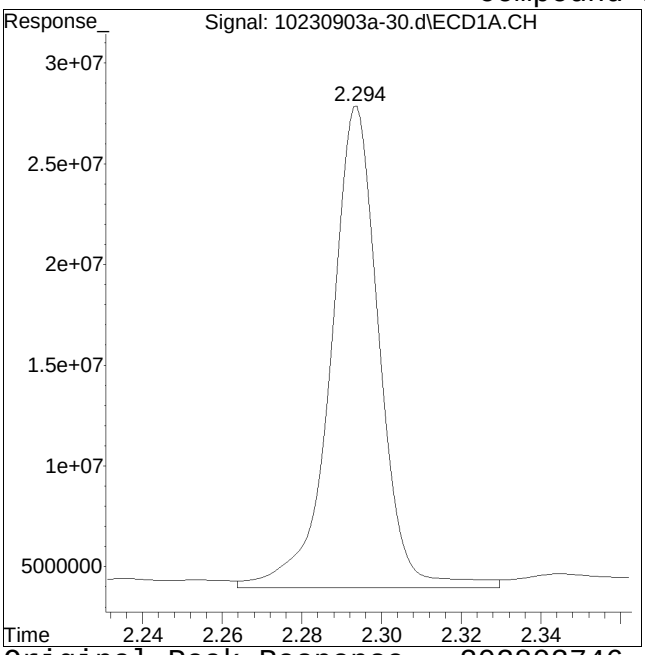
Manual Peak Response = 89699931 M4

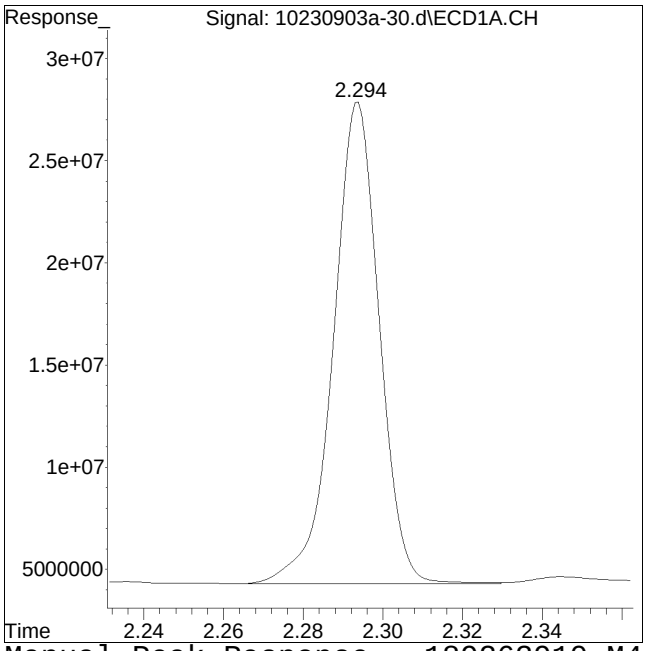
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #7: delta-BHC



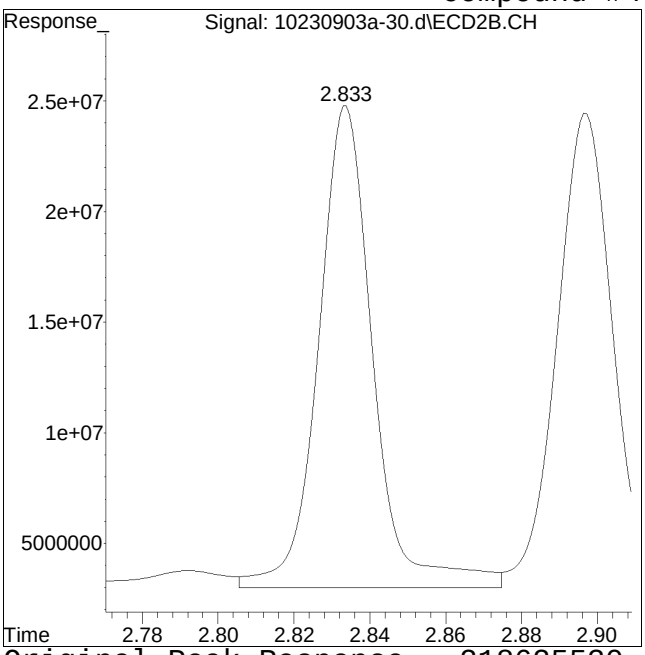


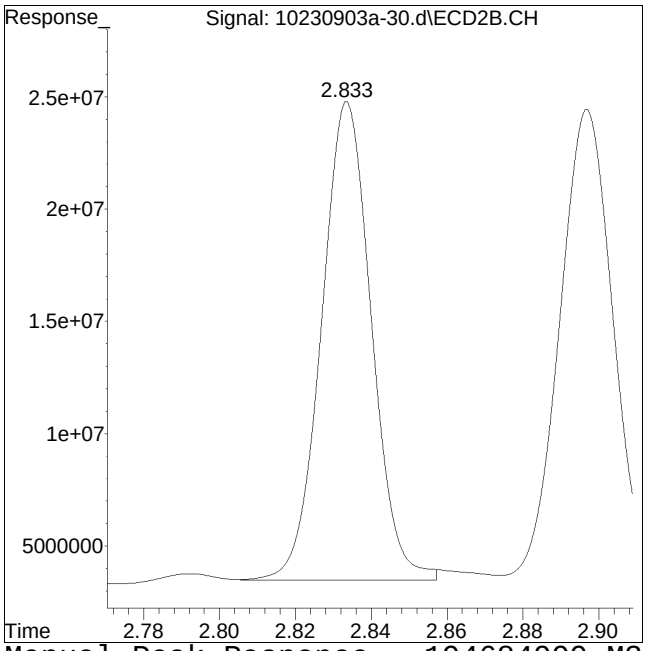
Original Peak Response = 202803746 Manual Peak Response = 189263910 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #45: delta-BHC #2



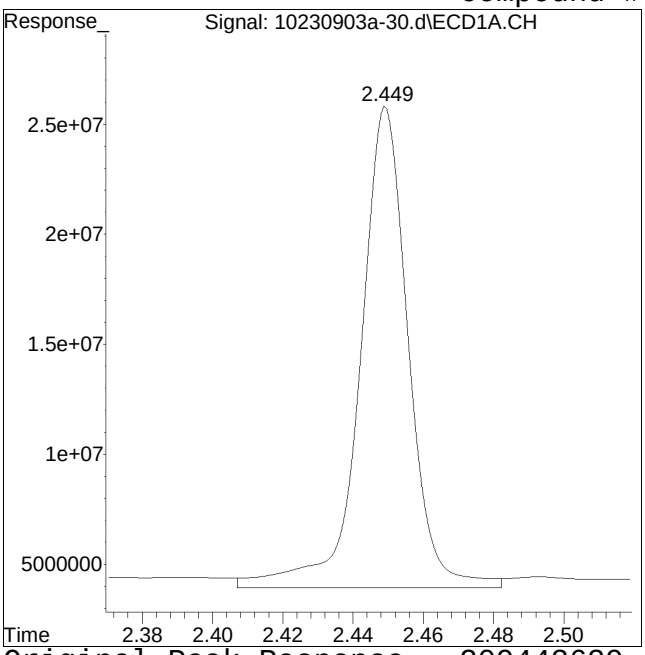


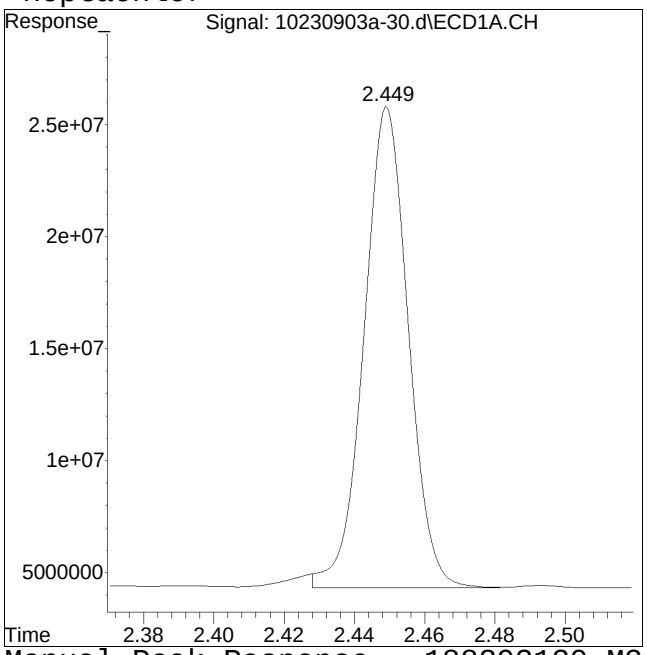
Original Peak Response = 218625530 Manual Peak Response = 194684999 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #8: Heptachlor



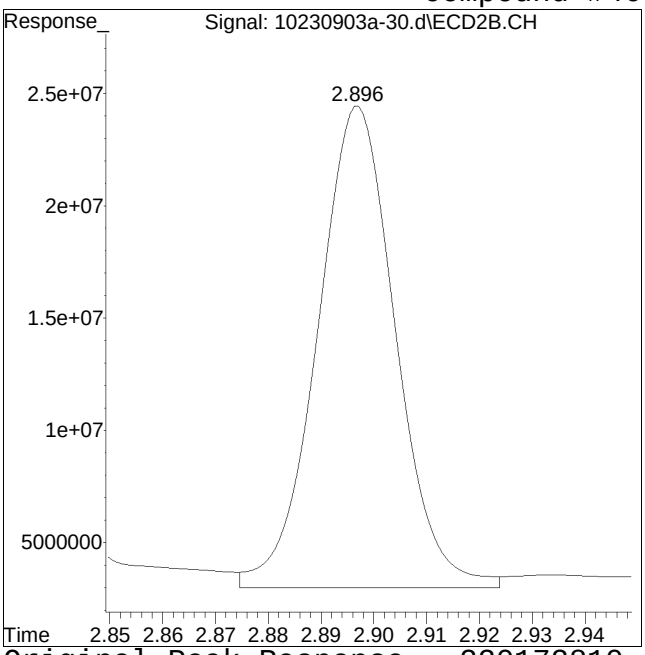


Original Peak Response = 209442629 Manual Peak Response = 188393130 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

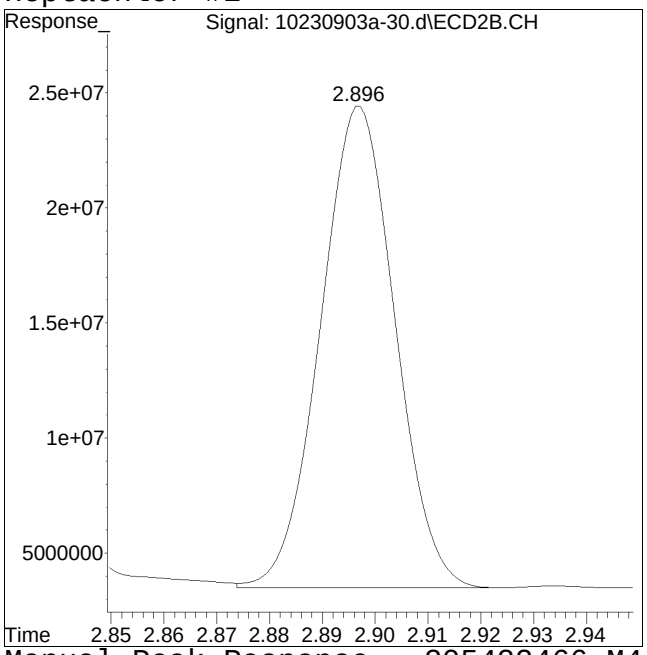
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #46: Heptachlor #2



Original Peak Response = 220172810



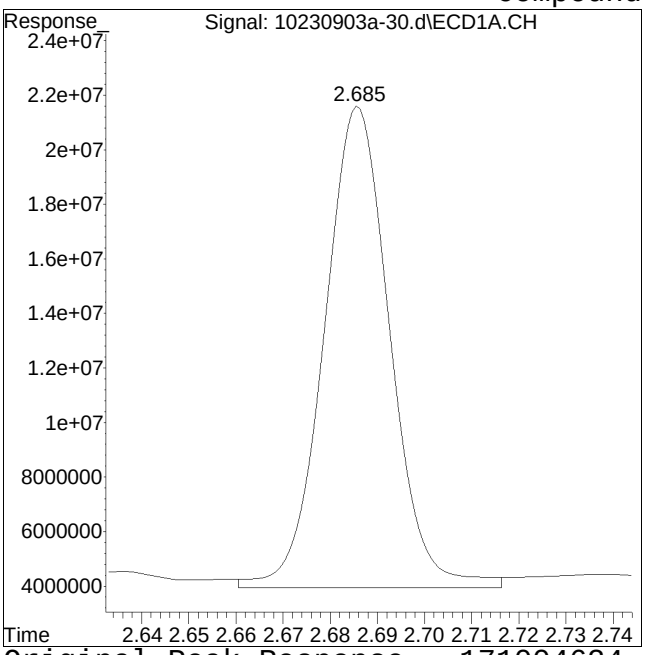
Manual Peak Response = 205422466 M4

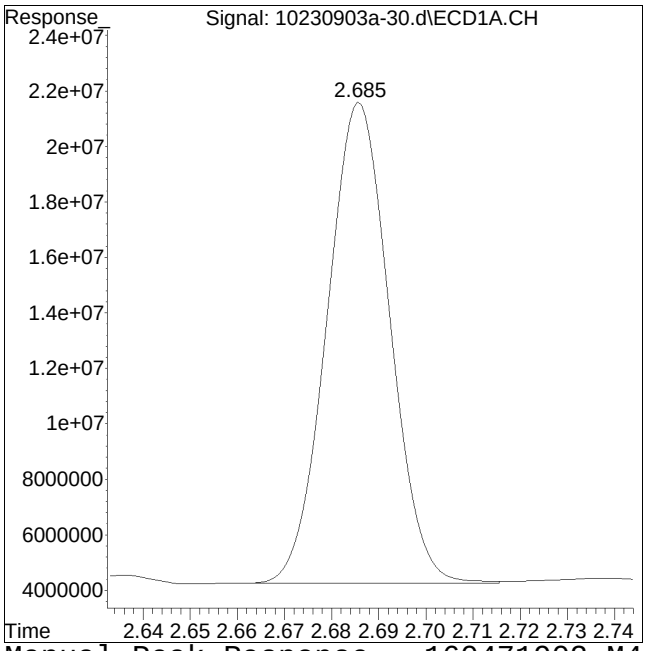
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #9: Aldrin



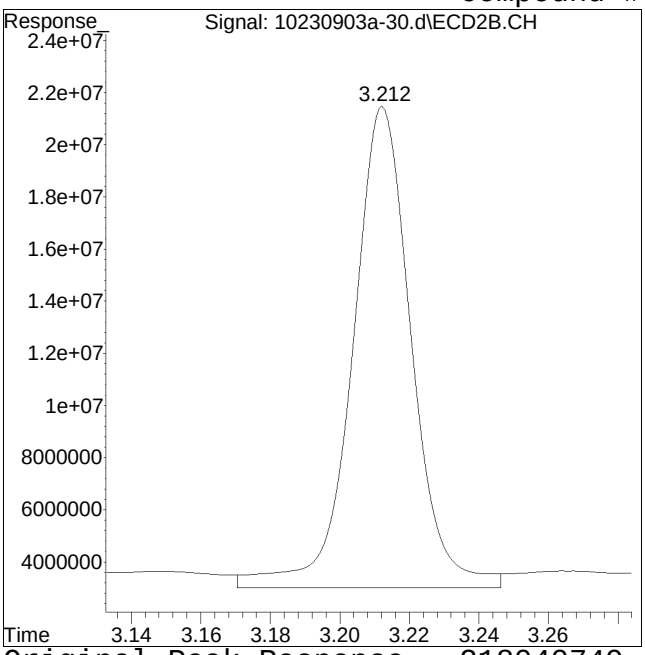


Original Peak Response = 171004624 Manual Peak Response = 160471902 M4
M4 = Poor automated baseline construction.

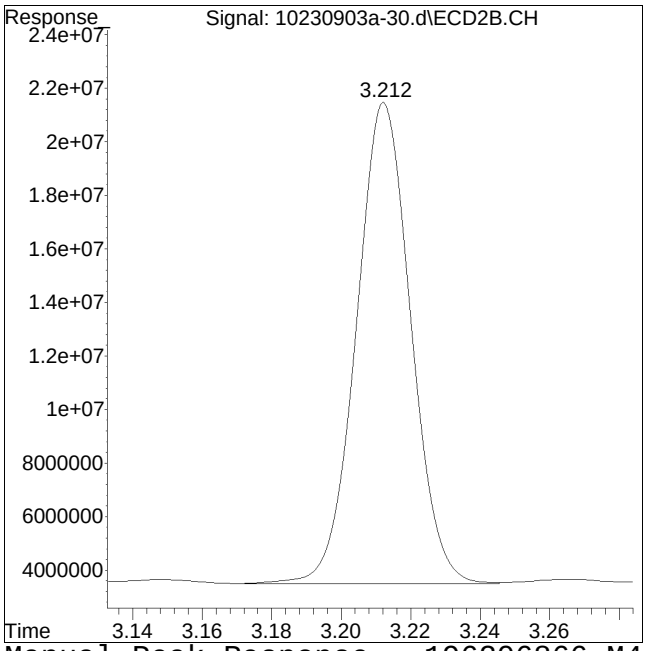
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #47: Aldrin #2



Original Peak Response = 218040749



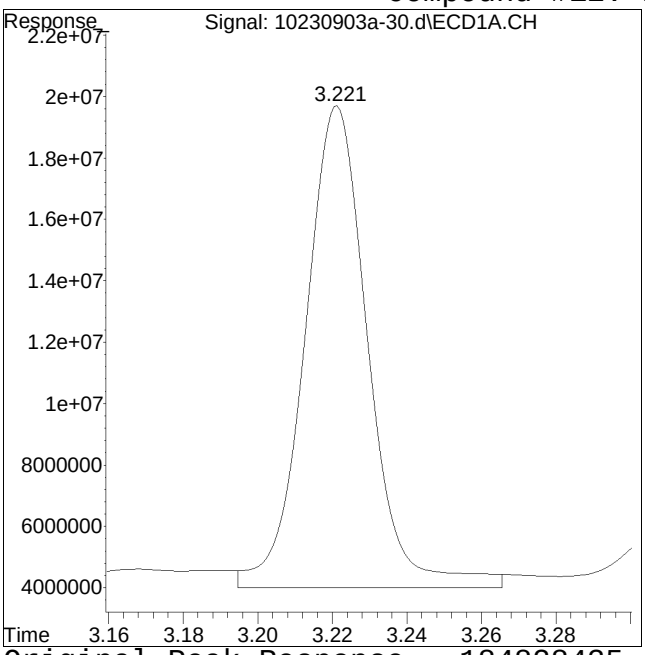
Manual Peak Response = 196206866 M4

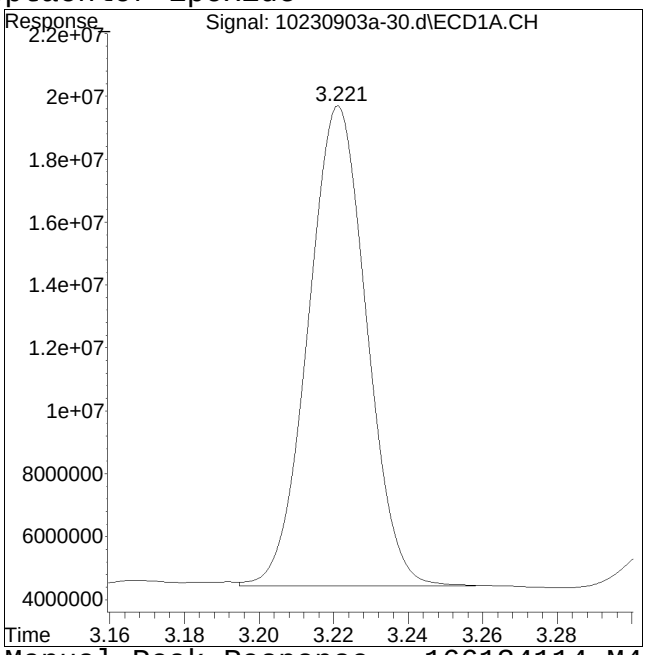
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #12: Heptachlor Epoxide



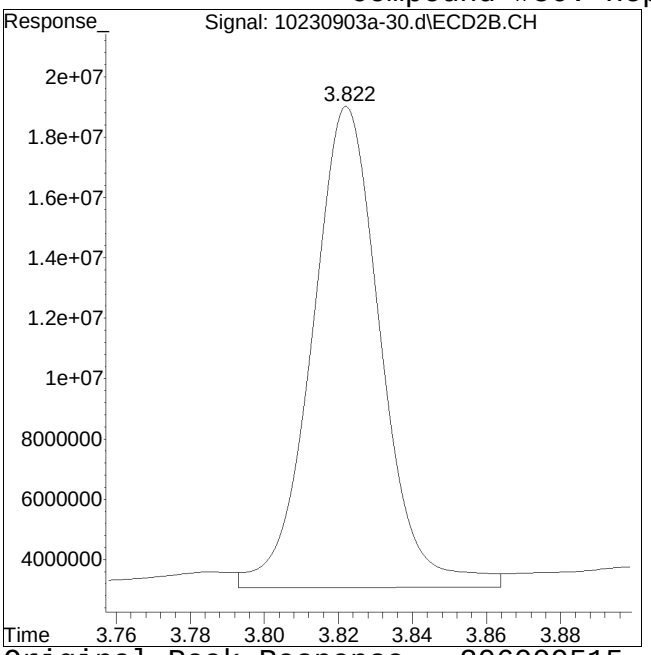


Original Peak Response = 184828435 Manual Peak Response = 166134114 M4
M4 = Poor automated baseline construction.

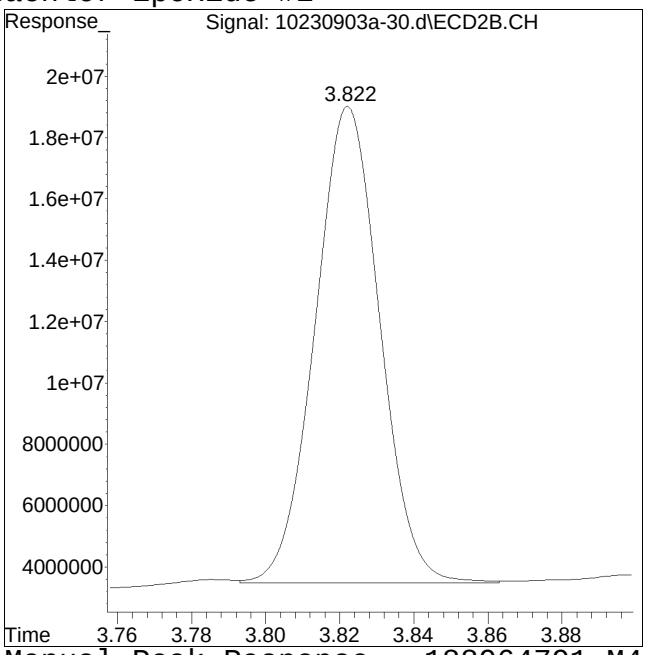
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #50: Heptachlor Epoxide #2



Original Peak Response = 206009515



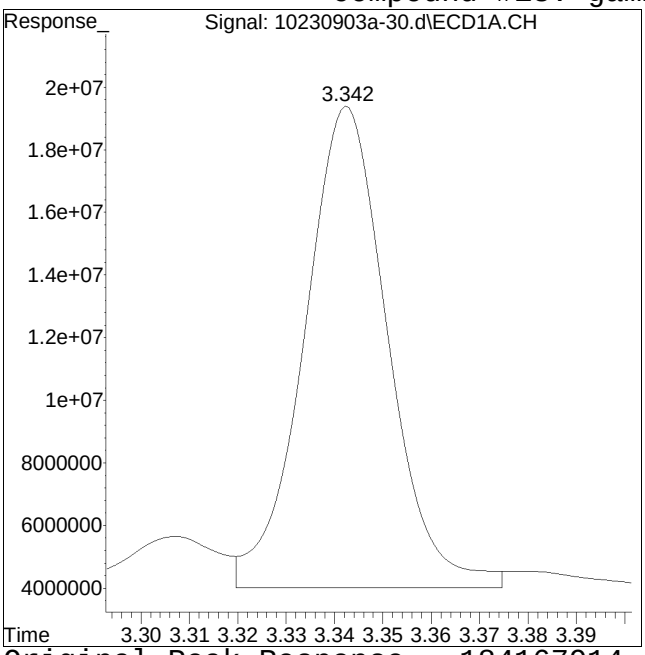
Manual Peak Response = 188964791 M4

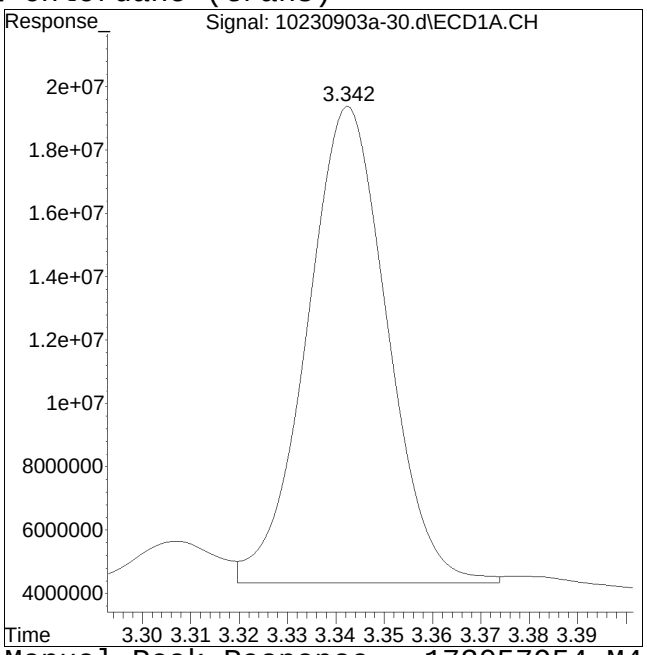
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #13: gamma-Chlordane (trans)



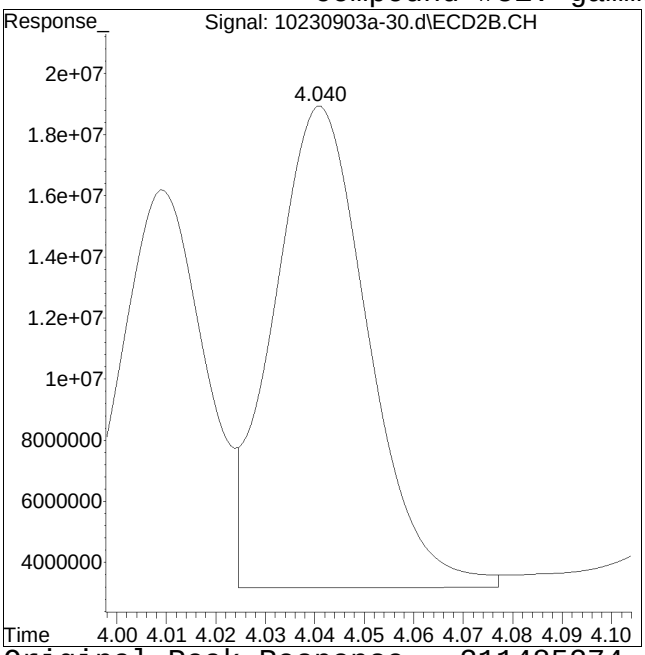


Original Peak Response = 184167914 Manual Peak Response = 173057954 M4
M4 = Poor automated baseline construction.

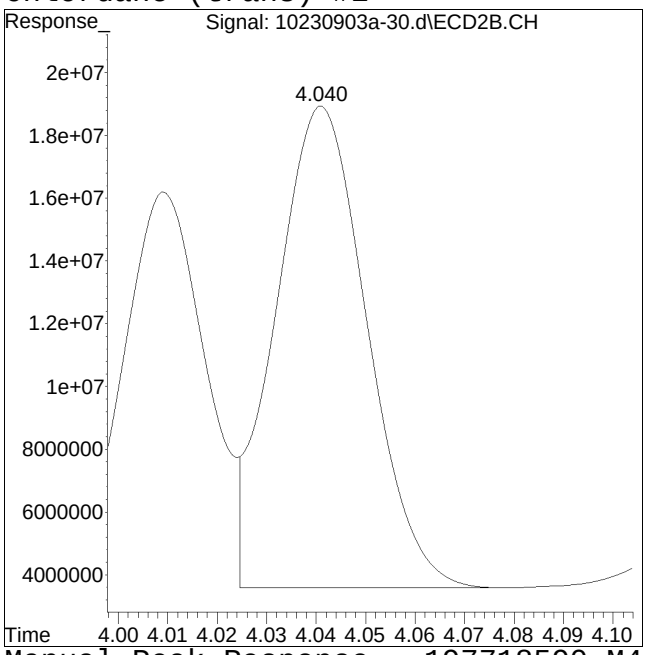
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #51: gamma-Chlordane (trans) #2



Original Peak Response = 211485274



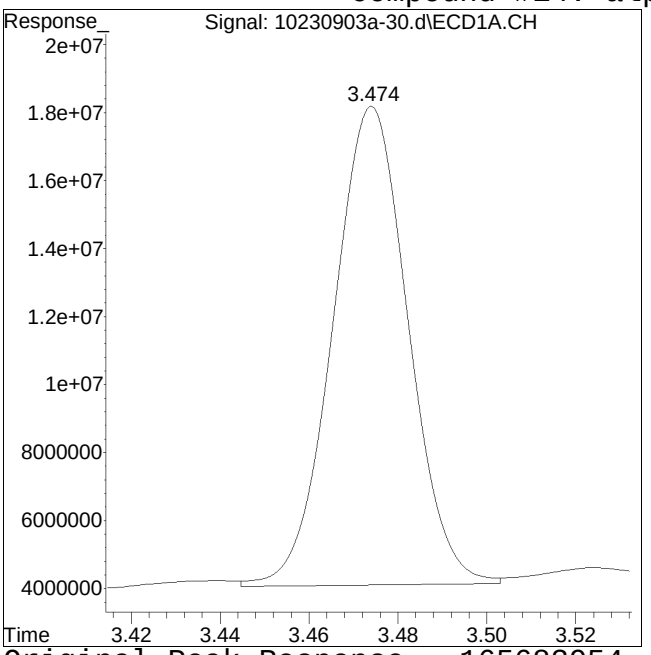
Manual Peak Response = 197718590 M4

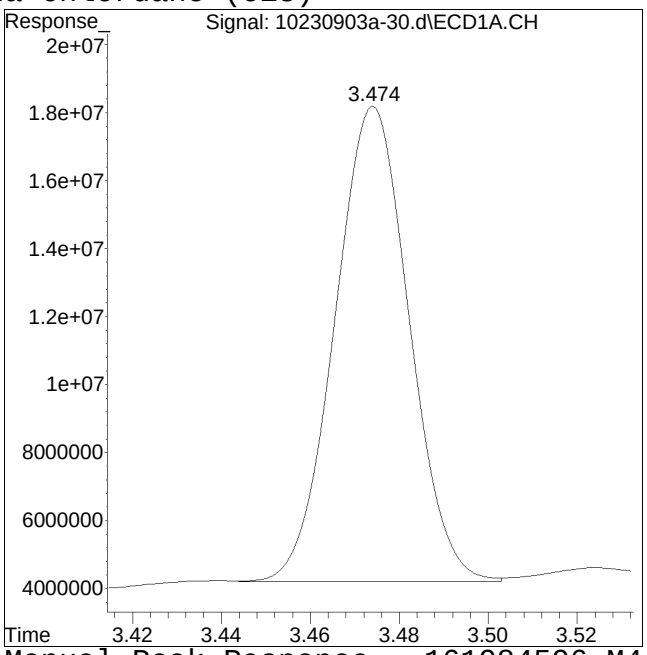
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #14: alpha-Chlordane (cis)



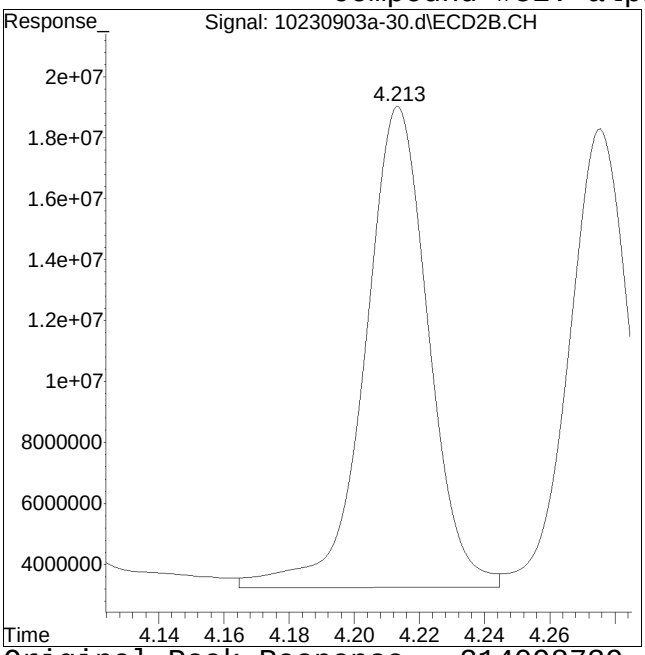


Original Peak Response = 165683954 Manual Peak Response = 161984596 M4
M4 = Poor automated baseline construction.

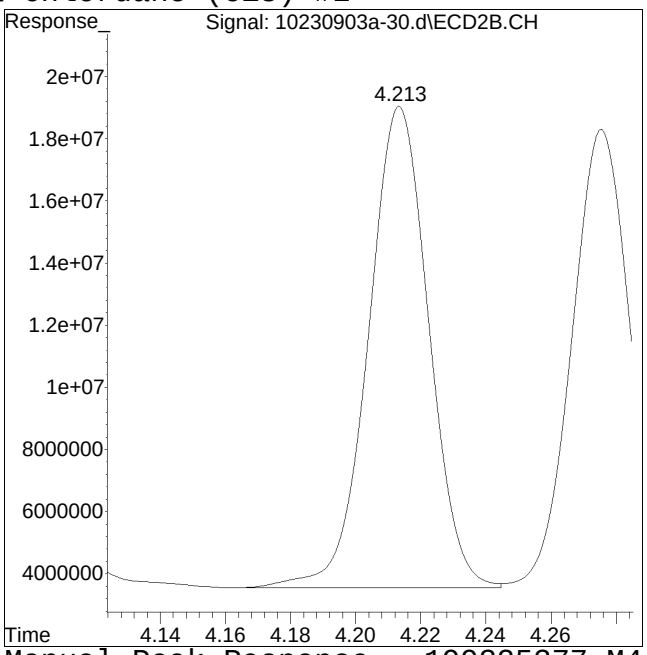
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #52: alpha-Chlordane (cis) #2



Original Peak Response = 214098739



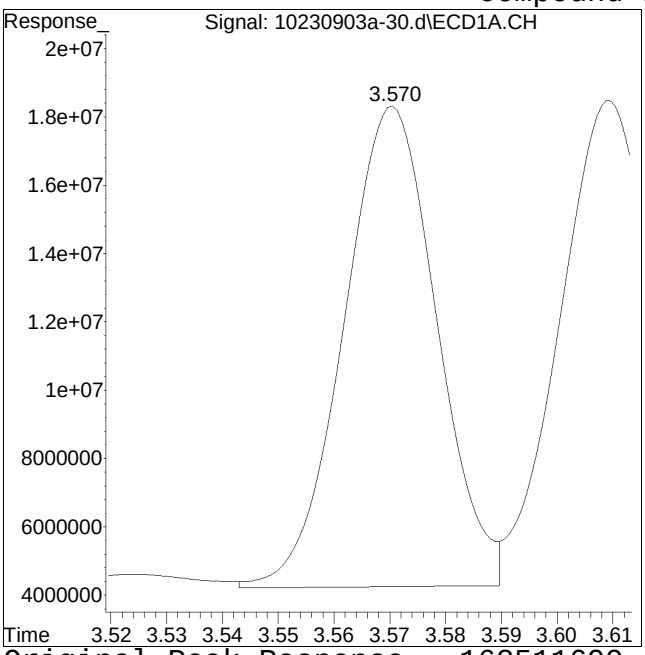
Manual Peak Response = 199325377 M4

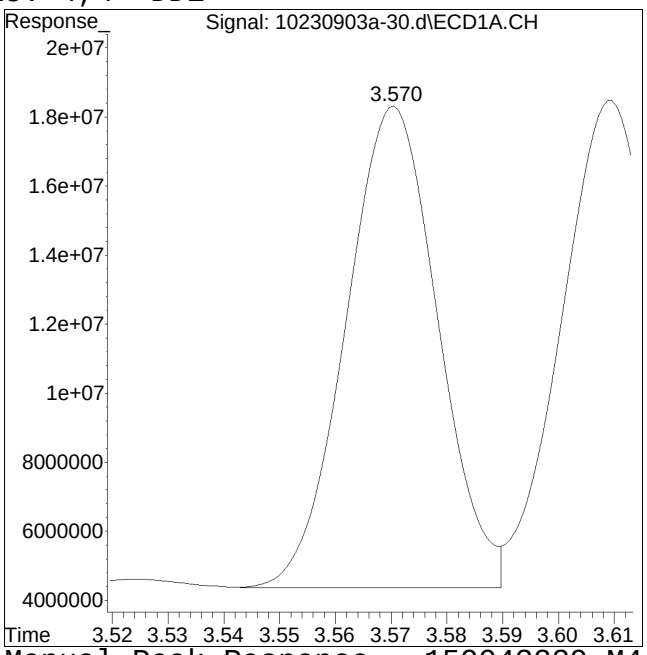
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #15: 4,4'-DDE



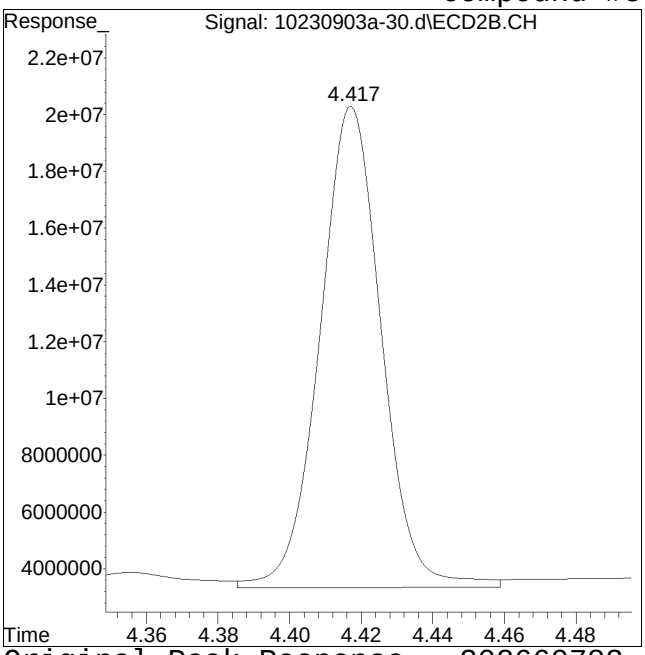


Original Peak Response = 162511699 Manual Peak Response = 159943229 M4
M4 = Poor automated baseline construction.

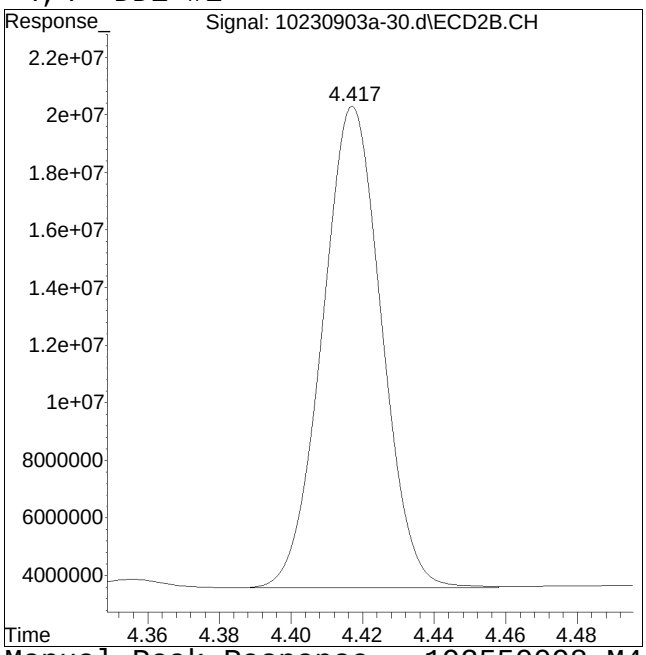
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #53: 4,4'-DDE #2



Original Peak Response = 202660783

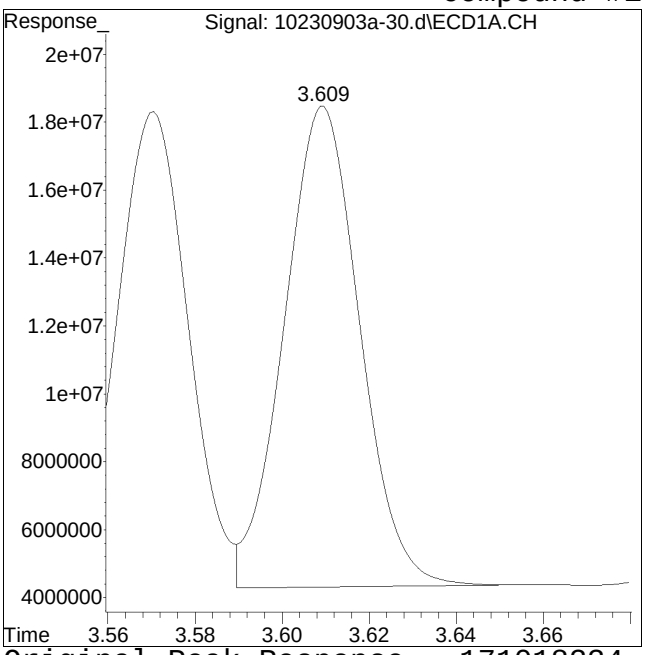


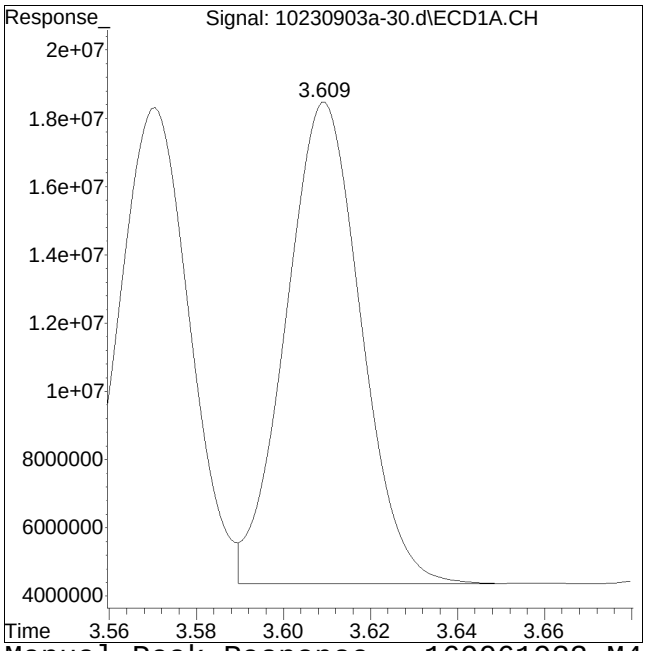
Manual Peak Response = 192550098 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #16: Endosulfan I



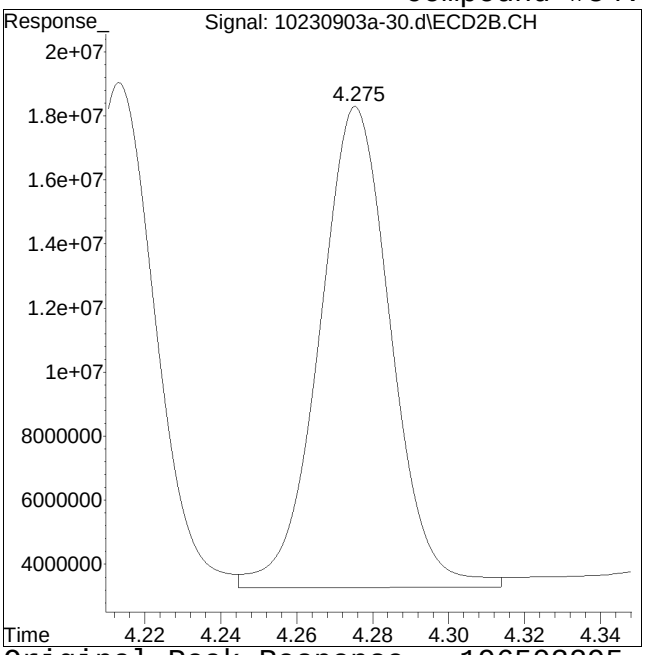


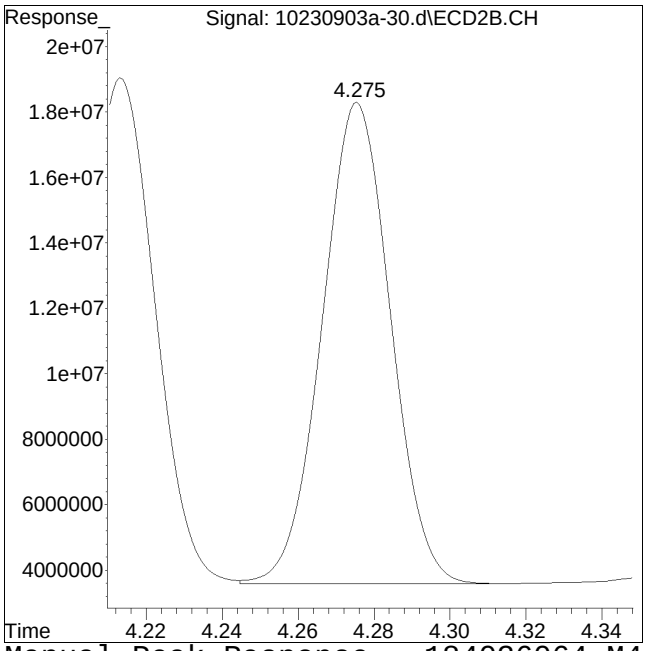
Original Peak Response = 171018334 Manual Peak Response = 169061933 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #54: Endosulfan I #2



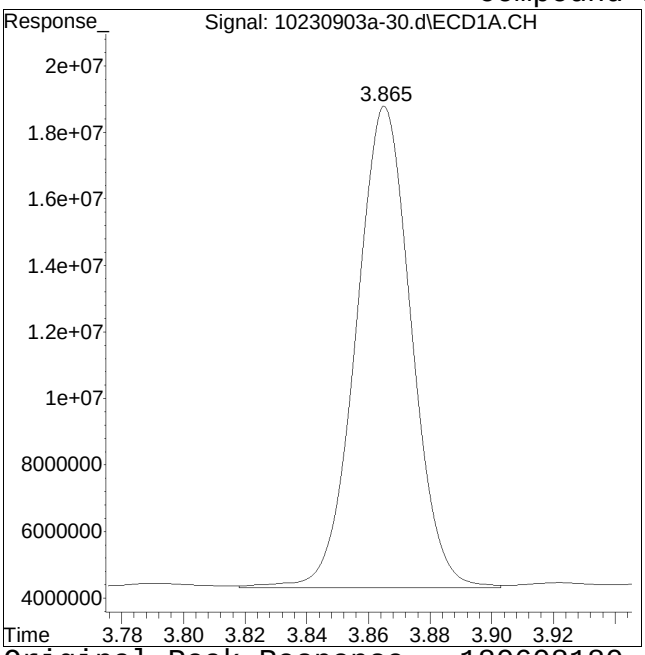


Original Peak Response = 196503295 Manual Peak Response = 184036064 M4
M4 = Poor automated baseline construction.

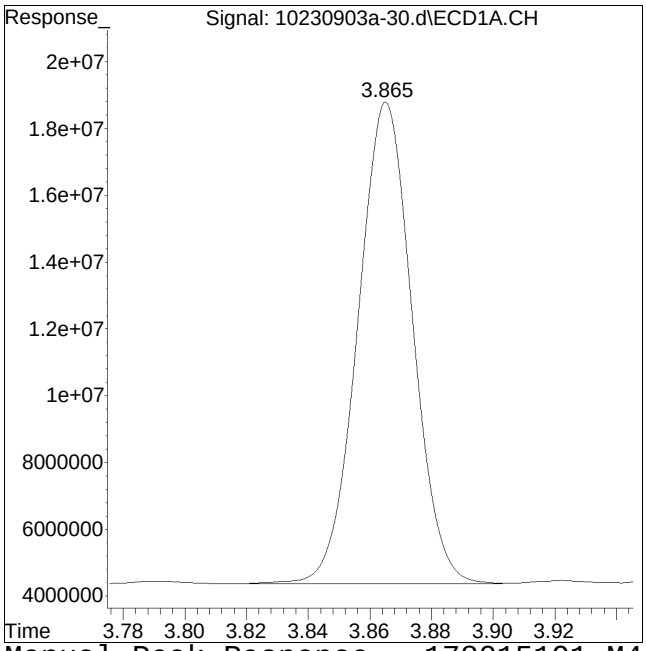
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #17: Dieldrin



Original Peak Response = 180608180

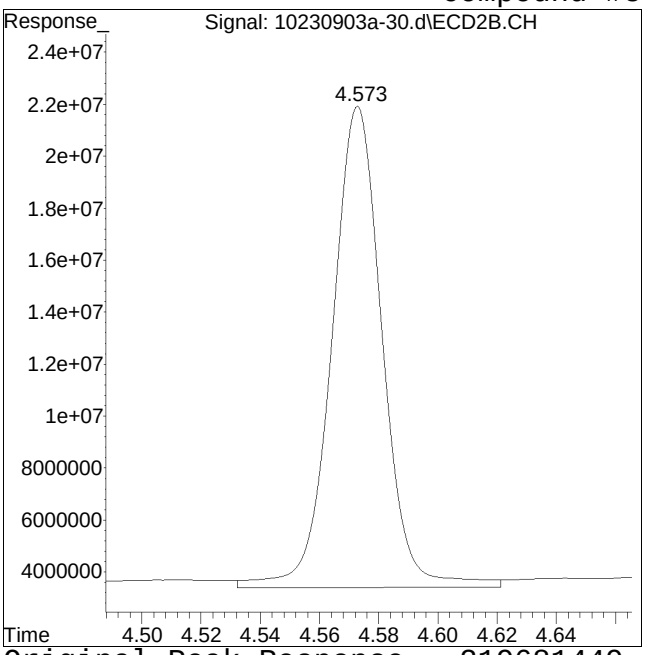


Manual Peak Response = 178015191 M4
M4 = Poor automated baseline construction.

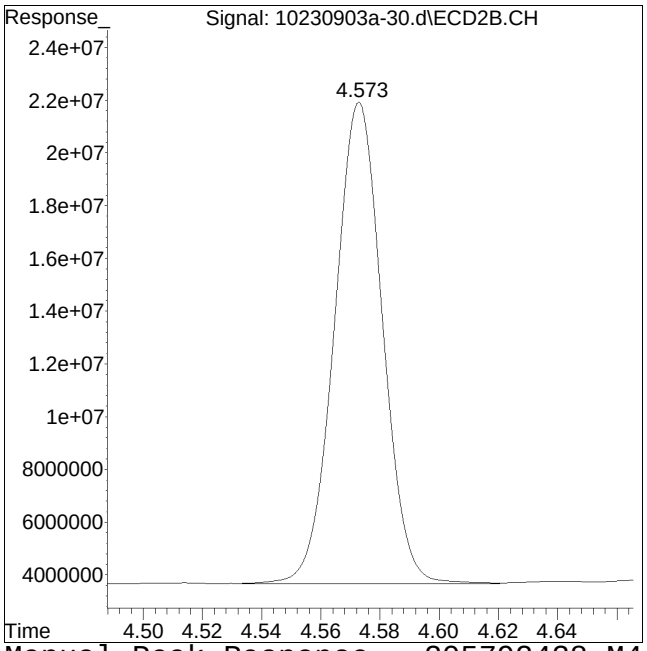
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #55: Dieldrin #2



Original Peak Response = 219681449



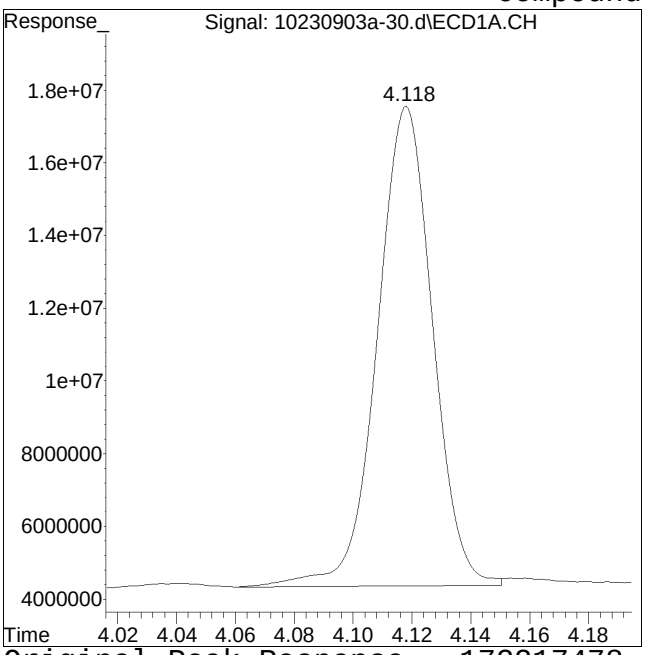
Manual Peak Response = 205792438 M4

M4 = Poor automated baseline construction.

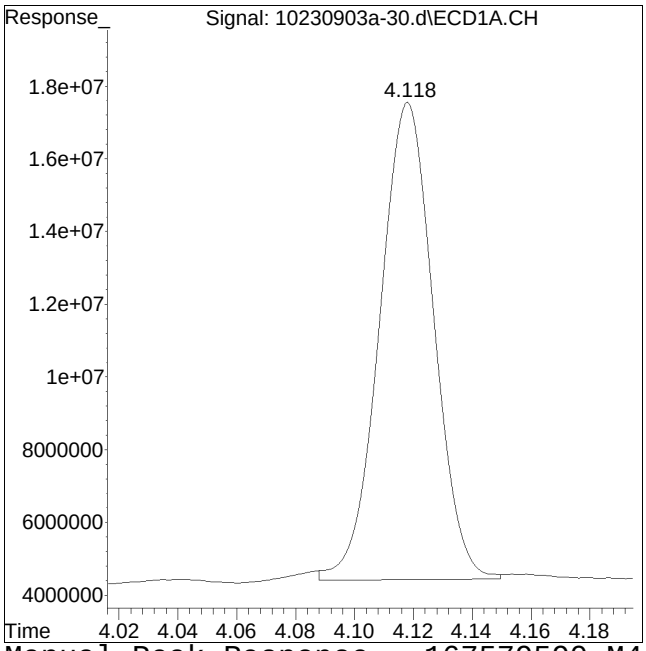
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #18: Endrin



Original Peak Response = 172217478



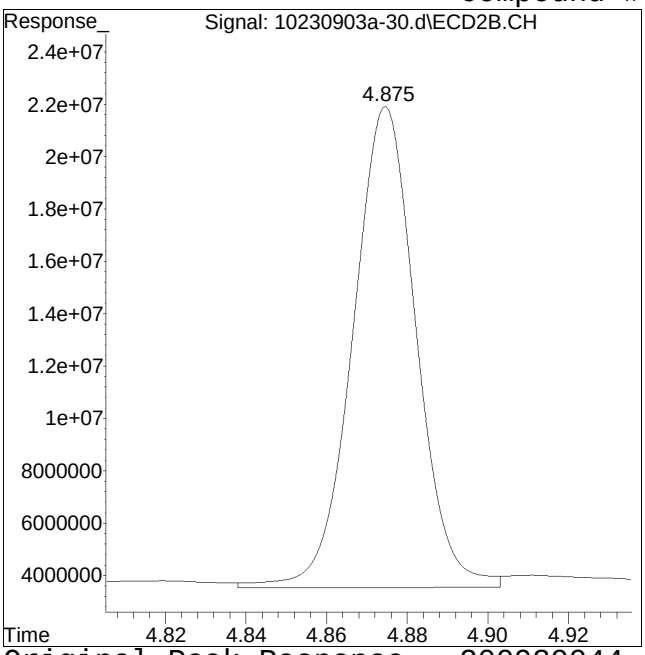
Manual Peak Response = 167579590 M4

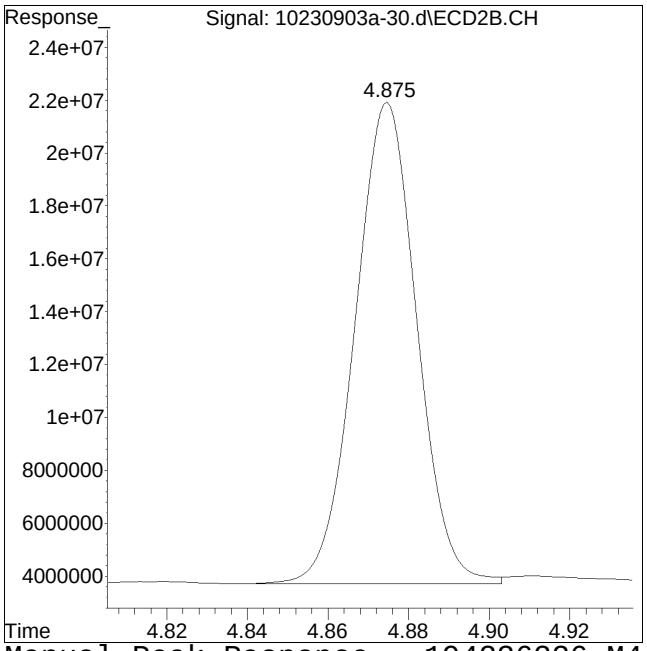
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #56: Endrin #2



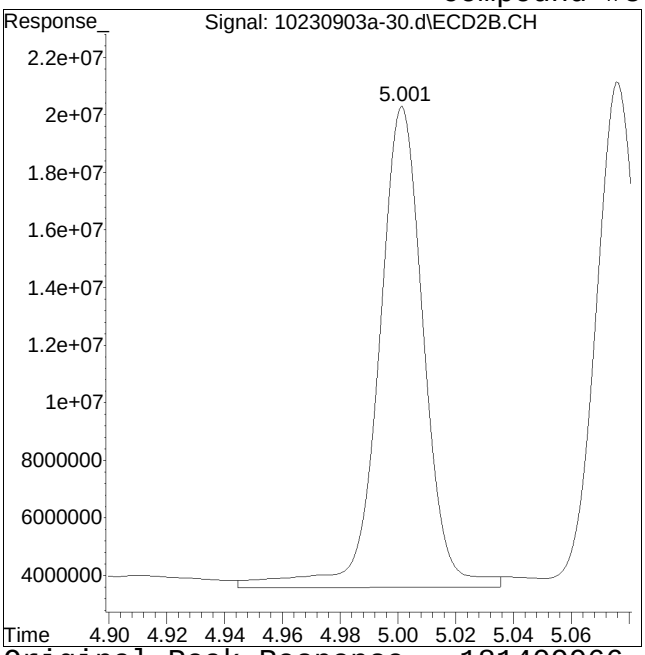


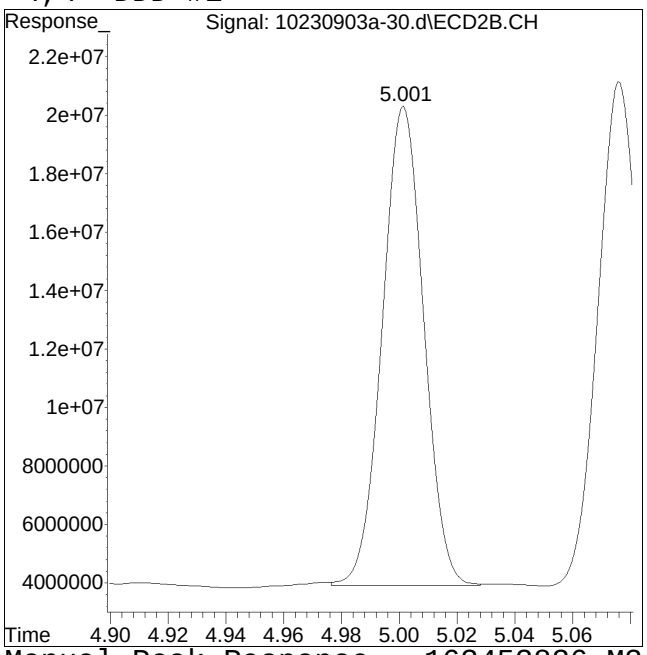
Original Peak Response = 200939944 Manual Peak Response = 194236226 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #57: 4,4'-DDD #2



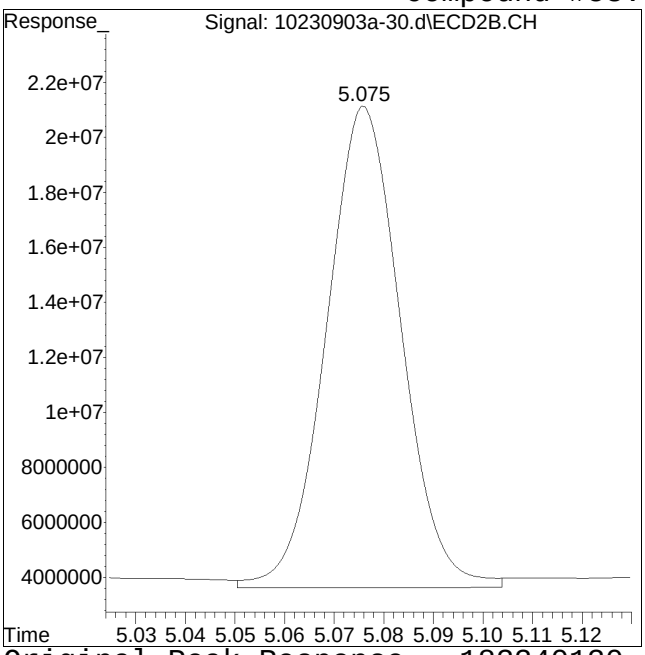


Original Peak Response = 181409966 Manual Peak Response = 163453836 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

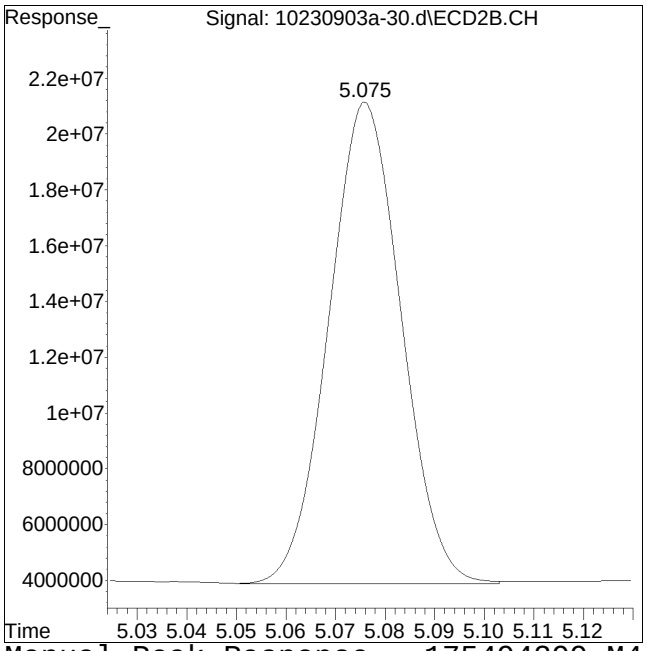
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #58: Endosulfan II #2



Original Peak Response = 183340130



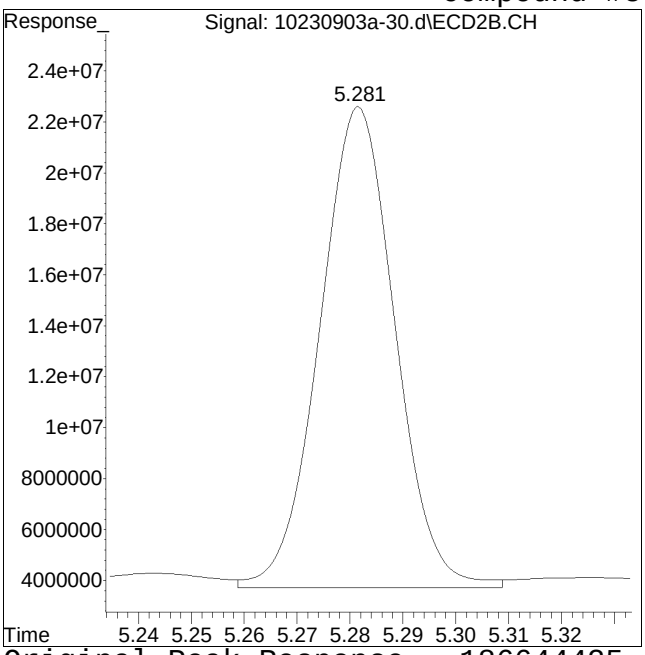
Manual Peak Response = 175494299 M4

M4 = Poor automated baseline construction.

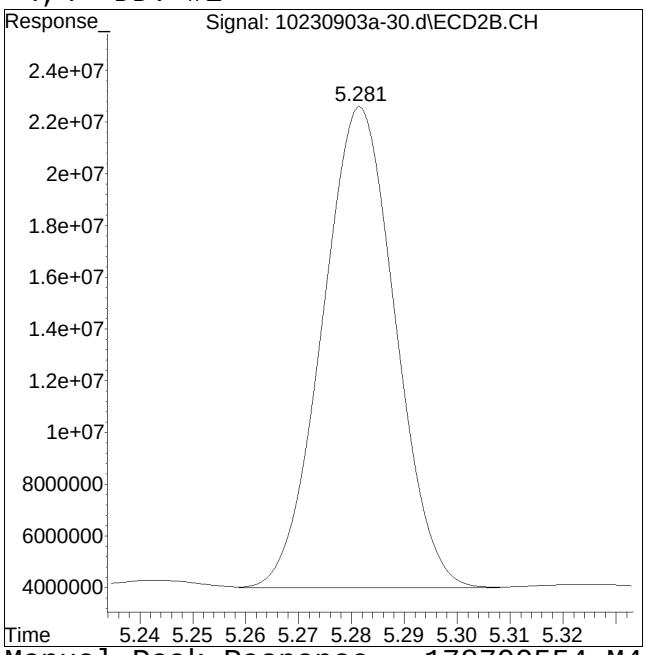
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #59: 4,4'-DDT #2



Original Peak Response = 186644425



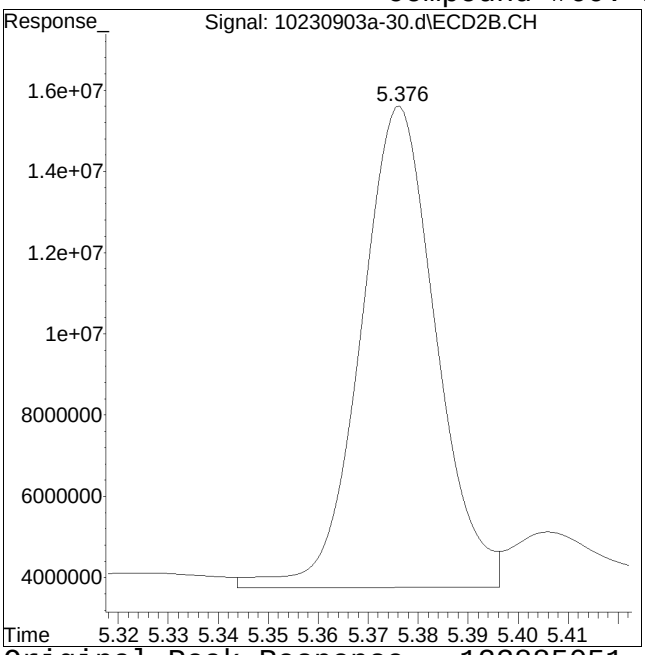
Manual Peak Response = 178700554 M4

M4 = Poor automated baseline construction.

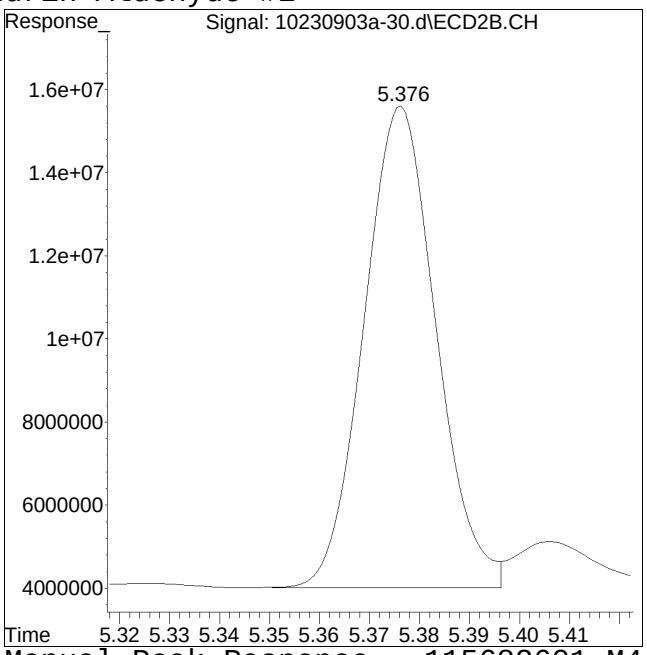
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #60: Endrin Aldehyde #2



Original Peak Response = 123885051



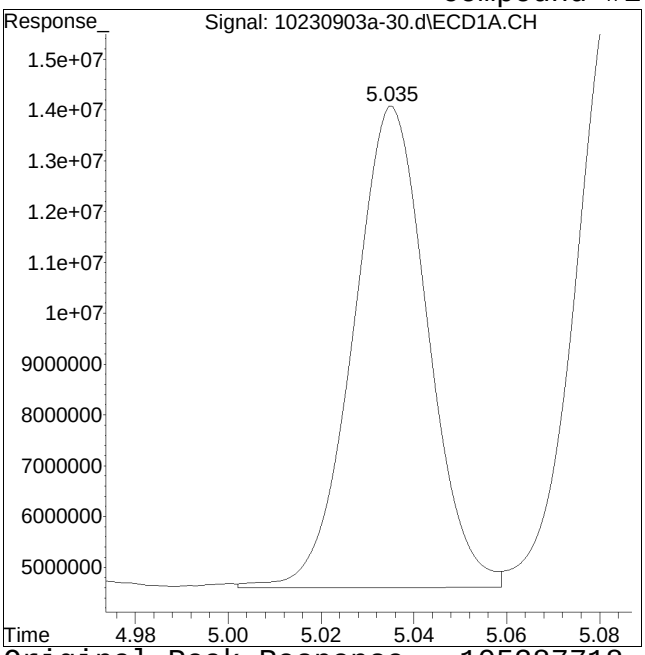
Manual Peak Response = 115682601 M4

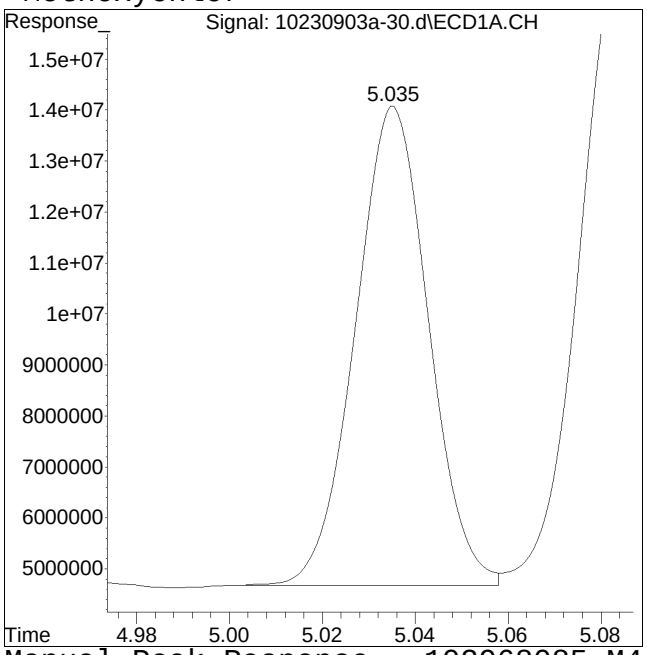
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #23: Methoxychlor



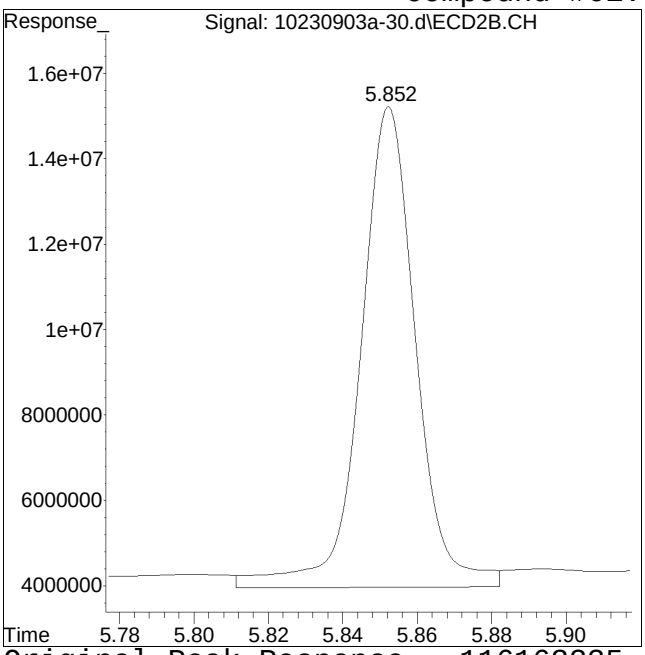


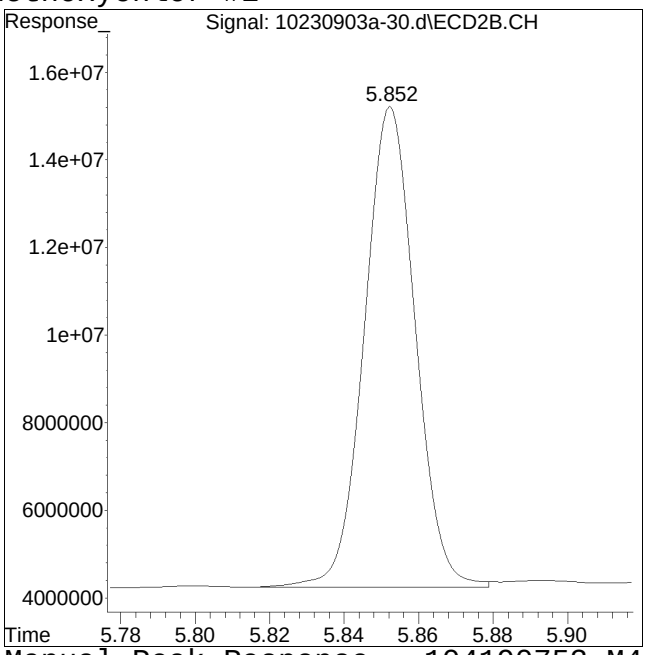
Original Peak Response = 105387718 Manual Peak Response = 102968085 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #61: Methoxychlor #2



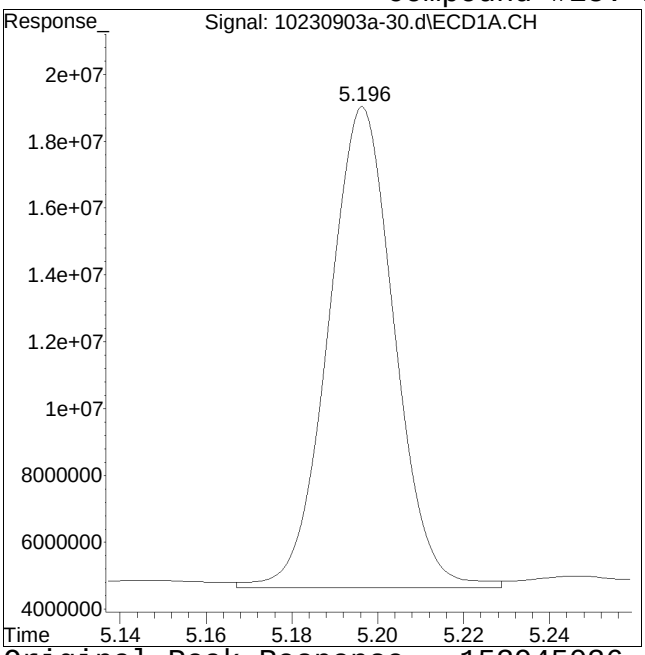


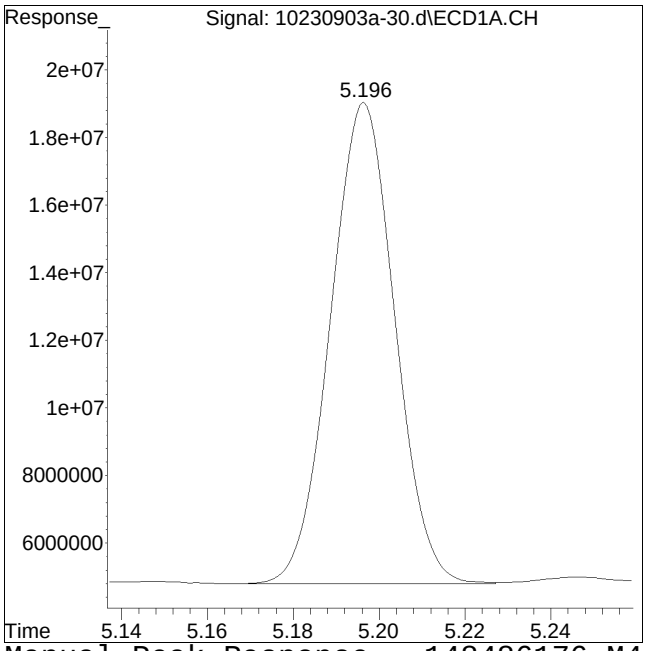
Original Peak Response = 116163335 Manual Peak Response = 104190753 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #25: Endosulfan Sulfate



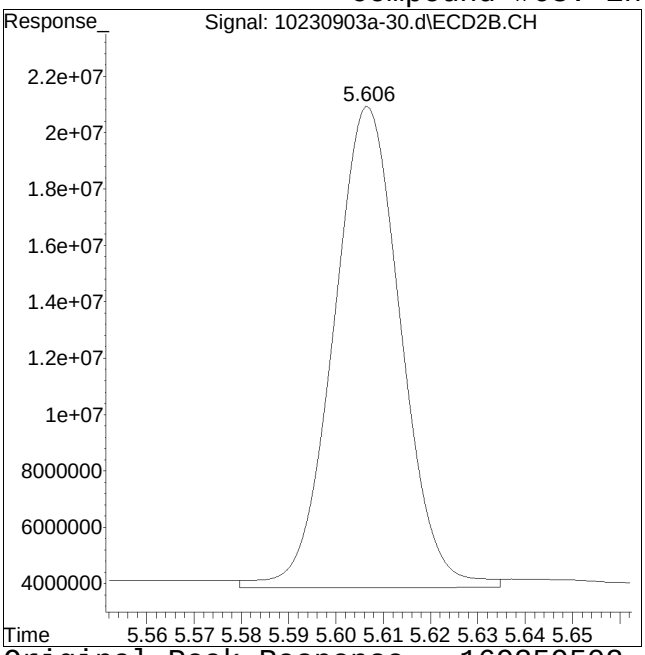


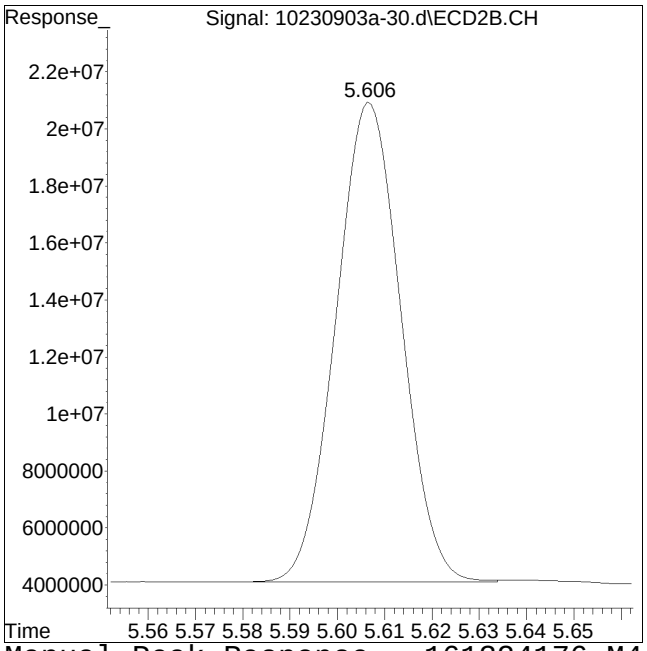
Original Peak Response = 153945036 Manual Peak Response = 148486176 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #63: Endosulfan Sulfate #2



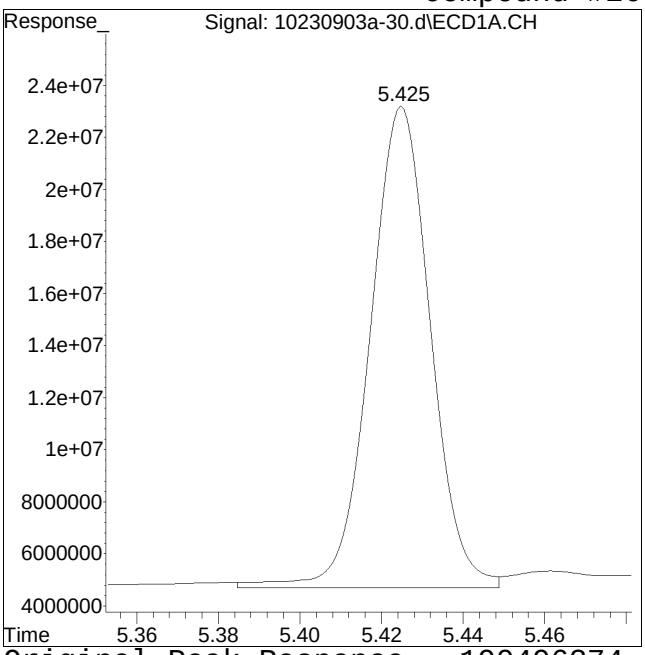


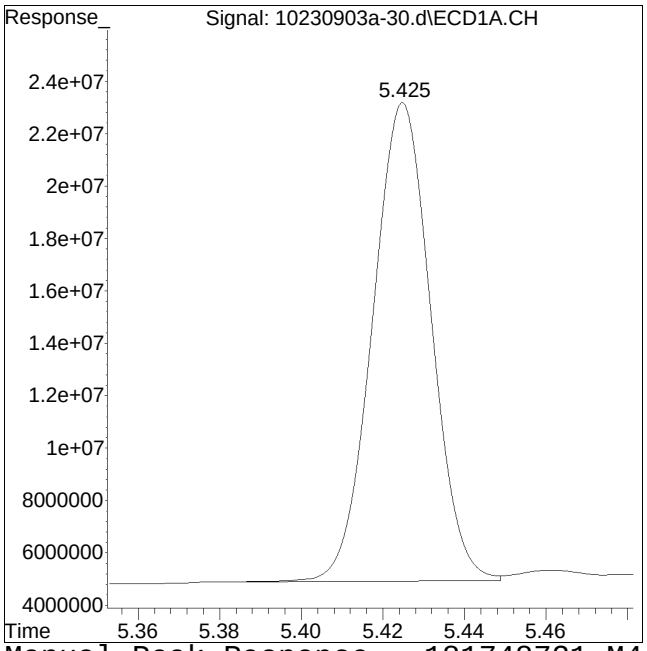
Original Peak Response = 169359502 Manual Peak Response = 161324176 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #26: Endrin Ketone



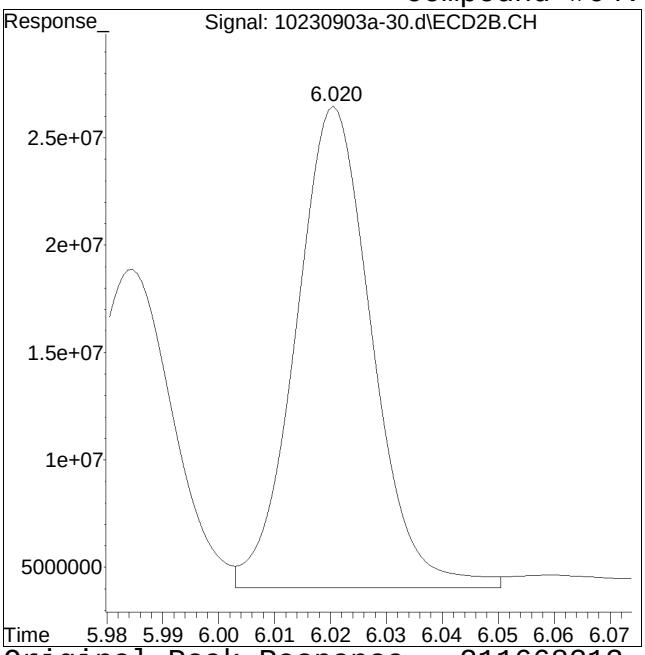


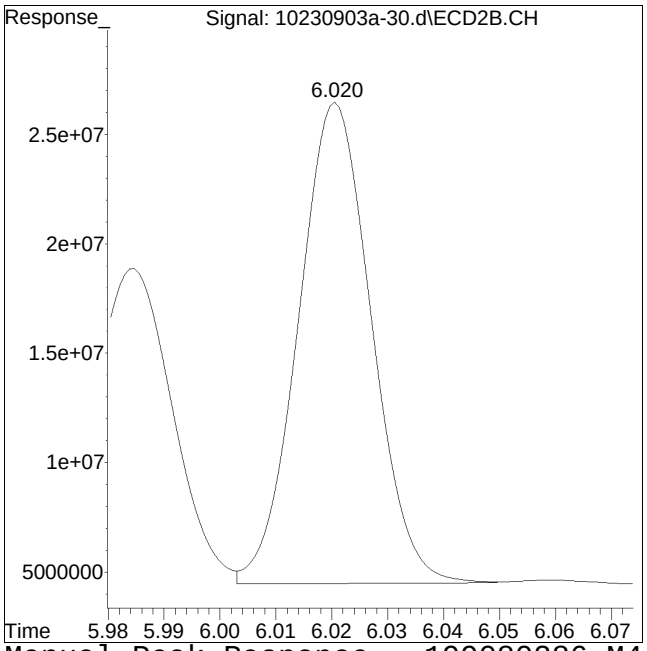
Original Peak Response = 190496374 Manual Peak Response = 181748721 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #64: Endrin Ketone #2



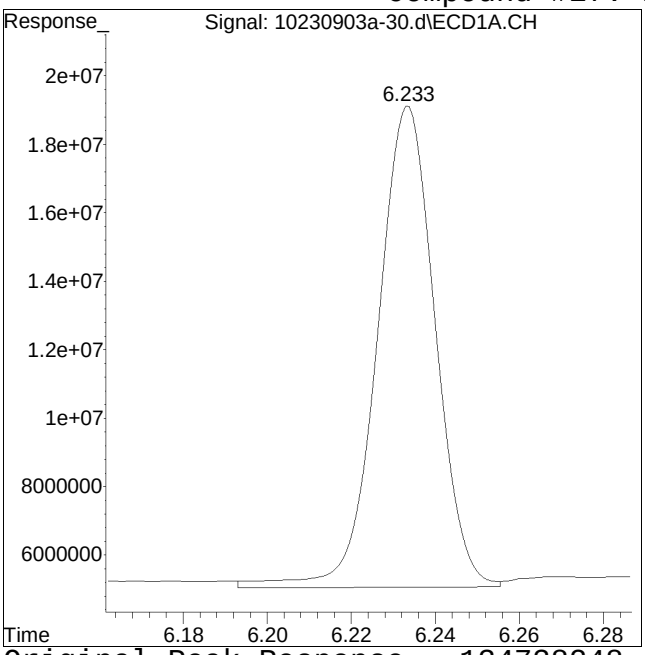


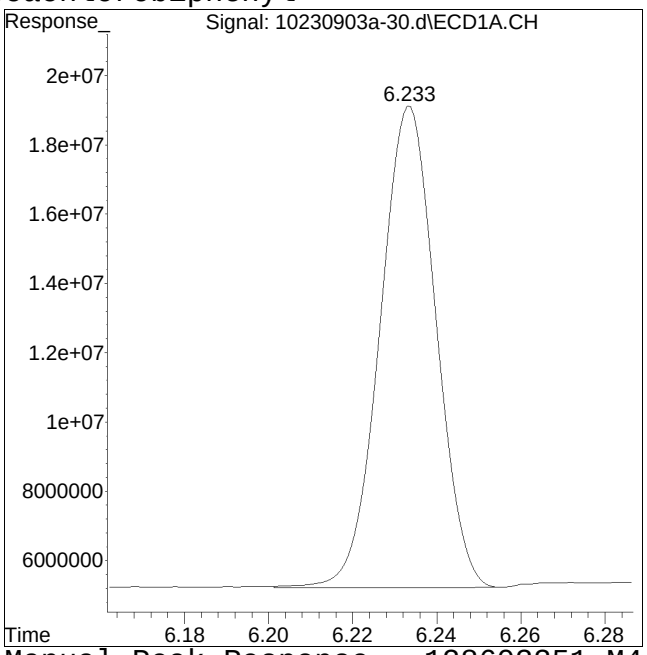
Original Peak Response = 211668313 Manual Peak Response = 199080286 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #27: Decachlorobiphenyl



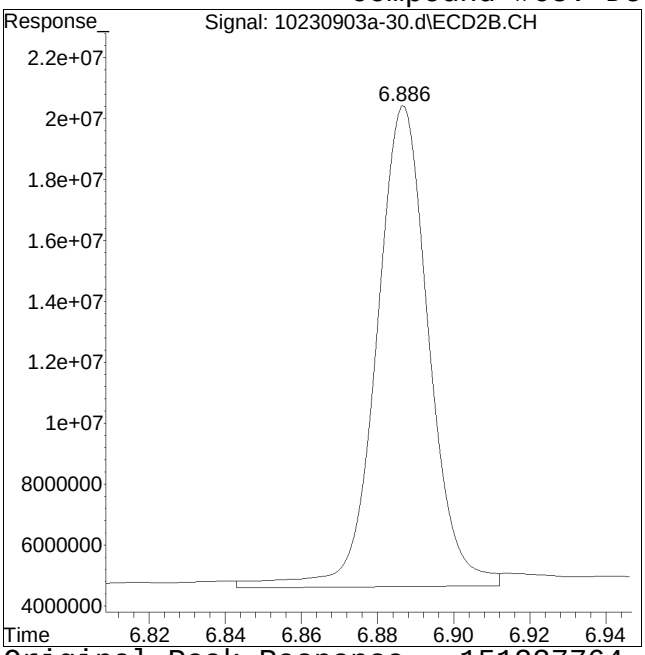


Original Peak Response = 134738248 Manual Peak Response = 128603351 M4
M4 = Poor automated baseline construction.

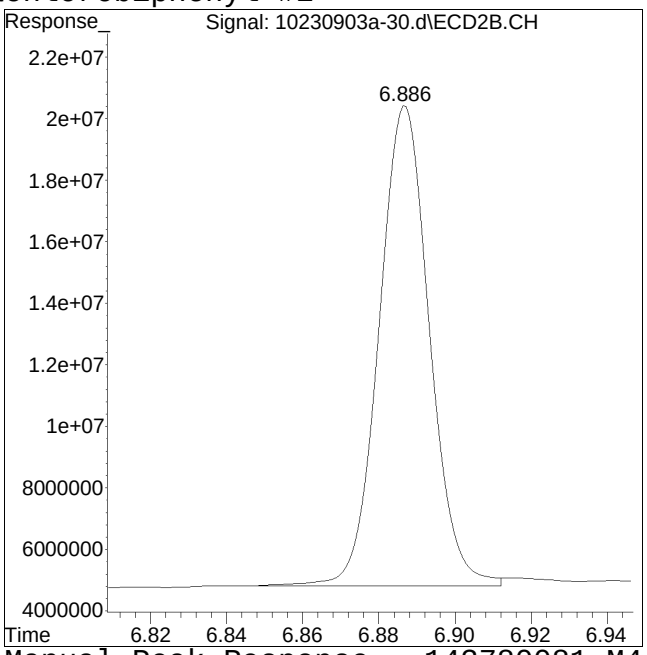
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-30.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:22 pm Instrument : Pest 10
Sample : WG1823255-4,42,, ms Quant Date : 9/3/2023 2:56 pm

Compound #65: Decachlorobiphenyl #2



Original Peak Response = 151227764



Manual Peak Response = 143780081 M4
M4 = Poor automated baseline construction.

Quantitation Report (QT Reviewed)

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-31.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:33 pm
Operator : PEST10:mmg
Sample : WG1823255-5,42,, msd
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 31 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:12:10 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-27.d
Sub List : LCS_MS - spk only

	Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
Internal Standards							
1) i	1-br-2-nb_Pe	1.275	1.344	111.9E6	115.6E6	25.000	25.000M3
	Standard Area 1 : #1 = 128148385				Recovery =	87.28%	
	Standard Area 1 : #2 = 140314702				Recovery =	82.40%	
System Monitoring Compounds							
2) s	2,4,5,6-Tetr	1.609	1.814	135.4E6	147.7E6	29.854M3	33.142M3
	Spiked Amount 50.000	Range 30 - 150			Recovery =	59.71%	66.28%
27) s	Decachlorobi	6.233	6.886	133.3E6	145.4E6	32.521M4	34.013M4
	Spiked Amount 50.000	Range 30 - 150			Recovery =	65.04%	68.03%
Target Compounds							
4) t	alpha-BHC	1.914	2.225	220.8E6	226.6E6	36.171M4	32.162
5) t	gamma-BHC (l	2.111	2.506	194.2E6	219.1E6	33.226M4	36.866M4
6) t	beta-BHC	2.168	2.571	96136922	94047174	35.588M4	33.992M4
7) t	delta-BHC	2.293	2.833	204.1E6	204.3E6	34.875M4	30.956M3
8) t	Heptachlor	2.448	2.897	197.0E6	211.4E6	34.644M3	35.214M4
9) t	Aldrin	2.684	3.212	166.7E6	196.2E6	32.204M4	32.745M4
12) t	Heptachlor E	3.220	3.822	173.4E6	187.7E6	33.954M4	34.216M4
13) t	gamma-Chlord	3.341	4.041	177.9E6	203.4E6	36.153M4	35.292M4
14) t	alpha-Chlord	3.472	4.213	165.3E6	203.7E6	30.574M4	36.453M4
15) t	4,4'-DDE	3.568	4.417	164.7E6	199.2E6	33.800M4	34.548M4
16) t	Endosulfan I	3.607	4.275	171.5E6	190.5E6	35.526M4	37.394M4
17) t	Dieldrin	3.864	4.573	188.1E6	213.9E6	38.477	39.092M3
18) t	Endrin	4.116	4.874	178.1E6	200.7E6	35.288M3	36.012
19) t	4,4'-DDD	4.233	5.001	148.8E6	169.5E6	37.564	36.616M3
20) t	Endosulfan I	4.367	5.076	165.7E6	183.0E6	36.300	39.763M4
21) t	4,4'-DDT	4.534	5.281	168.1E6	183.9E6	38.111M4	35.686M4

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-31.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:33 pm
Operator : PEST10:mmg
Sample : WG1823255-5,42,, msd
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical20332 (Sig #2)
ALS Vial : 31 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:12:10 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

CCAL FILE(s) : 1 - I:\PEST\Pest10\2023\230903A\10230903a-27.d
Sub List : LCS_MS - spk only

Compound	RT#1	RT#2	Resp#1	Resp#2	ug/l	ug/l
22) t Endrin Aldeh	4.795	5.376	112.0E6	120.1E6	29.663M4	31.440
23) t Methoxychlor	5.034	5.852	99060035	104.2E6	39.335M4	39.437M4
25) t Endosulfan S	5.195	5.607	154.3E6	166.7E6	35.232M4	37.912M3
26) t Endrin Keton	5.424	6.020	189.0E6	205.7E6	38.836M4	41.262M4
Sum chlordane-1			0	0	N.D.	N.D.
Average chlordane-1					0.000	0.000
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000
SemiQuant Compounds - Not Calibrated on this Instrument						
Sum toxaphene-1			0	0	N.D.	N.D.
Average toxaphene-1					0.000	0.000

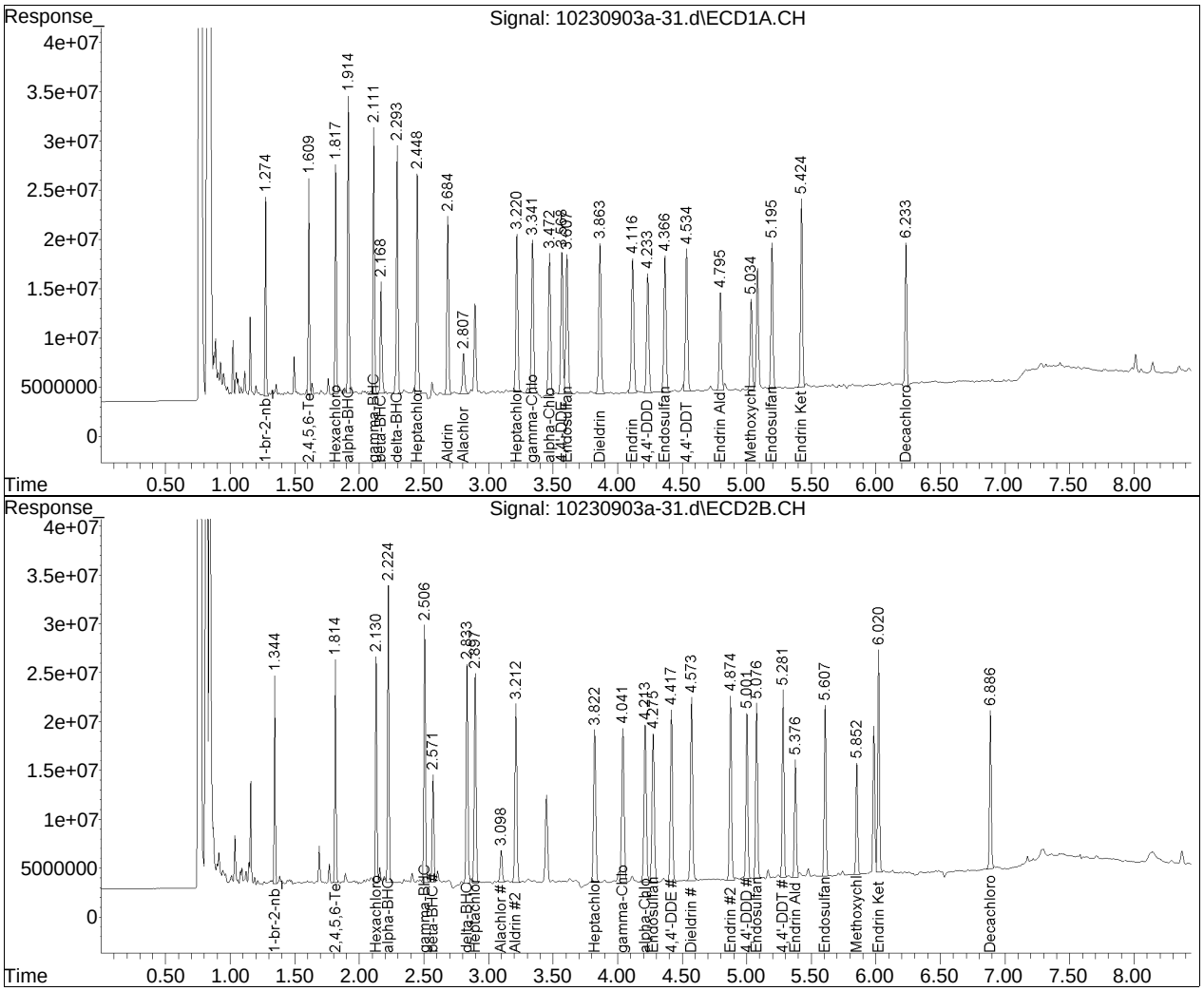
(f)=RT Delta > 1/2 Window (D)=Amounts differ by > 40% (m)=manual int.
(#)=Recovery Exceeds Compound Acceptance Limits.
(I,C,F) I=Interference, C=Coelluting Calibration Peak, F=Fails CC Criteria.

Sub List : LCS_MS - spk only0\2023\230903A\10230903a-27.d••

Data Path : I:\PEST\Pest10\2023\230903A\
Data File : 10230903a-31.d
Signal(s) : Signal #1: ECD1A.CH Signal #2: ECD2B.CH
Acq On : 03 Sep 2023 2:33 pm
Operator : PEST10:mmg
Sample : WG1823255-5,42,, msd
Misc : wg1823359,wg1823255,ical20332 (Sig #1); wg1823359,wg18233255,ical2
ALS Vial : 31 (Sig #1); 0 (Sig #2) Sample Multiplier: 1

Integration File signal 1: autoint1.e
Integration File signal 2: autoint2.e
Quant Time: Sep 05 12:12:10 2023
Quant Method : I:\PEST\Pest10\2023\230903A\pest10_2023_08_28_ugL_ical20332.m
Quant Title : pest
QLast Update : Sun Sep 03 09:43:35 2023
Response via : Initial Calibration
Integrator: ChemStation 6890 Scale Mode: Large solvent peaks clipped

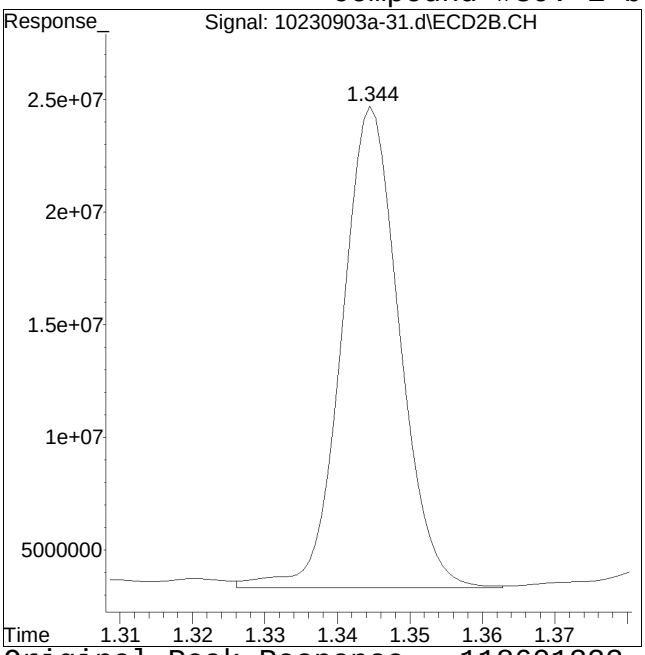
Volume Inj. :
Signal #1 Phase : Signal #2 Phase:
Signal #1 Info : Signal #2 Info :

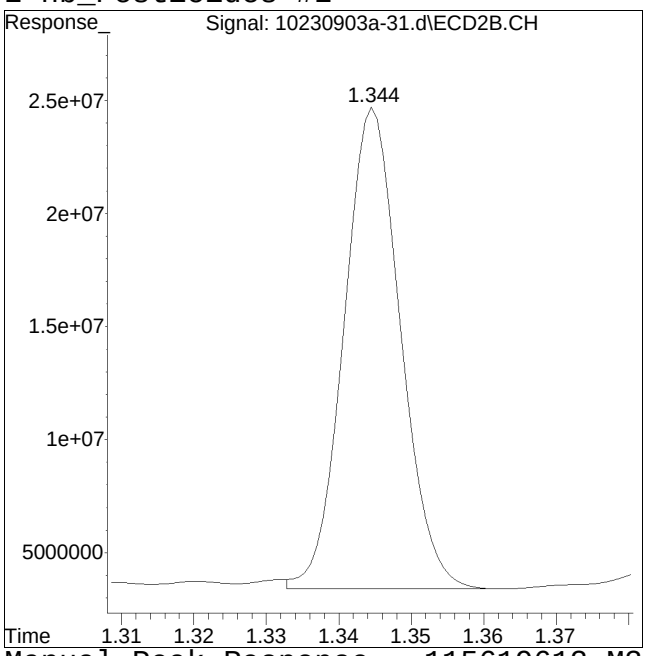


Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #39: 1-br-2-nb_Pesticides #2



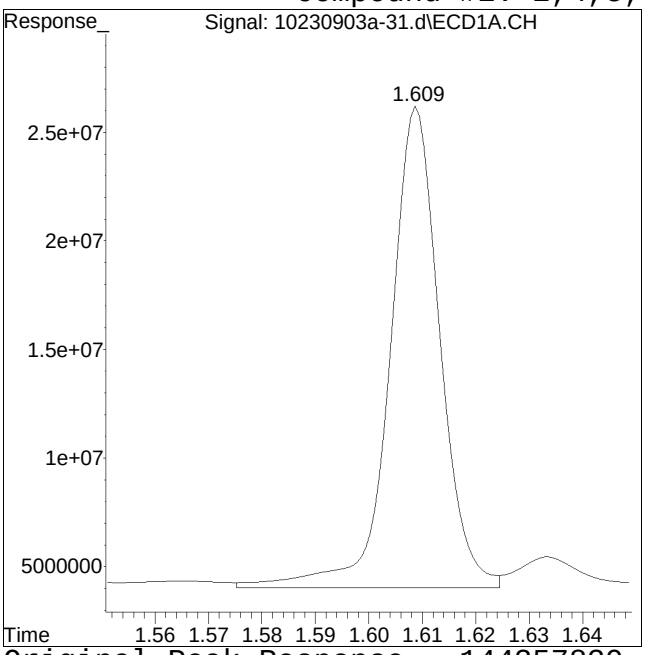


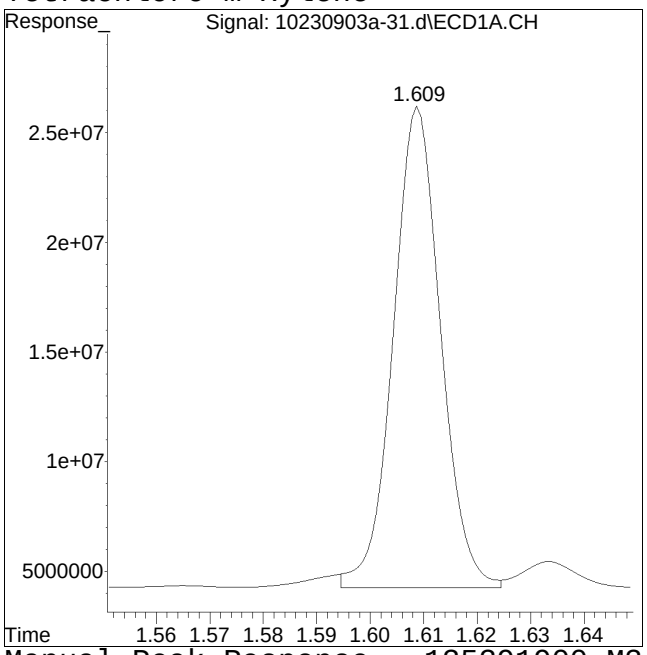
Original Peak Response = 118601323 Manual Peak Response = 115619612 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #2: 2,4,5,6-Tetrachloro-m-xylene



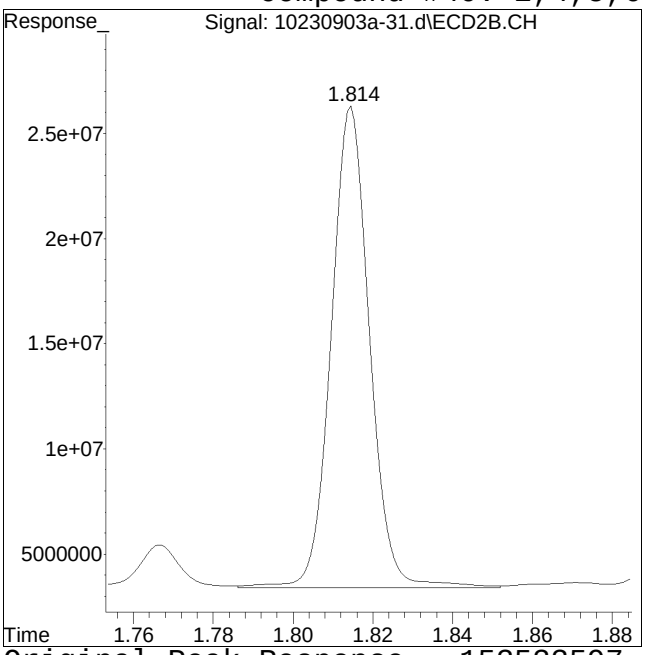


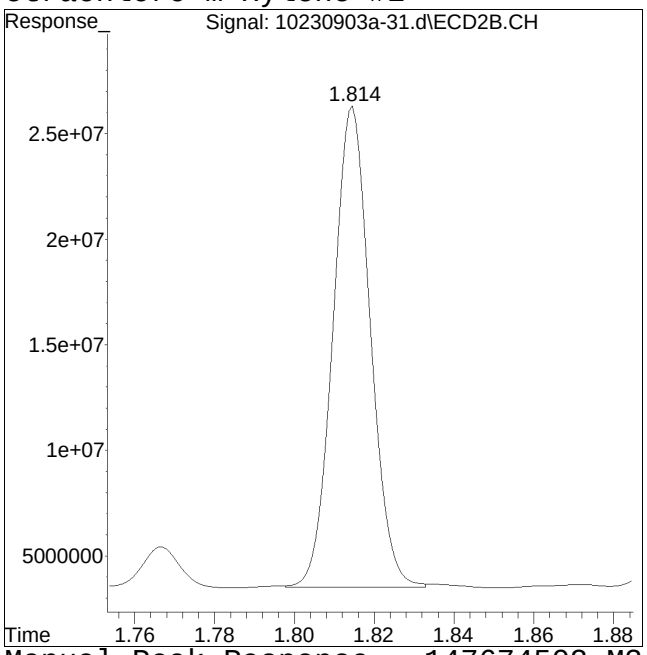
Original Peak Response = 144357839 Manual Peak Response = 135391900 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #40: 2,4,5,6-Tetrachloro-m-xylene #2



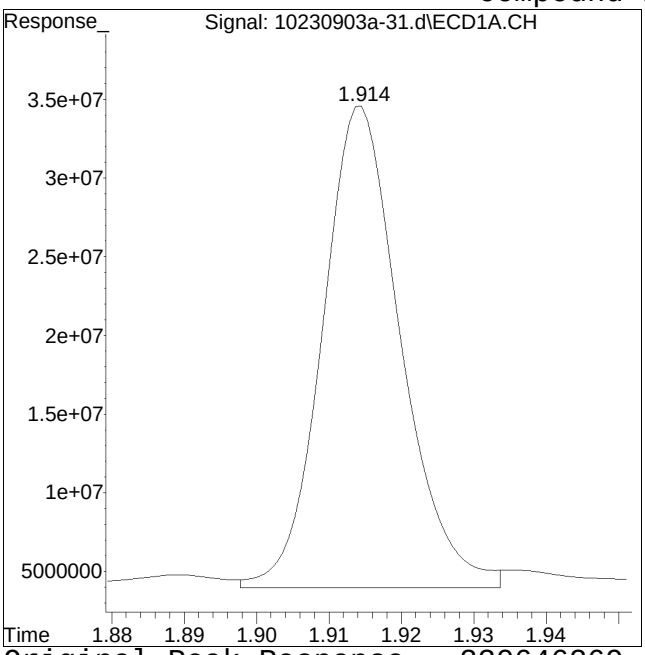


Original Peak Response = 153533597 Manual Peak Response = 147674502 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

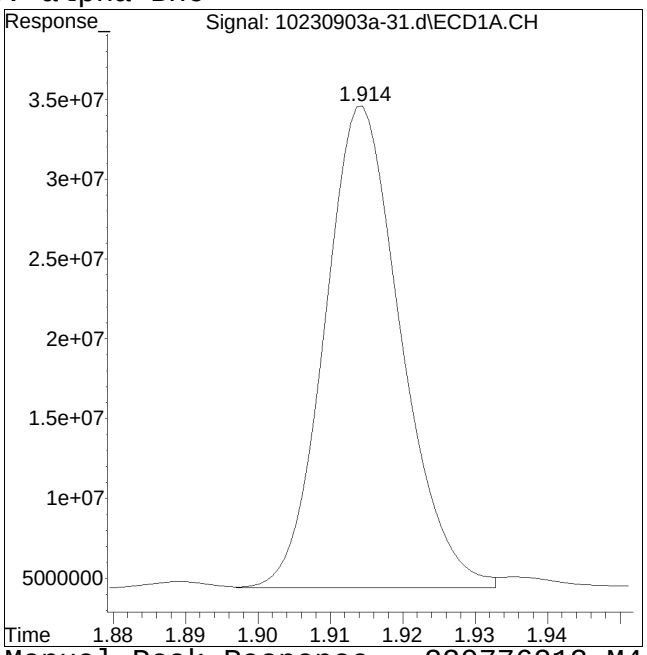
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #4: alpha-BHC



Original Peak Response = 230646269



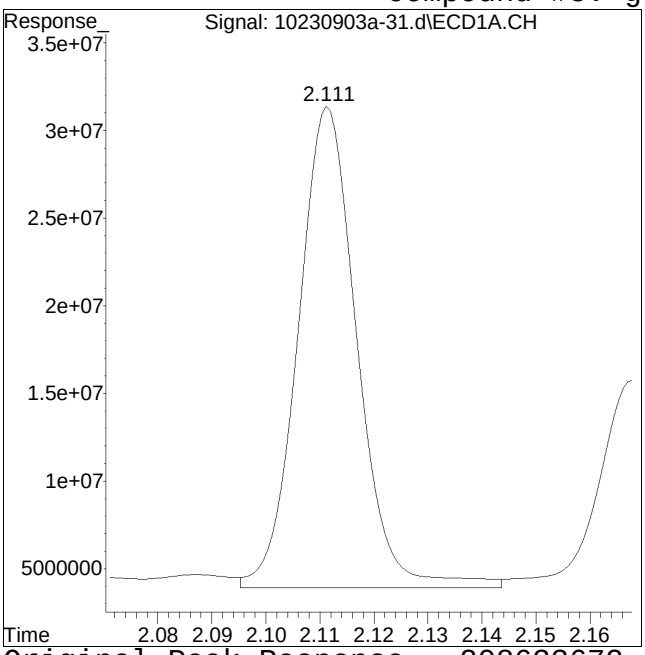
Manual Peak Response = 220776212 M4

M4 = Poor automated baseline construction.

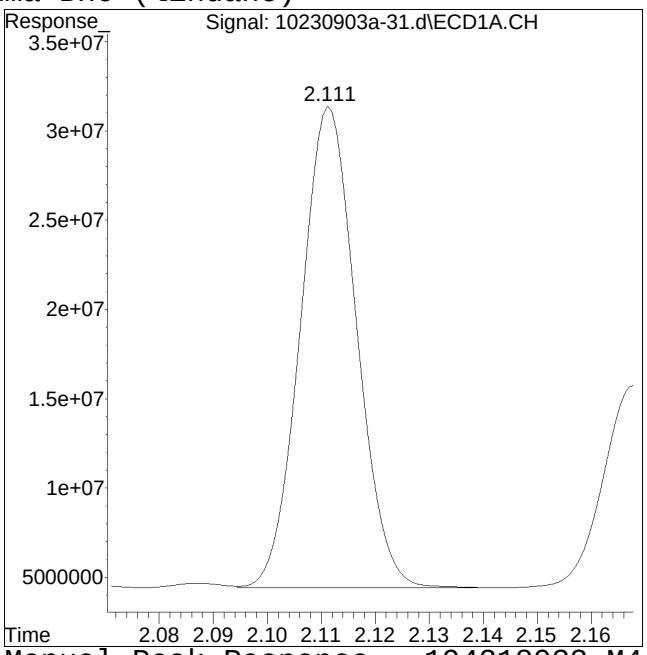
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #5: gamma-BHC (lindane)



Original Peak Response = 208633672



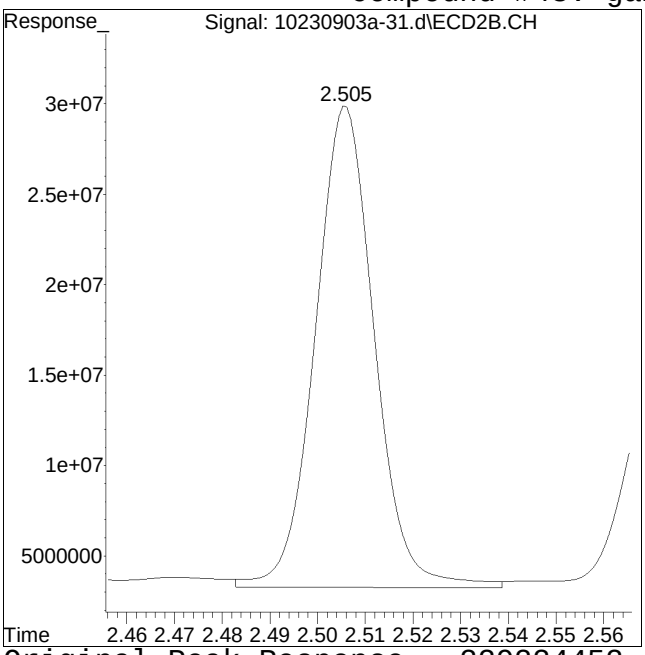
Manual Peak Response = 194218933 M4

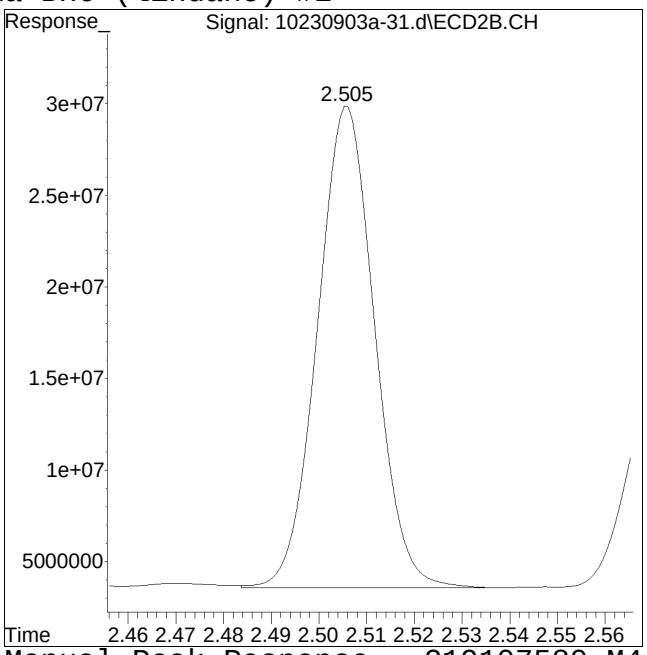
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #43: gamma-BHC (lindane) #2



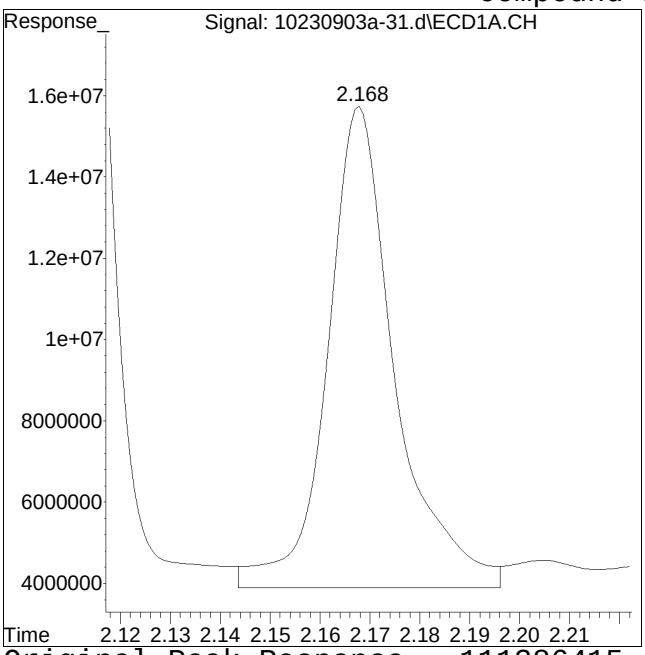


Original Peak Response = 229224452 Manual Peak Response = 219107580 M4
M4 = Poor automated baseline construction.

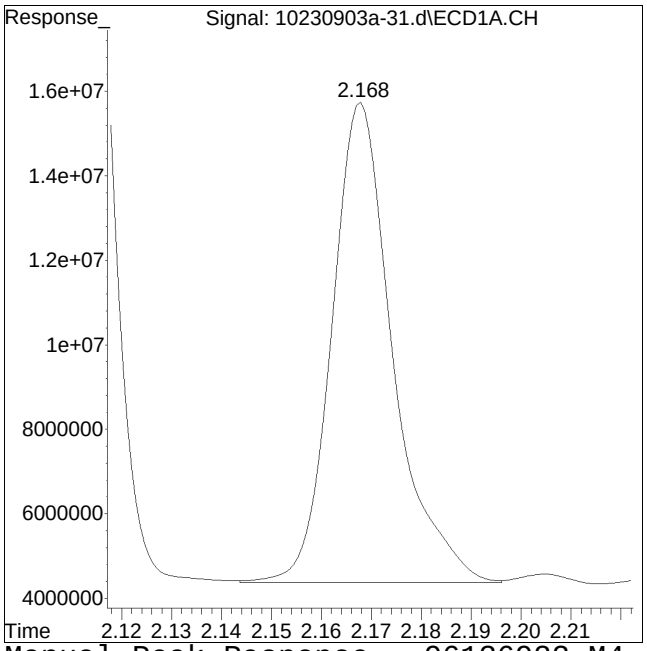
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #6: beta-BHC



Original Peak Response = 111386415



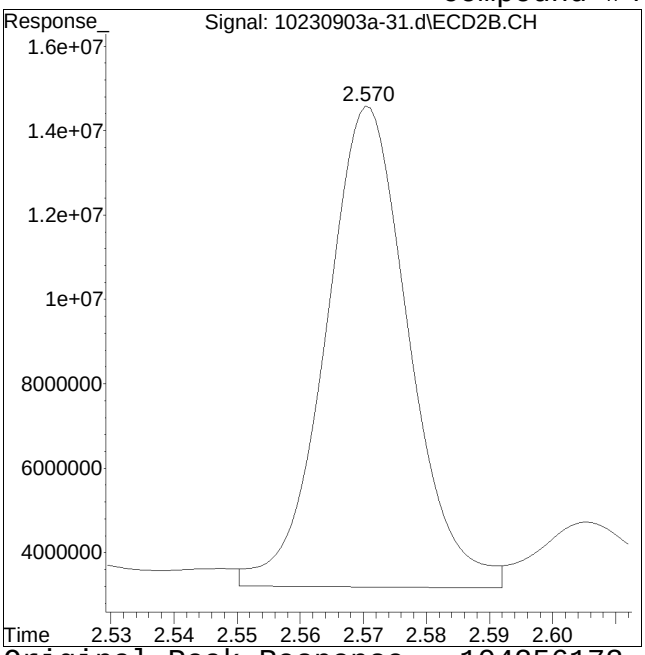
Manual Peak Response = 96136922 M4

M4 = Poor automated baseline construction.

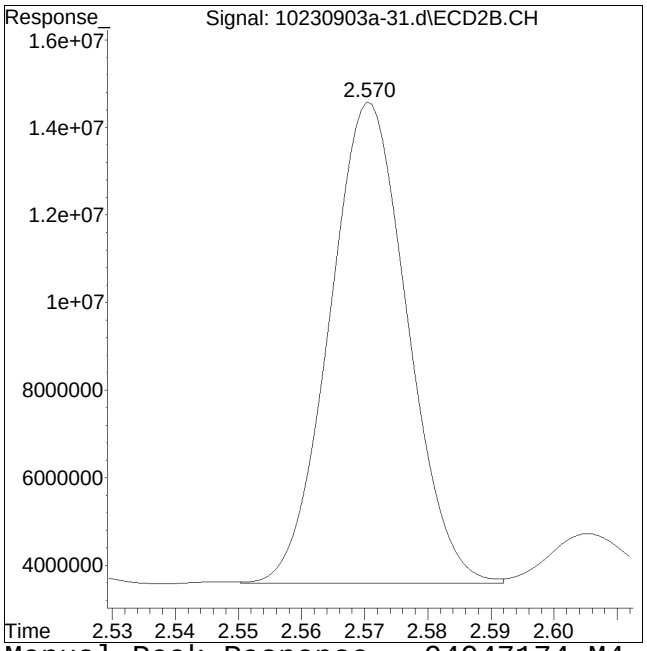
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #44: beta-BHC #2



Original Peak Response = 104256173



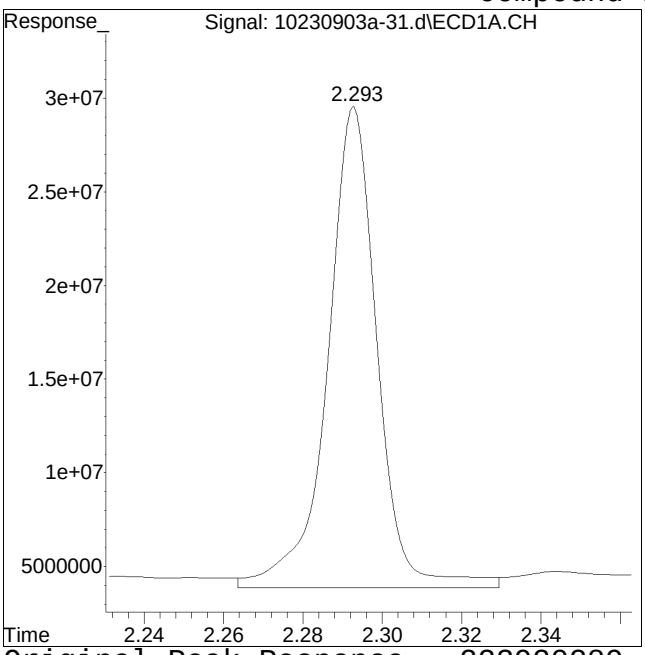
Manual Peak Response = 94047174 M4

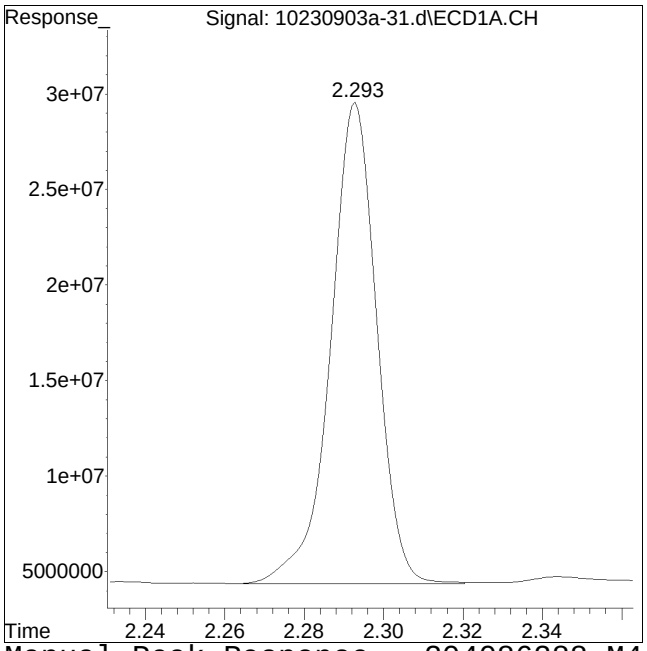
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #7: delta-BHC



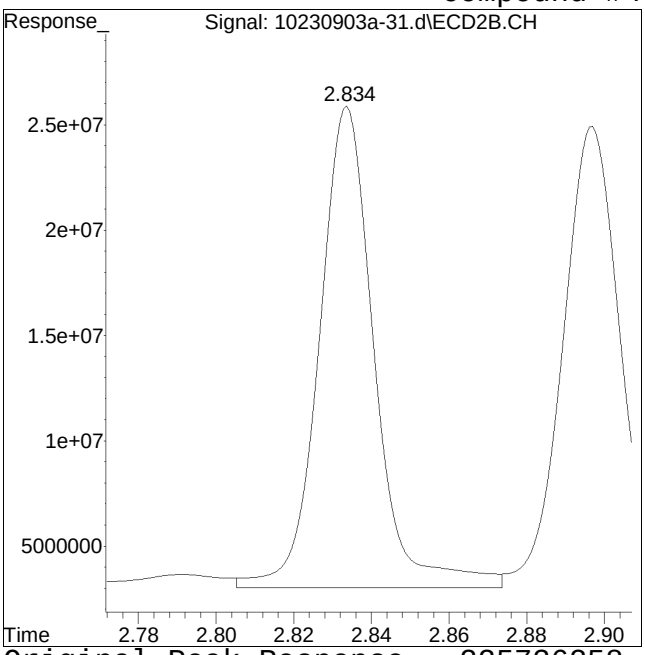


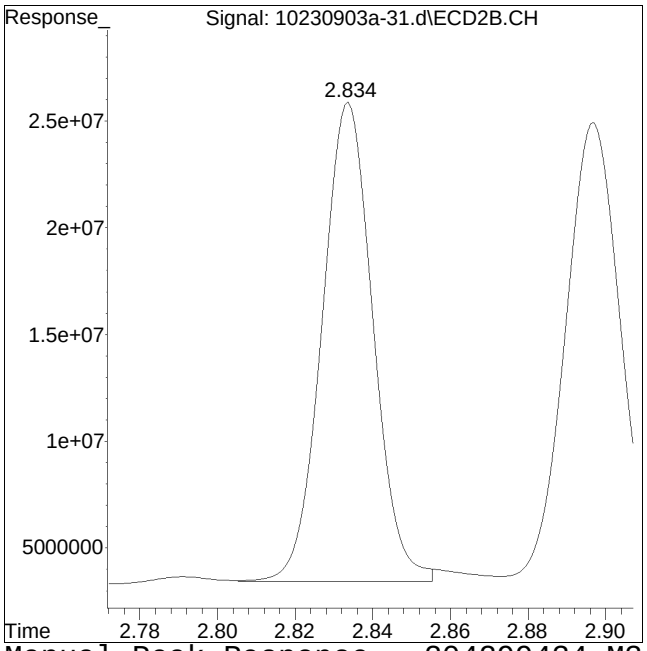
Original Peak Response = 223920289 Manual Peak Response = 204086288 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #45: delta-BHC #2



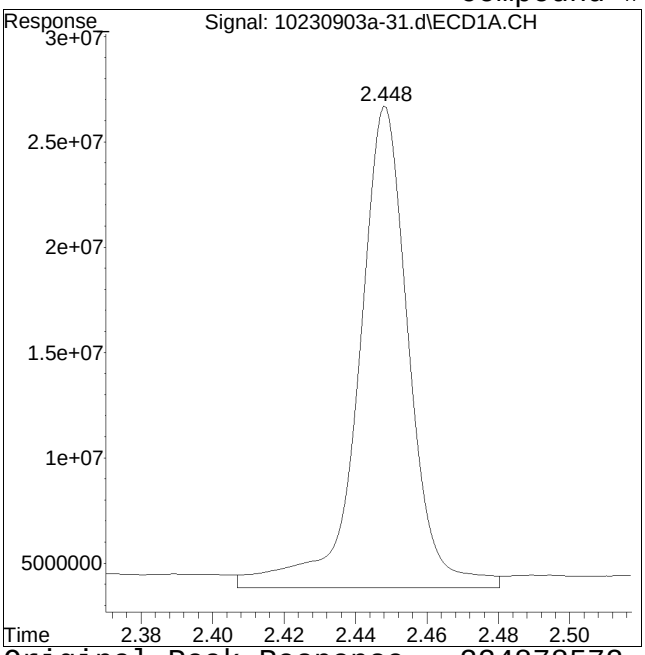


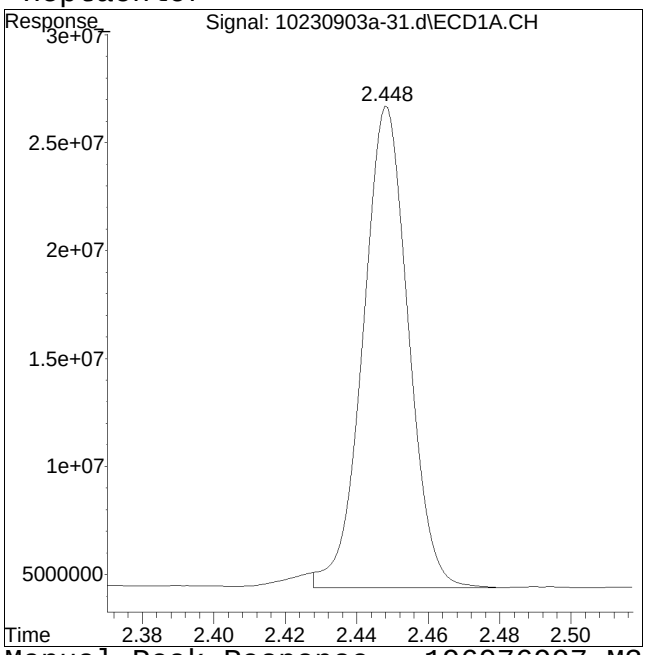
Original Peak Response = 225736258 Manual Peak Response = 204299434 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #8: Heptachlor



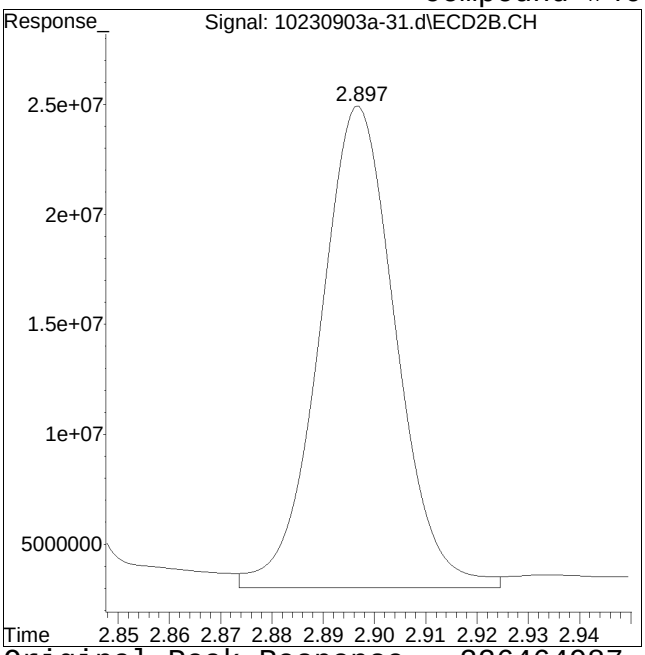


Original Peak Response = 224878572 Manual Peak Response = 196976997 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

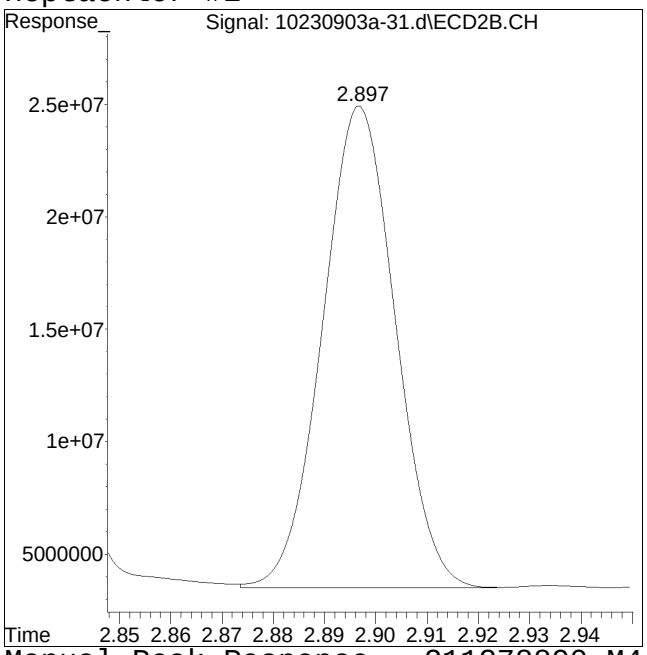
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #46: Heptachlor #2



Original Peak Response = 226464987



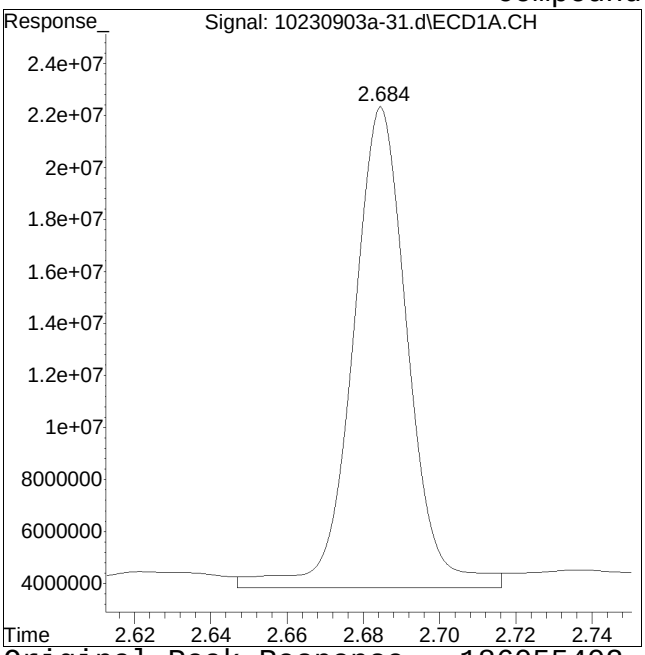
Manual Peak Response = 211378890 M4

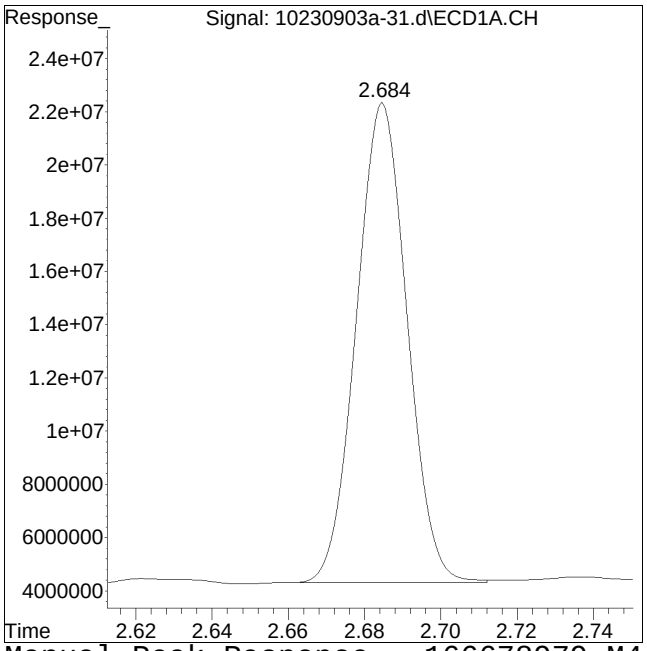
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #9: Aldrin



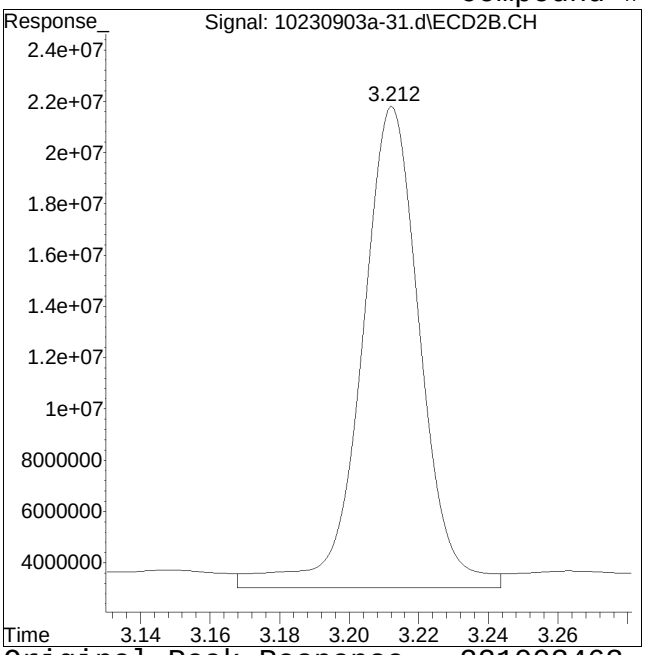


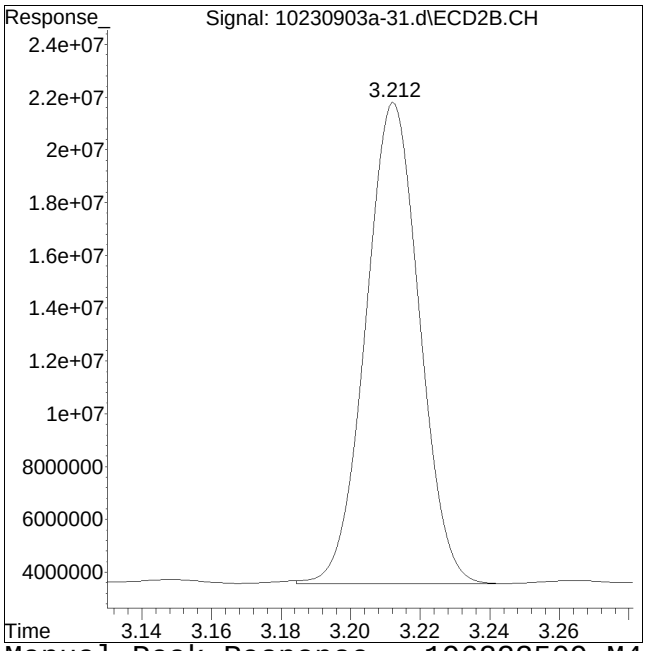
Original Peak Response = 186055402 Manual Peak Response = 166678979 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #47: Aldrin #2



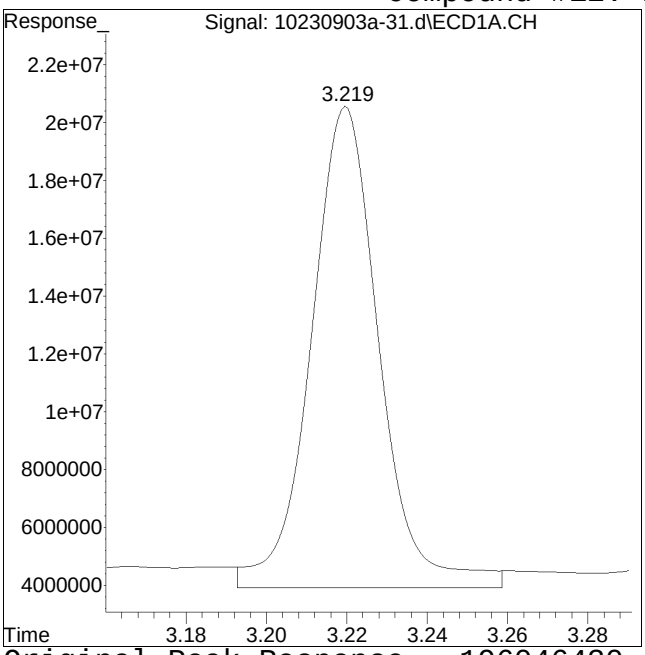


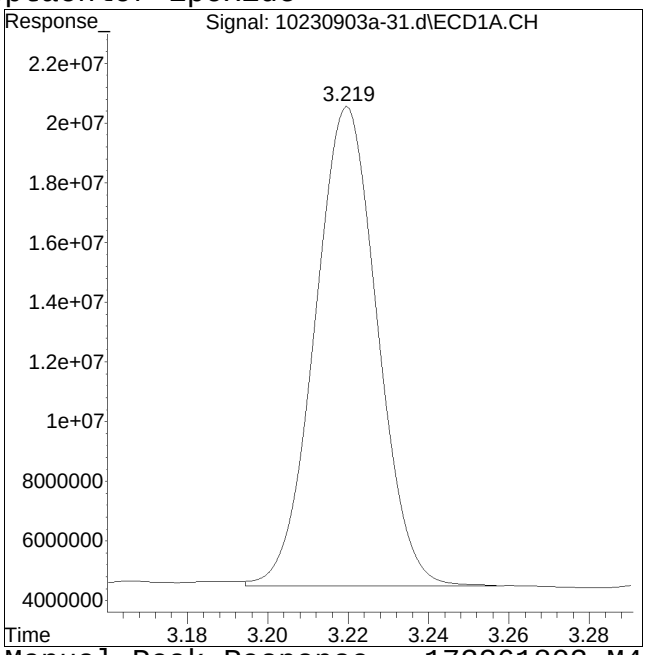
Original Peak Response = 221003463 Manual Peak Response = 196223509 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #12: Heptachlor Epoxide



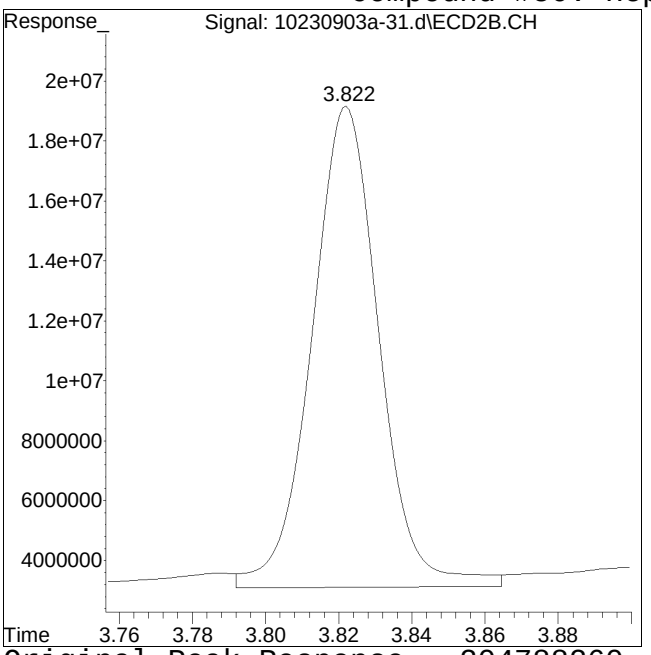


Original Peak Response = 196046430 Manual Peak Response = 173361803 M4
M4 = Poor automated baseline construction.

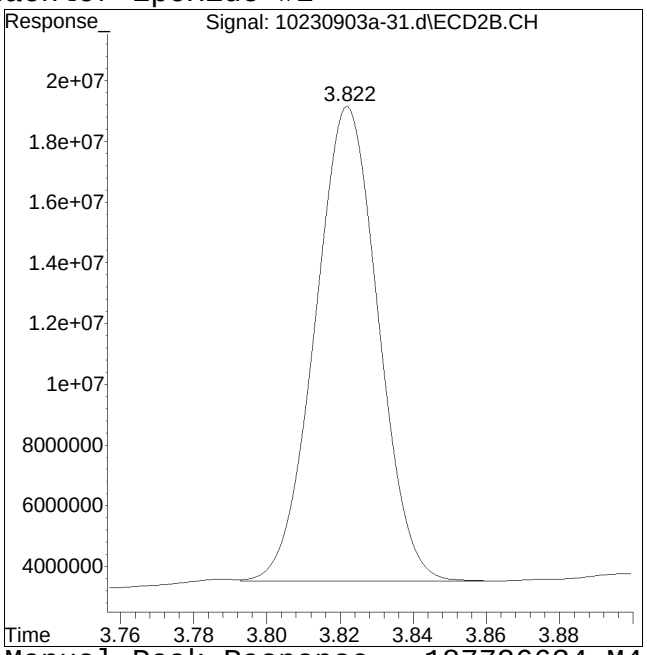
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #50: Heptachlor Epoxide #2



Original Peak Response = 204788260



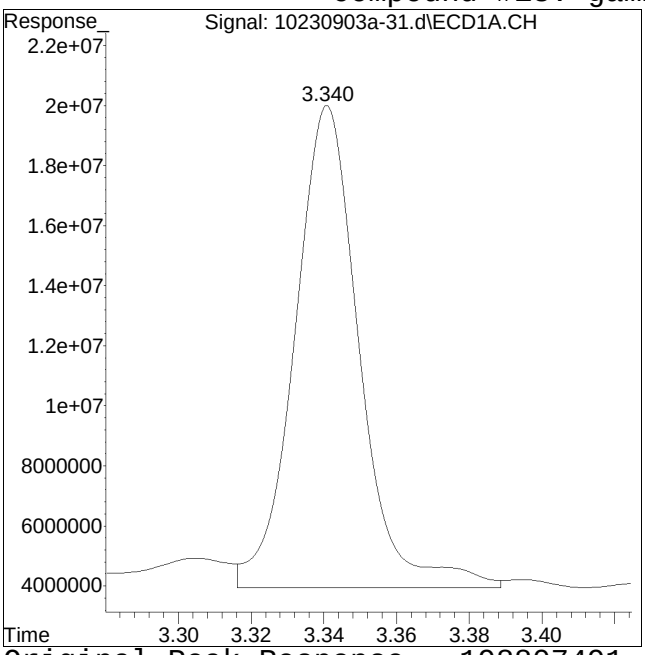
Manual Peak Response = 187726634 M4

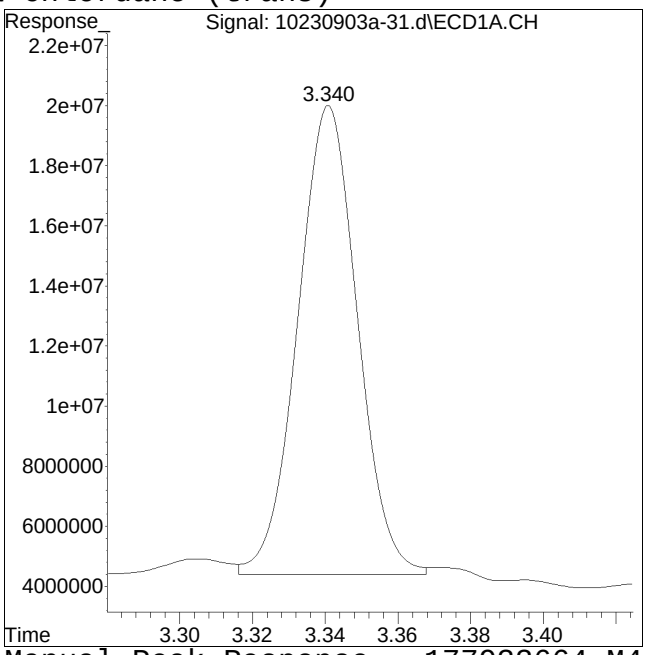
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #13: gamma-Chlordane (trans)



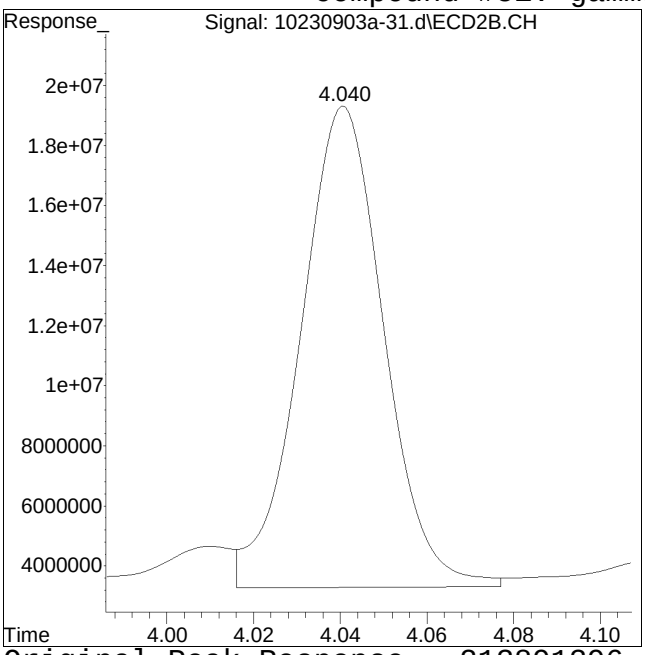


Original Peak Response = 198807491 Manual Peak Response = 177933664 M4
M4 = Poor automated baseline construction.

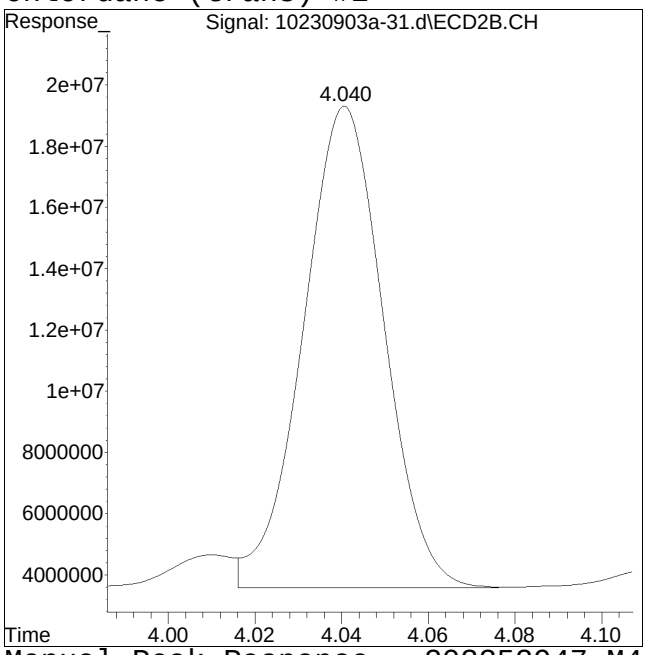
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #51: gamma-Chlordane (trans) #2



Original Peak Response = 213891396



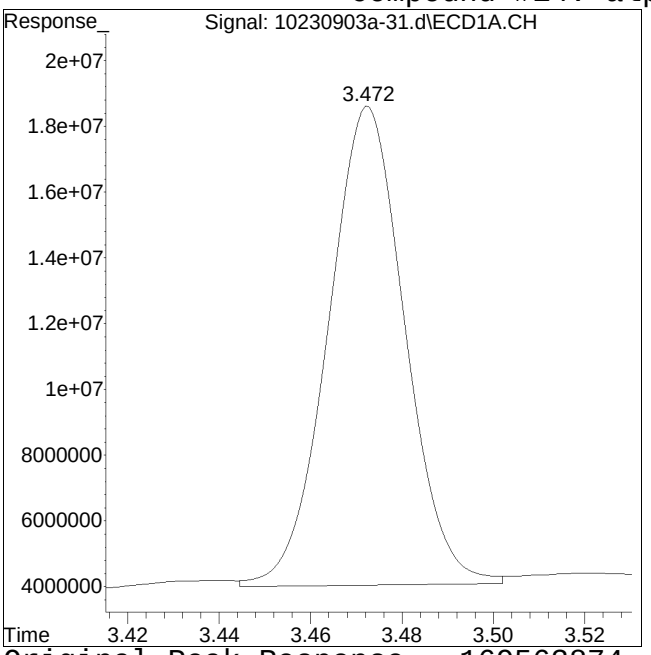
Manual Peak Response = 203352947 M4

M4 = Poor automated baseline construction.

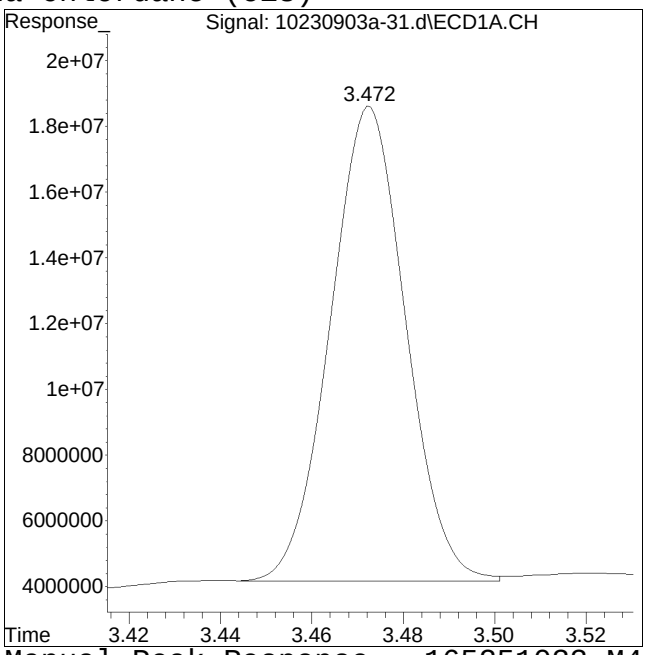
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #14: alpha-Chlordane (cis)



Original Peak Response = 169563874

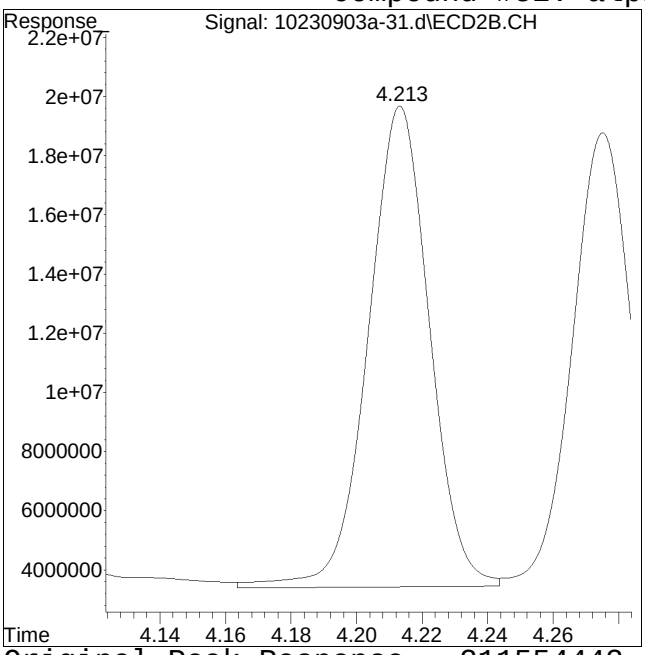


Manual Peak Response = 165251033 M4
M4 = Poor automated baseline construction.

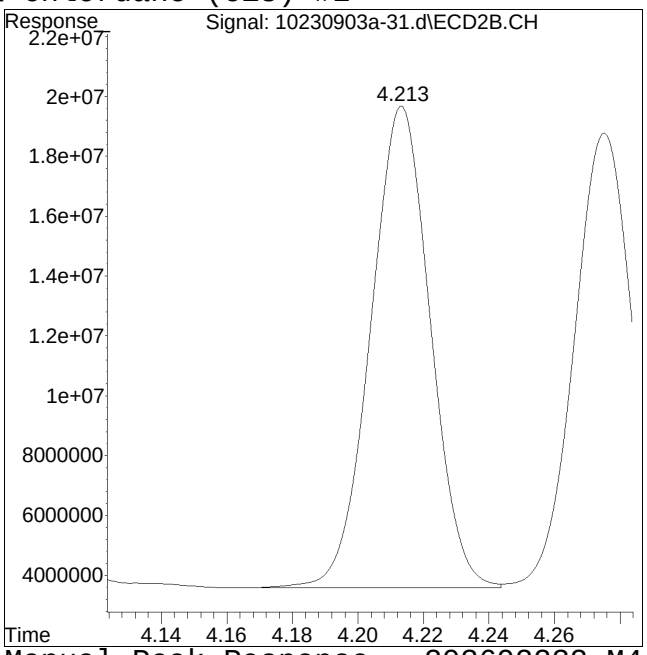
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #52: alpha-Chlordane (cis) #2



Original Peak Response = 211554442



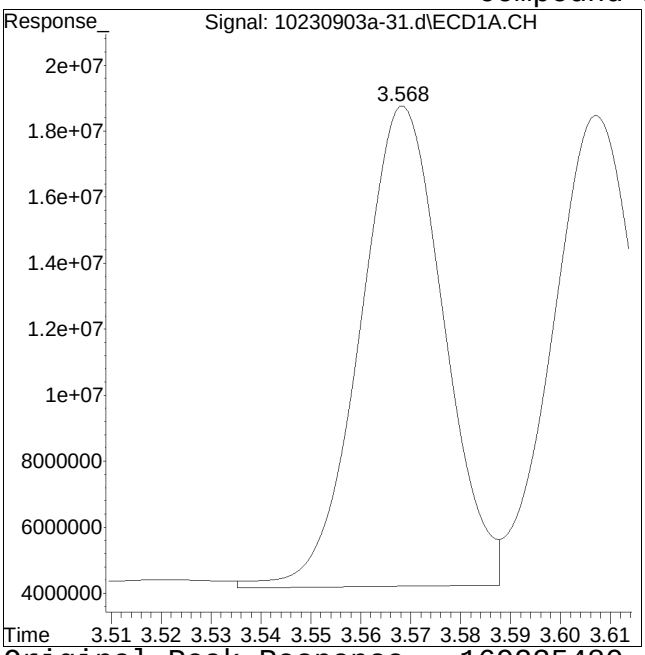
Manual Peak Response = 203692232 M4

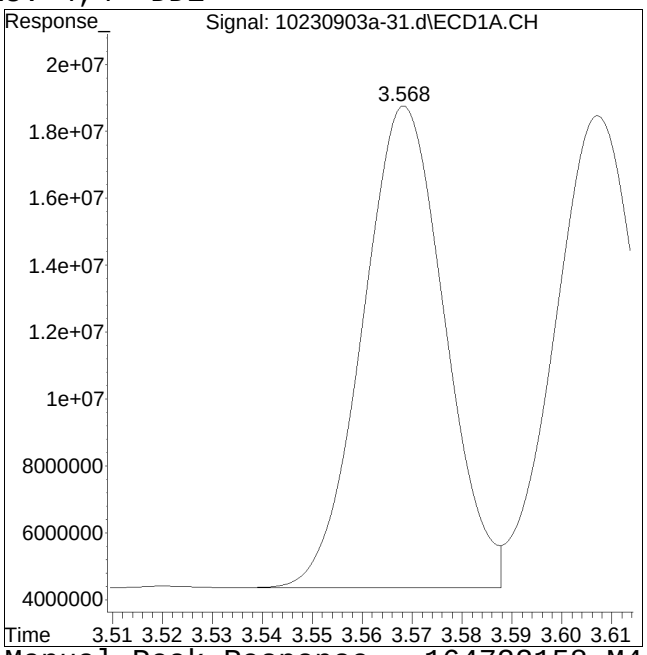
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #15: 4,4'-DDE



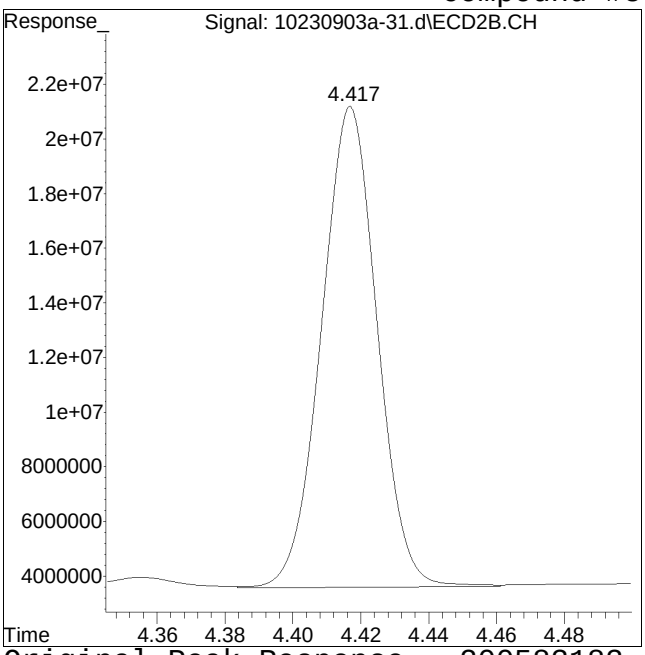


Original Peak Response = 169235480 Manual Peak Response = 164722158 M4
M4 = Poor automated baseline construction.

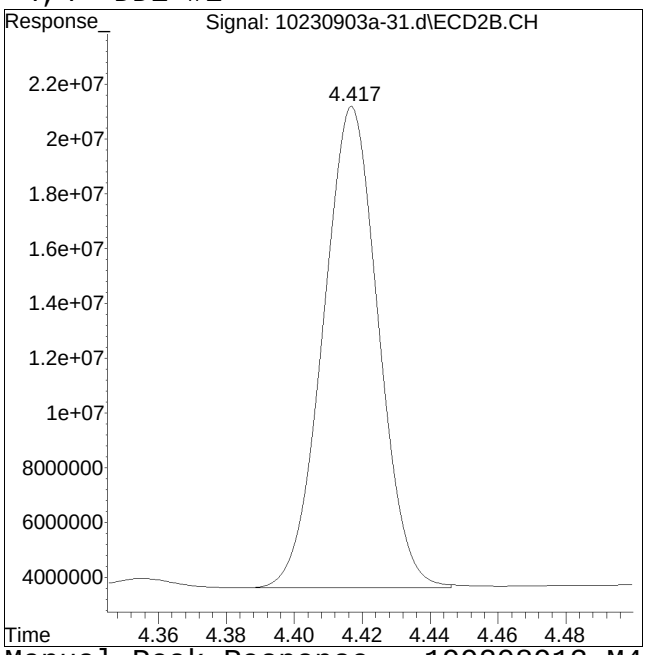
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #53: 4,4'-DDE #2



Original Peak Response = 200583183

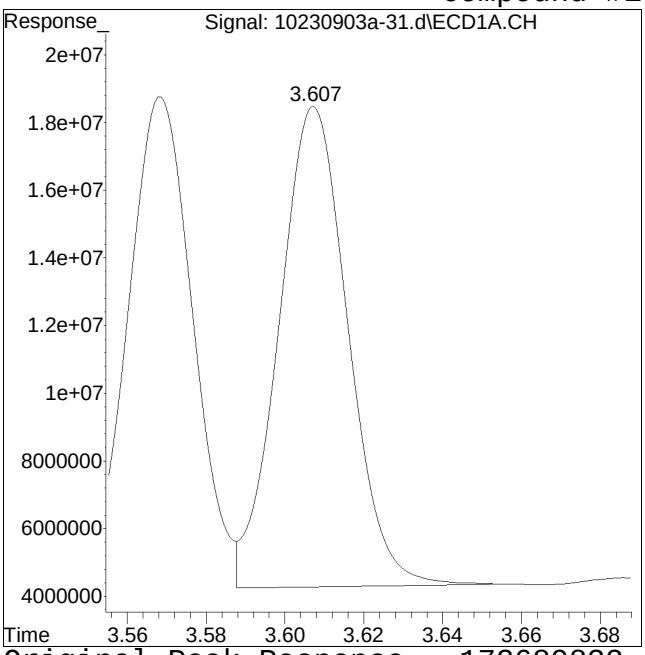


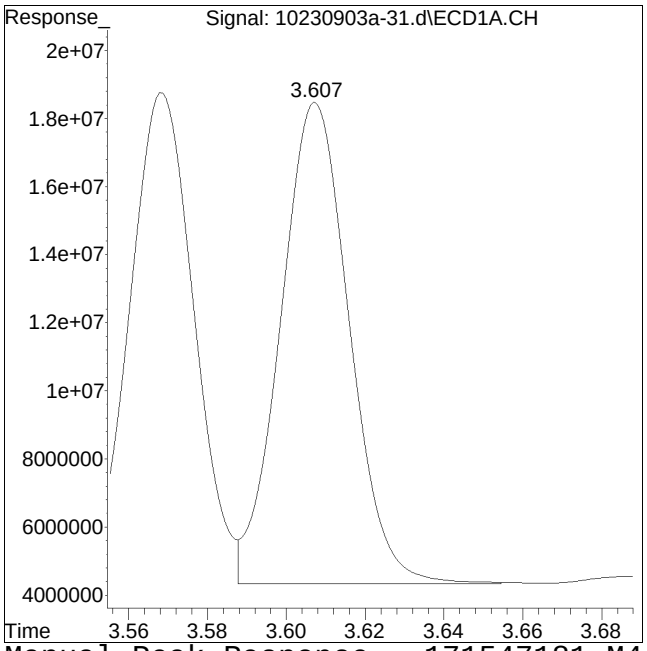
Manual Peak Response = 199208913 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #16: Endosulfan I



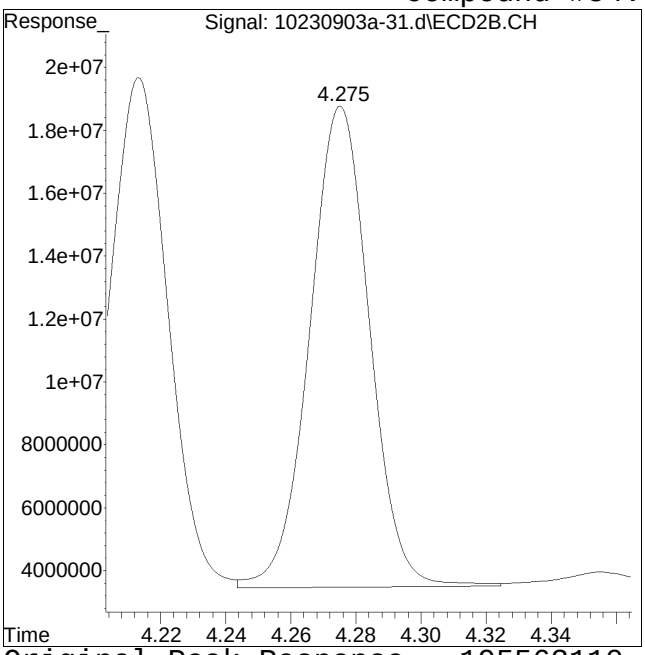


Original Peak Response = 172689832 Manual Peak Response = 171547181 M4
M4 = Poor automated baseline construction.

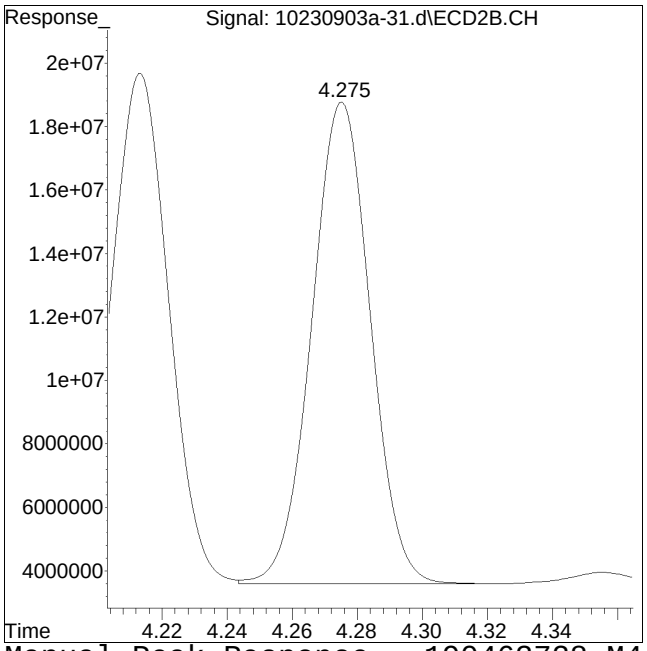
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #54: Endosulfan I #2



Original Peak Response = 195563110

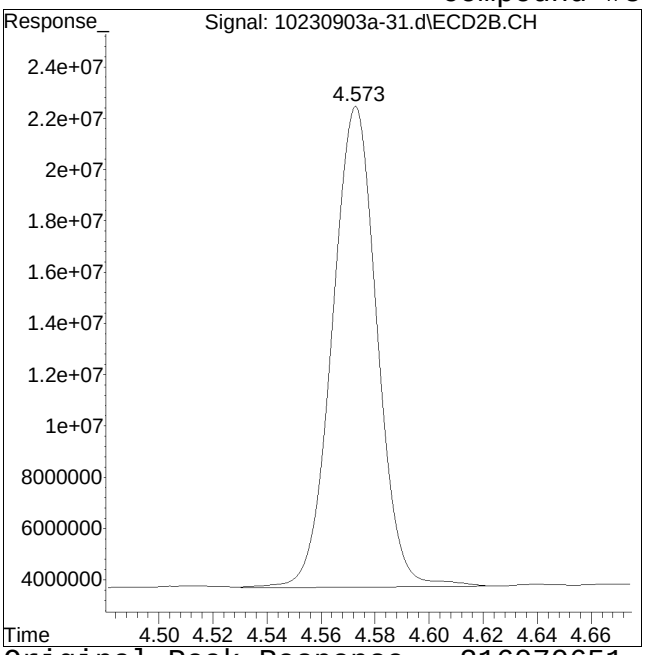


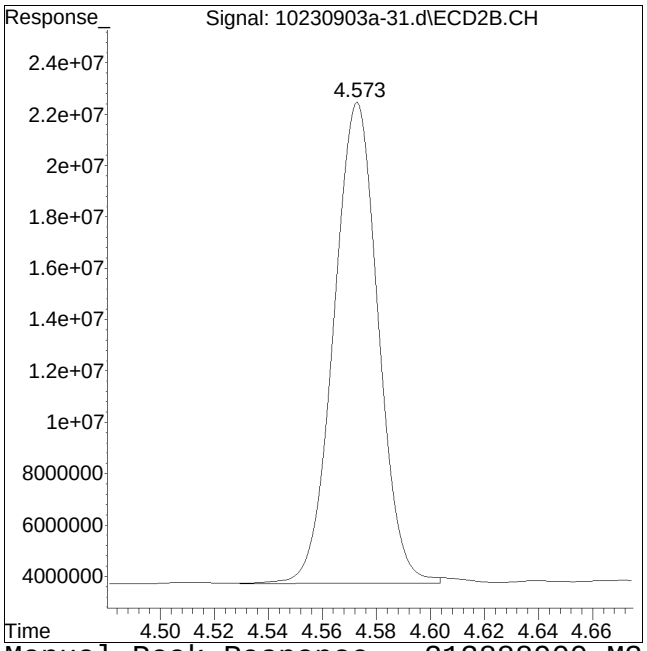
Manual Peak Response = 190463728 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #55: Dieldrin #2



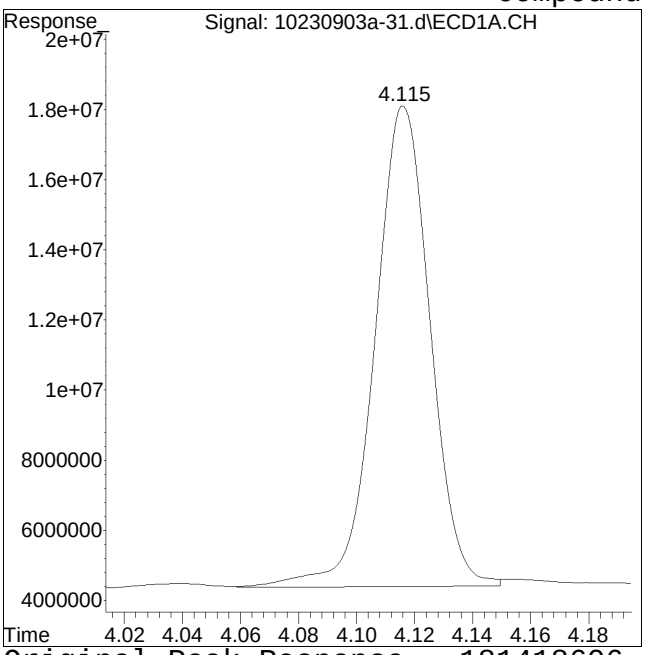


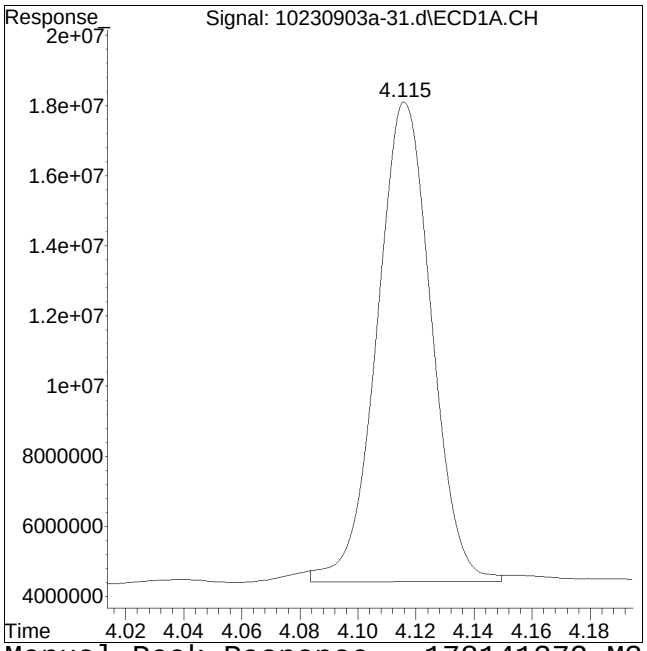
Original Peak Response = 216070651 Manual Peak Response = 213888900 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #18: Endrin



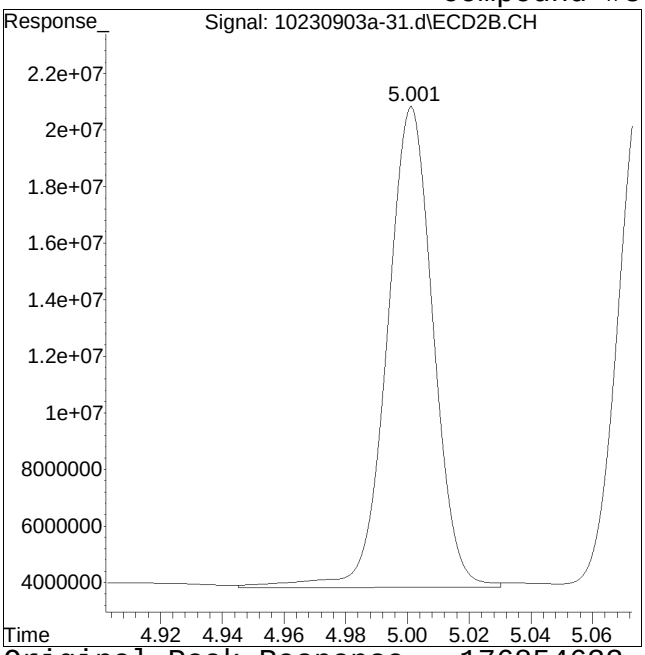


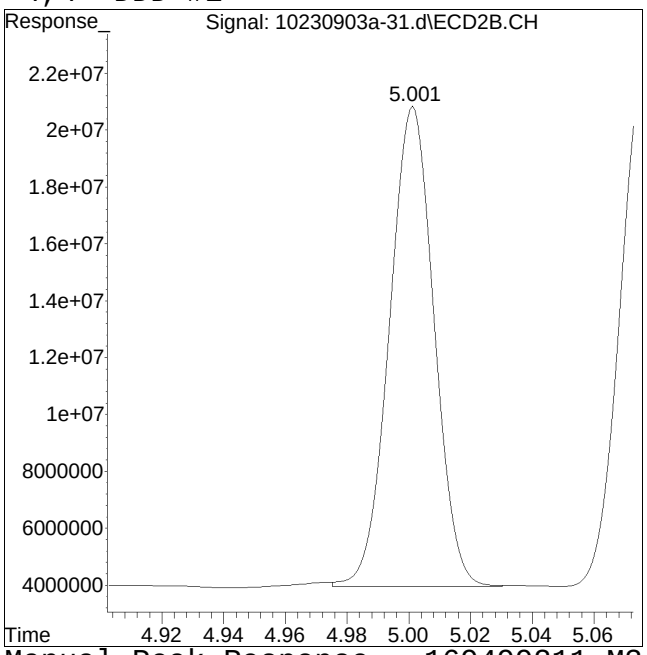
Original Peak Response = 181418606 Manual Peak Response = 178141372 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #57: 4,4'-DDD #2



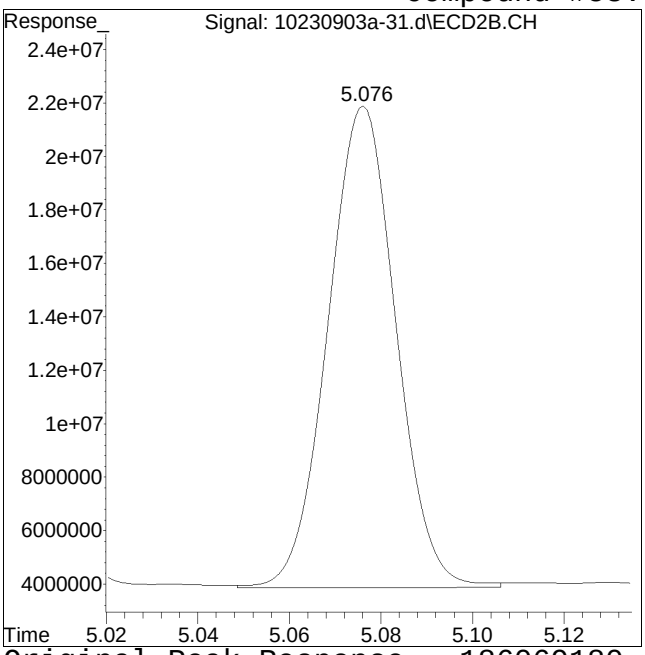


Original Peak Response = 176854633 Manual Peak Response = 169499211 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

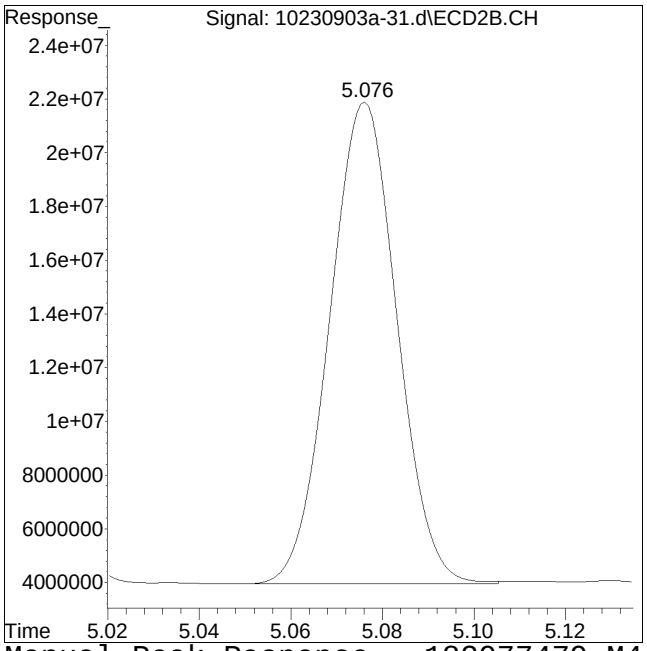
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #58: Endosulfan II #2



Original Peak Response = 186069180



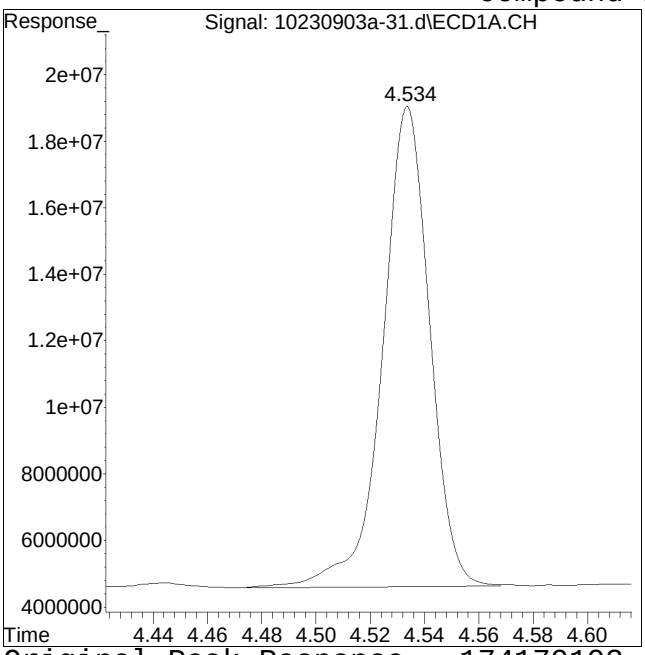
Manual Peak Response = 182977479 M4

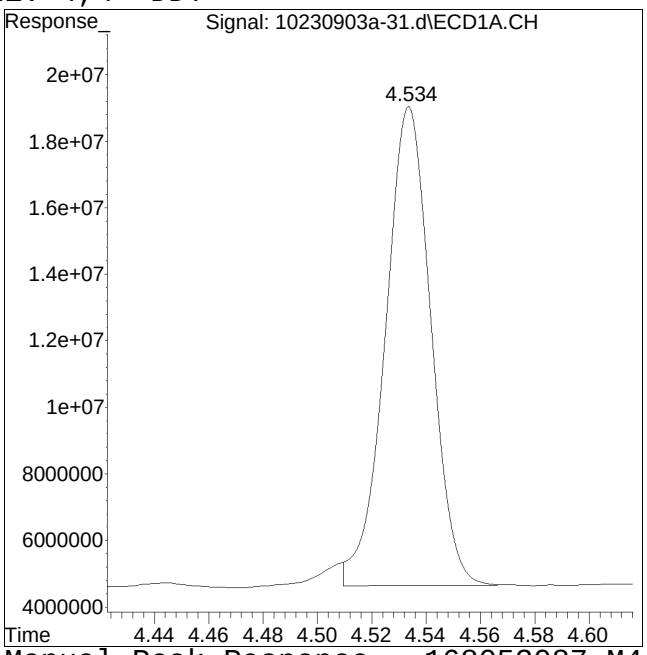
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #21: 4,4'-DDT



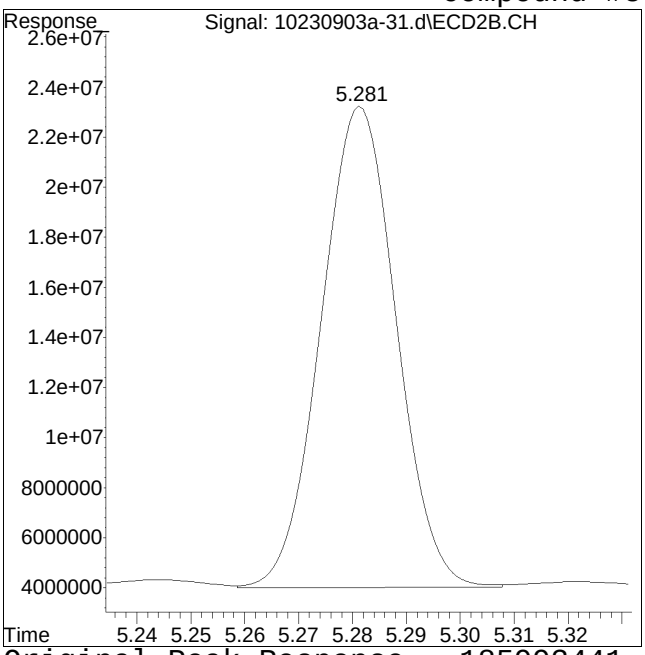


Original Peak Response = 174179193 Manual Peak Response = 168053087 M4
M4 = Poor automated baseline construction.

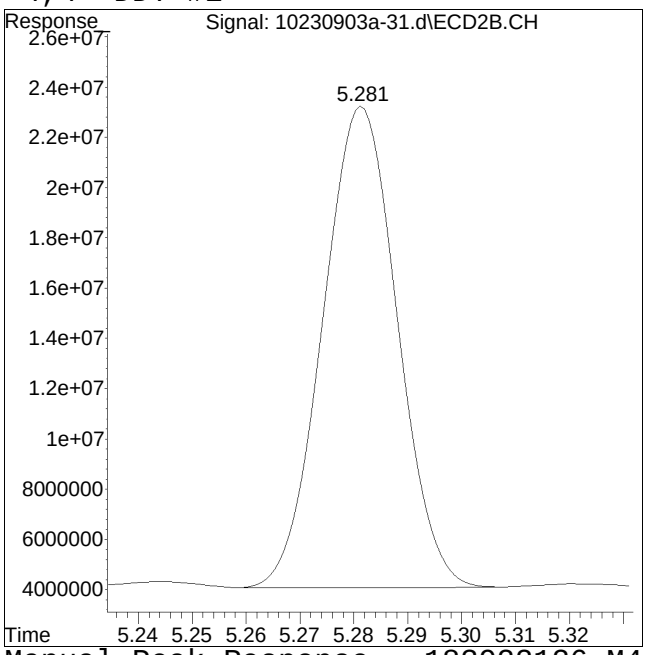
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #59: 4,4'-DDT #2



Original Peak Response = 185993441



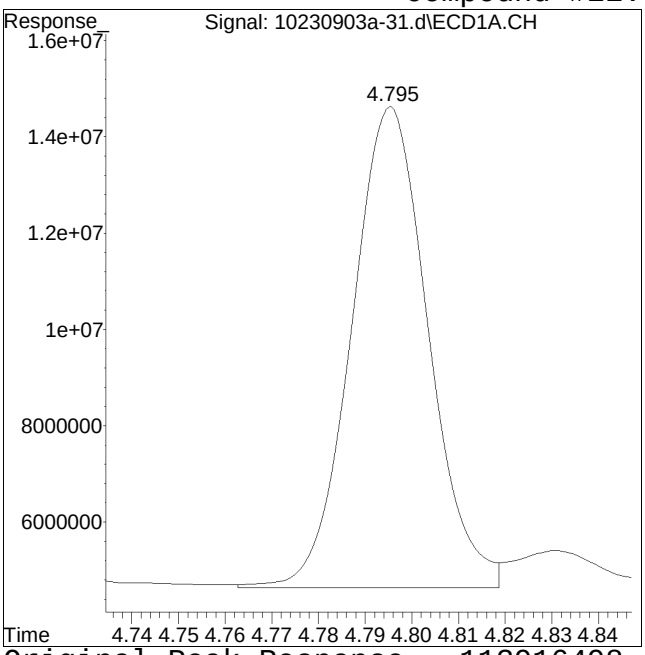
Manual Peak Response = 183922126 M4

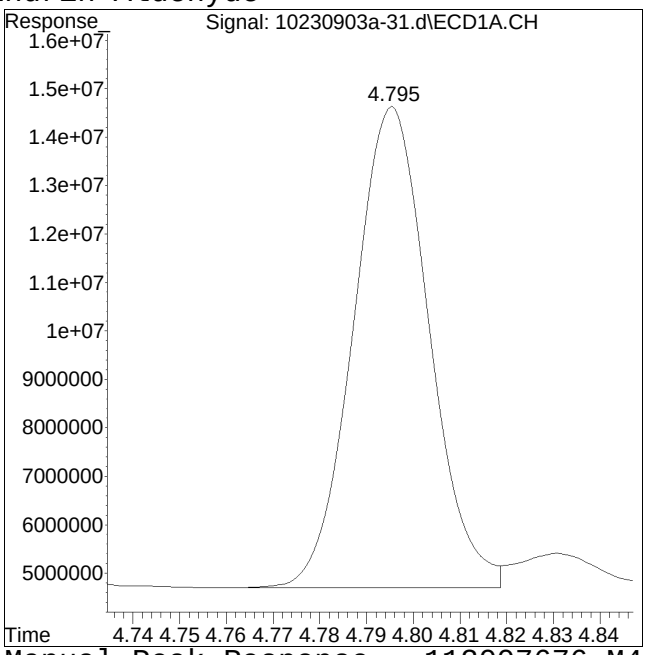
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #22: Endrin Aldehyde



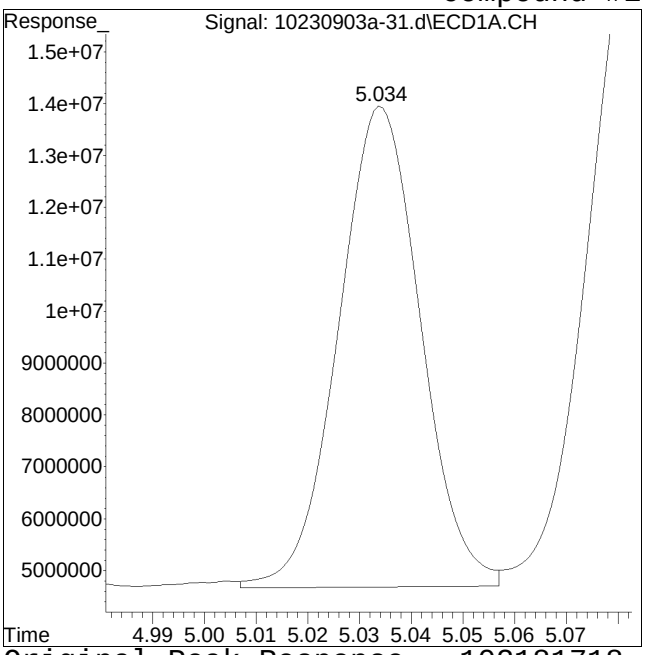


Original Peak Response = 113916498 Manual Peak Response = 112007676 M4
M4 = Poor automated baseline construction.

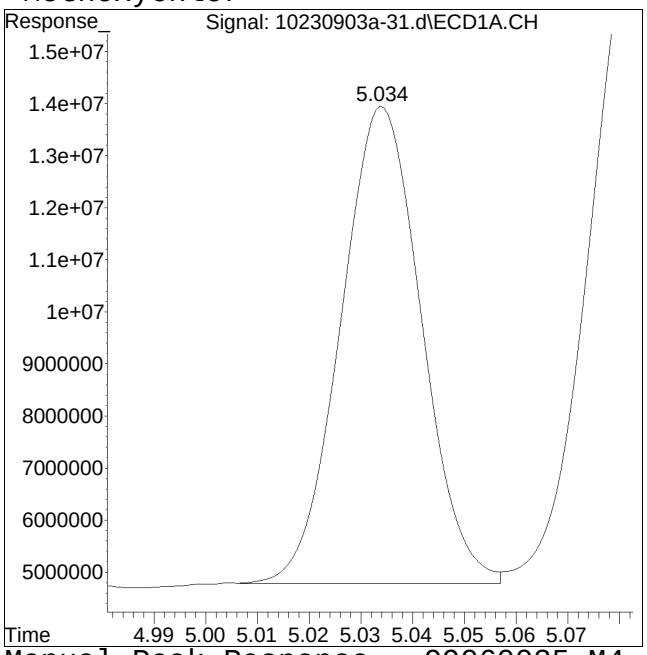
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #23: Methoxychlor



Original Peak Response = 102181718



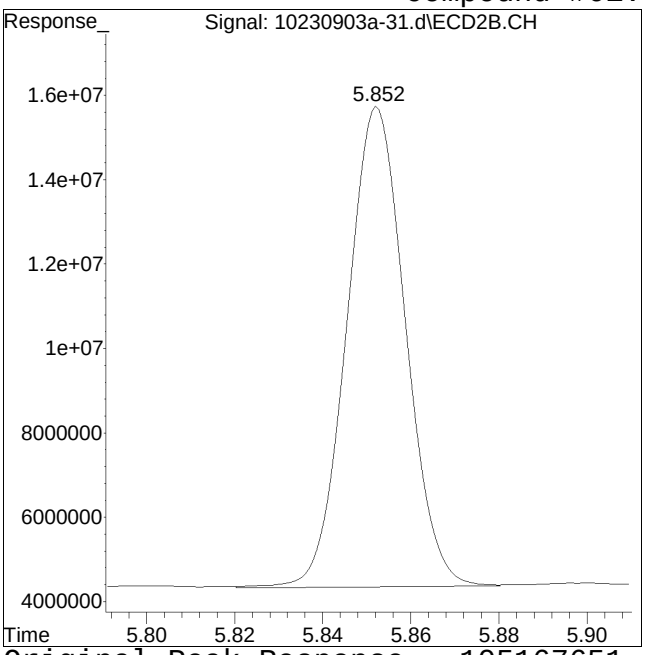
Manual Peak Response = 99060035 M4

M4 = Poor automated baseline construction.

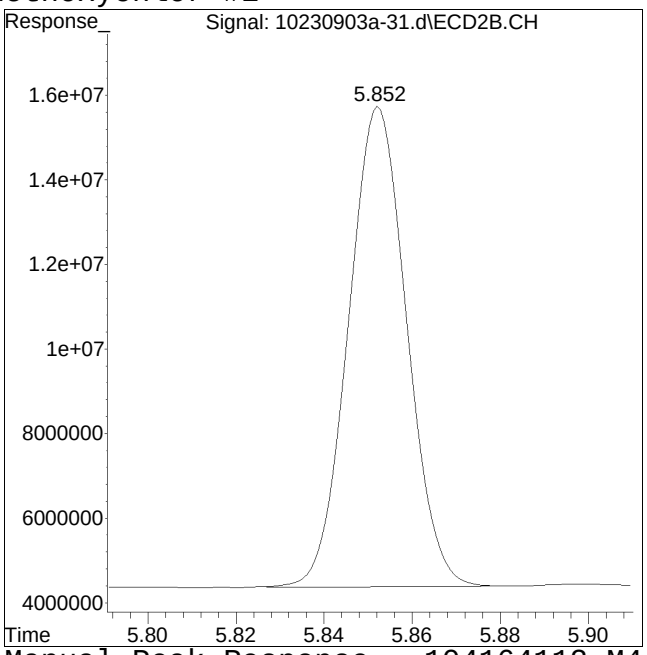
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #61: Methoxychlor #2



Original Peak Response = 105167651



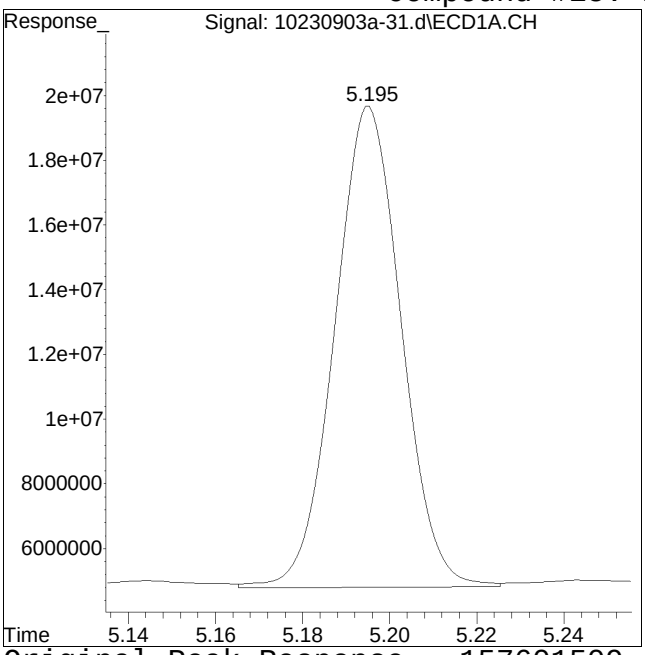
Manual Peak Response = 104164112 M4

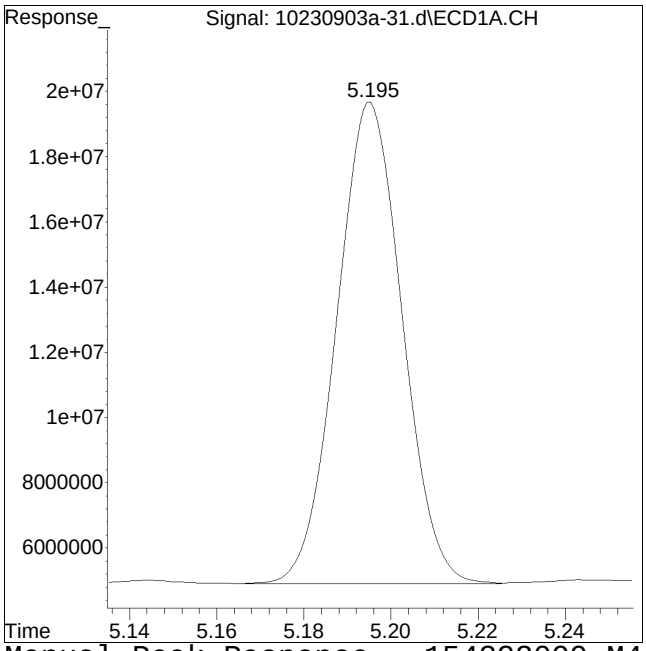
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #25: Endosulfan Sulfate



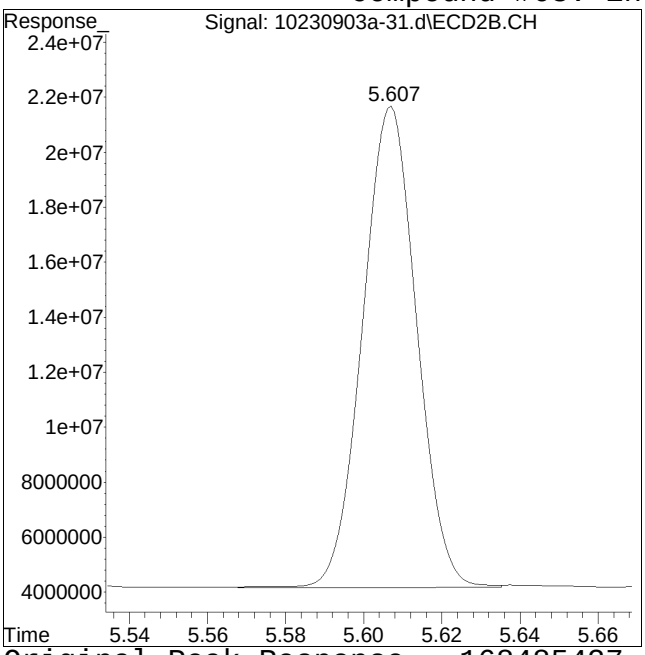


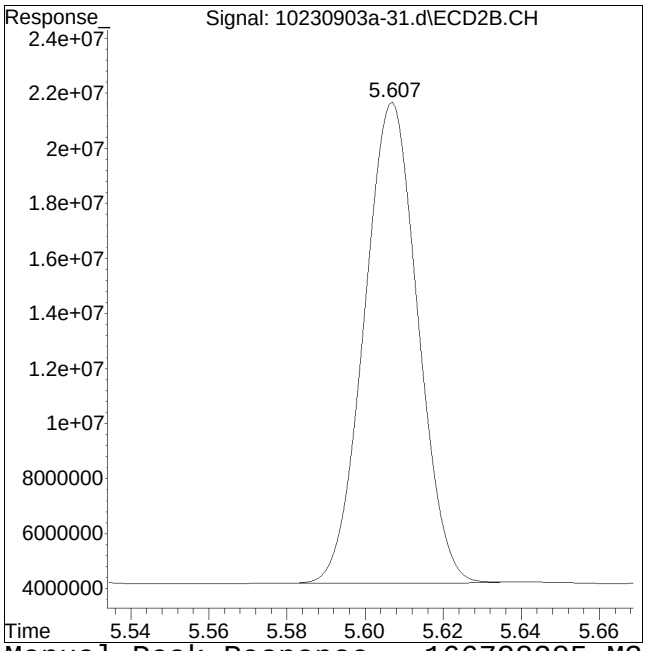
Original Peak Response = 157601509 Manual Peak Response = 154322099 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #63: Endosulfan Sulfate #2



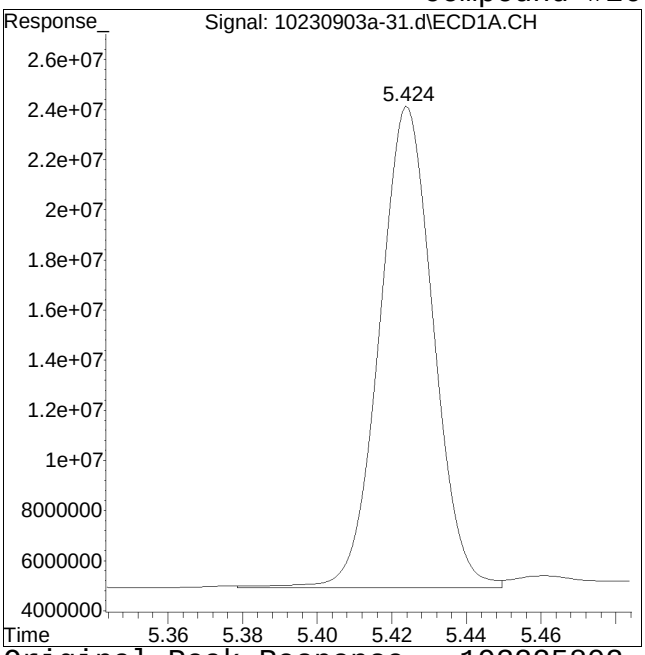


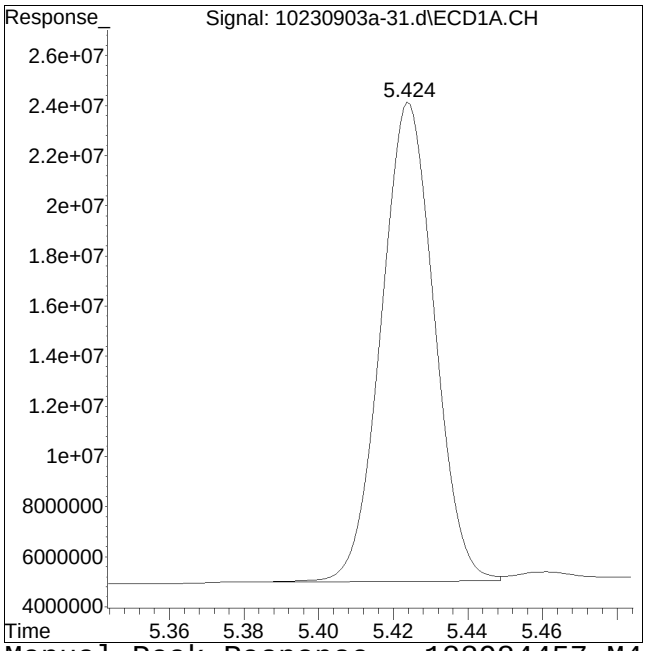
Original Peak Response = 168485427 Manual Peak Response = 166728285 M3
M3 = Misidentification of the peak (i.e. 1,4-dichlorobenzene identified as 1,3-dichlorobenzene), or misidentification from 2 partially resolved peaks not being split.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #26: Endrin Ketone



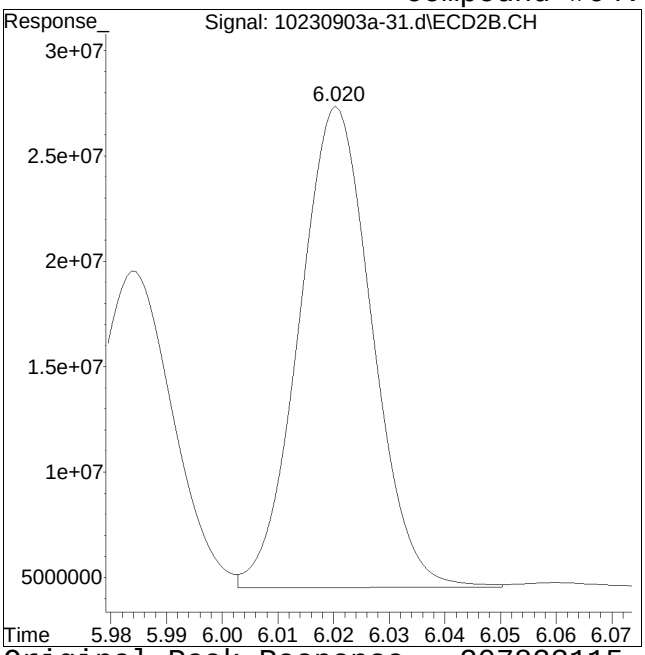


Original Peak Response = 193225802 Manual Peak Response = 188984457 M4
M4 = Poor automated baseline construction.

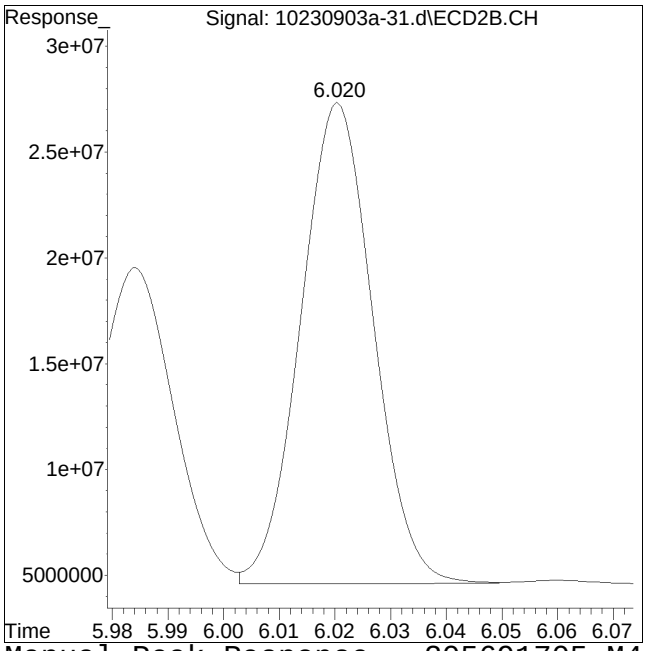
Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #64: Endrin Ketone #2



Original Peak Response = 207823115



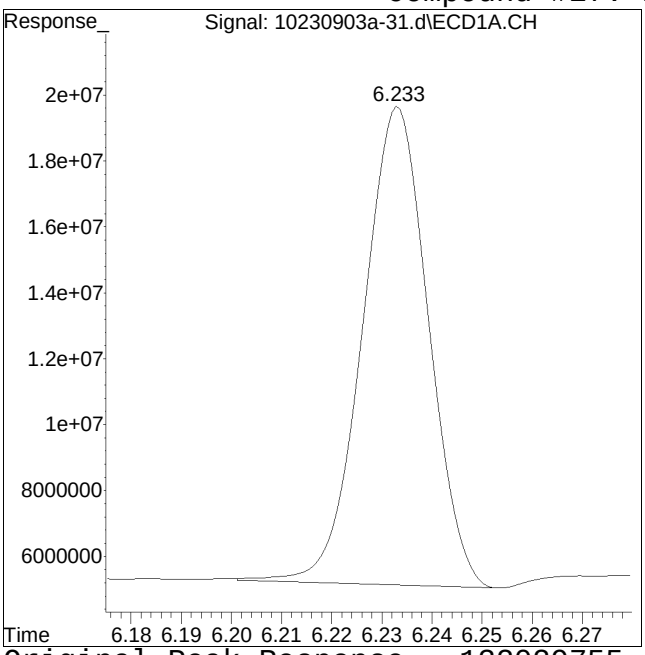
Manual Peak Response = 205691705 M4

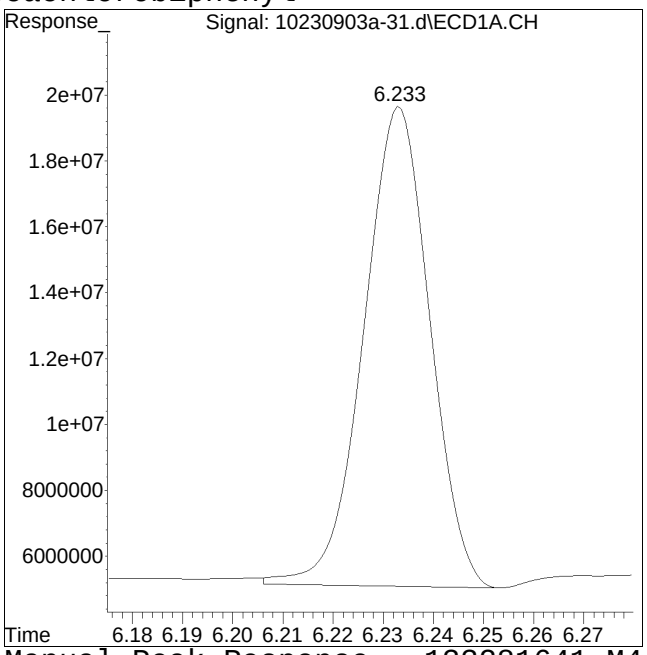
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #27: Decachlorobiphenyl



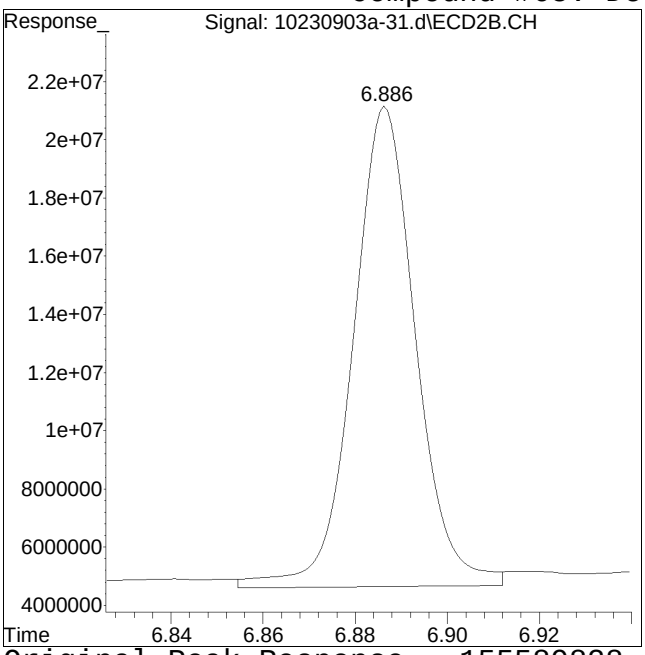


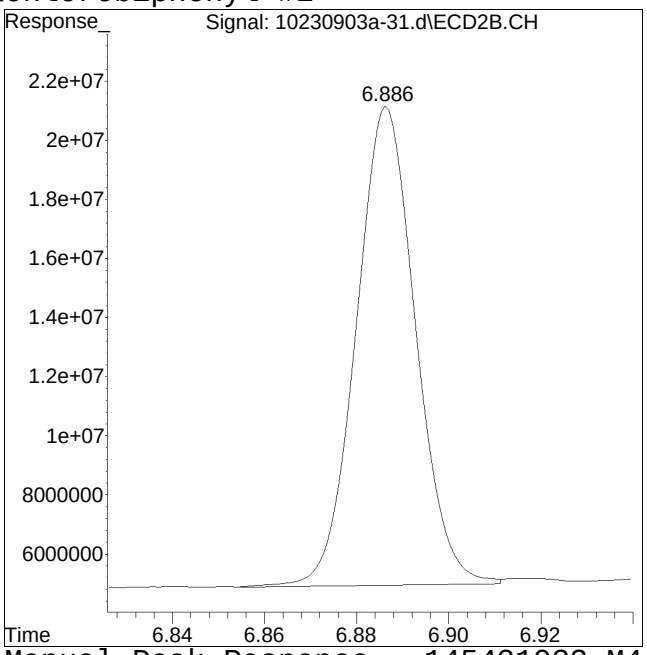
Original Peak Response = 132029755 Manual Peak Response = 133281641 M4
M4 = Poor automated baseline construction.

Manual Integration Report

Data Path : I:\PEST\Pest10\2023\230903QMethod : pest10_2023_08_28_ugL_ic
Data File : 10230903a-31.d Operator : PEST10:mmg
Date Inj'd : 9/3/2023 2:33 pm Instrument : Pest 10
Sample : WG1823255-5,42,, msd Quant Date : 9/3/2023 2:56 pm

Compound #65: Decachlorobiphenyl #2





Original Peak Response = 155589828 Manual Peak Response = 145421933 M4
M4 = Poor automated baseline construction.

Calculation of PCB Aroclors & Pesticides

Aqueous Concentration Formula:
Amt * DF*(Vt/Vp)*(1000/Vo)*(Ve/1000)

Where:
DF = Dilution Factor
Vt = Extract Final Volume (mL)
Vp = Aliquot Cleaned (mL)
Vo = Volume of Sample (mL)
Ve = Extraction Lab Final Volume (mL)

Soil Concentration Formula:
Amt * DF * (Vt/Vp)*(1000/Wt)*(Ve/1000)* (100/TS)

Where:
DF = Dilution Factor
Vt = Extract Final Volume (mL)
Vp = Aliquot Cleaned (mL)
Wt = Weight of Sample (g)
Ve = Extraction Lab Final Volume (mL)
TS = Total Solids

Dep.: Pest
Inst: Pest_10
Date: **08/28/23**
Run: **ical**

Method
GC: PEST

Seq: WG1822166
IS: pp11198

Vial	Data File	Sample	CCAL	notes	initials
1	10230828i-01	Blank,42e,,pp 11198 --			
2	10230828i-02	deg11180			EJL 8/29
3	10230828i-03	il1pest,42e,,pp 11230 L0.0005			EJL 8/29
4	10230828i-04	il2pest,42e,,pp 11229 L0.001			EJL 8/29
5	10230828i-05	il3pest,42e,,pp 11228 L0.002			EJL 8/29
6	10230828i-06	il4pest,42e,,pp 11227 L0.003			EJL 8/29
7	10230828i-07	il5pest,42e,,pp 11226 L0.004			EJL 8/29
8	10230828i-08	il7pest,42e,,pp 11225 L0.01			EJL 8/29
9	10230828i-09	il8pest,42e,,pp 11224 L0.05			EJL 8/29
10	10230828i-10	il9pest,42e,,pp 11223 L0.1			EJL 8/29
11	10230828i-11	il10pest,42e,,pp 11222 L0.2			EJL 8/29
12	10230828i-12	il11pest,42e,,pp 11221 L0.4			EJL 8/29
13	10230828i-13	cicvpest,42e,,pp 11274 L0.05ICV			EJL 8/29
14	10230828i-14	il3chlor,42e,,pp 11121 L0.01			EJL 8/29
15	10230828i-15	il4chlor,42e,,pp 11120 L0.02			EJL 8/29
16	10230828i-16	il5chlor,42e,,pp 11119 L0.1			EJL 8/29
17	10230828i-17	il7chlor,42e,,pp 11118 L0.5			EJL 8/29
18	10230828i-18	il8chlor,42e,,pp 11117 L1.0			EJL 8/29
19	10230828i-19	il9chlor,42e,,pp 11116 L2.0			EJL 8/29
20	10230828i-20	il10chlor,42e,,pp 11210 L5.0			EJL 8/29
21	10230828i-21	cicvchlor,42e,,pp 11239 L1.0ICV			EJL 8/29
22	10230828i-22	il3tox,42e,,pp 11124 L0.02			EJL 8/29
23	10230828i-23	il8tox,42e,,pp 11123 L2.0			EJL 8/29
24	10230828i-24	il9tox,42e,,pp 11122 L5.0			EJL 8/29
25	10230828i-25	cicvtox,42e,,pp 11211 L2.0ICV			EJL 8/29

Dep.: Pest
Inst: Pest_10
Date: **09/01/23**
Run: **a**

Method
GC: PEST

Seq: wg1822821
IS: pp11198

Vial	Data File	Sample	CCAL	notes	initials
1	10230901a-01	blank			
2	10230901a-02	blank			
3	10230901a-03	deg11180	20%		AR 9/1
4	10230901a-04	pest11274		S+V AR	AR 9/1
5	10230901a-05	chlor11212	20%	S+V AR	AR 9/1
6	10230901a-06	pest11274	20%	S+V AR	AR 9/1
7	10230901a-07	tox11211	20%	S+V AR	AR 9/1
8	10230901a-08	blank		S+V AR	AR 9/1
9	10230901a-09	WG1822409-1,42,,		S+V AR	AR 9/1
10	10230901a-10	WG1822409-2,42,,		S+V AR	AR 9/1
11	10230901a-11	WG1822409-3,42,,		S+V AR	AR 9/1
12	10230901a-12	L2350111-01,42,,,R3E		S+V AR	AR 9/1
13	10230901a-13	L2350120-01,42,,,R3F		S+V AR	AR 9/1
14	10230901a-14	L2350120-02,42,,,R3F		S+V AR	AR 9/1
15	10230901a-15	L2350120-03,42,,,R3F		S+V AR	AR 9/1
16	10230901a-16	L2350120-04,42,,,R3F		S+V AR	AR 9/1
17	10230901a-17	L2350530-01,42,,,R3A		S+V AR	AR 9/1
18	10230901a-18	L2350505-01,42,,		S+V AR	AR 9/1
19	10230901a-19	L2350505-02,42,,		S+V AR	AR 9/1
20	10230901a-20	L2350505-03,42,,		S+V AR	AR 9/1
21	10230901a-21	L2350505-04,42,,		S+V AR	AR 9/1
22	10230901a-22	L2350505-05,42,,		S+V AR	AR 9/1
23	10230901a-23	L2350505-06,42,,		S+V AR	AR 9/1
24	10230901a-24	L2350505-08,42,,		S+V AR	AR 9/1
25	10230901a-25	L2350505-09,42,,		S+V AR	AR 9/1
26	10230901a-26	L2350505-10,42,,		S+V AR	AR 9/1
27	10230901a-27	L2350505-11,42,,		S+V AR	AR 9/1
28	10230901a-28	L2350505-12,42,,		S+V AR	AR 9/1
29	10230901a-29	pest11274	20%	S+V AR	AR 9/1
30	10230901a-30	blank		S+V AR	
31	10230901a-31	L2350511-12,42,,,R3C		S+V AR	AR 9/1
32	10230901a-32	L2350511-13,42,,,R3C		S+V AR	AR 9/1
33	10230901a-33	L2350511-14,42,,,R3C		S+V AR	AR 9/1
34	10230901a-34	L2350511-20,42,,,R3C		S+V AR	AR 9/1
35	10230901a-35	L2348199-02,42,,,R3E		S+V AR	AR 9/1
36	10230901a-36	L2348199-09,42,,,R3E		S+V AR	AR 9/1
37	10230901a-37	L2349741-01,42,,		S+V AR	AR 9/1
38	10230901a-38	L2349741-03,42,,		S+V AR	AR 9/1
39	10230901a-39	L2349741-05,42,,		S+V AR	AR 9/2
40	10230901a-40	L2349741-07,42,,		S+V AR	AR 9/2
41	10230901a-41	blank		S+V AR	AR 9/2
42	10230901a-42	WG1822377-1,42,, 74		S+V AR	AR 9/2
43	10230901a-43	WG1822377-2,42,, 74		S+V AR	AR 9/2
44	10230901a-44	WG1822377-3,42,, 74		S+V AR	AR 9/2
45	10230901a-45	L2350282-01,42,,		S+V AR	AR 9/2

Dep.: Pest
Inst: Pest_10
Date: **09/01/23**
Run: **a**

Method
GC: PEST

Seq: wg1822821
IS: pp11198

Vial	Data File	Sample	CCAL	notes	initials
46	10230901a-46	L2350283-01,42,,		S+V AR	AR 9/2
47	10230901a-47	L2350269-04,42,,		S+V AR	AR 9/2
48	10230901a-48	L2350269-05,42,,		S+V AR	AR 9/2
49	10230901a-49	L2350269-11,42,,		S+V AR	AR 9/2

Dep.: Pest
Inst: Pest_10
Date: **09/03/23**
Run: **a**

Method
GC: PEST

Seq: wg1823359
IS: pp11198

Vial	Data File	Sample	CCAL	notes	initials
1	10230903a-01	blank			
2	10230903a-02	deg11180		9:10	mmg
3	10230903a-03	pest11274		several high	mmg
4	10230903a-04	chlor11212		15%	mmg
5	10230903a-05	tox11211		15%	mmg
6	10230903a-06	blank			
7	10230903a-07	WG1823261-1,42,, 259 t			AR 9/5
8	10230903a-08	WG1823261-2,42,, 259 t			AR 9/5
9	10230903a-09	WG1823261-3,42,, 259 t			AR 9/5
10	10230903a-10	L2349994-01,42,,,R3C t			AR 9/5
11	10230903a-11	L2349994-02,42,,,R3C t			AR 9/5
12	10230903a-12	L2350380-01,42,,,R3C t			AR 9/5
13	10230903a-13	L2350380-02,42,,,R3C t			AR 9/5
14	10230903a-14	WG1823258-1,42,, 308 t			AR 9/5
15	10230903a-15	WG1823258-2,42,, 308 t			AR 9/5
16	10230903a-16	WG1823258-3,42,, 308 t			AR 9/5
17	10230903a-17	L2350686-01,42,,,R1B t			AR 9/5
18	10230903a-18	L2350530-01,42,,,R3A t			AR 9/5
19	10230903a-19	WG1823255-1,42,,			
20	10230903a-20	WG1823255-2,42,,			
21	10230903a-21	WG1823255-3,42,,			
22	10230903a-22	L2349877-02,42,, re			
23	10230903a-23	L2350269-01,42,, re			
24	10230903a-24	L2350269-02,42,, re			
25	10230903a-25	L2350269-03,42,, re			
26	10230903a-26	L2350269-06,42,, re			
27	10230903a-27	pest11274			
28	10230903a-28	L2350269-07,42,, re			
29	10230903a-29	L2350269-08,42,, re			
30	10230903a-30	WG1823255-4,42,, ms			
31	10230903a-31	WG1823255-5,42,, msd			
32	10230903a-32	L2350269-09,42,, re			

Dep.: Pest
Inst: Pest_10
Date: **09/05/23**
Run: **a**

Method
GC: PEST

Seq: wg1823612
IS: pp11198

Vial	Data File	Sample	CCAL	notes	initials
1	10230905a-01	blank			
2	10230905a-02	deg11180			
3	10230905a-03	pest11274			
4	10230905a-04	chlor11212			
5	10230905a-05	tox11211			
6	10230905a-06	blank			
7	10230905a-07	WG1823000-1,42,,			
8	10230905a-08	WG1823000-2,42,,			
9	10230905a-09	WG1823000-3,42,,			
10	10230905a-10	WG1823340-1,42,,			
11	10230905a-11	WG1823340-2,42,,			
12	10230905a-12	WG1823340-3,42,,			
13	10230905a-13	WG1823299-1,42,,			
14	10230905a-14	WG1823299-2,42,,			
15	10230905a-15	WG1823299-3,42,,			
16	10230905a-16	L2350369-01,42,,			
17	10230905a-17	L2350734-02,42,,			
18	10230905a-18	L2350387-01,42,,,R3E			
19	10230905a-19	L2350588-01,42,,			
20	10230905a-20	L2350588-02,42,,			
21	10230905a-21	L2350588-03,42,,			
22	10230905a-22	L2350453-02,42,,			
23	10230905a-23	WG1823299-4,42,, ms			
24	10230905a-24	WG1823299-5,42,, msd			
25	10230905a-25	L2350453-03,42,,			
26	10230905a-26	L2350453-04,42,,			
27	10230905a-27	pest11274			
28	10230905a-28	pest11274			
29	10230905a-29	blank			
30	10230905a-30	L2350720-02,42,, rr p			
31	10230905a-31	L2350470-03,42,, rr			
32	10230905a-32	L2350470-04,42,, rr			
33	10230905a-33	L2350470-05,42,, rr			
34	10230905a-34	L2350470-06,42,, rr			
35	10230905a-35	L2349937-07,42,,			
36	10230905a-36	WG1823429-1,42,,			
37	10230905a-37	WG1823429-2,42,,			
38	10230905a-38	WG1823429-3,42,,			
39	10230905a-39	L2350799-03,42,,,R3C			
40	10230905a-40	L2350799-04,42,,,R3C			
41	10230905a-41	L2350799-05,42,,,R3C			
42	10230905a-42	L2350799-08,42,,,R3C			
43	10230905a-43	L2350799-09,42,,,R3C			

Dep.: Pest
Inst: Pest_10
Date: **09/05/23**
Run: **a**

Method
GC: PEST

Seq: wg1823612
IS: pp11198

Vial	Data File	Sample	CCAL	notes	initials
44	10230905a-44	L2351049-02,42,,,R3C			
45	10230905a-45	L2349792-05,42,,			
46	10230905a-46	L2349877-02,42,, re rv			
47	10230905a-47	L2350269-03,42,, re rv			
48	10230905a-48	L2349877-01,42,, re			
49	10230905a-49	pest11274			
50	10230905a-50	WG1823429-4,42,,			
51	10230905a-51	WG1823429-5,42,,			
52	10230905a-52	WG1823000-4,42,,			
53	10230905a-53	WG1823000-5,42,,			

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 08 2023, 09:11 am

Work Group: WG1822374 for Department: 2 Organic Preparation

Created: 31-AUG-23 Due: Operator: ARP

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2350269-04	MW-4D	S	NYTCL-8081	WATER	DONE	U	0905	0913	S0	Amber-A.120
L2350269-05	MW-5S	S	NYTCL-8081	WATER	DONE	U	0905	0913	S0	Amber-A.120
L2350269-11	EQUIPMENT BLANK	S	NYTCL-8081	WATER	DONE	U	0905	0913	S0	Amber-A.120
WG1822374-1	Laboratory Method Bl	S	NYTCL-8081	WATER	DONE	U				
WG1822374-2	Laboratory Control S	S	NYTCL-8081	WATER	DONE	U				
WG1822374-3	LCS Duplicate	S	NYTCL-8081	WATER	DONE	U				

Comments:

WG1822374-3 WG1822374-2

ALPHA ANALYTICAL LABORATORIES, INC.

Alpha WORK GROUP REPORT (wk02)

Sep 08 2023, 09:11 am

Work Group: WG1823255 for Department: 2 Organic Preparation

Created: 02-SEP-23 Due: Operator: RET

Sample	Client ID	C	Product	Matrix	Stat	UA	HOLD	DUE	PR	Location
L2349877-01	DRUM 2	S	NYTCL-8081	WATER	DONE	U	0904	0912	S0	Amber-A.120
L2349877-02	DRUM 1	S	NYTCL-8081	WATER	DONE	U	0904	0912	S0	Amber-A.120
L2350269-01	MW-1S	S	NYTCL-8081	WATER	DONE	U	0904	0913	S0	Amber-A.120
L2350269-02	MW-2S	S	NYTCL-8081	WATER	DONE	U	0904	0913	S0	Amber-A.120
L2350269-03	MW-3S	S	NYTCL-8081	WATER	DONE	U	0904	0913	S0	Amber-A.120
L2350269-06	MW-6D	S	NYTCL-8081	WATER	DONE	U	0904	0913	S0	Amber-A.120
L2350269-07	MW-7S	S	NYTCL-8081	WATER	DONE	U	0904	0913	S0	Amber-A.120
L2350269-08	MW-8S	S	NYTCL-8081	WATER	DONE	U	0904	0913	S0	Amber-A.120
L2350269-09	DUP	S	NYTCL-8081	WATER	DONE	U	0904	0913	S0	Amber-A.120
WG1823255-1	Laboratory Method Bl	S	NYTCL-8081	WATER	DONE	U				
WG1823255-2	Laboratory Control S	S	NYTCL-8081	WATER	DONE	U				
WG1823255-3	LCS Duplicate	S	NYTCL-8081	WATER	DONE	U				
WG1823255-4	Matrix Spike	S	NYTCL-8081	WATER	DONE	U				
WG1823255-5	Matrix Spike Duplica	S	NYTCL-8081	WATER	DONE	U				

Comments:

WG1823255-3	WG1823255-2
WG1823255-4	L2350269-08
WG1823255-5	L2350269-08

ORGANIC ELN REPORT

Workgroup: WG1823255

Prep Method: EPA 3510C
Solvent Type: DCM **Lot #:** EH108
Surrogate Type: Pesticide/PCB **Lot #:** PP11270c-011824,
Spike Type: Pesticide **Lot #:** PP11196C-120923
Spike Verify by: RET
Lims Spikelot: PEST_LVI

Additional Reagents/Stds

Na2SO4	23A1161008

Conc.Method: S-EVAP/N-EVAP
Solvent Type: Hexane
Lot #: eh061

Additional Reagents/Stds

Cleanup 1

Cleanup Method 1:
Cleanup Method 2:
Solvent Type: **Lot #:**

Additional Reagents/Stds

Sample/ Type	Extraction: Extract Date	Analyst	Sample Vol ml	Ph	Surr Amt ml	Spike Amt ml	Concentration: Conc Date	Analyst	Final Vol ml	Conc Unit
L2349877-01 WATER	09/02/23 17:07	Sampson Amoah	140	>5,<9	.25		09/03/23 09:02	Tian-Long Chheou	1	H, G, & 3
L2349877-02 WATER	09/02/23 12:19	Ryan Trenholm	140	>5,<9	.25		09/02/23 17:51	Kevin Wehbe	1	D&A,N #1
L2350269-01 WATER	09/02/23 12:15	Ryan Trenholm	140	>5,<9	.25		09/02/23 17:51	Kevin Wehbe	1	D&A,N #1
L2350269-02 WATER	09/02/23 12:15	Ryan Trenholm	140	>5,<9	.25		09/02/23 17:51	Kevin Wehbe	1	D&A,N #1
L2350269-03 WATER	09/02/23 12:15	Ryan Trenholm	140	>5,<9	.25		09/02/23 17:51	Kevin Wehbe	1	D&A,N #1
L2350269-06 WATER	09/02/23 12:15	Ryan Trenholm	140	>5,<9	.25		09/02/23 17:51	Kevin Wehbe	1	D&A,N #1
L2350269-07 WATER	09/02/23 12:15	Ryan Trenholm	140	>5,<9	.25		09/02/23 17:51	Kevin Wehbe	1	D&A,N #1

Reported: 08-SEP-23 09:11 AM

ORGANIC ELN REPORT

Workgroup: WG1823255

Sample/ Type	Extraction						Concentration			
	Extract Date	Analyst	Sample Vol **ml**	Ph	Surr Amt **ml**	Spike Amt **ml**	Conc Date	Analyst	Final Vol **ml**	Conc Unit
L2350269-08 WATER	09/02/23 12:15	Ryan Trenholm	140	>5,<9	.25		09/02/23 17:51	Kevin Wehbe	1	D&A,N #1
L2350269-09 WATER	09/02/23 12:15	Ryan Trenholm	140	>5,<9	.25		09/02/23 17:51	Kevin Wehbe	1	D&A,N #1
WG1823255-1 BLANK	09/02/23 12:15	Ryan Trenholm	140	>5,<9	.25		09/02/23 17:53	Kevin Wehbe	1	D&A,N #1
WG1823255-2 LCS	09/02/23 12:15	Ryan Trenholm	140	>5,<9	.25	.25	09/02/23 17:51	Kevin Wehbe	1	D&A,N #1
WG1823255-3 LCSD	09/02/23 12:15	Ryan Trenholm	140	>5,<9	.25	.25	09/02/23 17:51	Kevin Wehbe	1	D&A,N #1
WG1823255-4 MS	09/02/23 12:15	Ryan Trenholm	140	>5,<9	.25	.25	09/02/23 17:51	Kevin Wehbe	1	D&A,N #1
WG1823255-5 MSD	09/02/23 12:15	Ryan Trenholm	140	>5,<9	.25	.25	09/02/23 17:51	Kevin Wehbe	1	D&A,N #1

Reported: 08-SEP-23 09:11 AM

ORGANIC ELN REPORT

Workgroup: WG1822374

Prep Method: EPA 3510C
Solvent Type: DCM **Lot #:** EG858
Surrogate Type: Pesticide/PCB **Lot #:** PP11270-C[01/18/24]
Spike Type: Pesticide **Lot #:** PP11196-C[12/09/23]
Spike Verify by: ARP
Lims Spikelot: PEST_LVI

Additional Reagents/Stds

Na2SO4	23A1161008

Conc.Method: S-EVAP/N-EVAP
Solvent Type: Hexane
Lot #: EG 061

Additional Reagents/Stds

Cleanup 1

Cleanup Method 1:
Cleanup Method 2:
Solvent Type: **Lot #:**

Additional Reagents/Stds

Sample/ Type	Extraction						Concentration			
	Extract Date	Analyst	Sample Vol ml	Ph	Surr Amt ml	Spike Amt ml	Conc Date	Analyst	Final Vol ml	Conc Unit
L2350269-04 WATER	08/31/23 08:24	Amanda Patterson	140	>5, <9	.25		08/31/23 17:44	Kwasi Siriboe	1	H&G,N #3
L2350269-05 WATER	08/31/23 08:24	Amanda Patterson	140	>5, <9	.25		08/31/23 17:44	Kwasi Siriboe	1	H&G,N #3
L2350269-11 WATER	08/31/23 08:24	Amanda Patterson	140	>5, <9	.25		08/31/23 17:44	Kwasi Siriboe	1	H&G,N #3
WG1822374-1 BLANK	08/31/23 08:24 **WG1822377**	Amanda Patterson	140	>5, <9	.25		08/31/23 17:44	Kwasi Siriboe	1	H&G,N #3
WG1822374-2 LCS	08/31/23 08:24	Amanda Patterson	140	>5, <9	.25	.25	08/31/23 17:44	Kwasi Siriboe	1	H&G,N #3
WG1822374-3 LCSD	08/31/23 08:24	Amanda Patterson	140	>5, <9	.25	.25	08/31/23 17:44	Kwasi Siriboe	1	H&G,N #3

Reported: 08-SEP-23 09:11 AM

Metals

Inorganic Data
(ICPMS Analysis)

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/03/23 17:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG1823417.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00748	0.0100	0.00327	J
7440-36-0	Antimony, Total	0.00079	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.00044	0.00050	0.00016	J
7440-39-3	Barium, Total	0.03972	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	44.6	0.100	0.0394	
7440-47-3	Chromium, Total	0.00079	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00028	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00480	0.00100	0.00038	
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	4.82	0.0700	0.0242	
7439-96-5	Manganese, Total	0.04738	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00067	0.00200	0.00055	J
7440-09-7	Potassium, Total	37.5	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	49.3	0.100	0.0293	
7440-28-0	Thallium, Total	0.00030	0.00100	0.00014	J
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822783-1	**Date Collected**	: NA
Client ID	: WG1822783-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/03/23 16:36
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG1823417.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	ND	0.100	0.0394	U
7440-47-3	Chromium, Total	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	ND	0.0700	0.0242	U
7439-96-5	Manganese, Total	ND	0.00100	0.00044	U
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	ND	0.100	0.0309	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	ND	0.100	0.0293	U
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822783-6	**Date Collected**	:
Client ID	: Serial Dilution	**Date Received**	:
Sample Location	:	**Date Analyzed**	: 09/03/23 17:13
Sample Matrix	: WATER	**Dilution Factor**	: 5
Analytical Method	: 1,6020B	**Analyst**	: WKP
Lab File ID	: WG1823417.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-39-3	Barium, Total	0.03824	0.00250	0.0009	
7440-70-2	Calcium, Total	42.8	0.500	0.197	
7439-95-4	Magnesium, Total	4.65	0.350	0.121	
7439-96-5	Manganese, Total	0.04715	0.00500	0.0022	
7440-09-7	Potassium, Total	34.6	0.500	0.154	
7440-23-5	Sodium, Total	47.0	0.500	0.146	

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 17:04
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1823506.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	0.00359	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	0.00064	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00054	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.03883	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	42.5	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00033	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00028	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00436	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	4.91	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.04496	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00095	0.00200	0.00055	J
7440-09-7	Potassium, Dissolved	37.6	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	49.5	0.100	0.0293	
7440-28-0	Thallium, Dissolved	0.00030	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822318-1	**Date Collected**	: NA
Client ID	: WG1822318-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/05/23 16:32
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1823506.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	ND	0.100	0.0394	U
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	ND	0.0700	0.0242	U
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	ND	0.100	0.0309	U
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	ND	0.100	0.0293	U
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822318-6	**Date Collected**	:
Client ID	: Serial Dilution	**Date Received**	:
Sample Location	:	**Date Analyzed**	: 09/05/23 17:00
Sample Matrix	: WATER	**Dilution Factor**	: 5
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1823506.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-39-3	Barium, Dissolved	0.04013	0.00250	0.0009	
7440-70-2	Calcium, Dissolved	41.6	0.500	0.197	
7439-95-4	Magnesium, Dissolved	4.82	0.350	0.121	
7439-96-5	Manganese, Dissolved	0.04582	0.00500	0.0022	
7440-09-7	Potassium, Dissolved	35.6	0.500	0.154	
7440-23-5	Sodium, Dissolved	48.2	0.500	0.146	

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822316-1	**Date Collected**	: NA
Client ID	: WG1822316-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/05/23 15:31
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1823506.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	0.0482	0.100	0.0394	J
7440-47-3	Chromium, Total	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	ND	0.0700	0.0242	U
7439-96-5	Manganese, Total	ND	0.00100	0.00044	U
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	ND	0.100	0.0309	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	ND	0.100	0.0293	U
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822316-4	**Date Collected**	: 08/29/23 10:02
Client ID	: WG1822316-4 DUP	**Date Received**	: 08/29/23
Sample Location	:	**Date Analyzed**	: 09/05/23 15:55
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1823506.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7440-38-2	Arsenic, Total	0.01059	0.00050	0.0002	
7440-39-3	Barium, Total	0.00204	0.00050	0.0002	
7440-70-2	Calcium, Total	24.4	0.100	0.039	
7439-89-6	Iron, Total	0.0222	0.0500	0.019	J
7439-95-4	Magnesium, Total	2.34	0.0700	0.024	
7439-96-5	Manganese, Total	ND	0.00100	0.0004	U
7440-09-7	Potassium, Total	3.21	0.100	0.031	
7440-23-5	Sodium, Total	5.42	0.100	0.029	

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:12
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1827292.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	1.08	0.0100	0.00327	
7440-36-0	Antimony, Dissolved	0.00078	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00597	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.00751	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	99.3	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00022	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00065	0.00050	0.00016	
7440-50-8	Copper, Dissolved	0.00123	0.00100	0.00038	
7439-89-6	Iron, Dissolved	0.111	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	0.313	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.05786	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00721	0.00200	0.00055	
7440-09-7	Potassium, Dissolved	34.8	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	69.8	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	0.01985	0.00500	0.00157	
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:17
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1827292.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	0.00350	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00057	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.03566	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	72.4	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00254	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	0.00056	0.00050	0.00016	
7440-50-8	Copper, Dissolved	0.00184	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	7.10	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	16.2	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	8.29	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:21
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1827292.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00061	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.06189	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	74.3	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00042	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00050	0.00050	0.00016	
7440-50-8	Copper, Dissolved	0.00191	0.00100	0.00038	
7439-89-6	Iron, Dissolved	0.0205	0.0500	0.0191	J
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	6.52	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00479	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00156	0.00200	0.00055	J
7440-09-7	Potassium, Dissolved	18.0	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	10.2	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	0.00189	0.00500	0.00157	J
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

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Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:26
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1827292.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00016	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.04516	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	20.5	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00124	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	0.0217	0.0500	0.0191	J
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	11.8	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00088	0.00100	0.00044	J
7440-02-0	Nickel, Dissolved	0.00189	0.00200	0.00055	J
7440-09-7	Potassium, Dissolved	1.31	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	61.5	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

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Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:31
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1827292.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	0.00703	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00037	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.00769	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	13.6	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00042	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	2.24	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.00075	0.00100	0.00044	J
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	2.32	0.100	0.0309	
7782-49-2	Selenium, Dissolved	0.00227	0.00500	0.00173	J
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	6.62	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

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Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:35
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1827292.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	0.00477	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00031	0.00050	0.00016	J
7440-39-3	Barium, Dissolved	0.05808	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	68.8	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00194	0.00100	0.00017	
7440-48-4	Cobalt, Dissolved	0.00029	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00086	0.00100	0.00038	J
7439-89-6	Iron, Dissolved	0.0303	0.0500	0.0191	J
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	16.6	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.7506	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00141	0.00200	0.00055	J
7440-09-7	Potassium, Dissolved	23.8	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	26.0	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

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Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:40
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1827292.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	0.00334	0.0100	0.00327	J
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	0.00050	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.09938	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	166.	0.100	0.0394	
7440-47-3	Chromium, Dissolved	0.00059	0.00100	0.00017	J
7440-48-4	Cobalt, Dissolved	0.00038	0.00050	0.00016	J
7440-50-8	Copper, Dissolved	0.00185	0.00100	0.00038	
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	15.9	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.01123	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00083	0.00200	0.00055	J
7440-09-7	Potassium, Dissolved	14.3	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	29.8	0.100	0.0293	
7440-28-0	Thallium, Dissolved	0.00026	0.00100	0.00014	J
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

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METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 17:37
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1827292.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	1.02	0.0100	0.00327	
7440-36-0	Antimony, Dissolved	0.00118	0.00400	0.00042	J
7440-38-2	Arsenic, Dissolved	0.00498	0.00050	0.00016	
7440-39-3	Barium, Dissolved	0.00741	0.00050	0.00017	
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	98.4	0.100	0.0394	
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	0.00063	0.00050	0.00016	
7440-50-8	Copper, Dissolved	0.00118	0.00100	0.00038	
7439-89-6	Iron, Dissolved	0.0542	0.0500	0.0191	
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	0.291	0.0700	0.0242	
7439-96-5	Manganese, Dissolved	0.05482	0.00100	0.00044	
7440-02-0	Nickel, Dissolved	0.00691	0.00200	0.00055	
7440-09-7	Potassium, Dissolved	33.8	0.100	0.0309	
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	66.1	0.100	0.0293	
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	0.01964	0.00500	0.00157	
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

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Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 17:00
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: EJF
Lab File ID	: WG1827292.pdf	**Instrument ID**	: ICPMSQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Dissolved	ND	0.0100	0.00327	U
7440-36-0	Antimony, Dissolved	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Dissolved	ND	0.00050	0.00016	U
7440-39-3	Barium, Dissolved	ND	0.00050	0.00017	U
7440-41-7	Beryllium, Dissolved	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Dissolved	ND	0.00020	0.00005	U
7440-70-2	Calcium, Dissolved	ND	0.100	0.0394	U
7440-47-3	Chromium, Dissolved	ND	0.00100	0.00017	U
7440-48-4	Cobalt, Dissolved	ND	0.00050	0.00016	U
7440-50-8	Copper, Dissolved	ND	0.00100	0.00038	U
7439-89-6	Iron, Dissolved	ND	0.0500	0.0191	U
7439-92-1	Lead, Dissolved	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Dissolved	ND	0.0700	0.0242	U
7439-96-5	Manganese, Dissolved	ND	0.00100	0.00044	U
7440-02-0	Nickel, Dissolved	ND	0.00200	0.00055	U
7440-09-7	Potassium, Dissolved	ND	0.100	0.0309	U
7782-49-2	Selenium, Dissolved	ND	0.00500	0.00173	U
7440-22-4	Silver, Dissolved	ND	0.00040	0.00016	U
7440-23-5	Sodium, Dissolved	ND	0.100	0.0293	U
7440-28-0	Thallium, Dissolved	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Dissolved	ND	0.00500	0.00157	U
7440-66-6	Zinc, Dissolved	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:04
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: SMV
Lab File ID	: WG1827474.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.804	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00068	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.00529	0.00050	0.00016	
7440-39-3	Barium, Total	0.00738	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	101.	0.100	0.0394	
7440-47-3	Chromium, Total	0.00017	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00064	0.00050	0.00016	
7440-50-8	Copper, Total	0.00145	0.00100	0.00038	
7439-89-6	Iron, Total	0.0607	0.0500	0.0191	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	0.310	0.0700	0.0242	
7439-96-5	Manganese, Total	0.07072	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00715	0.00200	0.00055	
7440-09-7	Potassium, Total	39.4	0.100	0.0309	
7782-49-2	Selenium, Total	0.00190	0.00500	0.00173	J
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	67.7	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.02120	0.00500	0.00157	
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: SMV
Lab File ID	: WG1827474.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00508	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00022	0.00050	0.00016	J
7440-39-3	Barium, Total	0.03701	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	75.0	0.100	0.0394	
7440-47-3	Chromium, Total	0.00258	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00055	0.00050	0.00016	
7440-50-8	Copper, Total	0.00185	0.00100	0.00038	
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	7.20	0.0700	0.0242	
7439-96-5	Manganese, Total	ND	0.00100	0.00044	U
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	18.6	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	8.30	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:13
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: SMV
Lab File ID	: WG1827474.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	ND	0.0100	0.00327	U
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00035	0.00050	0.00016	J
7440-39-3	Barium, Total	0.06158	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	82.9	0.100	0.0394	
7440-47-3	Chromium, Total	0.00062	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00063	0.00050	0.00016	
7440-50-8	Copper, Total	0.00145	0.00100	0.00038	
7439-89-6	Iron, Total	0.0373	0.0500	0.0191	J
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	6.90	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00940	0.00100	0.00044	
7440-02-0	Nickel, Total	ND	0.00200	0.00055	U
7440-09-7	Potassium, Total	21.2	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	10.9	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.00215	0.00500	0.00157	J
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

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Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: SMV
Lab File ID	: WG1827474.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.0351	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.04657	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	22.4	0.100	0.0394	
7440-47-3	Chromium, Total	0.00642	0.00100	0.00017	
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	0.109	0.0500	0.0191	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	13.3	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00904	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00373	0.00200	0.00055	
7440-09-7	Potassium, Total	1.36	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	59.9	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

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METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:23
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: SMV
Lab File ID	: WG1827474.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.0125	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00019	0.00050	0.00016	J
7440-39-3	Barium, Total	0.00836	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	14.2	0.100	0.0394	
7440-47-3	Chromium, Total	0.00035	0.00100	0.00017	J
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	0.0243	0.0500	0.0191	J
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	2.54	0.0700	0.0242	
7439-96-5	Manganese, Total	0.00409	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00055	0.00200	0.00055	J
7440-09-7	Potassium, Total	2.57	0.100	0.0309	
7782-49-2	Selenium, Total	0.00211	0.00500	0.00173	J
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	7.26	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

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METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:28
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: SMV
Lab File ID	: WG1827474.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.0463	0.0100	0.00327	
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00028	0.00050	0.00016	J
7440-39-3	Barium, Total	0.05936	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	77.5	0.100	0.0394	
7440-47-3	Chromium, Total	0.01104	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00044	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00124	0.00100	0.00038	
7439-89-6	Iron, Total	0.210	0.0500	0.0191	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	19.7	0.0700	0.0242	
7439-96-5	Manganese, Total	0.9300	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00713	0.00200	0.00055	
7440-09-7	Potassium, Total	29.9	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	25.5	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

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METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 16:33
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: SMV
Lab File ID	: WG1827474.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00485	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	0.00024	0.00050	0.00016	J
7440-39-3	Barium, Total	0.1016	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	172.	0.100	0.0394	
7440-47-3	Chromium, Total	0.00120	0.00100	0.00017	
7440-48-4	Cobalt, Total	0.00037	0.00050	0.00016	J
7440-50-8	Copper, Total	0.00200	0.00100	0.00038	
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	18.6	0.0700	0.0242	
7439-96-5	Manganese, Total	0.01425	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00103	0.00200	0.00055	J
7440-09-7	Potassium, Total	15.8	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	29.0	0.100	0.0293	
7440-28-0	Thallium, Total	0.00023	0.00100	0.00014	J
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 14:23
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: SMV
Lab File ID	: WG1827474.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.821	0.0100	0.00327	
7440-36-0	Antimony, Total	0.00065	0.00400	0.00042	J
7440-38-2	Arsenic, Total	0.00502	0.00050	0.00016	
7440-39-3	Barium, Total	0.00769	0.00050	0.00017	
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	101.	0.100	0.0394	
7440-47-3	Chromium, Total	0.00020	0.00100	0.00017	J
7440-48-4	Cobalt, Total	0.00062	0.00050	0.00016	
7440-50-8	Copper, Total	0.00138	0.00100	0.00038	
7439-89-6	Iron, Total	0.0638	0.0500	0.0191	
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	0.322	0.0700	0.0242	
7439-96-5	Manganese, Total	0.07032	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00689	0.00200	0.00055	
7440-09-7	Potassium, Total	38.2	0.100	0.0309	
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	63.5	0.100	0.0293	
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	0.02094	0.00500	0.00157	
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/14/23 13:59
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,6020B	**Analyst**	: SMV
Lab File ID	: WG1827474.pdf	**Instrument ID**	: ICPMSRQ
Sample Amount	: 50ml	**%Solids**	: N/A
Digestion Method	: EPA 3005A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7429-90-5	Aluminum, Total	0.00481	0.0100	0.00327	J
7440-36-0	Antimony, Total	ND	0.00400	0.00042	U
7440-38-2	Arsenic, Total	ND	0.00050	0.00016	U
7440-39-3	Barium, Total	0.00025	0.00050	0.00017	J
7440-41-7	Beryllium, Total	ND	0.00050	0.00010	U
7440-43-9	Cadmium, Total	ND	0.00020	0.00005	U
7440-70-2	Calcium, Total	ND	0.100	0.0394	U
7440-47-3	Chromium, Total	0.00097	0.00100	0.00017	J
7440-48-4	Cobalt, Total	ND	0.00050	0.00016	U
7440-50-8	Copper, Total	ND	0.00100	0.00038	U
7439-89-6	Iron, Total	ND	0.0500	0.0191	U
7439-92-1	Lead, Total	ND	0.00100	0.00034	U
7439-95-4	Magnesium, Total	ND	0.0700	0.0242	U
7439-96-5	Manganese, Total	0.00116	0.00100	0.00044	
7440-02-0	Nickel, Total	0.00084	0.00200	0.00055	J
7440-09-7	Potassium, Total	ND	0.100	0.0309	U
7782-49-2	Selenium, Total	ND	0.00500	0.00173	U
7440-22-4	Silver, Total	ND	0.00040	0.00016	U
7440-23-5	Sodium, Total	ND	0.100	0.0293	U
7440-28-0	Thallium, Total	ND	0.00100	0.00014	U
7440-62-2	Vanadium, Total	ND	0.00500	0.00157	U
7440-66-6	Zinc, Total	ND	0.01000	0.00341	U

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1736897-1									
Date Analyzed :	09/03/23 14:43									
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	46.6000	93							
Antimony	50.0	57.1000	114							
Arsenic	50.0	47.7000	95							
Barium	50.0	47.8000	96							
Beryllium	50.0	50.0000	100							
Cadmium	50.0	48.5000	97							
Calcium	5000	4880.0000	98							
Chromium	50.0	48.0000	96							
Cobalt	50.0	47.6000	95							
Copper	50.0	48.8000	98							
Iron	5000	4840.0000	97							
Lead	50.0	50.0000	100							
Magnesium	5000	4780.0000	96							
Manganese	50.0	49.1000	98							
Nickel	50.0	48.6000	97							
Potassium	5000	4760.0000	95							
Selenium	50.0	49.0000	98							
Silver	50.0	50.2000	100							
Sodium	5000	4490.0000	90							
Thallium	50.0	48.8000	98							
Vanadium	50.0	48.8000	98							
Zinc	50.0	47.4000	95							

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1736897-3			R1736897-6			R1736897-8		R1736897-10	
Date Analyzed:	09/03/23 14:54			09/03/23 15:21			09/03/23 15:33		09/03/23 16:22	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	48.3000	97	60.0000	60.4	101	61.0	102	66.0	110
Antimony	50.0	54.0000	108	60.0000	66.2	110	64.2	107	64.7	108
Arsenic	50.0	48.4000	97	60.0000	61.2	102	58.7	98	60.1	100
Barium	50.0	46.4000	93	60.0000	59.6	99	56.4	94	61.0	102
Beryllium	50.0	50.9000	102	60.0000	61.8	103	60.1	100	60.5	101
Cadmium	50.0	48.7000	97	60.0000	60.4	101	57.9	96	59.8	100
Calcium	5000	4900.0000	98	6000.0000	6150	102	5920	99	6200	103
Chromium	50.0	48.6000	97	60.0000	59.9	100	56.9	95	58.1	97
Cobalt	50.0	48.4000	97	60.0000	60.1	100	57.5	96	59.1	98
Copper	50.0	49.0000	98	60.0000	60.7	101	57.5	96	58.6	98
Iron	5000	4960.0000	99	6000.0000	6070	101	5810	97	5980	100
Lead	50.0	48.7000	97	60.0000	100.	167	60.8	101	62.6	104
Magnesium	5000	4960.0000	99	6000.0000	6100	102	5810	97	6420	107
Manganese	50.0	49.4000	99	60.0000	58.7	98	57.2	95	58.0	97
Nickel	50.0	49.8000	100	60.0000	60.2	100	57.3	96	59.1	98
Potassium	5000	4860.0000	97	6000.0000	6090	102	6000	100	6330	106
Selenium	50.0	49.4000	99	60.0000	61.8	103	59.7	100	61.5	102
Silver	50.0	50.3000	101	60.0000	60.1	100	58.0	97	60.1	100
Sodium	5000	4710.0000	94	6000.0000	5880	98	5810	97	6220	104
Thallium	50.0	48.6000	97	60.0000	116.	193	56.1	94	63.6	106
Vanadium	50.0	48.8000	98	60.0000	59.5	99	56.7	94	58.9	98
Zinc	50.0	48.8000	98	60.0000	60.7	101	57.4	96	59.3	99

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1736897-12			R1736897-15		R1736897-17	
Date Analyzed:				09/03/23 17:27			09/03/23 17:46		09/03/23 18:08	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	62.2	104	61.4	102	64.9	108
Antimony				60.0000	67.0	112	66.4	111	68.6	114
Arsenic				60.0000	60.5	101	61.5	102	61.7	103
Barium				60.0000	60.5	101	60.7	101	62.2	104
Beryllium				60.0000	59.8	100	60.9	102	60.5	101
Cadmium				60.0000	59.3	99	60.3	100	60.3	100
Calcium				6000.0000	6230	104	6180	103	6480	108
Chromium				60.0000	56.8	95	57.6	96	58.3	97
Cobalt				60.0000	58.5	98	59.7	100	59.7	100
Copper				60.0000	57.9	96	59.2	99	59.3	99
Iron				6000.0000	5910	98	6020	100	6070	101
Lead				60.0000	62.8	105	65.6	109	69.6	116
Magnesium				6000.0000	6120	102	6060	101	6300	105
Manganese				60.0000	57.2	95	57.6	96	59.3	99
Nickel				60.0000	57.4	96	58.7	98	59.0	98
Potassium				6000.0000	6410	107	6320	105	6580	110
Selenium				60.0000	63.9	106	62.0	103	65.1	108
Silver				60.0000	59.2	99	60.8	101	59.8	100
Sodium				6000.0000	6100	102	6030	100	6240	104
Thallium				60.0000	62.4	104	64.9	108	63.4	106
Vanadium				60.0000	57.2	95	57.8	96	59.9	100
Zinc				60.0000	59.3	99	59.6	99	60.4	101

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1736897-19			R1736897-21						
Date Analyzed :	09/03/23 18:59			09/03/23 19:55						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	49.7000	99	60.0000	59.4	99				
Antimony	50.0	50.8000	102	60.0000	62.6	104				
Arsenic	50.0	50.3000	101	60.0000	61.5	102				
Barium	50.0	50.2000	100	60.0000	61.2	102				
Beryllium	50.0	51.4000	103	60.0000	61.8	103				
Cadmium	50.0	50.9000	102	60.0000	62.8	105				
Calcium	5000	5250.0000	105	6000.0000	6080	101				
Chromium	50.0	50.2000	100	60.0000	61.9	103				
Cobalt	50.0	50.2000	100	60.0000	63.4	106				
Copper	50.0	51.6000	103	60.0000	63.4	106				
Iron	5000	5050.0000	101	6000.0000	6160	103				
Lead	50.0	49.0000	98	60.0000	64.0	107				
Magnesium	5000	5060.0000	101	6000.0000	6170	103				
Manganese	50.0	51.0000	102	60.0000	60.8	101				
Nickel	50.0	51.5000	103	60.0000	63.4	106				
Potassium	5000	5020.0000	100	6000.0000	6010	100				
Selenium	50.0	51.7000	103	60.0000	58.6	98				
Silver	50.0	50.7000	101	60.0000	60.3	100				
Sodium	5000	4950.0000	99	6000.0000	6260	104				
Thallium	50.0	50.4000	101	60.0000	65.0	108				
Vanadium	50.0	49.5000	99	60.0000	60.9	102				
Zinc	50.0	52.0000	104	60.0000	62.2	104				

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1737102-1			R1737102-4			R1737102-7		R1737102-9	
Date Analyzed:	09/05/23 06:06			09/05/23 06:30			09/05/23 07:57		09/05/23 08:55	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	50.1000	100	60.0000	61.1	102	62.8	105	64.3	107
Antimony	50.0	47.6000	95	60.0000	58.9	98	60.3	100	59.4	99
Arsenic	50.0	47.6000	95	60.0000	59.9	100	61.5	102	59.6	99
Barium	50.0	47.4000	95	60.0000	58.9	98	60.5	101	60.1	100
Beryllium	50.0	51.2000	102	60.0000	62.0	103	61.5	102	62.0	103
Cadmium	50.0	48.9000	98	60.0000	60.5	101	61.6	103	59.0	98
Calcium	5000	5130.0000	103	6000.0000	6000	100	6390	106	6330	106
Chromium	50.0	48.2000	96	60.0000	58.2	97	58.8	98	57.9	96
Cobalt	50.0	47.5000	95	60.0000	59.4	99	59.6	99	58.2	97
Copper	50.0	48.7000	97	60.0000	60.1	100	58.9	98	58.4	97
Iron	5000	4910.0000	98	6000.0000	5950	99	5980	100	5870	98
Lead	50.0	46.4000	93	60.0000	62.6	104	63.3	106	57.6	96
Magnesium	5000	5060.0000	101	6000.0000	5980	100	6180	103	6160	103
Manganese	50.0	49.5000	99	60.0000	57.7	96	58.3	97	57.6	96
Nickel	50.0	48.8000	98	60.0000	60.2	100	59.5	99	58.3	97
Potassium	5000	5050.0000	101	6000.0000	5940	99	6320	105	6340	106
Selenium	50.0	50.2000	100	60.0000	60.3	100	63.7	106	64.4	107
Silver	50.0	50.0000	100	60.0000	60.0	100	61.2	102	59.2	99
Sodium	5000	4800.0000	96	6000.0000	5940	99	6370	106	6010	100
Thallium	50.0	45.7000	91	60.0000	61.4	102	62.5	104	56.5	94
Vanadium	50.0	49.0000	98	60.0000	59.1	98	59.2	99	58.6	98
Zinc	50.0	50.2000	100	60.0000	61.0	102	62.0	103	61.1	102

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1737102-11			R1737102-14		R1737102-16	
Date Analyzed :				09/05/23 10:00			09/05/23 11:10		09/05/23 12:43	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	61.5	102	61.7	103	61.3	102
Antimony				60.0000	59.8	100	58.8	98	59.2	99
Arsenic				60.0000	61.6	103	60.4	101	61.0	102
Barium				60.0000	59.8	100	59.6	99	60.0	100
Beryllium				60.0000	62.3	104	63.4	106	63.9	106
Cadmium				60.0000	61.1	102	59.9	100	60.6	101
Calcium				6000.0000	6460	108	6260	104	6330	106
Chromium				60.0000	57.9	96	57.4	96	57.1	95
Cobalt				60.0000	59.4	99	58.9	98	59.3	99
Copper				60.0000	59.8	100	58.9	98	59.2	99
Iron				6000.0000	6010	100	5930	99	5940	99
Lead				60.0000	61.9	103	60.8	101	61.5	102
Magnesium				6000.0000	6130	102	6110	102	6260	104
Manganese				60.0000	58.0	97	56.0	93	55.8	93
Nickel				60.0000	59.4	99	58.9	98	59.4	99
Potassium				6000.0000	6520	109	6240	104	6420	107
Selenium				60.0000	64.0	107	61.5	102	61.5	102
Silver				60.0000	60.7	101	59.6	99	60.2	100
Sodium				6000.0000	6030	100	6040	101	6190	103
Thallium				60.0000	60.6	101	60.1	100	60.6	101
Vanadium				60.0000	58.8	98	58.3	97	58.0	97
Zinc				60.0000	62.3	104	61.3	102	61.2	102

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1737102-18			R1737102-20		R1737102-22	
Date Analyzed:				09/05/23 14:05			09/05/23 15:16		09/05/23 16:20	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	61.9	103	64.0	107	64.1	107
Antimony				60.0000	59.5	99	58.3	97	59.1	98
Arsenic				60.0000	62.0	103	61.1	102	60.8	101
Barium				60.0000	61.0	102	59.1	98	59.1	98
Beryllium				60.0000	64.9	108	64.6	108	64.6	108
Cadmium				60.0000	61.0	102	59.5	99	59.3	99
Calcium				6000.0000	6180	103	6410	107	6320	105
Chromium				60.0000	56.5	94	56.4	94	55.8	93
Cobalt				60.0000	58.5	98	58.2	97	57.6	96
Copper				60.0000	59.0	98	58.2	97	57.2	95
Iron				6000.0000	5910	98	5790	96	5830	97
Lead				60.0000	56.5	94	58.0	97	56.8	95
Magnesium				6000.0000	6250	104	6180	103	6270	104
Manganese				60.0000	56.2	94	55.5	92	55.5	92
Nickel				60.0000	59.2	99	57.4	96	56.7	94
Potassium				6000.0000	6380	106	6390	106	6490	108
Selenium				60.0000	64.4	107	63.3	106	64.0	107
Silver				60.0000	61.0	102	59.1	98	59.1	98
Sodium				6000.0000	6120	102	6040	101	6110	102
Thallium				60.0000	56.5	94	57.8	96	56.0	93
Vanadium				60.0000	57.7	96	57.6	96	56.8	95
Zinc				60.0000	61.1	102	60.7	101	60.4	101

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1737102-24						
Date Analyzed:				09/05/23 17:29						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	57.8	96				
Antimony				60.0000	58.8	98				
Arsenic				60.0000	59.4	99				
Barium				60.0000	58.7	98				
Beryllium				60.0000	62.0	103				
Cadmium				60.0000	58.7	98				
Calcium				6000.0000	6030	100				
Chromium				60.0000	54.7	91				
Cobalt				60.0000	57.1	95				
Copper				60.0000	57.4	96				
Iron				6000.0000	5610	94				
Lead				60.0000	59.3	99				
Magnesium				6000.0000	5840	97				
Manganese				60.0000	53.8	90				
Nickel				60.0000	57.0	95				
Potassium				6000.0000	6070	101				
Selenium				60.0000	62.4	104				
Silver				60.0000	58.6	98				
Sodium				6000.0000	5740	96				
Thallium				60.0000	58.7	98				
Vanadium				60.0000	55.5	92				
Zinc				60.0000	59.6	99				

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1737102-1			R1737102-4			R1737102-7		R1737102-9	
Date Analyzed:	09/05/23 06:06			09/05/23 06:30			09/05/23 07:57		09/05/23 08:55	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	50.1000	100	60.0000	61.1	102	62.8	105	64.3	107
Antimony	50.0	47.6000	95	60.0000	58.9	98	60.3	100	59.4	99
Arsenic	50.0	47.6000	95	60.0000	59.9	100	61.5	102	59.6	99
Barium	50.0	47.4000	95	60.0000	58.9	98	60.5	101	60.1	100
Beryllium	50.0	51.2000	102	60.0000	62.0	103	61.5	102	62.0	103
Cadmium	50.0	48.9000	98	60.0000	60.5	101	61.6	103	59.0	98
Calcium	5000	5130.0000	103	6000.0000	6000	100	6390	106	6330	106
Chromium	50.0	48.2000	96	60.0000	58.2	97	58.8	98	57.9	96
Cobalt	50.0	47.5000	95	60.0000	59.4	99	59.6	99	58.2	97
Copper	50.0	48.7000	97	60.0000	60.1	100	58.9	98	58.4	97
Iron	5000	4910.0000	98	6000.0000	5950	99	5980	100	5870	98
Lead	50.0	46.4000	93	60.0000	62.6	104	63.3	106	57.6	96
Magnesium	5000	5060.0000	101	6000.0000	5980	100	6180	103	6160	103
Manganese	50.0	49.5000	99	60.0000	57.7	96	58.3	97	57.6	96
Nickel	50.0	48.8000	98	60.0000	60.2	100	59.5	99	58.3	97
Potassium	5000	5050.0000	101	6000.0000	5940	99	6320	105	6340	106
Selenium	50.0	50.2000	100	60.0000	60.3	100	63.7	106	64.4	107
Silver	50.0	50.0000	100	60.0000	60.0	100	61.2	102	59.2	99
Sodium	5000	4800.0000	96	6000.0000	5940	99	6370	106	6010	100
Thallium	50.0	45.7000	91	60.0000	61.4	102	62.5	104	56.5	94
Vanadium	50.0	49.0000	98	60.0000	59.1	98	59.2	99	58.6	98
Zinc	50.0	50.2000	100	60.0000	61.0	102	62.0	103	61.1	102

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1737102-11			R1737102-14		R1737102-16	
Date Analyzed:				09/05/23 10:00			09/05/23 11:10		09/05/23 12:43	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	61.5	102	61.7	103	61.3	102
Antimony				60.0000	59.8	100	58.8	98	59.2	99
Arsenic				60.0000	61.6	103	60.4	101	61.0	102
Barium				60.0000	59.8	100	59.6	99	60.0	100
Beryllium				60.0000	62.3	104	63.4	106	63.9	106
Cadmium				60.0000	61.1	102	59.9	100	60.6	101
Calcium				6000.0000	6460	108	6260	104	6330	106
Chromium				60.0000	57.9	96	57.4	96	57.1	95
Cobalt				60.0000	59.4	99	58.9	98	59.3	99
Copper				60.0000	59.8	100	58.9	98	59.2	99
Iron				6000.0000	6010	100	5930	99	5940	99
Lead				60.0000	61.9	103	60.8	101	61.5	102
Magnesium				6000.0000	6130	102	6110	102	6260	104
Manganese				60.0000	58.0	97	56.0	93	55.8	93
Nickel				60.0000	59.4	99	58.9	98	59.4	99
Potassium				6000.0000	6520	109	6240	104	6420	107
Selenium				60.0000	64.0	107	61.5	102	61.5	102
Silver				60.0000	60.7	101	59.6	99	60.2	100
Sodium				6000.0000	6030	100	6040	101	6190	103
Thallium				60.0000	60.6	101	60.1	100	60.6	101
Vanadium				60.0000	58.8	98	58.3	97	58.0	97
Zinc				60.0000	62.3	104	61.3	102	61.2	102

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1737102-18			R1737102-20		R1737102-22	
Date Analyzed:				09/05/23 14:05			09/05/23 15:16		09/05/23 16:20	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	61.9	103	64.0	107	64.1	107
Antimony				60.0000	59.5	99	58.3	97	59.1	98
Arsenic				60.0000	62.0	103	61.1	102	60.8	101
Barium				60.0000	61.0	102	59.1	98	59.1	98
Beryllium				60.0000	64.9	108	64.6	108	64.6	108
Cadmium				60.0000	61.0	102	59.5	99	59.3	99
Calcium				6000.0000	6180	103	6410	107	6320	105
Chromium				60.0000	56.5	94	56.4	94	55.8	93
Cobalt				60.0000	58.5	98	58.2	97	57.6	96
Copper				60.0000	59.0	98	58.2	97	57.2	95
Iron				6000.0000	5910	98	5790	96	5830	97
Lead				60.0000	56.5	94	58.0	97	56.8	95
Magnesium				6000.0000	6250	104	6180	103	6270	104
Manganese				60.0000	56.2	94	55.5	92	55.5	92
Nickel				60.0000	59.2	99	57.4	96	56.7	94
Potassium				6000.0000	6380	106	6390	106	6490	108
Selenium				60.0000	64.4	107	63.3	106	64.0	107
Silver				60.0000	61.0	102	59.1	98	59.1	98
Sodium				6000.0000	6120	102	6040	101	6110	102
Thallium				60.0000	56.5	94	57.8	96	56.0	93
Vanadium				60.0000	57.7	96	57.6	96	56.8	95
Zinc				60.0000	61.1	102	60.7	101	60.4	101

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1740616-1			R1740616-4			R1740616-6		R1740616-8	
Date Analyzed:	09/14/23 06:21			09/14/23 06:55			09/14/23 08:15		09/14/23 09:20	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	51.1000	102	60.0000	56.3	94	61.7	103	60.0	100
Antimony	50.0	49.8000	100	60.0000	55.9	93	55.1	92	56.9	95
Arsenic	50.0	48.3000	97	60.0000	58.2	97	60.0	100	60.4	101
Barium	50.0	49.0000	98	60.0000	57.2	95	58.3	97	59.2	99
Beryllium	50.0	50.3000	101	60.0000	60.2	100	62.6	104	61.4	102
Cadmium	50.0	50.1000	100	60.0000	58.2	97	57.4	96	59.0	98
Calcium	5000	5050.0000	101	6000.0000	5600	93	5410	90	5490	92
Chromium	50.0	50.1000	100	60.0000	57.1	95	54.2	90	54.2	90
Cobalt	50.0	49.8000	100	60.0000	60.6	101	62.6	104	63.4	106
Copper	50.0	49.3000	99	60.0000	59.5	99	60.5	101	59.5	99
Iron	5000	5110.0000	102	6000.0000	5950	99	6100	102	5910	98
Lead	50.0	51.3000	103	60.0000	59.7	100	58.1	97	59.0	98
Magnesium	5000	5130.0000	103	6000.0000	5710	95	6140	102	6020	100
Manganese	50.0	52.8000	106	60.0000	56.4	94	54.7	91	57.4	96
Nickel	50.0	52.2000	104	60.0000	60.2	100	62.8	105	61.5	102
Potassium	5000	4980.0000	100	6000.0000	5550	92	5650	94	6040	101
Selenium	50.0	50.0000	100	60.0000	58.2	97	54.2	90	55.9	93
Silver	50.0	54.3000	109	60.0000	60.7	101	60.3	100	60.1	100
Sodium	5000	4890.0000	98	6000.0000	5620	94	5950	99	6000	100
Thallium	50.0	49.3000	99	60.0000	59.0	98	57.7	96	59.0	98
Vanadium	50.0	50.2000	100	60.0000	55.1	92	55.2	92	55.6	93
Zinc	50.0	50.1000	100	60.0000	59.0	98	58.8	98	58.8	98

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1740616-10			R1740616-13		R1740616-15	
Date Analyzed:				09/14/23 10:23			09/14/23 11:27		09/14/23 12:21	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	63.3	106	63.6	106	65.4	109
Antimony				60.0000	58.7	98	57.0	95	56.3	94
Arsenic				60.0000	61.2	102	61.1	102	60.6	101
Barium				60.0000	61.7	103	61.3	102	58.5	98
Beryllium				60.0000	61.2	102	61.6	103	58.3	97
Cadmium				60.0000	59.6	99	58.2	97	58.1	97
Calcium				6000.0000	5540	92	6020	100	6060	101
Chromium				60.0000	53.9	90	58.0	97	55.8	93
Cobalt				60.0000	64.1	107	64.4	107	63.5	106
Copper				60.0000	61.4	102	58.3	97	59.6	99
Iron				6000.0000	6180	103	6140	102	6360	106
Lead				60.0000	58.5	98	60.1	100	58.2	97
Magnesium				6000.0000	6230	104	6110	102	6510	108
Manganese				60.0000	56.9	95	57.1	95	60.8	101
Nickel				60.0000	64.1	107	62.0	103	61.6	103
Potassium				6000.0000	6130	102	6500	108	6820	114
Selenium				60.0000	58.6	98	57.6	96	59.0	98
Silver				60.0000	61.2	102	60.5	101	60.0	100
Sodium				6000.0000	6090	102	6580	110	6550	109
Thallium				60.0000	57.5	96	58.0	97	57.6	96
Vanadium				60.0000	54.4	91	55.0	92	57.2	95
Zinc				60.0000	60.2	100	58.5	98	59.8	100

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1740616-17			R1740616-19			R1740616-21		R1740616-23	
Date Analyzed:	09/14/23 13:46			09/14/23 14:53			09/14/23 15:33		09/14/23 16:45	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	49.5000	99	60.0000	63.1	105	61.0	102	60.1	100
Antimony	50.0	48.8000	98	60.0000	55.7	93	57.5	96	55.1	92
Arsenic	50.0	49.9000	100	60.0000	60.4	101	58.4	97	57.9	96
Barium	50.0	47.3000	95	60.0000	58.2	97	58.4	97	56.0	93
Beryllium	50.0	50.3000	101	60.0000	60.0	100	59.4	99	60.9	102
Cadmium	50.0	50.4000	101	60.0000	59.1	98	58.2	97	57.5	96
Calcium	5000	5090.0000	102	6000.0000	5860	98	5840	97	5560	93
Chromium	50.0	49.9000	100	60.0000	54.8	91	56.5	94	54.4	91
Cobalt	50.0	54.2000	108	60.0000	65.4	109	61.9	103	62.8	105
Copper	50.0	51.5000	103	60.0000	59.3	99	57.2	95	57.1	95
Iron	5000	5300.0000	106	6000.0000	6280	105	6050	101	5960	99
Lead	50.0	51.4000	103	60.0000	60.7	101	58.4	97	56.6	94
Magnesium	5000	5060.0000	101	6000.0000	6200	103	5930	99	5780	96
Manganese	50.0	53.1000	106	60.0000	57.0	95	58.1	97	56.0	93
Nickel	50.0	51.6000	103	60.0000	60.2	100	58.4	97	58.4	97
Potassium	5000	5000.0000	100	6000.0000	6400	107	6280	105	5820	97
Selenium	50.0	50.2000	100	60.0000	59.9	100	59.2	99	56.7	94
Silver	50.0	52.4000	105	60.0000	57.9	96	58.0	97	57.9	96
Sodium	5000	4980.0000	100	6000.0000	6310	105	5860	98	5980	100
Thallium	50.0	49.0000	98	60.0000	59.4	99	57.9	96	56.5	94
Vanadium	50.0	49.8000	100	60.0000	57.0	95	56.6	94	54.2	90
Zinc	50.0	51.7000	103	60.0000	61.0	102	60.0	100	58.3	97

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1740616-25			R1740616-27			
Date Analyzed:				09/14/23 17:47			09/14/23 17:57			
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	59.4	99	58.0	97		
Antimony				60.0000	56.9	95	56.9	95		
Arsenic				60.0000	59.6	99	57.6	96		
Barium				60.0000	57.3	96	57.4	96		
Beryllium				60.0000	59.7	100	60.9	102		
Cadmium				60.0000	59.8	100	59.2	99		
Calcium				6000.0000	5670	94	5790	96		
Chromium				60.0000	54.7	91	54.4	91		
Cobalt				60.0000	68.2	114	62.6	104		
Copper				60.0000	62.1	104	57.2	95		
Iron				6000.0000	6370	106	6010	100		
Lead				60.0000	58.6	98	54.1	90		
Magnesium				6000.0000	5910	98	5710	95		
Manganese				60.0000	57.3	96	56.2	94		
Nickel				60.0000	62.9	105	58.5	98		
Potassium				6000.0000	6030	100	6030	100		
Selenium				60.0000	58.1	97	57.8	96		
Silver				60.0000	59.8	100	58.5	98		
Sodium				6000.0000	6090	102	5760	96		
Thallium				60.0000	58.3	97	54.1	90		
Vanadium				60.0000	55.5	92	55.7	93		
Zinc				60.0000	61.4	102	58.9	98		

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSRQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1740682-1			R1740682-4			R1740682-6		R1740682-9	
Date Analyzed:	09/14/23 11:05			09/14/23 11:31			09/14/23 12:30		09/14/23 12:50	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum	50.0	50.7000	101	60.0000	58.7	98	60.2	100	61.9	103
Antimony	50.0	49.7000	99	60.0000	54.9	92	61.3	102	61.2	102
Arsenic	50.0	49.6000	99	60.0000	59.2	99	63.5	106	63.4	106
Barium	50.0	48.1000	96	60.0000	56.5	94	64.7	108	61.9	103
Beryllium	50.0	48.8000	98	60.0000	55.8	93	59.5	99	58.0	97
Cadmium	50.0	49.8000	100	60.0000	56.4	94	62.7	104	62.1	104
Calcium	5000	5020.0000	100	6000.0000	5950	99	6520	109	6430	107
Chromium	50.0	51.7000	103	60.0000	58.7	98	63.3	106	63.0	105
Cobalt	50.0	52.6000	105	60.0000	61.6	103	61.4	102	65.0	108
Copper	50.0	53.6000	107	60.0000	62.5	104	62.0	103	62.8	105
Iron	5000	5280.0000	106	6000.0000	6300	105	6440	107	6480	108
Lead	50.0	50.1000	100	60.0000	57.8	96	62.2	104	61.7	103
Magnesium	5000	5000.0000	100	6000.0000	5660	94	5840	97	6080	101
Manganese	50.0	53.0000	106	60.0000	60.6	101	64.8	108	64.8	108
Nickel	50.0	50.9000	102	60.0000	62.0	103	63.5	106	64.7	108
Potassium	5000	5360.0000	107	6000.0000	5920	99	6220	104	6320	105
Selenium	50.0	46.5000	93	60.0000	56.5	94	66.1	110	62.1	104
Silver	50.0	51.6000	103	60.0000	56.2	94	60.0	100	59.9	100
Sodium	5000	4870.0000	97	6000.0000	5620	94	7020	117	6540	109
Thallium	50.0	48.9000	98	60.0000	57.3	96	61.9	103	60.9	102
Vanadium	50.0	52.9000	106	60.0000	59.2	99	64.7	108	64.3	107
Zinc	50.0	53.2000	106	60.0000	59.3	99	64.2	107	65.3	109

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSRQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1740682-11			R1740682-13		R1740682-15	
Date Analyzed:				09/14/23 13:44			09/14/23 14:48		09/14/23 15:50	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	59.8	100	59.2	99	62.3	104
Antimony				60.0000	57.1	95	56.3	94	56.7	94
Arsenic				60.0000	58.3	97	56.5	94	56.1	94
Barium				60.0000	58.3	97	58.1	97	58.1	97
Beryllium				60.0000	55.9	93	56.4	94	59.3	99
Cadmium				60.0000	57.4	96	56.6	94	56.9	95
Calcium				6000.0000	6090	102	5470	91	6180	103
Chromium				60.0000	57.0	95	55.0	92	54.4	91
Cobalt				60.0000	60.3	100	59.5	99	60.2	100
Copper				60.0000	59.4	99	58.4	97	60.6	101
Iron				6000.0000	6190	103	6110	102	6340	106
Lead				60.0000	55.8	93	55.6	93	57.3	96
Magnesium				6000.0000	5790	96	5940	99	6280	105
Manganese				60.0000	60.9	102	59.5	99	63.5	106
Nickel				60.0000	60.9	102	58.8	98	61.0	102
Potassium				6000.0000	5800	97	6200	103	6430	107
Selenium				60.0000	54.7	91	59.0	98	54.6	91
Silver				60.0000	57.0	95	55.7	93	56.8	95
Sodium				6000.0000	6060	101	5910	98	6280	105
Thallium				60.0000	55.5	92	55.2	92	56.2	94
Vanadium				60.0000	58.4	97	55.7	93	55.1	92
Zinc				60.0000	59.5	99	58.8	98	59.5	99

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSRQ	**Units**	: ug/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1740682-17						
Date Analyzed :				09/14/23 16:48						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Aluminum				60.0000	57.4	96				
Antimony				60.0000	64.4	107				
Arsenic				60.0000	60.7	101				
Barium				60.0000	64.2	107				
Beryllium				60.0000	56.4	94				
Cadmium				60.0000	63.5	106				
Calcium				6000.0000	6590	110				
Chromium				60.0000	61.3	102				
Cobalt				60.0000	65.4	109				
Copper				60.0000	64.0	107				
Iron				6000.0000	6800	113				
Lead				60.0000	63.1	105				
Magnesium				6000.0000	6900	115				
Manganese				60.0000	68.0	113				
Nickel				60.0000	64.2	107				
Potassium				6000.0000	6910	115				
Selenium				60.0000	58.3	97				
Silver				60.0000	62.9	105				
Sodium				6000.0000	6760	113				
Thallium				60.0000	62.6	104				
Vanadium				60.0000	65.0	108				
Zinc				60.0000	65.0	108				

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1736897-2		R1736897-7		R1736897-9		R1736897-11		WG1822783-1	
Date Analyzed :	09/03/23 14:48		09/03/23 15:27		09/03/23 15:37		09/03/23 16:27		09/03/23 16:36	
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	mg/l	Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U	0.00327	U
Antimony	1.17	J	0.429	U	0.429	U	0.458	J	0.00042	U
Arsenic	0.165	U	0.165	U	0.165	U	0.165	U	0.00016	U
Barium	0.173	U	0.173	U	0.173	U	0.173	U	0.00017	U
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U	0.00010	U
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U	0.00005	U
Calcium	39.4	U	39.4	U	39.4	U	39.4	U	0.0394	U
Chromium	0.178	U	0.178	U	0.178	U	0.178	U	0.00017	U
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Copper	0.384	U	0.384	U	0.384	U	0.384	U	0.00038	U
Iron	19.1	U	19.1	U	19.1	U	19.1	U	0.0191	U
Lead	0.343	U	0.343	U	0.343	U	0.343	U	0.00034	U
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U	0.0242	U
Manganese	0.440	U	0.440	U	0.440	U	0.440	U	0.00044	U
Nickel	0.556	U	0.556	U	0.556	U	0.556	U	0.00055	U
Potassium	30.9	U	30.9	U	30.9	U	30.9	U	0.0309	U
Selenium	1.73	U	1.73	U	1.73	U	1.73	U	0.00173	U
Silver	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Sodium	29.3	U	29.3	U	29.3	U	29.3	U	0.0293	U
Thallium	0.282	J	0.256	J	0.315	J	0.288	J	0.00014	U
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U	0.00157	U
Zinc	3.41	U	3.41	U	3.41	U	3.41	U	0.00341	U

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1736897-4		R1736897-13		R1736897-16		R1736897-18			
Date Analyzed:	09/03/23 14:59		09/03/23 17:33		09/03/23 17:52		09/03/23 18:13			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U		
Antimony	0.598	J	0.429	U	0.429	U	0.429	U		
Arsenic	0.165	U	0.165	U	0.165	U	0.165	U		
Barium	0.173	U	0.173	U	0.173	U	0.173	U		
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U		
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U		
Calcium	39.4	U	39.4	U	39.4	U	39.4	U		
Chromium	0.178	U	0.178	U	0.178	U	0.178	U		
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U		
Copper	0.384	U	0.384	U	0.384	U	0.384	U		
Iron	19.1	U	19.1	U	19.1	U	19.1	U		
Lead	0.343	U	0.343	U	0.343	U	0.343	U		
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U		
Manganese	0.440	U	0.440	U	0.440	U	0.440	U		
Nickel	0.556	U	0.556	U	0.556	U	0.556	U		
Potassium	30.9	U	30.9	U	30.9	U	30.9	U		
Selenium	1.73	U	1.73	U	1.73	U	1.73	U		
Silver	0.163	U	0.163	U	0.163	U	0.163	U		
Sodium	29.3	U	29.3	U	29.3	U	29.3	U		
Thallium	0.143	U	0.242	J	0.334	J	0.366	J		
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U		
Zinc	3.41	U	3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1736897-20		R1736897-22							
Date Analyzed :	09/03/23 19:04		09/03/23 19:59							
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum	3.27	U	3.27	U						
Antimony	0.429	U	0.429	U						
Arsenic	0.165	J	0.165	U						
Barium	0.173	U	0.173	U						
Beryllium	0.107	U	0.107	U						
Cadmium	0.0599	U	0.0599	U						
Calcium	39.4	U	39.4	U						
Chromium	0.178	U	0.178	U						
Cobalt	0.163	U	0.163	U						
Copper	0.384	U	0.384	U						
Iron	19.1	U	19.1	U						
Lead	0.343	U	0.343	U						
Magnesium	24.2	U	24.2	U						
Manganese	0.440	U	0.440	U						
Nickel	0.556	U	0.556	U						
Potassium	30.9	U	30.9	U						
Selenium	1.73	U	1.73	U						
Silver	0.163	U	0.163	U						
Sodium	29.3	U	29.3	U						
Thallium	0.143	U	0.386	J						
Vanadium	1.57	U	1.57	U						
Zinc	3.41	U	3.41	U						

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1737102-2		R1737102-5		R1737102-6		R1737102-8		WG1822318-1	
Date Analyzed :	09/05/23 06:10		09/05/23 06:35		09/05/23 07:01		09/05/23 08:01		09/05/23 16:32	
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	mg/l	Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U	0.00327	U
Antimony	0.429	U	0.429	U	0.429	U	0.429	U	0.00042	U
Arsenic	0.188	J	0.165	U	0.165	U	0.165	U	0.00016	U
Barium	0.173	U	0.173	U	0.173	U	0.173	U	0.00017	U
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U	0.00010	U
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U	0.00005	U
Calcium	39.4	U	39.4	U	39.4	U	39.4	U	0.0394	U
Chromium	0.178	U	0.178	U	0.178	U	0.178	U	0.00017	U
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Copper	0.384	U	0.384	U	0.384	U	0.384	U	0.00038	U
Iron	19.1	U	22.0	J	19.1	U	19.1	U	0.0191	U
Lead	0.343	U	0.343	U	0.343	U	0.343	U	0.00034	U
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U	0.0242	U
Manganese	0.440	U	0.440	U	0.440	U	0.440	U	0.00044	U
Nickel	0.556	U	0.556	U	0.556	U	0.556	U	0.00055	U
Potassium	30.9	U	30.9	U	30.9	U	30.9	U	0.0309	U
Selenium	1.73	U	1.73	U	1.73	U	1.73	U	0.00173	U
Silver	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Sodium	29.3	U	29.3	U	29.3	U	29.3	U	0.0293	U
Thallium	0.292	J	0.338	J	0.143	U	0.322	J	0.00014	U
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U	0.00157	U
Zinc	3.41	U	3.41	U	3.41	U	3.41	U	0.00341	U

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1737102-10		R1737102-12		R1737102-15			
Date Analyzed :			09/05/23 09:00		09/05/23 10:05		09/05/23 11:14			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	24.3	J		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			29.3	U	29.3	U	29.3	U		
Thallium			0.358	J	0.335	J	0.282	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1737102-17		R1737102-19		R1737102-21			
Date Analyzed :			09/05/23 12:47		09/05/23 14:10		09/05/23 15:20			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.194	J	0.185	J	0.177	J		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			21.2	J	24.4	J	21.1	J		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			29.3	U	29.3	U	29.3	U		
Thallium			0.283	J	0.266	J	0.320	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)				Preparation Blank		
Lab ID :			R1737102-23		R1737102-25				
Date Analyzed :			09/05/23 16:25		09/05/23 17:34				
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	Q
Aluminum			3.27	U	3.27	U			
Antimony			0.429	U	0.429	U			
Arsenic			0.180	J	0.165	U			
Barium			0.173	U	0.173	U			
Beryllium			0.107	U	0.107	U			
Cadmium			0.0599	U	0.0599	U			
Calcium			39.4	U	39.4	U			
Chromium			0.178	U	0.178	U			
Cobalt			0.163	U	0.163	U			
Copper			0.384	U	0.384	U			
Iron			19.1	U	19.1	U			
Lead			0.343	U	0.343	U			
Magnesium			24.2	U	24.2	U			
Manganese			0.440	U	0.440	U			
Nickel			0.556	U	0.556	U			
Potassium			30.9	U	30.9	U			
Selenium			1.73	U	1.73	U			
Silver			0.163	U	0.163	U			
Sodium			29.3	U	29.3	U			
Thallium			0.290	J	0.306	J			
Vanadium			1.57	U	1.57	U			
Zinc			3.41	U	3.41	U			

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1737102-2		R1737102-5		R1737102-6		R1737102-8		WG1822316-1	
Date Analyzed :	09/05/23 06:10		09/05/23 06:35		09/05/23 07:01		09/05/23 08:01		09/05/23 15:31	
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q	mg/l	Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U	0.00327	U
Antimony	0.429	U	0.429	U	0.429	U	0.429	U	0.00042	U
Arsenic	0.188	J	0.165	U	0.165	U	0.165	U	0.00016	U
Barium	0.173	U	0.173	U	0.173	U	0.173	U	0.00017	U
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U	0.00010	U
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U	0.00005	U
Calcium	39.4	U	39.4	U	39.4	U	39.4	U	0.0482	J
Chromium	0.178	U	0.178	U	0.178	U	0.178	U	0.00017	U
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Copper	0.384	U	0.384	U	0.384	U	0.384	U	0.00038	U
Iron	19.1	U	22.0	J	19.1	U	19.1	U	0.0191	U
Lead	0.343	U	0.343	U	0.343	U	0.343	U	0.00034	U
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U	0.0242	U
Manganese	0.440	U	0.440	U	0.440	U	0.440	U	0.00044	U
Nickel	0.556	U	0.556	U	0.556	U	0.556	U	0.00055	U
Potassium	30.9	U	30.9	U	30.9	U	30.9	U	0.0309	U
Selenium	1.73	U	1.73	U	1.73	U	1.73	U	0.00173	U
Silver	0.163	U	0.163	U	0.163	U	0.163	U	0.00016	U
Sodium	29.3	U	29.3	U	29.3	U	29.3	U	0.0293	U
Thallium	0.292	J	0.338	J	0.143	U	0.322	J	0.00014	U
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U	0.00157	U
Zinc	3.41	U	3.41	U	3.41	U	3.41	U	0.00341	U

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1737102-10		R1737102-12		R1737102-15			
Date Analyzed:			09/05/23 09:00		09/05/23 10:05		09/05/23 11:14			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	24.3	J		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			29.3	U	29.3	U	29.3	U		
Thallium			0.358	J	0.335	J	0.282	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1737102-17		R1737102-19		R1737102-21			
Date Analyzed:			09/05/23 12:47		09/05/23 14:10		09/05/23 15:20			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.194	J	0.185	J	0.177	J		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			21.2	J	24.4	J	21.1	J		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			29.3	U	29.3	U	29.3	U		
Thallium			0.283	J	0.266	J	0.320	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1737102-23							
Date Analyzed :			09/05/23 16:25							
Parameter	**ug/l**	**Q**	**ug/l**	**Q**	**ug/l**	**Q**	**ug/l**	**Q**		**Q**
Aluminum			3.27	U						
Antimony			0.429	U						
Arsenic			0.180	J						
Barium			0.173	U						
Beryllium			0.107	U						
Cadmium			0.0599	U						
Calcium			39.4	U						
Chromium			0.178	U						
Cobalt			0.163	U						
Copper			0.384	U						
Iron			19.1	U						
Lead			0.343	U						
Magnesium			24.2	U						
Manganese			0.440	U						
Nickel			0.556	U						
Potassium			30.9	U						
Selenium			1.73	U						
Silver			0.163	U						
Sodium			29.3	U						
Thallium			0.290	J						
Vanadium			1.57	U						
Zinc			3.41	U						

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1740616-2		R1740616-5		R1740616-7		R1740616-9			
Date Analyzed :	09/14/23 06:26		09/14/23 07:00		09/14/23 08:20		09/14/23 09:24			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U		
Antimony	0.429	U	0.429	U	0.429	U	0.429	U		
Arsenic	0.165	U	0.165	U	0.217	J	0.169	J		
Barium	0.173	U	0.173	U	0.173	U	0.173	U		
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U		
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U		
Calcium	39.4	U	39.4	U	39.4	U	39.4	U		
Chromium	0.178	U	0.178	U	0.178	U	0.178	U		
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U		
Copper	0.384	U	0.384	U	0.384	U	0.384	U		
Iron	19.1	U	19.1	U	19.1	U	19.1	U		
Lead	0.343	U	0.343	U	0.343	U	0.343	U		
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U		
Manganese	0.440	U	0.440	U	0.440	U	0.440	U		
Nickel	0.556	U	0.556	U	0.556	U	0.556	U		
Potassium	30.9	U	30.9	U	30.9	U	30.9	U		
Selenium	1.73	U	1.73	U	1.73	U	1.73	U		
Silver	0.163	U	0.163	U	0.163	U	0.163	U		
Sodium	29.3	U	29.3	U	29.3	U	29.3	U		
Thallium	0.235	J	0.143	U	0.143	U	0.143	U		
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U		
Zinc	3.41	U	3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1740616-18		R1740616-11		R1740616-14		R1740616-16			
Date Analyzed:	09/14/23 13:51		09/14/23 10:27		09/14/23 11:31		09/14/23 12:25			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U		
Antimony	0.429	U	0.429	U	0.455	J	0.429	U		
Arsenic	0.165	U	0.177	J	0.312	J	0.208	J		
Barium	0.173	U	0.173	U	0.173	U	0.173	U		
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U		
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U		
Calcium	39.4	U	39.4	U	39.4	U	39.4	U		
Chromium	0.178	U	0.178	U	0.178	U	0.178	U		
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U		
Copper	0.384	U	0.384	U	0.384	U	0.384	U		
Iron	19.1	U	19.1	U	19.1	U	19.1	U		
Lead	0.343	U	0.343	U	0.343	U	0.343	U		
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U		
Manganese	0.440	U	0.440	U	0.440	U	0.440	U		
Nickel	0.556	U	0.556	U	0.556	U	0.556	U		
Potassium	30.9	U	30.9	U	45.5	J	36.6	J		
Selenium	1.73	U	1.73	U	1.73	U	1.73	U		
Silver	0.163	U	0.163	U	0.163	U	0.163	U		
Sodium	29.3	U	29.3	U	40.7	J	37.2	J		
Thallium	0.264	J	0.143	U	0.143	U	0.143	U		
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U		
Zinc	3.41	U	3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1740616-20		R1740616-22		R1740616-24			
Date Analyzed:			09/14/23 14:57		09/14/23 15:38		09/14/23 16:50			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.440	U		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			52.1	J	29.3	U	29.3	U		
Thallium			0.143	U	0.143	U	0.143	U		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1740616-26		R1740616-28					
Date Analyzed :			09/14/23 17:51		09/14/23 18:02					
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U				
Antimony			0.429	U	0.429	U				
Arsenic			0.165	U	0.165	U				
Barium			0.173	U	0.173	U				
Beryllium			0.107	U	0.107	U				
Cadmium			0.0599	U	0.0599	U				
Calcium			39.4	U	39.4	U				
Chromium			0.178	U	0.178	U				
Cobalt			0.163	U	0.163	U				
Copper			0.384	U	0.384	U				
Iron			19.1	U	19.1	U				
Lead			0.343	U	0.343	U				
Magnesium			24.2	U	24.2	U				
Manganese			0.440	U	0.440	U				
Nickel			0.556	U	2.29					
Potassium			30.9	U	30.9	U				
Selenium			1.73	U	1.73	U				
Silver			0.163	U	0.163	U				
Sodium			29.3	U	29.3	U				
Thallium			0.143	U	0.143	U				
Vanadium			1.57	U	1.57	U				
Zinc			3.41	U	3.41	U				

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSRQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1740682-2		R1740682-5		R1740682-7		R1740682-10			
Date Analyzed:	09/14/23 11:10		09/14/23 11:35		09/14/23 12:35		09/14/23 12:54			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum	3.27	U	3.27	U	3.27	U	3.27	U		
Antimony	0.429	U	0.429	U	0.429	U	0.429	U		
Arsenic	0.165	U	0.165	U	0.165	U	0.165	U		
Barium	0.173	U	0.173	U	0.173	U	0.173	U		
Beryllium	0.107	U	0.107	U	0.107	U	0.107	U		
Cadmium	0.0599	U	0.0599	U	0.0599	U	0.0599	U		
Calcium	39.4	U	39.4	U	160.		39.4	U		
Chromium	0.178	U	0.178	U	0.178	U	0.178	U		
Cobalt	0.163	U	0.163	U	0.163	U	0.163	U		
Copper	0.384	U	0.384	U	0.384	U	0.384	U		
Iron	19.1	U	19.1	U	19.1	U	19.1	U		
Lead	0.343	U	0.343	U	0.343	U	0.343	U		
Magnesium	24.2	U	24.2	U	24.2	U	24.2	U		
Manganese	0.440	U	0.440	U	0.440	U	0.440	U		
Nickel	0.556	U	0.556	U	0.556	U	0.556	U		
Potassium	30.9	U	30.9	U	33.2	J	30.9	U		
Selenium	1.73	U	1.73	U	1.73	U	1.73	U		
Silver	0.163	U	0.163	U	0.163	U	0.163	U		
Sodium	29.3	U	29.3	U	200.		29.3	U		
Thallium	0.232	J	0.224	J	0.225	J	0.198	J		
Vanadium	1.57	U	1.57	U	1.57	U	1.57	U		
Zinc	3.41	U	3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSRQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1740682-12		R1740682-14		R1740682-16			
Date Analyzed :			09/14/23 13:51		09/14/23 14:53		09/14/23 15:54			
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U	3.27	U	3.27	U		
Antimony			0.429	U	0.429	U	0.429	U		
Arsenic			0.165	U	0.165	U	0.165	U		
Barium			0.173	U	0.173	U	0.173	U		
Beryllium			0.107	U	0.107	U	0.107	U		
Cadmium			0.0599	U	0.0599	U	0.0599	U		
Calcium			39.4	U	39.4	U	39.4	U		
Chromium			0.178	U	0.178	U	0.178	U		
Cobalt			0.163	U	0.163	U	0.163	U		
Copper			0.384	U	0.384	U	0.384	U		
Iron			19.1	U	19.1	U	19.1	U		
Lead			0.343	U	0.343	U	0.343	U		
Magnesium			24.2	U	24.2	U	24.2	U		
Manganese			0.440	U	0.440	U	0.817	J		
Nickel			0.556	U	0.556	U	0.556	U		
Potassium			30.9	U	30.9	U	30.9	U		
Selenium			1.73	U	1.73	U	1.73	U		
Silver			0.163	U	0.163	U	0.163	U		
Sodium			29.3	U	29.3	U	29.3	U		
Thallium			0.143	U	0.180	J	0.205	J		
Vanadium			1.57	U	1.57	U	1.57	U		
Zinc			3.41	U	3.41	U	3.41	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSRQ		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1740682-18							
Date Analyzed :			09/14/23 16:52							
Parameter	ug/l	Q	ug/l	Q	ug/l	Q	ug/l	Q		Q
Aluminum			3.27	U						
Antimony			0.429	U						
Arsenic			0.165	U						
Barium			0.173	U						
Beryllium			0.107	U						
Cadmium			0.0599	U						
Calcium			39.4	U						
Chromium			0.178	U						
Cobalt			0.163	U						
Copper			0.384	U						
Iron			19.1	U						
Lead			0.343	U						
Magnesium			24.2	U						
Manganese			0.440	U						
Nickel			0.556	U						
Potassium			30.9	U						
Selenium			1.73	U						
Silver			0.163	U						
Sodium			29.3	U						
Thallium			0.206	J						
Vanadium			1.57	U						
Zinc			3.41	U						

Form 4a
Interference Check Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Concentration Units**	: ug/l

			Initial Found				Final Found			
Lab ID :			R1736897-5							
Analysis Date :			09/03/23 15:12							
Analyte	**Sol. A**	**Sol. AB**	**Sol. A**	**%R**	**Sol. AB**	**%R**	**Sol. A**	**%R**	**Sol. AB**	**%R**
Aluminum	20000		21100	106						
Antimony			0.475							
Arsenic			0.133							
Barium			0.225							
Beryllium			0.0107							
Cadmium			0.0601							
Calcium	60000		64000	107						
Chromium			0.280							
Cobalt			0.435							
Copper			0.287							
Iron	50000		57300	115						
Lead			0.367							
Magnesium	20000		21400	107						
Manganese			0.852							
Nickel			0.318							
Potassium	20000		21400	107						
Selenium			1.00							
Silver			0.00170							
Sodium	50000		51900	104						
Thallium			0.0306							
Vanadium			0.00609							
Zinc			-1.01							

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 4a
Interference Check Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R1737102-3							
Analysis Date :			09/05/23 06:21							
Analyte	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	20000		19800	99						
Antimony			0.121							
Arsenic			0.146							
Barium			0.258							
Beryllium			0.0160							
Cadmium			0.0638							
Calcium	60000		63700	106						
Chromium			0.313							
Cobalt			0.418							
Copper			0.203							
Iron	50000		54900	110						
Lead			0.290							
Magnesium	20000		21200	106						
Manganese			0.940							
Nickel			0.644							
Potassium	20000		20600	103						
Selenium			1.04							
Silver			0.00756							
Sodium	50000		49600	99						
Thallium			0.0430							
Vanadium			0.00365							
Zinc			0.715							

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 4a
Interference Check Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R1737102-3							
Analysis Date :			09/05/23 06:21							
Analyte	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	20000		19800	99						
Antimony			0.121							
Arsenic			0.146							
Barium			0.258							
Beryllium			0.0160							
Cadmium			0.0638							
Calcium	60000		63700	106						
Chromium			0.313							
Cobalt			0.418							
Copper			0.203							
Iron	50000		54900	110						
Lead			0.290							
Magnesium	20000		21200	106						
Manganese			0.940							
Nickel			0.644							
Potassium	20000		20600	103						
Selenium			1.04							
Silver			0.00756							
Sodium	50000		49600	99						
Thallium			0.0430							
Vanadium			0.00365							
Zinc			0.715							

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 4a
Interference Check Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R1740616-3							
Analysis Date :			09/14/23 06:46							
Analyte	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	20000		19900	100						
Antimony			0.126							
Arsenic			0.115							
Barium			0.230							
Beryllium			0.0129							
Cadmium			0.0772							
Calcium	60000		57300	96						
Chromium			0.361							
Cobalt			0.439							
Copper			0.245							
Iron	50000		45400	91						
Lead			0.339							
Magnesium	20000		17700	88						
Manganese			0.979							
Nickel			0.735							
Potassium	20000		19600	98						
Selenium			0.776							
Silver			0.00708							
Sodium	50000		49500	99						
Thallium			0.0309							
Vanadium			0.0241							
Zinc			0.337							

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 4a
Interference Check Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSRQ	**Concentration Units**	: ug/l

	True		Initial Found				Final Found			
Lab ID :			R1740682-3							
Analysis Date :			09/14/23 11:21							
Analyte	Sol. A	Sol. AB	Sol. A	%R	Sol. AB	%R	Sol. A	%R	Sol. AB	%R
Aluminum	20000		17100	86						
Antimony			0.0432							
Arsenic			0.0570							
Barium			0.291							
Beryllium			0.0193							
Cadmium			0.0411							
Calcium	60000		59800	100						
Chromium			0.350							
Cobalt			0.429							
Copper			0.297							
Iron	50000		50700	101						
Lead			1.01							
Magnesium	20000		19400	97						
Manganese			1.01							
Nickel			0.706							
Potassium	20000		20700	104						
Selenium			0.568							
Silver			0.00749							
Sodium	50000		48400	97						
Thallium			0.0435							
Vanadium			-0.00733							
Zinc			0.453							

Acceptance Criteria: Methods 200.7, 200.8, 6010, 6020

ICSA: 80-120%

ICSAB: 80-120%

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix**	: WATER
Lab Sample ID	: L2350269-08		
Matrix Spike	: WG1822783-3	**MS Analysis Date**	: 09/03/23 19:35
Matrix Spike Dup	: WG1822783-4	**MSD Analysis Date**	: 09/03/23 19:40

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Antimony, Total	0.00079J	0.5	0.5574	111	0.5	0.5354	107	4	75-125	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix**	: WATER
Lab Sample ID	: L2350269-08		
Matrix Spike	: WG1822783-3	**MS Analysis Date**	: 09/03/23 16:59
Matrix Spike Dup	: WG1822783-4	**MSD Analysis Date**	: 09/03/23 17:04

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Aluminum, Total	0.00748J	2	2.14	107		2	2.23	112	4	75-125	20
Arsenic, Total	0.00044J	0.12	0.1275	106		0.12	0.1315	110	3	75-125	20
Barium, Total	0.03972	2	2.016	99		2	2.080	102	3	75-125	20
Beryllium, Total	ND	0.05	0.05319	106		0.05	0.05379	108	1	75-125	20
Cadmium, Total	ND	0.053	0.05426	102		0.053	0.05521	104	2	75-125	20
Calcium, Total	44.6	10	51.2	66	Q	10	53.3	87	4	75-125	20
Chromium, Total	0.00079J	0.2	0.1887	94		0.2	0.1966	98	4	75-125	20
Cobalt, Total	0.00028J	0.5	0.4828	96		0.5	0.4959	99	3	75-125	20
Copper, Total	0.00480	0.25	0.2499	98		0.25	0.2569	101	3	75-125	20
Iron, Total	ND	1	0.987	99		1	1.06	106	7	75-125	20
Lead, Total	ND	0.53	0.6015	113		0.53	0.6170	116	3	75-125	20
Magnesium, Total	4.82	10	14.8	100		10	15.2	104	3	75-125	20
Manganese, Total	0.04738	0.5	0.5222	95		0.5	0.5478	100	5	75-125	20
Nickel, Total	0.00067J	0.5	0.4791	96		0.5	0.4960	99	3	75-125	20
Potassium, Total	37.5	10	45.2	77		10	46.7	92	3	75-125	20
Selenium, Total	ND	0.12	0.122	102		0.12	0.135	112	10	75-125	20
Silver, Total	ND	0.05	0.05038	101		0.05	0.05130	103	2	75-125	20
Sodium, Total	49.3	10	57.4	81		10	58.0	87	1	75-125	20
Thallium, Total	0.00030J	0.12	0.1124	94		0.12	0.1169	97	4	75-125	20
Vanadium, Total	ND	0.5	0.4676	94		0.5	0.4880	98	4	75-125	20
Zinc, Total	ND	0.5	0.4969	99		0.5	0.5053	101	2	75-125	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix**	: WATER
Lab Sample ID	: L2350269-08		
Matrix Spike	: WG1822318-3	**MS Analysis Date**	: 09/05/23 16:46
Matrix Spike Dup	: WG1822318-4	**MSD Analysis Date**	: 09/05/23 16:50

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Aluminum, Dissolved	0.00359J	2	2.13	106	2	2.12	106	0	75-125	20
Antimony, Dissolved	0.00064J	0.5	0.5649	113	0.5	0.5266	105	7	75-125	20
Arsenic, Dissolved	0.00054	0.12	0.1318	109	0.12	0.1306	108	1	75-125	20
Barium, Dissolved	0.03883	2	2.118	104	2	2.048	100	3	75-125	20
Beryllium, Dissolved	ND	0.05	0.05721	114	0.05	0.05575	112	3	75-125	20
Cadmium, Dissolved	ND	0.053	0.05735	108	0.053	0.05556	105	3	75-125	20
Calcium, Dissolved	42.5	10	51.8	93	10	50.4	79	3	75-125	20
Chromium, Dissolved	0.00033J	0.2	0.1927	96	0.2	0.1896	95	2	75-125	20
Cobalt, Dissolved	0.00028J	0.5	0.4875	98	0.5	0.4875	98	0	75-125	20
Copper, Dissolved	0.00436	0.25	0.2525	99	0.25	0.2542	100	1	75-125	20
Iron, Dissolved	ND	1	1.05	105	1	1.03	103	2	75-125	20
Lead, Dissolved	ND	0.53	0.5759	109	0.53	0.5568	105	3	75-125	20
Magnesium, Dissolved	4.91	10	15.1	102	10	14.9	100	1	75-125	20
Manganese, Dissolved	0.04496	0.5	0.5170	94	0.5	0.5230	96	1	75-125	20
Nickel, Dissolved	0.00095J	0.5	0.4863	97	0.5	0.4862	97	0	75-125	20
Potassium, Dissolved	37.6	10	46.5	89	10	45.0	74 Q	3	75-125	20
Selenium, Dissolved	ND	0.12	0.135	112	0.12	0.128	107	5	75-125	20
Silver, Dissolved	ND	0.05	0.05360	107	0.05	0.05227	104	3	75-125	20
Sodium, Dissolved	49.5	10	58.1	86	10	57.3	78	1	75-125	20
Thallium, Dissolved	0.00030J	0.12	0.1140	95	0.12	0.1095	91	4	75-125	20
Vanadium, Dissolved	ND	0.5	0.4854	97	0.5	0.4797	96	1	75-125	20
Zinc, Dissolved	ND	0.5	0.5239	105	0.5	0.5197	104	1	75-125	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: L2350250-01		
Matrix Spike	: WG1822316-3	**MS Analysis Date**	: 09/05/23 15:46
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Aluminum, Total	0.005J	2	2.08	104					75-125	20
Antimony, Total	0.0014J	0.5	0.4528	90					75-125	20
Arsenic, Total	0.01020	0.12	0.1391	107					75-125	20
Barium, Total	0.00181	2	2.090	104					75-125	20
Beryllium, Total	ND	0.05	0.05613	112					75-125	20
Cadmium, Total	ND	0.053	0.05669	107					75-125	20
Calcium, Total	24.1	10	33.1	90					75-125	20
Chromium, Total	0.0004J	0.2	0.1920	96					75-125	20
Cobalt, Total	ND	0.5	0.4889	98					75-125	20
Copper, Total	0.0006J	0.25	0.2486	99					75-125	20
Iron, Total	ND	1	1.04	104					75-125	20
Lead, Total	ND	0.53	0.5689	107					75-125	20
Magnesium, Total	2.26	10	12.7	104					75-125	20
Manganese, Total	ND	0.5	0.4764	95					75-125	20
Nickel, Total	ND	0.5	0.4849	97					75-125	20
Potassium, Total	3.21	10	13.8	106					75-125	20
Selenium, Total	ND	0.12	0.135	112					75-125	20
Silver, Total	ND	0.05	0.05300	106					75-125	20
Sodium, Total	5.28	10	15.5	102					75-125	20
Thallium, Total	ND	0.12	0.1133	94					75-125	20
Vanadium, Total	ND	0.5	0.4792	96					75-125	20
Zinc, Total	ND	0.5	0.5242	105					75-125	20

Form 5b
Post Digest Spike Recovery

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix**	: WATER
Lab Sample ID	: L2350269-08		
Post Spike	: WG1822318-5	**PS Analysis Date**	: 09/05/23 16:55

		Post Spike Sample			
	Sample Conc.	Spike Added	Spike Conc.	%R	Recovery Limits
Parameter	(mg/l)	(mg/l)	(mg/l)		
Potassium, Dissolved	37.6	50	87.0	99	75-125

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 09/05/23 16:01
Dup Sample ID	: WG1822316-4	**DUP Analysis Date**	: 09/05/23 15:55

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Arsenic, Total	0.01020	0.01059	4	20
Barium, Total	0.00181	0.00204	12	20
Calcium, Total	24.1	24.4	1	20
Iron, Total	ND	0.0222J	NC	20
Magnesium, Total	2.26	2.34	3	20
Manganese, Total	ND	ND	NC	20
Potassium, Total	3.21	3.21	0	20
Sodium, Total	5.28	5.42	3	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1822783-2	**LCS Analysis Date**	: 09/03/23 16:55
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Aluminum, Total	2.00	2.18	109.					80-120	20
Arsenic, Total	0.120	0.129	108.					80-120	20
Barium, Total	2.00	2.08	104.					80-120	20
Beryllium, Total	0.0500	0.0526	105.					80-120	20
Cadmium, Total	0.0530	0.0551	104.					80-120	20
Calcium, Total	10.0	10.0	100.					80-120	20
Chromium, Total	0.200	0.199	99.					80-120	20
Cobalt, Total	0.500	0.516	103.					80-120	20
Copper, Total	0.250	0.258	103.					80-120	20
Iron, Total	1.00	1.06	106.					80-120	20
Lead, Total	0.530	0.597	113.					80-120	20
Magnesium, Total	10.0	10.4	104.					80-120	20
Manganese, Total	0.500	0.509	102.					80-120	20
Nickel, Total	0.500	0.510	102.					80-120	20
Potassium, Total	10.0	10.8	108.					80-120	20
Selenium, Total	0.120	0.131	109.					80-120	20
Silver, Total	0.0500	0.0523	104.					80-120	20
Sodium, Total	10.0	10.2	102.					80-120	20
Thallium, Total	0.120	0.122	101.					80-120	20
Vanadium, Total	0.500	0.499	100.					80-120	20
Zinc, Total	0.500	0.518	104.					80-120	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1822783-2	**LCS Analysis Date**	: 09/03/23 19:27
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Antimony, Total	0.500	0.443	89.					80-120	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1822318-2	**LCS Analysis Date**	: 09/05/23 16:41
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Aluminum, Dissolved	2.00	2.19	110.					80-120	20
Antimony, Dissolved	0.500	0.466	93.					80-120	20
Arsenic, Dissolved	0.120	0.129	108.					80-120	20
Barium, Dissolved	2.00	2.15	108.					80-120	20
Beryllium, Dissolved	0.0500	0.0569	114.					80-120	20
Cadmium, Dissolved	0.0530	0.0582	110.					80-120	20
Calcium, Dissolved	10.0	9.15	92.					80-120	20
Chromium, Dissolved	0.200	0.196	98.					80-120	20
Cobalt, Dissolved	0.500	0.498	100.					80-120	20
Copper, Dissolved	0.250	0.254	101.					80-120	20
Iron, Dissolved	1.00	1.03	103.					80-120	20
Lead, Dissolved	0.530	0.606	114.					80-120	20
Magnesium, Dissolved	10.0	10.8	108.					80-120	20
Manganese, Dissolved	0.500	0.485	97.					80-120	20
Nickel, Dissolved	0.500	0.493	99.					80-120	20
Potassium, Dissolved	10.0	11.0	110.					80-120	20
Selenium, Dissolved	0.120	0.131	109.					80-120	20
Silver, Dissolved	0.0500	0.0543	109.					80-120	20
Sodium, Dissolved	10.0	10.4	104.					80-120	20
Thallium, Dissolved	0.120	0.114	94.					80-120	20
Vanadium, Dissolved	0.500	0.495	99.					80-120	20
Zinc, Dissolved	0.500	0.520	104.					80-120	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1822316-2	**LCS Analysis Date**	: 09/05/23 15:41
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Aluminum, Total	2.00	2.03	102.					80-120	20
Antimony, Total	0.500	0.426	85.					80-120	20
Arsenic, Total	0.120	0.126	105.					80-120	20
Barium, Total	2.00	1.98	99.					80-120	20
Beryllium, Total	0.0500	0.0546	109.					80-120	20
Cadmium, Total	0.0530	0.0547	103.					80-120	20
Calcium, Total	10.0	8.92	89.					80-120	20
Chromium, Total	0.200	0.188	94.					80-120	20
Cobalt, Total	0.500	0.482	96.					80-120	20
Copper, Total	0.250	0.246	98.					80-120	20
Iron, Total	1.00	1.00	100.					80-120	20
Lead, Total	0.530	0.563	106.					80-120	20
Magnesium, Total	10.0	10.3	103.					80-120	20
Manganese, Total	0.500	0.466	93.					80-120	20
Nickel, Total	0.500	0.485	97.					80-120	20
Potassium, Total	10.0	10.6	106.					80-120	20
Selenium, Total	0.120	0.131	109.					80-120	20
Silver, Total	0.0500	0.0519	104.					80-120	20
Sodium, Total	10.0	10.1	101.					80-120	20
Thallium, Total	0.120	0.111	92.					80-120	20
Vanadium, Total	0.500	0.476	95.					80-120	20
Zinc, Total	0.500	0.505	101.					80-120	20

Form 8
Serial Dilutions

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix**	: WATER
Lab Sample ID	: L2350269-08	**Analysis Date**	: 09/03/23 17:18
Serial Dilution ID	: WG1822783-6	**Analysis Date**	: 09/03/23 17:13

Parameter	Initial Sample Result (mg/l)	Serial Dilution Result (mg/l)	% Difference	%D Limit
Barium, Total	0.03972	0.03824	4	20
Calcium, Total	44.6	42.8	4	20
Magnesium, Total	4.82	4.65	4	20
Manganese, Total	0.04738	0.04715	0	20
Potassium, Total	37.5	34.6	8	20
Sodium, Total	49.3	47.0	5	20

Form 8
Serial Dilutions

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix**	: WATER
Lab Sample ID	: L2350269-08	**Analysis Date**	: 09/03/23 17:18
Serial Dilution ID	: WG1822783-6	**Analysis Date**	: 09/03/23 19:49

Parameter	Initial Sample Result (mg/l)	Serial Dilution Result (mg/l)	% Difference	%D Limit

Form 8
Serial Dilutions

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix**	: WATER
Lab Sample ID	: L2350269-08	**Analysis Date**	: 09/05/23 17:04
Serial Dilution ID	: WG1822318-6	**Analysis Date**	: 09/05/23 17:00

Parameter	Initial Sample Result (mg/l)	Serial Dilution Result (mg/l)	% Difference	%D Limit
Barium, Dissolved	0.03883	0.04013	3	20
Calcium, Dissolved	42.5	41.6	2	20
Magnesium, Dissolved	4.91	4.82	2	20
Manganese, Dissolved	0.04496	0.04582	2	20
Potassium, Dissolved	37.6	35.6	5	20
Sodium, Dissolved	49.5	48.2	3	20

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2350269-08	09/01/23 09:07	-	50
WG1822783-1	09/01/23 09:07	-	50
WG1822783-2	09/01/23 09:07	-	50
WG1822783-3	09/01/23 09:07	-	50
WG1822783-4	09/01/23 09:07	-	50
WG1822783-5	09/01/23 09:07	-	50
WG1822783-6	09/01/23 09:07	-	50

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2350269-08	09/01/23 00:03	-	50
WG1822318-1	09/01/23 00:03	-	50
WG1822318-2	09/01/23 00:03	-	50
WG1822318-3	09/01/23 00:03	-	50
WG1822318-4	09/01/23 00:03	-	50
WG1822318-5	09/01/23 00:03	-	50
WG1822318-6	09/01/23 00:03	-	50

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
WG1822316-1	08/31/23 13:36	-	50
WG1822316-2	08/31/23 13:36	-	50
WG1822316-3	08/31/23 13:36	-	50
WG1822316-4	08/31/23 13:36	-	50

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2350269-01	09/01/23 00:03	-	50
L2350269-02	09/01/23 00:03	-	50
L2350269-03	09/01/23 00:03	-	50
L2350269-04	09/01/23 00:03	-	50
L2350269-05	09/01/23 00:03	-	50
L2350269-06	09/01/23 00:03	-	50
L2350269-07	09/01/23 00:03	-	50
L2350269-09	09/01/23 00:03	-	50
L2350269-11	09/01/23 00:03	-	50

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2350269-09	09/01/23 09:07	-	50
L2350269-11	09/01/23 09:07	-	50

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 3005A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2350269-01	08/31/23 13:36	-	50
L2350269-02	08/31/23 13:36	-	50
L2350269-03	08/31/23 13:36	-	50
L2350269-04	08/31/23 13:36	-	50
L2350269-05	08/31/23 13:36	-	50
L2350269-06	08/31/23 13:36	-	50
L2350269-07	08/31/23 13:36	-	50

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 09/03/23 13:48	**End Date**	: 09/03/23 19:59

Sample Number	Dilution Factor	Analysis Time	Aluminum, Total	Antimony, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Calcium, Total	Chromium, Total	Cobalt, Total	Copper, Total	Iron, Total	Lead, Total	Magnesium, Total	Manganese, Total	Nickel, Total	Potassium, Total	Selenium, Total	Silver, Total	Sodium, Total	Thallium, Total	Vanadium, Total	Zinc, Total
R1736897-14 TUNE		13:48:00																						
R1736897-1 ICV	1	14:43:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-2 ICB	1	14:48:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-3 ICV	1	14:54:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-4 ICB	1	14:59:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-5 ICSA	1	15:12:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-6 CCV	1	15:21:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-7 CCB	1	15:27:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-8 CCV	1	15:33:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-9 CCB	1	15:37:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-10 CCV	1	16:22:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-11 CCB	1	16:27:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1822783-1 BLANK	1	16:36:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1822783-2 LCS	5	16:55:14	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1822783-3 MS	10	16:59:52	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1822783-4 MSD	10	17:04:32	X		X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1822783-5 PS	10	17:09:13																						
WG1822783-6 SERDIL	5	17:13:49				X			X						X	X		X			X			
L2350269-08	1	17:18:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-12 CCV	1	17:27:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-13 CCB	1	17:33:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-15 CCV	1	17:46:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-16 CCB	1	17:52:19	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-17 CCV	1	18:08:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-18 CCB	1	18:13:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-19 ICV	1	18:59:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1736897-20 ICB	1	19:04:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 09/03/23 13:48	**End Date**	: 09/03/23 19:59

Sample Number	Dilution Factor	Analysis Time	Aluminum, Total	Antimony, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Calcium, Total	Chromium, Total	Cobalt, Total	Copper, Total	Iron, Total	Lead, Total	Magnesium, Total	Manganese, Total	Nickel, Total	Potassium, Total	Selenium, Total	Silver, Total	Sodium, Total	Thallium, Total	Vanadium, Total	Zinc, Total				
WG1822783-2 LCS	5	19:27:35		X																								
WG1822783-3 MS	10	19:35:51		X																								
WG1822783-4 MSD	10	19:40:31		X																								
WG1822783-5 PS	10	19:45:11																										
WG1822783-6 SERDIL	5	19:49:48																										
R1736897-21 CCV	1	19:55:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				
R1736897-22 CCB	1	19:59:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X				

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 09/05/23 05:11	**End Date**	: 09/05/23 17:34

Sample Number	Dilution Factor	Analysis Time	Aluminum, Dissolved	Antimony, Dissolved	Arsenic, Dissolved	Barium, Dissolved	Beryllium, Dissolved	Cadmium, Dissolved	Calcium, Dissolved	Chromium, Dissolved	Cobalt, Dissolved	Copper, Dissolved	Iron, Dissolved	Lead, Dissolved	Magnesium, Dissolved	Manganese, Dissolved	Nickel, Dissolved	Potassium, Dissolved	Selenium, Dissolved	Silver, Dissolved	Sodium, Dissolved	Thallium, Dissolved	Vanadium, Dissolved	Zinc, Dissolved
R1737102-13 TUNE		05:11:00																						
R1737102-1 ICV	1	06:06:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-2 ICB	1	06:10:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-3 ICSA	1	06:21:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-4 CCV	1	06:30:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-5 CCB	1	06:35:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-6 CCB	1	07:01:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-7 CCV	1	07:57:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-8 CCB	1	08:01:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-9 CCV	1	08:55:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-10 CCB	1	09:00:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-11 CCV	1	10:00:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-12 CCB	1	10:05:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-14 CCV	1	11:10:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-15 CCB	1	11:14:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-16 CCV	1	12:43:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-17 CCB	1	12:47:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-18 CCV	1	14:05:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-19 CCB	1	14:10:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-20 CCV	1	15:16:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-21 CCB	1	15:20:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-22 CCV	1	16:20:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-23 CCB	1	16:25:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1822318-1 BLANK	1	16:32:16	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1822318-2 LCS	5	16:41:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1822318-3 MS	10	16:46:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1822318-4 MSD	10	16:50:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 09/05/23 05:11	**End Date**	: 09/05/23 17:34

Sample Number	Dilution Factor	Analysis Time	Aluminum, Dissolved	Antimony, Dissolved	Arsenic, Dissolved	Barium, Dissolved	Beryllium, Dissolved	Cadmium, Dissolved	Calcium, Dissolved	Chromium, Dissolved	Cobalt, Dissolved	Copper, Dissolved	Iron, Dissolved	Lead, Dissolved	Magnesium, Dissolved	Manganese, Dissolved	Nickel, Dissolved	Potassium, Dissolved	Selenium, Dissolved	Silver, Dissolved	Sodium, Dissolved	Thallium, Dissolved	Vanadium, Dissolved	Zinc, Dissolved
WG1822318-5 PS	10	16:55:34																X						
WG1822318-6 SERDIL	5	17:00:14				X			X						X	X		X			X			
L2350269-08	1	17:04:54	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-24 CCV	1	17:29:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-25 CCB	1	17:34:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 09/05/23 05:11	**End Date**	: 09/05/23 16:25

Sample Number	Dilution Factor	Analysis Time	Aluminum, Total	Antimony, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Calcium, Total	Chromium, Total	Cobalt, Total	Copper, Total	Iron, Total	Lead, Total	Magnesium, Total	Manganese, Total	Nickel, Total	Potassium, Total	Selenium, Total	Silver, Total	Sodium, Total	Thallium, Total	Vanadium, Total	Zinc, Total
R1737102-13 TUNE		05:11:00																						
R1737102-1 ICV	1	06:06:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-2 ICB	1	06:10:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-3 ICSA	1	06:21:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-4 CCV	1	06:30:41	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-5 CCB	1	06:35:23	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-6 CCB	1	07:01:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-7 CCV	1	07:57:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-8 CCB	1	08:01:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-9 CCV	1	08:55:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-10 CCB	1	09:00:27	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-11 CCV	1	10:00:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-12 CCB	1	10:05:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-14 CCV	1	11:10:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-15 CCB	1	11:14:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-16 CCV	1	12:43:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-17 CCB	1	12:47:51	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-18 CCV	1	14:05:52	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-19 CCB	1	14:10:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-20 CCV	1	15:16:05	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-21 CCB	1	15:20:48	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1822316-1 BLANK	1	15:31:46	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1822316-2 LCS	5	15:41:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1822316-3 MS	10	15:46:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
WG1822316-4 DUP	1	15:55:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-22 CCV	1	16:20:18	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1737102-23 CCB	1	16:25:01	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 09/14/23 05:25	**End Date**	: 09/14/23 18:02

Sample Number	Dilution Factor	Analysis Time	Aluminum, Dissolved	Antimony, Dissolved	Arsenic, Dissolved	Barium, Dissolved	Beryllium, Dissolved	Cadmium, Dissolved	Calcium, Dissolved	Chromium, Dissolved	Cobalt, Dissolved	Copper, Dissolved	Iron, Dissolved	Lead, Dissolved	Magnesium, Dissolved	Manganese, Dissolved	Nickel, Dissolved	Potassium, Dissolved	Selenium, Dissolved	Silver, Dissolved	Sodium, Dissolved	Thallium, Dissolved	Vanadium, Dissolved	Zinc, Dissolved
R1740616-12 TUNE		05:25:00																						
R1740616-1 ICV	1	06:21:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-2 ICB	1	06:26:38	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-3 ICSA	1	06:46:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-4 CCV	1	06:55:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-5 CCB	1	07:00:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-6 CCV	1	08:15:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-7 CCB	1	08:20:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-8 CCV	1	09:20:02	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-9 CCB	1	09:24:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-10 CCV	1	10:23:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-11 CCB	1	10:27:42	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-13 CCV	1	11:27:13	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-14 CCB	1	11:31:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-15 CCV	1	12:21:10	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-16 CCB	1	12:25:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-17 ICV	1	13:46:34	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-18 ICB	1	13:51:14	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-19 CCV	1	14:53:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-20 CCB	1	14:57:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-21 CCV	1	15:33:55	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-22 CCB	1	15:38:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-01	1	16:12:35	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-02	1	16:17:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-03	1	16:21:53	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-04	1	16:26:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-05	1	16:31:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 09/14/23 05:25	**End Date**	: 09/14/23 18:02

Sample Number	Dilution Factor	Analysis Time	Aluminum, Dissolved	Antimony, Dissolved	Arsenic, Dissolved	Barium, Dissolved	Beryllium, Dissolved	Cadmium, Dissolved	Calcium, Dissolved	Chromium, Dissolved	Cobalt, Dissolved	Copper, Dissolved	Iron, Dissolved	Lead, Dissolved	Magnesium, Dissolved	Manganese, Dissolved	Nickel, Dissolved	Potassium, Dissolved	Selenium, Dissolved	Silver, Dissolved	Sodium, Dissolved	Thallium, Dissolved	Vanadium, Dissolved	Zinc, Dissolved
L2350269-06	1	16:35:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-07	1	16:40:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-23 CCV	1	16:45:04	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-24 CCB	1	16:50:31	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-11	1	17:00:22	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-09	1	17:37:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-25 CCV	1	17:47:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-26 CCB	1	17:51:49	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-27 CCV	1	17:57:50	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740616-28 CCB	1	18:02:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSRQ	**Analysis Method**	: 1,6020B
Start Date	: 09/14/23 05:00	**End Date**	: 09/14/23 16:52

Sample Number	Dilution Factor	Analysis Time	Aluminum, Total	Antimony, Total	Arsenic, Total	Barium, Total	Beryllium, Total	Cadmium, Total	Calcium, Total	Chromium, Total	Cobalt, Total	Copper, Total	Iron, Total	Lead, Total	Magnesium, Total	Manganese, Total	Nickel, Total	Potassium, Total	Selenium, Total	Silver, Total	Sodium, Total	Thallium, Total	Vanadium, Total	Zinc, Total
R1740682-8 TUNE		05:00:00																						
R1740682-1 ICV	1	11:05:44	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-2 ICB	1	11:10:32	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-3 ICSA	1	11:21:33	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-4 CCV	1	11:31:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-5 CCB	1	11:35:57	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-6 CCV	1	12:30:47	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-7 CCB	1	12:35:37	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-9 CCV	1	12:50:06	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-10 CCB	1	12:54:56	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-11 CCV	1	13:44:29	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-12 CCB	1	13:51:26	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-11	1	13:59:20	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-09	1	14:23:08	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-13 CCV	1	14:48:17	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-14 CCB	1	14:53:07	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-15 CCV	1	15:50:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-16 CCB	1	15:54:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-01	1	16:04:25	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-02	1	16:09:11	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-03	1	16:13:58	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-04	1	16:18:45	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-05	1	16:23:30	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-06	1	16:28:15	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
L2350269-07	1	16:33:00	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-17 CCV	1	16:48:09	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
R1740682-18 CCB	1	16:52:59	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X

Form 14
ICP-MS Tune

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: R1736897-14	**Analysis Date**	: 09/03/23 13:48
ICP-MS Instrument	: iCAP Q		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.9089	0.731	0.8
115 In	114.8897	0.741	0.6
7 Li	7.0158	0.71	1.2
238 U	238.0541	0.697	0.7

Form 14
ICP-MS Tune

Client	: **Alpha Geoscience**	**Lab Number**	: **L2350269**
Project Name	: **HUNTINGTON READY MIX**	**Project Number**	: **20116**
Lab Sample ID	: **R1737102-13**	**Analysis Date**	: **09/05/23 05:11**
ICP-MS Instrument	: **iCAP Q**		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.92	0.706	1.1
115 In	114.9042	0.721	0.9
7 Li	7.0155	0.711	0.6
238 U	238.0561	0.662	0.8

Form 14
ICP-MS Tune

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: R1737102-13	**Analysis Date**	: 09/05/23 05:11
ICP-MS Instrument	: iCAP Q		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.92	0.706	1.1
115 In	114.9042	0.721	0.9
7 Li	7.0155	0.711	0.6
238 U	238.0561	0.662	0.8

Form 14
ICP-MS Tune

Client	: **Alpha Geoscience**	**Lab Number**	: **L2350269**
Project Name	: **HUNTINGTON READY MIX**	**Project Number**	: **20116**
Lab Sample ID	: **R1740616-12**	**Analysis Date**	: **09/14/23 05:25**
ICP-MS Instrument	: **iCAP Q**		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.8914	0.74	1.8
115 In	114.8295	0.804	1.1
7 Li	6.9663	0.763	1.4
238 U	237.9861	0.794	0.6

Form 14
ICP-MS Tune

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab Sample ID	: R1740682-8	**Analysis Date**	: 09/14/23 05:00
ICP-MS Instrument	: iCAP RQ		

Mass Element	Avg Measured Mass (amu)	Avg. Peak Width at 10% Peak Height (amu)	%RSD
59 Co	58.9166	0.687	1.6
115 In	114.8504	0.715	1.6
7 Li	7.0194	0.673	2.7
238 U	238.001	0.726	1.7

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 09/03/23	**End Date**	: 09/03/23

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1736897-1 ICV	14:43:49	92	94	99	98	101
R1736897-2 ICB	14:48:30	94	93	104	105	101
R1736897-3 ICV	14:54:46	94	98	105	105	110
R1736897-4 ICB	14:59:26	94	92	102	100	97
R1736897-5 ICSA	15:12:32	88	90	94	94	83
R1736897-6 CCV	15:21:50	91	98	99	98	94
R1736897-7 CCB	15:27:31	98	95	104	104	102
R1736897-8 CCV	15:33:06	95	107	111	111	112
R1736897-9 CCB	15:37:46	96	90	107	107	95
R1736897-10 CCV	16:22:22	100	107	122	114	100
R1736897-11 CCB	16:27:04	97	92	113	110	95
WG1822783-1 BLANK	16:36:11	108	100	124	119	124
WG1822783-2 LCS	16:55:14	103	100	120	118	102
WG1822783-3 MS	16:59:52	100	98	119	116	104
WG1822783-4 MSD	17:04:32	98	94	116	113	100
WG1822783-5 PS	17:09:13	96	98	110	108	97
WG1822783-6 SERDIL	17:13:49	100	98	114	109	98
L2350269-08	17:18:26	106	118	123	116	105
R1736897-12 CCV	17:27:44	106	116	122	117	103
R1736897-13 CCB	17:33:14	109	111	120	117	115
R1736897-15 CCV	17:46:22	104	109	119	115	101
R1736897-16 CCB	17:52:19	104	99	116	113	105
R1736897-17 CCV	18:08:20	114	121	126	122	106
R1736897-18 CCB	18:13:02	117	113	121	118	105
R1736897-19 ICV	18:59:54	95	101	98	97	103
R1736897-20 ICB	19:04:34	96	94	95	95	95
WG1822783-2 LCS	19:27:35	98	102	96	94	96

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 09/03/23	**End Date**	: 09/03/23

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
WG1822783-3 MS	19:35:51	99	97	103	101	107
WG1822783-4 MSD	19:40:31	97	97	97	96	96
WG1822783-5 PS	19:45:11	98	109	96	95	103
WG1822783-6 SERDIL	19:49:48	99	103	100	94	94
R1736897-21 CCV	19:55:00	94	109	98	94	96
R1736897-22 CCB	19:59:42	96	96	96	94	94

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 09/05/23	**End Date**	: 09/05/23

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1737102-1 ICV	06:06:13	102	110	108	109	114
R1737102-2 ICB	06:10:53	107	106	108	107	106
R1737102-3 ICSA	06:21:22	92	104	98	98	98
R1737102-4 CCV	06:30:41	99	114	104	105	101
R1737102-5 CCB	06:35:23	106	111	108	108	114
R1737102-6 CCB	07:01:00	119	125	113	117	146
R1737102-7 CCV	07:57:17	116	127	106	106	100
R1737102-8 CCB	08:01:59	120	117	107	110	113
R1737102-9 CCV	08:55:45	105	128	113	111	112
R1737102-10 CCB	09:00:27	111	109	110	110	104
R1737102-11 CCV	10:00:56	102	116	107	109	106
R1737102-12 CCB	10:05:38	105	105	109	110	114
R1737102-14 CCV	11:10:01	96	114	111	111	106
R1737102-15 CCB	11:14:44	99	105	113	113	117
R1737102-16 CCV	12:43:09	97	120	121	118	112
R1737102-17 CCB	12:47:51	100	112	120	122	127
R1737102-18 CCV	14:05:52	89	108	119	119	125
R1737102-19 CCB	14:10:35	93	104	120	120	130
R1737102-20 CCV	15:16:05	84	110	119	121	119
R1737102-21 CCB	15:20:48	90	98	119	117	114
R1737102-22 CCV	16:20:18	87	113	119	123	124
R1737102-23 CCB	16:25:01	91	98	120	121	128
WG1822318-1 BLANK	16:32:16	98	105	122	122	150
WG1822318-2 LCS	16:41:35	92	100	118	114	117
WG1822318-3 MS	16:46:15	90	96	116	115	112
WG1822318-4 MSD	16:50:55	92	105	118	119	116
WG1822318-5 PS	16:55:34	88	100	115	115	112

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 09/05/23	**End Date**	: 09/05/23

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
WG1822318-6 SERDIL	17:00:14	92	103	120	117	115
L2350269-08	17:04:54	91	111	120	116	110
R1737102-24 CCV	17:29:44	92	114	120	120	135
R1737102-25 CCB	17:34:26	92	101	112	117	126

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	:	**Analysis Method**	:
Start Date	: 09/05/23	**End Date**	: 09/05/23

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1737102-1 ICV	06:06:13	102	110	108	109	114
R1737102-2 ICB	06:10:53	107	106	108	107	106
R1737102-3 ICSA	06:21:22	92	104	98	98	98
R1737102-4 CCV	06:30:41	99	114	104	105	101
R1737102-5 CCB	06:35:23	106	111	108	108	114
R1737102-6 CCB	07:01:00	119	125	113	117	146
R1737102-7 CCV	07:57:17	116	127	106	106	100
R1737102-8 CCB	08:01:59	120	117	107	110	113
R1737102-9 CCV	08:55:45	105	128	113	111	112
R1737102-10 CCB	09:00:27	111	109	110	110	104
R1737102-11 CCV	10:00:56	102	116	107	109	106
R1737102-12 CCB	10:05:38	105	105	109	110	114
R1737102-14 CCV	11:10:01	96	114	111	111	106
R1737102-15 CCB	11:14:44	99	105	113	113	117
R1737102-16 CCV	12:43:09	97	120	121	118	112
R1737102-17 CCB	12:47:51	100	112	120	122	127
R1737102-18 CCV	14:05:52	89	108	119	119	125
R1737102-19 CCB	14:10:35	93	104	120	120	130
R1737102-20 CCV	15:16:05	84	110	119	121	119
R1737102-21 CCB	15:20:48	90	98	119	117	114
WG1822316-1 BLANK	15:31:46	100	108	126	122	122
WG1822316-2 LCS	15:41:57	97	113	128	126	129
WG1822316-3 MS	15:46:35	93	101	120	117	115
WG1822316-4 DUP	15:55:53	98	107	119	118	113
R1737102-22 CCV	16:20:18	87	113	119	123	124
R1737102-23 CCB	16:25:01	91	98	120	121	128

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 09/14/23	**End Date**	: 09/14/23

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1740616-1 ICV	06:21:58	112	128	116	112	117
R1740616-2 ICB	06:26:38	114	118	116	115	117
R1740616-3 ICSA	06:46:13	91	116	106	103	97
R1740616-4 CCV	06:55:32	95	111	104	102	103
R1740616-5 CCB	07:00:13	93	98	98	100	103
R1740616-6 CCV	08:15:49	82	95	100	96	98
R1740616-7 CCB	08:20:31	85	91	99	94	96
R1740616-8 CCV	09:20:02	82	102	109	101	99
R1740616-9 CCB	09:24:44	86	96	108	97	98
R1740616-10 CCV	10:23:00	85	108	104	96	98
R1740616-11 CCB	10:27:42	88	97	111	105	100
R1740616-13 CCV	11:27:13	94	118	109	102	94
R1740616-14 CCB	11:31:55	101	107	104	101	88
R1740616-15 CCV	12:21:10	111	151	119	112	103
R1740616-16 CCB	12:25:53	115	134	121	116	102
R1740616-17 ICV	13:46:34	96	104	105	104	108
R1740616-18 ICB	13:51:14	100	95	108	105	110
R1740616-19 CCV	14:53:07	78	82	95	92	90
R1740616-20 CCB	14:57:49	79	78	95	90	95
R1740616-21 CCV	15:33:55	86	96	104	96	100
R1740616-22 CCB	15:38:37	87	89	104	100	102
L2350269-01	16:12:35	72	78	89	82	80
L2350269-02	16:17:15	74	77	91	86	84
L2350269-03	16:21:53	74	77	92	85	83
L2350269-04	16:26:31	76	83	93	85	87
L2350269-05	16:31:09	79	86	99	94	95
L2350269-06	16:35:47	75	85	98	89	88

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSQ	**Analysis Method**	: 1,6020B
Start Date	: 09/14/23	**End Date**	: 09/14/23

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
L2350269-07	16:40:26	74	81	97	86	86
R1740616-23 CCV	16:45:04	75	90	100	92	94
R1740616-24 CCB	16:50:31	78	82	100	95	103
L2350269-11	17:00:22	81	89	105	101	105
L2350269-09	17:37:49	60	72	94	83	82
R1740616-25 CCV	17:47:06	69	84	94	86	90
R1740616-26 CCB	17:51:49	71	74	96	90	93
R1740616-27 CCV	17:57:50	78	93	104	95	107
R1740616-28 CCB	18:02:32	79	83	102	98	101

Form 15
ICP-MS Internal Standards Relative Intensity Summary

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: ICPMSRQ	**Analysis Method**	: 1,6020B
Start Date	: 09/14/23	**End Date**	: 09/14/23

Sample #	Time	Internal Standards %RI For:				
		Lithium	Scandium	Ge	In	Bismuth
R1740682-1 ICV	11:05:44	105	107	104	101	101
R1740682-2 ICB	11:10:32	104	103	102	102	102
R1740682-3 ICSA	11:21:33	101	115	108	102	98
R1740682-4 CCV	11:31:07	104	114	106	100	99
R1740682-5 CCB	11:35:57	105	103	101	101	98
R1740682-6 CCV	12:30:47	87	95	99	100	109
R1740682-7 CCB	12:35:37	94	97	100	101	104
R1740682-9 CCV	12:50:06	98	103	102	98	99
R1740682-10 CCB	12:54:56	105	106	106	105	106
R1740682-11 CCV	13:44:29	103	113	105	101	100
R1740682-12 CCB	13:51:26	107	110	106	104	103
L2350269-11	13:59:20	111	113	107	103	104
L2350269-09	14:23:08	103	119	119	110	108
R1740682-13 CCV	14:48:17	106	114	106	104	106
R1740682-14 CCB	14:53:07	107	103	107	104	107
R1740682-15 CCV	15:50:09	112	115	110	103	102
R1740682-16 CCB	15:54:59	116	114	116	111	110
L2350269-01	16:04:25	112	135	126	115	112
L2350269-02	16:09:11	113	123	122	113	107
L2350269-03	16:13:58	114	128	120	113	107
L2350269-04	16:18:45	107	123	118	106	105
L2350269-05	16:23:30	119	128	125	117	115
L2350269-06	16:28:15	109	121	122	111	106
L2350269-07	16:33:00	112	127	121	114	110
R1740682-17 CCV	16:48:09	112	125	117	113	112
R1740682-18 CCB	16:52:59	113	117	116	111	111

Date Created: 01/22/21
Created By: Jason Hebert
File: PM9836-1
Page: 1

METALS by 6020B (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Aluminum, Total	7429-90-5	0.01	0.00327	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Antimony, Total	7440-36-0	0.004	0.000429	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Arsenic, Total	7440-38-2	0.0005	0.000165	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Barium, Total	7440-39-3	0.0005	0.000173	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Beryllium, Total	7440-41-7	0.0005	0.000107	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Cadmium, Total	7440-43-9	0.0002	0.0000599	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Calcium, Total	7440-70-2	0.1	0.0394	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Chromium, Total	7440-47-3	0.001	0.000178	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Cobalt, Total	7440-48-4	0.0005	0.000163	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Copper, Total	7440-50-8	0.001	0.000384	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Lithium, Total	7439-93-2	0.001	0.000083	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Iron, Total	7439-89-6	0.05	0.0191	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Lead, Total	7439-92-1	0.001	0.000343	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Magnesium, Total	7439-95-4	0.07	0.0242	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Manganese, Total	7439-96-5	0.001	0.00044	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Nickel, Total	7440-02-0	0.002	0.000556	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Potassium, Total	7440-09-7	0.1	0.0309	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Selenium, Total	7782-49-2	0.005	0.00173	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Silver, Total	7440-22-4	0.0004	0.000163	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Sodium, Total	7440-23-5	0.1	0.0293	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Thallium, Total	7440-28-0	0.0005	0.000143	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Vanadium, Total	7440-62-2	0.005	0.00157	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved
Zinc, Total	7440-66-6	0.01	0.00341	mg/l	80-120		75-125	20	20		180 days	1 - Plastic 500ml HNO3 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 01/22/21
Created By: Jason Hebert
File: PM9837-1
Page: 1

METALS by 6020B (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Aluminum, Total	7429-90-5	10	1.48	mg/kg	48-151	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Antimony, Total	7440-36-0	0.16	0.01352	mg/kg	1-208	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Arsenic, Total	7440-38-2	0.05	0.0066	mg/kg	79-121	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Barium, Total	7440-39-3	0.3	0.02112	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Beryllium, Total	7440-41-7	0.03	0.00872	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Cadmium, Total	7440-43-9	0.02	0.00264	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Calcium, Total	7440-70-2	50	6.08	mg/kg	81-119	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Chromium, Total	7440-47-3	0.2	0.0468	mg/kg	80-120	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Cobalt, Total	7440-48-4	0.05	0.00532	mg/kg	84-115	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Copper, Total	7440-50-8	0.2	0.0194	mg/kg	81-118	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Iron, Total	7439-89-6	20	2.06	mg/kg	45-155	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Lead, Total	7439-92-1	0.06	0.0146	mg/kg	81-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Magnesium, Total	7439-95-4	10	1.232	mg/kg	76-124	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Manganese, Total	7439-96-5	0.2	0.0444	mg/kg	81-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Nickel, Total	7440-02-0	0.1	0.02672	mg/kg	83-117	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Potassium, Total	7440-09-7	10	1.588	mg/kg	71-129	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Selenium, Total	7782-49-2	0.2	0.0756	mg/kg	78-122	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Silver, Total	7440-22-4	0.05	0.00488	mg/kg	75-124	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Sodium, Total	7440-23-5	15	1.172	mg/kg	72-127	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Thallium, Total	7440-28-0	0.02	0.00516	mg/kg	80-120	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Vanadium, Total	7440-62-2	0.1	0.03792	mg/kg	78-122	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv
Zinc, Total	7440-66-6	1	0.26	mg/kg	82-118	20	75-125	20	20		180 days	Metals Only-Glass 60mL/2oz unpreserv

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Performance Report

System

Start time:	9/3/2023 1:48:28 PM
Instrument:	iCAP Q
Operator:	ALPHALAB\Metals-Instrument
Template:	STD AGD
Instrument Serial Number:	03031R
Last Autotune:	Autotune-SourceTune High Matrix Alpha Custom-20230627-104406597.imatdat
Solution:	1 ppb Tune B in 2% HNO3 and 0.5% HCl.

Sensitivity & Stability Test

Result	Runs	Sweeps
Passed	5	10

Sensitivity

Analyte	Result	Value	Condition	Limit
Bkg4.5	Passed	0.0 CPS	Less than	5.0 CPS
Bkg220.7	Passed	0.0 CPS	Less than	5.0 CPS
7Li	Passed	47,168.0 CPS	Greater than	10,000.0 CPS
59Co	Passed	47,629.0 CPS	Greater than	1,000.0 CPS
238U	Passed	135,712.0 CPS	Greater than	20,000.0 CPS
140Ce.16O/140Ce	Passed	0.0165	Less than	0.025
137Ba++/137Ba	Passed	0.0126	Less than	0.034
115In	Passed	82,701.0 CPS	Greater than	5,000.0 CPS

Stability

Analyte	Value	Limit
7Li	1.2%	5
59Co	0.8%	5
238U	0.7%	5
140Ce.16O	2.6%	2
140Ce	0.6%	2
115In	0.6%	5

Mass Calibration Test

Result	Channels	Dwell	MeasureWidth	PointSpacing	Sweeps
Passed	75	0.04	1.5	0.02	10

Analyte	Result	Centroid Mass [u]	Offset	Peak width [u]	Peak width min [u]	Peak width max [u]
7Li	Passed	7.0158	0.0002	0.710	0.600	0.900
59Co	Passed	58.9089	0.0243	0.731	0.600	0.900
115In	Passed	114.8897	0.0142	0.741	0.600	0.900
238U	Passed	238.0541	0.0033	0.697	0.600	0.900

Tune Settings

Parameter	Value
Additional Gas Flow 1	48.01
Additional Gas Flow 2	0.00
Additional Gas Flow 3	0.00
Angular Deflection	-374.02
Auxilliary Flow	0.80
CCT Bias	0.56
CCT Entry Lens	-89.99
CCT Exit Lens	-160.01
CCT Focus Lens	-5.63
CCT1 Flow	0.00
CCT1 Shut-Off Valve	0.00
CCT2 Flow	0.00
CCT2 Shut-Off Valve	0.00
Cool Flow	14.00
D1 Lens	-198.39
D2 Lens	-80.00
Deflection Entry Lens	-35.01
Dry Pump Speed	0.00
Extraction Lens 1 Negative	0.00
Extraction Lens 1 Polarity	0.00
Extraction Lens 1 Positive	0.00
Extraction Lens 2	-102.08
Focus Lens	21.00
Nebulizer Flow	0.38
Peristaltic Pump Speed	17.00
Plasma Power	1550.00
Pole Bias	2.99
Quad Entry Lens	-25.20
Sampling Depth	5.00
Spray Chamber Temperature	2.70
Torch Horizontal Position	-0.10
Torch Vertical Position	1.15
Virtual CCT Mass Maximum Dac Limit Set	4095.00
Virtual CCT Mass parameter b	0.65
Virtual CCT Mass to Dac Factor	130.00
Virtual CCT Mass to Dac Offset	-200.00

Vacuum Check

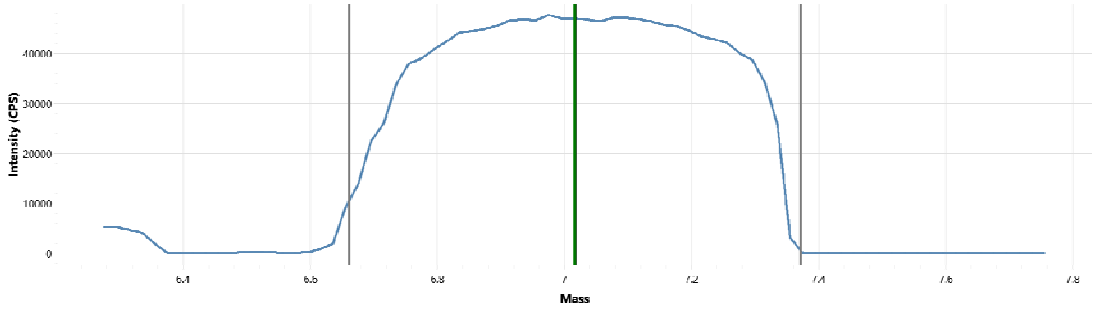
Parameter	Result	Value
Analyzer Pressure	Vacuum ok	1.676e-7
Interface Pressure		1.654e+0

Detector Voltages

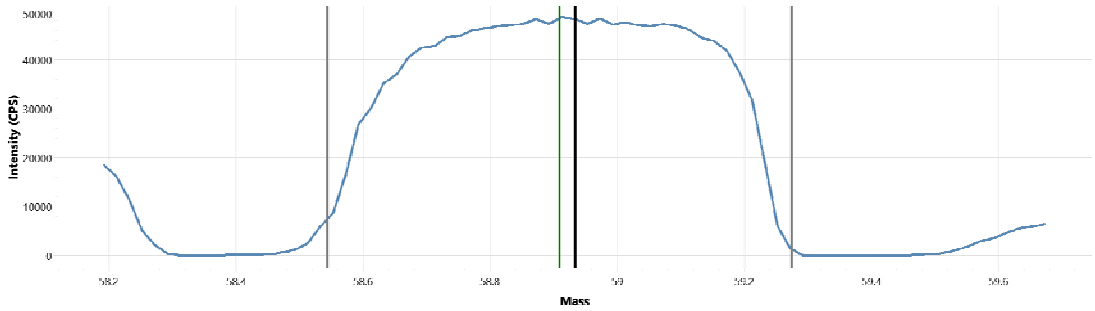
Analog	Counting
-1975.00	1325.00

Mass Calibration Peaks

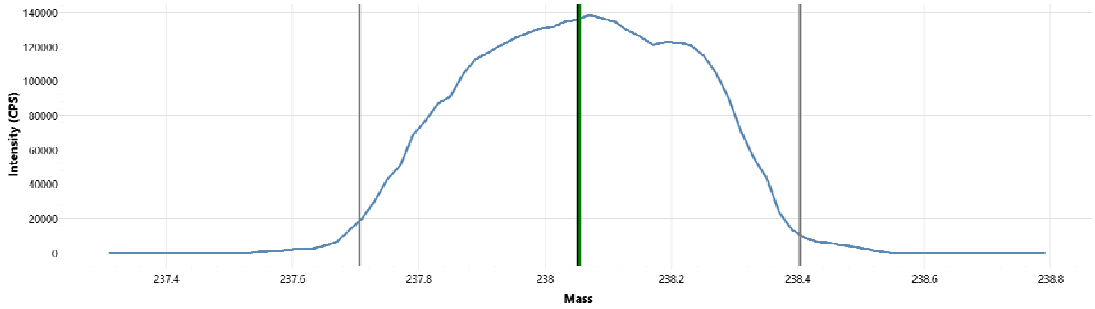
Analyte: 7Li



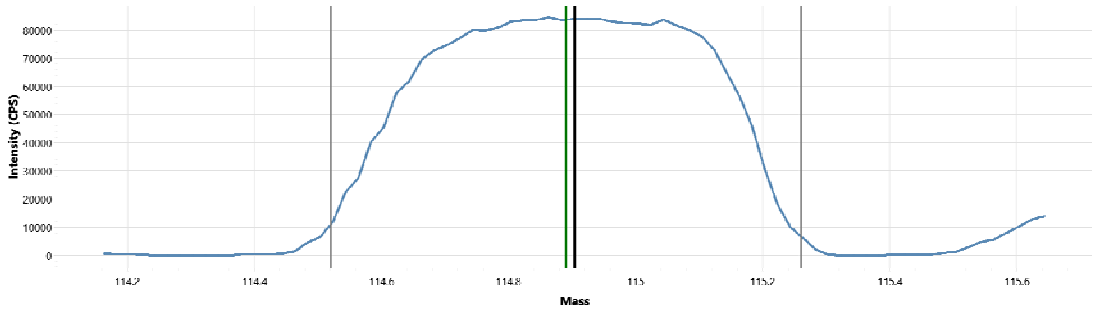
Analyte: 59Co



Analyte: 238U



Analyte: 115In



Performance Report

System

Start time:	9/5/2023 5:11:56 AM
Instrument:	iCAP Q
Operator:	ALPHALAB\Metals-Instrument
Template:	STD AGD
Instrument Serial Number:	03031R
Last Autotune:	Autotune-SourceTune High Matrix Alpha Custom-20230627-104406597.imatdat
Solution:	1 ppb Tune B in 2% HNO3 and 0.5% HCl.

Sensitivity & Stability Test

Result	Runs	Sweeps
Passed	5	10

Sensitivity

Analyte	Result	Value	Condition	Limit
Bkg4.5	Passed	0.2 CPS	Less than	5.0 CPS
Bkg220.7	Passed	0.0 CPS	Less than	5.0 CPS
7Li	Passed	39,527.0 CPS	Greater than	10,000.0 CPS
59Co	Passed	44,446.0 CPS	Greater than	1,000.0 CPS
238U	Passed	142,818.0 CPS	Greater than	20,000.0 CPS
140Ce.16O/140Ce	Passed	0.0171	Less than	0.025
137Ba++/137Ba	Passed	0.0125	Less than	0.034
115In	Passed	88,664.0 CPS	Greater than	5,000.0 CPS

Stability

Analyte	Value	Limit
7Li	0.6%	5
59Co	1.1%	5
238U	0.8%	5
140Ce.16O	2.7%	2
140Ce	0.9%	2
115In	0.9%	5

Mass Calibration Test

Result	Channels	Dwell	MeasureWidth	PointSpacing	Sweeps
Passed	75	0.04	1.5	0.02	10

Analyte	Result	Centroid Mass [u]	Offset	Peak width [u]	Peak width min [u]	Peak width max [u]
7Li	Passed	7.0155	0.0005	0.711	0.600	0.900
59Co	Passed	58.9200	0.0132	0.706	0.600	0.900
115In	Passed	114.9042	0.0003	0.721	0.600	0.900
238U	Passed	238.0561	0.0053	0.662	0.600	0.900

Tune Settings

Parameter	Value
Additional Gas Flow 1	48.01
Additional Gas Flow 2	0.00
Additional Gas Flow 3	0.00
Angular Deflection	-374.02
Auxilliary Flow	0.80
CCT Bias	0.56
CCT Entry Lens	-89.99
CCT Exit Lens	-160.01
CCT Focus Lens	-5.63
CCT1 Flow	0.00
CCT1 Shut-Off Valve	0.00
CCT2 Flow	0.00
CCT2 Shut-Off Valve	0.00
Cool Flow	14.00
D1 Lens	-198.39
D2 Lens	-80.00
Deflection Entry Lens	-35.01
Dry Pump Speed	0.00
Extraction Lens 1 Negative	0.00
Extraction Lens 1 Polarity	0.00
Extraction Lens 1 Positive	0.00
Extraction Lens 2	-102.08
Focus Lens	21.00
Nebulizer Flow	0.38
Peristaltic Pump Speed	17.00
Plasma Power	1550.00
Pole Bias	2.99
Quad Entry Lens	-25.20
Sampling Depth	5.00
Spray Chamber Temperature	2.70
Torch Horizontal Position	-0.10
Torch Vertical Position	1.15
Virtual CCT Mass Maximum Dac Limit Set	4095.00
Virtual CCT Mass parameter b	0.65
Virtual CCT Mass to Dac Factor	130.00
Virtual CCT Mass to Dac Offset	-200.00

Vacuum Check

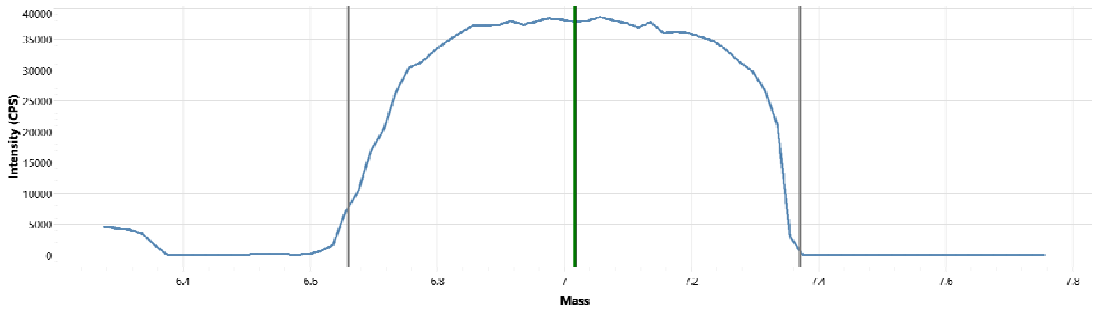
Parameter	Result	Value
Analyzer Pressure	Vacuum ok	1.532e-7
Interface Pressure		1.691e+0

Detector Voltages

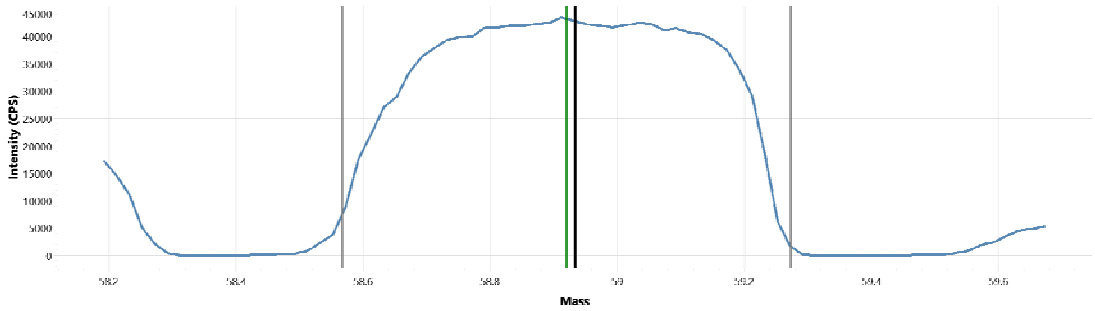
Analog	Counting
-1975.00	1325.00

Mass Calibration Peaks

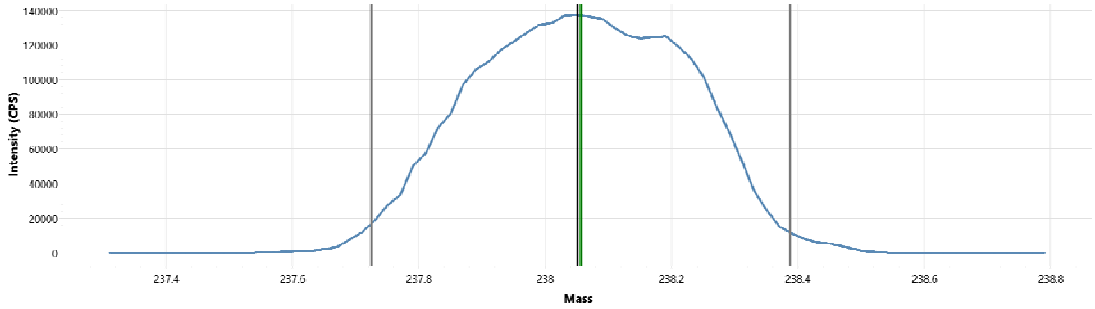
Analyte: 7Li



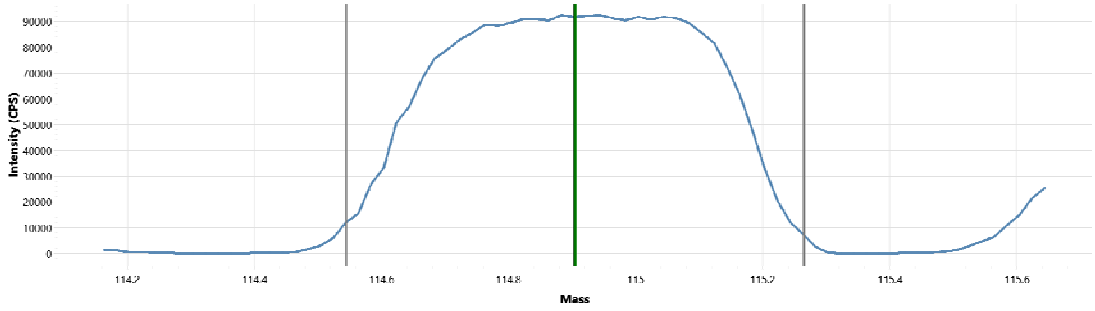
Analyte: 59Co



Analyte: 238U



Analyte: 115In



Performance Report

System

Start time:	9/14/2023 5:00:00 AM
Instrument:	iCAP RQ
Operator:	ALPHALAB\ICPMSRQ
Template:	STD_DEF
Instrument Serial Number:	RQ01904
Last Autotune:	Autotune-Alpha CustomTorch Alignment Indium ONLY STD Mode-20230908-122641848.imatdat
Solution:	No solution specified

Sensitivity & Stability Test

Result	Runs	Sweeps
Passed	5	10

Sensitivity

Analyte	Result	Value	Condition	Limit
7Li	Passed	20,610.0 CPS	Greater than	10,000.0 CPS
59Co	Passed	63,664.0 CPS	Greater than	1,000.0 CPS
238U	Passed	52,900.0 CPS	Greater than	20,000.0 CPS
140Ce.16O/140Ce	Passed	0.0222	Less than	0.025
137Ba++/137Ba	Passed	0.0229	Less than	0.034
115In	Passed	56,745.0 CPS	Greater than	5,000.0 CPS

Stability

Analyte	Value	Limit
7Li	2.7%	5
59Co	1.6%	5
238U	1.7%	5
115In	1.6%	5

Mass Calibration Test

Result	Channels	Dwell	MeasureWidth	PointSpacing	Sweeps
Passed	75	0.04	1.5	0.02	10

Analyte	Result	Centroid Mass [u]	Offset	Peak width [u]	Peak width min [u]	Peak width max [u]
7Li	Passed	7.0194	0.0034	0.673	0.600	0.900
59Co	Passed	58.9166	0.0166	0.687	0.600	0.900
115In	Passed	114.8504	0.0535	0.715	0.600	0.900
238U	Passed	238.0010	0.0498	0.726	0.600	0.900

Tune Settings

Parameter	Value
Additional Gas Flow 1	0.00
Additional Gas Flow 2	0.00
Additional Gas Flow 3	0.00
Angular Deflection	-382.40
Auxilliary Flow	0.80
CCT Bias	-3.55
CCT Entry Lens	-102.01
CCT Exit Lens	-160.01
CCT Focus Lens	-2.86
CCT1 Flow	0.00
CCT1 Shut-Off Valve	0.00
CCT2 Flow	0.00
CCT2 Shut-Off Valve	0.00
Cool Flow	14.00
D1 Lens	-210.01
D2 Lens	-80.00
Deflection Entry Lens	-35.01
Dry Pump Speed	100.00
Extraction Lens 1 Negative	0.00
Extraction Lens 1 Polarity	0.00
Extraction Lens 1 Positive	0.00
Extraction Lens 2	-139.44
Focus Lens	21.00
Nebulizer Flow	0.92
Peristaltic Pump Speed	17.00
Plasma Power	1549.58
Pole Bias	-0.93
Quad Entry Lens	-30.79
Sampling Depth	5.00
Spray Chamber Temperature	2.68
Torch Horizontal Position	-0.87
Torch Vertical Position	-0.87
Virtual CCT Mass Maximum Dac Limit Set	4095.00
Virtual CCT Mass parameter b	0.65
Virtual CCT Mass to Dac Factor	130.00
Virtual CCT Mass to Dac Offset	-45.00

Vacuum Check

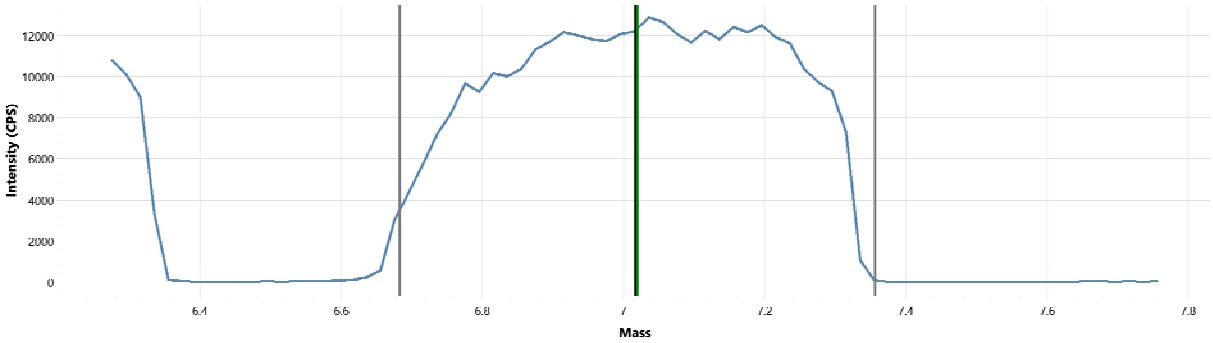
Parameter	Result	Value
Analyzer Pressure	Vacuum ok	3.445e-7
Interface Pressure		1.730e+0

Detector Voltages

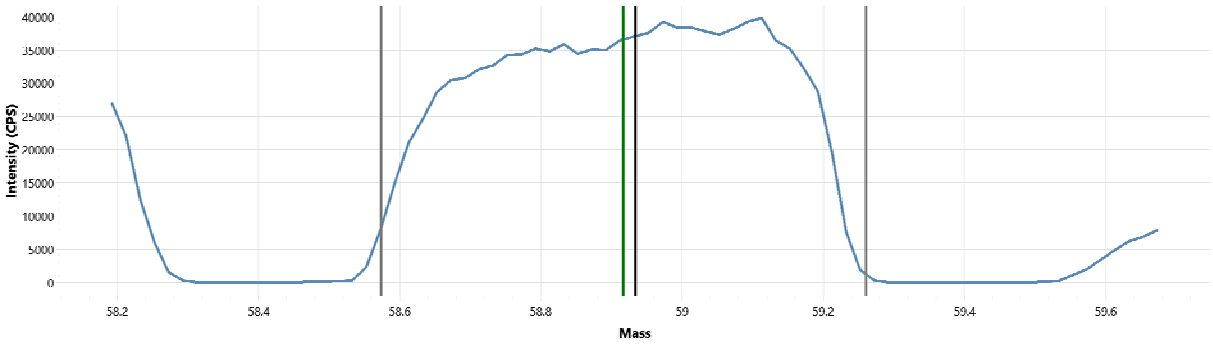
Analog	Counting
-1975.00	1250.00

Mass Calibration Peaks

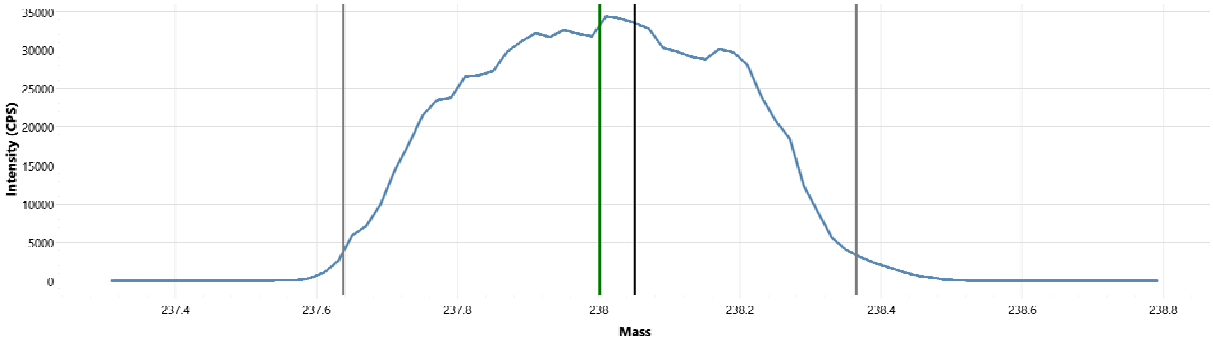
Analyte: 7Li



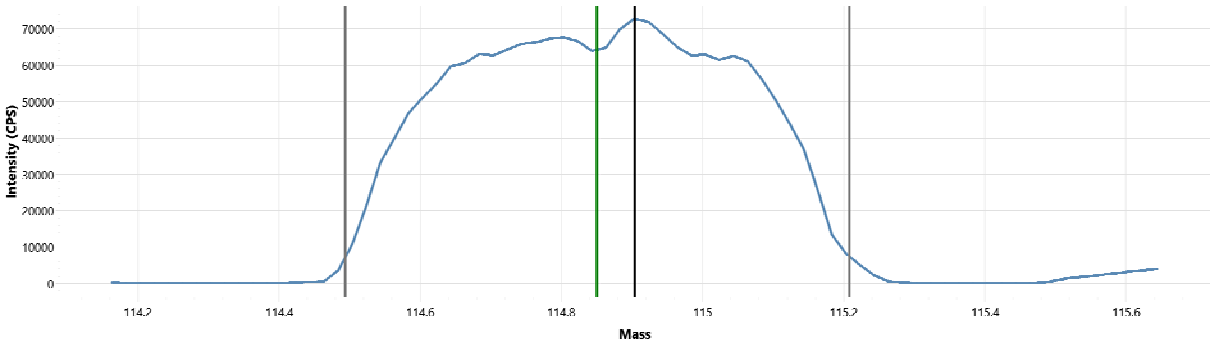
Analyte: 59Co



Analyte: 238U



Analyte: 115In



Performance Report

System

Start time:	9/14/2023 5:25:16 AM
Instrument:	iCAP Q
Operator:	ALPHALAB\Metals-Instrument
Template:	STD AGD
Instrument Serial Number:	03031R
Last Autotune:	Autotune-SourceTune High Matrix-20230912-162143260.imatdat
Solution:	1 ppb Tune B in 2% HNO3 and 0.5% HCl.

Sensitivity & Stability Test

Result	Runs	Sweeps
Passed	5	10

Sensitivity

Analyte	Result	Value	Condition	Limit
Bkg4.5	Passed	1.6 CPS	Less than	5.0 CPS
Bkg220.7	Passed	0.2 CPS	Less than	5.0 CPS
7Li	Passed	27,984.0 CPS	Greater than	10,000.0 CPS
59Co	Passed	53,360.0 CPS	Greater than	1,000.0 CPS
238U	Passed	85,825.0 CPS	Greater than	20,000.0 CPS
140Ce.16O/140Ce	Passed	0.0098	Less than	0.025
137Ba++/137Ba	Passed	0.0282	Less than	0.034
115In	Passed	54,661.0 CPS	Greater than	5,000.0 CPS

Stability

Analyte	Value	Limit
7Li	1.4%	5
59Co	1.8%	5
238U	0.6%	5
140Ce.16O	2.6%	2
140Ce	1.0%	2
115In	1.1%	5

Mass Calibration Test

Result	Channels	Dwell	MeasureWidth	PointSpacing	Sweeps
Passed	75	0.04	1.5	0.02	10

Analyte	Result	Centroid Mass [u]	Offset	Peak width [u]	Peak width min [u]	Peak width max [u]
7Li	Passed	6.9663	0.0497	0.763	0.600	0.900
59Co	Passed	58.8914	0.0418	0.740	0.600	0.900
115In	Passed	114.8295	0.0744	0.804	0.600	0.900
238U	Passed	237.9861	0.0647	0.794	0.600	0.900

Tune Settings

Parameter	Value
Additional Gas Flow 1	45.00
Additional Gas Flow 2	0.00
Additional Gas Flow 3	0.00
Angular Deflection	-374.00
Auxilliary Flow	0.80
CCT Bias	0.56
CCT Entry Lens	-89.99
CCT Exit Lens	-160.01
CCT Focus Lens	-4.44
CCT1 Flow	0.00
CCT1 Shut-Off Valve	0.00
CCT2 Flow	0.00
CCT2 Shut-Off Valve	0.00
Cool Flow	14.00
D1 Lens	-198.39
D2 Lens	-80.00
Deflection Entry Lens	-35.00
Dry Pump Speed	0.00
Extraction Lens 1 Negative	0.00
Extraction Lens 1 Polarity	0.00
Extraction Lens 1 Positive	0.00
Extraction Lens 2	-105.30
Focus Lens	21.00
Nebulizer Flow	0.40
Peristaltic Pump Speed	17.00
Plasma Power	1550.00
Pole Bias	2.99
Quad Entry Lens	-25.20
Sampling Depth	5.00
Spray Chamber Temperature	2.70
Torch Horizontal Position	-0.11
Torch Vertical Position	1.42
Virtual CCT Mass Maximum Dac Limit Set	4095.00
Virtual CCT Mass parameter b	0.65
Virtual CCT Mass to Dac Factor	130.00
Virtual CCT Mass to Dac Offset	-200.00

Vacuum Check

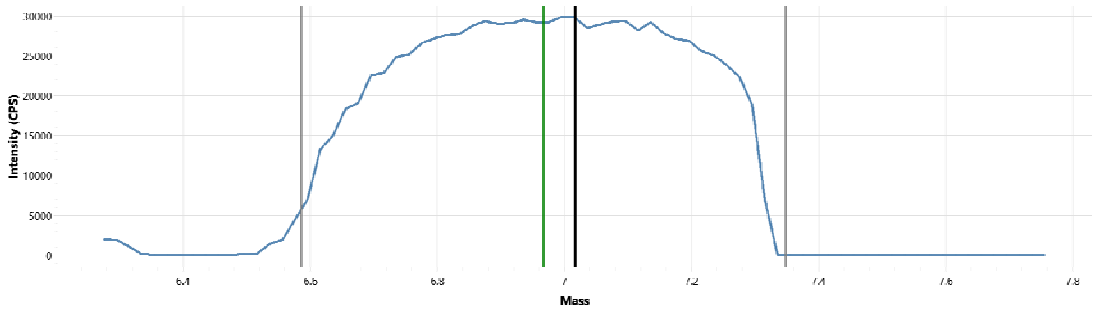
Parameter	Result	Value
Analyzer Pressure	Vacuum ok	3.445e-7
Interface Pressure		1.546e+0

Detector Voltages

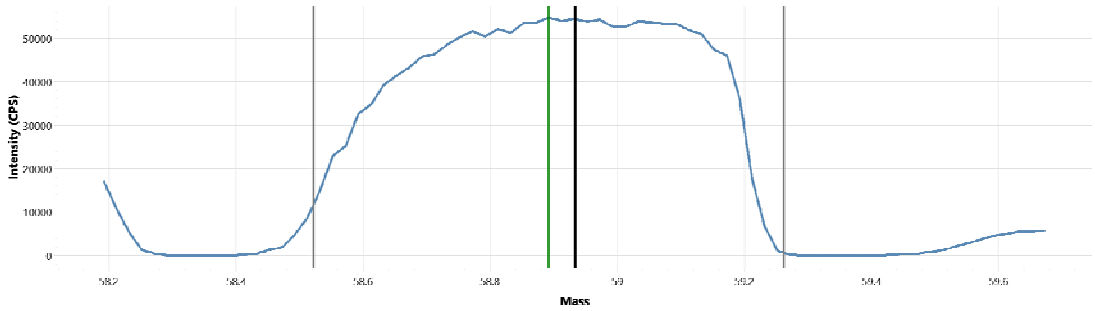
Analog	Counting
-2100.00	1725.00

Mass Calibration Peaks

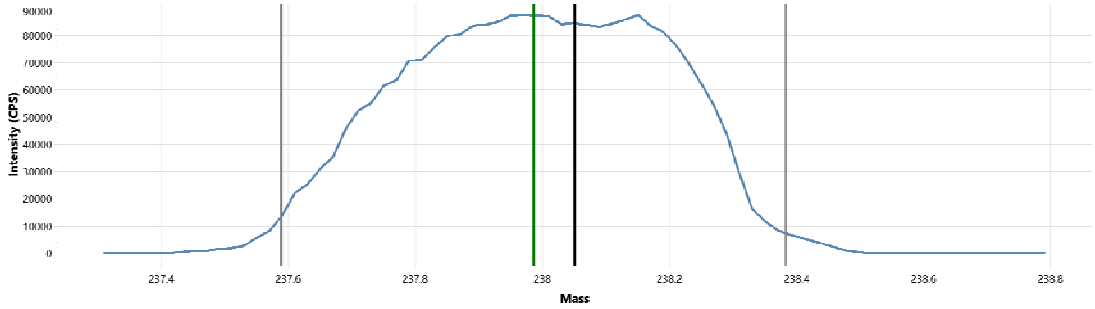
Analyte: 7Li



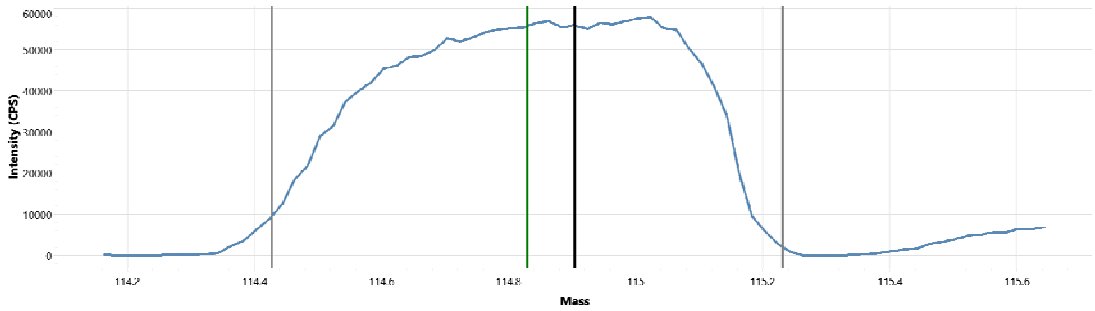
Analyte: 59Co



Analyte: 238U

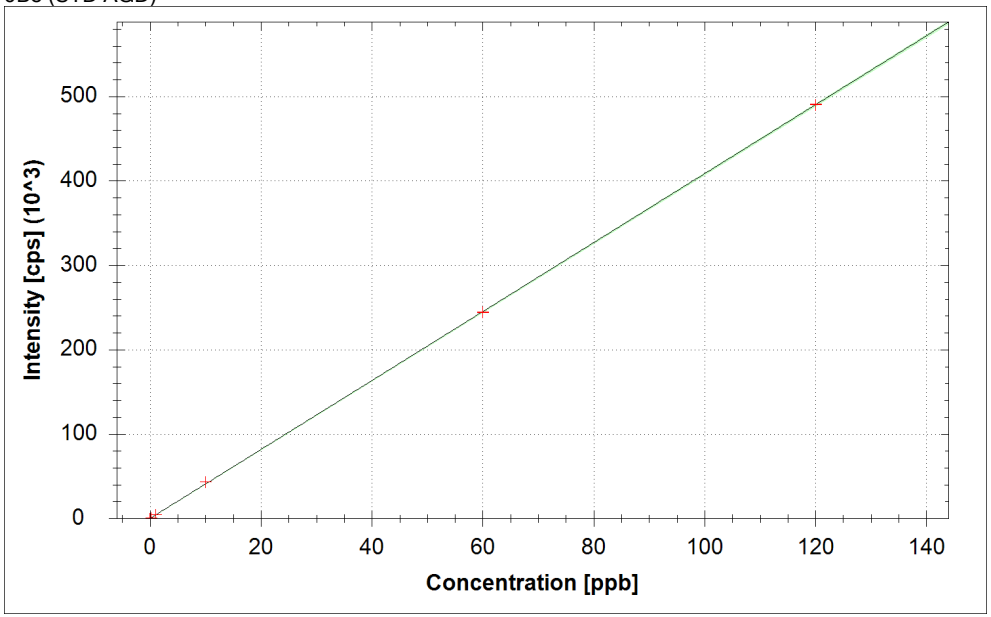


Analyte: 115In



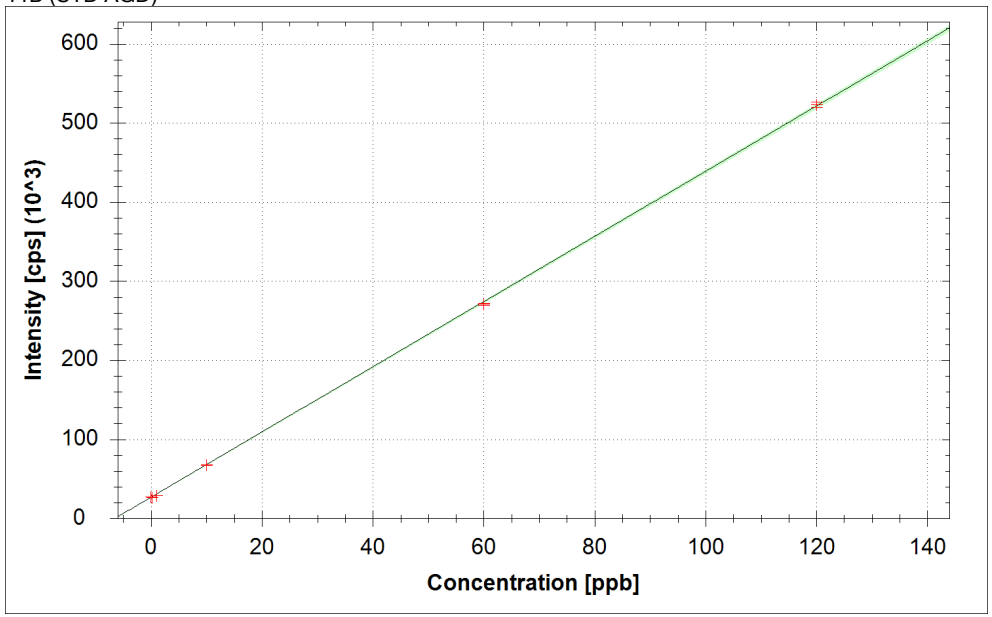
Calibration Curves:

9Be (STD AGD)



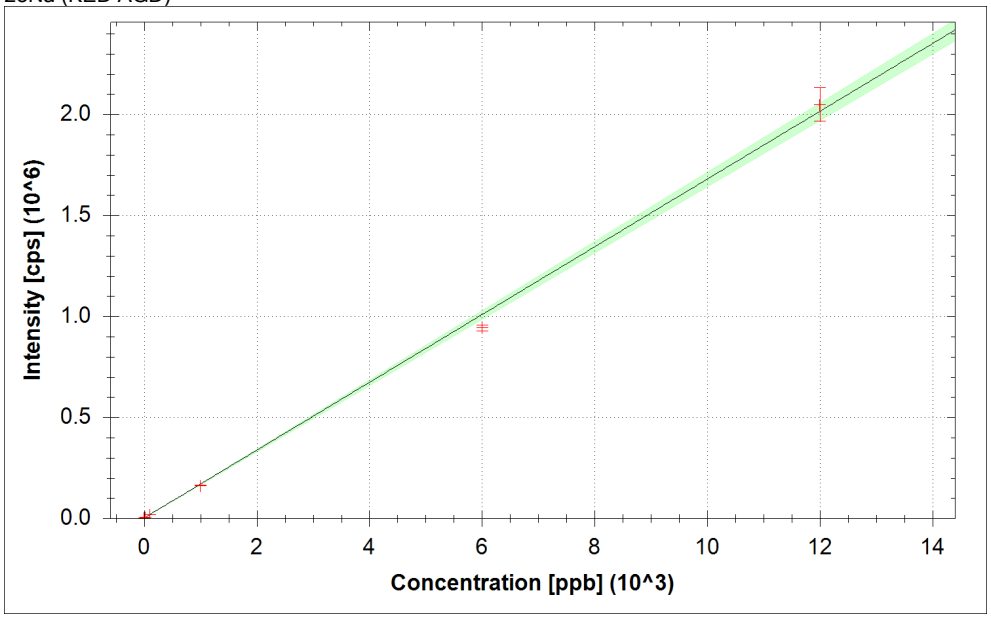
f(x) = 4084.0183*x + 20.0156
R² = 1.0000
BEC = 0.005 ppb
LoD = 0.0049 ppb

11B (STD AGD)



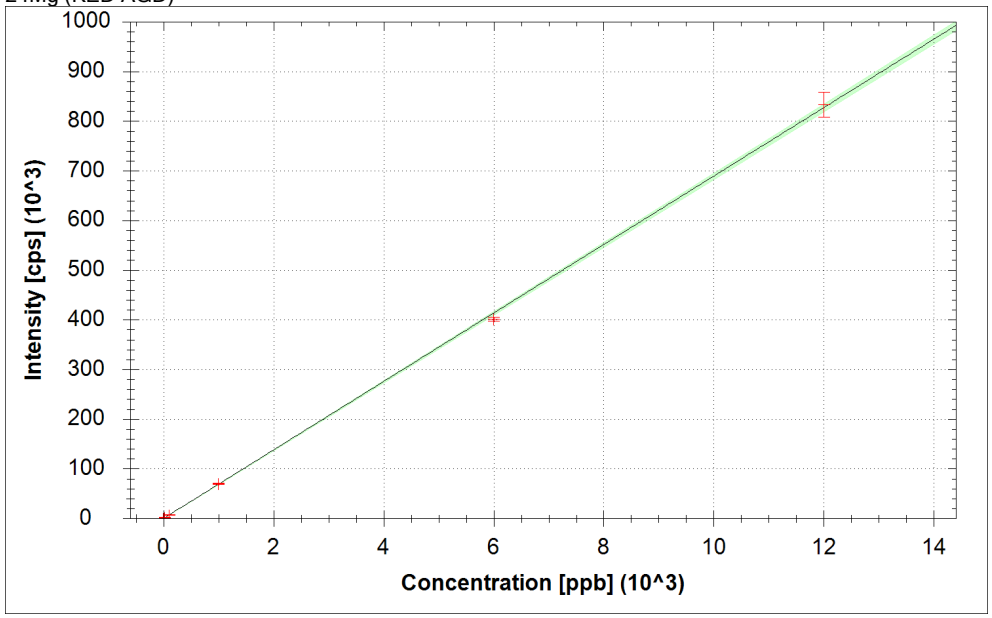
f(x) = 4119.2671*x + 26986.1104
R² = 0.9999
BEC = 6.551 ppb
LoD = 0.1086 ppb

23Na (KED AGD)



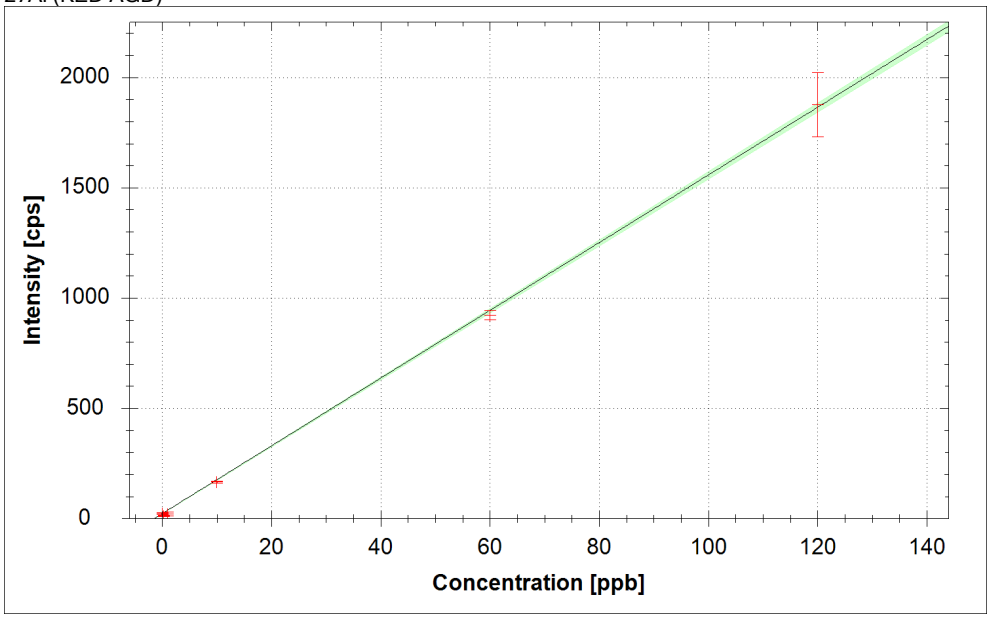
f(x) = 167.7031*x + 2617.4545
R² = 0.9984
BEC = 15.608 ppb
LoD = 2.1533 ppb

24Mg (KED AGD)



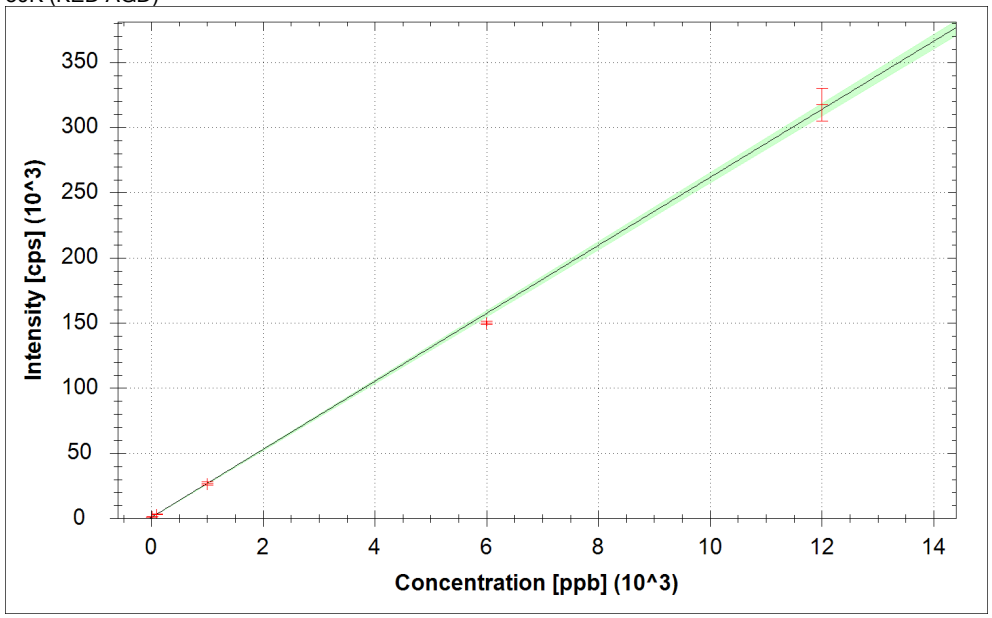
f(x) = 68.9247*x + 73.5764
R² = 0.9997
BEC = 1.067 ppb
LoD = 0.4088 ppb

27Al (KED AGD)



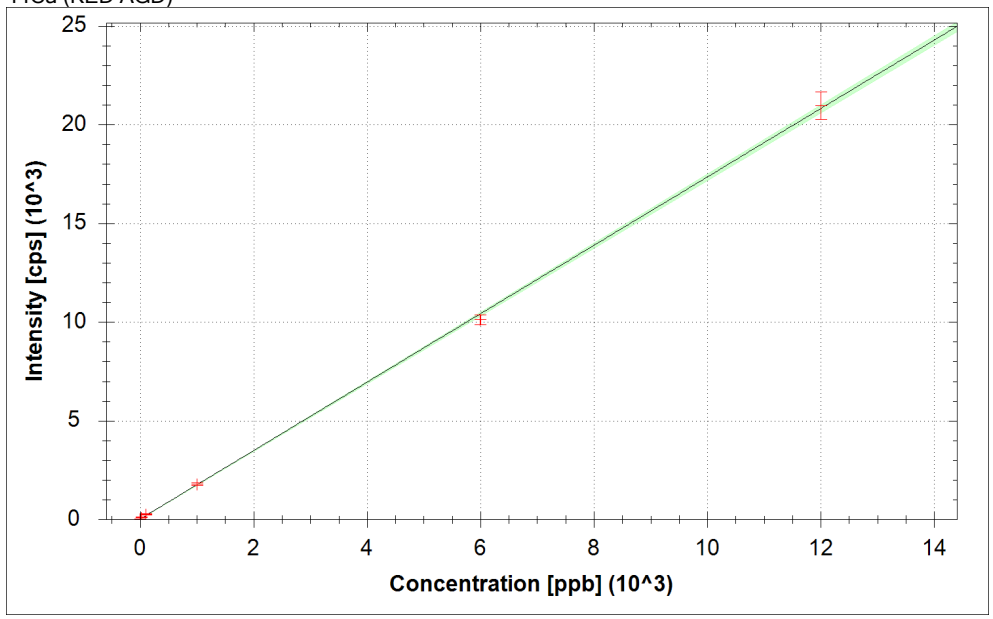
f(x) = 15.3487*x + 22.1655
R² = 0.9996
BEC = 1.444 ppb
LoD = 0.9552 ppb

39K (KED AGD)



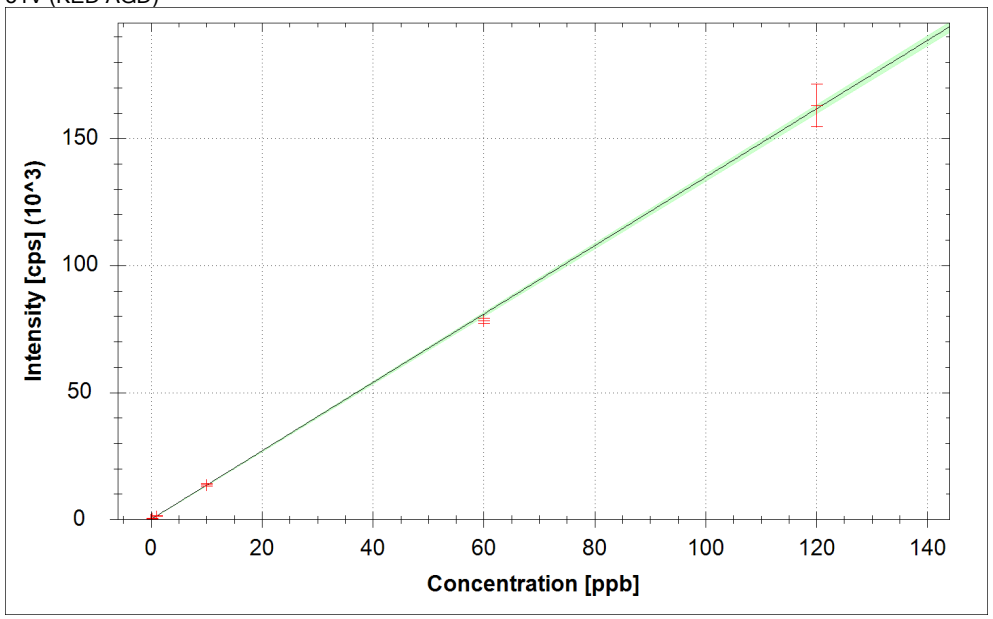
f(x) = 26.0832*x + 813.3843
R² = 0.9992
BEC = 31.184 ppb
LoD = 6.6621 ppb

44Ca (KED AGD)



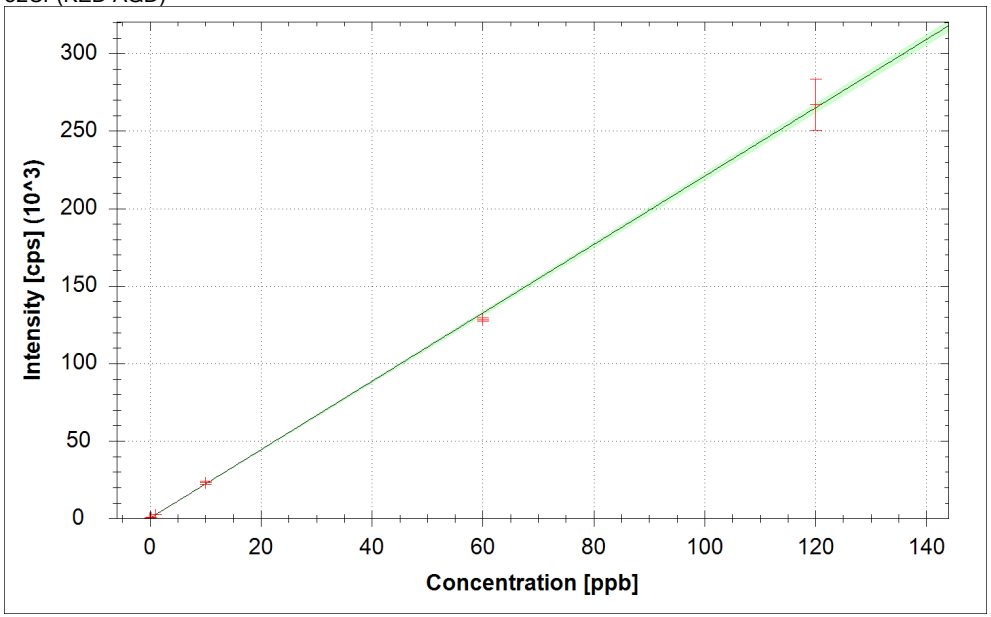
f(x) = 1.7325*x + 22.1668
R² = 0.9997
BEC = 12.795 ppb
LoD = 1.0697 ppb

51V (KED AGD)



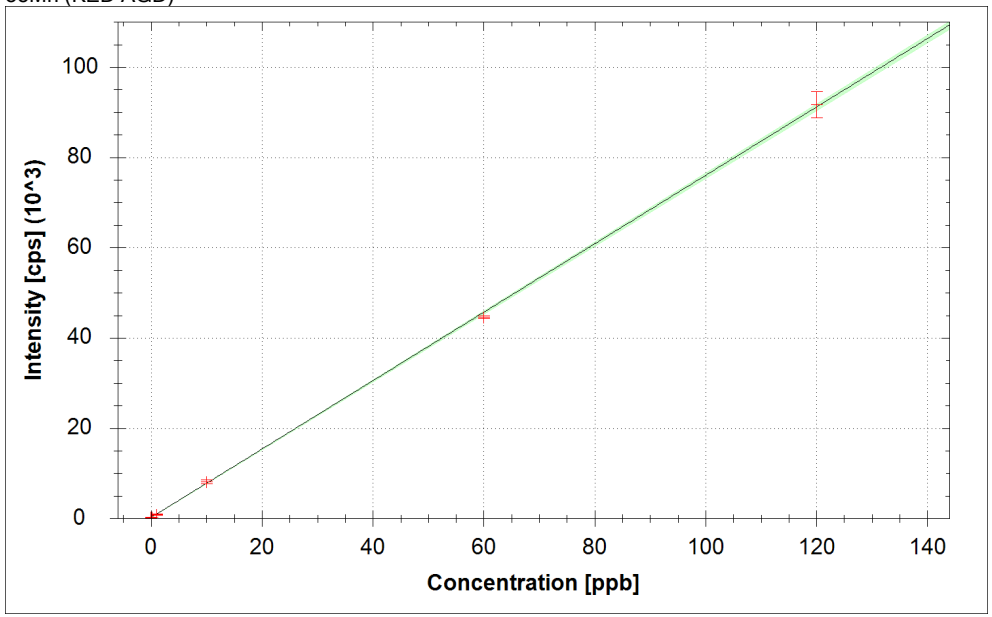
f(x) = 1346.3351*x + 42.2047
R² = 0.9996
BEC = 0.031 ppb
LoD = 0.0049 ppb

52Cr (KED AGD)



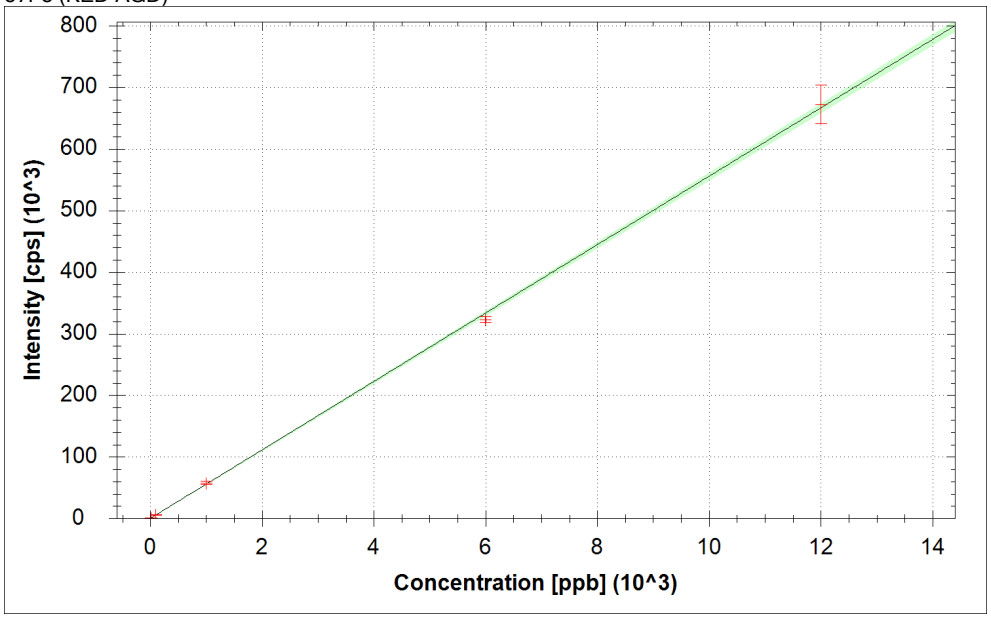
f(x) = 2205.5409*x + 192.5775
R² = 0.9996
BEC = 0.087 ppb
LoD = 0.0439 ppb

55Mn (KED AGD)



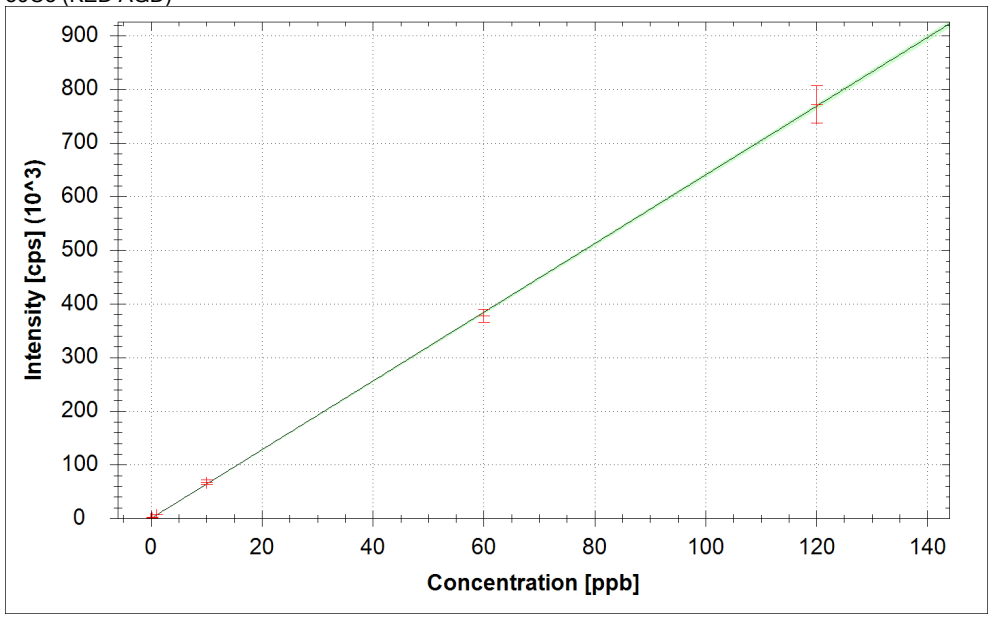
f(x) = 757.6990*x + 220.2243
R² = 0.9998
BEC = 0.291 ppb
LoD = 0.2140 ppb

57Fe (KED AGD)



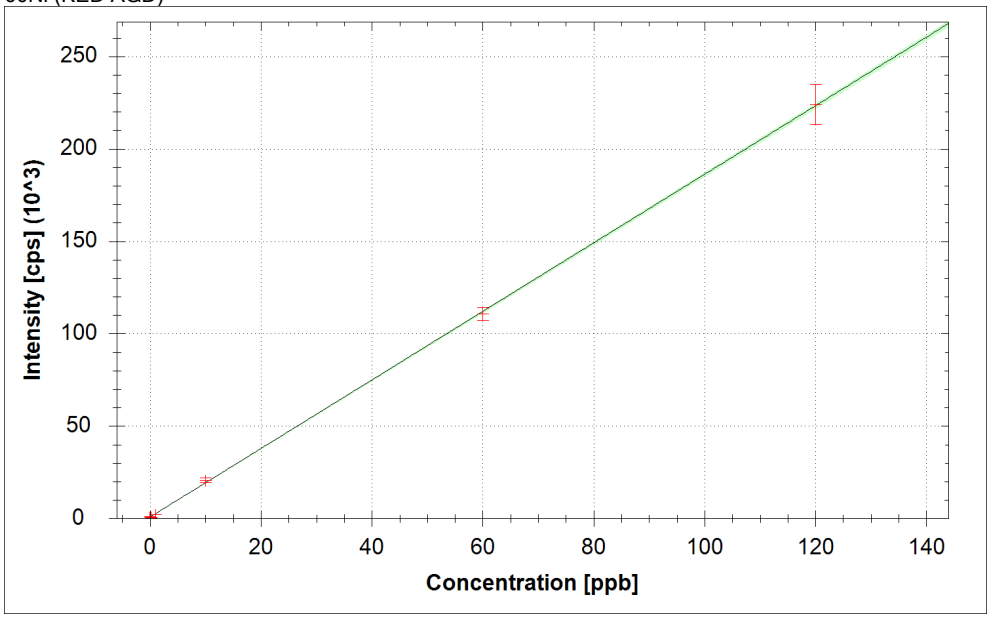
f(x) = 55.5369*x + 238.5889
R² = 0.9996
BEC = 4.296 ppb
LoD = 2.0480 ppb

59Co (KED AGD)



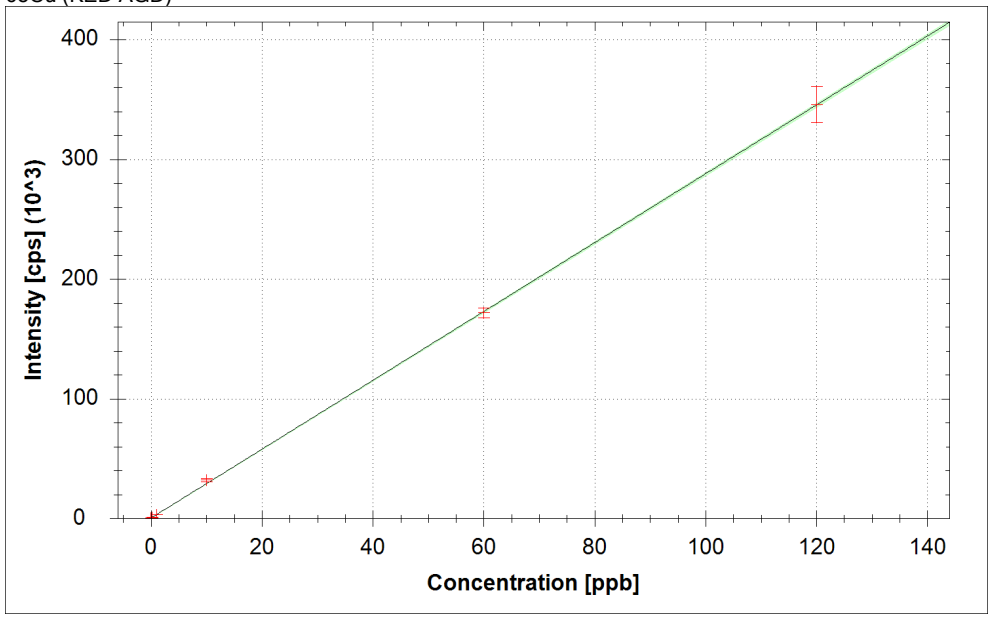
f(x) = 6401.9328*x + 55.9370
R² = 0.9999
BEC = 0.009 ppb
LoD = 0.0083 ppb

60Ni (KED AGD)



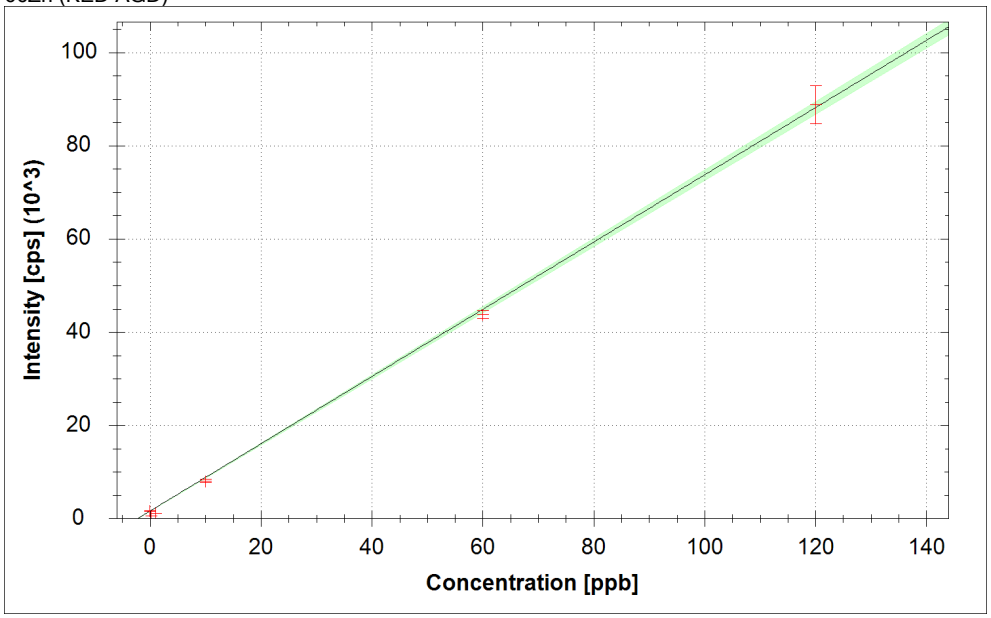
f(x) = 1854.2163*x + 765.1511
R² = 0.9999
BEC = 0.413 ppb
LoD = 0.0817 ppb

65Cu (KED AGD)



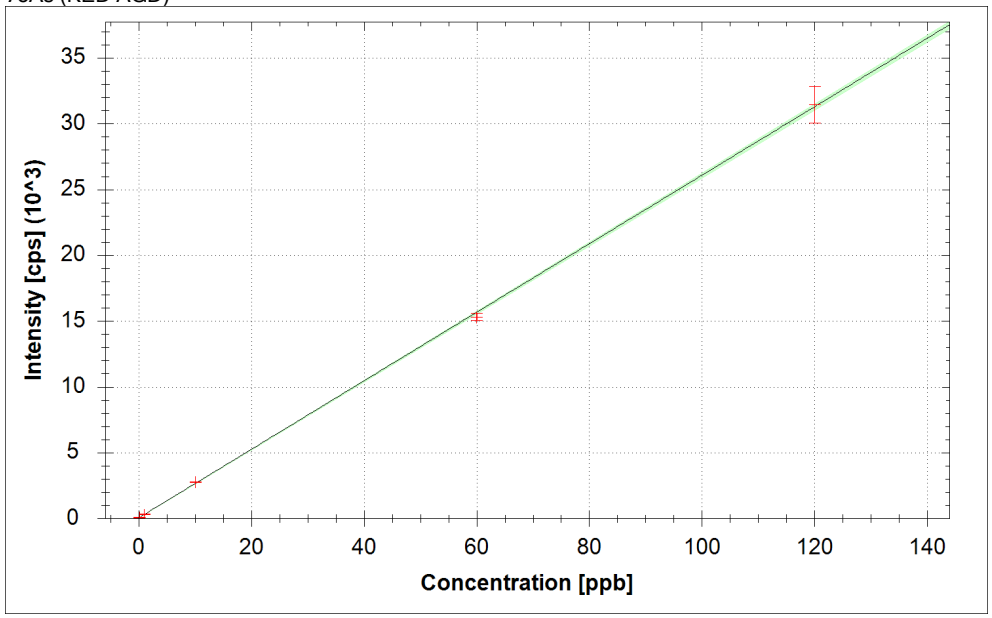
f(x) = 2874.4820*x + 343.4344
R² = 0.9999
BEC = 0.119 ppb
LoD = 0.0460 ppb

66Zn (KED AGD)



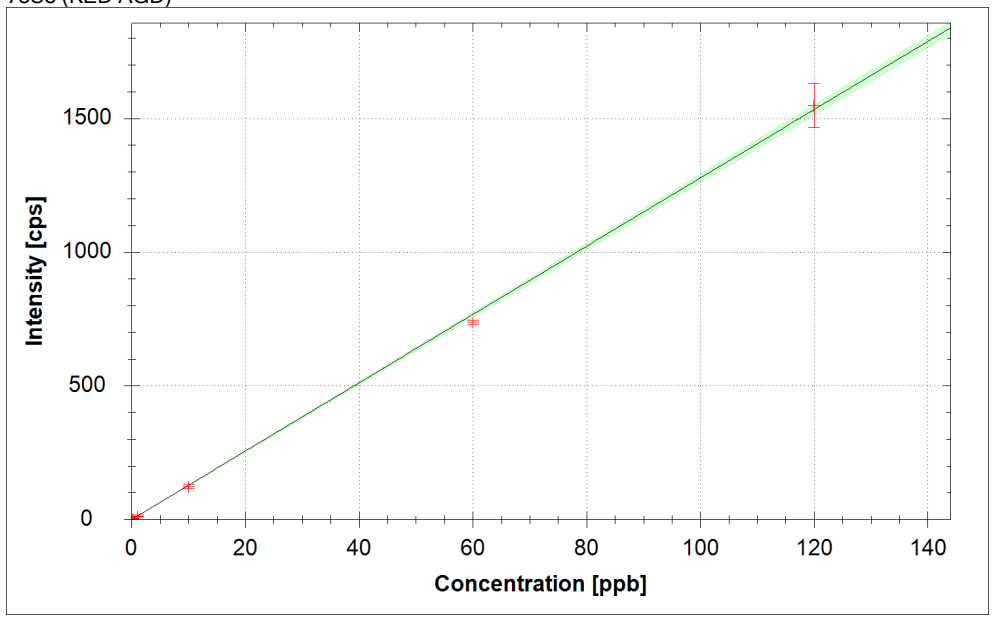
f(x) = 721.3304*x + 1592.3987
R² = 0.9992
BEC = 2.208 ppb
LoD = 0.1652 ppb

75As (KED AGD)



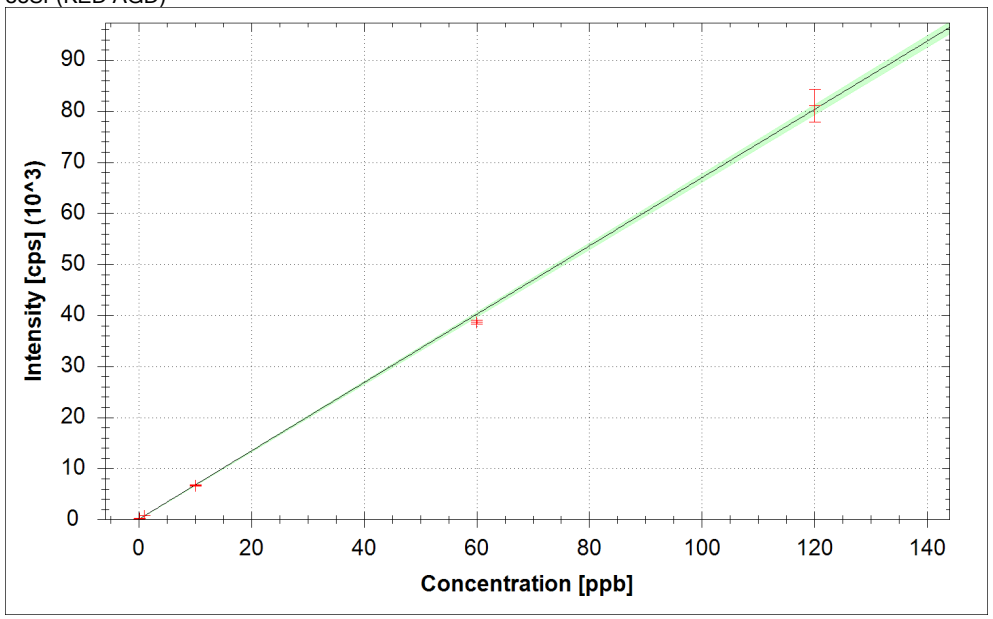
f(x) = 260.1762*x + 53.0140
R² = 0.9998
BEC = 0.204 ppb
LoD = 0.1364 ppb

78Se (KED AGD)



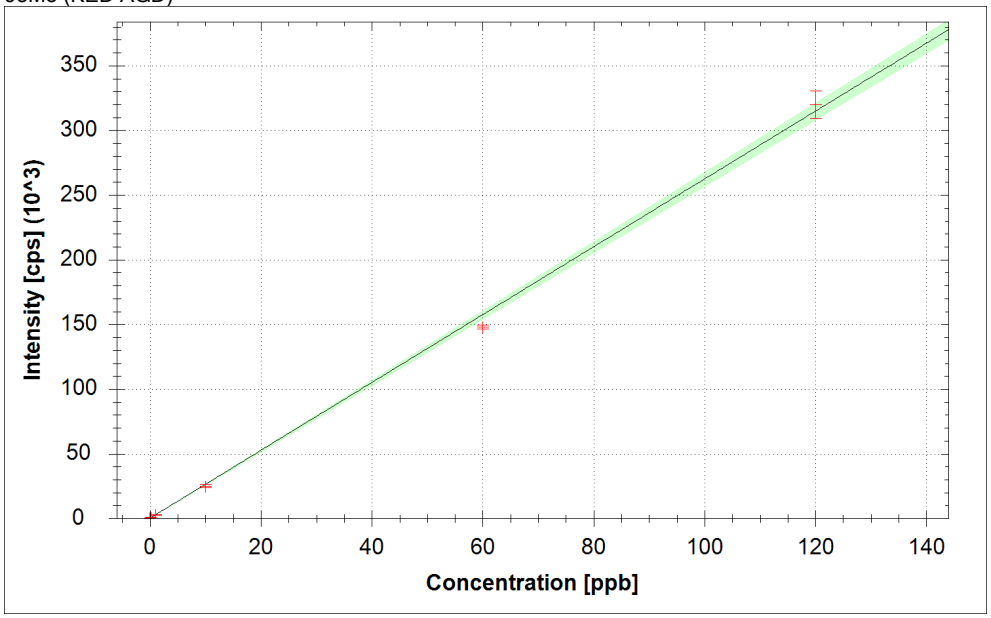
f(x) = 12.7693*x + -0.0357
R² = 0.9994
BEC = -0.003 ppb
LoD = 0.0371 ppb

88Sr (KED AGD)



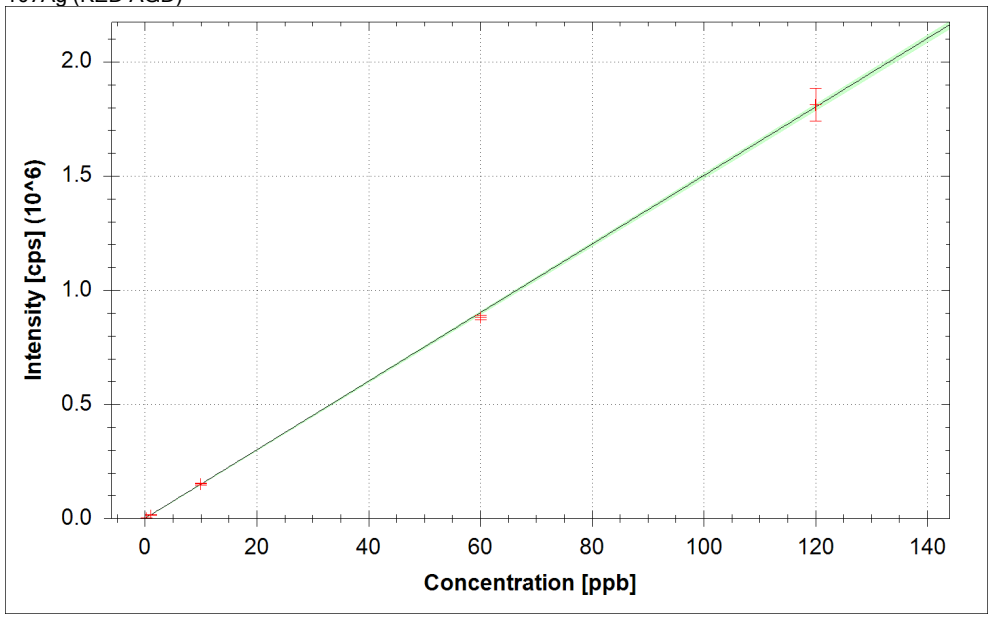
f(x) = 668.9491*x + 56.5433
R² = 0.9995
BEC = 0.085 ppb
LoD = 0.0217 ppb

95Mo (KED AGD)



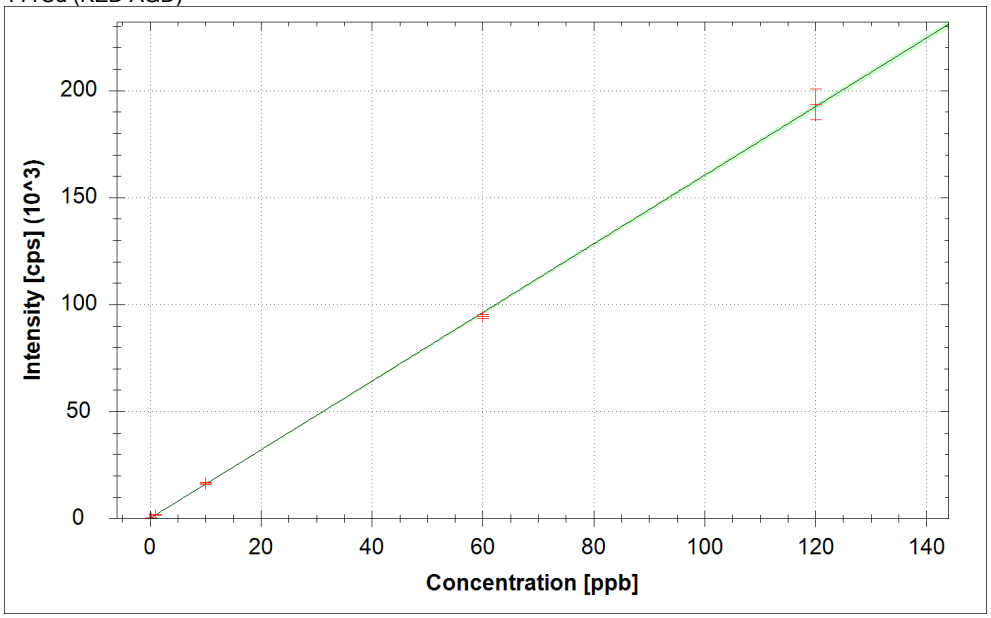
f(x) = 2621.7267*x + 222.3489
R² = 0.9985
BEC = 0.085 ppb
LoD = 0.1438 ppb

107Ag (KED AGD)



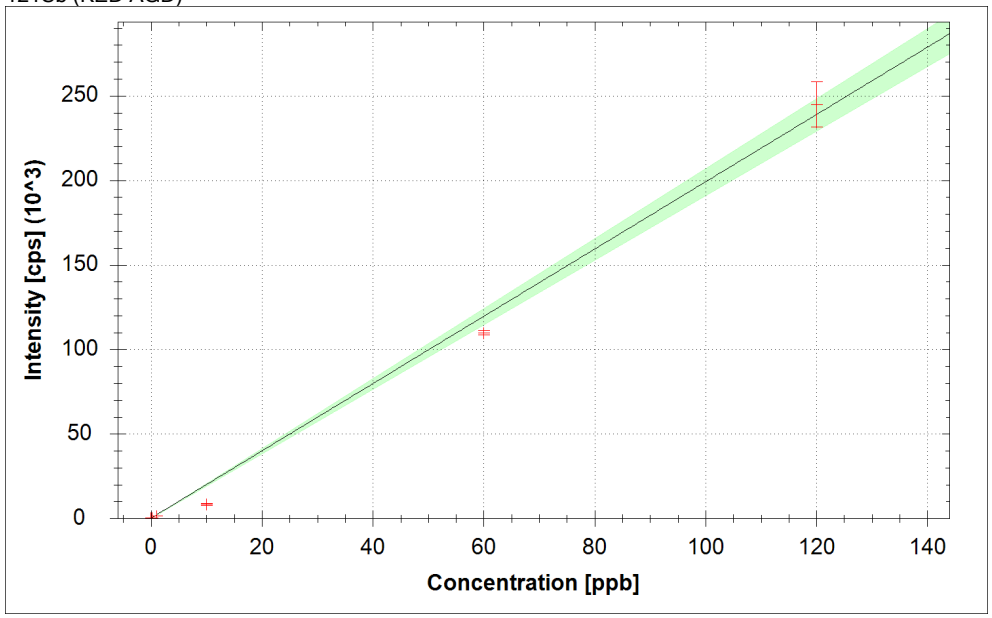
f(x) = 15013.2105*x + 129.1001
R² = 0.9998
BEC = 0.009 ppb
LoD = 0.0044 ppb

111Cd (KED AGD)



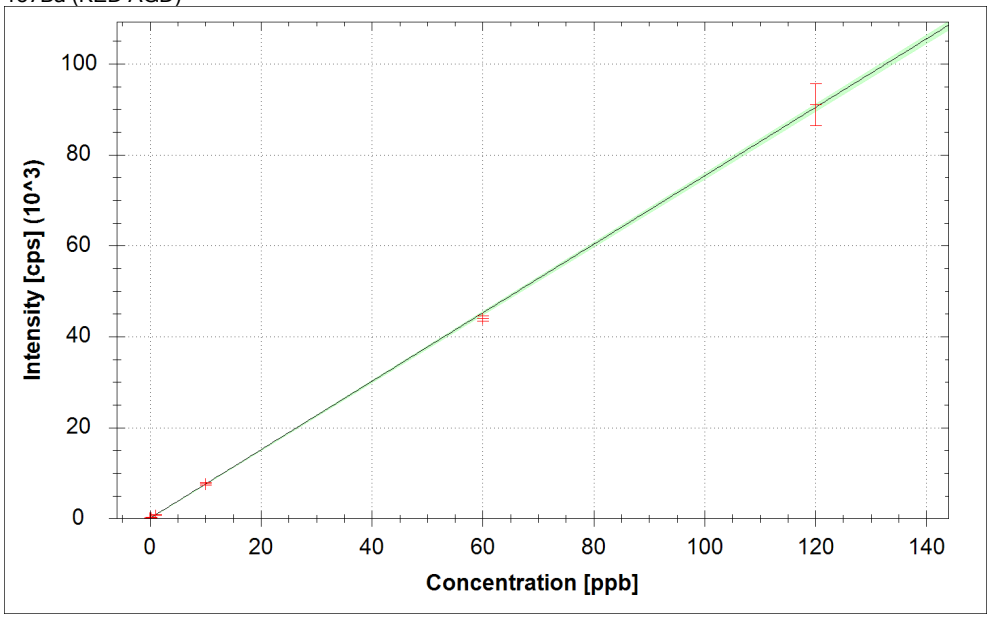
f(x) = 1603.3768*x + 1.3369
R² = 0.9998
BEC = 0.001 ppb
LoD = 0.0002 ppb

121Sb (KED AGD)



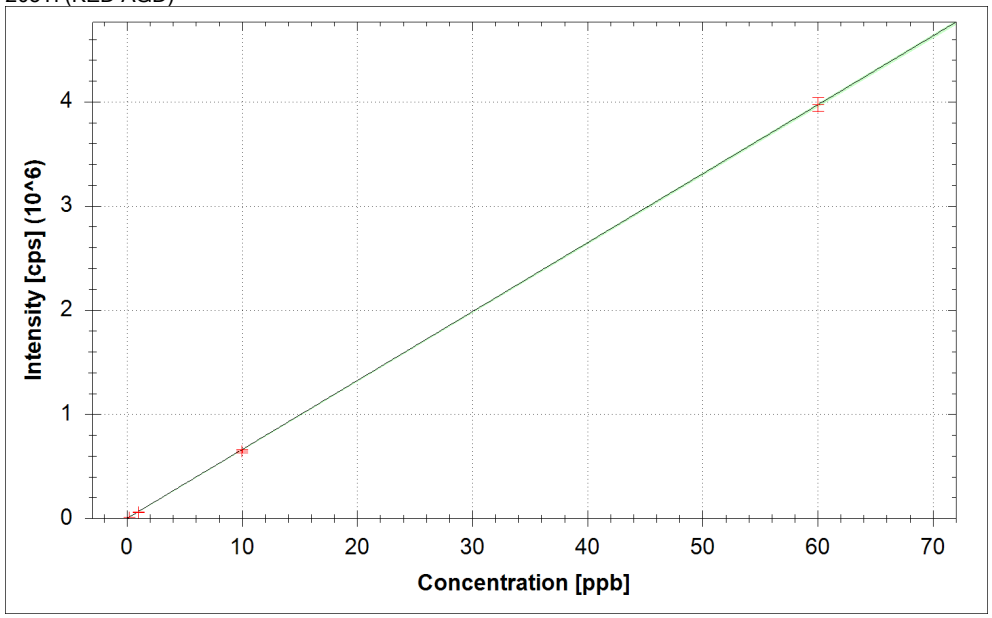
f(x) = 1989.1592*x + 178.6182
R² = 0.9946
BEC = 0.090 ppb
LoD = 0.0302 ppb

137Ba (KED AGD)



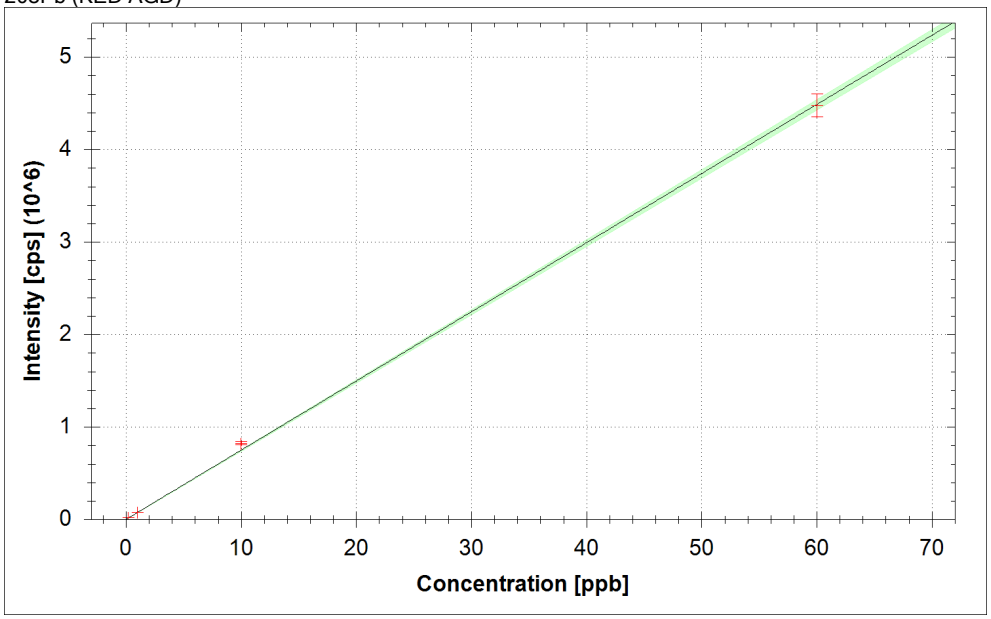
f(x) = 753.0453*x + 41.9884
R² = 0.9997
BEC = 0.056 ppb
LoD = 0.0237 ppb

205Tl (KED AGD)



f(x) = 66148.5605*x + 235.7347
R² = 1.0000
BEC = 0.004 ppb
LoD = 0.0033 ppb

208Pb (KED AGD)



f(x) = 74775.1346*x + 825.1569
R² = 0.9996
BEC = 0.011 ppb
LoD = 0.0062 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 9/3/2023 2:15:54 PM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	99.100 %	1.3 %	
6Li (KED AGD)	97.960 %	10.0 %	
9Be (STD AGD)	0.209 ppb	2.0 %	0.200 ppb
11B (STD AGD)	-0.118 ppb	2.1 %	0.200 ppb
23Na (KED AGD)	16.572 ppb	10.3 %	20.000 ppb
24Mg (KED AGD)	20.961 ppb	8.9 %	20.000 ppb
27Al (KED AGD)	-0.725 ppb	30.7 %	0.200 ppb
39K (KED AGD)	13.411 ppb	12.0 %	20.000 ppb
44Ca (KED AGD)	42.882 ppb	20.4 %	20.000 ppb
45Sc (STD AGD)	94.777 %	0.2 %	
51V (KED AGD)	0.225 ppb	18.5 %	0.200 ppb
52Cr (KED AGD)	0.201 ppb	11.5 %	0.200 ppb
55Mn (KED AGD)	-0.010 ppb	298.1 %	0.200 ppb
57Fe (KED AGD)	17.281 ppb	4.4 %	20.000 ppb
59Co (KED AGD)	0.210 ppb	6.3 %	0.200 ppb
60Ni (KED AGD)	-0.140 ppb	32.7 %	0.200 ppb
65Cu (KED AGD)	0.139 ppb	47.2 %	0.200 ppb
66Zn (KED AGD)	-1.482 ppb	2.8 %	0.200 ppb
74Ge (KED AGD)	100.544 %	8.7 %	
75As (KED AGD)	0.168 ppb	19.4 %	0.200 ppb
78Se (KED AGD)	0.236 ppb	12.1 %	0.200 ppb
88Sr (KED AGD)	0.197 ppb	3.8 %	0.200 ppb
95Mo (KED AGD)	0.176 ppb	14.0 %	0.200 ppb
103Rh (KED AGD)	97.916 %	4.9 %	
107Ag (KED AGD)	0.207 ppb	6.0 %	0.200 ppb
111Cd (KED AGD)	0.199 ppb	8.2 %	0.200 ppb
115In (KED AGD)	99.549 %	8.4 %	
121Sb (KED AGD)	0.067 ppb	33.2 %	0.200 ppb
137Ba (KED AGD)	0.169 ppb	18.6 %	0.200 ppb
159Tb (KED AGD)	98.098 %	6.8 %	
175Lu (KED AGD)	98.904 %	7.3 %	
205Tl (KED AGD)	0.180 ppb	3.2 %	0.200 ppb
208Pb (KED AGD)	0.214 ppb	0.9 %	0.200 ppb
209Bi (KED AGD)	95.914 %	2.8 %	

Standards:

Analysis Index: 5
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 9/3/2023 2:20:31 PM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	99.976 %	1.1 %	
6Li (KED AGD)	98.435 %	6.6 %	
9Be (STD AGD)	1.021 ppb	1.7 %	1.000 ppb
11B (STD AGD)	0.348 ppb	2.3 %	1.000 ppb
23Na (KED AGD)	91.647 ppb	1.4 %	100.000 ppb
24Mg (KED AGD)	95.596 ppb	3.7 %	100.000 ppb
27Al (KED AGD)	-0.090 ppb	603.4 %	1.000 ppb
39K (KED AGD)	85.771 ppb	3.7 %	100.000 ppb
44Ca (KED AGD)	140.045 ppb	14.3 %	100.000 ppb
45Sc (STD AGD)	101.108 %	0.2 %	
51V (KED AGD)	0.934 ppb	3.7 %	1.000 ppb
52Cr (KED AGD)	1.007 ppb	3.6 %	1.000 ppb
55Mn (KED AGD)	0.852 ppb	18.0 %	1.000 ppb
57Fe (KED AGD)	100.490 ppb	6.8 %	100.000 ppb
59Co (KED AGD)	1.053 ppb	5.2 %	1.000 ppb
60Ni (KED AGD)	0.691 ppb	2.5 %	1.000 ppb
65Cu (KED AGD)	0.973 ppb	4.2 %	1.000 ppb
66Zn (KED AGD)	-0.727 ppb	8.8 %	1.000 ppb
74Ge (KED AGD)	102.997 %	7.9 %	
75As (KED AGD)	0.925 ppb	11.0 %	1.000 ppb
78Se (KED AGD)	0.958 ppb	31.6 %	1.000 ppb
88Sr (KED AGD)	0.948 ppb	0.9 %	1.000 ppb
95Mo (KED AGD)	0.924 ppb	1.5 %	1.000 ppb
103Rh (KED AGD)	100.873 %	4.1 %	
107Ag (KED AGD)	0.985 ppb	1.7 %	1.000 ppb
111Cd (KED AGD)	0.988 ppb	1.1 %	1.000 ppb
115In (KED AGD)	100.171 %	7.0 %	
121Sb (KED AGD)	0.578 ppb	3.3 %	1.000 ppb
137Ba (KED AGD)	0.937 ppb	10.8 %	1.000 ppb
159Tb (KED AGD)	101.244 %	5.9 %	
175Lu (KED AGD)	99.522 %	5.6 %	
205Tl (KED AGD)	0.886 ppb	3.5 %	1.000 ppb
208Pb (KED AGD)	1.011 ppb	1.1 %	1.000 ppb
209Bi (KED AGD)	97.860 %	2.4 %	

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 9/3/2023 2:25:10 PM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	96.463 %	1.8 %	
6Li (KED AGD)	97.009 %	5.3 %	
9Be (STD AGD)	10.624 ppb	0.5 %	10.000 ppb
11B (STD AGD)	9.809 ppb	1.2 %	10.000 ppb
23Na (KED AGD)	951.374 ppb	0.8 %	1,000.000 ppb
24Mg (KED AGD)	1,006.737 ppb	2.4 %	1,000.000 ppb
27Al (KED AGD)	9.294 ppb	3.5 %	10.000 ppb
39K (KED AGD)	990.843 ppb	4.9 %	1,000.000 ppb
44Ca (KED AGD)	1,017.653 ppb	3.2 %	1,000.000 ppb
45Sc (STD AGD)	94.220 %	0.9 %	
51V (KED AGD)	10.035 ppb	3.9 %	10.000 ppb
52Cr (KED AGD)	10.371 ppb	4.6 %	10.000 ppb
55Mn (KED AGD)	10.325 ppb	5.8 %	10.000 ppb
57Fe (KED AGD)	1,033.837 ppb	4.2 %	1,000.000 ppb
59Co (KED AGD)	10.528 ppb	6.0 %	10.000 ppb
60Ni (KED AGD)	10.719 ppb	6.7 %	10.000 ppb
65Cu (KED AGD)	11.002 ppb	4.9 %	10.000 ppb
66Zn (KED AGD)	8.947 ppb	5.9 %	10.000 ppb
74Ge (KED AGD)	100.495 %	8.3 %	
75As (KED AGD)	10.373 ppb	1.7 %	10.000 ppb
78Se (KED AGD)	9.594 ppb	7.1 %	10.000 ppb
88Sr (KED AGD)	9.811 ppb	1.6 %	10.000 ppb
95Mo (KED AGD)	9.410 ppb	5.8 %	10.000 ppb
103Rh (KED AGD)	98.192 %	3.6 %	
107Ag (KED AGD)	10.044 ppb	2.6 %	10.000 ppb
111Cd (KED AGD)	10.198 ppb	3.0 %	10.000 ppb
115In (KED AGD)	99.682 %	7.7 %	
121Sb (KED AGD)	4.105 ppb	7.6 %	10.000 ppb
137Ba (KED AGD)	10.004 ppb	4.2 %	10.000 ppb
159Tb (KED AGD)	97.278 %	5.4 %	
175Lu (KED AGD)	99.057 %	6.4 %	
205Tl (KED AGD)	9.737 ppb	2.4 %	10.000 ppb
208Pb (KED AGD)	10.990 ppb	2.3 %	10.000 ppb
209Bi (KED AGD)	93.101 %	0.6 %	

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 9/3/2023 2:29:48 PM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	92.271 %	1.9 %	
6Li (KED AGD)	94.019 %	2.6 %	
9Be (STD AGD)	59.815 ppb	0.1 %	60.000 ppb
11B (STD AGD)	59.143 ppb	0.5 %	60.000 ppb
23Na (KED AGD)	5,608.466 ppb	1.5 %	6,000.000 ppb
24Mg (KED AGD)	5,824.253 ppb	1.0 %	6,000.000 ppb
27Al (KED AGD)	58.551 ppb	2.4 %	60.000 ppb
39K (KED AGD)	5,721.246 ppb	0.8 %	6,000.000 ppb
44Ca (KED AGD)	5,824.643 ppb	2.4 %	6,000.000 ppb
45Sc (STD AGD)	105.444 %	1.4 %	
51V (KED AGD)	58.066 ppb	1.4 %	60.000 ppb
52Cr (KED AGD)	58.036 ppb	0.8 %	60.000 ppb
55Mn (KED AGD)	58.542 ppb	0.5 %	60.000 ppb
57Fe (KED AGD)	5,803.871 ppb	1.5 %	6,000.000 ppb
59Co (KED AGD)	58.954 ppb	3.1 %	60.000 ppb
60Ni (KED AGD)	59.206 ppb	3.3 %	60.000 ppb
65Cu (KED AGD)	59.626 ppb	2.3 %	60.000 ppb
66Zn (KED AGD)	58.398 ppb	2.0 %	60.000 ppb
74Ge (KED AGD)	100.920 %	3.3 %	
75As (KED AGD)	58.644 ppb	1.7 %	60.000 ppb
78Se (KED AGD)	57.694 ppb	1.3 %	60.000 ppb
88Sr (KED AGD)	57.768 ppb	1.0 %	60.000 ppb
95Mo (KED AGD)	56.266 ppb	1.0 %	60.000 ppb
103Rh (KED AGD)	94.611 %	2.6 %	
107Ag (KED AGD)	58.584 ppb	1.0 %	60.000 ppb
111Cd (KED AGD)	58.747 ppb	1.0 %	60.000 ppb
115In (KED AGD)	97.358 %	2.4 %	
121Sb (KED AGD)	55.087 ppb	1.2 %	60.000 ppb
137Ba (KED AGD)	58.355 ppb	1.2 %	60.000 ppb
159Tb (KED AGD)	99.873 %	3.2 %	
175Lu (KED AGD)	101.018 %	4.2 %	
205Tl (KED AGD)	60.046 ppb	1.7 %	60.000 ppb
208Pb (KED AGD)	59.835 ppb	2.8 %	60.000 ppb
209Bi (KED AGD)	98.635 %	1.5 %	

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 9/3/2023 2:34:27 PM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	89.825 %	1.3 %	
6Li (KED AGD)	88.904 %	5.8 %	
9Be (STD AGD)	120.040 ppb	0.1 %	120.000 ppb
11B (STD AGD)	120.450 ppb	0.7 %	120.000 ppb
23Na (KED AGD)	12,199.894 ppb	4.1 %	12,000.000 ppb
24Mg (KED AGD)	12,087.347 ppb	3.0 %	12,000.000 ppb
27Al (KED AGD)	120.794 ppb	7.8 %	120.000 ppb
39K (KED AGD)	12,140.270 ppb	3.9 %	12,000.000 ppb
44Ca (KED AGD)	12,085.836 ppb	3.3 %	12,000.000 ppb
45Sc (STD AGD)	105.468 %	0.8 %	
51V (KED AGD)	120.965 ppb	5.2 %	120.000 ppb
52Cr (KED AGD)	120.951 ppb	6.2 %	120.000 ppb
55Mn (KED AGD)	120.704 ppb	3.1 %	120.000 ppb
57Fe (KED AGD)	12,095.245 ppb	4.7 %	12,000.000 ppb
59Co (KED AGD)	120.478 ppb	4.5 %	120.000 ppb
60Ni (KED AGD)	120.340 ppb	4.9 %	120.000 ppb
65Cu (KED AGD)	120.104 ppb	4.4 %	120.000 ppb
66Zn (KED AGD)	120.906 ppb	4.7 %	120.000 ppb
74Ge (KED AGD)	96.996 %	4.8 %	
75As (KED AGD)	120.648 ppb	4.5 %	120.000 ppb
78Se (KED AGD)	121.187 ppb	5.3 %	120.000 ppb
88Sr (KED AGD)	121.132 ppb	4.0 %	120.000 ppb
95Mo (KED AGD)	121.917 ppb	3.3 %	120.000 ppb
103Rh (KED AGD)	90.708 %	4.5 %	
107Ag (KED AGD)	120.704 ppb	3.9 %	120.000 ppb
111Cd (KED AGD)	120.610 ppb	3.7 %	120.000 ppb
115In (KED AGD)	93.417 %	5.6 %	
121Sb (KED AGD)	122.952 ppb	5.5 %	120.000 ppb
137Ba (KED AGD)	120.823 ppb	5.1 %	120.000 ppb
159Tb (KED AGD)	98.444 %	5.3 %	
175Lu (KED AGD)	99.511 %	5.2 %	
205Tl (KED AGD)	135.236 ppb	1.6 %	120.000 ppb
208Pb (KED AGD)	145.993 ppb	0.2 %	120.000 ppb
209Bi (KED AGD)	87.123 %	2.0 %	

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	1	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	9/3/2023 2:01:59 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	100.308 %	91.475 %	0.005 ppb	1.583 ppb	3.053 ppb	2.416 ppb	-0.008 ppb	-1.504 ppb	-3.593 ppb
Concentration per Run 1	101.738 %	92.398 %	0.005 ppb	1.570 ppb	3.392 ppb	2.315 ppb	-0.022 ppb	-1.892 ppb	-1.479 ppb
Concentration per Run 2	99.591 %	87.199 %	0.004 ppb	1.535 ppb	3.633 ppb	3.132 ppb	-0.193 ppb	-2.294 ppb	-4.210 ppb
Concentration per Run 3	99.596 %	94.829 %	0.006 ppb	1.642 ppb	2.135 ppb	1.801 ppb	0.191 ppb	-0.327 ppb	-5.090 ppb
Concentration RSD	1.2 %	4.3 %	19.9 %	3.4 %	26.4 %	27.8 %	2,442.9 %	69.1 %	52.4 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	88.236 %	0.000 ppb	-0.019 ppb	-0.070 ppb	1.038 ppb	0.002 ppb	-0.134 ppb	0.262 ppb	-0.733 ppb
Concentration per Run 1	87.978 %	-0.001 ppb	-0.013 ppb	-0.075 ppb	-0.497 ppb	-0.002 ppb	-0.178 ppb	0.308 ppb	-0.657 ppb
Concentration per Run 2	86.913 %	0.016 ppb	-0.021 ppb	-0.076 ppb	1.158 ppb	0.006 ppb	-0.095 ppb	0.232 ppb	-0.765 ppb
Concentration per Run 3	89.816 %	-0.017 ppb	-0.024 ppb	-0.060 ppb	2.452 ppb	0.002 ppb	-0.128 ppb	0.247 ppb	-0.777 ppb
Concentration RSD	1.7 %	3,444.2 %	29.8 %	13.0 %	142.4 %	217.4 %	31.4 %	15.4 %	9.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.954 %	-0.019 ppb	0.040 ppb	-0.011 ppb	0.054 ppb	97.974 %	-0.001 ppb	0.000 ppb	95.670 %
Concentration per Run 1	99.794 %	-0.027 ppb	0.049 ppb	-0.009 ppb	0.023 ppb	95.318 %	-0.001 ppb	0.002 ppb	95.773 %
Concentration per Run 2	97.115 %	-0.052 ppb	0.028 ppb	-0.015 ppb	0.054 ppb	97.049 %	-0.002 ppb	-0.001 ppb	90.336 %
Concentration per Run 3	105.955 %	0.023 ppb	0.042 ppb	-0.010 ppb	0.083 ppb	101.555 %	0.001 ppb	-0.001 ppb	100.900 %
Concentration RSD	4.5 %	206.5 %	26.9 %	27.5 %	56.3 %	3.3 %	168.5 %	4,201.2 %	5.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.055 ppb	-0.025 ppb	96.457 %	96.789 %	0.002 ppb	0.023 ppb	87.771 %
Concentration per Run 1	0.030 ppb	-0.046 ppb	94.386 %	96.031 %	0.001 ppb	0.025 ppb	87.158 %
Concentration per Run 2	0.063 ppb	-0.017 ppb	94.411 %	91.014 %	0.002 ppb	0.023 ppb	84.453 %
Concentration per Run 3	0.072 ppb	-0.012 ppb	100.573 %	103.321 %	0.002 ppb	0.023 ppb	91.703 %
Concentration RSD	39.9 %	73.7 %	3.7 %	6.4 %	28.4 %	4.0 %	4.2 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 2
Analysis label: CAL LOT #M22-1040
Analysis started at: 9/3/2023 2:06:36 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	99.848 %	97.540 %	0.003 ppb	0.927 ppb	2.855 ppb	2.406 ppb	0.260 ppb	1.361 ppb	0.154 ppb
Concentration per Run 1	99.742 %	93.488 %	0.004 ppb	0.937 ppb	3.787 ppb	2.195 ppb	0.520 ppb	4.488 ppb	3.401 ppb
Concentration per Run 2	100.634 %	95.165 %	0.004 ppb	0.915 ppb	2.632 ppb	2.060 ppb	-0.222 ppb	-3.621 ppb	-3.111 ppb
Concentration per Run 3	99.167 %	103.969 %	0.003 ppb	0.928 ppb	2.145 ppb	2.962 ppb	0.484 ppb	3.217 ppb	0.173 ppb
Concentration RSD	0.7 %	5.8 %	23.1 %	1.2 %	29.5 %	20.2 %	160.6 %	320.3 %	2,110.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.426 %	0.024 ppb	-0.021 ppb	-0.125 ppb	0.189 ppb	-0.001 ppb	-0.161 ppb	0.218 ppb	-0.858 ppb
Concentration per Run 1	98.041 %	0.030 ppb	-0.009 ppb	-0.046 ppb	0.018 ppb	0.001 ppb	-0.133 ppb	0.195 ppb	-0.826 ppb
Concentration per Run 2	100.431 %	0.010 ppb	-0.030 ppb	-0.200 ppb	0.647 ppb	-0.002 ppb	-0.176 ppb	0.202 ppb	-0.852 ppb
Concentration per Run 3	99.807 %	0.033 ppb	-0.023 ppb	-0.128 ppb	-0.097 ppb	-0.002 ppb	-0.175 ppb	0.256 ppb	-0.896 ppb
Concentration RSD	1.2 %	52.7 %	49.8 %	61.6 %	211.8 %	152.0 %	15.3 %	15.3 %	4.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.231 %	-0.006 ppb	0.008 ppb	-0.011 ppb	0.020 ppb	100.063 %	-0.001 ppb	0.000 ppb	99.510 %
Concentration per Run 1	98.697 %	-0.002 ppb	-0.015 ppb	-0.013 ppb	-0.004 ppb	96.665 %	-0.001 ppb	0.000 ppb	97.839 %
Concentration per Run 2	97.795 %	-0.001 ppb	0.015 ppb	-0.008 ppb	0.014 ppb	98.158 %	0.001 ppb	-0.001 ppb	95.837 %
Concentration per Run 3	110.202 %	-0.015 ppb	0.024 ppb	-0.013 ppb	0.051 ppb	105.366 %	-0.003 ppb	0.002 ppb	104.855 %
Concentration RSD	6.8 %	127.9 %	257.4 %	26.6 %	137.5 %	4.7 %	269.8 %	496.3 %	4.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.033 ppb	0.000 ppb	99.386 %	98.814 %	0.001 ppb	0.017 ppb	98.626 %
Concentration per Run 1	0.018 ppb	-0.006 ppb	96.655 %	96.272 %	0.001 ppb	0.015 ppb	96.763 %
Concentration per Run 2	0.030 ppb	-0.010 ppb	97.813 %	94.535 %	0.001 ppb	0.018 ppb	96.303 %
Concentration per Run 3	0.052 ppb	0.016 ppb	103.690 %	105.636 %	0.001 ppb	0.019 ppb	102.811 %
Concentration RSD	51.4 %	6,266.8 %	3.8 %	6.0 %	37.1 %	11.7 %	3.7 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	3	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Blank WKP ICPMSQ	Rack	4		
Analysis started at:	9/3/2023 2:11:12 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration RSD	0.0 %	0.0 %	0.3 %	0.0 %	0.0 %	0.1 %	0.2 %	0.1 %	0.0 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration RSD	0.0 %	0.1 %	0.2 %	0.2 %	0.2 %	0.3 %	0.1 %	0.1 %	0.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.1 %	0.2 %	-4.4 %	0.1 %	0.6 %	0.0 %	0.2 %	0.1 %	0.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.1 %	0.1 %	0.0 %	0.0 %	0.3 %	0.2 %	0.0 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	4	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	9/3/2023 2:15:54 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	99.100 %	97.960 %	0.209 ppb	-0.118 ppb	16.572 ppb	20.961 ppb	-0.725 ppb	13.411 ppb	42.882 ppb
Concentration per Run 1	100.387 %	87.283 %	0.210 ppb	-0.118 ppb	18.435 ppb	20.864 ppb	-0.953 ppb	13.339 ppb	46.541 ppb
Concentration per Run 2	99.185 %	100.196 %	0.212 ppb	-0.116 ppb	16.193 ppb	22.870 ppb	-0.714 ppb	15.056 ppb	49.204 ppb
Concentration per Run 3	97.727 %	106.400 %	0.204 ppb	-0.121 ppb	15.089 ppb	19.149 ppb	-0.508 ppb	11.837 ppb	32.901 ppb
Concentration RSD	1.3 %	10.0 %	2.0 %	2.1 %	10.3 %	8.9 %	30.7 %	12.0 %	20.4 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.777 %	0.225 ppb	0.201 ppb	-0.010 ppb	17.281 ppb	0.210 ppb	-0.140 ppb	0.139 ppb	-1.482 ppb
Concentration per Run 1	94.592 %	0.228 ppb	0.226 ppb	-0.046 ppb	17.600 ppb	0.220 ppb	-0.089 ppb	0.214 ppb	-1.463 ppb
Concentration per Run 2	94.977 %	0.264 ppb	0.196 ppb	0.010 ppb	17.831 ppb	0.195 ppb	-0.154 ppb	0.108 ppb	-1.453 ppb
Concentration per Run 3	94.763 %	0.181 ppb	0.181 ppb	0.005 ppb	16.413 ppb	0.216 ppb	-0.178 ppb	0.094 ppb	-1.529 ppb
Concentration RSD	0.2 %	18.5 %	11.5 %	298.1 %	4.4 %	6.3 %	32.7 %	47.2 %	2.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.544 %	0.168 ppb	0.236 ppb	0.197 ppb	0.176 ppb	97.916 %	0.207 ppb	0.199 ppb	99.549 %
Concentration per Run 1	90.791 %	0.138 ppb	0.220 ppb	0.192 ppb	0.202 ppb	92.863 %	0.219 ppb	0.216 ppb	89.964 %
Concentration per Run 2	103.319 %	0.203 ppb	0.269 ppb	0.194 ppb	0.172 ppb	98.550 %	0.194 ppb	0.183 ppb	103.226 %
Concentration per Run 3	107.522 %	0.163 ppb	0.218 ppb	0.206 ppb	0.153 ppb	102.336 %	0.208 ppb	0.197 ppb	105.456 %
Concentration RSD	8.7 %	19.4 %	12.1 %	3.8 %	14.0 %	4.9 %	6.0 %	8.2 %	8.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.067 ppb	0.169 ppb	98.098 %	98.904 %	0.180 ppb	0.214 ppb	95.914 %
Concentration per Run 1	0.093 ppb	0.155 ppb	90.615 %	90.633 %	0.174 ppb	0.212 ppb	92.807 %
Concentration per Run 2	0.056 ppb	0.205 ppb	100.152 %	102.010 %	0.181 ppb	0.213 ppb	97.316 %
Concentration per Run 3	0.054 ppb	0.148 ppb	103.527 %	104.068 %	0.185 ppb	0.216 ppb	97.619 %
Concentration RSD	33.2 %	18.6 %	6.8 %	7.3 %	3.2 %	0.9 %	2.8 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	5	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	9/3/2023 2:20:31 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	99.976 %	98.435 %	1.021 ppb	0.348 ppb	91.647 ppb	95.596 ppb	-0.090 ppb	85.771 ppb	140.045 ppb
Concentration per Run 1	101.105 %	91.140 %	1.006 ppb	0.339 ppb	90.342 ppb	94.365 ppb	0.440 ppb	88.624 ppb	122.873 ppb
Concentration per Run 2	99.883 %	103.382 %	1.017 ppb	0.354 ppb	91.741 ppb	92.822 ppb	-0.647 ppb	86.353 ppb	135.215 ppb
Concentration per Run 3	98.940 %	100.783 %	1.039 ppb	0.351 ppb	92.858 ppb	99.599 ppb	-0.064 ppb	82.336 ppb	162.048 ppb
Concentration RSD	1.1 %	6.6 %	1.7 %	2.3 %	1.4 %	3.7 %	603.4 %	3.7 %	14.3 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.108 %	0.934 ppb	1.007 ppb	0.852 ppb	100.490 ppb	1.053 ppb	0.691 ppb	0.973 ppb	-0.727 ppb
Concentration per Run 1	101.226 %	0.917 ppb	0.994 ppb	0.687 ppb	106.005 ppb	1.111 ppb	0.671 ppb	0.965 ppb	-0.661 ppb
Concentration per Run 2	100.860 %	0.911 ppb	1.048 ppb	0.882 ppb	92.825 ppb	1.046 ppb	0.705 ppb	1.018 ppb	-0.733 ppb
Concentration per Run 3	101.237 %	0.974 ppb	0.980 ppb	0.989 ppb	102.639 ppb	1.002 ppb	0.696 ppb	0.936 ppb	-0.789 ppb
Concentration RSD	0.2 %	3.7 %	3.6 %	18.0 %	6.8 %	5.2 %	2.5 %	4.2 %	8.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.997 %	0.925 ppb	0.958 ppb	0.948 ppb	0.924 ppb	100.873 %	0.985 ppb	0.988 ppb	100.171 %
Concentration per Run 1	94.587 %	0.987 ppb	0.654 ppb	0.938 ppb	0.938 ppb	97.173 %	0.992 ppb	1.000 ppb	92.222 %
Concentration per Run 2	103.672 %	0.808 ppb	1.260 ppb	0.954 ppb	0.911 ppb	100.112 %	0.966 ppb	0.979 ppb	102.698 %
Concentration per Run 3	110.732 %	0.981 ppb	0.960 ppb	0.953 ppb	0.922 ppb	105.333 %	0.997 ppb	0.986 ppb	105.592 %
Concentration RSD	7.9 %	11.0 %	31.6 %	0.9 %	1.5 %	4.1 %	1.7 %	1.1 %	7.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.578 ppb	0.937 ppb	101.244 %	99.522 %	0.886 ppb	1.011 ppb	97.860 %
Concentration per Run 1	0.599 ppb	0.989 ppb	95.982 %	93.782 %	0.856 ppb	1.000 ppb	95.398 %
Concentration per Run 2	0.570 ppb	1.001 ppb	100.043 %	99.960 %	0.884 ppb	1.021 ppb	98.054 %
Concentration per Run 3	0.564 ppb	0.820 ppb	107.706 %	104.824 %	0.917 ppb	1.013 ppb	100.127 %
Concentration RSD	3.3 %	10.8 %	5.9 %	5.6 %	3.5 %	1.1 %	2.4 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	6	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	9/3/2023 2:25:10 PM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	96.463 %	97.009 %	10.624 ppb	9.809 ppb	951.374 ppb	1,006.737 ppb	9.294 ppb	990.843 ppb	1,017.653 ppb
Concentration per Run 1	98.343 %	91.224 %	10.628 ppb	9.819 ppb	959.994 ppb	1,011.825 ppb	9.044 ppb	972.040 ppb	1,009.476 ppb
Concentration per Run 2	96.047 %	98.603 %	10.566 ppb	9.682 ppb	944.271 ppb	980.239 ppb	9.664 ppb	954.111 ppb	989.540 ppb
Concentration per Run 3	94.999 %	101.202 %	10.680 ppb	9.924 ppb	949.859 ppb	1,028.147 ppb	9.174 ppb	1,046.376 ppb	1,053.944 ppb
Concentration RSD	1.8 %	5.3 %	0.5 %	1.2 %	0.8 %	2.4 %	3.5 %	4.9 %	3.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.220 %	10.035 ppb	10.371 ppb	10.325 ppb	1,033.837 ppb	10.528 ppb	10.719 ppb	11.002 ppb	8.947 ppb
Concentration per Run 1	94.540 %	10.408 ppb	10.777 ppb	10.672 ppb	1,073.814 ppb	11.144 ppb	11.510 ppb	11.616 ppb	9.523 ppb
Concentration per Run 2	93.213 %	9.635 ppb	9.841 ppb	9.635 ppb	987.577 ppb	9.873 ppb	10.124 ppb	10.591 ppb	8.493 ppb
Concentration per Run 3	94.908 %	10.062 ppb	10.496 ppb	10.669 ppb	1,040.119 ppb	10.566 ppb	10.521 ppb	10.800 ppb	8.826 ppb
Concentration RSD	0.9 %	3.9 %	4.6 %	5.8 %	4.2 %	6.0 %	6.7 %	4.9 %	5.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.495 %	10.373 ppb	9.594 ppb	9.811 ppb	9.410 ppb	98.192 %	10.044 ppb	10.198 ppb	99.682 %
Concentration per Run 1	90.855 %	10.558 ppb	9.279 ppb	9.751 ppb	10.014 ppb	94.104 %	10.339 ppb	10.511 ppb	90.766 %
Concentration per Run 2	105.985 %	10.211 ppb	9.127 ppb	9.694 ppb	8.954 ppb	99.886 %	9.845 ppb	9.900 ppb	104.037 %
Concentration per Run 3	104.645 %	10.350 ppb	10.377 ppb	9.988 ppb	9.263 ppb	100.586 %	9.946 ppb	10.184 ppb	104.245 %
Concentration RSD	8.3 %	1.7 %	7.1 %	1.6 %	5.8 %	3.6 %	2.6 %	3.0 %	7.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.105 ppb	10.004 ppb	97.278 %	99.057 %	9.737 ppb	10.990 ppb	93.101 %
Concentration per Run 1	4.465 ppb	10.461 ppb	91.373 %	91.775 %	9.466 ppb	10.701 ppb	93.430 %
Concentration per Run 2	3.909 ppb	9.644 ppb	98.831 %	102.400 %	9.908 ppb	11.108 ppb	92.476 %
Concentration per Run 3	3.942 ppb	9.907 ppb	101.629 %	102.995 %	9.838 ppb	11.161 ppb	93.395 %
Concentration RSD	7.6 %	4.2 %	5.4 %	6.4 %	2.4 %	2.3 %	0.6 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	7	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	9/3/2023 2:29:48 PM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	92.271 %	94.019 %	59.815 ppb	59.143 ppb	5,608.466 ppb	5,824.253 ppb	58.551 ppb	5,721.246 ppb	5,824.643 ppb
Concentration per Run 1	94.094 %	93.907 %	59.742 ppb	58.835 ppb	5,634.546 ppb	5,834.787 ppb	60.043 ppb	5,744.022 ppb	5,880.963 ppb
Concentration per Run 2	92.117 %	91.643 %	59.872 ppb	59.341 ppb	5,675.913 ppb	5,879.046 ppb	57.272 ppb	5,668.655 ppb	5,930.394 ppb
Concentration per Run 3	90.602 %	96.506 %	59.831 ppb	59.255 ppb	5,514.939 ppb	5,758.927 ppb	58.338 ppb	5,751.060 ppb	5,662.571 ppb
Concentration RSD	1.9 %	2.6 %	0.1 %	0.5 %	1.5 %	1.0 %	2.4 %	0.8 %	2.4 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.444 %	58.066 ppb	58.036 ppb	58.542 ppb	5,803.871 ppb	58.954 ppb	59.206 ppb	59.626 ppb	58.398 ppb
Concentration per Run 1	106.864 %	58.914 ppb	58.532 ppb	58.535 ppb	5,900.650 ppb	61.067 ppb	61.448 ppb	61.241 ppb	59.634 ppb
Concentration per Run 2	105.564 %	57.953 ppb	57.706 ppb	58.855 ppb	5,732.078 ppb	57.619 ppb	58.006 ppb	58.887 ppb	58.216 ppb
Concentration per Run 3	103.904 %	57.331 ppb	57.871 ppb	58.234 ppb	5,778.884 ppb	58.177 ppb	58.164 ppb	58.752 ppb	57.345 ppb
Concentration RSD	1.4 %	1.4 %	0.8 %	0.5 %	1.5 %	3.1 %	3.3 %	2.3 %	2.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.920 %	58.644 ppb	57.694 ppb	57.768 ppb	56.266 ppb	94.611 %	58.584 ppb	58.747 ppb	97.358 %
Concentration per Run 1	97.263 %	59.794 ppb	58.349 ppb	58.419 ppb	56.799 ppb	91.967 %	59.156 ppb	59.331 ppb	95.034 %
Concentration per Run 2	101.748 %	58.026 ppb	56.913 ppb	57.430 ppb	55.673 ppb	94.998 %	58.654 ppb	58.749 ppb	97.354 %
Concentration per Run 3	103.748 %	58.111 ppb	57.819 ppb	57.455 ppb	56.326 ppb	96.868 %	57.942 ppb	58.161 ppb	99.685 %
Concentration RSD	3.3 %	1.7 %	1.3 %	1.0 %	1.0 %	2.6 %	1.0 %	1.0 %	2.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.087 ppb	58.355 ppb	99.873 %	101.018 %	60.046 ppb	59.835 ppb	98.635 %
Concentration per Run 1	54.320 ppb	58.089 ppb	96.293 %	96.420 %	59.099 ppb	57.935 ppb	100.065 %
Concentration per Run 2	55.322 ppb	59.155 ppb	100.733 %	101.908 %	61.086 ppb	61.027 ppb	97.104 %
Concentration per Run 3	55.618 ppb	57.822 ppb	102.593 %	104.726 %	59.951 ppb	60.543 ppb	98.737 %
Concentration RSD	1.2 %	1.2 %	3.2 %	4.2 %	1.7 %	2.8 %	1.5 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 8
Analysis label: 120/12000 Cal
Analysis started at: 9/3/2023 2:34:27 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 6
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	89.825 %	88.904 %	120.040 ppb	120.450 ppb	12,199.894 ppb	12,087.347 ppb	120.794 ppb	12,140.270 ppb	12,085.836 ppb
Concentration per Run 1	91.191 %	83.258 %	120.037 ppb	119.851 ppb	12,770.313 ppb	12,496.886 ppb	131.479 ppb	12,668.279 ppb	12,545.059 ppb
Concentration per Run 2	89.119 %	90.218 %	120.134 ppb	120.136 ppb	11,934.776 ppb	11,789.402 ppb	113.613 ppb	12,014.373 ppb	11,925.193 ppb
Concentration per Run 3	89.166 %	93.236 %	119.950 ppb	121.363 ppb	11,894.595 ppb	11,975.753 ppb	117.289 ppb	11,738.158 ppb	11,787.255 ppb
Concentration RSD	1.3 %	5.8 %	0.1 %	0.7 %	4.1 %	3.0 %	7.8 %	3.9 %	3.3 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.468 %	120.965 ppb	120.951 ppb	120.704 ppb	12,095.245 ppb	120.478 ppb	120.340 ppb	120.104 ppb	120.906 ppb
Concentration per Run 1	106.488 %	127.739 ppb	129.565 ppb	125.071 ppb	12,712.689 ppb	126.726 ppb	127.105 ppb	126.144 ppb	127.437 ppb
Concentration per Run 2	104.945 %	115.415 ppb	115.942 ppb	118.702 ppb	11,606.787 ppb	116.757 ppb	117.082 ppb	116.887 ppb	117.534 ppb
Concentration per Run 3	104.972 %	119.740 ppb	117.345 ppb	118.338 ppb	11,966.260 ppb	117.952 ppb	116.834 ppb	117.280 ppb	117.747 ppb
Concentration RSD	0.8 %	5.2 %	6.2 %	3.1 %	4.7 %	4.5 %	4.9 %	4.4 %	4.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.996 %	120.648 ppb	121.187 ppb	121.132 ppb	121.917 ppb	90.708 %	120.704 ppb	120.610 ppb	93.417 %
Concentration per Run 1	91.642 %	126.845 ppb	128.388 ppb	126.556 ppb	126.435 ppb	86.009 %	126.146 ppb	125.778 ppb	87.550 %
Concentration per Run 2	99.182 %	116.942 ppb	115.924 ppb	117.465 ppb	118.581 ppb	92.418 %	117.612 ppb	118.548 ppb	95.017 %
Concentration per Run 3	100.164 %	118.156 ppb	119.249 ppb	119.375 ppb	120.734 ppb	93.696 %	118.355 ppb	117.505 ppb	97.684 %
Concentration RSD	4.8 %	4.5 %	5.3 %	4.0 %	3.3 %	4.5 %	3.9 %	3.7 %	5.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	122.952 ppb	120.823 ppb	98.444 %	99.511 %	135.236 ppb	145.993 ppb	87.123 %
Concentration per Run 1	130.577 ppb	127.750 ppb	92.446 %	93.583 %	137.707 ppb	146.286 ppb	86.325 %
Concentration per Run 2	117.677 ppb	116.228 ppb	100.660 %	101.509 %	134.023 ppb	145.913 ppb	85.954 %
Concentration per Run 3	120.601 ppb	118.489 ppb	102.227 %	103.441 %	133.977 ppb	145.779 ppb	89.089 %
Concentration RSD	5.5 %	5.1 %	5.3 %	5.2 %	1.6 %	0.2 %	2.0 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	9	User name	ALPHALAB\Metals-Instrument	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	9/3/2023 2:39:07 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	92.164 %	93.124 %	0.026 ppb	0.325 ppb	19.367 ppb	10.342 ppb	7.009 ppb	1.317 ppb	-15.863 ppb
Concentration per Run 1	93.253 %	86.864 %	0.024 ppb	0.317 ppb	21.274 ppb	10.538 ppb	7.334 ppb	-3.690 ppb	-51.430 ppb
Concentration per Run 2	92.232 %	96.842 %	0.030 ppb	0.309 ppb	18.224 ppb	9.022 ppb	5.917 ppb	3.561 ppb	-87.630 ppb
Concentration per Run 3	91.006 %	95.668 %	0.022 ppb	0.348 ppb	18.603 ppb	11.464 ppb	7.776 ppb	4.080 ppb	91.472 ppb
Concentration RSD	1.2 %	5.9 %	15.2 %	6.3 %	8.6 %	11.9 %	13.9 %	329.8 %	597.0 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	85.641 %	0.019 ppb	-0.038 ppb	-0.151 ppb	46.396 ppb	0.003 ppb	-0.259 ppb	-0.009 ppb	-0.932 ppb
Concentration per Run 1	86.309 %	0.011 ppb	-0.035 ppb	-0.111 ppb	47.237 ppb	0.005 ppb	-0.275 ppb	-0.031 ppb	-0.906 ppb
Concentration per Run 2	85.432 %	0.029 ppb	-0.054 ppb	-0.184 ppb	49.265 ppb	0.005 ppb	-0.268 ppb	-0.001 ppb	-0.956 ppb
Concentration per Run 3	85.183 %	0.018 ppb	-0.024 ppb	-0.159 ppb	42.688 ppb	0.000 ppb	-0.234 ppb	0.005 ppb	-0.933 ppb
Concentration RSD	0.7 %	44.4 %	40.5 %	24.5 %	7.3 %	99.2 %	8.5 %	209.2 %	2.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.228 %	0.206 ppb	1.220 ppb	199.809 ppb	2.898 ppb	95.453 %	0.008 ppb	0.009 ppb	98.135 %
Concentration per Run 1	95.605 %	0.148 ppb	0.737 ppb	201.092 ppb	2.275 ppb	92.180 %	0.012 ppb	0.009 ppb	94.007 %
Concentration per Run 2	100.416 %	0.208 ppb	1.462 ppb	199.109 ppb	2.950 ppb	95.777 %	0.006 ppb	0.009 ppb	98.946 %
Concentration per Run 3	101.663 %	0.260 ppb	1.460 ppb	199.226 ppb	3.468 ppb	98.402 %	0.007 ppb	0.009 ppb	101.452 %
Concentration RSD	3.2 %	27.1 %	34.3 %	0.6 %	20.6 %	3.3 %	42.4 %	2.2 %	3.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.789 ppb	0.015 ppb	97.243 %	99.803 %	0.085 ppb	0.034 ppb	94.794 %
Concentration per Run 1	3.703 ppb	0.005 ppb	94.164 %	98.079 %	0.084 ppb	0.033 ppb	96.362 %
Concentration per Run 2	3.772 ppb	0.030 ppb	97.993 %	99.180 %	0.088 ppb	0.036 ppb	93.124 %
Concentration per Run 3	3.891 ppb	0.010 ppb	99.572 %	102.150 %	0.085 ppb	0.034 ppb	94.894 %
Concentration RSD	2.5 %	84.8 %	2.9 %	2.1 %	2.2 %	4.0 %	1.7 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	10	User name	ALPHALAB\Metals-Instrument	Comment	ICV
Analysis label:	ICV	Rack	0		
Analysis started at:	9/3/2023 2:43:49 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	91.550 %	96.954 %	50.029 ppb	51.335 ppb	4,487.543 ppb	4,781.802 ppb	46.620 ppb	4,756.144 ppb	4,875.797 ppb
Concentration per Run 1	93.730 %	99.776 %	49.723 ppb	51.211 ppb	4,396.426 ppb	4,708.480 ppb	43.918 ppb	4,759.894 ppb	4,829.351 ppb
Concentration per Run 2	90.826 %	96.087 %	50.460 ppb	51.417 ppb	4,468.064 ppb	4,775.099 ppb	47.044 ppb	4,654.202 ppb	4,804.708 ppb
Concentration per Run 3	90.094 %	94.997 %	49.904 ppb	51.378 ppb	4,598.138 ppb	4,861.826 ppb	48.898 ppb	4,854.337 ppb	4,993.331 ppb
Recovery Percentage 1			100.058 %	102.671 %	89.751 %	95.636 %	93.240 %	95.123 %	97.516 %
Concentration RSD	2.1 %	2.6 %	0.8 %	0.2 %	2.3 %	1.6 %	5.4 %	2.1 %	2.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.560 %	48.789 ppb	47.979 ppb	49.073 ppb	4,845.702 ppb	47.587 ppb	48.577 ppb	48.751 ppb	47.420 ppb
Concentration per Run 1	94.750 %	48.122 ppb	47.524 ppb	48.913 ppb	4,886.528 ppb	47.580 ppb	48.117 ppb	49.032 ppb	47.689 ppb
Concentration per Run 2	94.215 %	49.302 ppb	47.957 ppb	48.554 ppb	4,846.681 ppb	47.708 ppb	49.355 ppb	48.732 ppb	47.531 ppb
Concentration per Run 3	94.715 %	48.942 ppb	48.456 ppb	49.752 ppb	4,803.898 ppb	47.473 ppb	48.259 ppb	48.489 ppb	47.038 ppb
Recovery Percentage 1		97.578 %	95.958 %	98.145 %	96.914 %	95.174 %	97.154 %	97.502 %	94.839 %
Concentration RSD	0.3 %	1.2 %	1.0 %	1.3 %	0.9 %	0.2 %	1.4 %	0.6 %	0.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.905 %	47.720 ppb	48.953 ppb	48.825 ppb	48.815 ppb	94.853 %	50.224 ppb	48.499 ppb	98.039 %
Concentration per Run 1	94.813 %	48.232 ppb	51.176 ppb	49.491 ppb	49.747 ppb	91.401 %	50.398 ppb	48.966 ppb	95.752 %
Concentration per Run 2	98.807 %	47.810 ppb	47.169 ppb	48.593 ppb	48.647 ppb	95.261 %	50.703 ppb	49.083 ppb	95.912 %
Concentration per Run 3	103.095 %	47.120 ppb	48.513 ppb	48.390 ppb	48.053 ppb	97.898 %	49.569 ppb	47.448 ppb	102.454 %
Recovery Percentage 1		95.441 %	97.905 %	97.650 %	97.631 %		100.447 %	96.999 %	
Concentration RSD	4.2 %	1.2 %	4.2 %	1.2 %	1.8 %	3.4 %	1.2 %	1.9 %	3.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.145 ppb	47.774 ppb	100.956 %	101.371 %	48.799 ppb	49.971 ppb	100.755 %
Concentration per Run 1	57.462 ppb	47.754 ppb	97.427 %	96.959 %	46.796 ppb	47.947 ppb	103.104 %
Concentration per Run 2	56.177 ppb	47.148 ppb	101.501 %	100.871 %	49.523 ppb	50.559 ppb	98.078 %
Concentration per Run 3	57.797 ppb	48.419 ppb	103.939 %	106.283 %	50.077 ppb	51.406 ppb	101.082 %
Recovery Percentage 1	114.291 %	95.547 %			97.598 %	99.941 %	
Concentration RSD	1.5 %	1.3 %	3.3 %	4.6 %	3.6 %	3.6 %	2.5 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 11
Analysis label: ICB
Analysis started at: 9/3/2023 2:48:30 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment ICB

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	94.336 %	99.944 %	0.014 ppb	-1.150 ppb	-1.441 ppb	-0.776 ppb	-0.887 ppb	-5.173 ppb	-7.304 ppb
Concentration per Run 1	95.387 %	94.242 %	0.015 ppb	-1.170 ppb	-1.715 ppb	-0.663 ppb	-0.901 ppb	-6.111 ppb	-9.364 ppb
Concentration per Run 2	94.796 %	104.556 %	0.011 ppb	-1.173 ppb	-0.692 ppb	-0.885 ppb	-0.789 ppb	-7.754 ppb	-6.874 ppb
Concentration per Run 3	92.825 %	101.034 %	0.015 ppb	-1.107 ppb	-1.915 ppb	-0.781 ppb	-0.972 ppb	-1.653 ppb	-5.674 ppb
Recovery Percentage 1			2.763 %	-11.502 %	-1.441 %	-1.109 %	-8.871 %	-5.173 %	-7.304 %
Concentration RSD	1.4 %	5.2 %	16.0 %	3.2 %	45.5 %	14.3 %	10.4 %	61.0 %	25.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.275 %	-0.007 ppb	0.004 ppb	-0.231 ppb	14.922 ppb	-0.004 ppb	-0.223 ppb	-0.077 ppb	-1.726 ppb
Concentration per Run 1	92.681 %	-0.011 ppb	0.008 ppb	-0.255 ppb	16.350 ppb	-0.006 ppb	-0.212 ppb	-0.075 ppb	-1.771 ppb
Concentration per Run 2	93.624 %	-0.004 ppb	0.004 ppb	-0.217 ppb	14.123 ppb	-0.005 ppb	-0.237 ppb	-0.079 ppb	-1.712 ppb
Concentration per Run 3	93.521 %	-0.007 ppb	-0.001 ppb	-0.221 ppb	14.292 ppb	-0.002 ppb	-0.221 ppb	-0.078 ppb	-1.696 ppb
Recovery Percentage 1		-0.145 %	0.379 %	-23.112 %	29.843 %	-0.800 %	-11.166 %	-7.740 %	-34.519 %
Concentration RSD	0.6 %	50.5 %	122.1 %	8.9 %	8.3 %	53.7 %	5.7 %	2.8 %	2.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.508 %	0.119 ppb	0.793 ppb	-0.017 ppb	1.781 ppb	98.855 %	0.001 ppb	0.001 ppb	104.620 %
Concentration per Run 1	99.605 %	0.108 ppb	0.596 ppb	-0.015 ppb	1.367 ppb	97.065 %	0.002 ppb	0.002 ppb	102.735 %
Concentration per Run 2	109.402 %	0.113 ppb	0.855 ppb	-0.016 ppb	1.735 ppb	100.586 %	0.003 ppb	0.001 ppb	110.094 %
Concentration per Run 3	101.517 %	0.134 ppb	0.927 ppb	-0.018 ppb	2.241 ppb	98.914 %	-0.001 ppb	0.000 ppb	101.030 %
Recovery Percentage 1		23.725 %	15.859 %	-0.166 %	89.039 %		0.362 %	0.530 %	
Concentration RSD	5.0 %	11.5 %	21.9 %	8.7 %	24.6 %	1.8 %	134.9 %	119.7 %	4.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.173 ppb	-0.041 ppb	101.233 %	103.903 %	0.282 ppb	0.010 ppb	100.919 %
Concentration per Run 1	1.024 ppb	-0.043 ppb	97.927 %	98.771 %	0.319 ppb	0.011 ppb	99.829 %
Concentration per Run 2	1.252 ppb	-0.043 ppb	103.281 %	109.546 %	0.290 ppb	0.009 ppb	102.150 %
Concentration per Run 3	1.243 ppb	-0.038 ppb	102.492 %	103.391 %	0.237 ppb	0.009 ppb	100.778 %
Recovery Percentage 1	29.333 %	-8.279 %			28.231 %	0.954 %	
Concentration RSD	11.0 %	6.4 %	2.9 %	5.2 %	14.7 %	11.1 %	1.2 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	12	User name	ALPHALAB\Metals-Instrument	Comment	ICV
Analysis label:	ICV	Rack	0		
Analysis started at:	9/3/2023 2:54:46 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	93.817 %	99.050 %	50.922 ppb	51.655 ppb	4,707.475 ppb	4,957.253 ppb	48.290 ppb	4,856.903 ppb	4,903.195 ppb
Concentration per Run 1	93.853 %	97.093 %	50.920 ppb	51.578 ppb	4,833.304 ppb	5,087.627 ppb	47.082 ppb	4,823.055 ppb	5,022.973 ppb
Concentration per Run 2	94.143 %	98.519 %	50.994 ppb	51.477 ppb	4,697.686 ppb	4,961.966 ppb	49.798 ppb	4,845.218 ppb	4,983.126 ppb
Concentration per Run 3	93.456 %	101.537 %	50.851 ppb	51.910 ppb	4,591.434 ppb	4,822.165 ppb	47.989 ppb	4,902.437 ppb	4,703.487 ppb
Recovery Percentage 1			101.844 %	103.310 %	94.149 %	99.145 %	96.580 %	97.138 %	98.064 %
Concentration RSD	0.4 %	2.3 %	0.1 %	0.4 %	2.6 %	2.7 %	2.9 %	0.8 %	3.6 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.466 %	48.773 ppb	48.580 ppb	49.360 ppb	4,957.826 ppb	48.359 ppb	49.770 ppb	48.958 ppb	48.801 ppb
Concentration per Run 1	98.357 %	49.243 ppb	49.634 ppb	49.239 ppb	5,043.600 ppb	49.275 ppb	50.382 ppb	49.422 ppb	49.114 ppb
Concentration per Run 2	98.873 %	49.447 ppb	48.725 ppb	49.686 ppb	5,041.597 ppb	48.805 ppb	50.301 ppb	50.231 ppb	49.272 ppb
Concentration per Run 3	98.168 %	47.629 ppb	47.380 ppb	49.155 ppb	4,788.281 ppb	46.996 ppb	48.627 ppb	47.220 ppb	48.018 ppb
Recovery Percentage 1		97.546 %	97.160 %	98.720 %	99.157 %	96.717 %	99.540 %	97.915 %	97.602 %
Concentration RSD	0.4 %	2.0 %	2.3 %	0.6 %	3.0 %	2.5 %	2.0 %	3.2 %	1.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.414 %	48.381 ppb	49.366 ppb	48.563 ppb	47.405 ppb	99.555 %	50.296 ppb	48.675 ppb	104.801 %
Concentration per Run 1	102.395 %	48.872 ppb	46.352 ppb	48.502 ppb	47.761 ppb	98.484 %	50.348 ppb	48.784 ppb	101.979 %
Concentration per Run 2	104.215 %	48.200 ppb	52.382 ppb	49.674 ppb	47.236 ppb	98.278 %	49.926 ppb	48.489 ppb	106.465 %
Concentration per Run 3	109.631 %	48.070 ppb	49.362 ppb	47.512 ppb	47.217 ppb	101.903 %	50.614 ppb	48.753 ppb	105.961 %
Recovery Percentage 1		96.761 %	98.731 %	97.125 %	94.809 %		100.592 %	97.351 %	
Concentration RSD	3.6 %	0.9 %	6.1 %	2.2 %	0.7 %	2.0 %	0.7 %	0.3 %	2.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	54.002 ppb	46.438 ppb	105.062 %	106.801 %	48.585 ppb	48.683 ppb	110.483 %
Concentration per Run 1	54.003 ppb	47.044 ppb	103.349 %	102.116 %	43.649 ppb	43.221 ppb	122.983 %
Concentration per Run 2	53.430 ppb	46.192 ppb	104.277 %	107.220 %	50.106 ppb	50.894 ppb	104.953 %
Concentration per Run 3	54.572 ppb	46.077 ppb	107.559 %	111.067 %	51.999 ppb	51.933 ppb	103.514 %
Recovery Percentage 1	108.003 %	92.876 %			97.170 %	97.366 %	
Concentration RSD	1.1 %	1.1 %	2.1 %	4.2 %	9.0 %	9.8 %	9.8 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 13 User name ALPHALAB\Metals-Instrument Comment ICB
Analysis label: ICB Rack 0
Analysis started at: 9/3/2023 2:59:26 PM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	93.586 %	96.618 %	0.014 ppb	-0.619 ppb	-1.060 ppb	-0.509 ppb	-0.839 ppb	-7.126 ppb	-9.973 ppb
Concentration per Run 1	94.912 %	92.733 %	0.017 ppb	-0.604 ppb	-0.836 ppb	-0.452 ppb	-0.801 ppb	-4.443 ppb	-10.892 ppb
Concentration per Run 2	93.588 %	95.752 %	0.013 ppb	-0.628 ppb	-1.338 ppb	-0.671 ppb	-0.868 ppb	-6.700 ppb	-10.228 ppb
Concentration per Run 3	92.258 %	101.370 %	0.012 ppb	-0.625 ppb	-1.006 ppb	-0.404 ppb	-0.848 ppb	-10.233 ppb	-8.799 ppb
Recovery Percentage 1			2.766 %	-6.189 %	-1.060 %	-0.727 %	-8.390 %	-7.126 %	-9.973 %
Concentration RSD	1.4 %	4.5 %	18.9 %	2.2 %	24.1 %	28.0 %	4.1 %	41.0 %	10.7 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	91.848 %	-0.003 ppb	-0.001 ppb	-0.209 ppb	14.270 ppb	-0.005 ppb	-0.248 ppb	-0.088 ppb	-1.741 ppb
Concentration per Run 1	91.007 %	-0.006 ppb	-0.008 ppb	-0.227 ppb	14.365 ppb	-0.006 ppb	-0.243 ppb	-0.086 ppb	-1.717 ppb
Concentration per Run 2	91.581 %	0.008 ppb	0.016 ppb	-0.221 ppb	13.644 ppb	-0.008 ppb	-0.207 ppb	-0.092 ppb	-1.823 ppb
Concentration per Run 3	92.957 %	-0.012 ppb	-0.011 ppb	-0.180 ppb	14.802 ppb	-0.001 ppb	-0.294 ppb	-0.086 ppb	-1.684 ppb
Recovery Percentage 1		-0.065 %	-0.071 %	-20.920 %	28.540 %	-0.926 %	-12.399 %	-8.809 %	-34.825 %
Concentration RSD	1.1 %	318.7 %	2,094.6 %	12.3 %	4.1 %	77.9 %	17.7 %	4.0 %	4.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.692 %	0.112 ppb	0.592 ppb	-0.016 ppb	1.772 ppb	96.922 %	0.002 ppb	0.003 ppb	100.084 %
Concentration per Run 1	98.609 %	0.063 ppb	0.387 ppb	-0.016 ppb	1.330 ppb	95.479 %	0.002 ppb	0.003 ppb	96.495 %
Concentration per Run 2	102.809 %	0.130 ppb	0.531 ppb	-0.016 ppb	1.844 ppb	96.343 %	-0.001 ppb	0.003 ppb	99.905 %
Concentration per Run 3	103.657 %	0.143 ppb	0.857 ppb	-0.017 ppb	2.143 ppb	98.943 %	0.004 ppb	0.002 ppb	103.853 %
Recovery Percentage 1		22.404 %	11.834 %	-0.163 %	88.609 %		0.394 %	1.408 %	
Concentration RSD	2.7 %	38.4 %	40.7 %	4.4 %	23.2 %	1.9 %	161.6 %	20.9 %	3.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.598 ppb	-0.035 ppb	98.987 %	99.965 %	0.082 ppb	0.008 ppb	97.283 %
Concentration per Run 1	0.552 ppb	-0.047 ppb	97.758 %	97.750 %	0.081 ppb	0.009 ppb	97.851 %
Concentration per Run 2	0.620 ppb	-0.025 ppb	99.127 %	99.444 %	0.086 ppb	0.007 ppb	97.279 %
Concentration per Run 3	0.621 ppb	-0.034 ppb	100.075 %	102.700 %	0.079 ppb	0.009 ppb	96.718 %
Recovery Percentage 1	14.942 %	-7.021 %			8.175 %	0.847 %	
Concentration RSD	6.6 %	31.5 %	1.2 %	2.5 %	4.4 %	11.9 %	0.6 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	14	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	LLCCV	Rack	4		
Analysis started at:	9/3/2023 3:07:49 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	99.022 %	99.385 %	0.332 ppb	106.679 ppb	98.635 ppb	74.054 ppb	10.526 ppb	100.351 ppb	183.882 ppb
Concentration per Run 1	100.597 %	95.416 %	0.331 ppb	106.776 ppb	96.365 ppb	74.731 ppb	9.896 ppb	97.218 ppb	175.600 ppb
Concentration per Run 2	99.454 %	99.860 %	0.330 ppb	106.240 ppb	99.531 ppb	75.698 ppb	10.912 ppb	101.533 ppb	180.627 ppb
Concentration per Run 3	97.016 %	102.879 %	0.335 ppb	107.023 ppb	100.009 ppb	71.733 ppb	10.769 ppb	102.302 ppb	195.420 ppb
Recovery Percentage 1			66.419 %	1,066.795 %	98.635 %	105.792 %	105.255 %	100.351 %	183.882 %
Concentration RSD	1.8 %	3.8 %	0.8 %	0.4 %	2.0 %	2.8 %	5.2 %	2.7 %	5.6 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.931 %	5.150 ppb	0.499 ppb	1.050 ppb	45.283 ppb	0.515 ppb	1.840 ppb	1.123 ppb	9.587 ppb
Concentration per Run 1	97.405 %	5.151 ppb	0.473 ppb	0.895 ppb	46.002 ppb	0.531 ppb	1.955 ppb	1.166 ppb	9.411 ppb
Concentration per Run 2	96.361 %	5.327 ppb	0.521 ppb	1.210 ppb	48.571 ppb	0.490 ppb	1.909 ppb	1.132 ppb	9.599 ppb
Concentration per Run 3	97.026 %	4.974 ppb	0.503 ppb	1.044 ppb	41.275 ppb	0.523 ppb	1.657 ppb	1.071 ppb	9.750 ppb
Recovery Percentage 1		103.009 %	49.912 %	104.951 %	90.565 %	102.917 %	92.023 %	112.280 %	95.865 %
Concentration RSD	0.5 %	3.4 %	4.8 %	15.0 %	8.2 %	4.3 %	8.7 %	4.3 %	1.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.125 %	0.511 ppb	5.079 ppb	0.542 ppb	2.112 ppb	101.008 %	0.264 ppb	0.218 ppb	104.793 %
Concentration per Run 1	98.995 %	0.460 ppb	5.689 ppb	0.517 ppb	2.002 ppb	98.642 %	0.279 ppb	0.221 ppb	99.295 %
Concentration per Run 2	102.062 %	0.521 ppb	5.040 ppb	0.556 ppb	2.086 ppb	101.425 %	0.258 ppb	0.207 ppb	106.313 %
Concentration per Run 3	108.319 %	0.552 ppb	4.509 ppb	0.552 ppb	2.248 ppb	102.959 %	0.255 ppb	0.226 ppb	108.770 %
Recovery Percentage 1		102.166 %	101.579 %	108.375 %	105.593 %		66.022 %	108.822 %	
Concentration RSD	4.6 %	9.2 %	11.6 %	3.9 %	5.9 %	2.2 %	4.8 %	4.6 %	4.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.797 ppb	0.480 ppb	102.793 %	103.323 %	0.454 ppb	0.517 ppb	107.346 %
Concentration per Run 1	4.797 ppb	0.524 ppb	99.346 %	100.191 %	0.416 ppb	0.476 ppb	112.859 %
Concentration per Run 2	4.789 ppb	0.513 ppb	103.700 %	103.595 %	0.454 ppb	0.515 ppb	105.888 %
Concentration per Run 3	4.805 ppb	0.403 ppb	105.334 %	106.182 %	0.492 ppb	0.558 ppb	103.292 %
Recovery Percentage 1	119.930 %	96.012 %			90.821 %	103.315 %	
Concentration RSD	0.2 %	13.9 %	3.0 %	2.9 %	8.4 %	7.9 %	4.6 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	15	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	9/3/2023 3:12:32 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	87.694 %	89.715 %	0.011 ppb	0.391 ppb	51,915.238 ppb	21,402.251 ppb	21,130.768 ppb	21,402.721 ppb	64,020.320 ppb
Concentration per Run 1	89.053 %	88.457 %	0.009 ppb	0.356 ppb	52,915.682 ppb	21,292.752 ppb	21,440.511 ppb	22,100.994 ppb	65,582.862 ppb
Concentration per Run 2	87.569 %	91.224 %	0.011 ppb	0.402 ppb	50,341.043 ppb	20,701.088 ppb	20,749.475 ppb	20,667.978 ppb	62,702.702 ppb
Concentration per Run 3	86.461 %	89.463 %	0.011 ppb	0.413 ppb	52,488.987 ppb	22,212.915 ppb	21,202.317 ppb	21,439.191 ppb	63,775.396 ppb
Recovery Percentage 1			2.143 %	3.907 %	51,915.238 %	30,574.645 %	211,307.679 %	21,402.721 %	64,020.320 %
Concentration RSD	1.5 %	1.6 %	10.8 %	7.7 %	2.7 %	3.6 %	1.7 %	3.4 %	2.3 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	89.885 %	0.006 ppb	0.280 ppb	0.852 ppb	57,323.791 ppb	0.435 ppb	0.318 ppb	0.287 ppb	-1.013 ppb
Concentration per Run 1	89.766 %	0.008 ppb	0.254 ppb	0.834 ppb	59,543.177 ppb	0.450 ppb	0.345 ppb	0.330 ppb	-0.912 ppb
Concentration per Run 2	90.249 %	0.000 ppb	0.296 ppb	0.941 ppb	56,021.622 ppb	0.438 ppb	0.268 ppb	0.279 ppb	-1.075 ppb
Concentration per Run 3	89.640 %	0.010 ppb	0.290 ppb	0.782 ppb	56,406.574 ppb	0.416 ppb	0.342 ppb	0.254 ppb	-1.050 ppb
Recovery Percentage 1		0.122 %	28.014 %	85.228 %	114,647.582 %	86.953 %	15.905 %	28.738 %	-20.251 %
Concentration RSD	0.4 %	86.6 %	8.3 %	9.5 %	3.4 %	4.0 %	13.8 %	13.5 %	8.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	94.119 %	0.133 ppb	1.006 ppb	0.517 ppb	432.327 ppb	85.709 %	0.002 ppb	0.060 ppb	94.039 %
Concentration per Run 1	89.442 %	0.144 ppb	0.875 ppb	0.519 ppb	447.469 ppb	82.929 %	0.002 ppb	0.068 ppb	87.845 %
Concentration per Run 2	95.499 %	0.089 ppb	1.068 ppb	0.502 ppb	420.017 ppb	86.036 %	0.002 ppb	0.055 ppb	96.989 %
Concentration per Run 3	97.415 %	0.166 ppb	1.074 ppb	0.530 ppb	429.493 ppb	88.160 %	0.001 ppb	0.057 ppb	97.283 %
Recovery Percentage 1		26.614 %	20.114 %	5.172 %	21,616.330 %		0.425 %	30.059 %	
Concentration RSD	4.4 %	29.7 %	11.3 %	2.7 %	3.2 %	3.1 %	24.2 %	11.0 %	5.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.475 ppb	0.225 ppb	93.876 %	95.263 %	0.031 ppb	0.367 ppb	83.180 %
Concentration per Run 1	0.412 ppb	0.224 ppb	89.368 %	91.389 %	0.032 ppb	0.362 ppb	82.374 %
Concentration per Run 2	0.478 ppb	0.231 ppb	94.280 %	95.852 %	0.032 ppb	0.373 ppb	81.637 %
Concentration per Run 3	0.534 ppb	0.221 ppb	97.979 %	98.548 %	0.029 ppb	0.367 ppb	85.529 %
Recovery Percentage 1	11.868 %	45.068 %			3.060 %	36.738 %	
Concentration RSD	12.9 %	2.4 %	4.6 %	3.8 %	5.6 %	1.5 %	2.5 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	16	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	9/3/2023 3:17:14 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	89.298 %	97.121 %	0.013 ppb	-0.590 ppb	7.379 ppb	2.759 ppb	0.126 ppb	6.085 ppb	-3.087 ppb
Concentration per Run 1	90.580 %	96.003 %	0.009 ppb	-0.616 ppb	8.147 ppb	2.480 ppb	0.241 ppb	4.074 ppb	2.048 ppb
Concentration per Run 2	89.391 %	95.165 %	0.017 ppb	-0.599 ppb	6.810 ppb	2.567 ppb	-0.131 ppb	8.081 ppb	-5.523 ppb
Concentration per Run 3	87.922 %	100.196 %	0.013 ppb	-0.554 ppb	7.179 ppb	3.231 ppb	0.269 ppb	6.101 ppb	-5.786 ppb
Concentration RSD	1.5 %	2.8 %	30.6 %	5.5 %	9.4 %	14.9 %	176.6 %	32.9 %	144.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	88.353 %	-0.019 ppb	-0.020 ppb	-0.127 ppb	52.346 ppb	-0.001 ppb	-0.204 ppb	0.221 ppb	-0.744 ppb
Concentration per Run 1	88.860 %	-0.005 ppb	-0.020 ppb	-0.151 ppb	57.130 ppb	-0.003 ppb	-0.203 ppb	0.193 ppb	-0.729 ppb
Concentration per Run 2	88.996 %	-0.026 ppb	-0.014 ppb	-0.118 ppb	54.997 ppb	0.001 ppb	-0.198 ppb	0.257 ppb	-0.711 ppb
Concentration per Run 3	87.204 %	-0.027 ppb	-0.026 ppb	-0.111 ppb	44.909 ppb	-0.001 ppb	-0.211 ppb	0.212 ppb	-0.793 ppb
Concentration RSD	1.1 %	63.4 %	29.4 %	16.7 %	12.5 %	210.5 %	3.2 %	14.9 %	5.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.558 %	0.000 ppb	0.125 ppb	-0.011 ppb	9.175 ppb	96.011 %	-0.002 ppb	0.005 ppb	98.838 %
Concentration per Run 1	93.867 %	-0.033 ppb	0.133 ppb	-0.010 ppb	7.574 ppb	93.402 %	-0.003 ppb	0.005 ppb	96.369 %
Concentration per Run 2	97.595 %	0.026 ppb	0.179 ppb	-0.005 ppb	9.773 ppb	96.821 %	-0.002 ppb	0.004 ppb	99.183 %
Concentration per Run 3	104.212 %	0.006 ppb	0.063 ppb	-0.017 ppb	10.176 ppb	97.812 %	-0.002 ppb	0.004 ppb	100.961 %
Concentration RSD	5.3 %	6,419.2 %	46.5 %	54.8 %	15.3 %	2.4 %	32.3 %	13.6 %	2.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.220 ppb	-0.020 ppb	97.287 %	99.201 %	0.010 ppb	0.019 ppb	94.626 %
Concentration per Run 1	0.193 ppb	-0.023 ppb	93.224 %	94.468 %	0.008 ppb	0.019 ppb	90.402 %
Concentration per Run 2	0.227 ppb	-0.016 ppb	99.560 %	101.536 %	0.012 ppb	0.019 ppb	94.685 %
Concentration per Run 3	0.238 ppb	-0.020 ppb	99.079 %	101.599 %	0.010 ppb	0.018 ppb	98.791 %
Concentration RSD	10.7 %	19.0 %	3.6 %	4.1 %	18.4 %	2.9 %	4.4 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	17	User name	ALPHALAB\Metals-Instrument	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	9/3/2023 3:21:50 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	91.211 %	95.556 %	61.787 ppb	53.429 ppb	5,884.056 ppb	6,105.020 ppb	60.354 ppb	6,091.948 ppb	6,152.576 ppb
Concentration per Run 1	91.591 %	91.308 %	61.598 ppb	53.024 ppb	6,095.562 ppb	6,360.615 ppb	62.931 ppb	6,475.989 ppb	6,429.745 ppb
Concentration per Run 2	92.229 %	92.901 %	61.782 ppb	53.693 ppb	5,786.630 ppb	5,962.283 ppb	58.151 ppb	5,829.720 ppb	6,273.342 ppb
Concentration per Run 3	89.813 %	102.460 %	61.982 ppb	53.570 ppb	5,769.975 ppb	5,992.163 ppb	59.981 ppb	5,970.136 ppb	5,754.640 ppb
Recovery Percentage 1			102.979 %	89.048 %	98.068 %	101.750 %	100.590 %	101.532 %	102.543 %
Concentration RSD	1.4 %	6.3 %	0.3 %	0.7 %	3.1 %	3.6 %	4.0 %	5.6 %	5.7 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.203 %	59.541 ppb	59.938 ppb	58.690 ppb	6,069.658 ppb	60.118 ppb	60.224 ppb	60.714 ppb	60.715 ppb
Concentration per Run 1	96.508 %	62.677 ppb	62.261 ppb	61.498 ppb	6,246.036 ppb	61.341 ppb	60.874 ppb	61.939 ppb	61.448 ppb
Concentration per Run 2	100.647 %	57.773 ppb	58.875 ppb	58.010 ppb	6,038.055 ppb	60.487 ppb	60.300 ppb	61.672 ppb	60.971 ppb
Concentration per Run 3	97.452 %	58.172 ppb	58.678 ppb	56.563 ppb	5,924.885 ppb	58.527 ppb	59.497 ppb	58.531 ppb	59.727 ppb
Recovery Percentage 1		99.234 %	99.896 %	97.817 %	101.161 %	100.197 %	100.373 %	101.190 %	101.192 %
Concentration RSD	2.2 %	4.6 %	3.4 %	4.3 %	2.7 %	2.4 %	1.1 %	3.1 %	1.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.825 %	61.201 ppb	61.797 ppb	53.215 ppb	63.116 ppb	92.831 %	60.140 ppb	60.378 ppb	98.081 %
Concentration per Run 1	95.409 %	63.920 ppb	62.970 ppb	55.430 ppb	64.688 ppb	90.636 %	61.495 ppb	62.444 ppb	95.567 %
Concentration per Run 2	96.296 %	60.145 ppb	59.718 ppb	50.698 ppb	61.440 ppb	90.823 %	60.246 ppb	60.208 ppb	92.982 %
Concentration per Run 3	104.769 %	59.538 ppb	62.701 ppb	53.517 ppb	63.219 ppb	97.032 %	58.680 ppb	58.481 ppb	105.693 %
Recovery Percentage 1		102.001 %	102.994 %	88.692 %	105.193 %		100.234 %	100.629 %	
Concentration RSD	5.2 %	3.9 %	2.9 %	4.5 %	2.6 %	3.9 %	2.3 %	3.3 %	6.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	66.218 ppb	59.619 ppb	98.759 %	99.909 %	116.350 ppb	100.226 ppb	93.933 %
Concentration per Run 1	67.463 ppb	60.532 ppb	95.582 %	97.924 %	124.228 ppb	102.618 ppb	92.771 %
Concentration per Run 2	67.168 ppb	58.719 ppb	96.469 %	94.194 %	113.097 ppb	100.157 ppb	91.775 %
Concentration per Run 3	64.024 ppb	59.605 ppb	104.226 %	107.608 %	111.726 ppb	97.903 ppb	97.251 %
Recovery Percentage 1	110.364 %	99.365 %			193.917 %	167.043 %	
Concentration RSD	2.9 %	1.5 %	4.8 %	6.9 %	5.9 %	2.4 %	3.1 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	18	User name	ALPHALAB\Metals-Instrument	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	9/3/2023 3:27:31 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	97.767 %	103.633 %	0.012 ppb	-1.590 ppb	-0.461 ppb	-0.542 ppb	-0.752 ppb	-5.774 ppb	-11.561 ppb
Concentration per Run 1	99.328 %	100.950 %	0.011 ppb	-1.593 ppb	-0.421 ppb	-0.780 ppb	-0.627 ppb	-2.824 ppb	-10.312 ppb
Concentration per Run 2	96.601 %	100.279 %	0.010 ppb	-1.517 ppb	0.389 ppb	-0.398 ppb	-1.101 ppb	-7.100 ppb	-11.013 ppb
Concentration per Run 3	97.374 %	109.671 %	0.014 ppb	-1.662 ppb	-1.349 ppb	-0.447 ppb	-0.527 ppb	-7.396 ppb	-13.357 ppb
Recovery Percentage 1			2.344 %	-15.905 %	-0.461 %	-0.774 %	-7.516 %	-5.774 %	-11.561 %
Concentration RSD	1.4 %	5.1 %	16.9 %	4.5 %	188.8 %	38.4 %	40.8 %	44.3 %	13.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.011 %	-0.017 ppb	-0.005 ppb	-0.226 ppb	13.107 ppb	-0.005 ppb	-0.220 ppb	-0.089 ppb	-1.734 ppb
Concentration per Run 1	94.761 %	-0.017 ppb	-0.009 ppb	-0.230 ppb	12.592 ppb	-0.005 ppb	-0.210 ppb	-0.096 ppb	-1.735 ppb
Concentration per Run 2	93.858 %	-0.022 ppb	-0.011 ppb	-0.231 ppb	15.448 ppb	-0.004 ppb	-0.238 ppb	-0.083 ppb	-1.769 ppb
Concentration per Run 3	96.415 %	-0.013 ppb	0.005 ppb	-0.217 ppb	11.280 ppb	-0.008 ppb	-0.213 ppb	-0.087 ppb	-1.697 ppb
Recovery Percentage 1		-0.342 %	-0.504 %	-22.586 %	26.213 %	-1.071 %	-11.002 %	-8.905 %	-34.674 %
Concentration RSD	1.4 %	25.4 %	172.6 %	3.3 %	16.3 %	40.1 %	7.1 %	7.5 %	2.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	103.942 %	0.049 ppb	0.515 ppb	-0.017 ppb	1.656 ppb	103.752 %	-0.001 ppb	0.002 ppb	104.475 %
Concentration per Run 1	100.936 %	0.037 ppb	0.324 ppb	-0.014 ppb	1.162 ppb	100.178 %	-0.002 ppb	0.006 ppb	98.770 %
Concentration per Run 2	103.581 %	0.040 ppb	0.527 ppb	-0.020 ppb	1.730 ppb	104.160 %	-0.001 ppb	-0.001 ppb	102.475 %
Concentration per Run 3	107.308 %	0.068 ppb	0.694 ppb	-0.016 ppb	2.078 ppb	106.916 %	-0.001 ppb	0.001 ppb	112.179 %
Recovery Percentage 1		9.723 %	10.296 %	-0.166 %	82.820 %		-0.355 %	1.077 %	
Concentration RSD	3.1 %	34.5 %	36.0 %	19.7 %	27.9 %	3.3 %	51.9 %	158.4 %	6.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.157 ppb	-0.039 ppb	104.242 %	106.153 %	0.256 ppb	0.007 ppb	102.451 %
Concentration per Run 1	0.137 ppb	-0.034 ppb	100.744 %	106.373 %	0.304 ppb	0.007 ppb	104.724 %
Concentration per Run 2	0.163 ppb	-0.039 ppb	102.719 %	104.311 %	0.256 ppb	0.009 ppb	97.183 %
Concentration per Run 3	0.171 ppb	-0.044 ppb	109.265 %	107.777 %	0.207 ppb	0.006 ppb	105.448 %
Recovery Percentage 1	3.922 %	-7.722 %			25.586 %	0.700 %	
Concentration RSD	11.3 %	13.2 %	4.3 %	1.6 %	19.0 %	21.7 %	4.5 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	19	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/3/2023 3:33:06 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	95.358 %	106.792 %	60.083 ppb	58.299 ppb	5,808.783 ppb	5,813.305 ppb	60.952 ppb	6,004.159 ppb	5,920.332 ppb
Concentration per Run 1	96.602 %	103.801 %	59.574 ppb	57.439 ppb	5,653.539 ppb	5,769.038 ppb	55.183 ppb	5,731.372 ppb	5,868.545 ppb
Concentration per Run 2	94.815 %	104.556 %	60.242 ppb	58.666 ppb	5,904.591 ppb	5,786.730 ppb	60.122 ppb	5,980.263 ppb	5,826.448 ppb
Concentration per Run 3	94.655 %	112.018 %	60.432 ppb	58.790 ppb	5,868.219 ppb	5,884.146 ppb	67.552 ppb	6,300.842 ppb	6,066.002 ppb
Recovery Percentage 1			100.138 %	97.164 %	96.813 %	96.888 %	101.587 %	100.069 %	98.672 %
Concentration RSD	1.1 %	4.3 %	0.8 %	1.3 %	2.3 %	1.1 %	10.2 %	4.8 %	2.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.829 %	56.747 ppb	56.935 ppb	57.260 ppb	5,807.701 ppb	57.539 ppb	57.316 ppb	57.478 ppb	57.451 ppb
Concentration per Run 1	106.351 %	59.204 ppb	57.984 ppb	56.889 ppb	5,925.625 ppb	59.229 ppb	60.168 ppb	59.329 ppb	57.945 ppb
Concentration per Run 2	106.675 %	54.557 ppb	55.714 ppb	56.090 ppb	5,694.620 ppb	57.034 ppb	56.405 ppb	57.487 ppb	56.960 ppb
Concentration per Run 3	107.460 %	56.481 ppb	57.109 ppb	58.800 ppb	5,802.858 ppb	56.355 ppb	55.375 ppb	55.619 ppb	57.449 ppb
Recovery Percentage 1		94.579 %	94.892 %	95.433 %	96.795 %	95.899 %	95.527 %	95.797 %	95.752 %
Concentration RSD	0.5 %	4.1 %	2.0 %	2.4 %	2.0 %	2.6 %	4.4 %	3.2 %	0.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	111.252 %	58.710 ppb	59.719 ppb	61.360 ppb	56.231 ppb	102.068 %	57.982 ppb	57.888 ppb	110.833 %
Concentration per Run 1	106.725 %	58.766 ppb	58.681 ppb	59.575 ppb	56.242 ppb	101.144 %	58.271 ppb	57.812 ppb	107.542 %
Concentration per Run 2	107.537 %	59.096 ppb	58.684 ppb	59.529 ppb	55.568 ppb	100.289 %	58.874 ppb	58.230 ppb	105.062 %
Concentration per Run 3	119.494 %	58.266 ppb	61.793 ppb	64.977 ppb	56.883 ppb	104.772 %	56.801 ppb	57.623 ppb	119.897 %
Recovery Percentage 1		97.849 %	99.532 %	102.267 %	93.718 %		96.636 %	96.480 %	
Concentration RSD	6.4 %	0.7 %	3.0 %	5.1 %	1.2 %	2.3 %	1.8 %	0.5 %	7.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	64.177 ppb	56.430 ppb	109.096 %	111.453 %	56.128 ppb	60.806 ppb	111.868 %
Concentration per Run 1	63.792 ppb	55.255 ppb	105.394 %	104.959 %	51.940 ppb	55.985 ppb	120.304 %
Concentration per Run 2	64.304 ppb	55.617 ppb	106.137 %	108.369 %	57.593 ppb	62.550 ppb	106.133 %
Concentration per Run 3	64.436 ppb	58.418 ppb	115.755 %	121.033 %	58.850 ppb	63.882 ppb	109.167 %
Recovery Percentage 1	106.962 %	94.050 %			93.546 %	101.343 %	
Concentration RSD	0.5 %	3.1 %	5.3 %	7.6 %	6.6 %	7.0 %	6.7 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	20	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/3/2023 3:37:46 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	95.971 %	105.869 %	0.015 ppb	-1.032 ppb	-0.861 ppb	-0.492 ppb	-0.705 ppb	-4.320 ppb	-7.044 ppb
Concentration per Run 1	97.674 %	103.382 %	0.018 ppb	-1.050 ppb	-0.329 ppb	-0.408 ppb	-0.767 ppb	-6.153 ppb	-7.890 ppb
Concentration per Run 2	95.916 %	105.143 %	0.014 ppb	-1.015 ppb	-1.823 ppb	-0.701 ppb	-0.375 ppb	-3.681 ppb	-8.206 ppb
Concentration per Run 3	94.322 %	109.084 %	0.015 ppb	-1.031 ppb	-0.433 ppb	-0.365 ppb	-0.972 ppb	-3.127 ppb	-5.035 ppb
Recovery Percentage 1			3.095 %	-10.323 %	-0.861 %	-0.702 %	-7.046 %	-4.320 %	-7.044 %
Concentration RSD	1.7 %	2.8 %	12.1 %	1.7 %	96.8 %	37.2 %	43.0 %	37.3 %	24.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	90.216 %	-0.010 ppb	-0.005 ppb	-0.241 ppb	18.356 ppb	-0.003 ppb	-0.202 ppb	-0.087 ppb	-1.737 ppb
Concentration per Run 1	90.577 %	-0.007 ppb	-0.016 ppb	-0.239 ppb	19.140 ppb	-0.002 ppb	-0.203 ppb	-0.092 ppb	-1.690 ppb
Concentration per Run 2	90.083 %	-0.017 ppb	-0.015 ppb	-0.241 ppb	18.837 ppb	-0.004 ppb	-0.224 ppb	-0.087 ppb	-1.788 ppb
Concentration per Run 3	89.986 %	-0.005 ppb	0.017 ppb	-0.244 ppb	17.091 ppb	-0.003 ppb	-0.179 ppb	-0.082 ppb	-1.732 ppb
Recovery Percentage 1		-0.194 %	-0.469 %	-24.107 %	36.711 %	-0.571 %	-10.100 %	-8.708 %	-34.737 %
Concentration RSD	0.4 %	69.1 %	394.0 %	1.0 %	6.0 %	41.4 %	11.0 %	5.5 %	2.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	106.965 %	0.116 ppb	0.858 ppb	-0.020 ppb	1.961 ppb	101.394 %	-0.001 ppb	0.004 ppb	106.960 %
Concentration per Run 1	100.770 %	0.099 ppb	0.795 ppb	-0.022 ppb	1.462 ppb	95.078 %	-0.001 ppb	0.005 ppb	99.325 %
Concentration per Run 2	106.799 %	0.139 ppb	0.601 ppb	-0.019 ppb	2.110 ppb	102.367 %	-0.001 ppb	0.006 ppb	108.250 %
Concentration per Run 3	113.325 %	0.111 ppb	1.179 ppb	-0.019 ppb	2.310 ppb	106.737 %	-0.003 ppb	0.001 ppb	113.304 %
Recovery Percentage 1		23.200 %	17.161 %	-0.199 %	98.043 %		-0.346 %	2.122 %	
Concentration RSD	5.9 %	17.6 %	34.3 %	7.8 %	22.6 %	5.8 %	107.0 %	59.2 %	6.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.126 ppb	-0.030 ppb	102.377 %	104.794 %	0.315 ppb	0.012 ppb	95.196 %
Concentration per Run 1	0.085 ppb	-0.024 ppb	94.525 %	95.952 %	0.360 ppb	0.014 ppb	92.563 %
Concentration per Run 2	0.149 ppb	-0.027 ppb	103.886 %	104.190 %	0.329 ppb	0.012 ppb	93.896 %
Concentration per Run 3	0.144 ppb	-0.040 ppb	108.720 %	114.240 %	0.256 ppb	0.010 ppb	99.129 %
Recovery Percentage 1	3.146 %	-6.010 %			31.491 %	1.237 %	
Concentration RSD	28.3 %	28.5 %	7.0 %	8.7 %	17.0 %	15.4 %	3.6 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 21 User name ALPHALAB\Metals-Instrument Comment <Comment>
Analysis label: wg1822899-1 2008TL Rack 1
Analysis started at: 9/3/2023 3:44:00 PM Vial 1

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	100.826 %	110.285 %	0.014 ppb	-1.527 ppb	-0.361 ppb	1.150 ppb	0.202 ppb	-11.330 ppb	66.224 ppb
Concentration per Run 1	101.593 %	111.767 %	0.012 ppb	-1.559 ppb	-1.369 ppb	1.000 ppb	0.566 ppb	-11.905 ppb	74.909 ppb
Concentration per Run 2	100.773 %	110.677 %	0.016 ppb	-1.516 ppb	0.337 ppb	2.105 ppb	0.260 ppb	-9.142 ppb	66.193 ppb
Concentration per Run 3	100.111 %	108.413 %	0.014 ppb	-1.505 ppb	-0.052 ppb	0.344 ppb	-0.219 ppb	-12.944 ppb	57.571 ppb
Concentration RSD	0.7 %	1.6 %	13.4 %	1.9 %	247.5 %	77.4 %	195.4 %	17.3 %	13.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.465 %	-0.019 ppb	-0.039 ppb	-0.006 ppb	3.240 ppb	-0.008 ppb	-0.382 ppb	-0.081 ppb	-1.733 ppb
Concentration per Run 1	99.622 %	-0.018 ppb	-0.049 ppb	0.020 ppb	3.233 ppb	-0.008 ppb	-0.381 ppb	-0.085 ppb	-1.727 ppb
Concentration per Run 2	100.606 %	-0.013 ppb	-0.033 ppb	-0.014 ppb	3.811 ppb	-0.008 ppb	-0.383 ppb	-0.087 ppb	-1.720 ppb
Concentration per Run 3	101.169 %	-0.027 ppb	-0.036 ppb	-0.023 ppb	2.674 ppb	-0.009 ppb	-0.384 ppb	-0.070 ppb	-1.753 ppb
Concentration RSD	0.8 %	36.1 %	21.2 %	410.1 %	17.6 %	6.7 %	0.4 %	11.5 %	1.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	111.342 %	-0.001 ppb	0.246 ppb	0.006 ppb	0.633 ppb	108.289 %	-0.004 ppb	0.002 ppb	110.775 %
Concentration per Run 1	113.674 %	-0.009 ppb	0.152 ppb	0.004 ppb	0.427 ppb	109.765 %	-0.005 ppb	0.003 ppb	115.465 %
Concentration per Run 2	107.226 %	-0.019 ppb	0.242 ppb	0.007 ppb	0.683 ppb	107.312 %	-0.004 ppb	0.001 ppb	106.231 %
Concentration per Run 3	113.126 %	0.026 ppb	0.344 ppb	0.007 ppb	0.788 ppb	107.790 %	-0.003 ppb	0.001 ppb	110.628 %
Concentration RSD	3.2 %	4,072.1 %	39.2 %	28.1 %	29.4 %	1.2 %	20.8 %	64.2 %	4.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.042 ppb	-0.038 ppb	109.039 %	108.623 %	0.057 ppb	0.000 ppb	132.229 %
Concentration per Run 1	0.021 ppb	-0.036 ppb	110.812 %	111.297 %	0.050 ppb	-0.001 ppb	163.098 %
Concentration per Run 2	0.045 ppb	-0.039 ppb	108.262 %	108.209 %	0.063 ppb	0.000 ppb	118.464 %
Concentration per Run 3	0.061 ppb	-0.040 ppb	108.043 %	106.362 %	0.058 ppb	0.002 ppb	115.124 %
Concentration RSD	47.4 %	4.9 %	1.4 %	2.3 %	11.2 %	278.8 %	20.3 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 22
Analysis label: wg1822899-2D5 2008TL
Analysis started at: 9/3/2023 3:54:27 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 2
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	101.763 %	108.888 %	10.770 ppb	222.768 ppb	2,079.021 ppb	2,103.824 ppb	432.453 ppb	2,141.534 ppb	1,886.168 ppb
Concentration per Run 1	103.280 %	103.550 %	10.742 ppb	220.435 ppb	2,161.745 ppb	2,198.448 ppb	450.265 ppb	2,187.926 ppb	1,848.629 ppb
Concentration per Run 2	101.889 %	111.431 %	10.675 ppb	223.204 ppb	2,036.199 ppb	2,009.778 ppb	420.192 ppb	2,067.939 ppb	1,902.966 ppb
Concentration per Run 3	100.121 %	111.683 %	10.894 ppb	224.665 ppb	2,039.119 ppb	2,103.247 ppb	426.902 ppb	2,168.737 ppb	1,906.911 ppb
Concentration RSD	1.6 %	4.2 %	1.0 %	1.0 %	3.4 %	4.5 %	3.7 %	3.0 %	1.7 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.520 %	102.651 ppb	40.847 ppb	102.257 ppb	211.802 ppb	103.676 ppb	103.350 ppb	52.887 ppb	103.993 ppb
Concentration per Run 1	95.571 %	105.636 ppb	42.403 ppb	103.008 ppb	221.197 ppb	107.420 ppb	108.282 ppb	54.858 ppb	107.377 ppb
Concentration per Run 2	95.049 %	99.858 ppb	40.011 ppb	101.805 ppb	211.198 ppb	102.496 ppb	101.097 ppb	52.516 ppb	103.316 ppb
Concentration per Run 3	95.941 %	102.458 ppb	40.126 ppb	101.958 ppb	203.012 ppb	101.113 ppb	100.670 ppb	51.288 ppb	101.287 ppb
Concentration RSD	0.5 %	2.8 %	3.3 %	0.6 %	4.3 %	3.2 %	4.1 %	3.4 %	3.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	113.239 %	25.957 ppb	26.664 ppb	208.392 ppb	224.189 ppb	104.676 %	10.895 ppb	11.319 ppb	108.055 %
Concentration per Run 1	108.230 %	27.200 ppb	27.647 ppb	214.427 ppb	235.186 ppb	101.114 %	11.485 ppb	11.713 ppb	102.263 %
Concentration per Run 2	114.605 %	25.150 ppb	25.325 ppb	206.287 ppb	220.095 ppb	104.654 %	10.674 ppb	11.175 ppb	107.889 %
Concentration per Run 3	116.882 %	25.522 ppb	27.020 ppb	204.460 ppb	217.287 ppb	108.260 %	10.527 ppb	11.069 ppb	114.014 %
Concentration RSD	4.0 %	4.2 %	4.5 %	2.5 %	4.3 %	3.4 %	4.7 %	3.1 %	5.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	106.377 ppb	420.796 ppb	107.439 %	109.321 %	25.218 ppb	135.482 ppb	97.145 %
Concentration per Run 1	110.314 ppb	433.176 ppb	102.871 %	104.825 %	25.041 ppb	136.734 ppb	96.880 %
Concentration per Run 2	105.439 ppb	414.048 ppb	108.147 %	108.428 %	25.066 ppb	134.699 ppb	96.821 %
Concentration per Run 3	103.378 ppb	415.164 ppb	111.297 %	114.711 %	25.549 ppb	135.012 ppb	97.733 %
Concentration RSD	3.3 %	2.6 %	4.0 %	4.6 %	1.1 %	0.8 %	0.5 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 23
Analysis label: wg1822899-3d10 2008TL
Analysis started at: 9/3/2023 3:59:04 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 4
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	98.931 %	107.043 %	5.379 ppb	110.268 ppb	1,997.281 ppb	1,109.319 ppb	219.237 ppb	1,081.086 ppb	1,192.121 ppb
Concentration per Run 1	100.769 %	105.562 %	5.406 ppb	110.110 ppb	1,974.636 ppb	1,100.252 ppb	226.809 ppb	1,059.578 ppb	1,075.475 ppb
Concentration per Run 2	98.951 %	104.807 %	5.330 ppb	110.470 ppb	2,024.223 ppb	1,129.756 ppb	215.427 ppb	1,100.383 ppb	1,292.208 ppb
Concentration per Run 3	97.073 %	110.761 %	5.402 ppb	110.225 ppb	1,992.984 ppb	1,097.949 ppb	215.476 ppb	1,083.297 ppb	1,208.680 ppb
Concentration RSD	1.9 %	3.0 %	0.8 %	0.2 %	1.3 %	1.6 %	3.0 %	1.9 %	9.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.135 %	50.228 ppb	20.264 ppb	53.661 ppb	110.274 ppb	51.151 ppb	51.437 ppb	26.275 ppb	52.865 ppb
Concentration per Run 1	93.623 %	49.783 ppb	20.544 ppb	53.566 ppb	115.905 ppb	52.570 ppb	53.454 ppb	27.353 ppb	54.039 ppb
Concentration per Run 2	93.951 %	50.222 ppb	19.947 ppb	53.568 ppb	100.755 ppb	50.218 ppb	49.932 ppb	25.622 ppb	51.645 ppb
Concentration per Run 3	91.830 %	50.679 ppb	20.300 ppb	53.849 ppb	114.162 ppb	50.664 ppb	50.927 ppb	25.850 ppb	52.910 ppb
Concentration RSD	1.2 %	0.9 %	1.5 %	0.3 %	7.5 %	2.4 %	3.5 %	3.6 %	2.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	108.365 %	13.184 ppb	13.277 ppb	102.929 ppb	102.627 ppb	102.738 %	5.246 ppb	5.621 ppb	104.463 %
Concentration per Run 1	104.666 %	13.555 ppb	12.936 ppb	105.435 ppb	103.373 ppb	97.653 %	5.249 ppb	5.719 ppb	101.454 %
Concentration per Run 2	110.300 %	12.888 ppb	13.424 ppb	101.344 ppb	101.234 ppb	101.294 %	5.278 ppb	5.682 ppb	104.803 %
Concentration per Run 3	110.128 %	13.108 ppb	13.471 ppb	102.007 ppb	103.273 ppb	109.267 %	5.211 ppb	5.461 ppb	107.134 %
Concentration RSD	3.0 %	2.6 %	2.2 %	2.1 %	1.2 %	5.8 %	0.6 %	2.5 %	2.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.886 ppb	208.655 ppb	104.649 %	105.848 %	11.665 ppb	59.466 ppb	97.368 %
Concentration per Run 1	57.905 ppb	212.499 ppb	98.923 %	101.643 %	11.500 ppb	58.074 ppb	98.197 %
Concentration per Run 2	57.297 ppb	207.014 ppb	105.660 %	105.312 %	11.808 ppb	60.390 ppb	95.624 %
Concentration per Run 3	58.456 ppb	206.451 ppb	109.365 %	110.588 %	11.686 ppb	59.934 ppb	98.282 %
Concentration RSD	1.0 %	1.6 %	5.1 %	4.2 %	1.3 %	2.1 %	1.6 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 24
Analysis label: wg1822899-4 2008TL
Analysis started at: 9/3/2023 4:03:42 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 5
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	100.994 %	105.478 %	0.012 ppb	9.881 ppb	9,565.484 ppb	632.732 ppb	14.601 ppb	342.546 ppb	1,423.128 ppb
Concentration per Run 1	101.930 %	99.022 %	0.009 ppb	9.949 ppb	9,972.503 ppb	672.089 ppb	15.765 ppb	346.623 ppb	1,498.086 ppb
Concentration per Run 2	100.558 %	108.832 %	0.015 ppb	9.860 ppb	9,189.643 ppb	596.377 ppb	13.598 ppb	326.487 ppb	1,438.937 ppb
Concentration per Run 3	100.494 %	108.580 %	0.012 ppb	9.834 ppb	9,534.305 ppb	629.730 ppb	14.441 ppb	354.528 ppb	1,332.361 ppb
Concentration RSD	0.8 %	5.3 %	23.9 %	0.6 %	4.1 %	6.0 %	7.5 %	4.2 %	5.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.246 %	0.103 ppb	0.068 ppb	27.624 ppb	19.495 ppb	0.057 ppb	-0.045 ppb	0.679 ppb	4.287 ppb
Concentration per Run 1	92.300 %	0.131 ppb	0.077 ppb	28.132 ppb	20.209 ppb	0.054 ppb	-0.090 ppb	0.721 ppb	4.453 ppb
Concentration per Run 2	92.774 %	0.083 ppb	0.079 ppb	26.846 ppb	18.842 ppb	0.048 ppb	0.003 ppb	0.708 ppb	4.089 ppb
Concentration per Run 3	94.664 %	0.096 ppb	0.047 ppb	27.894 ppb	19.434 ppb	0.068 ppb	-0.047 ppb	0.609 ppb	4.319 ppb
Concentration RSD	1.3 %	24.1 %	26.1 %	2.5 %	3.5 %	17.9 %	103.7 %	9.0 %	4.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	112.074 %	0.214 ppb	0.361 ppb	11.028 ppb	4.325 ppb	101.574 %	-0.005 ppb	0.002 ppb	105.696 %
Concentration per Run 1	106.121 %	0.193 ppb	0.410 ppb	11.434 ppb	3.429 ppb	95.629 %	-0.005 ppb	-0.001 ppb	96.944 %
Concentration per Run 2	114.529 %	0.212 ppb	0.153 ppb	10.718 ppb	4.425 ppb	102.757 %	-0.005 ppb	0.001 ppb	107.333 %
Concentration per Run 3	115.572 %	0.238 ppb	0.520 ppb	10.934 ppb	5.122 ppb	106.335 %	-0.004 ppb	0.007 ppb	112.809 %
Concentration RSD	4.6 %	10.6 %	52.1 %	3.3 %	19.7 %	5.4 %	16.3 %	180.6 %	7.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.364 ppb	2.647 ppb	104.003 %	105.900 %	0.065 ppb	0.029 ppb	94.171 %
Concentration per Run 1	3.534 ppb	2.748 ppb	97.250 %	99.369 %	0.065 ppb	0.029 ppb	94.653 %
Concentration per Run 2	3.296 ppb	2.645 ppb	106.385 %	108.200 %	0.068 ppb	0.030 ppb	92.748 %
Concentration per Run 3	3.261 ppb	2.546 ppb	108.373 %	110.132 %	0.061 ppb	0.028 ppb	95.112 %
Concentration RSD	4.4 %	3.8 %	5.7 %	5.4 %	5.2 %	2.8 %	1.3 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	25	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350518-04 2008TL	Rack	1		
Analysis started at:	9/3/2023 4:08:21 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	105.111 %	112.549 %	0.013 ppb	9.643 ppb	10,035.680 ppb	653.178 ppb	15.980 ppb	348.232 ppb	1,452.522 ppb
Concentration per Run 1	103.413 %	108.580 %	0.013 ppb	10.159 ppb	10,299.027 ppb	675.957 ppb	16.759 ppb	346.689 ppb	1,427.951 ppb
Concentration per Run 2	103.476 %	114.953 %	0.013 ppb	9.816 ppb	9,853.300 ppb	637.860 ppb	16.064 ppb	351.114 ppb	1,500.807 ppb
Concentration per Run 3	108.443 %	114.115 %	0.014 ppb	8.953 ppb	9,954.714 ppb	645.717 ppb	15.118 ppb	346.892 ppb	1,428.810 ppb
Concentration RSD	2.7 %	3.1 %	6.0 %	6.4 %	2.3 %	3.1 %	5.2 %	0.7 %	2.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.763 %	0.118 ppb	0.075 ppb	29.361 ppb	19.630 ppb	0.050 ppb	0.026 ppb	0.758 ppb	4.607 ppb
Concentration per Run 1	96.983 %	0.162 ppb	0.081 ppb	29.736 ppb	19.757 ppb	0.051 ppb	0.066 ppb	0.753 ppb	4.696 ppb
Concentration per Run 2	95.847 %	0.101 ppb	0.081 ppb	28.677 ppb	18.983 ppb	0.052 ppb	0.044 ppb	0.699 ppb	4.559 ppb
Concentration per Run 3	103.459 %	0.091 ppb	0.061 ppb	29.671 ppb	20.151 ppb	0.047 ppb	-0.032 ppb	0.823 ppb	4.564 ppb
Concentration RSD	4.2 %	32.7 %	16.2 %	2.0 %	3.0 %	5.4 %	198.5 %	8.2 %	1.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	115.684 %	0.173 ppb	0.155 ppb	11.676 ppb	1.468 ppb	105.611 %	-0.005 ppb	0.000 ppb	111.278 %
Concentration per Run 1	110.872 %	0.239 ppb	0.256 ppb	11.766 ppb	0.948 ppb	101.974 %	-0.005 ppb	-0.001 ppb	106.473 %
Concentration per Run 2	117.077 %	0.148 ppb	0.083 ppb	11.394 ppb	1.476 ppb	106.599 %	-0.005 ppb	0.001 ppb	111.550 %
Concentration per Run 3	119.103 %	0.133 ppb	0.127 ppb	11.868 ppb	1.980 ppb	108.259 %	-0.005 ppb	0.000 ppb	115.812 %
Concentration RSD	3.7 %	33.2 %	57.8 %	2.1 %	35.2 %	3.1 %	2.7 %	893.6 %	4.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.698 ppb	2.618 ppb	106.253 %	106.789 %	0.024 ppb	0.017 ppb	105.528 %
Concentration per Run 1	1.626 ppb	2.684 ppb	103.586 %	104.236 %	0.018 ppb	0.017 ppb	108.462 %
Concentration per Run 2	1.715 ppb	2.591 ppb	106.256 %	106.731 %	0.028 ppb	0.018 ppb	102.846 %
Concentration per Run 3	1.752 ppb	2.580 ppb	108.918 %	109.400 %	0.026 ppb	0.017 ppb	105.277 %
Concentration RSD	3.8 %	2.2 %	2.5 %	2.4 %	21.0 %	2.2 %	2.7 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	26	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	zL2350518-02D5 2008TL	Rack	1		
Analysis started at:	9/3/2023 4:12:58 PM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	107.939 %	117.441 %	0.015 ppb	14.361 ppb	11,961.116 ppb	813.517 ppb	18.317 ppb	420.352 ppb	962.491 ppb
Concentration per Run 1	109.967 %	111.348 %	0.015 ppb	14.248 ppb	12,238.279 ppb	820.713 ppb	18.207 ppb	426.567 ppb	1,017.538 ppb
Concentration per Run 2	107.878 %	118.055 %	0.017 ppb	14.350 ppb	11,875.061 ppb	808.261 ppb	18.196 ppb	423.994 ppb	944.606 ppb
Concentration per Run 3	105.971 %	122.919 %	0.013 ppb	14.485 ppb	11,770.007 ppb	811.577 ppb	18.547 ppb	410.496 ppb	925.330 ppb
Concentration RSD	1.9 %	4.9 %	11.2 %	0.8 %	2.1 %	0.8 %	1.1 %	2.1 %	5.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	110.127 %	0.265 ppb	0.186 ppb	30.915 ppb	32.264 ppb	0.052 ppb	-0.179 ppb	2.893 ppb	4.836 ppb
Concentration per Run 1	109.274 %	0.249 ppb	0.213 ppb	31.154 ppb	31.024 ppb	0.039 ppb	-0.173 ppb	2.979 ppb	4.985 ppb
Concentration per Run 2	110.586 %	0.284 ppb	0.155 ppb	29.708 ppb	30.259 ppb	0.060 ppb	-0.208 ppb	2.693 ppb	4.598 ppb
Concentration per Run 3	110.522 %	0.262 ppb	0.191 ppb	31.882 ppb	35.509 ppb	0.059 ppb	-0.154 ppb	3.007 ppb	4.925 ppb
Concentration RSD	0.7 %	6.7 %	15.8 %	3.6 %	8.8 %	22.1 %	15.4 %	6.0 %	4.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	122.356 %	0.424 ppb	0.166 ppb	8.943 ppb	0.876 ppb	110.210 %	-0.005 ppb	0.002 ppb	112.658 %
Concentration per Run 1	116.520 %	0.395 ppb	0.137 ppb	9.353 ppb	0.549 ppb	103.099 %	-0.005 ppb	0.001 ppb	105.041 %
Concentration per Run 2	124.632 %	0.436 ppb	0.162 ppb	8.673 ppb	0.899 ppb	112.158 %	-0.004 ppb	0.005 ppb	113.078 %
Concentration per Run 3	125.915 %	0.442 ppb	0.198 ppb	8.803 ppb	1.182 ppb	115.374 %	-0.006 ppb	0.001 ppb	119.856 %
Concentration RSD	4.2 %	6.0 %	18.7 %	4.0 %	36.2 %	5.8 %	17.5 %	119.2 %	6.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.263 ppb	3.242 ppb	108.296 %	109.613 %	0.017 ppb	0.019 ppb	102.167 %
Concentration per Run 1	1.270 ppb	3.376 ppb	102.136 %	103.270 %	0.013 ppb	0.018 ppb	101.276 %
Concentration per Run 2	1.267 ppb	3.328 ppb	108.810 %	110.549 %	0.020 ppb	0.021 ppb	99.530 %
Concentration per Run 3	1.253 ppb	3.023 ppb	113.941 %	115.022 %	0.018 ppb	0.016 ppb	105.696 %
Concentration RSD	0.7 %	5.9 %	5.5 %	5.4 %	19.3 %	13.9 %	3.1 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	27	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350518-02 2008TL	Rack	1		
Analysis started at:	9/3/2023 4:17:40 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	103.702 %	121.941 %	0.039 ppb	73.001 ppb	57,382.980 ppb	3,901.324 ppb	86.292 ppb	2,045.233 ppb	4,605.707 ppb
Concentration per Run 1	105.685 %	111.096 %	0.039 ppb	72.880 ppb	59,361.569 ppb	4,034.791 ppb	82.016 ppb	2,112.312 ppb	4,591.658 ppb
Concentration per Run 2	102.831 %	124.093 %	0.046 ppb	73.101 ppb	55,160.092 ppb	3,716.945 ppb	84.903 ppb	1,901.924 ppb	4,434.471 ppb
Concentration per Run 3	102.591 %	130.633 %	0.033 ppb	73.022 ppb	57,627.280 ppb	3,952.236 ppb	91.956 ppb	2,121.463 ppb	4,790.991 ppb
Concentration RSD	1.7 %	8.2 %	16.3 %	0.2 %	3.7 %	4.2 %	5.9 %	6.1 %	3.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	115.773 %	1.197 ppb	1.081 ppb	151.470 ppb	163.094 ppb	0.251 ppb	0.539 ppb	13.936 ppb	27.311 ppb
Concentration per Run 1	116.924 %	1.167 ppb	1.139 ppb	154.364 ppb	170.543 ppb	0.258 ppb	0.500 ppb	13.987 ppb	28.414 ppb
Concentration per Run 2	115.368 %	1.253 ppb	1.065 ppb	144.935 ppb	157.539 ppb	0.227 ppb	0.567 ppb	13.974 ppb	26.845 ppb
Concentration per Run 3	115.028 %	1.173 ppb	1.039 ppb	155.111 ppb	161.200 ppb	0.268 ppb	0.550 ppb	13.848 ppb	26.674 ppb
Concentration RSD	0.9 %	4.0 %	4.8 %	3.7 %	4.1 %	8.4 %	6.5 %	0.6 %	3.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	120.790 %	1.988 ppb	0.354 ppb	46.152 ppb	1.040 ppb	105.679 %	-0.005 ppb	0.005 ppb	113.632 %
Concentration per Run 1	115.548 %	1.969 ppb	0.311 ppb	45.282 ppb	0.806 ppb	103.013 %	-0.005 ppb	0.009 ppb	107.134 %
Concentration per Run 2	118.427 %	2.007 ppb	0.435 ppb	44.950 ppb	1.056 ppb	103.632 %	-0.005 ppb	0.001 ppb	110.953 %
Concentration per Run 3	128.395 %	1.987 ppb	0.314 ppb	48.224 ppb	1.258 ppb	110.392 %	-0.006 ppb	0.006 ppb	122.810 %
Concentration RSD	5.6 %	1.0 %	20.0 %	3.9 %	21.8 %	3.9 %	15.2 %	67.0 %	7.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.469 ppb	15.894 ppb	111.970 %	113.458 %	0.014 ppb	0.096 ppb	101.749 %
Concentration per Run 1	1.414 ppb	15.893 ppb	107.243 %	106.139 %	0.011 ppb	0.093 ppb	103.291 %
Concentration per Run 2	1.490 ppb	16.013 ppb	108.995 %	110.249 %	0.014 ppb	0.097 ppb	97.879 %
Concentration per Run 3	1.502 ppb	15.777 ppb	119.673 %	123.986 %	0.018 ppb	0.098 ppb	104.077 %
Concentration RSD	3.2 %	0.7 %	6.0 %	8.2 %	24.7 %	2.4 %	3.3 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	28	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/3/2023 4:22:22 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	100.010 %	114.310 %	60.470 ppb	59.868 ppb	6,219.968 ppb	6,416.795 ppb	66.041 ppb	6,327.840 ppb	6,202.012 ppb
Concentration per Run 1	102.298 %	106.484 %	59.856 ppb	59.979 ppb	6,578.885 ppb	6,673.598 ppb	68.764 ppb	6,426.755 ppb	6,365.663 ppb
Concentration per Run 2	99.845 %	115.372 %	60.813 ppb	59.610 ppb	5,814.011 ppb	6,163.487 ppb	62.889 ppb	5,976.096 ppb	5,822.229 ppb
Concentration per Run 3	97.888 %	121.074 %	60.742 ppb	60.016 ppb	6,267.007 ppb	6,413.300 ppb	66.472 ppb	6,580.670 ppb	6,418.143 ppb
Recovery Percentage 1			100.784 %	99.781 %	103.666 %	106.947 %	110.069 %	105.464 %	103.367 %
Concentration RSD	2.2 %	6.4 %	0.9 %	0.4 %	6.2 %	4.0 %	4.5 %	5.0 %	5.3 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	107.395 %	58.880 ppb	58.063 ppb	58.024 ppb	5,976.789 ppb	59.086 ppb	59.071 ppb	58.552 ppb	59.341 ppb
Concentration per Run 1	109.031 %	61.451 ppb	61.052 ppb	59.332 ppb	6,155.749 ppb	61.818 ppb	62.336 ppb	61.368 ppb	61.422 ppb
Concentration per Run 2	106.542 %	56.878 ppb	56.610 ppb	56.473 ppb	5,941.102 ppb	59.020 ppb	58.626 ppb	58.580 ppb	59.319 ppb
Concentration per Run 3	106.613 %	58.311 ppb	56.527 ppb	58.267 ppb	5,833.515 ppb	56.420 ppb	56.250 ppb	55.708 ppb	57.283 ppb
Recovery Percentage 1		98.133 %	96.772 %	96.707 %	99.613 %	98.477 %	98.451 %	97.586 %	98.902 %
Concentration RSD	1.3 %	4.0 %	4.5 %	2.5 %	2.7 %	4.6 %	5.2 %	4.8 %	3.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	122.493 %	60.133 ppb	61.474 ppb	61.304 ppb	58.006 ppb	109.529 %	60.126 ppb	59.796 ppb	113.700 %
Concentration per Run 1	115.474 %	63.938 ppb	62.078 ppb	62.362 ppb	61.181 ppb	103.209 %	62.261 ppb	62.465 ppb	105.330 %
Concentration per Run 2	118.927 %	58.079 ppb	59.238 ppb	59.331 ppb	56.755 ppb	109.707 %	59.864 ppb	58.567 ppb	113.170 %
Concentration per Run 3	133.079 %	58.383 ppb	63.105 ppb	62.217 ppb	56.082 ppb	115.672 %	58.254 ppb	58.355 ppb	122.601 %
Recovery Percentage 1		100.222 %	102.456 %	102.173 %	96.677 %		100.211 %	99.660 %	
Concentration RSD	7.6 %	5.5 %	3.3 %	2.8 %	4.8 %	5.7 %	3.4 %	3.9 %	7.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	64.661 ppb	60.981 ppb	111.399 %	113.145 %	63.582 ppb	62.569 ppb	99.728 %
Concentration per Run 1	66.774 ppb	64.046 ppb	104.537 %	102.899 %	62.922 ppb	64.780 ppb	99.430 %
Concentration per Run 2	64.616 ppb	59.674 ppb	109.587 %	110.958 %	64.339 ppb	62.319 ppb	96.308 %
Concentration per Run 3	62.592 ppb	59.222 ppb	120.074 %	125.579 %	63.485 ppb	60.607 ppb	103.445 %
Recovery Percentage 1	107.768 %	101.634 %			105.970 %	104.281 %	
Concentration RSD	3.2 %	4.4 %	7.1 %	10.2 %	1.1 %	3.4 %	3.6 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 29
Analysis label: CCB
Analysis started at: 9/3/2023 4:27:04 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	97.202 %	109.056 %	0.013 ppb	-0.293 ppb	0.820 ppb	-0.658 ppb	-0.884 ppb	-6.605 ppb	-7.943 ppb
Concentration per Run 1	98.684 %	100.280 %	0.011 ppb	-0.360 ppb	2.349 ppb	-0.688 ppb	-0.977 ppb	-6.693 ppb	-8.148 ppb
Concentration per Run 2	97.548 %	107.994 %	0.016 ppb	-0.255 ppb	0.587 ppb	-0.624 ppb	-0.887 ppb	-9.062 ppb	-5.566 ppb
Concentration per Run 3	95.375 %	118.894 %	0.012 ppb	-0.264 ppb	-0.478 ppb	-0.662 ppb	-0.789 ppb	-4.060 ppb	-10.116 ppb
Recovery Percentage 1			2.571 %	-2.930 %	0.820 %	-0.940 %	-8.843 %	-6.605 %	-7.943 %
Concentration RSD	1.7 %	8.6 %	18.5 %	19.9 %	174.2 %	4.9 %	10.6 %	37.9 %	28.7 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.179 %	-0.001 ppb	-0.005 ppb	-0.196 ppb	13.817 ppb	-0.004 ppb	-0.227 ppb	-0.075 ppb	-1.782 ppb
Concentration per Run 1	92.053 %	-0.012 ppb	-0.018 ppb	-0.165 ppb	17.431 ppb	-0.003 ppb	-0.215 ppb	-0.073 ppb	-1.769 ppb
Concentration per Run 2	92.542 %	-0.018 ppb	0.013 ppb	-0.227 ppb	11.424 ppb	-0.006 ppb	-0.215 ppb	-0.080 ppb	-1.797 ppb
Concentration per Run 3	91.941 %	0.026 ppb	-0.010 ppb	-0.195 ppb	12.595 ppb	-0.003 ppb	-0.251 ppb	-0.071 ppb	-1.780 ppb
Recovery Percentage 1		-0.026 %	-0.527 %	-19.570 %	27.634 %	-0.759 %	-11.342 %	-7.484 %	-35.644 %
Concentration RSD	0.3 %	1,891.0 %	301.3 %	15.9 %	23.0 %	48.5 %	9.3 %	6.0 %	0.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	112.899 %	0.088 ppb	0.811 ppb	-0.019 ppb	1.835 ppb	104.604 %	-0.002 ppb	0.001 ppb	109.693 %
Concentration per Run 1	106.546 %	0.071 ppb	0.635 ppb	-0.015 ppb	1.421 ppb	97.520 %	-0.001 ppb	0.002 ppb	101.465 %
Concentration per Run 2	111.640 %	0.098 ppb	0.793 ppb	-0.022 ppb	1.881 ppb	105.969 %	-0.002 ppb	0.002 ppb	106.440 %
Concentration per Run 3	120.511 %	0.095 ppb	1.004 ppb	-0.020 ppb	2.204 ppb	110.324 %	-0.002 ppb	-0.001 ppb	121.174 %
Recovery Percentage 1		17.560 %	16.220 %	-0.189 %	91.754 %		-0.421 %	0.520 %	
Concentration RSD	6.3 %	17.1 %	22.8 %	18.5 %	21.5 %	6.2 %	29.2 %	159.0 %	9.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.458 ppb	-0.042 ppb	104.712 %	108.016 %	0.288 ppb	0.007 ppb	95.324 %
Concentration per Run 1	0.424 ppb	-0.038 ppb	97.216 %	98.269 %	0.337 ppb	0.010 ppb	93.437 %
Concentration per Run 2	0.449 ppb	-0.035 ppb	103.633 %	106.572 %	0.295 ppb	0.007 ppb	93.706 %
Concentration per Run 3	0.501 ppb	-0.052 ppb	113.287 %	119.206 %	0.233 ppb	0.006 ppb	98.828 %
Recovery Percentage 1	11.449 %	-8.307 %			28.844 %	0.736 %	
Concentration RSD	8.5 %	22.1 %	7.7 %	9.8 %	18.2 %	27.3 %	3.2 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 30
Analysis label: WG1822783-1 6020TL
Analysis started at: 9/3/2023 4:36:11 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 8
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	108.181 %	121.493 %	0.006 ppb	-0.884 ppb	0.701 ppb	1.016 ppb	2.968 ppb	-6.273 ppb	10.650 ppb
Concentration per Run 1	109.732 %	122.416 %	0.007 ppb	-0.885 ppb	0.420 ppb	0.837 ppb	2.727 ppb	-9.727 ppb	10.748 ppb
Concentration per Run 2	107.808 %	117.217 %	0.005 ppb	-0.891 ppb	0.870 ppb	1.066 ppb	3.415 ppb	-7.013 ppb	14.755 ppb
Concentration per Run 3	107.003 %	124.847 %	0.005 ppb	-0.878 ppb	0.813 ppb	1.147 ppb	2.763 ppb	-2.078 ppb	6.448 ppb
Concentration RSD	1.3 %	3.2 %	23.6 %	0.8 %	34.9 %	15.8 %	13.0 %	61.8 %	39.0 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.334 %	-0.021 ppb	-0.021 ppb	0.118 ppb	2.803 ppb	-0.006 ppb	-0.273 ppb	-0.041 ppb	-1.176 ppb
Concentration per Run 1	100.001 %	-0.019 ppb	-0.027 ppb	0.124 ppb	1.755 ppb	-0.009 ppb	-0.297 ppb	-0.050 ppb	-1.150 ppb
Concentration per Run 2	100.288 %	-0.019 ppb	-0.014 ppb	0.175 ppb	3.566 ppb	-0.004 ppb	-0.241 ppb	-0.046 ppb	-1.172 ppb
Concentration per Run 3	100.711 %	-0.024 ppb	-0.022 ppb	0.055 ppb	3.088 ppb	-0.004 ppb	-0.283 ppb	-0.026 ppb	-1.205 ppb
Concentration RSD	0.4 %	13.3 %	33.2 %	51.1 %	33.5 %	46.7 %	10.7 %	32.5 %	2.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	124.016 %	-0.004 ppb	0.167 ppb	0.009 ppb	0.347 ppb	114.741 %	-0.006 ppb	0.000 ppb	119.032 %
Concentration per Run 1	120.535 %	0.004 ppb	0.213 ppb	0.016 ppb	0.220 ppb	114.342 %	-0.005 ppb	-0.001 ppb	117.895 %
Concentration per Run 2	119.728 %	-0.016 ppb	0.124 ppb	0.005 ppb	0.375 ppb	110.818 %	-0.006 ppb	0.000 ppb	113.534 %
Concentration per Run 3	131.784 %	-0.001 ppb	0.165 ppb	0.007 ppb	0.446 ppb	119.064 %	-0.006 ppb	0.000 ppb	125.666 %
Concentration RSD	5.4 %	229.2 %	26.5 %	57.5 %	33.4 %	3.6 %	16.7 %	112.6 %	5.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.244 ppb	0.017 ppb	114.306 %	116.506 %	0.027 ppb	0.005 ppb	124.175 %
Concentration per Run 1	0.193 ppb	0.028 ppb	114.340 %	114.443 %	0.020 ppb	0.002 ppb	141.727 %
Concentration per Run 2	0.245 ppb	0.004 ppb	109.583 %	111.173 %	0.030 ppb	0.006 ppb	118.725 %
Concentration per Run 3	0.294 ppb	0.020 ppb	118.994 %	123.903 %	0.033 ppb	0.006 ppb	112.074 %
Concentration RSD	20.7 %	71.5 %	4.1 %	5.7 %	24.8 %	41.7 %	12.5 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	31	User name	ALPHALAB\Metals-Instrument	Comment	fb
Analysis label:	L2350664-20 6020TL	Rack	1		
Analysis started at:	9/3/2023 4:40:51 PM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	105.813 %	118.055 %	0.006 ppb	1.469 ppb	189.365 ppb	10.811 ppb	2.380 ppb	-3.051 ppb	59.943 ppb
Concentration per Run 1	106.963 %	112.438 %	0.007 ppb	1.429 ppb	187.073 ppb	9.550 ppb	2.210 ppb	-2.311 ppb	67.479 ppb
Concentration per Run 2	106.284 %	117.552 %	0.006 ppb	1.495 ppb	186.626 ppb	11.493 ppb	2.315 ppb	-4.119 ppb	55.523 ppb
Concentration per Run 3	104.192 %	124.176 %	0.005 ppb	1.482 ppb	194.395 ppb	11.389 ppb	2.616 ppb	-2.723 ppb	56.826 ppb
Concentration RSD	1.4 %	5.0 %	17.4 %	2.4 %	2.3 %	10.1 %	8.9 %	31.0 %	10.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	110.501 %	0.004 ppb	0.195 ppb	0.108 ppb	1.542 ppb	-0.004 ppb	-0.286 ppb	0.039 ppb	-0.830 ppb
Concentration per Run 1	110.169 %	-0.014 ppb	0.179 ppb	0.080 ppb	2.194 ppb	-0.006 ppb	-0.289 ppb	0.027 ppb	-0.797 ppb
Concentration per Run 2	110.585 %	0.002 ppb	0.190 ppb	0.111 ppb	1.893 ppb	0.000 ppb	-0.297 ppb	0.043 ppb	-0.855 ppb
Concentration per Run 3	110.749 %	0.024 ppb	0.215 ppb	0.134 ppb	0.541 ppb	-0.005 ppb	-0.271 ppb	0.047 ppb	-0.838 ppb
Concentration RSD	0.3 %	498.1 %	9.4 %	25.0 %	57.1 %	90.4 %	4.8 %	27.0 %	3.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	121.282 %	0.016 ppb	0.105 ppb	0.330 ppb	0.240 ppb	113.410 %	-0.005 ppb	0.000 ppb	121.477 %
Concentration per Run 1	117.894 %	0.030 ppb	0.112 ppb	0.329 ppb	0.132 ppb	110.567 %	-0.006 ppb	0.001 ppb	112.104 %
Concentration per Run 2	118.572 %	0.024 ppb	0.085 ppb	0.312 ppb	0.253 ppb	110.906 %	-0.004 ppb	0.000 ppb	117.944 %
Concentration per Run 3	127.380 %	-0.005 ppb	0.118 ppb	0.349 ppb	0.335 ppb	118.757 %	-0.006 ppb	0.000 ppb	134.383 %
Concentration RSD	4.4 %	112.9 %	16.8 %	5.5 %	42.6 %	4.1 %	21.8 %	399.2 %	9.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.227 ppb	0.415 ppb	112.322 %	115.360 %	0.017 ppb	0.018 ppb	119.281 %
Concentration per Run 1	0.206 ppb	0.429 ppb	108.773 %	109.212 %	0.011 ppb	0.016 ppb	124.056 %
Concentration per Run 2	0.214 ppb	0.431 ppb	109.350 %	110.048 %	0.019 ppb	0.018 ppb	113.789 %
Concentration per Run 3	0.262 ppb	0.385 ppb	118.845 %	126.822 %	0.020 ppb	0.019 ppb	119.996 %
Concentration RSD	13.4 %	6.3 %	5.0 %	8.6 %	28.3 %	9.5 %	4.3 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	32	User name	ALPHALAB\Metals-Instrument	Comment	fb
Analysis label:	L2350787-16 6020TL	Rack	1		
Analysis started at:	9/3/2023 4:45:28 PM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	105.473 %	118.559 %	0.006 ppb	1.239 ppb	-1.122 ppb	1.032 ppb	2.622 ppb	-7.725 ppb	8.678 ppb
Concentration per Run 1	106.907 %	112.270 %	0.008 ppb	1.135 ppb	-0.384 ppb	1.137 ppb	2.012 ppb	-7.741 ppb	9.726 ppb
Concentration per Run 2	105.506 %	120.236 %	0.006 ppb	1.267 ppb	-1.031 ppb	0.873 ppb	3.133 ppb	-8.019 ppb	11.098 ppb
Concentration per Run 3	104.007 %	123.170 %	0.006 ppb	1.314 ppb	-1.950 ppb	1.086 ppb	2.720 ppb	-7.415 ppb	5.209 ppb
Concentration RSD	1.4 %	4.8 %	16.6 %	7.5 %	70.1 %	13.6 %	21.6 %	3.9 %	35.5 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	108.769 %	-0.012 ppb	0.104 ppb	-0.213 ppb	0.006 ppb	-0.007 ppb	-0.351 ppb	0.006 ppb	-1.680 ppb
Concentration per Run 1	107.714 %	-0.023 ppb	0.111 ppb	-0.231 ppb	-0.717 ppb	-0.008 ppb	-0.364 ppb	0.002 ppb	-1.648 ppb
Concentration per Run 2	109.768 %	-0.019 ppb	0.121 ppb	-0.246 ppb	0.158 ppb	-0.008 ppb	-0.346 ppb	0.022 ppb	-1.697 ppb
Concentration per Run 3	108.824 %	0.007 ppb	0.080 ppb	-0.162 ppb	0.576 ppb	-0.006 ppb	-0.344 ppb	-0.005 ppb	-1.695 ppb
Concentration RSD	0.9 %	138.6 %	20.5 %	20.9 %	11,114.2 %	11.8 %	3.1 %	220.2 %	1.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	123.387 %	0.007 ppb	0.038 ppb	0.246 ppb	0.176 ppb	115.314 %	-0.005 ppb	0.000 ppb	119.753 %
Concentration per Run 1	119.078 %	-0.037 ppb	-0.005 ppb	0.233 ppb	0.129 ppb	113.627 %	-0.005 ppb	-0.001 ppb	117.653 %
Concentration per Run 2	118.034 %	0.057 ppb	0.059 ppb	0.235 ppb	0.190 ppb	113.492 %	-0.004 ppb	0.001 ppb	113.234 %
Concentration per Run 3	133.050 %	-0.001 ppb	0.060 ppb	0.269 ppb	0.207 ppb	118.823 %	-0.006 ppb	0.000 ppb	128.371 %
Concentration RSD	6.8 %	725.9 %	98.7 %	8.2 %	23.3 %	2.6 %	15.3 %	596.7 %	6.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.175 ppb	0.205 ppb	112.659 %	115.234 %	0.013 ppb	0.001 ppb	114.557 %
Concentration per Run 1	0.143 ppb	0.225 ppb	109.036 %	112.864 %	0.008 ppb	0.001 ppb	116.803 %
Concentration per Run 2	0.189 ppb	0.161 ppb	111.650 %	113.633 %	0.016 ppb	0.001 ppb	110.566 %
Concentration per Run 3	0.194 ppb	0.229 ppb	117.291 %	119.204 %	0.016 ppb	0.001 ppb	116.302 %
Concentration RSD	15.9 %	18.7 %	3.7 %	3.0 %	36.5 %	7.2 %	3.0 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 33
Analysis label: WG1822783-2D5 6020TL
Analysis started at: 9/3/2023 4:55:14 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	103.330 %	122.108 %	10.512 ppb	216.985 ppb	2,031.437 ppb	2,075.418 ppb	436.096 ppb	2,151.679 ppb	2,001.684 ppb
Concentration per Run 1	105.247 %	118.810 %	10.451 ppb	216.078 ppb	2,063.641 ppb	2,130.812 ppb	438.250 ppb	2,194.400 ppb	2,259.681 ppb
Concentration per Run 2	103.584 %	125.183 %	10.395 ppb	218.766 ppb	2,014.886 ppb	2,065.942 ppb	443.105 ppb	2,145.524 ppb	1,713.600 ppb
Concentration per Run 3	101.159 %	122.332 %	10.690 ppb	216.112 ppb	2,015.785 ppb	2,029.500 ppb	426.931 ppb	2,115.111 ppb	2,031.772 ppb
Concentration RSD	2.0 %	2.6 %	1.5 %	0.7 %	1.4 %	2.5 %	1.9 %	1.9 %	13.7 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.433 %	99.785 ppb	39.754 ppb	101.808 ppb	212.934 ppb	103.304 ppb	101.995 ppb	51.541 ppb	103.538 ppb
Concentration per Run 1	100.655 %	102.725 ppb	41.457 ppb	104.179 ppb	235.828 ppb	109.305 ppb	107.638 ppb	55.057 ppb	109.691 ppb
Concentration per Run 2	101.041 %	99.841 ppb	38.849 ppb	100.944 ppb	203.188 ppb	98.903 ppb	97.033 ppb	48.443 ppb	98.981 ppb
Concentration per Run 3	99.603 %	96.789 ppb	38.955 ppb	100.301 ppb	199.786 ppb	101.703 ppb	101.313 ppb	51.123 ppb	101.942 ppb
Concentration RSD	0.7 %	3.0 %	3.7 %	2.0 %	9.3 %	5.2 %	5.2 %	6.5 %	5.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	119.856 %	25.815 ppb	26.162 ppb	212.298 ppb	219.808 ppb	112.168 %	10.458 ppb	11.027 ppb	117.896 %
Concentration per Run 1	110.793 %	27.089 ppb	26.200 ppb	212.836 ppb	229.210 ppb	107.748 %	10.966 ppb	11.462 ppb	106.593 %
Concentration per Run 2	129.241 %	24.671 ppb	26.010 ppb	218.421 ppb	215.999 ppb	115.960 %	10.052 ppb	10.715 ppb	129.390 %
Concentration per Run 3	119.535 %	25.685 ppb	26.276 ppb	205.636 ppb	214.215 ppb	112.797 %	10.356 ppb	10.905 ppb	117.704 %
Concentration RSD	7.7 %	4.7 %	0.5 %	3.0 %	3.7 %	3.7 %	4.4 %	3.5 %	9.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	102.045 ppb	415.120 ppb	115.824 %	118.904 %	24.348 ppb	132.872 ppb	102.312 %
Concentration per Run 1	107.224 ppb	426.542 ppb	109.998 %	112.925 %	24.816 ppb	135.682 ppb	98.395 %
Concentration per Run 2	97.977 ppb	416.026 ppb	120.647 %	123.778 %	24.349 ppb	134.781 ppb	103.803 %
Concentration per Run 3	100.936 ppb	402.793 ppb	116.828 %	120.010 %	23.879 ppb	128.152 ppb	104.739 %
Concentration RSD	4.6 %	2.9 %	4.7 %	4.6 %	1.9 %	3.1 %	3.3 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 34
Analysis label: WG1822783-3d10 6020TL
Analysis started at: 9/3/2023 4:59:52 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 11
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	100.570 %	118.587 %	5.319 ppb	111.003 ppb	5,736.832 ppb	1,482.592 ppb	214.449 ppb	4,524.731 ppb	5,120.526 ppb
Concentration per Run 1	101.324 %	112.354 %	5.367 ppb	111.533 ppb	5,929.599 ppb	1,503.244 ppb	219.985 ppb	4,732.515 ppb	5,102.590 ppb
Concentration per Run 2	100.733 %	125.183 %	5.341 ppb	110.518 ppb	5,683.508 ppb	1,463.071 ppb	206.458 ppb	4,374.683 ppb	5,197.764 ppb
Concentration per Run 3	99.652 %	118.223 %	5.249 ppb	110.956 ppb	5,597.390 ppb	1,481.459 ppb	216.903 ppb	4,466.996 ppb	5,061.225 ppb
Concentration RSD	0.8 %	5.4 %	1.2 %	0.5 %	3.0 %	1.4 %	3.3 %	4.1 %	1.4 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.945 %	46.759 ppb	18.873 ppb	52.219 ppb	98.721 ppb	48.279 ppb	47.908 ppb	24.987 ppb	49.686 ppb
Concentration per Run 1	97.658 %	47.109 ppb	19.014 ppb	53.087 ppb	102.034 ppb	48.458 ppb	47.973 ppb	24.523 ppb	49.853 ppb
Concentration per Run 2	97.709 %	45.380 ppb	18.482 ppb	52.558 ppb	97.908 ppb	47.532 ppb	47.199 ppb	24.829 ppb	50.309 ppb
Concentration per Run 3	98.469 %	47.788 ppb	19.123 ppb	51.014 ppb	96.222 ppb	48.847 ppb	48.552 ppb	25.611 ppb	48.896 ppb
Concentration RSD	0.5 %	2.7 %	1.8 %	2.1 %	3.0 %	1.4 %	1.4 %	2.2 %	1.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	119.112 %	12.750 ppb	12.223 ppb	112.760 ppb	101.496 ppb	108.214 %	5.038 ppb	5.426 ppb	115.868 %
Concentration per Run 1	116.430 %	13.106 ppb	11.671 ppb	114.809 ppb	101.140 ppb	108.571 %	4.979 ppb	5.502 ppb	114.566 %
Concentration per Run 2	120.244 %	12.555 ppb	12.526 ppb	112.334 ppb	101.588 ppb	107.150 %	5.037 ppb	5.348 ppb	113.768 %
Concentration per Run 3	120.662 %	12.588 ppb	12.471 ppb	111.136 ppb	101.760 ppb	108.922 %	5.099 ppb	5.429 ppb	119.271 %
Concentration RSD	2.0 %	2.4 %	3.9 %	1.7 %	0.3 %	0.9 %	1.2 %	1.4 %	2.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	62.606 ppb	201.589 ppb	112.691 %	116.715 %	11.236 ppb	60.149 ppb	104.284 %
Concentration per Run 1	64.801 ppb	208.595 ppb	110.829 %	117.931 %	10.910 ppb	58.016 ppb	106.371 %
Concentration per Run 2	62.528 ppb	199.815 ppb	113.155 %	113.977 %	11.517 ppb	61.342 ppb	100.757 %
Concentration per Run 3	60.489 ppb	196.356 ppb	114.089 %	118.236 %	11.279 ppb	61.088 ppb	105.723 %
Concentration RSD	3.4 %	3.1 %	1.5 %	2.0 %	2.7 %	3.1 %	2.9 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 35
Analysis label: WG1822783-4d10 6020TL
Analysis started at: 9/3/2023 5:04:32 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 12
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	98.542 %	114.701 %	5.379 ppb	112.665 ppb	5,800.806 ppb	1,515.036 ppb	223.047 ppb	4,669.068 ppb	5,334.596 ppb
Concentration per Run 1	100.514 %	114.450 %	5.294 ppb	111.260 ppb	6,048.475 ppb	1,593.125 ppb	232.253 ppb	4,966.972 ppb	5,507.608 ppb
Concentration per Run 2	99.094 %	113.024 %	5.383 ppb	112.699 ppb	5,731.375 ppb	1,509.260 ppb	217.316 ppb	4,484.368 ppb	5,205.891 ppb
Concentration per Run 3	96.018 %	116.630 %	5.461 ppb	114.036 ppb	5,622.567 ppb	1,442.722 ppb	219.573 ppb	4,555.865 ppb	5,290.288 ppb
Concentration RSD	2.3 %	1.6 %	1.6 %	1.2 %	3.8 %	5.0 %	3.6 %	5.6 %	2.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.261 %	48.800 ppb	19.664 ppb	54.783 ppb	105.953 ppb	49.587 ppb	49.601 ppb	25.692 ppb	50.534 ppb
Concentration per Run 1	94.916 %	50.215 ppb	20.501 ppb	57.344 ppb	107.384 ppb	50.243 ppb	50.602 ppb	26.083 ppb	51.616 ppb
Concentration per Run 2	93.993 %	48.804 ppb	19.241 ppb	53.787 ppb	107.942 ppb	49.634 ppb	49.233 ppb	25.507 ppb	49.910 ppb
Concentration per Run 3	93.873 %	47.381 ppb	19.250 ppb	53.219 ppb	102.533 ppb	48.885 ppb	48.969 ppb	25.485 ppb	50.076 ppb
Concentration RSD	0.6 %	2.9 %	3.7 %	4.1 %	2.8 %	1.4 %	1.8 %	1.3 %	1.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	115.684 %	13.154 ppb	13.522 ppb	115.696 ppb	101.963 ppb	106.010 %	5.130 ppb	5.521 ppb	113.167 %
Concentration per Run 1	115.242 %	13.278 ppb	14.190 ppb	122.895 ppb	103.904 ppb	104.983 %	5.178 ppb	5.557 ppb	115.469 %
Concentration per Run 2	114.526 %	12.971 ppb	12.603 ppb	111.879 ppb	100.198 ppb	105.354 %	5.132 ppb	5.576 ppb	110.162 %
Concentration per Run 3	117.282 %	13.213 ppb	13.773 ppb	112.315 ppb	101.788 ppb	107.692 %	5.081 ppb	5.431 ppb	113.870 %
Concentration RSD	1.2 %	1.2 %	6.1 %	5.4 %	1.8 %	1.4 %	0.9 %	1.4 %	2.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.372 ppb	207.997 ppb	109.422 %	113.064 %	11.690 ppb	61.700 ppb	100.190 %
Concentration per Run 1	60.585 ppb	217.195 ppb	108.991 %	115.484 %	11.624 ppb	61.975 ppb	101.684 %
Concentration per Run 2	59.318 ppb	205.218 ppb	108.779 %	110.195 %	11.564 ppb	63.395 ppb	98.168 %
Concentration per Run 3	58.213 ppb	201.578 ppb	110.496 %	113.512 %	11.881 ppb	59.731 ppb	100.718 %
Concentration RSD	2.0 %	3.9 %	0.9 %	2.4 %	1.4 %	3.0 %	1.8 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	36	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1822783-5d10 6020TL	Rack	1		
Analysis started at:	9/3/2023 5:09:13 PM	Vial	13		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	96.498 %	108.245 %	51.860 ppb	57.799 ppb	10,020.447 ppb	5,813.145 ppb	53.556 ppb	8,820.293 ppb	9,494.056 ppb
Concentration per Run 1	98.354 %	104.388 %	51.587 ppb	57.634 ppb	10,864.513 ppb	6,330.075 ppb	58.207 ppb	9,771.807 ppb	10,293.817 ppb
Concentration per Run 2	95.356 %	114.534 %	51.992 ppb	57.749 ppb	9,442.048 ppb	5,418.053 ppb	50.221 ppb	8,389.041 ppb	9,257.512 ppb
Concentration per Run 3	95.785 %	105.813 %	52.002 ppb	58.014 ppb	9,754.781 ppb	5,691.306 ppb	52.242 ppb	8,300.032 ppb	8,930.839 ppb
Concentration RSD	1.7 %	5.1 %	0.5 %	0.3 %	7.5 %	8.1 %	7.8 %	9.4 %	7.5 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.588 %	50.275 ppb	49.511 ppb	56.631 ppb	5,174.676 ppb	49.707 ppb	51.033 ppb	50.717 ppb	51.069 ppb
Concentration per Run 1	98.034 %	53.333 ppb	52.223 ppb	60.761 ppb	5,342.797 ppb	50.700 ppb	51.696 ppb	50.805 ppb	52.470 ppb
Concentration per Run 2	96.780 %	47.580 ppb	47.564 ppb	54.036 ppb	5,046.517 ppb	49.145 ppb	50.494 ppb	50.946 ppb	50.896 ppb
Concentration per Run 3	97.952 %	49.911 ppb	48.745 ppb	55.096 ppb	5,134.713 ppb	49.278 ppb	50.909 ppb	50.400 ppb	49.842 ppb
Concentration RSD	0.7 %	5.8 %	4.9 %	6.4 %	2.9 %	1.7 %	1.2 %	0.6 %	2.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	110.397 %	52.104 ppb	53.727 ppb	64.303 ppb	53.898 ppb	101.561 %	2.075 ppb	50.460 ppb	107.502 %
Concentration per Run 1	112.985 %	54.013 ppb	58.793 ppb	70.325 ppb	54.678 ppb	100.682 %	2.118 ppb	51.459 ppb	110.244 %
Concentration per Run 2	107.369 %	51.729 ppb	53.155 ppb	63.491 ppb	53.464 ppb	101.879 %	2.026 ppb	49.657 ppb	107.872 %
Concentration per Run 3	110.839 %	50.569 ppb	49.234 ppb	59.093 ppb	53.553 ppb	102.123 %	2.081 ppb	50.263 ppb	104.391 %
Concentration RSD	2.6 %	3.4 %	8.9 %	8.8 %	1.3 %	0.8 %	2.2 %	1.8 %	2.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.045 ppb	54.905 ppb	104.726 %	107.674 %	53.120 ppb	55.590 ppb	97.389 %
Concentration per Run 1	62.119 ppb	59.225 ppb	104.262 %	109.547 %	51.069 ppb	53.442 ppb	102.893 %
Concentration per Run 2	58.124 ppb	53.917 ppb	105.648 %	108.492 %	53.729 ppb	56.808 ppb	95.414 %
Concentration per Run 3	56.890 ppb	51.572 ppb	104.266 %	104.983 %	54.562 ppb	56.520 ppb	93.860 %
Concentration RSD	4.6 %	7.1 %	0.8 %	2.2 %	3.4 %	3.4 %	5.0 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 37
Analysis label: WG1822783-6d5 6020TL
Analysis started at: 9/3/2023 5:13:49 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 14
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	99.521 %	115.903 %	0.011 ppb	8.071 ppb	9,401.081 ppb	930.046 ppb	1.221 ppb	6,917.352 ppb	8,566.644 ppb
Concentration per Run 1	99.672 %	116.462 %	0.011 ppb	8.043 ppb	9,497.865 ppb	963.593 ppb	1.562 ppb	7,418.136 ppb	9,133.034 ppb
Concentration per Run 2	100.088 %	118.726 %	0.009 ppb	7.970 ppb	9,289.911 ppb	909.862 ppb	0.747 ppb	6,687.183 ppb	8,323.197 ppb
Concentration per Run 3	98.803 %	112.521 %	0.013 ppb	8.201 ppb	9,415.467 ppb	916.683 ppb	1.354 ppb	6,646.738 ppb	8,243.701 ppb
Concentration RSD	0.7 %	2.7 %	14.4 %	1.5 %	1.1 %	3.1 %	34.6 %	6.3 %	5.7 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.831 %	0.049 ppb	0.098 ppb	9.431 ppb	12.461 ppb	0.050 ppb	-0.121 ppb	0.993 ppb	-0.850 ppb
Concentration per Run 1	97.324 %	0.061 ppb	0.105 ppb	9.607 ppb	13.321 ppb	0.044 ppb	-0.147 ppb	0.943 ppb	-0.882 ppb
Concentration per Run 2	98.145 %	0.046 ppb	0.089 ppb	9.522 ppb	11.554 ppb	0.055 ppb	-0.107 ppb	1.017 ppb	-0.826 ppb
Concentration per Run 3	98.023 %	0.040 ppb	0.101 ppb	9.162 ppb	12.508 ppb	0.051 ppb	-0.107 ppb	1.019 ppb	-0.843 ppb
Concentration RSD	0.5 %	22.1 %	8.5 %	2.5 %	7.1 %	10.9 %	19.4 %	4.4 %	3.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	113.800 %	0.208 ppb	1.026 ppb	23.057 ppb	2.871 ppb	104.637 %	-0.006 ppb	0.003 ppb	109.034 %
Concentration per Run 1	118.356 %	0.180 ppb	1.069 ppb	25.181 ppb	2.247 ppb	103.275 %	-0.006 ppb	0.001 ppb	113.460 %
Concentration per Run 2	112.911 %	0.183 ppb	0.919 ppb	22.512 ppb	2.907 ppb	105.265 %	-0.007 ppb	0.005 ppb	110.861 %
Concentration per Run 3	110.131 %	0.262 ppb	1.090 ppb	21.478 ppb	3.459 ppb	105.370 %	-0.006 ppb	0.002 ppb	102.780 %
Concentration RSD	3.7 %	22.5 %	9.1 %	8.3 %	21.1 %	1.1 %	7.1 %	97.1 %	5.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.989 ppb	7.649 ppb	107.005 %	109.804 %	0.355 ppb	0.017 ppb	97.935 %
Concentration per Run 1	0.905 ppb	8.230 ppb	107.340 %	111.776 %	0.385 ppb	0.019 ppb	100.453 %
Concentration per Run 2	0.994 ppb	7.525 ppb	108.508 %	112.681 %	0.370 ppb	0.016 ppb	97.151 %
Concentration per Run 3	1.067 ppb	7.192 ppb	105.168 %	104.954 %	0.310 ppb	0.015 ppb	96.201 %
Concentration RSD	8.2 %	6.9 %	1.6 %	3.8 %	11.3 %	10.7 %	2.3 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	38	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350269-08 6020TL	Rack	1		
Analysis started at:	9/3/2023 5:18:26 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	105.606 %	118.363 %	0.013 ppb	38.360 ppb	49,304.690 ppb	4,824.639 ppb	7.482 ppb	37,476.618 ppb	44,552.067 ppb
Concentration per Run 1	107.243 %	119.313 %	0.009 ppb	38.092 ppb	49,700.129 ppb	4,853.466 ppb	6.971 ppb	37,813.318 ppb	44,238.384 ppb
Concentration per Run 2	105.369 %	115.959 %	0.016 ppb	38.444 ppb	48,680.242 ppb	4,779.010 ppb	7.976 ppb	37,371.364 ppb	44,338.869 ppb
Concentration per Run 3	104.205 %	119.816 %	0.013 ppb	38.543 ppb	49,533.700 ppb	4,841.442 ppb	7.501 ppb	37,245.171 ppb	45,078.949 ppb
Concentration RSD	1.5 %	1.8 %	27.0 %	0.6 %	1.1 %	0.8 %	6.7 %	0.8 %	1.0 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	117.975 %	0.253 ppb	0.797 ppb	47.380 ppb	12.058 ppb	0.288 ppb	0.675 ppb	4.808 ppb	1.839 ppb
Concentration per Run 1	118.274 %	0.249 ppb	0.717 ppb	47.112 ppb	13.110 ppb	0.264 ppb	0.633 ppb	4.680 ppb	1.799 ppb
Concentration per Run 2	117.830 %	0.255 ppb	0.925 ppb	47.119 ppb	11.826 ppb	0.305 ppb	0.736 ppb	4.748 ppb	1.929 ppb
Concentration per Run 3	117.819 %	0.254 ppb	0.749 ppb	47.909 ppb	11.238 ppb	0.294 ppb	0.656 ppb	4.997 ppb	1.790 ppb
Concentration RSD	0.2 %	1.3 %	14.1 %	1.0 %	7.9 %	7.4 %	8.0 %	3.5 %	4.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	122.965 %	0.450 ppb	1.114 ppb	117.977 ppb	1.454 ppb	107.434 %	-0.004 ppb	0.017 ppb	116.596 %
Concentration per Run 1	125.758 %	0.434 ppb	1.073 ppb	122.821 ppb	1.063 ppb	106.886 %	-0.004 ppb	0.019 ppb	122.214 %
Concentration per Run 2	118.213 %	0.408 ppb	1.162 ppb	115.336 ppb	1.513 ppb	105.715 %	-0.005 ppb	0.016 ppb	113.965 %
Concentration per Run 3	124.925 %	0.507 ppb	1.109 ppb	115.774 ppb	1.784 ppb	109.700 %	-0.004 ppb	0.017 ppb	113.611 %
Concentration RSD	3.4 %	11.4 %	4.0 %	3.6 %	25.1 %	1.9 %	12.5 %	8.1 %	4.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.794 ppb	39.721 ppb	113.493 %	117.337 %	0.306 ppb	0.035 ppb	105.026 %
Concentration per Run 1	0.722 ppb	39.023 ppb	114.925 %	118.964 %	0.268 ppb	0.032 ppb	111.212 %
Concentration per Run 2	0.785 ppb	39.233 ppb	111.284 %	114.516 %	0.326 ppb	0.036 ppb	101.143 %
Concentration per Run 3	0.874 ppb	40.906 ppb	114.271 %	118.532 %	0.326 ppb	0.036 ppb	102.724 %
Concentration RSD	9.6 %	2.6 %	1.7 %	2.1 %	11.0 %	7.3 %	5.2 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	39	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2348453-02 6020TL	Rack	1		
Analysis started at:	9/3/2023 5:23:06 PM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	111.004 %	125.043 %	0.007 ppb	85.699 ppb	23,748.602 ppb	41,232.315 ppb	21.820 ppb	1,658.596 ppb	154,011.233 ppb
Concentration per Run 1	112.506 %	128.537 %	0.004 ppb	84.925 ppb	22,349.750 ppb	38,888.587 ppb	20.804 ppb	1,559.921 ppb	124,350.256 ppb
Concentration per Run 2	111.391 %	121.661 %	0.006 ppb	85.789 ppb	24,884.902 ppb	43,251.984 ppb	24.247 ppb	1,818.754 ppb	206,218.401 ppb
Concentration per Run 3	109.116 %	124.931 %	0.011 ppb	86.383 ppb	24,011.155 ppb	41,556.373 ppb	20.410 ppb	1,597.114 ppb	131,465.043 ppb
Concentration RSD	1.6 %	2.8 %	48.3 %	0.9 %	5.4 %	5.3 %	9.7 %	8.4 %	29.4 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	114.297 %	0.016 ppb	0.051 ppb	6.044 ppb	7.347 ppb	0.035 ppb	-0.049 ppb	0.254 ppb	-0.961 ppb
Concentration per Run 1	114.097 %	0.006 ppb	0.072 ppb	6.088 ppb	7.826 ppb	0.032 ppb	-0.066 ppb	0.213 ppb	-0.879 ppb
Concentration per Run 2	114.986 %	0.020 ppb	0.077 ppb	6.294 ppb	7.372 ppb	0.038 ppb	-0.038 ppb	0.263 ppb	-0.987 ppb
Concentration per Run 3	113.808 %	0.024 ppb	0.005 ppb	5.749 ppb	6.842 ppb	0.036 ppb	-0.042 ppb	0.285 ppb	-1.018 ppb
Concentration RSD	0.5 %	58.5 %	78.2 %	4.6 %	6.7 %	7.9 %	31.0 %	14.4 %	7.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	123.403 %	0.124 ppb	0.328 ppb	13,937.034 ppb	1.842 ppb	107.013 %	-0.006 ppb	0.004 ppb	118.765 %
Concentration per Run 1	116.917 %	0.104 ppb	0.255 ppb	13,629.633 ppb	1.542 ppb	104.468 %	-0.006 ppb	0.004 ppb	114.042 %
Concentration per Run 2	126.805 %	0.131 ppb	0.479 ppb	14,731.423 ppb	1.963 ppb	107.227 %	-0.006 ppb	0.003 ppb	124.675 %
Concentration per Run 3	126.488 %	0.137 ppb	0.250 ppb	13,450.048 ppb	2.020 ppb	109.345 %	-0.006 ppb	0.004 ppb	117.579 %
Concentration RSD	4.6 %	14.2 %	39.8 %	5.0 %	14.2 %	2.3 %	6.5 %	15.2 %	4.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.469 ppb	32.438 ppb	116.717 %	119.818 %	0.038 ppb	0.005 ppb	101.541 %
Concentration per Run 1	0.402 ppb	31.338 ppb	112.590 %	114.445 %	0.028 ppb	0.006 ppb	104.389 %
Concentration per Run 2	0.453 ppb	33.683 ppb	119.036 %	124.981 %	0.040 ppb	0.005 ppb	101.445 %
Concentration per Run 3	0.550 ppb	32.292 ppb	118.526 %	120.027 %	0.047 ppb	0.006 ppb	98.789 %
Concentration RSD	16.0 %	3.6 %	3.1 %	4.4 %	24.8 %	9.5 %	2.8 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 40
Analysis label: CCV
Analysis started at: 9/3/2023 5:27:44 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	105.514 %	119.621 %	59.842 ppb	60.164 ppb	6,100.399 ppb	6,122.656 ppb	62.252 ppb	6,412.473 ppb	6,232.790 ppb
Concentration per Run 1	106.496 %	115.959 %	59.535 ppb	59.704 ppb	6,176.408 ppb	6,159.409 ppb	63.106 ppb	6,326.774 ppb	6,234.623 ppb
Concentration per Run 2	105.913 %	124.093 %	60.063 ppb	60.139 ppb	6,074.580 ppb	6,243.599 ppb	64.183 ppb	6,627.501 ppb	6,366.031 ppb
Concentration per Run 3	104.134 %	118.810 %	59.928 ppb	60.649 ppb	6,050.210 ppb	5,964.959 ppb	59.466 ppb	6,283.143 ppb	6,097.716 ppb
Recovery Percentage 1			99.737 %	100.273 %	101.673 %	102.044 %	103.753 %	106.875 %	103.880 %
Concentration RSD	1.2 %	3.4 %	0.5 %	0.8 %	1.1 %	2.3 %	4.0 %	2.9 %	2.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	116.057 %	57.215 ppb	56.806 ppb	57.193 ppb	5,908.833 ppb	58.488 ppb	57.405 ppb	57.907 ppb	59.332 ppb
Concentration per Run 1	115.949 %	61.630 ppb	60.466 ppb	58.956 ppb	6,151.042 ppb	62.291 ppb	61.054 ppb	62.389 ppb	62.606 ppb
Concentration per Run 2	116.149 %	55.335 ppb	55.586 ppb	57.611 ppb	5,772.136 ppb	56.508 ppb	55.375 ppb	55.982 ppb	58.089 ppb
Concentration per Run 3	116.072 %	54.681 ppb	54.365 ppb	55.013 ppb	5,803.320 ppb	56.666 ppb	55.787 ppb	55.351 ppb	57.302 ppb
Recovery Percentage 1		95.359 %	94.676 %	95.322 %	98.481 %	97.480 %	95.676 %	96.512 %	98.887 %
Concentration RSD	0.1 %	6.7 %	5.7 %	3.5 %	3.6 %	5.6 %	5.5 %	6.7 %	4.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	121.834 %	60.547 ppb	63.862 ppb	62.846 ppb	57.714 ppb	109.784 %	59.248 ppb	59.326 ppb	116.639 %
Concentration per Run 1	113.289 %	63.253 ppb	63.104 ppb	63.738 ppb	59.049 ppb	105.130 %	61.436 ppb	61.410 ppb	107.730 %
Concentration per Run 2	126.481 %	59.998 ppb	67.505 ppb	65.308 ppb	56.795 ppb	113.684 %	57.210 ppb	57.355 ppb	126.922 %
Concentration per Run 3	125.732 %	58.389 ppb	60.975 ppb	59.493 ppb	57.297 ppb	110.538 %	59.098 ppb	59.212 ppb	115.266 %
Recovery Percentage 1		100.911 %	106.436 %	104.744 %	96.189 %		98.746 %	98.876 %	
Concentration RSD	6.1 %	4.1 %	5.2 %	4.8 %	2.1 %	3.9 %	3.6 %	3.4 %	8.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	66.989 ppb	60.512 ppb	112.946 %	116.215 %	62.354 ppb	62.815 ppb	103.037 %
Concentration per Run 1	69.777 ppb	62.056 ppb	107.317 %	109.595 %	61.265 ppb	64.990 ppb	104.713 %
Concentration per Run 2	64.684 ppb	59.702 ppb	116.657 %	124.670 %	62.707 ppb	61.502 ppb	103.228 %
Concentration per Run 3	66.508 ppb	59.777 ppb	114.864 %	114.378 %	63.092 ppb	61.953 ppb	101.170 %
Recovery Percentage 1	111.649 %	100.853 %			103.924 %	104.692 %	
Concentration RSD	3.9 %	2.2 %	4.4 %	6.6 %	1.5 %	3.0 %	1.7 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	41	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/3/2023 5:33:14 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	108.811 %	121.549 %	0.011 ppb	-0.734 ppb	-2.826 ppb	-0.824 ppb	-0.824 ppb	-9.308 ppb	-7.779 ppb
Concentration per Run 1	110.664 %	124.093 %	0.013 ppb	-0.755 ppb	-2.931 ppb	-0.989 ppb	-0.743 ppb	-7.442 ppb	-10.623 ppb
Concentration per Run 2	108.257 %	123.422 %	0.008 ppb	-0.750 ppb	-2.681 ppb	-0.910 ppb	-0.842 ppb	-10.054 ppb	-4.203 ppb
Concentration per Run 3	107.512 %	117.133 %	0.010 ppb	-0.696 ppb	-2.865 ppb	-0.572 ppb	-0.887 ppb	-10.429 ppb	-8.511 ppb
Recovery Percentage 1			2.111 %	-7.338 %	-2.826 %	-1.177 %	-8.242 %	-9.308 %	-7.779 %
Concentration RSD	1.5 %	3.2 %	25.3 %	4.4 %	4.6 %	26.9 %	9.0 %	17.5 %	42.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	110.879 %	-0.015 ppb	-0.015 ppb	-0.222 ppb	11.962 ppb	-0.006 ppb	-0.240 ppb	-0.086 ppb	-1.772 ppb
Concentration per Run 1	111.943 %	-0.019 ppb	-0.020 ppb	-0.234 ppb	12.403 ppb	-0.006 ppb	-0.215 ppb	-0.084 ppb	-1.771 ppb
Concentration per Run 2	109.741 %	-0.019 ppb	-0.012 ppb	-0.226 ppb	15.663 ppb	-0.004 ppb	-0.265 ppb	-0.085 ppb	-1.786 ppb
Concentration per Run 3	110.952 %	-0.006 ppb	-0.014 ppb	-0.208 ppb	7.819 ppb	-0.009 ppb	-0.240 ppb	-0.088 ppb	-1.760 ppb
Recovery Percentage 1		-0.296 %	-1.510 %	-22.237 %	23.924 %	-1.293 %	-11.998 %	-8.553 %	-35.449 %
Concentration RSD	1.0 %	51.9 %	29.6 %	5.9 %	32.9 %	33.3 %	10.4 %	2.3 %	0.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	120.399 %	0.090 ppb	0.649 ppb	0.002 ppb	1.619 ppb	111.775 %	-0.003 ppb	0.000 ppb	117.157 %
Concentration per Run 1	123.501 %	0.020 ppb	0.404 ppb	0.003 ppb	1.231 ppb	110.911 %	-0.004 ppb	0.001 ppb	118.952 %
Concentration per Run 2	120.850 %	0.118 ppb	0.738 ppb	-0.001 ppb	1.620 ppb	112.612 %	-0.003 ppb	0.000 ppb	117.731 %
Concentration per Run 3	116.847 %	0.131 ppb	0.806 ppb	0.004 ppb	2.007 ppb	111.802 %	-0.003 ppb	-0.001 ppb	114.789 %
Recovery Percentage 1		17.928 %	12.984 %	0.021 %	80.974 %		-0.797 %	0.060 %	
Concentration RSD	2.8 %	67.6 %	33.2 %	139.1 %	23.9 %	0.8 %	9.8 %	907.9 %	1.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.377 ppb	-0.035 ppb	110.886 %	113.529 %	0.242 ppb	0.004 ppb	114.948 %
Concentration per Run 1	0.347 ppb	-0.033 ppb	110.936 %	115.088 %	0.288 ppb	0.005 ppb	123.729 %
Concentration per Run 2	0.384 ppb	-0.029 ppb	110.466 %	114.410 %	0.241 ppb	0.003 ppb	111.913 %
Concentration per Run 3	0.399 ppb	-0.044 ppb	111.256 %	111.090 %	0.198 ppb	0.004 ppb	109.203 %
Recovery Percentage 1	9.423 %	-7.018 %			24.244 %	0.418 %	
Concentration RSD	7.1 %	22.8 %	0.4 %	1.9 %	18.7 %	23.5 %	6.7 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 42
Analysis label: CCV
Analysis started at: 9/3/2023 5:46:22 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	103.990 %	122.807 %	60.893 ppb	52.930 ppb	6,031.448 ppb	6,065.831 ppb	61.353 ppb	6,324.356 ppb	6,185.194 ppb
Concentration per Run 1	104.902 %	125.015 %	61.049 ppb	52.677 ppb	6,477.411 ppb	6,501.835 ppb	68.025 ppb	7,011.456 ppb	6,704.292 ppb
Concentration per Run 2	103.825 %	124.176 %	61.030 ppb	53.369 ppb	5,853.699 ppb	5,919.582 ppb	59.192 ppb	6,090.827 ppb	5,876.406 ppb
Concentration per Run 3	103.243 %	119.229 %	60.599 ppb	52.744 ppb	5,763.232 ppb	5,776.075 ppb	56.843 ppb	5,870.785 ppb	5,974.884 ppb
Recovery Percentage 1			101.488 %	88.217 %	100.524 %	101.097 %	102.255 %	105.406 %	103.087 %
Concentration RSD	0.8 %	2.5 %	0.4 %	0.7 %	6.4 %	6.3 %	9.6 %	9.6 %	7.3 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	109.009 %	57.798 ppb	57.638 ppb	57.642 ppb	6,025.504 ppb	59.710 ppb	58.747 ppb	59.234 ppb	59.596 ppb
Concentration per Run 1	107.819 %	60.076 ppb	58.756 ppb	59.388 ppb	6,181.081 ppb	60.674 ppb	59.104 ppb	58.440 ppb	61.164 ppb
Concentration per Run 2	109.889 %	56.324 ppb	56.545 ppb	57.884 ppb	5,946.010 ppb	59.368 ppb	59.029 ppb	59.725 ppb	59.125 ppb
Concentration per Run 3	109.318 %	56.994 ppb	57.613 ppb	55.653 ppb	5,949.420 ppb	59.086 ppb	58.110 ppb	59.536 ppb	58.500 ppb
Recovery Percentage 1		96.330 %	96.063 %	96.069 %	100.425 %	99.516 %	97.912 %	98.723 %	99.327 %
Concentration RSD	1.0 %	3.5 %	1.9 %	3.3 %	2.2 %	1.4 %	0.9 %	1.2 %	2.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	119.284 %	61.492 ppb	62.030 ppb	55.658 ppb	61.217 ppb	109.142 %	60.799 ppb	60.303 ppb	115.349 %
Concentration per Run 1	125.144 %	62.510 ppb	67.799 ppb	60.766 ppb	63.184 ppb	106.817 %	62.506 ppb	62.470 ppb	117.962 %
Concentration per Run 2	117.805 %	60.781 ppb	61.409 ppb	53.819 ppb	60.252 ppb	111.921 %	59.996 ppb	59.098 ppb	114.873 %
Concentration per Run 3	114.904 %	61.184 ppb	56.880 ppb	52.389 ppb	60.214 ppb	108.688 %	59.894 ppb	59.340 ppb	113.210 %
Recovery Percentage 1		102.486 %	103.383 %	92.763 %	102.028 %		101.331 %	100.504 %	
Concentration RSD	4.4 %	1.5 %	8.8 %	8.1 %	2.8 %	2.4 %	2.4 %	3.1 %	2.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	66.417 ppb	60.665 ppb	111.266 %	114.899 %	64.928 ppb	65.613 ppb	100.965 %
Concentration per Run 1	69.385 ppb	65.430 ppb	111.337 %	115.697 %	61.366 ppb	68.605 ppb	110.800 %
Concentration per Run 2	66.065 ppb	59.873 ppb	112.246 %	116.631 %	67.128 ppb	64.228 ppb	96.926 %
Concentration per Run 3	63.801 ppb	56.692 ppb	110.216 %	112.369 %	66.290 ppb	64.006 ppb	95.168 %
Recovery Percentage 1	110.695 %	101.108 %			108.213 %	109.355 %	
Concentration RSD	4.2 %	7.3 %	0.9 %	1.9 %	4.8 %	4.0 %	8.5 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	43	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/3/2023 5:52:19 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	103.644 %	115.037 %	0.014 ppb	-1.065 ppb	-2.553 ppb	-0.794 ppb	-0.890 ppb	-7.136 ppb	-8.172 ppb
Concentration per Run 1	106.197 %	106.904 %	0.016 ppb	-1.129 ppb	-2.679 ppb	-0.977 ppb	-0.792 ppb	-6.681 ppb	-6.942 ppb
Concentration per Run 2	103.806 %	115.875 %	0.014 ppb	-1.105 ppb	-1.945 ppb	-0.652 ppb	-1.034 ppb	-8.836 ppb	-10.883 ppb
Concentration per Run 3	100.928 %	122.332 %	0.011 ppb	-0.961 ppb	-3.036 ppb	-0.753 ppb	-0.844 ppb	-5.892 ppb	-6.691 ppb
Recovery Percentage 1			2.720 %	-10.652 %	-2.553 %	-1.134 %	-8.897 %	-7.136 %	-8.172 %
Concentration RSD	2.5 %	6.7 %	21.2 %	8.5 %	21.8 %	21.0 %	14.3 %	21.4 %	28.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.767 %	-0.011 ppb	-0.001 ppb	-0.197 ppb	11.037 ppb	-0.007 ppb	-0.201 ppb	-0.084 ppb	-1.747 ppb
Concentration per Run 1	99.543 %	-0.008 ppb	0.012 ppb	-0.208 ppb	12.785 ppb	-0.008 ppb	-0.162 ppb	-0.095 ppb	-1.714 ppb
Concentration per Run 2	99.101 %	-0.014 ppb	-0.012 ppb	-0.200 ppb	10.467 ppb	-0.004 ppb	-0.219 ppb	-0.074 ppb	-1.747 ppb
Concentration per Run 3	97.658 %	-0.011 ppb	-0.003 ppb	-0.184 ppb	9.859 ppb	-0.009 ppb	-0.221 ppb	-0.082 ppb	-1.779 ppb
Recovery Percentage 1		-0.225 %	-0.102 %	-19.740 %	22.074 %	-1.386 %	-10.038 %	-8.383 %	-34.933 %
Concentration RSD	1.0 %	28.3 %	1,220.5 %	6.2 %	14.0 %	33.7 %	16.8 %	12.9 %	1.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	115.890 %	0.092 ppb	0.787 ppb	-0.010 ppb	1.527 ppb	110.285 %	-0.002 ppb	0.001 ppb	113.444 %
Concentration per Run 1	105.863 %	0.093 ppb	0.733 ppb	-0.010 ppb	1.262 ppb	104.931 %	-0.002 ppb	0.000 ppb	102.170 %
Concentration per Run 2	117.495 %	0.088 ppb	0.815 ppb	-0.009 ppb	1.603 ppb	111.274 %	-0.002 ppb	0.001 ppb	115.122 %
Concentration per Run 3	124.312 %	0.096 ppb	0.814 ppb	-0.009 ppb	1.717 ppb	114.651 %	-0.003 ppb	0.001 ppb	123.042 %
Recovery Percentage 1		18.481 %	15.742 %	-0.095 %	76.369 %		-0.596 %	0.307 %	
Concentration RSD	8.0 %	4.1 %	6.0 %	6.9 %	15.5 %	4.5 %	32.9 %	103.3 %	9.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.211 ppb	-0.036 ppb	110.094 %	110.959 %	0.334 ppb	0.006 ppb	104.828 %
Concentration per Run 1	0.207 ppb	-0.038 ppb	101.672 %	100.267 %	0.410 ppb	0.005 ppb	108.078 %
Concentration per Run 2	0.215 ppb	-0.032 ppb	111.923 %	114.831 %	0.326 ppb	0.008 ppb	101.968 %
Concentration per Run 3	0.212 ppb	-0.037 ppb	116.687 %	117.778 %	0.264 ppb	0.006 ppb	104.437 %
Recovery Percentage 1	5.280 %	-7.203 %			33.355 %	0.636 %	
Concentration RSD	1.9 %	8.9 %	7.0 %	8.4 %	22.0 %	17.5 %	2.9 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	44	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2348453-07 6020TL	Rack	1		
Analysis started at:	9/3/2023 5:58:25 PM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	109.727 %	127.894 %	0.010 ppb	294.626 ppb	16,350.756 ppb	86,643.970 ppb	33.503 ppb	3,052.197 ppb	760,864.457 ppb
Concentration per Run 1	114.111 %	120.739 %	0.007 ppb	292.303 ppb	16,940.402 ppb	88,641.700 ppb	35.487 ppb	3,162.786 ppb	780,551.777 ppb
Concentration per Run 2	109.582 %	126.944 %	0.012 ppb	294.633 ppb	16,041.046 ppb	85,822.305 ppb	32.911 ppb	2,817.611 ppb	738,525.752 ppb
Concentration per Run 3	105.488 %	135.999 %	0.012 ppb	296.941 ppb	16,070.822 ppb	85,467.906 ppb	32.110 ppb	3,176.194 ppb	763,515.841 ppb
Concentration RSD	3.9 %	6.0 %	23.8 %	0.8 %	3.1 %	2.0 %	5.3 %	6.7 %	2.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.777 %	0.119 ppb	0.282 ppb	192.123 ppb	305.560 ppb	0.887 ppb	0.117 ppb	0.387 ppb	12.636 ppb
Concentration per Run 1	109.187 %	0.136 ppb	0.313 ppb	199.558 ppb	327.865 ppb	0.993 ppb	0.126 ppb	0.461 ppb	13.624 ppb
Concentration per Run 2	106.259 %	0.075 ppb	0.277 ppb	188.222 ppb	304.709 ppb	0.855 ppb	0.182 ppb	0.334 ppb	12.341 ppb
Concentration per Run 3	104.887 %	0.145 ppb	0.257 ppb	188.589 ppb	284.107 ppb	0.812 ppb	0.044 ppb	0.366 ppb	11.944 ppb
Concentration RSD	2.1 %	32.1 %	10.0 %	3.4 %	7.2 %	10.7 %	59.4 %	17.0 %	6.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	117.173 %	0.430 ppb	0.301 ppb	17,160.071 ppb	1.914 ppb	101.896 %	-0.005 ppb	0.010 ppb	117.994 %
Concentration per Run 1	104.135 %	0.382 ppb	0.321 ppb	17,670.218 ppb	1.802 ppb	95.997 %	-0.005 ppb	0.012 ppb	106.468 %
Concentration per Run 2	117.921 %	0.418 ppb	0.213 ppb	16,102.356 ppb	1.918 ppb	102.922 %	-0.006 ppb	0.013 ppb	115.560 %
Concentration per Run 3	129.463 %	0.491 ppb	0.367 ppb	17,707.640 ppb	2.021 ppb	106.769 %	-0.003 ppb	0.005 ppb	131.956 %
Concentration RSD	10.8 %	12.8 %	26.3 %	5.3 %	5.7 %	5.4 %	26.2 %	41.3 %	10.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.182 ppb	9.171 ppb	107.142 %	109.843 %	0.086 ppb	0.034 ppb	87.181 %
Concentration per Run 1	0.169 ppb	9.634 ppb	98.512 %	100.550 %	0.067 ppb	0.034 ppb	87.753 %
Concentration per Run 2	0.196 ppb	9.039 ppb	108.396 %	108.803 %	0.098 ppb	0.033 ppb	84.990 %
Concentration per Run 3	0.181 ppb	8.840 ppb	114.519 %	120.175 %	0.092 ppb	0.035 ppb	88.799 %
Concentration RSD	7.5 %	4.5 %	7.5 %	9.0 %	18.9 %	2.6 %	2.3 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index:	45	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2348453-10 6020TL	Rack	1		
Analysis started at:	9/3/2023 6:03:03 PM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	112.739 %	124.260 %	0.012 ppb	139.422 ppb	21,654.093 ppb	55,215.266 ppb	45.652 ppb	2,014.879 ppb	254,983.348 ppb
Concentration per Run 1	114.972 %	125.183 %	0.010 ppb	138.777 ppb	21,468.381 ppb	54,074.110 ppb	42.282 ppb	2,002.742 ppb	229,352.772 ppb
Concentration per Run 2	112.479 %	124.176 %	0.012 ppb	139.202 ppb	21,352.346 ppb	54,644.971 ppb	45.422 ppb	2,015.572 ppb	239,170.876 ppb
Concentration per Run 3	110.765 %	123.422 %	0.014 ppb	140.287 ppb	22,141.552 ppb	56,926.717 ppb	49.252 ppb	2,026.324 ppb	296,426.396 ppb
Concentration RSD	1.9 %	0.7 %	18.3 %	0.6 %	2.0 %	2.7 %	7.6 %	0.6 %	14.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	112.671 %	0.191 ppb	1.953 ppb	197.778 ppb	794.028 ppb	0.943 ppb	0.680 ppb	1.599 ppb	1.385 ppb
Concentration per Run 1	112.664 %	0.201 ppb	2.005 ppb	202.366 ppb	805.586 ppb	0.992 ppb	0.691 ppb	1.630 ppb	1.337 ppb
Concentration per Run 2	112.005 %	0.176 ppb	1.980 ppb	195.803 ppb	814.148 ppb	0.928 ppb	0.658 ppb	1.626 ppb	1.378 ppb
Concentration per Run 3	113.344 %	0.195 ppb	1.875 ppb	195.166 ppb	762.350 ppb	0.909 ppb	0.692 ppb	1.542 ppb	1.440 ppb
Concentration RSD	0.6 %	7.0 %	3.5 %	2.0 %	3.5 %	4.6 %	2.9 %	3.1 %	3.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	122.990 %	0.342 ppb	0.166 ppb	13,563.720 ppb	1.663 ppb	104.385 %	-0.003 ppb	0.018 ppb	123.180 %
Concentration per Run 1	116.433 %	0.341 ppb	0.151 ppb	13,538.304 ppb	1.466 ppb	101.474 %	-0.003 ppb	0.018 ppb	116.360 %
Concentration per Run 2	120.929 %	0.403 ppb	0.233 ppb	13,177.080 ppb	1.709 ppb	104.105 %	-0.002 ppb	0.017 ppb	120.043 %
Concentration per Run 3	131.609 %	0.281 ppb	0.114 ppb	13,975.778 ppb	1.815 ppb	107.576 %	-0.003 ppb	0.020 ppb	133.137 %
Concentration RSD	6.3 %	17.8 %	36.7 %	2.9 %	10.7 %	2.9 %	17.9 %	7.4 %	7.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.180 ppb	23.428 ppb	115.882 %	119.789 %	0.047 ppb	0.150 ppb	99.631 %
Concentration per Run 1	0.178 ppb	23.778 ppb	110.701 %	114.637 %	0.033 ppb	0.146 ppb	102.330 %
Concentration per Run 2	0.176 ppb	23.654 ppb	114.569 %	117.249 %	0.054 ppb	0.153 ppb	97.817 %
Concentration per Run 3	0.186 ppb	22.853 ppb	122.375 %	127.482 %	0.055 ppb	0.151 ppb	98.745 %
Concentration RSD	2.8 %	2.1 %	5.1 %	5.7 %	26.2 %	2.4 %	2.4 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 46
Analysis label: CCV
Analysis started at: 9/3/2023 6:08:20 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	113.879 %	122.891 %	60.526 ppb	54.901 ppb	6,236.625 ppb	6,305.941 ppb	64.864 ppb	6,583.262 ppb	6,483.195 ppb
Concentration per Run 1	115.806 %	118.391 %	60.515 ppb	54.746 ppb	6,422.943 ppb	6,378.993 ppb	64.242 ppb	6,635.912 ppb	6,605.327 ppb
Concentration per Run 2	114.421 %	124.009 %	60.438 ppb	54.747 ppb	6,312.470 ppb	6,506.062 ppb	68.708 ppb	6,839.151 ppb	6,663.679 ppb
Concentration per Run 3	111.410 %	126.273 %	60.626 ppb	55.209 ppb	5,974.464 ppb	6,032.768 ppb	61.642 ppb	6,274.722 ppb	6,180.580 ppb
Recovery Percentage 1			100.877 %	91.501 %	103.944 %	105.099 %	108.107 %	109.721 %	108.053 %
Concentration RSD	2.0 %	3.3 %	0.2 %	0.5 %	3.7 %	3.9 %	5.5 %	4.3 %	4.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	120.711 %	59.915 ppb	58.278 ppb	59.306 ppb	6,074.238 ppb	59.675 ppb	58.991 ppb	59.343 ppb	60.362 ppb
Concentration per Run 1	121.191 %	60.610 ppb	59.460 ppb	58.901 ppb	6,337.852 ppb	62.792 ppb	62.601 ppb	62.963 ppb	62.498 ppb
Concentration per Run 2	121.632 %	59.966 ppb	58.747 ppb	61.202 ppb	6,064.167 ppb	58.780 ppb	57.472 ppb	57.947 ppb	60.302 ppb
Concentration per Run 3	119.309 %	59.170 ppb	56.628 ppb	57.816 ppb	5,820.695 ppb	57.452 ppb	56.901 ppb	57.121 ppb	58.287 ppb
Recovery Percentage 1		99.859 %	97.131 %	98.844 %	101.237 %	99.458 %	98.319 %	98.906 %	100.603 %
Concentration RSD	1.0 %	1.2 %	2.5 %	2.9 %	4.3 %	4.7 %	5.3 %	5.3 %	3.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	125.917 %	61.749 ppb	65.124 ppb	56.716 ppb	60.185 ppb	112.983 %	59.851 ppb	60.264 ppb	121.765 %
Concentration per Run 1	117.673 %	63.524 ppb	66.372 ppb	57.285 ppb	62.726 ppb	107.962 %	62.200 ppb	63.464 ppb	113.549 %
Concentration per Run 2	130.671 %	61.493 ppb	67.101 ppb	58.415 ppb	59.528 ppb	115.480 %	58.230 ppb	58.240 ppb	129.197 %
Concentration per Run 3	129.405 %	60.230 ppb	61.900 ppb	54.448 ppb	58.302 ppb	115.506 %	59.122 ppb	59.087 ppb	122.549 %
Recovery Percentage 1		102.915 %	108.540 %	94.527 %	100.309 %		99.751 %	100.440 %	
Concentration RSD	5.7 %	2.7 %	4.3 %	3.6 %	3.8 %	3.8 %	3.5 %	4.7 %	6.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	68.638 ppb	62.222 ppb	115.952 %	119.479 %	63.351 ppb	69.618 ppb	105.697 %
Concentration per Run 1	70.658 ppb	62.207 ppb	107.270 %	110.236 %	61.951 ppb	67.673 ppb	107.956 %
Concentration per Run 2	68.822 ppb	63.280 ppb	118.761 %	126.715 %	63.486 ppb	70.896 ppb	104.968 %
Concentration per Run 3	66.432 ppb	61.180 ppb	121.823 %	121.487 %	64.616 ppb	70.286 ppb	104.166 %
Recovery Percentage 1	114.396 %	103.704 %			105.585 %	116.030 %	
Concentration RSD	3.1 %	1.7 %	6.6 %	7.0 %	2.1 %	2.5 %	1.9 %

Alpha ICPMSQ Data

9/3/2023 6:32:28 PM

Analysis index: 47
Analysis label: CCB
Analysis started at: 9/3/2023 6:13:02 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	116.767 %	117.413 %	0.013 ppb	-0.441 ppb	-3.302 ppb	-0.687 ppb	-0.900 ppb	-7.782 ppb	-5.858 ppb
Concentration per Run 1	118.173 %	110.593 %	0.012 ppb	-0.423 ppb	-3.087 ppb	-0.723 ppb	-0.635 ppb	-4.920 ppb	-3.402 ppb
Concentration per Run 2	117.194 %	121.996 %	0.013 ppb	-0.463 ppb	-4.060 ppb	-0.668 ppb	-1.013 ppb	-8.422 ppb	-7.940 ppb
Concentration per Run 3	114.935 %	119.649 %	0.013 ppb	-0.436 ppb	-2.759 ppb	-0.670 ppb	-1.052 ppb	-10.003 ppb	-6.231 ppb
Recovery Percentage 1			2.534 %	-4.405 %	-3.302 %	-0.981 %	-8.998 %	-7.782 %	-5.858 %
Concentration RSD	1.4 %	5.1 %	2.9 %	4.6 %	20.5 %	4.6 %	25.6 %	33.4 %	39.1 %

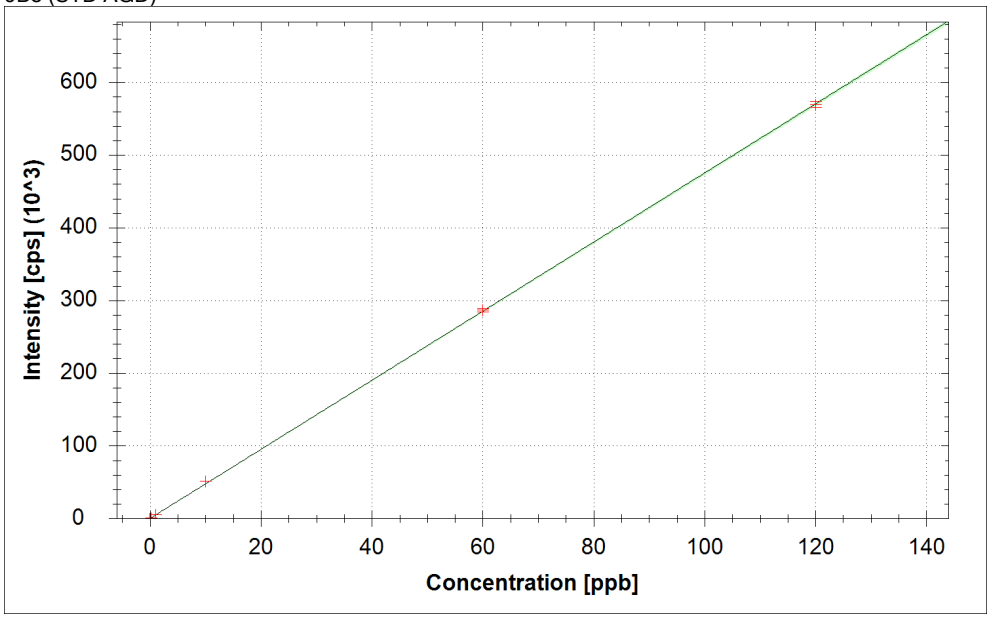
Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	112.612 %	-0.014 ppb	-0.007 ppb	-0.200 ppb	13.822 ppb	-0.005 ppb	-0.210 ppb	-0.074 ppb	-1.732 ppb
Concentration per Run 1	112.048 %	-0.027 ppb	-0.020 ppb	-0.176 ppb	14.285 ppb	-0.003 ppb	-0.205 ppb	-0.082 ppb	-1.706 ppb
Concentration per Run 2	113.074 %	-0.006 ppb	-0.013 ppb	-0.202 ppb	13.034 ppb	-0.007 ppb	-0.189 ppb	-0.067 ppb	-1.773 ppb
Concentration per Run 3	112.713 %	-0.007 ppb	0.011 ppb	-0.220 ppb	14.148 ppb	-0.004 ppb	-0.235 ppb	-0.073 ppb	-1.717 ppb
Recovery Percentage 1		-0.273 %	-0.732 %	-19.952 %	27.645 %	-0.939 %	-10.477 %	-7.391 %	-34.643 %
Concentration RSD	0.5 %	84.9 %	223.7 %	11.0 %	5.0 %	42.6 %	11.1 %	10.1 %	2.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	120.755 %	0.110 ppb	0.548 ppb	0.031 ppb	1.507 ppb	113.119 %	-0.004 ppb	0.001 ppb	117.839 %
Concentration per Run 1	117.330 %	0.081 ppb	0.570 ppb	0.024 ppb	1.200 ppb	111.437 %	-0.004 ppb	0.001 ppb	112.782 %
Concentration per Run 2	118.194 %	0.127 ppb	0.370 ppb	0.037 ppb	1.582 ppb	112.990 %	-0.002 ppb	0.002 ppb	121.231 %
Concentration per Run 3	126.740 %	0.121 ppb	0.705 ppb	0.032 ppb	1.740 ppb	114.931 %	-0.004 ppb	0.000 ppb	119.505 %
Recovery Percentage 1		21.917 %	10.964 %	0.313 %	75.365 %		-0.910 %	0.539 %	
Concentration RSD	4.3 %	23.1 %	30.7 %	20.8 %	18.4 %	1.5 %	32.7 %	100.7 %	3.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.130 ppb	-0.029 ppb	112.236 %	113.665 %	0.366 ppb	0.009 ppb	105.323 %
Concentration per Run 1	0.108 ppb	-0.040 ppb	107.868 %	108.959 %	0.408 ppb	0.009 ppb	105.745 %
Concentration per Run 2	0.141 ppb	-0.029 ppb	112.680 %	113.315 %	0.381 ppb	0.008 ppb	104.479 %
Concentration per Run 3	0.141 ppb	-0.018 ppb	116.161 %	118.720 %	0.309 ppb	0.009 ppb	105.747 %
Recovery Percentage 1	3.250 %	-5.811 %			36.582 %	0.878 %	
Concentration RSD	14.6 %	37.0 %	3.7 %	4.3 %	14.1 %	6.3 %	0.7 %

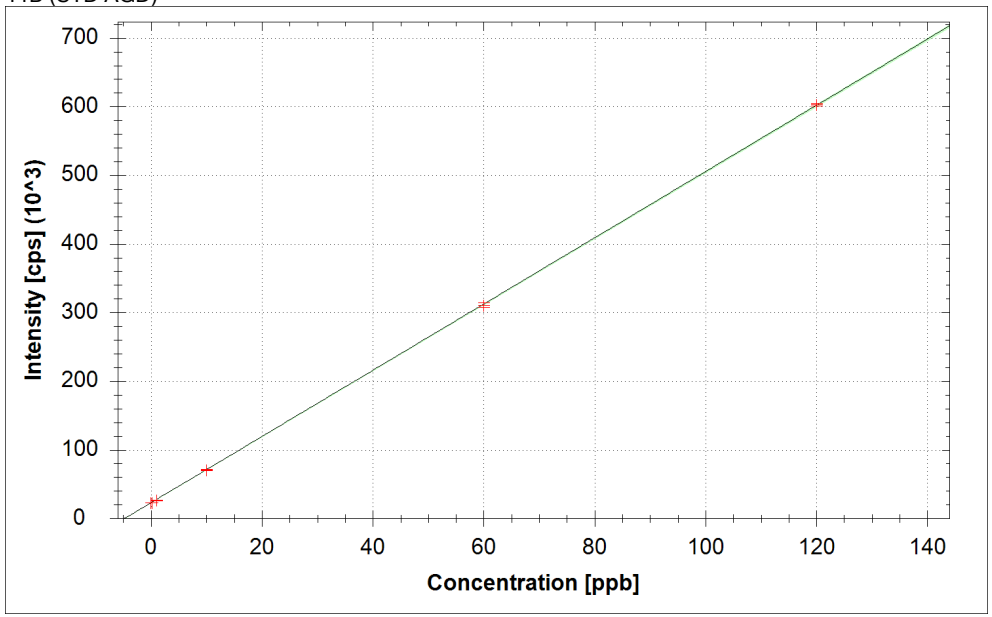
Calibration Curves:

9Be (STD AGD)



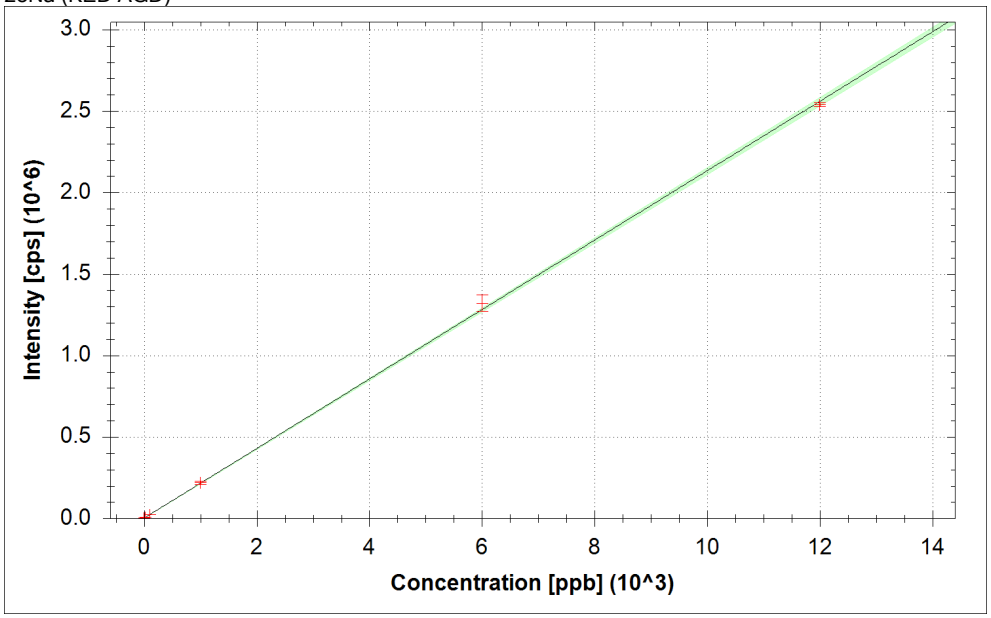
f(x) = 4750.3923*x + 55.4696
R² = 0.9999
BEC = 0.012 ppb
LoD = 0.0067 ppb

11B (STD AGD)



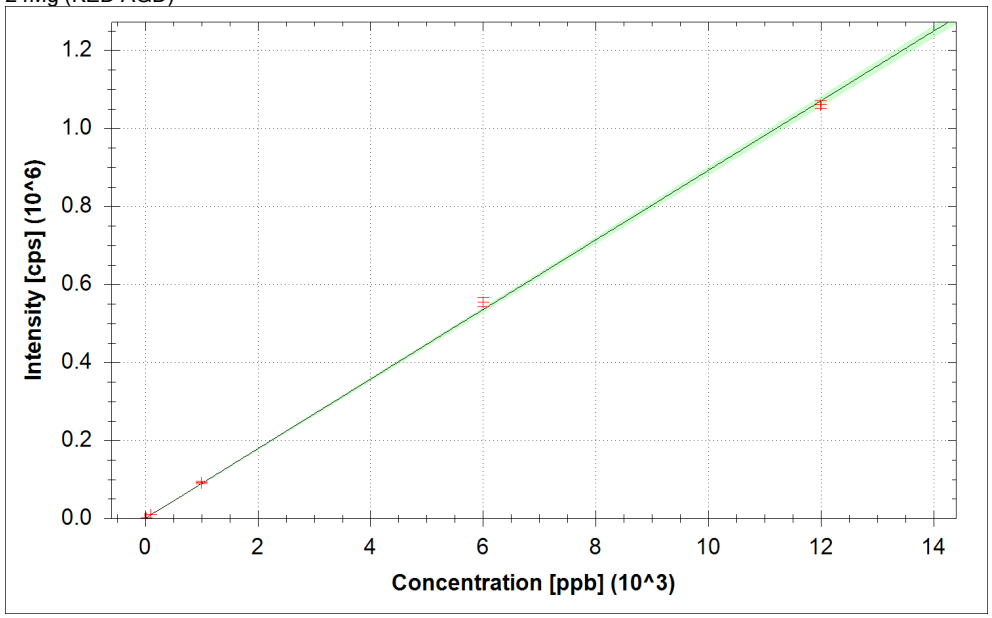
f(x) = 4824.2575*x + 22969.2354
R² = 1.0000
BEC = 4.761 ppb
LoD = 0.0532 ppb

23Na (KED AGD)



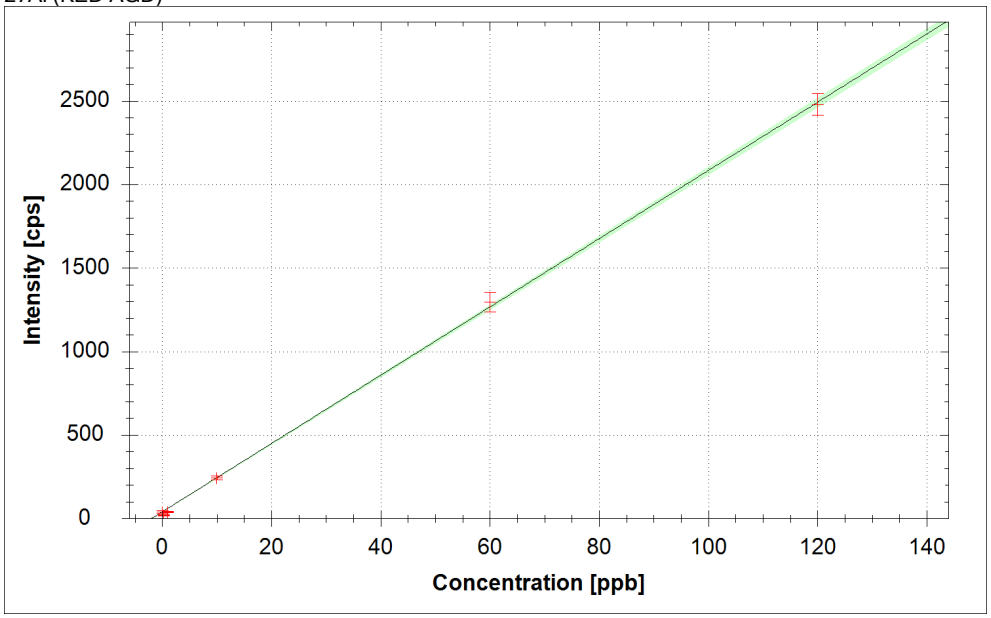
f(x) = 213.0071*x + 3179.7178
R² = 0.9996
BEC = 14.928 ppb
LoD = 0.1548 ppb

24Mg (KED AGD)



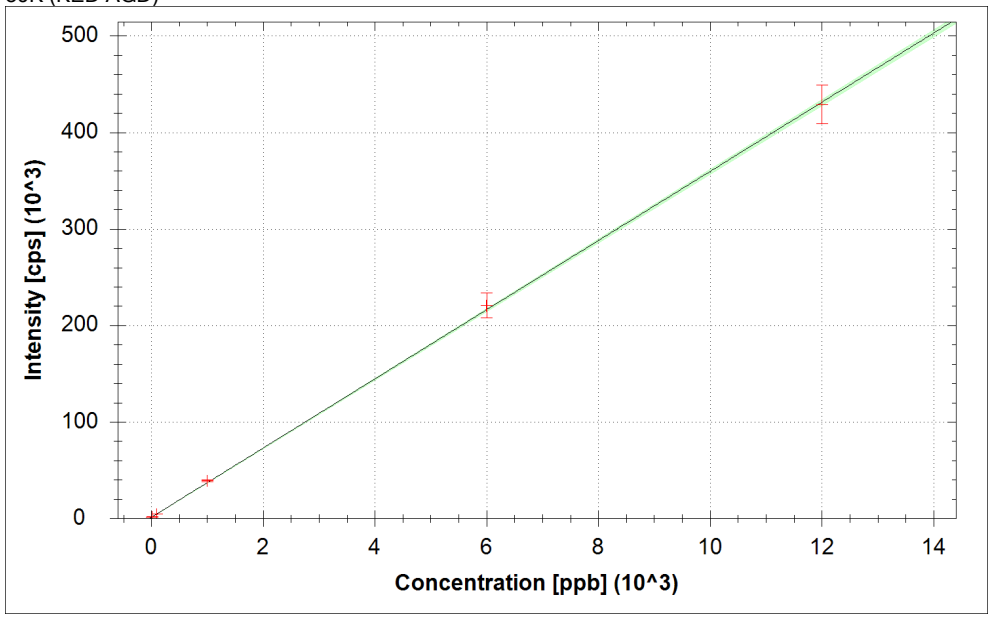
f(x) = 89.1703*x + 236.8657
R² = 0.9995
BEC = 2.656 ppb
LoD = 1.3272 ppb

27Al (KED AGD)



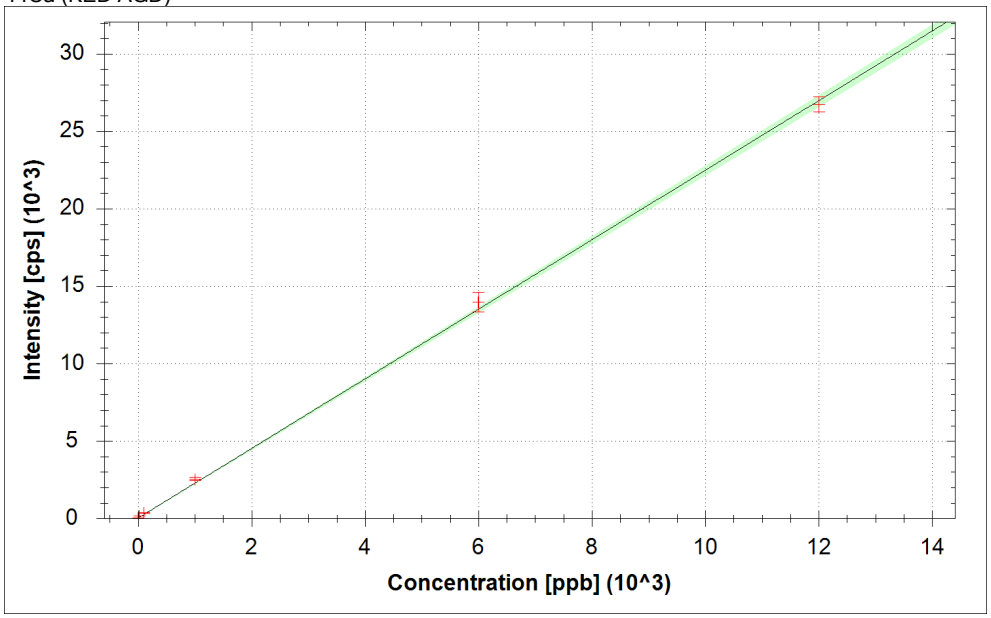
f(x) = 20.4291*x + 39.8997
R² = 0.9996
BEC = 1.953 ppb
LoD = 1.1823 ppb

39K (KED AGD)



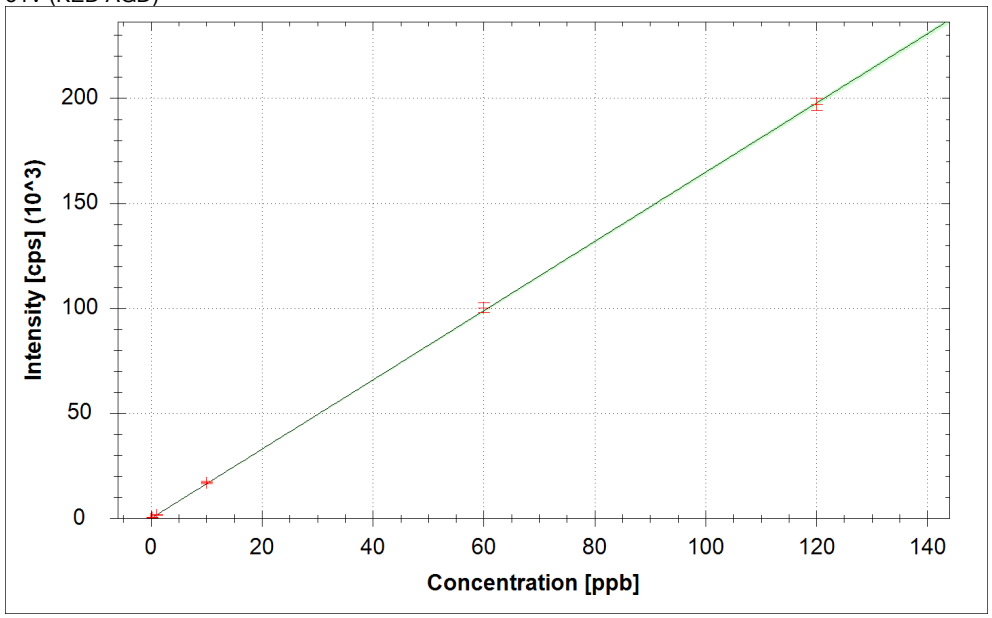
f(x) = 35.8269*x + 1228.0946
R² = 0.9998
BEC = 34.279 ppb
LoD = 9.6770 ppb

44Ca (KED AGD)



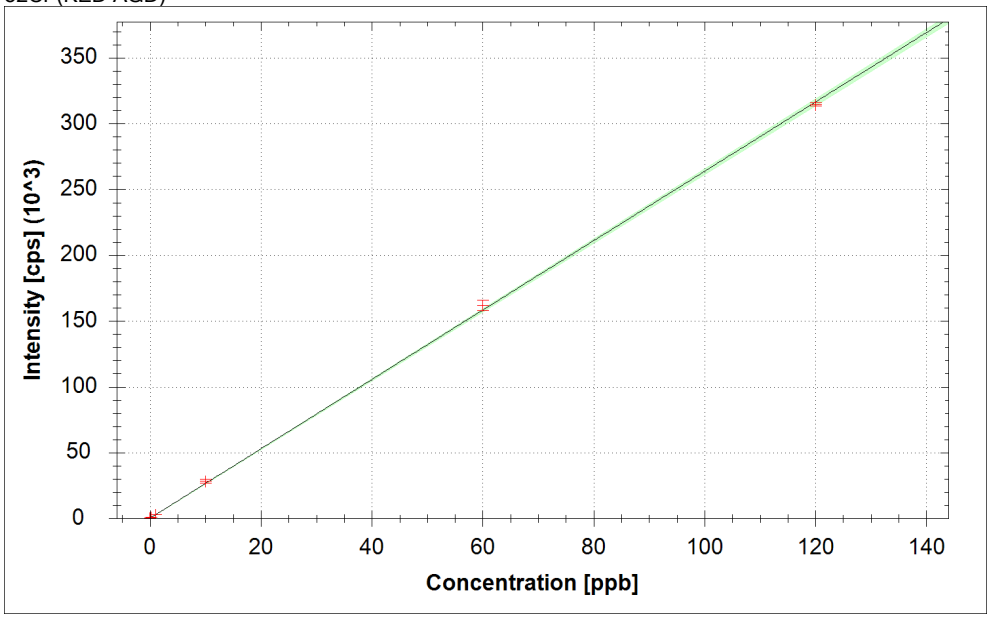
f(x) = 2.2457*x + 24.9892
R² = 0.9994
BEC = 11.128 ppb
LoD = 1.8226 ppb

51V (KED AGD)



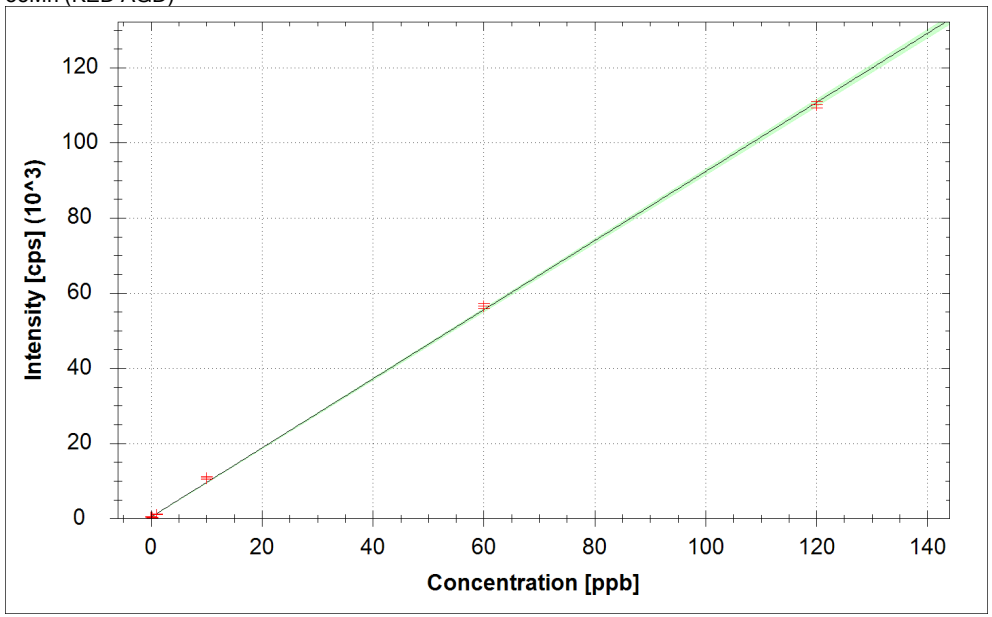
f(x) = 1646.9811*x + 28.3112
R² = 0.9999
BEC = 0.017 ppb
LoD = 0.0336 ppb

52Cr (KED AGD)



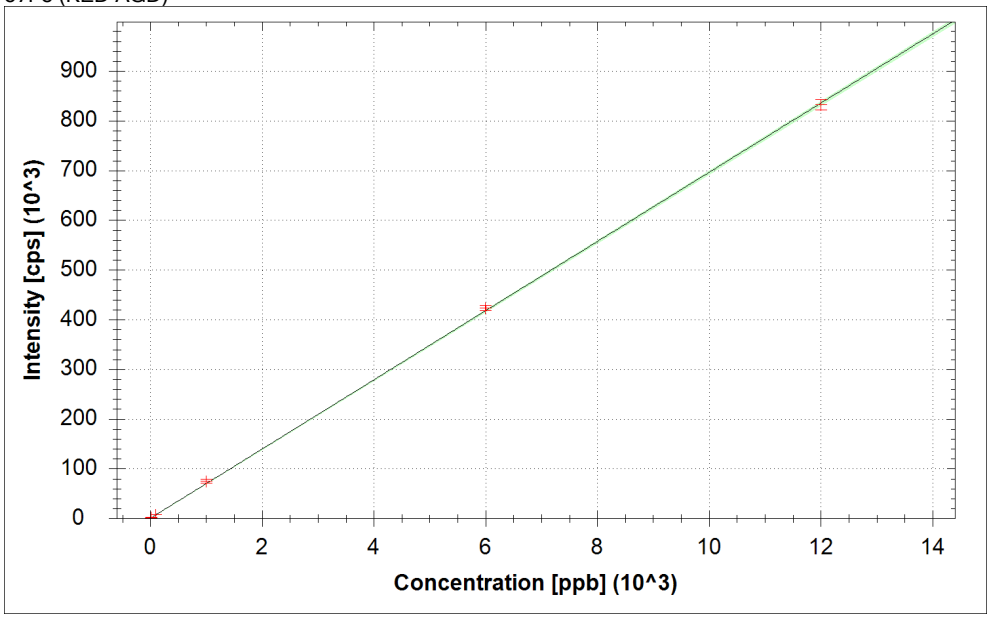
f(x) = 2634.0540*x + 240.1289
R² = 0.9997
BEC = 0.091 ppb
LoD = 0.0201 ppb

55Mn (KED AGD)



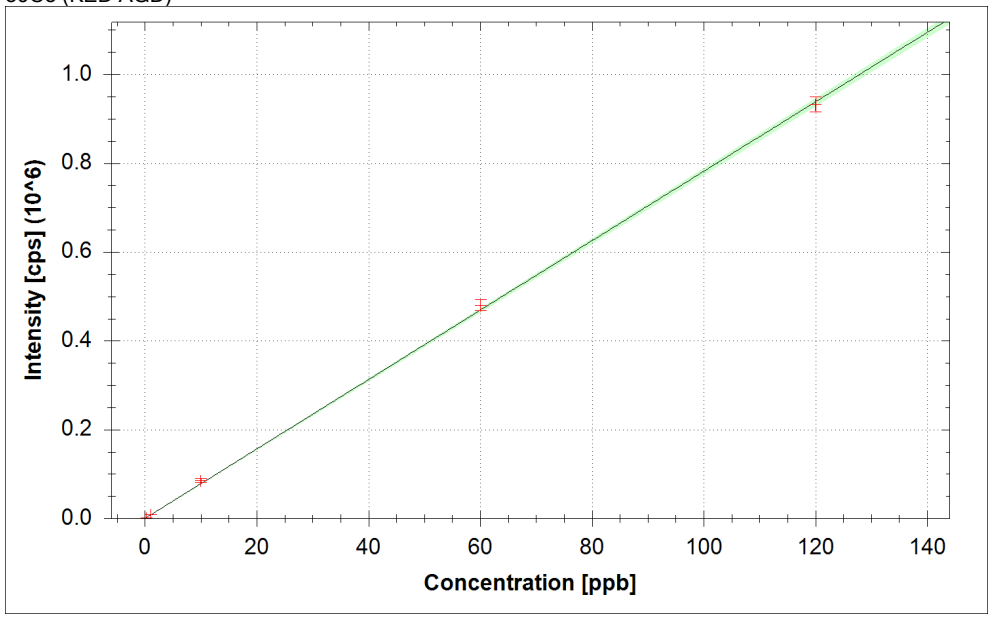
f(x) = 919.3379*x + 372.5284
R² = 0.9997
BEC = 0.405 ppb
LoD = 0.1174 ppb

57Fe (KED AGD)



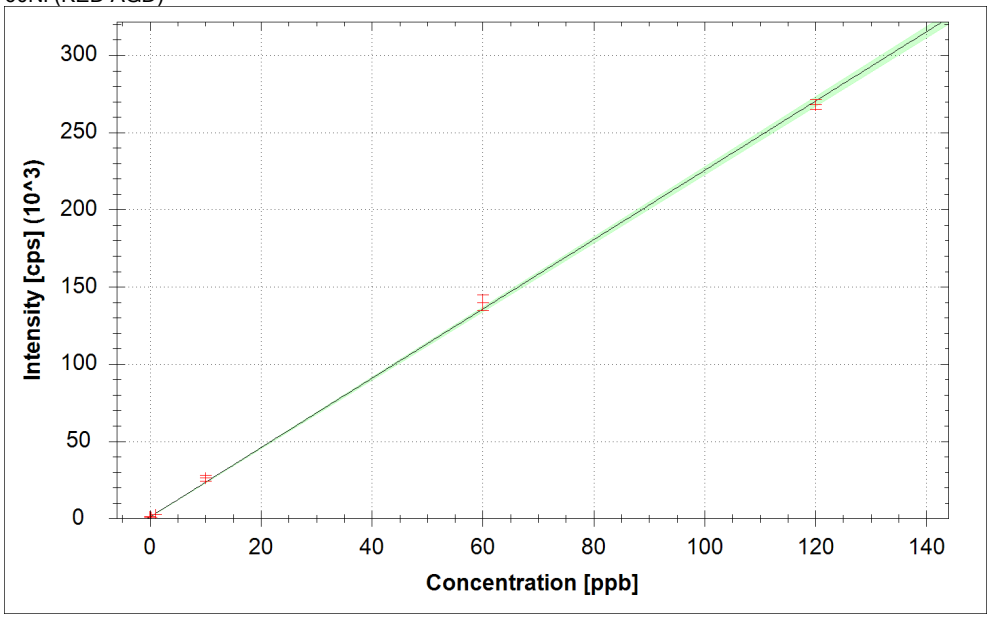
f(x) = 69.5766*x + 428.0216
R² = 0.9999
BEC = 6.152 ppb
LoD = 1.4192 ppb

59Co (KED AGD)



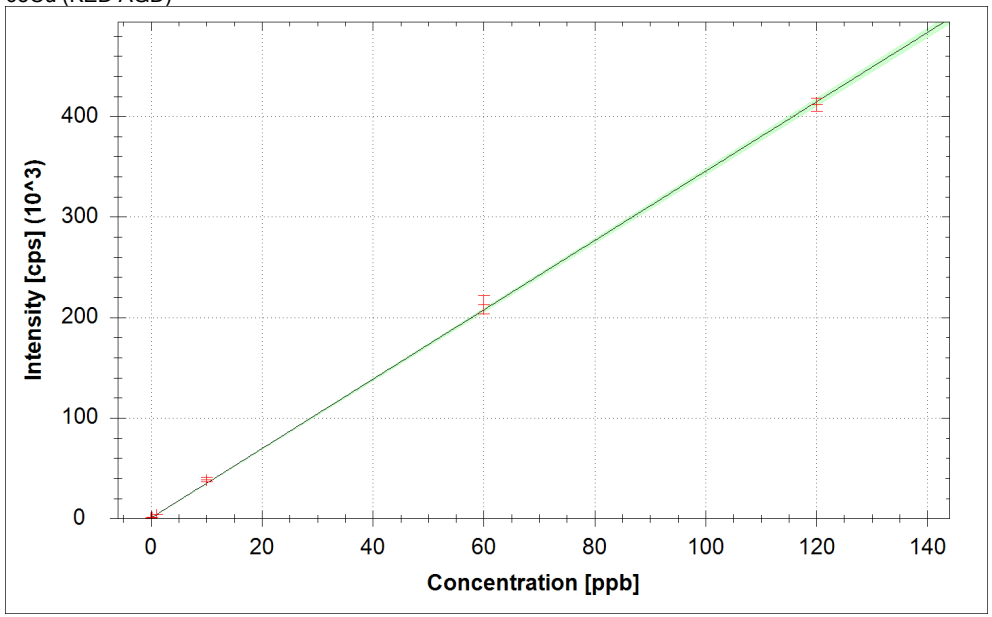
f(x) = 7815.0484*x + 42.8924
R² = 0.9997
BEC = 0.005 ppb
LoD = 0.0083 ppb

60Ni (KED AGD)



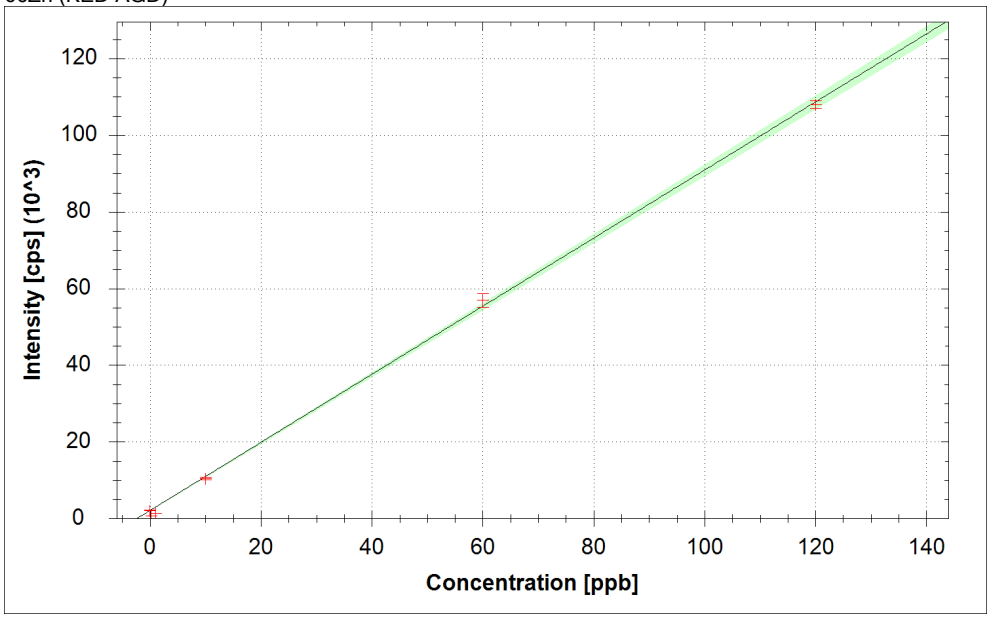
f(x) = 2244.2468*x + 952.4012
R² = 0.9995
BEC = 0.424 ppb
LoD = 0.1862 ppb

65Cu (KED AGD)



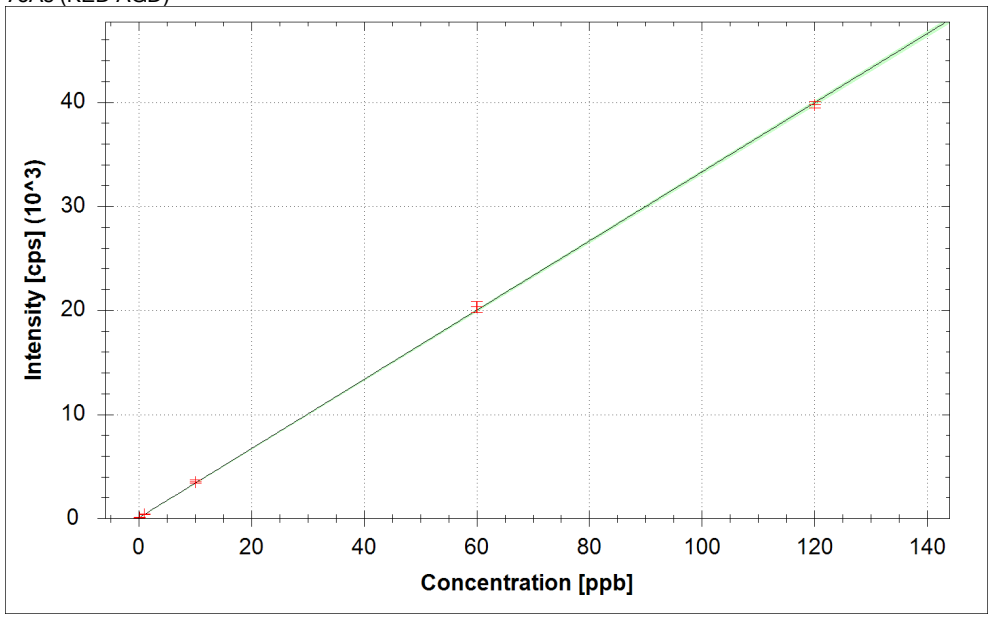
f(x) = 3449.2303*x + 462.8597
R² = 0.9997
BEC = 0.134 ppb
LoD = 0.0730 ppb

66Zn (KED AGD)



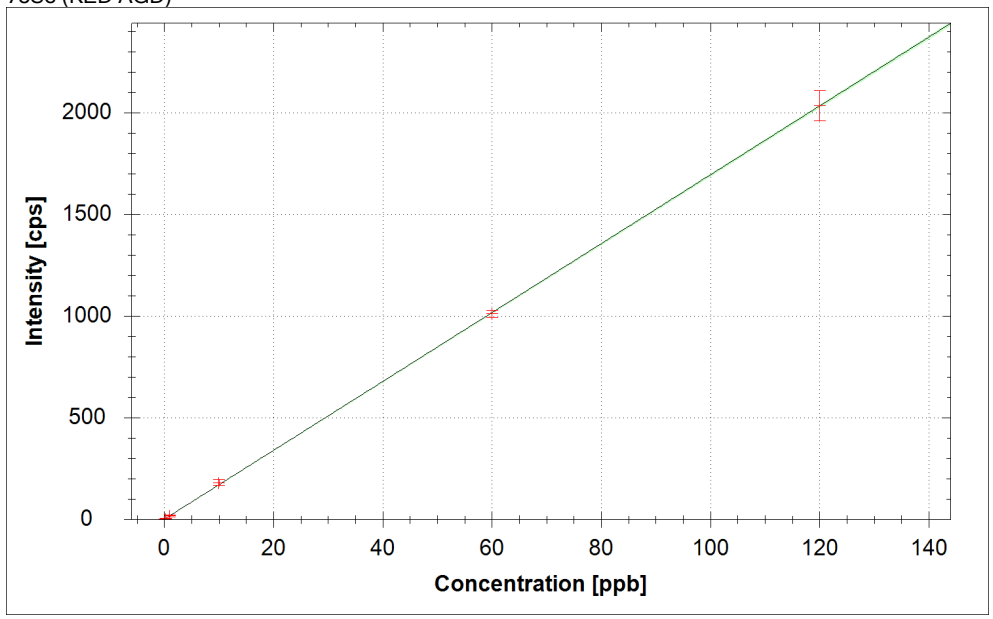
f(x) = 888.0502*x + 2085.5548
R² = 0.9991
BEC = 2.348 ppb
LoD = 0.3033 ppb

75As (KED AGD)



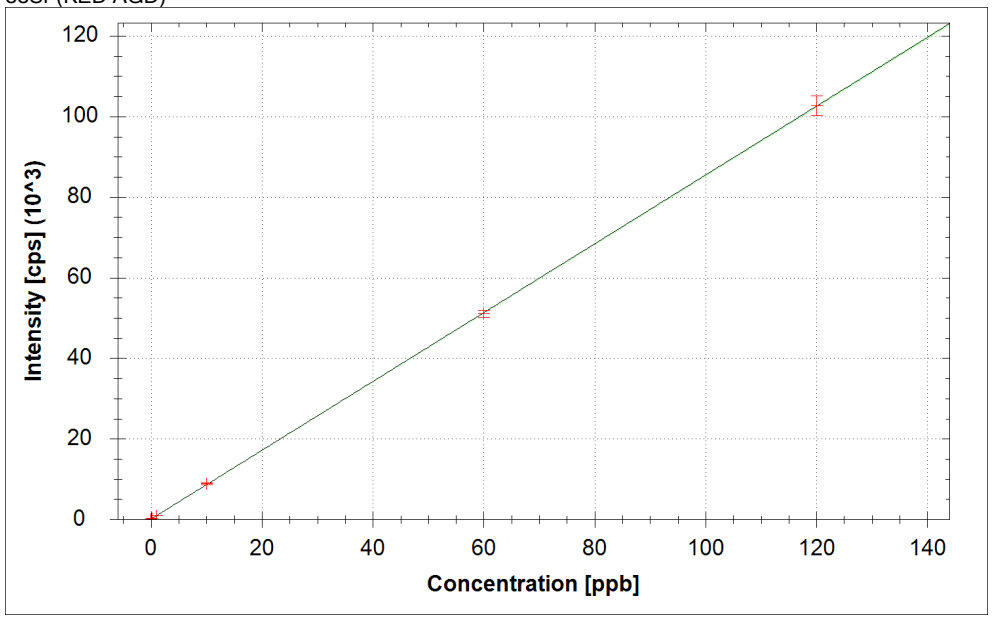
f(x) = 332.2449*x + 65.8961
R² = 0.9999
BEC = 0.198 ppb
LoD = 0.0639 ppb

78Se (KED AGD)



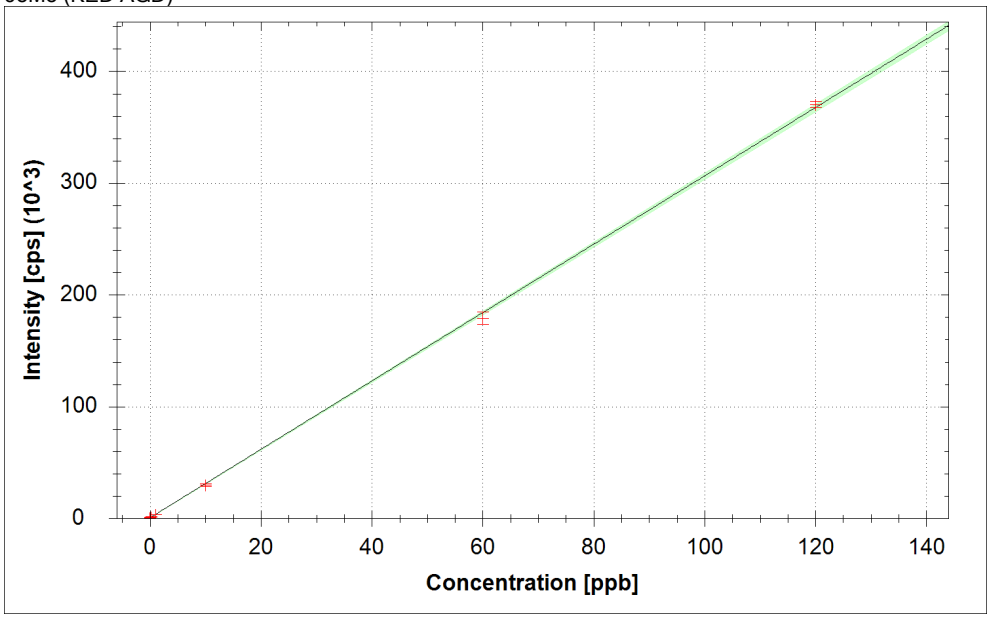
f(x) = 16.9404*x + 1.0244
R² = 1.0000
BEC = 0.060 ppb
LoD = 0.2197 ppb

88Sr (KED AGD)



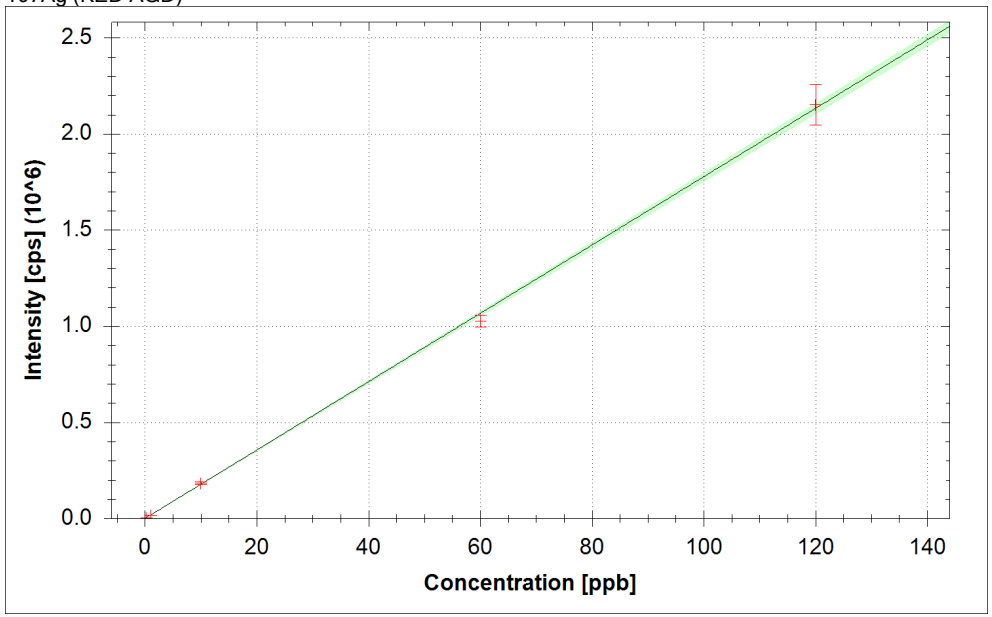
f(x) = 853.8469*x + 87.0387
R² = 1.0000
BEC = 0.102 ppb
LoD = 0.0666 ppb

95Mo (KED AGD)



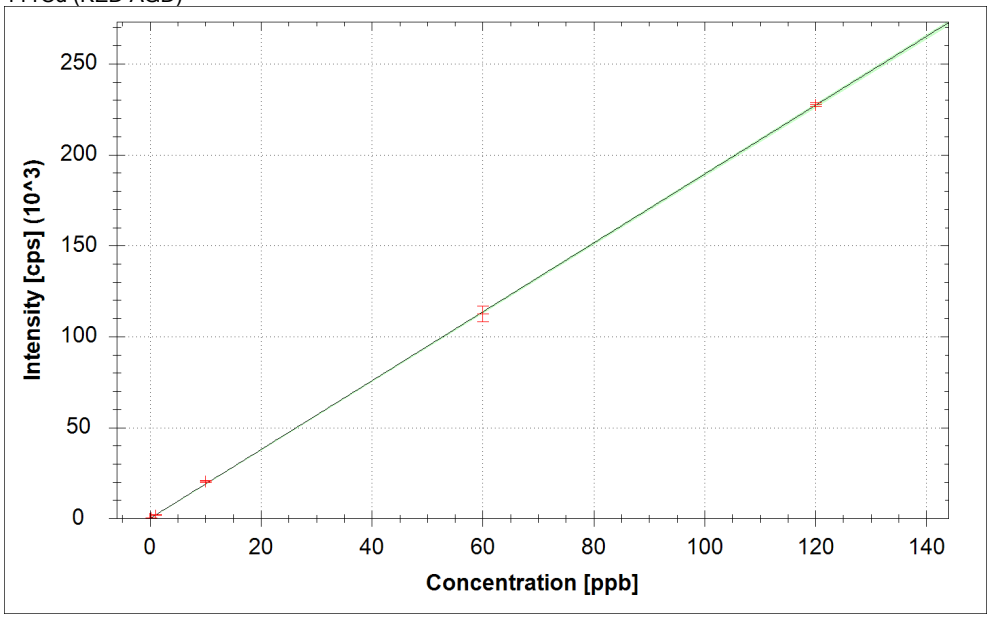
f(x) = 3056.3944*x + 699.1239
R² = 0.9997
BEC = 0.229 ppb
LoD = 0.2279 ppb

107Ag (KED AGD)



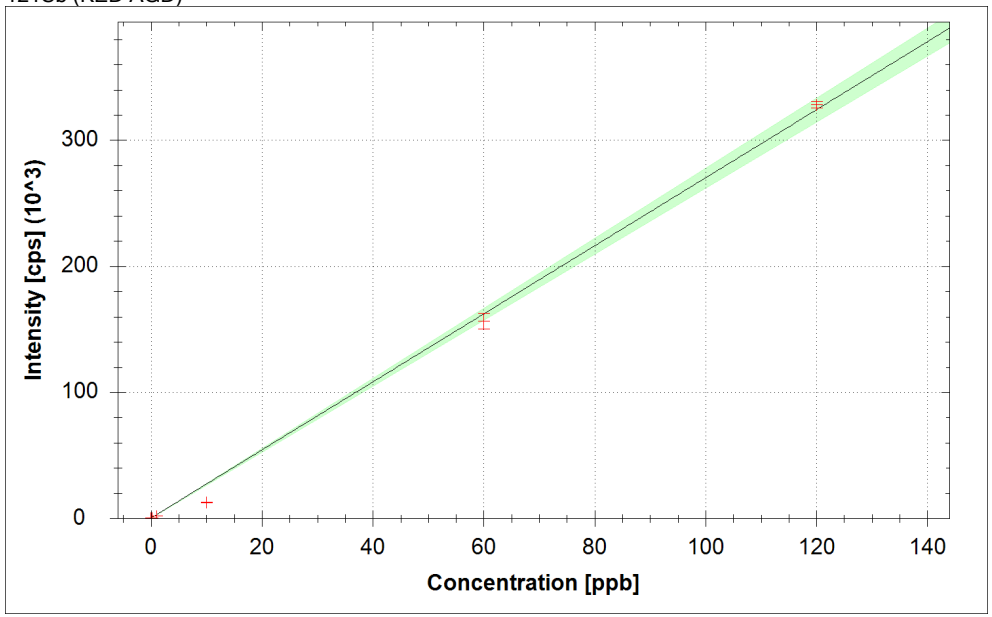
f(x) = 17766.9660*x + 105.7234
R² = 0.9995
BEC = 0.006 ppb
LoD = 0.0043 ppb

111Cd (KED AGD)



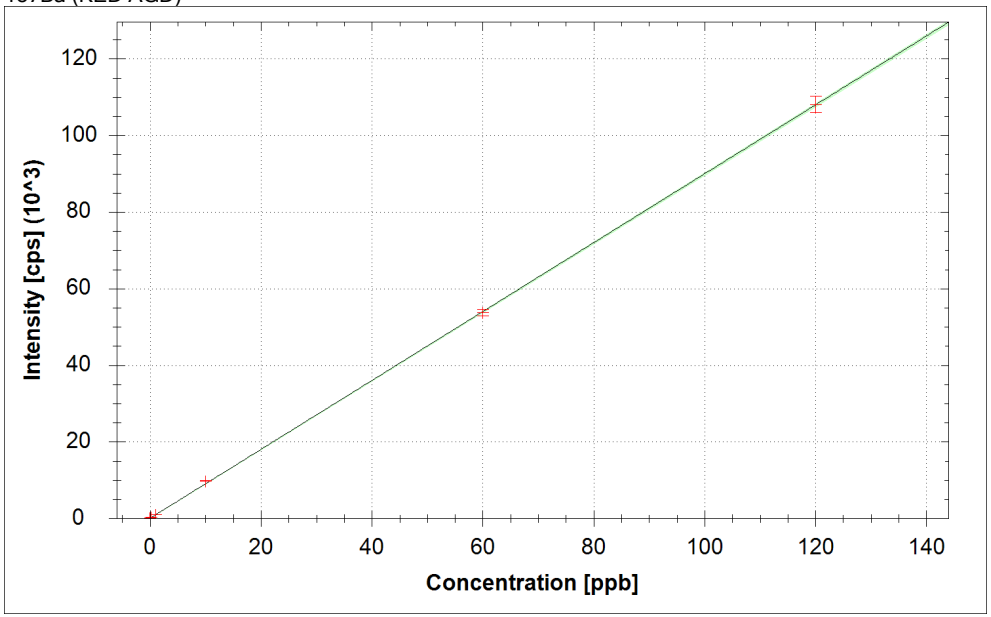
f(x) = 1892.6261*x + 1.8112
R² = 0.9999
BEC = 0.001 ppb
LoD = 0.0014 ppb

121Sb (KED AGD)



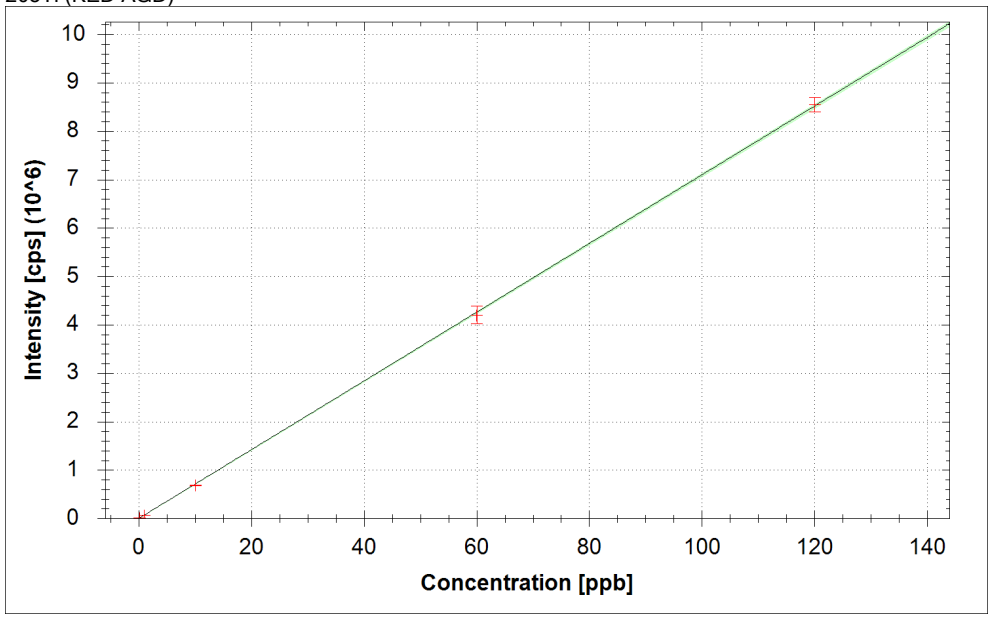
f(x) = 2697.6205*x + 358.1849
R² = 0.9971
BEC = 0.133 ppb
LoD = 0.0092 ppb

137Ba (KED AGD)



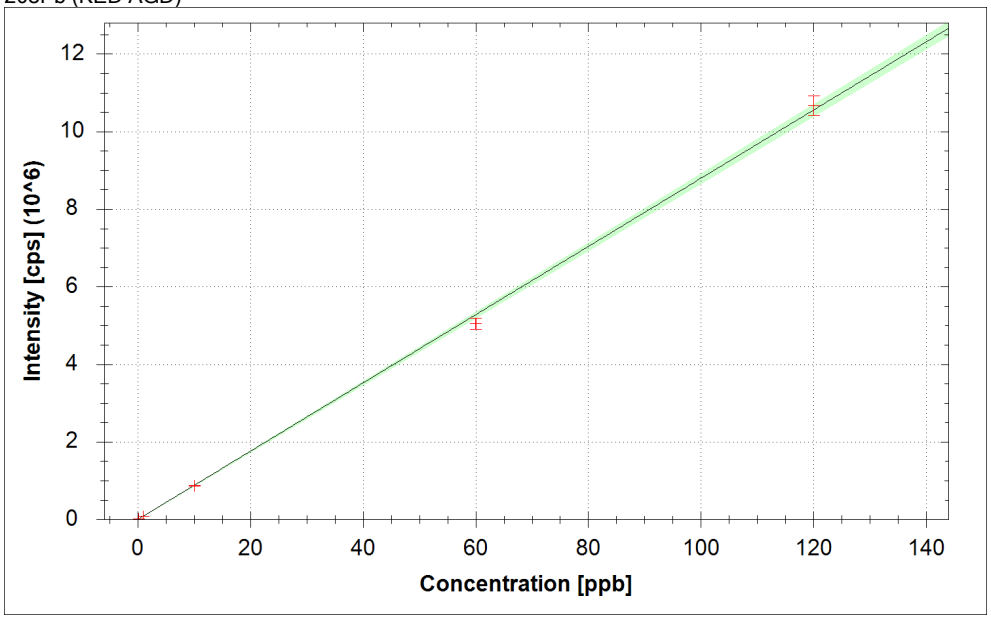
f(x) = 899.0886*x + 56.2844
R² = 0.9999
BEC = 0.063 ppb
LoD = 0.0250 ppb

205Tl (KED AGD)



f(x) = 70940.9524*x + 2305.8592
R² = 0.9999
BEC = 0.033 ppb
LoD = 0.0270 ppb

208Pb (KED AGD)



f(x) = 87898.1765*x + 950.9008
R² = 0.9993
BEC = 0.011 ppb
LoD = 0.0041 ppb

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 9/3/2023 6:31:59 PM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	98.741 %	1.3 %	
6Li (KED AGD)	95.734 %	6.1 %	
9Be (STD AGD)	0.208 ppb	2.1 %	0.200 ppb
11B (STD AGD)	-0.028 ppb	157.6 %	0.200 ppb
23Na (KED AGD)	18.409 ppb	12.0 %	20.000 ppb
24Mg (KED AGD)	19.746 ppb	1.2 %	20.000 ppb
27Al (KED AGD)	-1.076 ppb	16.4 %	0.200 ppb
39K (KED AGD)	8.242 ppb	35.9 %	20.000 ppb
44Ca (KED AGD)	61.673 ppb	3.3 %	20.000 ppb
45Sc (STD AGD)	96.777 %	0.8 %	
51V (KED AGD)	0.219 ppb	6.5 %	0.200 ppb
52Cr (KED AGD)	0.186 ppb	12.5 %	0.200 ppb
55Mn (KED AGD)	-0.091 ppb	94.6 %	0.200 ppb
57Fe (KED AGD)	18.207 ppb	12.5 %	20.000 ppb
59Co (KED AGD)	0.208 ppb	4.4 %	0.200 ppb
60Ni (KED AGD)	-0.143 ppb	13.0 %	0.200 ppb
65Cu (KED AGD)	0.142 ppb	11.4 %	0.200 ppb
66Zn (KED AGD)	-1.661 ppb	3.4 %	0.200 ppb
74Ge (KED AGD)	100.130 %	7.3 %	
75As (KED AGD)	0.210 ppb	4.5 %	0.200 ppb
78Se (KED AGD)	0.118 ppb	67.8 %	0.200 ppb
88Sr (KED AGD)	0.183 ppb	4.5 %	0.200 ppb
95Mo (KED AGD)	0.151 ppb	51.1 %	0.200 ppb
103Rh (KED AGD)	99.895 %	3.9 %	
107Ag (KED AGD)	0.198 ppb	7.1 %	0.200 ppb
111Cd (KED AGD)	0.214 ppb	3.2 %	0.200 ppb
115In (KED AGD)	99.179 %	7.4 %	
121Sb (KED AGD)	0.077 ppb	12.5 %	0.200 ppb
137Ba (KED AGD)	0.213 ppb	7.9 %	0.200 ppb
159Tb (KED AGD)	99.010 %	3.0 %	
175Lu (KED AGD)	99.988 %	3.5 %	
205Tl (KED AGD)	0.173 ppb	7.7 %	0.200 ppb
208Pb (KED AGD)	0.192 ppb	2.6 %	0.200 ppb
209Bi (KED AGD)	99.658 %	2.0 %	

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Standards:

Analysis Index: 5
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 9/3/2023 6:36:36 PM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	101.333 %	1.3 %	
6Li (KED AGD)	96.655 %	2.9 %	
9Be (STD AGD)	1.019 ppb	0.7 %	1.000 ppb
11B (STD AGD)	0.679 ppb	7.8 %	1.000 ppb
23Na (KED AGD)	96.934 ppb	3.9 %	100.000 ppb
24Mg (KED AGD)	101.842 ppb	4.3 %	100.000 ppb
27Al (KED AGD)	0.001 ppb	16,258.8 %	1.000 ppb
39K (KED AGD)	91.835 ppb	4.2 %	100.000 ppb
44Ca (KED AGD)	148.010 ppb	7.3 %	100.000 ppb
45Sc (STD AGD)	105.910 %	0.4 %	
51V (KED AGD)	1.015 ppb	10.6 %	1.000 ppb
52Cr (KED AGD)	1.005 ppb	2.0 %	1.000 ppb
55Mn (KED AGD)	0.697 ppb	11.4 %	1.000 ppb
57Fe (KED AGD)	99.187 ppb	4.5 %	100.000 ppb
59Co (KED AGD)	1.030 ppb	2.2 %	1.000 ppb
60Ni (KED AGD)	0.735 ppb	1.8 %	1.000 ppb
65Cu (KED AGD)	0.961 ppb	5.0 %	1.000 ppb
66Zn (KED AGD)	-0.843 ppb	2.6 %	1.000 ppb
74Ge (KED AGD)	101.929 %	5.4 %	
75As (KED AGD)	1.033 ppb	10.7 %	1.000 ppb
78Se (KED AGD)	0.955 ppb	22.8 %	1.000 ppb
88Sr (KED AGD)	0.965 ppb	6.8 %	1.000 ppb
95Mo (KED AGD)	0.820 ppb	2.2 %	1.000 ppb
103Rh (KED AGD)	101.813 %	3.4 %	
107Ag (KED AGD)	0.947 ppb	2.3 %	1.000 ppb
111Cd (KED AGD)	0.985 ppb	1.8 %	1.000 ppb
115In (KED AGD)	101.088 %	6.2 %	
121Sb (KED AGD)	0.600 ppb	2.6 %	1.000 ppb
137Ba (KED AGD)	1.003 ppb	5.3 %	1.000 ppb
159Tb (KED AGD)	100.883 %	4.1 %	
175Lu (KED AGD)	101.069 %	4.9 %	
205Tl (KED AGD)	0.832 ppb	3.8 %	1.000 ppb
208Pb (KED AGD)	0.885 ppb	0.9 %	1.000 ppb
209Bi (KED AGD)	107.930 %	2.8 %	

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 9/3/2023 6:41:14 PM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	101.607 %	1.5 %	
6Li (KED AGD)	102.066 %	7.5 %	
9Be (STD AGD)	10.709 ppb	0.3 %	10.000 ppb
11B (STD AGD)	9.868 ppb	1.5 %	10.000 ppb
23Na (KED AGD)	1,014.233 ppb	4.7 %	1,000.000 ppb
24Mg (KED AGD)	1,032.491 ppb	4.2 %	1,000.000 ppb
27Al (KED AGD)	9.932 ppb	6.2 %	10.000 ppb
39K (KED AGD)	1,053.924 ppb	2.6 %	1,000.000 ppb
44Ca (KED AGD)	1,117.891 ppb	4.3 %	1,000.000 ppb
45Sc (STD AGD)	104.305 %	0.2 %	
51V (KED AGD)	10.371 ppb	3.3 %	10.000 ppb
52Cr (KED AGD)	10.704 ppb	5.3 %	10.000 ppb
55Mn (KED AGD)	11.315 ppb	3.5 %	10.000 ppb
57Fe (KED AGD)	1,065.098 ppb	5.2 %	1,000.000 ppb
59Co (KED AGD)	10.878 ppb	5.0 %	10.000 ppb
60Ni (KED AGD)	11.201 ppb	7.7 %	10.000 ppb
65Cu (KED AGD)	11.067 ppb	5.7 %	10.000 ppb
66Zn (KED AGD)	9.328 ppb	4.0 %	10.000 ppb
74Ge (KED AGD)	102.013 %	8.2 %	
75As (KED AGD)	10.441 ppb	4.6 %	10.000 ppb
78Se (KED AGD)	10.587 ppb	8.2 %	10.000 ppb
88Sr (KED AGD)	10.258 ppb	2.4 %	10.000 ppb
95Mo (KED AGD)	9.517 ppb	4.2 %	10.000 ppb
103Rh (KED AGD)	102.059 %	5.0 %	
107Ag (KED AGD)	10.298 ppb	3.3 %	10.000 ppb
111Cd (KED AGD)	10.731 ppb	2.2 %	10.000 ppb
115In (KED AGD)	99.018 %	5.1 %	
121Sb (KED AGD)	4.593 ppb	1.7 %	10.000 ppb
137Ba (KED AGD)	10.805 ppb	0.4 %	10.000 ppb
159Tb (KED AGD)	101.172 %	4.0 %	
175Lu (KED AGD)	103.957 %	5.5 %	
205Tl (KED AGD)	9.594 ppb	1.4 %	10.000 ppb
208Pb (KED AGD)	9.857 ppb	1.4 %	10.000 ppb
209Bi (KED AGD)	102.068 %	1.2 %	

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 9/3/2023 6:45:53 PM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	95.008 %	2.4 %	
6Li (KED AGD)	94.769 %	2.9 %	
9Be (STD AGD)	60.255 ppb	0.8 %	60.000 ppb
11B (STD AGD)	59.604 ppb	1.2 %	60.000 ppb
23Na (KED AGD)	6,186.196 ppb	3.7 %	6,000.000 ppb
24Mg (KED AGD)	6,208.218 ppb	2.1 %	6,000.000 ppb
27Al (KED AGD)	61.403 ppb	4.6 %	60.000 ppb
39K (KED AGD)	6,125.137 ppb	5.8 %	6,000.000 ppb
44Ca (KED AGD)	6,207.660 ppb	4.6 %	6,000.000 ppb
45Sc (STD AGD)	116.345 %	0.5 %	
51V (KED AGD)	60.829 ppb	2.4 %	60.000 ppb
52Cr (KED AGD)	61.388 ppb	2.4 %	60.000 ppb
55Mn (KED AGD)	60.995 ppb	1.3 %	60.000 ppb
57Fe (KED AGD)	6,072.637 ppb	1.2 %	6,000.000 ppb
59Co (KED AGD)	61.423 ppb	2.6 %	60.000 ppb
60Ni (KED AGD)	61.810 ppb	3.6 %	60.000 ppb
65Cu (KED AGD)	61.399 ppb	4.3 %	60.000 ppb
66Zn (KED AGD)	61.683 ppb	3.2 %	60.000 ppb
74Ge (KED AGD)	98.506 %	6.3 %	
75As (KED AGD)	60.961 ppb	2.6 %	60.000 ppb
78Se (KED AGD)	59.667 ppb	1.8 %	60.000 ppb
88Sr (KED AGD)	59.618 ppb	1.7 %	60.000 ppb
95Mo (KED AGD)	58.335 ppb	3.0 %	60.000 ppb
103Rh (KED AGD)	98.580 %	4.5 %	
107Ag (KED AGD)	57.732 ppb	2.9 %	60.000 ppb
111Cd (KED AGD)	59.460 ppb	3.8 %	60.000 ppb
115In (KED AGD)	99.034 %	7.5 %	
121Sb (KED AGD)	57.879 ppb	4.0 %	60.000 ppb
137Ba (KED AGD)	59.688 ppb	1.6 %	60.000 ppb
159Tb (KED AGD)	100.590 %	4.8 %	
175Lu (KED AGD)	102.219 %	7.6 %	
205Tl (KED AGD)	59.173 ppb	4.3 %	60.000 ppb
208Pb (KED AGD)	57.375 ppb	2.7 %	60.000 ppb
209Bi (KED AGD)	105.336 %	5.4 %	

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 9/3/2023 6:50:32 PM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	94.205 %	2.0 %	
6Li (KED AGD)	97.530 %	1.1 %	
9Be (STD AGD)	119.813 ppb	0.7 %	120.000 ppb
11B (STD AGD)	120.212 ppb	0.4 %	120.000 ppb
23Na (KED AGD)	11,905.744 ppb	0.4 %	12,000.000 ppb
24Mg (KED AGD)	11,893.168 ppb	1.0 %	12,000.000 ppb
27Al (KED AGD)	119.315 ppb	2.7 %	120.000 ppb
39K (KED AGD)	11,933.025 ppb	4.7 %	12,000.000 ppb
44Ca (KED AGD)	11,885.876 ppb	1.8 %	12,000.000 ppb
45Sc (STD AGD)	128.796 %	0.5 %	
51V (KED AGD)	119.555 ppb	1.5 %	120.000 ppb
52Cr (KED AGD)	119.247 ppb	0.4 %	120.000 ppb
55Mn (KED AGD)	119.396 ppb	0.7 %	120.000 ppb
57Fe (KED AGD)	11,958.266 ppb	1.2 %	12,000.000 ppb
59Co (KED AGD)	119.215 ppb	1.8 %	120.000 ppb
60Ni (KED AGD)	118.997 ppb	1.2 %	120.000 ppb
65Cu (KED AGD)	119.212 ppb	1.6 %	120.000 ppb
66Zn (KED AGD)	119.233 ppb	1.0 %	120.000 ppb
74Ge (KED AGD)	100.148 %	2.0 %	
75As (KED AGD)	119.482 ppb	0.8 %	120.000 ppb
78Se (KED AGD)	120.118 ppb	3.7 %	120.000 ppb
88Sr (KED AGD)	120.170 ppb	2.4 %	120.000 ppb
95Mo (KED AGD)	120.874 ppb	0.7 %	120.000 ppb
103Rh (KED AGD)	95.541 %	1.5 %	
107Ag (KED AGD)	121.110 ppb	4.9 %	120.000 ppb
111Cd (KED AGD)	120.209 ppb	0.5 %	120.000 ppb
115In (KED AGD)	97.262 %	1.2 %	
121Sb (KED AGD)	121.515 ppb	0.8 %	120.000 ppb
137Ba (KED AGD)	120.089 ppb	2.0 %	120.000 ppb
159Tb (KED AGD)	100.944 %	1.1 %	
175Lu (KED AGD)	102.991 %	1.8 %	
205Tl (KED AGD)	120.449 ppb	1.7 %	120.000 ppb
208Pb (KED AGD)	121.326 ppb	2.4 %	120.000 ppb
209Bi (KED AGD)	103.723 %	2.1 %	

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	1	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	9/3/2023 6:18:05 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	99.464 %	104.333 %	0.005 ppb	0.932 ppb	1.993 ppb	1.033 ppb	-0.542 ppb	-4.274 ppb	2.361 ppb
Concentration per Run 1	100.986 %	99.079 %	0.004 ppb	0.929 ppb	1.881 ppb	1.475 ppb	-0.547 ppb	-1.918 ppb	-1.025 ppb
Concentration per Run 2	99.667 %	104.535 %	0.006 ppb	0.922 ppb	2.189 ppb	0.156 ppb	-0.566 ppb	-4.820 ppb	2.417 ppb
Concentration per Run 3	97.738 %	109.385 %	0.006 ppb	0.945 ppb	1.910 ppb	1.468 ppb	-0.511 ppb	-6.084 ppb	5.692 ppb
Concentration RSD	1.6 %	4.9 %	27.3 %	1.3 %	8.5 %	73.5 %	5.1 %	50.0 %	142.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.967 %	0.018 ppb	-0.028 ppb	-0.205 ppb	5.249 ppb	0.002 ppb	-0.189 ppb	0.245 ppb	-0.890 ppb
Concentration per Run 1	104.788 %	0.012 ppb	-0.026 ppb	-0.177 ppb	5.315 ppb	0.000 ppb	-0.177 ppb	0.266 ppb	-0.861 ppb
Concentration per Run 2	103.515 %	0.018 ppb	-0.022 ppb	-0.249 ppb	6.611 ppb	0.000 ppb	-0.174 ppb	0.234 ppb	-0.895 ppb
Concentration per Run 3	103.599 %	0.024 ppb	-0.037 ppb	-0.190 ppb	3.820 ppb	0.006 ppb	-0.214 ppb	0.233 ppb	-0.913 ppb
Concentration RSD	0.7 %	31.9 %	27.5 %	18.7 %	26.6 %	199.2 %	11.9 %	7.6 %	3.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.772 %	0.030 ppb	0.194 ppb	0.017 ppb	0.321 ppb	101.164 %	-0.001 ppb	0.001 ppb	100.247 %
Concentration per Run 1	93.986 %	0.017 ppb	0.141 ppb	0.015 ppb	0.207 ppb	99.116 %	-0.002 ppb	0.000 ppb	95.661 %
Concentration per Run 2	101.302 %	0.030 ppb	0.199 ppb	0.009 ppb	0.292 ppb	99.535 %	0.000 ppb	0.002 ppb	95.317 %
Concentration per Run 3	107.029 %	0.043 ppb	0.241 ppb	0.027 ppb	0.464 ppb	104.840 %	-0.002 ppb	0.000 ppb	109.761 %
Concentration RSD	6.5 %	42.9 %	25.8 %	54.2 %	40.9 %	3.2 %	89.4 %	95.2 %	8.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.053 ppb	-0.019 ppb	102.637 %	103.330 %	0.039 ppb	0.018 ppb	110.474 %
Concentration per Run 1	0.023 ppb	-0.028 ppb	99.524 %	100.647 %	0.018 ppb	0.018 ppb	114.399 %
Concentration per Run 2	0.064 ppb	-0.021 ppb	100.461 %	101.038 %	0.052 ppb	0.020 ppb	104.753 %
Concentration per Run 3	0.072 ppb	-0.008 ppb	107.927 %	108.305 %	0.048 ppb	0.016 ppb	112.269 %
Concentration RSD	49.0 %	53.6 %	4.5 %	4.2 %	46.8 %	8.6 %	4.6 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	2	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CAL LOT #M22-1040	Rack	0		
Analysis started at:	9/3/2023 6:22:40 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	99.245 %	96.408 %	0.007 ppb	0.564 ppb	3.641 ppb	1.693 ppb	-0.123 ppb	-5.736 ppb	5.864 ppb
Concentration per Run 1	100.391 %	92.546 %	0.003 ppb	0.518 ppb	1.991 ppb	0.876 ppb	0.112 ppb	-8.639 ppb	9.105 ppb
Concentration per Run 2	99.816 %	99.618 %	0.005 ppb	0.553 ppb	3.329 ppb	1.686 ppb	-0.549 ppb	-7.690 ppb	4.881 ppb
Concentration per Run 3	97.528 %	97.059 %	0.013 ppb	0.619 ppb	5.605 ppb	2.516 ppb	0.067 ppb	-0.880 ppb	3.605 ppb
Concentration RSD	1.5 %	3.7 %	76.7 %	9.1 %	50.2 %	48.5 %	299.2 %	73.8 %	49.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.510 %	-0.001 ppb	-0.029 ppb	-0.180 ppb	1.952 ppb	0.009 ppb	-0.162 ppb	0.232 ppb	-0.853 ppb
Concentration per Run 1	103.883 %	0.004 ppb	-0.039 ppb	-0.205 ppb	3.307 ppb	0.010 ppb	-0.204 ppb	0.238 ppb	-0.828 ppb
Concentration per Run 2	103.881 %	-0.005 ppb	-0.018 ppb	-0.131 ppb	1.010 ppb	0.010 ppb	-0.155 ppb	0.262 ppb	-0.876 ppb
Concentration per Run 3	102.765 %	-0.002 ppb	-0.029 ppb	-0.204 ppb	1.540 ppb	0.008 ppb	-0.128 ppb	0.196 ppb	-0.855 ppb
Concentration RSD	0.6 %	614.6 %	36.3 %	23.7 %	61.6 %	14.9 %	23.8 %	14.3 %	2.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.839 %	0.044 ppb	0.076 ppb	0.154 ppb	0.120 ppb	99.327 %	0.000 ppb	0.001 ppb	101.456 %
Concentration per Run 1	94.770 %	0.005 ppb	0.030 ppb	0.164 ppb	0.014 ppb	94.171 %	0.000 ppb	0.001 ppb	90.045 %
Concentration per Run 2	100.579 %	0.051 ppb	0.026 ppb	0.145 ppb	0.140 ppb	102.067 %	0.000 ppb	0.001 ppb	104.383 %
Concentration per Run 3	107.168 %	0.076 ppb	0.172 ppb	0.152 ppb	0.204 ppb	101.743 %	0.000 ppb	0.002 ppb	109.942 %
Concentration RSD	6.2 %	81.0 %	109.4 %	6.3 %	81.0 %	4.5 %	104.4 %	48.9 %	10.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.038 ppb	-0.010 ppb	100.281 %	101.598 %	0.014 ppb	0.017 ppb	104.208 %
Concentration per Run 1	0.037 ppb	0.007 ppb	92.158 %	91.890 %	0.005 ppb	0.018 ppb	94.579 %
Concentration per Run 2	0.023 ppb	-0.012 ppb	101.878 %	102.824 %	0.018 ppb	0.017 ppb	102.721 %
Concentration per Run 3	0.053 ppb	-0.025 ppb	106.808 %	110.079 %	0.019 ppb	0.016 ppb	115.324 %
Concentration RSD	39.8 %	155.3 %	7.4 %	9.0 %	52.5 %	5.2 %	10.0 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	3	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Blank WKP ICPMSQ	Rack	4		
Analysis started at:	9/3/2023 6:27:17 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration RSD	0.0 %	0.0 %	0.2 %	0.0 %	0.0 %	0.2 %	0.2 %	0.1 %	0.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration RSD	0.0 %	0.7 %	0.1 %	0.1 %	0.1 %	0.5 %	0.1 %	0.2 %	0.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.1 %	0.1 %	1.2 %	0.2 %	0.3 %	0.0 %	0.2 %	0.5 %	0.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.1 %	0.1 %	0.1 %	0.3 %	0.1 %	0.0 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	4	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	9/3/2023 6:31:59 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	98.741 %	95.734 %	0.208 ppb	-0.028 ppb	18.409 ppb	19.746 ppb	-1.076 ppb	8.242 ppb	61.673 ppb
Concentration per Run 1	99.962 %	89.111 %	0.204 ppb	-0.052 ppb	20.409 ppb	19.740 ppb	-1.009 ppb	9.784 ppb	59.367 ppb
Concentration per Run 2	98.849 %	98.002 %	0.209 ppb	-0.053 ppb	18.775 ppb	19.513 ppb	-0.943 ppb	4.830 ppb	63.060 ppb
Concentration per Run 3	97.411 %	100.090 %	0.212 ppb	0.023 ppb	16.042 ppb	19.983 ppb	-1.276 ppb	10.113 ppb	62.592 ppb
Concentration RSD	1.3 %	6.1 %	2.1 %	157.6 %	12.0 %	1.2 %	16.4 %	35.9 %	3.3 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.777 %	0.219 ppb	0.186 ppb	-0.091 ppb	18.207 ppb	0.208 ppb	-0.143 ppb	0.142 ppb	-1.661 ppb
Concentration per Run 1	97.688 %	0.232 ppb	0.165 ppb	-0.110 ppb	20.784 ppb	0.214 ppb	-0.125 ppb	0.160 ppb	-1.626 ppb
Concentration per Run 2	96.194 %	0.204 ppb	0.211 ppb	0.003 ppb	17.344 ppb	0.198 ppb	-0.143 ppb	0.128 ppb	-1.725 ppb
Concentration per Run 3	96.449 %	0.220 ppb	0.182 ppb	-0.165 ppb	16.491 ppb	0.213 ppb	-0.162 ppb	0.139 ppb	-1.632 ppb
Concentration RSD	0.8 %	6.5 %	12.5 %	94.6 %	12.5 %	4.4 %	13.0 %	11.4 %	3.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.130 %	0.210 ppb	0.118 ppb	0.183 ppb	0.151 ppb	99.895 %	0.198 ppb	0.214 ppb	99.179 %
Concentration per Run 1	91.725 %	0.203 ppb	0.037 ppb	0.181 ppb	0.099 ppb	95.482 %	0.214 ppb	0.220 ppb	93.050 %
Concentration per Run 2	104.910 %	0.221 ppb	0.198 ppb	0.192 ppb	0.114 ppb	101.536 %	0.188 ppb	0.206 ppb	107.319 %
Concentration per Run 3	103.754 %	0.206 ppb	0.120 ppb	0.176 ppb	0.239 ppb	102.669 %	0.191 ppb	0.215 ppb	97.168 %
Concentration RSD	7.3 %	4.5 %	67.8 %	4.5 %	51.1 %	3.9 %	7.1 %	3.2 %	7.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.077 ppb	0.213 ppb	99.010 %	99.988 %	0.173 ppb	0.192 ppb	99.658 %
Concentration per Run 1	0.078 ppb	0.232 ppb	95.559 %	96.464 %	0.158 ppb	0.187 ppb	101.799 %
Concentration per Run 2	0.067 ppb	0.208 ppb	101.101 %	103.521 %	0.177 ppb	0.197 ppb	99.218 %
Concentration per Run 3	0.086 ppb	0.200 ppb	100.372 %	99.979 %	0.184 ppb	0.193 ppb	97.955 %
Concentration RSD	12.5 %	7.9 %	3.0 %	3.5 %	7.7 %	2.6 %	2.0 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 5
Analysis label: 1/100 Cal
Analysis started at: 9/3/2023 6:36:36 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 3
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	101.333 %	96.655 %	1.019 ppb	0.679 ppb	96.934 ppb	101.842 ppb	0.001 ppb	91.835 ppb	148.010 ppb
Concentration per Run 1	102.755 %	93.421 %	1.014 ppb	0.632 ppb	97.756 ppb	99.310 ppb	-0.220 ppb	89.154 ppb	143.928 ppb
Concentration per Run 2	101.052 %	97.934 %	1.016 ppb	0.668 ppb	100.190 ppb	106.935 ppb	0.158 ppb	96.263 ppb	160.211 ppb
Concentration per Run 3	100.193 %	98.608 %	1.028 ppb	0.736 ppb	92.855 ppb	99.283 ppb	0.065 ppb	90.089 ppb	139.892 ppb
Concentration RSD	1.3 %	2.9 %	0.7 %	7.8 %	3.9 %	4.3 %	16,258.8 %	4.2 %	7.3 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.910 %	1.015 ppb	1.005 ppb	0.697 ppb	99.187 ppb	1.030 ppb	0.735 ppb	0.961 ppb	-0.843 ppb
Concentration per Run 1	106.114 %	1.023 ppb	1.013 ppb	0.624 ppb	99.112 ppb	1.017 ppb	0.723 ppb	1.010 ppb	-0.862 ppb
Concentration per Run 2	105.431 %	1.118 ppb	1.019 ppb	0.782 ppb	103.666 ppb	1.056 ppb	0.750 ppb	0.957 ppb	-0.847 ppb
Concentration per Run 3	106.186 %	0.903 ppb	0.982 ppb	0.685 ppb	94.782 ppb	1.016 ppb	0.732 ppb	0.915 ppb	-0.819 ppb
Concentration RSD	0.4 %	10.6 %	2.0 %	11.4 %	4.5 %	2.2 %	1.8 %	5.0 %	2.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.929 %	1.033 ppb	0.955 ppb	0.965 ppb	0.820 ppb	101.813 %	0.947 ppb	0.985 ppb	101.088 %
Concentration per Run 1	95.726 %	1.160 ppb	0.976 ppb	0.952 ppb	0.819 ppb	98.040 %	0.965 ppb	1.005 ppb	95.803 %
Concentration per Run 2	106.190 %	0.970 ppb	1.161 ppb	1.036 ppb	0.838 ppb	102.666 %	0.923 ppb	0.976 ppb	108.053 %
Concentration per Run 3	103.872 %	0.968 ppb	0.727 ppb	0.908 ppb	0.803 ppb	104.734 %	0.953 ppb	0.975 ppb	99.407 %
Concentration RSD	5.4 %	10.7 %	22.8 %	6.8 %	2.2 %	3.4 %	2.3 %	1.8 %	6.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.600 ppb	1.003 ppb	100.883 %	101.069 %	0.832 ppb	0.885 ppb	107.930 %
Concentration per Run 1	0.618 ppb	1.023 ppb	96.120 %	95.700 %	0.801 ppb	0.883 ppb	106.104 %
Concentration per Run 2	0.589 ppb	0.943 ppb	103.648 %	105.593 %	0.833 ppb	0.878 ppb	111.356 %
Concentration per Run 3	0.593 ppb	1.044 ppb	102.882 %	101.914 %	0.864 ppb	0.894 ppb	106.332 %
Concentration RSD	2.6 %	5.3 %	4.1 %	4.9 %	3.8 %	0.9 %	2.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 6
Analysis label: 10/1000 Cal
Analysis started at: 9/3/2023 6:41:14 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 4
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	101.607 %	102.066 %	10.709 ppb	9.868 ppb	1,014.233 ppb	1,032.491 ppb	9.932 ppb	1,053.924 ppb	1,117.891 ppb
Concentration per Run 1	103.200 %	93.489 %	10.720 ppb	9.817 ppb	1,068.705 ppb	1,080.638 ppb	10.195 ppb	1,068.811 ppb	1,168.951 ppb
Concentration per Run 2	101.506 %	108.375 %	10.678 ppb	9.755 ppb	982.411 ppb	996.126 ppb	9.224 ppb	1,071.100 ppb	1,111.771 ppb
Concentration per Run 3	100.115 %	104.333 %	10.729 ppb	10.032 ppb	991.582 ppb	1,020.709 ppb	10.375 ppb	1,021.860 ppb	1,072.952 ppb
Concentration RSD	1.5 %	7.5 %	0.3 %	1.5 %	4.7 %	4.2 %	6.2 %	2.6 %	4.3 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	104.305 %	10.371 ppb	10.704 ppb	11.315 ppb	1,065.098 ppb	10.878 ppb	11.201 ppb	11.067 ppb	9.328 ppb
Concentration per Run 1	104.316 %	10.617 ppb	11.321 ppb	11.765 ppb	1,128.128 ppb	11.430 ppb	12.073 ppb	11.625 ppb	9.749 ppb
Concentration per Run 2	104.084 %	9.978 ppb	10.200 ppb	11.113 ppb	1,027.329 ppb	10.332 ppb	10.357 ppb	10.382 ppb	9.055 ppb
Concentration per Run 3	104.515 %	10.518 ppb	10.591 ppb	11.067 ppb	1,039.836 ppb	10.872 ppb	11.172 ppb	11.193 ppb	9.179 ppb
Concentration RSD	0.2 %	3.3 %	5.3 %	3.5 %	5.2 %	5.0 %	7.7 %	5.7 %	4.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.013 %	10.441 ppb	10.587 ppb	10.258 ppb	9.517 ppb	102.059 %	10.298 ppb	10.731 ppb	99.018 %
Concentration per Run 1	93.461 %	10.927 ppb	10.315 ppb	10.394 ppb	9.969 ppb	96.139 %	10.652 ppb	10.836 ppb	95.097 %
Concentration per Run 2	110.075 %	9.976 ppb	11.559 ppb	10.408 ppb	9.380 ppb	104.736 %	9.979 ppb	10.455 ppb	104.691 %
Concentration per Run 3	102.503 %	10.420 ppb	9.888 ppb	9.971 ppb	9.202 ppb	105.302 %	10.263 ppb	10.900 ppb	97.267 %
Concentration RSD	8.2 %	4.6 %	8.2 %	2.4 %	4.2 %	5.0 %	3.3 %	2.2 %	5.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.593 ppb	10.805 ppb	101.172 %	103.957 %	9.594 ppb	9.857 ppb	102.068 %
Concentration per Run 1	4.669 ppb	10.839 ppb	96.582 %	97.430 %	9.503 ppb	9.716 ppb	101.186 %
Concentration per Run 2	4.601 ppb	10.758 ppb	102.540 %	107.618 %	9.749 ppb	9.994 ppb	101.577 %
Concentration per Run 3	4.509 ppb	10.818 ppb	104.395 %	106.823 %	9.530 ppb	9.861 ppb	103.439 %
Concentration RSD	1.7 %	0.4 %	4.0 %	5.5 %	1.4 %	1.4 %	1.2 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	7	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	9/3/2023 6:45:53 PM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	95.008 %	94.769 %	60.255 ppb	59.604 ppb	6,186.196 ppb	6,208.218 ppb	61.403 ppb	6,125.137 ppb	6,207.660 ppb
Concentration per Run 1	97.582 %	91.603 %	59.721 ppb	58.937 ppb	6,309.140 ppb	6,290.701 ppb	61.299 ppb	6,013.358 ppb	6,123.373 ppb
Concentration per Run 2	94.315 %	96.385 %	60.371 ppb	59.483 ppb	6,329.571 ppb	6,279.522 ppb	64.296 ppb	6,520.814 ppb	6,524.224 ppb
Concentration per Run 3	93.127 %	96.318 %	60.672 ppb	60.390 ppb	5,919.876 ppb	6,054.431 ppb	58.614 ppb	5,841.240 ppb	5,975.383 ppb
Concentration RSD	2.4 %	2.9 %	0.8 %	1.2 %	3.7 %	2.1 %	4.6 %	5.8 %	4.6 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	116.345 %	60.829 ppb	61.388 ppb	60.995 ppb	6,072.637 ppb	61.423 ppb	61.810 ppb	61.399 ppb	61.683 ppb
Concentration per Run 1	115.782 %	62.437 ppb	62.590 ppb	61.585 ppb	6,118.545 ppb	63.118 ppb	63.918 ppb	63.728 ppb	63.813 ppb
Concentration per Run 2	116.300 %	59.568 ppb	59.724 ppb	61.283 ppb	5,991.208 ppb	59.929 ppb	59.494 ppb	58.502 ppb	59.923 ppb
Concentration per Run 3	116.953 %	60.481 ppb	61.849 ppb	60.117 ppb	6,108.158 ppb	61.224 ppb	62.019 ppb	61.969 ppb	61.313 ppb
Concentration RSD	0.5 %	2.4 %	2.4 %	1.3 %	1.2 %	2.6 %	3.6 %	4.3 %	3.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.506 %	60.961 ppb	59.667 ppb	59.618 ppb	58.335 ppb	98.580 %	57.732 ppb	59.460 ppb	99.034 %
Concentration per Run 1	93.033 %	62.773 ppb	58.825 ppb	59.672 ppb	60.372 ppb	93.725 %	59.410 ppb	61.866 ppb	91.802 %
Concentration per Run 2	105.221 %	59.692 ppb	60.876 ppb	60.613 ppb	57.115 ppb	102.282 %	56.055 ppb	57.351 ppb	106.641 %
Concentration per Run 3	97.263 %	60.418 ppb	59.301 ppb	58.568 ppb	57.518 ppb	99.734 %	57.731 ppb	59.164 ppb	98.660 %
Concentration RSD	6.3 %	2.6 %	1.8 %	1.7 %	3.0 %	4.5 %	2.9 %	3.8 %	7.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.879 ppb	59.688 ppb	100.590 %	102.219 %	59.173 ppb	57.375 ppb	105.336 %
Concentration per Run 1	60.152 ppb	60.780 ppb	95.497 %	94.849 %	61.468 ppb	59.093 ppb	99.432 %
Concentration per Run 2	55.557 ppb	59.032 ppb	105.155 %	110.368 %	56.412 ppb	56.012 ppb	110.782 %
Concentration per Run 3	57.929 ppb	59.254 ppb	101.117 %	101.441 %	59.640 ppb	57.018 ppb	105.794 %
Concentration RSD	4.0 %	1.6 %	4.8 %	7.6 %	4.3 %	2.7 %	5.4 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 8
Analysis label: 120/12000 Cal
Analysis started at: 9/3/2023 6:50:32 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 6
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	94.205 %	97.530 %	119.813 ppb	120.212 ppb	11,905.744 ppb	11,893.168 ppb	119.315 ppb	11,933.025 ppb	11,885.876 ppb
Concentration per Run 1	96.315 %	97.463 %	118.831 ppb	119.709 ppb	11,883.948 ppb	11,818.440 ppb	117.278 ppb	11,884.417 ppb	11,868.637 ppb
Concentration per Run 2	93.764 %	98.675 %	120.365 ppb	120.440 ppb	11,867.904 ppb	11,835.066 ppb	122.996 ppb	12,513.490 ppb	12,113.264 ppb
Concentration per Run 3	92.534 %	96.452 %	120.245 ppb	120.487 ppb	11,965.381 ppb	12,025.999 ppb	117.670 ppb	11,401.170 ppb	11,675.728 ppb
Concentration RSD	2.0 %	1.1 %	0.7 %	0.4 %	0.4 %	1.0 %	2.7 %	4.7 %	1.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	128.796 %	119.555 ppb	119.247 ppb	119.396 ppb	11,958.266 ppb	119.215 ppb	118.997 ppb	119.212 ppb	119.233 ppb
Concentration per Run 1	129.501 %	117.853 ppb	118.842 ppb	120.422 ppb	12,127.389 ppb	121.604 ppb	118.825 ppb	120.622 ppb	118.719 ppb
Concentration per Run 2	128.672 %	119.430 ppb	119.131 ppb	118.913 ppb	11,851.283 ppb	117.438 ppb	117.658 ppb	116.989 ppb	120.602 ppb
Concentration per Run 3	128.214 %	121.380 ppb	119.769 ppb	118.852 ppb	11,896.127 ppb	118.602 ppb	120.509 ppb	120.025 ppb	118.378 ppb
Concentration RSD	0.5 %	1.5 %	0.4 %	0.7 %	1.2 %	1.8 %	1.2 %	1.6 %	1.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.148 %	119.482 ppb	120.118 ppb	120.170 ppb	120.874 ppb	95.541 %	121.110 ppb	120.209 ppb	97.262 %
Concentration per Run 1	97.849 %	120.491 ppb	121.767 ppb	121.086 ppb	121.023 ppb	93.956 %	127.987 ppb	119.928 ppb	96.597 %
Concentration per Run 2	101.486 %	119.341 ppb	123.465 ppb	122.423 ppb	119.934 ppb	95.844 %	117.917 ppb	119.860 ppb	98.621 %
Concentration per Run 3	101.109 %	118.615 ppb	115.121 ppb	117.001 ppb	121.666 ppb	96.823 %	117.425 ppb	120.839 ppb	96.568 %
Concentration RSD	2.0 %	0.8 %	3.7 %	2.4 %	0.7 %	1.5 %	4.9 %	0.5 %	1.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	121.515 ppb	120.089 ppb	100.944 %	102.991 %	120.449 ppb	121.326 ppb	103.723 %
Concentration per Run 1	120.431 ppb	117.320 ppb	99.823 %	101.188 %	118.048 ppb	118.937 ppb	106.051 %
Concentration per Run 2	122.217 ppb	121.486 ppb	100.927 %	104.919 %	121.625 ppb	120.459 ppb	103.281 %
Concentration per Run 3	121.896 ppb	121.460 ppb	102.081 %	102.866 %	121.674 ppb	124.581 ppb	101.836 %
Concentration RSD	0.8 %	2.0 %	1.1 %	1.8 %	1.7 %	2.4 %	2.1 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 9
Analysis label: Sr 200ppb
Analysis started at: 9/3/2023 6:55:12 PM
User name ALPHALAB\Metals-Instrument
Rack 4
Vial 55
Comment Sr Inteference Check

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	96.146 %	95.622 %	0.019 ppb	0.614 ppb	1.264 ppb	1.098 ppb	1.034 ppb	-4.469 ppb	0.420 ppb
Concentration per Run 1	97.474 %	95.712 %	0.021 ppb	0.618 ppb	1.698 ppb	0.809 ppb	0.965 ppb	-1.501 ppb	-161.782 ppb
Concentration per Run 2	96.423 %	92.276 %	0.015 ppb	0.582 ppb	0.693 ppb	1.584 ppb	0.591 ppb	-9.840 ppb	91.187 ppb
Concentration per Run 3	94.542 %	98.877 %	0.021 ppb	0.644 ppb	1.403 ppb	0.899 ppb	1.547 ppb	-2.066 ppb	71.855 ppb
Concentration RSD	1.5 %	3.5 %	16.4 %	5.1 %	40.9 %	38.6 %	46.6 %	104.3 %	33,523.6 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.580 %	0.021 ppb	-0.042 ppb	-0.321 ppb	28.231 ppb	0.001 ppb	-0.298 ppb	-0.075 ppb	-1.342 ppb
Concentration per Run 1	95.701 %	0.032 ppb	-0.043 ppb	-0.332 ppb	30.223 ppb	0.001 ppb	-0.296 ppb	-0.072 ppb	-1.378 ppb
Concentration per Run 2	97.161 %	0.004 ppb	-0.042 ppb	-0.337 ppb	27.331 ppb	0.000 ppb	-0.297 ppb	-0.070 ppb	-1.360 ppb
Concentration per Run 3	96.879 %	0.028 ppb	-0.041 ppb	-0.295 ppb	27.138 ppb	0.001 ppb	-0.301 ppb	-0.083 ppb	-1.288 ppb
Concentration RSD	0.8 %	70.6 %	1.8 %	7.1 %	6.1 %	126.6 %	0.8 %	9.5 %	3.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.752 %	0.176 ppb	1.238 ppb	197.731 ppb	2.767 ppb	98.864 %	0.001 ppb	0.005 ppb	99.279 %
Concentration per Run 1	100.874 %	0.090 ppb	0.853 ppb	205.326 ppb	2.081 ppb	97.603 %	0.001 ppb	0.004 ppb	100.862 %
Concentration per Run 2	96.696 %	0.193 ppb	1.461 ppb	195.156 ppb	3.051 ppb	97.769 %	0.001 ppb	0.007 ppb	97.730 %
Concentration per Run 3	98.687 %	0.244 ppb	1.400 ppb	192.711 ppb	3.169 ppb	101.219 %	0.002 ppb	0.004 ppb	99.246 %
Concentration RSD	2.1 %	44.4 %	27.0 %	3.4 %	21.6 %	2.1 %	14.3 %	34.7 %	1.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.380 ppb	-0.035 ppb	98.580 %	101.183 %	0.075 ppb	0.019 ppb	101.460 %
Concentration per Run 1	0.357 ppb	-0.025 ppb	97.712 %	101.607 %	0.075 ppb	0.019 ppb	107.481 %
Concentration per Run 2	0.364 ppb	-0.036 ppb	97.744 %	100.523 %	0.083 ppb	0.022 ppb	97.766 %
Concentration per Run 3	0.417 ppb	-0.044 ppb	100.285 %	101.419 %	0.067 ppb	0.017 ppb	99.133 %
Concentration RSD	8.6 %	26.8 %	1.5 %	0.6 %	10.5 %	12.8 %	5.2 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 10 User name ALPHALAB\Metals-Instrument Comment ICV
Analysis label: ICV Rack 0
Analysis started at: 9/3/2023 6:59:54 PM Vial 7

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	95.062 %	98.383 %	51.398 ppb	53.276 ppb	4,948.199 ppb	5,056.067 ppb	49.671 ppb	5,022.926 ppb	5,252.301 ppb
Concentration per Run 1	97.154 %	96.318 %	50.714 ppb	52.856 ppb	5,216.487 ppb	5,224.319 ppb	54.866 ppb	5,525.970 ppb	5,865.368 ppb
Concentration per Run 2	94.630 %	98.271 %	51.551 ppb	53.610 ppb	4,807.731 ppb	4,960.163 ppb	46.224 ppb	4,711.915 ppb	4,963.077 ppb
Concentration per Run 3	93.403 %	100.561 %	51.929 ppb	53.361 ppb	4,820.378 ppb	4,983.719 ppb	47.922 ppb	4,830.892 ppb	4,928.459 ppb
Recovery Percentage 1			102.797 %	106.552 %	98.964 %	101.121 %	99.341 %	100.459 %	105.046 %
Concentration RSD	2.0 %	2.2 %	1.2 %	0.7 %	4.7 %	2.9 %	9.2 %	8.8 %	10.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.618 %	49.486 ppb	50.167 ppb	51.020 ppb	5,049.255 ppb	50.229 ppb	51.536 ppb	51.647 ppb	52.026 ppb
Concentration per Run 1	101.409 %	51.265 ppb	51.374 ppb	53.142 ppb	5,192.592 ppb	50.732 ppb	52.927 ppb	52.874 ppb	54.385 ppb
Concentration per Run 2	99.873 %	48.901 ppb	49.550 ppb	49.987 ppb	4,997.226 ppb	50.806 ppb	51.651 ppb	51.624 ppb	51.358 ppb
Concentration per Run 3	100.572 %	48.290 ppb	49.577 ppb	49.931 ppb	4,957.947 ppb	49.148 ppb	50.029 ppb	50.443 ppb	50.335 ppb
Recovery Percentage 1		98.971 %	100.334 %	102.040 %	100.985 %	100.457 %	103.071 %	103.294 %	104.052 %
Concentration RSD	0.8 %	3.2 %	2.1 %	3.6 %	2.5 %	1.9 %	2.8 %	2.4 %	4.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.480 %	50.296 ppb	51.664 ppb	50.111 ppb	49.019 ppb	97.077 %	50.711 ppb	50.907 ppb	96.936 %
Concentration per Run 1	98.930 %	51.565 ppb	55.272 ppb	53.633 ppb	50.500 ppb	95.009 %	50.823 ppb	50.898 ppb	99.579 %
Concentration per Run 2	96.136 %	50.063 ppb	49.793 ppb	47.992 ppb	48.321 ppb	97.288 %	50.610 ppb	50.841 ppb	93.405 %
Concentration per Run 3	100.373 %	49.259 ppb	49.927 ppb	48.709 ppb	48.236 ppb	98.935 %	50.701 ppb	50.982 ppb	97.824 %
Recovery Percentage 1		100.591 %	103.327 %	100.222 %	98.038 %		101.423 %	101.814 %	
Concentration RSD	2.2 %	2.3 %	6.0 %	6.1 %	2.6 %	2.0 %	0.2 %	0.1 %	3.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.860 ppb	50.191 ppb	100.195 %	101.355 %	50.442 ppb	49.052 ppb	102.936 %
Concentration per Run 1	51.695 ppb	51.874 ppb	99.289 %	101.308 %	49.700 ppb	49.046 ppb	106.517 %
Concentration per Run 2	50.740 ppb	49.579 ppb	99.033 %	100.744 %	50.857 ppb	50.474 ppb	98.775 %
Concentration per Run 3	50.144 ppb	49.120 ppb	102.264 %	102.014 %	50.769 ppb	47.637 ppb	103.517 %
Recovery Percentage 1	101.720 %	100.382 %			100.884 %	98.104 %	
Concentration RSD	1.5 %	2.9 %	1.8 %	0.6 %	1.3 %	2.9 %	3.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 11 User name ALPHALAB\Metals-Instrument Comment ICB
Analysis label: ICB Rack 0
Analysis started at: 9/3/2023 7:04:34 PM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	95.857 %	93.915 %	0.008 ppb	-0.080 ppb	-2.986 ppb	-2.152 ppb	-1.376 ppb	-12.025 ppb	-6.330 ppb
Concentration per Run 1	97.820 %	92.209 %	0.010 ppb	-0.284 ppb	-2.925 ppb	-2.006 ppb	-1.421 ppb	-13.606 ppb	-8.598 ppb
Concentration per Run 2	95.550 %	94.701 %	0.004 ppb	-0.260 ppb	-2.571 ppb	-2.259 ppb	-1.328 ppb	-11.813 ppb	-2.282 ppb
Concentration per Run 3	94.200 %	94.836 %	0.011 ppb	0.305 ppb	-3.461 ppb	-2.191 ppb	-1.379 ppb	-10.655 ppb	-8.111 ppb
Recovery Percentage 1			1.691 %	-0.797 %	-2.986 %	-3.074 %	-13.760 %	-12.025 %	-6.330 %
Concentration RSD	1.9 %	1.6 %	46.6 %	418.3 %	15.0 %	6.1 %	3.4 %	12.4 %	55.5 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.873 %	0.013 ppb	-0.004 ppb	-0.302 ppb	14.067 ppb	-0.002 ppb	-0.234 ppb	-0.093 ppb	-1.868 ppb
Concentration per Run 1	94.592 %	0.009 ppb	-0.010 ppb	-0.286 ppb	12.259 ppb	-0.001 ppb	-0.246 ppb	-0.092 ppb	-1.879 ppb
Concentration per Run 2	93.368 %	0.009 ppb	0.003 ppb	-0.281 ppb	17.650 ppb	-0.004 ppb	-0.207 ppb	-0.101 ppb	-1.830 ppb
Concentration per Run 3	93.659 %	0.020 ppb	-0.005 ppb	-0.339 ppb	12.293 ppb	0.000 ppb	-0.248 ppb	-0.086 ppb	-1.894 ppb
Recovery Percentage 1		0.253 %	-0.416 %	-30.212 %	28.134 %	-0.322 %	-11.685 %	-9.287 %	-37.352 %
Concentration RSD	0.7 %	48.6 %	149.3 %	10.7 %	22.1 %	111.2 %	9.9 %	8.1 %	1.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	94.842 %	0.165 ppb	0.752 ppb	-0.035 ppb	1.960 ppb	96.639 %	-0.001 ppb	0.001 ppb	94.800 %
Concentration per Run 1	91.401 %	0.117 ppb	0.532 ppb	-0.031 ppb	1.479 ppb	93.072 %	-0.001 ppb	0.002 ppb	91.372 %
Concentration per Run 2	92.432 %	0.189 ppb	0.905 ppb	-0.033 ppb	2.079 ppb	97.166 %	0.000 ppb	0.001 ppb	94.234 %
Concentration per Run 3	100.693 %	0.190 ppb	0.818 ppb	-0.039 ppb	2.323 ppb	99.679 %	-0.001 ppb	0.000 ppb	98.793 %
Recovery Percentage 1		33.097 %	15.032 %	-0.345 %	98.022 %		-0.251 %	0.521 %	
Concentration RSD	5.4 %	25.4 %	26.0 %	11.9 %	22.2 %	3.5 %	78.1 %	114.5 %	3.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.268 ppb	-0.038 ppb	95.812 %	97.702 %	0.096 ppb	0.008 ppb	94.850 %
Concentration per Run 1	0.226 ppb	-0.042 ppb	90.800 %	93.701 %	0.106 ppb	0.009 ppb	95.089 %
Concentration per Run 2	0.268 ppb	-0.043 ppb	96.928 %	98.228 %	0.099 ppb	0.007 ppb	92.436 %
Concentration per Run 3	0.309 ppb	-0.029 ppb	99.707 %	101.176 %	0.084 ppb	0.007 ppb	97.024 %
Recovery Percentage 1	6.697 %	-7.629 %			9.638 %	0.784 %	
Concentration RSD	15.5 %	20.8 %	4.8 %	3.9 %	11.4 %	10.0 %	2.4 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 12
Analysis label: xwg1822899-2D5 2008TL
Analysis started at: 9/3/2023 7:11:37 PM

User name ALPHALAB\Metals-Instrument
Rack 1
Vial 2

Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	261.620 %	155.843 %	0.003 ppb	-1.579 ppb	1,210.783 ppb	1,216.938 ppb	249.974 ppb	1,217.753 ppb	1,238.483 ppb
Concentration per Run 1	262.877 %	93.893 %	0.007 ppb	-1.401 ppb	2,187.765 ppb	2,184.631 ppb	450.728 ppb	2,169.303 ppb	2,191.823 ppb
Concentration per Run 2	268.885 %	125.215 %	0.002 ppb	-1.652 ppb	1,445.322 ppb	1,457.408 ppb	299.130 ppb	1,499.281 ppb	1,526.279 ppb
Concentration per Run 3	253.097 %	248.421 %	-0.001 ppb	-1.686 ppb	-0.738 ppb	8.775 ppb	0.063 ppb	-15.326 ppb	-2.652 ppb
Concentration RSD	3.0 %	52.4 %	138.2 %	9.9 %	91.9 %	91.0 %	91.7 %	91.9 %	90.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	120.279 %	60.074 ppb	24.527 ppb	60.923 ppb	123.623 ppb	61.752 ppb	61.388 ppb	31.616 ppb	60.434 ppb
Concentration per Run 1	116.608 %	107.203 ppb	43.890 ppb	107.695 ppb	221.154 ppb	109.991 ppb	109.792 ppb	56.099 ppb	109.795 ppb
Concentration per Run 2	121.914 %	72.198 ppb	29.545 ppb	74.831 ppb	153.044 ppb	74.715 ppb	74.200 ppb	38.587 ppb	73.400 ppb
Concentration per Run 3	122.314 %	0.822 ppb	0.147 ppb	0.242 ppb	-3.328 ppb	0.549 ppb	0.173 ppb	0.162 ppb	-1.892 ppb
Concentration RSD	2.6 %	90.2 %	90.9 %	90.4 %	93.1 %	90.5 %	91.1 %	90.5 %	94.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	159.482 %	14.314 ppb	13.626 ppb	114.027 ppb	116.868 ppb	164.749 %	6.047 ppb	6.555 ppb	137.885 %
Concentration per Run 1	101.600 %	25.207 ppb	24.026 ppb	204.435 ppb	209.077 ppb	99.138 %	10.935 ppb	11.660 ppb	98.884 %
Concentration per Run 2	120.309 %	17.725 ppb	16.607 ppb	136.683 ppb	136.525 ppb	123.477 %	7.150 ppb	7.948 ppb	113.701 %
Concentration per Run 3	256.536 %	0.009 ppb	0.244 ppb	0.962 ppb	5.003 ppb	271.632 %	0.055 ppb	0.057 ppb	201.070 %
Concentration RSD	53.0 %	90.4 %	89.3 %	90.9 %	88.5 %	56.7 %	91.3 %	90.4 %	40.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	47.787 ppb	235.546 ppb	163.715 %	156.592 %	14.789 ppb	72.991 ppb	80.046 %
Concentration per Run 1	85.707 ppb	428.509 ppb	102.092 %	102.083 %	22.316 ppb	111.380 ppb	113.488 %
Concentration per Run 2	56.872 ppb	275.651 ppb	130.149 %	124.881 %	20.635 ppb	103.112 ppb	91.230 %
Concentration per Run 3	0.784 ppb	2.480 ppb	258.905 %	242.814 %	1.417 ppb	4.480 ppb	35.421 %
Concentration RSD	90.4 %	91.6 %	51.1 %	48.2 %	78.5 %	81.5 %	50.2 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 13
Analysis label: xWG1822783-2D5 6020TL
Analysis started at: 9/3/2023 7:16:14 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	269.429 %	112.215 %	-0.001 ppb	-0.097 ppb	1,654.397 ppb	1,638.298 ppb	338.519 ppb	1,678.465 ppb	1,664.510 ppb
Concentration per Run 1	270.018 %	97.328 %	0.001 ppb	0.238 ppb	2,010.317 ppb	2,007.333 ppb	417.817 ppb	2,067.139 ppb	2,019.846 ppb
Concentration per Run 2	272.620 %	98.608 %	-0.002 ppb	-0.199 ppb	2,062.384 ppb	2,021.137 ppb	411.964 ppb	2,064.840 ppb	1,966.621 ppb
Concentration per Run 3	265.648 %	140.709 %	-0.002 ppb	-0.329 ppb	890.491 ppb	886.426 ppb	185.778 ppb	903.417 ppb	1,007.064 ppb
Concentration RSD	1.3 %	22.0 %	181.3 %	307.5 %	40.0 %	39.7 %	39.1 %	40.0 %	34.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.601 %	81.469 ppb	32.925 ppb	83.083 ppb	169.979 ppb	83.657 ppb	83.402 ppb	42.251 ppb	83.220 ppb
Concentration per Run 1	92.842 %	99.937 ppb	40.358 ppb	101.092 ppb	208.367 ppb	101.881 ppb	101.229 ppb	51.500 ppb	101.633 ppb
Concentration per Run 2	101.448 %	100.788 ppb	40.869 ppb	104.466 ppb	212.376 ppb	104.452 ppb	105.021 ppb	52.511 ppb	105.335 ppb
Concentration per Run 3	104.513 %	43.681 ppb	17.547 ppb	43.690 ppb	89.195 ppb	44.638 ppb	43.956 ppb	22.742 ppb	42.694 ppb
Concentration RSD	6.1 %	40.2 %	40.5 %	41.1 %	41.2 %	40.4 %	41.0 %	40.0 %	42.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	116.750 %	20.177 ppb	19.367 ppb	156.312 ppb	163.481 ppb	118.592 %	8.424 ppb	9.112 ppb	104.338 %
Concentration per Run 1	100.744 %	25.008 ppb	23.405 ppb	194.404 ppb	202.555 ppb	97.920 %	10.444 ppb	10.989 ppb	96.729 %
Concentration per Run 2	100.801 %	25.240 ppb	24.639 ppb	194.645 ppb	204.914 ppb	101.463 %	10.513 ppb	11.320 ppb	96.259 %
Concentration per Run 3	148.707 %	10.282 ppb	10.056 ppb	79.888 ppb	82.973 ppb	156.392 %	4.315 ppb	5.027 ppb	120.025 %
Concentration RSD	23.7 %	42.5 %	41.8 %	42.3 %	42.7 %	27.6 %	42.2 %	38.9 %	13.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	69.017 ppb	340.541 ppb	115.925 %	115.420 %	19.169 ppb	94.914 ppb	104.318 %
Concentration per Run 1	82.630 ppb	407.816 ppb	100.139 %	103.078 %	18.630 ppb	89.005 ppb	127.351 %
Concentration per Run 2	84.811 ppb	427.073 ppb	100.564 %	103.737 %	21.249 ppb	104.140 ppb	112.115 %
Concentration per Run 3	39.611 ppb	186.735 ppb	147.072 %	139.444 %	17.627 ppb	91.597 ppb	73.488 %
Concentration RSD	36.9 %	39.2 %	23.3 %	18.0 %	9.8 %	8.5 %	26.6 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	14	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	wg1822899-2D5 2008TL	Rack	1		
Analysis started at:	9/3/2023 7:22:59 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	99.226 %	100.427 %	11.035 ppb	225.321 ppb	2,138.527 ppb	2,142.960 ppb	447.640 ppb	2,117.389 ppb	2,018.111 ppb
Concentration per Run 1	101.557 %	101.841 %	11.031 ppb	223.434 ppb	2,047.374 ppb	2,075.058 ppb	446.454 ppb	2,072.319 ppb	1,932.451 ppb
Concentration per Run 2	99.098 %	97.328 %	10.958 ppb	224.675 ppb	2,214.897 ppb	2,231.173 ppb	458.111 ppb	2,156.403 ppb	2,119.741 ppb
Concentration per Run 3	97.025 %	102.111 %	11.116 ppb	227.853 ppb	2,153.309 ppb	2,122.649 ppb	438.356 ppb	2,123.445 ppb	2,002.142 ppb
Concentration RSD	2.3 %	2.7 %	0.7 %	1.0 %	4.0 %	3.7 %	2.2 %	2.0 %	4.7 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	110.516 %	105.755 ppb	42.611 ppb	105.308 ppb	210.596 ppb	108.030 ppb	108.517 ppb	54.601 ppb	106.716 ppb
Concentration per Run 1	110.704 %	105.723 ppb	41.977 ppb	101.582 ppb	205.741 ppb	107.065 ppb	107.060 ppb	54.011 ppb	103.960 ppb
Concentration per Run 2	110.709 %	107.041 ppb	43.528 ppb	107.131 ppb	220.350 ppb	112.124 ppb	111.545 ppb	56.926 ppb	109.566 ppb
Concentration per Run 3	110.136 %	104.501 ppb	42.328 ppb	107.210 ppb	205.695 ppb	104.901 ppb	106.944 ppb	52.867 ppb	106.621 ppb
Concentration RSD	0.3 %	1.2 %	1.9 %	3.1 %	4.0 %	3.4 %	2.4 %	3.8 %	2.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	106.311 %	25.378 ppb	24.838 ppb	204.550 ppb	210.801 ppb	103.870 %	10.690 ppb	11.499 ppb	104.268 %
Concentration per Run 1	107.229 %	25.150 ppb	23.048 ppb	201.529 ppb	205.675 ppb	104.167 %	10.679 ppb	11.548 ppb	104.011 %
Concentration per Run 2	104.654 %	25.995 ppb	25.638 ppb	206.606 ppb	213.487 ppb	104.039 %	10.857 ppb	11.575 ppb	102.718 %
Concentration per Run 3	107.049 %	24.990 ppb	25.827 ppb	205.514 ppb	213.241 ppb	103.403 %	10.534 ppb	11.373 ppb	106.074 %
Concentration RSD	1.4 %	2.1 %	6.3 %	1.3 %	2.1 %	0.4 %	1.5 %	1.0 %	1.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	89.078 ppb	419.999 ppb	107.955 %	109.399 %	19.742 ppb	116.031 ppb	136.057 %
Concentration per Run 1	86.441 ppb	410.220 ppb	109.605 %	110.653 %	15.602 ppb	115.475 ppb	170.769 %
Concentration per Run 2	90.776 ppb	426.441 ppb	107.837 %	109.730 %	21.015 ppb	114.692 ppb	122.667 %
Concentration per Run 3	90.018 ppb	423.337 ppb	106.423 %	107.816 %	22.609 ppb	117.925 ppb	114.736 %
Concentration RSD	2.6 %	2.1 %	1.5 %	1.3 %	18.6 %	1.5 %	22.3 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 15
Analysis label: WG1822783-2D5 6020TL
Analysis started at: 9/3/2023 7:27:35 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	97.583 %	96.744 %	10.512 ppb	216.693 ppb	2,032.187 ppb	2,024.428 ppb	414.122 ppb	2,082.025 ppb	2,019.110 ppb
Concentration per Run 1	98.291 %	97.059 %	10.588 ppb	217.097 ppb	2,053.196 ppb	2,048.081 ppb	423.269 ppb	2,123.348 ppb	2,240.144 ppb
Concentration per Run 2	96.886 %	93.556 %	10.466 ppb	217.217 ppb	2,025.362 ppb	2,046.772 ppb	411.735 ppb	2,081.302 ppb	2,003.113 ppb
Concentration per Run 3	97.572 %	99.618 %	10.482 ppb	215.766 ppb	2,018.002 ppb	1,978.431 ppb	407.361 ppb	2,041.424 ppb	1,814.074 ppb
Concentration RSD	0.7 %	3.1 %	0.6 %	0.4 %	0.9 %	2.0 %	2.0 %	2.0 %	10.6 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.110 %	103.368 ppb	42.125 ppb	107.558 ppb	215.210 ppb	107.002 ppb	106.700 ppb	54.325 ppb	106.784 ppb
Concentration per Run 1	101.169 %	107.821 ppb	43.628 ppb	109.780 ppb	218.389 ppb	109.194 ppb	108.082 ppb	54.937 ppb	108.754 ppb
Concentration per Run 2	101.867 %	101.446 ppb	41.250 ppb	106.711 ppb	221.062 ppb	107.177 ppb	106.201 ppb	54.861 ppb	104.673 ppb
Concentration per Run 3	103.295 %	100.838 ppb	41.499 ppb	106.181 ppb	206.178 ppb	104.636 ppb	105.816 ppb	53.179 ppb	106.926 ppb
Concentration RSD	1.1 %	3.7 %	3.1 %	1.8 %	3.7 %	2.1 %	1.1 %	1.8 %	1.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.351 %	26.218 ppb	24.624 ppb	198.135 ppb	210.337 ppb	96.980 %	10.646 ppb	11.593 ppb	94.279 %
Concentration per Run 1	93.407 %	26.985 ppb	25.280 ppb	205.360 ppb	218.884 ppb	93.228 %	11.384 ppb	12.403 ppb	86.266 %
Concentration per Run 2	96.644 %	26.444 ppb	23.452 ppb	190.885 ppb	204.773 ppb	96.615 %	10.361 ppb	11.329 ppb	94.710 %
Concentration per Run 3	99.003 %	25.225 ppb	25.139 ppb	198.160 ppb	207.355 ppb	101.096 %	10.193 ppb	11.047 ppb	101.861 %
Concentration RSD	2.9 %	3.4 %	4.1 %	3.7 %	3.6 %	4.1 %	6.1 %	6.2 %	8.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	88.651 ppb	413.240 ppb	97.825 %	98.751 %	24.068 ppb	117.787 ppb	96.318 %
Concentration per Run 1	94.527 ppb	436.651 ppb	91.397 %	95.331 %	24.246 ppb	118.361 ppb	96.586 %
Concentration per Run 2	84.176 ppb	406.238 ppb	97.955 %	95.963 %	24.488 ppb	119.750 ppb	92.814 %
Concentration per Run 3	87.249 ppb	396.832 ppb	104.122 %	104.959 %	23.469 ppb	115.249 ppb	99.554 %
Concentration RSD	6.0 %	5.0 %	6.5 %	5.5 %	2.2 %	2.0 %	3.5 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 16
Analysis label: WG1822783-3d10 6020TL
Analysis started at: 9/3/2023 7:35:51 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 11
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	98.814 %	101.594 %	5.341 ppb	113.375 ppb	6,053.753 ppb	1,497.458 ppb	211.495 ppb	4,402.303 ppb	5,429.376 ppb
Concentration per Run 1	100.499 %	108.038 %	5.283 ppb	111.997 ppb	6,019.736 ppb	1,503.731 ppb	222.075 ppb	4,569.823 ppb	5,552.926 ppb
Concentration per Run 2	98.707 %	97.934 %	5.365 ppb	112.826 ppb	6,110.123 ppb	1,498.012 ppb	210.146 ppb	4,342.689 ppb	5,410.127 ppb
Concentration per Run 3	97.235 %	98.810 %	5.375 ppb	115.301 ppb	6,031.401 ppb	1,490.631 ppb	202.265 ppb	4,294.397 ppb	5,325.074 ppb
Concentration RSD	1.7 %	5.5 %	0.9 %	1.5 %	0.8 %	0.4 %	4.7 %	3.3 %	2.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.938 %	50.579 ppb	20.742 ppb	57.473 ppb	102.767 ppb	51.995 ppb	52.138 ppb	27.121 ppb	52.035 ppb
Concentration per Run 1	97.461 %	48.447 ppb	20.071 ppb	55.327 ppb	101.317 ppb	48.989 ppb	48.633 ppb	25.408 ppb	50.040 ppb
Concentration per Run 2	97.352 %	52.411 ppb	21.343 ppb	58.159 ppb	106.332 ppb	53.446 ppb	54.057 ppb	27.724 ppb	52.440 ppb
Concentration per Run 3	96.000 %	50.880 ppb	20.811 ppb	58.933 ppb	100.651 ppb	53.550 ppb	53.725 ppb	28.232 ppb	53.625 ppb
Concentration RSD	0.8 %	4.0 %	3.1 %	3.3 %	3.0 %	5.0 %	5.8 %	5.6 %	3.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	102.875 %	13.057 ppb	12.161 ppb	109.926 ppb	100.988 ppb	101.747 %	5.084 ppb	5.593 ppb	101.364 %
Concentration per Run 1	111.328 %	12.634 ppb	12.372 ppb	114.670 ppb	99.250 ppb	105.373 %	5.011 ppb	5.539 ppb	110.588 %
Concentration per Run 2	100.170 %	13.379 ppb	12.193 ppb	110.953 ppb	102.252 ppb	99.848 %	5.145 ppb	5.625 ppb	99.544 %
Concentration per Run 3	97.128 %	13.157 ppb	11.919 ppb	104.155 ppb	101.463 ppb	100.020 %	5.097 ppb	5.614 ppb	93.958 %
Concentration RSD	7.3 %	2.9 %	1.9 %	4.9 %	1.5 %	3.1 %	1.3 %	0.8 %	8.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.739 ppb	209.983 ppb	103.850 %	105.938 %	11.196 ppb	55.409 ppb	106.608 %
Concentration per Run 1	55.503 ppb	216.173 ppb	107.847 %	113.122 %	9.943 ppb	49.934 ppb	122.146 %
Concentration per Run 2	55.718 ppb	206.728 ppb	102.407 %	103.975 %	11.845 ppb	58.785 ppb	98.966 %
Concentration per Run 3	55.994 ppb	207.049 ppb	101.298 %	100.717 %	11.800 ppb	57.509 ppb	98.711 %
Concentration RSD	0.4 %	2.6 %	3.4 %	6.1 %	9.7 %	8.6 %	12.6 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 17
Analysis label: WG1822783-4d10 6020TL
Analysis started at: 9/3/2023 7:40:31 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 12
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	97.107 %	96.722 %	5.388 ppb	114.783 ppb	6,084.777 ppb	1,540.274 ppb	212.625 ppb	4,362.802 ppb	5,472.472 ppb
Concentration per Run 1	99.149 %	93.085 %	5.354 ppb	113.913 ppb	6,630.146 ppb	1,667.532 ppb	236.810 ppb	4,717.347 ppb	5,928.445 ppb
Concentration per Run 2	97.024 %	98.877 %	5.415 ppb	114.323 ppb	5,919.880 ppb	1,499.978 ppb	202.964 ppb	4,227.482 ppb	5,388.299 ppb
Concentration per Run 3	95.148 %	98.204 %	5.395 ppb	116.113 ppb	5,704.305 ppb	1,453.312 ppb	198.100 ppb	4,143.576 ppb	5,100.670 ppb
Concentration RSD	2.1 %	3.3 %	0.6 %	1.0 %	8.0 %	7.3 %	9.9 %	7.1 %	7.7 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.268 %	52.649 ppb	21.202 ppb	57.343 ppb	100.939 ppb	53.056 ppb	53.157 ppb	27.838 ppb	52.885 ppb
Concentration per Run 1	98.028 %	55.941 ppb	22.030 ppb	61.035 ppb	104.771 ppb	54.877 ppb	54.408 ppb	28.367 ppb	55.188 ppb
Concentration per Run 2	96.163 %	51.339 ppb	21.109 ppb	56.892 ppb	99.568 ppb	51.800 ppb	51.460 ppb	27.468 ppb	51.807 ppb
Concentration per Run 3	97.613 %	50.667 ppb	20.468 ppb	54.103 ppb	98.478 ppb	52.492 ppb	53.603 ppb	27.680 ppb	51.660 ppb
Concentration RSD	1.0 %	5.5 %	3.7 %	6.1 %	3.3 %	3.0 %	2.9 %	1.7 %	3.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	97.464 %	13.197 ppb	12.580 ppb	112.296 ppb	103.883 ppb	96.630 %	5.197 ppb	5.712 ppb	96.229 %
Concentration per Run 1	99.048 %	13.557 ppb	13.629 ppb	123.929 ppb	108.244 ppb	96.453 %	5.293 ppb	5.939 ppb	98.458 %
Concentration per Run 2	97.954 %	13.014 ppb	13.163 ppb	110.388 ppb	101.578 ppb	95.660 %	5.101 ppb	5.561 ppb	96.664 %
Concentration per Run 3	95.389 %	13.021 ppb	10.948 ppb	102.569 ppb	101.828 ppb	97.776 %	5.196 ppb	5.638 ppb	93.566 %
Concentration RSD	1.9 %	2.4 %	11.4 %	9.6 %	3.6 %	1.1 %	1.8 %	3.5 %	2.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	53.542 ppb	215.085 ppb	98.619 %	99.088 %	11.848 ppb	58.290 ppb	96.214 %
Concentration per Run 1	55.693 ppb	226.086 ppb	97.951 %	102.064 %	11.459 ppb	56.771 ppb	101.921 %
Concentration per Run 2	53.194 ppb	211.558 ppb	97.993 %	98.764 %	12.177 ppb	60.610 ppb	91.324 %
Concentration per Run 3	51.738 ppb	207.612 ppb	99.912 %	96.435 %	11.909 ppb	57.489 ppb	95.397 %
Concentration RSD	3.7 %	4.5 %	1.1 %	2.9 %	3.1 %	3.5 %	5.6 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 18
Analysis label: WG1822783-5d10 6020TL
Analysis started at: 9/3/2023 7:45:11 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 13
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	97.669 %	95.060 %	49.155 ppb	56.013 ppb	9,961.040 ppb	5,706.861 ppb	51.677 ppb	8,355.967 ppb	9,349.707 ppb
Concentration per Run 1	101.510 %	90.794 %	47.384 ppb	54.401 ppb	10,878.344 ppb	6,313.822 ppb	60.535 ppb	8,974.041 ppb	9,984.306 ppb
Concentration per Run 2	97.352 %	99.214 %	49.508 ppb	56.200 ppb	9,472.012 ppb	5,402.109 ppb	48.027 ppb	8,173.091 ppb	9,146.443 ppb
Concentration per Run 3	94.145 %	95.173 %	50.574 ppb	57.437 ppb	9,532.764 ppb	5,404.651 ppb	46.469 ppb	7,920.769 ppb	8,918.371 ppb
Concentration RSD	3.8 %	4.4 %	3.3 %	2.7 %	8.0 %	9.2 %	14.9 %	6.6 %	6.0 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	109.254 %	51.531 ppb	51.538 ppb	57.755 ppb	5,137.689 ppb	51.857 ppb	52.989 ppb	52.904 ppb	51.436 ppb
Concentration per Run 1	108.897 %	52.857 ppb	53.329 ppb	59.390 ppb	5,161.541 ppb	51.650 ppb	52.338 ppb	52.083 ppb	50.784 ppb
Concentration per Run 2	109.389 %	51.920 ppb	50.609 ppb	57.386 ppb	5,126.318 ppb	51.922 ppb	52.486 ppb	51.796 ppb	51.423 ppb
Concentration per Run 3	109.475 %	49.816 ppb	50.675 ppb	56.488 ppb	5,125.208 ppb	52.000 ppb	54.142 ppb	54.832 ppb	52.100 ppb
Concentration RSD	0.3 %	3.0 %	3.0 %	2.6 %	0.4 %	0.4 %	1.9 %	3.2 %	1.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.965 %	50.842 ppb	50.085 ppb	60.647 ppb	53.187 ppb	96.451 %	2.025 ppb	51.234 ppb	95.430 %
Concentration per Run 1	100.521 %	50.438 ppb	51.774 ppb	63.063 ppb	52.342 ppb	96.555 %	2.053 ppb	52.172 ppb	97.171 %
Concentration per Run 2	95.942 %	51.662 ppb	49.084 ppb	60.019 ppb	53.674 ppb	96.906 %	2.005 ppb	50.323 ppb	97.096 %
Concentration per Run 3	91.431 %	50.427 ppb	49.396 ppb	58.860 ppb	53.546 ppb	95.894 %	2.017 ppb	51.206 ppb	92.024 %
Concentration RSD	4.7 %	1.4 %	2.9 %	3.6 %	1.4 %	0.5 %	1.2 %	1.8 %	3.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	51.726 ppb	54.519 ppb	99.098 %	100.518 %	50.093 ppb	47.777 ppb	103.126 %
Concentration per Run 1	53.155 ppb	55.618 ppb	98.994 %	102.332 %	48.280 ppb	47.617 ppb	109.073 %
Concentration per Run 2	51.071 ppb	54.519 ppb	99.372 %	100.753 %	50.527 ppb	47.677 ppb	100.873 %
Concentration per Run 3	50.953 ppb	53.420 ppb	98.928 %	98.468 %	51.473 ppb	48.036 ppb	99.433 %
Concentration RSD	2.4 %	2.0 %	0.2 %	1.9 %	3.3 %	0.5 %	5.0 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	19	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1822783-6d5 6020TL	Rack	1		
Analysis started at:	9/3/2023 7:49:48 PM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	98.726 %	99.663 %	0.008 ppb	8.928 ppb	9,529.863 ppb	921.086 ppb	0.818 ppb	6,503.519 ppb	8,532.419 ppb
Concentration per Run 1	100.025 %	98.608 %	0.006 ppb	8.878 ppb	9,794.635 ppb	931.643 ppb	0.560 ppb	6,748.959 ppb	9,060.439 ppb
Concentration per Run 2	98.590 %	100.561 %	0.008 ppb	8.961 ppb	9,437.284 ppb	930.541 ppb	1.321 ppb	6,509.363 ppb	8,627.658 ppb
Concentration per Run 3	97.562 %	99.820 %	0.011 ppb	8.946 ppb	9,357.670 ppb	901.074 ppb	0.573 ppb	6,252.235 ppb	7,909.161 ppb
Concentration RSD	1.3 %	1.0 %	26.6 %	0.5 %	2.4 %	1.9 %	53.2 %	3.8 %	6.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.495 %	0.057 ppb	0.102 ppb	9.936 ppb	10.730 ppb	0.059 ppb	-0.124 ppb	0.992 ppb	-0.918 ppb
Concentration per Run 1	103.747 %	0.065 ppb	0.105 ppb	9.681 ppb	11.009 ppb	0.048 ppb	-0.166 ppb	0.992 ppb	-0.833 ppb
Concentration per Run 2	103.438 %	0.061 ppb	0.092 ppb	10.915 ppb	11.374 ppb	0.060 ppb	-0.122 ppb	1.009 ppb	-0.953 ppb
Concentration per Run 3	103.300 %	0.046 ppb	0.108 ppb	9.212 ppb	9.807 ppb	0.067 ppb	-0.084 ppb	0.974 ppb	-0.967 ppb
Concentration RSD	0.2 %	16.8 %	8.0 %	8.9 %	7.6 %	16.6 %	32.9 %	1.8 %	8.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.809 %	0.223 ppb	0.830 ppb	21.490 ppb	2.888 ppb	98.011 %	-0.003 ppb	0.005 ppb	93.994 %
Concentration per Run 1	98.908 %	0.170 ppb	0.842 ppb	22.361 ppb	2.089 ppb	95.572 %	-0.003 ppb	0.004 ppb	93.048 %
Concentration per Run 2	97.698 %	0.225 ppb	0.813 ppb	21.905 ppb	2.995 ppb	100.082 %	-0.003 ppb	0.006 ppb	96.788 %
Concentration per Run 3	102.823 %	0.276 ppb	0.834 ppb	20.206 ppb	3.579 ppb	98.377 %	-0.003 ppb	0.006 ppb	92.147 %
Concentration RSD	2.7 %	23.7 %	1.8 %	5.3 %	26.0 %	2.3 %	7.4 %	24.7 %	2.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.802 ppb	7.859 ppb	97.075 %	98.034 %	0.373 ppb	0.016 ppb	93.970 %
Concentration per Run 1	0.724 ppb	7.894 ppb	93.301 %	95.466 %	0.412 ppb	0.016 ppb	95.384 %
Concentration per Run 2	0.790 ppb	8.004 ppb	100.357 %	102.778 %	0.388 ppb	0.015 ppb	94.507 %
Concentration per Run 3	0.891 ppb	7.678 ppb	97.566 %	95.858 %	0.321 ppb	0.017 ppb	92.020 %
Concentration RSD	10.5 %	2.1 %	3.7 %	4.2 %	12.6 %	4.2 %	1.9 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	20	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/3/2023 7:55:00 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	94.082 %	95.016 %	61.841 ppb	54.907 ppb	6,265.221 ppb	6,173.877 ppb	59.405 ppb	6,010.757 ppb	6,083.580 ppb
Concentration per Run 1	95.914 %	89.245 %	61.514 ppb	54.261 ppb	6,670.422 ppb	6,713.960 ppb	64.035 ppb	6,267.748 ppb	6,505.533 ppb
Concentration per Run 2	93.891 %	93.489 %	61.680 ppb	54.938 ppb	6,091.150 ppb	5,891.608 ppb	56.342 ppb	5,894.078 ppb	5,908.006 ppb
Concentration per Run 3	92.440 %	102.313 %	62.329 ppb	55.521 ppb	6,034.092 ppb	5,916.062 ppb	57.840 ppb	5,870.444 ppb	5,837.202 ppb
Recovery Percentage 1			103.068 %	91.511 %	104.420 %	102.898 %	99.009 %	100.179 %	101.393 %
Concentration RSD	1.9 %	7.0 %	0.7 %	1.1 %	5.6 %	7.6 %	6.9 %	3.7 %	6.0 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	109.115 %	60.891 ppb	61.885 ppb	60.814 ppb	6,164.144 ppb	63.382 ppb	63.457 ppb	63.421 ppb	62.155 ppb
Concentration per Run 1	110.048 %	63.853 ppb	64.331 ppb	62.888 ppb	6,313.615 ppb	64.725 ppb	64.649 ppb	64.649 ppb	63.988 ppb
Concentration per Run 2	107.679 %	60.076 ppb	61.260 ppb	58.969 ppb	6,167.670 ppb	63.698 ppb	64.743 ppb	64.302 ppb	61.740 ppb
Concentration per Run 3	109.617 %	58.745 ppb	60.065 ppb	60.584 ppb	6,011.147 ppb	61.723 ppb	60.980 ppb	61.312 ppb	60.737 ppb
Recovery Percentage 1		101.485 %	103.142 %	101.356 %	102.736 %	105.636 %	105.762 %	105.701 %	103.591 %
Concentration RSD	1.2 %	4.4 %	3.6 %	3.2 %	2.5 %	2.4 %	3.4 %	2.9 %	2.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	97.908 %	61.475 ppb	58.629 ppb	52.493 ppb	62.529 ppb	97.614 %	60.272 ppb	62.761 ppb	93.944 %
Concentration per Run 1	95.885 %	62.461 ppb	62.114 ppb	53.807 ppb	64.466 ppb	93.262 %	62.517 ppb	65.130 ppb	89.888 %
Concentration per Run 2	93.855 %	61.648 ppb	56.759 ppb	51.412 ppb	61.016 ppb	96.280 %	60.118 ppb	62.396 ppb	90.005 %
Concentration per Run 3	103.984 %	60.316 ppb	57.014 ppb	52.260 ppb	62.104 ppb	103.299 %	58.181 ppb	60.756 ppb	101.939 %
Recovery Percentage 1		102.458 %	97.715 %	87.489 %	104.215 %		100.454 %	104.601 %	
Concentration RSD	5.5 %	1.8 %	5.2 %	2.3 %	2.8 %	5.3 %	3.6 %	3.5 %	7.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	62.615 ppb	61.244 ppb	98.404 %	98.912 %	64.980 ppb	64.012 ppb	95.729 %
Concentration per Run 1	65.356 ppb	63.363 ppb	94.445 %	95.264 %	64.920 ppb	63.725 ppb	95.648 %
Concentration per Run 2	61.499 ppb	59.307 ppb	96.755 %	96.749 %	65.114 ppb	64.349 ppb	92.643 %
Concentration per Run 3	60.989 ppb	61.063 ppb	104.011 %	104.722 %	64.906 ppb	63.962 ppb	98.896 %
Recovery Percentage 1	104.358 %	102.074 %			108.300 %	106.687 %	
Concentration RSD	3.8 %	3.3 %	5.1 %	5.1 %	0.2 %	0.5 %	3.3 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	21	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/3/2023 7:59:42 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	96.247 %	98.249 %	0.012 ppb	0.473 ppb	-3.314 ppb	-2.197 ppb	-1.506 ppb	-11.220 ppb	-6.451 ppb
Concentration per Run 1	98.449 %	92.680 %	0.008 ppb	0.452 ppb	-2.829 ppb	-2.163 ppb	-1.449 ppb	-11.836 ppb	-6.615 ppb
Concentration per Run 2	95.837 %	102.380 %	0.014 ppb	0.469 ppb	-3.943 ppb	-2.143 ppb	-1.440 ppb	-14.099 ppb	-7.274 ppb
Concentration per Run 3	94.454 %	99.686 %	0.015 ppb	0.498 ppb	-3.171 ppb	-2.284 ppb	-1.628 ppb	-7.725 ppb	-5.464 ppb
Recovery Percentage 1			2.477 %	4.727 %	-3.314 %	-3.138 %	-15.059 %	-11.220 %	-6.451 %
Concentration RSD	2.1 %	5.1 %	32.7 %	4.9 %	17.2 %	3.5 %	7.0 %	28.8 %	14.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.351 %	0.004 ppb	0.000 ppb	-0.296 ppb	12.027 ppb	-0.002 ppb	-0.218 ppb	-0.090 ppb	-1.924 ppb
Concentration per Run 1	97.287 %	0.006 ppb	0.002 ppb	-0.265 ppb	13.375 ppb	0.003 ppb	-0.194 ppb	-0.083 ppb	-1.869 ppb
Concentration per Run 2	96.196 %	-0.005 ppb	0.008 ppb	-0.290 ppb	10.654 ppb	-0.004 ppb	-0.218 ppb	-0.084 ppb	-1.947 ppb
Concentration per Run 3	95.570 %	0.011 ppb	-0.010 ppb	-0.334 ppb	12.053 ppb	-0.005 ppb	-0.243 ppb	-0.104 ppb	-1.955 ppb
Recovery Percentage 1		0.075 %	-0.010 %	-29.642 %	24.054 %	-0.345 %	-10.918 %	-9.042 %	-38.474 %
Concentration RSD	0.9 %	216.5 %	8,708.0 %	11.7 %	11.3 %	252.0 %	11.4 %	12.9 %	2.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.297 %	0.113 ppb	0.699 ppb	-0.026 ppb	1.809 ppb	98.777 %	0.000 ppb	0.002 ppb	94.037 %
Concentration per Run 1	86.228 %	0.103 ppb	0.583 ppb	-0.022 ppb	1.418 ppb	92.806 %	0.000 ppb	0.003 ppb	85.564 %
Concentration per Run 2	100.438 %	0.111 ppb	0.833 ppb	-0.027 ppb	1.767 ppb	100.780 %	0.001 ppb	0.002 ppb	97.733 %
Concentration per Run 3	102.224 %	0.123 ppb	0.680 ppb	-0.031 ppb	2.240 ppb	102.745 %	-0.001 ppb	0.000 ppb	98.815 %
Recovery Percentage 1		22.514 %	13.979 %	-0.264 %	90.428 %		0.029 %	0.899 %	
Concentration RSD	9.1 %	8.8 %	18.0 %	17.1 %	22.8 %	5.3 %	673.3 %	72.4 %	7.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.426 ppb	-0.038 ppb	97.095 %	97.065 %	0.386 ppb	0.010 ppb	93.734 %
Concentration per Run 1	0.369 ppb	-0.050 ppb	89.935 %	89.304 %	0.434 ppb	0.012 ppb	91.702 %
Concentration per Run 2	0.425 ppb	-0.032 ppb	99.090 %	100.212 %	0.411 ppb	0.010 ppb	92.996 %
Concentration per Run 3	0.485 ppb	-0.033 ppb	102.259 %	101.679 %	0.312 ppb	0.008 ppb	96.504 %
Recovery Percentage 1	10.657 %	-7.699 %			38.565 %	0.998 %	
Concentration RSD	13.6 %	25.7 %	6.6 %	7.0 %	16.9 %	19.7 %	2.7 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 22
Analysis label: WG1822896-1 A2-6020S
Analysis started at: 9/3/2023 8:10:01 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 20
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	103.031 %	103.256 %	0.004 ppb	0.399 ppb	15.103 ppb	-0.058 ppb	1.184 ppb	-6.220 ppb	8.739 ppb
Concentration per Run 1	104.189 %	101.370 %	0.007 ppb	0.419 ppb	14.627 ppb	0.362 ppb	1.451 ppb	-8.123 ppb	1.646 ppb
Concentration per Run 2	103.669 %	104.603 %	0.004 ppb	0.397 ppb	14.968 ppb	-0.568 ppb	1.005 ppb	-5.068 ppb	15.991 ppb
Concentration per Run 3	101.234 %	103.795 %	0.001 ppb	0.382 ppb	15.714 ppb	0.032 ppb	1.095 ppb	-5.469 ppb	8.581 ppb
Concentration RSD	1.5 %	1.6 %	67.8 %	4.7 %	3.7 %	811.3 %	19.9 %	26.7 %	82.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	113.268 %	0.002 ppb	0.043 ppb	-0.345 ppb	0.865 ppb	0.004 ppb	-0.353 ppb	-0.039 ppb	-1.660 ppb
Concentration per Run 1	113.349 %	0.003 ppb	0.043 ppb	-0.363 ppb	0.898 ppb	0.003 ppb	-0.349 ppb	-0.038 ppb	-1.627 ppb
Concentration per Run 2	113.641 %	0.006 ppb	0.040 ppb	-0.320 ppb	1.612 ppb	0.005 ppb	-0.352 ppb	-0.049 ppb	-1.689 ppb
Concentration per Run 3	112.813 %	-0.002 ppb	0.045 ppb	-0.352 ppb	0.084 ppb	0.005 ppb	-0.359 ppb	-0.030 ppb	-1.663 ppb
Concentration RSD	0.4 %	190.9 %	6.7 %	6.4 %	88.4 %	24.6 %	1.5 %	24.0 %	1.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	104.905 %	0.039 ppb	0.073 ppb	-0.011 ppb	0.410 ppb	107.310 %	-0.003 ppb	-0.001 ppb	106.140 %
Concentration per Run 1	102.132 %	0.023 ppb	0.029 ppb	-0.008 ppb	0.194 ppb	104.181 %	-0.004 ppb	0.000 ppb	101.261 %
Concentration per Run 2	101.718 %	0.040 ppb	0.031 ppb	-0.013 ppb	0.431 ppb	106.404 %	-0.003 ppb	-0.001 ppb	105.843 %
Concentration per Run 3	110.865 %	0.053 ppb	0.160 ppb	-0.011 ppb	0.603 ppb	111.345 %	-0.004 ppb	0.000 ppb	111.316 %
Concentration RSD	4.9 %	39.4 %	102.9 %	23.4 %	50.1 %	3.4 %	24.1 %	74.1 %	4.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.953 ppb	-0.029 ppb	104.871 %	107.456 %	0.010 ppb	0.004 ppb	133.947 %
Concentration per Run 1	0.929 ppb	-0.044 ppb	102.133 %	102.192 %	-0.003 ppb	0.001 ppb	153.075 %
Concentration per Run 2	0.920 ppb	-0.020 ppb	102.620 %	106.527 %	0.019 ppb	0.005 ppb	117.744 %
Concentration per Run 3	1.010 ppb	-0.022 ppb	109.860 %	113.648 %	0.015 ppb	0.005 ppb	131.023 %
Concentration RSD	5.2 %	46.6 %	4.1 %	5.4 %	115.1 %	55.1 %	13.3 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 23
Analysis label: WG1822896-2D5 A2-6020S
Analysis started at: 9/3/2023 8:14:40 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 21
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	98.152 %	102.111 %	10.539 ppb	214.815 ppb	2,034.895 ppb	2,020.213 ppb	417.189 ppb	2,048.984 ppb	2,082.506 ppb
Concentration per Run 1	99.271 %	101.370 %	10.548 ppb	214.164 ppb	1,987.070 ppb	1,969.126 ppb	402.832 ppb	1,985.457 ppb	2,148.550 ppb
Concentration per Run 2	99.099 %	101.370 %	10.446 ppb	213.453 ppb	2,008.326 ppb	1,963.515 ppb	391.359 ppb	1,930.440 ppb	2,048.119 ppb
Concentration per Run 3	96.086 %	103.592 %	10.623 ppb	216.828 ppb	2,109.288 ppb	2,128.000 ppb	457.375 ppb	2,231.056 ppb	2,050.849 ppb
Concentration RSD	1.8 %	1.3 %	0.8 %	0.8 %	3.2 %	4.6 %	8.5 %	7.8 %	2.7 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.213 %	100.254 ppb	40.524 ppb	101.758 ppb	207.075 ppb	100.471 ppb	100.981 ppb	50.867 ppb	100.843 ppb
Concentration per Run 1	106.089 %	99.944 ppb	40.075 ppb	99.326 ppb	204.837 ppb	100.918 ppb	102.058 ppb	51.573 ppb	102.013 ppb
Concentration per Run 2	107.786 %	99.609 ppb	40.650 ppb	100.394 ppb	205.937 ppb	100.484 ppb	102.265 ppb	51.309 ppb	101.363 ppb
Concentration per Run 3	104.764 %	101.207 ppb	40.847 ppb	105.554 ppb	210.452 ppb	100.010 ppb	98.620 ppb	49.720 ppb	99.152 ppb
Concentration RSD	1.4 %	0.8 %	1.0 %	3.3 %	1.4 %	0.5 %	2.0 %	2.0 %	1.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.006 %	24.536 ppb	23.486 ppb	193.972 ppb	194.580 ppb	103.002 %	10.099 ppb	10.793 ppb	104.049 %
Concentration per Run 1	99.259 %	24.800 ppb	23.581 ppb	190.443 ppb	195.089 ppb	101.156 %	10.179 ppb	10.800 ppb	98.231 %
Concentration per Run 2	102.912 %	24.316 ppb	23.078 ppb	191.277 ppb	192.794 ppb	100.823 %	10.268 ppb	10.859 ppb	101.157 %
Concentration per Run 3	112.847 %	24.493 ppb	23.799 ppb	200.196 ppb	195.858 ppb	107.025 %	9.850 ppb	10.722 ppb	112.760 %
Concentration RSD	6.7 %	1.0 %	1.6 %	2.8 %	0.8 %	3.4 %	2.2 %	0.6 %	7.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	80.262 ppb	403.789 ppb	105.649 %	108.053 %	21.431 ppb	105.063 ppb	110.394 %
Concentration per Run 1	78.671 ppb	396.469 ppb	102.136 %	103.749 %	20.353 ppb	99.119 ppb	112.658 %
Concentration per Run 2	79.266 ppb	400.716 ppb	103.760 %	104.047 %	21.932 ppb	105.664 ppb	107.443 %
Concentration per Run 3	82.849 ppb	414.183 ppb	111.050 %	116.364 %	22.008 ppb	110.407 ppb	111.082 %
Concentration RSD	2.8 %	2.3 %	4.5 %	6.7 %	4.4 %	5.4 %	2.4 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	24	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1822896-3d10 A2-6020S	Rack	1		
Analysis started at:	9/3/2023 8:19:18 PM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	97.591 %	100.719 %	5.295 ppb	116.424 ppb	5,649.110 ppb	2,547.960 ppb	224.481 ppb	1,158.003 ppb	5,447.686 ppb
Concentration per Run 1	99.012 %	94.566 %	5.282 ppb	116.451 ppb	5,752.166 ppb	2,591.897 ppb	223.631 ppb	1,145.102 ppb	5,526.740 ppb
Concentration per Run 2	97.840 %	102.313 %	5.272 ppb	115.856 ppb	5,398.871 ppb	2,452.859 ppb	210.660 ppb	1,093.443 ppb	5,318.099 ppb
Concentration per Run 3	95.923 %	105.276 %	5.333 ppb	116.966 ppb	5,796.295 ppb	2,599.123 ppb	239.151 ppb	1,235.465 ppb	5,498.221 ppb
Concentration RSD	1.6 %	5.5 %	0.6 %	0.5 %	3.9 %	3.2 %	6.4 %	6.2 %	2.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.892 %	48.112 ppb	19.710 ppb	50.540 ppb	98.117 ppb	49.711 ppb	49.444 ppb	25.384 ppb	49.537 ppb
Concentration per Run 1	100.714 %	49.668 ppb	20.477 ppb	52.737 ppb	95.720 ppb	52.481 ppb	51.512 ppb	26.505 ppb	50.315 ppb
Concentration per Run 2	101.760 %	46.059 ppb	18.649 ppb	47.273 ppb	103.415 ppb	48.296 ppb	47.634 ppb	24.607 ppb	47.666 ppb
Concentration per Run 3	100.201 %	48.608 ppb	20.003 ppb	51.609 ppb	95.216 ppb	48.358 ppb	49.186 ppb	25.039 ppb	50.629 ppb
Concentration RSD	0.8 %	3.9 %	4.8 %	5.7 %	4.7 %	4.8 %	3.9 %	3.9 %	3.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	106.294 %	12.474 ppb	12.492 ppb	110.993 ppb	101.257 ppb	101.936 %	5.063 ppb	5.516 ppb	102.383 %
Concentration per Run 1	99.067 %	12.722 ppb	12.764 ppb	108.827 ppb	103.011 ppb	97.716 %	5.190 ppb	5.647 ppb	93.174 %
Concentration per Run 2	107.148 %	12.099 ppb	11.259 ppb	106.125 ppb	98.451 ppb	99.823 %	5.062 ppb	5.531 ppb	98.522 %
Concentration per Run 3	112.668 %	12.600 ppb	13.454 ppb	118.028 ppb	102.309 ppb	108.270 %	4.936 ppb	5.372 ppb	115.453 %
Concentration RSD	6.4 %	2.6 %	9.0 %	5.6 %	2.4 %	5.5 %	2.5 %	2.5 %	11.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	47.806 ppb	209.236 ppb	102.628 %	103.473 %	11.332 ppb	55.095 ppb	101.739 %
Concentration per Run 1	48.671 ppb	214.899 ppb	97.530 %	95.819 %	11.030 ppb	53.661 ppb	100.573 %
Concentration per Run 2	47.543 ppb	205.835 ppb	100.013 %	101.701 %	11.485 ppb	55.917 ppb	98.135 %
Concentration per Run 3	47.205 ppb	206.975 ppb	110.341 %	112.898 %	11.482 ppb	55.707 ppb	106.507 %
Concentration RSD	1.6 %	2.4 %	6.6 %	8.4 %	2.3 %	2.3 %	4.2 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	25	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1822896-4d10 A2-6020S	Rack	1		
Analysis started at:	9/3/2023 8:24:32 PM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	100.141 %	105.366 %	5.288 ppb	116.748 ppb	5,670.926 ppb	2,566.413 ppb	217.939 ppb	1,168.446 ppb	5,763.161 ppb
Concentration per Run 1	101.674 %	101.774 %	5.245 ppb	116.535 ppb	5,751.196 ppb	2,605.538 ppb	222.774 ppb	1,200.422 ppb	5,899.908 ppb
Concentration per Run 2	100.071 %	106.960 %	5.284 ppb	116.737 ppb	5,651.787 ppb	2,538.575 ppb	220.539 ppb	1,153.066 ppb	5,649.315 ppb
Concentration per Run 3	98.676 %	107.364 %	5.335 ppb	116.973 ppb	5,609.794 ppb	2,555.125 ppb	210.503 ppb	1,151.850 ppb	5,740.259 ppb
Concentration RSD	1.5 %	3.0 %	0.9 %	0.2 %	1.3 %	1.4 %	3.0 %	2.4 %	2.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.174 %	50.213 ppb	20.295 ppb	50.890 ppb	104.314 ppb	51.881 ppb	51.945 ppb	26.668 ppb	50.535 ppb
Concentration per Run 1	106.184 %	51.595 ppb	20.577 ppb	52.576 ppb	112.267 ppb	53.038 ppb	52.209 ppb	26.713 ppb	50.566 ppb
Concentration per Run 2	104.402 %	49.444 ppb	20.173 ppb	49.890 ppb	99.032 ppb	51.105 ppb	52.181 ppb	26.697 ppb	51.130 ppb
Concentration per Run 3	104.935 %	49.599 ppb	20.134 ppb	50.203 ppb	101.642 ppb	51.500 ppb	51.446 ppb	26.596 ppb	49.908 ppb
Concentration RSD	0.9 %	2.4 %	1.2 %	2.9 %	6.7 %	2.0 %	0.8 %	0.2 %	1.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	107.137 %	12.653 ppb	12.119 ppb	109.555 ppb	101.311 ppb	103.999 %	5.258 ppb	5.750 ppb	101.660 %
Concentration per Run 1	104.865 %	12.668 ppb	12.297 ppb	111.670 ppb	102.792 ppb	101.180 %	5.444 ppb	6.004 ppb	96.919 %
Concentration per Run 2	106.623 %	12.773 ppb	11.866 ppb	108.866 ppb	100.337 ppb	105.499 %	5.173 ppb	5.612 ppb	104.080 %
Concentration per Run 3	109.922 %	12.518 ppb	12.192 ppb	108.130 ppb	100.805 ppb	105.319 %	5.156 ppb	5.632 ppb	103.980 %
Concentration RSD	2.4 %	1.0 %	1.9 %	1.7 %	1.3 %	2.3 %	3.1 %	3.8 %	4.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	48.189 ppb	209.985 ppb	105.047 %	105.811 %	11.193 ppb	54.439 ppb	106.966 %
Concentration per Run 1	49.189 ppb	214.417 ppb	100.348 %	100.006 %	10.605 ppb	51.175 ppb	113.295 %
Concentration per Run 2	46.978 ppb	205.421 ppb	105.606 %	107.485 %	11.485 ppb	55.425 ppb	104.151 %
Concentration per Run 3	48.399 ppb	210.116 ppb	109.185 %	109.942 %	11.488 ppb	56.717 ppb	103.453 %
Concentration RSD	2.3 %	2.1 %	4.2 %	4.9 %	4.5 %	5.3 %	5.1 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	26	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1822896-5d10 A2-6020S	Rack	1		
Analysis started at:	9/3/2023 8:29:11 PM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	94.046 %	99.057 %	51.222 ppb	61.614 ppb	9,384.186 ppb	6,455.066 ppb	59.569 ppb	5,114.595 ppb	9,772.699 ppb
Concentration per Run 1	96.398 %	97.598 %	50.656 ppb	61.553 ppb	9,521.018 ppb	6,562.484 ppb	58.952 ppb	5,033.794 ppb	9,931.349 ppb
Concentration per Run 2	93.447 %	96.991 %	51.418 ppb	61.648 ppb	9,389.582 ppb	6,466.988 ppb	62.473 ppb	5,163.872 ppb	9,768.566 ppb
Concentration per Run 3	92.292 %	102.582 %	51.592 ppb	61.642 ppb	9,241.958 ppb	6,335.725 ppb	57.283 ppb	5,146.119 ppb	9,618.182 ppb
Concentration RSD	2.3 %	3.1 %	1.0 %	0.1 %	1.5 %	1.8 %	4.4 %	1.4 %	1.6 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	111.109 %	50.298 ppb	50.027 ppb	50.973 ppb	5,005.322 ppb	50.396 ppb	51.872 ppb	51.503 ppb	49.996 ppb
Concentration per Run 1	112.528 %	50.379 ppb	50.313 ppb	51.501 ppb	5,050.596 ppb	51.314 ppb	52.424 ppb	51.312 ppb	49.711 ppb
Concentration per Run 2	110.215 %	50.945 ppb	50.347 ppb	51.183 ppb	5,106.668 ppb	50.740 ppb	52.302 ppb	52.013 ppb	50.469 ppb
Concentration per Run 3	110.583 %	49.569 ppb	49.421 ppb	50.234 ppb	4,858.701 ppb	49.134 ppb	50.890 ppb	51.183 ppb	49.809 ppb
Concentration RSD	1.1 %	1.4 %	1.0 %	1.3 %	2.6 %	2.2 %	1.6 %	0.9 %	0.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.369 %	49.313 ppb	47.693 ppb	61.858 ppb	52.758 ppb	98.210 %	2.077 ppb	49.745 ppb	97.196 %
Concentration per Run 1	97.698 %	49.712 ppb	47.252 ppb	62.468 ppb	51.852 ppb	96.044 %	2.094 ppb	49.696 ppb	95.137 %
Concentration per Run 2	98.181 %	49.794 ppb	48.340 ppb	61.772 ppb	53.016 ppb	98.704 %	2.068 ppb	49.433 ppb	97.953 %
Concentration per Run 3	102.229 %	48.432 ppb	47.489 ppb	61.335 ppb	53.406 ppb	99.882 %	2.070 ppb	50.106 ppb	98.497 %
Concentration RSD	2.5 %	1.5 %	1.2 %	0.9 %	1.5 %	2.0 %	0.7 %	0.7 %	1.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	53.173 ppb	51.287 ppb	102.353 %	101.902 %	48.507 ppb	45.245 ppb	105.914 %
Concentration per Run 1	53.490 ppb	51.268 ppb	102.116 %	100.697 %	46.164 ppb	43.408 ppb	109.305 %
Concentration per Run 2	52.521 ppb	50.925 ppb	100.335 %	101.430 %	49.006 ppb	45.444 ppb	105.103 %
Concentration per Run 3	53.509 ppb	51.669 ppb	104.608 %	103.580 %	50.350 ppb	46.882 ppb	103.333 %
Concentration RSD	1.1 %	0.7 %	2.1 %	1.5 %	4.4 %	3.9 %	2.9 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 27
Analysis label: WG1822896-6d5 A2-6020S
Analysis started at: 9/3/2023 8:33:47 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 26
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	99.968 %	98.294 %	0.006 ppb	16.730 ppb	9,716.667 ppb	3,276.793 ppb	22.670 ppb	296.662 ppb	9,713.233 ppb
Concentration per Run 1	100.072 %	97.059 %	0.006 ppb	16.934 ppb	9,634.119 ppb	3,283.968 ppb	21.647 ppb	292.688 ppb	9,689.513 ppb
Concentration per Run 2	99.857 %	98.945 %	0.006 ppb	16.676 ppb	9,557.779 ppb	3,221.977 ppb	22.614 ppb	300.355 ppb	9,901.309 ppb
Concentration per Run 3	99.975 %	98.877 %	0.006 ppb	16.579 ppb	9,958.102 ppb	3,324.433 ppb	23.749 ppb	296.945 ppb	9,548.877 ppb
Concentration RSD	0.1 %	1.1 %	5.2 %	1.1 %	2.2 %	1.6 %	4.6 %	1.3 %	1.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	105.147 %	0.256 ppb	0.069 ppb	-0.127 ppb	12.404 ppb	0.006 ppb	-0.240 ppb	0.533 ppb	-1.032 ppb
Concentration per Run 1	103.698 %	0.220 ppb	0.076 ppb	-0.136 ppb	11.219 ppb	0.012 ppb	-0.229 ppb	0.523 ppb	-1.135 ppb
Concentration per Run 2	104.841 %	0.293 ppb	0.067 ppb	-0.190 ppb	16.603 ppb	0.006 ppb	-0.236 ppb	0.597 ppb	-0.913 ppb
Concentration per Run 3	106.902 %	0.256 ppb	0.064 ppb	-0.055 ppb	9.389 ppb	0.000 ppb	-0.255 ppb	0.478 ppb	-1.050 ppb
Concentration RSD	1.5 %	14.2 %	9.1 %	53.7 %	30.2 %	100.6 %	5.6 %	11.4 %	10.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.764 %	0.341 ppb	0.771 ppb	27.784 ppb	2.823 ppb	99.140 %	-0.003 ppb	0.003 ppb	98.895 %
Concentration per Run 1	97.099 %	0.288 ppb	0.464 ppb	27.686 ppb	2.110 ppb	94.931 %	-0.003 ppb	0.004 ppb	92.326 %
Concentration per Run 2	97.282 %	0.369 ppb	0.697 ppb	27.468 ppb	2.967 ppb	98.820 %	-0.003 ppb	0.001 ppb	97.514 %
Concentration per Run 3	110.910 %	0.366 ppb	1.151 ppb	28.196 ppb	3.392 ppb	103.668 %	-0.004 ppb	0.003 ppb	106.844 %
Concentration RSD	7.8 %	13.5 %	45.3 %	1.3 %	23.1 %	4.4 %	19.5 %	47.8 %	7.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.492 ppb	5.530 ppb	99.925 %	101.060 %	0.290 ppb	0.031 ppb	96.007 %
Concentration per Run 1	1.447 ppb	5.488 ppb	96.468 %	96.274 %	0.322 ppb	0.031 ppb	96.876 %
Concentration per Run 2	1.513 ppb	5.614 ppb	97.672 %	100.883 %	0.301 ppb	0.031 ppb	93.977 %
Concentration per Run 3	1.517 ppb	5.487 ppb	105.635 %	106.022 %	0.246 ppb	0.033 ppb	97.169 %
Concentration RSD	2.7 %	1.3 %	5.0 %	4.8 %	13.5 %	4.2 %	1.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	28	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2343836-06 A2-6020S	Rack	1		
Analysis started at:	9/3/2023 8:38:24 PM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	100.453 %	102.021 %	0.005 ppb	79.836 ppb	49,756.643 ppb	17,388.388 ppb	127.278 ppb	1,620.206 ppb	50,587.453 ppb
Concentration per Run 1	103.139 %	95.577 %	0.002 ppb	79.578 ppb	51,069.309 ppb	17,696.647 ppb	124.574 ppb	1,580.144 ppb	50,328.206 ppb
Concentration per Run 2	100.679 %	100.359 %	0.008 ppb	80.100 ppb	49,127.958 ppb	17,118.165 ppb	123.977 ppb	1,561.288 ppb	48,687.010 ppb
Concentration per Run 3	97.542 %	110.126 %	0.005 ppb	79.830 ppb	49,072.662 ppb	17,350.351 ppb	133.283 ppb	1,719.186 ppb	52,747.144 ppb
Concentration RSD	2.8 %	7.3 %	64.2 %	0.3 %	2.3 %	1.7 %	4.1 %	5.3 %	4.0 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	112.808 %	1.365 ppb	0.541 ppb	0.819 ppb	17.324 ppb	0.039 ppb	0.260 ppb	2.863 ppb	1.559 ppb
Concentration per Run 1	114.309 %	1.488 ppb	0.565 ppb	0.738 ppb	18.693 ppb	0.043 ppb	0.293 ppb	2.851 ppb	1.623 ppb
Concentration per Run 2	113.533 %	1.251 ppb	0.558 ppb	0.828 ppb	17.760 ppb	0.037 ppb	0.205 ppb	2.871 ppb	1.490 ppb
Concentration per Run 3	110.583 %	1.357 ppb	0.500 ppb	0.892 ppb	15.519 ppb	0.038 ppb	0.281 ppb	2.868 ppb	1.564 ppb
Concentration RSD	1.7 %	8.7 %	6.6 %	9.5 %	9.4 %	9.0 %	18.5 %	0.4 %	4.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	104.474 %	0.986 ppb	0.382 ppb	143.410 ppb	1.694 ppb	99.649 %	-0.003 ppb	0.005 ppb	99.584 %
Concentration per Run 1	100.305 %	1.012 ppb	0.234 ppb	142.605 ppb	1.266 ppb	94.830 %	-0.002 ppb	0.001 ppb	91.241 %
Concentration per Run 2	100.659 %	1.033 ppb	0.381 ppb	140.527 ppb	1.730 ppb	99.508 %	-0.004 ppb	0.008 ppb	96.266 %
Concentration per Run 3	112.457 %	0.913 ppb	0.532 ppb	147.098 ppb	2.086 ppb	104.609 %	-0.002 ppb	0.004 ppb	111.245 %
Concentration RSD	6.6 %	6.5 %	39.0 %	2.3 %	24.3 %	4.9 %	37.8 %	76.8 %	10.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.810 ppb	27.795 ppb	102.506 %	103.864 %	0.048 ppb	0.114 ppb	92.289 %
Concentration per Run 1	1.819 ppb	29.070 ppb	96.608 %	95.475 %	0.032 ppb	0.111 ppb	92.546 %
Concentration per Run 2	1.807 ppb	26.721 ppb	100.674 %	102.228 %	0.058 ppb	0.115 ppb	89.723 %
Concentration per Run 3	1.804 ppb	27.595 ppb	110.237 %	113.889 %	0.054 ppb	0.117 ppb	94.599 %
Concentration RSD	0.4 %	4.3 %	6.8 %	9.0 %	28.9 %	2.5 %	2.7 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 29
Analysis label: L2343526-01 A2-6020S
Analysis started at: 9/3/2023 8:43:03 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 27
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	94.759 %	99.731 %	0.005 ppb	133.202 ppb	85,601.314 ppb	16,633.186 ppb	2,085.587 ppb	6,194.907 ppb	47,824.382 ppb
Concentration per Run 1	96.954 %	92.748 %	0.004 ppb	132.351 ppb	87,435.417 ppb	17,339.267 ppb	2,113.217 ppb	6,474.697 ppb	49,450.738 ppb
Concentration per Run 2	94.745 %	98.608 %	0.008 ppb	133.400 ppb	84,968.256 ppb	16,270.424 ppb	2,023.504 ppb	5,812.164 ppb	45,137.697 ppb
Concentration per Run 3	92.578 %	107.836 %	0.004 ppb	133.855 ppb	84,400.271 ppb	16,289.869 ppb	2,120.040 ppb	6,297.861 ppb	48,884.712 ppb
Concentration RSD	2.3 %	7.6 %	43.1 %	0.6 %	1.9 %	3.7 %	2.6 %	5.5 %	4.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	104.353 %	1.583 ppb	3.751 ppb	4.509 ppb	40.304 ppb	0.138 ppb	2.013 ppb	22.619 ppb	28.352 ppb
Concentration per Run 1	104.936 %	1.744 ppb	3.953 ppb	4.578 ppb	42.355 ppb	0.151 ppb	2.171 ppb	23.787 ppb	29.121 ppb
Concentration per Run 2	103.951 %	1.443 ppb	3.630 ppb	4.415 ppb	39.174 ppb	0.133 ppb	1.934 ppb	22.655 ppb	28.446 ppb
Concentration per Run 3	104.173 %	1.562 ppb	3.669 ppb	4.533 ppb	39.382 ppb	0.130 ppb	1.934 ppb	21.413 ppb	27.488 ppb
Concentration RSD	0.5 %	9.6 %	4.7 %	1.9 %	4.4 %	8.0 %	6.8 %	5.2 %	2.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.329 %	0.468 ppb	0.529 ppb	133.870 ppb	1.521 ppb	96.233 %	0.004 ppb	0.013 ppb	98.715 %
Concentration per Run 1	92.889 %	0.461 ppb	0.264 ppb	134.049 ppb	1.331 ppb	90.367 %	0.007 ppb	0.010 ppb	89.736 %
Concentration per Run 2	97.087 %	0.468 ppb	0.684 ppb	129.273 ppb	1.505 ppb	96.482 %	0.002 ppb	0.019 ppb	97.770 %
Concentration per Run 3	108.009 %	0.474 ppb	0.639 ppb	138.288 ppb	1.729 ppb	101.849 %	0.004 ppb	0.008 ppb	108.638 %
Concentration RSD	7.9 %	1.4 %	43.6 %	3.4 %	13.1 %	6.0 %	47.2 %	47.2 %	9.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.454 ppb	16.067 ppb	100.160 %	101.830 %	0.016 ppb	1.342 ppb	89.845 %
Concentration per Run 1	1.486 ppb	17.010 ppb	93.481 %	93.453 %	0.005 ppb	1.310 ppb	89.657 %
Concentration per Run 2	1.394 ppb	15.709 ppb	100.224 %	100.783 %	0.020 ppb	1.362 ppb	87.671 %
Concentration per Run 3	1.481 ppb	15.481 ppb	106.776 %	111.253 %	0.024 ppb	1.356 ppb	92.206 %
Concentration RSD	3.6 %	5.1 %	6.6 %	8.8 %	62.2 %	2.1 %	2.5 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 30
Analysis label: L2343526-02 A2-6020S
Analysis started at: 9/3/2023 8:47:40 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 28
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	94.687 %	99.686 %	0.003 ppb	129.954 ppb	83,310.752 ppb	16,051.124 ppb	54.677 ppb	5,710.952 ppb	45,954.007 ppb
Concentration per Run 1	96.929 %	92.748 %	0.004 ppb	128.460 ppb	85,092.473 ppb	16,544.804 ppb	56.758 ppb	5,875.856 ppb	47,386.704 ppb
Concentration per Run 2	94.341 %	99.551 %	0.003 ppb	129.893 ppb	81,683.502 ppb	15,600.165 ppb	50.252 ppb	5,394.592 ppb	43,957.570 ppb
Concentration per Run 3	92.791 %	106.758 %	0.002 ppb	131.510 ppb	83,156.281 ppb	16,008.402 ppb	57.021 ppb	5,862.409 ppb	46,517.746 ppb
Concentration RSD	2.2 %	7.0 %	40.8 %	1.2 %	2.1 %	3.0 %	7.0 %	4.8 %	3.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.189 %	1.521 ppb	0.264 ppb	2.530 ppb	11.417 ppb	0.104 ppb	0.776 ppb	6.057 ppb	9.002 ppb
Concentration per Run 1	102.763 %	1.539 ppb	0.248 ppb	2.424 ppb	13.279 ppb	0.097 ppb	0.804 ppb	6.432 ppb	9.357 ppb
Concentration per Run 2	102.553 %	1.553 ppb	0.269 ppb	2.482 ppb	8.233 ppb	0.104 ppb	0.756 ppb	6.009 ppb	9.012 ppb
Concentration per Run 3	101.250 %	1.471 ppb	0.274 ppb	2.685 ppb	12.740 ppb	0.112 ppb	0.769 ppb	5.729 ppb	8.639 ppb
Concentration RSD	0.8 %	2.9 %	5.3 %	5.4 %	24.3 %	7.2 %	3.2 %	5.8 %	4.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.260 %	0.469 ppb	0.533 ppb	132.350 ppb	0.971 ppb	94.140 %	-0.004 ppb	0.014 ppb	96.126 %
Concentration per Run 1	91.383 %	0.536 ppb	0.622 ppb	134.269 ppb	0.807 ppb	87.689 %	-0.004 ppb	0.012 ppb	85.099 %
Concentration per Run 2	95.604 %	0.513 ppb	0.325 ppb	126.878 ppb	0.940 ppb	94.541 %	-0.004 ppb	0.012 ppb	96.373 %
Concentration per Run 3	107.792 %	0.359 ppb	0.652 ppb	135.902 ppb	1.166 ppb	100.190 %	-0.003 ppb	0.018 ppb	106.906 %
Concentration RSD	8.7 %	20.5 %	33.9 %	3.6 %	18.7 %	6.6 %	16.6 %	23.2 %	11.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.441 ppb	16.002 ppb	98.671 %	100.562 %	0.002 ppb	0.063 ppb	87.463 %
Concentration per Run 1	1.479 ppb	16.546 ppb	92.237 %	92.061 %	-0.006 ppb	0.062 ppb	85.766 %
Concentration per Run 2	1.398 ppb	15.492 ppb	97.130 %	98.111 %	0.006 ppb	0.063 ppb	84.087 %
Concentration per Run 3	1.448 ppb	15.968 ppb	106.645 %	111.513 %	0.007 ppb	0.063 ppb	92.536 %
Concentration RSD	2.8 %	3.3 %	7.4 %	9.9 %	290.8 %	0.7 %	5.1 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 31
Analysis label: L2343526-03 A2-6020S
Analysis started at: 9/3/2023 8:52:17 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 29
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	92.418 %	99.551 %	0.001 ppb	132.072 ppb	82,653.549 ppb	15,099.964 ppb	723.736 ppb	5,825.495 ppb	43,015.752 ppb
Concentration per Run 1	95.785 %	96.385 %	0.003 ppb	130.476 ppb	82,752.042 ppb	14,619.021 ppb	708.831 ppb	5,759.066 ppb	42,529.811 ppb
Concentration per Run 2	91.380 %	98.002 %	0.002 ppb	131.741 ppb	81,289.765 ppb	14,990.848 ppb	702.169 ppb	5,636.291 ppb	42,096.536 ppb
Concentration per Run 3	90.089 %	104.266 %	-0.002 ppb	133.999 ppb	83,918.839 ppb	15,690.022 ppb	760.207 ppb	6,081.129 ppb	44,420.909 ppb
Concentration RSD	3.2 %	4.2 %	230.7 %	1.4 %	1.6 %	3.6 %	4.4 %	3.9 %	2.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	104.958 %	2.072 ppb	1.132 ppb	1.441 ppb	25.707 ppb	0.108 ppb	1.159 ppb	11.762 ppb	15.044 ppb
Concentration per Run 1	106.298 %	2.015 ppb	1.142 ppb	1.484 ppb	25.607 ppb	0.116 ppb	1.242 ppb	12.010 ppb	15.131 ppb
Concentration per Run 2	104.116 %	1.986 ppb	1.068 ppb	1.494 ppb	26.824 ppb	0.101 ppb	1.136 ppb	11.824 ppb	14.998 ppb
Concentration per Run 3	104.459 %	2.215 ppb	1.186 ppb	1.344 ppb	24.691 ppb	0.105 ppb	1.098 ppb	11.450 ppb	15.002 ppb
Concentration RSD	1.1 %	6.0 %	5.3 %	5.8 %	4.2 %	7.2 %	6.4 %	2.4 %	0.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.539 %	0.570 ppb	0.595 ppb	125.347 ppb	0.845 ppb	94.590 %	0.000 ppb	0.016 ppb	97.373 %
Concentration per Run 1	95.805 %	0.552 ppb	0.435 ppb	123.038 ppb	0.685 ppb	90.168 %	-0.001 ppb	0.013 ppb	89.674 %
Concentration per Run 2	97.133 %	0.564 ppb	0.765 ppb	122.067 ppb	0.890 ppb	93.305 %	0.001 ppb	0.017 ppb	93.732 %
Concentration per Run 3	105.679 %	0.593 ppb	0.584 ppb	130.936 ppb	0.961 ppb	100.298 %	-0.001 ppb	0.018 ppb	108.715 %
Concentration RSD	5.4 %	3.7 %	27.7 %	3.9 %	17.0 %	5.5 %	612.8 %	16.7 %	10.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.356 ppb	15.660 ppb	101.680 %	102.444 %	-0.006 ppb	0.601 ppb	96.845 %
Concentration per Run 1	1.339 ppb	15.860 ppb	96.985 %	97.491 %	-0.013 ppb	0.571 ppb	99.216 %
Concentration per Run 2	1.393 ppb	15.643 ppb	99.762 %	98.079 %	-0.001 ppb	0.616 ppb	93.475 %
Concentration per Run 3	1.338 ppb	15.477 ppb	108.294 %	111.761 %	-0.003 ppb	0.617 ppb	97.845 %
Concentration RSD	2.3 %	1.2 %	5.8 %	7.9 %	113.8 %	4.4 %	3.1 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	32	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/3/2023 8:56:55 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	90.694 %	99.686 %	61.246 ppb	55.368 ppb	6,098.979 ppb	6,087.936 ppb	59.007 ppb	6,055.299 ppb	6,264.399 ppb
Concentration per Run 1	92.164 %	92.883 %	61.117 ppb	54.810 ppb	6,373.921 ppb	6,300.798 ppb	58.215 ppb	6,201.713 ppb	6,429.803 ppb
Concentration per Run 2	90.776 %	99.012 %	60.897 ppb	55.474 ppb	6,089.992 ppb	6,112.292 ppb	63.629 ppb	6,400.868 ppb	6,488.487 ppb
Concentration per Run 3	89.142 %	107.162 %	61.724 ppb	55.821 ppb	5,833.024 ppb	5,850.719 ppb	55.178 ppb	5,563.316 ppb	5,874.907 ppb
Recovery Percentage 1			102.076 %	92.280 %	101.650 %	101.466 %	98.345 %	100.922 %	104.407 %
Concentration RSD	1.7 %	7.2 %	0.7 %	0.9 %	4.4 %	3.7 %	7.3 %	7.2 %	5.4 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.139 %	59.226 ppb	60.300 ppb	59.961 ppb	6,003.044 ppb	60.574 ppb	60.547 ppb	61.583 ppb	60.682 ppb
Concentration per Run 1	103.046 %	60.835 ppb	62.556 ppb	61.152 ppb	6,265.774 ppb	63.717 ppb	64.109 ppb	64.676 ppb	62.267 ppb
Concentration per Run 2	103.420 %	58.571 ppb	59.657 ppb	60.029 ppb	5,965.642 ppb	59.556 ppb	58.494 ppb	60.284 ppb	59.880 ppb
Concentration per Run 3	102.951 %	58.271 ppb	58.689 ppb	58.703 ppb	5,777.717 ppb	58.447 ppb	59.037 ppb	59.789 ppb	59.900 ppb
Recovery Percentage 1		98.709 %	100.501 %	99.935 %	100.051 %	100.956 %	100.911 %	102.639 %	101.137 %
Concentration RSD	0.2 %	2.4 %	3.3 %	2.0 %	4.1 %	4.6 %	5.1 %	4.4 %	2.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	97.468 %	60.995 ppb	60.623 ppb	52.890 ppb	60.280 ppb	95.861 %	59.707 ppb	61.740 ppb	95.415 %
Concentration per Run 1	91.044 %	63.476 ppb	61.161 ppb	53.569 ppb	62.412 ppb	90.564 %	62.195 ppb	63.509 ppb	88.700 %
Concentration per Run 2	100.673 %	59.953 ppb	60.813 ppb	52.788 ppb	58.746 ppb	97.462 %	58.282 ppb	60.476 ppb	98.351 %
Concentration per Run 3	100.688 %	59.556 ppb	59.896 ppb	52.315 ppb	59.682 ppb	99.557 %	58.645 ppb	61.235 ppb	99.195 %
Recovery Percentage 1		101.658 %	101.039 %	88.150 %	100.467 %		99.512 %	102.900 %	
Concentration RSD	5.7 %	3.5 %	1.1 %	1.2 %	3.2 %	4.9 %	3.6 %	2.6 %	6.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.052 ppb	60.982 ppb	98.825 %	100.934 %	63.985 ppb	63.332 ppb	94.786 %
Concentration per Run 1	63.102 ppb	61.635 ppb	92.733 %	93.578 %	64.115 ppb	63.189 ppb	92.864 %
Concentration per Run 2	60.236 ppb	62.739 ppb	101.717 %	107.250 %	63.834 ppb	63.065 ppb	95.477 %
Concentration per Run 3	59.817 ppb	58.572 ppb	102.027 %	101.973 %	64.005 ppb	63.742 ppb	96.016 %
Recovery Percentage 1	101.753 %	101.637 %			106.641 %	105.553 %	
Concentration RSD	2.9 %	3.5 %	5.3 %	6.8 %	0.2 %	0.6 %	1.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	33	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/3/2023 9:01:37 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	91.846 %	93.758 %	0.005 ppb	0.885 ppb	-2.425 ppb	-2.231 ppb	-1.435 ppb	-11.109 ppb	-6.486 ppb
Concentration per Run 1	93.332 %	89.245 %	0.006 ppb	0.879 ppb	-1.821 ppb	-2.156 ppb	-1.444 ppb	-10.326 ppb	-6.477 ppb
Concentration per Run 2	91.761 %	95.981 %	0.005 ppb	0.843 ppb	-2.252 ppb	-2.425 ppb	-1.280 ppb	-9.867 ppb	-6.211 ppb
Concentration per Run 3	90.445 %	96.048 %	0.004 ppb	0.934 ppb	-3.201 ppb	-2.111 ppb	-1.579 ppb	-13.133 ppb	-6.769 ppb
Recovery Percentage 1			1.002 %	8.853 %	-2.425 %	-3.187 %	-14.345 %	-11.109 %	-6.486 %
Concentration RSD	1.6 %	4.2 %	18.2 %	5.2 %	29.1 %	7.6 %	10.4 %	15.9 %	4.3 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.454 %	0.013 ppb	-0.008 ppb	-0.331 ppb	11.111 ppb	-0.003 ppb	-0.240 ppb	-0.096 ppb	-1.901 ppb
Concentration per Run 1	93.427 %	0.010 ppb	-0.010 ppb	-0.325 ppb	10.030 ppb	-0.003 ppb	-0.247 ppb	-0.096 ppb	-1.879 ppb
Concentration per Run 2	91.407 %	0.012 ppb	-0.016 ppb	-0.317 ppb	11.759 ppb	-0.001 ppb	-0.238 ppb	-0.097 ppb	-1.904 ppb
Concentration per Run 3	92.529 %	0.017 ppb	0.003 ppb	-0.352 ppb	11.542 ppb	-0.004 ppb	-0.235 ppb	-0.094 ppb	-1.919 ppb
Recovery Percentage 1		0.253 %	-0.796 %	-33.137 %	22.221 %	-0.502 %	-12.005 %	-9.559 %	-38.011 %
Concentration RSD	1.1 %	28.2 %	121.2 %	5.6 %	8.5 %	51.0 %	2.7 %	1.7 %	1.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.367 %	0.110 ppb	0.742 ppb	-0.039 ppb	1.426 ppb	95.819 %	-0.001 ppb	0.001 ppb	96.065 %
Concentration per Run 1	91.051 %	0.099 ppb	0.470 ppb	-0.036 ppb	1.055 ppb	91.572 %	-0.001 ppb	0.001 ppb	89.439 %
Concentration per Run 2	99.260 %	0.085 ppb	0.962 ppb	-0.042 ppb	1.588 ppb	98.032 %	0.000 ppb	0.003 ppb	102.666 %
Concentration per Run 3	95.789 %	0.147 ppb	0.792 ppb	-0.039 ppb	1.635 ppb	97.854 %	-0.003 ppb	0.001 ppb	96.089 %
Recovery Percentage 1		22.064 %	14.832 %	-0.388 %	71.292 %		-0.300 %	0.605 %	
Concentration RSD	4.3 %	29.6 %	33.7 %	7.6 %	22.6 %	3.8 %	147.2 %	94.2 %	6.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.228 ppb	-0.042 ppb	95.849 %	97.078 %	0.325 ppb	0.007 ppb	98.966 %
Concentration per Run 1	0.218 ppb	-0.046 ppb	91.800 %	92.728 %	0.376 ppb	0.008 ppb	98.308 %
Concentration per Run 2	0.235 ppb	-0.040 ppb	98.533 %	101.274 %	0.333 ppb	0.006 ppb	100.884 %
Concentration per Run 3	0.230 ppb	-0.040 ppb	97.213 %	97.233 %	0.266 ppb	0.007 ppb	97.707 %
Recovery Percentage 1	5.691 %	-8.421 %			32.496 %	0.674 %	
Concentration RSD	3.9 %	8.6 %	3.7 %	4.4 %	17.0 %	13.6 %	1.7 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 34
Analysis label: WG1822892-1 A2-6020T
Analysis started at: 9/3/2023 9:06:19 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 39
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	94.263 %	94.836 %	0.005 ppb	0.413 ppb	-3.108 ppb	-0.232 ppb	0.264 ppb	-13.620 ppb	0.729 ppb
Concentration per Run 1	94.986 %	89.515 %	0.004 ppb	0.392 ppb	-2.482 ppb	-0.121 ppb	0.412 ppb	-16.859 ppb	0.440 ppb
Concentration per Run 2	94.784 %	100.157 %	0.006 ppb	0.419 ppb	-2.948 ppb	-0.129 ppb	0.058 ppb	-9.380 ppb	1.613 ppb
Concentration per Run 3	93.019 %	94.836 %	0.006 ppb	0.429 ppb	-3.894 ppb	-0.447 ppb	0.321 ppb	-14.621 ppb	0.134 ppb
Concentration RSD	1.1 %	5.6 %	26.1 %	4.6 %	23.1 %	80.1 %	69.9 %	28.2 %	107.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	90.079 %	-0.006 ppb	0.075 ppb	-0.359 ppb	0.107 ppb	-0.002 ppb	1.934 ppb	0.185 ppb	-1.862 ppb
Concentration per Run 1	89.439 %	-0.008 ppb	0.082 ppb	-0.363 ppb	-0.616 ppb	-0.002 ppb	2.109 ppb	0.209 ppb	-1.834 ppb
Concentration per Run 2	90.400 %	-0.001 ppb	0.070 ppb	-0.355 ppb	-0.004 ppb	-0.003 ppb	1.891 ppb	0.150 ppb	-1.887 ppb
Concentration per Run 3	90.397 %	-0.009 ppb	0.073 ppb	-0.359 ppb	0.941 ppb	-0.003 ppb	1.801 ppb	0.195 ppb	-1.864 ppb
Concentration RSD	0.6 %	69.5 %	8.3 %	1.2 %	733.3 %	31.9 %	8.2 %	16.9 %	1.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.909 %	-0.001 ppb	0.200 ppb	-0.032 ppb	0.355 ppb	96.040 %	-0.004 ppb	0.000 ppb	93.991 %
Concentration per Run 1	85.562 %	-0.026 ppb	0.220 ppb	-0.031 ppb	0.215 ppb	89.522 %	-0.004 ppb	0.002 ppb	83.601 %
Concentration per Run 2	101.684 %	0.007 ppb	0.201 ppb	-0.030 ppb	0.378 ppb	99.230 %	-0.004 ppb	0.000 ppb	102.411 %
Concentration per Run 3	94.480 %	0.016 ppb	0.179 ppb	-0.036 ppb	0.472 ppb	99.370 %	-0.005 ppb	-0.001 ppb	95.961 %
Concentration RSD	8.6 %	2,375.3 %	10.3 %	10.1 %	36.6 %	5.9 %	15.4 %	375.6 %	10.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.105 ppb	-0.011 ppb	95.646 %	96.956 %	0.042 ppb	-0.002 ppb	93.260 %
Concentration per Run 1	0.103 ppb	-0.015 ppb	89.278 %	87.186 %	0.021 ppb	-0.002 ppb	91.946 %
Concentration per Run 2	0.096 ppb	-0.015 ppb	100.363 %	105.432 %	0.053 ppb	-0.001 ppb	95.412 %
Concentration per Run 3	0.117 ppb	-0.001 ppb	97.296 %	98.252 %	0.053 ppb	-0.002 ppb	92.423 %
Concentration RSD	10.2 %	76.7 %	6.0 %	9.5 %	43.5 %	26.6 %	2.0 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	35	User name	ALPHALAB\Metals-Instrument	Comment	fb
Analysis label:	L2343526-06 A2-6020S	Rack	1		
Analysis started at:	9/3/2023 9:10:56 PM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	94.877 %	97.665 %	0.000 ppb	1.880 ppb	26.647 ppb	-0.265 ppb	1.086 ppb	-2.227 ppb	-2.778 ppb
Concentration per Run 1	96.247 %	90.458 %	-0.002 ppb	1.805 ppb	28.838 ppb	-0.746 ppb	1.167 ppb	-3.356 ppb	1.424 ppb
Concentration per Run 2	94.782 %	103.997 %	0.000 ppb	1.910 ppb	25.699 ppb	0.081 ppb	1.098 ppb	0.030 ppb	-5.497 ppb
Concentration per Run 3	93.603 %	98.541 %	0.001 ppb	1.924 ppb	25.403 ppb	-0.129 ppb	0.993 ppb	-3.356 ppb	-4.262 ppb
Concentration RSD	1.4 %	7.0 %	703.1 %	3.5 %	7.1 %	162.4 %	8.1 %	87.8 %	132.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.005 %	-0.002 ppb	0.046 ppb	-0.314 ppb	0.441 ppb	0.008 ppb	-0.319 ppb	0.045 ppb	-1.649 ppb
Concentration per Run 1	98.076 %	0.001 ppb	0.026 ppb	-0.292 ppb	0.720 ppb	0.012 ppb	-0.294 ppb	0.100 ppb	-1.605 ppb
Concentration per Run 2	97.865 %	-0.005 ppb	0.059 ppb	-0.328 ppb	-0.035 ppb	0.007 ppb	-0.327 ppb	0.012 ppb	-1.690 ppb
Concentration per Run 3	98.073 %	0.000 ppb	0.052 ppb	-0.322 ppb	0.636 ppb	0.005 ppb	-0.334 ppb	0.022 ppb	-1.654 ppb
Concentration RSD	0.1 %	206.3 %	37.7 %	6.3 %	93.9 %	42.8 %	6.7 %	109.0 %	2.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.713 %	0.036 ppb	0.081 ppb	0.028 ppb	0.206 ppb	98.934 %	-0.004 ppb	0.001 ppb	97.437 %
Concentration per Run 1	88.827 %	0.092 ppb	0.087 ppb	0.038 ppb	0.051 ppb	93.321 %	-0.004 ppb	0.003 ppb	91.428 %
Concentration per Run 2	103.177 %	-0.004 ppb	0.027 ppb	0.026 ppb	0.185 ppb	101.283 %	-0.003 ppb	0.000 ppb	106.719 %
Concentration per Run 3	95.135 %	0.020 ppb	0.131 ppb	0.019 ppb	0.383 ppb	102.198 %	-0.004 ppb	-0.001 ppb	94.163 %
Concentration RSD	7.5 %	138.3 %	63.8 %	34.0 %	81.0 %	4.9 %	9.6 %	376.7 %	8.4 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.195 ppb	0.076 ppb	98.842 %	99.955 %	0.011 ppb	0.009 ppb	102.221 %
Concentration per Run 1	1.222 ppb	0.077 ppb	94.419 %	94.454 %	0.000 ppb	0.008 ppb	104.177 %
Concentration per Run 2	1.145 ppb	0.075 ppb	102.741 %	105.759 %	0.016 ppb	0.009 ppb	104.309 %
Concentration per Run 3	1.218 ppb	0.075 ppb	99.366 %	99.653 %	0.018 ppb	0.011 ppb	98.176 %
Concentration RSD	3.6 %	1.3 %	4.2 %	5.7 %	85.1 %	15.8 %	3.4 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	36	User name	ALPHALAB\Metals-Instrument	Comment	fb
Analysis label:	L2343836-07 A2-6020S	Rack	1		
Analysis started at:	9/3/2023 9:15:35 PM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	96.564 %	96.722 %	0.001 ppb	1.857 ppb	30.116 ppb	1.349 ppb	42.124 ppb	-3.021 ppb	4.688 ppb
Concentration per Run 1	98.314 %	94.903 %	0.002 ppb	1.797 ppb	31.661 ppb	1.386 ppb	43.245 ppb	-3.739 ppb	7.015 ppb
Concentration per Run 2	96.288 %	98.271 %	0.004 ppb	1.873 ppb	29.859 ppb	1.052 ppb	41.875 ppb	-3.711 ppb	6.530 ppb
Concentration per Run 3	95.090 %	96.991 %	-0.003 ppb	1.901 ppb	28.828 ppb	1.609 ppb	41.251 ppb	-1.612 ppb	0.518 ppb
Concentration RSD	1.7 %	1.8 %	269.0 %	2.9 %	4.8 %	20.8 %	2.4 %	40.4 %	77.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.079 %	0.008 ppb	0.193 ppb	0.200 ppb	3.203 ppb	0.002 ppb	-0.296 ppb	0.415 ppb	-0.671 ppb
Concentration per Run 1	99.247 %	0.009 ppb	0.210 ppb	0.271 ppb	3.609 ppb	0.005 ppb	-0.275 ppb	0.500 ppb	-0.577 ppb
Concentration per Run 2	98.026 %	-0.001 ppb	0.205 ppb	0.213 ppb	3.934 ppb	0.003 ppb	-0.326 ppb	0.405 ppb	-0.600 ppb
Concentration per Run 3	96.963 %	0.015 ppb	0.166 ppb	0.116 ppb	2.066 ppb	-0.003 ppb	-0.288 ppb	0.341 ppb	-0.836 ppb
Concentration RSD	1.2 %	105.7 %	12.4 %	39.1 %	31.2 %	253.8 %	9.0 %	19.2 %	21.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.113 %	0.005 ppb	0.004 ppb	-0.024 ppb	0.091 ppb	98.142 %	-0.004 ppb	0.000 ppb	97.253 %
Concentration per Run 1	92.708 %	0.012 ppb	0.016 ppb	-0.023 ppb	-0.023 ppb	95.182 %	-0.004 ppb	0.000 ppb	93.058 %
Concentration per Run 2	100.252 %	0.004 ppb	-0.015 ppb	-0.026 ppb	0.121 ppb	100.378 %	-0.003 ppb	0.000 ppb	99.109 %
Concentration per Run 3	101.378 %	-0.003 ppb	0.012 ppb	-0.024 ppb	0.174 ppb	98.864 %	-0.003 ppb	0.000 ppb	99.591 %
Concentration RSD	4.8 %	162.1 %	381.9 %	5.9 %	112.7 %	2.7 %	6.3 %	23,430.8 %	3.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.266 ppb	-0.004 ppb	97.065 %	98.595 %	-0.001 ppb	0.027 ppb	99.351 %
Concentration per Run 1	1.320 ppb	-0.015 ppb	93.106 %	95.075 %	-0.010 ppb	0.026 ppb	102.388 %
Concentration per Run 2	1.241 ppb	0.008 ppb	99.276 %	101.142 %	0.002 ppb	0.025 ppb	98.424 %
Concentration per Run 3	1.239 ppb	-0.007 ppb	98.812 %	99.568 %	0.004 ppb	0.029 ppb	97.242 %
Concentration RSD	3.7 %	273.0 %	3.5 %	3.2 %	665.5 %	6.1 %	2.7 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 37
Analysis label: L2343526-04 A2-6020S
Analysis started at: 9/3/2023 9:20:12 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 30
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	93.082 %	96.475 %	0.001 ppb	132.577 ppb	84,823.633 ppb	15,835.274 ppb	38.621 ppb	6,050.319 ppb	46,899.951 ppb
Concentration per Run 1	95.628 %	95.712 %	-0.001 ppb	130.922 ppb	87,156.675 ppb	16,456.976 ppb	41.312 ppb	6,184.130 ppb	48,615.867 ppb
Concentration per Run 2	92.709 %	98.339 %	0.002 ppb	133.001 ppb	82,375.444 ppb	15,129.739 ppb	37.491 ppb	6,079.600 ppb	46,225.061 ppb
Concentration per Run 3	90.909 %	95.375 %	0.001 ppb	133.807 ppb	84,938.780 ppb	15,919.107 ppb	37.059 ppb	5,887.229 ppb	45,858.924 ppb
Concentration RSD	2.6 %	1.7 %	199.6 %	1.1 %	2.8 %	4.2 %	6.1 %	2.5 %	3.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.938 %	1.375 ppb	0.269 ppb	3.449 ppb	10.943 ppb	0.103 ppb	0.680 ppb	6.387 ppb	10.625 ppb
Concentration per Run 1	102.446 %	1.384 ppb	0.276 ppb	3.632 ppb	9.746 ppb	0.109 ppb	0.619 ppb	6.470 ppb	10.900 ppb
Concentration per Run 2	102.187 %	1.446 ppb	0.291 ppb	3.520 ppb	11.425 ppb	0.087 ppb	0.752 ppb	6.428 ppb	10.539 ppb
Concentration per Run 3	101.180 %	1.296 ppb	0.240 ppb	3.195 ppb	11.660 ppb	0.112 ppb	0.670 ppb	6.262 ppb	10.435 ppb
Concentration RSD	0.7 %	5.5 %	9.8 %	6.6 %	9.5 %	13.4 %	9.9 %	1.7 %	2.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.581 %	0.450 ppb	0.490 ppb	133.351 ppb	0.659 ppb	91.083 %	-0.003 ppb	0.017 ppb	93.134 %
Concentration per Run 1	94.273 %	0.453 ppb	0.537 ppb	141.597 ppb	0.570 ppb	87.088 %	-0.004 ppb	0.020 ppb	91.630 %
Concentration per Run 2	94.427 %	0.466 ppb	0.408 ppb	129.548 ppb	0.606 ppb	91.734 %	-0.002 ppb	0.014 ppb	92.448 %
Concentration per Run 3	98.043 %	0.432 ppb	0.525 ppb	128.908 ppb	0.802 ppb	94.428 %	-0.002 ppb	0.016 ppb	95.324 %
Concentration RSD	2.2 %	3.9 %	14.5 %	5.4 %	19.0 %	4.1 %	27.4 %	17.7 %	2.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.931 ppb	14.641 ppb	97.710 %	98.626 %	-0.003 ppb	0.050 ppb	88.682 %
Concentration per Run 1	0.980 ppb	15.234 ppb	94.848 %	96.602 %	-0.010 ppb	0.048 ppb	92.385 %
Concentration per Run 2	0.920 ppb	14.715 ppb	98.476 %	100.659 %	-0.002 ppb	0.050 ppb	86.292 %
Concentration per Run 3	0.894 ppb	13.974 ppb	99.805 %	98.615 %	0.003 ppb	0.051 ppb	87.368 %
Concentration RSD	4.7 %	4.3 %	2.6 %	2.1 %	219.8 %	3.0 %	3.7 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	38	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2343526-05 A2-6020S	Rack	1		
Analysis started at:	9/3/2023 9:24:50 PM	Vial	31		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	92.003 %	96.295 %	-0.001 ppb	131.603 ppb	82,777.145 ppb	15,409.835 ppb	35.266 ppb	5,740.801 ppb	44,353.919 ppb
Concentration per Run 1	93.713 %	95.307 %	-0.002 ppb	130.986 ppb	86,542.618 ppb	16,547.332 ppb	37.600 ppb	6,154.729 ppb	47,485.566 ppb
Concentration per Run 2	92.085 %	95.173 %	-0.001 ppb	131.407 ppb	81,757.516 ppb	14,928.157 ppb	35.398 ppb	5,721.058 ppb	43,928.368 ppb
Concentration per Run 3	90.212 %	98.406 %	0.001 ppb	132.416 ppb	80,031.301 ppb	14,754.017 ppb	32.799 ppb	5,346.617 ppb	41,647.825 ppb
Concentration RSD	1.9 %	1.9 %	157.9 %	0.6 %	4.1 %	6.4 %	6.8 %	7.0 %	6.6 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.897 %	1.316 ppb	0.286 ppb	1.353 ppb	8.392 ppb	0.099 ppb	0.613 ppb	5.892 ppb	9.719 ppb
Concentration per Run 1	101.059 %	1.395 ppb	0.294 ppb	1.339 ppb	8.249 ppb	0.102 ppb	0.619 ppb	5.809 ppb	10.084 ppb
Concentration per Run 2	99.726 %	1.318 ppb	0.286 ppb	1.352 ppb	8.994 ppb	0.110 ppb	0.687 ppb	5.928 ppb	9.747 ppb
Concentration per Run 3	98.905 %	1.235 ppb	0.280 ppb	1.367 ppb	7.932 ppb	0.084 ppb	0.533 ppb	5.940 ppb	9.327 ppb
Concentration RSD	1.1 %	6.1 %	2.4 %	1.0 %	6.5 %	14.0 %	12.6 %	1.2 %	3.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.805 %	0.501 ppb	0.458 ppb	126.454 ppb	0.504 ppb	92.565 %	-0.002 ppb	0.013 ppb	92.973 %
Concentration per Run 1	96.872 %	0.575 ppb	0.480 ppb	136.507 ppb	0.448 ppb	91.323 %	-0.002 ppb	0.014 ppb	94.861 %
Concentration per Run 2	94.808 %	0.482 ppb	0.448 ppb	121.877 ppb	0.471 ppb	91.820 %	-0.003 ppb	0.010 ppb	90.587 %
Concentration per Run 3	98.736 %	0.445 ppb	0.446 ppb	120.977 ppb	0.594 ppb	94.553 %	-0.003 ppb	0.016 ppb	93.472 %
Concentration RSD	2.0 %	13.3 %	4.1 %	6.9 %	15.6 %	1.9 %	27.3 %	22.4 %	2.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.980 ppb	14.470 ppb	96.930 %	99.043 %	-0.006 ppb	0.036 ppb	88.143 %
Concentration per Run 1	0.963 ppb	15.019 ppb	95.953 %	100.644 %	-0.014 ppb	0.036 ppb	93.013 %
Concentration per Run 2	1.001 ppb	14.817 ppb	95.088 %	96.435 %	-0.003 ppb	0.035 ppb	85.657 %
Concentration per Run 3	0.978 ppb	13.575 ppb	99.750 %	100.049 %	-0.002 ppb	0.038 ppb	85.759 %
Concentration RSD	1.9 %	5.4 %	2.6 %	2.3 %	101.4 %	4.8 %	4.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	39	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2343836-01 A2-6020S	Rack	1		
Analysis started at:	9/3/2023 9:29:28 PM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	93.512 %	97.014 %	0.002 ppb	112.455 ppb	65,030.308 ppb	15,199.054 ppb	156.251 ppb	4,138.058 ppb	44,795.679 ppb
Concentration per Run 1	96.040 %	97.800 %	0.000 ppb	110.187 ppb	70,234.133 ppb	16,519.562 ppb	174.878 ppb	4,518.303 ppb	49,797.307 ppb
Concentration per Run 2	93.455 %	99.012 %	0.002 ppb	113.447 ppb	63,368.223 ppb	14,856.437 ppb	147.854 ppb	3,968.309 ppb	42,643.620 ppb
Concentration per Run 3	91.041 %	94.230 %	0.003 ppb	113.732 ppb	61,488.568 ppb	14,221.164 ppb	146.020 ppb	3,927.563 ppb	41,946.110 ppb
Concentration RSD	2.7 %	2.6 %	105.9 %	1.8 %	7.1 %	7.8 %	10.3 %	8.0 %	9.7 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.360 %	1.236 ppb	0.434 ppb	1.554 ppb	13.201 ppb	0.080 ppb	0.661 ppb	5.379 ppb	12.229 ppb
Concentration per Run 1	102.289 %	1.211 ppb	0.462 ppb	1.720 ppb	14.944 ppb	0.077 ppb	0.577 ppb	5.463 ppb	12.577 ppb
Concentration per Run 2	101.590 %	1.233 ppb	0.420 ppb	1.343 ppb	12.112 ppb	0.086 ppb	0.719 ppb	5.400 ppb	12.148 ppb
Concentration per Run 3	100.200 %	1.265 ppb	0.420 ppb	1.599 ppb	12.547 ppb	0.078 ppb	0.688 ppb	5.275 ppb	11.963 ppb
Concentration RSD	1.0 %	2.2 %	5.5 %	12.4 %	11.6 %	5.7 %	11.3 %	1.8 %	2.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.713 %	0.658 ppb	0.435 ppb	133.341 ppb	0.524 ppb	93.091 %	-0.003 ppb	0.015 ppb	92.185 %
Concentration per Run 1	99.429 %	0.702 ppb	0.411 ppb	143.641 ppb	0.461 ppb	92.242 %	-0.001 ppb	0.012 ppb	95.960 %
Concentration per Run 2	95.713 %	0.557 ppb	0.357 ppb	131.086 ppb	0.534 ppb	93.800 %	-0.003 ppb	0.015 ppb	90.598 %
Concentration per Run 3	94.995 %	0.716 ppb	0.538 ppb	125.295 ppb	0.577 ppb	93.229 %	-0.003 ppb	0.016 ppb	89.996 %
Concentration RSD	2.5 %	13.4 %	21.3 %	7.0 %	11.2 %	0.8 %	43.0 %	13.0 %	3.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.274 ppb	22.338 ppb	96.832 %	98.393 %	-0.010 ppb	0.124 ppb	88.254 %
Concentration per Run 1	1.265 ppb	23.210 ppb	96.293 %	99.804 %	-0.017 ppb	0.118 ppb	93.083 %
Concentration per Run 2	1.264 ppb	21.862 ppb	98.904 %	100.233 %	-0.008 ppb	0.125 ppb	85.589 %
Concentration per Run 3	1.293 ppb	21.943 ppb	95.300 %	95.141 %	-0.006 ppb	0.129 ppb	86.091 %
Concentration RSD	1.3 %	3.4 %	1.9 %	2.9 %	56.8 %	4.1 %	4.7 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	40	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2343836-02 A2-6020S	Rack	1		
Analysis started at:	9/3/2023 9:34:07 PM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	95.899 %	99.955 %	0.002 ppb	100.384 ppb	56,688.055 ppb	14,920.491 ppb	24.809 ppb	3,157.590 ppb	44,685.517 ppb
Concentration per Run 1	98.401 %	96.116 %	0.002 ppb	100.111 ppb	59,970.372 ppb	16,354.031 ppb	28.867 ppb	3,544.015 ppb	48,637.378 ppb
Concentration per Run 2	95.761 %	105.950 %	0.002 ppb	100.097 ppb	53,793.144 ppb	13,937.421 ppb	22.905 ppb	2,935.800 ppb	42,823.893 ppb
Concentration per Run 3	93.535 %	97.800 %	0.002 ppb	100.943 ppb	56,300.650 ppb	14,470.021 ppb	22.656 ppb	2,992.955 ppb	42,595.279 ppb
Concentration RSD	2.5 %	5.3 %	9.5 %	0.5 %	5.5 %	8.5 %	14.2 %	10.6 %	7.7 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.650 %	1.085 ppb	0.330 ppb	1.401 ppb	12.160 ppb	0.059 ppb	0.490 ppb	3.628 ppb	7.579 ppb
Concentration per Run 1	103.464 %	1.029 ppb	0.359 ppb	1.644 ppb	11.810 ppb	0.063 ppb	0.486 ppb	3.532 ppb	7.808 ppb
Concentration per Run 2	101.966 %	1.071 ppb	0.310 ppb	1.215 ppb	11.199 ppb	0.054 ppb	0.495 ppb	3.675 ppb	7.286 ppb
Concentration per Run 3	102.519 %	1.156 ppb	0.323 ppb	1.344 ppb	13.472 ppb	0.060 ppb	0.489 ppb	3.678 ppb	7.644 ppb
Concentration RSD	0.7 %	5.9 %	7.7 %	15.7 %	9.7 %	7.9 %	0.9 %	2.3 %	3.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.467 %	0.722 ppb	0.392 ppb	135.680 ppb	0.525 ppb	94.613 %	-0.003 ppb	0.012 ppb	95.977 %
Concentration per Run 1	101.692 %	0.781 ppb	0.339 ppb	148.469 ppb	0.543 ppb	94.430 %	-0.003 ppb	0.010 ppb	101.171 %
Concentration per Run 2	98.702 %	0.695 ppb	0.466 ppb	131.818 ppb	0.485 ppb	95.355 %	-0.002 ppb	0.010 ppb	95.244 %
Concentration per Run 3	95.007 %	0.689 ppb	0.373 ppb	126.752 ppb	0.548 ppb	94.053 %	-0.003 ppb	0.014 ppb	91.517 %
Concentration RSD	3.4 %	7.1 %	16.7 %	8.4 %	6.7 %	0.7 %	34.0 %	20.0 %	5.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.130 ppb	23.811 ppb	99.571 %	99.667 %	-0.014 ppb	0.514 ppb	91.321 %
Concentration per Run 1	1.138 ppb	24.709 ppb	100.949 %	101.002 %	-0.020 ppb	0.493 ppb	97.191 %
Concentration per Run 2	1.146 ppb	23.032 ppb	99.449 %	100.956 %	-0.011 ppb	0.529 ppb	87.741 %
Concentration per Run 3	1.106 ppb	23.691 ppb	98.314 %	97.045 %	-0.010 ppb	0.520 ppb	89.030 %
Concentration RSD	1.9 %	3.5 %	1.3 %	2.3 %	37.9 %	3.7 %	5.6 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	41	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2343836-03 A2-6020S	Rack	1		
Analysis started at:	9/3/2023 9:38:46 PM	Vial	35		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	94.799 %	97.912 %	0.002 ppb	85.082 ppb	50,214.776 ppb	16,503.679 ppb	995.040 ppb	1,640.474 ppb	49,256.604 ppb
Concentration per Run 1	97.213 %	97.934 %	0.003 ppb	84.453 ppb	51,971.655 ppb	17,236.331 ppb	1,050.753 ppb	1,704.069 ppb	51,036.394 ppb
Concentration per Run 2	94.564 %	101.033 %	0.002 ppb	84.866 ppb	49,374.608 ppb	16,505.154 ppb	991.432 ppb	1,622.116 ppb	47,952.713 ppb
Concentration per Run 3	92.621 %	94.769 %	-0.001 ppb	85.929 ppb	49,298.065 ppb	15,769.554 ppb	942.936 ppb	1,595.236 ppb	48,780.704 ppb
Concentration RSD	2.4 %	3.2 %	119.0 %	0.9 %	3.0 %	4.4 %	5.4 %	3.5 %	3.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.640 %	1.204 ppb	2.220 ppb	2.009 ppb	27.432 ppb	0.060 ppb	1.157 ppb	11.107 ppb	12.821 ppb
Concentration per Run 1	103.913 %	1.171 ppb	2.214 ppb	2.109 ppb	26.586 ppb	0.058 ppb	1.153 ppb	10.945 ppb	12.682 ppb
Concentration per Run 2	103.177 %	1.281 ppb	2.213 ppb	2.074 ppb	26.780 ppb	0.063 ppb	1.117 ppb	10.904 ppb	12.891 ppb
Concentration per Run 3	103.831 %	1.159 ppb	2.233 ppb	1.845 ppb	28.929 ppb	0.058 ppb	1.202 ppb	11.473 ppb	12.889 ppb
Concentration RSD	0.4 %	5.6 %	0.5 %	7.1 %	4.7 %	5.2 %	3.7 %	2.9 %	0.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	94.881 %	0.916 ppb	0.110 ppb	145.060 ppb	0.734 ppb	92.283 %	0.003 ppb	0.004 ppb	90.435 %
Concentration per Run 1	97.709 %	0.952 ppb	0.109 ppb	149.585 ppb	0.663 ppb	90.821 %	0.005 ppb	0.002 ppb	90.098 %
Concentration per Run 2	93.966 %	0.893 ppb	0.182 ppb	146.343 ppb	0.764 ppb	94.130 %	0.002 ppb	0.005 ppb	92.436 %
Concentration per Run 3	92.969 %	0.903 ppb	0.040 ppb	139.251 ppb	0.775 ppb	91.896 %	0.003 ppb	0.005 ppb	88.770 %
Concentration RSD	2.6 %	3.4 %	64.1 %	3.6 %	8.4 %	1.8 %	52.3 %	42.0 %	2.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.305 ppb	29.803 ppb	96.246 %	96.931 %	-0.014 ppb	0.741 ppb	89.753 %
Concentration per Run 1	1.373 ppb	30.794 ppb	95.684 %	95.315 %	-0.019 ppb	0.705 ppb	93.748 %
Concentration per Run 2	1.258 ppb	28.864 ppb	97.236 %	99.084 %	-0.012 ppb	0.763 ppb	87.963 %
Concentration per Run 3	1.283 ppb	29.750 ppb	95.819 %	96.394 %	-0.011 ppb	0.755 ppb	87.548 %
Concentration RSD	4.6 %	3.2 %	0.9 %	2.0 %	32.5 %	4.3 %	3.9 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	42	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2343836-04 A2-6020S	Rack	1		
Analysis started at:	9/3/2023 9:43:25 PM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	95.125 %	95.510 %	0.001 ppb	82.524 ppb	48,274.112 ppb	16,727.186 ppb	13.366 ppb	1,595.459 ppb	47,808.862 ppb
Concentration per Run 1	96.917 %	90.997 %	0.002 ppb	81.986 ppb	51,460.811 ppb	17,485.666 ppb	15.011 ppb	1,659.640 ppb	49,952.899 ppb
Concentration per Run 2	96.011 %	98.743 %	0.002 ppb	81.958 ppb	45,876.075 ppb	16,435.005 ppb	12.810 ppb	1,622.008 ppb	48,020.444 ppb
Concentration per Run 3	92.447 %	96.789 %	-0.001 ppb	83.629 ppb	47,485.450 ppb	16,260.887 ppb	12.278 ppb	1,504.731 ppb	45,453.244 ppb
Concentration RSD	2.5 %	4.2 %	149.8 %	1.2 %	6.0 %	4.0 %	10.8 %	5.1 %	4.7 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	104.054 %	1.251 ppb	0.445 ppb	0.887 ppb	13.756 ppb	0.051 ppb	0.350 ppb	2.321 ppb	30.345 ppb
Concentration per Run 1	103.308 %	1.344 ppb	0.440 ppb	0.942 ppb	14.598 ppb	0.061 ppb	0.356 ppb	2.255 ppb	31.546 ppb
Concentration per Run 2	105.343 %	1.129 ppb	0.456 ppb	0.783 ppb	12.075 ppb	0.044 ppb	0.403 ppb	2.311 ppb	29.213 ppb
Concentration per Run 3	103.510 %	1.280 ppb	0.440 ppb	0.936 ppb	14.594 ppb	0.047 ppb	0.291 ppb	2.396 ppb	30.275 ppb
Concentration RSD	1.1 %	8.8 %	2.1 %	10.1 %	10.6 %	18.3 %	16.1 %	3.1 %	3.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.385 %	0.882 ppb	0.206 ppb	142.624 ppb	0.511 ppb	91.666 %	-0.003 ppb	0.004 ppb	88.597 %
Concentration per Run 1	90.968 %	0.836 ppb	0.210 ppb	147.117 ppb	0.464 ppb	88.831 %	-0.004 ppb	0.001 ppb	86.338 %
Concentration per Run 2	94.663 %	0.854 ppb	0.242 ppb	143.526 ppb	0.485 ppb	92.731 %	-0.001 ppb	0.009 ppb	91.786 %
Concentration per Run 3	91.524 %	0.955 ppb	0.168 ppb	137.230 ppb	0.584 ppb	93.436 %	-0.003 ppb	0.003 ppb	87.665 %
Concentration RSD	2.2 %	7.2 %	18.1 %	3.5 %	12.5 %	2.7 %	41.0 %	88.9 %	3.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.922 ppb	30.528 ppb	93.851 %	94.466 %	-0.016 ppb	0.415 ppb	86.478 %
Concentration per Run 1	0.978 ppb	32.451 ppb	91.597 %	94.224 %	-0.021 ppb	0.398 ppb	89.623 %
Concentration per Run 2	0.863 ppb	29.943 ppb	95.600 %	95.331 %	-0.015 ppb	0.419 ppb	85.387 %
Concentration per Run 3	0.925 ppb	29.191 ppb	94.356 %	93.842 %	-0.012 ppb	0.426 ppb	84.422 %
Concentration RSD	6.2 %	5.6 %	2.2 %	0.8 %	28.9 %	3.6 %	3.2 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	43	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2343836-05 A2-6020S	Rack	1		
Analysis started at:	9/3/2023 9:48:05 PM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	94.606 %	98.832 %	-0.001 ppb	82.114 ppb	50,126.354 ppb	16,411.320 ppb	46.181 ppb	1,841.514 ppb	48,298.318 ppb
Concentration per Run 1	96.622 %	98.406 %	-0.001 ppb	81.919 ppb	49,834.733 ppb	16,209.053 ppb	47.680 ppb	1,918.620 ppb	49,980.302 ppb
Concentration per Run 2	94.256 %	97.800 %	-0.003 ppb	81.938 ppb	48,996.913 ppb	16,448.796 ppb	42.180 ppb	1,697.992 ppb	45,860.009 ppb
Concentration per Run 3	92.939 %	100.292 %	0.002 ppb	82.485 ppb	51,547.417 ppb	16,576.110 ppb	48.684 ppb	1,907.929 ppb	49,054.643 ppb
Concentration RSD	2.0 %	1.3 %	368.1 %	0.4 %	2.6 %	1.1 %	7.6 %	6.8 %	4.5 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.564 %	1.426 ppb	0.460 ppb	1.719 ppb	16.904 ppb	0.058 ppb	0.369 ppb	2.580 ppb	0.165 ppb
Concentration per Run 1	106.661 %	1.450 ppb	0.439 ppb	1.838 ppb	17.246 ppb	0.056 ppb	0.352 ppb	2.634 ppb	0.198 ppb
Concentration per Run 2	107.618 %	1.407 ppb	0.447 ppb	1.723 ppb	16.160 ppb	0.060 ppb	0.411 ppb	2.635 ppb	0.138 ppb
Concentration per Run 3	105.412 %	1.422 ppb	0.494 ppb	1.596 ppb	17.306 ppb	0.057 ppb	0.343 ppb	2.471 ppb	0.160 ppb
Concentration RSD	1.0 %	1.6 %	6.5 %	7.0 %	3.8 %	3.7 %	10.1 %	3.7 %	18.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.592 %	0.888 ppb	0.144 ppb	151.799 ppb	0.696 ppb	91.957 %	-0.003 ppb	0.003 ppb	92.236 %
Concentration per Run 1	90.606 %	0.903 ppb	0.107 ppb	154.961 ppb	0.725 ppb	90.562 %	-0.003 ppb	0.004 ppb	91.052 %
Concentration per Run 2	88.794 %	0.914 ppb	0.110 ppb	148.061 ppb	0.682 ppb	90.161 %	-0.003 ppb	0.001 ppb	88.388 %
Concentration per Run 3	98.375 %	0.846 ppb	0.215 ppb	152.374 ppb	0.680 ppb	95.148 %	-0.004 ppb	0.005 ppb	97.267 %
Concentration RSD	5.5 %	4.1 %	42.8 %	2.3 %	3.6 %	3.0 %	15.9 %	52.8 %	4.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.043 ppb	28.926 ppb	98.421 %	97.891 %	-0.017 ppb	0.453 ppb	94.723 %
Concentration per Run 1	1.027 ppb	29.009 ppb	96.426 %	95.269 %	-0.022 ppb	0.424 ppb	99.372 %
Concentration per Run 2	1.064 ppb	28.167 ppb	95.866 %	95.961 %	-0.015 ppb	0.460 ppb	90.008 %
Concentration per Run 3	1.037 ppb	29.602 ppb	102.970 %	102.442 %	-0.015 ppb	0.473 ppb	94.789 %
Concentration RSD	1.9 %	2.5 %	4.0 %	4.0 %	24.1 %	5.6 %	4.9 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	44	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/3/2023 9:52:42 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	89.751 %	92.658 %	61.472 ppb	54.807 ppb	6,038.153 ppb	6,007.256 ppb	59.050 ppb	5,863.953 ppb	5,986.236 ppb
Concentration per Run 1	91.530 %	90.390 %	61.252 ppb	54.747 ppb	6,188.353 ppb	6,212.967 ppb	63.085 ppb	6,119.850 ppb	6,145.567 ppb
Concentration per Run 2	90.072 %	92.074 %	61.501 ppb	54.518 ppb	5,852.893 ppb	5,715.180 ppb	55.862 ppb	5,584.042 ppb	5,621.880 ppb
Concentration per Run 3	87.651 %	95.510 %	61.663 ppb	55.155 ppb	6,073.213 ppb	6,093.622 ppb	58.204 ppb	5,887.966 ppb	6,191.261 ppb
Recovery Percentage 1			102.454 %	91.345 %	100.636 %	100.121 %	98.417 %	97.733 %	99.771 %
Concentration RSD	2.2 %	2.8 %	0.3 %	0.6 %	2.8 %	4.3 %	6.2 %	4.6 %	5.3 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.577 %	60.528 ppb	61.456 ppb	60.607 ppb	6,103.618 ppb	62.304 ppb	62.364 ppb	63.456 ppb	62.728 ppb
Concentration per Run 1	102.520 %	65.217 ppb	64.199 ppb	63.238 ppb	6,239.285 ppb	63.654 ppb	64.243 ppb	64.849 ppb	64.617 ppb
Concentration per Run 2	103.207 %	57.010 ppb	59.556 ppb	57.782 ppb	6,021.322 ppb	62.372 ppb	61.919 ppb	63.945 ppb	62.695 ppb
Concentration per Run 3	102.004 %	59.356 ppb	60.613 ppb	60.801 ppb	6,050.247 ppb	60.887 ppb	60.930 ppb	61.574 ppb	60.871 ppb
Recovery Percentage 1		100.879 %	102.427 %	101.012 %	101.727 %	103.840 %	103.939 %	105.759 %	104.546 %
Concentration RSD	0.6 %	7.0 %	4.0 %	4.5 %	1.9 %	2.2 %	2.7 %	2.7 %	3.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	91.768 %	59.705 ppb	59.236 ppb	51.740 ppb	59.638 ppb	91.032 %	60.826 ppb	62.399 ppb	88.479 %
Concentration per Run 1	88.862 %	61.643 ppb	63.287 ppb	53.727 ppb	61.774 ppb	89.258 %	63.016 ppb	64.071 ppb	85.304 %
Concentration per Run 2	88.752 %	58.735 ppb	56.155 ppb	49.512 ppb	58.318 ppb	89.044 %	60.543 ppb	62.768 ppb	84.069 %
Concentration per Run 3	97.690 %	58.738 ppb	58.266 ppb	51.981 ppb	58.820 ppb	94.794 %	58.919 ppb	60.359 ppb	96.063 %
Recovery Percentage 1		99.509 %	98.726 %	86.233 %	99.396 %		101.377 %	103.999 %	
Concentration RSD	5.6 %	2.8 %	6.2 %	4.1 %	3.1 %	3.6 %	3.4 %	3.0 %	7.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.900 ppb	61.369 ppb	94.332 %	95.040 %	65.457 ppb	64.335 ppb	92.025 %
Concentration per Run 1	63.374 ppb	63.263 ppb	91.688 %	92.589 %	62.348 ppb	62.053 ppb	96.586 %
Concentration per Run 2	61.406 ppb	59.600 ppb	92.769 %	90.741 %	67.711 ppb	66.064 ppb	85.895 %
Concentration per Run 3	60.918 ppb	61.244 ppb	98.538 %	101.791 %	66.312 ppb	64.889 ppb	93.593 %
Recovery Percentage 1	103.166 %	102.282 %			109.095 %	107.226 %	
Concentration RSD	2.1 %	3.0 %	3.9 %	6.2 %	4.2 %	3.2 %	6.0 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	45	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/3/2023 9:57:24 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	91.995 %	92.793 %	0.003 ppb	-0.083 ppb	-2.347 ppb	-1.950 ppb	-1.373 ppb	-13.095 ppb	-6.893 ppb
Concentration per Run 1	92.795 %	93.219 %	0.001 ppb	-0.072 ppb	-1.983 ppb	-1.761 ppb	-1.419 ppb	-16.004 ppb	-6.370 ppb
Concentration per Run 2	91.942 %	92.276 %	0.004 ppb	-0.068 ppb	-2.796 ppb	-1.993 ppb	-1.481 ppb	-13.872 ppb	-7.685 ppb
Concentration per Run 3	91.246 %	92.883 %	0.003 ppb	-0.109 ppb	-2.262 ppb	-2.095 ppb	-1.219 ppb	-9.408 ppb	-6.622 ppb
Recovery Percentage 1			0.532 %	-0.828 %	-2.347 %	-2.785 %	-13.726 %	-13.095 %	-6.893 %
Concentration RSD	0.8 %	0.5 %	59.4 %	27.5 %	17.6 %	8.8 %	10.0 %	25.7 %	10.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.553 %	-0.005 ppb	0.010 ppb	-0.325 ppb	10.185 ppb	-0.003 ppb	-0.228 ppb	-0.093 ppb	-1.889 ppb
Concentration per Run 1	92.619 %	-0.004 ppb	0.011 ppb	-0.316 ppb	10.497 ppb	-0.004 ppb	-0.237 ppb	-0.095 ppb	-1.912 ppb
Concentration per Run 2	92.871 %	-0.003 ppb	-0.001 ppb	-0.338 ppb	10.491 ppb	-0.004 ppb	-0.238 ppb	-0.091 ppb	-1.868 ppb
Concentration per Run 3	92.168 %	-0.009 ppb	0.019 ppb	-0.320 ppb	9.567 ppb	-0.001 ppb	-0.209 ppb	-0.093 ppb	-1.886 ppb
Recovery Percentage 1		-0.103 %	0.970 %	-32.480 %	20.369 %	-0.535 %	-11.411 %	-9.307 %	-37.774 %
Concentration RSD	0.4 %	57.4 %	105.5 %	3.6 %	5.3 %	56.0 %	7.2 %	2.0 %	1.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	88.828 %	0.098 ppb	0.593 ppb	-0.038 ppb	1.339 ppb	92.703 %	0.000 ppb	0.001 ppb	90.652 %
Concentration per Run 1	87.876 %	0.061 ppb	0.555 ppb	-0.040 ppb	1.065 ppb	91.135 %	0.000 ppb	0.001 ppb	88.802 %
Concentration per Run 2	84.394 %	0.101 ppb	0.623 ppb	-0.034 ppb	1.309 ppb	91.051 %	0.000 ppb	0.001 ppb	85.799 %
Concentration per Run 3	94.214 %	0.132 ppb	0.600 ppb	-0.040 ppb	1.643 ppb	95.923 %	-0.001 ppb	0.000 ppb	97.355 %
Recovery Percentage 1		19.578 %	11.854 %	-0.379 %	66.955 %		-0.056 %	0.425 %	
Concentration RSD	5.6 %	36.1 %	5.8 %	9.0 %	21.7 %	3.0 %	255.4 %	56.9 %	6.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.048 ppb	-0.036 ppb	93.510 %	93.031 %	0.297 ppb	0.007 ppb	97.665 %
Concentration per Run 1	0.032 ppb	-0.034 ppb	93.509 %	90.739 %	0.338 ppb	0.007 ppb	100.880 %
Concentration per Run 2	0.055 ppb	-0.020 ppb	89.130 %	88.761 %	0.311 ppb	0.008 ppb	93.215 %
Concentration per Run 3	0.056 ppb	-0.055 ppb	97.890 %	99.595 %	0.241 ppb	0.005 ppb	98.901 %
Recovery Percentage 1	1.196 %	-7.290 %			29.676 %	0.656 %	
Concentration RSD	27.9 %	48.0 %	4.7 %	6.2 %	16.9 %	17.2 %	4.1 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 46
Analysis label: WG1822892-2D5 A2-6020T
Analysis started at: 9/3/2023 10:02:07 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 40
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	92.407 %	93.623 %	10.759 ppb	222.064 ppb	2,028.177 ppb	2,024.071 ppb	409.165 ppb	1,997.894 ppb	2,045.914 ppb
Concentration per Run 1	93.980 %	91.266 %	10.659 ppb	219.544 ppb	2,117.313 ppb	2,082.964 ppb	417.080 ppb	2,142.151 ppb	2,381.019 ppb
Concentration per Run 2	92.799 %	90.525 %	10.724 ppb	222.522 ppb	1,996.101 ppb	1,990.657 ppb	415.503 ppb	1,897.183 ppb	1,810.025 ppb
Concentration per Run 3	90.441 %	99.079 %	10.894 ppb	224.125 ppb	1,971.117 ppb	1,998.592 ppb	394.912 ppb	1,954.349 ppb	1,946.698 ppb
Concentration RSD	1.9 %	5.1 %	1.1 %	1.0 %	3.9 %	2.5 %	3.0 %	6.4 %	14.6 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.356 %	101.484 ppb	41.776 ppb	107.049 ppb	212.829 ppb	105.225 ppb	104.911 ppb	53.679 ppb	105.496 ppb
Concentration per Run 1	93.494 %	106.372 ppb	43.396 ppb	108.659 ppb	225.511 ppb	107.534 ppb	107.523 ppb	54.715 ppb	107.490 ppb
Concentration per Run 2	94.188 %	98.243 ppb	41.145 ppb	105.932 ppb	209.913 ppb	105.682 ppb	104.321 ppb	54.563 ppb	104.768 ppb
Concentration per Run 3	92.386 %	99.837 ppb	40.786 ppb	106.556 ppb	203.063 ppb	102.459 ppb	102.889 ppb	51.759 ppb	104.231 ppb
Concentration RSD	1.0 %	4.2 %	3.4 %	1.3 %	5.4 %	2.4 %	2.3 %	3.1 %	1.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.458 %	25.433 ppb	23.461 ppb	196.558 ppb	203.295 ppb	92.667 %	10.722 ppb	11.830 ppb	87.694 %
Concentration per Run 1	90.092 %	26.474 ppb	24.624 ppb	199.091 ppb	207.340 ppb	89.215 %	11.126 ppb	12.423 ppb	79.697 %
Concentration per Run 2	91.700 %	24.461 ppb	22.997 ppb	192.769 ppb	200.298 ppb	91.233 %	10.560 ppb	11.702 ppb	87.848 %
Concentration per Run 3	98.584 %	25.363 ppb	22.764 ppb	197.814 ppb	202.248 ppb	97.553 %	10.479 ppb	11.365 ppb	95.535 %
Concentration RSD	4.8 %	4.0 %	4.3 %	1.7 %	1.8 %	4.7 %	3.3 %	4.6 %	9.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	81.805 ppb	426.026 ppb	95.285 %	94.779 %	23.886 ppb	116.972 ppb	95.947 %
Concentration per Run 1	86.178 ppb	436.169 ppb	90.910 %	89.421 %	23.434 ppb	116.028 ppb	96.520 %
Concentration per Run 2	79.185 ppb	420.915 ppb	94.348 %	93.297 %	24.313 ppb	118.140 ppb	92.595 %
Concentration per Run 3	80.053 ppb	420.994 ppb	100.595 %	101.620 %	23.912 ppb	116.747 ppb	98.725 %
Concentration RSD	4.7 %	2.1 %	5.2 %	6.6 %	1.8 %	0.9 %	3.2 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 47
Analysis label: L2343836-06 A2-6020T
Analysis started at: 9/3/2023 10:06:44 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 41
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	95.279 %	93.736 %	0.006 ppb	83.635 ppb	49,297.382 ppb	16,950.926 ppb	17.639 ppb	1,559.374 ppb	49,838.800 ppb
Concentration per Run 1	98.151 %	87.225 %	0.006 ppb	82.992 ppb	50,725.798 ppb	17,006.474 ppb	17.147 ppb	1,492.061 ppb	49,355.901 ppb
Concentration per Run 2	94.792 %	96.655 %	0.003 ppb	83.914 ppb	48,095.208 ppb	16,850.910 ppb	16.656 ppb	1,587.094 ppb	50,538.238 ppb
Concentration per Run 3	92.894 %	97.328 %	0.008 ppb	83.998 ppb	49,071.141 ppb	16,995.393 ppb	19.113 ppb	1,598.967 ppb	49,622.260 ppb
Concentration RSD	2.8 %	6.0 %	39.3 %	0.7 %	2.7 %	0.5 %	7.4 %	3.8 %	1.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	100.976 %	1.604 ppb	0.534 ppb	19.842 ppb	75.276 ppb	0.067 ppb	0.419 ppb	3.007 ppb	0.504 ppb
Concentration per Run 1	102.931 %	1.698 ppb	0.555 ppb	20.649 ppb	80.316 ppb	0.061 ppb	0.399 ppb	3.244 ppb	0.529 ppb
Concentration per Run 2	99.824 %	1.640 ppb	0.537 ppb	18.844 ppb	70.508 ppb	0.069 ppb	0.442 ppb	2.951 ppb	0.450 ppb
Concentration per Run 3	100.172 %	1.474 ppb	0.510 ppb	20.034 ppb	75.005 ppb	0.072 ppb	0.414 ppb	2.826 ppb	0.533 ppb
Concentration RSD	1.7 %	7.3 %	4.3 %	4.6 %	6.5 %	8.8 %	5.2 %	7.1 %	9.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.159 %	1.046 ppb	0.522 ppb	140.843 ppb	6.024 ppb	91.734 %	-0.001 ppb	0.010 ppb	91.092 %
Concentration per Run 1	89.152 %	1.025 ppb	0.240 ppb	138.124 ppb	5.024 ppb	85.103 %	-0.001 ppb	0.013 ppb	82.531 %
Concentration per Run 2	97.134 %	1.022 ppb	0.461 ppb	142.762 ppb	6.171 ppb	92.533 %	-0.001 ppb	0.007 ppb	94.967 %
Concentration per Run 3	99.190 %	1.092 ppb	0.867 ppb	141.642 ppb	6.879 ppb	97.566 %	-0.001 ppb	0.011 ppb	95.778 %
Concentration RSD	5.6 %	3.8 %	60.9 %	1.7 %	15.5 %	6.8 %	46.0 %	33.9 %	8.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.270 ppb	28.054 ppb	95.108 %	95.264 %	0.048 ppb	0.288 ppb	87.970 %
Concentration per Run 1	4.318 ppb	28.303 ppb	88.376 %	86.825 %	0.049 ppb	0.283 ppb	88.345 %
Concentration per Run 2	4.178 ppb	27.369 ppb	97.052 %	97.020 %	0.050 ppb	0.287 ppb	86.736 %
Concentration per Run 3	4.313 ppb	28.490 ppb	99.895 %	101.948 %	0.044 ppb	0.293 ppb	88.828 %
Concentration RSD	1.9 %	2.1 %	6.3 %	8.1 %	7.1 %	1.7 %	1.2 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	48	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1822892-3d10 A2-6020T	Rack	1		
Analysis started at:	9/3/2023 10:11:22 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	97.187 %	99.506 %	5.376 ppb	117.113 ppb	5,870.842 ppb	2,702.719 ppb	210.011 ppb	1,143.832 ppb	5,718.239 ppb
Concentration per Run 1	98.953 %	87.898 %	5.429 ppb	116.605 ppb	6,208.720 ppb	2,841.130 ppb	221.310 ppb	1,236.271 ppb	6,084.369 ppb
Concentration per Run 2	96.787 %	100.292 %	5.365 ppb	117.401 ppb	5,890.659 ppb	2,746.910 ppb	211.851 ppb	1,153.569 ppb	5,775.963 ppb
Concentration per Run 3	95.821 %	110.328 %	5.332 ppb	117.333 ppb	5,513.147 ppb	2,520.118 ppb	196.870 ppb	1,041.655 ppb	5,294.385 ppb
Concentration RSD	1.6 %	11.3 %	0.9 %	0.4 %	5.9 %	6.1 %	5.9 %	8.5 %	7.0 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.870 %	51.074 ppb	20.624 ppb	53.810 ppb	111.649 ppb	52.721 ppb	52.967 ppb	27.093 ppb	51.712 ppb
Concentration per Run 1	99.438 %	54.949 ppb	22.026 ppb	55.824 ppb	119.186 ppb	56.590 ppb	57.248 ppb	29.097 ppb	54.970 ppb
Concentration per Run 2	100.346 %	51.119 ppb	20.377 ppb	54.380 ppb	111.558 ppb	52.213 ppb	51.834 ppb	26.755 ppb	51.103 ppb
Concentration per Run 3	99.826 %	47.154 ppb	19.470 ppb	51.225 ppb	104.202 ppb	49.359 ppb	49.819 ppb	25.427 ppb	49.065 ppb
Concentration RSD	0.5 %	7.6 %	6.3 %	4.4 %	6.7 %	6.9 %	7.3 %	6.9 %	5.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	101.135 %	12.901 ppb	11.347 ppb	109.745 ppb	98.858 ppb	98.450 %	5.239 ppb	5.753 ppb	94.488 %
Concentration per Run 1	89.998 %	13.892 ppb	11.633 ppb	110.409 ppb	104.272 ppb	92.079 %	5.503 ppb	5.810 ppb	84.772 %
Concentration per Run 2	103.915 %	12.739 ppb	11.188 ppb	109.939 ppb	97.780 ppb	100.615 %	5.162 ppb	5.754 ppb	96.210 %
Concentration per Run 3	109.492 %	12.072 ppb	11.220 ppb	108.886 ppb	94.522 ppb	102.658 %	5.052 ppb	5.694 ppb	102.483 %
Concentration RSD	9.9 %	7.1 %	2.2 %	0.7 %	5.0 %	5.7 %	4.5 %	1.0 %	9.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	43.084 ppb	208.972 ppb	98.455 %	99.691 %	11.654 ppb	56.585 ppb	97.818 %
Concentration per Run 1	44.737 ppb	213.675 ppb	90.432 %	89.523 %	11.200 ppb	54.254 ppb	99.750 %
Concentration per Run 2	42.879 ppb	206.460 ppb	101.280 %	103.459 %	11.904 ppb	58.197 ppb	95.188 %
Concentration per Run 3	41.637 ppb	206.781 ppb	103.654 %	106.092 %	11.858 ppb	57.303 ppb	98.516 %
Concentration RSD	3.6 %	2.0 %	7.2 %	8.9 %	3.4 %	3.7 %	2.4 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 49
Analysis label: WG1822892-4d10 A2-6020T
Analysis started at: 9/3/2023 10:16:00 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 43
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	96.012 %	99.506 %	5.514 ppb	119.169 ppb	5,685.030 ppb	2,621.562 ppb	208.995 ppb	1,136.394 ppb	5,641.827 ppb
Concentration per Run 1	96.938 %	93.017 %	5.502 ppb	118.301 ppb	5,765.118 ppb	2,614.203 ppb	210.385 ppb	1,127.180 ppb	5,573.066 ppb
Concentration per Run 2	96.299 %	100.494 %	5.546 ppb	118.960 ppb	5,644.390 ppb	2,655.321 ppb	207.558 ppb	1,147.086 ppb	5,775.798 ppb
Concentration per Run 3	94.798 %	105.007 %	5.495 ppb	120.245 ppb	5,645.583 ppb	2,595.163 ppb	209.043 ppb	1,134.916 ppb	5,576.617 ppb
Concentration RSD	1.1 %	6.1 %	0.5 %	0.8 %	1.2 %	1.2 %	0.7 %	0.9 %	2.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.883 %	51.922 ppb	20.887 ppb	53.785 ppb	111.553 ppb	51.732 ppb	52.459 ppb	26.992 ppb	51.879 ppb
Concentration per Run 1	101.540 %	51.223 ppb	20.813 ppb	53.725 ppb	113.302 ppb	52.538 ppb	54.349 ppb	27.657 ppb	52.044 ppb
Concentration per Run 2	101.718 %	51.980 ppb	21.177 ppb	53.474 ppb	114.163 ppb	51.485 ppb	52.174 ppb	26.817 ppb	52.478 ppb
Concentration per Run 3	102.391 %	52.563 ppb	20.671 ppb	54.157 ppb	107.194 ppb	51.174 ppb	50.854 ppb	26.501 ppb	51.116 ppb
Concentration RSD	0.4 %	1.3 %	1.2 %	0.6 %	3.4 %	1.4 %	3.4 %	2.2 %	1.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.311 %	12.849 ppb	12.273 ppb	109.938 ppb	101.557 ppb	97.665 %	5.259 ppb	5.661 ppb	94.012 %
Concentration per Run 1	94.488 %	12.964 ppb	12.170 ppb	105.595 ppb	99.640 ppb	93.474 %	5.343 ppb	5.770 ppb	85.420 %
Concentration per Run 2	100.554 %	12.566 ppb	12.612 ppb	112.636 ppb	101.759 ppb	98.078 %	5.202 ppb	5.627 ppb	98.030 %
Concentration per Run 3	102.892 %	13.015 ppb	12.037 ppb	111.584 ppb	103.271 ppb	101.443 %	5.231 ppb	5.586 ppb	98.585 %
Concentration RSD	4.4 %	1.9 %	2.5 %	3.5 %	1.8 %	4.1 %	1.4 %	1.7 %	7.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	46.093 ppb	211.381 ppb	98.790 %	97.882 %	11.014 ppb	53.593 ppb	103.665 %
Concentration per Run 1	46.584 ppb	211.419 ppb	94.564 %	90.363 %	10.711 ppb	51.674 ppb	102.899 %
Concentration per Run 2	45.480 ppb	210.549 ppb	99.775 %	99.413 %	11.097 ppb	54.388 ppb	103.338 %
Concentration per Run 3	46.216 ppb	212.175 ppb	102.030 %	103.871 %	11.234 ppb	54.716 ppb	104.758 %
Concentration RSD	1.2 %	0.4 %	3.9 %	7.0 %	2.5 %	3.1 %	0.9 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	50	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1822892-5d10 A2-6020T	Rack	1		
Analysis started at:	9/3/2023 10:20:38 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	91.552 %	94.409 %	51.614 ppb	63.349 ppb	9,485.592 ppb	6,466.472 ppb	50.521 ppb	4,965.596 ppb	9,336.879 ppb
Concentration per Run 1	93.057 %	87.494 %	51.029 ppb	62.817 ppb	9,598.907 ppb	6,381.537 ppb	50.594 ppb	5,023.284 ppb	9,341.428 ppb
Concentration per Run 2	91.445 %	100.292 %	51.789 ppb	63.398 ppb	9,110.410 ppb	6,301.309 ppb	47.742 ppb	4,860.306 ppb	9,190.847 ppb
Concentration per Run 3	90.154 %	95.442 %	52.024 ppb	63.832 ppb	9,747.457 ppb	6,716.568 ppb	53.226 ppb	5,013.199 ppb	9,478.364 ppb
Concentration RSD	1.6 %	6.8 %	1.0 %	0.8 %	3.5 %	3.4 %	5.4 %	1.8 %	1.5 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	96.463 %	49.724 ppb	50.334 ppb	53.413 ppb	5,006.753 ppb	50.027 ppb	50.597 ppb	51.073 ppb	49.758 ppb
Concentration per Run 1	96.941 %	50.271 ppb	51.220 ppb	52.337 ppb	4,964.413 ppb	51.001 ppb	51.289 ppb	52.080 ppb	49.725 ppb
Concentration per Run 2	96.651 %	49.242 ppb	50.048 ppb	53.704 ppb	4,996.956 ppb	49.213 ppb	49.777 ppb	50.322 ppb	49.054 ppb
Concentration per Run 3	95.797 %	49.659 ppb	49.735 ppb	54.197 ppb	5,058.891 ppb	49.867 ppb	50.725 ppb	50.817 ppb	50.495 ppb
Concentration RSD	0.6 %	1.0 %	1.6 %	1.8 %	1.0 %	1.8 %	1.5 %	1.8 %	1.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.693 %	49.723 ppb	48.337 ppb	62.280 ppb	53.418 ppb	91.811 %	2.116 ppb	51.609 ppb	89.207 %
Concentration per Run 1	89.341 %	50.472 ppb	48.197 ppb	61.108 ppb	53.748 ppb	87.224 %	2.155 ppb	52.812 ppb	82.925 %
Concentration per Run 2	94.716 %	48.972 ppb	49.738 ppb	62.482 ppb	52.579 ppb	93.755 %	2.081 ppb	50.763 ppb	92.375 %
Concentration per Run 3	97.022 %	49.724 ppb	47.076 ppb	63.250 ppb	53.928 ppb	94.453 %	2.111 ppb	51.253 ppb	92.322 %
Concentration RSD	4.2 %	1.5 %	2.8 %	1.7 %	1.4 %	4.3 %	1.8 %	2.1 %	6.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.662 ppb	53.226 ppb	95.240 %	95.742 %	52.383 ppb	50.411 ppb	94.773 %
Concentration per Run 1	56.724 ppb	53.439 ppb	89.206 %	88.147 %	49.675 ppb	46.226 ppb	97.397 %
Concentration per Run 2	54.955 ppb	52.255 ppb	97.076 %	98.433 %	53.703 ppb	50.594 ppb	92.644 %
Concentration per Run 3	55.307 ppb	53.984 ppb	99.439 %	100.645 %	53.771 ppb	54.412 ppb	94.278 %
Concentration RSD	1.7 %	1.7 %	5.6 %	7.0 %	4.5 %	8.1 %	2.5 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 51
Analysis label: WG1822892-6d5 A2-6020T
Analysis started at: 9/3/2023 10:25:17 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 45
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	94.816 %	93.287 %	0.005 ppb	17.062 ppb	9,770.835 ppb	3,284.447 ppb	2.879 ppb	301.190 ppb	9,887.093 ppb
Concentration per Run 1	95.559 %	85.339 %	0.004 ppb	17.075 ppb	9,935.169 ppb	3,279.394 ppb	2.174 ppb	313.454 ppb	9,916.336 ppb
Concentration per Run 2	95.319 %	93.017 %	0.008 ppb	16.964 ppb	9,917.407 ppb	3,376.861 ppb	3.083 ppb	311.636 ppb	9,948.629 ppb
Concentration per Run 3	93.570 %	101.504 %	0.003 ppb	17.148 ppb	9,459.930 ppb	3,197.086 ppb	3.380 ppb	278.481 ppb	9,796.315 ppb
Concentration RSD	1.1 %	8.7 %	62.3 %	0.5 %	2.8 %	2.7 %	21.8 %	6.5 %	0.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.287 %	0.310 ppb	0.078 ppb	3.863 ppb	24.253 ppb	0.011 ppb	-0.241 ppb	0.513 ppb	-1.330 ppb
Concentration per Run 1	96.231 %	0.319 ppb	0.078 ppb	3.896 ppb	22.651 ppb	0.011 ppb	-0.268 ppb	0.508 ppb	-1.300 ppb
Concentration per Run 2	97.628 %	0.290 ppb	0.083 ppb	3.921 ppb	26.459 ppb	0.007 ppb	-0.228 ppb	0.517 ppb	-1.368 ppb
Concentration per Run 3	98.002 %	0.322 ppb	0.072 ppb	3.771 ppb	23.649 ppb	0.014 ppb	-0.228 ppb	0.515 ppb	-1.321 ppb
Concentration RSD	1.0 %	5.8 %	6.9 %	2.1 %	8.1 %	29.8 %	9.5 %	0.9 %	2.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.440 %	0.328 ppb	0.776 ppb	27.889 ppb	2.651 ppb	93.090 %	-0.005 ppb	0.002 ppb	90.914 %
Concentration per Run 1	85.555 %	0.265 ppb	0.522 ppb	27.851 ppb	1.980 ppb	87.315 %	-0.004 ppb	0.002 ppb	81.951 %
Concentration per Run 2	93.978 %	0.303 ppb	0.752 ppb	27.889 ppb	2.710 ppb	93.992 %	-0.005 ppb	0.002 ppb	94.306 %
Concentration per Run 3	97.788 %	0.417 ppb	1.054 ppb	27.929 ppb	3.264 ppb	97.962 %	-0.004 ppb	0.003 ppb	96.486 %
Concentration RSD	6.8 %	24.2 %	34.4 %	0.1 %	24.3 %	5.8 %	13.2 %	13.6 %	8.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.527 ppb	5.307 ppb	94.238 %	94.943 %	0.263 ppb	0.062 ppb	91.693 %
Concentration per Run 1	1.475 ppb	5.263 ppb	88.502 %	87.149 %	0.292 ppb	0.061 ppb	90.860 %
Concentration per Run 2	1.570 ppb	5.304 ppb	93.762 %	97.267 %	0.275 ppb	0.065 ppb	91.718 %
Concentration per Run 3	1.538 ppb	5.353 ppb	100.451 %	100.413 %	0.223 ppb	0.061 ppb	92.501 %
Concentration RSD	3.2 %	0.8 %	6.4 %	7.3 %	13.6 %	4.2 %	0.9 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	52	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2343526-01 A2-6020T	Rack	1		
Analysis started at:	9/3/2023 10:29:56 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	91.211 %	95.128 %	0.004 ppb	132.404 ppb	79,732.538 ppb	14,741.590 ppb	130.673 ppb	5,542.697 ppb	44,392.191 ppb
Concentration per Run 1	93.062 %	91.468 %	0.007 ppb	132.026 ppb	80,802.859 ppb	14,936.218 ppb	130.872 ppb	5,633.113 ppb	44,689.340 ppb
Concentration per Run 2	91.443 %	93.960 %	0.001 ppb	131.674 ppb	80,827.166 ppb	15,032.187 ppb	133.598 ppb	5,415.513 ppb	44,017.468 ppb
Concentration per Run 3	89.128 %	99.955 %	0.002 ppb	133.512 ppb	77,567.590 ppb	14,256.364 ppb	127.547 ppb	5,579.464 ppb	44,469.765 ppb
Concentration RSD	2.2 %	4.6 %	91.8 %	0.7 %	2.4 %	2.9 %	2.3 %	2.0 %	0.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	102.222 %	1.402 ppb	0.397 ppb	64.405 ppb	74.512 ppb	0.158 ppb	0.658 ppb	6.843 ppb	16.207 ppb
Concentration per Run 1	102.972 %	1.328 ppb	0.456 ppb	62.997 ppb	76.612 ppb	0.181 ppb	0.609 ppb	6.939 ppb	16.198 ppb
Concentration per Run 2	102.414 %	1.489 ppb	0.348 ppb	65.327 ppb	72.921 ppb	0.154 ppb	0.666 ppb	7.077 ppb	16.623 ppb
Concentration per Run 3	101.279 %	1.389 ppb	0.387 ppb	64.892 ppb	74.004 ppb	0.139 ppb	0.700 ppb	6.513 ppb	15.800 ppb
Concentration RSD	0.8 %	5.8 %	13.7 %	1.9 %	2.5 %	13.4 %	6.9 %	4.3 %	2.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.309 %	0.509 ppb	0.633 ppb	125.991 ppb	1.517 ppb	89.986 %	0.001 ppb	0.023 ppb	91.794 %
Concentration per Run 1	91.020 %	0.503 ppb	0.364 ppb	126.492 ppb	1.182 ppb	87.448 %	0.003 ppb	0.032 ppb	89.462 %
Concentration per Run 2	91.659 %	0.464 ppb	0.766 ppb	125.972 ppb	1.529 ppb	89.876 %	0.001 ppb	0.019 ppb	92.381 %
Concentration per Run 3	97.248 %	0.561 ppb	0.770 ppb	125.510 ppb	1.841 ppb	92.634 %	0.000 ppb	0.018 ppb	93.539 %
Concentration RSD	3.7 %	9.6 %	36.9 %	0.4 %	21.7 %	2.9 %	106.5 %	34.7 %	2.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.035 ppb	17.090 ppb	96.350 %	97.346 %	0.032 ppb	0.222 ppb	92.465 %
Concentration per Run 1	0.984 ppb	16.985 ppb	92.935 %	93.921 %	0.017 ppb	0.207 ppb	94.580 %
Concentration per Run 2	1.030 ppb	16.817 ppb	96.665 %	96.512 %	0.041 ppb	0.233 ppb	90.142 %
Concentration per Run 3	1.090 ppb	17.469 ppb	99.451 %	101.605 %	0.039 ppb	0.225 ppb	92.674 %
Concentration RSD	5.1 %	2.0 %	3.4 %	4.0 %	40.8 %	6.0 %	2.4 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 53
Analysis label: L2343526-02 A2-6020T
Analysis started at: 9/3/2023 10:34:35 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 47
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	90.722 %	93.197 %	0.004 ppb	131.331 ppb	80,119.172 ppb	15,063.258 ppb	266.215 ppb	5,409.412 ppb	44,145.724 ppb
Concentration per Run 1	92.855 %	91.131 %	0.009 ppb	130.448 ppb	80,815.216 ppb	15,275.450 ppb	262.915 ppb	5,480.208 ppb	44,370.495 ppb
Concentration per Run 2	90.834 %	92.074 %	0.001 ppb	130.628 ppb	79,674.027 ppb	14,980.709 ppb	272.076 ppb	5,509.196 ppb	44,536.420 ppb
Concentration per Run 3	88.477 %	96.385 %	0.003 ppb	132.917 ppb	79,868.274 ppb	14,933.615 ppb	263.655 ppb	5,238.832 ppb	43,530.258 ppb
Concentration RSD	2.4 %	3.0 %	97.9 %	1.0 %	0.8 %	1.2 %	1.9 %	2.7 %	1.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.203 %	2.043 ppb	0.730 ppb	69.223 ppb	232.069 ppb	0.221 ppb	0.847 ppb	7.706 ppb	16.945 ppb
Concentration per Run 1	101.673 %	2.007 ppb	0.772 ppb	71.148 ppb	231.623 ppb	0.243 ppb	0.866 ppb	7.854 ppb	17.219 ppb
Concentration per Run 2	102.015 %	2.046 ppb	0.704 ppb	69.480 ppb	235.793 ppb	0.192 ppb	0.854 ppb	7.641 ppb	16.804 ppb
Concentration per Run 3	99.920 %	2.075 ppb	0.713 ppb	67.039 ppb	228.793 ppb	0.227 ppb	0.822 ppb	7.623 ppb	16.812 ppb
Concentration RSD	1.1 %	1.7 %	5.0 %	3.0 %	1.5 %	11.9 %	2.7 %	1.7 %	1.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.148 %	0.492 ppb	0.631 ppb	124.170 ppb	0.881 ppb	91.077 %	0.002 ppb	0.024 ppb	92.497 %
Concentration per Run 1	90.643 %	0.380 ppb	0.646 ppb	124.749 ppb	0.627 ppb	90.030 %	0.000 ppb	0.026 ppb	89.794 %
Concentration per Run 2	96.121 %	0.539 ppb	0.655 ppb	123.955 ppb	0.872 ppb	89.873 %	0.003 ppb	0.025 ppb	91.537 %
Concentration per Run 3	98.680 %	0.558 ppb	0.593 ppb	123.805 ppb	1.145 ppb	93.327 %	0.002 ppb	0.022 ppb	96.161 %
Concentration RSD	4.3 %	19.8 %	5.3 %	0.4 %	29.4 %	2.1 %	78.8 %	8.5 %	3.6 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.757 ppb	17.400 ppb	97.772 %	98.070 %	0.006 ppb	0.862 ppb	95.964 %
Concentration per Run 1	0.723 ppb	17.174 ppb	95.730 %	97.459 %	-0.005 ppb	0.803 ppb	99.678 %
Concentration per Run 2	0.757 ppb	17.260 ppb	97.564 %	96.880 %	0.012 ppb	0.881 ppb	94.091 %
Concentration per Run 3	0.791 ppb	17.766 ppb	100.022 %	99.872 %	0.012 ppb	0.901 ppb	94.122 %
Concentration RSD	4.5 %	1.8 %	2.2 %	1.6 %	159.1 %	6.0 %	3.4 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	54	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2343526-03 A2-6020T	Rack	1		
Analysis started at:	9/3/2023 10:39:15 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	90.604 %	91.468 %	0.003 ppb	136.772 ppb	83,697.333 ppb	15,022.664 ppb	289.354 ppb	5,922.851 ppb	44,445.142 ppb
Concentration per Run 1	92.278 %	85.877 %	0.004 ppb	135.255 ppb	86,898.980 ppb	15,420.433 ppb	292.937 ppb	5,996.439 ppb	45,662.230 ppb
Concentration per Run 2	90.586 %	91.266 %	0.005 ppb	137.121 ppb	81,941.272 ppb	14,735.365 ppb	292.876 ppb	5,871.399 ppb	43,883.499 ppb
Concentration per Run 3	88.946 %	97.261 %	-0.001 ppb	137.939 ppb	82,251.748 ppb	14,912.193 ppb	282.248 ppb	5,900.714 ppb	43,789.696 ppb
Concentration RSD	1.8 %	6.2 %	108.0 %	1.0 %	3.3 %	2.4 %	2.1 %	1.1 %	2.4 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.780 %	1.704 ppb	0.566 ppb	95.403 ppb	219.995 ppb	0.210 ppb	0.788 ppb	9.872 ppb	21.311 ppb
Concentration per Run 1	94.020 %	1.833 ppb	0.563 ppb	98.374 ppb	219.151 ppb	0.205 ppb	0.853 ppb	10.028 ppb	21.783 ppb
Concentration per Run 2	95.334 %	1.564 ppb	0.553 ppb	92.164 ppb	220.025 ppb	0.229 ppb	0.828 ppb	9.749 ppb	21.051 ppb
Concentration per Run 3	94.985 %	1.714 ppb	0.581 ppb	95.671 ppb	220.808 ppb	0.196 ppb	0.682 ppb	9.839 ppb	21.100 ppb
Concentration RSD	0.7 %	7.9 %	2.5 %	3.3 %	0.4 %	8.1 %	11.7 %	1.4 %	1.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.857 %	0.532 ppb	0.616 ppb	126.614 ppb	0.722 ppb	89.415 %	0.006 ppb	0.027 ppb	88.621 %
Concentration per Run 1	89.330 %	0.555 ppb	0.699 ppb	129.257 ppb	0.582 ppb	85.646 %	0.007 ppb	0.030 ppb	84.997 %
Concentration per Run 2	93.750 %	0.536 ppb	0.393 ppb	124.804 ppb	0.724 ppb	89.440 %	0.004 ppb	0.028 ppb	88.853 %
Concentration per Run 3	95.493 %	0.504 ppb	0.755 ppb	125.781 ppb	0.860 ppb	93.161 %	0.007 ppb	0.023 ppb	92.014 %
Concentration RSD	3.4 %	4.9 %	31.7 %	1.8 %	19.2 %	4.2 %	34.8 %	11.7 %	4.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.643 ppb	18.196 ppb	95.084 %	96.042 %	-0.002 ppb	1.557 ppb	86.548 %
Concentration per Run 1	0.614 ppb	18.398 ppb	89.104 %	92.535 %	-0.010 ppb	1.510 ppb	87.525 %
Concentration per Run 2	0.619 ppb	18.211 ppb	96.050 %	95.970 %	0.002 ppb	1.573 ppb	85.298 %
Concentration per Run 3	0.696 ppb	17.978 ppb	100.097 %	99.621 %	0.001 ppb	1.587 ppb	86.820 %
Concentration RSD	7.1 %	1.2 %	5.8 %	3.7 %	266.8 %	2.6 %	1.3 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 55
Analysis label: L2343526-04 A2-6020T
Analysis started at: 9/3/2023 10:43:54 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 49
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	91.855 %	94.634 %	0.002 ppb	134.628 ppb	80,636.638 ppb	14,558.529 ppb	148.393 ppb	5,667.226 ppb	43,979.100 ppb
Concentration per Run 1	93.778 %	96.250 %	0.000 ppb	134.246 ppb	77,478.191 ppb	13,904.088 ppb	142.769 ppb	5,546.396 ppb	43,395.487 ppb
Concentration per Run 2	92.258 %	92.883 %	0.003 ppb	133.552 ppb	81,239.579 ppb	14,882.242 ppb	155.321 ppb	5,784.992 ppb	43,516.521 ppb
Concentration per Run 3	89.529 %	94.769 %	0.002 ppb	136.086 ppb	83,192.144 ppb	14,889.258 ppb	147.089 ppb	5,670.290 ppb	45,025.293 ppb
Concentration RSD	2.3 %	1.8 %	109.0 %	1.0 %	3.6 %	3.9 %	4.3 %	2.1 %	2.1 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	101.390 %	1.430 ppb	0.377 ppb	56.354 ppb	70.065 ppb	0.135 ppb	0.622 ppb	7.590 ppb	17.019 ppb
Concentration per Run 1	102.613 %	1.441 ppb	0.381 ppb	52.826 ppb	68.323 ppb	0.118 ppb	0.564 ppb	7.353 ppb	17.084 ppb
Concentration per Run 2	100.855 %	1.485 ppb	0.397 ppb	57.412 ppb	70.340 ppb	0.149 ppb	0.692 ppb	7.974 ppb	17.195 ppb
Concentration per Run 3	100.700 %	1.363 ppb	0.353 ppb	58.824 ppb	71.533 ppb	0.137 ppb	0.610 ppb	7.442 ppb	16.776 ppb
Concentration RSD	1.0 %	4.3 %	6.0 %	5.6 %	2.3 %	11.3 %	10.5 %	4.4 %	1.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.908 %	0.433 ppb	0.592 ppb	123.949 ppb	0.683 ppb	90.973 %	0.001 ppb	0.020 ppb	91.907 %
Concentration per Run 1	94.713 %	0.417 ppb	0.514 ppb	121.397 ppb	0.470 ppb	89.884 %	0.001 ppb	0.022 ppb	89.196 %
Concentration per Run 2	93.829 %	0.458 ppb	0.711 ppb	126.595 ppb	0.717 ppb	89.784 %	0.002 ppb	0.028 ppb	92.121 %
Concentration per Run 3	99.182 %	0.425 ppb	0.551 ppb	123.856 ppb	0.863 ppb	93.253 %	-0.001 ppb	0.011 ppb	94.402 %
Concentration RSD	3.0 %	4.9 %	17.7 %	2.1 %	29.1 %	2.2 %	148.6 %	42.9 %	2.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.508 ppb	15.685 ppb	97.168 %	97.880 %	-0.009 ppb	0.194 ppb	95.544 %
Concentration per Run 1	0.459 ppb	15.637 ppb	93.825 %	96.079 %	-0.015 ppb	0.180 ppb	99.855 %
Concentration per Run 2	0.517 ppb	15.447 ppb	97.501 %	97.380 %	-0.007 ppb	0.200 ppb	94.133 %
Concentration per Run 3	0.547 ppb	15.971 ppb	100.179 %	100.182 %	-0.005 ppb	0.203 ppb	92.644 %
Concentration RSD	8.9 %	1.7 %	3.3 %	2.1 %	59.4 %	6.2 %	4.0 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 56
Analysis label: CCV
Analysis started at: 9/3/2023 10:48:32 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	87.844 %	96.497 %	61.515 ppb	55.515 ppb	6,146.614 ppb	6,019.599 ppb	59.293 ppb	6,010.691 ppb	6,133.019 ppb
Concentration per Run 1	89.079 %	99.079 %	61.354 ppb	55.121 ppb	6,017.270 ppb	5,704.823 ppb	54.744 ppb	5,644.478 ppb	5,933.219 ppb
Concentration per Run 2	87.995 %	93.691 %	61.388 ppb	55.929 ppb	6,130.518 ppb	6,098.689 ppb	58.264 ppb	5,980.902 ppb	6,040.743 ppb
Concentration per Run 3	86.459 %	96.722 %	61.803 ppb	55.496 ppb	6,292.054 ppb	6,255.285 ppb	64.873 ppb	6,406.694 ppb	6,425.095 ppb
Recovery Percentage 1			102.525 %	92.526 %	102.444 %	100.327 %	98.822 %	100.178 %	102.217 %
Concentration RSD	1.5 %	2.8 %	0.4 %	0.7 %	2.2 %	4.7 %	8.7 %	6.4 %	4.2 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	110.365 %	59.395 ppb	61.177 ppb	61.005 ppb	6,095.480 ppb	61.047 ppb	61.736 ppb	61.491 ppb	61.700 ppb
Concentration per Run 1	110.229 %	57.434 ppb	59.558 ppb	59.475 ppb	5,993.306 ppb	61.125 ppb	61.817 ppb	61.846 ppb	60.863 ppb
Concentration per Run 2	111.032 %	61.009 ppb	63.142 ppb	62.546 ppb	6,190.429 ppb	63.011 ppb	62.633 ppb	62.901 ppb	63.537 ppb
Concentration per Run 3	109.834 %	59.742 ppb	60.832 ppb	60.994 ppb	6,102.706 ppb	59.006 ppb	60.759 ppb	59.727 ppb	60.699 ppb
Recovery Percentage 1		98.992 %	101.962 %	101.675 %	101.591 %	101.746 %	102.894 %	102.486 %	102.833 %
Concentration RSD	0.6 %	3.1 %	3.0 %	2.5 %	1.6 %	3.3 %	1.5 %	2.6 %	2.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.791 %	60.704 ppb	60.216 ppb	52.568 ppb	58.915 ppb	95.995 %	58.486 ppb	60.407 ppb	94.901 %
Concentration per Run 1	94.545 %	59.759 ppb	58.923 ppb	50.630 ppb	58.749 ppb	95.192 %	59.217 ppb	60.514 ppb	91.584 %
Concentration per Run 2	91.448 %	62.019 ppb	61.695 ppb	52.538 ppb	58.973 ppb	95.529 %	58.425 ppb	60.471 ppb	91.911 %
Concentration per Run 3	101.380 %	60.333 ppb	60.031 ppb	54.536 ppb	59.025 ppb	97.263 %	57.814 ppb	60.235 ppb	101.208 %
Recovery Percentage 1		101.173 %	100.360 %	87.613 %	98.192 %		97.476 %	100.678 %	
Concentration RSD	5.3 %	1.9 %	2.3 %	3.7 %	0.2 %	1.2 %	1.2 %	0.2 %	5.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.852 ppb	60.683 ppb	98.816 %	99.321 %	58.576 ppb	57.579 ppb	105.455 %
Concentration per Run 1	62.960 ppb	60.347 ppb	96.096 %	97.879 %	58.656 ppb	56.379 ppb	104.798 %
Concentration per Run 2	62.681 ppb	61.625 ppb	98.099 %	98.626 %	57.745 ppb	56.967 ppb	105.302 %
Concentration per Run 3	59.915 ppb	60.077 ppb	102.254 %	101.458 %	59.325 ppb	59.391 ppb	106.265 %
Recovery Percentage 1	103.087 %	101.138 %			97.626 %	95.965 %	
Concentration RSD	2.7 %	1.4 %	3.2 %	1.9 %	1.4 %	2.8 %	0.7 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	57	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/3/2023 10:53:14 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	89.800 %	95.599 %	0.006 ppb	0.061 ppb	-2.193 ppb	-1.895 ppb	-1.466 ppb	-10.962 ppb	-7.299 ppb
Concentration per Run 1	91.175 %	88.437 %	0.004 ppb	0.034 ppb	-1.422 ppb	-1.814 ppb	-1.475 ppb	-13.785 ppb	-6.982 ppb
Concentration per Run 2	90.103 %	92.815 %	0.004 ppb	0.122 ppb	-2.179 ppb	-2.008 ppb	-1.599 ppb	-10.980 ppb	-7.868 ppb
Concentration per Run 3	88.122 %	105.546 %	0.010 ppb	0.026 ppb	-2.979 ppb	-1.864 ppb	-1.323 ppb	-8.120 ppb	-7.049 ppb
Recovery Percentage 1			1.229 %	0.607 %	-2.193 %	-2.708 %	-14.658 %	-10.962 %	-7.299 %
Concentration RSD	1.7 %	9.3 %	48.7 %	88.1 %	35.5 %	5.3 %	9.4 %	25.8 %	6.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	91.458 %	0.016 ppb	-0.011 ppb	-0.340 ppb	11.171 ppb	-0.002 ppb	-0.228 ppb	-0.099 ppb	-1.864 ppb
Concentration per Run 1	90.652 %	0.015 ppb	0.005 ppb	-0.283 ppb	12.200 ppb	-0.003 ppb	-0.268 ppb	-0.104 ppb	-1.904 ppb
Concentration per Run 2	92.068 %	0.018 ppb	-0.021 ppb	-0.373 ppb	11.580 ppb	-0.001 ppb	-0.226 ppb	-0.100 ppb	-1.819 ppb
Concentration per Run 3	91.655 %	0.015 ppb	-0.017 ppb	-0.362 ppb	9.733 ppb	-0.004 ppb	-0.191 ppb	-0.094 ppb	-1.871 ppb
Recovery Percentage 1		0.317 %	-1.090 %	-33.964 %	22.342 %	-0.482 %	-11.410 %	-9.926 %	-37.289 %
Concentration RSD	0.8 %	12.8 %	129.6 %	14.5 %	11.5 %	62.2 %	17.0 %	5.3 %	2.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.180 %	0.101 ppb	0.596 ppb	-0.039 ppb	1.465 ppb	95.450 %	0.001 ppb	0.000 ppb	95.827 %
Concentration per Run 1	89.570 %	0.098 ppb	0.343 ppb	-0.041 ppb	1.106 ppb	93.178 %	0.001 ppb	-0.001 ppb	90.310 %
Concentration per Run 2	90.831 %	0.116 ppb	0.777 ppb	-0.035 ppb	1.561 ppb	93.367 %	0.001 ppb	0.001 ppb	90.179 %
Concentration per Run 3	99.141 %	0.087 ppb	0.667 ppb	-0.039 ppb	1.729 ppb	99.806 %	0.000 ppb	0.000 ppb	106.991 %
Recovery Percentage 1		20.115 %	11.914 %	-0.385 %	73.262 %		0.168 %	0.003 %	
Concentration RSD	5.6 %	14.4 %	37.9 %	7.7 %	22.0 %	4.0 %	67.2 %	12,404.4 %	10.1 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.231 ppb	-0.030 ppb	97.366 %	98.402 %	0.303 ppb	0.007 ppb	101.079 %
Concentration per Run 1	0.189 ppb	-0.034 ppb	93.317 %	93.301 %	0.351 ppb	0.008 ppb	101.366 %
Concentration per Run 2	0.268 ppb	-0.015 ppb	95.294 %	94.276 %	0.310 ppb	0.009 ppb	98.647 %
Concentration per Run 3	0.236 ppb	-0.041 ppb	103.487 %	107.629 %	0.246 ppb	0.005 ppb	103.223 %
Recovery Percentage 1	5.766 %	-6.028 %			30.250 %	0.728 %	
Concentration RSD	17.2 %	46.1 %	5.5 %	8.1 %	17.5 %	24.5 %	2.3 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	58	User name	ALPHALAB\Metals-Instrument	Comment	fb
Analysis label:	L2343526-06 A2-6020T	Rack	1		
Analysis started at:	9/3/2023 10:57:57 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	93.151 %	91.446 %	0.001 ppb	1.712 ppb	3.451 ppb	1.217 ppb	0.574 ppb	-12.858 ppb	9.433 ppb
Concentration per Run 1	95.426 %	84.328 %	0.001 ppb	1.606 ppb	4.479 ppb	1.888 ppb	-0.012 ppb	-9.990 ppb	7.101 ppb
Concentration per Run 2	92.304 %	91.064 %	0.004 ppb	1.732 ppb	3.419 ppb	0.987 ppb	0.339 ppb	-14.156 ppb	6.345 ppb
Concentration per Run 3	91.724 %	98.945 %	0.000 ppb	1.799 ppb	2.454 ppb	0.776 ppb	1.395 ppb	-14.427 ppb	14.854 ppb
Concentration RSD	2.1 %	8.0 %	134.4 %	5.7 %	29.3 %	48.5 %	127.7 %	19.3 %	49.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	91.099 %	-0.008 ppb	0.181 ppb	-0.335 ppb	3.784 ppb	0.000 ppb	-0.341 ppb	0.187 ppb	-1.802 ppb
Concentration per Run 1	91.219 %	0.001 ppb	0.214 ppb	-0.347 ppb	3.888 ppb	-0.003 ppb	-0.353 ppb	0.214 ppb	-1.773 ppb
Concentration per Run 2	90.866 %	-0.013 ppb	0.154 ppb	-0.336 ppb	4.172 ppb	0.001 ppb	-0.340 ppb	0.174 ppb	-1.821 ppb
Concentration per Run 3	91.212 %	-0.013 ppb	0.174 ppb	-0.320 ppb	3.291 ppb	0.002 ppb	-0.329 ppb	0.172 ppb	-1.813 ppb
Concentration RSD	0.2 %	100.6 %	16.9 %	4.1 %	11.9 %	3,186.5 %	3.6 %	12.6 %	1.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.172 %	0.027 ppb	0.152 ppb	0.216 ppb	0.364 ppb	95.592 %	-0.004 ppb	0.001 ppb	93.504 %
Concentration per Run 1	88.961 %	0.013 ppb	0.101 ppb	0.223 ppb	0.210 ppb	90.412 %	-0.004 ppb	0.000 ppb	84.945 %
Concentration per Run 2	95.881 %	0.042 ppb	0.136 ppb	0.204 ppb	0.326 ppb	95.979 %	-0.004 ppb	0.003 ppb	91.308 %
Concentration per Run 3	103.676 %	0.027 ppb	0.220 ppb	0.221 ppb	0.557 ppb	100.385 %	-0.004 ppb	0.002 ppb	104.260 %
Concentration RSD	7.7 %	53.5 %	39.9 %	4.6 %	48.5 %	5.2 %	11.4 %	101.4 %	10.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.145 ppb	0.317 ppb	97.089 %	97.967 %	0.038 ppb	0.000 ppb	96.663 %
Concentration per Run 1	0.129 ppb	0.362 ppb	89.503 %	89.324 %	0.021 ppb	-0.001 ppb	96.517 %
Concentration per Run 2	0.130 ppb	0.257 ppb	96.808 %	97.634 %	0.048 ppb	0.001 ppb	93.809 %
Concentration per Run 3	0.177 ppb	0.331 ppb	104.957 %	106.941 %	0.046 ppb	0.001 ppb	99.662 %
Concentration RSD	18.8 %	17.1 %	8.0 %	9.0 %	38.7 %	237.5 %	3.0 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	59	User name	ALPHALAB\Metals-Instrument	Comment	fb
Analysis label:	L2343836-07 A2-6020T	Rack	1		
Analysis started at:	9/3/2023 11:02:35 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	94.090 %	96.700 %	0.001 ppb	1.371 ppb	14.284 ppb	1.114 ppb	0.161 ppb	-13.628 ppb	6.156 ppb
Concentration per Run 1	95.313 %	93.354 %	0.004 ppb	1.354 ppb	15.664 ppb	1.556 ppb	0.421 ppb	-13.715 ppb	8.793 ppb
Concentration per Run 2	94.332 %	91.737 %	-0.002 ppb	1.356 ppb	14.689 ppb	1.212 ppb	0.259 ppb	-15.003 ppb	3.116 ppb
Concentration per Run 3	92.625 %	105.007 %	0.001 ppb	1.402 ppb	12.498 ppb	0.573 ppb	-0.197 ppb	-12.167 ppb	6.560 ppb
Concentration RSD	1.4 %	7.5 %	332.8 %	2.0 %	11.4 %	44.8 %	199.1 %	10.4 %	46.5 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	91.683 %	0.005 ppb	0.142 ppb	-0.346 ppb	-1.033 ppb	-0.001 ppb	-0.374 ppb	-0.080 ppb	-1.719 ppb
Concentration per Run 1	91.225 %	0.010 ppb	0.150 ppb	-0.373 ppb	-1.484 ppb	-0.003 ppb	-0.365 ppb	-0.093 ppb	-1.698 ppb
Concentration per Run 2	92.047 %	-0.004 ppb	0.141 ppb	-0.336 ppb	-1.901 ppb	-0.001 ppb	-0.399 ppb	-0.067 ppb	-1.732 ppb
Concentration per Run 3	91.776 %	0.010 ppb	0.134 ppb	-0.328 ppb	0.286 ppb	-0.001 ppb	-0.358 ppb	-0.079 ppb	-1.726 ppb
Concentration RSD	0.5 %	158.7 %	5.9 %	7.0 %	112.4 %	81.7 %	5.9 %	16.4 %	1.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.640 %	0.005 ppb	0.036 ppb	0.244 ppb	0.117 ppb	97.802 %	-0.004 ppb	0.001 ppb	98.537 %
Concentration per Run 1	89.322 %	-0.013 ppb	0.000 ppb	0.256 ppb	0.065 ppb	93.162 %	-0.004 ppb	0.001 ppb	91.398 %
Concentration per Run 2	95.668 %	0.017 ppb	0.059 ppb	0.237 ppb	0.087 ppb	97.330 %	-0.003 ppb	0.003 ppb	95.097 %
Concentration per Run 3	101.932 %	0.013 ppb	0.048 ppb	0.241 ppb	0.201 ppb	102.915 %	-0.004 ppb	0.000 ppb	109.115 %
Concentration RSD	6.6 %	297.8 %	88.2 %	4.0 %	62.1 %	5.0 %	7.5 %	120.5 %	9.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.089 ppb	0.293 ppb	97.035 %	98.974 %	0.008 ppb	-0.001 ppb	99.729 %
Concentration per Run 1	0.086 ppb	0.300 ppb	92.577 %	93.263 %	-0.002 ppb	-0.001 ppb	103.682 %
Concentration per Run 2	0.095 ppb	0.298 ppb	95.908 %	97.683 %	0.012 ppb	-0.001 ppb	96.038 %
Concentration per Run 3	0.086 ppb	0.281 ppb	102.618 %	105.977 %	0.014 ppb	0.000 ppb	99.467 %
Concentration RSD	5.8 %	3.7 %	5.3 %	6.5 %	112.5 %	64.6 %	3.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	60	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2343526-05 A2-6020T	Rack	1		
Analysis started at:	9/3/2023 11:07:14 PM	Vial	50		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	89.968 %	93.758 %	0.002 ppb	135.696 ppb	83,326.380 ppb	15,767.652 ppb	117.310 ppb	5,900.804 ppb	46,031.946 ppb
Concentration per Run 1	92.004 %	91.131 %	0.003 ppb	134.092 ppb	83,065.006 ppb	15,214.105 ppb	113.811 ppb	5,678.639 ppb	44,964.652 ppb
Concentration per Run 2	89.997 %	91.266 %	0.001 ppb	135.781 ppb	83,268.658 ppb	16,147.667 ppb	113.570 ppb	5,794.602 ppb	45,086.129 ppb
Concentration per Run 3	87.902 %	98.877 %	0.003 ppb	137.215 ppb	83,645.477 ppb	15,941.184 ppb	124.550 ppb	6,229.172 ppb	48,045.057 ppb
Concentration RSD	2.3 %	4.7 %	49.6 %	1.2 %	0.4 %	3.1 %	5.3 %	4.9 %	3.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.341 %	1.484 ppb	0.401 ppb	44.771 ppb	64.182 ppb	0.124 ppb	0.906 ppb	7.399 ppb	17.466 ppb
Concentration per Run 1	96.879 %	1.592 ppb	0.375 ppb	44.375 ppb	64.076 ppb	0.149 ppb	0.934 ppb	7.512 ppb	17.492 ppb
Concentration per Run 2	97.974 %	1.457 ppb	0.431 ppb	44.336 ppb	65.109 ppb	0.098 ppb	0.922 ppb	7.486 ppb	18.078 ppb
Concentration per Run 3	97.171 %	1.403 ppb	0.397 ppb	45.603 ppb	63.361 ppb	0.124 ppb	0.861 ppb	7.200 ppb	16.828 ppb
Concentration RSD	0.6 %	6.6 %	7.0 %	1.6 %	1.4 %	20.8 %	4.3 %	2.3 %	3.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	95.184 %	0.510 ppb	0.426 ppb	132.820 ppb	0.549 ppb	89.808 %	0.001 ppb	0.023 ppb	93.035 %
Concentration per Run 1	89.528 %	0.594 ppb	0.285 ppb	131.774 ppb	0.446 ppb	83.356 %	0.002 ppb	0.029 ppb	86.188 %
Concentration per Run 2	92.767 %	0.508 ppb	0.445 ppb	127.137 ppb	0.618 ppb	91.288 %	0.001 ppb	0.019 ppb	89.063 %
Concentration per Run 3	103.257 %	0.430 ppb	0.548 ppb	139.548 ppb	0.582 ppb	94.781 %	0.000 ppb	0.021 ppb	103.855 %
Concentration RSD	7.5 %	16.0 %	31.1 %	4.7 %	16.6 %	6.5 %	134.3 %	22.1 %	10.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.293 ppb	16.258 ppb	96.076 %	98.420 %	-0.001 ppb	0.164 ppb	91.223 %
Concentration per Run 1	0.282 ppb	15.470 ppb	89.286 %	90.919 %	-0.008 ppb	0.159 ppb	93.754 %
Concentration per Run 2	0.298 ppb	16.415 ppb	94.279 %	98.483 %	0.003 ppb	0.167 ppb	88.240 %
Concentration per Run 3	0.297 ppb	16.890 ppb	104.661 %	105.857 %	0.002 ppb	0.166 ppb	91.677 %
Concentration RSD	3.1 %	4.4 %	8.2 %	7.6 %	565.4 %	2.7 %	3.1 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 61
Analysis label: L2343836-01 A2-6020T
Analysis started at: 9/3/2023 11:11:52 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 52
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	91.584 %	98.024 %	0.002 ppb	111.214 ppb	61,517.725 ppb	14,031.867 ppb	89.773 ppb	4,030.915 ppb	42,243.660 ppb
Concentration per Run 1	93.080 %	89.851 %	0.002 ppb	110.722 ppb	63,798.573 ppb	14,316.492 ppb	89.734 ppb	4,158.790 ppb	43,790.362 ppb
Concentration per Run 2	91.909 %	101.235 %	0.002 ppb	111.409 ppb	58,737.457 ppb	13,066.755 ppb	82.481 ppb	3,706.068 ppb	39,664.984 ppb
Concentration per Run 3	89.762 %	102.986 %	0.003 ppb	111.511 ppb	62,017.145 ppb	14,712.355 ppb	97.103 ppb	4,227.888 ppb	43,275.633 ppb
Concentration RSD	1.8 %	7.3 %	38.0 %	0.4 %	4.2 %	6.1 %	8.1 %	7.0 %	5.3 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.045 %	1.217 ppb	0.470 ppb	59.194 ppb	88.306 ppb	0.113 ppb	0.515 ppb	5.252 ppb	19.340 ppb
Concentration per Run 1	97.826 %	1.332 ppb	0.473 ppb	60.913 ppb	93.190 ppb	0.111 ppb	0.607 ppb	5.535 ppb	20.291 ppb
Concentration per Run 2	97.515 %	1.116 ppb	0.466 ppb	54.978 ppb	82.090 ppb	0.104 ppb	0.422 ppb	4.919 ppb	18.439 ppb
Concentration per Run 3	95.796 %	1.203 ppb	0.470 ppb	61.692 ppb	89.638 ppb	0.124 ppb	0.517 ppb	5.302 ppb	19.288 ppb
Concentration RSD	1.1 %	8.9 %	0.8 %	6.2 %	6.4 %	8.8 %	18.0 %	5.9 %	4.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	98.376 %	0.679 ppb	0.535 ppb	127.611 ppb	0.480 ppb	93.344 %	0.000 ppb	0.022 ppb	96.217 %
Concentration per Run 1	90.968 %	0.762 ppb	0.643 ppb	127.559 ppb	0.439 ppb	89.808 %	0.002 ppb	0.022 ppb	88.030 %
Concentration per Run 2	99.341 %	0.594 ppb	0.347 ppb	122.542 ppb	0.466 ppb	92.693 %	-0.001 ppb	0.028 ppb	94.779 %
Concentration per Run 3	104.818 %	0.682 ppb	0.615 ppb	132.733 ppb	0.534 ppb	97.532 %	-0.001 ppb	0.017 ppb	105.841 %
Concentration RSD	7.1 %	12.4 %	30.5 %	4.0 %	10.2 %	4.2 %	514.4 %	25.6 %	9.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.336 ppb	22.103 ppb	98.563 %	100.743 %	-0.005 ppb	0.293 ppb	91.249 %
Concentration per Run 1	0.342 ppb	22.953 ppb	91.618 %	92.751 %	-0.012 ppb	0.280 ppb	94.344 %
Concentration per Run 2	0.334 ppb	20.622 ppb	98.831 %	100.297 %	-0.002 ppb	0.298 ppb	87.506 %
Concentration per Run 3	0.330 ppb	22.735 ppb	105.239 %	109.180 %	0.000 ppb	0.302 ppb	91.899 %
Concentration RSD	1.8 %	5.8 %	6.9 %	8.2 %	124.0 %	4.0 %	3.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 62
Analysis label: L2343836-02 A2-6020T
Analysis started at: 9/3/2023 11:16:30 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 53
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	92.118 %	95.195 %	0.001 ppb	99.945 ppb	56,347.675 ppb	14,794.898 ppb	65.008 ppb	3,048.105 ppb	44,566.844 ppb
Concentration per Run 1	94.615 %	94.836 %	0.000 ppb	99.371 ppb	57,462.633 ppb	15,012.604 ppb	63.512 ppb	3,063.356 ppb	46,025.421 ppb
Concentration per Run 2	92.091 %	93.826 %	0.003 ppb	99.867 ppb	54,980.530 ppb	14,016.845 ppb	67.226 ppb	3,095.326 ppb	43,965.157 ppb
Concentration per Run 3	89.649 %	96.924 %	0.000 ppb	100.598 ppb	56,599.861 ppb	15,355.245 ppb	64.286 ppb	2,985.633 ppb	43,709.956 ppb
Concentration RSD	2.7 %	1.7 %	255.0 %	0.6 %	2.2 %	4.7 %	3.0 %	1.9 %	2.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	98.100 %	1.250 ppb	0.420 ppb	46.573 ppb	89.554 ppb	0.100 ppb	0.484 ppb	4.296 ppb	13.786 ppb
Concentration per Run 1	98.723 %	1.215 ppb	0.411 ppb	48.069 ppb	89.126 ppb	0.115 ppb	0.524 ppb	4.216 ppb	14.326 ppb
Concentration per Run 2	98.024 %	1.170 ppb	0.401 ppb	44.437 ppb	88.290 ppb	0.090 ppb	0.452 ppb	4.388 ppb	13.402 ppb
Concentration per Run 3	97.554 %	1.366 ppb	0.449 ppb	47.211 ppb	91.247 ppb	0.096 ppb	0.478 ppb	4.284 ppb	13.629 ppb
Concentration RSD	0.6 %	8.2 %	6.0 %	4.1 %	1.7 %	12.7 %	7.6 %	2.0 %	3.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	94.929 %	0.822 ppb	0.376 ppb	132.844 ppb	0.487 ppb	92.627 %	0.000 ppb	0.015 ppb	94.621 %
Concentration per Run 1	90.572 %	0.841 ppb	0.343 ppb	138.156 ppb	0.408 ppb	87.956 %	-0.002 ppb	0.018 ppb	91.484 %
Concentration per Run 2	97.811 %	0.818 ppb	0.402 ppb	128.965 ppb	0.510 ppb	94.518 %	0.001 ppb	0.016 ppb	97.649 %
Concentration per Run 3	96.403 %	0.806 ppb	0.383 ppb	131.411 ppb	0.542 ppb	95.406 %	0.001 ppb	0.012 ppb	94.731 %
Concentration RSD	4.0 %	2.2 %	7.9 %	3.6 %	14.3 %	4.4 %	5,770.1 %	20.7 %	3.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.302 ppb	24.302 ppb	96.654 %	97.766 %	-0.011 ppb	0.295 ppb	89.679 %
Concentration per Run 1	0.291 ppb	25.247 ppb	92.628 %	94.166 %	-0.016 ppb	0.281 ppb	92.242 %
Concentration per Run 2	0.289 ppb	23.864 ppb	96.883 %	97.749 %	-0.010 ppb	0.302 ppb	86.372 %
Concentration per Run 3	0.327 ppb	23.796 ppb	100.450 %	101.383 %	-0.008 ppb	0.302 ppb	90.424 %
Concentration RSD	7.1 %	3.4 %	4.1 %	3.7 %	40.0 %	4.2 %	3.4 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 63
Analysis label: L2343836-03 A2-6020T
Analysis started at: 9/3/2023 11:21:08 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 54
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	92.018 %	96.789 %	0.003 ppb	85.932 ppb	49,960.558 ppb	16,239.583 ppb	22.967 ppb	1,647.354 ppb	48,812.262 ppb
Concentration per Run 1	93.663 %	92.950 %	0.006 ppb	85.202 ppb	51,600.189 ppb	17,008.137 ppb	23.601 ppb	1,718.049 ppb	50,439.769 ppb
Concentration per Run 2	91.961 %	99.484 %	0.003 ppb	86.593 ppb	49,251.886 ppb	15,582.344 ppb	21.046 ppb	1,583.701 ppb	47,750.931 ppb
Concentration per Run 3	90.430 %	97.934 %	0.002 ppb	86.001 ppb	49,029.600 ppb	16,128.269 ppb	24.254 ppb	1,640.312 ppb	48,246.085 ppb
Concentration RSD	1.8 %	3.5 %	67.7 %	0.8 %	2.9 %	4.4 %	7.4 %	4.1 %	2.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.461 %	1.352 ppb	0.612 ppb	31.385 ppb	115.490 ppb	0.080 ppb	0.326 ppb	2.468 ppb	12.247 ppb
Concentration per Run 1	96.633 %	1.436 ppb	0.624 ppb	32.850 ppb	116.787 ppb	0.072 ppb	0.400 ppb	2.631 ppb	13.052 ppb
Concentration per Run 2	98.190 %	1.343 ppb	0.591 ppb	29.950 ppb	118.567 ppb	0.084 ppb	0.294 ppb	2.287 ppb	11.784 ppb
Concentration per Run 3	97.560 %	1.277 ppb	0.621 ppb	31.357 ppb	111.116 ppb	0.083 ppb	0.285 ppb	2.485 ppb	11.905 ppb
Concentration RSD	0.8 %	5.9 %	2.9 %	4.6 %	3.4 %	8.3 %	19.7 %	7.0 %	5.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	94.296 %	0.981 ppb	0.181 ppb	146.504 ppb	0.569 ppb	92.623 %	0.042 ppb	0.014 ppb	91.101 %
Concentration per Run 1	89.288 %	1.064 ppb	0.240 ppb	152.944 ppb	0.571 ppb	87.323 %	0.041 ppb	0.012 ppb	88.941 %
Concentration per Run 2	96.669 %	0.949 ppb	0.194 ppb	142.490 ppb	0.528 ppb	94.493 %	0.038 ppb	0.014 ppb	91.356 %
Concentration per Run 3	96.932 %	0.930 ppb	0.109 ppb	144.076 ppb	0.607 ppb	96.054 %	0.046 ppb	0.016 ppb	93.006 %
Concentration RSD	4.6 %	7.4 %	36.7 %	3.8 %	6.9 %	5.0 %	8.8 %	13.7 %	2.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.340 ppb	30.645 ppb	95.818 %	97.648 %	-0.012 ppb	0.327 ppb	91.636 %
Concentration per Run 1	0.318 ppb	31.444 ppb	90.362 %	91.016 %	-0.017 ppb	0.306 ppb	96.742 %
Concentration per Run 2	0.350 ppb	30.006 ppb	97.836 %	102.460 %	-0.010 ppb	0.336 ppb	88.949 %
Concentration per Run 3	0.353 ppb	30.485 ppb	99.255 %	99.466 %	-0.009 ppb	0.340 ppb	89.219 %
Concentration RSD	5.7 %	2.4 %	5.0 %	6.1 %	33.2 %	5.6 %	4.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 64
Analysis label: L2343836-04 A2-6020T
Analysis started at: 9/3/2023 11:25:46 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 55
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	91.776 %	96.587 %	0.003 ppb	83.260 ppb	47,640.355 ppb	16,165.865 ppb	23.060 ppb	1,598.079 ppb	48,543.704 ppb
Concentration per Run 1	93.212 %	93.691 %	0.000 ppb	82.817 ppb	48,075.015 ppb	16,299.856 ppb	22.918 ppb	1,601.485 ppb	48,257.592 ppb
Concentration per Run 2	92.233 %	96.655 %	0.005 ppb	83.050 ppb	48,316.017 ppb	16,285.929 ppb	23.150 ppb	1,596.782 ppb	48,745.848 ppb
Concentration per Run 3	89.881 %	99.416 %	0.005 ppb	83.911 ppb	46,530.033 ppb	15,911.810 ppb	23.111 ppb	1,595.968 ppb	48,627.671 ppb
Concentration RSD	1.9 %	3.0 %	96.2 %	0.7 %	2.0 %	1.4 %	0.5 %	0.2 %	0.5 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	103.640 %	1.410 ppb	0.625 ppb	29.890 ppb	127.372 ppb	0.083 ppb	0.318 ppb	2.560 ppb	30.252 ppb
Concentration per Run 1	104.404 %	1.392 ppb	0.625 ppb	29.143 ppb	127.700 ppb	0.089 ppb	0.353 ppb	2.631 ppb	29.904 ppb
Concentration per Run 2	103.926 %	1.405 ppb	0.619 ppb	30.936 ppb	125.600 ppb	0.095 ppb	0.258 ppb	2.586 ppb	30.746 ppb
Concentration per Run 3	102.589 %	1.435 ppb	0.630 ppb	29.590 ppb	128.818 ppb	0.065 ppb	0.341 ppb	2.463 ppb	30.106 ppb
Concentration RSD	0.9 %	1.6 %	0.9 %	3.1 %	1.3 %	19.2 %	16.2 %	3.4 %	1.5 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.150 %	0.928 ppb	0.247 ppb	142.499 ppb	0.460 ppb	93.352 %	0.005 ppb	0.009 ppb	94.673 %
Concentration per Run 1	94.518 %	0.925 ppb	0.201 ppb	142.299 ppb	0.431 ppb	92.673 %	0.005 ppb	0.008 ppb	90.822 %
Concentration per Run 2	96.019 %	0.916 ppb	0.264 ppb	142.185 ppb	0.427 ppb	92.545 %	0.006 ppb	0.010 ppb	95.111 %
Concentration per Run 3	97.914 %	0.943 ppb	0.277 ppb	143.014 ppb	0.521 ppb	94.837 %	0.004 ppb	0.008 ppb	98.087 %
Concentration RSD	1.8 %	1.5 %	16.4 %	0.3 %	11.6 %	1.4 %	19.5 %	12.0 %	3.9 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.299 ppb	29.862 ppb	98.273 %	99.908 %	-0.016 ppb	0.320 ppb	98.985 %
Concentration per Run 1	0.292 ppb	29.637 ppb	98.692 %	97.938 %	-0.021 ppb	0.304 ppb	101.928 %
Concentration per Run 2	0.283 ppb	30.551 ppb	96.557 %	100.852 %	-0.016 ppb	0.322 ppb	98.639 %
Concentration per Run 3	0.322 ppb	29.398 ppb	99.570 %	100.934 %	-0.012 ppb	0.335 ppb	96.387 %
Concentration RSD	6.8 %	2.0 %	1.6 %	1.7 %	27.0 %	4.8 %	2.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 65
Analysis label: L2343836-05 A2-6020T
Analysis started at: 9/3/2023 11:30:25 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 56
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	91.163 %	91.782 %	0.022 ppb	81.980 ppb	51,196.920 ppb	16,827.973 ppb	419.545 ppb	1,870.069 ppb	49,848.070 ppb
Concentration per Run 1	92.813 %	87.157 %	0.017 ppb	81.729 ppb	52,915.064 ppb	17,569.273 ppb	441.528 ppb	1,945.223 ppb	51,794.528 ppb
Concentration per Run 2	91.555 %	95.442 %	0.025 ppb	82.135 ppb	49,176.604 ppb	16,326.455 ppb	400.348 ppb	1,796.379 ppb	48,418.708 ppb
Concentration per Run 3	89.122 %	92.748 %	0.024 ppb	82.075 ppb	51,499.091 ppb	16,588.190 ppb	416.759 ppb	1,868.605 ppb	49,330.975 ppb
Concentration RSD	2.1 %	4.6 %	18.7 %	0.3 %	3.7 %	3.9 %	4.9 %	4.0 %	3.5 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	97.966 %	3.406 ppb	2.298 ppb	161.309 ppb	898.353 ppb	0.527 ppb	1.292 ppb	6.937 ppb	18.149 ppb
Concentration per Run 1	97.506 %	3.547 ppb	2.425 ppb	172.728 ppb	968.393 ppb	0.571 ppb	1.418 ppb	7.255 ppb	18.656 ppb
Concentration per Run 2	98.140 %	3.421 ppb	2.241 ppb	154.663 ppb	855.761 ppb	0.521 ppb	1.217 ppb	6.825 ppb	18.196 ppb
Concentration per Run 3	98.251 %	3.250 ppb	2.228 ppb	156.536 ppb	870.904 ppb	0.490 ppb	1.242 ppb	6.730 ppb	17.595 ppb
Concentration RSD	0.4 %	4.4 %	4.8 %	6.2 %	6.8 %	7.8 %	8.5 %	4.0 %	2.9 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	94.819 %	1.224 ppb	0.492 ppb	150.234 ppb	0.415 ppb	90.221 %	0.014 ppb	0.050 ppb	90.962 %
Concentration per Run 1	88.664 %	1.319 ppb	0.592 ppb	156.627 ppb	0.377 ppb	87.110 %	0.015 ppb	0.052 ppb	87.044 %
Concentration per Run 2	96.772 %	1.145 ppb	0.316 ppb	146.923 ppb	0.381 ppb	90.155 %	0.015 ppb	0.048 ppb	92.087 %
Concentration per Run 3	99.022 %	1.208 ppb	0.569 ppb	147.151 ppb	0.488 ppb	93.396 %	0.013 ppb	0.048 ppb	93.755 %
Concentration RSD	5.7 %	7.2 %	31.1 %	3.7 %	15.2 %	3.5 %	9.6 %	5.0 %	3.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.363 ppb	35.937 ppb	94.981 %	97.235 %	-0.013 ppb	8.876 ppb	88.661 %
Concentration per Run 1	0.369 ppb	36.948 ppb	89.591 %	92.419 %	-0.018 ppb	8.402 ppb	93.553 %
Concentration per Run 2	0.379 ppb	35.224 ppb	96.613 %	98.877 %	-0.011 ppb	8.933 ppb	86.852 %
Concentration per Run 3	0.340 ppb	35.641 ppb	98.739 %	100.409 %	-0.009 ppb	9.293 ppb	85.577 %
Concentration RSD	5.6 %	2.5 %	5.0 %	4.4 %	36.1 %	5.1 %	4.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 66
Analysis label: L2344255-01D5 A2-SEM
Analysis started at: 9/3/2023 11:35:04 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 58
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	87.322 %	96.003 %	1.941 ppb	5.836 ppb	363.415 ppb	2,661.140 ppb	7,483.138 ppb	151.729 ppb	15,353.300 ppb
Concentration per Run 1	89.144 %	94.095 %	1.934 ppb	5.741 ppb	374.598 ppb	2,672.434 ppb	7,406.165 ppb	150.013 ppb	15,232.310 ppb
Concentration per Run 2	87.026 %	97.463 %	1.915 ppb	5.847 ppb	356.006 ppb	2,649.384 ppb	7,315.517 ppb	152.838 ppb	15,131.508 ppb
Concentration per Run 3	85.796 %	96.453 %	1.974 ppb	5.919 ppb	359.641 ppb	2,661.600 ppb	7,727.732 ppb	152.335 ppb	15,696.081 ppb
Concentration RSD	1.9 %	1.8 %	1.5 %	1.5 %	2.7 %	0.4 %	2.9 %	1.0 %	2.0 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	95.846 %	136.678 ppb	10.298 ppb	117.687 ppb	8,951.758 ppb	9.421 ppb	25.423 ppb	20.157 ppb	1,122.912 ppb
Concentration per Run 1	95.521 %	135.189 ppb	10.084 ppb	113.268 ppb	8,837.630 ppb	9.287 ppb	25.013 ppb	20.033 ppb	1,137.747 ppb
Concentration per Run 2	96.038 %	135.720 ppb	10.242 ppb	118.866 ppb	8,860.013 ppb	9.427 ppb	25.337 ppb	19.706 ppb	1,091.752 ppb
Concentration per Run 3	95.979 %	139.124 ppb	10.567 ppb	120.926 ppb	9,157.631 ppb	9.549 ppb	25.919 ppb	20.732 ppb	1,139.238 ppb
Concentration RSD	0.3 %	1.6 %	2.4 %	3.4 %	2.0 %	1.4 %	1.8 %	2.6 %	2.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	97.967 %	5.204 ppb	18.796 ppb	86.211 ppb	0.827 ppb	95.003 %	0.024 ppb	1.544 ppb	94.210 %
Concentration per Run 1	96.870 %	5.214 ppb	18.505 ppb	85.257 ppb	0.798 ppb	93.709 %	0.021 ppb	1.515 ppb	94.349 %
Concentration per Run 2	98.324 %	5.062 ppb	18.595 ppb	86.582 ppb	0.820 ppb	94.089 %	0.028 ppb	1.545 ppb	92.691 %
Concentration per Run 3	98.706 %	5.334 ppb	19.288 ppb	86.793 ppb	0.864 ppb	97.210 %	0.022 ppb	1.573 ppb	95.592 %
Concentration RSD	1.0 %	2.6 %	2.3 %	1.0 %	4.1 %	2.0 %	14.2 %	1.9 %	1.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.502 ppb	935.297 ppb	103.850 %	100.244 %	0.031 ppb	37.808 ppb	105.360 %
Concentration per Run 1	0.463 ppb	909.868 ppb	101.684 %	98.196 %	0.023 ppb	36.237 ppb	107.951 %
Concentration per Run 2	0.538 ppb	963.515 ppb	102.554 %	99.113 %	0.035 ppb	38.318 ppb	104.401 %
Concentration per Run 3	0.506 ppb	932.507 ppb	107.312 %	103.424 %	0.035 ppb	38.869 ppb	103.727 %
Concentration RSD	7.5 %	2.9 %	2.9 %	2.8 %	23.1 %	3.7 %	2.2 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	67	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344255-02D5 A2-SEM	Rack	1		
Analysis started at:	9/3/2023 11:39:43 PM	Vial	59		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	89.057 %	98.294 %	1.347 ppb	3.479 ppb	498.612 ppb	2,192.819 ppb	5,888.075 ppb	197.827 ppb	8,586.453 ppb
Concentration per Run 1	90.799 %	99.686 %	1.328 ppb	3.402 ppb	490.164 ppb	2,129.360 ppb	5,684.915 ppb	192.312 ppb	8,597.280 ppb
Concentration per Run 2	88.773 %	98.877 %	1.351 ppb	3.542 ppb	486.531 ppb	2,171.556 ppb	5,897.381 ppb	185.627 ppb	8,323.018 ppb
Concentration per Run 3	87.598 %	96.318 %	1.364 ppb	3.494 ppb	519.141 ppb	2,277.542 ppb	6,081.927 ppb	215.543 ppb	8,839.060 ppb
Concentration RSD	1.8 %	1.8 %	1.4 %	2.0 %	3.6 %	3.5 %	3.4 %	7.9 %	3.0 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	106.842 %	205.465 ppb	88.572 ppb	893.015 ppb	15,995.543 ppb	7.907 ppb	87.867 ppb	858.116 ppb	1,039.908 ppb
Concentration per Run 1	107.804 %	207.157 ppb	89.643 ppb	885.818 ppb	15,811.834 ppb	7.772 ppb	86.156 ppb	847.823 ppb	1,027.671 ppb
Concentration per Run 2	105.699 %	198.268 ppb	85.205 ppb	868.925 ppb	15,622.908 ppb	7.581 ppb	85.202 ppb	839.780 ppb	1,018.476 ppb
Concentration per Run 3	107.024 %	210.970 ppb	90.868 ppb	924.303 ppb	16,551.889 ppb	8.367 ppb	92.243 ppb	886.744 ppb	1,073.577 ppb
Concentration RSD	1.0 %	3.2 %	3.4 %	3.2 %	3.1 %	5.2 %	4.3 %	2.9 %	2.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.962 %	8.166 ppb	12.874 ppb	98.159 ppb	1.493 ppb	98.746 %	0.757 ppb	8.965 ppb	96.965 %
Concentration per Run 1	98.080 %	7.959 ppb	13.078 ppb	97.317 ppb	1.400 ppb	97.666 %	0.787 ppb	8.924 ppb	94.948 %
Concentration per Run 2	102.518 %	7.934 ppb	12.619 ppb	97.402 ppb	1.496 ppb	98.452 %	0.736 ppb	9.112 ppb	97.140 %
Concentration per Run 3	99.289 %	8.604 ppb	12.925 ppb	99.757 ppb	1.584 ppb	100.121 %	0.748 ppb	8.859 ppb	98.806 %
Concentration RSD	2.3 %	4.7 %	1.8 %	1.4 %	6.2 %	1.3 %	3.5 %	1.5 %	2.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.703 ppb	628.205 ppb	105.171 %	102.753 %	0.032 ppb	316.140 ppb	108.773 %
Concentration per Run 1	0.675 ppb	631.566 ppb	103.186 %	102.181 %	0.026 ppb	306.656 ppb	110.891 %
Concentration per Run 2	0.703 ppb	623.078 ppb	105.297 %	102.154 %	0.037 ppb	320.182 ppb	107.044 %
Concentration per Run 3	0.731 ppb	629.971 ppb	107.029 %	103.925 %	0.033 ppb	321.581 ppb	108.384 %
Concentration RSD	4.0 %	0.7 %	1.8 %	1.0 %	17.3 %	2.6 %	1.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	68	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/3/2023 11:44:23 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	85.212 %	92.299 %	61.941 ppb	53.931 ppb	6,143.270 ppb	6,056.133 ppb	58.433 ppb	6,013.876 ppb	6,309.310 ppb
Concentration per Run 1	86.448 %	90.390 %	61.610 ppb	53.736 ppb	6,271.292 ppb	6,182.428 ppb	59.518 ppb	6,234.679 ppb	6,450.503 ppb
Concentration per Run 2	85.440 %	96.250 %	62.089 ppb	53.963 ppb	5,899.750 ppb	5,801.743 ppb	56.480 ppb	5,824.615 ppb	6,141.412 ppb
Concentration per Run 3	83.747 %	90.256 %	62.125 ppb	54.093 ppb	6,258.767 ppb	6,184.229 ppb	59.300 ppb	5,982.333 ppb	6,336.016 ppb
Recovery Percentage 1			103.235 %	89.885 %	102.388 %	100.936 %	97.388 %	100.231 %	105.155 %
Concentration RSD	1.6 %	3.7 %	0.5 %	0.3 %	3.4 %	3.6 %	2.9 %	3.4 %	2.5 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.623 %	61.334 ppb	62.035 ppb	61.112 ppb	6,191.106 ppb	62.590 ppb	63.394 ppb	63.845 ppb	62.713 ppb
Concentration per Run 1	98.675 %	61.440 ppb	62.371 ppb	61.386 ppb	6,324.994 ppb	64.826 ppb	65.741 ppb	66.109 ppb	63.699 ppb
Concentration per Run 2	100.013 %	61.235 ppb	61.485 ppb	58.707 ppb	5,943.472 ppb	60.233 ppb	61.245 ppb	62.166 ppb	61.675 ppb
Concentration per Run 3	100.182 %	61.327 ppb	62.250 ppb	63.243 ppb	6,304.851 ppb	62.711 ppb	63.196 ppb	63.259 ppb	62.766 ppb
Recovery Percentage 1		102.224 %	103.392 %	101.854 %	103.185 %	104.317 %	105.657 %	106.408 %	104.522 %
Concentration RSD	0.8 %	0.2 %	0.8 %	3.7 %	3.5 %	3.7 %	3.6 %	3.2 %	1.6 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.835 %	61.956 ppb	60.178 ppb	52.495 ppb	60.331 ppb	94.450 %	60.233 ppb	62.431 ppb	91.455 %
Concentration per Run 1	89.942 %	63.803 ppb	63.986 ppb	53.948 ppb	62.613 ppb	91.080 %	61.826 ppb	63.857 ppb	87.493 %
Concentration per Run 2	93.831 %	60.917 ppb	57.881 ppb	51.582 ppb	59.541 ppb	96.019 %	59.630 ppb	61.644 ppb	92.728 %
Concentration per Run 3	94.733 %	61.148 ppb	58.668 ppb	51.955 ppb	58.839 ppb	96.251 %	59.244 ppb	61.792 ppb	94.142 %
Recovery Percentage 1		103.260 %	100.297 %	87.491 %	100.552 %		100.389 %	104.051 %	
Concentration RSD	2.7 %	2.6 %	5.5 %	2.4 %	3.3 %	3.1 %	2.3 %	2.0 %	3.8 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.830 ppb	62.516 ppb	96.206 %	96.914 %	65.521 ppb	65.392 ppb	92.851 %
Concentration per Run 1	62.851 ppb	64.237 ppb	91.994 %	91.435 %	65.577 ppb	65.078 ppb	92.587 %
Concentration per Run 2	61.150 ppb	60.551 ppb	97.243 %	97.568 %	66.564 ppb	66.626 ppb	91.664 %
Concentration per Run 3	61.488 ppb	62.760 ppb	99.380 %	101.739 %	64.423 ppb	64.473 ppb	94.302 %
Recovery Percentage 1	103.050 %	104.194 %			109.202 %	108.987 %	
Concentration RSD	1.5 %	3.0 %	4.0 %	5.3 %	1.6 %	1.7 %	1.4 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	69	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/3/2023 11:49:05 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	87.317 %	90.548 %	0.004 ppb	-0.929 ppb	-2.420 ppb	-2.083 ppb	-1.381 ppb	-13.760 ppb	-6.781 ppb
Concentration per Run 1	88.434 %	88.370 %	0.000 ppb	-0.915 ppb	-2.301 ppb	-1.904 ppb	-1.370 ppb	-11.803 ppb	-5.193 ppb
Concentration per Run 2	87.752 %	89.178 %	0.004 ppb	-0.953 ppb	-2.553 ppb	-2.243 ppb	-1.233 ppb	-14.340 ppb	-8.441 ppb
Concentration per Run 3	85.766 %	94.095 %	0.007 ppb	-0.918 ppb	-2.407 ppb	-2.104 ppb	-1.540 ppb	-15.136 ppb	-6.711 ppb
Recovery Percentage 1			0.786 %	-9.286 %	-2.420 %	-2.976 %	-13.811 %	-13.760 %	-6.781 %
Concentration RSD	1.6 %	3.4 %	87.5 %	2.3 %	5.2 %	8.2 %	11.1 %	12.6 %	24.0 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	92.390 %	0.002 ppb	-0.001 ppb	-0.325 ppb	13.034 ppb	-0.003 ppb	-0.231 ppb	-0.097 ppb	-1.876 ppb
Concentration per Run 1	92.278 %	0.010 ppb	0.005 ppb	-0.334 ppb	13.795 ppb	-0.003 ppb	-0.246 ppb	-0.090 ppb	-1.879 ppb
Concentration per Run 2	92.607 %	-0.004 ppb	-0.003 ppb	-0.319 ppb	13.074 ppb	-0.002 ppb	-0.213 ppb	-0.091 ppb	-1.824 ppb
Concentration per Run 3	92.285 %	0.000 ppb	-0.005 ppb	-0.322 ppb	12.233 ppb	-0.004 ppb	-0.233 ppb	-0.110 ppb	-1.926 ppb
Recovery Percentage 1		0.035 %	-0.130 %	-32.488 %	26.068 %	-0.547 %	-11.527 %	-9.690 %	-37.524 %
Concentration RSD	0.2 %	402.2 %	412.1 %	2.4 %	6.0 %	34.7 %	7.1 %	11.8 %	2.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	94.210 %	0.064 ppb	0.674 ppb	-0.040 ppb	1.332 ppb	96.224 %	-0.001 ppb	0.003 ppb	95.128 %
Concentration per Run 1	92.242 %	0.062 ppb	0.508 ppb	-0.037 ppb	0.933 ppb	95.032 %	0.000 ppb	0.005 ppb	92.675 %
Concentration per Run 2	93.882 %	0.031 ppb	0.708 ppb	-0.041 ppb	1.425 ppb	96.830 %	-0.002 ppb	0.003 ppb	94.975 %
Concentration per Run 3	96.505 %	0.098 ppb	0.807 ppb	-0.041 ppb	1.637 ppb	96.810 %	-0.001 ppb	0.003 ppb	97.733 %
Recovery Percentage 1		12.769 %	13.487 %	-0.396 %	66.584 %		-0.262 %	1.743 %	
Concentration RSD	2.3 %	52.3 %	22.6 %	6.2 %	27.1 %	1.1 %	92.1 %	39.4 %	2.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.026 ppb	-0.038 ppb	97.114 %	97.720 %	0.294 ppb	0.013 ppb	100.898 %
Concentration per Run 1	-0.001 ppb	-0.031 ppb	95.860 %	96.224 %	0.336 ppb	0.014 ppb	106.342 %
Concentration per Run 2	0.048 ppb	-0.028 ppb	97.036 %	96.581 %	0.303 ppb	0.013 ppb	98.274 %
Concentration per Run 3	0.031 ppb	-0.055 ppb	98.446 %	100.355 %	0.244 ppb	0.013 ppb	98.078 %
Recovery Percentage 1	0.655 %	-7.602 %			29.435 %	1.320 %	
Concentration RSD	93.9 %	39.1 %	1.3 %	2.3 %	15.7 %	4.4 %	4.7 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	70	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344255-03D5 A2-SEM	Rack	1		
Analysis started at:	9/3/2023 11:53:48 PM	Vial	60		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	84.417 %	95.038 %	1.603 ppb	6.304 ppb	894.711 ppb	2,938.472 ppb	6,943.259 ppb	359.333 ppb	14,070.034 ppb
Concentration per Run 1	86.477 %	93.489 %	1.585 ppb	6.254 ppb	895.873 ppb	2,912.551 ppb	6,901.740 ppb	367.177 ppb	14,105.691 ppb
Concentration per Run 2	84.687 %	97.126 %	1.605 ppb	6.258 ppb	880.127 ppb	2,895.777 ppb	6,843.453 ppb	347.305 ppb	13,693.070 ppb
Concentration per Run 3	82.086 %	94.499 %	1.617 ppb	6.399 ppb	908.133 ppb	3,007.089 ppb	7,084.583 ppb	363.518 ppb	14,411.341 ppb
Concentration RSD	2.6 %	2.0 %	1.0 %	1.3 %	1.6 %	2.0 %	1.8 %	2.9 %	2.6 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.954 %	53.022 ppb	49.781 ppb	3,246.710 ppb	16,726.699 ppb	7.987 ppb	99.522 ppb	476.700 ppb	409.336 ppb
Concentration per Run 1	100.352 %	53.174 ppb	49.800 ppb	3,271.217 ppb	16,683.394 ppb	7.972 ppb	99.835 ppb	479.120 ppb	414.045 ppb
Concentration per Run 2	100.252 %	52.682 ppb	48.991 ppb	3,165.443 ppb	16,130.505 ppb	7.737 ppb	97.883 ppb	472.191 ppb	405.301 ppb
Concentration per Run 3	99.259 %	53.212 ppb	50.553 ppb	3,303.469 ppb	17,366.198 ppb	8.253 ppb	100.848 ppb	478.790 ppb	408.662 ppb
Concentration RSD	0.6 %	0.6 %	1.6 %	2.2 %	3.7 %	3.2 %	1.5 %	0.8 %	1.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.373 %	6.958 ppb	14.360 ppb	99.754 ppb	0.590 ppb	95.743 %	2.010 ppb	6.508 ppb	93.996 %
Concentration per Run 1	96.467 %	6.992 ppb	14.623 ppb	101.073 ppb	0.527 ppb	93.115 %	2.067 ppb	6.493 ppb	92.143 %
Concentration per Run 2	100.886 %	6.855 ppb	14.420 ppb	97.874 ppb	0.546 ppb	96.896 %	2.000 ppb	6.600 ppb	93.977 %
Concentration per Run 3	100.765 %	7.027 ppb	14.039 ppb	100.316 ppb	0.698 ppb	97.217 %	1.963 ppb	6.432 ppb	95.868 %
Concentration RSD	2.5 %	1.3 %	2.1 %	1.7 %	15.8 %	2.4 %	2.6 %	1.3 %	2.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.759 ppb	1,094.637 ppb	102.193 %	99.797 %	0.047 ppb	201.420 ppb	103.628 %
Concentration per Run 1	0.766 ppb	1,084.527 ppb	101.469 %	97.603 %	0.033 ppb	202.431 ppb	103.089 %
Concentration per Run 2	0.768 ppb	1,101.487 ppb	101.206 %	99.319 %	0.058 ppb	202.268 ppb	102.068 %
Concentration per Run 3	0.743 ppb	1,097.896 ppb	103.905 %	102.468 %	0.051 ppb	199.561 ppb	105.728 %
Concentration RSD	1.8 %	0.8 %	1.5 %	2.5 %	27.4 %	0.8 %	1.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	71	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344255-04D5 A2-SEM	Rack	2		
Analysis started at:	9/3/2023 11:58:28 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	85.572 %	97.036 %	1.364 ppb	5.448 ppb	644.881 ppb	2,945.702 ppb	8,066.794 ppb	275.614 ppb	13,650.896 ppb
Concentration per Run 1	87.332 %	94.230 %	1.352 ppb	5.349 ppb	655.191 ppb	2,945.022 ppb	8,184.290 ppb	285.624 ppb	14,048.501 ppb
Concentration per Run 2	85.915 %	94.634 %	1.371 ppb	5.390 ppb	659.747 ppb	3,014.853 ppb	8,207.412 ppb	280.735 ppb	13,679.781 ppb
Concentration per Run 3	83.469 %	102.245 %	1.369 ppb	5.604 ppb	619.706 ppb	2,877.230 ppb	7,808.680 ppb	260.484 ppb	13,224.406 ppb
Concentration RSD	2.3 %	4.7 %	0.8 %	2.5 %	3.4 %	2.3 %	2.8 %	4.8 %	3.0 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	91.495 %	223.914 ppb	17.760 ppb	2,178.760 ppb	10,255.109 ppb	7.812 ppb	61.545 ppb	2,294.672 ppb	1,485.256 ppb
Concentration per Run 1	92.467 %	228.033 ppb	17.998 ppb	2,245.846 ppb	10,483.065 ppb	7.961 ppb	62.482 ppb	2,325.182 ppb	1,518.549 ppb
Concentration per Run 2	90.876 %	224.253 ppb	17.727 ppb	2,142.038 ppb	10,256.663 ppb	7.894 ppb	62.955 ppb	2,329.188 ppb	1,506.895 ppb
Concentration per Run 3	91.141 %	219.457 ppb	17.556 ppb	2,148.396 ppb	10,025.598 ppb	7.582 ppb	59.197 ppb	2,229.647 ppb	1,430.325 ppb
Concentration RSD	0.9 %	1.9 %	1.3 %	2.7 %	2.2 %	2.6 %	3.3 %	2.5 %	3.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	100.622 %	2.566 ppb	10.708 ppb	79.309 ppb	0.302 ppb	95.914 %	0.428 ppb	8.894 ppb	94.312 %
Concentration per Run 1	96.239 %	2.617 ppb	11.021 ppb	81.844 ppb	0.201 ppb	91.052 %	0.433 ppb	9.110 ppb	89.883 %
Concentration per Run 2	99.465 %	2.508 ppb	10.789 ppb	79.249 ppb	0.291 ppb	96.061 %	0.437 ppb	9.022 ppb	94.348 %
Concentration per Run 3	106.162 %	2.573 ppb	10.313 ppb	76.834 ppb	0.414 ppb	100.629 %	0.415 ppb	8.549 ppb	98.705 %
Concentration RSD	5.0 %	2.1 %	3.4 %	3.2 %	35.5 %	5.0 %	2.7 %	3.4 %	4.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.825 ppb	546.713 ppb	100.369 %	98.944 %	0.064 ppb	746.479 ppb	95.462 %
Concentration per Run 1	0.865 ppb	559.930 ppb	96.473 %	94.101 %	0.058 ppb	756.039 ppb	93.244 %
Concentration per Run 2	0.787 ppb	535.556 ppb	101.137 %	98.406 %	0.068 ppb	754.151 ppb	94.926 %
Concentration per Run 3	0.821 ppb	544.652 ppb	103.496 %	104.326 %	0.066 ppb	729.247 ppb	98.215 %
Concentration RSD	4.8 %	2.3 %	3.6 %	5.2 %	8.1 %	2.0 %	2.6 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index: 72
Analysis label: L2344255-05D5 A2-SEM
Analysis started at: 9/4/2023 12:03:07 AM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 2
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	80.452 %	87.202 %	0.760 ppb	18.116 ppb	850.886 ppb	4,375.756 ppb	5,657.042 ppb	654.915 ppb	42,791.963 ppb
Concentration per Run 1	81.768 %	84.800 %	0.777 ppb	18.062 ppb	864.828 ppb	4,445.744 ppb	5,590.487 ppb	663.588 ppb	42,547.229 ppb
Concentration per Run 2	80.615 %	88.976 %	0.751 ppb	17.927 ppb	831.501 ppb	4,295.671 ppb	5,446.060 ppb	613.333 ppb	42,222.309 ppb
Concentration per Run 3	78.973 %	87.831 %	0.753 ppb	18.358 ppb	856.330 ppb	4,385.852 ppb	5,934.579 ppb	687.823 ppb	43,606.352 ppb
Concentration RSD	1.7 %	2.5 %	1.9 %	1.2 %	2.0 %	1.7 %	4.4 %	5.8 %	1.7 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	83.016 %	79.847 ppb	25.573 ppb	844.733 ppb	7,020.675 ppb	4.876 ppb	43.664 ppb	4,083.635 ppb	1,050.846 ppb
Concentration per Run 1	82.267 %	78.881 ppb	25.445 ppb	830.144 ppb	6,936.532 ppb	4.871 ppb	43.682 ppb	4,087.446 ppb	1,050.804 ppb
Concentration per Run 2	83.318 %	79.263 ppb	25.170 ppb	829.952 ppb	6,948.100 ppb	4.826 ppb	42.079 ppb	3,964.304 ppb	1,021.220 ppb
Concentration per Run 3	83.461 %	81.396 ppb	26.104 ppb	874.103 ppb	7,177.393 ppb	4.930 ppb	45.231 ppb	4,199.155 ppb	1,080.515 ppb
Concentration RSD	0.8 %	1.7 %	1.9 %	3.0 %	1.9 %	1.1 %	3.6 %	2.9 %	2.8 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.547 %	1.730 ppb	4.527 ppb	172.725 ppb	0.164 ppb	91.433 %	0.209 ppb	6.941 ppb	92.500 %
Concentration per Run 1	90.825 %	1.680 ppb	4.572 ppb	171.886 ppb	0.049 ppb	90.083 %	0.203 ppb	6.855 ppb	91.703 %
Concentration per Run 2	93.837 %	1.733 ppb	4.639 ppb	169.867 ppb	0.188 ppb	92.266 %	0.210 ppb	6.859 ppb	92.834 %
Concentration per Run 3	92.980 %	1.777 ppb	4.371 ppb	176.423 ppb	0.254 ppb	91.949 %	0.215 ppb	7.109 ppb	92.964 %
Concentration RSD	1.7 %	2.8 %	3.1 %	1.9 %	63.9 %	1.3 %	3.0 %	2.1 %	0.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.747 ppb	408.712 ppb	96.188 %	95.203 %	0.047 ppb	1,162.039 ppb	100.016 %
Concentration per Run 1	0.685 ppb	398.119 ppb	95.051 %	95.630 %	0.038 ppb	1,120.327 ppb	101.403 %
Concentration per Run 2	0.786 ppb	401.986 ppb	96.891 %	95.478 %	0.046 ppb	1,141.548 ppb	101.885 %
Concentration per Run 3	0.771 ppb	426.031 ppb	96.621 %	94.502 %	0.057 ppb	1,224.243 ppb	96.760 %
Concentration RSD	7.2 %	3.7 %	1.0 %	0.6 %	20.8 %	4.7 %	2.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	73	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344255-06D5 A2-SEM	Rack	2		
Analysis started at:	9/4/2023 12:07:45 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	91.353 %	105.546 %	0.898 ppb	5.145 ppb	365.023 ppb	2,161.612 ppb	9,278.348 ppb	357.142 ppb	8,987.942 ppb
Concentration per Run 1	93.024 %	102.313 %	0.907 ppb	5.066 ppb	363.975 ppb	2,171.214 ppb	9,347.862 ppb	352.824 ppb	9,053.902 ppb
Concentration per Run 2	91.274 %	105.815 %	0.865 ppb	5.110 ppb	364.456 ppb	2,171.870 ppb	9,228.882 ppb	361.819 ppb	9,001.598 ppb
Concentration per Run 3	89.761 %	108.510 %	0.922 ppb	5.258 ppb	366.638 ppb	2,141.751 ppb	9,258.299 ppb	356.784 ppb	8,908.325 ppb
Concentration RSD	1.8 %	2.9 %	3.3 %	2.0 %	0.4 %	0.8 %	0.7 %	1.3 %	0.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	112.434 %	491.395 ppb	69.572 ppb	936.066 ppb	16,834.905 ppb	9.886 ppb	134.659 ppb	**24,338.585 ppb**	**3,998.948 ppb**
Concentration per Run 1	112.788 %	510.620 ppb	72.016 ppb	963.665 ppb	17,238.308 ppb	10.222 ppb	138.471 ppb	25,026.164 ppb	4,097.861 ppb
Concentration per Run 2	112.672 %	493.975 ppb	69.955 ppb	942.206 ppb	16,903.134 ppb	9.806 ppb	133.890 ppb	24,280.968 ppb	4,017.088 ppb
Concentration per Run 3	111.842 %	469.592 ppb	66.746 ppb	902.328 ppb	16,363.274 ppb	9.630 ppb	131.616 ppb	23,708.621 ppb	3,881.893 ppb
Concentration RSD	0.5 %	4.2 %	3.8 %	3.3 %	2.6 %	3.1 %	2.6 %	2.7 %	2.7 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	111.814 %	7.413 ppb	11.265 ppb	36.409 ppb	1.703 ppb	108.159 %	2.666 ppb	9.098 ppb	103.913 %
Concentration per Run 1	106.162 %	7.596 ppb	11.867 ppb	37.101 ppb	1.733 ppb	103.739 %	2.731 ppb	9.206 ppb	98.916 %
Concentration per Run 2	110.560 %	7.438 ppb	10.755 ppb	36.459 ppb	1.678 ppb	108.937 %	2.656 ppb	9.232 ppb	105.217 %
Concentration per Run 3	118.720 %	7.206 ppb	11.175 ppb	35.668 ppb	1.698 ppb	111.801 %	2.611 ppb	8.855 ppb	107.606 %
Concentration RSD	5.7 %	2.6 %	5.0 %	2.0 %	1.6 %	3.8 %	2.3 %	2.3 %	4.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.568 ppb	304.021 ppb	108.426 %	106.576 %	0.021 ppb	2,428.506 ppb	105.706 %
Concentration per Run 1	2.645 ppb	317.466 ppb	103.874 %	102.271 %	0.019 ppb	2,488.798 ppb	102.394 %
Concentration per Run 2	2.616 ppb	301.141 ppb	108.839 %	106.482 %	0.024 ppb	2,408.916 ppb	105.758 %
Concentration per Run 3	2.445 ppb	293.455 ppb	112.564 %	110.975 %	0.020 ppb	2,387.804 ppb	108.966 %
Concentration RSD	4.2 %	4.0 %	4.0 %	4.1 %	13.3 %	2.2 %	3.1 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	74	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344255-07D5 A2-SEM	Rack	2		
Analysis started at:	9/4/2023 12:12:24 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	82.197 %	99.910 %	0.923 ppb	0.323 ppb	99.061 ppb	1,450.226 ppb	4,817.759 ppb	464.101 ppb	8,766.669 ppb
Concentration per Run 1	83.022 %	101.908 %	0.917 ppb	0.271 ppb	99.473 ppb	1,492.333 ppb	4,862.874 ppb	462.663 ppb	8,817.657 ppb
Concentration per Run 2	82.452 %	95.779 %	0.927 ppb	0.310 ppb	102.777 ppb	1,477.664 ppb	4,923.502 ppb	462.251 ppb	8,745.379 ppb
Concentration per Run 3	81.116 %	102.043 %	0.924 ppb	0.387 ppb	94.932 ppb	1,380.680 ppb	4,666.900 ppb	467.391 ppb	8,736.971 ppb
Concentration RSD	1.2 %	3.6 %	0.5 %	18.2 %	4.0 %	4.2 %	2.8 %	0.6 %	0.5 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	94.801 %	19.436 ppb	9.867 ppb	686.344 ppb	5,402.319 ppb	4.894 ppb	13.254 ppb	214.491 ppb	77.254 ppb
Concentration per Run 1	93.935 %	19.514 ppb	10.064 ppb	679.707 ppb	5,401.633 ppb	4.977 ppb	13.392 ppb	218.435 ppb	78.276 ppb
Concentration per Run 2	95.106 %	19.758 ppb	10.038 ppb	681.826 ppb	5,385.410 ppb	4.879 ppb	13.406 ppb	215.461 ppb	77.348 ppb
Concentration per Run 3	95.361 %	19.037 ppb	9.498 ppb	697.499 ppb	5,419.914 ppb	4.825 ppb	12.964 ppb	209.578 ppb	76.138 ppb
Concentration RSD	0.8 %	1.9 %	3.2 %	1.4 %	0.3 %	1.6 %	1.9 %	2.1 %	1.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	105.353 %	3.032 ppb	12.820 ppb	24.548 ppb	0.058 ppb	102.316 %	0.401 ppb	0.896 ppb	99.356 %
Concentration per Run 1	106.505 %	3.138 ppb	12.343 ppb	24.555 ppb	-0.012 ppb	102.837 %	0.400 ppb	0.903 ppb	99.460 %
Concentration per Run 2	105.139 %	2.999 ppb	13.551 ppb	24.517 ppb	0.071 ppb	102.672 %	0.400 ppb	0.901 ppb	99.155 %
Concentration per Run 3	104.415 %	2.959 ppb	12.567 ppb	24.572 ppb	0.115 ppb	101.440 %	0.403 ppb	0.884 ppb	99.452 %
Concentration RSD	1.0 %	3.1 %	5.0 %	0.1 %	111.8 %	0.7 %	0.4 %	1.1 %	0.2 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.630 ppb	290.437 ppb	105.688 %	102.547 %	0.009 ppb	80.096 ppb	104.091 %
Concentration per Run 1	0.602 ppb	277.854 ppb	106.498 %	103.310 %	0.003 ppb	78.840 ppb	105.301 %
Concentration per Run 2	0.647 ppb	294.115 ppb	104.526 %	100.891 %	0.012 ppb	79.620 ppb	104.352 %
Concentration per Run 3	0.640 ppb	299.341 ppb	106.041 %	103.439 %	0.012 ppb	81.828 ppb	102.620 %
Concentration RSD	3.8 %	3.9 %	1.0 %	1.4 %	60.4 %	1.9 %	1.3 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	75	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344255-08D5 A2-SEM	Rack	2		
Analysis started at:	9/4/2023 12:17:03 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	81.244 %	97.193 %	0.653 ppb	34.551 ppb	1,285.880 ppb	5,578.022 ppb	7,469.837 ppb	1,139.408 ppb	15,109.810 ppb
Concentration per Run 1	82.688 %	94.095 %	0.621 ppb	34.564 ppb	1,290.169 ppb	5,611.611 ppb	7,652.500 ppb	1,131.519 ppb	14,898.240 ppb
Concentration per Run 2	81.302 %	101.033 %	0.661 ppb	34.305 ppb	1,245.197 ppb	5,419.608 ppb	7,192.539 ppb	1,120.959 ppb	14,833.745 ppb
Concentration per Run 3	79.742 %	96.453 %	0.678 ppb	34.783 ppb	1,322.274 ppb	5,702.847 ppb	7,564.473 ppb	1,165.745 ppb	15,597.446 ppb
Concentration RSD	1.8 %	3.6 %	4.4 %	0.7 %	3.0 %	2.6 %	3.3 %	2.1 %	2.8 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	91.222 %	69.423 ppb	16.574 ppb	223.151 ppb	18,234.281 ppb	11.838 ppb	29.744 ppb	1,627.195 ppb	1,452.274 ppb
Concentration per Run 1	91.439 %	68.802 ppb	16.302 ppb	216.063 ppb	17,830.988 ppb	11.631 ppb	29.188 ppb	1,607.421 ppb	1,440.286 ppb
Concentration per Run 2	91.506 %	67.492 ppb	16.168 ppb	217.577 ppb	17,892.644 ppb	11.709 ppb	29.975 ppb	1,618.327 ppb	1,441.148 ppb
Concentration per Run 3	90.721 %	71.974 ppb	17.252 ppb	235.813 ppb	18,979.211 ppb	12.176 ppb	30.071 ppb	1,655.838 ppb	1,475.389 ppb
Concentration RSD	0.5 %	3.3 %	3.6 %	4.9 %	3.5 %	2.5 %	1.6 %	1.6 %	1.4 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	99.171 %	2.452 ppb	7.427 ppb	50.733 ppb	0.477 ppb	97.196 %	0.224 ppb	4.619 ppb	95.028 %
Concentration per Run 1	99.614 %	2.322 ppb	7.257 ppb	50.191 ppb	0.437 ppb	96.449 %	0.216 ppb	4.622 ppb	93.213 %
Concentration per Run 2	99.738 %	2.341 ppb	7.699 ppb	50.429 ppb	0.455 ppb	97.780 %	0.227 ppb	4.629 ppb	95.395 %
Concentration per Run 3	98.160 %	2.693 ppb	7.324 ppb	51.580 ppb	0.538 ppb	97.359 %	0.228 ppb	4.605 ppb	96.475 %
Concentration RSD	0.9 %	8.5 %	3.2 %	1.5 %	11.3 %	0.7 %	3.0 %	0.3 %	1.7 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.688 ppb	391.724 ppb	101.554 %	100.083 %	0.085 ppb	436.493 ppb	101.823 %
Concentration per Run 1	0.668 ppb	384.643 ppb	99.155 %	98.693 %	0.079 ppb	427.823 ppb	102.237 %
Concentration per Run 2	0.657 ppb	388.415 ppb	101.449 %	98.947 %	0.087 ppb	433.012 ppb	101.905 %
Concentration per Run 3	0.738 ppb	402.113 ppb	104.057 %	102.609 %	0.088 ppb	448.644 ppb	101.327 %
Concentration RSD	6.4 %	2.3 %	2.4 %	2.2 %	5.9 %	2.5 %	0.5 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	76	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/4/2023 12:21:41 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	79.653 %	90.301 %	62.832 ppb	53.638 ppb	6,170.945 ppb	6,020.208 ppb	59.870 ppb	6,038.910 ppb	6,162.784 ppb
Concentration per Run 1	81.256 %	88.841 %	62.190 ppb	53.091 ppb	6,359.834 ppb	6,095.018 ppb	59.966 ppb	6,182.620 ppb	6,333.266 ppb
Concentration per Run 2	79.206 %	91.333 %	62.746 ppb	53.526 ppb	5,934.334 ppb	5,902.996 ppb	60.098 ppb	5,951.158 ppb	5,975.072 ppb
Concentration per Run 3	78.497 %	90.727 %	63.560 ppb	54.298 ppb	6,218.666 ppb	6,062.609 ppb	59.546 ppb	5,982.951 ppb	6,180.016 ppb
Recovery Percentage 1			104.720 %	89.397 %	102.849 %	100.337 %	99.784 %	100.648 %	102.713 %
Concentration RSD	1.8 %	1.4 %	1.1 %	1.1 %	3.5 %	1.7 %	0.5 %	2.1 %	2.9 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	93.403 %	61.143 ppb	62.802 ppb	62.785 ppb	6,264.803 ppb	63.491 ppb	63.517 ppb	64.441 ppb	62.786 ppb
Concentration per Run 1	94.549 %	64.324 ppb	65.396 ppb	63.312 ppb	6,373.713 ppb	65.245 ppb	65.810 ppb	67.083 ppb	66.405 ppb
Concentration per Run 2	92.852 %	59.934 ppb	61.654 ppb	62.676 ppb	6,173.337 ppb	62.999 ppb	62.790 ppb	63.713 ppb	61.551 ppb
Concentration per Run 3	92.808 %	59.171 ppb	61.358 ppb	62.368 ppb	6,247.360 ppb	62.228 ppb	61.950 ppb	62.526 ppb	60.403 ppb
Recovery Percentage 1		101.905 %	104.671 %	104.642 %	104.413 %	105.818 %	105.861 %	107.401 %	104.644 %
Concentration RSD	1.1 %	4.5 %	3.6 %	0.8 %	1.6 %	2.5 %	3.2 %	3.7 %	5.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.362 %	60.980 ppb	60.337 ppb	51.818 ppb	60.483 ppb	92.951 %	60.423 ppb	62.095 ppb	90.536 %
Concentration per Run 1	88.051 %	63.392 ppb	62.010 ppb	53.992 ppb	62.203 ppb	89.665 %	61.484 ppb	63.733 ppb	87.964 %
Concentration per Run 2	92.932 %	60.108 ppb	61.733 ppb	50.744 ppb	60.081 ppb	94.183 %	59.818 ppb	60.515 ppb	89.786 %
Concentration per Run 3	96.104 %	59.441 ppb	57.267 ppb	50.717 ppb	59.166 ppb	95.007 %	59.968 ppb	62.038 ppb	93.857 %
Recovery Percentage 1		101.634 %	100.561 %	86.363 %	100.806 %		100.705 %	103.492 %	
Concentration RSD	4.4 %	3.5 %	4.4 %	3.6 %	2.6 %	3.1 %	1.5 %	2.6 %	3.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	62.218 ppb	61.190 ppb	95.386 %	94.961 %	65.862 ppb	65.077 ppb	91.711 %
Concentration per Run 1	63.633 ppb	61.937 ppb	91.253 %	91.279 %	66.017 ppb	65.088 ppb	91.617 %
Concentration per Run 2	62.075 ppb	61.459 ppb	96.016 %	94.093 %	67.972 ppb	66.780 ppb	88.444 %
Concentration per Run 3	60.946 ppb	60.173 ppb	98.889 %	99.509 %	63.597 ppb	63.364 ppb	95.071 %
Recovery Percentage 1	103.697 %	101.983 %			109.770 %	108.462 %	
Concentration RSD	2.2 %	1.5 %	4.0 %	4.4 %	3.3 %	2.6 %	3.6 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	77	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/4/2023 12:26:24 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	82.299 %	93.017 %	0.004 ppb	-1.526 ppb	-3.023 ppb	-2.122 ppb	-1.243 ppb	-10.305 ppb	-7.518 ppb
Concentration per Run 1	83.713 %	92.950 %	0.003 ppb	-1.589 ppb	-3.702 ppb	-2.336 ppb	-1.221 ppb	-9.916 ppb	-7.307 ppb
Concentration per Run 2	82.050 %	94.095 %	0.005 ppb	-1.551 ppb	-2.414 ppb	-2.258 ppb	-1.326 ppb	-9.382 ppb	-7.912 ppb
Concentration per Run 3	81.135 %	92.007 %	0.005 ppb	-1.438 ppb	-2.951 ppb	-1.771 ppb	-1.181 ppb	-11.616 ppb	-7.335 ppb
Recovery Percentage 1			0.876 %	-15.262 %	-3.023 %	-3.031 %	-12.427 %	-10.305 %	-7.518 %
Concentration RSD	1.6 %	1.1 %	20.7 %	5.1 %	21.4 %	14.4 %	6.0 %	11.3 %	4.5 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	88.422 %	0.009 ppb	0.010 ppb	-0.269 ppb	14.750 ppb	-0.001 ppb	-0.197 ppb	0.139 ppb	-1.820 ppb
Concentration per Run 1	88.928 %	0.009 ppb	0.032 ppb	-0.275 ppb	14.434 ppb	0.000 ppb	-0.179 ppb	0.137 ppb	-1.835 ppb
Concentration per Run 2	88.006 %	0.005 ppb	0.003 ppb	-0.265 ppb	16.088 ppb	-0.002 ppb	-0.220 ppb	0.147 ppb	-1.800 ppb
Concentration per Run 3	88.331 %	0.013 ppb	-0.005 ppb	-0.267 ppb	13.727 ppb	0.000 ppb	-0.192 ppb	0.133 ppb	-1.823 ppb
Recovery Percentage 1		0.173 %	0.986 %	-26.887 %	29.499 %	-0.131 %	-9.857 %	13.885 %	-36.393 %
Concentration RSD	0.5 %	48.3 %	200.5 %	1.9 %	8.2 %	153.2 %	10.5 %	5.1 %	1.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	94.346 %	0.072 ppb	0.678 ppb	-0.038 ppb	1.252 ppb	97.248 %	0.001 ppb	0.004 ppb	94.145 %
Concentration per Run 1	95.009 %	0.037 ppb	0.400 ppb	-0.038 ppb	0.882 ppb	95.387 %	0.001 ppb	0.007 ppb	93.834 %
Concentration per Run 2	92.726 %	0.085 ppb	0.566 ppb	-0.038 ppb	1.373 ppb	98.209 %	0.001 ppb	0.004 ppb	92.166 %
Concentration per Run 3	95.303 %	0.093 ppb	1.067 ppb	-0.037 ppb	1.501 ppb	98.149 %	-0.001 ppb	0.000 ppb	96.435 %
Recovery Percentage 1		14.346 %	13.554 %	-0.378 %	62.599 %		0.155 %	1.759 %	
Concentration RSD	1.5 %	42.8 %	51.2 %	1.6 %	26.1 %	1.7 %	170.2 %	106.4 %	2.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.017 ppb	-0.021 ppb	96.054 %	96.349 %	0.317 ppb	0.055 ppb	98.826 %
Concentration per Run 1	-0.030 ppb	-0.007 ppb	94.506 %	95.251 %	0.370 ppb	0.053 ppb	102.353 %
Concentration per Run 2	-0.019 ppb	-0.019 ppb	95.343 %	96.080 %	0.319 ppb	0.058 ppb	95.627 %
Concentration per Run 3	-0.002 ppb	-0.036 ppb	98.311 %	97.718 %	0.262 ppb	0.053 ppb	98.499 %
Recovery Percentage 1	-0.422 %	-4.169 %			31.696 %	5.469 %	
Concentration RSD	81.1 %	68.7 %	2.1 %	1.3 %	17.1 %	5.4 %	3.4 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	78	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/4/2023 12:31:07 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	79.296 %	91.244 %	62.283 ppb	53.060 ppb	6,001.648 ppb	5,870.336 ppb	58.421 ppb	5,807.762 ppb	6,043.335 ppb
Concentration per Run 1	80.336 %	92.276 %	61.572 ppb	52.184 ppb	5,863.540 ppb	5,668.562 ppb	56.071 ppb	5,587.816 ppb	5,865.321 ppb
Concentration per Run 2	78.948 %	92.411 %	62.995 ppb	53.521 ppb	6,033.553 ppb	5,880.161 ppb	58.870 ppb	5,812.413 ppb	6,150.123 ppb
Concentration per Run 3	78.604 %	89.043 %	62.282 ppb	53.475 ppb	6,107.852 ppb	6,062.285 ppb	60.323 ppb	6,023.057 ppb	6,114.561 ppb
Recovery Percentage 1			103.806 %	88.433 %	100.027 %	97.839 %	97.369 %	96.796 %	100.722 %
Concentration RSD	1.2 %	2.1 %	1.1 %	1.4 %	2.1 %	3.4 %	3.7 %	3.7 %	2.6 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	99.096 %	59.672 ppb	60.986 ppb	61.094 ppb	6,077.029 ppb	62.138 ppb	63.210 ppb	62.859 ppb	61.720 ppb
Concentration per Run 1	98.879 %	58.798 ppb	60.418 ppb	59.367 ppb	5,929.037 ppb	60.886 ppb	62.273 ppb	62.291 ppb	61.006 ppb
Concentration per Run 2	98.445 %	60.412 ppb	60.689 ppb	62.170 ppb	6,182.071 ppb	63.205 ppb	64.060 ppb	62.711 ppb	62.189 ppb
Concentration per Run 3	99.966 %	59.805 ppb	61.851 ppb	61.744 ppb	6,119.979 ppb	62.324 ppb	63.298 ppb	63.574 ppb	61.967 ppb
Recovery Percentage 1		99.453 %	101.643 %	101.823 %	101.284 %	103.564 %	105.350 %	104.764 %	102.867 %
Concentration RSD	0.8 %	1.4 %	1.2 %	2.5 %	2.2 %	1.9 %	1.4 %	1.0 %	1.0 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	93.875 %	60.068 ppb	58.129 ppb	50.398 ppb	60.096 ppb	95.165 %	59.497 ppb	60.781 ppb	92.839 %
Concentration per Run 1	93.975 %	59.535 ppb	56.502 ppb	49.741 ppb	58.670 ppb	93.784 %	58.090 ppb	59.690 ppb	95.006 %
Concentration per Run 2	92.358 %	61.086 ppb	59.113 ppb	50.631 ppb	61.399 ppb	95.022 %	60.830 ppb	61.992 ppb	90.389 %
Concentration per Run 3	95.291 %	59.584 ppb	58.772 ppb	50.822 ppb	60.221 ppb	96.689 %	59.571 ppb	60.660 ppb	93.122 %
Recovery Percentage 1		100.114 %	96.882 %	83.997 %	100.161 %		99.162 %	101.302 %	
Concentration RSD	1.6 %	1.5 %	2.4 %	1.1 %	2.3 %	1.5 %	2.3 %	1.9 %	2.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.059 ppb	60.217 ppb	98.552 %	98.372 %	59.823 ppb	58.741 ppb	101.410 %
Concentration per Run 1	57.880 ppb	59.229 ppb	97.633 %	97.046 %	57.582 ppb	56.143 ppb	104.638 %
Concentration per Run 2	60.334 ppb	61.048 ppb	97.903 %	98.517 %	60.299 ppb	59.167 ppb	99.814 %
Concentration per Run 3	61.963 ppb	60.373 ppb	100.120 %	99.554 %	61.589 ppb	60.914 ppb	99.779 %
Recovery Percentage 1	100.099 %	100.361 %			99.705 %	97.902 %	
Concentration RSD	3.4 %	1.5 %	1.4 %	1.3 %	3.4 %	4.1 %	2.8 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	79	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/4/2023 12:35:49 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	82.652 %	93.287 %	0.006 ppb	-1.587 ppb	-2.913 ppb	-1.992 ppb	-1.300 ppb	-13.594 ppb	-6.600 ppb
Concentration per Run 1	83.714 %	90.660 %	0.004 ppb	-1.452 ppb	-2.113 ppb	-2.325 ppb	-1.337 ppb	-11.257 ppb	-6.445 ppb
Concentration per Run 2	82.892 %	96.857 %	0.006 ppb	-1.682 ppb	-3.587 ppb	-1.800 ppb	-1.170 ppb	-13.580 ppb	-7.362 ppb
Concentration per Run 3	81.351 %	92.344 %	0.009 ppb	-1.628 ppb	-3.038 ppb	-1.852 ppb	-1.392 ppb	-15.944 ppb	-5.992 ppb
Recovery Percentage 1			1.260 %	-15.874 %	-2.913 %	-2.846 %	-12.996 %	-13.594 %	-6.600 %
Concentration RSD	1.5 %	3.4 %	37.5 %	7.6 %	25.6 %	14.5 %	8.9 %	17.2 %	10.6 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	85.155 %	0.004 ppb	-0.007 ppb	-0.322 ppb	12.909 ppb	-0.001 ppb	-0.236 ppb	0.076 ppb	-1.840 ppb
Concentration per Run 1	85.199 %	-0.008 ppb	-0.008 ppb	-0.316 ppb	15.330 ppb	0.000 ppb	-0.201 ppb	0.118 ppb	-1.815 ppb
Concentration per Run 2	84.749 %	0.013 ppb	-0.016 ppb	-0.329 ppb	12.922 ppb	-0.002 ppb	-0.264 ppb	0.073 ppb	-1.852 ppb
Concentration per Run 3	85.518 %	0.009 ppb	0.003 ppb	-0.320 ppb	10.475 ppb	-0.002 ppb	-0.244 ppb	0.036 ppb	-1.853 ppb
Recovery Percentage 1		0.089 %	-0.688 %	-32.154 %	25.818 %	-0.232 %	-11.818 %	7.575 %	-36.799 %
Concentration RSD	0.5 %	249.5 %	142.9 %	2.0 %	18.8 %	105.5 %	13.6 %	54.0 %	1.2 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	92.281 %	0.109 ppb	0.729 ppb	-0.037 ppb	1.397 ppb	94.356 %	0.000 ppb	0.001 ppb	93.152 %
Concentration per Run 1	88.729 %	0.098 ppb	0.620 ppb	-0.035 ppb	1.001 ppb	90.623 %	0.001 ppb	0.001 ppb	88.654 %
Concentration per Run 2	93.642 %	0.123 ppb	0.623 ppb	-0.037 ppb	1.507 ppb	94.644 %	0.000 ppb	0.002 ppb	93.781 %
Concentration per Run 3	94.473 %	0.107 ppb	0.945 ppb	-0.040 ppb	1.681 ppb	97.800 %	-0.002 ppb	0.000 ppb	97.020 %
Recovery Percentage 1		21.856 %	14.584 %	-0.370 %	69.827 %		-0.112 %	0.536 %	
Concentration RSD	3.4 %	11.5 %	25.6 %	7.3 %	25.3 %	3.8 %	361.4 %	109.4 %	4.5 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.014 ppb	-0.007 ppb	93.718 %	94.920 %	0.373 ppb	0.042 ppb	93.026 %
Concentration per Run 1	-0.023 ppb	-0.021 ppb	89.873 %	89.894 %	0.432 ppb	0.042 ppb	95.469 %
Concentration per Run 2	-0.010 ppb	-0.020 ppb	95.998 %	95.291 %	0.382 ppb	0.041 ppb	91.428 %
Concentration per Run 3	-0.008 ppb	0.018 ppb	95.284 %	99.575 %	0.305 ppb	0.041 ppb	92.181 %
Recovery Percentage 1	-0.343 %	-1.488 %			37.304 %	4.151 %	
Concentration RSD	60.3 %	300.6 %	3.6 %	5.1 %	17.1 %	0.6 %	2.3 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	80	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	LLCCV	Rack	4		
Analysis started at:	9/4/2023 12:40:32 AM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	83.743 %	92.209 %	0.323 ppb	106.863 ppb	98.892 ppb	72.133 ppb	9.768 ppb	93.987 ppb	163.923 ppb
Concentration per Run 1	84.379 %	86.888 %	0.323 ppb	106.885 ppb	102.002 ppb	73.002 ppb	10.896 ppb	96.494 ppb	175.040 ppb
Concentration per Run 2	84.232 %	92.142 %	0.327 ppb	106.532 ppb	96.731 ppb	71.700 ppb	8.514 ppb	100.882 ppb	156.409 ppb
Concentration per Run 3	82.618 %	97.598 %	0.317 ppb	107.172 ppb	97.943 ppb	71.698 ppb	9.893 ppb	84.586 ppb	160.320 ppb
Recovery Percentage 1			64.505 %	1,068.626 %	98.892 %	103.047 %	97.680 %	93.987 %	163.923 %
Concentration RSD	1.2 %	5.8 %	1.6 %	0.3 %	2.8 %	1.0 %	12.2 %	9.0 %	6.0 %

Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	88.284 %	5.127 ppb	0.487 ppb	0.943 ppb	47.469 ppb	0.546 ppb	1.788 ppb	1.281 ppb	9.750 ppb
Concentration per Run 1	87.106 %	5.125 ppb	0.498 ppb	0.790 ppb	46.257 ppb	0.575 ppb	1.747 ppb	1.315 ppb	10.114 ppb
Concentration per Run 2	89.053 %	4.998 ppb	0.491 ppb	1.017 ppb	49.031 ppb	0.509 ppb	1.777 ppb	1.245 ppb	9.285 ppb
Concentration per Run 3	88.691 %	5.259 ppb	0.470 ppb	1.021 ppb	47.119 ppb	0.554 ppb	1.842 ppb	1.284 ppb	9.850 ppb
Recovery Percentage 1		102.539 %	48.669 %	94.256 %	94.938 %	109.195 %	89.418 %	128.135 %	97.499 %
Concentration RSD	1.2 %	2.5 %	3.0 %	14.0 %	3.0 %	6.2 %	2.7 %	2.8 %	4.3 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	94.638 %	0.564 ppb	5.134 ppb	0.483 ppb	2.128 ppb	95.838 %	0.263 ppb	0.219 ppb	92.033 %
Concentration per Run 1	91.721 %	0.602 ppb	5.638 ppb	0.474 ppb	2.025 ppb	93.810 %	0.266 ppb	0.230 ppb	87.409 %
Concentration per Run 2	96.639 %	0.510 ppb	4.766 ppb	0.480 ppb	2.123 ppb	95.546 %	0.269 ppb	0.213 ppb	92.046 %
Concentration per Run 3	95.554 %	0.578 ppb	4.998 ppb	0.494 ppb	2.237 ppb	98.157 %	0.254 ppb	0.214 ppb	96.643 %
Recovery Percentage 1		112.712 %	102.683 %	96.564 %	106.403 %		65.777 %	109.367 %	
Concentration RSD	2.7 %	8.4 %	8.8 %	2.1 %	5.0 %	2.3 %	3.0 %	4.3 %	5.0 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.074 ppb	0.546 ppb	95.357 %	95.535 %	0.510 ppb	0.536 ppb	97.490 %
Concentration per Run 1	4.257 ppb	0.560 ppb	92.456 %	92.866 %	0.467 ppb	0.513 ppb	101.979 %
Concentration per Run 2	3.901 ppb	0.447 ppb	95.774 %	96.754 %	0.529 ppb	0.549 ppb	94.306 %
Concentration per Run 3	4.065 ppb	0.631 ppb	97.840 %	96.985 %	0.535 ppb	0.546 ppb	96.186 %
Recovery Percentage 1	101.860 %	109.195 %			102.051 %	107.255 %	
Concentration RSD	4.4 %	17.1 %	2.8 %	2.4 %	7.4 %	3.8 %	4.1 %

Alpha ICPMSQ Data

9/5/2023 7:59:55 AM

Analysis index:	81	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/4/2023 12:45:15 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	11B (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)
Concentration average	83.086 %	93.444 %	0.002 ppb	-1.127 ppb	-3.535 ppb	-2.179 ppb	-1.261 ppb	-11.895 ppb	-4.452 ppb
Concentration per Run 1	84.912 %	91.468 %	0.001 ppb	-1.149 ppb	-3.414 ppb	-2.086 ppb	-1.243 ppb	-10.631 ppb	-5.198 ppb
Concentration per Run 2	82.918 %	94.836 %	0.002 ppb	-1.141 ppb	-3.749 ppb	-2.264 ppb	-1.371 ppb	-10.714 ppb	-4.918 ppb
Concentration per Run 3	81.429 %	94.028 %	0.003 ppb	-1.092 ppb	-3.441 ppb	-2.188 ppb	-1.171 ppb	-14.340 ppb	-3.240 ppb
Recovery Percentage 1			0.464 %	-11.273 %	-3.535 %	-3.113 %	-12.614 %	-11.895 %	-4.452 %
Concentration RSD	2.1 %	1.9 %	48.1 %	2.7 %	5.3 %	4.1 %	8.0 %	17.8 %	23.8 %

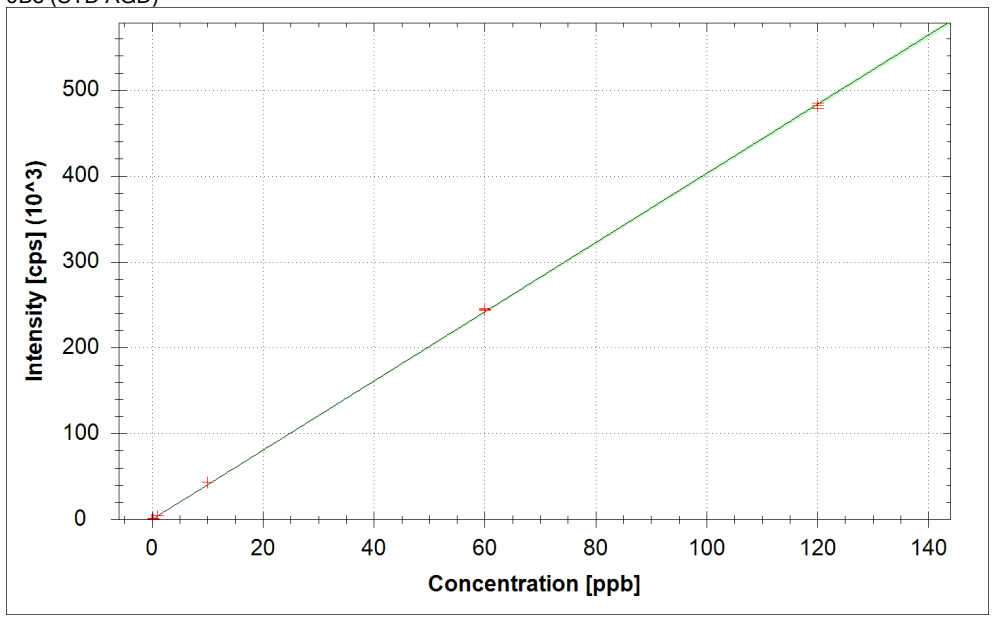
Category	45Sc (STD AGD)	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)
Concentration average	90.450 %	0.000 ppb	-0.013 ppb	-0.304 ppb	2.210 ppb	-0.003 ppb	-0.225 ppb	0.033 ppb	-1.867 ppb
Concentration per Run 1	90.403 %	-0.004 ppb	0.005 ppb	-0.303 ppb	1.315 ppb	-0.001 ppb	-0.232 ppb	0.056 ppb	-1.860 ppb
Concentration per Run 2	91.265 %	-0.005 ppb	-0.003 ppb	-0.307 ppb	2.537 ppb	-0.004 ppb	-0.217 ppb	0.031 ppb	-1.852 ppb
Concentration per Run 3	89.681 %	0.008 ppb	-0.041 ppb	-0.302 ppb	2.778 ppb	-0.004 ppb	-0.226 ppb	0.012 ppb	-1.890 ppb
Recovery Percentage 1		-0.007 %	-1.294 %	-30.408 %	4.420 %	-0.557 %	-11.250 %	3.271 %	-37.347 %
Concentration RSD	0.9 %	2,057.6 %	189.6 %	0.8 %	35.5 %	59.4 %	3.3 %	67.9 %	1.1 %

Category	74Ge (KED AGD)	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)
Concentration average	96.434 %	0.007 ppb	0.163 ppb	-0.039 ppb	0.126 ppb	97.551 %	-0.001 ppb	0.000 ppb	94.864 %
Concentration per Run 1	92.710 %	-0.017 ppb	0.144 ppb	-0.042 ppb	0.042 ppb	95.886 %	-0.001 ppb	-0.001 ppb	91.488 %
Concentration per Run 2	96.311 %	0.033 ppb	0.097 ppb	-0.037 ppb	0.161 ppb	97.031 %	0.000 ppb	0.000 ppb	97.675 %
Concentration per Run 3	100.282 %	0.004 ppb	0.249 ppb	-0.038 ppb	0.175 ppb	99.737 %	-0.001 ppb	0.000 ppb	95.429 %
Recovery Percentage 1		1.360 %	3.266 %	-0.393 %	6.307 %		-0.227 %	-0.116 %	
Concentration RSD	3.9 %	374.1 %	47.7 %	6.9 %	57.9 %	2.0 %	56.9 %	314.6 %	3.3 %

Category	121Sb (KED AGD)	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.048 ppb	-0.014 ppb	96.425 %	97.067 %	0.027 ppb	0.019 ppb	103.697 %
Concentration per Run 1	-0.058 ppb	-0.019 ppb	94.868 %	95.131 %	0.014 ppb	0.017 ppb	107.097 %
Concentration per Run 2	-0.044 ppb	-0.017 ppb	96.133 %	97.074 %	0.034 ppb	0.018 ppb	102.650 %
Concentration per Run 3	-0.042 ppb	-0.005 ppb	98.275 %	98.995 %	0.033 ppb	0.020 ppb	101.345 %
Recovery Percentage 1	-1.196 %	-2.714 %			2.708 %	1.857 %	
Concentration RSD	17.6 %	54.1 %	1.8 %	2.0 %	42.4 %	7.6 %	2.9 %

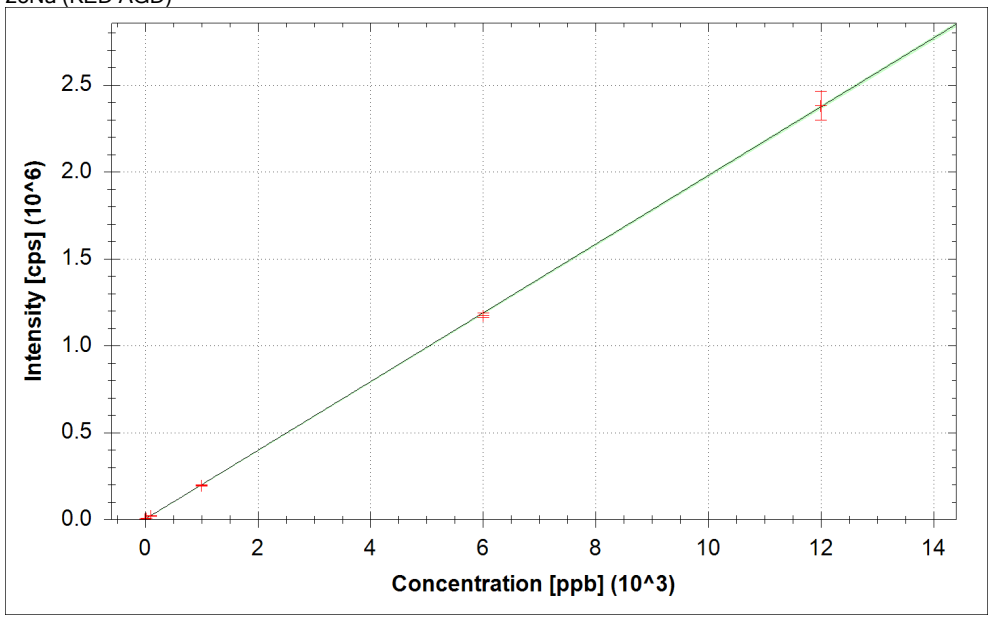
Calibration Curves:

9Be (STD AGD)



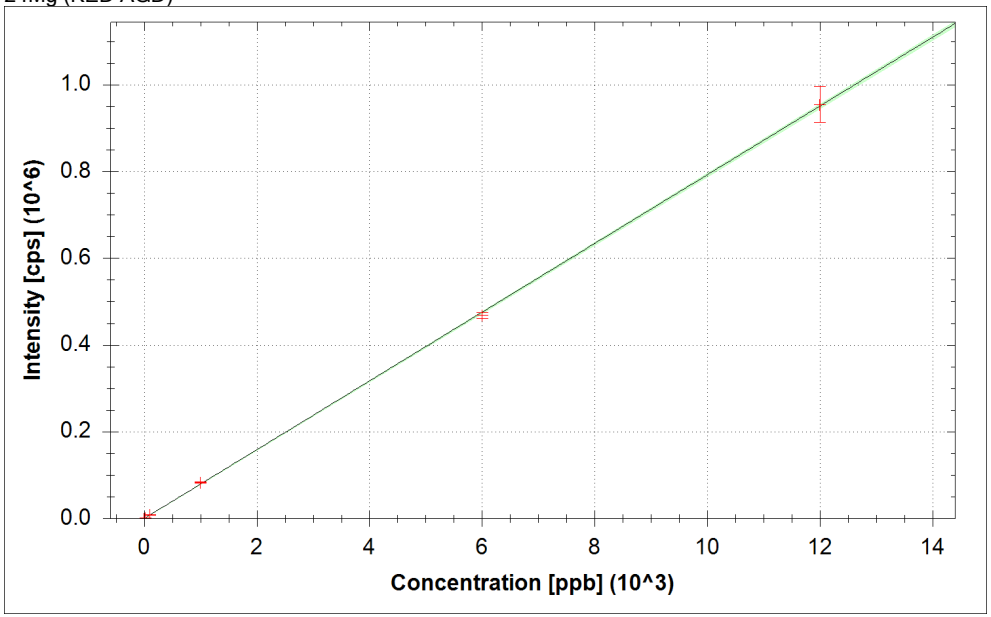
f(x) = 4028.9323*x + 40.8565
R² = 0.9999
BEC = 0.010 ppb
LoD = 0.0028 ppb

23Na (KED AGD)



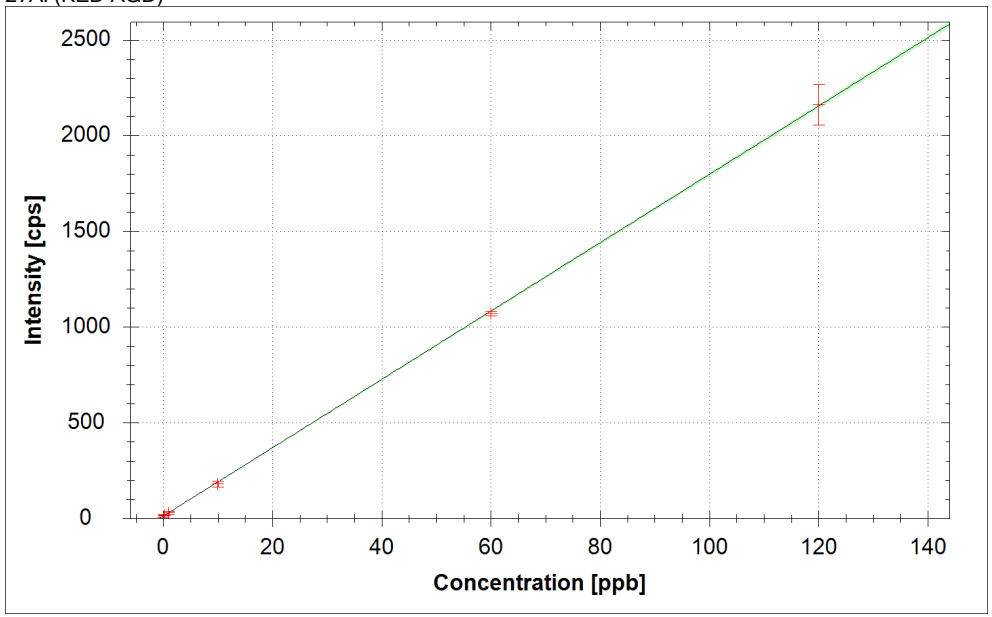
f(x) = 197.6820*x + 1950.8127
R² = 0.9999
BEC = 9.868 ppb
LoD = 0.9538 ppb

24Mg (KED AGD)



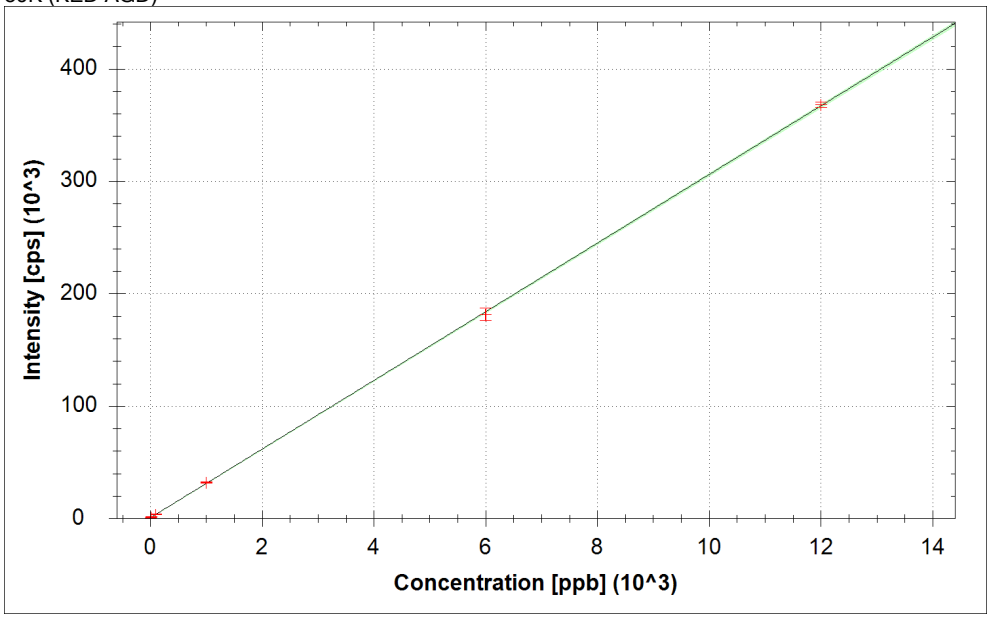
f(x) = 79.1905*x + 81.9815
R² = 0.9999
BEC = 1.035 ppb
LoD = 1.2562 ppb

27Al (KED AGD)



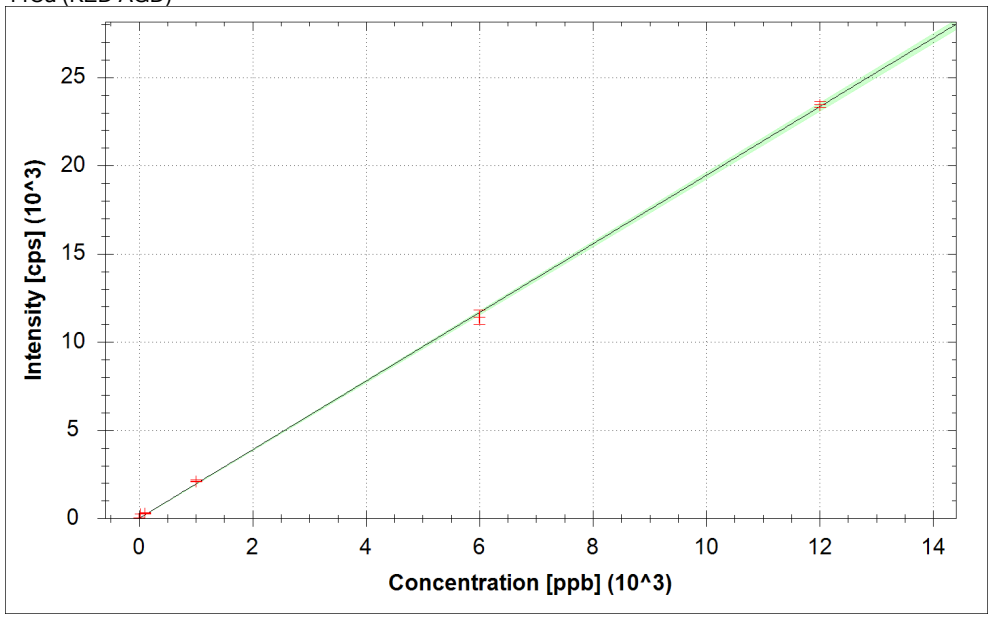
f(x) = 17.8446*x + 12.4642
R² = 0.9999
BEC = 0.698 ppb
LoD = 1.1398 ppb

39K (KED AGD)



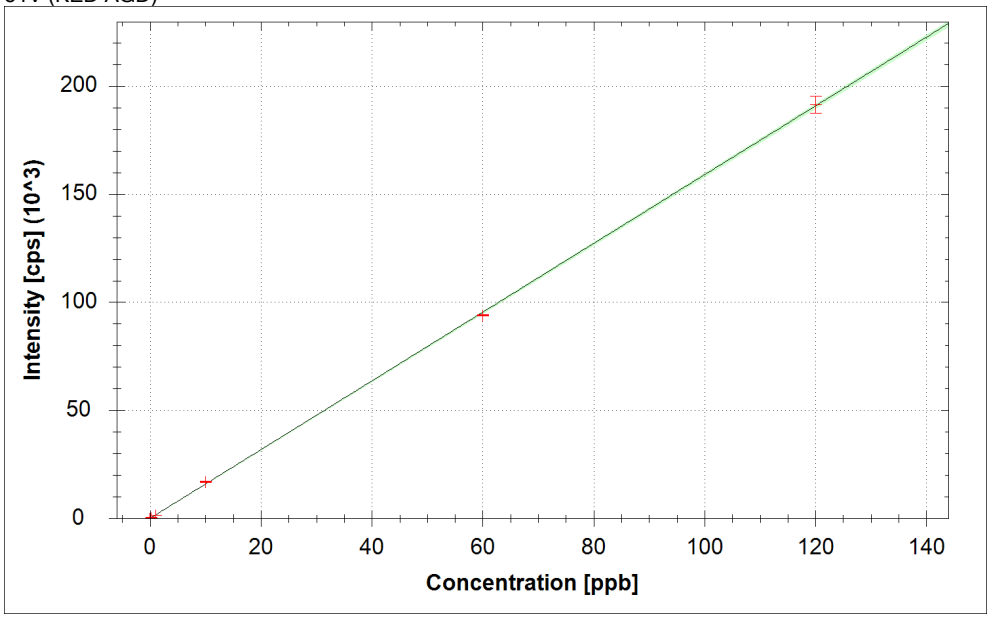
f(x) = 30.5286*x + 593.0568
R² = 0.9999
BEC = 19.426 ppb
LoD = 8.6954 ppb

44Ca (KED AGD)



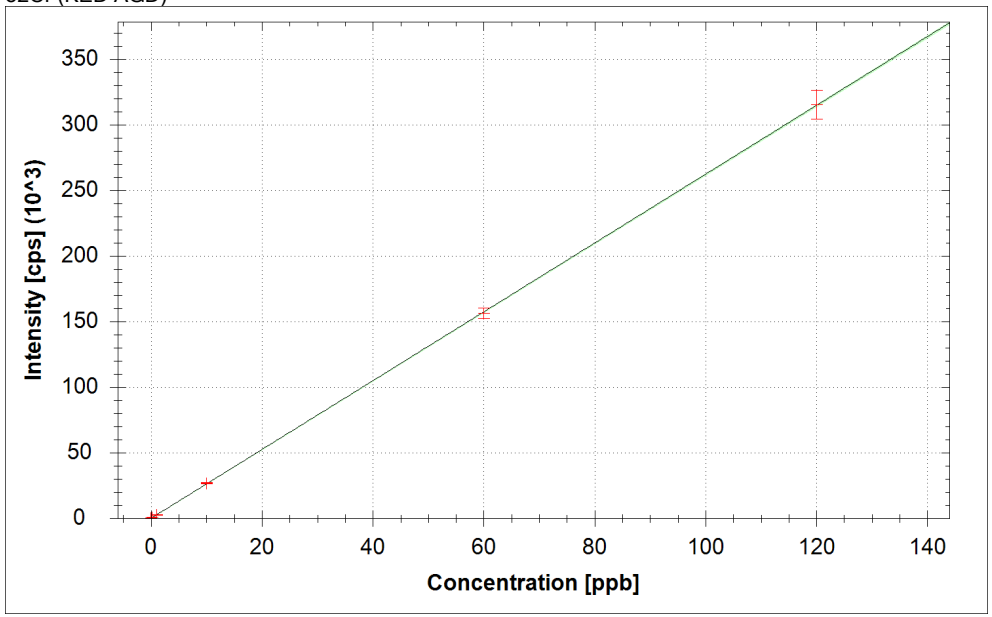
f(x) = 1.9440*x + 6.0760
R² = 0.9996
BEC = 3.125 ppb
LoD = 4.5909 ppb

51V (KED AGD)



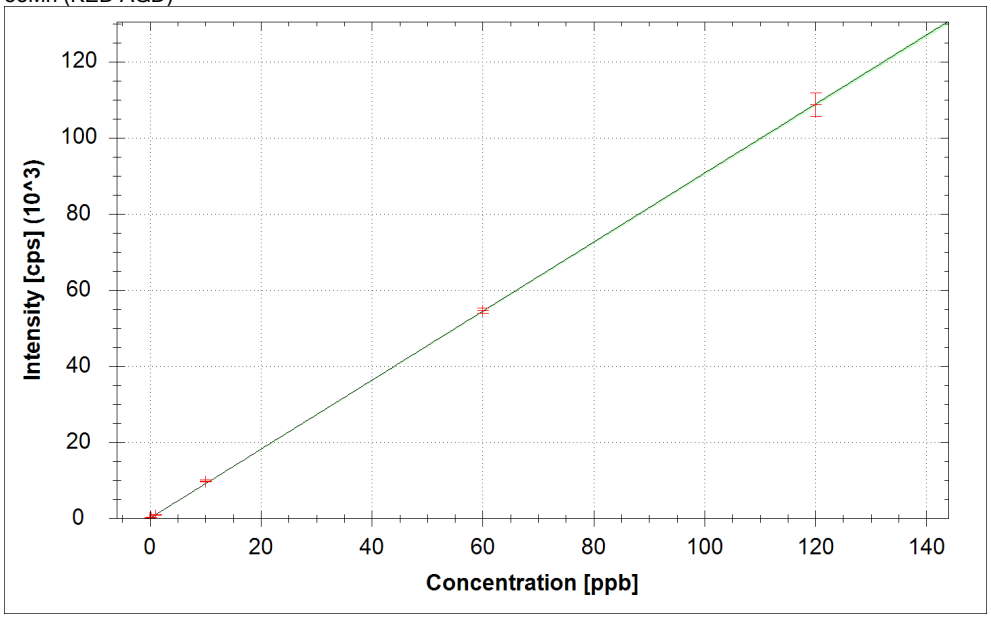
f(x) = 1588.6826*x + 50.9876
R² = 0.9999
BEC = 0.032 ppb
LoD = 0.0175 ppb

52Cr (KED AGD)



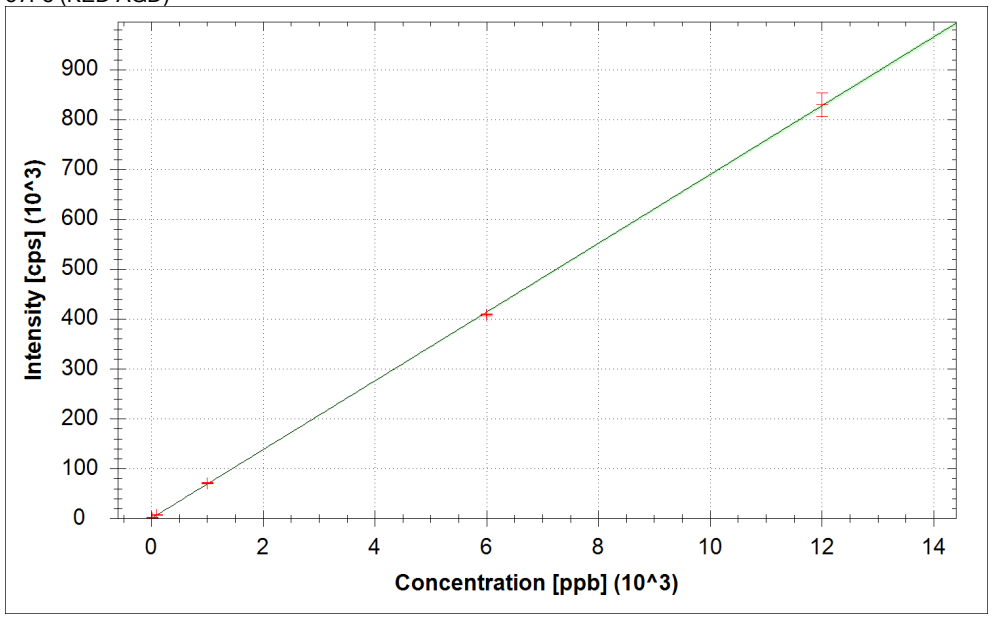
f(x) = 2623.2174*x + 112.0773
R² = 1.0000
BEC = 0.043 ppb
LoD = 0.0112 ppb

55Mn (KED AGD)



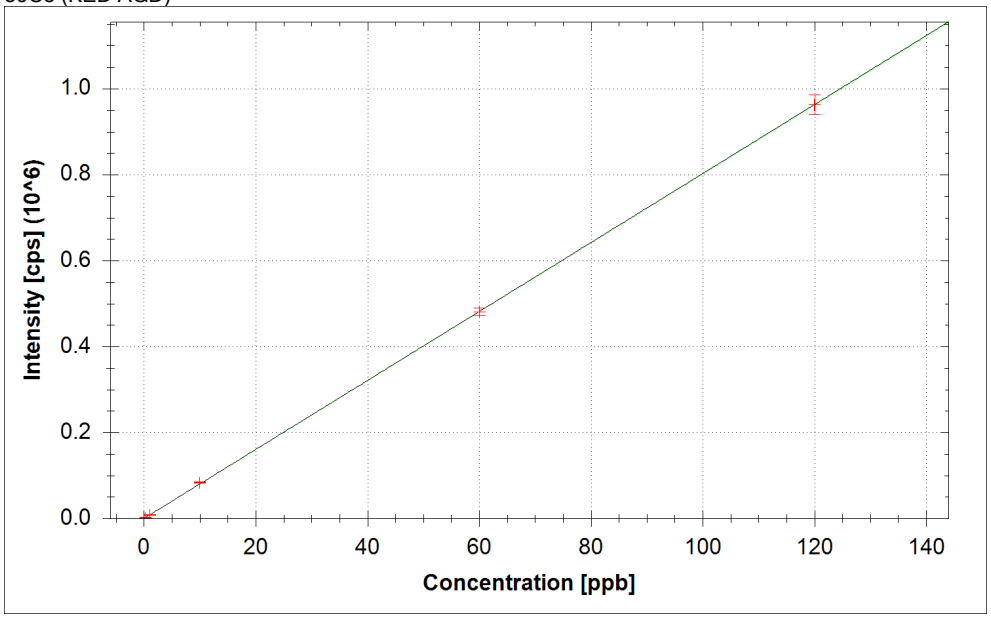
f(x) = 906.6070*x + 62.2488
R² = 0.9999
BEC = 0.069 ppb
LoD = 0.0130 ppb

57Fe (KED AGD)



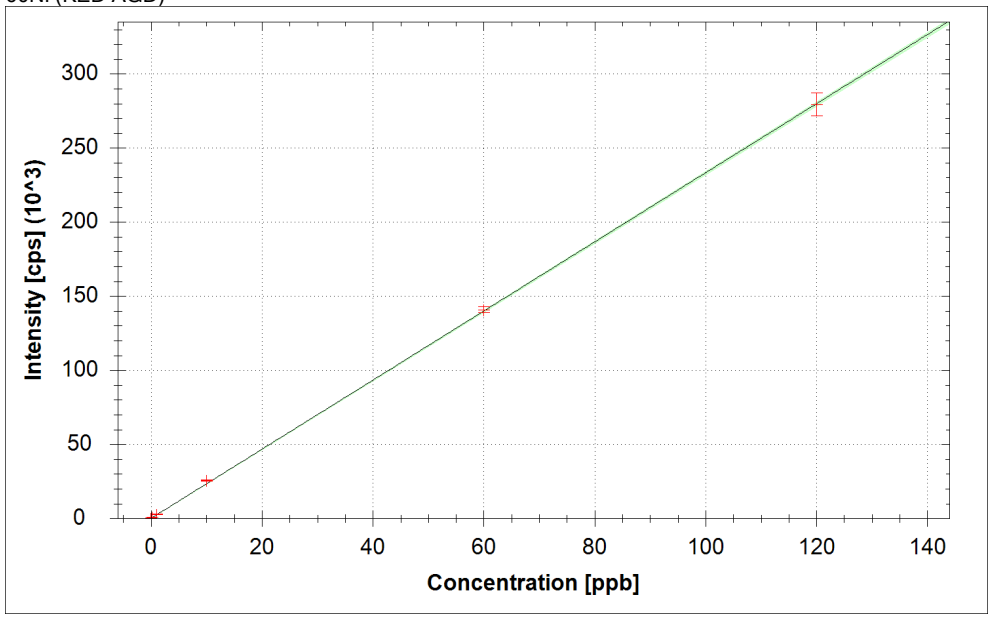
f(x) = 68.9207*x + 81.6893
R² = 0.9999
BEC = 1.185 ppb
LoD = 1.3199 ppb

59Co (KED AGD)



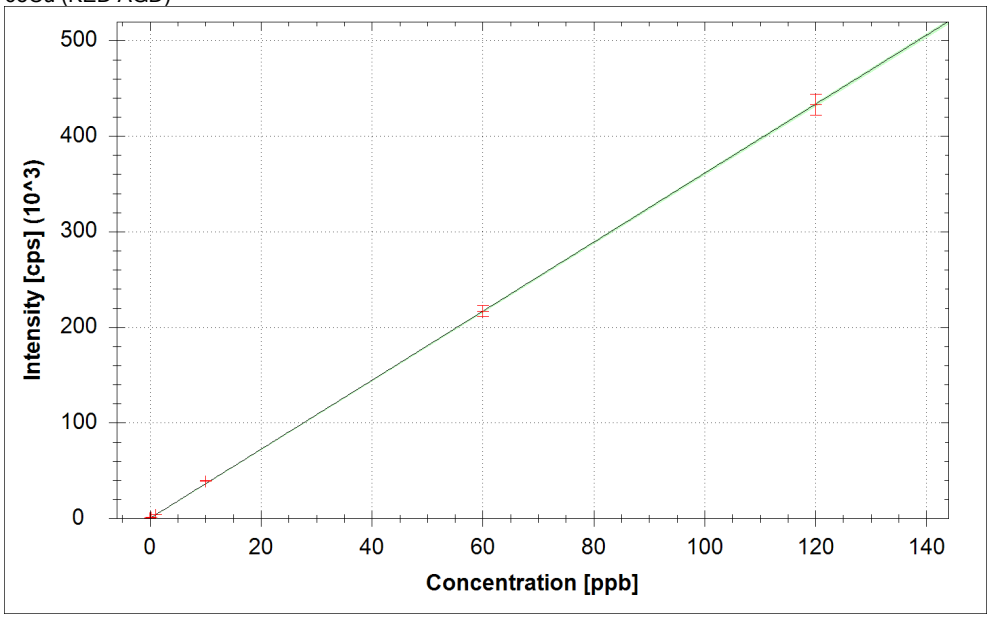
f(x) = 8024.4799*x + 8.7246
R² = 1.0000
BEC = 0.001 ppb
LoD = 0.0028 ppb

60Ni (KED AGD)



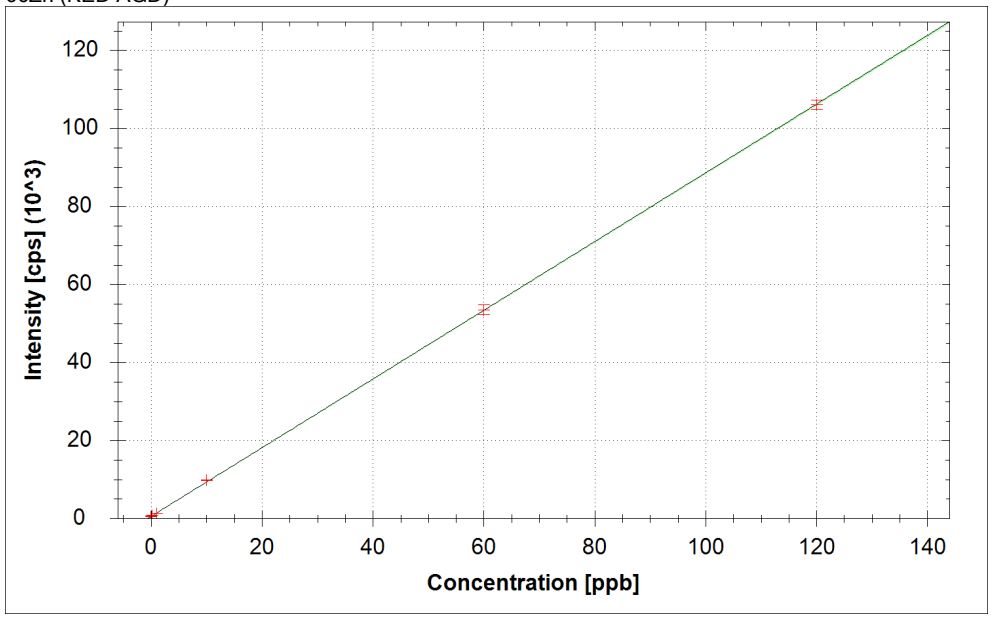
f(x) = 2330.9477*x + 93.5875
R² = 0.9999
BEC = 0.040 ppb
LoD = 0.0562 ppb

65Cu (KED AGD)



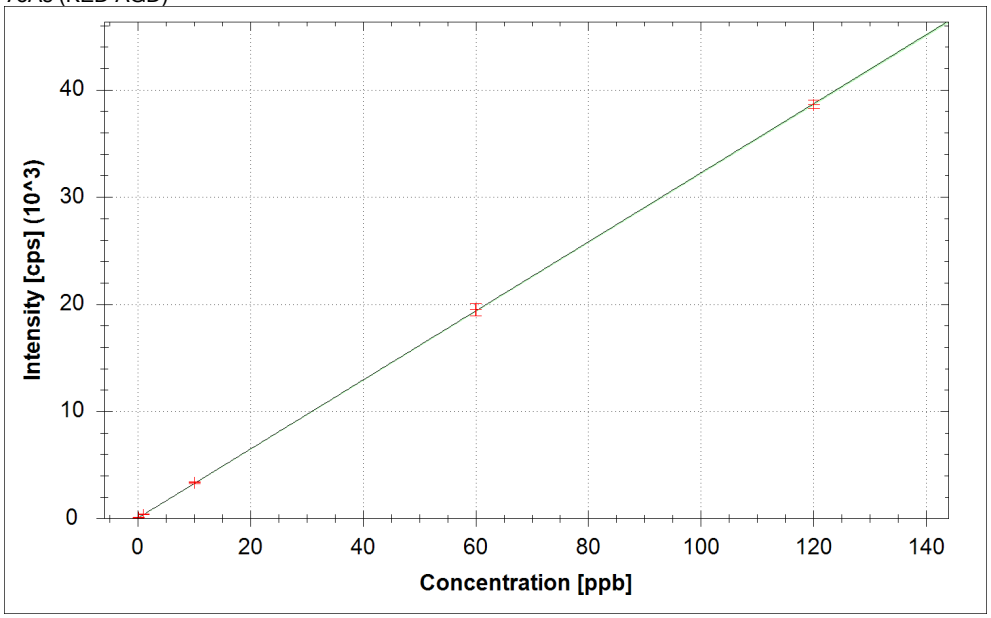
f(x) = 3608.1185*x + 178.8630
R² = 0.9999
BEC = 0.050 ppb
LoD = 0.0412 ppb

66Zn (KED AGD)



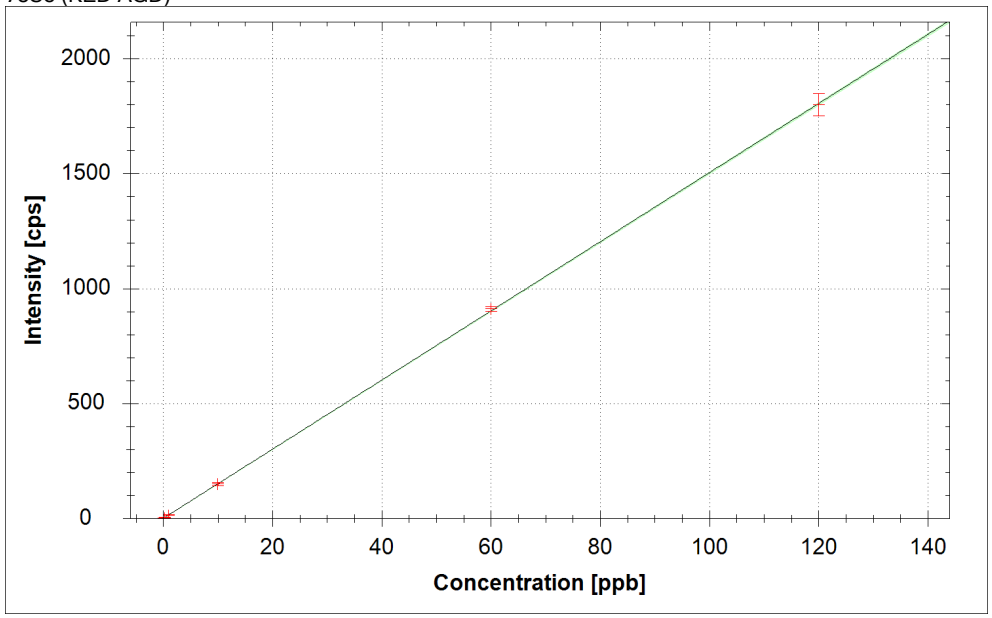
f(x) = 880.4217*x + 520.7701
R² = 1.0000
BEC = 0.592 ppb
LoD = 0.1318 ppb

75As (KED AGD)



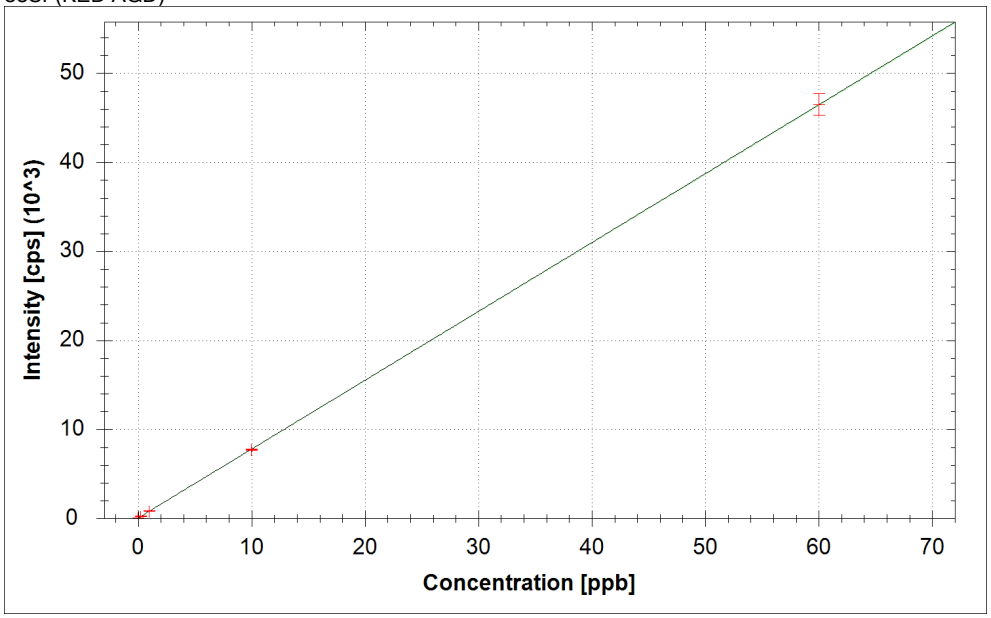
f(x) = 322.1216*x + 36.2832
R² = 1.0000
BEC = 0.113 ppb
LoD = 0.0408 ppb

78Se (KED AGD)



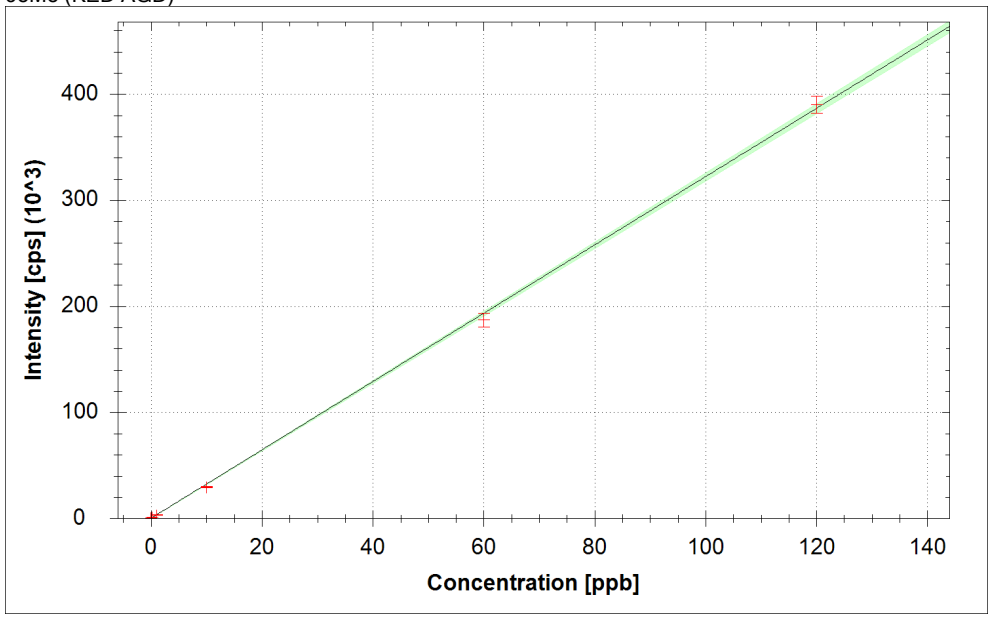
f(x) = 15.0300*x + 0.6331
R² = 1.0000
BEC = 0.042 ppb
LoD = 0.0386 ppb

88Sr (KED AGD)



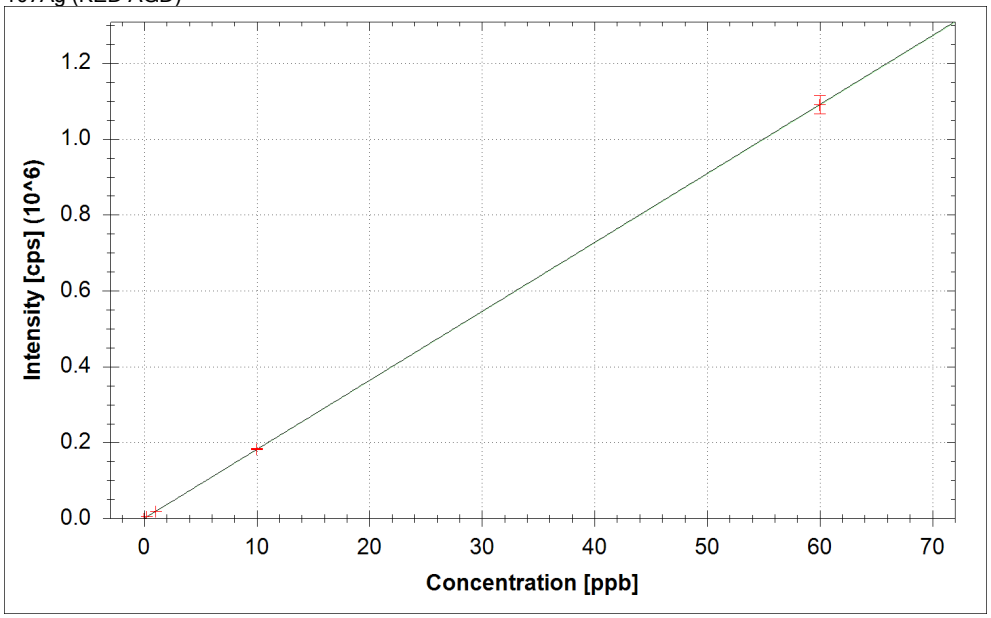
f(x) = 773.4488*x + 52.4847
R² = 1.0000
BEC = 0.068 ppb
LoD = 0.0070 ppb

95Mo (KED AGD)



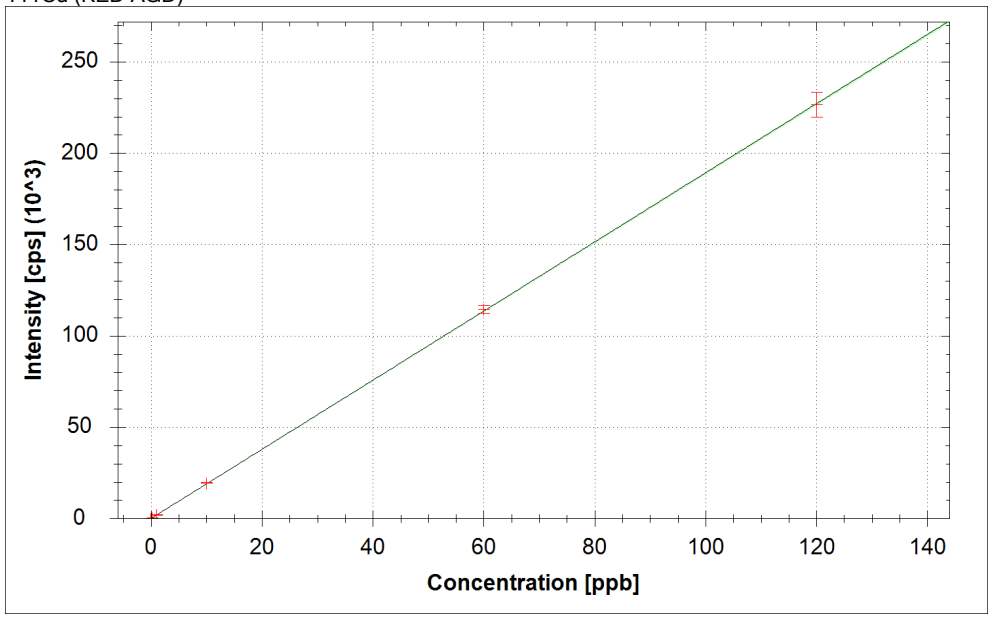
f(x) = 3219.4053*x + 255.9528
R² = 0.9995
BEC = 0.080 ppb
LoD = 0.0836 ppb

107Ag (KED AGD)



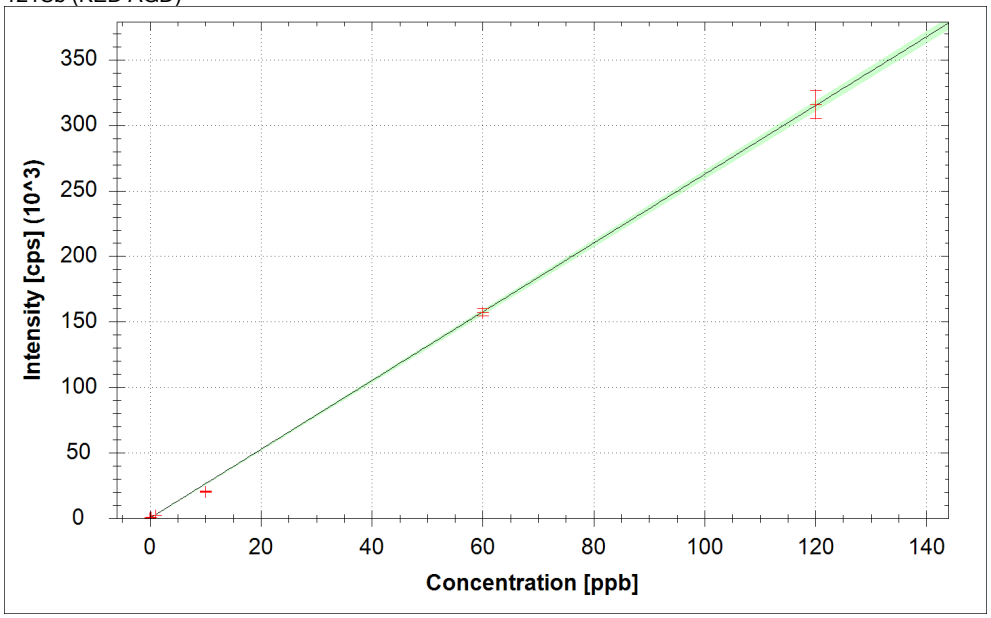
f(x) = 18176.4600*x + 106.6741
R² = 1.0000
BEC = 0.006 ppb
LoD = 0.0013 ppb

111Cd (KED AGD)



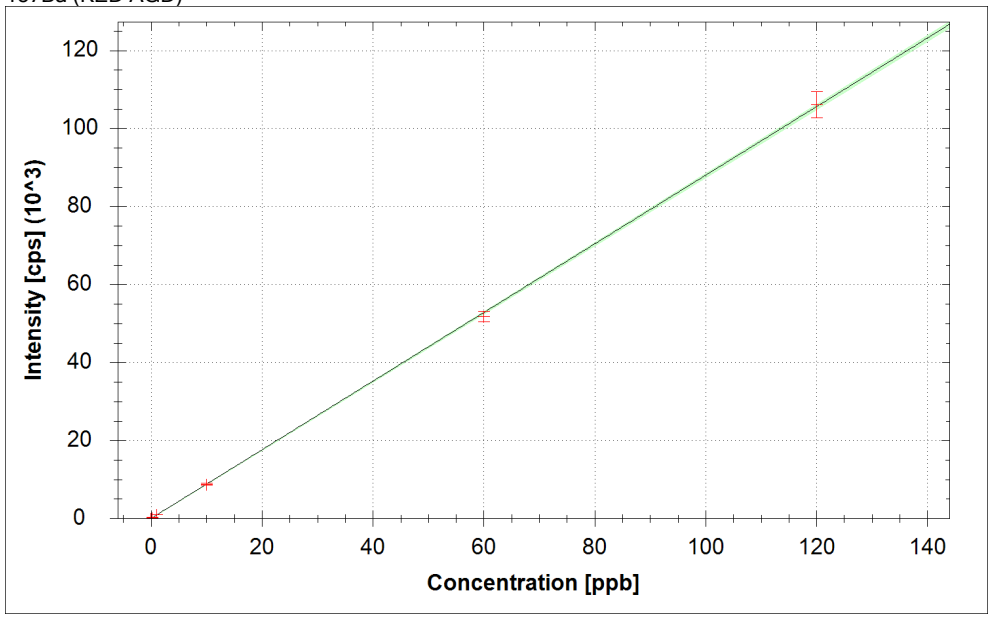
f(x) = 1892.0670*x + 0.8997
R² = 1.0000
BEC = 0.000 ppb
LoD = 0.0012 ppb

121Sb (KED AGD)



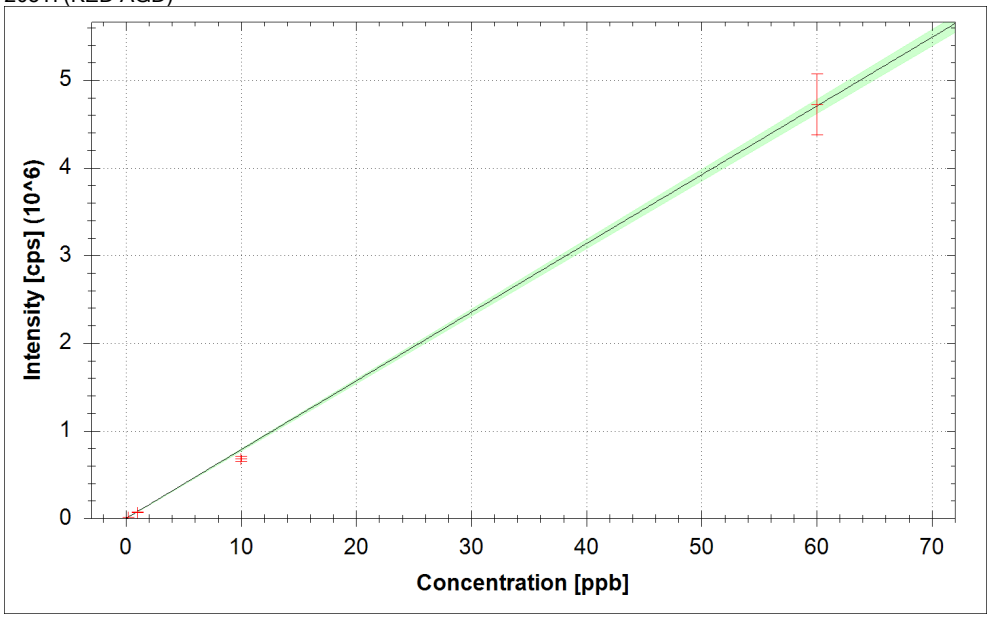
f(x) = 2621.8395*x + 271.1075
R² = 0.9995
BEC = 0.103 ppb
LoD = 0.0265 ppb

137Ba (KED AGD)



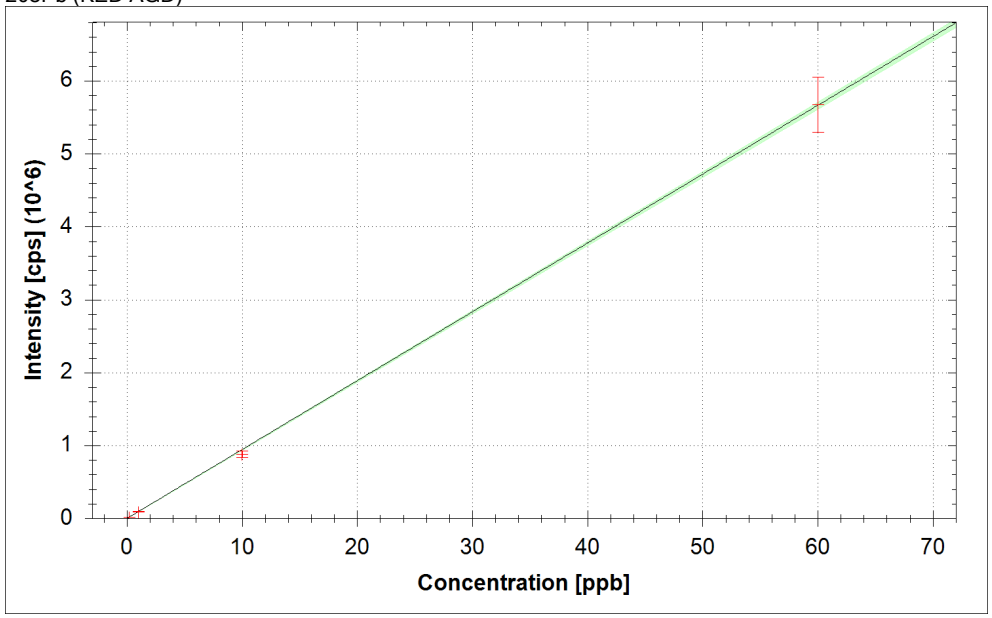
f(x) = 879.5572*x + 7.8960
R² = 0.9999
BEC = 0.009 ppb
LoD = 0.0186 ppb

205Tl (KED AGD)



f(x) = 78385.3292*x + 213.3984
R² = 0.9993
BEC = 0.003 ppb
LoD = 0.0003 ppb

208Pb (KED AGD)



f(x) = 94359.1895*x + 921.3302
R² = 0.9998
BEC = 0.010 ppb
LoD = 0.0020 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 9/5/2023 5:38:18 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	101.642 %	2.6 %	
6Li (KED AGD)	105.816 %	0.8 %	
9Be (STD AGD)	0.211 ppb	4.9 %	0.200 ppb
23Na (KED AGD)	19.871 ppb	3.0 %	20.000 ppb
24Mg (KED AGD)	20.395 ppb	4.6 %	20.000 ppb
27Al (KED AGD)	0.254 ppb	38.9 %	0.200 ppb
39K (KED AGD)	17.774 ppb	29.3 %	20.000 ppb
44Ca (KED AGD)	125.128 ppb	4.2 %	20.000 ppb
45Sc (STD AGD)	103.661 %	1.8 %	
51V (KED AGD)	0.194 ppb	24.6 %	0.200 ppb
52Cr (KED AGD)	0.254 ppb	5.6 %	0.200 ppb
55Mn (KED AGD)	0.224 ppb	2.8 %	0.200 ppb
57Fe (KED AGD)	21.440 ppb	11.7 %	20.000 ppb
59Co (KED AGD)	0.214 ppb	8.2 %	0.200 ppb
60Ni (KED AGD)	0.328 ppb	10.6 %	0.200 ppb
65Cu (KED AGD)	0.237 ppb	19.7 %	0.200 ppb
66Zn (KED AGD)	0.245 ppb	7.9 %	0.200 ppb
74Ge (KED AGD)	101.747 %	3.0 %	
75As (KED AGD)	0.254 ppb	11.0 %	0.200 ppb
78Se (KED AGD)	0.179 ppb	15.5 %	0.200 ppb
88Sr (KED AGD)	0.235 ppb	4.5 %	0.200 ppb
95Mo (KED AGD)	0.172 ppb	8.8 %	0.200 ppb
103Rh (KED AGD)	102.396 %	1.5 %	
107Ag (KED AGD)	0.211 ppb	2.8 %	0.200 ppb
111Cd (KED AGD)	0.203 ppb	3.5 %	0.200 ppb
115In (KED AGD)	102.603 %	1.2 %	
121Sb (KED AGD)	0.165 ppb	6.7 %	0.200 ppb
137Ba (KED AGD)	0.199 ppb	15.1 %	0.200 ppb
159Tb (KED AGD)	102.981 %	2.1 %	
175Lu (KED AGD)	103.411 %	1.2 %	
205Tl (KED AGD)	0.164 ppb	7.4 %	0.200 ppb
208Pb (KED AGD)	0.183 ppb	7.2 %	0.200 ppb
209Bi (KED AGD)	106.534 %	5.1 %	

Standards:

Analysis Index: 5
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 9/5/2023 5:42:55 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	102.386 %	1.7 %	
6Li (KED AGD)	108.661 %	5.9 %	
9Be (STD AGD)	1.025 ppb	2.2 %	1.000 ppb
23Na (KED AGD)	93.304 ppb	5.4 %	100.000 ppb
24Mg (KED AGD)	98.703 ppb	6.9 %	100.000 ppb
27Al (KED AGD)	0.889 ppb	63.1 %	1.000 ppb
39K (KED AGD)	95.040 ppb	7.7 %	100.000 ppb
44Ca (KED AGD)	147.535 ppb	11.2 %	100.000 ppb
45Sc (STD AGD)	102.724 %	0.1 %	
51V (KED AGD)	0.900 ppb	1.2 %	1.000 ppb
52Cr (KED AGD)	1.023 ppb	9.1 %	1.000 ppb
55Mn (KED AGD)	0.912 ppb	4.5 %	1.000 ppb
57Fe (KED AGD)	100.571 ppb	4.5 %	100.000 ppb
59Co (KED AGD)	1.038 ppb	7.3 %	1.000 ppb
60Ni (KED AGD)	1.051 ppb	9.5 %	1.000 ppb
65Cu (KED AGD)	1.060 ppb	6.7 %	1.000 ppb
66Zn (KED AGD)	0.911 ppb	2.6 %	1.000 ppb
74Ge (KED AGD)	102.465 %	4.0 %	
75As (KED AGD)	1.022 ppb	6.1 %	1.000 ppb
78Se (KED AGD)	0.901 ppb	14.9 %	1.000 ppb
88Sr (KED AGD)	0.997 ppb	4.5 %	1.000 ppb
95Mo (KED AGD)	0.885 ppb	6.9 %	1.000 ppb
103Rh (KED AGD)	101.365 %	3.5 %	
107Ag (KED AGD)	1.008 ppb	2.4 %	1.000 ppb
111Cd (KED AGD)	1.011 ppb	2.7 %	1.000 ppb
115In (KED AGD)	101.846 %	3.3 %	
121Sb (KED AGD)	0.858 ppb	2.0 %	1.000 ppb
137Ba (KED AGD)	1.027 ppb	2.2 %	1.000 ppb
159Tb (KED AGD)	102.570 %	2.6 %	
175Lu (KED AGD)	103.473 %	4.2 %	
205Tl (KED AGD)	0.866 ppb	4.6 %	1.000 ppb
208Pb (KED AGD)	0.939 ppb	3.3 %	1.000 ppb
209Bi (KED AGD)	100.239 %	5.0 %	

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 9/5/2023 5:47:33 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	103.186 %	0.3 %	
6Li (KED AGD)	107.956 %	3.4 %	
9Be (STD AGD)	10.742 ppb	0.3 %	10.000 ppb
23Na (KED AGD)	982.894 ppb	1.7 %	1,000.000 ppb
24Mg (KED AGD)	1,047.554 ppb	1.8 %	1,000.000 ppb
27Al (KED AGD)	9.387 ppb	8.9 %	10.000 ppb
39K (KED AGD)	1,026.081 ppb	2.6 %	1,000.000 ppb
44Ca (KED AGD)	1,086.080 ppb	2.2 %	1,000.000 ppb
45Sc (STD AGD)	107.178 %	0.7 %	
51V (KED AGD)	10.544 ppb	1.5 %	10.000 ppb
52Cr (KED AGD)	10.190 ppb	1.7 %	10.000 ppb
55Mn (KED AGD)	10.790 ppb	2.2 %	10.000 ppb
57Fe (KED AGD)	1,021.336 ppb	1.4 %	1,000.000 ppb
59Co (KED AGD)	10.435 ppb	1.4 %	10.000 ppb
60Ni (KED AGD)	10.942 ppb	1.8 %	10.000 ppb
65Cu (KED AGD)	10.826 ppb	1.0 %	10.000 ppb
66Zn (KED AGD)	10.534 ppb	1.3 %	10.000 ppb
74Ge (KED AGD)	107.411 %	1.5 %	
75As (KED AGD)	10.191 ppb	2.7 %	10.000 ppb
78Se (KED AGD)	9.891 ppb	4.1 %	10.000 ppb
88Sr (KED AGD)	9.871 ppb	1.1 %	10.000 ppb
95Mo (KED AGD)	9.104 ppb	1.7 %	10.000 ppb
103Rh (KED AGD)	103.859 %	2.5 %	
107Ag (KED AGD)	10.077 ppb	0.9 %	10.000 ppb
111Cd (KED AGD)	10.235 ppb	0.8 %	10.000 ppb
115In (KED AGD)	107.469 %	2.6 %	
121Sb (KED AGD)	7.622 ppb	2.2 %	10.000 ppb
137Ba (KED AGD)	9.907 ppb	2.8 %	10.000 ppb
159Tb (KED AGD)	106.488 %	1.2 %	
175Lu (KED AGD)	106.844 %	3.5 %	
205Tl (KED AGD)	8.662 ppb	4.0 %	10.000 ppb
208Pb (KED AGD)	9.319 ppb	4.8 %	10.000 ppb
209Bi (KED AGD)	108.541 %	3.8 %	

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 9/5/2023 5:52:12 AM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	98.711 %	1.8 %	
6Li (KED AGD)	106.168 %	0.8 %	
9Be (STD AGD)	60.627 ppb	0.5 %	60.000 ppb
23Na (KED AGD)	5,930.450 ppb	1.1 %	6,000.000 ppb
24Mg (KED AGD)	5,905.230 ppb	1.5 %	6,000.000 ppb
27Al (KED AGD)	59.248 ppb	1.1 %	60.000 ppb
39K (KED AGD)	5,921.300 ppb	3.1 %	6,000.000 ppb
44Ca (KED AGD)	5,861.824 ppb	3.5 %	6,000.000 ppb
45Sc (STD AGD)	111.825 %	0.3 %	
51V (KED AGD)	59.105 ppb	0.4 %	60.000 ppb
52Cr (KED AGD)	59.518 ppb	2.5 %	60.000 ppb
55Mn (KED AGD)	60.127 ppb	1.4 %	60.000 ppb
57Fe (KED AGD)	5,924.867 ppb	0.5 %	6,000.000 ppb
59Co (KED AGD)	59.944 ppb	1.7 %	60.000 ppb
60Ni (KED AGD)	60.365 ppb	1.5 %	60.000 ppb
65Cu (KED AGD)	60.059 ppb	2.6 %	60.000 ppb
66Zn (KED AGD)	60.147 ppb	2.4 %	60.000 ppb
74Ge (KED AGD)	100.843 %	3.4 %	
75As (KED AGD)	60.391 ppb	2.9 %	60.000 ppb
78Se (KED AGD)	60.604 ppb	1.1 %	60.000 ppb
88Sr (KED AGD)	60.021 ppb	2.6 %	60.000 ppb
95Mo (KED AGD)	57.970 ppb	3.4 %	60.000 ppb
103Rh (KED AGD)	98.548 %	2.4 %	
107Ag (KED AGD)	59.987 ppb	2.3 %	60.000 ppb
111Cd (KED AGD)	60.493 ppb	2.0 %	60.000 ppb
115In (KED AGD)	101.094 %	2.0 %	
121Sb (KED AGD)	59.814 ppb	1.8 %	60.000 ppb
137Ba (KED AGD)	58.815 ppb	2.5 %	60.000 ppb
159Tb (KED AGD)	104.499 %	2.3 %	
175Lu (KED AGD)	104.958 %	2.8 %	
205Tl (KED AGD)	60.225 ppb	7.4 %	60.000 ppb
208Pb (KED AGD)	60.115 ppb	6.7 %	60.000 ppb
209Bi (KED AGD)	102.952 %	7.7 %	

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 9/5/2023 5:56:51 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	95.782 %	2.1 %	
6Li (KED AGD)	102.291 %	4.1 %	
9Be (STD AGD)	119.624 ppb	0.6 %	120.000 ppb
23Na (KED AGD)	12,036.257 ppb	3.5 %	12,000.000 ppb
24Mg (KED AGD)	12,043.432 ppb	4.3 %	12,000.000 ppb
27Al (KED AGD)	120.428 ppb	4.9 %	120.000 ppb
39K (KED AGD)	12,037.222 ppb	0.6 %	12,000.000 ppb
44Ca (KED AGD)	12,061.343 ppb	0.7 %	12,000.000 ppb
45Sc (STD AGD)	120.418 %	1.0 %	
51V (KED AGD)	120.403 ppb	2.1 %	120.000 ppb
52Cr (KED AGD)	120.225 ppb	3.4 %	120.000 ppb
55Mn (KED AGD)	119.871 ppb	2.8 %	120.000 ppb
57Fe (KED AGD)	12,035.782 ppb	2.8 %	12,000.000 ppb
59Co (KED AGD)	119.991 ppb	2.4 %	120.000 ppb
60Ni (KED AGD)	119.738 ppb	2.7 %	120.000 ppb
65Cu (KED AGD)	119.901 ppb	2.5 %	120.000 ppb
66Zn (KED AGD)	119.883 ppb	1.2 %	120.000 ppb
74Ge (KED AGD)	98.077 %	1.3 %	
75As (KED AGD)	119.788 ppb	1.1 %	120.000 ppb
78Se (KED AGD)	119.708 ppb	2.7 %	120.000 ppb
88Sr (KED AGD)	122.009 ppb	0.5 %	120.000 ppb
95Mo (KED AGD)	121.091 ppb	2.0 %	120.000 ppb
103Rh (KED AGD)	95.459 %	2.2 %	
107Ag (KED AGD)	133.088 ppb	3.0 %	120.000 ppb
111Cd (KED AGD)	119.734 ppb	3.0 %	120.000 ppb
115In (KED AGD)	99.280 %	5.2 %	
121Sb (KED AGD)	120.292 ppb	3.4 %	120.000 ppb
137Ba (KED AGD)	120.600 ppb	3.1 %	120.000 ppb
159Tb (KED AGD)	103.459 %	2.8 %	
175Lu (KED AGD)	106.636 %	2.8 %	
205Tl (KED AGD)	122.873 ppb	2.2 %	120.000 ppb
208Pb (KED AGD)	127.360 ppb	3.9 %	120.000 ppb
209Bi (KED AGD)	99.746 %	3.3 %	

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	1	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	9/5/2023 5:24:23 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.703 %	91.692 %	0.001 ppb	4.711 ppb	1.203 ppb	0.519 ppb	3.551 ppb	2.123 ppb	89.357 %
Concentration per Run 1	95.745 %	89.048 %	0.002 ppb	5.003 ppb	0.943 ppb	0.722 ppb	2.742 ppb	-1.593 ppb	89.368 %
Concentration per Run 2	93.050 %	91.389 %	-0.002 ppb	5.465 ppb	1.281 ppb	0.536 ppb	1.103 ppb	-0.020 ppb	89.363 %
Concentration per Run 3	92.312 %	94.637 %	0.002 ppb	3.664 ppb	1.386 ppb	0.298 ppb	6.809 ppb	7.983 ppb	89.340 %
Concentration RSD	1.9 %	3.1 %	363.8 %	19.9 %	19.3 %	41.0 %	82.7 %	241.9 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.011 ppb	0.011 ppb	0.069 ppb	2.623 ppb	0.003 ppb	0.198 ppb	0.192 ppb	0.719 ppb	90.468 %
Concentration per Run 1	-0.023 ppb	0.024 ppb	0.103 ppb	3.115 ppb	0.004 ppb	0.170 ppb	0.203 ppb	0.726 ppb	90.275 %
Concentration per Run 2	0.005 ppb	0.005 ppb	0.078 ppb	2.904 ppb	0.003 ppb	0.215 ppb	0.194 ppb	0.698 ppb	89.393 %
Concentration per Run 3	-0.014 ppb	0.004 ppb	0.027 ppb	1.849 ppb	0.003 ppb	0.211 ppb	0.179 ppb	0.733 ppb	91.736 %
Concentration RSD	135.8 %	101.1 %	56.2 %	25.9 %	34.2 %	12.6 %	6.2 %	2.6 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.036 ppb	-0.011 ppb	0.000 ppb	0.047 ppb	90.826 %	0.006 ppb	0.001 ppb	90.615 %	0.082 ppb
Concentration per Run 1	0.048 ppb	-0.003 ppb	0.003 ppb	0.004 ppb	88.294 %	0.007 ppb	0.000 ppb	87.343 %	0.080 ppb
Concentration per Run 2	0.015 ppb	-0.032 ppb	-0.001 ppb	0.052 ppb	92.306 %	0.007 ppb	0.001 ppb	91.313 %	0.073 ppb
Concentration per Run 3	0.045 ppb	0.003 ppb	-0.001 ppb	0.085 ppb	91.878 %	0.003 ppb	0.001 ppb	93.188 %	0.093 ppb
Concentration RSD	51.7 %	175.4 %	737.9 %	86.1 %	2.4 %	34.4 %	51.6 %	3.3 %	12.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.020 ppb	92.042 %	92.582 %	0.002 ppb	0.014 ppb	93.292 %
Concentration per Run 1	0.025 ppb	89.012 %	88.543 %	0.002 ppb	0.013 ppb	100.603 %
Concentration per Run 2	0.016 ppb	92.790 %	95.041 %	0.003 ppb	0.016 ppb	90.024 %
Concentration per Run 3	0.019 ppb	94.325 %	94.163 %	0.003 ppb	0.014 ppb	89.250 %
Concentration RSD	24.3 %	3.0 %	3.8 %	22.1 %	10.7 %	6.8 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	2	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CAL LOT #M22-1040	Rack	0		
Analysis started at:	9/5/2023 5:29:00 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.448 %	98.892 %	-0.001 ppb	4.501 ppb	2.029 ppb	0.459 ppb	5.999 ppb	4.011 ppb	100.390 %
Concentration per Run 1	99.662 %	94.939 %	0.000 ppb	4.462 ppb	2.439 ppb	0.726 ppb	7.023 ppb	1.157 ppb	101.177 %
Concentration per Run 2	96.727 %	99.396 %	0.000 ppb	4.747 ppb	1.946 ppb	0.058 ppb	7.437 ppb	8.679 ppb	99.568 %
Concentration per Run 3	95.955 %	102.341 %	-0.002 ppb	4.294 ppb	1.702 ppb	0.591 ppb	3.537 ppb	2.197 ppb	100.425 %
Concentration RSD	2.0 %	3.8 %	116.6 %	5.1 %	18.5 %	77.0 %	35.7 %	101.6 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.014 ppb	0.014 ppb	0.077 ppb	2.788 ppb	0.003 ppb	0.171 ppb	0.184 ppb	0.750 ppb	96.572 %
Concentration per Run 1	-0.023 ppb	0.024 ppb	0.080 ppb	2.429 ppb	0.002 ppb	0.168 ppb	0.211 ppb	0.776 ppb	93.266 %
Concentration per Run 2	0.002 ppb	0.009 ppb	0.044 ppb	2.573 ppb	0.005 ppb	0.176 ppb	0.182 ppb	0.746 ppb	97.270 %
Concentration per Run 3	-0.020 ppb	0.011 ppb	0.108 ppb	3.362 ppb	0.002 ppb	0.169 ppb	0.158 ppb	0.727 ppb	99.180 %
Concentration RSD	101.4 %	55.3 %	41.3 %	18.0 %	45.6 %	2.8 %	14.5 %	3.3 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.035 ppb	-0.028 ppb	0.003 ppb	0.040 ppb	96.310 %	0.003 ppb	0.001 ppb	97.099 %	0.054 ppb
Concentration per Run 1	0.059 ppb	-0.024 ppb	0.004 ppb	0.006 ppb	94.212 %	0.004 ppb	0.000 ppb	95.041 %	0.056 ppb
Concentration per Run 2	0.039 ppb	-0.052 ppb	0.001 ppb	0.048 ppb	95.731 %	0.003 ppb	0.002 ppb	97.715 %	0.061 ppb
Concentration per Run 3	0.007 ppb	-0.008 ppb	0.002 ppb	0.067 ppb	98.987 %	0.003 ppb	0.000 ppb	98.542 %	0.044 ppb
Concentration RSD	74.3 %	78.5 %	61.5 %	76.6 %	2.5 %	25.9 %	113.6 %	1.9 %	16.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.023 ppb	98.227 %	99.656 %	0.002 ppb	0.011 ppb	99.794 %
Concentration per Run 1	0.027 ppb	95.595 %	97.064 %	0.001 ppb	0.011 ppb	105.779 %
Concentration per Run 2	0.018 ppb	99.081 %	99.366 %	0.002 ppb	0.012 ppb	95.957 %
Concentration per Run 3	0.025 ppb	100.005 %	102.539 %	0.002 ppb	0.011 ppb	97.646 %
Concentration RSD	20.2 %	2.4 %	2.8 %	16.9 %	2.6 %	5.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	3	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Blank EJF ICPMSQ	Rack	4		
Analysis started at:	9/5/2023 5:33:36 AM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.1 %	0.0 %	0.4 %	0.5 %	0.1 %	0.5 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.2 %	0.1 %	0.1 %	0.4 %	0.9 %	0.5 %	0.3 %	0.1 %	0.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration RSD	0.1 %	0.3 %	0.0 %	0.4 %	0.0 %	0.1 %	0.9 %	0.0 %	0.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.7 %	0.0 %	0.1 %	0.0 %	0.1 %	0.0 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	4	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	9/5/2023 5:38:18 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.642 %	105.816 %	0.211 ppb	19.871 ppb	20.395 ppb	0.254 ppb	17.774 ppb	125.128 ppb	103.661 %
Concentration per Run 1	104.457 %	104.834 %	0.199 ppb	19.714 ppb	20.287 ppb	0.166 ppb	17.669 ppb	131.119 ppb	105.460 %
Concentration per Run 2	101.315 %	106.420 %	0.219 ppb	20.526 ppb	19.512 ppb	0.234 ppb	23.033 ppb	122.340 ppb	103.719 %
Concentration per Run 3	99.154 %	106.194 %	0.215 ppb	19.372 ppb	21.387 ppb	0.361 ppb	12.619 ppb	121.924 ppb	101.805 %
Concentration RSD	2.6 %	0.8 %	4.9 %	3.0 %	4.6 %	38.9 %	29.3 %	4.2 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.194 ppb	0.254 ppb	0.224 ppb	21.440 ppb	0.214 ppb	0.328 ppb	0.237 ppb	0.245 ppb	101.747 %
Concentration per Run 1	0.226 ppb	0.244 ppb	0.226 ppb	20.809 ppb	0.198 ppb	0.333 ppb	0.220 ppb	0.241 ppb	101.106 %
Concentration per Run 2	0.216 ppb	0.270 ppb	0.229 ppb	24.213 ppb	0.212 ppb	0.361 ppb	0.290 ppb	0.266 ppb	99.104 %
Concentration per Run 3	0.139 ppb	0.248 ppb	0.218 ppb	19.297 ppb	0.232 ppb	0.291 ppb	0.202 ppb	0.228 ppb	105.031 %
Concentration RSD	24.6 %	5.6 %	2.8 %	11.7 %	8.2 %	10.6 %	19.7 %	7.9 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.254 ppb	0.179 ppb	0.235 ppb	0.172 ppb	102.396 %	0.211 ppb	0.203 ppb	102.603 %	0.165 ppb
Concentration per Run 1	0.287 ppb	0.176 ppb	0.243 ppb	0.175 ppb	100.611 %	0.208 ppb	0.206 ppb	101.388 %	0.152 ppb
Concentration per Run 2	0.239 ppb	0.153 ppb	0.240 ppb	0.156 ppb	103.141 %	0.207 ppb	0.208 ppb	102.612 %	0.169 ppb
Concentration per Run 3	0.237 ppb	0.208 ppb	0.223 ppb	0.186 ppb	103.436 %	0.218 ppb	0.195 ppb	103.810 %	0.173 ppb
Concentration RSD	11.0 %	15.5 %	4.5 %	8.8 %	1.5 %	2.8 %	3.5 %	1.2 %	6.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.199 ppb	102.981 %	103.411 %	0.164 ppb	0.183 ppb	106.534 %
Concentration per Run 1	0.175 ppb	100.586 %	102.906 %	0.150 ppb	0.169 ppb	112.794 %
Concentration per Run 2	0.188 ppb	104.880 %	102.539 %	0.166 ppb	0.186 ppb	103.894 %
Concentration per Run 3	0.232 ppb	103.477 %	104.788 %	0.174 ppb	0.195 ppb	102.914 %
Concentration RSD	15.1 %	2.1 %	1.2 %	7.4 %	7.2 %	5.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	5	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	9/5/2023 5:42:55 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.386 %	108.661 %	1.025 ppb	93.304 ppb	98.703 ppb	0.889 ppb	95.040 ppb	147.535 ppb	102.724 %
Concentration per Run 1	104.186 %	104.683 %	1.002 ppb	96.546 ppb	99.426 ppb	1.049 ppb	102.597 ppb	158.924 ppb	102.700 %
Concentration per Run 2	102.345 %	105.287 %	1.025 ppb	95.902 ppb	105.107 ppb	0.266 ppb	94.524 ppb	128.572 ppb	102.618 %
Concentration per Run 3	100.625 %	116.013 %	1.047 ppb	87.464 ppb	91.575 ppb	1.352 ppb	87.999 ppb	155.108 ppb	102.853 %
Concentration RSD	1.7 %	5.9 %	2.2 %	5.4 %	6.9 %	63.1 %	7.7 %	11.2 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.900 ppb	1.023 ppb	0.912 ppb	100.571 ppb	1.038 ppb	1.051 ppb	1.060 ppb	0.911 ppb	102.465 %
Concentration per Run 1	0.892 ppb	1.077 ppb	0.881 ppb	103.000 ppb	1.125 ppb	0.998 ppb	1.119 ppb	0.930 ppb	98.095 %
Concentration per Run 2	0.913 ppb	1.077 ppb	0.959 ppb	103.400 ppb	0.988 ppb	1.166 ppb	1.079 ppb	0.884 ppb	103.185 %
Concentration per Run 3	0.896 ppb	0.915 ppb	0.897 ppb	95.313 ppb	1.001 ppb	0.989 ppb	0.981 ppb	0.919 ppb	106.117 %
Concentration RSD	1.2 %	9.1 %	4.5 %	4.5 %	7.3 %	9.5 %	6.7 %	2.6 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.022 ppb	0.901 ppb	0.997 ppb	0.885 ppb	101.365 %	1.008 ppb	1.011 ppb	101.846 %	0.858 ppb
Concentration per Run 1	1.093 ppb	1.056 ppb	1.048 ppb	0.955 ppb	97.274 %	1.025 ppb	1.039 ppb	97.990 %	0.871 ppb
Concentration per Run 2	0.995 ppb	0.815 ppb	0.979 ppb	0.844 ppb	103.410 %	0.980 ppb	1.009 ppb	103.234 %	0.839 ppb
Concentration per Run 3	0.978 ppb	0.834 ppb	0.964 ppb	0.855 ppb	103.409 %	1.019 ppb	0.985 ppb	104.313 %	0.865 ppb
Concentration RSD	6.1 %	14.9 %	4.5 %	6.9 %	3.5 %	2.4 %	2.7 %	3.3 %	2.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.027 ppb	102.570 %	103.473 %	0.866 ppb	0.939 ppb	100.239 %
Concentration per Run 1	1.048 ppb	99.867 %	98.564 %	0.821 ppb	0.903 ppb	105.955 %
Concentration per Run 2	1.029 ppb	102.695 %	105.259 %	0.896 ppb	0.955 ppb	97.744 %
Concentration per Run 3	1.004 ppb	105.148 %	106.595 %	0.880 ppb	0.958 ppb	97.018 %
Concentration RSD	2.2 %	2.6 %	4.2 %	4.6 %	3.3 %	5.0 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	6	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	9/5/2023 5:47:33 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.186 %	107.956 %	10.742 ppb	982.894 ppb	1,047.554 ppb	9.387 ppb	1,026.081 ppb	1,086.080 ppb	107.178 %
Concentration per Run 1	103.535 %	104.758 %	10.703 ppb	999.925 ppb	1,067.763 ppb	10.331 ppb	1,041.147 ppb	1,070.414 ppb	107.705 %
Concentration per Run 2	103.064 %	107.100 %	10.763 ppb	981.577 ppb	1,044.689 ppb	8.744 ppb	995.774 ppb	1,073.661 ppb	106.308 %
Concentration per Run 3	102.959 %	112.010 %	10.761 ppb	967.180 ppb	1,030.211 ppb	9.085 ppb	1,041.321 ppb	1,114.164 ppb	107.521 %
Concentration RSD	0.3 %	3.4 %	0.3 %	1.7 %	1.8 %	8.9 %	2.6 %	2.2 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	10.544 ppb	10.190 ppb	10.790 ppb	1,021.336 ppb	10.435 ppb	10.942 ppb	10.826 ppb	10.534 ppb	107.411 %
Concentration per Run 1	10.728 ppb	10.360 ppb	10.986 ppb	1,037.922 ppb	10.597 ppb	11.170 ppb	10.897 ppb	10.447 ppb	105.573 %
Concentration per Run 2	10.481 ppb	10.012 ppb	10.854 ppb	1,016.384 ppb	10.306 ppb	10.861 ppb	10.695 ppb	10.461 ppb	108.774 %
Concentration per Run 3	10.424 ppb	10.198 ppb	10.531 ppb	1,009.703 ppb	10.402 ppb	10.796 ppb	10.885 ppb	10.694 ppb	107.885 %
Concentration RSD	1.5 %	1.7 %	2.2 %	1.4 %	1.4 %	1.8 %	1.0 %	1.3 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	10.191 ppb	9.891 ppb	9.871 ppb	9.104 ppb	103.859 %	10.077 ppb	10.235 ppb	107.469 %	7.622 ppb
Concentration per Run 1	9.948 ppb	10.347 ppb	9.856 ppb	9.257 ppb	100.976 %	10.168 ppb	10.306 ppb	104.411 %	7.792 ppb
Concentration per Run 2	10.132 ppb	9.774 ppb	9.774 ppb	8.940 ppb	105.833 %	9.999 ppb	10.142 ppb	109.793 %	7.454 ppb
Concentration per Run 3	10.491 ppb	9.551 ppb	9.983 ppb	9.115 ppb	104.769 %	10.063 ppb	10.258 ppb	108.204 %	7.619 ppb
Concentration RSD	2.7 %	4.1 %	1.1 %	1.7 %	2.5 %	0.9 %	0.8 %	2.6 %	2.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9.907 ppb	106.488 %	106.844 %	8.662 ppb	9.319 ppb	108.541 %
Concentration per Run 1	9.605 ppb	105.053 %	103.136 %	8.261 ppb	8.803 ppb	113.252 %
Concentration per Run 2	9.959 ppb	107.085 %	110.641 %	8.847 ppb	9.571 ppb	106.315 %
Concentration per Run 3	10.158 ppb	107.325 %	106.754 %	8.878 ppb	9.584 ppb	106.055 %
Concentration RSD	2.8 %	1.2 %	3.5 %	4.0 %	4.8 %	3.8 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	7	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	9/5/2023 5:52:12 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.711 %	106.168 %	60.627 ppb	5,930.450 ppb	5,905.230 ppb	59.248 ppb	5,921.300 ppb	5,861.824 ppb	111.825 %
Concentration per Run 1	100.449 %	105.287 %	60.377 ppb	5,960.079 ppb	5,838.578 ppb	59.438 ppb	6,098.121 ppb	6,086.254 ppb	112.223 %
Concentration per Run 2	98.864 %	107.024 %	60.578 ppb	5,977.121 ppb	6,008.779 ppb	59.777 ppb	5,733.000 ppb	5,681.490 ppb	111.647 %
Concentration per Run 3	96.820 %	106.194 %	60.925 ppb	5,854.150 ppb	5,868.334 ppb	58.528 ppb	5,932.777 ppb	5,817.728 ppb	111.606 %
Concentration RSD	1.8 %	0.8 %	0.5 %	1.1 %	1.5 %	1.1 %	3.1 %	3.5 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	59.105 ppb	59.518 ppb	60.127 ppb	5,924.867 ppb	59.944 ppb	60.365 ppb	60.059 ppb	60.147 ppb	100.843 %
Concentration per Run 1	58.917 ppb	61.249 ppb	61.047 ppb	5,952.970 ppb	61.062 ppb	61.103 ppb	61.725 ppb	61.422 ppb	97.902 %
Concentration per Run 2	59.001 ppb	58.789 ppb	59.916 ppb	5,929.059 ppb	59.672 ppb	60.601 ppb	59.842 ppb	60.447 ppb	99.947 %
Concentration per Run 3	59.396 ppb	58.517 ppb	59.417 ppb	5,892.571 ppb	59.099 ppb	59.390 ppb	58.609 ppb	58.572 ppb	104.679 %
Concentration RSD	0.4 %	2.5 %	1.4 %	0.5 %	1.7 %	1.5 %	2.6 %	2.4 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.391 ppb	60.604 ppb	60.021 ppb	57.970 ppb	98.548 %	59.987 ppb	60.493 ppb	101.094 %	59.814 ppb
Concentration per Run 1	62.044 ppb	60.634 ppb	61.542 ppb	60.179 ppb	96.110 %	61.549 ppb	61.303 ppb	98.923 %	60.301 ppb
Concentration per Run 2	60.617 ppb	61.262 ppb	60.118 ppb	57.216 ppb	98.701 %	59.114 ppb	61.094 ppb	101.352 %	60.549 ppb
Concentration per Run 3	58.513 ppb	59.917 ppb	58.404 ppb	56.514 ppb	100.833 %	59.298 ppb	59.082 ppb	103.008 %	58.594 ppb
Concentration RSD	2.9 %	1.1 %	2.6 %	3.4 %	2.4 %	2.3 %	2.0 %	2.0 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.815 ppb	104.499 %	104.958 %	60.225 ppb	60.115 ppb	102.952 %
Concentration per Run 1	59.287 ppb	102.432 %	101.782 %	55.125 ppb	55.514 ppb	112.056 %
Concentration per Run 2	59.980 ppb	103.958 %	105.576 %	62.213 ppb	61.893 ppb	99.572 %
Concentration per Run 3	57.178 ppb	107.105 %	107.517 %	63.337 ppb	62.937 ppb	97.227 %
Concentration RSD	2.5 %	2.3 %	2.8 %	7.4 %	6.7 %	7.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	8	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	9/5/2023 5:56:51 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.782 %	102.291 %	119.624 ppb	12,036.257 ppb	12,043.432 ppb	120.428 ppb	12,037.222 ppb	12,061.343 ppb	120.418 %
Concentration per Run 1	97.765 %	97.810 %	118.813 ppb	12,517.635 ppb	12,597.974 ppb	127.011 ppb	11,986.414 ppb	12,114.705 ppb	120.501 %
Concentration per Run 2	95.767 %	106.118 %	119.920 ppb	11,708.055 ppb	11,560.382 ppb	118.726 ppb	12,004.074 ppb	11,962.116 ppb	121.545 %
Concentration per Run 3	93.814 %	102.946 %	120.141 ppb	11,883.080 ppb	11,971.941 ppb	115.548 ppb	12,121.178 ppb	12,107.209 ppb	119.210 %
Concentration RSD	2.1 %	4.1 %	0.6 %	3.5 %	4.3 %	4.9 %	0.6 %	0.7 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	120.403 ppb	120.225 ppb	119.871 ppb	12,035.782 ppb	119.991 ppb	119.738 ppb	119.901 ppb	119.883 ppb	98.077 %
Concentration per Run 1	123.311 ppb	124.908 ppb	123.810 ppb	12,424.763 ppb	123.115 ppb	123.531 ppb	123.059 ppb	121.078 ppb	96.937 %
Concentration per Run 2	119.133 ppb	118.698 ppb	118.008 ppb	11,816.123 ppb	119.454 ppb	118.011 ppb	117.030 ppb	118.349 ppb	99.443 %
Concentration per Run 3	118.766 ppb	117.069 ppb	117.796 ppb	11,866.459 ppb	117.404 ppb	117.673 ppb	119.614 ppb	120.221 ppb	97.852 %
Concentration RSD	2.1 %	3.4 %	2.8 %	2.8 %	2.4 %	2.7 %	2.5 %	1.2 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	119.788 ppb	119.708 ppb	122.009 ppb	121.091 ppb	95.459 %	133.088 ppb	119.734 ppb	99.280 %	120.292 ppb
Concentration per Run 1	121.206 ppb	117.986 ppb	122.527 ppb	123.901 ppb	93.219 %	137.584 ppb	123.803 ppb	93.377 %	125.045 ppb
Concentration per Run 2	118.790 ppb	117.695 ppb	121.259 ppb	119.349 ppb	95.859 %	131.655 ppb	118.184 ppb	101.956 %	118.316 ppb
Concentration per Run 3	119.369 ppb	123.442 ppb	122.240 ppb	120.023 ppb	97.297 %	130.025 ppb	117.214 ppb	102.507 %	117.515 ppb
Concentration RSD	1.1 %	2.7 %	0.5 %	2.0 %	2.2 %	3.0 %	3.0 %	5.2 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	120.600 ppb	103.459 %	106.636 %	122.873 ppb	127.360 ppb	99.746 %
Concentration per Run 1	124.830 ppb	100.498 %	103.264 %	119.801 ppb	122.598 ppb	103.555 %
Concentration per Run 2	119.418 ppb	103.654 %	107.586 %	124.085 ppb	126.992 ppb	98.264 %
Concentration per Run 3	117.552 ppb	106.225 %	109.057 %	124.734 ppb	132.492 ppb	97.417 %
Concentration RSD	3.1 %	2.8 %	2.8 %	2.2 %	3.9 %	3.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	9	User name	ALPHALAB\Metals-Instrument	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	9/5/2023 6:01:31 AM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.793 %	105.917 %	0.020 ppb	7.994 ppb	3.350 ppb	2.277 ppb	8.202 ppb	0.403 ppb	105.255 %
Concentration per Run 1	104.504 %	99.698 %	0.023 ppb	8.133 ppb	4.481 ppb	2.354 ppb	7.984 ppb	31.380 ppb	105.176 %
Concentration per Run 2	104.675 %	106.571 %	0.019 ppb	8.298 ppb	3.109 ppb	2.171 ppb	8.902 ppb	50.185 ppb	105.559 %
Concentration per Run 3	102.198 %	111.481 %	0.017 ppb	7.552 ppb	2.460 ppb	2.306 ppb	7.720 ppb	-80.358 ppb	105.031 %
Concentration RSD	1.3 %	5.6 %	16.4 %	4.9 %	30.8 %	4.2 %	7.6 %	17,527.5 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.012 ppb	0.017 ppb	0.048 ppb	33.679 ppb	0.012 ppb	0.062 ppb	0.030 ppb	0.497 ppb	103.236 %
Concentration per Run 1	0.015 ppb	0.021 ppb	0.088 ppb	35.622 ppb	0.016 ppb	0.071 ppb	0.037 ppb	0.593 ppb	97.831 %
Concentration per Run 2	0.008 ppb	0.013 ppb	0.016 ppb	32.241 ppb	0.012 ppb	0.054 ppb	0.027 ppb	0.458 ppb	103.008 %
Concentration per Run 3	0.014 ppb	0.018 ppb	0.039 ppb	33.175 ppb	0.009 ppb	0.062 ppb	0.027 ppb	0.439 ppb	108.868 %
Concentration RSD	29.1 %	20.9 %	77.3 %	5.2 %	29.2 %	13.7 %	19.5 %	16.9 %	5.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.215 ppb	1.445 ppb	199.972 ppb	3.145 ppb	103.474 %	0.014 ppb	0.011 ppb	108.716 %	0.119 ppb
Concentration per Run 1	0.154 ppb	1.102 ppb	200.124 ppb	2.540 ppb	99.565 %	0.023 ppb	0.010 ppb	101.911 %	0.107 ppb
Concentration per Run 2	0.221 ppb	1.282 ppb	196.649 ppb	3.173 ppb	103.689 %	0.012 ppb	0.015 ppb	110.226 %	0.115 ppb
Concentration per Run 3	0.270 ppb	1.951 ppb	203.144 ppb	3.722 ppb	107.169 %	0.005 ppb	0.008 ppb	114.013 %	0.135 ppb
Concentration RSD	27.0 %	31.0 %	1.6 %	18.8 %	3.7 %	65.1 %	29.2 %	5.7 %	12.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.034 ppb	107.133 %	107.200 %	0.367 ppb	0.029 ppb	111.252 %
Concentration per Run 1	0.028 ppb	103.039 %	102.705 %	0.420 ppb	0.032 ppb	116.119 %
Concentration per Run 2	0.044 ppb	105.962 %	107.825 %	0.376 ppb	0.027 ppb	106.746 %
Concentration per Run 3	0.031 ppb	112.397 %	111.071 %	0.306 ppb	0.027 ppb	110.891 %
Concentration RSD	24.1 %	4.5 %	3.9 %	15.6 %	10.0 %	4.2 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 10 User name ALPHALAB\Metals-Instrument Comment ICV
Analysis label: ICV Rack 0
Analysis started at: 9/5/2023 6:06:13 AM Vial 7

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.844 %	109.139 %	51.166 ppb	4,804.181 ppb	5,065.048 ppb	50.074 ppb	5,048.929 ppb	5,134.366 ppb	110.024 %
Concentration per Run 1	104.450 %	106.345 %	50.693 ppb	4,639.497 ppb	4,963.299 ppb	49.190 ppb	4,733.198 ppb	4,948.430 ppb	110.868 %
Concentration per Run 2	101.499 %	105.287 %	51.298 ppb	4,792.942 ppb	4,950.517 ppb	47.912 ppb	5,028.028 ppb	5,102.191 ppb	109.317 %
Concentration per Run 3	99.583 %	115.786 %	51.508 ppb	4,980.105 ppb	5,281.328 ppb	53.119 ppb	5,385.560 ppb	5,352.479 ppb	109.885 %
Recovery Percentage 1			102.333 %	96.084 %	101.301 %	100.147 %	100.979 %	102.687 %	
Concentration RSD	2.4 %	5.3 %	0.8 %	3.6 %	3.7 %	5.4 %	6.5 %	4.0 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.001 ppb	48.160 ppb	49.505 ppb	4,907.509 ppb	47.473 ppb	48.760 ppb	48.702 ppb	50.223 ppb	107.812 %
Concentration per Run 1	48.605 ppb	47.694 ppb	47.848 ppb	4,888.184 ppb	48.290 ppb	49.695 ppb	49.382 ppb	50.263 ppb	102.456 %
Concentration per Run 2	48.620 ppb	48.182 ppb	49.387 ppb	4,877.200 ppb	47.679 ppb	49.293 ppb	49.226 ppb	50.735 ppb	106.060 %
Concentration per Run 3	49.778 ppb	48.604 ppb	51.281 ppb	4,957.144 ppb	46.452 ppb	47.292 ppb	47.498 ppb	49.671 ppb	114.920 %
Recovery Percentage 1	98.002 %	96.320 %	99.011 %	98.150 %	94.947 %	97.520 %	97.404 %	100.446 %	
Concentration RSD	1.4 %	0.9 %	3.5 %	0.9 %	2.0 %	2.6 %	2.1 %	1.1 %	5.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	47.592 ppb	50.177 ppb	49.743 ppb	47.386 ppb	100.085 %	49.975 ppb	48.938 ppb	108.737 %	47.632 ppb
Concentration per Run 1	47.503 ppb	49.731 ppb	49.061 ppb	47.527 ppb	96.938 %	50.335 ppb	48.925 ppb	101.700 %	48.866 ppb
Concentration per Run 2	46.796 ppb	47.694 ppb	48.583 ppb	47.311 ppb	99.393 %	50.390 ppb	49.232 ppb	106.619 %	47.078 ppb
Concentration per Run 3	48.478 ppb	53.105 ppb	51.584 ppb	47.320 ppb	103.923 %	49.201 ppb	48.657 ppb	117.892 %	46.952 ppb
Recovery Percentage 1	95.185 %	100.353 %	99.485 %	94.773 %		99.951 %	97.876 %		95.265 %
Concentration RSD	1.8 %	5.4 %	3.2 %	0.3 %	3.5 %	1.3 %	0.6 %	7.6 %	2.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	47.403 ppb	108.549 %	111.655 %	45.722 ppb	46.439 ppb	114.499 %
Concentration per Run 1	48.065 ppb	103.558 %	106.821 %	42.527 ppb	43.594 ppb	118.449 %
Concentration per Run 2	46.899 ppb	107.925 %	111.217 %	47.810 ppb	47.808 ppb	109.697 %
Concentration per Run 3	47.246 ppb	114.163 %	116.927 %	46.828 ppb	47.914 ppb	115.350 %
Recovery Percentage 1	94.807 %			91.443 %	92.877 %	
Concentration RSD	1.3 %	4.9 %	4.5 %	6.1 %	5.3 %	3.9 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 11 User name ALPHALAB\Metals-Instrument Comment ICB
Analysis label: ICB Rack 0
Analysis started at: 9/5/2023 6:10:53 AM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.784 %	109.215 %	0.009 ppb	0.598 ppb	-0.378 ppb	-0.335 ppb	0.442 ppb	-1.117 ppb	106.456 %
Concentration per Run 1	108.499 %	102.795 %	0.010 ppb	0.612 ppb	0.046 ppb	-0.217 ppb	1.776 ppb	-2.766 ppb	106.350 %
Concentration per Run 2	107.003 %	106.345 %	0.008 ppb	0.966 ppb	-0.639 ppb	-0.277 ppb	-0.123 ppb	-0.083 ppb	106.421 %
Concentration per Run 3	104.851 %	118.505 %	0.009 ppb	0.218 ppb	-0.541 ppb	-0.511 ppb	-0.327 ppb	-0.501 ppb	106.598 %
Recovery Percentage 1			1.836 %	0.598 %	-0.540 %	-3.351 %	0.442 %	-1.117 %	
Concentration RSD	1.7 %	7.5 %	13.9 %	62.5 %	98.0 %	46.3 %	262.5 %	129.3 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.014 ppb	-0.004 ppb	-0.026 ppb	15.456 ppb	0.005 ppb	0.026 ppb	-0.017 ppb	-0.084 ppb	108.300 %
Concentration per Run 1	-0.024 ppb	-0.005 ppb	-0.031 ppb	17.604 ppb	0.007 ppb	0.027 ppb	0.000 ppb	-0.047 ppb	96.850 %
Concentration per Run 2	-0.008 ppb	-0.002 ppb	-0.013 ppb	16.189 ppb	0.005 ppb	0.022 ppb	-0.024 ppb	-0.107 ppb	106.342 %
Concentration per Run 3	-0.011 ppb	-0.005 ppb	-0.032 ppb	12.576 ppb	0.003 ppb	0.031 ppb	-0.027 ppb	-0.097 ppb	121.709 %
Recovery Percentage 1	-0.288 %	-0.411 %	-2.561 %	30.912 %	1.038 %	1.323 %	-1.687 %	-1.674 %	
Concentration RSD	56.1 %	43.0 %	41.5 %	16.8 %	41.8 %	17.1 %	85.2 %	38.9 %	11.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.188 ppb	0.855 ppb	0.004 ppb	1.919 ppb	104.567 %	0.004 ppb	0.007 ppb	106.872 %	0.111 ppb
Concentration per Run 1	0.203 ppb	0.680 ppb	0.013 ppb	1.526 ppb	97.291 %	0.008 ppb	0.012 ppb	97.504 %	0.098 ppb
Concentration per Run 2	0.172 ppb	0.803 ppb	0.000 ppb	1.935 ppb	106.201 %	0.002 ppb	0.007 ppb	107.048 %	0.110 ppb
Concentration per Run 3	0.188 ppb	1.082 ppb	-0.002 ppb	2.296 ppb	110.210 %	0.001 ppb	0.003 ppb	116.063 %	0.125 ppb
Recovery Percentage 1	37.504 %	17.102 %	0.037 %	95.928 %		0.951 %	3.639 %		2.781 %
Concentration RSD	8.1 %	24.1 %	226.8 %	20.1 %	6.3 %	89.6 %	59.3 %	8.7 %	12.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.011 ppb	106.892 %	109.591 %	0.292 ppb	0.013 ppb	106.327 %
Concentration per Run 1	0.018 ppb	98.576 %	100.401 %	0.344 ppb	0.014 ppb	107.380 %
Concentration per Run 2	0.002 ppb	108.694 %	111.579 %	0.288 ppb	0.012 ppb	104.424 %
Concentration per Run 3	0.014 ppb	113.407 %	116.792 %	0.245 ppb	0.014 ppb	107.176 %
Recovery Percentage 1	2.253 %			29.242 %	1.322 %	
Concentration RSD	76.6 %	7.1 %	7.6 %	17.1 %	6.4 %	1.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 12
Analysis label: LLCCV
Analysis started at: 9/5/2023 6:16:40 AM
User name ALPHALAB\Metals-Instrument
Rack 4
Vial 51
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.825 %	118.002 %	0.328 ppb	102.741 ppb	75.228 ppb	10.735 ppb	118.245 ppb	170.752 ppb	115.611 %
Concentration per Run 1	113.233 %	122.509 %	0.333 ppb	103.933 ppb	73.832 ppb	10.871 ppb	129.364 ppb	181.497 ppb	117.228 %
Concentration per Run 2	111.194 %	116.995 %	0.330 ppb	102.174 ppb	74.801 ppb	10.407 ppb	118.088 ppb	174.610 ppb	115.189 %
Concentration per Run 3	108.047 %	114.502 %	0.322 ppb	102.115 ppb	77.051 ppb	10.927 ppb	107.282 ppb	156.148 ppb	114.415 %
Recovery Percentage 1			65.678 %	102.741 %	107.468 %	107.352 %	118.245 %	170.752 %	
Concentration RSD	2.4 %	3.5 %	1.8 %	1.0 %	2.2 %	2.7 %	9.3 %	7.7 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.951 ppb	0.549 ppb	1.122 ppb	52.490 ppb	0.511 ppb	2.206 ppb	1.156 ppb	11.274 ppb	109.734 %
Concentration per Run 1	4.759 ppb	0.527 ppb	1.120 ppb	53.356 ppb	0.483 ppb	2.187 ppb	1.122 ppb	11.272 ppb	114.787 %
Concentration per Run 2	5.031 ppb	0.569 ppb	1.057 ppb	48.555 ppb	0.530 ppb	2.200 ppb	1.082 ppb	11.275 ppb	109.598 %
Concentration per Run 3	5.063 ppb	0.551 ppb	1.190 ppb	55.560 ppb	0.521 ppb	2.231 ppb	1.264 ppb	11.274 ppb	104.817 %
Recovery Percentage 1	99.022 %	54.889 %	112.235 %	104.981 %	102.240 %	110.293 %	115.578 %	112.738 %	
Concentration RSD	3.4 %	3.8 %	5.9 %	6.8 %	4.9 %	1.0 %	8.3 %	0.0 %	4.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.577 ppb	5.376 ppb	0.583 ppb	2.329 ppb	107.849 %	0.263 ppb	0.213 ppb	114.798 %	3.880 ppb
Concentration per Run 1	0.558 ppb	5.181 ppb	0.605 ppb	2.178 ppb	109.863 %	0.254 ppb	0.214 ppb	121.187 %	3.800 ppb
Concentration per Run 2	0.563 ppb	5.469 ppb	0.560 ppb	2.282 ppb	107.829 %	0.270 ppb	0.213 ppb	113.110 %	3.861 ppb
Concentration per Run 3	0.610 ppb	5.477 ppb	0.585 ppb	2.528 ppb	105.856 %	0.266 ppb	0.211 ppb	110.098 %	3.979 ppb
Recovery Percentage 1	115.389 %	107.519 %	116.672 %	116.474 %		65.846 %	106.457 %		97.000 %
Concentration RSD	5.0 %	3.1 %	3.8 %	7.7 %	1.9 %	3.1 %	0.8 %	5.0 %	2.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.552 ppb	115.963 %	113.136 %	0.442 ppb	0.443 ppb	124.292 %
Concentration per Run 1	0.585 ppb	130.378 %	119.275 %	0.383 ppb	0.382 ppb	146.253 %
Concentration per Run 2	0.543 ppb	110.586 %	112.897 %	0.459 ppb	0.462 ppb	115.759 %
Concentration per Run 3	0.529 ppb	106.926 %	107.235 %	0.486 ppb	0.484 ppb	110.862 %
Recovery Percentage 1	110.454 %			88.477 %	88.552 %	
Concentration RSD	5.2 %	10.9 %	5.3 %	12.1 %	12.1 %	15.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	13	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	9/5/2023 6:21:22 AM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.547 %	106.647 %	0.016 ppb	49,632.625 ppb	21,208.105 ppb	19,854.418 ppb	20,623.100 ppb	63,700.902 ppb	104.589 %
Concentration per Run 1	93.469 %	107.704 %	0.020 ppb	52,313.584 ppb	22,537.416 ppb	21,497.803 ppb	21,557.916 ppb	67,641.291 ppb	104.057 %
Concentration per Run 2	91.214 %	107.100 %	0.013 ppb	48,112.761 ppb	20,739.657 ppb	19,319.653 ppb	20,227.053 ppb	62,547.381 ppb	105.215 %
Concentration per Run 3	89.960 %	105.136 %	0.015 ppb	48,471.531 ppb	20,347.242 ppb	18,745.797 ppb	20,084.329 ppb	60,914.035 ppb	104.496 %
Recovery Percentage 1			3.209 %	49,632.625 %	30,297.293 %	198,544.176 %	20,623.100 %	63,700.902 %	
Concentration RSD	1.9 %	1.3 %	23.9 %	4.7 %	5.5 %	7.3 %	3.9 %	5.5 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.004 ppb	0.313 ppb	0.940 ppb	54,905.758 ppb	0.418 ppb	0.644 ppb	0.203 ppb	0.715 ppb	98.418 %
Concentration per Run 1	0.020 ppb	0.309 ppb	0.875 ppb	54,596.258 ppb	0.393 ppb	0.559 ppb	0.196 ppb	0.737 ppb	103.214 %
Concentration per Run 2	-0.011 ppb	0.289 ppb	1.009 ppb	54,318.831 ppb	0.442 ppb	0.709 ppb	0.221 ppb	0.711 ppb	98.620 %
Concentration per Run 3	0.002 ppb	0.340 ppb	0.935 ppb	55,802.186 ppb	0.420 ppb	0.664 ppb	0.192 ppb	0.698 ppb	93.419 %
Recovery Percentage 1	0.073 %	31.305 %	93.960 %	109,811.516 %	83.688 %	32.203 %	20.288 %	14.307 %	
Concentration RSD	431.3 %	8.2 %	7.2 %	1.4 %	5.9 %	12.0 %	7.8 %	2.8 %	5.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.147 ppb	1.036 ppb	0.533 ppb	405.525 ppb	92.009 %	0.008 ppb	0.064 ppb	98.522 %	0.121 ppb
Concentration per Run 1	0.177 ppb	0.803 ppb	0.574 ppb	403.331 ppb	92.605 %	0.005 ppb	0.067 ppb	105.324 %	0.100 ppb
Concentration per Run 2	0.134 ppb	0.951 ppb	0.513 ppb	403.899 ppb	92.856 %	0.007 ppb	0.060 ppb	98.018 %	0.112 ppb
Concentration per Run 3	0.129 ppb	1.353 ppb	0.512 ppb	409.345 ppb	90.567 %	0.011 ppb	0.065 ppb	92.224 %	0.152 ppb
Recovery Percentage 1	29.308 %	20.712 %	5.330 %	20,276.260 %		1.890 %	31.924 %		3.032 %
Concentration RSD	17.9 %	27.5 %	6.6 %	0.8 %	1.4 %	38.1 %	6.1 %	6.7 %	22.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.258 ppb	100.897 %	101.962 %	0.043 ppb	0.291 ppb	98.090 %
Concentration per Run 1	0.257 ppb	102.396 %	107.614 %	0.038 ppb	0.271 ppb	105.718 %
Concentration per Run 2	0.260 ppb	102.034 %	102.037 %	0.046 ppb	0.298 ppb	96.363 %
Concentration per Run 3	0.258 ppb	98.260 %	96.235 %	0.045 ppb	0.303 ppb	92.189 %
Recovery Percentage 1	51.671 %			4.300 %	29.056 %	
Concentration RSD	0.6 %	2.3 %	5.6 %	10.2 %	6.0 %	7.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	14	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	9/5/2023 6:26:04 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.236 %	114.175 %	0.010 ppb	11.414 ppb	3.052 ppb	2.159 ppb	8.019 ppb	8.678 ppb	104.031 %
Concentration per Run 1	101.900 %	114.880 %	0.012 ppb	14.046 ppb	4.310 ppb	3.228 ppb	9.351 ppb	9.821 ppb	103.903 %
Concentration per Run 2	100.437 %	113.973 %	0.012 ppb	10.725 ppb	2.740 ppb	1.622 ppb	6.913 ppb	7.307 ppb	104.078 %
Concentration per Run 3	98.372 %	113.671 %	0.005 ppb	9.472 ppb	2.106 ppb	1.627 ppb	7.794 ppb	8.906 ppb	104.111 %
Concentration RSD	1.8 %	0.6 %	40.5 %	20.7 %	37.2 %	42.9 %	15.4 %	14.7 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.022 ppb	0.010 ppb	0.121 ppb	62.237 ppb	0.003 ppb	0.144 ppb	0.186 ppb	0.714 ppb	102.429 %
Concentration per Run 1	-0.016 ppb	0.008 ppb	0.111 ppb	68.037 ppb	0.004 ppb	0.147 ppb	0.183 ppb	0.750 ppb	103.334 %
Concentration per Run 2	-0.020 ppb	0.007 ppb	0.130 ppb	61.852 ppb	0.000 ppb	0.129 ppb	0.176 ppb	0.690 ppb	104.639 %
Concentration per Run 3	-0.028 ppb	0.016 ppb	0.123 ppb	56.822 ppb	0.004 ppb	0.156 ppb	0.199 ppb	0.703 ppb	99.313 %
Concentration RSD	27.3 %	47.1 %	8.1 %	9.0 %	71.1 %	9.4 %	6.4 %	4.4 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.028 ppb	0.128 ppb	0.009 ppb	10.493 ppb	103.051 %	-0.002 ppb	0.002 ppb	103.505 %	0.040 ppb
Concentration per Run 1	0.025 ppb	0.053 ppb	0.011 ppb	8.905 ppb	100.203 %	0.000 ppb	0.003 ppb	104.683 %	0.033 ppb
Concentration per Run 2	0.006 ppb	0.162 ppb	0.006 ppb	10.517 ppb	105.624 %	-0.002 ppb	0.000 ppb	106.296 %	0.036 ppb
Concentration per Run 3	0.054 ppb	0.169 ppb	0.009 ppb	12.057 ppb	103.325 %	-0.002 ppb	0.002 ppb	99.536 %	0.050 ppb
Concentration RSD	84.9 %	51.1 %	27.2 %	15.0 %	2.6 %	61.6 %	86.9 %	3.4 %	23.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.024 ppb	105.596 %	106.529 %	0.023 ppb	0.013 ppb	102.784 %
Concentration per Run 1	0.006 ppb	103.032 %	105.789 %	0.016 ppb	0.012 ppb	109.044 %
Concentration per Run 2	0.026 ppb	107.727 %	108.278 %	0.026 ppb	0.014 ppb	100.140 %
Concentration per Run 3	0.039 ppb	106.028 %	105.521 %	0.027 ppb	0.012 ppb	99.168 %
Concentration RSD	71.1 %	2.3 %	1.4 %	26.3 %	7.4 %	5.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	15	User name	ALPHALAB\Metals-Instrument	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	9/5/2023 6:30:41 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.322 %	114.099 %	62.047 ppb	5,941.077 ppb	5,982.471 ppb	61.107 ppb	5,944.899 ppb	6,004.559 ppb	114.345 %
Concentration per Run 1	101.678 %	113.218 %	61.544 ppb	6,119.507 ppb	6,150.232 ppb	64.828 ppb	6,276.478 ppb	6,103.007 ppb	115.670 %
Concentration per Run 2	99.013 %	112.161 %	62.552 ppb	6,077.598 ppb	6,157.181 ppb	61.504 ppb	6,051.524 ppb	6,254.936 ppb	114.070 %
Concentration per Run 3	97.274 %	116.919 %	62.044 ppb	5,626.126 ppb	5,640.000 ppb	56.989 ppb	5,506.693 ppb	5,655.734 ppb	113.295 %
Recovery Percentage 1			103.411 %	99.018 %	99.708 %	101.845 %	99.082 %	100.076 %	
Concentration RSD	2.2 %	2.2 %	0.8 %	4.6 %	5.0 %	6.4 %	6.7 %	5.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	59.125 ppb	58.154 ppb	57.725 ppb	5,953.699 ppb	59.374 ppb	60.224 ppb	60.111 ppb	61.037 ppb	104.179 %
Concentration per Run 1	60.590 ppb	60.197 ppb	59.726 ppb	6,106.278 ppb	60.791 ppb	61.506 ppb	61.143 ppb	63.378 ppb	100.721 %
Concentration per Run 2	59.657 ppb	58.189 ppb	58.445 ppb	5,936.347 ppb	59.197 ppb	59.710 ppb	59.075 ppb	59.727 ppb	108.591 %
Concentration per Run 3	57.130 ppb	56.077 ppb	55.004 ppb	5,818.472 ppb	58.136 ppb	59.455 ppb	60.116 ppb	60.005 ppb	103.224 %
Recovery Percentage 1	98.542 %	96.923 %	96.208 %	99.228 %	98.957 %	100.373 %	100.186 %	101.728 %	
Concentration RSD	3.0 %	3.5 %	4.2 %	2.4 %	2.3 %	1.9 %	1.7 %	3.3 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.882 ppb	60.323 ppb	53.749 ppb	62.073 ppb	100.273 %	60.026 ppb	60.466 ppb	104.613 %	58.868 ppb
Concentration per Run 1	62.698 ppb	63.579 ppb	56.069 ppb	62.907 ppb	97.799 %	61.850 ppb	61.167 ppb	104.692 %	59.545 ppb
Concentration per Run 2	58.400 ppb	60.570 ppb	54.050 ppb	61.815 ppb	101.955 %	58.309 ppb	59.946 ppb	107.310 %	58.009 ppb
Concentration per Run 3	58.549 ppb	56.818 ppb	51.129 ppb	61.498 ppb	101.067 %	59.920 ppb	60.285 ppb	101.838 %	59.050 ppb
Recovery Percentage 1	99.804 %	100.538 %	89.582 %	103.455 %		100.044 %	100.777 %		98.113 %
Concentration RSD	4.1 %	5.6 %	4.6 %	1.2 %	2.2 %	3.0 %	1.0 %	2.6 %	1.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.949 ppb	106.566 %	108.145 %	61.405 ppb	62.598 ppb	101.236 %
Concentration per Run 1	59.935 ppb	103.210 %	105.797 %	59.688 ppb	60.845 ppb	103.904 %
Concentration per Run 2	58.636 ppb	109.237 %	110.753 %	61.937 ppb	64.070 ppb	100.586 %
Concentration per Run 3	58.276 ppb	107.252 %	107.885 %	62.591 ppb	62.880 ppb	99.218 %
Recovery Percentage 1	98.248 %			102.342 %	104.330 %	
Concentration RSD	1.5 %	2.9 %	2.3 %	2.5 %	2.6 %	2.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	16	User name	ALPHALAB\Metals-Instrument	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	9/5/2023 6:35:23 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.650 %	118.455 %	0.010 ppb	0.167 ppb	-0.375 ppb	-0.167 ppb	1.148 ppb	-1.402 ppb	110.860 %
Concentration per Run 1	107.342 %	115.786 %	0.008 ppb	0.231 ppb	0.154 ppb	-0.069 ppb	2.182 ppb	-1.648 ppb	112.029 %
Concentration per Run 2	105.233 %	120.394 %	0.010 ppb	0.212 ppb	-0.604 ppb	-0.314 ppb	-2.266 ppb	-0.315 ppb	110.454 %
Concentration per Run 3	104.374 %	119.185 %	0.012 ppb	0.059 ppb	-0.674 ppb	-0.119 ppb	3.528 ppb	-2.245 ppb	110.096 %
Recovery Percentage 1			2.012 %	0.167 %	-0.535 %	-1.675 %	1.148 %	-1.402 %	
Concentration RSD	1.4 %	2.0 %	21.4 %	56.4 %	122.5 %	77.3 %	264.1 %	70.5 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.011 ppb	0.000 ppb	-0.029 ppb	21.987 ppb	0.006 ppb	0.016 ppb	-0.016 ppb	-0.107 ppb	107.810 %
Concentration per Run 1	-0.005 ppb	0.006 ppb	-0.062 ppb	21.607 ppb	0.008 ppb	-0.001 ppb	-0.013 ppb	-0.160 ppb	106.276 %
Concentration per Run 2	-0.021 ppb	0.001 ppb	-0.016 ppb	20.450 ppb	0.008 ppb	0.027 ppb	-0.011 ppb	-0.089 ppb	108.312 %
Concentration per Run 3	-0.006 ppb	-0.009 ppb	-0.009 ppb	23.905 ppb	0.001 ppb	0.022 ppb	-0.023 ppb	-0.073 ppb	108.841 %
Recovery Percentage 1	-0.214 %	-0.041 %	-2.911 %	43.974 %	1.144 %	0.803 %	-1.572 %	-2.146 %	
Concentration RSD	82.5 %	1,848.0 %	98.2 %	8.0 %	69.1 %	90.9 %	39.6 %	43.2 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.157 ppb	0.647 ppb	0.007 ppb	2.115 ppb	105.533 %	0.003 ppb	0.007 ppb	108.269 %	0.022 ppb
Concentration per Run 1	0.146 ppb	0.432 ppb	0.011 ppb	1.588 ppb	104.947 %	0.007 ppb	0.009 ppb	108.146 %	0.011 ppb
Concentration per Run 2	0.182 ppb	0.527 ppb	0.002 ppb	2.211 ppb	103.341 %	0.002 ppb	0.008 ppb	103.516 %	0.016 ppb
Concentration per Run 3	0.144 ppb	0.982 ppb	0.006 ppb	2.545 ppb	108.312 %	-0.001 ppb	0.003 ppb	113.144 %	0.039 ppb
Recovery Percentage 1	31.415 %	12.942 %	0.065 %	105.740 %		0.666 %	3.296 %		0.551 %
Concentration RSD	13.5 %	45.4 %	65.3 %	23.0 %	2.4 %	140.0 %	52.9 %	4.4 %	68.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.008 ppb	107.029 %	108.005 %	0.338 ppb	0.012 ppb	114.184 %
Concentration per Run 1	0.016 ppb	107.115 %	110.976 %	0.386 ppb	0.013 ppb	120.983 %
Concentration per Run 2	-0.002 ppb	103.803 %	103.383 %	0.348 ppb	0.011 ppb	108.121 %
Concentration per Run 3	0.011 ppb	110.169 %	109.657 %	0.279 ppb	0.010 ppb	113.449 %
Recovery Percentage 1	1.693 %			33.782 %	1.153 %	
Concentration RSD	106.7 %	3.0 %	3.8 %	16.0 %	15.6 %	5.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 17 User name ALPHALAB\Metals-Instrument Comment CCB
Analysis label: CCB Rack 0
Analysis started at: 9/5/2023 7:01:00 AM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.399 %	127.015 %	0.002 ppb	-0.358 ppb	-0.945 ppb	-0.406 ppb	-0.404 ppb	-1.241 ppb	124.641 %
Concentration per Run 1	121.819 %	123.415 %	0.001 ppb	-0.089 ppb	-0.964 ppb	-0.507 ppb	-2.472 ppb	-0.832 ppb	125.680 %
Concentration per Run 2	119.586 %	129.306 %	0.004 ppb	-0.579 ppb	-0.968 ppb	-0.340 ppb	0.862 ppb	-1.603 ppb	124.176 %
Concentration per Run 3	116.792 %	128.325 %	0.002 ppb	-0.408 ppb	-0.902 ppb	-0.372 ppb	0.399 ppb	-1.287 ppb	124.066 %
Recovery Percentage 1			0.404 %	-0.358 %	-1.350 %	-4.064 %	-0.404 %	-1.241 %	
Concentration RSD	2.1 %	2.5 %	74.4 %	69.3 %	3.9 %	21.8 %	447.4 %	31.2 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.019 ppb	-0.015 ppb	-0.033 ppb	3.887 ppb	0.001 ppb	-0.004 ppb	-0.027 ppb	-0.099 ppb	112.921 %
Concentration per Run 1	-0.017 ppb	-0.021 ppb	-0.028 ppb	4.016 ppb	0.002 ppb	-0.008 ppb	-0.023 ppb	-0.064 ppb	102.666 %
Concentration per Run 2	-0.025 ppb	-0.012 ppb	-0.044 ppb	3.850 ppb	0.000 ppb	0.001 ppb	-0.023 ppb	-0.119 ppb	115.709 %
Concentration per Run 3	-0.015 ppb	-0.013 ppb	-0.027 ppb	3.795 ppb	0.000 ppb	-0.005 ppb	-0.036 ppb	-0.115 ppb	120.388 %
Recovery Percentage 1	-0.380 %	-1.515 %	-3.290 %	7.774 %	0.126 %	-0.203 %	-2.733 %	-1.985 %	
Concentration RSD	28.4 %	31.5 %	29.4 %	3.0 %	195.9 %	111.9 %	27.1 %	30.7 %	8.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.029 ppb	0.040 ppb	0.000 ppb	0.187 ppb	111.355 %	-0.001 ppb	0.000 ppb	116.756 %	-0.016 ppb
Concentration per Run 1	0.008 ppb	-0.007 ppb	0.001 ppb	0.101 ppb	106.913 %	-0.002 ppb	0.000 ppb	108.515 %	-0.022 ppb
Concentration per Run 2	0.044 ppb	0.029 ppb	-0.004 ppb	0.223 ppb	112.905 %	-0.001 ppb	0.001 ppb	118.385 %	-0.015 ppb
Concentration per Run 3	0.036 ppb	0.100 ppb	0.005 ppb	0.238 ppb	114.246 %	-0.001 ppb	0.000 ppb	123.369 %	-0.011 ppb
Recovery Percentage 1	5.869 %	0.810 %	0.004 %	9.367 %		-0.337 %	0.170 %		-0.404 %
Concentration RSD	64.1 %	133.9 %	1,229.0 %	40.3 %	3.5 %	40.7 %	100.6 %	6.5 %	34.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.007 ppb	111.691 %	113.589 %	0.017 ppb	-0.005 ppb	146.050 %
Concentration per Run 1	0.002 ppb	104.986 %	105.207 %	0.013 ppb	-0.006 ppb	181.092 %
Concentration per Run 2	0.010 ppb	115.674 %	118.409 %	0.020 ppb	-0.004 ppb	132.353 %
Concentration per Run 3	0.010 ppb	114.412 %	117.152 %	0.020 ppb	-0.004 ppb	124.704 %
Recovery Percentage 1	1.485 %			1.746 %	-0.462 %	
Concentration RSD	67.1 %	5.2 %	6.4 %	23.0 %	17.3 %	20.9 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 18
Analysis label: WG1821639-1 6020tl
Analysis started at: 9/5/2023 7:10:57 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	122.486 %	129.684 %	0.002 ppb	4.605 ppb	0.472 ppb	1.037 ppb	0.123 ppb	140.253 ppb	123.806 %
Concentration per Run 1	125.164 %	126.285 %	0.003 ppb	4.506 ppb	0.732 ppb	1.148 ppb	1.907 ppb	135.445 ppb	123.445 %
Concentration per Run 2	123.033 %	132.705 %	0.002 ppb	4.494 ppb	0.398 ppb	0.869 ppb	-1.974 ppb	137.216 ppb	123.998 %
Concentration per Run 3	119.260 %	130.062 %	0.001 ppb	4.814 ppb	0.285 ppb	1.095 ppb	0.435 ppb	148.098 ppb	123.975 %
Concentration RSD	2.4 %	2.5 %	36.8 %	3.9 %	49.3 %	14.3 %	1,597.8 %	4.9 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.013 ppb	-0.015 ppb	0.028 ppb	1.651 ppb	0.001 ppb	0.020 ppb	-0.003 ppb	-0.142 ppb	119.032 %
Concentration per Run 1	-0.008 ppb	-0.009 ppb	0.048 ppb	1.732 ppb	0.001 ppb	0.018 ppb	-0.001 ppb	-0.129 ppb	117.080 %
Concentration per Run 2	-0.025 ppb	-0.019 ppb	0.027 ppb	1.254 ppb	0.003 ppb	0.011 ppb	-0.005 ppb	-0.152 ppb	119.675 %
Concentration per Run 3	-0.005 ppb	-0.016 ppb	0.009 ppb	1.966 ppb	0.000 ppb	0.030 ppb	-0.002 ppb	-0.146 ppb	120.340 %
Concentration RSD	87.6 %	35.9 %	70.0 %	22.0 %	98.8 %	48.6 %	72.5 %	8.4 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.049 ppb	-0.020 ppb	0.048 ppb	0.088 ppb	115.007 %	-0.003 ppb	0.000 ppb	119.509 %	-0.039 ppb
Concentration per Run 1	0.062 ppb	-0.031 ppb	0.050 ppb	0.063 ppb	112.472 %	-0.003 ppb	0.001 ppb	118.461 %	-0.039 ppb
Concentration per Run 2	0.037 ppb	-0.012 ppb	0.050 ppb	0.056 ppb	115.005 %	-0.003 ppb	0.000 ppb	117.399 %	-0.041 ppb
Concentration per Run 3	0.049 ppb	-0.018 ppb	0.044 ppb	0.145 ppb	117.543 %	-0.003 ppb	0.000 ppb	122.666 %	-0.035 ppb
Concentration RSD	25.9 %	49.8 %	6.4 %	56.4 %	2.2 %	14.0 %	495.8 %	2.3 %	8.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.011 ppb	115.910 %	116.153 %	0.008 ppb	-0.004 ppb	135.270 %
Concentration per Run 1	0.007 ppb	111.806 %	112.877 %	0.004 ppb	-0.005 ppb	161.260 %
Concentration per Run 2	0.007 ppb	115.522 %	116.680 %	0.010 ppb	-0.004 ppb	124.295 %
Concentration per Run 3	0.019 ppb	120.401 %	118.902 %	0.009 ppb	-0.004 ppb	120.256 %
Concentration RSD	59.9 %	3.7 %	2.6 %	37.8 %	9.7 %	16.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	19	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1821639-2D5 6020tl	Rack	1		
Analysis started at:	9/5/2023 7:15:35 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.282 %	120.167 %	10.631 ppb	1,983.079 ppb	2,061.618 ppb	419.366 ppb	2,139.089 ppb	2,105.232 ppb	115.836 %
Concentration per Run 1	111.535 %	114.049 %	10.534 ppb	2,006.620 ppb	2,076.585 ppb	419.869 ppb	2,149.605 ppb	2,215.098 ppb	115.357 %
Concentration per Run 2	110.988 %	123.264 %	10.535 ppb	1,923.932 ppb	2,024.236 ppb	409.402 ppb	2,074.953 ppb	2,003.467 ppb	117.061 %
Concentration per Run 3	108.323 %	123.188 %	10.825 ppb	2,018.686 ppb	2,084.033 ppb	428.828 ppb	2,192.709 ppb	2,097.131 ppb	115.091 %
Concentration RSD	1.6 %	4.4 %	1.6 %	2.6 %	1.6 %	2.3 %	2.8 %	5.0 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	97.264 ppb	38.978 ppb	96.842 ppb	200.994 ppb	98.180 ppb	97.893 ppb	50.368 ppb	101.015 ppb	109.501 %
Concentration per Run 1	99.079 ppb	38.997 ppb	97.058 ppb	202.366 ppb	99.031 ppb	98.065 ppb	50.810 ppb	102.824 ppb	106.725 %
Concentration per Run 2	95.417 ppb	38.656 ppb	96.397 ppb	195.678 ppb	98.165 ppb	98.466 ppb	50.288 ppb	100.651 ppb	108.504 %
Concentration per Run 3	97.297 ppb	39.282 ppb	97.071 ppb	204.939 ppb	97.345 ppb	97.149 ppb	50.007 ppb	99.568 ppb	113.273 %
Concentration RSD	1.9 %	0.8 %	0.4 %	2.4 %	0.9 %	0.7 %	0.8 %	1.6 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	25.197 ppb	24.413 ppb	202.464 ppb	194.057 ppb	106.313 %	10.306 ppb	10.859 ppb	108.632 %	81.083 ppb
Concentration per Run 1	25.518 ppb	24.371 ppb	202.854 ppb	195.093 ppb	103.178 %	10.236 ppb	11.058 ppb	103.683 %	83.671 ppb
Concentration per Run 2	25.024 ppb	24.563 ppb	201.105 ppb	192.411 ppb	105.846 %	10.310 ppb	10.668 ppb	109.526 %	79.227 ppb
Concentration per Run 3	25.050 ppb	24.307 ppb	203.434 ppb	194.666 ppb	109.915 %	10.374 ppb	10.851 ppb	112.687 %	80.349 ppb
Concentration RSD	1.1 %	0.5 %	0.6 %	0.7 %	3.2 %	0.7 %	1.8 %	4.2 %	2.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	398.011 ppb	109.806 %	110.852 %	20.024 ppb	103.558 ppb	115.398 %
Concentration per Run 1	408.921 ppb	104.269 %	107.656 %	18.374 ppb	94.426 ppb	123.197 %
Concentration per Run 2	391.949 ppb	109.201 %	112.554 %	20.723 ppb	106.988 ppb	111.179 %
Concentration per Run 3	393.163 ppb	115.947 %	112.345 %	20.975 ppb	109.260 ppb	111.818 %
Concentration RSD	2.4 %	5.3 %	2.5 %	7.2 %	7.7 %	5.9 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 20
Analysis label: WG1821639-3D10 6020tl
Analysis started at: 9/5/2023 7:20:12 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 4
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.517 %	121.023 %	5.226 ppb	38,756.940 ppb	8,332.324 ppb	211.703 ppb	3,926.427 ppb	23,902.004 ppb	123.706 %
Concentration per Run 1	115.284 %	114.502 %	5.230 ppb	38,230.209 ppb	8,216.976 ppb	208.154 ppb	3,787.938 ppb	24,151.741 ppb	122.931 %
Concentration per Run 2	113.739 %	119.789 %	5.233 ppb	39,022.847 ppb	8,318.126 ppb	213.349 ppb	3,962.190 ppb	23,633.703 ppb	123.311 %
Concentration per Run 3	111.527 %	128.778 %	5.215 ppb	39,017.765 ppb	8,461.870 ppb	213.606 ppb	4,029.152 ppb	23,920.566 ppb	124.875 %
Concentration RSD	1.7 %	6.0 %	0.2 %	1.2 %	1.5 %	1.5 %	3.2 %	1.1 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.317 ppb	19.031 ppb	157.029 ppb	108.667 ppb	49.309 ppb	48.501 ppb	24.515 ppb	49.254 ppb	108.183 %
Concentration per Run 1	49.924 ppb	18.943 ppb	155.347 ppb	106.806 ppb	48.746 ppb	47.515 ppb	24.547 ppb	49.000 ppb	102.682 %
Concentration per Run 2	49.966 ppb	18.543 ppb	153.357 ppb	107.092 ppb	47.646 ppb	47.372 ppb	23.766 ppb	48.948 ppb	108.653 %
Concentration per Run 3	51.060 ppb	19.607 ppb	162.384 ppb	112.101 ppb	51.534 ppb	50.614 ppb	25.233 ppb	49.814 ppb	113.213 %
Concentration RSD	1.3 %	2.8 %	3.0 %	2.7 %	4.1 %	3.8 %	3.0 %	1.0 %	4.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.956 ppb	12.510 ppb	174.589 ppb	106.606 ppb	101.489 %	5.027 ppb	5.245 ppb	109.341 %	51.507 ppb
Concentration per Run 1	12.838 ppb	11.974 ppb	174.182 ppb	105.062 ppb	94.832 %	5.025 ppb	5.235 ppb	103.890 %	51.399 ppb
Concentration per Run 2	12.702 ppb	12.280 ppb	172.655 ppb	107.813 ppb	100.501 %	5.064 ppb	5.368 ppb	106.602 %	51.821 ppb
Concentration per Run 3	13.327 ppb	13.277 ppb	176.928 ppb	106.942 ppb	109.134 %	4.993 ppb	5.131 ppb	117.531 %	51.301 ppb
Concentration RSD	2.5 %	5.4 %	1.2 %	1.3 %	7.1 %	0.7 %	2.3 %	6.6 %	0.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	224.808 ppb	108.811 %	110.789 %	10.718 ppb	54.337 ppb	102.200 %
Concentration per Run 1	216.513 ppb	103.594 %	104.118 %	10.196 ppb	51.305 ppb	104.482 %
Concentration per Run 2	229.630 ppb	107.657 %	110.786 %	10.855 ppb	55.358 ppb	98.777 %
Concentration per Run 3	228.282 ppb	115.181 %	117.464 %	11.103 ppb	56.347 ppb	103.340 %
Concentration RSD	3.2 %	5.4 %	6.0 %	4.4 %	4.9 %	3.0 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 21
Analysis label: WG1821639-5D10 6020tl
Analysis started at: 9/5/2023 7:24:50 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 6
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.307 %	119.563 %	49.568 ppb	42,818.974 ppb	12,514.181 ppb	52.703 ppb	8,143.219 ppb	27,339.189 ppb	127.771 %
Concentration per Run 1	113.076 %	113.294 %	49.221 ppb	44,502.962 ppb	13,218.173 ppb	55.030 ppb	8,368.915 ppb	27,912.417 ppb	130.267 %
Concentration per Run 2	110.023 %	119.185 %	49.526 ppb	41,352.259 ppb	11,926.043 ppb	51.358 ppb	7,792.070 ppb	26,100.459 ppb	126.234 %
Concentration per Run 3	107.823 %	126.210 %	49.958 ppb	42,601.703 ppb	12,398.325 ppb	51.720 ppb	8,268.671 ppb	28,004.692 ppb	126.812 %
Concentration RSD	2.4 %	5.4 %	0.7 %	3.7 %	5.2 %	3.8 %	3.8 %	3.9 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.913 ppb	46.809 ppb	156.904 ppb	4,935.737 ppb	48.892 ppb	49.452 ppb	47.542 ppb	47.705 ppb	110.964 %
Concentration per Run 1	48.694 ppb	47.241 ppb	159.087 ppb	4,956.747 ppb	49.329 ppb	49.837 ppb	47.569 ppb	47.598 ppb	110.058 %
Concentration per Run 2	49.034 ppb	46.257 ppb	153.207 ppb	4,863.359 ppb	48.971 ppb	49.377 ppb	47.925 ppb	48.269 ppb	107.878 %
Concentration per Run 3	49.012 ppb	46.927 ppb	158.418 ppb	4,987.104 ppb	48.378 ppb	49.143 ppb	47.134 ppb	47.249 ppb	114.956 %
Concentration RSD	0.4 %	1.1 %	2.1 %	1.3 %	1.0 %	0.7 %	0.8 %	1.1 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	49.375 ppb	48.244 ppb	117.262 ppb	53.332 ppb	103.775 %	1.428 ppb	47.261 ppb	109.566 %	49.736 ppb
Concentration per Run 1	48.930 ppb	48.473 ppb	117.078 ppb	52.280 ppb	102.811 %	1.447 ppb	47.431 ppb	107.396 %	49.624 ppb
Concentration per Run 2	49.338 ppb	47.108 ppb	113.760 ppb	53.346 ppb	101.445 %	1.416 ppb	47.494 ppb	105.191 %	49.374 ppb
Concentration per Run 3	49.858 ppb	49.149 ppb	120.948 ppb	54.371 ppb	107.069 %	1.420 ppb	46.856 ppb	116.112 %	50.211 ppb
Concentration RSD	0.9 %	2.2 %	3.1 %	2.0 %	2.8 %	1.2 %	0.7 %	5.3 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	74.316 ppb	110.000 %	112.239 %	45.557 ppb	46.748 ppb	108.752 %
Concentration per Run 1	74.460 ppb	108.647 %	111.483 %	42.896 ppb	43.497 ppb	114.566 %
Concentration per Run 2	72.224 ppb	105.336 %	107.684 %	46.377 ppb	48.253 ppb	102.366 %
Concentration per Run 3	76.263 ppb	116.018 %	117.551 %	47.397 ppb	48.495 ppb	109.324 %
Concentration RSD	2.7 %	5.0 %	4.4 %	5.2 %	6.0 %	5.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	22	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1821639-4 6020tl	Rack	1		
Analysis started at:	9/5/2023 7:29:29 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.265 %	108.862 %	0.005 ppb	405,623.835 ppb	78,715.007 ppb	9.963 ppb	32,364.796 ppb	227,033.242 ppb	123.986 %
Concentration per Run 1	111.557 %	104.985 %	0.007 ppb	417,746.501 ppb	81,894.165 ppb	9.911 ppb	32,222.637 ppb	227,440.369 ppb	125.716 %
Concentration per Run 2	107.156 %	110.272 %	0.007 ppb	387,651.117 ppb	74,294.929 ppb	9.616 ppb	31,416.320 ppb	220,172.121 ppb	124.298 %
Concentration per Run 3	103.082 %	111.330 %	0.002 ppb	411,473.887 ppb	79,955.929 ppb	10.361 ppb	33,455.431 ppb	233,487.234 ppb	121.946 %
Concentration RSD	4.0 %	3.1 %	50.3 %	3.9 %	5.0 %	3.8 %	3.2 %	2.9 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.732 ppb	0.232 ppb	979.806 ppb	42.781 ppb	3.367 ppb	5.269 ppb	0.348 ppb	3.321 ppb	98.175 %
Concentration per Run 1	0.716 ppb	0.240 ppb	1,003.894 ppb	44.792 ppb	3.295 ppb	5.183 ppb	0.332 ppb	3.256 ppb	97.984 %
Concentration per Run 2	0.769 ppb	0.223 ppb	931.688 ppb	43.230 ppb	3.262 ppb	5.258 ppb	0.346 ppb	3.304 ppb	95.669 %
Concentration per Run 3	0.711 ppb	0.232 ppb	1,003.836 ppb	40.321 ppb	3.544 ppb	5.365 ppb	0.366 ppb	3.403 ppb	100.871 %
Concentration RSD	4.3 %	3.6 %	4.3 %	5.3 %	4.6 %	1.7 %	5.0 %	2.3 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.515 ppb	1.093 ppb	729.806 ppb	14.271 ppb	87.440 %	-0.001 ppb	0.085 ppb	96.874 %	0.867 ppb
Concentration per Run 1	0.476 ppb	0.796 ppb	718.435 ppb	13.717 ppb	87.089 %	-0.002 ppb	0.084 ppb	95.808 %	0.848 ppb
Concentration per Run 2	0.506 ppb	1.074 ppb	714.451 ppb	14.358 ppb	85.432 %	-0.001 ppb	0.087 ppb	91.886 %	0.881 ppb
Concentration per Run 3	0.564 ppb	1.408 ppb	756.532 ppb	14.739 ppb	89.800 %	-0.001 ppb	0.083 ppb	102.927 %	0.873 ppb
Concentration RSD	8.7 %	28.1 %	3.2 %	3.6 %	2.5 %	41.8 %	2.8 %	5.8 %	2.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	282.426 ppb	99.320 %	99.038 %	0.312 ppb	0.022 ppb	83.184 %
Concentration per Run 1	281.271 ppb	97.591 %	99.906 %	0.338 ppb	0.022 ppb	86.517 %
Concentration per Run 2	279.832 ppb	96.111 %	93.417 %	0.326 ppb	0.024 ppb	78.306 %
Concentration per Run 3	286.174 ppb	104.258 %	103.791 %	0.272 ppb	0.021 ppb	84.729 %
Concentration RSD	1.2 %	4.4 %	5.3 %	11.4 %	7.5 %	5.2 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	23	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2349927-01 6020tl	Rack	1		
Analysis started at:	9/5/2023 7:34:07 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.859 %	109.089 %	0.000 ppb	413,008.383 ppb	79,607.212 ppb	9.971 ppb	33,084.101 ppb	233,132.206 ppb	120.121 %
Concentration per Run 1	116.466 %	102.719 %	0.001 ppb	427,399.492 ppb	81,097.664 ppb	11.099 ppb	34,317.024 ppb	237,895.847 ppb	121.714 %
Concentration per Run 2	111.598 %	109.441 %	-0.003 ppb	410,805.803 ppb	79,798.292 ppb	8.827 ppb	32,488.021 ppb	236,033.143 ppb	121.020 %
Concentration per Run 3	107.513 %	115.106 %	0.001 ppb	400,819.854 ppb	77,925.681 ppb	9.987 ppb	32,447.256 ppb	225,467.628 ppb	117.628 %
Concentration RSD	4.0 %	5.7 %	1,619.9 %	3.3 %	2.0 %	11.4 %	3.2 %	2.9 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.747 ppb	0.243 ppb	1,007.580 ppb	34.600 ppb	3.378 ppb	5.242 ppb	0.199 ppb	3.209 ppb	98.085 %
Concentration per Run 1	0.741 ppb	0.242 ppb	1,014.669 ppb	36.095 ppb	3.425 ppb	5.398 ppb	0.202 ppb	3.193 ppb	95.160 %
Concentration per Run 2	0.807 ppb	0.251 ppb	1,017.370 ppb	35.813 ppb	3.415 ppb	5.322 ppb	0.211 ppb	3.379 ppb	96.694 %
Concentration per Run 3	0.692 ppb	0.236 ppb	990.700 ppb	31.892 ppb	3.293 ppb	5.006 ppb	0.185 ppb	3.055 ppb	102.400 %
Concentration RSD	7.8 %	3.0 %	1.5 %	6.8 %	2.2 %	4.0 %	6.8 %	5.1 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.464 ppb	0.565 ppb	754.672 ppb	12.793 ppb	87.303 %	-0.001 ppb	0.076 ppb	96.590 %	0.608 ppb
Concentration per Run 1	0.494 ppb	0.503 ppb	754.963 ppb	12.545 ppb	83.224 %	-0.001 ppb	0.079 ppb	91.983 %	0.611 ppb
Concentration per Run 2	0.451 ppb	0.638 ppb	757.679 ppb	12.930 ppb	87.873 %	-0.001 ppb	0.079 ppb	98.157 %	0.578 ppb
Concentration per Run 3	0.448 ppb	0.555 ppb	751.374 ppb	12.904 ppb	90.812 %	-0.002 ppb	0.069 ppb	99.630 %	0.634 ppb
Concentration RSD	5.5 %	12.1 %	0.4 %	1.7 %	4.4 %	30.0 %	7.4 %	4.2 %	4.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	291.533 ppb	100.069 %	101.104 %	0.075 ppb	0.010 ppb	80.167 %
Concentration per Run 1	297.245 ppb	94.130 %	96.995 %	0.057 ppb	0.010 ppb	82.568 %
Concentration per Run 2	289.462 ppb	101.952 %	101.628 %	0.086 ppb	0.010 ppb	78.796 %
Concentration per Run 3	287.894 ppb	104.126 %	104.689 %	0.083 ppb	0.011 ppb	79.137 %
Concentration RSD	1.7 %	5.3 %	3.8 %	21.5 %	3.0 %	2.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	24	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2349986-10 6020tl	Rack	1		
Analysis started at:	9/5/2023 7:38:45 AM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	131.051 %	114.527 %	0.004 ppb	21.964 ppb	2.425 ppb	3.457 ppb	3.089 ppb	25.803 ppb	123.318 %
Concentration per Run 1	132.095 %	108.157 %	0.006 ppb	32.031 ppb	3.684 ppb	2.903 ppb	6.513 ppb	32.329 ppb	121.990 %
Concentration per Run 2	131.983 %	113.822 %	0.004 ppb	18.394 ppb	2.180 ppb	3.722 ppb	1.513 ppb	24.850 ppb	124.394 %
Concentration per Run 3	129.076 %	121.602 %	0.002 ppb	15.467 ppb	1.412 ppb	3.746 ppb	1.241 ppb	20.231 ppb	123.571 %
Concentration RSD	1.3 %	5.9 %	47.8 %	40.3 %	47.7 %	13.9 %	96.1 %	23.7 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.004 ppb	0.120 ppb	-0.002 ppb	3.801 ppb	0.001 ppb	0.004 ppb	0.056 ppb	0.118 ppb	110.057 %
Concentration per Run 1	0.000 ppb	0.130 ppb	0.015 ppb	4.253 ppb	0.001 ppb	0.012 ppb	0.053 ppb	0.130 ppb	103.877 %
Concentration per Run 2	-0.006 ppb	0.098 ppb	-0.009 ppb	4.161 ppb	0.000 ppb	-0.001 ppb	0.056 ppb	0.098 ppb	109.226 %
Concentration per Run 3	-0.007 ppb	0.131 ppb	-0.013 ppb	2.988 ppb	0.002 ppb	0.001 ppb	0.059 ppb	0.126 ppb	117.068 %
Concentration RSD	84.6 %	15.4 %	735.9 %	18.5 %	73.1 %	179.1 %	5.1 %	14.5 %	6.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.074 ppb	0.135 ppb	0.486 ppb	1.049 ppb	105.252 %	-0.003 ppb	0.000 ppb	109.421 %	0.341 ppb
Concentration per Run 1	0.034 ppb	-0.010 ppb	0.500 ppb	0.691 ppb	100.776 %	-0.003 ppb	0.000 ppb	106.745 %	0.301 ppb
Concentration per Run 2	0.087 ppb	0.237 ppb	0.483 ppb	1.063 ppb	105.117 %	-0.003 ppb	0.000 ppb	105.088 %	0.374 ppb
Concentration per Run 3	0.100 ppb	0.178 ppb	0.475 ppb	1.395 ppb	109.862 %	-0.004 ppb	0.001 ppb	116.430 %	0.347 ppb
Concentration RSD	47.0 %	95.4 %	2.6 %	33.6 %	4.3 %	13.6 %	1,108.1 %	5.6 %	10.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.447 ppb	106.752 %	108.986 %	0.030 ppb	0.008 ppb	105.192 %
Concentration per Run 1	0.429 ppb	102.509 %	104.020 %	0.022 ppb	0.007 ppb	109.482 %
Concentration per Run 2	0.507 ppb	105.128 %	106.458 %	0.033 ppb	0.008 ppb	102.016 %
Concentration per Run 3	0.405 ppb	112.618 %	116.480 %	0.035 ppb	0.009 ppb	104.077 %
Concentration RSD	11.9 %	4.9 %	6.1 %	23.6 %	7.5 %	3.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	25	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344001-02d5 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 7:43:25 AM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.316 %	110.801 %	0.617 ppb	1,173.574 ppb	1,218.989 ppb	2,840.078 ppb	183.546 ppb	6,754.300 ppb	117.088 %
Concentration per Run 1	117.217 %	110.046 %	0.603 ppb	1,134.513 ppb	1,187.240 ppb	2,786.926 ppb	186.285 ppb	6,681.253 ppb	116.939 %
Concentration per Run 2	116.672 %	107.704 %	0.633 ppb	1,210.152 ppb	1,263.308 ppb	2,861.846 ppb	179.234 ppb	6,763.245 ppb	116.807 %
Concentration per Run 3	115.058 %	114.653 %	0.614 ppb	1,176.057 ppb	1,206.418 ppb	2,871.460 ppb	185.117 ppb	6,818.402 ppb	117.516 %
Concentration RSD	1.0 %	3.2 %	2.5 %	3.2 %	3.2 %	1.6 %	2.1 %	1.0 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.656 ppb	7.020 ppb	339.675 ppb	7,301.297 ppb	3.569 ppb	13.772 ppb	198.100 ppb	539.058 ppb	103.597 %
Concentration per Run 1	43.559 ppb	6.978 ppb	332.966 ppb	7,294.517 ppb	3.576 ppb	13.836 ppb	202.145 ppb	539.959 ppb	100.555 %
Concentration per Run 2	44.368 ppb	7.102 ppb	340.294 ppb	7,412.709 ppb	3.697 ppb	14.422 ppb	202.525 ppb	549.230 ppb	100.780 %
Concentration per Run 3	43.042 ppb	6.980 ppb	345.764 ppb	7,196.665 ppb	3.434 ppb	13.058 ppb	189.629 ppb	527.985 ppb	109.456 %
Concentration RSD	1.5 %	1.0 %	1.9 %	1.5 %	3.7 %	5.0 %	3.7 %	2.0 %	4.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.719 ppb	7.497 ppb	35.455 ppb	0.593 ppb	96.475 %	0.017 ppb	2.285 ppb	103.906 %	0.909 ppb
Concentration per Run 1	2.623 ppb	7.573 ppb	35.145 ppb	0.381 ppb	94.638 %	0.018 ppb	2.364 ppb	98.684 %	0.898 ppb
Concentration per Run 2	2.798 ppb	7.566 ppb	35.167 ppb	0.642 ppb	95.674 %	0.015 ppb	2.242 ppb	102.677 %	0.916 ppb
Concentration per Run 3	2.735 ppb	7.350 ppb	36.051 ppb	0.755 ppb	99.112 %	0.019 ppb	2.249 ppb	110.358 %	0.912 ppb
Concentration RSD	3.3 %	1.7 %	1.5 %	32.4 %	2.4 %	12.5 %	3.0 %	5.7 %	1.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	389.808 ppb	104.246 %	105.751 %	0.031 ppb	159.206 ppb	108.311 %
Concentration per Run 1	391.672 ppb	102.103 %	102.640 %	0.026 ppb	152.583 ppb	110.606 %
Concentration per Run 2	388.300 ppb	103.139 %	102.653 %	0.032 ppb	159.384 ppb	105.863 %
Concentration per Run 3	389.452 ppb	107.495 %	111.960 %	0.035 ppb	165.650 ppb	108.464 %
Concentration RSD	0.4 %	2.7 %	5.1 %	16.0 %	4.1 %	2.2 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	26	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344001-03d5 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 7:48:01 AM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.699 %	106.370 %	1.230 ppb	1,857.565 ppb	1,368.631 ppb	4,240.830 ppb	298.303 ppb	7,805.512 ppb	109.307 %
Concentration per Run 1	110.803 %	103.021 %	1.230 ppb	1,900.054 ppb	1,404.211 ppb	4,328.070 ppb	303.328 ppb	7,780.376 ppb	109.570 %
Concentration per Run 2	110.307 %	106.118 %	1.224 ppb	1,816.651 ppb	1,353.693 ppb	4,172.049 ppb	280.112 ppb	7,634.145 ppb	110.153 %
Concentration per Run 3	107.988 %	109.970 %	1.235 ppb	1,855.990 ppb	1,347.988 ppb	4,222.373 ppb	311.469 ppb	8,002.016 ppb	108.199 %
Concentration RSD	1.4 %	3.3 %	0.5 %	2.2 %	2.3 %	1.9 %	5.5 %	2.4 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.215 ppb	5.339 ppb	570.889 ppb	7,476.975 ppb	8.384 ppb	31.243 ppb	130.277 ppb	836.320 ppb	104.869 %
Concentration per Run 1	46.103 ppb	5.347 ppb	572.089 ppb	7,582.685 ppb	8.532 ppb	32.012 ppb	132.156 ppb	840.516 ppb	103.159 %
Concentration per Run 2	44.300 ppb	5.237 ppb	561.834 ppb	7,386.045 ppb	8.363 ppb	30.916 ppb	129.434 ppb	828.085 ppb	102.509 %
Concentration per Run 3	45.243 ppb	5.433 ppb	578.745 ppb	7,462.196 ppb	8.258 ppb	30.801 ppb	129.242 ppb	840.359 ppb	108.937 %
Concentration RSD	2.0 %	1.8 %	1.5 %	1.3 %	1.6 %	2.1 %	1.3 %	0.9 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.117 ppb	11.806 ppb	48.189 ppb	0.735 ppb	95.642 %	0.153 ppb	2.290 ppb	101.235 %	1.322 ppb
Concentration per Run 1	3.084 ppb	11.643 ppb	48.414 ppb	0.589 ppb	92.369 %	0.155 ppb	2.309 ppb	97.807 %	1.256 ppb
Concentration per Run 2	3.062 ppb	11.899 ppb	47.528 ppb	0.764 ppb	95.912 %	0.157 ppb	2.237 ppb	101.059 %	1.352 ppb
Concentration per Run 3	3.206 ppb	11.876 ppb	48.624 ppb	0.853 ppb	98.646 %	0.147 ppb	2.325 ppb	104.838 %	1.357 ppb
Concentration RSD	2.5 %	1.2 %	1.2 %	18.2 %	3.3 %	3.2 %	2.1 %	3.5 %	4.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	393.860 ppb	104.797 %	105.143 %	0.039 ppb	61.485 ppb	97.988 %
Concentration per Run 1	401.752 ppb	102.205 %	102.466 %	0.034 ppb	46.174 ppb	98.500 %
Concentration per Run 2	389.202 ppb	104.174 %	103.576 %	0.041 ppb	68.190 ppb	95.198 %
Concentration per Run 3	390.627 ppb	108.011 %	109.386 %	0.043 ppb	70.092 ppb	100.267 %
Concentration RSD	1.7 %	2.8 %	3.5 %	12.1 %	21.6 %	2.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 27
Analysis label: WG1821639-6D5 6020tl
Analysis started at: 9/5/2023 7:52:38 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 7
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	121.352 %	111.053 %	0.001 ppb	125,482.512 ppb	26,339.487 ppb	2.502 ppb	6,092.868 ppb	47,442.115 ppb	130.962 %
Concentration per Run 1	124.610 %	105.363 %	0.000 ppb	133,082.273 ppb	27,984.003 ppb	2.357 ppb	5,952.336 ppb	47,413.226 ppb	132.274 %
Concentration per Run 2	121.133 %	110.272 %	0.001 ppb	126,109.566 ppb	26,684.164 ppb	2.825 ppb	6,200.827 ppb	48,018.735 ppb	130.705 %
Concentration per Run 3	118.313 %	117.523 %	0.001 ppb	117,255.698 ppb	24,350.294 ppb	2.324 ppb	6,125.442 ppb	46,894.384 ppb	129.907 %
Concentration RSD	2.6 %	5.5 %	67.7 %	6.3 %	7.0 %	11.2 %	2.1 %	1.2 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.158 ppb	0.048 ppb	221.102 ppb	19.349 ppb	0.690 ppb	1.094 ppb	0.033 ppb	0.780 ppb	106.930 %
Concentration per Run 1	0.177 ppb	0.048 ppb	221.368 ppb	18.467 ppb	0.713 ppb	1.091 ppb	0.029 ppb	0.729 ppb	100.735 %
Concentration per Run 2	0.127 ppb	0.051 ppb	218.177 ppb	18.846 ppb	0.693 ppb	1.109 ppb	0.021 ppb	0.856 ppb	106.830 %
Concentration per Run 3	0.169 ppb	0.046 ppb	223.760 ppb	20.735 ppb	0.664 ppb	1.083 ppb	0.048 ppb	0.755 ppb	113.226 %
Concentration RSD	17.0 %	5.7 %	1.3 %	6.3 %	3.6 %	1.2 %	42.3 %	8.6 %	5.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.159 ppb	0.081 ppb	141.530 ppb	2.232 ppb	98.624 %	-0.003 ppb	0.015 ppb	105.143 %	0.182 ppb
Concentration per Run 1	0.137 ppb	0.106 ppb	141.782 ppb	2.187 ppb	90.966 %	-0.004 ppb	0.019 ppb	98.446 %	0.172 ppb
Concentration per Run 2	0.174 ppb	0.022 ppb	140.141 ppb	2.156 ppb	100.838 %	-0.003 ppb	0.011 ppb	105.770 %	0.172 ppb
Concentration per Run 3	0.165 ppb	0.116 ppb	142.669 ppb	2.354 ppb	104.067 %	-0.004 ppb	0.014 ppb	111.212 %	0.201 ppb
Concentration RSD	11.9 %	63.0 %	0.9 %	4.8 %	6.9 %	16.8 %	28.8 %	6.1 %	9.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.586 ppb	106.450 %	108.379 %	0.014 ppb	0.014 ppb	98.016 %
Concentration per Run 1	55.240 ppb	100.391 %	101.304 %	0.010 ppb	0.016 ppb	97.529 %
Concentration per Run 2	56.623 ppb	106.977 %	110.233 %	0.015 ppb	0.014 ppb	97.596 %
Concentration per Run 3	57.895 ppb	111.981 %	113.601 %	0.016 ppb	0.013 ppb	98.924 %
Concentration RSD	2.3 %	5.5 %	5.9 %	25.0 %	12.8 %	0.8 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 28
Analysis label: CCV
Analysis started at: 9/5/2023 7:57:17 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.060 %	114.678 %	61.492 ppb	6,373.330 ppb	6,185.017 ppb	62.811 ppb	6,319.966 ppb	6,389.988 ppb	126.748 %
Concentration per Run 1	118.659 %	114.049 %	61.179 ppb	6,466.554 ppb	5,925.380 ppb	61.495 ppb	6,163.275 ppb	6,274.033 ppb	128.923 %
Concentration per Run 2	116.246 %	114.427 %	61.166 ppb	6,278.110 ppb	6,248.671 ppb	61.792 ppb	6,529.753 ppb	6,643.886 ppb	126.889 %
Concentration per Run 3	113.274 %	115.560 %	62.130 ppb	6,375.325 ppb	6,381.001 ppb	65.148 ppb	6,266.869 ppb	6,252.045 ppb	124.431 %
Recovery Percentage 1			102.486 %	106.222 %	103.084 %	104.686 %	105.333 %	106.500 %	
Concentration RSD	2.3 %	0.7 %	0.9 %	1.5 %	3.8 %	3.2 %	3.0 %	3.4 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	59.256 ppb	58.831 ppb	58.313 ppb	5,981.018 ppb	59.600 ppb	59.465 ppb	58.913 ppb	62.030 ppb	105.862 %
Concentration per Run 1	60.907 ppb	61.172 ppb	60.360 ppb	6,189.954 ppb	63.189 ppb	63.569 ppb	62.106 ppb	64.207 ppb	96.442 %
Concentration per Run 2	58.668 ppb	57.323 ppb	56.690 ppb	5,848.243 ppb	58.083 ppb	57.353 ppb	57.814 ppb	61.909 ppb	108.640 %
Concentration per Run 3	58.195 ppb	58.000 ppb	57.888 ppb	5,904.858 ppb	57.529 ppb	57.474 ppb	56.818 ppb	59.976 ppb	112.504 %
Recovery Percentage 1	98.761 %	98.052 %	97.188 %	99.684 %	99.334 %	99.109 %	98.188 %	103.384 %	
Concentration RSD	2.4 %	3.5 %	3.2 %	3.1 %	5.2 %	6.0 %	4.8 %	3.4 %	7.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.548 ppb	63.691 ppb	55.877 ppb	59.747 ppb	99.039 %	61.214 ppb	61.614 ppb	105.776 %	60.348 ppb
Concentration per Run 1	65.118 ppb	64.984 ppb	56.292 ppb	61.736 ppb	94.410 %	63.250 ppb	64.031 ppb	98.957 %	60.749 ppb
Concentration per Run 2	59.962 ppb	62.135 ppb	55.536 ppb	58.795 ppb	101.167 %	59.645 ppb	59.300 ppb	109.134 %	59.555 ppb
Concentration per Run 3	59.563 ppb	63.955 ppb	55.803 ppb	58.711 ppb	101.539 %	60.748 ppb	61.510 ppb	109.239 %	60.739 ppb
Recovery Percentage 1	102.580 %	106.152 %	93.128 %	99.579 %		102.024 %	102.690 %		100.580 %
Concentration RSD	5.0 %	2.3 %	0.7 %	2.9 %	4.1 %	3.0 %	3.8 %	5.6 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.477 ppb	106.573 %	106.791 %	62.537 ppb	63.310 ppb	99.670 %
Concentration per Run 1	60.525 ppb	100.250 %	97.951 %	61.811 ppb	61.636 ppb	100.418 %
Concentration per Run 2	60.080 ppb	107.770 %	111.649 %	62.984 ppb	64.674 ppb	95.736 %
Concentration per Run 3	60.827 ppb	111.700 %	110.772 %	62.817 ppb	63.620 ppb	102.857 %
Recovery Percentage 1	100.795 %			104.229 %	105.517 %	
Concentration RSD	0.6 %	5.5 %	7.2 %	1.0 %	2.4 %	3.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	29	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/5/2023 8:01:59 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.634 %	115.988 %	0.007 ppb	3.359 ppb	-0.740 ppb	-0.282 ppb	0.233 ppb	0.428 ppb	117.206 %
Concentration per Run 1	120.735 %	109.970 %	0.004 ppb	3.988 ppb	-0.801 ppb	-0.351 ppb	0.780 ppb	1.260 ppb	116.875 %
Concentration per Run 2	120.302 %	119.034 %	0.005 ppb	3.167 ppb	-0.674 ppb	-0.086 ppb	-0.110 ppb	-0.353 ppb	116.740 %
Concentration per Run 3	117.864 %	118.959 %	0.010 ppb	2.922 ppb	-0.746 ppb	-0.409 ppb	0.029 ppb	0.376 ppb	118.002 %
Recovery Percentage 1			1.301 %	3.359 %	-1.057 %	-2.819 %	0.233 %	0.428 %	
Concentration RSD	1.3 %	4.5 %	48.3 %	16.6 %	8.6 %	61.0 %	205.5 %	188.8 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.021 ppb	-0.016 ppb	-0.001 ppb	15.813 ppb	0.002 ppb	0.004 ppb	-0.012 ppb	-0.081 ppb	106.803 %
Concentration per Run 1	-0.028 ppb	-0.010 ppb	0.023 ppb	16.072 ppb	0.002 ppb	-0.010 ppb	-0.015 ppb	-0.065 ppb	101.612 %
Concentration per Run 2	-0.010 ppb	-0.013 ppb	0.010 ppb	13.905 ppb	0.006 ppb	0.011 ppb	-0.018 ppb	-0.084 ppb	109.045 %
Concentration per Run 3	-0.025 ppb	-0.025 ppb	-0.036 ppb	17.462 ppb	0.000 ppb	0.011 ppb	-0.003 ppb	-0.094 ppb	109.753 %
Recovery Percentage 1	-0.416 %	-1.594 %	-0.080 %	31.625 %	0.494 %	0.212 %	-1.204 %	-1.621 %	
Concentration RSD	47.0 %	48.7 %	3,913.2 %	11.3 %	121.5 %	284.9 %	66.1 %	18.6 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.124 ppb	0.780 ppb	0.001 ppb	1.538 ppb	102.852 %	-0.001 ppb	0.002 ppb	109.951 %	0.102 ppb
Concentration per Run 1	0.124 ppb	0.632 ppb	0.004 ppb	1.309 ppb	98.267 %	0.001 ppb	0.003 ppb	100.704 %	0.084 ppb
Concentration per Run 2	0.111 ppb	0.869 ppb	0.004 ppb	1.503 ppb	103.251 %	-0.002 ppb	0.003 ppb	112.363 %	0.108 ppb
Concentration per Run 3	0.137 ppb	0.840 ppb	-0.004 ppb	1.802 ppb	107.038 %	-0.002 ppb	0.000 ppb	116.786 %	0.114 ppb
Recovery Percentage 1	24.841 %	15.607 %	0.015 %	76.895 %		-0.304 %	0.995 %		2.549 %
Concentration RSD	10.7 %	16.5 %	309.9 %	16.1 %	4.3 %	156.6 %	107.6 %	7.6 %	15.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.003 ppb	108.866 %	109.134 %	0.322 ppb	0.008 ppb	113.217 %
Concentration per Run 1	-0.002 ppb	104.369 %	102.546 %	0.369 ppb	0.010 ppb	114.405 %
Concentration per Run 2	-0.009 ppb	110.271 %	111.767 %	0.329 ppb	0.008 ppb	112.469 %
Concentration per Run 3	0.001 ppb	111.959 %	113.090 %	0.270 ppb	0.007 ppb	112.777 %
Recovery Percentage 1	-0.640 %			32.239 %	0.833 %	
Concentration RSD	161.4 %	3.7 %	5.3 %	15.5 %	14.0 %	0.9 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	30	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1813067-1d5 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 8:09:19 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	124.171 %	120.796 %	0.002 ppb	10.814 ppb	1.821 ppb	112.582 ppb	3.924 ppb	4.236 ppb	116.640 %
Concentration per Run 1	127.451 %	126.663 %	0.001 ppb	11.758 ppb	1.732 ppb	120.750 ppb	2.921 ppb	5.871 ppb	117.413 %
Concentration per Run 2	123.887 %	120.847 %	0.001 ppb	11.066 ppb	1.879 ppb	106.684 ppb	2.700 ppb	0.747 ppb	116.257 %
Concentration per Run 3	121.174 %	114.880 %	0.002 ppb	9.618 ppb	1.853 ppb	110.312 ppb	6.152 ppb	6.090 ppb	116.251 %
Concentration RSD	2.5 %	4.9 %	52.9 %	10.1 %	4.3 %	6.5 %	49.2 %	71.4 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.013 ppb	1.483 ppb	0.279 ppb	14.021 ppb	0.020 ppb	0.894 ppb	0.819 ppb	1.601 ppb	113.860 %
Concentration per Run 1	0.030 ppb	1.448 ppb	0.331 ppb	16.533 ppb	0.018 ppb	0.869 ppb	0.775 ppb	1.540 ppb	119.380 %
Concentration per Run 2	0.001 ppb	1.541 ppb	0.253 ppb	11.620 ppb	0.022 ppb	0.934 ppb	0.848 ppb	1.648 ppb	111.812 %
Concentration per Run 3	0.009 ppb	1.461 ppb	0.254 ppb	13.909 ppb	0.021 ppb	0.880 ppb	0.835 ppb	1.617 ppb	110.388 %
Concentration RSD	112.9 %	3.4 %	16.0 %	17.5 %	10.2 %	3.9 %	4.7 %	3.5 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.050 ppb	0.174 ppb	0.039 ppb	0.341 ppb	109.822 %	-0.003 ppb	0.007 ppb	114.483 %	0.142 ppb
Concentration per Run 1	0.031 ppb	0.137 ppb	0.039 ppb	0.250 ppb	112.582 %	-0.003 ppb	0.008 ppb	122.078 %	0.117 ppb
Concentration per Run 2	0.082 ppb	0.249 ppb	0.032 ppb	0.353 ppb	108.852 %	-0.003 ppb	0.005 ppb	112.683 %	0.152 ppb
Concentration per Run 3	0.037 ppb	0.134 ppb	0.045 ppb	0.420 ppb	108.032 %	-0.003 ppb	0.009 ppb	108.690 %	0.158 ppb
Concentration RSD	55.6 %	37.8 %	17.8 %	25.1 %	2.2 %	5.9 %	27.6 %	6.0 %	15.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.303 ppb	112.038 %	115.867 %	0.042 ppb	0.102 ppb	122.148 %
Concentration per Run 1	2.402 ppb	117.513 %	125.302 %	0.028 ppb	0.080 ppb	153.564 %
Concentration per Run 2	2.185 ppb	111.882 %	113.897 %	0.049 ppb	0.109 ppb	108.930 %
Concentration per Run 3	2.321 ppb	106.718 %	108.403 %	0.049 ppb	0.117 ppb	103.949 %
Concentration RSD	4.8 %	4.8 %	7.4 %	28.7 %	19.1 %	22.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	31	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1813067-2d10 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 8:13:59 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	123.303 %	121.325 %	0.003 ppb	554.428 ppb	17.706 ppb	1,976.225 ppb	6.660 ppb	13.484 ppb	120.310 %
Concentration per Run 1	125.144 %	119.487 %	0.004 ppb	587.095 ppb	18.424 ppb	2,135.598 ppb	7.829 ppb	6.742 ppb	119.988 %
Concentration per Run 2	123.227 %	122.584 %	0.000 ppb	543.259 ppb	17.824 ppb	1,916.834 ppb	7.223 ppb	19.505 ppb	120.495 %
Concentration per Run 3	121.538 %	121.904 %	0.005 ppb	532.930 ppb	16.868 ppb	1,876.245 ppb	4.928 ppb	14.204 ppb	120.449 %
Concentration RSD	1.5 %	1.3 %	77.7 %	5.2 %	4.4 %	7.1 %	23.0 %	47.6 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.131 ppb	3.481 ppb	1.198 ppb	30.628 ppb	0.041 ppb	54.897 ppb	69.992 ppb	305.243 ppb	111.076 %
Concentration per Run 1	0.112 ppb	3.637 ppb	1.261 ppb	33.016 ppb	0.044 ppb	55.534 ppb	72.243 ppb	316.204 ppb	111.024 %
Concentration per Run 2	0.141 ppb	3.420 ppb	1.246 ppb	29.553 ppb	0.036 ppb	54.028 ppb	67.365 ppb	299.489 ppb	113.142 %
Concentration per Run 3	0.142 ppb	3.387 ppb	1.087 ppb	29.317 ppb	0.044 ppb	55.129 ppb	70.368 ppb	300.035 ppb	109.062 %
Concentration RSD	13.1 %	3.9 %	8.1 %	6.8 %	11.7 %	1.4 %	3.5 %	3.1 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.106 ppb	0.075 ppb	0.114 ppb	0.534 ppb	107.502 %	0.004 ppb	26.639 ppb	112.901 %	0.165 ppb
Concentration per Run 1	0.102 ppb	0.130 ppb	0.122 ppb	0.446 ppb	105.076 %	0.005 ppb	27.147 ppb	117.545 %	0.156 ppb
Concentration per Run 2	0.091 ppb	-0.011 ppb	0.112 ppb	0.574 ppb	108.798 %	0.003 ppb	26.345 ppb	111.989 %	0.163 ppb
Concentration per Run 3	0.125 ppb	0.106 ppb	0.107 ppb	0.583 ppb	108.632 %	0.003 ppb	26.425 ppb	109.168 %	0.177 ppb
Concentration RSD	16.1 %	100.8 %	6.8 %	14.3 %	2.0 %	41.5 %	1.7 %	3.8 %	6.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.098 ppb	110.622 %	113.735 %	0.026 ppb	288.865 ppb	104.844 %
Concentration per Run 1	0.120 ppb	111.066 %	115.792 %	0.019 ppb	281.959 ppb	109.171 %
Concentration per Run 2	0.093 ppb	110.687 %	113.036 %	0.029 ppb	291.944 ppb	103.427 %
Concentration per Run 3	0.081 ppb	110.112 %	112.376 %	0.032 ppb	292.692 ppb	101.933 %
Concentration RSD	20.6 %	0.4 %	1.6 %	25.5 %	2.1 %	3.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	32	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	zWG1821639-2D5 6020tl	Rack	1		
Analysis started at:	9/5/2023 8:18:38 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	120.238 %	118.002 %	10.503 ppb	2,010.521 ppb	2,093.733 ppb	434.625 ppb	2,221.290 ppb	2,183.350 ppb	120.053 %
Concentration per Run 1	122.066 %	113.596 %	10.420 ppb	2,139.607 ppb	2,223.852 ppb	457.607 ppb	2,254.797 ppb	2,056.627 ppb	120.561 %
Concentration per Run 2	120.076 %	121.300 %	10.512 ppb	1,942.114 ppb	2,037.649 ppb	437.114 ppb	2,300.845 ppb	2,278.468 ppb	119.337 %
Concentration per Run 3	118.573 %	119.110 %	10.575 ppb	1,949.841 ppb	2,019.698 ppb	409.153 ppb	2,108.229 ppb	2,214.956 ppb	120.260 %
Concentration RSD	1.5 %	3.4 %	0.7 %	5.6 %	5.4 %	5.6 %	4.5 %	5.2 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	98.138 ppb	39.168 ppb	97.939 ppb	202.410 ppb	97.484 ppb	96.421 ppb	49.486 ppb	101.330 ppb	109.880 %
Concentration per Run 1	101.784 ppb	40.136 ppb	101.277 ppb	204.004 ppb	98.109 ppb	97.925 ppb	49.357 ppb	102.469 ppb	110.820 %
Concentration per Run 2	96.945 ppb	38.773 ppb	97.339 ppb	202.016 ppb	95.723 ppb	94.610 ppb	48.906 ppb	100.095 ppb	110.912 %
Concentration per Run 3	95.685 ppb	38.595 ppb	95.200 ppb	201.209 ppb	98.619 ppb	96.729 ppb	50.195 ppb	101.425 ppb	107.908 %
Concentration RSD	3.3 %	2.2 %	3.1 %	0.7 %	1.6 %	1.7 %	1.3 %	1.2 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	25.157 ppb	25.719 ppb	207.431 ppb	193.809 ppb	105.005 %	10.517 ppb	11.158 ppb	108.351 %	82.232 ppb
Concentration per Run 1	25.414 ppb	26.092 ppb	217.611 ppb	194.842 ppb	101.994 %	10.502 ppb	11.177 ppb	110.946 %	83.941 ppb
Concentration per Run 2	25.291 ppb	25.867 ppb	208.088 ppb	194.616 ppb	106.666 %	10.515 ppb	11.255 ppb	108.185 %	82.233 ppb
Concentration per Run 3	24.765 ppb	25.198 ppb	196.593 ppb	191.970 ppb	106.356 %	10.533 ppb	11.044 ppb	105.923 %	80.521 ppb
Concentration RSD	1.4 %	1.8 %	5.1 %	0.8 %	2.5 %	0.1 %	1.0 %	2.3 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	402.660 ppb	109.797 %	111.930 %	21.429 ppb	110.764 ppb	110.318 %
Concentration per Run 1	410.280 ppb	107.857 %	111.318 %	19.450 ppb	100.428 ppb	122.232 %
Concentration per Run 2	411.398 ppb	109.575 %	112.258 %	22.139 ppb	115.801 ppb	104.770 %
Concentration per Run 3	386.302 ppb	111.959 %	112.214 %	22.699 ppb	116.064 ppb	103.952 %
Concentration RSD	3.5 %	1.9 %	0.5 %	8.1 %	8.1 %	9.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	33	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1813067-3d10 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 8:23:16 AM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.894 %	118.203 %	0.298 ppb	1,004.227 ppb	815.030 ppb	1,211.478 ppb	88.047 ppb	3,660.400 ppb	113.578 %
Concentration per Run 1	118.238 %	117.448 %	0.277 ppb	1,032.765 ppb	836.937 ppb	1,241.163 ppb	89.848 ppb	3,785.234 ppb	115.068 %
Concentration per Run 2	115.652 %	116.013 %	0.298 ppb	1,019.854 ppb	823.717 ppb	1,231.494 ppb	90.101 ppb	3,777.319 ppb	113.157 %
Concentration per Run 3	113.794 %	121.149 %	0.320 ppb	960.063 ppb	784.435 ppb	1,161.775 ppb	84.193 ppb	3,418.645 ppb	112.507 %
Concentration RSD	1.9 %	2.2 %	7.1 %	3.9 %	3.4 %	3.6 %	3.8 %	5.7 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	8.158 ppb	5.068 ppb	136.591 ppb	2,050.140 ppb	1.686 ppb	54.886 ppb	257.224 ppb	347.665 ppb	108.068 %
Concentration per Run 1	8.519 ppb	5.185 ppb	140.486 ppb	2,078.348 ppb	1.714 ppb	56.639 ppb	264.105 ppb	359.769 ppb	104.835 %
Concentration per Run 2	7.944 ppb	5.048 ppb	136.041 ppb	2,040.773 ppb	1.669 ppb	54.261 ppb	251.552 ppb	343.673 ppb	111.583 %
Concentration per Run 3	8.010 ppb	4.971 ppb	133.247 ppb	2,031.299 ppb	1.676 ppb	53.759 ppb	256.013 ppb	339.554 ppb	107.784 %
Concentration RSD	3.9 %	2.1 %	2.7 %	1.2 %	1.5 %	2.8 %	2.5 %	3.1 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.183 ppb	6.234 ppb	15.213 ppb	5.310 ppb	102.382 %	0.061 ppb	26.783 ppb	106.596 %	3.403 ppb
Concentration per Run 1	1.223 ppb	5.938 ppb	16.050 ppb	4.176 ppb	98.975 %	0.061 ppb	27.787 ppb	103.025 %	3.487 ppb
Concentration per Run 2	1.251 ppb	6.276 ppb	15.127 ppb	5.567 ppb	104.123 %	0.061 ppb	26.395 ppb	109.154 %	3.430 ppb
Concentration per Run 3	1.074 ppb	6.489 ppb	14.462 ppb	6.189 ppb	104.049 %	0.060 ppb	26.166 ppb	107.609 %	3.291 ppb
Concentration RSD	8.0 %	4.5 %	5.2 %	19.4 %	2.9 %	1.2 %	3.3 %	3.0 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	99.499 ppb	109.111 %	109.666 %	0.070 ppb	456.078 ppb	103.376 %
Concentration per Run 1	104.670 ppb	106.469 %	105.833 %	0.071 ppb	435.897 ppb	108.721 %
Concentration per Run 2	100.562 ppb	110.266 %	110.488 %	0.077 ppb	464.911 ppb	101.215 %
Concentration per Run 3	93.264 ppb	110.597 %	112.677 %	0.063 ppb	467.425 ppb	100.191 %
Concentration RSD	5.8 %	2.1 %	3.2 %	10.5 %	3.8 %	4.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 34
Analysis label: WG1813067-4d5 A2-SEM
Analysis started at: 9/5/2023 8:27:56 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 13
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.200 %	118.833 %	0.629 ppb	1,156.839 ppb	1,271.827 ppb	2,659.011 ppb	169.967 ppb	6,329.479 ppb	117.779 %
Concentration per Run 1	111.351 %	120.469 %	0.618 ppb	1,172.792 ppb	1,282.915 ppb	2,687.521 ppb	170.722 ppb	6,559.754 ppb	119.144 %
Concentration per Run 2	110.164 %	114.351 %	0.629 ppb	1,160.237 ppb	1,268.811 ppb	2,653.496 ppb	168.091 ppb	6,414.490 ppb	117.145 %
Concentration per Run 3	109.086 %	121.678 %	0.640 ppb	1,137.486 ppb	1,263.757 ppb	2,636.016 ppb	171.086 ppb	6,014.193 ppb	117.049 %
Concentration RSD	1.0 %	3.3 %	1.8 %	1.5 %	0.8 %	1.0 %	1.0 %	4.5 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	16.298 ppb	11.942 ppb	367.816 ppb	4,578.666 ppb	3.314 ppb	11.185 ppb	460.892 ppb	181.125 ppb	108.345 %
Concentration per Run 1	16.365 ppb	12.126 ppb	369.319 ppb	4,527.070 ppb	3.212 ppb	11.124 ppb	464.932 ppb	183.895 ppb	106.572 %
Concentration per Run 2	16.095 ppb	11.897 ppb	365.557 ppb	4,591.562 ppb	3.368 ppb	11.029 ppb	453.716 ppb	176.955 ppb	107.947 %
Concentration per Run 3	16.433 ppb	11.804 ppb	368.571 ppb	4,617.364 ppb	3.361 ppb	11.402 ppb	464.029 ppb	182.524 ppb	110.515 %
Concentration RSD	1.1 %	1.4 %	0.5 %	1.0 %	2.7 %	1.7 %	1.4 %	2.0 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.058 ppb	10.377 ppb	29.036 ppb	1.397 ppb	104.681 %	0.130 ppb	1.628 ppb	108.422 %	1.879 ppb
Concentration per Run 1	2.113 ppb	10.839 ppb	29.410 ppb	0.965 ppb	104.009 %	0.125 ppb	1.646 ppb	106.230 %	1.828 ppb
Concentration per Run 2	2.113 ppb	9.706 ppb	28.855 ppb	1.423 ppb	102.183 %	0.133 ppb	1.641 ppb	107.395 %	1.922 ppb
Concentration per Run 3	1.949 ppb	10.584 ppb	28.844 ppb	1.803 ppb	107.852 %	0.132 ppb	1.596 ppb	111.642 %	1.887 ppb
Concentration RSD	4.6 %	5.7 %	1.1 %	30.1 %	2.8 %	3.3 %	1.7 %	2.6 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	235.418 ppb	111.664 %	110.842 %	0.036 ppb	348.689 ppb	111.884 %
Concentration per Run 1	240.697 ppb	110.265 %	112.211 %	0.032 ppb	339.003 ppb	113.662 %
Concentration per Run 2	230.811 ppb	109.856 %	106.355 %	0.037 ppb	353.894 ppb	108.798 %
Concentration per Run 3	234.745 ppb	114.871 %	113.959 %	0.038 ppb	353.169 ppb	113.192 %
Concentration RSD	2.1 %	2.5 %	3.6 %	8.1 %	2.4 %	2.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	35	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344001-01d5 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 8:32:33 AM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.907 %	120.419 %	0.574 ppb	2,127.009 ppb	1,516.770 ppb	3,551.484 ppb	255.276 ppb	6,245.958 ppb	118.775 %
Concentration per Run 1	113.018 %	115.333 %	0.555 ppb	2,200.531 ppb	1,549.230 ppb	3,583.948 ppb	261.978 ppb	6,417.530 ppb	119.773 %
Concentration per Run 2	108.969 %	120.016 %	0.574 ppb	2,070.510 ppb	1,478.833 ppb	3,554.848 ppb	247.030 ppb	6,183.851 ppb	117.887 %
Concentration per Run 3	107.733 %	125.907 %	0.593 ppb	2,109.985 ppb	1,522.247 ppb	3,515.655 ppb	256.819 ppb	6,136.492 ppb	118.664 %
Concentration RSD	2.5 %	4.4 %	3.3 %	3.1 %	2.3 %	1.0 %	3.0 %	2.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	16.171 ppb	14.239 ppb	230.687 ppb	5,077.371 ppb	3.458 ppb	14.785 ppb	394.489 ppb	195.510 ppb	110.091 %
Concentration per Run 1	16.323 ppb	14.343 ppb	226.354 ppb	5,096.621 ppb	3.435 ppb	14.845 ppb	393.902 ppb	195.448 ppb	108.350 %
Concentration per Run 2	16.336 ppb	14.174 ppb	226.055 ppb	4,995.562 ppb	3.451 ppb	14.788 ppb	394.076 ppb	196.064 ppb	109.395 %
Concentration per Run 3	15.854 ppb	14.200 ppb	239.652 ppb	5,139.929 ppb	3.489 ppb	14.722 ppb	395.489 ppb	195.017 ppb	112.528 %
Concentration RSD	1.7 %	0.6 %	3.4 %	1.5 %	0.8 %	0.4 %	0.2 %	0.3 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.052 ppb	9.363 ppb	26.693 ppb	1.499 ppb	103.840 %	0.142 ppb	1.167 ppb	110.319 %	1.453 ppb
Concentration per Run 1	2.037 ppb	9.397 ppb	26.362 ppb	1.302 ppb	103.480 %	0.146 ppb	1.158 ppb	107.720 %	1.480 ppb
Concentration per Run 2	2.118 ppb	9.967 ppb	26.702 ppb	1.533 ppb	102.390 %	0.141 ppb	1.162 ppb	110.191 %	1.434 ppb
Concentration per Run 3	2.000 ppb	8.725 ppb	27.016 ppb	1.663 ppb	105.651 %	0.140 ppb	1.180 ppb	113.047 %	1.446 ppb
Concentration RSD	2.9 %	6.6 %	1.2 %	12.2 %	1.6 %	2.4 %	1.0 %	2.4 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	181.194 ppb	112.347 %	112.879 %	0.026 ppb	314.142 ppb	108.833 %
Concentration per Run 1	181.671 ppb	111.134 %	112.252 %	0.023 ppb	306.638 ppb	110.372 %
Concentration per Run 2	180.972 ppb	111.574 %	110.238 %	0.027 ppb	319.607 ppb	106.598 %
Concentration per Run 3	180.939 ppb	114.333 %	116.148 %	0.028 ppb	316.182 ppb	109.530 %
Concentration RSD	0.2 %	1.5 %	2.7 %	11.0 %	2.1 %	1.8 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	36	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344001-04d5 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 8:37:13 AM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.290 %	119.538 %	1.016 ppb	2,848.391 ppb	1,038.222 ppb	4,037.576 ppb	389.090 ppb	5,965.357 ppb	123.919 %
Concentration per Run 1	113.263 %	116.541 %	0.965 ppb	2,804.613 ppb	1,030.369 ppb	4,072.881 ppb	396.616 ppb	5,964.949 ppb	124.803 %
Concentration per Run 2	111.557 %	120.091 %	1.025 ppb	2,864.267 ppb	1,030.617 ppb	3,982.878 ppb	370.714 ppb	5,877.414 ppb	124.682 %
Concentration per Run 3	109.050 %	121.980 %	1.059 ppb	2,876.293 ppb	1,053.679 ppb	4,056.969 ppb	399.942 ppb	6,053.708 ppb	122.272 %
Concentration RSD	1.9 %	2.3 %	4.7 %	1.3 %	1.3 %	1.2 %	4.1 %	1.5 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.650 ppb	5.671 ppb	1,947.194 ppb	14,170.717 ppb	11.735 ppb	15.524 ppb	126.735 ppb	696.681 ppb	114.949 %
Concentration per Run 1	46.425 ppb	5.718 ppb	1,925.099 ppb	14,219.496 ppb	11.610 ppb	15.631 ppb	127.333 ppb	703.514 ppb	111.884 %
Concentration per Run 2	46.710 ppb	5.607 ppb	2,000.151 ppb	14,152.251 ppb	11.774 ppb	15.282 ppb	126.034 ppb	683.731 ppb	114.746 %
Concentration per Run 3	46.815 ppb	5.690 ppb	1,916.333 ppb	14,140.404 ppb	11.822 ppb	15.659 ppb	126.839 ppb	702.797 ppb	118.215 %
Concentration RSD	0.4 %	1.0 %	2.4 %	0.3 %	0.9 %	1.4 %	0.5 %	1.6 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.845 ppb	8.010 ppb	75.922 ppb	0.864 ppb	106.427 %	0.020 ppb	1.664 ppb	113.453 %	1.027 ppb
Concentration per Run 1	3.887 ppb	8.251 ppb	75.569 ppb	0.783 ppb	104.651 %	0.021 ppb	1.684 ppb	109.302 %	1.032 ppb
Concentration per Run 2	3.867 ppb	7.673 ppb	75.556 ppb	0.811 ppb	105.552 %	0.017 ppb	1.675 ppb	114.602 %	0.988 ppb
Concentration per Run 3	3.780 ppb	8.105 ppb	76.640 ppb	0.997 ppb	109.076 %	0.021 ppb	1.632 ppb	116.456 %	1.061 ppb
Concentration RSD	1.5 %	3.7 %	0.8 %	13.5 %	2.2 %	12.9 %	1.7 %	3.3 %	3.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	529.024 ppb	114.817 %	116.182 %	0.051 ppb	79.764 ppb	112.578 %
Concentration per Run 1	526.473 ppb	113.384 %	113.056 %	0.046 ppb	77.911 ppb	113.150 %
Concentration per Run 2	537.687 ppb	113.709 %	114.118 %	0.052 ppb	80.306 ppb	110.182 %
Concentration per Run 3	522.913 ppb	117.358 %	121.373 %	0.054 ppb	81.075 ppb	114.401 %
Concentration RSD	1.5 %	1.9 %	3.9 %	8.2 %	2.1 %	1.9 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	37	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344001-05d5 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 8:41:50 AM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.004 %	116.642 %	1.413 ppb	2,591.502 ppb	1,795.344 ppb	5,266.365 ppb	404.393 ppb	12,306.354 ppb	110.874 %
Concentration per Run 1	110.708 %	120.998 %	1.364 ppb	2,543.897 ppb	1,757.491 ppb	5,226.801 ppb	417.953 ppb	12,581.317 ppb	112.164 %
Concentration per Run 2	107.988 %	113.822 %	1.432 ppb	2,651.257 ppb	1,839.888 ppb	5,319.836 ppb	392.369 ppb	12,178.250 ppb	110.639 %
Concentration per Run 3	105.315 %	115.106 %	1.444 ppb	2,579.354 ppb	1,788.653 ppb	5,252.459 ppb	402.857 ppb	12,159.494 ppb	109.818 %
Concentration RSD	2.5 %	3.3 %	3.1 %	2.1 %	2.3 %	0.9 %	3.2 %	1.9 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	62.955 ppb	5.335 ppb	1,329.185 ppb	9,729.419 ppb	7.363 ppb	27.373 ppb	384.946 ppb	444.292 ppb	110.886 %
Concentration per Run 1	63.242 ppb	5.550 ppb	1,368.730 ppb	9,963.029 ppb	7.657 ppb	27.580 ppb	394.944 ppb	460.397 ppb	107.307 %
Concentration per Run 2	62.387 ppb	5.219 ppb	1,325.751 ppb	9,700.349 ppb	7.143 ppb	27.176 ppb	374.423 ppb	435.754 ppb	114.353 %
Concentration per Run 3	63.237 ppb	5.237 ppb	1,293.074 ppb	9,524.878 ppb	7.289 ppb	27.362 ppb	385.469 ppb	436.725 ppb	110.999 %
Concentration RSD	0.8 %	3.5 %	2.9 %	2.3 %	3.6 %	0.7 %	2.7 %	3.1 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.211 ppb	13.358 ppb	75.884 ppb	0.483 ppb	103.848 %	0.281 ppb	3.982 ppb	107.768 %	1.198 ppb
Concentration per Run 1	3.310 ppb	13.585 ppb	78.134 ppb	0.413 ppb	101.840 %	0.286 ppb	4.101 ppb	108.054 %	1.144 ppb
Concentration per Run 2	3.110 ppb	13.140 ppb	75.798 ppb	0.424 ppb	104.094 %	0.286 ppb	3.926 ppb	107.819 %	1.236 ppb
Concentration per Run 3	3.214 ppb	13.349 ppb	73.722 ppb	0.611 ppb	105.612 %	0.272 ppb	3.919 ppb	107.432 %	1.213 ppb
Concentration RSD	3.1 %	1.7 %	2.9 %	23.0 %	1.8 %	2.9 %	2.6 %	0.3 %	4.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	366.143 ppb	110.537 %	111.827 %	0.041 ppb	211.291 ppb	103.691 %
Concentration per Run 1	369.840 ppb	109.006 %	110.107 %	0.037 ppb	205.397 ppb	104.976 %
Concentration per Run 2	371.248 ppb	109.726 %	109.927 %	0.042 ppb	215.429 ppb	102.290 %
Concentration per Run 3	357.340 ppb	112.880 %	115.448 %	0.045 ppb	213.046 ppb	103.808 %
Concentration RSD	2.1 %	1.9 %	2.8 %	9.1 %	2.5 %	1.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	38	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344001-06d5 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 8:46:28 AM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.008 %	115.484 %	1.190 ppb	236.158 ppb	1,905.204 ppb	4,722.469 ppb	345.189 ppb	10,518.977 ppb	112.387 %
Concentration per Run 1	112.109 %	110.499 %	1.163 ppb	250.338 ppb	1,996.204 ppb	4,955.276 ppb	354.507 ppb	10,854.667 ppb	113.491 %
Concentration per Run 2	108.092 %	114.049 %	1.212 ppb	237.387 ppb	1,918.410 ppb	4,669.749 ppb	332.853 ppb	10,440.938 ppb	112.025 %
Concentration per Run 3	106.823 %	121.904 %	1.194 ppb	220.751 ppb	1,800.997 ppb	4,542.381 ppb	348.205 ppb	10,261.328 ppb	111.645 %
Concentration RSD	2.5 %	5.1 %	2.1 %	6.3 %	5.2 %	4.5 %	3.2 %	2.9 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.219 ppb	14.024 ppb	598.890 ppb	12,528.734 ppb	4.331 ppb	32.032 ppb	45.355 ppb	335.876 ppb	112.845 %
Concentration per Run 1	55.688 ppb	14.167 ppb	602.146 ppb	12,839.926 ppb	4.364 ppb	32.544 ppb	46.444 ppb	344.216 ppb	109.756 %
Concentration per Run 2	56.893 ppb	14.385 ppb	605.561 ppb	12,665.351 ppb	4.433 ppb	32.415 ppb	46.009 ppb	337.250 ppb	109.585 %
Concentration per Run 3	53.078 ppb	13.521 ppb	588.963 ppb	12,080.926 ppb	4.196 ppb	31.135 ppb	43.612 ppb	326.162 ppb	119.194 %
Concentration RSD	3.5 %	3.2 %	1.5 %	3.2 %	2.8 %	2.4 %	3.4 %	2.7 %	4.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.320 ppb	11.963 ppb	58.425 ppb	0.286 ppb	103.537 %	0.033 ppb	2.153 ppb	110.467 %	0.769 ppb
Concentration per Run 1	3.531 ppb	12.403 ppb	60.891 ppb	0.222 ppb	99.694 %	0.033 ppb	2.184 ppb	108.393 %	0.811 ppb
Concentration per Run 2	3.284 ppb	12.053 ppb	58.340 ppb	0.267 ppb	101.720 %	0.032 ppb	2.137 ppb	109.442 %	0.745 ppb
Concentration per Run 3	3.146 ppb	11.435 ppb	56.043 ppb	0.370 ppb	109.198 %	0.033 ppb	2.137 ppb	113.565 %	0.751 ppb
Concentration RSD	5.9 %	4.1 %	4.2 %	26.5 %	4.8 %	3.3 %	1.3 %	2.5 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	633.377 ppb	113.383 %	112.777 %	0.029 ppb	113.720 ppb	104.432 %
Concentration per Run 1	649.126 ppb	109.762 %	108.321 %	0.024 ppb	108.570 ppb	108.647 %
Concentration per Run 2	622.644 ppb	112.777 %	113.861 %	0.032 ppb	115.035 ppb	100.269 %
Concentration per Run 3	628.361 ppb	117.609 %	116.148 %	0.030 ppb	117.556 ppb	104.381 %
Concentration RSD	2.2 %	3.5 %	3.6 %	14.6 %	4.1 %	4.0 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	39	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xL2344255-06d10 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 8:51:06 AM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	120.047 %	126.512 %	0.439 ppb	181.493 ppb	1,099.997 ppb	4,684.918 ppb	190.941 ppb	4,559.082 ppb	135.995 %
Concentration per Run 1	122.471 %	120.696 %	0.428 ppb	190.943 ppb	1,164.755 ppb	4,855.584 ppb	206.879 ppb	4,828.536 ppb	135.628 %
Concentration per Run 2	119.833 %	129.306 %	0.435 ppb	173.112 ppb	1,051.835 ppb	4,639.476 ppb	183.510 ppb	4,557.524 ppb	136.730 %
Concentration per Run 3	117.838 %	129.533 %	0.455 ppb	180.424 ppb	1,083.400 ppb	4,559.694 ppb	182.436 ppb	4,291.186 ppb	135.627 %
Concentration RSD	1.9 %	4.0 %	3.3 %	4.9 %	5.3 %	3.3 %	7.2 %	5.9 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	233.424 ppb	32.703 ppb	427.926 ppb	7,954.543 ppb	4.607 ppb	62.513 ppb	11,206.586 ppb	1,843.573 ppb	122.477 %
Concentration per Run 1	242.277 ppb	34.517 ppb	451.419 ppb	8,304.686 ppb	4.914 ppb	65.989 ppb	11,722.774 ppb	1,814.567 ppb	116.444 %
Concentration per Run 2	228.360 ppb	31.873 ppb	417.490 ppb	7,678.076 ppb	4.422 ppb	59.727 ppb	10,727.827 ppb	1,841.454 ppb	127.473 %
Concentration per Run 3	229.636 ppb	31.718 ppb	414.868 ppb	7,880.867 ppb	4.485 ppb	61.822 ppb	11,169.156 ppb	1,874.696 ppb	123.514 %
Concentration RSD	3.3 %	4.8 %	4.8 %	4.0 %	5.8 %	5.1 %	4.4 %	1.6 %	4.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.638 ppb	6.469 ppb	18.896 ppb	0.978 ppb	114.710 %	1.289 ppb	4.263 ppb	119.053 %	1.369 ppb
Concentration per Run 1	3.751 ppb	6.160 ppb	19.885 ppb	0.957 ppb	109.077 %	1.337 ppb	4.422 ppb	113.883 %	1.391 ppb
Concentration per Run 2	3.529 ppb	6.056 ppb	18.563 ppb	0.952 ppb	116.431 %	1.257 ppb	4.198 ppb	121.977 %	1.364 ppb
Concentration per Run 3	3.634 ppb	7.191 ppb	18.241 ppb	1.025 ppb	118.621 %	1.274 ppb	4.169 ppb	121.298 %	1.354 ppb
Concentration RSD	3.0 %	9.7 %	4.6 %	4.2 %	4.4 %	3.3 %	3.2 %	3.8 %	1.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	142.179 ppb	117.320 %	117.291 %	0.023 ppb	1,125.174 ppb	117.336 %
Concentration per Run 1	148.017 ppb	114.109 %	113.068 %	0.018 ppb	1,012.441 ppb	131.663 %
Concentration per Run 2	140.550 ppb	118.808 %	120.165 %	0.025 ppb	1,191.395 ppb	107.543 %
Concentration per Run 3	137.969 ppb	119.042 %	118.641 %	0.024 ppb	1,171.687 ppb	112.801 %
Concentration RSD	3.7 %	2.4 %	3.2 %	17.0 %	8.7 %	10.8 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	40	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/5/2023 8:55:45 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.050 %	120.092 %	61.967 ppb	6,009.342 ppb	6,161.917 ppb	64.346 ppb	6,336.563 ppb	6,333.858 ppb	128.093 %
Concentration per Run 1	107.014 %	123.491 %	61.764 ppb	6,171.233 ppb	6,450.591 ppb	68.408 ppb	6,945.023 ppb	6,867.270 ppb	128.384 %
Concentration per Run 2	104.472 %	117.372 %	62.150 ppb	5,983.837 ppb	5,988.348 ppb	64.110 ppb	6,206.692 ppb	6,193.120 ppb	127.031 %
Concentration per Run 3	103.665 %	119.412 %	61.989 ppb	5,872.955 ppb	6,046.811 ppb	60.520 ppb	5,857.973 ppb	5,941.183 ppb	128.864 %
Recovery Percentage 1			103.279 %	100.156 %	102.699 %	107.243 %	105.609 %	105.564 %	
Concentration RSD	1.7 %	2.6 %	0.3 %	2.5 %	4.1 %	6.1 %	8.8 %	7.6 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.622 ppb	57.901 ppb	57.635 ppb	5,870.604 ppb	58.164 ppb	58.260 ppb	58.416 ppb	61.083 ppb	112.954 %
Concentration per Run 1	60.258 ppb	58.862 ppb	59.674 ppb	5,951.624 ppb	58.036 ppb	58.140 ppb	57.858 ppb	61.489 ppb	120.491 %
Concentration per Run 2	58.436 ppb	57.196 ppb	56.618 ppb	5,706.696 ppb	56.837 ppb	56.696 ppb	56.490 ppb	59.619 ppb	112.522 %
Concentration per Run 3	57.172 ppb	57.643 ppb	56.613 ppb	5,953.491 ppb	59.618 ppb	59.946 ppb	60.900 ppb	62.140 ppb	105.849 %
Recovery Percentage 1	97.703 %	96.501 %	96.058 %	97.843 %	96.940 %	97.101 %	97.360 %	101.804 %	
Concentration RSD	2.6 %	1.5 %	3.1 %	2.4 %	2.4 %	2.8 %	3.9 %	2.1 %	6.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.593 ppb	64.408 ppb	55.306 ppb	57.887 ppb	106.542 %	59.157 ppb	59.024 ppb	111.186 %	59.385 ppb
Concentration per Run 1	60.468 ppb	68.004 ppb	59.264 ppb	58.943 ppb	111.865 %	57.925 ppb	57.979 ppb	121.651 %	58.879 ppb
Concentration per Run 2	58.595 ppb	64.040 ppb	54.132 ppb	57.165 ppb	103.832 %	59.314 ppb	59.742 ppb	109.340 %	59.412 ppb
Concentration per Run 3	59.717 ppb	61.179 ppb	52.520 ppb	57.552 ppb	103.930 %	60.231 ppb	59.352 ppb	102.567 %	59.863 ppb
Recovery Percentage 1	99.322 %	107.346 %	92.176 %	96.478 %		98.595 %	98.374 %		98.975 %
Concentration RSD	1.6 %	5.3 %	6.4 %	1.6 %	4.3 %	2.0 %	1.6 %	8.7 %	0.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.080 ppb	112.279 %	113.433 %	56.519 ppb	57.640 ppb	111.561 %
Concentration per Run 1	59.304 ppb	118.288 %	121.701 %	53.487 ppb	54.522 ppb	119.254 %
Concentration per Run 2	62.701 ppb	110.073 %	111.823 %	56.678 ppb	58.779 ppb	108.888 %
Concentration per Run 3	58.236 ppb	108.474 %	106.774 %	59.393 ppb	59.620 ppb	106.541 %
Recovery Percentage 1	100.133 %			94.199 %	96.067 %	
Concentration RSD	3.9 %	4.7 %	6.7 %	5.2 %	4.7 %	6.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 41
Analysis label: CCB
Analysis started at: 9/5/2023 9:00:27 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.175 %	115.132 %	0.005 ppb	2.901 ppb	-0.121 ppb	-0.305 ppb	0.503 ppb	0.939 ppb	108.983 %
Concentration per Run 1	113.423 %	114.124 %	0.009 ppb	4.335 ppb	-0.068 ppb	-0.401 ppb	3.309 ppb	0.186 ppb	110.429 %
Concentration per Run 2	110.912 %	112.085 %	0.005 ppb	2.796 ppb	0.023 ppb	-0.296 ppb	3.236 ppb	-0.416 ppb	108.199 %
Concentration per Run 3	109.189 %	119.185 %	0.002 ppb	1.574 ppb	-0.316 ppb	-0.218 ppb	-5.035 ppb	3.047 ppb	108.321 %
Recovery Percentage 1			1.085 %	2.901 %	-0.172 %	-3.050 %	0.503 %	0.939 %	
Concentration RSD	1.9 %	3.2 %	57.9 %	47.7 %	145.6 %	30.0 %	952.8 %	197.1 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.018 ppb	-0.006 ppb	-0.023 ppb	16.035 ppb	0.004 ppb	0.015 ppb	0.041 ppb	-0.117 ppb	110.413 %
Concentration per Run 1	-0.017 ppb	-0.002 ppb	0.024 ppb	16.698 ppb	0.007 ppb	0.016 ppb	0.050 ppb	-0.100 ppb	110.534 %
Concentration per Run 2	-0.024 ppb	-0.013 ppb	-0.042 ppb	15.504 ppb	0.001 ppb	0.007 ppb	0.035 ppb	-0.142 ppb	109.473 %
Concentration per Run 3	-0.014 ppb	-0.004 ppb	-0.049 ppb	15.902 ppb	0.004 ppb	0.021 ppb	0.038 ppb	-0.108 ppb	111.233 %
Recovery Percentage 1	-0.368 %	-0.606 %	-2.252 %	32.070 %	0.824 %	0.728 %	4.083 %	-2.334 %	
Concentration RSD	30.0 %	97.1 %	178.2 %	3.8 %	72.2 %	49.3 %	20.4 %	18.9 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.157 ppb	0.732 ppb	0.009 ppb	1.487 ppb	107.172 %	0.000 ppb	0.003 ppb	109.656 %	0.108 ppb
Concentration per Run 1	0.141 ppb	0.563 ppb	0.009 ppb	1.214 ppb	103.338 %	0.002 ppb	0.005 ppb	112.138 %	0.076 ppb
Concentration per Run 2	0.162 ppb	0.823 ppb	0.008 ppb	1.516 ppb	109.082 %	-0.001 ppb	0.001 ppb	110.099 %	0.130 ppb
Concentration per Run 3	0.169 ppb	0.810 ppb	0.009 ppb	1.731 ppb	109.097 %	-0.001 ppb	0.003 ppb	106.731 %	0.117 ppb
Recovery Percentage 1	31.413 %	14.642 %	0.088 %	74.362 %		-0.034 %	1.597 %		2.693 %
Concentration RSD	9.3 %	20.0 %	3.5 %	17.5 %	3.1 %	1,296.1 %	61.7 %	2.5 %	26.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.024 ppb	107.288 %	110.168 %	0.358 ppb	0.032 ppb	104.544 %
Concentration per Run 1	0.005 ppb	106.966 %	108.176 %	0.401 ppb	0.034 ppb	114.161 %
Concentration per Run 2	0.040 ppb	107.394 %	112.655 %	0.373 ppb	0.031 ppb	101.381 %
Concentration per Run 3	0.026 ppb	107.505 %	109.674 %	0.300 ppb	0.031 ppb	98.089 %
Recovery Percentage 1	4.738 %			35.794 %	3.203 %	
Concentration RSD	74.4 %	0.3 %	2.1 %	14.6 %	5.4 %	8.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 42
Analysis label: L2344001-07d5 A2-SEM
Analysis started at: 9/5/2023 9:14:34 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 19
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	113.718 %	128.853 %	1.010 ppb	645.503 ppb	2,433.487 ppb	7,862.368 ppb	586.557 ppb	18,248.038 ppb	145.072 %
Concentration per Run 1	116.815 %	128.173 %	0.983 ppb	638.213 ppb	2,396.778 ppb	7,926.530 ppb	591.502 ppb	17,885.338 ppb	146.723 %
Concentration per Run 2	113.650 %	123.944 %	1.015 ppb	659.384 ppb	2,483.806 ppb	7,784.628 ppb	587.592 ppb	18,441.632 ppb	144.643 %
Concentration per Run 3	110.687 %	134.443 %	1.033 ppb	638.911 ppb	2,419.877 ppb	7,875.946 ppb	580.576 ppb	18,417.143 ppb	143.851 %
Concentration RSD	2.7 %	4.1 %	2.5 %	1.9 %	1.9 %	0.9 %	0.9 %	1.7 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.365 ppb	29.731 ppb	7,198.679 ppb	24,325.552 ppb	13.255 ppb	96.857 ppb	439.171 ppb	589.718 ppb	123.321 %
Concentration per Run 1	55.952 ppb	29.795 ppb	7,292.299 ppb	24,251.376 ppb	13.164 ppb	96.149 ppb	416.838 ppb	580.422 ppb	125.270 %
Concentration per Run 2	57.817 ppb	29.859 ppb	7,065.990 ppb	24,586.685 ppb	13.532 ppb	99.439 ppb	439.070 ppb	597.302 ppb	117.259 %
Concentration per Run 3	55.327 ppb	29.540 ppb	7,237.747 ppb	24,138.595 ppb	13.068 ppb	94.983 ppb	461.606 ppb	591.431 ppb	127.432 %
Concentration RSD	2.3 %	0.6 %	1.6 %	1.0 %	1.8 %	2.4 %	5.1 %	1.5 %	4.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	9.187 ppb	14.728 ppb	113.274 ppb	1.421 ppb	113.701 %	0.874 ppb	5.428 ppb	124.835 %	0.885 ppb
Concentration per Run 1	8.925 ppb	13.865 ppb	114.203 ppb	1.340 ppb	112.417 %	0.859 ppb	5.272 ppb	131.267 %	0.858 ppb
Concentration per Run 2	9.295 ppb	14.911 ppb	110.811 ppb	1.397 ppb	110.485 %	0.899 ppb	5.567 ppb	116.181 %	0.883 ppb
Concentration per Run 3	9.342 ppb	15.407 ppb	114.808 ppb	1.526 ppb	118.203 %	0.863 ppb	5.445 ppb	127.056 %	0.913 ppb
Concentration RSD	2.5 %	5.3 %	1.9 %	6.7 %	3.5 %	2.6 %	2.7 %	6.2 %	3.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	848.734 ppb	126.266 %	123.774 %	0.055 ppb	142.531 ppb	162.808 %
Concentration per Run 1	824.336 ppb	128.027 %	122.643 %	0.045 ppb	109.758 ppb	206.967 %
Concentration per Run 2	850.000 ppb	122.109 %	119.514 %	0.061 ppb	146.569 ppb	150.128 %
Concentration per Run 3	871.867 ppb	128.663 %	129.166 %	0.060 ppb	171.265 ppb	131.330 %
Concentration RSD	2.8 %	2.9 %	4.0 %	16.8 %	21.7 %	24.2 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	43	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344001-08d5 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 9:19:12 AM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	109.747 %	125.354 %	1.736 ppb	743.996 ppb	3,450.898 ppb	6,942.823 ppb	448.987 ppb	26,577.220 ppb	138.091 %
Concentration per Run 1	112.760 %	126.587 %	1.713 ppb	737.484 ppb	3,437.512 ppb	6,800.470 ppb	436.696 ppb	26,105.521 ppb	139.726 %
Concentration per Run 2	109.450 %	121.904 %	1.745 ppb	737.933 ppb	3,428.328 ppb	6,702.788 ppb	434.445 ppb	26,943.491 ppb	137.803 %
Concentration per Run 3	107.030 %	127.569 %	1.749 ppb	756.570 ppb	3,486.854 ppb	7,325.211 ppb	475.820 ppb	26,682.650 ppb	136.745 %
Concentration RSD	2.6 %	2.4 %	1.1 %	1.5 %	0.9 %	4.8 %	5.2 %	1.6 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	98.887 ppb	44.597 ppb	13,802.811 ppb	48,521.559 ppb	24.490 ppb	167.168 ppb	591.216 ppb	854.716 ppb	122.455 %
Concentration per Run 1	99.983 ppb	44.632 ppb	13,914.272 ppb	48,384.014 ppb	24.225 ppb	164.722 ppb	583.263 ppb	853.691 ppb	119.655 %
Concentration per Run 2	98.498 ppb	44.751 ppb	13,892.958 ppb	49,584.043 ppb	25.027 ppb	172.146 ppb	615.028 ppb	865.250 ppb	116.850 %
Concentration per Run 3	98.181 ppb	44.409 ppb	13,601.204 ppb	47,596.620 ppb	24.218 ppb	164.636 ppb	575.358 ppb	845.205 ppb	130.859 %
Concentration RSD	1.0 %	0.4 %	1.3 %	2.1 %	1.9 %	2.6 %	3.6 %	1.2 %	6.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	16.024 ppb	23.245 ppb	167.012 ppb	0.837 ppb	110.611 %	1.435 ppb	8.876 ppb	119.661 %	0.856 ppb
Concentration per Run 1	15.544 ppb	22.751 ppb	170.281 ppb	0.756 ppb	108.717 %	1.394 ppb	8.671 ppb	120.701 %	0.859 ppb
Concentration per Run 2	16.390 ppb	24.384 ppb	162.515 ppb	0.832 ppb	106.459 %	1.482 ppb	8.961 ppb	113.184 %	0.858 ppb
Concentration per Run 3	16.138 ppb	22.600 ppb	168.241 ppb	0.922 ppb	116.656 %	1.430 ppb	8.995 ppb	125.097 %	0.851 ppb
Concentration RSD	2.7 %	4.3 %	2.4 %	9.9 %	4.8 %	3.1 %	2.0 %	5.0 %	0.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1,340.911 ppb	122.041 %	118.231 %	0.060 ppb	311.366 ppb	119.083 %
Concentration per Run 1	1,370.154 ppb	119.087 %	113.247 %	0.053 ppb	302.933 ppb	120.836 %
Concentration per Run 2	1,312.283 ppb	118.558 %	113.649 %	0.065 ppb	317.204 ppb	113.935 %
Concentration per Run 3	1,340.295 ppb	128.478 %	127.798 %	0.063 ppb	313.960 ppb	122.478 %
Concentration RSD	2.2 %	4.6 %	7.0 %	11.3 %	2.4 %	3.8 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	44	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344001-09d5 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 9:23:51 AM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.880 %	119.009 %	1.339 ppb	690.124 ppb	2,682.245 ppb	4,896.549 ppb	323.529 ppb	13,162.978 ppb	115.138 %
Concentration per Run 1	106.918 %	113.822 %	1.336 ppb	693.503 ppb	2,659.046 ppb	4,702.241 ppb	325.119 ppb	13,039.619 ppb	116.347 %
Concentration per Run 2	105.282 %	120.998 %	1.342 ppb	678.796 ppb	2,668.341 ppb	4,843.975 ppb	319.219 ppb	13,354.497 ppb	115.117 %
Concentration per Run 3	102.438 %	122.206 %	1.339 ppb	698.074 ppb	2,719.347 ppb	5,143.431 ppb	326.248 ppb	13,094.817 ppb	113.949 %
Concentration RSD	2.2 %	3.8 %	0.2 %	1.5 %	1.2 %	4.6 %	1.2 %	1.3 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.698 ppb	18.143 ppb	1,456.720 ppb	10,481.782 ppb	8.441 ppb	70.810 ppb	411.436 ppb	294.123 ppb	114.547 %
Concentration per Run 1	51.124 ppb	18.428 ppb	1,423.381 ppb	10,497.995 ppb	8.658 ppb	71.111 ppb	427.634 ppb	302.081 ppb	105.982 %
Concentration per Run 2	50.891 ppb	18.294 ppb	1,465.343 ppb	10,447.870 ppb	8.374 ppb	70.639 ppb	406.601 ppb	288.844 ppb	116.683 %
Concentration per Run 3	50.078 ppb	17.705 ppb	1,481.436 ppb	10,499.483 ppb	8.291 ppb	70.679 ppb	400.073 ppb	291.444 ppb	120.975 %
Concentration RSD	1.1 %	2.1 %	2.1 %	0.3 %	2.3 %	0.4 %	3.5 %	2.4 %	6.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.611 ppb	13.728 ppb	101.373 ppb	0.358 ppb	106.180 %	0.990 ppb	4.991 ppb	110.866 %	0.767 ppb
Concentration per Run 1	3.557 ppb	14.919 ppb	100.558 ppb	0.270 ppb	101.006 %	1.012 ppb	5.139 ppb	101.247 %	0.754 ppb
Concentration per Run 2	3.695 ppb	12.470 ppb	101.398 ppb	0.375 ppb	106.051 %	0.979 ppb	4.855 ppb	114.418 %	0.758 ppb
Concentration per Run 3	3.580 ppb	13.795 ppb	102.162 ppb	0.429 ppb	111.482 %	0.978 ppb	4.979 ppb	116.934 %	0.788 ppb
Concentration RSD	2.0 %	8.9 %	0.8 %	22.5 %	4.9 %	2.0 %	2.9 %	7.6 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	739.893 ppb	114.330 %	114.196 %	0.039 ppb	224.230 ppb	107.862 %
Concentration per Run 1	741.058 ppb	107.740 %	105.130 %	0.033 ppb	217.802 ppb	106.687 %
Concentration per Run 2	724.406 ppb	115.619 %	115.747 %	0.042 ppb	229.450 ppb	105.426 %
Concentration per Run 3	754.217 ppb	119.630 %	121.711 %	0.041 ppb	225.438 ppb	111.474 %
Concentration RSD	2.0 %	5.3 %	7.4 %	11.5 %	2.6 %	3.0 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	45	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2344255-09d5 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 9:28:29 AM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.587 %	118.556 %	1.145 ppb	697.349 ppb	1,977.867 ppb	3,189.478 ppb	293.919 ppb	46,366.449 ppb	112.903 %
Concentration per Run 1	103.380 %	112.161 %	1.131 ppb	708.382 ppb	2,004.312 ppb	3,108.334 ppb	289.675 ppb	46,359.747 ppb	113.866 %
Concentration per Run 2	99.950 %	119.563 %	1.155 ppb	696.539 ppb	1,958.949 ppb	3,194.068 ppb	301.657 ppb	47,540.491 ppb	112.465 %
Concentration per Run 3	98.433 %	123.944 %	1.147 ppb	687.127 ppb	1,970.341 ppb	3,266.033 ppb	290.424 ppb	45,199.111 ppb	112.376 %
Concentration RSD	2.5 %	5.0 %	1.1 %	1.5 %	1.2 %	2.5 %	2.3 %	2.5 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	28.331 ppb	14.967 ppb	3,761.352 ppb	30,267.347 ppb	15.372 ppb	159.806 ppb	59.742 ppb	354.023 ppb	110.493 %
Concentration per Run 1	28.406 ppb	15.050 ppb	3,659.760 ppb	30,082.506 ppb	15.705 ppb	164.055 ppb	61.988 ppb	361.012 ppb	102.120 %
Concentration per Run 2	28.329 ppb	15.063 ppb	3,763.980 ppb	30,219.285 ppb	15.176 ppb	158.211 ppb	58.446 ppb	347.711 ppb	113.089 %
Concentration per Run 3	28.257 ppb	14.789 ppb	3,860.317 ppb	30,500.251 ppb	15.234 ppb	157.152 ppb	58.793 ppb	353.345 ppb	116.269 %
Concentration RSD	0.3 %	1.0 %	2.7 %	0.7 %	1.9 %	2.3 %	3.3 %	1.9 %	6.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	7.324 ppb	14.549 ppb	112.040 ppb	0.287 ppb	101.866 %	0.171 ppb	1.156 ppb	107.460 %	0.618 ppb
Concentration per Run 1	7.429 ppb	14.971 ppb	110.541 ppb	0.252 ppb	96.566 %	0.170 ppb	1.218 ppb	97.865 %	0.616 ppb
Concentration per Run 2	7.328 ppb	13.457 ppb	112.627 ppb	0.275 ppb	102.836 %	0.163 ppb	1.140 ppb	111.316 %	0.615 ppb
Concentration per Run 3	7.215 ppb	15.220 ppb	112.952 ppb	0.335 ppb	106.195 %	0.180 ppb	1.108 ppb	113.199 %	0.624 ppb
Concentration RSD	1.5 %	6.6 %	1.2 %	14.9 %	4.8 %	5.0 %	4.9 %	7.8 %	0.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	771.568 ppb	112.582 %	110.776 %	0.033 ppb	82.270 ppb	102.386 %
Concentration per Run 1	770.219 ppb	104.947 %	102.969 %	0.029 ppb	80.422 ppb	100.205 %
Concentration per Run 2	759.196 ppb	114.298 %	111.058 %	0.033 ppb	83.170 ppb	101.556 %
Concentration per Run 3	785.290 ppb	118.501 %	118.301 %	0.037 ppb	83.218 ppb	105.397 %
Concentration RSD	1.7 %	6.2 %	6.9 %	12.0 %	1.9 %	2.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	46	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348473-10 6020TL	Rack	1		
Analysis started at:	9/5/2023 9:33:08 AM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.348 %	132.202 %	0.000 ppb	271,050.787 ppb	38,253.489 ppb	5.857 ppb	42,097.705 ppb	219,188.910 ppb	127.626 %
Concentration per Run 1	112.087 %	127.116 %	0.002 ppb	264,781.595 ppb	36,617.485 ppb	4.754 ppb	40,304.606 ppb	209,171.604 ppb	129.304 %
Concentration per Run 2	106.390 %	129.835 %	0.001 ppb	275,155.410 ppb	39,246.459 ppb	7.096 ppb	42,456.399 ppb	222,672.030 ppb	126.532 %
Concentration per Run 3	103.566 %	139.655 %	-0.003 ppb	273,215.356 ppb	38,896.522 ppb	5.723 ppb	43,532.112 ppb	225,723.097 ppb	127.042 %
Concentration RSD	4.0 %	5.0 %	3,817.4 %	2.0 %	3.7 %	20.1 %	3.9 %	4.0 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	39.548 ppb	1.204 ppb	9.501 ppb	166.729 ppb	0.282 ppb	12.691 ppb	20.443 ppb	787.496 ppb	105.591 %
Concentration per Run 1	39.006 ppb	1.187 ppb	9.428 ppb	164.043 ppb	0.286 ppb	13.055 ppb	20.901 ppb	779.669 ppb	99.366 %
Concentration per Run 2	39.569 ppb	1.134 ppb	9.625 ppb	167.697 ppb	0.276 ppb	12.772 ppb	19.828 ppb	784.936 ppb	109.843 %
Concentration per Run 3	40.067 ppb	1.291 ppb	9.451 ppb	168.447 ppb	0.283 ppb	12.245 ppb	20.601 ppb	797.883 ppb	107.565 %
Concentration RSD	1.3 %	6.6 %	1.1 %	1.4 %	1.8 %	3.2 %	2.7 %	1.2 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.676 ppb	34.571 ppb	1,262.792 ppb	44.849 ppb	95.010 %	-0.001 ppb	1.622 ppb	104.431 %	0.828 ppb
Concentration per Run 1	2.496 ppb	33.293 ppb	1,223.560 ppb	45.559 ppb	88.352 %	-0.002 ppb	1.614 ppb	96.121 %	0.844 ppb
Concentration per Run 2	2.595 ppb	34.077 ppb	1,262.207 ppb	44.332 ppb	96.721 %	-0.002 ppb	1.637 ppb	108.241 %	0.803 ppb
Concentration per Run 3	2.937 ppb	36.344 ppb	1,302.609 ppb	44.656 ppb	99.957 %	0.000 ppb	1.617 ppb	108.930 %	0.836 ppb
Concentration RSD	8.7 %	4.6 %	3.1 %	1.4 %	6.3 %	76.6 %	0.8 %	6.9 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	70.870 ppb	106.287 %	107.961 %	0.194 ppb	0.326 ppb	90.993 %
Concentration per Run 1	69.786 ppb	100.300 %	99.180 %	0.180 ppb	0.315 ppb	91.893 %
Concentration per Run 2	69.980 ppb	108.018 %	109.865 %	0.200 ppb	0.329 ppb	90.102 %
Concentration per Run 3	72.845 ppb	110.543 %	114.839 %	0.201 ppb	0.335 ppb	90.985 %
Concentration RSD	2.4 %	5.0 %	7.4 %	6.2 %	3.2 %	1.0 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 47
Analysis label: L2344255-06d20 A2-SEM
Analysis started at: 9/5/2023 9:37:48 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 25
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	117.641 %	140.234 %	0.208 ppb	91.062 ppb	521.965 ppb	2,243.853 ppb	93.986 ppb	2,162.304 ppb	146.888 %
Concentration per Run 1	120.544 %	131.497 %	0.203 ppb	89.824 ppb	513.297 ppb	2,137.268 ppb	91.647 ppb	2,168.919 ppb	148.071 %
Concentration per Run 2	117.100 %	142.525 %	0.205 ppb	92.618 ppb	517.176 ppb	2,244.752 ppb	94.063 ppb	2,107.098 ppb	145.491 %
Concentration per Run 3	115.281 %	146.679 %	0.216 ppb	90.745 ppb	535.423 ppb	2,349.538 ppb	96.249 ppb	2,210.897 ppb	147.102 %
Concentration RSD	2.3 %	5.6 %	3.3 %	1.6 %	2.3 %	4.7 %	2.4 %	2.4 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	110.830 ppb	15.515 ppb	207.282 ppb	3,890.116 ppb	2.232 ppb	30.824 ppb	5,488.633 ppb	854.537 ppb	129.688 %
Concentration per Run 1	112.098 ppb	15.781 ppb	204.454 ppb	3,879.515 ppb	2.243 ppb	31.518 ppb	5,714.162 ppb	869.487 ppb	115.398 %
Concentration per Run 2	109.815 ppb	15.509 ppb	210.061 ppb	3,903.535 ppb	2.273 ppb	30.618 ppb	5,424.598 ppb	855.152 ppb	131.197 %
Concentration per Run 3	110.577 ppb	15.254 ppb	207.333 ppb	3,887.299 ppb	2.181 ppb	30.336 ppb	5,327.138 ppb	838.973 ppb	142.470 %
Concentration RSD	1.0 %	1.7 %	1.4 %	0.3 %	2.1 %	2.0 %	3.7 %	1.8 %	10.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.766 ppb	3.348 ppb	9.024 ppb	1.764 ppb	122.888 %	0.633 ppb	2.067 ppb	126.901 %	0.574 ppb
Concentration per Run 1	1.789 ppb	3.259 ppb	8.906 ppb	1.469 ppb	114.671 %	0.642 ppb	2.092 ppb	114.047 %	0.580 ppb
Concentration per Run 2	1.750 ppb	3.546 ppb	9.121 ppb	1.850 ppb	124.513 %	0.636 ppb	2.085 ppb	127.784 %	0.570 ppb
Concentration per Run 3	1.758 ppb	3.240 ppb	9.046 ppb	1.972 ppb	129.479 %	0.622 ppb	2.023 ppb	138.872 %	0.573 ppb
Concentration RSD	1.2 %	5.1 %	1.2 %	14.9 %	6.1 %	1.6 %	1.8 %	9.8 %	0.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	65.777 ppb	127.659 %	123.882 %	0.015 ppb	526.976 ppb	126.322 %
Concentration per Run 1	62.359 ppb	126.861 %	116.129 %	0.012 ppb	514.197 ppb	124.179 %
Concentration per Run 2	67.735 ppb	124.934 %	123.135 %	0.016 ppb	531.541 ppb	125.177 %
Concentration per Run 3	67.237 ppb	131.183 %	132.380 %	0.016 ppb	535.191 ppb	129.611 %
Concentration RSD	4.5 %	2.5 %	6.6 %	14.9 %	2.1 %	2.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	48	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1823522-3d10 SPLP-6020T	Rack	1		
Analysis started at:	9/5/2023 9:42:24 AM	Vial	29		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.387 %	123.742 %	5.204 ppb	1,214.109 ppb	1,073.076 ppb	272.078 ppb	1,387.447 ppb	43,601.292 ppb	121.474 %
Concentration per Run 1	110.492 %	115.711 %	5.180 ppb	1,220.977 ppb	1,085.861 ppb	268.525 ppb	1,422.078 ppb	44,434.917 ppb	121.244 %
Concentration per Run 2	108.183 %	120.847 %	5.171 ppb	1,255.728 ppb	1,112.213 ppb	282.683 ppb	1,374.985 ppb	43,079.873 ppb	121.509 %
Concentration per Run 3	106.488 %	134.669 %	5.260 ppb	1,165.621 ppb	1,021.155 ppb	265.027 ppb	1,365.279 ppb	43,289.086 ppb	121.669 %
Concentration RSD	1.9 %	7.9 %	0.9 %	3.7 %	4.4 %	3.4 %	2.2 %	1.7 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.847 ppb	26.592 ppb	50.276 ppb	136.086 ppb	49.615 ppb	49.736 ppb	24.879 ppb	49.794 ppb	114.237 %
Concentration per Run 1	52.036 ppb	27.564 ppb	49.238 ppb	136.752 ppb	52.199 ppb	52.288 ppb	26.569 ppb	52.481 ppb	103.233 %
Concentration per Run 2	51.443 ppb	26.561 ppb	51.713 ppb	138.025 ppb	49.097 ppb	49.370 ppb	24.424 ppb	49.325 ppb	115.154 %
Concentration per Run 3	49.062 ppb	25.650 ppb	49.878 ppb	133.480 ppb	47.549 ppb	47.551 ppb	23.645 ppb	47.576 ppb	124.325 %
Concentration RSD	3.1 %	3.6 %	2.6 %	1.7 %	4.8 %	4.8 %	6.1 %	5.0 %	9.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.440 ppb	11.722 ppb	421.114 ppb	102.177 ppb	106.921 %	5.288 ppb	5.376 ppb	112.876 %	48.637 ppb
Concentration per Run 1	12.921 ppb	12.101 ppb	427.123 ppb	106.082 ppb	99.662 %	5.488 ppb	5.487 ppb	101.247 %	52.136 ppb
Concentration per Run 2	12.448 ppb	11.467 ppb	421.839 ppb	100.917 ppb	108.012 %	5.199 ppb	5.302 ppb	115.624 %	47.284 ppb
Concentration per Run 3	11.951 ppb	11.600 ppb	414.382 ppb	99.532 ppb	113.088 %	5.176 ppb	5.340 ppb	121.756 %	46.492 ppb
Concentration RSD	3.9 %	2.9 %	1.5 %	3.4 %	6.3 %	3.3 %	1.8 %	9.3 %	6.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	225.842 ppb	115.334 %	115.985 %	11.146 ppb	57.733 ppb	103.363 %
Concentration per Run 1	229.470 ppb	106.776 %	105.906 %	11.268 ppb	58.146 ppb	100.149 %
Concentration per Run 2	223.143 ppb	115.857 %	119.344 %	11.083 ppb	57.983 ppb	103.418 %
Concentration per Run 3	224.914 ppb	123.368 %	122.704 %	11.086 ppb	57.070 ppb	106.524 %
Concentration RSD	1.4 %	7.2 %	7.7 %	1.0 %	1.0 %	3.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	49	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1823522-4d10 SPLP-6020T	Rack	1		
Analysis started at:	9/5/2023 9:47:02 AM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.202 %	143.054 %	0.001 ppb	170.875 ppb	6.153 ppb	54.474 ppb	239.682 ppb	40,736.731 ppb	135.197 %
Concentration per Run 1	117.127 %	145.093 %	0.004 ppb	165.781 ppb	5.786 ppb	53.832 ppb	226.283 ppb	39,021.949 ppb	137.571 %
Concentration per Run 2	114.845 %	136.482 %	0.000 ppb	176.512 ppb	5.831 ppb	56.258 ppb	247.583 ppb	41,559.392 ppb	135.228 %
Concentration per Run 3	110.635 %	147.586 %	0.000 ppb	170.332 ppb	6.844 ppb	53.332 ppb	245.180 ppb	41,628.851 ppb	132.792 %
Concentration RSD	2.9 %	4.1 %	175.1 %	3.2 %	9.7 %	2.9 %	4.9 %	3.6 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.008 ppb	6.117 ppb	0.023 ppb	11.014 ppb	0.023 ppb	0.024 ppb	0.038 ppb	0.978 ppb	127.057 %
Concentration per Run 1	0.013 ppb	6.000 ppb	0.011 ppb	10.497 ppb	0.021 ppb	0.025 ppb	0.022 ppb	0.949 ppb	123.858 %
Concentration per Run 2	0.009 ppb	6.100 ppb	0.032 ppb	10.180 ppb	0.025 ppb	0.025 ppb	0.048 ppb	1.004 ppb	130.404 %
Concentration per Run 3	0.002 ppb	6.253 ppb	0.026 ppb	12.364 ppb	0.024 ppb	0.023 ppb	0.043 ppb	0.981 ppb	126.910 %
Concentration RSD	65.1 %	2.1 %	47.6 %	10.7 %	9.0 %	4.2 %	36.6 %	2.8 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.090 ppb	0.164 ppb	302.235 ppb	3.017 ppb	119.537 %	-0.004 ppb	0.001 ppb	126.945 %	0.096 ppb
Concentration per Run 1	0.076 ppb	0.055 ppb	298.707 ppb	2.387 ppb	115.327 %	-0.004 ppb	0.000 ppb	123.791 %	0.071 ppb
Concentration per Run 2	0.090 ppb	0.190 ppb	298.708 ppb	3.091 ppb	120.077 %	-0.004 ppb	0.001 ppb	125.494 %	0.103 ppb
Concentration per Run 3	0.104 ppb	0.245 ppb	309.290 ppb	3.575 ppb	123.207 %	-0.005 ppb	0.001 ppb	131.549 %	0.115 ppb
Concentration RSD	15.5 %	59.8 %	2.0 %	19.8 %	3.3 %	12.0 %	86.4 %	3.2 %	24.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	21.686 ppb	123.702 %	126.201 %	0.096 ppb	0.115 ppb	121.084 %
Concentration per Run 1	21.360 ppb	118.762 %	121.338 %	0.097 ppb	0.115 ppb	119.863 %
Concentration per Run 2	22.101 ppb	125.553 %	126.720 %	0.101 ppb	0.114 ppb	120.173 %
Concentration per Run 3	21.597 ppb	126.789 %	130.546 %	0.088 ppb	0.115 ppb	123.217 %
Concentration RSD	1.7 %	3.5 %	3.7 %	6.7 %	0.4 %	1.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	50	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350871-01d10 SPLP-6020T	Rack	1		
Analysis started at:	9/5/2023 9:51:40 AM	Vial	28		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.147 %	131.950 %	-0.001 ppb	181.601 ppb	7.997 ppb	57.003 ppb	247.359 ppb	42,166.371 ppb	122.344 %
Concentration per Run 1	113.711 %	131.497 %	0.000 ppb	178.367 ppb	7.657 ppb	56.657 ppb	254.027 ppb	42,489.435 ppb	122.561 %
Concentration per Run 2	111.736 %	129.835 %	-0.003 ppb	187.025 ppb	8.628 ppb	55.422 ppb	240.984 ppb	42,291.298 ppb	124.005 %
Concentration per Run 3	107.993 %	134.518 %	-0.002 ppb	179.411 ppb	7.706 ppb	58.930 ppb	247.064 ppb	41,718.381 ppb	120.467 %
Concentration RSD	2.6 %	1.8 %	110.3 %	2.6 %	6.8 %	3.1 %	2.6 %	0.9 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.007 ppb	6.377 ppb	0.051 ppb	10.803 ppb	0.023 ppb	0.006 ppb	0.020 ppb	1.109 ppb	120.792 %
Concentration per Run 1	-0.008 ppb	6.546 ppb	0.055 ppb	11.967 ppb	0.029 ppb	0.004 ppb	0.019 ppb	1.149 ppb	114.052 %
Concentration per Run 2	-0.001 ppb	6.356 ppb	0.069 ppb	10.910 ppb	0.023 ppb	0.018 ppb	0.019 ppb	1.096 ppb	119.867 %
Concentration per Run 3	-0.013 ppb	6.229 ppb	0.027 ppb	9.532 ppb	0.017 ppb	-0.005 ppb	0.023 ppb	1.080 ppb	128.457 %
Concentration RSD	78.0 %	2.5 %	42.1 %	11.3 %	26.7 %	205.9 %	12.7 %	3.2 %	6.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.107 ppb	0.055 ppb	309.463 ppb	1.050 ppb	114.047 %	-0.004 ppb	0.000 ppb	119.390 %	0.049 ppb
Concentration per Run 1	0.103 ppb	0.086 ppb	316.765 ppb	0.859 ppb	110.671 %	-0.005 ppb	0.000 ppb	115.787 %	0.032 ppb
Concentration per Run 2	0.106 ppb	0.027 ppb	307.703 ppb	1.052 ppb	114.360 %	-0.004 ppb	0.001 ppb	117.653 %	0.045 ppb
Concentration per Run 3	0.114 ppb	0.051 ppb	303.922 ppb	1.240 ppb	117.111 %	-0.004 ppb	0.001 ppb	124.730 %	0.071 ppb
Concentration RSD	5.1 %	54.8 %	2.1 %	18.1 %	2.8 %	6.4 %	218.8 %	4.0 %	40.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.367 ppb	115.921 %	118.215 %	0.024 ppb	0.111 ppb	106.683 %
Concentration per Run 1	22.828 ppb	113.498 %	112.207 %	0.017 ppb	0.104 ppb	110.642 %
Concentration per Run 2	22.276 ppb	114.999 %	118.320 %	0.028 ppb	0.112 ppb	103.037 %
Concentration per Run 3	21.996 ppb	119.266 %	124.117 %	0.027 ppb	0.115 ppb	106.369 %
Concentration RSD	1.9 %	2.6 %	5.0 %	24.8 %	4.9 %	3.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	51	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1823522-6d50 SPLP-6020T	Rack	1		
Analysis started at:	9/5/2023 9:56:17 AM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.682 %	133.687 %	0.001 ppb	35.061 ppb	2.329 ppb	10.626 ppb	45.004 ppb	8,150.831 ppb	116.867 %
Concentration per Run 1	112.627 %	133.838 %	0.000 ppb	34.889 ppb	2.832 ppb	10.376 ppb	46.668 ppb	8,369.578 ppb	116.167 %
Concentration per Run 2	110.992 %	134.292 %	0.000 ppb	34.678 ppb	1.688 ppb	10.587 ppb	43.424 ppb	7,959.211 ppb	118.077 %
Concentration per Run 3	108.425 %	132.932 %	0.003 ppb	35.617 ppb	2.466 ppb	10.914 ppb	44.919 ppb	8,123.705 ppb	116.358 %
Concentration RSD	1.9 %	0.5 %	198.2 %	1.4 %	25.1 %	2.6 %	3.6 %	2.5 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.011 ppb	1.257 ppb	-0.020 ppb	3.603 ppb	0.005 ppb	0.024 ppb	-0.003 ppb	0.223 ppb	117.384 %
Concentration per Run 1	-0.018 ppb	1.275 ppb	-0.019 ppb	4.366 ppb	0.007 ppb	0.011 ppb	-0.003 ppb	0.243 ppb	113.382 %
Concentration per Run 2	-0.012 ppb	1.283 ppb	-0.002 ppb	3.346 ppb	0.006 ppb	0.036 ppb	0.004 ppb	0.197 ppb	117.488 %
Concentration per Run 3	-0.002 ppb	1.213 ppb	-0.039 ppb	3.098 ppb	0.003 ppb	0.025 ppb	-0.010 ppb	0.230 ppb	121.282 %
Concentration RSD	77.1 %	3.0 %	90.5 %	18.6 %	39.1 %	52.0 %	237.3 %	10.6 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.050 ppb	0.017 ppb	61.617 ppb	0.360 ppb	114.165 %	-0.005 ppb	0.000 ppb	120.280 %	-0.006 ppb
Concentration per Run 1	0.027 ppb	0.008 ppb	61.574 ppb	0.243 ppb	112.965 %	-0.005 ppb	0.000 ppb	116.049 %	-0.011 ppb
Concentration per Run 2	0.037 ppb	0.003 ppb	61.255 ppb	0.372 ppb	113.013 %	-0.004 ppb	0.000 ppb	117.630 %	-0.002 ppb
Concentration per Run 3	0.086 ppb	0.040 ppb	62.023 ppb	0.465 ppb	116.517 %	-0.005 ppb	0.000 ppb	127.160 %	-0.004 ppb
Concentration RSD	63.4 %	115.8 %	0.6 %	31.0 %	1.8 %	15.8 %	128.3 %	5.0 %	77.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	4.454 ppb	117.070 %	119.850 %	0.012 ppb	0.020 ppb	116.194 %
Concentration per Run 1	4.360 ppb	114.885 %	117.460 %	0.007 ppb	0.018 ppb	120.223 %
Concentration per Run 2	4.628 ppb	114.530 %	118.371 %	0.013 ppb	0.021 ppb	112.493 %
Concentration per Run 3	4.373 ppb	121.795 %	123.719 %	0.015 ppb	0.020 ppb	115.866 %
Concentration RSD	3.4 %	3.5 %	2.8 %	35.1 %	7.2 %	3.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	52	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/5/2023 10:00:56 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.204 %	121.275 %	62.334 ppb	6,027.327 ppb	6,130.695 ppb	61.490 ppb	6,516.407 ppb	6,464.740 ppb	116.260 %
Concentration per Run 1	104.634 %	119.789 %	61.864 ppb	6,134.718 ppb	6,202.732 ppb	60.491 ppb	6,535.748 ppb	6,390.260 ppb	116.892 %
Concentration per Run 2	102.139 %	118.052 %	62.294 ppb	5,993.533 ppb	6,154.197 ppb	62.308 ppb	6,589.525 ppb	6,660.903 ppb	115.940 %
Concentration per Run 3	99.839 %	125.983 %	62.844 ppb	5,953.730 ppb	6,035.156 ppb	61.671 ppb	6,423.948 ppb	6,343.056 ppb	115.949 %
Recovery Percentage 1			103.890 %	100.455 %	102.178 %	102.484 %	108.607 %	107.746 %	
Concentration RSD	2.3 %	3.4 %	0.8 %	1.6 %	1.4 %	1.5 %	1.3 %	2.7 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.829 ppb	57.888 ppb	58.016 ppb	6,006.963 ppb	59.384 ppb	59.459 ppb	59.802 ppb	62.331 ppb	107.382 %
Concentration per Run 1	61.052 ppb	59.388 ppb	59.882 ppb	6,192.482 ppb	61.044 ppb	61.329 ppb	61.164 ppb	63.707 ppb	102.806 %
Concentration per Run 2	59.634 ppb	57.997 ppb	56.649 ppb	5,966.406 ppb	59.203 ppb	59.470 ppb	60.584 ppb	62.201 ppb	105.987 %
Concentration per Run 3	55.800 ppb	56.280 ppb	57.518 ppb	5,862.000 ppb	57.906 ppb	57.578 ppb	57.659 ppb	61.085 ppb	113.352 %
Recovery Percentage 1	98.048 %	96.480 %	96.694 %	100.116 %	98.974 %	99.099 %	99.670 %	103.885 %	
Concentration RSD	4.6 %	2.7 %	2.9 %	2.8 %	2.7 %	3.2 %	3.1 %	2.1 %	5.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.550 ppb	64.002 ppb	57.547 ppb	59.675 ppb	103.312 %	60.710 ppb	61.062 ppb	109.026 %	59.787 ppb
Concentration per Run 1	63.498 ppb	66.781 ppb	58.757 ppb	61.512 ppb	99.730 %	63.272 ppb	63.486 ppb	104.574 %	60.457 ppb
Concentration per Run 2	61.398 ppb	63.030 ppb	57.364 ppb	59.359 ppb	102.819 %	60.014 ppb	60.134 ppb	106.908 %	60.514 ppb
Concentration per Run 3	59.755 ppb	62.195 ppb	56.521 ppb	58.153 ppb	107.387 %	58.844 ppb	59.566 ppb	115.596 %	58.391 ppb
Recovery Percentage 1	102.584 %	106.670 %	95.912 %	99.458 %		101.184 %	101.770 %		99.646 %
Concentration RSD	3.0 %	3.8 %	2.0 %	2.9 %	3.7 %	3.8 %	3.5 %	5.3 %	2.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.816 ppb	111.284 %	113.069 %	60.571 ppb	61.885 ppb	106.109 %
Concentration per Run 1	62.456 ppb	108.456 %	108.649 %	57.492 ppb	57.702 ppb	112.109 %
Concentration per Run 2	60.081 ppb	109.600 %	113.266 %	61.889 ppb	63.908 ppb	101.628 %
Concentration per Run 3	56.910 ppb	115.797 %	117.291 %	62.332 ppb	64.045 ppb	104.591 %
Recovery Percentage 1	99.693 %			100.952 %	103.141 %	
Concentration RSD	4.7 %	3.5 %	3.8 %	4.4 %	5.9 %	5.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 53
Analysis label: CCB
Analysis started at: 9/5/2023 10:05:38 AM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.649 %	116.995 %	0.006 ppb	-0.556 ppb	-0.791 ppb	-0.296 ppb	2.023 ppb	-1.700 ppb	105.477 %
Concentration per Run 1	106.642 %	118.732 %	0.004 ppb	-0.905 ppb	-0.889 ppb	-0.211 ppb	1.512 ppb	-2.111 ppb	105.486 %
Concentration per Run 2	104.233 %	116.768 %	0.009 ppb	-0.302 ppb	-0.740 ppb	-0.370 ppb	4.396 ppb	-1.451 ppb	105.061 %
Concentration per Run 3	103.071 %	115.484 %	0.005 ppb	-0.461 ppb	-0.743 ppb	-0.309 ppb	0.161 ppb	-1.537 ppb	105.884 %
Recovery Percentage 1			1.114 %	-0.556 %	-1.130 %	-2.964 %	2.023 %	-1.700 %	
Concentration RSD	1.7 %	1.4 %	47.8 %	56.3 %	10.8 %	27.1 %	106.9 %	21.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.022 ppb	-0.006 ppb	-0.026 ppb	16.516 ppb	-0.001 ppb	0.004 ppb	-0.016 ppb	-0.109 ppb	108.980 %
Concentration per Run 1	-0.021 ppb	-0.013 ppb	-0.022 ppb	15.185 ppb	0.000 ppb	0.002 ppb	-0.003 ppb	-0.129 ppb	106.184 %
Concentration per Run 2	-0.028 ppb	-0.010 ppb	0.005 ppb	16.451 ppb	0.000 ppb	0.023 ppb	-0.027 ppb	-0.070 ppb	106.609 %
Concentration per Run 3	-0.017 ppb	0.004 ppb	-0.062 ppb	17.911 ppb	-0.001 ppb	-0.013 ppb	-0.017 ppb	-0.129 ppb	114.147 %
Recovery Percentage 1	-0.443 %	-0.642 %	-2.624 %	33.031 %	-0.116 %	0.204 %	-1.596 %	-2.187 %	
Concentration RSD	25.1 %	139.9 %	129.4 %	8.3 %	76.1 %	438.4 %	75.5 %	30.9 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.146 ppb	0.689 ppb	0.001 ppb	1.548 ppb	104.791 %	-0.003 ppb	0.000 ppb	110.556 %	0.013 ppb
Concentration per Run 1	0.122 ppb	0.390 ppb	0.003 ppb	1.139 ppb	102.702 %	-0.003 ppb	0.000 ppb	107.246 %	0.008 ppb
Concentration per Run 2	0.169 ppb	0.827 ppb	0.001 ppb	1.618 ppb	103.946 %	-0.002 ppb	0.000 ppb	109.845 %	0.016 ppb
Concentration per Run 3	0.149 ppb	0.851 ppb	-0.001 ppb	1.888 ppb	107.725 %	-0.002 ppb	0.000 ppb	114.578 %	0.014 ppb
Recovery Percentage 1	29.274 %	13.787 %	0.012 %	77.421 %		-0.653 %	0.087 %		0.316 %
Concentration RSD	16.3 %	37.7 %	186.7 %	24.5 %	2.5 %	26.3 %	11.4 %	3.4 %	33.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.005 ppb	109.322 %	110.688 %	0.335 ppb	0.010 ppb	113.619 %
Concentration per Run 1	-0.002 ppb	105.233 %	107.720 %	0.370 ppb	0.011 ppb	118.318 %
Concentration per Run 2	0.005 ppb	109.694 %	108.896 %	0.358 ppb	0.009 ppb	110.341 %
Concentration per Run 3	0.011 ppb	113.038 %	115.448 %	0.278 ppb	0.010 ppb	112.200 %
Recovery Percentage 1	0.933 %			33.527 %	1.011 %	
Concentration RSD	137.7 %	3.6 %	3.8 %	14.9 %	9.1 %	3.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	54	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1823522-1d10 SPLP-6020T	Rack	1		
Analysis started at:	9/5/2023 10:20:23 AM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.889 %	129.835 %	0.000 ppb	15.818 ppb	2.821 ppb	1.860 ppb	2.084 ppb	12.564 ppb	132.436 %
Concentration per Run 1	113.927 %	136.407 %	-0.001 ppb	13.978 ppb	1.738 ppb	1.464 ppb	2.296 ppb	15.301 ppb	134.017 %
Concentration per Run 2	111.974 %	124.019 %	0.001 ppb	15.700 ppb	3.371 ppb	1.828 ppb	-1.003 ppb	14.323 ppb	132.227 %
Concentration per Run 3	109.765 %	129.080 %	-0.001 ppb	17.774 ppb	3.356 ppb	2.287 ppb	4.959 ppb	8.067 ppb	131.064 %
Concentration RSD	1.9 %	4.8 %	3,613.0 %	12.0 %	33.3 %	22.2 %	143.3 %	31.2 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.012 ppb	0.001 ppb	0.027 ppb	10.644 ppb	0.002 ppb	0.024 ppb	0.009 ppb	1.592 ppb	112.259 %
Concentration per Run 1	-0.018 ppb	0.004 ppb	0.047 ppb	10.441 ppb	0.002 ppb	0.032 ppb	0.009 ppb	1.536 ppb	114.276 %
Concentration per Run 2	-0.007 ppb	0.002 ppb	0.002 ppb	10.299 ppb	0.000 ppb	0.031 ppb	0.010 ppb	1.596 ppb	110.276 %
Concentration per Run 3	-0.011 ppb	-0.002 ppb	0.032 ppb	11.193 ppb	0.004 ppb	0.009 ppb	0.009 ppb	1.644 ppb	112.224 %
Concentration RSD	50.3 %	214.0 %	84.4 %	4.5 %	79.6 %	53.2 %	7.2 %	3.4 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.066 ppb	0.185 ppb	0.061 ppb	0.732 ppb	110.254 %	-0.004 ppb	0.002 ppb	120.431 %	0.050 ppb
Concentration per Run 1	0.055 ppb	0.110 ppb	0.064 ppb	0.588 ppb	109.790 %	-0.004 ppb	0.003 ppb	125.138 %	0.044 ppb
Concentration per Run 2	0.040 ppb	0.196 ppb	0.059 ppb	0.695 ppb	109.292 %	-0.003 ppb	0.000 ppb	115.294 %	0.065 ppb
Concentration per Run 3	0.102 ppb	0.248 ppb	0.059 ppb	0.911 ppb	111.681 %	-0.004 ppb	0.002 ppb	120.861 %	0.042 ppb
Concentration RSD	49.2 %	37.7 %	5.0 %	22.5 %	1.1 %	11.4 %	85.8 %	4.1 %	25.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3.226 ppb	116.825 %	118.283 %	0.044 ppb	0.006 ppb	172.011 %
Concentration per Run 1	3.033 ppb	119.300 %	120.161 %	0.033 ppb	0.001 ppb	229.504 %
Concentration per Run 2	3.389 ppb	112.287 %	112.916 %	0.051 ppb	0.006 ppb	154.541 %
Concentration per Run 3	3.257 ppb	118.887 %	121.772 %	0.048 ppb	0.010 ppb	131.989 %
Concentration RSD	5.6 %	3.4 %	4.0 %	21.8 %	73.3 %	29.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 55
Analysis label: WG1823522-2d10 SPLP-6020T
Analysis started at: 9/5/2023 10:28:16 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 27
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.562 %	129.986 %	5.231 ppb	1,030.100 ppb	1,049.264 ppb	220.402 ppb	1,076.738 ppb	868.721 ppb	116.353 %
Concentration per Run 1	110.093 %	131.044 %	5.167 ppb	1,014.007 ppb	1,026.030 ppb	215.026 ppb	1,018.486 ppb	780.342 ppb	116.300 %
Concentration per Run 2	107.817 %	131.875 %	5.202 ppb	1,045.292 ppb	1,090.090 ppb	233.972 ppb	1,175.402 ppb	829.588 ppb	117.944 %
Concentration per Run 3	104.777 %	127.040 %	5.325 ppb	1,031.001 ppb	1,031.674 ppb	212.208 ppb	1,036.327 ppb	996.233 ppb	114.815 %
Concentration RSD	2.5 %	2.0 %	1.6 %	1.5 %	3.4 %	5.4 %	8.0 %	13.0 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.045 ppb	19.794 ppb	50.194 ppb	117.306 ppb	48.868 ppb	48.999 ppb	24.701 ppb	51.085 ppb	117.304 %
Concentration per Run 1	50.207 ppb	19.604 ppb	49.622 ppb	118.920 ppb	49.201 ppb	49.662 ppb	24.840 ppb	51.210 ppb	112.512 %
Concentration per Run 2	50.490 ppb	20.078 ppb	52.025 ppb	118.142 ppb	48.565 ppb	48.372 ppb	24.698 ppb	50.961 ppb	123.640 %
Concentration per Run 3	49.439 ppb	19.699 ppb	48.937 ppb	114.855 ppb	48.839 ppb	48.963 ppb	24.565 ppb	51.086 ppb	115.759 %
Concentration RSD	1.1 %	1.3 %	3.2 %	1.8 %	0.7 %	1.3 %	0.6 %	0.2 %	4.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.373 ppb	11.725 ppb	107.798 ppb	99.286 ppb	112.461 %	5.250 ppb	5.418 ppb	120.095 %	48.102 ppb
Concentration per Run 1	12.722 ppb	11.433 ppb	106.946 ppb	101.636 ppb	113.172 %	5.426 ppb	5.515 ppb	116.717 %	48.745 ppb
Concentration per Run 2	11.888 ppb	12.061 ppb	111.195 ppb	98.334 ppb	112.911 %	5.038 ppb	5.192 ppb	127.527 %	46.990 ppb
Concentration per Run 3	12.509 ppb	11.680 ppb	105.254 ppb	97.887 ppb	111.299 %	5.287 ppb	5.548 ppb	116.042 %	48.570 ppb
Concentration RSD	3.5 %	2.7 %	2.8 %	2.1 %	0.9 %	3.7 %	3.6 %	5.4 %	2.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	205.181 ppb	123.957 %	123.565 %	9.494 ppb	49.196 ppb	132.716 %
Concentration per Run 1	199.263 ppb	132.959 %	123.014 %	8.001 ppb	40.816 ppb	158.986 %
Concentration per Run 2	208.646 ppb	121.535 %	126.744 %	10.105 ppb	53.290 ppb	121.304 %
Concentration per Run 3	207.635 ppb	117.377 %	120.937 %	10.377 ppb	53.482 ppb	117.858 %
Concentration RSD	2.5 %	6.5 %	2.4 %	13.7 %	14.8 %	17.2 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	56	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1823522-5d10 SPLP-6020T	Rack	1		
Analysis started at:	9/5/2023 10:32:53 AM	Vial	31		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.916 %	121.904 %	47.833 ppb	5,047.735 ppb	5,115.188 ppb	105.589 ppb	5,537.641 ppb	46,118.131 ppb	113.680 %
Concentration per Run 1	103.274 %	122.433 %	47.763 ppb	5,206.311 ppb	5,215.133 ppb	109.167 ppb	5,961.099 ppb	49,494.792 ppb	113.351 %
Concentration per Run 2	102.576 %	124.850 %	47.738 ppb	4,818.227 ppb	4,922.686 ppb	105.558 ppb	5,318.835 ppb	43,945.227 ppb	114.036 %
Concentration per Run 3	99.899 %	118.430 %	48.000 ppb	5,118.669 ppb	5,207.747 ppb	102.041 ppb	5,332.988 ppb	44,914.375 ppb	113.654 %
Concentration RSD	1.7 %	2.7 %	0.3 %	4.0 %	3.3 %	3.4 %	6.6 %	6.4 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.629 ppb	53.533 ppb	49.850 ppb	4,837.464 ppb	46.446 ppb	46.940 ppb	45.612 ppb	46.801 ppb	110.351 %
Concentration per Run 1	50.193 ppb	54.227 ppb	51.735 ppb	4,936.567 ppb	47.436 ppb	47.829 ppb	46.571 ppb	47.655 ppb	107.553 %
Concentration per Run 2	47.239 ppb	52.646 ppb	48.665 ppb	4,694.906 ppb	45.274 ppb	45.618 ppb	44.769 ppb	46.071 ppb	110.319 %
Concentration per Run 3	48.455 ppb	53.726 ppb	49.150 ppb	4,880.919 ppb	46.628 ppb	47.373 ppb	45.496 ppb	46.677 ppb	113.183 %
Concentration RSD	3.1 %	1.5 %	3.3 %	2.6 %	2.4 %	2.5 %	2.0 %	1.7 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	46.926 ppb	47.154 ppb	368.162 ppb	53.296 ppb	102.224 %	1.493 ppb	47.759 ppb	109.720 %	48.337 ppb
Concentration per Run 1	49.289 ppb	50.342 ppb	384.223 ppb	54.177 ppb	100.870 %	1.523 ppb	48.477 ppb	108.451 %	49.132 ppb
Concentration per Run 2	45.846 ppb	45.905 ppb	360.891 ppb	53.512 ppb	102.245 %	1.475 ppb	47.691 ppb	107.689 %	48.042 ppb
Concentration per Run 3	45.643 ppb	45.216 ppb	359.373 ppb	52.200 ppb	103.557 %	1.480 ppb	47.109 ppb	113.020 %	47.837 ppb
Concentration RSD	4.4 %	5.9 %	3.8 %	1.9 %	1.3 %	1.8 %	1.4 %	2.6 %	1.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	71.819 ppb	111.570 %	116.718 %	49.880 ppb	51.156 ppb	104.562 %
Concentration per Run 1	74.342 ppb	111.345 %	116.767 %	49.071 ppb	49.393 ppb	108.874 %
Concentration per Run 2	72.074 ppb	110.432 %	114.913 %	50.062 ppb	51.470 ppb	100.914 %
Concentration per Run 3	69.042 ppb	112.932 %	118.475 %	50.505 ppb	52.603 ppb	103.898 %
Concentration RSD	3.7 %	1.1 %	1.5 %	1.5 %	3.2 %	3.8 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	57	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2347019-01 6020TL	Rack	1		
Analysis started at:	9/5/2023 10:37:32 AM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.828 %	111.430 %	0.106 ppb	69,766.334 ppb	7,021.694 ppb	688.215 ppb	7,957.129 ppb	43,764.135 ppb	120.608 %
Concentration per Run 1	94.466 %	109.517 %	0.113 ppb	73,319.117 ppb	7,377.859 ppb	743.010 ppb	8,389.581 ppb	46,731.650 ppb	120.631 %
Concentration per Run 2	91.116 %	109.819 %	0.110 ppb	69,446.385 ppb	6,896.347 ppb	662.171 ppb	7,704.956 ppb	42,392.618 ppb	120.208 %
Concentration per Run 3	89.904 %	114.955 %	0.095 ppb	66,533.499 ppb	6,790.876 ppb	659.465 ppb	7,776.851 ppb	42,168.136 ppb	120.985 %
Concentration RSD	2.6 %	2.7 %	8.9 %	4.9 %	4.5 %	6.9 %	4.7 %	5.9 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	7.859 ppb	11.841 ppb	478.724 ppb	65,821.851 ppb	1.085 ppb	9.056 ppb	10.785 ppb	44.959 ppb	111.783 %
Concentration per Run 1	8.055 ppb	11.894 ppb	487.821 ppb	66,655.267 ppb	1.102 ppb	8.853 ppb	10.583 ppb	45.326 ppb	113.490 %
Concentration per Run 2	8.069 ppb	11.983 ppb	486.544 ppb	66,482.548 ppb	1.087 ppb	9.212 ppb	10.996 ppb	44.686 ppb	108.960 %
Concentration per Run 3	7.453 ppb	11.645 ppb	461.806 ppb	64,327.737 ppb	1.067 ppb	9.103 ppb	10.776 ppb	44.865 ppb	112.898 %
Concentration RSD	4.5 %	1.5 %	3.1 %	2.0 %	1.6 %	2.0 %	1.9 %	0.7 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	6.261 ppb	1.568 ppb	396.267 ppb	4.368 ppb	96.472 %	0.061 ppb	0.346 ppb	109.074 %	1.264 ppb
Concentration per Run 1	6.167 ppb	1.492 ppb	413.563 ppb	4.104 ppb	93.677 %	0.066 ppb	0.328 ppb	109.408 %	1.213 ppb
Concentration per Run 2	6.303 ppb	1.535 ppb	386.731 ppb	4.179 ppb	96.168 %	0.065 ppb	0.351 ppb	106.327 %	1.305 ppb
Concentration per Run 3	6.314 ppb	1.677 ppb	388.509 ppb	4.821 ppb	99.571 %	0.052 ppb	0.359 ppb	111.488 %	1.273 ppb
Concentration RSD	1.3 %	6.2 %	3.8 %	9.0 %	3.1 %	12.5 %	4.6 %	2.4 %	3.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	161.056 ppb	111.520 %	114.052 %	0.292 ppb	67.787 ppb	103.980 %
Concentration per Run 1	161.932 ppb	111.693 %	114.022 %	0.296 ppb	65.151 ppb	108.392 %
Concentration per Run 2	158.376 ppb	108.850 %	112.869 %	0.321 ppb	69.916 ppb	98.460 %
Concentration per Run 3	162.859 ppb	114.018 %	115.264 %	0.260 ppb	68.294 ppb	105.090 %
Concentration RSD	1.5 %	2.3 %	1.1 %	10.4 %	3.6 %	4.9 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	58	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2347019-02 6020TL	Rack	1		
Analysis started at:	9/5/2023 10:42:10 AM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.116 %	117.322 %	0.151 ppb	28,672.242 ppb	2,267.639 ppb	279.600 ppb	4,280.891 ppb	11,672.483 ppb	106.530 %
Concentration per Run 1	96.587 %	118.883 %	0.160 ppb	29,362.571 ppb	2,300.662 ppb	298.093 ppb	4,520.998 ppb	12,077.959 ppb	107.579 %
Concentration per Run 2	93.184 %	112.991 %	0.154 ppb	29,335.542 ppb	2,317.552 ppb	281.551 ppb	4,346.921 ppb	11,874.149 ppb	105.284 %
Concentration per Run 3	92.577 %	120.092 %	0.140 ppb	27,318.613 ppb	2,184.703 ppb	259.156 ppb	3,974.755 ppb	11,065.341 ppb	106.729 %
Concentration RSD	2.3 %	3.2 %	6.7 %	4.1 %	3.2 %	7.0 %	6.5 %	4.6 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.187 ppb	0.534 ppb	41.252 ppb	4,644.587 ppb	0.035 ppb	0.813 ppb	0.878 ppb	4.253 ppb	110.409 %
Concentration per Run 1	1.109 ppb	0.537 ppb	41.142 ppb	4,603.708 ppb	0.036 ppb	0.805 ppb	0.801 ppb	4.274 ppb	115.340 %
Concentration per Run 2	1.181 ppb	0.535 ppb	42.748 ppb	4,734.110 ppb	0.032 ppb	0.810 ppb	0.917 ppb	4.254 ppb	107.909 %
Concentration per Run 3	1.271 ppb	0.531 ppb	39.867 ppb	4,595.943 ppb	0.036 ppb	0.822 ppb	0.917 ppb	4.232 ppb	107.977 %
Concentration RSD	6.8 %	0.6 %	3.5 %	1.7 %	7.7 %	1.1 %	7.6 %	0.5 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.505 ppb	1.370 ppb	98.731 ppb	1.102 ppb	98.796 %	-0.005 ppb	0.031 ppb	107.765 %	0.112 ppb
Concentration per Run 1	0.527 ppb	1.418 ppb	105.065 ppb	0.917 ppb	100.717 %	-0.005 ppb	0.027 ppb	112.831 %	0.102 ppb
Concentration per Run 2	0.443 ppb	1.305 ppb	97.520 ppb	1.106 ppb	98.085 %	-0.004 ppb	0.036 ppb	106.620 %	0.114 ppb
Concentration per Run 3	0.546 ppb	1.387 ppb	93.609 ppb	1.283 ppb	97.586 %	-0.005 ppb	0.029 ppb	103.844 %	0.120 ppb
Concentration RSD	10.9 %	4.3 %	5.9 %	16.6 %	1.7 %	8.4 %	15.9 %	4.3 %	8.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	107.465 ppb	111.344 %	113.312 %	0.062 ppb	0.298 ppb	107.862 %
Concentration per Run 1	111.410 ppb	113.595 %	117.501 %	0.044 ppb	0.282 ppb	116.083 %
Concentration per Run 2	106.204 ppb	111.248 %	113.603 %	0.075 ppb	0.300 ppb	104.917 %
Concentration per Run 3	104.780 ppb	109.191 %	108.833 %	0.069 ppb	0.311 ppb	102.586 %
Concentration RSD	3.2 %	2.0 %	3.8 %	25.8 %	4.9 %	6.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	59	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2347019-03 6020TL	Rack	1		
Analysis started at:	9/5/2023 10:46:50 AM	Vial	35		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.422 %	115.988 %	0.023 ppb	28,172.020 ppb	5,340.823 ppb	117.432 ppb	5,282.169 ppb	29,800.002 ppb	108.504 %
Concentration per Run 1	97.604 %	114.729 %	0.025 ppb	29,719.597 ppb	5,716.889 ppb	129.645 ppb	5,892.356 ppb	32,679.702 ppb	109.487 %
Concentration per Run 2	95.839 %	117.825 %	0.017 ppb	27,532.130 ppb	5,162.814 ppb	110.873 ppb	4,980.180 ppb	28,597.063 ppb	109.265 %
Concentration per Run 3	92.824 %	115.408 %	0.028 ppb	27,264.332 ppb	5,142.767 ppb	111.777 ppb	4,973.973 ppb	28,123.242 ppb	106.759 %
Concentration RSD	2.5 %	1.4 %	24.8 %	4.8 %	6.1 %	9.0 %	10.0 %	8.4 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.726 ppb	0.692 ppb	199.320 ppb	5,955.349 ppb	0.076 ppb	0.379 ppb	0.396 ppb	1.508 ppb	110.554 %
Concentration per Run 1	0.714 ppb	0.692 ppb	208.810 ppb	6,128.962 ppb	0.087 ppb	0.406 ppb	0.409 ppb	1.501 ppb	113.958 %
Concentration per Run 2	0.767 ppb	0.667 ppb	194.358 ppb	5,839.514 ppb	0.069 ppb	0.420 ppb	0.422 ppb	1.584 ppb	108.016 %
Concentration per Run 3	0.697 ppb	0.716 ppb	194.790 ppb	5,897.570 ppb	0.073 ppb	0.311 ppb	0.357 ppb	1.440 ppb	109.688 %
Concentration RSD	5.0 %	3.5 %	4.1 %	2.6 %	12.3 %	15.7 %	8.7 %	4.8 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.635 ppb	2.121 ppb	289.987 ppb	0.970 ppb	100.353 %	-0.004 ppb	0.006 ppb	109.108 %	0.099 ppb
Concentration per Run 1	0.712 ppb	2.304 ppb	309.468 ppb	0.929 ppb	101.260 %	-0.004 ppb	0.007 ppb	114.415 %	0.104 ppb
Concentration per Run 2	0.610 ppb	2.083 ppb	288.995 ppb	0.923 ppb	101.180 %	-0.004 ppb	0.007 ppb	109.442 %	0.089 ppb
Concentration per Run 3	0.583 ppb	1.977 ppb	271.499 ppb	1.057 ppb	98.618 %	-0.003 ppb	0.006 ppb	103.467 %	0.104 ppb
Concentration RSD	10.7 %	7.9 %	6.6 %	7.8 %	1.5 %	16.3 %	8.6 %	5.0 %	8.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	121.060 ppb	110.243 %	112.517 %	0.036 ppb	0.217 ppb	114.057 %
Concentration per Run 1	124.379 ppb	110.944 %	116.287 %	0.022 ppb	0.180 ppb	136.113 %
Concentration per Run 2	120.641 ppb	111.639 %	112.960 %	0.044 ppb	0.236 ppb	102.911 %
Concentration per Run 3	118.160 ppb	108.145 %	108.304 %	0.042 ppb	0.235 ppb	103.148 %
Concentration RSD	2.6 %	1.7 %	3.6 %	34.3 %	14.8 %	16.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	60	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2347019-04 6020TL	Rack	1		
Analysis started at:	9/5/2023 10:51:29 AM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.963 %	115.711 %	0.004 ppb	25,010.593 ppb	2,777.027 ppb	31.186 ppb	7,938.269 ppb	37,987.015 ppb	109.215 %
Concentration per Run 1	98.317 %	116.919 %	0.004 ppb	25,280.264 ppb	2,801.006 ppb	31.105 ppb	7,874.702 ppb	37,871.842 ppb	109.245 %
Concentration per Run 2	95.738 %	116.088 %	0.005 ppb	24,962.424 ppb	2,777.228 ppb	30.777 ppb	7,989.077 ppb	37,566.009 ppb	109.707 %
Concentration per Run 3	93.835 %	114.124 %	0.004 ppb	24,789.090 ppb	2,752.846 ppb	31.674 ppb	7,951.029 ppb	38,523.194 ppb	108.693 %
Concentration RSD	2.3 %	1.2 %	16.1 %	1.0 %	0.9 %	1.5 %	0.7 %	1.3 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.320 ppb	0.464 ppb	289.882 ppb	7,861.985 ppb	1.402 ppb	4.670 ppb	4.749 ppb	473.429 ppb	106.586 %
Concentration per Run 1	0.290 ppb	0.463 ppb	288.140 ppb	7,644.239 ppb	1.410 ppb	4.660 ppb	4.730 ppb	474.265 ppb	107.679 %
Concentration per Run 2	0.373 ppb	0.419 ppb	289.048 ppb	7,953.887 ppb	1.343 ppb	4.633 ppb	4.726 ppb	464.445 ppb	108.003 %
Concentration per Run 3	0.296 ppb	0.510 ppb	292.459 ppb	7,987.830 ppb	1.454 ppb	4.718 ppb	4.790 ppb	481.578 ppb	104.076 %
Concentration RSD	14.6 %	9.8 %	0.8 %	2.4 %	4.0 %	0.9 %	0.8 %	1.8 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.220 ppb	0.326 ppb	365.253 ppb	0.776 ppb	101.259 %	0.012 ppb	0.978 ppb	110.391 %	0.103 ppb
Concentration per Run 1	1.159 ppb	0.240 ppb	371.879 ppb	0.687 ppb	100.090 %	0.012 ppb	0.972 ppb	112.731 %	0.072 ppb
Concentration per Run 2	1.239 ppb	0.363 ppb	366.485 ppb	0.735 ppb	102.091 %	0.012 ppb	0.971 ppb	112.683 %	0.110 ppb
Concentration per Run 3	1.263 ppb	0.374 ppb	357.396 ppb	0.907 ppb	101.595 %	0.012 ppb	0.991 ppb	105.760 %	0.127 ppb
Concentration RSD	4.5 %	22.8 %	2.0 %	14.9 %	1.0 %	2.2 %	1.2 %	3.6 %	27.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	322.043 ppb	112.088 %	113.713 %	0.044 ppb	1.441 ppb	109.129 %
Concentration per Run 1	322.120 ppb	111.445 %	110.069 %	0.033 ppb	1.346 ppb	115.903 %
Concentration per Run 2	318.960 ppb	112.715 %	117.044 %	0.048 ppb	1.472 ppb	106.913 %
Concentration per Run 3	325.049 ppb	112.104 %	114.027 %	0.051 ppb	1.504 ppb	104.572 %
Concentration RSD	0.9 %	0.6 %	3.1 %	22.2 %	5.8 %	5.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	61	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2347019-05 6020TL	Rack	1		
Analysis started at:	9/5/2023 10:56:08 AM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.437 %	110.725 %	0.151 ppb	68,549.318 ppb	8,304.989 ppb	1,151.667 ppb	18,804.879 ppb	50,420.341 ppb	113.700 %
Concentration per Run 1	95.117 %	109.517 %	0.154 ppb	68,709.385 ppb	8,420.087 ppb	1,181.497 ppb	18,974.780 ppb	51,149.288 ppb	113.677 %
Concentration per Run 2	93.600 %	108.006 %	0.155 ppb	69,248.572 ppb	8,264.149 ppb	1,142.024 ppb	18,448.849 ppb	50,403.771 ppb	113.564 %
Concentration per Run 3	91.595 %	114.653 %	0.144 ppb	67,689.997 ppb	8,230.729 ppb	1,131.479 ppb	18,991.007 ppb	49,707.963 ppb	113.859 %
Concentration RSD	1.9 %	3.1 %	4.1 %	1.2 %	1.2 %	2.3 %	1.6 %	1.4 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	9.783 ppb	15.028 ppb	669.350 ppb	14,859.638 ppb	0.198 ppb	1.970 ppb	0.205 ppb	1.619 ppb	106.236 %
Concentration per Run 1	9.879 ppb	14.979 ppb	674.809 ppb	14,922.240 ppb	0.223 ppb	1.987 ppb	0.206 ppb	1.671 ppb	104.204 %
Concentration per Run 2	9.527 ppb	14.898 ppb	649.207 ppb	14,582.864 ppb	0.186 ppb	1.863 ppb	0.190 ppb	1.560 ppb	106.961 %
Concentration per Run 3	9.944 ppb	15.205 ppb	684.034 ppb	15,073.811 ppb	0.186 ppb	2.059 ppb	0.218 ppb	1.628 ppb	107.545 %
Concentration RSD	2.3 %	1.1 %	2.7 %	1.7 %	10.7 %	5.0 %	6.8 %	3.5 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	4.662 ppb	5.769 ppb	297.028 ppb	1.132 ppb	97.969 %	-0.002 ppb	0.013 ppb	105.448 %	0.089 ppb
Concentration per Run 1	4.896 ppb	5.211 ppb	303.011 ppb	1.045 ppb	97.620 %	-0.001 ppb	0.009 ppb	103.063 %	0.089 ppb
Concentration per Run 2	4.544 ppb	6.366 ppb	286.523 ppb	1.109 ppb	95.507 %	-0.002 ppb	0.012 ppb	103.412 %	0.079 ppb
Concentration per Run 3	4.545 ppb	5.729 ppb	301.549 ppb	1.242 ppb	100.779 %	-0.002 ppb	0.018 ppb	109.868 %	0.099 ppb
Concentration RSD	4.4 %	10.0 %	3.1 %	8.9 %	2.7 %	51.5 %	33.9 %	3.6 %	11.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.735 ppb	110.213 %	110.742 %	0.020 ppb	0.378 ppb	103.250 %
Concentration per Run 1	57.193 ppb	110.867 %	109.644 %	0.012 ppb	0.348 ppb	110.274 %
Concentration per Run 2	56.098 ppb	106.970 %	108.149 %	0.023 ppb	0.390 ppb	97.969 %
Concentration per Run 3	56.914 ppb	112.804 %	114.434 %	0.024 ppb	0.395 ppb	101.506 %
Concentration RSD	1.0 %	2.7 %	3.0 %	32.7 %	6.8 %	6.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	62	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2347019-06 6020TL	Rack	1		
Analysis started at:	9/5/2023 11:00:46 AM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.774 %	112.312 %	0.017 ppb	101,248.057 ppb	6,165.162 ppb	115.389 ppb	66,569.313 ppb	84,203.222 ppb	118.347 %
Concentration per Run 1	96.523 %	111.556 %	0.014 ppb	101,922.402 ppb	6,116.818 ppb	112.695 ppb	67,421.862 ppb	85,076.483 ppb	119.306 %
Concentration per Run 2	93.906 %	108.535 %	0.022 ppb	99,245.330 ppb	6,028.385 ppb	115.799 ppb	64,412.402 ppb	81,043.284 ppb	117.601 %
Concentration per Run 3	90.891 %	116.844 %	0.015 ppb	102,576.439 ppb	6,350.282 ppb	117.673 ppb	67,873.674 ppb	86,489.897 ppb	118.136 %
Concentration RSD	3.0 %	3.7 %	24.5 %	1.7 %	2.7 %	2.2 %	2.8 %	3.4 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.943 ppb	4.210 ppb	128.370 ppb	18,416.392 ppb	0.372 ppb	1.234 ppb	1.289 ppb	3.960 ppb	103.442 %
Concentration per Run 1	2.907 ppb	4.020 ppb	126.399 ppb	18,085.707 ppb	0.359 ppb	1.224 ppb	1.330 ppb	4.020 ppb	101.564 %
Concentration per Run 2	2.953 ppb	4.326 ppb	127.834 ppb	18,598.882 ppb	0.379 ppb	1.316 ppb	1.261 ppb	3.985 ppb	97.719 %
Concentration per Run 3	2.969 ppb	4.284 ppb	130.876 ppb	18,564.588 ppb	0.377 ppb	1.163 ppb	1.276 ppb	3.876 ppb	111.041 %
Concentration RSD	1.1 %	3.9 %	1.8 %	1.6 %	2.9 %	6.3 %	2.8 %	1.9 %	6.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.362 ppb	1.141 ppb	960.458 ppb	0.522 ppb	95.289 %	-0.001 ppb	0.048 ppb	105.664 %	0.273 ppb
Concentration per Run 1	2.424 ppb	1.306 ppb	973.457 ppb	0.455 ppb	93.576 %	-0.002 ppb	0.038 ppb	106.210 %	0.253 ppb
Concentration per Run 2	2.383 ppb	0.868 ppb	928.680 ppb	0.563 ppb	93.133 %	0.000 ppb	0.056 ppb	98.716 %	0.268 ppb
Concentration per Run 3	2.280 ppb	1.248 ppb	979.237 ppb	0.549 ppb	99.156 %	-0.001 ppb	0.052 ppb	112.066 %	0.297 ppb
Concentration RSD	3.1 %	20.9 %	2.9 %	11.3 %	3.5 %	53.0 %	19.7 %	6.3 %	8.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	88.081 ppb	109.539 %	110.239 %	0.017 ppb	0.570 ppb	104.151 %
Concentration per Run 1	86.247 ppb	108.947 %	108.642 %	0.013 ppb	0.524 ppb	111.106 %
Concentration per Run 2	86.955 ppb	105.973 %	103.928 %	0.019 ppb	0.589 ppb	98.373 %
Concentration per Run 3	91.039 ppb	113.696 %	118.147 %	0.020 ppb	0.597 ppb	102.975 %
Concentration RSD	2.9 %	3.6 %	6.6 %	22.2 %	7.1 %	6.2 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	63	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1813067-2d10 A2-SEM	Rack	1		
Analysis started at:	9/5/2023 11:05:24 AM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.685 %	121.149 %	0.002 ppb	576.863 ppb	4.262 ppb	19.908 ppb	14.826 ppb	21.578 ppb	109.258 %
Concentration per Run 1	102.782 %	113.671 %	0.000 ppb	610.987 ppb	4.402 ppb	20.284 ppb	21.208 ppb	22.865 ppb	110.658 %
Concentration per Run 2	100.541 %	118.807 %	0.002 ppb	541.749 ppb	3.656 ppb	20.369 ppb	9.541 ppb	14.429 ppb	109.260 %
Concentration per Run 3	98.732 %	130.968 %	0.002 ppb	577.852 ppb	4.728 ppb	19.071 ppb	13.729 ppb	27.442 ppb	107.857 %
Concentration RSD	2.0 %	7.3 %	64.2 %	6.0 %	12.9 %	3.6 %	39.9 %	30.6 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.007 ppb	1.163 ppb	0.229 ppb	59.004 ppb	0.031 ppb	52.407 ppb	52.022 ppb	277.192 ppb	108.507 %
Concentration per Run 1	0.014 ppb	1.178 ppb	0.239 ppb	58.607 ppb	0.040 ppb	52.005 ppb	51.553 ppb	277.229 ppb	105.360 %
Concentration per Run 2	0.003 ppb	1.126 ppb	0.210 ppb	57.961 ppb	0.029 ppb	52.789 ppb	52.742 ppb	275.047 ppb	103.903 %
Concentration per Run 3	0.003 ppb	1.184 ppb	0.237 ppb	60.444 ppb	0.025 ppb	52.428 ppb	51.771 ppb	279.301 ppb	116.258 %
Concentration RSD	105.5 %	2.7 %	6.9 %	2.2 %	25.3 %	0.7 %	1.2 %	0.8 %	6.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.061 ppb	0.065 ppb	0.154 ppb	0.106 ppb	108.030 %	-0.004 ppb	26.321 ppb	110.332 %	0.078 ppb
Concentration per Run 1	0.042 ppb	0.034 ppb	0.164 ppb	0.055 ppb	104.603 %	-0.004 ppb	26.328 ppb	106.300 %	0.067 ppb
Concentration per Run 2	0.099 ppb	0.076 ppb	0.138 ppb	0.097 ppb	103.116 %	-0.003 ppb	26.529 ppb	104.214 %	0.088 ppb
Concentration per Run 3	0.043 ppb	0.086 ppb	0.158 ppb	0.166 ppb	116.371 %	-0.004 ppb	26.107 ppb	120.481 %	0.078 ppb
Concentration RSD	53.1 %	41.6 %	8.9 %	53.0 %	6.7 %	24.9 %	0.8 %	8.0 %	13.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.131 ppb	112.586 %	113.073 %	0.015 ppb	263.194 ppb	116.521 %
Concentration per Run 1	0.136 ppb	108.625 %	109.134 %	0.010 ppb	253.355 ppb	117.987 %
Concentration per Run 2	0.123 ppb	108.483 %	106.007 %	0.017 ppb	267.871 ppb	110.860 %
Concentration per Run 3	0.136 ppb	120.650 %	124.079 %	0.019 ppb	268.355 ppb	120.716 %
Concentration RSD	5.6 %	6.2 %	8.5 %	29.8 %	3.2 %	4.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	64	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/5/2023 11:10:01 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.014 %	121.275 %	63.429 ppb	6,045.894 ppb	6,113.298 ppb	61.689 ppb	6,243.923 ppb	6,255.231 ppb	114.486 %
Concentration per Run 1	98.386 %	119.185 %	62.640 ppb	6,154.257 ppb	6,211.318 ppb	61.985 ppb	6,381.877 ppb	6,301.587 ppb	115.467 %
Concentration per Run 2	95.368 %	121.904 %	63.834 ppb	5,996.276 ppb	6,027.167 ppb	60.921 ppb	6,112.776 ppb	6,332.386 ppb	113.646 %
Concentration per Run 3	94.287 %	122.735 %	63.814 ppb	5,987.149 ppb	6,101.409 ppb	62.162 ppb	6,237.115 ppb	6,131.720 ppb	114.344 %
Recovery Percentage 1			105.716 %	100.765 %	101.888 %	102.816 %	104.065 %	104.254 %	
Concentration RSD	2.2 %	1.5 %	1.1 %	1.6 %	1.5 %	1.1 %	2.2 %	1.7 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.324 ppb	57.440 ppb	56.014 ppb	5,926.773 ppb	58.889 ppb	58.915 ppb	58.905 ppb	61.325 ppb	111.044 %
Concentration per Run 1	57.378 ppb	57.349 ppb	54.970 ppb	5,862.821 ppb	58.673 ppb	59.407 ppb	59.914 ppb	62.781 ppb	108.446 %
Concentration per Run 2	57.834 ppb	57.627 ppb	56.936 ppb	6,009.963 ppb	59.612 ppb	58.889 ppb	58.382 ppb	60.783 ppb	111.193 %
Concentration per Run 3	59.759 ppb	57.343 ppb	56.135 ppb	5,907.535 ppb	58.383 ppb	58.451 ppb	58.418 ppb	60.411 ppb	113.493 %
Recovery Percentage 1	97.206 %	95.733 %	93.356 %	98.780 %	98.148 %	98.192 %	98.174 %	102.208 %	
Concentration RSD	2.2 %	0.3 %	1.8 %	1.3 %	1.1 %	0.8 %	1.5 %	2.1 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.436 ppb	61.482 ppb	55.216 ppb	58.535 ppb	105.423 %	59.569 ppb	59.873 ppb	111.048 %	58.753 ppb
Concentration per Run 1	60.717 ppb	60.195 ppb	55.610 ppb	59.882 ppb	102.894 %	60.069 ppb	60.733 ppb	106.907 %	60.131 ppb
Concentration per Run 2	60.888 ppb	63.089 ppb	54.779 ppb	57.243 ppb	106.516 %	59.366 ppb	59.830 ppb	112.208 %	57.373 ppb
Concentration per Run 3	59.702 ppb	61.162 ppb	55.258 ppb	58.480 ppb	106.860 %	59.272 ppb	59.056 ppb	114.030 %	58.753 ppb
Recovery Percentage 1	100.726 %	102.470 %	92.026 %	97.558 %		99.282 %	99.789 %		97.921 %
Concentration RSD	1.1 %	2.4 %	0.8 %	2.3 %	2.1 %	0.7 %	1.4 %	3.3 %	2.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.637 ppb	112.230 %	114.145 %	60.089 ppb	60.809 ppb	106.395 %
Concentration per Run 1	61.566 ppb	108.399 %	109.743 %	58.038 ppb	59.612 ppb	109.020 %
Concentration per Run 2	58.043 ppb	112.357 %	114.134 %	61.208 ppb	61.905 ppb	103.795 %
Concentration per Run 3	59.303 ppb	115.934 %	118.557 %	61.020 ppb	60.911 ppb	106.369 %
Recovery Percentage 1	99.396 %			100.148 %	101.349 %	
Concentration RSD	3.0 %	3.4 %	3.9 %	3.0 %	1.9 %	2.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	65	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/5/2023 11:14:44 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.747 %	124.498 %	0.008 ppb	13.204 ppb	0.629 ppb	-0.265 ppb	5.214 ppb	11.847 ppb	105.335 %
Concentration per Run 1	100.120 %	122.735 %	0.005 ppb	13.718 ppb	0.586 ppb	-0.101 ppb	6.029 ppb	9.613 ppb	105.338 %
Concentration per Run 2	99.436 %	126.889 %	0.005 ppb	13.136 ppb	0.257 ppb	-0.365 ppb	3.445 ppb	15.752 ppb	105.063 %
Concentration per Run 3	96.685 %	123.868 %	0.013 ppb	12.757 ppb	1.044 ppb	-0.328 ppb	6.168 ppb	10.176 ppb	105.604 %
Recovery Percentage 1			1.538 %	13.204 %	0.898 %	-2.649 %	5.214 %	11.847 %	
Concentration RSD	1.8 %	1.7 %	55.7 %	3.7 %	62.9 %	53.9 %	29.4 %	28.6 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.019 ppb	-0.003 ppb	0.075 ppb	24.323 ppb	0.003 ppb	0.010 ppb	-0.004 ppb	-0.081 ppb	113.438 %
Concentration per Run 1	-0.021 ppb	-0.005 ppb	0.112 ppb	26.546 ppb	0.001 ppb	-0.002 ppb	0.003 ppb	-0.093 ppb	110.250 %
Concentration per Run 2	-0.018 ppb	-0.001 ppb	0.024 ppb	21.077 ppb	0.006 ppb	0.025 ppb	-0.010 ppb	-0.081 ppb	115.293 %
Concentration per Run 3	-0.018 ppb	-0.003 ppb	0.088 ppb	25.345 ppb	0.003 ppb	0.006 ppb	-0.005 ppb	-0.069 ppb	114.772 %
Recovery Percentage 1	-0.380 %	-0.293 %	7.493 %	48.645 %	0.684 %	0.496 %	-0.391 %	-1.617 %	
Concentration RSD	9.6 %	65.4 %	60.6 %	11.8 %	71.1 %	142.3 %	171.6 %	14.9 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.160 ppb	0.750 ppb	0.098 ppb	1.466 ppb	107.341 %	0.002 ppb	0.006 ppb	113.246 %	0.037 ppb
Concentration per Run 1	0.148 ppb	0.621 ppb	0.094 ppb	1.118 ppb	105.599 %	0.004 ppb	0.005 ppb	111.398 %	0.042 ppb
Concentration per Run 2	0.171 ppb	0.804 ppb	0.099 ppb	1.509 ppb	107.004 %	0.003 ppb	0.007 ppb	112.975 %	0.017 ppb
Concentration per Run 3	0.161 ppb	0.825 ppb	0.101 ppb	1.772 ppb	109.418 %	-0.001 ppb	0.005 ppb	115.365 %	0.052 ppb
Recovery Percentage 1	31.969 %	14.999 %	0.978 %	73.303 %		0.442 %	2.824 %		0.928 %
Concentration RSD	7.1 %	15.0 %	3.8 %	22.4 %	1.8 %	142.9 %	13.3 %	1.8 %	49.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.045 ppb	111.353 %	112.921 %	0.282 ppb	0.029 ppb	116.600 %
Concentration per Run 1	0.053 ppb	110.089 %	111.593 %	0.313 ppb	0.029 ppb	120.931 %
Concentration per Run 2	0.025 ppb	111.750 %	113.637 %	0.293 ppb	0.028 ppb	113.548 %
Concentration per Run 3	0.058 ppb	112.220 %	113.532 %	0.239 ppb	0.029 ppb	115.321 %
Recovery Percentage 1	9.000 %			28.186 %	2.881 %	
Concentration RSD	39.4 %	1.0 %	1.0 %	13.6 %	2.3 %	3.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	66	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2347019-07 6020TL	Rack	1		
Analysis started at:	9/5/2023 11:55:06 AM	Vial	39		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.719 %	126.059 %	0.032 ppb	76,021.358 ppb	1,659.468 ppb	817.334 ppb	15,543.559 ppb	17,863.751 ppb	137.059 %
Concentration per Run 1	105.619 %	130.591 %	0.032 ppb	78,152.215 ppb	1,756.490 ppb	888.519 ppb	16,150.825 ppb	18,139.590 ppb	138.724 %
Concentration per Run 2	103.985 %	124.623 %	0.031 ppb	76,179.746 ppb	1,641.459 ppb	807.213 ppb	15,667.785 ppb	18,383.509 ppb	136.207 %
Concentration per Run 3	101.555 %	122.962 %	0.034 ppb	73,732.113 ppb	1,580.456 ppb	756.269 ppb	14,812.068 ppb	17,068.154 ppb	136.247 %
Concentration RSD	2.0 %	3.2 %	4.6 %	2.9 %	5.4 %	8.2 %	4.4 %	3.9 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	13.073 ppb	6.585 ppb	42.774 ppb	2,082.935 ppb	0.172 ppb	1.012 ppb	3.143 ppb	15.419 ppb	111.107 %
Concentration per Run 1	13.288 ppb	6.625 ppb	45.206 ppb	2,094.532 ppb	0.168 ppb	1.083 ppb	3.012 ppb	14.980 ppb	118.441 %
Concentration per Run 2	13.102 ppb	6.536 ppb	41.048 ppb	2,066.076 ppb	0.181 ppb	1.030 ppb	3.219 ppb	15.572 ppb	108.100 %
Concentration per Run 3	12.828 ppb	6.594 ppb	42.069 ppb	2,088.198 ppb	0.168 ppb	0.924 ppb	3.197 ppb	15.703 ppb	106.781 %
Concentration RSD	1.8 %	0.7 %	5.1 %	0.7 %	4.4 %	8.0 %	3.6 %	2.5 %	5.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.780 ppb	0.923 ppb	170.549 ppb	3.582 ppb	100.233 %	0.008 ppb	0.132 ppb	116.562 %	6.762 ppb
Concentration per Run 1	13.601 ppb	1.009 ppb	176.131 ppb	3.518 ppb	102.946 %	0.007 ppb	0.100 ppb	129.892 %	6.532 ppb
Concentration per Run 2	13.970 ppb	0.729 ppb	170.858 ppb	3.659 ppb	99.325 %	0.008 ppb	0.143 ppb	113.196 %	6.875 ppb
Concentration per Run 3	13.769 ppb	1.031 ppb	164.657 ppb	3.569 ppb	98.426 %	0.010 ppb	0.154 ppb	106.598 %	6.879 ppb
Concentration RSD	1.3 %	18.3 %	3.4 %	2.0 %	2.4 %	18.1 %	21.6 %	10.3 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	7.270 ppb	116.562 %	119.067 %	0.016 ppb	0.784 ppb	282.553 %
Concentration per Run 1	7.158 ppb	123.681 %	127.371 %	0.010 ppb	0.437 ppb	443.631 %
Concentration per Run 2	7.235 ppb	114.647 %	116.484 %	0.019 ppb	0.816 ppb	233.583 %
Concentration per Run 3	7.418 ppb	111.357 %	113.345 %	0.020 ppb	1.098 ppb	170.444 %
Concentration RSD	1.8 %	5.5 %	6.2 %	35.8 %	42.4 %	50.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	67	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2347019-08 6020TL	Rack	1		
Analysis started at:	9/5/2023 11:59:43 AM	Vial	40		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.062 %	113.168 %	0.138 ppb	65,392.796 ppb	7,970.557 ppb	1,110.854 ppb	18,427.562 ppb	49,554.913 ppb	122.047 %
Concentration per Run 1	99.574 %	119.865 %	0.145 ppb	65,607.306 ppb	8,067.523 ppb	1,152.582 ppb	19,348.484 ppb	51,334.971 ppb	121.730 %
Concentration per Run 2	96.781 %	109.744 %	0.133 ppb	65,566.809 ppb	8,058.838 ppb	1,142.077 ppb	18,840.651 ppb	51,167.768 ppb	121.763 %
Concentration per Run 3	94.832 %	109.895 %	0.137 ppb	65,004.272 ppb	7,785.309 ppb	1,037.902 ppb	17,093.551 ppb	46,161.999 ppb	122.650 %
Concentration RSD	2.5 %	5.1 %	4.3 %	0.5 %	2.0 %	5.7 %	6.4 %	5.9 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	10.114 ppb	14.608 ppb	664.262 ppb	14,500.655 ppb	0.200 ppb	1.970 ppb	0.258 ppb	1.598 ppb	108.407 %
Concentration per Run 1	10.356 ppb	14.849 ppb	685.340 ppb	14,664.969 ppb	0.194 ppb	1.913 ppb	0.236 ppb	1.461 ppb	110.575 %
Concentration per Run 2	10.552 ppb	14.708 ppb	674.604 ppb	14,576.850 ppb	0.207 ppb	1.993 ppb	0.238 ppb	1.721 ppb	105.492 %
Concentration per Run 3	9.433 ppb	14.269 ppb	632.842 ppb	14,260.147 ppb	0.198 ppb	2.004 ppb	0.299 ppb	1.612 ppb	109.155 %
Concentration RSD	5.9 %	2.1 %	4.2 %	1.5 %	3.1 %	2.5 %	13.8 %	8.2 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	4.420 ppb	5.950 ppb	304.216 ppb	1.220 ppb	96.158 %	-0.002 ppb	0.010 ppb	107.024 %	0.111 ppb
Concentration per Run 1	4.557 ppb	6.195 ppb	330.197 ppb	1.200 ppb	96.515 %	-0.002 ppb	0.009 ppb	110.850 %	0.115 ppb
Concentration per Run 2	4.394 ppb	6.195 ppb	301.592 ppb	1.205 ppb	96.080 %	-0.002 ppb	0.011 ppb	104.145 %	0.111 ppb
Concentration per Run 3	4.307 ppb	5.461 ppb	280.858 ppb	1.256 ppb	95.880 %	-0.001 ppb	0.009 ppb	106.076 %	0.107 ppb
Concentration RSD	2.9 %	7.1 %	8.1 %	2.6 %	0.3 %	24.4 %	14.0 %	3.2 %	3.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.699 ppb	111.096 %	113.985 %	0.012 ppb	0.318 ppb	116.781 %
Concentration per Run 1	58.537 ppb	110.492 %	116.120 %	0.007 ppb	0.259 ppb	141.563 %
Concentration per Run 2	57.199 ppb	111.291 %	113.722 %	0.013 ppb	0.334 ppb	106.642 %
Concentration per Run 3	54.360 ppb	111.505 %	112.113 %	0.016 ppb	0.360 ppb	102.140 %
Concentration RSD	3.8 %	0.5 %	1.8 %	36.1 %	16.5 %	18.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	68	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2347070-02 6020TL	Rack	1		
Analysis started at:	9/5/2023 12:04:21 PM	Vial	41		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.949 %	139.428 %	3.338 ppb	53,230.102 ppb	101,563.170 ppb	21,954.241 ppb	10,079.386 ppb	321,916.429 ppb	157.792 %
Concentration per Run 1	111.087 %	136.633 %	3.297 ppb	56,470.163 ppb	107,914.276 ppb	23,936.411 ppb	10,776.656 ppb	342,153.438 ppb	159.880 %
Concentration per Run 2	106.617 %	141.694 %	3.375 ppb	51,763.748 ppb	99,231.038 ppb	21,354.854 ppb	10,080.713 ppb	317,500.243 ppb	156.337 %
Concentration per Run 3	103.144 %	139.957 %	3.343 ppb	51,456.393 ppb	97,544.196 ppb	20,571.459 ppb	9,380.788 ppb	306,095.605 ppb	157.157 %
Concentration RSD	3.7 %	1.8 %	1.2 %	5.3 %	5.5 %	8.0 %	6.9 %	5.7 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	33.125 ppb	30.033 ppb	24,777.974 ppb	26,412.118 ppb	64.133 ppb	141.274 ppb	209.800 ppb	172.609 ppb	119.217 %
Concentration per Run 1	33.962 ppb	30.599 ppb	25,673.751 ppb	27,106.473 ppb	64.893 ppb	143.394 ppb	211.313 ppb	179.004 ppb	118.497 %
Concentration per Run 2	32.506 ppb	29.339 ppb	24,113.883 ppb	25,757.341 ppb	62.613 ppb	137.530 ppb	205.324 ppb	167.695 ppb	121.846 %
Concentration per Run 3	32.908 ppb	30.163 ppb	24,546.287 ppb	26,372.539 ppb	64.893 ppb	142.896 ppb	212.764 ppb	171.128 ppb	117.308 %
Concentration RSD	2.3 %	2.1 %	3.3 %	2.6 %	2.1 %	2.3 %	1.9 %	3.4 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	14.448 ppb	54.006 ppb	773.724 ppb	0.493 ppb	95.632 %	0.157 ppb	1.889 ppb	111.869 %	0.146 ppb
Concentration per Run 1	14.510 ppb	54.372 ppb	816.583 ppb	0.456 ppb	93.670 %	0.155 ppb	1.949 ppb	114.197 %	0.133 ppb
Concentration per Run 2	14.226 ppb	52.935 ppb	756.785 ppb	0.508 ppb	95.670 %	0.162 ppb	1.879 ppb	111.660 %	0.142 ppb
Concentration per Run 3	14.606 ppb	54.710 ppb	747.805 ppb	0.514 ppb	97.557 %	0.154 ppb	1.838 ppb	109.752 %	0.164 ppb
Concentration RSD	1.4 %	1.7 %	4.8 %	6.4 %	2.0 %	2.7 %	3.0 %	2.0 %	10.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	3,696.620 ppb	114.060 %	102.114 %	0.294 ppb	26.281 ppb	103.935 %
Concentration per Run 1	3,782.917 ppb	114.770 %	102.238 %	0.280 ppb	25.222 ppb	109.199 %
Concentration per Run 2	3,709.416 ppb	113.010 %	102.957 %	0.302 ppb	27.042 ppb	100.530 %
Concentration per Run 3	3,597.528 ppb	114.400 %	101.146 %	0.300 ppb	26.579 ppb	102.074 %
Concentration RSD	2.5 %	0.8 %	0.9 %	4.1 %	3.6 %	4.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	69	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348791-08 6020TL	Rack	1		
Analysis started at:	9/5/2023 12:10:36 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.376 %	125.807 %	0.327 ppb	120,921.422 ppb	7,714.648 ppb	2,906.572 ppb	5,359.671 ppb	21,415.186 ppb	119.424 %
Concentration per Run 1	98.537 %	127.796 %	0.325 ppb	118,753.206 ppb	7,608.330 ppb	2,859.967 ppb	5,243.450 ppb	20,943.403 ppb	119.791 %
Concentration per Run 2	97.271 %	122.735 %	0.327 ppb	121,640.284 ppb	7,729.434 ppb	2,957.464 ppb	5,403.093 ppb	21,553.433 ppb	119.960 %
Concentration per Run 3	96.321 %	126.889 %	0.328 ppb	122,370.776 ppb	7,806.181 ppb	2,902.285 ppb	5,432.470 ppb	21,748.723 ppb	118.521 %
Concentration RSD	1.1 %	2.1 %	0.5 %	1.6 %	1.3 %	1.7 %	1.9 %	2.0 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	19.306 ppb	6.290 ppb	174.997 ppb	18,897.615 ppb	0.612 ppb	8.139 ppb	2.048 ppb	17.569 ppb	116.182 %
Concentration per Run 1	19.547 ppb	6.249 ppb	172.403 ppb	18,631.540 ppb	0.595 ppb	8.341 ppb	2.078 ppb	17.913 ppb	112.680 %
Concentration per Run 2	18.710 ppb	6.194 ppb	173.840 ppb	18,770.831 ppb	0.623 ppb	7.756 ppb	2.051 ppb	17.204 ppb	116.742 %
Concentration per Run 3	19.661 ppb	6.427 ppb	178.748 ppb	19,290.474 ppb	0.619 ppb	8.321 ppb	2.015 ppb	17.590 ppb	119.125 %
Concentration RSD	2.7 %	1.9 %	1.9 %	1.8 %	2.5 %	4.1 %	1.5 %	2.0 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	102.534 ppb	14.075 ppb	156.207 ppb	1.049 ppb	101.934 %	0.006 ppb	0.151 ppb	112.880 %	0.132 ppb
Concentration per Run 1	104.071 ppb	14.297 ppb	158.737 ppb	1.099 ppb	100.745 %	0.006 ppb	0.151 ppb	109.610 %	0.129 ppb
Concentration per Run 2	101.796 ppb	14.506 ppb	153.511 ppb	1.036 ppb	101.101 %	0.006 ppb	0.147 ppb	115.048 %	0.128 ppb
Concentration per Run 3	101.734 ppb	13.421 ppb	156.373 ppb	1.010 ppb	103.957 %	0.007 ppb	0.156 ppb	113.981 %	0.140 ppb
Concentration RSD	1.3 %	4.1 %	1.7 %	4.4 %	1.7 %	8.6 %	2.8 %	2.6 %	4.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	96.516 ppb	120.308 %	120.088 %	0.012 ppb	1.713 ppb	111.756 %
Concentration per Run 1	97.183 ppb	117.253 %	119.565 %	0.010 ppb	1.550 ppb	121.526 %
Concentration per Run 2	94.384 ppb	121.131 %	117.380 %	0.015 ppb	1.763 ppb	108.252 %
Concentration per Run 3	97.982 ppb	122.540 %	123.318 %	0.013 ppb	1.825 ppb	105.489 %
Concentration RSD	2.0 %	2.3 %	2.5 %	19.8 %	8.4 %	7.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	70	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1819212-2d5 6020TL	Rack	1		
Analysis started at:	9/5/2023 12:15:15 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.654 %	132.101 %	11.622 ppb	2,034.386 ppb	2,079.623 ppb	443.988 ppb	2,220.036 ppb	2,063.252 ppb	111.650 %
Concentration per Run 1	99.760 %	131.572 %	11.558 ppb	2,007.813 ppb	2,049.844 ppb	437.114 ppb	2,227.871 ppb	2,032.223 ppb	112.282 %
Concentration per Run 2	99.019 %	134.141 %	11.531 ppb	2,043.693 ppb	2,070.005 ppb	438.167 ppb	2,210.067 ppb	1,980.322 ppb	111.484 %
Concentration per Run 3	97.184 %	130.591 %	11.777 ppb	2,051.652 ppb	2,119.020 ppb	456.684 ppb	2,222.168 ppb	2,177.210 ppb	111.183 %
Concentration RSD	1.3 %	1.4 %	1.2 %	1.1 %	1.7 %	2.5 %	0.4 %	4.9 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	100.940 ppb	39.875 ppb	101.063 ppb	254.941 ppb	102.722 ppb	102.819 ppb	52.914 ppb	107.457 ppb	120.609 %
Concentration per Run 1	99.787 ppb	39.796 ppb	101.691 ppb	261.115 ppb	103.063 ppb	103.833 ppb	53.376 ppb	107.931 ppb	119.086 %
Concentration per Run 2	102.333 ppb	40.162 ppb	101.172 ppb	259.040 ppb	102.915 ppb	100.900 ppb	52.108 ppb	105.966 ppb	120.621 %
Concentration per Run 3	100.699 ppb	39.665 ppb	100.328 ppb	244.667 ppb	102.189 ppb	103.723 ppb	53.258 ppb	108.476 ppb	122.119 %
Concentration RSD	1.3 %	0.6 %	0.7 %	3.5 %	0.5 %	1.6 %	1.3 %	1.2 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	25.920 ppb	25.930 ppb	213.077 ppb	199.390 ppb	113.968 %	10.877 ppb	11.483 ppb	119.242 %	83.743 ppb
Concentration per Run 1	25.497 ppb	27.558 ppb	213.619 ppb	198.085 ppb	110.553 %	11.064 ppb	11.849 ppb	114.738 %	84.635 ppb
Concentration per Run 2	26.105 ppb	24.432 ppb	211.077 ppb	199.791 ppb	115.163 %	10.919 ppb	11.430 ppb	119.593 %	83.242 ppb
Concentration per Run 3	26.158 ppb	25.800 ppb	214.535 ppb	200.292 ppb	116.186 %	10.647 ppb	11.169 ppb	123.395 %	83.350 ppb
Concentration RSD	1.4 %	6.0 %	0.8 %	0.6 %	2.6 %	1.9 %	3.0 %	3.6 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	423.240 ppb	118.823 %	120.864 %	21.665 ppb	115.752 ppb	116.984 %
Concentration per Run 1	419.365 ppb	114.593 %	117.925 %	20.621 ppb	109.335 ppb	122.911 %
Concentration per Run 2	425.852 ppb	118.754 %	120.585 %	22.121 ppb	118.376 ppb	113.186 %
Concentration per Run 3	424.504 ppb	123.123 %	124.081 %	22.253 ppb	119.544 ppb	114.855 %
Concentration RSD	0.8 %	3.6 %	2.6 %	4.2 %	4.8 %	4.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	71	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1819212-3d10 6020TL	Rack	1		
Analysis started at:	9/5/2023 12:19:54 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.499 %	129.659 %	5.557 ppb	13,007.138 ppb	1,786.830 ppb	493.899 ppb	1,551.185 ppb	3,119.695 ppb	113.052 %
Concentration per Run 1	101.516 %	124.623 %	5.462 ppb	13,286.695 ppb	1,841.582 ppb	499.902 ppb	1,566.537 ppb	3,011.796 ppb	112.997 %
Concentration per Run 2	98.862 %	125.681 %	5.565 ppb	13,158.081 ppb	1,803.939 ppb	500.881 ppb	1,542.670 ppb	3,135.518 ppb	112.980 %
Concentration per Run 3	98.121 %	138.673 %	5.642 ppb	12,576.637 ppb	1,714.969 ppb	480.915 ppb	1,544.347 ppb	3,211.773 ppb	113.180 %
Concentration RSD	1.8 %	6.0 %	1.6 %	2.9 %	3.6 %	2.3 %	0.9 %	3.2 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.893 ppb	19.679 ppb	66.500 ppb	1,957.986 ppb	48.810 ppb	49.199 ppb	24.517 ppb	53.144 ppb	120.999 %
Concentration per Run 1	50.614 ppb	19.581 ppb	66.273 ppb	1,969.285 ppb	49.169 ppb	49.662 ppb	24.769 ppb	53.487 ppb	119.290 %
Concentration per Run 2	52.045 ppb	19.868 ppb	67.066 ppb	1,944.111 ppb	47.726 ppb	48.157 ppb	24.025 ppb	51.910 ppb	123.171 %
Concentration per Run 3	50.019 ppb	19.589 ppb	66.162 ppb	1,960.562 ppb	49.535 ppb	49.777 ppb	24.758 ppb	54.037 ppb	120.538 %
Concentration RSD	2.0 %	0.8 %	0.7 %	0.7 %	2.0 %	1.8 %	1.7 %	2.1 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	22.275 ppb	8.539 ppb	116.574 ppb	92.143 ppb	111.469 %	5.068 ppb	5.356 ppb	117.830 %	48.290 ppb
Concentration per Run 1	22.080 ppb	8.432 ppb	116.938 ppb	90.939 ppb	107.612 %	5.137 ppb	5.437 ppb	114.906 %	48.800 ppb
Concentration per Run 2	22.053 ppb	8.452 ppb	115.928 ppb	91.286 ppb	111.476 %	5.066 ppb	5.387 ppb	117.010 %	48.755 ppb
Concentration per Run 3	22.692 ppb	8.734 ppb	116.857 ppb	94.203 ppb	115.318 %	5.003 ppb	5.242 ppb	121.576 %	47.316 ppb
Concentration RSD	1.6 %	2.0 %	0.5 %	1.9 %	3.5 %	1.3 %	1.9 %	2.9 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	214.480 ppb	118.734 %	119.681 %	10.075 ppb	51.473 ppb	117.553 %
Concentration per Run 1	214.389 ppb	116.171 %	116.286 %	9.578 ppb	48.690 ppb	123.001 %
Concentration per Run 2	219.208 ppb	118.320 %	121.009 %	10.311 ppb	52.490 ppb	114.491 %
Concentration per Run 3	209.842 ppb	121.712 %	121.750 %	10.337 ppb	53.238 ppb	115.167 %
Concentration RSD	2.2 %	2.4 %	2.5 %	4.3 %	4.7 %	4.0 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	72	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1819212-4d10 6020TL	Rack	1		
Analysis started at:	9/5/2023 12:24:33 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.187 %	129.130 %	5.440 ppb	12,463.093 ppb	1,734.622 ppb	491.444 ppb	1,535.690 ppb	3,018.651 ppb	115.949 %
Concentration per Run 1	101.361 %	129.382 %	5.341 ppb	12,452.157 ppb	1,720.646 ppb	472.220 ppb	1,476.886 ppb	3,120.222 ppb	116.489 %
Concentration per Run 2	99.040 %	127.494 %	5.475 ppb	12,353.436 ppb	1,748.172 ppb	502.591 ppb	1,562.885 ppb	3,095.706 ppb	115.607 %
Concentration per Run 3	97.161 %	130.515 %	5.503 ppb	12,583.687 ppb	1,735.048 ppb	499.520 ppb	1,567.297 ppb	2,840.026 ppb	115.750 %
Concentration RSD	2.1 %	1.2 %	1.6 %	0.9 %	0.8 %	3.4 %	3.3 %	5.1 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.134 ppb	18.821 ppb	63.169 ppb	1,936.515 ppb	46.572 ppb	47.930 ppb	23.971 ppb	52.049 ppb	121.259 %
Concentration per Run 1	47.160 ppb	18.823 ppb	61.590 ppb	1,910.871 ppb	46.741 ppb	48.360 ppb	24.041 ppb	51.738 ppb	118.224 %
Concentration per Run 2	47.899 ppb	18.721 ppb	64.331 ppb	1,976.274 ppb	47.220 ppb	48.496 ppb	24.505 ppb	52.331 ppb	120.602 %
Concentration per Run 3	49.343 ppb	18.919 ppb	63.587 ppb	1,922.401 ppb	45.754 ppb	46.936 ppb	23.368 ppb	52.078 ppb	124.950 %
Concentration RSD	2.3 %	0.5 %	2.2 %	1.8 %	1.6 %	1.8 %	2.4 %	0.6 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	21.969 ppb	8.055 ppb	112.402 ppb	88.867 ppb	113.691 %	5.010 ppb	5.234 ppb	117.849 %	45.476 ppb
Concentration per Run 1	21.752 ppb	8.177 ppb	112.145 ppb	87.980 ppb	111.104 %	4.987 ppb	5.129 ppb	116.970 %	44.243 ppb
Concentration per Run 2	22.119 ppb	8.115 ppb	111.585 ppb	88.625 ppb	113.671 %	5.028 ppb	5.252 ppb	116.048 %	46.472 ppb
Concentration per Run 3	22.036 ppb	7.874 ppb	113.477 ppb	89.997 ppb	116.299 %	5.016 ppb	5.322 ppb	120.527 %	45.714 ppb
Concentration RSD	0.9 %	2.0 %	0.9 %	1.2 %	2.3 %	0.4 %	1.9 %	2.0 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	206.546 ppb	120.664 %	122.194 %	9.640 ppb	48.525 ppb	122.093 %
Concentration per Run 1	202.526 ppb	117.739 %	119.155 %	9.151 ppb	46.010 ppb	126.752 %
Concentration per Run 2	210.531 ppb	120.415 %	122.314 %	9.848 ppb	49.179 ppb	119.127 %
Concentration per Run 3	206.580 ppb	123.837 %	125.114 %	9.921 ppb	50.386 ppb	120.399 %
Concentration RSD	1.9 %	2.5 %	2.4 %	4.4 %	4.7 %	3.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	73	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1819212-5d10 6020TL	Rack	1		
Analysis started at:	9/5/2023 12:29:13 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.947 %	132.051 %	51.977 ppb	16,199.303 ppb	5,624.971 ppb	318.771 ppb	5,589.212 ppb	7,031.618 ppb	113.833 %
Concentration per Run 1	96.728 %	132.630 %	51.440 ppb	15,891.341 ppb	5,574.501 ppb	311.282 ppb	5,488.370 ppb	7,031.841 ppb	113.541 %
Concentration per Run 2	96.318 %	132.630 %	52.213 ppb	16,144.363 ppb	5,626.701 ppb	318.302 ppb	5,540.169 ppb	7,016.416 ppb	113.787 %
Concentration per Run 3	94.795 %	130.893 %	52.279 ppb	16,562.204 ppb	5,673.711 ppb	326.730 ppb	5,739.098 ppb	7,046.598 ppb	114.172 %
Concentration RSD	1.1 %	0.8 %	0.9 %	2.1 %	0.9 %	2.4 %	2.4 %	0.2 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.726 ppb	45.737 ppb	63.647 ppb	6,526.235 ppb	46.840 ppb	48.021 ppb	47.012 ppb	50.832 ppb	117.567 %
Concentration per Run 1	47.538 ppb	44.608 ppb	62.044 ppb	6,336.765 ppb	46.173 ppb	47.739 ppb	46.871 ppb	50.507 ppb	117.600 %
Concentration per Run 2	48.877 ppb	46.105 ppb	64.651 ppb	6,659.401 ppb	47.594 ppb	48.355 ppb	47.368 ppb	51.129 ppb	113.867 %
Concentration per Run 3	49.765 ppb	46.499 ppb	64.245 ppb	6,582.539 ppb	46.753 ppb	47.970 ppb	46.798 ppb	50.860 ppb	121.233 %
Concentration RSD	2.3 %	2.2 %	2.2 %	2.6 %	1.5 %	0.6 %	0.7 %	0.6 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.715 ppb	52.877 ppb	66.305 ppb	50.493 ppb	111.112 %	1.531 ppb	48.132 ppb	116.679 %	49.252 ppb
Concentration per Run 1	59.172 ppb	52.887 ppb	65.182 ppb	49.290 ppb	110.882 %	1.530 ppb	48.011 ppb	114.359 %	48.663 ppb
Concentration per Run 2	61.406 ppb	54.977 ppb	67.159 ppb	51.330 ppb	109.388 %	1.539 ppb	47.725 ppb	117.186 %	47.801 ppb
Concentration per Run 3	58.568 ppb	50.767 ppb	66.575 ppb	50.858 ppb	113.065 %	1.524 ppb	48.659 ppb	118.492 %	51.292 ppb
Concentration RSD	2.5 %	4.0 %	1.5 %	2.1 %	1.7 %	0.5 %	1.0 %	1.8 %	3.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.685 ppb	118.303 %	121.577 %	45.983 ppb	47.297 ppb	117.547 %
Concentration per Run 1	56.197 ppb	119.075 %	120.354 %	42.127 ppb	43.185 ppb	124.616 %
Concentration per Run 2	56.981 ppb	118.100 %	121.304 %	46.591 ppb	48.675 ppb	114.836 %
Concentration per Run 3	59.878 ppb	117.734 %	123.074 %	49.230 ppb	50.031 ppb	113.189 %
Concentration RSD	3.4 %	0.6 %	1.1 %	7.8 %	7.7 %	5.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	74	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348742-01 6020TL	Rack	1		
Analysis started at:	9/5/2023 12:33:53 PM	Vial	50		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.461 %	126.738 %	0.008 ppb	35,528.139 ppb	28,232.835 ppb	12.599 ppb	1,540.823 ppb	96,623.001 ppb	124.338 %
Concentration per Run 1	100.370 %	122.811 %	0.007 ppb	37,088.230 ppb	29,572.284 ppb	14.139 ppb	1,649.401 ppb	101,343.495 ppb	126.113 %
Concentration per Run 2	97.106 %	126.663 %	0.011 ppb	34,798.748 ppb	28,325.849 ppb	11.638 ppb	1,492.849 ppb	94,062.184 ppb	123.928 %
Concentration per Run 3	94.907 %	130.742 %	0.006 ppb	34,697.438 ppb	26,800.371 ppb	12.022 ppb	1,480.219 ppb	94,463.325 ppb	122.974 %
Concentration RSD	2.8 %	3.1 %	30.2 %	3.8 %	4.9 %	10.7 %	6.1 %	4.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	6.846 ppb	128.028 ppb	1,706.620 ppb	4,205.548 ppb	2.567 ppb	25.337 ppb	3.545 ppb	0.919 ppb	118.433 %
Concentration per Run 1	6.692 ppb	126.998 ppb	1,743.442 ppb	4,233.360 ppb	2.587 ppb	24.930 ppb	3.427 ppb	0.928 ppb	121.397 %
Concentration per Run 2	7.266 ppb	131.058 ppb	1,731.631 ppb	4,205.933 ppb	2.606 ppb	25.634 ppb	3.615 ppb	0.937 ppb	116.620 %
Concentration per Run 3	6.581 ppb	126.029 ppb	1,644.786 ppb	4,177.350 ppb	2.507 ppb	25.447 ppb	3.593 ppb	0.893 ppb	117.281 %
Concentration RSD	5.4 %	2.1 %	3.2 %	0.7 %	2.0 %	1.4 %	2.9 %	2.6 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.722 ppb	1.176 ppb	244.491 ppb	4.527 ppb	105.819 %	-0.003 ppb	0.016 ppb	118.680 %	0.617 ppb
Concentration per Run 1	1.722 ppb	1.210 ppb	257.670 ppb	3.814 ppb	105.948 %	-0.003 ppb	0.019 ppb	123.180 %	0.588 ppb
Concentration per Run 2	1.753 ppb	1.198 ppb	243.065 ppb	4.655 ppb	104.432 %	-0.002 ppb	0.017 ppb	118.983 %	0.616 ppb
Concentration per Run 3	1.691 ppb	1.121 ppb	232.737 ppb	5.112 ppb	107.076 %	-0.003 ppb	0.013 ppb	113.876 %	0.648 ppb
Concentration RSD	1.8 %	4.1 %	5.1 %	14.5 %	1.3 %	15.4 %	18.8 %	3.9 %	4.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	79.069 ppb	117.025 %	120.661 %	0.225 ppb	0.034 ppb	110.185 %
Concentration per Run 1	80.855 ppb	118.072 %	123.053 %	0.236 ppb	0.033 ppb	115.913 %
Concentration per Run 2	79.026 ppb	115.763 %	120.541 %	0.232 ppb	0.035 ppb	107.854 %
Concentration per Run 3	77.325 ppb	117.240 %	118.390 %	0.206 ppb	0.034 ppb	106.786 %
Concentration RSD	2.2 %	1.0 %	1.9 %	7.3 %	2.7 %	4.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	75	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1819212-6d5 6020TL	Rack	1		
Analysis started at:	9/5/2023 12:38:31 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.768 %	129.357 %	0.081 ppb	24,664.904 ppb	1,590.013 ppb	589.262 ppb	1,135.952 ppb	4,414.544 ppb	114.861 %
Concentration per Run 1	99.165 %	127.494 %	0.080 ppb	25,608.041 ppb	1,641.521 ppb	629.554 ppb	1,190.796 ppb	4,604.837 ppb	115.675 %
Concentration per Run 2	97.046 %	128.325 %	0.074 ppb	24,252.195 ppb	1,572.587 ppb	566.931 ppb	1,101.057 ppb	4,268.153 ppb	115.488 %
Concentration per Run 3	94.092 %	132.252 %	0.089 ppb	24,134.474 ppb	1,555.931 ppb	571.301 ppb	1,116.002 ppb	4,370.641 ppb	113.420 %
Concentration RSD	2.6 %	2.0 %	9.7 %	3.3 %	2.9 %	5.9 %	4.2 %	3.9 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	3.779 ppb	1.305 ppb	37.374 ppb	3,854.467 ppb	0.134 ppb	1.686 ppb	0.409 ppb	4.058 ppb	122.829 %
Concentration per Run 1	3.911 ppb	1.323 ppb	37.634 ppb	3,856.821 ppb	0.123 ppb	1.690 ppb	0.398 ppb	4.092 ppb	127.084 %
Concentration per Run 2	3.686 ppb	1.325 ppb	36.826 ppb	3,859.621 ppb	0.142 ppb	1.628 ppb	0.399 ppb	4.027 ppb	120.876 %
Concentration per Run 3	3.741 ppb	1.268 ppb	37.664 ppb	3,846.961 ppb	0.136 ppb	1.740 ppb	0.429 ppb	4.054 ppb	120.527 %
Concentration RSD	3.1 %	2.5 %	1.3 %	0.2 %	7.2 %	3.3 %	4.3 %	0.8 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	21.294 ppb	3.085 ppb	30.723 ppb	1.130 ppb	111.055 %	-0.003 ppb	0.041 ppb	121.675 %	0.407 ppb
Concentration per Run 1	21.486 ppb	2.888 ppb	32.357 ppb	0.870 ppb	113.055 %	-0.003 ppb	0.051 ppb	123.120 %	0.399 ppb
Concentration per Run 2	20.942 ppb	2.948 ppb	29.647 ppb	1.145 ppb	108.346 %	-0.003 ppb	0.029 ppb	117.259 %	0.385 ppb
Concentration per Run 3	21.454 ppb	3.418 ppb	30.164 ppb	1.375 ppb	111.763 %	-0.002 ppb	0.043 ppb	124.646 %	0.436 ppb
Concentration RSD	1.4 %	9.4 %	4.7 %	22.4 %	2.2 %	25.0 %	28.2 %	3.2 %	6.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	19.056 ppb	120.914 %	121.550 %	0.047 ppb	0.325 ppb	125.405 %
Concentration per Run 1	19.974 ppb	124.293 %	125.857 %	0.032 ppb	0.282 ppb	144.073 %
Concentration per Run 2	19.150 ppb	118.243 %	118.100 %	0.056 ppb	0.345 ppb	115.148 %
Concentration per Run 3	18.043 ppb	120.207 %	120.694 %	0.053 ppb	0.349 ppb	116.995 %
Concentration RSD	5.1 %	2.6 %	3.2 %	28.2 %	11.6 %	12.9 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	76	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/5/2023 12:43:09 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.163 %	130.238 %	63.934 ppb	6,188.306 ppb	6,256.470 ppb	61.267 ppb	6,421.165 ppb	6,327.821 ppb	119.525 %
Concentration per Run 1	99.935 %	129.835 %	63.638 ppb	6,184.448 ppb	6,234.990 ppb	62.136 ppb	6,533.401 ppb	6,293.659 ppb	120.005 %
Concentration per Run 2	96.316 %	129.004 %	63.539 ppb	6,295.548 ppb	6,318.494 ppb	61.002 ppb	6,451.740 ppb	6,427.207 ppb	118.791 %
Concentration per Run 3	95.240 %	131.875 %	64.627 ppb	6,084.923 ppb	6,215.926 ppb	60.665 ppb	6,278.356 ppb	6,262.598 ppb	119.780 %
Recovery Percentage 1			106.557 %	103.138 %	104.275 %	102.112 %	107.019 %	105.464 %	
Concentration RSD	2.5 %	1.1 %	0.9 %	1.7 %	0.9 %	1.3 %	2.0 %	1.4 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.986 ppb	57.074 ppb	55.858 ppb	5,935.799 ppb	59.310 ppb	59.398 ppb	59.176 ppb	61.193 ppb	121.081 %
Concentration per Run 1	56.877 ppb	55.811 ppb	54.362 ppb	5,799.882 ppb	58.837 ppb	58.916 ppb	60.003 ppb	61.938 ppb	118.947 %
Concentration per Run 2	59.011 ppb	58.414 ppb	57.569 ppb	6,097.389 ppb	59.576 ppb	59.954 ppb	58.876 ppb	60.479 ppb	120.490 %
Concentration per Run 3	58.072 ppb	56.995 ppb	55.643 ppb	5,910.126 ppb	59.518 ppb	59.325 ppb	58.648 ppb	61.161 ppb	123.805 %
Recovery Percentage 1	96.644 %	95.123 %	93.096 %	98.930 %	98.850 %	98.997 %	98.626 %	101.988 %	
Concentration RSD	1.8 %	2.3 %	2.9 %	2.5 %	0.7 %	0.9 %	1.2 %	1.2 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.027 ppb	61.494 ppb	55.919 ppb	59.485 ppb	114.167 %	60.155 ppb	60.632 ppb	117.909 %	59.188 ppb
Concentration per Run 1	61.671 ppb	62.940 ppb	56.761 ppb	59.762 ppb	109.702 %	61.127 ppb	61.567 ppb	114.982 %	58.682 ppb
Concentration per Run 2	61.196 ppb	62.622 ppb	55.973 ppb	59.526 ppb	114.200 %	59.196 ppb	59.299 ppb	121.132 %	59.432 ppb
Concentration per Run 3	60.213 ppb	58.921 ppb	55.022 ppb	59.168 ppb	118.600 %	60.142 ppb	61.031 ppb	117.614 %	59.450 ppb
Recovery Percentage 1	101.711 %	102.491 %	93.198 %	99.142 %		100.258 %	101.054 %		98.647 %
Concentration RSD	1.2 %	3.6 %	1.6 %	0.5 %	3.9 %	1.6 %	2.0 %	2.6 %	0.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.991 ppb	119.643 %	121.103 %	60.600 ppb	61.477 ppb	112.505 %
Concentration per Run 1	60.083 ppb	119.048 %	118.044 %	56.606 ppb	57.698 ppb	117.942 %
Concentration per Run 2	60.262 ppb	119.326 %	121.453 %	62.167 ppb	63.428 ppb	108.772 %
Concentration per Run 3	59.629 ppb	120.556 %	123.813 %	63.026 ppb	63.305 ppb	110.800 %
Recovery Percentage 1	99.986 %			101.000 %	102.462 %	
Concentration RSD	0.5 %	0.7 %	2.4 %	5.8 %	5.3 %	4.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 77
Analysis label: CCB
Analysis started at: 9/5/2023 12:47:51 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.481 %	131.950 %	0.014 ppb	10.564 ppb	2.524 ppb	-0.029 ppb	3.183 ppb	9.530 ppb	111.906 %
Concentration per Run 1	102.304 %	135.500 %	0.011 ppb	11.562 ppb	3.603 ppb	-0.019 ppb	6.278 ppb	12.488 ppb	111.094 %
Concentration per Run 2	99.798 %	127.192 %	0.018 ppb	10.524 ppb	2.323 ppb	-0.041 ppb	2.447 ppb	8.342 ppb	111.560 %
Concentration per Run 3	99.342 %	133.159 %	0.014 ppb	9.606 ppb	1.645 ppb	-0.027 ppb	0.824 ppb	7.758 ppb	113.062 %
Recovery Percentage 1			2.852 %	10.564 %	3.606 %	-0.292 %	3.183 %	9.530 %	
Concentration RSD	1.6 %	3.2 %	25.1 %	9.3 %	39.4 %	38.0 %	88.0 %	27.1 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.012 ppb	0.007 ppb	0.241 ppb	21.245 ppb	0.011 ppb	0.006 ppb	-0.011 ppb	-0.089 ppb	120.297 %
Concentration per Run 1	-0.006 ppb	-0.013 ppb	0.336 ppb	21.136 ppb	0.012 ppb	0.014 ppb	-0.014 ppb	-0.088 ppb	124.144 %
Concentration per Run 2	-0.018 ppb	0.027 ppb	0.202 ppb	21.422 ppb	0.006 ppb	-0.005 ppb	-0.013 ppb	-0.095 ppb	120.204 %
Concentration per Run 3	-0.011 ppb	0.006 ppb	0.186 ppb	21.176 ppb	0.016 ppb	0.010 ppb	-0.004 ppb	-0.085 ppb	116.544 %
Recovery Percentage 1	-0.238 %	0.672 %	24.135 %	42.489 %	2.264 %	0.319 %	-1.056 %	-1.789 %	
Concentration RSD	52.7 %	295.5 %	34.0 %	0.7 %	46.5 %	156.3 %	50.5 %	5.3 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.195 ppb	0.661 ppb	0.051 ppb	1.586 ppb	116.091 %	0.003 ppb	0.007 ppb	122.218 %	0.203 ppb
Concentration per Run 1	0.163 ppb	0.618 ppb	0.053 ppb	1.287 ppb	117.805 %	0.004 ppb	0.008 ppb	130.804 %	0.165 ppb
Concentration per Run 2	0.189 ppb	0.579 ppb	0.050 ppb	1.596 ppb	116.020 %	0.003 ppb	0.005 ppb	120.170 %	0.216 ppb
Concentration per Run 3	0.232 ppb	0.787 ppb	0.051 ppb	1.874 ppb	114.450 %	0.002 ppb	0.008 ppb	115.680 %	0.227 ppb
Recovery Percentage 1	38.906 %	13.227 %	0.513 %	79.300 %		0.662 %	3.570 %		5.071 %
Concentration RSD	17.8 %	16.7 %	2.7 %	18.5 %	1.4 %	39.9 %	20.5 %	6.4 %	16.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.077 ppb	118.293 %	120.337 %	0.283 ppb	0.016 ppb	127.102 %
Concentration per Run 1	0.096 ppb	121.698 %	127.880 %	0.290 ppb	0.014 ppb	144.557 %
Concentration per Run 2	0.074 ppb	117.287 %	120.304 %	0.303 ppb	0.016 ppb	117.407 %
Concentration per Run 3	0.060 ppb	115.894 %	112.827 %	0.257 ppb	0.018 ppb	119.342 %
Recovery Percentage 1	15.324 %			28.349 %	1.605 %	
Concentration RSD	23.9 %	2.6 %	6.3 %	8.5 %	11.5 %	11.9 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	78	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1819212-1 6020TL	Rack	1		
Analysis started at:	9/5/2023 1:19:24 PM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	124.463 %	156.448 %	0.001 ppb	1.417 ppb	0.967 ppb	1.516 ppb	1.058 ppb	5.305 ppb	176.456 %
Concentration per Run 1	126.736 %	166.771 %	0.000 ppb	1.505 ppb	0.966 ppb	1.745 ppb	2.583 ppb	4.169 ppb	174.850 %
Concentration per Run 2	124.792 %	151.060 %	-0.001 ppb	1.958 ppb	0.786 ppb	1.862 ppb	1.621 ppb	6.930 ppb	177.361 %
Concentration per Run 3	121.860 %	151.513 %	0.002 ppb	0.789 ppb	1.147 ppb	0.942 ppb	-1.029 ppb	4.817 ppb	177.157 %
Concentration RSD	2.0 %	5.7 %	299.8 %	41.6 %	18.7 %	33.0 %	176.8 %	27.2 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.020 ppb	-0.008 ppb	0.048 ppb	8.950 ppb	0.001 ppb	0.049 ppb	-0.005 ppb	-0.140 ppb	142.776 %
Concentration per Run 1	-0.019 ppb	-0.012 ppb	0.056 ppb	8.671 ppb	0.001 ppb	0.039 ppb	-0.012 ppb	-0.169 ppb	156.396 %
Concentration per Run 2	-0.020 ppb	-0.012 ppb	0.055 ppb	9.162 ppb	0.001 ppb	0.047 ppb	-0.005 ppb	-0.113 ppb	139.108 %
Concentration per Run 3	-0.020 ppb	-0.002 ppb	0.033 ppb	9.016 ppb	0.001 ppb	0.060 ppb	0.002 ppb	-0.137 ppb	132.825 %
Concentration RSD	3.7 %	70.4 %	27.8 %	2.8 %	22.2 %	21.9 %	147.2 %	20.0 %	8.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.113 ppb	0.175 ppb	0.020 ppb	0.703 ppb	132.551 %	-0.004 ppb	0.000 ppb	148.062 %	0.182 ppb
Concentration per Run 1	0.087 ppb	0.080 ppb	0.015 ppb	0.555 ppb	139.286 %	-0.004 ppb	0.000 ppb	174.389 %	0.155 ppb
Concentration per Run 2	0.115 ppb	0.222 ppb	0.022 ppb	0.729 ppb	130.923 %	-0.005 ppb	0.000 ppb	140.291 %	0.183 ppb
Concentration per Run 3	0.137 ppb	0.222 ppb	0.021 ppb	0.825 ppb	127.443 %	-0.004 ppb	0.000 ppb	129.506 %	0.208 ppb
Concentration RSD	22.4 %	46.8 %	19.2 %	19.5 %	4.6 %	7.6 %	107.7 %	15.8 %	14.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.011 ppb	141.718 %	137.037 %	0.019 ppb	-0.007 ppb	399.136 %
Concentration per Run 1	0.009 ppb	166.955 %	149.519 %	0.012 ppb	-0.008 ppb	619.316 %
Concentration per Run 2	0.019 ppb	131.347 %	134.394 %	0.021 ppb	-0.006 ppb	337.173 %
Concentration per Run 3	0.006 ppb	126.852 %	127.198 %	0.024 ppb	-0.006 ppb	240.921 %
Concentration RSD	61.6 %	15.5 %	8.3 %	34.7 %	16.6 %	49.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 79
Analysis label: L2348742-02 6020TL
Analysis started at: 9/5/2023 1:24:02 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 51
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.663 %	127.066 %	0.003 ppb	48,651.428 ppb	26,647.722 ppb	104.456 ppb	3,005.834 ppb	148,296.886 ppb	133.849 %
Concentration per Run 1	96.544 %	125.454 %	0.001 ppb	49,934.463 ppb	27,204.341 ppb	104.434 ppb	3,019.281 ppb	151,625.405 ppb	133.885 %
Concentration per Run 2	94.865 %	126.285 %	0.005 ppb	48,058.051 ppb	26,525.107 ppb	105.907 ppb	2,957.934 ppb	148,278.007 ppb	134.111 %
Concentration per Run 3	92.579 %	129.458 %	0.003 ppb	47,961.771 ppb	26,213.718 ppb	103.028 ppb	3,040.285 ppb	144,987.247 ppb	133.551 %
Concentration RSD	2.1 %	1.7 %	66.3 %	2.3 %	1.9 %	1.4 %	1.4 %	2.2 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.721 ppb	0.466 ppb	6,478.070 ppb	8,441.919 ppb	3.955 ppb	6.585 ppb	0.457 ppb	329.662 ppb	110.254 %
Concentration per Run 1	0.713 ppb	0.492 ppb	6,472.095 ppb	8,300.685 ppb	3.859 ppb	6.313 ppb	0.447 ppb	326.292 ppb	110.371 %
Concentration per Run 2	0.664 ppb	0.427 ppb	6,561.663 ppb	8,493.628 ppb	3.901 ppb	6.526 ppb	0.422 ppb	324.807 ppb	113.095 %
Concentration per Run 3	0.787 ppb	0.479 ppb	6,400.451 ppb	8,531.443 ppb	4.105 ppb	6.917 ppb	0.502 ppb	337.888 ppb	107.297 %
Concentration RSD	8.6 %	7.4 %	1.2 %	1.5 %	3.3 %	4.7 %	9.0 %	2.2 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.016 ppb	0.091 ppb	3,471.403 ppb	1.821 ppb	101.294 %	-0.003 ppb	0.007 ppb	112.502 %	0.151 ppb
Concentration per Run 1	0.960 ppb	0.052 ppb	3,539.724 ppb	1.766 ppb	99.422 %	-0.005 ppb	0.007 ppb	113.991 %	0.147 ppb
Concentration per Run 2	1.059 ppb	0.082 ppb	3,452.969 ppb	1.756 ppb	100.303 %	-0.002 ppb	0.006 ppb	112.175 %	0.156 ppb
Concentration per Run 3	1.029 ppb	0.138 ppb	3,421.515 ppb	1.940 ppb	104.157 %	-0.003 ppb	0.007 ppb	111.340 %	0.151 ppb
Concentration RSD	5.0 %	48.2 %	1.8 %	5.7 %	2.5 %	35.7 %	9.4 %	1.2 %	3.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	66.995 ppb	116.523 %	118.421 %	0.015 ppb	0.048 ppb	130.518 %
Concentration per Run 1	66.859 ppb	114.259 %	117.673 %	0.009 ppb	0.035 ppb	156.690 %
Concentration per Run 2	69.018 ppb	117.316 %	119.521 %	0.017 ppb	0.053 ppb	121.348 %
Concentration per Run 3	65.108 ppb	117.996 %	118.070 %	0.019 ppb	0.056 ppb	113.517 %
Concentration RSD	2.9 %	1.7 %	0.8 %	35.6 %	23.3 %	17.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	80	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348791-02 6020TL	Rack	1		
Analysis started at:	9/5/2023 1:28:40 PM	Vial	52		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.436 %	136.910 %	0.004 ppb	11.824 ppb	1.885 ppb	2.417 ppb	-0.331 ppb	36.582 ppb	123.993 %
Concentration per Run 1	106.994 %	133.990 %	0.005 ppb	14.645 ppb	2.171 ppb	2.871 ppb	0.712 ppb	38.898 ppb	124.242 %
Concentration per Run 2	105.345 %	142.902 %	0.007 ppb	11.559 ppb	2.202 ppb	2.357 ppb	0.194 ppb	36.600 ppb	123.713 %
Concentration per Run 3	103.968 %	133.839 %	0.001 ppb	9.269 ppb	1.281 ppb	2.025 ppb	-1.898 ppb	34.247 ppb	124.024 %
Concentration RSD	1.4 %	3.8 %	67.2 %	22.8 %	27.7 %	17.6 %	417.8 %	6.4 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.013 ppb	0.014 ppb	0.192 ppb	22.210 ppb	0.001 ppb	0.001 ppb	0.063 ppb	-0.351 ppb	123.312 %
Concentration per Run 1	0.014 ppb	0.020 ppb	0.297 ppb	24.540 ppb	0.000 ppb	-0.004 ppb	0.069 ppb	-0.356 ppb	123.802 %
Concentration per Run 2	0.003 ppb	0.016 ppb	0.171 ppb	20.350 ppb	0.002 ppb	0.007 ppb	0.059 ppb	-0.352 ppb	123.661 %
Concentration per Run 3	0.021 ppb	0.005 ppb	0.107 ppb	21.742 ppb	0.000 ppb	0.001 ppb	0.062 ppb	-0.344 ppb	122.474 %
Concentration RSD	69.4 %	59.4 %	50.5 %	9.6 %	111.2 %	382.7 %	7.8 %	1.7 %	0.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.062 ppb	-0.002 ppb	0.137 ppb	0.173 ppb	118.103 %	-0.004 ppb	0.000 ppb	121.789 %	0.087 ppb
Concentration per Run 1	0.072 ppb	0.025 ppb	0.182 ppb	0.074 ppb	114.561 %	-0.004 ppb	0.001 ppb	120.774 %	0.063 ppb
Concentration per Run 2	0.055 ppb	0.005 ppb	0.125 ppb	0.174 ppb	120.941 %	-0.004 ppb	0.000 ppb	123.794 %	0.113 ppb
Concentration per Run 3	0.059 ppb	-0.035 ppb	0.104 ppb	0.271 ppb	118.807 %	-0.003 ppb	0.000 ppb	120.800 %	0.087 ppb
Concentration RSD	14.3 %	1,842.0 %	29.4 %	56.9 %	2.8 %	14.9 %	512.7 %	1.4 %	28.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.017 ppb	118.636 %	120.100 %	0.010 ppb	-0.005 ppb	134.276 %
Concentration per Run 1	0.020 ppb	116.464 %	118.960 %	0.005 ppb	-0.006 ppb	157.966 %
Concentration per Run 2	0.022 ppb	120.405 %	121.111 %	0.012 ppb	-0.004 ppb	124.338 %
Concentration per Run 3	0.010 ppb	119.040 %	120.228 %	0.014 ppb	-0.004 ppb	120.525 %
Concentration RSD	37.1 %	1.7 %	0.9 %	44.0 %	25.3 %	15.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	81	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348791-03 6020TL	Rack	1		
Analysis started at:	9/5/2023 1:33:18 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.435 %	138.093 %	0.036 ppb	27,370.655 ppb	24,690.423 ppb	342.412 ppb	4,541.324 ppb	55,504.824 ppb	122.416 %
Concentration per Run 1	107.665 %	134.518 %	0.037 ppb	27,990.963 ppb	25,525.559 ppb	344.256 ppb	4,557.334 ppb	57,150.458 ppb	122.868 %
Concentration per Run 2	103.511 %	135.047 %	0.035 ppb	27,067.249 ppb	24,526.638 ppb	337.312 ppb	4,506.804 ppb	54,690.614 ppb	121.858 %
Concentration per Run 3	102.128 %	144.715 %	0.034 ppb	27,053.754 ppb	24,019.070 ppb	345.668 ppb	4,559.835 ppb	54,673.400 ppb	122.522 %
Concentration RSD	2.8 %	4.2 %	4.4 %	2.0 %	3.1 %	1.3 %	0.7 %	2.6 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	17.323 ppb	31.924 ppb	47.583 ppb	1,289.762 ppb	0.632 ppb	8.425 ppb	145.962 ppb	61.133 ppb	122.360 %
Concentration per Run 1	17.423 ppb	32.551 ppb	48.354 ppb	1,317.500 ppb	0.615 ppb	8.519 ppb	146.152 ppb	61.561 ppb	120.920 %
Concentration per Run 2	17.250 ppb	31.735 ppb	47.309 ppb	1,269.542 ppb	0.641 ppb	8.203 ppb	143.892 ppb	60.415 ppb	120.494 %
Concentration per Run 3	17.295 ppb	31.484 ppb	47.086 ppb	1,282.245 ppb	0.639 ppb	8.552 ppb	147.840 ppb	61.424 ppb	125.666 %
Concentration RSD	0.5 %	1.7 %	1.4 %	1.9 %	2.3 %	2.3 %	1.4 %	1.0 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.426 ppb	47.236 ppb	291.423 ppb	5.121 ppb	111.376 %	0.065 ppb	2.957 ppb	118.385 %	2.470 ppb
Concentration per Run 1	63.177 ppb	46.852 ppb	295.576 ppb	5.221 ppb	110.240 %	0.065 ppb	2.987 ppb	115.941 %	2.427 ppb
Concentration per Run 2	59.682 ppb	47.322 ppb	282.379 ppb	5.095 ppb	109.547 %	0.064 ppb	2.925 ppb	116.648 %	2.484 ppb
Concentration per Run 3	61.419 ppb	47.533 ppb	296.315 ppb	5.046 ppb	114.341 %	0.065 ppb	2.959 ppb	122.567 %	2.499 ppb
Concentration RSD	2.8 %	0.7 %	2.7 %	1.8 %	2.3 %	1.3 %	1.1 %	3.1 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	66.225 ppb	118.333 %	120.000 %	0.025 ppb	27.142 ppb	114.090 %
Concentration per Run 1	65.462 ppb	115.594 %	118.743 %	0.021 ppb	24.944 ppb	121.638 %
Concentration per Run 2	65.908 ppb	116.242 %	115.674 %	0.027 ppb	27.937 ppb	108.809 %
Concentration per Run 3	67.307 ppb	123.162 %	125.582 %	0.026 ppb	28.546 ppb	111.824 %
Concentration RSD	1.5 %	3.5 %	4.2 %	12.7 %	7.1 %	5.9 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 82
Analysis label: L2348791-04 6020TL
Analysis started at: 9/5/2023 1:37:57 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 54
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.412 %	143.910 %	0.028 ppb	28,105.786 ppb	24,922.835 ppb	229.063 ppb	4,829.558 ppb	58,185.382 ppb	115.547 %
Concentration per Run 1	104.731 %	136.331 %	0.027 ppb	28,855.214 ppb	26,070.749 ppb	240.100 ppb	4,875.298 ppb	60,550.248 ppb	116.172 %
Concentration per Run 2	102.863 %	148.945 %	0.031 ppb	26,365.484 ppb	23,150.118 ppb	218.214 ppb	4,673.304 ppb	55,990.048 ppb	115.880 %
Concentration per Run 3	99.643 %	146.453 %	0.027 ppb	29,096.660 ppb	25,547.637 ppb	228.876 ppb	4,940.072 ppb	58,015.851 ppb	114.589 %
Concentration RSD	2.5 %	4.6 %	8.7 %	5.4 %	6.2 %	4.8 %	2.9 %	3.9 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	14.242 ppb	23.592 ppb	42.514 ppb	1,082.010 ppb	0.469 ppb	6.990 ppb	101.037 ppb	35.621 ppb	121.352 %
Concentration per Run 1	14.513 ppb	24.248 ppb	43.127 ppb	1,107.390 ppb	0.472 ppb	7.339 ppb	104.425 ppb	36.632 ppb	116.823 %
Concentration per Run 2	13.941 ppb	22.820 ppb	40.592 ppb	1,041.681 ppb	0.458 ppb	6.624 ppb	98.151 ppb	35.030 ppb	123.367 %
Concentration per Run 3	14.271 ppb	23.709 ppb	43.822 ppb	1,096.959 ppb	0.475 ppb	7.007 ppb	100.535 ppb	35.200 ppb	123.867 %
Concentration RSD	2.0 %	3.1 %	4.0 %	3.3 %	2.0 %	5.1 %	3.1 %	2.5 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	53.457 ppb	36.767 ppb	304.352 ppb	4.886 ppb	111.189 %	0.040 ppb	2.093 ppb	118.029 %	2.023 ppb
Concentration per Run 1	55.095 ppb	37.024 ppb	313.945 ppb	5.025 ppb	105.297 %	0.039 ppb	2.116 ppb	111.602 %	2.070 ppb
Concentration per Run 2	52.081 ppb	36.278 ppb	295.732 ppb	4.744 ppb	113.017 %	0.040 ppb	2.071 ppb	118.804 %	1.944 ppb
Concentration per Run 3	53.195 ppb	37.000 ppb	303.379 ppb	4.889 ppb	115.252 %	0.041 ppb	2.092 ppb	123.681 %	2.056 ppb
Concentration RSD	2.9 %	1.2 %	3.0 %	2.9 %	4.7 %	1.9 %	1.1 %	5.1 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	63.685 ppb	120.010 %	120.405 %	0.021 ppb	18.293 ppb	106.386 %
Concentration per Run 1	65.385 ppb	112.876 %	111.388 %	0.018 ppb	17.733 ppb	108.840 %
Concentration per Run 2	61.712 ppb	122.798 %	121.491 %	0.022 ppb	18.453 ppb	104.119 %
Concentration per Run 3	63.957 ppb	124.357 %	128.337 %	0.022 ppb	18.693 ppb	106.198 %
Concentration RSD	2.9 %	5.2 %	7.1 %	12.0 %	2.7 %	2.2 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	83	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348791-05 6020TL	Rack	1		
Analysis started at:	9/5/2023 1:42:35 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.105 %	143.406 %	0.026 ppb	13,655.823 ppb	4,250.078 ppb	292.936 ppb	4,387.847 ppb	15,418.136 ppb	110.499 %
Concentration per Run 1	104.908 %	141.996 %	0.026 ppb	13,492.375 ppb	4,156.751 ppb	292.937 ppb	4,373.123 ppb	15,185.318 ppb	111.770 %
Concentration per Run 2	103.332 %	144.111 %	0.026 ppb	13,580.648 ppb	4,159.466 ppb	290.911 ppb	4,338.323 ppb	15,511.778 ppb	110.318 %
Concentration per Run 3	101.074 %	144.111 %	0.025 ppb	13,894.446 ppb	4,434.016 ppb	294.960 ppb	4,452.096 ppb	15,557.312 ppb	109.408 %
Concentration RSD	1.9 %	0.9 %	2.4 %	1.5 %	3.7 %	0.7 %	1.3 %	1.3 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.877 ppb	6.545 ppb	224.968 ppb	8,821.185 ppb	3.728 ppb	3.516 ppb	3.215 ppb	134.903 ppb	117.260 %
Concentration per Run 1	4.814 ppb	6.319 ppb	218.971 ppb	8,623.457 ppb	3.653 ppb	3.438 ppb	3.116 ppb	133.476 ppb	119.066 %
Concentration per Run 2	4.902 ppb	6.511 ppb	223.217 ppb	8,824.053 ppb	3.735 ppb	3.492 ppb	3.329 ppb	136.119 ppb	113.797 %
Concentration per Run 3	4.916 ppb	6.806 ppb	232.716 ppb	9,016.045 ppb	3.798 ppb	3.619 ppb	3.200 ppb	135.114 ppb	118.917 %
Concentration RSD	1.1 %	3.8 %	3.1 %	2.2 %	2.0 %	2.6 %	3.3 %	1.0 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	35.481 ppb	13.251 ppb	126.248 ppb	0.817 ppb	108.521 %	0.019 ppb	0.594 ppb	117.302 %	0.497 ppb
Concentration per Run 1	34.898 ppb	12.570 ppb	124.726 ppb	0.699 ppb	106.420 %	0.021 ppb	0.602 ppb	114.807 %	0.495 ppb
Concentration per Run 2	36.049 ppb	13.545 ppb	127.942 ppb	0.864 ppb	107.556 %	0.016 ppb	0.589 ppb	117.057 %	0.502 ppb
Concentration per Run 3	35.495 ppb	13.637 ppb	126.075 ppb	0.887 ppb	111.587 %	0.019 ppb	0.593 ppb	120.043 %	0.495 ppb
Concentration RSD	1.6 %	4.5 %	1.3 %	12.6 %	2.5 %	11.4 %	1.1 %	2.2 %	0.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	64.316 ppb	118.704 %	119.852 %	0.073 ppb	3.834 ppb	122.676 %
Concentration per Run 1	65.551 ppb	115.364 %	116.772 %	0.067 ppb	3.541 ppb	132.229 %
Concentration per Run 2	64.640 ppb	117.703 %	120.043 %	0.074 ppb	3.920 ppb	119.275 %
Concentration per Run 3	62.758 ppb	123.045 %	122.741 %	0.078 ppb	4.040 ppb	116.525 %
Concentration RSD	2.2 %	3.3 %	2.5 %	8.1 %	6.8 %	6.8 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	84	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348791-06 6020TL	Rack	1		
Analysis started at:	9/5/2023 1:47:14 PM	Vial	56		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.729 %	151.211 %	0.011 ppb	36,660.858 ppb	53,138.841 ppb	29.896 ppb	2,281.933 ppb	62,697.245 ppb	127.838 %
Concentration per Run 1	110.363 %	154.233 %	0.009 ppb	35,138.687 ppb	50,613.116 ppb	29.259 ppb	2,111.972 ppb	59,218.770 ppb	128.621 %
Concentration per Run 2	106.073 %	146.528 %	0.010 ppb	37,270.815 ppb	53,740.899 ppb	29.630 ppb	2,353.850 ppb	63,742.176 ppb	126.513 %
Concentration per Run 3	103.751 %	152.873 %	0.013 ppb	37,573.072 ppb	55,062.509 ppb	30.798 ppb	2,379.978 ppb	65,130.788 ppb	128.381 %
Concentration RSD	3.1 %	2.7 %	18.5 %	3.6 %	4.3 %	2.7 %	6.5 %	4.9 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	44.665 ppb	10.087 ppb	17.209 ppb	2,967.101 ppb	0.402 ppb	4.100 ppb	5.500 ppb	19.124 ppb	120.730 %
Concentration per Run 1	43.395 ppb	9.727 ppb	16.418 ppb	2,829.206 ppb	0.398 ppb	3.955 ppb	5.276 ppb	18.604 ppb	118.399 %
Concentration per Run 2	44.112 ppb	10.169 ppb	17.302 ppb	2,991.946 ppb	0.398 ppb	3.988 ppb	5.442 ppb	19.308 ppb	120.799 %
Concentration per Run 3	46.490 ppb	10.364 ppb	17.907 ppb	3,080.152 ppb	0.411 ppb	4.358 ppb	5.783 ppb	19.460 ppb	122.990 %
Concentration RSD	3.6 %	3.2 %	4.4 %	4.3 %	1.9 %	5.5 %	4.7 %	2.4 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	54.983 ppb	8.638 ppb	383.462 ppb	5.787 ppb	108.756 %	-0.001 ppb	0.675 ppb	119.245 %	1.292 ppb
Concentration per Run 1	54.018 ppb	9.204 ppb	375.988 ppb	5.798 ppb	107.513 %	-0.002 ppb	0.671 ppb	115.156 %	1.279 ppb
Concentration per Run 2	55.483 ppb	8.023 ppb	382.451 ppb	5.667 ppb	108.675 %	-0.001 ppb	0.700 ppb	117.024 %	1.328 ppb
Concentration per Run 3	55.447 ppb	8.688 ppb	391.948 ppb	5.895 ppb	110.081 %	0.000 ppb	0.656 ppb	125.556 %	1.267 ppb
Concentration RSD	1.5 %	6.9 %	2.1 %	2.0 %	1.2 %	77.2 %	3.3 %	4.6 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	430.679 ppb	119.277 %	122.150 %	0.024 ppb	0.909 ppb	118.992 %
Concentration per Run 1	427.451 ppb	115.247 %	119.896 %	0.020 ppb	0.848 ppb	123.698 %
Concentration per Run 2	435.379 ppb	119.238 %	121.141 %	0.025 ppb	0.935 ppb	115.903 %
Concentration per Run 3	429.207 ppb	123.346 %	125.414 %	0.026 ppb	0.945 ppb	117.374 %
Concentration RSD	1.0 %	3.4 %	2.4 %	14.0 %	5.8 %	3.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	85	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348791-07 6020TL	Rack	1		
Analysis started at:	9/5/2023 1:51:53 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.431 %	151.916 %	0.022 ppb	33,772.994 ppb	17,216.332 ppb	52.955 ppb	4,382.408 ppb	43,507.346 ppb	120.666 %
Concentration per Run 1	106.258 %	152.269 %	0.019 ppb	33,409.334 ppb	17,082.820 ppb	50.741 ppb	4,244.275 ppb	43,099.437 ppb	121.889 %
Concentration per Run 2	102.472 %	151.513 %	0.020 ppb	33,724.027 ppb	17,137.264 ppb	54.181 ppb	4,367.585 ppb	43,214.296 ppb	120.296 %
Concentration per Run 3	101.561 %	151.967 %	0.028 ppb	34,185.621 ppb	17,428.913 ppb	53.944 ppb	4,535.364 ppb	44,208.307 ppb	119.812 %
Concentration RSD	2.4 %	0.3 %	21.2 %	1.2 %	1.1 %	3.6 %	3.3 %	1.4 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.225 ppb	3.979 ppb	102.053 ppb	6,526.055 ppb	0.161 ppb	2.043 ppb	0.844 ppb	9.793 ppb	120.859 %
Concentration per Run 1	4.983 ppb	3.966 ppb	98.916 ppb	6,465.936 ppb	0.171 ppb	2.072 ppb	0.807 ppb	9.634 ppb	118.999 %
Concentration per Run 2	5.440 ppb	4.088 ppb	103.516 ppb	6,515.477 ppb	0.148 ppb	2.111 ppb	0.852 ppb	9.825 ppb	121.632 %
Concentration per Run 3	5.253 ppb	3.884 ppb	103.727 ppb	6,596.753 ppb	0.165 ppb	1.945 ppb	0.872 ppb	9.920 ppb	121.945 %
Concentration RSD	4.4 %	2.6 %	2.7 %	1.0 %	7.3 %	4.3 %	4.0 %	1.5 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	83.055 ppb	2.036 ppb	355.841 ppb	1.433 ppb	108.628 %	0.000 ppb	0.115 ppb	117.872 %	0.238 ppb
Concentration per Run 1	83.576 ppb	1.995 ppb	351.262 ppb	1.282 ppb	108.830 %	-0.002 ppb	0.117 ppb	116.881 %	0.219 ppb
Concentration per Run 2	82.297 ppb	2.341 ppb	353.337 ppb	1.452 ppb	107.891 %	0.001 ppb	0.104 ppb	116.902 %	0.247 ppb
Concentration per Run 3	83.291 ppb	1.771 ppb	362.923 ppb	1.566 ppb	109.164 %	0.000 ppb	0.124 ppb	119.832 %	0.248 ppb
Concentration RSD	0.8 %	14.1 %	1.7 %	9.9 %	0.6 %	504.2 %	8.7 %	1.4 %	6.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	162.218 ppb	121.896 %	121.739 %	0.015 ppb	0.438 ppb	129.929 %
Concentration per Run 1	162.980 ppb	120.211 %	118.758 %	0.011 ppb	0.366 ppb	151.426 %
Concentration per Run 2	162.370 ppb	120.600 %	123.746 %	0.016 ppb	0.468 ppb	118.657 %
Concentration per Run 3	161.303 ppb	124.877 %	122.714 %	0.018 ppb	0.480 ppb	119.704 %
Concentration RSD	0.5 %	2.1 %	2.2 %	24.6 %	14.3 %	14.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	86	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348791-09 6020TL	Rack	1		
Analysis started at:	9/5/2023 1:56:33 PM	Vial	58		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.568 %	131.296 %	0.374 ppb	84,571.728 ppb	16,578.845 ppb	984.590 ppb	5,408.255 ppb	32,176.406 ppb	121.115 %
Concentration per Run 1	93.940 %	124.019 %	0.374 ppb	88,470.344 ppb	17,373.053 ppb	990.388 ppb	5,404.096 ppb	33,507.193 ppb	122.238 %
Concentration per Run 2	91.158 %	136.709 %	0.363 ppb	81,569.922 ppb	15,761.345 ppb	952.060 ppb	5,244.834 ppb	30,940.054 ppb	120.243 %
Concentration per Run 3	89.606 %	133.159 %	0.386 ppb	83,674.916 ppb	16,602.136 ppb	1,011.321 ppb	5,575.834 ppb	32,081.969 ppb	120.864 %
Concentration RSD	2.4 %	5.0 %	3.0 %	4.2 %	4.9 %	3.1 %	3.1 %	4.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	26.333 ppb	40.449 ppb	602.398 ppb	55,688.725 ppb	10.841 ppb	122.268 ppb	71.770 ppb	12.050 ppb	115.178 %
Concentration per Run 1	26.735 ppb	41.822 ppb	607.518 ppb	56,471.784 ppb	11.110 ppb	125.003 ppb	73.361 ppb	12.253 ppb	112.667 %
Concentration per Run 2	25.899 ppb	39.208 ppb	579.885 ppb	53,761.474 ppb	10.542 ppb	118.475 ppb	70.067 ppb	11.946 ppb	115.149 %
Concentration per Run 3	26.366 ppb	40.315 ppb	619.790 ppb	56,832.916 ppb	10.871 ppb	123.326 ppb	71.881 ppb	11.951 ppb	117.717 %
Concentration RSD	1.6 %	3.2 %	3.4 %	3.0 %	2.6 %	2.8 %	2.3 %	1.5 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.649 ppb	12.002 ppb	169.720 ppb	1.703 ppb	104.257 %	0.024 ppb	2.571 ppb	116.461 %	0.164 ppb
Concentration per Run 1	13.936 ppb	11.646 ppb	169.674 ppb	1.627 ppb	102.050 %	0.024 ppb	2.574 ppb	112.946 %	0.182 ppb
Concentration per Run 2	13.621 ppb	12.227 ppb	169.518 ppb	1.707 ppb	103.258 %	0.023 ppb	2.608 ppb	119.113 %	0.154 ppb
Concentration per Run 3	13.391 ppb	12.134 ppb	169.968 ppb	1.774 ppb	107.464 %	0.025 ppb	2.531 ppb	117.323 %	0.158 ppb
Concentration RSD	2.0 %	2.6 %	0.1 %	4.3 %	2.7 %	4.0 %	1.5 %	2.7 %	9.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	125.090 ppb	118.442 %	119.751 %	0.026 ppb	7.490 ppb	114.049 %
Concentration per Run 1	128.211 ppb	115.097 %	115.160 %	0.023 ppb	7.002 ppb	120.027 %
Concentration per Run 2	122.526 ppb	117.402 %	120.806 %	0.028 ppb	7.609 ppb	110.802 %
Concentration per Run 3	124.531 ppb	122.827 %	123.287 %	0.027 ppb	7.858 ppb	111.319 %
Concentration RSD	2.3 %	3.4 %	3.5 %	9.3 %	5.9 %	4.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 87
Analysis label: L2348791-10 6020TL
Analysis started at: 9/5/2023 2:01:12 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 59
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.725 %	143.582 %	0.013 ppb	36,675.750 ppb	12,717.198 ppb	167.447 ppb	4,878.049 ppb	30,109.829 ppb	108.778 %
Concentration per Run 1	105.466 %	142.374 %	0.015 ppb	36,977.079 ppb	12,438.641 ppb	165.584 ppb	4,904.828 ppb	30,566.480 ppb	108.828 %
Concentration per Run 2	103.521 %	145.320 %	0.011 ppb	36,858.782 ppb	13,041.948 ppb	170.703 ppb	4,895.971 ppb	29,914.201 ppb	109.043 %
Concentration per Run 3	102.188 %	143.054 %	0.014 ppb	36,191.387 ppb	12,671.004 ppb	166.056 ppb	4,833.347 ppb	29,848.805 ppb	108.464 %
Concentration RSD	1.6 %	1.1 %	14.3 %	1.2 %	2.4 %	1.7 %	0.8 %	1.3 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.935 ppb	1.224 ppb	66.631 ppb	7,991.369 ppb	0.080 ppb	0.479 ppb	0.327 ppb	0.428 ppb	111.025 %
Concentration per Run 1	1.746 ppb	1.221 ppb	65.196 ppb	7,891.320 ppb	0.080 ppb	0.489 ppb	0.331 ppb	0.390 ppb	111.599 %
Concentration per Run 2	2.037 ppb	1.235 ppb	67.852 ppb	8,011.727 ppb	0.083 ppb	0.429 ppb	0.307 ppb	0.433 ppb	110.583 %
Concentration per Run 3	2.022 ppb	1.215 ppb	66.846 ppb	8,071.060 ppb	0.078 ppb	0.520 ppb	0.345 ppb	0.461 ppb	110.893 %
Concentration RSD	8.5 %	0.9 %	2.0 %	1.1 %	2.6 %	9.7 %	6.0 %	8.3 %	0.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	21.857 ppb	0.946 ppb	213.109 ppb	0.894 ppb	103.755 %	-0.004 ppb	0.011 ppb	113.787 %	0.055 ppb
Concentration per Run 1	21.835 ppb	0.991 ppb	213.413 ppb	0.834 ppb	102.078 %	-0.004 ppb	0.012 ppb	111.255 %	0.044 ppb
Concentration per Run 2	22.551 ppb	0.871 ppb	218.350 ppb	0.940 ppb	103.816 %	-0.004 ppb	0.008 ppb	116.483 %	0.070 ppb
Concentration per Run 3	21.185 ppb	0.975 ppb	207.564 ppb	0.909 ppb	105.370 %	-0.005 ppb	0.012 ppb	113.622 %	0.051 ppb
Concentration RSD	3.1 %	6.9 %	2.5 %	6.0 %	1.6 %	13.0 %	18.8 %	2.3 %	24.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	76.313 ppb	114.296 %	116.104 %	0.006 ppb	0.114 ppb	110.992 %
Concentration per Run 1	77.081 ppb	111.693 %	113.649 %	0.004 ppb	0.105 ppb	116.547 %
Concentration per Run 2	76.760 ppb	115.210 %	117.229 %	0.006 ppb	0.121 ppb	109.031 %
Concentration per Run 3	75.099 ppb	115.986 %	117.435 %	0.008 ppb	0.116 ppb	107.400 %
Concentration RSD	1.4 %	2.0 %	1.8 %	34.0 %	7.1 %	4.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	88	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/5/2023 2:05:52 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.015 %	131.925 %	64.918 ppb	6,121.583 ppb	6,249.182 ppb	61.936 ppb	6,383.978 ppb	6,175.074 ppb	108.426 %
Concentration per Run 1	90.007 %	139.503 %	64.243 ppb	6,013.405 ppb	6,156.170 ppb	61.598 ppb	6,608.238 ppb	6,277.262 ppb	108.846 %
Concentration per Run 2	89.194 %	131.195 %	65.025 ppb	6,070.934 ppb	6,212.648 ppb	60.690 ppb	6,302.222 ppb	6,268.508 ppb	108.111 %
Concentration per Run 3	87.844 %	125.077 %	65.487 ppb	6,280.410 ppb	6,378.727 ppb	63.520 ppb	6,241.473 ppb	5,979.451 ppb	108.321 %
Recovery Percentage 1			108.197 %	102.026 %	104.153 %	103.227 %	106.400 %	102.918 %	
Concentration RSD	1.2 %	5.5 %	1.0 %	2.3 %	1.9 %	2.3 %	3.1 %	2.7 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.678 ppb	56.530 ppb	56.156 ppb	5,912.836 ppb	58.521 ppb	59.183 ppb	58.961 ppb	61.123 ppb	119.315 %
Concentration per Run 1	55.521 ppb	54.080 ppb	54.439 ppb	5,713.691 ppb	56.238 ppb	56.555 ppb	55.898 ppb	59.787 ppb	127.065 %
Concentration per Run 2	56.102 ppb	55.667 ppb	56.407 ppb	5,784.135 ppb	56.708 ppb	57.229 ppb	57.244 ppb	59.345 ppb	121.606 %
Concentration per Run 3	61.410 ppb	59.842 ppb	57.623 ppb	6,240.680 ppb	62.618 ppb	63.764 ppb	63.739 ppb	64.237 ppb	109.275 %
Recovery Percentage 1	96.130 %	94.216 %	93.594 %	98.547 %	97.535 %	98.638 %	98.268 %	101.872 %	
Concentration RSD	5.6 %	5.3 %	2.9 %	4.8 %	6.1 %	6.7 %	7.1 %	4.4 %	7.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	62.060 ppb	64.405 ppb	58.269 ppb	59.562 ppb	111.421 %	61.005 ppb	60.969 ppb	119.185 %	59.528 ppb
Concentration per Run 1	59.812 ppb	67.142 ppb	60.957 ppb	58.488 ppb	113.484 %	59.020 ppb	59.475 ppb	127.589 %	58.619 ppb
Concentration per Run 2	60.247 ppb	61.597 ppb	55.770 ppb	57.919 ppb	111.633 %	60.088 ppb	60.216 ppb	118.908 %	59.166 ppb
Concentration per Run 3	66.120 ppb	64.476 ppb	58.079 ppb	62.278 ppb	109.145 %	63.908 ppb	63.216 ppb	111.059 %	60.799 ppb
Recovery Percentage 1	103.433 %	107.342 %	97.115 %	99.269 %		101.675 %	101.615 %		99.213 %
Concentration RSD	5.7 %	4.3 %	4.5 %	4.0 %	2.0 %	4.2 %	3.2 %	6.9 %	1.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.013 ppb	118.812 %	120.795 %	56.484 ppb	56.537 ppb	125.300 %
Concentration per Run 1	61.003 ppb	124.118 %	129.530 %	46.928 ppb	47.498 ppb	148.591 %
Concentration per Run 2	60.023 ppb	119.274 %	119.746 %	56.920 ppb	57.297 ppb	121.486 %
Concentration per Run 3	62.013 ppb	113.044 %	113.111 %	65.604 ppb	64.816 ppb	105.823 %
Recovery Percentage 1	101.688 %			94.140 %	94.228 %	
Concentration RSD	1.6 %	4.7 %	6.8 %	16.5 %	15.4 %	17.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 89
Analysis label: CCB
Analysis started at: 9/5/2023 2:10:35 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.639 %	130.591 %	0.003 ppb	11.835 ppb	3.005 ppb	-0.296 ppb	1.232 ppb	8.590 ppb	104.055 %
Concentration per Run 1	93.881 %	128.249 %	0.003 ppb	13.458 ppb	3.610 ppb	-0.248 ppb	3.769 ppb	9.440 ppb	104.319 %
Concentration per Run 2	93.539 %	126.512 %	0.000 ppb	11.487 ppb	2.257 ppb	-0.280 ppb	0.434 ppb	6.663 ppb	105.083 %
Concentration per Run 3	90.496 %	137.011 %	0.005 ppb	10.560 ppb	3.149 ppb	-0.359 ppb	-0.506 ppb	9.666 ppb	102.762 %
Recovery Percentage 1			0.526 %	11.835 %	4.293 %	-2.959 %	1.232 %	8.590 %	
Concentration RSD	2.0 %	4.3 %	109.5 %	12.5 %	22.9 %	19.2 %	182.3 %	19.5 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.004 ppb	-0.009 ppb	0.077 ppb	24.420 ppb	0.004 ppb	0.007 ppb	-0.012 ppb	-0.090 ppb	119.701 %
Concentration per Run 1	0.006 ppb	-0.012 ppb	0.091 ppb	25.272 ppb	0.005 ppb	0.020 ppb	-0.015 ppb	-0.074 ppb	116.183 %
Concentration per Run 2	-0.015 ppb	-0.007 ppb	0.099 ppb	22.562 ppb	0.005 ppb	0.004 ppb	-0.016 ppb	-0.082 ppb	121.859 %
Concentration per Run 3	-0.002 ppb	-0.008 ppb	0.043 ppb	25.426 ppb	0.003 ppb	-0.003 ppb	-0.005 ppb	-0.115 ppb	121.061 %
Recovery Percentage 1	-0.074 %	-0.907 %	7.747 %	48.840 %	0.874 %	0.348 %	-1.200 %	-1.802 %	
Concentration RSD	292.6 %	30.1 %	39.2 %	6.6 %	29.0 %	172.4 %	53.9 %	24.1 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.185 ppb	0.654 ppb	0.069 ppb	1.398 ppb	114.897 %	0.000 ppb	0.005 ppb	119.558 %	0.046 ppb
Concentration per Run 1	0.170 ppb	0.484 ppb	0.063 ppb	1.026 ppb	112.794 %	0.000 ppb	0.003 ppb	119.326 %	0.029 ppb
Concentration per Run 2	0.151 ppb	0.500 ppb	0.075 ppb	1.446 ppb	113.299 %	0.000 ppb	0.008 ppb	116.992 %	0.051 ppb
Concentration per Run 3	0.234 ppb	0.979 ppb	0.067 ppb	1.721 ppb	118.600 %	0.000 ppb	0.003 ppb	122.355 %	0.059 ppb
Recovery Percentage 1	37.032 %	13.087 %	0.687 %	69.891 %		-0.050 %	2.366 %		1.157 %
Concentration RSD	23.3 %	43.0 %	8.9 %	25.1 %	2.8 %	114.7 %	60.7 %	2.2 %	32.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.054 ppb	117.526 %	120.664 %	0.266 ppb	0.008 ppb	129.915 %
Concentration per Run 1	0.053 ppb	114.841 %	118.803 %	0.271 ppb	0.007 ppb	147.318 %
Concentration per Run 2	0.066 ppb	116.750 %	118.709 %	0.287 ppb	0.010 ppb	119.216 %
Concentration per Run 3	0.044 ppb	120.988 %	124.479 %	0.240 ppb	0.008 ppb	123.211 %
Recovery Percentage 1	10.807 %			26.565 %	0.828 %	
Concentration RSD	20.2 %	2.7 %	2.7 %	9.0 %	20.1 %	11.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	90	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348791-11 6020TL	Rack	1		
Analysis started at:	9/5/2023 2:17:49 PM	Vial	60		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	106.136 %	154.258 %	0.023 ppb	37,253.422 ppb	7,715.051 ppb	236.055 ppb	4,956.723 ppb	35,375.017 ppb	114.144 %
Concentration per Run 1	107.805 %	152.722 %	0.023 ppb	37,347.774 ppb	7,665.989 ppb	232.710 ppb	5,171.499 ppb	36,408.198 ppb	113.790 %
Concentration per Run 2	105.913 %	152.571 %	0.027 ppb	37,507.118 ppb	7,863.822 ppb	238.044 ppb	4,707.068 ppb	34,523.397 ppb	114.152 %
Concentration per Run 3	104.690 %	157.481 %	0.019 ppb	36,905.374 ppb	7,615.343 ppb	237.410 ppb	4,991.601 ppb	35,193.455 ppb	114.490 %
Concentration RSD	1.5 %	1.8 %	17.8 %	0.8 %	1.7 %	1.2 %	4.7 %	2.7 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.532 ppb	2.213 ppb	62.376 ppb	804.422 ppb	0.282 ppb	2.512 ppb	2.562 ppb	5.833 ppb	126.240 %
Concentration per Run 1	5.615 ppb	2.265 ppb	63.378 ppb	812.744 ppb	0.289 ppb	2.547 ppb	2.699 ppb	5.817 ppb	121.911 %
Concentration per Run 2	5.482 ppb	2.187 ppb	61.792 ppb	807.347 ppb	0.268 ppb	2.477 ppb	2.455 ppb	5.672 ppb	127.048 %
Concentration per Run 3	5.499 ppb	2.186 ppb	61.957 ppb	793.175 ppb	0.289 ppb	2.511 ppb	2.533 ppb	6.010 ppb	129.760 %
Concentration RSD	1.3 %	2.0 %	1.4 %	1.3 %	4.4 %	1.4 %	4.9 %	2.9 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.933 ppb	1.841 ppb	244.690 ppb	1.403 ppb	115.227 %	0.001 ppb	0.066 ppb	128.062 %	0.103 ppb
Concentration per Run 1	13.311 ppb	1.828 ppb	246.849 ppb	1.285 ppb	112.646 %	0.002 ppb	0.065 ppb	125.230 %	0.104 ppb
Concentration per Run 2	12.490 ppb	1.751 ppb	242.952 ppb	1.454 ppb	115.755 %	0.000 ppb	0.066 ppb	129.235 %	0.099 ppb
Concentration per Run 3	12.996 ppb	1.943 ppb	244.270 ppb	1.470 ppb	117.280 %	0.000 ppb	0.067 ppb	129.720 %	0.105 ppb
Concentration RSD	3.2 %	5.2 %	0.8 %	7.3 %	2.0 %	166.4 %	1.6 %	1.9 %	3.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.388 ppb	126.046 %	128.190 %	0.039 ppb	0.862 ppb	140.623 %
Concentration per Run 1	60.437 ppb	123.077 %	125.368 %	0.027 ppb	0.681 ppb	172.242 %
Concentration per Run 2	58.091 ppb	126.662 %	129.439 %	0.045 ppb	0.923 ppb	127.992 %
Concentration per Run 3	59.637 ppb	128.400 %	129.763 %	0.045 ppb	0.982 ppb	121.634 %
Concentration RSD	2.0 %	2.2 %	1.9 %	26.0 %	18.5 %	19.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 91
Analysis label: WG1823074-2d5 6020TL
Analysis started at: 9/5/2023 2:34:15 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 2
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.146 %	144.262 %	11.301 ppb	2,061.882 ppb	2,126.796 ppb	427.879 ppb	2,183.481 ppb	1,825.823 ppb	115.561 %
Concentration per Run 1	103.070 %	150.003 %	11.226 ppb	1,981.725 ppb	2,042.022 ppb	411.870 ppb	2,083.831 ppb	1,642.412 ppb	116.568 %
Concentration per Run 2	102.194 %	140.259 %	11.281 ppb	2,101.616 ppb	2,203.620 ppb	444.277 ppb	2,215.671 ppb	1,919.819 ppb	116.491 %
Concentration per Run 3	98.174 %	142.525 %	11.395 ppb	2,102.304 ppb	2,134.747 ppb	427.490 ppb	2,250.942 ppb	1,915.239 ppb	113.625 %
Concentration RSD	2.6 %	3.5 %	0.8 %	3.4 %	3.8 %	3.8 %	4.0 %	8.7 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	96.296 ppb	38.483 ppb	95.173 ppb	209.658 ppb	99.803 ppb	98.916 ppb	51.039 ppb	103.924 ppb	128.009 %
Concentration per Run 1	94.413 ppb	37.766 ppb	92.600 ppb	209.559 ppb	98.803 ppb	98.325 ppb	50.569 ppb	102.591 ppb	125.648 %
Concentration per Run 2	98.438 ppb	38.833 ppb	95.439 ppb	212.775 ppb	100.163 ppb	99.469 ppb	52.126 ppb	106.092 ppb	127.706 %
Concentration per Run 3	96.035 ppb	38.850 ppb	97.479 ppb	206.639 ppb	100.441 ppb	98.955 ppb	50.423 ppb	103.090 ppb	130.674 %
Concentration RSD	2.1 %	1.6 %	2.6 %	1.5 %	0.9 %	0.6 %	1.8 %	1.8 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	25.555 ppb	27.118 ppb	218.169 ppb	218.358 ppb	120.401 %	10.587 ppb	11.164 ppb	128.466 %	88.990 ppb
Concentration per Run 1	25.073 ppb	26.424 ppb	216.432 ppb	216.109 ppb	118.950 %	10.408 ppb	10.787 ppb	130.544 %	84.692 ppb
Concentration per Run 2	25.769 ppb	26.744 ppb	218.511 ppb	221.283 ppb	119.908 %	10.569 ppb	11.276 ppb	125.328 %	91.731 ppb
Concentration per Run 3	25.823 ppb	28.186 ppb	219.563 ppb	217.682 ppb	122.346 %	10.783 ppb	11.430 ppb	129.526 %	90.548 ppb
Concentration RSD	1.6 %	3.5 %	0.7 %	1.2 %	1.5 %	1.8 %	3.0 %	2.2 %	4.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	407.280 ppb	129.731 %	133.314 %	20.855 ppb	110.926 ppb	136.533 %
Concentration per Run 1	389.580 ppb	130.273 %	133.589 %	18.705 ppb	99.191 ppb	150.735 %
Concentration per Run 2	414.717 ppb	129.223 %	132.512 %	21.756 ppb	116.853 ppb	127.525 %
Concentration per Run 3	417.542 ppb	129.697 %	133.842 %	22.105 ppb	116.733 ppb	131.338 %
Concentration RSD	3.8 %	0.4 %	0.5 %	9.0 %	9.2 %	9.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	92	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1823074-3d10 6020TL	Rack	2		
Analysis started at:	9/5/2023 2:38:52 PM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.258 %	132.353 %	5.778 ppb	6,342.506 ppb	2,368.926 ppb	1,356.011 ppb	1,693.014 ppb	8,910.972 ppb	108.514 %
Concentration per Run 1	98.097 %	128.400 %	5.723 ppb	6,506.083 ppb	2,421.891 ppb	1,364.816 ppb	1,737.587 ppb	9,121.057 ppb	108.442 %
Concentration per Run 2	96.369 %	131.270 %	5.783 ppb	6,278.974 ppb	2,348.959 ppb	1,364.251 ppb	1,699.195 ppb	8,965.336 ppb	109.125 %
Concentration per Run 3	94.308 %	137.389 %	5.829 ppb	6,242.463 ppb	2,335.927 ppb	1,338.967 ppb	1,642.260 ppb	8,646.524 ppb	107.975 %
Concentration RSD	2.0 %	3.5 %	0.9 %	2.3 %	2.0 %	1.1 %	2.8 %	2.7 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	51.243 ppb	24.768 ppb	174.827 ppb	1,759.184 ppb	52.687 ppb	52.600 ppb	33.247 ppb	91.148 ppb	121.446 %
Concentration per Run 1	51.569 ppb	24.775 ppb	173.835 ppb	1,763.538 ppb	53.135 ppb	52.905 ppb	33.742 ppb	91.888 ppb	118.219 %
Concentration per Run 2	51.835 ppb	25.008 ppb	174.642 ppb	1,731.812 ppb	52.506 ppb	52.470 ppb	33.240 ppb	91.360 ppb	120.937 %
Concentration per Run 3	50.326 ppb	24.522 ppb	176.003 ppb	1,782.201 ppb	52.420 ppb	52.425 ppb	32.758 ppb	90.197 ppb	125.183 %
Concentration RSD	1.6 %	1.0 %	0.6 %	1.4 %	0.7 %	0.5 %	1.5 %	0.9 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.334 ppb	15.276 ppb	134.806 ppb	100.800 ppb	112.660 %	5.266 ppb	5.656 ppb	121.718 %	41.584 ppb
Concentration per Run 1	13.425 ppb	14.952 ppb	135.963 ppb	100.902 ppb	108.281 %	5.395 ppb	5.813 ppb	116.392 %	42.605 ppb
Concentration per Run 2	13.506 ppb	16.146 ppb	134.616 ppb	100.159 ppb	112.050 %	5.182 ppb	5.575 ppb	122.216 %	41.097 ppb
Concentration per Run 3	13.071 ppb	14.729 ppb	133.838 ppb	101.340 ppb	117.650 %	5.221 ppb	5.581 ppb	126.544 %	41.050 ppb
Concentration RSD	1.7 %	5.0 %	0.8 %	0.6 %	4.2 %	2.1 %	2.4 %	4.2 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	249.990 ppb	122.586 %	124.341 %	10.528 ppb	55.327 ppb	122.787 %
Concentration per Run 1	254.278 ppb	115.685 %	116.619 %	9.893 ppb	52.889 ppb	128.939 %
Concentration per Run 2	246.643 ppb	123.419 %	124.919 %	11.023 ppb	56.923 ppb	116.377 %
Concentration per Run 3	249.050 ppb	128.653 %	131.484 %	10.667 ppb	56.169 ppb	123.046 %
Concentration RSD	1.6 %	5.3 %	6.0 %	5.5 %	3.9 %	5.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 93
Analysis label: WG1823074-5d10 6020TL
Analysis started at: 9/5/2023 2:43:31 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 6
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.740 %	128.325 %	52.703 ppb	10,035.954 ppb	6,297.481 ppb	857.121 ppb	5,711.389 ppb	12,903.521 ppb	107.102 %
Concentration per Run 1	95.052 %	131.497 %	52.489 ppb	9,664.299 ppb	5,999.283 ppb	834.502 ppb	5,516.433 ppb	12,913.280 ppb	108.360 %
Concentration per Run 2	92.762 %	122.584 %	52.932 ppb	10,358.201 ppb	6,462.126 ppb	880.993 ppb	5,839.373 ppb	13,199.804 ppb	106.187 %
Concentration per Run 3	90.406 %	130.893 %	52.687 ppb	10,085.362 ppb	6,431.033 ppb	855.867 ppb	5,778.361 ppb	12,597.480 ppb	106.759 %
Concentration RSD	2.5 %	3.9 %	0.4 %	3.5 %	4.1 %	2.7 %	3.0 %	2.3 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.005 ppb	51.132 ppb	167.800 ppb	6,260.446 ppb	50.465 ppb	50.864 ppb	54.843 ppb	85.436 ppb	117.000 %
Concentration per Run 1	50.942 ppb	51.964 ppb	168.487 ppb	6,372.626 ppb	51.684 ppb	51.045 ppb	56.246 ppb	86.359 ppb	112.663 %
Concentration per Run 2	49.286 ppb	49.993 ppb	165.768 ppb	6,168.013 ppb	49.631 ppb	51.158 ppb	54.134 ppb	85.119 ppb	118.727 %
Concentration per Run 3	49.786 ppb	51.437 ppb	169.146 ppb	6,240.699 ppb	50.081 ppb	50.389 ppb	54.148 ppb	84.828 ppb	119.610 %
Concentration RSD	1.7 %	2.0 %	1.1 %	1.7 %	2.1 %	0.8 %	2.2 %	1.0 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.366 ppb	55.568 ppb	80.084 ppb	55.859 ppb	107.556 %	1.653 ppb	50.532 ppb	115.023 %	52.616 ppb
Concentration per Run 1	50.515 ppb	56.819 ppb	81.238 ppb	55.794 ppb	104.387 %	1.702 ppb	52.469 ppb	108.624 %	54.573 ppb
Concentration per Run 2	50.123 ppb	55.928 ppb	79.279 ppb	55.019 ppb	108.574 %	1.622 ppb	49.455 ppb	117.836 %	51.502 ppb
Concentration per Run 3	50.460 ppb	53.958 ppb	79.735 ppb	56.762 ppb	109.708 %	1.634 ppb	49.672 ppb	118.608 %	51.774 ppb
Concentration RSD	0.4 %	2.6 %	1.3 %	1.6 %	2.6 %	2.6 %	3.3 %	4.8 %	3.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	92.919 ppb	117.493 %	119.705 %	50.467 ppb	53.512 ppb	111.657 %
Concentration per Run 1	95.699 ppb	112.481 %	114.458 %	48.402 ppb	50.508 ppb	116.955 %
Concentration per Run 2	91.265 ppb	118.099 %	121.089 %	51.011 ppb	54.756 ppb	108.199 %
Concentration per Run 3	91.791 ppb	121.899 %	123.568 %	51.989 ppb	55.273 ppb	109.818 %
Concentration RSD	2.6 %	4.0 %	3.9 %	3.7 %	4.9 %	4.2 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	94	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1823074-4 6020TL	Rack	2		
Analysis started at:	9/5/2023 2:48:10 PM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.505 %	133.486 %	1.787 ppb	52,009.192 ppb	15,810.604 ppb	15,209.820 ppb	7,284.882 ppb	81,559.605 ppb	129.710 %
Concentration per Run 1	94.494 %	128.476 %	1.774 ppb	52,376.148 ppb	16,050.744 ppb	15,717.508 ppb	7,578.110 ppb	85,843.109 ppb	130.906 %
Concentration per Run 2	91.252 %	134.141 %	1.774 ppb	51,686.090 ppb	15,655.048 ppb	15,107.838 ppb	7,107.714 ppb	78,733.637 ppb	129.300 %
Concentration per Run 3	88.767 %	137.842 %	1.814 ppb	51,965.338 ppb	15,726.021 ppb	14,804.116 ppb	7,168.823 ppb	80,102.069 ppb	128.923 %
Concentration RSD	3.1 %	3.5 %	1.3 %	0.7 %	1.3 %	3.1 %	3.5 %	4.6 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	35.730 ppb	65.873 ppb	1,321.827 ppb	24,856.772 ppb	39.201 ppb	40.535 ppb	87.318 ppb	373.262 ppb	116.635 %
Concentration per Run 1	36.361 ppb	67.452 ppb	1,322.453 ppb	25,247.912 ppb	40.198 ppb	41.725 ppb	90.080 ppb	381.374 ppb	110.004 %
Concentration per Run 2	35.315 ppb	64.787 ppb	1,281.539 ppb	24,650.788 ppb	38.507 ppb	39.779 ppb	86.078 ppb	374.613 ppb	117.557 %
Concentration per Run 3	35.516 ppb	65.381 ppb	1,361.489 ppb	24,671.616 ppb	38.899 ppb	40.100 ppb	85.797 ppb	363.801 ppb	122.343 %
Concentration RSD	1.6 %	2.1 %	3.0 %	1.4 %	2.3 %	2.6 %	2.7 %	2.4 %	5.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.663 ppb	21.927 ppb	288.634 ppb	28.297 ppb	100.686 %	0.071 ppb	0.451 ppb	111.396 %	1.802 ppb
Concentration per Run 1	8.847 ppb	23.217 ppb	296.539 ppb	28.470 ppb	97.073 %	0.076 ppb	0.472 ppb	104.940 %	1.781 ppb
Concentration per Run 2	8.741 ppb	21.038 ppb	287.394 ppb	27.940 ppb	99.906 %	0.066 ppb	0.437 ppb	114.277 %	1.759 ppb
Concentration per Run 3	8.399 ppb	21.526 ppb	281.968 ppb	28.480 ppb	105.078 %	0.072 ppb	0.443 ppb	114.971 %	1.864 ppb
Concentration RSD	2.7 %	5.2 %	2.6 %	1.1 %	4.0 %	6.7 %	4.1 %	5.0 %	3.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	511.630 ppb	114.045 %	110.828 %	0.445 ppb	21.007 ppb	104.043 %
Concentration per Run 1	522.122 ppb	109.891 %	107.680 %	0.420 ppb	19.490 ppb	110.477 %
Concentration per Run 2	501.216 ppb	114.867 %	113.447 %	0.472 ppb	21.618 ppb	100.649 %
Concentration per Run 3	511.551 ppb	117.378 %	111.357 %	0.442 ppb	21.912 ppb	101.003 %
Concentration RSD	2.0 %	3.3 %	2.6 %	5.9 %	6.3 %	5.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 95
Analysis label: I2350799-03 6020TL
Analysis started at: 9/5/2023 2:52:49 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 3
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.535 %	132.378 %	1.538 ppb	51,953.398 ppb	11,899.529 ppb	8,283.361 ppb	6,033.018 ppb	82,822.659 ppb	123.515 %
Concentration per Run 1	91.097 %	128.929 %	1.541 ppb	52,216.832 ppb	11,670.798 ppb	8,085.701 ppb	6,132.756 ppb	83,667.784 ppb	124.370 %
Concentration per Run 2	90.483 %	126.285 %	1.494 ppb	51,826.820 ppb	11,746.669 ppb	8,251.665 ppb	5,990.468 ppb	82,914.486 ppb	123.723 %
Concentration per Run 3	87.025 %	141.921 %	1.579 ppb	51,816.542 ppb	12,281.119 ppb	8,512.718 ppb	5,975.829 ppb	81,885.707 ppb	122.454 %
Concentration RSD	2.5 %	6.3 %	2.8 %	0.4 %	2.8 %	2.6 %	1.4 %	1.1 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	25.470 ppb	47.190 ppb	1,227.989 ppb	14,409.910 ppb	33.122 ppb	26.725 ppb	71.074 ppb	315.427 ppb	123.774 %
Concentration per Run 1	26.167 ppb	49.354 ppb	1,228.901 ppb	14,966.492 ppb	34.740 ppb	28.335 ppb	75.306 ppb	330.845 ppb	112.617 %
Concentration per Run 2	25.136 ppb	46.583 ppb	1,186.425 ppb	14,299.460 ppb	32.885 ppb	26.425 ppb	70.902 ppb	310.053 ppb	121.610 %
Concentration per Run 3	25.107 ppb	45.633 ppb	1,268.640 ppb	13,963.779 ppb	31.743 ppb	25.416 ppb	67.013 ppb	305.384 ppb	137.095 %
Concentration RSD	2.4 %	4.1 %	3.3 %	3.5 %	4.6 %	5.5 %	5.8 %	4.3 %	10.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	7.165 ppb	20.432 ppb	275.875 ppb	27.137 ppb	105.344 %	0.037 ppb	0.407 ppb	118.337 %	1.259 ppb
Concentration per Run 1	7.405 ppb	22.433 ppb	278.411 ppb	27.757 ppb	100.393 %	0.039 ppb	0.397 ppb	108.449 %	1.232 ppb
Concentration per Run 2	7.112 ppb	19.532 ppb	269.488 ppb	27.092 ppb	104.024 %	0.039 ppb	0.423 ppb	118.439 %	1.238 ppb
Concentration per Run 3	6.976 ppb	19.330 ppb	279.726 ppb	26.562 ppb	111.616 %	0.034 ppb	0.402 ppb	128.122 %	1.306 ppb
Concentration RSD	3.1 %	8.5 %	2.0 %	2.2 %	5.4 %	7.6 %	3.4 %	8.3 %	3.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	455.718 ppb	120.340 %	117.767 %	0.160 ppb	15.736 ppb	104.182 %
Concentration per Run 1	466.485 ppb	113.681 %	109.365 %	0.139 ppb	14.829 ppb	109.005 %
Concentration per Run 2	435.644 ppb	119.364 %	114.828 %	0.174 ppb	16.323 ppb	98.127 %
Concentration per Run 3	465.024 ppb	127.976 %	129.109 %	0.167 ppb	16.057 ppb	105.414 %
Concentration RSD	3.8 %	6.0 %	8.7 %	11.6 %	5.1 %	5.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	96	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350799-04 6020TL	Rack	2		
Analysis started at:	9/5/2023 2:57:28 PM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.151 %	136.054 %	0.406 ppb	30,377.458 ppb	5,967.366 ppb	3,527.148 ppb	3,439.228 ppb	53,681.946 ppb	110.698 %
Concentration per Run 1	88.135 %	133.008 %	0.400 ppb	30,742.923 ppb	5,998.262 ppb	3,403.184 ppb	3,420.183 ppb	53,924.990 ppb	110.559 %
Concentration per Run 2	86.937 %	133.914 %	0.418 ppb	29,257.736 ppb	5,809.968 ppb	3,462.489 ppb	3,421.534 ppb	51,455.235 ppb	110.958 %
Concentration per Run 3	86.382 %	141.241 %	0.399 ppb	31,131.716 ppb	6,093.869 ppb	3,715.770 ppb	3,475.967 ppb	55,665.614 ppb	110.576 %
Concentration RSD	1.0 %	3.3 %	2.6 %	3.3 %	2.4 %	4.7 %	0.9 %	3.9 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	12.299 ppb	12.613 ppb	7,161.480 ppb	8,227.533 ppb	25.958 ppb	34.084 ppb	17.109 ppb	243.995 ppb	121.723 %
Concentration per Run 1	12.148 ppb	12.791 ppb	7,221.578 ppb	8,374.732 ppb	26.431 ppb	34.956 ppb	17.992 ppb	249.936 ppb	114.456 %
Concentration per Run 2	12.391 ppb	12.552 ppb	7,212.250 ppb	8,278.308 ppb	26.317 ppb	34.476 ppb	16.989 ppb	241.435 ppb	118.914 %
Concentration per Run 3	12.360 ppb	12.496 ppb	7,050.613 ppb	8,029.558 ppb	25.125 ppb	32.820 ppb	16.346 ppb	240.614 ppb	131.799 %
Concentration RSD	1.1 %	1.2 %	1.3 %	2.2 %	2.8 %	3.3 %	4.8 %	2.1 %	7.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.435 ppb	6.220 ppb	179.984 ppb	9.825 ppb	108.245 %	0.051 ppb	0.671 ppb	122.037 %	0.857 ppb
Concentration per Run 1	3.523 ppb	6.640 ppb	177.008 ppb	9.426 ppb	103.616 %	0.053 ppb	0.685 ppb	114.326 %	0.836 ppb
Concentration per Run 2	3.324 ppb	6.287 ppb	174.054 ppb	9.794 ppb	106.597 %	0.049 ppb	0.671 ppb	117.711 %	0.869 ppb
Concentration per Run 3	3.458 ppb	5.732 ppb	188.888 ppb	10.257 ppb	114.521 %	0.051 ppb	0.656 ppb	134.075 %	0.865 ppb
Concentration RSD	2.9 %	7.4 %	4.4 %	4.2 %	5.2 %	4.4 %	2.2 %	8.7 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	94.014 ppb	125.591 %	121.595 %	0.081 ppb	6.339 ppb	111.213 %
Concentration per Run 1	94.456 ppb	114.837 %	115.227 %	0.069 ppb	6.130 ppb	112.134 %
Concentration per Run 2	96.264 ppb	117.248 %	116.254 %	0.087 ppb	6.483 ppb	106.180 %
Concentration per Run 3	91.321 ppb	144.689 %	133.304 %	0.086 ppb	6.402 ppb	115.325 %
Concentration RSD	2.7 %	13.2 %	8.3 %	12.5 %	2.9 %	4.2 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 97
Analysis label: I2350799-05 6020TL
Analysis started at: 9/5/2023 3:02:07 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.660 %	147.107 %	4.992 ppb	63,580.525 ppb	75,583.917 ppb	24,392.853 ppb	10,484.483 ppb	224,800.614 ppb	165.205 %
Concentration per Run 1	95.342 %	138.144 %	4.896 ppb	65,661.285 ppb	78,143.967 ppb	24,238.298 ppb	10,221.079 ppb	218,849.041 ppb	167.393 %
Concentration per Run 2	91.741 %	144.640 %	5.009 ppb	62,387.267 ppb	73,640.964 ppb	23,619.274 ppb	10,042.346 ppb	221,061.842 ppb	165.786 %
Concentration per Run 3	87.897 %	158.538 %	5.071 ppb	62,693.022 ppb	74,966.821 ppb	25,320.988 ppb	11,190.023 ppb	234,490.960 ppb	162.437 %
Concentration RSD	4.1 %	7.1 %	1.8 %	2.8 %	3.1 %	3.5 %	5.9 %	3.8 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	44.345 ppb	64.398 ppb	9,419.970 ppb	22,010.965 ppb	141.101 ppb	83.766 ppb	214.895 ppb	170.093 ppb	136.150 %
Concentration per Run 1	44.817 ppb	65.368 ppb	9,456.230 ppb	22,457.502 ppb	145.429 ppb	87.678 ppb	222.667 ppb	174.630 ppb	128.635 %
Concentration per Run 2	43.716 ppb	63.788 ppb	9,194.695 ppb	21,806.831 ppb	142.008 ppb	83.658 ppb	216.733 ppb	169.013 ppb	131.991 %
Concentration per Run 3	44.502 ppb	64.039 ppb	9,608.985 ppb	21,768.563 ppb	135.864 ppb	79.961 ppb	205.286 ppb	166.636 ppb	147.825 %
Concentration RSD	1.3 %	1.3 %	2.2 %	1.8 %	3.4 %	4.6 %	4.1 %	2.4 %	7.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	18.914 ppb	87.069 ppb	937.482 ppb	9.504 ppb	102.133 %	0.050 ppb	1.968 ppb	117.951 %	1.007 ppb
Concentration per Run 1	19.310 ppb	86.619 ppb	936.507 ppb	9.441 ppb	96.413 %	0.049 ppb	2.044 ppb	109.109 %	1.009 ppb
Concentration per Run 2	18.900 ppb	88.904 ppb	914.431 ppb	9.480 ppb	100.833 %	0.051 ppb	1.919 ppb	115.791 %	0.995 ppb
Concentration per Run 3	18.532 ppb	85.685 ppb	961.507 ppb	9.592 ppb	109.154 %	0.049 ppb	1.940 ppb	128.952 %	1.017 ppb
Concentration RSD	2.1 %	1.9 %	2.5 %	0.8 %	6.3 %	2.5 %	3.4 %	8.6 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2,202.746 ppb	136.965 %	112.625 %	0.201 ppb	29.025 ppb	101.355 %
Concentration per Run 1	2,264.501 ppb	127.281 %	105.367 %	0.182 ppb	27.522 ppb	103.872 %
Concentration per Run 2	2,221.021 ppb	130.465 %	112.027 %	0.212 ppb	29.537 ppb	98.083 %
Concentration per Run 3	2,122.716 ppb	153.149 %	120.482 %	0.209 ppb	30.016 ppb	102.110 %
Concentration RSD	3.3 %	10.3 %	6.7 %	8.1 %	4.6 %	2.9 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 98
Analysis label: I2350799-08 6020TL
Analysis started at: 9/5/2023 3:06:47 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.343 %	133.259 %	0.624 ppb	38,333.428 ppb	17,295.523 ppb	8,670.000 ppb	5,988.790 ppb	45,239.794 ppb	118.066 %
Concentration per Run 1	90.980 %	130.591 %	0.631 ppb	37,572.958 ppb	16,967.618 ppb	8,425.484 ppb	5,878.083 ppb	45,300.714 ppb	118.837 %
Concentration per Run 2	89.293 %	130.591 %	0.602 ppb	38,346.219 ppb	16,860.064 ppb	8,469.920 ppb	5,617.081 ppb	43,552.936 ppb	117.676 %
Concentration per Run 3	87.756 %	138.597 %	0.639 ppb	39,081.106 ppb	18,058.887 ppb	9,114.597 ppb	6,471.204 ppb	46,865.730 ppb	117.685 %
Concentration RSD	1.8 %	3.5 %	3.1 %	2.0 %	3.8 %	4.4 %	7.3 %	3.7 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	14.929 ppb	18.368 ppb	948.719 ppb	9,145.119 ppb	7.747 ppb	17.420 ppb	72.749 ppb	117.915 ppb	121.256 %
Concentration per Run 1	14.871 ppb	18.258 ppb	925.757 ppb	9,194.442 ppb	7.869 ppb	17.728 ppb	74.235 ppb	119.574 ppb	115.317 %
Concentration per Run 2	14.716 ppb	18.512 ppb	952.391 ppb	9,215.912 ppb	7.807 ppb	17.723 ppb	73.361 ppb	117.176 ppb	117.880 %
Concentration per Run 3	15.201 ppb	18.333 ppb	968.010 ppb	9,025.003 ppb	7.565 ppb	16.808 ppb	70.649 ppb	116.995 ppb	130.571 %
Concentration RSD	1.7 %	0.7 %	2.3 %	1.1 %	2.1 %	3.0 %	2.6 %	1.2 %	6.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.862 ppb	10.507 ppb	169.518 ppb	38.318 ppb	107.652 %	0.035 ppb	0.204 ppb	120.676 %	0.904 ppb
Concentration per Run 1	3.770 ppb	11.027 ppb	165.925 ppb	39.084 ppb	102.880 %	0.037 ppb	0.232 ppb	112.861 %	0.904 ppb
Concentration per Run 2	3.970 ppb	11.043 ppb	164.051 ppb	37.801 ppb	106.267 %	0.035 ppb	0.205 ppb	117.474 %	0.889 ppb
Concentration per Run 3	3.846 ppb	9.451 ppb	178.577 ppb	38.068 ppb	113.810 %	0.033 ppb	0.176 ppb	131.694 %	0.917 ppb
Concentration RSD	2.6 %	8.7 %	4.7 %	1.8 %	5.2 %	5.7 %	13.6 %	8.1 %	1.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	259.131 ppb	122.360 %	119.730 %	0.111 ppb	29.676 ppb	110.766 %
Concentration per Run 1	266.240 ppb	111.978 %	110.654 %	0.097 ppb	27.692 ppb	115.548 %
Concentration per Run 2	252.356 ppb	116.388 %	119.068 %	0.117 ppb	30.536 ppb	105.696 %
Concentration per Run 3	258.798 ppb	138.713 %	129.467 %	0.118 ppb	30.800 ppb	111.055 %
Concentration RSD	2.7 %	11.7 %	7.9 %	10.9 %	5.8 %	4.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 99
Analysis label: WG1823074-6d5 6020TL
Analysis started at: 9/5/2023 3:11:26 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 7
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.548 %	128.853 %	0.356 ppb	10,681.791 ppb	2,449.785 ppb	1,668.312 ppb	1,195.725 ppb	16,257.369 ppb	109.574 %
Concentration per Run 1	90.220 %	128.098 %	0.359 ppb	10,692.723 ppb	2,458.291 ppb	1,660.323 ppb	1,165.232 ppb	16,102.976 ppb	110.275 %
Concentration per Run 2	88.601 %	123.339 %	0.350 ppb	10,968.295 ppb	2,529.807 ppb	1,728.011 ppb	1,265.630 ppb	16,861.316 ppb	109.281 %
Concentration per Run 3	86.822 %	135.123 %	0.358 ppb	10,384.354 ppb	2,361.257 ppb	1,616.601 ppb	1,156.312 ppb	15,807.815 ppb	109.167 %
Concentration RSD	1.9 %	4.6 %	1.4 %	2.7 %	3.5 %	3.4 %	5.1 %	3.3 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.350 ppb	9.635 ppb	245.573 ppb	3,010.792 ppb	7.017 ppb	5.905 ppb	15.646 ppb	73.832 ppb	121.764 %
Concentration per Run 1	5.483 ppb	9.721 ppb	240.191 ppb	2,994.205 ppb	7.069 ppb	6.024 ppb	15.673 ppb	73.136 ppb	120.309 %
Concentration per Run 2	5.604 ppb	9.821 ppb	254.045 ppb	3,061.353 ppb	7.190 ppb	5.917 ppb	16.020 ppb	75.309 ppb	118.734 %
Concentration per Run 3	4.963 ppb	9.364 ppb	242.482 ppb	2,976.819 ppb	6.792 ppb	5.774 ppb	15.245 ppb	73.051 ppb	126.250 %
Concentration RSD	6.4 %	2.5 %	3.0 %	1.5 %	2.9 %	2.1 %	2.5 %	1.7 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.562 ppb	4.627 ppb	52.459 ppb	6.347 ppb	114.142 %	0.005 ppb	0.086 ppb	123.385 %	0.350 ppb
Concentration per Run 1	1.580 ppb	4.184 ppb	52.513 ppb	5.958 ppb	110.898 %	0.006 ppb	0.094 ppb	121.550 %	0.310 ppb
Concentration per Run 2	1.563 ppb	5.139 ppb	52.660 ppb	6.513 ppb	114.997 %	0.003 ppb	0.081 ppb	122.621 %	0.353 ppb
Concentration per Run 3	1.543 ppb	4.559 ppb	52.204 ppb	6.570 ppb	116.532 %	0.007 ppb	0.081 ppb	125.985 %	0.385 ppb
Concentration RSD	1.2 %	10.4 %	0.4 %	5.3 %	2.6 %	35.8 %	9.1 %	1.9 %	10.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	87.071 ppb	122.839 %	124.483 %	0.030 ppb	2.728 ppb	125.079 %
Concentration per Run 1	86.721 ppb	119.873 %	123.523 %	0.023 ppb	2.573 ppb	130.193 %
Concentration per Run 2	86.116 ppb	123.892 %	122.086 %	0.034 ppb	2.756 ppb	121.559 %
Concentration per Run 3	88.375 ppb	124.751 %	127.839 %	0.034 ppb	2.855 ppb	123.486 %
Concentration RSD	1.3 %	2.1 %	2.4 %	20.1 %	5.2 %	3.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 100
Analysis label: CCV
Analysis started at: 9/5/2023 3:16:05 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.337 %	132.076 %	64.654 ppb	6,036.708 ppb	6,184.170 ppb	64.036 ppb	6,391.283 ppb	6,406.206 ppb	110.483 %
Concentration per Run 1	85.521 %	130.666 %	64.200 ppb	6,199.032 ppb	6,152.884 ppb	67.849 ppb	6,555.429 ppb	6,606.744 ppb	109.658 %
Concentration per Run 2	84.114 %	135.727 %	64.843 ppb	5,857.890 ppb	6,138.316 ppb	61.100 ppb	6,175.541 ppb	6,229.421 ppb	111.352 %
Concentration per Run 3	83.376 %	129.835 %	64.920 ppb	6,053.201 ppb	6,261.309 ppb	63.158 ppb	6,442.880 ppb	6,382.452 ppb	110.440 %
Recovery Percentage 1			107.757 %	100.612 %	103.069 %	106.727 %	106.521 %	106.770 %	
Concentration RSD	1.3 %	2.4 %	0.6 %	2.8 %	1.1 %	5.4 %	3.1 %	3.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.618 ppb	56.379 ppb	55.549 ppb	5,792.619 ppb	58.231 ppb	57.415 ppb	58.166 ppb	60.695 ppb	119.206 %
Concentration per Run 1	57.776 ppb	56.433 ppb	55.991 ppb	5,871.335 ppb	59.041 ppb	57.777 ppb	58.338 ppb	60.708 ppb	121.077 %
Concentration per Run 2	57.215 ppb	56.228 ppb	54.839 ppb	5,818.622 ppb	58.236 ppb	58.162 ppb	58.286 ppb	61.036 ppb	117.711 %
Concentration per Run 3	57.863 ppb	56.476 ppb	55.818 ppb	5,687.899 ppb	57.416 ppb	56.305 ppb	57.874 ppb	60.343 ppb	118.830 %
Recovery Percentage 1	96.030 %	93.965 %	92.582 %	96.544 %	97.051 %	95.691 %	96.943 %	101.159 %	
Concentration RSD	0.6 %	0.2 %	1.1 %	1.6 %	1.4 %	1.7 %	0.4 %	0.6 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.113 ppb	63.344 ppb	57.050 ppb	59.729 ppb	111.361 %	59.066 ppb	59.473 ppb	120.616 %	58.341 ppb
Concentration per Run 1	60.404 ppb	61.823 ppb	57.290 ppb	59.151 ppb	110.403 %	58.150 ppb	58.335 ppb	124.465 %	55.691 ppb
Concentration per Run 2	60.900 ppb	65.677 ppb	57.006 ppb	60.356 ppb	110.526 %	59.060 ppb	59.460 ppb	117.391 %	60.592 ppb
Concentration per Run 3	62.034 ppb	62.532 ppb	56.853 ppb	59.680 ppb	113.156 %	59.988 ppb	60.625 ppb	119.992 %	58.740 ppb
Recovery Percentage 1	101.854 %	105.574 %	95.083 %	99.548 %		98.444 %	99.122 %		97.235 %
Concentration RSD	1.4 %	3.2 %	0.4 %	1.0 %	1.4 %	1.6 %	1.9 %	3.0 %	4.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.111 ppb	119.998 %	121.541 %	57.818 ppb	57.957 ppb	119.477 %
Concentration per Run 1	58.263 ppb	120.635 %	120.255 %	55.571 ppb	55.913 ppb	125.089 %
Concentration per Run 2	58.885 ppb	118.225 %	120.902 %	59.127 ppb	58.970 ppb	116.037 %
Concentration per Run 3	60.184 ppb	121.135 %	123.467 %	58.755 ppb	58.989 ppb	117.304 %
Recovery Percentage 1	98.518 %			96.363 %	96.596 %	
Concentration RSD	1.7 %	1.3 %	1.4 %	3.4 %	3.1 %	4.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 101
Analysis label: CCB
Analysis started at: 9/5/2023 3:20:48 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.019 %	128.778 %	0.005 ppb	7.592 ppb	1.109 ppb	0.300 ppb	0.146 ppb	2.651 ppb	97.943 %
Concentration per Run 1	92.509 %	115.635 %	0.005 ppb	10.504 ppb	1.376 ppb	0.307 ppb	3.388 ppb	-1.095 ppb	99.199 %
Concentration per Run 2	89.521 %	134.216 %	0.003 ppb	6.535 ppb	0.894 ppb	0.075 ppb	-2.048 ppb	3.503 ppb	97.468 %
Concentration per Run 3	88.026 %	136.482 %	0.006 ppb	5.737 ppb	1.057 ppb	0.517 ppb	-0.901 ppb	5.544 ppb	97.162 %
Recovery Percentage 1			0.968 %	7.592 %	1.584 %	2.999 %	0.146 %	2.651 %	
Concentration RSD	2.5 %	8.9 %	29.2 %	33.6 %	22.1 %	73.7 %	1,957.2 %	128.3 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.017 ppb	-0.010 ppb	0.156 ppb	21.146 ppb	0.005 ppb	0.021 ppb	-0.011 ppb	-0.031 ppb	119.421 %
Concentration per Run 1	-0.003 ppb	-0.011 ppb	0.130 ppb	20.454 ppb	0.006 ppb	0.017 ppb	-0.020 ppb	-0.023 ppb	114.048 %
Concentration per Run 2	-0.022 ppb	-0.011 ppb	0.178 ppb	21.666 ppb	0.006 ppb	0.017 ppb	-0.009 ppb	-0.048 ppb	121.772 %
Concentration per Run 3	-0.025 ppb	-0.008 ppb	0.158 ppb	21.318 ppb	0.004 ppb	0.028 ppb	-0.003 ppb	-0.022 ppb	122.444 %
Recovery Percentage 1	-0.336 %	-0.989 %	15.555 %	42.292 %	1.020 %	1.051 %	-1.104 %	-0.618 %	
Concentration RSD	72.9 %	19.6 %	15.3 %	3.0 %	27.0 %	30.1 %	78.3 %	48.9 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.177 ppb	0.758 ppb	0.033 ppb	1.649 ppb	112.524 %	-0.001 ppb	0.003 ppb	116.728 %	0.203 ppb
Concentration per Run 1	0.128 ppb	0.671 ppb	0.034 ppb	1.266 ppb	109.364 %	-0.001 ppb	0.005 ppb	113.172 %	0.175 ppb
Concentration per Run 2	0.175 ppb	0.793 ppb	0.032 ppb	1.645 ppb	113.030 %	-0.001 ppb	0.003 ppb	115.108 %	0.213 ppb
Concentration per Run 3	0.228 ppb	0.812 ppb	0.032 ppb	2.035 ppb	115.179 %	-0.001 ppb	0.001 ppb	121.905 %	0.220 ppb
Recovery Percentage 1	35.417 %	15.169 %	0.328 %	82.428 %		-0.260 %	1.410 %		5.067 %
Concentration RSD	28.3 %	10.1 %	4.3 %	23.3 %	2.6 %	17.2 %	58.4 %	3.9 %	11.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.028 ppb	115.821 %	116.116 %	0.320 ppb	0.012 ppb	114.091 %
Concentration per Run 1	0.032 ppb	109.611 %	110.800 %	0.354 ppb	0.011 ppb	119.086 %
Concentration per Run 2	0.043 ppb	117.108 %	116.411 %	0.332 ppb	0.014 ppb	109.257 %
Concentration per Run 3	0.010 ppb	120.743 %	121.136 %	0.273 ppb	0.011 ppb	113.928 %
Recovery Percentage 1	5.657 %			31.986 %	1.214 %	
Concentration RSD	60.2 %	4.9 %	4.5 %	13.1 %	16.8 %	4.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 102
Analysis label: WG1823074-1 6020TL
Analysis started at: 9/5/2023 3:27:07 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 1
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.362 %	137.263 %	0.005 ppb	3.817 ppb	1.923 ppb	2.076 ppb	-0.399 ppb	7.566 ppb	105.326 %
Concentration per Run 1	99.858 %	129.533 %	0.005 ppb	4.032 ppb	2.200 ppb	2.092 ppb	0.010 ppb	13.510 ppb	105.567 %
Concentration per Run 2	97.909 %	135.349 %	0.005 ppb	3.292 ppb	1.791 ppb	1.651 ppb	-3.158 ppb	2.492 ppb	104.315 %
Concentration per Run 3	97.319 %	146.906 %	0.003 ppb	4.125 ppb	1.777 ppb	2.486 ppb	1.951 ppb	6.696 ppb	106.094 %
Concentration RSD	1.4 %	6.4 %	24.4 %	12.0 %	12.5 %	20.1 %	646.6 %	73.5 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.026 ppb	0.028 ppb	0.147 ppb	6.159 ppb	0.003 ppb	-0.005 ppb	-0.011 ppb	-0.167 ppb	125.276 %
Concentration per Run 1	-0.025 ppb	0.031 ppb	0.151 ppb	4.986 ppb	0.004 ppb	-0.012 ppb	-0.027 ppb	-0.170 ppb	121.919 %
Concentration per Run 2	-0.029 ppb	0.029 ppb	0.050 ppb	6.741 ppb	0.002 ppb	0.007 ppb	-0.004 ppb	-0.131 ppb	119.224 %
Concentration per Run 3	-0.023 ppb	0.024 ppb	0.240 ppb	6.750 ppb	0.004 ppb	-0.009 ppb	-0.001 ppb	-0.199 ppb	134.685 %
Concentration RSD	11.2 %	12.2 %	64.6 %	16.5 %	44.3 %	205.0 %	135.7 %	20.3 %	6.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.079 ppb	0.125 ppb	0.030 ppb	0.416 ppb	116.724 %	-0.004 ppb	0.001 ppb	125.208 %	0.106 ppb
Concentration per Run 1	0.055 ppb	0.097 ppb	0.030 ppb	0.278 ppb	111.763 %	-0.005 ppb	0.001 ppb	112.917 %	0.091 ppb
Concentration per Run 2	0.096 ppb	0.077 ppb	0.031 ppb	0.447 ppb	114.860 %	-0.004 ppb	0.002 ppb	124.773 %	0.106 ppb
Concentration per Run 3	0.086 ppb	0.202 ppb	0.029 ppb	0.524 ppb	123.550 %	-0.004 ppb	0.000 ppb	137.934 %	0.122 ppb
Concentration RSD	26.6 %	53.2 %	3.8 %	30.2 %	5.2 %	12.1 %	133.3 %	10.0 %	14.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.043 ppb	120.998 %	124.208 %	0.041 ppb	0.001 ppb	132.788 %
Concentration per Run 1	0.038 ppb	112.276 %	112.893 %	0.028 ppb	-0.001 ppb	144.134 %
Concentration per Run 2	0.029 ppb	117.893 %	123.174 %	0.051 ppb	0.001 ppb	113.873 %
Concentration per Run 3	0.064 ppb	132.826 %	136.557 %	0.044 ppb	0.001 ppb	140.358 %
Concentration RSD	42.0 %	8.8 %	9.6 %	29.6 %	207.9 %	12.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 103
Analysis label: WG1822316-1 6020TL
Analysis started at: 9/5/2023 3:31:46 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 13
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.181 %	137.187 %	0.002 ppb	4.929 ppb	1.712 ppb	1.579 ppb	-1.419 ppb	48.253 ppb	108.468 %
Concentration per Run 1	102.107 %	133.385 %	0.004 ppb	5.992 ppb	1.868 ppb	1.370 ppb	-2.038 ppb	49.102 ppb	108.897 %
Concentration per Run 2	99.721 %	132.630 %	0.003 ppb	4.546 ppb	1.225 ppb	1.745 ppb	-1.745 ppb	41.686 ppb	107.018 %
Concentration per Run 3	98.714 %	145.546 %	0.001 ppb	4.249 ppb	2.043 ppb	1.622 ppb	-0.474 ppb	53.970 ppb	109.490 %
Concentration RSD	1.7 %	5.3 %	60.6 %	18.9 %	25.2 %	12.1 %	58.6 %	12.8 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.016 ppb	0.005 ppb	0.156 ppb	5.479 ppb	0.002 ppb	-0.014 ppb	0.004 ppb	-0.166 ppb	126.479 %
Concentration per Run 1	-0.012 ppb	0.015 ppb	0.136 ppb	5.458 ppb	0.002 ppb	-0.010 ppb	-0.006 ppb	-0.166 ppb	122.491 %
Concentration per Run 2	-0.019 ppb	-0.002 ppb	0.170 ppb	4.488 ppb	0.004 ppb	-0.022 ppb	0.015 ppb	-0.166 ppb	124.016 %
Concentration per Run 3	-0.017 ppb	0.002 ppb	0.163 ppb	6.492 ppb	0.001 ppb	-0.008 ppb	0.004 ppb	-0.167 ppb	132.929 %
Concentration RSD	21.6 %	174.0 %	11.3 %	18.3 %	45.9 %	53.7 %	250.5 %	0.3 %	4.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.069 ppb	0.041 ppb	0.046 ppb	0.258 ppb	119.218 %	-0.003 ppb	0.000 ppb	121.963 %	0.106 ppb
Concentration per Run 1	0.044 ppb	0.008 ppb	0.041 ppb	0.181 ppb	113.596 %	-0.003 ppb	0.001 ppb	114.539 %	0.098 ppb
Concentration per Run 2	0.113 ppb	0.010 ppb	0.049 ppb	0.258 ppb	118.679 %	-0.004 ppb	0.000 ppb	117.579 %	0.110 ppb
Concentration per Run 3	0.051 ppb	0.104 ppb	0.048 ppb	0.333 ppb	125.377 %	-0.003 ppb	0.001 ppb	133.772 %	0.111 ppb
Concentration RSD	54.6 %	135.0 %	9.3 %	29.5 %	5.0 %	12.9 %	178.1 %	8.5 %	6.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.039 ppb	119.267 %	123.161 %	0.028 ppb	0.001 ppb	122.500 %
Concentration per Run 1	0.044 ppb	113.740 %	117.171 %	0.017 ppb	0.000 ppb	129.082 %
Concentration per Run 2	0.033 ppb	117.089 %	117.267 %	0.033 ppb	0.002 ppb	115.559 %
Concentration per Run 3	0.040 ppb	126.971 %	135.047 %	0.035 ppb	0.001 ppb	122.857 %
Concentration RSD	14.5 %	5.8 %	8.4 %	35.0 %	84.6 %	5.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 104
Analysis label: WG1822316-2d5 6020TL
Analysis started at: 9/5/2023 3:41:57 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 14
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.333 %	141.341 %	10.922 ppb	2,019.406 ppb	2,067.548 ppb	405.959 ppb	2,125.700 ppb	1,784.505 ppb	112.909 %
Concentration per Run 1	98.716 %	143.280 %	10.886 ppb	2,028.449 ppb	2,102.916 ppb	418.076 ppb	2,082.620 ppb	1,685.597 ppb	111.856 %
Concentration per Run 2	97.772 %	135.953 %	10.968 ppb	2,037.148 ppb	2,052.716 ppb	395.363 ppb	2,109.053 ppb	1,810.471 ppb	114.803 %
Concentration per Run 3	95.512 %	144.791 %	10.914 ppb	1,992.621 ppb	2,047.013 ppb	404.439 ppb	2,185.426 ppb	1,857.447 ppb	112.068 %
Concentration RSD	1.7 %	3.3 %	0.4 %	1.2 %	1.5 %	2.8 %	2.5 %	5.0 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	95.288 ppb	37.599 ppb	93.287 ppb	200.227 ppb	96.392 ppb	97.086 ppb	49.185 ppb	100.952 ppb	127.999 %
Concentration per Run 1	96.573 ppb	37.999 ppb	93.814 ppb	199.365 ppb	98.762 ppb	100.405 ppb	50.623 ppb	103.188 ppb	124.259 %
Concentration per Run 2	98.457 ppb	38.465 ppb	94.036 ppb	202.982 ppb	98.668 ppb	98.757 ppb	50.280 ppb	102.178 ppb	121.821 %
Concentration per Run 3	90.833 ppb	36.333 ppb	92.011 ppb	198.334 ppb	91.746 ppb	92.094 ppb	46.653 ppb	97.488 ppb	137.918 %
Concentration RSD	4.2 %	3.0 %	1.2 %	1.2 %	4.2 %	4.5 %	4.5 %	3.0 %	6.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	25.129 ppb	26.165 ppb	211.613 ppb	213.249 ppb	121.181 %	10.375 ppb	10.939 ppb	126.214 %	85.234 ppb
Concentration per Run 1	25.583 ppb	26.171 ppb	215.635 ppb	219.496 ppb	121.051 %	10.389 ppb	11.034 ppb	123.890 %	85.647 ppb
Concentration per Run 2	25.713 ppb	26.408 ppb	208.257 ppb	209.148 ppb	118.052 %	10.424 ppb	10.759 ppb	122.840 %	84.415 ppb
Concentration per Run 3	24.090 ppb	25.917 ppb	210.947 ppb	211.103 ppb	124.440 %	10.310 ppb	11.025 ppb	131.911 %	85.638 ppb
Concentration RSD	3.6 %	0.9 %	1.8 %	2.6 %	2.6 %	0.6 %	1.4 %	3.9 %	0.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	396.201 ppb	127.630 %	130.091 %	22.213 ppb	112.646 ppb	128.633 %
Concentration per Run 1	396.810 ppb	127.936 %	132.790 %	20.386 ppb	110.663 ppb	131.596 %
Concentration per Run 2	398.698 ppb	122.134 %	120.412 %	22.133 ppb	114.485 ppb	123.726 %
Concentration per Run 3	393.094 ppb	132.820 %	137.072 %	24.120 ppb	112.791 ppb	130.576 %
Concentration RSD	0.7 %	4.2 %	6.7 %	8.4 %	1.7 %	3.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 105
Analysis label: WG1822316-3d10 6020TL
Analysis started at: 9/5/2023 3:46:35 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 16
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.344 %	130.011 %	5.613 ppb	1,550.134 ppb	1,273.286 ppb	207.762 ppb	1,385.501 ppb	3,313.993 ppb	101.249 %
Concentration per Run 1	94.702 %	129.911 %	5.657 ppb	1,569.470 ppb	1,288.825 ppb	209.298 ppb	1,420.727 ppb	3,478.492 ppb	101.046 %
Concentration per Run 2	93.208 %	123.037 %	5.636 ppb	1,578.349 ppb	1,276.434 ppb	201.584 ppb	1,345.295 ppb	3,227.993 ppb	101.480 %
Concentration per Run 3	92.120 %	137.086 %	5.546 ppb	1,502.582 ppb	1,254.599 ppb	212.404 ppb	1,390.482 ppb	3,235.493 ppb	101.221 %
Concentration RSD	1.4 %	5.4 %	1.1 %	2.7 %	1.4 %	2.7 %	2.7 %	4.3 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.916 ppb	19.199 ppb	47.636 ppb	103.593 ppb	48.889 ppb	48.493 ppb	24.861 ppb	52.425 ppb	120.261 %
Concentration per Run 1	48.501 ppb	19.485 ppb	48.483 ppb	107.161 ppb	49.440 ppb	49.281 ppb	25.322 ppb	53.572 ppb	118.048 %
Concentration per Run 2	48.416 ppb	19.451 ppb	47.091 ppb	102.983 ppb	49.833 ppb	49.239 ppb	25.259 ppb	52.142 ppb	113.309 %
Concentration per Run 3	46.830 ppb	18.660 ppb	47.334 ppb	100.634 ppb	47.394 ppb	46.961 ppb	24.002 ppb	51.561 ppb	129.425 %
Concentration RSD	2.0 %	2.4 %	1.6 %	3.2 %	2.7 %	2.7 %	3.0 %	2.0 %	6.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.908 ppb	13.490 ppb	110.216 ppb	103.470 ppb	112.532 %	5.300 ppb	5.669 ppb	116.657 %	45.281 ppb
Concentration per Run 1	14.611 ppb	14.494 ppb	112.463 ppb	103.007 ppb	111.294 %	5.394 ppb	5.767 ppb	114.729 %	45.796 ppb
Concentration per Run 2	13.969 ppb	12.675 ppb	107.795 ppb	103.936 ppb	110.524 %	5.317 ppb	5.725 ppb	109.720 %	45.952 ppb
Concentration per Run 3	13.143 ppb	13.300 ppb	110.391 ppb	103.466 ppb	115.780 %	5.188 ppb	5.515 ppb	125.523 %	44.095 ppb
Concentration RSD	5.3 %	6.9 %	2.1 %	0.4 %	2.5 %	2.0 %	2.4 %	6.9 %	2.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	208.957 ppb	118.397 %	120.280 %	11.328 ppb	56.894 ppb	115.161 %
Concentration per Run 1	215.750 ppb	114.833 %	116.906 %	10.813 ppb	54.308 ppb	120.600 %
Concentration per Run 2	208.465 ppb	114.326 %	116.224 %	11.720 ppb	58.484 ppb	108.258 %
Concentration per Run 3	202.655 ppb	126.032 %	127.711 %	11.451 ppb	57.891 ppb	116.625 %
Concentration RSD	3.1 %	5.6 %	5.4 %	4.1 %	4.0 %	5.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	106	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1822316-5d10 6020TL	Rack	2		
Analysis started at:	9/5/2023 3:51:14 PM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.121 %	130.591 %	53.469 ppb	5,298.919 ppb	5,193.154 ppb	52.060 ppb	5,375.224 ppb	7,278.751 ppb	109.186 %
Concentration per Run 1	92.122 %	131.346 %	53.363 ppb	5,248.614 ppb	5,117.518 ppb	53.771 ppb	5,278.605 ppb	7,134.212 ppb	108.232 %
Concentration per Run 2	90.919 %	124.246 %	53.549 ppb	5,288.844 ppb	5,233.123 ppb	49.819 ppb	5,192.333 ppb	7,082.652 ppb	108.793 %
Concentration per Run 3	90.321 %	136.180 %	53.496 ppb	5,359.300 ppb	5,228.820 ppb	52.591 ppb	5,654.734 ppb	7,619.388 ppb	110.535 %
Concentration RSD	1.0 %	4.6 %	0.2 %	1.1 %	1.3 %	3.9 %	4.6 %	4.1 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.328 ppb	45.844 ppb	46.782 ppb	4,727.700 ppb	46.819 ppb	47.903 ppb	47.867 ppb	54.050 ppb	117.838 %
Concentration per Run 1	46.907 ppb	45.088 ppb	45.079 ppb	4,623.631 ppb	45.855 ppb	46.816 ppb	47.845 ppb	52.965 ppb	118.704 %
Concentration per Run 2	48.165 ppb	46.852 ppb	47.038 ppb	4,786.095 ppb	47.658 ppb	48.830 ppb	47.963 ppb	54.178 ppb	113.474 %
Concentration per Run 3	46.911 ppb	45.592 ppb	48.230 ppb	4,773.373 ppb	46.945 ppb	48.064 ppb	47.793 ppb	55.008 ppb	121.336 %
Concentration RSD	1.5 %	2.0 %	3.4 %	1.9 %	1.9 %	2.1 %	0.2 %	1.9 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	49.712 ppb	52.051 ppb	55.701 ppb	51.638 ppb	109.953 %	2.176 ppb	49.567 ppb	116.992 %	54.737 ppb
Concentration per Run 1	49.937 ppb	51.817 ppb	55.756 ppb	49.963 ppb	110.050 %	2.157 ppb	49.153 ppb	116.347 %	55.168 ppb
Concentration per Run 2	48.932 ppb	50.995 ppb	53.892 ppb	52.237 ppb	105.686 %	2.198 ppb	50.464 ppb	111.577 %	54.524 ppb
Concentration per Run 3	50.267 ppb	53.343 ppb	57.456 ppb	52.714 ppb	114.123 %	2.173 ppb	49.082 ppb	123.052 %	54.519 ppb
Concentration RSD	1.4 %	2.3 %	3.2 %	2.8 %	3.8 %	1.0 %	1.6 %	4.9 %	0.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	48.932 ppb	118.243 %	121.425 %	46.596 ppb	47.432 ppb	122.975 %
Concentration per Run 1	48.387 ppb	117.259 %	120.632 %	44.305 ppb	44.811 ppb	128.323 %
Concentration per Run 2	47.574 ppb	112.662 %	114.336 %	47.294 ppb	48.412 ppb	117.842 %
Concentration per Run 3	50.837 ppb	124.809 %	129.308 %	48.190 ppb	49.075 ppb	122.761 %
Concentration RSD	3.5 %	5.2 %	6.2 %	4.4 %	4.8 %	4.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 107
Analysis label: WG1822316-4 6020TL
Analysis started at: 9/5/2023 3:55:53 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 17
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.355 %	135.702 %	0.006 ppb	5,416.388 ppb	2,343.642 ppb	5.926 ppb	3,212.794 ppb	24,394.340 ppb	107.146 %
Concentration per Run 1	101.145 %	133.536 %	0.008 ppb	5,513.493 ppb	2,325.781 ppb	6.305 ppb	3,342.664 ppb	25,362.429 ppb	108.508 %
Concentration per Run 2	97.496 %	128.551 %	0.008 ppb	5,467.170 ppb	2,354.666 ppb	5.280 ppb	3,194.411 ppb	24,422.696 ppb	105.739 %
Concentration per Run 3	96.424 %	145.017 %	0.002 ppb	5,268.502 ppb	2,350.479 ppb	6.194 ppb	3,101.306 ppb	23,397.896 ppb	107.193 %
Concentration RSD	2.5 %	6.2 %	57.2 %	2.4 %	0.7 %	9.5 %	3.8 %	4.0 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.514 ppb	0.394 ppb	0.373 ppb	22.228 ppb	0.009 ppb	0.071 ppb	0.564 ppb	0.599 ppb	119.071 %
Concentration per Run 1	1.527 ppb	0.429 ppb	0.307 ppb	20.952 ppb	0.010 ppb	0.067 ppb	0.570 ppb	0.634 ppb	113.963 %
Concentration per Run 2	1.505 ppb	0.365 ppb	0.433 ppb	23.988 ppb	0.007 ppb	0.074 ppb	0.583 ppb	0.577 ppb	114.961 %
Concentration per Run 3	1.509 ppb	0.389 ppb	0.379 ppb	21.744 ppb	0.010 ppb	0.073 ppb	0.539 ppb	0.585 ppb	128.289 %
Concentration RSD	0.8 %	8.3 %	16.9 %	7.1 %	21.3 %	5.7 %	4.0 %	5.2 %	6.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	10.590 ppb	0.940 ppb	34.991 ppb	4.016 ppb	110.859 %	-0.004 ppb	0.008 ppb	117.773 %	2.430 ppb
Concentration per Run 1	10.799 ppb	0.757 ppb	35.390 ppb	3.275 ppb	106.350 %	-0.002 ppb	0.008 ppb	108.827 %	2.388 ppb
Concentration per Run 2	10.427 ppb	1.097 ppb	34.598 ppb	4.044 ppb	111.516 %	-0.004 ppb	0.005 ppb	117.821 %	2.400 ppb
Concentration per Run 3	10.545 ppb	0.966 ppb	34.986 ppb	4.728 ppb	114.711 %	-0.004 ppb	0.011 ppb	126.672 %	2.500 ppb
Concentration RSD	1.8 %	18.2 %	1.1 %	18.1 %	3.8 %	35.6 %	37.5 %	7.6 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2.048 ppb	117.957 %	119.898 %	0.265 ppb	0.031 ppb	112.821 %
Concentration per Run 1	2.144 ppb	112.631 %	114.133 %	0.280 ppb	0.030 ppb	112.479 %
Concentration per Run 2	2.003 ppb	118.367 %	118.821 %	0.274 ppb	0.031 ppb	110.558 %
Concentration per Run 3	1.996 ppb	122.873 %	126.739 %	0.240 ppb	0.030 ppb	115.425 %
Concentration RSD	4.1 %	4.4 %	5.3 %	8.1 %	2.1 %	2.2 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 108
Analysis label: L2350250-01 6020TL
Analysis started at: 9/5/2023 4:01:39 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 15
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.676 %	143.331 %	0.005 ppb	5,281.313 ppb	2,264.307 ppb	5.221 ppb	3,211.958 ppb	24,091.563 ppb	107.718 %
Concentration per Run 1	98.210 %	147.283 %	0.008 ppb	5,126.681 ppb	2,205.744 ppb	5.482 ppb	3,172.164 ppb	23,351.870 ppb	107.745 %
Concentration per Run 2	96.872 %	141.014 %	0.000 ppb	5,390.334 ppb	2,300.405 ppb	4.980 ppb	3,253.322 ppb	24,630.431 ppb	107.382 %
Concentration per Run 3	94.947 %	141.694 %	0.008 ppb	5,326.925 ppb	2,286.773 ppb	5.200 ppb	3,210.387 ppb	24,292.389 ppb	108.026 %
Concentration RSD	1.7 %	2.4 %	92.1 %	2.6 %	2.3 %	4.8 %	1.3 %	2.7 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.499 ppb	0.405 ppb	0.368 ppb	13.003 ppb	0.006 ppb	0.134 ppb	0.627 ppb	0.640 ppb	125.183 %
Concentration per Run 1	1.518 ppb	0.378 ppb	0.354 ppb	13.144 ppb	0.007 ppb	0.139 ppb	0.586 ppb	0.642 ppb	126.418 %
Concentration per Run 2	1.497 ppb	0.419 ppb	0.379 ppb	12.220 ppb	0.005 ppb	0.151 ppb	0.689 ppb	0.631 ppb	123.289 %
Concentration per Run 3	1.481 ppb	0.416 ppb	0.372 ppb	13.645 ppb	0.004 ppb	0.113 ppb	0.606 ppb	0.647 ppb	125.841 %
Concentration RSD	1.2 %	5.7 %	3.5 %	5.6 %	28.0 %	14.7 %	8.7 %	1.3 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	10.204 ppb	0.466 ppb	34.798 ppb	1.901 ppb	113.746 %	-0.004 ppb	0.009 ppb	129.597 %	1.387 ppb
Concentration per Run 1	9.936 ppb	0.397 ppb	34.239 ppb	1.538 ppb	113.952 %	-0.005 ppb	0.012 ppb	130.650 %	1.291 ppb
Concentration per Run 2	10.597 ppb	0.545 ppb	34.952 ppb	1.988 ppb	114.341 %	-0.003 ppb	0.009 ppb	129.283 %	1.426 ppb
Concentration per Run 3	10.081 ppb	0.455 ppb	35.203 ppb	2.175 ppb	112.946 %	-0.004 ppb	0.006 ppb	128.859 %	1.445 ppb
Concentration RSD	3.4 %	16.0 %	1.4 %	17.2 %	0.6 %	18.8 %	31.2 %	0.7 %	6.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.814 ppb	125.522 %	130.280 %	0.045 ppb	0.016 ppb	152.173 %
Concentration per Run 1	1.629 ppb	125.780 %	132.796 %	0.029 ppb	0.012 ppb	177.929 %
Concentration per Run 2	1.919 ppb	125.517 %	126.930 %	0.050 ppb	0.017 ppb	152.470 %
Concentration per Run 3	1.894 ppb	125.268 %	131.114 %	0.056 ppb	0.019 ppb	126.120 %
Concentration RSD	8.9 %	0.2 %	2.3 %	31.1 %	23.5 %	17.0 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 109
Analysis label: I2350799-09 6020TL
Analysis started at: 9/5/2023 4:06:18 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 11
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.556 %	137.112 %	4.941 ppb	43,634.804 ppb	25,681.402 ppb	15,919.732 ppb	5,854.647 ppb	136,909.185 ppb	139.027 %
Concentration per Run 1	95.377 %	132.479 %	4.941 ppb	43,066.853 ppb	25,281.371 ppb	15,435.945 ppb	5,705.333 ppb	133,391.144 ppb	139.726 %
Concentration per Run 2	92.230 %	135.953 %	4.944 ppb	43,514.382 ppb	25,449.128 ppb	15,733.805 ppb	5,747.276 ppb	135,958.004 ppb	138.728 %
Concentration per Run 3	90.059 %	142.902 %	4.940 ppb	44,323.176 ppb	26,313.708 ppb	16,589.445 ppb	6,111.331 ppb	141,378.406 ppb	138.625 %
Concentration RSD	2.9 %	3.9 %	0.0 %	1.5 %	2.2 %	3.8 %	3.8 %	3.0 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	35.248 ppb	30.627 ppb	3,874.222 ppb	11,662.286 ppb	14.802 ppb	36.812 ppb	177.046 ppb	167.478 ppb	126.320 %
Concentration per Run 1	34.623 ppb	30.396 ppb	3,808.282 ppb	11,567.899 ppb	14.799 ppb	36.591 ppb	174.684 ppb	164.959 ppb	123.908 %
Concentration per Run 2	35.723 ppb	30.894 ppb	3,874.703 ppb	11,769.479 ppb	14.966 ppb	37.262 ppb	181.939 ppb	171.381 ppb	121.803 %
Concentration per Run 3	35.398 ppb	30.590 ppb	3,939.681 ppb	11,649.482 ppb	14.641 ppb	36.584 ppb	174.516 ppb	166.094 ppb	133.250 %
Concentration RSD	1.6 %	0.8 %	1.7 %	0.9 %	1.1 %	1.1 %	2.4 %	2.0 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	15.709 ppb	55.854 ppb	403.524 ppb	2.794 ppb	102.822 %	0.166 ppb	1.390 ppb	119.948 %	1.433 ppb
Concentration per Run 1	15.255 ppb	54.656 ppb	388.184 ppb	2.543 ppb	98.623 %	0.166 ppb	1.365 ppb	113.522 %	1.372 ppb
Concentration per Run 2	15.924 ppb	58.035 ppb	398.274 ppb	2.781 ppb	101.900 %	0.164 ppb	1.397 ppb	115.949 %	1.441 ppb
Concentration per Run 3	15.946 ppb	54.870 ppb	424.113 ppb	3.057 ppb	107.944 %	0.170 ppb	1.408 ppb	130.372 %	1.487 ppb
Concentration RSD	2.5 %	3.4 %	4.6 %	9.2 %	4.6 %	1.7 %	1.6 %	7.6 %	4.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2,544.645 ppb	123.967 %	114.346 %	0.146 ppb	23.659 ppb	116.325 %
Concentration per Run 1	2,495.270 ppb	118.788 %	106.180 %	0.129 ppb	22.188 ppb	120.737 %
Concentration per Run 2	2,554.940 ppb	123.090 %	113.345 %	0.154 ppb	23.880 ppb	113.253 %
Concentration per Run 3	2,583.724 ppb	130.021 %	123.512 %	0.156 ppb	24.910 ppb	114.985 %
Concentration RSD	1.8 %	4.6 %	7.6 %	10.2 %	5.8 %	3.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 110
Analysis label: I2350799-05D10 6020TL
Analysis started at: 9/5/2023 4:10:58 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 12
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.499 %	133.436 %	0.702 ppb	6,711.480 ppb	7,808.852 ppb	2,608.070 ppb	1,041.430 ppb	22,636.160 ppb	105.106 %
Concentration per Run 1	90.343 %	125.001 %	0.720 ppb	6,891.520 ppb	7,998.486 ppb	2,650.967 ppb	1,082.929 ppb	23,467.565 ppb	104.380 %
Concentration per Run 2	88.994 %	136.482 %	0.705 ppb	6,418.857 ppb	7,504.981 ppb	2,463.933 ppb	965.171 ppb	21,183.237 ppb	105.675 %
Concentration per Run 3	89.159 %	138.824 %	0.683 ppb	6,824.064 ppb	7,923.090 ppb	2,709.309 ppb	1,076.189 ppb	23,257.677 ppb	105.263 %
Concentration RSD	0.8 %	5.5 %	2.6 %	3.8 %	3.4 %	4.9 %	6.3 %	5.6 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.423 ppb	7.022 ppb	976.601 ppb	2,225.907 ppb	15.797 ppb	10.153 ppb	25.702 ppb	23.421 ppb	121.760 %
Concentration per Run 1	4.598 ppb	7.450 ppb	1,019.270 ppb	2,377.949 ppb	17.132 ppb	10.748 ppb	27.842 ppb	24.708 ppb	111.180 %
Concentration per Run 2	4.214 ppb	6.750 ppb	930.025 ppb	2,120.390 ppb	15.104 ppb	9.945 ppb	24.570 ppb	22.432 ppb	123.392 %
Concentration per Run 3	4.457 ppb	6.867 ppb	980.510 ppb	2,179.381 ppb	15.157 ppb	9.765 ppb	24.693 ppb	23.124 ppb	130.709 %
Concentration RSD	4.4 %	5.3 %	4.6 %	6.1 %	7.3 %	5.2 %	7.2 %	5.0 %	8.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.361 ppb	11.520 ppb	93.156 ppb	1.312 ppb	110.552 %	0.002 ppb	0.214 ppb	123.280 %	0.780 ppb
Concentration per Run 1	2.486 ppb	12.411 ppb	93.833 ppb	1.262 ppb	106.238 %	0.002 ppb	0.228 ppb	114.842 %	0.761 ppb
Concentration per Run 2	2.304 ppb	10.546 ppb	88.457 ppb	1.214 ppb	109.318 %	0.002 ppb	0.201 ppb	118.583 %	0.780 ppb
Concentration per Run 3	2.294 ppb	11.603 ppb	97.178 ppb	1.460 ppb	116.100 %	0.001 ppb	0.214 ppb	136.416 %	0.800 ppb
Concentration RSD	4.6 %	8.1 %	4.7 %	9.9 %	4.6 %	43.0 %	6.2 %	9.4 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	197.659 ppb	123.397 %	122.521 %	0.038 ppb	2.797 ppb	112.943 %
Concentration per Run 1	198.447 ppb	117.393 %	114.361 %	0.030 ppb	2.712 ppb	114.469 %
Concentration per Run 2	195.802 ppb	122.674 %	121.187 %	0.044 ppb	2.870 ppb	108.967 %
Concentration per Run 3	198.729 ppb	130.125 %	132.013 %	0.040 ppb	2.811 ppb	115.393 %
Concentration RSD	0.8 %	5.2 %	7.3 %	19.0 %	2.9 %	3.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	111	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1822316-6d5 6020TL	Rack	2		
Analysis started at:	9/5/2023 4:15:39 PM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.383 %	139.680 %	0.003 ppb	1,052.897 ppb	483.694 ppb	1.886 ppb	670.385 ppb	5,049.005 ppb	99.160 %
Concentration per Run 1	94.589 %	137.237 %	0.000 ppb	1,051.356 ppb	475.183 ppb	1.371 ppb	650.215 ppb	4,946.689 ppb	99.800 %
Concentration per Run 2	92.731 %	134.367 %	0.005 ppb	1,036.182 ppb	470.917 ppb	1.951 ppb	656.913 ppb	5,016.811 ppb	100.280 %
Concentration per Run 3	89.831 %	147.435 %	0.004 ppb	1,071.152 ppb	504.984 ppb	2.336 ppb	704.026 ppb	5,183.515 ppb	97.399 %
Concentration RSD	2.6 %	4.9 %	100.6 %	1.7 %	3.8 %	25.8 %	4.4 %	2.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.283 ppb	0.074 ppb	0.140 ppb	15.096 ppb	0.004 ppb	0.093 ppb	0.121 ppb	0.472 ppb	123.179 %
Concentration per Run 1	0.264 ppb	0.083 ppb	0.182 ppb	15.391 ppb	0.002 ppb	0.102 ppb	0.118 ppb	0.455 ppb	113.759 %
Concentration per Run 2	0.295 ppb	0.061 ppb	0.068 ppb	16.414 ppb	0.008 ppb	0.081 ppb	0.116 ppb	0.521 ppb	119.368 %
Concentration per Run 3	0.288 ppb	0.077 ppb	0.169 ppb	13.481 ppb	0.003 ppb	0.096 ppb	0.129 ppb	0.439 ppb	136.410 %
Concentration RSD	5.7 %	15.8 %	44.5 %	9.9 %	77.3 %	11.5 %	5.5 %	9.3 %	9.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.240 ppb	0.064 ppb	7.109 ppb	0.486 ppb	113.783 %	-0.003 ppb	0.001 ppb	122.092 %	0.517 ppb
Concentration per Run 1	2.290 ppb	0.028 ppb	7.113 ppb	0.338 ppb	109.548 %	-0.003 ppb	0.002 ppb	110.582 %	0.556 ppb
Concentration per Run 2	2.251 ppb	0.117 ppb	7.002 ppb	0.494 ppb	111.560 %	-0.003 ppb	0.001 ppb	118.960 %	0.502 ppb
Concentration per Run 3	2.178 ppb	0.048 ppb	7.212 ppb	0.626 ppb	120.240 %	-0.004 ppb	0.001 ppb	136.734 %	0.494 ppb
Concentration RSD	2.5 %	72.9 %	1.5 %	29.7 %	5.0 %	24.1 %	55.3 %	10.9 %	6.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.459 ppb	120.424 %	123.067 %	0.018 ppb	0.006 ppb	114.916 %
Concentration per Run 1	0.537 ppb	114.228 %	116.984 %	0.013 ppb	0.006 ppb	117.214 %
Concentration per Run 2	0.358 ppb	120.601 %	118.525 %	0.020 ppb	0.006 ppb	110.478 %
Concentration per Run 3	0.481 ppb	126.444 %	133.693 %	0.020 ppb	0.006 ppb	117.056 %
Concentration RSD	20.0 %	5.1 %	7.5 %	22.6 %	0.6 %	3.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 112
Analysis label: CCV
Analysis started at: 9/5/2023 4:20:18 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.956 %	131.019 %	64.640 ppb	6,113.770 ppb	6,271.950 ppb	64.084 ppb	6,489.466 ppb	6,319.867 ppb	112.785 %
Concentration per Run 1	88.567 %	130.968 %	64.095 ppb	5,939.815 ppb	6,039.390 ppb	61.171 ppb	6,217.887 ppb	6,190.654 ppb	113.517 %
Concentration per Run 2	87.172 %	125.001 %	64.506 ppb	6,190.824 ppb	6,341.065 ppb	63.664 ppb	6,595.240 ppb	6,296.267 ppb	114.483 %
Concentration per Run 3	85.130 %	137.086 %	65.319 ppb	6,210.672 ppb	6,435.394 ppb	67.419 ppb	6,655.270 ppb	6,472.679 ppb	110.355 %
Recovery Percentage 1			107.733 %	101.896 %	104.532 %	106.807 %	108.158 %	105.331 %	
Concentration RSD	2.0 %	4.6 %	1.0 %	2.5 %	3.3 %	4.9 %	3.7 %	2.3 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.803 ppb	55.849 ppb	55.465 ppb	5,827.354 ppb	57.584 ppb	56.749 ppb	57.186 ppb	60.405 ppb	119.281 %
Concentration per Run 1	57.411 ppb	55.723 ppb	54.836 ppb	5,889.718 ppb	58.488 ppb	58.306 ppb	58.658 ppb	61.440 ppb	112.824 %
Concentration per Run 2	57.326 ppb	57.360 ppb	54.362 ppb	5,835.326 ppb	58.337 ppb	57.512 ppb	57.633 ppb	60.491 ppb	117.223 %
Concentration per Run 3	55.672 ppb	54.465 ppb	57.196 ppb	5,757.017 ppb	55.927 ppb	54.428 ppb	55.268 ppb	59.283 ppb	127.794 %
Recovery Percentage 1	94.672 %	93.082 %	92.441 %	97.123 %	95.973 %	94.581 %	95.311 %	100.674 %	
Concentration RSD	1.7 %	2.6 %	2.7 %	1.1 %	2.5 %	3.6 %	3.0 %	1.8 %	6.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.795 ppb	63.960 ppb	58.304 ppb	58.494 ppb	110.979 %	59.123 ppb	59.271 ppb	122.768 %	59.107 ppb
Concentration per Run 1	61.532 ppb	63.328 ppb	57.478 ppb	58.630 ppb	108.163 %	59.443 ppb	59.176 ppb	117.463 %	59.012 ppb
Concentration per Run 2	59.979 ppb	62.344 ppb	56.861 ppb	58.304 ppb	108.853 %	59.913 ppb	59.503 ppb	119.923 %	58.112 ppb
Concentration per Run 3	60.873 ppb	66.208 ppb	60.574 ppb	58.547 ppb	115.920 %	58.013 ppb	59.133 ppb	130.919 %	60.196 ppb
Recovery Percentage 1	101.324 %	106.600 %	97.174 %	97.490 %		98.538 %	98.784 %		98.511 %
Concentration RSD	1.3 %	3.1 %	3.4 %	0.3 %	3.9 %	1.7 %	0.3 %	5.8 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.114 ppb	120.604 %	126.314 %	56.007 ppb	56.838 ppb	123.700 %
Concentration per Run 1	58.660 ppb	116.322 %	123.424 %	53.636 ppb	54.643 ppb	126.574 %
Concentration per Run 2	58.243 ppb	118.976 %	125.144 %	56.575 ppb	57.552 ppb	121.147 %
Concentration per Run 3	60.439 ppb	126.513 %	130.374 %	57.809 ppb	58.321 ppb	123.379 %
Recovery Percentage 1	98.523 %			93.345 %	94.731 %	
Concentration RSD	2.0 %	4.4 %	2.9 %	3.8 %	3.4 %	2.2 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	113	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/5/2023 4:25:01 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.807 %	129.634 %	0.005 ppb	-0.670 ppb	-0.743 ppb	-0.372 ppb	-1.873 ppb	-1.555 ppb	97.907 %
Concentration per Run 1	92.604 %	124.095 %	0.005 ppb	-0.676 ppb	-0.552 ppb	-0.268 ppb	-2.078 ppb	-0.511 ppb	97.641 %
Concentration per Run 2	90.570 %	129.684 %	0.003 ppb	-0.385 ppb	-0.705 ppb	-0.434 ppb	-2.157 ppb	-1.772 ppb	97.803 %
Concentration per Run 3	89.248 %	135.123 %	0.007 ppb	-0.950 ppb	-0.972 ppb	-0.415 ppb	-1.384 ppb	-2.383 ppb	98.278 %
Recovery Percentage 1			1.016 %	-0.670 %	-1.061 %	-3.721 %	-1.873 %	-1.555 %	
Concentration RSD	1.9 %	4.3 %	34.4 %	42.2 %	28.6 %	24.4 %	22.7 %	61.4 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.016 ppb	-0.011 ppb	-0.015 ppb	18.476 ppb	0.001 ppb	0.004 ppb	-0.019 ppb	-0.109 ppb	120.133 %
Concentration per Run 1	-0.011 ppb	-0.016 ppb	-0.031 ppb	18.540 ppb	0.000 ppb	0.011 ppb	-0.012 ppb	-0.129 ppb	115.569 %
Concentration per Run 2	-0.025 ppb	-0.013 ppb	-0.015 ppb	18.319 ppb	0.002 ppb	-0.003 ppb	-0.025 ppb	-0.112 ppb	120.776 %
Concentration per Run 3	-0.012 ppb	-0.004 ppb	0.001 ppb	18.571 ppb	0.001 ppb	0.003 ppb	-0.019 ppb	-0.088 ppb	124.054 %
Recovery Percentage 1	-0.324 %	-1.090 %	-1.516 %	36.953 %	0.234 %	0.185 %	-1.852 %	-2.189 %	
Concentration RSD	49.1 %	57.3 %	105.5 %	0.7 %	86.9 %	188.8 %	37.1 %	18.9 %	3.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.180 ppb	0.730 ppb	0.001 ppb	1.586 ppb	111.754 %	-0.003 ppb	0.000 ppb	121.188 %	0.358 ppb
Concentration per Run 1	0.125 ppb	0.506 ppb	0.001 ppb	1.165 ppb	110.130 %	-0.003 ppb	0.000 ppb	115.093 %	0.320 ppb
Concentration per Run 2	0.184 ppb	0.844 ppb	0.001 ppb	1.583 ppb	111.050 %	-0.003 ppb	0.000 ppb	123.670 %	0.376 ppb
Concentration per Run 3	0.230 ppb	0.840 ppb	0.001 ppb	2.009 ppb	114.080 %	-0.003 ppb	0.000 ppb	124.802 %	0.377 ppb
Recovery Percentage 1	35.942 %	14.601 %	0.013 %	79.296 %		-0.709 %	-0.043 %		8.938 %
Concentration RSD	29.4 %	26.5 %	21.2 %	26.6 %	1.8 %	5.2 %	397.2 %	4.4 %	9.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.009 ppb	116.756 %	123.251 %	0.291 ppb	0.006 ppb	128.367 %
Concentration per Run 1	0.004 ppb	113.302 %	118.391 %	0.333 ppb	0.006 ppb	125.391 %
Concentration per Run 2	0.019 ppb	118.293 %	125.671 %	0.275 ppb	0.005 ppb	138.875 %
Concentration per Run 3	0.003 ppb	118.672 %	125.692 %	0.264 ppb	0.006 ppb	120.834 %
Recovery Percentage 1	1.799 %			29.055 %	0.586 %	
Concentration RSD	98.5 %	2.6 %	3.4 %	12.7 %	17.1 %	7.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	114	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1822318-1 6020SL	Rack	2		
Analysis started at:	9/5/2023 4:32:16 PM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.048 %	137.489 %	0.001 ppb	-0.918 ppb	0.357 ppb	0.802 ppb	-3.218 ppb	3.454 ppb	105.069 %
Concentration per Run 1	100.968 %	141.618 %	0.002 ppb	-1.017 ppb	0.453 ppb	0.632 ppb	-3.246 ppb	2.332 ppb	107.749 %
Concentration per Run 2	97.209 %	128.853 %	0.002 ppb	-0.452 ppb	0.493 ppb	0.810 ppb	-2.111 ppb	3.498 ppb	104.059 %
Concentration per Run 3	95.968 %	141.996 %	0.000 ppb	-1.285 ppb	0.126 ppb	0.964 ppb	-4.298 ppb	4.533 ppb	103.399 %
Concentration RSD	2.7 %	5.4 %	103.5 %	46.3 %	56.4 %	20.7 %	34.0 %	31.9 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.027 ppb	-0.005 ppb	0.005 ppb	5.004 ppb	0.000 ppb	-0.006 ppb	-0.027 ppb	-0.210 ppb	122.073 %
Concentration per Run 1	-0.022 ppb	0.003 ppb	0.031 ppb	4.073 ppb	0.000 ppb	-0.003 ppb	-0.025 ppb	-0.223 ppb	119.568 %
Concentration per Run 2	-0.025 ppb	-0.011 ppb	-0.015 ppb	5.280 ppb	0.000 ppb	0.000 ppb	-0.031 ppb	-0.238 ppb	120.622 %
Concentration per Run 3	-0.032 ppb	-0.007 ppb	-0.001 ppb	5.659 ppb	0.000 ppb	-0.014 ppb	-0.024 ppb	-0.168 ppb	126.029 %
Concentration RSD	19.1 %	154.2 %	470.6 %	16.5 %	193.1 %	120.5 %	15.1 %	17.7 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.049 ppb	0.070 ppb	0.010 ppb	0.405 ppb	116.667 %	-0.005 ppb	0.000 ppb	122.565 %	0.212 ppb
Concentration per Run 1	0.041 ppb	0.064 ppb	0.005 ppb	0.274 ppb	116.373 %	-0.005 ppb	0.000 ppb	124.007 %	0.172 ppb
Concentration per Run 2	0.057 ppb	0.066 ppb	0.013 ppb	0.393 ppb	114.451 %	-0.005 ppb	0.000 ppb	118.118 %	0.221 ppb
Concentration per Run 3	0.048 ppb	0.080 ppb	0.013 ppb	0.548 ppb	119.175 %	-0.005 ppb	0.001 ppb	125.572 %	0.243 ppb
Concentration RSD	16.5 %	12.5 %	45.0 %	34.0 %	2.0 %	1.4 %	694.4 %	3.2 %	17.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.011 ppb	122.054 %	124.287 %	0.038 ppb	-0.005 ppb	150.255 %
Concentration per Run 1	0.016 ppb	122.634 %	122.255 %	0.024 ppb	-0.006 ppb	180.307 %
Concentration per Run 2	0.004 ppb	118.851 %	122.788 %	0.044 ppb	-0.004 ppb	134.652 %
Concentration per Run 3	0.012 ppb	124.676 %	127.820 %	0.045 ppb	-0.004 ppb	135.805 %
Concentration RSD	57.5 %	2.4 %	2.5 %	31.0 %	18.2 %	17.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 115
Analysis label: WG1819212-2d5 6020TL
Analysis started at: 9/5/2023 4:36:56 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 44
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.179 %	127.645 %	11.599 ppb	2,047.127 ppb	2,146.133 ppb	438.500 ppb	2,180.723 ppb	1,718.842 ppb	104.126 %
Concentration per Run 1	94.529 %	123.415 %	11.583 ppb	2,034.877 ppb	2,096.220 ppb	410.407 ppb	2,040.718 ppb	1,823.782 ppb	104.770 %
Concentration per Run 2	92.796 %	125.605 %	11.629 ppb	2,066.328 ppb	2,181.820 ppb	459.185 ppb	2,250.284 ppb	1,595.940 ppb	103.298 %
Concentration per Run 3	92.213 %	133.914 %	11.586 ppb	2,040.177 ppb	2,160.358 ppb	445.909 ppb	2,251.167 ppb	1,736.804 ppb	104.309 %
Concentration RSD	1.3 %	4.3 %	0.2 %	0.8 %	2.1 %	5.8 %	5.6 %	6.7 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	100.266 ppb	39.558 ppb	99.921 ppb	211.778 ppb	101.585 ppb	99.427 ppb	51.260 ppb	106.049 ppb	117.240 %
Concentration per Run 1	98.786 ppb	39.532 ppb	97.389 ppb	203.934 ppb	100.781 ppb	99.184 ppb	51.504 ppb	105.461 ppb	111.940 %
Concentration per Run 2	100.833 ppb	39.911 ppb	103.410 ppb	213.977 ppb	104.111 ppb	101.247 ppb	51.462 ppb	107.085 ppb	117.569 %
Concentration per Run 3	101.180 ppb	39.232 ppb	98.964 ppb	217.425 ppb	99.864 ppb	97.849 ppb	50.814 ppb	105.600 ppb	122.211 %
Concentration RSD	1.3 %	0.9 %	3.1 %	3.3 %	2.2 %	1.7 %	0.8 %	0.8 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	25.092 ppb	25.939 ppb	214.739 ppb	195.340 ppb	110.778 %	10.836 ppb	11.371 ppb	118.259 %	83.125 ppb
Concentration per Run 1	24.913 ppb	24.828 ppb	206.419 ppb	193.806 ppb	106.391 %	10.793 ppb	11.135 ppb	109.147 %	83.951 ppb
Concentration per Run 2	24.959 ppb	26.495 ppb	219.070 ppb	195.556 ppb	110.718 %	11.021 ppb	11.804 ppb	119.971 %	82.764 ppb
Concentration per Run 3	25.405 ppb	26.493 ppb	218.726 ppb	196.660 ppb	115.225 %	10.696 ppb	11.174 ppb	125.658 %	82.659 ppb
Concentration RSD	1.1 %	3.7 %	3.4 %	0.7 %	4.0 %	1.5 %	3.3 %	7.1 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	422.049 ppb	119.402 %	122.613 %	20.511 ppb	109.826 ppb	126.148 %
Concentration per Run 1	425.410 ppb	113.743 %	114.384 %	19.448 ppb	104.525 ppb	129.535 %
Concentration per Run 2	425.121 ppb	118.636 %	121.872 %	21.038 ppb	112.304 ppb	123.500 %
Concentration per Run 3	415.617 ppb	125.827 %	131.584 %	21.047 ppb	112.650 ppb	125.408 %
Concentration RSD	1.3 %	5.1 %	7.0 %	4.5 %	4.2 %	2.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 116
Analysis label: WG1822318-2d5 6020SL
Analysis started at: 9/5/2023 4:41:35 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 23
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.065 %	128.627 %	11.379 ppb	2,073.351 ppb	2,155.430 ppb	437.290 ppb	2,193.361 ppb	1,830.131 ppb	99.569 %
Concentration per Run 1	92.717 %	123.339 %	11.238 ppb	2,060.351 ppb	2,150.666 ppb	429.583 ppb	2,160.411 ppb	1,952.114 ppb	99.879 %
Concentration per Run 2	92.430 %	127.343 %	11.498 ppb	2,074.252 ppb	2,147.314 ppb	443.881 ppb	2,217.832 ppb	1,813.274 ppb	98.851 %
Concentration per Run 3	91.049 %	135.198 %	11.400 ppb	2,085.450 ppb	2,168.310 ppb	438.406 ppb	2,201.841 ppb	1,725.005 ppb	99.975 %
Concentration RSD	1.0 %	4.7 %	1.2 %	0.6 %	0.5 %	1.6 %	1.4 %	6.3 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	99.049 ppb	39.182 ppb	96.931 ppb	205.254 ppb	99.563 ppb	98.602 ppb	50.725 ppb	103.898 ppb	117.643 %
Concentration per Run 1	101.272 ppb	40.416 ppb	97.235 ppb	204.928 ppb	103.825 ppb	102.173 ppb	52.999 ppb	108.213 ppb	108.344 %
Concentration per Run 2	99.137 ppb	38.625 ppb	95.709 ppb	199.945 ppb	97.406 ppb	96.785 ppb	49.439 ppb	100.645 ppb	120.216 %
Concentration per Run 3	96.739 ppb	38.505 ppb	97.848 ppb	210.889 ppb	97.457 ppb	96.849 ppb	49.736 ppb	102.838 ppb	124.368 %
Concentration RSD	2.3 %	2.7 %	1.1 %	2.7 %	3.7 %	3.1 %	3.9 %	3.7 %	7.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	25.859 ppb	26.296 ppb	220.518 ppb	208.923 ppb	110.516 %	10.868 ppb	11.639 ppb	114.496 %	93.284 ppb
Concentration per Run 1	26.734 ppb	27.425 ppb	221.225 ppb	213.719 ppb	102.428 %	11.158 ppb	11.905 ppb	106.167 %	92.516 ppb
Concentration per Run 2	25.404 ppb	25.517 ppb	219.738 ppb	205.885 ppb	111.509 %	10.716 ppb	11.485 ppb	117.273 %	93.082 ppb
Concentration per Run 3	25.440 ppb	25.947 ppb	220.590 ppb	207.166 ppb	117.611 %	10.729 ppb	11.528 ppb	120.049 %	94.254 ppb
Concentration RSD	2.9 %	3.8 %	0.3 %	2.0 %	6.9 %	2.3 %	2.0 %	6.4 %	1.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	430.860 ppb	118.269 %	120.575 %	22.692 ppb	121.287 ppb	117.077 %
Concentration per Run 1	426.877 ppb	109.181 %	109.113 %	21.465 ppb	114.127 ppb	120.825 %
Concentration per Run 2	431.939 ppb	121.211 %	123.413 %	23.712 ppb	125.934 ppb	112.482 %
Concentration per Run 3	433.764 ppb	124.416 %	129.198 %	22.899 ppb	123.800 ppb	117.924 %
Concentration RSD	0.8 %	6.8 %	8.6 %	5.0 %	5.2 %	3.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 117
Analysis label: WG1822318-3d10 6020SL
Analysis started at: 9/5/2023 4:46:15 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 25
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.334 %	128.677 %	5.721 ppb	5,813.136 ppb	1,507.958 ppb	212.968 ppb	4,648.423 ppb	5,180.120 ppb	96.039 %
Concentration per Run 1	92.116 %	121.829 %	5.668 ppb	5,892.389 ppb	1,569.208 ppb	210.844 ppb	4,644.000 ppb	5,219.153 ppb	96.203 %
Concentration per Run 2	90.594 %	129.911 %	5.642 ppb	5,720.043 ppb	1,457.695 ppb	215.392 ppb	4,638.390 ppb	4,882.347 ppb	96.212 %
Concentration per Run 3	88.292 %	134.292 %	5.855 ppb	5,826.976 ppb	1,496.971 ppb	212.668 ppb	4,662.880 ppb	5,438.861 ppb	95.702 %
Concentration RSD	2.1 %	4.9 %	2.0 %	1.5 %	3.8 %	1.1 %	0.3 %	5.4 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.538 ppb	19.266 ppb	51.698 ppb	104.953 ppb	48.754 ppb	48.634 ppb	25.247 ppb	52.392 ppb	115.922 %
Concentration per Run 1	50.779 ppb	19.762 ppb	50.290 ppb	107.810 ppb	50.406 ppb	50.735 ppb	26.557 ppb	54.957 ppb	107.349 %
Concentration per Run 2	47.337 ppb	18.944 ppb	52.321 ppb	103.319 ppb	47.218 ppb	47.798 ppb	24.568 ppb	50.848 ppb	119.289 %
Concentration per Run 3	47.497 ppb	19.092 ppb	52.482 ppb	103.729 ppb	48.637 ppb	47.370 ppb	24.618 ppb	51.372 ppb	121.128 %
Concentration RSD	4.0 %	2.3 %	2.4 %	2.4 %	3.3 %	3.8 %	4.5 %	4.3 %	6.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.176 ppb	13.527 ppb	121.013 ppb	106.082 ppb	108.992 %	5.360 ppb	5.735 ppb	114.762 %	56.488 ppb
Concentration per Run 1	13.702 ppb	13.335 ppb	121.232 ppb	108.411 ppb	102.316 %	5.618 ppb	5.884 ppb	103.789 %	58.984 ppb
Concentration per Run 2	12.723 ppb	14.132 ppb	121.251 ppb	104.474 ppb	108.653 %	5.222 ppb	5.664 ppb	119.948 %	54.326 ppb
Concentration per Run 3	13.104 ppb	13.114 ppb	120.556 ppb	105.360 ppb	116.009 %	5.240 ppb	5.657 ppb	120.549 %	56.154 ppb
Concentration RSD	3.7 %	4.0 %	0.3 %	1.9 %	6.3 %	4.2 %	2.3 %	8.3 %	4.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	211.789 ppb	116.416 %	118.675 %	11.399 ppb	57.595 ppb	112.519 %
Concentration per Run 1	214.270 ppb	108.005 %	108.574 %	10.973 ppb	56.086 ppb	112.752 %
Concentration per Run 2	208.703 ppb	117.322 %	121.350 %	11.638 ppb	58.866 ppb	110.556 %
Concentration per Run 3	212.394 ppb	123.921 %	126.102 %	11.584 ppb	57.833 ppb	114.250 %
Concentration RSD	1.3 %	6.9 %	7.6 %	3.2 %	2.4 %	1.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 118
Analysis label: WG1822318-4d10 6020SL
Analysis started at: 9/5/2023 4:50:55 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 26
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.003 %	129.357 %	5.575 ppb	5,727.470 ppb	1,488.126 ppb	212.597 ppb	4,496.591 ppb	5,039.329 ppb	105.173 %
Concentration per Run 1	93.702 %	121.829 %	5.607 ppb	5,833.958 ppb	1,491.376 ppb	218.372 ppb	4,538.737 ppb	4,968.447 ppb	105.920 %
Concentration per Run 2	91.244 %	126.663 %	5.611 ppb	5,832.024 ppb	1,535.495 ppb	213.741 ppb	4,441.814 ppb	5,108.228 ppb	105.285 %
Concentration per Run 3	91.065 %	139.579 %	5.507 ppb	5,516.428 ppb	1,437.507 ppb	205.677 ppb	4,509.221 ppb	5,041.313 ppb	104.315 %
Concentration RSD	1.6 %	7.1 %	1.1 %	3.2 %	3.3 %	3.0 %	1.1 %	1.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.969 ppb	18.957 ppb	52.298 ppb	102.736 ppb	48.753 ppb	48.623 ppb	25.415 ppb	51.972 ppb	117.552 %
Concentration per Run 1	50.570 ppb	19.756 ppb	52.623 ppb	108.997 ppb	50.823 ppb	50.830 ppb	26.788 ppb	54.240 ppb	106.223 %
Concentration per Run 2	48.580 ppb	19.148 ppb	53.328 ppb	105.111 ppb	49.163 ppb	48.995 ppb	25.500 ppb	52.868 ppb	117.751 %
Concentration per Run 3	44.757 ppb	17.968 ppb	50.944 ppb	94.100 ppb	46.274 ppb	46.045 ppb	23.957 ppb	48.809 ppb	128.681 %
Concentration RSD	6.2 %	4.8 %	2.3 %	7.5 %	4.7 %	5.0 %	5.6 %	5.4 %	9.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.061 ppb	12.773 ppb	119.412 ppb	101.930 ppb	109.994 %	5.227 ppb	5.556 ppb	119.162 %	52.657 ppb
Concentration per Run 1	13.699 ppb	12.764 ppb	122.662 ppb	105.481 ppb	102.372 %	5.485 ppb	5.793 ppb	108.929 %	54.595 ppb
Concentration per Run 2	13.226 ppb	13.535 ppb	120.497 ppb	102.792 ppb	108.665 %	5.300 ppb	5.635 ppb	113.107 %	54.607 ppb
Concentration per Run 3	12.258 ppb	12.019 ppb	115.078 ppb	97.515 ppb	118.946 %	4.896 ppb	5.240 ppb	135.451 %	48.769 ppb
Concentration RSD	5.6 %	5.9 %	3.3 %	4.0 %	7.6 %	5.8 %	5.1 %	12.0 %	6.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	204.813 ppb	119.096 %	122.189 %	10.946 ppb	55.682 ppb	116.504 %
Concentration per Run 1	207.764 ppb	108.645 %	112.129 %	10.981 ppb	55.882 ppb	113.392 %
Concentration per Run 2	215.479 ppb	117.773 %	118.873 %	11.768 ppb	60.370 ppb	106.649 %
Concentration per Run 3	191.196 ppb	130.871 %	135.566 %	10.090 ppb	50.794 ppb	129.471 %
Concentration RSD	6.1 %	9.4 %	9.9 %	7.7 %	8.6 %	10.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 119
Analysis label: WG1822318-5d10 6020SL
Analysis started at: 9/5/2023 4:55:34 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 27
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.546 %	130.490 %	52.065 ppb	9,538.574 ppb	5,472.060 ppb	51.674 ppb	8,700.686 ppb	9,236.841 ppb	100.465 %
Concentration per Run 1	90.503 %	124.397 %	51.695 ppb	9,838.246 ppb	5,655.072 ppb	50.493 ppb	8,722.728 ppb	9,532.538 ppb	101.111 %
Concentration per Run 2	87.697 %	134.896 %	52.273 ppb	9,121.895 ppb	5,188.154 ppb	48.515 ppb	8,730.478 ppb	9,114.685 ppb	99.276 %
Concentration per Run 3	87.438 %	132.177 %	52.226 ppb	9,655.580 ppb	5,572.954 ppb	56.012 ppb	8,648.851 ppb	9,063.298 ppb	101.007 %
Concentration RSD	1.9 %	4.2 %	0.6 %	3.9 %	4.6 %	7.5 %	0.5 %	2.8 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.896 ppb	45.696 ppb	51.104 ppb	4,714.913 ppb	46.539 ppb	47.297 ppb	47.373 ppb	49.741 ppb	114.829 %
Concentration per Run 1	48.330 ppb	47.095 ppb	52.260 ppb	4,764.587 ppb	48.065 ppb	48.815 ppb	48.021 ppb	51.074 ppb	110.106 %
Concentration per Run 2	45.063 ppb	44.381 ppb	49.517 ppb	4,651.864 ppb	45.526 ppb	46.344 ppb	46.945 ppb	49.190 ppb	115.496 %
Concentration per Run 3	47.296 ppb	45.613 ppb	51.536 ppb	4,728.288 ppb	46.027 ppb	46.731 ppb	47.154 ppb	48.958 ppb	118.884 %
Concentration RSD	3.6 %	3.0 %	2.8 %	1.2 %	2.9 %	2.8 %	1.2 %	2.3 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	49.302 ppb	53.308 ppb	66.677 ppb	51.955 ppb	107.228 %	1.728 ppb	49.819 ppb	115.441 %	50.608 ppb
Concentration per Run 1	50.579 ppb	54.980 ppb	67.795 ppb	52.095 ppb	104.145 %	1.801 ppb	51.179 ppb	111.533 %	50.562 ppb
Concentration per Run 2	48.809 ppb	52.100 ppb	65.923 ppb	51.701 ppb	107.832 %	1.703 ppb	49.385 ppb	115.699 %	50.330 ppb
Concentration per Run 3	48.519 ppb	52.843 ppb	66.312 ppb	52.067 ppb	109.708 %	1.679 ppb	48.893 ppb	119.091 %	50.930 ppb
Concentration RSD	2.3 %	2.8 %	1.5 %	0.4 %	2.6 %	3.7 %	2.4 %	3.3 %	0.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	53.250 ppb	118.647 %	120.979 %	50.965 ppb	51.596 ppb	111.984 %
Concentration per Run 1	55.610 ppb	114.068 %	114.935 %	48.720 ppb	48.940 ppb	116.866 %
Concentration per Run 2	51.749 ppb	118.498 %	121.778 %	51.881 ppb	52.560 ppb	107.322 %
Concentration per Run 3	52.392 ppb	123.374 %	126.225 %	52.293 ppb	53.289 ppb	111.764 %
Concentration RSD	3.9 %	3.9 %	4.7 %	3.8 %	4.5 %	4.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 120
Analysis label: WG1822318-6d5 6020SL
Analysis started at: 9/5/2023 5:00:14 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 28
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.493 %	132.126 %	0.003 ppb	9,636.170 ppb	963.181 ppb	1.123 ppb	7,125.560 ppb	8,320.529 ppb	103.136 %
Concentration per Run 1	93.499 %	126.738 %	0.007 ppb	9,693.677 ppb	965.692 ppb	1.454 ppb	7,187.228 ppb	8,292.173 ppb	102.369 %
Concentration per Run 2	92.839 %	135.123 %	0.003 ppb	9,409.346 ppb	943.545 ppb	0.798 ppb	7,015.210 ppb	8,374.713 ppb	102.312 %
Concentration per Run 3	91.142 %	134.518 %	0.000 ppb	9,805.488 ppb	980.306 ppb	1.115 ppb	7,174.241 ppb	8,294.703 ppb	104.727 %
Concentration RSD	1.3 %	3.5 %	119.4 %	2.1 %	1.9 %	29.2 %	1.3 %	0.6 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.026 ppb	0.054 ppb	9.163 ppb	14.476 ppb	0.057 ppb	0.234 ppb	0.873 ppb	0.422 ppb	119.686 %
Concentration per Run 1	0.031 ppb	0.067 ppb	8.626 ppb	13.710 ppb	0.053 ppb	0.271 ppb	0.823 ppb	0.468 ppb	115.350 %
Concentration per Run 2	0.022 ppb	0.051 ppb	9.569 ppb	14.812 ppb	0.061 ppb	0.217 ppb	0.890 ppb	0.429 ppb	117.825 %
Concentration per Run 3	0.023 ppb	0.044 ppb	9.295 ppb	14.907 ppb	0.055 ppb	0.215 ppb	0.905 ppb	0.368 ppb	125.882 %
Concentration RSD	19.4 %	21.9 %	5.3 %	4.6 %	7.2 %	13.5 %	5.0 %	11.9 %	4.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.239 ppb	0.777 ppb	24.072 ppb	2.866 ppb	111.344 %	-0.004 ppb	0.003 ppb	116.636 %	0.815 ppb
Concentration per Run 1	0.216 ppb	0.523 ppb	24.050 ppb	2.123 ppb	107.072 %	-0.004 ppb	0.003 ppb	112.285 %	0.756 ppb
Concentration per Run 2	0.220 ppb	0.924 ppb	24.404 ppb	3.012 ppb	109.298 %	-0.005 ppb	0.003 ppb	117.047 %	0.823 ppb
Concentration per Run 3	0.283 ppb	0.883 ppb	23.763 ppb	3.464 ppb	117.662 %	-0.004 ppb	0.004 ppb	120.577 %	0.865 ppb
Concentration RSD	15.7 %	28.4 %	1.3 %	23.8 %	5.0 %	10.3 %	19.2 %	3.6 %	6.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	8.027 ppb	118.377 %	119.997 %	0.312 ppb	0.012 ppb	114.892 %
Concentration per Run 1	7.989 ppb	116.189 %	118.063 %	0.306 ppb	0.011 ppb	122.277 %
Concentration per Run 2	7.870 ppb	116.399 %	118.256 %	0.337 ppb	0.012 ppb	110.172 %
Concentration per Run 3	8.221 ppb	122.544 %	123.672 %	0.292 ppb	0.012 ppb	112.226 %
Concentration RSD	2.2 %	3.0 %	2.7 %	7.3 %	6.0 %	5.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	121	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350269-08 6020SL	Rack	2		
Analysis started at:	9/5/2023 5:04:54 PM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.221 %	132.126 %	0.006 ppb	49,511.001 ppb	4,913.081 ppb	3.589 ppb	37,599.742 ppb	42,541.196 ppb	111.481 %
Concentration per Run 1	93.988 %	127.720 %	0.010 ppb	49,908.250 ppb	4,945.279 ppb	3.846 ppb	36,751.350 ppb	43,504.817 ppb	112.304 %
Concentration per Run 2	91.753 %	136.029 %	0.005 ppb	48,481.733 ppb	4,822.559 ppb	3.502 ppb	38,727.895 ppb	42,536.927 ppb	110.874 %
Concentration per Run 3	87.922 %	132.630 %	0.002 ppb	50,143.019 ppb	4,971.407 ppb	3.418 ppb	37,319.981 ppb	41,581.844 ppb	111.266 %
Concentration RSD	3.4 %	3.2 %	65.8 %	1.8 %	1.6 %	6.3 %	2.7 %	2.3 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.233 ppb	0.336 ppb	44.957 ppb	9.574 ppb	0.281 ppb	0.959 ppb	4.368 ppb	1.489 ppb	120.407 %
Concentration per Run 1	0.265 ppb	0.311 ppb	44.859 ppb	10.274 ppb	0.276 ppb	0.954 ppb	4.520 ppb	1.532 ppb	116.131 %
Concentration per Run 2	0.239 ppb	0.363 ppb	44.201 ppb	9.057 ppb	0.282 ppb	0.895 ppb	4.138 ppb	1.445 ppb	124.653 %
Concentration per Run 3	0.194 ppb	0.332 ppb	45.812 ppb	9.390 ppb	0.286 ppb	1.028 ppb	4.447 ppb	1.491 ppb	120.438 %
Concentration RSD	15.5 %	7.8 %	1.8 %	6.6 %	1.7 %	7.0 %	4.6 %	2.9 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.542 ppb	1.357 ppb	121.154 ppb	1.441 ppb	110.175 %	-0.004 ppb	0.018 ppb	116.555 %	0.648 ppb
Concentration per Run 1	0.526 ppb	1.244 ppb	123.064 ppb	1.126 ppb	107.584 %	-0.004 ppb	0.014 ppb	115.703 %	0.563 ppb
Concentration per Run 2	0.523 ppb	1.360 ppb	120.189 ppb	1.413 ppb	111.167 %	-0.005 ppb	0.023 ppb	117.717 %	0.664 ppb
Concentration per Run 3	0.579 ppb	1.465 ppb	120.209 ppb	1.784 ppb	111.774 %	-0.003 ppb	0.018 ppb	116.244 %	0.718 ppb
Concentration RSD	5.8 %	8.1 %	1.4 %	22.9 %	2.1 %	16.4 %	22.4 %	0.9 %	12.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	38.832 ppb	121.245 %	123.265 %	0.307 ppb	0.014 ppb	109.516 %
Concentration per Run 1	39.242 ppb	118.495 %	121.190 %	0.282 ppb	0.013 ppb	112.898 %
Concentration per Run 2	37.654 ppb	124.211 %	126.148 %	0.312 ppb	0.015 ppb	108.037 %
Concentration per Run 3	39.599 ppb	121.030 %	122.457 %	0.326 ppb	0.015 ppb	107.614 %
Concentration RSD	2.7 %	2.4 %	2.1 %	7.3 %	9.8 %	2.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	122	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350282-01 6020TL	Rack	2		
Analysis started at:	9/5/2023 5:09:34 PM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.901 %	139.050 %	0.007 ppb	17,246.713 ppb	2,853.773 ppb	5.358 ppb	13,322.677 ppb	111,046.798 ppb	110.581 %
Concentration per Run 1	96.647 %	133.234 %	0.006 ppb	18,198.244 ppb	3,017.465 ppb	5.527 ppb	13,880.897 ppb	115,867.216 ppb	112.597 %
Concentration per Run 2	93.542 %	136.180 %	0.010 ppb	16,890.141 ppb	2,774.616 ppb	5.445 ppb	13,789.567 ppb	108,784.913 ppb	109.764 %
Concentration per Run 3	91.514 %	147.737 %	0.007 ppb	16,651.753 ppb	2,769.238 ppb	5.102 ppb	12,297.567 ppb	108,488.266 ppb	109.382 %
Concentration RSD	2.8 %	5.5 %	30.8 %	4.8 %	5.0 %	4.2 %	6.7 %	3.8 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.414 ppb	0.632 ppb	122.080 ppb	14.147 ppb	0.977 ppb	5.441 ppb	2.594 ppb	1.141 ppb	121.459 %
Concentration per Run 1	0.470 ppb	0.694 ppb	125.588 ppb	15.369 ppb	0.991 ppb	5.570 ppb	2.631 ppb	1.215 ppb	117.642 %
Concentration per Run 2	0.433 ppb	0.632 ppb	123.983 ppb	14.156 ppb	1.014 ppb	5.338 ppb	2.575 ppb	1.080 ppb	118.548 %
Concentration per Run 3	0.338 ppb	0.571 ppb	116.669 ppb	12.917 ppb	0.927 ppb	5.415 ppb	2.577 ppb	1.127 ppb	128.186 %
Concentration RSD	16.4 %	9.7 %	3.9 %	8.7 %	4.6 %	2.2 %	1.2 %	6.0 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.289 ppb	1.292 ppb	683.483 ppb	3.889 ppb	113.300 %	-0.004 ppb	0.049 ppb	121.106 %	0.510 ppb
Concentration per Run 1	0.278 ppb	1.264 ppb	711.824 ppb	2.917 ppb	109.476 %	-0.004 ppb	0.045 ppb	118.274 %	0.474 ppb
Concentration per Run 2	0.316 ppb	1.350 ppb	662.479 ppb	3.997 ppb	111.575 %	-0.003 ppb	0.053 ppb	118.184 %	0.512 ppb
Concentration per Run 3	0.274 ppb	1.261 ppb	676.146 ppb	4.754 ppb	118.849 %	-0.005 ppb	0.050 ppb	126.860 %	0.544 ppb
Concentration RSD	8.1 %	3.9 %	3.7 %	23.7 %	4.3 %	23.5 %	8.5 %	4.1 %	6.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	50.323 ppb	123.266 %	124.828 %	0.056 ppb	0.031 ppb	111.361 %
Concentration per Run 1	50.974 ppb	119.825 %	120.696 %	0.043 ppb	0.029 ppb	116.720 %
Concentration per Run 2	49.138 ppb	120.425 %	119.885 %	0.064 ppb	0.033 ppb	104.995 %
Concentration per Run 3	50.858 ppb	129.549 %	133.902 %	0.060 ppb	0.032 ppb	112.367 %
Concentration RSD	2.0 %	4.4 %	6.3 %	19.9 %	6.3 %	5.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	123	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350283-01 6020TL	Rack	2		
Analysis started at:	9/5/2023 5:14:14 PM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.263 %	137.187 %	0.007 ppb	17,693.030 ppb	3,100.253 ppb	5.490 ppb	13,778.506 ppb	122,959.054 ppb	111.409 %
Concentration per Run 1	95.455 %	137.691 %	0.007 ppb	17,399.976 ppb	3,015.123 ppb	5.240 ppb	13,505.032 ppb	123,613.181 ppb	113.906 %
Concentration per Run 2	91.905 %	136.709 %	0.008 ppb	17,840.975 ppb	3,136.322 ppb	5.272 ppb	13,627.978 ppb	120,731.295 ppb	110.596 %
Concentration per Run 3	89.429 %	137.162 %	0.007 ppb	17,838.139 ppb	3,149.315 ppb	5.956 ppb	14,202.509 ppb	124,532.685 ppb	109.724 %
Concentration RSD	3.3 %	0.4 %	9.7 %	1.4 %	2.4 %	7.4 %	2.7 %	1.6 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.377 ppb	0.580 ppb	128.154 ppb	13.283 ppb	0.920 ppb	5.148 ppb	0.514 ppb	0.844 ppb	123.557 %
Concentration per Run 1	0.376 ppb	0.596 ppb	126.356 ppb	14.042 ppb	0.943 ppb	5.200 ppb	0.542 ppb	0.874 ppb	117.577 %
Concentration per Run 2	0.393 ppb	0.556 ppb	126.082 ppb	13.961 ppb	0.887 ppb	5.071 ppb	0.451 ppb	0.836 ppb	125.594 %
Concentration per Run 3	0.363 ppb	0.587 ppb	132.025 ppb	11.845 ppb	0.930 ppb	5.173 ppb	0.549 ppb	0.821 ppb	127.501 %
Concentration RSD	4.0 %	3.6 %	2.6 %	9.4 %	3.2 %	1.3 %	10.7 %	3.3 %	4.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.275 ppb	1.369 ppb	734.684 ppb	1.699 ppb	110.922 %	-0.004 ppb	0.049 ppb	124.178 %	0.402 ppb
Concentration per Run 1	0.260 ppb	1.395 ppb	740.395 ppb	1.502 ppb	109.090 %	-0.004 ppb	0.046 ppb	118.803 %	0.371 ppb
Concentration per Run 2	0.276 ppb	1.346 ppb	725.031 ppb	1.682 ppb	109.970 %	-0.004 ppb	0.049 ppb	123.320 %	0.410 ppb
Concentration per Run 3	0.289 ppb	1.366 ppb	738.628 ppb	1.912 ppb	113.706 %	-0.004 ppb	0.051 ppb	130.412 %	0.426 ppb
Concentration RSD	5.2 %	1.8 %	1.1 %	12.1 %	2.2 %	10.1 %	5.8 %	4.7 %	6.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	53.836 ppb	124.117 %	127.699 %	0.040 ppb	0.009 ppb	124.038 %
Concentration per Run 1	55.690 ppb	119.543 %	125.082 %	0.030 ppb	0.008 ppb	128.514 %
Concentration per Run 2	52.904 ppb	123.029 %	123.936 %	0.044 ppb	0.009 ppb	120.445 %
Concentration per Run 3	52.914 ppb	129.778 %	134.079 %	0.045 ppb	0.010 ppb	123.155 %
Concentration RSD	3.0 %	4.2 %	4.3 %	21.1 %	12.0 %	3.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	124	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xCCV	Rack	0		
Analysis started at:	9/5/2023 5:18:54 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	245.341 %	361.968 %	-0.008 ppb	-6.482 ppb	-0.794 ppb	-0.540 ppb	-14.086 ppb	-0.745 ppb	131.386 %
Concentration per Run 1	192.463 %	362.572 %	-0.008 ppb	-6.105 ppb	-0.647 ppb	-0.590 ppb	-13.223 ppb	2.877 ppb	96.603 %
Concentration per Run 2	273.949 %	372.620 %	-0.008 ppb	-6.492 ppb	-0.776 ppb	-0.487 ppb	-14.785 ppb	-3.038 ppb	148.159 %
Concentration per Run 3	269.611 %	350.712 %	-0.008 ppb	-6.849 ppb	-0.960 ppb	-0.542 ppb	-14.250 ppb	-2.076 ppb	149.397 %
Recovery Percentage 1			-0.013 %	-0.108 %	-0.013 %	-0.900 %	-0.235 %	-0.012 %	
Concentration RSD	18.7 %	3.0 %	3.4 %	5.7 %	19.8 %	9.5 %	5.6 %	425.7 %	22.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.029 ppb	-0.037 ppb	-0.051 ppb	-0.786 ppb	-0.001 ppb	-0.030 ppb	-0.043 ppb	-0.557 ppb	304.849 %
Concentration per Run 1	-0.024 ppb	-0.038 ppb	-0.057 ppb	-0.943 ppb	0.000 ppb	-0.028 ppb	-0.042 ppb	-0.558 ppb	304.624 %
Concentration per Run 2	-0.032 ppb	-0.033 ppb	-0.051 ppb	-1.008 ppb	-0.001 ppb	-0.032 ppb	-0.044 ppb	-0.558 ppb	312.517 %
Concentration per Run 3	-0.031 ppb	-0.040 ppb	-0.045 ppb	-0.407 ppb	0.000 ppb	-0.029 ppb	-0.044 ppb	-0.555 ppb	297.406 %
Recovery Percentage 1	-0.048 %	-0.062 %	-0.085 %	-0.013 %	-0.001 %	-0.049 %	-0.072 %	-0.929 %	
Concentration RSD	14.3 %	9.4 %	11.8 %	42.0 %	82.5 %	8.2 %	2.4 %	0.3 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.058 ppb	-0.027 ppb	0.014 ppb	0.103 ppb	335.930 %	-0.005 ppb	0.000 ppb	279.645 %	-0.033 ppb
Concentration per Run 1	-0.054 ppb	-0.040 ppb	0.023 ppb	0.088 ppb	328.898 %	-0.005 ppb	0.000 ppb	257.513 %	-0.046 ppb
Concentration per Run 2	-0.070 ppb	-0.004 ppb	0.013 ppb	0.083 ppb	357.508 %	-0.005 ppb	0.000 ppb	300.883 %	-0.039 ppb
Concentration per Run 3	-0.051 ppb	-0.036 ppb	0.005 ppb	0.139 ppb	321.384 %	-0.005 ppb	0.000 ppb	280.538 %	-0.014 ppb
Recovery Percentage 1	-0.097 %	-0.045 %	0.023 %	0.172 %		-0.009 %	0.000 %		-0.055 %
Concentration RSD	17.2 %	73.8 %	66.6 %	30.3 %	5.7 %	1.2 %	14,590.7 %	7.8 %	51.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.003 ppb	353.596 %	375.695 %	0.017 ppb	-0.002 ppb	85.448 %
Concentration per Run 1	-0.003 ppb	328.521 %	349.703 %	0.007 ppb	0.002 ppb	59.171 %
Concentration per Run 2	-0.003 ppb	383.024 %	414.724 %	0.016 ppb	-0.004 ppb	96.791 %
Concentration per Run 3	-0.003 ppb	349.244 %	362.658 %	0.026 ppb	-0.004 ppb	100.383 %
Recovery Percentage 1	-0.005 %			0.028 %	-0.004 %	
Concentration RSD	15.6 %	7.8 %	9.2 %	57.9 %	142.9 %	26.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 125
Analysis label: xCCB
Analysis started at: 9/5/2023 5:23:36 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.427 %	145.647 %	0.001 ppb	-2.038 ppb	-0.835 ppb	-0.199 ppb	-1.637 ppb	-0.251 ppb	112.147 %
Concentration per Run 1	101.331 %	143.280 %	0.000 ppb	-2.289 ppb	-0.792 ppb	-0.155 ppb	-1.822 ppb	1.011 ppb	113.711 %
Concentration per Run 2	99.476 %	144.489 %	0.002 ppb	-1.809 ppb	-0.735 ppb	-0.030 ppb	-1.090 ppb	-2.563 ppb	111.095 %
Concentration per Run 3	97.472 %	149.172 %	0.003 ppb	-2.014 ppb	-0.977 ppb	-0.412 ppb	-1.999 ppb	0.800 ppb	111.635 %
Recovery Percentage 1			0.282 %	-2.038 %	-1.192 %	-1.989 %	-1.637 %	-0.251 %	
Concentration RSD	1.9 %	2.1 %	98.6 %	11.8 %	15.1 %	98.0 %	29.4 %	799.9 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.024 ppb	-0.010 ppb	-0.023 ppb	1.105 ppb	0.001 ppb	0.006 ppb	-0.028 ppb	-0.089 ppb	128.022 %
Concentration per Run 1	-0.029 ppb	-0.018 ppb	-0.023 ppb	1.216 ppb	0.001 ppb	0.020 ppb	-0.023 ppb	-0.142 ppb	124.095 %
Concentration per Run 2	-0.013 ppb	-0.004 ppb	-0.019 ppb	0.999 ppb	0.000 ppb	0.005 ppb	-0.030 ppb	-0.068 ppb	128.986 %
Concentration per Run 3	-0.029 ppb	-0.009 ppb	-0.025 ppb	1.099 ppb	0.001 ppb	-0.006 ppb	-0.032 ppb	-0.057 ppb	130.985 %
Recovery Percentage 1	-0.475 %	-1.050 %	-2.256 %	2.209 %	0.118 %	0.321 %	-2.824 %	-1.780 %	
Concentration RSD	38.0 %	69.8 %	14.4 %	9.9 %	160.3 %	205.7 %	15.4 %	52.0 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.058 ppb	0.053 ppb	0.008 ppb	0.377 ppb	121.518 %	-0.005 ppb	0.000 ppb	129.377 %	0.220 ppb
Concentration per Run 1	0.023 ppb	-0.014 ppb	0.011 ppb	0.245 ppb	116.833 %	-0.004 ppb	0.000 ppb	128.466 %	0.200 ppb
Concentration per Run 2	0.064 ppb	0.105 ppb	0.005 ppb	0.373 ppb	121.351 %	-0.004 ppb	0.000 ppb	130.411 %	0.206 ppb
Concentration per Run 3	0.087 ppb	0.067 ppb	0.007 ppb	0.514 ppb	126.370 %	-0.006 ppb	0.001 ppb	129.253 %	0.253 ppb
Recovery Percentage 1	11.630 %	1.055 %	0.078 %	18.873 %		-1.143 %	0.040 %		5.497 %
Concentration RSD	55.7 %	115.2 %	39.1 %	35.7 %	3.9 %	19.5 %	693.5 %	0.8 %	13.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.005 ppb	123.353 %	128.239 %	0.016 ppb	-0.005 ppb	161.253 %
Concentration per Run 1	0.006 ppb	119.510 %	123.805 %	0.010 ppb	-0.006 ppb	196.699 %
Concentration per Run 2	0.009 ppb	122.985 %	131.369 %	0.017 ppb	-0.005 ppb	157.015 %
Concentration per Run 3	0.000 ppb	127.565 %	129.544 %	0.021 ppb	-0.004 ppb	130.045 %
Recovery Percentage 1	1.010 %			1.601 %	-0.498 %	
Concentration RSD	92.6 %	3.3 %	3.1 %	35.2 %	25.6 %	20.8 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	126	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/5/2023 5:29:44 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.266 %	137.389 %	61.957 ppb	5,739.749 ppb	5,839.803 ppb	57.798 ppb	6,068.252 ppb	6,033.862 ppb	114.553 %
Concentration per Run 1	93.614 %	136.331 %	61.515 ppb	5,908.319 ppb	6,002.738 ppb	57.382 ppb	6,219.512 ppb	6,063.124 ppb	115.078 %
Concentration per Run 2	92.560 %	136.104 %	62.093 ppb	5,706.394 ppb	5,798.483 ppb	58.485 ppb	5,879.498 ppb	6,044.873 ppb	114.107 %
Concentration per Run 3	90.625 %	139.730 %	62.263 ppb	5,604.534 ppb	5,718.187 ppb	57.526 ppb	6,105.746 ppb	5,993.588 ppb	114.475 %
Recovery Percentage 1			103.262 %	95.662 %	97.330 %	96.330 %	101.138 %	100.564 %	
Concentration RSD	1.6 %	1.5 %	0.6 %	2.7 %	2.5 %	1.0 %	2.9 %	0.6 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.544 ppb	54.728 ppb	53.834 ppb	5,610.201 ppb	57.071 ppb	56.995 ppb	57.364 ppb	59.608 ppb	119.668 %
Concentration per Run 1	56.274 ppb	56.037 ppb	53.827 ppb	5,651.520 ppb	59.022 ppb	59.004 ppb	59.543 ppb	62.059 ppb	115.218 %
Concentration per Run 2	54.905 ppb	54.645 ppb	53.343 ppb	5,601.925 ppb	56.259 ppb	56.740 ppb	57.054 ppb	59.066 ppb	119.342 %
Concentration per Run 3	55.453 ppb	53.501 ppb	54.331 ppb	5,577.158 ppb	55.933 ppb	55.240 ppb	55.497 ppb	57.700 ppb	124.443 %
Recovery Percentage 1	92.574 %	91.213 %	89.723 %	93.503 %	95.119 %	94.991 %	95.607 %	99.347 %	
Concentration RSD	1.2 %	2.3 %	0.9 %	0.7 %	3.0 %	3.3 %	3.6 %	3.7 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.385 ppb	62.409 ppb	64.153 ppb	56.106 ppb	112.059 %	58.637 ppb	58.718 ppb	120.107 %	58.789 ppb
Concentration per Run 1	61.463 ppb	63.710 ppb	65.106 ppb	57.920 ppb	108.308 %	60.532 ppb	60.039 ppb	112.018 %	62.762 ppb
Concentration per Run 2	58.801 ppb	62.597 ppb	63.761 ppb	54.610 ppb	112.877 %	57.317 ppb	58.020 ppb	123.881 %	56.100 ppb
Concentration per Run 3	57.890 ppb	60.920 ppb	63.592 ppb	55.787 ppb	114.991 %	58.062 ppb	58.095 ppb	124.422 %	57.507 ppb
Recovery Percentage 1	98.974 %	104.016 %	106.922 %	93.510 %		97.729 %	97.863 %		97.982 %
Concentration RSD	3.1 %	2.3 %	1.3 %	3.0 %	3.0 %	2.9 %	1.9 %	5.8 %	6.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.741 ppb	122.095 %	123.855 %	58.693 ppb	59.330 ppb	134.916 %
Concentration per Run 1	61.439 ppb	115.592 %	116.181 %	61.047 ppb	62.622 ppb	159.914 %
Concentration per Run 2	56.068 ppb	126.346 %	127.823 %	56.944 ppb	57.262 ppb	124.312 %
Concentration per Run 3	58.714 ppb	124.347 %	127.561 %	58.088 ppb	58.107 ppb	120.523 %
Recovery Percentage 1	97.901 %			97.821 %	98.884 %	
Concentration RSD	4.6 %	4.7 %	5.4 %	3.6 %	4.9 %	16.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 127
Analysis label: CCB
Analysis started at: 9/5/2023 5:34:26 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.501 %	129.684 %	0.005 ppb	-1.787 ppb	-0.795 ppb	-0.202 ppb	-1.034 ppb	0.278 ppb	101.141 %
Concentration per Run 1	94.397 %	117.448 %	0.002 ppb	-1.441 ppb	-0.962 ppb	-0.304 ppb	0.916 ppb	1.592 ppb	102.200 %
Concentration per Run 2	92.450 %	136.407 %	0.003 ppb	-1.926 ppb	-0.842 ppb	-0.151 ppb	-2.592 ppb	0.979 ppb	101.152 %
Concentration per Run 3	90.655 %	135.198 %	0.009 ppb	-1.994 ppb	-0.583 ppb	-0.150 ppb	-1.426 ppb	-1.737 ppb	100.070 %
Recovery Percentage 1			0.917 %	-1.787 %	-1.136 %	-2.019 %	-1.034 %	0.278 %	
Concentration RSD	2.0 %	8.2 %	84.6 %	16.9 %	24.3 %	44.0 %	172.8 %	636.6 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.013 ppb	-0.004 ppb	-0.021 ppb	16.569 ppb	0.002 ppb	-0.008 ppb	-0.024 ppb	-0.089 ppb	112.233 %
Concentration per Run 1	-0.017 ppb	0.005 ppb	-0.028 ppb	17.363 ppb	0.003 ppb	-0.011 ppb	-0.022 ppb	-0.104 ppb	105.489 %
Concentration per Run 2	-0.022 ppb	-0.009 ppb	-0.008 ppb	16.138 ppb	0.001 ppb	-0.011 ppb	-0.026 ppb	-0.095 ppb	114.608 %
Concentration per Run 3	-0.001 ppb	-0.009 ppb	-0.026 ppb	16.207 ppb	0.001 ppb	-0.002 ppb	-0.025 ppb	-0.066 ppb	116.603 %
Recovery Percentage 1	-0.266 %	-0.431 %	-2.075 %	33.138 %	0.315 %	-0.408 %	-2.423 %	-1.771 %	
Concentration RSD	80.0 %	185.7 %	54.5 %	4.2 %	64.6 %	63.8 %	8.5 %	22.4 %	5.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.161 ppb	0.774 ppb	0.003 ppb	1.771 ppb	110.118 %	-0.003 ppb	0.001 ppb	117.406 %	0.201 ppb
Concentration per Run 1	0.108 ppb	0.705 ppb	0.003 ppb	1.373 ppb	107.111 %	-0.001 ppb	0.001 ppb	110.882 %	0.175 ppb
Concentration per Run 2	0.181 ppb	0.905 ppb	0.005 ppb	1.872 ppb	110.109 %	-0.003 ppb	0.001 ppb	117.181 %	0.201 ppb
Concentration per Run 3	0.194 ppb	0.711 ppb	0.000 ppb	2.068 ppb	113.134 %	-0.004 ppb	0.002 ppb	124.156 %	0.228 ppb
Recovery Percentage 1	32.201 %	15.481 %	0.027 %	88.553 %		-0.644 %	0.678 %		5.037 %
Concentration RSD	28.8 %	14.7 %	78.0 %	20.2 %	2.7 %	55.5 %	41.5 %	5.7 %	13.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.009 ppb	117.005 %	119.036 %	0.306 ppb	0.008 ppb	126.466 %
Concentration per Run 1	0.008 ppb	112.655 %	112.142 %	0.347 ppb	0.008 ppb	127.149 %
Concentration per Run 2	0.020 ppb	118.353 %	120.522 %	0.316 ppb	0.008 ppb	125.883 %
Concentration per Run 3	0.000 ppb	120.007 %	124.442 %	0.257 ppb	0.007 ppb	126.366 %
Recovery Percentage 1	1.887 %			30.642 %	0.755 %	
Concentration RSD	105.0 %	3.3 %	5.3 %	14.9 %	10.9 %	0.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	128	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1819196-1 6020TL	Rack	2		
Analysis started at:	9/5/2023 5:45:42 PM	Vial	31		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.693 %	143.985 %	-0.001 ppb	4.083 ppb	1.607 ppb	5.017 ppb	3.422 ppb	18.734 ppb	116.956 %
Concentration per Run 1	102.454 %	145.999 %	0.000 ppb	4.332 ppb	1.313 ppb	5.225 ppb	1.499 ppb	20.678 ppb	116.124 %
Concentration per Run 2	102.527 %	144.262 %	-0.002 ppb	4.020 ppb	2.033 ppb	5.313 ppb	5.081 ppb	18.251 ppb	117.922 %
Concentration per Run 3	100.098 %	141.694 %	-0.003 ppb	3.896 ppb	1.473 ppb	4.514 ppb	3.687 ppb	17.274 ppb	116.823 %
Concentration RSD	1.4 %	1.5 %	117.2 %	5.5 %	23.5 %	8.7 %	52.8 %	9.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.015 ppb	0.015 ppb	0.269 ppb	8.944 ppb	0.004 ppb	0.073 ppb	0.018 ppb	0.532 ppb	125.557 %
Concentration per Run 1	-0.026 ppb	0.008 ppb	0.210 ppb	8.833 ppb	0.001 ppb	0.074 ppb	0.022 ppb	0.461 ppb	122.560 %
Concentration per Run 2	-0.007 ppb	0.020 ppb	0.248 ppb	9.366 ppb	0.007 ppb	0.099 ppb	0.024 ppb	0.586 ppb	127.934 %
Concentration per Run 3	-0.013 ppb	0.016 ppb	0.348 ppb	8.632 ppb	0.003 ppb	0.046 ppb	0.007 ppb	0.548 ppb	126.178 %
Concentration RSD	63.0 %	41.8 %	26.5 %	4.2 %	89.6 %	36.3 %	54.6 %	12.1 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.052 ppb	0.281 ppb	0.029 ppb	0.760 ppb	119.512 %	-0.004 ppb	0.000 ppb	137.575 %	0.138 ppb
Concentration per Run 1	0.044 ppb	0.186 ppb	0.035 ppb	0.627 ppb	117.325 %	-0.004 ppb	0.000 ppb	136.457 %	0.124 ppb
Concentration per Run 2	0.082 ppb	0.404 ppb	0.031 ppb	0.808 ppb	121.379 %	-0.004 ppb	0.001 ppb	146.703 %	0.141 ppb
Concentration per Run 3	0.031 ppb	0.252 ppb	0.021 ppb	0.845 ppb	119.833 %	-0.005 ppb	0.000 ppb	129.566 %	0.148 ppb
Concentration RSD	50.5 %	39.9 %	25.1 %	15.4 %	1.7 %	8.1 %	1,137.0 %	6.3 %	9.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.052 ppb	128.278 %	133.465 %	0.032 ppb	-0.004 ppb	244.358 %
Concentration per Run 1	0.059 ppb	130.283 %	129.168 %	0.024 ppb	-0.006 ppb	325.331 %
Concentration per Run 2	0.032 ppb	130.494 %	139.492 %	0.036 ppb	-0.003 ppb	227.944 %
Concentration per Run 3	0.066 ppb	124.056 %	131.736 %	0.037 ppb	-0.002 ppb	179.798 %
Concentration RSD	34.2 %	2.9 %	4.0 %	23.5 %	54.4 %	30.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 129
Analysis label: WG1819196-2D5 6020TL
Analysis started at: 9/5/2023 5:50:22 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 32
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.055 %	134.644 %	11.162 ppb	2,032.121 ppb	2,151.645 ppb	436.741 ppb	2,269.444 ppb	1,706.369 ppb	106.599 %
Concentration per Run 1	94.347 %	129.533 %	11.038 ppb	2,036.519 ppb	2,123.192 ppb	424.271 ppb	2,256.023 ppb	1,726.050 ppb	105.734 %
Concentration per Run 2	92.856 %	133.990 %	11.228 ppb	2,089.174 ppb	2,250.318 ppb	473.269 ppb	2,388.400 ppb	1,793.393 ppb	107.416 %
Concentration per Run 3	91.961 %	140.410 %	11.220 ppb	1,970.669 ppb	2,081.426 ppb	412.683 ppb	2,163.910 ppb	1,599.666 ppb	106.647 %
Concentration RSD	1.3 %	4.1 %	1.0 %	2.9 %	4.1 %	7.4 %	5.0 %	5.8 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	98.840 ppb	38.985 ppb	99.711 ppb	203.712 ppb	96.403 ppb	94.605 ppb	48.690 ppb	103.370 ppb	119.381 %
Concentration per Run 1	99.965 ppb	39.663 ppb	99.466 ppb	211.792 ppb	99.886 ppb	99.142 ppb	50.568 ppb	105.814 ppb	110.678 %
Concentration per Run 2	100.218 ppb	38.862 ppb	99.795 ppb	191.003 ppb	92.702 ppb	90.157 ppb	46.463 ppb	101.733 ppb	127.586 %
Concentration per Run 3	96.337 ppb	38.430 ppb	99.871 ppb	208.341 ppb	96.623 ppb	94.516 ppb	49.037 ppb	102.562 ppb	119.880 %
Concentration RSD	2.2 %	1.6 %	0.2 %	5.5 %	3.7 %	4.7 %	4.3 %	2.1 %	7.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	25.570 ppb	26.913 ppb	227.881 ppb	201.276 ppb	111.551 %	10.609 ppb	10.977 ppb	121.974 %	71.648 ppb
Concentration per Run 1	25.998 ppb	26.890 ppb	226.758 ppb	202.292 ppb	106.800 %	10.688 ppb	11.082 ppb	117.130 %	72.014 ppb
Concentration per Run 2	25.338 ppb	27.707 ppb	232.530 ppb	198.240 ppb	113.967 %	10.515 ppb	11.092 ppb	125.092 %	71.722 ppb
Concentration per Run 3	25.373 ppb	26.142 ppb	224.356 ppb	203.295 ppb	113.888 %	10.625 ppb	10.758 ppb	123.700 %	71.209 ppb
Concentration RSD	1.5 %	2.9 %	1.8 %	1.3 %	3.7 %	0.8 %	1.7 %	3.5 %	0.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	424.147 ppb	121.443 %	126.468 %	19.652 ppb	103.667 ppb	139.736 %
Concentration per Run 1	428.195 ppb	115.071 %	119.548 %	18.990 ppb	100.190 ppb	139.483 %
Concentration per Run 2	434.334 ppb	123.995 %	131.739 %	18.717 ppb	97.955 ppb	149.926 %
Concentration per Run 3	409.912 ppb	125.265 %	128.116 %	21.248 ppb	112.858 ppb	129.798 %
Concentration RSD	3.0 %	4.6 %	5.0 %	7.1 %	7.8 %	7.2 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	130	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1819196-3d10 6020TL	Rack	2		
Analysis started at:	9/5/2023 5:55:02 PM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.771 %	140.888 %	5.433 ppb	2,163.153 ppb	5,622.087 ppb	220.569 ppb	1,346.139 ppb	60,459.588 ppb	107.139 %
Concentration per Run 1	92.921 %	134.594 %	5.476 ppb	2,196.628 ppb	5,787.376 ppb	221.659 ppb	1,345.100 ppb	58,723.795 ppb	107.581 %
Concentration per Run 2	90.816 %	143.205 %	5.375 ppb	2,161.466 ppb	5,558.045 ppb	224.272 ppb	1,369.744 ppb	61,262.040 ppb	107.359 %
Concentration per Run 3	88.576 %	144.866 %	5.448 ppb	2,131.364 ppb	5,520.838 ppb	215.775 ppb	1,323.574 ppb	61,392.930 ppb	106.477 %
Concentration RSD	2.4 %	3.9 %	1.0 %	1.5 %	2.6 %	2.0 %	1.7 %	2.5 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.176 ppb	19.000 ppb	55.233 ppb	105.054 ppb	46.890 ppb	45.680 ppb	23.404 ppb	47.117 ppb	132.026 %
Concentration per Run 1	50.083 ppb	19.143 ppb	55.484 ppb	102.989 ppb	47.524 ppb	46.457 ppb	23.514 ppb	47.555 ppb	126.917 %
Concentration per Run 2	48.980 ppb	19.002 ppb	55.497 ppb	104.201 ppb	46.892 ppb	45.391 ppb	23.148 ppb	46.961 ppb	135.541 %
Concentration per Run 3	48.465 ppb	18.855 ppb	54.719 ppb	107.973 ppb	46.255 ppb	45.190 ppb	23.550 ppb	46.836 ppb	133.620 %
Concentration RSD	1.7 %	0.8 %	0.8 %	2.5 %	1.4 %	1.5 %	1.0 %	0.8 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.413 ppb	13.041 ppb	1,842.878 ppb	102.368 ppb	117.554 %	5.038 ppb	5.166 ppb	132.902 %	37.970 ppb
Concentration per Run 1	12.598 ppb	13.073 ppb	1,868.998 ppb	102.995 ppb	114.954 %	5.032 ppb	5.147 ppb	126.429 %	38.016 ppb
Concentration per Run 2	12.257 ppb	13.103 ppb	1,849.835 ppb	100.347 ppb	117.594 %	5.025 ppb	5.155 ppb	136.002 %	37.561 ppb
Concentration per Run 3	12.383 ppb	12.948 ppb	1,809.802 ppb	103.760 ppb	120.115 %	5.055 ppb	5.197 ppb	136.275 %	38.334 ppb
Concentration RSD	1.4 %	0.6 %	1.6 %	1.7 %	2.2 %	0.3 %	0.5 %	4.2 %	1.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	202.260 ppb	131.474 %	132.275 %	10.390 ppb	51.596 ppb	128.841 %
Concentration per Run 1	194.728 ppb	137.191 %	129.160 %	10.071 ppb	50.030 ppb	128.265 %
Concentration per Run 2	208.454 ppb	127.869 %	133.810 %	10.351 ppb	51.702 ppb	129.948 %
Concentration per Run 3	203.598 ppb	129.361 %	133.856 %	10.747 ppb	53.055 ppb	128.309 %
Concentration RSD	3.4 %	3.8 %	2.0 %	3.3 %	2.9 %	0.7 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 131
Analysis label: WG1819196-4d10 6020TL
Analysis started at: 9/5/2023 5:59:42 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 35
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.627 %	137.993 %	5.437 ppb	2,169.916 ppb	5,469.828 ppb	223.592 ppb	1,362.376 ppb	60,682.316 ppb	100.312 %
Concentration per Run 1	87.831 %	136.633 %	5.431 ppb	2,272.538 ppb	5,778.826 ppb	239.589 ppb	1,471.364 ppb	61,728.263 ppb	100.667 %
Concentration per Run 2	86.971 %	135.802 %	5.374 ppb	2,064.502 ppb	5,191.198 ppb	212.945 ppb	1,310.531 ppb	61,390.941 ppb	100.703 %
Concentration per Run 3	85.078 %	141.543 %	5.506 ppb	2,172.707 ppb	5,439.459 ppb	218.244 ppb	1,305.234 ppb	58,927.744 ppb	99.566 %
Concentration RSD	1.6 %	2.2 %	1.2 %	4.8 %	5.4 %	6.3 %	6.9 %	2.5 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.677 ppb	19.446 ppb	55.742 ppb	106.333 ppb	47.651 ppb	46.839 ppb	24.242 ppb	49.178 ppb	125.240 %
Concentration per Run 1	50.156 ppb	19.676 ppb	57.629 ppb	105.567 ppb	47.132 ppb	46.208 ppb	23.822 ppb	48.409 ppb	128.133 %
Concentration per Run 2	48.912 ppb	19.316 ppb	54.480 ppb	102.856 ppb	47.849 ppb	47.059 ppb	24.349 ppb	49.998 ppb	122.638 %
Concentration per Run 3	49.963 ppb	19.345 ppb	55.117 ppb	110.575 ppb	47.971 ppb	47.250 ppb	24.556 ppb	49.127 ppb	124.949 %
Concentration RSD	1.3 %	1.0 %	3.0 %	3.7 %	1.0 %	1.2 %	1.6 %	1.6 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.688 ppb	13.038 ppb	1,706.019 ppb	102.936 ppb	113.345 %	5.081 ppb	5.344 ppb	128.291 %	38.442 ppb
Concentration per Run 1	12.786 ppb	13.748 ppb	1,851.829 ppb	102.646 ppb	114.014 %	5.031 ppb	5.316 ppb	131.823 %	37.591 ppb
Concentration per Run 2	12.575 ppb	12.337 ppb	1,629.105 ppb	101.919 ppb	110.633 %	5.127 ppb	5.278 ppb	125.068 %	38.286 ppb
Concentration per Run 3	12.703 ppb	13.028 ppb	1,637.123 ppb	104.244 ppb	115.386 %	5.085 ppb	5.439 ppb	127.982 %	39.449 ppb
Concentration RSD	0.8 %	5.4 %	7.4 %	1.2 %	2.2 %	0.9 %	1.6 %	2.6 %	2.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	202.681 ppb	125.527 %	130.575 %	10.597 ppb	52.771 ppb	123.724 %
Concentration per Run 1	199.733 ppb	126.065 %	133.606 %	10.132 ppb	50.395 ppb	127.130 %
Concentration per Run 2	204.368 ppb	124.423 %	127.946 %	10.788 ppb	53.961 ppb	119.538 %
Concentration per Run 3	203.942 ppb	126.092 %	130.173 %	10.870 ppb	53.956 ppb	124.504 %
Concentration RSD	1.3 %	0.8 %	2.2 %	3.8 %	3.9 %	3.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 132
Analysis label: WG1819196-5d10 6020TL
Analysis started at: 9/5/2023 6:04:22 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 36
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.146 %	136.860 %	48.926 ppb	5,850.998 ppb	9,354.104 ppb	53.810 ppb	5,441.923 ppb	61,929.996 ppb	105.235 %
Concentration per Run 1	85.165 %	137.842 %	48.613 ppb	6,014.351 ppb	9,701.343 ppb	57.595 ppb	5,660.514 ppb	62,689.552 ppb	104.229 %
Concentration per Run 2	83.824 %	137.011 %	48.934 ppb	5,920.674 ppb	9,296.634 ppb	52.388 ppb	5,358.812 ppb	62,937.284 ppb	105.481 %
Concentration per Run 3	83.450 %	135.727 %	49.229 ppb	5,617.970 ppb	9,064.336 ppb	51.447 ppb	5,306.444 ppb	60,163.153 ppb	105.995 %
Concentration RSD	1.1 %	0.8 %	0.6 %	3.5 %	3.4 %	6.2 %	3.5 %	2.5 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.296 ppb	45.917 ppb	53.862 ppb	4,695.823 ppb	45.497 ppb	45.558 ppb	44.475 ppb	45.972 ppb	119.321 %
Concentration per Run 1	49.021 ppb	47.486 ppb	56.500 ppb	4,780.986 ppb	44.859 ppb	44.753 ppb	43.697 ppb	46.350 ppb	122.963 %
Concentration per Run 2	47.204 ppb	45.291 ppb	53.438 ppb	4,662.608 ppb	45.562 ppb	45.231 ppb	44.560 ppb	45.921 ppb	117.915 %
Concentration per Run 3	45.663 ppb	44.975 ppb	51.648 ppb	4,643.875 ppb	46.069 ppb	46.690 ppb	45.167 ppb	45.644 ppb	117.087 %
Concentration RSD	3.6 %	3.0 %	4.6 %	1.6 %	1.3 %	2.2 %	1.7 %	0.8 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	48.910 ppb	49.707 ppb	1,705.615 ppb	52.066 ppb	110.160 %	1.872 ppb	47.162 ppb	122.531 %	53.440 ppb
Concentration per Run 1	49.055 ppb	51.780 ppb	1,906.160 ppb	51.450 ppb	107.631 %	1.877 ppb	47.475 ppb	126.843 %	53.438 ppb
Concentration per Run 2	49.040 ppb	48.285 ppb	1,632.220 ppb	52.084 ppb	110.616 %	1.866 ppb	46.987 ppb	121.369 %	53.850 ppb
Concentration per Run 3	48.633 ppb	49.056 ppb	1,578.465 ppb	52.664 ppb	112.233 %	1.872 ppb	47.023 ppb	119.380 %	53.032 ppb
Concentration RSD	0.5 %	3.7 %	10.3 %	1.2 %	2.1 %	0.3 %	0.6 %	3.2 %	0.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	48.913 ppb	123.061 %	126.437 %	46.118 ppb	47.023 ppb	124.455 %
Concentration per Run 1	51.091 ppb	123.312 %	129.580 %	40.248 ppb	41.024 ppb	143.241 %
Concentration per Run 2	48.209 ppb	121.701 %	123.949 %	49.170 ppb	50.655 ppb	115.801 %
Concentration per Run 3	47.440 ppb	124.170 %	125.781 %	48.937 ppb	49.390 ppb	114.324 %
Concentration RSD	3.9 %	1.0 %	2.3 %	11.0 %	11.1 %	13.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	133	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1819196-6d5 6020TL	Rack	2		
Analysis started at:	9/5/2023 6:09:03 PM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.515 %	136.734 %	0.004 ppb	2,298.013 ppb	9,032.250 ppb	5.481 ppb	406.781 ppb	124,460.128 ppb	90.439 %
Concentration per Run 1	83.479 %	138.824 %	0.007 ppb	2,380.943 ppb	9,476.594 ppb	5.326 ppb	426.681 ppb	128,010.570 ppb	91.155 %
Concentration per Run 2	81.419 %	133.234 %	0.005 ppb	2,360.056 ppb	9,251.807 ppb	6.380 ppb	407.480 ppb	122,940.569 ppb	90.460 %
Concentration per Run 3	79.648 %	138.144 %	0.001 ppb	2,153.040 ppb	8,368.347 ppb	4.737 ppb	386.182 ppb	122,429.247 ppb	89.702 %
Concentration RSD	2.4 %	2.2 %	78.9 %	5.5 %	6.5 %	15.2 %	5.0 %	2.5 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.016 ppb	0.120 ppb	13.120 ppb	25.603 ppb	0.048 ppb	0.154 ppb	0.077 ppb	0.343 ppb	115.312 %
Concentration per Run 1	0.031 ppb	0.116 ppb	13.516 ppb	28.071 ppb	0.051 ppb	0.167 ppb	0.064 ppb	0.347 ppb	119.052 %
Concentration per Run 2	-0.001 ppb	0.112 ppb	13.248 ppb	25.931 ppb	0.040 ppb	0.135 ppb	0.101 ppb	0.334 ppb	115.413 %
Concentration per Run 3	0.017 ppb	0.131 ppb	12.595 ppb	22.806 ppb	0.052 ppb	0.160 ppb	0.066 ppb	0.349 ppb	111.469 %
Concentration RSD	103.3 %	8.1 %	3.6 %	10.3 %	13.9 %	10.8 %	26.8 %	2.4 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.252 ppb	0.670 ppb	3,661.784 ppb	3.294 ppb	108.905 %	-0.004 ppb	0.003 ppb	119.855 %	2.239 ppb
Concentration per Run 1	0.227 ppb	0.438 ppb	3,957.291 ppb	2.585 ppb	109.158 %	-0.003 ppb	0.003 ppb	124.110 %	2.194 ppb
Concentration per Run 2	0.229 ppb	0.801 ppb	3,588.277 ppb	3.311 ppb	109.437 %	-0.004 ppb	0.002 ppb	120.313 %	2.247 ppb
Concentration per Run 3	0.301 ppb	0.771 ppb	3,439.784 ppb	3.987 ppb	108.122 %	-0.003 ppb	0.003 ppb	115.141 %	2.278 ppb
Concentration RSD	16.7 %	30.1 %	7.3 %	21.3 %	0.6 %	8.2 %	22.4 %	3.8 %	1.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.226 ppb	117.383 %	118.816 %	0.292 ppb	0.017 ppb	108.531 %
Concentration per Run 1	1.404 ppb	119.475 %	122.908 %	0.304 ppb	0.018 ppb	115.435 %
Concentration per Run 2	1.140 ppb	117.103 %	117.863 %	0.314 ppb	0.017 ppb	105.533 %
Concentration per Run 3	1.134 ppb	115.569 %	115.677 %	0.258 ppb	0.016 ppb	104.625 %
Concentration RSD	12.5 %	1.7 %	3.1 %	10.3 %	5.8 %	5.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 134
Analysis label: L2348762-07 6020TL
Analysis started at: 9/5/2023 6:13:44 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 33
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.612 %	136.709 %	0.004 ppb	13,171.473 ppb	48,969.100 ppb	23.495 ppb	2,472.387 ppb	921,674.690 ppb	94.418 %
Concentration per Run 1	83.327 %	134.518 %	0.004 ppb	13,992.571 ppb	51,487.786 ppb	25.538 ppb	2,599.119 ppb	938,237.170 ppb	96.983 %
Concentration per Run 2	80.040 %	135.953 %	0.005 ppb	13,106.503 ppb	48,865.971 ppb	22.374 ppb	2,430.604 ppb	915,112.639 ppb	94.291 %
Concentration per Run 3	75.468 %	139.655 %	0.005 ppb	12,415.344 ppb	46,553.542 ppb	22.573 ppb	2,387.437 ppb	911,674.261 ppb	91.980 %
Concentration RSD	5.0 %	1.9 %	10.9 %	6.0 %	5.0 %	7.5 %	4.5 %	1.6 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.119 ppb	0.719 ppb	77.903 ppb	69.350 ppb	0.250 ppb	0.595 ppb	0.417 ppb	1.144 ppb	111.365 %
Concentration per Run 1	0.179 ppb	0.727 ppb	82.719 ppb	75.197 ppb	0.256 ppb	0.644 ppb	0.451 ppb	1.197 ppb	108.849 %
Concentration per Run 2	0.106 ppb	0.705 ppb	76.374 ppb	65.802 ppb	0.250 ppb	0.584 ppb	0.413 ppb	1.153 ppb	114.132 %
Concentration per Run 3	0.072 ppb	0.725 ppb	74.615 ppb	67.051 ppb	0.244 ppb	0.556 ppb	0.386 ppb	1.082 ppb	111.114 %
Concentration RSD	45.7 %	1.7 %	5.5 %	7.4 %	2.5 %	7.5 %	7.8 %	5.1 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.521 ppb	0.126 ppb	19,534.478 ppb	2.761 ppb	101.037 %	-0.001 ppb	0.012 ppb	115.840 %	1.280 ppb
Concentration per Run 1	0.555 ppb	0.118 ppb	20,566.865 ppb	2.469 ppb	96.910 %	-0.002 ppb	0.015 ppb	112.233 %	1.238 ppb
Concentration per Run 2	0.533 ppb	0.164 ppb	19,460.346 ppb	2.655 ppb	102.998 %	-0.001 ppb	0.008 ppb	119.031 %	1.295 ppb
Concentration per Run 3	0.473 ppb	0.095 ppb	18,576.224 ppb	3.158 ppb	103.204 %	0.000 ppb	0.013 ppb	116.255 %	1.307 ppb
Concentration RSD	8.2 %	27.7 %	5.1 %	12.9 %	3.5 %	145.9 %	27.9 %	3.0 %	2.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.594 ppb	103.778 %	104.766 %	0.077 ppb	0.041 ppb	90.226 %
Concentration per Run 1	6.741 ppb	101.162 %	101.672 %	0.055 ppb	0.041 ppb	94.148 %
Concentration per Run 2	6.589 ppb	104.468 %	107.423 %	0.090 ppb	0.042 ppb	87.936 %
Concentration per Run 3	6.453 ppb	105.704 %	105.203 %	0.085 ppb	0.040 ppb	88.594 %
Concentration RSD	2.2 %	2.3 %	2.8 %	24.4 %	2.2 %	3.8 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 135
Analysis label: I2350282-01 6020SL
Analysis started at: 9/5/2023 6:18:24 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 29
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.460 %	132.580 %	0.010 ppb	18,638.779 ppb	3,155.860 ppb	37.000 ppb	14,366.122 ppb	126,719.143 ppb	106.412 %
Concentration per Run 1	95.096 %	129.004 %	0.007 ppb	19,634.165 ppb	3,275.920 ppb	39.990 ppb	15,115.991 ppb	133,647.660 ppb	107.170 %
Concentration per Run 2	92.384 %	131.346 %	0.011 ppb	18,962.442 ppb	3,232.670 ppb	36.006 ppb	14,692.556 ppb	127,884.507 ppb	106.680 %
Concentration per Run 3	89.899 %	137.389 %	0.011 ppb	17,319.731 ppb	2,958.989 ppb	35.005 ppb	13,289.819 ppb	118,625.262 ppb	105.387 %
Concentration RSD	2.8 %	3.3 %	19.4 %	6.4 %	5.4 %	7.1 %	6.7 %	6.0 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.468 ppb	0.637 ppb	120.344 ppb	58.994 ppb	0.969 ppb	5.684 ppb	0.560 ppb	0.551 ppb	120.767 %
Concentration per Run 1	0.473 ppb	0.616 ppb	120.305 ppb	63.947 ppb	0.974 ppb	5.859 ppb	0.546 ppb	0.569 ppb	118.614 %
Concentration per Run 2	0.466 ppb	0.622 ppb	119.232 ppb	56.998 ppb	0.936 ppb	5.440 ppb	0.581 ppb	0.543 ppb	126.270 %
Concentration per Run 3	0.465 ppb	0.673 ppb	121.495 ppb	56.036 ppb	0.996 ppb	5.753 ppb	0.554 ppb	0.542 ppb	117.418 %
Concentration RSD	0.9 %	5.0 %	0.9 %	7.3 %	3.1 %	3.8 %	3.2 %	2.8 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.311 ppb	1.354 ppb	761.706 ppb	1.240 ppb	109.956 %	-0.002 ppb	0.046 ppb	121.883 %	0.937 ppb
Concentration per Run 1	0.358 ppb	1.233 ppb	788.251 ppb	0.987 ppb	107.372 %	-0.003 ppb	0.051 ppb	119.770 %	0.885 ppb
Concentration per Run 2	0.274 ppb	1.685 ppb	760.357 ppb	1.201 ppb	112.452 %	-0.003 ppb	0.053 ppb	126.097 %	0.937 ppb
Concentration per Run 3	0.302 ppb	1.144 ppb	736.509 ppb	1.530 ppb	110.045 %	0.000 ppb	0.033 ppb	119.782 %	0.990 ppb
Concentration RSD	13.7 %	21.4 %	3.4 %	22.1 %	2.3 %	80.6 %	23.7 %	3.0 %	5.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.944 ppb	120.760 %	124.549 %	0.054 ppb	0.062 ppb	115.247 %
Concentration per Run 1	55.967 ppb	118.700 %	123.738 %	0.041 ppb	0.057 ppb	122.205 %
Concentration per Run 2	56.941 ppb	122.751 %	128.918 %	0.058 ppb	0.064 ppb	113.182 %
Concentration per Run 3	54.925 ppb	120.828 %	120.990 %	0.062 ppb	0.064 ppb	110.355 %
Concentration RSD	1.8 %	1.7 %	3.2 %	21.4 %	6.6 %	5.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	136	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350283-01 6020SL	Rack	2		
Analysis started at:	9/5/2023 6:23:04 PM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.873 %	123.541 %	0.020 ppb	18,767.783 ppb	3,247.230 ppb	141.914 ppb	14,441.954 ppb	123,160.076 ppb	106.550 %
Concentration per Run 1	96.254 %	123.264 %	0.016 ppb	19,214.115 ppb	3,342.399 ppb	145.895 ppb	14,756.929 ppb	127,446.199 ppb	106.672 %
Concentration per Run 2	94.023 %	123.188 %	0.018 ppb	18,886.619 ppb	3,266.289 ppb	143.945 ppb	14,941.357 ppb	126,308.355 ppb	106.990 %
Concentration per Run 3	91.342 %	124.170 %	0.026 ppb	18,202.615 ppb	3,133.002 ppb	135.902 ppb	13,627.577 ppb	115,725.673 ppb	105.988 %
Concentration RSD	2.6 %	0.4 %	24.9 %	2.8 %	3.3 %	3.7 %	4.9 %	5.2 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.811 ppb	0.971 ppb	148.129 ppb	251.386 ppb	1.228 ppb	6.907 ppb	0.802 ppb	0.861 ppb	117.943 %
Concentration per Run 1	0.822 ppb	0.997 ppb	149.259 ppb	260.109 ppb	1.235 ppb	7.100 ppb	0.825 ppb	0.908 ppb	114.425 %
Concentration per Run 2	0.782 ppb	0.981 ppb	150.071 ppb	253.888 ppb	1.277 ppb	6.911 ppb	0.799 ppb	0.857 ppb	120.777 %
Concentration per Run 3	0.828 ppb	0.936 ppb	145.056 ppb	240.163 ppb	1.172 ppb	6.709 ppb	0.782 ppb	0.818 ppb	118.627 %
Concentration RSD	3.1 %	3.3 %	1.8 %	4.1 %	4.3 %	2.8 %	2.7 %	5.2 %	2.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.342 ppb	1.449 ppb	760.695 ppb	1.070 ppb	105.242 %	-0.001 ppb	0.050 ppb	118.399 %	0.738 ppb
Concentration per Run 1	0.343 ppb	1.510 ppb	785.287 ppb	0.933 ppb	103.292 %	0.000 ppb	0.052 ppb	116.919 %	0.697 ppb
Concentration per Run 2	0.356 ppb	1.474 ppb	764.549 ppb	1.083 ppb	106.508 %	-0.002 ppb	0.051 ppb	120.052 %	0.750 ppb
Concentration per Run 3	0.327 ppb	1.364 ppb	732.249 ppb	1.194 ppb	105.925 %	-0.001 ppb	0.047 ppb	118.226 %	0.765 ppb
Concentration RSD	4.2 %	5.3 %	3.5 %	12.3 %	1.6 %	74.0 %	5.5 %	1.3 %	4.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	55.975 ppb	119.001 %	121.504 %	0.045 ppb	0.189 ppb	112.294 %
Concentration per Run 1	57.292 ppb	116.529 %	119.270 %	0.037 ppb	0.178 ppb	119.385 %
Concentration per Run 2	56.161 ppb	119.766 %	124.381 %	0.047 ppb	0.189 ppb	111.674 %
Concentration per Run 3	54.472 ppb	120.708 %	120.860 %	0.050 ppb	0.199 ppb	105.823 %
Concentration RSD	2.5 %	1.8 %	2.2 %	15.0 %	5.7 %	6.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	137	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348692-01 6020TL	Rack	2		
Analysis started at:	9/5/2023 6:27:44 PM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.201 %	122.307 %	0.002 ppb	40,614.352 ppb	10,221.344 ppb	5.690 ppb	24,184.883 ppb	121,983.255 ppb	108.528 %
Concentration per Run 1	96.738 %	115.333 %	0.004 ppb	42,265.119 ppb	10,671.241 ppb	5.839 ppb	25,722.695 ppb	128,177.325 ppb	109.655 %
Concentration per Run 2	94.026 %	123.566 %	0.001 ppb	39,414.751 ppb	9,769.481 ppb	5.504 ppb	23,283.584 ppb	118,564.035 ppb	108.580 %
Concentration per Run 3	91.839 %	128.022 %	0.002 ppb	40,163.186 ppb	10,223.309 ppb	5.727 ppb	23,548.370 ppb	119,208.405 ppb	107.349 %
Concentration RSD	2.6 %	5.3 %	73.7 %	3.6 %	4.4 %	3.0 %	5.5 %	4.4 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.239 ppb	0.849 ppb	0.758 ppb	18.932 ppb	0.043 ppb	4.419 ppb	0.532 ppb	0.284 ppb	110.797 %
Concentration per Run 1	0.264 ppb	0.857 ppb	0.852 ppb	19.385 ppb	0.044 ppb	4.549 ppb	0.502 ppb	0.340 ppb	108.279 %
Concentration per Run 2	0.228 ppb	0.840 ppb	0.784 ppb	18.651 ppb	0.045 ppb	4.382 ppb	0.603 ppb	0.218 ppb	107.708 %
Concentration per Run 3	0.226 ppb	0.850 ppb	0.638 ppb	18.760 ppb	0.039 ppb	4.327 ppb	0.489 ppb	0.295 ppb	116.405 %
Concentration RSD	8.9 %	1.0 %	14.4 %	2.1 %	7.0 %	2.6 %	11.8 %	21.6 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.600 ppb	0.185 ppb	585.745 ppb	4.797 ppb	101.052 %	0.008 ppb	0.034 ppb	113.025 %	1.211 ppb
Concentration per Run 1	0.508 ppb	0.116 ppb	600.886 ppb	4.885 ppb	97.668 %	0.007 ppb	0.034 ppb	109.535 %	1.189 ppb
Concentration per Run 2	0.677 ppb	0.158 ppb	576.294 ppb	4.782 ppb	99.349 %	0.008 ppb	0.034 ppb	109.661 %	1.213 ppb
Concentration per Run 3	0.614 ppb	0.279 ppb	580.055 ppb	4.726 ppb	106.139 %	0.007 ppb	0.034 ppb	119.878 %	1.233 ppb
Concentration RSD	14.2 %	45.7 %	2.3 %	1.7 %	4.4 %	4.4 %	1.2 %	5.3 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	33.787 ppb	113.472 %	115.679 %	0.023 ppb	0.039 ppb	104.813 %
Concentration per Run 1	35.136 ppb	109.752 %	111.332 %	0.016 ppb	0.036 ppb	110.792 %
Concentration per Run 2	32.679 ppb	111.586 %	113.884 %	0.027 ppb	0.040 ppb	100.471 %
Concentration per Run 3	33.547 ppb	119.077 %	121.822 %	0.026 ppb	0.041 ppb	103.177 %
Concentration RSD	3.7 %	4.4 %	4.7 %	25.3 %	6.3 %	5.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 138
Analysis label: CCV
Analysis started at: 9/5/2023 6:32:24 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.163 %	120.620 %	60.806 ppb	5,784.085 ppb	5,963.811 ppb	60.691 ppb	5,998.753 ppb	6,080.527 ppb	115.714 %
Concentration per Run 1	96.066 %	120.696 %	60.282 ppb	5,854.898 ppb	6,013.364 ppb	61.095 ppb	5,937.832 ppb	6,151.542 ppb	117.556 %
Concentration per Run 2	93.887 %	115.560 %	60.690 ppb	5,711.401 ppb	5,970.263 ppb	59.912 ppb	6,016.327 ppb	6,042.323 ppb	114.332 %
Concentration per Run 3	92.536 %	125.605 %	61.447 ppb	5,785.955 ppb	5,907.807 ppb	61.067 ppb	6,042.100 ppb	6,047.715 ppb	115.255 %
Recovery Percentage 1			101.344 %	96.401 %	99.397 %	101.152 %	99.979 %	101.342 %	
Concentration RSD	1.9 %	4.2 %	1.0 %	1.2 %	0.9 %	1.1 %	0.9 %	1.0 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.050 ppb	54.555 ppb	53.705 ppb	5,528.610 ppb	55.598 ppb	54.545 ppb	55.128 ppb	59.069 ppb	113.681 %
Concentration per Run 1	55.663 ppb	54.653 ppb	53.421 ppb	5,476.014 ppb	55.444 ppb	54.891 ppb	55.190 ppb	59.005 ppb	113.015 %
Concentration per Run 2	57.556 ppb	55.792 ppb	55.324 ppb	5,783.821 ppb	58.613 ppb	57.680 ppb	57.754 ppb	60.809 ppb	106.239 %
Concentration per Run 3	54.929 ppb	53.219 ppb	52.372 ppb	5,325.993 ppb	52.737 ppb	51.064 ppb	52.438 ppb	57.393 ppb	121.789 %
Recovery Percentage 1	93.416 %	90.924 %	89.509 %	92.143 %	92.663 %	90.908 %	91.879 %	98.448 %	
Concentration RSD	2.4 %	2.4 %	2.8 %	4.2 %	5.3 %	6.1 %	4.8 %	2.9 %	6.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.027 ppb	61.041 ppb	62.996 ppb	55.090 ppb	106.178 %	57.111 ppb	57.998 ppb	115.764 %	58.047 ppb
Concentration per Run 1	60.008 ppb	62.551 ppb	64.181 ppb	55.387 ppb	105.001 %	56.654 ppb	58.177 ppb	117.469 %	58.463 ppb
Concentration per Run 2	59.555 ppb	59.496 ppb	60.803 ppb	54.903 ppb	103.740 %	57.357 ppb	58.161 ppb	108.033 %	57.876 ppb
Concentration per Run 3	57.518 ppb	61.076 ppb	64.005 ppb	54.979 ppb	109.792 %	57.321 ppb	57.655 ppb	121.791 %	57.803 ppb
Recovery Percentage 1	98.378 %	101.735 %	104.994 %	91.816 %		95.184 %	96.663 %		96.746 %
Concentration RSD	2.2 %	2.5 %	3.0 %	0.5 %	3.0 %	0.7 %	0.5 %	6.1 %	0.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.074 ppb	116.505 %	118.505 %	55.624 ppb	55.725 ppb	119.009 %
Concentration per Run 1	59.651 ppb	115.584 %	117.219 %	54.061 ppb	53.628 ppb	124.073 %
Concentration per Run 2	56.545 ppb	112.034 %	112.688 %	56.381 ppb	56.547 ppb	113.295 %
Concentration per Run 3	58.026 ppb	121.897 %	125.607 %	56.431 ppb	57.001 ppb	119.658 %
Recovery Percentage 1	96.790 %			92.707 %	92.876 %	
Concentration RSD	2.7 %	4.3 %	5.5 %	2.4 %	3.3 %	4.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	139	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/5/2023 6:37:08 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.630 %	120.897 %	0.003 ppb	-1.789 ppb	-0.629 ppb	-0.285 ppb	-1.588 ppb	0.529 ppb	97.552 %
Concentration per Run 1	95.929 %	118.354 %	0.003 ppb	-1.791 ppb	-0.304 ppb	-0.307 ppb	-4.259 ppb	-0.689 ppb	97.472 %
Concentration per Run 2	94.802 %	121.224 %	0.005 ppb	-1.917 ppb	-0.964 ppb	-0.159 ppb	0.566 ppb	-0.181 ppb	97.675 %
Concentration per Run 3	93.160 %	123.113 %	0.001 ppb	-1.659 ppb	-0.620 ppb	-0.390 ppb	-1.072 ppb	2.457 ppb	97.510 %
Recovery Percentage 1			0.598 %	-1.789 %	-0.899 %	-2.855 %	-1.588 %	0.529 %	
Concentration RSD	1.5 %	2.0 %	67.7 %	7.2 %	52.5 %	41.0 %	154.5 %	319.5 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.015 ppb	-0.012 ppb	-0.015 ppb	18.213 ppb	0.002 ppb	-0.001 ppb	-0.019 ppb	-0.080 ppb	110.985 %
Concentration per Run 1	-0.017 ppb	-0.013 ppb	-0.013 ppb	17.984 ppb	0.001 ppb	0.002 ppb	-0.008 ppb	-0.072 ppb	105.885 %
Concentration per Run 2	-0.010 ppb	-0.009 ppb	-0.002 ppb	16.221 ppb	0.001 ppb	-0.015 ppb	-0.028 ppb	-0.085 ppb	110.015 %
Concentration per Run 3	-0.018 ppb	-0.013 ppb	-0.031 ppb	20.435 ppb	0.002 ppb	0.011 ppb	-0.021 ppb	-0.084 ppb	117.056 %
Recovery Percentage 1	-0.299 %	-1.156 %	-1.514 %	36.426 %	0.317 %	-0.034 %	-1.924 %	-1.609 %	
Concentration RSD	29.1 %	17.8 %	95.9 %	11.6 %	45.7 %	1,908.3 %	52.1 %	8.8 %	5.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.139 ppb	0.766 ppb	0.023 ppb	1.802 ppb	106.766 %	-0.003 ppb	0.002 ppb	110.940 %	0.338 ppb
Concentration per Run 1	0.100 ppb	0.643 ppb	0.024 ppb	1.392 ppb	103.902 %	-0.003 ppb	0.003 ppb	109.812 %	0.301 ppb
Concentration per Run 2	0.125 ppb	0.804 ppb	0.023 ppb	1.906 ppb	104.898 %	-0.003 ppb	0.002 ppb	106.122 %	0.318 ppb
Concentration per Run 3	0.193 ppb	0.850 ppb	0.022 ppb	2.107 ppb	111.498 %	-0.003 ppb	0.000 ppb	116.888 %	0.395 ppb
Recovery Percentage 1	27.878 %	15.311 %	0.230 %	90.077 %		-0.690 %	0.851 %		8.451 %
Concentration RSD	34.4 %	14.2 %	4.2 %	20.5 %	3.9 %	6.1 %	97.6 %	4.9 %	14.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.016 ppb	112.953 %	114.628 %	0.313 ppb	0.008 ppb	112.822 %
Concentration per Run 1	0.005 ppb	109.774 %	113.430 %	0.343 ppb	0.008 ppb	118.568 %
Concentration per Run 2	0.015 ppb	111.780 %	111.693 %	0.330 ppb	0.009 ppb	107.028 %
Concentration per Run 3	0.027 ppb	117.303 %	118.761 %	0.267 ppb	0.007 ppb	112.870 %
Recovery Percentage 1	3.122 %			31.342 %	0.801 %	
Concentration RSD	69.8 %	3.5 %	3.2 %	12.9 %	13.1 %	5.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 140
Analysis label: xL2348692-02 6020TL
Analysis started at: 9/5/2023 6:43:31 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 39
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	62.625 %	42.899 %	0.061 ppb	5,620,783.732 ppb	130,946.839 ppb	1,269.445 ppb	4,222,445.563 ppb	6,545,196.899 ppb	45.031 %
Concentration per Run 1	65.046 %	46.751 %	0.061 ppb	5,812,549.312 ppb	133,544.114 ppb	1,306.224 ppb	4,333,348.688 ppb	6,449,476.891 ppb	45.856 %
Concentration per Run 2	61.605 %	44.561 %	0.067 ppb	5,332,801.290 ppb	124,097.935 ppb	1,193.326 ppb	4,064,506.182 ppb	6,423,962.265 ppb	44.476 %
Concentration per Run 3	61.223 %	37.386 %	0.055 ppb	5,717,000.594 ppb	135,198.467 ppb	1,308.786 ppb	4,269,481.818 ppb	6,762,151.540 ppb	44.761 %
Concentration RSD	3.4 %	11.4 %	10.1 %	4.5 %	4.6 %	5.2 %	3.3 %	2.9 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.979 ppb	5.878 ppb	3,015.599 ppb	4,245.435 ppb	20.111 ppb	76.961 ppb	65.366 ppb	1,194.206 ppb	31.677 %
Concentration per Run 1	0.788 ppb	5.495 ppb	2,866.313 ppb	4,421.295 ppb	21.071 ppb	80.072 ppb	68.340 ppb	1,231.403 ppb	32.570 %
Concentration per Run 2	1.070 ppb	5.862 ppb	3,022.007 ppb	4,142.326 ppb	19.765 ppb	75.292 ppb	64.626 ppb	1,169.731 ppb	31.312 %
Concentration per Run 3	1.078 ppb	6.276 ppb	3,158.475 ppb	4,172.683 ppb	19.497 ppb	75.518 ppb	63.131 ppb	1,181.484 ppb	31.149 %
Concentration RSD	16.9 %	6.7 %	4.8 %	3.6 %	4.2 %	3.5 %	4.1 %	2.7 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	9.492 ppb	1.576 ppb	41,639.644 ppb	56.353 ppb	24.164 %	2.281 ppb	90.466 ppb	34.668 %	12.021 ppb
Concentration per Run 1	9.870 ppb	2.048 ppb	41,666.408 ppb	56.714 ppb	25.299 %	2.303 ppb	90.727 ppb	35.613 %	12.178 ppb
Concentration per Run 2	8.999 ppb	1.545 ppb	41,800.143 ppb	56.349 ppb	24.063 %	2.257 ppb	88.590 ppb	35.028 %	11.859 ppb
Concentration per Run 3	9.608 ppb	1.134 ppb	41,452.381 ppb	55.996 ppb	23.129 %	2.282 ppb	92.081 ppb	33.362 %	12.024 ppb
Concentration RSD	4.7 %	29.0 %	0.4 %	0.6 %	4.5 %	1.0 %	1.9 %	3.4 %	1.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2,041.527 ppb	29.250 %	30.412 %	0.465 ppb	20.083 ppb	22.840 %
Concentration per Run 1	2,043.774 ppb	30.020 %	30.786 %	0.438 ppb	19.588 ppb	23.953 %
Concentration per Run 2	2,035.748 ppb	29.124 %	30.646 %	0.479 ppb	20.335 ppb	22.360 %
Concentration per Run 3	2,045.061 ppb	28.607 %	29.806 %	0.478 ppb	20.325 ppb	22.206 %
Concentration RSD	0.2 %	2.4 %	1.7 %	5.0 %	2.1 %	4.2 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	141	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xL2348692-03 6020TL	Rack	2		
Analysis started at:	9/5/2023 6:48:12 PM	Vial	40		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	53.010 %	33.811 %	0.020 ppb	4,103,694.290 ppb	105,778.909 ppb	420.327 ppb	3,061,749.663 ppb	5,654,927.364 ppb	38.168 %
Concentration per Run 1	54.239 %	33.685 %	0.024 ppb	4,250,690.605 ppb	109,301.640 ppb	429.033 ppb	3,101,906.516 ppb	5,741,533.085 ppb	38.836 %
Concentration per Run 2	52.853 %	34.365 %	0.019 ppb	3,991,016.816 ppb	102,066.138 ppb	401.297 ppb	2,923,828.294 ppb	5,470,558.248 ppb	37.649 %
Concentration per Run 3	51.940 %	33.383 %	0.016 ppb	4,069,375.449 ppb	105,968.948 ppb	430.649 ppb	3,159,514.179 ppb	5,752,690.758 ppb	38.019 %
Concentration RSD	2.2 %	1.5 %	21.5 %	3.2 %	3.4 %	3.9 %	4.0 %	2.8 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.484 ppb	4.915 ppb	2,934.461 ppb	3,461.837 ppb	17.562 ppb	63.926 ppb	54.425 ppb	932.587 ppb	29.081 %
Concentration per Run 1	0.704 ppb	5.047 ppb	2,885.325 ppb	3,556.903 ppb	18.456 ppb	66.982 ppb	56.471 ppb	978.083 ppb	28.440 %
Concentration per Run 2	0.313 ppb	4.814 ppb	2,941.790 ppb	3,485.799 ppb	17.614 ppb	62.892 ppb	54.905 ppb	923.214 ppb	28.394 %
Concentration per Run 3	0.435 ppb	4.883 ppb	2,976.268 ppb	3,342.810 ppb	16.617 ppb	61.904 ppb	51.900 ppb	896.465 ppb	30.411 %
Concentration RSD	41.3 %	2.4 %	1.6 %	3.1 %	5.2 %	4.2 %	4.3 %	4.5 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	6.425 ppb	1.230 ppb	33,656.318 ppb	64.441 ppb	23.041 %	0.903 ppb	66.905 ppb	34.103 %	16.707 ppb
Concentration per Run 1	6.762 ppb	1.693 ppb	33,282.748 ppb	65.176 ppb	23.250 %	0.898 ppb	68.057 ppb	33.546 %	17.172 ppb
Concentration per Run 2	6.371 ppb	0.910 ppb	33,146.819 ppb	64.060 ppb	23.037 %	0.889 ppb	66.559 ppb	33.442 %	16.700 ppb
Concentration per Run 3	6.143 ppb	1.086 ppb	34,539.387 ppb	64.087 ppb	22.836 %	0.923 ppb	66.100 ppb	35.319 %	16.250 ppb
Concentration RSD	4.9 %	33.4 %	2.3 %	1.0 %	0.9 %	1.9 %	1.5 %	3.1 %	2.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1,534.728 ppb	30.011 %	32.465 %	0.373 ppb	7.183 ppb	23.609 %
Concentration per Run 1	1,501.412 ppb	29.837 %	31.451 %	0.357 ppb	7.273 ppb	23.498 %
Concentration per Run 2	1,540.434 ppb	29.761 %	32.233 %	0.385 ppb	7.101 ppb	23.625 %
Concentration per Run 3	1,562.339 ppb	30.436 %	33.710 %	0.377 ppb	7.173 ppb	23.704 %
Concentration RSD	2.0 %	1.2 %	3.5 %	3.9 %	1.2 %	0.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 142
Analysis label: xL2348762-01 6020TL
Analysis started at: 9/5/2023 6:52:52 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 41
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	252.168 %	118.707 %	-0.008 ppb	502,135.919 ppb	47,217.681 ppb	1.359 ppb	51,424.286 ppb	334,150.555 ppb	53.407 %
Concentration per Run 1	250.362 %	111.330 %	-0.007 ppb	498,139.403 ppb	47,383.704 ppb	1.307 ppb	51,267.878 ppb	335,356.422 ppb	53.151 %
Concentration per Run 2	252.569 %	119.487 %	-0.008 ppb	499,950.633 ppb	46,786.603 ppb	1.460 ppb	48,454.618 ppb	325,449.314 ppb	53.641 %
Concentration per Run 3	253.572 %	125.303 %	-0.009 ppb	508,317.723 ppb	47,482.736 ppb	1.310 ppb	54,550.361 ppb	341,645.928 ppb	53.428 %
Concentration RSD	0.7 %	5.9 %	7.9 %	1.1 %	0.8 %	6.4 %	5.9 %	2.4 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.144 ppb	0.228 ppb	13.774 ppb	68.866 ppb	0.114 ppb	0.252 ppb	0.433 ppb	0.801 ppb	41.967 %
Concentration per Run 1	0.118 ppb	0.206 ppb	13.522 ppb	74.749 ppb	0.132 ppb	0.256 ppb	0.474 ppb	0.864 ppb	40.338 %
Concentration per Run 2	0.167 ppb	0.253 ppb	13.431 ppb	67.786 ppb	0.103 ppb	0.251 ppb	0.391 ppb	0.737 ppb	40.761 %
Concentration per Run 3	0.148 ppb	0.226 ppb	14.369 ppb	64.065 ppb	0.105 ppb	0.249 ppb	0.433 ppb	0.801 ppb	44.804 %
Concentration RSD	17.2 %	10.2 %	3.8 %	7.9 %	14.4 %	1.6 %	9.6 %	7.9 %	5.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.941 ppb	0.023 ppb	23,214.930 ppb	5.658 ppb	35.597 %	-0.002 ppb	0.006 ppb	50.613 %	0.299 ppb
Concentration per Run 1	0.828 ppb	0.004 ppb	22,440.388 ppb	5.098 ppb	34.460 %	-0.002 ppb	0.006 ppb	47.544 %	0.297 ppb
Concentration per Run 2	1.009 ppb	0.010 ppb	23,117.716 ppb	6.142 ppb	35.503 %	-0.002 ppb	0.007 ppb	50.511 %	0.293 ppb
Concentration per Run 3	0.985 ppb	0.056 ppb	24,086.684 ppb	5.732 ppb	36.828 %	-0.002 ppb	0.004 ppb	53.785 %	0.308 ppb
Concentration RSD	10.4 %	123.2 %	3.6 %	9.3 %	3.3 %	14.9 %	29.5 %	6.2 %	2.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	21.478 ppb	47.544 %	54.104 %	0.039 ppb	0.109 ppb	39.239 %
Concentration per Run 1	20.707 ppb	46.227 %	52.240 %	0.028 ppb	0.098 ppb	39.869 %
Concentration per Run 2	20.830 ppb	47.436 %	52.577 %	0.044 ppb	0.115 ppb	38.696 %
Concentration per Run 3	22.897 ppb	48.970 %	57.494 %	0.046 ppb	0.116 ppb	39.151 %
Concentration RSD	5.7 %	2.9 %	5.4 %	25.2 %	9.2 %	1.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 143
Analysis label: xL2348762-02 6020TL
Analysis started at: 9/5/2023 6:57:32 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 42
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.382 %	47.179 %	0.003 ppb	14,117.587 ppb	76,654.686 ppb	145.750 ppb	2,638.887 ppb	263,076.071 ppb	79.850 %
Concentration per Run 1	94.118 %	44.863 %	0.002 ppb	14,113.277 ppb	76,282.385 ppb	147.619 ppb	2,575.309 ppb	253,420.820 ppb	80.879 %
Concentration per Run 2	92.890 %	45.543 %	0.006 ppb	13,813.016 ppb	74,827.363 ppb	139.478 ppb	2,568.128 ppb	264,910.134 ppb	79.570 %
Concentration per Run 3	93.138 %	51.132 %	0.000 ppb	14,426.467 ppb	78,854.311 ppb	150.153 ppb	2,773.224 ppb	270,897.258 ppb	79.101 %
Concentration RSD	0.7 %	7.3 %	125.7 %	2.2 %	2.7 %	3.8 %	4.4 %	3.4 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.373 ppb	0.628 ppb	3.723 ppb	206.462 ppb	0.096 ppb	0.448 ppb	0.681 ppb	3.708 ppb	60.374 %
Concentration per Run 1	0.363 ppb	0.597 ppb	3.786 ppb	213.723 ppb	0.110 ppb	0.483 ppb	0.721 ppb	3.650 ppb	57.267 %
Concentration per Run 2	0.385 ppb	0.632 ppb	3.569 ppb	200.435 ppb	0.079 ppb	0.389 ppb	0.672 ppb	3.671 ppb	60.328 %
Concentration per Run 3	0.371 ppb	0.655 ppb	3.813 ppb	205.229 ppb	0.100 ppb	0.471 ppb	0.649 ppb	3.803 ppb	63.526 %
Concentration RSD	3.0 %	4.7 %	3.6 %	3.3 %	16.5 %	11.4 %	5.4 %	2.2 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.207 ppb	0.127 ppb	9,537.396 ppb	1.555 ppb	53.261 %	-0.003 ppb	0.004 ppb	71.183 %	0.113 ppb
Concentration per Run 1	0.177 ppb	0.144 ppb	9,370.908 ppb	1.342 ppb	52.647 %	-0.002 ppb	0.004 ppb	68.079 %	0.081 ppb
Concentration per Run 2	0.275 ppb	0.108 ppb	9,255.155 ppb	1.609 ppb	52.384 %	-0.005 ppb	0.006 ppb	69.773 %	0.113 ppb
Concentration per Run 3	0.170 ppb	0.129 ppb	9,986.126 ppb	1.714 ppb	54.752 %	-0.003 ppb	0.003 ppb	75.696 %	0.147 ppb
Concentration RSD	28.3 %	14.5 %	4.1 %	12.3 %	2.4 %	37.7 %	41.9 %	5.6 %	29.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	18.988 ppb	71.044 %	81.327 %	0.022 ppb	0.091 ppb	67.582 %
Concentration per Run 1	18.555 ppb	68.559 %	78.059 %	0.015 ppb	0.086 ppb	68.945 %
Concentration per Run 2	18.860 ppb	70.608 %	79.370 %	0.026 ppb	0.091 ppb	65.291 %
Concentration per Run 3	19.550 ppb	73.965 %	86.551 %	0.024 ppb	0.097 ppb	68.510 %
Concentration RSD	2.7 %	3.8 %	5.6 %	28.3 %	6.0 %	3.0 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	144	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xL2348762-03 6020TL	Rack	2		
Analysis started at:	9/5/2023 7:02:13 PM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.371 %	48.791 %	-0.002 ppb	7,286.578 ppb	80,960.541 ppb	15.644 ppb	3,048.103 ppb	421,776.526 ppb	78.563 %
Concentration per Run 1	94.664 %	50.452 %	-0.004 ppb	6,776.842 ppb	74,945.738 ppb	15.204 ppb	2,805.816 ppb	411,409.121 ppb	78.637 %
Concentration per Run 2	94.109 %	47.205 %	-0.001 ppb	7,245.564 ppb	80,321.678 ppb	14.499 ppb	2,984.993 ppb	394,704.052 ppb	77.958 %
Concentration per Run 3	94.339 %	48.715 %	0.000 ppb	7,837.326 ppb	87,614.206 ppb	17.229 ppb	3,353.502 ppb	459,216.405 ppb	79.094 %
Concentration RSD	0.3 %	3.3 %	138.6 %	7.3 %	7.9 %	9.1 %	9.2 %	7.9 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.077 ppb	0.331 ppb	70.461 ppb	73.332 ppb	2.557 ppb	2.896 ppb	3.568 ppb	4.188 ppb	61.905 %
Concentration per Run 1	0.080 ppb	0.301 ppb	68.464 ppb	75.027 ppb	2.478 ppb	2.803 ppb	3.642 ppb	4.229 ppb	59.008 %
Concentration per Run 2	0.078 ppb	0.331 ppb	68.769 ppb	73.684 ppb	2.593 ppb	2.825 ppb	3.386 ppb	3.982 ppb	62.313 %
Concentration per Run 3	0.074 ppb	0.362 ppb	74.150 ppb	71.284 ppb	2.599 ppb	3.061 ppb	3.676 ppb	4.353 ppb	64.395 %
Concentration RSD	3.7 %	9.3 %	4.5 %	2.6 %	2.7 %	4.9 %	4.4 %	4.5 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.269 ppb	0.104 ppb	17,331.211 ppb	1.565 ppb	55.195 %	0.121 ppb	0.010 ppb	75.148 %	0.253 ppb
Concentration per Run 1	0.270 ppb	0.020 ppb	16,791.936 ppb	1.385 ppb	53.850 %	0.131 ppb	0.007 ppb	70.760 %	0.209 ppb
Concentration per Run 2	0.238 ppb	0.030 ppb	16,891.392 ppb	1.576 ppb	54.706 %	0.114 ppb	0.011 ppb	74.203 %	0.234 ppb
Concentration per Run 3	0.299 ppb	0.262 ppb	18,310.304 ppb	1.733 ppb	57.029 %	0.117 ppb	0.011 ppb	80.480 %	0.317 ppb
Concentration RSD	11.4 %	131.4 %	4.9 %	11.1 %	3.0 %	7.4 %	23.5 %	6.6 %	22.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	19.171 ppb	72.400 %	82.606 %	0.025 ppb	0.121 ppb	72.303 %
Concentration per Run 1	19.023 ppb	71.326 %	80.314 %	0.019 ppb	0.113 ppb	76.361 %
Concentration per Run 2	18.440 ppb	71.429 %	80.090 %	0.027 ppb	0.119 ppb	69.474 %
Concentration per Run 3	20.051 ppb	74.445 %	87.414 %	0.029 ppb	0.131 ppb	71.074 %
Concentration RSD	4.3 %	2.4 %	5.0 %	20.8 %	7.6 %	5.0 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 145
Analysis label: xL2348762-04 6020TL
Analysis started at: 9/5/2023 7:06:53 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 44
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	421.414 %	233.093 %	-0.009 ppb	326,388.876 ppb	32,307.530 ppb	5.656 ppb	23,096.280 ppb	272,742.232 ppb	58.059 %
Concentration per Run 1	427.176 %	225.765 %	-0.009 ppb	327,196.015 ppb	32,053.525 ppb	5.818 ppb	22,714.867 ppb	257,355.237 ppb	59.254 %
Concentration per Run 2	418.342 %	241.326 %	-0.009 ppb	330,692.841 ppb	33,171.975 ppb	5.961 ppb	24,037.100 ppb	306,405.606 ppb	57.804 %
Concentration per Run 3	418.724 %	232.186 %	-0.009 ppb	321,277.771 ppb	31,697.089 ppb	5.188 ppb	22,536.874 ppb	254,465.851 ppb	57.118 %
Concentration RSD	1.2 %	3.4 %	1.6 %	1.5 %	2.4 %	7.3 %	3.5 %	10.7 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.016 ppb	0.271 ppb	44.666 ppb	1,503.597 ppb	0.286 ppb	0.899 ppb	0.249 ppb	0.905 ppb	47.308 %
Concentration per Run 1	0.003 ppb	0.280 ppb	44.069 ppb	1,523.182 ppb	0.270 ppb	1.017 ppb	0.236 ppb	0.836 ppb	46.012 %
Concentration per Run 2	0.016 ppb	0.251 ppb	44.565 ppb	1,486.861 ppb	0.303 ppb	0.833 ppb	0.235 ppb	0.905 ppb	48.428 %
Concentration per Run 3	0.029 ppb	0.283 ppb	45.365 ppb	1,500.747 ppb	0.286 ppb	0.846 ppb	0.277 ppb	0.975 ppb	47.483 %
Concentration RSD	80.1 %	6.6 %	1.5 %	1.2 %	5.7 %	11.5 %	9.5 %	7.7 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.780 ppb	0.070 ppb	23,721.631 ppb	1.712 ppb	40.584 %	0.159 ppb	0.003 ppb	55.688 %	0.156 ppb
Concentration per Run 1	0.713 ppb	0.143 ppb	23,865.591 ppb	1.681 ppb	38.990 %	0.166 ppb	0.001 ppb	52.888 %	0.145 ppb
Concentration per Run 2	0.832 ppb	-0.013 ppb	24,063.892 ppb	1.726 ppb	42.057 %	0.162 ppb	0.003 ppb	59.073 %	0.147 ppb
Concentration per Run 3	0.796 ppb	0.081 ppb	23,235.410 ppb	1.730 ppb	40.704 %	0.149 ppb	0.005 ppb	55.104 %	0.178 ppb
Concentration RSD	7.8 %	111.2 %	1.8 %	1.6 %	3.8 %	5.5 %	65.2 %	5.6 %	11.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	14.424 ppb	52.150 %	57.471 %	0.016 ppb	0.205 ppb	43.092 %
Concentration per Run 1	14.315 ppb	49.368 %	54.775 %	0.011 ppb	0.205 ppb	43.399 %
Concentration per Run 2	14.630 ppb	53.937 %	60.079 %	0.017 ppb	0.197 ppb	44.330 %
Concentration per Run 3	14.328 ppb	53.144 %	57.560 %	0.019 ppb	0.214 ppb	41.549 %
Concentration RSD	1.2 %	4.7 %	4.6 %	24.5 %	4.0 %	3.3 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 146
Analysis label: xL2348762-05 6020TL
Analysis started at: 9/5/2023 7:11:34 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 45
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.773 %	54.153 %	0.000 ppb	15,035.073 ppb	54,857.466 ppb	127.017 ppb	3,453.503 ppb	733,682.582 ppb	82.567 %
Concentration per Run 1	90.000 %	47.356 %	-0.001 ppb	15,993.923 ppb	58,864.888 ppb	133.820 ppb	3,468.268 ppb	666,656.124 ppb	83.316 %
Concentration per Run 2	90.636 %	55.362 %	0.002 ppb	15,195.638 ppb	55,245.254 ppb	132.246 ppb	3,663.423 ppb	776,007.980 ppb	82.721 %
Concentration per Run 3	88.682 %	59.742 %	-0.001 ppb	13,915.656 ppb	50,462.255 ppb	114.984 ppb	3,228.819 ppb	758,383.643 ppb	81.665 %
Concentration RSD	1.1 %	11.6 %	1,432.3 %	7.0 %	7.7 %	8.2 %	6.3 %	8.0 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.267 ppb	0.731 ppb	107.879 ppb	5,032.873 ppb	0.102 ppb	0.468 ppb	0.317 ppb	0.964 ppb	64.558 %
Concentration per Run 1	0.192 ppb	0.768 ppb	109.328 ppb	5,166.022 ppb	0.127 ppb	0.504 ppb	0.362 ppb	1.005 ppb	60.577 %
Concentration per Run 2	0.241 ppb	0.701 ppb	109.516 ppb	5,049.869 ppb	0.087 ppb	0.448 ppb	0.282 ppb	1.046 ppb	66.745 %
Concentration per Run 3	0.367 ppb	0.725 ppb	104.794 ppb	4,882.728 ppb	0.092 ppb	0.453 ppb	0.306 ppb	0.840 ppb	66.352 %
Concentration RSD	33.8 %	4.6 %	2.5 %	2.8 %	21.4 %	6.6 %	13.0 %	11.3 %	5.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.435 ppb	0.083 ppb	20,278.815 ppb	1.341 ppb	58.683 %	0.079 ppb	0.007 ppb	78.531 %	0.061 ppb
Concentration per Run 1	0.479 ppb	0.021 ppb	20,049.075 ppb	1.255 ppb	55.147 %	0.086 ppb	0.008 ppb	72.695 %	0.047 ppb
Concentration per Run 2	0.405 ppb	0.146 ppb	21,531.188 ppb	1.326 ppb	59.395 %	0.085 ppb	0.007 ppb	81.484 %	0.082 ppb
Concentration per Run 3	0.423 ppb	0.083 ppb	19,256.183 ppb	1.443 ppb	61.508 %	0.067 ppb	0.006 ppb	81.415 %	0.055 ppb
Concentration RSD	8.8 %	75.3 %	5.7 %	7.1 %	5.5 %	13.2 %	13.0 %	6.4 %	30.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.963 ppb	70.958 %	79.152 %	0.013 ppb	0.117 ppb	70.331 %
Concentration per Run 1	6.920 ppb	65.708 %	72.351 %	0.009 ppb	0.113 ppb	69.120 %
Concentration per Run 2	7.074 ppb	72.737 %	82.333 %	0.014 ppb	0.125 ppb	68.248 %
Concentration per Run 3	6.894 ppb	74.431 %	82.773 %	0.014 ppb	0.112 ppb	73.624 %
Concentration RSD	1.4 %	6.5 %	7.4 %	23.1 %	6.0 %	4.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	147	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xL2348762-06 6020TL	Rack	2		
Analysis started at:	9/5/2023 7:16:14 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.363 %	58.207 %	-0.001 ppb	12,986.689 ppb	55,479.477 ppb	4.903 ppb	2,799.602 ppb	825,380.315 ppb	76.123 %
Concentration per Run 1	91.504 %	61.102 %	0.000 ppb	12,487.617 ppb	51,947.717 ppb	4.381 ppb	2,594.720 ppb	791,810.289 ppb	75.969 %
Concentration per Run 2	90.330 %	57.552 %	-0.001 ppb	13,366.264 ppb	59,248.044 ppb	5.333 ppb	3,027.177 ppb	878,156.661 ppb	76.646 %
Concentration per Run 3	89.254 %	55.966 %	-0.001 ppb	13,106.185 ppb	55,242.670 ppb	4.996 ppb	2,776.909 ppb	806,173.995 ppb	75.755 %
Concentration RSD	1.2 %	4.5 %	176.3 %	3.5 %	6.6 %	9.8 %	7.8 %	5.6 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.018 ppb	0.220 ppb	75.345 ppb	714.518 ppb	0.199 ppb	0.154 ppb	0.246 ppb	0.379 ppb	70.714 %
Concentration per Run 1	0.013 ppb	0.222 ppb	74.213 ppb	708.525 ppb	0.203 ppb	0.114 ppb	0.245 ppb	0.386 ppb	68.049 %
Concentration per Run 2	0.024 ppb	0.203 ppb	77.319 ppb	734.415 ppb	0.196 ppb	0.159 ppb	0.217 ppb	0.376 ppb	71.784 %
Concentration per Run 3	0.018 ppb	0.236 ppb	74.504 ppb	700.612 ppb	0.200 ppb	0.188 ppb	0.277 ppb	0.375 ppb	72.308 %
Concentration RSD	31.8 %	7.5 %	2.3 %	2.5 %	1.6 %	24.1 %	12.1 %	1.6 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.610 ppb	0.013 ppb	20,480.108 ppb	1.482 ppb	61.912 %	0.012 ppb	0.004 ppb	84.668 %	0.045 ppb
Concentration per Run 1	0.612 ppb	0.148 ppb	20,184.385 ppb	1.426 ppb	60.692 %	0.012 ppb	0.008 ppb	80.329 %	0.041 ppb
Concentration per Run 2	0.644 ppb	-0.057 ppb	21,483.574 ppb	1.592 ppb	62.328 %	0.011 ppb	0.002 ppb	87.300 %	0.045 ppb
Concentration per Run 3	0.574 ppb	-0.052 ppb	19,772.365 ppb	1.429 ppb	62.717 %	0.014 ppb	0.002 ppb	86.376 %	0.050 ppb
Concentration RSD	5.8 %	895.5 %	4.4 %	6.4 %	1.7 %	9.6 %	81.6 %	4.5 %	10.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	8.222 ppb	75.233 %	83.387 %	0.012 ppb	0.015 ppb	73.083 %
Concentration per Run 1	8.491 ppb	73.534 %	81.159 %	0.007 ppb	0.014 ppb	77.291 %
Concentration per Run 2	8.008 ppb	76.296 %	86.003 %	0.013 ppb	0.015 ppb	71.803 %
Concentration per Run 3	8.168 ppb	75.869 %	82.998 %	0.016 ppb	0.015 ppb	70.156 %
Concentration RSD	3.0 %	2.0 %	2.9 %	39.0 %	6.1 %	5.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	148	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xL2348762-08 6020TL	Rack	2		
Analysis started at:	9/5/2023 7:20:55 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.426 %	58.987 %	-0.004 ppb	8,701.286 ppb	81,683.759 ppb	25.401 ppb	2,428.059 ppb	324,628.533 ppb	76.224 %
Concentration per Run 1	92.179 %	55.664 %	-0.004 ppb	8,759.047 ppb	82,558.957 ppb	25.263 ppb	2,483.657 ppb	332,023.802 ppb	76.137 %
Concentration per Run 2	92.323 %	58.912 %	-0.004 ppb	8,310.901 ppb	79,700.060 ppb	23.573 ppb	2,356.407 ppb	329,313.900 ppb	76.961 %
Concentration per Run 3	89.775 %	62.386 %	-0.005 ppb	9,033.909 ppb	82,792.260 ppb	27.368 ppb	2,444.114 ppb	312,547.897 ppb	75.575 %
Concentration RSD	1.6 %	5.7 %	14.0 %	4.2 %	2.1 %	7.5 %	2.7 %	3.2 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.090 ppb	0.284 ppb	50.443 ppb	190.587 ppb	1.610 ppb	0.403 ppb	0.400 ppb	0.527 ppb	71.581 %
Concentration per Run 1	0.080 ppb	0.351 ppb	51.725 ppb	194.240 ppb	1.675 ppb	0.479 ppb	0.411 ppb	0.592 ppb	67.404 %
Concentration per Run 2	0.075 ppb	0.249 ppb	48.667 ppb	189.391 ppb	1.570 ppb	0.369 ppb	0.411 ppb	0.479 ppb	71.015 %
Concentration per Run 3	0.114 ppb	0.253 ppb	50.937 ppb	188.131 ppb	1.585 ppb	0.361 ppb	0.377 ppb	0.510 ppb	76.324 %
Concentration RSD	24.0 %	20.3 %	3.1 %	1.7 %	3.5 %	16.4 %	4.9 %	11.1 %	6.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.321 ppb	0.044 ppb	16,570.155 ppb	1.995 ppb	62.950 %	-0.002 ppb	0.009 ppb	82.140 %	0.065 ppb
Concentration per Run 1	0.311 ppb	0.079 ppb	16,439.922 ppb	2.088 ppb	59.563 %	-0.001 ppb	0.011 ppb	77.658 %	0.059 ppb
Concentration per Run 2	0.330 ppb	0.019 ppb	15,863.288 ppb	1.857 ppb	62.739 %	-0.002 ppb	0.006 ppb	79.823 %	0.063 ppb
Concentration per Run 3	0.323 ppb	0.034 ppb	17,407.254 ppb	2.041 ppb	66.548 %	-0.003 ppb	0.009 ppb	88.938 %	0.073 ppb
Concentration RSD	2.9 %	70.7 %	4.7 %	6.1 %	5.6 %	51.1 %	29.2 %	7.3 %	11.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	16.194 ppb	80.929 %	89.775 %	0.018 ppb	0.343 ppb	74.272 %
Concentration per Run 1	16.293 ppb	76.171 %	83.484 %	0.014 ppb	0.321 ppb	75.983 %
Concentration per Run 2	16.097 ppb	79.922 %	87.493 %	0.020 ppb	0.351 ppb	71.296 %
Concentration per Run 3	16.191 ppb	86.694 %	98.347 %	0.019 ppb	0.357 ppb	75.538 %
Concentration RSD	0.6 %	6.6 %	8.6 %	18.3 %	5.7 %	3.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 149
Analysis label: xL2348762-09 6020TL
Analysis started at: 9/5/2023 7:25:35 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 48
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.288 %	67.849 %	-0.003 ppb	19,840.719 ppb	73,572.163 ppb	29.134 ppb	3,260.032 ppb	802,173.028 ppb	83.861 %
Concentration per Run 1	96.314 %	65.709 %	-0.001 ppb	19,749.369 ppb	72,986.778 ppb	27.638 ppb	3,159.988 ppb	793,870.395 ppb	84.423 %
Concentration per Run 2	94.140 %	71.676 %	-0.005 ppb	19,204.458 ppb	72,045.983 ppb	29.290 ppb	3,370.926 ppb	812,224.239 ppb	83.620 %
Concentration per Run 3	92.411 %	66.162 %	-0.002 ppb	20,568.329 ppb	75,683.729 ppb	30.473 ppb	3,249.184 ppb	800,424.450 ppb	83.541 %
Concentration RSD	2.1 %	4.9 %	88.4 %	3.5 %	2.6 %	4.9 %	3.2 %	1.2 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.033 ppb	0.262 ppb	48.882 ppb	423.833 ppb	0.255 ppb	0.203 ppb	0.229 ppb	1.993 ppb	76.615 %
Concentration per Run 1	0.052 ppb	0.253 ppb	49.714 ppb	439.018 ppb	0.257 ppb	0.179 ppb	0.219 ppb	2.017 ppb	71.523 %
Concentration per Run 2	0.031 ppb	0.240 ppb	46.769 ppb	413.338 ppb	0.239 ppb	0.232 ppb	0.210 ppb	1.989 ppb	83.240 %
Concentration per Run 3	0.014 ppb	0.293 ppb	50.163 ppb	419.144 ppb	0.271 ppb	0.198 ppb	0.258 ppb	1.974 ppb	75.083 %
Concentration RSD	57.9 %	10.6 %	3.8 %	3.2 %	6.2 %	13.2 %	11.0 %	1.1 %	7.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.388 ppb	0.037 ppb	20,137.807 ppb	1.542 ppb	68.829 %	-0.005 ppb	0.015 ppb	92.203 %	0.039 ppb
Concentration per Run 1	0.348 ppb	0.044 ppb	19,923.672 ppb	1.488 ppb	65.794 %	-0.004 ppb	0.019 ppb	83.859 %	0.030 ppb
Concentration per Run 2	0.328 ppb	0.065 ppb	20,548.828 ppb	1.571 ppb	71.406 %	-0.005 ppb	0.017 ppb	101.275 %	0.041 ppb
Concentration per Run 3	0.488 ppb	0.003 ppb	19,940.922 ppb	1.568 ppb	69.286 %	-0.005 ppb	0.010 ppb	91.476 %	0.045 ppb
Concentration RSD	22.6 %	84.2 %	1.8 %	3.0 %	4.1 %	8.9 %	32.0 %	9.5 %	20.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	7.303 ppb	84.835 %	93.026 %	0.009 ppb	0.115 ppb	82.477 %
Concentration per Run 1	7.282 ppb	80.222 %	85.849 %	0.005 ppb	0.112 ppb	82.850 %
Concentration per Run 2	7.065 ppb	89.482 %	99.038 %	0.010 ppb	0.112 ppb	84.835 %
Concentration per Run 3	7.560 ppb	84.801 %	94.192 %	0.011 ppb	0.122 ppb	79.747 %
Concentration RSD	3.4 %	5.5 %	7.2 %	36.7 %	4.7 %	3.1 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	150	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/5/2023 7:30:16 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.553 %	57.099 %	60.403 ppb	5,889.433 ppb	5,115.693 ppb	54.503 ppb	5,649.500 ppb	6,128.467 ppb	86.502 %
Concentration per Run 1	88.351 %	58.307 %	60.227 ppb	5,912.280 ppb	5,341.612 ppb	53.667 ppb	5,831.156 ppb	6,199.238 ppb	86.932 %
Concentration per Run 2	87.044 %	58.307 %	60.287 ppb	5,880.542 ppb	4,948.971 ppb	56.266 ppb	5,725.092 ppb	6,162.028 ppb	86.000 %
Concentration per Run 3	87.264 %	54.682 %	60.695 ppb	5,875.477 ppb	5,056.496 ppb	53.575 ppb	5,392.251 ppb	6,024.137 ppb	86.574 %
Recovery Percentage 1			100.671 %	98.157 %	85.262 %	90.838 %	94.158 %	102.141 %	
Concentration RSD	0.8 %	3.7 %	0.4 %	0.3 %	4.0 %	2.8 %	4.1 %	1.5 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.591 ppb	57.126 ppb	59.926 ppb	5,630.483 ppb	54.658 ppb	53.872 ppb	45.397 ppb	59.378 ppb	74.624 %
Concentration per Run 1	61.380 ppb	58.985 ppb	60.288 ppb	5,838.111 ppb	56.513 ppb	56.755 ppb	46.414 ppb	61.299 ppb	71.768 %
Concentration per Run 2	57.047 ppb	55.160 ppb	60.745 ppb	5,458.411 ppb	52.425 ppb	51.059 ppb	43.194 ppb	57.638 ppb	80.014 %
Concentration per Run 3	57.346 ppb	57.233 ppb	58.745 ppb	5,594.928 ppb	55.035 ppb	53.803 ppb	46.583 ppb	59.196 ppb	72.089 %
Recovery Percentage 1	97.652 %	95.210 %	99.877 %	93.841 %	91.097 %	89.787 %	75.662 %	98.963 %	
Concentration RSD	4.1 %	3.4 %	1.7 %	3.4 %	3.8 %	5.3 %	4.2 %	3.1 %	6.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.152 ppb	60.401 ppb	63.062 ppb	55.018 ppb	68.939 %	56.950 ppb	54.436 ppb	84.940 %	59.591 ppb
Concentration per Run 1	61.297 ppb	56.987 ppb	60.723 ppb	56.958 ppb	68.961 %	59.633 ppb	54.189 ppb	85.333 %	58.863 ppb
Concentration per Run 2	57.459 ppb	61.802 ppb	64.847 ppb	52.801 ppb	70.229 %	53.764 ppb	52.829 ppb	90.058 %	59.356 ppb
Concentration per Run 3	58.700 ppb	62.412 ppb	63.617 ppb	55.295 ppb	67.626 %	57.454 ppb	56.289 ppb	79.428 %	60.553 ppb
Recovery Percentage 1	98.587 %	100.668 %	105.104 %	91.697 %		94.917 %	90.726 %		99.318 %
Concentration RSD	3.3 %	4.9 %	3.4 %	3.8 %	1.9 %	5.2 %	3.2 %	6.3 %	1.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.274 ppb	85.051 %	93.987 %	55.259 ppb	56.926 ppb	87.585 %
Concentration per Run 1	60.974 ppb	84.521 %	89.018 %	52.532 ppb	53.350 ppb	93.750 %
Concentration per Run 2	60.584 ppb	87.977 %	100.153 %	55.801 ppb	58.364 ppb	87.200 %
Concentration per Run 3	62.265 ppb	82.656 %	92.789 %	57.446 ppb	59.064 ppb	81.805 %
Recovery Percentage 1	102.124 %			92.099 %	94.876 %	
Concentration RSD	1.4 %	3.2 %	6.0 %	4.5 %	5.5 %	6.8 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	151	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/5/2023 7:34:59 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.171 %	58.458 %	-0.002 ppb	10.207 ppb	-0.550 ppb	-0.363 ppb	3.341 ppb	2.026 ppb	81.336 %
Concentration per Run 1	89.570 %	54.606 %	-0.002 ppb	10.640 ppb	-0.536 ppb	-0.379 ppb	3.611 ppb	0.330 ppb	82.290 %
Concentration per Run 2	89.403 %	61.631 %	-0.003 ppb	10.559 ppb	-0.682 ppb	-0.175 ppb	-1.452 ppb	1.890 ppb	80.719 %
Concentration per Run 3	88.540 %	59.138 %	-0.003 ppb	9.423 ppb	-0.433 ppb	-0.536 ppb	7.863 ppb	3.860 ppb	81.000 %
Recovery Percentage 1			-0.484 %	10.207 %	-0.786 %	-3.633 %	3.341 %	2.026 %	
Concentration RSD	0.6 %	6.1 %	31.1 %	6.7 %	22.8 %	49.8 %	139.6 %	87.3 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.011 ppb	-0.009 ppb	0.018 ppb	19.569 ppb	0.001 ppb	0.008 ppb	-0.029 ppb	-0.113 ppb	73.749 %
Concentration per Run 1	-0.014 ppb	-0.007 ppb	0.024 ppb	19.662 ppb	0.001 ppb	0.019 ppb	-0.029 ppb	-0.071 ppb	70.891 %
Concentration per Run 2	-0.016 ppb	-0.010 ppb	0.016 ppb	19.501 ppb	0.001 ppb	0.017 ppb	-0.034 ppb	-0.126 ppb	77.972 %
Concentration per Run 3	-0.003 ppb	-0.009 ppb	0.012 ppb	19.542 ppb	0.001 ppb	-0.011 ppb	-0.025 ppb	-0.142 ppb	72.383 %
Recovery Percentage 1	-0.218 %	-0.867 %	1.759 %	39.137 %	0.256 %	0.418 %	-2.944 %	-2.261 %	
Concentration RSD	63.1 %	19.4 %	34.8 %	0.4 %	9.4 %	205.0 %	15.8 %	33.0 %	5.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.118 ppb	0.651 ppb	0.058 ppb	1.730 ppb	69.487 %	-0.002 ppb	0.000 ppb	86.544 %	0.061 ppb
Concentration per Run 1	0.095 ppb	0.415 ppb	0.064 ppb	1.353 ppb	69.011 %	-0.003 ppb	0.000 ppb	82.305 %	0.052 ppb
Concentration per Run 2	0.113 ppb	0.847 ppb	0.040 ppb	1.728 ppb	70.613 %	-0.002 ppb	0.000 ppb	95.310 %	0.051 ppb
Concentration per Run 3	0.145 ppb	0.692 ppb	0.069 ppb	2.110 ppb	68.838 %	-0.003 ppb	0.000 ppb	82.016 %	0.079 ppb
Recovery Percentage 1	23.557 %	13.028 %	0.578 %	86.520 %		-0.611 %	0.028 %		1.519 %
Concentration RSD	21.2 %	33.6 %	26.9 %	21.9 %	1.4 %	20.2 %	827.4 %	8.8 %	26.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.012 ppb	83.643 %	92.401 %	0.293 ppb	0.007 ppb	91.472 %
Concentration per Run 1	0.005 ppb	81.002 %	88.752 %	0.318 ppb	0.008 ppb	95.580 %
Concentration per Run 2	0.008 ppb	87.006 %	95.620 %	0.307 ppb	0.007 ppb	92.852 %
Concentration per Run 3	0.023 ppb	82.921 %	92.831 %	0.255 ppb	0.004 ppb	85.984 %
Recovery Percentage 1	2.386 %			29.294 %	0.654 %	
Concentration RSD	82.5 %	3.7 %	3.7 %	11.5 %	27.7 %	5.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	152	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/5/2023 7:54:27 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.140 %	65.407 %	60.897 ppb	5,482.351 ppb	5,922.547 ppb	60.409 ppb	6,013.534 ppb	6,386.507 ppb	77.048 %
Concentration per Run 1	87.188 %	66.087 %	60.554 ppb	5,393.052 ppb	5,922.288 ppb	60.793 ppb	5,961.954 ppb	6,502.372 ppb	77.716 %
Concentration per Run 2	85.565 %	63.745 %	61.097 ppb	5,644.540 ppb	6,036.168 ppb	58.263 ppb	5,982.935 ppb	6,348.961 ppb	76.400 %
Concentration per Run 3	85.666 %	66.389 %	61.039 ppb	5,409.462 ppb	5,809.186 ppb	62.170 ppb	6,095.712 ppb	6,308.189 ppb	77.029 %
Recovery Percentage 1			101.494 %	91.373 %	98.709 %	100.681 %	100.226 %	106.442 %	
Concentration RSD	1.1 %	2.2 %	0.5 %	2.6 %	1.9 %	3.3 %	1.2 %	1.6 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	63.062 ppb	60.926 ppb	63.230 ppb	5,584.410 ppb	55.642 ppb	54.692 ppb	54.648 ppb	58.679 ppb	76.677 %
Concentration per Run 1	64.376 ppb	61.366 ppb	62.898 ppb	5,522.198 ppb	56.058 ppb	55.868 ppb	55.671 ppb	59.899 ppb	74.407 %
Concentration per Run 2	64.060 ppb	63.034 ppb	63.869 ppb	5,779.587 ppb	57.683 ppb	56.161 ppb	56.457 ppb	59.180 ppb	71.748 %
Concentration per Run 3	60.750 ppb	58.377 ppb	62.922 ppb	5,451.444 ppb	53.183 ppb	52.049 ppb	51.815 ppb	56.957 ppb	83.876 %
Recovery Percentage 1	105.103 %	101.543 %	105.383 %	93.073 %	92.736 %	91.154 %	91.080 %	97.798 %	
Concentration RSD	3.2 %	3.9 %	0.9 %	3.1 %	4.1 %	4.2 %	4.5 %	2.6 %	8.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.780 ppb	65.161 ppb	68.220 ppb	54.274 ppb	72.848 %	56.754 ppb	57.810 ppb	83.435 %	59.179 ppb
Concentration per Run 1	60.278 ppb	67.098 ppb	69.631 ppb	55.227 ppb	72.271 %	56.739 ppb	57.119 ppb	82.220 %	59.872 ppb
Concentration per Run 2	60.156 ppb	67.072 ppb	67.672 ppb	54.212 ppb	71.183 %	57.654 ppb	58.806 ppb	79.233 %	59.673 ppb
Concentration per Run 3	55.907 ppb	61.314 ppb	67.356 ppb	53.383 ppb	75.090 %	55.870 ppb	57.504 ppb	88.853 %	57.992 ppb
Recovery Percentage 1	97.967 %	108.602 %	113.700 %	90.457 %		94.591 %	96.350 %		98.632 %
Concentration RSD	4.2 %	5.1 %	1.8 %	1.7 %	2.8 %	1.6 %	1.5 %	5.9 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.508 ppb	87.396 %	95.845 %	63.052 ppb	63.533 ppb	78.883 %
Concentration per Run 1	61.037 ppb	86.514 %	95.867 %	64.551 ppb	66.689 ppb	75.893 %
Concentration per Run 2	59.380 ppb	86.289 %	92.131 %	63.411 ppb	65.373 ppb	77.983 %
Concentration per Run 3	61.106 ppb	89.385 %	99.539 %	61.195 ppb	58.537 ppb	82.773 %
Recovery Percentage 1	100.846 %			105.087 %	105.888 %	
Concentration RSD	1.6 %	2.0 %	3.9 %	2.7 %	6.9 %	4.5 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	153	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/5/2023 7:59:11 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.970 %	64.551 %	-0.001 ppb	9.030 ppb	-0.463 ppb	-0.339 ppb	4.783 ppb	-0.343 ppb	78.871 %
Concentration per Run 1	85.999 %	66.616 %	0.004 ppb	8.514 ppb	-0.316 ppb	-0.276 ppb	6.821 ppb	2.751 ppb	78.334 %
Concentration per Run 2	86.366 %	64.727 %	-0.002 ppb	8.425 ppb	-0.788 ppb	-0.372 ppb	2.787 ppb	0.565 ppb	79.396 %
Concentration per Run 3	85.545 %	62.310 %	-0.004 ppb	10.150 ppb	-0.284 ppb	-0.369 ppb	4.740 ppb	-4.345 ppb	78.882 %
Recovery Percentage 1			-0.118 %	9.030 %	-0.661 %	-3.391 %	4.783 %	-0.343 %	
Concentration RSD	0.5 %	3.3 %	675.6 %	10.8 %	61.0 %	16.0 %	42.2 %	1,059.8 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.009 ppb	-0.016 ppb	-0.020 ppb	19.689 ppb	0.000 ppb	0.005 ppb	-0.020 ppb	-0.079 ppb	79.485 %
Concentration per Run 1	-0.027 ppb	-0.006 ppb	-0.001 ppb	16.318 ppb	0.000 ppb	0.004 ppb	-0.024 ppb	-0.050 ppb	80.221 %
Concentration per Run 2	-0.003 ppb	-0.025 ppb	0.001 ppb	20.619 ppb	0.000 ppb	0.002 ppb	-0.006 ppb	-0.098 ppb	77.211 %
Concentration per Run 3	0.002 ppb	-0.016 ppb	-0.059 ppb	22.130 ppb	0.001 ppb	0.008 ppb	-0.031 ppb	-0.088 ppb	81.022 %
Recovery Percentage 1	-0.189 %	-1.561 %	-1.970 %	39.378 %	0.073 %	0.237 %	-1.999 %	-1.573 %	
Concentration RSD	159.5 %	62.5 %	172.7 %	15.3 %	169.2 %	64.5 %	65.0 %	31.9 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.143 ppb	0.748 ppb	0.029 ppb	1.806 ppb	74.756 %	-0.003 ppb	0.001 ppb	87.832 %	0.034 ppb
Concentration per Run 1	0.110 ppb	0.477 ppb	0.040 ppb	1.391 ppb	74.287 %	-0.003 ppb	0.000 ppb	88.059 %	0.017 ppb
Concentration per Run 2	0.152 ppb	0.986 ppb	0.022 ppb	1.840 ppb	73.992 %	-0.003 ppb	0.003 ppb	83.482 %	0.034 ppb
Concentration per Run 3	0.166 ppb	0.781 ppb	0.025 ppb	2.188 ppb	75.990 %	-0.003 ppb	0.000 ppb	91.954 %	0.050 ppb
Recovery Percentage 1	28.576 %	14.956 %	0.290 %	90.310 %		-0.656 %	0.347 %		0.845 %
Concentration RSD	20.2 %	34.2 %	34.4 %	22.1 %	1.4 %	3.3 %	291.8 %	4.8 %	50.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.003 ppb	86.835 %	93.662 %	0.285 ppb	0.013 ppb	95.428 %
Concentration per Run 1	0.004 ppb	85.303 %	93.017 %	0.307 ppb	0.014 ppb	101.361 %
Concentration per Run 2	0.000 ppb	86.036 %	91.203 %	0.301 ppb	0.014 ppb	92.070 %
Concentration per Run 3	0.004 ppb	89.166 %	96.766 %	0.247 ppb	0.011 ppb	92.854 %
Recovery Percentage 1	0.512 %			28.479 %	1.314 %	
Concentration RSD	88.5 %	2.4 %	3.0 %	11.6 %	11.6 %	5.4 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index: 154
Analysis label: OB SCAN 7019-07E TOT
Analysis started at: 9/5/2023 8:05:07 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 50
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.912 %	60.321 %	0.028 ppb	78,310.773 ppb	1,755.395 ppb	899.707 ppb	17,226.643 ppb	20,345.409 ppb	72.887 %
Concentration per Run 1	84.550 %	56.041 %	0.030 ppb	81,685.009 ppb	1,822.426 ppb	906.922 ppb	17,705.088 ppb	20,930.919 ppb	73.153 %
Concentration per Run 2	84.237 %	62.612 %	0.028 ppb	75,733.990 ppb	1,684.739 ppb	883.029 ppb	16,400.297 ppb	20,025.460 ppb	73.118 %
Concentration per Run 3	82.949 %	62.310 %	0.027 ppb	77,513.321 ppb	1,759.018 ppb	909.171 ppb	17,574.544 ppb	20,079.848 ppb	72.389 %
Concentration RSD	1.0 %	6.1 %	6.0 %	3.9 %	3.9 %	1.6 %	4.2 %	2.5 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	14.889 ppb	6.798 ppb	50.833 ppb	2,097.059 ppb	0.150 ppb	0.976 ppb	2.497 ppb	17.606 ppb	74.760 %
Concentration per Run 1	14.784 ppb	6.875 ppb	52.273 ppb	2,132.065 ppb	0.166 ppb	1.037 ppb	2.598 ppb	17.664 ppb	72.387 %
Concentration per Run 2	15.106 ppb	6.689 ppb	50.051 ppb	2,068.505 ppb	0.141 ppb	0.903 ppb	2.424 ppb	17.436 ppb	76.235 %
Concentration per Run 3	14.777 ppb	6.831 ppb	50.175 ppb	2,090.608 ppb	0.143 ppb	0.988 ppb	2.469 ppb	17.718 ppb	75.658 %
Concentration RSD	1.3 %	1.4 %	2.5 %	1.5 %	9.2 %	7.0 %	3.6 %	0.8 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	14.756 ppb	1.030 ppb	189.226 ppb	2.142 ppb	66.573 %	-0.004 ppb	0.137 ppb	75.936 %	7.077 ppb
Concentration per Run 1	14.878 ppb	1.033 ppb	190.238 ppb	2.258 ppb	65.417 %	-0.003 ppb	0.145 ppb	75.227 %	7.169 ppb
Concentration per Run 2	14.550 ppb	0.923 ppb	188.192 ppb	2.148 ppb	66.355 %	-0.005 ppb	0.143 ppb	74.369 %	7.181 ppb
Concentration per Run 3	14.840 ppb	1.133 ppb	189.247 ppb	2.019 ppb	67.946 %	-0.004 ppb	0.121 ppb	78.211 %	6.881 ppb
Concentration RSD	1.2 %	10.2 %	0.5 %	5.6 %	1.9 %	21.5 %	9.8 %	2.7 %	2.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	8.393 ppb	82.653 %	91.412 %	0.066 ppb	2.181 ppb	66.050 %
Concentration per Run 1	8.712 ppb	80.556 %	90.497 %	0.054 ppb	2.196 ppb	64.820 %
Concentration per Run 2	8.148 ppb	83.909 %	91.595 %	0.075 ppb	2.164 ppb	66.447 %
Concentration per Run 3	8.318 ppb	83.493 %	92.146 %	0.069 ppb	2.183 ppb	66.884 %
Concentration RSD	3.4 %	2.2 %	0.9 %	16.8 %	0.8 %	1.6 %

Alpha ICPMSQ Data

9/6/2023 11:55:44 AM

Analysis index:	155	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	OB SCAN 7019-07F DIS	Rack	2		
Analysis started at:	9/5/2023 8:09:48 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.117 %	60.825 %	0.021 ppb	79,701.401 ppb	1,747.133 ppb	669.902 ppb	17,021.969 ppb	19,697.526 ppb	73.058 %
Concentration per Run 1	83.999 %	62.915 %	0.024 ppb	77,487.833 ppb	1,669.064 ppb	647.266 ppb	16,630.538 ppb	19,623.240 ppb	72.714 %
Concentration per Run 2	82.891 %	61.933 %	0.021 ppb	77,387.668 ppb	1,723.103 ppb	652.205 ppb	16,961.115 ppb	19,388.818 ppb	72.900 %
Concentration per Run 3	82.461 %	57.628 %	0.019 ppb	84,228.703 ppb	1,849.233 ppb	710.235 ppb	17,474.256 ppb	20,080.520 ppb	73.558 %
Concentration RSD	1.0 %	4.6 %	13.0 %	4.9 %	5.3 %	5.2 %	2.5 %	1.8 %	0.6 %

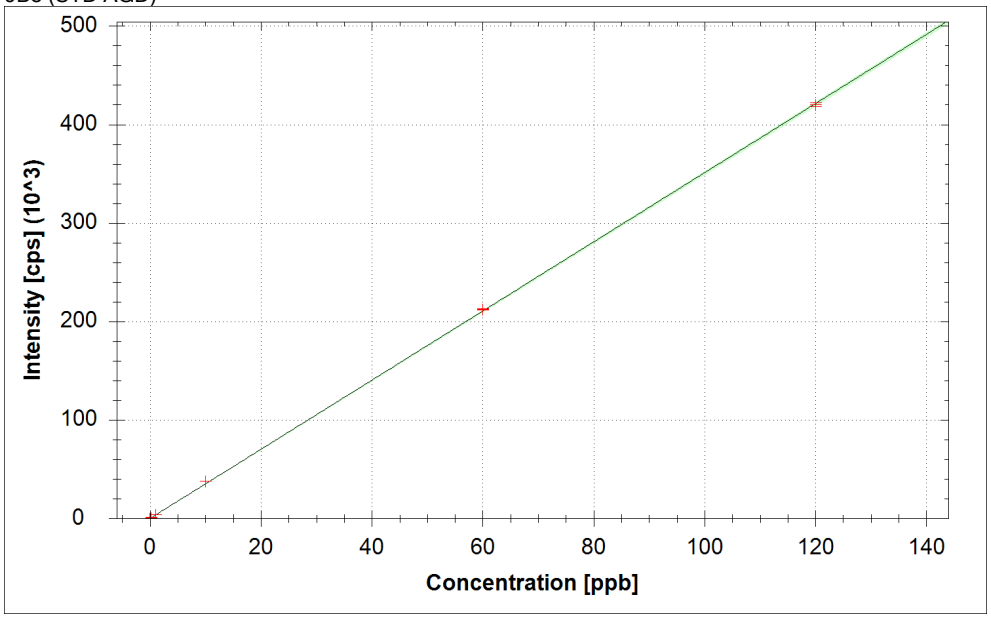
Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	12.285 ppb	6.391 ppb	51.607 ppb	3,269.071 ppb	0.140 ppb	1.127 ppb	0.454 ppb	2.812 ppb	77.896 %
Concentration per Run 1	12.570 ppb	6.365 ppb	52.273 ppb	3,296.999 ppb	0.143 ppb	1.101 ppb	0.465 ppb	2.851 ppb	75.233 %
Concentration per Run 2	11.888 ppb	6.255 ppb	50.655 ppb	3,239.344 ppb	0.130 ppb	1.053 ppb	0.422 ppb	2.726 ppb	78.208 %
Concentration per Run 3	12.398 ppb	6.552 ppb	51.892 ppb	3,270.871 ppb	0.146 ppb	1.228 ppb	0.474 ppb	2.860 ppb	80.246 %
Concentration RSD	2.9 %	2.4 %	1.6 %	0.9 %	5.9 %	8.0 %	6.2 %	2.7 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	16.275 ppb	0.955 ppb	186.626 ppb	2.826 ppb	67.985 %	-0.005 ppb	0.019 ppb	79.026 %	7.387 ppb
Concentration per Run 1	17.016 ppb	1.048 ppb	185.830 ppb	2.848 ppb	66.707 %	-0.004 ppb	0.020 ppb	75.579 %	7.492 ppb
Concentration per Run 2	15.735 ppb	0.640 ppb	180.274 ppb	2.714 ppb	68.183 %	-0.005 ppb	0.015 ppb	75.938 %	7.432 ppb
Concentration per Run 3	16.074 ppb	1.177 ppb	193.774 ppb	2.915 ppb	69.066 %	-0.006 ppb	0.022 ppb	85.563 %	7.236 ppb
Concentration RSD	4.1 %	29.3 %	3.6 %	3.6 %	1.8 %	20.0 %	20.1 %	7.2 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	8.126 ppb	83.370 %	92.014 %	0.037 ppb	0.519 ppb	68.355 %
Concentration per Run 1	7.752 ppb	82.584 %	87.916 %	0.028 ppb	0.518 ppb	67.335 %
Concentration per Run 2	8.312 ppb	81.504 %	91.386 %	0.043 ppb	0.513 ppb	67.987 %
Concentration per Run 3	8.316 ppb	86.022 %	96.739 %	0.040 ppb	0.526 ppb	69.742 %
Concentration RSD	4.0 %	2.8 %	4.8 %	20.9 %	1.3 %	1.8 %

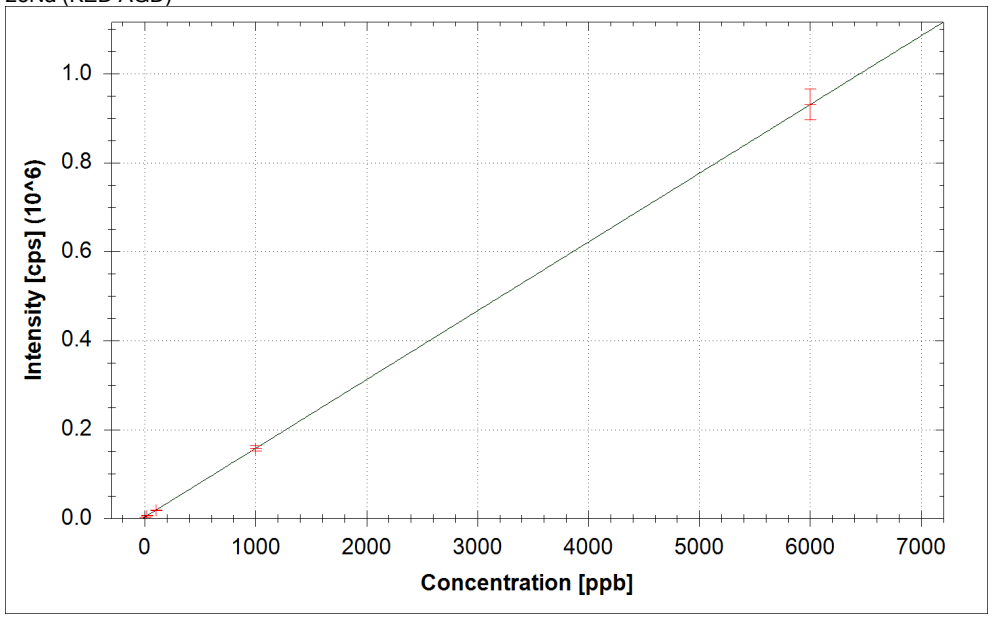
Calibration Curves:

9Be (STD AGD)



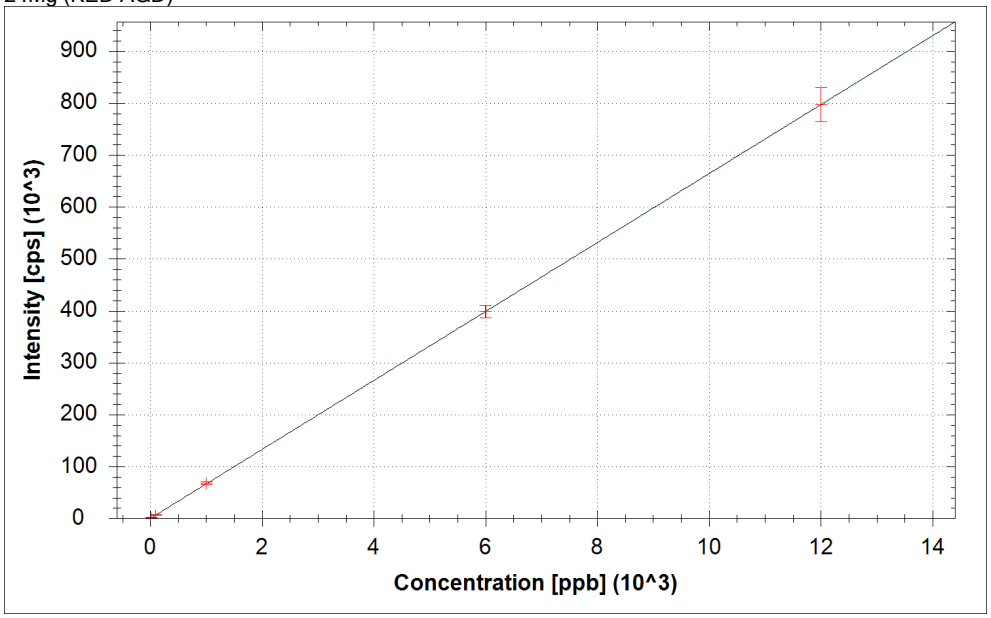
f(x) = 3509.5502*x + 21.7828
R² = 0.9999
BEC = 0.006 ppb
LoD = 0.0018 ppb

23Na (KED AGD)



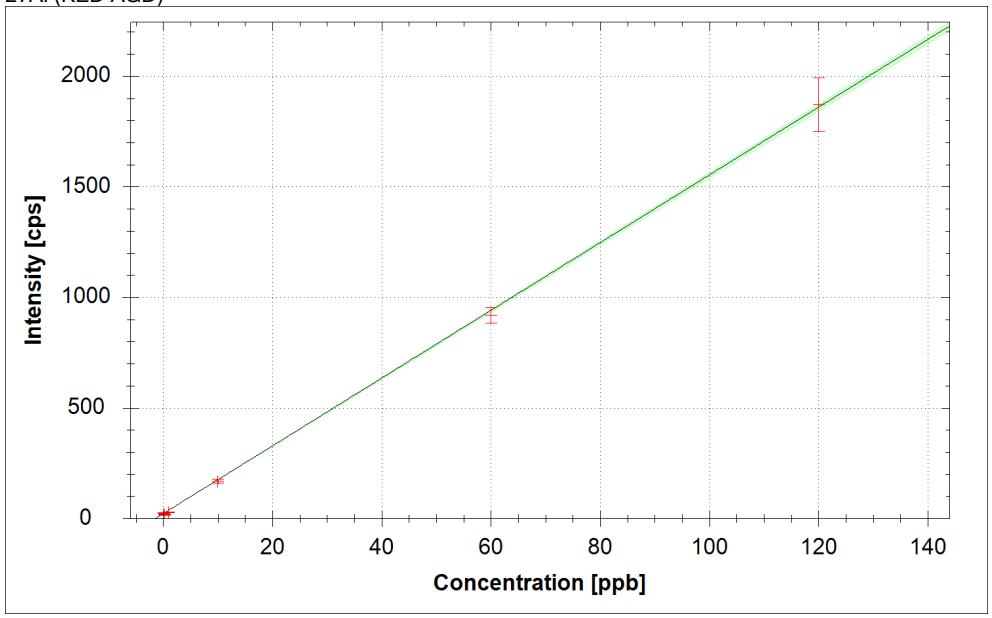
f(x) = 154.5763*x + 2923.4059
R² = 1.0000
BEC = 18.912 ppb
LoD = 1.6093 ppb

24Mg (KED AGD)



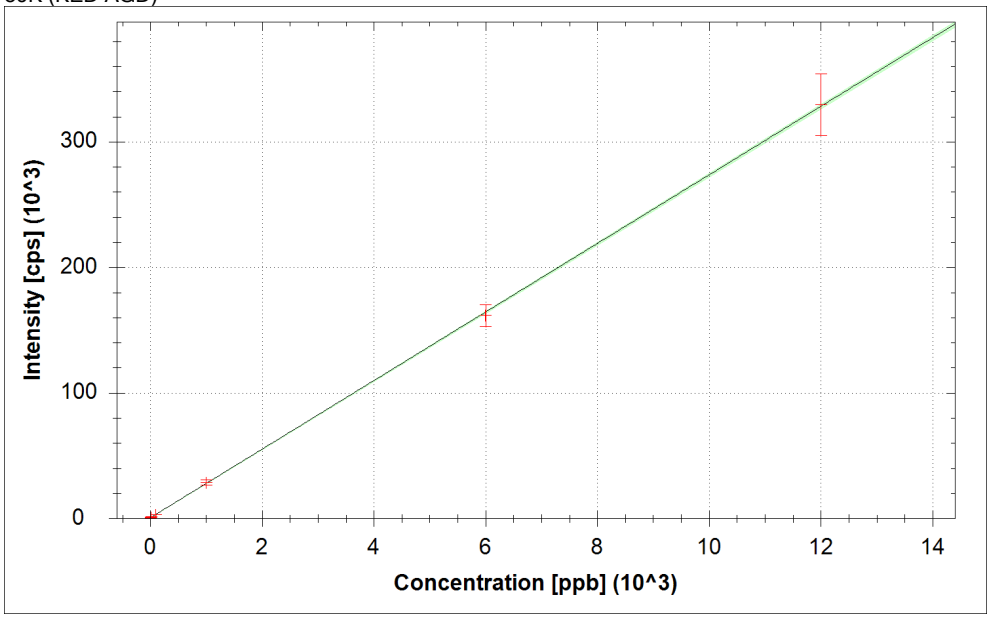
f(x) = 66.4060*x + 98.0910
R² = 1.0000
BEC = 1.477 ppb
LoD = 0.8360 ppb

27Al (KED AGD)



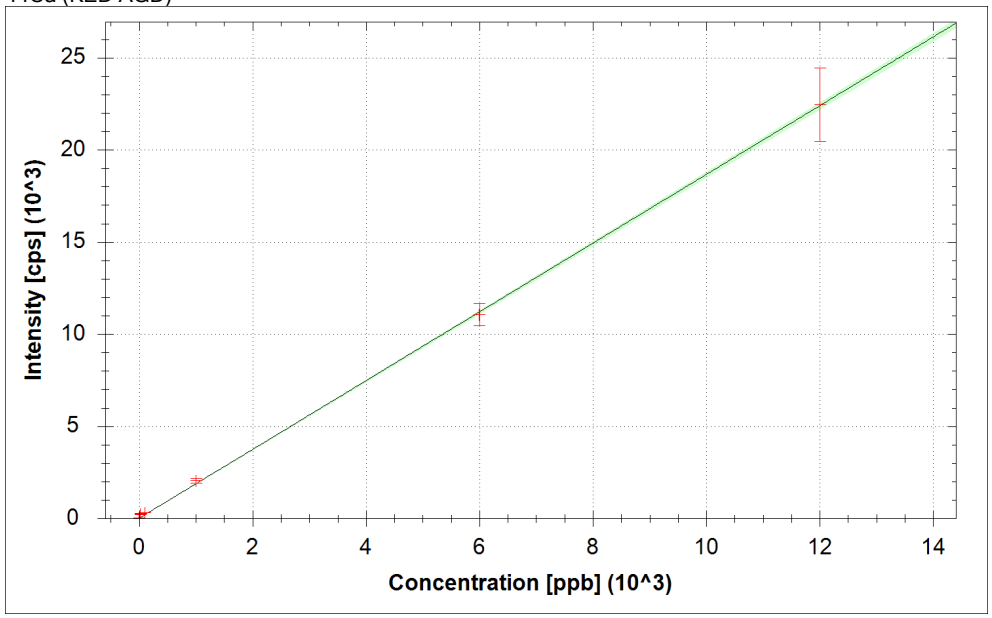
f(x) = 15.3078*x + 22.1450
R² = 0.9997
BEC = 1.447 ppb
LoD = 0.7109 ppb

39K (KED AGD)



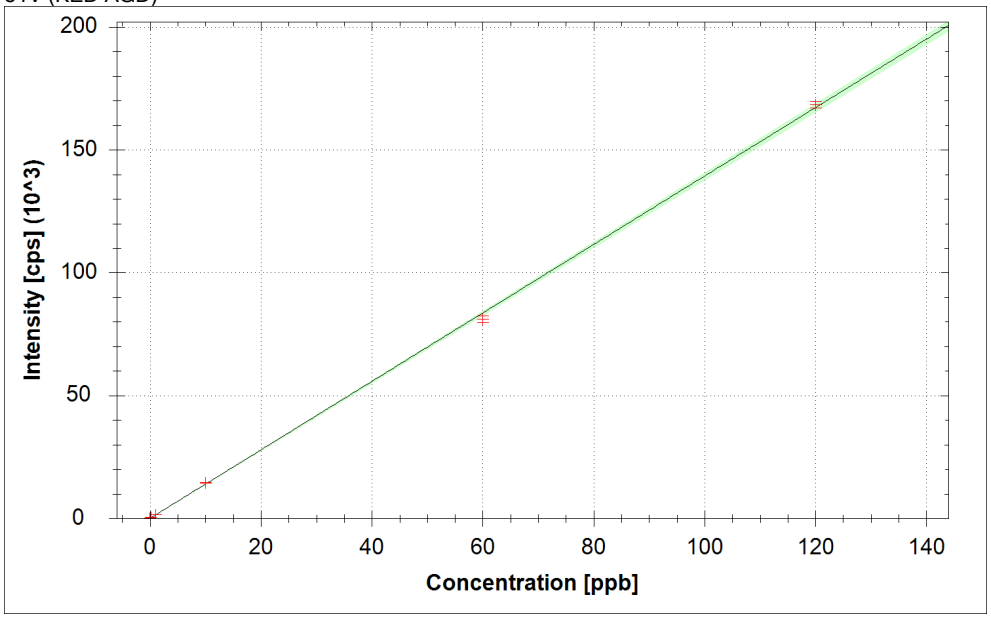
f(x) = 27.2989*x + 571.7623
R² = 0.9999
BEC = 20.945 ppb
LoD = 10.5386 ppb

44Ca (KED AGD)



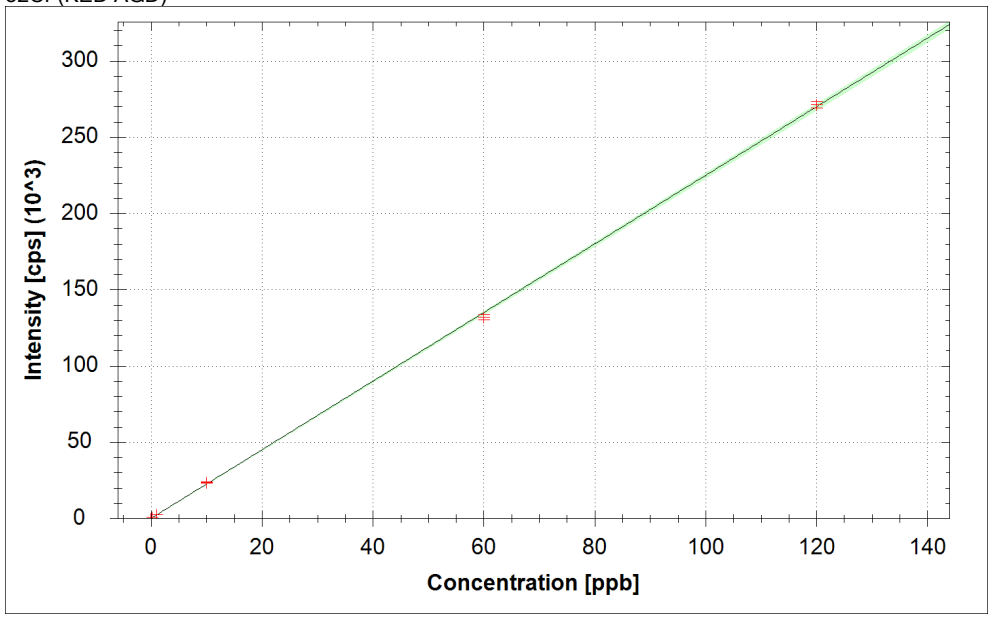
f(x) = 1.8647*x + 14.2828
R² = 0.9998
BEC = 7.659 ppb
LoD = 13.0293 ppb

51V (KED AGD)



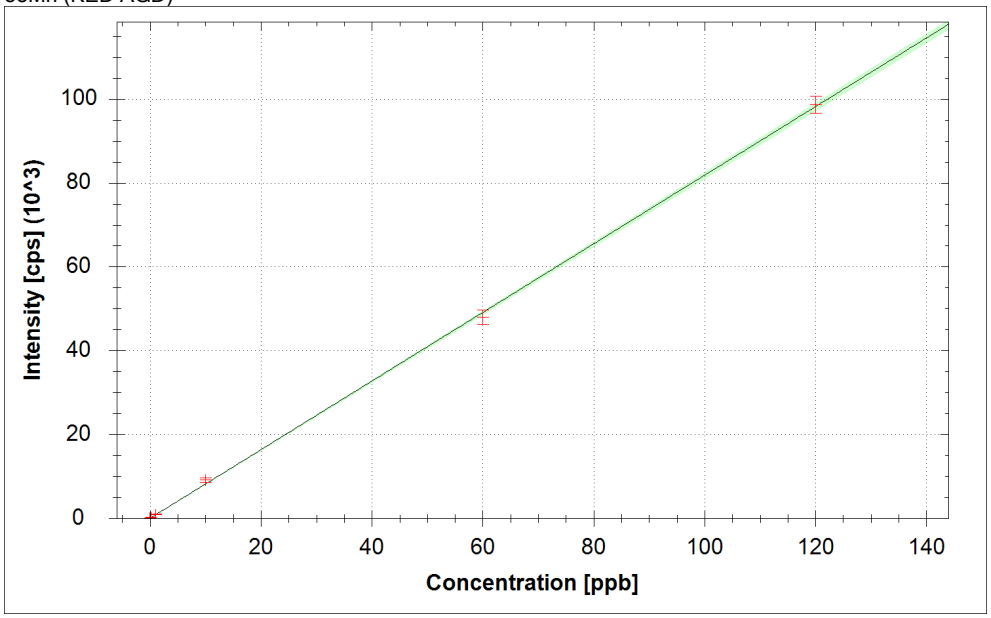
f(x) = 1392.3244*x + 62.0174
R² = 0.9996
BEC = 0.045 ppb
LoD = 0.0163 ppb

52Cr (KED AGD)



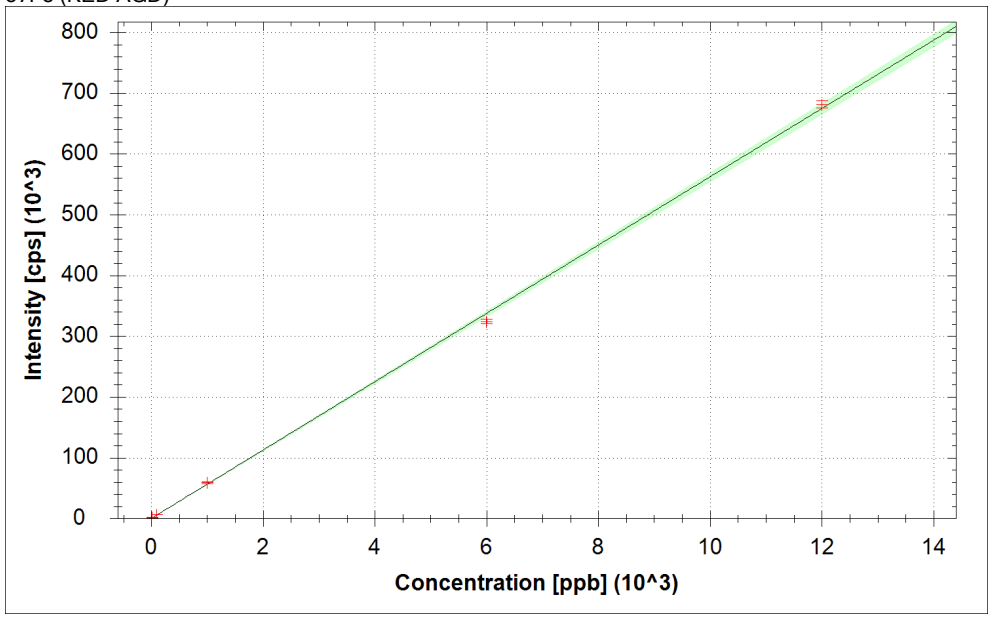
f(x) = 2248.5494*x + 72.0537
R² = 0.9998
BEC = 0.032 ppb
LoD = 0.0089 ppb

55Mn (KED AGD)



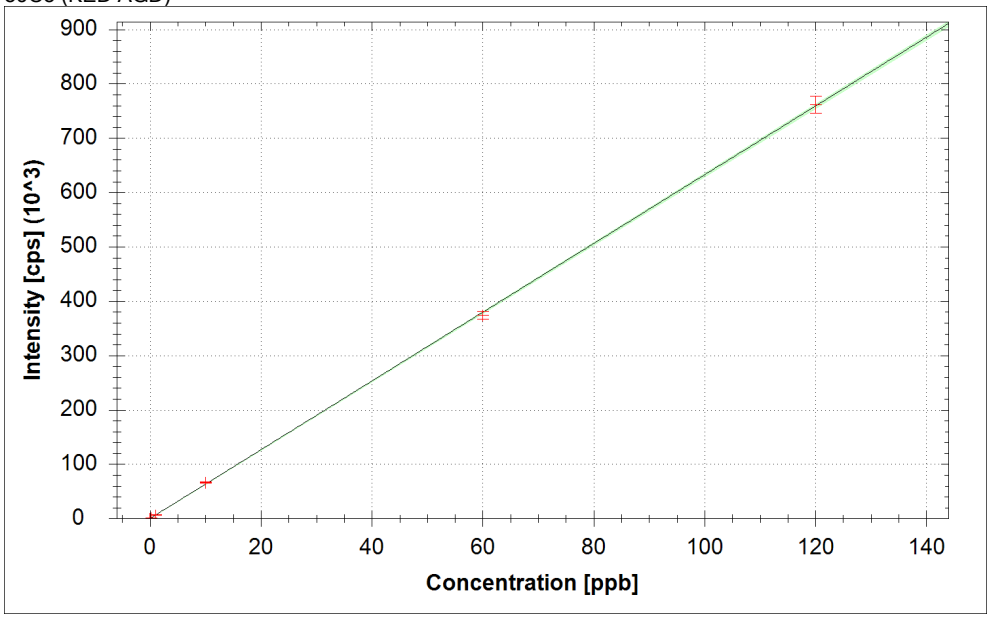
f(x) = 817.6661*x + 42.5160
R² = 0.9997
BEC = 0.052 ppb
LoD = 0.0432 ppb

57Fe (KED AGD)



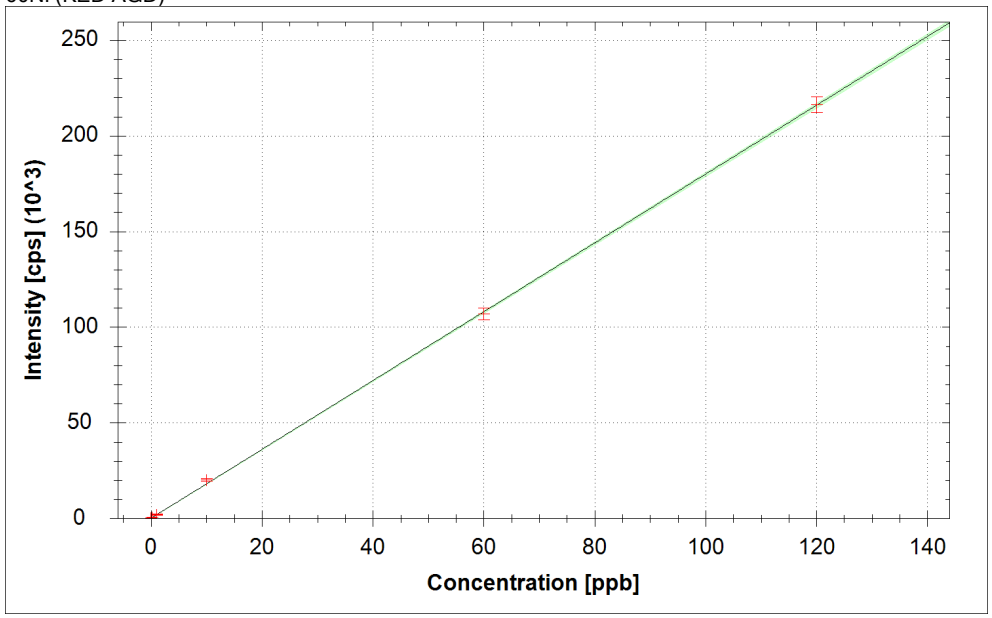
f(x) = 56.2015*x + 182.5780
R² = 0.9994
BEC = 3.249 ppb
LoD = 1.1108 ppb

59Co (KED AGD)



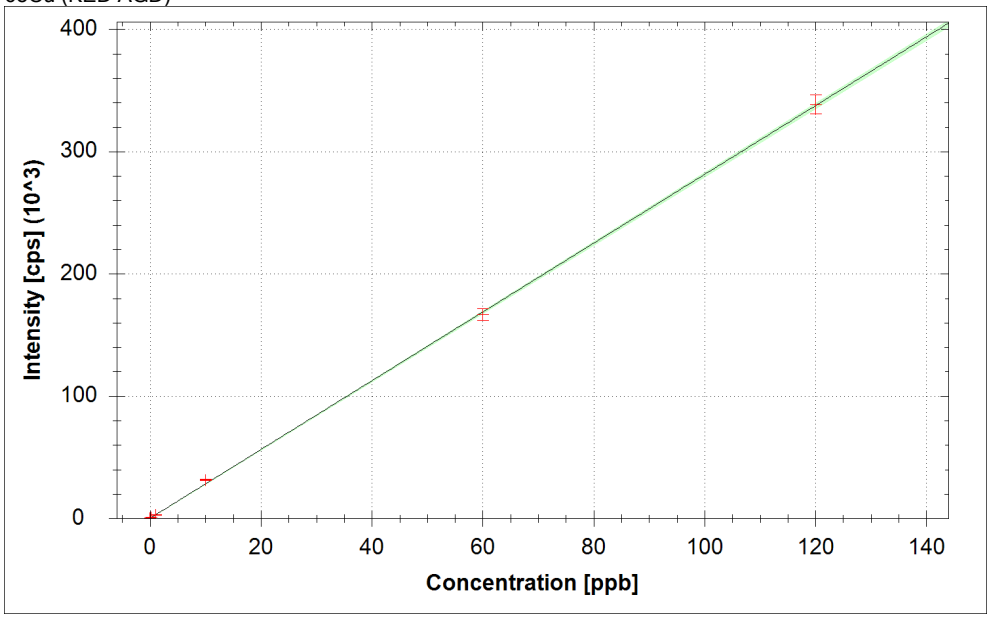
f(x) = 6324.0010*x + 2.2606
R² = 0.9999
BEC = 0.000 ppb
LoD = 0.0019 ppb

60Ni (KED AGD)



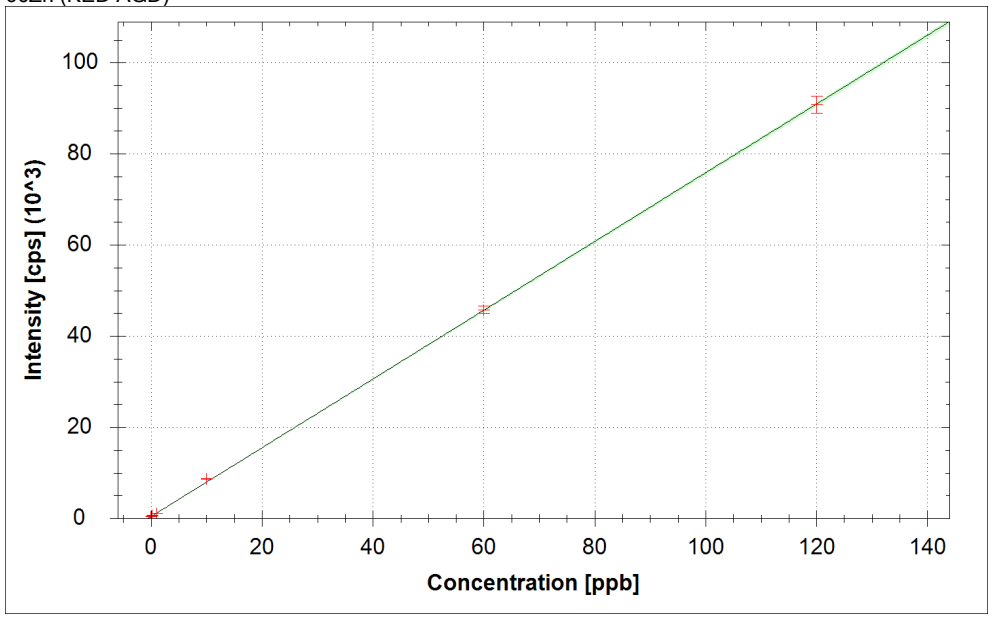
f(x) = 1797.9066*x + 113.0096
R² = 0.9999
BEC = 0.063 ppb
LoD = 0.0216 ppb

65Cu (KED AGD)



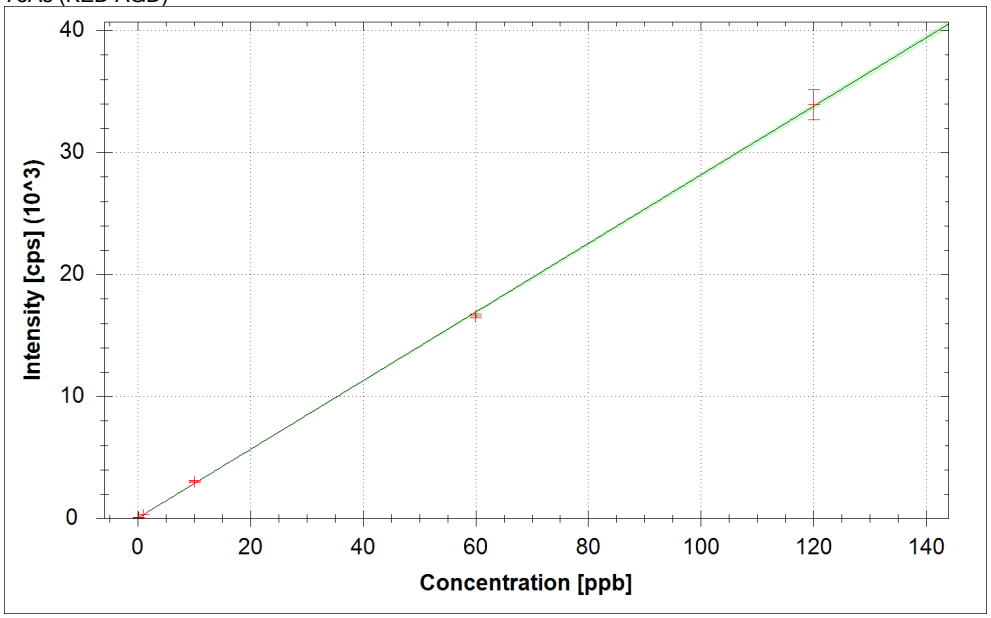
f(x) = 2810.6814*x + 171.7228
R² = 0.9998
BEC = 0.061 ppb
LoD = 0.0275 ppb

66Zn (KED AGD)



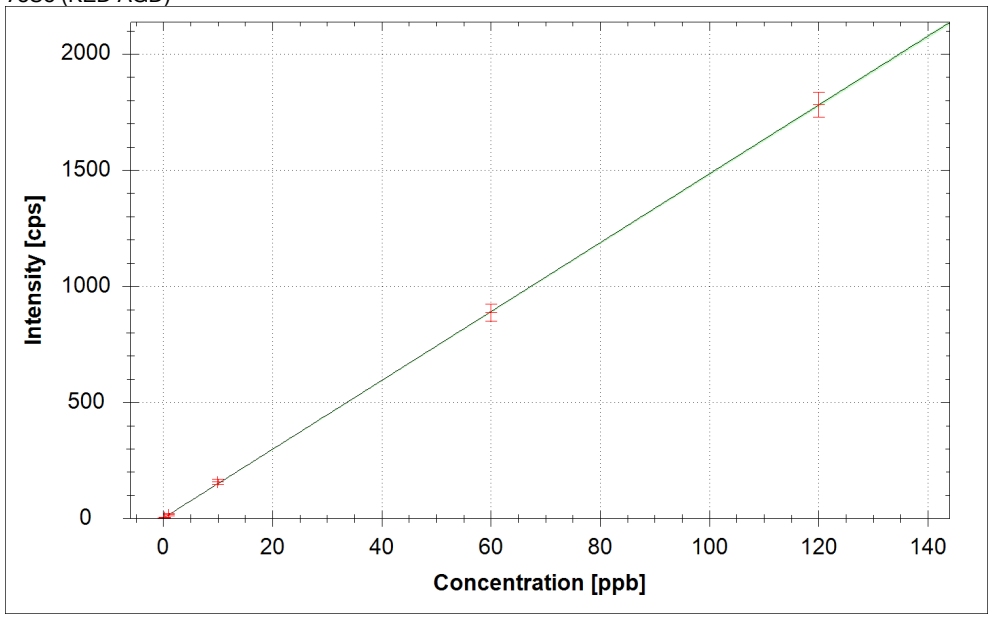
f(x) = 753.9687*x + 422.9575
R² = 0.9999
BEC = 0.561 ppb
LoD = 0.1023 ppb

75As (KED AGD)



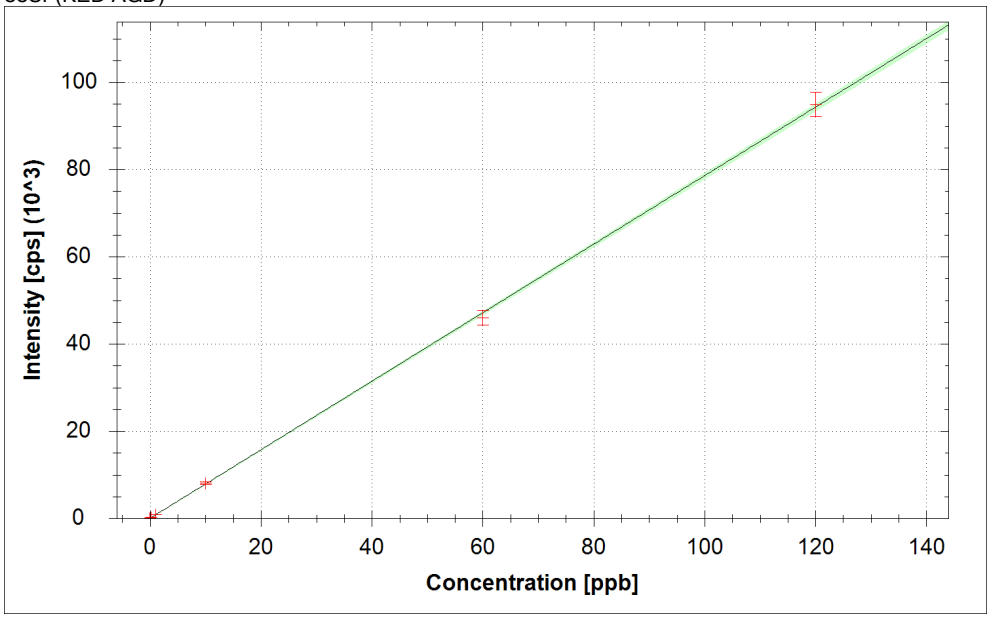
f(x) = 281.0697*x + 43.0042
R² = 0.9998
BEC = 0.153 ppb
LoD = 0.0674 ppb

78Se (KED AGD)



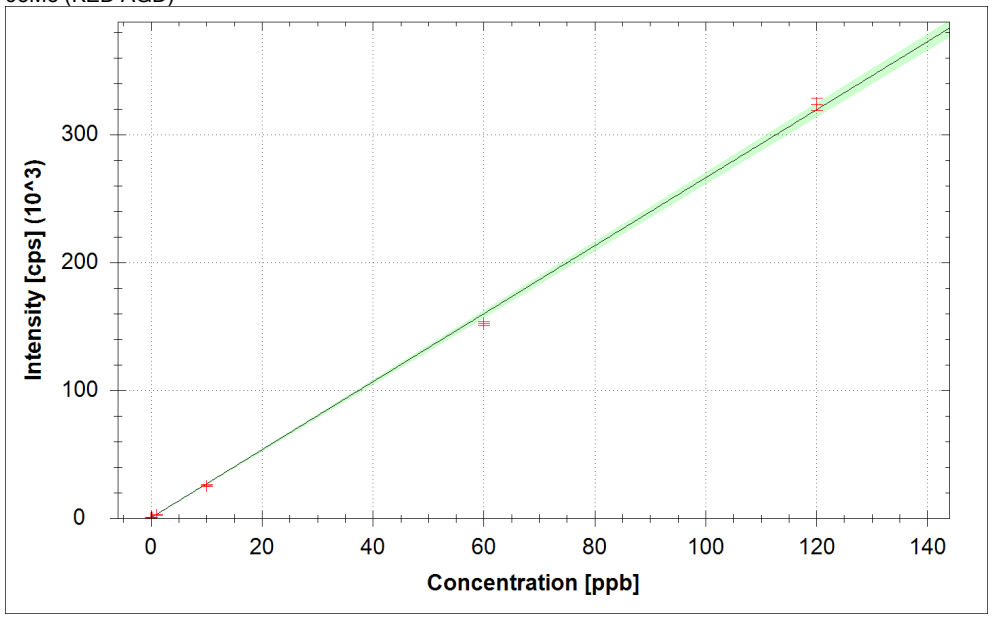
f(x) = 14.8190*x + 1.3051
R² = 1.0000
BEC = 0.088 ppb
LoD = 0.0305 ppb

88Sr (KED AGD)



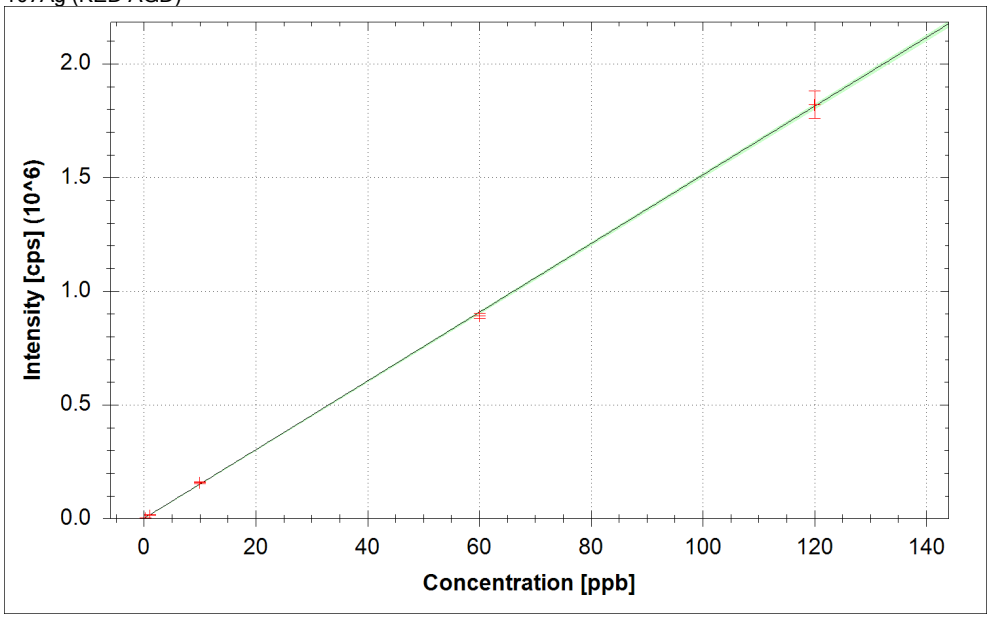
f(x) = 785.0700*x + 46.9164
R² = 0.9997
BEC = 0.060 ppb
LoD = 0.0067 ppb

95Mo (KED AGD)



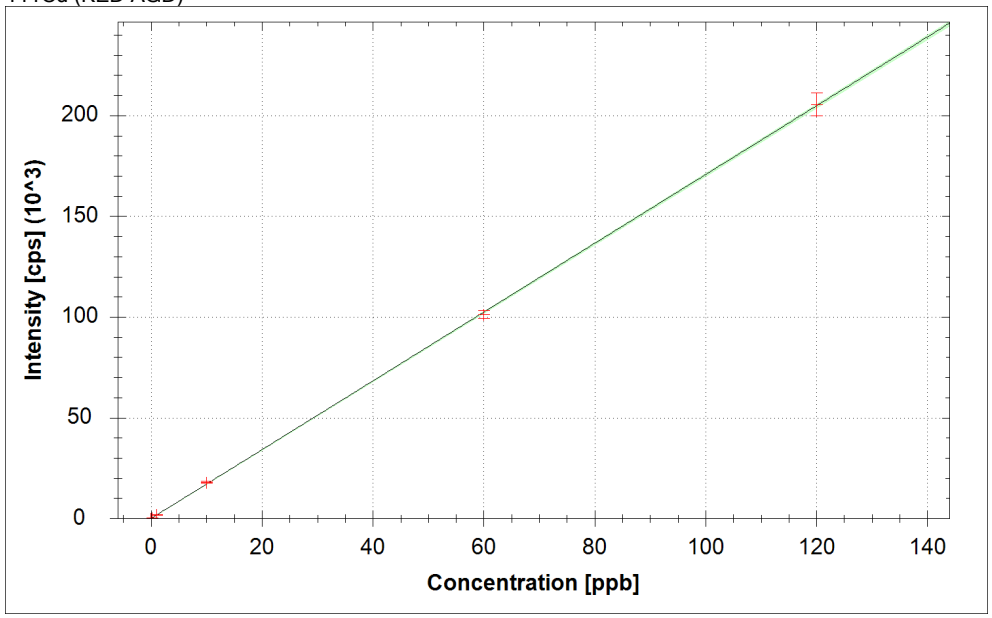
f(x) = 2657.7014*x + 487.7426
R² = 0.9991
BEC = 0.184 ppb
LoD = 0.1900 ppb

107Ag (KED AGD)



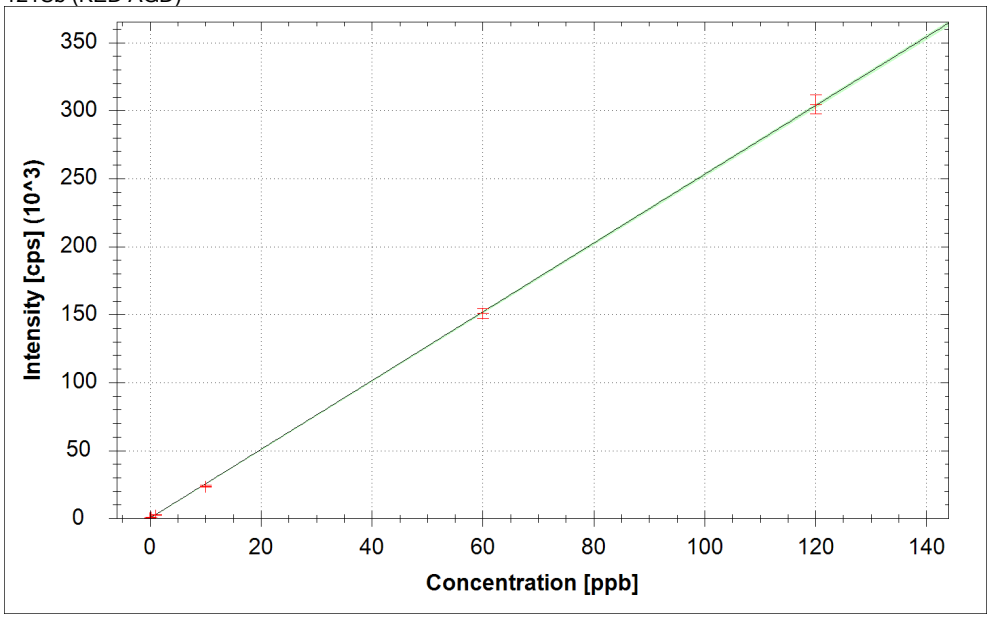
f(x) = 15106.4313*x + 18.9391
R² = 0.9999
BEC = 0.001 ppb
LoD = 0.0008 ppb

111Cd (KED AGD)



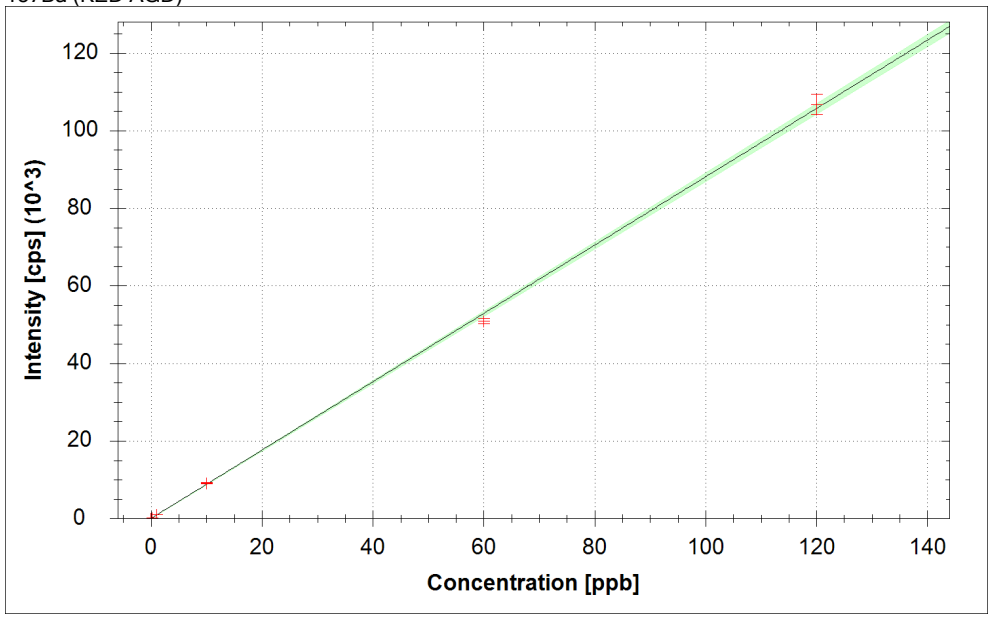
f(x) = 1706.5545*x + 0.9134
R² = 0.9999
BEC = 0.001 ppb
LoD = 0.0028 ppb

121Sb (KED AGD)



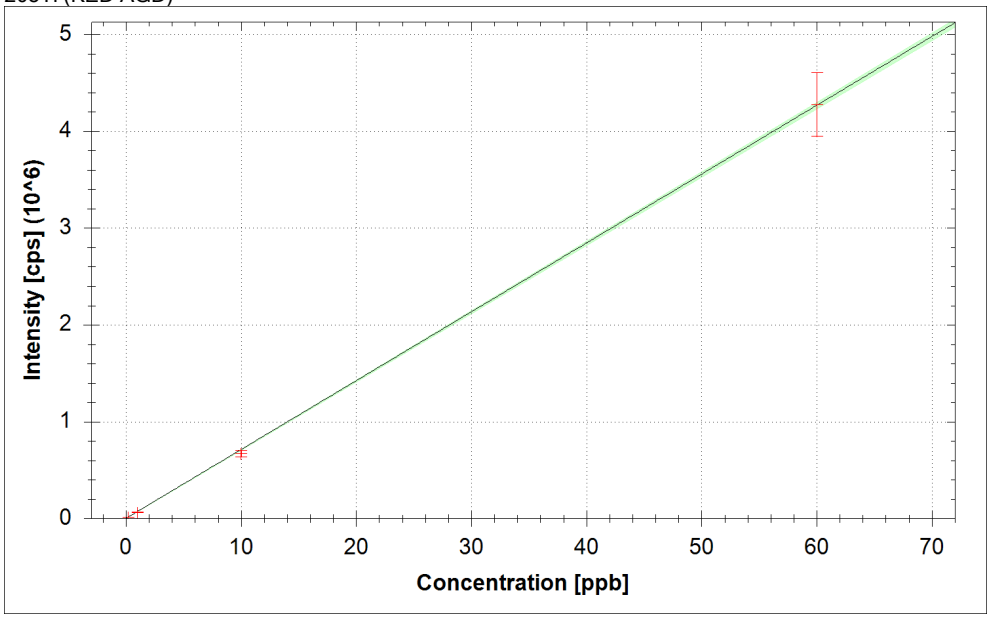
f(x) = 2527.3969*x + 242.3042
R² = 0.9999
BEC = 0.096 ppb
LoD = 0.0444 ppb

137Ba (KED AGD)



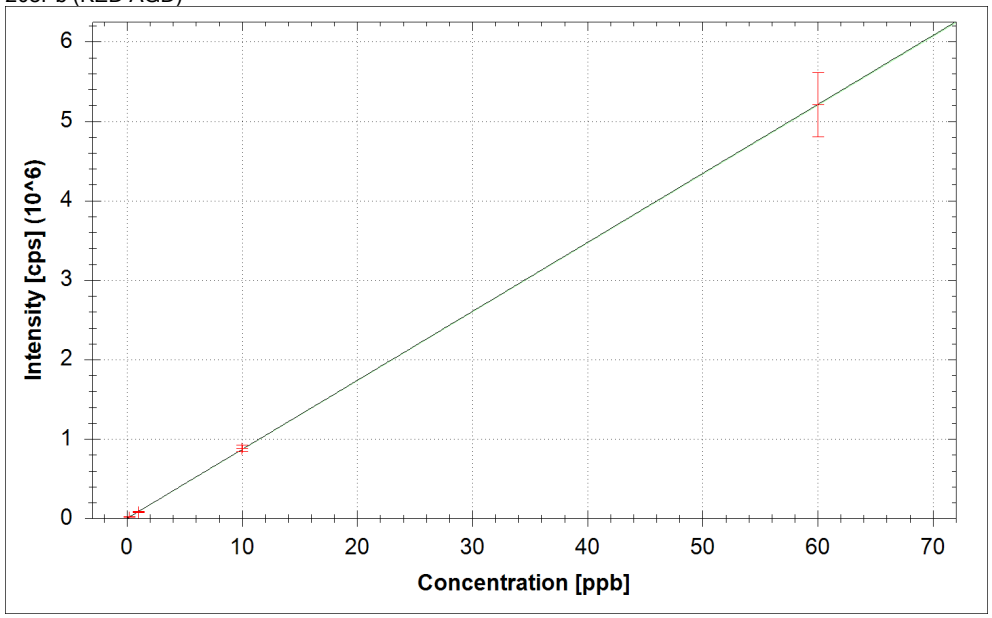
f(x) = 880.5640*x + 11.0622
R² = 0.9994
BEC = 0.013 ppb
LoD = 0.0125 ppb

205Tl (KED AGD)



f(x) = 71100.3768*x + 1074.8115
R² = 0.9998
BEC = 0.015 ppb
LoD = 0.0120 ppb

208Pb (KED AGD)



f(x) = 86818.7348*x + 721.7146
R² = 1.0000
BEC = 0.008 ppb
LoD = 0.0031 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 9/5/2023 8:29:13 PM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	100.032 %	0.6 %	
6Li (KED AGD)	103.747 %	0.9 %	
9Be (STD AGD)	0.216 ppb	4.4 %	0.200 ppb
23Na (KED AGD)	20.556 ppb	5.7 %	20.000 ppb
24Mg (KED AGD)	21.198 ppb	8.3 %	20.000 ppb
27Al (KED AGD)	-0.267 ppb	78.9 %	0.200 ppb
39K (KED AGD)	21.345 ppb	16.9 %	20.000 ppb
44Ca (KED AGD)	115.954 ppb	12.3 %	20.000 ppb
45Sc (STD AGD)	102.455 %	0.1 %	
51V (KED AGD)	0.243 ppb	13.3 %	0.200 ppb
52Cr (KED AGD)	0.270 ppb	13.0 %	0.200 ppb
55Mn (KED AGD)	0.278 ppb	29.8 %	0.200 ppb
57Fe (KED AGD)	21.030 ppb	7.2 %	20.000 ppb
59Co (KED AGD)	0.215 ppb	2.6 %	0.200 ppb
60Ni (KED AGD)	0.291 ppb	9.5 %	0.200 ppb
65Cu (KED AGD)	0.255 ppb	10.5 %	0.200 ppb
66Zn (KED AGD)	0.267 ppb	18.8 %	0.200 ppb
74Ge (KED AGD)	98.349 %	5.7 %	
75As (KED AGD)	0.204 ppb	14.1 %	0.200 ppb
78Se (KED AGD)	0.171 ppb	41.9 %	0.200 ppb
88Sr (KED AGD)	0.243 ppb	3.4 %	0.200 ppb
95Mo (KED AGD)	0.139 ppb	42.0 %	0.200 ppb
103Rh (KED AGD)	101.513 %	2.5 %	
107Ag (KED AGD)	0.212 ppb	3.9 %	0.200 ppb
111Cd (KED AGD)	0.197 ppb	4.9 %	0.200 ppb
115In (KED AGD)	101.343 %	5.5 %	
121Sb (KED AGD)	0.169 ppb	12.1 %	0.200 ppb
137Ba (KED AGD)	0.184 ppb	11.0 %	0.200 ppb
159Tb (KED AGD)	101.577 %	3.2 %	
175Lu (KED AGD)	99.791 %	4.0 %	
205Tl (KED AGD)	0.165 ppb	9.7 %	0.200 ppb
208Pb (KED AGD)	0.188 ppb	8.3 %	0.200 ppb
209Bi (KED AGD)	103.094 %	6.2 %	

Standards:

Analysis Index: 5
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 9/5/2023 8:33:51 PM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	100.309 %	1.0 %	
6Li (KED AGD)	100.696 %	3.1 %	
9Be (STD AGD)	1.032 ppb	1.5 %	1.000 ppb
23Na (KED AGD)	98.606 ppb	2.7 %	100.000 ppb
24Mg (KED AGD)	96.597 ppb	1.4 %	100.000 ppb
27Al (KED AGD)	0.373 ppb	34.3 %	1.000 ppb
39K (KED AGD)	88.749 ppb	6.0 %	100.000 ppb
44Ca (KED AGD)	152.510 ppb	1.4 %	100.000 ppb
45Sc (STD AGD)	103.122 %	0.7 %	
51V (KED AGD)	1.017 ppb	4.4 %	1.000 ppb
52Cr (KED AGD)	1.011 ppb	4.5 %	1.000 ppb
55Mn (KED AGD)	1.059 ppb	9.5 %	1.000 ppb
57Fe (KED AGD)	101.630 ppb	3.7 %	100.000 ppb
59Co (KED AGD)	0.963 ppb	3.5 %	1.000 ppb
60Ni (KED AGD)	1.040 ppb	12.2 %	1.000 ppb
65Cu (KED AGD)	0.949 ppb	5.1 %	1.000 ppb
66Zn (KED AGD)	0.925 ppb	7.3 %	1.000 ppb
74Ge (KED AGD)	102.401 %	4.7 %	
75As (KED AGD)	0.928 ppb	6.0 %	1.000 ppb
78Se (KED AGD)	1.033 ppb	32.9 %	1.000 ppb
88Sr (KED AGD)	0.965 ppb	2.4 %	1.000 ppb
95Mo (KED AGD)	0.835 ppb	9.2 %	1.000 ppb
103Rh (KED AGD)	102.170 %	1.7 %	
107Ag (KED AGD)	0.970 ppb	3.6 %	1.000 ppb
111Cd (KED AGD)	0.996 ppb	1.9 %	1.000 ppb
115In (KED AGD)	101.367 %	3.5 %	
121Sb (KED AGD)	0.896 ppb	4.6 %	1.000 ppb
137Ba (KED AGD)	1.048 ppb	2.1 %	1.000 ppb
159Tb (KED AGD)	101.355 %	0.9 %	
175Lu (KED AGD)	101.861 %	4.5 %	
205Tl (KED AGD)	0.831 ppb	5.7 %	1.000 ppb
208Pb (KED AGD)	0.915 ppb	6.0 %	1.000 ppb
209Bi (KED AGD)	102.918 %	4.0 %	

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 9/5/2023 8:38:29 PM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	98.703 %	1.2 %	
6Li (KED AGD)	100.630 %	3.1 %	
9Be (STD AGD)	10.783 ppb	0.3 %	10.000 ppb
23Na (KED AGD)	1,002.724 ppb	3.8 %	1,000.000 ppb
24Mg (KED AGD)	1,019.451 ppb	3.4 %	1,000.000 ppb
27Al (KED AGD)	9.527 ppb	6.9 %	10.000 ppb
39K (KED AGD)	1,020.573 ppb	7.7 %	1,000.000 ppb
44Ca (KED AGD)	1,088.252 ppb	6.3 %	1,000.000 ppb
45Sc (STD AGD)	98.920 %	1.1 %	
51V (KED AGD)	10.410 ppb	1.1 %	10.000 ppb
52Cr (KED AGD)	10.386 ppb	1.4 %	10.000 ppb
55Mn (KED AGD)	11.120 ppb	6.5 %	10.000 ppb
57Fe (KED AGD)	1,039.423 ppb	2.9 %	1,000.000 ppb
59Co (KED AGD)	10.481 ppb	1.8 %	10.000 ppb
60Ni (KED AGD)	11.082 ppb	3.2 %	10.000 ppb
65Cu (KED AGD)	11.060 ppb	1.6 %	10.000 ppb
66Zn (KED AGD)	10.938 ppb	1.5 %	10.000 ppb
74Ge (KED AGD)	98.733 %	4.5 %	
75As (KED AGD)	10.653 ppb	2.9 %	10.000 ppb
78Se (KED AGD)	10.525 ppb	7.9 %	10.000 ppb
88Sr (KED AGD)	10.251 ppb	3.7 %	10.000 ppb
95Mo (KED AGD)	9.468 ppb	3.5 %	10.000 ppb
103Rh (KED AGD)	99.773 %	4.2 %	
107Ag (KED AGD)	10.424 ppb	2.6 %	10.000 ppb
111Cd (KED AGD)	10.492 ppb	2.6 %	10.000 ppb
115In (KED AGD)	99.425 %	6.4 %	
121Sb (KED AGD)	9.264 ppb	2.5 %	10.000 ppb
137Ba (KED AGD)	10.324 ppb	1.6 %	10.000 ppb
159Tb (KED AGD)	100.041 %	4.7 %	
175Lu (KED AGD)	99.391 %	5.2 %	
205Tl (KED AGD)	9.390 ppb	4.7 %	10.000 ppb
208Pb (KED AGD)	10.107 ppb	4.8 %	10.000 ppb
209Bi (KED AGD)	97.568 %	4.0 %	

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 9/5/2023 8:43:07 PM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	94.409 %	1.3 %	
6Li (KED AGD)	97.314 %	2.6 %	
9Be (STD AGD)	60.466 ppb	0.2 %	60.000 ppb
23Na (KED AGD)	5,999.567 ppb	3.7 %	6,000.000 ppb
24Mg (KED AGD)	5,995.756 ppb	3.1 %	6,000.000 ppb
27Al (KED AGD)	58.541 ppb	4.1 %	60.000 ppb
39K (KED AGD)	5,895.967 ppb	5.4 %	6,000.000 ppb
44Ca (KED AGD)	5,921.418 ppb	5.5 %	6,000.000 ppb
45Sc (STD AGD)	108.367 %	0.9 %	
51V (KED AGD)	58.171 ppb	1.8 %	60.000 ppb
52Cr (KED AGD)	58.653 ppb	1.2 %	60.000 ppb
55Mn (KED AGD)	58.634 ppb	3.6 %	60.000 ppb
57Fe (KED AGD)	5,762.784 ppb	1.2 %	6,000.000 ppb
59Co (KED AGD)	59.087 ppb	2.0 %	60.000 ppb
60Ni (KED AGD)	59.399 ppb	2.9 %	60.000 ppb
65Cu (KED AGD)	59.194 ppb	2.8 %	60.000 ppb
66Zn (KED AGD)	60.156 ppb	1.7 %	60.000 ppb
74Ge (KED AGD)	99.361 %	5.4 %	
75As (KED AGD)	58.865 ppb	1.0 %	60.000 ppb
78Se (KED AGD)	59.628 ppb	4.1 %	60.000 ppb
88Sr (KED AGD)	58.446 ppb	3.5 %	60.000 ppb
95Mo (KED AGD)	57.052 ppb	1.1 %	60.000 ppb
103Rh (KED AGD)	96.604 %	2.3 %	
107Ag (KED AGD)	58.951 ppb	1.2 %	60.000 ppb
111Cd (KED AGD)	59.224 ppb	2.0 %	60.000 ppb
115In (KED AGD)	98.253 %	6.6 %	
121Sb (KED AGD)	59.503 ppb	2.3 %	60.000 ppb
137Ba (KED AGD)	57.654 ppb	1.3 %	60.000 ppb
159Tb (KED AGD)	101.271 %	2.8 %	
175Lu (KED AGD)	100.673 %	3.9 %	
205Tl (KED AGD)	60.105 ppb	7.7 %	60.000 ppb
208Pb (KED AGD)	59.984 ppb	7.7 %	60.000 ppb
209Bi (KED AGD)	100.172 %	7.8 %	

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 9/5/2023 8:47:47 PM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	91.667 %	1.3 %	
6Li (KED AGD)	95.026 %	1.4 %	
9Be (STD AGD)	119.702 ppb	0.4 %	120.000 ppb
23Na (KED AGD)	12,436.000 ppb	3.8 %	12,000.000 ppb
24Mg (KED AGD)	12,000.527 ppb	4.1 %	12,000.000 ppb
27Al (KED AGD)	120.775 ppb	6.6 %	120.000 ppb
39K (KED AGD)	12,050.394 ppb	7.5 %	12,000.000 ppb
44Ca (KED AGD)	12,031.339 ppb	8.8 %	12,000.000 ppb
45Sc (STD AGD)	114.416 %	0.6 %	
51V (KED AGD)	120.880 ppb	0.8 %	120.000 ppb
52Cr (KED AGD)	120.641 ppb	0.8 %	120.000 ppb
55Mn (KED AGD)	120.589 ppb	2.0 %	120.000 ppb
57Fe (KED AGD)	12,115.308 ppb	0.9 %	12,000.000 ppb
59Co (KED AGD)	120.417 ppb	2.1 %	120.000 ppb
60Ni (KED AGD)	120.210 ppb	1.9 %	120.000 ppb
65Cu (KED AGD)	120.315 ppb	2.3 %	120.000 ppb
66Zn (KED AGD)	119.844 ppb	2.1 %	120.000 ppb
74Ge (KED AGD)	94.272 %	4.9 %	
75As (KED AGD)	120.514 ppb	3.6 %	120.000 ppb
78Se (KED AGD)	120.142 ppb	3.0 %	120.000 ppb
88Sr (KED AGD)	120.756 ppb	2.9 %	120.000 ppb
95Mo (KED AGD)	121.520 ppb	1.5 %	120.000 ppb
103Rh (KED AGD)	93.391 %	3.1 %	
107Ag (KED AGD)	120.489 ppb	3.3 %	120.000 ppb
111Cd (KED AGD)	120.347 ppb	2.8 %	120.000 ppb
115In (KED AGD)	95.001 %	7.5 %	
121Sb (KED AGD)	120.311 ppb	2.3 %	120.000 ppb
137Ba (KED AGD)	121.146 ppb	2.5 %	120.000 ppb
159Tb (KED AGD)	98.971 %	3.5 %	
175Lu (KED AGD)	100.448 %	5.4 %	
205Tl (KED AGD)	127.541 ppb	5.3 %	120.000 ppb
208Pb (KED AGD)	130.103 ppb	6.6 %	120.000 ppb
209Bi (KED AGD)	93.763 %	4.8 %	

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	1	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	9/5/2023 8:15:18 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.285 %	101.757 %	0.002 ppb	5.579 ppb	0.975 ppb	-0.005 ppb	7.421 ppb	1.045 ppb	101.224 %
Concentration per Run 1	100.749 %	101.161 %	0.001 ppb	6.856 ppb	0.540 ppb	0.176 ppb	7.159 ppb	6.494 ppb	101.196 %
Concentration per Run 2	100.927 %	101.658 %	0.003 ppb	5.186 ppb	0.988 ppb	0.093 ppb	8.756 ppb	-1.766 ppb	101.573 %
Concentration per Run 3	99.179 %	102.454 %	0.002 ppb	4.695 ppb	1.399 ppb	-0.283 ppb	6.349 ppb	-1.595 ppb	100.902 %
Concentration RSD	1.0 %	0.6 %	38.1 %	20.3 %	44.0 %	5,407.3 %	16.5 %	451.8 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.002 ppb	0.036 ppb	0.150 ppb	9.149 ppb	0.006 ppb	0.168 ppb	0.194 ppb	0.765 ppb	98.392 %
Concentration per Run 1	0.010 ppb	0.041 ppb	0.108 ppb	9.525 ppb	0.002 ppb	0.199 ppb	0.211 ppb	0.778 ppb	95.055 %
Concentration per Run 2	-0.016 ppb	0.029 ppb	0.140 ppb	8.948 ppb	0.009 ppb	0.184 ppb	0.183 ppb	0.747 ppb	102.283 %
Concentration per Run 3	0.013 ppb	0.038 ppb	0.203 ppb	8.974 ppb	0.007 ppb	0.121 ppb	0.189 ppb	0.769 ppb	97.839 %
Concentration RSD	741.0 %	17.7 %	32.2 %	3.6 %	61.9 %	24.6 %	7.6 %	2.1 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.027 ppb	0.045 ppb	0.006 ppb	0.381 ppb	97.910 %	0.003 ppb	0.000 ppb	97.184 %	0.068 ppb
Concentration per Run 1	-0.010 ppb	0.051 ppb	0.010 ppb	0.186 ppb	97.087 %	0.002 ppb	0.000 ppb	96.940 %	0.048 ppb
Concentration per Run 2	0.033 ppb	0.016 ppb	0.005 ppb	0.389 ppb	97.878 %	0.003 ppb	0.000 ppb	97.983 %	0.079 ppb
Concentration per Run 3	0.059 ppb	0.067 ppb	0.003 ppb	0.568 ppb	98.763 %	0.004 ppb	0.000 ppb	96.630 %	0.077 ppb
Concentration RSD	126.5 %	58.8 %	60.1 %	50.2 %	0.9 %	26.8 %	1.5 %	0.7 %	25.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.027 ppb	98.555 %	96.540 %	0.007 ppb	0.013 ppb	122.080 %
Concentration per Run 1	0.026 ppb	98.234 %	93.805 %	-0.001 ppb	0.008 ppb	154.473 %
Concentration per Run 2	0.033 ppb	99.352 %	98.023 %	0.011 ppb	0.016 ppb	108.630 %
Concentration per Run 3	0.022 ppb	98.078 %	97.792 %	0.013 ppb	0.015 ppb	103.138 %
Concentration RSD	20.5 %	0.7 %	2.5 %	103.4 %	36.1 %	23.1 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	2	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CAL LOT #M22-1040	Rack	0		
Analysis started at:	9/5/2023 8:19:55 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.153 %	103.581 %	0.005 ppb	4.656 ppb	0.892 ppb	-0.013 ppb	8.773 ppb	-1.163 ppb	102.057 %
Concentration per Run 1	101.080 %	98.873 %	0.006 ppb	5.037 ppb	1.304 ppb	-0.148 ppb	6.951 ppb	0.150 ppb	103.187 %
Concentration per Run 2	100.275 %	103.349 %	0.006 ppb	4.535 ppb	0.885 ppb	0.008 ppb	8.356 ppb	-2.390 ppb	101.952 %
Concentration per Run 3	99.103 %	108.521 %	0.002 ppb	4.396 ppb	0.488 ppb	0.099 ppb	11.012 ppb	-1.249 ppb	101.033 %
Concentration RSD	1.0 %	4.7 %	46.4 %	7.2 %	45.7 %	932.7 %	23.5 %	109.4 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.008 ppb	0.021 ppb	0.101 ppb	5.160 ppb	0.007 ppb	0.179 ppb	0.175 ppb	0.804 ppb	98.522 %
Concentration per Run 1	0.001 ppb	0.002 ppb	0.145 ppb	5.501 ppb	0.010 ppb	0.204 ppb	0.191 ppb	0.857 ppb	93.572 %
Concentration per Run 2	0.018 ppb	0.036 ppb	0.071 ppb	4.978 ppb	0.011 ppb	0.176 ppb	0.176 ppb	0.729 ppb	98.203 %
Concentration per Run 3	0.005 ppb	0.026 ppb	0.088 ppb	5.001 ppb	0.001 ppb	0.157 ppb	0.157 ppb	0.827 ppb	103.791 %
Concentration RSD	111.1 %	81.6 %	38.6 %	5.7 %	79.7 %	13.2 %	9.6 %	8.3 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.004 ppb	0.030 ppb	0.003 ppb	0.102 ppb	100.528 %	0.003 ppb	0.000 ppb	101.341 %	0.040 ppb
Concentration per Run 1	-0.045 ppb	0.023 ppb	0.005 ppb	-0.004 ppb	97.227 %	0.004 ppb	0.001 ppb	92.423 %	0.051 ppb
Concentration per Run 2	0.019 ppb	-0.008 ppb	0.005 ppb	0.112 ppb	101.045 %	0.001 ppb	0.000 ppb	101.811 %	0.025 ppb
Concentration per Run 3	0.016 ppb	0.076 ppb	-0.001 ppb	0.197 ppb	103.311 %	0.002 ppb	-0.001 ppb	109.790 %	0.044 ppb
Concentration RSD	993.4 %	140.3 %	112.0 %	99.0 %	3.1 %	61.7 %	302.2 %	8.6 %	34.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.028 ppb	101.751 %	100.322 %	0.004 ppb	0.014 ppb	100.745 %
Concentration per Run 1	0.048 ppb	95.199 %	93.491 %	0.002 ppb	0.016 ppb	96.484 %
Concentration per Run 2	0.017 ppb	103.409 %	100.038 %	0.004 ppb	0.013 ppb	100.476 %
Concentration per Run 3	0.019 ppb	106.644 %	107.437 %	0.006 ppb	0.015 ppb	105.274 %
Concentration RSD	62.1 %	5.8 %	7.0 %	55.7 %	10.4 %	4.4 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	3	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Blank WKP ICPMSQ	Rack	4		
Analysis started at:	9/5/2023 8:24:31 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.1 %	0.0 %	0.2 %	0.2 %	0.2 %	0.6 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.1 %	0.1 %	0.3 %	0.1 %	1.7 %	0.1 %	0.1 %	0.1 %	0.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration RSD	0.1 %	0.1 %	0.0 %	0.3 %	0.0 %	0.2 %	1.7 %	0.1 %	0.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.3 %	0.0 %	0.0 %	0.3 %	0.1 %	0.1 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	4	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	9/5/2023 8:29:13 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.032 %	103.747 %	0.216 ppb	20.556 ppb	21.198 ppb	-0.267 ppb	21.345 ppb	115.954 ppb	102.455 %
Concentration per Run 1	100.662 %	102.752 %	0.219 ppb	19.708 ppb	19.583 ppb	-0.491 ppb	19.353 ppb	100.049 ppb	102.450 %
Concentration per Run 2	100.035 %	103.846 %	0.206 ppb	20.072 ppb	20.936 ppb	-0.071 ppb	25.513 ppb	120.312 ppb	102.593 %
Concentration per Run 3	99.400 %	104.642 %	0.224 ppb	21.887 ppb	23.076 ppb	-0.240 ppb	19.171 ppb	127.501 ppb	102.323 %
Concentration RSD	0.6 %	0.9 %	4.4 %	5.7 %	8.3 %	78.9 %	16.9 %	12.3 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.243 ppb	0.270 ppb	0.278 ppb	21.030 ppb	0.215 ppb	0.291 ppb	0.255 ppb	0.267 ppb	98.349 %
Concentration per Run 1	0.206 ppb	0.308 ppb	0.259 ppb	19.342 ppb	0.213 ppb	0.280 ppb	0.259 ppb	0.279 ppb	94.579 %
Concentration per Run 2	0.257 ppb	0.265 ppb	0.206 ppb	21.516 ppb	0.211 ppb	0.322 ppb	0.280 ppb	0.310 ppb	95.677 %
Concentration per Run 3	0.266 ppb	0.238 ppb	0.368 ppb	22.232 ppb	0.221 ppb	0.270 ppb	0.226 ppb	0.212 ppb	104.790 %
Concentration RSD	13.3 %	13.0 %	29.8 %	7.2 %	2.6 %	9.5 %	10.5 %	18.8 %	5.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.204 ppb	0.171 ppb	0.243 ppb	0.139 ppb	101.513 %	0.212 ppb	0.197 ppb	101.343 %	0.169 ppb
Concentration per Run 1	0.188 ppb	0.117 ppb	0.235 ppb	0.077 ppb	100.714 %	0.219 ppb	0.197 ppb	98.548 %	0.146 ppb
Concentration per Run 2	0.187 ppb	0.253 ppb	0.244 ppb	0.145 ppb	99.455 %	0.203 ppb	0.206 ppb	97.671 %	0.176 ppb
Concentration per Run 3	0.238 ppb	0.144 ppb	0.251 ppb	0.193 ppb	104.370 %	0.214 ppb	0.187 ppb	107.809 %	0.184 ppb
Concentration RSD	14.1 %	41.9 %	3.4 %	42.0 %	2.5 %	3.9 %	4.9 %	5.5 %	12.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.184 ppb	101.577 %	99.791 %	0.165 ppb	0.188 ppb	103.094 %
Concentration per Run 1	0.161 ppb	101.759 %	96.460 %	0.147 ppb	0.171 ppb	110.407 %
Concentration per Run 2	0.200 ppb	98.217 %	98.710 %	0.172 ppb	0.193 ppb	98.600 %
Concentration per Run 3	0.190 ppb	104.755 %	104.204 %	0.177 ppb	0.201 ppb	100.274 %
Concentration RSD	11.0 %	3.2 %	4.0 %	9.7 %	8.3 %	6.2 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	5	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	9/5/2023 8:33:51 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.309 %	100.696 %	1.032 ppb	98.606 ppb	96.597 ppb	0.373 ppb	88.749 ppb	152.510 ppb	103.122 %
Concentration per Run 1	101.476 %	99.768 %	1.047 ppb	97.221 ppb	95.081 ppb	0.227 ppb	82.589 ppb	152.125 ppb	103.507 %
Concentration per Run 2	99.883 %	98.176 %	1.032 ppb	101.714 ppb	97.428 ppb	0.425 ppb	92.289 ppb	150.599 ppb	102.340 %
Concentration per Run 3	99.568 %	104.145 %	1.017 ppb	96.885 ppb	97.282 ppb	0.467 ppb	91.369 ppb	154.805 ppb	103.520 %
Concentration RSD	1.0 %	3.1 %	1.5 %	2.7 %	1.4 %	34.3 %	6.0 %	1.4 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.017 ppb	1.011 ppb	1.059 ppb	101.630 ppb	0.963 ppb	1.040 ppb	0.949 ppb	0.925 ppb	102.401 %
Concentration per Run 1	1.061 ppb	1.047 ppb	1.033 ppb	101.651 ppb	0.980 ppb	1.124 ppb	1.000 ppb	0.980 ppb	96.891 %
Concentration per Run 2	0.972 ppb	1.027 ppb	0.973 ppb	97.866 ppb	0.984 ppb	0.894 ppb	0.904 ppb	0.849 ppb	104.331 %
Concentration per Run 3	1.019 ppb	0.960 ppb	1.169 ppb	105.371 ppb	0.924 ppb	1.103 ppb	0.944 ppb	0.946 ppb	105.981 %
Concentration RSD	4.4 %	4.5 %	9.5 %	3.7 %	3.5 %	12.2 %	5.1 %	7.3 %	4.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.928 ppb	1.033 ppb	0.965 ppb	0.835 ppb	102.170 %	0.970 ppb	0.996 ppb	101.367 %	0.896 ppb
Concentration per Run 1	0.984 ppb	1.272 ppb	0.950 ppb	0.751 ppb	100.561 %	1.009 ppb	0.989 ppb	97.241 %	0.862 ppb
Concentration per Run 2	0.873 ppb	0.644 ppb	0.953 ppb	0.850 ppb	104.060 %	0.943 ppb	1.018 ppb	103.794 %	0.941 ppb
Concentration per Run 3	0.928 ppb	1.184 ppb	0.992 ppb	0.903 ppb	101.890 %	0.958 ppb	0.982 ppb	103.066 %	0.883 ppb
Concentration RSD	6.0 %	32.9 %	2.4 %	9.2 %	1.7 %	3.6 %	1.9 %	3.5 %	4.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.048 ppb	101.355 %	101.861 %	0.831 ppb	0.915 ppb	102.918 %
Concentration per Run 1	1.072 ppb	100.353 %	96.600 %	0.780 ppb	0.854 ppb	107.338 %
Concentration per Run 2	1.045 ppb	101.666 %	105.060 %	0.840 ppb	0.934 ppb	102.211 %
Concentration per Run 3	1.028 ppb	102.045 %	103.923 %	0.874 ppb	0.958 ppb	99.205 %
Concentration RSD	2.1 %	0.9 %	4.5 %	5.7 %	6.0 %	4.0 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index: 6
Analysis label: 10/1000 Cal
Analysis started at: 9/5/2023 8:38:29 PM
User name ALPHALAB\Metals-Instrument
Rack 0
Vial 4
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.703 %	100.630 %	10.783 ppb	1,002.724 ppb	1,019.451 ppb	9.527 ppb	1,020.573 ppb	1,088.252 ppb	98.920 %
Concentration per Run 1	99.997 %	103.448 %	10.813 ppb	981.850 ppb	994.826 ppb	9.691 ppb	963.859 ppb	1,061.040 ppb	100.094 %
Concentration per Run 2	98.400 %	97.281 %	10.742 ppb	1,046.791 ppb	1,058.615 ppb	10.090 ppb	1,109.901 ppb	1,165.731 ppb	98.562 %
Concentration per Run 3	97.712 %	101.161 %	10.794 ppb	979.532 ppb	1,004.913 ppb	8.800 ppb	987.959 ppb	1,037.984 ppb	98.104 %
Concentration RSD	1.2 %	3.1 %	0.3 %	3.8 %	3.4 %	6.9 %	7.7 %	6.3 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	10.410 ppb	10.386 ppb	11.120 ppb	1,039.423 ppb	10.481 ppb	11.082 ppb	11.060 ppb	10.938 ppb	98.733 %
Concentration per Run 1	10.345 ppb	10.548 ppb	11.048 ppb	1,063.613 ppb	10.643 ppb	11.468 ppb	11.234 ppb	11.105 ppb	93.870 %
Concentration per Run 2	10.539 ppb	10.340 ppb	11.875 ppb	1,049.692 ppb	10.522 ppb	11.009 ppb	11.071 ppb	10.937 ppb	102.547 %
Concentration per Run 3	10.345 ppb	10.270 ppb	10.435 ppb	1,004.964 ppb	10.277 ppb	10.770 ppb	10.874 ppb	10.771 ppb	99.783 %
Concentration RSD	1.1 %	1.4 %	6.5 %	2.9 %	1.8 %	3.2 %	1.6 %	1.5 %	4.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	10.653 ppb	10.525 ppb	10.251 ppb	9.468 ppb	99.773 %	10.424 ppb	10.492 ppb	99.425 %	9.264 ppb
Concentration per Run 1	11.004 ppb	11.433 ppb	10.158 ppb	9.749 ppb	95.324 %	10.676 ppb	10.795 ppb	93.488 %	9.526 ppb
Concentration per Run 2	10.481 ppb	10.349 ppb	10.666 ppb	9.547 ppb	103.706 %	10.131 ppb	10.276 ppb	106.141 %	9.166 ppb
Concentration per Run 3	10.475 ppb	9.793 ppb	9.928 ppb	9.108 ppb	100.289 %	10.466 ppb	10.404 ppb	98.646 %	9.099 ppb
Concentration RSD	2.9 %	7.9 %	3.7 %	3.5 %	4.2 %	2.6 %	2.6 %	6.4 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.324 ppb	100.041 %	99.391 %	9.390 ppb	10.107 ppb	97.568 %
Concentration per Run 1	10.482 ppb	95.085 %	95.273 %	8.952 ppb	9.606 ppb	101.119 %
Concentration per Run 2	10.330 ppb	104.471 %	105.258 %	9.390 ppb	10.137 ppb	98.137 %
Concentration per Run 3	10.161 ppb	100.568 %	97.641 %	9.828 ppb	10.577 ppb	93.446 %
Concentration RSD	1.6 %	4.7 %	5.2 %	4.7 %	4.8 %	4.0 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	7	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	9/5/2023 8:43:07 PM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.409 %	97.314 %	60.466 ppb	5,999.567 ppb	5,995.756 ppb	58.541 ppb	5,895.967 ppb	5,921.418 ppb	108.367 %
Concentration per Run 1	95.711 %	97.580 %	60.325 ppb	5,763.368 ppb	5,781.785 ppb	55.884 ppb	5,619.636 ppb	5,825.005 ppb	108.709 %
Concentration per Run 2	94.124 %	99.668 %	60.461 ppb	6,210.979 ppb	6,105.006 ppb	60.496 ppb	6,248.418 ppb	6,285.237 ppb	107.316 %
Concentration per Run 3	93.391 %	94.695 %	60.611 ppb	6,024.355 ppb	6,100.478 ppb	59.243 ppb	5,819.846 ppb	5,654.012 ppb	109.075 %
Concentration RSD	1.3 %	2.6 %	0.2 %	3.7 %	3.1 %	4.1 %	5.4 %	5.5 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.171 ppb	58.653 ppb	58.634 ppb	5,762.784 ppb	59.087 ppb	59.399 ppb	59.194 ppb	60.156 ppb	99.361 %
Concentration per Run 1	57.358 ppb	57.810 ppb	57.268 ppb	5,721.246 ppb	59.535 ppb	59.864 ppb	60.234 ppb	61.170 ppb	95.489 %
Concentration per Run 2	57.805 ppb	59.112 ppb	61.043 ppb	5,723.365 ppb	57.757 ppb	57.498 ppb	57.282 ppb	59.105 ppb	105.468 %
Concentration per Run 3	59.351 ppb	59.037 ppb	57.590 ppb	5,843.741 ppb	59.969 ppb	60.836 ppb	60.065 ppb	60.194 ppb	97.124 %
Concentration RSD	1.8 %	1.2 %	3.6 %	1.2 %	2.0 %	2.9 %	2.8 %	1.7 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.865 ppb	59.628 ppb	58.446 ppb	57.052 ppb	96.604 %	58.951 ppb	59.224 ppb	98.253 %	59.503 ppb
Concentration per Run 1	59.496 ppb	57.304 ppb	57.308 ppb	56.453 ppb	96.112 %	59.263 ppb	59.626 ppb	93.444 %	60.931 ppb
Concentration per Run 2	58.360 ppb	62.198 ppb	60.824 ppb	56.959 ppb	99.023 %	58.137 ppb	57.897 ppb	105.650 %	58.206 ppb
Concentration per Run 3	58.739 ppb	59.382 ppb	57.207 ppb	57.744 ppb	94.676 %	59.454 ppb	60.149 ppb	95.664 %	59.372 ppb
Concentration RSD	1.0 %	4.1 %	3.5 %	1.1 %	2.3 %	1.2 %	2.0 %	6.6 %	2.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.654 ppb	101.271 %	100.673 %	60.105 ppb	59.984 ppb	100.172 %
Concentration per Run 1	57.366 ppb	99.433 %	98.126 %	54.789 ppb	54.698 ppb	108.989 %
Concentration per Run 2	58.530 ppb	104.490 %	105.202 %	62.473 ppb	61.854 ppb	97.338 %
Concentration per Run 3	57.066 ppb	99.890 %	98.692 %	63.052 ppb	63.399 ppb	94.190 %
Concentration RSD	1.3 %	2.8 %	3.9 %	7.7 %	7.7 %	7.8 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	8	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	9/5/2023 8:47:47 PM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.667 %	95.026 %	119.702 ppb	12,436.888 ppb	12,000.527 ppb	120.775 ppb	12,050.394 ppb	12,031.339 ppb	114.416 %
Concentration per Run 1	92.937 %	96.087 %	119.103 ppb	12,189.637 ppb	11,855.702 ppb	114.599 ppb	11,570.457 ppb	11,688.683 ppb	114.665 %
Concentration per Run 2	91.507 %	93.601 %	119.919 ppb	12,978.931 ppb	12,554.105 ppb	129.750 ppb	13,093.724 ppb	13,223.431 ppb	114.981 %
Concentration per Run 3	90.556 %	95.391 %	120.083 ppb	12,139.431 ppb	11,591.775 ppb	117.976 ppb	11,487.000 ppb	11,181.904 ppb	113.601 %
Concentration RSD	1.3 %	1.4 %	0.4 %	3.6 %	4.1 %	6.6 %	7.5 %	8.8 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	120.880 ppb	120.641 ppb	120.589 ppb	12,115.308 ppb	120.417 ppb	120.210 ppb	120.315 ppb	119.844 ppb	94.272 %
Concentration per Run 1	121.828 ppb	121.565 ppb	120.231 ppb	12,205.293 ppb	122.868 ppb	122.746 ppb	123.499 ppb	122.023 ppb	89.502 %
Concentration per Run 2	120.932 ppb	120.739 ppb	123.176 ppb	12,140.937 ppb	120.552 ppb	118.372 ppb	118.496 ppb	120.385 ppb	98.816 %
Concentration per Run 3	119.880 ppb	119.620 ppb	118.362 ppb	11,999.693 ppb	117.830 ppb	119.511 ppb	118.950 ppb	117.124 ppb	94.497 %
Concentration RSD	0.8 %	0.8 %	2.0 %	0.9 %	2.1 %	1.9 %	2.3 %	2.1 %	4.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	120.514 ppb	120.142 ppb	120.756 ppb	121.520 ppb	93.391 %	120.489 ppb	120.347 ppb	95.001 %	120.311 ppb
Concentration per Run 1	124.956 ppb	120.251 ppb	120.102 ppb	123.444 ppb	90.703 %	124.952 ppb	124.203 ppb	88.198 %	123.460 ppb
Concentration per Run 2	120.344 ppb	123.741 ppb	124.588 ppb	121.236 ppb	96.497 %	117.335 ppb	118.049 ppb	102.397 %	118.908 ppb
Concentration per Run 3	116.241 ppb	116.434 ppb	117.579 ppb	119.879 ppb	92.973 %	119.180 ppb	118.790 ppb	94.409 %	118.564 ppb
Concentration RSD	3.6 %	3.0 %	2.9 %	1.5 %	3.1 %	3.3 %	2.8 %	7.5 %	2.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	121.146 ppb	98.971 %	100.448 %	127.541 ppb	130.103 ppb	93.763 %
Concentration per Run 1	122.523 ppb	95.716 %	97.010 %	120.158 ppb	120.853 ppb	98.241 %
Concentration per Run 2	123.199 ppb	102.624 %	106.748 %	129.214 ppb	137.658 ppb	93.835 %
Concentration per Run 3	117.716 ppb	98.575 %	97.587 %	133.252 ppb	131.797 ppb	89.213 %
Concentration RSD	2.5 %	3.5 %	5.4 %	5.3 %	6.6 %	4.8 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	9	User name	ALPHALAB\Metals-Instrument	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	9/5/2023 8:52:26 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.260 %	100.796 %	0.010 ppb	3.123 ppb	3.149 ppb	1.443 ppb	3.763 ppb	-5.894 ppb	95.749 %
Concentration per Run 1	94.783 %	98.674 %	0.012 ppb	2.442 ppb	3.266 ppb	1.243 ppb	4.927 ppb	24.681 ppb	95.612 %
Concentration per Run 2	94.497 %	105.935 %	0.007 ppb	3.249 ppb	3.131 ppb	1.809 ppb	5.503 ppb	-91.398 ppb	95.723 %
Concentration per Run 3	93.499 %	97.778 %	0.012 ppb	3.679 ppb	3.049 ppb	1.276 ppb	0.860 ppb	49.033 ppb	95.910 %
Concentration RSD	0.7 %	4.4 %	27.4 %	20.1 %	3.5 %	22.0 %	67.2 %	1,273.1 %	0.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.017 ppb	0.014 ppb	0.039 ppb	36.506 ppb	0.004 ppb	0.039 ppb	0.000 ppb	0.516 ppb	97.197 %
Concentration per Run 1	-0.029 ppb	0.007 ppb	-0.001 ppb	37.718 ppb	0.001 ppb	0.027 ppb	0.002 ppb	0.450 ppb	93.752 %
Concentration per Run 2	-0.021 ppb	0.026 ppb	0.060 ppb	39.066 ppb	0.006 ppb	0.035 ppb	-0.024 ppb	0.531 ppb	100.755 %
Concentration per Run 3	0.000 ppb	0.011 ppb	0.057 ppb	32.734 ppb	0.005 ppb	0.055 ppb	0.022 ppb	0.567 ppb	97.084 %
Concentration RSD	88.7 %	69.8 %	88.0 %	9.1 %	70.5 %	36.9 %	91,727.3 %	11.7 %	3.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.182 ppb	1.285 ppb	194.522 ppb	3.050 ppb	98.682 %	0.007 ppb	0.004 ppb	101.267 %	0.076 ppb
Concentration per Run 1	0.153 ppb	1.065 ppb	190.459 ppb	2.417 ppb	98.180 %	0.010 ppb	0.009 ppb	99.972 %	0.069 ppb
Concentration per Run 2	0.191 ppb	1.340 ppb	203.020 ppb	3.127 ppb	99.557 %	0.006 ppb	0.003 ppb	106.054 %	0.075 ppb
Concentration per Run 3	0.201 ppb	1.450 ppb	190.087 ppb	3.605 ppb	98.310 %	0.005 ppb	0.001 ppb	97.776 %	0.085 ppb
Concentration RSD	13.9 %	15.4 %	3.8 %	19.6 %	0.8 %	34.2 %	92.1 %	4.2 %	11.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.037 ppb	99.431 %	98.986 %	0.466 ppb	0.025 ppb	104.538 %
Concentration per Run 1	0.022 ppb	98.731 %	97.961 %	0.486 ppb	0.024 ppb	112.424 %
Concentration per Run 2	0.017 ppb	101.562 %	100.762 %	0.499 ppb	0.025 ppb	102.531 %
Concentration per Run 3	0.073 ppb	98.001 %	98.235 %	0.413 ppb	0.025 ppb	98.660 %
Concentration RSD	83.6 %	1.9 %	1.6 %	9.9 %	2.5 %	6.8 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	10	User name	ALPHALAB\Metals-Instrument	Comment	ICV
Analysis label:	ICV	Rack	0		
Analysis started at:	9/5/2023 8:57:08 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.931 %	96.220 %	51.408 ppb	4,798.842 ppb	4,904.937 ppb	48.276 ppb	4,858.209 ppb	4,936.083 ppb	96.961 %
Concentration per Run 1	92.546 %	95.590 %	51.214 ppb	4,805.770 ppb	4,896.666 ppb	49.529 ppb	4,960.934 ppb	5,086.931 ppb	97.197 %
Concentration per Run 2	91.742 %	95.491 %	51.203 ppb	4,844.733 ppb	4,948.230 ppb	48.151 ppb	4,845.650 ppb	4,881.576 ppb	96.040 %
Concentration per Run 3	91.505 %	97.580 %	51.807 ppb	4,746.022 ppb	4,869.914 ppb	47.148 ppb	4,768.043 ppb	4,839.742 ppb	97.645 %
Recovery Percentage 1			102.816 %	95.977 %	98.099 %	96.552 %	97.164 %	98.722 %	
Concentration RSD	0.6 %	1.2 %	0.7 %	1.0 %	0.8 %	2.5 %	2.0 %	2.7 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.089 ppb	49.766 ppb	50.911 ppb	4,992.724 ppb	49.836 ppb	51.543 ppb	50.952 ppb	52.303 ppb	93.864 %
Concentration per Run 1	49.341 ppb	50.294 ppb	50.226 ppb	5,020.635 ppb	50.109 ppb	52.144 ppb	51.288 ppb	52.660 ppb	92.037 %
Concentration per Run 2	50.325 ppb	49.166 ppb	50.143 ppb	4,918.444 ppb	49.800 ppb	51.350 ppb	50.368 ppb	52.097 ppb	93.940 %
Concentration per Run 3	50.600 ppb	49.836 ppb	52.364 ppb	5,039.094 ppb	49.599 ppb	51.135 ppb	51.200 ppb	52.151 ppb	95.615 %
Recovery Percentage 1	100.178 %	99.531 %	101.822 %	99.854 %	99.672 %	103.086 %	101.904 %	104.605 %	
Concentration RSD	1.3 %	1.1 %	2.5 %	1.3 %	0.5 %	1.0 %	1.0 %	0.6 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	48.689 ppb	50.799 ppb	47.986 ppb	48.597 ppb	94.466 %	52.085 ppb	50.194 ppb	94.340 %	49.952 ppb
Concentration per Run 1	49.360 ppb	52.661 ppb	48.444 ppb	48.486 ppb	94.090 %	52.303 ppb	49.015 ppb	94.618 %	49.589 ppb
Concentration per Run 2	48.103 ppb	49.756 ppb	47.789 ppb	48.331 ppb	95.205 %	52.554 ppb	51.906 ppb	91.462 %	50.974 ppb
Concentration per Run 3	48.604 ppb	49.981 ppb	47.725 ppb	48.975 ppb	94.104 %	51.398 ppb	49.662 ppb	96.941 %	49.295 ppb
Recovery Percentage 1	97.378 %	101.599 %	95.972 %	97.194 %		104.170 %	100.388 %		99.905 %
Concentration RSD	1.3 %	3.2 %	0.8 %	0.7 %	0.7 %	1.2 %	3.0 %	2.9 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	48.110 ppb	96.951 %	97.200 %	51.701 ppb	49.095 ppb	96.155 %
Concentration per Run 1	48.035 ppb	96.355 %	96.013 %	48.220 ppb	45.989 ppb	102.403 %
Concentration per Run 2	49.286 ppb	98.531 %	98.120 %	53.243 ppb	50.414 ppb	93.645 %
Concentration per Run 3	47.009 ppb	95.966 %	97.466 %	53.639 ppb	50.884 ppb	92.418 %
Recovery Percentage 1	96.220 %			103.401 %	98.191 %	
Concentration RSD	2.4 %	1.4 %	1.1 %	5.8 %	5.5 %	5.7 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index: 11 User name ALPHALAB\Metals-Instrument Comment ICB
Analysis label: ICB Rack 0
Analysis started at: 9/5/2023 9:01:48 PM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.642 %	99.901 %	0.008 ppb	-3.517 ppb	-1.073 ppb	-0.960 ppb	0.338 ppb	-4.370 ppb	94.955 %
Concentration per Run 1	94.425 %	99.271 %	0.007 ppb	-3.528 ppb	-0.969 ppb	-1.049 ppb	3.388 ppb	-6.359 ppb	94.743 %
Concentration per Run 2	94.050 %	97.381 %	0.005 ppb	-2.128 ppb	-1.266 ppb	-0.988 ppb	1.253 ppb	-2.467 ppb	95.878 %
Concentration per Run 3	92.449 %	103.050 %	0.010 ppb	-4.895 ppb	-0.982 ppb	-0.844 ppb	-3.626 ppb	-4.283 ppb	94.242 %
Recovery Percentage 1			1.518 %	-3.517 %	-1.532 %	-9.605 %	0.338 %	-4.370 %	
Concentration RSD	1.1 %	2.9 %	31.6 %	39.3 %	15.7 %	11.0 %	1,063.7 %	44.6 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.030 ppb	0.007 ppb	-0.001 ppb	17.944 ppb	0.002 ppb	0.295 ppb	-0.004 ppb	0.109 ppb	94.610 %
Concentration per Run 1	-0.025 ppb	0.004 ppb	0.031 ppb	16.631 ppb	0.002 ppb	0.328 ppb	-0.020 ppb	0.097 ppb	97.394 %
Concentration per Run 2	-0.039 ppb	0.011 ppb	0.010 ppb	19.980 ppb	0.003 ppb	0.251 ppb	0.015 ppb	0.085 ppb	89.421 %
Concentration per Run 3	-0.025 ppb	0.004 ppb	-0.044 ppb	17.220 ppb	0.002 ppb	0.307 ppb	-0.008 ppb	0.147 ppb	97.016 %
Recovery Percentage 1	-0.597 %	0.654 %	-0.073 %	35.887 %	0.446 %	14.757 %	-0.421 %	2.188 %	
Concentration RSD	27.5 %	65.2 %	5,306.5 %	10.0 %	34.1 %	13.5 %	419.3 %	29.9 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.088 ppb	0.694 ppb	-0.007 ppb	1.906 ppb	96.566 %	0.002 ppb	0.002 ppb	93.678 %	0.078 ppb
Concentration per Run 1	0.066 ppb	0.433 ppb	-0.009 ppb	1.380 ppb	97.149 %	0.003 ppb	0.002 ppb	96.674 %	0.056 ppb
Concentration per Run 2	0.069 ppb	0.749 ppb	-0.005 ppb	1.998 ppb	95.247 %	0.001 ppb	0.000 ppb	88.677 %	0.084 ppb
Concentration per Run 3	0.128 ppb	0.900 ppb	-0.006 ppb	2.340 ppb	97.303 %	0.002 ppb	0.003 ppb	95.682 %	0.094 ppb
Recovery Percentage 1	17.532 %	13.883 %	-0.067 %	95.306 %		0.491 %	0.820 %		1.950 %
Concentration RSD	40.0 %	34.3 %	34.5 %	25.5 %	1.2 %	50.8 %	73.9 %	4.7 %	24.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.003 ppb	95.810 %	94.984 %	0.351 ppb	0.012 ppb	98.677 %
Concentration per Run 1	-0.009 ppb	96.909 %	95.511 %	0.372 ppb	0.011 ppb	102.854 %
Concentration per Run 2	0.008 ppb	94.138 %	91.702 %	0.378 ppb	0.013 ppb	93.679 %
Concentration per Run 3	-0.009 ppb	96.383 %	97.739 %	0.305 ppb	0.012 ppb	99.499 %
Recovery Percentage 1	-0.609 %			35.147 %	1.197 %	
Concentration RSD	318.4 %	1.5 %	3.2 %	11.6 %	7.6 %	4.7 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	12	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2346993-01 A2-6020T	Rack	2		
Analysis started at:	9/5/2023 9:06:30 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.049 %	83.222 %	0.002 ppb	74,184.154 ppb	44.501 ppb	2.426 ppb	184.666 ppb	38.951 ppb	74.289 %
Concentration per Run 1	92.685 %	82.261 %	0.003 ppb	74,979.120 ppb	55.386 ppb	3.619 ppb	191.982 ppb	46.625 ppb	73.911 %
Concentration per Run 2	92.293 %	83.256 %	0.004 ppb	70,996.851 ppb	33.170 ppb	2.636 ppb	165.766 ppb	37.014 ppb	74.051 %
Concentration per Run 3	91.170 %	84.151 %	0.000 ppb	76,576.490 ppb	44.947 ppb	1.023 ppb	196.252 ppb	33.214 ppb	74.904 %
Concentration RSD	0.9 %	1.1 %	98.6 %	3.9 %	25.0 %	54.0 %	8.9 %	17.7 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.797 ppb	2.518 ppb	-0.019 ppb	10.602 ppb	0.008 ppb	0.780 ppb	0.532 ppb	-0.323 ppb	81.899 %
Concentration per Run 1	0.659 ppb	2.521 ppb	-0.022 ppb	13.189 ppb	0.006 ppb	0.943 ppb	0.595 ppb	-0.320 ppb	80.347 %
Concentration per Run 2	0.820 ppb	2.724 ppb	0.009 ppb	8.239 ppb	0.010 ppb	0.749 ppb	0.522 ppb	-0.362 ppb	79.638 %
Concentration per Run 3	0.911 ppb	2.308 ppb	-0.042 ppb	10.377 ppb	0.007 ppb	0.649 ppb	0.480 ppb	-0.286 ppb	85.711 %
Concentration RSD	16.0 %	8.3 %	138.9 %	23.4 %	26.7 %	19.1 %	11.0 %	11.8 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.727 ppb	0.433 ppb	0.129 ppb	80.306 ppb	75.551 %	0.001 ppb	0.010 ppb	59.794 %	0.405 ppb
Concentration per Run 1	0.621 ppb	0.159 ppb	0.172 ppb	34.924 ppb	71.159 %	0.001 ppb	0.004 ppb	56.297 %	0.384 ppb
Concentration per Run 2	0.708 ppb	0.439 ppb	0.107 ppb	69.151 ppb	77.441 %	0.000 ppb	0.011 ppb	59.611 %	0.364 ppb
Concentration per Run 3	0.853 ppb	0.703 ppb	0.108 ppb	136.845 ppb	78.053 %	0.000 ppb	0.014 ppb	63.474 %	0.468 ppb
Concentration RSD	16.1 %	62.7 %	29.0 %	64.6 %	5.1 %	138.5 %	55.0 %	6.0 %	13.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.063 ppb	71.696 %	70.992 %	0.040 ppb	0.002 ppb	56.217 %
Concentration per Run 1	0.152 ppb	68.126 %	68.507 %	0.046 ppb	0.002 ppb	53.977 %
Concentration per Run 2	0.020 ppb	71.068 %	70.513 %	0.040 ppb	0.002 ppb	55.610 %
Concentration per Run 3	0.018 ppb	75.894 %	73.956 %	0.034 ppb	0.002 ppb	59.063 %
Concentration RSD	121.7 %	5.5 %	3.9 %	15.2 %	11.6 %	4.6 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	13	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2346993-02 A2-6020T	Rack	2		
Analysis started at:	9/5/2023 9:11:09 PM	Vial	56		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.537 %	88.892 %	0.001 ppb	1,085.970 ppb	-1.329 ppb	-1.173 ppb	-0.531 ppb	-6.930 ppb	79.194 %
Concentration per Run 1	100.373 %	87.036 %	0.000 ppb	1,053.219 ppb	-1.364 ppb	-1.008 ppb	-0.477 ppb	-7.656 ppb	79.021 %
Concentration per Run 2	102.306 %	90.815 %	-0.002 ppb	1,074.378 ppb	-1.477 ppb	-1.208 ppb	-1.184 ppb	-6.917 ppb	79.913 %
Concentration per Run 3	98.931 %	88.826 %	0.004 ppb	1,130.313 ppb	-1.144 ppb	-1.303 ppb	0.067 ppb	-6.217 ppb	78.650 %
Concentration RSD	1.7 %	2.1 %	483.5 %	3.7 %	12.7 %	12.8 %	118.1 %	10.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.027 ppb	0.061 ppb	-0.034 ppb	-2.780 ppb	0.001 ppb	-0.051 ppb	-0.052 ppb	-0.462 ppb	93.894 %
Concentration per Run 1	-0.034 ppb	0.058 ppb	-0.043 ppb	-2.737 ppb	0.000 ppb	-0.051 ppb	-0.051 ppb	-0.468 ppb	94.548 %
Concentration per Run 2	-0.024 ppb	0.057 ppb	-0.043 ppb	-2.861 ppb	0.000 ppb	-0.055 ppb	-0.053 ppb	-0.463 ppb	92.137 %
Concentration per Run 3	-0.024 ppb	0.068 ppb	-0.017 ppb	-2.741 ppb	0.004 ppb	-0.047 ppb	-0.051 ppb	-0.456 ppb	94.997 %
Concentration RSD	21.9 %	10.4 %	43.8 %	2.5 %	227.3 %	7.6 %	2.6 %	1.4 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.040 ppb	0.149 ppb	-0.013 ppb	0.579 ppb	89.639 %	0.000 ppb	0.000 ppb	75.188 %	-0.029 ppb
Concentration per Run 1	-0.046 ppb	0.076 ppb	-0.016 ppb	0.536 ppb	88.171 %	0.001 ppb	0.000 ppb	71.600 %	-0.034 ppb
Concentration per Run 2	-0.063 ppb	0.203 ppb	-0.013 ppb	0.681 ppb	89.860 %	0.000 ppb	-0.001 ppb	74.887 %	-0.026 ppb
Concentration per Run 3	-0.012 ppb	0.168 ppb	-0.010 ppb	0.520 ppb	90.886 %	0.000 ppb	-0.001 ppb	79.077 %	-0.027 ppb
Concentration RSD	63.6 %	44.2 %	21.0 %	15.4 %	1.5 %	895.1 %	296.1 %	5.0 %	15.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.008 ppb	84.687 %	84.443 %	0.001 ppb	-0.005 ppb	46.653 %
Concentration per Run 1	-0.008 ppb	81.160 %	81.167 %	-0.001 ppb	-0.006 ppb	46.994 %
Concentration per Run 2	-0.008 ppb	84.134 %	83.331 %	0.001 ppb	-0.005 ppb	46.148 %
Concentration per Run 3	-0.008 ppb	88.767 %	88.831 %	0.003 ppb	-0.005 ppb	46.816 %
Concentration RSD	2.9 %	4.5 %	4.7 %	228.6 %	7.2 %	1.0 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	14	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1819196-2D5 6020TL	Rack	2		
Analysis started at:	9/5/2023 9:18:24 PM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.406 %	102.686 %	10.755 ppb	2,109.856 ppb	2,040.644 ppb	419.879 ppb	2,168.861 ppb	2,206.778 ppb	97.782 %
Concentration per Run 1	96.783 %	98.674 %	10.699 ppb	2,153.857 ppb	2,033.272 ppb	414.239 ppb	2,101.130 ppb	2,225.877 ppb	96.791 %
Concentration per Run 2	96.187 %	102.454 %	10.751 ppb	2,117.768 ppb	2,074.983 ppb	430.440 ppb	2,215.648 ppb	2,289.365 ppb	98.405 %
Concentration per Run 3	96.247 %	106.930 %	10.815 ppb	2,057.941 ppb	2,013.677 ppb	414.959 ppb	2,189.804 ppb	2,105.091 ppb	98.151 %
Concentration RSD	0.3 %	4.0 %	0.5 %	2.3 %	1.5 %	2.2 %	2.8 %	4.2 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	102.343 ppb	41.831 ppb	103.912 ppb	219.305 ppb	106.271 ppb	108.018 ppb	55.012 ppb	107.231 ppb	98.124 %
Concentration per Run 1	102.853 ppb	41.912 ppb	101.316 ppb	221.452 ppb	108.135 ppb	110.452 ppb	56.165 ppb	109.155 ppb	92.739 %
Concentration per Run 2	101.334 ppb	41.510 ppb	103.472 ppb	218.230 ppb	104.845 ppb	106.867 ppb	54.610 ppb	105.885 ppb	100.742 %
Concentration per Run 3	102.841 ppb	42.070 ppb	106.949 ppb	218.232 ppb	105.833 ppb	106.736 ppb	54.262 ppb	106.652 ppb	100.892 %
Concentration RSD	0.9 %	0.7 %	2.7 %	0.8 %	1.6 %	2.0 %	1.8 %	1.6 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	26.074 ppb	25.129 ppb	197.908 ppb	220.525 ppb	98.553 %	11.153 ppb	11.560 ppb	95.062 %	81.448 ppb
Concentration per Run 1	25.961 ppb	25.387 ppb	194.456 ppb	224.905 ppb	93.008 %	11.559 ppb	11.671 ppb	87.572 %	82.232 ppb
Concentration per Run 2	25.586 ppb	26.480 ppb	200.073 ppb	218.350 ppb	101.332 %	10.988 ppb	11.556 ppb	97.847 %	83.052 ppb
Concentration per Run 3	26.675 ppb	23.522 ppb	199.194 ppb	218.320 ppb	101.319 %	10.912 ppb	11.453 ppb	99.766 %	79.059 ppb
Concentration RSD	2.1 %	6.0 %	1.5 %	1.7 %	4.9 %	3.2 %	0.9 %	6.9 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	414.722 ppb	99.599 %	98.347 %	25.030 ppb	123.647 ppb	95.437 %
Concentration per Run 1	422.935 ppb	93.798 %	91.476 %	24.254 ppb	119.321 ppb	95.984 %
Concentration per Run 2	413.633 ppb	101.899 %	100.757 %	24.892 ppb	123.787 ppb	96.271 %
Concentration per Run 3	407.599 ppb	103.100 %	102.807 %	25.945 ppb	127.833 ppb	94.058 %
Concentration RSD	1.9 %	5.1 %	6.1 %	3.4 %	3.4 %	1.3 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	15	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348762-01d10 6020TL	Rack	2		
Analysis started at:	9/5/2023 9:23:01 PM	Vial	54		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	122.553 %	139.093 %	0.003 ppb	110,948.754 ppb	9,374.409 ppb	-0.301 ppb	7,402.013 ppb	64,286.953 ppb	104.497 %
Concentration per Run 1	124.509 %	131.898 %	0.003 ppb	110,005.800 ppb	9,244.737 ppb	-0.364 ppb	7,280.986 ppb	62,788.261 ppb	104.189 %
Concentration per Run 2	122.993 %	142.144 %	0.002 ppb	110,273.814 ppb	9,396.271 ppb	-0.312 ppb	7,397.972 ppb	65,512.388 ppb	104.555 %
Concentration per Run 3	120.157 %	143.238 %	0.005 ppb	112,566.648 ppb	9,482.219 ppb	-0.225 ppb	7,527.080 ppb	64,560.208 ppb	104.748 %
Concentration RSD	1.8 %	4.5 %	53.8 %	1.3 %	1.3 %	23.4 %	1.7 %	2.2 %	0.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.028 ppb	0.036 ppb	1.801 ppb	10.494 ppb	0.020 ppb	0.011 ppb	0.025 ppb	-0.145 ppb	102.239 %
Concentration per Run 1	0.031 ppb	0.029 ppb	1.799 ppb	9.785 ppb	0.015 ppb	0.009 ppb	0.031 ppb	-0.127 ppb	95.583 %
Concentration per Run 2	0.025 ppb	0.039 ppb	1.931 ppb	10.694 ppb	0.030 ppb	-0.007 ppb	0.025 ppb	-0.131 ppb	104.621 %
Concentration per Run 3	0.028 ppb	0.041 ppb	1.673 ppb	11.003 ppb	0.015 ppb	0.031 ppb	0.018 ppb	-0.178 ppb	106.511 %
Concentration RSD	10.9 %	17.9 %	7.2 %	6.0 %	41.9 %	170.4 %	27.1 %	19.5 %	5.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.226 ppb	0.494 ppb	1,427.045 ppb	8.191 ppb	99.137 %	0.002 ppb	0.002 ppb	97.795 %	6.219 ppb
Concentration per Run 1	0.201 ppb	0.514 ppb	1,410.520 ppb	6.451 ppb	91.909 %	0.003 ppb	0.002 ppb	89.535 %	6.370 ppb
Concentration per Run 2	0.241 ppb	0.509 ppb	1,436.110 ppb	8.562 ppb	101.453 %	0.002 ppb	0.002 ppb	101.156 %	6.323 ppb
Concentration per Run 3	0.237 ppb	0.460 ppb	1,434.504 ppb	9.561 ppb	104.047 %	0.002 ppb	0.002 ppb	102.695 %	5.963 ppb
Concentration RSD	9.8 %	6.0 %	1.0 %	19.4 %	6.4 %	21.5 %	9.4 %	7.4 %	3.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.903 ppb	100.381 %	99.136 %	0.052 ppb	0.027 ppb	89.506 %
Concentration per Run 1	1.994 ppb	93.083 %	92.931 %	0.052 ppb	0.025 ppb	94.269 %
Concentration per Run 2	1.782 ppb	103.089 %	100.163 %	0.054 ppb	0.030 ppb	87.852 %
Concentration per Run 3	1.934 ppb	104.972 %	104.316 %	0.049 ppb	0.026 ppb	86.396 %
Concentration RSD	5.8 %	6.4 %	5.8 %	4.7 %	10.0 %	4.7 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index: 16
Analysis label: L2348762-01 6020TL
Analysis started at: 9/5/2023 9:27:40 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 41
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	312.802 %	322.798 %	-0.005 ppb	466,690.413 ppb	39,159.255 ppb	0.245 ppb	40,233.358 ppb	294,142.489 ppb	88.160 %
Concentration per Run 1	321.731 %	318.620 %	-0.005 ppb	459,905.441 ppb	38,516.853 ppb	-0.008 ppb	38,977.572 ppb	285,490.168 ppb	89.133 %
Concentration per Run 2	313.915 %	330.657 %	-0.005 ppb	470,118.610 ppb	39,692.682 ppb	0.329 ppb	40,604.864 ppb	290,742.571 ppb	88.830 %
Concentration per Run 3	302.760 %	319.117 %	-0.004 ppb	470,047.188 ppb	39,268.230 ppb	0.413 ppb	41,117.638 ppb	306,194.726 ppb	86.518 %
Concentration RSD	3.0 %	2.1 %	12.4 %	1.3 %	1.5 %	91.0 %	2.8 %	3.7 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.062 ppb	0.162 ppb	8.675 ppb	48.422 ppb	0.103 ppb	0.269 ppb	0.461 ppb	0.713 ppb	74.499 %
Concentration per Run 1	0.076 ppb	0.147 ppb	8.013 ppb	45.408 ppb	0.106 ppb	0.259 ppb	0.449 ppb	0.693 ppb	70.930 %
Concentration per Run 2	0.064 ppb	0.172 ppb	8.780 ppb	49.329 ppb	0.093 ppb	0.262 ppb	0.462 ppb	0.733 ppb	78.077 %
Concentration per Run 3	0.047 ppb	0.169 ppb	9.231 ppb	50.528 ppb	0.110 ppb	0.285 ppb	0.472 ppb	0.711 ppb	74.490 %
Concentration RSD	23.7 %	8.5 %	7.1 %	5.5 %	8.6 %	5.1 %	2.5 %	2.8 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.118 ppb	0.130 ppb	17,452.646 ppb	6.260 ppb	69.377 %	0.003 ppb	0.008 ppb	76.639 %	2.411 ppb
Concentration per Run 1	1.076 ppb	0.069 ppb	16,838.247 ppb	5.291 ppb	67.424 %	0.003 ppb	0.009 ppb	71.913 %	2.286 ppb
Concentration per Run 2	1.021 ppb	0.083 ppb	17,421.585 ppb	6.166 ppb	71.403 %	0.005 ppb	0.007 ppb	79.942 %	2.449 ppb
Concentration per Run 3	1.257 ppb	0.237 ppb	18,098.105 ppb	7.324 ppb	69.305 %	0.002 ppb	0.006 ppb	78.063 %	2.499 ppb
Concentration RSD	11.0 %	72.0 %	3.6 %	16.3 %	2.9 %	44.3 %	18.6 %	5.5 %	4.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	19.725 ppb	72.945 %	70.062 %	0.024 ppb	0.098 ppb	59.800 %
Concentration per Run 1	19.704 ppb	69.196 %	64.963 %	0.022 ppb	0.104 ppb	62.760 %
Concentration per Run 2	19.191 ppb	75.038 %	73.196 %	0.026 ppb	0.094 ppb	58.870 %
Concentration per Run 3	20.282 ppb	74.601 %	72.027 %	0.025 ppb	0.096 ppb	57.771 %
Concentration RSD	2.8 %	4.5 %	6.4 %	8.6 %	5.1 %	4.4 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	17	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348762-02 6020TL	Rack	2		
Analysis started at:	9/5/2023 9:32:19 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.808 %	106.565 %	0.007 ppb	14,168.805 ppb	69,920.616 ppb	118.422 ppb	2,280.335 ppb	259,085.818 ppb	98.033 %
Concentration per Run 1	96.477 %	101.956 %	0.006 ppb	14,807.816 ppb	71,988.075 ppb	120.173 ppb	2,352.689 ppb	270,493.473 ppb	97.473 %
Concentration per Run 2	94.070 %	112.699 %	0.007 ppb	13,382.559 ppb	66,699.518 ppb	113.605 ppb	2,213.438 ppb	254,424.842 ppb	96.745 %
Concentration per Run 3	93.877 %	105.040 %	0.006 ppb	14,316.039 ppb	71,074.254 ppb	121.489 ppb	2,274.876 ppb	252,339.141 ppb	99.880 %
Concentration RSD	1.5 %	5.2 %	12.1 %	5.1 %	4.0 %	3.6 %	3.1 %	3.8 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.274 ppb	0.578 ppb	3.594 ppb	215.437 ppb	0.127 ppb	0.542 ppb	0.782 ppb	3.785 ppb	91.478 %
Concentration per Run 1	0.272 ppb	0.602 ppb	3.521 ppb	222.552 ppb	0.150 ppb	0.519 ppb	0.778 ppb	3.829 ppb	87.456 %
Concentration per Run 2	0.279 ppb	0.537 ppb	3.553 ppb	201.622 ppb	0.124 ppb	0.511 ppb	0.747 ppb	3.754 ppb	94.427 %
Concentration per Run 3	0.272 ppb	0.596 ppb	3.709 ppb	222.138 ppb	0.107 ppb	0.596 ppb	0.820 ppb	3.773 ppb	92.552 %
Concentration RSD	1.5 %	6.2 %	2.8 %	5.6 %	17.0 %	8.6 %	4.7 %	1.0 %	3.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.258 ppb	0.110 ppb	7,551.448 ppb	1.869 ppb	90.114 %	0.001 ppb	0.003 ppb	92.708 %	1.239 ppb
Concentration per Run 1	0.284 ppb	0.062 ppb	7,721.468 ppb	1.496 ppb	87.125 %	0.001 ppb	0.000 ppb	86.976 %	1.273 ppb
Concentration per Run 2	0.240 ppb	0.120 ppb	7,433.589 ppb	1.764 ppb	91.962 %	0.001 ppb	0.002 ppb	95.368 %	1.182 ppb
Concentration per Run 3	0.251 ppb	0.150 ppb	7,499.286 ppb	2.347 ppb	91.256 %	0.001 ppb	0.007 ppb	95.781 %	1.262 ppb
Concentration RSD	9.0 %	40.5 %	2.0 %	23.3 %	2.9 %	27.3 %	111.1 %	5.4 %	4.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	17.841 ppb	95.562 %	94.049 %	0.013 ppb	0.107 ppb	84.152 %
Concentration per Run 1	18.434 ppb	90.598 %	89.374 %	0.006 ppb	0.106 ppb	86.933 %
Concentration per Run 2	17.351 ppb	97.599 %	96.167 %	0.017 ppb	0.108 ppb	82.777 %
Concentration per Run 3	17.738 ppb	98.489 %	96.606 %	0.017 ppb	0.107 ppb	82.744 %
Concentration RSD	3.1 %	4.5 %	4.3 %	48.2 %	0.9 %	2.9 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index: 18
Analysis label: L2348762-03 6020TL
Analysis started at: 9/5/2023 9:36:57 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 43
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.304 %	115.617 %	0.002 ppb	7,373.247 ppb	71,903.369 ppb	10.864 ppb	2,688.408 ppb	530,027.392 ppb	103.916 %
Concentration per Run 1	101.689 %	106.830 %	0.001 ppb	7,471.510 ppb	74,001.098 ppb	10.991 ppb	2,743.859 ppb	549,118.699 ppb	103.584 %
Concentration per Run 2	98.743 %	115.385 %	0.000 ppb	7,439.323 ppb	72,647.035 ppb	11.428 ppb	2,667.939 ppb	517,619.668 ppb	103.087 %
Concentration per Run 3	97.480 %	124.636 %	0.005 ppb	7,208.906 ppb	69,061.974 ppb	10.174 ppb	2,653.426 ppb	523,343.809 ppb	105.076 %
Concentration RSD	2.2 %	7.7 %	145.7 %	1.9 %	3.5 %	5.9 %	1.8 %	3.2 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.035 ppb	0.303 ppb	62.198 ppb	72.322 ppb	2.822 ppb	3.211 ppb	4.108 ppb	4.338 ppb	97.275 %
Concentration per Run 1	0.025 ppb	0.302 ppb	62.349 ppb	71.014 ppb	2.770 ppb	3.496 ppb	4.187 ppb	4.436 ppb	91.980 %
Concentration per Run 2	0.048 ppb	0.303 ppb	63.028 ppb	76.189 ppb	2.930 ppb	3.018 ppb	4.053 ppb	4.382 ppb	97.745 %
Concentration per Run 3	0.034 ppb	0.303 ppb	61.216 ppb	69.762 ppb	2.765 ppb	3.120 ppb	4.083 ppb	4.195 ppb	102.100 %
Concentration RSD	33.0 %	0.2 %	1.5 %	4.7 %	3.3 %	7.8 %	1.7 %	2.9 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.312 ppb	0.057 ppb	13,617.429 ppb	1.735 ppb	93.147 %	0.140 ppb	0.011 ppb	99.739 %	0.965 ppb
Concentration per Run 1	0.347 ppb	-0.005 ppb	13,968.938 ppb	1.438 ppb	87.781 %	0.137 ppb	0.007 ppb	93.727 %	0.964 ppb
Concentration per Run 2	0.306 ppb	0.070 ppb	13,497.269 ppb	1.769 ppb	93.565 %	0.146 ppb	0.016 ppb	101.273 %	0.932 ppb
Concentration per Run 3	0.283 ppb	0.106 ppb	13,386.080 ppb	1.999 ppb	98.094 %	0.136 ppb	0.010 ppb	104.218 %	0.997 ppb
Concentration RSD	10.4 %	98.8 %	2.3 %	16.2 %	5.5 %	3.8 %	40.9 %	5.4 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	18.484 ppb	97.459 %	95.075 %	0.019 ppb	0.145 ppb	87.135 %
Concentration per Run 1	18.866 ppb	93.031 %	90.915 %	0.012 ppb	0.134 ppb	90.293 %
Concentration per Run 2	18.566 ppb	96.782 %	94.189 %	0.020 ppb	0.148 ppb	84.991 %
Concentration per Run 3	18.020 ppb	102.565 %	100.120 %	0.025 ppb	0.152 ppb	86.121 %
Concentration RSD	2.3 %	4.9 %	4.9 %	32.3 %	6.3 %	3.2 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	19	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348762-04 6020TL	Rack	2		
Analysis started at:	9/5/2023 9:41:36 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	495.660 %	485.064 %	-0.005 ppb	317,265.466 ppb	28,638.180 ppb	3.661 ppb	18,153.898 ppb	236,159.699 ppb	84.739 %
Concentration per Run 1	511.506 %	513.618 %	-0.005 ppb	315,877.322 ppb	28,581.383 ppb	3.807 ppb	18,651.393 ppb	232,840.765 ppb	86.739 %
Concentration per Run 2	493.971 %	485.362 %	-0.005 ppb	315,264.351 ppb	28,167.343 ppb	3.977 ppb	17,603.460 ppb	235,074.744 ppb	84.388 %
Concentration per Run 3	481.503 %	456.211 %	-0.005 ppb	320,654.726 ppb	29,165.813 ppb	3.200 ppb	18,206.840 ppb	240,563.590 ppb	83.089 %
Concentration RSD	3.0 %	5.9 %	4.8 %	0.9 %	1.8 %	11.2 %	2.9 %	1.7 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.012 ppb	0.180 ppb	30.999 ppb	1,297.290 ppb	0.281 ppb	0.872 ppb	0.200 ppb	0.903 ppb	72.194 %
Concentration per Run 1	-0.014 ppb	0.164 ppb	31.105 ppb	1,301.480 ppb	0.303 ppb	0.903 ppb	0.192 ppb	0.877 ppb	71.811 %
Concentration per Run 2	-0.002 ppb	0.185 ppb	30.157 ppb	1,271.702 ppb	0.267 ppb	0.863 ppb	0.200 ppb	0.909 ppb	73.348 %
Concentration per Run 3	-0.021 ppb	0.190 ppb	31.734 ppb	1,318.687 ppb	0.273 ppb	0.850 ppb	0.208 ppb	0.924 ppb	71.423 %
Concentration RSD	78.7 %	7.8 %	2.6 %	1.8 %	6.8 %	3.2 %	4.1 %	2.6 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.728 ppb	0.080 ppb	18,464.262 ppb	1.661 ppb	67.876 %	0.166 ppb	0.002 ppb	73.385 %	0.690 ppb
Concentration per Run 1	0.740 ppb	0.159 ppb	19,134.653 ppb	1.430 ppb	68.176 %	0.174 ppb	0.004 ppb	72.965 %	0.682 ppb
Concentration per Run 2	0.670 ppb	0.059 ppb	18,041.367 ppb	1.720 ppb	68.136 %	0.171 ppb	0.001 ppb	72.612 %	0.686 ppb
Concentration per Run 3	0.775 ppb	0.023 ppb	18,216.766 ppb	1.832 ppb	67.314 %	0.153 ppb	0.001 ppb	74.576 %	0.701 ppb
Concentration RSD	7.4 %	87.0 %	3.2 %	12.5 %	0.7 %	6.8 %	116.7 %	1.4 %	1.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	13.384 ppb	70.765 %	68.393 %	0.003 ppb	0.173 ppb	54.512 %
Concentration per Run 1	14.243 ppb	69.039 %	68.505 %	-0.002 ppb	0.180 ppb	58.892 %
Concentration per Run 2	12.876 ppb	71.757 %	68.539 %	0.005 ppb	0.171 ppb	53.191 %
Concentration per Run 3	13.032 ppb	71.499 %	68.136 %	0.006 ppb	0.169 ppb	51.452 %
Concentration RSD	5.6 %	2.1 %	0.3 %	140.9 %	3.6 %	7.1 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	20	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348762-05 6020TL	Rack	2		
Analysis started at:	9/5/2023 9:46:15 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.630 %	95.756 %	0.006 ppb	15,402.523 ppb	51,922.518 ppb	110.953 ppb	3,133.965 ppb	785,407.007 ppb	95.953 %
Concentration per Run 1	92.359 %	87.036 %	0.007 ppb	15,904.502 ppb	53,912.547 ppb	112.485 ppb	3,163.576 ppb	803,559.595 ppb	94.352 %
Concentration per Run 2	92.201 %	101.757 %	0.007 ppb	14,720.063 ppb	49,859.231 ppb	106.387 ppb	3,037.731 ppb	771,814.241 ppb	97.729 %
Concentration per Run 3	90.328 %	98.475 %	0.006 ppb	15,583.005 ppb	51,995.777 ppb	113.986 ppb	3,200.587 ppb	780,847.184 ppb	95.779 %
Concentration RSD	1.2 %	8.1 %	7.7 %	4.0 %	3.9 %	3.6 %	2.7 %	2.1 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.292 ppb	0.773 ppb	101.127 ppb	5,437.113 ppb	0.105 ppb	0.486 ppb	0.370 ppb	1.115 ppb	85.149 %
Concentration per Run 1	0.306 ppb	0.754 ppb	103.059 ppb	5,579.872 ppb	0.098 ppb	0.551 ppb	0.362 ppb	1.245 ppb	77.160 %
Concentration per Run 2	0.255 ppb	0.709 ppb	98.062 ppb	5,287.660 ppb	0.118 ppb	0.418 ppb	0.363 ppb	0.931 ppb	88.234 %
Concentration per Run 3	0.316 ppb	0.856 ppb	102.261 ppb	5,443.807 ppb	0.101 ppb	0.491 ppb	0.384 ppb	1.168 ppb	90.052 %
Concentration RSD	11.3 %	9.8 %	2.7 %	2.7 %	10.1 %	13.7 %	3.3 %	14.7 %	8.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.485 ppb	0.054 ppb	16,260.600 ppb	1.546 ppb	83.006 %	0.095 ppb	0.010 ppb	88.404 %	0.446 ppb
Concentration per Run 1	0.397 ppb	-0.035 ppb	16,668.103 ppb	1.552 ppb	76.835 %	0.104 ppb	0.006 ppb	81.832 %	0.415 ppb
Concentration per Run 2	0.493 ppb	0.050 ppb	15,990.345 ppb	1.466 ppb	85.504 %	0.096 ppb	0.010 ppb	90.806 %	0.450 ppb
Concentration per Run 3	0.566 ppb	0.148 ppb	16,123.350 ppb	1.621 ppb	86.679 %	0.085 ppb	0.014 ppb	92.575 %	0.474 ppb
Concentration RSD	17.5 %	168.7 %	2.2 %	5.0 %	6.5 %	9.9 %	38.7 %	6.5 %	6.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.557 ppb	82.400 %	80.081 %	0.005 ppb	0.142 ppb	73.885 %
Concentration per Run 1	6.819 ppb	76.662 %	73.106 %	0.000 ppb	0.135 ppb	74.257 %
Concentration per Run 2	6.409 ppb	83.609 %	81.054 %	0.005 ppb	0.143 ppb	73.431 %
Concentration per Run 3	6.442 ppb	86.930 %	86.082 %	0.008 ppb	0.147 ppb	73.968 %
Concentration RSD	3.5 %	6.4 %	8.2 %	82.9 %	4.3 %	0.6 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	21	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348762-06 6020TL	Rack	2		
Analysis started at:	9/5/2023 9:50:54 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.540 %	101.989 %	0.002 ppb	12,930.830 ppb	51,025.805 ppb	3.347 ppb	2,448.918 ppb	797,158.543 ppb	97.193 %
Concentration per Run 1	93.869 %	103.050 %	0.003 ppb	12,677.578 ppb	50,709.968 ppb	2.847 ppb	2,446.037 ppb	808,859.958 ppb	98.548 %
Concentration per Run 2	90.818 %	100.464 %	0.004 ppb	12,776.052 ppb	50,432.206 ppb	4.068 ppb	2,392.158 ppb	776,579.545 ppb	96.636 %
Concentration per Run 3	86.932 %	102.454 %	-0.001 ppb	13,338.860 ppb	51,935.240 ppb	3.126 ppb	2,508.560 ppb	806,036.125 ppb	96.394 %
Concentration RSD	3.8 %	1.3 %	126.9 %	2.8 %	1.6 %	19.1 %	2.4 %	2.2 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.011 ppb	0.242 ppb	70.827 ppb	743.499 ppb	0.231 ppb	0.192 ppb	0.244 ppb	0.422 ppb	92.660 %
Concentration per Run 1	0.001 ppb	0.269 ppb	71.569 ppb	757.131 ppb	0.225 ppb	0.274 ppb	0.266 ppb	0.394 ppb	91.234 %
Concentration per Run 2	-0.014 ppb	0.218 ppb	68.028 ppb	687.818 ppb	0.228 ppb	0.154 ppb	0.241 ppb	0.439 ppb	92.250 %
Concentration per Run 3	-0.020 ppb	0.238 ppb	72.883 ppb	785.548 ppb	0.238 ppb	0.149 ppb	0.224 ppb	0.432 ppb	94.494 %
Concentration RSD	95.4 %	10.6 %	3.5 %	6.8 %	3.0 %	36.6 %	8.6 %	5.8 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.635 ppb	-0.019 ppb	16,252.691 ppb	1.466 ppb	89.506 %	0.016 ppb	0.004 ppb	97.823 %	0.337 ppb
Concentration per Run 1	0.618 ppb	-0.054 ppb	16,450.057 ppb	1.297 ppb	88.076 %	0.014 ppb	0.002 ppb	96.767 %	0.305 ppb
Concentration per Run 2	0.652 ppb	0.000 ppb	15,886.745 ppb	1.473 ppb	87.657 %	0.016 ppb	0.003 ppb	94.201 %	0.337 ppb
Concentration per Run 3	0.635 ppb	-0.003 ppb	16,421.269 ppb	1.627 ppb	92.785 %	0.017 ppb	0.006 ppb	102.502 %	0.369 ppb
Concentration RSD	2.7 %	159.1 %	2.0 %	11.3 %	3.2 %	10.9 %	56.3 %	4.3 %	9.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	7.802 ppb	89.192 %	86.829 %	0.001 ppb	0.017 ppb	84.601 %
Concentration per Run 1	7.780 ppb	90.794 %	88.325 %	-0.004 ppb	0.015 ppb	89.934 %
Concentration per Run 2	7.836 ppb	84.585 %	82.250 %	0.005 ppb	0.018 ppb	80.689 %
Concentration per Run 3	7.790 ppb	92.197 %	89.913 %	0.004 ppb	0.019 ppb	83.179 %
Concentration RSD	0.4 %	4.5 %	4.7 %	349.1 %	10.4 %	5.7 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	22	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/5/2023 9:55:32 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.272 %	85.543 %	60.818 ppb	5,536.211 ppb	5,536.251 ppb	55.524 ppb	5,692.048 ppb	5,894.045 ppb	88.617 %
Concentration per Run 1	76.590 %	85.742 %	60.787 ppb	5,569.312 ppb	5,551.839 ppb	57.294 ppb	5,637.051 ppb	5,906.946 ppb	88.335 %
Concentration per Run 2	76.664 %	85.444 %	60.452 ppb	5,694.785 ppb	5,724.599 ppb	59.518 ppb	6,056.369 ppb	6,166.656 ppb	89.144 %
Concentration per Run 3	75.562 %	85.444 %	61.216 ppb	5,344.536 ppb	5,332.314 ppb	49.762 ppb	5,382.724 ppb	5,608.532 ppb	88.371 %
Recovery Percentage 1			101.364 %	92.270 %	92.271 %	92.541 %	94.867 %	98.234 %	
Concentration RSD	0.8 %	0.2 %	0.6 %	3.2 %	3.6 %	9.2 %	6.0 %	4.7 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	59.019 ppb	57.758 ppb	57.295 ppb	5,681.722 ppb	56.942 ppb	57.133 ppb	58.141 ppb	59.620 ppb	85.227 %
Concentration per Run 1	59.814 ppb	59.538 ppb	57.785 ppb	5,730.401 ppb	58.224 ppb	58.975 ppb	59.721 ppb	60.787 ppb	82.516 %
Concentration per Run 2	58.895 ppb	57.079 ppb	58.343 ppb	5,690.009 ppb	56.161 ppb	55.232 ppb	57.175 ppb	59.498 ppb	89.830 %
Concentration per Run 3	58.348 ppb	56.658 ppb	55.759 ppb	5,624.756 ppb	56.440 ppb	57.191 ppb	57.528 ppb	58.575 ppb	83.336 %
Recovery Percentage 1	98.365 %	96.264 %	95.492 %	94.695 %	94.903 %	95.221 %	96.902 %	99.367 %	
Concentration RSD	1.3 %	2.7 %	2.4 %	0.9 %	2.0 %	3.3 %	2.4 %	1.9 %	4.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.217 ppb	59.518 ppb	57.664 ppb	54.121 ppb	83.590 %	58.151 ppb	58.077 ppb	84.802 %	58.397 ppb
Concentration per Run 1	59.406 ppb	58.597 ppb	57.084 ppb	54.764 ppb	83.551 %	58.124 ppb	57.682 ppb	84.064 %	58.167 ppb
Concentration per Run 2	56.777 ppb	62.188 ppb	59.322 ppb	53.835 ppb	86.090 %	57.464 ppb	57.706 ppb	88.605 %	57.455 ppb
Concentration per Run 3	58.468 ppb	57.771 ppb	56.586 ppb	53.764 ppb	81.130 %	58.865 ppb	58.842 ppb	81.738 %	59.570 ppb
Recovery Percentage 1	97.029 %	99.197 %	96.107 %	90.202 %		96.918 %	96.795 %		97.329 %
Concentration RSD	2.3 %	3.9 %	2.5 %	1.0 %	3.0 %	1.2 %	1.1 %	4.1 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.144 ppb	85.042 %	85.414 %	60.213 ppb	56.620 ppb	92.929 %
Concentration per Run 1	57.620 ppb	83.581 %	83.039 %	61.156 ppb	57.619 ppb	100.117 %
Concentration per Run 2	59.076 ppb	88.107 %	89.096 %	59.031 ppb	55.419 ppb	91.432 %
Concentration per Run 3	57.736 ppb	83.440 %	84.106 %	60.454 ppb	56.821 ppb	87.237 %
Recovery Percentage 1	96.906 %			100.356 %	94.367 %	
Concentration RSD	1.4 %	3.1 %	3.8 %	1.8 %	2.0 %	7.1 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	23	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/5/2023 10:00:14 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.135 %	82.261 %	0.003 ppb	5.778 ppb	-1.035 ppb	-0.955 ppb	2.985 ppb	-1.545 ppb	79.962 %
Concentration per Run 1	78.964 %	81.962 %	0.003 ppb	6.737 ppb	-0.996 ppb	-0.979 ppb	4.982 ppb	-0.843 ppb	80.725 %
Concentration per Run 2	78.183 %	83.256 %	0.002 ppb	4.929 ppb	-0.755 ppb	-1.081 ppb	0.705 ppb	1.191 ppb	79.336 %
Concentration per Run 3	77.256 %	81.565 %	0.006 ppb	5.668 ppb	-1.354 ppb	-0.807 ppb	3.268 ppb	-4.982 ppb	79.824 %
Recovery Percentage 1			0.670 %	5.778 %	-1.479 %	-9.554 %	2.985 %	-1.545 %	
Concentration RSD	1.1 %	1.1 %	60.9 %	15.7 %	29.1 %	14.5 %	72.1 %	203.7 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.026 ppb	-0.003 ppb	0.023 ppb	18.601 ppb	0.001 ppb	0.175 ppb	-0.020 ppb	0.032 ppb	84.435 %
Concentration per Run 1	-0.022 ppb	0.002 ppb	0.005 ppb	17.093 ppb	0.001 ppb	0.138 ppb	-0.042 ppb	0.014 ppb	87.759 %
Concentration per Run 2	-0.027 ppb	-0.004 ppb	0.016 ppb	18.747 ppb	0.001 ppb	0.172 ppb	0.010 ppb	0.029 ppb	83.706 %
Concentration per Run 3	-0.027 ppb	-0.008 ppb	0.048 ppb	19.963 ppb	0.001 ppb	0.214 ppb	-0.029 ppb	0.053 ppb	81.840 %
Recovery Percentage 1	-0.510 %	-0.322 %	2.294 %	37.202 %	0.180 %	8.740 %	-2.047 %	0.637 %	
Concentration RSD	11.2 %	170.6 %	96.9 %	7.7 %	3.9 %	21.6 %	131.8 %	62.0 %	3.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.090 ppb	0.678 ppb	0.028 ppb	1.779 ppb	84.224 %	0.001 ppb	0.000 ppb	82.919 %	0.269 ppb
Concentration per Run 1	0.063 ppb	0.633 ppb	0.028 ppb	1.426 ppb	85.186 %	0.002 ppb	-0.001 ppb	87.976 %	0.246 ppb
Concentration per Run 2	0.091 ppb	0.631 ppb	0.021 ppb	1.745 ppb	83.644 %	0.001 ppb	0.002 ppb	81.625 %	0.249 ppb
Concentration per Run 3	0.115 ppb	0.770 ppb	0.035 ppb	2.166 ppb	83.843 %	0.001 ppb	-0.001 ppb	79.156 %	0.313 ppb
Recovery Percentage 1	17.980 %	13.558 %	0.279 %	88.945 %		0.364 %	0.207 %		6.737 %
Concentration RSD	28.6 %	11.8 %	25.8 %	20.9 %	1.0 %	59.3 %	397.1 %	5.5 %	14.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	-0.004 ppb	85.368 %	84.716 %	0.345 ppb	0.011 ppb	86.084 %
Concentration per Run 1	0.000 ppb	87.495 %	88.165 %	0.399 ppb	0.013 ppb	92.387 %
Concentration per Run 2	-0.013 ppb	86.254 %	84.280 %	0.353 ppb	0.011 ppb	84.018 %
Concentration per Run 3	0.002 ppb	82.354 %	81.704 %	0.282 ppb	0.010 ppb	81.846 %
Recovery Percentage 1	-0.712 %			34.458 %	1.141 %	
Concentration RSD	219.5 %	3.1 %	3.8 %	17.0 %	9.9 %	6.5 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	24	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/5/2023 10:18:37 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.699 %	92.672 %	59.655 ppb	5,495.899 ppb	5,496.606 ppb	55.343 ppb	5,569.463 ppb	5,706.145 ppb	90.621 %
Concentration per Run 1	80.166 %	91.810 %	59.541 ppb	5,366.130 ppb	5,318.555 ppb	53.297 ppb	5,299.892 ppb	5,538.730 ppb	90.261 %
Concentration per Run 2	79.690 %	91.114 %	59.508 ppb	5,537.910 ppb	5,531.710 ppb	54.659 ppb	5,411.414 ppb	5,613.461 ppb	90.515 %
Concentration per Run 3	79.241 %	95.093 %	59.916 ppb	5,583.658 ppb	5,639.551 ppb	58.073 ppb	5,997.082 ppb	5,966.243 ppb	91.088 %
Recovery Percentage 1			99.425 %	91.598 %	91.610 %	92.238 %	92.824 %	95.102 %	
Concentration RSD	0.6 %	2.3 %	0.4 %	2.1 %	3.0 %	4.4 %	6.7 %	4.0 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.893 ppb	56.399 ppb	55.952 ppb	5,614.745 ppb	57.409 ppb	57.601 ppb	58.702 ppb	59.179 ppb	88.094 %
Concentration per Run 1	58.605 ppb	57.537 ppb	57.511 ppb	5,712.197 ppb	58.933 ppb	59.637 ppb	60.768 ppb	59.500 ppb	81.757 %
Concentration per Run 2	58.524 ppb	56.841 ppb	55.729 ppb	5,673.896 ppb	58.399 ppb	58.173 ppb	59.811 ppb	60.111 ppb	86.143 %
Concentration per Run 3	56.550 ppb	54.819 ppb	54.617 ppb	5,458.142 ppb	54.897 ppb	54.994 ppb	55.527 ppb	57.926 ppb	96.383 %
Recovery Percentage 1	96.489 %	93.998 %	93.254 %	93.579 %	95.682 %	96.002 %	97.836 %	98.632 %	
Concentration RSD	2.0 %	2.5 %	2.6 %	2.4 %	3.8 %	4.1 %	4.8 %	1.9 %	8.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.568 ppb	58.609 ppb	56.733 ppb	54.219 ppb	87.085 %	58.799 ppb	58.576 ppb	86.748 %	58.547 ppb
Concentration per Run 1	58.706 ppb	57.914 ppb	55.674 ppb	54.740 ppb	85.592 %	60.387 ppb	59.732 ppb	81.314 %	59.584 ppb
Concentration per Run 2	59.766 ppb	57.029 ppb	55.993 ppb	54.094 ppb	85.678 %	58.862 ppb	58.997 ppb	84.591 %	58.512 ppb
Concentration per Run 3	57.231 ppb	60.885 ppb	58.532 ppb	53.824 ppb	89.985 %	57.149 ppb	57.000 ppb	94.339 %	57.546 ppb
Recovery Percentage 1	97.613 %	97.682 %	94.555 %	90.366 %		97.998 %	97.627 %		97.578 %
Concentration RSD	2.2 %	3.4 %	2.8 %	0.9 %	2.9 %	2.8 %	2.4 %	7.8 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.080 ppb	88.489 %	88.584 %	61.038 ppb	59.595 ppb	105.125 %
Concentration per Run 1	58.452 ppb	85.544 %	84.087 %	63.166 ppb	58.527 ppb	126.772 %
Concentration per Run 2	55.615 ppb	87.883 %	88.788 %	60.223 ppb	60.561 ppb	97.123 %
Concentration per Run 3	57.173 ppb	92.039 %	92.876 %	59.725 ppb	59.698 ppb	91.482 %
Recovery Percentage 1	95.133 %			101.730 %	99.326 %	
Concentration RSD	2.5 %	3.7 %	5.0 %	3.0 %	1.7 %	18.0 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	25	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/5/2023 10:23:53 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.847 %	91.678 %	0.003 ppb	2.736 ppb	-1.249 ppb	-0.949 ppb	1.464 ppb	-5.561 ppb	79.894 %
Concentration per Run 1	78.185 %	87.433 %	0.002 ppb	2.274 ppb	-1.014 ppb	-0.944 ppb	2.847 ppb	-3.762 ppb	79.873 %
Concentration per Run 2	76.612 %	95.888 %	0.004 ppb	3.532 ppb	-1.477 ppb	-0.938 ppb	3.700 ppb	-7.325 ppb	79.305 %
Concentration per Run 3	75.743 %	91.711 %	0.004 ppb	2.402 ppb	-1.256 ppb	-0.965 ppb	-2.153 ppb	-5.595 ppb	80.506 %
Recovery Percentage 1			0.667 %	2.736 %	-1.784 %	-9.490 %	1.464 %	-5.561 %	
Concentration RSD	1.6 %	4.6 %	34.8 %	25.3 %	18.5 %	1.5 %	215.9 %	32.0 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.030 ppb	0.001 ppb	0.000 ppb	12.979 ppb	0.002 ppb	0.171 ppb	-0.012 ppb	0.051 ppb	87.569 %
Concentration per Run 1	-0.039 ppb	0.006 ppb	0.015 ppb	10.614 ppb	0.001 ppb	0.184 ppb	0.014 ppb	0.034 ppb	84.946 %
Concentration per Run 2	-0.019 ppb	0.000 ppb	0.010 ppb	12.282 ppb	0.003 ppb	0.181 ppb	-0.030 ppb	0.067 ppb	90.249 %
Concentration per Run 3	-0.034 ppb	-0.002 ppb	-0.024 ppb	16.040 ppb	0.002 ppb	0.147 ppb	-0.021 ppb	0.050 ppb	87.510 %
Recovery Percentage 1	-0.609 %	0.138 %	0.013 %	25.957 %	0.400 %	8.532 %	-1.217 %	1.011 %	
Concentration RSD	34.8 %	301.0 %	16,574.7 %	21.4 %	55.6 %	12.1 %	190.0 %	32.5 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.065 ppb	0.528 ppb	0.006 ppb	1.548 ppb	87.662 %	0.003 ppb	0.002 ppb	86.628 %	0.156 ppb
Concentration per Run 1	0.007 ppb	0.436 ppb	0.002 ppb	1.198 ppb	86.033 %	0.004 ppb	0.001 ppb	83.457 %	0.170 ppb
Concentration per Run 2	0.097 ppb	0.473 ppb	0.011 ppb	1.608 ppb	89.791 %	0.001 ppb	0.003 ppb	92.735 %	0.140 ppb
Concentration per Run 3	0.091 ppb	0.674 ppb	0.006 ppb	1.838 ppb	87.162 %	0.005 ppb	0.001 ppb	83.693 %	0.158 ppb
Recovery Percentage 1	13.011 %	10.555 %	0.063 %	77.388 %		0.815 %	0.916 %		3.903 %
Concentration RSD	76.8 %	24.3 %	66.9 %	21.0 %	2.2 %	69.1 %	49.1 %	6.1 %	9.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.002 ppb	86.294 %	85.434 %	0.291 ppb	0.007 ppb	95.589 %
Concentration per Run 1	-0.013 ppb	83.712 %	82.862 %	0.340 ppb	0.007 ppb	106.529 %
Concentration per Run 2	0.004 ppb	90.839 %	92.004 %	0.291 ppb	0.008 ppb	94.991 %
Concentration per Run 3	0.014 ppb	84.331 %	81.436 %	0.243 ppb	0.007 ppb	85.246 %
Recovery Percentage 1	0.390 %			29.113 %	0.736 %	
Concentration RSD	699.5 %	4.6 %	6.7 %	16.7 %	11.7 %	11.1 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	26	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348762-08 6020TL	Rack	2		
Analysis started at:	9/5/2023 10:28:37 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.169 %	98.475 %	0.005 ppb	8,700.139 ppb	73,158.497 ppb	20.368 ppb	2,203.525 ppb	383,818.176 ppb	79.058 %
Concentration per Run 1	79.324 %	94.695 %	0.006 ppb	9,115.436 ppb	76,992.352 ppb	21.315 ppb	2,342.846 ppb	460,001.570 ppb	79.636 %
Concentration per Run 2	76.738 %	101.061 %	0.003 ppb	8,509.487 ppb	71,023.001 ppb	20.819 ppb	2,199.974 ppb	363,477.504 ppb	78.507 %
Concentration per Run 3	75.443 %	99.668 %	0.006 ppb	8,475.494 ppb	71,460.138 ppb	18.970 ppb	2,067.755 ppb	327,975.452 ppb	79.030 %
Concentration RSD	2.6 %	3.4 %	30.7 %	4.1 %	4.5 %	6.1 %	6.2 %	17.8 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.052 ppb	0.238 ppb	45.223 ppb	198.578 ppb	1.730 ppb	0.417 ppb	0.471 ppb	0.640 ppb	87.304 %
Concentration per Run 1	0.036 ppb	0.257 ppb	46.711 ppb	207.646 ppb	1.752 ppb	0.397 ppb	0.467 ppb	0.663 ppb	86.077 %
Concentration per Run 2	0.076 ppb	0.216 ppb	45.805 ppb	192.846 ppb	1.815 ppb	0.438 ppb	0.453 ppb	0.682 ppb	86.696 %
Concentration per Run 3	0.043 ppb	0.240 ppb	43.152 ppb	195.241 ppb	1.623 ppb	0.416 ppb	0.494 ppb	0.576 ppb	89.138 %
Concentration RSD	40.8 %	8.5 %	4.1 %	4.0 %	5.7 %	4.8 %	4.5 %	8.8 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.432 ppb	0.098 ppb	13,209.323 ppb	2.431 ppb	82.557 %	0.004 ppb	0.009 ppb	86.555 %	0.124 ppb
Concentration per Run 1	0.475 ppb	0.057 ppb	13,984.385 ppb	2.288 ppb	81.328 %	0.005 ppb	0.011 ppb	87.137 %	0.120 ppb
Concentration per Run 2	0.391 ppb	0.060 ppb	13,249.894 ppb	2.421 ppb	83.370 %	0.004 ppb	0.008 ppb	87.608 %	0.113 ppb
Concentration per Run 3	0.430 ppb	0.177 ppb	12,393.691 ppb	2.584 ppb	82.974 %	0.003 ppb	0.009 ppb	84.919 %	0.139 ppb
Concentration RSD	9.7 %	69.4 %	6.0 %	6.1 %	1.3 %	20.2 %	20.9 %	1.7 %	11.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.475 ppb	85.129 %	84.299 %	0.071 ppb	0.383 ppb	75.574 %
Concentration per Run 1	15.554 ppb	83.267 %	83.174 %	0.049 ppb	0.352 ppb	81.383 %
Concentration per Run 2	15.908 ppb	86.950 %	85.778 %	0.083 ppb	0.397 ppb	73.258 %
Concentration per Run 3	14.963 ppb	85.170 %	83.944 %	0.081 ppb	0.400 ppb	72.079 %
Concentration RSD	3.1 %	2.2 %	1.6 %	26.3 %	6.9 %	6.7 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	27	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348762-09 6020TL	Rack	2		
Analysis started at:	9/5/2023 10:33:16 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.091 %	104.642 %	0.006 ppb	19,040.015 ppb	66,179.524 ppb	24.237 ppb	2,864.606 ppb	776,543.719 ppb	78.045 %
Concentration per Run 1	77.302 %	99.867 %	0.005 ppb	19,902.480 ppb	69,406.635 ppb	24.813 ppb	3,048.271 ppb	814,278.428 ppb	78.361 %
Concentration per Run 2	74.768 %	102.852 %	0.004 ppb	19,147.812 ppb	66,380.748 ppb	24.600 ppb	2,781.059 ppb	766,193.203 ppb	78.151 %
Concentration per Run 3	73.203 %	111.207 %	0.008 ppb	18,069.754 ppb	62,751.188 ppb	23.297 ppb	2,764.488 ppb	749,159.524 ppb	77.624 %
Concentration RSD	2.8 %	5.6 %	30.5 %	4.8 %	5.0 %	3.4 %	5.6 %	4.3 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.015 ppb	0.264 ppb	44.166 ppb	429.677 ppb	0.274 ppb	0.203 ppb	0.258 ppb	2.075 ppb	86.972 %
Concentration per Run 1	-0.012 ppb	0.248 ppb	47.469 ppb	459.996 ppb	0.267 ppb	0.186 ppb	0.320 ppb	2.242 ppb	83.138 %
Concentration per Run 2	0.017 ppb	0.265 ppb	42.476 ppb	408.991 ppb	0.281 ppb	0.212 ppb	0.256 ppb	1.995 ppb	88.707 %
Concentration per Run 3	0.040 ppb	0.279 ppb	42.552 ppb	420.044 ppb	0.273 ppb	0.210 ppb	0.199 ppb	1.989 ppb	89.071 %
Concentration RSD	175.6 %	6.0 %	6.5 %	6.2 %	2.6 %	7.4 %	23.3 %	7.0 %	3.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.452 ppb	0.173 ppb	15,810.072 ppb	1.786 ppb	82.943 %	0.000 ppb	0.018 ppb	87.027 %	0.084 ppb
Concentration per Run 1	0.443 ppb	0.067 ppb	17,030.737 ppb	1.659 ppb	79.998 %	0.001 ppb	0.015 ppb	85.892 %	0.068 ppb
Concentration per Run 2	0.463 ppb	0.237 ppb	15,143.681 ppb	1.883 ppb	83.075 %	0.000 ppb	0.022 ppb	84.727 %	0.090 ppb
Concentration per Run 3	0.450 ppb	0.215 ppb	15,255.799 ppb	1.817 ppb	85.756 %	0.000 ppb	0.017 ppb	90.462 %	0.093 ppb
Concentration RSD	2.2 %	53.5 %	6.7 %	6.4 %	3.5 %	288.2 %	18.5 %	3.5 %	16.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	7.218 ppb	79.705 %	76.987 %	0.035 ppb	0.137 ppb	75.936 %
Concentration per Run 1	7.488 ppb	77.062 %	75.797 %	0.019 ppb	0.125 ppb	82.432 %
Concentration per Run 2	7.200 ppb	80.102 %	77.590 %	0.040 ppb	0.143 ppb	72.895 %
Concentration per Run 3	6.966 ppb	81.950 %	77.574 %	0.046 ppb	0.144 ppb	72.483 %
Concentration RSD	3.6 %	3.1 %	1.3 %	40.8 %	8.0 %	7.4 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	28	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348762-10 6020TL	Rack	2		
Analysis started at:	9/5/2023 10:37:56 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.489 %	102.653 %	0.001 ppb	11,329.647 ppb	57,126.735 ppb	9.184 ppb	1,535.182 ppb	135,807.446 ppb	83.783 %
Concentration per Run 1	77.156 %	107.427 %	0.001 ppb	11,306.155 ppb	57,505.867 ppb	11.043 ppb	1,600.115 ppb	141,178.104 ppb	85.097 %
Concentration per Run 2	75.260 %	102.454 %	0.000 ppb	11,469.641 ppb	56,734.713 ppb	7.973 ppb	1,549.046 ppb	134,838.169 ppb	83.673 %
Concentration per Run 3	74.053 %	98.077 %	0.002 ppb	11,213.144 ppb	57,139.624 ppb	8.535 ppb	1,456.384 ppb	131,406.065 ppb	82.580 %
Concentration RSD	2.1 %	4.6 %	83.9 %	1.1 %	0.7 %	17.8 %	4.7 %	3.7 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.085 ppb	0.283 ppb	0.374 ppb	21.155 ppb	0.027 ppb	0.208 ppb	0.268 ppb	1.802 ppb	91.278 %
Concentration per Run 1	0.070 ppb	0.291 ppb	0.372 ppb	21.489 ppb	0.019 ppb	0.169 ppb	0.252 ppb	1.736 ppb	97.184 %
Concentration per Run 2	0.083 ppb	0.284 ppb	0.324 ppb	20.526 ppb	0.025 ppb	0.223 ppb	0.287 ppb	1.788 ppb	89.588 %
Concentration per Run 3	0.103 ppb	0.274 ppb	0.427 ppb	21.450 ppb	0.036 ppb	0.232 ppb	0.266 ppb	1.881 ppb	87.061 %
Concentration RSD	19.8 %	3.1 %	13.8 %	2.6 %	33.4 %	16.4 %	6.6 %	4.1 %	5.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.130 ppb	-0.027 ppb	2,682.261 ppb	0.771 ppb	86.108 %	0.001 ppb	0.004 ppb	88.435 %	0.077 ppb
Concentration per Run 1	0.095 ppb	-0.047 ppb	2,781.728 ppb	0.720 ppb	88.373 %	0.000 ppb	0.003 ppb	96.378 %	0.067 ppb
Concentration per Run 2	0.115 ppb	-0.069 ppb	2,666.969 ppb	0.726 ppb	85.475 %	0.001 ppb	0.002 ppb	84.933 %	0.080 ppb
Concentration per Run 3	0.181 ppb	0.034 ppb	2,598.085 ppb	0.868 ppb	84.474 %	0.001 ppb	0.006 ppb	83.995 %	0.084 ppb
Concentration RSD	34.5 %	197.6 %	3.5 %	10.9 %	2.4 %	50.0 %	55.1 %	7.8 %	11.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	22.938 ppb	91.162 %	89.030 %	0.017 ppb	0.029 ppb	88.912 %
Concentration per Run 1	23.576 ppb	94.169 %	93.346 %	0.006 ppb	0.024 ppb	101.722 %
Concentration per Run 2	22.684 ppb	89.551 %	89.061 %	0.022 ppb	0.030 ppb	85.009 %
Concentration per Run 3	22.556 ppb	89.767 %	84.682 %	0.024 ppb	0.032 ppb	80.005 %
Concentration RSD	2.4 %	2.9 %	4.9 %	55.5 %	14.0 %	12.8 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	29	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348692-02D10 6020TL	Rack	2		
Analysis started at:	9/5/2023 10:42:35 PM	Vial	52		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	64.021 %	85.610 %	0.009 ppb	556,318.334 ppb	11,582.894 ppb	110.446 ppb	305,325.192 ppb	577,159.609 ppb	72.675 %
Concentration per Run 1	66.934 %	90.815 %	0.009 ppb	567,504.155 ppb	11,808.147 ppb	117.903 ppb	329,849.809 ppb	626,786.380 ppb	74.167 %
Concentration per Run 2	64.073 %	89.224 %	0.006 ppb	536,307.828 ppb	11,256.498 ppb	106.536 ppb	288,576.086 ppb	544,325.512 ppb	72.846 %
Concentration per Run 3	61.058 %	76.790 %	0.012 ppb	565,143.019 ppb	11,684.036 ppb	106.898 ppb	297,549.682 ppb	560,366.936 ppb	71.010 %
Concentration RSD	4.6 %	9.0 %	35.0 %	3.1 %	2.5 %	5.8 %	7.1 %	7.6 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.078 ppb	0.999 ppb	379.233 ppb	435.373 ppb	2.311 ppb	9.610 ppb	8.942 ppb	154.502 ppb	76.128 %
Concentration per Run 1	0.132 ppb	0.995 ppb	384.311 ppb	439.514 ppb	2.252 ppb	9.237 ppb	8.880 ppb	156.381 ppb	80.699 %
Concentration per Run 2	0.057 ppb	0.989 ppb	377.141 ppb	439.056 ppb	2.315 ppb	9.633 ppb	8.970 ppb	152.204 ppb	74.967 %
Concentration per Run 3	0.046 ppb	1.011 ppb	376.245 ppb	427.550 ppb	2.365 ppb	9.959 ppb	8.976 ppb	154.920 ppb	72.719 %
Concentration RSD	59.5 %	1.2 %	1.2 %	1.6 %	2.5 %	3.8 %	0.6 %	1.4 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.967 ppb	0.118 ppb	2,851.743 ppb	5.173 ppb	69.800 %	0.300 ppb	11.575 ppb	74.466 %	1.333 ppb
Concentration per Run 1	0.987 ppb	0.065 ppb	3,210.220 ppb	5.005 ppb	71.577 %	0.298 ppb	11.364 ppb	80.269 %	1.339 ppb
Concentration per Run 2	0.877 ppb	0.228 ppb	2,760.487 ppb	5.281 ppb	70.434 %	0.300 ppb	11.824 ppb	74.185 %	1.309 ppb
Concentration per Run 3	1.036 ppb	0.061 ppb	2,584.521 ppb	5.232 ppb	67.388 %	0.303 ppb	11.536 ppb	68.943 %	1.350 ppb
Concentration RSD	8.4 %	81.2 %	11.3 %	2.8 %	3.1 %	0.7 %	2.0 %	7.6 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	181.623 ppb	73.786 %	71.708 %	0.055 ppb	1.817 ppb	61.594 %
Concentration per Run 1	184.357 ppb	77.213 %	76.306 %	0.044 ppb	1.753 ppb	66.697 %
Concentration per Run 2	181.959 ppb	74.407 %	72.808 %	0.060 ppb	1.795 ppb	60.728 %
Concentration per Run 3	178.552 ppb	69.738 %	66.010 %	0.060 ppb	1.902 ppb	57.357 %
Concentration RSD	1.6 %	5.1 %	7.3 %	16.6 %	4.2 %	7.7 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	30	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2348692-03d10 6020TL	Rack	2		
Analysis started at:	9/5/2023 10:47:14 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	64.518 %	81.366 %	0.003 ppb	422,850.572 ppb	9,773.653 ppb	38.843 ppb	225,357.545 ppb	435,730.781 ppb	71.198 %
Concentration per Run 1	66.757 %	83.554 %	0.001 ppb	438,623.633 ppb	10,189.513 ppb	43.069 ppb	248,191.715 ppb	462,318.191 ppb	71.558 %
Concentration per Run 2	64.124 %	83.057 %	0.004 ppb	418,943.096 ppb	9,491.659 ppb	39.397 ppb	217,898.610 ppb	427,623.670 ppb	71.085 %
Concentration per Run 3	62.673 %	77.486 %	0.003 ppb	410,984.987 ppb	9,639.787 ppb	34.063 ppb	209,982.310 ppb	417,250.482 ppb	70.951 %
Concentration RSD	3.2 %	4.1 %	51.6 %	3.4 %	3.8 %	11.7 %	8.9 %	5.4 %	0.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.017 ppb	0.532 ppb	294.627 ppb	337.281 ppb	1.938 ppb	8.096 ppb	7.254 ppb	120.735 ppb	75.954 %
Concentration per Run 1	0.003 ppb	0.541 ppb	309.274 ppb	348.025 ppb	1.913 ppb	8.252 ppb	7.473 ppb	124.152 ppb	77.843 %
Concentration per Run 2	0.022 ppb	0.525 ppb	290.221 ppb	340.572 ppb	1.933 ppb	8.154 ppb	7.048 ppb	117.820 ppb	77.214 %
Concentration per Run 3	0.026 ppb	0.530 ppb	284.385 ppb	323.247 ppb	1.968 ppb	7.883 ppb	7.241 ppb	120.234 ppb	72.804 %
Concentration RSD	70.3 %	1.6 %	4.4 %	3.8 %	1.4 %	2.4 %	2.9 %	2.6 %	3.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.738 ppb	0.102 ppb	2,191.796 ppb	5.653 ppb	69.147 %	0.111 ppb	8.727 ppb	73.552 %	1.788 ppb
Concentration per Run 1	0.783 ppb	0.133 ppb	2,521.604 ppb	5.851 ppb	71.647 %	0.114 ppb	8.627 ppb	79.190 %	1.783 ppb
Concentration per Run 2	0.733 ppb	0.047 ppb	2,068.341 ppb	5.579 ppb	69.386 %	0.105 ppb	8.819 ppb	73.308 %	1.751 ppb
Concentration per Run 3	0.697 ppb	0.125 ppb	1,985.442 ppb	5.529 ppb	66.408 %	0.114 ppb	8.735 ppb	68.157 %	1.830 ppb
Concentration RSD	5.9 %	46.7 %	13.2 %	3.1 %	3.8 %	4.7 %	1.1 %	7.5 %	2.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	134.969 ppb	74.775 %	72.159 %	0.040 ppb	0.638 ppb	60.908 %
Concentration per Run 1	139.596 ppb	78.088 %	76.708 %	0.029 ppb	0.616 ppb	65.786 %
Concentration per Run 2	132.474 ppb	75.303 %	72.421 %	0.045 ppb	0.639 ppb	60.067 %
Concentration per Run 3	132.836 ppb	70.933 %	67.348 %	0.048 ppb	0.661 ppb	56.872 %
Concentration RSD	3.0 %	4.8 %	6.5 %	24.6 %	3.5 %	7.4 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	31	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/5/2023 10:51:53 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	68.695 %	85.676 %	61.200 ppb	5,416.518 ppb	5,389.319 ppb	55.175 ppb	5,473.994 ppb	5,443.369 ppb	84.302 %
Concentration per Run 1	69.171 %	87.234 %	61.480 ppb	5,503.172 ppb	5,463.143 ppb	55.966 ppb	5,564.427 ppb	5,656.653 ppb	84.800 %
Concentration per Run 2	68.880 %	89.821 %	61.525 ppb	5,313.075 ppb	5,330.722 ppb	54.948 ppb	5,239.434 ppb	5,316.974 ppb	83.989 %
Concentration per Run 3	68.032 %	79.973 %	60.594 ppb	5,433.308 ppb	5,374.092 ppb	54.611 ppb	5,618.120 ppb	5,356.479 ppb	84.115 %
Recovery Percentage 1			101.999 %	90.275 %	89.822 %	91.959 %	91.233 %	90.723 %	
Concentration RSD	0.9 %	6.0 %	0.9 %	1.8 %	1.3 %	1.3 %	3.7 %	3.4 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.289 ppb	56.867 ppb	54.566 ppb	5,556.649 ppb	56.969 ppb	58.245 ppb	58.658 ppb	59.817 ppb	81.582 %
Concentration per Run 1	57.653 ppb	58.518 ppb	57.343 ppb	5,641.298 ppb	57.383 ppb	59.400 ppb	59.119 ppb	61.067 ppb	81.958 %
Concentration per Run 2	54.399 ppb	54.449 ppb	52.781 ppb	5,393.715 ppb	55.626 ppb	56.373 ppb	56.465 ppb	57.665 ppb	84.980 %
Concentration per Run 3	56.813 ppb	57.634 ppb	53.572 ppb	5,634.933 ppb	57.898 ppb	58.961 ppb	60.391 ppb	60.718 ppb	77.810 %
Recovery Percentage 1	93.814 %	94.778 %	90.943 %	92.611 %	94.948 %	97.074 %	97.763 %	99.694 %	
Concentration RSD	3.0 %	3.8 %	4.5 %	2.5 %	2.1 %	2.8 %	3.4 %	3.1 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.243 ppb	57.362 ppb	54.549 ppb	54.402 ppb	81.101 %	59.538 ppb	58.994 ppb	79.263 %	59.008 ppb
Concentration per Run 1	60.062 ppb	59.218 ppb	56.147 ppb	54.784 ppb	81.666 %	59.209 ppb	58.772 ppb	80.363 %	59.366 ppb
Concentration per Run 2	56.582 ppb	56.616 ppb	54.289 ppb	53.654 ppb	82.144 %	59.392 ppb	59.601 ppb	80.776 %	58.969 ppb
Concentration per Run 3	58.083 ppb	56.251 ppb	53.211 ppb	54.766 ppb	79.494 %	60.012 ppb	58.608 ppb	76.651 %	58.689 ppb
Recovery Percentage 1	97.071 %	95.603 %	90.915 %	90.669 %		99.229 %	98.323 %		98.346 %
Concentration RSD	3.0 %	2.8 %	2.7 %	1.2 %	1.7 %	0.7 %	0.9 %	2.9 %	0.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.148 ppb	83.725 %	81.770 %	58.610 ppb	54.469 ppb	86.244 %
Concentration per Run 1	56.920 ppb	85.274 %	84.308 %	55.943 ppb	52.107 ppb	91.115 %
Concentration per Run 2	56.505 ppb	84.494 %	83.382 %	59.888 ppb	55.187 ppb	85.984 %
Concentration per Run 3	55.019 ppb	81.408 %	77.621 %	60.000 ppb	56.113 ppb	81.631 %
Recovery Percentage 1	93.580 %			97.684 %	90.782 %	
Concentration RSD	1.8 %	2.4 %	4.4 %	3.9 %	3.9 %	5.5 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	32	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/5/2023 10:56:35 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	69.040 %	86.140 %	0.007 ppb	6.921 ppb	-0.801 ppb	-1.012 ppb	1.611 ppb	-4.938 ppb	70.008 %
Concentration per Run 1	69.853 %	84.051 %	0.004 ppb	7.428 ppb	-0.986 ppb	-1.072 ppb	2.034 ppb	-0.696 ppb	70.757 %
Concentration per Run 2	69.469 %	87.533 %	0.012 ppb	6.768 ppb	-0.419 ppb	-0.883 ppb	5.626 ppb	-7.974 ppb	69.803 %
Concentration per Run 3	67.799 %	86.837 %	0.006 ppb	6.566 ppb	-0.997 ppb	-1.080 ppb	-2.829 ppb	-6.145 ppb	69.464 %
Recovery Percentage 1			1.471 %	6.921 %	-1.144 %	-10.115 %	1.611 %	-4.938 %	
Concentration RSD	1.6 %	2.1 %	51.4 %	6.5 %	41.3 %	11.0 %	263.5 %	76.7 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.037 ppb	0.009 ppb	-0.014 ppb	14.848 ppb	0.002 ppb	0.177 ppb	-0.003 ppb	0.035 ppb	76.394 %
Concentration per Run 1	-0.045 ppb	0.010 ppb	0.001 ppb	15.311 ppb	0.004 ppb	0.202 ppb	0.007 ppb	0.066 ppb	75.101 %
Concentration per Run 2	-0.027 ppb	0.002 ppb	-0.012 ppb	15.524 ppb	0.004 ppb	0.147 ppb	0.001 ppb	0.035 ppb	79.511 %
Concentration per Run 3	-0.038 ppb	0.015 ppb	-0.031 ppb	13.711 ppb	0.000 ppb	0.182 ppb	-0.018 ppb	0.004 ppb	74.571 %
Recovery Percentage 1	-0.734 %	0.906 %	-1.422 %	29.697 %	0.461 %	8.866 %	-0.316 %	0.700 %	
Concentration RSD	24.2 %	71.4 %	111.9 %	6.7 %	100.1 %	15.7 %	406.8 %	88.0 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.101 ppb	0.685 ppb	0.009 ppb	1.712 ppb	80.497 %	0.003 ppb	0.001 ppb	76.611 %	0.070 ppb
Concentration per Run 1	0.068 ppb	0.561 ppb	0.009 ppb	1.308 ppb	78.920 %	0.005 ppb	0.002 ppb	75.345 %	0.057 ppb
Concentration per Run 2	0.100 ppb	0.723 ppb	0.008 ppb	1.793 ppb	82.442 %	0.003 ppb	0.001 ppb	76.878 %	0.063 ppb
Concentration per Run 3	0.136 ppb	0.771 ppb	0.009 ppb	2.035 ppb	80.130 %	0.002 ppb	0.000 ppb	77.610 %	0.092 ppb
Recovery Percentage 1	20.295 %	13.696 %	0.086 %	85.599 %		0.874 %	0.569 %		1.762 %
Concentration RSD	33.9 %	16.1 %	1.3 %	21.6 %	2.2 %	38.7 %	51.6 %	1.5 %	26.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.020 ppb	78.574 %	77.261 %	0.347 ppb	0.014 ppb	78.000 %
Concentration per Run 1	0.017 ppb	76.827 %	76.748 %	0.384 ppb	0.014 ppb	82.846 %
Concentration per Run 2	0.017 ppb	79.299 %	77.612 %	0.376 ppb	0.016 ppb	74.921 %
Concentration per Run 3	0.026 ppb	79.596 %	77.422 %	0.280 ppb	0.011 ppb	76.233 %
Recovery Percentage 1	3.985 %			34.698 %	1.372 %	
Concentration RSD	26.3 %	1.9 %	0.6 %	16.7 %	17.3 %	5.4 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index: 33 User name ALPHALAB\Metals-Instrument Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 9/5/2023 11:01:18 PM Vial 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	68.367 %	83.256 %	61.252 ppb	5,546.132 ppb	5,470.285 ppb	51.651 ppb	5,541.870 ppb	5,674.209 ppb	78.850 %
Concentration per Run 1	68.660 %	79.973 %	61.345 ppb	5,862.277 ppb	5,730.008 ppb	53.965 ppb	5,795.704 ppb	5,949.078 ppb	78.447 %
Concentration per Run 2	68.733 %	85.245 %	61.138 ppb	5,316.462 ppb	5,267.281 ppb	48.696 ppb	5,312.029 ppb	5,382.573 ppb	78.848 %
Concentration per Run 3	67.708 %	84.549 %	61.273 ppb	5,459.657 ppb	5,413.566 ppb	52.293 ppb	5,517.876 ppb	5,690.976 ppb	79.255 %
Recovery Percentage 1			102.087 %	92.436 %	91.171 %	86.085 %	92.364 %	94.570 %	
Concentration RSD	0.8 %	3.4 %	0.2 %	5.1 %	4.3 %	5.2 %	4.4 %	5.0 %	0.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.848 ppb	58.019 ppb	57.297 ppb	5,722.460 ppb	58.953 ppb	59.930 ppb	60.178 ppb	61.173 ppb	77.455 %
Concentration per Run 1	61.310 ppb	60.922 ppb	59.261 ppb	5,922.063 ppb	60.671 ppb	61.771 ppb	62.111 ppb	62.737 ppb	75.519 %
Concentration per Run 2	55.902 ppb	57.294 ppb	55.844 ppb	5,702.896 ppb	58.943 ppb	59.880 ppb	60.937 ppb	60.784 ppb	74.991 %
Concentration per Run 3	56.333 ppb	55.842 ppb	56.787 ppb	5,542.423 ppb	57.246 ppb	58.139 ppb	57.487 ppb	59.998 ppb	81.857 %
Recovery Percentage 1	96.414 %	96.698 %	95.495 %	95.374 %	98.255 %	99.884 %	100.297 %	101.955 %	
Concentration RSD	5.2 %	4.5 %	3.1 %	3.3 %	2.9 %	3.0 %	4.0 %	2.3 %	4.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.545 ppb	58.237 ppb	55.684 ppb	56.457 ppb	79.237 %	60.650 ppb	60.884 ppb	76.287 %	60.117 ppb
Concentration per Run 1	63.190 ppb	59.662 ppb	58.083 ppb	58.138 ppb	78.709 %	62.197 ppb	62.151 ppb	76.177 %	61.804 ppb
Concentration per Run 2	60.554 ppb	57.970 ppb	53.254 ppb	54.404 ppb	78.706 %	61.054 ppb	61.057 ppb	72.581 %	59.633 ppb
Concentration per Run 3	57.890 ppb	57.078 ppb	55.715 ppb	56.828 ppb	80.295 %	58.700 ppb	59.443 ppb	80.103 %	58.913 ppb
Recovery Percentage 1	100.908 %	97.061 %	92.807 %	94.095 %		101.084 %	101.473 %		100.195 %
Concentration RSD	4.4 %	2.3 %	4.3 %	3.4 %	1.2 %	2.9 %	2.2 %	4.9 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.583 ppb	80.093 %	77.887 %	62.318 ppb	57.317 ppb	81.053 %
Concentration per Run 1	58.222 ppb	78.923 %	76.976 %	58.843 ppb	53.184 ppb	88.166 %
Concentration per Run 2	57.375 ppb	78.370 %	76.663 %	63.108 ppb	58.325 ppb	77.626 %
Concentration per Run 3	57.153 ppb	82.986 %	80.023 %	65.002 ppb	60.443 ppb	77.367 %
Recovery Percentage 1	95.972 %			103.863 %	95.529 %	
Concentration RSD	1.0 %	3.1 %	2.4 %	5.1 %	6.5 %	7.6 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	34	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/5/2023 11:05:59 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	68.856 %	82.493 %	0.007 ppb	40.271 ppb	5.831 ppb	-1.037 ppb	12.996 ppb	55.391 ppb	71.043 %
Concentration per Run 1	69.868 %	80.868 %	0.006 ppb	44.437 ppb	5.449 ppb	-1.063 ppb	15.329 ppb	56.047 ppb	71.683 %
Concentration per Run 2	68.821 %	83.753 %	0.008 ppb	37.815 ppb	5.183 ppb	-1.124 ppb	14.106 ppb	64.607 ppb	71.607 %
Concentration per Run 3	67.880 %	82.858 %	0.008 ppb	38.563 ppb	6.860 ppb	-0.923 ppb	9.552 ppb	45.521 ppb	69.840 %
Recovery Percentage 1			1.440 %	40.271 %	8.329 %	-10.367 %	12.996 %	55.391 %	
Concentration RSD	1.4 %	1.8 %	18.4 %	9.0 %	15.5 %	10.0 %	23.4 %	17.3 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.027 ppb	0.000 ppb	0.032 ppb	16.730 ppb	0.005 ppb	0.179 ppb	-0.013 ppb	0.064 ppb	78.377 %
Concentration per Run 1	-0.026 ppb	0.006 ppb	0.084 ppb	18.298 ppb	0.001 ppb	0.167 ppb	0.000 ppb	0.024 ppb	76.548 %
Concentration per Run 2	-0.026 ppb	-0.003 ppb	0.053 ppb	17.530 ppb	0.004 ppb	0.193 ppb	-0.008 ppb	0.045 ppb	74.845 %
Concentration per Run 3	-0.027 ppb	-0.004 ppb	-0.042 ppb	14.364 ppb	0.010 ppb	0.177 ppb	-0.033 ppb	0.124 ppb	83.737 %
Recovery Percentage 1	-0.530 %	-0.036 %	3.184 %	33.461 %	0.967 %	8.954 %	-1.346 %	1.288 %	
Concentration RSD	2.6 %	1,548.1 %	207.2 %	12.5 %	92.4 %	7.5 %	128.0 %	81.9 %	6.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.137 ppb	0.727 ppb	1.054 ppb	1.818 ppb	80.492 %	0.008 ppb	0.007 ppb	76.657 %	0.058 ppb
Concentration per Run 1	0.114 ppb	0.431 ppb	1.193 ppb	1.419 ppb	79.164 %	0.008 ppb	0.008 ppb	76.056 %	0.061 ppb
Concentration per Run 2	0.140 ppb	0.716 ppb	1.018 ppb	1.747 ppb	78.275 %	0.009 ppb	0.010 ppb	73.368 %	0.045 ppb
Concentration per Run 3	0.159 ppb	1.035 ppb	0.953 ppb	2.288 ppb	84.036 %	0.007 ppb	0.002 ppb	80.547 %	0.068 ppb
Recovery Percentage 1	27.477 %	14.550 %	10.545 %	90.895 %		1.944 %	3.298 %		1.459 %
Concentration RSD	16.3 %	41.5 %	11.8 %	24.1 %	3.9 %	12.1 %	58.6 %	4.7 %	20.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.020 ppb	80.165 %	77.194 %	0.378 ppb	0.019 ppb	80.252 %
Concentration per Run 1	0.007 ppb	80.125 %	77.158 %	0.388 ppb	0.018 ppb	88.349 %
Concentration per Run 2	0.043 ppb	77.320 %	73.544 %	0.415 ppb	0.020 ppb	75.161 %
Concentration per Run 3	0.011 ppb	83.051 %	80.879 %	0.331 ppb	0.020 ppb	77.247 %
Recovery Percentage 1	4.007 %			37.761 %	1.934 %	
Concentration RSD	98.4 %	3.6 %	4.8 %	11.3 %	5.8 %	8.8 %

Alpha ICPMSQ Data

9/6/2023 11:54:41 AM

Analysis index:	35	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	LLCCV	Rack	4		
Analysis started at:	9/5/2023 11:10:42 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	69.095 %	86.704 %	0.330 ppb	137.752 ppb	75.994 ppb	9.623 ppb	114.008 ppb	219.261 ppb	71.162 %
Concentration per Run 1	69.787 %	85.146 %	0.353 ppb	146.705 ppb	76.628 ppb	10.548 ppb	116.951 ppb	210.709 ppb	70.864 %
Concentration per Run 2	69.343 %	85.941 %	0.307 ppb	131.436 ppb	77.700 ppb	8.362 ppb	109.710 ppb	204.094 ppb	71.685 %
Concentration per Run 3	68.154 %	89.025 %	0.331 ppb	135.116 ppb	73.653 ppb	9.958 ppb	115.362 ppb	242.979 ppb	70.938 %
Recovery Percentage 1			66.084 %	137.752 %	108.562 %	96.226 %	114.008 %	219.261 %	
Concentration RSD	1.2 %	2.4 %	7.0 %	5.8 %	2.8 %	11.8 %	3.3 %	9.5 %	0.6 %

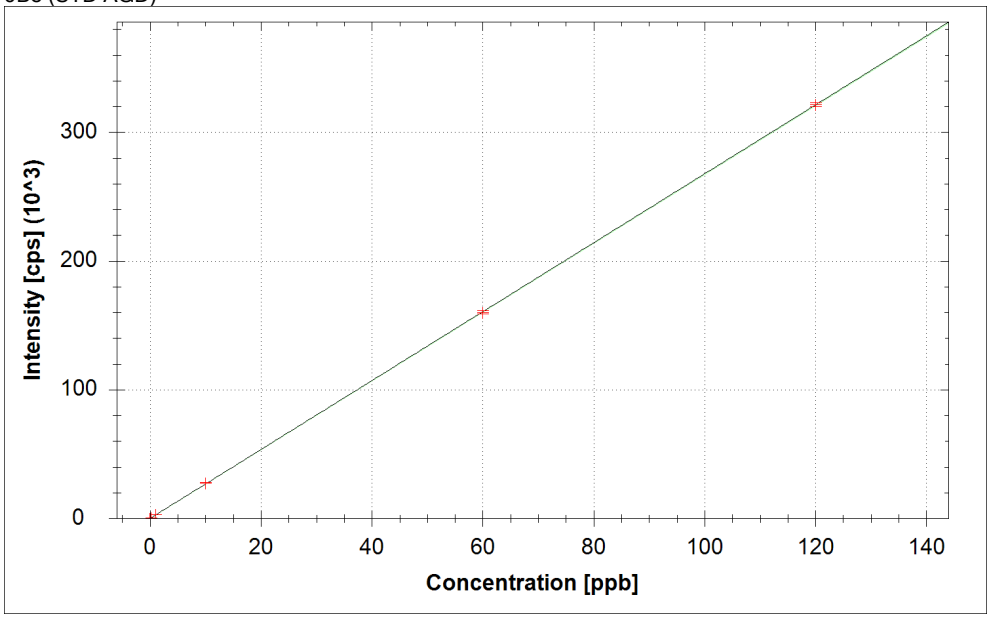
Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	5.025 ppb	0.519 ppb	1.225 ppb	51.944 ppb	0.505 ppb	2.203 ppb	1.177 ppb	11.546 ppb	80.182 %
Concentration per Run 1	5.108 ppb	0.524 ppb	1.326 ppb	58.511 ppb	0.529 ppb	2.338 ppb	1.165 ppb	11.742 ppb	78.676 %
Concentration per Run 2	4.801 ppb	0.524 ppb	1.016 ppb	47.795 ppb	0.509 ppb	2.220 ppb	1.257 ppb	11.702 ppb	77.953 %
Concentration per Run 3	5.167 ppb	0.508 ppb	1.333 ppb	49.526 ppb	0.478 ppb	2.050 ppb	1.108 ppb	11.195 ppb	83.918 %
Recovery Percentage 1	100.507 %	51.882 %	122.491 %	103.888 %	101.049 %	110.130 %	117.665 %	115.463 %	
Concentration RSD	3.9 %	1.7 %	14.8 %	11.1 %	5.0 %	6.6 %	6.4 %	2.6 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.550 ppb	5.064 ppb	1.502 ppb	2.268 ppb	81.730 %	0.285 ppb	0.224 ppb	77.491 %	4.149 ppb
Concentration per Run 1	0.536 ppb	5.507 ppb	1.667 ppb	2.112 ppb	80.655 %	0.291 ppb	0.213 ppb	78.093 %	4.110 ppb
Concentration per Run 2	0.569 ppb	4.955 ppb	1.455 ppb	2.393 ppb	80.724 %	0.294 ppb	0.236 ppb	74.135 %	4.177 ppb
Concentration per Run 3	0.547 ppb	4.729 ppb	1.384 ppb	2.300 ppb	83.811 %	0.268 ppb	0.223 ppb	80.244 %	4.159 ppb
Recovery Percentage 1	110.092 %	101.281 %	300.449 %	113.419 %		71.142 %	112.027 %		103.717 %
Concentration RSD	3.0 %	7.9 %	9.8 %	6.3 %	2.2 %	5.0 %	5.1 %	4.0 %	0.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.588 ppb	80.699 %	78.629 %	0.557 ppb	0.549 ppb	79.701 %
Concentration per Run 1	0.678 ppb	79.682 %	76.910 %	0.504 ppb	0.511 ppb	86.084 %
Concentration per Run 2	0.550 ppb	79.374 %	76.462 %	0.583 ppb	0.566 ppb	75.746 %
Concentration per Run 3	0.535 ppb	83.042 %	82.513 %	0.584 ppb	0.569 ppb	77.272 %
Recovery Percentage 1	117.514 %			111.420 %	109.730 %	
Concentration RSD	13.5 %	2.5 %	4.3 %	8.2 %	6.0 %	7.0 %

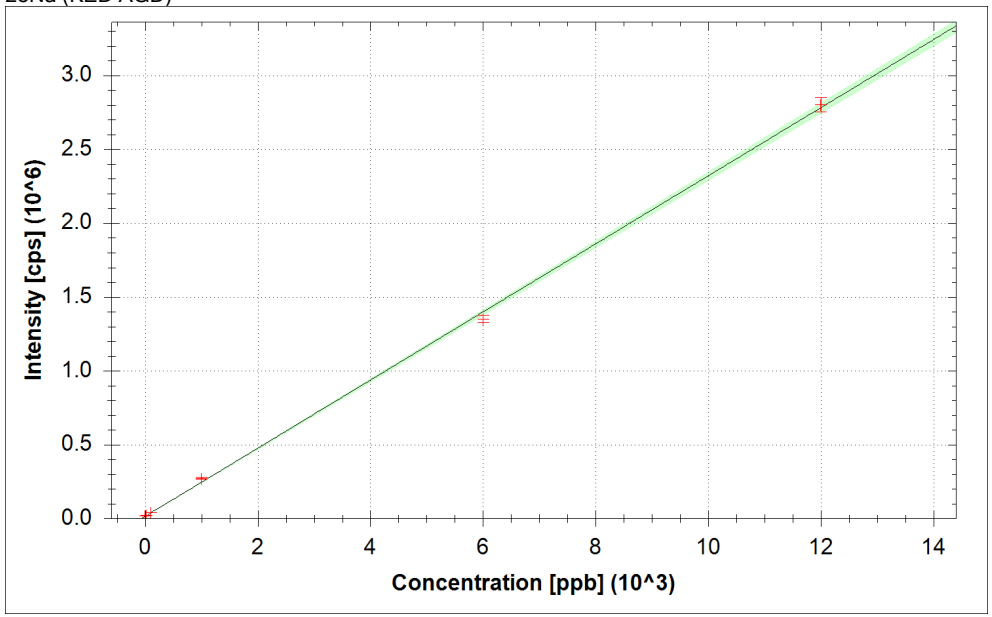
Calibration Curves:

9Be (STD AGD)



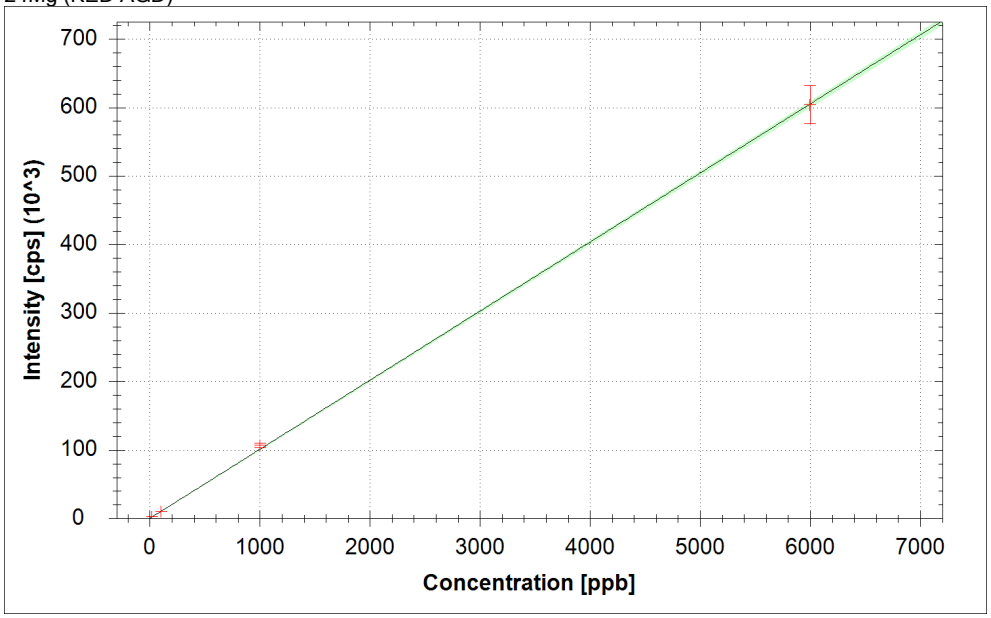
f(x) = 2676.4139*x + 16.8260
R² = 1.0000
BEC = 0.006 ppb
LoD = 0.0037 ppb

23Na (KED AGD)



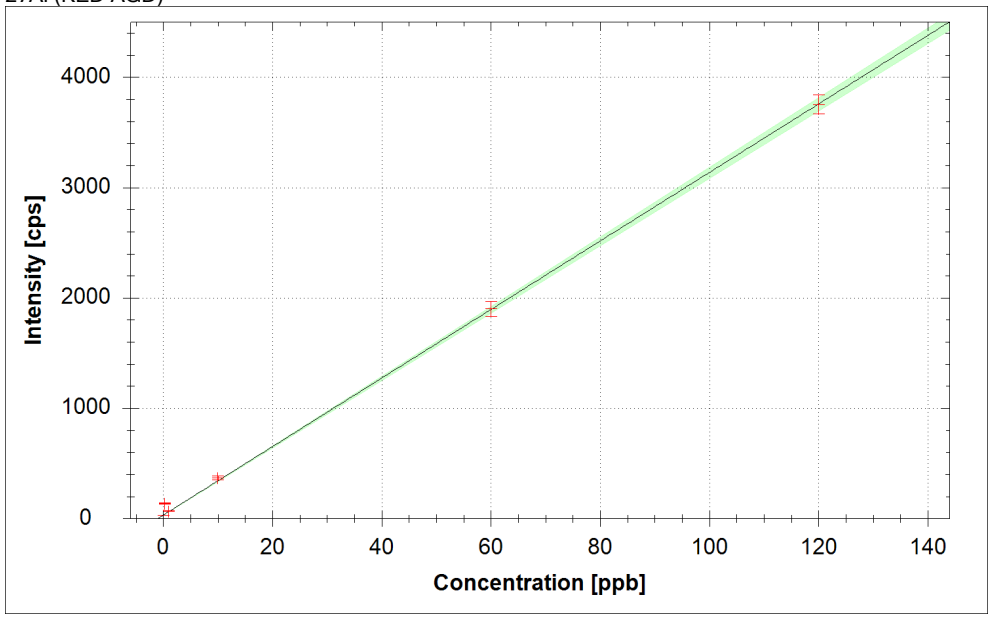
f(x) = 230.5310*x + 14712.6166
R² = 0.9995
BEC = 63.821 ppb
LoD = 3.6629 ppb

24Mg (KED AGD)



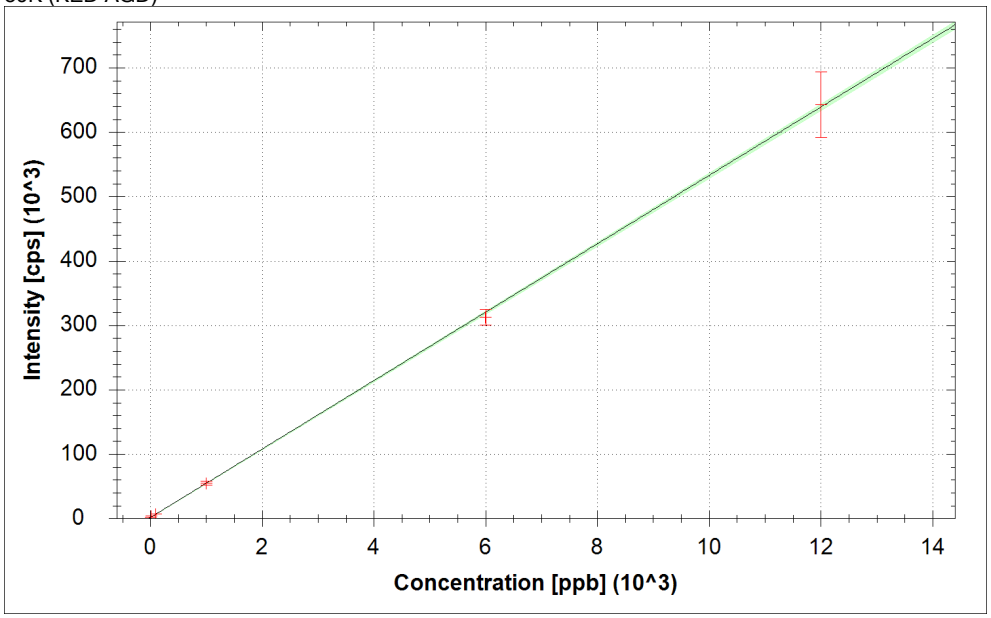
f(x) = 100.8158*x + 106.6637
R² = 0.9999
BEC = 1.058 ppb
LoD = 0.5161 ppb

27Al (KED AGD)



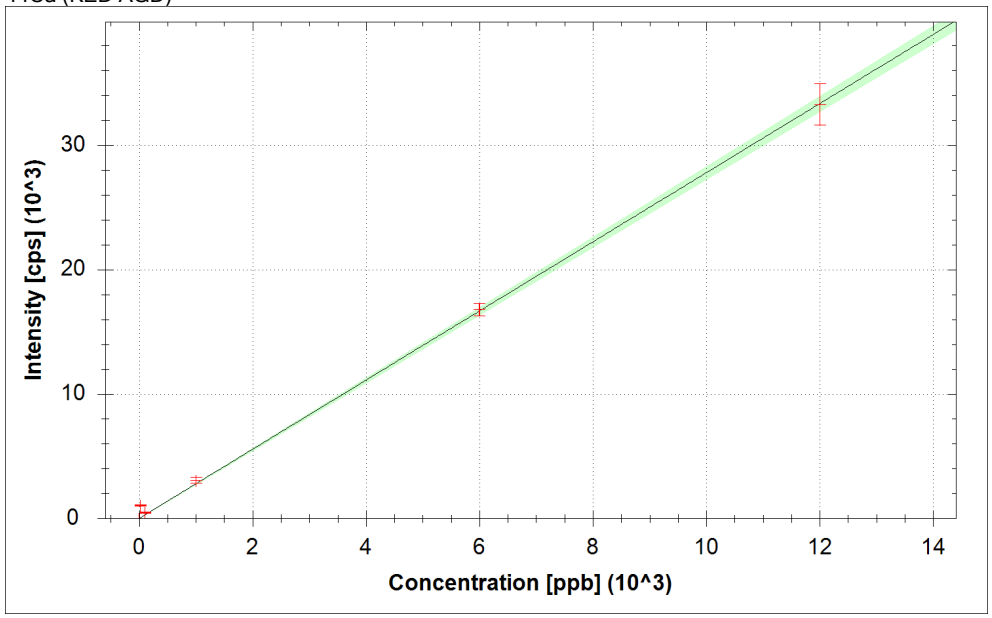
f(x) = 31.0503*x + 29.9977
R² = 0.9991
BEC = 0.966 ppb
LoD = 0.0886 ppb

39K (KED AGD)



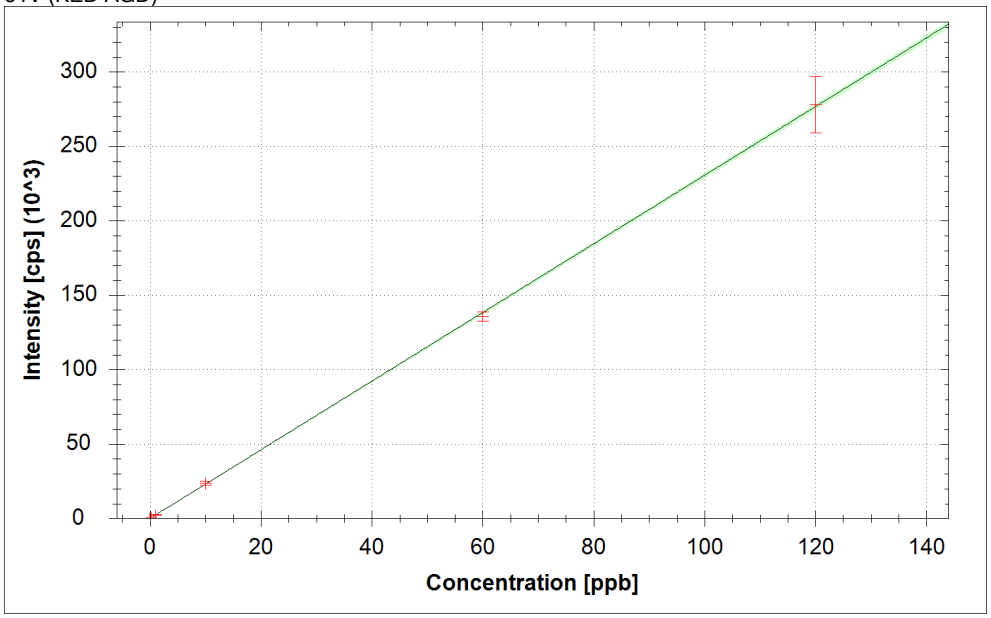
f(x) = 53.1204*x + 1463.2654
R² = 0.9998
BEC = 27.546 ppb
LoD = 10.2650 ppb

44Ca (KED AGD)



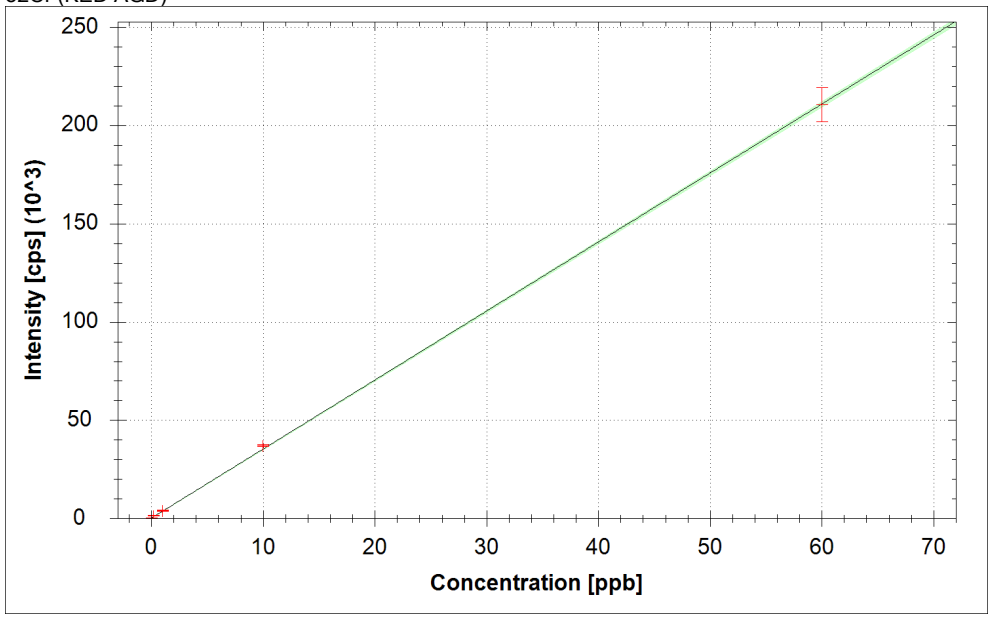
f(x) = 2.7781*x + 1.9301
R² = 0.9988
BEC = 0.695 ppb
LoD = 3.8650 ppb

51V (KED AGD)



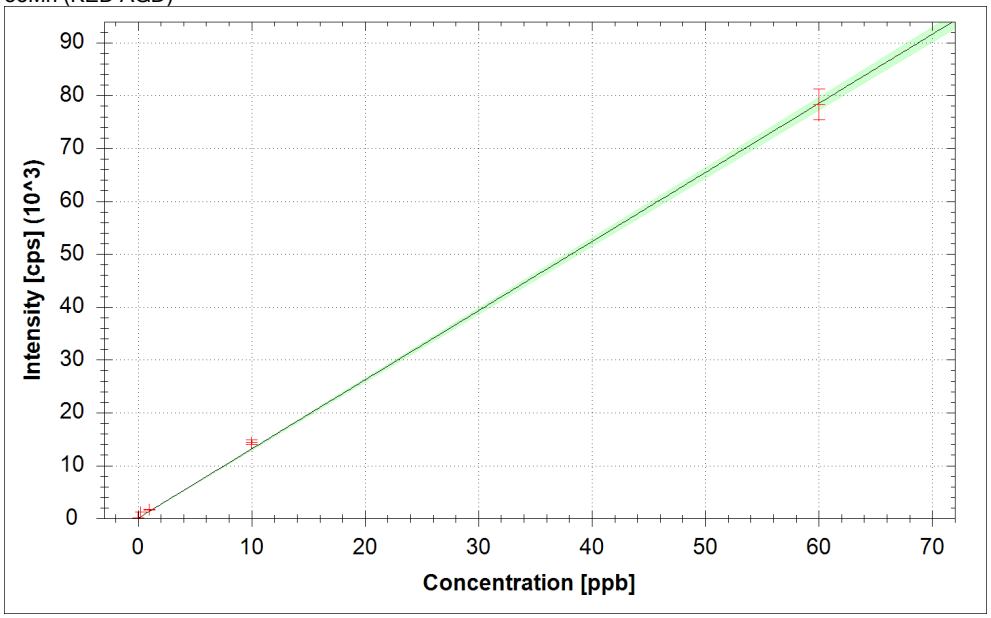
f(x) = 2305.0825*x + 31.1366
R² = 0.9998
BEC = 0.014 ppb
LoD = 0.0220 ppb

52Cr (KED AGD)



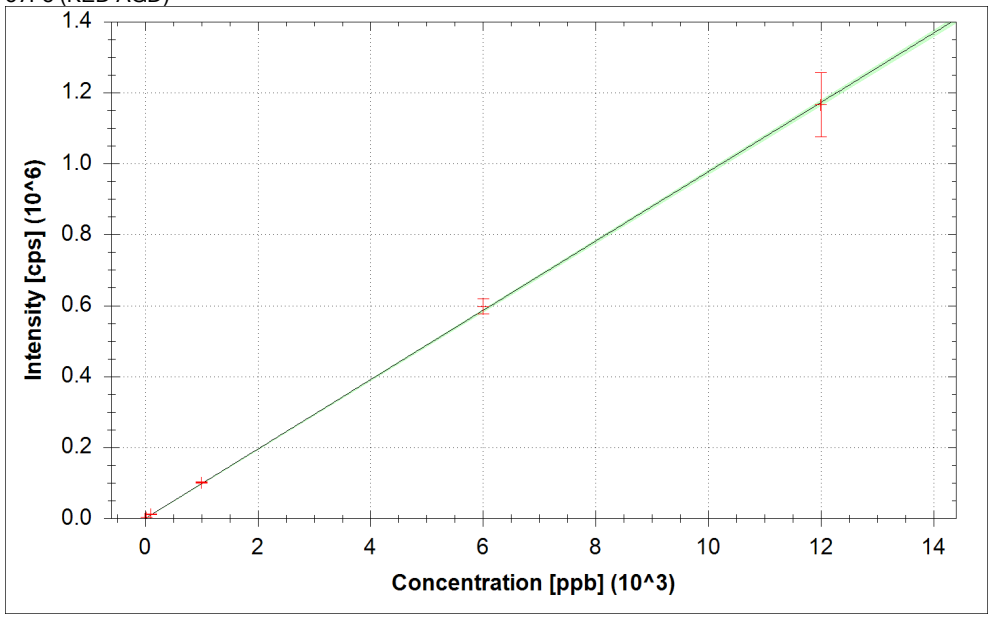
f(x) = 3511.6784*x + 172.3091
R² = 0.9999
BEC = 0.049 ppb
LoD = 0.0128 ppb

55Mn (KED AGD)



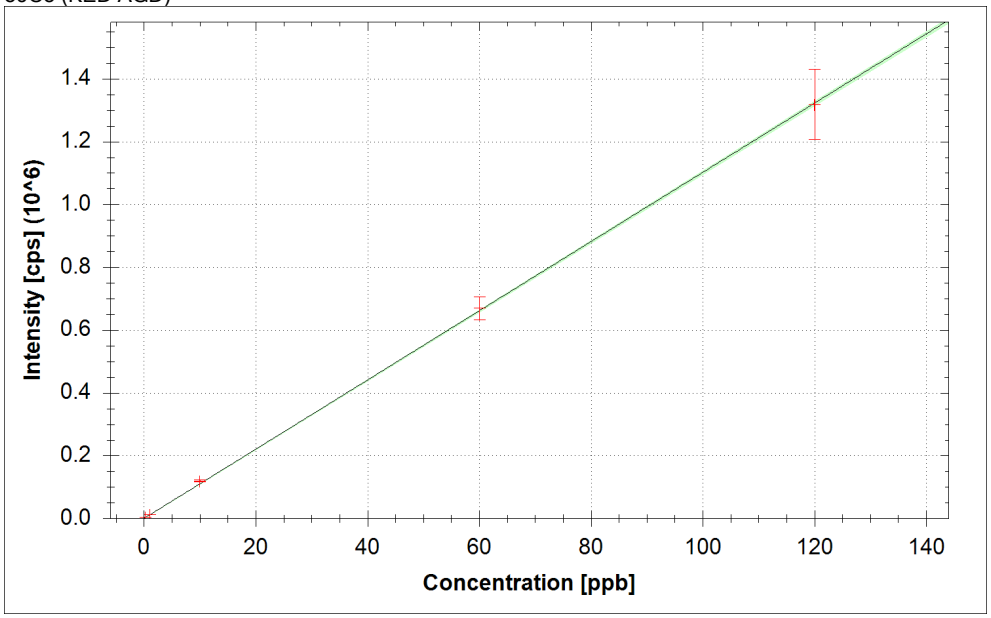
f(x) = 1307.1474*x + 53.3031
R² = 0.9994
BEC = 0.041 ppb
LoD = 0.0300 ppb

57Fe (KED AGD)



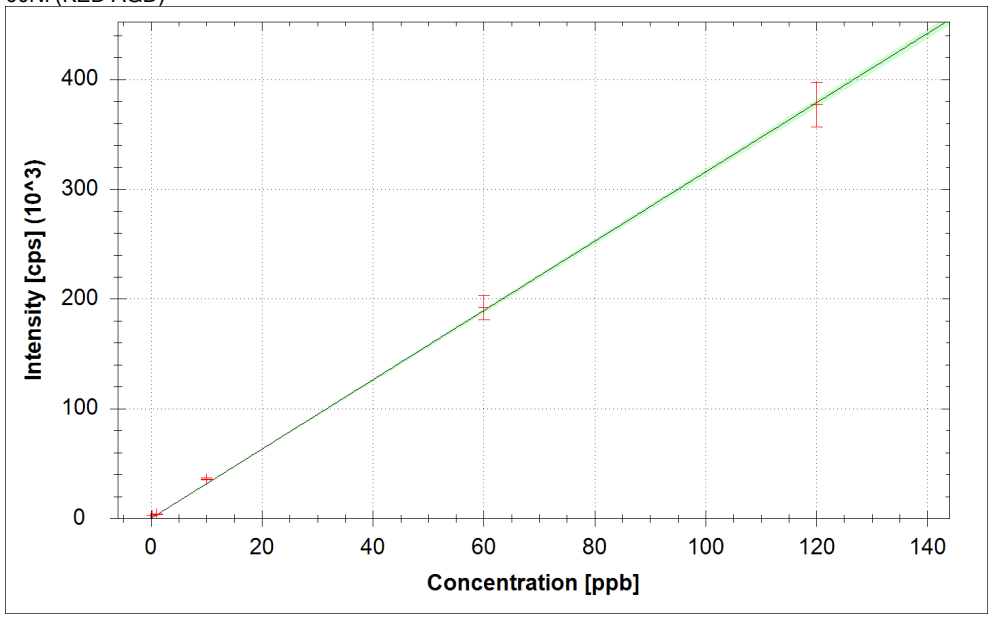
f(x) = 97.6311*x + 133.2341
R² = 0.9998
BEC = 1.365 ppb
LoD = 0.5020 ppb

59Co (KED AGD)



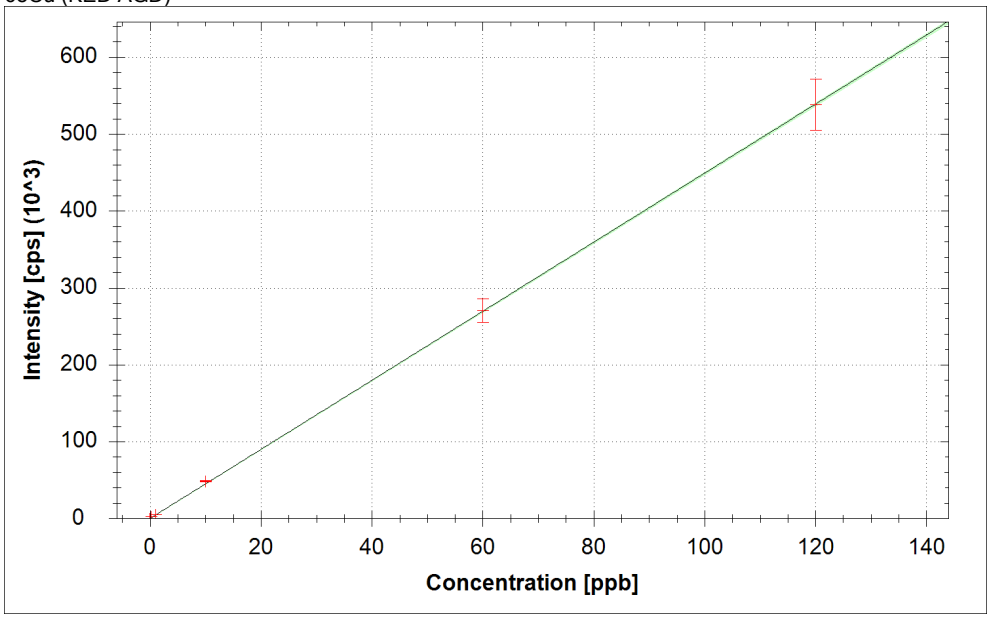
f(x) = 11017.5440*x + 24.3513
R² = 0.9999
BEC = 0.002 ppb
LoD = 0.0037 ppb

60Ni (KED AGD)



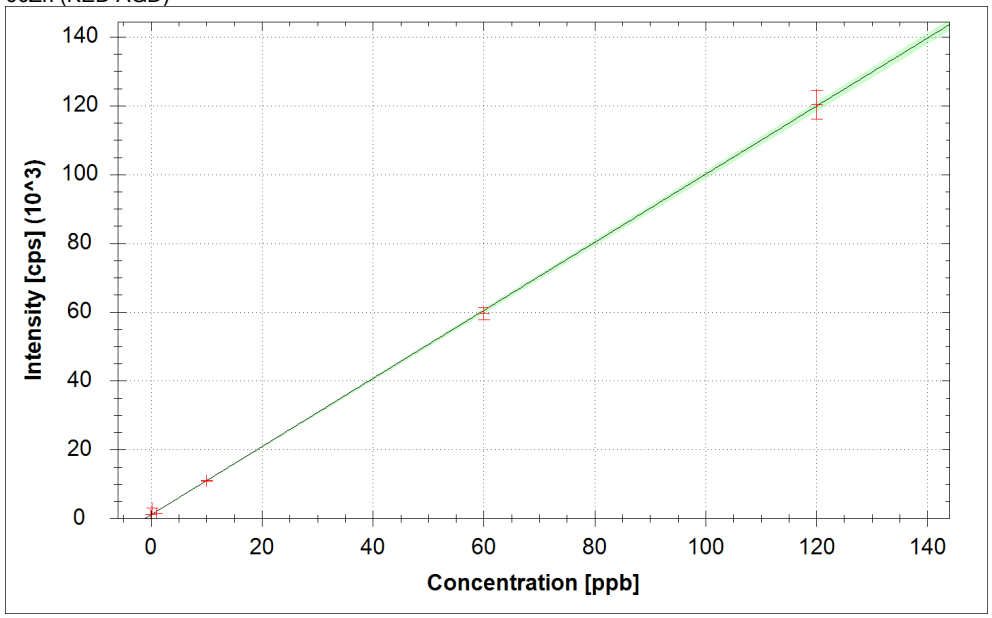
f(x) = 3154.2955*x + 80.1556
R² = 0.9997
BEC = 0.025 ppb
LoD = 0.0178 ppb

65Cu (KED AGD)



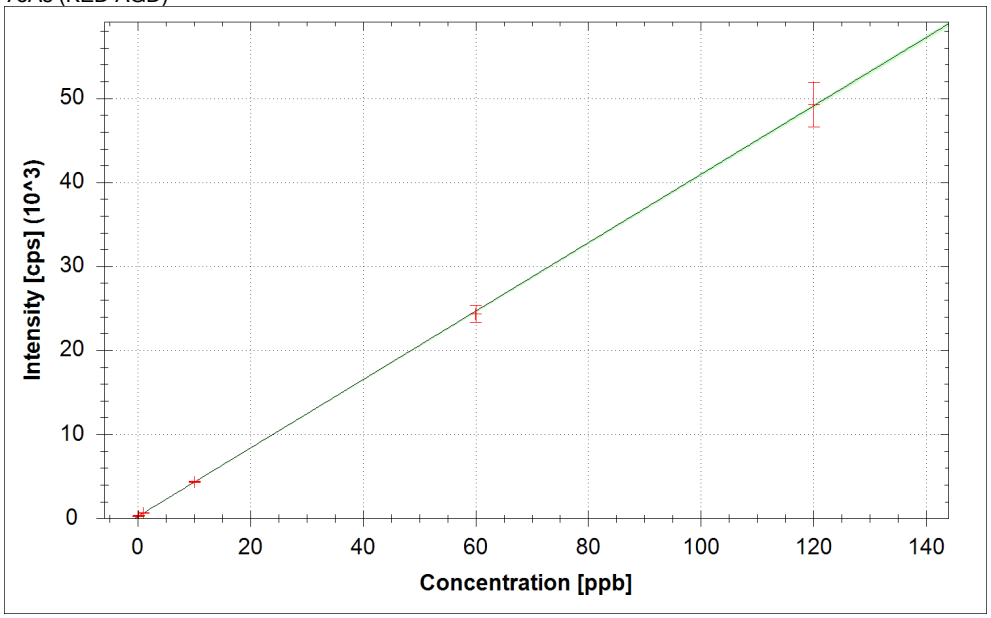
f(x) = 4489.6973*x + 59.9997
R² = 0.9999
BEC = 0.013 ppb
LoD = 0.0221 ppb

66Zn (KED AGD)



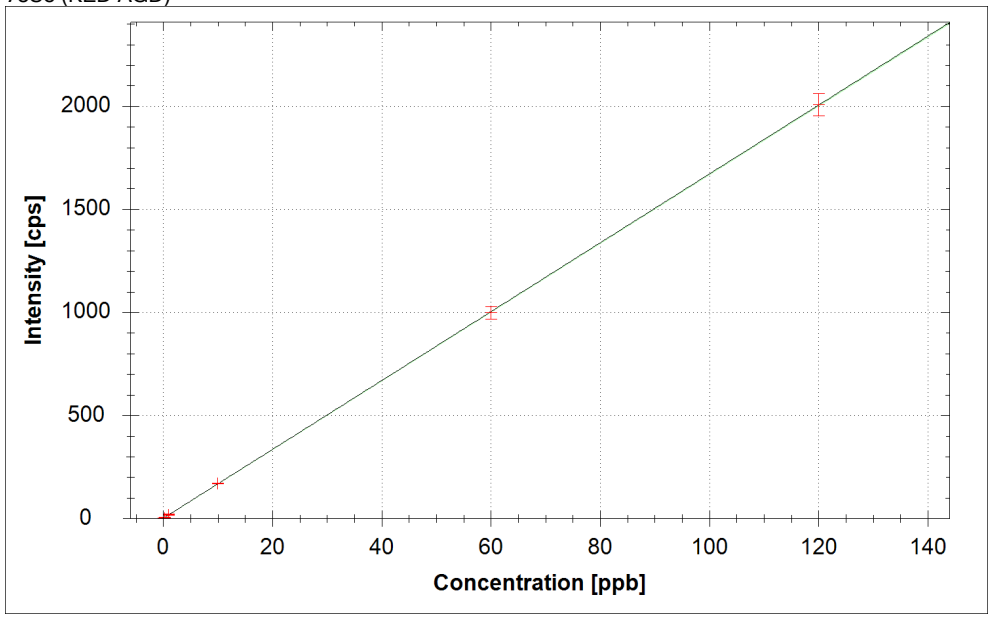
f(x) = 989.5761*x + 1082.0375
R² = 0.9996
BEC = 1.093 ppb
LoD = 0.0560 ppb

75As (KED AGD)



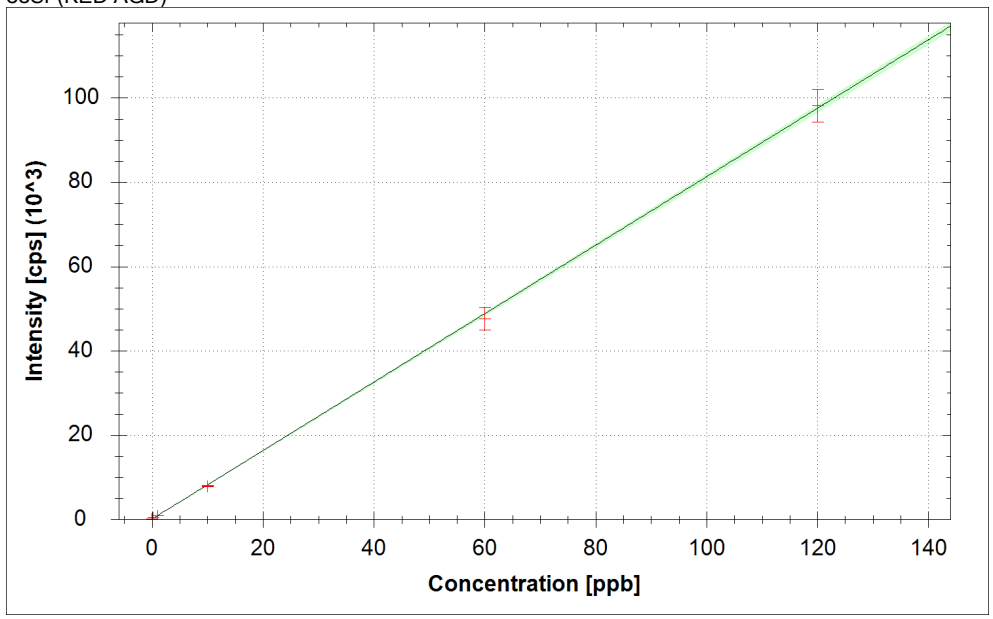
f(x) = 406.9821*x + 242.3409
R² = 0.9999
BEC = 0.595 ppb
LoD = 0.1293 ppb

78Se (KED AGD)



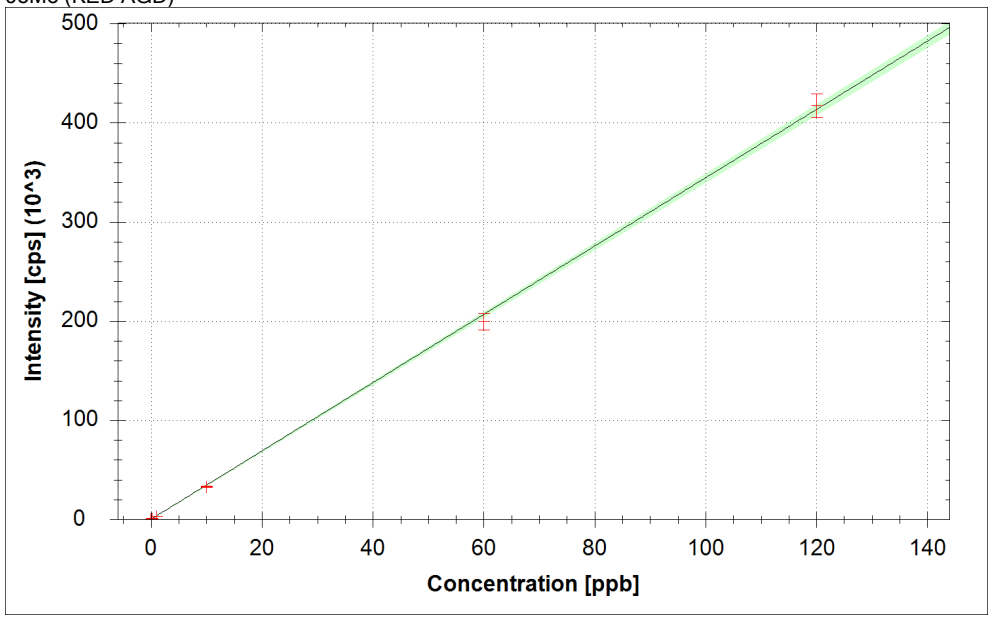
f(x) = 16.7037*x + 0.9363
R² = 1.0000
BEC = 0.056 ppb
LoD = 0.2170 ppb

88Sr (KED AGD)



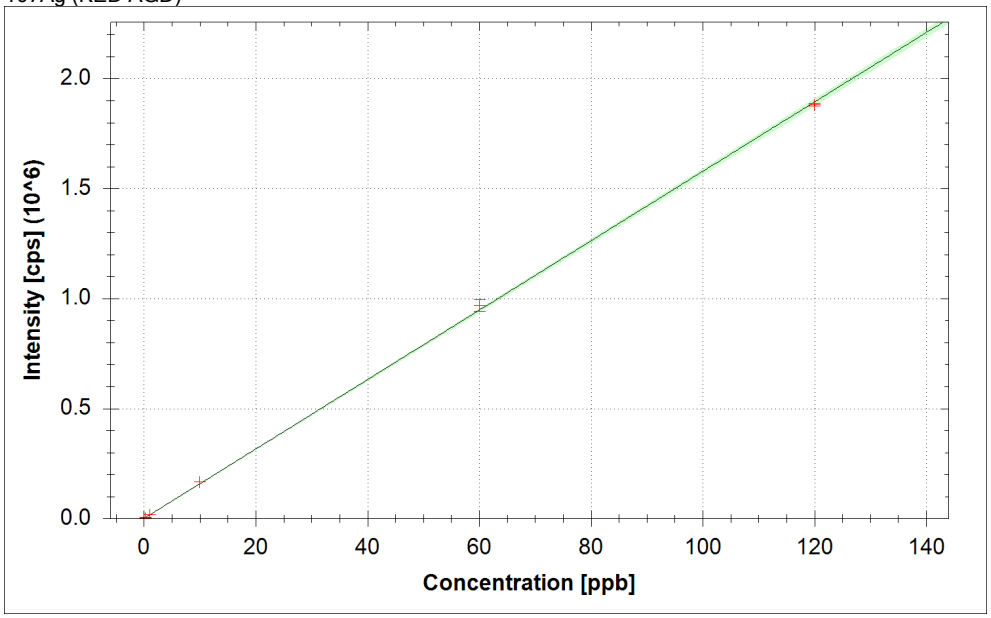
f(x) = 811.7294*x + 103.2189
R² = 0.9997
BEC = 0.127 ppb
LoD = 0.0183 ppb

95Mo (KED AGD)



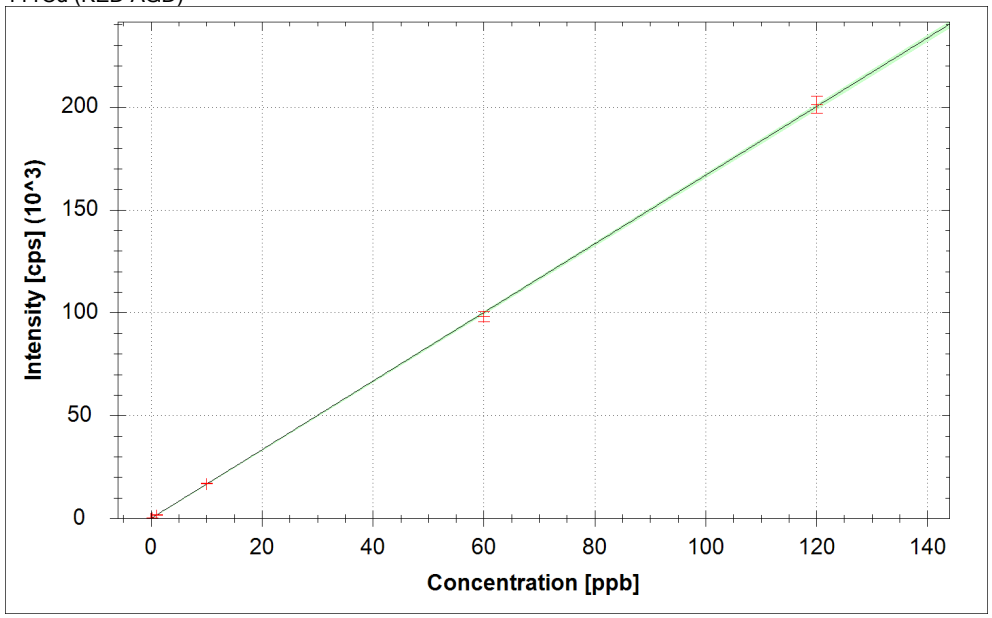
f(x) = 3442.2136*x + 229.0239
R² = 0.9995
BEC = 0.067 ppb
LoD = 0.0246 ppb

107Ag (KED AGD)



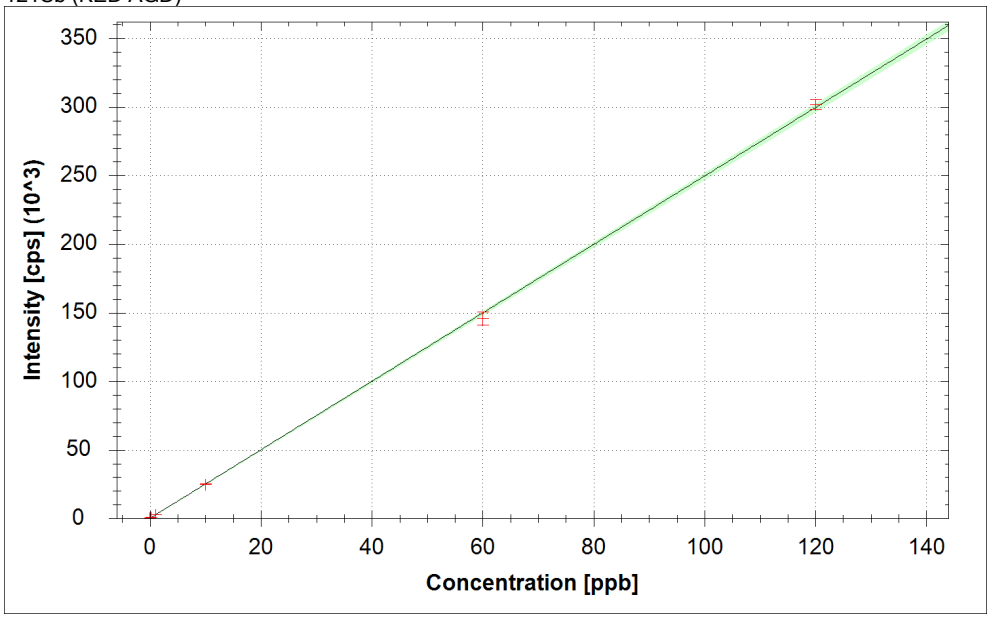
f(x) = 15775.1990*x + 5.5730
R² = 0.9998
BEC = 0.000 ppb
LoD = 0.0007 ppb

111Cd (KED AGD)



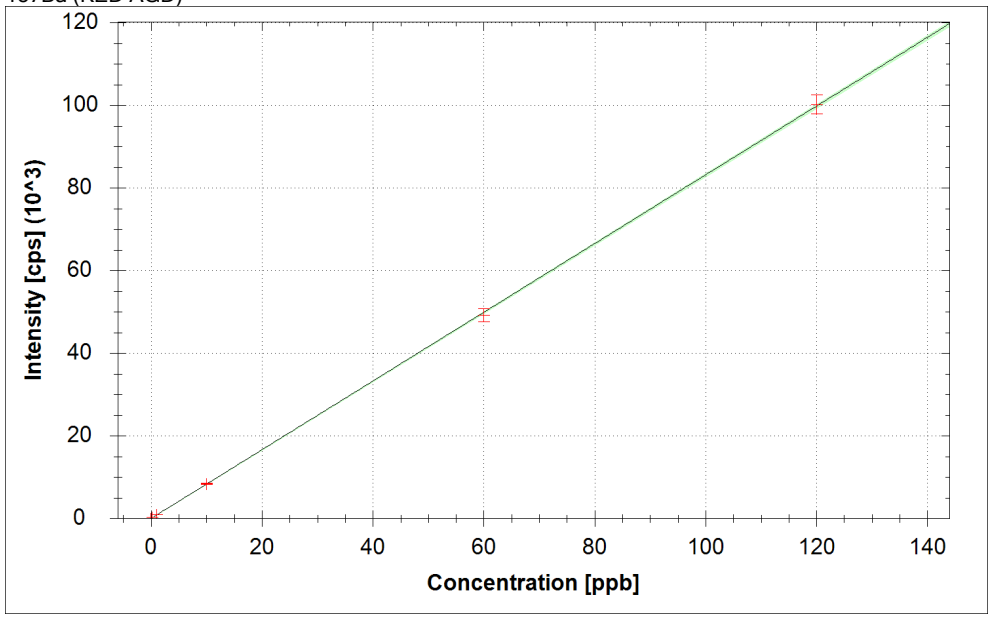
f(x) = 1667.7655*x + 0.4469
R² = 0.9999
BEC = 0.000 ppb
LoD = 0.0014 ppb

121Sb (KED AGD)



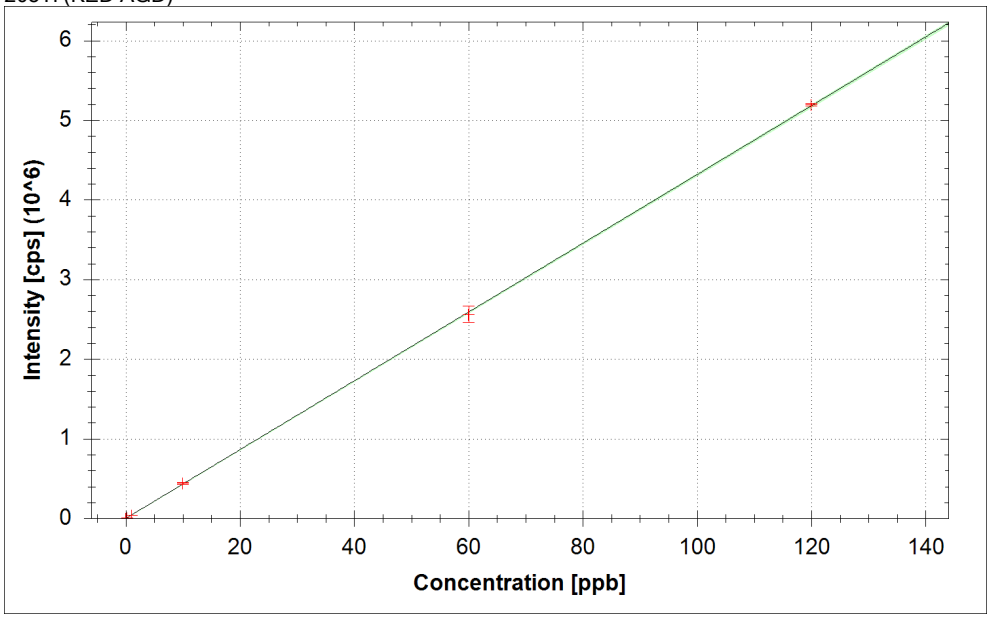
f(x) = 2493.9877*x + 208.5073
R² = 0.9997
BEC = 0.084 ppb
LoD = 0.0277 ppb

137Ba (KED AGD)



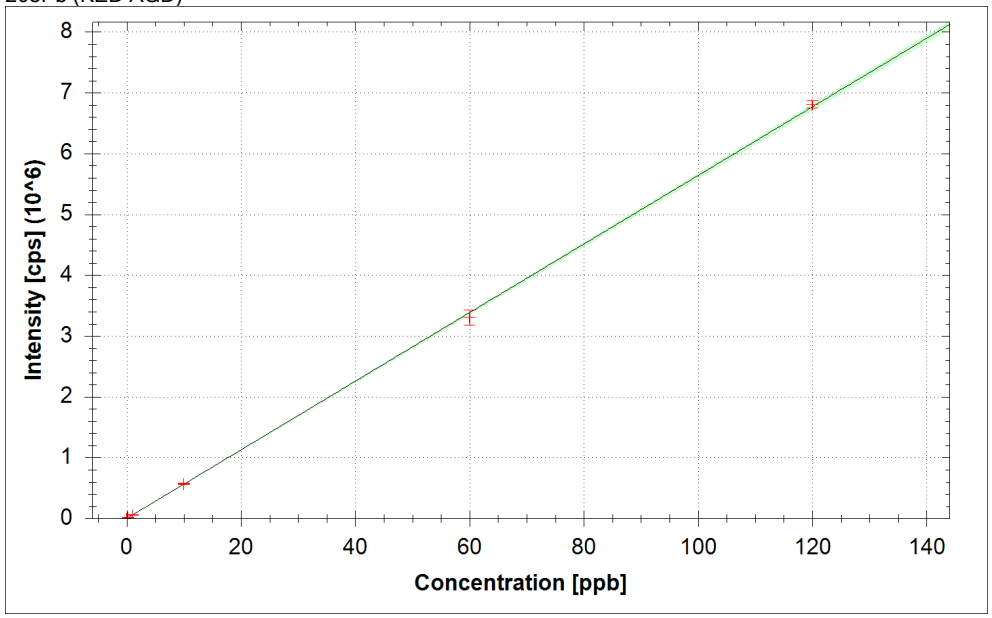
f(x) = 831.4448*x + 6.6676
R² = 0.9999
BEC = 0.008 ppb
LoD = 0.0004 ppb

205Tl (KED AGD)



f(x) = 43175.0015*x + 191.1654
R² = 0.9999
BEC = 0.004 ppb
LoD = 0.0043 ppb

208Pb (KED AGD)



f(x) = 56390.4900*x + 121.1393
R² = 0.9998
BEC = 0.002 ppb
LoD = 0.0006 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 5:54:01 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	100.479 %	2.2 %	
6Li (KED AGD)	106.327 %	2.6 %	
9Be (STD AGD)	0.213 ppb	4.6 %	0.200 ppb
23Na (KED AGD)	33.736 ppb	3.0 %	20.000 ppb
24Mg (KED AGD)	26.974 ppb	2.4 %	20.000 ppb
27Al (KED AGD)	3.387 ppb	6.7 %	0.200 ppb
39K (KED AGD)	47.278 ppb	4.7 %	20.000 ppb
44Ca (KED AGD)	371.697 ppb	6.2 %	20.000 ppb
45Sc (STD AGD)	110.024 %	2.6 %	
51V (KED AGD)	0.243 ppb	10.2 %	0.200 ppb
52Cr (KED AGD)	0.337 ppb	5.8 %	0.200 ppb
55Mn (KED AGD)	0.877 ppb	4.9 %	0.200 ppb
57Fe (KED AGD)	38.225 ppb	3.9 %	20.000 ppb
59Co (KED AGD)	0.240 ppb	1.4 %	0.200 ppb
60Ni (KED AGD)	0.856 ppb	2.4 %	0.200 ppb
65Cu (KED AGD)	0.489 ppb	6.1 %	0.200 ppb
66Zn (KED AGD)	1.948 ppb	3.7 %	0.200 ppb
74Ge (KED AGD)	103.545 %	3.2 %	
75As (KED AGD)	0.189 ppb	36.7 %	0.200 ppb
78Se (KED AGD)	0.169 ppb	29.2 %	0.200 ppb
88Sr (KED AGD)	0.342 ppb	0.8 %	0.200 ppb
95Mo (KED AGD)	0.206 ppb	25.4 %	0.200 ppb
103Rh (KED AGD)	100.407 %	2.7 %	
107Ag (KED AGD)	0.226 ppb	4.2 %	0.200 ppb
111Cd (KED AGD)	0.201 ppb	0.7 %	0.200 ppb
115In (KED AGD)	103.099 %	1.9 %	
121Sb (KED AGD)	0.242 ppb	6.8 %	0.200 ppb
137Ba (KED AGD)	0.268 ppb	3.9 %	0.200 ppb
159Tb (KED AGD)	102.089 %	1.8 %	
175Lu (KED AGD)	98.959 %	0.5 %	
205Tl (KED AGD)	0.199 ppb	1.4 %	0.200 ppb
208Pb (KED AGD)	0.235 ppb	3.2 %	0.200 ppb
209Bi (KED AGD)	107.374 %	2.3 %	

Standards:

Analysis Index: 5
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 5:58:39 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	107.237 %	1.6 %	
6Li (KED AGD)	107.005 %	1.4 %	
9Be (STD AGD)	1.003 ppb	1.3 %	1.000 ppb
23Na (KED AGD)	104.790 ppb	2.5 %	100.000 ppb
24Mg (KED AGD)	101.513 ppb	0.9 %	100.000 ppb
27Al (KED AGD)	1.174 ppb	8.3 %	1.000 ppb
39K (KED AGD)	95.669 ppb	2.8 %	100.000 ppb
44Ca (KED AGD)	161.137 ppb	12.3 %	100.000 ppb
45Sc (STD AGD)	118.651 %	2.7 %	
51V (KED AGD)	0.972 ppb	3.9 %	1.000 ppb
52Cr (KED AGD)	1.103 ppb	9.4 %	1.000 ppb
55Mn (KED AGD)	1.227 ppb	6.4 %	1.000 ppb
57Fe (KED AGD)	117.775 ppb	2.1 %	100.000 ppb
59Co (KED AGD)	1.028 ppb	2.6 %	1.000 ppb
60Ni (KED AGD)	1.153 ppb	2.1 %	1.000 ppb
65Cu (KED AGD)	1.100 ppb	5.7 %	1.000 ppb
66Zn (KED AGD)	0.370 ppb	6.0 %	1.000 ppb
74Ge (KED AGD)	104.966 %	4.2 %	
75As (KED AGD)	0.982 ppb	5.4 %	1.000 ppb
78Se (KED AGD)	0.960 ppb	20.4 %	1.000 ppb
88Sr (KED AGD)	0.942 ppb	4.8 %	1.000 ppb
95Mo (KED AGD)	0.889 ppb	3.6 %	1.000 ppb
103Rh (KED AGD)	105.925 %	2.1 %	
107Ag (KED AGD)	1.050 ppb	1.6 %	1.000 ppb
111Cd (KED AGD)	0.972 ppb	2.8 %	1.000 ppb
115In (KED AGD)	104.143 %	1.9 %	
121Sb (KED AGD)	0.980 ppb	1.9 %	1.000 ppb
137Ba (KED AGD)	1.029 ppb	2.2 %	1.000 ppb
159Tb (KED AGD)	105.588 %	2.0 %	
175Lu (KED AGD)	104.288 %	1.6 %	
205Tl (KED AGD)	0.953 ppb	2.5 %	1.000 ppb
208Pb (KED AGD)	0.987 ppb	2.2 %	1.000 ppb
209Bi (KED AGD)	109.062 %	1.6 %	

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 6:03:17 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	110.139 %	2.4 %	
6Li (KED AGD)	106.679 %	1.9 %	
9Be (STD AGD)	10.289 ppb	0.7 %	10.000 ppb
23Na (KED AGD)	1,114.790 ppb	2.0 %	1,000.000 ppb
24Mg (KED AGD)	1,056.475 ppb	2.9 %	1,000.000 ppb
27Al (KED AGD)	10.874 ppb	4.7 %	10.000 ppb
39K (KED AGD)	1,003.605 ppb	5.9 %	1,000.000 ppb
44Ca (KED AGD)	1,099.348 ppb	7.4 %	1,000.000 ppb
45Sc (STD AGD)	120.233 %	0.7 %	
51V (KED AGD)	10.247 ppb	5.9 %	10.000 ppb
52Cr (KED AGD)	10.494 ppb	1.5 %	10.000 ppb
55Mn (KED AGD)	10.981 ppb	3.1 %	10.000 ppb
57Fe (KED AGD)	1,034.657 ppb	1.8 %	1,000.000 ppb
59Co (KED AGD)	10.776 ppb	2.4 %	10.000 ppb
60Ni (KED AGD)	11.360 ppb	2.7 %	10.000 ppb
65Cu (KED AGD)	10.749 ppb	1.8 %	10.000 ppb
66Zn (KED AGD)	9.965 ppb	1.4 %	10.000 ppb
74Ge (KED AGD)	108.376 %	1.8 %	
75As (KED AGD)	10.062 ppb	1.6 %	10.000 ppb
78Se (KED AGD)	10.104 ppb	1.0 %	10.000 ppb
88Sr (KED AGD)	9.559 ppb	1.7 %	10.000 ppb
95Mo (KED AGD)	9.439 ppb	2.1 %	10.000 ppb
103Rh (KED AGD)	107.454 %	3.9 %	
107Ag (KED AGD)	10.531 ppb	0.3 %	10.000 ppb
111Cd (KED AGD)	10.166 ppb	0.8 %	10.000 ppb
115In (KED AGD)	106.729 %	2.0 %	
121Sb (KED AGD)	9.923 ppb	1.0 %	10.000 ppb
137Ba (KED AGD)	10.065 ppb	1.3 %	10.000 ppb
159Tb (KED AGD)	107.376 %	1.1 %	
175Lu (KED AGD)	105.106 %	3.6 %	
205Tl (KED AGD)	10.184 ppb	2.4 %	10.000 ppb
208Pb (KED AGD)	10.085 ppb	2.4 %	10.000 ppb
209Bi (KED AGD)	111.102 %	1.4 %	

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 6:07:56 AM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	112.533 %	3.7 %	
6Li (KED AGD)	115.065 %	1.9 %	
9Be (STD AGD)	59.781 ppb	0.9 %	60.000 ppb
23Na (KED AGD)	5,795.369 ppb	1.9 %	6,000.000 ppb
24Mg (KED AGD)	5,990.539 ppb	4.6 %	6,000.000 ppb
27Al (KED AGD)	60.190 ppb	3.7 %	60.000 ppb
39K (KED AGD)	5,858.202 ppb	3.9 %	6,000.000 ppb
44Ca (KED AGD)	6,040.117 ppb	2.9 %	6,000.000 ppb
45Sc (STD AGD)	136.455 %	2.6 %	
51V (KED AGD)	58.797 ppb	2.2 %	60.000 ppb
52Cr (KED AGD)	59.916 ppb	4.1 %	60.000 ppb
55Mn (KED AGD)	59.830 ppb	3.7 %	60.000 ppb
57Fe (KED AGD)	6,114.442 ppb	3.6 %	6,000.000 ppb
59Co (KED AGD)	60.699 ppb	5.6 %	60.000 ppb
60Ni (KED AGD)	60.826 ppb	5.6 %	60.000 ppb
65Cu (KED AGD)	60.129 ppb	5.7 %	60.000 ppb
66Zn (KED AGD)	59.069 ppb	3.0 %	60.000 ppb
74Ge (KED AGD)	112.745 %	6.6 %	
75As (KED AGD)	59.183 ppb	4.1 %	60.000 ppb
78Se (KED AGD)	59.675 ppb	3.1 %	60.000 ppb
88Sr (KED AGD)	58.501 ppb	5.5 %	60.000 ppb
95Mo (KED AGD)	57.815 ppb	4.1 %	60.000 ppb
103Rh (KED AGD)	108.412 %	2.6 %	
107Ag (KED AGD)	61.406 ppb	2.7 %	60.000 ppb
111Cd (KED AGD)	58.811 ppb	2.5 %	60.000 ppb
115In (KED AGD)	111.366 %	10.1 %	
121Sb (KED AGD)	58.268 ppb	3.3 %	60.000 ppb
137Ba (KED AGD)	59.090 ppb	3.2 %	60.000 ppb
159Tb (KED AGD)	112.109 %	3.0 %	
175Lu (KED AGD)	110.419 %	5.3 %	
205Tl (KED AGD)	59.313 ppb	4.0 %	60.000 ppb
208Pb (KED AGD)	58.654 ppb	3.8 %	60.000 ppb
209Bi (KED AGD)	111.683 %	2.7 %	

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 6:12:35 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	110.486 %	4.7 %	
6Li (KED AGD)	114.236 %	2.8 %	
9Be (STD AGD)	120.085 ppb	0.5 %	120.000 ppb
23Na (KED AGD)	12,092.687 ppb	1.7 %	12,000.000 ppb
24Mg (KED AGD)	10,870.346 ppb	3.2 %	12,000.000 ppb
27Al (KED AGD)	119.825 ppb	2.3 %	120.000 ppb
39K (KED AGD)	12,070.589 ppb	7.9 %	12,000.000 ppb
44Ca (KED AGD)	11,970.567 ppb	5.0 %	12,000.000 ppb
45Sc (STD AGD)	144.377 %	5.3 %	
51V (KED AGD)	120.581 ppb	6.8 %	120.000 ppb
52Cr (KED AGD)	122.429 ppb	5.5 %	120.000 ppb
55Mn (KED AGD)	123.700 ppb	1.6 %	120.000 ppb
57Fe (KED AGD)	11,939.713 ppb	7.8 %	12,000.000 ppb
59Co (KED AGD)	119.585 ppb	8.5 %	120.000 ppb
60Ni (KED AGD)	119.471 ppb	5.4 %	120.000 ppb
65Cu (KED AGD)	119.872 ppb	6.2 %	120.000 ppb
66Zn (KED AGD)	120.471 ppb	3.5 %	120.000 ppb
74Ge (KED AGD)	113.691 %	7.5 %	
75As (KED AGD)	120.404 ppb	5.4 %	120.000 ppb
78Se (KED AGD)	120.154 ppb	2.7 %	120.000 ppb
88Sr (KED AGD)	120.787 ppb	4.0 %	120.000 ppb
95Mo (KED AGD)	121.140 ppb	2.9 %	120.000 ppb
103Rh (KED AGD)	110.377 %	3.3 %	
107Ag (KED AGD)	119.252 ppb	0.3 %	120.000 ppb
111Cd (KED AGD)	120.581 ppb	2.1 %	120.000 ppb
115In (KED AGD)	112.069 %	7.3 %	
121Sb (KED AGD)	120.873 ppb	1.2 %	120.000 ppb
137Ba (KED AGD)	120.449 ppb	2.3 %	120.000 ppb
159Tb (KED AGD)	114.477 %	3.8 %	
175Lu (KED AGD)	112.584 %	6.0 %	
205Tl (KED AGD)	120.328 ppb	0.3 %	120.000 ppb
208Pb (KED AGD)	120.666 ppb	0.9 %	120.000 ppb
209Bi (KED AGD)	112.256 %	1.6 %	

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	1	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	9/14/2023 5:40:05 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.146 %	101.230 %	0.001 ppb	1.350 ppb	0.056 ppb	0.105 ppb	2.072 ppb	6.327 ppb	102.730 %
Concentration per Run 1	101.691 %	100.477 %	0.003 ppb	2.145 ppb	0.332 ppb	0.260 ppb	9.208 ppb	9.154 ppb	105.382 %
Concentration per Run 2	102.632 %	98.443 %	0.001 ppb	2.447 ppb	0.004 ppb	0.131 ppb	-3.578 ppb	5.627 ppb	100.729 %
Concentration per Run 3	99.116 %	104.770 %	0.001 ppb	-0.543 ppb	-0.168 ppb	-0.078 ppb	0.587 ppb	4.199 ppb	102.079 %
Concentration RSD	1.8 %	3.2 %	87.1 %	121.9 %	453.4 %	163.3 %	314.7 %	40.3 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.004 ppb	0.018 ppb	0.028 ppb	1.044 ppb	0.002 ppb	0.057 ppb	0.029 ppb	-0.076 ppb	101.041 %
Concentration per Run 1	0.004 ppb	0.014 ppb	0.047 ppb	0.986 ppb	0.002 ppb	0.058 ppb	0.027 ppb	-0.088 ppb	98.203 %
Concentration per Run 2	0.001 ppb	0.015 ppb	0.004 ppb	1.053 ppb	0.002 ppb	0.058 ppb	0.032 ppb	-0.083 ppb	102.765 %
Concentration per Run 3	0.006 ppb	0.027 ppb	0.034 ppb	1.093 ppb	0.001 ppb	0.055 ppb	0.027 ppb	-0.057 ppb	102.154 %
Concentration RSD	74.3 %	37.8 %	76.8 %	5.2 %	22.7 %	3.1 %	8.9 %	21.6 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.024 ppb	-0.003 ppb	-0.006 ppb	0.023 ppb	100.534 %	0.002 ppb	0.000 ppb	101.121 %	0.075 ppb
Concentration per Run 1	0.087 ppb	0.016 ppb	0.001 ppb	0.000 ppb	103.179 %	0.000 ppb	0.001 ppb	104.219 %	0.063 ppb
Concentration per Run 2	0.011 ppb	-0.002 ppb	-0.015 ppb	0.029 ppb	98.200 %	0.003 ppb	0.000 ppb	100.456 %	0.075 ppb
Concentration per Run 3	-0.028 ppb	-0.024 ppb	-0.003 ppb	0.039 ppb	100.222 %	0.002 ppb	0.000 ppb	98.689 %	0.088 ppb
Concentration RSD	248.6 %	592.9 %	141.5 %	89.3 %	2.5 %	71.8 %	362.6 %	2.8 %	16.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.014 ppb	102.080 %	101.155 %	0.001 ppb	0.003 ppb	108.974 %
Concentration per Run 1	0.038 ppb	103.026 %	102.117 %	-0.001 ppb	0.003 ppb	117.832 %
Concentration per Run 2	-0.004 ppb	100.974 %	101.569 %	0.002 ppb	0.003 ppb	107.265 %
Concentration per Run 3	0.008 ppb	102.240 %	99.778 %	0.002 ppb	0.004 ppb	101.826 %
Concentration RSD	155.2 %	1.0 %	1.2 %	122.6 %	17.8 %	7.5 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	2	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CAL LOT #M22-1040	Rack	0		
Analysis started at:	9/14/2023 5:44:42 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.062 %	99.749 %	0.002 ppb	0.668 ppb	-0.121 ppb	0.184 ppb	4.654 ppb	3.222 ppb	101.027 %
Concentration per Run 1	101.646 %	100.929 %	0.004 ppb	0.677 ppb	-0.270 ppb	0.101 ppb	6.683 ppb	5.063 ppb	102.773 %
Concentration per Run 2	98.699 %	103.038 %	0.001 ppb	0.820 ppb	-0.286 ppb	0.266 ppb	5.213 ppb	0.746 ppb	99.702 %
Concentration per Run 3	96.840 %	95.280 %	0.002 ppb	0.508 ppb	0.194 ppb	0.186 ppb	2.065 ppb	3.858 ppb	100.605 %
Concentration RSD	2.4 %	4.0 %	51.3 %	23.4 %	225.5 %	44.9 %	50.7 %	69.1 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.012 ppb	0.016 ppb	0.033 ppb	0.606 ppb	0.003 ppb	0.064 ppb	0.025 ppb	-0.059 ppb	98.956 %
Concentration per Run 1	0.004 ppb	0.020 ppb	0.041 ppb	0.952 ppb	0.003 ppb	0.048 ppb	0.030 ppb	-0.101 ppb	99.985 %
Concentration per Run 2	0.012 ppb	0.018 ppb	0.009 ppb	0.501 ppb	0.004 ppb	0.084 ppb	0.020 ppb	-0.012 ppb	102.295 %
Concentration per Run 3	0.020 ppb	0.011 ppb	0.051 ppb	0.365 ppb	0.002 ppb	0.059 ppb	0.024 ppb	-0.064 ppb	94.587 %
Concentration RSD	68.3 %	28.8 %	65.1 %	50.7 %	47.3 %	28.4 %	19.6 %	76.3 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.021 ppb	-0.040 ppb	-0.005 ppb	0.014 ppb	101.266 %	0.001 ppb	0.001 ppb	97.573 %	0.042 ppb
Concentration per Run 1	0.055 ppb	-0.048 ppb	0.005 ppb	-0.006 ppb	102.140 %	0.001 ppb	0.002 ppb	95.637 %	0.047 ppb
Concentration per Run 2	-0.053 ppb	-0.045 ppb	-0.013 ppb	0.017 ppb	101.301 %	0.001 ppb	0.000 ppb	101.488 %	0.032 ppb
Concentration per Run 3	0.061 ppb	-0.027 ppb	-0.006 ppb	0.030 ppb	100.357 %	0.001 ppb	0.000 ppb	95.595 %	0.046 ppb
Concentration RSD	302.3 %	28.6 %	202.1 %	128.9 %	0.9 %	8.3 %	257.7 %	3.5 %	19.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.019 ppb	98.927 %	97.310 %	0.001 ppb	0.004 ppb	103.125 %
Concentration per Run 1	0.033 ppb	99.225 %	98.900 %	0.000 ppb	0.003 ppb	106.769 %
Concentration per Run 2	0.012 ppb	100.209 %	97.833 %	0.001 ppb	0.005 ppb	103.539 %
Concentration per Run 3	0.013 ppb	97.346 %	95.197 %	0.003 ppb	0.004 ppb	99.067 %
Concentration RSD	62.5 %	1.5 %	2.0 %	112.2 %	26.3 %	3.8 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	3	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Blank EJF ICPMSQ	Rack	4		
Analysis started at:	9/14/2023 5:49:19 AM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.2 %	0.0 %	0.2 %	0.0 %	0.1 %	1.9 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.5 %	0.1 %	0.2 %	0.1 %	0.6 %	0.2 %	0.6 %	0.0 %	0.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration RSD	0.1 %	1.3 %	0.0 %	0.1 %	0.0 %	0.7 %	1.7 %	0.0 %	0.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.0 %	0.0 %	0.3 %	0.1 %	0.0 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	4	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	9/14/2023 5:54:01 AM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.479 %	106.327 %	0.213 ppb	33.736 ppb	26.974 ppb	3.387 ppb	47.278 ppb	371.697 ppb	110.024 %
Concentration per Run 1	102.404 %	106.653 %	0.224 ppb	34.159 ppb	26.335 ppb	3.584 ppb	45.467 ppb	387.328 ppb	110.716 %
Concentration per Run 2	101.017 %	108.913 %	0.212 ppb	32.573 ppb	27.616 ppb	3.137 ppb	46.621 ppb	382.646 ppb	112.422 %
Concentration per Run 3	98.017 %	103.415 %	0.204 ppb	34.476 ppb	26.971 ppb	3.439 ppb	49.745 ppb	345.117 ppb	106.934 %
Concentration RSD	2.2 %	2.6 %	4.6 %	3.0 %	2.4 %	6.7 %	4.7 %	6.2 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.243 ppb	0.337 ppb	0.877 ppb	38.225 ppb	0.240 ppb	0.856 ppb	0.489 ppb	1.948 ppb	103.545 %
Concentration per Run 1	0.254 ppb	0.340 ppb	0.872 ppb	37.925 ppb	0.244 ppb	0.832 ppb	0.485 ppb	2.019 ppb	100.496 %
Concentration per Run 2	0.215 ppb	0.316 ppb	0.837 ppb	36.892 ppb	0.239 ppb	0.866 ppb	0.462 ppb	1.874 ppb	106.986 %
Concentration per Run 3	0.261 ppb	0.355 ppb	0.923 ppb	39.857 ppb	0.237 ppb	0.870 ppb	0.521 ppb	1.949 ppb	103.153 %
Concentration RSD	10.2 %	5.8 %	4.9 %	3.9 %	1.4 %	2.4 %	6.1 %	3.7 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.189 ppb	0.169 ppb	0.342 ppb	0.206 ppb	100.407 %	0.226 ppb	0.201 ppb	103.099 %	0.242 ppb
Concentration per Run 1	0.267 ppb	0.153 ppb	0.340 ppb	0.185 ppb	97.969 %	0.229 ppb	0.202 ppb	105.127 %	0.224 ppb
Concentration per Run 2	0.168 ppb	0.129 ppb	0.340 ppb	0.167 ppb	99.940 %	0.215 ppb	0.200 ppb	101.251 %	0.255 ppb
Concentration per Run 3	0.133 ppb	0.223 ppb	0.345 ppb	0.265 ppb	103.313 %	0.233 ppb	0.200 ppb	102.918 %	0.248 ppb
Concentration RSD	36.7 %	29.2 %	0.8 %	25.4 %	2.7 %	4.2 %	0.7 %	1.9 %	6.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.268 ppb	102.089 %	98.959 %	0.199 ppb	0.235 ppb	107.374 %
Concentration per Run 1	0.270 ppb	99.990 %	98.449 %	0.196 ppb	0.227 ppb	110.158 %
Concentration per Run 2	0.278 ppb	103.600 %	99.010 %	0.202 ppb	0.239 ppb	106.305 %
Concentration per Run 3	0.257 ppb	102.677 %	99.418 %	0.200 ppb	0.240 ppb	105.660 %
Concentration RSD	3.9 %	1.8 %	0.5 %	1.4 %	3.2 %	2.3 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	5	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	9/14/2023 5:58:39 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.237 %	107.005 %	1.003 ppb	104.790 ppb	101.513 ppb	1.174 ppb	95.669 ppb	161.137 ppb	118.651 %
Concentration per Run 1	109.074 %	108.537 %	1.016 ppb	107.597 ppb	100.464 ppb	1.284 ppb	98.585 ppb	178.408 ppb	114.930 %
Concentration per Run 2	106.875 %	105.599 %	0.989 ppb	104.436 ppb	102.194 ppb	1.102 ppb	95.082 ppb	139.519 ppb	120.937 %
Concentration per Run 3	105.762 %	106.879 %	1.004 ppb	102.336 ppb	101.881 ppb	1.134 ppb	93.342 ppb	165.484 ppb	120.088 %
Concentration RSD	1.6 %	1.4 %	1.3 %	2.5 %	0.9 %	8.3 %	2.8 %	12.3 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.972 ppb	1.103 ppb	1.227 ppb	117.775 ppb	1.028 ppb	1.153 ppb	1.100 ppb	0.370 ppb	104.966 %
Concentration per Run 1	1.012 ppb	1.221 ppb	1.314 ppb	120.621 ppb	1.049 ppb	1.171 ppb	1.164 ppb	0.395 ppb	100.023 %
Concentration per Run 2	0.937 ppb	1.059 ppb	1.207 ppb	116.690 ppb	0.998 ppb	1.163 ppb	1.096 ppb	0.352 ppb	106.544 %
Concentration per Run 3	0.968 ppb	1.028 ppb	1.160 ppb	116.013 ppb	1.036 ppb	1.125 ppb	1.040 ppb	0.363 ppb	108.331 %
Concentration RSD	3.9 %	9.4 %	6.4 %	2.1 %	2.6 %	2.1 %	5.7 %	6.0 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.982 ppb	0.960 ppb	0.942 ppb	0.889 ppb	105.925 %	1.050 ppb	0.972 ppb	104.143 %	0.980 ppb
Concentration per Run 1	0.987 ppb	1.185 ppb	0.994 ppb	0.892 ppb	103.397 %	1.066 ppb	1.003 ppb	101.850 %	0.959 ppb
Concentration per Run 2	1.032 ppb	0.836 ppb	0.913 ppb	0.919 ppb	106.838 %	1.033 ppb	0.954 ppb	105.393 %	0.995 ppb
Concentration per Run 3	0.927 ppb	0.859 ppb	0.919 ppb	0.856 ppb	107.541 %	1.050 ppb	0.958 ppb	105.184 %	0.985 ppb
Concentration RSD	5.4 %	20.4 %	4.8 %	3.6 %	2.1 %	1.6 %	2.8 %	1.9 %	1.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.029 ppb	105.588 %	104.288 %	0.953 ppb	0.987 ppb	109.062 %
Concentration per Run 1	1.049 ppb	103.728 %	102.422 %	0.930 ppb	0.963 ppb	111.106 %
Concentration per Run 2	1.005 ppb	105.136 %	105.555 %	0.949 ppb	1.005 ppb	107.891 %
Concentration per Run 3	1.034 ppb	107.901 %	104.888 %	0.978 ppb	0.995 ppb	108.189 %
Concentration RSD	2.2 %	2.0 %	1.6 %	2.5 %	2.2 %	1.6 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	6	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	9/14/2023 6:03:17 AM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.139 %	106.679 %	10.289 ppb	1,114.790 ppb	1,056.475 ppb	10.874 ppb	1,003.605 ppb	1,099.348 ppb	120.233 %
Concentration per Run 1	113.179 %	105.976 %	10.208 ppb	1,120.607 ppb	1,033.286 ppb	11.158 ppb	1,070.313 ppb	1,177.603 ppb	120.428 %
Concentration per Run 2	108.907 %	105.072 %	10.308 ppb	1,133.233 ppb	1,091.045 ppb	10.279 ppb	981.069 ppb	1,106.045 ppb	119.314 %
Concentration per Run 3	108.330 %	108.989 %	10.353 ppb	1,090.531 ppb	1,045.095 ppb	11.186 ppb	959.434 ppb	1,014.394 ppb	120.956 %
Concentration RSD	2.4 %	1.9 %	0.7 %	2.0 %	2.9 %	4.7 %	5.9 %	7.4 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	10.247 ppb	10.494 ppb	10.981 ppb	1,034.657 ppb	10.776 ppb	11.360 ppb	10.749 ppb	9.965 ppb	108.376 %
Concentration per Run 1	10.935 ppb	10.560 ppb	11.341 ppb	1,055.114 ppb	10.982 ppb	11.686 ppb	10.974 ppb	10.053 ppb	106.319 %
Concentration per Run 2	9.792 ppb	10.605 ppb	10.677 ppb	1,028.967 ppb	10.867 ppb	11.325 ppb	10.632 ppb	9.798 ppb	108.598 %
Concentration per Run 3	10.014 ppb	10.315 ppb	10.926 ppb	1,019.890 ppb	10.480 ppb	11.071 ppb	10.640 ppb	10.043 ppb	110.212 %
Concentration RSD	5.9 %	1.5 %	3.1 %	1.8 %	2.4 %	2.7 %	1.8 %	1.4 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	10.062 ppb	10.104 ppb	9.559 ppb	9.439 ppb	107.454 %	10.531 ppb	10.166 ppb	106.729 %	9.923 ppb
Concentration per Run 1	10.246 ppb	10.190 ppb	9.579 ppb	9.581 ppb	105.557 %	10.565 ppb	10.180 ppb	105.227 %	9.993 ppb
Concentration per Run 2	9.960 ppb	10.127 ppb	9.705 ppb	9.520 ppb	104.575 %	10.504 ppb	10.239 ppb	105.734 %	9.963 ppb
Concentration per Run 3	9.980 ppb	9.995 ppb	9.392 ppb	9.217 ppb	112.230 %	10.523 ppb	10.079 ppb	109.225 %	9.811 ppb
Concentration RSD	1.6 %	1.0 %	1.7 %	2.1 %	3.9 %	0.3 %	0.8 %	2.0 %	1.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.065 ppb	107.376 %	105.106 %	10.184 ppb	10.085 ppb	111.102 %
Concentration per Run 1	10.063 ppb	105.999 %	101.324 %	10.059 ppb	9.806 ppb	112.815 %
Concentration per Run 2	10.202 ppb	108.023 %	105.044 %	10.032 ppb	10.268 ppb	109.784 %
Concentration per Run 3	9.931 ppb	108.106 %	108.951 %	10.461 ppb	10.180 ppb	110.706 %
Concentration RSD	1.3 %	1.1 %	3.6 %	2.4 %	2.4 %	1.4 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	7	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	9/14/2023 6:07:56 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.533 %	115.065 %	59.781 ppb	5,795.369 ppb	5,990.539 ppb	60.190 ppb	5,858.202 ppb	6,040.117 ppb	136.455 %
Concentration per Run 1	115.766 %	114.562 %	59.499 ppb	5,770.257 ppb	6,059.642 ppb	60.392 ppb	5,831.170 ppb	6,240.500 ppb	140.313 %
Concentration per Run 2	113.984 %	113.131 %	59.464 ppb	5,702.510 ppb	5,686.264 ppb	57.882 ppb	5,644.446 ppb	5,915.614 ppb	135.686 %
Concentration per Run 3	107.849 %	117.500 %	60.380 ppb	5,913.340 ppb	6,225.712 ppb	62.297 ppb	6,098.989 ppb	5,964.236 ppb	133.365 %
Concentration RSD	3.7 %	1.9 %	0.9 %	1.9 %	4.6 %	3.7 %	3.9 %	2.9 %	2.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.797 ppb	59.916 ppb	59.830 ppb	6,114.442 ppb	60.699 ppb	60.826 ppb	60.129 ppb	59.069 ppb	112.745 %
Concentration per Run 1	59.943 ppb	62.760 ppb	60.544 ppb	6,369.756 ppb	64.371 ppb	64.094 ppb	64.010 ppb	61.079 ppb	105.874 %
Concentration per Run 2	57.410 ppb	58.729 ppb	57.342 ppb	6,009.642 ppb	59.984 ppb	61.115 ppb	58.709 ppb	58.312 ppb	111.650 %
Concentration per Run 3	59.037 ppb	58.257 ppb	61.605 ppb	5,963.927 ppb	57.743 ppb	57.268 ppb	57.668 ppb	57.815 ppb	120.712 %
Concentration RSD	2.2 %	4.1 %	3.7 %	3.6 %	5.6 %	5.6 %	5.7 %	3.0 %	6.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.183 ppb	59.675 ppb	58.501 ppb	57.815 ppb	108.412 %	61.406 ppb	58.811 ppb	111.366 %	58.268 ppb
Concentration per Run 1	61.849 ppb	61.178 ppb	57.532 ppb	59.565 ppb	105.645 %	63.146 ppb	60.352 ppb	104.319 %	59.760 ppb
Concentration per Run 2	58.630 ppb	57.633 ppb	55.872 ppb	55.086 ppb	108.384 %	61.191 ppb	58.584 ppb	105.388 %	58.947 ppb
Concentration per Run 3	57.068 ppb	60.213 ppb	62.098 ppb	58.795 ppb	111.206 %	59.882 ppb	57.497 ppb	124.391 %	56.096 ppb
Concentration RSD	4.1 %	3.1 %	5.5 %	4.1 %	2.6 %	2.7 %	2.5 %	10.1 %	3.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.090 ppb	112.109 %	110.419 %	59.313 ppb	58.654 ppb	111.683 %
Concentration per Run 1	61.223 ppb	108.913 %	106.762 %	57.123 ppb	56.137 ppb	114.186 %
Concentration per Run 2	57.626 ppb	111.863 %	107.287 %	61.820 ppb	60.212 ppb	108.291 %
Concentration per Run 3	58.420 ppb	115.552 %	117.210 %	58.996 ppb	59.613 ppb	112.572 %
Concentration RSD	3.2 %	3.0 %	5.3 %	4.0 %	3.8 %	2.7 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	8	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	9/14/2023 6:12:35 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.486 %	114.236 %	120.085 ppb	12,092.687 ppb	10,871.316 ppb	119.825 ppb	12,070.589 ppb	11,970.567 ppb	144.377 %
Concentration per Run 1	115.657 %	112.077 %	119.594 ppb	12,258.854 ppb	10,840.483 ppb	122.322 ppb	12,919.775 ppb	12,660.161 ppb	150.145 %
Concentration per Run 2	110.492 %	112.679 %	119.868 ppb	11,861.614 ppb	10,543.788 ppb	116.802 ppb	11,036.230 ppb	11,651.229 ppb	147.282 %
Concentration per Run 3	105.310 %	117.952 %	120.794 ppb	12,157.592 ppb	11,226.768 ppb	120.352 ppb	12,255.763 ppb	11,600.311 ppb	135.704 %
Concentration RSD	4.7 %	2.8 %	0.5 %	1.7 %	3.2 %	2.3 %	7.9 %	5.0 %	5.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	120.581 ppb	122.429 ppb	123.700 ppb	11,939.713 ppb	119.585 ppb	119.471 ppb	119.872 ppb	120.471 ppb	113.691 %
Concentration per Run 1	129.518 ppb	130.209 ppb	125.917 ppb	12,766.597 ppb	128.579 ppb	126.380 ppb	128.469 ppb	125.302 ppb	105.443 %
Concentration per Run 2	113.400 ppb	118.562 ppb	122.631 ppb	12,121.440 ppb	121.597 ppb	118.286 ppb	115.728 ppb	117.964 ppb	113.237 %
Concentration per Run 3	118.826 ppb	118.517 ppb	122.553 ppb	10,931.100 ppb	108.580 ppb	113.748 ppb	115.418 ppb	118.147 ppb	122.392 %
Concentration RSD	6.8 %	5.3 %	1.6 %	7.8 %	8.5 %	5.4 %	6.2 %	3.5 %	7.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	120.404 ppb	120.154 ppb	120.787 ppb	121.140 ppb	110.377 %	119.252 ppb	120.581 ppb	112.069 %	120.873 ppb
Concentration per Run 1	127.819 ppb	123.326 ppb	119.866 ppb	124.608 ppb	108.435 %	119.089 ppb	119.677 ppb	107.240 %	121.472 ppb
Concentration per Run 2	117.658 ppb	116.838 ppb	116.507 ppb	121.216 ppb	108.167 %	119.626 ppb	123.448 ppb	107.460 %	121.949 ppb
Concentration per Run 3	115.734 ppb	120.299 ppb	125.987 ppb	117.595 ppb	114.528 %	119.041 ppb	118.618 ppb	121.506 %	119.197 ppb
Concentration RSD	5.4 %	2.7 %	4.0 %	2.9 %	3.3 %	0.3 %	2.1 %	7.3 %	1.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	120.449 ppb	114.477 %	112.584 %	120.328 ppb	120.666 ppb	112.256 %
Concentration per Run 1	117.287 ppb	113.344 %	107.362 %	120.617 ppb	120.136 ppb	112.857 %
Concentration per Run 2	122.548 ppb	110.858 %	110.188 %	119.981 ppb	119.967 ppb	110.215 %
Concentration per Run 3	121.513 ppb	119.230 %	120.201 %	120.388 ppb	121.895 ppb	113.695 %
Concentration RSD	2.3 %	3.8 %	6.0 %	0.3 %	0.9 %	1.6 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	9	User name	ALPHALAB\Metals-Instrument	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	9/14/2023 6:17:15 AM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.333 %	118.052 %	0.009 ppb	-7.857 ppb	0.795 ppb	0.302 ppb	1.532 ppb	0.710 ppb	123.233 %
Concentration per Run 1	118.650 %	116.747 %	0.008 ppb	-6.854 ppb	0.319 ppb	0.453 ppb	2.964 ppb	243.998 ppb	125.024 %
Concentration per Run 2	116.929 %	114.336 %	0.011 ppb	-8.825 ppb	1.094 ppb	0.225 ppb	-1.139 ppb	90.875 ppb	124.249 %
Concentration per Run 3	110.421 %	123.074 %	0.008 ppb	-7.892 ppb	0.970 ppb	0.228 ppb	2.771 ppb	-332.743 ppb	120.428 %
Concentration RSD	3.8 %	3.8 %	21.7 %	12.5 %	52.4 %	43.3 %	151.1 %	42,076.1 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.016 ppb	0.015 ppb	0.035 ppb	23.337 ppb	0.001 ppb	0.025 ppb	0.047 ppb	0.505 ppb	116.353 %
Concentration per Run 1	0.010 ppb	0.025 ppb	0.018 ppb	23.844 ppb	0.003 ppb	0.022 ppb	0.057 ppb	0.539 ppb	110.984 %
Concentration per Run 2	0.022 ppb	0.003 ppb	0.041 ppb	23.959 ppb	0.002 ppb	0.027 ppb	0.042 ppb	0.529 ppb	111.829 %
Concentration per Run 3	0.017 ppb	0.016 ppb	0.045 ppb	22.207 ppb	0.000 ppb	0.025 ppb	0.041 ppb	0.447 ppb	126.245 %
Concentration RSD	39.9 %	74.2 %	41.6 %	4.2 %	113.2 %	11.4 %	19.2 %	10.0 %	7.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.133 ppb	1.299 ppb	191.334 ppb	2.499 ppb	115.593 %	0.007 ppb	0.001 ppb	119.048 %	0.018 ppb
Concentration per Run 1	0.072 ppb	1.095 ppb	190.787 ppb	2.045 ppb	114.069 %	0.009 ppb	0.000 ppb	115.019 %	0.006 ppb
Concentration per Run 2	0.186 ppb	1.356 ppb	188.818 ppb	2.668 ppb	113.463 %	0.007 ppb	0.003 ppb	114.418 %	0.015 ppb
Concentration per Run 3	0.142 ppb	1.447 ppb	194.396 ppb	2.785 ppb	119.247 %	0.004 ppb	0.000 ppb	127.706 %	0.032 ppb
Concentration RSD	43.2 %	14.0 %	1.5 %	15.9 %	2.8 %	33.8 %	167.0 %	6.3 %	74.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.085 ppb	115.663 %	115.749 %	0.365 ppb	0.023 ppb	123.300 %
Concentration per Run 1	0.081 ppb	111.080 %	109.340 %	0.283 ppb	0.024 ppb	128.227 %
Concentration per Run 2	0.076 ppb	114.167 %	113.058 %	0.425 ppb	0.021 ppb	120.760 %
Concentration per Run 3	0.098 ppb	121.741 %	124.850 %	0.386 ppb	0.023 ppb	120.912 %
Concentration RSD	13.6 %	4.7 %	7.0 %	20.2 %	5.6 %	3.5 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	10	User name	ALPHALAB\Metals-Instrument	Comment	ICV
Analysis label:	ICV	Rack	0		
Analysis started at:	9/14/2023 6:21:58 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	112.352 %	113.357 %	50.325 ppb	4,893.883 ppb	5,133.014 ppb	51.128 ppb	4,981.354 ppb	5,054.706 ppb	128.328 %
Concentration per Run 1	116.123 %	107.934 %	49.855 ppb	4,998.441 ppb	5,329.075 ppb	52.694 ppb	5,096.069 ppb	5,297.800 ppb	130.795 %
Concentration per Run 2	111.981 %	117.349 %	50.488 ppb	4,775.655 ppb	4,981.705 ppb	47.984 ppb	4,881.539 ppb	4,859.523 ppb	128.284 %
Concentration per Run 3	108.953 %	114.788 %	50.632 ppb	4,907.552 ppb	5,088.261 ppb	52.706 ppb	4,966.453 ppb	5,006.796 ppb	125.905 %
Recovery Percentage 1			100.650 %	97.878 %	102.660 %	102.256 %	99.627 %	101.094 %	
Concentration RSD	3.2 %	4.3 %	0.8 %	2.3 %	3.5 %	5.3 %	2.2 %	4.4 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.160 ppb	50.071 ppb	52.783 ppb	5,107.155 ppb	49.759 ppb	52.249 ppb	49.264 ppb	50.137 ppb	116.577 %
Concentration per Run 1	52.028 ppb	52.107 ppb	54.898 ppb	5,239.311 ppb	51.717 ppb	55.131 ppb	51.660 ppb	51.644 ppb	110.483 %
Concentration per Run 2	49.672 ppb	49.157 ppb	53.476 ppb	5,202.703 ppb	50.150 ppb	52.197 ppb	49.709 ppb	49.720 ppb	114.904 %
Concentration per Run 3	48.780 ppb	48.949 ppb	49.973 ppb	4,879.452 ppb	47.411 ppb	49.419 ppb	46.424 ppb	49.047 ppb	124.344 %
Recovery Percentage 1	100.320 %	100.142 %	105.565 %	102.143 %	99.518 %	104.498 %	98.528 %	100.274 %	
Concentration RSD	3.3 %	3.5 %	4.8 %	3.9 %	4.4 %	5.5 %	5.4 %	2.7 %	6.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	48.312 ppb	49.992 ppb	48.281 ppb	47.133 ppb	112.009 %	54.321 ppb	50.124 ppb	112.431 %	49.762 ppb
Concentration per Run 1	49.269 ppb	51.333 ppb	47.793 ppb	47.749 ppb	109.496 %	57.063 ppb	51.033 ppb	107.067 %	50.595 ppb
Concentration per Run 2	48.829 ppb	49.157 ppb	48.825 ppb	46.949 ppb	114.245 %	52.703 ppb	49.912 ppb	114.698 %	48.469 ppb
Concentration per Run 3	46.839 ppb	49.484 ppb	48.224 ppb	46.703 ppb	112.286 %	53.196 ppb	49.427 ppb	115.527 %	50.223 ppb
Recovery Percentage 1	96.624 %	99.983 %	96.562 %	94.267 %		108.641 %	100.248 %		99.525 %
Concentration RSD	2.7 %	2.3 %	1.1 %	1.2 %	2.1 %	4.4 %	1.6 %	4.1 %	2.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	48.976 ppb	114.500 %	111.857 %	49.281 ppb	51.262 ppb	116.936 %
Concentration per Run 1	50.237 ppb	110.649 %	106.429 %	48.764 ppb	49.596 ppb	121.237 %
Concentration per Run 2	47.576 ppb	114.881 %	113.034 %	50.337 ppb	52.678 ppb	113.759 %
Concentration per Run 3	49.114 ppb	117.969 %	116.108 %	48.743 ppb	51.513 ppb	115.812 %
Recovery Percentage 1	97.951 %			98.563 %	102.524 %	
Concentration RSD	2.7 %	3.2 %	4.4 %	1.9 %	3.0 %	3.3 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	11	User name	ALPHALAB\Metals-Instrument	Comment	ICB
Analysis label:	ICB	Rack	0		
Analysis started at:	9/14/2023 6:26:38 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	114.563 %	116.521 %	0.005 ppb	-8.142 ppb	-0.565 ppb	-0.317 ppb	0.207 ppb	0.523 ppb	118.159 %
Concentration per Run 1	118.553 %	107.557 %	0.005 ppb	-5.428 ppb	-0.568 ppb	-0.211 ppb	3.393 ppb	0.653 ppb	120.097 %
Concentration per Run 2	114.434 %	121.191 %	0.005 ppb	-8.040 ppb	-0.679 ppb	-0.404 ppb	-0.997 ppb	0.144 ppb	118.810 %
Concentration per Run 3	110.703 %	120.814 %	0.006 ppb	-10.957 ppb	-0.449 ppb	-0.336 ppb	-1.776 ppb	0.771 ppb	115.570 %
Recovery Percentage 1			1.059 %	-8.142 %	-0.808 %	-3.170 %	0.207 %	0.523 %	
Concentration RSD	3.4 %	6.7 %	16.6 %	34.0 %	20.3 %	30.9 %	1,347.3 %	63.7 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.006 ppb	-0.003 ppb	0.017 ppb	8.897 ppb	0.001 ppb	0.027 ppb	0.011 ppb	0.161 ppb	116.529 %
Concentration per Run 1	0.008 ppb	0.002 ppb	0.006 ppb	7.365 ppb	0.005 ppb	0.015 ppb	0.014 ppb	0.230 ppb	109.118 %
Concentration per Run 2	0.008 ppb	-0.009 ppb	0.025 ppb	8.725 ppb	0.000 ppb	0.031 ppb	0.015 ppb	0.155 ppb	124.739 %
Concentration per Run 3	0.001 ppb	-0.002 ppb	0.020 ppb	10.600 ppb	-0.002 ppb	0.034 ppb	0.003 ppb	0.097 ppb	115.731 %
Recovery Percentage 1	0.111 %	-0.322 %	1.716 %	17.794 %	0.205 %	1.342 %	1.081 %	3.217 %	
Concentration RSD	66.8 %	169.2 %	57.4 %	18.3 %	345.3 %	37.5 %	61.2 %	41.4 %	6.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.014 ppb	0.671 ppb	-0.014 ppb	1.178 ppb	112.843 %	0.003 ppb	0.000 ppb	114.743 %	0.007 ppb
Concentration per Run 1	0.040 ppb	0.487 ppb	-0.005 ppb	0.870 ppb	110.918 %	0.003 ppb	0.000 ppb	108.256 %	-0.007 ppb
Concentration per Run 2	-0.020 ppb	0.745 ppb	-0.018 ppb	1.183 ppb	116.023 %	0.003 ppb	0.000 ppb	120.232 %	0.006 ppb
Concentration per Run 3	0.021 ppb	0.783 ppb	-0.018 ppb	1.480 ppb	111.588 %	0.004 ppb	0.000 ppb	115.740 %	0.023 ppb
Recovery Percentage 1	2.787 %	13.428 %	-0.136 %	58.890 %		0.845 %	0.100 %		0.179 %
Concentration RSD	219.3 %	24.0 %	51.9 %	25.9 %	2.5 %	18.6 %	202.9 %	5.3 %	214.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.014 ppb	114.490 %	110.720 %	0.235 ppb	0.010 ppb	117.241 %
Concentration per Run 1	0.010 ppb	112.624 %	110.803 %	0.179 ppb	0.009 ppb	118.173 %
Concentration per Run 2	0.012 ppb	115.706 %	115.527 %	0.273 ppb	0.010 ppb	116.543 %
Concentration per Run 3	0.020 ppb	115.140 %	105.829 %	0.254 ppb	0.010 ppb	117.007 %
Recovery Percentage 1	2.818 %			23.543 %	0.982 %	
Concentration RSD	35.8 %	1.4 %	4.4 %	21.2 %	6.2 %	0.7 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	12	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	LLCCV	Rack	4		
Analysis started at:	9/14/2023 6:41:31 AM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	108.478 %	117.601 %	0.314 ppb	99.752 ppb	72.935 ppb	9.727 ppb	98.347 ppb	136.254 ppb	116.208 %
Concentration per Run 1	110.248 %	123.149 %	0.309 ppb	105.234 ppb	77.763 ppb	10.288 ppb	107.134 ppb	134.913 ppb	116.786 %
Concentration per Run 2	108.368 %	116.747 %	0.313 ppb	100.476 ppb	72.492 ppb	9.806 ppb	92.245 ppb	141.349 ppb	115.235 %
Concentration per Run 3	106.819 %	112.905 %	0.319 ppb	93.547 ppb	68.552 ppb	9.086 ppb	95.663 ppb	132.500 ppb	116.602 %
Recovery Percentage 1			62.758 %	99.752 %	104.193 %	97.265 %	98.347 %	136.254 %	
Concentration RSD	1.6 %	4.4 %	1.5 %	5.9 %	6.3 %	6.2 %	7.9 %	3.4 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.854 ppb	0.498 ppb	0.991 ppb	12.509 ppb	0.511 ppb	2.097 ppb	1.065 ppb	9.158 ppb	108.713 %
Concentration per Run 1	4.803 ppb	0.530 ppb	1.004 ppb	10.911 ppb	0.488 ppb	2.132 ppb	1.004 ppb	8.938 ppb	115.447 %
Concentration per Run 2	5.026 ppb	0.485 ppb	0.897 ppb	13.459 ppb	0.522 ppb	2.158 ppb	1.105 ppb	9.382 ppb	107.886 %
Concentration per Run 3	4.734 ppb	0.478 ppb	1.070 ppb	13.158 ppb	0.523 ppb	2.000 ppb	1.085 ppb	9.154 ppb	102.805 %
Recovery Percentage 1	97.089 %	49.754 %	99.056 %	25.019 %	102.252 %	104.829 %	106.457 %	91.582 %	
Concentration RSD	3.1 %	5.6 %	8.8 %	11.1 %	3.9 %	4.0 %	5.0 %	2.4 %	5.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.530 ppb	4.617 ppb	0.478 ppb	1.949 ppb	105.565 %	0.282 ppb	0.190 ppb	105.876 %	3.163 ppb
Concentration per Run 1	0.620 ppb	4.692 ppb	0.501 ppb	1.911 ppb	105.071 %	0.287 ppb	0.199 ppb	108.025 %	3.308 ppb
Concentration per Run 2	0.498 ppb	4.737 ppb	0.472 ppb	1.928 ppb	106.277 %	0.269 ppb	0.193 ppb	109.791 %	3.057 ppb
Concentration per Run 3	0.473 ppb	4.423 ppb	0.461 ppb	2.007 ppb	105.348 %	0.290 ppb	0.179 ppb	99.813 %	3.124 ppb
Recovery Percentage 1	106.084 %	92.341 %	95.555 %	97.448 %		70.510 %	95.128 %		79.079 %
Concentration RSD	14.8 %	3.7 %	4.3 %	2.6 %	0.6 %	4.0 %	5.4 %	5.0 %	4.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.517 ppb	105.070 %	104.183 %	0.537 ppb	0.514 ppb	111.296 %
Concentration per Run 1	0.434 ppb	105.813 %	106.456 %	0.503 ppb	0.495 ppb	116.938 %
Concentration per Run 2	0.500 ppb	107.931 %	105.937 %	0.551 ppb	0.523 ppb	110.738 %
Concentration per Run 3	0.617 ppb	101.466 %	100.155 %	0.556 ppb	0.526 ppb	106.211 %
Recovery Percentage 1	103.472 %			107.347 %	102.852 %	
Concentration RSD	17.9 %	3.1 %	3.4 %	5.4 %	3.3 %	4.8 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	13	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	9/14/2023 6:46:13 AM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.472 %	102.837 %	0.013 ppb	49,549.332 ppb	17,744.541 ppb	19,886.708 ppb	19,632.338 ppb	57,281.782 ppb	115.576 %
Concentration per Run 1	94.873 %	103.038 %	0.013 ppb	52,218.768 ppb	19,181.465 ppb	20,737.054 ppb	20,583.790 ppb	59,942.669 ppb	115.170 %
Concentration per Run 2	90.781 %	102.737 %	0.012 ppb	49,767.561 ppb	17,261.298 ppb	20,084.395 ppb	19,404.426 ppb	56,528.257 ppb	114.085 %
Concentration per Run 3	88.762 %	102.737 %	0.013 ppb	46,661.667 ppb	16,790.859 ppb	18,838.677 ppb	18,908.798 ppb	55,374.419 ppb	117.473 %
Recovery Percentage 1			2.585 %	49,549.332 %	25,349.344 %	198,867.084 %	19,632.338 %	57,281.782 %	
Concentration RSD	3.4 %	0.2 %	6.2 %	5.6 %	7.1 %	4.8 %	4.4 %	4.1 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.024 ppb	0.361 ppb	0.979 ppb	45,442.762 ppb	0.439 ppb	0.735 ppb	0.245 ppb	0.337 ppb	105.992 %
Concentration per Run 1	0.032 ppb	0.350 ppb	0.981 ppb	45,609.884 ppb	0.442 ppb	0.806 ppb	0.228 ppb	0.431 ppb	110.390 %
Concentration per Run 2	0.017 ppb	0.351 ppb	0.929 ppb	45,794.370 ppb	0.420 ppb	0.688 ppb	0.249 ppb	0.355 ppb	107.626 %
Concentration per Run 3	0.024 ppb	0.382 ppb	1.028 ppb	44,924.032 ppb	0.456 ppb	0.713 ppb	0.259 ppb	0.225 ppb	99.961 %
Recovery Percentage 1	0.482 %	36.100 %	97.909 %	90,885.524 %	87.827 %	36.773 %	24.539 %	6.739 %	
Concentration RSD	32.3 %	5.0 %	5.0 %	1.0 %	4.1 %	8.4 %	6.4 %	31.0 %	5.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.115 ppb	0.776 ppb	0.503 ppb	400.859 ppb	96.598 %	0.007 ppb	0.077 ppb	102.841 %	0.126 ppb
Concentration per Run 1	0.148 ppb	0.836 ppb	0.510 ppb	395.633 ppb	97.944 %	0.007 ppb	0.072 ppb	105.571 %	0.100 ppb
Concentration per Run 2	0.099 ppb	0.653 ppb	0.499 ppb	390.855 ppb	97.439 %	0.006 ppb	0.081 ppb	105.467 %	0.131 ppb
Concentration per Run 3	0.098 ppb	0.838 ppb	0.501 ppb	416.090 ppb	94.413 %	0.008 ppb	0.078 ppb	97.487 %	0.148 ppb
Recovery Percentage 1	23.007 %	15.516 %	5.033 %	20,042.970 %		1.771 %	38.627 %		3.153 %
Concentration RSD	24.5 %	13.7 %	1.2 %	3.3 %	2.0 %	16.7 %	6.3 %	4.5 %	19.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.230 ppb	103.747 %	99.369 %	0.031 ppb	0.339 ppb	97.133 %
Concentration per Run 1	0.206 ppb	103.855 %	100.993 %	0.024 ppb	0.333 ppb	103.182 %
Concentration per Run 2	0.246 ppb	102.693 %	100.224 %	0.035 ppb	0.350 ppb	94.356 %
Concentration per Run 3	0.238 ppb	104.692 %	96.890 %	0.033 ppb	0.336 ppb	93.862 %
Recovery Percentage 1	46.031 %			3.088 %	33.948 %	
Concentration RSD	9.1 %	1.0 %	2.2 %	18.9 %	2.8 %	5.4 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	14	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	9/14/2023 6:50:55 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.889 %	107.658 %	0.005 ppb	4.774 ppb	-0.046 ppb	0.000 ppb	5.509 ppb	4.420 ppb	107.963 %
Concentration per Run 1	99.428 %	111.926 %	0.007 ppb	5.098 ppb	-0.204 ppb	0.010 ppb	8.510 ppb	5.422 ppb	109.154 %
Concentration per Run 2	95.324 %	109.365 %	0.000 ppb	4.376 ppb	-0.136 ppb	-0.165 ppb	2.866 ppb	4.567 ppb	107.487 %
Concentration per Run 3	92.915 %	101.682 %	0.007 ppb	4.848 ppb	0.201 ppb	0.156 ppb	5.150 ppb	3.270 ppb	107.247 %
Concentration RSD	3.4 %	5.0 %	78.7 %	7.7 %	467.0 %	632,065.1 %	51.5 %	24.5 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.002 ppb	0.007 ppb	0.007 ppb	42.593 ppb	0.004 ppb	0.076 ppb	0.037 ppb	-0.042 ppb	98.612 %
Concentration per Run 1	0.001 ppb	0.002 ppb	-0.016 ppb	44.923 ppb	0.003 ppb	0.070 ppb	0.044 ppb	-0.003 ppb	98.630 %
Concentration per Run 2	-0.002 ppb	0.008 ppb	0.008 ppb	39.379 ppb	0.006 ppb	0.078 ppb	0.030 ppb	-0.049 ppb	102.559 %
Concentration per Run 3	0.007 ppb	0.011 ppb	0.028 ppb	43.478 ppb	0.002 ppb	0.080 ppb	0.038 ppb	-0.073 ppb	94.648 %
Concentration RSD	280.2 %	68.4 %	327.8 %	6.8 %	57.9 %	6.7 %	19.7 %	85.7 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.021 ppb	0.062 ppb	0.001 ppb	7.652 ppb	103.013 %	0.002 ppb	0.001 ppb	100.336 %	-0.002 ppb
Concentration per Run 1	-0.005 ppb	0.016 ppb	0.001 ppb	6.119 ppb	103.164 %	0.003 ppb	0.001 ppb	99.764 %	-0.014 ppb
Concentration per Run 2	-0.061 ppb	0.109 ppb	-0.007 ppb	7.763 ppb	106.067 %	0.002 ppb	0.000 ppb	104.397 %	-0.008 ppb
Concentration per Run 3	0.003 ppb	0.062 ppb	0.010 ppb	9.075 ppb	99.808 %	0.002 ppb	0.002 ppb	96.847 %	0.014 ppb
Concentration RSD	165.7 %	74.8 %	659.8 %	19.4 %	3.0 %	22.8 %	90.6 %	3.8 %	619.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.001 ppb	101.959 %	98.924 %	0.019 ppb	0.005 ppb	105.620 %
Concentration per Run 1	0.004 ppb	101.878 %	102.173 %	0.012 ppb	0.004 ppb	111.275 %
Concentration per Run 2	0.000 ppb	101.767 %	99.654 %	0.022 ppb	0.005 ppb	104.530 %
Concentration per Run 3	0.000 ppb	102.231 %	94.944 %	0.023 ppb	0.005 ppb	101.056 %
Concentration RSD	187.9 %	0.2 %	3.7 %	32.4 %	13.5 %	4.9 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	15	User name	ALPHALAB\Metals-Instrument	Comment	CCV/MCCV
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 6:55:32 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.717 %	109.466 %	60.252 ppb	5,622.886 ppb	5,714.846 ppb	56.290 ppb	5,550.505 ppb	5,600.086 ppb	110.725 %
Concentration per Run 1	95.283 %	107.181 %	60.307 ppb	5,829.715 ppb	5,912.194 ppb	57.863 ppb	5,786.785 ppb	5,929.527 ppb	111.524 %
Concentration per Run 2	96.020 %	110.043 %	60.620 ppb	5,508.704 ppb	5,509.101 ppb	53.983 ppb	5,476.501 ppb	5,477.971 ppb	108.870 %
Concentration per Run 3	92.846 %	111.173 %	59.828 ppb	5,530.239 ppb	5,723.243 ppb	57.025 ppb	5,388.230 ppb	5,392.760 ppb	111.781 %
Recovery Percentage 1			100.420 %	93.715 %	95.247 %	93.817 %	92.508 %	93.335 %	
Concentration RSD	1.8 %	1.9 %	0.7 %	3.2 %	3.5 %	3.6 %	3.8 %	5.2 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.124 ppb	57.106 ppb	56.383 ppb	5,950.060 ppb	60.559 ppb	60.258 ppb	59.528 ppb	59.057 ppb	104.391 %
Concentration per Run 1	58.336 ppb	57.882 ppb	58.049 ppb	6,149.474 ppb	62.936 ppb	62.349 ppb	61.404 ppb	61.572 ppb	101.445 %
Concentration per Run 2	54.017 ppb	55.884 ppb	55.451 ppb	5,730.555 ppb	57.670 ppb	57.012 ppb	57.781 ppb	57.050 ppb	108.890 %
Concentration per Run 3	53.020 ppb	57.551 ppb	55.648 ppb	5,970.151 ppb	61.072 ppb	61.413 ppb	59.399 ppb	58.549 ppb	102.838 %
Recovery Percentage 1	91.873 %	95.176 %	93.971 %	99.168 %	100.932 %	100.430 %	99.213 %	98.428 %	
Concentration RSD	5.1 %	1.9 %	2.6 %	3.5 %	4.4 %	4.7 %	3.0 %	3.9 %	3.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.179 ppb	58.238 ppb	55.120 ppb	54.947 ppb	101.459 %	60.721 ppb	58.211 ppb	101.598 %	55.876 ppb
Concentration per Run 1	60.859 ppb	60.488 ppb	55.937 ppb	55.956 ppb	101.838 %	61.093 ppb	59.445 ppb	98.676 %	56.966 ppb
Concentration per Run 2	55.326 ppb	55.168 ppb	53.091 ppb	54.497 ppb	103.116 %	60.822 ppb	57.766 ppb	102.616 %	55.835 ppb
Concentration per Run 3	58.353 ppb	59.059 ppb	56.331 ppb	54.387 ppb	99.424 %	60.247 ppb	57.422 ppb	103.503 %	54.825 ppb
Recovery Percentage 1	96.966 %	97.064 %	91.866 %	91.578 %		101.201 %	97.019 %		93.126 %
Concentration RSD	4.8 %	4.7 %	3.2 %	1.6 %	1.8 %	0.7 %	1.9 %	2.5 %	1.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.177 ppb	103.053 %	100.894 %	58.983 ppb	59.702 ppb	103.145 %
Concentration per Run 1	58.709 ppb	101.925 %	98.430 %	57.830 ppb	57.337 ppb	107.838 %
Concentration per Run 2	57.060 ppb	103.961 %	99.893 %	59.565 ppb	61.557 ppb	100.457 %
Concentration per Run 3	55.761 ppb	103.271 %	104.359 %	59.554 ppb	60.211 ppb	101.141 %
Recovery Percentage 1	95.294 %			98.305 %	99.503 %	
Concentration RSD	2.6 %	1.0 %	3.1 %	1.7 %	3.6 %	4.0 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	16	User name	ALPHALAB\Metals-Instrument	Comment	CCB
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 7:00:13 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.718 %	106.553 %	0.004 ppb	0.144 ppb	-0.698 ppb	-0.327 ppb	1.270 ppb	1.115 ppb	97.825 %
Concentration per Run 1	93.602 %	107.030 %	0.005 ppb	2.894 ppb	-0.739 ppb	-0.258 ppb	2.586 ppb	1.243 ppb	98.164 %
Concentration per Run 2	94.776 %	104.319 %	0.002 ppb	-3.099 ppb	-0.546 ppb	-0.446 ppb	-1.129 ppb	0.722 ppb	98.859 %
Concentration per Run 3	89.775 %	108.311 %	0.006 ppb	0.637 ppb	-0.809 ppb	-0.277 ppb	2.353 ppb	1.380 ppb	96.451 %
Recovery Percentage 1			0.853 %	0.144 %	-0.997 %	-3.269 %	1.270 %	1.115 %	
Concentration RSD	2.8 %	1.9 %	55.0 %	2,098.0 %	19.5 %	31.7 %	163.9 %	31.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.006 ppb	0.002 ppb	0.015 ppb	15.502 ppb	0.001 ppb	0.021 ppb	0.013 ppb	0.273 ppb	98.509 %
Concentration per Run 1	0.010 ppb	-0.002 ppb	0.037 ppb	15.321 ppb	0.002 ppb	0.038 ppb	0.013 ppb	0.317 ppb	94.193 %
Concentration per Run 2	0.009 ppb	-0.003 ppb	-0.011 ppb	15.221 ppb	0.001 ppb	0.010 ppb	0.004 ppb	0.234 ppb	100.825 %
Concentration per Run 3	-0.002 ppb	0.011 ppb	0.019 ppb	15.964 ppb	0.000 ppb	0.014 ppb	0.022 ppb	0.270 ppb	100.509 %
Recovery Percentage 1	0.112 %	0.186 %	1.519 %	31.004 %	0.203 %	1.029 %	1.297 %	5.470 %	
Concentration RSD	122.1 %	418.2 %	160.0 %	2.6 %	73.7 %	73.4 %	67.5 %	15.4 %	3.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.112 ppb	0.644 ppb	-0.007 ppb	1.753 ppb	102.383 %	0.004 ppb	0.001 ppb	99.650 %	0.156 ppb
Concentration per Run 1	0.122 ppb	0.417 ppb	-0.008 ppb	1.256 ppb	103.495 %	0.004 ppb	0.001 ppb	100.507 %	0.138 ppb
Concentration per Run 2	0.081 ppb	0.670 ppb	-0.010 ppb	1.906 ppb	99.555 %	0.006 ppb	0.003 ppb	97.371 %	0.142 ppb
Concentration per Run 3	0.133 ppb	0.843 ppb	-0.004 ppb	2.098 ppb	104.099 %	0.003 ppb	0.001 ppb	101.073 %	0.189 ppb
Recovery Percentage 1	22.382 %	12.870 %	-0.073 %	87.657 %		1.030 %	0.671 %		3.912 %
Concentration RSD	24.4 %	33.3 %	45.2 %	25.2 %	2.4 %	47.1 %	106.4 %	2.0 %	18.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.004 ppb	99.847 %	96.648 %	0.079 ppb	0.011 ppb	102.902 %
Concentration per Run 1	0.000 ppb	101.828 %	96.817 %	0.064 ppb	0.010 ppb	105.865 %
Concentration per Run 2	0.008 ppb	96.810 %	94.561 %	0.091 ppb	0.012 ppb	99.798 %
Concentration per Run 3	0.004 ppb	100.903 %	98.566 %	0.082 ppb	0.012 ppb	103.044 %
Recovery Percentage 1	0.820 %			7.901 %	1.139 %	
Concentration RSD	104.9 %	2.7 %	2.1 %	17.6 %	9.0 %	3.0 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	17	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1825220-1 6020TL	Rack	1		
Analysis started at:	9/14/2023 7:23:39 AM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.938 %	107.808 %	0.002 ppb	5.579 ppb	1.441 ppb	2.149 ppb	4.776 ppb	19.007 ppb	101.756 %
Concentration per Run 1	98.539 %	110.344 %	0.001 ppb	3.472 ppb	1.000 ppb	1.970 ppb	5.302 ppb	15.211 ppb	100.681 %
Concentration per Run 2	97.237 %	104.770 %	0.001 ppb	6.559 ppb	1.193 ppb	2.490 ppb	1.974 ppb	20.721 ppb	103.707 %
Concentration per Run 3	95.038 %	108.311 %	0.005 ppb	6.705 ppb	2.129 ppb	1.987 ppb	7.051 ppb	21.090 ppb	100.879 %
Concentration RSD	1.8 %	2.6 %	98.1 %	32.7 %	41.9 %	13.7 %	54.0 %	17.3 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.011 ppb	0.073 ppb	0.199 ppb	4.737 ppb	0.004 ppb	0.231 ppb	0.390 ppb	0.003 ppb	96.761 %
Concentration per Run 1	0.013 ppb	0.092 ppb	0.202 ppb	4.763 ppb	0.002 ppb	0.229 ppb	0.410 ppb	0.057 ppb	93.975 %
Concentration per Run 2	0.004 ppb	0.056 ppb	0.216 ppb	4.003 ppb	0.003 ppb	0.222 ppb	0.378 ppb	-0.065 ppb	97.388 %
Concentration per Run 3	0.018 ppb	0.071 ppb	0.180 ppb	5.446 ppb	0.007 ppb	0.241 ppb	0.384 ppb	0.017 ppb	98.920 %
Concentration RSD	61.3 %	25.4 %	9.0 %	15.2 %	65.8 %	4.0 %	4.4 %	2,098.1 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.096 ppb	0.026 ppb	0.014 ppb	0.215 ppb	100.014 %	0.002 ppb	0.001 ppb	97.268 %	0.056 ppb
Concentration per Run 1	0.111 ppb	0.063 ppb	0.020 ppb	0.087 ppb	99.944 %	0.002 ppb	0.001 ppb	95.139 %	0.045 ppb
Concentration per Run 2	0.081 ppb	0.018 ppb	0.011 ppb	0.249 ppb	99.228 %	0.003 ppb	0.000 ppb	98.139 %	0.073 ppb
Concentration per Run 3	0.095 ppb	-0.002 ppb	0.011 ppb	0.308 ppb	100.870 %	0.002 ppb	0.001 ppb	98.527 %	0.050 ppb
Concentration RSD	15.7 %	125.1 %	34.6 %	53.2 %	0.8 %	43.3 %	149.9 %	1.9 %	26.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.054 ppb	97.693 %	94.249 %	0.009 ppb	0.017 ppb	116.856 %
Concentration per Run 1	0.064 ppb	94.827 %	91.893 %	0.003 ppb	0.017 ppb	131.700 %
Concentration per Run 2	0.057 ppb	98.768 %	95.094 %	0.011 ppb	0.018 ppb	111.197 %
Concentration per Run 3	0.041 ppb	99.485 %	95.761 %	0.011 ppb	0.018 ppb	107.672 %
Concentration RSD	22.2 %	2.6 %	2.2 %	52.8 %	3.1 %	11.1 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index: 18
Analysis label: WG1825220-2d5 6020TL
Analysis started at: 9/14/2023 7:34:01 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 2
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.324 %	107.507 %	10.695 ppb	2,248.862 ppb	2,095.878 ppb	415.660 ppb	1,992.509 ppb	2,139.993 ppb	109.919 %
Concentration per Run 1	105.078 %	106.654 %	10.675 ppb	2,230.981 ppb	2,118.668 ppb	418.325 ppb	1,941.468 ppb	2,151.910 ppb	114.160 %
Concentration per Run 2	102.296 %	109.365 %	10.612 ppb	2,237.585 ppb	2,038.803 ppb	412.692 ppb	1,984.734 ppb	2,220.002 ppb	108.677 %
Concentration per Run 3	99.596 %	106.503 %	10.798 ppb	2,278.018 ppb	2,130.163 ppb	415.964 ppb	2,051.326 ppb	2,048.066 ppb	106.919 %
Concentration RSD	2.7 %	1.5 %	0.9 %	1.1 %	2.4 %	0.7 %	2.8 %	4.0 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	97.375 ppb	39.472 ppb	99.899 ppb	216.437 ppb	105.365 ppb	103.814 ppb	51.702 ppb	103.116 ppb	104.914 %
Concentration per Run 1	97.322 ppb	39.727 ppb	99.149 ppb	218.638 ppb	106.734 ppb	104.471 ppb	53.291 ppb	103.619 ppb	102.297 %
Concentration per Run 2	97.472 ppb	39.469 ppb	103.628 ppb	215.359 ppb	104.870 ppb	105.957 ppb	50.896 ppb	102.622 ppb	104.741 %
Concentration per Run 3	97.330 ppb	39.222 ppb	96.921 ppb	215.314 ppb	104.491 ppb	101.013 ppb	50.920 ppb	103.106 ppb	107.704 %
Concentration RSD	0.1 %	0.6 %	3.4 %	0.9 %	1.1 %	2.4 %	2.7 %	0.5 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	24.735 ppb	24.332 ppb	183.770 ppb	207.096 ppb	101.856 %	10.913 ppb	11.068 ppb	99.636 %	82.035 ppb
Concentration per Run 1	25.129 ppb	24.373 ppb	184.811 ppb	208.898 ppb	100.635 %	11.018 ppb	10.848 ppb	98.798 %	81.417 ppb
Concentration per Run 2	24.932 ppb	25.214 ppb	183.279 ppb	207.906 ppb	101.428 %	11.193 ppb	11.025 ppb	98.825 %	83.059 ppb
Concentration per Run 3	24.146 ppb	23.408 ppb	183.219 ppb	204.483 ppb	103.505 %	10.527 ppb	11.332 ppb	101.284 %	81.630 ppb
Concentration RSD	2.1 %	3.7 %	0.5 %	1.1 %	1.5 %	3.2 %	2.2 %	1.4 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	398.835 ppb	102.155 %	98.891 %	24.575 ppb	105.322 ppb	106.261 %
Concentration per Run 1	394.978 ppb	101.475 %	97.075 %	24.305 ppb	103.044 ppb	109.125 %
Concentration per Run 2	400.912 ppb	103.371 %	97.508 %	24.599 ppb	106.973 ppb	104.099 %
Concentration per Run 3	400.614 ppb	101.618 %	102.089 %	24.821 ppb	105.950 ppb	105.559 %
Concentration RSD	0.8 %	1.0 %	2.8 %	1.1 %	1.9 %	2.4 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index: 19
Analysis label: xWG1825220-3d10 6020TL
Analysis started at: 9/14/2023 7:38:37 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 4
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.082 %	112.679 %	0.002 ppb	-3.828 ppb	0.171 ppb	0.208 ppb	0.282 ppb	8.306 ppb	109.811 %
Concentration per Run 1	106.032 %	114.939 %	0.003 ppb	-3.872 ppb	0.240 ppb	0.342 ppb	0.258 ppb	10.616 ppb	111.158 %
Concentration per Run 2	101.438 %	113.282 %	0.005 ppb	-4.292 ppb	0.121 ppb	0.146 ppb	1.460 ppb	5.832 ppb	107.386 %
Concentration per Run 3	101.775 %	109.817 %	-0.001 ppb	-3.318 ppb	0.153 ppb	0.136 ppb	-0.872 ppb	8.470 ppb	110.888 %
Concentration RSD	2.5 %	2.3 %	147.6 %	12.8 %	35.8 %	55.8 %	413.4 %	28.9 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.022 ppb	0.000 ppb	0.083 ppb	2.452 ppb	0.006 ppb	0.079 ppb	0.056 ppb	0.517 ppb	106.873 %
Concentration per Run 1	0.000 ppb	-0.004 ppb	0.078 ppb	1.384 ppb	0.002 ppb	0.084 ppb	0.054 ppb	0.499 ppb	104.126 %
Concentration per Run 2	0.039 ppb	-0.003 ppb	0.112 ppb	3.040 ppb	0.012 ppb	0.105 ppb	0.057 ppb	0.537 ppb	108.999 %
Concentration per Run 3	0.027 ppb	0.007 ppb	0.058 ppb	2.932 ppb	0.003 ppb	0.047 ppb	0.056 ppb	0.513 ppb	107.495 %
Concentration RSD	91.4 %	3,584.9 %	32.8 %	37.8 %	95.6 %	37.5 %	2.7 %	3.7 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.031 ppb	0.363 ppb	0.008 ppb	5.634 ppb	105.038 %	0.002 ppb	0.001 ppb	104.498 %	4.097 ppb
Concentration per Run 1	0.091 ppb	0.181 ppb	0.007 ppb	4.333 ppb	104.737 %	0.002 ppb	0.001 ppb	103.577 %	3.824 ppb
Concentration per Run 2	0.042 ppb	0.379 ppb	0.013 ppb	5.972 ppb	105.428 %	0.002 ppb	0.001 ppb	108.140 %	4.188 ppb
Concentration per Run 3	-0.039 ppb	0.529 ppb	0.004 ppb	6.596 ppb	104.947 %	0.002 ppb	0.000 ppb	101.778 %	4.279 ppb
Concentration RSD	208.7 %	48.0 %	56.4 %	20.7 %	0.3 %	6.5 %	117.9 %	3.1 %	5.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.067 ppb	103.333 %	100.310 %	0.038 ppb	0.025 ppb	107.847 %
Concentration per Run 1	0.042 ppb	103.425 %	99.338 %	0.033 ppb	0.022 ppb	111.204 %
Concentration per Run 2	0.133 ppb	102.475 %	100.695 %	0.043 ppb	0.034 ppb	106.883 %
Concentration per Run 3	0.027 ppb	104.099 %	100.897 %	0.038 ppb	0.019 ppb	105.454 %
Concentration RSD	84.8 %	0.8 %	0.8 %	12.8 %	31.2 %	2.8 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	20	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xWG1825220-5d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 7:43:15 AM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.780 %	111.072 %	50.659 ppb	26,781.582 ppb	15,978.900 ppb	9,615.423 ppb	6,213.701 ppb	44,601.247 ppb	123.475 %
Concentration per Run 1	102.608 %	110.646 %	50.845 ppb	27,173.200 ppb	15,932.113 ppb	9,576.039 ppb	6,229.260 ppb	45,807.429 ppb	122.110 %
Concentration per Run 2	100.493 %	108.461 %	50.413 ppb	26,328.484 ppb	15,797.679 ppb	9,411.898 ppb	6,067.673 ppb	44,532.727 ppb	125.457 %
Concentration per Run 3	96.238 %	114.111 %	50.720 ppb	26,843.062 ppb	16,206.908 ppb	9,858.333 ppb	6,344.170 ppb	43,463.586 ppb	122.857 %
Concentration RSD	3.3 %	2.6 %	0.4 %	1.6 %	1.3 %	2.3 %	2.2 %	2.6 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	99.304 ppb	71.247 ppb	758.439 ppb	15,558.808 ppb	95.756 ppb	100.495 ppb	72.761 ppb	146.817 ppb	110.400 %
Concentration per Run 1	101.985 ppb	73.163 ppb	770.068 ppb	16,085.831 ppb	102.256 ppb	105.314 ppb	77.686 ppb	151.072 ppb	105.639 %
Concentration per Run 2	99.497 ppb	71.546 ppb	752.462 ppb	15,457.740 ppb	92.209 ppb	99.588 ppb	72.210 ppb	146.001 ppb	108.871 %
Concentration per Run 3	96.430 ppb	69.032 ppb	752.786 ppb	15,132.852 ppb	92.801 ppb	96.584 ppb	68.386 ppb	143.378 ppb	116.690 %
Concentration RSD	2.8 %	2.9 %	1.3 %	3.1 %	5.9 %	4.4 %	6.4 %	2.7 %	5.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	55.645 ppb	55.246 ppb	265.772 ppb	97.905 ppb	102.271 %	6.094 ppb	49.736 ppb	106.061 %	61.141 ppb
Concentration per Run 1	57.845 ppb	56.329 ppb	261.191 ppb	100.010 ppb	100.463 %	6.243 ppb	50.667 ppb	103.010 %	61.124 ppb
Concentration per Run 2	55.379 ppb	54.147 ppb	257.558 ppb	95.660 ppb	102.462 %	6.063 ppb	49.480 ppb	104.158 %	59.738 ppb
Concentration per Run 3	53.710 ppb	55.261 ppb	278.566 ppb	98.045 ppb	103.888 %	5.977 ppb	49.060 ppb	111.015 %	62.562 ppb
Concentration RSD	3.7 %	2.0 %	4.2 %	2.2 %	1.7 %	2.2 %	1.7 %	4.1 %	2.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	357.722 ppb	107.081 %	104.247 %	54.758 ppb	105.431 ppb	106.626 %
Concentration per Run 1	367.867 ppb	105.279 %	102.671 %	52.627 ppb	102.802 ppb	109.314 %
Concentration per Run 2	339.105 ppb	105.288 %	99.948 %	56.875 ppb	108.047 ppb	103.354 %
Concentration per Run 3	366.192 ppb	110.676 %	110.122 %	54.773 ppb	105.443 ppb	107.210 %
Concentration RSD	4.5 %	2.9 %	5.1 %	3.9 %	2.5 %	2.8 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	21	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1825220-4 6020TL	Rack	1		
Analysis started at:	9/14/2023 7:47:54 AM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.234 %	104.871 %	3.254 ppb	116,950.335 ppb	59,648.661 ppb	41,947.475 ppb	4,297.696 ppb	210,520.968 ppb	132.986 %
Concentration per Run 1	93.894 %	102.887 %	3.215 ppb	119,178.082 ppb	60,613.674 ppb	43,764.635 ppb	4,457.484 ppb	214,765.349 ppb	137.384 %
Concentration per Run 2	89.585 %	105.900 %	3.208 ppb	119,512.062 ppb	61,968.366 ppb	41,944.961 ppb	4,257.355 ppb	210,264.767 ppb	135.920 %
Concentration per Run 3	87.222 %	105.825 %	3.339 ppb	112,160.861 ppb	56,363.944 ppb	40,132.827 ppb	4,178.250 ppb	206,532.788 ppb	125.655 %
Concentration RSD	3.7 %	1.6 %	2.3 %	3.5 %	4.9 %	4.3 %	3.3 %	2.0 %	4.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	64.384 ppb	49.135 ppb	3,186.606 ppb	59,495.545 ppb	32.653 ppb	56.942 ppb	41.911 ppb	276.522 ppb	106.618 %
Concentration per Run 1	65.748 ppb	50.020 ppb	3,183.406 ppb	61,098.415 ppb	32.793 ppb	57.557 ppb	41.906 ppb	280.857 ppb	108.754 %
Concentration per Run 2	65.290 ppb	49.802 ppb	3,308.627 ppb	59,183.039 ppb	32.453 ppb	57.685 ppb	41.963 ppb	275.898 ppb	107.619 %
Concentration per Run 3	62.114 ppb	47.582 ppb	3,067.784 ppb	58,205.181 ppb	32.713 ppb	55.584 ppb	41.865 ppb	272.811 ppb	103.483 %
Concentration RSD	3.1 %	2.7 %	3.8 %	2.5 %	0.5 %	2.1 %	0.1 %	1.5 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	19.135 ppb	34.194 ppb	732.621 ppb	5.405 ppb	90.958 %	0.370 ppb	2.159 ppb	98.160 %	1.527 ppb
Concentration per Run 1	19.470 ppb	33.120 ppb	738.130 ppb	4.273 ppb	92.582 %	0.366 ppb	2.206 ppb	98.766 %	1.441 ppb
Concentration per Run 2	19.000 ppb	35.307 ppb	748.044 ppb	5.580 ppb	92.236 %	0.351 ppb	2.106 ppb	100.342 %	1.542 ppb
Concentration per Run 3	18.934 ppb	34.156 ppb	711.690 ppb	6.361 ppb	88.056 %	0.392 ppb	2.164 ppb	95.371 %	1.599 ppb
Concentration RSD	1.5 %	3.2 %	2.6 %	19.5 %	2.8 %	5.5 %	2.3 %	2.6 %	5.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	756.497 ppb	96.679 %	88.506 %	0.619 ppb	84.867 ppb	91.742 %
Concentration per Run 1	792.454 ppb	96.312 %	87.858 %	0.567 ppb	79.549 ppb	99.244 %
Concentration per Run 2	737.459 ppb	98.406 %	91.243 %	0.651 ppb	86.904 ppb	89.915 %
Concentration per Run 3	739.578 ppb	95.319 %	86.418 %	0.639 ppb	88.147 ppb	86.066 %
Concentration RSD	4.1 %	1.6 %	2.8 %	7.4 %	5.5 %	7.4 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	22	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2351774-05 6020TL	Rack	1		
Analysis started at:	9/14/2023 7:52:32 AM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.453 %	97.665 %	3.546 ppb	120,446.767 ppb	60,754.418 ppb	44,995.502 ppb	4,415.891 ppb	209,855.715 ppb	119.348 %
Concentration per Run 1	86.586 %	103.641 %	3.440 ppb	125,323.307 ppb	63,440.428 ppb	46,756.228 ppb	4,622.103 ppb	219,932.908 ppb	120.878 %
Concentration per Run 2	80.147 %	97.088 %	3.659 ppb	118,112.029 ppb	58,801.410 ppb	45,725.012 ppb	4,461.731 ppb	210,577.600 ppb	119.453 %
Concentration per Run 3	77.628 %	92.267 %	3.541 ppb	117,904.965 ppb	60,021.415 ppb	42,505.265 ppb	4,163.839 ppb	199,056.637 ppb	117.713 %
Concentration RSD	5.7 %	5.8 %	3.1 %	3.5 %	4.0 %	4.9 %	5.3 %	5.0 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	64.069 ppb	49.793 ppb	3,040.436 ppb	58,882.780 ppb	32.945 ppb	57.889 ppb	43.503 ppb	281.442 ppb	104.023 %
Concentration per Run 1	63.401 ppb	48.980 ppb	3,111.430 ppb	57,465.259 ppb	32.063 ppb	56.684 ppb	42.825 ppb	279.883 ppb	112.797 %
Concentration per Run 2	65.508 ppb	48.822 ppb	2,919.276 ppb	58,450.307 ppb	33.040 ppb	56.863 ppb	41.428 ppb	277.844 ppb	105.555 %
Concentration per Run 3	63.298 ppb	51.576 ppb	3,090.602 ppb	60,732.776 ppb	33.732 ppb	60.121 ppb	46.257 ppb	286.599 ppb	93.716 %
Concentration RSD	1.9 %	3.1 %	3.5 %	2.8 %	2.5 %	3.3 %	5.7 %	1.6 %	9.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	18.690 ppb	34.509 ppb	746.159 ppb	2.133 ppb	87.644 %	0.395 ppb	2.266 ppb	95.807 %	0.932 ppb
Concentration per Run 1	18.600 ppb	32.102 ppb	752.448 ppb	1.722 ppb	91.343 %	0.399 ppb	2.268 ppb	104.803 %	0.843 ppb
Concentration per Run 2	18.237 ppb	34.056 ppb	747.117 ppb	2.148 ppb	87.611 %	0.378 ppb	2.285 ppb	94.317 %	0.993 ppb
Concentration per Run 3	19.233 ppb	37.370 ppb	738.912 ppb	2.529 ppb	83.978 %	0.408 ppb	2.246 ppb	88.302 %	0.959 ppb
Concentration RSD	2.7 %	7.7 %	0.9 %	18.9 %	4.2 %	4.0 %	0.9 %	8.7 %	8.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	781.096 ppb	95.714 %	87.451 %	0.483 ppb	87.450 ppb	88.027 %
Concentration per Run 1	819.679 ppb	98.932 %	93.691 %	0.446 ppb	83.417 ppb	95.017 %
Concentration per Run 2	772.913 ppb	97.093 %	87.559 %	0.499 ppb	89.044 ppb	86.724 %
Concentration per Run 3	750.696 ppb	91.118 %	81.103 %	0.503 ppb	89.890 ppb	82.340 %
Concentration RSD	4.5 %	4.3 %	7.2 %	6.5 %	4.0 %	7.3 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	23	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2351774-06d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 7:57:11 AM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.388 %	102.737 %	1.612 ppb	3,547.143 ppb	13,546.891 ppb	20,974.073 ppb	3,266.477 ppb	77,324.889 ppb	97.162 %
Concentration per Run 1	83.826 %	109.139 %	1.613 ppb	3,652.531 ppb	13,650.522 ppb	20,051.388 ppb	3,419.010 ppb	81,879.334 ppb	99.932 %
Concentration per Run 2	81.356 %	100.703 %	1.569 ppb	3,582.082 ppb	13,967.799 ppb	22,051.894 ppb	3,324.019 ppb	77,460.799 ppb	95.800 %
Concentration per Run 3	78.981 %	98.368 %	1.655 ppb	3,406.817 ppb	13,022.351 ppb	20,818.937 ppb	3,056.402 ppb	72,634.534 ppb	95.754 %
Concentration RSD	3.0 %	5.5 %	2.7 %	3.6 %	3.6 %	4.8 %	5.8 %	6.0 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	32.429 ppb	30.659 ppb	1,221.986 ppb	25,738.592 ppb	16.154 ppb	33.852 ppb	34.152 ppb	168.109 ppb	100.296 %
Concentration per Run 1	32.099 ppb	30.819 ppb	1,243.254 ppb	25,707.242 ppb	15.389 ppb	33.066 ppb	32.178 ppb	164.466 ppb	108.597 %
Concentration per Run 2	32.609 ppb	30.994 ppb	1,244.096 ppb	26,238.289 ppb	16.954 ppb	35.210 ppb	35.208 ppb	173.684 ppb	97.529 %
Concentration per Run 3	32.580 ppb	30.165 ppb	1,178.609 ppb	25,270.243 ppb	16.119 ppb	33.282 ppb	35.070 ppb	166.176 ppb	94.761 %
Concentration RSD	0.9 %	1.4 %	3.1 %	1.9 %	4.8 %	3.5 %	5.0 %	2.9 %	7.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	6.758 ppb	20.363 ppb	190.442 ppb	1.182 ppb	90.142 %	0.193 ppb	2.004 ppb	94.632 %	0.474 ppb
Concentration per Run 1	6.660 ppb	20.032 ppb	201.032 ppb	1.069 ppb	92.428 %	0.204 ppb	1.958 ppb	103.934 %	0.419 ppb
Concentration per Run 2	6.795 ppb	21.595 ppb	192.471 ppb	1.161 ppb	90.581 %	0.190 ppb	1.970 ppb	94.323 %	0.479 ppb
Concentration per Run 3	6.819 ppb	19.461 ppb	177.823 ppb	1.315 ppb	87.417 %	0.187 ppb	2.083 ppb	85.639 %	0.524 ppb
Concentration RSD	1.3 %	5.4 %	6.2 %	10.5 %	2.8 %	4.7 %	3.4 %	9.7 %	11.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	278.992 ppb	95.866 %	90.727 %	0.212 ppb	59.136 ppb	93.777 %
Concentration per Run 1	283.414 ppb	100.950 %	96.923 %	0.185 ppb	56.034 ppb	100.273 %
Concentration per Run 2	267.451 ppb	96.276 %	89.427 %	0.226 ppb	60.761 ppb	92.716 %
Concentration per Run 3	286.111 ppb	90.373 %	85.831 %	0.224 ppb	60.613 ppb	88.341 %
Concentration RSD	3.6 %	5.5 %	6.2 %	10.8 %	4.5 %	6.4 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index: 24 User name ALPHALAB\Metals-Instrument Comment <Comment>
Analysis label: L2351774-07 6020TL Rack 1
Analysis started at: 9/14/2023 8:01:50 AM Vial 9

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.404 %	87.898 %	3.284 ppb	99,513.559 ppb	140,952.731 ppb	68,852.891 ppb	63,144.324 ppb	1,205,757.394 ppb	149.039 %
Concentration per Run 1	89.317 %	83.530 %	3.277 ppb	104,696.528 ppb	151,097.184 ppb	72,207.805 ppb	66,824.418 ppb	1,259,549.435 ppb	150.242 %
Concentration per Run 2	83.692 %	86.768 %	3.222 ppb	102,786.010 ppb	141,770.710 ppb	71,156.425 ppb	63,277.208 ppb	1,224,172.673 ppb	150.413 %
Concentration per Run 3	80.204 %	93.397 %	3.353 ppb	91,058.137 ppb	129,990.299 ppb	63,194.445 ppb	59,331.347 ppb	1,133,550.073 ppb	146.464 %
Concentration RSD	5.4 %	5.7 %	2.0 %	7.4 %	7.5 %	7.2 %	5.9 %	5.4 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	136.669 ppb	173.150 ppb	4,687.372 ppb	93,718.332 ppb	57.298 ppb	130.560 ppb	460.744 ppb	674.313 ppb	95.144 %
Concentration per Run 1	137.717 ppb	173.411 ppb	4,775.360 ppb	94,246.431 ppb	59.132 ppb	133.574 ppb	459.046 ppb	690.507 ppb	95.322 %
Concentration per Run 2	135.850 ppb	171.487 ppb	4,693.781 ppb	94,186.002 ppb	56.980 ppb	128.650 ppb	458.023 ppb	663.583 ppb	97.240 %
Concentration per Run 3	136.440 ppb	174.552 ppb	4,592.975 ppb	92,722.563 ppb	55.781 ppb	129.457 ppb	465.164 ppb	668.849 ppb	92.871 %
Concentration RSD	0.7 %	0.9 %	1.9 %	0.9 %	3.0 %	2.0 %	0.8 %	2.1 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	29.515 ppb	43.035 ppb	1,722.216 ppb	9.279 ppb	73.752 %	2.623 ppb	4.028 ppb	87.159 %	1.446 ppb
Concentration per Run 1	29.736 ppb	43.834 ppb	1,659.493 ppb	9.390 ppb	72.139 %	2.633 ppb	4.051 ppb	86.769 %	1.384 ppb
Concentration per Run 2	29.070 ppb	42.458 ppb	1,785.296 ppb	8.817 ppb	74.727 %	2.571 ppb	3.877 ppb	91.807 %	1.408 ppb
Concentration per Run 3	29.740 ppb	42.813 ppb	1,721.859 ppb	9.629 ppb	74.389 %	2.665 ppb	4.157 ppb	82.902 %	1.547 ppb
Concentration RSD	1.3 %	1.7 %	3.7 %	4.5 %	1.9 %	1.8 %	3.5 %	5.1 %	6.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1,179.567 ppb	78.568 %	68.319 %	1.180 ppb	966.619 ppb	74.601 %
Concentration per Run 1	1,199.570 ppb	77.397 %	66.938 %	1.118 ppb	923.500 ppb	78.272 %
Concentration per Run 2	1,135.805 ppb	80.337 %	70.386 %	1.212 ppb	979.710 ppb	73.017 %
Concentration per Run 3	1,203.325 ppb	77.970 %	67.633 %	1.209 ppb	996.646 ppb	72.516 %
Concentration RSD	3.2 %	2.0 %	2.7 %	4.5 %	4.0 %	4.3 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	25	User name	ALPHALAB\Metals-Instrument	Comment	cont swap
Analysis label:	xL2352016-01 6020sL	Rack	1		
Analysis started at:	9/14/2023 8:06:30 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	71.849 %	77.579 %	0.006 ppb	313,589.501 ppb	113,974.514 ppb	16.577 ppb	120,690.228 ppb	**782,048.202 ppb**	91.334 %
Concentration per Run 1	76.913 %	77.579 %	0.006 ppb	325,271.793 ppb	119,568.405 ppb	10.837 ppb	127,176.169 ppb	829,705.872 ppb	95.644 %
Concentration per Run 2	70.946 %	78.106 %	0.008 ppb	309,680.215 ppb	111,239.858 ppb	28.541 ppb	126,359.076 ppb	782,688.654 ppb	88.027 %
Concentration per Run 3	67.688 %	77.052 %	0.004 ppb	305,816.496 ppb	111,115.280 ppb	10.353 ppb	108,535.438 ppb	733,750.081 ppb	90.332 %
Concentration RSD	6.5 %	0.7 %	36.4 %	3.3 %	4.3 %	62.5 %	8.7 %	6.1 %	4.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.322 ppb	0.313 ppb	1,103.020 ppb	172.804 ppb	2.515 ppb	7.090 ppb	2.964 ppb	8.209 ppb	84.546 %
Concentration per Run 1	0.309 ppb	0.306 ppb	1,109.874 ppb	182.680 ppb	2.601 ppb	7.184 ppb	2.956 ppb	8.439 ppb	83.782 %
Concentration per Run 2	0.361 ppb	0.324 ppb	1,116.914 ppb	180.676 ppb	2.382 ppb	6.933 ppb	2.916 ppb	8.050 ppb	88.620 %
Concentration per Run 3	0.298 ppb	0.309 ppb	1,082.271 ppb	155.055 ppb	2.562 ppb	7.153 ppb	3.021 ppb	8.137 ppb	81.237 %
Concentration RSD	10.4 %	3.1 %	1.7 %	8.9 %	4.6 %	1.9 %	1.8 %	2.5 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.079 ppb	8.863 ppb	5,226.494 ppb	7.655 ppb	78.504 %	0.007 ppb	0.269 ppb	87.939 %	0.427 ppb
Concentration per Run 1	1.156 ppb	9.247 ppb	5,433.850 ppb	7.126 ppb	78.834 %	0.009 ppb	0.281 ppb	90.060 %	0.391 ppb
Concentration per Run 2	1.023 ppb	8.815 ppb	5,199.919 ppb	7.567 ppb	79.077 %	0.005 ppb	0.249 ppb	91.018 %	0.429 ppb
Concentration per Run 3	1.058 ppb	8.528 ppb	5,045.714 ppb	8.271 ppb	77.602 %	0.008 ppb	0.278 ppb	82.740 %	0.460 ppb
Concentration RSD	6.4 %	4.1 %	3.7 %	7.5 %	1.0 %	28.9 %	6.7 %	5.1 %	8.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	62.760 ppb	90.282 %	87.918 %	0.053 ppb	0.704 ppb	71.155 %
Concentration per Run 1	63.373 ppb	89.213 %	88.525 %	0.045 ppb	0.694 ppb	72.850 %
Concentration per Run 2	62.304 ppb	92.583 %	89.904 %	0.060 ppb	0.753 ppb	71.632 %
Concentration per Run 3	62.604 ppb	89.051 %	85.326 %	0.055 ppb	0.665 ppb	68.982 %
Concentration RSD	0.9 %	2.2 %	2.7 %	15.1 %	6.4 %	2.8 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	26	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1825220-6d5 6020TL	Rack	1		
Analysis started at:	9/14/2023 8:11:10 AM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.764 %	103.666 %	0.824 ppb	24,447.957 ppb	12,563.261 ppb	10,530.760 ppb	866.011 ppb	41,331.867 ppb	101.183 %
Concentration per Run 1	86.997 %	106.879 %	0.815 ppb	24,761.437 ppb	12,842.249 ppb	10,750.165 ppb	891.002 ppb	42,635.727 ppb	100.915 %
Concentration per Run 2	83.929 %	104.996 %	0.809 ppb	23,543.642 ppb	11,897.114 ppb	10,388.658 ppb	886.510 ppb	41,089.225 ppb	100.718 %
Concentration per Run 3	83.366 %	99.121 %	0.848 ppb	25,038.792 ppb	12,950.421 ppb	10,453.455 ppb	820.520 ppb	40,270.650 ppb	101.915 %
Concentration RSD	2.3 %	3.9 %	2.6 %	3.3 %	4.6 %	1.8 %	4.6 %	2.9 %	0.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	13.371 ppb	10.676 ppb	706.474 ppb	13,569.145 ppb	7.245 ppb	12.968 ppb	10.119 ppb	69.145 ppb	105.051 %
Concentration per Run 1	14.113 ppb	10.724 ppb	707.394 ppb	14,104.716 ppb	7.340 ppb	12.861 ppb	10.261 ppb	70.567 ppb	105.235 %
Concentration per Run 2	13.121 ppb	10.539 ppb	704.819 ppb	13,692.150 ppb	7.233 ppb	12.967 ppb	10.180 ppb	68.792 ppb	105.257 %
Concentration per Run 3	12.878 ppb	10.763 ppb	707.210 ppb	12,910.569 ppb	7.160 ppb	13.076 ppb	9.915 ppb	68.075 ppb	104.662 %
Concentration RSD	4.9 %	1.1 %	0.2 %	4.5 %	1.2 %	0.8 %	1.8 %	1.9 %	0.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	4.239 ppb	7.689 ppb	142.932 ppb	0.613 ppb	97.229 %	0.080 ppb	0.479 ppb	97.169 %	0.199 ppb
Concentration per Run 1	4.379 ppb	7.895 ppb	147.942 ppb	0.476 ppb	100.957 %	0.080 ppb	0.450 ppb	100.898 %	0.195 ppb
Concentration per Run 2	4.225 ppb	7.247 ppb	140.520 ppb	0.641 ppb	94.442 %	0.080 ppb	0.488 ppb	95.785 %	0.183 ppb
Concentration per Run 3	4.111 ppb	7.926 ppb	140.334 ppb	0.721 ppb	96.286 %	0.079 ppb	0.501 ppb	94.824 %	0.219 ppb
Concentration RSD	3.2 %	5.0 %	3.0 %	20.4 %	3.5 %	0.2 %	5.5 %	3.4 %	9.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	152.273 ppb	97.079 %	93.595 %	0.091 ppb	17.518 ppb	95.426 %
Concentration per Run 1	156.582 ppb	99.545 %	96.734 %	0.081 ppb	16.920 ppb	100.231 %
Concentration per Run 2	150.177 ppb	96.697 %	91.524 %	0.093 ppb	17.590 ppb	94.577 %
Concentration per Run 3	150.061 ppb	94.994 %	92.526 %	0.098 ppb	18.044 ppb	91.470 %
Concentration RSD	2.5 %	2.4 %	3.0 %	9.8 %	3.2 %	4.7 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	27	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 8:15:49 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.500 %	100.803 %	62.656 ppb	5,946.330 ppb	6,145.320 ppb	61.691 ppb	5,652.280 ppb	5,406.603 ppb	94.751 %
Concentration per Run 1	85.428 %	107.708 %	60.694 ppb	5,897.839 ppb	5,841.538 ppb	60.970 ppb	5,772.909 ppb	5,582.316 ppb	99.243 %
Concentration per Run 2	81.623 %	90.760 %	63.029 ppb	6,037.726 ppb	6,273.918 ppb	62.843 ppb	5,453.398 ppb	5,373.943 ppb	89.804 %
Concentration per Run 3	80.450 %	103.942 %	64.246 ppb	5,903.425 ppb	6,320.502 ppb	61.260 ppb	5,730.534 ppb	5,263.550 ppb	95.207 %
Recovery Percentage 1			104.427 %	99.105 %	102.422 %	102.818 %	94.205 %	90.110 %	
Concentration RSD	3.2 %	8.8 %	2.9 %	1.3 %	4.3 %	1.6 %	3.1 %	3.0 %	5.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.222 ppb	54.160 ppb	54.674 ppb	6,096.257 ppb	62.560 ppb	62.806 ppb	60.468 ppb	58.781 ppb	99.937 %
Concentration per Run 1	55.756 ppb	54.035 ppb	55.311 ppb	6,181.455 ppb	62.372 ppb	61.982 ppb	59.142 ppb	59.203 ppb	99.760 %
Concentration per Run 2	54.510 ppb	52.964 ppb	52.806 ppb	5,957.233 ppb	63.355 ppb	64.010 ppb	61.129 ppb	57.696 ppb	98.702 %
Concentration per Run 3	55.399 ppb	55.480 ppb	55.904 ppb	6,150.085 ppb	61.952 ppb	62.426 ppb	61.133 ppb	59.445 ppb	101.348 %
Recovery Percentage 1	92.036 %	90.266 %	91.123 %	101.604 %	104.267 %	104.677 %	100.781 %	97.969 %	
Concentration RSD	1.2 %	2.3 %	3.0 %	2.0 %	1.2 %	1.7 %	1.9 %	1.6 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.959 ppb	54.177 ppb	53.909 ppb	54.775 ppb	96.008 %	60.287 ppb	57.364 ppb	95.714 %	55.143 ppb
Concentration per Run 1	61.463 ppb	56.068 ppb	55.145 ppb	55.274 ppb	96.120 %	61.004 ppb	58.415 ppb	94.395 %	56.957 ppb
Concentration per Run 2	58.458 ppb	51.871 ppb	51.185 ppb	53.307 ppb	95.101 %	60.855 ppb	57.533 ppb	91.441 %	54.446 ppb
Concentration per Run 3	59.955 ppb	54.594 ppb	55.397 ppb	55.745 ppb	96.802 %	59.003 ppb	56.145 ppb	101.307 %	54.026 ppb
Recovery Percentage 1	99.932 %	90.296 %	89.848 %	91.292 %		100.479 %	95.607 %		91.906 %
Concentration RSD	2.5 %	3.9 %	4.4 %	2.4 %	0.9 %	1.8 %	2.0 %	5.3 %	2.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.338 ppb	95.105 %	91.799 %	57.747 ppb	58.085 ppb	97.765 %
Concentration per Run 1	59.295 ppb	97.193 %	94.304 %	56.342 ppb	55.915 ppb	104.160 %
Concentration per Run 2	57.882 ppb	91.732 %	86.851 %	58.129 ppb	59.550 ppb	92.453 %
Concentration per Run 3	57.836 ppb	96.390 %	94.242 %	58.769 ppb	58.789 ppb	96.683 %
Recovery Percentage 1	97.230 %			96.244 %	96.808 %	
Concentration RSD	1.4 %	3.1 %	4.7 %	2.2 %	3.3 %	6.1 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	28	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 8:20:31 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.957 %	100.904 %	0.003 ppb	-6.951 ppb	-0.529 ppb	-0.225 ppb	11.751 ppb	2.596 ppb	90.604 %
Concentration per Run 1	87.370 %	101.984 %	0.007 ppb	-6.349 ppb	-0.472 ppb	-0.057 ppb	15.831 ppb	1.130 ppb	94.065 %
Concentration per Run 2	84.784 %	99.272 %	0.000 ppb	-8.432 ppb	-0.381 ppb	-0.261 ppb	11.240 ppb	3.747 ppb	89.285 %
Concentration per Run 3	82.719 %	101.456 %	0.003 ppb	-6.072 ppb	-0.734 ppb	-0.357 ppb	8.183 ppb	2.911 ppb	88.463 %
Recovery Percentage 1			0.678 %	-6.951 %	-0.756 %	-2.249 %	11.751 %	2.596 %	
Concentration RSD	2.7 %	1.4 %	107.2 %	18.6 %	34.6 %	68.1 %	32.8 %	51.5 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.006 ppb	0.005 ppb	0.015 ppb	17.595 ppb	0.001 ppb	0.028 ppb	0.010 ppb	0.217 ppb	99.234 %
Concentration per Run 1	-0.005 ppb	0.003 ppb	0.030 ppb	15.422 ppb	0.001 ppb	0.033 ppb	0.007 ppb	0.214 ppb	100.519 %
Concentration per Run 2	0.002 ppb	0.012 ppb	0.008 ppb	18.212 ppb	0.002 ppb	0.019 ppb	0.010 ppb	0.241 ppb	93.421 %
Concentration per Run 3	0.020 ppb	0.002 ppb	0.009 ppb	19.152 ppb	0.000 ppb	0.032 ppb	0.014 ppb	0.196 ppb	103.761 %
Recovery Percentage 1	0.113 %	0.531 %	1.539 %	35.191 %	0.212 %	1.407 %	1.049 %	4.337 %	
Concentration RSD	230.8 %	104.5 %	82.2 %	11.0 %	102.6 %	27.4 %	31.6 %	10.5 %	5.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.217 ppb	0.450 ppb	-0.004 ppb	1.412 ppb	97.891 %	0.004 ppb	0.001 ppb	93.734 %	0.304 ppb
Concentration per Run 1	0.212 ppb	0.331 ppb	-0.006 ppb	1.159 ppb	98.805 %	0.004 ppb	0.001 ppb	95.044 %	0.291 ppb
Concentration per Run 2	0.235 ppb	0.426 ppb	0.000 ppb	1.449 ppb	95.547 %	0.004 ppb	0.001 ppb	91.487 %	0.287 ppb
Concentration per Run 3	0.205 ppb	0.593 ppb	-0.007 ppb	1.627 ppb	99.320 %	0.004 ppb	0.000 ppb	94.671 %	0.335 ppb
Recovery Percentage 1	43.415 %	9.003 %	-0.044 %	70.583 %		1.006 %	0.291 %		7.608 %
Concentration RSD	7.2 %	29.5 %	79.4 %	16.7 %	2.1 %	8.6 %	147.8 %	2.1 %	8.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.019 ppb	92.942 %	89.690 %	0.071 ppb	0.015 ppb	95.562 %
Concentration per Run 1	0.022 ppb	93.725 %	89.434 %	0.062 ppb	0.015 ppb	98.688 %
Concentration per Run 2	0.010 ppb	91.038 %	87.820 %	0.080 ppb	0.015 ppb	91.894 %
Concentration per Run 3	0.026 ppb	94.063 %	91.816 %	0.069 ppb	0.014 ppb	96.104 %
Recovery Percentage 1	3.816 %			7.051 %	1.494 %	
Concentration RSD	44.7 %	1.8 %	2.2 %	12.4 %	3.0 %	3.6 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	29	User name	ALPHALAB\Metals-Instrument	Comment	FB
Analysis label:	L2352025-25 6020TL	Rack	1		
Analysis started at:	9/14/2023 8:33:41 AM	Vial	15		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.629 %	101.255 %	-0.001 ppb	272.079 ppb	16.866 ppb	6.363 ppb	20.000 ppb	121.197 ppb	117.518 %
Concentration per Run 1	107.894 %	103.716 %	-0.001 ppb	281.584 ppb	18.069 ppb	7.003 ppb	22.413 ppb	117.154 ppb	121.791 %
Concentration per Run 2	105.588 %	102.209 %	-0.003 ppb	264.530 ppb	16.006 ppb	6.833 ppb	17.547 ppb	136.680 ppb	119.776 %
Concentration per Run 3	103.403 %	97.841 %	0.001 ppb	270.122 ppb	16.524 ppb	5.254 ppb	20.038 ppb	109.757 ppb	110.988 %
Concentration RSD	2.1 %	3.0 %	179.8 %	3.2 %	6.4 %	15.2 %	12.2 %	11.5 %	4.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.058 ppb	0.374 ppb	0.475 ppb	16.328 ppb	0.019 ppb	0.127 ppb	0.228 ppb	1.790 ppb	103.588 %
Concentration per Run 1	0.054 ppb	0.392 ppb	0.491 ppb	14.492 ppb	0.017 ppb	0.108 ppb	0.216 ppb	1.795 ppb	108.986 %
Concentration per Run 2	0.072 ppb	0.355 ppb	0.437 ppb	16.637 ppb	0.023 ppb	0.138 ppb	0.242 ppb	1.667 ppb	105.532 %
Concentration per Run 3	0.046 ppb	0.375 ppb	0.497 ppb	17.855 ppb	0.016 ppb	0.134 ppb	0.225 ppb	1.908 ppb	96.247 %
Concentration RSD	23.3 %	5.0 %	6.9 %	10.4 %	21.1 %	13.0 %	5.9 %	6.7 %	6.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.127 ppb	0.204 ppb	0.359 ppb	0.706 ppb	101.731 %	0.001 ppb	0.003 ppb	103.918 %	0.332 ppb
Concentration per Run 1	0.129 ppb	0.229 ppb	0.381 ppb	0.563 ppb	103.388 %	0.001 ppb	0.002 ppb	110.199 %	0.291 ppb
Concentration per Run 2	0.089 ppb	0.219 ppb	0.349 ppb	0.679 ppb	100.358 %	0.002 ppb	0.003 ppb	105.950 %	0.348 ppb
Concentration per Run 3	0.163 ppb	0.165 ppb	0.348 ppb	0.877 ppb	101.446 %	0.001 ppb	0.003 ppb	95.604 %	0.356 ppb
Concentration RSD	29.2 %	16.7 %	5.3 %	22.5 %	1.5 %	5.7 %	21.6 %	7.2 %	10.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.160 ppb	102.174 %	99.591 %	0.017 ppb	0.052 ppb	124.998 %
Concentration per Run 1	1.118 ppb	105.625 %	103.371 %	0.013 ppb	0.043 ppb	148.162 %
Concentration per Run 2	1.226 ppb	102.622 %	100.446 %	0.019 ppb	0.055 ppb	120.531 %
Concentration per Run 3	1.138 ppb	98.275 %	94.957 %	0.019 ppb	0.059 ppb	106.301 %
Concentration RSD	5.0 %	3.6 %	4.3 %	21.8 %	16.2 %	17.0 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	30	User name	ALPHALAB\Metals-Instrument	Comment	FB
Analysis label:	L2352160-09 6020TL	Rack	1		
Analysis started at:	9/14/2023 8:38:17 AM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	104.611 %	105.273 %	0.001 ppb	-10.689 ppb	1.926 ppb	4.104 ppb	8.182 ppb	10.254 ppb	115.204 %
Concentration per Run 1	108.078 %	108.612 %	0.002 ppb	-8.746 ppb	1.652 ppb	4.518 ppb	9.495 ppb	15.644 ppb	117.894 %
Concentration per Run 2	105.651 %	103.339 %	0.001 ppb	-12.180 ppb	2.472 ppb	3.525 ppb	9.089 ppb	6.979 ppb	116.932 %
Concentration per Run 3	100.105 %	103.867 %	-0.001 ppb	-11.141 ppb	1.655 ppb	4.269 ppb	5.962 ppb	8.140 ppb	110.785 %
Concentration RSD	3.9 %	2.8 %	180.2 %	16.5 %	24.5 %	12.6 %	23.6 %	45.9 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.003 ppb	0.151 ppb	0.045 ppb	6.617 ppb	0.003 ppb	0.009 ppb	0.092 ppb	-0.522 ppb	109.958 %
Concentration per Run 1	0.015 ppb	0.161 ppb	0.037 ppb	6.196 ppb	0.004 ppb	0.016 ppb	0.079 ppb	-0.541 ppb	113.130 %
Concentration per Run 2	-0.003 ppb	0.145 ppb	0.026 ppb	5.795 ppb	0.001 ppb	0.002 ppb	0.108 ppb	-0.499 ppb	109.250 %
Concentration per Run 3	-0.003 ppb	0.148 ppb	0.074 ppb	7.861 ppb	0.003 ppb	0.008 ppb	0.088 ppb	-0.527 ppb	107.494 %
Concentration RSD	316.9 %	5.7 %	56.0 %	16.6 %	71.8 %	80.4 %	16.5 %	4.1 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.029 ppb	0.055 ppb	0.583 ppb	0.246 ppb	105.545 %	0.001 ppb	0.000 ppb	107.309 %	0.208 ppb
Concentration per Run 1	0.026 ppb	0.005 ppb	0.607 ppb	0.159 ppb	107.620 %	0.001 ppb	0.000 ppb	110.742 %	0.173 ppb
Concentration per Run 2	0.009 ppb	0.026 ppb	0.568 ppb	0.249 ppb	103.464 %	0.000 ppb	0.000 ppb	108.535 %	0.208 ppb
Concentration per Run 3	0.051 ppb	0.134 ppb	0.576 ppb	0.330 ppb	105.551 %	0.001 ppb	0.000 ppb	102.651 %	0.241 ppb
Concentration RSD	72.6 %	125.6 %	3.5 %	34.8 %	2.0 %	59.5 %	2,327.7 %	3.9 %	16.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.655 ppb	105.462 %	103.046 %	0.009 ppb	0.009 ppb	108.168 %
Concentration per Run 1	0.679 ppb	104.002 %	106.938 %	0.005 ppb	0.008 ppb	113.284 %
Concentration per Run 2	0.634 ppb	106.177 %	99.869 %	0.009 ppb	0.009 ppb	106.886 %
Concentration per Run 3	0.652 ppb	106.206 %	102.330 %	0.013 ppb	0.009 ppb	104.333 %
Concentration RSD	3.4 %	1.2 %	3.5 %	43.2 %	3.2 %	4.3 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	31	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2352016-02 6020TL	Rack	1		
Analysis started at:	9/14/2023 8:42:54 AM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.358 %	97.590 %	0.014 ppb	72,054.951 ppb	26,137.838 ppb	170.023 ppb	48,323.920 ppb	247,317.377 ppb	108.041 %
Concentration per Run 1	93.121 %	97.539 %	0.014 ppb	73,840.561 ppb	26,416.724 ppb	173.978 ppb	48,995.322 ppb	251,148.048 ppb	109.687 %
Concentration per Run 2	90.439 %	96.485 %	0.020 ppb	71,144.241 ppb	26,181.027 ppb	172.101 ppb	46,613.139 ppb	250,541.860 ppb	109.120 %
Concentration per Run 3	87.515 %	98.745 %	0.008 ppb	71,180.052 ppb	25,815.763 ppb	163.988 ppb	49,363.300 ppb	240,262.224 ppb	105.316 %
Concentration RSD	3.1 %	1.2 %	41.1 %	2.1 %	1.2 %	3.1 %	3.1 %	2.5 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.656 ppb	0.917 ppb	1,391.687 ppb	339.991 ppb	1.642 ppb	3.958 ppb	1.668 ppb	2.903 ppb	98.551 %
Concentration per Run 1	0.763 ppb	0.889 ppb	1,377.307 ppb	351.548 ppb	1.665 ppb	3.939 ppb	1.631 ppb	3.063 ppb	97.145 %
Concentration per Run 2	0.601 ppb	0.927 ppb	1,395.865 ppb	334.979 ppb	1.632 ppb	4.020 ppb	1.718 ppb	2.936 ppb	97.098 %
Concentration per Run 3	0.605 ppb	0.937 ppb	1,401.889 ppb	333.448 ppb	1.628 ppb	3.916 ppb	1.655 ppb	2.711 ppb	101.409 %
Concentration RSD	14.0 %	2.8 %	0.9 %	3.0 %	1.2 %	1.4 %	2.7 %	6.1 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.641 ppb	14.814 ppb	1,619.674 ppb	3.690 ppb	90.694 %	0.006 ppb	0.122 ppb	96.824 %	0.226 ppb
Concentration per Run 1	0.677 ppb	15.182 ppb	1,620.736 ppb	3.729 ppb	90.243 %	0.006 ppb	0.123 ppb	94.716 %	0.210 ppb
Concentration per Run 2	0.687 ppb	15.001 ppb	1,643.011 ppb	3.669 ppb	90.735 %	0.004 ppb	0.127 ppb	97.854 %	0.208 ppb
Concentration per Run 3	0.560 ppb	14.257 ppb	1,595.275 ppb	3.673 ppb	91.102 %	0.008 ppb	0.116 ppb	97.902 %	0.259 ppb
Concentration RSD	11.1 %	3.3 %	1.5 %	0.9 %	0.5 %	36.5 %	4.6 %	1.9 %	12.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.752 ppb	99.715 %	96.345 %	0.020 ppb	0.531 ppb	90.061 %
Concentration per Run 1	63.189 ppb	99.397 %	96.154 %	0.016 ppb	0.512 ppb	93.624 %
Concentration per Run 2	59.970 ppb	98.488 %	96.558 %	0.021 ppb	0.541 ppb	88.369 %
Concentration per Run 3	62.096 ppb	101.260 %	96.324 %	0.023 ppb	0.540 ppb	88.190 %
Concentration RSD	2.7 %	1.4 %	0.2 %	18.8 %	3.0 %	3.4 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	32	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2352025-22 6020TL	Rack	1		
Analysis started at:	9/14/2023 8:47:35 AM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.722 %	111.976 %	22.307 ppb	15,644.661 ppb	14,966.793 ppb	42,122.656 ppb	7,145.159 ppb	33,241.072 ppb	371.451 %
Concentration per Run 1	96.080 %	112.981 %	22.197 ppb	15,563.299 ppb	15,102.321 ppb	41,975.233 ppb	7,157.631 ppb	32,457.318 ppb	381.781 %
Concentration per Run 2	90.437 %	111.625 %	22.319 ppb	15,703.573 ppb	14,938.561 ppb	41,835.498 ppb	7,359.301 ppb	33,696.786 ppb	364.145 %
Concentration per Run 3	88.649 %	111.324 %	22.405 ppb	15,667.111 ppb	14,859.498 ppb	42,557.238 ppb	6,918.544 ppb	33,569.111 ppb	368.428 %
Concentration RSD	4.2 %	0.8 %	0.5 %	0.5 %	0.8 %	0.9 %	3.1 %	2.1 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	176.737 ppb	176.295 ppb	4,422.345 ppb	91,868.529 ppb	498.572 ppb	72.321 ppb	198.559 ppb	280.978 ppb	200.400 %
Concentration per Run 1	178.904 ppb	180.248 ppb	4,407.374 ppb	94,405.622 ppb	507.239 ppb	73.402 ppb	203.428 ppb	283.023 ppb	197.144 %
Concentration per Run 2	176.913 ppb	175.138 ppb	4,303.753 ppb	92,959.468 ppb	492.536 ppb	72.500 ppb	192.436 ppb	278.543 ppb	201.346 %
Concentration per Run 3	174.395 ppb	173.500 ppb	4,555.908 ppb	88,240.496 ppb	495.941 ppb	71.062 ppb	199.812 ppb	281.366 ppb	202.711 %
Concentration RSD	1.3 %	2.0 %	2.9 %	3.5 %	1.5 %	1.6 %	2.8 %	0.8 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	30.574 ppb	197.406 ppb	341.741 ppb	0.372 ppb	97.922 %	0.445 ppb	1.141 ppb	112.511 %	0.166 ppb
Concentration per Run 1	30.595 ppb	201.144 ppb	345.083 ppb	0.292 ppb	96.292 %	0.445 ppb	1.152 ppb	111.946 %	0.165 ppb
Concentration per Run 2	30.619 ppb	197.323 ppb	338.942 ppb	0.350 ppb	98.085 %	0.450 ppb	1.174 ppb	111.762 %	0.160 ppb
Concentration per Run 3	30.509 ppb	193.750 ppb	341.197 ppb	0.473 ppb	99.388 %	0.439 ppb	1.098 ppb	113.826 %	0.174 ppb
Concentration RSD	0.2 %	1.9 %	0.9 %	24.8 %	1.6 %	1.3 %	3.4 %	1.0 %	4.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2,748.471 ppb	149.003 %	120.500 %	2.740 ppb	127.832 ppb	100.514 %
Concentration per Run 1	2,726.842 ppb	149.647 %	121.681 %	2.659 ppb	124.411 ppb	104.908 %
Concentration per Run 2	2,656.140 ppb	155.584 %	122.194 %	2.792 ppb	130.925 ppb	96.876 %
Concentration per Run 3	2,862.432 ppb	141.777 %	117.625 %	2.767 ppb	128.160 ppb	99.756 %
Concentration RSD	3.8 %	4.6 %	2.1 %	2.6 %	2.6 %	4.0 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	33	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2352025-23d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 8:52:15 AM	Vial	13		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.001 %	116.119 %	17.302 ppb	1,041.993 ppb	5,711.505 ppb	19,885.269 ppb	1,389.097 ppb	14,332.446 ppb	711.206 %
Concentration per Run 1	95.691 %	113.734 %	17.434 ppb	1,058.077 ppb	5,752.228 ppb	20,199.935 ppb	1,410.069 ppb	14,317.144 ppb	713.953 %
Concentration per Run 2	93.046 %	119.157 %	17.219 ppb	1,008.218 ppb	5,548.512 ppb	19,563.230 ppb	1,264.957 ppb	14,159.414 ppb	718.376 %
Concentration per Run 3	90.267 %	115.466 %	17.251 ppb	1,059.683 ppb	5,833.776 ppb	19,892.643 ppb	1,492.265 ppb	14,520.778 ppb	701.288 %
Concentration RSD	2.9 %	2.4 %	0.7 %	2.8 %	2.6 %	1.6 %	8.3 %	1.3 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2,442.886 ppb	73.055 ppb	360.199 ppb	41,567.738 ppb	263.071 ppb	242.502 ppb	1,249.672 ppb	714.833 ppb	159.027 %
Concentration per Run 1	2,446.127 ppb	74.063 ppb	359.415 ppb	41,875.090 ppb	265.435 ppb	242.051 ppb	1,264.931 ppb	719.336 ppb	157.457 %
Concentration per Run 2	2,460.706 ppb	70.853 ppb	343.810 ppb	40,114.037 ppb	255.098 ppb	238.462 ppb	1,215.166 ppb	692.945 ppb	162.728 %
Concentration per Run 3	2,421.827 ppb	74.249 ppb	377.373 ppb	42,714.089 ppb	268.679 ppb	246.993 ppb	1,268.920 ppb	732.218 ppb	156.896 %
Concentration RSD	0.8 %	2.6 %	4.7 %	3.2 %	2.7 %	1.8 %	2.4 %	2.8 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	24.596 ppb	174.191 ppb	156.294 ppb	0.325 ppb	102.723 %	0.661 ppb	0.604 ppb	112.470 %	0.048 ppb
Concentration per Run 1	24.966 ppb	175.365 ppb	156.653 ppb	0.327 ppb	101.201 %	0.681 ppb	0.604 ppb	110.041 %	0.032 ppb
Concentration per Run 2	23.952 ppb	170.818 ppb	153.485 ppb	0.268 ppb	104.958 %	0.660 ppb	0.602 ppb	113.585 %	0.040 ppb
Concentration per Run 3	24.872 ppb	176.389 ppb	158.744 ppb	0.380 ppb	102.011 %	0.641 ppb	0.606 ppb	113.785 %	0.073 ppb
Concentration RSD	2.3 %	1.7 %	1.7 %	17.2 %	1.9 %	3.0 %	0.3 %	1.9 %	45.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	196.826 ppb	142.700 %	116.260 %	0.763 ppb	66.920 ppb	101.746 %
Concentration per Run 1	196.188 ppb	143.416 %	116.662 %	0.742 ppb	65.029 ppb	104.044 %
Concentration per Run 2	192.951 ppb	146.895 %	117.031 %	0.765 ppb	66.979 ppb	102.479 %
Concentration per Run 3	201.339 ppb	137.789 %	115.089 %	0.784 ppb	68.751 ppb	98.715 %
Concentration RSD	2.1 %	3.2 %	0.9 %	2.8 %	2.8 %	2.7 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	34	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2352025-24 6020TL	Rack	1		
Analysis started at:	9/14/2023 8:56:52 AM	Vial	14		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.087 %	112.001 %	25.502 ppb	29,478.957 ppb	11,812.138 ppb	64,981.243 ppb	32,129.681 ppb	57,927.116 ppb	215.844 %
Concentration per Run 1	89.322 %	112.604 %	25.326 ppb	30,204.089 ppb	11,969.959 ppb	65,397.130 ppb	32,796.920 ppb	59,999.594 ppb	222.745 %
Concentration per Run 2	86.943 %	112.905 %	25.174 ppb	29,276.152 ppb	11,811.219 ppb	65,402.537 ppb	32,388.684 ppb	57,078.577 ppb	220.124 %
Concentration per Run 3	81.995 %	110.495 %	26.005 ppb	28,956.630 ppb	11,655.237 ppb	64,144.061 ppb	31,203.440 ppb	56,703.177 ppb	204.662 %
Concentration RSD	4.3 %	1.2 %	1.7 %	2.2 %	1.3 %	1.1 %	2.6 %	3.1 %	4.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	85.664 ppb	106.685 ppb	1,578.691 ppb	48,166.652 ppb	126.171 ppb	76.725 ppb	135.519 ppb	354.593 ppb	175.942 %
Concentration per Run 1	85.973 ppb	106.820 ppb	1,540.396 ppb	47,301.303 ppb	124.675 ppb	77.066 ppb	134.285 ppb	358.126 ppb	177.259 %
Concentration per Run 2	83.714 ppb	104.182 ppb	1,582.245 ppb	47,507.431 ppb	128.030 ppb	76.357 ppb	133.692 ppb	350.376 ppb	177.663 %
Concentration per Run 3	87.305 ppb	109.052 ppb	1,613.430 ppb	49,691.221 ppb	125.807 ppb	76.751 ppb	138.580 ppb	355.277 ppb	172.905 %
Concentration RSD	2.1 %	2.3 %	2.3 %	2.7 %	1.4 %	0.5 %	2.0 %	1.1 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	24.404 ppb	203.330 ppb	351.207 ppb	0.777 ppb	100.845 %	0.084 ppb	1.021 ppb	113.008 %	0.259 ppb
Concentration per Run 1	24.622 ppb	203.075 ppb	355.561 ppb	0.774 ppb	101.524 %	0.091 ppb	1.033 ppb	114.354 %	0.232 ppb
Concentration per Run 2	24.082 ppb	203.586 ppb	349.677 ppb	0.758 ppb	100.727 %	0.082 ppb	1.047 ppb	111.184 %	0.278 ppb
Concentration per Run 3	24.508 ppb	203.330 ppb	348.383 ppb	0.800 ppb	100.285 %	0.079 ppb	0.984 ppb	113.485 %	0.268 ppb
Concentration RSD	1.2 %	0.1 %	1.1 %	2.7 %	0.6 %	7.4 %	3.2 %	1.4 %	9.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6,943.176 ppb	142.443 %	121.298 %	0.762 ppb	178.620 ppb	97.823 %
Concentration per Run 1	7,187.836 ppb	140.439 %	125.174 %	0.730 ppb	174.133 ppb	101.504 %
Concentration per Run 2	6,848.716 ppb	148.420 %	120.265 %	0.756 ppb	178.344 ppb	96.745 %
Concentration per Run 3	6,792.977 ppb	138.469 %	118.455 %	0.801 ppb	183.382 ppb	95.222 %
Concentration RSD	3.1 %	3.7 %	2.9 %	4.7 %	2.6 %	3.4 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	35	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xWG1825203-2d10 A2-6020T	Rack	1		
Analysis started at:	9/14/2023 9:01:28 AM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.152 %	119.810 %	5.595 ppb	12,488.791 ppb	1,655.036 ppb	629.248 ppb	1,402.720 ppb	2,177.921 ppb	107.421 %
Concentration per Run 1	93.851 %	120.965 %	5.551 ppb	12,905.172 ppb	1,743.519 ppb	669.349 ppb	1,542.904 ppb	2,399.310 ppb	111.798 %
Concentration per Run 2	90.224 %	117.048 %	5.546 ppb	12,302.106 ppb	1,644.366 ppb	627.618 ppb	1,351.222 ppb	2,131.126 ppb	104.454 %
Concentration per Run 3	86.380 %	121.417 %	5.687 ppb	12,259.093 ppb	1,577.223 ppb	590.776 ppb	1,314.035 ppb	2,003.327 ppb	106.012 %
Concentration RSD	4.1 %	2.0 %	1.4 %	2.9 %	5.1 %	6.2 %	8.8 %	9.3 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.272 ppb	19.566 ppb	49.416 ppb	162.045 ppb	52.144 ppb	51.236 ppb	26.347 ppb	55.620 ppb	118.867 %
Concentration per Run 1	48.336 ppb	20.352 ppb	50.613 ppb	159.083 ppb	53.173 ppb	51.620 ppb	26.403 ppb	56.820 ppb	120.902 %
Concentration per Run 2	49.166 ppb	19.057 ppb	50.211 ppb	164.685 ppb	51.490 ppb	51.913 ppb	25.814 ppb	55.668 ppb	119.018 %
Concentration per Run 3	47.315 ppb	19.289 ppb	47.426 ppb	162.367 ppb	51.768 ppb	50.176 ppb	26.824 ppb	54.372 ppb	116.679 %
Concentration RSD	1.9 %	3.5 %	3.5 %	1.7 %	1.7 %	1.8 %	1.9 %	2.2 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.790 ppb	12.546 ppb	99.622 ppb	89.537 ppb	109.018 %	5.528 ppb	5.601 ppb	111.349 %	11.342 ppb
Concentration per Run 1	13.154 ppb	13.256 ppb	103.759 ppb	92.528 ppb	108.718 %	5.522 ppb	5.525 ppb	115.741 %	11.435 ppb
Concentration per Run 2	12.700 ppb	12.171 ppb	97.894 ppb	87.377 ppb	110.465 %	5.626 ppb	5.675 ppb	108.124 %	11.646 ppb
Concentration per Run 3	12.516 ppb	12.210 ppb	97.214 ppb	88.706 ppb	107.870 %	5.434 ppb	5.604 ppb	110.181 %	10.945 ppb
Concentration RSD	2.6 %	4.9 %	3.6 %	3.0 %	1.2 %	1.7 %	1.3 %	3.5 %	3.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	211.974 ppb	105.545 %	103.931 %	13.095 ppb	56.807 ppb	105.875 %
Concentration per Run 1	206.413 ppb	106.835 %	107.431 %	13.100 ppb	57.389 ppb	107.914 %
Concentration per Run 2	222.406 ppb	103.177 %	102.926 %	12.974 ppb	55.757 ppb	106.321 %
Concentration per Run 3	207.102 ppb	106.622 %	101.436 %	13.212 ppb	57.273 ppb	103.391 %
Concentration RSD	4.3 %	1.9 %	3.0 %	0.9 %	1.6 %	2.2 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	36	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xL2352188-03d2 A2-6020T	Rack	1		
Analysis started at:	9/14/2023 9:06:06 AM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.436 %	110.872 %	0.092 ppb	41,279.403 ppb	961.387 ppb	5,956.004 ppb	15,009.387 ppb	5,631.299 ppb	101.599 %
Concentration per Run 1	88.103 %	110.194 %	0.096 ppb	42,044.196 ppb	984.962 ppb	6,329.741 ppb	16,117.348 ppb	6,051.706 ppb	103.979 %
Concentration per Run 2	83.524 %	110.420 %	0.097 ppb	41,371.619 ppb	981.976 ppb	5,787.121 ppb	15,046.940 ppb	5,548.835 ppb	100.069 %
Concentration per Run 3	81.681 %	112.001 %	0.082 ppb	40,422.394 ppb	917.222 ppb	5,751.150 ppb	13,863.874 ppb	5,293.357 ppb	100.748 %
Concentration RSD	3.9 %	0.9 %	9.0 %	2.0 %	4.0 %	5.4 %	7.5 %	6.9 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.979 ppb	5.781 ppb	15.705 ppb	865.785 ppb	0.348 ppb	1.452 ppb	42.406 ppb	14,535.727 ppb	118.590 %
Concentration per Run 1	0.964 ppb	5.818 ppb	15.771 ppb	857.069 ppb	0.360 ppb	1.469 ppb	42.439 ppb	14,465.675 ppb	122.477 %
Concentration per Run 2	1.027 ppb	5.808 ppb	15.753 ppb	853.970 ppb	0.333 ppb	1.369 ppb	40.855 ppb	14,328.151 ppb	117.954 %
Concentration per Run 3	0.946 ppb	5.718 ppb	15.590 ppb	886.316 ppb	0.351 ppb	1.516 ppb	43.922 ppb	14,813.354 ppb	115.340 %
Concentration RSD	4.3 %	0.9 %	0.6 %	2.1 %	3.8 %	5.2 %	3.6 %	1.7 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.224 ppb	0.894 ppb	359.046 ppb	4.744 ppb	105.081 %	0.044 ppb	0.099 ppb	114.161 %	2.357 ppb
Concentration per Run 1	2.265 ppb	0.853 ppb	380.292 ppb	4.114 ppb	107.627 %	0.047 ppb	0.090 ppb	120.330 %	2.377 ppb
Concentration per Run 2	2.190 ppb	0.863 ppb	348.704 ppb	4.854 ppb	104.223 %	0.041 ppb	0.103 ppb	110.256 %	2.357 ppb
Concentration per Run 3	2.218 ppb	0.965 ppb	348.143 ppb	5.264 ppb	103.394 %	0.046 ppb	0.105 ppb	111.897 %	2.336 ppb
Concentration RSD	1.7 %	6.9 %	5.1 %	12.3 %	2.1 %	6.9 %	8.4 %	4.7 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	21,693.184 ppb	110.071 %	108.970 %	0.119 ppb	10.930 ppb	105.147 %
Concentration per Run 1	22,260.775 ppb	112.251 %	115.051 %	0.120 ppb	10.522 ppb	110.824 %
Concentration per Run 2	21,497.793 ppb	109.000 %	106.396 %	0.121 ppb	11.144 ppb	102.244 %
Concentration per Run 3	21,320.985 ppb	108.962 %	105.463 %	0.117 ppb	11.124 ppb	102.372 %
Concentration RSD	2.3 %	1.7 %	4.9 %	1.9 %	3.2 %	4.7 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	37	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	xL2352188-04d2 A2-6020T	Rack	1		
Analysis started at:	9/14/2023 9:10:44 AM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.710 %	113.257 %	0.081 ppb	38,165.779 ppb	765.923 ppb	5,139.467 ppb	13,517.090 ppb	5,298.864 ppb	95.349 %
Concentration per Run 1	85.561 %	119.082 %	0.078 ppb	38,242.022 ppb	780.346 ppb	5,460.572 ppb	14,524.909 ppb	5,657.988 ppb	96.464 %
Concentration per Run 2	83.088 %	108.235 %	0.080 ppb	39,552.009 ppb	787.594 ppb	5,119.179 ppb	13,515.205 ppb	5,047.176 ppb	96.272 %
Concentration per Run 3	79.481 %	112.453 %	0.085 ppb	36,703.306 ppb	729.828 ppb	4,838.649 ppb	12,511.156 ppb	5,191.427 ppb	93.310 %
Concentration RSD	3.7 %	4.8 %	4.6 %	3.7 %	4.1 %	6.1 %	7.4 %	6.0 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.656 ppb	5.294 ppb	12.490 ppb	605.565 ppb	0.220 ppb	2.214 ppb	58.653 ppb	13,353.602 ppb	116.998 %
Concentration per Run 1	0.630 ppb	5.307 ppb	12.861 ppb	601.799 ppb	0.232 ppb	2.101 ppb	56.889 ppb	13,241.924 ppb	123.868 %
Concentration per Run 2	0.661 ppb	5.357 ppb	12.594 ppb	611.267 ppb	0.214 ppb	2.327 ppb	59.282 ppb	13,242.404 ppb	117.585 %
Concentration per Run 3	0.677 ppb	5.218 ppb	12.016 ppb	603.629 ppb	0.215 ppb	2.213 ppb	59.787 ppb	13,576.478 ppb	109.542 %
Concentration RSD	3.7 %	1.3 %	3.5 %	0.8 %	4.6 %	5.1 %	2.6 %	1.4 %	6.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	2.177 ppb	0.775 ppb	327.657 ppb	2.815 ppb	103.908 %	0.063 ppb	0.085 ppb	112.123 %	2.129 ppb
Concentration per Run 1	2.143 ppb	0.923 ppb	338.836 ppb	2.700 ppb	107.649 %	0.065 ppb	0.100 ppb	118.338 %	2.114 ppb
Concentration per Run 2	2.155 ppb	0.762 ppb	318.257 ppb	2.718 ppb	104.065 %	0.062 ppb	0.072 ppb	109.128 %	2.131 ppb
Concentration per Run 3	2.232 ppb	0.641 ppb	325.878 ppb	3.027 ppb	100.010 %	0.061 ppb	0.082 ppb	108.904 %	2.143 ppb
Concentration RSD	2.2 %	18.3 %	3.2 %	6.5 %	3.7 %	3.2 %	16.8 %	4.8 %	0.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	20,453.601 ppb	107.047 %	104.754 %	0.092 ppb	22.879 ppb	101.639 %
Concentration per Run 1	20,933.461 ppb	112.541 %	112.214 %	0.085 ppb	22.194 ppb	109.183 %
Concentration per Run 2	20,491.177 ppb	104.822 %	102.100 %	0.095 ppb	23.017 ppb	99.087 %
Concentration per Run 3	19,936.165 ppb	103.778 %	99.949 %	0.095 ppb	23.426 ppb	96.645 %
Concentration RSD	2.4 %	4.5 %	6.3 %	5.9 %	2.7 %	6.5 %

Alpha ICPMSQ Data

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Analysis index:	38	User name	ALPHALAB\Metals-Instrument	Comment	cont swap
Analysis label:	L2352016-01 6020sL	Rack	1		
Analysis started at:	9/14/2023 9:15:22 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	71.322 %	93.773 %	0.009 ppb	309,963.391 ppb	110,957.873 ppb	9.135 ppb	123,149.232 ppb	785,736.218 ppb	90.179 %
Concentration per Run 1	74.820 %	96.410 %	0.010 ppb	319,973.530 ppb	116,828.099 ppb	10.068 ppb	132,406.926 ppb	837,018.583 ppb	93.329 %
Concentration per Run 2	71.392 %	89.706 %	0.006 ppb	320,328.262 ppb	113,696.598 ppb	9.615 ppb	124,192.643 ppb	793,333.334 ppb	89.522 %
Concentration per Run 3	67.752 %	95.204 %	0.012 ppb	289,588.379 ppb	102,348.922 ppb	7.723 ppb	112,848.127 ppb	726,856.737 ppb	87.686 %
Concentration RSD	5.0 %	3.8 %	33.9 %	5.7 %	6.9 %	13.6 %	8.0 %	7.1 %	3.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.294 ppb	0.280 ppb	1,022.713 ppb	99.915 ppb	2.419 ppb	6.779 ppb	2.732 ppb	8.363 ppb	92.482 %
Concentration per Run 1	0.307 ppb	0.286 ppb	1,033.951 ppb	100.814 ppb	2.370 ppb	6.816 ppb	2.649 ppb	8.617 ppb	96.761 %
Concentration per Run 2	0.254 ppb	0.291 ppb	1,011.733 ppb	103.114 ppb	2.396 ppb	6.774 ppb	2.775 ppb	8.315 ppb	92.929 %
Concentration per Run 3	0.320 ppb	0.265 ppb	1,022.455 ppb	95.817 ppb	2.491 ppb	6.747 ppb	2.774 ppb	8.157 ppb	87.756 %
Concentration RSD	11.8 %	5.0 %	1.1 %	3.7 %	2.6 %	0.5 %	2.7 %	2.8 %	4.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.124 ppb	9.187 ppb	5,089.362 ppb	8.698 ppb	82.307 %	0.006 ppb	0.267 ppb	88.299 %	0.296 ppb
Concentration per Run 1	1.253 ppb	9.622 ppb	5,467.547 ppb	7.817 ppb	84.881 %	0.005 ppb	0.264 ppb	95.225 %	0.261 ppb
Concentration per Run 2	1.090 ppb	9.054 ppb	5,046.770 ppb	8.323 ppb	82.055 %	0.009 ppb	0.265 ppb	87.508 %	0.313 ppb
Concentration per Run 3	1.029 ppb	8.884 ppb	4,753.770 ppb	9.953 ppb	79.986 %	0.004 ppb	0.272 ppb	82.163 %	0.315 ppb
Concentration RSD	10.3 %	4.2 %	7.0 %	12.8 %	3.0 %	41.1 %	1.6 %	7.4 %	10.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	63.542 ppb	89.962 %	86.473 %	0.039 ppb	0.550 ppb	76.884 %
Concentration per Run 1	65.702 ppb	92.852 %	93.276 %	0.039 ppb	0.518 ppb	84.089 %
Concentration per Run 2	63.294 ppb	91.114 %	85.466 %	0.039 ppb	0.566 ppb	75.578 %
Concentration per Run 3	61.630 ppb	85.919 %	80.677 %	0.040 ppb	0.565 ppb	70.985 %
Concentration RSD	3.2 %	4.0 %	7.4 %	1.4 %	5.0 %	8.6 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	39	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 9:20:02 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.008 %	116.069 %	61.454 ppb	6,005.141 ppb	6,018.726 ppb	59.951 ppb	6,039.164 ppb	5,494.980 ppb	101.822 %
Concentration per Run 1	84.139 %	118.103 %	61.328 ppb	6,437.285 ppb	6,669.515 ppb	65.413 ppb	6,895.855 ppb	5,913.954 ppb	101.894 %
Concentration per Run 2	81.985 %	113.885 %	60.536 ppb	5,964.237 ppb	6,085.226 ppb	60.207 ppb	5,738.392 ppb	5,309.181 ppb	103.939 %
Concentration per Run 3	79.899 %	116.220 %	62.496 ppb	5,613.900 ppb	5,301.437 ppb	54.232 ppb	5,483.245 ppb	5,261.805 ppb	99.633 %
Recovery Percentage 1			102.423 %	100.086 %	100.312 %	99.918 %	100.653 %	91.583 %	
Concentration RSD	2.6 %	1.8 %	1.6 %	6.9 %	11.4 %	9.3 %	12.5 %	6.6 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.599 ppb	54.153 ppb	57.422 ppb	5,912.454 ppb	63.450 ppb	61.543 ppb	59.528 ppb	58.855 ppb	108.870 %
Concentration per Run 1	56.918 ppb	54.104 ppb	56.859 ppb	5,856.668 ppb	62.156 ppb	61.218 ppb	58.861 ppb	58.816 ppb	116.012 %
Concentration per Run 2	55.178 ppb	52.481 ppb	56.917 ppb	5,728.297 ppb	62.926 ppb	59.896 ppb	58.678 ppb	58.784 ppb	110.080 %
Concentration per Run 3	54.702 ppb	55.874 ppb	58.491 ppb	6,152.398 ppb	65.267 ppb	63.514 ppb	61.047 ppb	58.964 ppb	100.519 %
Recovery Percentage 1	92.666 %	90.255 %	95.704 %	98.541 %	105.750 %	102.571 %	99.214 %	98.091 %	
Concentration RSD	2.1 %	3.1 %	1.6 %	3.7 %	2.6 %	3.0 %	2.2 %	0.2 %	7.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.357 ppb	55.924 ppb	54.032 ppb	55.322 ppb	104.954 %	60.118 ppb	58.978 ppb	101.356 %	56.877 ppb
Concentration per Run 1	62.207 ppb	59.488 ppb	57.340 ppb	53.779 ppb	108.446 %	59.205 ppb	58.456 ppb	110.236 %	57.193 ppb
Concentration per Run 2	58.276 ppb	54.404 ppb	53.109 ppb	55.812 ppb	103.306 %	60.784 ppb	59.489 ppb	98.933 %	56.481 ppb
Concentration per Run 3	60.588 ppb	53.880 ppb	51.646 ppb	56.375 ppb	103.108 %	60.365 ppb	58.988 ppb	94.899 %	56.959 ppb
Recovery Percentage 1	100.595 %	93.206 %	90.053 %	92.203 %		100.197 %	98.297 %		94.796 %
Concentration RSD	3.3 %	5.5 %	5.5 %	2.5 %	2.9 %	1.4 %	0.9 %	7.8 %	0.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	59.207 ppb	99.894 %	94.601 %	58.962 ppb	59.033 ppb	99.323 %
Concentration per Run 1	59.779 ppb	105.740 %	99.602 %	57.197 ppb	57.410 ppb	104.778 %
Concentration per Run 2	59.945 ppb	98.876 %	93.239 %	58.621 ppb	59.769 ppb	97.470 %
Concentration per Run 3	57.897 ppb	95.065 %	90.963 %	61.070 ppb	59.919 ppb	95.722 %
Recovery Percentage 1	98.678 %			98.271 %	98.388 %	
Concentration RSD	1.9 %	5.4 %	4.7 %	3.3 %	2.4 %	4.8 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	40	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 9:24:44 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.656 %	116.169 %	0.003 ppb	0.747 ppb	-0.461 ppb	-0.362 ppb	21.210 ppb	3.604 ppb	96.399 %
Concentration per Run 1	87.892 %	119.609 %	0.002 ppb	1.248 ppb	-0.378 ppb	-0.282 ppb	24.799 ppb	2.490 ppb	98.086 %
Concentration per Run 2	85.808 %	118.027 %	0.002 ppb	0.573 ppb	-0.430 ppb	-0.408 ppb	21.124 ppb	3.832 ppb	94.434 %
Concentration per Run 3	83.267 %	110.872 %	0.004 ppb	0.421 ppb	-0.575 ppb	-0.397 ppb	17.707 ppb	4.489 ppb	96.678 %
Recovery Percentage 1			0.514 %	0.747 %	-0.658 %	-3.623 %	21.210 %	3.604 %	
Concentration RSD	2.7 %	4.0 %	60.2 %	58.9 %	22.2 %	19.3 %	16.7 %	28.3 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.016 ppb	-0.002 ppb	0.002 ppb	14.759 ppb	0.002 ppb	0.019 ppb	0.016 ppb	0.200 ppb	107.973 %
Concentration per Run 1	0.007 ppb	-0.004 ppb	-0.009 ppb	12.397 ppb	0.004 ppb	0.020 ppb	0.015 ppb	0.235 ppb	108.337 %
Concentration per Run 2	0.025 ppb	-0.006 ppb	0.014 ppb	16.351 ppb	0.001 ppb	0.018 ppb	0.025 ppb	0.234 ppb	109.704 %
Concentration per Run 3	0.016 ppb	0.003 ppb	0.002 ppb	15.528 ppb	0.002 ppb	0.018 ppb	0.009 ppb	0.130 ppb	105.877 %
Recovery Percentage 1	0.322 %	-0.237 %	0.237 %	29.517 %	0.477 %	0.945 %	1.649 %	3.992 %	
Concentration RSD	55.7 %	201.3 %	477.3 %	14.1 %	57.7 %	7.0 %	50.8 %	30.0 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.169 ppb	0.524 ppb	0.005 ppb	1.541 ppb	104.385 %	0.003 ppb	0.001 ppb	96.792 %	0.270 ppb
Concentration per Run 1	0.213 ppb	0.285 ppb	0.008 ppb	1.164 ppb	102.406 %	0.003 ppb	0.001 ppb	96.926 %	0.245 ppb
Concentration per Run 2	0.169 ppb	0.648 ppb	0.002 ppb	1.522 ppb	106.915 %	0.004 ppb	0.001 ppb	99.114 %	0.277 ppb
Concentration per Run 3	0.124 ppb	0.640 ppb	0.006 ppb	1.936 ppb	103.835 %	0.002 ppb	0.002 ppb	94.338 %	0.287 ppb
Recovery Percentage 1	33.745 %	10.487 %	0.055 %	77.030 %		0.774 %	0.542 %		6.745 %
Concentration RSD	26.3 %	39.5 %	59.7 %	25.1 %	2.2 %	24.8 %	88.5 %	2.5 %	8.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.024 ppb	95.029 %	90.451 %	0.071 ppb	0.012 ppb	98.515 %
Concentration per Run 1	0.042 ppb	96.248 %	92.742 %	0.061 ppb	0.012 ppb	101.260 %
Concentration per Run 2	0.017 ppb	95.949 %	90.207 %	0.079 ppb	0.013 ppb	97.012 %
Concentration per Run 3	0.013 ppb	92.891 %	88.405 %	0.074 ppb	0.011 ppb	97.273 %
Recovery Percentage 1	4.788 %			7.137 %	1.211 %	
Concentration RSD	64.9 %	2.0 %	2.4 %	12.5 %	5.4 %	2.4 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	41	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2351774-07d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 9:36:37 AM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.806 %	117.601 %	0.490 ppb	10,365.565 ppb	15,721.458 ppb	8,928.652 ppb	6,347.436 ppb	122,767.327 ppb	118.992 %
Concentration per Run 1	97.468 %	113.131 %	0.492 ppb	10,361.764 ppb	15,965.340 ppb	8,703.129 ppb	6,344.887 ppb	122,202.981 ppb	120.979 %
Concentration per Run 2	94.926 %	118.103 %	0.485 ppb	10,303.281 ppb	15,350.910 ppb	8,548.736 ppb	6,226.200 ppb	120,719.850 ppb	118.979 %
Concentration per Run 3	92.022 %	121.568 %	0.492 ppb	10,431.650 ppb	15,848.123 ppb	9,534.090 ppb	6,471.221 ppb	125,379.149 ppb	117.019 %
Concentration RSD	2.9 %	3.6 %	0.7 %	0.6 %	2.1 %	5.9 %	1.9 %	1.9 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	14.105 ppb	15.805 ppb	460.071 ppb	10,627.050 ppb	6.317 ppb	15.237 ppb	60.704 ppb	99.267 ppb	114.345 %
Concentration per Run 1	14.322 ppb	16.422 ppb	463.856 ppb	11,038.830 ppb	6.545 ppb	15.918 ppb	62.160 ppb	100.157 ppb	108.425 %
Concentration per Run 2	13.985 ppb	15.679 ppb	456.909 ppb	11,026.961 ppb	6.388 ppb	15.271 ppb	61.985 ppb	99.587 ppb	110.951 %
Concentration per Run 3	14.010 ppb	15.314 ppb	459.448 ppb	9,815.359 ppb	6.018 ppb	14.521 ppb	57.968 ppb	98.057 ppb	123.661 %
Concentration RSD	1.3 %	3.6 %	0.8 %	6.6 %	4.3 %	4.6 %	3.9 %	1.1 %	7.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.783 ppb	6.541 ppb	164.896 ppb	0.897 ppb	101.477 %	0.281 ppb	0.476 ppb	107.241 %	0.259 ppb
Concentration per Run 1	3.868 ppb	6.342 ppb	162.239 ppb	0.885 ppb	100.085 %	0.276 ppb	0.477 ppb	103.832 %	0.232 ppb
Concentration per Run 2	3.708 ppb	6.515 ppb	161.608 ppb	0.832 ppb	100.601 %	0.280 ppb	0.484 ppb	101.849 %	0.268 ppb
Concentration per Run 3	3.774 ppb	6.767 ppb	170.842 ppb	0.974 ppb	103.745 %	0.287 ppb	0.467 ppb	116.043 %	0.276 ppb
Concentration RSD	2.1 %	3.3 %	3.1 %	8.0 %	2.0 %	2.0 %	1.8 %	7.2 %	8.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	105.548 ppb	101.174 %	95.009 %	0.104 ppb	83.018 ppb	113.141 %
Concentration per Run 1	105.317 ppb	97.941 %	89.940 %	0.096 ppb	74.289 ppb	124.961 %
Concentration per Run 2	104.903 ppb	100.621 %	93.461 %	0.108 ppb	85.806 ppb	108.209 %
Concentration per Run 3	106.423 ppb	104.961 %	101.628 %	0.107 ppb	88.958 ppb	106.252 %
Concentration RSD	0.7 %	3.5 %	6.3 %	6.3 %	9.3 %	9.1 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	42	User name	ALPHALAB\Metals-Instrument	Comment	cont swap
Analysis label:	L2352016-01d10 6020sL	Rack	1		
Analysis started at:	9/14/2023 9:41:14 AM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.522 %	110.696 %	0.001 ppb	27,314.519 ppb	10,256.798 ppb	3.544 ppb	10,854.564 ppb	71,453.870 ppb	104.981 %
Concentration per Run 1	94.952 %	104.921 %	0.003 ppb	27,935.406 ppb	10,609.784 ppb	3.217 ppb	10,836.381 ppb	72,232.803 ppb	105.087 %
Concentration per Run 2	93.565 %	109.214 %	0.001 ppb	26,790.389 ppb	9,987.001 ppb	3.303 ppb	10,586.522 ppb	71,368.173 ppb	104.991 %
Concentration per Run 3	89.050 %	117.952 %	-0.001 ppb	27,217.761 ppb	10,173.611 ppb	4.112 ppb	11,140.788 ppb	70,760.634 ppb	104.866 %
Concentration RSD	3.3 %	6.0 %	203.3 %	2.1 %	3.1 %	13.9 %	2.6 %	1.0 %	0.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.043 ppb	0.025 ppb	98.439 ppb	33.612 ppb	0.250 ppb	0.756 ppb	0.311 ppb	1.187 ppb	111.389 %
Concentration per Run 1	0.047 ppb	0.021 ppb	102.835 ppb	34.285 ppb	0.280 ppb	0.785 ppb	0.303 ppb	1.325 ppb	104.234 %
Concentration per Run 2	0.044 ppb	0.036 ppb	95.182 ppb	34.631 ppb	0.243 ppb	0.728 ppb	0.299 ppb	1.142 ppb	110.575 %
Concentration per Run 3	0.038 ppb	0.018 ppb	97.299 ppb	31.920 ppb	0.227 ppb	0.756 ppb	0.333 ppb	1.093 ppb	119.358 %
Concentration RSD	11.6 %	39.2 %	4.0 %	4.4 %	10.9 %	3.8 %	6.0 %	10.3 %	6.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.234 ppb	1.107 ppb	511.841 ppb	0.757 ppb	100.911 %	0.002 ppb	0.032 ppb	105.886 %	0.095 ppb
Concentration per Run 1	0.255 ppb	1.147 ppb	510.035 ppb	0.701 ppb	98.937 %	0.001 ppb	0.028 ppb	101.647 %	0.078 ppb
Concentration per Run 2	0.255 ppb	1.081 ppb	498.311 ppb	0.755 ppb	100.224 %	0.001 ppb	0.033 ppb	99.464 %	0.101 ppb
Concentration per Run 3	0.190 ppb	1.093 ppb	527.175 ppb	0.815 ppb	103.572 %	0.003 ppb	0.034 ppb	116.545 %	0.105 ppb
Concentration RSD	16.0 %	3.2 %	2.8 %	7.5 %	2.4 %	55.8 %	11.3 %	8.8 %	15.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.162 ppb	102.601 %	102.717 %	0.008 ppb	0.088 ppb	98.128 %
Concentration per Run 1	6.166 ppb	99.817 %	96.254 %	0.007 ppb	0.086 ppb	98.214 %
Concentration per Run 2	5.945 ppb	98.978 %	100.718 %	0.008 ppb	0.086 ppb	95.905 %
Concentration per Run 3	6.374 ppb	109.009 %	111.180 %	0.010 ppb	0.091 ppb	100.264 %
Concentration RSD	3.5 %	5.4 %	7.5 %	19.9 %	3.1 %	2.2 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index: 43
Analysis label: L2351602-04d10 6020SL
Analysis started at: 9/14/2023 9:45:53 AM

User name ALPHALAB\Metals-Instrument
Rack 1
Vial 22

Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	419.989 %	531.289 %	-0.004 ppb	89,495.071 ppb	18,914.656 ppb	0.290 ppb	1,427.425 ppb	26,939.266 ppb	103.744 %
Concentration per Run 1	442.151 %	526.944 %	-0.004 ppb	90,781.574 ppb	18,547.119 ppb	0.224 ppb	1,387.823 ppb	28,672.480 ppb	104.929 %
Concentration per Run 2	417.237 %	516.999 %	-0.003 ppb	87,670.295 ppb	19,127.856 ppb	0.436 ppb	1,398.314 ppb	24,768.453 ppb	105.338 %
Concentration per Run 3	400.578 %	549.925 %	-0.003 ppb	90,033.345 ppb	19,068.995 ppb	0.209 ppb	1,496.138 ppb	27,376.866 ppb	100.964 %
Concentration RSD	5.0 %	3.2 %	14.2 %	1.8 %	1.7 %	43.8 %	4.2 %	7.4 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.013 ppb	0.054 ppb	5.038 ppb	312.797 ppb	0.016 ppb	0.196 ppb	0.224 ppb	-0.023 ppb	99.200 %
Concentration per Run 1	0.017 ppb	0.053 ppb	4.930 ppb	310.637 ppb	0.020 ppb	0.210 ppb	0.213 ppb	-0.008 ppb	93.789 %
Concentration per Run 2	0.014 ppb	0.056 ppb	4.940 ppb	318.749 ppb	0.016 ppb	0.192 ppb	0.229 ppb	0.007 ppb	97.336 %
Concentration per Run 3	0.008 ppb	0.052 ppb	5.243 ppb	309.004 ppb	0.013 ppb	0.185 ppb	0.229 ppb	-0.066 ppb	106.476 %
Concentration RSD	34.7 %	4.2 %	3.5 %	1.7 %	20.8 %	6.6 %	4.3 %	169.9 %	6.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.378 ppb	0.023 ppb	9,210.940 ppb	0.244 ppb	87.529 %	0.001 ppb	0.002 ppb	96.069 %	0.224 ppb
Concentration per Run 1	0.504 ppb	0.002 ppb	9,142.763 ppb	0.183 ppb	85.206 %	0.001 ppb	0.001 ppb	90.416 %	0.219 ppb
Concentration per Run 2	0.306 ppb	0.038 ppb	8,972.057 ppb	0.221 ppb	87.675 %	0.001 ppb	0.003 ppb	95.749 %	0.207 ppb
Concentration per Run 3	0.325 ppb	0.029 ppb	9,517.999 ppb	0.328 ppb	89.706 %	0.001 ppb	0.003 ppb	102.041 %	0.245 ppb
Concentration RSD	28.9 %	81.1 %	3.0 %	30.7 %	2.6 %	20.0 %	62.5 %	6.1 %	8.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	138.859 ppb	97.364 %	96.565 %	0.005 ppb	0.027 ppb	83.684 %
Concentration per Run 1	139.648 ppb	93.337 %	92.715 %	0.002 ppb	0.025 ppb	85.657 %
Concentration per Run 2	135.539 ppb	97.321 %	95.009 %	0.005 ppb	0.027 ppb	81.862 %
Concentration per Run 3	141.390 ppb	101.436 %	101.970 %	0.008 ppb	0.028 ppb	83.532 %
Concentration RSD	2.2 %	4.2 %	5.0 %	55.6 %	5.8 %	2.3 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	44	User name	ALPHALAB\Metals-Instrument	Comment	cont swap
Analysis label:	L2352016-01d10 6020tL	Rack	1		
Analysis started at:	9/14/2023 9:50:32 AM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.944 %	102.712 %	0.001 ppb	28,011.375 ppb	10,826.733 ppb	6.257 ppb	10,764.319 ppb	70,270.862 ppb	104.502 %
Concentration per Run 1	97.091 %	102.812 %	0.001 ppb	28,938.460 ppb	11,134.766 ppb	6.878 ppb	10,820.771 ppb	72,229.431 ppb	106.234 %
Concentration per Run 2	92.135 %	107.633 %	-0.002 ppb	27,315.881 ppb	10,661.597 ppb	5.465 ppb	10,722.267 ppb	70,150.124 ppb	104.489 %
Concentration per Run 3	89.604 %	97.690 %	0.004 ppb	27,779.784 ppb	10,683.834 ppb	6.429 ppb	10,749.919 ppb	68,433.029 ppb	102.782 %
Concentration RSD	4.1 %	4.8 %	286.5 %	3.0 %	2.5 %	11.5 %	0.5 %	2.7 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.050 ppb	0.027 ppb	101.877 ppb	23.381 ppb	0.260 ppb	0.796 ppb	0.226 ppb	0.837 ppb	104.626 %
Concentration per Run 1	0.036 ppb	0.027 ppb	101.147 ppb	21.448 ppb	0.261 ppb	0.800 ppb	0.223 ppb	0.808 ppb	105.827 %
Concentration per Run 2	0.060 ppb	0.027 ppb	99.930 ppb	24.673 ppb	0.249 ppb	0.741 ppb	0.230 ppb	0.791 ppb	106.104 %
Concentration per Run 3	0.053 ppb	0.028 ppb	104.554 ppb	24.021 ppb	0.269 ppb	0.847 ppb	0.224 ppb	0.912 ppb	101.946 %
Concentration RSD	24.4 %	3.3 %	2.4 %	7.3 %	3.9 %	6.6 %	1.6 %	7.9 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.202 ppb	1.197 ppb	518.825 ppb	0.543 ppb	97.200 %	0.001 ppb	0.036 ppb	101.365 %	0.040 ppb
Concentration per Run 1	0.187 ppb	1.251 ppb	530.077 ppb	0.542 ppb	96.406 %	0.001 ppb	0.036 ppb	101.966 %	0.035 ppb
Concentration per Run 2	0.257 ppb	0.943 ppb	521.041 ppb	0.507 ppb	99.383 %	0.002 ppb	0.037 ppb	106.435 %	0.044 ppb
Concentration per Run 3	0.163 ppb	1.399 ppb	505.358 ppb	0.579 ppb	95.810 %	0.002 ppb	0.034 ppb	95.696 %	0.040 ppb
Concentration RSD	24.2 %	19.4 %	2.4 %	6.6 %	2.0 %	50.8 %	4.2 %	5.3 %	11.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.276 ppb	99.640 %	94.861 %	0.006 ppb	0.110 ppb	93.674 %
Concentration per Run 1	6.244 ppb	101.863 %	95.081 %	0.004 ppb	0.109 ppb	97.513 %
Concentration per Run 2	6.322 ppb	100.079 %	97.072 %	0.008 ppb	0.111 ppb	92.586 %
Concentration per Run 3	6.261 ppb	96.977 %	92.430 %	0.007 ppb	0.111 ppb	90.922 %
Concentration RSD	0.7 %	2.5 %	2.5 %	37.3 %	0.9 %	3.7 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	45	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350028-03 6020SL	Rack	1		
Analysis started at:	9/14/2023 9:55:11 AM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.434 %	112.027 %	0.001 ppb	39,754.864 ppb	16,743.869 ppb	4.049 ppb	2,806.416 ppb	172,271.599 ppb	113.106 %
Concentration per Run 1	101.573 %	115.692 %	0.002 ppb	41,821.609 ppb	17,841.485 ppb	4.608 ppb	3,084.677 ppb	185,773.702 ppb	114.524 %
Concentration per Run 2	97.649 %	114.788 %	0.001 ppb	38,080.976 ppb	16,252.761 ppb	3.766 ppb	2,641.676 ppb	166,733.432 ppb	112.131 %
Concentration per Run 3	93.081 %	105.599 %	-0.002 ppb	39,362.007 ppb	16,137.361 ppb	3.772 ppb	2,692.894 ppb	164,307.662 ppb	112.663 %
Concentration RSD	4.4 %	5.0 %	328.2 %	4.8 %	5.7 %	12.0 %	8.6 %	6.8 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.265 ppb	0.107 ppb	6.921 ppb	16.082 ppb	0.028 ppb	2.155 ppb	4.850 ppb	139.163 ppb	107.113 %
Concentration per Run 1	1.204 ppb	0.115 ppb	6.845 ppb	16.625 ppb	0.034 ppb	1.994 ppb	4.718 ppb	139.458 ppb	112.770 %
Concentration per Run 2	1.239 ppb	0.106 ppb	6.894 ppb	15.823 ppb	0.022 ppb	2.183 ppb	4.934 ppb	138.536 ppb	107.417 %
Concentration per Run 3	1.350 ppb	0.099 ppb	7.025 ppb	15.797 ppb	0.027 ppb	2.288 ppb	4.898 ppb	139.495 ppb	101.151 %
Concentration RSD	6.0 %	7.7 %	1.3 %	2.9 %	21.6 %	6.9 %	2.4 %	0.4 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.745 ppb	0.027 ppb	644.385 ppb	0.323 ppb	97.615 %	0.001 ppb	0.011 ppb	102.593 %	0.345 ppb
Concentration per Run 1	0.834 ppb	0.061 ppb	682.438 ppb	0.230 ppb	99.696 %	0.001 ppb	0.010 ppb	108.990 %	0.351 ppb
Concentration per Run 2	0.721 ppb	-0.010 ppb	623.719 ppb	0.346 ppb	99.075 %	0.001 ppb	0.011 ppb	103.514 %	0.328 ppb
Concentration per Run 3	0.681 ppb	0.029 ppb	626.999 ppb	0.393 ppb	94.073 %	0.002 ppb	0.012 ppb	95.274 %	0.355 ppb
Concentration RSD	10.6 %	133.4 %	5.1 %	26.1 %	3.2 %	29.2 %	9.9 %	6.7 %	4.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	445.471 ppb	101.916 %	100.042 %	0.007 ppb	0.037 ppb	96.664 %
Concentration per Run 1	454.830 ppb	106.309 %	106.703 %	0.005 ppb	0.037 ppb	104.103 %
Concentration per Run 2	446.158 ppb	102.292 %	100.386 %	0.008 ppb	0.037 ppb	93.726 %
Concentration per Run 3	435.424 ppb	97.145 %	93.036 %	0.008 ppb	0.038 ppb	92.162 %
Concentration RSD	2.2 %	4.5 %	6.8 %	29.0 %	1.3 %	6.7 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	46	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350187-03d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 9:59:51 AM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.584 %	107.909 %	0.011 ppb	9,203.174 ppb	1,105.199 ppb	385.420 ppb	146.875 ppb	14,907.402 ppb	111.173 %
Concentration per Run 1	99.974 %	104.846 %	0.008 ppb	9,422.400 ppb	1,121.606 ppb	391.963 ppb	156.168 ppb	15,644.456 ppb	113.621 %
Concentration per Run 2	98.105 %	107.030 %	0.011 ppb	9,233.970 ppb	1,131.003 ppb	386.136 ppb	150.226 ppb	15,024.496 ppb	113.490 %
Concentration per Run 3	94.674 %	111.851 %	0.015 ppb	8,953.153 ppb	1,062.989 ppb	378.161 ppb	134.232 ppb	14,053.253 ppb	106.408 %
Concentration RSD	2.8 %	3.3 %	29.6 %	2.6 %	3.3 %	1.8 %	7.7 %	5.4 %	3.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.005 ppb	0.089 ppb	978.164 ppb	3,865.272 ppb	2.374 ppb	2.698 ppb	14.078 ppb	3.975 ppb	109.071 %
Concentration per Run 1	-0.005 ppb	0.105 ppb	967.596 ppb	3,934.679 ppb	2.471 ppb	2.841 ppb	14.167 ppb	4.041 ppb	106.939 %
Concentration per Run 2	0.021 ppb	0.076 ppb	938.831 ppb	3,954.922 ppb	2.345 ppb	2.700 ppb	14.041 ppb	3.993 ppb	109.584 %
Concentration per Run 3	0.000 ppb	0.086 ppb	1,028.065 ppb	3,706.214 ppb	2.307 ppb	2.553 ppb	14.026 ppb	3.890 ppb	110.691 %
Concentration RSD	276.7 %	16.5 %	4.7 %	3.6 %	3.6 %	5.3 %	0.5 %	1.9 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.167 ppb	0.416 ppb	88.857 ppb	0.041 ppb	100.816 %	0.004 ppb	0.012 ppb	105.214 %	0.014 ppb
Concentration per Run 1	0.205 ppb	0.373 ppb	90.298 ppb	-0.003 ppb	99.036 %	0.006 ppb	0.012 ppb	101.955 %	0.001 ppb
Concentration per Run 2	0.163 ppb	0.456 ppb	87.334 ppb	0.047 ppb	102.276 %	0.003 ppb	0.013 ppb	107.648 %	0.014 ppb
Concentration per Run 3	0.132 ppb	0.420 ppb	88.940 ppb	0.079 ppb	101.137 %	0.005 ppb	0.009 ppb	106.041 %	0.025 ppb
Concentration RSD	22.0 %	9.9 %	1.7 %	101.8 %	1.6 %	28.1 %	20.1 %	2.8 %	90.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	8.749 ppb	101.210 %	100.094 %	0.002 ppb	0.036 ppb	102.577 %
Concentration per Run 1	8.831 ppb	100.935 %	97.357 %	0.000 ppb	0.035 ppb	108.071 %
Concentration per Run 2	8.624 ppb	101.598 %	100.906 %	0.003 ppb	0.036 ppb	101.604 %
Concentration per Run 3	8.793 ppb	101.099 %	102.020 %	0.004 ppb	0.036 ppb	98.056 %
Concentration RSD	1.3 %	0.3 %	2.4 %	85.2 %	2.1 %	5.0 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	47	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	wg1825273-3d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 10:04:28 AM	Vial	29		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.179 %	106.352 %	5.811 ppb	15,944.404 ppb	3,094.075 ppb	3,167.258 ppb	1,532.029 ppb	3,936.406 ppb	115.926 %
Concentration per Run 1	101.231 %	110.269 %	5.813 ppb	15,643.656 ppb	3,016.115 ppb	3,086.247 ppb	1,542.407 ppb	4,079.203 ppb	116.700 %
Concentration per Run 2	97.890 %	106.654 %	5.770 ppb	16,029.568 ppb	3,142.110 ppb	3,175.707 ppb	1,495.925 ppb	3,888.422 ppb	116.202 %
Concentration per Run 3	95.417 %	102.134 %	5.850 ppb	16,159.986 ppb	3,124.000 ppb	3,239.818 ppb	1,557.756 ppb	3,841.593 ppb	114.877 %
Concentration RSD	3.0 %	3.8 %	0.7 %	1.7 %	2.2 %	2.4 %	2.1 %	3.2 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	46.350 ppb	18.508 ppb	839.307 ppb	317.149 ppb	62.381 ppb	59.580 ppb	29.705 ppb	92.585 ppb	110.467 %
Concentration per Run 1	45.496 ppb	18.348 ppb	848.464 ppb	311.738 ppb	63.741 ppb	61.481 ppb	30.332 ppb	95.030 ppb	108.425 %
Concentration per Run 2	46.896 ppb	18.962 ppb	879.531 ppb	322.379 ppb	62.296 ppb	59.202 ppb	29.124 ppb	92.729 ppb	111.090 %
Concentration per Run 3	46.659 ppb	18.215 ppb	789.925 ppb	317.331 ppb	61.105 ppb	58.057 ppb	29.658 ppb	89.995 ppb	111.885 %
Concentration RSD	1.6 %	2.2 %	5.4 %	1.7 %	2.1 %	2.9 %	2.0 %	2.7 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.276 ppb	20.469 ppb	164.967 ppb	82.070 ppb	102.448 %	5.281 ppb	5.599 ppb	102.680 %	42.674 ppb
Concentration per Run 1	13.824 ppb	21.130 ppb	168.340 ppb	86.187 ppb	100.747 %	5.257 ppb	5.790 ppb	101.276 %	43.671 ppb
Concentration per Run 2	13.134 ppb	20.240 ppb	163.970 ppb	80.287 ppb	103.030 %	5.307 ppb	5.445 ppb	104.063 %	41.644 ppb
Concentration per Run 3	12.872 ppb	20.037 ppb	162.592 ppb	79.737 ppb	103.567 %	5.278 ppb	5.561 ppb	102.701 %	42.706 ppb
Concentration RSD	3.7 %	2.8 %	1.8 %	4.4 %	1.5 %	0.5 %	3.1 %	1.4 %	2.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	200.216 ppb	104.768 %	100.296 %	12.235 ppb	53.156 ppb	102.438 %
Concentration per Run 1	199.660 ppb	104.230 %	97.880 %	12.180 ppb	52.665 ppb	103.974 %
Concentration per Run 2	202.111 ppb	103.662 %	102.093 %	12.147 ppb	53.394 ppb	102.268 %
Concentration per Run 3	198.876 ppb	106.412 %	100.914 %	12.379 ppb	53.409 ppb	101.073 %
Concentration RSD	0.8 %	1.4 %	2.2 %	1.0 %	0.8 %	1.4 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	48	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	wg1825273-4d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 10:09:06 AM	Vial	30		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.840 %	111.550 %	6.176 ppb	15,583.959 ppb	3,070.013 ppb	3,136.718 ppb	1,529.675 ppb	3,959.618 ppb	112.284 %
Concentration per Run 1	99.139 %	110.043 %	6.155 ppb	15,636.871 ppb	3,156.534 ppb	3,142.855 ppb	1,573.643 ppb	4,170.833 ppb	111.985 %
Concentration per Run 2	94.950 %	110.420 %	6.246 ppb	15,768.175 ppb	3,031.876 ppb	3,158.655 ppb	1,499.060 ppb	3,935.425 ppb	111.049 %
Concentration per Run 3	93.430 %	114.186 %	6.125 ppb	15,346.832 ppb	3,021.630 ppb	3,108.643 ppb	1,516.321 ppb	3,772.597 ppb	113.817 %
Concentration RSD	3.1 %	2.1 %	1.0 %	1.4 %	2.4 %	0.8 %	2.6 %	5.1 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.427 ppb	18.485 ppb	839.799 ppb	303.227 ppb	63.425 ppb	60.082 ppb	31.160 ppb	92.238 ppb	111.147 %
Concentration per Run 1	47.564 ppb	18.816 ppb	788.399 ppb	297.000 ppb	64.016 ppb	61.072 ppb	31.913 ppb	92.436 ppb	112.490 %
Concentration per Run 2	47.180 ppb	18.432 ppb	839.788 ppb	303.496 ppb	61.246 ppb	58.326 ppb	31.294 ppb	91.891 ppb	110.023 %
Concentration per Run 3	47.536 ppb	18.208 ppb	891.212 ppb	309.185 ppb	65.013 ppb	60.849 ppb	30.273 ppb	92.388 ppb	110.929 %
Concentration RSD	0.5 %	1.7 %	6.1 %	2.0 %	3.1 %	2.5 %	2.7 %	0.3 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.318 ppb	20.853 ppb	166.091 ppb	89.224 ppb	101.094 %	5.426 ppb	5.677 ppb	104.100 %	44.483 ppb
Concentration per Run 1	13.356 ppb	20.482 ppb	163.800 ppb	89.321 ppb	99.877 %	5.476 ppb	5.705 ppb	101.176 %	46.507 ppb
Concentration per Run 2	13.256 ppb	20.812 ppb	166.029 ppb	88.820 ppb	101.866 %	5.528 ppb	5.697 ppb	103.098 %	44.466 ppb
Concentration per Run 3	13.341 ppb	21.264 ppb	168.443 ppb	89.531 ppb	101.540 %	5.274 ppb	5.630 ppb	108.027 %	42.475 ppb
Concentration RSD	0.4 %	1.9 %	1.4 %	0.4 %	1.1 %	2.5 %	0.7 %	3.4 %	4.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	204.217 ppb	104.175 %	100.174 %	12.517 ppb	54.742 ppb	100.138 %
Concentration per Run 1	209.058 ppb	104.970 %	98.233 %	12.182 ppb	53.806 ppb	102.241 %
Concentration per Run 2	203.002 ppb	101.966 %	98.820 %	12.683 ppb	54.757 ppb	100.749 %
Concentration per Run 3	200.590 ppb	105.589 %	103.469 %	12.686 ppb	55.665 ppb	97.425 %
Concentration RSD	2.1 %	1.9 %	2.9 %	2.3 %	1.7 %	2.5 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index: 49
Analysis label: L2351953-01 6020TL
Analysis started at: 9/14/2023 10:13:43 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 28
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.600 %	121.467 %	7.485 ppb	137,044.781 ppb	16,953.598 ppb	27,512.267 ppb	4,437.314 ppb	22,989.061 ppb	154.831 %
Concentration per Run 1	101.436 %	122.396 %	7.339 ppb	141,332.740 ppb	17,140.076 ppb	27,807.951 ppb	4,689.740 ppb	24,304.554 ppb	160.524 %
Concentration per Run 2	96.469 %	116.973 %	7.450 ppb	138,851.111 ppb	16,712.655 ppb	28,172.866 ppb	4,490.343 ppb	22,512.664 ppb	149.672 %
Concentration per Run 3	91.895 %	125.033 %	7.666 ppb	130,950.492 ppb	17,008.064 ppb	26,555.984 ppb	4,131.858 ppb	22,149.965 ppb	154.299 %
Concentration RSD	4.9 %	3.4 %	2.2 %	4.0 %	1.3 %	3.1 %	6.4 %	5.0 %	3.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.250 ppb	4.375 ppb	5,787.246 ppb	1,916.775 ppb	101.596 ppb	88.629 ppb	53.154 ppb	339.944 ppb	114.362 %
Concentration per Run 1	4.313 ppb	4.353 ppb	5,712.777 ppb	1,892.948 ppb	101.655 ppb	89.736 ppb	53.440 ppb	342.156 ppb	115.805 %
Concentration per Run 2	4.290 ppb	4.436 ppb	5,917.523 ppb	1,955.417 ppb	103.322 ppb	88.459 ppb	53.001 ppb	341.781 ppb	112.620 %
Concentration per Run 3	4.147 ppb	4.336 ppb	5,731.439 ppb	1,901.960 ppb	99.810 ppb	87.692 ppb	53.021 ppb	335.896 ppb	114.660 %
Concentration RSD	2.1 %	1.2 %	2.0 %	1.8 %	1.7 %	1.2 %	0.5 %	1.0 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	7.082 ppb	87.013 ppb	766.990 ppb	4.889 ppb	91.930 %	0.006 ppb	1.778 ppb	97.034 %	1.612 ppb
Concentration per Run 1	7.140 ppb	88.967 ppb	768.693 ppb	3.796 ppb	92.625 %	0.007 ppb	1.795 ppb	97.595 %	1.499 ppb
Concentration per Run 2	7.222 ppb	87.044 ppb	777.276 ppb	5.110 ppb	91.258 %	0.004 ppb	1.834 ppb	96.160 %	1.658 ppb
Concentration per Run 3	6.884 ppb	85.027 ppb	754.999 ppb	5.759 ppb	91.908 %	0.006 ppb	1.705 ppb	97.349 %	1.678 ppb
Concentration RSD	2.5 %	2.3 %	1.5 %	20.5 %	0.7 %	35.5 %	3.7 %	0.8 %	6.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	35.931 ppb	114.086 %	101.350 %	0.248 ppb	0.258 ppb	91.692 %
Concentration per Run 1	36.138 ppb	114.349 %	102.510 %	0.243 ppb	0.245 ppb	98.128 %
Concentration per Run 2	35.907 ppb	115.760 %	100.902 %	0.255 ppb	0.257 ppb	91.480 %
Concentration per Run 3	35.747 ppb	112.150 %	100.638 %	0.247 ppb	0.273 ppb	85.467 %
Concentration RSD	0.5 %	1.6 %	1.0 %	2.5 %	5.5 %	6.9 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	50	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	wg1825273-6d5 6020TL	Rack	1		
Analysis started at:	9/14/2023 10:18:21 AM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.218 %	109.692 %	1.945 ppb	30,860.753 ppb	4,242.192 ppb	6,043.216 ppb	1,031.081 ppb	5,967.016 ppb	99.300 %
Concentration per Run 1	87.256 %	106.352 %	1.917 ppb	31,424.013 ppb	4,425.199 ppb	6,161.050 ppb	1,047.680 ppb	6,129.492 ppb	103.207 %
Concentration per Run 2	83.789 %	113.885 %	1.963 ppb	29,266.006 ppb	4,085.522 ppb	5,823.960 ppb	1,011.912 ppb	5,869.121 ppb	100.818 %
Concentration per Run 3	81.609 %	108.838 %	1.956 ppb	31,892.241 ppb	4,215.855 ppb	6,144.639 ppb	1,033.651 ppb	5,902.435 ppb	93.875 %
Concentration RSD	3.4 %	3.5 %	1.3 %	4.5 %	4.0 %	3.1 %	1.7 %	2.4 %	4.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.030 ppb	1.074 ppb	1,431.477 ppb	425.117 ppb	23.250 ppb	20.356 ppb	12.305 ppb	84.170 ppb	107.627 %
Concentration per Run 1	1.142 ppb	1.109 ppb	1,462.430 ppb	442.546 ppb	23.802 ppb	20.982 ppb	12.672 ppb	86.022 ppb	105.282 %
Concentration per Run 2	0.983 ppb	1.074 ppb	1,376.086 ppb	413.823 ppb	22.204 ppb	20.365 ppb	11.751 ppb	82.828 ppb	109.821 %
Concentration per Run 3	0.965 ppb	1.040 ppb	1,455.915 ppb	418.983 ppb	23.744 ppb	19.721 ppb	12.490 ppb	83.661 ppb	107.778 %
Concentration RSD	9.4 %	3.2 %	3.4 %	3.6 %	3.9 %	3.1 %	4.0 %	2.0 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.642 ppb	18.525 ppb	151.006 ppb	0.913 ppb	94.846 %	0.002 ppb	0.400 ppb	96.466 %	0.552 ppb
Concentration per Run 1	1.721 ppb	17.901 ppb	153.538 ppb	0.625 ppb	91.878 %	0.002 ppb	0.409 ppb	95.018 %	0.514 ppb
Concentration per Run 2	1.538 ppb	17.903 ppb	149.509 ppb	0.831 ppb	95.573 %	0.002 ppb	0.399 ppb	99.393 %	0.537 ppb
Concentration per Run 3	1.666 ppb	19.773 ppb	149.969 ppb	1.285 ppb	97.087 %	0.002 ppb	0.391 ppb	94.985 %	0.605 ppb
Concentration RSD	5.7 %	5.8 %	1.5 %	37.0 %	2.8 %	3.8 %	2.3 %	2.6 %	8.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	7.587 ppb	98.137 %	94.668 %	0.052 ppb	0.059 ppb	90.190 %
Concentration per Run 1	7.776 ppb	95.996 %	95.872 %	0.046 ppb	0.058 ppb	91.387 %
Concentration per Run 2	7.341 ppb	97.376 %	94.150 %	0.053 ppb	0.057 ppb	89.162 %
Concentration per Run 3	7.643 ppb	101.040 %	93.983 %	0.057 ppb	0.061 ppb	90.022 %
Concentration RSD	2.9 %	2.7 %	1.1 %	10.7 %	3.4 %	1.2 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	51	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 10:23:00 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.850 %	112.152 %	61.236 ppb	6,086.436 ppb	6,228.642 ppb	63.279 ppb	6,127.891 ppb	5,544.218 ppb	108.226 %
Concentration per Run 1	86.037 %	115.843 %	61.942 ppb	5,760.018 ppb	5,846.983 ppb	62.200 ppb	6,083.934 ppb	5,491.672 ppb	108.478 %
Concentration per Run 2	85.412 %	109.440 %	60.121 ppb	6,301.969 ppb	6,450.399 ppb	63.201 ppb	6,199.675 ppb	5,693.227 ppb	108.879 %
Concentration per Run 3	83.102 %	111.173 %	61.646 ppb	6,197.322 ppb	6,388.543 ppb	64.436 ppb	6,100.066 ppb	5,447.756 ppb	107.320 %
Recovery Percentage 1			102.060 %	101.441 %	103.811 %	105.464 %	102.132 %	92.404 %	
Concentration RSD	1.8 %	3.0 %	1.6 %	4.7 %	5.3 %	1.8 %	1.0 %	2.4 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	54.417 ppb	53.867 ppb	56.903 ppb	6,177.747 ppb	64.069 ppb	64.118 ppb	61.357 ppb	60.176 ppb	104.364 %
Concentration per Run 1	54.172 ppb	52.927 ppb	55.289 ppb	6,204.689 ppb	64.002 ppb	65.251 ppb	61.600 ppb	61.813 ppb	101.666 %
Concentration per Run 2	55.062 ppb	54.353 ppb	57.536 ppb	6,207.252 ppb	63.338 ppb	64.013 ppb	63.093 ppb	59.145 ppb	104.949 %
Concentration per Run 3	54.017 ppb	54.321 ppb	57.884 ppb	6,121.299 ppb	64.868 ppb	63.089 ppb	59.379 ppb	59.570 ppb	106.478 %
Recovery Percentage 1	90.695 %	89.779 %	94.838 %	102.962 %	106.782 %	106.863 %	102.262 %	100.293 %	
Concentration RSD	1.0 %	1.5 %	2.5 %	0.8 %	1.2 %	1.7 %	3.0 %	2.4 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.187 ppb	58.556 ppb	55.794 ppb	55.253 ppb	99.416 %	61.228 ppb	59.654 ppb	96.451 %	58.695 ppb
Concentration per Run 1	60.642 ppb	58.624 ppb	55.515 ppb	54.698 ppb	99.498 %	62.560 ppb	60.147 ppb	92.360 %	60.306 ppb
Concentration per Run 2	61.812 ppb	58.748 ppb	56.373 ppb	54.811 ppb	96.890 %	61.429 ppb	59.507 ppb	98.096 %	58.532 ppb
Concentration per Run 3	61.106 ppb	58.296 ppb	55.493 ppb	56.249 ppb	101.860 %	59.696 ppb	59.307 ppb	98.898 %	57.247 ppb
Recovery Percentage 1	101.978 %	97.593 %	92.990 %	92.088 %		102.047 %	99.423 %		97.826 %
Concentration RSD	1.0 %	0.4 %	0.9 %	1.6 %	2.5 %	2.4 %	0.7 %	3.7 %	2.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.709 ppb	95.559 %	90.927 %	57.511 ppb	58.497 ppb	97.671 %
Concentration per Run 1	64.717 ppb	92.046 %	89.889 %	55.207 ppb	55.990 ppb	100.616 %
Concentration per Run 2	60.664 ppb	95.851 %	89.545 %	58.856 ppb	59.857 ppb	96.942 %
Concentration per Run 3	59.745 ppb	98.781 %	93.349 %	58.469 ppb	59.645 ppb	95.455 %
Recovery Percentage 1	102.848 %			95.851 %	97.495 %	
Concentration RSD	4.3 %	3.5 %	2.3 %	3.5 %	3.7 %	2.7 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	52	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 10:27:42 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.534 %	112.052 %	0.004 ppb	2.733 ppb	-0.609 ppb	-0.220 ppb	23.252 ppb	1.984 ppb	96.667 %
Concentration per Run 1	90.421 %	105.222 %	0.001 ppb	5.884 ppb	-0.810 ppb	-0.062 ppb	25.388 ppb	2.454 ppb	97.438 %
Concentration per Run 2	86.442 %	115.466 %	0.010 ppb	0.314 ppb	-0.482 ppb	-0.179 ppb	22.940 ppb	-0.188 ppb	96.346 %
Concentration per Run 3	85.740 %	115.466 %	0.002 ppb	2.000 ppb	-0.535 ppb	-0.418 ppb	21.430 ppb	3.687 ppb	96.216 %
Recovery Percentage 1			0.896 %	2.733 %	-0.870 %	-2.199 %	23.252 %	1.984 %	
Concentration RSD	2.9 %	5.3 %	112.3 %	104.5 %	28.9 %	82.4 %	8.6 %	99.8 %	0.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.010 ppb	0.001 ppb	0.025 ppb	11.991 ppb	0.003 ppb	0.042 ppb	0.008 ppb	0.215 ppb	110.924 %
Concentration per Run 1	0.005 ppb	0.003 ppb	0.020 ppb	11.313 ppb	0.002 ppb	0.044 ppb	0.011 ppb	0.177 ppb	110.718 %
Concentration per Run 2	0.025 ppb	-0.001 ppb	0.022 ppb	13.030 ppb	0.003 ppb	0.034 ppb	0.006 ppb	0.209 ppb	112.684 %
Concentration per Run 3	-0.001 ppb	0.002 ppb	0.033 ppb	11.629 ppb	0.002 ppb	0.047 ppb	0.008 ppb	0.260 ppb	109.368 %
Recovery Percentage 1	0.195 %	0.129 %	2.493 %	23.982 %	0.500 %	2.092 %	0.849 %	4.308 %	
Concentration RSD	135.8 %	188.1 %	27.3 %	7.6 %	21.8 %	16.0 %	27.2 %	19.5 %	1.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.177 ppb	0.630 ppb	-0.005 ppb	1.606 ppb	103.576 %	0.003 ppb	0.000 ppb	104.959 %	0.429 ppb
Concentration per Run 1	0.137 ppb	0.480 ppb	-0.002 ppb	1.249 ppb	101.545 %	0.002 ppb	0.000 ppb	99.845 %	0.395 ppb
Concentration per Run 2	0.195 ppb	0.672 ppb	-0.007 ppb	1.580 ppb	104.898 %	0.003 ppb	0.000 ppb	109.440 %	0.447 ppb
Concentration per Run 3	0.200 ppb	0.737 ppb	-0.005 ppb	1.988 ppb	104.284 %	0.003 ppb	0.001 ppb	105.592 %	0.444 ppb
Recovery Percentage 1	35.457 %	12.592 %	-0.046 %	80.300 %		0.672 %	0.243 %		10.722 %
Concentration RSD	19.6 %	21.3 %	50.0 %	23.0 %	1.7 %	17.7 %	156.5 %	4.6 %	6.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.017 ppb	98.380 %	95.613 %	0.073 ppb	0.012 ppb	100.516 %
Concentration per Run 1	0.016 ppb	96.910 %	94.525 %	0.064 ppb	0.013 ppb	100.155 %
Concentration per Run 2	0.015 ppb	100.055 %	98.120 %	0.079 ppb	0.012 ppb	103.303 %
Concentration per Run 3	0.020 ppb	98.174 %	94.193 %	0.076 ppb	0.011 ppb	98.088 %
Recovery Percentage 1	3.393 %			7.274 %	1.206 %	
Concentration RSD	13.8 %	1.6 %	2.3 %	10.5 %	7.3 %	2.6 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	53	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	wg1825273-1 6020TL	Rack	1		
Analysis started at:	9/14/2023 10:40:52 AM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.656 %	110.922 %	-0.001 ppb	-7.534 ppb	0.878 ppb	1.995 ppb	20.979 ppb	6.276 ppb	121.815 %
Concentration per Run 1	111.900 %	106.051 %	-0.001 ppb	-7.435 ppb	0.681 ppb	2.823 ppb	21.938 ppb	7.425 ppb	124.908 %
Concentration per Run 2	107.973 %	109.365 %	-0.001 ppb	-7.037 ppb	1.228 ppb	1.707 ppb	21.335 ppb	6.329 ppb	127.952 %
Concentration per Run 3	103.096 %	117.349 %	0.000 ppb	-8.130 ppb	0.726 ppb	1.456 ppb	19.664 ppb	5.073 ppb	112.586 %
Concentration RSD	4.1 %	5.2 %	135.9 %	7.3 %	34.5 %	36.5 %	5.6 %	18.7 %	6.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.003 ppb	0.017 ppb	0.083 ppb	6.317 ppb	0.002 ppb	0.034 ppb	0.034 ppb	-0.435 ppb	113.722 %
Concentration per Run 1	0.005 ppb	0.033 ppb	0.069 ppb	5.898 ppb	0.002 ppb	0.030 ppb	0.025 ppb	-0.438 ppb	107.567 %
Concentration per Run 2	0.000 ppb	0.001 ppb	0.102 ppb	7.188 ppb	0.003 ppb	0.053 ppb	0.031 ppb	-0.464 ppb	111.526 %
Concentration per Run 3	0.003 ppb	0.015 ppb	0.077 ppb	5.866 ppb	0.002 ppb	0.018 ppb	0.047 ppb	-0.402 ppb	122.074 %
Concentration RSD	108.0 %	97.0 %	20.7 %	11.9 %	9.4 %	52.2 %	32.2 %	7.2 %	6.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.160 ppb	0.056 ppb	-0.004 ppb	0.526 ppb	107.269 %	0.000 ppb	0.000 ppb	111.079 %	0.331 ppb
Concentration per Run 1	0.175 ppb	0.060 ppb	-0.001 ppb	0.341 ppb	102.655 %	0.000 ppb	0.001 ppb	103.422 %	0.315 ppb
Concentration per Run 2	0.153 ppb	0.075 ppb	-0.007 ppb	0.534 ppb	107.675 %	0.000 ppb	0.000 ppb	111.138 %	0.326 ppb
Concentration per Run 3	0.153 ppb	0.032 ppb	-0.004 ppb	0.702 ppb	111.479 %	0.001 ppb	0.000 ppb	118.679 %	0.353 ppb
Concentration RSD	7.9 %	38.8 %	87.5 %	34.3 %	4.1 %	15.9 %	193.4 %	6.9 %	5.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.016 ppb	105.119 %	104.268 %	0.010 ppb	0.006 ppb	135.731 %
Concentration per Run 1	0.004 ppb	102.035 %	100.016 %	0.007 ppb	0.005 ppb	156.441 %
Concentration per Run 2	0.014 ppb	105.274 %	103.316 %	0.011 ppb	0.006 ppb	130.988 %
Concentration per Run 3	0.031 ppb	108.047 %	109.473 %	0.012 ppb	0.006 ppb	119.765 %
Concentration RSD	84.3 %	2.9 %	4.6 %	25.0 %	6.8 %	13.8 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	54	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	wg1825273-2d5 6020TL	Rack	1		
Analysis started at:	9/14/2023 10:45:29 AM	Vial	27		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	105.091 %	110.118 %	10.217 ppb	2,338.487 ppb	2,162.931 ppb	439.709 ppb	2,159.628 ppb	1,894.041 ppb	116.515 %
Concentration per Run 1	109.187 %	110.344 %	10.144 ppb	2,332.653 ppb	2,138.614 ppb	416.889 ppb	2,129.447 ppb	2,067.257 ppb	111.655 %
Concentration per Run 2	104.185 %	108.537 %	10.253 ppb	2,291.567 ppb	2,119.913 ppb	435.802 ppb	2,124.718 ppb	1,969.386 ppb	121.780 %
Concentration per Run 3	101.901 %	111.474 %	10.252 ppb	2,391.242 ppb	2,230.267 ppb	466.437 ppb	2,224.718 ppb	1,645.479 ppb	116.110 %
Concentration RSD	3.5 %	1.3 %	0.6 %	2.1 %	2.7 %	5.7 %	2.6 %	11.7 %	4.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	92.610 ppb	36.410 ppb	99.009 ppb	205.008 ppb	100.654 ppb	99.227 ppb	48.554 ppb	98.390 ppb	115.455 %
Concentration per Run 1	93.048 ppb	36.474 ppb	98.577 ppb	208.054 ppb	104.054 ppb	101.648 ppb	50.644 ppb	99.050 ppb	110.300 %
Concentration per Run 2	89.436 ppb	36.773 ppb	97.367 ppb	209.919 ppb	104.500 ppb	97.510 ppb	48.006 ppb	97.494 ppb	111.547 %
Concentration per Run 3	95.347 ppb	35.984 ppb	101.083 ppb	197.050 ppb	93.407 ppb	98.523 ppb	47.011 ppb	98.626 ppb	124.520 %
Concentration RSD	3.2 %	1.1 %	1.9 %	3.4 %	6.2 %	2.2 %	3.9 %	0.8 %	6.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	24.683 ppb	25.132 ppb	188.870 ppb	177.462 ppb	106.915 %	10.552 ppb	10.456 ppb	111.580 %	75.394 ppb
Concentration per Run 1	24.717 ppb	24.321 ppb	184.566 ppb	178.068 ppb	103.759 %	10.799 ppb	10.621 ppb	106.768 %	78.768 ppb
Concentration per Run 2	24.718 ppb	24.486 ppb	185.165 ppb	178.411 ppb	106.018 %	10.612 ppb	10.337 ppb	108.724 %	73.602 ppb
Concentration per Run 3	24.615 ppb	26.588 ppb	196.879 ppb	175.906 ppb	110.969 %	10.246 ppb	10.411 ppb	119.249 %	73.810 ppb
Concentration RSD	0.2 %	5.0 %	3.7 %	0.8 %	3.4 %	2.7 %	1.4 %	6.0 %	3.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	398.473 ppb	105.877 %	104.211 %	23.428 ppb	99.667 ppb	110.399 %
Concentration per Run 1	409.130 ppb	101.588 %	100.931 %	23.406 ppb	96.330 ppb	112.943 %
Concentration per Run 2	382.406 ppb	104.831 %	104.997 %	23.510 ppb	101.260 ppb	107.221 %
Concentration per Run 3	403.884 ppb	111.213 %	106.706 %	23.366 ppb	101.410 ppb	111.034 %
Concentration RSD	3.6 %	4.6 %	2.8 %	0.3 %	2.9 %	2.6 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	55	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	wg1825273-5d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 10:50:06 AM	Vial	31		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	102.096 %	114.537 %	52.195 ppb	20,190.595 ppb	7,575.393 ppb	3,129.815 ppb	5,874.464 ppb	7,784.137 ppb	128.613 %
Concentration per Run 1	105.375 %	111.022 %	51.914 ppb	20,980.350 ppb	7,603.635 ppb	3,190.039 ppb	5,991.899 ppb	7,965.092 ppb	129.796 %
Concentration per Run 2	101.640 %	114.337 %	52.216 ppb	19,409.895 ppb	7,208.640 ppb	3,002.228 ppb	5,696.127 ppb	7,738.212 ppb	128.820 %
Concentration per Run 3	99.272 %	118.253 %	52.456 ppb	20,181.539 ppb	7,913.903 ppb	3,197.177 ppb	5,935.366 ppb	7,649.109 ppb	127.223 %
Concentration RSD	3.0 %	3.2 %	0.5 %	3.9 %	4.7 %	3.5 %	2.7 %	2.1 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.172 ppb	45.589 ppb	864.637 ppb	5,312.102 ppb	60.901 ppb	60.092 ppb	53.622 ppb	92.811 ppb	117.966 %
Concentration per Run 1	48.575 ppb	47.112 ppb	911.708 ppb	5,494.872 ppb	63.786 ppb	64.942 ppb	55.898 ppb	95.474 ppb	111.742 %
Concentration per Run 2	46.870 ppb	45.383 ppb	891.959 ppb	5,357.700 ppb	62.497 ppb	60.425 ppb	54.435 ppb	92.529 ppb	113.425 %
Concentration per Run 3	46.071 ppb	44.270 ppb	790.244 ppb	5,083.733 ppb	56.419 ppb	54.908 ppb	50.534 ppb	90.429 ppb	128.730 %
Concentration RSD	2.7 %	3.1 %	7.5 %	3.9 %	6.5 %	8.4 %	5.2 %	2.7 %	7.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	51.216 ppb	60.391 ppb	128.226 ppb	49.354 ppb	105.143 %	1.513 ppb	50.484 ppb	111.123 %	52.521 ppb
Concentration per Run 1	51.974 ppb	58.980 ppb	125.068 ppb	49.193 ppb	105.328 %	1.547 ppb	50.781 ppb	109.403 %	50.868 ppb
Concentration per Run 2	52.500 ppb	60.701 ppb	125.446 ppb	50.113 ppb	104.235 %	1.499 ppb	50.485 ppb	105.543 %	52.847 ppb
Concentration per Run 3	49.175 ppb	61.493 ppb	134.165 ppb	48.756 ppb	105.867 %	1.494 ppb	50.185 ppb	118.424 %	53.848 ppb
Concentration RSD	3.5 %	2.1 %	4.0 %	1.4 %	0.8 %	1.9 %	0.6 %	5.9 %	2.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	52.709 ppb	107.604 %	106.432 %	47.147 ppb	49.795 ppb	107.540 %
Concentration per Run 1	51.604 ppb	104.494 %	102.824 %	45.760 ppb	48.335 ppb	110.544 %
Concentration per Run 2	53.133 ppb	106.959 %	101.839 %	48.318 ppb	50.313 ppb	105.795 %
Concentration per Run 3	53.390 ppb	111.357 %	114.633 %	47.363 ppb	50.736 ppb	106.281 %
Concentration RSD	1.8 %	3.2 %	6.7 %	2.7 %	2.6 %	2.4 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	56	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2351546-01 6020TL	Rack	1		
Analysis started at:	9/14/2023 10:54:44 AM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.848 %	85.312 %	0.006 ppb	1,097,434.253 ppb	124,577.645 ppb	34.907 ppb	43,494.331 ppb	168,551.729 ppb	116.384 %
Concentration per Run 1	86.841 %	85.187 %	0.003 ppb	1,113,596.109 ppb	124,656.230 ppb	34.598 ppb	41,959.388 ppb	168,026.229 ppb	120.927 %
Concentration per Run 2	80.079 %	87.220 %	0.011 ppb	1,052,033.056 ppb	120,961.186 ppb	32.844 ppb	40,443.982 ppb	162,246.947 ppb	116.889 %
Concentration per Run 3	75.623 %	83.530 %	0.005 ppb	1,126,673.594 ppb	128,115.520 ppb	37.279 ppb	48,079.624 ppb	175,382.010 ppb	111.336 %
Concentration RSD	7.0 %	2.2 %	66.2 %	3.6 %	2.9 %	6.4 %	9.3 %	3.9 %	4.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.728 ppb	0.129 ppb	20.357 ppb	761.542 ppb	10.974 ppb	9.125 ppb	0.096 ppb	-0.197 ppb	92.247 %
Concentration per Run 1	0.827 ppb	0.152 ppb	19.312 ppb	795.191 ppb	11.315 ppb	9.783 ppb	0.089 ppb	-0.201 ppb	85.971 %
Concentration per Run 2	0.652 ppb	0.118 ppb	20.797 ppb	761.071 ppb	11.189 ppb	9.128 ppb	0.112 ppb	-0.179 ppb	89.391 %
Concentration per Run 3	0.705 ppb	0.116 ppb	20.962 ppb	728.365 ppb	10.418 ppb	8.466 ppb	0.087 ppb	-0.211 ppb	101.380 %
Concentration RSD	12.3 %	16.0 %	4.5 %	4.4 %	4.4 %	7.2 %	14.3 %	8.4 %	8.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	7.499 ppb	0.428 ppb	1,004.537 ppb	6.959 ppb	77.882 %	0.001 ppb	0.001 ppb	90.163 %	1.890 ppb
Concentration per Run 1	8.039 ppb	0.268 ppb	1,004.585 ppb	6.089 ppb	75.076 %	0.002 ppb	0.002 ppb	84.708 %	1.810 ppb
Concentration per Run 2	7.387 ppb	0.500 ppb	981.839 ppb	7.007 ppb	77.771 %	0.001 ppb	0.001 ppb	87.484 %	1.938 ppb
Concentration per Run 3	7.070 ppb	0.518 ppb	1,027.188 ppb	7.781 ppb	80.800 %	0.001 ppb	0.001 ppb	98.296 %	1.922 ppb
Concentration RSD	6.6 %	32.6 %	2.3 %	12.2 %	3.7 %	6.4 %	61.6 %	8.0 %	3.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.485 ppb	92.608 %	89.958 %	0.490 ppb	0.030 ppb	72.433 %
Concentration per Run 1	60.476 ppb	89.847 %	85.148 %	0.442 ppb	0.032 ppb	72.781 %
Concentration per Run 2	62.232 ppb	91.184 %	86.856 %	0.535 ppb	0.027 ppb	69.780 %
Concentration per Run 3	61.748 ppb	96.794 %	97.871 %	0.493 ppb	0.030 ppb	74.739 %
Concentration RSD	1.5 %	4.0 %	7.7 %	9.5 %	9.3 %	3.4 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	57	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350268-01 6020TL	Rack	1		
Analysis started at:	9/14/2023 10:59:23 AM	Vial	34		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	72.215 %	83.278 %	0.044 ppb	112,688.941 ppb	16,374.481 ppb	588.212 ppb	5,829.874 ppb	95,062.815 ppb	86.285 %
Concentration per Run 1	74.391 %	84.810 %	0.052 ppb	114,820.248 ppb	16,134.134 ppb	566.929 ppb	5,850.293 ppb	94,742.295 ppb	86.639 %
Concentration per Run 2	72.609 %	80.592 %	0.044 ppb	109,109.510 ppb	16,332.141 ppb	584.330 ppb	5,738.602 ppb	94,467.643 ppb	87.638 %
Concentration per Run 3	69.644 %	84.433 %	0.035 ppb	114,137.066 ppb	16,657.167 ppb	613.377 ppb	5,900.728 ppb	95,978.509 ppb	84.578 %
Concentration RSD	3.3 %	2.8 %	19.0 %	2.8 %	1.6 %	4.0 %	1.4 %	0.8 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.348 ppb	1.628 ppb	1,001.711 ppb	1,016.553 ppb	1.473 ppb	3.571 ppb	1.824 ppb	2.648 ppb	91.903 %
Concentration per Run 1	1.355 ppb	1.625 ppb	1,047.067 ppb	1,061.237 ppb	1.450 ppb	3.676 ppb	1.954 ppb	2.555 ppb	89.497 %
Concentration per Run 2	1.326 ppb	1.577 ppb	972.141 ppb	1,005.655 ppb	1.475 ppb	3.551 ppb	1.749 ppb	2.886 ppb	91.614 %
Concentration per Run 3	1.364 ppb	1.681 ppb	985.925 ppb	982.768 ppb	1.494 ppb	3.485 ppb	1.767 ppb	2.502 ppb	94.599 %
Concentration RSD	1.5 %	3.2 %	4.0 %	4.0 %	1.5 %	2.7 %	6.2 %	7.9 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.102 ppb	5.821 ppb	180.253 ppb	3.495 ppb	81.314 %	0.003 ppb	0.071 ppb	89.198 %	0.907 ppb
Concentration per Run 1	1.087 ppb	5.742 ppb	176.440 ppb	3.085 ppb	80.957 %	0.004 ppb	0.070 ppb	85.925 %	0.810 ppb
Concentration per Run 2	1.143 ppb	5.579 ppb	181.841 ppb	3.571 ppb	81.607 %	0.004 ppb	0.068 ppb	90.127 %	0.921 ppb
Concentration per Run 3	1.075 ppb	6.142 ppb	182.478 ppb	3.828 ppb	81.377 %	0.002 ppb	0.074 ppb	91.543 %	0.991 ppb
Concentration RSD	3.3 %	5.0 %	1.8 %	10.8 %	0.4 %	45.2 %	4.1 %	3.3 %	10.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	148.335 ppb	88.466 %	87.639 %	0.069 ppb	1.673 ppb	82.541 %
Concentration per Run 1	147.401 ppb	88.612 %	84.998 %	0.049 ppb	1.629 ppb	85.854 %
Concentration per Run 2	149.553 ppb	88.522 %	88.015 %	0.077 ppb	1.667 ppb	81.271 %
Concentration per Run 3	148.052 ppb	88.265 %	89.904 %	0.082 ppb	1.722 ppb	80.499 %
Concentration RSD	0.7 %	0.2 %	2.8 %	25.8 %	2.8 %	3.5 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	58	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1825220-3d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 11:04:02 AM	Vial	38		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.292 %	90.384 %	5.968 ppb	13,688.177 ppb	8,290.242 ppb	6,133.747 ppb	1,561.950 ppb	21,543.258 ppb	88.247 %
Concentration per Run 1	80.260 %	90.534 %	6.014 ppb	13,061.502 ppb	8,276.843 ppb	5,811.215 ppb	1,594.478 ppb	21,292.026 ppb	88.622 %
Concentration per Run 2	76.605 %	89.631 %	5.948 ppb	14,337.807 ppb	7,982.390 ppb	6,601.749 ppb	1,624.163 ppb	21,891.335 ppb	87.397 %
Concentration per Run 3	75.010 %	90.986 %	5.943 ppb	13,665.222 ppb	8,611.492 ppb	5,988.276 ppb	1,467.209 ppb	21,446.413 ppb	88.722 %
Concentration RSD	3.5 %	0.8 %	0.7 %	4.7 %	3.8 %	6.8 %	5.3 %	1.4 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	50.288 ppb	22.661 ppb	393.981 ppb	7,317.128 ppb	57.015 ppb	59.717 ppb	30.013 ppb	85.640 ppb	92.250 %
Concentration per Run 1	48.694 ppb	22.369 ppb	378.135 ppb	7,313.275 ppb	56.795 ppb	60.394 ppb	30.876 ppb	84.711 ppb	89.813 %
Concentration per Run 2	49.115 ppb	22.446 ppb	400.649 ppb	7,292.677 ppb	57.968 ppb	58.866 ppb	29.405 ppb	87.031 ppb	95.224 %
Concentration per Run 3	53.055 ppb	23.167 ppb	403.160 ppb	7,345.433 ppb	56.284 ppb	59.890 ppb	29.757 ppb	85.176 ppb	91.712 %
Concentration RSD	4.8 %	1.9 %	3.5 %	0.4 %	1.5 %	1.3 %	2.6 %	1.4 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.368 ppb	9.705 ppb	173.899 ppb	57.443 ppb	86.814 %	5.211 ppb	5.352 ppb	95.013 %	16.725 ppb
Concentration per Run 1	12.225 ppb	9.815 ppb	170.633 ppb	59.498 ppb	84.460 %	5.283 ppb	5.356 ppb	89.958 %	16.960 ppb
Concentration per Run 2	12.483 ppb	8.969 ppb	179.500 ppb	57.220 ppb	87.043 %	5.152 ppb	5.217 ppb	100.121 %	16.764 ppb
Concentration per Run 3	12.397 ppb	10.331 ppb	171.565 ppb	55.610 ppb	88.940 %	5.199 ppb	5.485 ppb	94.960 %	16.451 ppb
Concentration RSD	1.1 %	7.1 %	2.8 %	3.4 %	2.6 %	1.3 %	2.5 %	5.3 %	1.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	280.421 ppb	89.658 %	89.652 %	11.931 ppb	62.694 ppb	87.489 %
Concentration per Run 1	279.962 ppb	85.986 %	87.176 %	11.619 ppb	60.356 ppb	89.437 %
Concentration per Run 2	279.724 ppb	93.180 %	93.391 %	11.920 ppb	62.208 ppb	88.083 %
Concentration per Run 3	281.576 ppb	89.809 %	88.390 %	12.253 ppb	65.517 ppb	84.945 %
Concentration RSD	0.4 %	4.0 %	3.7 %	2.7 %	4.2 %	2.6 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	59	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1825203-2d5 A2-6020T	Rack	1		
Analysis started at:	9/14/2023 11:08:39 AM	Vial	39		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.937 %	95.682 %	11.118 ppb	26,902.475 ppb	3,675.068 ppb	1,382.197 ppb	2,981.239 ppb	4,240.704 ppb	99.105 %
Concentration per Run 1	89.755 %	88.953 %	11.078 ppb	27,778.921 ppb	3,718.804 ppb	1,408.960 ppb	2,998.990 ppb	4,608.007 ppb	103.111 %
Concentration per Run 2	86.685 %	99.649 %	11.202 ppb	27,052.415 ppb	3,701.560 ppb	1,413.932 ppb	3,004.682 ppb	4,002.262 ppb	96.986 %
Concentration per Run 3	84.372 %	98.443 %	11.073 ppb	25,876.089 ppb	3,604.842 ppb	1,323.698 ppb	2,940.045 ppb	4,111.844 ppb	97.219 %
Concentration RSD	3.1 %	6.1 %	0.7 %	3.6 %	1.7 %	3.7 %	1.2 %	7.6 %	3.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	93.830 ppb	36.868 ppb	92.070 ppb	245.388 ppb	106.353 ppb	105.134 ppb	52.077 ppb	106.523 ppb	102.420 %
Concentration per Run 1	97.412 ppb	38.555 ppb	94.010 ppb	243.729 ppb	108.301 ppb	106.069 ppb	52.293 ppb	108.168 ppb	97.809 %
Concentration per Run 2	93.663 ppb	36.615 ppb	92.113 ppb	252.805 ppb	105.196 ppb	102.748 ppb	51.615 ppb	105.326 ppb	107.604 %
Concentration per Run 3	90.413 ppb	35.434 ppb	90.089 ppb	239.629 ppb	105.562 ppb	106.584 ppb	52.324 ppb	106.075 ppb	101.848 %
Concentration RSD	3.7 %	4.3 %	2.1 %	2.7 %	1.6 %	2.0 %	0.8 %	1.4 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	25.791 ppb	24.750 ppb	205.821 ppb	196.176 ppb	95.241 %	10.662 ppb	10.737 ppb	100.310 %	21.269 ppb
Concentration per Run 1	26.554 ppb	25.451 ppb	201.246 ppb	199.747 ppb	94.525 %	10.751 ppb	10.740 ppb	95.797 %	21.387 ppb
Concentration per Run 2	25.207 ppb	25.620 ppb	213.231 ppb	190.682 ppb	95.607 %	10.404 ppb	10.713 ppb	106.372 %	21.511 ppb
Concentration per Run 3	25.611 ppb	23.177 ppb	202.985 ppb	198.098 ppb	95.589 %	10.831 ppb	10.759 ppb	98.760 %	20.908 ppb
Concentration RSD	2.7 %	5.5 %	3.1 %	2.5 %	0.7 %	2.1 %	0.2 %	5.4 %	1.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	434.206 ppb	95.063 %	95.594 %	25.283 ppb	108.893 ppb	93.245 %
Concentration per Run 1	438.382 ppb	90.641 %	91.352 %	24.392 ppb	106.163 ppb	94.225 %
Concentration per Run 2	432.342 ppb	99.960 %	100.370 %	25.606 ppb	108.713 ppb	95.520 %
Concentration per Run 3	431.894 ppb	94.589 %	95.060 %	25.851 ppb	111.802 ppb	89.991 %
Concentration RSD	0.8 %	4.9 %	4.7 %	3.1 %	2.6 %	3.1 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	60	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350268-02 6020TL	Rack	1		
Analysis started at:	9/14/2023 11:13:17 AM	Vial	35		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	90.964 %	101.456 %	0.044 ppb	124,902.123 ppb	10,146.085 ppb	673.215 ppb	5,820.965 ppb	85,240.715 ppb	109.882 %
Concentration per Run 1	95.275 %	99.422 %	0.040 ppb	128,568.182 ppb	10,181.897 ppb	658.050 ppb	5,767.144 ppb	85,615.697 ppb	112.160 %
Concentration per Run 2	89.362 %	100.929 %	0.053 ppb	129,821.124 ppb	10,698.755 ppb	722.308 ppb	6,218.954 ppb	84,781.210 ppb	111.396 %
Concentration per Run 3	88.254 %	104.017 %	0.041 ppb	116,317.062 ppb	9,557.603 ppb	639.287 ppb	5,476.798 ppb	85,325.239 ppb	106.091 %
Concentration RSD	4.1 %	2.3 %	16.3 %	6.0 %	5.6 %	6.5 %	6.4 %	0.5 %	3.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.081 ppb	2.253 ppb	139.479 ppb	806.345 ppb	1.887 ppb	6.717 ppb	1.750 ppb	3.424 ppb	103.605 %
Concentration per Run 1	1.151 ppb	2.267 ppb	136.135 ppb	797.404 ppb	1.873 ppb	6.931 ppb	1.789 ppb	3.371 ppb	100.778 %
Concentration per Run 2	1.054 ppb	2.263 ppb	140.695 ppb	807.681 ppb	1.853 ppb	6.545 ppb	1.710 ppb	3.375 ppb	109.375 %
Concentration per Run 3	1.038 ppb	2.228 ppb	141.607 ppb	813.949 ppb	1.933 ppb	6.674 ppb	1.751 ppb	3.527 ppb	100.663 %
Concentration RSD	5.7 %	1.0 %	2.1 %	1.0 %	2.2 %	2.9 %	2.3 %	2.6 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.890 ppb	5.485 ppb	271.860 ppb	7.720 ppb	91.653 %	0.005 ppb	0.010 ppb	100.839 %	1.859 ppb
Concentration per Run 1	0.871 ppb	5.200 ppb	259.519 ppb	6.032 ppb	89.511 %	0.004 ppb	0.007 ppb	96.227 %	1.782 ppb
Concentration per Run 2	0.899 ppb	5.448 ppb	285.337 ppb	7.783 ppb	96.071 %	0.005 ppb	0.013 ppb	106.895 %	1.891 ppb
Concentration per Run 3	0.899 ppb	5.806 ppb	270.724 ppb	9.345 ppb	89.376 %	0.005 ppb	0.011 ppb	99.394 %	1.905 ppb
Concentration RSD	1.8 %	5.5 %	4.8 %	21.5 %	4.2 %	5.3 %	26.9 %	5.4 %	3.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	261.536 ppb	96.233 %	95.080 %	0.051 ppb	0.560 ppb	89.475 %
Concentration per Run 1	253.670 ppb	94.538 %	90.893 %	0.050 ppb	0.543 ppb	90.231 %
Concentration per Run 2	273.534 ppb	99.818 %	100.742 %	0.052 ppb	0.561 ppb	91.237 %
Concentration per Run 3	257.404 ppb	94.343 %	93.605 %	0.051 ppb	0.576 ppb	86.956 %
Concentration RSD	4.0 %	3.2 %	5.4 %	2.4 %	2.9 %	2.5 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	61	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350268-03 6020TL	Rack	1		
Analysis started at:	9/14/2023 11:17:56 AM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.554 %	102.536 %	0.100 ppb	114,429.867 ppb	16,759.372 ppb	1,489.770 ppb	6,571.290 ppb	104,752.766 ppb	116.644 %
Concentration per Run 1	98.483 %	100.778 %	0.108 ppb	116,295.315 ppb	16,877.628 ppb	1,450.626 ppb	6,367.109 ppb	106,323.152 ppb	121.623 %
Concentration per Run 2	94.246 %	108.235 %	0.086 ppb	112,043.471 ppb	16,450.673 ppb	1,546.269 ppb	6,846.145 ppb	106,163.307 ppb	116.091 %
Concentration per Run 3	90.934 %	98.594 %	0.106 ppb	114,950.816 ppb	16,949.816 ppb	1,472.415 ppb	6,500.617 ppb	101,771.840 ppb	112.218 %
Concentration RSD	4.0 %	4.9 %	12.5 %	1.9 %	1.6 %	3.4 %	3.8 %	2.5 %	4.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.416 ppb	3.746 ppb	1,182.330 ppb	2,439.935 ppb	1.830 ppb	7.899 ppb	3.569 ppb	7.567 ppb	107.328 %
Concentration per Run 1	2.467 ppb	3.740 ppb	1,198.499 ppb	2,491.299 ppb	1.873 ppb	8.063 ppb	3.602 ppb	7.988 ppb	101.439 %
Concentration per Run 2	2.289 ppb	3.691 ppb	1,169.764 ppb	2,405.301 ppb	1.778 ppb	7.896 ppb	3.431 ppb	7.186 ppb	114.052 %
Concentration per Run 3	2.491 ppb	3.808 ppb	1,178.727 ppb	2,423.203 ppb	1.839 ppb	7.736 ppb	3.673 ppb	7.528 ppb	106.492 %
Concentration RSD	4.6 %	1.6 %	1.2 %	1.9 %	2.6 %	2.1 %	3.5 %	5.3 %	5.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.409 ppb	7.324 ppb	173.472 ppb	3.614 ppb	93.627 %	0.024 ppb	0.066 ppb	101.272 %	1.010 ppb
Concentration per Run 1	1.500 ppb	7.022 ppb	173.857 ppb	3.088 ppb	93.004 %	0.021 ppb	0.062 ppb	95.075 %	0.936 ppb
Concentration per Run 2	1.344 ppb	7.659 ppb	176.306 ppb	3.627 ppb	95.437 %	0.022 ppb	0.082 ppb	105.275 %	1.045 ppb
Concentration per Run 3	1.384 ppb	7.290 ppb	170.253 ppb	4.128 ppb	92.440 %	0.028 ppb	0.053 ppb	103.466 %	1.049 ppb
Concentration RSD	5.7 %	4.4 %	1.8 %	14.4 %	1.7 %	15.8 %	22.8 %	5.4 %	6.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	162.168 ppb	98.008 %	95.882 %	0.033 ppb	1.921 ppb	91.975 %
Concentration per Run 1	162.966 ppb	95.844 %	92.271 %	0.027 ppb	1.875 ppb	93.162 %
Concentration per Run 2	163.338 ppb	103.155 %	102.509 %	0.035 ppb	1.894 ppb	94.892 %
Concentration per Run 3	160.199 ppb	95.023 %	92.867 %	0.037 ppb	1.994 ppb	87.870 %
Concentration RSD	1.1 %	4.6 %	6.0 %	14.9 %	3.3 %	4.0 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	62	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350268-04 6020TL	Rack	1		
Analysis started at:	9/14/2023 11:22:36 AM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.047 %	94.577 %	0.016 ppb	169,284.447 ppb	15,490.224 ppb	87.103 ppb	5,967.743 ppb	113,263.969 ppb	101.107 %
Concentration per Run 1	86.433 %	92.643 %	0.015 ppb	174,395.029 ppb	15,494.512 ppb	86.971 ppb	6,102.713 ppb	117,536.925 ppb	103.451 %
Concentration per Run 2	82.051 %	99.799 %	0.019 ppb	163,894.404 ppb	15,308.275 ppb	89.090 ppb	6,005.421 ppb	116,271.209 ppb	100.259 %
Concentration per Run 3	80.658 %	91.288 %	0.016 ppb	169,563.908 ppb	15,667.885 ppb	85.248 ppb	5,795.096 ppb	105,983.771 ppb	99.611 %
Concentration RSD	3.6 %	4.8 %	13.1 %	3.1 %	1.2 %	2.2 %	2.6 %	5.6 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.988 ppb	0.630 ppb	24,187.740 ppb	623.772 ppb	1.855 ppb	45.255 ppb	535.079 ppb	119.434 ppb	103.980 %
Concentration per Run 1	3.103 ppb	0.661 ppb	24,770.333 ppb	655.742 ppb	1.983 ppb	47.597 ppb	555.345 ppb	122.763 ppb	98.258 %
Concentration per Run 2	2.887 ppb	0.608 ppb	24,698.199 ppb	615.745 ppb	1.779 ppb	43.271 ppb	507.701 ppb	117.141 ppb	109.184 %
Concentration per Run 3	2.974 ppb	0.620 ppb	23,094.688 ppb	599.831 ppb	1.802 ppb	44.899 ppb	542.190 ppb	118.398 ppb	104.496 %
Concentration RSD	3.6 %	4.4 %	3.9 %	4.6 %	6.0 %	4.8 %	4.6 %	2.5 %	5.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.745 ppb	5.672 ppb	210.645 ppb	1.257 ppb	90.329 %	0.111 ppb	7.025 ppb	102.545 %	1.032 ppb
Concentration per Run 1	0.809 ppb	5.556 ppb	210.935 ppb	1.024 ppb	90.067 %	0.115 ppb	7.198 ppb	98.982 %	1.017 ppb
Concentration per Run 2	0.744 ppb	5.730 ppb	216.666 ppb	1.232 ppb	93.975 %	0.105 ppb	6.908 ppb	110.105 %	1.010 ppb
Concentration per Run 3	0.682 ppb	5.731 ppb	204.334 ppb	1.514 ppb	86.945 %	0.113 ppb	6.970 ppb	98.548 %	1.070 ppb
Concentration RSD	8.5 %	1.8 %	2.9 %	19.6 %	3.9 %	4.9 %	2.2 %	6.4 %	3.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1,569.733 ppb	96.628 %	97.918 %	0.052 ppb	37.992 ppb	87.448 %
Concentration per Run 1	1,488.484 ppb	96.058 %	96.420 %	0.050 ppb	37.457 ppb	88.828 %
Concentration per Run 2	1,594.250 ppb	100.384 %	103.607 %	0.051 ppb	38.561 ppb	87.629 %
Concentration per Run 3	1,626.466 ppb	93.443 %	93.726 %	0.053 ppb	37.959 ppb	85.888 %
Concentration RSD	4.6 %	3.6 %	5.2 %	2.6 %	1.5 %	1.7 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	63	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 11:27:13 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	94.090 %	99.423 %	61.592 ppb	6,583.420 ppb	6,111.290 ppb	63.558 ppb	6,504.206 ppb	6,015.995 ppb	118.590 %
Concentration per Run 1	98.540 %	97.464 %	60.641 ppb	6,752.331 ppb	6,381.462 ppb	66.388 ppb	6,699.050 ppb	6,233.573 ppb	123.425 %
Concentration per Run 2	93.773 %	100.251 %	62.520 ppb	6,537.651 ppb	6,095.396 ppb	61.279 ppb	6,592.747 ppb	6,162.602 ppb	117.740 %
Concentration per Run 3	89.955 %	100.552 %	61.615 ppb	6,460.279 ppb	5,857.012 ppb	63.008 ppb	6,220.820 ppb	5,651.810 ppb	114.605 %
Recovery Percentage 1			102.653 %	109.724 %	101.855 %	105.931 %	108.403 %	100.267 %	
Concentration RSD	4.6 %	1.7 %	1.5 %	2.3 %	4.3 %	4.1 %	3.9 %	5.3 %	3.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	54.986 ppb	57.978 ppb	57.075 ppb	6,143.118 ppb	64.403 ppb	61.980 ppb	58.288 ppb	58.507 ppb	109.329 %
Concentration per Run 1	58.204 ppb	59.845 ppb	59.719 ppb	6,489.899 ppb	67.455 ppb	65.328 ppb	59.830 ppb	60.597 ppb	103.879 %
Concentration per Run 2	54.256 ppb	58.212 ppb	54.774 ppb	6,073.036 ppb	61.787 ppb	62.000 ppb	55.605 ppb	58.473 ppb	111.240 %
Concentration per Run 3	52.497 ppb	55.877 ppb	56.733 ppb	5,866.420 ppb	63.966 ppb	58.612 ppb	59.431 ppb	56.452 ppb	112.867 %
Recovery Percentage 1	91.643 %	96.630 %	95.125 %	102.385 %	107.338 %	103.300 %	97.147 %	97.512 %	
Concentration RSD	5.3 %	3.4 %	4.4 %	5.2 %	4.4 %	5.4 %	4.0 %	3.5 %	4.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	61.064 ppb	57.635 ppb	57.855 ppb	53.996 ppb	97.619 %	60.531 ppb	58.238 ppb	102.544 %	56.957 ppb
Concentration per Run 1	62.653 ppb	60.615 ppb	58.998 ppb	53.943 ppb	97.782 %	61.332 ppb	58.640 ppb	102.704 %	56.968 ppb
Concentration per Run 2	60.215 ppb	55.673 ppb	57.653 ppb	54.147 ppb	95.680 %	60.062 ppb	57.443 ppb	104.131 %	55.950 ppb
Concentration per Run 3	60.323 ppb	56.617 ppb	56.915 ppb	53.898 ppb	99.397 %	60.198 ppb	58.631 ppb	100.798 %	57.954 ppb
Recovery Percentage 1	101.773 %	96.059 %	96.425 %	89.994 %		100.885 %	97.064 %		94.929 %
Concentration RSD	2.3 %	4.6 %	1.8 %	0.2 %	1.9 %	1.2 %	1.2 %	1.6 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.336 ppb	95.372 %	93.790 %	58.009 ppb	60.090 ppb	93.698 %
Concentration per Run 1	62.057 ppb	94.815 %	93.160 %	57.693 ppb	58.740 ppb	96.834 %
Concentration per Run 2	60.655 ppb	96.240 %	93.217 %	57.201 ppb	59.834 ppb	92.946 %
Concentration per Run 3	61.297 ppb	95.062 %	94.992 %	59.134 ppb	61.697 ppb	91.313 %
Recovery Percentage 1	102.227 %			96.682 %	100.150 %	
Concentration RSD	1.1 %	0.8 %	1.1 %	1.7 %	2.5 %	3.0 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index: 64 User name ALPHALAB\Metals-Instrument Comment <Comment>
Analysis label: CCB Rack 0
Analysis started at: 9/14/2023 11:31:55 AM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.471 %	101.381 %	0.003 ppb	40.676 ppb	-0.237 ppb	-0.190 ppb	45.499 ppb	5.127 ppb	106.687 %
Concentration per Run 1	104.661 %	101.155 %	0.005 ppb	49.279 ppb	0.195 ppb	-0.044 ppb	54.273 ppb	11.676 ppb	105.610 %
Concentration per Run 2	100.952 %	103.189 %	0.002 ppb	38.758 ppb	-0.238 ppb	-0.108 ppb	47.492 ppb	0.891 ppb	108.272 %
Concentration per Run 3	98.800 %	99.799 %	0.002 ppb	33.989 ppb	-0.666 ppb	-0.417 ppb	34.733 ppb	2.815 ppb	106.181 %
Recovery Percentage 1			0.628 %	40.676 %	-0.338 %	-1.896 %	45.499 %	5.127 %	
Concentration RSD	2.9 %	1.7 %	54.9 %	19.2 %	182.0 %	105.0 %	21.8 %	112.2 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.004 ppb	0.007 ppb	0.215 ppb	13.456 ppb	0.001 ppb	0.025 ppb	0.019 ppb	0.249 ppb	104.288 %
Concentration per Run 1	0.007 ppb	0.005 ppb	0.470 ppb	11.643 ppb	0.003 ppb	0.043 ppb	0.018 ppb	0.396 ppb	97.881 %
Concentration per Run 2	0.005 ppb	0.004 ppb	0.106 ppb	13.955 ppb	0.001 ppb	0.012 ppb	0.017 ppb	0.159 ppb	109.440 %
Concentration per Run 3	0.000 ppb	0.011 ppb	0.067 ppb	14.772 ppb	-0.002 ppb	0.021 ppb	0.021 ppb	0.191 ppb	105.542 %
Recovery Percentage 1	0.085 %	0.666 %	21.451 %	26.913 %	0.189 %	1.268 %	1.857 %	4.972 %	
Concentration RSD	79.6 %	61.4 %	103.7 %	12.1 %	262.4 %	63.7 %	10.6 %	51.7 %	5.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.312 ppb	0.669 ppb	-0.003 ppb	1.678 ppb	97.197 %	0.004 ppb	0.003 ppb	101.340 %	0.455 ppb
Concentration per Run 1	0.401 ppb	0.487 ppb	0.005 ppb	1.366 ppb	90.244 %	0.005 ppb	0.006 ppb	94.931 %	0.463 ppb
Concentration per Run 2	0.329 ppb	0.800 ppb	-0.009 ppb	1.805 ppb	102.555 %	0.002 ppb	0.001 ppb	108.584 %	0.432 ppb
Concentration per Run 3	0.208 ppb	0.720 ppb	-0.004 ppb	1.862 ppb	98.791 %	0.003 ppb	0.002 ppb	100.506 %	0.470 ppb
Recovery Percentage 1	62.496 %	13.376 %	-0.026 %	83.881 %		0.909 %	1.515 %		11.374 %
Concentration RSD	31.3 %	24.3 %	265.0 %	16.2 %	6.5 %	38.1 %	78.5 %	6.8 %	4.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.017 ppb	94.639 %	92.485 %	0.088 ppb	0.016 ppb	88.075 %
Concentration per Run 1	0.027 ppb	88.428 %	86.299 %	0.081 ppb	0.016 ppb	88.495 %
Concentration per Run 2	0.019 ppb	98.590 %	96.807 %	0.099 ppb	0.017 ppb	88.706 %
Concentration per Run 3	0.004 ppb	96.898 %	94.349 %	0.084 ppb	0.016 ppb	87.025 %
Recovery Percentage 1	3.347 %			8.784 %	1.641 %	
Concentration RSD	69.2 %	5.8 %	5.9 %	10.7 %	1.7 %	1.0 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index: 65
Analysis label: WG1826010-1 6020TL
Analysis started at: 9/14/2023 11:44:02 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 40
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.812 %	109.666 %	0.000 ppb	22.616 ppb	1.324 ppb	1.021 ppb	32.754 ppb	15.092 ppb	140.170 %
Concentration per Run 1	124.330 %	108.461 %	0.000 ppb	22.442 ppb	1.382 ppb	1.193 ppb	31.318 ppb	11.144 ppb	137.921 %
Concentration per Run 2	119.149 %	108.235 %	0.000 ppb	20.403 ppb	0.843 ppb	0.839 ppb	28.795 ppb	17.745 ppb	137.973 %
Concentration per Run 3	115.956 %	112.303 %	0.000 ppb	25.003 ppb	1.746 ppb	1.031 ppb	38.149 ppb	16.389 ppb	144.617 %
Concentration RSD	3.5 %	2.1 %	211.5 %	10.2 %	34.3 %	17.4 %	14.8 %	23.1 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.002 ppb	0.045 ppb	0.082 ppb	6.765 ppb	0.001 ppb	0.030 ppb	0.035 ppb	-0.481 ppb	117.523 %
Concentration per Run 1	-0.005 ppb	0.053 ppb	0.105 ppb	6.836 ppb	0.000 ppb	0.033 ppb	0.044 ppb	-0.494 ppb	108.174 %
Concentration per Run 2	0.009 ppb	0.046 ppb	0.073 ppb	6.171 ppb	-0.001 ppb	0.034 ppb	0.027 ppb	-0.494 ppb	119.792 %
Concentration per Run 3	0.003 ppb	0.037 ppb	0.069 ppb	7.289 ppb	0.002 ppb	0.021 ppb	0.035 ppb	-0.453 ppb	124.604 %
Concentration RSD	323.0 %	16.7 %	24.3 %	8.3 %	282.3 %	24.0 %	24.7 %	4.9 %	7.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.160 ppb	0.169 ppb	-0.004 ppb	0.958 ppb	108.109 %	0.001 ppb	0.001 ppb	117.921 %	0.356 ppb
Concentration per Run 1	0.183 ppb	0.118 ppb	0.004 ppb	0.726 ppb	104.543 %	0.001 ppb	0.000 ppb	109.800 %	0.347 ppb
Concentration per Run 2	0.109 ppb	0.065 ppb	-0.010 ppb	0.976 ppb	108.343 %	0.001 ppb	0.000 ppb	113.063 %	0.350 ppb
Concentration per Run 3	0.186 ppb	0.324 ppb	-0.005 ppb	1.172 ppb	111.441 %	0.001 ppb	0.002 ppb	130.899 %	0.371 ppb
Concentration RSD	27.3 %	81.1 %	187.4 %	23.3 %	3.2 %	7.6 %	156.5 %	9.6 %	3.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.021 ppb	107.039 %	106.467 %	0.019 ppb	0.003 ppb	132.334 %
Concentration per Run 1	0.026 ppb	105.433 %	101.703 %	0.015 ppb	0.002 ppb	147.402 %
Concentration per Run 2	0.025 ppb	106.050 %	103.271 %	0.022 ppb	0.003 ppb	127.557 %
Concentration per Run 3	0.012 ppb	109.634 %	114.429 %	0.020 ppb	0.005 ppb	122.042 %
Concentration RSD	36.7 %	2.1 %	6.5 %	19.2 %	42.0 %	10.1 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	66	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	zWG1826010-2d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 11:48:39 AM	Vial	41		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	119.303 %	113.859 %	4.872 ppb	1,218.635 ppb	1,119.381 ppb	225.313 ppb	1,172.337 ppb	1,025.363 ppb	134.123 %
Concentration per Run 1	124.309 %	110.947 %	4.728 ppb	1,214.676 ppb	1,121.996 ppb	221.812 ppb	1,188.860 ppb	1,251.485 ppb	143.262 %
Concentration per Run 2	119.346 %	113.583 %	4.816 ppb	1,207.734 ppb	1,084.382 ppb	214.199 ppb	1,130.612 ppb	989.031 ppb	138.490 %
Concentration per Run 3	114.254 %	117.048 %	5.071 ppb	1,233.494 ppb	1,151.764 ppb	239.928 ppb	1,197.540 ppb	835.574 ppb	120.617 %
Concentration RSD	4.2 %	2.7 %	3.7 %	1.1 %	3.0 %	5.9 %	3.1 %	20.5 %	8.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	44.797 ppb	18.212 ppb	49.685 ppb	104.076 ppb	49.174 ppb	47.846 ppb	23.220 ppb	49.308 ppb	124.747 %
Concentration per Run 1	44.544 ppb	18.038 ppb	49.188 ppb	105.613 ppb	50.450 ppb	48.863 ppb	23.669 ppb	49.336 ppb	121.994 %
Concentration per Run 2	44.793 ppb	18.320 ppb	48.838 ppb	102.434 ppb	49.357 ppb	47.877 ppb	24.297 ppb	50.190 ppb	120.628 %
Concentration per Run 3	45.055 ppb	18.277 ppb	51.031 ppb	104.181 ppb	47.714 ppb	46.798 ppb	21.695 ppb	48.398 ppb	131.618 %
Concentration RSD	0.6 %	0.8 %	2.4 %	1.5 %	2.8 %	2.2 %	5.8 %	1.8 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.357 ppb	12.629 ppb	96.539 ppb	83.754 ppb	112.489 %	5.040 ppb	5.187 ppb	119.706 %	36.633 ppb
Concentration per Run 1	12.522 ppb	11.874 ppb	94.923 ppb	86.466 ppb	108.281 %	5.174 ppb	5.259 ppb	115.467 %	36.934 ppb
Concentration per Run 2	12.386 ppb	12.900 ppb	94.457 ppb	83.843 ppb	113.012 %	5.095 ppb	5.162 ppb	116.851 %	36.829 ppb
Concentration per Run 3	12.164 ppb	13.113 ppb	100.237 ppb	80.955 ppb	116.176 %	4.852 ppb	5.138 ppb	126.801 %	36.136 ppb
Concentration RSD	1.5 %	5.2 %	3.3 %	3.3 %	3.5 %	3.3 %	1.2 %	5.2 %	1.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	195.962 ppb	107.085 %	109.418 %	11.450 ppb	51.006 ppb	111.955 %
Concentration per Run 1	189.810 ppb	105.894 %	105.784 %	11.275 ppb	49.841 ppb	113.609 %
Concentration per Run 2	194.039 ppb	107.339 %	106.369 %	11.555 ppb	51.932 ppb	108.370 %
Concentration per Run 3	204.037 ppb	108.022 %	116.100 %	11.519 ppb	51.244 ppb	113.887 %
Concentration RSD	3.7 %	1.0 %	5.3 %	1.3 %	2.1 %	2.8 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index: 67
Analysis label: zl2351877-01 6020TL
Analysis started at: 9/14/2023 11:53:17 AM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 42
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.103 %	100.552 %	0.009 ppb	346,854.266 ppb	29,211.407 ppb	132.010 ppb	24,088.387 ppb	142,954.739 ppb	123.102 %
Concentration per Run 1	101.422 %	99.121 %	0.007 ppb	350,685.319 ppb	28,328.604 ppb	134.064 ppb	26,049.947 ppb	147,329.854 ppb	129.044 %
Concentration per Run 2	96.646 %	98.368 %	0.010 ppb	343,138.127 ppb	30,024.828 ppb	129.587 ppb	22,210.224 ppb	138,585.089 ppb	121.224 %
Concentration per Run 3	90.242 %	104.168 %	0.011 ppb	346,739.351 ppb	29,280.790 ppb	132.380 ppb	24,004.990 ppb	142,949.275 ppb	119.038 %
Concentration RSD	5.8 %	3.1 %	20.8 %	1.1 %	2.9 %	1.7 %	8.0 %	3.1 %	4.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.485 ppb	0.668 ppb	5,780.794 ppb	254.469 ppb	3.175 ppb	2.213 ppb	5.438 ppb	1.342 ppb	107.968 %
Concentration per Run 1	0.492 ppb	0.692 ppb	5,783.592 ppb	259.912 ppb	3.180 ppb	2.346 ppb	5.691 ppb	1.329 ppb	101.503 %
Concentration per Run 2	0.544 ppb	0.690 ppb	5,679.240 ppb	259.015 ppb	3.183 ppb	2.149 ppb	5.376 ppb	1.336 ppb	107.194 %
Concentration per Run 3	0.420 ppb	0.624 ppb	5,879.550 ppb	244.480 ppb	3.162 ppb	2.144 ppb	5.248 ppb	1.361 ppb	115.207 %
Concentration RSD	12.9 %	5.8 %	1.7 %	3.4 %	0.4 %	5.2 %	4.2 %	1.3 %	6.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.056 ppb	0.612 ppb	744.985 ppb	10.005 ppb	94.306 %	0.004 ppb	0.856 ppb	106.758 %	1.939 ppb
Concentration per Run 1	1.034 ppb	0.523 ppb	760.476 ppb	9.397 ppb	88.175 %	0.006 ppb	0.935 ppb	98.946 %	1.897 ppb
Concentration per Run 2	1.079 ppb	0.528 ppb	709.979 ppb	9.961 ppb	94.712 %	0.003 ppb	0.824 ppb	103.783 %	1.968 ppb
Concentration per Run 3	1.056 ppb	0.785 ppb	764.500 ppb	10.656 ppb	100.031 %	0.004 ppb	0.809 ppb	117.544 %	1.950 ppb
Concentration RSD	2.1 %	24.5 %	4.1 %	6.3 %	6.3 %	35.0 %	8.0 %	9.0 %	1.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	84.245 ppb	102.003 %	100.294 %	0.085 ppb	0.442 ppb	84.104 %
Concentration per Run 1	88.033 ppb	98.803 %	94.940 %	0.094 ppb	0.438 ppb	85.373 %
Concentration per Run 2	81.790 ppb	102.126 %	100.304 %	0.083 ppb	0.437 ppb	82.698 %
Concentration per Run 3	82.911 ppb	105.079 %	105.638 %	0.078 ppb	0.451 ppb	84.243 %
Concentration RSD	4.0 %	3.1 %	5.3 %	9.8 %	1.8 %	1.6 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	68	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	zWG1826010-3d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 11:57:55 AM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	107.524 %	112.880 %	5.090 ppb	34,054.671 ppb	4,279.146 ppb	239.808 ppb	3,592.201 ppb	15,378.336 ppb	124.084 %
Concentration per Run 1	112.332 %	110.043 %	5.052 ppb	34,312.187 ppb	4,175.876 ppb	229.567 ppb	3,618.943 ppb	15,412.174 ppb	119.286 %
Concentration per Run 2	107.374 %	114.713 %	5.049 ppb	32,587.918 ppb	4,131.150 ppb	227.343 ppb	3,389.738 ppb	15,189.824 ppb	129.628 %
Concentration per Run 3	102.866 %	113.885 %	5.169 ppb	35,263.907 ppb	4,530.411 ppb	262.513 ppb	3,767.923 ppb	15,533.010 ppb	123.337 %
Concentration RSD	4.4 %	2.2 %	1.3 %	4.0 %	5.1 %	8.2 %	5.3 %	1.1 %	4.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.995 ppb	17.523 ppb	752.719 ppb	127.363 ppb	50.809 ppb	49.178 ppb	24.424 ppb	48.386 ppb	120.542 %
Concentration per Run 1	47.170 ppb	17.846 ppb	773.153 ppb	123.336 ppb	50.871 ppb	50.251 ppb	24.993 ppb	49.211 ppb	117.535 %
Concentration per Run 2	45.049 ppb	17.410 ppb	784.195 ppb	129.844 ppb	52.110 ppb	49.372 ppb	24.690 ppb	48.257 ppb	117.847 %
Concentration per Run 3	45.766 ppb	17.313 ppb	700.809 ppb	128.908 ppb	49.447 ppb	47.911 ppb	23.589 ppb	47.690 ppb	126.244 %
Concentration RSD	2.3 %	1.6 %	6.0 %	2.8 %	2.6 %	2.4 %	3.0 %	1.6 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.849 ppb	12.069 ppb	167.510 ppb	88.212 ppb	106.050 %	5.093 ppb	5.187 ppb	116.155 %	42.689 ppb
Concentration per Run 1	12.827 ppb	11.513 ppb	163.620 ppb	87.835 ppb	103.853 %	5.215 ppb	5.276 ppb	110.176 %	43.985 ppb
Concentration per Run 2	12.840 ppb	12.023 ppb	162.521 ppb	86.317 ppb	105.981 %	5.127 ppb	5.106 ppb	114.839 %	41.790 ppb
Concentration per Run 3	12.880 ppb	12.672 ppb	176.388 ppb	90.484 ppb	108.314 %	4.937 ppb	5.177 ppb	123.450 %	42.293 ppb
Concentration RSD	0.2 %	4.8 %	4.6 %	2.4 %	2.1 %	2.8 %	1.6 %	5.8 %	2.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	202.130 ppb	107.565 %	106.545 %	12.108 ppb	54.072 ppb	100.520 %
Concentration per Run 1	200.688 ppb	105.322 %	102.306 %	11.789 ppb	53.060 ppb	102.992 %
Concentration per Run 2	199.353 ppb	106.057 %	102.985 %	12.347 ppb	54.266 ppb	99.496 %
Concentration per Run 3	206.349 ppb	111.318 %	114.344 %	12.188 ppb	54.892 ppb	99.073 %
Concentration RSD	1.8 %	3.0 %	6.3 %	2.4 %	1.7 %	2.1 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	69	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	zWG1826010-4 6020TL	Rack	1		
Analysis started at:	9/14/2023 12:02:34 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.269 %	99.699 %	0.014 ppb	342,114.517 ppb	28,202.494 ppb	132.785 ppb	23,994.328 ppb	132,333.813 ppb	108.996 %
Concentration per Run 1	89.720 %	96.184 %	0.014 ppb	354,146.978 ppb	28,616.686 ppb	134.913 ppb	25,321.893 ppb	135,861.863 ppb	108.491 %
Concentration per Run 2	84.744 %	101.456 %	0.016 ppb	332,267.995 ppb	27,494.973 ppb	127.461 ppb	23,732.778 ppb	127,378.945 ppb	111.042 %
Concentration per Run 3	81.343 %	101.456 %	0.012 ppb	339,928.578 ppb	28,495.823 ppb	135.981 ppb	22,928.314 ppb	133,760.633 ppb	107.456 %
Concentration RSD	4.9 %	3.1 %	16.0 %	3.2 %	2.2 %	3.5 %	5.1 %	3.3 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.428 ppb	0.679 ppb	5,481.747 ppb	252.402 ppb	3.152 ppb	2.525 ppb	5.573 ppb	1.491 ppb	102.189 %
Concentration per Run 1	0.421 ppb	0.743 ppb	5,689.761 ppb	257.474 ppb	3.307 ppb	2.713 ppb	5.624 ppb	1.652 ppb	98.533 %
Concentration per Run 2	0.425 ppb	0.681 ppb	5,337.172 ppb	255.895 ppb	3.192 ppb	2.451 ppb	5.662 ppb	1.478 ppb	98.711 %
Concentration per Run 3	0.437 ppb	0.613 ppb	5,418.308 ppb	243.837 ppb	2.957 ppb	2.411 ppb	5.434 ppb	1.342 ppb	109.324 %
Concentration RSD	1.9 %	9.6 %	3.4 %	3.0 %	5.7 %	6.5 %	2.2 %	10.4 %	6.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.022 ppb	0.464 ppb	720.634 ppb	10.439 ppb	87.491 %	0.002 ppb	0.885 ppb	100.270 %	1.499 ppb
Concentration per Run 1	1.145 ppb	0.399 ppb	741.620 ppb	9.732 ppb	86.014 %	0.003 ppb	0.917 ppb	94.558 %	1.428 ppb
Concentration per Run 2	0.979 ppb	0.411 ppb	731.722 ppb	10.124 ppb	86.512 %	0.002 ppb	0.867 ppb	98.025 %	1.542 ppb
Concentration per Run 3	0.940 ppb	0.581 ppb	688.561 ppb	11.463 ppb	89.946 %	0.003 ppb	0.869 ppb	108.226 %	1.527 ppb
Concentration RSD	10.6 %	21.9 %	3.9 %	8.7 %	2.4 %	34.6 %	3.2 %	7.1 %	4.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	84.660 ppb	96.314 %	94.560 %	0.070 ppb	0.449 ppb	79.579 %
Concentration per Run 1	86.072 ppb	95.630 %	91.836 %	0.075 ppb	0.426 ppb	83.153 %
Concentration per Run 2	86.605 ppb	94.025 %	93.782 %	0.070 ppb	0.459 ppb	76.640 %
Concentration per Run 3	81.302 ppb	99.287 %	98.063 %	0.065 ppb	0.463 ppb	78.944 %
Concentration RSD	3.4 %	2.8 %	3.4 %	7.4 %	4.5 %	4.1 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	70	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	zWG1826010-5d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 12:07:13 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.588 %	101.758 %	52.770 ppb	39,100.879 ppb	8,819.449 ppb	72.226 ppb	8,064.783 ppb	19,075.482 ppb	109.117 %
Concentration per Run 1	94.843 %	103.716 %	52.115 ppb	38,357.546 ppb	9,024.888 ppb	69.831 ppb	8,090.614 ppb	19,795.531 ppb	114.225 %
Concentration per Run 2	91.090 %	99.874 %	53.151 ppb	38,232.146 ppb	8,941.228 ppb	69.257 ppb	7,886.174 ppb	18,419.358 ppb	111.235 %
Concentration per Run 3	88.830 %	101.682 %	53.046 ppb	40,712.947 ppb	8,492.231 ppb	77.588 ppb	8,217.561 ppb	19,011.555 ppb	101.890 %
Concentration RSD	3.3 %	1.9 %	1.1 %	3.6 %	3.2 %	6.4 %	2.1 %	3.6 %	5.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.708 ppb	43.777 ppb	736.162 ppb	5,235.079 ppb	52.140 ppb	52.729 ppb	48.963 ppb	49.028 ppb	112.101 %
Concentration per Run 1	45.830 ppb	44.002 ppb	744.434 ppb	5,276.078 ppb	55.318 ppb	54.966 ppb	50.247 ppb	50.174 ppb	106.406 %
Concentration per Run 2	45.724 ppb	43.675 ppb	713.309 ppb	5,271.108 ppb	52.408 ppb	52.314 ppb	49.035 ppb	49.257 ppb	109.254 %
Concentration per Run 3	45.570 ppb	43.656 ppb	750.743 ppb	5,158.052 ppb	48.693 ppb	50.908 ppb	47.608 ppb	47.654 ppb	120.642 %
Concentration RSD	0.3 %	0.4 %	2.7 %	1.3 %	6.4 %	3.9 %	2.7 %	2.6 %	6.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.366 ppb	50.444 ppb	117.607 ppb	44.247 ppb	97.300 %	1.519 ppb	48.250 ppb	107.566 %	49.212 ppb
Concentration per Run 1	51.559 ppb	51.318 ppb	115.451 ppb	45.010 ppb	96.584 %	1.533 ppb	49.569 ppb	104.267 %	48.363 ppb
Concentration per Run 2	50.751 ppb	49.719 ppb	115.013 ppb	45.797 ppb	95.499 %	1.514 ppb	47.556 ppb	105.108 %	48.862 ppb
Concentration per Run 3	48.789 ppb	50.296 ppb	122.358 ppb	41.933 ppb	99.818 %	1.511 ppb	47.624 ppb	113.324 %	50.410 ppb
Concentration RSD	2.8 %	1.6 %	3.5 %	4.6 %	2.3 %	0.8 %	2.4 %	4.7 %	2.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.647 ppb	97.354 %	95.862 %	46.418 ppb	49.588 ppb	95.367 %
Concentration per Run 1	57.738 ppb	95.827 %	91.312 %	45.296 ppb	48.535 ppb	97.147 %
Concentration per Run 2	56.968 ppb	96.715 %	93.078 %	48.041 ppb	50.306 ppb	92.835 %
Concentration per Run 3	61.233 ppb	99.522 %	103.196 %	45.918 ppb	49.923 ppb	96.119 %
Concentration RSD	3.9 %	2.0 %	6.7 %	3.1 %	1.9 %	2.4 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	71	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	zWG1826010-6d5 6020TL	Rack	1		
Analysis started at:	9/14/2023 12:11:52 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.272 %	106.854 %	0.006 ppb	66,554.922 ppb	6,314.471 ppb	24.921 ppb	5,149.063 ppb	28,666.257 ppb	114.212 %
Concentration per Run 1	99.213 %	105.222 %	0.001 ppb	69,291.203 ppb	6,452.223 ppb	25.935 ppb	5,642.635 ppb	30,665.930 ppb	116.964 %
Concentration per Run 2	97.281 %	105.298 %	0.008 ppb	65,600.800 ppb	6,128.630 ppb	26.056 ppb	4,998.938 ppb	27,954.848 ppb	112.124 %
Concentration per Run 3	92.322 %	110.043 %	0.009 ppb	64,772.762 ppb	6,362.559 ppb	22.771 ppb	4,805.616 ppb	27,377.994 ppb	113.547 %
Concentration RSD	3.7 %	2.6 %	77.0 %	3.6 %	2.6 %	7.5 %	8.5 %	6.1 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.082 ppb	0.156 ppb	1,277.480 ppb	62.991 ppb	0.647 ppb	0.485 ppb	1.108 ppb	0.461 ppb	109.511 %
Concentration per Run 1	0.082 ppb	0.178 ppb	1,290.267 ppb	60.826 ppb	0.672 ppb	0.539 ppb	1.140 ppb	0.519 ppb	105.652 %
Concentration per Run 2	0.091 ppb	0.156 ppb	1,267.272 ppb	61.788 ppb	0.626 ppb	0.465 ppb	1.091 ppb	0.444 ppb	112.716 %
Concentration per Run 3	0.073 ppb	0.135 ppb	1,274.900 ppb	66.360 ppb	0.645 ppb	0.451 ppb	1.092 ppb	0.420 ppb	110.165 %
Concentration RSD	11.1 %	13.5 %	0.9 %	4.7 %	3.6 %	9.8 %	2.5 %	11.3 %	3.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.469 ppb	0.674 ppb	135.052 ppb	3.181 ppb	97.311 %	0.001 ppb	0.178 ppb	103.813 %	0.391 ppb
Concentration per Run 1	0.539 ppb	0.553 ppb	136.879 ppb	2.592 ppb	98.532 %	0.000 ppb	0.183 ppb	100.330 %	0.377 ppb
Concentration per Run 2	0.394 ppb	0.779 ppb	131.984 ppb	3.285 ppb	97.412 %	0.001 ppb	0.172 ppb	105.924 %	0.391 ppb
Concentration per Run 3	0.474 ppb	0.691 ppb	136.293 ppb	3.665 ppb	95.990 %	0.001 ppb	0.177 ppb	105.185 %	0.404 ppb
Concentration RSD	15.5 %	16.8 %	2.0 %	17.1 %	1.3 %	67.7 %	3.2 %	2.9 %	3.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	16.483 ppb	97.983 %	95.747 %	0.204 ppb	0.095 ppb	91.024 %
Concentration per Run 1	16.637 ppb	96.459 %	95.645 %	0.159 ppb	0.094 ppb	94.165 %
Concentration per Run 2	16.777 ppb	98.791 %	94.132 %	0.242 ppb	0.092 ppb	89.431 %
Concentration per Run 3	16.034 ppb	98.698 %	97.464 %	0.212 ppb	0.099 ppb	89.476 %
Concentration RSD	2.4 %	1.3 %	1.7 %	20.6 %	3.8 %	3.0 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index: 72
Analysis label: zl2351877-02 6020TL
Analysis started at: 9/14/2023 12:16:31 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 47
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	111.965 %	116.496 %	0.000 ppb	64.604 ppb	1.431 ppb	10.450 ppb	35.721 ppb	15.095 ppb	130.345 %
Concentration per Run 1	117.762 %	111.550 %	-0.001 ppb	72.113 ppb	1.476 ppb	10.849 ppb	41.150 ppb	18.787 ppb	136.652 %
Concentration per Run 2	110.697 %	115.994 %	0.000 ppb	60.162 ppb	1.442 ppb	10.025 ppb	35.500 ppb	16.424 ppb	119.890 %
Concentration per Run 3	107.435 %	121.944 %	0.002 ppb	61.536 ppb	1.375 ppb	10.476 ppb	30.512 ppb	10.074 ppb	134.494 %
Concentration RSD	4.7 %	4.5 %	781.2 %	10.1 %	3.6 %	3.9 %	14.9 %	29.8 %	7.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.008 ppb	0.224 ppb	0.463 ppb	9.438 ppb	0.002 ppb	0.161 ppb	0.143 ppb	-0.480 ppb	118.217 %
Concentration per Run 1	-0.001 ppb	0.223 ppb	0.490 ppb	10.379 ppb	0.000 ppb	0.176 ppb	0.122 ppb	-0.457 ppb	114.000 %
Concentration per Run 2	0.006 ppb	0.214 ppb	0.469 ppb	9.079 ppb	0.005 ppb	0.153 ppb	0.145 ppb	-0.474 ppb	117.388 %
Concentration per Run 3	0.019 ppb	0.235 ppb	0.428 ppb	8.856 ppb	0.001 ppb	0.153 ppb	0.162 ppb	-0.508 ppb	123.264 %
Concentration RSD	122.9 %	4.6 %	6.8 %	8.7 %	128.6 %	8.1 %	13.7 %	5.4 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.193 ppb	0.145 ppb	0.187 ppb	0.999 ppb	110.263 %	0.001 ppb	0.000 ppb	108.641 %	0.391 ppb
Concentration per Run 1	0.228 ppb	0.110 ppb	0.206 ppb	0.648 ppb	109.582 %	0.001 ppb	0.000 ppb	106.884 %	0.344 ppb
Concentration per Run 2	0.223 ppb	0.226 ppb	0.177 ppb	1.023 ppb	107.762 %	0.001 ppb	0.001 ppb	106.160 %	0.414 ppb
Concentration per Run 3	0.127 ppb	0.099 ppb	0.178 ppb	1.324 ppb	113.446 %	0.000 ppb	0.000 ppb	112.878 %	0.416 ppb
Concentration RSD	29.4 %	48.5 %	9.0 %	33.9 %	2.6 %	57.6 %	156.5 %	3.4 %	10.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.287 ppb	102.535 %	98.607 %	0.052 ppb	0.010 ppb	105.816 %
Concentration per Run 1	0.285 ppb	101.307 %	100.528 %	0.029 ppb	0.010 ppb	111.031 %
Concentration per Run 2	0.282 ppb	100.948 %	92.104 %	0.062 ppb	0.010 ppb	102.878 %
Concentration per Run 3	0.293 ppb	105.351 %	103.188 %	0.065 ppb	0.009 ppb	103.540 %
Concentration RSD	2.0 %	2.4 %	5.9 %	38.2 %	3.6 %	4.3 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	73	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 12:21:10 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	110.675 %	114.588 %	58.307 ppb	6,552.836 ppb	6,508.753 ppb	65.368 ppb	6,818.435 ppb	6,062.331 ppb	150.691 %
Concentration per Run 1	115.017 %	113.960 %	57.263 ppb	6,707.795 ppb	6,736.985 ppb	68.417 ppb	7,205.491 ppb	6,328.491 ppb	154.873 %
Concentration per Run 2	108.057 %	109.290 %	59.081 ppb	6,692.978 ppb	6,711.911 ppb	64.214 ppb	6,750.338 ppb	6,143.356 ppb	147.889 %
Concentration per Run 3	108.951 %	120.513 %	58.578 ppb	6,257.733 ppb	6,077.362 ppb	63.472 ppb	6,499.477 ppb	5,715.148 ppb	149.313 %
Recovery Percentage 1			97.179 %	109.214 %	108.479 %	108.946 %	113.641 %	101.039 %	
Concentration RSD	3.4 %	4.9 %	1.6 %	3.9 %	5.7 %	4.1 %	5.2 %	5.2 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.237 ppb	55.837 ppb	60.768 ppb	6,358.616 ppb	63.516 ppb	61.637 ppb	59.626 ppb	59.800 ppb	118.777 %
Concentration per Run 1	58.672 ppb	57.512 ppb	63.339 ppb	6,462.021 ppb	64.481 ppb	64.609 ppb	61.353 ppb	62.132 ppb	116.638 %
Concentration per Run 2	58.961 ppb	57.926 ppb	60.792 ppb	6,516.187 ppb	65.155 ppb	63.532 ppb	62.059 ppb	60.124 ppb	112.332 %
Concentration per Run 3	54.077 ppb	52.071 ppb	58.174 ppb	6,097.640 ppb	60.911 ppb	56.769 ppb	55.466 ppb	57.145 ppb	127.362 %
Recovery Percentage 1	95.394 %	93.061 %	101.280 %	105.977 %	105.859 %	102.728 %	99.377 %	99.667 %	
Concentration RSD	4.8 %	5.9 %	4.3 %	3.6 %	3.6 %	6.9 %	6.1 %	4.2 %	6.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.555 ppb	58.998 ppb	57.065 ppb	54.446 ppb	109.128 %	60.053 ppb	58.064 ppb	111.728 %	56.302 ppb
Concentration per Run 1	61.885 ppb	60.289 ppb	58.781 ppb	55.520 ppb	108.311 %	60.794 ppb	58.937 ppb	109.813 %	57.163 ppb
Concentration per Run 2	60.881 ppb	59.354 ppb	56.407 ppb	54.440 ppb	104.342 %	60.608 ppb	58.212 ppb	106.913 %	56.188 ppb
Concentration per Run 3	58.901 ppb	57.350 ppb	56.007 ppb	53.377 ppb	114.729 %	58.756 ppb	57.043 ppb	118.458 %	55.555 ppb
Recovery Percentage 1	100.926 %	98.330 %	95.109 %	90.743 %		100.088 %	96.773 %		93.837 %
Concentration RSD	2.5 %	2.5 %	2.6 %	2.0 %	4.8 %	1.9 %	1.6 %	5.4 %	1.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.498 ppb	105.449 %	100.073 %	57.590 ppb	58.219 ppb	103.200 %
Concentration per Run 1	59.249 ppb	105.508 %	98.701 %	54.954 ppb	54.805 ppb	105.960 %
Concentration per Run 2	58.480 ppb	101.718 %	95.724 %	58.705 ppb	59.688 ppb	100.998 %
Concentration per Run 3	57.766 ppb	109.121 %	105.794 %	59.112 ppb	60.165 ppb	102.642 %
Recovery Percentage 1	97.497 %			95.984 %	97.032 %	
Concentration RSD	1.3 %	3.5 %	5.2 %	4.0 %	5.1 %	2.4 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	74	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 12:25:53 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	115.002 %	115.466 %	0.000 ppb	37.222 ppb	-0.606 ppb	-0.264 ppb	36.633 ppb	2.586 ppb	133.932 %
Concentration per Run 1	118.761 %	112.529 %	0.000 ppb	39.159 ppb	-0.650 ppb	-0.191 ppb	34.950 ppb	0.289 ppb	137.267 %
Concentration per Run 2	115.650 %	115.466 %	0.002 ppb	35.969 ppb	-0.605 ppb	-0.434 ppb	40.034 ppb	3.829 ppb	131.761 %
Concentration per Run 3	110.594 %	118.404 %	-0.002 ppb	36.538 ppb	-0.564 ppb	-0.167 ppb	34.914 ppb	3.638 ppb	132.767 %
Recovery Percentage 1			0.021 %	37.222 %	-0.866 %	-2.638 %	36.633 %	2.586 %	
Concentration RSD	3.6 %	2.5 %	1,937.4 %	4.6 %	7.0 %	55.9 %	8.0 %	77.0 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.011 ppb	-0.002 ppb	0.052 ppb	14.358 ppb	0.001 ppb	0.029 ppb	0.014 ppb	0.233 ppb	120.844 %
Concentration per Run 1	0.002 ppb	0.009 ppb	0.057 ppb	15.333 ppb	0.001 ppb	0.032 ppb	0.015 ppb	0.265 ppb	115.726 %
Concentration per Run 2	0.013 ppb	0.000 ppb	0.079 ppb	13.153 ppb	0.001 ppb	0.031 ppb	0.019 ppb	0.223 ppb	120.191 %
Concentration per Run 3	0.019 ppb	-0.015 ppb	0.021 ppb	14.589 ppb	0.001 ppb	0.024 ppb	0.007 ppb	0.211 ppb	126.614 %
Recovery Percentage 1	0.228 %	-0.226 %	5.235 %	28.716 %	0.199 %	1.442 %	1.355 %	4.660 %	
Concentration RSD	78.6 %	541.9 %	56.5 %	7.7 %	32.7 %	15.6 %	45.9 %	12.2 %	4.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.208 ppb	0.672 ppb	-0.010 ppb	1.583 ppb	113.470 %	0.003 ppb	0.000 ppb	116.146 %	0.327 ppb
Concentration per Run 1	0.227 ppb	0.387 ppb	0.002 ppb	1.196 ppb	109.482 %	0.005 ppb	0.001 ppb	110.145 %	0.302 ppb
Concentration per Run 2	0.190 ppb	0.787 ppb	-0.014 ppb	1.634 ppb	114.410 %	0.002 ppb	0.000 ppb	119.777 %	0.323 ppb
Concentration per Run 3	0.209 ppb	0.841 ppb	-0.018 ppb	1.920 ppb	116.517 %	0.003 ppb	0.000 ppb	118.515 %	0.355 ppb
Recovery Percentage 1	41.699 %	13.434 %	-0.101 %	79.157 %		0.872 %	0.222 %		8.165 %
Concentration RSD	9.0 %	36.9 %	106.2 %	23.0 %	3.2 %	32.7 %	164.3 %	4.5 %	8.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.009 ppb	105.002 %	103.519 %	0.097 ppb	0.013 ppb	102.107 %
Concentration per Run 1	0.007 ppb	101.038 %	96.419 %	0.081 ppb	0.013 ppb	101.309 %
Concentration per Run 2	0.003 ppb	107.323 %	106.677 %	0.112 ppb	0.013 ppb	100.635 %
Concentration per Run 3	0.017 ppb	106.643 %	107.463 %	0.097 ppb	0.011 ppb	104.376 %
Recovery Percentage 1	1.777 %			9.656 %	1.260 %	
Concentration RSD	82.4 %	3.3 %	6.0 %	15.8 %	8.3 %	2.0 %

Alpha ICPMSQ Data

9/14/2023 7:46:50 PM

Analysis index:	75	User name	ALPHALAB\Metals-Instrument	Comment	CCV/MCCV
Analysis label:	xCCV	Rack	0		
Analysis started at:	9/14/2023 12:32:21 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	116.599 %	121.994 %	59.384 ppb	6,345.521 ppb	6,274.323 ppb	62.939 ppb	6,743.634 ppb	6,413.353 ppb	157.308 %
Concentration per Run 1	120.244 %	120.287 %	58.779 ppb	6,384.216 ppb	6,489.462 ppb	63.202 ppb	6,754.909 ppb	6,440.263 ppb	161.451 %
Concentration per Run 2	118.033 %	122.095 %	59.184 ppb	6,117.249 ppb	6,128.840 ppb	62.067 ppb	6,668.810 ppb	6,370.129 ppb	155.368 %
Concentration per Run 3	111.519 %	123.601 %	60.190 ppb	6,535.098 ppb	6,204.667 ppb	63.549 ppb	6,807.184 ppb	6,429.668 ppb	155.104 %
Recovery Percentage 1			98.973 %	105.759 %	104.572 %	104.899 %	112.394 %	106.889 %	
Concentration RSD	3.9 %	1.4 %	1.2 %	3.3 %	3.0 %	1.2 %	1.0 %	0.6 %	2.3 %

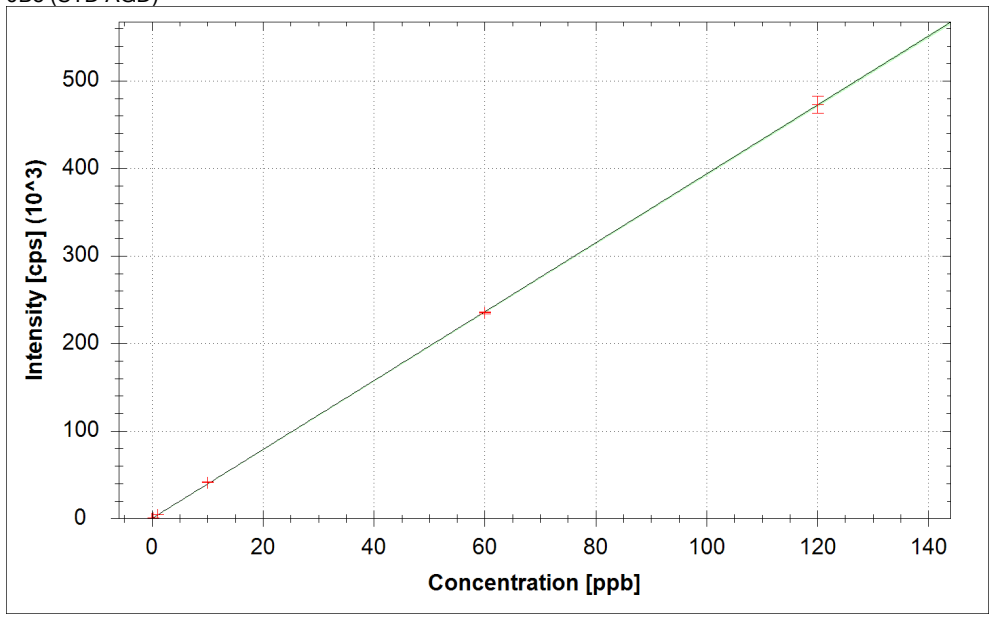
Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	58.179 ppb	57.118 ppb	60.026 ppb	6,239.980 ppb	61.529 ppb	62.066 ppb	57.704 ppb	59.720 ppb	130.844 %
Concentration per Run 1	59.315 ppb	59.987 ppb	62.576 ppb	6,609.146 ppb	62.552 ppb	63.217 ppb	60.095 ppb	59.308 ppb	123.789 %
Concentration per Run 2	57.058 ppb	55.729 ppb	57.019 ppb	6,081.593 ppb	61.346 ppb	63.222 ppb	57.606 ppb	60.662 ppb	128.961 %
Concentration per Run 3	58.165 ppb	55.638 ppb	60.483 ppb	6,029.201 ppb	60.689 ppb	59.760 ppb	55.411 ppb	59.190 ppb	139.781 %
Recovery Percentage 1	96.966 %	95.197 %	100.043 %	104.000 %	102.549 %	103.443 %	96.173 %	99.533 %	
Concentration RSD	1.9 %	4.4 %	4.7 %	5.1 %	1.5 %	3.2 %	4.1 %	1.4 %	6.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.002 ppb	60.831 ppb	60.039 ppb	53.930 ppb	114.587 %	60.257 ppb	59.733 ppb	118.896 %	58.382 ppb
Concentration per Run 1	62.161 ppb	60.593 ppb	58.715 ppb	51.864 ppb	114.603 %	61.751 ppb	61.628 ppb	112.782 %	59.502 ppb
Concentration per Run 2	58.607 ppb	58.739 ppb	58.679 ppb	54.774 ppb	111.170 %	60.585 ppb	60.013 ppb	115.757 %	57.662 ppb
Concentration per Run 3	59.238 ppb	63.159 ppb	62.724 ppb	55.151 ppb	117.988 %	58.434 ppb	57.559 ppb	128.149 %	57.981 ppb
Recovery Percentage 1	100.003 %	101.384 %	100.065 %	89.883 %		100.428 %	99.555 %		97.303 %
Concentration RSD	3.2 %	3.6 %	3.9 %	3.3 %	3.0 %	2.8 %	3.4 %	6.9 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.971 ppb	111.730 %	107.234 %	55.037 ppb	55.428 ppb	115.026 %
Concentration per Run 1	63.453 ppb	111.186 %	102.291 %	51.444 ppb	53.496 ppb	122.009 %
Concentration per Run 2	59.876 ppb	110.530 %	106.835 %	56.314 ppb	56.466 ppb	112.138 %
Concentration per Run 3	62.585 ppb	113.474 %	112.575 %	57.354 ppb	56.321 ppb	110.930 %
Recovery Percentage 1	103.285 %			91.729 %	92.380 %	
Concentration RSD	3.0 %	1.4 %	4.8 %	5.7 %	3.0 %	5.3 %

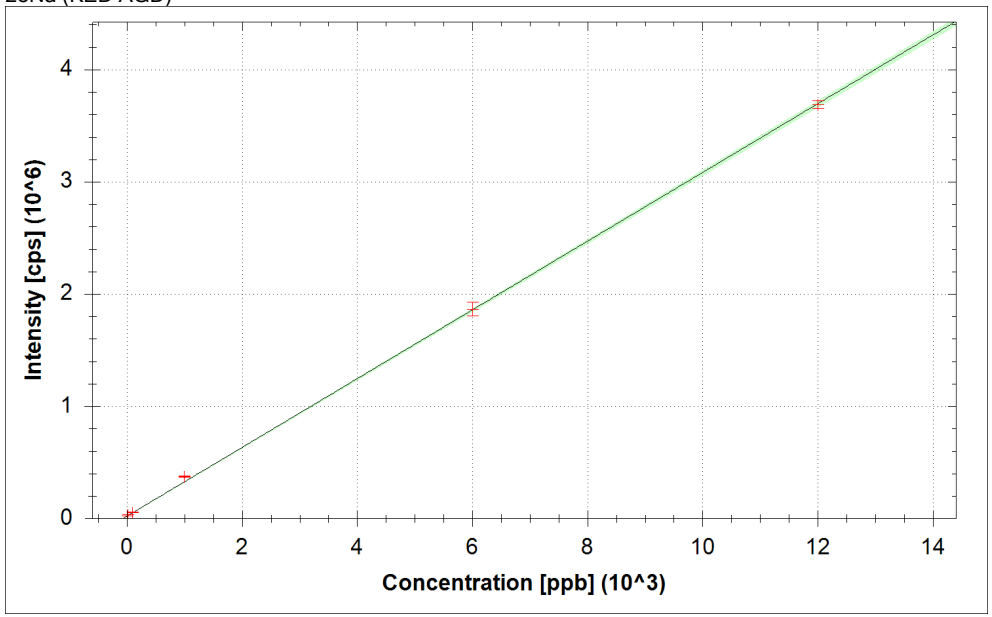
Calibration Curves:

9Be (STD AGD)



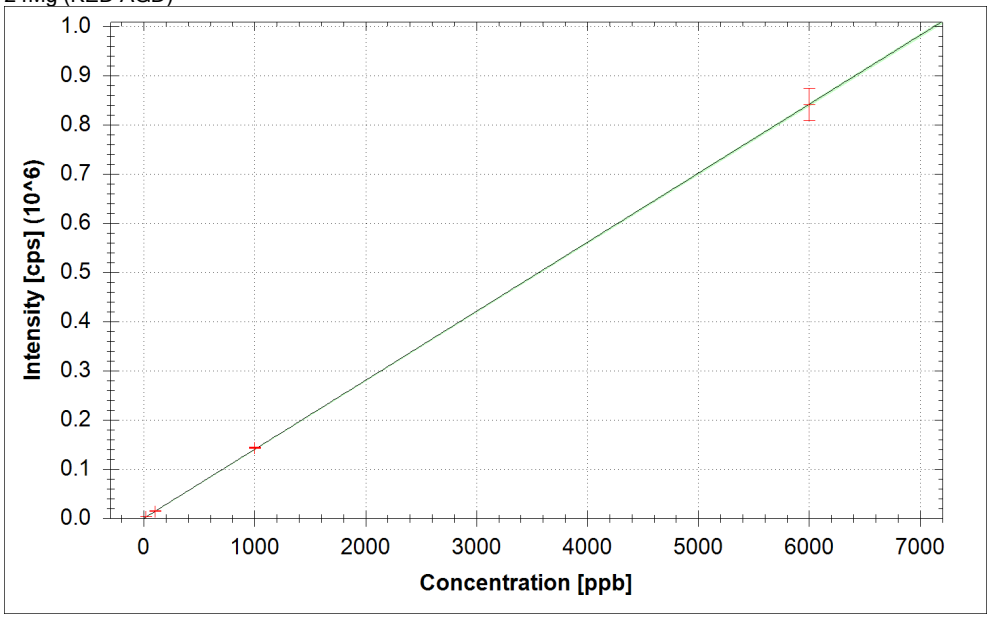
f(x) = 3934.9110*x + 27.5439
R² = 1.0000
BEC = 0.007 ppb
LoD = 0.0058 ppb

23Na (KED AGD)



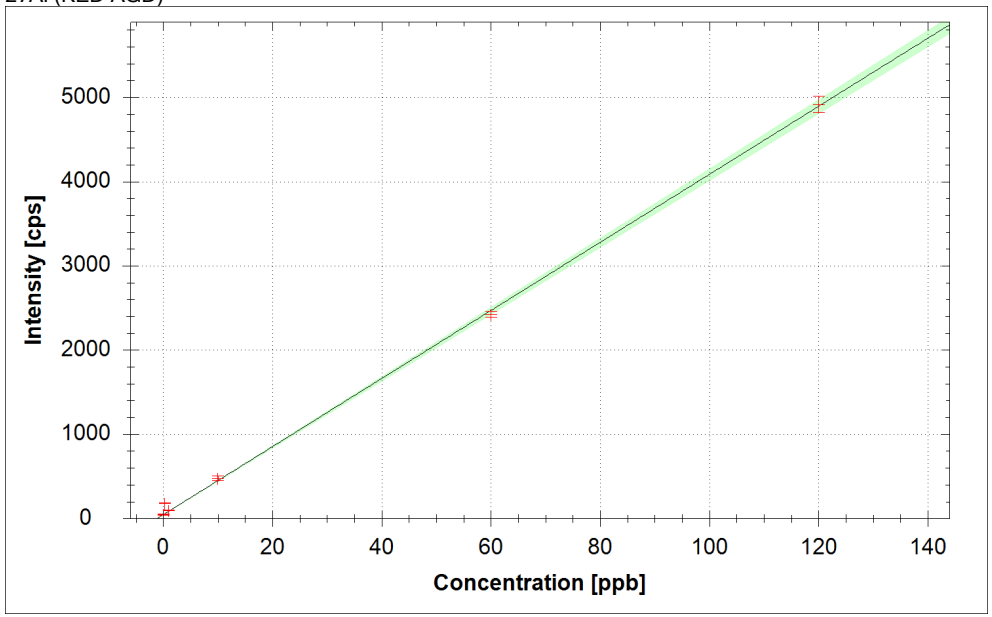
f(x) = 306.2289*x + 20349.9452
R² = 0.9998
BEC = 66.453 ppb
LoD = 6.8946 ppb

24Mg (KED AGD)



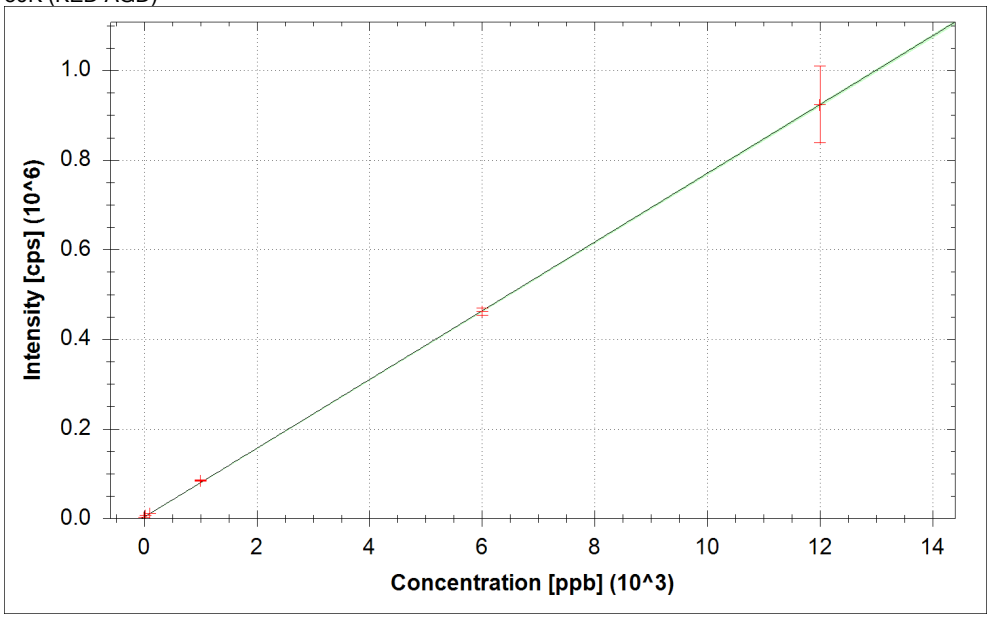
f(x) = 140.3108*x + 203.1356
R² = 1.0000
BEC = 1.448 ppb
LoD = 0.5850 ppb

27Al (KED AGD)



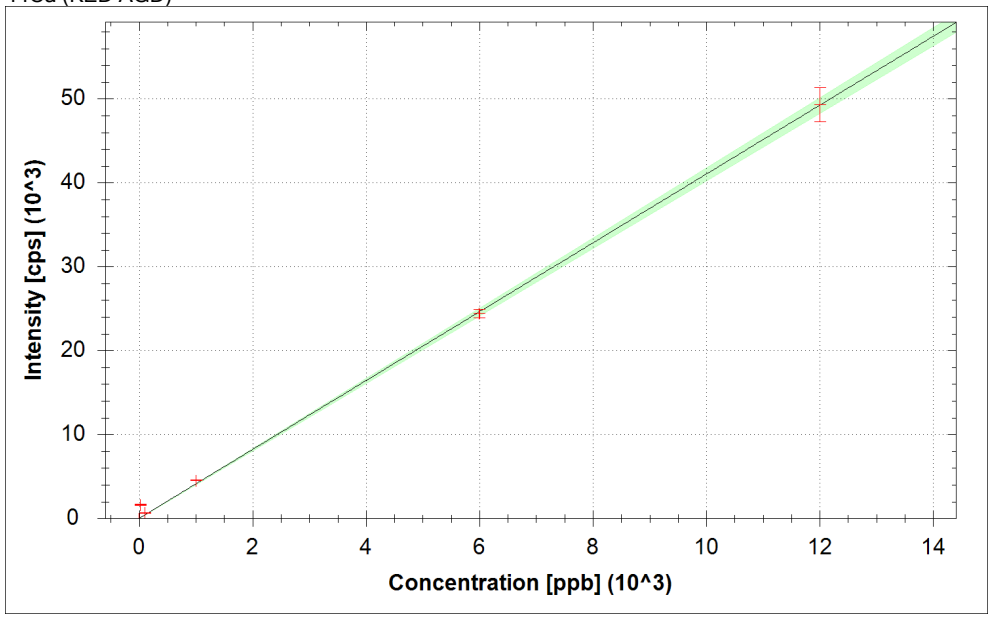
f(x) = 40.3969*x + 44.9267
R² = 0.9990
BEC = 1.112 ppb
LoD = 0.7507 ppb

39K (KED AGD)



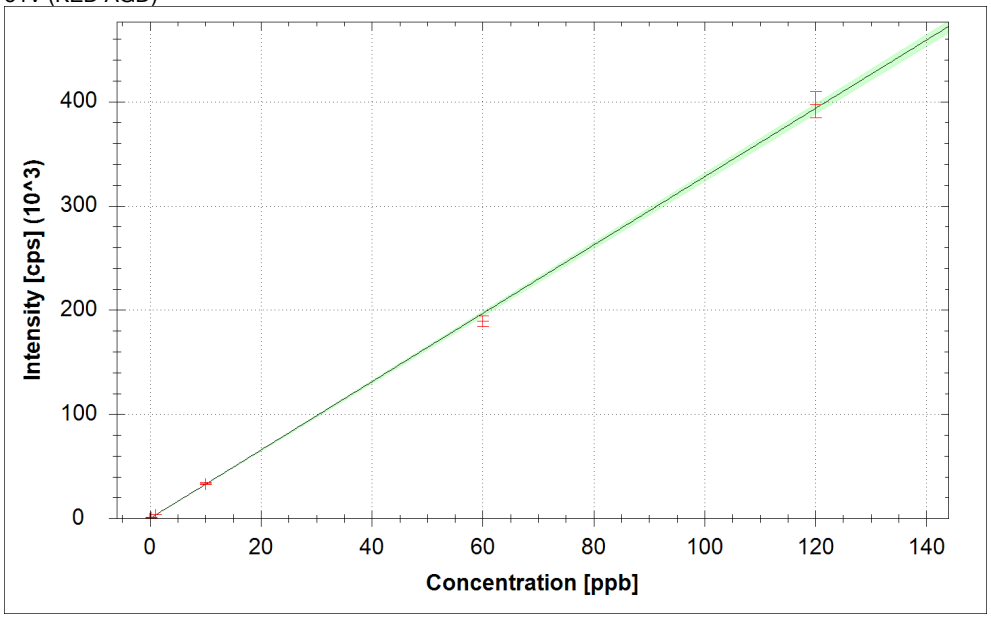
f(x) = 76.6795*x + 3138.4830
R² = 1.0000
BEC = 40.930 ppb
LoD = 3.0245 ppb

44Ca (KED AGD)



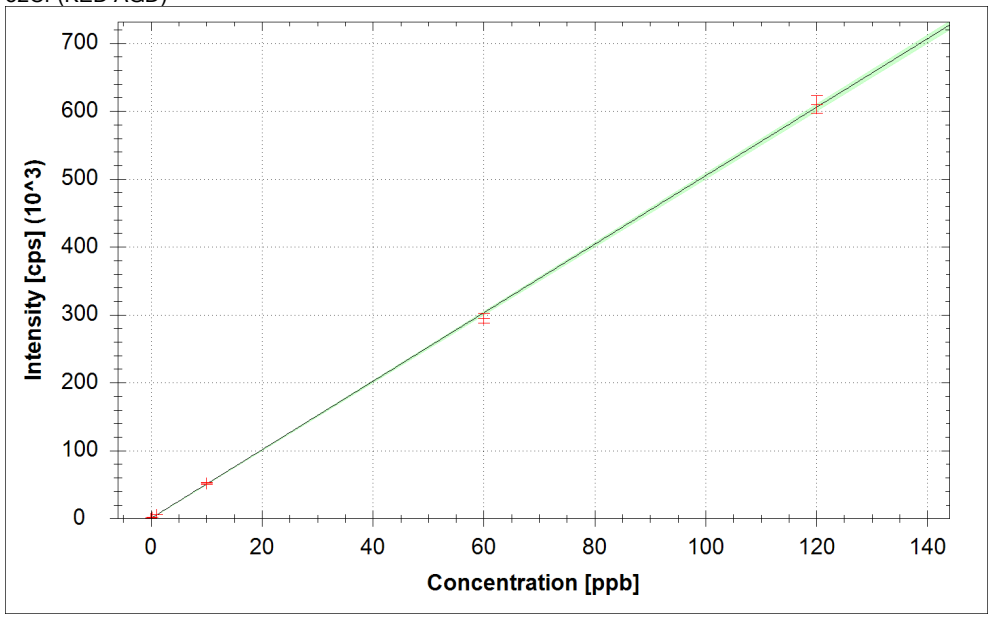
f(x) = 4.1012*x + 12.0841
R² = 0.9987
BEC = 2.946 ppb
LoD = 2.5542 ppb

51V (KED AGD)



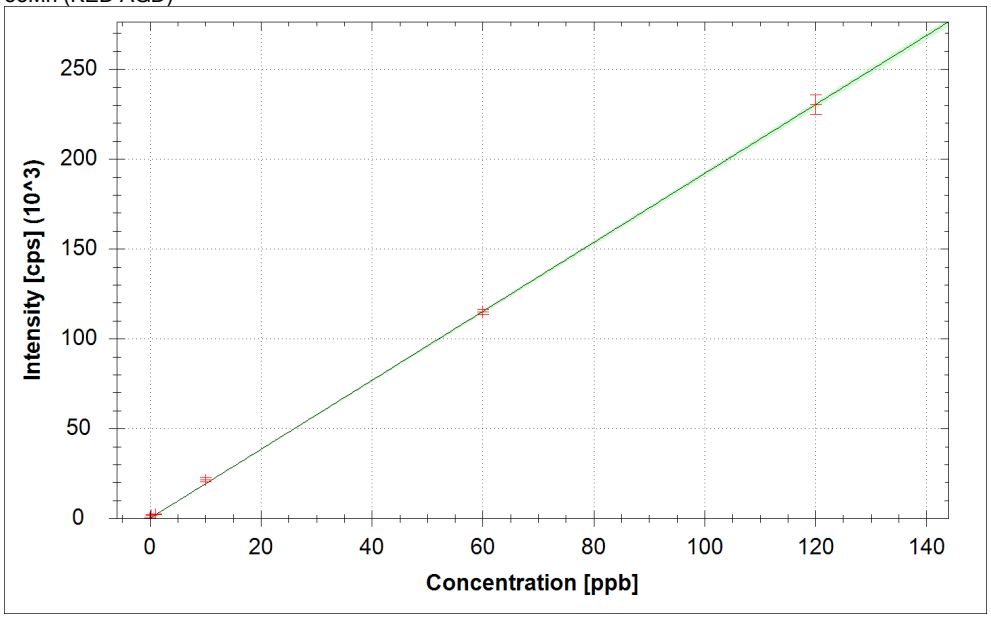
f(x) = 3277.9837*x + 44.2900
R² = 0.9995
BEC = 0.014 ppb
LoD = 0.0084 ppb

52Cr (KED AGD)



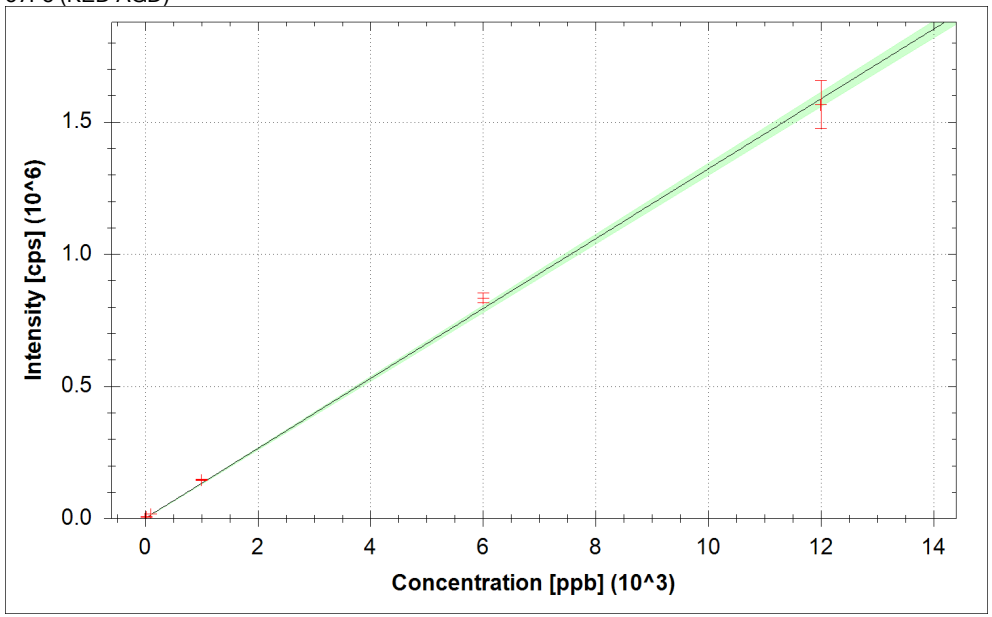
f(x) = 5044.9578*x + 190.7650
R² = 0.9997
BEC = 0.038 ppb
LoD = 0.0105 ppb

55Mn (KED AGD)



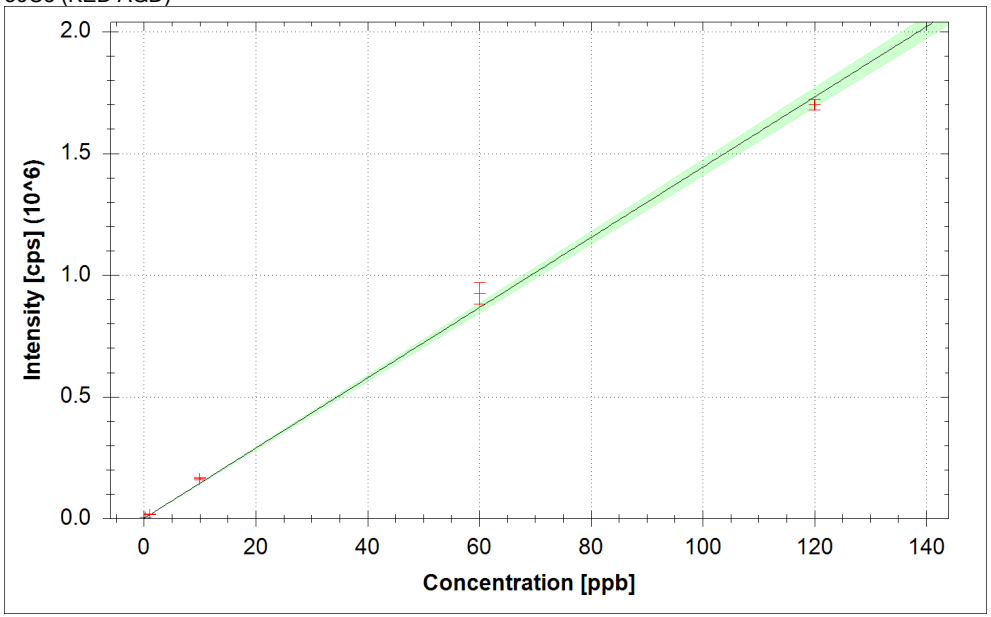
f(x) = 1917.9337*x + 107.5325
R² = 0.9998
BEC = 0.056 ppb
LoD = 0.0684 ppb

57Fe (KED AGD)



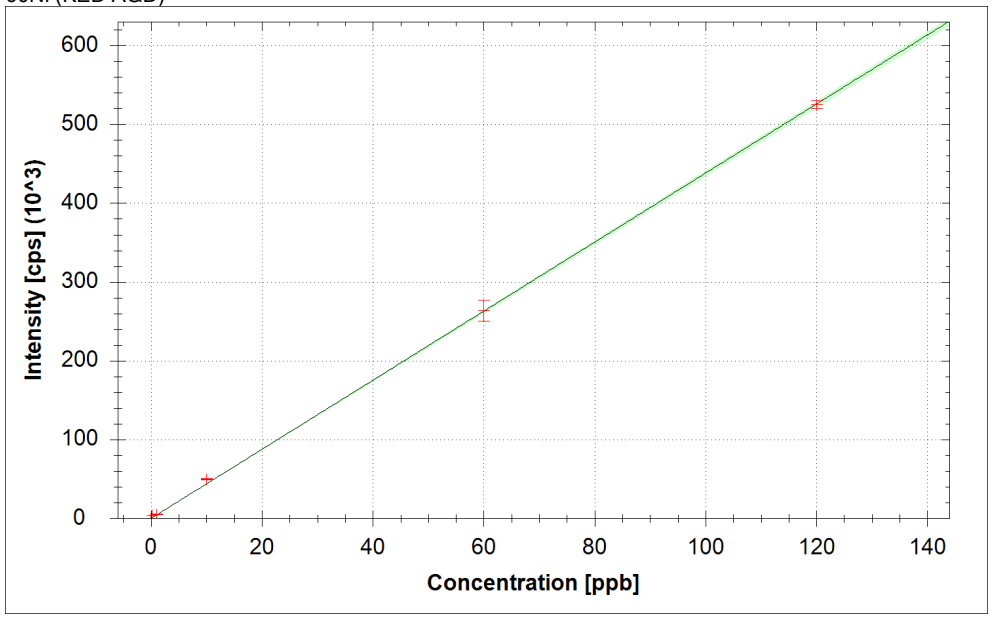
f(x) = 132.1612*x + 314.7589
R² = 0.9989
BEC = 2.382 ppb
LoD = 1.3336 ppb

59Co (KED AGD)



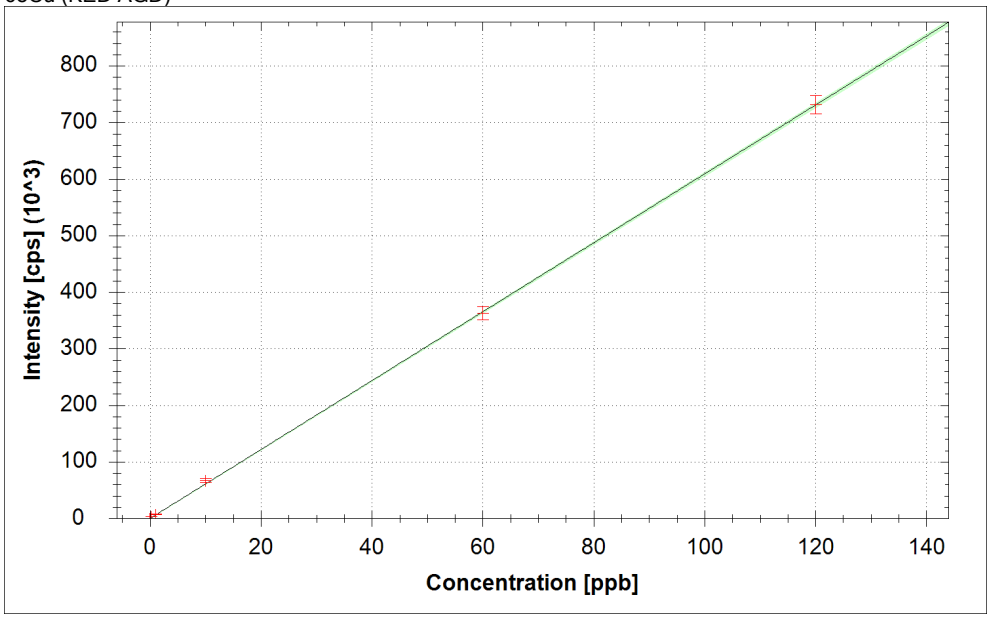
f(x) = 14423.1469*x + 42.5531
R² = 0.9981
BEC = 0.003 ppb
LoD = 0.0020 ppb

60Ni (KED AGD)



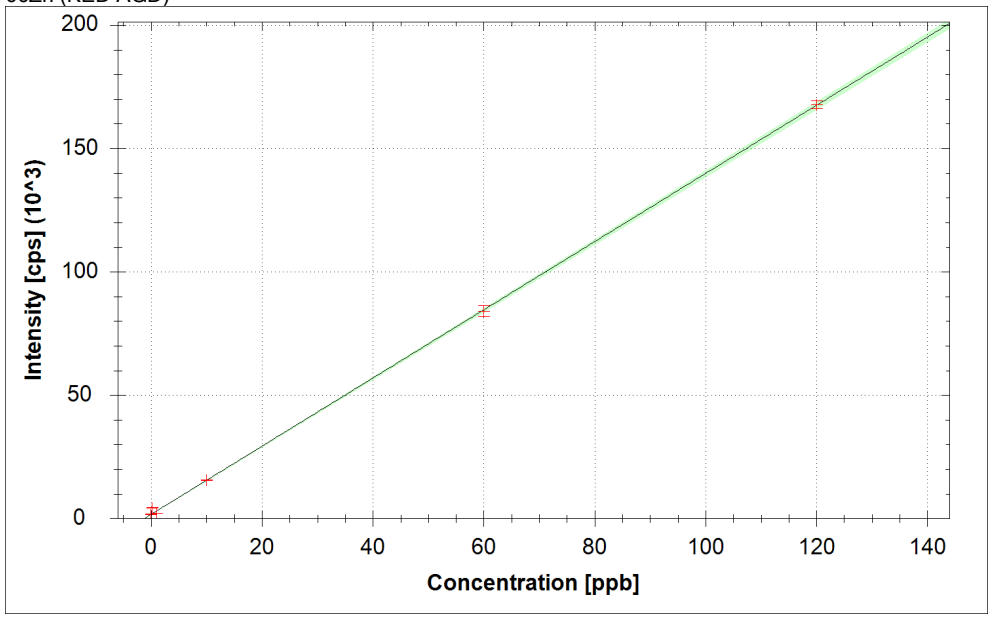
f(x) = 4378.8668*x + 127.7746
R² = 0.9998
BEC = 0.029 ppb
LoD = 0.0298 ppb

65Cu (KED AGD)



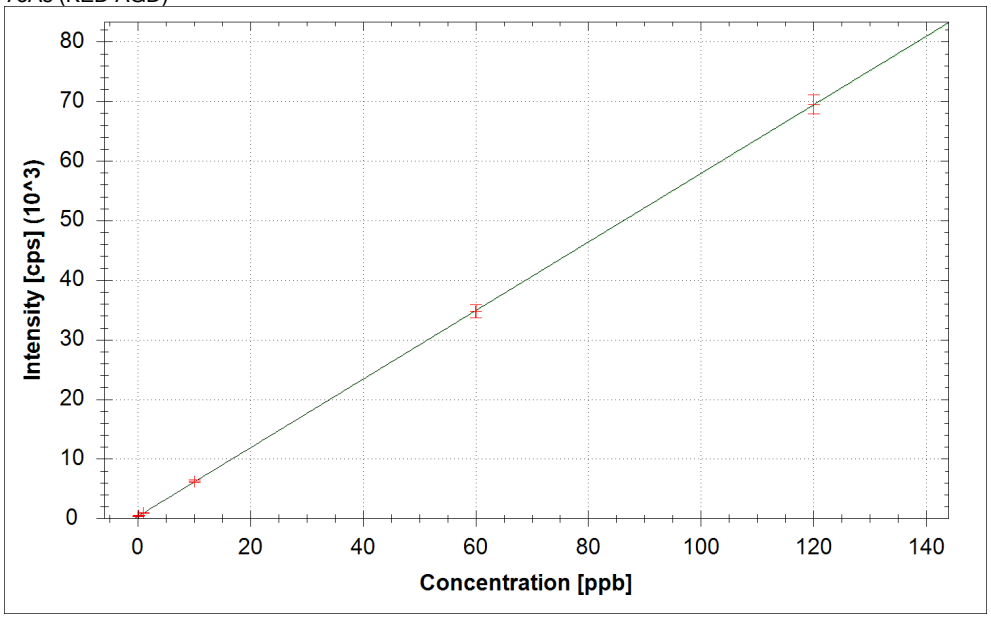
f(x) = 6086.5787*x + 68.2588
R² = 0.9999
BEC = 0.011 ppb
LoD = 0.0085 ppb

66Zn (KED AGD)



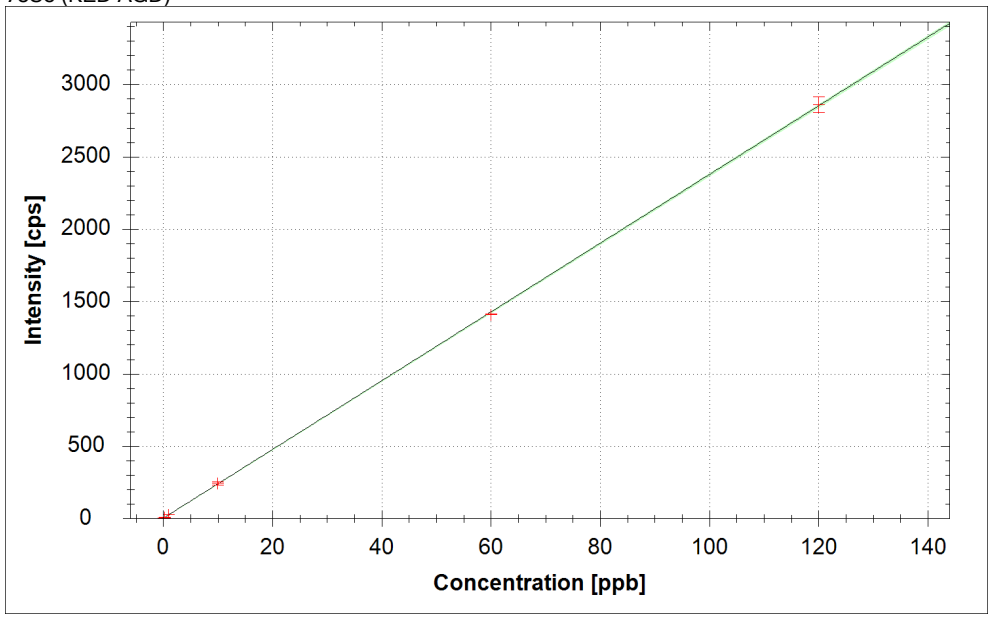
f(x) = 1381.7091*x + 1649.9389
R² = 0.9997
BEC = 1.194 ppb
LoD = 0.2360 ppb

75As (KED AGD)



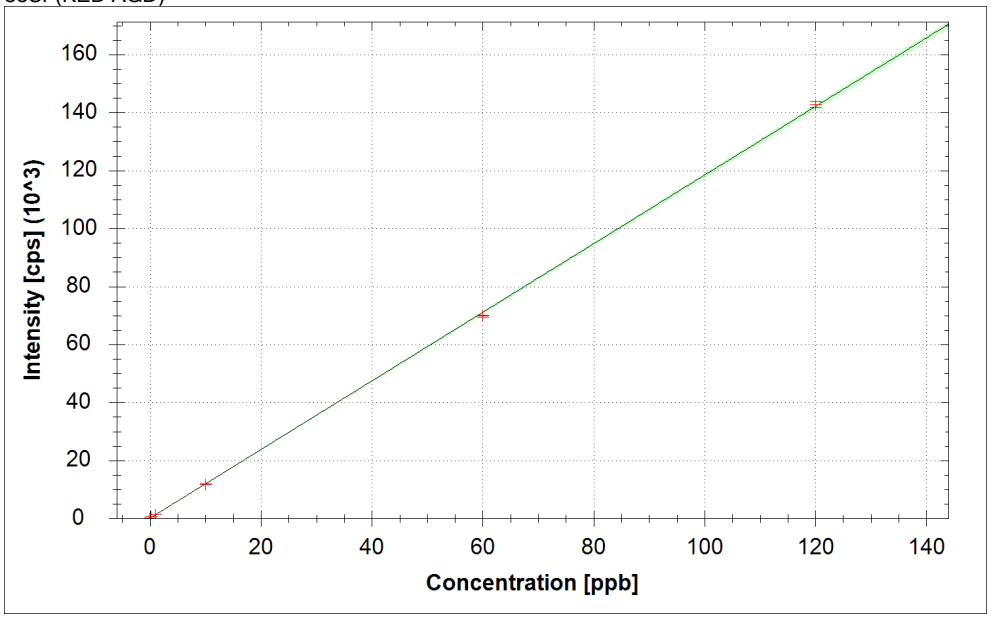
f(x) = 575.3574*x + 354.0087
R² = 1.0000
BEC = 0.615 ppb
LoD = 0.1293 ppb

78Se (KED AGD)



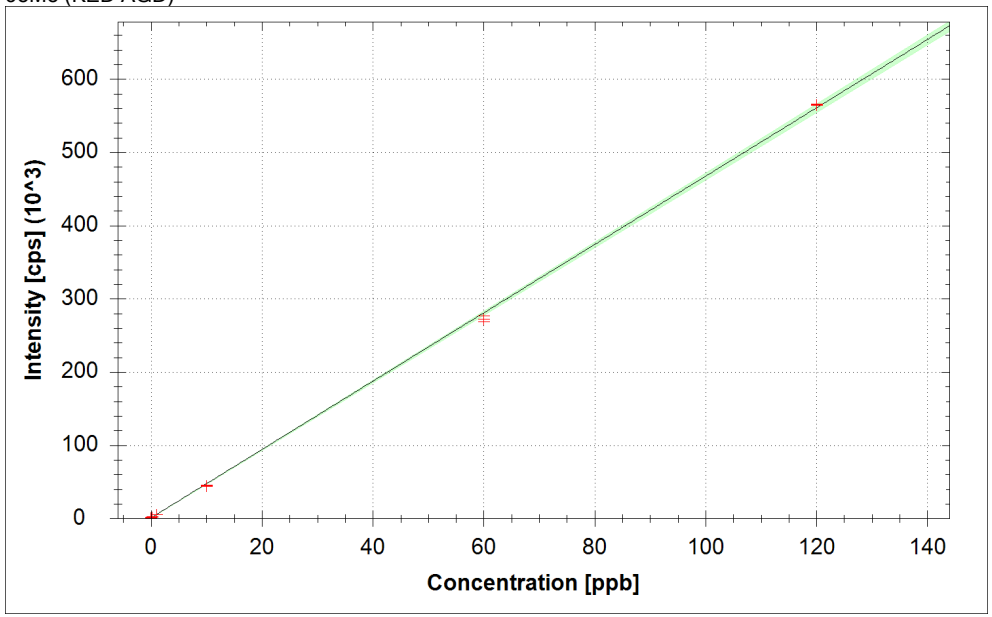
f(x) = 23.7434*x + 1.8453
R² = 0.9999
BEC = 0.078 ppb
LoD = 0.1279 ppb

88Sr (KED AGD)



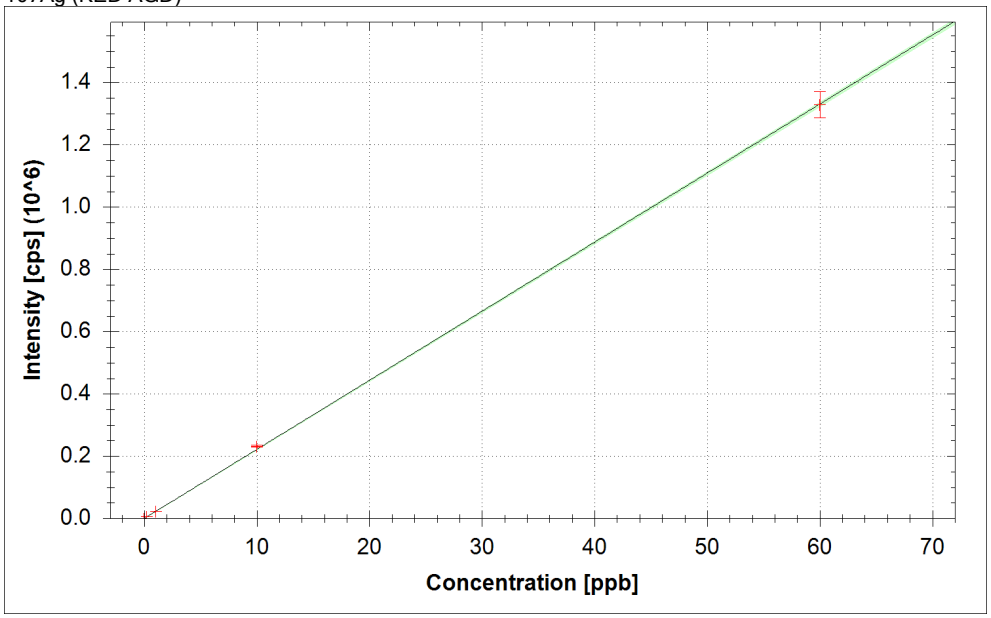
f(x) = 1182.6254*x + 119.9646
R² = 0.9999
BEC = 0.101 ppb
LoD = 0.0121 ppb

95Mo (KED AGD)



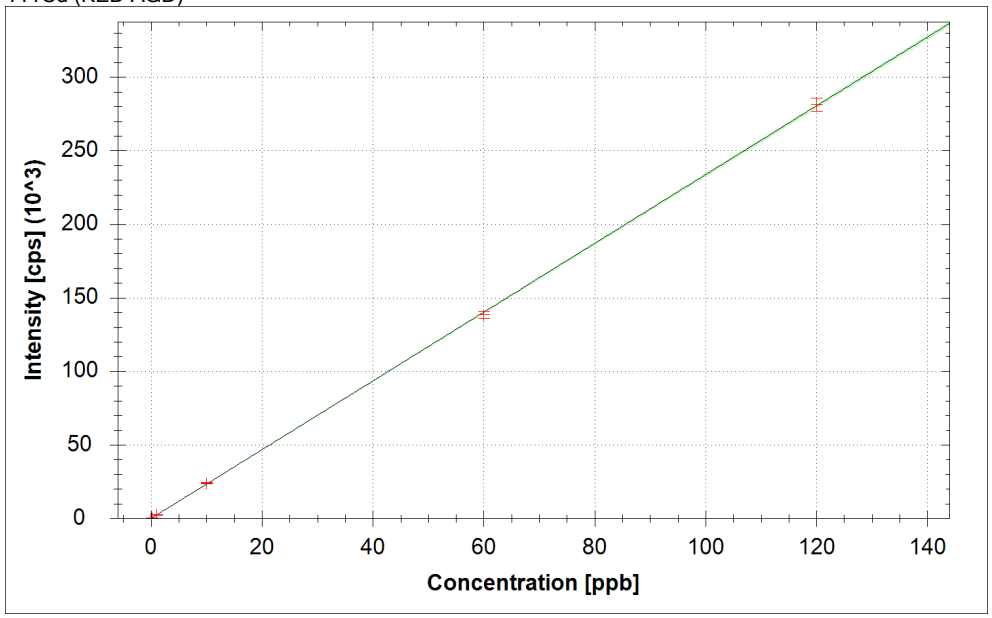
f(x) = 4664.0176*x + 861.7033
R² = 0.9996
BEC = 0.185 ppb
LoD = 0.2015 ppb

107Ag (KED AGD)



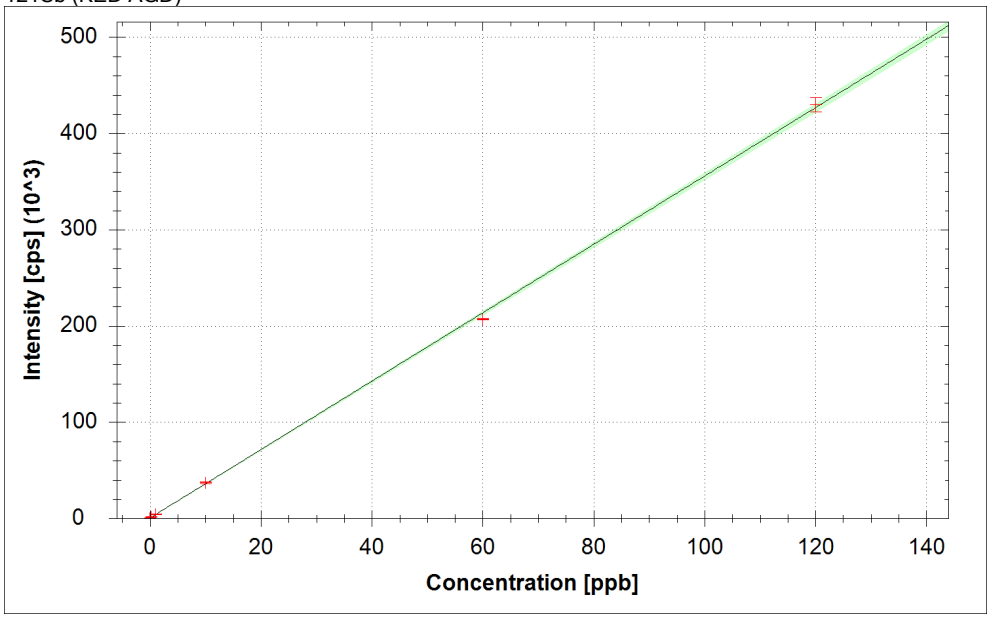
f(x) = 22168.0768*x + 11.0534
R² = 0.9999
BEC = 0.000 ppb
LoD = 0.0006 ppb

111Cd (KED AGD)



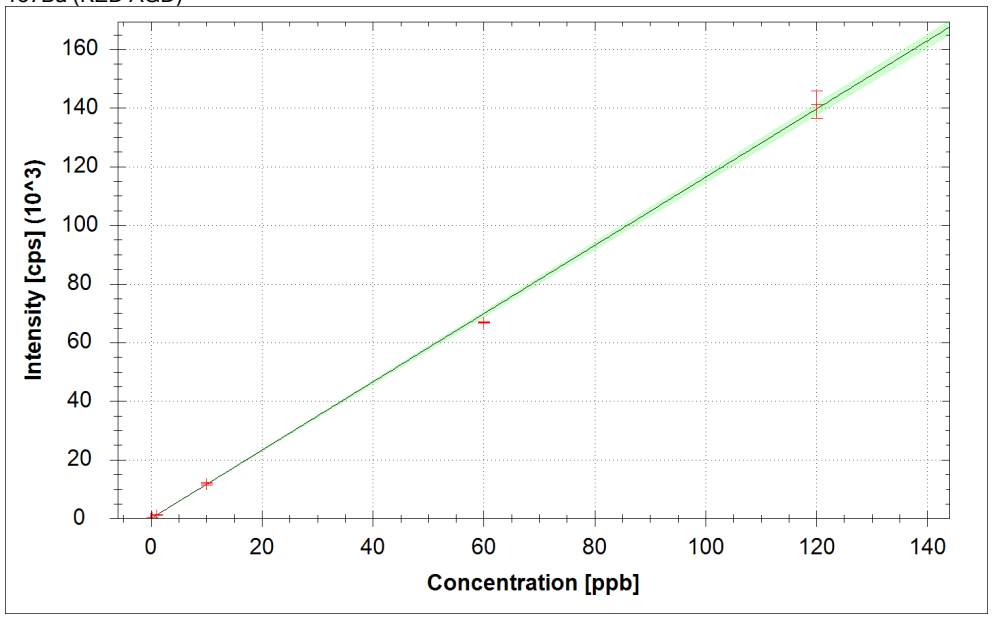
f(x) = 2336.8026*x + 0.8988
R² = 0.9999
BEC = 0.000 ppb
LoD = 0.0010 ppb

121Sb (KED AGD)



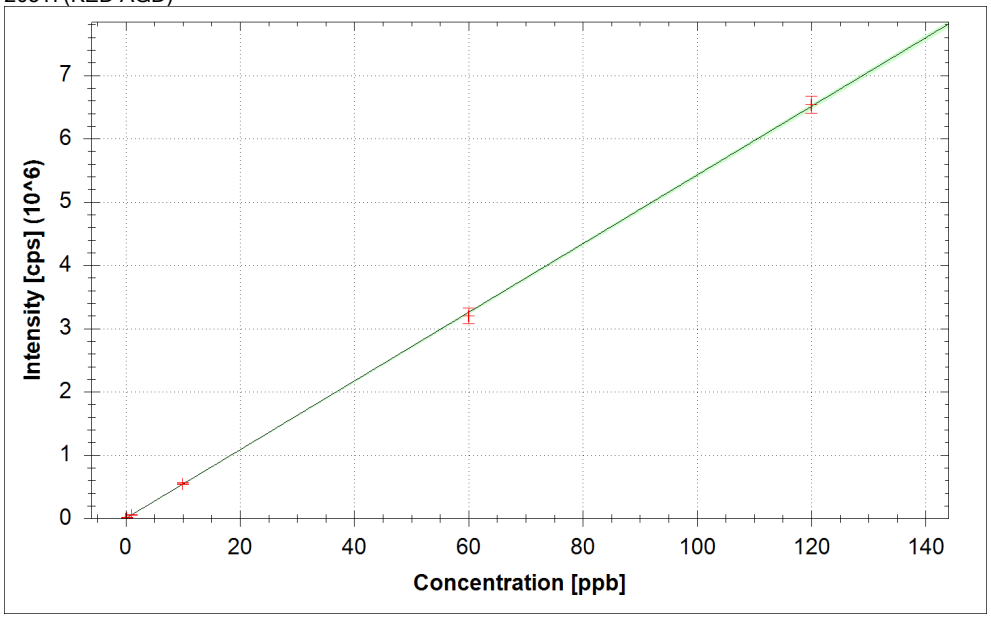
f(x) = 3551.3100*x + 556.9728
R² = 0.9996
BEC = 0.157 ppb
LoD = 0.0474 ppb

137Ba (KED AGD)



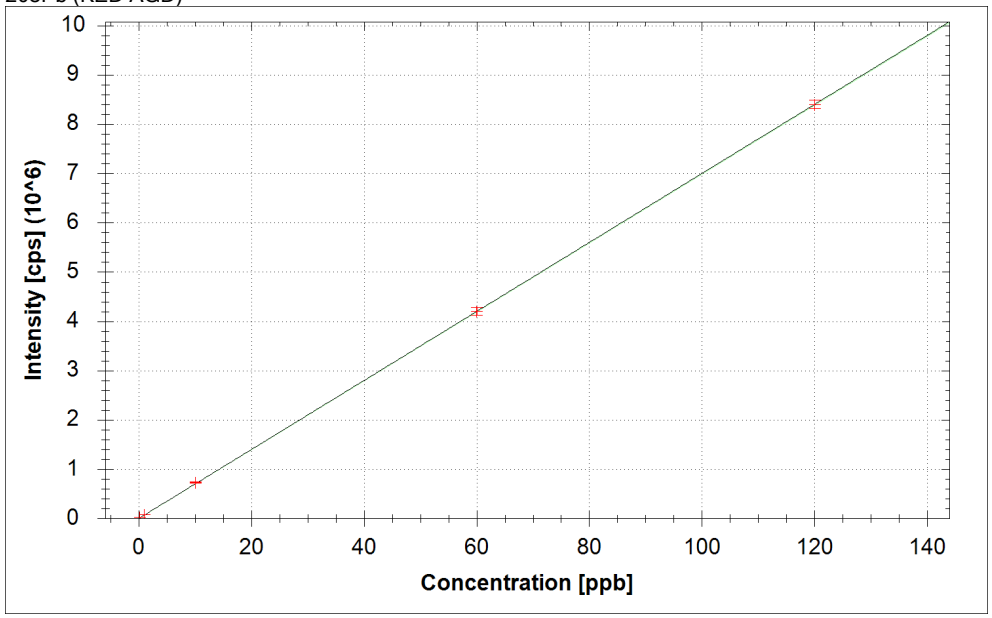
f(x) = 1163.3686*x + 7.6826
R² = 0.9993
BEC = 0.007 ppb
LoD = 0.0094 ppb

205Tl (KED AGD)



f(x) = 54239.0792*x + 601.4481
R² = 0.9999
BEC = 0.011 ppb
LoD = 0.0082 ppb

208Pb (KED AGD)



f(x) = 69982.3439*x + 172.2930
R² = 1.0000
BEC = 0.002 ppb
LoD = 0.0003 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 1:18:39 PM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	96.745 %	4.7 %	
6Li (KED AGD)	103.354 %	4.4 %	
9Be (STD AGD)	0.209 ppb	5.9 %	0.200 ppb
23Na (KED AGD)	35.362 ppb	6.2 %	20.000 ppb
24Mg (KED AGD)	25.332 ppb	6.0 %	20.000 ppb
27Al (KED AGD)	3.330 ppb	1.7 %	0.200 ppb
39K (KED AGD)	48.338 ppb	5.1 %	20.000 ppb
44Ca (KED AGD)	386.558 ppb	5.6 %	20.000 ppb
45Sc (STD AGD)	94.294 %	3.9 %	
51V (KED AGD)	0.227 ppb	10.5 %	0.200 ppb
52Cr (KED AGD)	0.320 ppb	6.5 %	0.200 ppb
55Mn (KED AGD)	1.023 ppb	9.4 %	0.200 ppb
57Fe (KED AGD)	41.058 ppb	4.7 %	20.000 ppb
59Co (KED AGD)	0.245 ppb	5.7 %	0.200 ppb
60Ni (KED AGD)	0.853 ppb	4.6 %	0.200 ppb
65Cu (KED AGD)	0.571 ppb	3.2 %	0.200 ppb
66Zn (KED AGD)	1.877 ppb	3.6 %	0.200 ppb
74Ge (KED AGD)	101.144 %	2.6 %	
75As (KED AGD)	0.201 ppb	9.9 %	0.200 ppb
78Se (KED AGD)	0.194 ppb	38.0 %	0.200 ppb
88Sr (KED AGD)	0.362 ppb	2.7 %	0.200 ppb
95Mo (KED AGD)	0.198 ppb	32.3 %	0.200 ppb
103Rh (KED AGD)	98.872 %	3.5 %	
107Ag (KED AGD)	0.219 ppb	2.5 %	0.200 ppb
111Cd (KED AGD)	0.202 ppb	7.7 %	0.200 ppb
115In (KED AGD)	97.185 %	6.2 %	
121Sb (KED AGD)	0.288 ppb	6.9 %	0.200 ppb
137Ba (KED AGD)	0.287 ppb	14.7 %	0.200 ppb
159Tb (KED AGD)	101.687 %	3.0 %	
175Lu (KED AGD)	98.419 %	4.5 %	
205Tl (KED AGD)	0.206 ppb	7.0 %	0.200 ppb
208Pb (KED AGD)	0.244 ppb	5.1 %	0.200 ppb
209Bi (KED AGD)	101.016 %	2.0 %	

Standards:

Analysis Index: 5
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 1:23:16 PM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	97.197 %	3.7 %	
6Li (KED AGD)	100.853 %	1.6 %	
9Be (STD AGD)	1.010 ppb	2.3 %	1.000 ppb
23Na (KED AGD)	107.996 ppb	4.4 %	100.000 ppb
24Mg (KED AGD)	103.634 ppb	2.2 %	100.000 ppb
27Al (KED AGD)	1.164 ppb	7.9 %	1.000 ppb
39K (KED AGD)	109.170 ppb	5.6 %	100.000 ppb
44Ca (KED AGD)	158.907 ppb	4.2 %	100.000 ppb
45Sc (STD AGD)	99.688 %	5.3 %	
51V (KED AGD)	1.042 ppb	2.8 %	1.000 ppb
52Cr (KED AGD)	1.044 ppb	7.7 %	1.000 ppb
55Mn (KED AGD)	1.200 ppb	7.7 %	1.000 ppb
57Fe (KED AGD)	125.580 ppb	4.1 %	100.000 ppb
59Co (KED AGD)	1.132 ppb	5.9 %	1.000 ppb
60Ni (KED AGD)	1.143 ppb	3.2 %	1.000 ppb
65Cu (KED AGD)	1.128 ppb	6.3 %	1.000 ppb
66Zn (KED AGD)	0.336 ppb	7.1 %	1.000 ppb
74Ge (KED AGD)	102.349 %	6.2 %	
75As (KED AGD)	0.976 ppb	2.3 %	1.000 ppb
78Se (KED AGD)	0.972 ppb	5.4 %	1.000 ppb
88Sr (KED AGD)	0.979 ppb	1.4 %	1.000 ppb
95Mo (KED AGD)	0.919 ppb	5.9 %	1.000 ppb
103Rh (KED AGD)	100.947 %	1.4 %	
107Ag (KED AGD)	1.033 ppb	1.9 %	1.000 ppb
111Cd (KED AGD)	0.999 ppb	2.6 %	1.000 ppb
115In (KED AGD)	95.767 %	4.0 %	
121Sb (KED AGD)	1.037 ppb	3.9 %	1.000 ppb
137Ba (KED AGD)	0.958 ppb	6.3 %	1.000 ppb
159Tb (KED AGD)	102.387 %	2.2 %	
175Lu (KED AGD)	99.000 %	2.9 %	
205Tl (KED AGD)	0.989 ppb	1.2 %	1.000 ppb
208Pb (KED AGD)	1.042 ppb	1.7 %	1.000 ppb
209Bi (KED AGD)	99.988 %	0.8 %	

Standards:

Analysis Index: 6
Analysis Name: 10/1000 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 1:27:54 PM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	100.470 %	3.8 %	
6Li (KED AGD)	104.029 %	0.8 %	
9Be (STD AGD)	10.451 ppb	1.0 %	10.000 ppb
23Na (KED AGD)	1,150.520 ppb	2.0 %	1,000.000 ppb
24Mg (KED AGD)	1,026.401 ppb	0.9 %	1,000.000 ppb
27Al (KED AGD)	10.666 ppb	6.6 %	10.000 ppb
39K (KED AGD)	1,060.390 ppb	2.3 %	1,000.000 ppb
44Ca (KED AGD)	1,101.693 ppb	1.1 %	1,000.000 ppb
45Sc (STD AGD)	100.927 %	3.3 %	
51V (KED AGD)	10.142 ppb	2.9 %	10.000 ppb
52Cr (KED AGD)	10.174 ppb	3.4 %	10.000 ppb
55Mn (KED AGD)	11.144 ppb	6.1 %	10.000 ppb
57Fe (KED AGD)	1,094.773 ppb	1.4 %	1,000.000 ppb
59Co (KED AGD)	11.318 ppb	3.2 %	10.000 ppb
60Ni (KED AGD)	11.332 ppb	2.0 %	10.000 ppb
65Cu (KED AGD)	10.998 ppb	5.6 %	10.000 ppb
66Zn (KED AGD)	10.064 ppb	1.0 %	10.000 ppb
74Ge (KED AGD)	105.072 %	6.2 %	
75As (KED AGD)	10.240 ppb	3.1 %	10.000 ppb
78Se (KED AGD)	10.116 ppb	4.8 %	10.000 ppb
88Sr (KED AGD)	9.833 ppb	1.0 %	10.000 ppb
95Mo (KED AGD)	9.325 ppb	2.0 %	10.000 ppb
103Rh (KED AGD)	103.738 %	1.9 %	
107Ag (KED AGD)	10.431 ppb	1.4 %	10.000 ppb
111Cd (KED AGD)	10.231 ppb	1.1 %	10.000 ppb
115In (KED AGD)	99.281 %	6.6 %	
121Sb (KED AGD)	10.257 ppb	2.4 %	10.000 ppb
137Ba (KED AGD)	10.204 ppb	3.9 %	10.000 ppb
159Tb (KED AGD)	104.786 %	4.0 %	
175Lu (KED AGD)	102.290 %	4.2 %	
205Tl (KED AGD)	10.108 ppb	2.5 %	10.000 ppb
208Pb (KED AGD)	10.342 ppb	1.7 %	10.000 ppb
209Bi (KED AGD)	106.684 %	0.6 %	

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 1:32:33 PM
Total Dilution Factor 166.6666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	99.126 %	3.8 %	
6Li (KED AGD)	102.759 %	2.6 %	
9Be (STD AGD)	59.672 ppb	0.4 %	60.000 ppb
23Na (KED AGD)	6,024.314 ppb	3.3 %	6,000.000 ppb
24Mg (KED AGD)	5,995.522 ppb	3.9 %	6,000.000 ppb
27Al (KED AGD)	58.851 ppb	1.5 %	60.000 ppb
39K (KED AGD)	5,985.290 ppb	1.8 %	6,000.000 ppb
44Ca (KED AGD)	5,945.760 ppb	2.2 %	6,000.000 ppb
45Sc (STD AGD)	110.941 %	5.6 %	
51V (KED AGD)	57.730 ppb	2.7 %	60.000 ppb
52Cr (KED AGD)	58.408 ppb	2.5 %	60.000 ppb
55Mn (KED AGD)	59.796 ppb	1.2 %	60.000 ppb
57Fe (KED AGD)	6,301.303 ppb	2.2 %	6,000.000 ppb
59Co (KED AGD)	64.051 ppb	4.8 %	60.000 ppb
60Ni (KED AGD)	60.090 ppb	5.1 %	60.000 ppb
65Cu (KED AGD)	59.562 ppb	3.1 %	60.000 ppb
66Zn (KED AGD)	59.574 ppb	2.7 %	60.000 ppb
74Ge (KED AGD)	105.700 %	4.0 %	
75As (KED AGD)	59.786 ppb	3.2 %	60.000 ppb
78Se (KED AGD)	59.263 ppb	0.1 %	60.000 ppb
88Sr (KED AGD)	58.899 ppb	0.5 %	60.000 ppb
95Mo (KED AGD)	58.200 ppb	1.5 %	60.000 ppb
103Rh (KED AGD)	104.056 %	3.0 %	
107Ag (KED AGD)	59.928 ppb	3.1 %	60.000 ppb
111Cd (KED AGD)	59.215 ppb	1.8 %	60.000 ppb
115In (KED AGD)	103.784 %	2.5 %	
121Sb (KED AGD)	58.155 ppb	0.4 %	60.000 ppb
137Ba (KED AGD)	57.384 ppb	0.3 %	60.000 ppb
159Tb (KED AGD)	110.323 %	2.6 %	
175Lu (KED AGD)	108.067 %	3.1 %	
205Tl (KED AGD)	58.950 ppb	3.9 %	60.000 ppb
208Pb (KED AGD)	60.018 ppb	1.8 %	60.000 ppb
209Bi (KED AGD)	105.438 %	3.6 %	

Standards:

Analysis Index: 8
Analysis Name: 120/12000 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 1:37:12 PM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD AGD)	96.434 %	4.4 %	
6Li (KED AGD)	103.354 %	0.6 %	
9Be (STD AGD)	120.126 ppb	2.0 %	120.000 ppb
23Na (KED AGD)	11,975.208 ppb	0.9 %	12,000.000 ppb
24Mg (KED AGD)	10,150.934 ppb	3.5 %	12,000.000 ppb
27Al (KED AGD)	120.512 ppb	2.0 %	120.000 ppb
39K (KED AGD)	12,002.199 ppb	9.3 %	12,000.000 ppb
44Ca (KED AGD)	12,017.544 ppb	4.1 %	12,000.000 ppb
45Sc (STD AGD)	115.156 %	4.3 %	
51V (KED AGD)	121.123 ppb	3.2 %	120.000 ppb
52Cr (KED AGD)	120.781 ppb	2.1 %	120.000 ppb
55Mn (KED AGD)	120.004 ppb	2.4 %	120.000 ppb
57Fe (KED AGD)	11,841.203 ppb	5.8 %	12,000.000 ppb
59Co (KED AGD)	117.864 ppb	1.3 %	120.000 ppb
60Ni (KED AGD)	119.842 ppb	0.9 %	120.000 ppb
65Cu (KED AGD)	120.134 ppb	2.2 %	120.000 ppb
66Zn (KED AGD)	120.211 ppb	1.0 %	120.000 ppb
74Ge (KED AGD)	107.253 %	2.1 %	
75As (KED AGD)	120.087 ppb	2.3 %	120.000 ppb
78Se (KED AGD)	120.359 ppb	1.9 %	120.000 ppb
88Sr (KED AGD)	120.564 ppb	0.7 %	120.000 ppb
95Mo (KED AGD)	120.957 ppb	0.2 %	120.000 ppb
103Rh (KED AGD)	103.893 %	1.0 %	
107Ag (KED AGD)	112.658 ppb	1.2 %	120.000 ppb
111Cd (KED AGD)	120.373 ppb	1.6 %	120.000 ppb
115In (KED AGD)	102.482 %	1.4 %	
121Sb (KED AGD)	120.901 ppb	1.8 %	120.000 ppb
137Ba (KED AGD)	121.291 ppb	3.3 %	120.000 ppb
159Tb (KED AGD)	107.989 %	3.6 %	
175Lu (KED AGD)	109.821 %	1.5 %	
205Tl (KED AGD)	120.516 ppb	2.0 %	120.000 ppb
208Pb (KED AGD)	119.962 ppb	1.0 %	120.000 ppb
209Bi (KED AGD)	105.705 %	1.3 %	

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	1	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Rinse	Rack	0		
Analysis started at:	9/14/2023 1:04:45 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.799 %	100.615 %	0.002 ppb	11.434 ppb	-0.224 ppb	-0.018 ppb	3.956 ppb	4.620 ppb	100.246 %
Concentration per Run 1	106.043 %	100.020 %	-0.001 ppb	12.985 ppb	-0.577 ppb	0.370 ppb	6.952 ppb	3.932 ppb	101.429 %
Concentration per Run 2	103.912 %	99.365 %	0.002 ppb	10.821 ppb	-0.060 ppb	-0.165 ppb	2.096 ppb	5.448 ppb	101.543 %
Concentration per Run 3	86.442 %	102.461 %	0.005 ppb	10.496 ppb	-0.033 ppb	-0.258 ppb	2.821 ppb	4.479 ppb	97.767 %
Concentration RSD	10.9 %	1.6 %	141.8 %	11.8 %	137.2 %	1,934.5 %	66.2 %	16.6 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.010 ppb	0.008 ppb	0.038 ppb	5.327 ppb	0.003 ppb	0.093 ppb	0.053 ppb	-0.020 ppb	96.185 %
Concentration per Run 1	0.023 ppb	0.012 ppb	0.024 ppb	5.209 ppb	0.004 ppb	0.101 ppb	0.056 ppb	0.010 ppb	93.372 %
Concentration per Run 2	0.007 ppb	0.004 ppb	0.060 ppb	5.097 ppb	0.003 ppb	0.080 ppb	0.051 ppb	-0.059 ppb	99.084 %
Concentration per Run 3	-0.001 ppb	0.008 ppb	0.029 ppb	5.674 ppb	0.002 ppb	0.097 ppb	0.051 ppb	-0.010 ppb	96.099 %
Concentration RSD	126.8 %	48.7 %	50.9 %	5.7 %	26.1 %	12.2 %	5.9 %	180.3 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.051 ppb	0.262 ppb	0.010 ppb	0.571 ppb	97.219 %	0.003 ppb	0.000 ppb	93.066 %	0.256 ppb
Concentration per Run 1	0.053 ppb	0.135 ppb	0.014 ppb	0.377 ppb	95.946 %	0.003 ppb	0.000 ppb	92.323 %	0.225 ppb
Concentration per Run 2	0.028 ppb	0.211 ppb	0.007 ppb	0.638 ppb	97.178 %	0.004 ppb	0.000 ppb	93.257 %	0.257 ppb
Concentration per Run 3	0.071 ppb	0.438 ppb	0.008 ppb	0.699 ppb	98.533 %	0.002 ppb	0.001 ppb	93.618 %	0.285 ppb
Concentration RSD	42.5 %	60.3 %	40.2 %	30.0 %	1.3 %	21.1 %	277.5 %	0.7 %	11.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.021 ppb	97.939 %	96.484 %	0.019 ppb	0.007 ppb	117.887 %
Concentration per Run 1	0.027 ppb	96.274 %	95.812 %	0.013 ppb	0.006 ppb	132.785 %
Concentration per Run 2	0.008 ppb	99.437 %	96.588 %	0.024 ppb	0.008 ppb	113.886 %
Concentration per Run 3	0.029 ppb	98.108 %	97.051 %	0.021 ppb	0.007 ppb	106.990 %
Concentration RSD	53.5 %	1.6 %	0.6 %	28.4 %	11.1 %	11.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	2	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CAL LOT #M22-1040	Rack	0		
Analysis started at:	9/14/2023 1:09:21 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.595 %	103.612 %	0.003 ppb	4.038 ppb	-0.354 ppb	-0.093 ppb	2.889 ppb	3.315 ppb	96.826 %
Concentration per Run 1	103.116 %	105.736 %	0.003 ppb	2.015 ppb	-0.345 ppb	-0.167 ppb	2.621 ppb	1.089 ppb	93.142 %
Concentration per Run 2	98.100 %	104.366 %	0.003 ppb	5.106 ppb	-0.213 ppb	-0.079 ppb	1.412 ppb	4.105 ppb	99.656 %
Concentration per Run 3	94.569 %	100.734 %	0.002 ppb	4.993 ppb	-0.506 ppb	-0.032 ppb	4.633 ppb	4.751 ppb	97.680 %
Concentration RSD	4.4 %	2.5 %	34.7 %	43.4 %	41.3 %	73.6 %	56.3 %	59.0 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.007 ppb	0.010 ppb	0.045 ppb	2.875 ppb	0.002 ppb	0.078 ppb	0.051 ppb	0.001 ppb	100.212 %
Concentration per Run 1	-0.001 ppb	0.012 ppb	0.038 ppb	2.506 ppb	0.003 ppb	0.077 ppb	0.054 ppb	0.017 ppb	96.859 %
Concentration per Run 2	0.002 ppb	0.010 ppb	0.065 ppb	2.710 ppb	0.002 ppb	0.088 ppb	0.046 ppb	-0.014 ppb	102.583 %
Concentration per Run 3	0.021 ppb	0.008 ppb	0.030 ppb	3.408 ppb	0.002 ppb	0.069 ppb	0.052 ppb	-0.001 ppb	101.194 %
Concentration RSD	163.5 %	20.1 %	41.5 %	16.4 %	42.7 %	12.2 %	7.4 %	2,515.5 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.021 ppb	0.029 ppb	0.007 ppb	0.093 ppb	96.294 %	0.002 ppb	0.000 ppb	93.704 %	0.136 ppb
Concentration per Run 1	-0.010 ppb	-0.044 ppb	0.012 ppb	-0.006 ppb	92.013 %	0.002 ppb	0.000 ppb	88.561 %	0.114 ppb
Concentration per Run 2	-0.003 ppb	0.062 ppb	0.007 ppb	0.109 ppb	97.475 %	0.002 ppb	0.000 ppb	97.144 %	0.135 ppb
Concentration per Run 3	-0.050 ppb	0.068 ppb	0.001 ppb	0.176 ppb	99.394 %	0.003 ppb	0.000 ppb	95.405 %	0.160 ppb
Concentration RSD	120.5 %	217.5 %	86.7 %	98.7 %	4.0 %	34.6 %	181.1 %	4.8 %	17.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.013 ppb	98.496 %	95.361 %	0.005 ppb	0.006 ppb	99.606 %
Concentration per Run 1	0.021 ppb	97.453 %	89.963 %	0.000 ppb	0.006 ppb	100.558 %
Concentration per Run 2	0.002 ppb	97.915 %	95.755 %	0.005 ppb	0.006 ppb	99.362 %
Concentration per Run 3	0.017 ppb	100.119 %	100.365 %	0.010 ppb	0.007 ppb	98.898 %
Concentration RSD	74.1 %	1.4 %	5.5 %	99.4 %	7.7 %	0.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	3	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	Blank EJF ICPMSQ	Rack	4		
Analysis started at:	9/14/2023 1:13:57 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.0 %	0.1 %	0.3 %	0.0 %	0.1 %	0.2 %	0.0 %	0.3 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.2 %	0.1 %	0.4 %	0.2 %	0.2 %	0.3 %	0.3 %	0.1 %	0.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration per Run	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb	0.000 ppb	100.000 %	0.000 ppb
Concentration RSD	0.1 %	0.5 %	0.0 %	0.4 %	0.0 %	0.4 %	0.9 %	0.1 %	0.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %
Concentration RSD	0.5 %	0.0 %	0.0 %	0.2 %	0.0 %	0.0 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	4	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	0.2/20 Cal	Rack	0		
Analysis started at:	9/14/2023 1:18:39 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.745 %	103.354 %	0.209 ppb	35.362 ppb	25.332 ppb	3.330 ppb	48.338 ppb	386.558 ppb	94.294 %
Concentration per Run 1	101.410 %	100.258 %	0.195 ppb	36.246 ppb	23.566 ppb	3.382 ppb	46.515 ppb	395.926 ppb	97.428 %
Concentration per Run 2	96.426 %	101.211 %	0.216 ppb	36.985 ppb	26.192 ppb	3.269 ppb	51.147 ppb	402.032 ppb	95.149 %
Concentration per Run 3	92.400 %	108.593 %	0.217 ppb	32.856 ppb	26.237 ppb	3.338 ppb	47.351 ppb	361.717 ppb	90.306 %
Concentration RSD	4.7 %	4.4 %	5.9 %	6.2 %	6.0 %	1.7 %	5.1 %	5.6 %	3.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.227 ppb	0.320 ppb	1.023 ppb	41.058 ppb	0.245 ppb	0.853 ppb	0.571 ppb	1.877 ppb	101.144 %
Concentration per Run 1	0.242 ppb	0.331 ppb	0.927 ppb	39.528 ppb	0.236 ppb	0.848 ppb	0.584 ppb	1.809 ppb	99.008 %
Concentration per Run 2	0.239 ppb	0.334 ppb	1.119 ppb	43.232 ppb	0.261 ppb	0.894 ppb	0.577 ppb	1.946 ppb	104.019 %
Concentration per Run 3	0.199 ppb	0.296 ppb	1.024 ppb	40.415 ppb	0.237 ppb	0.817 ppb	0.550 ppb	1.877 ppb	100.403 %
Concentration RSD	10.5 %	6.5 %	9.4 %	4.7 %	5.7 %	4.6 %	3.2 %	3.6 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.201 ppb	0.194 ppb	0.362 ppb	0.198 ppb	98.872 %	0.219 ppb	0.202 ppb	97.185 %	0.288 ppb
Concentration per Run 1	0.183 ppb	0.109 ppb	0.350 ppb	0.137 ppb	94.924 %	0.225 ppb	0.220 ppb	90.288 %	0.265 ppb
Concentration per Run 2	0.222 ppb	0.239 ppb	0.366 ppb	0.194 ppb	100.677 %	0.217 ppb	0.194 ppb	100.953 %	0.299 ppb
Concentration per Run 3	0.198 ppb	0.234 ppb	0.368 ppb	0.265 ppb	101.015 %	0.215 ppb	0.192 ppb	100.312 %	0.298 ppb
Concentration RSD	9.9 %	38.0 %	2.7 %	32.3 %	3.5 %	2.5 %	7.7 %	6.2 %	6.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.287 ppb	101.687 %	98.419 %	0.206 ppb	0.244 ppb	101.016 %
Concentration per Run 1	0.324 ppb	98.375 %	93.632 %	0.192 ppb	0.229 ppb	103.301 %
Concentration per Run 2	0.242 ppb	102.258 %	102.393 %	0.207 ppb	0.251 ppb	99.976 %
Concentration per Run 3	0.296 ppb	104.428 %	99.233 %	0.221 ppb	0.251 ppb	99.772 %
Concentration RSD	14.7 %	3.0 %	4.5 %	7.0 %	5.1 %	2.0 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	5	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	1/100 Cal	Rack	0		
Analysis started at:	9/14/2023 1:23:16 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	97.197 %	100.853 %	1.010 ppb	107.996 ppb	103.634 ppb	1.164 ppb	109.170 ppb	158.907 ppb	99.688 %
Concentration per Run 1	100.767 %	99.544 %	1.004 ppb	105.798 ppb	105.360 ppb	1.223 ppb	111.750 ppb	152.066 ppb	103.284 %
Concentration per Run 2	97.282 %	100.318 %	1.036 ppb	113.504 ppb	101.058 ppb	1.211 ppb	113.518 ppb	165.504 ppb	93.621 %
Concentration per Run 3	93.544 %	102.699 %	0.991 ppb	104.685 ppb	104.484 ppb	1.059 ppb	102.242 ppb	159.150 ppb	102.159 %
Concentration RSD	3.7 %	1.6 %	2.3 %	4.4 %	2.2 %	7.9 %	5.6 %	4.2 %	5.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.042 ppb	1.044 ppb	1.200 ppb	125.580 ppb	1.132 ppb	1.143 ppb	1.128 ppb	0.336 ppb	102.349 %
Concentration per Run 1	1.027 ppb	1.136 ppb	1.302 ppb	127.545 ppb	1.209 ppb	1.155 ppb	1.181 ppb	0.364 ppb	95.285 %
Concentration per Run 2	1.075 ppb	1.004 ppb	1.173 ppb	129.454 ppb	1.088 ppb	1.102 ppb	1.156 ppb	0.325 ppb	104.356 %
Concentration per Run 3	1.023 ppb	0.992 ppb	1.124 ppb	119.742 ppb	1.100 ppb	1.171 ppb	1.047 ppb	0.320 ppb	107.405 %
Concentration RSD	2.8 %	7.7 %	7.7 %	4.1 %	5.9 %	3.2 %	6.3 %	7.1 %	6.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.976 ppb	0.972 ppb	0.979 ppb	0.919 ppb	100.947 %	1.033 ppb	0.999 ppb	95.767 %	1.037 ppb
Concentration per Run 1	1.002 ppb	0.996 ppb	0.972 ppb	0.924 ppb	100.145 %	1.055 ppb	1.024 ppb	91.582 %	1.008 ppb
Concentration per Run 2	0.966 ppb	1.009 ppb	0.995 ppb	0.862 ppb	100.142 %	1.028 ppb	1.000 ppb	96.652 %	1.020 ppb
Concentration per Run 3	0.960 ppb	0.912 ppb	0.970 ppb	0.971 ppb	102.555 %	1.016 ppb	0.973 ppb	99.065 %	1.083 ppb
Concentration RSD	2.3 %	5.4 %	1.4 %	5.9 %	1.4 %	1.9 %	2.6 %	4.0 %	3.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.958 ppb	102.387 %	99.000 %	0.989 ppb	1.042 ppb	99.988 %
Concentration per Run 1	0.933 ppb	99.858 %	95.764 %	0.976 ppb	1.021 ppb	100.653 %
Concentration per Run 2	1.027 ppb	102.996 %	100.170 %	0.993 ppb	1.050 ppb	99.071 %
Concentration per Run 3	0.915 ppb	104.308 %	101.066 %	0.999 ppb	1.053 ppb	100.239 %
Concentration RSD	6.3 %	2.2 %	2.9 %	1.2 %	1.7 %	0.8 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	6	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	10/1000 Cal	Rack	0		
Analysis started at:	9/14/2023 1:27:54 PM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.470 %	104.029 %	10.451 ppb	1,150.520 ppb	1,026.401 ppb	10.666 ppb	1,060.390 ppb	1,101.693 ppb	100.927 %
Concentration per Run 1	104.095 %	104.247 %	10.390 ppb	1,139.374 ppb	1,017.509 ppb	9.867 ppb	1,032.316 ppb	1,106.138 ppb	99.159 %
Concentration per Run 2	100.850 %	104.783 %	10.576 ppb	1,135.437 ppb	1,024.940 ppb	11.212 ppb	1,076.163 ppb	1,088.326 ppb	98.853 %
Concentration per Run 3	96.465 %	103.056 %	10.388 ppb	1,176.747 ppb	1,036.753 ppb	10.921 ppb	1,072.691 ppb	1,110.614 ppb	104.770 %
Concentration RSD	3.8 %	0.8 %	1.0 %	2.0 %	0.9 %	6.6 %	2.3 %	1.1 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	10.142 ppb	10.174 ppb	11.144 ppb	1,094.773 ppb	11.318 ppb	11.332 ppb	10.998 ppb	10.064 ppb	105.072 %
Concentration per Run 1	10.296 ppb	10.465 ppb	11.548 ppb	1,091.252 ppb	11.556 ppb	11.571 ppb	11.567 ppb	10.183 ppb	97.675 %
Concentration per Run 2	9.803 ppb	9.790 ppb	10.363 ppb	1,081.860 ppb	10.900 ppb	11.113 ppb	10.338 ppb	10.023 ppb	109.779 %
Concentration per Run 3	10.327 ppb	10.267 ppb	11.521 ppb	1,111.209 ppb	11.499 ppb	11.312 ppb	11.090 ppb	9.986 ppb	107.761 %
Concentration RSD	2.9 %	3.4 %	6.1 %	1.4 %	3.2 %	2.0 %	5.6 %	1.0 %	6.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	10.240 ppb	10.116 ppb	9.833 ppb	9.325 ppb	103.738 %	10.431 ppb	10.231 ppb	99.281 %	10.257 ppb
Concentration per Run 1	10.492 ppb	10.176 ppb	9.763 ppb	9.483 ppb	101.482 %	10.566 ppb	10.361 ppb	91.678 %	10.540 ppb
Concentration per Run 2	9.878 ppb	9.606 ppb	9.793 ppb	9.123 ppb	104.413 %	10.453 ppb	10.170 ppb	102.624 %	10.132 ppb
Concentration per Run 3	10.349 ppb	10.567 ppb	9.944 ppb	9.369 ppb	105.318 %	10.273 ppb	10.163 ppb	103.541 %	10.098 ppb
Concentration RSD	3.1 %	4.8 %	1.0 %	2.0 %	1.9 %	1.4 %	1.1 %	6.6 %	2.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	10.204 ppb	104.786 %	102.290 %	10.108 ppb	10.342 ppb	106.684 %
Concentration per Run 1	10.541 ppb	100.747 %	97.840 %	9.922 ppb	10.142 ppb	107.038 %
Concentration per Run 2	10.300 ppb	104.537 %	106.340 %	10.004 ppb	10.403 ppb	107.088 %
Concentration per Run 3	9.771 ppb	109.075 %	102.691 %	10.396 ppb	10.481 ppb	105.927 %
Concentration RSD	3.9 %	4.0 %	4.2 %	2.5 %	1.7 %	0.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	7	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	9/14/2023 1:32:33 PM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.126 %	102.759 %	59.672 ppb	6,024.314 ppb	5,995.522 ppb	58.851 ppb	5,985.290 ppb	5,945.760 ppb	110.941 %
Concentration per Run 1	103.373 %	101.389 %	59.604 ppb	6,081.668 ppb	6,042.151 ppb	58.109 ppb	5,910.584 ppb	5,962.892 ppb	108.402 %
Concentration per Run 2	97.710 %	105.855 %	59.461 ppb	5,804.581 ppb	5,741.921 ppb	58.630 ppb	5,940.049 ppb	5,805.259 ppb	106.384 %
Concentration per Run 3	96.297 %	101.032 %	59.951 ppb	6,186.692 ppb	6,202.493 ppb	59.816 ppb	6,105.237 ppb	6,069.131 ppb	118.037 %
Concentration RSD	3.8 %	2.6 %	0.4 %	3.3 %	3.9 %	1.5 %	1.8 %	2.2 %	5.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.730 ppb	58.408 ppb	59.796 ppb	6,301.303 ppb	64.051 ppb	60.090 ppb	59.562 ppb	59.574 ppb	105.700 %
Concentration per Run 1	58.918 ppb	59.778 ppb	59.038 ppb	6,417.646 ppb	66.701 ppb	62.680 ppb	60.503 ppb	59.825 ppb	101.389 %
Concentration per Run 2	55.989 ppb	56.827 ppb	59.867 ppb	6,144.653 ppb	60.640 ppb	56.718 ppb	57.430 ppb	57.826 ppb	109.826 %
Concentration per Run 3	58.281 ppb	58.619 ppb	60.483 ppb	6,341.609 ppb	64.811 ppb	60.871 ppb	60.753 ppb	61.070 ppb	105.886 %
Concentration RSD	2.7 %	2.5 %	1.2 %	2.2 %	4.8 %	5.1 %	3.1 %	2.7 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.786 ppb	59.263 ppb	58.899 ppb	58.200 ppb	104.056 %	59.928 ppb	59.215 ppb	103.784 %	58.155 ppb
Concentration per Run 1	61.092 ppb	59.324 ppb	59.180 ppb	59.153 ppb	100.441 %	62.084 ppb	60.155 ppb	100.996 %	57.872 ppb
Concentration per Run 2	57.580 ppb	59.162 ppb	58.628 ppb	57.532 ppb	105.769 %	59.100 ppb	59.414 ppb	104.366 %	58.254 ppb
Concentration per Run 3	60.686 ppb	59.304 ppb	58.888 ppb	57.915 ppb	105.957 %	58.599 ppb	58.077 ppb	105.990 %	58.339 ppb
Concentration RSD	3.2 %	0.1 %	0.5 %	1.5 %	3.0 %	3.1 %	1.8 %	2.5 %	0.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.384 ppb	110.323 %	108.067 %	58.950 ppb	60.018 ppb	105.438 %
Concentration per Run 1	57.424 ppb	107.108 %	105.117 %	56.747 ppb	59.161 ppb	109.176 %
Concentration per Run 2	57.538 ppb	112.596 %	111.722 %	61.341 ppb	61.269 ppb	101.655 %
Concentration per Run 3	57.191 ppb	111.267 %	107.361 %	58.764 ppb	59.624 ppb	105.484 %
Concentration RSD	0.3 %	2.6 %	3.1 %	3.9 %	1.8 %	3.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	8	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	120/12000 Cal	Rack	0		
Analysis started at:	9/14/2023 1:37:12 PM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.434 %	103.354 %	120.126 ppb	11,975.208 ppb	10,151.924 ppb	120.512 ppb	12,002.199 ppb	12,017.544 ppb	115.156 %
Concentration per Run 1	100.501 %	102.937 %	117.481 ppb	12,054.867 ppb	9,911.332 ppb	118.644 ppb	12,503.511 ppb	12,497.648 ppb	118.144 %
Concentration per Run 2	96.821 %	103.056 %	120.629 ppb	12,022.784 ppb	10,553.488 ppb	123.261 ppb	12,782.414 ppb	12,039.710 ppb	117.903 %
Concentration per Run 3	91.979 %	104.068 %	122.269 ppb	11,847.972 ppb	9,987.981 ppb	119.632 ppb	10,720.672 ppb	11,515.273 ppb	109.421 %
Concentration RSD	4.4 %	0.6 %	2.0 %	0.9 %	3.5 %	2.0 %	9.3 %	4.1 %	4.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	121.123 ppb	120.781 ppb	120.004 ppb	11,841.203 ppb	117.864 ppb	119.842 ppb	120.134 ppb	120.211 ppb	107.253 %
Concentration per Run 1	125.540 ppb	122.055 ppb	121.046 ppb	11,394.075 ppb	118.139 ppb	121.106 ppb	119.662 ppb	120.514 ppb	105.559 %
Concentration per Run 2	118.597 ppb	122.483 ppb	122.188 ppb	11,501.677 ppb	119.240 ppb	119.363 ppb	123.025 ppb	121.228 ppb	106.446 %
Concentration per Run 3	119.232 ppb	117.805 ppb	116.777 ppb	12,627.855 ppb	116.212 ppb	119.056 ppb	117.715 ppb	118.889 ppb	109.753 %
Concentration RSD	3.2 %	2.1 %	2.4 %	5.8 %	1.3 %	0.9 %	2.2 %	1.0 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	120.087 ppb	120.359 ppb	120.564 ppb	120.957 ppb	103.893 %	112.658 ppb	120.373 ppb	102.482 %	120.901 ppb
Concentration per Run 1	121.704 ppb	120.780 ppb	120.380 ppb	121.103 ppb	105.067 %	113.943 ppb	122.540 ppb	100.794 %	123.383 ppb
Concentration per Run 2	121.651 ppb	122.427 ppb	121.487 ppb	121.075 ppb	103.127 %	111.327 ppb	119.818 ppb	103.472 %	119.612 ppb
Concentration per Run 3	116.906 ppb	117.869 ppb	119.826 ppb	120.694 ppb	103.483 %	112.704 ppb	118.761 ppb	103.180 %	119.708 ppb
Concentration RSD	2.3 %	1.9 %	0.7 %	0.2 %	1.0 %	1.2 %	1.6 %	1.4 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	121.291 ppb	107.989 %	109.821 %	120.516 ppb	119.962 ppb	105.705 %
Concentration per Run 1	116.761 ppb	110.791 %	110.235 %	118.328 ppb	118.541 ppb	107.030 %
Concentration per Run 2	124.435 ppb	103.593 %	111.228 %	120.072 ppb	120.797 ppb	104.227 %
Concentration per Run 3	122.677 ppb	109.583 %	107.998 %	123.148 ppb	120.548 ppb	105.859 %
Concentration RSD	3.3 %	3.6 %	1.5 %	2.0 %	1.0 %	1.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	9	User name	ALPHALAB\Metals-Instrument	Comment	Sr Inteference Check
Analysis label:	Sr 200ppb	Rack	4		
Analysis started at:	9/14/2023 1:41:52 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.221 %	107.363 %	0.007 ppb	-8.372 ppb	0.504 ppb	0.022 ppb	-2.040 ppb	-5.231 ppb	93.445 %
Concentration per Run 1	100.635 %	107.998 %	0.006 ppb	-7.185 ppb	0.095 ppb	0.006 ppb	-1.485 ppb	153.743 ppb	94.030 %
Concentration per Run 2	98.248 %	106.986 %	0.008 ppb	-7.860 ppb	0.738 ppb	-0.027 ppb	-2.510 ppb	-126.387 ppb	94.198 %
Concentration per Run 3	95.782 %	107.105 %	0.008 ppb	-10.072 ppb	0.679 ppb	0.088 ppb	-2.124 ppb	-43.048 ppb	92.108 %
Concentration RSD	2.5 %	0.5 %	15.3 %	18.0 %	70.5 %	264.0 %	25.4 %	2,749.9 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.015 ppb	0.009 ppb	0.033 ppb	24.385 ppb	0.002 ppb	0.028 ppb	0.090 ppb	0.358 ppb	106.650 %
Concentration per Run 1	0.015 ppb	0.005 ppb	0.009 ppb	24.501 ppb	0.002 ppb	0.018 ppb	0.097 ppb	0.376 ppb	107.131 %
Concentration per Run 2	0.010 ppb	0.015 ppb	0.043 ppb	25.354 ppb	0.004 ppb	0.050 ppb	0.085 ppb	0.392 ppb	105.253 %
Concentration per Run 3	0.021 ppb	0.008 ppb	0.047 ppb	23.301 ppb	0.000 ppb	0.018 ppb	0.089 ppb	0.307 ppb	107.567 %
Concentration RSD	36.7 %	57.0 %	64.2 %	4.2 %	79.0 %	66.0 %	6.7 %	12.7 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.057 ppb	1.095 ppb	194.740 ppb	2.438 ppb	107.525 %	0.006 ppb	0.002 ppb	106.317 %	-0.002 ppb
Concentration per Run 1	0.019 ppb	0.846 ppb	194.304 ppb	1.827 ppb	106.921 %	0.007 ppb	0.003 ppb	104.207 %	-0.028 ppb
Concentration per Run 2	0.043 ppb	1.020 ppb	196.405 ppb	2.580 ppb	108.545 %	0.005 ppb	0.000 ppb	108.282 %	0.007 ppb
Concentration per Run 3	0.109 ppb	1.419 ppb	193.510 ppb	2.907 ppb	107.110 %	0.006 ppb	0.002 ppb	106.461 %	0.016 ppb
Concentration RSD	82.0 %	26.9 %	0.8 %	22.7 %	0.8 %	15.1 %	86.4 %	1.9 %	1,471.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.062 ppb	112.414 %	108.860 %	0.386 ppb	0.023 ppb	113.453 %
Concentration per Run 1	0.065 ppb	112.128 %	108.264 %	0.287 ppb	0.024 ppb	119.388 %
Concentration per Run 2	0.058 ppb	112.322 %	109.659 %	0.462 ppb	0.022 ppb	111.991 %
Concentration per Run 3	0.064 ppb	112.793 %	108.658 %	0.410 ppb	0.023 ppb	108.980 %
Concentration RSD	5.7 %	0.3 %	0.7 %	23.3 %	3.5 %	4.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	10	User name	ALPHALAB\Metals-Instrument	Comment	ICV
Analysis label:	ICV	Rack	0		
Analysis started at:	9/14/2023 1:46:34 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.801 %	104.307 %	50.343 ppb	4,981.731 ppb	5,064.908 ppb	49.481 ppb	5,003.307 ppb	5,086.209 ppb	103.767 %
Concentration per Run 1	100.331 %	103.473 %	50.192 ppb	5,211.610 ppb	5,262.575 ppb	50.256 ppb	5,215.144 ppb	5,242.805 ppb	105.564 %
Concentration per Run 2	94.684 %	105.319 %	50.046 ppb	4,852.894 ppb	4,955.207 ppb	49.102 ppb	4,926.050 ppb	4,905.933 ppb	102.423 %
Concentration per Run 3	92.389 %	104.128 %	50.792 ppb	4,880.690 ppb	4,976.940 ppb	49.086 ppb	4,868.726 ppb	5,109.890 ppb	103.314 %
Recovery Percentage 1			100.687 %	99.635 %	101.298 %	98.962 %	100.066 %	101.724 %	
Concentration RSD	4.3 %	0.9 %	0.8 %	4.0 %	3.4 %	1.4 %	3.7 %	3.3 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.804 ppb	49.937 ppb	53.072 ppb	5,304.748 ppb	54.169 ppb	51.576 ppb	51.511 ppb	51.669 ppb	104.704 %
Concentration per Run 1	51.648 ppb	51.807 ppb	54.812 ppb	5,386.854 ppb	55.348 ppb	53.031 ppb	51.087 ppb	52.208 ppb	103.420 %
Concentration per Run 2	48.462 ppb	49.228 ppb	52.028 ppb	5,301.663 ppb	52.866 ppb	50.963 ppb	51.713 ppb	51.768 ppb	106.034 %
Concentration per Run 3	49.301 ppb	48.777 ppb	52.376 ppb	5,225.727 ppb	54.294 ppb	50.734 ppb	51.733 ppb	51.031 ppb	104.657 %
Recovery Percentage 1	99.607 %	99.875 %	106.144 %	106.095 %	108.339 %	103.153 %	103.022 %	103.338 %	
Concentration RSD	3.3 %	3.3 %	2.9 %	1.5 %	2.3 %	2.5 %	0.7 %	1.2 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	49.924 ppb	50.249 ppb	48.982 ppb	48.931 ppb	106.436 %	52.446 ppb	50.397 ppb	104.433 %	48.812 ppb
Concentration per Run 1	50.552 ppb	50.432 ppb	49.183 ppb	49.542 ppb	107.771 %	53.144 ppb	50.637 ppb	102.741 %	49.246 ppb
Concentration per Run 2	49.297 ppb	49.086 ppb	48.701 ppb	48.519 ppb	107.759 %	51.878 ppb	50.148 ppb	107.139 %	48.987 ppb
Concentration per Run 3	49.925 ppb	51.229 ppb	49.062 ppb	48.733 ppb	103.780 %	52.317 ppb	50.407 ppb	103.419 %	48.202 ppb
Recovery Percentage 1	99.849 %	100.498 %	97.964 %	97.863 %		104.892 %	100.795 %		97.623 %
Concentration RSD	1.3 %	2.2 %	0.5 %	1.1 %	2.2 %	1.2 %	0.5 %	2.3 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	47.299 ppb	112.108 %	109.360 %	48.973 ppb	51.388 ppb	108.147 %
Concentration per Run 1	48.780 ppb	110.702 %	108.056 %	48.721 ppb	50.069 ppb	110.726 %
Concentration per Run 2	47.384 ppb	112.790 %	111.467 %	48.821 ppb	51.992 ppb	107.742 %
Concentration per Run 3	45.734 ppb	112.831 %	108.555 %	49.378 ppb	52.104 ppb	105.972 %
Recovery Percentage 1	94.599 %			97.947 %	102.777 %	
Concentration RSD	3.2 %	1.1 %	1.7 %	0.7 %	2.2 %	2.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	11	User name	ALPHALAB\Metals-Instrument	Comment	ICB
Analysis label:	ICB	Rack	0		
Analysis started at:	9/14/2023 1:51:14 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	99.991 %	107.561 %	0.004 ppb	-12.973 ppb	-0.978 ppb	-0.579 ppb	-4.296 ppb	0.568 ppb	95.068 %
Concentration per Run 1	104.075 %	102.937 %	0.011 ppb	-9.479 ppb	-1.037 ppb	-0.463 ppb	-5.005 ppb	2.181 ppb	90.986 %
Concentration per Run 2	99.814 %	110.737 %	-0.001 ppb	-14.546 ppb	-0.887 ppb	-0.633 ppb	-3.558 ppb	-1.457 ppb	98.053 %
Concentration per Run 3	96.084 %	109.010 %	0.001 ppb	-14.894 ppb	-1.010 ppb	-0.641 ppb	-4.326 ppb	0.980 ppb	96.164 %
Recovery Percentage 1			0.778 %	-12.973 %	-1.397 %	-5.790 %	-4.296 %	0.568 %	
Concentration RSD	4.0 %	3.8 %	154.8 %	23.4 %	8.2 %	17.3 %	16.9 %	326.4 %	3.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.004 ppb	-0.005 ppb	0.005 ppb	8.516 ppb	0.001 ppb	0.081 ppb	0.016 ppb	0.134 ppb	107.908 %
Concentration per Run 1	0.004 ppb	0.005 ppb	0.009 ppb	7.879 ppb	0.000 ppb	0.087 ppb	0.014 ppb	0.138 ppb	107.281 %
Concentration per Run 2	0.001 ppb	-0.004 ppb	0.001 ppb	8.509 ppb	0.001 ppb	0.074 ppb	0.017 ppb	0.116 ppb	108.847 %
Concentration per Run 3	0.007 ppb	-0.016 ppb	0.005 ppb	9.161 ppb	0.003 ppb	0.082 ppb	0.016 ppb	0.147 ppb	107.596 %
Recovery Percentage 1	0.082 %	-0.506 %	0.523 %	17.033 %	0.237 %	4.050 %	1.586 %	2.679 %	
Concentration RSD	71.4 %	202.5 %	79.7 %	7.5 %	125.0 %	8.0 %	8.0 %	11.9 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.017 ppb	0.686 ppb	-0.006 ppb	1.200 ppb	106.278 %	0.003 ppb	0.002 ppb	105.476 %	-0.020 ppb
Concentration per Run 1	-0.006 ppb	0.508 ppb	-0.001 ppb	0.901 ppb	104.722 %	0.003 ppb	0.001 ppb	106.675 %	-0.041 ppb
Concentration per Run 2	-0.020 ppb	0.755 ppb	-0.008 ppb	1.225 ppb	106.158 %	0.003 ppb	0.002 ppb	103.294 %	-0.022 ppb
Concentration per Run 3	-0.026 ppb	0.796 ppb	-0.008 ppb	1.475 ppb	107.954 %	0.003 ppb	0.002 ppb	106.459 %	0.002 ppb
Recovery Percentage 1	-3.440 %	13.725 %	-0.057 %	60.025 %		0.797 %	0.797 %		-0.505 %
Concentration RSD	59.4 %	22.8 %	67.2 %	24.0 %	1.5 %	3.3 %	19.9 %	1.8 %	104.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.015 ppb	108.645 %	109.519 %	0.264 ppb	0.011 ppb	110.262 %
Concentration per Run 1	0.014 ppb	110.808 %	109.199 %	0.196 ppb	0.012 ppb	112.482 %
Concentration per Run 2	0.023 ppb	107.926 %	110.896 %	0.310 ppb	0.012 ppb	109.769 %
Concentration per Run 3	0.007 ppb	107.201 %	108.462 %	0.286 ppb	0.010 ppb	108.536 %
Recovery Percentage 1	2.968 %			26.399 %	1.105 %	
Concentration RSD	55.4 %	1.8 %	1.1 %	22.7 %	10.0 %	1.8 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	12	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1827286-1 6020TL	Rack	1		
Analysis started at:	9/14/2023 1:56:48 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	101.215 %	105.636 %	0.003 ppb	-9.490 ppb	0.107 ppb	0.975 ppb	-0.834 ppb	16.092 ppb	95.616 %
Concentration per Run 1	105.478 %	102.044 %	0.004 ppb	-8.653 ppb	0.353 ppb	0.841 ppb	-3.010 ppb	12.344 ppb	96.566 %
Concentration per Run 2	100.263 %	105.378 %	0.003 ppb	-10.867 ppb	-0.005 ppb	1.002 ppb	-0.735 ppb	15.777 ppb	92.035 %
Concentration per Run 3	97.904 %	109.486 %	0.003 ppb	-8.951 ppb	-0.027 ppb	1.083 ppb	1.243 ppb	20.155 ppb	98.247 %
Concentration RSD	3.8 %	3.5 %	15.4 %	12.7 %	199.4 %	12.6 %	255.2 %	24.3 %	3.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.004 ppb	0.005 ppb	0.045 ppb	4.134 ppb	0.000 ppb	0.011 ppb	0.113 ppb	-0.398 ppb	107.851 %
Concentration per Run 1	0.008 ppb	0.003 ppb	0.050 ppb	3.458 ppb	-0.001 ppb	0.013 ppb	0.114 ppb	-0.389 ppb	105.344 %
Concentration per Run 2	0.006 ppb	0.000 ppb	0.063 ppb	4.706 ppb	0.000 ppb	0.008 ppb	0.111 ppb	-0.403 ppb	105.326 %
Concentration per Run 3	-0.001 ppb	0.011 ppb	0.022 ppb	4.237 ppb	0.000 ppb	0.013 ppb	0.113 ppb	-0.402 ppb	112.883 %
Concentration RSD	105.0 %	118.3 %	47.0 %	15.2 %	187.9 %	23.0 %	1.2 %	2.0 %	4.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.042 ppb	0.233 ppb	0.009 ppb	0.465 ppb	107.826 %	0.001 ppb	0.000 ppb	108.474 %	-0.055 ppb
Concentration per Run 1	-0.068 ppb	0.098 ppb	0.008 ppb	0.279 ppb	106.301 %	0.001 ppb	0.000 ppb	103.840 %	-0.067 ppb
Concentration per Run 2	0.015 ppb	0.181 ppb	0.009 ppb	0.484 ppb	107.972 %	0.001 ppb	0.000 ppb	107.901 %	-0.057 ppb
Concentration per Run 3	-0.073 ppb	0.422 ppb	0.011 ppb	0.632 ppb	109.205 %	0.002 ppb	0.000 ppb	113.679 %	-0.040 ppb
Concentration RSD	118.4 %	72.0 %	15.4 %	38.1 %	1.4 %	42.7 %	146.5 %	4.6 %	24.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.024 ppb	113.007 %	112.930 %	0.077 ppb	0.027 ppb	117.030 %
Concentration per Run 1	0.012 ppb	112.007 %	112.515 %	0.044 ppb	0.025 ppb	126.815 %
Concentration per Run 2	0.025 ppb	111.533 %	109.233 %	0.093 ppb	0.027 ppb	112.445 %
Concentration per Run 3	0.036 ppb	115.481 %	117.042 %	0.094 ppb	0.029 ppb	111.830 %
Concentration RSD	49.5 %	1.9 %	3.5 %	37.1 %	9.0 %	7.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	13	User name	ALPHALAB\Metals-Instrument	Comment	fb
Analysis label:	I2351877-02 6020TL	Rack	1		
Analysis started at:	9/14/2023 2:01:26 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.800 %	106.529 %	0.002 ppb	8.798 ppb	1.061 ppb	9.016 ppb	-5.456 ppb	13.746 ppb	103.139 %
Concentration per Run 1	104.585 %	106.748 %	0.001 ppb	11.040 ppb	0.887 ppb	9.135 ppb	-5.577 ppb	15.213 ppb	107.804 %
Concentration per Run 2	101.524 %	107.938 %	0.001 ppb	7.291 ppb	0.831 ppb	8.912 ppb	-5.051 ppb	15.613 ppb	97.487 %
Concentration per Run 3	96.292 %	104.902 %	0.004 ppb	8.063 ppb	1.465 ppb	9.001 ppb	-5.740 ppb	10.411 ppb	104.127 %
Concentration RSD	4.2 %	1.4 %	90.8 %	22.5 %	33.0 %	1.2 %	6.6 %	21.1 %	5.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.002 ppb	0.229 ppb	0.415 ppb	5.449 ppb	0.001 ppb	0.156 ppb	0.142 ppb	-0.541 ppb	107.384 %
Concentration per Run 1	-0.004 ppb	0.222 ppb	0.468 ppb	5.422 ppb	0.001 ppb	0.158 ppb	0.159 ppb	-0.525 ppb	103.194 %
Concentration per Run 2	-0.004 ppb	0.241 ppb	0.396 ppb	5.003 ppb	0.000 ppb	0.143 ppb	0.127 ppb	-0.586 ppb	109.748 %
Concentration per Run 3	0.002 ppb	0.224 ppb	0.382 ppb	5.922 ppb	0.000 ppb	0.168 ppb	0.141 ppb	-0.512 ppb	109.211 %
Concentration RSD	151.6 %	4.4 %	11.1 %	8.4 %	116.0 %	7.8 %	11.3 %	7.3 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.084 ppb	0.064 ppb	0.190 ppb	0.189 ppb	107.311 %	0.001 ppb	0.000 ppb	106.594 %	-0.056 ppb
Concentration per Run 1	-0.071 ppb	0.033 ppb	0.193 ppb	0.066 ppb	107.350 %	0.001 ppb	0.000 ppb	105.973 %	-0.073 ppb
Concentration per Run 2	-0.060 ppb	0.056 ppb	0.189 ppb	0.187 ppb	106.699 %	0.000 ppb	0.000 ppb	106.459 %	-0.059 ppb
Concentration per Run 3	-0.119 ppb	0.103 ppb	0.189 ppb	0.314 ppb	107.884 %	0.001 ppb	0.001 ppb	107.349 %	-0.035 ppb
Concentration RSD	37.2 %	56.3 %	1.3 %	65.8 %	0.6 %	40.7 %	1,985.1 %	0.7 %	34.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.249 ppb	112.734 %	110.942 %	0.043 ppb	0.007 ppb	113.539 %
Concentration per Run 1	0.191 ppb	111.794 %	111.046 %	0.024 ppb	0.006 ppb	115.999 %
Concentration per Run 2	0.286 ppb	112.735 %	111.591 %	0.051 ppb	0.007 ppb	113.714 %
Concentration per Run 3	0.271 ppb	113.671 %	110.189 %	0.055 ppb	0.007 ppb	110.902 %
Concentration RSD	20.6 %	0.8 %	0.6 %	39.4 %	8.9 %	2.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	14	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1827286-2D5 6020TL	Rack	1		
Analysis started at:	9/14/2023 2:16:05 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	103.595 %	107.105 %	10.343 ppb	2,079.062 ppb	1,865.864 ppb	405.920 ppb	1,978.705 ppb	1,663.318 ppb	97.990 %
Concentration per Run 1	107.130 %	103.533 %	10.260 ppb	2,119.880 ppb	1,883.524 ppb	402.402 ppb	2,019.557 ppb	1,975.338 ppb	95.821 %
Concentration per Run 2	103.649 %	105.021 %	10.231 ppb	2,091.467 ppb	1,864.469 ppb	394.618 ppb	1,888.211 ppb	1,669.052 ppb	104.322 %
Concentration per Run 3	100.006 %	112.761 %	10.538 ppb	2,025.839 ppb	1,849.599 ppb	420.741 ppb	2,028.347 ppb	1,345.562 ppb	93.829 %
Concentration RSD	3.4 %	4.6 %	1.6 %	2.3 %	0.9 %	3.3 %	4.0 %	18.9 %	5.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	96.623 ppb	38.928 ppb	99.118 ppb	206.148 ppb	102.606 ppb	96.810 ppb	50.109 ppb	103.520 ppb	108.422 %
Concentration per Run 1	100.962 ppb	39.408 ppb	98.756 ppb	210.383 ppb	109.289 ppb	101.391 ppb	52.366 ppb	106.096 ppb	101.733 %
Concentration per Run 2	94.028 ppb	39.352 ppb	99.798 ppb	207.436 ppb	104.563 ppb	96.244 ppb	50.074 ppb	103.038 ppb	108.261 %
Concentration per Run 3	94.880 ppb	38.024 ppb	98.800 ppb	200.626 ppb	93.965 ppb	92.795 ppb	47.887 ppb	101.426 ppb	115.272 %
Concentration RSD	3.9 %	2.0 %	0.6 %	2.4 %	7.6 %	4.5 %	4.5 %	2.3 %	6.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	24.972 ppb	25.682 ppb	193.329 ppb	204.902 ppb	104.706 %	10.313 ppb	11.260 ppb	105.861 %	86.027 ppb
Concentration per Run 1	25.841 ppb	25.420 ppb	192.213 ppb	205.358 ppb	100.227 %	10.720 ppb	11.621 ppb	99.261 %	87.718 ppb
Concentration per Run 2	24.535 ppb	25.202 ppb	187.134 ppb	202.848 ppb	103.738 %	10.275 ppb	11.321 ppb	102.642 %	85.492 ppb
Concentration per Run 3	24.541 ppb	26.424 ppb	200.642 ppb	206.501 ppb	110.152 %	9.944 ppb	10.838 ppb	115.681 %	84.871 ppb
Concentration RSD	3.0 %	2.5 %	3.5 %	0.9 %	4.8 %	3.8 %	3.5 %	8.2 %	1.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	408.709 ppb	109.306 %	109.065 %	25.240 ppb	107.273 ppb	111.081 %
Concentration per Run 1	407.346 ppb	107.075 %	104.727 %	25.283 ppb	107.366 ppb	108.908 %
Concentration per Run 2	400.952 ppb	113.464 %	107.176 %	24.740 ppb	107.752 ppb	110.834 %
Concentration per Run 3	417.829 ppb	107.378 %	115.292 %	25.697 ppb	106.702 ppb	113.501 %
Concentration RSD	2.1 %	3.3 %	5.1 %	1.9 %	0.5 %	2.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 15
Analysis label: WG1826010-2d10 6020TL
Analysis started at: 9/14/2023 2:20:41 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 41
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	100.040 %	106.668 %	4.837 ppb	1,042.574 ppb	943.653 ppb	189.625 ppb	947.932 ppb	871.331 ppb	96.068 %
Concentration per Run 1	103.156 %	106.033 %	4.730 ppb	1,055.104 ppb	939.193 ppb	192.306 ppb	967.930 ppb	983.548 ppb	101.360 %
Concentration per Run 2	100.078 %	107.819 %	4.848 ppb	1,005.449 ppb	930.742 ppb	179.806 ppb	919.453 ppb	877.036 ppb	98.231 %
Concentration per Run 3	96.885 %	106.152 %	4.933 ppb	1,067.169 ppb	961.024 ppb	196.762 ppb	956.413 ppb	753.409 ppb	88.613 %
Concentration RSD	3.1 %	0.9 %	2.1 %	3.1 %	1.7 %	4.6 %	2.7 %	13.2 %	6.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.740 ppb	18.209 ppb	47.231 ppb	100.100 ppb	47.693 ppb	44.787 ppb	23.060 ppb	49.340 ppb	108.994 %
Concentration per Run 1	48.072 ppb	18.869 ppb	48.258 ppb	100.695 ppb	49.734 ppb	46.433 ppb	24.498 ppb	51.472 ppb	101.824 %
Concentration per Run 2	44.422 ppb	17.930 ppb	46.200 ppb	97.165 ppb	47.319 ppb	44.230 ppb	22.524 ppb	49.229 ppb	107.988 %
Concentration per Run 3	44.725 ppb	17.827 ppb	47.235 ppb	102.441 ppb	46.025 ppb	43.698 ppb	22.158 ppb	47.321 ppb	117.169 %
Concentration RSD	4.4 %	3.2 %	2.2 %	2.7 %	3.9 %	3.2 %	5.5 %	4.2 %	7.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	11.755 ppb	13.269 ppb	95.570 ppb	91.648 ppb	105.138 %	4.832 ppb	5.112 ppb	107.512 %	43.347 ppb
Concentration per Run 1	12.505 ppb	12.345 ppb	93.542 ppb	91.072 ppb	105.106 %	4.911 ppb	5.276 ppb	102.140 %	43.378 ppb
Concentration per Run 2	11.427 ppb	13.571 ppb	93.463 ppb	92.025 ppb	103.926 %	4.808 ppb	5.021 ppb	104.304 %	43.756 ppb
Concentration per Run 3	11.333 ppb	13.892 ppb	99.704 ppb	91.848 ppb	106.381 %	4.776 ppb	5.040 ppb	116.091 %	42.907 ppb
Concentration RSD	5.5 %	6.2 %	3.7 %	0.6 %	1.2 %	1.5 %	2.8 %	7.0 %	1.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	182.081 ppb	112.794 %	111.887 %	11.731 ppb	51.332 ppb	113.683 %
Concentration per Run 1	185.399 ppb	109.427 %	108.362 %	11.479 ppb	50.486 ppb	116.605 %
Concentration per Run 2	182.810 ppb	111.179 %	109.144 %	11.818 ppb	51.342 ppb	111.084 %
Concentration per Run 3	178.035 ppb	117.777 %	118.154 %	11.898 ppb	52.168 ppb	113.359 %
Concentration RSD	2.1 %	3.9 %	4.9 %	1.9 %	1.6 %	2.4 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 16
Analysis label: WG1826010-3d10 6020TL
Analysis started at: 9/14/2023 2:25:19 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 43
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	96.882 %	105.398 %	5.009 ppb	30,084.408 ppb	3,695.704 ppb	212.610 ppb	3,187.894 ppb	14,896.762 ppb	93.489 %
Concentration per Run 1	99.447 %	103.711 %	5.030 ppb	30,102.638 ppb	3,629.651 ppb	210.460 ppb	3,177.754 ppb	15,234.180 ppb	102.661 %
Concentration per Run 2	96.930 %	103.235 %	5.011 ppb	30,042.390 ppb	3,737.207 ppb	210.043 ppb	3,132.178 ppb	14,291.032 ppb	89.094 %
Concentration per Run 3	94.271 %	109.248 %	4.987 ppb	30,108.197 ppb	3,720.253 ppb	217.328 ppb	3,253.751 ppb	15,165.073 ppb	88.712 %
Concentration RSD	2.7 %	3.2 %	0.4 %	0.1 %	1.6 %	1.9 %	1.9 %	3.5 %	8.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.913 ppb	18.470 ppb	689.046 ppb	119.575 ppb	49.555 ppb	45.625 ppb	23.813 ppb	48.186 ppb	108.762 %
Concentration per Run 1	46.841 ppb	19.010 ppb	708.606 ppb	124.963 ppb	52.583 ppb	47.639 ppb	25.505 ppb	49.500 ppb	104.486 %
Concentration per Run 2	45.191 ppb	18.302 ppb	690.749 ppb	118.251 ppb	50.095 ppb	46.228 ppb	23.352 ppb	48.719 ppb	106.521 %
Concentration per Run 3	45.705 ppb	18.099 ppb	667.782 ppb	115.511 ppb	45.987 ppb	43.006 ppb	22.582 ppb	46.340 ppb	115.279 %
Concentration RSD	1.8 %	2.6 %	3.0 %	4.1 %	6.7 %	5.2 %	6.4 %	3.4 %	5.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.304 ppb	12.637 ppb	163.350 ppb	91.766 ppb	103.874 %	4.916 ppb	5.328 ppb	106.271 %	46.270 ppb
Concentration per Run 1	12.746 ppb	12.484 ppb	162.198 ppb	93.690 ppb	102.330 %	5.008 ppb	5.340 ppb	101.417 %	46.593 ppb
Concentration per Run 2	12.274 ppb	12.888 ppb	158.879 ppb	90.006 ppb	103.705 %	4.908 ppb	5.408 ppb	103.671 %	46.499 ppb
Concentration per Run 3	11.893 ppb	12.538 ppb	168.973 ppb	91.601 ppb	105.588 %	4.831 ppb	5.236 ppb	113.725 %	45.716 ppb
Concentration RSD	3.5 %	1.7 %	3.1 %	2.0 %	1.6 %	1.8 %	1.6 %	6.2 %	1.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	196.111 ppb	113.384 %	114.364 %	12.160 ppb	52.655 ppb	107.254 %
Concentration per Run 1	193.772 ppb	111.393 %	109.774 %	12.045 ppb	51.478 ppb	109.556 %
Concentration per Run 2	194.132 ppb	112.323 %	112.350 %	12.326 ppb	52.824 ppb	105.667 %
Concentration per Run 3	200.430 ppb	116.437 %	120.966 %	12.108 ppb	53.663 ppb	106.537 %
Concentration RSD	1.9 %	2.4 %	5.1 %	1.2 %	2.1 %	1.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 17
Analysis label: WG1826010-5d10 6020TL
Analysis started at: 9/14/2023 2:29:57 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 45
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.967 %	102.699 %	50.765 ppb	34,029.816 ppb	7,723.886 ppb	62.851 ppb	7,282.636 ppb	18,597.914 ppb	95.734 %
Concentration per Run 1	98.285 %	101.806 %	50.115 ppb	33,904.828 ppb	7,741.928 ppb	61.106 ppb	7,177.267 ppb	19,264.716 ppb	92.274 %
Concentration per Run 2	91.785 %	102.282 %	50.931 ppb	33,615.989 ppb	7,440.113 ppb	61.752 ppb	7,027.774 ppb	17,783.522 ppb	99.085 %
Concentration per Run 3	88.832 %	104.009 %	51.249 ppb	34,568.631 ppb	7,989.618 ppb	65.696 ppb	7,642.866 ppb	18,745.503 ppb	95.842 %
Concentration RSD	5.2 %	1.1 %	1.2 %	1.4 %	3.6 %	4.0 %	4.4 %	4.0 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.490 ppb	47.409 ppb	694.279 ppb	5,120.002 ppb	51.663 ppb	48.200 ppb	47.969 ppb	50.207 ppb	106.672 %
Concentration per Run 1	48.929 ppb	48.485 ppb	704.461 ppb	5,102.129 ppb	52.292 ppb	49.517 ppb	48.560 ppb	50.760 ppb	104.142 %
Concentration per Run 2	48.616 ppb	47.124 ppb	690.020 ppb	5,333.998 ppb	52.826 ppb	48.261 ppb	48.956 ppb	50.088 ppb	104.508 %
Concentration per Run 3	47.924 ppb	46.618 ppb	688.356 ppb	4,923.879 ppb	49.871 ppb	46.821 ppb	46.390 ppb	49.772 ppb	111.366 %
Concentration RSD	1.1 %	2.0 %	1.3 %	4.0 %	3.0 %	2.8 %	2.9 %	1.0 %	3.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	49.046 ppb	51.493 ppb	118.469 ppb	49.270 ppb	99.887 %	1.507 ppb	50.337 ppb	104.061 %	51.477 ppb
Concentration per Run 1	49.358 ppb	51.290 ppb	114.797 ppb	49.889 ppb	99.495 %	1.532 ppb	51.080 ppb	98.939 %	53.343 ppb
Concentration per Run 2	48.654 ppb	50.570 ppb	120.257 ppb	48.873 ppb	100.587 %	1.498 ppb	50.286 ppb	103.937 %	51.052 ppb
Concentration per Run 3	49.125 ppb	52.619 ppb	120.353 ppb	49.048 ppb	99.578 %	1.491 ppb	49.645 ppb	109.306 %	50.037 ppb
Concentration RSD	0.7 %	2.0 %	2.7 %	1.1 %	0.6 %	1.4 %	1.4 %	5.0 %	3.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.611 ppb	110.068 %	111.574 %	47.835 ppb	51.069 ppb	106.198 %
Concentration per Run 1	58.807 ppb	108.187 %	105.123 %	46.874 ppb	50.362 ppb	109.361 %
Concentration per Run 2	57.538 ppb	107.403 %	115.891 %	47.176 ppb	51.943 ppb	105.174 %
Concentration per Run 3	56.487 ppb	114.613 %	113.708 %	49.453 ppb	50.902 ppb	104.058 %
Concentration RSD	2.0 %	3.6 %	5.1 %	2.9 %	1.6 %	2.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	18	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1826010-4 6020TL	Rack	1		
Analysis started at:	9/14/2023 2:34:35 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.260 %	95.296 %	0.014 ppb	314,560.520 ppb	24,929.869 ppb	119.885 ppb	21,015.681 ppb	129,870.086 ppb	93.150 %
Concentration per Run 1	82.291 %	96.626 %	0.015 ppb	311,967.141 ppb	24,132.614 ppb	116.305 ppb	21,390.522 ppb	132,828.578 ppb	95.306 %
Concentration per Run 2	76.764 %	98.115 %	0.013 ppb	312,651.706 ppb	25,462.201 ppb	120.893 ppb	21,435.850 ppb	131,291.375 ppb	94.242 %
Concentration per Run 3	72.725 %	91.149 %	0.013 ppb	319,062.713 ppb	25,194.791 ppb	122.457 ppb	20,220.671 ppb	125,490.305 ppb	89.903 %
Concentration RSD	6.2 %	3.8 %	6.5 %	1.2 %	2.8 %	2.7 %	3.3 %	3.0 %	3.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.512 ppb	0.721 ppb	5,526.181 ppb	261.559 ppb	3.189 ppb	2.287 ppb	5.339 ppb	1.455 ppb	96.259 %
Concentration per Run 1	0.511 ppb	0.749 ppb	5,515.947 ppb	275.550 ppb	3.221 ppb	2.448 ppb	5.452 ppb	1.476 ppb	91.862 %
Concentration per Run 2	0.500 ppb	0.723 ppb	5,670.821 ppb	261.269 ppb	3.222 ppb	2.182 ppb	5.407 ppb	1.523 ppb	97.014 %
Concentration per Run 3	0.526 ppb	0.691 ppb	5,391.776 ppb	247.859 ppb	3.124 ppb	2.231 ppb	5.158 ppb	1.365 ppb	99.901 %
Concentration RSD	2.5 %	4.1 %	2.5 %	5.3 %	1.8 %	6.2 %	3.0 %	5.6 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.817 ppb	0.887 ppb	699.151 ppb	9.662 ppb	87.531 %	0.003 ppb	0.875 ppb	93.747 %	1.577 ppb
Concentration per Run 1	0.780 ppb	0.832 ppb	689.297 ppb	8.418 ppb	86.849 %	0.003 ppb	0.853 ppb	91.863 %	1.463 ppb
Concentration per Run 2	0.826 ppb	0.875 ppb	737.019 ppb	9.761 ppb	89.577 %	0.004 ppb	0.879 ppb	98.854 %	1.651 ppb
Concentration per Run 3	0.846 ppb	0.955 ppb	671.136 ppb	10.806 ppb	86.167 %	0.003 ppb	0.892 ppb	90.524 %	1.617 ppb
Concentration RSD	4.2 %	7.0 %	4.9 %	12.4 %	2.1 %	28.2 %	2.3 %	4.8 %	6.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	76.920 ppb	100.635 %	100.335 %	0.280 ppb	0.435 ppb	87.188 %
Concentration per Run 1	76.490 ppb	99.367 %	97.660 %	0.226 ppb	0.415 ppb	92.568 %
Concentration per Run 2	76.661 ppb	101.581 %	105.189 %	0.325 ppb	0.447 ppb	85.512 %
Concentration per Run 3	77.608 ppb	100.958 %	98.156 %	0.288 ppb	0.443 ppb	83.485 %
Concentration RSD	0.8 %	1.1 %	4.2 %	17.8 %	4.0 %	5.5 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	19	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2351877-01 6020TL	Rack	1		
Analysis started at:	9/14/2023 2:39:13 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	70.986 %	88.787 %	0.015 ppb	331,801.440 ppb	26,354.975 ppb	123.108 ppb	21,825.135 ppb	132,751.261 ppb	84.238 %
Concentration per Run 1	76.620 %	87.755 %	0.014 ppb	337,786.605 ppb	26,468.671 ppb	116.992 ppb	21,965.886 ppb	134,699.191 ppb	84.919 %
Concentration per Run 2	69.503 %	91.268 %	0.014 ppb	332,923.851 ppb	26,442.415 ppb	131.249 ppb	22,443.806 ppb	134,195.441 ppb	83.398 %
Concentration per Run 3	66.835 %	87.338 %	0.018 ppb	324,693.864 ppb	26,153.840 ppb	121.082 ppb	21,065.714 ppb	129,359.152 ppb	84.396 %
Concentration RSD	7.1 %	2.4 %	14.1 %	2.0 %	0.7 %	6.0 %	3.2 %	2.2 %	0.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.464 ppb	0.666 ppb	5,495.156 ppb	259.077 ppb	3.221 ppb	2.139 ppb	5.354 ppb	1.354 ppb	90.240 %
Concentration per Run 1	0.486 ppb	0.711 ppb	5,623.974 ppb	269.553 ppb	3.378 ppb	2.320 ppb	5.677 ppb	1.485 ppb	85.483 %
Concentration per Run 2	0.501 ppb	0.626 ppb	5,452.216 ppb	247.350 ppb	3.119 ppb	2.005 ppb	4.970 ppb	1.292 ppb	96.049 %
Concentration per Run 3	0.404 ppb	0.661 ppb	5,409.277 ppb	260.326 ppb	3.167 ppb	2.092 ppb	5.415 ppb	1.286 ppb	89.187 %
Concentration RSD	11.2 %	6.4 %	2.1 %	4.3 %	4.3 %	7.6 %	6.7 %	8.3 %	5.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.778 ppb	0.436 ppb	706.919 ppb	6.986 ppb	83.540 %	0.002 ppb	0.843 ppb	89.009 %	0.971 ppb
Concentration per Run 1	0.835 ppb	0.410 ppb	706.213 ppb	6.597 ppb	82.354 %	0.002 ppb	0.864 ppb	85.485 %	0.871 ppb
Concentration per Run 2	0.803 ppb	0.438 ppb	733.890 ppb	7.041 ppb	85.286 %	0.003 ppb	0.847 ppb	95.173 %	1.014 ppb
Concentration per Run 3	0.697 ppb	0.460 ppb	680.654 ppb	7.319 ppb	82.980 %	0.002 ppb	0.818 ppb	86.370 %	1.028 ppb
Concentration RSD	9.3 %	5.7 %	3.8 %	5.2 %	1.8 %	26.8 %	2.8 %	6.0 %	9.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	77.471 ppb	95.994 %	95.079 %	0.108 ppb	0.427 ppb	81.699 %
Concentration per Run 1	77.201 ppb	95.333 %	95.745 %	0.080 ppb	0.415 ppb	84.812 %
Concentration per Run 2	78.315 ppb	99.054 %	99.632 %	0.123 ppb	0.444 ppb	80.610 %
Concentration per Run 3	76.896 ppb	93.596 %	89.860 %	0.120 ppb	0.423 ppb	79.676 %
Concentration RSD	1.0 %	2.9 %	5.2 %	22.1 %	3.5 %	3.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	20	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2353359-01D10 6020TL	Rack	1		
Analysis started at:	9/14/2023 2:43:51 PM	Vial	55		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.119 %	95.396 %	0.011 ppb	109,258.475 ppb	3,096.564 ppb	107.938 ppb	1,261.696 ppb	11,149.749 ppb	74.218 %
Concentration per Run 1	78.740 %	94.364 %	0.014 ppb	110,739.301 ppb	3,097.748 ppb	103.445 ppb	1,340.577 ppb	13,027.754 ppb	76.006 %
Concentration per Run 2	74.601 %	97.460 %	0.008 ppb	110,748.196 ppb	3,113.214 ppb	112.783 ppb	1,296.441 ppb	10,504.812 ppb	74.827 %
Concentration per Run 3	72.016 %	94.364 %	0.010 ppb	106,287.929 ppb	3,078.731 ppb	107.586 ppb	1,148.070 ppb	9,916.679 ppb	71.821 %
Concentration RSD	4.5 %	1.9 %	31.0 %	2.4 %	0.6 %	4.3 %	8.0 %	14.8 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.243 ppb	0.644 ppb	8.285 ppb	349.863 ppb	0.167 ppb	1.261 ppb	0.753 ppb	1.836 ppb	92.364 %
Concentration per Run 1	2.340 ppb	0.673 ppb	8.745 ppb	361.879 ppb	0.180 ppb	1.323 ppb	0.808 ppb	2.002 ppb	87.734 %
Concentration per Run 2	2.120 ppb	0.654 ppb	8.132 ppb	343.162 ppb	0.160 ppb	1.222 ppb	0.717 ppb	1.774 ppb	97.322 %
Concentration per Run 3	2.268 ppb	0.605 ppb	7.978 ppb	344.547 ppb	0.160 ppb	1.238 ppb	0.735 ppb	1.731 ppb	92.036 %
Concentration RSD	5.0 %	5.5 %	4.9 %	3.0 %	6.8 %	4.3 %	6.4 %	7.9 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.712 ppb	0.265 ppb	450.611 ppb	3.379 ppb	85.141 %	0.004 ppb	0.007 ppb	84.222 %	0.617 ppb
Concentration per Run 1	0.758 ppb	0.087 ppb	419.983 ppb	3.231 ppb	84.702 %	0.004 ppb	0.010 ppb	82.395 %	0.516 ppb
Concentration per Run 2	0.676 ppb	0.392 ppb	481.580 ppb	3.497 ppb	86.294 %	0.004 ppb	0.006 ppb	87.991 %	0.683 ppb
Concentration per Run 3	0.703 ppb	0.317 ppb	450.269 ppb	3.409 ppb	84.428 %	0.003 ppb	0.005 ppb	82.280 %	0.653 ppb
Concentration RSD	5.9 %	59.8 %	6.8 %	4.0 %	1.2 %	14.1 %	35.8 %	3.9 %	14.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	19.689 ppb	91.943 %	92.390 %	0.036 ppb	0.281 ppb	83.552 %
Concentration per Run 1	19.383 ppb	92.058 %	90.246 %	0.020 ppb	0.277 ppb	84.986 %
Concentration per Run 2	20.639 ppb	94.847 %	99.317 %	0.045 ppb	0.281 ppb	87.007 %
Concentration per Run 3	19.047 ppb	88.925 %	87.608 %	0.044 ppb	0.285 ppb	78.662 %
Concentration RSD	4.3 %	3.2 %	6.6 %	39.5 %	1.4 %	5.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 21
Analysis label: WG1826010-6d5 6020TL
Analysis started at: 9/14/2023 2:48:29 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 46
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.171 %	96.944 %	0.004 ppb	62,810.604 ppb	5,850.862 ppb	23.141 ppb	4,560.820 ppb	27,022.656 ppb	78.147 %
Concentration per Run 1	77.607 %	95.138 %	0.003 ppb	63,007.495 ppb	5,693.032 ppb	21.977 ppb	4,481.158 ppb	27,278.877 ppb	80.091 %
Concentration per Run 2	72.884 %	101.151 %	0.005 ppb	63,351.995 ppb	5,949.287 ppb	24.266 ppb	4,828.017 ppb	27,900.419 ppb	76.948 %
Concentration per Run 3	72.020 %	94.542 %	0.003 ppb	62,072.322 ppb	5,910.266 ppb	23.179 ppb	4,373.284 ppb	25,888.671 ppb	77.403 %
Concentration RSD	4.1 %	3.8 %	24.5 %	1.1 %	2.4 %	4.9 %	5.2 %	3.8 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.108 ppb	0.149 ppb	1,210.052 ppb	48.580 ppb	0.654 ppb	0.426 ppb	1.104 ppb	0.331 ppb	93.496 %
Concentration per Run 1	0.118 ppb	0.143 ppb	1,213.761 ppb	46.114 ppb	0.642 ppb	0.441 ppb	1.084 ppb	0.352 ppb	91.195 %
Concentration per Run 2	0.113 ppb	0.163 ppb	1,240.296 ppb	50.157 ppb	0.659 ppb	0.434 ppb	1.116 ppb	0.315 ppb	96.638 %
Concentration per Run 3	0.093 ppb	0.141 ppb	1,176.100 ppb	49.468 ppb	0.661 ppb	0.403 ppb	1.114 ppb	0.328 ppb	92.656 %
Concentration RSD	12.2 %	8.2 %	2.7 %	4.5 %	1.6 %	4.8 %	1.6 %	5.6 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.222 ppb	0.059 ppb	133.215 ppb	1.349 ppb	86.974 %	0.001 ppb	0.183 ppb	88.749 %	0.300 ppb
Concentration per Run 1	0.230 ppb	0.066 ppb	130.939 ppb	1.249 ppb	84.079 %	0.000 ppb	0.172 ppb	83.908 %	0.279 ppb
Concentration per Run 2	0.264 ppb	0.103 ppb	141.255 ppb	1.307 ppb	89.721 %	0.000 ppb	0.180 ppb	96.605 %	0.289 ppb
Concentration per Run 3	0.171 ppb	0.007 ppb	127.452 ppb	1.489 ppb	87.122 %	0.001 ppb	0.199 ppb	85.734 %	0.333 ppb
Concentration RSD	21.2 %	82.1 %	5.4 %	9.3 %	3.2 %	73.7 %	7.6 %	7.7 %	9.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	15.436 ppb	92.595 %	93.628 %	0.030 ppb	0.086 ppb	85.442 %
Concentration per Run 1	15.988 ppb	88.893 %	88.559 %	0.019 ppb	0.083 ppb	88.462 %
Concentration per Run 2	15.095 ppb	97.137 %	102.458 %	0.034 ppb	0.086 ppb	86.061 %
Concentration per Run 3	15.226 ppb	91.756 %	89.865 %	0.038 ppb	0.089 ppb	81.803 %
Concentration RSD	3.1 %	4.5 %	8.2 %	31.9 %	3.6 %	3.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	22	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 2:53:07 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.905 %	99.901 %	60.011 ppb	6,313.575 ppb	6,195.089 ppb	63.114 ppb	6,405.125 ppb	5,863.761 ppb	81.589 %
Concentration per Run 1	81.646 %	94.721 %	59.498 ppb	6,534.715 ppb	6,528.703 ppb	63.712 ppb	6,560.167 ppb	6,331.009 ppb	80.674 %
Concentration per Run 2	77.227 %	104.842 %	60.117 ppb	6,367.193 ppb	6,246.400 ppb	64.822 ppb	6,557.435 ppb	5,807.746 ppb	80.606 %
Concentration per Run 3	74.843 %	100.139 %	60.418 ppb	6,038.817 ppb	5,810.164 ppb	60.809 ppb	6,097.774 ppb	5,452.527 ppb	83.488 %
Recovery Percentage 1			100.019 %	105.226 %	103.251 %	105.191 %	106.752 %	97.729 %	
Concentration RSD	4.4 %	5.1 %	0.8 %	4.0 %	5.8 %	3.3 %	4.2 %	7.5 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.979 ppb	54.860 ppb	57.040 ppb	6,277.209 ppb	65.442 ppb	60.248 ppb	59.310 ppb	61.001 ppb	95.425 %
Concentration per Run 1	60.953 ppb	58.151 ppb	59.564 ppb	6,584.701 ppb	70.425 ppb	65.171 ppb	63.444 ppb	65.597 ppb	88.263 %
Concentration per Run 2	54.672 ppb	53.525 ppb	56.013 ppb	6,197.420 ppb	60.845 ppb	56.831 ppb	56.919 ppb	59.286 ppb	102.791 %
Concentration per Run 3	55.312 ppb	52.904 ppb	55.542 ppb	6,049.506 ppb	65.055 ppb	58.741 ppb	57.567 ppb	58.120 ppb	95.222 %
Recovery Percentage 1	94.965 %	91.433 %	95.066 %	104.620 %	109.069 %	100.413 %	98.850 %	101.668 %	
Concentration RSD	6.1 %	5.2 %	3.9 %	4.4 %	7.3 %	7.3 %	6.1 %	6.6 %	7.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	60.393 ppb	59.887 ppb	58.351 ppb	54.395 ppb	91.015 %	57.907 ppb	59.100 ppb	92.553 %	55.681 ppb
Concentration per Run 1	64.271 ppb	60.976 ppb	59.807 ppb	57.236 ppb	85.434 %	62.003 ppb	62.055 ppb	84.998 %	59.053 ppb
Concentration per Run 2	59.247 ppb	61.737 ppb	60.165 ppb	52.578 ppb	94.592 %	54.923 ppb	55.980 ppb	102.228 %	53.911 ppb
Concentration per Run 3	57.662 ppb	56.949 ppb	55.081 ppb	53.371 ppb	93.018 %	56.795 ppb	59.264 ppb	90.432 %	54.079 ppb
Recovery Percentage 1	100.655 %	99.812 %	97.252 %	90.658 %		96.512 %	98.499 %		92.802 %
Concentration RSD	5.7 %	4.3 %	4.9 %	4.6 %	5.4 %	6.3 %	5.1 %	9.5 %	5.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.215 ppb	95.214 %	94.281 %	59.431 ppb	60.664 ppb	90.069 %
Concentration per Run 1	60.738 ppb	88.967 %	88.178 %	59.252 ppb	62.072 ppb	89.422 %
Concentration per Run 2	57.630 ppb	99.869 %	100.497 %	58.476 ppb	59.577 ppb	92.639 %
Concentration per Run 3	56.278 ppb	96.807 %	94.169 %	60.565 ppb	60.343 ppb	88.145 %
Recovery Percentage 1	97.026 %			99.052 %	101.107 %	
Concentration RSD	3.9 %	5.9 %	6.5 %	1.8 %	2.1 %	2.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	23	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 2:57:49 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.787 %	101.052 %	0.003 ppb	52.114 ppb	-0.611 ppb	-0.471 ppb	9.853 ppb	1.159 ppb	78.272 %
Concentration per Run 1	81.808 %	98.889 %	0.003 ppb	61.709 ppb	-0.115 ppb	-0.389 ppb	14.178 ppb	4.560 ppb	79.602 %
Concentration per Run 2	78.664 %	104.009 %	0.002 ppb	51.578 ppb	-0.895 ppb	-0.296 ppb	9.343 ppb	-0.094 ppb	78.654 %
Concentration per Run 3	75.887 %	100.258 %	0.005 ppb	43.055 ppb	-0.824 ppb	-0.728 ppb	6.037 ppb	-0.989 ppb	76.558 %
Recovery Percentage 1			0.671 %	52.114 %	-0.873 %	-4.708 %	9.853 %	1.159 %	
Concentration RSD	3.8 %	2.6 %	43.6 %	17.9 %	70.6 %	48.3 %	41.6 %	257.1 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.005 ppb	0.005 ppb	0.049 ppb	11.397 ppb	0.002 ppb	0.108 ppb	0.021 ppb	0.167 ppb	95.142 %
Concentration per Run 1	0.009 ppb	0.008 ppb	0.084 ppb	10.257 ppb	0.003 ppb	0.113 ppb	0.034 ppb	0.199 ppb	88.904 %
Concentration per Run 2	0.004 ppb	0.004 ppb	0.009 ppb	12.487 ppb	0.000 ppb	0.083 ppb	0.009 ppb	0.133 ppb	101.045 %
Concentration per Run 3	0.003 ppb	0.003 ppb	0.055 ppb	11.447 ppb	0.002 ppb	0.127 ppb	0.020 ppb	0.170 ppb	95.478 %
Recovery Percentage 1	0.108 %	0.514 %	4.940 %	22.794 %	0.313 %	5.389 %	2.085 %	3.345 %	
Concentration RSD	51.3 %	51.0 %	77.0 %	9.8 %	78.0 %	20.8 %	58.8 %	19.8 %	6.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.126 ppb	0.665 ppb	0.009 ppb	1.432 ppb	93.655 %	0.003 ppb	0.002 ppb	90.265 %	0.347 ppb
Concentration per Run 1	0.124 ppb	0.512 ppb	0.018 ppb	1.082 ppb	90.501 %	0.003 ppb	0.003 ppb	87.480 %	0.295 ppb
Concentration per Run 2	0.161 ppb	0.848 ppb	0.001 ppb	1.521 ppb	98.018 %	0.002 ppb	0.001 ppb	95.759 %	0.359 ppb
Concentration per Run 3	0.092 ppb	0.636 ppb	0.008 ppb	1.693 ppb	92.445 %	0.002 ppb	0.002 ppb	87.557 %	0.388 ppb
Recovery Percentage 1	25.154 %	13.307 %	0.089 %	71.594 %		0.663 %	0.961 %		8.676 %
Concentration RSD	27.3 %	25.5 %	98.6 %	22.0 %	4.2 %	18.0 %	41.6 %	5.3 %	13.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.018 ppb	94.138 %	94.621 %	0.098 ppb	0.013 ppb	95.033 %
Concentration per Run 1	0.022 ppb	91.795 %	93.171 %	0.084 ppb	0.014 ppb	96.062 %
Concentration per Run 2	0.011 ppb	97.825 %	98.681 %	0.109 ppb	0.014 ppb	97.085 %
Concentration per Run 3	0.022 ppb	92.795 %	92.012 %	0.102 ppb	0.011 ppb	91.953 %
Recovery Percentage 1	3.688 %			9.819 %	1.285 %	
Concentration RSD	34.2 %	3.4 %	3.8 %	13.5 %	9.7 %	2.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 24
Analysis label: WG1827286-3D10 6020TL
Analysis started at: 9/14/2023 3:03:22 PM
User name ALPHALAB\Metals-Instrument
Rack 1
Vial 51
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.140 %	101.250 %	5.405 ppb	1,239.802 ppb	1,056.185 ppb	221.683 ppb	1,142.192 ppb	2,729.825 ppb	83.352 %
Concentration per Run 1	83.041 %	103.533 %	5.318 ppb	1,245.506 ppb	1,026.142 ppb	221.752 ppb	1,127.130 ppb	2,800.443 ppb	84.603 %
Concentration per Run 2	82.216 %	99.305 %	5.394 ppb	1,255.869 ppb	1,088.769 ppb	222.305 ppb	1,160.256 ppb	2,779.211 ppb	82.697 %
Concentration per Run 3	78.164 %	100.913 %	5.502 ppb	1,218.030 ppb	1,053.645 ppb	220.991 ppb	1,139.191 ppb	2,609.821 ppb	82.756 %
Concentration RSD	3.2 %	2.1 %	1.7 %	1.6 %	3.0 %	0.3 %	1.5 %	3.8 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.097 ppb	18.813 ppb	53.374 ppb	111.557 ppb	53.964 ppb	49.700 ppb	25.819 ppb	52.832 ppb	95.819 %
Concentration per Run 1	46.788 ppb	18.818 ppb	54.519 ppb	108.934 ppb	54.472 ppb	49.632 ppb	26.186 ppb	52.929 ppb	96.013 %
Concentration per Run 2	48.616 ppb	19.081 ppb	53.354 ppb	111.533 ppb	54.209 ppb	50.254 ppb	25.247 ppb	53.408 ppb	94.681 %
Concentration per Run 3	45.888 ppb	18.538 ppb	52.250 ppb	114.204 ppb	53.212 ppb	49.212 ppb	26.022 ppb	52.159 ppb	96.762 %
Concentration RSD	3.0 %	1.4 %	2.1 %	2.4 %	1.2 %	1.1 %	1.9 %	1.2 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.774 ppb	12.790 ppb	101.062 ppb	80.442 ppb	92.982 %	5.101 ppb	5.467 ppb	89.931 %	34.467 ppb
Concentration per Run 1	12.769 ppb	12.369 ppb	102.334 ppb	80.241 ppb	92.859 %	5.255 ppb	5.571 ppb	90.881 %	35.058 ppb
Concentration per Run 2	12.736 ppb	12.815 ppb	100.162 ppb	80.369 ppb	92.962 %	4.967 ppb	5.331 ppb	89.286 %	33.924 ppb
Concentration per Run 3	12.815 ppb	13.185 ppb	100.691 ppb	80.716 ppb	93.123 %	5.081 ppb	5.498 ppb	89.626 %	34.419 ppb
Concentration RSD	0.3 %	3.2 %	1.1 %	0.3 %	0.1 %	2.8 %	2.3 %	0.9 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	194.316 ppb	96.270 %	93.370 %	11.684 ppb	50.999 ppb	100.772 %
Concentration per Run 1	193.053 ppb	97.638 %	95.162 %	11.156 ppb	48.566 ppb	107.677 %
Concentration per Run 2	192.922 ppb	95.285 %	92.163 %	12.027 ppb	50.010 ppb	98.987 %
Concentration per Run 3	196.971 ppb	95.887 %	92.784 %	11.868 ppb	54.421 ppb	95.653 %
Concentration RSD	1.2 %	1.3 %	1.7 %	4.0 %	6.0 %	6.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	25	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1827286-4D10 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:07:59 PM	Vial	52		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.348 %	103.711 %	5.348 ppb	1,202.849 ppb	1,015.629 ppb	223.923 ppb	1,090.487 ppb	2,578.818 ppb	82.778 %
Concentration per Run 1	87.245 %	102.580 %	5.230 ppb	1,246.049 ppb	1,036.849 ppb	221.366 ppb	1,078.865 ppb	2,731.671 ppb	87.767 %
Concentration per Run 2	83.267 %	104.664 %	5.452 ppb	1,191.654 ppb	1,007.400 ppb	221.976 ppb	1,125.976 ppb	2,503.954 ppb	86.826 %
Concentration per Run 3	79.531 %	103.890 %	5.362 ppb	1,170.845 ppb	1,002.638 ppb	228.427 ppb	1,066.620 ppb	2,500.829 ppb	73.740 %
Concentration RSD	4.6 %	1.0 %	2.1 %	3.2 %	1.8 %	1.7 %	2.9 %	5.1 %	9.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.808 ppb	18.978 ppb	53.683 ppb	115.029 ppb	53.411 ppb	49.843 ppb	25.943 ppb	53.122 ppb	97.717 %
Concentration per Run 1	49.716 ppb	19.767 ppb	55.828 ppb	111.704 ppb	54.985 ppb	51.651 ppb	26.829 ppb	53.018 ppb	95.227 %
Concentration per Run 2	45.506 ppb	18.532 ppb	52.084 ppb	114.579 ppb	52.948 ppb	48.479 ppb	24.689 ppb	52.141 ppb	100.103 %
Concentration per Run 3	48.203 ppb	18.636 ppb	53.136 ppb	118.804 ppb	52.300 ppb	49.399 ppb	26.312 ppb	54.206 ppb	97.821 %
Concentration RSD	4.5 %	3.6 %	3.6 %	3.1 %	2.6 %	3.3 %	4.3 %	2.0 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.746 ppb	12.989 ppb	100.926 ppb	87.510 ppb	95.735 %	5.113 ppb	5.551 ppb	92.913 %	36.767 ppb
Concentration per Run 1	13.265 ppb	13.105 ppb	102.322 ppb	89.537 ppb	94.648 %	5.212 ppb	5.645 ppb	91.007 %	36.802 ppb
Concentration per Run 2	12.424 ppb	12.785 ppb	99.854 ppb	85.303 ppb	96.383 %	5.089 ppb	5.446 ppb	94.697 %	36.935 ppb
Concentration per Run 3	12.549 ppb	13.078 ppb	100.601 ppb	87.689 ppb	96.173 %	5.037 ppb	5.562 ppb	93.037 %	36.565 ppb
Concentration RSD	3.6 %	1.4 %	1.3 %	2.4 %	1.0 %	1.8 %	1.8 %	2.0 %	0.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	196.934 ppb	96.652 %	95.095 %	12.139 ppb	54.284 ppb	97.527 %
Concentration per Run 1	204.700 ppb	97.062 %	93.818 %	11.865 ppb	52.970 ppb	99.676 %
Concentration per Run 2	191.572 ppb	96.269 %	94.057 %	12.380 ppb	54.875 ppb	97.326 %
Concentration per Run 3	194.530 ppb	96.624 %	97.410 %	12.171 ppb	55.009 ppb	95.578 %
Concentration RSD	3.5 %	0.4 %	2.1 %	2.1 %	2.1 %	2.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	26	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1825220-5d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:12:36 PM	Vial	56		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.221 %	99.147 %	49.492 ppb	17,023.596 ppb	10,047.102 ppb	5,370.759 ppb	5,421.525 ppb	26,314.506 ppb	90.893 %
Concentration per Run 1	83.898 %	97.936 %	49.816 ppb	17,576.281 ppb	10,249.028 ppb	5,409.147 ppb	5,716.481 ppb	27,606.340 ppb	86.742 %
Concentration per Run 2	81.202 %	102.282 %	49.221 ppb	16,131.972 ppb	9,792.899 ppb	5,226.317 ppb	5,319.835 ppb	25,679.239 ppb	92.754 %
Concentration per Run 3	78.562 %	97.222 %	49.441 ppb	17,362.535 ppb	10,099.379 ppb	5,476.812 ppb	5,228.258 ppb	25,657.940 ppb	93.183 %
Concentration RSD	3.3 %	2.8 %	0.6 %	4.6 %	2.3 %	2.4 %	4.8 %	4.3 %	4.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	52.852 ppb	50.191 ppb	414.052 ppb	11,371.377 ppb	53.838 ppb	52.488 ppb	50.848 ppb	82.574 ppb	100.834 %
Concentration per Run 1	54.844 ppb	52.432 ppb	428.202 ppb	11,011.268 ppb	55.469 ppb	53.586 ppb	52.936 ppb	83.924 ppb	98.425 %
Concentration per Run 2	51.328 ppb	49.171 ppb	405.306 ppb	11,639.823 ppb	52.513 ppb	52.147 ppb	49.479 ppb	80.628 ppb	102.460 %
Concentration per Run 3	52.385 ppb	48.970 ppb	408.648 ppb	11,463.040 ppb	53.532 ppb	51.730 ppb	50.128 ppb	83.170 ppb	101.617 %
Concentration RSD	3.4 %	3.9 %	3.0 %	2.9 %	2.8 %	1.9 %	3.6 %	2.1 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	48.567 ppb	51.927 ppb	118.358 ppb	45.530 ppb	92.740 %	1.524 ppb	48.164 ppb	92.127 %	49.854 ppb
Concentration per Run 1	49.362 ppb	53.573 ppb	121.755 ppb	46.732 ppb	90.298 %	1.517 ppb	48.635 ppb	91.278 %	50.291 ppb
Concentration per Run 2	48.384 ppb	51.150 ppb	117.291 ppb	44.895 ppb	92.890 %	1.566 ppb	48.234 ppb	92.910 %	49.436 ppb
Concentration per Run 3	47.957 ppb	51.058 ppb	116.030 ppb	44.961 ppb	95.033 %	1.490 ppb	47.625 ppb	92.193 %	49.836 ppb
Concentration RSD	1.5 %	2.7 %	2.5 %	2.3 %	2.6 %	2.5 %	1.1 %	0.9 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	118.968 ppb	97.001 %	96.878 %	44.758 ppb	56.000 ppb	98.072 %
Concentration per Run 1	123.662 ppb	95.330 %	96.680 %	41.859 ppb	53.754 ppb	104.032 %
Concentration per Run 2	116.951 ppb	93.848 %	97.293 %	45.624 ppb	55.843 ppb	95.803 %
Concentration per Run 3	116.290 ppb	101.824 %	96.661 %	46.791 ppb	58.402 ppb	94.380 %
Concentration RSD	3.4 %	4.4 %	0.4 %	5.8 %	4.2 %	5.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	27	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1827286-5D10 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:17:14 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.328 %	102.004 %	49.193 ppb	4,991.559 ppb	5,017.100 ppb	60.284 ppb	5,205.956 ppb	6,480.888 ppb	90.316 %
Concentration per Run 1	88.910 %	104.366 %	48.201 ppb	5,228.776 ppb	5,429.030 ppb	65.829 ppb	5,771.680 ppb	7,187.291 ppb	92.840 %
Concentration per Run 2	84.397 %	102.520 %	49.414 ppb	4,830.344 ppb	4,733.329 ppb	56.716 ppb	5,016.210 ppb	6,168.189 ppb	90.081 %
Concentration per Run 3	82.678 %	99.127 %	49.964 ppb	4,915.558 ppb	4,888.940 ppb	58.306 ppb	4,829.979 ppb	6,087.183 ppb	88.026 %
Concentration RSD	3.8 %	2.6 %	1.8 %	4.2 %	7.3 %	8.1 %	9.6 %	9.5 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.208 ppb	45.862 ppb	52.864 ppb	5,194.377 ppb	51.262 ppb	48.499 ppb	48.121 ppb	50.110 ppb	101.927 %
Concentration per Run 1	49.819 ppb	47.237 ppb	55.673 ppb	5,234.002 ppb	51.365 ppb	50.404 ppb	48.056 ppb	52.472 ppb	105.409 %
Concentration per Run 2	46.781 ppb	45.825 ppb	53.157 ppb	5,224.208 ppb	52.671 ppb	47.077 ppb	47.903 ppb	49.190 ppb	101.216 %
Concentration per Run 3	45.025 ppb	44.525 ppb	49.763 ppb	5,124.922 ppb	49.752 ppb	48.014 ppb	48.404 ppb	48.669 ppb	99.155 %
Concentration RSD	5.1 %	3.0 %	5.6 %	1.2 %	2.9 %	3.5 %	0.5 %	4.1 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	47.932 ppb	51.709 ppb	57.242 ppb	45.235 ppb	95.697 %	1.614 ppb	49.658 ppb	94.364 %	50.273 ppb
Concentration per Run 1	50.133 ppb	55.251 ppb	62.514 ppb	46.855 ppb	94.606 %	1.662 ppb	51.830 ppb	97.183 %	53.433 ppb
Concentration per Run 2	47.881 ppb	50.683 ppb	55.614 ppb	44.257 ppb	98.605 %	1.570 ppb	47.657 ppb	96.617 %	48.335 ppb
Concentration per Run 3	45.783 ppb	49.193 ppb	53.597 ppb	44.594 ppb	93.879 %	1.610 ppb	49.485 ppb	89.293 %	49.052 ppb
Concentration RSD	4.5 %	6.1 %	8.2 %	3.1 %	2.7 %	2.9 %	4.2 %	4.7 %	5.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	48.525 ppb	100.250 %	97.447 %	49.477 ppb	52.423 ppb	92.644 %
Concentration per Run 1	52.529 ppb	100.267 %	99.511 %	50.585 ppb	53.388 ppb	95.586 %
Concentration per Run 2	47.245 ppb	102.192 %	98.256 %	48.222 ppb	51.557 ppb	92.489 %
Concentration per Run 3	45.802 ppb	98.292 %	94.576 %	49.623 ppb	52.325 ppb	89.856 %
Concentration RSD	7.3 %	1.9 %	2.6 %	2.4 %	1.8 %	3.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	28	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1827286-6D5 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:21:52 PM	Vial	54		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.079 %	102.798 %	0.003 ppb	227.303 ppb	132.259 ppb	19.168 ppb	223.725 ppb	3,269.104 ppb	89.694 %
Concentration per Run 1	88.716 %	107.284 %	0.006 ppb	228.455 ppb	136.903 ppb	21.748 ppb	241.016 ppb	3,459.294 ppb	91.169 %
Concentration per Run 2	84.488 %	103.592 %	0.003 ppb	222.978 ppb	128.588 ppb	16.857 ppb	209.615 ppb	3,174.541 ppb	89.615 %
Concentration per Run 3	82.032 %	97.519 %	0.002 ppb	230.477 ppb	131.285 ppb	18.898 ppb	220.545 ppb	3,173.475 ppb	88.299 %
Concentration RSD	4.0 %	4.8 %	56.1 %	1.7 %	3.2 %	12.8 %	7.1 %	5.0 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.297 ppb	0.083 ppb	7.538 ppb	35.218 ppb	0.022 ppb	0.068 ppb	0.260 ppb	0.216 ppb	99.377 %
Concentration per Run 1	0.273 ppb	0.068 ppb	7.536 ppb	37.433 ppb	0.024 ppb	0.071 ppb	0.258 ppb	0.180 ppb	106.343 %
Concentration per Run 2	0.309 ppb	0.091 ppb	7.217 ppb	32.614 ppb	0.022 ppb	0.073 ppb	0.252 ppb	0.142 ppb	99.449 %
Concentration per Run 3	0.309 ppb	0.090 ppb	7.861 ppb	35.607 ppb	0.020 ppb	0.060 ppb	0.271 ppb	0.326 ppb	92.338 %
Concentration RSD	7.1 %	16.0 %	4.3 %	6.9 %	8.6 %	9.6 %	3.8 %	44.8 %	7.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.241 ppb	0.660 ppb	20.337 ppb	2.738 ppb	98.632 %	0.004 ppb	0.004 ppb	96.204 %	0.972 ppb
Concentration per Run 1	0.231 ppb	0.486 ppb	21.779 ppb	2.115 ppb	100.052 %	0.003 ppb	0.004 ppb	105.952 %	0.888 ppb
Concentration per Run 2	0.263 ppb	0.557 ppb	19.881 ppb	2.801 ppb	99.693 %	0.004 ppb	0.004 ppb	94.120 %	0.976 ppb
Concentration per Run 3	0.231 ppb	0.938 ppb	19.351 ppb	3.297 ppb	96.151 %	0.005 ppb	0.003 ppb	88.541 %	1.054 ppb
Concentration RSD	7.7 %	36.9 %	6.3 %	21.7 %	2.2 %	29.0 %	23.0 %	9.2 %	8.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.810 ppb	101.828 %	100.223 %	0.273 ppb	0.047 ppb	101.792 %
Concentration per Run 1	1.855 ppb	105.203 %	109.163 %	0.200 ppb	0.043 ppb	110.636 %
Concentration per Run 2	1.750 ppb	102.614 %	99.517 %	0.318 ppb	0.048 ppb	100.568 %
Concentration per Run 3	1.825 ppb	97.667 %	91.988 %	0.300 ppb	0.049 ppb	94.172 %
Concentration RSD	3.0 %	3.8 %	8.6 %	23.2 %	6.6 %	8.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	29	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2353442-01 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:26:30 PM	Vial	50		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.475 %	105.239 %	0.005 ppb	1,081.524 ppb	631.503 ppb	94.252 ppb	1,131.198 ppb	16,374.700 ppb	95.459 %
Concentration per Run 1	91.927 %	107.819 %	0.007 ppb	1,166.562 ppb	678.006 ppb	100.476 ppb	1,224.102 ppb	17,864.068 ppb	97.142 %
Concentration per Run 2	88.718 %	107.105 %	0.004 ppb	1,035.858 ppb	608.231 ppb	90.536 ppb	1,134.743 ppb	16,100.358 ppb	95.574 %
Concentration per Run 3	84.780 %	100.794 %	0.004 ppb	1,042.153 ppb	608.272 ppb	91.744 ppb	1,034.749 ppb	15,159.674 ppb	93.663 %
Concentration RSD	4.0 %	3.7 %	34.1 %	6.8 %	6.4 %	5.8 %	8.4 %	8.4 %	1.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.370 ppb	0.336 ppb	36.824 ppb	98.338 ppb	0.100 ppb	0.269 ppb	1.107 ppb	0.013 ppb	102.552 %
Concentration per Run 1	1.424 ppb	0.331 ppb	38.457 ppb	99.061 ppb	0.097 ppb	0.273 ppb	1.100 ppb	0.059 ppb	108.035 %
Concentration per Run 2	1.326 ppb	0.318 ppb	34.947 ppb	96.550 ppb	0.102 ppb	0.263 ppb	1.101 ppb	-0.038 ppb	101.500 %
Concentration per Run 3	1.361 ppb	0.359 ppb	37.069 ppb	99.403 ppb	0.102 ppb	0.270 ppb	1.120 ppb	0.019 ppb	98.121 %
Concentration RSD	3.6 %	6.3 %	4.8 %	1.6 %	2.7 %	1.8 %	1.0 %	364.8 %	4.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.827 ppb	0.282 ppb	102.400 ppb	3.094 ppb	99.493 %	0.004 ppb	0.007 ppb	99.345 %	1.428 ppb
Concentration per Run 1	0.854 ppb	0.273 ppb	107.320 ppb	2.766 ppb	102.887 %	0.003 ppb	0.006 ppb	106.824 %	1.355 ppb
Concentration per Run 2	0.870 ppb	0.218 ppb	102.495 ppb	2.986 ppb	98.550 %	0.005 ppb	0.007 ppb	96.213 %	1.466 ppb
Concentration per Run 3	0.758 ppb	0.354 ppb	97.384 ppb	3.530 ppb	97.041 %	0.005 ppb	0.009 ppb	94.998 %	1.463 ppb
Concentration RSD	7.3 %	24.4 %	4.9 %	12.7 %	3.1 %	22.2 %	24.5 %	6.5 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	9.217 ppb	100.927 %	104.538 %	0.092 ppb	0.160 ppb	106.245 %
Concentration per Run 1	9.571 ppb	107.950 %	109.337 %	0.059 ppb	0.145 ppb	118.081 %
Concentration per Run 2	9.588 ppb	93.440 %	105.173 %	0.109 ppb	0.177 ppb	101.189 %
Concentration per Run 3	8.491 ppb	101.389 %	99.105 %	0.109 ppb	0.156 ppb	99.465 %
Concentration RSD	6.8 %	7.2 %	4.9 %	30.9 %	10.1 %	9.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	30	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 3:33:55 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.302 %	103.930 %	59.361 ppb	5,858.903 ppb	5,933.159 ppb	60.974 ppb	6,281.926 ppb	5,836.544 ppb	96.203 %
Concentration per Run 1	89.069 %	103.056 %	58.726 ppb	5,816.082 ppb	5,900.061 ppb	59.548 ppb	6,249.927 ppb	6,029.412 ppb	100.666 %
Concentration per Run 2	85.567 %	102.282 %	58.941 ppb	5,795.087 ppb	5,735.915 ppb	59.034 ppb	6,104.490 ppb	5,692.236 ppb	97.236 %
Concentration per Run 3	84.269 %	106.450 %	60.415 ppb	5,965.540 ppb	6,163.501 ppb	64.340 ppb	6,491.361 ppb	5,787.984 ppb	90.708 %
Recovery Percentage 1			98.934 %	97.648 %	98.886 %	101.623 %	104.699 %	97.276 %	
Concentration RSD	2.9 %	2.1 %	1.5 %	1.6 %	3.6 %	4.8 %	3.1 %	3.0 %	5.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.650 ppb	56.464 ppb	58.073 ppb	6,046.961 ppb	61.933 ppb	58.418 ppb	57.175 ppb	60.003 ppb	104.395 %
Concentration per Run 1	56.560 ppb	56.926 ppb	55.082 ppb	6,017.661 ppb	63.562 ppb	60.294 ppb	58.341 ppb	60.127 ppb	99.472 %
Concentration per Run 2	57.262 ppb	56.641 ppb	57.849 ppb	6,131.157 ppb	63.017 ppb	58.283 ppb	57.773 ppb	60.775 ppb	101.983 %
Concentration per Run 3	56.129 ppb	55.824 ppb	61.289 ppb	5,992.066 ppb	59.219 ppb	56.676 ppb	55.412 ppb	59.107 ppb	111.729 %
Recovery Percentage 1	94.417 %	94.106 %	96.789 %	100.783 %	103.221 %	97.363 %	95.292 %	100.005 %	
Concentration RSD	1.0 %	1.0 %	5.4 %	1.2 %	3.8 %	3.1 %	2.7 %	1.4 %	6.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.426 ppb	59.238 ppb	57.063 ppb	54.258 ppb	98.791 %	58.022 ppb	58.254 ppb	96.438 %	57.537 ppb
Concentration per Run 1	59.885 ppb	58.911 ppb	56.933 ppb	56.170 ppb	96.570 %	58.756 ppb	59.504 ppb	92.358 %	57.820 ppb
Concentration per Run 2	57.300 ppb	58.313 ppb	55.601 ppb	53.585 ppb	100.246 %	57.357 ppb	56.845 ppb	96.523 %	56.709 ppb
Concentration per Run 3	58.092 ppb	60.489 ppb	58.656 ppb	53.018 ppb	99.557 %	57.953 ppb	58.412 ppb	100.432 %	58.081 ppb
Recovery Percentage 1	97.376 %	98.730 %	95.105 %	90.429 %		96.703 %	97.090 %		95.895 %
Concentration RSD	2.3 %	1.9 %	2.7 %	3.1 %	2.0 %	1.2 %	2.3 %	4.2 %	1.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.381 ppb	102.689 %	103.842 %	57.904 ppb	58.433 ppb	99.944 %
Concentration per Run 1	56.993 ppb	100.497 %	98.725 %	55.901 ppb	55.834 ppb	102.669 %
Concentration per Run 2	59.166 ppb	99.819 %	99.874 %	58.407 ppb	59.898 ppb	96.984 %
Concentration per Run 3	58.983 ppb	107.752 %	112.926 %	59.405 ppb	59.565 ppb	100.179 %
Recovery Percentage 1	97.301 %			96.507 %	97.388 %	
Concentration RSD	2.1 %	4.3 %	7.6 %	3.1 %	3.9 %	2.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 31 User name ALPHALAB\Metals-Instrument Comment <Comment>
Analysis label: CCB Rack 0
Analysis started at: 9/14/2023 3:38:37 PM Vial 10

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.655 %	106.648 %	0.003 ppb	1.084 ppb	-1.004 ppb	-0.468 ppb	-2.352 ppb	0.578 ppb	89.134 %
Concentration per Run 1	89.963 %	102.580 %	0.001 ppb	3.129 ppb	-1.168 ppb	-0.528 ppb	-3.691 ppb	1.588 ppb	91.883 %
Concentration per Run 2	86.090 %	106.986 %	0.004 ppb	-1.393 ppb	-1.040 ppb	-0.417 ppb	-3.267 ppb	-0.069 ppb	87.510 %
Concentration per Run 3	83.912 %	110.380 %	0.003 ppb	1.515 ppb	-0.806 ppb	-0.459 ppb	-0.099 ppb	0.214 ppb	88.009 %
Recovery Percentage 1			0.504 %	1.084 %	-1.435 %	-4.678 %	-2.352 %	0.578 %	
Concentration RSD	3.5 %	3.7 %	61.9 %	211.4 %	18.3 %	12.0 %	83.4 %	153.4 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.003 ppb	0.001 ppb	-0.001 ppb	13.188 ppb	0.001 ppb	0.087 ppb	0.020 ppb	0.176 ppb	103.710 %
Concentration per Run 1	0.005 ppb	0.004 ppb	-0.011 ppb	12.556 ppb	0.001 ppb	0.089 ppb	0.018 ppb	0.179 ppb	99.542 %
Concentration per Run 2	-0.001 ppb	0.001 ppb	0.009 ppb	14.288 ppb	0.002 ppb	0.075 ppb	0.025 ppb	0.236 ppb	98.705 %
Concentration per Run 3	0.006 ppb	-0.001 ppb	0.000 ppb	12.718 ppb	0.000 ppb	0.097 ppb	0.017 ppb	0.115 ppb	112.881 %
Recovery Percentage 1	0.064 %	0.119 %	-0.068 %	26.375 %	0.213 %	4.361 %	2.013 %	3.528 %	
Concentration RSD	129.6 %	184.0 %	1,499.3 %	7.3 %	62.4 %	12.4 %	21.2 %	34.3 %	7.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.018 ppb	0.567 ppb	-0.003 ppb	1.367 ppb	101.704 %	0.007 ppb	0.002 ppb	100.083 %	0.378 ppb
Concentration per Run 1	-0.011 ppb	0.374 ppb	0.000 ppb	1.081 ppb	98.840 %	0.007 ppb	0.002 ppb	96.625 %	0.330 ppb
Concentration per Run 2	0.031 ppb	0.582 ppb	-0.002 ppb	1.419 ppb	102.723 %	0.006 ppb	0.002 ppb	96.402 %	0.410 ppb
Concentration per Run 3	0.036 ppb	0.746 ppb	-0.006 ppb	1.601 ppb	103.550 %	0.007 ppb	0.001 ppb	107.220 %	0.393 ppb
Recovery Percentage 1	3.698 %	11.346 %	-0.027 %	68.347 %		1.669 %	0.854 %		9.450 %
Concentration RSD	140.1 %	32.8 %	121.2 %	19.3 %	2.5 %	8.8 %	24.2 %	6.2 %	11.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.015 ppb	101.348 %	103.625 %	0.115 ppb	0.013 ppb	101.998 %
Concentration per Run 1	0.016 ppb	102.303 %	100.858 %	0.097 ppb	0.014 ppb	103.807 %
Concentration per Run 2	0.020 ppb	94.665 %	100.466 %	0.127 ppb	0.012 ppb	100.490 %
Concentration per Run 3	0.007 ppb	107.075 %	109.550 %	0.122 ppb	0.013 ppb	101.697 %
Recovery Percentage 1	2.907 %			11.505 %	1.290 %	
Concentration RSD	48.2 %	6.2 %	5.0 %	14.0 %	8.3 %	1.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	32	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2349882-01 6020SL	Rack	1		
Analysis started at:	9/14/2023 3:58:39 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	72.281 %	88.866 %	0.906 ppb	541,451.760 ppb	31,554.292 ppb	14.316 ppb	105,040.291 ppb	39,718.962 ppb	85.273 %
Concentration per Run 1	77.266 %	96.983 %	0.882 ppb	518,036.744 ppb	30,043.918 ppb	13.016 ppb	104,420.736 ppb	38,680.921 ppb	89.444 %
Concentration per Run 2	71.245 %	86.207 %	0.901 ppb	560,731.576 ppb	33,097.206 ppb	15.140 ppb	106,141.913 ppb	39,686.807 ppb	83.034 %
Concentration per Run 3	68.333 %	83.409 %	0.934 ppb	545,586.961 ppb	31,521.751 ppb	14.792 ppb	104,558.224 ppb	40,789.159 ppb	83.342 %
Concentration RSD	6.3 %	8.1 %	2.9 %	4.0 %	4.8 %	8.0 %	0.9 %	2.7 %	4.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.876 ppb	3.755 ppb	384.120 ppb	19,708.698 ppb	33.305 ppb	71.025 ppb	0.397 ppb	0.691 ppb	82.980 %
Concentration per Run 1	2.929 ppb	3.664 ppb	374.842 ppb	19,188.072 ppb	32.573 ppb	67.157 ppb	0.393 ppb	0.588 ppb	88.570 %
Concentration per Run 2	2.816 ppb	3.819 ppb	387.202 ppb	20,436.329 ppb	33.593 ppb	72.491 ppb	0.396 ppb	0.771 ppb	82.281 %
Concentration per Run 3	2.884 ppb	3.781 ppb	390.316 ppb	19,501.692 ppb	33.748 ppb	73.428 ppb	0.403 ppb	0.715 ppb	78.089 %
Concentration RSD	2.0 %	2.1 %	2.1 %	3.3 %	1.9 %	4.8 %	1.3 %	13.6 %	6.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.919 ppb	3.534 ppb	389.062 ppb	29.247 ppb	75.132 %	0.003 ppb	0.008 ppb	75.062 %	0.764 ppb
Concentration per Run 1	8.289 ppb	3.503 ppb	386.050 ppb	28.780 ppb	76.783 %	0.002 ppb	0.009 ppb	77.540 %	0.740 ppb
Concentration per Run 2	9.524 ppb	3.220 ppb	399.683 ppb	29.578 ppb	76.061 %	0.002 ppb	0.009 ppb	77.122 %	0.731 ppb
Concentration per Run 3	8.945 ppb	3.879 ppb	381.453 ppb	29.383 ppb	72.554 %	0.003 ppb	0.006 ppb	70.524 %	0.821 ppb
Concentration RSD	6.9 %	9.4 %	2.4 %	1.4 %	3.0 %	31.6 %	21.2 %	5.2 %	6.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	480.673 ppb	88.095 %	87.320 %	0.020 ppb	0.060 ppb	76.450 %
Concentration per Run 1	497.434 ppb	89.053 %	89.704 %	0.017 ppb	0.057 ppb	84.447 %
Concentration per Run 2	465.942 ppb	91.468 %	89.938 %	0.022 ppb	0.061 ppb	75.477 %
Concentration per Run 3	478.642 ppb	83.765 %	82.317 %	0.023 ppb	0.063 ppb	69.425 %
Concentration RSD	3.3 %	4.5 %	5.0 %	16.9 %	5.0 %	9.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	33	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2349882-02 6020SL	Rack	1		
Analysis started at:	9/14/2023 4:03:18 PM	Vial	58		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.285 %	104.704 %	12.568 ppb	63,224.816 ppb	9,031.607 ppb	3.759 ppb	18,935.297 ppb	68,126.343 ppb	98.469 %
Concentration per Run 1	89.410 %	105.914 %	12.435 ppb	64,637.600 ppb	9,398.380 ppb	3.694 ppb	19,550.793 ppb	71,071.693 ppb	99.987 %
Concentration per Run 2	84.508 %	104.128 %	12.561 ppb	62,125.950 ppb	8,860.950 ppb	3.916 ppb	18,991.228 ppb	68,275.807 ppb	99.175 %
Concentration per Run 3	81.938 %	104.068 %	12.709 ppb	62,910.897 ppb	8,835.490 ppb	3.668 ppb	18,263.870 ppb	65,031.529 ppb	96.246 %
Concentration RSD	4.5 %	1.0 %	1.1 %	2.0 %	3.5 %	3.6 %	3.4 %	4.4 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.052 ppb	0.538 ppb	4,473.216 ppb	24,109.195 ppb	1.402 ppb	4.591 ppb	0.648 ppb	27.318 ppb	95.421 %
Concentration per Run 1	0.050 ppb	0.569 ppb	4,578.306 ppb	24,249.865 ppb	1.473 ppb	4.682 ppb	0.629 ppb	28.210 ppb	96.505 %
Concentration per Run 2	0.067 ppb	0.523 ppb	4,388.684 ppb	23,288.973 ppb	1.322 ppb	4.426 ppb	0.690 ppb	26.879 ppb	99.586 %
Concentration per Run 3	0.038 ppb	0.522 ppb	4,452.659 ppb	24,788.746 ppb	1.410 ppb	4.666 ppb	0.626 ppb	26.864 ppb	90.172 %
Concentration RSD	28.3 %	5.0 %	2.2 %	3.2 %	5.4 %	3.1 %	5.6 %	2.8 %	5.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.615 ppb	4.205 ppb	327.028 ppb	6.796 ppb	87.571 %	0.002 ppb	0.012 ppb	87.897 %	0.221 ppb
Concentration per Run 1	0.595 ppb	4.634 ppb	335.981 ppb	6.328 ppb	89.279 %	0.002 ppb	0.010 ppb	89.510 %	0.216 ppb
Concentration per Run 2	0.589 ppb	4.028 ppb	327.472 ppb	6.666 ppb	88.228 %	0.002 ppb	0.010 ppb	91.318 %	0.204 ppb
Concentration per Run 3	0.663 ppb	3.954 ppb	317.632 ppb	7.395 ppb	85.205 %	0.001 ppb	0.016 ppb	82.864 %	0.243 ppb
Concentration RSD	6.6 %	8.9 %	2.8 %	8.0 %	2.4 %	8.2 %	30.3 %	5.1 %	8.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	147.185 ppb	94.638 %	98.317 %	0.106 ppb	0.149 ppb	87.162 %
Concentration per Run 1	153.421 ppb	97.877 %	103.207 %	0.093 ppb	0.141 ppb	94.666 %
Concentration per Run 2	144.638 ppb	94.620 %	97.172 %	0.114 ppb	0.155 ppb	84.002 %
Concentration per Run 3	143.496 ppb	91.415 %	94.574 %	0.111 ppb	0.152 ppb	82.818 %
Concentration RSD	3.7 %	3.4 %	4.5 %	10.5 %	5.1 %	7.5 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	34	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350250-06 6020SL	Rack	1		
Analysis started at:	9/14/2023 4:07:56 PM	Vial	59		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	71.485 %	90.573 %	0.012 ppb	32,657.810 ppb	11,977.820 ppb	55.279 ppb	12,051.803 ppb	67,467.100 ppb	84.644 %
Concentration per Run 1	75.069 %	93.471 %	0.014 ppb	33,916.080 ppb	12,318.296 ppb	53.394 ppb	12,321.967 ppb	69,677.290 ppb	89.694 %
Concentration per Run 2	70.707 %	87.457 %	0.007 ppb	32,604.462 ppb	11,968.995 ppb	57.539 ppb	11,614.359 ppb	67,200.418 ppb	78.990 %
Concentration per Run 3	68.679 %	90.791 %	0.013 ppb	31,452.888 ppb	11,646.167 ppb	54.904 ppb	12,219.084 ppb	65,523.590 ppb	85.249 %
Concentration RSD	4.6 %	3.3 %	33.0 %	3.8 %	2.8 %	3.8 %	3.2 %	3.1 %	6.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.598 ppb	0.621 ppb	8,453.650 ppb	60,007.581 ppb	8.161 ppb	1.876 ppb	3.306 ppb	4.794 ppb	95.622 %
Concentration per Run 1	0.568 ppb	0.654 ppb	8,368.351 ppb	59,130.602 ppb	8.157 ppb	1.907 ppb	3.277 ppb	4.811 ppb	95.344 %
Concentration per Run 2	0.622 ppb	0.628 ppb	8,415.384 ppb	58,901.171 ppb	8.229 ppb	1.796 ppb	3.338 ppb	4.692 ppb	96.482 %
Concentration per Run 3	0.604 ppb	0.581 ppb	8,577.215 ppb	61,990.970 ppb	8.098 ppb	1.925 ppb	3.304 ppb	4.878 ppb	95.040 %
Concentration RSD	4.6 %	6.0 %	1.3 %	2.9 %	0.8 %	3.7 %	0.9 %	2.0 %	0.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	409.128 ppb	0.416 ppb	369.889 ppb	2.445 ppb	85.379 %	0.003 ppb	0.063 ppb	90.136 %	0.142 ppb
Concentration per Run 1	422.987 ppb	0.428 ppb	372.154 ppb	1.684 ppb	87.011 %	0.002 ppb	0.059 ppb	91.069 %	0.104 ppb
Concentration per Run 2	398.339 ppb	0.456 ppb	368.145 ppb	2.449 ppb	84.316 %	0.004 ppb	0.064 ppb	91.824 %	0.147 ppb
Concentration per Run 3	406.058 ppb	0.366 ppb	369.370 ppb	3.202 ppb	84.810 %	0.003 ppb	0.066 ppb	87.515 %	0.177 ppb
Concentration RSD	3.1 %	11.0 %	0.6 %	31.0 %	1.7 %	35.7 %	5.5 %	2.6 %	25.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	123.060 ppb	91.312 %	93.773 %	0.010 ppb	0.315 ppb	85.446 %
Concentration per Run 1	123.616 ppb	93.479 %	95.094 %	0.004 ppb	0.312 ppb	88.908 %
Concentration per Run 2	123.184 ppb	92.535 %	94.122 %	0.013 ppb	0.317 ppb	83.949 %
Concentration per Run 3	122.380 ppb	87.921 %	92.102 %	0.013 ppb	0.317 ppb	83.482 %
Concentration RSD	0.5 %	3.3 %	1.6 %	52.7 %	1.0 %	3.5 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	35	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350269-01 6020SL	Rack	1		
Analysis started at:	9/14/2023 4:12:35 PM	Vial	60		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	72.177 %	92.320 %	0.002 ppb	69,772.157 ppb	313.197 ppb	1,084.080 ppb	34,759.409 ppb	99,266.202 ppb	77.812 %
Concentration per Run 1	74.793 %	92.220 %	0.000 ppb	71,218.751 ppb	310.992 ppb	1,066.303 ppb	34,476.825 ppb	105,435.095 ppb	76.307 %
Concentration per Run 2	72.201 %	86.981 %	0.002 ppb	68,958.959 ppb	314.956 ppb	1,089.689 ppb	35,650.886 ppb	95,162.882 ppb	82.780 %
Concentration per Run 3	69.537 %	97.757 %	0.004 ppb	69,138.763 ppb	313.644 ppb	1,096.249 ppb	34,150.515 ppb	97,200.629 ppb	74.350 %
Concentration RSD	3.6 %	5.8 %	113.9 %	1.8 %	0.6 %	1.5 %	2.3 %	5.5 %	5.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	19.847 ppb	0.222 ppb	57.857 ppb	111.090 ppb	0.651 ppb	7.215 ppb	1.239 ppb	-0.566 ppb	89.378 %
Concentration per Run 1	20.087 ppb	0.210 ppb	59.115 ppb	116.965 ppb	0.646 ppb	7.444 ppb	1.273 ppb	-0.589 ppb	89.083 %
Concentration per Run 2	20.167 ppb	0.234 ppb	57.673 ppb	113.526 ppb	0.650 ppb	7.201 ppb	1.279 ppb	-0.577 ppb	85.382 %
Concentration per Run 3	19.286 ppb	0.223 ppb	56.784 ppb	102.780 ppb	0.658 ppb	7.001 ppb	1.165 ppb	-0.533 ppb	93.667 %
Concentration RSD	2.5 %	5.3 %	2.0 %	6.7 %	0.9 %	3.1 %	5.2 %	5.2 %	4.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	5.978 ppb	1.283 ppb	1,024.880 ppb	43.469 ppb	81.946 %	0.002 ppb	0.005 ppb	82.540 %	0.789 ppb
Concentration per Run 1	5.895 ppb	1.223 ppb	1,011.497 ppb	45.357 ppb	79.600 %	0.001 ppb	0.005 ppb	82.935 %	0.805 ppb
Concentration per Run 2	6.120 ppb	1.287 ppb	1,076.294 ppb	43.021 ppb	81.623 %	0.002 ppb	0.003 ppb	77.368 %	0.787 ppb
Concentration per Run 3	5.917 ppb	1.340 ppb	986.848 ppb	42.027 ppb	84.614 %	0.004 ppb	0.008 ppb	87.317 %	0.774 ppb
Concentration RSD	2.1 %	4.6 %	4.5 %	3.9 %	3.1 %	55.9 %	40.5 %	6.0 %	2.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	7.513 ppb	87.942 %	86.078 %	0.012 ppb	0.023 ppb	79.937 %
Concentration per Run 1	7.564 ppb	87.653 %	85.496 %	0.005 ppb	0.022 ppb	84.527 %
Concentration per Run 2	7.459 ppb	85.338 %	82.963 %	0.016 ppb	0.024 ppb	77.066 %
Concentration per Run 3	7.516 ppb	90.834 %	89.775 %	0.014 ppb	0.024 ppb	78.217 %
Concentration RSD	0.7 %	3.1 %	4.0 %	53.3 %	4.3 %	5.0 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	36	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350269-02 6020SL	Rack	2		
Analysis started at:	9/14/2023 4:17:15 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	74.228 %	99.563 %	0.004 ppb	8,294.012 ppb	7,100.915 ppb	3.505 ppb	16,159.829 ppb	72,446.498 ppb	77.222 %
Concentration per Run 1	76.815 %	99.722 %	0.005 ppb	8,561.584 ppb	7,289.368 ppb	3.341 ppb	16,774.339 ppb	76,777.294 ppb	73.908 %
Concentration per Run 2	73.925 %	95.435 %	0.003 ppb	8,164.498 ppb	6,906.279 ppb	3.746 ppb	15,758.962 ppb	70,058.969 ppb	80.277 %
Concentration per Run 3	71.945 %	103.533 %	0.003 ppb	8,155.954 ppb	7,107.099 ppb	3.429 ppb	15,946.185 ppb	70,503.230 ppb	77.479 %
Concentration RSD	3.3 %	4.1 %	38.0 %	2.8 %	2.7 %	6.1 %	3.3 %	5.2 %	4.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.412 ppb	2.543 ppb	0.129 ppb	19.007 ppb	0.566 ppb	0.270 ppb	1.845 ppb	-0.492 ppb	91.105 %
Concentration per Run 1	0.404 ppb	2.551 ppb	0.115 ppb	18.862 ppb	0.551 ppb	0.261 ppb	1.784 ppb	-0.471 ppb	91.195 %
Concentration per Run 2	0.427 ppb	2.530 ppb	0.147 ppb	20.042 ppb	0.584 ppb	0.287 ppb	1.984 ppb	-0.489 ppb	86.676 %
Concentration per Run 3	0.405 ppb	2.550 ppb	0.125 ppb	18.115 ppb	0.564 ppb	0.261 ppb	1.767 ppb	-0.515 ppb	95.443 %
Concentration RSD	3.1 %	0.5 %	12.6 %	5.1 %	2.9 %	5.7 %	6.5 %	4.6 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.580 ppb	0.752 ppb	279.293 ppb	13.920 ppb	86.655 %	0.001 ppb	0.004 ppb	85.966 %	0.317 ppb
Concentration per Run 1	0.525 ppb	0.755 ppb	282.186 ppb	13.835 ppb	87.190 %	0.002 ppb	0.005 ppb	85.458 %	0.278 ppb
Concentration per Run 2	0.616 ppb	0.645 ppb	275.195 ppb	13.767 ppb	83.276 %	0.000 ppb	0.004 ppb	83.004 %	0.325 ppb
Concentration per Run 3	0.598 ppb	0.858 ppb	280.497 ppb	14.157 ppb	89.498 %	0.002 ppb	0.003 ppb	89.436 %	0.347 ppb
Concentration RSD	8.3 %	14.2 %	1.3 %	1.5 %	3.6 %	65.7 %	27.8 %	3.8 %	11.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	35.662 ppb	89.031 %	88.439 %	0.025 ppb	0.025 ppb	84.443 %
Concentration per Run 1	36.457 ppb	88.883 %	87.591 %	0.020 ppb	0.024 ppb	90.037 %
Concentration per Run 2	35.509 ppb	87.114 %	84.864 %	0.027 ppb	0.025 ppb	81.842 %
Concentration per Run 3	35.019 ppb	91.095 %	92.862 %	0.030 ppb	0.027 ppb	81.449 %
Concentration RSD	2.1 %	2.2 %	4.6 %	19.7 %	6.1 %	5.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	37	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350269-03 6020SL	Rack	2		
Analysis started at:	9/14/2023 4:21:53 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	73.793 %	102.798 %	0.003 ppb	10,186.283 ppb	6,523.034 ppb	2.255 ppb	17,995.979 ppb	74,345.335 ppb	76.682 %
Concentration per Run 1	76.445 %	101.746 %	0.003 ppb	10,330.478 ppb	6,597.012 ppb	2.244 ppb	17,466.499 ppb	76,490.391 ppb	79.079 %
Concentration per Run 2	74.527 %	100.139 %	0.005 ppb	10,125.693 ppb	6,302.473 ppb	2.138 ppb	17,921.532 ppb	72,822.397 ppb	76.281 %
Concentration per Run 3	70.407 %	106.510 %	0.002 ppb	10,102.677 ppb	6,669.619 ppb	2.384 ppb	18,599.906 ppb	73,723.218 ppb	74.684 %
Concentration RSD	4.2 %	3.2 %	54.4 %	1.2 %	3.0 %	5.5 %	3.2 %	2.6 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.897 ppb	0.426 ppb	4.797 ppb	20.497 ppb	0.504 ppb	1.561 ppb	1.917 ppb	0.323 ppb	91.839 %
Concentration per Run 1	2.038 ppb	0.437 ppb	5.127 ppb	21.548 ppb	0.510 ppb	1.585 ppb	1.900 ppb	0.401 ppb	92.295 %
Concentration per Run 2	1.852 ppb	0.446 ppb	4.528 ppb	18.462 ppb	0.500 ppb	1.548 ppb	1.952 ppb	0.288 ppb	89.897 %
Concentration per Run 3	1.803 ppb	0.395 ppb	4.736 ppb	21.480 ppb	0.501 ppb	1.549 ppb	1.897 ppb	0.279 ppb	93.326 %
Concentration RSD	6.5 %	6.4 %	6.3 %	8.6 %	1.1 %	1.4 %	1.6 %	21.1 %	1.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.611 ppb	0.453 ppb	330.961 ppb	2.365 ppb	87.125 %	0.002 ppb	0.003 ppb	85.433 %	0.401 ppb
Concentration per Run 1	0.566 ppb	0.447 ppb	340.740 ppb	2.036 ppb	85.494 %	0.001 ppb	0.003 ppb	85.081 %	0.365 ppb
Concentration per Run 2	0.646 ppb	0.489 ppb	313.332 ppb	2.541 ppb	87.229 %	0.002 ppb	0.004 ppb	82.518 %	0.403 ppb
Concentration per Run 3	0.621 ppb	0.423 ppb	338.812 ppb	2.517 ppb	88.652 %	0.002 ppb	0.003 ppb	88.698 %	0.435 ppb
Concentration RSD	6.7 %	7.3 %	4.6 %	12.0 %	1.8 %	19.4 %	25.1 %	3.6 %	8.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	61.888 ppb	89.526 %	87.918 %	0.139 ppb	0.013 ppb	83.429 %
Concentration per Run 1	61.515 ppb	88.436 %	86.362 %	0.132 ppb	0.012 ppb	85.881 %
Concentration per Run 2	61.706 ppb	88.296 %	87.607 %	0.135 ppb	0.014 ppb	80.599 %
Concentration per Run 3	62.443 ppb	91.846 %	89.785 %	0.149 ppb	0.013 ppb	83.807 %
Concentration RSD	0.8 %	2.2 %	2.0 %	6.7 %	6.2 %	3.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	38	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350269-04 6020SL	Rack	2		
Analysis started at:	9/14/2023 4:26:31 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.354 %	100.437 %	0.003 ppb	61,524.442 ppb	11,756.448 ppb	2.704 ppb	1,314.041 ppb	20,483.940 ppb	83.211 %
Concentration per Run 1	79.690 %	104.247 %	0.005 ppb	61,737.934 ppb	11,877.239 ppb	2.435 ppb	1,348.789 ppb	20,948.908 ppb	86.074 %
Concentration per Run 2	76.052 %	95.674 %	0.004 ppb	62,039.245 ppb	11,569.970 ppb	2.782 ppb	1,289.712 ppb	19,864.281 ppb	82.105 %
Concentration per Run 3	73.321 %	101.389 %	0.001 ppb	60,796.145 ppb	11,822.136 ppb	2.896 ppb	1,303.622 ppb	20,638.632 ppb	81.454 %
Concentration RSD	4.2 %	4.3 %	59.7 %	1.1 %	1.4 %	8.9 %	2.4 %	2.7 %	3.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.142 ppb	1.245 ppb	0.884 ppb	21.680 ppb	0.058 ppb	1.894 ppb	0.118 ppb	-0.434 ppb	93.226 %
Concentration per Run 1	0.139 ppb	1.255 ppb	0.847 ppb	22.228 ppb	0.056 ppb	1.955 ppb	0.109 ppb	-0.406 ppb	92.074 %
Concentration per Run 2	0.148 ppb	1.194 ppb	0.841 ppb	22.234 ppb	0.059 ppb	1.912 ppb	0.114 ppb	-0.456 ppb	91.900 %
Concentration per Run 3	0.139 ppb	1.285 ppb	0.962 ppb	20.577 ppb	0.060 ppb	1.816 ppb	0.131 ppb	-0.440 ppb	95.705 %
Concentration RSD	3.8 %	3.7 %	7.7 %	4.4 %	3.6 %	3.7 %	9.5 %	6.0 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.166 ppb	0.212 ppb	88.506 ppb	0.441 ppb	88.144 %	0.001 ppb	0.006 ppb	85.422 %	0.052 ppb
Concentration per Run 1	0.187 ppb	0.128 ppb	92.676 ppb	0.295 ppb	85.987 %	0.001 ppb	0.006 ppb	85.863 %	0.057 ppb
Concentration per Run 2	0.114 ppb	0.140 ppb	83.607 ppb	0.423 ppb	88.375 %	0.001 ppb	0.006 ppb	82.215 %	0.043 ppb
Concentration per Run 3	0.198 ppb	0.368 ppb	89.236 ppb	0.605 ppb	90.071 %	0.001 ppb	0.007 ppb	88.189 %	0.058 ppb
Concentration RSD	27.5 %	63.6 %	5.2 %	35.3 %	2.3 %	53.0 %	3.4 %	3.5 %	15.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	45.166 ppb	91.215 %	89.561 %	0.005 ppb	0.006 ppb	86.736 %
Concentration per Run 1	45.770 ppb	89.122 %	88.791 %	0.001 ppb	0.006 ppb	91.713 %
Concentration per Run 2	44.790 ppb	91.088 %	86.657 %	0.008 ppb	0.006 ppb	84.911 %
Concentration per Run 3	44.936 ppb	93.435 %	93.233 %	0.007 ppb	0.007 ppb	83.585 %
Concentration RSD	1.2 %	2.4 %	3.7 %	76.4 %	8.6 %	5.0 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	39	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350269-05 6020SL	Rack	2		
Analysis started at:	9/14/2023 4:31:09 PM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.427 %	107.958 %	0.020 ppb	6,624.670 ppb	2,239.557 ppb	7.031 ppb	2,321.309 ppb	13,570.724 ppb	85.601 %
Concentration per Run 1	82.367 %	109.010 %	0.016 ppb	6,970.963 ppb	2,375.383 ppb	7.380 ppb	2,411.151 ppb	14,635.088 ppb	85.603 %
Concentration per Run 2	78.621 %	103.949 %	0.021 ppb	6,456.374 ppb	2,130.619 ppb	6.636 ppb	2,242.722 ppb	13,131.686 ppb	84.676 %
Concentration per Run 3	77.293 %	110.915 %	0.023 ppb	6,446.673 ppb	2,212.670 ppb	7.078 ppb	2,310.054 ppb	12,945.398 ppb	86.523 %
Concentration RSD	3.3 %	3.3 %	18.8 %	4.5 %	5.6 %	5.3 %	3.7 %	6.8 %	1.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.063 ppb	0.430 ppb	0.760 ppb	8.863 ppb	0.073 ppb	0.504 ppb	0.384 ppb	-0.058 ppb	99.393 %
Concentration per Run 1	0.071 ppb	0.395 ppb	0.726 ppb	8.909 ppb	0.083 ppb	0.520 ppb	0.408 ppb	-0.019 ppb	97.706 %
Concentration per Run 2	0.056 ppb	0.386 ppb	0.808 ppb	8.806 ppb	0.074 ppb	0.481 ppb	0.347 ppb	-0.090 ppb	97.013 %
Concentration per Run 3	0.061 ppb	0.508 ppb	0.744 ppb	8.874 ppb	0.062 ppb	0.512 ppb	0.396 ppb	-0.064 ppb	103.460 %
Concentration RSD	11.7 %	15.8 %	5.7 %	0.6 %	14.9 %	4.1 %	8.5 %	62.5 %	3.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.371 ppb	2.272 ppb	74.287 ppb	0.170 ppb	94.814 %	0.002 ppb	0.016 ppb	93.526 %	0.028 ppb
Concentration per Run 1	0.443 ppb	2.329 ppb	76.181 ppb	0.095 ppb	94.546 %	0.001 ppb	0.015 ppb	94.321 %	0.012 ppb
Concentration per Run 2	0.310 ppb	2.472 ppb	72.156 ppb	0.149 ppb	92.422 %	0.002 ppb	0.017 ppb	88.369 %	0.025 ppb
Concentration per Run 3	0.361 ppb	2.016 ppb	74.523 ppb	0.265 ppb	97.474 %	0.003 ppb	0.014 ppb	97.888 %	0.047 ppb
Concentration RSD	18.0 %	10.3 %	2.7 %	51.0 %	2.7 %	30.0 %	10.4 %	5.1 %	63.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	7.691 ppb	94.376 %	93.755 %	0.007 ppb	0.012 ppb	95.485 %
Concentration per Run 1	8.012 ppb	98.266 %	95.026 %	0.003 ppb	0.011 ppb	100.059 %
Concentration per Run 2	7.045 ppb	96.581 %	92.001 %	0.008 ppb	0.013 ppb	92.710 %
Concentration per Run 3	8.014 ppb	88.281 %	94.239 %	0.009 ppb	0.014 ppb	93.687 %
Concentration RSD	7.3 %	5.7 %	1.7 %	46.1 %	12.6 %	4.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	40	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350269-06 6020SL	Rack	2		
Analysis started at:	9/14/2023 4:35:47 PM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.092 %	102.024 %	0.006 ppb	25,982.553 ppb	16,564.996 ppb	4.772 ppb	23,756.088 ppb	68,769.461 ppb	84.944 %
Concentration per Run 1	78.978 %	104.247 %	0.004 ppb	26,064.298 ppb	16,692.012 ppb	5.187 ppb	23,418.117 ppb	69,907.649 ppb	86.575 %
Concentration per Run 2	74.806 %	102.580 %	0.008 ppb	25,400.795 ppb	15,968.272 ppb	4.210 ppb	23,216.347 ppb	67,334.647 ppb	85.207 %
Concentration per Run 3	71.491 %	99.246 %	0.006 ppb	26,482.565 ppb	17,034.703 ppb	4.919 ppb	24,633.799 ppb	69,066.087 ppb	83.050 %
Concentration RSD	5.0 %	2.5 %	31.3 %	2.1 %	3.3 %	10.6 %	3.2 %	1.9 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.228 ppb	1.947 ppb	750.559 ppb	30.349 ppb	0.300 ppb	1.417 ppb	0.870 ppb	-0.068 ppb	98.542 %
Concentration per Run 1	0.208 ppb	2.003 ppb	738.567 ppb	29.701 ppb	0.308 ppb	1.353 ppb	0.885 ppb	-0.039 ppb	96.716 %
Concentration per Run 2	0.254 ppb	1.863 ppb	768.242 ppb	30.600 ppb	0.300 ppb	1.342 ppb	0.882 ppb	-0.086 ppb	96.750 %
Concentration per Run 3	0.222 ppb	1.974 ppb	744.867 ppb	30.746 ppb	0.291 ppb	1.556 ppb	0.842 ppb	-0.079 ppb	102.160 %
Concentration RSD	10.5 %	3.8 %	2.1 %	1.9 %	2.7 %	8.5 %	2.7 %	37.0 %	3.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.316 ppb	0.337 ppb	169.924 ppb	0.185 ppb	90.431 %	0.002 ppb	0.029 ppb	89.076 %	0.029 ppb
Concentration per Run 1	0.327 ppb	0.207 ppb	172.883 ppb	0.107 ppb	87.598 %	0.002 ppb	0.023 ppb	86.714 %	0.015 ppb
Concentration per Run 2	0.280 ppb	0.368 ppb	167.287 ppb	0.164 ppb	91.635 %	0.003 ppb	0.033 ppb	89.860 %	0.029 ppb
Concentration per Run 3	0.341 ppb	0.437 ppb	169.601 ppb	0.284 ppb	92.060 %	0.001 ppb	0.032 ppb	90.653 %	0.043 ppb
Concentration RSD	10.1 %	35.0 %	1.7 %	48.8 %	2.7 %	28.3 %	19.5 %	2.3 %	48.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.078 ppb	92.794 %	94.336 %	0.059 ppb	0.017 ppb	88.228 %
Concentration per Run 1	60.364 ppb	85.241 %	93.906 %	0.050 ppb	0.017 ppb	93.881 %
Concentration per Run 2	56.467 ppb	93.451 %	93.572 %	0.061 ppb	0.017 ppb	85.825 %
Concentration per Run 3	57.403 ppb	99.691 %	95.532 %	0.067 ppb	0.019 ppb	84.978 %
Concentration RSD	3.5 %	7.8 %	1.1 %	14.1 %	7.6 %	5.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	41	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350269-07 6020SL	Rack	2		
Analysis started at:	9/14/2023 4:40:26 PM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	73.582 %	98.313 %	0.001 ppb	29,797.284 ppb	15,933.767 ppb	3.339 ppb	14,346.266 ppb	166,270.181 ppb	80.677 %
Concentration per Run 1	77.996 %	101.449 %	0.003 ppb	29,096.618 ppb	15,318.259 ppb	2.607 ppb	14,874.377 ppb	163,348.920 ppb	78.098 %
Concentration per Run 2	72.356 %	95.674 %	-0.001 ppb	30,662.348 ppb	16,307.157 ppb	3.742 ppb	14,480.623 ppb	170,444.533 ppb	82.349 %
Concentration per Run 3	70.394 %	97.817 %	0.002 ppb	29,632.886 ppb	16,175.886 ppb	3.670 ppb	13,683.797 ppb	165,017.089 ppb	81.585 %
Concentration RSD	5.4 %	3.0 %	153.3 %	2.7 %	3.4 %	19.0 %	4.2 %	2.2 %	2.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.350 ppb	0.596 ppb	11.232 ppb	12.944 ppb	0.380 ppb	0.831 ppb	1.855 ppb	1.477 ppb	97.166 %
Concentration per Run 1	0.319 ppb	0.606 ppb	11.426 ppb	11.630 ppb	0.409 ppb	0.820 ppb	1.947 ppb	1.576 ppb	93.400 %
Concentration per Run 2	0.360 ppb	0.623 ppb	11.587 ppb	13.450 ppb	0.376 ppb	0.894 ppb	1.789 ppb	1.487 ppb	98.544 %
Concentration per Run 3	0.371 ppb	0.558 ppb	10.682 ppb	13.753 ppb	0.356 ppb	0.778 ppb	1.828 ppb	1.368 ppb	99.553 %
Concentration RSD	7.8 %	5.6 %	4.3 %	8.9 %	7.2 %	7.1 %	4.4 %	7.1 %	3.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.506 ppb	0.517 ppb	521.026 ppb	0.164 ppb	88.230 %	0.002 ppb	0.006 ppb	86.559 %	0.047 ppb
Concentration per Run 1	0.518 ppb	0.521 ppb	507.459 ppb	0.116 ppb	86.435 %	0.002 ppb	0.006 ppb	81.669 %	0.043 ppb
Concentration per Run 2	0.405 ppb	0.546 ppb	528.622 ppb	0.161 ppb	88.499 %	0.001 ppb	0.007 ppb	87.687 %	0.060 ppb
Concentration per Run 3	0.593 ppb	0.484 ppb	526.998 ppb	0.216 ppb	89.756 %	0.001 ppb	0.005 ppb	90.320 %	0.039 ppb
Concentration RSD	18.7 %	6.0 %	2.3 %	30.3 %	1.9 %	38.2 %	12.3 %	5.1 %	23.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	99.381 ppb	94.767 %	91.424 %	0.269 ppb	0.022 ppb	85.549 %
Concentration per Run 1	97.257 ppb	91.068 %	88.034 %	0.254 ppb	0.023 ppb	87.333 %
Concentration per Run 2	100.624 ppb	98.081 %	93.307 %	0.261 ppb	0.020 ppb	87.479 %
Concentration per Run 3	100.262 ppb	95.152 %	92.932 %	0.292 ppb	0.024 ppb	81.835 %
Concentration RSD	1.9 %	3.7 %	3.2 %	7.5 %	9.3 %	3.8 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	42	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 4:45:04 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	75.335 %	108.196 %	60.912 ppb	5,985.987 ppb	5,781.757 ppb	60.135 ppb	5,818.196 ppb	5,562.314 ppb	89.694 %
Concentration per Run 1	78.115 %	102.759 %	59.899 ppb	6,166.270 ppb	5,938.650 ppb	60.973 ppb	5,918.359 ppb	5,767.453 ppb	89.721 %
Concentration per Run 2	74.734 %	113.535 %	61.643 ppb	5,902.243 ppb	5,668.551 ppb	58.147 ppb	5,681.043 ppb	5,328.868 ppb	89.700 %
Concentration per Run 3	73.156 %	108.296 %	61.195 ppb	5,889.450 ppb	5,738.071 ppb	61.286 ppb	5,855.187 ppb	5,590.621 ppb	89.661 %
Recovery Percentage 1			101.521 %	99.766 %	96.363 %	100.225 %	96.970 %	92.705 %	
Concentration RSD	3.4 %	5.0 %	1.5 %	2.6 %	2.4 %	2.9 %	2.1 %	4.0 %	0.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	54.155 ppb	54.426 ppb	56.029 ppb	5,955.142 ppb	62.855 ppb	58.413 ppb	57.110 ppb	58.273 ppb	100.497 %
Concentration per Run 1	55.500 ppb	56.466 ppb	57.671 ppb	6,262.651 ppb	64.283 ppb	59.931 ppb	60.271 ppb	59.163 ppb	96.263 %
Concentration per Run 2	54.321 ppb	54.295 ppb	55.552 ppb	5,728.969 ppb	61.760 ppb	57.328 ppb	55.961 ppb	57.381 ppb	101.412 %
Concentration per Run 3	52.643 ppb	52.516 ppb	54.864 ppb	5,873.807 ppb	62.522 ppb	57.981 ppb	55.098 ppb	58.274 ppb	103.817 %
Recovery Percentage 1	90.258 %	90.710 %	93.381 %	99.252 %	104.758 %	97.356 %	95.183 %	97.121 %	
Concentration RSD	2.7 %	3.6 %	2.6 %	4.6 %	2.1 %	2.3 %	4.9 %	1.5 %	3.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	57.931 ppb	56.711 ppb	54.078 ppb	55.355 ppb	96.281 %	57.933 ppb	57.477 ppb	91.947 %	55.131 ppb
Concentration per Run 1	58.846 ppb	54.161 ppb	52.717 ppb	56.719 ppb	93.135 %	58.882 ppb	58.629 ppb	86.232 %	55.864 ppb
Concentration per Run 2	57.424 ppb	58.801 ppb	55.010 ppb	55.922 ppb	99.351 %	57.559 ppb	56.334 ppb	93.666 %	54.696 ppb
Concentration per Run 3	57.522 ppb	57.169 ppb	54.507 ppb	53.424 ppb	96.358 %	57.357 ppb	57.467 ppb	95.942 %	54.834 ppb
Recovery Percentage 1	96.551 %	94.518 %	90.130 %	92.258 %		96.555 %	95.795 %		91.886 %
Concentration RSD	1.4 %	4.2 %	2.2 %	3.1 %	3.2 %	1.4 %	2.0 %	5.5 %	1.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.011 ppb	93.329 %	92.560 %	56.498 ppb	56.643 ppb	94.125 %
Concentration per Run 1	56.864 ppb	88.645 %	87.171 %	54.889 ppb	56.017 ppb	96.024 %
Concentration per Run 2	55.300 ppb	93.841 %	97.130 %	57.172 ppb	56.586 ppb	94.542 %
Concentration per Run 3	55.871 ppb	97.501 %	93.379 %	57.434 ppb	57.326 ppb	91.808 %
Recovery Percentage 1	93.352 %			94.164 %	94.405 %	
Concentration RSD	1.4 %	4.8 %	5.4 %	2.5 %	1.2 %	2.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	43	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 4:50:31 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.609 %	108.514 %	0.002 ppb	1.988 ppb	-0.777 ppb	-0.495 ppb	3.015 ppb	0.751 ppb	81.586 %
Concentration per Run 1	81.957 %	107.164 %	0.004 ppb	3.405 ppb	-0.639 ppb	-0.361 ppb	2.653 ppb	0.582 ppb	84.193 %
Concentration per Run 2	77.277 %	105.557 %	-0.003 ppb	2.471 ppb	-0.808 ppb	-0.572 ppb	5.002 ppb	1.817 ppb	81.089 %
Concentration per Run 3	73.593 %	112.821 %	0.003 ppb	0.087 ppb	-0.883 ppb	-0.551 ppb	1.390 ppb	-0.146 ppb	79.476 %
Recovery Percentage 1			0.305 %	1.988 %	-1.110 %	-4.947 %	3.015 %	0.751 %	
Concentration RSD	5.4 %	3.5 %	238.6 %	86.1 %	16.1 %	23.5 %	60.8 %	132.1 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.007 ppb	-0.002 ppb	-0.003 ppb	10.227 ppb	0.001 ppb	0.097 ppb	0.013 ppb	0.140 ppb	100.570 %
Concentration per Run 1	0.000 ppb	0.008 ppb	-0.002 ppb	9.702 ppb	0.001 ppb	0.085 ppb	0.014 ppb	0.122 ppb	101.765 %
Concentration per Run 2	0.006 ppb	0.002 ppb	0.009 ppb	10.169 ppb	0.002 ppb	0.114 ppb	0.009 ppb	0.106 ppb	99.867 %
Concentration per Run 3	0.016 ppb	-0.014 ppb	-0.016 ppb	10.808 ppb	-0.001 ppb	0.091 ppb	0.016 ppb	0.191 ppb	100.077 %
Recovery Percentage 1	0.149 %	-0.168 %	-0.300 %	20.453 %	0.134 %	4.827 %	1.320 %	2.794 %	
Concentration RSD	104.3 %	676.3 %	414.5 %	5.4 %	182.1 %	15.9 %	24.9 %	32.4 %	1.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.070 ppb	0.506 ppb	0.002 ppb	1.207 ppb	100.194 %	0.004 ppb	0.001 ppb	95.411 %	0.089 ppb
Concentration per Run 1	0.064 ppb	0.343 ppb	0.008 ppb	0.896 ppb	99.759 %	0.003 ppb	0.001 ppb	97.640 %	0.067 ppb
Concentration per Run 2	0.053 ppb	0.490 ppb	-0.001 ppb	1.289 ppb	101.385 %	0.004 ppb	0.001 ppb	93.555 %	0.096 ppb
Concentration per Run 3	0.094 ppb	0.686 ppb	-0.001 ppb	1.436 ppb	99.440 %	0.003 ppb	0.000 ppb	95.039 %	0.104 ppb
Recovery Percentage 1	14.072 %	10.123 %	0.020 %	60.345 %		0.905 %	0.396 %		2.222 %
Concentration RSD	30.2 %	34.0 %	256.1 %	23.1 %	1.0 %	7.1 %	75.0 %	2.2 %	22.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.010 ppb	97.433 %	93.593 %	0.063 ppb	0.008 ppb	103.354 %
Concentration per Run 1	0.008 ppb	97.362 %	92.743 %	0.049 ppb	0.007 ppb	112.526 %
Concentration per Run 2	0.005 ppb	96.976 %	94.037 %	0.072 ppb	0.008 ppb	101.249 %
Concentration per Run 3	0.017 ppb	97.960 %	94.000 %	0.069 ppb	0.009 ppb	96.287 %
Recovery Percentage 1	2.044 %			6.324 %	0.815 %	
Concentration RSD	60.1 %	0.5 %	0.8 %	19.5 %	10.7 %	8.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	44	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1825239-1 6020SL	Rack	2		
Analysis started at:	9/14/2023 4:55:44 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.053 %	113.019 %	0.002 ppb	33.793 ppb	2.185 ppb	5.750 ppb	13.607 ppb	19.202 ppb	89.732 %
Concentration per Run 1	84.985 %	106.986 %	0.001 ppb	35.466 ppb	3.037 ppb	6.229 ppb	12.528 ppb	17.652 ppb	86.761 %
Concentration per Run 2	82.219 %	112.344 %	0.004 ppb	32.954 ppb	1.992 ppb	5.469 ppb	14.876 ppb	18.849 ppb	93.192 %
Concentration per Run 3	78.954 %	119.727 %	0.001 ppb	32.958 ppb	1.526 ppb	5.552 ppb	13.417 ppb	21.106 ppb	89.243 %
Concentration RSD	3.7 %	5.7 %	81.2 %	4.3 %	35.4 %	7.2 %	8.7 %	9.1 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.006 ppb	0.055 ppb	1.667 ppb	11.709 ppb	0.011 ppb	0.058 ppb	0.095 ppb	-0.059 ppb	102.428 %
Concentration per Run 1	0.008 ppb	0.052 ppb	1.715 ppb	10.901 ppb	0.014 ppb	0.054 ppb	0.094 ppb	-0.066 ppb	99.038 %
Concentration per Run 2	0.008 ppb	0.054 ppb	1.659 ppb	13.066 ppb	0.007 ppb	0.045 ppb	0.088 ppb	-0.093 ppb	100.149 %
Concentration per Run 3	0.001 ppb	0.058 ppb	1.627 ppb	11.161 ppb	0.013 ppb	0.076 ppb	0.105 ppb	-0.018 ppb	108.098 %
Concentration RSD	71.7 %	5.5 %	2.7 %	10.1 %	33.7 %	27.0 %	9.0 %	64.4 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.027 ppb	0.086 ppb	0.063 ppb	0.542 ppb	105.241 %	0.001 ppb	0.000 ppb	100.126 %	1.102 ppb
Concentration per Run 1	-0.003 ppb	0.013 ppb	0.062 ppb	0.289 ppb	103.454 %	0.002 ppb	0.000 ppb	95.087 %	1.045 ppb
Concentration per Run 2	0.023 ppb	0.097 ppb	0.063 ppb	0.564 ppb	104.553 %	0.001 ppb	0.000 ppb	95.313 %	1.167 ppb
Concentration per Run 3	0.063 ppb	0.146 ppb	0.066 ppb	0.774 ppb	107.716 %	0.001 ppb	0.001 ppb	109.978 %	1.094 ppb
Concentration RSD	121.5 %	78.5 %	3.2 %	44.8 %	2.1 %	17.4 %	76.2 %	8.5 %	5.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.057 ppb	100.358 %	100.855 %	0.021 ppb	0.015 ppb	108.570 %
Concentration per Run 1	0.060 ppb	101.656 %	96.305 %	0.014 ppb	0.013 ppb	115.146 %
Concentration per Run 2	0.066 ppb	100.702 %	98.338 %	0.024 ppb	0.016 ppb	105.756 %
Concentration per Run 3	0.046 ppb	98.715 %	107.923 %	0.025 ppb	0.017 ppb	104.807 %
Concentration RSD	18.7 %	1.5 %	6.2 %	29.6 %	13.2 %	5.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	45	User name	ALPHALAB\Metals-Instrument	Comment	eb
Analysis label:	I2350269-11 6020SL	Rack	2		
Analysis started at:	9/14/2023 5:00:22 PM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.896 %	111.908 %	0.002 ppb	-2.346 ppb	1.327 ppb	1.466 ppb	2.436 ppb	12.425 ppb	88.975 %
Concentration per Run 1	84.068 %	111.451 %	0.001 ppb	-3.191 ppb	1.087 ppb	1.982 ppb	2.678 ppb	8.434 ppb	90.563 %
Concentration per Run 2	81.547 %	110.082 %	0.000 ppb	-4.055 ppb	1.568 ppb	1.277 ppb	-0.020 ppb	13.304 ppb	89.862 %
Concentration per Run 3	77.073 %	114.190 %	0.003 ppb	0.209 ppb	1.325 ppb	1.139 ppb	4.650 ppb	15.537 ppb	86.499 %
Concentration RSD	4.4 %	1.9 %	81.0 %	96.1 %	18.2 %	30.8 %	96.2 %	29.2 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.003 ppb	0.161 ppb	-0.002 ppb	4.152 ppb	0.000 ppb	0.013 ppb	0.057 ppb	-0.762 ppb	105.371 %
Concentration per Run 1	0.006 ppb	0.162 ppb	0.011 ppb	3.646 ppb	-0.002 ppb	0.009 ppb	0.069 ppb	-0.771 ppb	101.206 %
Concentration per Run 2	-0.002 ppb	0.147 ppb	-0.010 ppb	4.698 ppb	0.002 ppb	0.027 ppb	0.052 ppb	-0.790 ppb	104.863 %
Concentration per Run 3	0.007 ppb	0.173 ppb	-0.006 ppb	4.113 ppb	0.001 ppb	0.002 ppb	0.050 ppb	-0.725 ppb	110.043 %
Concentration RSD	138.5 %	8.1 %	594.1 %	12.7 %	380.5 %	98.8 %	18.0 %	4.4 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.001 ppb	0.006 ppb	0.012 ppb	0.119 ppb	101.727 %	0.001 ppb	0.000 ppb	100.972 %	0.059 ppb
Concentration per Run 1	0.016 ppb	-0.043 ppb	0.012 ppb	0.017 ppb	99.437 %	0.000 ppb	0.000 ppb	95.223 %	0.044 ppb
Concentration per Run 2	0.034 ppb	0.005 ppb	0.013 ppb	0.107 ppb	103.458 %	0.001 ppb	0.000 ppb	98.411 %	0.054 ppb
Concentration per Run 3	-0.055 ppb	0.055 ppb	0.011 ppb	0.234 ppb	102.287 %	0.001 ppb	0.000 ppb	109.282 %	0.079 ppb
Concentration RSD	3,424.1 %	882.2 %	11.3 %	91.4 %	2.0 %	43.2 %	0.0 %	7.3 %	31.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.037 ppb	104.399 %	102.443 %	0.009 ppb	0.006 ppb	105.235 %
Concentration per Run 1	0.052 ppb	101.634 %	97.119 %	0.003 ppb	0.005 ppb	107.473 %
Concentration per Run 2	0.022 ppb	102.923 %	100.468 %	0.011 ppb	0.006 ppb	102.455 %
Concentration per Run 3	0.038 ppb	108.640 %	109.742 %	0.013 ppb	0.006 ppb	105.776 %
Concentration RSD	40.1 %	3.6 %	6.4 %	57.7 %	12.9 %	2.4 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 46
Analysis label: WG1825239-2d5 6020SL
Analysis started at: 9/14/2023 5:09:59 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 10
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.453 %	107.879 %	10.748 ppb	2,296.880 ppb	2,017.214 ppb	422.312 ppb	2,128.608 ppb	1,984.005 ppb	93.118 %
Concentration per Run 1	93.495 %	103.830 %	10.564 ppb	2,448.997 ppb	2,124.737 ppb	438.377 ppb	2,168.479 ppb	2,121.360 ppb	98.174 %
Concentration per Run 2	88.759 %	113.595 %	10.920 ppb	2,189.644 ppb	1,898.661 ppb	407.108 ppb	2,090.037 ppb	2,053.671 ppb	86.827 %
Concentration per Run 3	86.103 %	106.212 %	10.761 ppb	2,251.999 ppb	2,028.245 ppb	421.451 ppb	2,127.308 ppb	1,776.984 ppb	94.353 %
Concentration RSD	4.2 %	4.7 %	1.7 %	5.9 %	5.6 %	3.7 %	1.8 %	9.2 %	6.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	99.792 ppb	40.333 ppb	106.106 ppb	220.929 ppb	110.562 ppb	303.338 ppb	51.243 ppb	104.412 ppb	106.463 %
Concentration per Run 1	104.970 ppb	41.346 ppb	109.365 ppb	226.371 ppb	114.365 ppb	308.302 ppb	52.857 ppb	107.275 ppb	103.518 %
Concentration per Run 2	97.164 ppb	39.694 ppb	101.214 ppb	214.182 ppb	108.540 ppb	294.507 ppb	50.250 ppb	102.303 ppb	105.951 %
Concentration per Run 3	97.244 ppb	39.960 ppb	107.739 ppb	222.235 ppb	108.782 ppb	307.205 ppb	50.622 ppb	103.657 ppb	109.921 %
Concentration RSD	4.5 %	2.2 %	4.1 %	2.8 %	3.0 %	2.5 %	2.8 %	2.5 %	3.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	25.107 ppb	25.848 ppb	196.796 ppb	215.838 ppb	103.020 %	10.770 ppb	11.310 ppb	100.773 %	93.006 ppb
Concentration per Run 1	25.839 ppb	26.957 ppb	198.729 ppb	214.974 ppb	102.001 %	10.964 ppb	11.507 ppb	99.029 %	93.386 ppb
Concentration per Run 2	25.071 ppb	26.170 ppb	198.275 ppb	223.621 ppb	102.835 %	10.805 ppb	11.417 ppb	99.208 %	94.233 ppb
Concentration per Run 3	24.409 ppb	24.418 ppb	193.384 ppb	208.918 ppb	104.223 %	10.542 ppb	11.006 ppb	104.082 %	91.400 ppb
Concentration RSD	2.8 %	5.0 %	1.5 %	3.4 %	1.1 %	2.0 %	2.4 %	2.8 %	1.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	397.137 ppb	107.889 %	104.780 %	25.880 ppb	109.698 ppb	106.747 %
Concentration per Run 1	393.202 ppb	107.388 %	102.155 %	25.373 ppb	107.251 ppb	109.868 %
Concentration per Run 2	403.661 ppb	109.326 %	107.101 %	25.845 ppb	108.880 ppb	106.231 %
Concentration per Run 3	394.549 ppb	106.953 %	105.085 %	26.421 ppb	112.963 ppb	104.142 %
Concentration RSD	1.4 %	1.2 %	2.4 %	2.0 %	2.7 %	2.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 47
Analysis label: WG1825239-3d10 6020SL
Analysis started at: 9/14/2023 5:14:36 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 12
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.489 %	112.027 %	6.171 ppb	15,422.044 ppb	3,014.378 ppb	3,186.443 ppb	1,630.278 ppb	4,113.209 ppb	98.132 %
Concentration per Run 1	91.804 %	114.845 %	6.056 ppb	15,938.195 ppb	3,144.277 ppb	3,384.873 ppb	1,732.187 ppb	4,145.942 ppb	101.468 %
Concentration per Run 2	86.518 %	107.164 %	6.149 ppb	15,453.976 ppb	3,014.580 ppb	3,166.130 ppb	1,624.554 ppb	4,291.584 ppb	96.596 %
Concentration per Run 3	84.146 %	114.071 %	6.308 ppb	14,873.963 ppb	2,884.276 ppb	3,008.327 ppb	1,534.093 ppb	3,902.102 ppb	96.332 %
Concentration RSD	4.5 %	3.8 %	2.1 %	3.5 %	4.3 %	5.9 %	6.1 %	4.8 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.769 ppb	19.962 ppb	833.704 ppb	323.068 ppb	66.493 ppb	58.129 ppb	31.808 ppb	97.071 ppb	108.648 %
Concentration per Run 1	52.122 ppb	20.674 ppb	872.325 ppb	341.313 ppb	67.147 ppb	59.031 ppb	31.286 ppb	97.293 ppb	112.203 %
Concentration per Run 2	48.593 ppb	19.729 ppb	834.630 ppb	324.984 ppb	66.291 ppb	57.792 ppb	32.229 ppb	97.249 ppb	107.540 %
Concentration per Run 3	48.593 ppb	19.485 ppb	794.159 ppb	302.906 ppb	66.041 ppb	57.564 ppb	31.909 ppb	96.672 ppb	106.200 %
Concentration RSD	4.1 %	3.1 %	4.7 %	6.0 %	0.9 %	1.4 %	1.5 %	0.4 %	2.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.635 ppb	21.434 ppb	182.142 ppb	103.258 ppb	102.452 %	5.333 ppb	5.841 ppb	103.318 %	49.085 ppb
Concentration per Run 1	13.849 ppb	21.098 ppb	191.411 ppb	101.392 ppb	104.983 %	5.324 ppb	5.872 ppb	109.857 %	48.484 ppb
Concentration per Run 2	13.504 ppb	22.103 ppb	178.675 ppb	105.316 ppb	99.492 %	5.492 ppb	5.959 ppb	96.978 %	50.387 ppb
Concentration per Run 3	13.550 ppb	21.101 ppb	176.338 ppb	103.068 ppb	102.881 %	5.182 ppb	5.694 ppb	103.119 %	48.385 ppb
Concentration RSD	1.4 %	2.7 %	4.5 %	1.9 %	2.7 %	2.9 %	2.3 %	6.2 %	2.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	202.238 ppb	110.441 %	108.873 %	12.855 ppb	56.627 ppb	105.213 %
Concentration per Run 1	206.236 ppb	112.407 %	113.790 %	12.912 ppb	56.694 ppb	107.576 %
Concentration per Run 2	199.449 ppb	109.610 %	107.430 %	12.474 ppb	54.883 ppb	106.263 %
Concentration per Run 3	201.029 ppb	109.306 %	105.397 %	13.180 ppb	58.305 ppb	101.800 %
Concentration RSD	1.8 %	1.5 %	4.0 %	2.8 %	3.0 %	2.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 48
Analysis label: WG1825239-4d10 6020SL
Analysis started at: 9/14/2023 5:19:15 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 13
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.586 %	109.308 %	6.211 ppb	15,702.418 ppb	3,044.439 ppb	3,193.073 ppb	1,564.248 ppb	3,996.546 ppb	95.162 %
Concentration per Run 1	88.322 %	111.749 %	6.212 ppb	16,406.764 ppb	3,270.827 ppb	3,404.894 ppb	1,718.708 ppb	4,179.943 ppb	96.927 %
Concentration per Run 2	83.995 %	111.332 %	6.231 ppb	15,153.612 ppb	2,899.915 ppb	3,100.211 ppb	1,493.754 ppb	3,767.188 ppb	95.972 %
Concentration per Run 3	81.440 %	104.843 %	6.190 ppb	15,546.878 ppb	2,962.574 ppb	3,074.114 ppb	1,480.281 ppb	4,042.507 ppb	92.586 %
Concentration RSD	4.1 %	3.5 %	0.3 %	4.1 %	6.5 %	5.8 %	8.6 %	5.3 %	2.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	49.500 ppb	19.637 ppb	828.630 ppb	320.639 ppb	65.314 ppb	59.251 ppb	31.304 ppb	95.765 ppb	108.700 %
Concentration per Run 1	50.919 ppb	20.123 ppb	852.260 ppb	323.497 ppb	64.448 ppb	58.012 ppb	30.860 ppb	97.706 ppb	114.356 %
Concentration per Run 2	48.104 ppb	18.914 ppb	790.626 ppb	318.328 ppb	65.506 ppb	57.807 ppb	30.775 ppb	93.624 ppb	109.020 %
Concentration per Run 3	49.477 ppb	19.875 ppb	843.003 ppb	320.093 ppb	65.987 ppb	61.932 ppb	32.277 ppb	95.964 ppb	102.724 %
Concentration RSD	2.8 %	3.3 %	4.0 %	0.8 %	1.2 %	3.9 %	2.7 %	2.1 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.507 ppb	20.481 ppb	179.038 ppb	99.985 ppb	100.299 %	5.476 ppb	5.859 ppb	100.664 %	48.474 ppb
Concentration per Run 1	13.670 ppb	20.682 ppb	192.189 ppb	100.863 ppb	100.424 %	5.350 ppb	5.806 ppb	107.455 %	49.134 ppb
Concentration per Run 2	13.331 ppb	20.152 ppb	173.631 ppb	99.255 ppb	101.466 %	5.531 ppb	6.023 ppb	100.199 %	47.984 ppb
Concentration per Run 3	13.521 ppb	20.608 ppb	171.293 ppb	99.837 ppb	99.008 %	5.548 ppb	5.748 ppb	94.340 %	48.303 ppb
Concentration RSD	1.3 %	1.4 %	6.4 %	0.8 %	1.2 %	2.0 %	2.5 %	6.5 %	1.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	200.813 ppb	108.892 %	103.940 %	12.464 ppb	55.075 ppb	104.719 %
Concentration per Run 1	207.826 ppb	111.388 %	109.153 %	11.886 ppb	52.769 ppb	112.743 %
Concentration per Run 2	196.389 ppb	110.892 %	103.846 %	12.543 ppb	55.825 ppb	102.736 %
Concentration per Run 3	198.224 ppb	104.395 %	98.822 %	12.963 ppb	56.631 ppb	98.677 %
Concentration RSD	3.1 %	3.6 %	5.0 %	4.4 %	3.7 %	6.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 49
Analysis label: WG1825239-5d10 6020SL
Analysis started at: 9/14/2023 5:23:53 PM

User name ALPHALAB\Metals-Instrument
Rack 2
Vial 14

Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.603 %	109.943 %	50.387 ppb	18,982.606 ppb	6,411.993 ppb	2,895.741 ppb	5,469.656 ppb	7,880.406 ppb	99.154 %
Concentration per Run 1	84.986 %	112.047 %	50.224 ppb	20,564.934 ppb	6,275.896 ppb	3,182.146 ppb	6,028.645 ppb	8,459.167 ppb	102.577 %
Concentration per Run 2	82.299 %	111.273 %	50.280 ppb	18,311.047 ppb	6,533.285 ppb	2,844.068 ppb	5,363.614 ppb	7,896.478 ppb	94.283 %
Concentration per Run 3	80.525 %	106.510 %	50.659 ppb	18,071.839 ppb	6,426.798 ppb	2,661.011 ppb	5,016.710 ppb	7,285.572 ppb	100.603 %
Concentration RSD	2.7 %	2.7 %	0.5 %	7.2 %	2.0 %	9.1 %	9.4 %	7.4 %	4.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.925 ppb	45.994 ppb	803.296 ppb	5,224.794 ppb	63.852 ppb	58.058 ppb	54.027 ppb	92.978 ppb	106.045 %
Concentration per Run 1	49.649 ppb	46.942 ppb	832.130 ppb	5,380.970 ppb	62.883 ppb	57.259 ppb	52.531 ppb	94.013 ppb	111.999 %
Concentration per Run 2	47.822 ppb	45.788 ppb	801.835 ppb	5,250.065 ppb	66.021 ppb	58.916 ppb	54.987 ppb	94.488 ppb	105.533 %
Concentration per Run 3	46.304 ppb	45.251 ppb	775.924 ppb	5,043.347 ppb	62.653 ppb	57.998 ppb	54.564 ppb	90.432 ppb	100.603 %
Concentration RSD	3.5 %	1.9 %	3.5 %	3.3 %	2.9 %	1.4 %	2.4 %	2.4 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	49.724 ppb	58.290 ppb	127.104 ppb	50.460 ppb	99.603 %	1.545 ppb	50.791 ppb	99.328 %	51.470 ppb
Concentration per Run 1	50.400 ppb	61.810 ppb	135.677 ppb	50.596 ppb	102.310 %	1.525 ppb	49.907 ppb	106.197 %	51.294 ppb
Concentration per Run 2	50.472 ppb	57.021 ppb	125.229 ppb	49.027 ppb	98.415 %	1.523 ppb	51.044 ppb	102.150 %	50.656 ppb
Concentration per Run 3	48.300 ppb	56.038 ppb	120.407 ppb	51.758 ppb	98.083 %	1.586 ppb	51.420 ppb	89.636 %	52.460 ppb
Concentration RSD	2.5 %	5.3 %	6.1 %	2.7 %	2.4 %	2.3 %	1.6 %	8.7 %	1.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	52.506 ppb	103.862 %	104.770 %	46.859 ppb	50.259 ppb	105.358 %
Concentration per Run 1	52.738 ppb	108.258 %	109.589 %	43.773 ppb	47.716 ppb	116.197 %
Concentration per Run 2	53.356 ppb	98.930 %	103.571 %	48.634 ppb	52.466 ppb	101.397 %
Concentration per Run 3	51.425 ppb	104.397 %	101.149 %	48.170 ppb	50.594 ppb	98.479 %
Concentration RSD	1.9 %	4.5 %	4.1 %	5.7 %	4.8 %	9.0 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 50
Analysis label: WG1825239-6d5 6020SL
Analysis started at: 9/14/2023 5:28:31 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 15
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	81.616 %	112.483 %	1.826 ppb	28,151.863 ppb	3,802.469 ppb	5,734.571 ppb	961.929 ppb	5,903.896 ppb	96.727 %
Concentration per Run 1	84.985 %	119.429 %	1.788 ppb	28,350.820 ppb	3,919.083 ppb	6,083.813 ppb	1,021.652 ppb	6,090.003 ppb	99.283 %
Concentration per Run 2	81.037 %	111.392 %	1.797 ppb	28,697.402 ppb	3,815.220 ppb	5,594.783 ppb	933.574 ppb	5,760.437 ppb	95.861 %
Concentration per Run 3	78.826 %	106.629 %	1.892 ppb	27,407.366 ppb	3,673.104 ppb	5,525.117 ppb	930.561 ppb	5,861.247 ppb	95.039 %
Concentration RSD	3.8 %	5.8 %	3.2 %	2.4 %	3.2 %	5.3 %	5.4 %	2.9 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.029 ppb	1.112 ppb	1,488.803 ppb	434.508 ppb	22.578 ppb	19.132 ppb	11.937 ppb	85.149 ppb	106.640 %
Concentration per Run 1	1.001 ppb	1.127 ppb	1,495.787 ppb	435.076 ppb	22.210 ppb	19.055 ppb	11.640 ppb	85.033 ppb	112.621 %
Concentration per Run 2	1.055 ppb	1.119 ppb	1,523.820 ppb	442.291 ppb	22.697 ppb	19.156 ppb	11.902 ppb	85.722 ppb	106.212 %
Concentration per Run 3	1.032 ppb	1.090 ppb	1,446.800 ppb	426.157 ppb	22.828 ppb	19.184 ppb	12.268 ppb	84.693 ppb	101.086 %
Concentration RSD	2.6 %	1.7 %	2.6 %	1.9 %	1.4 %	0.4 %	2.6 %	0.6 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.389 ppb	16.891 ppb	156.303 ppb	2.979 ppb	97.971 %	0.002 ppb	0.370 ppb	99.652 %	0.947 ppb
Concentration per Run 1	1.400 ppb	16.035 ppb	166.042 ppb	2.089 ppb	100.564 %	0.001 ppb	0.361 ppb	108.684 %	0.851 ppb
Concentration per Run 2	1.387 ppb	17.335 ppb	152.592 ppb	2.988 ppb	99.128 %	0.002 ppb	0.379 ppb	98.534 %	0.972 ppb
Concentration per Run 3	1.380 ppb	17.304 ppb	150.276 ppb	3.860 ppb	94.222 %	0.002 ppb	0.371 ppb	91.739 %	1.018 ppb
Concentration RSD	0.7 %	4.4 %	5.4 %	29.7 %	3.4 %	42.6 %	2.4 %	8.6 %	9.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	6.846 ppb	107.811 %	103.954 %	0.268 ppb	0.069 ppb	98.549 %
Concentration per Run 1	6.575 ppb	114.383 %	109.543 %	0.209 ppb	0.065 ppb	105.831 %
Concentration per Run 2	7.117 ppb	106.097 %	103.733 %	0.309 ppb	0.074 ppb	97.514 %
Concentration per Run 3	6.845 ppb	102.951 %	98.587 %	0.286 ppb	0.069 ppb	92.303 %
Concentration RSD	4.0 %	5.5 %	5.3 %	19.5 %	6.3 %	6.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	51	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2351953-06 6020SL	Rack	2		
Analysis started at:	9/14/2023 5:33:10 PM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	76.716 %	121.851 %	7.484 ppb	131,996.009 ppb	15,153.519 ppb	25,260.818 ppb	4,437.869 ppb	24,774.815 ppb	121.626 %
Concentration per Run 1	79.907 %	127.527 %	7.338 ppb	134,752.395 ppb	15,813.339 ppb	23,775.177 ppb	4,681.607 ppb	26,766.778 ppb	123.717 %
Concentration per Run 2	76.300 %	119.727 %	7.552 ppb	134,045.084 ppb	15,076.447 ppb	26,875.001 ppb	4,562.919 ppb	24,411.537 ppb	122.333 %
Concentration per Run 3	73.940 %	118.298 %	7.561 ppb	127,190.548 ppb	14,570.772 ppb	25,132.275 ppb	4,069.081 ppb	23,146.130 ppb	118.828 %
Concentration RSD	3.9 %	4.1 %	1.7 %	3.2 %	4.1 %	6.2 %	7.3 %	7.4 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.406 ppb	4.694 ppb	5,985.868 ppb	1,952.029 ppb	104.006 ppb	85.669 ppb	53.655 ppb	350.244 ppb	107.650 %
Concentration per Run 1	4.409 ppb	4.706 ppb	5,985.509 ppb	1,894.610 ppb	94.606 ppb	81.942 ppb	51.281 ppb	351.507 ppb	115.818 %
Concentration per Run 2	4.491 ppb	4.846 ppb	6,415.840 ppb	2,052.532 ppb	114.692 ppb	91.622 ppb	54.815 ppb	356.773 ppb	103.392 %
Concentration per Run 3	4.318 ppb	4.530 ppb	5,556.255 ppb	1,908.946 ppb	102.718 ppb	83.443 ppb	54.869 ppb	342.452 ppb	103.739 %
Concentration RSD	2.0 %	3.4 %	7.2 %	4.5 %	9.7 %	6.1 %	3.8 %	2.1 %	6.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	6.505 ppb	77.681 ppb	737.976 ppb	1.407 ppb	88.888 %	0.002 ppb	1.762 ppb	88.939 %	0.715 ppb
Concentration per Run 1	6.565 ppb	74.583 ppb	717.966 ppb	0.894 ppb	91.671 %	0.002 ppb	1.729 ppb	95.017 %	0.649 ppb
Concentration per Run 2	6.590 ppb	80.109 ppb	767.025 ppb	1.501 ppb	89.191 %	0.002 ppb	1.726 ppb	89.942 %	0.698 ppb
Concentration per Run 3	6.359 ppb	78.351 ppb	728.938 ppb	1.824 ppb	85.800 %	0.001 ppb	1.832 ppb	81.857 %	0.797 ppb
Concentration RSD	1.9 %	3.6 %	3.5 %	33.6 %	3.3 %	30.2 %	3.4 %	7.5 %	10.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	33.693 ppb	108.379 %	98.675 %	0.285 ppb	0.271 ppb	87.936 %
Concentration per Run 1	36.280 ppb	107.116 %	105.708 %	0.241 ppb	0.260 ppb	96.365 %
Concentration per Run 2	32.746 ppb	111.042 %	98.449 %	0.301 ppb	0.274 ppb	85.696 %
Concentration per Run 3	32.053 ppb	106.981 %	91.867 %	0.312 ppb	0.279 ppb	81.747 %
Concentration RSD	6.7 %	2.1 %	7.0 %	13.6 %	3.8 %	8.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	52	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350269-09 6020SL	Rack	2		
Analysis started at:	9/14/2023 5:37:49 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	59.814 %	103.255 %	0.003 ppb	66,136.390 ppb	291.040 ppb	1,022.110 ppb	33,805.549 ppb	98,375.739 ppb	71.799 %
Concentration per Run 1	62.782 %	104.188 %	0.006 ppb	68,892.319 ppb	297.365 ppb	1,081.488 ppb	35,969.516 ppb	104,659.314 ppb	73.583 %
Concentration per Run 2	59.521 %	105.081 %	0.003 ppb	64,905.052 ppb	282.370 ppb	1,004.938 ppb	34,203.606 ppb	98,577.918 ppb	71.496 %
Concentration per Run 3	57.138 %	100.496 %	0.001 ppb	64,611.798 ppb	293.384 ppb	979.905 ppb	31,243.526 ppb	91,889.986 ppb	70.318 %
Concentration RSD	4.7 %	2.4 %	82.9 %	3.6 %	2.7 %	5.2 %	7.1 %	6.5 %	2.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	19.643 ppb	0.164 ppb	54.825 ppb	54.256 ppb	0.639 ppb	6.916 ppb	1.188 ppb	-0.821 ppb	93.728 %
Concentration per Run 1	20.099 ppb	0.181 ppb	57.424 ppb	56.917 ppb	0.630 ppb	6.984 ppb	1.169 ppb	-0.811 ppb	96.428 %
Concentration per Run 2	19.323 ppb	0.169 ppb	54.143 ppb	52.523 ppb	0.678 ppb	6.906 ppb	1.211 ppb	-0.851 ppb	93.510 %
Concentration per Run 3	19.507 ppb	0.143 ppb	52.908 ppb	53.329 ppb	0.611 ppb	6.859 ppb	1.185 ppb	-0.801 ppb	91.246 %
Concentration RSD	2.1 %	11.7 %	4.3 %	4.3 %	5.4 %	0.9 %	1.8 %	3.2 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	4.988 ppb	1.202 ppb	955.573 ppb	41.934 ppb	86.534 %	0.001 ppb	0.009 ppb	83.128 %	1.188 ppb
Concentration per Run 1	5.094 ppb	1.473 ppb	994.012 ppb	42.939 ppb	87.893 %	0.002 ppb	0.009 ppb	87.993 %	1.108 ppb
Concentration per Run 2	4.933 ppb	1.019 ppb	959.704 ppb	41.691 ppb	86.267 %	0.000 ppb	0.013 ppb	82.093 %	1.219 ppb
Concentration per Run 3	4.937 ppb	1.115 ppb	913.003 ppb	41.174 ppb	85.442 %	0.001 ppb	0.005 ppb	79.298 %	1.237 ppb
Concentration RSD	1.8 %	19.9 %	4.3 %	2.2 %	1.4 %	86.6 %	41.7 %	5.3 %	5.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	7.415 ppb	90.075 %	85.727 %	0.042 ppb	0.024 ppb	82.188 %
Concentration per Run 1	7.363 ppb	92.476 %	90.699 %	0.026 ppb	0.023 ppb	86.016 %
Concentration per Run 2	7.552 ppb	89.606 %	84.950 %	0.048 ppb	0.024 ppb	79.779 %
Concentration per Run 3	7.330 ppb	88.144 %	81.531 %	0.051 ppb	0.024 ppb	80.770 %
Concentration RSD	1.6 %	2.4 %	5.4 %	33.8 %	2.8 %	4.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	53	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350028-01 6020SL	Rack	2		
Analysis started at:	9/14/2023 5:42:28 PM	Vial	16		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	66.031 %	108.415 %	0.001 ppb	32,294.796 ppb	21,069.204 ppb	143.962 ppb	768.217 ppb	94,719.885 ppb	79.450 %
Concentration per Run 1	68.126 %	105.855 %	0.001 ppb	33,811.761 ppb	22,167.452 ppb	154.937 ppb	826.049 ppb	100,191.459 ppb	80.924 %
Concentration per Run 2	66.276 %	110.915 %	0.000 ppb	32,300.986 ppb	21,184.884 ppb	141.186 ppb	757.766 ppb	92,258.990 ppb	81.044 %
Concentration per Run 3	63.690 %	108.474 %	0.002 ppb	30,771.642 ppb	19,855.277 ppb	135.762 ppb	720.835 ppb	91,709.205 ppb	76.382 %
Concentration RSD	3.4 %	2.3 %	129.8 %	4.7 %	5.5 %	6.9 %	6.9 %	5.0 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.249 ppb	0.364 ppb	6,697.942 ppb	15.825 ppb	1.422 ppb	2.043 ppb	2.886 ppb	1.492 ppb	94.939 %
Concentration per Run 1	0.290 ppb	0.375 ppb	7,065.309 ppb	15.878 ppb	1.481 ppb	2.055 ppb	2.934 ppb	1.503 ppb	92.908 %
Concentration per Run 2	0.235 ppb	0.380 ppb	6,652.767 ppb	16.862 ppb	1.407 ppb	2.040 ppb	2.839 ppb	1.476 ppb	97.598 %
Concentration per Run 3	0.222 ppb	0.336 ppb	6,375.749 ppb	14.735 ppb	1.378 ppb	2.035 ppb	2.885 ppb	1.496 ppb	94.310 %
Concentration RSD	14.3 %	6.6 %	5.2 %	6.7 %	3.7 %	0.5 %	1.7 %	0.9 %	2.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.448 ppb	0.213 ppb	210.466 ppb	3.085 ppb	88.492 %	0.002 ppb	0.002 ppb	85.484 %	0.805 ppb
Concentration per Run 1	1.525 ppb	0.202 ppb	215.840 ppb	2.583 ppb	87.829 %	0.001 ppb	0.001 ppb	85.193 %	0.766 ppb
Concentration per Run 2	1.377 ppb	0.089 ppb	208.587 ppb	3.182 ppb	90.460 %	0.001 ppb	0.003 ppb	85.473 %	0.795 ppb
Concentration per Run 3	1.442 ppb	0.348 ppb	206.972 ppb	3.491 ppb	87.187 %	0.003 ppb	0.004 ppb	85.787 %	0.856 ppb
Concentration RSD	5.1 %	61.1 %	2.2 %	15.0 %	2.0 %	58.2 %	55.4 %	0.3 %	5.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	346.929 ppb	91.316 %	87.914 %	0.027 ppb	0.117 ppb	83.009 %
Concentration per Run 1	351.497 ppb	89.997 %	89.267 %	0.014 ppb	0.112 ppb	86.101 %
Concentration per Run 2	347.546 ppb	93.325 %	88.036 %	0.032 ppb	0.120 ppb	81.861 %
Concentration per Run 3	341.742 ppb	90.626 %	86.440 %	0.036 ppb	0.117 ppb	81.066 %
Concentration RSD	1.4 %	1.9 %	1.6 %	41.6 %	3.5 %	3.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	54	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 5:47:06 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	68.876 %	104.783 %	59.724 ppb	6,094.366 ppb	5,911.767 ppb	59.363 ppb	6,028.559 ppb	5,671.300 ppb	83.692 %
Concentration per Run 1	71.087 %	101.389 %	60.993 ppb	6,364.985 ppb	6,129.615 ppb	63.110 ppb	6,329.025 ppb	5,903.734 ppb	84.318 %
Concentration per Run 2	68.995 %	107.641 %	59.887 ppb	6,036.722 ppb	5,904.671 ppb	59.090 ppb	5,978.162 ppb	5,749.146 ppb	83.779 %
Concentration per Run 3	66.545 %	105.319 %	58.291 ppb	5,881.392 ppb	5,701.014 ppb	55.891 ppb	5,778.490 ppb	5,361.022 ppb	82.979 %
Recovery Percentage 1			99.539 %	101.573 %	98.529 %	98.939 %	100.476 %	94.522 %	
Concentration RSD	3.3 %	3.0 %	2.3 %	4.1 %	3.6 %	6.1 %	4.6 %	4.9 %	0.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.547 ppb	54.705 ppb	57.265 ppb	6,366.580 ppb	68.184 ppb	62.870 ppb	62.095 ppb	61.458 ppb	94.270 %
Concentration per Run 1	56.573 ppb	55.915 ppb	59.212 ppb	6,561.509 ppb	67.980 ppb	63.857 ppb	62.894 ppb	62.288 ppb	92.464 %
Concentration per Run 2	53.640 ppb	52.971 ppb	55.744 ppb	6,055.601 ppb	70.346 ppb	60.403 ppb	59.584 ppb	60.251 ppb	99.981 %
Concentration per Run 3	56.429 ppb	55.228 ppb	56.838 ppb	6,482.631 ppb	66.225 ppb	64.348 ppb	63.808 ppb	61.837 ppb	90.365 %
Recovery Percentage 1	92.578 %	91.174 %	95.441 %	106.110 %	113.639 %	104.783 %	103.492 %	102.431 %	
Concentration RSD	3.0 %	2.8 %	3.1 %	4.3 %	3.0 %	3.4 %	3.6 %	1.7 %	5.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.654 ppb	58.081 ppb	54.874 ppb	55.160 ppb	92.675 %	59.848 ppb	59.837 ppb	86.227 %	56.863 ppb
Concentration per Run 1	61.550 ppb	59.462 ppb	55.558 ppb	56.079 ppb	92.819 %	60.753 ppb	60.431 ppb	85.677 %	58.098 ppb
Concentration per Run 2	57.294 ppb	58.078 ppb	54.348 ppb	55.277 ppb	92.806 %	58.629 ppb	59.602 ppb	89.096 %	56.334 ppb
Concentration per Run 3	60.119 ppb	56.703 ppb	54.716 ppb	54.123 ppb	92.402 %	60.163 ppb	59.479 ppb	83.908 %	56.157 ppb
Recovery Percentage 1	99.424 %	96.802 %	91.457 %	91.933 %		99.747 %	99.729 %		94.772 %
Concentration RSD	3.6 %	2.4 %	1.1 %	1.8 %	0.3 %	1.8 %	0.9 %	3.1 %	1.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.262 ppb	93.097 %	88.973 %	58.317 ppb	58.596 ppb	89.839 %
Concentration per Run 1	57.072 ppb	91.371 %	86.501 %	56.366 ppb	56.330 ppb	91.642 %
Concentration per Run 2	57.202 ppb	95.461 %	92.158 %	59.294 ppb	59.000 ppb	90.049 %
Concentration per Run 3	57.514 ppb	92.460 %	88.259 %	59.290 ppb	60.459 ppb	87.826 %
Recovery Percentage 1	95.437 %			97.195 %	97.660 %	
Concentration RSD	0.4 %	2.3 %	3.3 %	2.9 %	3.6 %	2.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	55	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 5:51:49 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	70.845 %	107.819 %	0.003 ppb	0.116 ppb	-0.979 ppb	-0.483 ppb	4.754 ppb	0.303 ppb	74.013 %
Concentration per Run 1	72.615 %	108.117 %	0.005 ppb	2.837 ppb	-0.907 ppb	-0.405 ppb	6.785 ppb	0.686 ppb	75.423 %
Concentration per Run 2	70.956 %	104.902 %	0.003 ppb	0.371 ppb	-0.981 ppb	-0.428 ppb	3.325 ppb	1.250 ppb	74.299 %
Concentration per Run 3	68.964 %	110.439 %	0.001 ppb	-2.860 ppb	-1.048 ppb	-0.615 ppb	4.151 ppb	-1.027 ppb	72.318 %
Recovery Percentage 1			0.659 %	0.116 %	-1.398 %	-4.829 %	4.754 %	0.303 %	
Concentration RSD	2.6 %	2.6 %	57.5 %	2,466.4 %	7.2 %	23.9 %	38.0 %	391.6 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.015 ppb	-0.004 ppb	0.050 ppb	12.670 ppb	0.000 ppb	0.114 ppb	0.015 ppb	0.194 ppb	96.183 %
Concentration per Run 1	0.017 ppb	-0.005 ppb	0.054 ppb	10.791 ppb	-0.001 ppb	0.130 ppb	0.017 ppb	0.167 ppb	98.249 %
Concentration per Run 2	0.007 ppb	-0.005 ppb	0.066 ppb	12.522 ppb	0.002 ppb	0.108 ppb	0.015 ppb	0.215 ppb	93.202 %
Concentration per Run 3	0.021 ppb	-0.001 ppb	0.030 ppb	14.696 ppb	-0.001 ppb	0.105 ppb	0.013 ppb	0.201 ppb	97.098 %
Recovery Percentage 1	0.296 %	-0.390 %	5.021 %	25.340 %	-0.007 %	5.717 %	1.531 %	3.884 %	
Concentration RSD	45.3 %	57.1 %	36.8 %	15.4 %	4,700.1 %	12.1 %	13.8 %	12.7 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.085 ppb	0.624 ppb	0.007 ppb	1.537 ppb	96.188 %	0.005 ppb	0.000 ppb	89.507 %	0.256 ppb
Concentration per Run 1	0.106 ppb	0.300 ppb	0.010 ppb	1.083 ppb	96.185 %	0.006 ppb	0.000 ppb	87.852 %	0.220 ppb
Concentration per Run 2	0.081 ppb	0.709 ppb	0.011 ppb	1.687 ppb	94.356 %	0.005 ppb	0.001 ppb	86.728 %	0.257 ppb
Concentration per Run 3	0.068 ppb	0.864 ppb	0.001 ppb	1.842 ppb	98.022 %	0.004 ppb	0.000 ppb	93.941 %	0.289 ppb
Recovery Percentage 1	16.963 %	12.485 %	0.073 %	76.875 %		1.238 %	0.121 %		6.389 %
Concentration RSD	23.1 %	46.7 %	70.0 %	26.1 %	1.9 %	18.3 %	265.3 %	4.3 %	13.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.012 ppb	93.377 %	87.822 %	0.096 ppb	0.013 ppb	92.922 %
Concentration per Run 1	0.016 ppb	90.464 %	88.977 %	0.073 ppb	0.012 ppb	94.359 %
Concentration per Run 2	0.006 ppb	94.224 %	86.448 %	0.111 ppb	0.014 ppb	90.983 %
Concentration per Run 3	0.015 ppb	95.444 %	88.039 %	0.105 ppb	0.012 ppb	93.423 %
Recovery Percentage 1	2.436 %			9.647 %	1.270 %	
Concentration RSD	43.8 %	2.8 %	1.5 %	21.1 %	9.3 %	1.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	56	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 5:57:50 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.214 %	107.819 %	60.871 ppb	5,756.635 ppb	5,712.707 ppb	58.026 ppb	6,026.091 ppb	5,789.791 ppb	92.661 %
Concentration per Run 1	80.926 %	109.486 %	60.818 ppb	5,628.403 ppb	5,734.206 ppb	56.216 ppb	6,130.960 ppb	6,030.414 ppb	88.113 %
Concentration per Run 2	77.974 %	110.320 %	59.875 ppb	5,838.473 ppb	5,746.101 ppb	59.512 ppb	6,024.791 ppb	5,656.444 ppb	95.263 %
Concentration per Run 3	75.743 %	103.652 %	61.921 ppb	5,803.031 ppb	5,657.815 ppb	58.351 ppb	5,922.520 ppb	5,682.516 ppb	94.606 %
Recovery Percentage 1			101.452 %	95.944 %	95.212 %	96.710 %	100.435 %	96.497 %	
Concentration RSD	3.3 %	3.4 %	1.7 %	2.0 %	0.8 %	2.9 %	1.7 %	3.6 %	4.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.696 ppb	54.410 ppb	56.156 ppb	6,007.495 ppb	62.584 ppb	58.480 ppb	57.170 ppb	58.909 ppb	103.546 %
Concentration per Run 1	56.058 ppb	54.898 ppb	56.311 ppb	6,040.141 ppb	64.050 ppb	58.860 ppb	58.243 ppb	57.887 ppb	102.776 %
Concentration per Run 2	55.390 ppb	53.703 ppb	55.449 ppb	6,038.257 ppb	61.633 ppb	57.935 ppb	57.098 ppb	59.264 ppb	102.719 %
Concentration per Run 3	55.639 ppb	54.629 ppb	56.707 ppb	5,944.088 ppb	62.069 ppb	58.644 ppb	56.168 ppb	59.578 ppb	105.144 %
Recovery Percentage 1	92.826 %	90.683 %	93.593 %	100.125 %	104.307 %	97.466 %	95.283 %	98.182 %	
Concentration RSD	0.6 %	1.2 %	1.1 %	0.9 %	2.1 %	0.8 %	1.8 %	1.5 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	57.643 ppb	57.772 ppb	56.227 ppb	54.048 ppb	97.761 %	58.468 ppb	59.196 ppb	95.265 %	56.916 ppb
Concentration per Run 1	57.841 ppb	57.264 ppb	56.147 ppb	54.142 ppb	98.101 %	57.902 ppb	58.284 ppb	95.688 %	56.910 ppb
Concentration per Run 2	58.207 ppb	58.404 ppb	56.391 ppb	53.683 ppb	97.962 %	58.350 ppb	59.124 ppb	93.795 %	57.041 ppb
Concentration per Run 3	56.883 ppb	57.650 ppb	56.142 ppb	54.321 ppb	97.222 %	59.153 ppb	60.181 ppb	96.311 %	56.797 ppb
Recovery Percentage 1	96.072 %	96.287 %	93.712 %	90.081 %		97.447 %	98.660 %		94.860 %
Concentration RSD	1.2 %	1.0 %	0.3 %	0.6 %	0.5 %	1.1 %	1.6 %	1.4 %	0.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.390 ppb	99.813 %	98.429 %	54.128 ppb	54.062 ppb	106.661 %
Concentration per Run 1	58.839 ppb	97.917 %	98.906 %	52.309 ppb	51.840 ppb	111.274 %
Concentration per Run 2	56.850 ppb	101.062 %	97.158 %	53.866 ppb	54.089 ppb	105.391 %
Concentration per Run 3	56.481 ppb	100.461 %	99.223 %	56.210 ppb	56.257 ppb	103.317 %
Recovery Percentage 1	95.650 %			90.214 %	90.103 %	
Concentration RSD	2.2 %	1.7 %	1.1 %	3.6 %	4.1 %	3.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	57	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 6:02:32 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.989 %	107.780 %	0.005 ppb	-2.677 ppb	-0.926 ppb	-0.467 ppb	0.243 ppb	0.802 ppb	83.065 %
Concentration per Run 1	81.386 %	105.736 %	0.008 ppb	-0.862 ppb	-1.038 ppb	-0.414 ppb	0.822 ppb	-0.089 ppb	81.494 %
Concentration per Run 2	79.212 %	110.618 %	0.006 ppb	-4.846 ppb	-0.925 ppb	-0.535 ppb	0.118 ppb	1.079 ppb	85.683 %
Concentration per Run 3	76.369 %	106.986 %	0.002 ppb	-2.323 ppb	-0.816 ppb	-0.452 ppb	-0.211 ppb	1.415 ppb	82.019 %
Recovery Percentage 1			1.094 %	-2.677 %	-1.323 %	-4.671 %	0.243 %	0.802 %	
Concentration RSD	3.2 %	2.4 %	61.2 %	75.3 %	12.0 %	13.3 %	217.0 %	98.5 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.009 ppb	0.000 ppb	0.019 ppb	13.396 ppb	0.002 ppb	2.295 ppb	0.032 ppb	0.197 ppb	101.697 %
Concentration per Run 1	0.016 ppb	-0.003 ppb	0.002 ppb	13.301 ppb	0.002 ppb	1.387 ppb	0.022 ppb	0.225 ppb	100.285 %
Concentration per Run 2	0.006 ppb	0.007 ppb	0.026 ppb	12.804 ppb	0.002 ppb	1.685 ppb	0.035 ppb	0.164 ppb	104.421 %
Concentration per Run 3	0.006 ppb	-0.004 ppb	0.029 ppb	14.082 ppb	0.001 ppb	3.812 ppb	0.039 ppb	0.202 ppb	100.385 %
Recovery Percentage 1	0.188 %	-0.030 %	1.890 %	26.792 %	0.337 %	114.735 %	3.184 %	3.938 %	
Concentration RSD	64.0 %	2,055.9 %	78.0 %	4.8 %	28.9 %	57.6 %	26.4 %	15.5 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.073 ppb	0.610 ppb	0.003 ppb	1.506 ppb	99.109 %	0.005 ppb	0.001 ppb	97.606 %	0.279 ppb
Concentration per Run 1	0.040 ppb	0.631 ppb	0.001 ppb	1.088 ppb	96.934 %	0.004 ppb	0.001 ppb	99.140 %	0.228 ppb
Concentration per Run 2	0.065 ppb	0.644 ppb	0.006 ppb	1.550 ppb	101.139 %	0.005 ppb	0.001 ppb	96.107 %	0.292 ppb
Concentration per Run 3	0.114 ppb	0.556 ppb	0.002 ppb	1.879 ppb	99.255 %	0.005 ppb	0.001 ppb	97.572 %	0.316 ppb
Recovery Percentage 1	14.566 %	12.209 %	0.030 %	75.279 %		1.222 %	0.486 %		6.964 %
Concentration RSD	51.6 %	7.7 %	92.3 %	26.4 %	2.1 %	8.2 %	34.1 %	1.6 %	16.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.015 ppb	96.881 %	96.624 %	0.099 ppb	0.013 ppb	101.050 %
Concentration per Run 1	0.022 ppb	101.034 %	98.357 %	0.081 ppb	0.013 ppb	102.086 %
Concentration per Run 2	0.009 ppb	91.781 %	97.152 %	0.115 ppb	0.014 ppb	100.121 %
Concentration per Run 3	0.014 ppb	97.826 %	94.364 %	0.103 ppb	0.012 ppb	100.943 %
Recovery Percentage 1	2.973 %			9.947 %	1.286 %	
Concentration RSD	45.3 %	4.8 %	2.1 %	17.0 %	8.5 %	1.0 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	58	User name	ALPHALAB\Metals-Instrument	Comment	fb
Analysis label:	I2350359-11 6020SL	Rack	2		
Analysis started at:	9/14/2023 6:10:02 PM	Vial	23		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.777 %	108.812 %	0.003 ppb	4.133 ppb	0.757 ppb	1.349 ppb	2.879 ppb	16.247 ppb	101.465 %
Concentration per Run 1	95.161 %	109.248 %	0.004 ppb	2.926 ppb	0.615 ppb	1.270 ppb	3.025 ppb	15.361 ppb	103.852 %
Concentration per Run 2	91.475 %	112.225 %	0.003 ppb	4.680 ppb	1.023 ppb	1.661 ppb	2.830 ppb	16.521 ppb	102.240 %
Concentration per Run 3	88.694 %	104.962 %	0.001 ppb	4.793 ppb	0.632 ppb	1.117 ppb	2.782 ppb	16.859 ppb	98.304 %
Concentration RSD	3.5 %	3.4 %	44.8 %	25.3 %	30.5 %	20.8 %	4.5 %	4.8 %	2.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.004 ppb	0.149 ppb	0.061 ppb	9.460 ppb	0.003 ppb	2.264 ppb	0.165 ppb	-0.643 ppb	109.275 %
Concentration per Run 1	0.002 ppb	0.152 ppb	0.045 ppb	8.758 ppb	0.004 ppb	1.259 ppb	0.168 ppb	-0.647 ppb	105.479 %
Concentration per Run 2	0.008 ppb	0.135 ppb	0.091 ppb	10.178 ppb	0.004 ppb	1.618 ppb	0.154 ppb	-0.635 ppb	116.827 %
Concentration per Run 3	0.002 ppb	0.160 ppb	0.046 ppb	9.443 ppb	0.002 ppb	3.916 ppb	0.173 ppb	-0.648 ppb	105.519 %
Concentration RSD	89.2 %	8.8 %	43.4 %	7.5 %	25.1 %	63.7 %	6.0 %	1.2 %	6.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.081 ppb	0.182 ppb	0.015 ppb	0.768 ppb	106.254 %	0.005 ppb	0.001 ppb	105.376 %	0.343 ppb
Concentration per Run 1	-0.092 ppb	0.069 ppb	0.015 ppb	0.552 ppb	104.551 %	0.002 ppb	0.000 ppb	99.331 %	0.294 ppb
Concentration per Run 2	-0.099 ppb	0.190 ppb	0.015 ppb	0.796 ppb	107.011 %	0.006 ppb	0.001 ppb	111.037 %	0.364 ppb
Concentration per Run 3	-0.053 ppb	0.286 ppb	0.016 ppb	0.956 ppb	107.200 %	0.008 ppb	0.001 ppb	105.761 %	0.372 ppb
Concentration RSD	30.7 %	59.8 %	5.4 %	26.5 %	1.4 %	54.5 %	68.6 %	5.6 %	12.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.100 ppb	107.569 %	107.401 %	0.031 ppb	0.011 ppb	124.447 %
Concentration per Run 1	0.119 ppb	111.062 %	106.043 %	0.020 ppb	0.010 ppb	138.969 %
Concentration per Run 2	0.077 ppb	102.559 %	112.027 %	0.035 ppb	0.012 ppb	122.283 %
Concentration per Run 3	0.105 ppb	109.087 %	104.132 %	0.037 ppb	0.012 ppb	112.090 %
Concentration RSD	21.5 %	4.1 %	3.8 %	30.3 %	13.8 %	10.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	59	User name	ALPHALAB\Metals-Instrument	Comment	fb
Analysis label:	I2350359-12 6020SL	Rack	2		
Analysis started at:	9/14/2023 6:14:40 PM	Vial	24		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.087 %	109.169 %	0.001 ppb	272.196 ppb	36.138 ppb	2.921 ppb	21.837 ppb	1,080.333 ppb	90.271 %
Concentration per Run 1	89.395 %	106.629 %	0.001 ppb	280.203 ppb	36.681 ppb	2.589 ppb	23.247 ppb	1,053.538 ppb	88.850 %
Concentration per Run 2	87.512 %	113.833 %	0.001 ppb	273.109 ppb	36.290 ppb	3.387 ppb	22.679 ppb	1,110.219 ppb	96.067 %
Concentration per Run 3	84.353 %	107.045 %	0.001 ppb	263.276 ppb	35.442 ppb	2.787 ppb	19.586 ppb	1,077.243 ppb	85.898 %
Concentration RSD	2.9 %	3.7 %	45.2 %	3.1 %	1.8 %	14.2 %	9.0 %	2.6 %	5.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.009 ppb	0.156 ppb	2.567 ppb	8.723 ppb	0.020 ppb	1.570 ppb	0.467 ppb	1.936 ppb	110.096 %
Concentration per Run 1	0.010 ppb	0.168 ppb	2.577 ppb	9.512 ppb	0.022 ppb	0.799 ppb	0.513 ppb	2.037 ppb	103.578 %
Concentration per Run 2	0.016 ppb	0.166 ppb	2.599 ppb	8.218 ppb	0.019 ppb	1.184 ppb	0.421 ppb	1.848 ppb	118.166 %
Concentration per Run 3	0.002 ppb	0.133 ppb	2.526 ppb	8.438 ppb	0.019 ppb	2.726 ppb	0.466 ppb	1.925 ppb	108.546 %
Concentration RSD	79.8 %	12.5 %	1.5 %	7.9 %	9.0 %	65.0 %	9.9 %	4.9 %	6.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.087 ppb	0.055 ppb	1.366 ppb	0.269 ppb	105.250 %	0.004 ppb	0.003 ppb	104.691 %	0.197 ppb
Concentration per Run 1	-0.088 ppb	0.037 ppb	1.360 ppb	0.109 ppb	102.789 %	0.004 ppb	0.005 ppb	100.950 %	0.166 ppb
Concentration per Run 2	-0.080 ppb	0.034 ppb	1.406 ppb	0.245 ppb	107.390 %	0.004 ppb	0.002 ppb	109.132 %	0.210 ppb
Concentration per Run 3	-0.093 ppb	0.095 ppb	1.333 ppb	0.453 ppb	105.573 %	0.005 ppb	0.001 ppb	103.990 %	0.214 ppb
Concentration RSD	7.3 %	62.0 %	2.7 %	64.3 %	2.2 %	19.8 %	64.6 %	4.0 %	13.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1.896 ppb	107.188 %	105.981 %	0.014 ppb	0.021 ppb	111.132 %
Concentration per Run 1	1.859 ppb	105.180 %	100.118 %	0.007 ppb	0.021 ppb	117.238 %
Concentration per Run 2	2.036 ppb	108.892 %	112.883 %	0.017 ppb	0.019 ppb	111.788 %
Concentration per Run 3	1.793 ppb	107.491 %	104.941 %	0.018 ppb	0.023 ppb	104.370 %
Concentration RSD	6.6 %	1.7 %	6.1 %	44.0 %	9.3 %	5.8 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	60	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350766-01 6020TL	Rack	2		
Analysis started at:	9/14/2023 6:19:20 PM	Vial	17		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.985 %	104.565 %	0.011 ppb	9,809.800 ppb	32,857.950 ppb	5.026 ppb	4,036.024 ppb	186,784.459 ppb	94.738 %
Concentration per Run 1	82.343 %	104.307 %	0.009 ppb	9,420.737 ppb	32,258.688 ppb	4.836 ppb	3,863.264 ppb	196,576.203 ppb	96.498 %
Concentration per Run 2	78.813 %	105.438 %	0.010 ppb	10,240.958 ppb	34,273.388 ppb	5.436 ppb	4,249.301 ppb	182,797.116 ppb	94.494 %
Concentration per Run 3	75.798 %	103.949 %	0.012 ppb	9,767.706 ppb	32,041.775 ppb	4.807 ppb	3,995.509 ppb	180,980.058 ppb	93.221 %
Concentration RSD	4.1 %	0.7 %	14.7 %	4.2 %	3.7 %	7.1 %	4.9 %	4.6 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.772 ppb	0.329 ppb	2,086.843 ppb	2,915.198 ppb	2.927 ppb	2.763 ppb	0.332 ppb	0.093 ppb	104.633 %
Concentration per Run 1	4.637 ppb	0.330 ppb	2,063.856 ppb	2,919.125 ppb	2.920 ppb	2.369 ppb	0.337 ppb	0.110 ppb	103.475 %
Concentration per Run 2	4.749 ppb	0.320 ppb	2,141.653 ppb	2,842.752 ppb	2.906 ppb	2.440 ppb	0.314 ppb	0.062 ppb	110.846 %
Concentration per Run 3	4.930 ppb	0.338 ppb	2,055.019 ppb	2,983.716 ppb	2.954 ppb	3.479 ppb	0.346 ppb	0.106 ppb	99.578 %
Concentration RSD	3.1 %	2.8 %	2.3 %	2.4 %	0.8 %	22.5 %	5.0 %	28.4 %	5.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.441 ppb	0.205 ppb	1,303.040 ppb	3.142 ppb	94.367 %	0.012 ppb	0.004 ppb	99.283 %	0.194 ppb
Concentration per Run 1	3.488 ppb	0.188 ppb	1,269.505 ppb	3.096 ppb	92.704 %	0.009 ppb	0.005 ppb	94.454 %	0.170 ppb
Concentration per Run 2	3.290 ppb	0.209 ppb	1,338.507 ppb	3.123 ppb	96.002 %	0.007 ppb	0.004 ppb	104.673 %	0.209 ppb
Concentration per Run 3	3.544 ppb	0.219 ppb	1,301.108 ppb	3.206 ppb	94.394 %	0.019 ppb	0.003 ppb	98.724 %	0.203 ppb
Concentration RSD	3.9 %	7.6 %	2.7 %	1.8 %	1.7 %	56.8 %	32.7 %	5.2 %	11.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	132.274 ppb	105.348 %	103.288 %	0.014 ppb	0.043 ppb	97.666 %
Concentration per Run 1	136.730 ppb	102.355 %	100.401 %	0.007 ppb	0.040 ppb	102.172 %
Concentration per Run 2	132.053 ppb	110.642 %	108.739 %	0.016 ppb	0.044 ppb	99.434 %
Concentration per Run 3	128.041 ppb	103.048 %	100.725 %	0.018 ppb	0.045 ppb	91.391 %
Concentration RSD	3.3 %	4.4 %	4.6 %	44.8 %	6.7 %	5.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	61	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	zL2350766-02 6020TL	Rack	2		
Analysis started at:	9/14/2023 6:23:59 PM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	58.408 %	118.834 %	0.014 ppb	21,470.537 ppb	50,060.714 ppb	8.322 ppb	11,097.640 ppb	643,169.194 ppb	68.005 %
Concentration per Run 1	61.047 %	121.037 %	0.014 ppb	20,797.773 ppb	48,239.988 ppb	7.650 ppb	11,839.513 ppb	627,118.422 ppb	69.663 %
Concentration per Run 2	58.370 %	121.394 %	0.017 ppb	21,557.564 ppb	52,072.779 ppb	8.631 ppb	10,803.246 ppb	665,521.878 ppb	67.302 %
Concentration per Run 3	55.808 %	114.071 %	0.012 ppb	22,056.273 ppb	49,869.374 ppb	8.684 ppb	10,650.161 ppb	636,867.282 ppb	67.050 %
Concentration RSD	4.5 %	3.5 %	17.5 %	3.0 %	3.8 %	7.0 %	5.8 %	3.1 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.205 ppb	0.857 ppb	11,055.684 ppb	102,979.031 ppb	28.628 ppb	14.457 ppb	0.188 ppb	6.943 ppb	98.217 %
Concentration per Run 1	0.187 ppb	0.830 ppb	10,941.908 ppb	102,022.402 ppb	28.178 ppb	12.431 ppb	0.187 ppb	6.856 ppb	96.267 %
Concentration per Run 2	0.179 ppb	0.842 ppb	10,982.175 ppb	100,922.003 ppb	28.019 ppb	12.514 ppb	0.173 ppb	6.829 ppb	104.008 %
Concentration per Run 3	0.248 ppb	0.900 ppb	11,242.970 ppb	105,992.688 ppb	29.688 ppb	18.426 ppb	0.203 ppb	7.144 ppb	94.376 %
Concentration RSD	18.5 %	4.4 %	1.5 %	2.6 %	3.2 %	23.8 %	8.0 %	2.5 %	5.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	5.448 ppb	0.467 ppb	5,490.851 ppb	3.069 ppb	85.200 %	0.015 ppb	0.003 ppb	94.153 %	0.114 ppb
Concentration per Run 1	5.427 ppb	0.558 ppb	5,501.483 ppb	3.003 ppb	84.928 %	0.013 ppb	0.003 ppb	90.839 %	0.101 ppb
Concentration per Run 2	5.407 ppb	0.461 ppb	5,623.158 ppb	3.110 ppb	88.006 %	0.012 ppb	0.004 ppb	99.147 %	0.122 ppb
Concentration per Run 3	5.511 ppb	0.383 ppb	5,347.913 ppb	3.094 ppb	82.665 %	0.022 ppb	0.003 ppb	92.474 %	0.121 ppb
Concentration RSD	1.0 %	18.8 %	2.5 %	1.9 %	3.1 %	35.8 %	14.9 %	4.7 %	10.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	141.723 ppb	89.560 %	88.086 %	0.011 ppb	0.025 ppb	81.273 %
Concentration per Run 1	147.038 ppb	91.245 %	86.589 %	0.003 ppb	0.023 ppb	87.168 %
Concentration per Run 2	139.928 ppb	92.483 %	93.957 %	0.014 ppb	0.024 ppb	81.173 %
Concentration per Run 3	138.202 ppb	84.953 %	83.713 %	0.016 ppb	0.027 ppb	75.477 %
Concentration RSD	3.3 %	4.5 %	6.0 %	64.3 %	7.9 %	7.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	62	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350359-07 6020SL	Rack	2		
Analysis started at:	9/14/2023 6:28:38 PM	Vial	19		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	63.437 %	116.671 %	0.006 ppb	31,754.044 ppb	11,394.984 ppb	4.686 ppb	2,711.212 ppb	53,561.946 ppb	73.907 %
Concentration per Run 1	65.837 %	116.393 %	0.004 ppb	31,882.650 ppb	11,502.929 ppb	4.588 ppb	2,808.546 ppb	55,539.978 ppb	76.685 %
Concentration per Run 2	63.179 %	120.442 %	0.005 ppb	32,192.181 ppb	11,352.300 ppb	4.969 ppb	2,780.461 ppb	53,772.729 ppb	72.102 %
Concentration per Run 3	61.294 %	113.178 %	0.008 ppb	31,187.300 ppb	11,329.722 ppb	4.499 ppb	2,544.628 ppb	51,373.131 ppb	72.935 %
Concentration RSD	3.6 %	3.1 %	43.6 %	1.6 %	0.8 %	5.3 %	5.3 %	3.9 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.225 ppb	0.186 ppb	14.763 ppb	80.452 ppb	0.047 ppb	1.085 ppb	1.204 ppb	1.461 ppb	99.773 %
Concentration per Run 1	0.239 ppb	0.192 ppb	15.032 ppb	91.064 ppb	0.041 ppb	1.069 ppb	1.265 ppb	1.573 ppb	90.097 %
Concentration per Run 2	0.213 ppb	0.167 ppb	14.638 ppb	77.320 ppb	0.044 ppb	0.911 ppb	1.192 ppb	1.398 ppb	108.275 %
Concentration per Run 3	0.223 ppb	0.201 ppb	14.619 ppb	72.972 ppb	0.055 ppb	1.275 ppb	1.154 ppb	1.411 ppb	100.946 %
Concentration RSD	6.0 %	9.6 %	1.6 %	11.7 %	15.1 %	16.8 %	4.7 %	6.7 %	9.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.528 ppb	0.081 ppb	211.164 ppb	0.702 ppb	91.490 %	0.001 ppb	0.009 ppb	90.580 %	0.123 ppb
Concentration per Run 1	0.641 ppb	0.085 ppb	211.922 ppb	0.602 ppb	87.878 %	0.001 ppb	0.008 ppb	84.513 %	0.112 ppb
Concentration per Run 2	0.486 ppb	0.073 ppb	214.573 ppb	0.661 ppb	93.394 %	0.001 ppb	0.009 ppb	95.726 %	0.115 ppb
Concentration per Run 3	0.457 ppb	0.084 ppb	206.999 ppb	0.844 ppb	93.198 %	0.001 ppb	0.009 ppb	91.500 %	0.141 ppb
Concentration RSD	18.8 %	8.3 %	1.8 %	18.0 %	3.4 %	42.2 %	10.0 %	6.3 %	13.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	32.195 ppb	90.993 %	89.161 %	0.009 ppb	0.038 ppb	87.350 %
Concentration per Run 1	32.254 ppb	89.583 %	84.543 %	0.005 ppb	0.037 ppb	87.408 %
Concentration per Run 2	31.999 ppb	95.220 %	93.526 %	0.011 ppb	0.038 ppb	86.510 %
Concentration per Run 3	32.333 ppb	88.175 %	89.412 %	0.012 ppb	0.040 ppb	88.130 %
Concentration RSD	0.5 %	4.1 %	5.0 %	42.2 %	5.1 %	0.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	63	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350359-08 6020SL	Rack	2		
Analysis started at:	9/14/2023 6:33:17 PM	Vial	20		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	73.338 %	113.595 %	0.004 ppb	31,859.087 ppb	11,318.357 ppb	5.302 ppb	2,721.885 ppb	56,259.498 ppb	84.285 %
Concentration per Run 1	75.580 %	114.309 %	0.001 ppb	31,789.021 ppb	11,286.247 ppb	6.085 ppb	2,876.173 ppb	59,571.410 ppb	86.393 %
Concentration per Run 2	72.655 %	113.773 %	0.003 ppb	32,594.552 ppb	11,461.008 ppb	5.425 ppb	2,673.066 ppb	55,027.267 ppb	83.172 %
Concentration per Run 3	71.780 %	112.702 %	0.008 ppb	31,193.688 ppb	11,207.816 ppb	4.395 ppb	2,616.415 ppb	54,179.817 ppb	83.289 %
Concentration RSD	2.7 %	0.7 %	85.9 %	2.2 %	1.1 %	16.1 %	5.0 %	5.2 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.266 ppb	0.240 ppb	34.561 ppb	35.517 ppb	0.055 ppb	0.572 ppb	1.081 ppb	0.176 ppb	107.061 %
Concentration per Run 1	0.253 ppb	0.244 ppb	34.215 ppb	38.857 ppb	0.052 ppb	0.417 ppb	1.054 ppb	0.149 ppb	108.719 %
Concentration per Run 2	0.272 ppb	0.241 ppb	34.802 ppb	35.025 ppb	0.059 ppb	0.531 ppb	1.031 ppb	0.229 ppb	106.665 %
Concentration per Run 3	0.272 ppb	0.234 ppb	34.666 ppb	32.670 ppb	0.053 ppb	0.769 ppb	1.159 ppb	0.149 ppb	105.798 %
Concentration RSD	4.1 %	2.3 %	0.9 %	8.8 %	6.4 %	31.4 %	6.3 %	26.2 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.444 ppb	0.071 ppb	218.494 ppb	0.631 ppb	97.724 %	0.002 ppb	0.010 ppb	98.930 %	0.105 ppb
Concentration per Run 1	0.424 ppb	0.014 ppb	219.258 ppb	0.568 ppb	97.244 %	0.001 ppb	0.008 ppb	99.146 %	0.090 ppb
Concentration per Run 2	0.470 ppb	0.136 ppb	218.207 ppb	0.671 ppb	98.211 %	0.001 ppb	0.015 ppb	99.611 %	0.109 ppb
Concentration per Run 3	0.439 ppb	0.061 ppb	218.018 ppb	0.655 ppb	97.716 %	0.002 ppb	0.008 ppb	98.034 %	0.117 ppb
Concentration RSD	5.3 %	87.3 %	0.3 %	8.7 %	0.5 %	45.7 %	39.5 %	0.8 %	12.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	31.800 ppb	103.959 %	101.611 %	0.009 ppb	0.039 ppb	96.680 %
Concentration per Run 1	32.122 ppb	103.773 %	99.352 %	0.004 ppb	0.039 ppb	98.480 %
Concentration per Run 2	31.408 ppb	104.781 %	102.789 %	0.010 ppb	0.039 ppb	96.395 %
Concentration per Run 3	31.871 ppb	103.322 %	102.691 %	0.011 ppb	0.040 ppb	95.167 %
Concentration RSD	1.1 %	0.7 %	1.9 %	45.0 %	1.9 %	1.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	64	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350359-09 6020SL	Rack	2		
Analysis started at:	9/14/2023 6:37:55 PM	Vial	21		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.045 %	115.103 %	0.003 ppb	31,894.530 ppb	11,343.923 ppb	5.047 ppb	2,662.959 ppb	56,169.180 ppb	89.623 %
Concentration per Run 1	80.181 %	116.988 %	0.003 ppb	32,762.185 ppb	11,723.040 ppb	5.395 ppb	2,762.342 ppb	58,268.735 ppb	91.826 %
Concentration per Run 2	76.882 %	112.404 %	0.003 ppb	32,347.175 ppb	11,176.882 ppb	4.447 ppb	2,689.909 ppb	56,140.118 ppb	89.727 %
Concentration per Run 3	74.072 %	115.917 %	0.002 ppb	30,574.231 ppb	11,131.845 ppb	5.300 ppb	2,536.627 ppb	54,098.687 ppb	87.315 %
Concentration RSD	4.0 %	2.1 %	2.7 %	3.6 %	2.9 %	10.3 %	4.3 %	3.7 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.273 ppb	0.202 ppb	13.037 ppb	18.501 ppb	0.044 ppb	0.478 ppb	0.710 ppb	0.074 ppb	109.289 %
Concentration per Run 1	0.256 ppb	0.220 ppb	13.259 ppb	17.686 ppb	0.041 ppb	0.417 ppb	0.733 ppb	0.091 ppb	110.163 %
Concentration per Run 2	0.262 ppb	0.207 ppb	13.020 ppb	18.713 ppb	0.051 ppb	0.411 ppb	0.703 ppb	0.092 ppb	107.939 %
Concentration per Run 3	0.301 ppb	0.177 ppb	12.832 ppb	19.103 ppb	0.041 ppb	0.606 ppb	0.693 ppb	0.038 ppb	109.766 %
Concentration RSD	9.0 %	10.8 %	1.6 %	4.0 %	12.7 %	23.1 %	2.9 %	41.6 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.460 ppb	0.073 ppb	221.911 ppb	0.654 ppb	101.021 %	0.001 ppb	0.011 ppb	102.951 %	0.122 ppb
Concentration per Run 1	0.521 ppb	0.051 ppb	234.634 ppb	0.644 ppb	101.519 %	0.001 ppb	0.007 ppb	106.753 %	0.100 ppb
Concentration per Run 2	0.512 ppb	0.069 ppb	214.091 ppb	0.645 ppb	100.655 %	0.001 ppb	0.010 ppb	101.735 %	0.123 ppb
Concentration per Run 3	0.348 ppb	0.098 ppb	217.009 ppb	0.674 ppb	100.889 %	0.002 ppb	0.017 ppb	100.364 %	0.142 ppb
Concentration RSD	21.2 %	32.1 %	5.0 %	2.7 %	0.4 %	60.4 %	43.5 %	3.3 %	17.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	30.114 ppb	108.521 %	106.453 %	0.007 ppb	0.016 ppb	101.484 %
Concentration per Run 1	29.991 ppb	110.662 %	107.232 %	0.001 ppb	0.016 ppb	107.453 %
Concentration per Run 2	29.283 ppb	106.815 %	104.751 %	0.011 ppb	0.017 ppb	98.853 %
Concentration per Run 3	31.067 ppb	108.086 %	107.376 %	0.010 ppb	0.016 ppb	98.146 %
Concentration RSD	3.0 %	1.8 %	1.4 %	79.8 %	2.8 %	5.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	65	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350359-10 6020SL	Rack	2		
Analysis started at:	9/14/2023 6:42:34 PM	Vial	22		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.149 %	115.361 %	0.004 ppb	30,053.981 ppb	11,083.153 ppb	6.796 ppb	2,622.564 ppb	53,271.801 ppb	91.810 %
Concentration per Run 1	81.994 %	117.346 %	0.004 ppb	29,960.880 ppb	10,677.821 ppb	6.781 ppb	2,586.517 ppb	53,220.966 ppb	95.029 %
Concentration per Run 2	78.968 %	114.607 %	0.002 ppb	31,020.737 ppb	11,933.283 ppb	7.137 ppb	2,692.534 ppb	54,101.508 ppb	90.453 %
Concentration per Run 3	76.485 %	114.131 %	0.006 ppb	29,180.326 ppb	10,638.354 ppb	6.470 ppb	2,588.641 ppb	52,492.928 ppb	89.947 %
Concentration RSD	3.5 %	1.5 %	47.9 %	3.1 %	6.6 %	4.9 %	2.3 %	1.5 %	3.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.210 ppb	0.220 ppb	11.848 ppb	14.992 ppb	0.043 ppb	0.598 ppb	0.662 ppb	34.197 ppb	110.214 %
Concentration per Run 1	0.238 ppb	0.217 ppb	11.421 ppb	14.124 ppb	0.037 ppb	0.523 ppb	0.687 ppb	34.462 ppb	106.367 %
Concentration per Run 2	0.195 ppb	0.227 ppb	12.318 ppb	15.843 ppb	0.048 ppb	0.548 ppb	0.680 ppb	33.802 ppb	115.342 %
Concentration per Run 3	0.196 ppb	0.217 ppb	11.805 ppb	15.009 ppb	0.044 ppb	0.724 ppb	0.618 ppb	34.328 ppb	108.933 %
Concentration RSD	11.6 %	2.8 %	3.8 %	5.7 %	13.0 %	18.3 %	5.7 %	1.0 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.283 ppb	0.088 ppb	230.200 ppb	0.462 ppb	102.362 %	0.001 ppb	0.015 ppb	104.429 %	0.062 ppb
Concentration per Run 1	0.321 ppb	0.125 ppb	224.196 ppb	0.379 ppb	99.126 %	0.001 ppb	0.012 ppb	100.507 %	0.051 ppb
Concentration per Run 2	0.239 ppb	0.110 ppb	240.321 ppb	0.494 ppb	105.770 %	0.000 ppb	0.013 ppb	113.188 %	0.054 ppb
Concentration per Run 3	0.289 ppb	0.030 ppb	226.084 ppb	0.513 ppb	102.190 %	0.002 ppb	0.018 ppb	99.593 %	0.082 ppb
Concentration RSD	14.7 %	58.0 %	3.8 %	15.7 %	3.2 %	85.8 %	23.1 %	7.3 %	27.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	37.578 ppb	109.149 %	108.497 %	0.006 ppb	0.020 ppb	104.604 %
Concentration per Run 1	36.247 ppb	110.227 %	104.487 %	0.001 ppb	0.020 ppb	108.283 %
Concentration per Run 2	39.545 ppb	106.663 %	114.371 %	0.008 ppb	0.020 ppb	105.576 %
Concentration per Run 3	36.942 ppb	110.557 %	106.633 %	0.009 ppb	0.020 ppb	99.953 %
Concentration RSD	4.6 %	2.0 %	4.8 %	71.0 %	2.1 %	4.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	66	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350359-13 6020SL	Rack	2		
Analysis started at:	9/14/2023 6:47:12 PM	Vial	25		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.024 %	111.412 %	0.012 ppb	69,609.110 ppb	13,827.755 ppb	2.338 ppb	2,558.064 ppb	44,604.914 ppb	91.566 %
Concentration per Run 1	85.259 %	112.880 %	0.014 ppb	67,137.786 ppb	13,151.107 ppb	2.149 ppb	2,514.772 ppb	44,601.427 ppb	86.582 %
Concentration per Run 2	81.222 %	113.237 %	0.010 ppb	71,323.568 ppb	14,188.332 ppb	2.469 ppb	2,667.264 ppb	46,511.703 ppb	95.764 %
Concentration per Run 3	79.591 %	108.117 %	0.011 ppb	70,365.978 ppb	14,143.826 ppb	2.395 ppb	2,492.156 ppb	42,701.614 ppb	92.351 %
Concentration RSD	3.6 %	2.6 %	16.0 %	3.2 %	4.2 %	7.2 %	3.7 %	4.3 %	5.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.055 ppb	0.148 ppb	373.436 ppb	15.757 ppb	0.037 ppb	1.657 ppb	1.699 ppb	251.889 ppb	111.987 %
Concentration per Run 1	0.051 ppb	0.159 ppb	365.464 ppb	15.791 ppb	0.037 ppb	1.567 ppb	1.744 ppb	253.360 ppb	107.839 %
Concentration per Run 2	0.064 ppb	0.146 ppb	379.434 ppb	16.600 ppb	0.036 ppb	1.522 ppb	1.644 ppb	248.265 ppb	119.598 %
Concentration per Run 3	0.050 ppb	0.139 ppb	375.410 ppb	14.881 ppb	0.038 ppb	1.882 ppb	1.709 ppb	254.042 ppb	108.523 %
Concentration RSD	14.1 %	6.9 %	1.9 %	5.5 %	3.0 %	11.8 %	3.0 %	1.3 %	5.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.122 ppb	0.058 ppb	270.559 ppb	0.098 ppb	102.450 %	0.003 ppb	0.127 ppb	105.373 %	0.092 ppb
Concentration per Run 1	0.157 ppb	0.012 ppb	262.583 ppb	0.037 ppb	100.762 %	0.003 ppb	0.125 ppb	101.072 %	0.042 ppb
Concentration per Run 2	0.069 ppb	0.105 ppb	278.135 ppb	0.127 ppb	105.076 %	0.002 ppb	0.136 ppb	112.603 %	0.171 ppb
Concentration per Run 3	0.139 ppb	0.056 ppb	270.958 ppb	0.129 ppb	101.511 %	0.003 ppb	0.121 ppb	102.445 %	0.063 ppb
Concentration RSD	38.1 %	80.8 %	2.9 %	54.2 %	2.3 %	25.7 %	5.9 %	6.0 %	75.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	54.931 ppb	110.012 %	111.283 %	0.005 ppb	0.013 ppb	103.333 %
Concentration per Run 1	52.722 ppb	111.598 %	104.714 %	0.001 ppb	0.013 ppb	102.867 %
Concentration per Run 2	58.399 ppb	107.962 %	119.745 %	0.008 ppb	0.014 ppb	106.318 %
Concentration per Run 3	53.671 ppb	110.475 %	109.389 %	0.006 ppb	0.013 ppb	100.815 %
Concentration RSD	5.5 %	1.7 %	6.9 %	76.4 %	3.8 %	2.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	67	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350359-14 6020SL	Rack	2		
Analysis started at:	9/14/2023 6:51:52 PM	Vial	26		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.187 %	114.468 %	0.012 ppb	33,676.495 ppb	19,090.420 ppb	4.918 ppb	3,787.798 ppb	48,157.738 ppb	88.343 %
Concentration per Run 1	84.977 %	113.595 %	0.013 ppb	33,974.773 ppb	19,420.241 ppb	4.995 ppb	3,951.756 ppb	50,381.623 ppb	89.614 %
Concentration per Run 2	82.099 %	115.024 %	0.012 ppb	34,004.358 ppb	19,247.469 ppb	4.995 ppb	3,780.011 ppb	47,557.995 ppb	87.868 %
Concentration per Run 3	79.486 %	114.785 %	0.011 ppb	33,050.353 ppb	18,603.551 ppb	4.763 ppb	3,631.627 ppb	46,533.594 ppb	87.546 %
Concentration RSD	3.3 %	0.7 %	8.7 %	1.6 %	2.3 %	2.7 %	4.2 %	4.1 %	1.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.074 ppb	0.206 ppb	298.153 ppb	11.532 ppb	0.242 ppb	5.055 ppb	0.737 ppb	4.058 ppb	111.562 %
Concentration per Run 1	0.079 ppb	0.209 ppb	311.196 ppb	12.093 ppb	0.259 ppb	5.127 ppb	0.773 ppb	4.296 ppb	108.046 %
Concentration per Run 2	0.080 ppb	0.202 ppb	283.511 ppb	10.886 ppb	0.234 ppb	4.757 ppb	0.655 ppb	3.788 ppb	118.824 %
Concentration per Run 3	0.064 ppb	0.208 ppb	299.752 ppb	11.616 ppb	0.234 ppb	5.281 ppb	0.782 ppb	4.091 ppb	107.817 %
Concentration RSD	12.0 %	2.1 %	4.7 %	5.3 %	5.9 %	5.3 %	9.7 %	6.3 %	5.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.192 ppb	0.177 ppb	217.280 ppb	0.061 ppb	102.093 %	0.001 ppb	0.133 ppb	104.741 %	0.025 ppb
Concentration per Run 1	0.234 ppb	0.226 ppb	223.702 ppb	0.009 ppb	100.575 %	0.000 ppb	0.135 ppb	104.226 %	0.019 ppb
Concentration per Run 2	0.145 ppb	0.117 ppb	212.395 ppb	0.077 ppb	104.258 %	0.000 ppb	0.141 ppb	106.360 %	0.019 ppb
Concentration per Run 3	0.198 ppb	0.188 ppb	215.741 ppb	0.096 ppb	101.447 %	0.001 ppb	0.123 ppb	103.637 %	0.036 ppb
Concentration RSD	23.3 %	31.2 %	2.7 %	75.8 %	1.9 %	90.3 %	6.8 %	1.4 %	39.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	87.539 ppb	111.572 %	109.126 %	0.011 ppb	0.019 ppb	99.856 %
Concentration per Run 1	91.468 ppb	107.126 %	109.365 %	0.008 ppb	0.019 ppb	99.987 %
Concentration per Run 2	87.297 ppb	114.062 %	107.326 %	0.013 ppb	0.020 ppb	100.840 %
Concentration per Run 3	83.853 ppb	113.527 %	110.685 %	0.012 ppb	0.019 ppb	98.742 %
Concentration RSD	4.4 %	3.5 %	1.6 %	27.2 %	3.8 %	1.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	68	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 6:56:31 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.225 %	113.753 %	58.560 ppb	5,430.445 ppb	5,505.394 ppb	56.667 ppb	5,707.062 ppb	5,550.907 ppb	100.929 %
Concentration per Run 1	87.184 %	115.024 %	58.554 ppb	5,635.755 ppb	5,705.084 ppb	60.480 ppb	6,161.752 ppb	5,866.724 ppb	96.096 %
Concentration per Run 2	84.369 %	116.036 %	58.028 ppb	5,232.011 ppb	5,296.269 ppb	54.451 ppb	5,467.487 ppb	5,361.655 ppb	104.614 %
Concentration per Run 3	81.122 %	110.201 %	59.099 ppb	5,423.569 ppb	5,514.828 ppb	55.069 ppb	5,491.946 ppb	5,424.341 ppb	102.077 %
Recovery Percentage 1			97.600 %	90.507 %	91.757 %	94.445 %	95.118 %	92.515 %	
Concentration RSD	3.6 %	2.7 %	0.9 %	3.7 %	3.7 %	5.9 %	6.9 %	5.0 %	4.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.392 ppb	55.205 ppb	56.106 ppb	5,858.899 ppb	59.593 ppb	55.854 ppb	55.418 ppb	58.799 ppb	113.042 %
Concentration per Run 1	56.646 ppb	56.092 ppb	57.294 ppb	5,991.338 ppb	60.632 ppb	56.446 ppb	56.595 ppb	59.891 ppb	113.168 %
Concentration per Run 2	55.336 ppb	54.836 ppb	55.303 ppb	5,773.272 ppb	59.336 ppb	55.231 ppb	54.721 ppb	58.101 ppb	113.019 %
Concentration per Run 3	54.194 ppb	54.687 ppb	55.720 ppb	5,812.086 ppb	58.811 ppb	55.886 ppb	54.939 ppb	58.404 ppb	112.939 %
Recovery Percentage 1	92.320 %	92.008 %	93.510 %	97.648 %	99.322 %	93.091 %	92.363 %	97.998 %	
Concentration RSD	2.2 %	1.4 %	1.9 %	2.0 %	1.6 %	1.1 %	1.8 %	1.6 %	0.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	57.308 ppb	59.585 ppb	58.132 ppb	51.810 ppb	108.649 %	57.647 ppb	57.727 ppb	110.344 %	55.934 ppb
Concentration per Run 1	58.147 ppb	63.192 ppb	60.068 ppb	53.831 ppb	109.146 %	58.519 ppb	57.620 ppb	112.706 %	55.911 ppb
Concentration per Run 2	57.512 ppb	57.653 ppb	58.053 ppb	51.652 ppb	106.946 %	56.164 ppb	58.215 ppb	111.456 %	54.633 ppb
Concentration per Run 3	56.264 ppb	57.912 ppb	56.274 ppb	49.947 ppb	109.855 %	58.259 ppb	57.346 ppb	106.870 %	57.257 ppb
Recovery Percentage 1	95.513 %	99.309 %	96.886 %	86.350 %		96.079 %	96.211 %		93.223 %
Concentration RSD	1.7 %	5.2 %	3.3 %	3.8 %	1.4 %	2.2 %	0.8 %	2.8 %	2.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	56.672 ppb	114.152 %	113.142 %	55.783 ppb	56.110 ppb	116.644 %
Concentration per Run 1	58.875 ppb	116.034 %	116.770 %	52.587 ppb	53.266 ppb	125.395 %
Concentration per Run 2	54.443 ppb	112.761 %	111.155 %	57.251 ppb	57.375 ppb	112.911 %
Concentration per Run 3	56.698 ppb	113.661 %	111.501 %	57.512 ppb	57.689 ppb	111.625 %
Recovery Percentage 1	94.454 %			92.972 %	93.516 %	
Concentration RSD	3.9 %	1.5 %	2.8 %	5.0 %	4.4 %	6.5 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	69	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 7:01:13 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.572 %	112.027 %	0.003 ppb	-18.141 ppb	-0.953 ppb	-0.544 ppb	-8.329 ppb	0.882 ppb	90.921 %
Concentration per Run 1	89.270 %	114.190 %	0.002 ppb	-15.940 ppb	-0.904 ppb	-0.604 ppb	-7.530 ppb	-1.068 ppb	91.910 %
Concentration per Run 2	85.653 %	109.189 %	0.005 ppb	-17.469 ppb	-1.012 ppb	-0.401 ppb	-9.992 ppb	3.624 ppb	90.651 %
Concentration per Run 3	84.793 %	112.702 %	0.003 ppb	-21.013 ppb	-0.941 ppb	-0.628 ppb	-7.464 ppb	0.091 ppb	90.203 %
Recovery Percentage 1			0.658 %	-18.141 %	-1.361 %	-5.444 %	-8.329 %	0.882 %	
Concentration RSD	2.7 %	2.3 %	47.2 %	14.3 %	5.8 %	22.9 %	17.3 %	276.9 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.013 ppb	-0.005 ppb	0.000 ppb	12.870 ppb	-0.001 ppb	0.147 ppb	0.021 ppb	0.144 ppb	111.149 %
Concentration per Run 1	0.014 ppb	0.000 ppb	-0.004 ppb	12.296 ppb	-0.001 ppb	0.138 ppb	0.018 ppb	0.154 ppb	112.248 %
Concentration per Run 2	0.013 ppb	-0.009 ppb	0.001 ppb	14.423 ppb	-0.001 ppb	0.126 ppb	0.024 ppb	0.183 ppb	108.900 %
Concentration per Run 3	0.012 ppb	-0.005 ppb	0.003 ppb	11.891 ppb	0.000 ppb	0.178 ppb	0.020 ppb	0.094 ppb	112.298 %
Recovery Percentage 1	0.253 %	-0.466 %	0.012 %	25.741 %	-0.203 %	7.374 %	2.065 %	2.878 %	
Concentration RSD	6.7 %	97.3 %	2,840.0 %	10.6 %	45.5 %	18.5 %	14.8 %	31.5 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.029 ppb	0.522 ppb	-0.006 ppb	1.275 ppb	108.983 %	0.004 ppb	0.002 ppb	108.924 %	0.093 ppb
Concentration per Run 1	-0.024 ppb	0.339 ppb	-0.005 ppb	0.997 ppb	110.609 %	0.004 ppb	0.002 ppb	114.121 %	0.077 ppb
Concentration per Run 2	-0.051 ppb	0.574 ppb	-0.009 ppb	1.366 ppb	108.239 %	0.005 ppb	0.003 ppb	107.704 %	0.096 ppb
Concentration per Run 3	-0.012 ppb	0.654 ppb	-0.004 ppb	1.462 ppb	108.101 %	0.004 ppb	0.001 ppb	104.947 %	0.106 ppb
Recovery Percentage 1	-5.828 %	10.447 %	-0.059 %	63.746 %		1.039 %	1.031 %		2.323 %
Concentration RSD	68.7 %	31.3 %	40.3 %	19.2 %	1.3 %	12.9 %	53.7 %	4.3 %	15.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.020 ppb	108.359 %	111.119 %	0.089 ppb	0.011 ppb	114.999 %
Concentration per Run 1	0.017 ppb	108.490 %	116.206 %	0.073 ppb	0.010 ppb	120.821 %
Concentration per Run 2	0.022 ppb	113.140 %	108.736 %	0.098 ppb	0.013 ppb	113.671 %
Concentration per Run 3	0.021 ppb	103.448 %	108.415 %	0.095 ppb	0.012 ppb	110.504 %
Recovery Percentage 1	3.960 %			8.872 %	1.142 %	
Concentration RSD	14.4 %	4.5 %	4.0 %	15.5 %	12.2 %	4.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 70
Analysis label: zWG1825239-1 6020SL
Analysis started at: 9/14/2023 7:06:24 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 30
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.339 %	111.967 %	0.001 ppb	12.615 ppb	0.758 ppb	3.253 ppb	-1.731 ppb	9.339 ppb	97.681 %
Concentration per Run 1	96.267 %	113.892 %	0.000 ppb	13.029 ppb	0.706 ppb	2.475 ppb	-3.748 ppb	8.169 ppb	103.645 %
Concentration per Run 2	91.398 %	111.332 %	0.000 ppb	16.376 ppb	1.093 ppb	3.369 ppb	-0.805 ppb	12.384 ppb	86.698 %
Concentration per Run 3	89.352 %	110.677 %	0.001 ppb	8.441 ppb	0.476 ppb	3.917 ppb	-0.640 ppb	7.463 ppb	102.701 %
Concentration RSD	3.8 %	1.5 %	72.6 %	31.6 %	41.1 %	22.4 %	101.0 %	28.5 %	9.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.010 ppb	0.043 ppb	1.654 ppb	11.882 ppb	0.009 ppb	0.160 ppb	0.068 ppb	-0.321 ppb	114.280 %
Concentration per Run 1	0.007 ppb	0.038 ppb	1.634 ppb	14.004 ppb	0.007 ppb	0.078 ppb	0.062 ppb	-0.318 ppb	108.583 %
Concentration per Run 2	0.016 ppb	0.046 ppb	1.682 ppb	12.229 ppb	0.009 ppb	0.107 ppb	0.063 ppb	-0.363 ppb	121.723 %
Concentration per Run 3	0.008 ppb	0.044 ppb	1.648 ppb	9.412 ppb	0.010 ppb	0.297 ppb	0.080 ppb	-0.282 ppb	112.535 %
Concentration RSD	46.8 %	9.2 %	1.5 %	19.5 %	20.5 %	74.1 %	14.3 %	12.5 %	5.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.134 ppb	0.082 ppb	0.056 ppb	0.554 ppb	111.870 %	0.001 ppb	0.001 ppb	112.064 %	1.097 ppb
Concentration per Run 1	-0.135 ppb	0.047 ppb	0.051 ppb	0.333 ppb	108.155 %	0.001 ppb	0.000 ppb	108.365 %	1.074 ppb
Concentration per Run 2	-0.148 ppb	0.025 ppb	0.056 ppb	0.550 ppb	115.145 %	0.001 ppb	0.001 ppb	118.924 %	1.064 ppb
Concentration per Run 3	-0.118 ppb	0.175 ppb	0.059 ppb	0.778 ppb	112.310 %	0.001 ppb	0.002 ppb	108.903 %	1.152 ppb
Concentration RSD	11.1 %	98.5 %	6.9 %	40.2 %	3.1 %	37.1 %	164.7 %	5.3 %	4.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.042 ppb	115.587 %	116.686 %	0.024 ppb	0.013 ppb	121.594 %
Concentration per Run 1	0.040 ppb	113.986 %	109.560 %	0.016 ppb	0.013 ppb	125.544 %
Concentration per Run 2	0.050 ppb	122.127 %	124.048 %	0.027 ppb	0.011 ppb	121.036 %
Concentration per Run 3	0.035 ppb	110.647 %	116.451 %	0.028 ppb	0.014 ppb	118.201 %
Concentration RSD	18.8 %	5.1 %	6.2 %	27.2 %	10.2 %	3.0 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	71	User name	ALPHALAB\Metals-Instrument	Comment	fb
Analysis label:	I2350405-07 6020SL	Rack	2		
Analysis started at:	9/14/2023 7:11:03 PM	Vial	29		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.892 %	112.860 %	0.000 ppb	9.671 ppb	1.300 ppb	2.124 ppb	-9.263 ppb	13.017 ppb	97.826 %
Concentration per Run 1	98.511 %	111.689 %	0.000 ppb	9.086 ppb	1.405 ppb	2.187 ppb	-7.083 ppb	12.293 ppb	97.338 %
Concentration per Run 2	93.007 %	119.132 %	-0.001 ppb	8.281 ppb	1.469 ppb	2.038 ppb	-10.475 ppb	17.196 ppb	95.007 %
Concentration per Run 3	90.159 %	107.760 %	0.002 ppb	11.645 ppb	1.025 ppb	2.148 ppb	-10.230 ppb	9.563 ppb	101.132 %
Concentration RSD	4.5 %	5.1 %	1,644.5 %	18.2 %	18.5 %	3.6 %	20.4 %	29.7 %	3.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.010 ppb	0.048 ppb	0.035 ppb	7.100 ppb	0.012 ppb	0.156 ppb	0.066 ppb	-0.374 ppb	114.724 %
Concentration per Run 1	0.008 ppb	0.045 ppb	0.038 ppb	6.540 ppb	0.010 ppb	0.079 ppb	0.067 ppb	-0.407 ppb	111.290 %
Concentration per Run 2	0.004 ppb	0.047 ppb	0.047 ppb	7.616 ppb	0.009 ppb	0.124 ppb	0.068 ppb	-0.354 ppb	118.392 %
Concentration per Run 3	0.017 ppb	0.053 ppb	0.021 ppb	7.144 ppb	0.016 ppb	0.267 ppb	0.063 ppb	-0.361 ppb	114.490 %
Concentration RSD	71.0 %	8.9 %	36.8 %	7.6 %	32.1 %	62.8 %	4.3 %	7.6 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.143 ppb	0.026 ppb	0.154 ppb	0.191 ppb	111.125 %	0.001 ppb	0.001 ppb	117.162 %	0.426 ppb
Concentration per Run 1	-0.134 ppb	-0.008 ppb	0.143 ppb	0.049 ppb	114.360 %	0.001 ppb	0.001 ppb	112.405 %	0.413 ppb
Concentration per Run 2	-0.154 ppb	0.069 ppb	0.175 ppb	0.221 ppb	105.535 %	0.001 ppb	0.001 ppb	122.943 %	0.435 ppb
Concentration per Run 3	-0.142 ppb	0.019 ppb	0.144 ppb	0.303 ppb	113.480 %	0.001 ppb	0.000 ppb	116.137 %	0.430 ppb
Concentration RSD	6.8 %	149.0 %	11.7 %	67.6 %	4.4 %	8.3 %	80.0 %	4.6 %	2.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.264 ppb	114.258 %	120.343 %	0.011 ppb	0.013 ppb	121.074 %
Concentration per Run 1	0.219 ppb	118.715 %	114.847 %	0.005 ppb	0.012 ppb	127.795 %
Concentration per Run 2	0.305 ppb	113.995 %	128.486 %	0.015 ppb	0.013 ppb	115.913 %
Concentration per Run 3	0.267 ppb	110.063 %	117.695 %	0.014 ppb	0.013 ppb	119.515 %
Concentration RSD	16.4 %	3.8 %	6.0 %	47.6 %	7.3 %	5.0 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 72
Analysis label: WG1825239-2D5 6020SL
Analysis started at: 9/14/2023 7:15:42 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 31
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.345 %	109.903 %	10.391 ppb	2,181.891 ppb	1,975.596 ppb	410.997 ppb	2,072.679 ppb	1,380.098 ppb	101.990 %
Concentration per Run 1	96.853 %	105.795 %	10.242 ppb	2,268.017 ppb	2,060.608 ppb	414.521 ppb	2,077.129 ppb	1,690.725 ppb	103.635 %
Concentration per Run 2	93.159 %	116.750 %	10.406 ppb	2,118.838 ppb	1,941.330 ppb	424.681 ppb	2,159.637 ppb	1,103.706 ppb	100.908 %
Concentration per Run 3	90.023 %	107.164 %	10.524 ppb	2,158.816 ppb	1,924.848 ppb	393.790 ppb	1,981.271 ppb	1,345.864 ppb	101.426 %
Concentration RSD	3.7 %	5.4 %	1.4 %	3.5 %	3.7 %	3.8 %	4.3 %	21.4 %	1.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	98.003 ppb	39.164 ppb	103.058 ppb	209.399 ppb	98.744 ppb	95.907 ppb	48.376 ppb	98.396 ppb	115.123 %
Concentration per Run 1	100.264 ppb	40.045 ppb	105.555 ppb	210.542 ppb	99.190 ppb	98.573 ppb	50.161 ppb	100.273 ppb	110.948 %
Concentration per Run 2	96.966 ppb	38.417 ppb	101.965 ppb	204.830 ppb	91.994 ppb	92.936 ppb	47.070 ppb	97.879 ppb	119.368 %
Concentration per Run 3	96.780 ppb	39.029 ppb	101.653 ppb	212.825 ppb	105.049 ppb	96.211 ppb	47.899 ppb	97.036 ppb	115.052 %
Concentration RSD	2.0 %	2.1 %	2.1 %	2.0 %	6.6 %	3.0 %	3.3 %	1.7 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	23.801 ppb	23.874 ppb	205.660 ppb	197.774 ppb	111.332 %	10.706 ppb	11.190 ppb	112.015 %	79.203 ppb
Concentration per Run 1	24.354 ppb	24.049 ppb	202.464 ppb	196.184 ppb	107.332 %	10.898 ppb	11.390 ppb	108.939 %	79.101 ppb
Concentration per Run 2	23.513 ppb	24.613 ppb	216.455 ppb	197.359 ppb	113.139 %	10.698 ppb	11.109 ppb	118.291 %	78.373 ppb
Concentration per Run 3	23.538 ppb	22.958 ppb	198.061 ppb	199.779 ppb	113.524 %	10.522 ppb	11.071 ppb	108.815 %	80.134 ppb
Concentration RSD	2.0 %	3.5 %	4.7 %	0.9 %	3.1 %	1.8 %	1.6 %	4.9 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	417.041 ppb	118.708 %	119.354 %	25.512 ppb	107.043 ppb	122.084 %
Concentration per Run 1	400.843 ppb	120.583 %	115.268 %	24.820 ppb	103.363 ppb	125.783 %
Concentration per Run 2	441.948 ppb	116.693 %	128.331 %	25.868 ppb	109.845 ppb	120.729 %
Concentration per Run 3	408.332 ppb	118.846 %	114.463 %	25.847 ppb	107.921 ppb	119.741 %
Concentration RSD	5.2 %	1.6 %	6.5 %	2.3 %	3.1 %	2.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	73	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350766-02 6020TL	Rack	2		
Analysis started at:	9/14/2023 7:20:22 PM	Vial	18		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	70.257 %	117.564 %	0.012 ppb	21,265.500 ppb	49,307.987 ppb	8.215 ppb	11,485.027 ppb	650,899.792 ppb	85.265 %
Concentration per Run 1	74.923 %	111.987 %	0.010 ppb	21,636.105 ppb	51,070.035 ppb	7.695 ppb	11,870.806 ppb	659,964.604 ppb	88.673 %
Concentration per Run 2	69.208 %	125.026 %	0.013 ppb	20,861.701 ppb	48,519.585 ppb	8.506 ppb	10,995.561 ppb	646,918.263 ppb	84.552 %
Concentration per Run 3	66.640 %	115.679 %	0.011 ppb	21,298.693 ppb	48,334.340 ppb	8.444 ppb	11,588.715 ppb	645,816.508 ppb	82.570 %
Concentration RSD	6.0 %	5.7 %	12.9 %	1.8 %	3.1 %	5.5 %	3.9 %	1.2 %	3.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.253 ppb	0.866 ppb	11,110.554 ppb	100,209.599 ppb	27.899 ppb	9.332 ppb	0.174 ppb	7.099 ppb	103.911 %
Concentration per Run 1	0.252 ppb	0.877 ppb	10,799.816 ppb	99,869.882 ppb	27.667 ppb	9.390 ppb	0.158 ppb	7.061 ppb	102.514 %
Concentration per Run 2	0.264 ppb	0.823 ppb	11,292.049 ppb	100,320.171 ppb	27.788 ppb	9.035 ppb	0.167 ppb	7.213 ppb	108.000 %
Concentration per Run 3	0.243 ppb	0.900 ppb	11,239.798 ppb	100,438.744 ppb	28.244 ppb	9.571 ppb	0.199 ppb	7.023 ppb	101.217 %
Concentration RSD	4.0 %	4.6 %	2.4 %	0.3 %	1.1 %	2.9 %	12.5 %	1.4 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	5.475 ppb	0.721 ppb	5,717.429 ppb	7.906 ppb	92.561 %	0.005 ppb	0.004 ppb	104.951 %	3.751 ppb
Concentration per Run 1	5.610 ppb	0.538 ppb	5,590.740 ppb	6.826 ppb	92.737 %	0.004 ppb	0.003 ppb	105.028 %	3.687 ppb
Concentration per Run 2	5.320 ppb	0.805 ppb	5,989.881 ppb	8.113 ppb	93.301 %	0.004 ppb	0.006 ppb	110.593 %	3.790 ppb
Concentration per Run 3	5.494 ppb	0.819 ppb	5,571.666 ppb	8.780 ppb	91.646 %	0.005 ppb	0.003 ppb	99.232 %	3.775 ppb
Concentration RSD	2.7 %	22.0 %	4.1 %	12.6 %	0.9 %	13.2 %	50.0 %	5.4 %	1.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	140.296 ppb	101.822 %	101.991 %	0.050 ppb	0.039 ppb	90.548 %
Concentration per Run 1	140.129 ppb	102.089 %	101.316 %	0.049 ppb	0.038 ppb	95.972 %
Concentration per Run 2	142.312 ppb	105.312 %	105.981 %	0.055 ppb	0.040 ppb	91.524 %
Concentration per Run 3	138.446 ppb	98.065 %	98.676 %	0.046 ppb	0.037 ppb	84.147 %
Concentration RSD	1.4 %	3.6 %	3.6 %	9.7 %	4.1 %	6.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 74
Analysis label: I2350359-15 6020SL
Analysis started at: 9/14/2023 7:25:00 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 27
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	60.900 %	108.097 %	0.006 ppb	179,290.363 ppb	4,101.040 ppb	2.833 ppb	1,690.253 ppb	9,203.808 ppb	74.875 %
Concentration per Run 1	63.381 %	107.760 %	0.008 ppb	176,981.467 ppb	4,100.907 ppb	2.465 ppb	1,677.228 ppb	9,662.197 ppb	76.632 %
Concentration per Run 2	60.885 %	110.201 %	0.006 ppb	181,251.430 ppb	4,086.448 ppb	3.069 ppb	1,764.230 ppb	8,985.326 ppb	73.708 %
Concentration per Run 3	58.434 %	106.331 %	0.004 ppb	179,638.192 ppb	4,115.765 ppb	2.964 ppb	1,629.301 ppb	8,963.902 ppb	74.287 %
Concentration RSD	4.1 %	1.8 %	31.9 %	1.2 %	0.4 %	11.4 %	4.0 %	4.3 %	2.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.065 ppb	0.120 ppb	137.440 ppb	475.453 ppb	0.182 ppb	0.530 ppb	0.727 ppb	1.542 ppb	99.501 %
Concentration per Run 1	0.073 ppb	0.125 ppb	137.920 ppb	488.384 ppb	0.187 ppb	0.549 ppb	0.756 ppb	1.593 ppb	93.462 %
Concentration per Run 2	0.067 ppb	0.110 ppb	135.491 ppb	463.161 ppb	0.168 ppb	0.481 ppb	0.683 ppb	1.459 ppb	107.423 %
Concentration per Run 3	0.055 ppb	0.123 ppb	138.908 ppb	474.815 ppb	0.191 ppb	0.560 ppb	0.743 ppb	1.573 ppb	97.618 %
Concentration RSD	14.1 %	6.7 %	1.3 %	2.7 %	6.9 %	8.1 %	5.4 %	4.7 %	7.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.842 ppb	0.079 ppb	425.686 ppb	3.536 ppb	89.527 %	0.001 ppb	0.002 ppb	89.639 %	1.534 ppb
Concentration per Run 1	0.824 ppb	0.017 ppb	427.281 ppb	2.545 ppb	84.849 %	0.000 ppb	0.002 ppb	83.531 %	1.452 ppb
Concentration per Run 2	0.896 ppb	0.122 ppb	425.758 ppb	3.432 ppb	94.504 %	0.001 ppb	0.001 ppb	98.219 %	1.512 ppb
Concentration per Run 3	0.806 ppb	0.099 ppb	424.020 ppb	4.632 ppb	89.229 %	0.002 ppb	0.002 ppb	87.167 %	1.638 ppb
Concentration RSD	5.6 %	69.8 %	0.4 %	29.6 %	5.4 %	108.9 %	9.1 %	8.5 %	6.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	415.906 ppb	98.286 %	92.985 %	0.010 ppb	0.031 ppb	87.530 %
Concentration per Run 1	414.117 ppb	96.052 %	88.092 %	0.006 ppb	0.029 ppb	90.335 %
Concentration per Run 2	405.634 ppb	103.043 %	99.248 %	0.013 ppb	0.032 ppb	88.166 %
Concentration per Run 3	427.965 ppb	95.764 %	91.616 %	0.012 ppb	0.032 ppb	84.089 %
Concentration RSD	2.7 %	4.2 %	6.1 %	35.3 %	6.3 %	3.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	75	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2350405-06 6020SL	Rack	2		
Analysis started at:	9/14/2023 7:29:40 PM	Vial	28		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	66.697 %	103.433 %	0.002 ppb	149,317.502 ppb	26,879.060 ppb	9.114 ppb	11,637.432 ppb	156,843.680 ppb	87.353 %
Concentration per Run 1	70.115 %	101.151 %	0.003 ppb	149,084.065 ppb	27,113.005 ppb	9.075 ppb	11,630.828 ppb	156,993.056 ppb	88.836 %
Concentration per Run 2	65.850 %	106.629 %	0.001 ppb	149,244.925 ppb	26,760.035 ppb	9.848 ppb	11,989.697 ppb	162,698.840 ppb	87.788 %
Concentration per Run 3	64.127 %	102.520 %	0.003 ppb	149,623.517 ppb	26,764.142 ppb	8.420 ppb	11,291.770 ppb	150,839.143 ppb	85.434 %
Concentration RSD	4.6 %	2.8 %	54.1 %	0.2 %	0.8 %	7.8 %	3.0 %	3.8 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	1.542 ppb	0.078 ppb	1,740.883 ppb	115.608 ppb	0.528 ppb	0.817 ppb	1.899 ppb	1.476 ppb	100.698 %
Concentration per Run 1	1.599 ppb	0.080 ppb	1,743.273 ppb	123.492 ppb	0.546 ppb	0.776 ppb	2.009 ppb	1.570 ppb	93.588 %
Concentration per Run 2	1.550 ppb	0.067 ppb	1,743.466 ppb	116.043 ppb	0.503 ppb	0.795 ppb	1.892 ppb	1.444 ppb	106.084 %
Concentration per Run 3	1.478 ppb	0.089 ppb	1,735.911 ppb	107.289 ppb	0.535 ppb	0.879 ppb	1.795 ppb	1.415 ppb	102.423 %
Concentration RSD	4.0 %	14.1 %	0.2 %	7.0 %	4.2 %	6.7 %	5.7 %	5.6 %	6.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.233 ppb	0.366 ppb	472.520 ppb	3.681 ppb	91.149 %	0.001 ppb	0.028 ppb	96.045 %	1.641 ppb
Concentration per Run 1	1.316 ppb	0.256 ppb	471.076 ppb	3.411 ppb	87.493 %	0.001 ppb	0.030 ppb	91.932 %	1.534 ppb
Concentration per Run 2	1.291 ppb	0.391 ppb	489.211 ppb	3.628 ppb	94.298 %	0.000 ppb	0.024 ppb	101.568 %	1.654 ppb
Concentration per Run 3	1.091 ppb	0.451 ppb	457.273 ppb	4.006 ppb	91.655 %	0.001 ppb	0.029 ppb	94.634 %	1.735 ppb
Concentration RSD	10.0 %	27.4 %	3.4 %	8.2 %	3.8 %	41.6 %	11.0 %	5.2 %	6.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	60.626 ppb	99.301 %	100.138 %	0.007 ppb	0.020 ppb	89.354 %
Concentration per Run 1	60.225 ppb	96.484 %	94.346 %	0.004 ppb	0.018 ppb	90.213 %
Concentration per Run 2	61.498 ppb	99.120 %	104.441 %	0.009 ppb	0.020 ppb	90.117 %
Concentration per Run 3	60.154 ppb	102.298 %	101.626 %	0.009 ppb	0.021 ppb	87.731 %
Concentration RSD	1.2 %	2.9 %	5.2 %	39.5 %	6.3 %	1.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	76	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350766-02d10 6020TL	Rack	2		
Analysis started at:	9/14/2023 7:53:29 PM	Vial	32		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.888 %	109.367 %	0.003 ppb	2,255.006 ppb	5,787.833 ppb	0.207 ppb	916.640 ppb	51,253.584 ppb	91.865 %
Concentration per Run 1	89.379 %	113.773 %	0.004 ppb	2,233.225 ppb	5,582.569 ppb	0.415 ppb	964.155 ppb	53,180.416 ppb	88.141 %
Concentration per Run 2	85.882 %	113.654 %	0.001 ppb	2,210.628 ppb	5,711.590 ppb	0.116 ppb	882.450 ppb	49,920.490 ppb	94.427 %
Concentration per Run 3	82.404 %	100.675 %	0.004 ppb	2,321.165 ppb	6,069.341 ppb	0.092 ppb	903.314 ppb	50,659.846 ppb	93.025 %
Concentration RSD	4.1 %	6.9 %	54.0 %	2.6 %	4.4 %	86.6 %	4.6 %	3.3 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.027 ppb	0.070 ppb	864.474 ppb	10,973.252 ppb	2.962 ppb	1.048 ppb	0.025 ppb	0.481 ppb	101.451 %
Concentration per Run 1	0.020 ppb	0.066 ppb	867.329 ppb	11,161.518 ppb	2.958 ppb	1.021 ppb	0.021 ppb	0.497 ppb	98.888 %
Concentration per Run 2	0.033 ppb	0.069 ppb	827.740 ppb	10,630.002 ppb	2.880 ppb	0.993 ppb	0.027 ppb	0.452 ppb	106.781 %
Concentration per Run 3	0.029 ppb	0.076 ppb	898.354 ppb	11,128.235 ppb	3.048 ppb	1.129 ppb	0.026 ppb	0.493 ppb	98.684 %
Concentration RSD	25.1 %	7.3 %	4.1 %	2.7 %	2.8 %	6.9 %	13.0 %	5.2 %	4.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.533 ppb	0.042 ppb	522.415 ppb	0.279 ppb	98.208 %	0.002 ppb	0.000 ppb	95.943 %	0.236 ppb
Concentration per Run 1	0.591 ppb	0.026 ppb	531.573 ppb	0.218 ppb	96.702 %	0.001 ppb	0.000 ppb	92.788 %	0.227 ppb
Concentration per Run 2	0.471 ppb	0.060 ppb	518.012 ppb	0.302 ppb	100.494 %	0.001 ppb	0.000 ppb	96.543 %	0.261 ppb
Concentration per Run 3	0.536 ppb	0.040 ppb	517.660 ppb	0.318 ppb	97.428 %	0.002 ppb	0.000 ppb	98.499 %	0.221 ppb
Concentration RSD	11.3 %	40.9 %	1.5 %	19.3 %	2.0 %	43.7 %	0.0 %	3.0 %	9.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	12.865 ppb	103.957 %	100.995 %	-0.004 ppb	0.002 ppb	105.461 %
Concentration per Run 1	13.234 ppb	101.566 %	98.165 %	-0.006 ppb	0.002 ppb	112.180 %
Concentration per Run 2	12.636 ppb	107.147 %	105.049 %	-0.003 ppb	0.002 ppb	104.780 %
Concentration per Run 3	12.723 ppb	103.160 %	99.772 %	-0.002 ppb	0.003 ppb	99.423 %
Concentration RSD	2.5 %	2.8 %	3.6 %	54.8 %	18.5 %	6.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	77	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 7:59:47 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.134 %	106.053 %	59.460 ppb	5,698.792 ppb	5,651.358 ppb	56.710 ppb	5,770.753 ppb	5,433.448 ppb	91.933 %
Concentration per Run 1	88.188 %	103.056 %	59.608 ppb	6,028.044 ppb	6,012.470 ppb	60.212 ppb	6,072.282 ppb	5,626.021 ppb	85.524 %
Concentration per Run 2	84.289 %	109.486 %	59.195 ppb	5,605.844 ppb	5,495.166 ppb	56.404 ppb	5,770.598 ppb	5,482.651 ppb	96.659 %
Concentration per Run 3	82.924 %	105.616 %	59.575 ppb	5,462.488 ppb	5,446.440 ppb	53.515 ppb	5,469.378 ppb	5,191.673 ppb	93.617 %
Recovery Percentage 1			99.099 %	94.980 %	94.189 %	94.517 %	96.179 %	90.557 %	
Concentration RSD	3.2 %	3.1 %	0.4 %	5.2 %	5.6 %	5.9 %	5.2 %	4.1 %	6.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	55.770 ppb	54.653 ppb	55.830 ppb	6,148.324 ppb	63.064 ppb	59.579 ppb	59.363 ppb	60.168 ppb	100.300 %
Concentration per Run 1	55.812 ppb	55.613 ppb	57.123 ppb	6,284.212 ppb	65.895 ppb	61.272 ppb	63.076 ppb	62.842 ppb	98.859 %
Concentration per Run 2	56.362 ppb	55.145 ppb	56.167 ppb	6,202.966 ppb	62.402 ppb	58.556 ppb	58.630 ppb	60.070 ppb	100.803 %
Concentration per Run 3	55.136 ppb	53.201 ppb	54.198 ppb	5,957.794 ppb	60.893 ppb	58.908 ppb	56.381 ppb	57.593 ppb	101.239 %
Recovery Percentage 1	92.950 %	91.088 %	93.049 %	102.472 %	105.106 %	99.298 %	98.938 %	100.281 %	
Concentration RSD	1.1 %	2.3 %	2.7 %	2.8 %	4.1 %	2.5 %	5.7 %	4.4 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.744 ppb	58.552 ppb	57.354 ppb	53.639 ppb	99.603 %	59.380 ppb	59.987 ppb	95.406 %	57.848 ppb
Concentration per Run 1	60.083 ppb	61.508 ppb	59.726 ppb	56.881 ppb	95.394 %	62.408 ppb	63.105 ppb	90.285 %	61.421 ppb
Concentration per Run 2	59.346 ppb	58.728 ppb	58.859 ppb	53.302 ppb	101.243 %	58.213 ppb	59.087 ppb	101.844 %	55.491 ppb
Concentration per Run 3	56.803 ppb	55.420 ppb	53.477 ppb	50.734 ppb	102.172 %	57.519 ppb	57.769 ppb	94.089 %	56.631 ppb
Recovery Percentage 1	97.906 %	97.587 %	95.590 %	89.398 %		98.967 %	99.978 %		96.413 %
Concentration RSD	2.9 %	5.2 %	5.9 %	5.8 %	3.7 %	4.5 %	4.6 %	6.2 %	5.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.701 ppb	102.946 %	98.915 %	58.896 ppb	59.299 ppb	100.646 %
Concentration per Run 1	61.077 ppb	100.992 %	95.611 %	57.144 ppb	57.741 ppb	104.926 %
Concentration per Run 2	56.567 ppb	105.359 %	100.830 %	59.434 ppb	59.228 ppb	101.372 %
Concentration per Run 3	55.459 ppb	102.486 %	100.304 %	60.111 ppb	60.928 ppb	95.639 %
Recovery Percentage 1	96.169 %			98.161 %	98.831 %	
Concentration RSD	5.2 %	2.2 %	2.9 %	2.6 %	2.7 %	4.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	78	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 8:04:29 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.290 %	105.616 %	0.002 ppb	-7.602 ppb	-0.903 ppb	-0.477 ppb	-6.896 ppb	0.624 ppb	86.962 %
Concentration per Run 1	89.010 %	109.427 %	0.000 ppb	-4.945 ppb	-0.788 ppb	-0.301 ppb	-2.100 ppb	-0.022 ppb	90.996 %
Concentration per Run 2	86.425 %	103.294 %	0.004 ppb	-6.583 ppb	-1.080 ppb	-0.457 ppb	-7.724 ppb	-0.828 ppb	91.119 %
Concentration per Run 3	83.434 %	104.128 %	0.002 ppb	-11.277 ppb	-0.841 ppb	-0.673 ppb	-10.863 ppb	2.723 ppb	78.771 %
Recovery Percentage 1			0.436 %	-7.602 %	-1.290 %	-4.765 %	-6.896 %	0.624 %	
Concentration RSD	3.2 %	3.1 %	85.6 %	43.2 %	17.2 %	39.2 %	64.4 %	298.2 %	8.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.001 ppb	0.000 ppb	0.003 ppb	14.448 ppb	0.001 ppb	0.128 ppb	0.019 ppb	0.208 ppb	100.745 %
Concentration per Run 1	-0.006 ppb	-0.005 ppb	0.010 ppb	12.648 ppb	0.002 ppb	0.116 ppb	0.012 ppb	0.214 ppb	104.050 %
Concentration per Run 2	-0.004 ppb	0.001 ppb	0.005 ppb	14.793 ppb	0.002 ppb	0.111 ppb	0.025 ppb	0.200 ppb	103.039 %
Concentration per Run 3	0.011 ppb	0.005 ppb	-0.006 ppb	15.904 ppb	-0.001 ppb	0.156 ppb	0.022 ppb	0.210 ppb	95.145 %
Recovery Percentage 1	0.012 %	0.020 %	0.272 %	28.896 %	0.190 %	6.379 %	1.949 %	4.160 %	
Concentration RSD	1,502.1 %	2,629.8 %	300.2 %	11.5 %	140.0 %	19.4 %	35.2 %	3.4 %	4.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.003 ppb	0.516 ppb	0.000 ppb	1.300 ppb	102.248 %	0.004 ppb	0.001 ppb	99.019 %	0.178 ppb
Concentration per Run 1	-0.014 ppb	0.263 ppb	0.001 ppb	0.975 ppb	103.480 %	0.002 ppb	0.000 ppb	101.781 %	0.157 ppb
Concentration per Run 2	0.026 ppb	0.557 ppb	0.001 ppb	1.393 ppb	102.173 %	0.006 ppb	0.004 ppb	102.507 %	0.185 ppb
Concentration per Run 3	-0.002 ppb	0.726 ppb	-0.002 ppb	1.530 ppb	101.091 %	0.003 ppb	0.000 ppb	92.770 %	0.192 ppb
Recovery Percentage 1	0.698 %	10.311 %	0.002 %	64.980 %		0.964 %	0.650 %		4.454 %
Concentration RSD	582.6 %	45.4 %	1,055.4 %	22.2 %	1.2 %	49.3 %	186.1 %	5.5 %	10.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.016 ppb	104.078 %	102.890 %	0.085 ppb	0.012 ppb	105.154 %
Concentration per Run 1	0.018 ppb	104.415 %	105.417 %	0.069 ppb	0.010 ppb	109.345 %
Concentration per Run 2	0.016 ppb	104.110 %	103.645 %	0.102 ppb	0.015 ppb	105.534 %
Concentration per Run 3	0.014 ppb	103.710 %	99.608 %	0.086 ppb	0.011 ppb	100.583 %
Recovery Percentage 1	3.187 %			8.546 %	1.190 %	
Concentration RSD	14.5 %	0.3 %	2.9 %	18.9 %	23.0 %	4.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	79	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1822954-1 6020SL	Rack	2		
Analysis started at:	9/14/2023 8:16:41 PM	Vial	33		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.986 %	112.344 %	0.000 ppb	4.725 ppb	0.694 ppb	1.261 ppb	-8.293 ppb	9.155 ppb	94.634 %
Concentration per Run 1	97.337 %	116.036 %	0.002 ppb	3.268 ppb	0.406 ppb	1.182 ppb	-11.065 ppb	10.527 ppb	104.350 %
Concentration per Run 2	93.518 %	107.403 %	0.000 ppb	4.863 ppb	0.554 ppb	1.254 ppb	-5.198 ppb	8.225 ppb	90.000 %
Concentration per Run 3	91.103 %	113.595 %	-0.002 ppb	6.043 ppb	1.123 ppb	1.347 ppb	-8.615 ppb	8.715 ppb	89.554 %
Concentration RSD	3.3 %	4.0 %	1,177.1 %	29.5 %	54.5 %	6.6 %	35.5 %	13.2 %	8.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	-0.001 ppb	0.152 ppb	0.070 ppb	20.055 ppb	0.010 ppb	0.053 ppb	0.088 ppb	-0.421 ppb	108.771 %
Concentration per Run 1	-0.006 ppb	0.154 ppb	0.080 ppb	18.877 ppb	0.008 ppb	0.047 ppb	0.087 ppb	-0.414 ppb	103.710 %
Concentration per Run 2	0.004 ppb	0.147 ppb	0.082 ppb	20.706 ppb	0.008 ppb	0.044 ppb	0.091 ppb	-0.421 ppb	105.217 %
Concentration per Run 3	-0.001 ppb	0.153 ppb	0.049 ppb	20.583 ppb	0.014 ppb	0.069 ppb	0.086 ppb	-0.428 ppb	117.385 %
Concentration RSD	422.5 %	2.4 %	26.8 %	5.1 %	32.1 %	25.3 %	2.7 %	1.7 %	6.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	-0.087 ppb	0.027 ppb	0.008 ppb	0.166 ppb	105.979 %	0.002 ppb	0.001 ppb	105.229 %	0.582 ppb
Concentration per Run 1	-0.089 ppb	0.050 ppb	0.006 ppb	0.040 ppb	103.001 %	0.001 ppb	0.001 ppb	100.062 %	0.523 ppb
Concentration per Run 2	-0.083 ppb	0.008 ppb	0.013 ppb	0.172 ppb	105.971 %	0.001 ppb	0.000 ppb	104.379 %	0.594 ppb
Concentration per Run 3	-0.088 ppb	0.023 ppb	0.005 ppb	0.285 ppb	108.965 %	0.003 ppb	0.003 ppb	111.245 %	0.629 ppb
Concentration RSD	3.9 %	78.6 %	55.0 %	74.2 %	2.8 %	70.5 %	111.0 %	5.4 %	9.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.058 ppb	103.798 %	108.663 %	0.006 ppb	0.011 ppb	114.426 %
Concentration per Run 1	0.056 ppb	102.707 %	101.510 %	0.000 ppb	0.010 ppb	121.485 %
Concentration per Run 2	0.069 ppb	101.563 %	108.559 %	0.007 ppb	0.011 ppb	106.844 %
Concentration per Run 3	0.049 ppb	107.122 %	115.921 %	0.011 ppb	0.013 ppb	114.949 %
Concentration RSD	17.6 %	2.8 %	6.6 %	86.5 %	11.9 %	6.4 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 80
Analysis label: WG1822954-2d5 6020SL
Analysis started at: 9/14/2023 8:21:21 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 34
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.723 %	108.514 %	10.558 ppb	2,234.530 ppb	1,975.881 ppb	435.333 ppb	2,117.085 ppb	1,540.567 ppb	96.874 %
Concentration per Run 1	96.683 %	102.104 %	10.608 ppb	2,325.654 ppb	2,060.288 ppb	447.438 ppb	2,221.957 ppb	1,840.470 ppb	91.183 %
Concentration per Run 2	92.364 %	111.749 %	10.522 ppb	2,158.681 ppb	1,883.695 ppb	414.089 ppb	2,061.152 ppb	1,494.952 ppb	100.987 %
Concentration per Run 3	89.123 %	111.689 %	10.544 ppb	2,219.256 ppb	1,983.661 ppb	444.473 ppb	2,068.145 ppb	1,286.280 ppb	98.454 %
Concentration RSD	4.1 %	5.1 %	0.4 %	3.8 %	4.5 %	4.2 %	4.3 %	18.2 %	5.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	95.971 ppb	38.766 ppb	101.978 ppb	217.356 ppb	105.187 ppb	98.894 ppb	50.459 ppb	101.663 ppb	110.035 %
Concentration per Run 1	97.205 ppb	39.906 ppb	102.909 ppb	218.123 ppb	111.972 ppb	104.203 ppb	51.830 ppb	104.893 ppb	105.837 %
Concentration per Run 2	95.583 ppb	38.923 ppb	102.388 ppb	219.483 ppb	109.213 ppb	99.809 ppb	51.049 ppb	101.480 ppb	105.986 %
Concentration per Run 3	95.124 ppb	37.468 ppb	100.638 ppb	214.463 ppb	94.375 ppb	92.671 ppb	48.498 ppb	98.614 ppb	118.282 %
Concentration RSD	1.1 %	3.2 %	1.2 %	1.2 %	9.0 %	5.9 %	3.5 %	3.1 %	6.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	24.508 ppb	24.254 ppb	204.834 ppb	197.623 ppb	104.852 %	10.628 ppb	11.255 ppb	107.987 %	88.630 ppb
Concentration per Run 1	24.373 ppb	22.847 ppb	200.614 ppb	193.516 ppb	103.627 %	10.701 ppb	11.267 ppb	102.876 %	91.088 ppb
Concentration per Run 2	25.103 ppb	25.454 ppb	203.300 ppb	199.466 ppb	102.762 %	10.665 ppb	11.418 ppb	103.178 %	88.064 ppb
Concentration per Run 3	24.049 ppb	24.461 ppb	210.588 ppb	199.887 ppb	108.166 %	10.517 ppb	11.080 ppb	117.908 %	86.738 ppb
Concentration RSD	2.2 %	5.4 %	2.5 %	1.8 %	2.8 %	0.9 %	1.5 %	8.0 %	2.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	411.794 ppb	113.884 %	112.560 %	25.459 ppb	108.279 ppb	111.519 %
Concentration per Run 1	421.806 ppb	108.652 %	105.250 %	24.989 ppb	105.259 ppb	112.382 %
Concentration per Run 2	399.152 ppb	115.929 %	111.086 %	25.725 ppb	110.452 ppb	109.378 %
Concentration per Run 3	414.425 ppb	117.072 %	121.344 %	25.661 ppb	109.125 ppb	112.796 %
Concentration RSD	2.8 %	4.0 %	7.2 %	1.6 %	2.5 %	1.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	81	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1822954-3d10 6020SL	Rack	2		
Analysis started at:	9/14/2023 8:26:00 PM	Vial	36		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.572 %	101.846 %	5.132 ppb	22,033.278 ppb	1,347.175 ppb	216.955 ppb	1,238.411 ppb	1,497.131 ppb	99.333 %
Concentration per Run 1	96.692 %	99.901 %	5.092 ppb	22,214.584 ppb	1,355.659 ppb	214.012 ppb	1,246.524 ppb	1,731.292 ppb	100.383 %
Concentration per Run 2	93.302 %	103.175 %	5.176 ppb	22,067.347 ppb	1,334.222 ppb	215.663 ppb	1,224.892 ppb	1,322.660 ppb	98.007 %
Concentration per Run 3	90.722 %	102.461 %	5.129 ppb	21,817.904 ppb	1,351.643 ppb	221.191 ppb	1,243.817 ppb	1,437.442 ppb	99.609 %
Concentration RSD	3.2 %	1.7 %	0.8 %	0.9 %	0.8 %	1.7 %	1.0 %	14.1 %	1.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	48.740 ppb	19.132 ppb	59.170 ppb	122.828 ppb	53.179 ppb	48.560 ppb	25.246 ppb	49.832 ppb	108.322 %
Concentration per Run 1	49.202 ppb	19.293 ppb	59.187 ppb	124.873 ppb	56.175 ppb	49.897 ppb	26.283 ppb	50.811 ppb	103.580 %
Concentration per Run 2	48.768 ppb	19.295 ppb	59.352 ppb	125.031 ppb	52.327 ppb	48.341 ppb	24.800 ppb	49.241 ppb	109.034 %
Concentration per Run 3	48.251 ppb	18.809 ppb	58.970 ppb	118.581 ppb	51.036 ppb	47.441 ppb	24.655 ppb	49.445 ppb	112.353 %
Concentration RSD	1.0 %	1.5 %	0.3 %	3.0 %	5.0 %	2.6 %	3.6 %	1.7 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	12.055 ppb	11.777 ppb	153.733 ppb	100.281 ppb	103.489 %	5.122 ppb	5.455 ppb	106.159 %	52.301 ppb
Concentration per Run 1	12.302 ppb	11.833 ppb	150.521 ppb	102.156 ppb	100.285 %	5.214 ppb	5.589 ppb	101.038 %	52.646 ppb
Concentration per Run 2	11.995 ppb	11.804 ppb	158.251 ppb	99.079 ppb	105.388 %	5.076 ppb	5.367 ppb	109.096 %	52.701 ppb
Concentration per Run 3	11.868 ppb	11.694 ppb	152.427 ppb	99.608 ppb	104.792 %	5.077 ppb	5.409 ppb	108.342 %	51.557 ppb
Concentration RSD	1.9 %	0.6 %	2.6 %	1.6 %	2.7 %	1.6 %	2.2 %	4.2 %	1.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	235.250 ppb	112.978 %	111.740 %	12.022 ppb	53.957 ppb	109.133 %
Concentration per Run 1	230.237 ppb	110.748 %	106.818 %	11.497 ppb	53.524 ppb	112.021 %
Concentration per Run 2	241.896 ppb	113.413 %	116.153 %	12.388 ppb	54.367 ppb	107.245 %
Concentration per Run 3	233.618 ppb	114.772 %	112.249 %	12.179 ppb	53.979 ppb	108.133 %
Concentration RSD	2.5 %	1.8 %	4.2 %	3.9 %	0.8 %	2.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 82
Analysis label: WG1822954-5d10 6020SL
Analysis started at: 9/14/2023 8:32:20 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 38
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	95.736 %	98.710 %	47.058 ppb	24,785.943 ppb	5,051.177 ppb	47.423 ppb	4,966.490 ppb	5,414.904 ppb	107.555 %
Concentration per Run 1	100.188 %	98.055 %	46.278 ppb	25,413.589 ppb	5,122.515 ppb	48.109 ppb	5,203.107 ppb	5,753.930 ppb	110.248 %
Concentration per Run 2	95.420 %	95.852 %	47.231 ppb	25,006.141 ppb	5,086.784 ppb	47.257 ppb	4,892.290 ppb	5,279.623 ppb	106.088 %
Concentration per Run 3	91.601 %	102.223 %	47.667 ppb	23,938.100 ppb	4,944.231 ppb	46.903 ppb	4,804.073 ppb	5,211.159 ppb	106.328 %
Concentration RSD	4.5 %	3.3 %	1.5 %	3.1 %	1.9 %	1.3 %	4.2 %	5.5 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	47.994 ppb	46.515 ppb	58.050 ppb	5,094.026 ppb	51.400 ppb	48.742 ppb	48.777 ppb	47.822 ppb	101.718 %
Concentration per Run 1	49.411 ppb	47.778 ppb	58.046 ppb	5,035.841 ppb	52.018 ppb	49.260 ppb	48.794 ppb	47.364 ppb	103.448 %
Concentration per Run 2	46.878 ppb	45.636 ppb	57.421 ppb	5,040.059 ppb	50.179 ppb	48.106 ppb	49.671 ppb	48.000 ppb	100.033 %
Concentration per Run 3	47.692 ppb	46.130 ppb	58.683 ppb	5,206.178 ppb	52.003 ppb	48.859 ppb	47.865 ppb	48.103 ppb	101.672 %
Concentration RSD	2.7 %	2.4 %	1.1 %	1.9 %	2.1 %	1.2 %	1.9 %	0.8 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	47.120 ppb	45.591 ppb	99.052 ppb	49.776 ppb	99.173 %	1.738 ppb	47.876 ppb	100.850 %	48.734 ppb
Concentration per Run 1	46.494 ppb	46.480 ppb	100.349 ppb	49.432 ppb	96.994 %	1.780 ppb	48.998 ppb	98.507 %	50.524 ppb
Concentration per Run 2	47.461 ppb	45.004 ppb	96.131 ppb	49.178 ppb	98.447 %	1.745 ppb	48.361 ppb	97.715 %	48.110 ppb
Concentration per Run 3	47.405 ppb	45.289 ppb	100.677 ppb	50.717 ppb	102.078 %	1.690 ppb	46.269 ppb	106.327 %	47.567 ppb
Concentration RSD	1.2 %	1.7 %	2.6 %	1.7 %	2.6 %	2.6 %	3.0 %	4.7 %	3.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	79.908 ppb	110.005 %	106.934 %	43.881 ppb	47.072 ppb	114.006 %
Concentration per Run 1	82.749 ppb	111.221 %	107.968 %	40.988 ppb	44.166 ppb	123.985 %
Concentration per Run 2	78.195 ppb	107.401 %	102.487 %	44.544 ppb	48.546 ppb	108.475 %
Concentration per Run 3	78.779 ppb	111.395 %	110.347 %	46.112 ppb	48.505 ppb	109.556 %
Concentration RSD	3.1 %	2.1 %	3.8 %	6.0 %	5.3 %	7.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	83	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1822954-4 6020SL	Rack	2		
Analysis started at:	9/14/2023 8:37:00 PM	Vial	37		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.878 %	96.864 %	0.003 ppb	206,871.254 ppb	3,496.024 ppb	2.549 ppb	1,754.291 ppb	6,317.940 ppb	95.221 %
Concentration per Run 1	92.414 %	99.067 %	0.004 ppb	200,410.257 ppb	3,418.772 ppb	2.412 ppb	1,757.110 ppb	5,883.402 ppb	98.477 %
Concentration per Run 2	87.522 %	96.328 %	0.005 ppb	208,651.140 ppb	3,545.435 ppb	2.417 ppb	1,733.632 ppb	6,447.044 ppb	95.546 %
Concentration per Run 3	83.698 %	95.197 %	0.001 ppb	211,552.364 ppb	3,523.867 ppb	2.817 ppb	1,772.131 ppb	6,623.374 ppb	91.641 %
Concentration RSD	5.0 %	2.1 %	70.5 %	2.8 %	1.9 %	9.1 %	1.1 %	6.1 %	3.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.021 ppb	0.052 ppb	92.221 ppb	163.726 ppb	0.310 ppb	0.238 ppb	0.312 ppb	0.714 ppb	98.201 %
Concentration per Run 1	0.009 ppb	0.060 ppb	90.681 ppb	160.373 ppb	0.318 ppb	0.220 ppb	0.311 ppb	0.711 ppb	99.744 %
Concentration per Run 2	0.035 ppb	0.055 ppb	91.467 ppb	165.192 ppb	0.299 ppb	0.253 ppb	0.324 ppb	0.688 ppb	97.845 %
Concentration per Run 3	0.018 ppb	0.042 ppb	94.516 ppb	165.612 ppb	0.312 ppb	0.242 ppb	0.300 ppb	0.743 ppb	97.015 %
Concentration RSD	63.1 %	18.5 %	2.2 %	1.8 %	3.1 %	7.1 %	3.9 %	3.9 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.470 ppb	0.543 ppb	522.180 ppb	3.343 ppb	91.792 %	0.003 ppb	0.003 ppb	94.142 %	0.582 ppb
Concentration per Run 1	0.413 ppb	0.539 ppb	521.000 ppb	2.661 ppb	91.629 %	0.002 ppb	0.003 ppb	91.533 %	0.553 ppb
Concentration per Run 2	0.453 ppb	0.493 ppb	517.196 ppb	3.412 ppb	92.599 %	0.003 ppb	0.004 ppb	94.412 %	0.579 ppb
Concentration per Run 3	0.546 ppb	0.597 ppb	528.343 ppb	3.955 ppb	91.148 %	0.003 ppb	0.002 ppb	96.480 %	0.615 ppb
Concentration RSD	14.5 %	9.7 %	1.1 %	19.4 %	0.8 %	6.0 %	37.4 %	2.6 %	5.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	366.492 ppb	104.027 %	103.073 %	0.202 ppb	0.022 ppb	95.754 %
Concentration per Run 1	387.965 ppb	102.307 %	104.701 %	0.156 ppb	0.023 ppb	100.870 %
Concentration per Run 2	354.125 ppb	105.224 %	103.217 %	0.240 ppb	0.023 ppb	93.233 %
Concentration per Run 3	357.387 ppb	104.550 %	101.300 %	0.210 ppb	0.021 ppb	93.159 %
Concentration RSD	5.1 %	1.5 %	1.7 %	21.3 %	5.4 %	4.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 84
Analysis label: L2350359-16 6020SL
Analysis started at: 9/14/2023 8:41:39 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 35
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.493 %	97.916 %	0.001 ppb	210,590.017 ppb	3,524.582 ppb	2.399 ppb	1,801.420 ppb	6,436.298 ppb	92.775 %
Concentration per Run 1	89.322 %	93.352 %	0.002 ppb	215,198.859 ppb	3,482.990 ppb	2.316 ppb	1,827.676 ppb	7,166.783 ppb	93.762 %
Concentration per Run 2	83.969 %	102.223 %	-0.001 ppb	209,205.450 ppb	3,525.620 ppb	2.561 ppb	1,818.411 ppb	5,865.211 ppb	93.437 %
Concentration per Run 3	80.187 %	98.174 %	0.001 ppb	207,365.742 ppb	3,565.138 ppb	2.321 ppb	1,758.173 ppb	6,276.901 ppb	91.125 %
Concentration RSD	5.4 %	4.5 %	144.2 %	1.9 %	1.2 %	5.8 %	2.1 %	10.3 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.016 ppb	0.058 ppb	89.772 ppb	157.567 ppb	0.301 ppb	0.224 ppb	0.307 ppb	0.523 ppb	99.069 %
Concentration per Run 1	0.010 ppb	0.066 ppb	86.603 ppb	155.714 ppb	0.298 ppb	0.223 ppb	0.316 ppb	0.463 ppb	96.572 %
Concentration per Run 2	0.028 ppb	0.047 ppb	90.397 ppb	156.165 ppb	0.300 ppb	0.207 ppb	0.289 ppb	0.516 ppb	104.385 %
Concentration per Run 3	0.012 ppb	0.060 ppb	92.317 ppb	160.823 ppb	0.304 ppb	0.242 ppb	0.316 ppb	0.590 ppb	96.250 %
Concentration RSD	59.6 %	16.8 %	3.2 %	1.8 %	0.9 %	7.8 %	5.1 %	12.2 %	4.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.456 ppb	0.126 ppb	524.767 ppb	1.584 ppb	90.170 %	0.001 ppb	0.002 ppb	94.456 %	0.375 ppb
Concentration per Run 1	0.398 ppb	0.025 ppb	510.132 ppb	1.217 ppb	90.249 %	0.001 ppb	0.003 ppb	90.474 %	0.324 ppb
Concentration per Run 2	0.472 ppb	0.130 ppb	544.449 ppb	1.593 ppb	91.488 %	0.001 ppb	0.001 ppb	101.318 %	0.398 ppb
Concentration per Run 3	0.498 ppb	0.221 ppb	519.719 ppb	1.942 ppb	88.773 %	0.002 ppb	0.003 ppb	91.577 %	0.402 ppb
Concentration RSD	11.4 %	78.0 %	3.4 %	22.9 %	1.5 %	54.0 %	59.0 %	6.3 %	11.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	365.500 ppb	103.489 %	103.643 %	0.052 ppb	0.013 ppb	92.967 %
Concentration per Run 1	358.511 ppb	99.389 %	102.493 %	0.035 ppb	0.011 ppb	94.058 %
Concentration per Run 2	373.685 ppb	108.605 %	107.473 %	0.059 ppb	0.014 ppb	95.513 %
Concentration per Run 3	364.302 ppb	102.474 %	100.964 %	0.062 ppb	0.013 ppb	89.330 %
Concentration RSD	2.1 %	4.5 %	3.3 %	29.0 %	12.8 %	3.5 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	85	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350359-17 6020SL	Rack	2		
Analysis started at:	9/14/2023 8:46:19 PM	Vial	40		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.311 %	97.182 %	0.011 ppb	103,214.060 ppb	24,762.895 ppb	2.003 ppb	5,709.568 ppb	66,425.089 ppb	92.729 %
Concentration per Run 1	89.508 %	97.519 %	0.010 ppb	102,631.904 ppb	24,524.572 ppb	1.926 ppb	5,939.594 ppb	68,960.877 ppb	97.491 %
Concentration per Run 2	84.298 %	96.448 %	0.014 ppb	102,670.982 ppb	24,516.929 ppb	2.045 ppb	5,364.041 ppb	63,382.622 ppb	96.212 %
Concentration per Run 3	82.127 %	97.579 %	0.009 ppb	104,339.294 ppb	25,247.185 ppb	2.038 ppb	5,825.069 ppb	66,931.767 ppb	84.485 %
Concentration RSD	4.4 %	0.7 %	21.7 %	0.9 %	1.7 %	3.3 %	5.3 %	4.3 %	7.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.190 ppb	0.130 ppb	1,213.838 ppb	2,312.772 ppb	0.197 ppb	0.518 ppb	0.286 ppb	227.558 ppb	95.838 %
Concentration per Run 1	0.205 ppb	0.127 ppb	1,223.142 ppb	2,297.519 ppb	0.187 ppb	0.490 ppb	0.302 ppb	228.667 ppb	94.801 %
Concentration per Run 2	0.171 ppb	0.130 ppb	1,175.467 ppb	2,371.866 ppb	0.206 ppb	0.556 ppb	0.283 ppb	230.088 ppb	95.545 %
Concentration per Run 3	0.193 ppb	0.133 ppb	1,242.904 ppb	2,268.930 ppb	0.199 ppb	0.508 ppb	0.273 ppb	223.919 ppb	97.169 %
Concentration RSD	9.2 %	2.1 %	2.9 %	2.3 %	4.9 %	6.6 %	5.2 %	1.4 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.581 ppb	0.070 ppb	1,488.913 ppb	5.533 ppb	89.286 %	0.001 ppb	0.028 ppb	92.185 %	0.297 ppb
Concentration per Run 1	0.550 ppb	0.015 ppb	1,473.630 ppb	4.177 ppb	89.116 %	0.001 ppb	0.027 ppb	89.202 %	0.270 ppb
Concentration per Run 2	0.525 ppb	0.123 ppb	1,466.242 ppb	5.641 ppb	88.685 %	0.002 ppb	0.032 ppb	91.623 %	0.308 ppb
Concentration per Run 3	0.668 ppb	0.071 ppb	1,526.867 ppb	6.781 ppb	90.056 %	0.001 ppb	0.026 ppb	95.730 %	0.315 ppb
Concentration RSD	13.2 %	77.4 %	2.2 %	23.6 %	0.8 %	12.4 %	11.1 %	3.6 %	8.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	416.360 ppb	100.958 %	101.296 %	0.027 ppb	0.017 ppb	91.504 %
Concentration per Run 1	426.647 ppb	100.158 %	100.048 %	0.011 ppb	0.016 ppb	95.625 %
Concentration per Run 2	414.319 ppb	98.194 %	100.679 %	0.035 ppb	0.019 ppb	90.885 %
Concentration per Run 3	408.114 ppb	104.522 %	103.161 %	0.035 ppb	0.017 ppb	88.001 %
Concentration RSD	2.3 %	3.2 %	1.6 %	51.0 %	9.1 %	4.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	86	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350359-18 6020SL	Rack	2		
Analysis started at:	9/14/2023 8:50:59 PM	Vial	41		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	78.545 %	89.025 %	0.003 ppb	543,638.387 ppb	1,496.245 ppb	5.480 ppb	1,237.462 ppb	-66.501 ppb	86.879 %
Concentration per Run 1	83.418 %	89.005 %	0.004 ppb	535,989.266 ppb	1,485.447 ppb	5.505 ppb	1,245.693 ppb	96.985 ppb	90.677 %
Concentration per Run 2	77.653 %	88.529 %	0.004 ppb	546,499.596 ppb	1,511.920 ppb	5.408 ppb	1,208.651 ppb	-83.085 ppb	86.034 %
Concentration per Run 3	74.564 %	89.541 %	0.002 ppb	548,426.300 ppb	1,491.369 ppb	5.526 ppb	1,258.042 ppb	-213.404 ppb	83.927 %
Concentration RSD	5.7 %	0.6 %	35.7 %	1.2 %	0.9 %	1.1 %	2.1 %	234.4 %	4.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.082 ppb	0.082 ppb	8.132 ppb	70.090 ppb	0.013 ppb	0.081 ppb	0.458 ppb	1.215 ppb	95.284 %
Concentration per Run 1	0.100 ppb	0.104 ppb	8.168 ppb	70.487 ppb	0.016 ppb	0.096 ppb	0.513 ppb	1.239 ppb	89.903 %
Concentration per Run 2	0.062 ppb	0.070 ppb	8.028 ppb	68.248 ppb	0.010 ppb	0.081 ppb	0.429 ppb	1.234 ppb	96.902 %
Concentration per Run 3	0.084 ppb	0.074 ppb	8.200 ppb	71.536 ppb	0.013 ppb	0.066 ppb	0.432 ppb	1.172 ppb	99.047 %
Concentration RSD	23.1 %	22.7 %	1.1 %	2.4 %	23.1 %	18.4 %	10.4 %	3.1 %	5.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.295 ppb	0.027 ppb	354.399 ppb	0.626 ppb	78.917 %	0.001 ppb	0.001 ppb	84.876 %	0.192 ppb
Concentration per Run 1	0.353 ppb	0.024 ppb	356.464 ppb	0.439 ppb	76.201 %	0.001 ppb	0.000 ppb	83.771 %	0.152 ppb
Concentration per Run 2	0.312 ppb	0.000 ppb	352.365 ppb	0.580 ppb	80.479 %	0.001 ppb	0.000 ppb	84.947 %	0.205 ppb
Concentration per Run 3	0.218 ppb	0.057 ppb	354.367 ppb	0.859 ppb	80.071 %	0.000 ppb	0.001 ppb	85.910 %	0.219 ppb
Concentration RSD	23.6 %	107.2 %	0.6 %	34.2 %	3.0 %	38.8 %	72.5 %	1.3 %	18.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	2,205.426 ppb	92.947 %	94.732 %	0.013 ppb	0.021 ppb	81.109 %
Concentration per Run 1	2,143.929 ppb	90.202 %	90.586 %	0.006 ppb	0.021 ppb	83.635 %
Concentration per Run 2	2,205.589 ppb	92.959 %	95.405 %	0.016 ppb	0.022 ppb	79.597 %
Concentration per Run 3	2,266.759 ppb	95.682 %	98.207 %	0.018 ppb	0.020 ppb	80.095 %
Concentration RSD	2.8 %	2.9 %	4.1 %	49.2 %	4.0 %	2.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	87	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350359-19 6020SL	Rack	2		
Analysis started at:	9/14/2023 8:55:38 PM	Vial	42		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.759 %	91.347 %	0.003 ppb	230,955.358 ppb	3,263.794 ppb	3.521 ppb	2,046.224 ppb	11,767.595 ppb	92.242 %
Concentration per Run 1	89.745 %	91.327 %	0.002 ppb	234,267.402 ppb	3,261.865 ppb	3.294 ppb	2,159.389 ppb	12,534.161 ppb	95.888 %
Concentration per Run 2	84.134 %	92.518 %	0.003 ppb	229,980.289 ppb	3,300.771 ppb	3.785 ppb	2,100.053 ppb	11,956.667 ppb	89.643 %
Concentration per Run 3	80.399 %	90.196 %	0.004 ppb	228,618.384 ppb	3,228.745 ppb	3.485 ppb	1,879.231 ppb	10,811.958 ppb	91.197 %
Concentration RSD	5.6 %	1.3 %	31.0 %	1.3 %	1.1 %	7.0 %	7.2 %	7.4 %	3.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.098 ppb	0.150 ppb	35.748 ppb	494.139 ppb	0.034 ppb	0.131 ppb	0.563 ppb	1.831 ppb	91.430 %
Concentration per Run 1	0.118 ppb	0.144 ppb	38.326 ppb	511.155 ppb	0.029 ppb	0.122 ppb	0.620 ppb	1.904 ppb	89.123 %
Concentration per Run 2	0.076 ppb	0.152 ppb	35.349 ppb	484.493 ppb	0.041 ppb	0.130 ppb	0.532 ppb	1.809 ppb	94.123 %
Concentration per Run 3	0.101 ppb	0.153 ppb	33.567 ppb	486.769 ppb	0.032 ppb	0.142 ppb	0.537 ppb	1.781 ppb	91.044 %
Concentration RSD	21.6 %	3.3 %	6.7 %	3.0 %	18.8 %	7.5 %	8.7 %	3.5 %	2.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.238 ppb	-0.011 ppb	649.189 ppb	0.382 ppb	85.793 %	0.001 ppb	0.003 ppb	88.772 %	0.103 ppb
Concentration per Run 1	0.286 ppb	-0.007 ppb	670.594 ppb	0.238 ppb	86.441 %	0.001 ppb	0.004 ppb	89.289 %	0.105 ppb
Concentration per Run 2	0.264 ppb	-0.041 ppb	654.276 ppb	0.398 ppb	87.166 %	0.000 ppb	0.002 ppb	90.829 %	0.105 ppb
Concentration per Run 3	0.163 ppb	0.016 ppb	622.698 ppb	0.509 ppb	83.772 %	0.001 ppb	0.004 ppb	86.199 %	0.099 ppb
Concentration RSD	27.5 %	270.1 %	3.8 %	35.6 %	2.1 %	58.6 %	31.0 %	2.7 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	782.052 ppb	97.748 %	98.624 %	0.008 ppb	0.035 ppb	88.712 %
Concentration per Run 1	794.698 ppb	99.201 %	99.043 %	0.000 ppb	0.033 ppb	94.020 %
Concentration per Run 2	787.044 ppb	98.689 %	100.494 %	0.011 ppb	0.035 ppb	87.923 %
Concentration per Run 3	764.413 ppb	95.354 %	96.334 %	0.013 ppb	0.036 ppb	84.194 %
Concentration RSD	2.0 %	2.1 %	2.1 %	86.8 %	4.5 %	5.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 88
Analysis label: WG1822954-6d5 6020SL
Analysis started at: 9/14/2023 9:00:18 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 39
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.630 %	96.031 %	0.000 ppb	43,868.584 ppb	758.769 ppb	0.572 ppb	403.538 ppb	1,832.670 ppb	90.682 %
Concentration per Run 1	92.564 %	100.913 %	-0.002 ppb	44,982.742 ppb	773.724 ppb	0.616 ppb	423.940 ppb	1,925.471 ppb	84.804 %
Concentration per Run 2	88.153 %	95.078 %	-0.001 ppb	43,304.363 ppb	757.957 ppb	0.538 ppb	402.928 ppb	1,769.722 ppb	94.323 %
Concentration per Run 3	85.173 %	92.101 %	0.002 ppb	43,318.645 ppb	744.626 ppb	0.561 ppb	383.747 ppb	1,802.818 ppb	92.920 %
Concentration RSD	4.2 %	4.7 %	822.8 %	2.2 %	1.9 %	7.0 %	5.0 %	4.5 %	5.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.013 ppb	0.014 ppb	22.097 ppb	37.456 ppb	0.057 ppb	0.046 ppb	0.067 ppb	-0.122 ppb	100.132 %
Concentration per Run 1	0.015 ppb	0.007 ppb	22.216 ppb	36.153 ppb	0.056 ppb	0.032 ppb	0.058 ppb	-0.135 ppb	108.120 %
Concentration per Run 2	0.013 ppb	0.014 ppb	21.679 ppb	38.255 ppb	0.055 ppb	0.054 ppb	0.072 ppb	-0.160 ppb	101.407 %
Concentration per Run 3	0.011 ppb	0.022 ppb	22.396 ppb	37.959 ppb	0.060 ppb	0.053 ppb	0.072 ppb	-0.070 ppb	90.867 %
Concentration RSD	16.6 %	52.2 %	1.7 %	3.0 %	5.1 %	26.6 %	11.5 %	38.0 %	8.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.113 ppb	0.017 ppb	101.733 ppb	0.282 ppb	93.677 %	0.001 ppb	0.000 ppb	95.510 %	0.072 ppb
Concentration per Run 1	0.192 ppb	0.016 ppb	105.224 ppb	0.175 ppb	95.900 %	0.001 ppb	0.000 ppb	99.645 %	0.062 ppb
Concentration per Run 2	0.046 ppb	-0.015 ppb	100.992 ppb	0.299 ppb	93.139 %	0.001 ppb	0.001 ppb	98.591 %	0.059 ppb
Concentration per Run 3	0.100 ppb	0.051 ppb	98.983 ppb	0.370 ppb	91.992 %	0.000 ppb	0.000 ppb	88.295 %	0.094 ppb
Concentration RSD	65.1 %	188.5 %	3.1 %	35.1 %	2.1 %	91.4 %	292.3 %	6.6 %	26.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	76.573 ppb	94.655 %	101.620 %	0.004 ppb	0.003 ppb	98.906 %
Concentration per Run 1	80.736 ppb	92.904 %	106.330 %	-0.003 ppb	0.002 ppb	105.953 %
Concentration per Run 2	75.288 ppb	93.013 %	100.561 %	0.005 ppb	0.003 ppb	97.526 %
Concentration per Run 3	73.695 ppb	98.048 %	97.969 %	0.010 ppb	0.003 ppb	93.238 %
Concentration RSD	4.8 %	3.1 %	4.2 %	162.6 %	23.8 %	6.5 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	89	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 9:04:57 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.155 %	95.118 %	58.918 ppb	6,201.842 ppb	6,063.914 ppb	64.889 ppb	6,333.363 ppb	5,777.882 ppb	101.792 %
Concentration per Run 1	90.265 %	99.603 %	58.595 ppb	6,382.513 ppb	6,254.901 ppb	68.351 ppb	6,936.979 ppb	6,160.546 ppb	105.367 %
Concentration per Run 2	86.487 %	94.185 %	58.921 ppb	6,207.627 ppb	6,001.886 ppb	62.995 ppb	6,288.940 ppb	5,628.235 ppb	104.616 %
Concentration per Run 3	84.714 %	91.565 %	59.237 ppb	6,015.387 ppb	5,934.955 ppb	63.322 ppb	5,774.169 ppb	5,544.865 ppb	95.392 %
Recovery Percentage 1			98.196 %	103.364 %	101.065 %	108.149 %	105.556 %	96.298 %	
Concentration RSD	3.3 %	4.3 %	0.5 %	3.0 %	2.8 %	4.6 %	9.2 %	5.8 %	5.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	54.780 ppb	53.896 ppb	57.126 ppb	6,101.886 ppb	63.567 ppb	59.828 ppb	58.659 ppb	59.216 ppb	101.674 %
Concentration per Run 1	55.582 ppb	54.350 ppb	59.269 ppb	6,093.978 ppb	63.874 ppb	59.009 ppb	56.430 ppb	59.776 ppb	106.380 %
Concentration per Run 2	56.050 ppb	53.568 ppb	55.498 ppb	6,117.585 ppb	62.111 ppb	60.530 ppb	59.418 ppb	58.732 ppb	101.579 %
Concentration per Run 3	52.708 ppb	53.770 ppb	56.612 ppb	6,094.095 ppb	64.717 ppb	59.944 ppb	60.129 ppb	59.141 ppb	97.064 %
Recovery Percentage 1	91.300 %	89.827 %	95.211 %	101.698 %	105.946 %	99.713 %	97.765 %	98.693 %	
Concentration RSD	3.3 %	0.8 %	3.4 %	0.2 %	2.1 %	1.3 %	3.3 %	0.9 %	4.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	59.585 ppb	58.899 ppb	57.272 ppb	51.276 ppb	96.363 %	57.653 ppb	58.269 ppb	97.183 %	55.932 ppb
Concentration per Run 1	60.031 ppb	62.903 ppb	60.124 ppb	52.552 ppb	97.375 %	57.172 ppb	57.868 ppb	101.088 %	57.662 ppb
Concentration per Run 2	59.634 ppb	57.419 ppb	58.442 ppb	50.495 ppb	94.552 %	58.885 ppb	57.766 ppb	100.227 %	54.529 ppb
Concentration per Run 3	59.091 ppb	56.375 ppb	53.250 ppb	50.781 ppb	97.163 %	56.904 ppb	59.172 ppb	90.234 %	55.606 ppb
Recovery Percentage 1	99.309 %	98.165 %	95.453 %	85.460 %		96.089 %	97.115 %		93.221 %
Concentration RSD	0.8 %	6.0 %	6.3 %	2.2 %	1.6 %	1.9 %	1.3 %	6.2 %	2.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.837 ppb	101.110 %	99.653 %	56.350 ppb	57.781 ppb	99.618 %
Concentration per Run 1	61.143 ppb	103.535 %	101.551 %	54.209 ppb	54.816 ppb	104.800 %
Concentration per Run 2	56.103 ppb	102.144 %	100.625 %	55.432 ppb	59.081 ppb	100.734 %
Concentration per Run 3	56.265 ppb	97.651 %	96.782 %	59.408 ppb	59.445 ppb	93.319 %
Recovery Percentage 1	96.395 %			93.916 %	96.301 %	
Concentration RSD	5.0 %	3.0 %	2.5 %	4.8 %	4.5 %	5.8 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	90	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 9:09:40 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.884 %	97.718 %	0.004 ppb	97.667 ppb	-0.831 ppb	-0.484 ppb	0.747 ppb	0.301 ppb	88.549 %
Concentration per Run 1	89.833 %	94.721 %	0.003 ppb	115.331 ppb	-0.705 ppb	-0.477 ppb	5.288 ppb	-1.929 ppb	92.102 %
Concentration per Run 2	87.898 %	101.389 %	0.004 ppb	90.897 ppb	-0.783 ppb	-0.649 ppb	-0.352 ppb	2.759 ppb	89.470 %
Concentration per Run 3	82.921 %	97.043 %	0.004 ppb	86.772 ppb	-1.004 ppb	-0.324 ppb	-2.694 ppb	0.074 ppb	84.076 %
Recovery Percentage 1			0.706 %	97.667 %	-1.187 %	-4.835 %	0.747 %	0.301 %	
Concentration RSD	4.1 %	3.5 %	18.5 %	15.8 %	18.7 %	33.6 %	549.0 %	780.4 %	4.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.012 ppb	-0.002 ppb	0.024 ppb	13.738 ppb	0.001 ppb	0.109 ppb	0.016 ppb	0.169 ppb	96.829 %
Concentration per Run 1	0.011 ppb	-0.005 ppb	0.026 ppb	12.947 ppb	0.002 ppb	0.098 ppb	0.014 ppb	0.152 ppb	99.195 %
Concentration per Run 2	0.009 ppb	-0.003 ppb	0.033 ppb	13.936 ppb	0.000 ppb	0.116 ppb	0.012 ppb	0.175 ppb	96.464 %
Concentration per Run 3	0.016 ppb	0.002 ppb	0.013 ppb	14.332 ppb	0.001 ppb	0.113 ppb	0.022 ppb	0.179 ppb	94.828 %
Recovery Percentage 1	0.247 %	-0.218 %	2.381 %	27.476 %	0.203 %	5.449 %	1.633 %	3.373 %	
Concentration RSD	29.0 %	153.1 %	41.7 %	5.2 %	68.7 %	9.0 %	31.6 %	8.8 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.088 ppb	0.682 ppb	0.002 ppb	1.352 ppb	97.033 %	0.004 ppb	0.001 ppb	95.500 %	0.091 ppb
Concentration per Run 1	0.126 ppb	0.663 ppb	0.001 ppb	1.096 ppb	96.800 %	0.004 ppb	0.002 ppb	97.201 %	0.076 ppb
Concentration per Run 2	0.096 ppb	0.684 ppb	-0.002 ppb	1.408 ppb	98.648 %	0.004 ppb	0.000 ppb	96.655 %	0.097 ppb
Concentration per Run 3	0.041 ppb	0.700 ppb	0.006 ppb	1.553 ppb	95.652 %	0.005 ppb	0.000 ppb	92.644 %	0.102 ppb
Recovery Percentage 1	17.520 %	13.644 %	0.020 %	67.617 %		1.007 %	0.301 %		2.287 %
Concentration RSD	48.8 %	2.7 %	194.4 %	17.3 %	1.6 %	18.9 %	202.6 %	2.6 %	15.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.030 ppb	96.137 %	98.763 %	0.109 ppb	0.013 ppb	98.487 %
Concentration per Run 1	0.043 ppb	99.895 %	100.565 %	0.093 ppb	0.014 ppb	100.705 %
Concentration per Run 2	0.017 ppb	99.609 %	101.936 %	0.120 ppb	0.012 ppb	100.013 %
Concentration per Run 3	0.031 ppb	88.909 %	93.789 %	0.116 ppb	0.014 ppb	94.744 %
Recovery Percentage 1	6.057 %			10.948 %	1.346 %	
Concentration RSD	43.1 %	6.5 %	4.4 %	13.5 %	10.0 %	3.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	91	User name	ALPHALAB\Metals-Instrument	Comment	fb
Analysis label:	L2350435-01 6020SL	Rack	2		
Analysis started at:	9/14/2023 9:21:56 PM	Vial	48		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	91.776 %	104.584 %	0.000 ppb	105.734 ppb	1.126 ppb	1.348 ppb	11.811 ppb	23.781 ppb	97.598 %
Concentration per Run 1	95.115 %	104.366 %	0.002 ppb	112.488 ppb	1.331 ppb	1.195 ppb	10.242 ppb	21.782 ppb	100.629 %
Concentration per Run 2	91.266 %	102.401 %	0.002 ppb	101.176 ppb	0.839 ppb	1.566 ppb	13.246 ppb	24.813 ppb	96.446 %
Concentration per Run 3	88.946 %	106.986 %	-0.002 ppb	103.537 ppb	1.207 ppb	1.284 ppb	11.946 ppb	24.747 ppb	95.720 %
Concentration RSD	3.4 %	2.2 %	421.5 %	5.6 %	22.7 %	14.4 %	12.8 %	7.3 %	2.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.006 ppb	0.119 ppb	0.025 ppb	6.745 ppb	0.015 ppb	0.023 ppb	0.117 ppb	-0.740 ppb	104.727 %
Concentration per Run 1	0.003 ppb	0.135 ppb	0.031 ppb	7.420 ppb	0.019 ppb	0.020 ppb	0.122 ppb	-0.729 ppb	97.651 %
Concentration per Run 2	0.011 ppb	0.110 ppb	0.006 ppb	6.844 ppb	0.014 ppb	0.009 ppb	0.126 ppb	-0.747 ppb	108.033 %
Concentration per Run 3	0.003 ppb	0.111 ppb	0.037 ppb	5.970 ppb	0.013 ppb	0.040 ppb	0.104 ppb	-0.745 ppb	108.498 %
Concentration RSD	81.8 %	11.9 %	66.8 %	10.8 %	22.9 %	67.2 %	9.9 %	1.3 %	5.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.030 ppb	0.038 ppb	0.017 ppb	0.245 ppb	98.780 %	0.001 ppb	0.000 ppb	100.560 %	0.518 ppb
Concentration per Run 1	0.066 ppb	0.043 ppb	0.022 ppb	0.165 ppb	96.171 %	0.001 ppb	0.000 ppb	93.929 %	0.505 ppb
Concentration per Run 2	0.014 ppb	0.009 ppb	0.019 ppb	0.230 ppb	99.632 %	0.001 ppb	0.001 ppb	105.833 %	0.509 ppb
Concentration per Run 3	0.010 ppb	0.062 ppb	0.009 ppb	0.341 ppb	100.536 %	0.001 ppb	0.000 ppb	101.920 %	0.539 ppb
Concentration RSD	105.0 %	71.4 %	40.1 %	36.4 %	2.3 %	19.7 %	3,519.0 %	6.0 %	3.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.013 ppb	96.191 %	100.849 %	0.011 ppb	0.007 ppb	104.801 %
Concentration per Run 1	0.015 ppb	89.028 %	95.579 %	0.005 ppb	0.007 ppb	108.122 %
Concentration per Run 2	0.016 ppb	96.245 %	102.599 %	0.012 ppb	0.006 ppb	105.194 %
Concentration per Run 3	0.007 ppb	103.299 %	104.368 %	0.016 ppb	0.008 ppb	101.087 %
Concentration RSD	37.4 %	7.4 %	4.6 %	50.3 %	10.8 %	3.4 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	92	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350359-20 6020SL	Rack	2		
Analysis started at:	9/14/2023 9:26:36 PM	Vial	43		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.408 %	97.222 %	0.008 ppb	190,161.972 ppb	5,773.937 ppb	3.238 ppb	2,068.647 ppb	11,145.938 ppb	90.659 %
Concentration per Run 1	88.274 %	91.923 %	0.004 ppb	198,605.490 ppb	6,012.404 ppb	3.280 ppb	2,241.342 ppb	11,944.935 ppb	94.496 %
Concentration per Run 2	83.673 %	102.580 %	0.011 ppb	187,915.336 ppb	5,599.509 ppb	3.022 ppb	2,056.555 ppb	11,576.895 ppb	82.099 %
Concentration per Run 3	81.276 %	97.162 %	0.009 ppb	183,965.091 ppb	5,709.899 ppb	3.413 ppb	1,908.045 ppb	9,915.984 ppb	95.381 %
Concentration RSD	4.2 %	5.5 %	45.5 %	4.0 %	3.7 %	6.1 %	8.1 %	9.7 %	8.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.034 ppb	0.131 ppb	68.390 ppb	316.262 ppb	0.008 ppb	0.052 ppb	0.278 ppb	0.205 ppb	99.588 %
Concentration per Run 1	0.035 ppb	0.143 ppb	70.529 ppb	338.461 ppb	0.007 ppb	0.050 ppb	0.266 ppb	0.271 ppb	92.362 %
Concentration per Run 2	0.034 ppb	0.109 ppb	69.519 ppb	310.932 ppb	0.012 ppb	0.046 ppb	0.285 ppb	0.232 ppb	102.656 %
Concentration per Run 3	0.033 ppb	0.140 ppb	65.122 ppb	299.394 ppb	0.006 ppb	0.059 ppb	0.282 ppb	0.113 ppb	103.746 %
Concentration RSD	3.6 %	14.5 %	4.2 %	6.3 %	42.4 %	12.0 %	3.6 %	39.9 %	6.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.074 ppb	0.073 ppb	700.771 ppb	0.211 ppb	88.507 %	0.001 ppb	0.001 ppb	94.695 %	0.034 ppb
Concentration per Run 1	0.114 ppb	0.033 ppb	731.905 ppb	0.149 ppb	87.714 %	0.002 ppb	0.002 ppb	91.541 %	0.021 ppb
Concentration per Run 2	0.058 ppb	0.092 ppb	676.568 ppb	0.204 ppb	90.456 %	0.001 ppb	0.000 ppb	99.770 %	0.041 ppb
Concentration per Run 3	0.052 ppb	0.093 ppb	693.840 ppb	0.280 ppb	87.352 %	0.001 ppb	0.001 ppb	92.775 %	0.041 ppb
Concentration RSD	46.1 %	47.6 %	4.0 %	31.2 %	1.9 %	23.0 %	70.0 %	4.7 %	32.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	411.113 ppb	99.216 %	100.599 %	0.009 ppb	0.016 ppb	89.819 %
Concentration per Run 1	404.070 ppb	97.195 %	96.596 %	0.004 ppb	0.016 ppb	93.024 %
Concentration per Run 2	408.823 ppb	101.865 %	105.121 %	0.011 ppb	0.017 ppb	89.395 %
Concentration per Run 3	420.446 ppb	98.587 %	100.079 %	0.012 ppb	0.015 ppb	87.037 %
Concentration RSD	2.0 %	2.4 %	4.3 %	48.1 %	8.2 %	3.4 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	93	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350359-21 6020SL	Rack	2		
Analysis started at:	9/14/2023 9:31:15 PM	Vial	44		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.884 %	98.353 %	0.008 ppb	76,984.961 ppb	15,050.646 ppb	3.171 ppb	2,790.342 ppb	46,429.281 ppb	95.726 %
Concentration per Run 1	90.969 %	93.649 %	0.009 ppb	79,971.366 ppb	15,270.618 ppb	3.024 ppb	2,833.165 ppb	47,161.800 ppb	97.236 %
Concentration per Run 2	84.875 %	101.568 %	0.005 ppb	75,936.901 ppb	15,160.628 ppb	3.254 ppb	2,870.562 ppb	47,658.350 ppb	94.349 %
Concentration per Run 3	81.808 %	99.841 %	0.010 ppb	75,046.618 ppb	14,720.692 ppb	3.237 ppb	2,667.298 ppb	44,467.694 ppb	95.594 %
Concentration RSD	5.4 %	4.2 %	32.9 %	3.4 %	1.9 %	4.0 %	3.9 %	3.7 %	1.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.043 ppb	0.172 ppb	385.069 ppb	17.112 ppb	0.041 ppb	1.653 ppb	1.848 ppb	261.573 ppb	101.518 %
Concentration per Run 1	0.043 ppb	0.176 ppb	374.064 ppb	15.255 ppb	0.048 ppb	1.561 ppb	1.824 ppb	264.720 ppb	99.220 %
Concentration per Run 2	0.065 ppb	0.191 ppb	388.749 ppb	17.825 ppb	0.039 ppb	1.638 ppb	1.862 ppb	256.812 ppb	105.622 %
Concentration per Run 3	0.021 ppb	0.150 ppb	392.393 ppb	18.255 ppb	0.037 ppb	1.760 ppb	1.860 ppb	263.187 ppb	99.711 %
Concentration RSD	50.6 %	11.9 %	2.5 %	9.5 %	14.3 %	6.1 %	1.2 %	1.6 %	3.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.270 ppb	0.123 ppb	281.354 ppb	0.185 ppb	93.253 %	0.003 ppb	0.108 ppb	99.083 %	0.080 ppb
Concentration per Run 1	0.274 ppb	0.083 ppb	273.852 ppb	0.130 ppb	93.078 %	0.003 ppb	0.104 ppb	95.525 %	0.037 ppb
Concentration per Run 2	0.279 ppb	0.178 ppb	292.221 ppb	0.174 ppb	95.704 %	0.003 ppb	0.108 ppb	106.579 %	0.083 ppb
Concentration per Run 3	0.257 ppb	0.109 ppb	277.989 ppb	0.250 ppb	90.976 %	0.004 ppb	0.110 ppb	95.146 %	0.119 ppb
Concentration RSD	4.2 %	40.0 %	3.4 %	32.7 %	2.5 %	17.0 %	2.8 %	6.6 %	51.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.491 ppb	99.183 %	102.659 %	0.008 ppb	0.018 ppb	92.239 %
Concentration per Run 1	56.577 ppb	99.353 %	99.422 %	0.003 ppb	0.016 ppb	96.706 %
Concentration per Run 2	59.230 ppb	95.584 %	108.443 %	0.010 ppb	0.018 ppb	90.637 %
Concentration per Run 3	56.666 ppb	102.611 %	100.112 %	0.011 ppb	0.019 ppb	89.374 %
Concentration RSD	2.6 %	3.5 %	4.9 %	55.6 %	8.3 %	4.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	94	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350359-22 6020SL	Rack	2		
Analysis started at:	9/14/2023 9:35:55 PM	Vial	45		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.100 %	97.440 %	0.003 ppb	201,728.017 ppb	6,132.879 ppb	4.228 ppb	1,847.525 ppb	13,846.790 ppb	89.392 %
Concentration per Run 1	87.830 %	95.257 %	0.002 ppb	203,666.689 ppb	6,163.736 ppb	4.239 ppb	1,918.879 ppb	14,956.945 ppb	84.990 %
Concentration per Run 2	83.808 %	106.033 %	0.003 ppb	197,844.216 ppb	5,977.380 ppb	4.358 ppb	1,822.095 ppb	13,301.170 ppb	91.138 %
Concentration per Run 3	80.661 %	91.030 %	0.006 ppb	203,673.145 ppb	6,257.521 ppb	4.087 ppb	1,801.600 ppb	13,282.255 ppb	92.047 %
Concentration RSD	4.3 %	7.9 %	63.8 %	1.7 %	2.3 %	3.2 %	3.4 %	6.9 %	4.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.024 ppb	0.174 ppb	75.318 ppb	309.276 ppb	0.035 ppb	0.062 ppb	0.242 ppb	0.360 ppb	98.438 %
Concentration per Run 1	0.010 ppb	0.177 ppb	73.725 ppb	315.094 ppb	0.035 ppb	0.063 ppb	0.268 ppb	0.366 ppb	93.375 %
Concentration per Run 2	0.025 ppb	0.156 ppb	75.175 ppb	301.376 ppb	0.035 ppb	0.049 ppb	0.214 ppb	0.333 ppb	106.567 %
Concentration per Run 3	0.038 ppb	0.189 ppb	77.055 ppb	311.358 ppb	0.035 ppb	0.074 ppb	0.243 ppb	0.381 ppb	95.373 %
Concentration RSD	57.5 %	9.5 %	2.2 %	2.3 %	0.5 %	19.7 %	11.2 %	6.8 %	7.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.154 ppb	-0.032 ppb	614.854 ppb	0.362 ppb	88.197 %	0.000 ppb	0.000 ppb	94.905 %	0.001 ppb
Concentration per Run 1	0.187 ppb	-0.043 ppb	607.179 ppb	0.302 ppb	86.931 %	0.000 ppb	0.000 ppb	92.159 %	-0.003 ppb
Concentration per Run 2	0.166 ppb	-0.034 ppb	630.953 ppb	0.377 ppb	89.409 %	0.000 ppb	0.000 ppb	99.606 %	0.007 ppb
Concentration per Run 3	0.109 ppb	-0.018 ppb	606.429 ppb	0.408 ppb	88.252 %	0.000 ppb	0.001 ppb	92.950 %	-0.001 ppb
Concentration RSD	26.0 %	40.5 %	2.3 %	15.0 %	1.4 %	45.9 %	258.0 %	4.3 %	571.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	1,035.046 ppb	98.897 %	99.670 %	0.000 ppb	0.007 ppb	89.935 %
Concentration per Run 1	1,056.727 ppb	98.515 %	94.927 %	-0.003 ppb	0.006 ppb	93.679 %
Concentration per Run 2	1,035.580 ppb	99.756 %	107.046 %	0.002 ppb	0.007 ppb	90.434 %
Concentration per Run 3	1,012.831 ppb	98.420 %	97.038 %	0.001 ppb	0.007 ppb	85.692 %
Concentration RSD	2.1 %	0.8 %	6.5 %	1,685.1 %	5.5 %	4.5 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	95	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350359-23 6020SL	Rack	2		
Analysis started at:	9/14/2023 9:40:34 PM	Vial	46		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.828 %	101.469 %	0.011 ppb	92,345.695 ppb	20,343.093 ppb	2.240 ppb	3,728.449 ppb	76,433.810 ppb	93.443 %
Concentration per Run 1	88.534 %	100.020 %	0.008 ppb	92,757.104 ppb	19,907.954 ppb	2.187 ppb	3,765.980 ppb	78,226.283 ppb	96.988 %
Concentration per Run 2	84.216 %	104.723 %	0.010 ppb	92,543.236 ppb	21,133.551 ppb	2.441 ppb	3,773.440 ppb	74,381.855 ppb	87.990 %
Concentration per Run 3	81.735 %	99.663 %	0.013 ppb	91,736.744 ppb	19,987.774 ppb	2.091 ppb	3,645.926 ppb	76,693.290 ppb	95.351 %
Concentration RSD	4.1 %	2.8 %	25.0 %	0.6 %	3.4 %	8.1 %	1.9 %	2.5 %	5.1 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.020 ppb	0.184 ppb	387.659 ppb	2,312.680 ppb	0.050 ppb	0.084 ppb	0.134 ppb	17.442 ppb	99.878 %
Concentration per Run 1	0.024 ppb	0.202 ppb	385.095 ppb	2,323.552 ppb	0.050 ppb	0.065 ppb	0.146 ppb	17.821 ppb	96.854 %
Concentration per Run 2	0.019 ppb	0.159 ppb	392.004 ppb	2,283.033 ppb	0.050 ppb	0.088 ppb	0.131 ppb	16.911 ppb	105.560 %
Concentration per Run 3	0.018 ppb	0.191 ppb	385.879 ppb	2,331.456 ppb	0.049 ppb	0.100 ppb	0.124 ppb	17.596 ppb	97.220 %
Concentration RSD	16.0 %	12.3 %	1.0 %	1.1 %	1.8 %	21.5 %	8.7 %	2.7 %	4.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.475 ppb	-0.008 ppb	1,222.529 ppb	0.080 ppb	90.392 %	0.001 ppb	0.001 ppb	99.547 %	-0.016 ppb
Concentration per Run 1	0.485 ppb	-0.015 ppb	1,212.561 ppb	0.038 ppb	87.423 %	0.001 ppb	0.001 ppb	96.422 %	-0.027 ppb
Concentration per Run 2	0.508 ppb	0.002 ppb	1,267.139 ppb	0.061 ppb	92.855 %	0.000 ppb	0.001 ppb	105.943 %	-0.016 ppb
Concentration per Run 3	0.433 ppb	-0.011 ppb	1,187.886 ppb	0.142 ppb	90.898 %	0.001 ppb	0.000 ppb	96.276 %	-0.006 ppb
Concentration RSD	8.1 %	112.5 %	3.3 %	68.3 %	3.0 %	41.8 %	55.5 %	5.6 %	62.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	431.373 ppb	98.387 %	100.577 %	0.000 ppb	0.006 ppb	91.363 %
Concentration per Run 1	422.753 ppb	99.142 %	96.775 %	-0.004 ppb	0.005 ppb	94.468 %
Concentration per Run 2	445.799 ppb	95.018 %	104.476 %	0.001 ppb	0.006 ppb	91.273 %
Concentration per Run 3	425.566 ppb	101.002 %	100.480 %	0.002 ppb	0.008 ppb	88.348 %
Concentration RSD	2.9 %	3.1 %	3.8 %	1,113.8 %	20.5 %	3.4 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	96	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350359-24 6020SL	Rack	2		
Analysis started at:	9/14/2023 9:45:14 PM	Vial	47		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.232 %	100.655 %	0.002 ppb	68,164.025 ppb	20,416.440 ppb	2.763 ppb	2,730.344 ppb	62,325.885 ppb	97.484 %
Concentration per Run 1	91.396 %	97.817 %	0.001 ppb	69,943.709 ppb	20,956.743 ppb	2.655 ppb	2,705.547 ppb	62,878.575 ppb	99.084 %
Concentration per Run 2	87.194 %	105.378 %	0.001 ppb	66,944.332 ppb	20,390.776 ppb	2.961 ppb	2,749.932 ppb	61,521.132 ppb	96.046 %
Concentration per Run 3	86.106 %	98.770 %	0.002 ppb	67,604.033 ppb	19,901.801 ppb	2.673 ppb	2,735.555 ppb	62,577.946 ppb	97.323 %
Concentration RSD	3.2 %	4.1 %	39.2 %	2.3 %	2.6 %	6.2 %	0.8 %	1.1 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.013 ppb	0.211 ppb	124.581 ppb	31.958 ppb	0.109 ppb	0.416 ppb	0.652 ppb	2.444 ppb	103.466 %
Concentration per Run 1	0.013 ppb	0.216 ppb	123.715 ppb	30.691 ppb	0.109 ppb	0.418 ppb	0.641 ppb	2.418 ppb	101.638 %
Concentration per Run 2	0.013 ppb	0.200 ppb	126.862 ppb	31.815 ppb	0.105 ppb	0.393 ppb	0.623 ppb	2.461 ppb	107.889 %
Concentration per Run 3	0.013 ppb	0.217 ppb	123.167 ppb	33.367 ppb	0.114 ppb	0.436 ppb	0.692 ppb	2.453 ppb	100.872 %
Concentration RSD	1.0 %	4.4 %	1.6 %	4.2 %	4.1 %	5.2 %	5.5 %	0.9 %	3.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.318 ppb	-0.008 ppb	881.822 ppb	0.206 ppb	91.945 %	0.000 ppb	0.014 ppb	98.680 %	-0.005 ppb
Concentration per Run 1	0.357 ppb	-0.043 ppb	849.457 ppb	0.140 ppb	91.365 %	0.000 ppb	0.020 ppb	94.825 %	-0.011 ppb
Concentration per Run 2	0.265 ppb	0.004 ppb	910.429 ppb	0.205 ppb	94.026 %	0.000 ppb	0.013 ppb	106.278 %	-0.008 ppb
Concentration per Run 3	0.333 ppb	0.015 ppb	885.580 ppb	0.273 ppb	90.445 %	0.001 ppb	0.010 ppb	94.937 %	0.004 ppb
Concentration RSD	15.0 %	386.4 %	3.5 %	32.3 %	2.0 %	64.8 %	34.9 %	6.7 %	168.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	114.261 ppb	98.901 %	102.666 %	0.001 ppb	0.017 ppb	92.191 %
Concentration per Run 1	111.083 ppb	101.608 %	100.398 %	-0.003 ppb	0.017 ppb	94.842 %
Concentration per Run 2	118.663 ppb	94.880 %	107.689 %	0.002 ppb	0.017 ppb	94.536 %
Concentration per Run 3	113.038 ppb	100.215 %	99.911 %	0.004 ppb	0.017 ppb	87.196 %
Concentration RSD	3.4 %	3.6 %	4.2 %	289.6 %	1.7 %	4.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	97	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350435-02 6020SL	Rack	2		
Analysis started at:	9/14/2023 9:49:55 PM	Vial	49		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.791 %	105.934 %	0.004 ppb	51,006.329 ppb	20,122.213 ppb	6.642 ppb	3,808.299 ppb	77,245.712 ppb	94.174 %
Concentration per Run 1	92.830 %	103.473 %	0.006 ppb	51,056.417 ppb	19,770.622 ppb	6.402 ppb	3,725.495 ppb	77,343.375 ppb	102.699 %
Concentration per Run 2	87.939 %	109.189 %	0.001 ppb	51,103.883 ppb	20,740.434 ppb	6.830 ppb	3,989.399 ppb	79,262.277 ppb	90.037 %
Concentration per Run 3	85.603 %	105.140 %	0.004 ppb	50,858.688 ppb	19,855.582 ppb	6.693 ppb	3,710.004 ppb	75,131.483 ppb	89.785 %
Concentration RSD	4.2 %	2.8 %	57.0 %	0.3 %	2.7 %	3.3 %	4.1 %	2.7 %	7.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.218 ppb	0.077 ppb	122.409 ppb	1,044.598 ppb	1.389 ppb	6.020 ppb	0.455 ppb	3.536 ppb	105.961 %
Concentration per Run 1	0.224 ppb	0.090 ppb	122.904 ppb	1,068.285 ppb	1.423 ppb	6.180 ppb	0.484 ppb	3.489 ppb	104.795 %
Concentration per Run 2	0.211 ppb	0.080 ppb	121.499 ppb	1,010.666 ppb	1.340 ppb	5.924 ppb	0.422 ppb	3.395 ppb	110.878 %
Concentration per Run 3	0.219 ppb	0.060 ppb	122.824 ppb	1,054.845 ppb	1.403 ppb	5.957 ppb	0.458 ppb	3.725 ppb	102.209 %
Concentration RSD	3.0 %	20.3 %	0.6 %	2.9 %	3.1 %	2.3 %	6.8 %	4.8 %	4.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.376 ppb	0.140 ppb	101.968 ppb	0.265 ppb	94.078 %	0.002 ppb	0.019 ppb	101.059 %	0.130 ppb
Concentration per Run 1	0.335 ppb	0.089 ppb	97.788 ppb	0.193 ppb	92.342 %	0.001 ppb	0.023 ppb	96.964 %	0.109 ppb
Concentration per Run 2	0.411 ppb	0.128 ppb	107.576 ppb	0.289 ppb	96.557 %	0.001 ppb	0.016 ppb	104.778 %	0.142 ppb
Concentration per Run 3	0.383 ppb	0.204 ppb	100.540 ppb	0.312 ppb	93.334 %	0.002 ppb	0.019 ppb	101.435 %	0.139 ppb
Concentration RSD	10.1 %	41.9 %	5.0 %	23.9 %	2.3 %	23.4 %	17.2 %	3.9 %	14.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	119.207 ppb	101.300 %	104.131 %	-0.001 ppb	0.072 ppb	94.334 %
Concentration per Run 1	118.979 ppb	102.106 %	101.473 %	-0.003 ppb	0.067 ppb	97.949 %
Concentration per Run 2	124.890 ppb	99.548 %	111.119 %	-0.001 ppb	0.075 ppb	94.125 %
Concentration per Run 3	113.752 ppb	102.245 %	99.801 %	0.001 ppb	0.074 ppb	90.927 %
Concentration RSD	4.7 %	1.5 %	5.9 %	244.2 %	5.8 %	3.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	98	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350435-03 6020SL	Rack	2		
Analysis started at:	9/14/2023 9:54:35 PM	Vial	50		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	93.409 %	112.027 %	0.010 ppb	31,554.197 ppb	22,326.669 ppb	62.221 ppb	2,866.331 ppb	83,649.241 ppb	99.581 %
Concentration per Run 1	98.694 %	110.975 %	0.008 ppb	31,386.466 ppb	22,067.046 ppb	59.759 ppb	2,856.275 ppb	85,422.920 ppb	95.488 %
Concentration per Run 2	92.198 %	115.083 %	0.010 ppb	32,079.334 ppb	23,370.106 ppb	67.315 ppb	2,922.487 ppb	84,259.407 ppb	102.997 %
Concentration per Run 3	89.336 %	110.022 %	0.010 ppb	31,196.790 ppb	21,542.855 ppb	59.588 ppb	2,820.231 ppb	81,265.397 ppb	100.259 %
Concentration RSD	5.1 %	2.4 %	13.5 %	1.5 %	4.2 %	7.1 %	1.8 %	2.6 %	3.8 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.232 ppb	0.176 ppb	563.956 ppb	1,993.246 ppb	0.600 ppb	3.080 ppb	0.152 ppb	0.803 ppb	106.352 %
Concentration per Run 1	0.213 ppb	0.172 ppb	591.013 ppb	2,115.591 ppb	0.639 ppb	3.248 ppb	0.161 ppb	0.844 ppb	100.361 %
Concentration per Run 2	0.235 ppb	0.163 ppb	523.454 ppb	1,943.101 ppb	0.557 ppb	2.913 ppb	0.151 ppb	0.806 ppb	114.606 %
Concentration per Run 3	0.249 ppb	0.195 ppb	577.402 ppb	1,921.046 ppb	0.604 ppb	3.079 ppb	0.143 ppb	0.758 ppb	104.090 %
Concentration RSD	7.7 %	9.6 %	6.3 %	5.3 %	6.8 %	5.4 %	5.8 %	5.4 %	6.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.515 ppb	0.293 ppb	132.140 ppb	3.764 ppb	95.818 %	0.001 ppb	0.002 ppb	102.972 %	0.122 ppb
Concentration per Run 1	0.535 ppb	0.290 ppb	130.695 ppb	3.857 ppb	93.810 %	0.000 ppb	0.002 ppb	97.677 %	0.116 ppb
Concentration per Run 2	0.503 ppb	0.289 ppb	135.840 ppb	3.792 ppb	97.798 %	0.001 ppb	0.003 ppb	109.880 %	0.122 ppb
Concentration per Run 3	0.508 ppb	0.300 ppb	129.886 ppb	3.643 ppb	95.845 %	0.000 ppb	0.000 ppb	101.360 %	0.129 ppb
Concentration RSD	3.3 %	2.1 %	2.4 %	2.9 %	2.1 %	78.3 %	81.1 %	6.1 %	5.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	163.892 ppb	102.869 %	103.824 %	0.000 ppb	0.123 ppb	93.143 %
Concentration per Run 1	167.450 ppb	101.155 %	102.680 %	-0.002 ppb	0.114 ppb	94.150 %
Concentration per Run 2	165.188 ppb	106.717 %	107.602 %	0.000 ppb	0.123 ppb	95.554 %
Concentration per Run 3	159.040 ppb	100.734 %	101.190 %	0.002 ppb	0.131 ppb	89.725 %
Concentration RSD	2.7 %	3.2 %	3.2 %	1,209.9 %	6.8 %	3.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	99	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350435-04 6020SL	Rack	2		
Analysis started at:	9/14/2023 9:59:15 PM	Vial	51		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	92.461 %	112.166 %	0.000 ppb	29,302.078 ppb	12,568.579 ppb	5.302 ppb	1,431.388 ppb	78,573.094 ppb	95.554 %
Concentration per Run 1	95.596 %	111.928 %	0.000 ppb	29,689.055 ppb	12,386.798 ppb	5.125 ppb	1,382.726 ppb	79,889.333 ppb	97.617 %
Concentration per Run 2	93.648 %	114.786 %	-0.002 ppb	29,406.468 ppb	12,843.086 ppb	5.633 ppb	1,516.087 ppb	79,427.394 ppb	90.796 %
Concentration per Run 3	88.138 %	109.784 %	0.001 ppb	28,810.712 ppb	12,475.852 ppb	5.147 ppb	1,395.352 ppb	76,402.555 ppb	98.250 %
Concentration RSD	4.2 %	2.2 %	980.1 %	1.5 %	1.9 %	5.4 %	5.1 %	2.4 %	4.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.392 ppb	0.057 ppb	236.409 ppb	57.754 ppb	0.609 ppb	1.918 ppb	0.345 ppb	16.227 ppb	108.268 %
Concentration per Run 1	0.370 ppb	0.064 ppb	239.890 ppb	57.786 ppb	0.631 ppb	2.080 ppb	0.370 ppb	16.595 ppb	102.468 %
Concentration per Run 2	0.385 ppb	0.052 ppb	231.604 ppb	59.141 ppb	0.578 ppb	1.799 ppb	0.359 ppb	15.824 ppb	116.271 %
Concentration per Run 3	0.420 ppb	0.055 ppb	237.733 ppb	56.334 ppb	0.617 ppb	1.875 ppb	0.305 ppb	16.262 ppb	106.065 %
Concentration RSD	6.7 %	10.5 %	1.8 %	2.4 %	4.5 %	7.6 %	10.0 %	2.4 %	6.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.311 ppb	0.532 ppb	121.436 ppb	1.094 ppb	99.277 %	0.001 ppb	0.027 ppb	101.679 %	0.110 ppb
Concentration per Run 1	0.331 ppb	0.536 ppb	122.633 ppb	1.136 ppb	95.208 %	0.001 ppb	0.026 ppb	95.359 %	0.112 ppb
Concentration per Run 2	0.300 ppb	0.546 ppb	122.771 ppb	1.083 ppb	103.531 %	0.000 ppb	0.024 ppb	108.580 %	0.112 ppb
Concentration per Run 3	0.303 ppb	0.515 ppb	118.905 ppb	1.062 ppb	99.092 %	0.000 ppb	0.031 ppb	101.097 %	0.105 ppb
Concentration RSD	5.5 %	3.0 %	1.8 %	3.5 %	4.2 %	43.5 %	12.8 %	6.5 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	127.119 ppb	102.878 %	103.958 %	-0.002 ppb	0.028 ppb	93.444 %
Concentration per Run 1	128.201 ppb	99.745 %	96.808 %	-0.004 ppb	0.027 ppb	92.530 %
Concentration per Run 2	132.570 ppb	101.459 %	109.644 %	-0.001 ppb	0.029 ppb	94.176 %
Concentration per Run 3	120.586 ppb	107.429 %	105.423 %	0.000 ppb	0.027 ppb	93.627 %
Concentration RSD	4.8 %	3.9 %	6.3 %	166.4 %	5.2 %	0.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	100	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350435-05 6020SL	Rack	2		
Analysis started at:	9/14/2023 10:03:55 PM	Vial	52		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.672 %	109.764 %	0.009 ppb	70,677.471 ppb	8,483.369 ppb	36.532 ppb	1,762.413 ppb	58,475.958 ppb	100.827 %
Concentration per Run 1	93.983 %	109.546 %	0.009 ppb	71,454.615 ppb	8,435.221 ppb	36.908 ppb	1,819.515 ppb	62,005.911 ppb	106.561 %
Concentration per Run 2	89.867 %	112.821 %	0.009 ppb	70,671.800 ppb	8,384.025 ppb	37.560 ppb	1,735.931 ppb	56,803.091 ppb	102.965 %
Concentration per Run 3	85.166 %	106.926 %	0.009 ppb	69,905.996 ppb	8,630.859 ppb	35.127 ppb	1,731.793 ppb	56,618.871 ppb	92.954 %
Concentration RSD	4.9 %	2.7 %	3.8 %	1.1 %	1.5 %	3.4 %	2.8 %	5.2 %	7.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.082 ppb	0.196 ppb	468.075 ppb	1,956.351 ppb	1.252 ppb	3.312 ppb	0.212 ppb	3.668 ppb	106.662 %
Concentration per Run 1	0.106 ppb	0.194 ppb	472.217 ppb	1,919.546 ppb	1.241 ppb	3.353 ppb	0.195 ppb	3.707 ppb	108.760 %
Concentration per Run 2	0.057 ppb	0.192 ppb	466.297 ppb	1,956.215 ppb	1.269 ppb	3.339 ppb	0.209 ppb	3.725 ppb	104.580 %
Concentration per Run 3	0.084 ppb	0.201 ppb	465.712 ppb	1,993.293 ppb	1.246 ppb	3.244 ppb	0.231 ppb	3.571 ppb	106.648 %
Concentration RSD	30.1 %	2.5 %	0.8 %	1.9 %	1.2 %	1.8 %	8.6 %	2.3 %	2.0 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.248 ppb	0.814 ppb	234.473 ppb	4.911 ppb	96.976 %	0.000 ppb	0.007 ppb	104.326 %	0.175 ppb
Concentration per Run 1	0.192 ppb	0.933 ppb	239.954 ppb	5.063 ppb	97.533 %	0.000 ppb	0.007 ppb	106.793 %	0.162 ppb
Concentration per Run 2	0.276 ppb	0.834 ppb	237.311 ppb	4.887 ppb	96.475 %	0.000 ppb	0.006 ppb	104.935 %	0.175 ppb
Concentration per Run 3	0.274 ppb	0.674 ppb	226.154 ppb	4.782 ppb	96.920 %	0.001 ppb	0.008 ppb	101.249 %	0.188 ppb
Concentration RSD	19.4 %	16.1 %	3.1 %	2.9 %	0.5 %	159.6 %	13.8 %	2.7 %	7.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	85.481 ppb	107.944 %	108.798 %	-0.003 ppb	0.111 ppb	98.533 %
Concentration per Run 1	85.655 ppb	108.889 %	112.326 %	-0.006 ppb	0.103 ppb	104.103 %
Concentration per Run 2	85.996 ppb	109.540 %	107.590 %	-0.003 ppb	0.112 ppb	98.103 %
Concentration per Run 3	84.791 ppb	105.402 %	106.479 %	-0.001 ppb	0.117 ppb	93.392 %
Concentration RSD	0.7 %	2.1 %	2.9 %	76.4 %	6.3 %	5.4 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	101	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 10:08:35 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.763 %	108.375 %	59.116 ppb	6,099.306 ppb	5,996.071 ppb	61.536 ppb	6,424.135 ppb	5,860.964 ppb	102.312 %
Concentration per Run 1	91.133 %	105.259 %	57.637 ppb	6,497.913 ppb	6,342.895 ppb	68.793 ppb	6,832.455 ppb	6,288.807 ppb	109.020 %
Concentration per Run 2	86.986 %	107.760 %	59.927 ppb	6,009.189 ppb	5,959.528 ppb	58.310 ppb	6,402.372 ppb	5,807.502 ppb	93.262 %
Concentration per Run 3	85.171 %	112.106 %	59.785 ppb	5,790.817 ppb	5,685.791 ppb	57.505 ppb	6,037.576 ppb	5,486.585 ppb	104.654 %
Recovery Percentage 1			98.527 %	101.655 %	99.935 %	102.560 %	107.069 %	97.683 %	
Concentration RSD	3.5 %	3.2 %	2.2 %	5.9 %	5.5 %	10.2 %	6.2 %	6.9 %	8.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.216 ppb	54.138 ppb	57.195 ppb	6,013.906 ppb	62.120 ppb	58.071 ppb	56.901 ppb	59.328 ppb	110.651 %
Concentration per Run 1	56.662 ppb	54.937 ppb	57.335 ppb	5,931.777 ppb	61.142 ppb	58.106 ppb	55.947 ppb	59.519 ppb	115.496 %
Concentration per Run 2	55.367 ppb	53.432 ppb	57.473 ppb	6,047.648 ppb	62.328 ppb	57.945 ppb	57.784 ppb	58.798 ppb	108.777 %
Concentration per Run 3	56.621 ppb	54.047 ppb	56.778 ppb	6,062.292 ppb	62.890 ppb	58.162 ppb	56.971 ppb	59.668 ppb	107.680 %
Recovery Percentage 1	93.694 %	90.231 %	95.325 %	100.232 %	103.533 %	96.785 %	94.835 %	98.881 %	
Concentration RSD	1.3 %	1.4 %	0.6 %	1.2 %	1.4 %	0.2 %	1.6 %	0.8 %	3.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.440 ppb	59.037 ppb	58.876 ppb	52.197 ppb	102.847 %	56.970 ppb	57.348 ppb	104.383 %	55.855 ppb
Concentration per Run 1	58.672 ppb	60.223 ppb	60.151 ppb	51.914 ppb	104.438 %	56.706 ppb	57.277 ppb	110.733 %	55.142 ppb
Concentration per Run 2	57.825 ppb	58.135 ppb	58.150 ppb	49.552 ppb	101.238 %	56.694 ppb	56.607 ppb	101.866 %	56.044 ppb
Concentration per Run 3	58.823 ppb	58.753 ppb	58.328 ppb	55.124 ppb	102.865 %	57.510 ppb	58.159 ppb	100.550 %	56.378 ppb
Recovery Percentage 1	97.400 %	98.395 %	98.127 %	86.995 %		94.950 %	95.579 %		93.091 %
Concentration RSD	0.9 %	1.8 %	1.9 %	5.4 %	1.6 %	0.8 %	1.4 %	5.3 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.617 ppb	107.639 %	106.513 %	55.847 ppb	56.605 ppb	104.373 %
Concentration per Run 1	59.261 ppb	109.380 %	110.028 %	54.866 ppb	55.049 ppb	109.106 %
Concentration per Run 2	57.441 ppb	107.216 %	104.496 %	56.658 ppb	57.581 ppb	101.224 %
Concentration per Run 3	59.150 ppb	106.320 %	105.014 %	56.016 ppb	57.184 ppb	102.790 %
Recovery Percentage 1	97.696 %			93.078 %	94.341 %	
Concentration RSD	1.7 %	1.5 %	2.9 %	1.6 %	2.4 %	4.0 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	102	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 10:13:18 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.846 %	105.855 %	0.000 ppb	16.010 ppb	-0.672 ppb	-0.497 ppb	-3.722 ppb	1.969 ppb	89.200 %
Concentration per Run 1	91.608 %	104.247 %	0.002 ppb	22.109 ppb	-0.145 ppb	-0.521 ppb	-0.158 ppb	1.758 ppb	90.781 %
Concentration per Run 2	89.054 %	106.569 %	-0.001 ppb	13.852 ppb	-1.005 ppb	-0.482 ppb	-5.644 ppb	0.873 ppb	90.574 %
Concentration per Run 3	85.878 %	106.748 %	0.000 ppb	12.068 ppb	-0.865 ppb	-0.489 ppb	-5.365 ppb	3.274 ppb	86.246 %
Recovery Percentage 1			0.072 %	16.010 %	-0.960 %	-4.972 %	-3.722 %	1.969 %	
Concentration RSD	3.2 %	1.3 %	293.6 %	33.5 %	68.7 %	4.1 %	83.0 %	61.7 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.008 ppb	0.002 ppb	-0.009 ppb	13.624 ppb	0.003 ppb	0.107 ppb	0.020 ppb	0.313 ppb	107.782 %
Concentration per Run 1	0.009 ppb	0.009 ppb	-0.008 ppb	13.645 ppb	0.006 ppb	0.108 ppb	0.016 ppb	0.418 ppb	110.046 %
Concentration per Run 2	0.024 ppb	0.002 ppb	-0.024 ppb	14.469 ppb	0.001 ppb	0.109 ppb	0.022 ppb	0.255 ppb	109.380 %
Concentration per Run 3	-0.008 ppb	-0.004 ppb	0.004 ppb	12.758 ppb	0.002 ppb	0.105 ppb	0.022 ppb	0.267 ppb	103.921 %
Recovery Percentage 1	0.169 %	0.240 %	-0.945 %	27.249 %	0.556 %	5.368 %	2.006 %	6.262 %	
Concentration RSD	187.5 %	283.9 %	147.4 %	6.3 %	88.3 %	2.1 %	18.2 %	29.1 %	3.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.052 ppb	0.632 ppb	-0.003 ppb	1.323 ppb	102.376 %	0.003 ppb	0.001 ppb	104.256 %	0.023 ppb
Concentration per Run 1	0.086 ppb	0.593 ppb	-0.002 ppb	1.050 ppb	104.066 %	0.005 ppb	0.002 ppb	108.098 %	0.009 ppb
Concentration per Run 2	0.007 ppb	0.590 ppb	-0.002 ppb	1.306 ppb	102.189 %	0.002 ppb	0.001 ppb	102.070 %	0.031 ppb
Concentration per Run 3	0.063 ppb	0.713 ppb	-0.004 ppb	1.615 ppb	100.873 %	0.003 ppb	0.000 ppb	102.599 %	0.028 ppb
Recovery Percentage 1	10.412 %	12.632 %	-0.026 %	66.174 %		0.869 %	0.537 %		0.564 %
Concentration RSD	78.0 %	11.1 %	48.6 %	21.4 %	1.6 %	37.1 %	75.6 %	3.2 %	54.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.020 ppb	103.992 %	102.638 %	0.110 ppb	0.015 ppb	98.692 %
Concentration per Run 1	0.010 ppb	104.352 %	104.531 %	0.097 ppb	0.017 ppb	102.649 %
Concentration per Run 2	0.010 ppb	104.720 %	101.913 %	0.127 ppb	0.014 ppb	96.855 %
Concentration per Run 3	0.041 ppb	102.905 %	101.469 %	0.105 ppb	0.013 ppb	96.571 %
Recovery Percentage 1	4.027 %			10.982 %	1.466 %	
Concentration RSD	88.9 %	0.9 %	1.6 %	14.2 %	16.1 %	3.5 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 103
Analysis label: WG1825988-1D10 6020TS
Analysis started at: 9/14/2023 10:18:01 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 55
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.872 %	106.946 %	0.001 ppb	42.328 ppb	3.819 ppb	0.733 ppb	-5.419 ppb	13.168 ppb	92.272 %
Concentration per Run 1	91.094 %	110.201 %	-0.001 ppb	105.934 ppb	9.990 ppb	0.721 ppb	-1.065 ppb	33.564 ppb	87.863 %
Concentration per Run 2	87.139 %	109.844 %	0.003 ppb	11.917 ppb	0.834 ppb	0.568 ppb	-5.495 ppb	5.453 ppb	94.986 %
Concentration per Run 3	85.384 %	100.794 %	0.002 ppb	9.132 ppb	0.633 ppb	0.909 ppb	-9.697 ppb	0.486 ppb	93.968 %
Concentration RSD	3.3 %	5.0 %	206.9 %	130.2 %	140.0 %	23.3 %	79.7 %	135.5 %	4.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.010 ppb	0.027 ppb	0.079 ppb	9.827 ppb	0.004 ppb	0.010 ppb	0.021 ppb	-0.390 ppb	107.106 %
Concentration per Run 1	0.020 ppb	0.035 ppb	0.245 ppb	11.596 ppb	0.012 ppb	0.014 ppb	0.024 ppb	-0.423 ppb	117.743 %
Concentration per Run 2	0.004 ppb	0.016 ppb	0.000 ppb	9.916 ppb	-0.001 ppb	0.000 ppb	0.021 ppb	-0.371 ppb	103.958 %
Concentration per Run 3	0.007 ppb	0.030 ppb	-0.007 ppb	7.969 ppb	0.002 ppb	0.017 ppb	0.016 ppb	-0.377 ppb	99.616 %
Concentration RSD	84.7 %	35.2 %	181.5 %	18.5 %	157.4 %	89.4 %	20.0 %	7.3 %	8.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.070 ppb	0.120 ppb	0.107 ppb	0.475 ppb	103.334 %	0.004 ppb	0.004 ppb	105.022 %	0.029 ppb
Concentration per Run 1	0.062 ppb	0.093 ppb	0.300 ppb	0.259 ppb	105.791 %	0.009 ppb	0.011 ppb	111.438 %	0.011 ppb
Concentration per Run 2	0.067 ppb	0.142 ppb	0.015 ppb	0.521 ppb	101.636 %	0.001 ppb	0.001 ppb	103.916 %	0.027 ppb
Concentration per Run 3	0.080 ppb	0.126 ppb	0.004 ppb	0.646 ppb	102.574 %	0.001 ppb	0.000 ppb	99.712 %	0.048 ppb
Concentration RSD	13.5 %	20.5 %	157.5 %	41.5 %	2.1 %	119.4 %	152.9 %	5.7 %	65.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.056 ppb	102.498 %	105.634 %	0.028 ppb	0.006 ppb	104.561 %
Concentration per Run 1	0.150 ppb	101.167 %	110.989 %	0.020 ppb	0.009 ppb	112.218 %
Concentration per Run 2	0.016 ppb	103.366 %	103.441 %	0.029 ppb	0.004 ppb	102.927 %
Concentration per Run 3	0.002 ppb	102.962 %	102.473 %	0.033 ppb	0.005 ppb	98.539 %
Concentration RSD	146.7 %	1.1 %	4.4 %	24.1 %	44.0 %	6.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 104
Analysis label: WG1825988-2D10 6020TS
Analysis started at: 9/14/2023 10:22:42 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 56
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.982 %	108.990 %	62.058 ppb	1,476.745 ppb	1,641.159 ppb	4,822.030 ppb	1,453.845 ppb	3,519.334 ppb	109.243 %
Concentration per Run 1	94.337 %	109.189 %	61.466 ppb	1,570.265 ppb	1,762.896 ppb	5,349.575 ppb	1,642.491 ppb	3,777.509 ppb	113.154 %
Concentration per Run 2	89.488 %	109.844 %	62.568 ppb	1,484.845 ppb	1,642.299 ppb	4,654.616 ppb	1,430.542 ppb	3,469.455 ppb	102.453 %
Concentration per Run 3	86.122 %	107.938 %	62.138 ppb	1,375.125 ppb	1,518.282 ppb	4,461.898 ppb	1,288.502 ppb	3,311.039 ppb	112.123 %
Concentration RSD	4.6 %	0.9 %	0.9 %	6.6 %	7.5 %	9.7 %	12.3 %	6.7 %	5.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	153.109 ppb	147.882 ppb	307.080 ppb	10,190.274 ppb	80.514 ppb	128.664 ppb	102.526 ppb	178.650 ppb	114.377 %
Concentration per Run 1	157.861 ppb	150.946 ppb	314.374 ppb	10,422.927 ppb	80.134 ppb	128.881 ppb	102.009 ppb	179.941 ppb	120.306 %
Concentration per Run 2	153.635 ppb	149.475 ppb	317.775 ppb	10,482.772 ppb	82.392 ppb	129.673 ppb	105.498 ppb	178.763 ppb	111.646 %
Concentration per Run 3	147.832 ppb	143.223 ppb	289.093 ppb	9,665.124 ppb	79.016 ppb	127.437 ppb	100.071 ppb	177.246 ppb	111.178 %
Concentration RSD	3.3 %	2.8 %	5.1 %	4.5 %	2.1 %	0.9 %	2.7 %	0.8 %	4.5 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	147.277 ppb	178.330 ppb	86.200 ppb	131.514 ppb	105.486 %	56.805 ppb	169.195 ppb	107.339 %	106.637 ppb
Concentration per Run 1	150.980 ppb	189.044 ppb	90.614 ppb	132.011 ppb	109.144 %	56.963 ppb	170.148 ppb	113.424 %	109.331 ppb
Concentration per Run 2	149.564 ppb	180.439 ppb	86.651 ppb	128.834 ppb	104.211 %	56.585 ppb	169.677 ppb	109.429 %	103.001 ppb
Concentration per Run 3	141.287 ppb	165.505 ppb	81.335 ppb	133.697 ppb	103.103 %	56.866 ppb	167.761 ppb	99.162 %	107.577 ppb
Concentration RSD	3.6 %	6.7 %	5.4 %	1.9 %	3.0 %	0.3 %	0.7 %	6.9 %	3.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	231.806 ppb	106.571 %	110.852 %	62.109 ppb	199.789 ppb	108.967 %
Concentration per Run 1	245.327 ppb	103.159 %	117.172 %	57.752 ppb	186.998 ppb	119.072 %
Concentration per Run 2	228.900 ppb	105.135 %	111.508 %	63.591 ppb	204.730 ppb	106.088 %
Concentration per Run 3	221.192 ppb	111.419 %	103.875 %	64.985 ppb	207.638 ppb	101.741 %
Concentration RSD	5.3 %	4.0 %	6.0 %	6.2 %	5.6 %	8.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 105
Analysis label: WG1825988-3D10 6020TS
Analysis started at: 9/14/2023 10:27:22 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 58
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.139 %	106.906 %	10.658 ppb	2,275.727 ppb	4,723.556 ppb	22,215.195 ppb	3,269.974 ppb	3,141.427 ppb	121.911 %
Concentration per Run 1	94.524 %	111.570 %	10.484 ppb	2,159.804 ppb	4,930.610 ppb	21,402.005 ppb	3,596.486 ppb	3,313.226 ppb	124.290 %
Concentration per Run 2	87.316 %	106.986 %	10.624 ppb	2,348.758 ppb	4,586.135 ppb	22,899.465 ppb	3,158.804 ppb	3,054.012 ppb	120.171 %
Concentration per Run 3	85.578 %	102.163 %	10.865 ppb	2,318.618 ppb	4,653.923 ppb	22,344.114 ppb	3,054.631 ppb	3,057.041 ppb	121.273 %
Concentration RSD	5.3 %	4.4 %	1.8 %	4.5 %	3.9 %	3.4 %	8.8 %	4.7 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	159.636 ppb	72.450 ppb	320.437 ppb	37,275.998 ppb	101.511 ppb	106.301 ppb	68.594 ppb	129.133 ppb	118.041 %
Concentration per Run 1	162.906 ppb	72.436 ppb	329.843 ppb	38,106.372 ppb	100.847 ppb	106.526 ppb	69.094 ppb	131.680 ppb	122.801 %
Concentration per Run 2	156.196 ppb	72.799 ppb	318.051 ppb	35,949.331 ppb	100.659 ppb	104.323 ppb	65.978 ppb	126.965 ppb	119.650 %
Concentration per Run 3	159.805 ppb	72.116 ppb	313.418 ppb	37,772.290 ppb	103.028 ppb	108.054 ppb	70.709 ppb	128.754 ppb	111.672 %
Concentration RSD	2.1 %	0.5 %	2.6 %	3.1 %	1.3 %	1.8 %	3.5 %	1.8 %	4.9 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	33.766 ppb	32.088 ppb	212.517 ppb	182.092 ppb	104.426 %	10.090 ppb	10.584 ppb	107.954 %	75.586 ppb
Concentration per Run 1	34.340 ppb	33.448 ppb	227.343 ppb	179.649 ppb	104.955 %	10.096 ppb	10.922 ppb	114.183 %	74.696 ppb
Concentration per Run 2	33.502 ppb	32.151 ppb	207.723 ppb	181.170 ppb	104.856 %	9.837 ppb	10.415 ppb	108.129 %	75.815 ppb
Concentration per Run 3	33.455 ppb	30.664 ppb	202.484 ppb	185.456 ppb	103.468 %	10.337 ppb	10.416 ppb	101.549 %	76.248 ppb
Concentration RSD	1.5 %	4.3 %	6.2 %	1.7 %	0.8 %	2.5 %	2.8 %	5.9 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	465.455 ppb	106.231 %	107.423 %	24.250 ppb	118.527 ppb	104.884 %
Concentration per Run 1	469.583 ppb	110.390 %	111.957 %	23.537 ppb	115.612 ppb	109.300 %
Concentration per Run 2	469.450 ppb	101.995 %	105.805 %	24.485 ppb	117.518 ppb	103.342 %
Concentration per Run 3	457.332 ppb	106.309 %	104.508 %	24.727 ppb	122.452 ppb	102.009 %
Concentration RSD	1.5 %	4.0 %	3.7 %	2.6 %	3.0 %	3.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 106
Analysis label: WG1825988-5D10 6020TS
Analysis started at: 9/14/2023 10:32:02 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 60
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.956 %	104.386 %	49.407 ppb	4,957.367 ppb	6,074.978 ppb	10,943.748 ppb	5,832.949 ppb	5,968.074 ppb	114.652 %
Concentration per Run 1	92.784 %	106.033 %	48.639 ppb	5,004.273 ppb	6,197.982 ppb	11,559.187 ppb	5,968.440 ppb	6,201.932 ppb	115.983 %
Concentration per Run 2	88.747 %	105.438 %	49.450 ppb	5,030.414 ppb	6,091.862 ppb	10,968.467 ppb	5,979.376 ppb	5,961.398 ppb	115.566 %
Concentration per Run 3	85.339 %	101.687 %	50.132 ppb	4,837.416 ppb	5,935.091 ppb	10,303.590 ppb	5,551.033 ppb	5,740.890 ppb	112.408 %
Concentration RSD	4.2 %	2.3 %	1.5 %	2.1 %	2.2 %	5.7 %	4.2 %	3.9 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	91.743 ppb	70.195 ppb	152.304 ppb	31,227.943 ppb	54.621 ppb	54.084 ppb	62.935 ppb	64.117 ppb	115.369 %
Concentration per Run 1	92.258 ppb	69.727 ppb	150.843 ppb	30,891.754 ppb	53.010 ppb	53.329 ppb	61.667 ppb	64.268 ppb	121.562 %
Concentration per Run 2	93.037 ppb	71.393 ppb	155.273 ppb	31,644.634 ppb	56.027 ppb	53.134 ppb	62.950 ppb	64.735 ppb	115.325 %
Concentration per Run 3	89.935 ppb	69.465 ppb	150.797 ppb	31,147.442 ppb	54.826 ppb	55.789 ppb	64.189 ppb	63.348 ppb	109.220 %
Concentration RSD	1.8 %	1.5 %	1.7 %	1.2 %	2.8 %	2.7 %	2.0 %	1.1 %	5.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	54.376 ppb	57.516 ppb	56.077 ppb	52.320 ppb	104.809 %	2.031 ppb	49.106 ppb	106.714 %	48.274 ppb
Concentration per Run 1	54.253 ppb	58.818 ppb	57.538 ppb	51.868 ppb	105.443 %	2.043 ppb	48.298 ppb	112.824 %	48.333 ppb
Concentration per Run 2	55.179 ppb	58.515 ppb	56.837 ppb	52.159 ppb	105.790 %	2.016 ppb	49.219 ppb	107.149 %	48.604 ppb
Concentration per Run 3	53.698 ppb	55.216 ppb	53.858 ppb	52.932 ppb	103.194 %	2.035 ppb	49.802 ppb	100.168 %	47.886 ppb
Concentration RSD	1.4 %	3.5 %	3.5 %	1.1 %	1.3 %	0.7 %	1.5 %	5.9 %	0.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	77.228 ppb	110.159 %	109.445 %	47.878 ppb	61.122 ppb	102.764 %
Concentration per Run 1	76.985 ppb	114.083 %	112.736 %	46.830 ppb	59.048 ppb	107.627 %
Concentration per Run 2	78.822 ppb	109.972 %	110.791 %	48.309 ppb	62.824 ppb	100.049 %
Concentration per Run 3	75.876 ppb	106.421 %	104.810 %	48.496 ppb	61.493 ppb	100.617 %
Concentration RSD	1.9 %	3.5 %	3.8 %	1.9 %	3.1 %	4.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 107
Analysis label: WG1825988-4D10 6020TS
Analysis started at: 9/14/2023 10:36:43 PM
User name ALPHALAB\Metals-Instrument
Rack 2
Vial 59
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	88.455 %	105.378 %	0.455 ppb	16.982 ppb	1,287.366 ppb	10,674.295 ppb	540.280 ppb	1,281.625 ppb	117.746 %
Concentration per Run 1	91.947 %	108.712 %	0.461 ppb	19.135 ppb	1,318.818 ppb	10,890.458 ppb	558.063 ppb	1,310.386 ppb	122.189 %
Concentration per Run 2	88.356 %	104.485 %	0.448 ppb	16.628 ppb	1,312.124 ppb	10,760.579 ppb	552.391 ppb	1,311.004 ppb	116.849 %
Concentration per Run 3	85.061 %	102.937 %	0.457 ppb	15.183 ppb	1,231.156 ppb	10,371.847 ppb	510.386 ppb	1,223.487 ppb	114.199 %
Concentration RSD	3.9 %	2.8 %	1.4 %	11.8 %	3.8 %	2.5 %	4.8 %	3.9 %	3.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	45.402 ppb	25.736 ppb	127.013 ppb	28,365.341 ppb	4.136 ppb	6.810 ppb	15.485 ppb	18.486 ppb	116.753 %
Concentration per Run 1	45.006 ppb	26.093 ppb	123.689 ppb	28,041.595 ppb	4.037 ppb	6.721 ppb	15.106 ppb	18.690 ppb	121.004 %
Concentration per Run 2	45.322 ppb	26.887 ppb	130.132 ppb	28,246.679 ppb	4.078 ppb	6.503 ppb	15.130 ppb	18.223 ppb	120.076 %
Concentration per Run 3	45.877 ppb	24.228 ppb	127.220 ppb	28,807.747 ppb	4.292 ppb	7.207 ppb	16.218 ppb	18.546 ppb	109.179 %
Concentration RSD	1.0 %	5.3 %	2.5 %	1.4 %	3.3 %	5.3 %	4.1 %	1.3 %	5.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	6.933 ppb	10.522 ppb	6.920 ppb	2.891 ppb	107.645 %	0.015 ppb	0.037 ppb	109.064 %	0.278 ppb
Concentration per Run 1	6.731 ppb	10.694 ppb	6.967 ppb	2.246 ppb	108.118 %	0.016 ppb	0.032 ppb	110.172 %	0.245 ppb
Concentration per Run 2	6.808 ppb	10.084 ppb	6.925 ppb	2.994 ppb	108.335 %	0.016 ppb	0.028 ppb	113.704 %	0.266 ppb
Concentration per Run 3	7.261 ppb	10.787 ppb	6.867 ppb	3.433 ppb	106.481 %	0.013 ppb	0.051 ppb	103.317 %	0.324 ppb
Concentration RSD	4.1 %	3.6 %	0.7 %	20.8 %	0.9 %	11.6 %	33.3 %	4.8 %	14.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	30.436 ppb	113.037 %	110.459 %	0.325 ppb	10.521 ppb	106.809 %
Concentration per Run 1	31.315 ppb	115.885 %	110.569 %	0.259 ppb	10.247 ppb	111.156 %
Concentration per Run 2	30.317 ppb	113.604 %	114.426 %	0.374 ppb	10.563 ppb	107.767 %
Concentration per Run 3	29.675 ppb	109.622 %	106.381 %	0.342 ppb	10.752 ppb	101.505 %
Concentration RSD	2.7 %	2.8 %	3.6 %	18.3 %	2.4 %	4.6 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	108	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2352354-41D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 10:41:23 PM	Vial	57		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	89.758 %	107.105 %	0.396 ppb	14.071 ppb	1,115.960 ppb	10,626.133 ppb	517.853 ppb	1,101.126 ppb	112.343 %
Concentration per Run 1	94.239 %	108.236 %	0.404 ppb	17.456 ppb	1,152.781 ppb	11,074.239 ppb	539.742 ppb	1,137.299 ppb	115.275 %
Concentration per Run 2	89.348 %	110.201 %	0.399 ppb	12.315 ppb	1,108.412 ppb	10,589.586 ppb	511.773 ppb	1,095.804 ppb	112.863 %
Concentration per Run 3	85.687 %	102.878 %	0.383 ppb	12.443 ppb	1,086.689 ppb	10,214.573 ppb	502.043 ppb	1,070.273 ppb	108.890 %
Concentration RSD	4.8 %	3.5 %	2.7 %	20.8 %	3.0 %	4.1 %	3.8 %	3.1 %	2.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	44.215 ppb	23.907 ppb	102.420 ppb	27,147.751 ppb	3.501 ppb	6.466 ppb	15.514 ppb	17.067 ppb	116.869 %
Concentration per Run 1	45.258 ppb	24.274 ppb	105.526 ppb	28,199.218 ppb	3.567 ppb	6.464 ppb	15.222 ppb	17.295 ppb	117.193 %
Concentration per Run 2	43.423 ppb	23.261 ppb	99.111 ppb	26,479.033 ppb	3.393 ppb	6.016 ppb	15.443 ppb	16.664 ppb	121.479 %
Concentration per Run 3	43.963 ppb	24.186 ppb	102.625 ppb	26,765.001 ppb	3.543 ppb	6.918 ppb	15.878 ppb	17.241 ppb	111.934 %
Concentration RSD	2.1 %	2.3 %	3.1 %	3.4 %	2.7 %	7.0 %	2.2 %	2.0 %	4.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	8.104 ppb	10.106 ppb	5.912 ppb	1.269 ppb	107.857 %	0.011 ppb	0.035 ppb	109.481 %	0.202 ppb
Concentration per Run 1	8.558 ppb	10.062 ppb	5.917 ppb	0.947 ppb	110.960 %	0.011 ppb	0.031 ppb	110.786 %	0.198 ppb
Concentration per Run 2	7.914 ppb	9.747 ppb	6.008 ppb	1.271 ppb	107.246 %	0.010 ppb	0.036 ppb	111.672 %	0.194 ppb
Concentration per Run 3	7.840 ppb	10.508 ppb	5.813 ppb	1.590 ppb	105.367 %	0.013 ppb	0.038 ppb	105.985 %	0.215 ppb
Concentration RSD	4.9 %	3.8 %	1.7 %	25.3 %	2.6 %	15.1 %	11.6 %	2.8 %	5.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	27.730 ppb	109.178 %	109.281 %	0.155 ppb	10.218 ppb	107.336 %
Concentration per Run 1	29.096 ppb	102.104 %	112.710 %	0.122 ppb	10.064 ppb	110.293 %
Concentration per Run 2	27.210 ppb	116.833 %	112.713 %	0.168 ppb	10.156 ppb	107.614 %
Concentration per Run 3	26.885 ppb	108.597 %	102.422 %	0.175 ppb	10.434 ppb	104.102 %
Concentration RSD	4.3 %	6.8 %	5.4 %	18.7 %	1.9 %	2.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	109	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350435-06 6020SL	Rack	2		
Analysis started at:	9/14/2023 10:46:03 PM	Vial	53		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	98.150 %	112.741 %	0.001 ppb	16,786.542 ppb	27,272.744 ppb	4.315 ppb	1,331.711 ppb	85,326.721 ppb	107.000 %
Concentration per Run 1	102.175 %	114.785 %	0.000 ppb	16,863.393 ppb	27,613.964 ppb	4.487 ppb	1,376.582 ppb	86,416.479 ppb	111.094 %
Concentration per Run 2	97.693 %	112.583 %	0.002 ppb	17,111.607 ppb	27,933.543 ppb	4.304 ppb	1,358.799 ppb	87,237.904 ppb	101.370 %
Concentration per Run 3	94.583 %	110.856 %	0.002 ppb	16,384.626 ppb	26,270.725 ppb	4.155 ppb	1,259.752 ppb	82,325.779 ppb	108.535 %
Concentration RSD	3.9 %	1.7 %	93.5 %	2.2 %	3.2 %	3.8 %	4.7 %	3.1 %	4.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	2.335 ppb	0.070 ppb	3.393 ppb	51.299 ppb	0.118 ppb	3.529 ppb	0.270 ppb	1.121 ppb	110.185 %
Concentration per Run 1	2.323 ppb	0.074 ppb	3.271 ppb	51.775 ppb	0.111 ppb	3.495 ppb	0.266 ppb	1.035 ppb	113.426 %
Concentration per Run 2	2.298 ppb	0.069 ppb	3.696 ppb	53.541 ppb	0.124 ppb	3.515 ppb	0.264 ppb	1.143 ppb	109.128 %
Concentration per Run 3	2.384 ppb	0.067 ppb	3.213 ppb	48.580 ppb	0.121 ppb	3.578 ppb	0.281 ppb	1.184 ppb	108.002 %
Concentration RSD	1.9 %	5.1 %	7.8 %	4.9 %	5.7 %	1.2 %	3.5 %	6.9 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	3.139 ppb	0.218 ppb	247.408 ppb	0.856 ppb	103.109 %	0.000 ppb	0.012 ppb	107.031 %	0.210 ppb
Concentration per Run 1	3.135 ppb	0.198 ppb	252.051 ppb	0.598 ppb	103.763 %	0.000 ppb	0.013 ppb	111.436 %	0.200 ppb
Concentration per Run 2	3.239 ppb	0.238 ppb	251.916 ppb	0.849 ppb	105.108 %	0.001 ppb	0.017 ppb	108.763 %	0.213 ppb
Concentration per Run 3	3.044 ppb	0.219 ppb	238.255 ppb	1.122 ppb	100.456 %	0.000 ppb	0.005 ppb	100.893 %	0.217 ppb
Concentration RSD	3.1 %	9.1 %	3.2 %	30.6 %	2.3 %	32.9 %	54.6 %	5.1 %	4.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	179.542 ppb	110.759 %	111.128 %	0.054 ppb	0.044 ppb	102.274 %
Concentration per Run 1	180.593 ppb	105.848 %	114.341 %	0.034 ppb	0.044 ppb	108.919 %
Concentration per Run 2	181.168 ppb	114.664 %	112.497 %	0.063 ppb	0.044 ppb	101.899 %
Concentration per Run 3	176.865 ppb	111.764 %	106.547 %	0.065 ppb	0.044 ppb	96.006 %
Concentration RSD	1.3 %	4.1 %	3.7 %	32.8 %	0.9 %	6.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	110	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	L2350435-07 6020SL	Rack	2		
Analysis started at:	9/14/2023 10:50:44 PM	Vial	54		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.365 %	104.862 %	0.008 ppb	62,078.429 ppb	11,862.978 ppb	4.439 ppb	2,456.257 ppb	33,285.685 ppb	106.809 %
Concentration per Run 1	90.047 %	105.497 %	0.004 ppb	62,458.781 ppb	11,887.836 ppb	4.574 ppb	2,479.359 ppb	34,448.716 ppb	104.993 %
Concentration per Run 2	87.172 %	105.795 %	0.011 ppb	62,142.161 ppb	11,903.292 ppb	4.314 ppb	2,465.600 ppb	33,339.140 ppb	108.984 %
Concentration per Run 3	84.876 %	103.294 %	0.008 ppb	61,634.347 ppb	11,797.806 ppb	4.428 ppb	2,423.811 ppb	32,069.200 ppb	106.451 %
Concentration RSD	3.0 %	1.3 %	42.7 %	0.7 %	0.5 %	2.9 %	1.2 %	3.6 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.012 ppb	0.063 ppb	761.780 ppb	6,744.627 ppb	1.382 ppb	11.444 ppb	0.931 ppb	113.723 ppb	109.981 %
Concentration per Run 1	0.022 ppb	0.062 ppb	733.168 ppb	6,827.014 ppb	1.397 ppb	11.229 ppb	0.891 ppb	113.362 ppb	111.611 %
Concentration per Run 2	0.005 ppb	0.056 ppb	715.533 ppb	6,524.913 ppb	1.354 ppb	11.309 ppb	0.899 ppb	112.876 ppb	114.825 %
Concentration per Run 3	0.010 ppb	0.070 ppb	836.639 ppb	6,881.954 ppb	1.394 ppb	11.795 ppb	1.002 ppb	114.933 ppb	103.508 %
Concentration RSD	71.7 %	11.2 %	8.6 %	2.9 %	1.7 %	2.7 %	6.7 %	0.9 %	5.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.058 ppb	0.411 ppb	139.923 ppb	0.625 ppb	101.583 %	0.001 ppb	0.002 ppb	106.241 %	0.145 ppb
Concentration per Run 1	0.059 ppb	0.330 ppb	141.668 ppb	0.471 ppb	101.351 %	0.001 ppb	0.002 ppb	103.953 %	0.137 ppb
Concentration per Run 2	0.016 ppb	0.464 ppb	140.422 ppb	0.581 ppb	104.416 %	0.001 ppb	0.002 ppb	111.885 %	0.146 ppb
Concentration per Run 3	0.099 ppb	0.440 ppb	137.679 ppb	0.824 ppb	98.983 %	0.001 ppb	0.001 ppb	102.885 %	0.152 ppb
Concentration RSD	71.6 %	17.5 %	1.5 %	28.8 %	2.7 %	3.8 %	29.7 %	4.6 %	5.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	141.679 ppb	113.650 %	110.256 %	0.030 ppb	0.054 ppb	102.183 %
Concentration per Run 1	150.419 ppb	113.523 %	111.791 %	0.015 ppb	0.051 ppb	105.359 %
Concentration per Run 2	141.962 ppb	115.915 %	111.529 %	0.036 ppb	0.053 ppb	103.246 %
Concentration per Run 3	132.657 ppb	111.511 %	107.448 %	0.038 ppb	0.057 ppb	97.944 %
Concentration RSD	6.3 %	1.9 %	2.2 %	41.8 %	5.9 %	3.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	111	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2352354-42D10 6020TS	Rack	3		
Analysis started at:	9/14/2023 10:55:24 PM	Vial	2		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.472 %	108.097 %	1.339 ppb	50.635 ppb	3,832.037 ppb	24,731.166 ppb	1,004.174 ppb	2,188.308 ppb	109.277 %
Concentration per Run 1	90.812 %	106.688 %	1.335 ppb	54.147 ppb	3,916.422 ppb	25,542.829 ppb	1,025.323 ppb	2,252.883 ppb	111.525 %
Concentration per Run 2	86.041 %	107.819 %	1.355 ppb	50.531 ppb	3,815.735 ppb	24,193.366 ppb	1,019.372 ppb	2,237.627 ppb	109.148 %
Concentration per Run 3	82.563 %	109.784 %	1.327 ppb	47.227 ppb	3,763.953 ppb	24,457.302 ppb	967.827 ppb	2,074.415 ppb	107.158 %
Concentration RSD	4.8 %	1.4 %	1.1 %	6.8 %	2.0 %	2.9 %	3.1 %	4.5 %	2.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	65.345 ppb	42.216 ppb	626.533 ppb	40,223.218 ppb	14.323 ppb	20.880 ppb	22.640 ppb	66.750 ppb	120.522 %
Concentration per Run 1	66.063 ppb	42.639 ppb	648.459 ppb	40,575.399 ppb	14.363 ppb	21.679 ppb	23.035 ppb	68.290 ppb	117.665 %
Concentration per Run 2	67.709 ppb	42.275 ppb	580.360 ppb	40,605.278 ppb	14.358 ppb	20.962 ppb	22.607 ppb	67.276 ppb	120.006 %
Concentration per Run 3	62.262 ppb	41.733 ppb	650.780 ppb	39,488.978 ppb	14.247 ppb	19.997 ppb	22.280 ppb	64.683 ppb	123.895 %
Concentration RSD	4.3 %	1.1 %	6.4 %	1.6 %	0.5 %	4.0 %	1.7 %	2.8 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	62.804 ppb	15.359 ppb	16.725 ppb	1.202 ppb	102.371 %	0.064 ppb	0.318 ppb	109.713 %	0.648 ppb
Concentration per Run 1	63.838 ppb	15.276 ppb	16.720 ppb	1.115 ppb	103.920 %	0.066 ppb	0.302 ppb	108.306 %	0.642 ppb
Concentration per Run 2	61.929 ppb	15.751 ppb	17.123 ppb	1.325 ppb	98.224 %	0.066 ppb	0.328 ppb	109.441 %	0.664 ppb
Concentration per Run 3	62.646 ppb	15.049 ppb	16.331 ppb	1.165 ppb	104.969 %	0.060 ppb	0.324 ppb	111.391 %	0.639 ppb
Concentration RSD	1.5 %	2.3 %	2.4 %	9.2 %	3.5 %	5.1 %	4.4 %	1.4 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	141.025 ppb	111.025 %	109.673 %	0.256 ppb	49.554 ppb	106.842 %
Concentration per Run 1	142.281 ppb	108.588 %	110.599 %	0.233 ppb	48.331 ppb	110.428 %
Concentration per Run 2	143.211 ppb	111.360 %	107.186 %	0.265 ppb	49.006 ppb	105.248 %
Concentration per Run 3	137.582 ppb	113.126 %	111.234 %	0.269 ppb	51.324 ppb	104.849 %
Concentration RSD	2.1 %	2.1 %	2.0 %	7.6 %	3.2 %	2.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	112	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	WG1825988-6d50 6020TS	Rack	3		
Analysis started at:	9/14/2023 11:00:05 PM	Vial	1		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.260 %	106.053 %	0.086 ppb	-3.547 ppb	233.568 ppb	2,239.149 ppb	98.378 ppb	222.600 ppb	96.081 %
Concentration per Run 1	89.710 %	104.545 %	0.080 ppb	-1.641 ppb	237.994 ppb	2,261.870 ppb	102.562 ppb	226.073 ppb	97.802 %
Concentration per Run 2	86.301 %	107.700 %	0.090 ppb	-3.410 ppb	231.446 ppb	2,196.419 ppb	94.481 ppb	220.696 ppb	94.804 %
Concentration per Run 3	82.769 %	105.914 %	0.088 ppb	-5.590 ppb	231.265 ppb	2,259.159 ppb	98.091 ppb	221.030 ppb	95.637 %
Concentration RSD	4.0 %	1.5 %	5.8 %	55.8 %	1.6 %	1.7 %	4.1 %	1.4 %	1.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	9.048 ppb	4.905 ppb	21.219 ppb	6,267.444 ppb	0.733 ppb	1.387 ppb	3.181 ppb	3.247 ppb	115.618 %
Concentration per Run 1	9.172 ppb	5.070 ppb	21.156 ppb	6,340.336 ppb	0.765 ppb	1.426 ppb	3.375 ppb	3.252 ppb	112.965 %
Concentration per Run 2	9.072 ppb	4.820 ppb	20.842 ppb	6,273.084 ppb	0.722 ppb	1.380 ppb	2.963 ppb	3.288 ppb	115.694 %
Concentration per Run 3	8.899 ppb	4.824 ppb	21.657 ppb	6,188.912 ppb	0.713 ppb	1.356 ppb	3.206 ppb	3.200 ppb	118.196 %
Concentration RSD	1.5 %	2.9 %	1.9 %	1.2 %	3.8 %	2.6 %	6.5 %	1.4 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	1.655 ppb	1.992 ppb	1.195 ppb	0.175 ppb	109.629 %	0.003 ppb	0.008 ppb	109.429 %	-0.032 ppb
Concentration per Run 1	1.655 ppb	2.017 ppb	1.212 ppb	0.107 ppb	109.623 %	0.002 ppb	0.011 ppb	106.947 %	-0.045 ppb
Concentration per Run 2	1.647 ppb	2.034 ppb	1.192 ppb	0.164 ppb	108.235 %	0.004 ppb	0.006 ppb	110.912 %	-0.037 ppb
Concentration per Run 3	1.664 ppb	1.925 ppb	1.180 ppb	0.253 ppb	111.029 %	0.003 ppb	0.006 ppb	110.428 %	-0.016 ppb
Concentration RSD	0.5 %	2.9 %	1.3 %	42.0 %	1.3 %	28.7 %	32.5 %	2.0 %	46.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	5.613 ppb	113.073 %	110.751 %	0.030 ppb	2.072 ppb	110.042 %
Concentration per Run 1	5.671 ppb	114.252 %	107.514 %	0.019 ppb	2.015 ppb	113.013 %
Concentration per Run 2	5.915 ppb	112.117 %	110.405 %	0.033 ppb	2.072 ppb	110.216 %
Concentration per Run 3	5.254 ppb	112.849 %	114.336 %	0.038 ppb	2.129 ppb	106.895 %
Concentration RSD	6.0 %	1.0 %	3.1 %	32.2 %	2.7 %	2.8 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	113	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 11:04:45 PM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.146 %	104.664 %	60.326 ppb	5,820.849 ppb	5,803.328 ppb	59.755 ppb	6,195.322 ppb	5,852.856 ppb	102.291 %
Concentration per Run 1	89.487 %	101.330 %	59.904 ppb	5,974.768 ppb	6,135.727 ppb	63.229 ppb	6,329.945 ppb	5,890.788 ppb	106.901 %
Concentration per Run 2	85.658 %	107.462 %	60.609 ppb	5,752.930 ppb	5,643.080 ppb	57.859 ppb	6,098.960 ppb	5,942.758 ppb	94.152 %
Concentration per Run 3	83.294 %	105.200 %	60.466 ppb	5,734.849 ppb	5,631.178 ppb	58.176 ppb	6,157.061 ppb	5,725.022 ppb	105.819 %
Recovery Percentage 1			100.544 %	97.014 %	96.722 %	99.591 %	103.255 %	97.548 %	
Concentration RSD	3.6 %	3.0 %	0.6 %	2.3 %	5.0 %	5.0 %	1.9 %	1.9 %	6.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	56.254 ppb	55.834 ppb	58.426 ppb	6,026.537 ppb	62.016 ppb	57.592 ppb	56.340 ppb	59.637 ppb	114.426 %
Concentration per Run 1	57.597 ppb	57.952 ppb	59.936 ppb	6,306.418 ppb	63.122 ppb	58.144 ppb	57.606 ppb	60.628 ppb	112.698 %
Concentration per Run 2	56.832 ppb	55.650 ppb	58.686 ppb	5,950.689 ppb	63.256 ppb	57.492 ppb	56.107 ppb	59.764 ppb	113.481 %
Concentration per Run 3	54.334 ppb	53.899 ppb	56.656 ppb	5,822.503 ppb	59.668 ppb	57.139 ppb	55.307 ppb	58.520 ppb	117.101 %
Recovery Percentage 1	93.757 %	93.056 %	97.377 %	100.442 %	103.359 %	95.986 %	93.901 %	99.396 %	
Concentration RSD	3.0 %	3.6 %	2.8 %	4.2 %	3.3 %	0.9 %	2.1 %	1.8 %	2.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	57.683 ppb	59.630 ppb	58.024 ppb	51.553 ppb	108.618 %	57.563 ppb	58.988 ppb	109.547 %	56.390 ppb
Concentration per Run 1	58.512 ppb	60.626 ppb	59.230 ppb	52.892 ppb	104.382 %	59.802 ppb	61.642 ppb	105.357 %	58.164 ppb
Concentration per Run 2	58.505 ppb	60.172 ppb	57.682 ppb	51.001 ppb	110.904 %	56.911 ppb	57.801 ppb	113.014 %	55.171 ppb
Concentration per Run 3	56.031 ppb	58.093 ppb	57.161 ppb	50.767 ppb	110.568 %	55.976 ppb	57.522 ppb	110.269 %	55.836 ppb
Recovery Percentage 1	96.138 %	99.384 %	96.707 %	85.922 %		95.938 %	98.314 %		93.984 %
Concentration RSD	2.5 %	2.3 %	1.9 %	2.3 %	3.4 %	3.5 %	3.9 %	3.5 %	2.8 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.617 ppb	111.736 %	111.980 %	56.091 ppb	57.951 ppb	109.378 %
Concentration per Run 1	58.346 ppb	114.397 %	111.869 %	55.682 ppb	56.869 ppb	112.110 %
Concentration per Run 2	58.434 ppb	105.191 %	112.823 %	55.528 ppb	58.376 ppb	108.556 %
Concentration per Run 3	59.072 ppb	115.618 %	111.250 %	57.062 ppb	58.607 ppb	107.466 %
Recovery Percentage 1	97.695 %			93.485 %	96.584 %	
Concentration RSD	0.7 %	5.1 %	0.7 %	1.5 %	1.6 %	2.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	114	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 11:09:28 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	86.568 %	102.421 %	0.003 ppb	-1.210 ppb	-0.946 ppb	-0.550 ppb	-3.974 ppb	0.718 ppb	92.191 %
Concentration per Run 1	89.489 %	102.223 %	0.004 ppb	-1.844 ppb	-0.944 ppb	-0.604 ppb	0.023 ppb	-0.699 ppb	97.236 %
Concentration per Run 2	85.784 %	101.211 %	0.002 ppb	-1.253 ppb	-0.764 ppb	-0.466 ppb	-6.083 ppb	1.220 ppb	93.690 %
Concentration per Run 3	84.432 %	103.830 %	0.004 ppb	-0.535 ppb	-1.131 ppb	-0.578 ppb	-5.863 ppb	1.633 ppb	85.648 %
Recovery Percentage 1			0.649 %	-1.210 %	-1.352 %	-5.496 %	-3.974 %	0.718 %	
Concentration RSD	3.0 %	1.3 %	43.7 %	54.2 %	19.4 %	13.3 %	87.2 %	173.4 %	6.4 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.002 ppb	0.000 ppb	-0.005 ppb	17.513 ppb	-0.001 ppb	0.109 ppb	0.018 ppb	0.304 ppb	109.498 %
Concentration per Run 1	0.002 ppb	0.001 ppb	-0.014 ppb	14.792 ppb	-0.001 ppb	0.114 ppb	0.015 ppb	0.373 ppb	107.716 %
Concentration per Run 2	0.005 ppb	0.000 ppb	-0.005 ppb	17.781 ppb	-0.002 ppb	0.103 ppb	0.021 ppb	0.275 ppb	112.723 %
Concentration per Run 3	0.000 ppb	-0.001 ppb	0.002 ppb	19.968 ppb	0.000 ppb	0.109 ppb	0.016 ppb	0.263 ppb	108.056 %
Recovery Percentage 1	0.046 %	-0.001 %	-0.544 %	35.027 %	-0.189 %	5.426 %	1.766 %	6.074 %	
Concentration RSD	117.6 %	8,740.9 %	147.0 %	14.8 %	72.0 %	4.8 %	18.0 %	20.0 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.033 ppb	0.716 ppb	-0.001 ppb	1.286 ppb	110.003 %	0.004 ppb	0.001 ppb	106.137 %	0.013 ppb
Concentration per Run 1	0.034 ppb	0.523 ppb	0.000 ppb	1.038 ppb	109.407 %	0.005 ppb	0.001 ppb	103.483 %	-0.011 ppb
Concentration per Run 2	0.029 ppb	0.663 ppb	-0.008 ppb	1.327 ppb	109.964 %	0.003 ppb	0.001 ppb	106.738 %	0.020 ppb
Concentration per Run 3	0.037 ppb	0.962 ppb	0.003 ppb	1.493 ppb	110.637 %	0.004 ppb	0.002 ppb	108.191 %	0.030 ppb
Recovery Percentage 1	6.653 %	14.320 %	-0.015 %	64.318 %		0.994 %	0.513 %		0.319 %
Concentration RSD	12.0 %	31.3 %	406.5 %	17.9 %	0.6 %	16.6 %	57.6 %	2.3 %	168.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.027 ppb	112.307 %	107.129 %	0.115 ppb	0.016 ppb	108.801 %
Concentration per Run 1	0.036 ppb	112.883 %	105.777 %	0.094 ppb	0.016 ppb	112.813 %
Concentration per Run 2	0.022 ppb	112.337 %	107.823 %	0.130 ppb	0.018 ppb	106.792 %
Concentration per Run 3	0.022 ppb	111.701 %	107.786 %	0.120 ppb	0.015 ppb	106.800 %
Recovery Percentage 1	5.334 %			11.474 %	1.646 %	
Concentration RSD	29.6 %	0.5 %	1.1 %	16.0 %	8.3 %	3.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	115	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2352354-43D10 6020TS	Rack	3		
Analysis started at:	9/14/2023 11:14:12 PM	Vial	3		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.666 %	107.919 %	1.770 ppb	45.276 ppb	4,031.618 ppb	26,628.271 ppb	1,102.322 ppb	2,947.481 ppb	106.331 %
Concentration per Run 1	88.936 %	109.070 %	1.789 ppb	47.643 ppb	4,097.913 ppb	25,441.594 ppb	1,119.436 ppb	2,945.970 ppb	106.660 %
Concentration per Run 2	85.638 %	108.058 %	1.785 ppb	45.728 ppb	3,980.747 ppb	24,929.745 ppb	1,089.816 ppb	2,918.641 ppb	108.446 %
Concentration per Run 3	82.423 %	106.629 %	1.735 ppb	42.457 ppb	4,016.194 ppb	29,513.473 ppb	1,097.714 ppb	2,977.831 ppb	103.887 %
Concentration RSD	3.8 %	1.1 %	1.7 %	5.8 %	1.5 %	9.4 %	1.4 %	1.0 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	63.042 ppb	38.434 ppb	993.859 ppb	37,769.866 ppb	13.864 ppb	20.595 ppb	24.713 ppb	74.581 ppb	120.031 %
Concentration per Run 1	64.611 ppb	39.340 ppb	1,040.363 ppb	38,431.470 ppb	14.233 ppb	20.796 ppb	25.499 ppb	74.987 ppb	116.945 %
Concentration per Run 2	61.946 ppb	37.576 ppb	964.476 ppb	38,059.758 ppb	14.037 ppb	20.083 ppb	24.686 ppb	73.702 ppb	122.336 %
Concentration per Run 3	62.570 ppb	38.387 ppb	976.739 ppb	36,818.368 ppb	13.323 ppb	20.906 ppb	23.954 ppb	75.055 ppb	120.812 %
Concentration RSD	2.2 %	2.3 %	4.1 %	2.2 %	3.5 %	2.2 %	3.1 %	1.0 %	2.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	290.863 ppb	26.512 ppb	16.139 ppb	1.593 ppb	106.203 %	0.062 ppb	0.331 ppb	111.271 %	1.632 ppb
Concentration per Run 1	292.920 ppb	26.958 ppb	16.351 ppb	1.396 ppb	105.180 %	0.059 ppb	0.324 ppb	111.405 %	1.629 ppb
Concentration per Run 2	286.451 ppb	26.225 ppb	15.877 ppb	1.607 ppb	107.385 %	0.062 ppb	0.334 ppb	112.014 %	1.622 ppb
Concentration per Run 3	293.219 ppb	26.353 ppb	16.188 ppb	1.777 ppb	106.045 %	0.064 ppb	0.334 ppb	110.395 %	1.644 ppb
Concentration RSD	1.3 %	1.5 %	1.5 %	12.0 %	1.0 %	4.1 %	1.8 %	0.7 %	0.7 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	164.392 ppb	114.536 %	110.946 %	0.287 ppb	63.933 ppb	107.568 %
Concentration per Run 1	163.899 ppb	113.467 %	107.987 %	0.268 ppb	61.281 ppb	111.801 %
Concentration per Run 2	166.692 ppb	112.358 %	113.751 %	0.290 ppb	64.291 ppb	104.937 %
Concentration per Run 3	162.585 ppb	117.782 %	111.100 %	0.302 ppb	66.226 ppb	105.967 %
Concentration RSD	1.3 %	2.5 %	2.6 %	6.0 %	3.9 %	3.4 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	116	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2352354-44D10 6020TS	Rack	3		
Analysis started at:	9/14/2023 11:18:52 PM	Vial	4		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.573 %	110.042 %	1.011 ppb	22.101 ppb	2,706.055 ppb	23,927.826 ppb	993.041 ppb	1,991.598 ppb	111.223 %
Concentration per Run 1	92.096 %	112.047 %	1.007 ppb	21.583 ppb	2,658.233 ppb	23,630.322 ppb	982.780 ppb	2,019.844 ppb	113.010 %
Concentration per Run 2	87.448 %	107.343 %	1.010 ppb	23.468 ppb	2,774.787 ppb	24,383.106 ppb	1,020.170 ppb	1,956.004 ppb	112.161 %
Concentration per Run 3	83.174 %	110.737 %	1.016 ppb	21.250 ppb	2,685.145 ppb	23,770.048 ppb	976.173 ppb	1,998.946 ppb	108.499 %
Concentration RSD	5.1 %	2.2 %	0.5 %	5.4 %	2.3 %	1.7 %	2.4 %	1.6 %	2.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	61.659 ppb	49.598 ppb	500.197 ppb	36,035.781 ppb	9.511 ppb	15.514 ppb	25.026 ppb	68.374 ppb	121.848 %
Concentration per Run 1	61.068 ppb	49.648 ppb	482.500 ppb	36,555.369 ppb	9.271 ppb	15.357 ppb	25.120 ppb	66.988 ppb	123.078 %
Concentration per Run 2	62.802 ppb	50.434 ppb	518.809 ppb	36,217.420 ppb	9.808 ppb	16.119 ppb	25.833 ppb	69.600 ppb	119.252 %
Concentration per Run 3	61.106 ppb	48.712 ppb	499.282 ppb	35,334.555 ppb	9.456 ppb	15.066 ppb	24.125 ppb	68.533 ppb	123.214 %
Concentration RSD	1.6 %	1.7 %	3.6 %	1.7 %	2.9 %	3.5 %	3.4 %	1.9 %	1.8 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	106.496 ppb	15.522 ppb	11.003 ppb	1.278 ppb	110.008 %	0.120 ppb	0.761 ppb	112.093 %	1.096 ppb
Concentration per Run 1	105.731 ppb	15.054 ppb	10.881 ppb	1.187 ppb	107.738 %	0.123 ppb	0.789 ppb	110.462 %	1.084 ppb
Concentration per Run 2	109.927 ppb	16.198 ppb	11.154 ppb	1.284 ppb	111.760 %	0.121 ppb	0.751 ppb	112.283 %	1.096 ppb
Concentration per Run 3	103.830 ppb	15.313 ppb	10.974 ppb	1.363 ppb	110.526 %	0.117 ppb	0.743 ppb	113.535 %	1.108 ppb
Concentration RSD	2.9 %	3.9 %	1.3 %	6.9 %	1.9 %	2.8 %	3.2 %	1.4 %	1.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	90.737 ppb	113.441 %	113.040 %	0.198 ppb	138.846 ppb	109.645 %
Concentration per Run 1	89.386 ppb	115.714 %	113.888 %	0.183 ppb	136.422 ppb	112.033 %
Concentration per Run 2	89.347 ppb	117.583 %	114.012 %	0.208 ppb	139.903 ppb	107.380 %
Concentration per Run 3	93.476 ppb	107.025 %	111.221 %	0.201 ppb	140.213 ppb	109.523 %
Concentration RSD	2.6 %	5.0 %	1.4 %	6.4 %	1.5 %	2.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	117	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2352354-45D10 6020TS	Rack	3		
Analysis started at:	9/14/2023 11:23:33 PM	Vial	5		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	87.102 %	109.923 %	1.602 ppb	45.394 ppb	2,803.043 ppb	20,083.767 ppb	604.659 ppb	1,712.147 ppb	98.156 %
Concentration per Run 1	89.696 %	107.403 %	1.612 ppb	50.315 ppb	2,855.564 ppb	20,438.574 ppb	641.378 ppb	1,788.534 ppb	99.221 %
Concentration per Run 2	87.146 %	108.712 %	1.607 ppb	46.167 ppb	2,856.758 ppb	19,993.543 ppb	592.300 ppb	1,678.564 ppb	97.325 %
Concentration per Run 3	84.465 %	113.654 %	1.588 ppb	39.700 ppb	2,696.807 ppb	19,819.184 ppb	580.301 ppb	1,669.342 ppb	97.922 %
Concentration RSD	3.0 %	3.0 %	0.8 %	11.8 %	3.3 %	1.6 %	5.4 %	3.9 %	1.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	43.915 ppb	28.573 ppb	1,219.275 ppb	25,439.325 ppb	9.170 ppb	14.971 ppb	13.746 ppb	68.437 ppb	121.226 %
Concentration per Run 1	44.771 ppb	30.128 ppb	1,287.262 ppb	26,473.935 ppb	9.484 ppb	15.502 ppb	14.235 ppb	68.886 ppb	119.443 %
Concentration per Run 2	44.084 ppb	28.378 ppb	1,176.769 ppb	25,067.456 ppb	9.086 ppb	14.904 ppb	13.585 ppb	68.953 ppb	121.668 %
Concentration per Run 3	42.891 ppb	27.213 ppb	1,193.793 ppb	24,776.585 ppb	8.940 ppb	14.508 ppb	13.417 ppb	67.473 ppb	122.568 %
Concentration RSD	2.2 %	5.1 %	4.9 %	3.6 %	3.1 %	3.3 %	3.1 %	1.2 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	50.708 ppb	24.120 ppb	12.049 ppb	0.942 ppb	109.770 %	0.082 ppb	0.291 ppb	113.914 %	0.385 ppb
Concentration per Run 1	51.846 ppb	24.187 ppb	12.178 ppb	0.849 ppb	108.785 %	0.086 ppb	0.302 ppb	113.988 %	0.357 ppb
Concentration per Run 2	50.066 ppb	24.361 ppb	11.957 ppb	0.964 ppb	110.863 %	0.081 ppb	0.280 ppb	114.771 %	0.378 ppb
Concentration per Run 3	50.211 ppb	23.812 ppb	12.012 ppb	1.011 ppb	109.662 %	0.081 ppb	0.289 ppb	112.984 %	0.418 ppb
Concentration RSD	1.9 %	1.2 %	1.0 %	8.8 %	1.0 %	3.5 %	3.8 %	0.8 %	8.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	175.427 ppb	118.637 %	114.478 %	0.227 ppb	75.692 ppb	109.198 %
Concentration per Run 1	171.643 ppb	120.273 %	114.486 %	0.221 ppb	74.875 ppb	110.589 %
Concentration per Run 2	177.329 ppb	118.925 %	116.770 %	0.228 ppb	75.468 ppb	108.391 %
Concentration per Run 3	177.308 ppb	116.714 %	112.177 %	0.230 ppb	76.734 ppb	108.613 %
Concentration RSD	1.9 %	1.5 %	2.0 %	2.1 %	1.3 %	1.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	118	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2352354-46D10 6020TS	Rack	3		
Analysis started at:	9/14/2023 11:28:14 PM	Vial	6		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.207 %	109.665 %	1.844 ppb	31.581 ppb	2,375.609 ppb	20,412.181 ppb	642.627 ppb	2,165.075 ppb	102.699 %
Concentration per Run 1	89.612 %	114.130 %	1.803 ppb	32.367 ppb	2,313.968 ppb	19,750.184 ppb	643.852 ppb	2,197.653 ppb	111.706 %
Concentration per Run 2	84.522 %	108.236 %	1.829 ppb	31.599 ppb	2,414.019 ppb	20,733.847 ppb	637.958 ppb	2,207.340 ppb	98.197 %
Concentration per Run 3	81.486 %	106.629 %	1.900 ppb	30.776 ppb	2,398.840 ppb	20,752.512 ppb	646.069 ppb	2,090.231 ppb	98.193 %
Concentration RSD	4.8 %	3.6 %	2.7 %	2.5 %	2.3 %	2.8 %	0.7 %	3.0 %	7.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.682 ppb	31.013 ppb	1,705.202 ppb	35,424.163 ppb	13.518 ppb	13.584 ppb	18.088 ppb	64.535 ppb	119.577 %
Concentration per Run 1	57.056 ppb	31.034 ppb	1,703.855 ppb	35,320.062 ppb	13.751 ppb	14.297 ppb	18.034 ppb	65.478 ppb	117.640 %
Concentration per Run 2	57.686 ppb	30.720 ppb	1,672.065 ppb	35,654.549 ppb	13.263 ppb	13.180 ppb	17.873 ppb	62.763 ppb	121.401 %
Concentration per Run 3	58.306 ppb	31.284 ppb	1,739.687 ppb	35,297.879 ppb	13.540 ppb	13.276 ppb	18.358 ppb	65.364 ppb	119.689 %
Concentration RSD	1.1 %	0.9 %	2.0 %	0.6 %	1.8 %	4.6 %	1.4 %	2.4 %	1.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	82.995 ppb	23.347 ppb	12.675 ppb	1.107 ppb	108.822 %	0.095 ppb	0.241 ppb	113.944 %	0.462 ppb
Concentration per Run 1	84.326 ppb	24.434 ppb	12.657 ppb	1.034 ppb	107.679 %	0.094 ppb	0.256 ppb	111.626 %	0.450 ppb
Concentration per Run 2	81.617 ppb	22.781 ppb	12.589 ppb	1.104 ppb	109.512 %	0.097 ppb	0.221 ppb	114.552 %	0.442 ppb
Concentration per Run 3	83.041 ppb	22.825 ppb	12.779 ppb	1.182 ppb	109.275 %	0.093 ppb	0.247 ppb	115.655 %	0.496 ppb
Concentration RSD	1.6 %	4.0 %	0.8 %	6.7 %	0.9 %	1.9 %	7.5 %	1.8 %	6.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	168.984 ppb	111.867 %	114.866 %	0.244 ppb	68.924 ppb	108.883 %
Concentration per Run 1	166.221 ppb	118.267 %	115.754 %	0.230 ppb	66.750 ppb	113.912 %
Concentration per Run 2	165.512 ppb	108.229 %	112.157 %	0.252 ppb	71.018 ppb	104.057 %
Concentration per Run 3	175.217 ppb	109.105 %	116.686 %	0.250 ppb	69.005 ppb	108.680 %
Concentration RSD	3.2 %	5.0 %	2.1 %	4.9 %	3.1 %	4.5 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	119	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2352354-47D10 6020TS	Rack	3		
Analysis started at:	9/14/2023 11:32:55 PM	Vial	7		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.362 %	108.097 %	1.400 ppb	42.018 ppb	3,115.928 ppb	24,476.524 ppb	753.941 ppb	2,028.155 ppb	109.137 %
Concentration per Run 1	88.136 %	108.653 %	1.390 ppb	43.362 ppb	3,191.448 ppb	21,461.522 ppb	765.708 ppb	2,105.723 ppb	118.523 %
Concentration per Run 2	85.633 %	111.034 %	1.380 ppb	40.320 ppb	3,045.664 ppb	25,523.975 ppb	746.105 ppb	1,959.072 ppb	106.069 %
Concentration per Run 3	82.318 %	104.604 %	1.431 ppb	42.373 ppb	3,110.672 ppb	26,444.074 ppb	750.009 ppb	2,019.670 ppb	102.820 %
Concentration RSD	3.4 %	3.0 %	1.9 %	3.7 %	2.3 %	10.8 %	1.4 %	3.6 %	7.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	67.220 ppb	40.348 ppb	410.419 ppb	35,794.608 ppb	9.923 ppb	15.399 ppb	15.583 ppb	50.570 ppb	119.557 %
Concentration per Run 1	67.261 ppb	40.864 ppb	418.897 ppb	36,946.148 ppb	10.059 ppb	15.762 ppb	15.809 ppb	51.042 ppb	117.979 %
Concentration per Run 2	65.976 ppb	39.994 ppb	398.516 ppb	34,699.475 ppb	9.675 ppb	15.257 ppb	15.550 ppb	49.560 ppb	120.144 %
Concentration per Run 3	68.422 ppb	40.185 ppb	413.845 ppb	35,738.201 ppb	10.036 ppb	15.179 ppb	15.389 ppb	51.109 ppb	120.547 %
Concentration RSD	1.8 %	1.1 %	2.6 %	3.1 %	2.2 %	2.1 %	1.4 %	1.7 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	30.512 ppb	14.854 ppb	11.767 ppb	1.215 ppb	108.007 %	0.055 ppb	0.069 ppb	111.701 %	0.446 ppb
Concentration per Run 1	30.874 ppb	15.534 ppb	11.701 ppb	1.239 ppb	108.065 %	0.055 ppb	0.070 ppb	114.091 %	0.425 ppb
Concentration per Run 2	30.377 ppb	14.798 ppb	11.756 ppb	1.182 ppb	108.173 %	0.055 ppb	0.072 ppb	110.659 %	0.430 ppb
Concentration per Run 3	30.285 ppb	14.229 ppb	11.844 ppb	1.223 ppb	107.783 %	0.056 ppb	0.065 ppb	110.353 %	0.482 ppb
Concentration RSD	1.0 %	4.4 %	0.6 %	2.4 %	0.2 %	1.3 %	5.3 %	1.9 %	7.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	131.180 ppb	113.662 %	112.714 %	0.252 ppb	29.749 ppb	110.983 %
Concentration per Run 1	126.616 ppb	116.831 %	113.416 %	0.238 ppb	28.795 ppb	115.838 %
Concentration per Run 2	128.684 ppb	117.063 %	111.797 %	0.258 ppb	30.556 ppb	106.364 %
Concentration per Run 3	138.241 ppb	107.091 %	112.930 %	0.261 ppb	29.895 ppb	110.746 %
Concentration RSD	4.7 %	5.0 %	0.7 %	4.9 %	3.0 %	4.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	120	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2352354-48D10 6020TS	Rack	3		
Analysis started at:	9/14/2023 11:37:36 PM	Vial	8		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.811 %	109.586 %	1.095 ppb	24.109 ppb	3,174.545 ppb	24,159.105 ppb	862.113 ppb	1,132.787 ppb	122.494 %
Concentration per Run 1	89.045 %	107.164 %	1.087 ppb	28.237 ppb	3,264.926 ppb	24,773.344 ppb	862.285 ppb	1,136.683 ppb	125.194 %
Concentration per Run 2	84.765 %	111.034 %	1.103 ppb	22.419 ppb	3,096.781 ppb	23,765.814 ppb	845.514 ppb	1,079.382 ppb	123.197 %
Concentration per Run 3	80.622 %	110.558 %	1.096 ppb	21.669 ppb	3,161.929 ppb	23,938.158 ppb	878.540 ppb	1,182.297 ppb	119.091 %
Concentration RSD	5.0 %	1.9 %	0.8 %	14.9 %	2.7 %	2.2 %	1.9 %	4.6 %	2.5 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	79.925 ppb	50.283 ppb	165.670 ppb	50,369.045 ppb	6.426 ppb	15.216 ppb	12.623 ppb	52.243 ppb	118.604 %
Concentration per Run 1	81.290 ppb	51.350 ppb	163.968 ppb	50,314.437 ppb	6.743 ppb	15.358 ppb	13.091 ppb	53.208 ppb	117.769 %
Concentration per Run 2	80.411 ppb	50.882 ppb	167.833 ppb	50,346.613 ppb	6.263 ppb	15.076 ppb	12.303 ppb	50.657 ppb	120.299 %
Concentration per Run 3	78.075 ppb	48.619 ppb	165.209 ppb	50,446.084 ppb	6.274 ppb	15.214 ppb	12.474 ppb	52.865 ppb	117.743 %
Concentration RSD	2.1 %	2.9 %	1.2 %	0.1 %	4.3 %	0.9 %	3.3 %	2.7 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	13.934 ppb	8.968 ppb	6.225 ppb	0.947 ppb	109.307 %	0.033 ppb	0.049 ppb	114.444 %	0.178 ppb
Concentration per Run 1	13.804 ppb	9.539 ppb	6.328 ppb	0.987 ppb	107.229 %	0.032 ppb	0.050 ppb	115.611 %	0.139 ppb
Concentration per Run 2	13.733 ppb	8.104 ppb	6.109 ppb	0.917 ppb	110.783 %	0.034 ppb	0.050 ppb	113.150 %	0.185 ppb
Concentration per Run 3	14.264 ppb	9.262 ppb	6.238 ppb	0.937 ppb	109.908 %	0.033 ppb	0.048 ppb	114.571 %	0.208 ppb
Concentration RSD	2.1 %	8.5 %	1.8 %	3.8 %	1.7 %	2.2 %	2.4 %	1.1 %	19.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	88.093 ppb	109.770 %	112.214 %	0.185 ppb	17.698 ppb	109.672 %
Concentration per Run 1	89.693 ppb	103.695 %	109.483 %	0.175 ppb	17.437 ppb	110.784 %
Concentration per Run 2	89.274 ppb	111.973 %	113.099 %	0.194 ppb	17.689 ppb	109.815 %
Concentration per Run 3	85.313 ppb	113.643 %	114.060 %	0.187 ppb	17.969 ppb	108.417 %
Concentration RSD	2.7 %	4.9 %	2.2 %	5.2 %	1.5 %	1.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 121
Analysis label: I2352354-49D10 6020TS
Analysis started at: 9/14/2023 11:42:17 PM
User name ALPHALAB\Metals-Instrument
Rack 3
Vial 9
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	85.310 %	107.026 %	2.519 ppb	54.303 ppb	3,180.017 ppb	23,411.433 ppb	533.800 ppb	3,196.393 ppb	110.391 %
Concentration per Run 1	88.946 %	109.486 %	2.458 ppb	55.283 ppb	3,172.911 ppb	24,347.391 ppb	550.664 ppb	3,231.026 ppb	112.510 %
Concentration per Run 2	84.715 %	100.437 %	2.497 ppb	56.934 ppb	3,237.722 ppb	25,728.769 ppb	549.393 ppb	3,304.424 ppb	109.122 %
Concentration per Run 3	82.269 %	111.154 %	2.603 ppb	50.693 ppb	3,129.419 ppb	20,158.140 ppb	501.343 ppb	3,053.730 ppb	109.542 %
Concentration RSD	4.0 %	5.4 %	3.0 %	6.0 %	1.7 %	12.4 %	5.3 %	4.0 %	1.7 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	59.551 ppb	34.297 ppb	3,087.840 ppb	33,174.190 ppb	19.053 ppb	17.057 ppb	16.650 ppb	80.714 ppb	125.616 %
Concentration per Run 1	60.642 ppb	34.970 ppb	3,212.224 ppb	33,744.319 ppb	19.530 ppb	17.406 ppb	16.587 ppb	81.652 ppb	124.420 %
Concentration per Run 2	59.297 ppb	34.706 ppb	3,059.643 ppb	33,055.080 ppb	19.038 ppb	17.250 ppb	16.944 ppb	80.480 ppb	124.723 %
Concentration per Run 3	58.713 ppb	33.216 ppb	2,991.654 ppb	32,723.171 ppb	18.592 ppb	16.514 ppb	16.421 ppb	80.008 ppb	127.706 %
Concentration RSD	1.7 %	2.8 %	3.7 %	1.6 %	2.5 %	2.8 %	1.6 %	1.0 %	1.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	25.553 ppb	33.454 ppb	14.466 ppb	1.276 ppb	109.054 %	0.110 ppb	0.269 ppb	113.761 %	0.515 ppb
Concentration per Run 1	25.584 ppb	34.258 ppb	14.560 ppb	1.265 ppb	107.621 %	0.116 ppb	0.257 ppb	112.394 %	0.513 ppb
Concentration per Run 2	25.799 ppb	33.856 ppb	14.498 ppb	1.253 ppb	110.103 %	0.105 ppb	0.284 ppb	113.527 %	0.515 ppb
Concentration per Run 3	25.276 ppb	32.249 ppb	14.341 ppb	1.310 ppb	109.438 %	0.108 ppb	0.266 ppb	115.360 %	0.518 ppb
Concentration RSD	1.0 %	3.2 %	0.8 %	2.4 %	1.2 %	5.0 %	5.2 %	1.3 %	0.5 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	222.407 ppb	117.617 %	116.934 %	0.301 ppb	49.999 ppb	109.744 %
Concentration per Run 1	216.273 ppb	127.033 %	118.475 %	0.301 ppb	48.560 ppb	112.572 %
Concentration per Run 2	226.063 ppb	112.678 %	117.536 %	0.303 ppb	51.339 ppb	108.330 %
Concentration per Run 3	224.886 ppb	113.139 %	114.792 %	0.298 ppb	50.098 ppb	108.331 %
Concentration RSD	2.4 %	6.9 %	1.6 %	0.9 %	2.8 %	2.2 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	122	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2352354-50D10 6020TS	Rack	3		
Analysis started at:	9/14/2023 11:46:58 PM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	84.507 %	109.030 %	1.630 ppb	46.009 ppb	2,993.429 ppb	22,442.778 ppb	656.612 ppb	2,396.257 ppb	107.284 %
Concentration per Run 1	87.864 %	111.034 %	1.624 ppb	45.226 ppb	2,942.818 ppb	20,949.824 ppb	650.911 ppb	2,379.555 ppb	104.978 %
Concentration per Run 2	84.345 %	107.343 %	1.625 ppb	47.491 ppb	3,081.606 ppb	21,259.568 ppb	662.399 ppb	2,390.287 ppb	105.512 %
Concentration per Run 3	81.311 %	108.712 %	1.641 ppb	45.311 ppb	2,955.863 ppb	25,118.941 ppb	656.525 ppb	2,418.930 ppb	111.362 %
Concentration RSD	3.9 %	1.7 %	0.6 %	2.8 %	2.6 %	10.3 %	0.9 %	0.8 %	3.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	64.517 ppb	44.379 ppb	437.541 ppb	34,787.994 ppb	11.161 ppb	15.720 ppb	17.693 ppb	67.927 ppb	118.387 %
Concentration per Run 1	65.835 ppb	45.701 ppb	447.821 ppb	36,100.109 ppb	11.429 ppb	15.749 ppb	18.122 ppb	69.386 ppb	116.221 %
Concentration per Run 2	65.378 ppb	44.411 ppb	442.598 ppb	35,033.805 ppb	11.087 ppb	16.190 ppb	17.837 ppb	68.092 ppb	117.596 %
Concentration per Run 3	62.337 ppb	43.026 ppb	422.204 ppb	33,230.067 ppb	10.966 ppb	15.222 ppb	17.119 ppb	66.303 ppb	121.345 %
Concentration RSD	2.9 %	3.0 %	3.1 %	4.2 %	2.2 %	3.1 %	2.9 %	2.3 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	38.517 ppb	17.642 ppb	12.103 ppb	1.092 ppb	109.063 %	0.103 ppb	0.249 ppb	112.858 %	0.409 ppb
Concentration per Run 1	39.767 ppb	18.098 ppb	12.069 ppb	1.069 ppb	108.439 %	0.102 ppb	0.261 ppb	111.528 %	0.401 ppb
Concentration per Run 2	38.542 ppb	17.834 ppb	12.255 ppb	1.060 ppb	108.920 %	0.097 ppb	0.232 ppb	115.019 %	0.400 ppb
Concentration per Run 3	37.242 ppb	16.993 ppb	11.986 ppb	1.146 ppb	109.830 %	0.111 ppb	0.252 ppb	112.026 %	0.425 ppb
Concentration RSD	3.3 %	3.3 %	1.1 %	4.3 %	0.6 %	7.1 %	6.0 %	1.7 %	3.4 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	142.634 ppb	107.236 %	111.056 %	0.250 ppb	131.946 ppb	110.431 %
Concentration per Run 1	144.187 ppb	107.494 %	110.406 %	0.238 ppb	128.916 ppb	111.975 %
Concentration per Run 2	139.494 ppb	107.611 %	110.305 %	0.248 ppb	131.563 ppb	111.388 %
Concentration per Run 3	144.221 ppb	106.602 %	112.458 %	0.264 ppb	135.358 ppb	107.931 %
Concentration RSD	1.9 %	0.5 %	1.1 %	5.2 %	2.5 %	2.0 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	123	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2352354-51D10 6020TS	Rack	3		
Analysis started at:	9/14/2023 11:51:38 PM	Vial	11		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.657 %	110.161 %	1.230 ppb	30.620 ppb	2,933.540 ppb	17,775.570 ppb	610.814 ppb	3,056.864 ppb	99.988 %
Concentration per Run 1	86.416 %	109.606 %	1.161 ppb	32.117 ppb	2,947.409 ppb	17,800.671 ppb	625.391 ppb	3,167.142 ppb	107.493 %
Concentration per Run 2	84.213 %	111.689 %	1.238 ppb	28.164 ppb	2,890.425 ppb	17,811.172 ppb	618.122 ppb	2,982.174 ppb	97.102 %
Concentration per Run 3	80.341 %	109.189 %	1.290 ppb	31.578 ppb	2,962.786 ppb	17,714.869 ppb	588.929 ppb	3,021.276 ppb	95.370 %
Concentration RSD	3.7 %	1.2 %	5.3 %	7.0 %	1.3 %	0.3 %	3.2 %	3.2 %	6.6 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	44.097 ppb	30.656 ppb	196.488 ppb	25,979.926 ppb	7.676 ppb	15.281 ppb	24.175 ppb	66.457 ppb	116.515 %
Concentration per Run 1	44.837 ppb	31.535 ppb	206.760 ppb	26,935.206 ppb	7.902 ppb	16.134 ppb	24.774 ppb	67.519 ppb	115.759 %
Concentration per Run 2	43.525 ppb	29.420 ppb	189.132 ppb	24,618.431 ppb	7.551 ppb	14.789 ppb	24.135 ppb	65.230 ppb	118.784 %
Concentration per Run 3	43.928 ppb	31.014 ppb	193.571 ppb	26,386.141 ppb	7.573 ppb	14.920 ppb	23.616 ppb	66.621 ppb	115.003 %
Concentration RSD	1.5 %	3.6 %	4.7 %	4.7 %	2.6 %	4.9 %	2.4 %	1.7 %	1.7 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	102.963 ppb	12.809 ppb	15.450 ppb	0.907 ppb	108.893 %	0.086 ppb	0.156 ppb	113.058 %	0.684 ppb
Concentration per Run 1	103.673 ppb	12.275 ppb	15.429 ppb	0.879 ppb	108.216 %	0.087 ppb	0.161 ppb	111.711 %	0.666 ppb
Concentration per Run 2	101.249 ppb	12.906 ppb	15.358 ppb	0.882 ppb	107.568 %	0.089 ppb	0.155 ppb	112.183 %	0.692 ppb
Concentration per Run 3	103.968 ppb	13.245 ppb	15.562 ppb	0.960 ppb	110.895 %	0.082 ppb	0.152 ppb	115.282 %	0.693 ppb
Concentration RSD	1.4 %	3.8 %	0.7 %	5.0 %	1.6 %	3.9 %	3.0 %	1.7 %	2.2 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	102.913 ppb	114.397 %	114.449 %	0.188 ppb	59.961 ppb	110.068 %
Concentration per Run 1	98.075 ppb	118.114 %	117.795 %	0.178 ppb	59.410 ppb	111.954 %
Concentration per Run 2	108.687 ppb	106.079 %	112.295 %	0.195 ppb	60.246 ppb	107.627 %
Concentration per Run 3	101.975 ppb	118.999 %	113.256 %	0.190 ppb	60.227 ppb	110.623 %
Concentration RSD	5.2 %	6.3 %	2.6 %	4.6 %	0.8 %	2.0 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	124	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	I2352354-52D10 6020TS	Rack	3		
Analysis started at:	9/14/2023 11:56:19 PM	Vial	12		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	83.855 %	108.454 %	1.366 ppb	34.428 ppb	3,579.488 ppb	25,136.316 ppb	872.960 ppb	2,801.121 ppb	105.668 %
Concentration per Run 1	86.886 %	104.068 %	1.362 ppb	40.128 ppb	3,678.716 ppb	25,606.153 ppb	907.183 ppb	2,990.724 ppb	103.889 %
Concentration per Run 2	83.507 %	109.665 %	1.419 ppb	34.974 ppb	3,577.952 ppb	24,803.514 ppb	853.049 ppb	2,735.253 ppb	100.056 %
Concentration per Run 3	81.173 %	111.630 %	1.317 ppb	28.182 ppb	3,481.795 ppb	24,999.280 ppb	858.647 ppb	2,677.384 ppb	113.059 %
Concentration RSD	3.4 %	3.6 %	3.8 %	17.4 %	2.8 %	1.7 %	3.4 %	6.0 %	6.3 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	64.729 ppb	39.934 ppb	593.490 ppb	31,722.283 ppb	9.668 ppb	17.356 ppb	17.323 ppb	56.550 ppb	119.513 %
Concentration per Run 1	65.525 ppb	40.646 ppb	597.520 ppb	32,229.234 ppb	9.654 ppb	17.735 ppb	17.473 ppb	58.121 ppb	117.870 %
Concentration per Run 2	65.334 ppb	40.312 ppb	607.140 ppb	31,830.101 ppb	9.672 ppb	17.315 ppb	17.196 ppb	55.151 ppb	119.625 %
Concentration per Run 3	63.327 ppb	38.845 ppb	575.809 ppb	31,107.514 ppb	9.677 ppb	17.020 ppb	17.299 ppb	56.377 ppb	121.043 %
Concentration RSD	1.9 %	2.4 %	2.7 %	1.8 %	0.1 %	2.1 %	0.8 %	2.6 %	1.3 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	48.736 ppb	16.189 ppb	14.848 ppb	1.159 ppb	106.886 %	0.068 ppb	0.129 ppb	111.862 %	0.506 ppb
Concentration per Run 1	49.667 ppb	15.996 ppb	14.812 ppb	1.121 ppb	106.732 %	0.066 ppb	0.116 ppb	111.894 %	0.505 ppb
Concentration per Run 2	48.211 ppb	16.319 ppb	14.850 ppb	1.188 ppb	107.080 %	0.067 ppb	0.136 ppb	111.241 %	0.524 ppb
Concentration per Run 3	48.331 ppb	16.253 ppb	14.882 ppb	1.167 ppb	106.845 %	0.070 ppb	0.134 ppb	112.451 %	0.490 ppb
Concentration RSD	1.7 %	1.1 %	0.2 %	2.9 %	0.2 %	2.8 %	8.4 %	0.5 %	3.3 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	140.375 ppb	115.919 %	113.952 %	0.256 ppb	50.692 ppb	110.286 %
Concentration per Run 1	141.710 ppb	114.797 %	113.020 %	0.247 ppb	49.189 ppb	112.444 %
Concentration per Run 2	145.454 ppb	115.013 %	113.518 %	0.262 ppb	51.028 ppb	108.386 %
Concentration per Run 3	133.961 ppb	117.947 %	115.319 %	0.258 ppb	51.860 ppb	110.030 %
Concentration RSD	4.2 %	1.5 %	1.1 %	3.2 %	2.7 %	1.9 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	125	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/15/2023 12:01:00 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	82.392 %	101.945 %	59.587 ppb	5,695.043 ppb	5,686.580 ppb	58.812 ppb	5,838.788 ppb	5,798.925 ppb	94.267 %
Concentration per Run 1	86.835 %	102.282 %	58.654 ppb	5,766.755 ppb	5,824.545 ppb	59.531 ppb	5,859.613 ppb	6,056.068 ppb	104.094 %
Concentration per Run 2	81.460 %	101.389 %	59.537 ppb	5,628.873 ppb	5,649.206 ppb	58.947 ppb	5,860.527 ppb	5,740.174 ppb	88.963 %
Concentration per Run 3	78.880 %	102.163 %	60.571 ppb	5,689.501 ppb	5,585.988 ppb	57.957 ppb	5,796.225 ppb	5,600.534 ppb	89.744 %
Recovery Percentage 1			99.312 %	94.917 %	94.776 %	98.020 %	97.313 %	96.649 %	
Concentration RSD	4.9 %	0.5 %	1.6 %	1.2 %	2.2 %	1.4 %	0.6 %	4.0 %	9.0 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.927 ppb	57.627 ppb	58.993 ppb	6,079.904 ppb	61.570 ppb	57.208 ppb	56.705 ppb	59.684 ppb	112.015 %
Concentration per Run 1	59.409 ppb	59.404 ppb	60.927 ppb	6,349.559 ppb	63.425 ppb	59.572 ppb	59.361 ppb	60.998 ppb	110.466 %
Concentration per Run 2	56.167 ppb	57.390 ppb	59.324 ppb	6,115.569 ppb	61.705 ppb	56.748 ppb	56.784 ppb	59.425 ppb	110.689 %
Concentration per Run 3	58.204 ppb	56.087 ppb	56.728 ppb	5,774.583 ppb	59.580 ppb	55.303 ppb	53.971 ppb	58.630 ppb	114.890 %
Recovery Percentage 1	96.545 %	96.045 %	98.321 %	101.332 %	102.617 %	95.346 %	94.509 %	99.474 %	
Concentration RSD	2.8 %	2.9 %	3.6 %	4.8 %	3.1 %	3.8 %	4.8 %	2.0 %	2.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	58.343 ppb	59.195 ppb	58.194 ppb	52.556 ppb	108.551 %	57.655 ppb	59.346 ppb	108.579 %	57.088 ppb
Concentration per Run 1	59.557 ppb	59.066 ppb	58.578 ppb	53.580 ppb	108.682 %	57.851 ppb	60.688 ppb	107.966 %	58.303 ppb
Concentration per Run 2	58.736 ppb	60.389 ppb	58.195 ppb	52.288 ppb	107.995 %	56.637 ppb	58.452 ppb	109.862 %	56.091 ppb
Concentration per Run 3	56.736 ppb	58.129 ppb	57.810 ppb	51.800 ppb	108.976 %	58.478 ppb	58.897 ppb	107.908 %	56.870 ppb
Recovery Percentage 1	97.238 %	98.658 %	96.991 %	87.593 %		96.092 %	98.909 %		95.146 %
Concentration RSD	2.5 %	1.9 %	0.7 %	1.7 %	0.5 %	1.6 %	2.0 %	1.0 %	2.0 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	58.124 ppb	111.276 %	113.080 %	55.659 ppb	57.146 ppb	114.139 %
Concentration per Run 1	60.866 ppb	102.595 %	111.862 %	52.294 ppb	53.754 ppb	121.200 %
Concentration per Run 2	56.565 ppb	113.854 %	112.371 %	56.999 ppb	58.433 ppb	111.132 %
Concentration per Run 3	56.940 ppb	117.378 %	115.008 %	57.683 ppb	59.251 ppb	110.085 %
Recovery Percentage 1	96.873 %			92.764 %	95.243 %	
Concentration RSD	4.1 %	6.9 %	1.5 %	5.3 %	5.2 %	5.4 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	126	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/15/2023 12:05:43 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.821 %	101.528 %	0.002 ppb	-15.443 ppb	-0.786 ppb	-0.453 ppb	-10.918 ppb	0.340 ppb	91.459 %
Concentration per Run 1	83.725 %	103.354 %	0.001 ppb	-15.020 ppb	-0.673 ppb	-0.527 ppb	-12.024 ppb	0.443 ppb	93.281 %
Concentration per Run 2	80.243 %	103.652 %	0.003 ppb	-15.696 ppb	-0.996 ppb	-0.407 ppb	-12.718 ppb	-0.346 ppb	89.776 %
Concentration per Run 3	78.495 %	97.579 %	0.002 ppb	-15.613 ppb	-0.691 ppb	-0.425 ppb	-8.013 ppb	0.924 ppb	91.319 %
Recovery Percentage 1			0.401 %	-15.443 %	-1.123 %	-4.532 %	-10.918 %	0.340 %	
Concentration RSD	3.3 %	3.4 %	64.2 %	2.4 %	23.1 %	14.3 %	23.3 %	188.5 %	1.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.007 ppb	-0.001 ppb	-0.003 ppb	21.377 ppb	-0.001 ppb	0.091 ppb	0.019 ppb	0.245 ppb	108.043 %
Concentration per Run 1	0.006 ppb	0.002 ppb	0.010 ppb	19.920 ppb	0.000 ppb	0.099 ppb	0.026 ppb	0.262 ppb	106.709 %
Concentration per Run 2	0.011 ppb	0.000 ppb	-0.004 ppb	20.693 ppb	0.000 ppb	0.098 ppb	0.015 ppb	0.187 ppb	109.171 %
Concentration per Run 3	0.004 ppb	-0.004 ppb	-0.013 ppb	23.518 ppb	-0.002 ppb	0.076 ppb	0.017 ppb	0.286 ppb	108.249 %
Recovery Percentage 1	0.139 %	-0.082 %	-0.262 %	42.754 %	-0.129 %	4.532 %	1.948 %	4.899 %	
Concentration RSD	53.5 %	384.7 %	438.3 %	8.9 %	202.2 %	14.4 %	29.2 %	21.1 %	1.2 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.037 ppb	0.566 ppb	-0.007 ppb	1.222 ppb	108.800 %	0.004 ppb	0.001 ppb	106.700 %	-0.007 ppb
Concentration per Run 1	-0.010 ppb	0.226 ppb	-0.006 ppb	0.917 ppb	107.358 %	0.004 ppb	0.001 ppb	108.033 %	-0.025 ppb
Concentration per Run 2	0.065 ppb	0.680 ppb	-0.003 ppb	1.183 ppb	109.699 %	0.004 ppb	0.001 ppb	107.734 %	-0.002 ppb
Concentration per Run 3	0.055 ppb	0.793 ppb	-0.012 ppb	1.565 ppb	109.344 %	0.003 ppb	0.001 ppb	104.334 %	0.005 ppb
Recovery Percentage 1	7.334 %	11.324 %	-0.073 %	61.077 %		0.895 %	0.516 %		-0.179 %
Concentration RSD	111.2 %	53.0 %	60.0 %	26.6 %	1.2 %	12.9 %	30.2 %	1.9 %	223.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.024 ppb	110.386 %	109.110 %	0.110 ppb	0.020 ppb	111.017 %
Concentration per Run 1	0.017 ppb	108.900 %	108.001 %	0.085 ppb	0.019 ppb	114.852 %
Concentration per Run 2	0.025 ppb	112.141 %	109.710 %	0.132 ppb	0.021 ppb	109.824 %
Concentration per Run 3	0.031 ppb	110.116 %	109.618 %	0.112 ppb	0.019 ppb	108.375 %
Recovery Percentage 1	4.843 %			11.003 %	1.967 %	
Concentration RSD	28.2 %	1.5 %	0.9 %	21.4 %	4.1 %	3.1 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	127	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/15/2023 12:10:27 AM	Vial	9		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	79.802 %	103.334 %	59.420 ppb	5,745.017 ppb	5,630.187 ppb	56.655 ppb	5,973.734 ppb	5,765.796 ppb	92.032 %
Concentration per Run 1	83.497 %	103.652 %	57.513 ppb	5,885.669 ppb	5,815.641 ppb	57.152 ppb	6,129.482 ppb	5,989.474 ppb	100.344 %
Concentration per Run 2	79.857 %	104.307 %	59.498 ppb	5,701.078 ppb	5,512.972 ppb	55.197 ppb	5,851.958 ppb	5,582.304 ppb	88.769 %
Concentration per Run 3	76.053 %	102.044 %	61.249 ppb	5,648.305 ppb	5,561.950 ppb	57.617 ppb	5,939.762 ppb	5,725.609 ppb	86.982 %
Recovery Percentage 1			99.034 %	95.750 %	93.836 %	94.425 %	99.562 %	96.097 %	
Concentration RSD	4.7 %	1.1 %	3.1 %	2.2 %	2.9 %	2.3 %	2.4 %	3.6 %	7.9 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	57.144 ppb	56.815 ppb	59.468 ppb	5,950.857 ppb	60.071 ppb	57.387 ppb	56.770 ppb	59.724 ppb	110.193 %
Concentration per Run 1	56.955 ppb	56.832 ppb	58.279 ppb	6,009.538 ppb	58.914 ppb	58.580 ppb	58.246 ppb	60.683 ppb	109.333 %
Concentration per Run 2	56.766 ppb	56.619 ppb	58.873 ppb	5,881.933 ppb	59.834 ppb	57.380 ppb	56.907 ppb	59.481 ppb	109.656 %
Concentration per Run 3	57.711 ppb	56.995 ppb	61.251 ppb	5,961.099 ppb	61.467 ppb	56.200 ppb	55.156 ppb	59.008 ppb	111.591 %
Recovery Percentage 1	95.240 %	94.692 %	99.113 %	99.181 %	100.119 %	95.645 %	94.616 %	99.539 %	
Concentration RSD	0.9 %	0.3 %	2.6 %	1.1 %	2.2 %	2.1 %	2.7 %	1.4 %	1.1 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	57.163 ppb	59.869 ppb	58.314 ppb	53.526 ppb	105.447 %	57.132 ppb	58.465 ppb	107.555 %	56.504 ppb
Concentration per Run 1	58.207 ppb	59.524 ppb	58.455 ppb	54.636 ppb	105.053 %	56.618 ppb	57.730 ppb	106.941 %	57.537 ppb
Concentration per Run 2	56.787 ppb	61.619 ppb	59.070 ppb	52.544 ppb	104.794 %	56.849 ppb	58.689 ppb	106.462 %	56.744 ppb
Concentration per Run 3	56.496 ppb	58.463 ppb	57.417 ppb	53.400 ppb	106.495 %	57.930 ppb	58.975 ppb	109.263 %	55.230 ppb
Recovery Percentage 1	95.272 %	99.781 %	97.190 %	89.211 %		95.220 %	97.441 %		94.173 %
Concentration RSD	1.6 %	2.7 %	1.4 %	2.0 %	0.9 %	1.2 %	1.1 %	1.4 %	2.1 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	57.496 ppb	110.525 %	111.826 %	54.849 ppb	55.211 ppb	114.348 %
Concentration per Run 1	59.397 ppb	110.451 %	111.014 %	51.670 ppb	51.846 ppb	122.095 %
Concentration per Run 2	56.977 ppb	110.550 %	110.771 %	54.248 ppb	56.155 ppb	113.116 %
Concentration per Run 3	56.115 ppb	110.574 %	113.692 %	58.630 ppb	57.633 ppb	107.831 %
Recovery Percentage 1	95.827 %			91.415 %	92.019 %	
Concentration RSD	3.0 %	0.1 %	1.4 %	6.4 %	5.4 %	6.3 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index:	128	User name	ALPHALAB\Metals-Instrument	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/15/2023 12:15:10 AM	Vial	10		

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	80.219 %	100.020 %	0.004 ppb	-11.303 ppb	-0.907 ppb	-0.459 ppb	-8.018 ppb	0.453 ppb	86.983 %
Concentration per Run 1	83.654 %	97.281 %	0.005 ppb	-7.851 ppb	-1.018 ppb	-0.353 ppb	-4.797 ppb	-1.303 ppb	82.836 %
Concentration per Run 2	79.263 %	99.782 %	0.004 ppb	-11.150 ppb	-0.979 ppb	-0.381 ppb	-8.917 ppb	1.524 ppb	88.563 %
Concentration per Run 3	77.741 %	102.997 %	0.002 ppb	-14.908 ppb	-0.723 ppb	-0.642 ppb	-10.339 ppb	1.137 ppb	89.549 %
Recovery Percentage 1			0.721 %	-11.303 %	-1.296 %	-4.587 %	-8.018 %	0.453 %	
Concentration RSD	3.8 %	2.9 %	38.8 %	31.2 %	17.7 %	34.7 %	35.9 %	338.5 %	4.2 %

Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	0.006 ppb	0.004 ppb	0.001 ppb	15.802 ppb	0.000 ppb	0.096 ppb	0.019 ppb	0.278 ppb	107.407 %
Concentration per Run 1	0.006 ppb	0.008 ppb	0.004 ppb	13.012 ppb	0.002 ppb	0.086 ppb	0.027 ppb	0.217 ppb	106.087 %
Concentration per Run 2	0.008 ppb	0.002 ppb	-0.003 ppb	16.976 ppb	-0.001 ppb	0.103 ppb	0.016 ppb	0.375 ppb	105.736 %
Concentration per Run 3	0.003 ppb	0.001 ppb	0.002 ppb	17.417 ppb	0.000 ppb	0.098 ppb	0.015 ppb	0.243 ppb	110.399 %
Recovery Percentage 1	0.118 %	0.376 %	0.113 %	31.604 %	0.053 %	4.794 %	1.938 %	5.568 %	
Concentration RSD	39.2 %	105.8 %	311.4 %	15.4 %	549.0 %	9.2 %	36.0 %	30.5 %	2.4 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.028 ppb	0.682 ppb	-0.006 ppb	1.272 ppb	106.748 %	0.004 ppb	0.002 ppb	106.986 %	0.040 ppb
Concentration per Run 1	-0.024 ppb	0.472 ppb	-0.008 ppb	0.957 ppb	106.167 %	0.004 ppb	0.000 ppb	106.649 %	0.017 ppb
Concentration per Run 2	0.062 ppb	0.739 ppb	-0.009 ppb	1.379 ppb	109.106 %	0.004 ppb	0.003 ppb	106.980 %	0.046 ppb
Concentration per Run 3	0.046 ppb	0.835 ppb	-0.001 ppb	1.479 ppb	104.971 %	0.005 ppb	0.001 ppb	107.328 %	0.058 ppb
Recovery Percentage 1	5.577 %	13.636 %	-0.060 %	63.593 %		1.003 %	0.783 %		1.006 %
Concentration RSD	164.1 %	27.6 %	72.7 %	21.8 %	2.0 %	16.5 %	103.1 %	0.3 %	51.6 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.028 ppb	106.931 %	107.177 %	0.116 ppb	0.019 ppb	109.821 %
Concentration per Run 1	0.028 ppb	105.934 %	104.263 %	0.092 ppb	0.019 ppb	111.640 %
Concentration per Run 2	0.017 ppb	107.554 %	110.605 %	0.135 ppb	0.018 ppb	109.886 %
Concentration per Run 3	0.039 ppb	107.305 %	106.664 %	0.122 ppb	0.018 ppb	107.937 %
Recovery Percentage 1	5.644 %			11.642 %	1.858 %	
Concentration RSD	37.8 %	0.8 %	3.0 %	19.3 %	3.0 %	1.7 %

Alpha ICPMSQ Data

9/15/2023 5:02:21 AM

Analysis index: 129
Analysis label: LLCCV
Analysis started at: 9/15/2023 12:19:54 AM
User name ALPHALAB\Metals-Instrument
Rack 4
Vial 51
Comment <Comment>

Category	6Li (STD AGD)	6Li (KED AGD)	9Be (STD AGD)	23Na (KED AGD)	24Mg (KED AGD)	27Al (KED AGD)	39K (KED AGD)	44Ca (KED AGD)	45Sc (STD AGD)
Concentration average	77.181 %	103.731 %	0.310 ppb	98.088 ppb	72.044 ppb	10.872 ppb	92.588 ppb	143.311 ppb	84.774 %
Concentration per Run 1	80.870 %	102.044 %	0.306 ppb	105.330 ppb	73.907 ppb	12.027 ppb	95.651 ppb	144.584 ppb	84.430 %
Concentration per Run 2	76.307 %	105.438 %	0.297 ppb	93.587 ppb	69.584 ppb	11.003 ppb	92.254 ppb	144.281 ppb	90.004 %
Concentration per Run 3	74.365 %	103.711 %	0.327 ppb	95.346 ppb	72.642 ppb	9.585 ppb	89.859 ppb	141.068 ppb	79.889 %
Recovery Percentage 1			62.009 %	98.088 %	102.921 %	108.717 %	92.588 %	143.311 %	
Concentration RSD	4.3 %	1.6 %	4.9 %	6.5 %	3.1 %	11.3 %	3.1 %	1.4 %	6.0 %

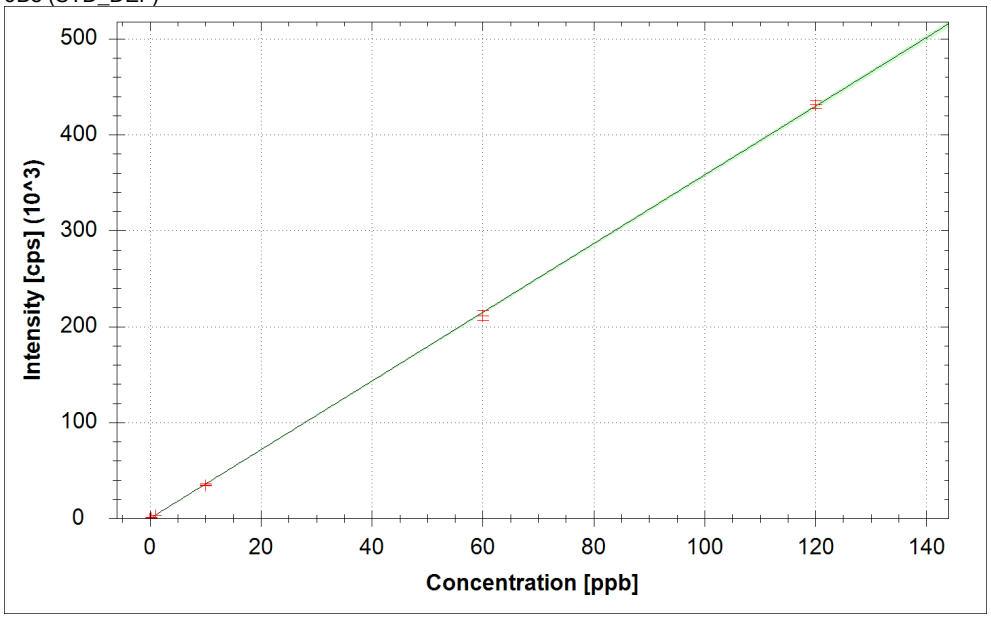
Category	51V (KED AGD)	52Cr (KED AGD)	55Mn (KED AGD)	57Fe (KED AGD)	59Co (KED AGD)	60Ni (KED AGD)	65Cu (KED AGD)	66Zn (KED AGD)	74Ge (KED AGD)
Concentration average	4.702 ppb	0.504 ppb	1.000 ppb	26.774 ppb	0.538 ppb	1.992 ppb	1.072 ppb	11.882 ppb	108.533 %
Concentration per Run 1	4.830 ppb	0.503 ppb	1.111 ppb	28.429 ppb	0.567 ppb	2.055 ppb	1.083 ppb	12.068 ppb	105.937 %
Concentration per Run 2	4.578 ppb	0.521 ppb	0.971 ppb	25.050 ppb	0.530 ppb	1.991 ppb	1.062 ppb	11.976 ppb	108.067 %
Concentration per Run 3	4.698 ppb	0.488 ppb	0.920 ppb	26.843 ppb	0.516 ppb	1.931 ppb	1.070 ppb	11.602 ppb	111.595 %
Recovery Percentage 1	94.043 %	50.399 %	100.039 %	53.548 %	107.502 %	99.611 %	107.167 %	118.819 %	
Concentration RSD	2.7 %	3.3 %	9.9 %	6.3 %	5.0 %	3.1 %	1.0 %	2.1 %	2.6 %

Category	75As (KED AGD)	78Se (KED AGD)	88Sr (KED AGD)	95Mo (KED AGD)	103Rh (KED AGD)	107Ag (KED AGD)	111Cd (KED AGD)	115In (KED AGD)	121Sb (KED AGD)
Concentration average	0.494 ppb	4.974 ppb	0.518 ppb	2.326 ppb	104.106 %	0.275 ppb	0.191 ppb	104.850 %	3.570 ppb
Concentration per Run 1	0.515 ppb	5.335 ppb	0.529 ppb	2.155 ppb	103.302 %	0.284 ppb	0.216 ppb	103.455 %	3.533 ppb
Concentration per Run 2	0.466 ppb	4.608 ppb	0.503 ppb	2.301 ppb	105.193 %	0.268 ppb	0.164 ppb	104.768 %	3.600 ppb
Concentration per Run 3	0.502 ppb	4.980 ppb	0.522 ppb	2.521 ppb	103.823 %	0.273 ppb	0.192 ppb	106.328 %	3.576 ppb
Recovery Percentage 1	98.889 %	99.486 %	103.593 %	116.280 %		68.769 %	95.329 %		89.241 %
Concentration RSD	5.1 %	7.3 %	2.6 %	7.9 %	0.9 %	2.9 %	13.8 %	1.4 %	0.9 %

Category	137Ba (KED AGD)	159Tb (KED AGD)	175Lu (KED AGD)	205Tl (KED AGD)	208Pb (KED AGD)	209Bi (KED AGD)
Concentration average	0.482 ppb	103.481 %	103.405 %	0.547 ppb	0.529 ppb	110.435 %
Concentration per Run 1	0.497 ppb	104.684 %	102.678 %	0.511 ppb	0.516 ppb	115.091 %
Concentration per Run 2	0.460 ppb	106.400 %	103.945 %	0.556 ppb	0.528 ppb	108.360 %
Concentration per Run 3	0.489 ppb	99.360 %	103.590 %	0.573 ppb	0.543 ppb	107.853 %
Recovery Percentage 1	96.448 %			109.348 %	105.814 %	
Concentration RSD	4.0 %	3.5 %	0.6 %	5.9 %	2.5 %	3.7 %

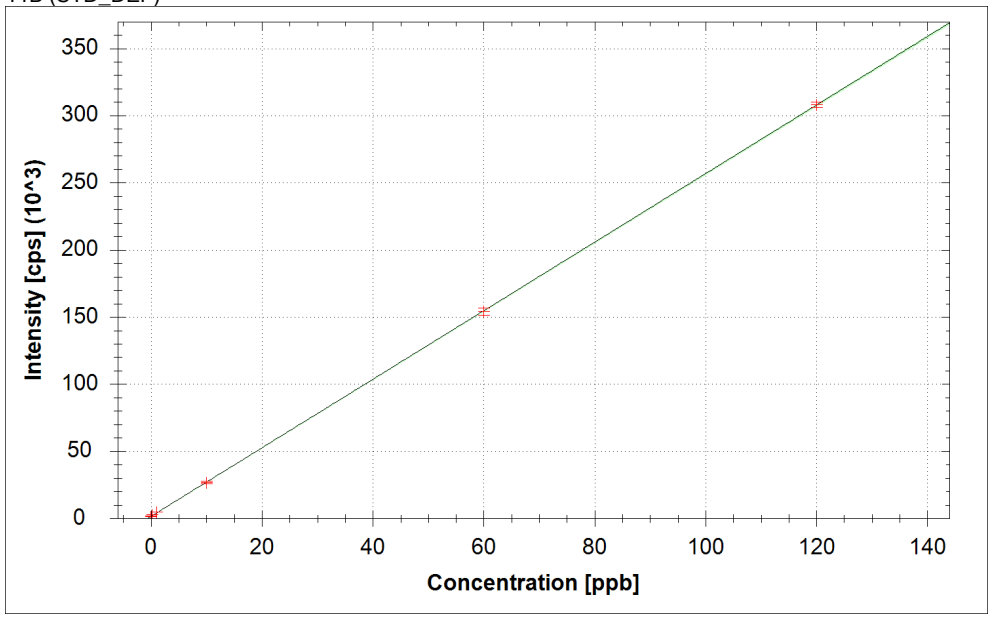
Calibration Curves:

9Be (STD_DEF)



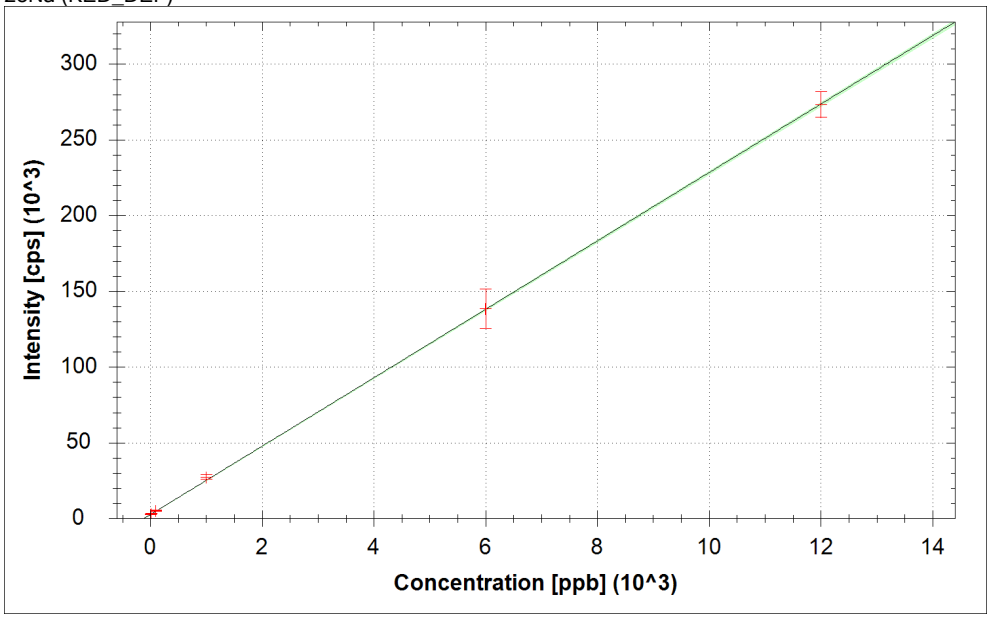
f(x) = 3579.2990*x + 67.9859
R² = 0.9999
BEC = 0.019 ppb
LoD = 0.0042 ppb

11B (STD_DEF)



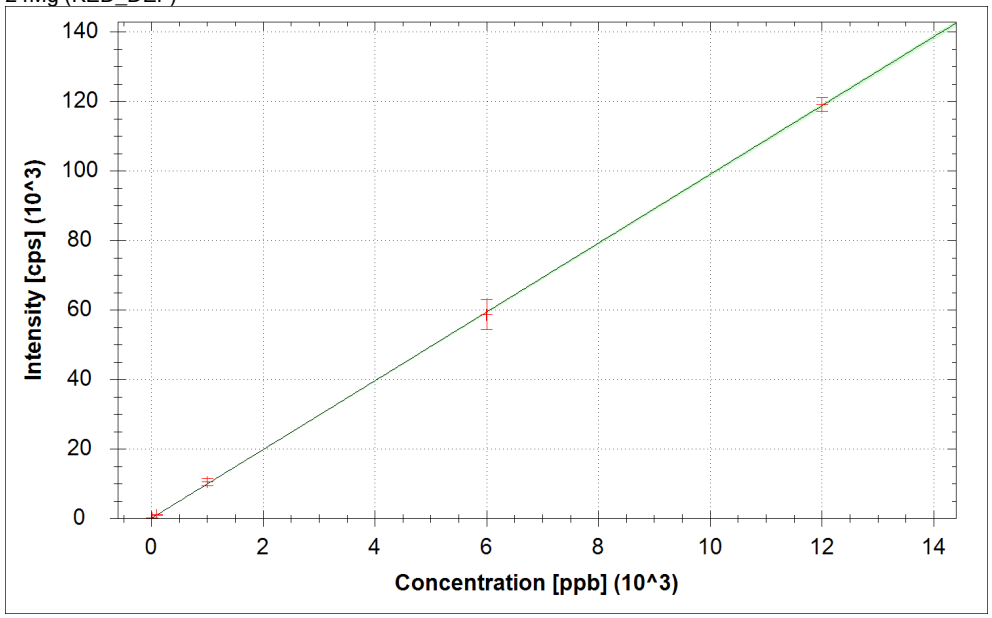
f(x) = 2551.6095*x + 1562.3743
R² = 1.0000
BEC = 0.612 ppb
LoD = 0.0325 ppb

23Na (KED_DEF)



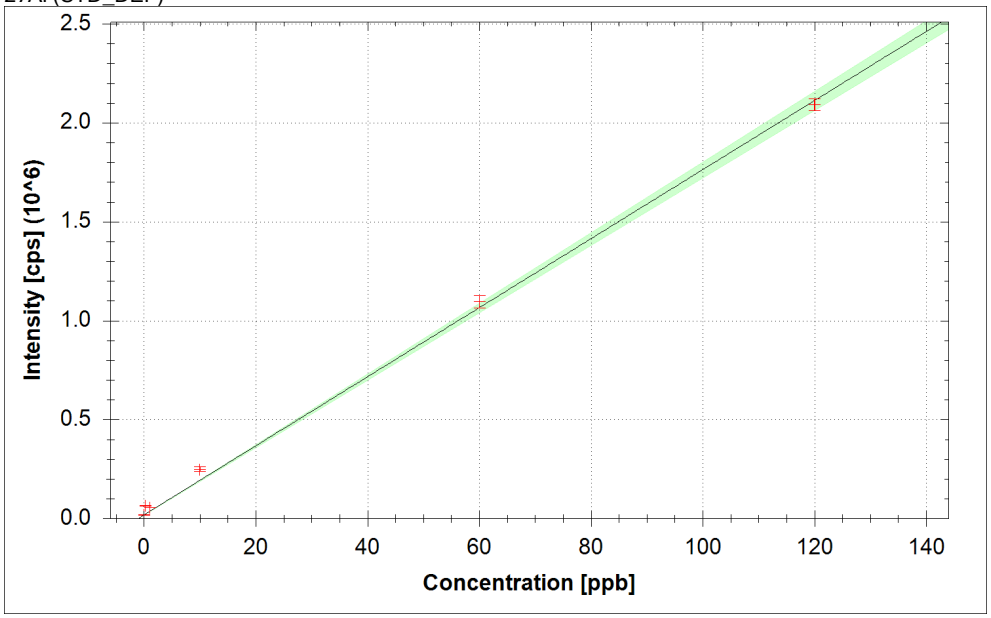
f(x) = 22.5843*x + 2537.9120
R² = 0.9999
BEC = 112.375 ppb
LoD = 23.1070 ppb

24Mg (KED_DEF)



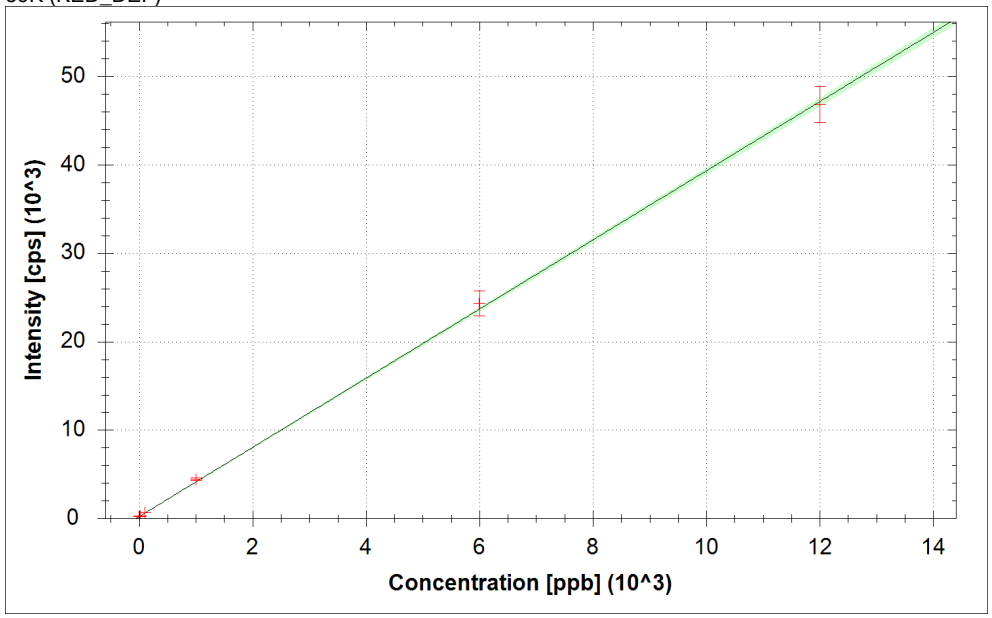
f(x) = 9.8909*x + 23.9741
R² = 0.9999
BEC = 2.424 ppb
LoD = 4.9940 ppb

27Al (STD_DEF)



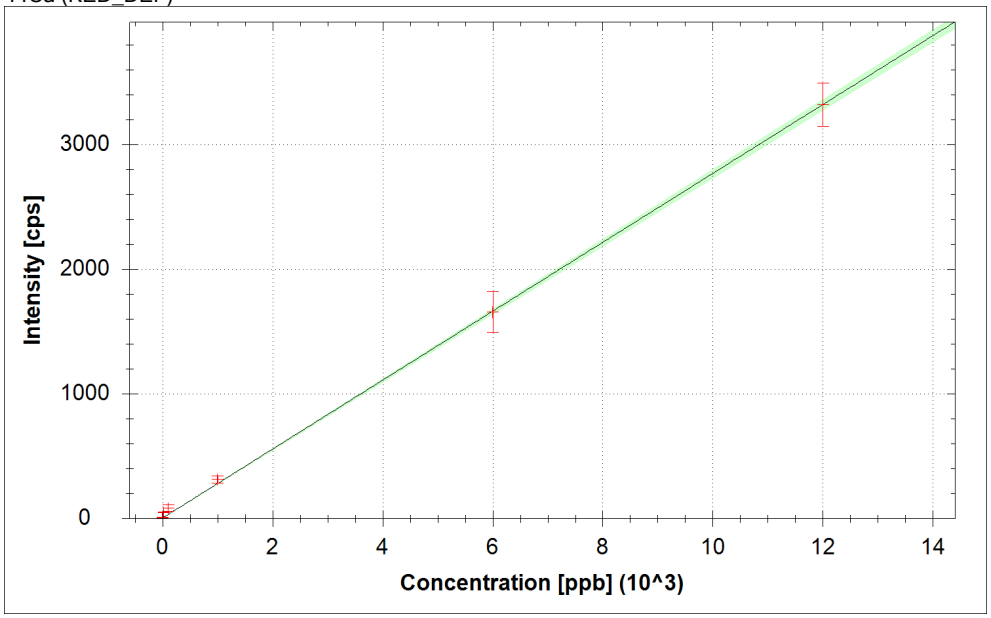
f(x) = 17449.3956*x + 17828.2071
R² = 0.9981
BEC = 1.022 ppb
LoD = 0.1118 ppb

39K (KED_DEF)



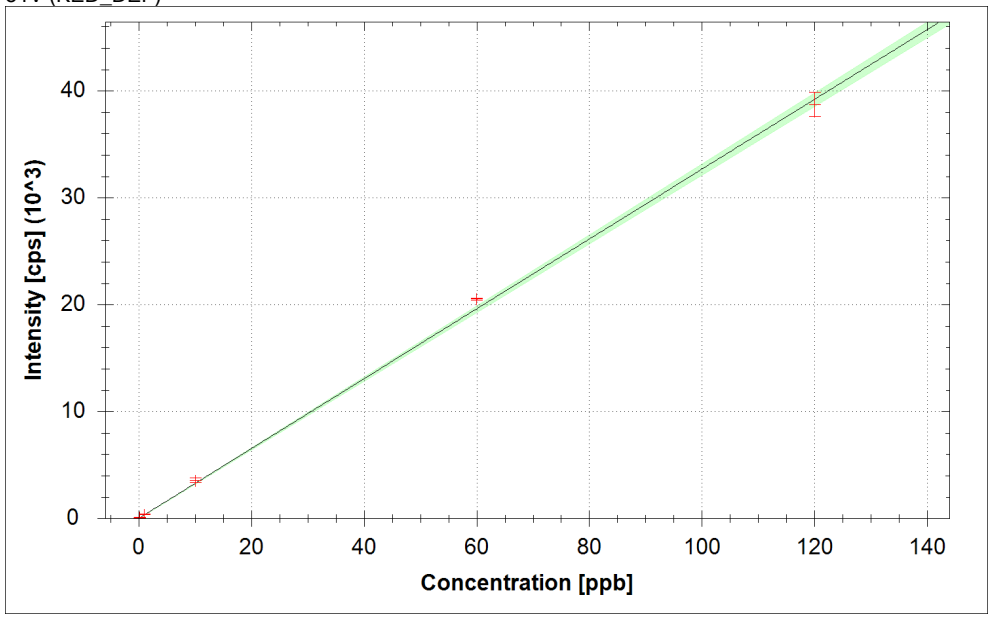
f(x) = 3.9107*x + 211.0371
R² = 0.9997
BEC = 53.964 ppb
LoD = 24.3269 ppb

44Ca (KED_DEF)



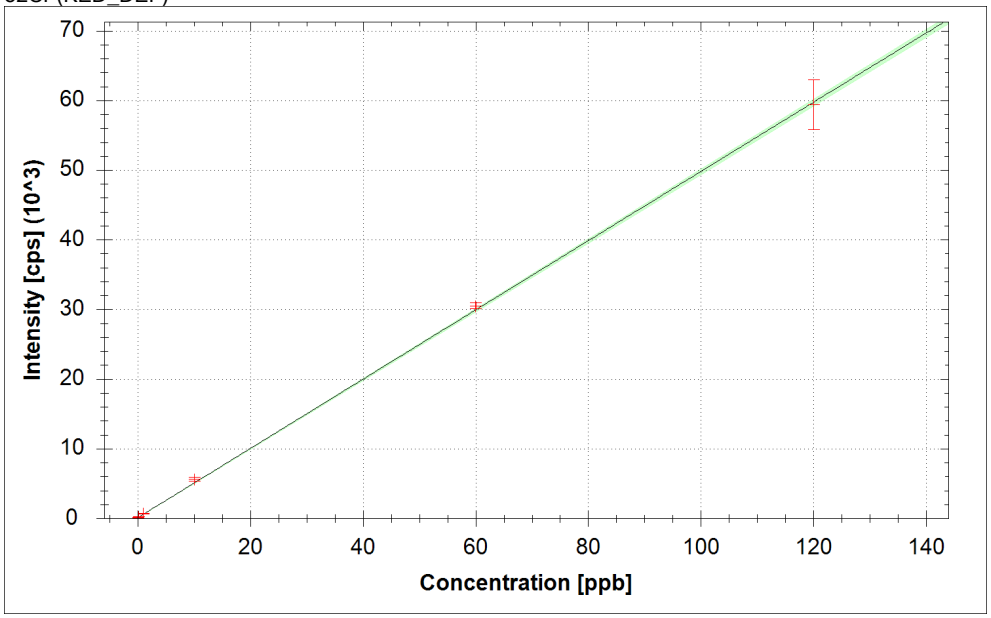
f(x) = 0.2765*x + 3.4654
R² = 0.9994
BEC = 12.535 ppb
LoD = 41.5123 ppb

51V (KED_DEF)



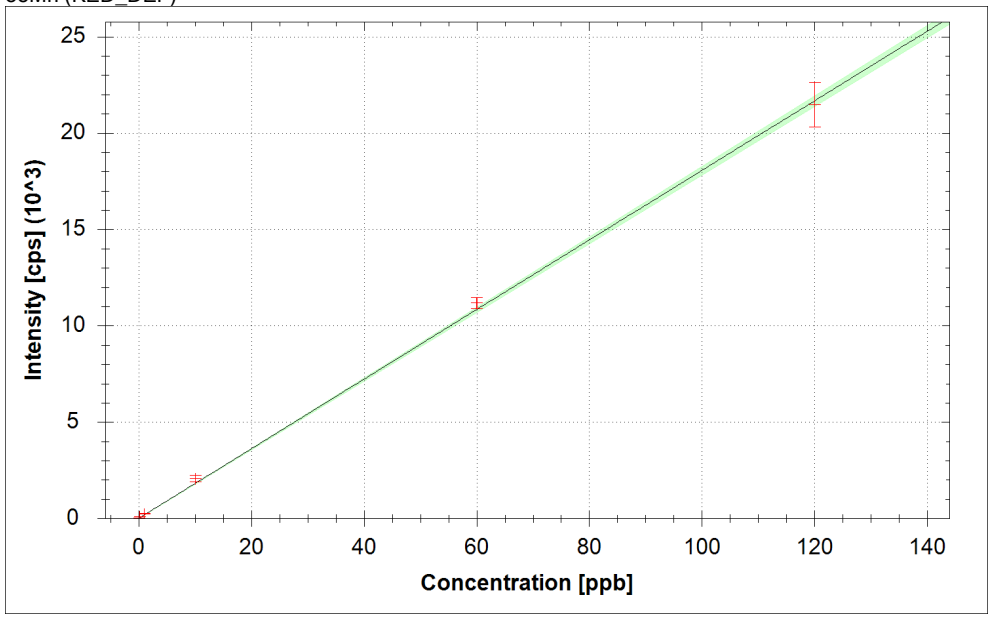
f(x) = 326.5100*x + 8.9388
R² = 0.9991
BEC = 0.027 ppb
LoD = 0.0932 ppb

52Cr (KED_DEF)



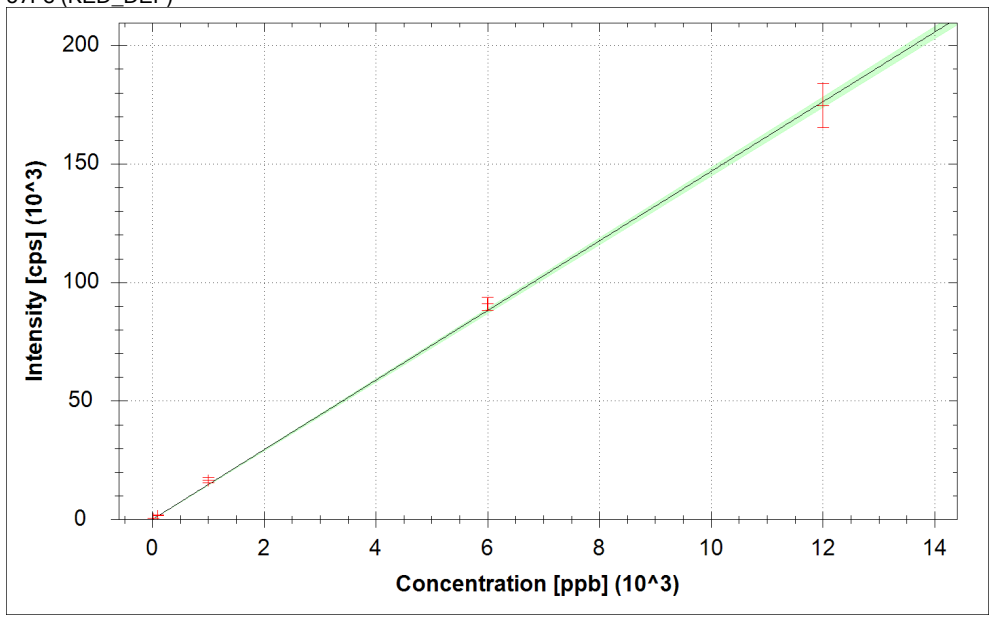
f(x) = 496.6117*x + 120.1880
R² = 0.9998
BEC = 0.242 ppb
LoD = 0.1090 ppb

55Mn (KED_DEF)



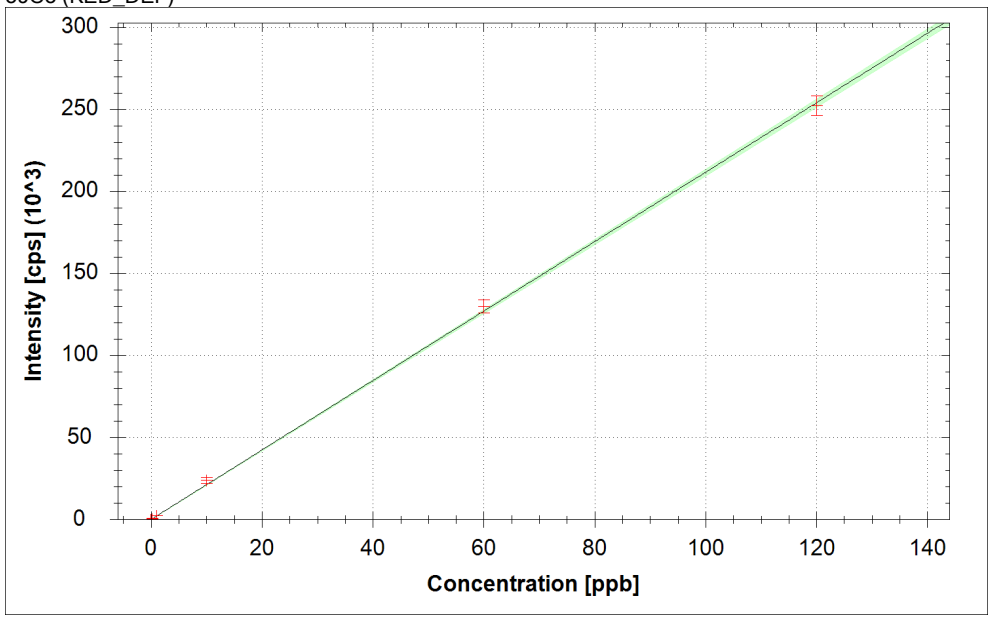
f(x) = 180.4578*x + 9.5284
R² = 0.9994
BEC = 0.053 ppb
LoD = 0.0582 ppb

57Fe (KED_DEF)



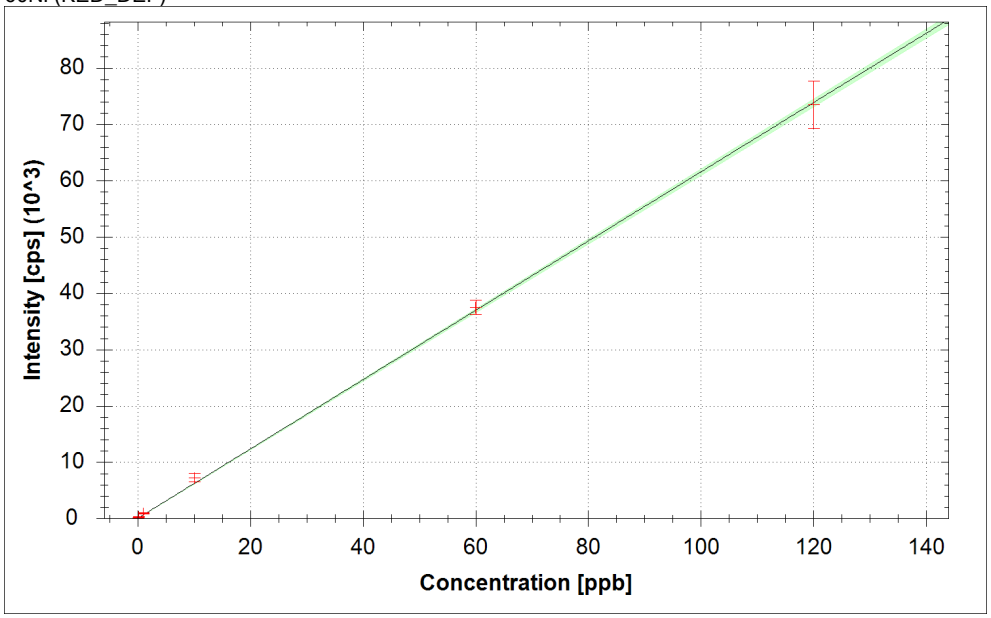
f(x) = 14.6746*x + 26.5752
R² = 0.9994
BEC = 1.811 ppb
LoD = 2.6247 ppb

59Co (KED_DEF)



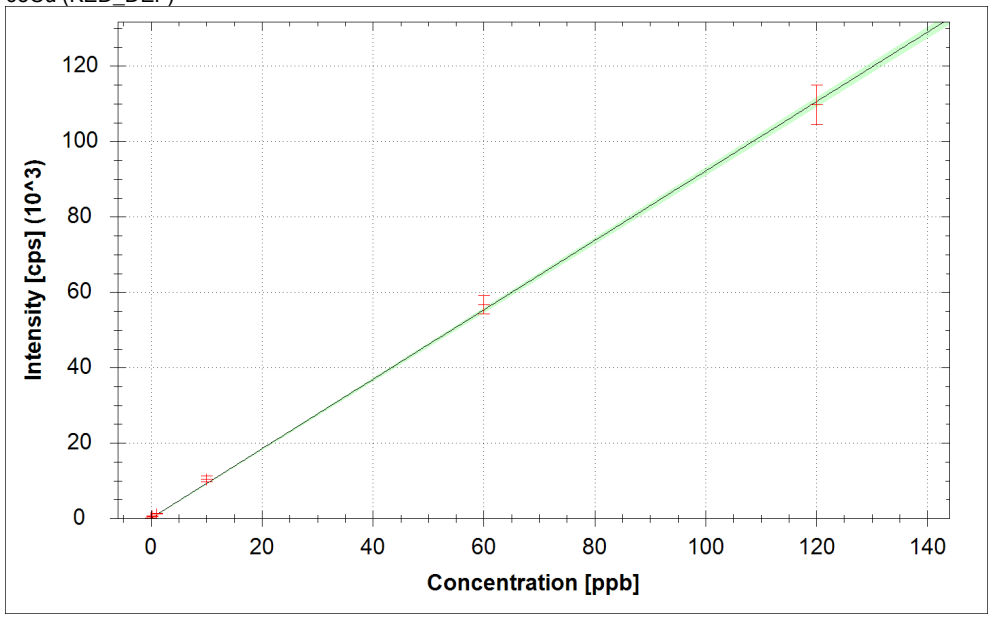
f(x) = 2115.5134*x + 4.5101
R² = 0.9997
BEC = 0.002 ppb
LoD = 0.0055 ppb

60Ni (KED_DEF)



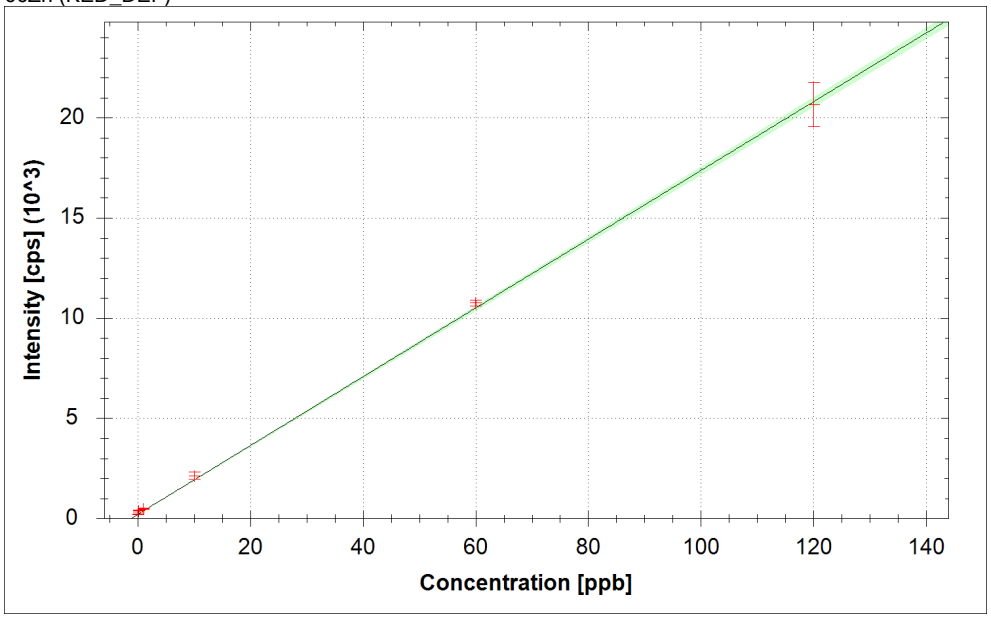
f(x) = 615.0343*x + 53.2856
R² = 0.9997
BEC = 0.087 ppb
LoD = 0.0289 ppb

65Cu (KED_DEF)



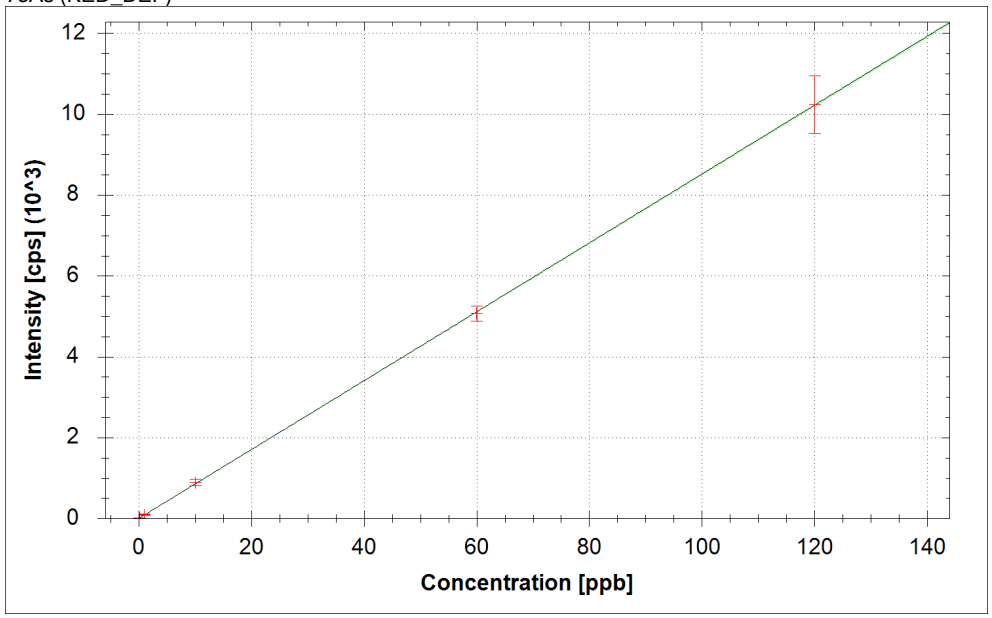
f(x) = 920.5412*x + 55.5288
R² = 0.9996
BEC = 0.060 ppb
LoD = 0.0084 ppb

66Zn (KED_DEF)



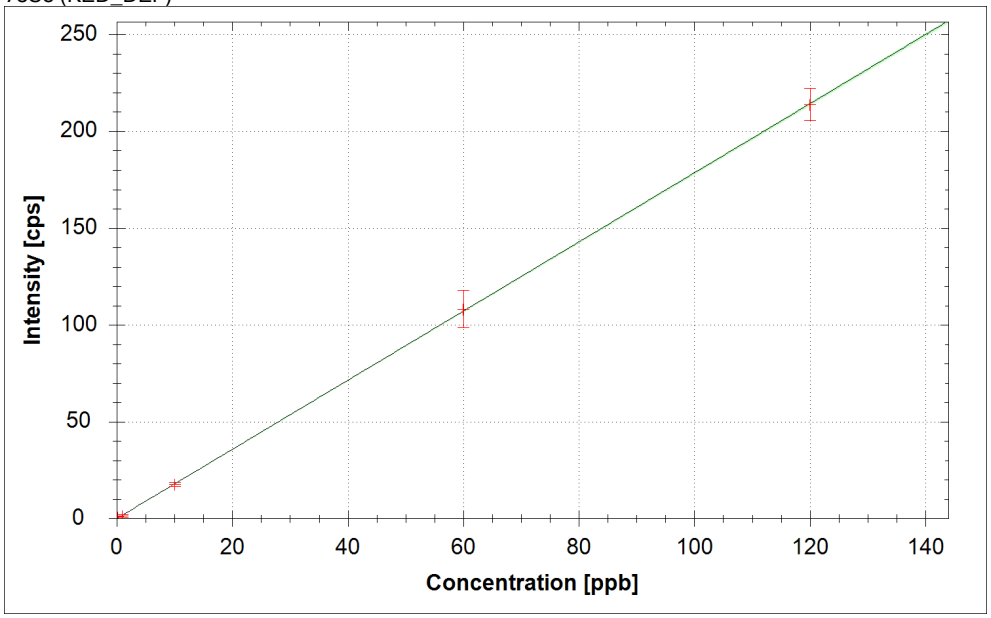
f(x) = 171.5444*x + 208.3371
R² = 0.9996
BEC = 1.214 ppb
LoD = 0.2628 ppb

75As (KED_DEF)



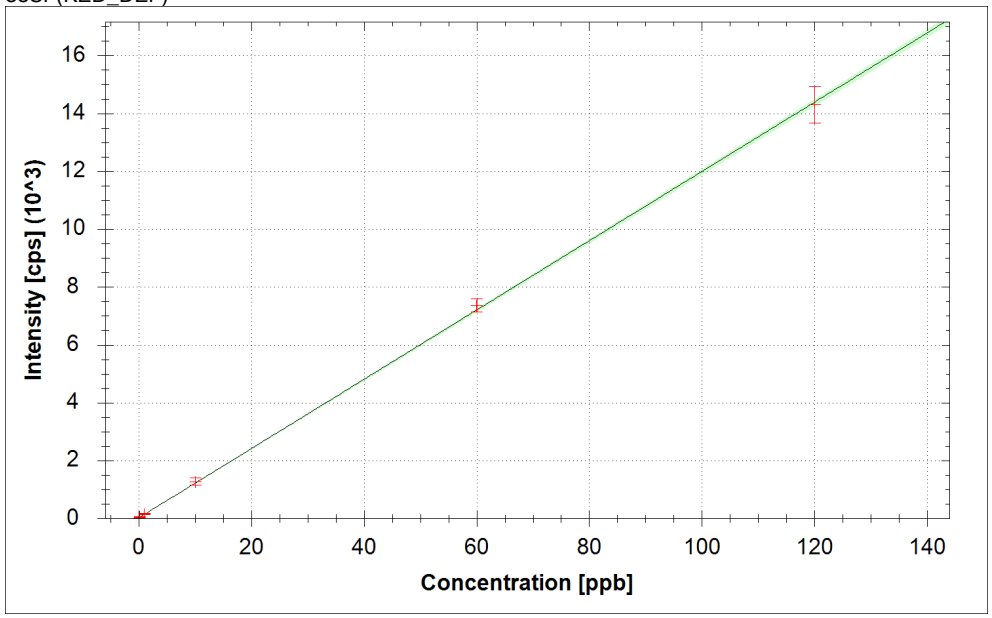
f(x) = 85.1259*x + 2.2649
R² = 1.0000
BEC = 0.027 ppb
LoD = 0.1873 ppb

78Se (KED_DEF)



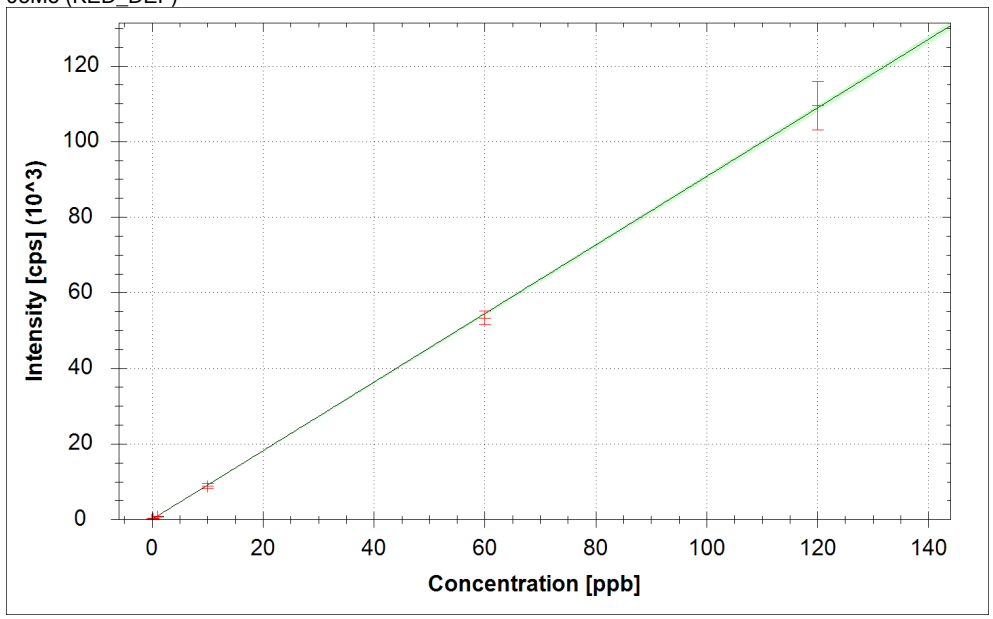
f(x) = 1.7854*x + -0.0066
R² = 1.0000
BEC = -0.004 ppb
LoD = 0.0191 ppb

88Sr (KED_DEF)



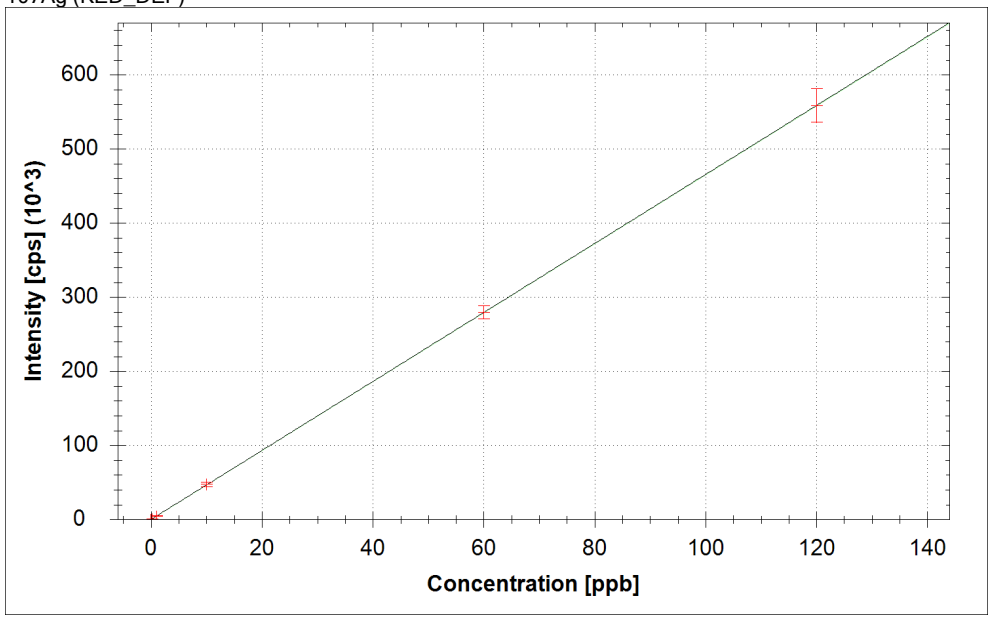
f(x) = 119.6570*x + 22.6994
R² = 0.9998
BEC = 0.190 ppb
LoD = 0.0478 ppb

95Mo (KED_DEF)



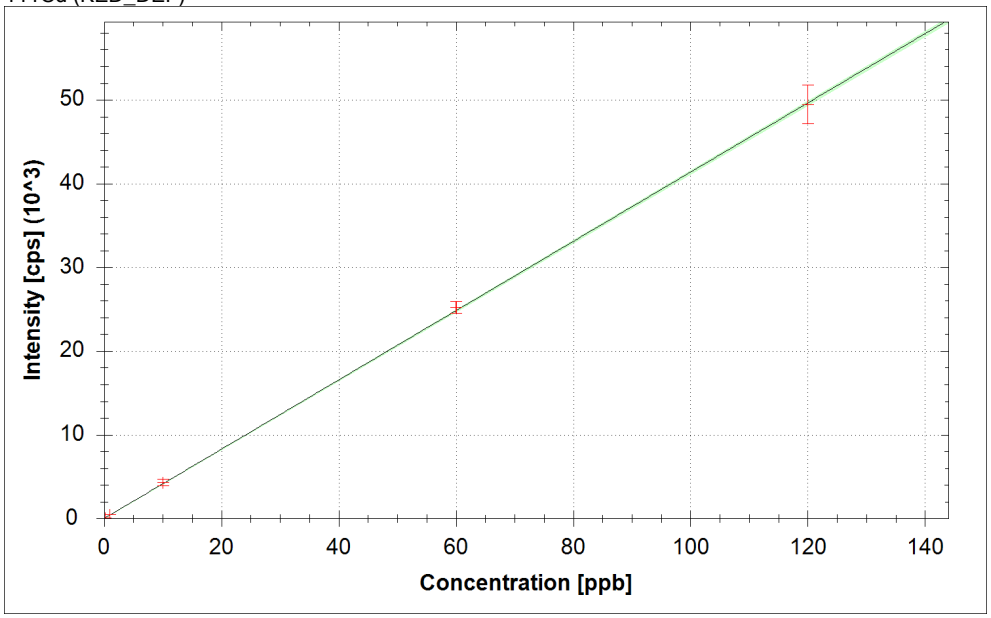
f(x) = 906.7388*x + 26.6778
R² = 0.9998
BEC = 0.029 ppb
LoD = 0.0448 ppb

107Ag (KED_DEF)



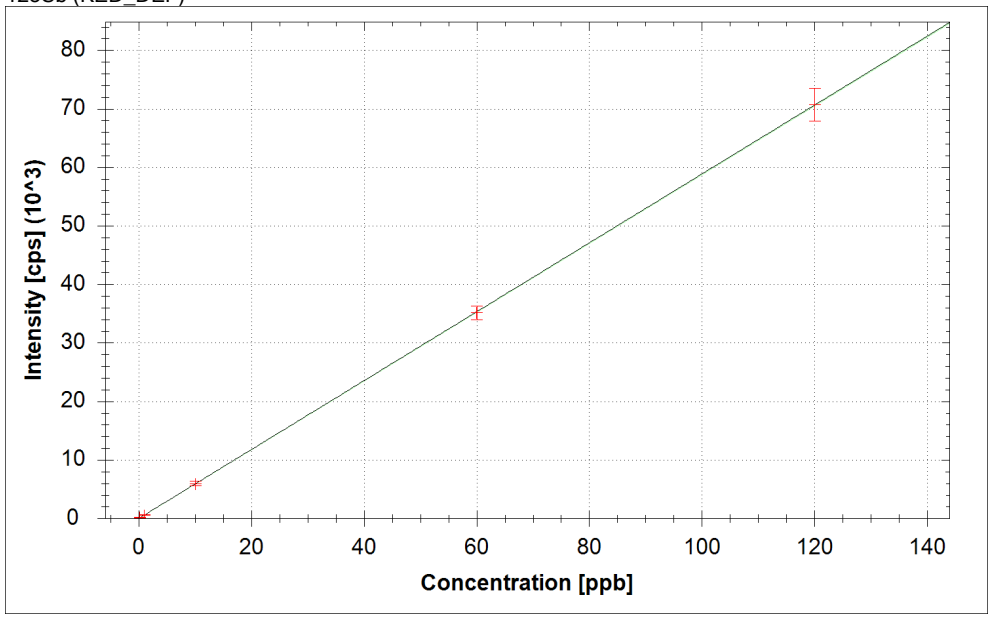
f(x) = 4654.3056*x + 2.2156
R² = 1.0000
BEC = 0.000 ppb
LoD = 0.0012 ppb

111Cd (KED_DEF)



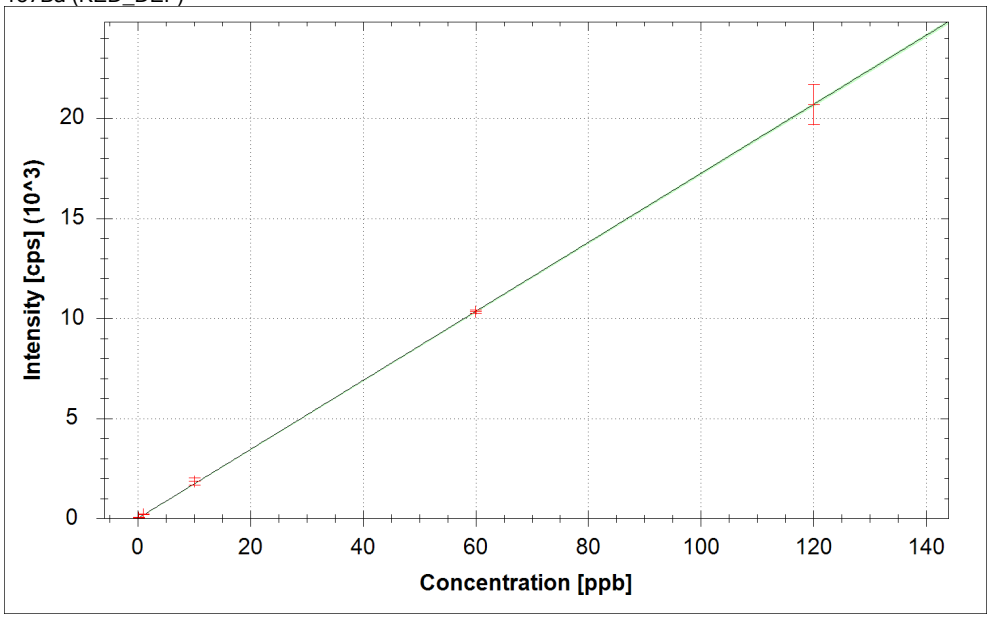
f(x) = 413.6219*x
R² = 0.9999
BEC = 0.000 ppb
LoD = 0.0000 ppb

123Sb (KED_DEF)



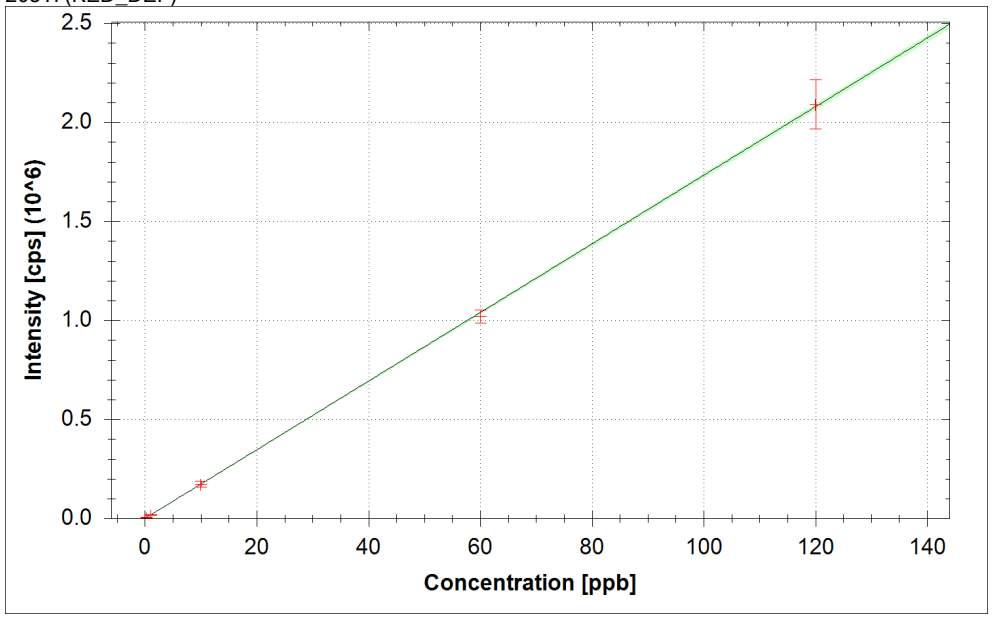
f(x) = 588.2657*x + 12.4766
R² = 1.0000
BEC = 0.021 ppb
LoD = 0.0151 ppb

137Ba (KED_DEF)



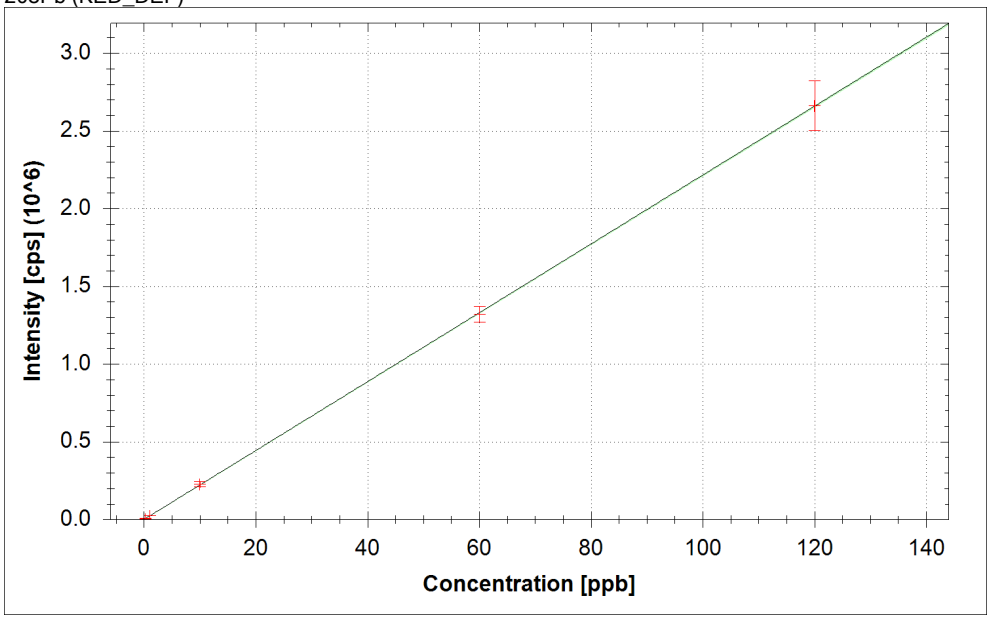
f(x) = 172.3623*x + 1.1353
R² = 1.0000
BEC = 0.007 ppb
LoD = 0.0342 ppb

205Tl (KED_DEF)



f(x) = 17320.2227*x + 266.9500
R² = 0.9999
BEC = 0.015 ppb
LoD = 0.0201 ppb

208Pb (KED_DEF)



f(x) = 22149.0176*x + 65.9440
R² = 1.0000
BEC = 0.003 ppb
LoD = 0.0025 ppb

Standards:

Analysis Index: 4
Analysis Name: 0.2/20 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 10:37:01 AM
Total Dilution Factor 50000
Rack 0
Vial 2

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD_DEF)	102.684 %	1.0 %	
6Li (KED_DEF)	109.018 %	10.2 %	
9Be (STD_DEF)	0.205 ppb	7.9 %	0.200 ppb
11B (STD_DEF)	0.556 ppb	1.4 %	0.200 ppb
23Na (KED_DEF)	21.272 ppb	45.2 %	20.000 ppb
24Mg (KED_DEF)	17.844 ppb	8.9 %	20.000 ppb
27Al (STD_DEF)	2.662 ppb	4.6 %	0.200 ppb
39K (KED_DEF)	11.619 ppb	79.0 %	20.000 ppb
44Ca (KED_DEF)	162.014 ppb	3.2 %	20.000 ppb
45Sc (STD_DEF)	102.495 %	1.8 %	
45Sc (KED_DEF)	100.746 %	6.6 %	
51V (KED_DEF)	0.233 ppb	43.1 %	0.200 ppb
52Cr (KED_DEF)	0.296 ppb	8.3 %	0.200 ppb
55Mn (KED_DEF)	0.433 ppb	9.5 %	0.200 ppb
57Fe (KED_DEF)	30.798 ppb	5.5 %	20.000 ppb
59Co (KED_DEF)	0.212 ppb	24.1 %	0.200 ppb
60Ni (KED_DEF)	0.410 ppb	21.4 %	0.200 ppb
65Cu (KED_DEF)	0.580 ppb	12.6 %	0.200 ppb
66Zn (KED_DEF)	0.952 ppb	26.9 %	0.200 ppb
74Ge (STD_DEF)	98.108 %	3.3 %	
74Ge (KED_DEF)	92.073 %	0.8 %	
75As (KED_DEF)	0.166 ppb	22.9 %	0.200 ppb
78Se (KED_DEF)	0.271 ppb	112.6 %	0.200 ppb
88Sr (KED_DEF)	0.267 ppb	20.4 %	0.200 ppb
95Mo (KED_DEF)	0.211 ppb	5.4 %	0.200 ppb
103Rh (STD_DEF)	99.638 %	0.5 %	
103Rh (KED_DEF)	98.574 %	0.4 %	
107Ag (KED_DEF)	0.199 ppb	3.1 %	0.200 ppb
111Cd (KED_DEF)	0.183 ppb	1.1 %	0.200 ppb
115In (STD_DEF)	98.367 %	1.0 %	
115In (KED_DEF)	97.808 %	1.5 %	
123Sb (KED_DEF)	0.214 ppb	6.8 %	0.200 ppb
137Ba (KED_DEF)	0.235 ppb	24.8 %	0.200 ppb
159Tb (STD_DEF)	98.567 %	0.9 %	
159Tb (KED_DEF)	99.534 %	1.2 %	
175Lu (STD_DEF)	98.337 %	0.6 %	
175Lu (KED_DEF)	96.884 %	0.4 %	
205Tl (KED_DEF)	0.202 ppb	8.1 %	0.200 ppb
208Pb (KED_DEF)	0.219 ppb	5.5 %	0.200 ppb
209Bi (STD_DEF)	98.776 %	0.7 %	
209Bi (KED_DEF)	99.404 %	2.8 %	

Standards:

Analysis Index: 5
Analysis Name: 1/100 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 10:41:47 AM
Total Dilution Factor 10000
Rack 0
Vial 3

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD_DEF)	101.171 %	1.4 %	
6Li (KED_DEF)	95.992 %	11.7 %	
9Be (STD_DEF)	0.952 ppb	0.7 %	1.000 ppb
11B (STD_DEF)	1.254 ppb	1.3 %	1.000 ppb
23Na (KED_DEF)	115.685 ppb	16.4 %	100.000 ppb
24Mg (KED_DEF)	105.212 ppb	8.3 %	100.000 ppb
27Al (STD_DEF)	2.099 ppb	1.4 %	1.000 ppb
39K (KED_DEF)	109.708 ppb	4.3 %	100.000 ppb
44Ca (KED_DEF)	277.813 ppb	34.3 %	100.000 ppb
45Sc (STD_DEF)	100.580 %	1.5 %	
45Sc (KED_DEF)	104.815 %	3.2 %	
51V (KED_DEF)	1.118 ppb	2.4 %	1.000 ppb
52Cr (KED_DEF)	1.188 ppb	8.0 %	1.000 ppb
55Mn (KED_DEF)	1.248 ppb	5.1 %	1.000 ppb
57Fe (KED_DEF)	111.345 ppb	6.1 %	100.000 ppb
59Co (KED_DEF)	1.054 ppb	4.3 %	1.000 ppb
60Ni (KED_DEF)	1.317 ppb	15.4 %	1.000 ppb
65Cu (KED_DEF)	1.258 ppb	7.6 %	1.000 ppb
66Zn (KED_DEF)	1.565 ppb	15.3 %	1.000 ppb
74Ge (STD_DEF)	99.024 %	0.6 %	
74Ge (KED_DEF)	94.837 %	5.2 %	
75As (KED_DEF)	1.036 ppb	18.3 %	1.000 ppb
78Se (KED_DEF)	0.770 ppb	48.0 %	1.000 ppb
88Sr (KED_DEF)	1.118 ppb	14.2 %	1.000 ppb
95Mo (KED_DEF)	0.854 ppb	9.5 %	1.000 ppb
103Rh (STD_DEF)	95.252 %	0.8 %	
103Rh (KED_DEF)	98.038 %	4.0 %	
107Ag (KED_DEF)	0.981 ppb	2.3 %	1.000 ppb
111Cd (KED_DEF)	1.045 ppb	1.6 %	1.000 ppb
115In (STD_DEF)	95.853 %	2.8 %	
115In (KED_DEF)	98.066 %	4.3 %	
123Sb (KED_DEF)	0.922 ppb	12.6 %	1.000 ppb
137Ba (KED_DEF)	1.209 ppb	9.1 %	1.000 ppb
159Tb (STD_DEF)	98.801 %	0.7 %	
159Tb (KED_DEF)	100.561 %	2.8 %	
175Lu (STD_DEF)	97.329 %	1.6 %	
175Lu (KED_DEF)	97.977 %	2.4 %	
205Tl (KED_DEF)	0.967 ppb	3.7 %	1.000 ppb
208Pb (KED_DEF)	1.025 ppb	1.9 %	1.000 ppb
209Bi (STD_DEF)	96.793 %	0.7 %	
209Bi (KED_DEF)	97.449 %	3.5 %	

Standards:

Analysis Index: 6
Analysis Name: 10/10000 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 10:46:33 AM
Total Dilution Factor 1000
Rack 0
Vial 4

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD_DEF)	101.744 %	2.1 %	
6Li (KED_DEF)	98.597 %	4.0 %	
9Be (STD_DEF)	9.738 ppb	2.6 %	10.000 ppb
11B (STD_DEF)	9.881 ppb	3.3 %	10.000 ppb
23Na (KED_DEF)	1,096.261 ppb	6.3 %	1,000.000 ppb
24Mg (KED_DEF)	1,055.336 ppb	10.1 %	1,000.000 ppb
27Al (STD_DEF)	13.248 ppb	4.5 %	10.000 ppb
39K (KED_DEF)	1,077.056 ppb	3.6 %	1,000.000 ppb
44Ca (KED_DEF)	1,121.347 ppb	9.5 %	1,000.000 ppb
45Sc (STD_DEF)	103.095 %	1.1 %	
45Sc (KED_DEF)	102.951 %	5.4 %	
51V (KED_DEF)	10.891 ppb	5.7 %	10.000 ppb
52Cr (KED_DEF)	11.050 ppb	4.8 %	10.000 ppb
55Mn (KED_DEF)	11.410 ppb	8.4 %	10.000 ppb
57Fe (KED_DEF)	1,121.660 ppb	6.1 %	1,000.000 ppb
59Co (KED_DEF)	11.210 ppb	8.1 %	10.000 ppb
60Ni (KED_DEF)	11.611 ppb	10.6 %	10.000 ppb
65Cu (KED_DEF)	11.313 ppb	8.2 %	10.000 ppb
66Zn (KED_DEF)	11.182 ppb	9.2 %	10.000 ppb
74Ge (STD_DEF)	97.606 %	2.2 %	
74Ge (KED_DEF)	93.570 %	8.6 %	
75As (KED_DEF)	10.404 ppb	8.6 %	10.000 ppb
78Se (KED_DEF)	9.819 ppb	6.2 %	10.000 ppb
88Sr (KED_DEF)	10.455 ppb	10.4 %	10.000 ppb
95Mo (KED_DEF)	9.690 ppb	7.4 %	10.000 ppb
103Rh (STD_DEF)	98.152 %	3.3 %	
103Rh (KED_DEF)	96.875 %	6.9 %	
107Ag (KED_DEF)	10.154 ppb	6.5 %	10.000 ppb
111Cd (KED_DEF)	10.430 ppb	9.2 %	10.000 ppb
115In (STD_DEF)	99.366 %	0.9 %	
115In (KED_DEF)	95.306 %	4.9 %	
123Sb (KED_DEF)	10.072 ppb	6.9 %	10.000 ppb
137Ba (KED_DEF)	10.683 ppb	8.9 %	10.000 ppb
159Tb (STD_DEF)	100.272 %	0.4 %	
159Tb (KED_DEF)	97.770 %	7.1 %	
175Lu (STD_DEF)	100.163 %	1.8 %	
175Lu (KED_DEF)	95.483 %	6.4 %	
205Tl (KED_DEF)	9.923 ppb	8.7 %	10.000 ppb
208Pb (KED_DEF)	10.204 ppb	7.8 %	10.000 ppb
209Bi (STD_DEF)	100.935 %	0.5 %	
209Bi (KED_DEF)	98.217 %	6.0 %	

Standards:

Analysis Index: 7
Analysis Name: 60/6000 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 10:51:20 AM
Total Dilution Factor 166.66666666
Rack 0
Vial 5

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD_DEF)	99.754 %	2.1 %	
6Li (KED_DEF)	100.802 %	18.0 %	
9Be (STD_DEF)	59.047 ppb	2.5 %	60.000 ppb
11B (STD_DEF)	59.749 ppb	1.8 %	60.000 ppb
23Na (KED_DEF)	6,012.584 ppb	9.5 %	6,000.000 ppb
24Mg (KED_DEF)	5,927.119 ppb	7.4 %	6,000.000 ppb
27Al (STD_DEF)	61.752 ppb	2.9 %	60.000 ppb
39K (KED_DEF)	6,157.846 ppb	5.8 %	6,000.000 ppb
44Ca (KED_DEF)	5,980.329 ppb	9.7 %	6,000.000 ppb
45Sc (STD_DEF)	108.391 %	1.1 %	
45Sc (KED_DEF)	108.979 %	2.7 %	
51V (KED_DEF)	62.824 ppb	0.5 %	60.000 ppb
52Cr (KED_DEF)	61.156 ppb	1.4 %	60.000 ppb
55Mn (KED_DEF)	61.890 ppb	2.6 %	60.000 ppb
57Fe (KED_DEF)	6,196.250 ppb	3.1 %	6,000.000 ppb
59Co (KED_DEF)	61.405 ppb	3.1 %	60.000 ppb
60Ni (KED_DEF)	60.859 ppb	3.4 %	60.000 ppb
65Cu (KED_DEF)	61.477 ppb	4.3 %	60.000 ppb
66Zn (KED_DEF)	61.430 ppb	1.5 %	60.000 ppb
74Ge (STD_DEF)	99.984 %	2.1 %	
74Ge (KED_DEF)	94.545 %	2.0 %	
75As (KED_DEF)	59.541 ppb	3.7 %	60.000 ppb
78Se (KED_DEF)	60.564 ppb	8.8 %	60.000 ppb
88Sr (KED_DEF)	61.278 ppb	3.1 %	60.000 ppb
95Mo (KED_DEF)	58.687 ppb	3.4 %	60.000 ppb
103Rh (STD_DEF)	98.865 %	1.4 %	
103Rh (KED_DEF)	95.771 %	3.9 %	
107Ag (KED_DEF)	60.056 ppb	3.1 %	60.000 ppb
111Cd (KED_DEF)	60.919 ppb	2.7 %	60.000 ppb
115In (STD_DEF)	100.077 %	1.2 %	
115In (KED_DEF)	94.531 %	2.0 %	
123Sb (KED_DEF)	59.686 ppb	3.3 %	60.000 ppb
137Ba (KED_DEF)	59.982 ppb	0.7 %	60.000 ppb
159Tb (STD_DEF)	101.031 %	2.2 %	
159Tb (KED_DEF)	98.171 %	1.5 %	
175Lu (STD_DEF)	99.618 %	0.4 %	
175Lu (KED_DEF)	94.237 %	2.3 %	
205Tl (KED_DEF)	58.811 ppb	3.2 %	60.000 ppb
208Pb (KED_DEF)	59.611 ppb	3.8 %	60.000 ppb
209Bi (STD_DEF)	100.712 %	2.4 %	
209Bi (KED_DEF)	95.826 %	3.0 %	

Standards:

Analysis Index: 8
Analysis Name: 120/120000 Cal
Analysis Type: STD
Analysis Started at: 9/14/2023 10:56:07 AM
Total Dilution Factor 83.33333333
Rack 0
Vial 6

Category	Concentration average	Concentration RSD	Standard Concentration
6Li (STD_DEF)	98.688 %	1.0 %	
6Li (KED_DEF)	98.798 %	5.2 %	
9Be (STD_DEF)	120.499 ppb	0.9 %	120.000 ppb
11B (STD_DEF)	120.133 ppb	0.6 %	120.000 ppb
23Na (KED_DEF)	11,985.553 ppb	3.1 %	12,000.000 ppb
24Mg (KED_DEF)	12,031.790 ppb	1.7 %	12,000.000 ppb
27Al (STD_DEF)	118.840 ppb	1.5 %	120.000 ppb
39K (KED_DEF)	11,914.589 ppb	4.4 %	12,000.000 ppb
44Ca (KED_DEF)	11,998.005 ppb	5.3 %	12,000.000 ppb
45Sc (STD_DEF)	110.649 %	1.4 %	
45Sc (KED_DEF)	113.390 %	4.6 %	
51V (KED_DEF)	118.513 ppb	3.0 %	120.000 ppb
52Cr (KED_DEF)	119.333 ppb	6.0 %	120.000 ppb
55Mn (KED_DEF)	118.935 ppb	5.3 %	120.000 ppb
57Fe (KED_DEF)	11,891.624 ppb	5.3 %	12,000.000 ppb
59Co (KED_DEF)	119.196 ppb	2.4 %	120.000 ppb
60Ni (KED_DEF)	119.433 ppb	5.7 %	120.000 ppb
65Cu (KED_DEF)	119.149 ppb	4.8 %	120.000 ppb
66Zn (KED_DEF)	119.181 ppb	5.4 %	120.000 ppb
74Ge (STD_DEF)	100.489 %	2.4 %	
74Ge (KED_DEF)	98.264 %	4.4 %	
75As (KED_DEF)	120.196 ppb	7.0 %	120.000 ppb
78Se (KED_DEF)	119.735 ppb	3.9 %	120.000 ppb
88Sr (KED_DEF)	119.322 ppb	4.5 %	120.000 ppb
95Mo (KED_DEF)	120.684 ppb	5.9 %	120.000 ppb
103Rh (STD_DEF)	97.608 %	2.7 %	
103Rh (KED_DEF)	96.768 %	3.1 %	
107Ag (KED_DEF)	119.959 ppb	4.0 %	120.000 ppb
111Cd (KED_DEF)	119.504 ppb	4.7 %	120.000 ppb
115In (STD_DEF)	100.304 %	1.9 %	
115In (KED_DEF)	96.268 %	3.9 %	
123Sb (KED_DEF)	120.152 ppb	4.0 %	120.000 ppb
137Ba (KED_DEF)	119.950 ppb	4.8 %	120.000 ppb
159Tb (STD_DEF)	101.404 %	0.5 %	
159Tb (KED_DEF)	98.396 %	4.5 %	
175Lu (STD_DEF)	101.966 %	1.3 %	
175Lu (KED_DEF)	97.815 %	2.1 %	
205Tl (KED_DEF)	120.601 ppb	5.9 %	120.000 ppb
208Pb (KED_DEF)	120.177 ppb	6.1 %	120.000 ppb
209Bi (STD_DEF)	99.666 %	0.9 %	
209Bi (KED_DEF)	94.422 %	5.9 %	

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 1 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: Rinse Rack 0
Analysis started at: 9/14/2023 10:22:44 AM Vial 1

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	101.278 %	94.389 %	0.007 ppb	0.278 ppb	3.421 ppb	-0.226 ppb	3.248 ppb	-4.063 ppb	-14.876 ppb
Concentration per Run 1	102.276 %	92.585 %	0.004 ppb	0.309 ppb	1.647 ppb	-1.095 ppb	2.573 ppb	2.405 ppb	-14.718 ppb
Concentration per Run 2	101.342 %	93.788 %	0.006 ppb	0.267 ppb	4.374 ppb	-1.095 ppb	3.759 ppb	-3.395 ppb	-14.342 ppb
Concentration per Run 3	100.215 %	96.794 %	0.011 ppb	0.259 ppb	4.242 ppb	1.514 ppb	3.413 ppb	-11.199 ppb	-15.567 ppb
Concentration RSD	1.0 %	2.3 %	54.5 %	9.7 %	44.9 %	667.7 %	18.8 %	168.0 %	4.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	102.623 %	110.625 %	-0.002 ppb	0.041 ppb	0.088 ppb	6.122 ppb	0.004 ppb	0.749 ppb	0.081 ppb
Concentration per Run 1	103.645 %	111.837 %	0.010 ppb	0.058 ppb	0.080 ppb	7.028 ppb	0.004 ppb	0.663 ppb	0.098 ppb
Concentration per Run 2	103.103 %	110.439 %	-0.009 ppb	-0.008 ppb	0.067 ppb	5.351 ppb	0.001 ppb	0.824 ppb	0.076 ppb
Concentration per Run 3	101.122 %	109.600 %	-0.008 ppb	0.072 ppb	0.119 ppb	5.985 ppb	0.007 ppb	0.760 ppb	0.068 ppb
Concentration RSD	1.3 %	1.0 %	438.8 %	104.6 %	30.5 %	13.8 %	80.2 %	10.8 %	19.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.345 ppb	100.821 %	101.579 %	0.002 ppb	-0.004 ppb	-0.063 ppb	0.023 ppb	102.057 %	104.601 %
Concentration per Run 1	1.154 ppb	100.540 %	102.399 %	-0.013 ppb	-0.007 ppb	-0.072 ppb	0.027 ppb	102.853 %	106.094 %
Concentration per Run 2	1.333 ppb	101.433 %	104.131 %	0.006 ppb	-0.007 ppb	-0.093 ppb	0.006 ppb	103.521 %	104.079 %
Concentration per Run 3	1.546 ppb	100.490 %	98.208 %	0.014 ppb	0.004 ppb	-0.024 ppb	0.035 ppb	99.798 %	103.630 %
Concentration RSD	14.6 %	0.5 %	3.0 %	581.9 %	173.6 %	56.4 %	66.9 %	1.9 %	1.3 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.002 ppb	0.000 ppb	101.769 %	105.426 %	0.033 ppb	0.024 ppb	102.131 %	106.788 %	99.639 %
Concentration per Run 1	0.002 ppb	0.000 ppb	104.401 %	103.623 %	0.042 ppb	0.012 ppb	102.629 %	107.244 %	99.948 %
Concentration per Run 2	0.002 ppb	0.000 ppb	100.999 %	105.028 %	0.039 ppb	0.030 ppb	101.807 %	107.443 %	98.869 %
Concentration per Run 3	0.002 ppb	0.000 ppb	99.907 %	107.628 %	0.019 ppb	0.030 ppb	101.956 %	105.677 %	100.101 %
Concentration RSD	19.0 %	N/A	2.3 %	1.9 %	37.5 %	43.7 %	0.4 %	0.9 %	0.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.610 %	0.061 ppb	0.011 ppb	104.946 %	109.399 %
Concentration per Run 1	104.751 %	0.039 ppb	0.013 ppb	102.694 %	111.178 %
Concentration per Run 2	106.548 %	0.075 ppb	0.010 ppb	107.413 %	110.109 %
Concentration per Run 3	105.531 %	0.067 ppb	0.011 ppb	104.730 %	106.910 %
Concentration RSD	0.9 %	31.0 %	13.3 %	2.3 %	2.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 2
Analysis label: CAL LOT #M22-1040
Analysis started at: 9/14/2023 10:27:28 AM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 1
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	101.382 %	97.595 %	0.005 ppb	0.210 ppb	8.831 ppb	-1.724 ppb	0.629 ppb	8.509 ppb	1.308 ppb
Concentration per Run 1	100.499 %	105.812 %	0.003 ppb	0.213 ppb	7.168 ppb	-1.753 ppb	0.698 ppb	27.718 ppb	10.174 ppb
Concentration per Run 2	102.059 %	102.204 %	0.001 ppb	0.210 ppb	2.610 ppb	-2.424 ppb	0.531 ppb	-6.592 ppb	8.601 ppb
Concentration per Run 3	101.588 %	84.769 %	0.010 ppb	0.207 ppb	16.715 ppb	-0.994 ppb	0.657 ppb	4.400 ppb	-14.852 ppb
Concentration RSD	0.8 %	11.5 %	94.4 %	1.5 %	81.5 %	41.5 %	13.9 %	205.9 %	1,072.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	98.337 %	101.460 %	-0.021 ppb	0.025 ppb	0.133 ppb	6.834 ppb	0.003 ppb	0.787 ppb	0.058 ppb
Concentration per Run 1	94.504 %	94.221 %	-0.027 ppb	0.013 ppb	0.130 ppb	5.834 ppb	0.001 ppb	0.880 ppb	0.061 ppb
Concentration per Run 2	101.067 %	104.753 %	-0.027 ppb	0.013 ppb	0.118 ppb	7.629 ppb	0.004 ppb	0.812 ppb	0.087 ppb
Concentration per Run 3	99.441 %	105.406 %	-0.008 ppb	0.049 ppb	0.151 ppb	7.038 ppb	0.004 ppb	0.668 ppb	0.026 ppb
Concentration RSD	3.5 %	6.2 %	54.4 %	82.6 %	12.7 %	13.4 %	53.9 %	13.8 %	52.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.530 ppb	99.316 %	96.986 %	0.008 ppb	0.004 ppb	-0.069 ppb	0.013 ppb	99.702 %	100.582 %
Concentration per Run 1	1.814 ppb	100.064 %	96.295 %	0.005 ppb	0.004 ppb	-0.055 ppb	-0.008 ppb	99.911 %	102.861 %
Concentration per Run 2	1.458 ppb	97.241 %	95.839 %	0.065 ppb	0.004 ppb	-0.087 ppb	0.015 ppb	98.773 %	100.195 %
Concentration per Run 3	1.319 ppb	100.642 %	98.824 %	-0.045 ppb	0.004 ppb	-0.066 ppb	0.030 ppb	100.423 %	98.692 %
Concentration RSD	16.7 %	1.8 %	1.7 %	647.2 %	0.0 %	23.6 %	151.2 %	0.8 %	2.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.003 ppb	0.002 ppb	99.135 %	104.603 %	0.003 ppb	0.012 ppb	99.916 %	104.289 %	98.923 %
Concentration per Run 1	0.006 ppb	0.000 ppb	99.481 %	107.115 %	0.002 ppb	0.011 ppb	95.857 %	107.244 %	95.073 %
Concentration per Run 2	0.003 ppb	0.003 ppb	99.349 %	102.559 %	0.010 ppb	0.012 ppb	100.342 %	104.009 %	99.362 %
Concentration per Run 3	0.000 ppb	0.003 ppb	98.576 %	104.135 %	-0.004 ppb	0.012 ppb	103.549 %	101.612 %	102.333 %
Concentration RSD	91.0 %	86.6 %	0.5 %	2.2 %	251.7 %	3.5 %	3.9 %	2.7 %	3.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	103.676 %	0.010 ppb	0.009 ppb	100.452 %	102.653 %
Concentration per Run 1	106.511 %	-0.002 ppb	0.008 ppb	99.565 %	105.973 %
Concentration per Run 2	102.849 %	0.013 ppb	0.010 ppb	100.968 %	102.018 %
Concentration per Run 3	101.668 %	0.019 ppb	0.009 ppb	100.823 %	99.968 %
Concentration RSD	2.4 %	104.9 %	9.1 %	0.8 %	3.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	3	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	Blank SMV ICPMSRQ	Rack	4		
Analysis started at:	9/14/2023 10:32:12 AM	Vial	49		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration RSD	0.0 %	0.2 %	0.1 %	0.0 %	0.1 %	0.7 %	0.0 %	0.2 %	1.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration per Run	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb
Concentration RSD	0.0 %	0.0 %	1.1 %	0.2 %	0.4 %	0.5 %	0.9 %	0.1 %	0.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	100.000 %
Concentration per Run	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	0.000 ppb	0.000 ppb	100.000 %	100.000 %
Concentration RSD	0.1 %	0.0 %	0.0 %	2.3 %	-1.7 %	0.1 %	0.5 %	0.0 %	0.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %	100.000 %	100.000 %
Concentration per Run	0.000 ppb	0.000 ppb	100.000 %	100.000 %	0.000 ppb	0.000 ppb	100.000 %	100.000 %	100.000 %
Concentration RSD	0.9 %		0.0 %	0.0 %	0.2 %	1.7 %	0.0 %	0.0 %	0.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	100.000 %	0.000 ppb	0.000 ppb	100.000 %	100.000 %
Concentration per Run	100.000 %	0.000 ppb	0.000 ppb	100.000 %	100.000 %
Concentration RSD	0.0 %	0.4 %	0.3 %	0.0 %	0.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 4
Analysis label: 0.2/20 Cal
Analysis started at: 9/14/2023 10:37:01 AM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 2
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	102.684 %	109.018 %	0.205 ppb	0.556 ppb	21.272 ppb	17.844 ppb	2.662 ppb	11.619 ppb	162.014 ppb
Concentration per Run 1	103.597 %	116.032 %	0.202 ppb	0.560 ppb	12.967 ppb	17.946 ppb	2.688 ppb	21.808 ppb	168.012 ppb
Concentration per Run 2	101.531 %	96.192 %	0.222 ppb	0.546 ppb	31.818 ppb	16.214 ppb	2.770 ppb	9.063 ppb	159.678 ppb
Concentration per Run 3	102.924 %	114.830 %	0.190 ppb	0.560 ppb	19.031 ppb	19.371 ppb	2.529 ppb	3.986 ppb	158.351 ppb
Concentration RSD	1.0 %	10.2 %	7.9 %	1.4 %	45.2 %	8.9 %	4.6 %	79.0 %	3.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	102.495 %	100.746 %	0.233 ppb	0.296 ppb	0.433 ppb	30.798 ppb	0.212 ppb	0.410 ppb	0.580 ppb
Concentration per Run 1	104.179 %	101.212 %	0.343 ppb	0.281 ppb	0.461 ppb	29.511 ppb	0.161 ppb	0.319 ppb	0.553 ppb
Concentration per Run 2	100.454 %	107.176 %	0.208 ppb	0.283 ppb	0.386 ppb	30.168 ppb	0.263 ppb	0.416 ppb	0.524 ppb
Concentration per Run 3	102.851 %	93.849 %	0.147 ppb	0.324 ppb	0.453 ppb	32.714 ppb	0.211 ppb	0.494 ppb	0.663 ppb
Concentration RSD	1.8 %	6.6 %	43.1 %	8.3 %	9.5 %	5.5 %	24.1 %	21.4 %	12.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.952 ppb	98.108 %	92.073 %	0.166 ppb	0.271 ppb	0.267 ppb	0.211 ppb	99.638 %	98.574 %
Concentration per Run 1	0.866 ppb	101.025 %	91.466 %	0.125 ppb	0.206 ppb	0.315 ppb	0.198 ppb	99.912 %	98.805 %
Concentration per Run 2	0.750 ppb	94.664 %	91.921 %	0.199 ppb	0.004 ppb	0.278 ppb	0.221 ppb	99.102 %	98.798 %
Concentration per Run 3	1.240 ppb	98.635 %	92.832 %	0.175 ppb	0.602 ppb	0.208 ppb	0.214 ppb	99.900 %	98.117 %
Concentration RSD	26.9 %	3.3 %	0.8 %	22.9 %	112.6 %	20.4 %	5.4 %	0.5 %	0.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.199 ppb	0.183 ppb	98.367 %	97.808 %	0.214 ppb	0.235 ppb	98.567 %	99.534 %	98.337 %
Concentration per Run 1	0.195 ppb	0.181 ppb	97.506 %	97.270 %	0.226 ppb	0.286 ppb	99.547 %	100.921 %	98.937 %
Concentration per Run 2	0.206 ppb	0.185 ppb	98.106 %	99.448 %	0.218 ppb	0.247 ppb	98.467 %	98.803 %	97.750 %
Concentration per Run 3	0.197 ppb	0.182 ppb	99.490 %	96.706 %	0.198 ppb	0.171 ppb	97.686 %	98.877 %	98.324 %
Concentration RSD	3.1 %	1.1 %	1.0 %	1.5 %	6.8 %	24.8 %	0.9 %	1.2 %	0.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	96.884 %	0.202 ppb	0.219 ppb	98.776 %	99.404 %
Concentration per Run 1	97.329 %	0.184 ppb	0.206 ppb	99.126 %	102.661 %
Concentration per Run 2	96.827 %	0.208 ppb	0.229 ppb	97.985 %	97.913 %
Concentration per Run 3	96.495 %	0.216 ppb	0.223 ppb	99.217 %	97.637 %
Concentration RSD	0.4 %	8.1 %	5.5 %	0.7 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 5
Analysis label: 1/100 Cal
Analysis started at: 9/14/2023 10:41:47 AM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 3
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	101.171 %	95.992 %	0.952 ppb	1.254 ppb	115.685 ppb	105.212 ppb	2.099 ppb	109.708 ppb	277.813 ppb
Concentration per Run 1	100.913 %	106.413 %	0.957 ppb	1.257 ppb	100.309 ppb	95.997 ppb	2.132 ppb	104.550 ppb	294.980 ppb
Concentration per Run 2	102.696 %	84.168 %	0.945 ppb	1.236 ppb	136.927 ppb	106.189 ppb	2.082 ppb	113.722 ppb	175.194 ppb
Concentration per Run 3	99.903 %	97.395 %	0.955 ppb	1.269 ppb	109.818 ppb	113.449 ppb	2.082 ppb	110.851 ppb	363.265 ppb
Concentration RSD	1.4 %	11.7 %	0.7 %	1.3 %	16.4 %	8.3 %	1.4 %	4.3 %	34.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	100.580 %	104.815 %	1.118 ppb	1.188 ppb	1.248 ppb	111.345 ppb	1.054 ppb	1.317 ppb	1.258 ppb
Concentration per Run 1	101.900 %	101.398 %	1.108 ppb	1.225 ppb	1.273 ppb	118.947 ppb	1.071 ppb	1.228 ppb	1.159 ppb
Concentration per Run 2	98.930 %	104.846 %	1.098 ppb	1.259 ppb	1.296 ppb	109.035 ppb	1.090 ppb	1.549 ppb	1.349 ppb
Concentration per Run 3	100.909 %	108.202 %	1.149 ppb	1.081 ppb	1.175 ppb	106.054 ppb	1.003 ppb	1.172 ppb	1.265 ppb
Concentration RSD	1.5 %	3.2 %	2.4 %	8.0 %	5.1 %	6.1 %	4.3 %	15.4 %	7.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.565 ppb	99.024 %	94.837 %	1.036 ppb	0.770 ppb	1.118 ppb	0.854 ppb	95.252 %	98.038 %
Concentration per Run 1	1.382 ppb	99.133 %	98.208 %	0.831 ppb	0.760 ppb	1.090 ppb	0.792 ppb	95.468 %	102.273 %
Concentration per Run 2	1.836 ppb	99.567 %	89.188 %	1.074 ppb	0.406 ppb	0.976 ppb	0.824 ppb	94.453 %	94.586 %
Concentration per Run 3	1.478 ppb	98.372 %	97.115 %	1.204 ppb	1.145 ppb	1.289 ppb	0.946 ppb	95.835 %	97.254 %
Concentration RSD	15.3 %	0.6 %	5.2 %	18.3 %	48.0 %	14.2 %	9.5 %	0.8 %	4.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.981 ppb	1.045 ppb	95.853 %	98.066 %	0.922 ppb	1.209 ppb	98.801 %	100.561 %	97.329 %
Concentration per Run 1	0.962 ppb	1.026 ppb	95.628 %	102.902 %	0.826 ppb	1.154 ppb	98.985 %	103.666 %	96.137 %
Concentration per Run 2	1.006 ppb	1.057 ppb	98.615 %	94.934 %	1.051 ppb	1.336 ppb	99.429 %	98.138 %	96.728 %
Concentration per Run 3	0.976 ppb	1.051 ppb	93.317 %	96.364 %	0.890 ppb	1.137 ppb	97.988 %	99.880 %	99.121 %
Concentration RSD	2.3 %	1.6 %	2.8 %	4.3 %	12.6 %	9.1 %	0.7 %	2.8 %	1.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	97.977 %	0.967 ppb	1.025 ppb	96.793 %	97.449 %
Concentration per Run 1	100.396 %	0.930 ppb	1.002 ppb	96.703 %	101.325 %
Concentration per Run 2	95.625 %	0.969 ppb	1.038 ppb	96.154 %	96.272 %
Concentration per Run 3	97.911 %	1.001 ppb	1.035 ppb	97.521 %	94.752 %
Concentration RSD	2.4 %	3.7 %	1.9 %	0.7 %	3.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 6
Analysis label: 10/10000 Cal
Analysis started at: 9/14/2023 10:46:33 AM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 4
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	101.744 %	98.597 %	9.738 ppb	9.881 ppb	1,096.261 ppb	1,055.336 ppb	13.248 ppb	1,077.056 ppb	1,121.347 ppb
Concentration per Run 1	103.957 %	94.389 %	9.443 ppb	9.505 ppb	1,175.507 ppb	1,176.751 ppb	13.029 ppb	1,120.592 ppb	1,145.403 ppb
Concentration per Run 2	101.609 %	99.198 %	9.860 ppb	10.018 ppb	1,065.316 ppb	1,011.278 ppb	12.798 ppb	1,064.678 ppb	1,005.367 ppb
Concentration per Run 3	99.666 %	102.204 %	9.911 ppb	10.119 ppb	1,047.959 ppb	977.980 ppb	13.918 ppb	1,045.897 ppb	1,213.273 ppb
Concentration RSD	2.1 %	4.0 %	2.6 %	3.3 %	6.3 %	10.1 %	4.5 %	3.6 %	9.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	103.095 %	102.951 %	10.891 ppb	11.050 ppb	11.410 ppb	1,121.660 ppb	11.210 ppb	11.611 ppb	11.313 ppb
Concentration per Run 1	103.617 %	96.924 %	11.423 ppb	11.661 ppb	12.513 ppb	1,198.651 ppb	12.120 ppb	12.966 ppb	12.295 ppb
Concentration per Run 2	103.845 %	103.914 %	11.036 ppb	10.790 ppb	10.776 ppb	1,067.855 ppb	11.196 ppb	10.561 ppb	10.442 ppb
Concentration per Run 3	101.823 %	108.015 %	10.212 ppb	10.698 ppb	10.941 ppb	1,098.474 ppb	10.315 ppb	11.306 ppb	11.203 ppb
Concentration RSD	1.1 %	5.4 %	5.7 %	4.8 %	8.4 %	6.1 %	8.1 %	10.6 %	8.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	11.182 ppb	97.606 %	93.570 %	10.404 ppb	9.819 ppb	10.455 ppb	9.690 ppb	98.152 %	96.875 %
Concentration per Run 1	12.337 ppb	98.204 %	84.428 %	11.361 ppb	10.506 ppb	11.710 ppb	10.484 ppb	100.376 %	89.367 %
Concentration per Run 2	10.387 ppb	95.194 %	99.484 %	9.581 ppb	9.578 ppb	9.836 ppb	9.080 ppb	94.419 %	99.245 %
Concentration per Run 3	10.823 ppb	99.420 %	96.798 %	10.269 ppb	9.373 ppb	9.819 ppb	9.507 ppb	99.663 %	102.014 %
Concentration RSD	9.2 %	2.2 %	8.6 %	8.6 %	6.2 %	10.4 %	7.4 %	3.3 %	6.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	10.154 ppb	10.430 ppb	99.366 %	95.306 %	10.072 ppb	10.683 ppb	100.272 %	97.770 %	100.163 %
Concentration per Run 1	10.910 ppb	11.528 ppb	99.578 %	90.025 %	10.858 ppb	11.740 ppb	100.581 %	89.766 %	101.538 %
Concentration per Run 2	9.876 ppb	9.993 ppb	98.417 %	96.916 %	9.809 ppb	10.426 ppb	99.784 %	101.452 %	98.067 %
Concentration per Run 3	9.676 ppb	9.770 ppb	100.103 %	98.976 %	9.549 ppb	9.882 ppb	100.450 %	102.092 %	100.883 %
Concentration RSD	6.5 %	9.2 %	0.9 %	4.9 %	6.9 %	8.9 %	0.4 %	7.1 %	1.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	95.483 %	9.923 ppb	10.204 ppb	100.935 %	98.217 %
Concentration per Run 1	88.407 %	10.916 ppb	11.124 ppb	100.698 %	91.593 %
Concentration per Run 2	98.938 %	9.443 ppb	9.803 ppb	100.586 %	100.299 %
Concentration per Run 3	99.102 %	9.410 ppb	9.685 ppb	101.519 %	102.758 %
Concentration RSD	6.4 %	8.7 %	7.8 %	0.5 %	6.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	7	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	60/6000 Cal	Rack	0		
Analysis started at:	9/14/2023 10:51:20 AM	Vial	5		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	99.754 %	100.802 %	59.047 ppb	59.749 ppb	6,012.584 ppb	5,927.119 ppb	61.752 ppb	6,157.846 ppb	5,980.329 ppb
Concentration per Run 1	97.412 %	80.561 %	59.579 ppb	60.569 ppb	6,602.503 ppb	6,392.220 ppb	63.098 ppb	6,039.950 ppb	5,510.022 ppb
Concentration per Run 2	100.396 %	106.413 %	60.214 ppb	60.158 ppb	5,976.005 ppb	5,874.128 ppb	62.432 ppb	6,558.122 ppb	6,632.703 ppb
Concentration per Run 3	101.454 %	115.431 %	57.348 ppb	58.520 ppb	5,459.245 ppb	5,515.008 ppb	59.727 ppb	5,875.464 ppb	5,798.261 ppb
Concentration RSD	2.1 %	18.0 %	2.5 %	1.8 %	9.5 %	7.4 %	2.9 %	5.8 %	9.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	108.391 %	108.979 %	62.824 ppb	61.156 ppb	61.890 ppb	6,196.250 ppb	61.405 ppb	60.859 ppb	61.477 ppb
Concentration per Run 1	109.176 %	109.227 %	62.633 ppb	61.660 ppb	60.224 ppb	5,999.692 ppb	60.583 ppb	58.479 ppb	58.612 ppb
Concentration per Run 2	108.937 %	105.872 %	63.161 ppb	61.620 ppb	63.387 ppb	6,202.963 ppb	63.552 ppb	61.854 ppb	63.848 ppb
Concentration per Run 3	107.060 %	111.837 %	62.677 ppb	60.188 ppb	62.058 ppb	6,386.095 ppb	60.080 ppb	62.246 ppb	61.971 ppb
Concentration RSD	1.1 %	2.7 %	0.5 %	1.4 %	2.6 %	3.1 %	3.1 %	3.4 %	4.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	61.430 ppb	99.984 %	94.545 %	59.541 ppb	60.564 ppb	61.278 ppb	58.687 ppb	98.865 %	95.771 %
Concentration per Run 1	60.683 ppb	97.584 %	94.863 %	59.881 ppb	56.039 ppb	59.243 ppb	56.541 ppb	97.732 %	100.063 %
Concentration per Run 2	61.169 ppb	101.288 %	96.235 %	57.188 ppb	59.181 ppb	61.535 ppb	59.040 ppb	98.420 %	93.866 %
Concentration per Run 3	62.437 ppb	101.082 %	92.538 %	61.555 ppb	66.473 ppb	63.057 ppb	60.480 ppb	100.443 %	93.383 %
Concentration RSD	1.5 %	2.1 %	2.0 %	3.7 %	8.8 %	3.1 %	3.4 %	1.4 %	3.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	60.056 ppb	60.919 ppb	100.077 %	94.531 %	59.686 ppb	59.982 ppb	101.031 %	98.171 %	99.618 %
Concentration per Run 1	57.887 ppb	59.093 ppb	99.353 %	95.235 %	58.184 ppb	60.055 ppb	101.441 %	99.844 %	100.002 %
Concentration per Run 2	61.195 ppb	62.283 ppb	99.390 %	92.348 %	61.937 ppb	59.512 ppb	98.682 %	97.096 %	99.160 %
Concentration per Run 3	61.087 ppb	61.381 ppb	101.489 %	96.010 %	58.936 ppb	60.379 ppb	102.968 %	97.573 %	99.693 %
Concentration RSD	3.1 %	2.7 %	1.2 %	2.0 %	3.3 %	0.7 %	2.2 %	1.5 %	0.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	94.237 %	58.811 ppb	59.611 ppb	100.712 %	95.826 %
Concentration per Run 1	94.300 %	56.643 ppb	57.035 ppb	98.331 %	98.321 %
Concentration per Run 2	96.339 %	59.785 ppb	60.386 ppb	100.592 %	96.536 %
Concentration per Run 3	92.074 %	60.005 ppb	61.411 ppb	103.212 %	92.620 %
Concentration RSD	2.3 %	3.2 %	3.8 %	2.4 %	3.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	8	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	120/120000 Cal	Rack	0		
Analysis started at:	9/14/2023 10:56:07 AM	Vial	6		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	98.688 %	98.798 %	120.499 ppb	120.133 ppb	11,985.553 ppb	12,031.790 ppb	118.840 ppb	11,914.589 ppb	11,998.005 ppb
Concentration per Run 1	99.534 %	93.788 %	119.663 ppb	119.960 ppb	12,054.449 ppb	12,116.051 ppb	120.019 ppb	11,547.135 ppb	11,305.134 ppb
Concentration per Run 2	98.932 %	104.008 %	120.047 ppb	120.944 ppb	11,581.741 ppb	11,802.955 ppb	116.824 ppb	11,685.482 ppb	12,151.278 ppb
Concentration per Run 3	97.599 %	98.597 %	121.786 ppb	119.495 ppb	12,320.470 ppb	12,176.363 ppb	119.676 ppb	12,511.150 ppb	12,537.603 ppb
Concentration RSD	1.0 %	5.2 %	0.9 %	0.6 %	3.1 %	1.7 %	1.5 %	4.4 %	5.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	110.649 %	113.390 %	118.513 ppb	119.333 ppb	118.935 ppb	11,891.624 ppb	119.196 ppb	119.433 ppb	119.149 ppb
Concentration per Run 1	108.840 %	118.175 %	115.409 ppb	111.043 ppb	112.013 ppb	11,160.189 ppb	116.023 ppb	111.966 ppb	113.015 ppb
Concentration per Run 2	111.882 %	114.167 %	117.827 ppb	123.183 ppb	120.284 ppb	12,288.531 ppb	121.545 ppb	125.457 ppb	124.327 ppb
Concentration per Run 3	111.224 %	107.829 %	122.302 ppb	123.773 ppb	124.508 ppb	12,226.153 ppb	120.021 ppb	120.877 ppb	120.106 ppb
Concentration RSD	1.4 %	4.6 %	3.0 %	6.0 %	5.3 %	5.3 %	2.4 %	5.7 %	4.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	119.181 ppb	100.489 %	98.264 %	120.196 ppb	119.735 ppb	119.322 ppb	120.684 ppb	97.608 %	96.768 %
Concentration per Run 1	111.849 ppb	99.935 %	102.457 %	110.616 ppb	116.604 ppb	113.144 ppb	112.960 ppb	100.574 %	100.196 %
Concentration per Run 2	123.617 ppb	98.364 %	93.818 %	126.340 ppb	125.044 ppb	122.645 ppb	122.165 ppb	95.685 %	95.545 %
Concentration per Run 3	122.077 ppb	103.169 %	98.517 %	123.631 ppb	117.557 ppb	122.177 ppb	126.925 ppb	96.566 %	94.562 %
Concentration RSD	5.4 %	2.4 %	4.4 %	7.0 %	3.9 %	4.5 %	5.9 %	2.7 %	3.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	119.959 ppb	119.504 ppb	100.304 %	96.268 %	120.152 ppb	119.950 ppb	101.404 %	98.396 %	101.966 %
Concentration per Run 1	114.387 ppb	113.144 ppb	99.475 %	100.368 %	114.831 ppb	113.712 ppb	101.780 %	103.464 %	103.433 %
Concentration per Run 2	122.941 ppb	121.859 ppb	98.966 %	92.991 %	124.070 ppb	125.178 ppb	100.764 %	95.265 %	101.662 %
Concentration per Run 3	122.549 ppb	123.510 ppb	102.470 %	95.445 %	121.554 ppb	120.961 ppb	101.668 %	96.459 %	100.805 %
Concentration RSD	4.0 %	4.7 %	1.9 %	3.9 %	4.0 %	4.8 %	0.5 %	4.5 %	1.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	97.815 %	120.601 ppb	120.177 ppb	99.666 %	94.422 %
Concentration per Run 1	100.122 %	112.355 ppb	111.848 ppb	99.977 %	100.718 %
Concentration per Run 2	96.114 %	124.893 ppb	123.394 ppb	100.319 %	92.226 %
Concentration per Run 3	97.208 %	124.556 ppb	125.289 ppb	98.700 %	90.322 %
Concentration RSD	2.1 %	5.9 %	6.1 %	0.9 %	5.9 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 9
Analysis label: Sr 200ppb
Analysis started at: 9/14/2023 11:00:55 AM
User name ALPHALAB\ICPMSRQ
Rack 4
Vial 55
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	105.488 %	99.800 %	0.029 ppb	0.277 ppb	5.104 ppb	0.975 ppb	0.238 ppb	1.007 ppb	-2.218 ppb
Concentration per Run 1	105.713 %	111.223 %	0.032 ppb	0.254 ppb	-10.789 ppb	-1.212 ppb	0.224 ppb	-12.597 ppb	255.623 ppb
Concentration per Run 2	105.530 %	99.800 %	0.027 ppb	0.293 ppb	3.956 ppb	2.986 ppb	0.240 ppb	2.533 ppb	-268.936 ppb
Concentration per Run 3	105.220 %	88.377 %	0.027 ppb	0.283 ppb	22.145 ppb	1.152 ppb	0.250 ppb	13.086 ppb	6.658 ppb
Concentration RSD	0.2 %	11.4 %	11.0 %	7.4 %	323.2 %	215.8 %	5.5 %	1,281.8 %	11,828.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	104.724 %	103.977 %	-0.027 ppb	0.059 ppb	0.084 ppb	12.549 ppb	0.002 ppb	0.087 ppb	0.092 ppb
Concentration per Run 1	105.468 %	111.277 %	-0.027 ppb	-0.001 ppb	0.064 ppb	11.355 ppb	0.004 ppb	0.026 ppb	0.114 ppb
Concentration per Run 2	102.587 %	99.534 %	-0.027 ppb	0.150 ppb	0.096 ppb	13.341 ppb	-0.002 ppb	0.111 ppb	0.094 ppb
Concentration per Run 3	106.116 %	101.118 %	-0.027 ppb	0.028 ppb	0.093 ppb	12.951 ppb	0.004 ppb	0.124 ppb	0.067 ppb
Concentration RSD	1.8 %	6.1 %	0.0 %	136.8 %	21.2 %	8.4 %	179.9 %	61.2 %	25.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.049 ppb	102.492 %	97.904 %	0.032 ppb	0.434 ppb	195.993 ppb	0.286 ppb	103.709 %	103.181 %
Concentration per Run 1	-0.053 ppb	103.488 %	100.850 %	0.093 ppb	0.176 ppb	184.827 ppb	0.186 ppb	103.570 %	108.004 %
Concentration per Run 2	-0.078 ppb	100.803 %	98.117 %	-0.008 ppb	0.550 ppb	199.162 ppb	0.317 ppb	106.406 %	100.395 %
Concentration per Run 3	-0.014 ppb	103.184 %	94.746 %	0.010 ppb	0.577 ppb	203.989 ppb	0.355 ppb	101.151 %	101.144 %
Concentration RSD	66.2 %	1.4 %	3.1 %	172.0 %	51.6 %	5.1 %	31.1 %	2.5 %	4.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.013 ppb	0.001 ppb	100.748 %	99.921 %	0.005 ppb	0.058 ppb	103.531 %	101.212 %	100.130 %
Concentration per Run 1	0.014 ppb	0.000 ppb	99.750 %	107.903 %	-0.002 ppb	0.048 ppb	102.215 %	103.637 %	100.198 %
Concentration per Run 2	0.012 ppb	0.003 ppb	99.902 %	94.264 %	0.000 ppb	0.073 ppb	101.804 %	100.822 %	100.185 %
Concentration per Run 3	0.013 ppb	0.000 ppb	102.593 %	97.598 %	0.018 ppb	0.052 ppb	106.574 %	99.177 %	100.007 %
Concentration RSD	8.5 %	173.2 %	1.6 %	7.1 %	206.6 %	22.7 %	2.6 %	2.2 %	0.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	97.102 %	0.350 ppb	0.021 ppb	101.683 %	101.395 %
Concentration per Run 1	100.327 %	0.207 ppb	0.022 ppb	100.880 %	107.451 %
Concentration per Run 2	95.911 %	0.390 ppb	0.020 ppb	100.859 %	101.459 %
Concentration per Run 3	95.067 %	0.453 ppb	0.020 ppb	103.309 %	95.275 %
Concentration RSD	2.9 %	36.6 %	5.3 %	1.4 %	6.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 10 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: ICV Rack 0
Analysis started at: 9/14/2023 11:05:44 AM Vial 7

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	104.635 %	107.415 %	48.761 ppb	49.956 ppb	4,873.467 ppb	5,004.201 ppb	50.737 ppb	5,365.890 ppb	5,017.829 ppb
Concentration per Run 1	104.538 %	107.615 %	48.856 ppb	49.787 ppb	4,698.168 ppb	4,776.595 ppb	49.191 ppb	5,008.448 ppb	4,915.142 ppb
Concentration per Run 2	106.145 %	105.210 %	48.167 ppb	48.744 ppb	5,001.455 ppb	4,987.683 ppb	50.831 ppb	5,485.596 ppb	4,499.054 ppb
Concentration per Run 3	103.222 %	109.419 %	49.260 ppb	51.336 ppb	4,920.777 ppb	5,248.324 ppb	52.190 ppb	5,603.624 ppb	5,639.292 ppb
Recovery Percentage 1			97.522 %	99.911 %	97.469 %	100.084 %	101.475 %	107.318 %	100.357 %
Concentration RSD	1.4 %	2.0 %	1.1 %	2.6 %	3.2 %	4.7 %	3.0 %	5.9 %	11.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	107.056 %	110.998 %	52.864 ppb	51.724 ppb	53.005 ppb	5,282.952 ppb	52.587 ppb	50.884 ppb	53.657 ppb
Concentration per Run 1	108.299 %	114.633 %	51.438 ppb	50.251 ppb	51.007 ppb	5,127.213 ppb	48.315 ppb	49.761 ppb	51.348 ppb
Concentration per Run 2	106.339 %	110.252 %	52.531 ppb	52.476 ppb	53.671 ppb	5,398.837 ppb	54.011 ppb	49.485 ppb	54.075 ppb
Concentration per Run 3	106.531 %	108.109 %	54.623 ppb	52.443 ppb	54.336 ppb	5,322.807 ppb	55.435 ppb	53.407 ppb	55.548 ppb
Recovery Percentage 1			105.728 %	103.447 %	106.010 %	105.659 %	105.174 %	101.769 %	107.314 %
Concentration RSD	1.0 %	3.0 %	3.1 %	2.5 %	3.3 %	2.7 %	7.2 %	4.3 %	4.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	53.255 ppb	103.803 %	96.369 %	49.629 ppb	46.501 ppb	49.111 ppb	50.644 ppb	100.006 %	100.732 %
Concentration per Run 1	50.390 ppb	104.980 %	98.647 %	47.225 ppb	45.938 ppb	48.501 ppb	49.000 ppb	101.750 %	102.087 %
Concentration per Run 2	54.063 ppb	101.325 %	96.165 %	49.986 ppb	50.013 ppb	49.491 ppb	50.724 ppb	97.265 %	99.814 %
Concentration per Run 3	55.310 ppb	105.103 %	94.295 %	51.676 ppb	43.552 ppb	49.340 ppb	52.209 ppb	101.003 %	100.295 %
Recovery Percentage 1	106.509 %			99.258 %	93.002 %	98.222 %	101.289 %		
Concentration RSD	4.8 %	2.1 %	2.3 %	4.5 %	7.0 %	1.1 %	3.2 %	2.4 %	1.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	51.561 ppb	49.792 ppb	100.703 %	96.902 %	49.672 ppb	48.133 ppb	104.207 %	100.232 %	104.885 %
Concentration per Run 1	50.526 ppb	47.882 ppb	100.305 %	100.040 %	47.103 ppb	44.543 ppb	102.519 %	103.882 %	103.676 %
Concentration per Run 2	52.201 ppb	51.039 ppb	100.724 %	93.739 %	51.517 ppb	49.650 ppb	106.517 %	98.096 %	106.351 %
Concentration per Run 3	51.957 ppb	50.455 ppb	101.079 %	96.929 %	50.396 ppb	50.205 ppb	103.586 %	98.719 %	104.628 %
Recovery Percentage 1	103.123 %	99.584 %			99.344 %	96.265 %			
Concentration RSD	1.8 %	3.4 %	0.4 %	3.3 %	4.6 %	6.5 %	2.0 %	3.2 %	1.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	98.706 %	48.892 ppb	50.105 ppb	100.635 %	97.754 %
Concentration per Run 1	100.308 %	47.458 ppb	47.990 ppb	99.000 %	101.675 %
Concentration per Run 2	97.026 %	49.111 ppb	50.525 ppb	101.732 %	96.428 %
Concentration per Run 3	98.783 %	50.108 ppb	51.801 ppb	101.175 %	95.159 %
Recovery Percentage 1		97.785 %	100.210 %		
Concentration RSD	1.7 %	2.7 %	3.9 %	1.4 %	3.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 11
Analysis label: ICB
Analysis started at: 9/14/2023 11:10:32 AM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	104.513 %	95.792 %	0.023 ppb	0.091 ppb	1.578 ppb	-0.194 ppb	-0.306 ppb	-1.031 ppb	-7.013 ppb
Concentration per Run 1	105.476 %	99.800 %	0.020 ppb	0.097 ppb	1.244 ppb	2.198 ppb	-0.356 ppb	-3.145 ppb	-13.802 ppb
Concentration per Run 2	104.752 %	93.788 %	0.024 ppb	0.090 ppb	1.679 ppb	-1.060 ppb	-0.270 ppb	13.852 ppb	8.222 ppb
Concentration per Run 3	103.312 %	93.788 %	0.024 ppb	0.087 ppb	1.811 ppb	-1.721 ppb	-0.291 ppb	-13.801 ppb	-15.459 ppb
Recovery Percentage 1			4.580 %	0.913 %	1.578 %	-0.278 %	-3.056 %	-1.031 %	-7.013 %
Concentration RSD	1.1 %	3.6 %	10.5 %	5.3 %	18.8 %	1,079.5 %	14.6 %	1,352.2 %	188.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	102.735 %	102.610 %	-0.014 ppb	0.036 ppb	0.094 ppb	5.137 ppb	0.005 ppb	0.037 ppb	-0.002 ppb
Concentration per Run 1	108.275 %	104.753 %	-0.027 ppb	0.043 ppb	0.083 ppb	6.570 ppb	0.010 ppb	0.030 ppb	0.011 ppb
Concentration per Run 2	98.812 %	104.753 %	-0.008 ppb	0.039 ppb	0.099 ppb	2.222 ppb	0.007 ppb	0.032 ppb	0.013 ppb
Concentration per Run 3	101.119 %	98.322 %	-0.006 ppb	0.026 ppb	0.099 ppb	6.620 ppb	-0.002 ppb	0.048 ppb	-0.030 ppb
Recovery Percentage 1			-0.276 %	3.595 %	9.391 %	10.275 %	1.017 %	1.825 %	-0.221 %
Concentration RSD	4.8 %	3.6 %	85.2 %	23.8 %	10.0 %	49.1 %	126.2 %	27.3 %	1,096.7 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.476 ppb	101.914 %	97.397 %	-0.014 ppb	0.122 ppb	-0.077 ppb	0.123 ppb	101.834 %	101.457 %
Concentration per Run 1	0.544 ppb	103.177 %	100.486 %	-0.089 ppb	0.177 ppb	-0.125 ppb	0.076 ppb	99.815 %	105.965 %
Concentration per Run 2	0.327 ppb	100.930 %	96.594 %	-0.083 ppb	-0.008 ppb	-0.064 ppb	0.135 ppb	103.231 %	98.680 %
Concentration per Run 3	0.559 ppb	101.634 %	95.110 %	0.128 ppb	0.199 ppb	-0.041 ppb	0.157 ppb	102.456 %	99.727 %
Recovery Percentage 1	9.529 %			-2.879 %	2.450 %	-15.325 %	6.148 %		
Concentration RSD	27.3 %	1.1 %	2.9 %	858.9 %	92.7 %	56.6 %	34.1 %	1.8 %	3.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.008 ppb	0.005 ppb	101.946 %	99.068 %	0.012 ppb	0.084 ppb	102.698 %	100.614 %	100.873 %
Concentration per Run 1	0.013 ppb	0.000 ppb	103.273 %	99.947 %	0.006 ppb	0.070 ppb	102.808 %	102.774 %	103.985 %
Concentration per Run 2	0.005 ppb	0.010 ppb	103.022 %	98.700 %	0.018 ppb	0.091 ppb	103.348 %	98.671 %	101.065 %
Concentration per Run 3	0.007 ppb	0.007 ppb	99.541 %	98.557 %	0.011 ppb	0.091 ppb	101.936 %	100.396 %	97.570 %
Recovery Percentage 1	2.116 %				0.288 %	16.783 %			
Concentration RSD	44.2 %	91.7 %	2.0 %	0.8 %	52.1 %	14.6 %	0.7 %	2.0 %	3.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	97.784 %	0.232 ppb	0.015 ppb	101.539 %	100.328 %
Concentration per Run 1	98.369 %	0.142 ppb	0.019 ppb	98.806 %	103.027 %
Concentration per Run 2	97.703 %	0.259 ppb	0.014 ppb	103.091 %	100.286 %
Concentration per Run 3	97.280 %	0.296 ppb	0.013 ppb	102.720 %	97.672 %
Recovery Percentage 1		23.210 %	1.509 %		
Concentration RSD	0.6 %	34.7 %	19.7 %	2.3 %	2.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 12
Analysis label: LLCCV
Analysis started at: 9/14/2023 11:16:45 AM
User name ALPHALAB\ICPMSRQ
Rack 4
Vial 51
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	104.636 %	105.812 %	0.289 ppb	96.036 ppb	97.884 ppb	74.511 ppb	10.567 ppb	101.803 ppb	206.125 ppb
Concentration per Run 1	103.776 %	96.192 %	0.294 ppb	98.078 ppb	99.675 ppb	77.185 ppb	10.703 ppb	106.095 ppb	277.886 ppb
Concentration per Run 2	105.644 %	104.008 %	0.280 ppb	94.991 ppb	98.168 ppb	79.610 ppb	10.608 ppb	131.765 ppb	249.635 ppb
Concentration per Run 3	104.490 %	117.235 %	0.294 ppb	95.038 ppb	95.810 ppb	66.739 ppb	10.388 ppb	67.548 ppb	90.855 ppb
Recovery Percentage 1			57.876 %	960.357 %	97.884 %	106.445 %	105.666 %	101.803 %	206.125 %
Concentration RSD	0.9 %	10.1 %	2.8 %	1.8 %	2.0 %	9.2 %	1.5 %	31.8 %	48.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	107.681 %	105.965 %	5.766 ppb	0.516 ppb	1.249 ppb	20.716 ppb	0.585 ppb	2.200 ppb	1.169 ppb
Concentration per Run 1	110.277 %	113.421 %	5.231 ppb	0.532 ppb	1.160 ppb	19.547 ppb	0.522 ppb	2.214 ppb	1.001 ppb
Concentration per Run 2	105.796 %	104.753 %	6.035 ppb	0.428 ppb	1.274 ppb	21.339 ppb	0.634 ppb	1.934 ppb	1.154 ppb
Concentration per Run 3	106.969 %	99.720 %	6.030 ppb	0.588 ppb	1.314 ppb	21.263 ppb	0.599 ppb	2.452 ppb	1.353 ppb
Recovery Percentage 1			115.310 %	51.600 %	124.925 %	41.433 %	117.001 %	110.005 %	116.916 %
Concentration RSD	2.2 %	6.5 %	8.0 %	15.7 %	6.4 %	4.9 %	9.8 %	11.8 %	15.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	10.170 ppb	101.875 %	95.476 %	0.543 ppb	4.606 ppb	0.521 ppb	1.879 ppb	102.264 %	101.494 %
Concentration per Run 1	9.277 ppb	103.138 %	96.343 %	0.323 ppb	4.386 ppb	0.284 ppb	1.710 ppb	102.282 %	106.337 %
Concentration per Run 2	10.039 ppb	101.386 %	98.208 %	0.720 ppb	3.610 ppb	0.567 ppb	2.006 ppb	103.267 %	99.258 %
Concentration per Run 3	11.192 ppb	101.099 %	91.878 %	0.586 ppb	5.823 ppb	0.711 ppb	1.920 ppb	101.242 %	98.888 %
Recovery Percentage 1	101.695 %			108.548 %	92.129 %	52.051 %	93.929 %		
Concentration RSD	9.5 %	1.1 %	3.4 %	37.2 %	24.4 %	41.7 %	8.1 %	1.0 %	4.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.270 ppb	0.196 ppb	100.600 %	98.290 %	3.805 ppb	0.726 ppb	100.547 %	102.449 %	100.003 %
Concentration per Run 1	0.256 ppb	0.253 ppb	102.035 %	99.488 %	3.797 ppb	0.655 ppb	101.031 %	105.058 %	100.632 %
Concentration per Run 2	0.276 ppb	0.167 ppb	99.192 %	98.189 %	3.878 ppb	0.776 ppb	100.542 %	99.396 %	100.250 %
Concentration per Run 3	0.279 ppb	0.168 ppb	100.573 %	97.192 %	3.740 ppb	0.747 ppb	100.068 %	102.893 %	99.128 %
Recovery Percentage 1	67.582 %	98.067 %			95.133 %	145.268 %			
Concentration RSD	4.8 %	25.3 %	1.4 %	1.2 %	1.8 %	8.7 %	0.5 %	2.8 %	0.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	99.113 %	0.571 ppb	0.530 ppb	100.335 %	99.570 %
Concentration per Run 1	101.733 %	0.500 ppb	0.506 ppb	101.337 %	102.678 %
Concentration per Run 2	97.316 %	0.606 ppb	0.559 ppb	101.840 %	96.454 %
Concentration per Run 3	98.290 %	0.607 ppb	0.526 ppb	97.829 %	99.578 %
Recovery Percentage 1		114.131 %	106.005 %		
Concentration RSD	2.3 %	10.8 %	5.0 %	2.2 %	3.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	13	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	ICSA	Rack	4		
Analysis started at:	9/14/2023 11:21:33 AM	Vial	53		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	100.655 %	102.405 %	0.019 ppb	0.873 ppb	48,365.272 ppb	19,418.824 ppb	17,119.143 ppb	20,691.017 ppb	59,829.572 ppb
Concentration per Run 1	99.589 %	99.198 %	0.015 ppb	0.866 ppb	47,462.858 ppb	18,615.356 ppb	17,542.914 ppb	19,074.691 ppb	56,928.146 ppb
Concentration per Run 2	100.884 %	101.002 %	0.021 ppb	0.882 ppb	49,436.951 ppb	19,448.567 ppb	16,981.388 ppb	21,231.652 ppb	58,821.601 ppb
Concentration per Run 3	101.493 %	107.014 %	0.022 ppb	0.870 ppb	48,196.008 ppb	20,192.549 ppb	16,833.126 ppb	21,766.708 ppb	63,738.970 ppb
Recovery Percentage 1			3.860 %	8.727 %	48,365.272 %	27,741.178 %	171,191.427 %	20,691.017 %	59,829.572 %
Concentration RSD	1.0 %	4.0 %	17.6 %	0.9 %	2.1 %	4.1 %	2.2 %	6.9 %	5.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	114.991 %	108.699 %	-0.007 ppb	0.350 ppb	1.007 ppb	50,677.895 ppb	0.429 ppb	0.706 ppb	0.297 ppb
Concentration per Run 1	113.827 %	112.116 %	-0.027 ppb	0.368 ppb	0.949 ppb	48,285.348 ppb	0.389 ppb	0.628 ppb	0.274 ppb
Concentration per Run 2	114.388 %	110.439 %	-0.027 ppb	0.276 ppb	1.120 ppb	51,102.521 ppb	0.499 ppb	0.747 ppb	0.309 ppb
Concentration per Run 3	116.757 %	103.542 %	0.033 ppb	0.405 ppb	0.952 ppb	52,645.817 ppb	0.400 ppb	0.742 ppb	0.309 ppb
Recovery Percentage 1			-0.147 %	34.996 %	100.688 %	101,355.791 %	85.810 %	35.291 %	29.746 %
Concentration RSD	1.4 %	4.2 %	473.4 %	19.0 %	9.7 %	4.4 %	14.1 %	9.5 %	6.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.453 ppb	107.723 %	99.014 %	0.057 ppb	0.568 ppb	0.402 ppb	**404.329 ppb**	102.221 %	93.345 %
Concentration per Run 1	0.276 ppb	106.564 %	103.471 %	0.066 ppb	0.346 ppb	0.345 ppb	377.729 ppb	96.166 %	96.299 %
Concentration per Run 2	0.516 ppb	108.244 %	98.117 %	0.076 ppb	0.580 ppb	0.443 ppb	403.469 ppb	104.119 %	91.823 %
Concentration per Run 3	0.568 ppb	108.361 %	95.453 %	0.029 ppb	0.778 ppb	0.417 ppb	431.789 ppb	106.377 %	91.914 %
Recovery Percentage 1	9.065 %			11.396 %	11.357 %	80.317 %	20,216.454 %		
Concentration RSD	34.3 %	0.9 %	4.1 %	42.9 %	38.1 %	12.6 %	6.7 %	5.2 %	2.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.007 ppb	0.041 ppb	102.597 %	91.416 %	0.043 ppb	0.291 ppb	108.838 %	98.757 %	108.199 %
Concentration per Run 1	0.009 ppb	0.027 ppb	99.489 %	94.343 %	0.038 ppb	0.325 ppb	106.290 %	103.677 %	106.155 %
Concentration per Run 2	0.005 ppb	0.047 ppb	102.573 %	89.145 %	0.046 ppb	0.348 ppb	111.386 %	96.361 %	109.752 %
Concentration per Run 3	0.009 ppb	0.050 ppb	105.728 %	90.760 %	0.045 ppb	0.200 ppb	108.838 %	96.235 %	108.691 %
Recovery Percentage 1	1.872 %				1.081 %	58.240 %			
Concentration RSD	28.5 %	29.6 %	3.0 %	2.9 %	11.0 %	27.3 %	2.3 %	4.3 %	1.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	95.435 %	0.044 ppb	1.009 ppb	98.335 %	90.685 %
Concentration per Run 1	98.345 %	0.015 ppb	0.957 ppb	94.639 %	95.044 %
Concentration per Run 2	94.377 %	0.050 ppb	1.009 ppb	98.751 %	89.586 %
Concentration per Run 3	93.582 %	0.065 ppb	1.060 ppb	101.614 %	87.425 %
Recovery Percentage 1		4.351 %	100.887 %		
Concentration RSD	2.7 %	59.0 %	5.1 %	3.6 %	4.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 14 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: Rinse Rack 0
Analysis started at: 9/14/2023 11:26:22 AM Vial 1

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	106.379 %	106.613 %	0.017 ppb	0.181 ppb	42.733 ppb	12.064 ppb	1.352 ppb	17.909 ppb	37.368 ppb
Concentration per Run 1	108.000 %	99.198 %	0.017 ppb	0.186 ppb	46.796 ppb	11.729 ppb	1.378 ppb	23.937 ppb	7.604 ppb
Concentration per Run 2	106.210 %	109.419 %	0.019 ppb	0.150 ppb	65.492 ppb	21.397 ppb	1.360 ppb	23.273 ppb	98.281 ppb
Concentration per Run 3	104.926 %	111.223 %	0.014 ppb	0.209 ppb	15.911 ppb	3.065 ppb	1.319 ppb	6.516 ppb	6.220 ppb
Concentration RSD	1.5 %	6.1 %	14.2 %	16.3 %	58.6 %	76.0 %	2.2 %	55.1 %	141.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	107.074 %	108.761 %	-0.015 ppb	0.019 ppb	0.109 ppb	48.278 ppb	0.004 ppb	0.879 ppb	0.063 ppb
Concentration per Run 1	109.343 %	111.278 %	-0.009 ppb	0.016 ppb	0.104 ppb	37.737 ppb	0.004 ppb	0.581 ppb	0.029 ppb
Concentration per Run 2	110.202 %	105.312 %	-0.027 ppb	0.052 ppb	0.112 ppb	79.960 ppb	0.004 ppb	1.101 ppb	0.023 ppb
Concentration per Run 3	101.676 %	109.693 %	-0.008 ppb	-0.010 ppb	0.111 ppb	27.137 ppb	0.004 ppb	0.955 ppb	0.138 ppb
Concentration RSD	4.4 %	2.8 %	73.2 %	161.8 %	4.3 %	57.9 %	2.4 %	30.5 %	103.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.402 ppb	104.491 %	102.203 %	-0.005 ppb	-0.011 ppb	-0.042 ppb	0.844 ppb	103.439 %	105.404 %
Concentration per Run 1	1.334 ppb	102.283 %	103.310 %	-0.004 ppb	-0.007 ppb	-0.105 ppb	0.702 ppb	102.122 %	107.779 %
Concentration per Run 2	1.337 ppb	107.059 %	104.586 %	-0.054 ppb	-0.029 ppb	-0.010 ppb	1.078 ppb	103.372 %	105.920 %
Concentration per Run 3	1.536 ppb	104.132 %	98.711 %	0.044 ppb	0.004 ppb	-0.012 ppb	0.753 ppb	104.823 %	102.514 %
Concentration RSD	8.2 %	2.3 %	3.0 %	1,039.4 %	153.0 %	128.2 %	24.2 %	1.3 %	2.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.004 ppb	0.002 ppb	103.246 %	101.142 %	-0.007 ppb	0.018 ppb	103.791 %	103.819 %	101.346 %
Concentration per Run 1	0.004 ppb	0.003 ppb	102.722 %	104.804 %	-0.008 ppb	0.030 ppb	101.813 %	106.740 %	100.233 %
Concentration per Run 2	0.006 ppb	0.000 ppb	105.739 %	100.459 %	-0.005 ppb	0.012 ppb	104.104 %	102.585 %	102.522 %
Concentration per Run 3	0.003 ppb	0.003 ppb	101.277 %	98.162 %	-0.007 ppb	0.013 ppb	105.456 %	102.132 %	101.284 %
Concentration RSD	30.6 %	86.7 %	2.2 %	3.3 %	20.4 %	54.6 %	1.8 %	2.4 %	1.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	100.731 %	0.018 ppb	0.012 ppb	100.869 %	101.219 %
Concentration per Run 1	103.932 %	0.000 ppb	0.010 ppb	99.639 %	104.938 %
Concentration per Run 2	100.527 %	0.021 ppb	0.012 ppb	101.952 %	98.669 %
Concentration per Run 3	97.734 %	0.034 ppb	0.013 ppb	101.016 %	100.049 %
Concentration RSD	3.1 %	94.4 %	13.0 %	1.2 %	3.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 15 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 9/14/2023 11:31:07 AM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	104.347 %	112.225 %	55.764 ppb	56.081 ppb	5,616.668 ppb	5,665.856 ppb	58.707 ppb	5,925.005 ppb	5,950.619 ppb
Concentration per Run 1	104.876 %	125.050 %	56.478 ppb	56.884 ppb	5,121.274 ppb	5,074.546 ppb	58.165 ppb	5,545.922 ppb	5,633.970 ppb
Concentration per Run 2	104.060 %	101.603 %	54.751 ppb	56.268 ppb	6,017.078 ppb	6,005.845 ppb	58.432 ppb	6,074.915 ppb	6,061.207 ppb
Concentration per Run 3	104.103 %	110.020 %	56.064 ppb	55.090 ppb	5,711.653 ppb	5,917.176 ppb	59.525 ppb	6,154.177 ppb	6,156.679 ppb
Recovery Percentage 1			92.940 %	93.468 %	93.611 %	94.431 %	97.845 %	98.750 %	99.177 %
Concentration RSD	0.4 %	10.6 %	1.6 %	1.6 %	8.1 %	9.1 %	1.2 %	5.6 %	4.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	114.372 %	114.353 %	59.253 ppb	58.670 ppb	60.654 ppb	6,301.966 ppb	61.639 ppb	62.016 ppb	62.533 ppb
Concentration per Run 1	117.353 %	117.615 %	56.653 ppb	55.538 ppb	57.301 ppb	6,105.577 ppb	56.814 ppb	59.907 ppb	61.865 ppb
Concentration per Run 2	113.890 %	112.862 %	59.008 ppb	59.493 ppb	62.022 ppb	6,447.629 ppb	63.777 ppb	62.066 ppb	62.523 ppb
Concentration per Run 3	111.874 %	112.582 %	62.099 ppb	60.980 ppb	62.637 ppb	6,352.691 ppb	64.326 ppb	64.075 ppb	63.210 ppb
Recovery Percentage 1			98.756 %	97.784 %	101.089 %	105.033 %	102.732 %	103.360 %	104.221 %
Concentration RSD	2.4 %	2.5 %	4.6 %	4.8 %	4.8 %	2.8 %	6.8 %	3.4 %	1.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	59.318 ppb	106.096 %	97.384 %	59.236 ppb	56.490 ppb	57.732 ppb	56.350 ppb	99.623 %	101.592 %
Concentration per Run 1	55.587 ppb	104.703 %	100.148 %	56.960 ppb	55.018 ppb	55.228 ppb	55.376 ppb	101.474 %	107.264 %
Concentration per Run 2	60.735 ppb	107.907 %	96.208 %	61.282 ppb	59.442 ppb	59.475 ppb	58.070 ppb	97.428 %	97.525 %
Concentration per Run 3	61.633 ppb	105.679 %	95.796 %	59.466 ppb	55.008 ppb	58.493 ppb	55.603 ppb	99.966 %	99.988 %
Recovery Percentage 1	98.864 %			98.727 %	94.149 %	96.220 %	93.916 %		
Concentration RSD	5.5 %	1.5 %	2.5 %	3.7 %	4.5 %	3.9 %	2.7 %	2.1 %	5.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	56.199 ppb	56.409 ppb	100.455 %	100.280 %	54.949 ppb	56.531 ppb	102.112 %	102.358 %	100.973 %
Concentration per Run 1	54.987 ppb	54.029 ppb	100.630 %	100.722 %	53.350 ppb	54.971 ppb	102.357 %	106.411 %	99.451 %
Concentration per Run 2	57.116 ppb	56.704 ppb	100.292 %	100.932 %	55.341 ppb	55.987 ppb	100.169 %	100.641 %	101.360 %
Concentration per Run 3	56.493 ppb	58.494 ppb	100.442 %	99.186 %	56.157 ppb	58.634 ppb	103.810 %	100.023 %	102.109 %
Recovery Percentage 1	93.665 %	94.015 %			91.582 %	94.218 %			
Concentration RSD	1.9 %	4.0 %	0.2 %	1.0 %	2.6 %	3.3 %	1.8 %	3.4 %	1.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	96.583 %	57.304 ppb	57.838 ppb	99.308 %	94.622 %
Concentration per Run 1	99.336 %	53.435 ppb	54.025 ppb	100.948 %	99.377 %
Concentration per Run 2	94.691 %	58.541 ppb	59.359 ppb	98.880 %	93.237 %
Concentration per Run 3	95.721 %	59.937 ppb	60.131 ppb	98.098 %	91.252 %
Recovery Percentage 1		95.507 %	96.397 %		
Concentration RSD	2.5 %	6.0 %	5.7 %	1.5 %	4.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 16 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCB Rack 0
Analysis started at: 9/14/2023 11:35:57 AM Vial 10

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	104.914 %	107.615 %	0.026 ppb	0.110 ppb	-1.050 ppb	-0.760 ppb	-0.180 ppb	9.973 ppb	-8.645 ppb
Concentration per Run 1	105.258 %	110.020 %	0.034 ppb	0.121 ppb	-10.314 ppb	-0.584 ppb	-0.115 ppb	14.336 ppb	6.814 ppb
Concentration per Run 2	105.981 %	112.425 %	0.017 ppb	0.115 ppb	-1.678 ppb	-0.579 ppb	-0.193 ppb	-3.111 ppb	-16.061 ppb
Concentration per Run 3	103.503 %	100.401 %	0.028 ppb	0.096 ppb	8.842 ppb	-1.118 ppb	-0.231 ppb	18.694 ppb	-16.689 ppb
Recovery Percentage 1			5.240 %	1.104 %	-1.050 %	-1.086 %	-1.796 %	9.973 %	-8.645 %
Concentration RSD	1.2 %	5.9 %	33.5 %	11.9 %	913.9 %	40.7 %	32.7 %	115.7 %	154.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	102.752 %	107.549 %	0.017 ppb	0.012 ppb	0.066 ppb	3.858 ppb	0.005 ppb	0.095 ppb	0.025 ppb
Concentration per Run 1	103.297 %	109.786 %	0.048 ppb	0.013 ppb	0.071 ppb	4.163 ppb	0.010 ppb	0.108 ppb	0.037 ppb
Concentration per Run 2	102.759 %	106.338 %	0.011 ppb	0.026 ppb	0.050 ppb	1.675 ppb	0.001 ppb	0.060 ppb	-0.004 ppb
Concentration per Run 3	102.200 %	106.524 %	-0.008 ppb	-0.003 ppb	0.076 ppb	5.734 ppb	0.004 ppb	0.117 ppb	0.041 ppb
Recovery Percentage 1			0.345 %	1.196 %	6.578 %	7.715 %	0.983 %	4.744 %	2.481 %
Concentration RSD	0.5 %	1.8 %	164.9 %	124.0 %	21.6 %	53.1 %	91.5 %	32.4 %	101.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.613 ppb	100.976 %	99.834 %	0.037 ppb	0.118 ppb	-0.005 ppb	0.159 ppb	99.207 %	102.664 %
Concentration per Run 1	0.371 ppb	101.972 %	101.740 %	0.022 ppb	0.004 ppb	-0.051 ppb	0.144 ppb	99.364 %	107.331 %
Concentration per Run 2	0.920 ppb	101.194 %	101.306 %	-0.017 ppb	0.154 ppb	-0.002 ppb	0.109 ppb	101.514 %	100.611 %
Concentration per Run 3	0.548 ppb	99.761 %	96.455 %	0.105 ppb	0.196 ppb	0.037 ppb	0.223 ppb	96.743 %	100.051 %
Recovery Percentage 1	12.255 %			7.329 %	2.362 %	-1.055 %	7.941 %		
Concentration RSD	45.8 %	1.1 %	2.9 %	170.7 %	85.8 %	838.0 %	36.7 %	2.4 %	3.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.011 ppb	0.009 ppb	101.060 %	103.011 %	0.012 ppb	0.018 ppb	101.529 %	100.907 %	99.778 %
Concentration per Run 1	0.014 ppb	0.009 ppb	102.773 %	107.758 %	-0.002 ppb	0.030 ppb	101.534 %	105.403 %	99.435 %
Concentration per Run 2	0.009 ppb	0.009 ppb	101.289 %	102.442 %	0.014 ppb	0.032 ppb	100.693 %	99.833 %	99.335 %
Concentration per Run 3	0.011 ppb	0.010 ppb	99.119 %	98.832 %	0.022 ppb	-0.007 ppb	102.361 %	97.485 %	100.564 %
Recovery Percentage 1	2.772 %				0.289 %	3.651 %			
Concentration RSD	21.6 %	4.1 %	1.8 %	4.4 %	109.0 %	118.0 %	0.8 %	4.0 %	0.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	99.397 %	0.224 ppb	0.014 ppb	97.794 %	99.822 %
Concentration per Run 1	102.135 %	0.136 ppb	0.018 ppb	97.788 %	102.457 %
Concentration per Run 2	99.244 %	0.261 ppb	0.014 ppb	98.804 %	98.194 %
Concentration per Run 3	96.812 %	0.274 ppb	0.011 ppb	96.790 %	98.816 %
Recovery Percentage 1		22.394 %	1.442 %		
Concentration RSD	2.7 %	34.0 %	23.4 %	1.0 %	2.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 17
Analysis label: WG1827291-1 2008TL
Analysis started at: 9/14/2023 11:43:08 AM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 1
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	103.125 %	104.208 %	0.013 ppb	0.225 ppb	0.985 ppb	3.051 ppb	0.571 ppb	6.581 ppb	37.322 ppb
Concentration per Run 1	102.652 %	108.216 %	0.014 ppb	0.221 ppb	-4.332 ppb	0.769 ppb	0.636 ppb	7.088 ppb	75.908 ppb
Concentration per Run 2	103.628 %	106.413 %	0.016 ppb	0.237 ppb	-1.712 ppb	0.116 ppb	0.535 ppb	7.176 ppb	-17.125 ppb
Concentration per Run 3	103.097 %	97.996 %	0.009 ppb	0.217 ppb	9.001 ppb	8.269 ppb	0.541 ppb	5.481 ppb	53.182 ppb
Concentration RSD	0.5 %	5.2 %	26.0 %	4.8 %	716.9 %	148.5 %	10.0 %	14.5 %	130.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	104.704 %	104.163 %	0.006 ppb	0.027 ppb	0.150 ppb	1.426 ppb	0.006 ppb	-0.016 ppb	0.061 ppb
Concentration per Run 1	102.240 %	102.423 %	0.013 ppb	0.073 ppb	0.168 ppb	0.416 ppb	0.010 ppb	0.041 ppb	0.061 ppb
Concentration per Run 2	104.772 %	105.872 %	-0.008 ppb	-0.034 ppb	0.149 ppb	0.870 ppb	0.007 ppb	-0.033 ppb	0.086 ppb
Concentration per Run 3	107.098 %	104.194 %	0.012 ppb	0.042 ppb	0.132 ppb	2.992 ppb	0.001 ppb	-0.055 ppb	0.037 ppb
Concentration RSD	2.3 %	1.7 %	206.4 %	205.9 %	12.1 %	96.4 %	77.9 %	320.8 %	39.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.136 ppb	103.431 %	100.334 %	-0.016 ppb	0.061 ppb	0.053 ppb	0.029 ppb	101.683 %	101.592 %
Concentration per Run 1	-0.144 ppb	103.564 %	101.397 %	-0.072 ppb	0.188 ppb	0.094 ppb	0.021 ppb	104.531 %	102.528 %
Concentration per Run 2	-0.118 ppb	104.458 %	95.748 %	0.065 ppb	0.004 ppb	0.059 ppb	0.022 ppb	100.183 %	101.713 %
Concentration per Run 3	-0.145 ppb	102.272 %	103.857 %	-0.041 ppb	-0.007 ppb	0.006 ppb	0.043 ppb	100.335 %	100.534 %
Concentration RSD	11.3 %	1.1 %	4.1 %	451.5 %	178.6 %	83.1 %	43.5 %	2.4 %	1.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.002 ppb	0.000 ppb	100.758 %	100.201 %	-0.005 ppb	0.057 ppb	99.778 %	102.707 %	98.403 %
Concentration per Run 1	0.002 ppb	0.000 ppb	100.787 %	100.538 %	-0.001 ppb	0.070 ppb	99.870 %	102.438 %	98.800 %
Concentration per Run 2	0.001 ppb	0.000 ppb	101.523 %	98.792 %	-0.008 ppb	0.051 ppb	101.498 %	101.845 %	97.664 %
Concentration per Run 3	0.003 ppb	0.000 ppb	99.964 %	101.273 %	-0.008 ppb	0.050 ppb	97.966 %	103.838 %	98.746 %
Concentration RSD	51.0 %	N/A	0.8 %	1.3 %	71.0 %	19.3 %	1.8 %	1.0 %	0.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	99.323 %	0.038 ppb	0.008 ppb	101.527 %	99.748 %
Concentration per Run 1	101.018 %	0.016 ppb	0.008 ppb	99.809 %	101.636 %
Concentration per Run 2	96.846 %	0.047 ppb	0.007 ppb	101.682 %	99.234 %
Concentration per Run 3	100.104 %	0.052 ppb	0.010 ppb	103.089 %	98.374 %
Concentration RSD	2.2 %	50.6 %	13.8 %	1.6 %	1.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 18
Analysis label: WG1825351-1 2008TL
Analysis started at: 9/14/2023 11:47:53 AM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 6
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	105.407 %	102.204 %	0.009 ppb	0.303 ppb	-3.640 ppb	1.051 ppb	0.588 ppb	-3.521 ppb	14.239 ppb
Concentration per Run 1	106.463 %	108.818 %	0.014 ppb	0.292 ppb	-10.937 ppb	1.313 ppb	0.557 ppb	-8.080 ppb	51.221 ppb
Concentration per Run 2	104.860 %	101.002 %	0.002 ppb	0.297 ppb	0.481 ppb	1.500 ppb	0.594 ppb	4.592 ppb	7.623 ppb
Concentration per Run 3	104.899 %	96.794 %	0.011 ppb	0.322 ppb	-0.465 ppb	0.340 ppb	0.614 ppb	-7.076 ppb	-16.128 ppb
Concentration RSD	0.9 %	6.0 %	72.4 %	5.2 %	174.1 %	59.2 %	4.9 %	200.0 %	239.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	105.523 %	103.821 %	0.000 ppb	0.049 ppb	0.117 ppb	1.493 ppb	0.001 ppb	0.007 ppb	0.005 ppb
Concentration per Run 1	105.146 %	107.549 %	-0.027 ppb	0.026 ppb	0.085 ppb	0.819 ppb	-0.002 ppb	-0.002 ppb	0.019 ppb
Concentration per Run 2	105.930 %	105.499 %	-0.008 ppb	0.042 ppb	0.104 ppb	2.596 ppb	0.001 ppb	0.030 ppb	0.018 ppb
Concentration per Run 3	105.494 %	98.416 %	0.036 ppb	0.079 ppb	0.160 ppb	1.065 ppb	0.005 ppb	-0.006 ppb	-0.021 ppb
Concentration RSD	0.4 %	4.6 %	11,376.8 %	55.7 %	33.4 %	64.5 %	298.6 %	270.0 %	438.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.048 ppb	104.081 %	95.809 %	0.050 ppb	-0.008 ppb	-0.017 ppb	0.014 ppb	101.378 %	102.171 %
Concentration per Run 1	-0.088 ppb	106.275 %	98.117 %	0.183 ppb	-0.008 ppb	-0.003 ppb	0.027 ppb	101.398 %	105.486 %
Concentration per Run 2	0.060 ppb	103.125 %	99.666 %	-0.052 ppb	-0.008 ppb	-0.044 ppb	0.000 ppb	101.719 %	99.049 %
Concentration per Run 3	-0.117 ppb	102.843 %	89.643 %	0.020 ppb	-0.009 ppb	-0.003 ppb	0.015 ppb	101.017 %	101.976 %
Concentration RSD	195.4 %	1.8 %	5.6 %	238.5 %	7.2 %	139.3 %	95.2 %	0.3 %	3.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.000 ppb	0.001 ppb	101.308 %	100.092 %	-0.013 ppb	0.019 ppb	102.546 %	101.399 %	101.206 %
Concentration per Run 1	0.001 ppb	0.000 ppb	102.212 %	100.971 %	-0.021 ppb	-0.007 ppb	101.901 %	103.718 %	101.457 %
Concentration per Run 2	0.001 ppb	0.003 ppb	100.816 %	97.467 %	-0.010 ppb	0.013 ppb	102.877 %	99.838 %	100.994 %
Concentration per Run 3	0.000 ppb	0.000 ppb	100.895 %	101.838 %	-0.008 ppb	0.051 ppb	102.860 %	100.642 %	101.168 %
Concentration RSD	174.9 %	173.2 %	0.8 %	2.3 %	56.3 %	152.9 %	0.5 %	2.0 %	0.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	97.819 %	0.018 ppb	0.008 ppb	99.425 %	100.970 %
Concentration per Run 1	98.595 %	0.000 ppb	0.010 ppb	99.174 %	102.090 %
Concentration per Run 2	98.376 %	0.021 ppb	0.009 ppb	100.351 %	99.819 %
Concentration per Run 3	96.485 %	0.033 ppb	0.006 ppb	98.751 %	101.000 %
Concentration RSD	1.2 %	94.7 %	23.9 %	0.8 %	1.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	19	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1825351-2D5 2008TL	Rack	1		
Analysis started at:	9/14/2023 11:52:39 AM	Vial	7		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	102.470 %	95.391 %	9.719 ppb	194.445 ppb	2,222.540 ppb	2,134.643 ppb	388.965 ppb	2,390.504 ppb	2,476.555 ppb
Concentration per Run 1	101.358 %	101.603 %	10.062 ppb	199.931 ppb	2,113.643 ppb	2,056.397 ppb	379.657 ppb	2,197.294 ppb	2,678.040 ppb
Concentration per Run 2	102.465 %	90.180 %	9.646 ppb	192.421 ppb	2,313.778 ppb	2,210.907 ppb	397.156 ppb	2,455.442 ppb	3,124.854 ppb
Concentration per Run 3	103.589 %	94.389 %	9.448 ppb	190.983 ppb	2,240.201 ppb	2,136.625 ppb	390.083 ppb	2,518.775 ppb	1,626.772 ppb
Concentration RSD	1.1 %	6.1 %	3.2 %	2.5 %	4.6 %	3.6 %	2.3 %	7.1 %	31.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	108.532 %	106.524 %	109.195 ppb	43.780 ppb	110.631 ppb	219.221 ppb	107.010 ppb	104.587 ppb	53.775 ppb
Concentration per Run 1	108.847 %	108.295 %	108.822 ppb	43.937 ppb	110.061 ppb	213.033 ppb	106.247 ppb	105.248 ppb	50.337 ppb
Concentration per Run 2	105.433 %	105.126 %	112.890 ppb	44.915 ppb	110.634 ppb	233.064 ppb	108.759 ppb	106.620 ppb	57.618 ppb
Concentration per Run 3	111.315 %	106.151 %	105.872 ppb	42.487 ppb	111.197 ppb	211.566 ppb	106.023 ppb	101.894 ppb	53.370 ppb
Concentration RSD	2.7 %	1.5 %	3.2 %	2.8 %	0.5 %	5.5 %	1.4 %	2.3 %	6.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	104.991 ppb	105.376 %	100.745 %	24.329 ppb	21.165 ppb	199.731 ppb	190.806 ppb	99.378 %	101.123 %
Concentration per Run 1	104.542 ppb	105.772 %	101.102 %	23.835 ppb	22.170 ppb	188.705 ppb	186.051 ppb	99.919 %	106.972 %
Concentration per Run 2	107.892 ppb	103.955 %	98.846 %	25.231 ppb	19.653 ppb	204.039 ppb	190.868 ppb	98.927 %	98.611 %
Concentration per Run 3	102.539 ppb	106.399 %	102.287 %	23.922 ppb	21.673 ppb	206.447 ppb	195.499 ppb	99.288 %	97.788 %
Concentration RSD	2.6 %	1.2 %	1.7 %	3.2 %	6.3 %	4.8 %	2.5 %	0.5 %	5.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	10.174 ppb	10.329 ppb	102.544 %	104.437 %	87.701 ppb	380.239 ppb	102.950 %	103.074 %	100.846 %
Concentration per Run 1	9.543 ppb	9.713 ppb	99.279 %	108.389 %	84.016 ppb	357.535 ppb	104.172 %	107.673 %	98.717 %
Concentration per Run 2	10.361 ppb	10.852 ppb	102.614 %	101.903 %	88.997 ppb	392.654 ppb	102.453 %	102.778 %	101.503 %
Concentration per Run 3	10.619 ppb	10.423 ppb	105.740 %	103.019 %	90.091 ppb	390.529 ppb	102.227 %	98.771 %	102.318 %
Concentration RSD	5.5 %	5.6 %	3.2 %	3.3 %	3.7 %	5.2 %	1.0 %	4.3 %	1.9 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	99.952 %	23.910 ppb	106.197 ppb	100.595 %	98.313 %
Concentration per Run 1	103.310 %	23.155 ppb	101.515 ppb	98.640 %	101.265 %
Concentration per Run 2	97.161 %	24.105 ppb	107.433 ppb	100.605 %	98.087 %
Concentration per Run 3	99.386 %	24.471 ppb	109.643 ppb	102.540 %	95.587 %
Concentration RSD	3.1 %	2.8 %	4.0 %	1.9 %	2.9 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	20	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1827291-2D10 2008TL	Rack	1		
Analysis started at:	9/14/2023 11:57:26 AM	Vial	2		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	103.466 %	94.589 %	4.761 ppb	93.400 ppb	1,173.259 ppb	1,161.710 ppb	194.749 ppb	1,301.401 ppb	1,101.671 ppb
Concentration per Run 1	100.779 %	87.174 %	4.813 ppb	95.777 ppb	1,313.539 ppb	1,263.250 ppb	195.247 ppb	1,441.871 ppb	1,091.588 ppb
Concentration per Run 2	102.379 %	102.806 %	4.791 ppb	94.838 ppb	1,090.853 ppb	1,113.383 ppb	194.643 ppb	1,260.923 ppb	1,050.170 ppb
Concentration per Run 3	107.240 %	93.788 %	4.679 ppb	89.585 ppb	1,115.384 ppb	1,108.497 ppb	194.357 ppb	1,201.409 ppb	1,163.255 ppb
Concentration RSD	3.3 %	8.3 %	1.5 %	3.6 %	10.4 %	7.6 %	0.2 %	9.6 %	5.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	105.652 %	90.338 %	65.057 ppb	26.417 ppb	63.533 ppb	128.364 ppb	61.196 ppb	63.430 ppb	30.055 ppb
Concentration per Run 1	107.705 %	80.335 %	73.628 ppb	30.508 ppb	71.721 ppb	143.022 ppb	70.167 ppb	72.722 ppb	33.822 ppb
Concentration per Run 2	105.715 %	94.408 %	60.958 ppb	24.538 ppb	60.622 ppb	118.400 ppb	56.549 ppb	59.744 ppb	28.883 ppb
Concentration per Run 3	103.535 %	96.272 %	60.585 ppb	24.205 ppb	58.256 ppb	123.671 ppb	56.873 ppb	57.825 ppb	27.461 ppb
Concentration RSD	2.0 %	9.6 %	11.4 %	13.4 %	11.3 %	10.1 %	12.7 %	12.8 %	11.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	58.250 ppb	104.405 %	94.792 %	13.162 ppb	12.007 ppb	105.384 ppb	99.675 ppb	99.580 %	92.965 %
Concentration per Run 1	65.332 ppb	104.142 %	87.092 %	14.621 ppb	12.492 ppb	114.915 ppb	111.382 ppb	97.759 %	84.320 %
Concentration per Run 2	54.154 ppb	105.222 %	99.167 %	11.829 ppb	10.773 ppb	102.063 ppb	96.885 ppb	98.069 %	96.580 %
Concentration per Run 3	55.265 ppb	103.851 %	98.117 %	13.035 ppb	12.754 ppb	99.175 ppb	90.758 ppb	102.913 %	97.996 %
Concentration RSD	10.6 %	0.7 %	7.1 %	10.6 %	9.0 %	8.0 %	10.6 %	2.9 %	8.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	5.510 ppb	5.863 ppb	102.385 %	92.922 %	51.174 ppb	216.370 ppb	102.411 %	94.199 %	100.282 %
Concentration per Run 1	6.149 ppb	6.481 ppb	101.650 %	82.519 %	56.999 ppb	245.673 ppb	103.099 %	85.185 %	99.213 %
Concentration per Run 2	5.144 ppb	5.708 ppb	102.694 %	98.451 %	48.512 ppb	204.581 ppb	100.496 %	97.343 %	101.037 %
Concentration per Run 3	5.239 ppb	5.399 ppb	102.811 %	97.795 %	48.010 ppb	198.857 ppb	103.638 %	100.068 %	100.598 %
Concentration RSD	10.1 %	9.5 %	0.6 %	9.7 %	9.9 %	11.8 %	1.6 %	8.4 %	0.9 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	91.018 %	13.375 ppb	58.872 ppb	100.660 %	89.510 %
Concentration per Run 1	81.181 %	14.674 ppb	65.197 ppb	99.753 %	81.547 %
Concentration per Run 2	96.576 %	12.623 ppb	56.065 ppb	100.398 %	93.424 %
Concentration per Run 3	95.296 %	12.828 ppb	55.354 ppb	101.830 %	93.561 %
Concentration RSD	9.4 %	8.4 %	9.3 %	1.1 %	7.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 21
Analysis label: WG1827291-3D10 2008TL
Analysis started at: 9/14/2023 12:02:10 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 4
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	101.538 %	98.798 %	5.077 ppb	109.658 ppb	16,358.377 ppb	1,444.067 ppb	239.736 ppb	4,774.631 ppb	4,414.321 ppb
Concentration per Run 1	100.749 %	100.401 %	5.107 ppb	110.250 ppb	15,667.271 ppb	1,394.637 ppb	240.906 ppb	4,658.101 ppb	3,959.367 ppb
Concentration per Run 2	101.411 %	98.597 %	5.034 ppb	108.860 ppb	16,516.737 ppb	1,417.960 ppb	231.792 ppb	4,835.814 ppb	4,254.777 ppb
Concentration per Run 3	102.454 %	97.395 %	5.090 ppb	109.863 ppb	16,891.122 ppb	1,519.605 ppb	246.511 ppb	4,829.978 ppb	5,028.818 ppb
Concentration RSD	0.8 %	1.5 %	0.8 %	0.7 %	3.8 %	4.6 %	3.1 %	2.1 %	12.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	106.553 %	105.095 %	58.314 ppb	21.691 ppb	63.119 ppb	152.465 ppb	55.139 ppb	55.888 ppb	28.513 ppb
Concentration per Run 1	110.032 %	105.965 %	57.699 ppb	21.067 ppb	61.076 ppb	142.223 ppb	54.194 ppb	52.075 ppb	27.043 ppb
Concentration per Run 2	106.211 %	109.041 %	56.898 ppb	21.712 ppb	64.045 ppb	142.780 ppb	56.111 ppb	58.368 ppb	28.953 ppb
Concentration per Run 3	103.416 %	100.279 %	60.345 ppb	22.294 ppb	64.236 ppb	172.393 ppb	55.112 ppb	57.220 ppb	29.543 ppb
Concentration RSD	3.1 %	4.2 %	3.1 %	2.8 %	2.8 %	11.3 %	1.7 %	6.0 %	4.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	56.634 ppb	105.019 %	96.736 %	13.471 ppb	10.462 ppb	128.699 ppb	97.048 ppb	97.564 %	96.525 %
Concentration per Run 1	53.824 ppb	101.539 %	101.445 %	12.441 ppb	9.021 ppb	122.312 ppb	92.247 ppb	96.975 %	100.562 %
Concentration per Run 2	57.576 ppb	105.295 %	93.834 %	14.667 ppb	12.897 ppb	132.628 ppb	99.184 ppb	96.073 %	95.910 %
Concentration per Run 3	58.503 ppb	108.222 %	94.928 %	13.306 ppb	9.469 ppb	131.156 ppb	99.714 ppb	99.645 %	93.102 %
Concentration RSD	4.4 %	3.2 %	4.3 %	8.3 %	20.3 %	4.3 %	4.3 %	1.9 %	3.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	5.188 ppb	5.589 ppb	102.046 %	98.044 %	51.508 ppb	205.896 ppb	103.344 %	99.798 %	101.188 %
Concentration per Run 1	4.968 ppb	5.382 ppb	103.739 %	100.301 %	49.501 ppb	197.655 ppb	102.780 %	103.905 %	100.040 %
Concentration per Run 2	5.325 ppb	5.887 ppb	101.446 %	97.427 %	52.252 ppb	208.702 ppb	102.786 %	96.936 %	100.634 %
Concentration per Run 3	5.271 ppb	5.497 ppb	100.955 %	96.404 %	52.769 ppb	211.333 ppb	104.465 %	98.552 %	102.891 %
Concentration RSD	3.7 %	4.7 %	1.5 %	2.1 %	3.4 %	3.5 %	0.9 %	3.7 %	1.5 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	98.367 %	12.482 ppb	55.358 ppb	99.331 %	95.828 %
Concentration per Run 1	102.198 %	12.165 ppb	53.265 ppb	98.309 %	97.678 %
Concentration per Run 2	96.793 %	12.311 ppb	55.769 ppb	98.878 %	97.074 %
Concentration per Run 3	96.111 %	12.969 ppb	57.039 ppb	100.806 %	92.731 %
Concentration RSD	3.4 %	3.4 %	3.5 %	1.3 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	22	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1827291-4 2008TL	Rack	1		
Analysis started at:	9/14/2023 12:06:55 PM	Vial	5		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	102.522 %	90.581 %	0.059 ppb	129.270 ppb	142,460.133 ppb	4,020.337 ppb	389.830 ppb	36,691.590 ppb	33,975.090 ppb
Concentration per Run 1	103.095 %	92.585 %	0.052 ppb	125.510 ppb	138,310.195 ppb	3,846.477 ppb	394.643 ppb	34,452.024 ppb	29,312.162 ppb
Concentration per Run 2	101.834 %	99.800 %	0.064 ppb	131.249 ppb	136,065.565 ppb	3,774.813 ppb	384.572 ppb	36,471.133 ppb	37,089.260 ppb
Concentration per Run 3	102.637 %	79.359 %	0.062 ppb	131.050 ppb	153,004.638 ppb	4,439.722 ppb	390.276 ppb	39,151.614 ppb	35,523.848 ppb
Concentration RSD	0.6 %	11.4 %	11.0 %	2.5 %	6.5 %	9.1 %	1.3 %	6.4 %	12.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	116.489 %	102.641 %	0.848 ppb	0.610 ppb	62.601 ppb	375.181 ppb	0.209 ppb	0.959 ppb	1.146 ppb
Concentration per Run 1	115.053 %	109.320 %	0.937 ppb	0.668 ppb	58.395 ppb	361.534 ppb	0.236 ppb	0.907 ppb	1.046 ppb
Concentration per Run 2	118.391 %	98.975 %	0.855 ppb	0.641 ppb	63.651 ppb	372.596 ppb	0.209 ppb	0.854 ppb	1.069 ppb
Concentration per Run 3	116.024 %	99.627 %	0.753 ppb	0.521 ppb	65.756 ppb	391.412 ppb	0.182 ppb	1.116 ppb	1.322 ppb
Concentration RSD	1.5 %	5.6 %	10.9 %	12.8 %	6.1 %	4.0 %	12.8 %	14.4 %	13.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	5.358 ppb	111.839 %	100.950 %	4.230 ppb	0.369 ppb	272.849 ppb	3.037 ppb	103.931 %	95.734 %
Concentration per Run 1	5.080 ppb	109.568 %	102.630 %	3.677 ppb	0.359 ppb	260.105 ppb	3.126 ppb	100.585 %	96.725 %
Concentration per Run 2	5.095 ppb	113.742 %	101.467 %	4.537 ppb	0.365 ppb	273.200 ppb	3.019 ppb	105.388 %	92.928 %
Concentration per Run 3	5.899 ppb	112.207 %	98.755 %	4.477 ppb	0.382 ppb	285.243 ppb	2.968 ppb	105.820 %	97.548 %
Concentration RSD	8.8 %	1.9 %	2.0 %	11.3 %	3.3 %	4.6 %	2.6 %	2.8 %	2.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.004 ppb	0.009 ppb	103.454 %	95.235 %	0.434 ppb	4.142 ppb	107.880 %	101.501 %	106.100 %
Concentration per Run 1	0.004 ppb	0.003 ppb	102.442 %	94.055 %	0.403 ppb	3.838 ppb	105.980 %	103.145 %	104.645 %
Concentration per Run 2	0.004 ppb	0.003 ppb	102.645 %	93.122 %	0.463 ppb	4.322 ppb	108.386 %	100.768 %	106.623 %
Concentration per Run 3	0.005 ppb	0.020 ppb	105.275 %	98.529 %	0.437 ppb	4.267 ppb	109.275 %	100.592 %	107.033 %
Concentration RSD	7.9 %	106.1 %	1.5 %	3.0 %	7.0 %	6.4 %	1.6 %	1.4 %	1.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	98.422 %	0.072 ppb	2.748 ppb	101.047 %	93.483 %
Concentration per Run 1	99.922 %	0.046 ppb	2.628 ppb	96.901 %	95.965 %
Concentration per Run 2	97.912 %	0.080 ppb	2.830 ppb	101.469 %	93.174 %
Concentration per Run 3	97.431 %	0.091 ppb	2.787 ppb	104.771 %	91.308 %
Concentration RSD	1.3 %	31.9 %	3.9 %	3.9 %	2.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 23 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2353167-01 2008TL Rack 1
Analysis started at: 9/14/2023 12:11:41 PM Vial 3

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	105.027 %	99.399 %	0.058 ppb	133.720 ppb	144,999.419 ppb	4,115.095 ppb	396.073 ppb	38,573.287 ppb	33,161.022 ppb
Concentration per Run 1	104.619 %	104.008 %	0.063 ppb	132.212 ppb	136,103.042 ppb	3,905.730 ppb	406.539 ppb	36,232.453 ppb	33,194.938 ppb
Concentration per Run 2	104.914 %	87.776 %	0.058 ppb	134.225 ppb	159,461.305 ppb	4,449.944 ppb	384.589 ppb	39,707.568 ppb	32,091.488 ppb
Concentration per Run 3	105.548 %	106.413 %	0.053 ppb	134.723 ppb	139,433.910 ppb	3,989.610 ppb	397.091 ppb	39,779.840 ppb	34,196.638 ppb
Concentration RSD	0.5 %	10.2 %	8.3 %	1.0 %	8.7 %	7.1 %	2.8 %	5.3 %	3.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	116.754 %	103.573 %	0.747 ppb	0.572 ppb	65.633 ppb	362.451 ppb	0.214 ppb	0.895 ppb	1.857 ppb
Concentration per Run 1	110.621 %	104.847 %	0.647 ppb	0.555 ppb	63.188 ppb	348.246 ppb	0.215 ppb	0.831 ppb	1.697 ppb
Concentration per Run 2	120.706 %	103.448 %	0.784 ppb	0.552 ppb	66.545 ppb	384.368 ppb	0.218 ppb	1.115 ppb	2.064 ppb
Concentration per Run 3	118.934 %	102.423 %	0.810 ppb	0.610 ppb	67.167 ppb	354.738 ppb	0.207 ppb	0.740 ppb	1.809 ppb
Concentration RSD	4.6 %	1.2 %	11.7 %	5.7 %	3.3 %	5.3 %	2.7 %	21.9 %	10.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	5.635 ppb	112.511 %	104.815 %	4.409 ppb	0.472 ppb	285.856 ppb	2.924 ppb	103.342 %	97.513 %
Concentration per Run 1	5.273 ppb	112.467 %	109.962 %	4.265 ppb	0.337 ppb	266.608 ppb	2.614 ppb	101.636 %	100.615 %
Concentration per Run 2	5.801 ppb	113.528 %	102.265 %	4.544 ppb	0.740 ppb	295.590 ppb	3.131 ppb	106.978 %	95.651 %
Concentration per Run 3	5.831 ppb	111.538 %	102.217 %	4.418 ppb	0.338 ppb	295.370 ppb	3.027 ppb	101.413 %	96.272 %
Concentration RSD	5.6 %	0.9 %	4.3 %	3.2 %	49.3 %	5.8 %	9.4 %	3.0 %	2.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.003 ppb	0.008 ppb	105.114 %	98.959 %	0.283 ppb	4.784 ppb	111.267 %	102.643 %	110.057 %
Concentration per Run 1	0.005 ppb	0.006 ppb	103.948 %	100.421 %	0.254 ppb	4.127 ppb	108.398 %	105.420 %	105.281 %
Concentration per Run 2	0.001 ppb	0.007 ppb	105.838 %	96.260 %	0.306 ppb	4.930 ppb	111.132 %	103.532 %	112.249 %
Concentration per Run 3	0.004 ppb	0.010 ppb	105.556 %	100.198 %	0.289 ppb	5.295 ppb	114.270 %	98.977 %	112.643 %
Concentration RSD	59.3 %	24.4 %	1.0 %	2.4 %	9.4 %	12.5 %	2.6 %	3.2 %	3.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	101.353 %	0.045 ppb	2.794 ppb	104.056 %	96.085 %
Concentration per Run 1	101.651 %	0.027 ppb	2.701 ppb	98.673 %	97.468 %
Concentration per Run 2	102.049 %	0.051 ppb	2.774 ppb	105.733 %	95.298 %
Concentration per Run 3	100.359 %	0.056 ppb	2.908 ppb	107.763 %	95.490 %
Concentration RSD	0.9 %	35.1 %	3.7 %	4.6 %	1.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 24
Analysis label: WG1825351-3D10 2008TL
Analysis started at: 9/14/2023 12:16:26 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 9
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	102.601 %	95.591 %	5.029 ppb	154.093 ppb	50,174.970 ppb	3,614.391 ppb	197.770 ppb	5,976.708 ppb	18,795.501 ppb
Concentration per Run 1	102.559 %	89.579 %	5.020 ppb	154.950 ppb	50,953.138 ppb	3,543.090 ppb	198.197 ppb	5,853.998 ppb	19,326.422 ppb
Concentration per Run 2	102.407 %	97.996 %	5.055 ppb	154.365 ppb	49,814.298 ppb	3,743.778 ppb	192.655 ppb	5,985.041 ppb	18,346.756 ppb
Concentration per Run 3	102.836 %	99.198 %	5.013 ppb	152.964 ppb	49,757.474 ppb	3,556.306 ppb	202.460 ppb	6,091.083 ppb	18,713.326 ppb
Concentration RSD	0.2 %	5.5 %	0.4 %	0.7 %	1.3 %	3.1 %	2.5 %	2.0 %	2.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	105.225 %	107.891 %	49.125 ppb	19.312 ppb	81.633 ppb	166.427 ppb	52.252 ppb	50.055 ppb	25.342 ppb
Concentration per Run 1	105.006 %	111.930 %	47.031 ppb	18.129 ppb	78.477 ppb	150.618 ppb	50.976 ppb	48.090 ppb	24.518 ppb
Concentration per Run 2	106.584 %	104.474 %	51.390 ppb	20.095 ppb	85.668 ppb	190.150 ppb	53.691 ppb	51.644 ppb	26.741 ppb
Concentration per Run 3	104.086 %	107.270 %	48.955 ppb	19.711 ppb	80.755 ppb	158.512 ppb	52.088 ppb	50.431 ppb	24.767 ppb
Concentration RSD	1.2 %	3.5 %	4.4 %	5.4 %	4.5 %	12.6 %	2.6 %	3.6 %	4.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	55.821 ppb	109.635 %	104.391 %	13.133 ppb	11.874 ppb	229.064 ppb	97.612 ppb	101.502 %	99.976 %
Concentration per Run 1	53.224 ppb	111.518 %	107.957 %	13.033 ppb	9.408 ppb	211.531 ppb	93.864 ppb	99.557 %	102.496 %
Concentration per Run 2	58.446 ppb	108.548 %	99.671 %	13.692 ppb	14.615 ppb	242.397 ppb	100.333 ppb	102.198 %	99.039 %
Concentration per Run 3	55.794 ppb	108.839 %	105.545 %	12.674 ppb	11.599 ppb	233.263 ppb	98.638 ppb	102.752 %	98.395 %
Concentration RSD	4.7 %	1.5 %	4.1 %	3.9 %	22.0 %	6.9 %	3.4 %	1.7 %	2.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	4.808 ppb	4.964 ppb	103.484 %	106.174 %	47.152 ppb	195.327 ppb	109.330 %	104.280 %	108.648 %
Concentration per Run 1	4.680 ppb	4.734 ppb	105.517 %	108.100 %	45.082 ppb	188.706 ppb	110.333 %	108.360 %	102.516 %
Concentration per Run 2	4.913 ppb	5.144 ppb	101.268 %	104.948 %	48.516 ppb	197.702 ppb	107.299 %	102.659 %	111.881 %
Concentration per Run 3	4.830 ppb	5.015 ppb	103.667 %	105.474 %	47.858 ppb	199.573 ppb	110.359 %	101.821 %	111.548 %
Concentration RSD	2.5 %	4.2 %	2.1 %	1.6 %	3.9 %	3.0 %	1.6 %	3.4 %	4.9 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	104.492 %	11.559 ppb	52.263 ppb	103.534 %	97.362 %
Concentration per Run 1	107.208 %	11.008 ppb	49.832 ppb	101.789 %	100.894 %
Concentration per Run 2	104.124 %	11.797 ppb	53.224 ppb	104.288 %	96.693 %
Concentration per Run 3	102.145 %	11.870 ppb	53.734 ppb	104.525 %	94.499 %
Concentration RSD	2.4 %	4.1 %	4.1 %	1.5 %	3.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 25
Analysis label: WG1825351-4 2008TL
Analysis started at: 9/14/2023 12:21:13 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 10
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	87.004 %	89.379 %	0.031 ppb	585.445 ppb	458,184.764 ppb	26,985.573 ppb	154.239 ppb	50,525.743 ppb	180,503.487 ppb
Concentration per Run 1	89.678 %	84.769 %	0.031 ppb	579.494 ppb	471,631.664 ppb	26,774.230 ppb	154.136 ppb	50,186.156 ppb	165,089.219 ppb
Concentration per Run 2	86.600 %	91.984 %	0.034 ppb	583.439 ppb	466,471.058 ppb	27,718.603 ppb	152.443 ppb	51,681.773 ppb	196,378.335 ppb
Concentration per Run 3	84.735 %	91.383 %	0.029 ppb	593.401 ppb	436,451.568 ppb	26,463.888 ppb	156.138 ppb	49,709.298 ppb	180,042.906 ppb
Concentration RSD	2.9 %	4.5 %	9.3 %	1.2 %	4.1 %	2.4 %	1.2 %	2.0 %	8.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	103.681 %	95.309 %	2.842 ppb	1.160 ppb	291.587 ppb	651.796 ppb	0.984 ppb	1.300 ppb	0.613 ppb
Concentration per Run 1	103.874 %	96.179 %	2.869 ppb	1.076 ppb	281.723 ppb	617.524 ppb	0.949 ppb	1.205 ppb	0.563 ppb
Concentration per Run 2	105.285 %	90.027 %	2.561 ppb	1.307 ppb	303.673 ppb	675.925 ppb	1.023 ppb	1.422 ppb	0.763 ppb
Concentration per Run 3	101.884 %	99.720 %	3.096 ppb	1.096 ppb	289.363 ppb	661.938 ppb	0.979 ppb	1.273 ppb	0.513 ppb
Concentration RSD	1.6 %	5.1 %	9.5 %	11.0 %	3.8 %	4.7 %	3.8 %	8.5 %	21.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	51.514 ppb	103.488 %	102.597 %	10.576 ppb	1.008 ppb	1,355.551 ppb	35.734 ppb	94.343 %	92.975 %
Concentration per Run 1	49.398 ppb	105.078 %	104.929 %	10.577 ppb	1.430 ppb	1,266.193 ppb	33.885 ppb	91.982 %	97.341 %
Concentration per Run 2	52.067 ppb	103.093 %	104.859 %	10.532 ppb	0.685 ppb	1,348.613 ppb	37.139 ppb	96.479 %	90.438 %
Concentration per Run 3	53.076 ppb	102.293 %	98.004 %	10.619 ppb	0.907 ppb	1,451.847 ppb	36.178 ppb	94.569 %	91.145 %
Concentration RSD	3.7 %	1.4 %	3.9 %	0.4 %	38.0 %	6.9 %	4.7 %	2.4 %	4.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.006 ppb	0.004 ppb	100.443 %	99.992 %	1.111 ppb	46.604 ppb	108.299 %	104.187 %	108.031 %
Concentration per Run 1	0.007 ppb	0.003 ppb	98.026 %	103.150 %	0.989 ppb	43.336 ppb	105.264 %	104.840 %	107.253 %
Concentration per Run 2	0.007 ppb	0.010 ppb	104.055 %	96.588 %	1.152 ppb	49.094 ppb	109.913 %	102.940 %	106.777 %
Concentration per Run 3	0.004 ppb	0.000 ppb	99.247 %	100.237 %	1.192 ppb	47.382 ppb	109.720 %	104.783 %	110.063 %
Concentration RSD	28.3 %	117.1 %	3.2 %	3.3 %	9.7 %	6.3 %	2.4 %	1.0 %	1.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.438 %	0.023 ppb	0.573 ppb	97.797 %	90.147 %
Concentration per Run 1	106.050 %	0.011 ppb	0.554 ppb	97.077 %	91.659 %
Concentration per Run 2	104.061 %	0.035 ppb	0.607 ppb	99.333 %	88.149 %
Concentration per Run 3	106.203 %	0.024 ppb	0.559 ppb	96.982 %	90.634 %
Concentration RSD	1.1 %	50.9 %	5.1 %	1.4 %	2.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 26
Analysis label: L2352110-01 2008TL
Analysis started at: 9/14/2023 12:26:00 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 8
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	75.984 %	78.357 %	0.032 ppb	602.741 ppb	463,773.464 ppb	28,224.136 ppb	158.592 ppb	52,458.573 ppb	183,715.225 ppb
Concentration per Run 1	77.754 %	78.156 %	0.038 ppb	597.684 ppb	454,095.170 ppb	27,711.638 ppb	177.063 ppb	52,356.219 ppb	176,888.351 ppb
Concentration per Run 2	75.523 %	85.371 %	0.034 ppb	606.634 ppb	458,930.899 ppb	26,581.987 ppb	147.589 ppb	52,207.405 ppb	193,476.774 ppb
Concentration per Run 3	74.676 %	71.543 %	0.025 ppb	603.905 ppb	478,294.323 ppb	30,378.784 ppb	151.124 ppb	52,812.096 ppb	180,780.549 ppb
Concentration RSD	2.1 %	8.8 %	21.4 %	0.8 %	2.8 %	6.9 %	10.1 %	0.6 %	4.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	94.107 %	94.439 %	3.003 ppb	1.135 ppb	287.707 ppb	641.766 ppb	0.930 ppb	1.556 ppb	0.603 ppb
Concentration per Run 1	93.745 %	97.204 %	3.133 ppb	1.154 ppb	285.208 ppb	642.455 ppb	0.956 ppb	1.472 ppb	0.536 ppb
Concentration per Run 2	96.505 %	90.773 %	2.867 ppb	1.129 ppb	296.544 ppb	648.941 ppb	0.964 ppb	1.585 ppb	0.593 ppb
Concentration per Run 3	92.069 %	95.340 %	3.008 ppb	1.122 ppb	281.371 ppb	633.903 ppb	0.870 ppb	1.612 ppb	0.680 ppb
Concentration RSD	2.4 %	3.5 %	4.4 %	1.5 %	2.7 %	1.2 %	5.6 %	4.8 %	12.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	52.963 ppb	97.756 %	102.331 %	10.964 ppb	0.384 ppb	1,453.223 ppb	34.803 ppb	91.644 %	91.374 %
Concentration per Run 1	53.442 ppb	100.810 %	98.915 %	10.846 ppb	0.124 ppb	1,406.379 ppb	32.794 ppb	90.539 %	96.909 %
Concentration per Run 2	53.650 ppb	96.077 %	102.126 %	11.297 ppb	0.156 ppb	1,479.305 ppb	35.417 ppb	93.750 %	88.883 %
Concentration per Run 3	51.798 ppb	96.381 %	105.953 %	10.748 ppb	0.872 ppb	1,473.985 ppb	36.196 ppb	90.643 %	88.331 %
Concentration RSD	1.9 %	2.7 %	3.4 %	2.7 %	110.2 %	2.8 %	5.1 %	2.0 %	5.3 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.003 ppb	0.012 ppb	94.069 %	102.971 %	1.046 ppb	47.200 ppb	105.955 %	108.076 %	106.846 %
Concentration per Run 1	0.001 ppb	0.006 ppb	94.750 %	107.509 %	0.958 ppb	44.635 ppb	104.974 %	112.121 %	105.899 %
Concentration per Run 2	0.002 ppb	0.017 ppb	94.915 %	99.606 %	1.104 ppb	49.106 ppb	106.303 %	106.649 %	108.120 %
Concentration per Run 3	0.006 ppb	0.013 ppb	92.541 %	101.799 %	1.076 ppb	47.860 ppb	106.588 %	105.458 %	106.517 %
Concentration RSD	95.9 %	44.6 %	1.4 %	4.0 %	7.4 %	4.9 %	0.8 %	3.3 %	1.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	114.073 %	0.009 ppb	0.528 ppb	98.774 %	95.946 %
Concentration per Run 1	117.433 %	-0.004 ppb	0.504 ppb	98.912 %	99.832 %
Concentration per Run 2	112.878 %	0.009 ppb	0.535 ppb	99.439 %	95.026 %
Concentration per Run 3	111.907 %	0.021 ppb	0.545 ppb	97.972 %	92.978 %
Concentration RSD	2.6 %	143.3 %	4.1 %	0.8 %	3.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 27 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 9/14/2023 12:30:47 PM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	86.905 %	72.545 %	59.464 ppb	60.557 ppb	7,019.368 ppb	5,835.985 ppb	60.164 ppb	6,224.047 ppb	6,524.716 ppb
Concentration per Run 1	86.056 %	60.721 %	60.237 ppb	60.922 ppb	7,856.897 ppb	6,414.056 ppb	59.065 ppb	6,737.316 ppb	7,274.679 ppb
Concentration per Run 2	85.515 %	84.168 %	59.563 ppb	61.118 ppb	6,619.958 ppb	5,468.481 ppb	60.392 ppb	5,837.099 ppb	7,157.986 ppb
Concentration per Run 3	89.144 %	72.745 %	58.593 ppb	59.629 ppb	6,581.248 ppb	5,625.418 ppb	61.036 ppb	6,097.727 ppb	5,141.483 ppb
Recovery Percentage 1			99.107 %	100.928 %	116.989 %	97.266 %	100.274 %	103.734 %	108.745 %
Concentration RSD	2.3 %	16.2 %	1.4 %	1.3 %	10.3 %	8.7 %	1.7 %	7.4 %	18.4 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	94.966 %	102.827 %	64.736 ppb	63.309 ppb	64.846 ppb	6,441.626 ppb	61.364 ppb	63.461 ppb	62.014 ppb
Concentration per Run 1	94.983 %	96.179 %	70.192 ppb	68.064 ppb	72.129 ppb	7,028.191 ppb	65.515 ppb	67.558 ppb	67.664 ppb
Concentration per Run 2	95.419 %	97.856 %	65.753 ppb	65.199 ppb	60.047 ppb	5,905.739 ppb	61.609 ppb	63.782 ppb	58.726 ppb
Concentration per Run 3	94.496 %	114.446 %	58.263 ppb	56.663 ppb	62.363 ppb	6,390.947 ppb	56.969 ppb	59.043 ppb	59.650 ppb
Recovery Percentage 1			107.893 %	105.515 %	108.077 %	107.360 %	102.274 %	105.768 %	103.356 %
Concentration RSD	0.5 %	9.8 %	9.3 %	9.4 %	9.9 %	8.7 %	7.0 %	6.7 %	7.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	64.200 ppb	99.049 %	95.322 %	63.530 ppb	66.096 ppb	63.384 ppb	63.753 ppb	96.191 %	90.860 %
Concentration per Run 1	70.364 ppb	99.676 %	85.939 %	70.818 ppb	74.295 ppb	71.885 ppb	69.603 ppb	96.511 %	84.162 %
Concentration per Run 2	61.604 ppb	98.360 %	103.133 %	58.788 ppb	58.542 ppb	59.588 ppb	61.491 ppb	93.890 %	93.012 %
Concentration per Run 3	60.633 ppb	99.110 %	96.894 %	60.984 ppb	65.449 ppb	58.679 ppb	60.165 ppb	98.173 %	95.406 %
Recovery Percentage 1	107.001 %			105.883 %	110.159 %	105.640 %	106.255 %		
Concentration RSD	8.3 %	0.7 %	9.1 %	10.1 %	11.9 %	11.6 %	8.0 %	2.2 %	6.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	59.958 ppb	62.729 ppb	99.680 %	105.965 %	61.266 ppb	64.692 ppb	106.891 %	105.383 %	107.018 %
Concentration per Run 1	67.094 ppb	70.444 ppb	97.991 %	95.329 %	68.992 ppb	72.838 ppb	105.058 %	98.520 %	102.531 %
Concentration per Run 2	56.357 ppb	59.927 ppb	100.906 %	110.830 %	58.313 ppb	62.044 ppb	106.287 %	107.192 %	108.099 %
Concentration per Run 3	56.421 ppb	57.815 ppb	100.142 %	111.736 %	56.491 ppb	59.194 ppb	109.330 %	110.438 %	110.424 %
Recovery Percentage 1	99.930 %	104.548 %			102.109 %	107.819 %			
Concentration RSD	10.3 %	10.8 %	1.5 %	8.7 %	11.0 %	11.1 %	2.1 %	5.8 %	3.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	110.444 %	61.876 ppb	62.158 ppb	109.414 %	99.505 %
Concentration per Run 1	101.911 %	67.901 ppb	68.357 ppb	110.666 %	92.635 %
Concentration per Run 2	111.979 %	58.961 ppb	60.056 ppb	108.277 %	101.294 %
Concentration per Run 3	117.442 %	58.768 ppb	58.060 ppb	109.299 %	104.586 %
Recovery Percentage 1		103.127 %	103.596 %		
Concentration RSD	7.1 %	8.4 %	8.8 %	1.1 %	6.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	28	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 12:35:37 PM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	94.323 %	95.792 %	0.017 ppb	0.470 ppb	199.543 ppb	12.753 ppb	-0.033 ppb	33.163 ppb	160.488 ppb
Concentration per Run 1	94.066 %	95.591 %	0.021 ppb	0.473 ppb	273.694 ppb	22.570 ppb	0.003 ppb	55.909 ppb	273.175 ppb
Concentration per Run 2	94.466 %	91.383 %	0.016 ppb	0.479 ppb	189.738 ppb	10.539 ppb	-0.011 ppb	13.911 ppb	103.333 ppb
Concentration per Run 3	94.436 %	100.401 %	0.013 ppb	0.457 ppb	135.197 ppb	5.150 ppb	-0.091 ppb	29.669 ppb	104.954 ppb
Recovery Percentage 1			3.348 %	4.698 %	199.543 %	18.218 %	-0.331 %	33.163 %	160.488 %
Concentration RSD	0.2 %	4.7 %	25.7 %	2.4 %	35.0 %	69.9 %	152.2 %	64.0 %	60.8 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	97.218 %	92.761 %	0.009 ppb	0.038 ppb	0.225 ppb	6.386 ppb	0.029 ppb	0.099 ppb	0.011 ppb
Concentration per Run 1	95.989 %	87.138 %	0.019 ppb	0.093 ppb	0.314 ppb	10.966 ppb	0.047 ppb	0.156 ppb	0.012 ppb
Concentration per Run 2	96.173 %	96.179 %	-0.006 ppb	0.070 ppb	0.226 ppb	4.002 ppb	0.018 ppb	0.041 ppb	0.010 ppb
Concentration per Run 3	99.491 %	94.967 %	0.015 ppb	-0.048 ppb	0.136 ppb	4.190 ppb	0.020 ppb	0.099 ppb	0.012 ppb
Recovery Percentage 1			0.187 %	3.812 %	22.528 %	12.772 %	5.707 %	4.939 %	1.134 %
Concentration RSD	2.0 %	5.3 %	142.9 %	198.5 %	39.5 %	62.1 %	57.2 %	58.1 %	7.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.087 ppb	100.352 %	95.019 %	0.051 ppb	0.393 ppb	0.412 ppb	0.171 ppb	100.745 %	95.595 %
Concentration per Run 1	1.069 ppb	99.907 %	91.374 %	0.113 ppb	0.412 ppb	0.674 ppb	0.163 ppb	100.018 %	91.916 %
Concentration per Run 2	1.245 ppb	99.721 %	90.372 %	-0.010 ppb	0.401 ppb	0.312 ppb	0.196 ppb	98.590 %	96.401 %
Concentration per Run 3	0.948 ppb	101.429 %	103.310 %	0.049 ppb	0.367 ppb	0.252 ppb	0.155 ppb	103.626 %	98.468 %
Recovery Percentage 1	21.743 %			10.127 %	7.867 %	82.493 %	8.554 %		
Concentration RSD	13.7 %	0.9 %	7.6 %	121.2 %	5.9 %	55.3 %	12.7 %	2.6 %	3.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.021 ppb	0.021 ppb	100.736 %	99.983 %	0.055 ppb	0.077 ppb	102.807 %	101.445 %	101.246 %
Concentration per Run 1	0.033 ppb	0.038 ppb	100.777 %	95.617 %	0.045 ppb	0.074 ppb	103.545 %	97.027 %	99.474 %
Concentration per Run 2	0.016 ppb	0.013 ppb	102.468 %	101.824 %	0.050 ppb	0.107 ppb	103.997 %	102.378 %	104.892 %
Concentration per Run 3	0.015 ppb	0.013 ppb	98.964 %	102.508 %	0.069 ppb	0.049 ppb	100.880 %	104.930 %	99.373 %
Recovery Percentage 1	5.288 %				1.367 %	15.342 %			
Concentration RSD	46.8 %	67.8 %	1.7 %	3.8 %	23.3 %	37.8 %	1.6 %	4.0 %	3.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	103.651 %	0.225 ppb	0.033 ppb	103.826 %	100.329 %
Concentration per Run 1	99.892 %	0.161 ppb	0.040 ppb	105.300 %	95.233 %
Concentration per Run 2	103.940 %	0.261 ppb	0.033 ppb	105.014 %	101.326 %
Concentration per Run 3	107.123 %	0.253 ppb	0.025 ppb	101.166 %	104.427 %
Recovery Percentage 1		22.526 %	3.256 %		
Concentration RSD	3.5 %	24.7 %	22.3 %	2.2 %	4.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 29 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 9/14/2023 12:50:06 PM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	98.478 %	87.375 %	57.971 ppb	58.732 ppb	6,540.210 ppb	6,079.732 ppb	61.928 ppb	6,319.300 ppb	6,432.303 ppb
Concentration per Run 1	97.319 %	82.365 %	58.629 ppb	60.477 ppb	7,128.192 ppb	6,371.259 ppb	64.114 ppb	6,682.161 ppb	6,859.010 ppb
Concentration per Run 2	97.877 %	90.180 %	58.161 ppb	58.756 ppb	6,148.129 ppb	5,730.889 ppb	60.363 ppb	6,024.547 ppb	5,889.903 ppb
Concentration per Run 3	100.237 %	89.579 %	57.123 ppb	56.965 ppb	6,344.311 ppb	6,137.048 ppb	61.309 ppb	6,251.192 ppb	6,547.997 ppb
Recovery Percentage 1			96.618 %	97.887 %	109.004 %	101.329 %	103.214 %	105.322 %	107.205 %
Concentration RSD	1.6 %	5.0 %	1.3 %	3.0 %	7.9 %	5.3 %	3.2 %	5.3 %	7.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	103.356 %	105.623 %	64.347 ppb	63.038 ppb	64.843 ppb	6,484.831 ppb	65.043 ppb	64.693 ppb	62.821 ppb
Concentration per Run 1	97.622 %	97.763 %	72.484 ppb	68.134 ppb	69.880 ppb	7,005.818 ppb	68.695 ppb	71.725 ppb	67.439 ppb
Concentration per Run 2	105.855 %	113.142 %	57.673 ppb	57.801 ppb	62.015 ppb	6,220.661 ppb	61.722 ppb	60.879 ppb	59.313 ppb
Concentration per Run 3	106.591 %	105.965 %	62.883 ppb	63.179 ppb	62.633 ppb	6,228.013 ppb	64.713 ppb	61.474 ppb	61.712 ppb
Recovery Percentage 1			107.245 %	105.064 %	108.071 %	108.081 %	108.405 %	107.821 %	104.702 %
Concentration RSD	4.8 %	7.3 %	11.7 %	8.2 %	6.7 %	7.0 %	5.4 %	9.4 %	6.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	65.275 ppb	101.840 %	96.794 %	63.457 ppb	62.121 ppb	64.258 ppb	61.661 ppb	97.264 %	96.279 %
Concentration per Run 1	70.510 ppb	103.012 %	90.720 %	68.149 ppb	66.971 ppb	68.646 ppb	66.876 ppb	96.514 %	89.643 %
Concentration per Run 2	63.150 ppb	104.068 %	101.563 %	60.667 ppb	58.134 ppb	64.085 ppb	60.442 ppb	99.079 %	98.703 %
Concentration per Run 3	62.167 ppb	98.440 %	98.100 %	61.555 ppb	61.257 ppb	60.043 ppb	57.665 ppb	96.198 %	100.490 %
Recovery Percentage 1	108.792 %			105.761 %	103.534 %	107.097 %	102.768 %		
Concentration RSD	7.0 %	2.9 %	5.7 %	6.4 %	7.2 %	6.7 %	7.7 %	1.6 %	6.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	59.861 ppb	62.116 ppb	98.325 %	101.659 %	61.151 ppb	61.915 ppb	101.692 %	102.713 %	101.181 %
Concentration per Run 1	65.421 ppb	65.861 ppb	97.708 %	95.668 %	65.416 ppb	64.140 ppb	100.249 %	95.433 %	100.306 %
Concentration per Run 2	57.909 ppb	61.239 ppb	99.092 %	103.229 %	59.854 ppb	60.407 ppb	101.873 %	107.434 %	102.401 %
Concentration per Run 3	56.253 ppb	59.249 ppb	98.174 %	106.078 %	58.183 ppb	61.199 ppb	102.953 %	105.273 %	100.836 %
Recovery Percentage 1	99.768 %	103.527 %			101.918 %	103.192 %			
Concentration RSD	8.2 %	5.5 %	0.7 %	5.3 %	6.2 %	3.2 %	1.3 %	6.2 %	1.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	101.924 %	60.865 ppb	61.698 ppb	99.327 %	96.852 %
Concentration per Run 1	94.793 %	64.376 ppb	64.999 ppb	99.259 %	93.126 %
Concentration per Run 2	105.892 %	59.679 ppb	60.817 ppb	97.987 %	98.570 %
Concentration per Run 3	105.086 %	58.541 ppb	59.278 ppb	100.735 %	98.862 %
Recovery Percentage 1		101.442 %	102.830 %		
Concentration RSD	6.1 %	5.1 %	4.8 %	1.4 %	3.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 30
Analysis label: CCB
Analysis started at: 9/14/2023 12:54:56 PM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	105.009 %	103.407 %	0.022 ppb	0.198 ppb	21.798 ppb	1.676 ppb	0.299 ppb	3.607 ppb	7.459 ppb
Concentration per Run 1	105.471 %	104.008 %	0.022 ppb	0.206 ppb	15.438 ppb	1.927 ppb	0.351 ppb	0.768 ppb	5.815 ppb
Concentration per Run 2	105.162 %	105.210 %	0.023 ppb	0.192 ppb	21.477 ppb	2.806 ppb	0.243 ppb	11.633 ppb	7.450 ppb
Concentration per Run 3	104.395 %	101.002 %	0.020 ppb	0.197 ppb	28.480 ppb	0.295 ppb	0.303 ppb	-1.581 ppb	9.111 ppb
Recovery Percentage 1			4.306 %	1.985 %	21.798 %	2.394 %	2.990 %	3.607 %	7.459 %
Concentration RSD	0.5 %	2.1 %	8.4 %	3.5 %	29.9 %	76.0 %	18.1 %	195.5 %	22.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	105.936 %	103.759 %	-0.001 ppb	-0.018 ppb	0.101 ppb	4.581 ppb	0.018 ppb	0.072 ppb	0.014 ppb
Concentration per Run 1	102.265 %	113.608 %	-0.009 ppb	-0.080 ppb	0.070 ppb	4.726 ppb	0.018 ppb	0.090 ppb	0.006 ppb
Concentration per Run 2	109.956 %	100.652 %	-0.007 ppb	0.030 ppb	0.108 ppb	2.670 ppb	0.016 ppb	0.063 ppb	0.025 ppb
Concentration per Run 3	105.587 %	97.018 %	0.014 ppb	-0.004 ppb	0.125 ppb	6.345 ppb	0.020 ppb	0.064 ppb	0.010 ppb
Recovery Percentage 1			-0.016 %	-1.824 %	10.081 %	9.161 %	3.602 %	3.601 %	1.372 %
Concentration RSD	3.6 %	8.4 %	1,640.6 %	310.5 %	28.1 %	40.2 %	9.1 %	21.4 %	73.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.777 ppb	106.182 %	105.011 %	0.003 ppb	0.228 ppb	-0.025 ppb	0.118 ppb	104.963 %	106.841 %
Concentration per Run 1	0.526 ppb	106.776 %	107.775 %	0.016 ppb	0.328 ppb	-0.036 ppb	0.092 ppb	104.784 %	109.951 %
Concentration per Run 2	0.967 ppb	105.390 %	102.399 %	-0.002 ppb	0.174 ppb	0.004 ppb	0.126 ppb	103.730 %	105.032 %
Concentration per Run 3	0.837 ppb	106.379 %	104.860 %	-0.006 ppb	0.182 ppb	-0.041 ppb	0.138 ppb	106.376 %	105.541 %
Recovery Percentage 1	15.532 %			0.505 %	4.560 %	-4.916 %	5.922 %		
Concentration RSD	29.1 %	0.7 %	2.6 %	456.9 %	38.1 %	100.5 %	20.3 %	1.3 %	2.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.015 ppb	0.016 ppb	105.309 %	107.426 %	0.022 ppb	0.035 ppb	105.759 %	110.291 %	105.236 %
Concentration per Run 1	0.015 ppb	0.009 ppb	103.947 %	112.538 %	0.025 ppb	0.028 ppb	107.088 %	113.631 %	105.803 %
Concentration per Run 2	0.011 ppb	0.012 ppb	103.217 %	106.944 %	0.021 ppb	-0.007 ppb	107.712 %	108.871 %	105.523 %
Concentration per Run 3	0.018 ppb	0.028 ppb	108.762 %	102.796 %	0.020 ppb	0.085 ppb	102.478 %	108.369 %	104.382 %
Recovery Percentage 1	3.674 %				0.553 %	7.068 %			
Concentration RSD	23.8 %	63.3 %	2.9 %	4.6 %	11.5 %	130.9 %	2.7 %	2.6 %	0.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	107.819 %	0.199 ppb	0.020 ppb	105.668 %	108.224 %
Concentration per Run 1	109.334 %	0.123 ppb	0.020 ppb	106.528 %	111.638 %
Concentration per Run 2	106.675 %	0.220 ppb	0.022 ppb	106.369 %	107.770 %
Concentration per Run 3	107.448 %	0.253 ppb	0.019 ppb	104.108 %	105.265 %
Recovery Percentage 1		19.851 %	2.029 %		
Concentration RSD	1.3 %	34.0 %	9.3 %	1.3 %	3.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	31	User name	ALPHALAB\ICPMSRQ	Comment	FB
Analysis label:	I2351336-07 6020TL	Rack	1		
Analysis started at:	9/14/2023 1:06:18 PM	Vial	14		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	107.253 %	98.998 %	0.007 ppb	11.376 ppb	21.944 ppb	0.542 ppb	3.901 ppb	4.296 ppb	21.150 ppb
Concentration per Run 1	108.166 %	97.395 %	0.007 ppb	11.309 ppb	29.084 ppb	0.758 ppb	3.964 ppb	9.395 ppb	19.696 ppb
Concentration per Run 2	108.470 %	93.186 %	0.006 ppb	11.316 ppb	19.799 ppb	-0.483 ppb	3.942 ppb	-5.818 ppb	-1.302 ppb
Concentration per Run 3	105.122 %	106.413 %	0.008 ppb	11.503 ppb	16.949 ppb	1.350 ppb	3.798 ppb	9.310 ppb	45.057 ppb
Concentration RSD	1.7 %	6.8 %	13.7 %	1.0 %	28.9 %	172.6 %	2.3 %	203.9 %	109.8 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	108.855 %	113.608 %	0.003 ppb	0.218 ppb	0.114 ppb	2.820 ppb	0.002 ppb	0.010 ppb	0.024 ppb
Concentration per Run 1	104.930 %	115.844 %	-0.027 ppb	0.188 ppb	0.107 ppb	2.916 ppb	0.003 ppb	0.036 ppb	0.072 ppb
Concentration per Run 2	111.388 %	116.963 %	0.008 ppb	0.241 ppb	0.111 ppb	1.850 ppb	0.001 ppb	0.012 ppb	-0.013 ppb
Concentration per Run 3	110.247 %	108.015 %	0.030 ppb	0.226 ppb	0.123 ppb	3.695 ppb	0.001 ppb	-0.016 ppb	0.014 ppb
Concentration RSD	3.2 %	4.3 %	822.1 %	12.6 %	7.0 %	32.9 %	91.9 %	245.4 %	179.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.520 ppb	106.756 %	108.338 %	0.005 ppb	0.162 ppb	0.312 ppb	0.034 ppb	104.228 %	107.685 %
Concentration per Run 1	-0.552 ppb	104.945 %	114.609 %	-0.004 ppb	0.148 ppb	0.308 ppb	0.030 ppb	103.656 %	109.270 %
Concentration per Run 2	-0.544 ppb	105.388 %	104.222 %	-0.030 ppb	0.160 ppb	0.337 ppb	0.040 ppb	104.865 %	107.527 %
Concentration per Run 3	-0.464 ppb	109.934 %	106.183 %	0.047 ppb	0.179 ppb	0.293 ppb	0.033 ppb	104.163 %	106.259 %
Concentration RSD	9.3 %	2.6 %	5.1 %	868.0 %	9.9 %	7.2 %	13.9 %	0.6 %	1.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.003 ppb	0.003 ppb	102.346 %	108.897 %	0.007 ppb	0.360 ppb	104.883 %	108.977 %	102.489 %
Concentration per Run 1	0.003 ppb	0.003 ppb	103.592 %	113.694 %	-0.001 ppb	0.371 ppb	103.688 %	111.759 %	102.085 %
Concentration per Run 2	0.003 ppb	0.003 ppb	98.619 %	108.323 %	0.006 ppb	0.369 ppb	104.270 %	107.975 %	103.890 %
Concentration per Run 3	0.003 ppb	0.003 ppb	104.828 %	104.674 %	0.015 ppb	0.340 ppb	106.689 %	107.196 %	101.492 %
Concentration RSD	10.0 %	3.2 %	3.2 %	4.2 %	123.8 %	4.8 %	1.5 %	2.2 %	1.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	107.759 %	0.026 ppb	0.038 ppb	104.834 %	108.359 %
Concentration per Run 1	109.076 %	0.011 ppb	0.037 ppb	103.402 %	107.943 %
Concentration per Run 2	107.005 %	0.032 ppb	0.041 ppb	103.240 %	109.760 %
Concentration per Run 3	107.196 %	0.034 ppb	0.036 ppb	107.861 %	107.374 %
Concentration RSD	1.1 %	49.3 %	6.2 %	2.5 %	1.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	32	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2352110-02 2008TL	Rack	1		
Analysis started at:	9/14/2023 1:11:02 PM	Vial	11		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	86.108 %	95.992 %	0.028 ppb	632.978 ppb	448,091.296 ppb	26,075.274 ppb	72.504 ppb	52,321.910 ppb	190,493.445 ppb
Concentration per Run 1	90.577 %	101.002 %	0.027 ppb	597.327 ppb	426,507.088 ppb	24,422.382 ppb	65.993 ppb	50,799.442 ppb	183,063.099 ppb
Concentration per Run 2	81.129 %	100.401 %	0.029 ppb	682.196 ppb	436,894.854 ppb	25,625.530 ppb	78.917 ppb	53,807.209 ppb	194,935.146 ppb
Concentration per Run 3	86.617 %	86.573 %	0.027 ppb	619.411 ppb	480,871.944 ppb	28,177.911 ppb	72.602 ppb	52,359.078 ppb	193,482.089 ppb
Concentration RSD	5.5 %	8.5 %	3.5 %	7.0 %	6.4 %	7.4 %	8.9 %	2.9 %	3.4 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	96.773 %	93.227 %	2.709 ppb	1.225 ppb	293.678 ppb	534.606 ppb	1.061 ppb	1.470 ppb	0.585 ppb
Concentration per Run 1	97.960 %	93.755 %	3.068 ppb	1.185 ppb	280.591 ppb	525.036 ppb	0.990 ppb	1.465 ppb	0.613 ppb
Concentration per Run 2	93.301 %	89.468 %	2.401 ppb	1.363 ppb	304.170 ppb	546.243 ppb	1.177 ppb	1.363 ppb	0.621 ppb
Concentration per Run 3	99.058 %	96.458 %	2.658 ppb	1.128 ppb	296.273 ppb	532.539 ppb	1.015 ppb	1.583 ppb	0.523 ppb
Concentration RSD	3.2 %	3.8 %	12.4 %	10.0 %	4.1 %	2.0 %	9.6 %	7.5 %	9.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	51.200 ppb	105.202 %	101.261 %	10.212 ppb	0.790 ppb	1,359.679 ppb	35.026 ppb	92.536 %	92.613 %
Concentration per Run 1	49.142 ppb	108.246 %	102.946 %	10.350 ppb	0.348 ppb	1,284.756 ppb	33.942 ppb	96.686 %	95.889 %
Concentration per Run 2	52.696 ppb	100.588 %	100.100 %	9.465 ppb	1.280 ppb	1,382.642 ppb	34.488 ppb	88.348 %	90.915 %
Concentration per Run 3	51.761 ppb	106.772 %	100.738 %	10.822 ppb	0.744 ppb	1,411.639 ppb	36.648 ppb	92.572 %	91.036 %
Concentration RSD	3.6 %	3.9 %	1.5 %	6.7 %	59.2 %	4.9 %	4.1 %	4.5 %	3.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.003 ppb	0.015 ppb	95.450 %	96.469 %	1.092 ppb	46.780 ppb	103.422 %	103.268 %	103.787 %
Concentration per Run 1	0.004 ppb	0.003 ppb	98.007 %	98.963 %	1.090 ppb	44.500 ppb	106.214 %	104.373 %	104.547 %
Concentration per Run 2	0.001 ppb	0.024 ppb	91.976 %	93.568 %	1.114 ppb	47.541 ppb	97.287 %	102.626 %	98.098 %
Concentration per Run 3	0.003 ppb	0.017 ppb	96.367 %	96.875 %	1.071 ppb	48.300 ppb	106.766 %	102.804 %	108.716 %
Concentration RSD	56.4 %	71.8 %	3.3 %	2.8 %	2.0 %	4.3 %	5.1 %	0.9 %	5.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	103.943 %	0.013 ppb	0.477 ppb	93.697 %	91.417 %
Concentration per Run 1	104.068 %	0.000 ppb	0.447 ppb	97.038 %	93.961 %
Concentration per Run 2	102.662 %	0.018 ppb	0.493 ppb	88.734 %	90.279 %
Concentration per Run 3	105.100 %	0.021 ppb	0.493 ppb	95.319 %	90.011 %
Concentration RSD	1.2 %	89.6 %	5.6 %	4.7 %	2.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	33	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2352203-01 2008TL	Rack	1		
Analysis started at:	9/14/2023 1:17:17 PM	Vial	12		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	85.503 %	83.767 %	0.047 ppb	17.435 ppb	372,558.147 ppb	7,265.588 ppb	59.402 ppb	7,672.480 ppb	40,916.722 ppb
Concentration per Run 1	86.801 %	93.186 %	0.044 ppb	17.002 ppb	340,441.037 ppb	6,370.621 ppb	59.185 ppb	7,080.898 ppb	40,053.874 ppb
Concentration per Run 2	85.612 %	80.561 %	0.053 ppb	17.491 ppb	386,202.486 ppb	7,723.227 ppb	57.953 ppb	8,016.391 ppb	42,178.644 ppb
Concentration per Run 3	84.095 %	77.555 %	0.044 ppb	17.810 ppb	391,030.918 ppb	7,702.916 ppb	61.067 ppb	7,920.152 ppb	40,517.649 ppb
Concentration RSD	1.6 %	9.9 %	11.8 %	2.3 %	7.5 %	10.7 %	2.6 %	6.7 %	2.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	101.704 %	100.311 %	2.269 ppb	0.250 ppb	272.768 ppb	281.477 ppb	4.690 ppb	6.634 ppb	4.113 ppb
Concentration per Run 1	101.318 %	101.678 %	2.383 ppb	0.249 ppb	261.751 ppb	271.357 ppb	4.430 ppb	6.928 ppb	4.208 ppb
Concentration per Run 2	103.730 %	98.229 %	2.411 ppb	0.186 ppb	276.964 ppb	300.841 ppb	4.702 ppb	6.341 ppb	4.279 ppb
Concentration per Run 3	100.065 %	101.025 %	2.013 ppb	0.316 ppb	279.589 ppb	272.234 ppb	4.938 ppb	6.632 ppb	3.854 ppb
Concentration RSD	1.8 %	1.8 %	9.8 %	26.0 %	3.5 %	6.0 %	5.4 %	4.4 %	5.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	14.643 ppb	107.072 %	102.642 %	1.631 ppb	0.845 ppb	258.161 ppb	3.558 ppb	99.451 %	96.333 %
Concentration per Run 1	13.996 ppb	106.534 %	105.588 %	1.792 ppb	0.359 ppb	242.595 ppb	3.279 ppb	97.968 %	100.963 %
Concentration per Run 2	14.897 ppb	106.085 %	101.033 %	1.544 ppb	0.913 ppb	264.891 ppb	3.687 ppb	99.970 %	94.582 %
Concentration per Run 3	15.034 ppb	108.598 %	101.306 %	1.556 ppb	1.262 ppb	266.995 ppb	3.708 ppb	100.416 %	93.454 %
Concentration RSD	3.9 %	1.3 %	2.5 %	8.6 %	53.9 %	5.2 %	6.8 %	1.3 %	4.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.021 ppb	0.358 ppb	101.332 %	107.002 %	1.216 ppb	86.393 ppb	111.441 %	110.480 %	114.332 %
Concentration per Run 1	0.021 ppb	0.329 ppb	101.924 %	108.074 %	1.190 ppb	84.559 ppb	108.794 %	112.710 %	110.494 %
Concentration per Run 2	0.023 ppb	0.324 ppb	100.524 %	108.074 %	1.136 ppb	89.767 ppb	111.939 %	108.226 %	116.065 %
Concentration per Run 3	0.019 ppb	0.421 ppb	101.549 %	104.858 %	1.323 ppb	84.854 ppb	113.592 %	110.505 %	116.438 %
Concentration RSD	9.6 %	15.3 %	0.7 %	1.7 %	7.9 %	3.4 %	2.2 %	2.0 %	2.9 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	112.214 %	0.093 ppb	0.257 ppb	104.467 %	100.106 %
Concentration per Run 1	113.358 %	0.082 ppb	0.256 ppb	101.682 %	104.399 %
Concentration per Run 2	109.941 %	0.096 ppb	0.259 ppb	104.120 %	98.713 %
Concentration per Run 3	113.343 %	0.100 ppb	0.256 ppb	107.598 %	97.206 %
Concentration RSD	1.8 %	9.9 %	0.8 %	2.8 %	3.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	34	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2352205-01 2008TL	Rack	1		
Analysis started at:	9/14/2023 1:22:04 PM	Vial	13		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	95.862 %	85.170 %	0.098 ppb	11.995 ppb	53,716.957 ppb	3,112.063 ppb	178.317 ppb	3,156.136 ppb	13,699.720 ppb
Concentration per Run 1	94.475 %	94.389 %	0.098 ppb	12.222 ppb	50,094.270 ppb	2,902.672 ppb	179.337 ppb	3,068.956 ppb	12,848.102 ppb
Concentration per Run 2	95.344 %	80.561 %	0.104 ppb	11.944 ppb	53,637.159 ppb	3,020.494 ppb	189.512 ppb	2,896.476 ppb	13,194.788 ppb
Concentration per Run 3	97.768 %	80.561 %	0.090 ppb	11.817 ppb	57,419.443 ppb	3,413.023 ppb	166.102 ppb	3,502.976 ppb	15,056.271 ppb
Concentration RSD	1.8 %	9.4 %	7.3 %	1.7 %	6.8 %	8.6 %	6.6 %	9.9 %	8.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	110.344 %	112.613 %	3.616 ppb	1.125 ppb	160.424 ppb	853.133 ppb	2.478 ppb	3.095 ppb	5.300 ppb
Concentration per Run 1	110.434 %	114.260 %	3.217 ppb	1.126 ppb	151.930 ppb	852.455 ppb	2.242 ppb	2.962 ppb	5.128 ppb
Concentration per Run 2	107.239 %	120.971 %	3.609 ppb	1.046 ppb	152.538 ppb	782.123 ppb	2.429 ppb	3.041 ppb	4.999 ppb
Concentration per Run 3	113.360 %	102.610 %	4.022 ppb	1.203 ppb	176.805 ppb	924.821 ppb	2.764 ppb	3.282 ppb	5.773 ppb
Concentration RSD	2.8 %	8.2 %	11.1 %	7.0 %	8.8 %	8.4 %	10.7 %	5.4 %	7.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	25.591 ppb	111.136 %	103.001 %	7.048 ppb	1.589 ppb	78.484 ppb	5.435 ppb	103.492 %	101.586 %
Concentration per Run 1	24.374 ppb	111.367 %	106.499 %	6.914 ppb	1.397 ppb	73.812 ppb	5.143 ppb	100.880 %	105.498 %
Concentration per Run 2	25.268 ppb	111.511 %	103.541 %	7.197 ppb	2.328 ppb	80.491 ppb	5.403 ppb	103.066 %	99.276 %
Concentration per Run 3	27.131 ppb	110.530 %	98.963 %	7.033 ppb	1.042 ppb	81.149 ppb	5.761 ppb	106.530 %	99.984 %
Concentration RSD	5.5 %	0.5 %	3.7 %	2.0 %	41.8 %	5.2 %	5.7 %	2.8 %	3.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.008 ppb	0.260 ppb	106.053 %	110.148 %	3.158 ppb	21.832 ppb	113.405 %	112.433 %	111.122 %
Concentration per Run 1	0.009 ppb	0.234 ppb	107.216 %	114.772 %	3.075 ppb	19.299 ppb	112.578 %	116.066 %	108.085 %
Concentration per Run 2	0.009 ppb	0.281 ppb	107.121 %	108.861 %	3.238 ppb	23.597 ppb	112.881 %	111.905 %	111.043 %
Concentration per Run 3	0.007 ppb	0.265 ppb	103.822 %	106.812 %	3.161 ppb	22.599 ppb	114.757 %	109.328 %	114.239 %
Concentration RSD	15.7 %	9.2 %	1.8 %	3.8 %	2.6 %	10.3 %	1.0 %	3.0 %	2.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	114.596 %	0.045 ppb	0.761 ppb	110.555 %	103.747 %
Concentration per Run 1	119.135 %	0.032 ppb	0.733 ppb	108.104 %	105.060 %
Concentration per Run 2	114.260 %	0.053 ppb	0.760 ppb	108.835 %	105.134 %
Concentration per Run 3	110.392 %	0.051 ppb	0.789 ppb	114.726 %	101.048 %
Concentration RSD	3.8 %	25.4 %	3.7 %	3.3 %	2.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	35	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1827291-2D5 2008TL	Rack	1		
Analysis started at:	9/14/2023 1:33:30 PM	Vial	15		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	103.808 %	96.593 %	10.242 ppb	199.356 ppb	2,351.110 ppb	2,200.603 ppb	399.086 ppb	2,419.097 ppb	1,864.231 ppb
Concentration per Run 1	103.206 %	98.597 %	10.377 ppb	205.058 ppb	2,307.723 ppb	2,205.978 ppb	392.889 ppb	2,344.434 ppb	2,287.143 ppb
Concentration per Run 2	102.883 %	93.186 %	10.215 ppb	197.855 ppb	2,447.566 ppb	2,182.911 ppb	412.409 ppb	2,640.933 ppb	1,694.603 ppb
Concentration per Run 3	105.334 %	97.996 %	10.135 ppb	195.157 ppb	2,298.042 ppb	2,212.921 ppb	391.959 ppb	2,271.924 ppb	1,610.946 ppb
Concentration RSD	1.3 %	3.1 %	1.2 %	2.6 %	3.6 %	0.7 %	2.9 %	8.1 %	19.8 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	106.381 %	108.544 %	112.197 ppb	44.544 ppb	120.105 ppb	226.156 ppb	110.816 ppb	111.202 ppb	56.038 ppb
Concentration per Run 1	105.241 %	108.295 %	108.058 ppb	43.961 ppb	116.418 ppb	203.056 ppb	106.879 ppb	108.606 ppb	55.214 ppb
Concentration per Run 2	106.808 %	106.990 %	115.070 ppb	45.076 ppb	121.145 ppb	231.600 ppb	114.573 ppb	107.815 ppb	54.502 ppb
Concentration per Run 3	107.094 %	110.345 %	113.464 ppb	44.594 ppb	122.752 ppb	243.811 ppb	110.995 ppb	117.185 ppb	58.398 ppb
Concentration RSD	0.9 %	1.6 %	3.3 %	1.3 %	2.7 %	9.2 %	3.5 %	4.7 %	3.7 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	110.648 ppb	106.659 %	106.492 %	25.778 ppb	24.445 ppb	219.214 ppb	193.671 ppb	101.449 %	104.371 %
Concentration per Run 1	105.507 ppb	104.632 %	109.689 %	25.223 ppb	22.652 ppb	206.427 ppb	180.380 ppb	102.236 %	109.303 %
Concentration per Run 2	110.908 ppb	107.773 %	109.485 %	26.001 ppb	26.084 ppb	216.188 ppb	195.800 ppb	100.272 %	104.578 %
Concentration per Run 3	115.529 ppb	107.573 %	100.304 %	26.110 ppb	24.598 ppb	235.028 ppb	204.834 ppb	101.840 %	99.233 %
Concentration RSD	4.5 %	1.6 %	5.0 %	1.9 %	7.0 %	6.6 %	6.4 %	1.0 %	4.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	10.158 ppb	10.586 ppb	105.885 %	117.826 %	88.781 ppb	405.506 ppb	104.780 %	113.883 %	102.176 %
Concentration per Run 1	9.622 ppb	9.933 ppb	105.324 %	121.271 %	84.756 ppb	381.577 ppb	103.326 %	117.300 %	99.310 %
Concentration per Run 2	10.333 ppb	10.987 ppb	106.312 %	115.769 %	90.367 ppb	419.247 ppb	104.518 %	113.358 %	101.112 %
Concentration per Run 3	10.520 ppb	10.837 ppb	106.017 %	116.438 %	91.222 ppb	415.694 ppb	106.496 %	110.992 %	106.106 %
Concentration RSD	4.7 %	5.4 %	0.5 %	2.5 %	4.0 %	5.1 %	1.5 %	2.8 %	3.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	111.879 %	24.777 ppb	109.214 ppb	103.493 %	104.747 %
Concentration per Run 1	114.766 %	23.668 ppb	105.981 ppb	102.147 %	106.606 %
Concentration per Run 2	109.298 %	25.060 ppb	109.253 ppb	103.143 %	105.897 %
Concentration per Run 3	111.573 %	25.604 ppb	112.409 ppb	105.187 %	101.736 %
Concentration RSD	2.5 %	4.0 %	2.9 %	1.5 %	2.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 36 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 9/14/2023 1:44:29 PM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	102.635 %	102.004 %	55.905 ppb	56.886 ppb	6,062.193 ppb	5,787.454 ppb	59.857 ppb	5,804.340 ppb	6,088.469 ppb
Concentration per Run 1	104.095 %	90.782 %	55.946 ppb	57.413 ppb	6,710.781 ppb	6,006.135 ppb	60.100 ppb	5,854.761 ppb	5,976.769 ppb
Concentration per Run 2	101.584 %	100.401 %	56.075 ppb	57.938 ppb	6,260.785 ppb	5,723.942 ppb	60.497 ppb	5,688.801 ppb	5,585.244 ppb
Concentration per Run 3	102.226 %	114.830 %	55.694 ppb	55.308 ppb	5,215.014 ppb	5,632.285 ppb	58.975 ppb	5,869.460 ppb	6,703.393 ppb
Recovery Percentage 1			93.175 %	94.811 %	101.037 %	96.458 %	99.762 %	96.739 %	101.474 %
Concentration RSD	1.3 %	11.9 %	0.3 %	2.4 %	12.7 %	3.4 %	1.3 %	1.7 %	9.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	113.396 %	126.625 %	58.369 ppb	57.022 ppb	60.914 ppb	6,189.184 ppb	60.341 ppb	60.924 ppb	59.441 ppb
Concentration per Run 1	109.894 %	130.012 %	59.550 ppb	55.842 ppb	59.407 ppb	6,043.421 ppb	58.723 ppb	59.470 ppb	59.330 ppb
Concentration per Run 2	113.228 %	130.384 %	57.687 ppb	57.324 ppb	61.531 ppb	6,422.831 ppb	60.423 ppb	61.378 ppb	58.099 ppb
Concentration per Run 3	117.065 %	119.479 %	57.870 ppb	57.901 ppb	61.804 ppb	6,101.299 ppb	61.878 ppb	61.923 ppb	60.894 ppb
Recovery Percentage 1			97.282 %	95.037 %	101.523 %	103.153 %	100.569 %	101.539 %	99.068 %
Concentration RSD	3.2 %	4.9 %	1.8 %	1.9 %	2.2 %	3.3 %	2.6 %	2.1 %	2.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	59.528 ppb	105.029 %	103.742 %	58.282 ppb	54.701 ppb	63.175 ppb	58.275 ppb	98.901 %	100.234 %
Concentration per Run 1	57.799 ppb	106.936 %	105.797 %	56.837 ppb	50.957 ppb	61.645 ppb	57.197 ppb	96.937 %	101.162 %
Concentration per Run 2	60.354 ppb	105.892 %	102.956 %	59.387 ppb	56.570 ppb	63.296 ppb	57.659 ppb	101.523 %	100.704 %
Concentration per Run 3	60.432 ppb	102.259 %	102.474 %	58.623 ppb	56.577 ppb	64.586 ppb	59.969 ppb	98.243 %	98.836 %
Recovery Percentage 1	99.214 %			97.137 %	91.169 %	105.292 %	97.125 %		
Concentration RSD	2.5 %	2.3 %	1.7 %	2.2 %	5.9 %	2.3 %	2.5 %	2.4 %	1.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	57.034 ppb	57.453 ppb	101.402 %	106.648 %	57.116 ppb	58.298 ppb	104.998 %	108.070 %	102.098 %
Concentration per Run 1	57.301 ppb	56.984 ppb	99.664 %	108.231 %	55.867 ppb	56.541 ppb	104.132 %	111.361 %	101.835 %
Concentration per Run 2	56.167 ppb	56.786 ppb	102.784 %	109.467 %	56.270 ppb	58.459 ppb	105.285 %	107.090 %	100.369 %
Concentration per Run 3	57.636 ppb	58.588 ppb	101.758 %	102.246 %	59.209 ppb	59.895 ppb	105.577 %	105.759 %	104.090 %
Recovery Percentage 1	95.057 %	95.755 %			95.193 %	97.164 %			
Concentration RSD	1.3 %	1.7 %	1.6 %	3.6 %	3.2 %	2.9 %	0.7 %	2.7 %	1.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	107.520 %	55.544 ppb	55.832 ppb	100.314 %	103.822 %
Concentration per Run 1	112.544 %	52.565 ppb	53.276 ppb	98.942 %	108.572 %
Concentration per Run 2	105.392 %	56.712 ppb	57.155 ppb	100.383 %	102.241 %
Concentration per Run 3	104.624 %	57.356 ppb	57.065 ppb	101.616 %	100.654 %
Recovery Percentage 1		92.574 %	93.053 %		
Concentration RSD	4.1 %	4.7 %	4.0 %	1.3 %	4.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	37	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 1:51:26 PM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	107.449 %	105.010 %	0.017 ppb	0.149 ppb	18.647 ppb	1.641 ppb	0.319 ppb	4.285 ppb	22.149 ppb
Concentration per Run 1	106.804 %	114.830 %	0.021 ppb	0.155 ppb	11.183 ppb	1.760 ppb	0.349 ppb	-4.834 ppb	27.928 ppb
Concentration per Run 2	107.913 %	94.990 %	0.015 ppb	0.139 ppb	23.335 ppb	1.666 ppb	0.306 ppb	7.786 ppb	7.615 ppb
Concentration per Run 3	107.629 %	105.210 %	0.015 ppb	0.155 ppb	21.424 ppb	1.497 ppb	0.301 ppb	9.901 ppb	30.903 ppb
Recovery Percentage 1			3.427 %	1.495 %	18.647 %	2.344 %	3.186 %	4.285 %	22.149 %
Concentration RSD	0.5 %	9.4 %	18.0 %	6.2 %	35.0 %	8.1 %	8.2 %	186.0 %	57.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	109.535 %	104.847 %	0.043 ppb	0.025 ppb	0.142 ppb	3.863 ppb	0.015 ppb	0.045 ppb	0.037 ppb
Concentration per Run 1	109.559 %	110.345 %	0.103 ppb	-0.039 ppb	0.080 ppb	3.228 ppb	0.018 ppb	0.064 ppb	0.069 ppb
Concentration per Run 2	111.092 %	103.449 %	0.052 ppb	0.076 ppb	0.144 ppb	3.470 ppb	0.019 ppb	0.018 ppb	0.024 ppb
Concentration per Run 3	107.955 %	100.746 %	-0.027 ppb	0.036 ppb	0.202 ppb	4.890 ppb	0.007 ppb	0.052 ppb	0.018 ppb
Recovery Percentage 1			0.851 %	2.454 %	14.192 %	7.725 %	2.981 %	2.240 %	3.669 %
Concentration RSD	1.4 %	4.7 %	154.8 %	238.5 %	43.0 %	23.3 %	45.2 %	53.0 %	75.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.751 ppb	105.781 %	103.706 %	0.055 ppb	0.117 ppb	-0.006 ppb	0.147 ppb	104.068 %	102.323 %
Concentration per Run 1	0.704 ppb	109.367 %	105.133 %	0.049 ppb	0.004 ppb	-0.020 ppb	0.125 ppb	104.571 %	104.695 %
Concentration per Run 2	0.836 ppb	105.219 %	102.946 %	0.065 ppb	0.163 ppb	-0.026 ppb	0.181 ppb	104.755 %	100.711 %
Concentration per Run 3	0.713 ppb	102.757 %	103.037 %	0.051 ppb	0.185 ppb	0.028 ppb	0.136 ppb	102.880 %	101.564 %
Recovery Percentage 1	15.023 %			10.945 %	2.349 %	-1.154 %	7.372 %		
Concentration RSD	9.8 %	3.2 %	1.2 %	15.7 %	84.4 %	510.6 %	20.1 %	1.0 %	2.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.012 ppb	0.019 ppb	104.087 %	107.063 %	0.150 ppb	0.108 ppb	104.232 %	105.033 %	102.763 %
Concentration per Run 1	0.013 ppb	0.027 ppb	105.207 %	110.005 %	0.123 ppb	0.187 ppb	105.699 %	110.018 %	101.907 %
Concentration per Run 2	0.017 ppb	0.012 ppb	104.791 %	107.929 %	0.155 ppb	0.049 ppb	104.510 %	101.470 %	102.496 %
Concentration per Run 3	0.007 ppb	0.019 ppb	102.263 %	103.255 %	0.172 ppb	0.087 ppb	102.488 %	103.611 %	103.886 %
Recovery Percentage 1	3.033 %				3.749 %	21.501 %			
Concentration RSD	43.1 %	37.9 %	1.5 %	3.2 %	16.5 %	66.3 %	1.6 %	4.2 %	1.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	103.169 %	0.103 ppb	0.022 ppb	103.170 %	105.014 %
Concentration per Run 1	105.993 %	0.076 ppb	0.023 ppb	103.347 %	108.334 %
Concentration per Run 2	102.637 %	0.117 ppb	0.023 ppb	104.010 %	102.946 %
Concentration per Run 3	100.879 %	0.116 ppb	0.021 ppb	102.151 %	103.763 %
Recovery Percentage 1		10.286 %	2.249 %		
Concentration RSD	2.5 %	23.0 %	6.4 %	0.9 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	38	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350269-11 6020TL	Rack	1		
Analysis started at:	9/14/2023 1:59:20 PM	Vial	18		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	111.016 %	109.619 %	0.005 ppb	0.515 ppb	12.926 ppb	3.957 ppb	4.815 ppb	3.281 ppb	10.276 ppb
Concentration per Run 1	112.318 %	109.419 %	0.008 ppb	0.510 ppb	11.404 ppb	2.307 ppb	4.770 ppb	-10.540 ppb	-16.989 ppb
Concentration per Run 2	110.437 %	116.032 %	0.005 ppb	0.488 ppb	12.905 ppb	4.644 ppb	4.677 ppb	18.378 ppb	24.978 ppb
Concentration per Run 3	110.292 %	103.407 %	0.003 ppb	0.548 ppb	14.471 ppb	4.920 ppb	4.997 ppb	2.004 ppb	22.838 ppb
Concentration RSD	1.0 %	5.8 %	49.1 %	5.9 %	11.9 %	36.3 %	3.4 %	442.0 %	230.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	113.116 %	116.621 %	-0.009 ppb	0.980 ppb	1.166 ppb	13.097 ppb	0.018 ppb	0.846 ppb	0.153 ppb
Concentration per Run 1	117.212 %	119.293 %	-0.027 ppb	0.903 ppb	1.165 ppb	16.791 ppb	0.003 ppb	0.991 ppb	0.147 ppb
Concentration per Run 2	114.035 %	112.582 %	0.027 ppb	1.070 ppb	1.158 ppb	11.316 ppb	0.026 ppb	0.818 ppb	0.145 ppb
Concentration per Run 3	108.100 %	117.988 %	-0.027 ppb	0.966 ppb	1.174 ppb	11.183 ppb	0.023 ppb	0.729 ppb	0.168 ppb
Concentration RSD	4.1 %	3.1 %	348.4 %	8.6 %	0.7 %	24.4 %	70.5 %	15.8 %	8.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.164 ppb	107.419 %	106.584 %	0.026 ppb	0.124 ppb	0.093 ppb	0.079 ppb	105.588 %	106.522 %
Concentration per Run 1	-0.182 ppb	106.730 %	108.392 %	0.002 ppb	0.004 ppb	0.057 ppb	0.086 ppb	105.591 %	108.236 %
Concentration per Run 2	-0.220 ppb	109.314 %	108.140 %	0.065 ppb	0.004 ppb	0.093 ppb	0.068 ppb	105.369 %	104.753 %
Concentration per Run 3	-0.092 ppb	106.214 %	103.219 %	0.011 ppb	0.364 ppb	0.129 ppb	0.082 ppb	105.804 %	106.578 %
Concentration RSD	40.0 %	1.5 %	2.7 %	130.8 %	168.1 %	38.7 %	12.0 %	0.2 %	1.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.001 ppb	0.004 ppb	103.452 %	108.880 %	0.077 ppb	0.255 ppb	106.255 %	108.149 %	104.158 %
Concentration per Run 1	0.000 ppb	0.003 ppb	103.600 %	112.459 %	0.060 ppb	0.253 ppb	105.273 %	110.741 %	104.076 %
Concentration per Run 2	0.000 ppb	0.006 ppb	103.212 %	104.333 %	0.080 ppb	0.268 ppb	107.504 %	107.259 %	105.274 %
Concentration per Run 3	0.002 ppb	0.003 ppb	103.542 %	109.847 %	0.091 ppb	0.244 ppb	105.987 %	106.448 %	103.123 %
Concentration RSD	134.2 %	46.6 %	0.2 %	3.8 %	20.6 %	4.7 %	1.1 %	2.1 %	1.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	104.515 %	0.020 ppb	0.029 ppb	104.099 %	106.861 %
Concentration per Run 1	106.856 %	0.006 ppb	0.023 ppb	104.400 %	110.451 %
Concentration per Run 2	102.867 %	0.023 ppb	0.029 ppb	105.540 %	105.981 %
Concentration per Run 3	103.820 %	0.033 ppb	0.034 ppb	102.356 %	104.150 %
Concentration RSD	2.0 %	67.1 %	19.0 %	1.6 %	3.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	39	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350484-01 6020TL	Rack	1		
Analysis started at:	9/14/2023 2:04:05 PM	Vial	19		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.362 %	101.002 %	0.008 ppb	81.067 ppb	6,619.194 ppb	49,750.201 ppb	2.758 ppb	1,370.384 ppb	257,166.974 ppb
Concentration per Run 1	110.483 %	107.615 %	0.008 ppb	79.619 ppb	6,429.833 ppb	47,196.057 ppb	2.569 ppb	1,387.097 ppb	252,496.906 ppb
Concentration per Run 2	107.836 %	102.204 %	0.007 ppb	81.953 ppb	6,529.495 ppb	50,423.160 ppb	2.871 ppb	1,296.276 ppb	266,278.265 ppb
Concentration per Run 3	109.768 %	93.186 %	0.008 ppb	81.630 ppb	6,898.254 ppb	51,631.386 ppb	2.834 ppb	1,427.780 ppb	252,725.751 ppb
Concentration RSD	1.3 %	7.2 %	5.0 %	1.6 %	3.7 %	4.6 %	6.0 %	4.9 %	3.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	123.648 %	110.749 %	0.248 ppb	0.220 ppb	1,891.122 ppb	1,411.622 ppb	1.008 ppb	2.271 ppb	0.757 ppb
Concentration per Run 1	124.975 %	109.786 %	0.216 ppb	0.262 ppb	1,816.568 ppb	1,382.942 ppb	0.974 ppb	2.143 ppb	0.711 ppb
Concentration per Run 2	123.097 %	110.066 %	0.240 ppb	0.212 ppb	1,941.968 ppb	1,476.121 ppb	0.989 ppb	2.410 ppb	0.838 ppb
Concentration per Run 3	122.873 %	112.396 %	0.287 ppb	0.185 ppb	1,914.831 ppb	1,375.805 ppb	1.062 ppb	2.261 ppb	0.723 ppb
Concentration RSD	0.9 %	1.3 %	14.7 %	17.8 %	3.5 %	4.0 %	4.7 %	5.9 %	9.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.018 ppb	112.943 %	101.588 %	0.492 ppb	0.126 ppb	1,015.772 ppb	0.725 ppb	103.878 %	97.704 %
Concentration per Run 1	1.163 ppb	110.451 %	107.137 %	0.524 ppb	0.004 ppb	959.135 ppb	0.644 ppb	101.095 %	100.839 %
Concentration per Run 2	1.084 ppb	116.138 %	95.384 %	0.552 ppb	0.187 ppb	1,063.962 ppb	0.882 ppb	104.696 %	96.272 %
Concentration per Run 3	0.806 ppb	112.239 %	102.244 %	0.399 ppb	0.188 ppb	1,024.219 ppb	0.648 ppb	105.843 %	96.001 %
Concentration RSD	18.5 %	2.6 %	5.8 %	16.5 %	84.1 %	5.2 %	18.8 %	2.4 %	2.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.004 ppb	0.052 ppb	107.849 %	102.140 %	0.127 ppb	96.601 ppb	111.792 %	105.671 %	110.191 %
Concentration per Run 1	0.005 ppb	0.038 ppb	104.803 %	102.743 %	0.116 ppb	94.185 ppb	109.208 %	107.978 %	107.146 %
Concentration per Run 2	0.003 ppb	0.074 ppb	108.220 %	101.812 %	0.141 ppb	97.566 ppb	110.447 %	103.472 %	109.969 %
Concentration per Run 3	0.004 ppb	0.045 ppb	110.524 %	101.864 %	0.122 ppb	98.052 ppb	115.723 %	105.563 %	113.459 %
Concentration RSD	24.7 %	36.6 %	2.7 %	0.5 %	10.0 %	2.2 %	3.1 %	2.1 %	2.9 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	102.958 %	0.020 ppb	0.014 ppb	104.988 %	95.494 %
Concentration per Run 1	105.257 %	0.010 ppb	0.013 ppb	102.271 %	99.477 %
Concentration per Run 2	101.814 %	0.020 ppb	0.012 ppb	104.799 %	94.549 %
Concentration per Run 3	101.801 %	0.030 ppb	0.018 ppb	107.895 %	92.457 %
Concentration RSD	1.9 %	50.3 %	21.0 %	2.7 %	3.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 40 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2350484-02 6020TL Rack 1
Analysis started at: 9/14/2023 2:08:51 PM Vial 20

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	106.063 %	93.988 %	0.002 ppb	163.432 ppb	22,325.065 ppb	37,953.033 ppb	2.406 ppb	3,626.798 ppb	183,510.366 ppb
Concentration per Run 1	105.234 %	108.818 %	0.004 ppb	166.277 ppb	20,090.591 ppb	33,289.611 ppb	2.365 ppb	3,539.937 ppb	174,902.368 ppb
Concentration per Run 2	106.613 %	99.198 %	0.002 ppb	159.703 ppb	21,191.830 ppb	36,569.614 ppb	2.425 ppb	3,470.940 ppb	182,445.309 ppb
Concentration per Run 3	106.342 %	73.948 %	0.000 ppb	164.317 ppb	25,692.774 ppb	43,999.875 ppb	2.429 ppb	3,869.517 ppb	193,183.421 ppb
Concentration RSD	0.7 %	19.2 %	118.6 %	2.1 %	13.3 %	14.5 %	1.5 %	5.9 %	5.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	120.498 %	109.507 %	0.304 ppb	0.173 ppb	1,121.716 ppb	3,611.111 ppb	0.676 ppb	1.945 ppb	0.084 ppb
Concentration per Run 1	116.508 %	112.769 %	0.318 ppb	0.117 ppb	1,060.272 ppb	3,407.887 ppb	0.619 ppb	1.654 ppb	0.057 ppb
Concentration per Run 2	119.446 %	112.303 %	0.268 ppb	0.179 ppb	1,123.347 ppb	3,709.390 ppb	0.696 ppb	2.159 ppb	0.076 ppb
Concentration per Run 3	125.539 %	103.449 %	0.326 ppb	0.222 ppb	1,181.528 ppb	3,716.056 ppb	0.713 ppb	2.021 ppb	0.118 ppb
Concentration RSD	3.8 %	4.8 %	10.3 %	30.6 %	5.4 %	4.9 %	7.4 %	13.4 %	37.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.698 ppb	112.439 %	106.614 %	0.467 ppb	-0.011 ppb	996.903 ppb	0.720 ppb	103.601 %	99.790 %
Concentration per Run 1	0.558 ppb	109.192 %	110.236 %	0.361 ppb	-0.007 ppb	932.645 ppb	0.609 ppb	103.054 %	104.295 %
Concentration per Run 2	0.718 ppb	110.330 %	103.289 %	0.566 ppb	-0.019 ppb	1,025.935 ppb	0.796 ppb	101.150 %	97.181 %
Concentration per Run 3	0.818 ppb	117.795 %	106.318 %	0.475 ppb	-0.007 ppb	1,032.128 ppb	0.756 ppb	106.599 %	97.894 %
Concentration RSD	18.8 %	4.2 %	3.3 %	21.9 %	62.0 %	5.6 %	13.7 %	2.7 %	3.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.001 ppb	0.003 ppb	106.210 %	101.672 %	0.092 ppb	139.220 ppb	111.944 %	108.443 %	112.226 %
Concentration per Run 1	0.000 ppb	0.006 ppb	102.674 %	105.212 %	0.087 ppb	129.706 ppb	111.868 %	112.950 %	108.532 %
Concentration per Run 2	0.002 ppb	0.000 ppb	107.205 %	100.170 %	0.097 ppb	141.480 ppb	112.250 %	107.316 %	111.668 %
Concentration per Run 3	0.001 ppb	0.003 ppb	108.752 %	99.633 %	0.091 ppb	146.475 ppb	111.715 %	105.062 %	116.477 %
Concentration RSD	93.8 %	98.1 %	3.0 %	3.0 %	5.4 %	6.2 %	0.2 %	3.7 %	3.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	104.952 %	0.004 ppb	0.016 ppb	105.590 %	98.705 %
Concentration per Run 1	109.799 %	-0.004 ppb	0.016 ppb	101.293 %	102.284 %
Concentration per Run 2	103.917 %	0.006 ppb	0.018 ppb	106.933 %	98.176 %
Concentration per Run 3	101.139 %	0.009 ppb	0.014 ppb	108.543 %	95.654 %
Concentration RSD	4.2 %	176.2 %	12.4 %	3.6 %	3.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	41	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350484-03 6020TL	Rack	1		
Analysis started at:	9/14/2023 2:13:37 PM	Vial	21		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	111.900 %	108.016 %	0.006 ppb	1,105.142 ppb	13,668.764 ppb	36,728.189 ppb	1.815 ppb	2,824.651 ppb	308,140.191 ppb
Concentration per Run 1	111.923 %	110.020 %	0.002 ppb	1,103.389 ppb	13,534.694 ppb	36,793.833 ppb	1.910 ppb	2,844.714 ppb	309,372.871 ppb
Concentration per Run 2	111.536 %	107.014 %	0.008 ppb	1,116.735 ppb	13,800.231 ppb	35,606.677 ppb	1.805 ppb	2,750.180 ppb	289,763.053 ppb
Concentration per Run 3	112.242 %	107.014 %	0.007 ppb	1,095.302 ppb	13,671.367 ppb	37,784.058 ppb	1.730 ppb	2,879.058 ppb	325,284.649 ppb
Concentration RSD	0.3 %	1.6 %	50.1 %	1.0 %	1.0 %	3.0 %	5.0 %	2.4 %	5.8 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	123.470 %	111.526 %	0.207 ppb	0.164 ppb	3,276.698 ppb	12,148.887 ppb	2.846 ppb	2.282 ppb	0.157 ppb
Concentration per Run 1	122.944 %	108.015 %	0.217 ppb	0.111 ppb	3,244.779 ppb	12,222.693 ppb	3.003 ppb	2.240 ppb	0.185 ppb
Concentration per Run 2	120.787 %	116.404 %	0.189 ppb	0.150 ppb	3,253.239 ppb	11,944.095 ppb	2.822 ppb	2.340 ppb	0.164 ppb
Concentration per Run 3	126.681 %	110.159 %	0.216 ppb	0.232 ppb	3,332.076 ppb	12,279.871 ppb	2.714 ppb	2.268 ppb	0.123 ppb
Concentration RSD	2.4 %	3.9 %	7.8 %	37.7 %	1.5 %	1.5 %	5.1 %	2.3 %	20.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	2.721 ppb	114.794 %	105.871 %	0.520 ppb	0.299 ppb	3,136.486 ppb	2.934 ppb	107.064 %	101.257 %
Concentration per Run 1	2.570 ppb	111.603 %	110.010 %	0.575 ppb	0.346 ppb	2,976.019 ppb	2.765 ppb	104.514 %	102.356 %
Concentration per Run 2	2.956 ppb	115.210 %	102.104 %	0.589 ppb	0.370 ppb	3,236.495 ppb	3.040 ppb	109.839 %	101.020 %
Concentration per Run 3	2.636 ppb	117.569 %	105.497 %	0.395 ppb	0.182 ppb	3,196.943 ppb	2.997 ppb	106.839 %	100.395 %
Concentration RSD	7.6 %	2.6 %	3.7 %	20.7 %	34.2 %	4.5 %	5.0 %	2.5 %	1.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.000 ppb	0.043 ppb	107.584 %	104.368 %	0.051 ppb	109.103 ppb	114.454 %	108.566 %	115.086 %
Concentration per Run 1	0.001 ppb	0.040 ppb	105.891 %	107.220 %	0.050 ppb	106.462 ppb	111.393 %	112.639 %	115.138 %
Concentration per Run 2	0.000 ppb	0.051 ppb	106.748 %	101.366 %	0.059 ppb	110.976 ppb	117.046 %	106.550 %	116.357 %
Concentration per Run 3	0.000 ppb	0.038 ppb	110.113 %	104.516 %	0.044 ppb	109.873 ppb	114.922 %	106.508 %	113.762 %
Concentration RSD	316.3 %	16.9 %	2.1 %	2.8 %	14.8 %	2.2 %	2.5 %	3.2 %	1.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.862 %	0.009 ppb	0.019 ppb	110.183 %	98.336 %
Concentration per Run 1	110.741 %	0.002 ppb	0.019 ppb	104.357 %	100.403 %
Concentration per Run 2	105.608 %	0.011 ppb	0.020 ppb	113.385 %	98.116 %
Concentration per Run 3	104.239 %	0.015 ppb	0.018 ppb	112.808 %	96.490 %
Concentration RSD	3.2 %	68.9 %	4.9 %	4.6 %	2.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	42	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350166-01 6020TL	Rack	1		
Analysis started at:	9/14/2023 2:18:23 PM	Vial	16		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	169.456 %	160.922 %	0.099 ppb	36.426 ppb	22,616.674 ppb	36,678.687 ppb	2,357.857 ppb	3,662.390 ppb	140,758.086 ppb
Concentration per Run 1	169.889 %	162.325 %	0.093 ppb	35.786 ppb	22,879.303 ppb	35,811.703 ppb	2,368.055 ppb	3,756.073 ppb	136,441.678 ppb
Concentration per Run 2	168.638 %	159.319 %	0.103 ppb	36.742 ppb	22,737.477 ppb	38,022.506 ppb	2,410.875 ppb	3,686.973 ppb	148,063.070 ppb
Concentration per Run 3	169.840 %	161.123 %	0.102 ppb	36.750 ppb	22,233.243 ppb	36,201.852 ppb	2,294.641 ppb	3,544.122 ppb	137,769.509 ppb
Concentration RSD	0.4 %	0.9 %	5.8 %	1.5 %	1.5 %	3.2 %	2.5 %	3.0 %	4.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	122.891 %	110.376 %	5.626 ppb	4.373 ppb	441.342 ppb	5,072.246 ppb	3.102 ppb	8.450 ppb	9.905 ppb
Concentration per Run 1	122.908 %	108.015 %	6.084 ppb	4.396 ppb	425.966 ppb	5,010.715 ppb	2.845 ppb	8.552 ppb	9.464 ppb
Concentration per Run 2	122.680 %	108.295 %	5.280 ppb	4.485 ppb	453.237 ppb	5,105.496 ppb	3.245 ppb	8.842 ppb	9.717 ppb
Concentration per Run 3	123.085 %	114.819 %	5.515 ppb	4.238 ppb	444.823 ppb	5,100.528 ppb	3.215 ppb	7.955 ppb	10.536 ppb
Concentration RSD	0.2 %	3.5 %	7.3 %	2.9 %	3.2 %	1.1 %	7.2 %	5.4 %	5.7 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	46.798 ppb	114.250 %	109.865 %	1.958 ppb	1.690 ppb	5,417.770 ppb	1.608 ppb	105.593 %	98.947 %
Concentration per Run 1	45.143 ppb	113.480 %	115.638 %	2.172 ppb	1.121 ppb	5,048.454 ppb	1.491 ppb	104.156 %	102.881 %
Concentration per Run 2	47.067 ppb	116.285 %	107.389 %	1.957 ppb	1.173 ppb	5,528.150 ppb	1.634 ppb	108.206 %	97.050 %
Concentration per Run 3	48.183 ppb	112.985 %	106.569 %	1.744 ppb	2.777 ppb	5,676.707 ppb	1.698 ppb	104.416 %	96.912 %
Concentration RSD	3.3 %	1.6 %	4.6 %	10.9 %	55.7 %	6.1 %	6.6 %	2.1 %	3.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.060 ppb	0.397 ppb	108.750 %	104.560 %	0.200 ppb	112.986 ppb	116.044 %	108.084 %	115.940 %
Concentration per Run 1	0.055 ppb	0.382 ppb	107.001 %	106.945 %	0.232 ppb	106.997 ppb	116.739 %	110.185 %	113.249 %
Concentration per Run 2	0.068 ppb	0.392 ppb	109.973 %	104.569 %	0.192 ppb	113.338 ppb	115.456 %	108.036 %	115.907 %
Concentration per Run 3	0.058 ppb	0.417 ppb	109.277 %	102.166 %	0.175 ppb	118.623 ppb	115.935 %	106.032 %	118.664 %
Concentration RSD	11.2 %	4.6 %	1.4 %	2.3 %	14.6 %	5.2 %	0.6 %	1.9 %	2.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	107.560 %	0.071 ppb	10.034 ppb	106.962 %	100.606 %
Concentration per Run 1	113.337 %	0.056 ppb	9.493 ppb	104.190 %	104.468 %
Concentration per Run 2	105.692 %	0.078 ppb	10.138 ppb	108.530 %	100.652 %
Concentration per Run 3	103.650 %	0.080 ppb	10.473 ppb	108.166 %	96.697 %
Concentration RSD	4.7 %	18.8 %	5.0 %	2.3 %	3.9 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 43 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2350269-09 6020TL Rack 1
Analysis started at: 9/14/2023 2:23:08 PM Vial 17

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	103.013 %	109.018 %	-0.002 ppb	41.498 ppb	63,524.836 ppb	322.580 ppb	821.302 ppb	38,207.898 ppb	101,068.410 ppb
Concentration per Run 1	101.862 %	122.044 %	0.002 ppb	42.004 ppb	57,460.125 ppb	297.365 ppb	811.221 ppb	37,113.021 ppb	99,047.245 ppb
Concentration per Run 2	103.117 %	105.210 %	-0.005 ppb	41.374 ppb	65,328.580 ppb	319.642 ppb	854.280 ppb	38,853.601 ppb	97,829.578 ppb
Concentration per Run 3	104.061 %	99.800 %	-0.002 ppb	41.116 ppb	67,785.802 ppb	350.732 ppb	798.404 ppb	38,657.073 ppb	106,328.409 ppb
Concentration RSD	1.1 %	10.6 %	176.9 %	1.1 %	8.5 %	8.3 %	3.6 %	2.5 %	4.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	118.848 %	107.456 %	20.938 ppb	0.207 ppb	70.321 ppb	63.764 ppb	0.627 ppb	6.891 ppb	1.386 ppb
Concentration per Run 1	122.799 %	107.549 %	21.370 ppb	0.207 ppb	68.857 ppb	61.521 ppb	0.619 ppb	6.834 ppb	1.440 ppb
Concentration per Run 2	114.364 %	110.811 %	20.131 ppb	0.248 ppb	69.650 ppb	65.098 ppb	0.624 ppb	6.553 ppb	1.271 ppb
Concentration per Run 3	119.382 %	104.008 %	21.313 ppb	0.165 ppb	72.456 ppb	64.673 ppb	0.638 ppb	7.285 ppb	1.447 ppb
Concentration RSD	3.6 %	3.2 %	3.3 %	20.1 %	2.7 %	3.1 %	1.6 %	5.4 %	7.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.348 ppb	118.746 %	105.642 %	5.027 ppb	1.720 ppb	1,156.404 ppb	42.819 ppb	106.875 %	99.827 %
Concentration per Run 1	0.331 ppb	116.799 %	107.684 %	4.758 ppb	1.387 ppb	1,093.876 ppb	39.782 ppb	106.311 %	103.852 %
Concentration per Run 2	0.311 ppb	117.463 %	105.567 %	5.325 ppb	2.146 ppb	1,173.161 ppb	44.399 ppb	103.766 %	98.228 %
Concentration per Run 3	0.403 ppb	121.977 %	103.675 %	4.998 ppb	1.627 ppb	1,202.174 ppb	44.275 ppb	110.550 %	97.401 %
Concentration RSD	14.0 %	2.4 %	1.9 %	5.7 %	22.6 %	4.8 %	6.1 %	3.2 %	3.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.001 ppb	0.006 ppb	110.282 %	103.208 %	0.658 ppb	7.695 ppb	114.591 %	108.604 %	115.706 %
Concentration per Run 1	0.001 ppb	0.003 ppb	108.242 %	106.236 %	0.615 ppb	7.650 ppb	114.219 %	115.539 %	113.452 %
Concentration per Run 2	0.002 ppb	0.010 ppb	109.771 %	101.654 %	0.695 ppb	8.006 ppb	115.398 %	104.970 %	116.987 %
Concentration per Run 3	0.002 ppb	0.006 ppb	112.832 %	101.733 %	0.663 ppb	7.429 ppb	114.158 %	105.302 %	116.679 %
Concentration RSD	32.4 %	51.5 %	2.1 %	2.5 %	6.1 %	3.8 %	0.6 %	5.5 %	1.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	107.945 %	0.002 ppb	0.042 ppb	108.515 %	98.358 %
Concentration per Run 1	110.019 %	-0.004 ppb	0.039 ppb	105.456 %	102.233 %
Concentration per Run 2	108.261 %	0.002 ppb	0.041 ppb	110.308 %	98.509 %
Concentration per Run 3	105.555 %	0.008 ppb	0.045 ppb	109.782 %	94.333 %
Concentration RSD	2.1 %	327.2 %	7.8 %	2.5 %	4.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 44
Analysis label: L2350484-02D5 6020TL
Analysis started at: 9/14/2023 2:31:43 PM
User name ALPHALAB\ICPMSRQ
Rack 1
Vial 22
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	108.099 %	106.413 %	-0.003 ppb	34.528 ppb	4,210.609 ppb	7,233.555 ppb	1.207 ppb	749.198 ppb	36,548.891 ppb
Concentration per Run 1	107.640 %	107.615 %	-0.005 ppb	34.267 ppb	4,339.527 ppb	7,371.187 ppb	1.174 ppb	779.685 ppb	38,948.538 ppb
Concentration per Run 2	108.061 %	109.419 %	0.000 ppb	34.776 ppb	4,092.775 ppb	6,964.785 ppb	1.254 ppb	678.670 ppb	37,311.187 ppb
Concentration per Run 3	108.596 %	102.204 %	-0.004 ppb	34.542 ppb	4,199.525 ppb	7,364.694 ppb	1.194 ppb	789.239 ppb	33,386.948 ppb
Concentration RSD	0.4 %	3.5 %	79.0 %	0.7 %	2.9 %	3.2 %	3.5 %	8.2 %	7.8 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	107.982 %	113.173 %	0.075 ppb	0.012 ppb	230.642 ppb	734.121 ppb	0.142 ppb	0.398 ppb	0.001 ppb
Concentration per Run 1	110.149 %	108.295 %	0.028 ppb	0.038 ppb	232.521 ppb	729.035 ppb	0.147 ppb	0.290 ppb	-0.022 ppb
Concentration per Run 2	103.419 %	117.895 %	0.113 ppb	0.023 ppb	224.859 ppb	737.877 ppb	0.130 ppb	0.453 ppb	0.004 ppb
Concentration per Run 3	110.378 %	113.328 %	0.083 ppb	-0.025 ppb	234.546 ppb	735.452 ppb	0.148 ppb	0.452 ppb	0.021 ppb
Concentration RSD	3.7 %	4.2 %	57.4 %	265.7 %	2.2 %	0.6 %	7.3 %	23.6 %	2,809.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.406 ppb	111.090 %	110.562 %	0.210 ppb	0.107 ppb	212.694 ppb	0.170 ppb	104.811 %	105.715 %
Concentration per Run 1	0.430 ppb	110.633 %	116.067 %	0.093 ppb	0.166 ppb	203.942 ppb	0.158 ppb	103.557 %	107.321 %
Concentration per Run 2	0.392 ppb	111.708 %	111.420 %	0.255 ppb	0.163 ppb	212.942 ppb	0.200 ppb	105.416 %	103.831 %
Concentration per Run 3	0.395 ppb	110.929 %	104.200 %	0.283 ppb	-0.007 ppb	221.198 ppb	0.152 ppb	105.459 %	105.994 %
Concentration RSD	5.2 %	0.5 %	5.4 %	48.7 %	92.4 %	4.1 %	15.3 %	1.0 %	1.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.000 ppb	0.003 ppb	108.523 %	112.394 %	0.008 ppb	28.398 ppb	108.994 %	114.229 %	109.466 %
Concentration per Run 1	0.000 ppb	0.003 ppb	107.559 %	111.908 %	0.009 ppb	27.909 ppb	112.208 %	117.035 %	111.067 %
Concentration per Run 2	0.001 ppb	0.003 ppb	107.127 %	111.764 %	0.005 ppb	28.804 ppb	106.096 %	111.542 %	108.053 %
Concentration per Run 3	0.000 ppb	0.003 ppb	110.882 %	113.510 %	0.011 ppb	28.480 ppb	108.679 %	114.108 %	109.278 %
Concentration RSD	96.2 %	0.9 %	1.9 %	0.9 %	34.2 %	1.6 %	2.8 %	2.4 %	1.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	113.108 %	-0.006 ppb	0.006 ppb	107.739 %	106.982 %
Concentration per Run 1	116.224 %	-0.010 ppb	0.007 ppb	104.736 %	109.247 %
Concentration per Run 2	111.931 %	-0.006 ppb	0.005 ppb	109.544 %	107.130 %
Concentration per Run 3	111.170 %	-0.003 ppb	0.005 ppb	108.938 %	104.568 %
Concentration RSD	2.4 %	58.2 %	18.9 %	2.4 %	2.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	45	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350484-03D25 6020TL	Rack	1		
Analysis started at:	9/14/2023 2:39:38 PM	Vial	23		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	107.466 %	105.210 %	-0.006 ppb	54.877 ppb	624.133 ppb	1,688.828 ppb	0.155 ppb	118.680 ppb	14,910.418 ppb
Concentration per Run 1	108.399 %	107.615 %	-0.008 ppb	54.100 ppb	634.552 ppb	1,716.076 ppb	0.131 ppb	121.670 ppb	15,605.405 ppb
Concentration per Run 2	107.758 %	109.419 %	-0.008 ppb	55.018 ppb	577.730 ppb	1,605.447 ppb	0.191 ppb	125.873 ppb	14,175.056 ppb
Concentration per Run 3	106.242 %	98.597 %	-0.002 ppb	55.514 ppb	660.116 ppb	1,744.960 ppb	0.144 ppb	108.497 ppb	14,950.795 ppb
Concentration RSD	1.0 %	5.5 %	54.2 %	1.3 %	6.8 %	4.4 %	20.5 %	7.6 %	4.8 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	108.591 %	107.922 %	0.017 ppb	0.013 ppb	145.063 ppb	530.890 ppb	0.135 ppb	0.127 ppb	-0.009 ppb
Concentration per Run 1	108.915 %	106.617 %	0.011 ppb	-0.024 ppb	145.035 ppb	550.069 ppb	0.134 ppb	0.112 ppb	-0.027 ppb
Concentration per Run 2	109.803 %	112.303 %	0.009 ppb	0.011 ppb	140.037 ppb	518.882 ppb	0.137 ppb	0.168 ppb	0.006 ppb
Concentration per Run 3	107.057 %	104.846 %	0.031 ppb	0.052 ppb	150.118 ppb	523.721 ppb	0.133 ppb	0.099 ppb	-0.005 ppb
Concentration RSD	1.3 %	3.6 %	71.9 %	291.7 %	3.5 %	3.2 %	1.8 %	29.2 %	185.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.421 ppb	110.114 %	108.474 %	-0.002 ppb	0.056 ppb	131.604 ppb	0.116 ppb	106.446 %	103.719 %
Concentration per Run 1	0.307 ppb	113.500 %	111.056 %	-0.049 ppb	-0.007 ppb	128.798 ppb	0.129 ppb	107.614 %	104.716 %
Concentration per Run 2	0.542 ppb	107.769 %	108.778 %	0.004 ppb	-0.007 ppb	131.299 ppb	0.060 ppb	105.579 %	105.540 %
Concentration per Run 3	0.416 ppb	109.073 %	105.588 %	0.039 ppb	0.182 ppb	134.716 ppb	0.158 ppb	106.146 %	100.899 %
Concentration RSD	27.9 %	2.7 %	2.5 %	2,139.6 %	194.0 %	2.3 %	43.2 %	1.0 %	2.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.001 ppb	0.003 ppb	105.470 %	108.463 %	0.000 ppb	4.752 ppb	108.533 %	111.868 %	107.736 %
Concentration per Run 1	0.000 ppb	0.003 ppb	105.118 %	108.034 %	0.006 ppb	5.028 ppb	110.209 %	112.444 %	107.889 %
Concentration per Run 2	0.002 ppb	0.003 ppb	104.625 %	113.115 %	-0.009 ppb	4.221 ppb	106.316 %	112.895 %	107.672 %
Concentration per Run 3	0.001 ppb	0.003 ppb	106.668 %	104.241 %	0.005 ppb	5.006 ppb	109.074 %	110.263 %	107.647 %
Concentration RSD	156.1 %	3.5 %	1.0 %	4.1 %	1,936.5 %	9.7 %	1.8 %	1.3 %	0.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	107.216 %	-0.005 ppb	0.003 ppb	107.576 %	105.934 %
Concentration per Run 1	106.474 %	-0.010 ppb	0.004 ppb	105.394 %	104.922 %
Concentration per Run 2	108.833 %	-0.002 ppb	0.004 ppb	107.653 %	109.596 %
Concentration per Run 3	106.341 %	-0.004 ppb	0.002 ppb	109.683 %	103.285 %
Concentration RSD	1.3 %	76.7 %	44.0 %	2.0 %	3.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	46	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 2:48:17 PM	Vial	9		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	106.269 %	105.210 %	56.354 ppb	57.563 ppb	5,906.826 ppb	5,943.092 ppb	59.212 ppb	6,202.426 ppb	5,470.297 ppb
Concentration per Run 1	105.559 %	113.026 %	57.209 ppb	58.054 ppb	5,632.729 ppb	5,678.547 ppb	59.460 ppb	5,905.871 ppb	5,049.171 ppb
Concentration per Run 2	105.649 %	107.615 %	56.153 ppb	58.507 ppb	5,722.666 ppb	5,830.988 ppb	60.840 ppb	6,425.222 ppb	5,922.996 ppb
Concentration per Run 3	107.599 %	94.990 %	55.701 ppb	56.128 ppb	6,365.083 ppb	6,319.743 ppb	57.336 ppb	6,276.186 ppb	5,438.723 ppb
Recovery Percentage 1			93.924 %	95.939 %	98.447 %	99.052 %	98.686 %	103.374 %	91.172 %
Concentration RSD	1.1 %	8.8 %	1.4 %	2.2 %	6.8 %	5.6 %	3.0 %	4.3 %	8.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	114.245 %	120.567 %	55.714 ppb	54.970 ppb	59.472 ppb	6,109.898 ppb	59.539 ppb	58.775 ppb	58.412 ppb
Concentration per Run 1	115.829 %	123.114 %	52.686 ppb	52.453 ppb	56.996 ppb	5,898.406 ppb	56.756 ppb	56.646 ppb	56.490 ppb
Concentration per Run 2	111.220 %	120.784 %	55.494 ppb	56.185 ppb	60.435 ppb	6,276.751 ppb	60.679 ppb	60.849 ppb	61.206 ppb
Concentration per Run 3	115.685 %	117.802 %	58.964 ppb	56.273 ppb	60.986 ppb	6,154.538 ppb	61.182 ppb	58.831 ppb	57.541 ppb
Recovery Percentage 1			92.857 %	91.617 %	99.120 %	101.832 %	99.232 %	97.959 %	97.353 %
Concentration RSD	2.3 %	2.2 %	5.6 %	4.0 %	3.6 %	3.2 %	4.1 %	3.6 %	4.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	58.805 ppb	106.449 %	107.155 %	56.489 ppb	59.034 ppb	60.737 ppb	54.117 ppb	102.329 %	104.534 %
Concentration per Run 1	57.181 ppb	106.960 %	111.907 %	52.808 ppb	54.509 ppb	55.844 ppb	51.330 ppb	101.819 %	110.148 %
Concentration per Run 2	60.114 ppb	104.258 %	102.887 %	59.293 ppb	56.807 ppb	63.225 ppb	56.992 ppb	102.435 %	102.652 %
Concentration per Run 3	59.121 ppb	108.130 %	106.670 %	57.367 ppb	65.786 ppb	63.143 ppb	54.028 ppb	102.735 %	100.803 %
Recovery Percentage 1	98.009 %			94.149 %	98.390 %	101.229 %	90.195 %		
Concentration RSD	2.5 %	1.9 %	4.2 %	5.9 %	10.1 %	7.0 %	5.2 %	0.5 %	4.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	55.727 ppb	56.570 ppb	104.199 %	107.811 %	56.310 ppb	58.131 ppb	108.162 %	112.386 %	107.031 %
Concentration per Run 1	52.006 ppb	52.487 ppb	101.350 %	112.748 %	53.006 ppb	54.288 ppb	105.656 %	118.236 %	104.037 %
Concentration per Run 2	57.062 ppb	58.563 ppb	105.722 %	107.418 %	56.563 ppb	60.321 ppb	108.419 %	108.681 %	105.907 %
Concentration per Run 3	58.114 ppb	58.661 ppb	105.525 %	103.268 %	59.363 ppb	59.784 ppb	110.411 %	110.241 %	111.149 %
Recovery Percentage 1	92.879 %	94.284 %			93.851 %	96.885 %			
Concentration RSD	5.9 %	6.3 %	2.4 %	4.4 %	5.7 %	5.7 %	2.2 %	4.6 %	3.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	110.363 %	55.219 ppb	55.654 ppb	105.762 %	104.948 %
Concentration per Run 1	115.461 %	51.597 ppb	51.624 ppb	103.855 %	111.887 %
Concentration per Run 2	107.813 %	56.446 ppb	57.255 ppb	105.518 %	101.590 %
Concentration per Run 3	107.814 %	57.614 ppb	58.084 ppb	107.914 %	101.368 %
Recovery Percentage 1		92.032 %	92.757 %		
Concentration RSD	4.0 %	5.8 %	6.3 %	1.9 %	5.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	47	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 2:53:07 PM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	107.347 %	102.605 %	0.013 ppb	0.137 ppb	-2.937 ppb	1.400 ppb	0.389 ppb	2.602 ppb	-2.209 ppb
Concentration per Run 1	107.787 %	107.014 %	0.013 ppb	0.129 ppb	-1.256 ppb	1.957 ppb	0.445 ppb	10.601 ppb	-18.035 ppb
Concentration per Run 2	108.023 %	97.395 %	0.014 ppb	0.123 ppb	-1.942 ppb	1.521 ppb	0.286 ppb	-4.470 ppb	-15.802 ppb
Concentration per Run 3	106.231 %	103.407 %	0.011 ppb	0.158 ppb	-5.614 ppb	0.721 ppb	0.435 ppb	1.674 ppb	27.209 ppb
Recovery Percentage 1			2.536 %	1.367 %	-2.937 %	2.000 %	3.887 %	2.602 %	-2.209 %
Concentration RSD	0.9 %	4.7 %	11.4 %	13.9 %	79.8 %	44.8 %	22.8 %	291.3 %	1,154.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	102.683 %	109.507 %	0.023 ppb	0.037 ppb	0.119 ppb	9.806 ppb	0.022 ppb	0.067 ppb	0.023 ppb
Concentration per Run 1	100.844 %	108.481 %	0.029 ppb	0.022 ppb	0.109 ppb	7.705 ppb	0.035 ppb	0.071 ppb	0.044 ppb
Concentration per Run 2	110.586 %	108.481 %	0.030 ppb	0.021 ppb	0.138 ppb	10.193 ppb	0.010 ppb	0.078 ppb	0.023 ppb
Concentration per Run 3	96.620 %	111.557 %	0.010 ppb	0.069 ppb	0.109 ppb	11.520 ppb	0.021 ppb	0.053 ppb	0.000 ppb
Recovery Percentage 1			0.454 %	3.750 %	11.880 %	19.612 %	4.399 %	3.369 %	2.258 %
Concentration RSD	7.0 %	1.6 %	49.9 %	72.6 %	14.1 %	19.8 %	57.6 %	18.8 %	97.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.811 ppb	107.369 %	106.530 %	0.111 ppb	0.104 ppb	0.024 ppb	0.083 ppb	103.689 %	104.335 %
Concentration per Run 1	0.701 ppb	108.107 %	111.693 %	-0.022 ppb	0.161 ppb	0.083 ppb	0.071 ppb	104.196 %	108.730 %
Concentration per Run 2	0.974 ppb	107.882 %	102.399 %	0.085 ppb	-0.019 ppb	-0.015 ppb	0.093 ppb	106.023 %	101.756 %
Concentration per Run 3	0.758 ppb	106.120 %	105.497 %	0.270 ppb	0.171 ppb	0.003 ppb	0.084 ppb	100.849 %	102.519 %
Recovery Percentage 1	16.216 %			22.200 %	2.088 %	4.742 %	4.148 %		
Concentration RSD	17.8 %	1.0 %	4.4 %	133.1 %	102.1 %	220.4 %	13.3 %	2.5 %	3.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.014 ppb	0.012 ppb	103.724 %	107.264 %	0.005 ppb	0.034 ppb	106.745 %	108.657 %	105.320 %
Concentration per Run 1	0.015 ppb	0.020 ppb	104.572 %	115.229 %	0.006 ppb	0.078 ppb	107.360 %	114.428 %	107.377 %
Concentration per Run 2	0.010 ppb	0.009 ppb	103.237 %	103.675 %	0.007 ppb	0.012 ppb	108.913 %	107.085 %	106.940 %
Concentration per Run 3	0.018 ppb	0.006 ppb	103.363 %	102.888 %	0.001 ppb	0.012 ppb	103.961 %	104.457 %	101.644 %
Recovery Percentage 1	3.617 %				0.118 %	6.764 %			
Concentration RSD	29.0 %	60.4 %	0.7 %	6.4 %	73.0 %	112.2 %	2.4 %	4.8 %	3.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.647 %	0.181 ppb	0.019 ppb	107.004 %	106.648 %
Concentration per Run 1	108.402 %	0.114 ppb	0.017 ppb	109.169 %	108.727 %
Concentration per Run 2	103.428 %	0.221 ppb	0.021 ppb	108.632 %	107.039 %
Concentration per Run 3	105.112 %	0.207 ppb	0.018 ppb	103.211 %	104.176 %
Recovery Percentage 1		18.053 %	1.871 %		
Concentration RSD	2.4 %	32.3 %	11.1 %	3.1 %	2.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	48	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350250-02 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:02:31 PM	Vial	24		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.644 %	108.818 %	0.002 ppb	7.204 ppb	3,015.949 ppb	849.629 ppb	7.369 ppb	2,702.894 ppb	14,025.725 ppb
Concentration per Run 1	113.530 %	102.806 %	0.001 ppb	7.182 ppb	3,026.733 ppb	848.610 ppb	7.624 ppb	2,704.996 ppb	13,814.989 ppb
Concentration per Run 2	113.520 %	101.603 %	0.003 ppb	7.199 ppb	3,115.705 ppb	909.219 ppb	7.517 ppb	2,616.517 ppb	14,152.111 ppb
Concentration per Run 3	110.882 %	122.044 %	0.003 ppb	7.230 ppb	2,905.409 ppb	791.059 ppb	6.965 ppb	2,787.169 ppb	14,110.075 ppb
Concentration RSD	1.4 %	10.5 %	51.4 %	0.3 %	3.5 %	7.0 %	4.8 %	3.2 %	1.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	119.929 %	119.759 %	2.639 ppb	0.279 ppb	0.328 ppb	3.861 ppb	0.009 ppb	0.031 ppb	0.156 ppb
Concentration per Run 1	116.449 %	123.487 %	2.269 ppb	0.191 ppb	0.317 ppb	4.035 ppb	0.009 ppb	0.036 ppb	0.134 ppb
Concentration per Run 2	119.501 %	120.411 %	2.855 ppb	0.196 ppb	0.298 ppb	3.273 ppb	0.009 ppb	0.026 ppb	0.170 ppb
Concentration per Run 3	123.838 %	115.378 %	2.793 ppb	0.451 ppb	0.367 ppb	4.275 ppb	0.009 ppb	0.030 ppb	0.164 ppb
Concentration RSD	3.1 %	3.4 %	12.2 %	53.2 %	10.9 %	13.5 %	2.6 %	15.7 %	12.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.502 ppb	114.831 %	108.018 %	5.841 ppb	0.055 ppb	29.343 ppb	0.411 ppb	107.041 %	106.961 %
Concentration per Run 1	-0.475 ppb	116.564 %	106.773 %	6.139 ppb	-0.007 ppb	29.018 ppb	0.433 ppb	105.057 %	110.939 %
Concentration per Run 2	-0.465 ppb	112.700 %	110.144 %	5.672 ppb	-0.007 ppb	28.675 ppb	0.422 ppb	107.537 %	106.484 %
Concentration per Run 3	-0.568 ppb	115.229 %	107.138 %	5.712 ppb	0.179 ppb	30.337 ppb	0.379 ppb	108.528 %	103.460 %
Concentration RSD	11.3 %	1.7 %	1.7 %	4.4 %	194.6 %	3.0 %	6.9 %	1.7 %	3.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.027 ppb	0.007 ppb	108.854 %	112.897 %	0.014 ppb	3.196 ppb	112.681 %	113.102 %	109.676 %
Concentration per Run 1	0.025 ppb	0.008 ppb	108.742 %	118.867 %	0.011 ppb	3.401 ppb	112.482 %	117.198 %	106.795 %
Concentration per Run 2	0.031 ppb	0.009 ppb	109.807 %	108.376 %	0.016 ppb	3.273 ppb	113.681 %	111.012 %	112.403 %
Concentration per Run 3	0.025 ppb	0.003 ppb	108.014 %	111.448 %	0.013 ppb	2.913 ppb	111.882 %	111.098 %	109.831 %
Concentration RSD	12.1 %	48.8 %	0.8 %	4.8 %	18.3 %	7.9 %	0.8 %	3.1 %	2.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	112.089 %	0.023 ppb	0.014 ppb	110.009 %	111.295 %
Concentration per Run 1	116.623 %	0.007 ppb	0.014 ppb	109.724 %	115.752 %
Concentration per Run 2	110.030 %	0.029 ppb	0.013 ppb	112.045 %	110.158 %
Concentration per Run 3	109.614 %	0.032 ppb	0.015 ppb	108.257 %	107.973 %
Concentration RSD	3.5 %	62.0 %	5.7 %	1.7 %	3.6 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 49 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2350250-03 6020TL Rack 1
Analysis started at: 9/14/2023 3:07:19 PM Vial 25

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.965 %	108.417 %	0.004 ppb	78.849 ppb	45,015.761 ppb	3,521.847 ppb	45.913 ppb	4,120.130 ppb	14,532.073 ppb
Concentration per Run 1	107.400 %	96.794 %	0.005 ppb	80.820 ppb	49,911.210 ppb	3,954.304 ppb	46.731 ppb	4,485.140 ppb	16,457.398 ppb
Concentration per Run 2	111.481 %	110.020 %	0.006 ppb	78.059 ppb	41,278.796 ppb	3,138.854 ppb	47.411 ppb	3,527.552 ppb	12,596.543 ppb
Concentration per Run 3	111.013 %	118.437 %	0.000 ppb	77.668 ppb	43,857.276 ppb	3,472.385 ppb	43.598 ppb	4,347.698 ppb	14,542.279 ppb
Concentration RSD	2.0 %	10.1 %	98.4 %	2.2 %	9.8 %	11.6 %	4.4 %	12.6 %	13.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	121.188 %	110.749 %	2.113 ppb	0.146 ppb	26.494 ppb	78.954 ppb	0.060 ppb	0.220 ppb	0.616 ppb
Concentration per Run 1	115.228 %	98.416 %	2.320 ppb	0.141 ppb	29.666 ppb	94.478 ppb	0.043 ppb	0.223 ppb	0.731 ppb
Concentration per Run 2	122.148 %	126.470 %	1.836 ppb	0.084 ppb	23.213 ppb	64.211 ppb	0.048 ppb	0.140 ppb	0.556 ppb
Concentration per Run 3	126.188 %	107.363 %	2.183 ppb	0.214 ppb	26.603 ppb	78.173 ppb	0.088 ppb	0.297 ppb	0.562 ppb
Concentration RSD	4.6 %	12.9 %	11.8 %	44.3 %	12.2 %	19.2 %	41.8 %	35.8 %	16.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	10.423 ppb	117.683 %	104.374 %	581.349 ppb	0.123 ppb	32.073 ppb	4.541 ppb	107.821 %	102.005 %
Concentration per Run 1	11.405 ppb	114.828 %	97.753 %	629.875 ppb	0.004 ppb	33.919 ppb	4.846 ppb	107.131 %	96.686 %
Concentration per Run 2	8.783 ppb	119.672 %	113.516 %	518.628 ppb	-0.006 ppb	28.890 ppb	4.166 ppb	107.484 %	112.885 %
Concentration per Run 3	11.080 ppb	118.548 %	101.853 %	595.544 ppb	0.373 ppb	33.409 ppb	4.611 ppb	108.847 %	96.446 %
Concentration RSD	13.7 %	2.2 %	7.8 %	9.8 %	175.1 %	8.6 %	7.6 %	0.8 %	9.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.008 ppb	0.016 ppb	111.513 %	104.989 %	0.212 ppb	2.357 ppb	115.797 %	107.919 %	116.078 %
Concentration per Run 1	0.009 ppb	0.016 ppb	107.056 %	100.158 %	0.189 ppb	2.266 ppb	111.776 %	105.770 %	109.033 %
Concentration per Run 2	0.009 ppb	0.020 ppb	114.990 %	113.654 %	0.221 ppb	2.203 ppb	115.034 %	117.382 %	117.127 %
Concentration per Run 3	0.007 ppb	0.013 ppb	112.493 %	101.155 %	0.226 ppb	2.601 ppb	120.581 %	100.605 %	122.075 %
Concentration RSD	15.3 %	21.2 %	3.6 %	7.2 %	9.3 %	9.1 %	3.8 %	8.0 %	5.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.182 %	0.014 ppb	0.083 ppb	108.865 %	101.559 %
Concentration per Run 1	102.702 %	0.007 ppb	0.089 ppb	105.412 %	96.373 %
Concentration per Run 2	114.583 %	0.014 ppb	0.076 ppb	109.393 %	110.213 %
Concentration per Run 3	101.260 %	0.022 ppb	0.083 ppb	111.790 %	98.090 %
Concentration RSD	6.9 %	52.8 %	7.7 %	3.0 %	7.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	50	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350250-04 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:12:04 PM	Vial	26		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	114.292 %	112.024 %	0.001 ppb	4.568 ppb	4,418.762 ppb	2,134.376 ppb	11.856 ppb	1,941.610 ppb	11,245.724 ppb
Concentration per Run 1	114.709 %	107.615 %	0.002 ppb	4.678 ppb	4,374.360 ppb	2,118.441 ppb	11.749 ppb	1,904.414 ppb	11,306.408 ppb
Concentration per Run 2	113.788 %	114.830 %	0.002 ppb	4.552 ppb	4,346.028 ppb	2,114.002 ppb	11.954 ppb	1,949.819 ppb	11,169.698 ppb
Concentration per Run 3	114.378 %	113.627 %	-0.002 ppb	4.476 ppb	4,535.900 ppb	2,170.684 ppb	11.864 ppb	1,970.599 ppb	11,261.066 ppb
Concentration RSD	0.4 %	3.5 %	264.1 %	2.2 %	2.3 %	1.5 %	0.9 %	1.7 %	0.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	122.421 %	115.161 %	0.361 ppb	0.187 ppb	1.247 ppb	13.834 ppb	0.026 ppb	0.235 ppb	0.318 ppb
Concentration per Run 1	121.256 %	117.615 %	0.389 ppb	0.255 ppb	1.148 ppb	8.629 ppb	0.030 ppb	0.209 ppb	0.285 ppb
Concentration per Run 2	124.426 %	117.522 %	0.202 ppb	0.165 ppb	1.209 ppb	15.750 ppb	0.017 ppb	0.230 ppb	0.388 ppb
Concentration per Run 3	121.583 %	110.345 %	0.491 ppb	0.141 ppb	1.383 ppb	17.123 ppb	0.029 ppb	0.267 ppb	0.281 ppb
Concentration RSD	1.4 %	3.6 %	40.6 %	32.0 %	9.8 %	33.0 %	27.9 %	12.5 %	19.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.378 ppb	115.539 %	112.111 %	1.350 ppb	0.165 ppb	36.019 ppb	0.190 ppb	110.187 %	106.489 %
Concentration per Run 1	-0.453 ppb	116.152 %	117.321 %	1.178 ppb	0.164 ppb	33.240 ppb	0.201 ppb	110.017 %	109.851 %
Concentration per Run 2	-0.368 ppb	112.317 %	108.595 %	1.348 ppb	0.339 ppb	36.813 ppb	0.193 ppb	108.207 %	104.698 %
Concentration per Run 3	-0.313 ppb	118.148 %	110.418 %	1.524 ppb	-0.007 ppb	38.004 ppb	0.178 ppb	112.337 %	104.919 %
Concentration RSD	18.6 %	2.6 %	4.1 %	12.8 %	104.4 %	6.9 %	6.1 %	1.9 %	2.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.021 ppb	0.004 ppb	112.554 %	109.606 %	0.060 ppb	3.392 ppb	110.771 %	110.868 %	111.018 %
Concentration per Run 1	0.021 ppb	0.003 ppb	110.835 %	114.100 %	0.054 ppb	3.379 ppb	112.484 %	114.377 %	111.517 %
Concentration per Run 2	0.027 ppb	0.000 ppb	114.152 %	107.457 %	0.054 ppb	3.236 ppb	108.795 %	109.663 %	112.982 %
Concentration per Run 3	0.014 ppb	0.009 ppb	112.676 %	107.260 %	0.072 ppb	3.560 ppb	111.034 %	108.566 %	108.555 %
Concentration RSD	31.5 %	116.6 %	1.5 %	3.6 %	16.5 %	4.8 %	1.7 %	2.8 %	2.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	109.414 %	0.006 ppb	0.019 ppb	111.782 %	107.240 %
Concentration per Run 1	112.020 %	-0.003 ppb	0.019 ppb	112.737 %	110.524 %
Concentration per Run 2	107.102 %	0.009 ppb	0.020 ppb	110.301 %	106.989 %
Concentration per Run 3	109.121 %	0.012 ppb	0.019 ppb	112.308 %	104.209 %
Concentration RSD	2.3 %	138.5 %	4.8 %	1.2 %	3.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	51	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350250-05 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:16:48 PM	Vial	27		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	111.521 %	105.210 %	-0.001 ppb	20.842 ppb	15,881.845 ppb	549.677 ppb	29.163 ppb	1,331.724 ppb	14,245.475 ppb
Concentration per Run 1	111.404 %	105.210 %	0.001 ppb	20.946 ppb	15,506.577 ppb	530.616 ppb	28.374 ppb	1,424.557 ppb	12,860.157 ppb
Concentration per Run 2	110.350 %	104.008 %	0.000 ppb	21.010 ppb	16,290.607 ppb	524.916 ppb	29.227 ppb	1,241.113 ppb	14,709.054 ppb
Concentration per Run 3	112.809 %	106.413 %	-0.004 ppb	20.572 ppb	15,848.351 ppb	593.498 ppb	29.889 ppb	1,329.504 ppb	15,167.215 ppb
Concentration RSD	1.1 %	1.1 %	229.7 %	1.1 %	2.5 %	6.9 %	2.6 %	6.9 %	8.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	118.069 %	116.342 %	0.228 ppb	0.294 ppb	3.387 ppb	36.683 ppb	0.046 ppb	1.173 ppb	2.333 ppb
Concentration per Run 1	121.632 %	116.217 %	0.133 ppb	0.186 ppb	3.357 ppb	33.481 ppb	0.037 ppb	1.214 ppb	2.503 ppb
Concentration per Run 2	116.960 %	117.709 %	0.310 ppb	0.309 ppb	3.294 ppb	38.220 ppb	0.060 ppb	1.075 ppb	2.210 ppb
Concentration per Run 3	115.614 %	115.099 %	0.242 ppb	0.386 ppb	3.510 ppb	38.349 ppb	0.040 ppb	1.229 ppb	2.285 ppb
Concentration RSD	2.7 %	1.1 %	39.1 %	34.4 %	3.3 %	7.6 %	27.3 %	7.2 %	6.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	4.233 ppb	119.849 %	107.161 %	70.784 ppb	0.220 ppb	14.739 ppb	2.791 ppb	108.453 %	104.631 %
Concentration per Run 1	4.055 ppb	119.965 %	109.121 %	67.961 ppb	0.154 ppb	14.622 ppb	2.509 ppb	107.619 %	108.434 %
Concentration per Run 2	4.288 ppb	118.419 %	104.768 %	73.417 ppb	0.328 ppb	14.574 ppb	2.876 ppb	109.559 %	104.773 %
Concentration per Run 3	4.357 ppb	121.162 %	107.593 %	70.973 ppb	0.179 ppb	15.020 ppb	2.988 ppb	108.181 %	100.687 %
Concentration RSD	3.7 %	1.1 %	2.1 %	3.9 %	42.6 %	1.7 %	9.0 %	0.9 %	3.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.002 ppb	0.094 ppb	109.781 %	107.478 %	0.074 ppb	2.715 ppb	112.474 %	110.543 %	111.594 %
Concentration per Run 1	0.001 ppb	0.075 ppb	106.335 %	113.339 %	0.059 ppb	2.660 ppb	110.491 %	114.431 %	110.117 %
Concentration per Run 2	0.005 ppb	0.096 ppb	109.419 %	104.226 %	0.080 ppb	2.632 ppb	112.572 %	108.338 %	111.173 %
Concentration per Run 3	0.000 ppb	0.112 ppb	113.589 %	104.870 %	0.082 ppb	2.853 ppb	114.360 %	108.860 %	113.493 %
Concentration RSD	129.0 %	19.7 %	3.3 %	4.7 %	17.6 %	4.4 %	1.7 %	3.1 %	1.5 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	107.986 %	0.004 ppb	0.180 ppb	110.078 %	103.975 %
Concentration per Run 1	112.600 %	-0.003 ppb	0.173 ppb	108.299 %	107.854 %
Concentration per Run 2	106.461 %	0.006 ppb	0.187 ppb	109.603 %	102.937 %
Concentration per Run 3	104.899 %	0.009 ppb	0.180 ppb	112.330 %	101.135 %
Concentration RSD	3.8 %	156.3 %	4.1 %	1.9 %	3.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	52	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350250-06 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:21:33 PM	Vial	28		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	108.934 %	117.435 %	0.008 ppb	53.125 ppb	28,151.363 ppb	12,312.913 ppb	41.876 ppb	10,734.416 ppb	64,598.603 ppb
Concentration per Run 1	110.867 %	120.241 %	0.010 ppb	51.682 ppb	28,005.239 ppb	12,417.760 ppb	42.352 ppb	10,777.876 ppb	63,746.676 ppb
Concentration per Run 2	110.029 %	108.818 %	0.011 ppb	53.119 ppb	30,007.344 ppb	12,899.073 ppb	37.603 ppb	11,055.265 ppb	66,579.884 ppb
Concentration per Run 3	105.905 %	123.247 %	0.004 ppb	54.574 ppb	26,441.505 ppb	11,621.907 ppb	45.673 ppb	10,370.107 ppb	63,469.250 ppb
Concentration RSD	2.4 %	6.5 %	47.9 %	2.7 %	6.3 %	5.2 %	9.7 %	3.2 %	2.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	134.739 %	122.710 %	0.552 ppb	0.267 ppb	8,964.799 ppb	73,997.748 ppb	7.400 ppb	1.408 ppb	0.179 ppb
Concentration per Run 1	134.339 %	121.996 %	0.531 ppb	0.304 ppb	8,928.178 ppb	76,045.044 ppb	7.389 ppb	1.303 ppb	0.162 ppb
Concentration per Run 2	133.852 %	118.827 %	0.585 ppb	0.301 ppb	9,274.471 ppb	76,536.587 ppb	7.614 ppb	1.444 ppb	0.212 ppb
Concentration per Run 3	136.025 %	127.309 %	0.540 ppb	0.196 ppb	8,691.748 ppb	69,411.611 ppb	7.197 ppb	1.478 ppb	0.164 ppb
Concentration RSD	0.8 %	3.5 %	5.3 %	23.1 %	3.3 %	5.4 %	2.8 %	6.6 %	16.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.705 ppb	127.599 %	114.831 %	562.601 ppb	0.268 ppb	360.609 ppb	0.071 ppb	116.195 %	103.982 %
Concentration per Run 1	0.530 ppb	129.813 %	115.338 %	550.455 ppb	0.475 ppb	347.798 ppb	0.065 ppb	118.223 %	106.035 %
Concentration per Run 2	0.856 ppb	127.871 %	108.209 %	599.848 ppb	0.177 ppb	376.480 ppb	0.061 ppb	115.434 %	104.373 %
Concentration per Run 3	0.730 ppb	125.114 %	120.945 %	537.498 ppb	0.152 ppb	357.548 ppb	0.088 ppb	114.929 %	101.538 %
Concentration RSD	23.3 %	1.9 %	5.6 %	5.8 %	67.0 %	4.0 %	19.8 %	1.5 %	2.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.000 ppb	0.005 ppb	117.314 %	109.024 %	0.028 ppb	117.897 ppb	122.310 %	112.962 %	123.896 %
Concentration per Run 1	0.000 ppb	0.006 ppb	118.281 %	109.715 %	0.030 ppb	116.197 ppb	123.315 %	114.799 %	123.097 %
Concentration per Run 2	0.000 ppb	0.009 ppb	118.199 %	108.849 %	0.026 ppb	118.909 ppb	124.552 %	111.162 %	128.473 %
Concentration per Run 3	0.000 ppb	0.000 ppb	115.461 %	108.507 %	0.029 ppb	118.584 ppb	119.064 %	112.925 %	120.118 %
Concentration RSD	5.4 %	91.9 %	1.4 %	0.6 %	6.2 %	1.3 %	2.4 %	1.6 %	3.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	109.589 %	0.000 ppb	0.050 ppb	117.817 %	103.208 %
Concentration per Run 1	110.080 %	-0.003 ppb	0.049 ppb	117.582 %	106.342 %
Concentration per Run 2	109.296 %	0.000 ppb	0.048 ppb	118.548 %	102.559 %
Concentration per Run 3	109.390 %	0.004 ppb	0.051 ppb	117.320 %	100.724 %
Concentration RSD	0.4 %	907.5 %	3.5 %	0.5 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	53	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350250-07 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:26:18 PM	Vial	29		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.510 %	109.018 %	0.002 ppb	4.396 ppb	4,420.085 ppb	2,128.557 ppb	10.904 ppb	1,869.909 ppb	11,058.867 ppb
Concentration per Run 1	109.213 %	111.222 %	0.004 ppb	4.556 ppb	4,116.568 ppb	1,910.875 ppb	11.082 ppb	1,718.491 ppb	10,163.667 ppb
Concentration per Run 2	108.475 %	107.615 %	0.000 ppb	4.361 ppb	4,602.324 ppb	2,273.895 ppb	11.003 ppb	1,986.592 ppb	11,596.810 ppb
Concentration per Run 3	110.841 %	108.216 %	0.004 ppb	4.272 ppb	4,541.363 ppb	2,200.902 ppb	10.628 ppb	1,904.643 ppb	11,416.124 ppb
Concentration RSD	1.1 %	1.8 %	99.2 %	3.3 %	6.0 %	9.0 %	2.2 %	7.3 %	7.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	119.806 %	111.402 %	0.435 ppb	0.213 ppb	2.351 ppb	34.343 ppb	0.027 ppb	0.285 ppb	0.192 ppb
Concentration per Run 1	110.287 %	119.293 %	0.445 ppb	0.208 ppb	2.469 ppb	32.771 ppb	0.023 ppb	0.287 ppb	0.142 ppb
Concentration per Run 2	125.339 %	105.965 %	0.398 ppb	0.178 ppb	2.472 ppb	39.272 ppb	0.022 ppb	0.172 ppb	0.203 ppb
Concentration per Run 3	123.791 %	108.947 %	0.462 ppb	0.253 ppb	2.112 ppb	30.986 ppb	0.036 ppb	0.396 ppb	0.230 ppb
Concentration RSD	6.9 %	6.3 %	7.6 %	17.7 %	8.8 %	12.7 %	29.0 %	39.3 %	23.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.441 ppb	114.333 %	105.916 %	1.496 ppb	0.055 ppb	36.499 ppb	0.205 ppb	105.732 %	104.582 %
Concentration per Run 1	-0.511 ppb	117.017 %	107.207 %	1.339 ppb	-0.017 ppb	33.967 ppb	0.178 ppb	107.227 %	110.544 %
Concentration per Run 2	-0.328 ppb	113.831 %	103.766 %	1.422 ppb	0.004 ppb	37.454 ppb	0.194 ppb	102.542 %	101.320 %
Concentration per Run 3	-0.483 ppb	112.151 %	106.773 %	1.729 ppb	0.180 ppb	38.077 ppb	0.241 ppb	107.426 %	101.883 %
Concentration RSD	22.4 %	2.2 %	1.8 %	13.7 %	195.7 %	6.1 %	16.0 %	2.6 %	4.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.016 ppb	0.004 ppb	108.771 %	107.934 %	0.024 ppb	3.398 ppb	108.488 %	110.616 %	107.163 %
Concentration per Run 1	0.015 ppb	0.006 ppb	110.805 %	111.672 %	0.017 ppb	3.377 ppb	106.422 %	114.658 %	106.882 %
Concentration per Run 2	0.017 ppb	0.006 ppb	106.156 %	105.120 %	0.032 ppb	3.538 ppb	110.132 %	109.859 %	107.520 %
Concentration per Run 3	0.015 ppb	0.000 ppb	109.351 %	107.010 %	0.021 ppb	3.278 ppb	108.909 %	107.330 %	107.086 %
Concentration RSD	6.5 %	86.8 %	2.2 %	3.1 %	33.3 %	3.9 %	1.7 %	3.4 %	0.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.875 %	-0.001 ppb	0.015 ppb	107.747 %	106.273 %
Concentration per Run 1	111.422 %	-0.008 ppb	0.016 ppb	108.386 %	110.109 %
Concentration per Run 2	100.557 %	0.000 ppb	0.014 ppb	105.925 %	104.354 %
Concentration per Run 3	105.648 %	0.006 ppb	0.015 ppb	108.931 %	104.357 %
Concentration RSD	5.1 %	1,223.9 %	6.2 %	1.5 %	3.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	54	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350250-08 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:31:04 PM	Vial	30		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	115.983 %	118.838 %	-0.002 ppb	11.372 ppb	15,884.897 ppb	14,860.375 ppb	5.854 ppb	6,727.404 ppb	94,372.050 ppb
Concentration per Run 1	114.095 %	116.032 %	-0.005 ppb	11.705 ppb	15,287.157 ppb	13,856.192 ppb	5.746 ppb	6,190.597 ppb	86,900.648 ppb
Concentration per Run 2	114.828 %	125.651 %	0.001 ppb	11.296 ppb	15,738.680 ppb	14,667.612 ppb	5.891 ppb	6,710.318 ppb	96,079.289 ppb
Concentration per Run 3	119.025 %	114.830 %	-0.003 ppb	11.116 ppb	16,628.854 ppb	16,057.321 ppb	5.923 ppb	7,281.297 ppb	100,136.214 ppb
Concentration RSD	2.3 %	5.0 %	116.5 %	2.7 %	4.3 %	7.5 %	1.6 %	8.1 %	7.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	124.026 %	113.639 %	0.726 ppb	0.351 ppb	6.581 ppb	73.618 ppb	0.017 ppb	0.360 ppb	0.340 ppb
Concentration per Run 1	125.243 %	117.895 %	0.631 ppb	0.367 ppb	8.640 ppb	91.866 ppb	0.017 ppb	0.327 ppb	0.222 ppb
Concentration per Run 2	125.549 %	111.557 %	0.671 ppb	0.375 ppb	6.144 ppb	68.875 ppb	0.015 ppb	0.346 ppb	0.414 ppb
Concentration per Run 3	121.286 %	111.464 %	0.876 ppb	0.310 ppb	4.959 ppb	60.113 ppb	0.021 ppb	0.407 ppb	0.384 ppb
Concentration RSD	1.9 %	3.2 %	18.1 %	10.1 %	28.6 %	22.3 %	17.2 %	11.7 %	30.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.353 ppb	120.261 %	111.656 %	0.975 ppb	0.319 ppb	384.413 ppb	0.624 ppb	105.827 %	103.499 %
Concentration per Run 1	-0.436 ppb	117.723 %	117.798 %	1.272 ppb	0.304 ppb	349.975 ppb	0.721 ppb	105.759 %	109.335 %
Concentration per Run 2	-0.450 ppb	121.759 %	109.120 %	0.900 ppb	0.145 ppb	392.654 ppb	0.564 ppb	104.826 %	102.176 %
Concentration per Run 3	-0.173 ppb	121.302 %	108.048 %	0.754 ppb	0.507 ppb	410.609 ppb	0.586 ppb	106.896 %	98.987 %
Concentration RSD	44.1 %	1.8 %	4.8 %	27.4 %	56.9 %	8.1 %	13.6 %	1.0 %	5.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.005 ppb	0.035 ppb	108.803 %	105.955 %	0.054 ppb	27.551 ppb	112.788 %	109.125 %	111.585 %
Concentration per Run 1	0.004 ppb	0.035 ppb	105.714 %	111.211 %	0.042 ppb	25.699 ppb	111.618 %	114.084 %	109.614 %
Concentration per Run 2	0.008 ppb	0.022 ppb	109.404 %	104.411 %	0.052 ppb	28.612 ppb	110.827 %	106.061 %	109.503 %
Concentration per Run 3	0.003 ppb	0.048 ppb	111.291 %	102.244 %	0.067 ppb	28.343 ppb	115.918 %	107.229 %	115.637 %
Concentration RSD	50.2 %	37.4 %	2.6 %	4.4 %	23.4 %	5.8 %	2.4 %	4.0 %	3.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.393 %	0.002 ppb	0.018 ppb	107.860 %	101.180 %
Concentration per Run 1	112.491 %	-0.006 ppb	0.016 ppb	105.066 %	104.553 %
Concentration per Run 2	103.105 %	0.004 ppb	0.019 ppb	108.307 %	100.287 %
Concentration per Run 3	103.584 %	0.007 ppb	0.018 ppb	110.207 %	98.701 %
Concentration RSD	5.0 %	388.0 %	10.5 %	2.4 %	3.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	55	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350250-09 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:35:49 PM	Vial	31		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	118.241 %	107.816 %	-0.003 ppb	92.616 ppb	66,031.104 ppb	1,297.369 ppb	16.043 ppb	4,432.154 ppb	21,432.083 ppb
Concentration per Run 1	118.379 %	99.800 %	0.001 ppb	90.805 ppb	72,819.100 ppb	1,498.763 ppb	16.060 ppb	4,842.855 ppb	23,140.465 ppb
Concentration per Run 2	117.863 %	113.026 %	-0.007 ppb	92.768 ppb	61,273.674 ppb	1,135.720 ppb	15.254 ppb	3,927.305 ppb	20,086.206 ppb
Concentration per Run 3	118.481 %	110.621 %	-0.002 ppb	94.275 ppb	64,000.538 ppb	1,257.625 ppb	16.814 ppb	4,526.301 ppb	21,069.577 ppb
Concentration RSD	0.3 %	6.5 %	147.7 %	1.9 %	9.1 %	14.2 %	4.9 %	10.5 %	7.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	132.240 %	119.262 %	1.169 ppb	0.010 ppb	3.526 ppb	18.477 ppb	0.044 ppb	0.049 ppb	0.086 ppb
Concentration per Run 1	132.432 %	107.363 %	1.302 ppb	-0.001 ppb	4.336 ppb	19.472 ppb	0.046 ppb	0.049 ppb	0.095 ppb
Concentration per Run 2	137.694 %	129.918 %	0.982 ppb	0.033 ppb	3.014 ppb	17.540 ppb	0.042 ppb	0.090 ppb	0.047 ppb
Concentration per Run 3	126.596 %	120.505 %	1.224 ppb	-0.001 ppb	3.228 ppb	18.420 ppb	0.045 ppb	0.009 ppb	0.117 ppb
Concentration RSD	4.2 %	9.5 %	14.3 %	189.4 %	20.1 %	5.2 %	5.2 %	81.7 %	41.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.328 ppb	124.576 %	111.572 %	65.716 ppb	0.043 ppb	35.367 ppb	0.819 ppb	114.334 %	104.002 %
Concentration per Run 1	0.537 ppb	125.958 %	100.668 %	71.979 ppb	-0.008 ppb	40.187 ppb	0.905 ppb	113.552 %	94.202 %
Concentration per Run 2	0.158 ppb	121.067 %	128.004 %	55.838 ppb	0.143 ppb	29.936 ppb	0.659 ppb	113.367 %	115.038 %
Concentration per Run 3	0.290 ppb	126.701 %	106.044 %	69.332 ppb	-0.007 ppb	35.978 ppb	0.893 ppb	116.085 %	102.767 %
Concentration RSD	58.5 %	2.5 %	13.0 %	13.2 %	203.3 %	14.6 %	17.0 %	1.3 %	10.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.001 ppb	0.001 ppb	113.543 %	104.710 %	0.108 ppb	1.963 ppb	118.671 %	109.967 %	120.523 %
Concentration per Run 1	0.000 ppb	0.000 ppb	114.425 %	94.739 %	0.126 ppb	2.297 ppb	120.762 %	98.347 %	122.114 %
Concentration per Run 2	0.001 ppb	0.000 ppb	111.190 %	115.914 %	0.097 ppb	1.772 ppb	117.104 %	121.064 %	117.405 %
Concentration per Run 3	0.002 ppb	0.003 ppb	115.014 %	103.479 %	0.102 ppb	1.819 ppb	118.146 %	110.492 %	122.051 %
Concentration RSD	94.5 %	173.2 %	1.8 %	10.2 %	14.3 %	14.8 %	1.6 %	10.3 %	2.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	107.375 %	-0.005 ppb	0.039 ppb	115.808 %	103.459 %
Concentration per Run 1	95.108 %	-0.009 ppb	0.049 ppb	116.010 %	95.302 %
Concentration per Run 2	120.961 %	-0.006 ppb	0.031 ppb	114.270 %	114.593 %
Concentration per Run 3	106.056 %	0.000 ppb	0.037 ppb	117.144 %	100.483 %
Concentration RSD	12.1 %	90.1 %	24.0 %	1.3 %	9.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	56	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350250-10 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:40:36 PM	Vial	32		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	119.212 %	111.022 %	0.008 ppb	150.208 ppb	53,680.614 ppb	56,625.899 ppb	4.313 ppb	27,363.720 ppb	294,804.079 ppb
Concentration per Run 1	117.322 %	115.431 %	0.006 ppb	154.786 ppb	53,198.175 ppb	55,620.850 ppb	4.541 ppb	27,425.582 ppb	307,156.741 ppb
Concentration per Run 2	118.844 %	99.198 %	0.010 ppb	149.253 ppb	55,941.251 ppb	60,819.885 ppb	4.232 ppb	27,354.166 ppb	289,204.113 ppb
Concentration per Run 3	121.470 %	118.437 %	0.008 ppb	146.586 ppb	51,902.417 ppb	53,436.963 ppb	4.166 ppb	27,311.412 ppb	288,051.384 ppb
Concentration RSD	1.8 %	9.3 %	29.2 %	2.8 %	3.8 %	6.7 %	4.6 %	0.2 %	3.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	135.519 %	104.567 %	4.100 ppb	0.387 ppb	15,433.982 ppb	25,909.357 ppb	28.025 ppb	28.538 ppb	0.247 ppb
Concentration per Run 1	133.036 %	101.305 %	4.191 ppb	0.399 ppb	15,824.288 ppb	26,803.021 ppb	29.155 ppb	29.118 ppb	0.319 ppb
Concentration per Run 2	137.649 %	105.965 %	4.087 ppb	0.410 ppb	15,664.506 ppb	26,602.661 ppb	28.504 ppb	29.178 ppb	0.272 ppb
Concentration per Run 3	135.873 %	106.431 %	4.020 ppb	0.351 ppb	14,813.152 ppb	24,322.389 ppb	26.416 ppb	27.317 ppb	0.151 ppb
Concentration RSD	1.7 %	2.7 %	2.1 %	8.2 %	3.5 %	5.3 %	5.1 %	3.7 %	35.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.736 ppb	122.731 %	102.380 %	401.882 ppb	1.930 ppb	1,222.905 ppb	0.364 ppb	108.377 %	94.277 %
Concentration per Run 1	0.880 ppb	123.804 %	98.256 %	420.908 ppb	2.619 ppb	1,225.829 ppb	0.378 ppb	104.905 %	94.585 %
Concentration per Run 2	0.833 ppb	122.928 %	97.527 %	418.363 ppb	2.045 ppb	1,297.412 ppb	0.341 ppb	109.794 %	91.534 %
Concentration per Run 3	0.496 ppb	121.461 %	111.355 %	366.376 ppb	1.126 ppb	1,145.476 ppb	0.372 ppb	110.434 %	96.713 %
Concentration RSD	28.5 %	1.0 %	7.6 %	7.7 %	39.0 %	6.2 %	5.4 %	2.8 %	2.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.005 ppb	0.006 ppb	112.631 %	97.270 %	0.011 ppb	366.217 ppb	119.460 %	101.513 %	117.238 %
Concentration per Run 1	0.006 ppb	0.007 ppb	110.916 %	95.105 %	0.012 ppb	370.547 ppb	115.069 %	99.179 %	113.839 %
Concentration per Run 2	0.003 ppb	0.010 ppb	114.559 %	95.327 %	0.005 ppb	370.332 ppb	122.068 %	99.025 %	116.465 %
Concentration per Run 3	0.006 ppb	0.000 ppb	112.418 %	101.379 %	0.016 ppb	357.774 ppb	121.242 %	106.336 %	121.411 %
Concentration RSD	41.5 %	91.9 %	1.6 %	3.7 %	53.4 %	2.0 %	3.2 %	4.1 %	3.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	101.665 %	-0.003 ppb	0.015 ppb	107.812 %	90.117 %
Concentration per Run 1	97.428 %	-0.008 ppb	0.016 ppb	106.054 %	89.067 %
Concentration per Run 2	100.156 %	-0.001 ppb	0.017 ppb	111.117 %	88.986 %
Concentration per Run 3	107.410 %	0.000 ppb	0.013 ppb	106.267 %	92.298 %
Concentration RSD	5.1 %	162.3 %	11.6 %	2.7 %	2.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	57	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350250-11 6020TL	Rack	1		
Analysis started at:	9/14/2023 3:45:22 PM	Vial	33		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	113.353 %	102.405 %	0.004 ppb	92.846 ppb	41,031.152 ppb	21,856.865 ppb	27.311 ppb	8,610.912 ppb	119,602.223 ppb
Concentration per Run 1	108.218 %	91.984 %	0.004 ppb	97.683 ppb	43,232.421 ppb	23,255.178 ppb	31.336 ppb	8,332.245 ppb	121,179.929 ppb
Concentration per Run 2	115.479 %	100.401 %	0.002 ppb	91.083 ppb	42,467.749 ppb	22,231.937 ppb	23.054 ppb	9,282.550 ppb	122,711.493 ppb
Concentration per Run 3	116.361 %	114.830 %	0.005 ppb	89.773 ppb	37,393.287 ppb	20,083.481 ppb	27.541 ppb	8,217.940 ppb	114,915.248 ppb
Concentration RSD	3.9 %	11.3 %	37.2 %	4.6 %	7.7 %	7.4 %	15.2 %	6.8 %	3.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	133.745 %	112.334 %	0.899 ppb	0.547 ppb	10.242 ppb	71.397 ppb	0.176 ppb	1.130 ppb	1.211 ppb
Concentration per Run 1	125.200 %	112.303 %	0.844 ppb	0.599 ppb	10.552 ppb	73.138 ppb	0.191 ppb	1.172 ppb	1.253 ppb
Concentration per Run 2	139.838 %	108.854 %	0.838 ppb	0.649 ppb	10.524 ppb	70.034 ppb	0.161 ppb	1.189 ppb	1.218 ppb
Concentration per Run 3	136.197 %	115.844 %	1.017 ppb	0.393 ppb	9.650 ppb	71.020 ppb	0.175 ppb	1.029 ppb	1.162 ppb
Concentration RSD	5.7 %	3.1 %	11.3 %	24.8 %	5.0 %	2.2 %	8.4 %	7.8 %	3.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.031 ppb	123.424 %	108.240 %	6.678 ppb	0.259 ppb	329.677 ppb	0.093 ppb	108.830 %	102.759 %
Concentration per Run 1	0.923 ppb	118.576 %	113.381 %	6.356 ppb	0.648 ppb	313.988 ppb	0.079 ppb	103.616 %	106.304 %
Concentration per Run 2	1.126 ppb	124.676 %	107.116 %	6.817 ppb	0.147 ppb	337.625 ppb	0.108 ppb	110.115 %	99.771 %
Concentration per Run 3	1.043 ppb	127.019 %	104.222 %	6.861 ppb	-0.018 ppb	337.418 ppb	0.092 ppb	112.760 %	102.203 %
Concentration RSD	9.9 %	3.5 %	4.3 %	4.2 %	133.9 %	4.1 %	15.4 %	4.3 %	3.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.010 ppb	0.022 ppb	112.840 %	105.650 %	0.037 ppb	56.217 ppb	117.402 %	110.451 %	116.365 %
Concentration per Run 1	0.010 ppb	0.036 ppb	108.728 %	109.151 %	0.043 ppb	54.798 ppb	111.527 %	113.187 %	111.378 %
Concentration per Run 2	0.007 ppb	0.016 ppb	115.516 %	102.770 %	0.023 ppb	58.873 ppb	118.651 %	106.875 %	118.281 %
Concentration per Run 3	0.012 ppb	0.015 ppb	114.277 %	105.028 %	0.045 ppb	54.980 ppb	122.027 %	111.292 %	119.437 %
Concentration RSD	24.3 %	51.9 %	3.2 %	3.1 %	33.5 %	4.1 %	4.6 %	2.9 %	3.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	108.915 %	-0.001 ppb	0.094 ppb	110.816 %	99.683 %
Concentration per Run 1	110.498 %	-0.004 ppb	0.094 ppb	102.072 %	102.235 %
Concentration per Run 2	104.070 %	0.002 ppb	0.098 ppb	114.605 %	97.576 %
Concentration per Run 3	112.178 %	-0.002 ppb	0.090 ppb	115.770 %	99.238 %
Concentration RSD	3.9 %	227.5 %	4.2 %	6.9 %	2.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	58	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 3:50:09 PM	Vial	9		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.030 %	109.619 %	59.348 ppb	58.517 ppb	6,280.818 ppb	6,276.268 ppb	62.305 ppb	6,429.283 ppb	6,183.649 ppb
Concentration per Run 1	117.401 %	104.609 %	55.922 ppb	55.309 ppb	6,241.511 ppb	6,044.113 ppb	58.307 ppb	6,136.362 ppb	5,535.202 ppb
Concentration per Run 2	107.601 %	110.020 %	61.702 ppb	60.873 ppb	6,341.673 ppb	6,284.014 ppb	66.415 ppb	6,440.824 ppb	6,850.482 ppb
Concentration per Run 3	111.087 %	114.229 %	60.422 ppb	59.370 ppb	6,259.269 ppb	6,500.675 ppb	62.193 ppb	6,710.663 ppb	6,165.264 ppb
Recovery Percentage 1			98.914 %	97.529 %	104.680 %	104.604 %	103.842 %	107.155 %	103.061 %
Concentration RSD	4.4 %	4.4 %	5.1 %	4.9 %	0.9 %	3.6 %	6.5 %	4.5 %	10.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	115.077 %	123.487 %	55.131 ppb	54.398 ppb	63.543 ppb	6,341.859 ppb	60.249 ppb	60.964 ppb	60.597 ppb
Concentration per Run 1	122.541 %	130.291 %	51.517 ppb	51.072 ppb	60.281 ppb	6,225.409 ppb	56.025 ppb	56.224 ppb	58.224 ppb
Concentration per Run 2	110.935 %	120.691 %	56.625 ppb	55.684 ppb	66.159 ppb	6,528.992 ppb	61.662 ppb	63.560 ppb	63.663 ppb
Concentration per Run 3	111.755 %	119.480 %	57.250 ppb	56.437 ppb	64.190 ppb	6,271.176 ppb	63.058 ppb	63.108 ppb	59.903 ppb
Recovery Percentage 1			91.884 %	90.663 %	105.905 %	105.698 %	100.414 %	101.607 %	100.995 %
Concentration RSD	5.6 %	4.8 %	5.7 %	5.3 %	4.7 %	2.6 %	6.2 %	6.7 %	4.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	59.496 ppb	110.361 %	114.705 %	56.077 ppb	54.637 ppb	59.941 ppb	55.152 ppb	102.512 %	104.238 %
Concentration per Run 1	56.270 ppb	118.283 %	117.391 %	53.023 ppb	52.973 ppb	56.646 ppb	52.561 ppb	107.579 %	108.378 %
Concentration per Run 2	60.514 ppb	105.138 %	111.494 %	59.030 ppb	57.187 ppb	62.553 ppb	55.460 ppb	97.220 %	102.810 %
Concentration per Run 3	61.704 ppb	107.663 %	115.230 %	56.177 ppb	53.751 ppb	60.624 ppb	57.434 ppb	102.738 %	101.526 %
Recovery Percentage 1	99.160 %			93.461 %	91.062 %	99.902 %	91.920 %		
Concentration RSD	4.8 %	6.3 %	2.6 %	5.4 %	4.1 %	5.0 %	4.4 %	5.1 %	3.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	56.836 ppb	56.867 ppb	102.928 %	108.078 %	56.744 ppb	58.098 ppb	105.657 %	110.960 %	104.931 %
Concentration per Run 1	54.907 ppb	54.336 ppb	111.966 %	110.463 %	53.869 ppb	52.786 ppb	111.697 %	116.096 %	109.278 %
Concentration per Run 2	57.037 ppb	57.140 ppb	95.975 %	109.426 %	57.179 ppb	60.335 ppb	100.235 %	108.802 %	101.383 %
Concentration per Run 3	58.565 ppb	59.126 ppb	100.844 %	104.346 %	59.183 ppb	61.174 ppb	105.038 %	107.983 %	104.133 %
Recovery Percentage 1	94.727 %	94.778 %			94.573 %	96.830 %			
Concentration RSD	3.2 %	4.2 %	8.0 %	3.0 %	4.7 %	8.0 %	5.4 %	4.0 %	3.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.952 %	56.194 ppb	57.333 ppb	101.959 %	103.838 %
Concentration per Run 1	109.788 %	53.908 ppb	54.332 ppb	108.948 %	108.904 %
Concentration per Run 2	107.374 %	57.015 ppb	58.472 ppb	97.173 %	101.932 %
Concentration per Run 3	103.693 %	57.658 ppb	59.196 ppb	99.756 %	100.679 %
Recovery Percentage 1		93.656 %	95.556 %		
Concentration RSD	2.9 %	3.6 %	4.6 %	6.1 %	4.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	59	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 3:54:59 PM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	115.736 %	112.826 %	0.013 ppb	0.068 ppb	5.411 ppb	3.785 ppb	0.171 ppb	8.976 ppb	-3.080 ppb
Concentration per Run 1	115.515 %	134.068 %	0.015 ppb	0.078 ppb	-11.038 ppb	4.600 ppb	0.232 ppb	-1.507 ppb	25.567 ppb
Concentration per Run 2	116.057 %	98.597 %	0.008 ppb	0.075 ppb	18.138 ppb	2.138 ppb	0.140 ppb	19.029 ppb	-17.003 ppb
Concentration per Run 3	115.635 %	105.812 %	0.016 ppb	0.052 ppb	9.133 ppb	4.616 ppb	0.140 ppb	9.406 ppb	-17.806 ppb
Recovery Percentage 1			2.582 %	0.684 %	5.411 %	5.407 %	1.706 %	8.976 %	-3.080 %
Concentration RSD	0.2 %	16.6 %	31.3 %	21.3 %	276.1 %	37.7 %	31.2 %	114.5 %	805.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	114.344 %	109.227 %	-0.008 ppb	-0.015 ppb	0.817 ppb	6.238 ppb	0.016 ppb	0.110 ppb	0.066 ppb
Concentration per Run 1	111.480 %	113.887 %	-0.009 ppb	0.002 ppb	0.695 ppb	6.311 ppb	0.023 ppb	0.118 ppb	0.038 ppb
Concentration per Run 2	118.202 %	109.041 %	-0.027 ppb	-0.017 ppb	0.877 ppb	6.759 ppb	0.016 ppb	0.078 ppb	0.065 ppb
Concentration per Run 3	113.350 %	104.753 %	0.012 ppb	-0.029 ppb	0.880 ppb	5.644 ppb	0.010 ppb	0.134 ppb	0.095 ppb
Recovery Percentage 1			-0.166 %	-1.460 %	81.701 %	12.476 %	3.276 %	5.493 %	6.587 %
Concentration RSD	3.0 %	4.2 %	236.9 %	108.1 %	13.0 %	9.0 %	40.5 %	26.1 %	43.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.099 ppb	116.331 %	104.231 %	0.024 ppb	0.124 ppb	0.058 ppb	0.112 ppb	108.669 %	100.314 %
Concentration per Run 1	0.877 ppb	118.377 %	109.008 %	-0.010 ppb	0.171 ppb	0.027 ppb	0.087 ppb	110.213 %	106.724 %
Concentration per Run 2	1.078 ppb	115.282 %	101.740 %	-0.010 ppb	-0.008 ppb	0.054 ppb	0.096 ppb	105.729 %	98.982 %
Concentration per Run 3	1.343 ppb	115.336 %	101.944 %	0.091 ppb	0.210 ppb	0.093 ppb	0.152 ppb	110.064 %	95.236 %
Recovery Percentage 1	21.989 %			4.757 %	2.487 %	11.608 %	5.587 %		
Concentration RSD	21.2 %	1.5 %	4.0 %	245.4 %	93.4 %	56.6 %	31.7 %	2.3 %	5.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.014 ppb	0.007 ppb	111.253 %	102.416 %	0.008 ppb	0.074 ppb	111.954 %	104.203 %	110.679 %
Concentration per Run 1	0.011 ppb	0.009 ppb	113.908 %	106.813 %	0.013 ppb	0.082 ppb	112.230 %	110.385 %	110.067 %
Concentration per Run 2	0.018 ppb	0.003 ppb	109.049 %	100.251 %	0.010 ppb	0.051 ppb	110.491 %	102.172 %	110.458 %
Concentration per Run 3	0.011 ppb	0.010 ppb	110.802 %	100.184 %	0.001 ppb	0.090 ppb	113.140 %	100.052 %	111.510 %
Recovery Percentage 1	3.378 %				0.202 %	14.879 %			
Concentration RSD	30.4 %	48.9 %	2.2 %	3.7 %	72.7 %	28.0 %	1.2 %	5.2 %	0.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	101.708 %	0.205 ppb	0.020 ppb	109.587 %	98.621 %
Concentration per Run 1	106.747 %	0.125 ppb	0.019 ppb	109.100 %	105.021 %
Concentration per Run 2	101.137 %	0.240 ppb	0.023 ppb	108.191 %	96.470 %
Concentration per Run 3	97.241 %	0.251 ppb	0.018 ppb	111.468 %	94.371 %
Recovery Percentage 1		20.540 %	2.000 %		
Concentration RSD	4.7 %	33.8 %	11.6 %	1.5 %	5.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	60	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350269-01 6020TL	Rack	1		
Analysis started at:	9/14/2023 4:04:25 PM	Vial	34		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.064 %	107.816 %	0.000 ppb	40.201 ppb	67,693.112 ppb	310.520 ppb	803.871 ppb	39,410.199 ppb	100,607.575 ppb
Concentration per Run 1	111.098 %	112.425 %	-0.001 ppb	40.336 ppb	64,452.356 ppb	272.485 ppb	819.176 ppb	37,481.227 ppb	94,350.627 ppb
Concentration per Run 2	111.882 %	105.210 %	0.000 ppb	40.482 ppb	69,479.849 ppb	351.961 ppb	813.307 ppb	40,764.859 ppb	103,681.450 ppb
Concentration per Run 3	113.211 %	105.812 %	0.001 ppb	39.784 ppb	69,147.131 ppb	307.115 ppb	779.129 ppb	39,984.510 ppb	103,790.648 ppb
Concentration RSD	1.0 %	3.7 %	1,291.8 %	0.9 %	4.2 %	12.8 %	2.7 %	4.4 %	5.4 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	134.972 %	114.975 %	21.198 ppb	0.179 ppb	70.724 ppb	60.733 ppb	0.644 ppb	7.153 ppb	1.454 ppb
Concentration per Run 1	135.110 %	118.547 %	20.269 ppb	0.222 ppb	67.652 ppb	65.480 ppb	0.589 ppb	6.699 ppb	1.375 ppb
Concentration per Run 2	132.490 %	113.421 %	20.901 ppb	0.180 ppb	70.997 ppb	51.541 ppb	0.686 ppb	7.386 ppb	1.398 ppb
Concentration per Run 3	137.315 %	112.955 %	22.425 ppb	0.134 ppb	73.521 ppb	65.177 ppb	0.657 ppb	7.375 ppb	1.589 ppb
Concentration RSD	1.8 %	2.7 %	5.2 %	24.7 %	4.2 %	13.1 %	7.7 %	5.5 %	8.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.417 ppb	125.660 %	109.172 %	5.296 ppb	1.899 ppb	1,212.933 ppb	41.863 ppb	112.256 %	103.249 %
Concentration per Run 1	-0.501 ppb	124.735 %	112.696 %	5.142 ppb	1.006 ppb	1,140.892 ppb	40.155 ppb	110.161 %	105.650 %
Concentration per Run 2	-0.316 ppb	124.788 %	110.964 %	5.341 ppb	2.533 ppb	1,209.280 ppb	42.764 ppb	112.253 %	102.743 %
Concentration per Run 3	-0.433 ppb	127.457 %	103.857 %	5.407 ppb	2.157 ppb	1,288.628 ppb	42.672 ppb	114.353 %	101.355 %
Concentration RSD	22.4 %	1.2 %	4.3 %	2.6 %	41.9 %	6.1 %	3.5 %	1.9 %	2.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.003 ppb	0.009 ppb	114.785 %	107.247 %	0.689 ppb	7.387 ppb	119.586 %	112.412 %	117.532 %
Concentration per Run 1	0.003 ppb	0.012 ppb	110.696 %	107.260 %	0.656 ppb	6.966 ppb	115.927 %	115.740 %	114.523 %
Concentration per Run 2	0.003 ppb	0.003 ppb	118.239 %	107.024 %	0.699 ppb	7.606 ppb	121.390 %	111.971 %	116.820 %
Concentration per Run 3	0.002 ppb	0.012 ppb	115.419 %	107.458 %	0.712 ppb	7.588 ppb	121.443 %	109.524 %	121.251 %
Concentration RSD	13.5 %	57.6 %	3.3 %	0.2 %	4.3 %	4.9 %	2.7 %	2.8 %	2.9 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	111.288 %	0.027 ppb	0.032 ppb	112.386 %	100.897 %
Concentration per Run 1	114.582 %	0.009 ppb	0.031 ppb	110.310 %	103.469 %
Concentration per Run 2	111.509 %	0.036 ppb	0.033 ppb	110.295 %	100.550 %
Concentration per Run 3	107.772 %	0.036 ppb	0.031 ppb	116.554 %	98.672 %
Concentration RSD	3.1 %	58.0 %	4.1 %	3.2 %	2.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	61	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350269-02 6020TL	Rack	1		
Analysis started at:	9/14/2023 4:09:11 PM	Vial	35		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.610 %	109.820 %	0.003 ppb	136.772 ppb	8,305.214 ppb	7,195.215 ppb	5.080 ppb	18,634.450 ppb	74,968.132 ppb
Concentration per Run 1	111.936 %	111.824 %	0.008 ppb	139.446 ppb	8,039.077 ppb	7,201.902 ppb	5.111 ppb	18,158.924 ppb	76,109.932 ppb
Concentration per Run 2	113.056 %	107.615 %	-0.002 ppb	135.809 ppb	8,420.797 ppb	7,068.577 ppb	4.997 ppb	18,695.490 ppb	71,094.786 ppb
Concentration per Run 3	112.839 %	110.020 %	0.003 ppb	135.062 ppb	8,455.767 ppb	7,315.167 ppb	5.133 ppb	19,048.936 ppb	77,699.679 ppb
Concentration RSD	0.5 %	1.9 %	149.9 %	1.7 %	2.8 %	1.7 %	1.4 %	2.4 %	4.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	123.165 %	122.027 %	0.400 ppb	2.583 ppb	0.286 ppb	2.864 ppb	0.554 ppb	0.371 ppb	1.859 ppb
Concentration per Run 1	124.581 %	119.852 %	0.398 ppb	2.632 ppb	0.273 ppb	3.480 ppb	0.564 ppb	0.328 ppb	1.750 ppb
Concentration per Run 2	124.474 %	127.122 %	0.400 ppb	2.538 ppb	0.261 ppb	2.673 ppb	0.557 ppb	0.436 ppb	1.838 ppb
Concentration per Run 3	120.440 %	119.107 %	0.404 ppb	2.580 ppb	0.323 ppb	2.439 ppb	0.540 ppb	0.348 ppb	1.990 ppb
Concentration RSD	1.9 %	3.6 %	0.8 %	1.8 %	11.6 %	19.1 %	2.2 %	15.6 %	6.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.637 ppb	121.547 %	116.614 %	0.224 ppb	0.684 ppb	310.473 ppb	13.058 ppb	110.543 %	107.932 %
Concentration per Run 1	-0.705 ppb	120.401 %	120.714 %	0.125 ppb	1.087 ppb	293.456 ppb	11.536 ppb	111.726 %	112.375 %
Concentration per Run 2	-0.625 ppb	123.229 %	113.698 %	0.389 ppb	0.325 ppb	313.960 ppb	13.679 ppb	112.060 %	106.609 %
Concentration per Run 3	-0.580 ppb	121.010 %	115.429 %	0.158 ppb	0.639 ppb	324.004 ppb	13.961 ppb	107.843 %	104.812 %
Concentration RSD	9.9 %	1.2 %	3.1 %	64.1 %	56.0 %	5.0 %	10.2 %	2.1 %	3.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.001 ppb	0.006 ppb	112.804 %	113.514 %	0.274 ppb	37.010 ppb	114.203 %	114.661 %	112.603 %
Concentration per Run 1	0.001 ppb	0.005 ppb	114.596 %	121.231 %	0.234 ppb	34.787 ppb	113.650 %	118.735 %	111.452 %
Concentration per Run 2	0.000 ppb	0.006 ppb	110.096 %	111.342 %	0.259 ppb	38.092 ppb	112.038 %	112.171 %	111.781 %
Concentration per Run 3	0.001 ppb	0.006 ppb	113.721 %	107.968 %	0.328 ppb	38.151 ppb	116.920 %	113.077 %	114.577 %
Concentration RSD	60.9 %	5.2 %	2.1 %	6.1 %	17.8 %	5.2 %	2.2 %	3.1 %	1.5 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	113.102 %	0.032 ppb	0.039 ppb	107.347 %	105.947 %
Concentration per Run 1	115.708 %	0.015 ppb	0.036 ppb	104.970 %	107.978 %
Concentration per Run 2	112.241 %	0.042 ppb	0.043 ppb	109.197 %	105.447 %
Concentration per Run 3	111.356 %	0.038 ppb	0.038 ppb	107.875 %	104.418 %
Concentration RSD	2.0 %	45.5 %	10.2 %	2.0 %	1.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	62	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350269-03 6020TL	Rack	1		
Analysis started at:	9/14/2023 4:13:58 PM	Vial	36		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	114.141 %	112.625 %	0.000 ppb	98.110 ppb	10,887.621 ppb	6,897.810 ppb	2.860 ppb	21,251.974 ppb	82,895.870 ppb
Concentration per Run 1	114.097 %	120.842 %	0.003 ppb	99.554 ppb	9,759.955 ppb	6,303.532 ppb	2.859 ppb	19,067.745 ppb	71,992.580 ppb
Concentration per Run 2	115.037 %	113.026 %	-0.005 ppb	97.044 ppb	11,211.690 ppb	7,147.076 ppb	2.902 ppb	22,901.455 ppb	88,993.041 ppb
Concentration per Run 3	113.288 %	104.008 %	0.001 ppb	97.731 ppb	11,691.219 ppb	7,242.823 ppb	2.818 ppb	21,786.721 ppb	87,701.990 ppb
Concentration RSD	0.8 %	7.5 %	1,305.9 %	1.3 %	9.2 %	7.5 %	1.5 %	9.3 %	11.4 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	127.549 %	117.087 %	2.156 ppb	0.622 ppb	9.402 ppb	37.320 ppb	0.631 ppb	0.528 ppb	1.456 ppb
Concentration per Run 1	129.714 %	129.359 %	1.853 ppb	0.561 ppb	8.801 ppb	34.504 ppb	0.602 ppb	0.478 ppb	1.301 ppb
Concentration per Run 2	126.959 %	109.227 %	2.463 ppb	0.607 ppb	9.580 ppb	36.023 ppb	0.684 ppb	0.530 ppb	1.540 ppb
Concentration per Run 3	125.973 %	112.675 %	2.152 ppb	0.699 ppb	9.826 ppb	41.434 ppb	0.606 ppb	0.575 ppb	1.525 ppb
Concentration RSD	1.5 %	9.2 %	14.2 %	11.3 %	5.7 %	9.8 %	7.3 %	9.2 %	9.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.118 ppb	120.101 %	110.738 %	0.353 ppb	0.744 ppb	366.023 ppb	1.917 ppb	109.532 %	105.160 %
Concentration per Run 1	-0.196 ppb	119.817 %	113.017 %	0.342 ppb	0.835 ppb	347.043 ppb	1.865 ppb	109.866 %	108.075 %
Concentration per Run 2	-0.140 ppb	120.833 %	112.240 %	0.317 ppb	0.004 ppb	368.722 ppb	1.932 ppb	110.824 %	103.239 %
Concentration per Run 3	-0.019 ppb	119.652 %	106.956 %	0.399 ppb	1.394 ppb	382.305 ppb	1.954 ppb	107.906 %	104.167 %
Concentration RSD	76.8 %	0.5 %	3.0 %	11.9 %	94.0 %	4.9 %	2.4 %	1.4 %	2.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.000 ppb	0.009 ppb	112.838 %	112.560 %	0.386 ppb	61.586 ppb	115.744 %	111.585 %	112.935 %
Concentration per Run 1	0.000 ppb	0.011 ppb	113.472 %	117.869 %	0.380 ppb	57.221 ppb	113.450 %	115.280 %	111.000 %
Concentration per Run 2	0.000 ppb	0.009 ppb	113.320 %	111.855 %	0.380 ppb	63.049 ppb	115.235 %	109.445 %	113.235 %
Concentration per Run 3	0.001 ppb	0.006 ppb	111.723 %	107.956 %	0.399 ppb	64.488 ppb	118.546 %	110.029 %	114.571 %
Concentration RSD	336.6 %	29.9 %	0.9 %	4.4 %	2.9 %	6.2 %	2.2 %	2.9 %	1.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	110.402 %	0.140 ppb	0.021 ppb	107.286 %	105.905 %
Concentration per Run 1	114.323 %	0.112 ppb	0.018 ppb	106.078 %	111.732 %
Concentration per Run 2	109.785 %	0.145 ppb	0.023 ppb	107.698 %	103.758 %
Concentration per Run 3	107.097 %	0.162 ppb	0.023 ppb	108.083 %	102.227 %
Concentration RSD	3.3 %	18.2 %	12.0 %	1.0 %	4.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	63	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350269-04 6020TL	Rack	1		
Analysis started at:	9/14/2023 4:18:45 PM	Vial	37		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	107.477 %	109.820 %	0.003 ppb	9.336 ppb	59,925.108 ppb	13,342.060 ppb	35.117 ppb	1,357.632 ppb	22,358.266 ppb
Concentration per Run 1	113.727 %	110.020 %	-0.001 ppb	8.578 ppb	58,733.617 ppb	13,002.970 ppb	29.798 ppb	1,312.101 ppb	22,190.530 ppb
Concentration per Run 2	113.509 %	104.008 %	0.001 ppb	8.570 ppb	62,210.011 ppb	13,681.422 ppb	32.997 ppb	1,435.954 ppb	22,514.380 ppb
Concentration per Run 3	95.196 %	115.431 %	0.009 ppb	10.859 ppb	58,831.697 ppb	13,341.789 ppb	42.556 ppb	1,324.840 ppb	22,369.886 ppb
Concentration RSD	9.9 %	5.2 %	180.0 %	14.1 %	3.3 %	2.5 %	18.9 %	5.0 %	0.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	123.446 %	116.621 %	0.330 ppb	6.422 ppb	9.044 ppb	108.607 ppb	0.159 ppb	3.733 ppb	0.308 ppb
Concentration per Run 1	139.592 %	119.107 %	0.283 ppb	6.368 ppb	8.476 ppb	107.545 ppb	0.127 ppb	3.530 ppb	0.238 ppb
Concentration per Run 2	128.533 %	117.429 %	0.446 ppb	6.237 ppb	9.075 ppb	109.190 ppb	0.184 ppb	3.762 ppb	0.314 ppb
Concentration per Run 3	102.212 %	113.328 %	0.260 ppb	6.663 ppb	9.580 ppb	109.085 ppb	0.167 ppb	3.906 ppb	0.371 ppb
Concentration RSD	15.6 %	2.5 %	30.7 %	3.4 %	6.1 %	0.8 %	18.4 %	5.1 %	21.7 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.367 ppb	118.039 %	114.230 %	0.101 ppb	0.272 ppb	94.501 ppb	0.253 ppb	105.079 %	105.357 %
Concentration per Run 1	-0.340 ppb	125.845 %	115.408 %	0.060 ppb	0.654 ppb	89.889 ppb	0.226 ppb	112.635 %	111.053 %
Concentration per Run 2	-0.334 ppb	125.142 %	112.583 %	0.140 ppb	-0.007 ppb	98.509 ppb	0.207 ppb	110.718 %	103.150 %
Concentration per Run 3	-0.426 ppb	103.129 %	114.700 %	0.104 ppb	0.169 ppb	95.104 ppb	0.326 ppb	91.884 %	101.868 %
Concentration RSD	14.0 %	10.9 %	1.3 %	39.3 %	125.7 %	4.6 %	25.3 %	10.9 %	4.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.001 ppb	0.011 ppb	106.145 %	107.111 %	0.026 ppb	46.570 ppb	111.101 %	111.122 %	110.951 %
Concentration per Run 1	0.000 ppb	0.009 ppb	112.420 %	112.340 %	0.019 ppb	44.131 ppb	115.660 %	116.020 %	119.052 %
Concentration per Run 2	0.002 ppb	0.015 ppb	116.055 %	105.474 %	0.034 ppb	47.261 ppb	119.194 %	109.405 %	117.479 %
Concentration per Run 3	0.002 ppb	0.009 ppb	89.959 %	103.518 %	0.024 ppb	48.318 ppb	98.450 %	107.941 %	96.322 %
Concentration RSD	126.7 %	33.2 %	13.3 %	4.3 %	30.1 %	4.7 %	10.0 %	3.9 %	11.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	109.221 %	0.005 ppb	0.133 ppb	105.367 %	103.258 %
Concentration per Run 1	112.428 %	-0.002 ppb	0.131 ppb	111.122 %	106.789 %
Concentration per Run 2	106.858 %	0.008 ppb	0.134 ppb	114.535 %	101.231 %
Concentration per Run 3	108.377 %	0.009 ppb	0.135 ppb	90.443 %	101.755 %
Concentration RSD	2.6 %	120.2 %	1.5 %	12.4 %	3.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	64	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350269-05 6020TL	Rack	1		
Analysis started at:	9/14/2023 4:23:30 PM	Vial	38		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	118.825 %	106.413 %	0.012 ppb	17.035 ppb	7,256.259 ppb	2,536.365 ppb	12.486 ppb	2,572.622 ppb	14,221.045 ppb
Concentration per Run 1	118.596 %	119.038 %	0.014 ppb	16.927 ppb	6,591.587 ppb	2,369.660 ppb	11.778 ppb	2,386.778 ppb	13,826.116 ppb
Concentration per Run 2	118.481 %	100.401 %	0.008 ppb	17.195 ppb	7,633.515 ppb	2,481.134 ppb	12.670 ppb	2,581.432 ppb	14,807.654 ppb
Concentration per Run 3	119.399 %	99.800 %	0.015 ppb	16.983 ppb	7,543.676 ppb	2,758.301 ppb	13.010 ppb	2,749.657 ppb	14,029.364 ppb
Concentration RSD	0.4 %	10.3 %	32.0 %	0.8 %	8.0 %	7.9 %	5.1 %	7.1 %	3.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	128.121 %	124.077 %	0.079 ppb	0.354 ppb	4.090 ppb	24.323 ppb	0.069 ppb	0.559 ppb	0.274 ppb
Concentration per Run 1	132.497 %	126.843 %	0.037 ppb	0.317 ppb	3.880 ppb	24.283 ppb	0.068 ppb	0.468 ppb	0.248 ppb
Concentration per Run 2	127.829 %	124.699 %	0.056 ppb	0.288 ppb	3.977 ppb	27.490 ppb	0.070 ppb	0.620 ppb	0.334 ppb
Concentration per Run 3	124.035 %	120.691 %	0.145 ppb	0.456 ppb	4.414 ppb	21.195 ppb	0.069 ppb	0.589 ppb	0.239 ppb
Concentration RSD	3.3 %	2.5 %	72.1 %	25.4 %	7.0 %	12.9 %	1.0 %	14.3 %	19.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.933 ppb	124.992 %	115.225 %	0.191 ppb	2.108 ppb	82.600 ppb	0.026 ppb	113.980 %	106.964 %
Concentration per Run 1	1.595 ppb	122.255 %	123.244 %	0.115 ppb	2.413 ppb	76.802 ppb	0.028 ppb	112.723 %	111.549 %
Concentration per Run 2	2.052 ppb	126.678 %	111.854 %	0.445 ppb	2.273 ppb	83.962 ppb	0.039 ppb	114.121 %	106.761 %
Concentration per Run 3	2.152 ppb	126.042 %	110.578 %	0.014 ppb	1.636 ppb	87.035 ppb	0.013 ppb	115.096 %	102.581 %
Concentration RSD	15.4 %	1.9 %	6.1 %	117.9 %	19.6 %	6.4 %	49.2 %	1.0 %	4.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.000 ppb	0.018 ppb	117.380 %	111.141 %	0.033 ppb	8.369 ppb	116.567 %	114.966 %	114.926 %
Concentration per Run 1	0.000 ppb	0.014 ppb	114.616 %	114.704 %	0.045 ppb	7.818 ppb	116.257 %	119.610 %	113.549 %
Concentration per Run 2	0.000 ppb	0.021 ppb	118.668 %	110.568 %	0.028 ppb	9.129 ppb	115.591 %	111.719 %	115.903 %
Concentration per Run 3	0.001 ppb	0.018 ppb	118.855 %	108.152 %	0.024 ppb	8.158 ppb	117.855 %	113.571 %	115.326 %
Concentration RSD	355.3 %	18.5 %	2.0 %	3.0 %	34.5 %	8.1 %	1.0 %	3.6 %	1.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	112.073 %	0.005 ppb	0.021 ppb	115.115 %	107.289 %
Concentration per Run 1	117.628 %	0.000 ppb	0.021 ppb	114.588 %	114.029 %
Concentration per Run 2	108.199 %	0.006 ppb	0.021 ppb	115.219 %	103.827 %
Concentration per Run 3	110.394 %	0.008 ppb	0.022 ppb	115.539 %	104.011 %
Concentration RSD	4.4 %	97.2 %	2.7 %	0.4 %	5.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	65	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350269-06 6020TL	Rack	1		
Analysis started at:	9/14/2023 4:28:15 PM	Vial	39		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.288 %	115.231 %	0.003 ppb	55.074 ppb	25,529.766 ppb	19,671.321 ppb	46.260 ppb	29,915.115 ppb	77,533.249 ppb
Concentration per Run 1	107.788 %	90.782 %	0.006 ppb	55.813 ppb	28,754.873 ppb	21,350.415 ppb	47.730 ppb	29,736.138 ppb	74,596.115 ppb
Concentration per Run 2	109.276 %	127.455 %	0.001 ppb	54.745 ppb	23,865.615 ppb	18,894.327 ppb	45.060 ppb	30,291.053 ppb	74,938.667 ppb
Concentration per Run 3	110.801 %	127.455 %	0.003 ppb	54.665 ppb	23,968.809 ppb	18,769.220 ppb	45.991 ppb	29,718.155 ppb	83,064.964 ppb
Concentration RSD	1.4 %	18.4 %	86.7 %	1.2 %	10.9 %	7.4 %	2.9 %	1.1 %	6.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	120.886 %	113.980 %	0.665 ppb	11.040 ppb	930.000 ppb	210.594 ppb	0.444 ppb	7.133 ppb	1.242 ppb
Concentration per Run 1	119.004 %	118.641 %	0.580 ppb	9.851 ppb	887.153 ppb	196.094 ppb	0.501 ppb	6.917 ppb	1.173 ppb
Concentration per Run 2	120.893 %	113.514 %	0.758 ppb	11.350 ppb	945.154 ppb	236.837 ppb	0.410 ppb	7.172 ppb	1.284 ppb
Concentration per Run 3	122.760 %	109.786 %	0.657 ppb	11.920 ppb	957.691 ppb	198.850 ppb	0.423 ppb	7.311 ppb	1.269 ppb
Concentration RSD	1.6 %	3.9 %	13.5 %	9.7 %	4.0 %	10.8 %	11.1 %	2.8 %	4.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.278 ppb	121.557 %	110.691 %	0.284 ppb	0.612 ppb	178.887 ppb	0.381 ppb	108.393 %	103.267 %
Concentration per Run 1	0.266 ppb	121.041 %	114.336 %	0.313 ppb	0.643 ppb	167.548 ppb	0.309 ppb	104.998 %	106.567 %
Concentration per Run 2	0.261 ppb	122.620 %	105.133 %	0.377 ppb	0.528 ppb	187.956 ppb	0.342 ppb	109.005 %	102.263 %
Concentration per Run 3	0.308 ppb	121.012 %	112.604 %	0.163 ppb	0.666 ppb	181.156 ppb	0.493 ppb	111.177 %	100.972 %
Concentration RSD	9.2 %	0.8 %	4.4 %	38.7 %	12.1 %	5.8 %	25.8 %	2.9 %	2.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.005 ppb	0.038 ppb	111.188 %	106.323 %	0.034 ppb	59.360 ppb	116.070 %	112.497 %	116.621 %
Concentration per Run 1	0.005 ppb	0.024 ppb	110.238 %	109.267 %	0.032 ppb	55.569 ppb	114.040 %	115.765 %	115.490 %
Concentration per Run 2	0.003 ppb	0.049 ppb	111.185 %	107.326 %	0.042 ppb	57.657 ppb	115.860 %	112.243 %	116.280 %
Concentration per Run 3	0.006 ppb	0.041 ppb	112.139 %	102.376 %	0.029 ppb	64.854 ppb	118.310 %	109.484 %	118.092 %
Concentration RSD	32.3 %	33.8 %	0.9 %	3.3 %	19.1 %	8.2 %	1.8 %	2.8 %	1.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	110.508 %	0.054 ppb	0.127 ppb	106.434 %	101.232 %
Concentration per Run 1	113.779 %	0.047 ppb	0.124 ppb	102.273 %	106.113 %
Concentration per Run 2	109.406 %	0.055 ppb	0.132 ppb	105.071 %	100.229 %
Concentration per Run 3	108.338 %	0.060 ppb	0.126 ppb	111.956 %	97.355 %
Concentration RSD	2.6 %	12.9 %	3.0 %	4.7 %	4.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	66	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350269-07 6020TL	Rack	1		
Analysis started at:	9/14/2023 4:33:00 PM	Vial	40		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.226 %	112.826 %	-0.002 ppb	149.916 ppb	28,970.382 ppb	18,629.163 ppb	4.851 ppb	15,760.947 ppb	172,245.886 ppb
Concentration per Run 1	106.711 %	121.443 %	-0.001 ppb	155.700 ppb	27,434.109 ppb	17,346.862 ppb	5.033 ppb	15,339.059 ppb	170,509.287 ppb
Concentration per Run 2	116.320 %	108.818 %	-0.007 ppb	144.809 ppb	29,239.014 ppb	18,813.605 ppb	4.826 ppb	15,685.925 ppb	168,000.027 ppb
Concentration per Run 3	113.646 %	108.216 %	0.003 ppb	149.238 ppb	30,238.024 ppb	19,727.022 ppb	4.694 ppb	16,257.858 ppb	178,228.345 ppb
Concentration RSD	4.4 %	6.6 %	342.4 %	3.7 %	4.9 %	6.4 %	3.5 %	2.9 %	3.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	126.775 %	118.206 %	0.282 ppb	1.205 ppb	14.249 ppb	15.038 ppb	0.372 ppb	1.039 ppb	2.006 ppb
Concentration per Run 1	123.870 %	118.268 %	0.286 ppb	1.093 ppb	13.954 ppb	15.750 ppb	0.353 ppb	1.035 ppb	1.964 ppb
Concentration per Run 2	130.927 %	119.759 %	0.321 ppb	1.256 ppb	13.855 ppb	14.403 ppb	0.340 ppb	1.163 ppb	2.094 ppb
Concentration per Run 3	125.528 %	116.590 %	0.239 ppb	1.265 ppb	14.937 ppb	14.960 ppb	0.423 ppb	0.920 ppb	1.959 ppb
Concentration RSD	2.9 %	1.3 %	14.6 %	8.1 %	4.2 %	4.5 %	12.0 %	11.7 %	3.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.619 ppb	121.381 %	110.509 %	0.249 ppb	0.718 ppb	580.868 ppb	0.113 ppb	110.003 %	104.751 %
Concentration per Run 1	1.468 ppb	118.110 %	113.789 %	0.252 ppb	0.129 ppb	548.797 ppb	0.131 ppb	105.486 %	108.369 %
Concentration per Run 2	1.700 ppb	123.532 %	107.957 %	0.402 ppb	0.854 ppb	601.581 ppb	0.077 ppb	112.747 %	101.872 %
Concentration per Run 3	1.688 ppb	122.502 %	109.780 %	0.093 ppb	1.172 ppb	592.226 ppb	0.131 ppb	111.777 %	104.012 %
Concentration RSD	8.1 %	2.4 %	2.7 %	62.2 %	74.5 %	4.8 %	27.5 %	3.6 %	3.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.003 ppb	0.004 ppb	113.737 %	107.723 %	0.068 ppb	101.608 ppb	118.116 %	113.563 %	116.870 %
Concentration per Run 1	0.003 ppb	0.006 ppb	109.299 %	112.222 %	0.071 ppb	94.894 ppb	112.165 %	117.988 %	111.672 %
Concentration per Run 2	0.002 ppb	0.003 ppb	117.207 %	108.033 %	0.064 ppb	103.971 ppb	119.757 %	112.061 %	121.603 %
Concentration per Run 3	0.002 ppb	0.003 ppb	114.704 %	102.914 %	0.068 ppb	105.960 ppb	122.428 %	110.640 %	117.334 %
Concentration RSD	25.0 %	39.5 %	3.6 %	4.3 %	4.9 %	5.8 %	4.5 %	3.4 %	4.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	112.601 %	0.239 ppb	0.021 ppb	110.377 %	102.254 %
Concentration per Run 1	115.472 %	0.214 ppb	0.023 ppb	105.573 %	106.393 %
Concentration per Run 2	111.079 %	0.267 ppb	0.021 ppb	115.992 %	96.739 %
Concentration per Run 3	111.251 %	0.237 ppb	0.020 ppb	109.566 %	103.630 %
Concentration RSD	2.2 %	11.3 %	7.7 %	4.8 %	4.9 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	67	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350250-06d10 6020TL	Rack	1		
Analysis started at:	9/14/2023 4:37:45 PM	Vial	41		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	111.856 %	106.413 %	-0.002 ppb	5.202 ppb	3,078.287 ppb	1,339.533 ppb	4.334 ppb	1,137.090 ppb	7,122.977 ppb
Concentration per Run 1	112.762 %	119.639 %	-0.003 ppb	5.172 ppb	2,856.828 ppb	1,276.715 ppb	4.233 ppb	1,135.876 ppb	7,426.011 ppb
Concentration per Run 2	111.292 %	97.996 %	0.002 ppb	5.241 ppb	3,243.616 ppb	1,401.193 ppb	4.342 ppb	1,150.951 ppb	6,818.082 ppb
Concentration per Run 3	111.514 %	101.603 %	-0.005 ppb	5.192 ppb	3,134.416 ppb	1,340.690 ppb	4.426 ppb	1,124.442 ppb	7,124.837 ppb
Concentration RSD	0.7 %	10.9 %	152.0 %	0.7 %	6.5 %	4.6 %	2.2 %	1.2 %	4.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	120.822 %	119.542 %	0.042 ppb	-0.019 ppb	950.559 ppb	7,585.604 ppb	0.797 ppb	0.119 ppb	-0.004 ppb
Concentration per Run 1	121.031 %	117.802 %	0.060 ppb	-0.058 ppb	938.640 ppb	7,432.883 ppb	0.751 ppb	0.130 ppb	-0.010 ppb
Concentration per Run 2	124.127 %	122.835 %	0.024 ppb	0.028 ppb	950.969 ppb	7,623.596 ppb	0.797 ppb	0.082 ppb	-0.015 ppb
Concentration per Run 3	117.307 %	117.988 %	0.043 ppb	-0.026 ppb	962.067 ppb	7,700.333 ppb	0.842 ppb	0.146 ppb	0.012 ppb
Concentration RSD	2.8 %	2.4 %	42.9 %	230.9 %	1.2 %	1.8 %	5.7 %	27.6 %	336.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.214 ppb	116.423 %	109.226 %	55.312 ppb	0.004 ppb	36.504 ppb	0.012 ppb	110.668 %	106.598 %
Concentration per Run 1	0.024 ppb	117.391 %	112.878 %	52.527 ppb	0.004 ppb	33.731 ppb	-0.016 ppb	111.728 %	113.253 %
Concentration per Run 2	0.286 ppb	114.022 %	108.483 %	55.490 ppb	0.004 ppb	37.655 ppb	0.027 ppb	109.851 %	102.947 %
Concentration per Run 3	0.332 ppb	117.856 %	106.317 %	57.918 ppb	0.004 ppb	38.127 ppb	0.027 ppb	110.427 %	103.595 %
Concentration RSD	77.7 %	1.8 %	3.1 %	4.9 %	0.0 %	6.6 %	200.7 %	0.9 %	5.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.000 ppb	0.000 ppb	113.065 %	108.319 %	-0.013 ppb	11.599 ppb	116.810 %	111.340 %	114.402 %
Concentration per Run 1	0.000 ppb	0.000 ppb	114.292 %	112.144 %	-0.011 ppb	10.757 ppb	116.445 %	116.429 %	109.012 %
Concentration per Run 2	0.002 ppb	0.000 ppb	111.898 %	107.994 %	-0.017 ppb	11.723 ppb	114.366 %	108.676 %	115.248 %
Concentration per Run 3	0.000 ppb	0.000 ppb	113.006 %	104.817 %	-0.010 ppb	12.318 ppb	119.620 %	108.916 %	118.945 %
Concentration RSD	568.7 %	N/A	1.1 %	3.4 %	27.9 %	6.8 %	2.3 %	4.0 %	4.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	109.643 %	-0.006 ppb	0.005 ppb	115.767 %	107.909 %
Concentration per Run 1	114.626 %	-0.011 ppb	0.003 ppb	113.346 %	110.630 %
Concentration per Run 2	108.700 %	-0.005 ppb	0.007 ppb	116.132 %	108.408 %
Concentration per Run 3	105.603 %	-0.003 ppb	0.005 ppb	117.824 %	104.689 %
Concentration RSD	4.2 %	66.1 %	42.9 %	2.0 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	68	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350250-10D10 6020TL	Rack	1		
Analysis started at:	9/14/2023 4:42:31 PM	Vial	42		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	111.229 %	107.816 %	-0.003 ppb	17.059 ppb	5,243.089 ppb	5,484.293 ppb	0.678 ppb	2,556.450 ppb	27,183.582 ppb
Concentration per Run 1	109.886 %	110.020 %	-0.002 ppb	17.026 ppb	5,094.503 ppb	5,463.570 ppb	0.689 ppb	2,622.870 ppb	25,744.003 ppb
Concentration per Run 2	111.836 %	105.812 %	-0.001 ppb	17.176 ppb	5,285.752 ppb	5,330.285 ppb	0.649 ppb	2,488.143 ppb	27,308.196 ppb
Concentration per Run 3	111.963 %	107.615 %	-0.006 ppb	16.976 ppb	5,349.011 ppb	5,659.025 ppb	0.695 ppb	2,558.339 ppb	28,498.547 ppb
Concentration RSD	1.0 %	2.0 %	81.1 %	0.6 %	2.5 %	3.0 %	3.7 %	2.6 %	5.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	118.901 %	115.440 %	0.306 ppb	-0.044 ppb	1,406.406 ppb	2,208.755 ppb	2.568 ppb	2.780 ppb	0.055 ppb
Concentration per Run 1	118.294 %	114.633 %	0.240 ppb	-0.078 ppb	1,355.844 ppb	2,095.503 ppb	2.624 ppb	2.725 ppb	0.028 ppb
Concentration per Run 2	120.177 %	117.615 %	0.378 ppb	-0.045 ppb	1,393.092 ppb	2,234.525 ppb	2.523 ppb	2.580 ppb	0.082 ppb
Concentration per Run 3	118.233 %	114.073 %	0.300 ppb	-0.008 ppb	1,470.281 ppb	2,296.239 ppb	2.556 ppb	3.036 ppb	0.054 ppb
Concentration RSD	0.9 %	1.6 %	22.6 %	80.4 %	4.2 %	4.7 %	2.0 %	8.4 %	49.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.314 ppb	118.985 %	109.864 %	35.599 ppb	0.154 ppb	110.424 ppb	-0.001 ppb	109.335 %	103.547 %
Concentration per Run 1	0.205 ppb	117.436 %	115.135 %	34.288 ppb	0.147 ppb	101.071 ppb	-0.003 ppb	109.819 %	109.019 %
Concentration per Run 2	0.462 ppb	119.181 %	109.506 %	35.671 ppb	0.155 ppb	113.007 ppb	-0.001 ppb	108.976 %	99.710 %
Concentration per Run 3	0.275 ppb	120.337 %	104.951 %	36.837 ppb	0.161 ppb	117.193 ppb	-0.001 ppb	109.211 %	101.913 %
Concentration RSD	42.3 %	1.2 %	4.6 %	3.6 %	4.4 %	7.6 %	83.6 %	0.4 %	4.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.001 ppb	0.001 ppb	113.129 %	107.264 %	-0.009 ppb	33.199 ppb	114.788 %	109.692 %	115.737 %
Concentration per Run 1	0.001 ppb	0.003 ppb	112.211 %	111.093 %	-0.013 ppb	30.708 ppb	114.269 %	115.634 %	115.809 %
Concentration per Run 2	0.000 ppb	0.000 ppb	109.298 %	105.067 %	-0.008 ppb	33.952 ppb	113.807 %	106.722 %	117.433 %
Concentration per Run 3	0.001 ppb	0.000 ppb	117.878 %	105.632 %	-0.006 ppb	34.937 ppb	116.287 %	106.721 %	113.968 %
Concentration RSD	56.7 %	173.2 %	3.9 %	3.1 %	38.4 %	6.7 %	1.1 %	4.7 %	1.5 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	110.151 %	-0.008 ppb	0.004 ppb	112.979 %	105.002 %
Concentration per Run 1	114.471 %	-0.012 ppb	0.003 ppb	110.518 %	109.116 %
Concentration per Run 2	108.369 %	-0.006 ppb	0.005 ppb	113.098 %	104.081 %
Concentration per Run 3	107.613 %	-0.006 ppb	0.003 ppb	115.321 %	101.808 %
Concentration RSD	3.4 %	39.6 %	27.9 %	2.1 %	3.6 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 69 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 9/14/2023 4:48:09 PM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.303 %	95.591 %	56.393 ppb	56.982 ppb	6,764.304 ppb	6,898.929 ppb	57.405 ppb	6,907.747 ppb	6,591.994 ppb
Concentration per Run 1	110.930 %	90.180 %	57.095 ppb	57.991 ppb	6,873.785 ppb	6,980.439 ppb	59.879 ppb	7,024.167 ppb	6,511.338 ppb
Concentration per Run 2	124.226 %	101.603 %	47.826 ppb	49.748 ppb	6,774.902 ppb	6,870.527 ppb	47.151 ppb	7,004.796 ppb	6,420.374 ppb
Concentration per Run 3	101.753 %	94.990 %	64.257 ppb	63.207 ppb	6,644.226 ppb	6,845.821 ppb	65.187 ppb	6,694.277 ppb	6,844.271 ppb
Recovery Percentage 1			93.988 %	94.970 %	112.738 %	114.982 %	95.676 %	115.129 %	109.867 %
Concentration RSD	10.1 %	6.0 %	14.6 %	11.9 %	1.7 %	1.0 %	16.1 %	2.7 %	3.4 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	125.329 %	109.848 %	65.049 ppb	61.263 ppb	67.968 ppb	6,798.063 ppb	65.384 ppb	64.150 ppb	63.968 ppb
Concentration per Run 1	118.287 %	109.507 %	66.427 ppb	63.259 ppb	68.014 ppb	6,912.047 ppb	67.195 ppb	63.138 ppb	66.588 ppb
Concentration per Run 2	146.303 %	109.320 %	64.681 ppb	62.771 ppb	71.829 ppb	7,093.466 ppb	67.059 ppb	69.101 ppb	66.022 ppb
Concentration per Run 3	111.398 %	110.718 %	64.039 ppb	57.758 ppb	64.060 ppb	6,388.676 ppb	61.898 ppb	60.212 ppb	59.295 ppb
Recovery Percentage 1			108.415 %	102.105 %	113.280 %	113.301 %	108.974 %	106.917 %	106.614 %
Concentration RSD	14.8 %	0.7 %	1.9 %	5.0 %	5.7 %	5.4 %	4.6 %	7.1 %	6.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	64.957 ppb	117.323 %	104.007 %	60.725 ppb	58.322 ppb	65.638 ppb	60.631 ppb	112.413 %	96.548 %
Concentration per Run 1	67.643 ppb	113.441 %	98.985 %	62.754 ppb	60.147 ppb	67.228 ppb	64.175 ppb	109.494 %	92.511 %
Concentration per Run 2	67.658 ppb	130.067 %	98.261 %	64.038 ppb	60.424 ppb	69.932 ppb	60.598 ppb	128.118 %	95.743 %
Concentration per Run 3	59.570 ppb	108.463 %	114.775 %	55.382 ppb	54.394 ppb	59.753 ppb	57.120 ppb	99.628 %	101.390 %
Recovery Percentage 1	108.261 %			101.208 %	97.203 %	109.396 %	101.052 %		
Concentration RSD	7.2 %	9.6 %	9.0 %	7.7 %	5.8 %	8.0 %	5.8 %	12.9 %	4.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	62.934 ppb	63.515 ppb	113.385 %	98.181 %	64.398 ppb	64.218 ppb	116.356 %	103.030 %	113.722 %
Concentration per Run 1	64.827 ppb	65.099 ppb	110.326 %	96.393 %	65.830 ppb	65.863 ppb	114.864 %	102.349 %	109.686 %
Concentration per Run 2	64.154 ppb	65.733 ppb	129.451 %	95.760 %	66.432 ppb	65.760 ppb	132.623 %	100.172 %	129.313 %
Concentration per Run 3	59.821 ppb	59.715 ppb	100.379 %	102.389 %	60.930 ppb	61.031 ppb	101.580 %	106.568 %	102.167 %
Recovery Percentage 1	104.890 %	105.859 %			107.329 %	107.030 %			
Concentration RSD	4.3 %	5.2 %	13.0 %	3.7 %	4.7 %	4.3 %	13.4 %	3.2 %	12.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	99.751 %	62.588 ppb	63.082 ppb	112.586 %	95.272 %
Concentration per Run 1	97.675 %	61.978 ppb	63.823 ppb	108.297 %	94.439 %
Concentration per Run 2	97.646 %	65.761 ppb	64.257 ppb	126.678 %	92.589 %
Concentration per Run 3	103.932 %	60.024 ppb	61.166 ppb	102.782 %	98.788 %
Recovery Percentage 1		104.313 %	105.137 %		
Concentration RSD	3.6 %	4.7 %	2.7 %	11.1 %	3.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 70 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCB Rack 0
Analysis started at: 9/14/2023 4:52:59 PM Vial 10

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.713 %	106.012 %	0.013 ppb	0.010 ppb	-3.552 ppb	-0.356 ppb	0.164 ppb	10.230 ppb	-1.237 ppb
Concentration per Run 1	112.192 %	110.020 %	0.008 ppb	0.010 ppb	-5.269 ppb	2.153 ppb	0.164 ppb	-7.167 ppb	-16.112 ppb
Concentration per Run 2	113.523 %	102.806 %	0.024 ppb	0.015 ppb	-0.379 ppb	-1.254 ppb	0.068 ppb	9.005 ppb	5.536 ppb
Concentration per Run 3	112.423 %	105.210 %	0.008 ppb	0.004 ppb	-5.009 ppb	-1.967 ppb	0.261 ppb	28.853 ppb	6.865 ppb
Recovery Percentage 1			2.607 %	0.096 %	-3.552 %	-0.509 %	1.641 %	10.230 %	-1.237 %
Concentration RSD	0.6 %	3.5 %	69.6 %	59.4 %	77.4 %	618.4 %	58.9 %	176.3 %	1,042.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	117.184 %	104.225 %	-0.014 ppb	-0.005 ppb	0.178 ppb	6.789 ppb	0.011 ppb	0.074 ppb	0.040 ppb
Concentration per Run 1	115.590 %	104.846 %	-0.008 ppb	-0.042 ppb	0.154 ppb	6.532 ppb	0.013 ppb	0.061 ppb	0.032 ppb
Concentration per Run 2	118.615 %	102.889 %	-0.027 ppb	0.044 ppb	0.165 ppb	7.862 ppb	0.010 ppb	0.144 ppb	0.038 ppb
Concentration per Run 3	117.347 %	104.940 %	-0.008 ppb	-0.018 ppb	0.215 ppb	5.973 ppb	0.010 ppb	0.017 ppb	0.050 ppb
Recovery Percentage 1			-0.287 %	-0.533 %	17.793 %	13.578 %	2.204 %	3.683 %	3.964 %
Concentration RSD	1.3 %	1.1 %	78.5 %	836.9 %	18.1 %	14.3 %	16.6 %	87.9 %	23.7 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.973 ppb	116.380 %	103.553 %	0.033 ppb	0.115 ppb	0.022 ppb	0.085 ppb	110.160 %	102.985 %
Concentration per Run 1	0.971 ppb	119.067 %	101.488 %	0.064 ppb	-0.008 ppb	0.000 ppb	0.119 ppb	112.039 %	98.598 %
Concentration per Run 2	0.930 ppb	117.981 %	103.948 %	-0.004 ppb	0.350 ppb	0.074 ppb	0.088 ppb	110.275 %	107.326 %
Concentration per Run 3	1.018 ppb	112.091 %	105.224 %	0.040 ppb	0.004 ppb	-0.008 ppb	0.049 ppb	108.168 %	103.030 %
Recovery Percentage 1	19.462 %			6.692 %	2.310 %	4.390 %	4.253 %		
Concentration RSD	4.5 %	3.2 %	1.8 %	102.2 %	176.2 %	206.6 %	41.2 %	1.8 %	4.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.012 ppb	0.008 ppb	111.423 %	106.306 %	0.008 ppb	0.108 ppb	109.312 %	106.126 %	108.782 %
Concentration per Run 1	0.018 ppb	0.010 ppb	110.448 %	101.536 %	0.005 ppb	0.031 ppb	108.819 %	103.787 %	107.521 %
Concentration per Run 2	0.009 ppb	0.009 ppb	114.154 %	112.039 %	0.019 ppb	0.116 ppb	110.394 %	108.796 %	108.971 %
Concentration per Run 3	0.009 ppb	0.006 ppb	109.667 %	105.343 %	0.000 ppb	0.177 ppb	108.724 %	105.794 %	109.855 %
Recovery Percentage 1	3.006 %				0.210 %	21.580 %			
Concentration RSD	39.5 %	22.0 %	2.2 %	5.0 %	118.0 %	67.7 %	0.9 %	2.4 %	1.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	103.790 %	0.206 ppb	0.018 ppb	111.389 %	103.010 %
Concentration per Run 1	99.609 %	0.136 ppb	0.022 ppb	110.674 %	100.732 %
Concentration per Run 2	109.312 %	0.239 ppb	0.019 ppb	112.476 %	106.250 %
Concentration per Run 3	102.450 %	0.243 ppb	0.014 ppb	111.016 %	102.049 %
Recovery Percentage 1		20.593 %	1.821 %		
Concentration RSD	4.8 %	29.5 %	22.3 %	0.9 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	71	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 4:59:42 PM	Vial	9		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	111.799 %	109.619 %	55.044 ppb	54.897 ppb	5,893.766 ppb	5,824.145 ppb	57.392 ppb	5,878.955 ppb	5,468.966 ppb
Concentration per Run 1	112.601 %	108.216 %	54.195 ppb	54.544 ppb	5,793.006 ppb	5,885.326 ppb	58.311 ppb	6,085.269 ppb	4,835.767 ppb
Concentration per Run 2	111.649 %	120.842 %	54.374 ppb	54.247 ppb	5,515.228 ppb	5,454.691 ppb	56.037 ppb	5,595.413 ppb	5,955.961 ppb
Concentration per Run 3	111.148 %	99.800 %	56.563 ppb	55.901 ppb	6,373.065 ppb	6,132.418 ppb	57.827 ppb	5,956.183 ppb	5,615.171 ppb
Recovery Percentage 1			91.740 %	91.495 %	98.229 %	97.069 %	95.653 %	97.983 %	91.149 %
Concentration RSD	0.7 %	9.7 %	2.4 %	1.6 %	7.4 %	5.9 %	2.1 %	4.3 %	10.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	120.765 %	125.942 %	53.885 ppb	54.313 ppb	57.936 ppb	5,877.201 ppb	54.445 ppb	57.342 ppb	56.575 ppb
Concentration per Run 1	127.383 %	125.817 %	55.126 ppb	52.568 ppb	57.183 ppb	5,919.392 ppb	52.333 ppb	55.684 ppb	55.206 ppb
Concentration per Run 2	119.833 %	127.588 %	52.121 ppb	56.385 ppb	57.435 ppb	5,820.907 ppb	55.291 ppb	58.518 ppb	56.318 ppb
Concentration per Run 3	115.078 %	124.419 %	54.410 ppb	53.987 ppb	59.191 ppb	5,891.306 ppb	55.711 ppb	57.824 ppb	58.200 ppb
Recovery Percentage 1			89.809 %	90.522 %	96.561 %	97.953 %	90.742 %	95.570 %	94.291 %
Concentration RSD	5.1 %	1.3 %	2.9 %	3.6 %	1.9 %	0.9 %	3.4 %	2.6 %	2.7 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	55.577 ppb	113.500 %	110.398 %	55.153 ppb	58.192 ppb	60.393 ppb	55.205 ppb	108.467 %	103.430 %
Concentration per Run 1	54.068 ppb	116.099 %	111.034 %	53.098 ppb	55.512 ppb	57.449 ppb	51.274 ppb	105.741 %	108.284 %
Concentration per Run 2	56.288 ppb	110.753 %	108.670 %	56.620 ppb	61.011 ppb	61.842 ppb	57.678 ppb	107.495 %	101.644 %
Concentration per Run 3	56.374 ppb	113.648 %	111.490 %	55.740 ppb	58.052 ppb	61.887 ppb	56.662 ppb	112.163 %	100.363 %
Recovery Percentage 1	92.628 %			91.921 %	96.986 %	100.654 %	92.008 %		
Concentration RSD	2.4 %	2.4 %	1.4 %	3.3 %	4.7 %	4.2 %	6.2 %	3.1 %	4.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	54.862 ppb	56.471 ppb	109.651 %	106.415 %	56.919 ppb	57.352 ppb	112.598 %	109.359 %	111.289 %
Concentration per Run 1	52.239 ppb	53.918 ppb	110.147 %	109.597 %	53.792 ppb	53.900 ppb	109.719 %	113.502 %	110.767 %
Concentration per Run 2	55.992 ppb	57.868 ppb	108.477 %	105.053 %	58.408 ppb	60.485 ppb	114.025 %	106.237 %	109.889 %
Concentration per Run 3	56.355 ppb	57.628 ppb	110.328 %	104.596 %	58.559 ppb	57.672 ppb	114.050 %	108.339 %	113.212 %
Recovery Percentage 1	91.437 %	94.119 %			94.866 %	95.587 %			
Concentration RSD	4.2 %	3.9 %	0.9 %	2.6 %	4.8 %	5.8 %	2.2 %	3.4 %	1.5 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	109.757 %	55.493 ppb	55.859 ppb	109.716 %	107.904 %
Concentration per Run 1	115.779 %	53.087 ppb	52.764 ppb	109.465 %	113.675 %
Concentration per Run 2	104.768 %	56.252 ppb	56.571 ppb	108.594 %	106.668 %
Concentration per Run 3	108.725 %	57.138 ppb	58.243 ppb	111.090 %	103.370 %
Recovery Percentage 1		92.488 %	93.099 %		
Concentration RSD	5.1 %	3.8 %	5.0 %	1.2 %	4.9 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	72	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 5:04:31 PM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.951 %	114.629 %	0.012 ppb	-0.020 ppb	-15.729 ppb	0.363 ppb	0.203 ppb	1.787 ppb	13.233 ppb
Concentration per Run 1	113.228 %	120.842 %	0.015 ppb	-0.005 ppb	-19.148 ppb	1.578 ppb	0.158 ppb	15.449 ppb	3.880 ppb
Concentration per Run 2	112.094 %	108.217 %	0.010 ppb	-0.026 ppb	-19.306 ppb	0.705 ppb	0.257 ppb	-6.282 ppb	29.399 ppb
Concentration per Run 3	113.532 %	114.830 %	0.011 ppb	-0.028 ppb	-8.732 ppb	-1.195 ppb	0.194 ppb	-3.804 ppb	6.419 ppb
Recovery Percentage 1			2.412 %	-0.197 %	-15.729 %	0.519 %	2.031 %	1.787 %	13.233 %
Concentration RSD	0.7 %	5.5 %	20.6 %	63.6 %	38.5 %	390.5 %	24.7 %	665.6 %	106.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	109.845 %	108.388 %	0.004 ppb	-0.053 ppb	0.149 ppb	6.149 ppb	0.015 ppb	0.108 ppb	0.050 ppb
Concentration per Run 1	114.695 %	114.446 %	0.027 ppb	-0.064 ppb	0.144 ppb	8.321 ppb	0.023 ppb	0.117 ppb	0.031 ppb
Concentration per Run 2	103.695 %	107.083 %	-0.008 ppb	-0.066 ppb	0.103 ppb	6.717 ppb	0.010 ppb	0.107 ppb	0.056 ppb
Concentration per Run 3	111.144 %	103.635 %	-0.008 ppb	-0.029 ppb	0.199 ppb	3.409 ppb	0.013 ppb	0.100 ppb	0.064 ppb
Recovery Percentage 1			0.071 %	-5.306 %	14.867 %	12.298 %	3.060 %	5.404 %	5.030 %
Concentration RSD	5.1 %	5.1 %	562.5 %	38.9 %	32.2 %	40.7 %	46.3 %	8.2 %	33.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.862 ppb	111.575 %	106.712 %	0.119 ppb	0.231 ppb	0.016 ppb	0.180 ppb	107.292 %	105.468 %
Concentration per Run 1	0.645 ppb	115.151 %	108.778 %	0.120 ppb	0.164 ppb	0.054 ppb	0.157 ppb	107.099 %	110.931 %
Concentration per Run 2	1.122 ppb	107.527 %	105.771 %	0.230 ppb	0.535 ppb	-0.029 ppb	0.191 ppb	109.069 %	102.627 %
Concentration per Run 3	0.820 ppb	112.049 %	105.588 %	0.005 ppb	-0.007 ppb	0.024 ppb	0.191 ppb	105.709 %	102.844 %
Recovery Percentage 1	17.248 %			23.706 %	4.618 %	3.232 %	8.976 %		
Concentration RSD	28.0 %	3.4 %	1.7 %	94.9 %	120.1 %	260.8 %	10.8 %	1.6 %	4.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.015 ppb	0.008 ppb	108.017 %	106.432 %	0.084 ppb	0.085 ppb	107.577 %	107.171 %	106.826 %
Concentration per Run 1	0.017 ppb	0.014 ppb	108.684 %	112.261 %	0.068 ppb	0.045 ppb	106.831 %	110.581 %	107.000 %
Concentration per Run 2	0.013 ppb	0.006 ppb	108.722 %	104.778 %	0.091 ppb	0.122 ppb	107.758 %	105.961 %	107.960 %
Concentration per Run 3	0.015 ppb	0.003 ppb	106.646 %	102.257 %	0.093 ppb	0.087 ppb	108.141 %	104.971 %	105.518 %
Recovery Percentage 1	3.704 %				2.103 %	16.941 %			
Concentration RSD	14.2 %	73.6 %	1.1 %	4.9 %	16.8 %	45.1 %	0.6 %	2.8 %	1.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.319 %	0.135 ppb	0.020 ppb	109.739 %	106.993 %
Concentration per Run 1	109.046 %	0.083 ppb	0.022 ppb	111.737 %	110.763 %
Concentration per Run 2	104.522 %	0.150 ppb	0.020 ppb	106.839 %	104.804 %
Concentration per Run 3	105.388 %	0.172 ppb	0.017 ppb	110.640 %	105.413 %
Recovery Percentage 1		13.506 %	1.987 %		
Concentration RSD	2.3 %	34.5 %	12.5 %	2.3 %	3.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	73	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	xTEST 120	Rack	1		
Analysis started at:	9/14/2023 5:10:58 PM	Vial	43		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	113.463 %	107.816 %	0.006 ppb	116.355 ppb	-18.834 ppb	1.076 ppb	0.171 ppb	-5.498 ppb	-116.771 ppb
Concentration per Run 1	113.441 %	118.437 %	0.007 ppb	118.546 ppb	-28.133 ppb	0.899 ppb	0.112 ppb	-15.607 ppb	-202.752 ppb
Concentration per Run 2	114.058 %	97.996 %	0.009 ppb	115.297 ppb	-13.913 ppb	-1.758 ppb	0.184 ppb	-9.618 ppb	-357.613 ppb
Concentration per Run 3	112.890 %	107.014 %	0.004 ppb	115.222 ppb	-14.455 ppb	4.087 ppb	0.215 ppb	8.732 ppb	210.052 ppb
Concentration RSD	0.5 %	9.5 %	41.7 %	1.6 %	42.8 %	271.9 %	31.1 %	230.7 %	251.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	116.336 %	109.942 %	0.006 ppb	-0.008 ppb	0.070 ppb	3.350 ppb	0.007 ppb	-0.015 ppb	-0.013 ppb
Concentration per Run 1	113.136 %	125.538 %	-0.027 ppb	-0.006 ppb	0.042 ppb	1.593 ppb	0.014 ppb	-0.004 ppb	-0.011 ppb
Concentration per Run 2	116.775 %	104.847 %	0.033 ppb	-0.057 ppb	0.091 ppb	2.760 ppb	0.001 ppb	-0.020 ppb	0.000 ppb
Concentration per Run 3	119.098 %	99.441 %	0.014 ppb	0.039 ppb	0.076 ppb	5.697 ppb	0.008 ppb	-0.019 ppb	-0.030 ppb
Concentration RSD	2.6 %	12.5 %	473.6 %	595.3 %	36.1 %	63.1 %	84.5 %	60.2 %	113.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.211 ppb	114.016 %	99.052 %	-0.010 ppb	0.124 ppb	139.584 ppb	0.011 ppb	110.809 %	97.791 %
Concentration per Run 1	0.045 ppb	112.436 %	112.401 %	-0.031 ppb	0.160 ppb	117.851 ppb	-0.003 ppb	111.174 %	109.887 %
Concentration per Run 2	0.246 ppb	115.769 %	91.648 %	-0.024 ppb	0.209 ppb	155.384 ppb	0.004 ppb	109.821 %	86.420 %
Concentration per Run 3	0.342 ppb	113.844 %	93.106 %	0.026 ppb	0.004 ppb	145.516 ppb	0.032 ppb	111.430 %	97.067 %
Concentration RSD	71.9 %	1.5 %	11.7 %	321.6 %	86.3 %	13.9 %	166.5 %	0.8 %	12.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.006 ppb	0.001 ppb	112.266 %	101.945 %	0.015 ppb	0.000 ppb	110.796 %	99.940 %	107.705 %
Concentration per Run 1	0.004 ppb	0.003 ppb	110.863 %	113.864 %	0.005 ppb	-0.007 ppb	111.700 %	115.694 %	106.474 %
Concentration per Run 2	0.005 ppb	0.000 ppb	116.830 %	91.234 %	0.019 ppb	-0.007 ppb	110.044 %	87.291 %	107.217 %
Concentration per Run 3	0.010 ppb	0.000 ppb	109.105 %	100.736 %	0.022 ppb	0.013 ppb	110.645 %	96.836 %	109.424 %
Concentration RSD	47.5 %	173.2 %	3.6 %	11.1 %	61.1 %	18,413.0 %	0.8 %	14.5 %	1.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	99.221 %	0.030 ppb	0.004 ppb	109.495 %	98.738 %
Concentration per Run 1	112.315 %	0.006 ppb	0.002 ppb	108.677 %	111.644 %
Concentration per Run 2	89.088 %	0.039 ppb	0.005 ppb	111.456 %	89.617 %
Concentration per Run 3	96.260 %	0.045 ppb	0.005 ppb	108.352 %	94.952 %
Concentration RSD	12.0 %	69.7 %	35.3 %	1.6 %	11.6 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 74 User name ALPHALAB\ICPMSRQ Comment fb
Analysis label: L2350359-11 6020TL Rack 1
Analysis started at: 9/14/2023 5:20:27 PM Vial 48

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	116.833 %	113.427 %	0.002 ppb	1.900 ppb	-19.414 ppb	0.916 ppb	2.790 ppb	-1.412 ppb	19.536 ppb
Concentration per Run 1	116.966 %	114.229 %	0.002 ppb	1.938 ppb	-15.486 ppb	2.256 ppb	2.958 ppb	-8.433 ppb	3.825 ppb
Concentration per Run 2	117.238 %	114.229 %	0.005 ppb	1.873 ppb	-22.018 ppb	-0.638 ppb	2.843 ppb	-2.416 ppb	48.613 ppb
Concentration per Run 3	116.295 %	111.824 %	-0.001 ppb	1.888 ppb	-20.737 ppb	1.131 ppb	2.568 ppb	6.612 ppb	6.171 ppb
Concentration RSD	0.4 %	1.2 %	144.4 %	1.8 %	17.8 %	159.3 %	7.2 %	536.2 %	129.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	116.926 %	114.850 %	-0.021 ppb	0.157 ppb	0.104 ppb	2.568 ppb	0.004 ppb	0.061 ppb	0.235 ppb
Concentration per Run 1	115.027 %	116.404 %	-0.027 ppb	0.089 ppb	0.079 ppb	1.348 ppb	0.001 ppb	0.055 ppb	0.232 ppb
Concentration per Run 2	119.031 %	112.116 %	-0.009 ppb	0.161 ppb	0.127 ppb	3.645 ppb	0.007 ppb	0.065 ppb	0.269 ppb
Concentration per Run 3	116.721 %	116.031 %	-0.027 ppb	0.222 ppb	0.106 ppb	2.711 ppb	0.004 ppb	0.062 ppb	0.204 ppb
Concentration RSD	1.7 %	2.1 %	50.5 %	42.4 %	23.4 %	45.0 %	83.2 %	8.4 %	13.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.357 ppb	114.584 %	106.189 %	-0.024 ppb	0.057 ppb	-0.014 ppb	0.010 ppb	110.639 %	107.452 %
Concentration per Run 1	-0.397 ppb	117.685 %	113.130 %	-0.006 ppb	-0.006 ppb	0.037 ppb	0.003 ppb	108.949 %	113.105 %
Concentration per Run 2	-0.329 ppb	112.417 %	102.764 %	-0.023 ppb	0.174 ppb	-0.007 ppb	-0.001 ppb	111.414 %	105.031 %
Concentration per Run 3	-0.345 ppb	113.649 %	102.673 %	-0.043 ppb	0.004 ppb	-0.071 ppb	0.027 ppb	111.555 %	104.222 %
Concentration RSD	9.9 %	2.4 %	5.7 %	77.2 %	177.5 %	391.5 %	158.5 %	1.3 %	4.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.008 ppb	0.001 ppb	110.127 %	110.915 %	0.014 ppb	0.011 ppb	113.351 %	111.903 %	111.676 %
Concentration per Run 1	0.006 ppb	0.000 ppb	111.384 %	118.079 %	0.010 ppb	-0.007 ppb	113.675 %	117.118 %	110.185 %
Concentration per Run 2	0.008 ppb	0.003 ppb	106.305 %	107.969 %	0.010 ppb	0.029 ppb	112.436 %	108.091 %	112.774 %
Concentration per Run 3	0.011 ppb	0.000 ppb	112.692 %	106.696 %	0.023 ppb	0.011 ppb	113.942 %	110.500 %	112.068 %
Concentration RSD	31.9 %	173.2 %	3.1 %	5.6 %	53.3 %	158.7 %	0.7 %	4.2 %	1.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	108.344 %	0.009 ppb	0.019 ppb	113.102 %	112.406 %
Concentration per Run 1	114.324 %	-0.001 ppb	0.016 ppb	112.076 %	115.735 %
Concentration per Run 2	105.055 %	0.013 ppb	0.020 ppb	113.138 %	109.381 %
Concentration per Run 3	105.652 %	0.015 ppb	0.021 ppb	114.090 %	112.102 %
Concentration RSD	4.8 %	100.7 %	12.7 %	0.9 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	75	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350359-07 6020TL	Rack	1		
Analysis started at:	9/14/2023 5:25:15 PM	Vial	44		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.597 %	108.417 %	0.004 ppb	45.688 ppb	31,431.273 ppb	13,304.404 ppb	28.230 ppb	2,687.059 ppb	58,140.866 ppb
Concentration per Run 1	111.517 %	117.235 %	0.002 ppb	45.539 ppb	28,532.084 ppb	12,497.177 ppb	30.055 ppb	2,522.814 ppb	56,290.739 ppb
Concentration per Run 2	111.674 %	100.401 %	0.006 ppb	45.760 ppb	31,716.507 ppb	13,122.042 ppb	27.558 ppb	2,703.482 ppb	53,096.444 ppb
Concentration per Run 3	114.599 %	107.615 %	0.005 ppb	45.767 ppb	34,045.227 ppb	14,293.992 ppb	27.076 ppb	2,834.881 ppb	65,035.416 ppb
Concentration RSD	1.5 %	7.8 %	54.1 %	0.3 %	8.8 %	6.9 %	5.7 %	5.8 %	10.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	122.882 %	109.786 %	0.423 ppb	0.222 ppb	21.330 ppb	69.886 ppb	0.070 ppb	0.357 ppb	0.650 ppb
Concentration per Run 1	125.111 %	112.209 %	0.269 ppb	0.228 ppb	20.795 ppb	68.098 ppb	0.045 ppb	0.427 ppb	0.561 ppb
Concentration per Run 2	120.270 %	117.056 %	0.495 ppb	0.270 ppb	20.398 ppb	68.519 ppb	0.085 ppb	0.325 ppb	0.705 ppb
Concentration per Run 3	123.265 %	100.093 %	0.506 ppb	0.170 ppb	22.796 ppb	73.039 ppb	0.081 ppb	0.320 ppb	0.685 ppb
Concentration RSD	2.0 %	8.0 %	31.6 %	22.5 %	6.0 %	3.9 %	31.7 %	16.9 %	12.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.123 ppb	119.938 %	100.054 %	0.418 ppb	0.306 ppb	227.930 ppb	0.520 ppb	108.971 %	96.991 %
Concentration per Run 1	0.211 ppb	118.482 %	103.310 %	0.405 ppb	0.356 ppb	213.411 ppb	0.460 ppb	106.270 %	99.675 %
Concentration per Run 2	0.074 ppb	118.024 %	99.553 %	0.399 ppb	0.570 ppb	232.401 ppb	0.580 ppb	107.380 %	95.418 %
Concentration per Run 3	0.085 ppb	123.307 %	97.297 %	0.450 ppb	-0.008 ppb	237.978 ppb	0.520 ppb	113.264 %	95.881 %
Concentration RSD	61.8 %	2.4 %	3.0 %	6.7 %	95.5 %	5.7 %	11.5 %	3.4 %	2.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.001 ppb	0.013 ppb	112.380 %	100.434 %	0.052 ppb	31.029 ppb	116.457 %	106.914 %	115.489 %
Concentration per Run 1	0.000 ppb	0.013 ppb	107.813 %	103.965 %	0.050 ppb	28.991 ppb	111.581 %	112.035 %	112.640 %
Concentration per Run 2	0.000 ppb	0.013 ppb	113.298 %	98.910 %	0.053 ppb	31.653 ppb	117.175 %	105.897 %	116.589 %
Concentration per Run 3	0.003 ppb	0.013 ppb	116.028 %	98.426 %	0.052 ppb	32.445 ppb	120.616 %	102.812 %	117.239 %
Concentration RSD	194.9 %	2.8 %	3.7 %	3.1 %	3.6 %	5.8 %	3.9 %	4.4 %	2.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.226 %	0.011 ppb	0.071 ppb	112.810 %	98.545 %
Concentration per Run 1	109.340 %	0.000 ppb	0.067 ppb	109.933 %	100.880 %
Concentration per Run 2	102.498 %	0.016 ppb	0.071 ppb	112.498 %	98.618 %
Concentration per Run 3	103.839 %	0.019 ppb	0.074 ppb	115.999 %	96.138 %
Concentration RSD	3.4 %	91.5 %	5.6 %	2.7 %	2.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	76	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350359-08 6020TL	Rack	1		
Analysis started at:	9/14/2023 5:30:02 PM	Vial	45		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	116.468 %	124.649 %	0.004 ppb	45.446 ppb	31,039.120 ppb	13,051.785 ppb	28.508 ppb	2,723.529 ppb	60,675.210 ppb
Concentration per Run 1	114.250 %	128.657 %	0.005 ppb	45.816 ppb	28,892.353 ppb	12,613.641 ppb	29.979 ppb	2,543.128 ppb	55,412.813 ppb
Concentration per Run 2	117.811 %	130.461 %	0.006 ppb	45.202 ppb	30,840.161 ppb	12,343.711 ppb	29.445 ppb	2,667.788 ppb	61,296.542 ppb
Concentration per Run 3	117.342 %	114.830 %	0.001 ppb	45.321 ppb	33,384.847 ppb	14,198.003 ppb	26.101 ppb	2,959.670 ppb	65,316.274 ppb
Concentration RSD	1.7 %	6.9 %	70.1 %	0.7 %	7.3 %	7.7 %	7.4 %	7.8 %	8.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	132.123 %	113.483 %	0.267 ppb	0.163 ppb	42.594 ppb	82.497 ppb	0.076 ppb	0.334 ppb	0.576 ppb
Concentration per Run 1	132.743 %	121.437 %	0.213 ppb	0.093 ppb	39.447 ppb	85.798 ppb	0.074 ppb	0.263 ppb	0.570 ppb
Concentration per Run 2	130.880 %	113.142 %	0.321 ppb	0.175 ppb	42.744 ppb	79.027 ppb	0.073 ppb	0.392 ppb	0.534 ppb
Concentration per Run 3	132.745 %	105.872 %	0.266 ppb	0.221 ppb	45.591 ppb	82.667 ppb	0.081 ppb	0.347 ppb	0.625 ppb
Concentration RSD	0.8 %	6.9 %	20.2 %	40.0 %	7.2 %	4.1 %	5.3 %	19.7 %	7.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.254 ppb	126.125 %	104.268 %	0.505 ppb	0.243 ppb	229.338 ppb	0.523 ppb	112.770 %	100.176 %
Concentration per Run 1	-0.397 ppb	121.678 %	108.687 %	0.546 ppb	0.166 ppb	215.225 ppb	0.482 ppb	107.501 %	103.635 %
Concentration per Run 2	-0.226 ppb	127.181 %	104.565 %	0.424 ppb	0.184 ppb	232.585 ppb	0.600 ppb	116.314 %	98.872 %
Concentration per Run 3	-0.140 ppb	129.516 %	99.553 %	0.546 ppb	0.380 ppb	240.203 ppb	0.486 ppb	114.497 %	98.021 %
Concentration RSD	51.4 %	3.2 %	4.4 %	13.9 %	48.8 %	5.6 %	12.9 %	4.1 %	3.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.001 ppb	0.016 ppb	115.557 %	105.164 %	0.052 ppb	30.629 ppb	119.063 %	109.977 %	119.115 %
Concentration per Run 1	0.002 ppb	0.003 ppb	113.329 %	110.437 %	0.042 ppb	28.186 ppb	118.184 %	113.374 %	120.006 %
Concentration per Run 2	0.002 ppb	0.029 ppb	117.049 %	100.552 %	0.046 ppb	32.262 ppb	119.209 %	107.103 %	119.066 %
Concentration per Run 3	0.000 ppb	0.016 ppb	116.292 %	104.504 %	0.069 ppb	31.438 ppb	119.796 %	109.452 %	118.273 %
Concentration RSD	131.6 %	81.8 %	1.7 %	4.7 %	28.1 %	7.0 %	0.7 %	2.9 %	0.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	108.023 %	0.007 ppb	0.076 ppb	117.071 %	100.548 %
Concentration per Run 1	109.965 %	-0.003 ppb	0.069 ppb	115.863 %	103.572 %
Concentration per Run 2	106.317 %	0.009 ppb	0.078 ppb	117.567 %	100.613 %
Concentration per Run 3	107.786 %	0.015 ppb	0.081 ppb	117.784 %	97.459 %
Concentration RSD	1.7 %	124.5 %	8.4 %	0.9 %	3.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	77	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350359-09 6020TL	Rack	1		
Analysis started at:	9/14/2023 5:34:49 PM	Vial	46		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	120.006 %	110.621 %	0.002 ppb	45.183 ppb	34,210.326 ppb	14,447.800 ppb	48.113 ppb	2,820.097 ppb	61,146.905 ppb
Concentration per Run 1	119.432 %	108.216 %	0.004 ppb	45.455 ppb	34,507.848 ppb	14,682.643 ppb	43.971 ppb	2,745.284 ppb	62,002.965 ppb
Concentration per Run 2	118.701 %	111.223 %	0.005 ppb	45.550 ppb	33,848.367 ppb	14,322.551 ppb	47.461 ppb	2,791.713 ppb	56,861.662 ppb
Concentration per Run 3	121.886 %	112.425 %	-0.002 ppb	44.542 ppb	34,274.761 ppb	14,338.206 ppb	52.908 ppb	2,923.296 ppb	64,576.087 ppb
Concentration RSD	1.4 %	2.0 %	154.2 %	1.2 %	1.0 %	1.4 %	9.4 %	3.3 %	6.4 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	131.539 %	116.124 %	0.480 ppb	0.326 ppb	23.838 ppb	115.250 ppb	0.121 ppb	0.444 ppb	0.670 ppb
Concentration per Run 1	135.980 %	112.676 %	0.448 ppb	0.415 ppb	23.967 ppb	105.549 ppb	0.155 ppb	0.515 ppb	0.598 ppb
Concentration per Run 2	129.639 %	120.318 %	0.352 ppb	0.287 ppb	22.943 ppb	125.597 ppb	0.110 ppb	0.440 ppb	0.775 ppb
Concentration per Run 3	128.996 %	115.378 %	0.641 ppb	0.276 ppb	24.605 ppb	114.603 ppb	0.098 ppb	0.378 ppb	0.638 ppb
Concentration RSD	2.9 %	3.3 %	30.5 %	23.7 %	3.5 %	8.7 %	25.0 %	15.5 %	13.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.499 ppb	128.420 %	107.396 %	0.514 ppb	0.104 ppb	231.340 ppb	0.596 ppb	111.604 %	103.542 %
Concentration per Run 1	0.486 ppb	124.640 %	107.298 %	0.437 ppb	0.146 ppb	221.714 ppb	0.622 ppb	109.927 %	108.720 %
Concentration per Run 2	0.324 ppb	131.496 %	110.487 %	0.526 ppb	0.175 ppb	228.311 ppb	0.598 ppb	111.643 %	100.415 %
Concentration per Run 3	0.688 ppb	129.125 %	104.404 %	0.580 ppb	-0.007 ppb	243.995 ppb	0.567 ppb	113.242 %	101.490 %
Concentration RSD	36.6 %	2.7 %	2.8 %	14.0 %	93.7 %	4.9 %	4.6 %	1.5 %	4.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.000 ppb	0.021 ppb	119.615 %	106.118 %	0.049 ppb	31.604 ppb	122.445 %	109.474 %	123.359 %
Concentration per Run 1	0.001 ppb	0.026 ppb	117.229 %	110.109 %	0.032 ppb	30.215 ppb	117.517 %	113.531 %	119.871 %
Concentration per Run 2	0.000 ppb	0.012 ppb	120.367 %	105.042 %	0.050 ppb	30.787 ppb	123.669 %	108.161 %	122.165 %
Concentration per Run 3	0.000 ppb	0.025 ppb	121.249 %	103.203 %	0.064 ppb	33.810 ppb	126.149 %	106.731 %	128.040 %
Concentration RSD	82.0 %	36.2 %	1.8 %	3.4 %	32.9 %	6.1 %	3.6 %	3.3 %	3.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	109.454 %	0.003 ppb	0.165 ppb	116.236 %	103.790 %
Concentration per Run 1	115.266 %	-0.004 ppb	0.144 ppb	113.571 %	108.059 %
Concentration per Run 2	104.909 %	0.003 ppb	0.176 ppb	117.268 %	100.142 %
Concentration per Run 3	108.188 %	0.011 ppb	0.176 ppb	117.871 %	103.170 %
Concentration RSD	4.8 %	243.6 %	11.2 %	2.0 %	3.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 78 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2350359-10 6020TL Rack 1
Analysis started at: 9/14/2023 5:39:36 PM Vial 47

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	115.993 %	105.611 %	0.004 ppb	48.342 ppb	32,956.429 ppb	14,033.956 ppb	50.645 ppb	2,814.718 ppb	54,717.291 ppb
Concentration per Run 1	115.193 %	107.014 %	0.002 ppb	48.840 ppb	31,923.281 ppb	13,465.344 ppb	48.083 ppb	2,676.757 ppb	54,563.164 ppb
Concentration per Run 2	115.142 %	114.830 %	0.006 ppb	47.725 ppb	32,164.415 ppb	14,389.446 ppb	51.772 ppb	2,950.882 ppb	58,382.026 ppb
Concentration per Run 3	117.644 %	94.990 %	0.005 ppb	48.460 ppb	34,781.591 ppb	14,247.079 ppb	52.082 ppb	2,816.514 ppb	51,206.684 ppb
Concentration RSD	1.2 %	9.5 %	55.1 %	1.2 %	4.8 %	3.5 %	4.4 %	4.9 %	6.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	132.846 %	118.765 %	0.301 ppb	0.256 ppb	23.298 ppb	125.708 ppb	0.118 ppb	0.587 ppb	0.784 ppb
Concentration per Run 1	128.463 %	117.988 %	0.254 ppb	0.222 ppb	22.053 ppb	113.225 ppb	0.101 ppb	0.660 ppb	0.797 ppb
Concentration per Run 2	137.215 %	114.633 %	0.282 ppb	0.274 ppb	24.465 ppb	131.016 ppb	0.116 ppb	0.602 ppb	0.701 ppb
Concentration per Run 3	132.861 %	123.674 %	0.366 ppb	0.273 ppb	23.377 ppb	132.882 ppb	0.137 ppb	0.499 ppb	0.854 ppb
Concentration RSD	3.3 %	3.8 %	19.4 %	11.6 %	5.2 %	8.6 %	15.3 %	13.9 %	9.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	42.411 ppb	127.073 %	104.799 %	0.433 ppb	0.240 ppb	239.653 ppb	0.529 ppb	112.028 %	100.714 %
Concentration per Run 1	40.920 ppb	124.380 %	108.686 %	0.240 ppb	0.166 ppb	218.935 ppb	0.439 ppb	109.543 %	105.947 %
Concentration per Run 2	43.435 ppb	128.238 %	102.946 %	0.412 ppb	0.368 ppb	250.085 ppb	0.596 ppb	112.939 %	98.692 %
Concentration per Run 3	42.878 ppb	128.601 %	102.764 %	0.647 ppb	0.187 ppb	249.939 ppb	0.550 ppb	113.600 %	97.502 %
Concentration RSD	3.1 %	1.8 %	3.2 %	47.2 %	46.4 %	7.5 %	15.3 %	1.9 %	4.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.001 ppb	0.020 ppb	116.336 %	104.665 %	0.059 ppb	38.059 ppb	120.384 %	109.281 %	118.981 %
Concentration per Run 1	0.000 ppb	0.012 ppb	116.153 %	106.589 %	0.061 ppb	36.094 ppb	116.464 %	112.363 %	113.924 %
Concentration per Run 2	0.004 ppb	0.019 ppb	116.219 %	105.003 %	0.050 ppb	38.946 ppb	119.261 %	106.656 %	119.708 %
Concentration per Run 3	0.000 ppb	0.029 ppb	116.638 %	102.404 %	0.066 ppb	39.136 ppb	125.429 %	108.824 %	123.311 %
Concentration RSD	192.4 %	42.2 %	0.2 %	2.0 %	14.3 %	4.5 %	3.8 %	2.6 %	4.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	108.242 %	0.004 ppb	0.190 ppb	116.584 %	100.407 %
Concentration per Run 1	111.005 %	-0.002 ppb	0.184 ppb	113.460 %	103.238 %
Concentration per Run 2	106.741 %	0.007 ppb	0.197 ppb	115.503 %	97.567 %
Concentration per Run 3	106.980 %	0.007 ppb	0.188 ppb	120.790 %	100.417 %
Concentration RSD	2.2 %	129.9 %	3.3 %	3.2 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	79	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350454-01 6020TL	Rack	1		
Analysis started at:	9/14/2023 5:44:23 PM	Vial	49		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	113.929 %	97.395 %	0.082 ppb	106.738 ppb	118,170.994 ppb	2,962.471 ppb	1,091.728 ppb	15,928.240 ppb	67,814.488 ppb
Concentration per Run 1	113.950 %	107.615 %	0.083 ppb	106.837 ppb	99,881.325 ppb	2,536.947 ppb	1,047.956 ppb	13,861.734 ppb	56,802.491 ppb
Concentration per Run 2	113.864 %	82.966 %	0.081 ppb	106.335 ppb	137,741.899 ppb	3,390.775 ppb	1,110.798 ppb	17,654.132 ppb	78,641.742 ppb
Concentration per Run 3	113.974 %	101.603 %	0.082 ppb	107.043 ppb	116,889.759 ppb	2,959.691 ppb	1,116.429 ppb	16,268.853 ppb	67,999.231 ppb
Concentration RSD	0.1 %	13.2 %	1.0 %	0.3 %	16.0 %	14.4 %	3.5 %	12.0 %	16.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	132.774 %	106.089 %	16.787 ppb	1.821 ppb	265.563 ppb	1,385.665 ppb	1.596 ppb	6.495 ppb	4.630 ppb
Concentration per Run 1	135.747 %	121.343 %	13.934 ppb	1.444 ppb	221.678 ppb	1,144.725 ppb	1.313 ppb	5.139 ppb	3.835 ppb
Concentration per Run 2	131.655 %	96.738 %	18.434 ppb	2.110 ppb	296.269 ppb	1,514.901 ppb	1.925 ppb	7.345 ppb	5.355 ppb
Concentration per Run 3	130.920 %	100.186 %	17.992 ppb	1.908 ppb	278.742 ppb	1,497.367 ppb	1.549 ppb	7.000 ppb	4.699 ppb
Concentration RSD	2.0 %	12.6 %	14.8 %	18.7 %	14.7 %	15.1 %	19.4 %	18.3 %	16.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	5.011 ppb	125.477 %	98.506 %	6.409 ppb	3.173 ppb	397.282 ppb	25.615 ppb	112.592 %	93.434 %
Concentration per Run 1	3.745 ppb	123.201 %	111.763 %	5.496 ppb	3.330 ppb	334.822 ppb	22.530 ppb	111.313 %	105.312 %
Concentration per Run 2	6.094 ppb	126.592 %	87.392 %	7.220 ppb	2.752 ppb	462.953 ppb	29.886 ppb	114.001 %	81.938 %
Concentration per Run 3	5.192 ppb	126.637 %	96.364 %	6.511 ppb	3.436 ppb	394.073 ppb	24.427 ppb	112.462 %	93.052 %
Concentration RSD	23.7 %	1.6 %	12.5 %	13.5 %	11.6 %	16.1 %	14.9 %	1.2 %	12.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.006 ppb	0.024 ppb	114.606 %	96.322 %	1.157 ppb	67.245 ppb	121.730 %	102.173 %	121.620 %
Concentration per Run 1	0.005 ppb	0.024 ppb	113.888 %	108.953 %	0.903 ppb	57.078 ppb	116.530 %	114.135 %	117.764 %
Concentration per Run 2	0.007 ppb	0.023 ppb	115.314 %	84.173 %	1.401 ppb	77.107 ppb	122.576 %	90.260 %	121.087 %
Concentration per Run 3	0.006 ppb	0.024 ppb	114.618 %	95.840 %	1.168 ppb	67.549 ppb	126.083 %	102.125 %	126.010 %
Concentration RSD	20.9 %	1.7 %	0.6 %	12.9 %	21.5 %	14.9 %	4.0 %	11.7 %	3.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	101.982 %	0.019 ppb	1.073 ppb	113.069 %	94.524 %
Concentration per Run 1	113.096 %	0.011 ppb	0.917 ppb	112.511 %	106.503 %
Concentration per Run 2	90.697 %	0.025 ppb	1.237 ppb	114.464 %	84.514 %
Concentration per Run 3	102.152 %	0.020 ppb	1.065 ppb	112.231 %	92.555 %
Concentration RSD	11.0 %	37.5 %	14.9 %	1.1 %	11.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 80 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2350454-02 6020TL Rack 1
Analysis started at: 9/14/2023 5:49:09 PM Vial 50

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.107 %	104.409 %	0.990 ppb	247.660 ppb	105,443.858 ppb	11,196.059 ppb	10,687.663 ppb	20,242.288 ppb	75,743.040 ppb
Concentration per Run 1	108.589 %	111.222 %	1.036 ppb	252.589 ppb	99,907.506 ppb	10,699.012 ppb	10,593.242 ppb	19,223.009 ppb	74,323.516 ppb
Concentration per Run 2	107.651 %	103.407 %	1.024 ppb	252.192 ppb	107,722.109 ppb	11,372.395 ppb	10,558.505 ppb	20,854.882 ppb	73,576.518 ppb
Concentration per Run 3	111.080 %	98.597 %	0.912 ppb	238.199 ppb	108,701.960 ppb	11,516.771 ppb	10,911.242 ppb	20,648.974 ppb	79,329.087 ppb
Concentration RSD	1.6 %	6.1 %	6.9 %	3.3 %	4.6 %	3.9 %	1.8 %	4.4 %	4.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	179.648 %	142.657 %	19.780 ppb	56.268 ppb	1,392.761 ppb	21,875.277 ppb	15.476 ppb	31.745 ppb	38.381 ppb
Concentration per Run 1	183.789 %	143.899 %	18.777 ppb	55.995 ppb	1,354.803 ppb	21,013.507 ppb	15.018 ppb	31.763 ppb	37.778 ppb
Concentration per Run 2	178.393 %	143.899 %	20.243 ppb	55.378 ppb	1,395.317 ppb	22,130.402 ppb	15.893 ppb	31.837 ppb	39.302 ppb
Concentration per Run 3	176.761 %	140.171 %	20.320 ppb	57.431 ppb	1,428.163 ppb	22,481.922 ppb	15.516 ppb	31.636 ppb	38.064 ppb
Concentration RSD	2.0 %	1.5 %	4.4 %	1.9 %	2.6 %	3.5 %	2.8 %	0.3 %	2.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	64.248 ppb	126.525 %	111.708 %	4.440 ppb	21.565 ppb	343.545 ppb	95.279 ppb	109.424 %	98.226 %
Concentration per Run 1	62.498 ppb	123.669 %	113.530 %	4.151 ppb	22.783 ppb	332.963 ppb	91.169 ppb	105.089 %	98.636 %
Concentration per Run 2	65.919 ppb	122.544 %	109.274 %	5.283 ppb	21.175 ppb	347.624 ppb	99.040 ppb	109.057 %	97.695 %
Concentration per Run 3	64.327 ppb	133.361 %	112.319 %	3.888 ppb	20.736 ppb	350.048 ppb	95.629 ppb	114.127 %	98.348 %
Concentration RSD	2.7 %	4.7 %	2.0 %	16.7 %	5.0 %	2.7 %	4.1 %	4.1 %	0.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.044 ppb	0.179 ppb	112.580 %	106.013 %	0.544 ppb	225.148 ppb	126.464 %	115.915 %	123.978 %
Concentration per Run 1	0.046 ppb	0.163 ppb	110.141 %	108.023 %	0.543 ppb	216.766 ppb	125.302 %	117.308 %	121.963 %
Concentration per Run 2	0.041 ppb	0.184 ppb	111.068 %	103.794 %	0.542 ppb	231.847 ppb	122.498 %	113.143 %	119.608 %
Concentration per Run 3	0.045 ppb	0.190 ppb	116.530 %	106.223 %	0.546 ppb	226.831 ppb	131.593 %	117.294 %	130.363 %
Concentration RSD	5.7 %	7.9 %	3.1 %	2.0 %	0.4 %	3.4 %	3.7 %	2.1 %	4.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	112.008 %	0.119 ppb	15.399 ppb	114.517 %	98.867 %
Concentration per Run 1	113.071 %	0.110 ppb	14.746 ppb	113.202 %	101.442 %
Concentration per Run 2	112.759 %	0.123 ppb	15.978 ppb	111.949 %	97.318 %
Concentration per Run 3	110.195 %	0.123 ppb	15.473 ppb	118.401 %	97.841 %
Concentration RSD	1.4 %	6.5 %	4.0 %	3.0 %	2.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	81	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350454-03 6020TL	Rack	1		
Analysis started at:	9/14/2023 5:53:55 PM	Vial	51		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	106.972 %	95.792 %	0.000 ppb	425.293 ppb	78,392.389 ppb	12,991.256 ppb	16.018 ppb	6,538.138 ppb	72,699.017 ppb
Concentration per Run 1	105.496 %	99.198 %	-0.001 ppb	426.856 ppb	76,869.679 ppb	12,017.258 ppb	16.251 ppb	6,103.593 ppb	68,810.162 ppb
Concentration per Run 2	107.043 %	95.591 %	-0.001 ppb	425.857 ppb	73,255.344 ppb	13,549.591 ppb	15.068 ppb	6,669.543 ppb	70,708.692 ppb
Concentration per Run 3	108.376 %	92.585 %	0.000 ppb	423.168 ppb	85,052.143 ppb	13,406.920 ppb	16.736 ppb	6,841.278 ppb	78,578.197 ppb
Concentration RSD	1.3 %	3.5 %	206.4 %	0.4 %	7.7 %	6.5 %	5.4 %	5.9 %	7.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	121.638 %	115.347 %	0.829 ppb	0.228 ppb	628.053 ppb	127.404 ppb	0.346 ppb	0.993 ppb	1.122 ppb
Concentration per Run 1	124.173 %	117.149 %	0.685 ppb	0.209 ppb	584.946 ppb	112.505 ppb	0.385 ppb	0.958 ppb	1.124 ppb
Concentration per Run 2	123.471 %	120.784 %	0.907 ppb	0.215 ppb	623.332 ppb	137.134 ppb	0.302 ppb	1.010 ppb	1.137 ppb
Concentration per Run 3	117.270 %	108.108 %	0.896 ppb	0.260 ppb	675.881 ppb	132.574 ppb	0.352 ppb	1.011 ppb	1.105 ppb
Concentration RSD	3.1 %	5.7 %	15.1 %	12.2 %	7.3 %	10.3 %	12.1 %	3.0 %	1.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.243 ppb	123.095 %	111.824 %	0.847 ppb	3.603 ppb	359.840 ppb	3.179 ppb	111.413 %	100.683 %
Concentration per Run 1	0.108 ppb	118.258 %	119.304 %	0.755 ppb	3.805 ppb	333.204 ppb	2.942 ppb	111.086 %	104.576 %
Concentration per Run 2	0.328 ppb	122.034 %	107.046 %	0.962 ppb	3.877 ppb	372.112 ppb	3.402 ppb	111.041 %	99.774 %
Concentration per Run 3	0.292 ppb	128.992 %	109.120 %	0.825 ppb	3.128 ppb	374.204 ppb	3.193 ppb	112.111 %	97.697 %
Concentration RSD	48.6 %	4.4 %	5.9 %	12.4 %	11.5 %	6.4 %	7.3 %	0.5 %	3.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.006 ppb	0.039 ppb	113.090 %	106.814 %	1.283 ppb	135.151 ppb	120.395 %	112.614 %	120.909 %
Concentration per Run 1	0.003 ppb	0.015 ppb	110.258 %	113.286 %	1.271 ppb	125.351 ppb	117.731 %	117.277 %	119.555 %
Concentration per Run 2	0.006 ppb	0.047 ppb	115.086 %	104.870 %	1.284 ppb	138.291 ppb	119.432 %	110.820 %	121.349 %
Concentration per Run 3	0.010 ppb	0.054 ppb	113.924 %	102.285 %	1.295 ppb	141.811 ppb	124.024 %	109.746 %	121.824 %
Concentration RSD	59.3 %	54.7 %	2.2 %	5.4 %	0.9 %	6.4 %	2.7 %	3.6 %	1.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	111.994 %	0.004 ppb	0.045 ppb	113.771 %	102.165 %
Concentration per Run 1	113.954 %	-0.004 ppb	0.044 ppb	113.269 %	105.662 %
Concentration per Run 2	112.035 %	0.005 ppb	0.043 ppb	113.022 %	103.863 %
Concentration per Run 3	109.993 %	0.012 ppb	0.048 ppb	115.022 %	96.970 %
Concentration RSD	1.8 %	171.7 %	5.9 %	1.0 %	4.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 82 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2350478-03 6020TL Rack 1
Analysis started at: 9/14/2023 5:58:41 PM Vial 52

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	86.747 %	87.776 %	0.006 ppb	34.755 ppb	501,387.076 ppb	44,012.801 ppb	39.566 ppb	6,405.532 ppb	114,374.551 ppb
Concentration per Run 1	88.237 %	92.585 %	0.007 ppb	34.512 ppb	466,781.353 ppb	40,060.660 ppb	38.076 ppb	5,988.885 ppb	105,877.023 ppb
Concentration per Run 2	87.370 %	89.579 %	0.004 ppb	34.524 ppb	518,975.467 ppb	45,041.900 ppb	40.941 ppb	6,567.216 ppb	123,901.807 ppb
Concentration per Run 3	84.635 %	81.162 %	0.007 ppb	35.228 ppb	518,404.408 ppb	46,935.844 ppb	39.680 ppb	6,660.495 ppb	113,344.822 ppb
Concentration RSD	2.2 %	6.7 %	25.0 %	1.2 %	6.0 %	8.1 %	3.6 %	5.7 %	7.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	107.993 %	105.499 %	0.289 ppb	15.782 ppb	830.050 ppb	41,186.132 ppb	1.504 ppb	13.211 ppb	1.884 ppb
Concentration per Run 1	110.206 %	111.930 %	0.289 ppb	15.069 ppb	794.810 ppb	38,366.833 ppb	1.441 ppb	12.841 ppb	1.899 ppb
Concentration per Run 2	106.465 %	100.373 %	0.254 ppb	16.468 ppb	857.979 ppb	42,149.353 ppb	1.510 ppb	13.451 ppb	1.982 ppb
Concentration per Run 3	107.307 %	104.194 %	0.325 ppb	15.809 ppb	837.362 ppb	43,042.211 ppb	1.561 ppb	13.341 ppb	1.771 ppb
Concentration RSD	1.8 %	5.6 %	12.3 %	4.4 %	3.9 %	6.0 %	4.0 %	2.5 %	5.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	4.391 ppb	107.507 %	104.315 %	2.605 ppb	0.356 ppb	760.465 ppb	3.077 ppb	97.251 %	92.141 %
Concentration per Run 1	4.438 ppb	111.682 %	101.306 %	2.440 ppb	1.095 ppb	734.503 ppb	3.087 ppb	97.882 %	95.959 %
Concentration per Run 2	4.183 ppb	105.794 %	106.548 %	2.834 ppb	-0.018 ppb	765.503 ppb	2.930 ppb	97.367 %	90.823 %
Concentration per Run 3	4.553 ppb	105.046 %	105.090 %	2.542 ppb	-0.007 ppb	781.389 ppb	3.212 ppb	96.505 %	89.640 %
Concentration RSD	4.3 %	3.4 %	2.6 %	7.8 %	179.4 %	3.1 %	4.6 %	0.7 %	3.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.008 ppb	0.021 ppb	99.798 %	102.823 %	0.602 ppb	234.186 ppb	113.874 %	108.652 %	115.277 %
Concentration per Run 1	0.007 ppb	0.022 ppb	100.281 %	107.745 %	0.514 ppb	222.791 ppb	111.622 %	109.002 %	113.992 %
Concentration per Run 2	0.010 ppb	0.016 ppb	101.637 %	102.087 %	0.615 ppb	231.115 ppb	114.257 %	110.533 %	116.456 %
Concentration per Run 3	0.007 ppb	0.024 ppb	97.477 %	98.635 %	0.677 ppb	248.653 ppb	115.744 %	106.421 %	115.385 %
Concentration RSD	19.5 %	18.2 %	2.1 %	4.5 %	13.6 %	5.6 %	1.8 %	1.9 %	1.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	114.972 %	-0.002 ppb	0.223 ppb	108.139 %	96.479 %
Concentration per Run 1	118.932 %	-0.009 ppb	0.208 ppb	107.552 %	99.330 %
Concentration per Run 2	112.388 %	-0.001 ppb	0.229 ppb	110.255 %	94.563 %
Concentration per Run 3	113.596 %	0.004 ppb	0.232 ppb	106.609 %	95.542 %
Concentration RSD	3.0 %	347.7 %	5.9 %	1.8 %	2.6 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	83	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 6:03:26 PM	Vial	9		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	97.133 %	83.767 %	58.249 ppb	59.349 ppb	6,325.246 ppb	6,399.227 ppb	59.878 ppb	6,313.548 ppb	6,016.874 ppb
Concentration per Run 1	96.549 %	82.966 %	57.864 ppb	59.779 ppb	6,043.877 ppb	6,044.606 ppb	60.063 ppb	5,943.948 ppb	5,648.299 ppb
Concentration per Run 2	96.801 %	76.353 %	58.357 ppb	60.372 ppb	6,852.468 ppb	6,812.338 ppb	60.413 ppb	6,467.634 ppb	5,991.286 ppb
Concentration per Run 3	98.050 %	91.984 %	58.526 ppb	57.895 ppb	6,079.392 ppb	6,340.736 ppb	59.157 ppb	6,529.061 ppb	6,411.038 ppb
Recovery Percentage 1			97.081 %	98.915 %	105.421 %	106.654 %	99.796 %	105.226 %	100.281 %
Concentration RSD	0.8 %	9.4 %	0.6 %	2.2 %	7.2 %	6.1 %	1.1 %	5.1 %	6.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	106.221 %	117.740 %	57.113 ppb	55.108 ppb	61.010 ppb	6,027.483 ppb	57.273 ppb	55.963 ppb	55.991 ppb
Concentration per Run 1	104.544 %	124.606 %	50.497 ppb	51.436 ppb	56.637 ppb	5,415.195 ppb	52.415 ppb	49.275 ppb	48.992 ppb
Concentration per Run 2	108.025 %	111.557 %	62.576 ppb	57.344 ppb	63.994 ppb	6,247.580 ppb	58.815 ppb	58.560 ppb	57.956 ppb
Concentration per Run 3	106.094 %	117.056 %	58.267 ppb	56.545 ppb	62.400 ppb	6,419.673 ppb	60.589 ppb	60.054 ppb	61.023 ppb
Recovery Percentage 1			95.189 %	91.847 %	101.684 %	100.458 %	95.455 %	93.272 %	93.318 %
Concentration RSD	1.6 %	5.6 %	10.7 %	5.8 %	6.3 %	8.9 %	7.5 %	10.4 %	11.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	60.236 ppb	111.078 %	107.675 %	55.028 ppb	55.394 ppb	65.162 ppb	53.705 ppb	102.229 %	100.568 %
Concentration per Run 1	55.296 ppb	109.480 %	116.827 %	50.605 ppb	50.361 ppb	59.871 ppb	50.542 ppb	101.545 %	105.752 %
Concentration per Run 2	62.646 ppb	112.123 %	104.569 %	56.271 ppb	56.078 ppb	67.925 ppb	55.028 ppb	102.615 %	97.143 %
Concentration per Run 3	62.766 ppb	111.632 %	101.627 %	58.209 ppb	59.742 ppb	67.690 ppb	55.544 ppb	102.526 %	98.809 %
Recovery Percentage 1	100.393 %			91.714 %	92.323 %	108.603 %	89.508 %		
Concentration RSD	7.1 %	1.3 %	7.5 %	7.2 %	8.5 %	7.0 %	5.1 %	0.6 %	4.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	55.021 ppb	55.364 ppb	104.245 %	112.218 %	57.291 ppb	58.517 ppb	110.771 %	116.324 %	112.191 %
Concentration per Run 1	52.100 ppb	51.782 ppb	102.673 %	118.933 %	52.848 ppb	54.352 ppb	110.957 %	122.108 %	112.196 %
Concentration per Run 2	57.113 ppb	57.864 ppb	103.872 %	106.721 %	60.209 ppb	61.445 ppb	109.179 %	113.363 %	111.356 %
Concentration per Run 3	55.852 ppb	56.445 ppb	106.189 %	111.001 %	58.815 ppb	59.753 ppb	112.177 %	113.502 %	113.021 %
Recovery Percentage 1	91.702 %	92.273 %			95.484 %	97.528 %			
Concentration RSD	4.7 %	5.7 %	1.7 %	5.5 %	6.8 %	6.3 %	1.4 %	4.3 %	0.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	118.162 %	54.947 ppb	55.418 ppb	114.274 %	110.129 %
Concentration per Run 1	124.994 %	51.431 ppb	51.375 ppb	112.677 %	116.330 %
Concentration per Run 2	114.660 %	56.334 ppb	56.808 ppb	112.414 %	107.929 %
Concentration per Run 3	114.832 %	57.076 ppb	58.069 ppb	117.731 %	106.128 %
Recovery Percentage 1		91.578 %	92.363 %		
Concentration RSD	5.0 %	5.6 %	6.4 %	2.6 %	4.9 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	84	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 6:08:17 PM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	104.459 %	96.593 %	0.012 ppb	0.171 ppb	34.730 ppb	0.786 ppb	0.550 ppb	16.410 ppb	28.744 ppb
Concentration per Run 1	104.637 %	105.812 %	0.008 ppb	0.179 ppb	24.529 ppb	2.534 ppb	0.574 ppb	15.008 ppb	28.933 ppb
Concentration per Run 2	104.803 %	97.395 %	0.018 ppb	0.161 ppb	35.538 ppb	0.196 ppb	0.561 ppb	25.338 ppb	29.073 ppb
Concentration per Run 3	103.937 %	86.573 %	0.010 ppb	0.172 ppb	44.124 ppb	-0.372 ppb	0.515 ppb	8.883 ppb	28.225 ppb
Recovery Percentage 1			2.374 %	1.708 %	34.730 %	1.123 %	5.501 %	16.410 %	28.744 %
Concentration RSD	0.4 %	10.0 %	44.8 %	5.2 %	28.3 %	195.9 %	5.7 %	50.7 %	1.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	105.826 %	111.340 %	0.003 ppb	-0.048 ppb	0.155 ppb	9.445 ppb	0.007 ppb	0.140 ppb	0.023 ppb
Concentration per Run 1	105.005 %	112.209 %	0.009 ppb	-0.043 ppb	0.154 ppb	11.751 ppb	0.004 ppb	0.140 ppb	0.019 ppb
Concentration per Run 2	109.117 %	109.320 %	-0.009 ppb	-0.032 ppb	0.173 ppb	9.563 ppb	0.007 ppb	0.186 ppb	0.014 ppb
Concentration per Run 3	103.357 %	112.489 %	0.010 ppb	-0.071 ppb	0.137 ppb	7.022 ppb	0.010 ppb	0.096 ppb	0.036 ppb
Recovery Percentage 1			0.069 %	-4.849 %	15.469 %	18.890 %	1.324 %	7.022 %	2.318 %
Concentration RSD	2.8 %	1.6 %	301.3 %	41.8 %	11.4 %	25.1 %	45.6 %	32.0 %	49.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.940 ppb	109.979 %	105.202 %	0.052 ppb	0.241 ppb	-0.073 ppb	0.155 ppb	104.469 %	104.863 %
Concentration per Run 1	0.791 ppb	109.307 %	108.188 %	0.002 ppb	0.349 ppb	-0.107 ppb	0.141 ppb	104.032 %	107.619 %
Concentration per Run 2	0.912 ppb	110.182 %	105.749 %	0.075 ppb	0.004 ppb	-0.052 ppb	0.201 ppb	103.501 %	104.869 %
Concentration per Run 3	1.118 ppb	110.446 %	101.671 %	0.080 ppb	0.371 ppb	-0.058 ppb	0.122 ppb	105.873 %	102.101 %
Recovery Percentage 1	18.803 %			10.487 %	4.823 %	-14.514 %	7.742 %		
Concentration RSD	17.6 %	0.5 %	3.1 %	83.4 %	85.4 %	41.4 %	26.8 %	1.2 %	2.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.008 ppb	0.008 ppb	104.722 %	111.247 %	0.066 ppb	0.115 ppb	108.556 %	111.725 %	109.649 %
Concentration per Run 1	0.005 ppb	0.011 ppb	104.835 %	114.769 %	0.064 ppb	0.060 ppb	106.937 %	116.056 %	109.052 %
Concentration per Run 2	0.011 ppb	0.009 ppb	102.518 %	108.153 %	0.085 ppb	0.082 ppb	107.767 %	109.149 %	109.537 %
Concentration per Run 3	0.009 ppb	0.003 ppb	106.811 %	110.817 %	0.048 ppb	0.204 ppb	110.965 %	109.971 %	110.358 %
Recovery Percentage 1	2.056 %				1.645 %	23.099 %			
Concentration RSD	38.6 %	55.8 %	2.1 %	3.0 %	28.3 %	66.8 %	2.0 %	3.4 %	0.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	114.350 %	0.092 ppb	0.016 ppb	109.542 %	108.071 %
Concentration per Run 1	117.813 %	0.055 ppb	0.016 ppb	109.976 %	107.980 %
Concentration per Run 2	112.233 %	0.113 ppb	0.019 ppb	108.252 %	106.857 %
Concentration per Run 3	113.004 %	0.109 ppb	0.013 ppb	110.398 %	109.377 %
Recovery Percentage 1		9.203 %	1.604 %		
Concentration RSD	2.6 %	35.3 %	17.8 %	1.0 %	1.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	85	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350478-04 6020TL	Rack	1		
Analysis started at:	9/14/2023 6:15:03 PM	Vial	53		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	107.716 %	102.605 %	0.036 ppb	101.196 ppb	208,389.646 ppb	35,992.185 ppb	24.543 ppb	995.969 ppb	72,294.854 ppb
Concentration per Run 1	106.408 %	109.419 %	0.013 ppb	102.474 ppb	198,252.777 ppb	34,865.905 ppb	24.249 ppb	939.888 ppb	68,322.772 ppb
Concentration per Run 2	108.840 %	102.806 %	0.064 ppb	100.220 ppb	210,467.143 ppb	35,511.391 ppb	24.975 ppb	1,020.494 ppb	76,236.261 ppb
Concentration per Run 3	107.900 %	95.591 %	0.031 ppb	100.895 ppb	216,449.018 ppb	37,599.259 ppb	24.404 ppb	1,027.524 ppb	72,325.528 ppb
Concentration RSD	1.1 %	6.7 %	72.0 %	1.1 %	4.5 %	4.0 %	1.6 %	4.9 %	5.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	136.522 %	112.893 %	0.149 ppb	1.014 ppb	452.257 ppb	13,485.516 ppb	1.965 ppb	3.359 ppb	0.848 ppb
Concentration per Run 1	135.649 %	116.963 %	0.204 ppb	0.929 ppb	433.436 ppb	12,574.252 ppb	1.981 ppb	3.140 ppb	0.801 ppb
Concentration per Run 2	137.311 %	111.650 %	0.083 ppb	1.012 ppb	453.975 ppb	13,669.450 ppb	1.868 ppb	3.450 ppb	0.922 ppb
Concentration per Run 3	136.607 %	110.066 %	0.159 ppb	1.100 ppb	469.360 ppb	14,212.847 ppb	2.046 ppb	3.488 ppb	0.821 ppb
Concentration RSD	0.6 %	3.2 %	41.0 %	8.4 %	4.0 %	6.2 %	4.6 %	5.7 %	7.7 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.464 ppb	124.853 %	107.624 %	0.395 ppb	0.341 ppb	277.681 ppb	0.266 ppb	107.530 %	97.376 %
Concentration per Run 1	1.566 ppb	123.144 %	107.138 %	0.438 ppb	0.509 ppb	261.075 ppb	0.272 ppb	106.963 %	100.784 %
Concentration per Run 2	1.489 ppb	125.861 %	107.958 %	0.332 ppb	0.344 ppb	282.689 ppb	0.266 ppb	107.042 %	96.284 %
Concentration per Run 3	1.338 ppb	125.555 %	107.775 %	0.415 ppb	0.169 ppb	289.281 ppb	0.261 ppb	108.586 %	95.059 %
Concentration RSD	7.9 %	1.2 %	0.4 %	14.0 %	49.9 %	5.3 %	1.9 %	0.9 %	3.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.010 ppb	0.020 ppb	113.121 %	107.637 %	0.089 ppb	104.801 ppb	120.008 %	112.047 %	122.235 %
Concentration per Run 1	0.009 ppb	0.006 ppb	110.531 %	109.782 %	0.075 ppb	101.162 ppb	121.217 %	115.356 %	120.250 %
Concentration per Run 2	0.010 ppb	0.031 ppb	113.824 %	105.474 %	0.083 ppb	108.097 ppb	120.589 %	111.205 %	124.078 %
Concentration per Run 3	0.011 ppb	0.022 ppb	115.008 %	107.654 %	0.109 ppb	105.145 ppb	118.217 %	109.580 %	122.378 %
Concentration RSD	9.3 %	64.9 %	2.1 %	2.0 %	19.9 %	3.3 %	1.3 %	2.7 %	1.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	114.017 %	0.027 ppb	0.073 ppb	112.341 %	100.199 %
Concentration per Run 1	114.303 %	0.014 ppb	0.071 ppb	110.312 %	103.828 %
Concentration per Run 2	114.245 %	0.031 ppb	0.073 ppb	114.500 %	100.473 %
Concentration per Run 3	113.503 %	0.036 ppb	0.075 ppb	112.212 %	96.296 %
Concentration RSD	0.4 %	43.9 %	2.6 %	1.9 %	3.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	86	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350478-05 6020TL	Rack	1		
Analysis started at:	9/14/2023 6:19:48 PM	Vial	54		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	93.357 %	96.393 %	0.004 ppb	71.795 ppb	277,020.582 ppb	58,627.338 ppb	4.420 ppb	1,986.827 ppb	121,542.398 ppb
Concentration per Run 1	94.863 %	104.609 %	0.005 ppb	71.154 ppb	266,772.330 ppb	54,435.212 ppb	4.439 ppb	1,923.621 ppb	114,318.983 ppb
Concentration per Run 2	93.648 %	97.996 %	0.007 ppb	72.025 ppb	277,940.362 ppb	61,320.396 ppb	4.341 ppb	2,098.239 ppb	129,393.205 ppb
Concentration per Run 3	91.559 %	86.573 %	0.001 ppb	72.205 ppb	286,349.055 ppb	60,126.406 ppb	4.479 ppb	1,938.620 ppb	120,915.007 ppb
Concentration RSD	1.8 %	9.5 %	60.0 %	0.8 %	3.5 %	6.3 %	1.6 %	4.9 %	6.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	111.152 %	107.580 %	0.004 ppb	6.719 ppb	1,314.962 ppb	10,901.578 ppb	0.364 ppb	5.128 ppb	0.225 ppb
Concentration per Run 1	113.403 %	109.693 %	0.009 ppb	6.344 ppb	1,245.322 ppb	10,417.761 ppb	0.393 ppb	4.848 ppb	0.237 ppb
Concentration per Run 2	110.042 %	103.169 %	-0.008 ppb	7.044 ppb	1,405.586 ppb	11,579.058 ppb	0.364 ppb	5.301 ppb	0.248 ppb
Concentration per Run 3	110.010 %	109.879 %	0.010 ppb	6.769 ppb	1,293.977 ppb	10,707.913 ppb	0.334 ppb	5.236 ppb	0.191 ppb
Concentration RSD	1.8 %	3.6 %	260.8 %	5.2 %	6.2 %	5.5 %	8.1 %	4.8 %	13.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.319 ppb	114.419 %	111.102 %	1.323 ppb	0.047 ppb	423.376 ppb	1.181 ppb	102.520 %	98.290 %
Concentration per Run 1	-0.348 ppb	115.878 %	116.796 %	1.206 ppb	0.156 ppb	394.396 ppb	1.005 ppb	100.130 %	102.742 %
Concentration per Run 2	-0.289 ppb	115.788 %	103.289 %	1.425 ppb	-0.019 ppb	446.259 ppb	1.312 ppb	103.065 %	96.156 %
Concentration per Run 3	-0.322 ppb	111.590 %	113.221 %	1.339 ppb	0.004 ppb	429.473 ppb	1.226 ppb	104.365 %	95.972 %
Concentration RSD	9.3 %	2.1 %	6.3 %	8.3 %	201.9 %	6.3 %	13.4 %	2.1 %	3.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.005 ppb	0.001 ppb	103.948 %	110.721 %	0.033 ppb	112.464 ppb	117.055 %	115.493 %	119.216 %
Concentration per Run 1	0.008 ppb	0.000 ppb	103.042 %	115.964 %	0.043 ppb	105.832 ppb	116.486 %	119.223 %	116.551 %
Concentration per Run 2	0.003 ppb	0.003 ppb	104.808 %	109.990 %	0.022 ppb	112.027 ppb	114.921 %	113.886 %	119.497 %
Concentration per Run 3	0.005 ppb	0.000 ppb	103.994 %	106.209 %	0.034 ppb	119.532 ppb	119.759 %	113.369 %	121.599 %
Concentration RSD	44.9 %	173.2 %	0.9 %	4.4 %	32.4 %	6.1 %	2.1 %	2.8 %	2.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	116.209 %	0.002 ppb	0.027 ppb	110.452 %	101.311 %
Concentration per Run 1	121.197 %	-0.004 ppb	0.026 ppb	107.529 %	106.889 %
Concentration per Run 2	113.582 %	0.002 ppb	0.026 ppb	111.441 %	100.303 %
Concentration per Run 3	113.849 %	0.008 ppb	0.029 ppb	112.385 %	96.742 %
Concentration RSD	3.7 %	286.3 %	6.7 %	2.3 %	5.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 87 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: L2350478-06 6020TL Rack 1
Analysis started at: 9/14/2023 6:24:34 PM Vial 55

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	81.582 %	81.363 %	0.004 ppb	61.704 ppb	516,843.993 ppb	35,655.618 ppb	3.892 ppb	3,521.993 ppb	116,766.074 ppb
Concentration per Run 1	82.053 %	94.389 %	0.000 ppb	61.582 ppb	457,037.466 ppb	31,980.991 ppb	3.835 ppb	3,293.549 ppb	115,078.583 ppb
Concentration per Run 2	81.855 %	77.555 %	0.007 ppb	61.799 ppb	535,230.028 ppb	35,913.598 ppb	3.839 ppb	3,643.071 ppb	116,425.502 ppb
Concentration per Run 3	80.838 %	72.144 %	0.005 ppb	61.732 ppb	558,264.486 ppb	39,072.265 ppb	4.003 ppb	3,629.360 ppb	118,794.135 ppb
Concentration RSD	0.8 %	14.3 %	86.6 %	0.2 %	10.3 %	10.0 %	2.5 %	5.6 %	1.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	97.813 %	96.738 %	0.154 ppb	0.556 ppb	1,075.807 ppb	4,333.050 ppb	0.318 ppb	1.146 ppb	0.538 ppb
Concentration per Run 1	98.323 %	97.670 %	0.075 ppb	0.516 ppb	1,038.645 ppb	4,191.230 ppb	0.294 ppb	1.180 ppb	0.481 ppb
Concentration per Run 2	99.661 %	95.713 %	0.184 ppb	0.632 ppb	1,103.892 ppb	4,397.996 ppb	0.314 ppb	1.064 ppb	0.674 ppb
Concentration per Run 3	95.453 %	96.831 %	0.204 ppb	0.519 ppb	1,084.882 ppb	4,409.925 ppb	0.348 ppb	1.194 ppb	0.460 ppb
Concentration RSD	2.2 %	1.0 %	45.0 %	11.9 %	3.1 %	2.8 %	8.6 %	6.2 %	21.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.707 ppb	105.069 %	101.701 %	2.794 ppb	0.241 ppb	522.554 ppb	1.157 ppb	94.699 %	92.308 %
Concentration per Run 1	0.598 ppb	105.495 %	107.320 %	2.614 ppb	0.169 ppb	479.520 ppb	1.001 ppb	93.263 %	97.063 %
Concentration per Run 2	0.752 ppb	106.466 %	100.030 %	3.115 ppb	0.382 ppb	529.744 ppb	1.283 ppb	95.411 %	91.052 %
Concentration per Run 3	0.771 ppb	103.245 %	97.752 %	2.652 ppb	0.174 ppb	558.398 ppb	1.187 ppb	95.422 %	88.811 %
Concentration RSD	13.4 %	1.6 %	4.9 %	10.0 %	50.3 %	7.6 %	12.4 %	1.3 %	4.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.002 ppb	0.001 ppb	99.338 %	104.778 %	0.070 ppb	104.010 ppb	109.397 %	112.279 %	112.836 %
Concentration per Run 1	0.002 ppb	0.000 ppb	98.923 %	108.218 %	0.070 ppb	99.814 ppb	107.093 %	117.165 %	111.403 %
Concentration per Run 2	0.003 ppb	0.003 ppb	100.327 %	103.347 %	0.076 ppb	104.203 ppb	109.439 %	110.833 %	113.635 %
Concentration per Run 3	0.002 ppb	0.000 ppb	98.765 %	102.769 %	0.064 ppb	108.014 ppb	111.660 %	108.839 %	113.472 %
Concentration RSD	39.8 %	173.2 %	0.9 %	2.9 %	8.8 %	3.9 %	2.1 %	3.9 %	1.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	120.751 %	-0.001 ppb	0.040 ppb	107.789 %	98.207 %
Concentration per Run 1	124.667 %	-0.009 ppb	0.037 ppb	106.794 %	100.283 %
Concentration per Run 2	118.402 %	0.004 ppb	0.038 ppb	109.547 %	97.622 %
Concentration per Run 3	119.185 %	0.003 ppb	0.045 ppb	107.026 %	96.717 %
Concentration RSD	2.8 %	1,085.1 %	12.2 %	1.4 %	1.9 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	88	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350478-07 6020TL	Rack	1		
Analysis started at:	9/14/2023 6:29:21 PM	Vial	56		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	66.102 %	65.331 %	0.033 ppb	43.522 ppb	1,214,196.692 ppb	54,005.150 ppb	420.191 ppb	5,974.616 ppb	48,218.360 ppb
Concentration per Run 1	66.142 %	58.918 %	0.040 ppb	43.626 ppb	1,387,178.152 ppb	62,517.174 ppb	429.692 ppb	6,769.219 ppb	56,755.121 ppb
Concentration per Run 2	66.557 %	76.353 %	0.027 ppb	42.999 ppb	1,084,449.513 ppb	47,805.835 ppb	411.063 ppb	5,541.379 ppb	45,398.706 ppb
Concentration per Run 3	65.606 %	60.721 %	0.031 ppb	43.940 ppb	1,170,962.412 ppb	51,692.440 ppb	419.817 ppb	5,613.249 ppb	42,501.254 ppb
Concentration RSD	0.7 %	14.7 %	20.7 %	1.1 %	12.8 %	14.1 %	2.2 %	11.5 %	15.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	88.204 %	73.966 %	0.732 ppb	1.131 ppb	718.593 ppb	95,002.457 ppb	7.536 ppb	14.148 ppb	2.971 ppb
Concentration per Run 1	86.088 %	65.609 %	0.680 ppb	1.516 ppb	818.483 ppb	110,966.284 ppb	9.108 ppb	16.631 ppb	3.289 ppb
Concentration per Run 2	89.900 %	75.581 %	0.869 ppb	0.910 ppb	683.555 ppb	88,712.298 ppb	7.027 ppb	12.900 ppb	2.752 ppb
Concentration per Run 3	88.624 %	80.707 %	0.647 ppb	0.969 ppb	653.742 ppb	85,328.788 ppb	6.473 ppb	12.914 ppb	2.872 ppb
Concentration RSD	2.2 %	10.4 %	16.4 %	29.5 %	12.2 %	14.7 %	18.4 %	15.2 %	9.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	10.576 ppb	93.264 %	93.014 %	3.835 ppb	0.469 ppb	633.444 ppb	0.592 ppb	85.063 %	77.427 %
Concentration per Run 1	13.003 ppb	92.234 %	83.356 %	4.891 ppb	0.448 ppb	714.320 ppb	0.729 ppb	82.916 %	69.981 %
Concentration per Run 2	9.662 ppb	92.881 %	95.566 %	3.387 ppb	0.978 ppb	602.274 ppb	0.544 ppb	86.599 %	80.506 %
Concentration per Run 3	9.063 ppb	94.676 %	100.121 %	3.229 ppb	-0.020 ppb	583.736 ppb	0.504 ppb	85.675 %	81.793 %
Concentration RSD	20.1 %	1.4 %	9.3 %	23.9 %	106.5 %	11.2 %	20.3 %	2.3 %	8.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.010 ppb	0.031 ppb	86.246 %	95.708 %	0.137 ppb	13.696 ppb	102.095 %	101.835 %	106.924 %
Concentration per Run 1	0.006 ppb	0.036 ppb	85.003 %	85.707 %	0.153 ppb	15.099 ppb	101.948 %	93.293 %	105.745 %
Concentration per Run 2	0.013 ppb	0.044 ppb	86.690 %	101.129 %	0.110 ppb	13.261 ppb	104.808 %	104.124 %	107.470 %
Concentration per Run 3	0.012 ppb	0.014 ppb	87.045 %	100.288 %	0.148 ppb	12.728 ppb	99.530 %	108.087 %	107.556 %
Concentration RSD	36.3 %	50.6 %	1.3 %	9.1 %	17.1 %	9.1 %	2.6 %	7.5 %	1.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	110.803 %	0.004 ppb	0.732 ppb	97.744 %	86.582 %
Concentration per Run 1	98.218 %	-0.002 ppb	0.805 ppb	95.514 %	79.742 %
Concentration per Run 2	115.173 %	0.005 ppb	0.703 ppb	99.517 %	90.885 %
Concentration per Run 3	119.019 %	0.010 ppb	0.687 ppb	98.202 %	89.119 %
Concentration RSD	10.0 %	136.8 %	8.7 %	2.1 %	6.9 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	89	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350478-08 6020TL	Rack	1		
Analysis started at:	9/14/2023 6:34:08 PM	Vial	57		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	89.390 %	79.759 %	0.011 ppb	96.845 ppb	160,534.678 ppb	14,466.741 ppb	118.162 ppb	2,915.649 ppb	47,587.966 ppb
Concentration per Run 1	88.987 %	76.954 %	0.010 ppb	93.718 ppb	156,548.539 ppb	14,440.740 ppb	115.308 ppb	2,863.507 ppb	47,674.317 ppb
Concentration per Run 2	89.762 %	85.371 %	0.018 ppb	97.286 ppb	157,412.847 ppb	13,627.058 ppb	121.520 ppb	3,043.863 ppb	46,967.613 ppb
Concentration per Run 3	89.420 %	76.954 %	0.006 ppb	99.530 ppb	167,642.648 ppb	15,332.426 ppb	117.657 ppb	2,839.577 ppb	48,121.968 ppb
Concentration RSD	0.4 %	6.1 %	55.5 %	3.0 %	3.8 %	5.9 %	2.7 %	3.8 %	1.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	104.974 %	105.281 %	0.647 ppb	0.288 ppb	45.614 ppb	321.213 ppb	0.458 ppb	0.871 ppb	1.019 ppb
Concentration per Run 1	105.712 %	106.431 %	0.575 ppb	0.240 ppb	44.171 ppb	334.234 ppb	0.483 ppb	0.887 ppb	0.940 ppb
Concentration per Run 2	104.970 %	104.008 %	0.562 ppb	0.320 ppb	47.650 ppb	341.788 ppb	0.457 ppb	0.960 ppb	1.137 ppb
Concentration per Run 3	104.240 %	105.406 %	0.804 ppb	0.302 ppb	45.021 ppb	287.616 ppb	0.433 ppb	0.765 ppb	0.980 ppb
Concentration RSD	0.7 %	1.2 %	21.0 %	14.8 %	4.0 %	9.1 %	5.5 %	11.3 %	10.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.152 ppb	114.324 %	112.422 %	0.197 ppb	1.068 ppb	181.826 ppb	0.174 ppb	103.653 %	95.504 %
Concentration per Run 1	-0.055 ppb	109.078 %	115.885 %	0.150 ppb	2.131 ppb	173.370 ppb	0.176 ppb	99.403 %	99.045 %
Concentration per Run 2	0.349 ppb	117.196 %	103.219 %	0.238 ppb	0.337 ppb	192.077 ppb	0.185 ppb	104.998 %	93.100 %
Concentration per Run 3	0.162 ppb	116.698 %	118.163 %	0.202 ppb	0.737 ppb	180.032 ppb	0.160 ppb	106.559 %	94.368 %
Concentration RSD	133.0 %	4.0 %	7.2 %	22.3 %	88.2 %	5.2 %	7.4 %	3.6 %	3.3 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.003 ppb	0.028 ppb	105.038 %	115.195 %	0.045 ppb	42.129 ppb	118.004 %	120.502 %	121.020 %
Concentration per Run 1	0.004 ppb	0.026 ppb	101.706 %	118.210 %	0.039 ppb	39.500 ppb	114.731 %	125.653 %	117.162 %
Concentration per Run 2	0.003 ppb	0.024 ppb	105.162 %	114.351 %	0.058 ppb	42.005 ppb	118.876 %	116.997 %	123.309 %
Concentration per Run 3	0.002 ppb	0.033 ppb	108.245 %	113.024 %	0.038 ppb	44.880 ppb	120.405 %	118.857 %	122.590 %
Concentration RSD	29.6 %	17.4 %	3.1 %	2.3 %	24.1 %	6.4 %	2.5 %	3.8 %	2.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	130.437 %	-0.003 ppb	0.169 ppb	117.461 %	108.799 %
Concentration per Run 1	136.158 %	-0.010 ppb	0.159 ppb	114.106 %	111.548 %
Concentration per Run 2	126.752 %	0.001 ppb	0.176 ppb	117.888 %	106.408 %
Concentration per Run 3	128.400 %	0.001 ppb	0.170 ppb	120.390 %	108.440 %
Concentration RSD	3.9 %	222.6 %	5.1 %	2.7 %	2.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	90	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350478-09 6020TL	Rack	1		
Analysis started at:	9/14/2023 6:38:55 PM	Vial	58		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	104.147 %	88.176 %	0.003 ppb	77.453 ppb	181,599.147 ppb	15,585.141 ppb	11.957 ppb	3,227.518 ppb	44,032.086 ppb
Concentration per Run 1	101.165 %	89.579 %	0.006 ppb	79.074 ppb	172,065.130 ppb	15,267.506 ppb	12.552 ppb	3,116.125 ppb	42,160.106 ppb
Concentration per Run 2	105.678 %	96.192 %	0.001 ppb	77.003 ppb	170,939.928 ppb	15,144.697 ppb	10.804 ppb	3,279.996 ppb	44,054.295 ppb
Concentration per Run 3	105.599 %	78.757 %	0.003 ppb	76.282 ppb	201,792.385 ppb	16,343.220 ppb	12.516 ppb	3,286.433 ppb	45,881.858 ppb
Concentration RSD	2.5 %	10.0 %	73.5 %	1.9 %	9.6 %	4.2 %	8.4 %	3.0 %	4.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	122.703 %	108.544 %	0.712 ppb	0.227 ppb	266.498 ppb	26.726 ppb	0.225 ppb	0.979 ppb	0.946 ppb
Concentration per Run 1	118.371 %	110.252 %	0.640 ppb	0.215 ppb	253.152 ppb	25.012 ppb	0.236 ppb	0.967 ppb	0.822 ppb
Concentration per Run 2	125.548 %	110.998 %	0.771 ppb	0.253 ppb	269.987 ppb	28.202 ppb	0.221 ppb	1.012 ppb	1.077 ppb
Concentration per Run 3	124.192 %	104.381 %	0.725 ppb	0.213 ppb	276.355 ppb	26.965 ppb	0.217 ppb	0.956 ppb	0.940 ppb
Concentration RSD	3.1 %	3.3 %	9.3 %	9.9 %	4.5 %	6.0 %	4.3 %	3.0 %	13.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.333 ppb	125.256 %	109.196 %	0.211 ppb	0.156 ppb	147.963 ppb	0.248 ppb	108.506 %	99.929 %
Concentration per Run 1	-0.352 ppb	125.673 %	109.871 %	0.153 ppb	0.133 ppb	140.307 ppb	0.201 ppb	106.587 %	103.457 %
Concentration per Run 2	-0.310 ppb	124.762 %	106.135 %	0.254 ppb	0.171 ppb	150.873 ppb	0.242 ppb	109.698 %	97.940 %
Concentration per Run 3	-0.335 ppb	125.334 %	111.581 %	0.224 ppb	0.163 ppb	152.710 ppb	0.302 ppb	109.234 %	98.389 %
Concentration RSD	6.3 %	0.4 %	2.6 %	24.6 %	12.7 %	4.5 %	20.4 %	1.5 %	3.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.003 ppb	0.042 ppb	112.798 %	116.640 %	0.014 ppb	41.713 ppb	122.891 %	119.627 %	124.662 %
Concentration per Run 1	0.002 ppb	0.042 ppb	112.519 %	120.890 %	0.009 ppb	41.015 ppb	123.974 %	121.891 %	123.557 %
Concentration per Run 2	0.005 ppb	0.036 ppb	114.357 %	113.247 %	0.009 ppb	41.208 ppb	122.204 %	119.385 %	127.088 %
Concentration per Run 3	0.003 ppb	0.047 ppb	111.517 %	115.782 %	0.026 ppb	42.915 ppb	122.495 %	117.604 %	123.340 %
Concentration RSD	44.7 %	13.4 %	1.3 %	3.3 %	68.7 %	2.5 %	0.8 %	1.8 %	1.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	125.780 %	-0.001 ppb	0.022 ppb	119.775 %	106.590 %
Concentration per Run 1	129.247 %	-0.005 ppb	0.020 ppb	116.354 %	113.413 %
Concentration per Run 2	125.541 %	0.001 ppb	0.026 ppb	124.674 %	103.631 %
Concentration per Run 3	122.553 %	-0.001 ppb	0.022 ppb	118.298 %	102.726 %
Concentration RSD	2.7 %	216.2 %	13.3 %	3.6 %	5.6 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	91	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350478-11 6020TL	Rack	1		
Analysis started at:	9/14/2023 6:43:43 PM	Vial	59		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	113.370 %	101.002 %	-0.003 ppb	632.543 ppb	128,584.980 ppb	633.316 ppb	243.443 ppb	62,797.572 ppb	8,621.137 ppb
Concentration per Run 1	113.910 %	98.597 %	-0.006 ppb	618.390 ppb	126,652.048 ppb	614.024 ppb	231.847 ppb	57,868.965 ppb	6,667.265 ppb
Concentration per Run 2	113.201 %	105.210 %	-0.001 ppb	642.331 ppb	127,336.229 ppb	659.780 ppb	252.013 ppb	64,544.628 ppb	10,191.925 ppb
Concentration per Run 3	112.998 %	99.198 %	-0.004 ppb	636.909 ppb	131,766.663 ppb	626.143 ppb	246.468 ppb	65,979.123 ppb	9,004.219 ppb
Concentration RSD	0.4 %	3.6 %	78.0 %	2.0 %	2.2 %	3.7 %	4.3 %	6.9 %	20.8 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	124.121 %	112.365 %	2.114 ppb	6.444 ppb	38.847 ppb	404.897 ppb	0.184 ppb	0.766 ppb	0.577 ppb
Concentration per Run 1	129.905 %	119.573 %	1.846 ppb	6.021 ppb	35.943 ppb	374.592 ppb	0.198 ppb	0.706 ppb	0.516 ppb
Concentration per Run 2	123.541 %	106.897 %	2.515 ppb	6.823 ppb	40.672 ppb	424.296 ppb	0.172 ppb	0.831 ppb	0.715 ppb
Concentration per Run 3	118.918 %	110.625 %	1.980 ppb	6.489 ppb	39.927 ppb	415.803 ppb	0.181 ppb	0.761 ppb	0.501 ppb
Concentration RSD	4.4 %	5.8 %	16.7 %	6.3 %	6.5 %	6.6 %	7.2 %	8.2 %	20.7 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	12.428 ppb	125.493 %	117.882 %	13.129 ppb	0.155 ppb	972.231 ppb	159.009 ppb	111.619 %	101.891 %
Concentration per Run 1	11.167 ppb	121.295 %	126.455 %	11.839 ppb	0.306 ppb	893.337 ppb	153.583 ppb	110.767 %	106.374 %
Concentration per Run 2	13.509 ppb	127.988 %	110.418 %	14.275 ppb	0.165 ppb	1,030.709 ppb	161.935 ppb	110.127 %	99.317 %
Concentration per Run 3	12.606 ppb	127.195 %	116.774 %	13.273 ppb	-0.006 ppb	992.646 ppb	161.508 ppb	113.962 %	99.982 %
Concentration RSD	9.5 %	2.9 %	6.9 %	9.3 %	101.0 %	7.3 %	3.0 %	1.8 %	3.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.000 ppb	0.034 ppb	109.741 %	114.275 %	2.195 ppb	24.559 ppb	123.531 %	119.870 %	122.669 %
Concentration per Run 1	0.000 ppb	0.031 ppb	107.468 %	117.580 %	2.119 ppb	23.178 ppb	124.033 %	125.039 %	121.651 %
Concentration per Run 2	0.000 ppb	0.047 ppb	110.588 %	114.992 %	2.061 ppb	24.788 ppb	125.115 %	118.271 %	124.010 %
Concentration per Run 3	0.000 ppb	0.024 ppb	111.166 %	110.254 %	2.403 ppb	25.710 ppb	121.446 %	116.302 %	122.347 %
Concentration RSD	1,250.7 %	34.3 %	1.8 %	3.3 %	8.3 %	5.2 %	1.5 %	3.8 %	1.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	123.538 %	-0.005 ppb	0.116 ppb	112.235 %	106.534 %
Concentration per Run 1	130.753 %	-0.010 ppb	0.110 ppb	109.455 %	112.965 %
Concentration per Run 2	118.475 %	-0.004 ppb	0.115 ppb	112.651 %	104.789 %
Concentration per Run 3	121.386 %	0.000 ppb	0.123 ppb	114.598 %	101.848 %
Concentration RSD	5.2 %	108.1 %	5.6 %	2.3 %	5.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	92	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350478-03D10 6020TL	Rack	1		
Analysis started at:	9/14/2023 6:48:31 PM	Vial	60		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	113.221 %	101.403 %	-0.002 ppb	3.945 ppb	55,352.496 ppb	4,467.829 ppb	3.364 ppb	702.472 ppb	13,322.174 ppb
Concentration per Run 1	111.402 %	94.990 %	-0.002 ppb	4.177 ppb	55,614.378 ppb	4,384.659 ppb	3.469 ppb	676.768 ppb	12,617.364 ppb
Concentration per Run 2	112.045 %	107.615 %	-0.003 ppb	3.927 ppb	53,195.286 ppb	4,178.700 ppb	3.372 ppb	675.355 ppb	13,495.302 ppb
Concentration per Run 3	116.216 %	101.603 %	-0.002 ppb	3.731 ppb	57,247.824 ppb	4,840.128 ppb	3.250 ppb	755.294 ppb	13,853.856 ppb
Concentration RSD	2.3 %	6.2 %	34.7 %	5.7 %	3.7 %	7.6 %	3.3 %	6.5 %	4.8 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	126.825 %	117.056 %	0.026 ppb	1.819 ppb	96.785 ppb	4,384.107 ppb	0.145 ppb	1.387 ppb	0.205 ppb
Concentration per Run 1	124.279 %	120.877 %	-0.010 ppb	1.593 ppb	93.731 ppb	4,232.676 ppb	0.127 ppb	1.280 ppb	0.237 ppb
Concentration per Run 2	125.557 %	120.784 %	0.041 ppb	1.830 ppb	95.817 ppb	4,266.774 ppb	0.137 ppb	1.633 ppb	0.195 ppb
Concentration per Run 3	130.640 %	109.507 %	0.047 ppb	2.033 ppb	100.807 ppb	4,652.872 ppb	0.173 ppb	1.250 ppb	0.184 ppb
Concentration RSD	2.7 %	5.6 %	121.9 %	12.1 %	3.8 %	5.3 %	16.6 %	15.3 %	13.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.091 ppb	124.698 %	114.427 %	0.236 ppb	0.166 ppb	74.281 ppb	0.652 ppb	113.249 %	105.147 %
Concentration per Run 1	0.042 ppb	122.292 %	118.801 %	0.240 ppb	-0.006 ppb	69.913 ppb	0.546 ppb	107.225 %	111.878 %
Concentration per Run 2	0.076 ppb	126.327 %	110.327 %	0.289 ppb	0.335 ppb	74.464 ppb	0.615 ppb	112.902 %	102.818 %
Concentration per Run 3	0.156 ppb	125.474 %	114.154 %	0.181 ppb	0.170 ppb	78.466 ppb	0.794 ppb	119.619 %	100.743 %
Concentration RSD	63.8 %	1.7 %	3.7 %	22.9 %	102.5 %	5.8 %	19.7 %	5.5 %	5.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.002 ppb	0.002 ppb	115.091 %	111.059 %	0.059 ppb	23.547 ppb	124.910 %	116.588 %	121.178 %
Concentration per Run 1	0.002 ppb	0.003 ppb	112.232 %	115.885 %	0.056 ppb	22.173 ppb	118.934 %	122.726 %	114.994 %
Concentration per Run 2	0.002 ppb	0.003 ppb	115.805 %	112.132 %	0.061 ppb	23.447 ppb	127.072 %	115.493 %	120.492 %
Concentration per Run 3	0.001 ppb	0.000 ppb	117.237 %	105.160 %	0.060 ppb	25.022 ppb	128.726 %	111.545 %	128.048 %
Concentration RSD	37.4 %	86.7 %	2.2 %	4.9 %	4.4 %	6.1 %	4.2 %	4.9 %	5.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	120.692 %	-0.007 ppb	0.020 ppb	117.378 %	105.040 %
Concentration per Run 1	124.888 %	-0.011 ppb	0.017 ppb	114.108 %	112.461 %
Concentration per Run 2	121.366 %	-0.006 ppb	0.019 ppb	116.228 %	102.958 %
Concentration per Run 3	115.823 %	-0.005 ppb	0.023 ppb	121.798 %	99.699 %
Concentration RSD	3.8 %	43.3 %	15.9 %	3.4 %	6.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	93	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350478-05D10 6020TL	Rack	2		
Analysis started at:	9/14/2023 6:56:16 PM	Vial	1		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	117.623 %	111.423 %	-0.005 ppb	7.119 ppb	29,936.253 ppb	5,820.383 ppb	-0.189 ppb	213.129 ppb	12,453.117 ppb
Concentration per Run 1	117.526 %	120.842 %	-0.004 ppb	7.189 ppb	27,689.700 ppb	5,258.410 ppb	-0.195 ppb	193.294 ppb	12,275.924 ppb
Concentration per Run 2	116.896 %	110.621 %	-0.005 ppb	7.121 ppb	30,488.934 ppb	6,008.944 ppb	-0.182 ppb	236.448 ppb	11,760.559 ppb
Concentration per Run 3	118.447 %	102.806 %	-0.006 ppb	7.046 ppb	31,630.125 ppb	6,193.796 ppb	-0.191 ppb	209.645 ppb	13,322.869 ppb
Concentration RSD	0.7 %	8.1 %	29.2 %	1.0 %	6.8 %	8.5 %	3.5 %	10.2 %	6.4 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	123.243 %	121.064 %	-0.005 ppb	0.754 ppb	139.036 ppb	1,123.049 ppb	0.030 ppb	0.565 ppb	-0.003 ppb
Concentration per Run 1	122.418 %	127.961 %	0.004 ppb	0.732 ppb	128.708 ppb	1,010.073 ppb	0.025 ppb	0.488 ppb	0.019 ppb
Concentration per Run 2	122.923 %	118.641 %	0.007 ppb	0.827 ppb	144.508 ppb	1,125.940 ppb	0.019 ppb	0.615 ppb	-0.023 ppb
Concentration per Run 3	124.388 %	116.590 %	-0.027 ppb	0.703 ppb	143.892 ppb	1,233.134 ppb	0.044 ppb	0.593 ppb	-0.003 ppb
Concentration RSD	0.8 %	5.0 %	367.6 %	8.6 %	6.4 %	9.9 %	44.7 %	12.1 %	795.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.290 ppb	127.019 %	119.401 %	0.107 ppb	0.051 ppb	41.213 ppb	0.119 ppb	114.209 %	110.500 %
Concentration per Run 1	-0.452 ppb	127.475 %	128.733 %	0.054 ppb	-0.005 ppb	38.490 ppb	0.106 ppb	113.338 %	116.157 %
Concentration per Run 2	-0.210 ppb	126.427 %	116.228 %	0.134 ppb	0.166 ppb	41.809 ppb	0.123 ppb	113.271 %	108.872 %
Concentration per Run 3	-0.207 ppb	127.155 %	113.242 %	0.133 ppb	-0.006 ppb	43.339 ppb	0.127 ppb	116.019 %	106.470 %
Concentration RSD	48.6 %	0.4 %	6.9 %	42.7 %	193.0 %	6.0 %	9.4 %	1.4 %	4.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.001 ppb	0.001 ppb	115.960 %	117.165 %	-0.004 ppb	10.931 ppb	121.766 %	119.323 %	117.945 %
Concentration per Run 1	0.002 ppb	0.000 ppb	110.053 %	124.633 %	-0.012 ppb	10.725 ppb	120.388 %	124.810 %	115.554 %
Concentration per Run 2	0.000 ppb	0.003 ppb	118.079 %	112.156 %	-0.003 ppb	10.764 ppb	123.989 %	118.409 %	117.653 %
Concentration per Run 3	0.000 ppb	0.000 ppb	119.750 %	114.705 %	0.003 ppb	11.305 ppb	120.920 %	114.749 %	120.627 %
Concentration RSD	132.9 %	173.2 %	4.5 %	5.6 %	172.4 %	3.0 %	1.6 %	4.3 %	2.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	120.548 %	-0.009 ppb	0.001 ppb	114.655 %	110.523 %
Concentration per Run 1	128.114 %	-0.013 ppb	0.000 ppb	112.665 %	114.805 %
Concentration per Run 2	119.211 %	-0.008 ppb	0.001 ppb	115.627 %	110.750 %
Concentration per Run 3	114.319 %	-0.007 ppb	0.002 ppb	115.673 %	106.013 %
Concentration RSD	5.8 %	33.9 %	71.3 %	1.5 %	4.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	94	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350478-06d10 6020TL	Rack	2		
Analysis started at:	9/14/2023 7:01:02 PM	Vial	2		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	118.547 %	116.032 %	-0.004 ppb	6.063 ppb	52,808.479 ppb	3,237.663 ppb	-0.243 ppb	336.568 ppb	12,128.675 ppb
Concentration per Run 1	116.865 %	114.229 %	-0.006 ppb	6.221 ppb	52,533.209 ppb	3,237.643 ppb	-0.244 ppb	321.932 ppb	11,523.145 ppb
Concentration per Run 2	116.523 %	122.645 %	-0.001 ppb	6.049 ppb	51,854.917 ppb	2,988.290 ppb	-0.241 ppb	349.818 ppb	13,178.253 ppb
Concentration per Run 3	122.254 %	111.223 %	-0.004 ppb	5.920 ppb	54,037.310 ppb	3,487.057 ppb	-0.244 ppb	337.953 ppb	11,684.627 ppb
Concentration RSD	2.7 %	5.1 %	64.6 %	2.5 %	2.1 %	7.7 %	0.6 %	4.2 %	7.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	130.643 %	122.897 %	0.017 ppb	0.053 ppb	122.141 ppb	451.539 ppb	0.029 ppb	0.063 ppb	0.011 ppb
Concentration per Run 1	126.404 %	126.097 %	0.005 ppb	0.080 ppb	116.238 ppb	433.152 ppb	0.021 ppb	0.097 ppb	0.004 ppb
Concentration per Run 2	131.951 %	120.411 %	0.024 ppb	0.001 ppb	125.336 ppb	471.287 ppb	0.033 ppb	0.015 ppb	0.021 ppb
Concentration per Run 3	133.574 %	122.182 %	0.023 ppb	0.079 ppb	124.848 ppb	450.178 ppb	0.032 ppb	0.076 ppb	0.007 ppb
Concentration RSD	2.9 %	2.4 %	60.8 %	85.1 %	4.2 %	4.2 %	23.7 %	67.6 %	85.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	-0.239 ppb	131.639 %	117.875 %	0.332 ppb	-0.003 ppb	47.824 ppb	0.132 ppb	118.295 %	107.383 %
Concentration per Run 1	-0.369 ppb	131.000 %	122.081 %	0.241 ppb	0.004 ppb	44.633 ppb	0.085 ppb	118.718 %	113.039 %
Concentration per Run 2	-0.119 ppb	132.093 %	113.789 %	0.371 ppb	0.004 ppb	50.016 ppb	0.128 ppb	118.058 %	104.840 %
Concentration per Run 3	-0.228 ppb	131.822 %	117.756 %	0.384 ppb	-0.016 ppb	48.823 ppb	0.182 ppb	118.108 %	104.271 %
Concentration RSD	52.6 %	0.4 %	3.5 %	23.9 %	394.7 %	5.9 %	36.7 %	0.3 %	4.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.000 ppb	0.002 ppb	118.988 %	115.405 %	0.000 ppb	9.771 ppb	121.175 %	118.096 %	120.139 %
Concentration per Run 1	0.000 ppb	0.000 ppb	115.075 %	121.179 %	-0.003 ppb	9.863 ppb	116.513 %	125.741 %	118.752 %
Concentration per Run 2	0.000 ppb	0.006 ppb	119.385 %	113.143 %	-0.005 ppb	9.643 ppb	122.377 %	116.157 %	119.515 %
Concentration per Run 3	0.000 ppb	0.000 ppb	122.505 %	111.894 %	0.009 ppb	9.807 ppb	124.634 %	112.392 %	122.149 %
Concentration RSD	0.0 %	173.2 %	3.1 %	4.4 %	1,829.9 %	1.2 %	3.5 %	5.8 %	1.5 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	117.919 %	-0.009 ppb	0.003 ppb	117.041 %	107.373 %
Concentration per Run 1	121.930 %	-0.012 ppb	0.003 ppb	113.254 %	112.767 %
Concentration per Run 2	117.230 %	-0.008 ppb	0.003 ppb	120.285 %	105.614 %
Concentration per Run 3	114.597 %	-0.006 ppb	0.003 ppb	117.583 %	103.739 %
Concentration RSD	3.2 %	34.8 %	11.2 %	3.0 %	4.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	95	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/14/2023 7:05:49 PM	Vial	9		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	123.079 %	111.423 %	55.494 ppb	54.522 ppb	7,121.587 ppb	6,483.282 ppb	54.925 ppb	7,110.213 ppb	6,588.890 ppb
Concentration per Run 1	122.874 %	117.836 %	56.479 ppb	54.642 ppb	6,667.818 ppb	6,066.522 ppb	53.692 ppb	6,804.235 ppb	6,253.717 ppb
Concentration per Run 2	122.304 %	92.585 %	55.821 ppb	54.645 ppb	8,013.604 ppb	7,649.354 ppb	56.983 ppb	8,197.323 ppb	7,509.038 ppb
Concentration per Run 3	124.058 %	123.848 %	54.181 ppb	54.279 ppb	6,683.339 ppb	5,733.969 ppb	54.100 ppb	6,329.082 ppb	6,003.914 ppb
Recovery Percentage 1			92.490 %	90.870 %	118.693 %	108.055 %	91.542 %	118.504 %	109.815 %
Concentration RSD	0.7 %	14.9 %	2.1 %	0.4 %	10.8 %	15.8 %	3.3 %	13.7 %	12.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	136.024 %	120.132 %	60.315 ppb	60.127 ppb	69.840 ppb	7,102.316 ppb	66.705 ppb	69.159 ppb	66.100 ppb
Concentration per Run 1	137.846 %	123.301 %	56.678 ppb	56.933 ppb	65.561 ppb	6,568.491 ppb	63.846 ppb	64.274 ppb	59.243 ppb
Concentration per Run 2	132.342 %	108.481 %	67.594 ppb	67.314 ppb	78.899 ppb	8,018.783 ppb	74.339 ppb	76.424 ppb	77.461 ppb
Concentration per Run 3	137.884 %	128.613 %	56.671 ppb	56.133 ppb	65.061 ppb	6,719.675 ppb	61.930 ppb	66.778 ppb	61.596 ppb
Recovery Percentage 1			100.524 %	100.211 %	116.400 %	118.372 %	111.175 %	115.264 %	110.167 %
Concentration RSD	2.3 %	8.7 %	10.5 %	10.4 %	11.2 %	11.2 %	10.0 %	9.3 %	15.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	69.573 ppb	127.292 %	110.408 %	63.000 ppb	61.217 ppb	69.286 ppb	60.812 ppb	117.327 %	104.567 %
Concentration per Run 1	64.495 ppb	127.347 %	117.691 %	58.176 ppb	59.875 ppb	65.236 ppb	57.107 ppb	115.710 %	105.023 %
Concentration per Run 2	78.594 ppb	125.841 %	98.352 %	71.817 ppb	67.296 ppb	76.829 ppb	66.707 ppb	116.429 %	97.349 %
Concentration per Run 3	65.630 ppb	128.687 %	115.182 %	59.008 ppb	56.479 ppb	65.794 ppb	58.621 ppb	119.843 %	111.329 %
Recovery Percentage 1	115.955 %			105.001 %	102.028 %	115.477 %	101.353 %		
Concentration RSD	11.3 %	1.1 %	9.5 %	12.1 %	9.0 %	9.4 %	8.5 %	1.9 %	6.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	59.675 ppb	61.333 ppb	115.325 %	109.130 %	61.641 ppb	63.664 ppb	122.365 %	109.293 %	120.172 %
Concentration per Run 1	58.416 ppb	60.423 ppb	113.013 %	108.851 %	61.201 ppb	61.350 ppb	121.772 %	108.482 %	119.958 %
Concentration per Run 2	63.759 ppb	66.926 ppb	116.214 %	101.983 %	66.576 ppb	69.537 ppb	121.559 %	102.846 %	120.170 %
Concentration per Run 3	56.850 ppb	56.650 ppb	116.749 %	116.555 %	57.146 ppb	60.105 ppb	123.762 %	116.550 %	120.387 %
Recovery Percentage 1	99.458 %	102.222 %			102.735 %	106.106 %			
Concentration RSD	6.1 %	8.5 %	1.8 %	6.7 %	7.7 %	8.0 %	1.0 %	6.3 %	0.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.949 %	60.712 ppb	61.326 ppb	116.637 %	101.505 %
Concentration per Run 1	107.112 %	57.986 ppb	59.414 ppb	115.940 %	105.565 %
Concentration per Run 2	100.053 %	66.979 ppb	66.736 ppb	115.365 %	93.312 %
Concentration per Run 3	113.682 %	57.171 ppb	57.826 ppb	118.606 %	105.637 %
Recovery Percentage 1		101.187 %	102.209 %		
Concentration RSD	6.4 %	9.0 %	7.7 %	1.5 %	7.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	96	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 7:10:39 PM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	126.368 %	121.042 %	0.007 ppb	0.087 ppb	53.916 ppb	2.333 ppb	0.778 ppb	10.483 ppb	-1.955 ppb
Concentration per Run 1	126.936 %	122.044 %	0.008 ppb	0.093 ppb	45.782 ppb	1.392 ppb	0.777 ppb	7.679 ppb	4.839 ppb
Concentration per Run 2	124.686 %	126.854 %	0.011 ppb	0.085 ppb	68.373 ppb	1.753 ppb	0.804 ppb	16.772 ppb	5.658 ppb
Concentration per Run 3	127.481 %	114.229 %	0.002 ppb	0.082 ppb	47.594 ppb	3.853 ppb	0.755 ppb	6.997 ppb	-16.364 ppb
Recovery Percentage 1			1.438 %	0.867 %	53.916 %	3.332 %	7.783 %	10.483 %	-1.955 %
Concentration RSD	1.2 %	5.3 %	65.8 %	6.5 %	23.3 %	57.0 %	3.2 %	52.1 %	638.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	125.042 %	120.909 %	0.017 ppb	-0.051 ppb	0.154 ppb	5.503 ppb	0.013 ppb	0.135 ppb	0.026 ppb
Concentration per Run 1	130.640 %	124.885 %	0.006 ppb	-0.030 ppb	0.109 ppb	4.853 ppb	0.016 ppb	0.188 ppb	0.029 ppb
Concentration per Run 2	123.622 %	116.497 %	-0.010 ppb	-0.053 ppb	0.186 ppb	8.220 ppb	0.009 ppb	0.097 ppb	0.019 ppb
Concentration per Run 3	120.865 %	121.344 %	0.057 ppb	-0.070 ppb	0.167 ppb	3.434 ppb	0.013 ppb	0.119 ppb	0.029 ppb
Recovery Percentage 1			0.350 %	-5.126 %	15.396 %	11.005 %	2.528 %	6.740 %	2.588 %
Concentration RSD	4.0 %	3.5 %	199.7 %	39.3 %	25.9 %	44.7 %	29.6 %	35.4 %	22.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.022 ppb	123.746 %	120.100 %	0.053 ppb	0.150 ppb	-0.046 ppb	0.122 ppb	116.369 %	114.005 %
Concentration per Run 1	0.872 ppb	124.470 %	119.621 %	-0.036 ppb	0.296 ppb	-0.088 ppb	0.079 ppb	113.994 %	122.352 %
Concentration per Run 2	1.208 ppb	122.325 %	119.530 %	0.163 ppb	0.004 ppb	-0.064 ppb	0.165 ppb	118.809 %	111.434 %
Concentration per Run 3	0.985 ppb	124.442 %	121.148 %	0.033 ppb	0.151 ppb	0.014 ppb	0.122 ppb	116.305 %	108.231 %
Recovery Percentage 1	20.437 %			10.609 %	3.001 %	-9.256 %	6.098 %		
Concentration RSD	16.8 %	1.0 %	0.8 %	190.6 %	97.4 %	115.6 %	34.9 %	2.1 %	6.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.013 ppb	0.004 ppb	114.227 %	116.429 %	0.067 ppb	0.061 ppb	116.599 %	115.650 %	114.367 %
Concentration per Run 1	0.007 ppb	0.005 ppb	115.023 %	124.067 %	0.076 ppb	0.041 ppb	116.700 %	119.563 %	115.142 %
Concentration per Run 2	0.019 ppb	0.003 ppb	112.454 %	115.294 %	0.056 ppb	0.044 ppb	116.388 %	113.714 %	111.357 %
Concentration per Run 3	0.013 ppb	0.003 ppb	115.203 %	109.924 %	0.069 ppb	0.097 ppb	116.710 %	113.672 %	116.602 %
Recovery Percentage 1	3.204 %				1.674 %	12.155 %			
Concentration RSD	47.2 %	36.8 %	1.3 %	6.1 %	15.6 %	52.0 %	0.2 %	2.9 %	2.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	112.743 %	0.109 ppb	0.017 ppb	111.309 %	110.647 %
Concentration per Run 1	118.236 %	0.059 ppb	0.016 ppb	109.992 %	115.099 %
Concentration per Run 2	110.421 %	0.124 ppb	0.017 ppb	109.225 %	110.481 %
Concentration per Run 3	109.571 %	0.145 ppb	0.018 ppb	114.710 %	106.362 %
Recovery Percentage 1		10.909 %	1.712 %		
Concentration RSD	4.2 %	40.9 %	5.0 %	2.7 %	4.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 97 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 9/14/2023 7:16:48 PM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	122.359 %	125.451 %	56.897 ppb	54.520 ppb	6,110.187 ppb	5,971.542 ppb	55.119 ppb	6,356.865 ppb	5,710.446 ppb
Concentration per Run 1	123.400 %	117.836 %	57.234 ppb	53.751 ppb	6,325.975 ppb	6,071.048 ppb	55.031 ppb	6,240.606 ppb	5,638.963 ppb
Concentration per Run 2	123.193 %	124.449 %	55.773 ppb	54.504 ppb	6,021.841 ppb	5,899.600 ppb	53.287 ppb	6,297.537 ppb	5,232.273 ppb
Concentration per Run 3	120.483 %	134.068 %	57.685 ppb	55.306 ppb	5,982.745 ppb	5,943.978 ppb	57.037 ppb	6,532.451 ppb	6,260.101 ppb
Recovery Percentage 1			94.829 %	90.867 %	101.836 %	99.526 %	91.864 %	105.948 %	95.174 %
Concentration RSD	1.3 %	6.5 %	1.8 %	1.4 %	3.1 %	1.5 %	3.4 %	2.4 %	9.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	139.388 %	138.058 %	52.749 ppb	52.360 ppb	61.500 ppb	6,082.132 ppb	59.736 ppb	61.724 ppb	60.742 ppb
Concentration per Run 1	140.700 %	139.891 %	53.439 ppb	51.660 ppb	58.641 ppb	5,813.612 ppb	57.348 ppb	60.463 ppb	57.662 ppb
Concentration per Run 2	141.515 %	144.272 %	53.182 ppb	53.777 ppb	60.032 ppb	5,870.753 ppb	60.868 ppb	61.586 ppb	61.447 ppb
Concentration per Run 3	135.948 %	130.012 %	51.627 ppb	51.644 ppb	65.828 ppb	6,562.031 ppb	60.992 ppb	63.123 ppb	63.116 ppb
Recovery Percentage 1			87.915 %	87.267 %	102.500 %	101.369 %	99.560 %	102.873 %	101.236 %
Concentration RSD	2.2 %	5.3 %	1.9 %	2.3 %	6.2 %	6.8 %	3.5 %	2.2 %	4.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	61.500 ppb	125.128 %	119.170 %	57.096 ppb	56.692 ppb	62.364 ppb	56.783 ppb	116.461 %	110.753 %
Concentration per Run 1	60.486 ppb	122.817 %	120.585 %	56.599 ppb	53.749 ppb	59.397 ppb	55.410 ppb	112.828 %	114.069 %
Concentration per Run 2	60.784 ppb	126.730 %	118.323 %	58.118 ppb	61.380 ppb	63.438 ppb	57.395 ppb	120.591 %	108.337 %
Concentration per Run 3	63.229 ppb	125.837 %	118.602 %	56.569 ppb	54.948 ppb	64.257 ppb	57.543 ppb	115.965 %	109.854 %
Recovery Percentage 1	102.499 %			95.159 %	94.487 %	103.940 %	94.638 %		
Concentration RSD	2.4 %	1.6 %	1.0 %	1.6 %	7.2 %	4.2 %	2.1 %	3.4 %	2.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	55.392 ppb	56.003 ppb	115.405 %	117.355 %	56.583 ppb	59.319 ppb	117.179 %	116.619 %	114.832 %
Concentration per Run 1	52.980 ppb	54.028 ppb	114.819 %	120.486 %	54.230 ppb	55.957 ppb	115.286 %	122.773 %	113.509 %
Concentration per Run 2	56.438 ppb	56.383 ppb	116.095 %	118.054 %	57.014 ppb	61.547 ppb	118.225 %	115.314 %	114.266 %
Concentration per Run 3	56.757 ppb	57.598 ppb	115.300 %	113.524 %	58.504 ppb	60.453 ppb	118.027 %	111.770 %	116.722 %
Recovery Percentage 1	92.319 %	93.339 %			94.304 %	98.865 %			
Concentration RSD	3.8 %	3.2 %	0.6 %	3.0 %	3.8 %	5.0 %	1.4 %	4.8 %	1.5 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	114.349 %	55.113 ppb	55.289 ppb	112.280 %	110.862 %
Concentration per Run 1	121.675 %	52.328 ppb	52.888 ppb	112.328 %	114.760 %
Concentration per Run 2	110.494 %	56.381 ppb	55.560 ppb	111.486 %	111.202 %
Concentration per Run 3	110.877 %	56.628 ppb	57.420 ppb	113.024 %	106.625 %
Recovery Percentage 1		91.854 %	92.149 %		
Concentration RSD	5.6 %	4.4 %	4.1 %	0.7 %	3.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	98	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 7:21:38 PM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	125.504 %	121.243 %	0.011 ppb	0.072 ppb	29.317 ppb	-0.391 ppb	0.813 ppb	2.885 ppb	-15.773 ppb
Concentration per Run 1	126.902 %	132.265 %	0.011 ppb	0.058 ppb	24.296 ppb	0.716 ppb	0.792 ppb	4.241 ppb	-15.716 ppb
Concentration per Run 2	124.586 %	107.014 %	0.011 ppb	0.094 ppb	43.111 ppb	-0.580 ppb	0.778 ppb	-3.683 ppb	-15.673 ppb
Concentration per Run 3	125.024 %	124.449 %	0.011 ppb	0.063 ppb	20.545 ppb	-1.310 ppb	0.869 ppb	8.098 ppb	-15.929 ppb
Recovery Percentage 1			2.174 %	0.719 %	29.317 %	-0.559 %	8.127 %	2.885 %	-15.773 %
Concentration RSD	1.0 %	10.7 %	4.6 %	26.9 %	41.2 %	262.1 %	6.0 %	208.2 %	0.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	126.374 %	118.175 %	0.001 ppb	-0.012 ppb	0.191 ppb	7.108 ppb	0.019 ppb	0.107 ppb	0.032 ppb
Concentration per Run 1	130.736 %	124.792 %	0.005 ppb	0.032 ppb	0.148 ppb	5.820 ppb	0.016 ppb	0.139 ppb	-0.002 ppb
Concentration per Run 2	125.849 %	112.769 %	-0.008 ppb	-0.041 ppb	0.203 ppb	5.440 ppb	0.020 ppb	0.077 ppb	0.068 ppb
Concentration per Run 3	122.536 %	116.963 %	0.006 ppb	-0.028 ppb	0.222 ppb	10.065 ppb	0.022 ppb	0.105 ppb	0.030 ppb
Recovery Percentage 1			0.014 %	-1.215 %	19.096 %	14.216 %	3.831 %	5.335 %	3.203 %
Concentration RSD	3.3 %	5.2 %	1,143.4 %	322.5 %	20.0 %	36.1 %	17.0 %	29.1 %	110.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.904 ppb	124.775 %	119.682 %	0.013 ppb	0.168 ppb	-0.025 ppb	0.166 ppb	115.766 %	113.977 %
Concentration per Run 1	0.679 ppb	124.582 %	125.362 %	0.038 ppb	0.004 ppb	-0.026 ppb	0.147 ppb	118.783 %	119.604 %
Concentration per Run 2	1.177 ppb	124.056 %	112.787 %	-0.040 ppb	0.167 ppb	-0.032 ppb	0.166 ppb	114.701 %	113.073 %
Concentration per Run 3	0.855 ppb	125.686 %	120.897 %	0.042 ppb	0.332 ppb	-0.016 ppb	0.186 ppb	113.814 %	109.254 %
Recovery Percentage 1	18.073 %			2.627 %	3.357 %	-4.908 %	8.310 %		
Concentration RSD	27.9 %	0.7 %	5.3 %	354.0 %	97.9 %	33.3 %	12.0 %	2.3 %	4.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.013 ppb	0.009 ppb	115.643 %	114.621 %	0.061 ppb	0.096 ppb	112.981 %	116.629 %	111.363 %
Concentration per Run 1	0.010 ppb	0.013 ppb	115.734 %	119.339 %	0.047 ppb	0.025 ppb	113.399 %	124.359 %	112.978 %
Concentration per Run 2	0.013 ppb	0.006 ppb	118.068 %	112.460 %	0.045 ppb	0.132 ppb	113.636 %	111.293 %	109.253 %
Concentration per Run 3	0.016 ppb	0.009 ppb	113.127 %	112.065 %	0.090 ppb	0.130 ppb	111.907 %	114.235 %	111.859 %
Recovery Percentage 1	3.301 %				1.514 %	19.134 %			
Concentration RSD	25.5 %	42.1 %	2.1 %	3.6 %	41.6 %	63.8 %	0.8 %	5.9 %	1.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	110.831 %	0.131 ppb	0.017 ppb	114.083 %	109.195 %
Concentration per Run 1	115.644 %	0.074 ppb	0.017 ppb	114.810 %	113.137 %
Concentration per Run 2	108.380 %	0.156 ppb	0.018 ppb	114.097 %	109.337 %
Concentration per Run 3	108.469 %	0.162 ppb	0.015 ppb	113.343 %	105.112 %
Recovery Percentage 1		13.065 %	1.652 %		
Concentration RSD	3.8 %	37.4 %	9.3 %	0.6 %	3.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	99	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	L2350478-07d10 6020TL	Rack	2		
Analysis started at:	9/14/2023 7:28:22 PM	Vial	3		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	122.412 %	121.443 %	0.007 ppb	3.954 ppb	98,019.215 ppb	4,138.377 ppb	40.643 ppb	476.745 ppb	3,964.272 ppb
Concentration per Run 1	120.972 %	138.878 %	0.011 ppb	3.946 ppb	86,973.271 ppb	3,814.116 ppb	39.862 ppb	424.413 ppb	3,685.488 ppb
Concentration per Run 2	123.746 %	126.253 %	0.004 ppb	3.934 ppb	99,901.772 ppb	4,098.676 ppb	40.753 ppb	474.333 ppb	4,181.570 ppb
Concentration per Run 3	122.519 %	99.198 %	0.007 ppb	3.981 ppb	107,182.601 ppb	4,502.340 ppb	41.315 ppb	531.489 ppb	4,025.760 ppb
Concentration RSD	1.1 %	16.7 %	44.8 %	0.6 %	10.4 %	8.4 %	1.8 %	11.2 %	6.4 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	134.988 %	121.965 %	0.049 ppb	0.078 ppb	75.397 ppb	9,260.971 ppb	0.620 ppb	1.355 ppb	0.245 ppb
Concentration per Run 1	140.856 %	126.377 %	0.087 ppb	0.010 ppb	72.267 ppb	8,898.426 ppb	0.568 ppb	1.258 ppb	0.198 ppb
Concentration per Run 2	133.618 %	114.726 %	-0.027 ppb	0.150 ppb	80.860 ppb	9,321.827 ppb	0.651 ppb	1.541 ppb	0.348 ppb
Concentration per Run 3	130.490 %	124.792 %	0.089 ppb	0.076 ppb	73.065 ppb	9,562.660 ppb	0.642 ppb	1.267 ppb	0.190 ppb
Concentration RSD	3.9 %	5.2 %	134.7 %	89.5 %	6.3 %	3.6 %	7.3 %	11.9 %	36.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.619 ppb	132.721 %	115.270 %	0.392 ppb	0.200 ppb	47.908 ppb	0.063 ppb	118.125 %	105.644 %
Concentration per Run 1	0.582 ppb	130.209 %	122.151 %	0.363 ppb	0.613 ppb	43.243 ppb	0.061 ppb	115.838 %	111.197 %
Concentration per Run 2	0.682 ppb	134.322 %	107.958 %	0.404 ppb	-0.007 ppb	50.750 ppb	0.042 ppb	119.511 %	101.838 %
Concentration per Run 3	0.594 ppb	133.630 %	115.703 %	0.410 ppb	-0.006 ppb	49.731 ppb	0.087 ppb	119.026 %	103.896 %
Concentration RSD	8.9 %	1.7 %	6.2 %	6.5 %	178.9 %	8.5 %	36.3 %	1.7 %	4.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.008 ppb	0.009 ppb	117.409 %	109.155 %	0.035 ppb	1.202 ppb	127.833 %	115.709 %	124.440 %
Concentration per Run 1	0.020 ppb	0.017 ppb	115.111 %	113.733 %	0.052 ppb	1.270 ppb	124.818 %	119.628 %	120.344 %
Concentration per Run 2	0.004 ppb	0.000 ppb	121.569 %	105.999 %	0.023 ppb	1.180 ppb	128.327 %	112.442 %	124.286 %
Concentration per Run 3	0.001 ppb	0.009 ppb	115.548 %	107.733 %	0.031 ppb	1.157 ppb	130.355 %	115.057 %	128.689 %
Concentration RSD	126.0 %	98.1 %	3.1 %	3.7 %	42.1 %	5.0 %	2.2 %	3.1 %	3.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	111.484 %	0.026 ppb	0.070 ppb	114.803 %	102.781 %
Concentration per Run 1	116.232 %	0.017 ppb	0.072 ppb	111.459 %	107.473 %
Concentration per Run 2	108.965 %	0.029 ppb	0.068 ppb	112.969 %	102.692 %
Concentration per Run 3	109.254 %	0.033 ppb	0.071 ppb	119.980 %	98.178 %
Concentration RSD	3.7 %	33.0 %	3.0 %	4.0 %	4.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 100
Analysis label: WG1825983-1D10 6020TS
Analysis started at: 9/14/2023 7:39:02 PM
User name ALPHALAB\ICPMSRQ
Rack 2
Vial 4
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	123.331 %	125.251 %	-0.003 ppb	-0.015 ppb	17.891 ppb	3.380 ppb	0.351 ppb	0.550 ppb	4.651 ppb
Concentration per Run 1	122.731 %	129.860 %	-0.001 ppb	-0.006 ppb	11.908 ppb	2.357 ppb	0.326 ppb	15.932 ppb	23.459 ppb
Concentration per Run 2	123.839 %	114.830 %	-0.001 ppb	-0.035 ppb	27.234 ppb	4.934 ppb	0.422 ppb	-2.528 ppb	5.515 ppb
Concentration per Run 3	123.423 %	131.062 %	-0.006 ppb	-0.004 ppb	14.531 ppb	2.847 ppb	0.306 ppb	-11.755 ppb	-15.023 ppb
Concentration RSD	0.5 %	7.2 %	111.3 %	117.2 %	45.8 %	40.5 %	17.6 %	2,564.8 %	414.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	125.811 %	123.860 %	0.011 ppb	-0.095 ppb	0.069 ppb	1.424 ppb	-0.001 ppb	-0.012 ppb	-0.037 ppb
Concentration per Run 1	127.644 %	123.394 %	0.022 ppb	-0.076 ppb	0.044 ppb	0.690 ppb	-0.002 ppb	-0.053 ppb	-0.021 ppb
Concentration per Run 2	124.521 %	124.047 %	0.023 ppb	-0.138 ppb	0.093 ppb	1.572 ppb	-0.002 ppb	0.040 ppb	-0.054 ppb
Concentration per Run 3	125.267 %	124.140 %	-0.011 ppb	-0.070 ppb	0.071 ppb	2.009 ppb	0.001 ppb	-0.022 ppb	-0.035 ppb
Concentration RSD	1.3 %	0.3 %	168.5 %	39.4 %	36.0 %	47.2 %	124.1 %	402.3 %	44.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.063 ppb	124.027 %	120.107 %	-0.010 ppb	-0.012 ppb	-0.068 ppb	-0.008 ppb	113.900 %	115.871 %
Concentration per Run 1	-0.048 ppb	124.597 %	132.469 %	-0.021 ppb	-0.014 ppb	-0.042 ppb	-0.012 ppb	114.518 %	123.243 %
Concentration per Run 2	0.065 ppb	123.729 %	116.341 %	0.010 ppb	-0.006 ppb	-0.112 ppb	0.009 ppb	113.865 %	112.910 %
Concentration per Run 3	0.171 ppb	123.756 %	111.511 %	-0.020 ppb	-0.017 ppb	-0.050 ppb	-0.023 ppb	113.317 %	111.462 %
Concentration RSD	175.3 %	0.4 %	9.1 %	166.3 %	44.7 %	56.7 %	193.1 %	0.5 %	5.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.000 ppb	0.000 ppb	117.415 %	119.554 %	-0.009 ppb	0.053 ppb	113.701 %	117.878 %	110.504 %
Concentration per Run 1	0.000 ppb	0.000 ppb	119.895 %	127.311 %	-0.005 ppb	0.055 ppb	113.035 %	124.541 %	109.546 %
Concentration per Run 2	0.000 ppb	0.000 ppb	117.901 %	114.849 %	-0.007 ppb	0.027 ppb	115.872 %	112.949 %	111.676 %
Concentration per Run 3	0.001 ppb	0.000 ppb	114.448 %	116.502 %	-0.013 ppb	0.077 ppb	112.195 %	116.144 %	110.291 %
Concentration RSD	405.2 %	N/A	2.3 %	5.7 %	49.8 %	46.6 %	1.7 %	5.1 %	1.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	117.246 %	-0.001 ppb	0.002 ppb	110.414 %	112.321 %
Concentration per Run 1	125.349 %	-0.008 ppb	0.003 ppb	111.340 %	118.548 %
Concentration per Run 2	113.772 %	0.001 ppb	0.001 ppb	110.549 %	109.892 %
Concentration per Run 3	112.617 %	0.004 ppb	0.001 ppb	109.353 %	108.524 %
Concentration RSD	6.0 %	839.3 %	71.0 %	0.9 %	4.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 101
Analysis label: WG1825983-2D10 6020TS
Analysis started at: 9/14/2023 7:43:48 PM
User name ALPHALAB\ICPMSRQ
Rack 2
Vial 5
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	120.753 %	125.852 %	59.342 ppb	73.563 ppb	1,329.279 ppb	1,574.494 ppb	3,657.894 ppb	1,439.057 ppb	3,284.406 ppb
Concentration per Run 1	118.647 %	129.860 %	60.538 ppb	75.739 ppb	1,228.320 ppb	1,476.585 ppb	3,704.933 ppb	1,412.039 ppb	3,185.476 ppb
Concentration per Run 2	120.850 %	119.038 %	58.893 ppb	73.432 ppb	1,379.787 ppb	1,626.849 ppb	3,687.350 ppb	1,478.021 ppb	2,905.313 ppb
Concentration per Run 3	122.762 %	128.658 %	58.594 ppb	71.516 ppb	1,379.730 ppb	1,620.047 ppb	3,581.399 ppb	1,427.109 ppb	3,762.428 ppb
Concentration RSD	1.7 %	4.7 %	1.8 %	2.9 %	6.6 %	5.4 %	1.8 %	2.4 %	13.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	140.896 %	130.571 %	148.924 ppb	143.509 ppb	348.345 ppb	11,255.403 ppb	77.898 ppb	147.159 ppb	117.393 ppb
Concentration per Run 1	138.464 %	131.317 %	143.529 ppb	138.267 ppb	332.204 ppb	10,937.352 ppb	73.089 ppb	145.643 ppb	110.989 ppb
Concentration per Run 2	138.080 %	134.113 %	146.417 ppb	144.467 ppb	348.564 ppb	11,084.020 ppb	79.329 ppb	146.148 ppb	118.113 ppb
Concentration per Run 3	146.143 %	126.283 %	156.826 ppb	147.792 ppb	364.267 ppb	11,744.836 ppb	81.275 ppb	149.687 ppb	123.077 ppb
Concentration RSD	3.2 %	3.0 %	4.7 %	3.4 %	4.6 %	3.8 %	5.5 %	1.5 %	5.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	194.515 ppb	122.030 %	111.581 %	154.075 ppb	176.459 ppb	88.906 ppb	132.711 ppb	108.735 %	109.261 %
Concentration per Run 1	185.826 ppb	121.584 %	116.971 %	143.809 ppb	171.727 ppb	83.868 ppb	126.304 ppb	105.838 %	114.262 %
Concentration per Run 2	195.647 ppb	123.616 %	109.725 %	157.777 ppb	178.093 ppb	90.919 ppb	133.887 ppb	107.431 %	107.057 %
Concentration per Run 3	202.071 ppb	120.891 %	108.047 %	160.639 ppb	179.558 ppb	91.931 ppb	137.943 ppb	112.936 %	106.465 %
Concentration RSD	4.2 %	1.2 %	4.3 %	5.8 %	2.4 %	4.9 %	4.5 %	3.4 %	4.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	53.953 ppb	176.951 ppb	111.686 %	113.068 %	112.885 ppb	220.812 ppb	113.229 %	113.419 %	109.294 %
Concentration per Run 1	50.417 ppb	166.633 ppb	111.898 %	115.979 %	107.035 ppb	207.501 ppb	112.249 %	120.272 %	107.746 %
Concentration per Run 2	55.608 ppb	180.990 ppb	109.906 %	112.380 %	115.390 ppb	225.222 ppb	112.928 %	111.899 %	108.340 %
Concentration per Run 3	55.832 ppb	183.230 ppb	113.254 %	110.845 %	116.228 ppb	229.712 ppb	114.510 %	108.084 %	111.797 %
Concentration RSD	5.7 %	5.1 %	1.5 %	2.3 %	4.5 %	5.3 %	1.0 %	5.5 %	2.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	109.435 %	63.217 ppb	199.328 ppb	108.986 %	106.201 %
Concentration per Run 1	116.198 %	58.649 ppb	188.108 ppb	107.067 %	110.451 %
Concentration per Run 2	106.714 %	64.364 ppb	203.701 ppb	107.242 %	104.126 %
Concentration per Run 3	105.394 %	66.637 ppb	206.175 ppb	112.648 %	104.024 %
Concentration RSD	5.4 %	6.5 %	4.9 %	2.9 %	3.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 102
Analysis label: WG1825983-3D10 6020TS
Analysis started at: 9/14/2023 7:48:35 PM
User name ALPHALAB\ICPMSRQ
Rack 2
Vial 7
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	118.884 %	115.631 %	10.113 ppb	165.039 ppb	2,278.692 ppb	3,154.351 ppb	11,869.064 ppb	2,739.962 ppb	3,005.739 ppb
Concentration per Run 1	116.539 %	112.425 %	10.208 ppb	168.420 ppb	2,259.608 ppb	3,167.368 ppb	11,680.371 ppb	2,667.189 ppb	2,682.410 ppb
Concentration per Run 2	119.090 %	119.038 %	9.877 ppb	164.360 ppb	2,274.107 ppb	3,149.711 ppb	12,270.352 ppb	2,843.159 ppb	2,603.833 ppb
Concentration per Run 3	121.024 %	115.431 %	10.253 ppb	162.337 ppb	2,302.362 ppb	3,145.973 ppb	11,656.470 ppb	2,709.539 ppb	3,730.974 ppb
Concentration RSD	1.9 %	2.9 %	2.0 %	1.9 %	1.0 %	0.4 %	2.9 %	3.4 %	20.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	132.715 %	124.978 %	115.743 ppb	60.121 ppb	453.575 ppb	21,603.409 ppb	104.237 ppb	111.608 ppb	63.851 ppb
Concentration per Run 1	131.103 %	130.384 %	106.880 ppb	56.595 ppb	426.048 ppb	20,404.782 ppb	98.739 ppb	106.535 ppb	59.701 ppb
Concentration per Run 2	134.164 %	121.623 %	121.512 ppb	60.460 ppb	467.360 ppb	22,048.910 ppb	104.955 ppb	115.216 ppb	64.658 ppb
Concentration per Run 3	132.878 %	122.928 %	118.837 ppb	63.309 ppb	467.317 ppb	22,356.535 ppb	109.016 ppb	113.072 ppb	67.193 ppb
Concentration RSD	1.2 %	3.8 %	6.7 %	5.6 %	5.3 %	4.9 %	5.0 %	4.1 %	6.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	158.342 ppb	118.410 %	118.244 %	28.704 ppb	33.335 ppb	219.217 ppb	180.578 ppb	108.088 %	106.555 %
Concentration per Run 1	152.319 ppb	115.500 %	122.578 %	26.807 ppb	26.845 ppb	199.766 ppb	165.353 ppb	106.217 %	112.938 %
Concentration per Run 2	156.911 ppb	119.731 %	121.501 %	26.684 ppb	33.511 ppb	221.147 ppb	179.366 ppb	111.469 %	105.646 %
Concentration per Run 3	165.798 ppb	120.000 %	110.653 %	32.622 ppb	39.649 ppb	236.737 ppb	197.014 ppb	106.577 %	101.081 %
Concentration RSD	4.3 %	2.1 %	5.6 %	11.8 %	19.2 %	8.5 %	8.8 %	2.7 %	5.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	9.973 ppb	10.743 ppb	111.830 %	113.054 %	60.634 ppb	472.309 ppb	113.388 %	114.503 %	107.793 %
Concentration per Run 1	9.542 ppb	10.396 ppb	109.583 %	115.386 %	57.270 ppb	444.026 ppb	108.198 %	120.143 %	104.546 %
Concentration per Run 2	10.027 ppb	10.866 ppb	112.104 %	111.632 %	62.797 ppb	486.839 ppb	113.433 %	113.471 %	108.909 %
Concentration per Run 3	10.351 ppb	10.967 ppb	113.804 %	112.144 %	61.836 ppb	486.063 ppb	118.534 %	109.897 %	109.923 %
Concentration RSD	4.1 %	2.8 %	1.9 %	1.8 %	4.9 %	5.2 %	4.6 %	4.5 %	2.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	107.111 %	22.724 ppb	143.860 ppb	105.267 %	103.197 %
Concentration per Run 1	113.298 %	21.537 ppb	133.804 ppb	102.055 %	108.383 %
Concentration per Run 2	104.749 %	23.499 ppb	147.312 ppb	105.741 %	100.685 %
Concentration per Run 3	103.284 %	23.134 ppb	150.463 ppb	108.005 %	100.523 %
Concentration RSD	5.0 %	4.6 %	6.2 %	2.9 %	4.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	103	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1825983-5D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 7:53:22 PM	Vial	9		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	114.124 %	106.212 %	49.052 ppb	49.545 ppb	5,330.244 ppb	6,527.989 ppb	10,676.363 ppb	6,027.416 ppb	6,639.670 ppb
Concentration per Run 1	113.699 %	108.216 %	49.623 ppb	49.566 ppb	5,301.149 ppb	6,173.246 ppb	10,638.029 ppb	5,552.508 ppb	6,359.610 ppb
Concentration per Run 2	114.958 %	105.210 %	49.079 ppb	49.499 ppb	5,284.675 ppb	6,816.696 ppb	10,425.836 ppb	6,142.567 ppb	7,259.259 ppb
Concentration per Run 3	113.715 %	105.210 %	48.453 ppb	49.572 ppb	5,404.907 ppb	6,594.025 ppb	10,965.225 ppb	6,387.172 ppb	6,300.140 ppb
Concentration RSD	0.6 %	1.6 %	1.2 %	0.1 %	1.2 %	5.0 %	2.5 %	7.1 %	8.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	127.666 %	124.264 %	72.974 ppb	68.825 ppb	480.302 ppb	26,603.533 ppb	54.926 ppb	59.179 ppb	62.996 ppb
Concentration per Run 1	124.793 %	128.147 %	69.689 ppb	63.579 ppb	452.506 ppb	24,968.194 ppb	51.263 ppb	58.938 ppb	60.189 ppb
Concentration per Run 2	132.165 %	121.623 %	76.667 ppb	71.634 ppb	489.615 ppb	27,671.224 ppb	56.389 ppb	58.212 ppb	63.120 ppb
Concentration per Run 3	126.040 %	123.021 %	72.566 ppb	71.263 ppb	498.785 ppb	27,171.181 ppb	57.127 ppb	60.387 ppb	65.679 ppb
Concentration RSD	3.1 %	2.8 %	4.8 %	6.6 %	5.1 %	5.4 %	5.8 %	1.9 %	4.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	104.491 ppb	119.877 %	114.851 %	54.327 ppb	57.718 ppb	64.640 ppb	49.311 ppb	108.590 %	105.853 %
Concentration per Run 1	100.527 ppb	117.395 %	115.609 %	53.055 ppb	55.440 ppb	61.618 ppb	45.710 ppb	106.792 %	111.707 %
Concentration per Run 2	105.024 ppb	122.655 %	116.511 %	54.308 ppb	59.033 ppb	65.118 ppb	51.706 ppb	107.287 %	101.152 %
Concentration per Run 3	107.921 ppb	119.581 %	112.432 %	55.617 ppb	58.681 ppb	67.183 ppb	50.518 ppb	111.690 %	104.699 %
Concentration RSD	3.6 %	2.2 %	1.9 %	2.4 %	3.4 %	4.4 %	6.4 %	2.5 %	5.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	1.975 ppb	48.565 ppb	109.563 %	110.016 %	48.666 ppb	142.734 ppb	112.892 %	112.798 %	108.909 %
Concentration per Run 1	1.802 ppb	44.514 ppb	107.948 %	113.613 %	46.297 ppb	135.204 ppb	110.902 %	116.973 %	109.833 %
Concentration per Run 2	2.044 ppb	51.119 ppb	111.613 %	106.196 %	50.636 ppb	148.105 ppb	114.972 %	110.955 %	108.337 %
Concentration per Run 3	2.079 ppb	50.062 ppb	109.130 %	110.239 %	49.066 ppb	144.893 ppb	112.803 %	110.467 %	108.558 %
Concentration RSD	7.6 %	7.3 %	1.7 %	3.4 %	4.5 %	4.7 %	1.8 %	3.2 %	0.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	108.156 %	47.671 ppb	83.197 ppb	103.881 %	101.607 %
Concentration per Run 1	111.226 %	45.254 ppb	78.888 ppb	102.948 %	104.876 %
Concentration per Run 2	106.793 %	47.553 ppb	84.221 ppb	101.923 %	100.446 %
Concentration per Run 3	106.451 %	50.207 ppb	86.481 ppb	106.773 %	99.498 %
Concentration RSD	2.5 %	5.2 %	4.7 %	2.5 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 104
Analysis label: WG1825983-4D10 6020TS
Analysis started at: 9/14/2023 7:58:09 PM
User name ALPHALAB\ICPMSRQ
Rack 2
Vial 8
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	118.251 %	121.443 %	0.528 ppb	0.840 ppb	38.768 ppb	917.320 ppb	9,901.713 ppb	457.026 ppb	1,219.686 ppb
Concentration per Run 1	118.628 %	125.651 %	0.533 ppb	0.856 ppb	32.107 ppb	860.837 ppb	9,808.622 ppb	397.330 ppb	1,069.767 ppb
Concentration per Run 2	118.537 %	125.050 %	0.522 ppb	0.840 ppb	31.191 ppb	945.277 ppb	10,191.486 ppb	472.305 ppb	1,272.415 ppb
Concentration per Run 3	117.590 %	113.627 %	0.528 ppb	0.825 ppb	53.005 ppb	945.847 ppb	9,705.030 ppb	501.444 ppb	1,316.875 ppb
Concentration RSD	0.5 %	5.6 %	1.0 %	1.9 %	31.8 %	5.3 %	2.6 %	11.8 %	10.8 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	129.658 %	124.979 %	24.967 ppb	20.957 ppb	335.077 ppb	21,241.163 ppb	2.582 ppb	7.589 ppb	11.934 ppb
Concentration per Run 1	134.742 %	130.291 %	23.956 ppb	19.465 ppb	311.320 ppb	20,157.603 ppb	2.397 ppb	7.191 ppb	11.228 ppb
Concentration per Run 2	127.010 %	122.369 %	25.110 ppb	21.437 ppb	350.621 ppb	22,047.594 ppb	2.591 ppb	7.788 ppb	12.385 ppb
Concentration per Run 3	127.221 %	122.276 %	25.836 ppb	21.968 ppb	343.291 ppb	21,518.293 ppb	2.759 ppb	7.787 ppb	12.189 ppb
Concentration RSD	3.4 %	3.7 %	3.8 %	6.3 %	6.2 %	4.6 %	7.0 %	4.5 %	5.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	46.256 ppb	114.933 %	115.384 %	5.818 ppb	11.525 ppb	12.591 ppb	0.776 ppb	109.928 %	107.046 %
Concentration per Run 1	43.363 ppb	118.322 %	120.902 %	5.358 ppb	10.531 ppb	11.916 ppb	0.680 ppb	106.048 %	111.487 %
Concentration per Run 2	47.312 ppb	112.013 %	113.365 %	6.243 ppb	12.500 ppb	12.856 ppb	0.734 ppb	110.601 %	105.722 %
Concentration per Run 3	48.094 ppb	114.463 %	111.885 %	5.852 ppb	11.543 ppb	13.002 ppb	0.913 ppb	113.134 %	103.930 %
Concentration RSD	5.5 %	2.8 %	4.2 %	7.6 %	8.5 %	4.7 %	15.7 %	3.3 %	3.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.128 ppb	0.338 ppb	108.767 %	109.584 %	0.374 ppb	85.301 ppb	112.808 %	110.897 %	107.942 %
Concentration per Run 1	0.116 ppb	0.298 ppb	110.095 %	114.428 %	0.353 ppb	79.250 ppb	108.813 %	114.448 %	105.641 %
Concentration per Run 2	0.126 ppb	0.422 ppb	107.447 %	109.964 %	0.387 ppb	84.038 ppb	111.603 %	109.561 %	109.184 %
Concentration per Run 3	0.142 ppb	0.294 ppb	108.760 %	104.358 %	0.382 ppb	92.614 ppb	118.008 %	108.682 %	109.000 %
Concentration RSD	10.2 %	21.5 %	1.2 %	4.6 %	4.9 %	7.9 %	4.2 %	2.8 %	1.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.897 %	0.314 ppb	34.468 ppb	104.451 %	104.410 %
Concentration per Run 1	110.261 %	0.230 ppb	32.361 ppb	103.146 %	110.419 %
Concentration per Run 2	103.189 %	0.345 ppb	35.459 ppb	104.265 %	102.000 %
Concentration per Run 3	104.240 %	0.368 ppb	35.584 ppb	105.941 %	100.812 %
Concentration RSD	3.6 %	23.5 %	5.3 %	1.3 %	5.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	105	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-01D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 8:02:57 PM	Vial	6		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	117.844 %	109.619 %	0.589 ppb	0.877 ppb	52.826 ppb	1,243.822 ppb	10,930.693 ppb	519.702 ppb	1,506.004 ppb
Concentration per Run 1	117.558 %	113.627 %	0.600 ppb	0.860 ppb	43.245 ppb	1,137.052 ppb	10,990.752 ppb	462.946 ppb	1,681.211 ppb
Concentration per Run 2	119.594 %	123.848 %	0.572 ppb	0.843 ppb	39.133 ppb	1,087.446 ppb	10,406.071 ppb	501.176 ppb	1,192.979 ppb
Concentration per Run 3	116.381 %	91.383 %	0.593 ppb	0.927 ppb	76.102 ppb	1,506.966 ppb	11,395.255 ppb	594.986 ppb	1,643.822 ppb
Concentration RSD	1.4 %	15.1 %	2.4 %	5.0 %	38.4 %	18.4 %	4.5 %	13.1 %	18.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	125.845 %	114.944 %	30.288 ppb	26.237 ppb	478.615 ppb	24,540.250 ppb	3.250 ppb	8.400 ppb	14.369 ppb
Concentration per Run 1	124.852 %	119.666 %	27.896 ppb	24.445 ppb	454.064 ppb	22,832.222 ppb	3.215 ppb	8.217 ppb	13.037 ppb
Concentration per Run 2	135.688 %	119.759 %	27.309 ppb	24.590 ppb	438.994 ppb	23,004.138 ppb	2.978 ppb	7.683 ppb	13.405 ppb
Concentration per Run 3	116.995 %	105.406 %	35.658 ppb	29.678 ppb	542.789 ppb	27,784.389 ppb	3.557 ppb	9.299 ppb	16.664 ppb
Concentration RSD	7.5 %	7.2 %	15.4 %	11.4 %	11.7 %	11.5 %	9.0 %	9.8 %	13.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	59.104 ppb	116.429 %	112.981 %	7.039 ppb	12.525 ppb	15.223 ppb	0.825 ppb	107.791 %	99.135 %
Concentration per Run 1	55.902 ppb	114.538 %	113.730 %	6.796 ppb	11.335 ppb	14.228 ppb	0.859 ppb	106.203 %	106.461 %
Concentration per Run 2	53.333 ppb	117.791 %	123.484 %	5.909 ppb	10.350 ppb	13.655 ppb	0.655 ppb	110.939 %	105.782 %
Concentration per Run 3	68.078 ppb	116.959 %	101.728 %	8.411 ppb	15.891 ppb	17.786 ppb	0.962 ppb	106.231 %	85.163 %
Concentration RSD	13.3 %	1.5 %	9.6 %	18.0 %	23.6 %	14.7 %	18.9 %	2.5 %	12.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.166 ppb	0.421 ppb	107.661 %	101.887 %	0.278 ppb	105.860 ppb	113.447 %	106.974 %	104.669 %
Concentration per Run 1	0.142 ppb	0.340 ppb	109.464 %	108.717 %	0.282 ppb	95.558 ppb	113.127 %	116.002 %	104.863 %
Concentration per Run 2	0.160 ppb	0.431 ppb	107.931 %	108.821 %	0.256 ppb	97.045 ppb	114.071 %	113.131 %	106.071 %
Concentration per Run 3	0.195 ppb	0.492 ppb	105.587 %	88.123 %	0.298 ppb	124.979 ppb	113.141 %	91.788 %	103.075 %
Concentration RSD	16.3 %	18.1 %	1.8 %	11.7 %	7.6 %	15.7 %	0.5 %	12.4 %	1.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	102.162 %	0.185 ppb	38.640 ppb	102.896 %	97.972 %
Concentration per Run 1	110.502 %	0.135 ppb	35.179 ppb	99.933 %	103.955 %
Concentration per Run 2	107.534 %	0.188 ppb	35.613 ppb	102.689 %	103.930 %
Concentration per Run 3	88.451 %	0.233 ppb	45.129 ppb	106.064 %	86.032 %
Concentration RSD	11.7 %	26.6 %	14.6 %	3.0 %	10.6 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	106	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-02D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 8:07:44 PM	Vial	11		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	111.800 %	108.617 %	1.041 ppb	1.183 ppb	50.188 ppb	1,690.904 ppb	16,265.959 ppb	599.647 ppb	1,955.523 ppb
Concentration per Run 1	107.312 %	105.812 %	1.100 ppb	1.252 ppb	57.219 ppb	1,740.366 ppb	16,987.068 ppb	625.579 ppb	1,875.414 ppb
Concentration per Run 2	114.686 %	113.627 %	1.021 ppb	1.144 ppb	41.747 ppb	1,587.829 ppb	16,272.101 ppb	607.773 ppb	2,312.515 ppb
Concentration per Run 3	113.402 %	106.413 %	1.002 ppb	1.153 ppb	51.597 ppb	1,744.518 ppb	15,538.707 ppb	565.589 ppb	1,678.640 ppb
Concentration RSD	3.5 %	4.0 %	5.0 %	5.0 %	15.6 %	5.3 %	4.5 %	5.1 %	16.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	121.377 %	115.254 %	36.336 ppb	46.713 ppb	736.779 ppb	29,266.654 ppb	5.538 ppb	13.366 ppb	28.703 ppb
Concentration per Run 1	118.256 %	112.116 %	37.354 ppb	48.831 ppb	756.747 ppb	29,687.418 ppb	5.904 ppb	13.892 ppb	29.978 ppb
Concentration per Run 2	119.630 %	115.751 %	35.978 ppb	45.332 ppb	730.866 ppb	30,053.739 ppb	5.678 ppb	13.432 ppb	28.996 ppb
Concentration per Run 3	126.245 %	117.895 %	35.675 ppb	45.976 ppb	722.723 ppb	28,058.807 ppb	5.031 ppb	12.773 ppb	27.136 ppb
Concentration RSD	3.5 %	2.5 %	2.5 %	4.0 %	2.4 %	3.6 %	8.2 %	4.2 %	5.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	138.694 ppb	112.675 %	107.963 %	11.801 ppb	20.127 ppb	16.212 ppb	1.169 ppb	105.581 %	101.545 %
Concentration per Run 1	143.013 ppb	104.405 %	102.462 %	11.751 ppb	18.862 ppb	17.209 ppb	1.222 ppb	98.796 %	98.116 %
Concentration per Run 2	141.744 ppb	116.869 %	108.605 %	10.854 ppb	21.816 ppb	16.473 ppb	1.123 ppb	110.395 %	102.248 %
Concentration per Run 3	131.324 ppb	116.750 %	112.823 %	12.798 ppb	19.703 ppb	14.953 ppb	1.163 ppb	107.551 %	104.271 %
Concentration RSD	4.6 %	6.4 %	4.8 %	8.2 %	7.6 %	7.1 %	4.2 %	5.7 %	3.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.338 ppb	0.982 ppb	104.843 %	103.295 %	0.740 ppb	171.016 ppb	106.912 %	106.775 %	104.005 %
Concentration per Run 1	0.335 ppb	0.988 ppb	98.834 %	99.252 %	0.751 ppb	178.498 ppb	96.808 %	100.930 %	93.625 %
Concentration per Run 2	0.339 ppb	0.989 ppb	110.529 %	105.276 %	0.797 ppb	166.039 ppb	113.375 %	109.784 %	108.402 %
Concentration per Run 3	0.339 ppb	0.970 ppb	105.166 %	105.356 %	0.673 ppb	168.511 ppb	110.554 %	109.610 %	109.986 %
Concentration RSD	0.6 %	1.1 %	5.6 %	3.4 %	8.5 %	3.9 %	8.3 %	4.7 %	8.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	101.177 %	0.195 ppb	147.641 ppb	101.774 %	96.063 %
Concentration per Run 1	96.349 %	0.171 ppb	150.578 ppb	92.301 %	94.511 %
Concentration per Run 2	102.779 %	0.213 ppb	148.671 ppb	104.429 %	94.657 %
Concentration per Run 3	104.403 %	0.201 ppb	143.672 ppb	108.592 %	99.020 %
Concentration RSD	4.2 %	11.3 %	2.4 %	8.3 %	2.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	107	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-03D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 8:12:32 PM	Vial	12		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	113.045 %	100.802 %	0.804 ppb	0.948 ppb	53.405 ppb	1,341.079 ppb	13,123.171 ppb	424.333 ppb	1,301.566 ppb
Concentration per Run 1	113.566 %	111.824 %	0.851 ppb	0.909 ppb	48.865 ppb	1,196.982 ppb	13,297.051 ppb	420.624 ppb	1,223.516 ppb
Concentration per Run 2	113.449 %	96.794 %	0.796 ppb	0.956 ppb	60.600 ppb	1,462.754 ppb	13,046.812 ppb	488.657 ppb	1,482.662 ppb
Concentration per Run 3	112.119 %	93.788 %	0.763 ppb	0.978 ppb	50.750 ppb	1,363.501 ppb	13,025.651 ppb	363.718 ppb	1,198.520 ppb
Concentration RSD	0.7 %	9.6 %	5.5 %	3.7 %	11.8 %	10.0 %	1.2 %	14.7 %	12.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	122.007 %	114.353 %	30.033 ppb	41.300 ppb	394.460 ppb	25,148.271 ppb	3.881 ppb	10.836 ppb	21.577 ppb
Concentration per Run 1	124.333 %	118.920 %	28.423 ppb	37.405 ppb	365.251 ppb	22,776.278 ppb	3.539 ppb	10.322 ppb	20.172 ppb
Concentration per Run 2	119.183 %	104.194 %	33.738 ppb	45.803 ppb	436.870 ppb	28,326.446 ppb	4.241 ppb	11.865 ppb	23.753 ppb
Concentration per Run 3	122.507 %	119.945 %	27.938 ppb	40.694 ppb	381.258 ppb	24,342.090 ppb	3.864 ppb	10.322 ppb	20.805 ppb
Concentration RSD	2.1 %	7.7 %	10.7 %	10.2 %	9.5 %	11.4 %	9.1 %	8.2 %	8.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	116.813 ppb	113.953 %	108.381 %	9.264 ppb	17.851 ppb	12.232 ppb	0.827 ppb	105.757 %	99.589 %
Concentration per Run 1	108.131 ppb	110.204 %	113.964 %	8.073 ppb	16.671 ppb	10.936 ppb	0.677 ppb	105.289 %	107.568 %
Concentration per Run 2	131.312 ppb	114.579 %	97.971 %	9.992 ppb	22.075 ppb	13.244 ppb	0.926 ppb	104.364 %	92.295 %
Concentration per Run 3	110.994 ppb	117.075 %	113.209 %	9.726 ppb	14.807 ppb	12.515 ppb	0.878 ppb	107.618 %	98.903 %
Concentration RSD	10.8 %	3.1 %	8.3 %	11.2 %	21.1 %	9.6 %	16.0 %	1.6 %	7.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.321 ppb	0.732 ppb	103.178 %	101.282 %	0.622 ppb	156.553 ppb	109.015 %	105.338 %	104.939 %
Concentration per Run 1	0.299 ppb	0.676 ppb	100.887 %	107.194 %	0.577 ppb	137.702 ppb	107.114 %	115.470 %	101.466 %
Concentration per Run 2	0.351 ppb	0.804 ppb	105.128 %	93.450 %	0.669 ppb	174.735 ppb	108.185 %	95.711 %	104.734 %
Concentration per Run 3	0.311 ppb	0.716 ppb	103.519 %	103.203 %	0.620 ppb	157.220 ppb	111.748 %	104.833 %	108.616 %
Concentration RSD	8.4 %	8.9 %	2.1 %	7.0 %	7.4 %	11.8 %	2.2 %	9.4 %	3.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	98.993 %	0.156 ppb	115.928 ppb	100.678 %	94.892 %
Concentration per Run 1	107.004 %	0.122 ppb	102.678 ppb	96.785 %	104.432 %
Concentration per Run 2	91.045 %	0.180 ppb	127.395 ppb	100.077 %	87.526 %
Concentration per Run 3	98.930 %	0.168 ppb	117.711 ppb	105.171 %	92.719 %
Concentration RSD	8.1 %	19.7 %	10.7 %	4.2 %	9.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 108
Analysis label: WG1825983-6d50 6020TS
Analysis started at: 9/14/2023 8:17:20 PM
User name ALPHALAB\ICPMSRQ
Rack 2
Vial 10
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.719 %	118.838 %	0.123 ppb	0.118 ppb	20.535 ppb	228.601 ppb	2,384.404 ppb	118.634 ppb	298.184 ppb
Concentration per Run 1	111.674 %	131.663 %	0.129 ppb	0.124 ppb	8.908 ppb	205.274 ppb	2,441.496 ppb	98.581 ppb	180.560 ppb
Concentration per Run 2	112.786 %	109.419 %	0.118 ppb	0.138 ppb	27.390 ppb	244.203 ppb	2,433.303 ppb	133.277 ppb	383.135 ppb
Concentration per Run 3	113.698 %	115.431 %	0.123 ppb	0.091 ppb	25.308 ppb	236.324 ppb	2,278.412 ppb	124.042 ppb	330.858 ppb
Concentration RSD	0.9 %	9.7 %	4.5 %	20.5 %	49.3 %	9.0 %	3.9 %	15.1 %	35.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	116.282 %	114.757 %	6.049 ppb	5.454 ppb	96.063 ppb	4,831.991 ppb	0.604 ppb	1.507 ppb	2.793 ppb
Concentration per Run 1	113.517 %	121.343 %	5.669 ppb	4.848 ppb	86.843 ppb	4,348.957 ppb	0.519 ppb	1.396 ppb	2.474 ppb
Concentration per Run 2	117.600 %	109.227 %	6.111 ppb	5.871 ppb	102.212 ppb	5,207.683 ppb	0.607 ppb	1.548 ppb	2.971 ppb
Concentration per Run 3	117.730 %	113.701 %	6.368 ppb	5.643 ppb	99.134 ppb	4,939.332 ppb	0.686 ppb	1.578 ppb	2.935 ppb
Concentration RSD	2.1 %	5.3 %	5.8 %	9.8 %	8.5 %	9.1 %	13.9 %	6.5 %	9.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	11.510 ppb	116.523 %	114.414 %	1.499 ppb	2.684 ppb	2.791 ppb	0.145 ppb	106.502 %	109.103 %
Concentration per Run 1	9.819 ppb	114.524 %	125.683 %	1.024 ppb	2.945 ppb	2.091 ppb	0.157 ppb	105.072 %	115.341 %
Concentration per Run 2	12.559 ppb	119.534 %	107.094 %	1.877 ppb	1.817 ppb	3.319 ppb	0.116 ppb	106.494 %	106.297 %
Concentration per Run 3	12.153 ppb	115.512 %	110.465 %	1.595 ppb	3.290 ppb	2.963 ppb	0.163 ppb	107.939 %	105.672 %
Concentration RSD	12.8 %	2.3 %	8.7 %	29.0 %	28.7 %	22.6 %	17.8 %	1.3 %	5.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.030 ppb	0.087 ppb	105.357 %	111.707 %	0.039 ppb	19.286 ppb	104.736 %	109.260 %	100.132 %
Concentration per Run 1	0.031 ppb	0.078 ppb	107.385 %	115.610 %	0.034 ppb	18.808 ppb	103.224 %	112.821 %	100.146 %
Concentration per Run 2	0.027 ppb	0.103 ppb	105.642 %	111.395 %	0.028 ppb	19.098 ppb	104.469 %	108.705 %	99.398 %
Concentration per Run 3	0.034 ppb	0.081 ppb	103.043 %	108.114 %	0.054 ppb	19.952 ppb	106.516 %	106.253 %	100.852 %
Concentration RSD	11.7 %	15.4 %	2.1 %	3.4 %	36.0 %	3.1 %	1.6 %	3.0 %	0.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.696 %	0.032 ppb	7.376 ppb	102.413 %	101.667 %
Concentration per Run 1	110.748 %	0.017 ppb	6.892 ppb	100.654 %	104.781 %
Concentration per Run 2	103.049 %	0.034 ppb	7.510 ppb	104.577 %	101.052 %
Concentration per Run 3	103.289 %	0.044 ppb	7.726 ppb	102.008 %	99.167 %
Concentration RSD	4.1 %	43.4 %	5.9 %	1.9 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 109 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 9/14/2023 8:22:08 PM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.059 %	119.038 %	58.007 ppb	55.057 ppb	5,928.130 ppb	5,966.571 ppb	56.876 ppb	6,546.324 ppb	5,949.047 ppb
Concentration per Run 1	112.368 %	110.020 %	56.997 ppb	54.896 ppb	5,872.902 ppb	5,925.867 ppb	58.202 ppb	6,282.136 ppb	5,904.960 ppb
Concentration per Run 2	112.081 %	123.247 %	57.859 ppb	54.966 ppb	6,045.790 ppb	6,118.958 ppb	55.908 ppb	6,645.053 ppb	5,825.433 ppb
Concentration per Run 3	111.728 %	123.848 %	59.165 ppb	55.308 ppb	5,865.696 ppb	5,854.888 ppb	56.518 ppb	6,711.783 ppb	6,116.747 ppb
Recovery Percentage 1			96.679 %	91.761 %	98.802 %	99.443 %	94.793 %	109.105 %	99.151 %
Concentration RSD	0.3 %	6.6 %	1.9 %	0.4 %	1.7 %	2.3 %	2.1 %	3.5 %	2.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	125.218 %	121.592 %	57.249 ppb	53.766 ppb	63.273 ppb	6,503.347 ppb	63.716 ppb	62.879 ppb	60.874 ppb
Concentration per Run 1	125.708 %	123.580 %	55.179 ppb	50.293 ppb	60.569 ppb	5,934.114 ppb	61.476 ppb	60.372 ppb	58.641 ppb
Concentration per Run 2	125.171 %	119.666 %	58.865 ppb	56.812 ppb	65.099 ppb	6,946.075 ppb	64.468 ppb	64.439 ppb	62.987 ppb
Concentration per Run 3	124.776 %	121.530 %	57.704 ppb	54.192 ppb	64.150 ppb	6,629.852 ppb	65.203 ppb	63.826 ppb	60.994 ppb
Recovery Percentage 1			95.416 %	89.609 %	105.454 %	108.389 %	106.193 %	104.798 %	101.457 %
Concentration RSD	0.4 %	1.6 %	3.3 %	6.1 %	3.8 %	8.0 %	3.1 %	3.5 %	3.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	64.018 ppb	115.659 %	107.417 %	60.172 ppb	55.380 ppb	63.349 ppb	56.531 ppb	107.941 %	103.080 %
Concentration per Run 1	60.111 ppb	115.557 %	110.079 %	56.541 ppb	50.287 ppb	58.316 ppb	51.858 ppb	107.112 %	108.779 %
Concentration per Run 2	67.276 ppb	114.612 %	102.816 %	65.465 ppb	59.402 ppb	67.004 ppb	60.988 ppb	107.673 %	100.273 %
Concentration per Run 3	64.667 ppb	116.807 %	109.355 %	58.510 ppb	56.452 ppb	64.726 ppb	56.748 ppb	109.039 %	100.186 %
Recovery Percentage 1	106.697 %			100.287 %	92.301 %	105.582 %	94.219 %		
Concentration RSD	5.7 %	1.0 %	3.7 %	7.8 %	8.4 %	7.1 %	8.1 %	0.9 %	4.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	56.354 ppb	57.040 ppb	106.032 %	106.699 %	57.485 ppb	59.681 ppb	108.640 %	107.995 %	105.691 %
Concentration per Run 1	52.156 ppb	52.549 ppb	105.276 %	111.697 %	53.537 ppb	55.746 ppb	108.499 %	112.203 %	105.450 %
Concentration per Run 2	58.302 ppb	58.692 ppb	104.014 %	103.965 %	58.343 ppb	61.560 ppb	108.215 %	104.641 %	105.267 %
Concentration per Run 3	58.604 ppb	59.880 ppb	108.805 %	104.437 %	60.575 ppb	61.738 ppb	109.206 %	107.140 %	106.356 %
Recovery Percentage 1	93.924 %	95.067 %			95.808 %	99.469 %			
Concentration RSD	6.5 %	6.9 %	2.3 %	4.1 %	6.3 %	5.7 %	0.5 %	3.6 %	0.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	104.473 %	56.705 ppb	56.808 ppb	101.782 %	100.698 %
Concentration per Run 1	110.337 %	55.275 ppb	53.524 ppb	101.869 %	104.771 %
Concentration per Run 2	101.625 %	56.568 ppb	58.235 ppb	101.470 %	98.954 %
Concentration per Run 3	101.458 %	58.272 ppb	58.667 ppb	102.006 %	98.369 %
Recovery Percentage 1		94.508 %	94.681 %		
Concentration RSD	4.9 %	2.7 %	5.0 %	0.3 %	3.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	110	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 8:26:59 PM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	115.658 %	109.619 %	0.021 ppb	0.026 ppb	25.190 ppb	-0.019 ppb	0.868 ppb	17.706 ppb	5.470 ppb
Concentration per Run 1	116.173 %	111.824 %	0.023 ppb	0.016 ppb	24.254 ppb	1.777 ppb	0.939 ppb	29.230 ppb	5.900 ppb
Concentration per Run 2	115.273 %	107.014 %	0.025 ppb	0.037 ppb	26.237 ppb	-1.226 ppb	0.843 ppb	21.746 ppb	5.188 ppb
Concentration per Run 3	115.528 %	110.020 %	0.014 ppb	0.025 ppb	25.079 ppb	-0.608 ppb	0.821 ppb	2.141 ppb	5.320 ppb
Recovery Percentage 1			4.150 %	0.260 %	25.190 %	-0.027 %	8.676 %	17.706 %	5.470 %
Concentration RSD	0.4 %	2.2 %	27.7 %	41.9 %	4.0 %	8,518.8 %	7.2 %	79.0 %	6.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	118.802 %	114.881 %	0.002 ppb	-0.011 ppb	0.159 ppb	8.332 ppb	0.007 ppb	0.078 ppb	0.031 ppb
Concentration per Run 1	118.459 %	112.862 %	0.008 ppb	0.003 ppb	0.179 ppb	6.345 ppb	0.011 ppb	0.088 ppb	0.036 ppb
Concentration per Run 2	120.645 %	118.920 %	0.008 ppb	-0.020 ppb	0.150 ppb	11.606 ppb	0.004 ppb	0.012 ppb	0.041 ppb
Concentration per Run 3	117.302 %	112.862 %	-0.009 ppb	-0.016 ppb	0.147 ppb	7.044 ppb	0.006 ppb	0.134 ppb	0.017 ppb
Recovery Percentage 1			0.046 %	-1.105 %	15.866 %	16.663 %	1.405 %	3.901 %	3.146 %
Concentration RSD	1.4 %	3.0 %	436.1 %	108.0 %	11.2 %	34.3 %	55.6 %	79.1 %	41.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.180 ppb	116.224 %	112.415 %	0.048 ppb	0.115 ppb	-0.031 ppb	0.140 ppb	109.968 %	107.977 %
Concentration per Run 1	1.090 ppb	115.565 %	122.810 %	0.007 ppb	0.004 ppb	-0.048 ppb	0.085 ppb	107.638 %	112.268 %
Concentration per Run 2	1.336 ppb	116.224 %	101.558 %	0.024 ppb	0.004 ppb	-0.040 ppb	0.159 ppb	111.293 %	107.158 %
Concentration per Run 3	1.113 ppb	116.884 %	112.878 %	0.113 ppb	0.338 ppb	-0.005 ppb	0.177 ppb	110.974 %	104.505 %
Recovery Percentage 1	23.596 %			9.578 %	2.301 %	-6.214 %	7.018 %		
Concentration RSD	11.5 %	0.6 %	9.5 %	119.5 %	167.7 %	72.6 %	34.5 %	1.8 %	3.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.018 ppb	0.015 ppb	108.653 %	109.198 %	0.064 ppb	0.124 ppb	108.466 %	108.554 %	104.099 %
Concentration per Run 1	0.012 ppb	0.023 ppb	108.144 %	111.369 %	0.062 ppb	0.114 ppb	107.319 %	113.270 %	102.539 %
Concentration per Run 2	0.026 ppb	0.015 ppb	109.100 %	107.050 %	0.102 ppb	0.139 ppb	108.151 %	105.684 %	105.100 %
Concentration per Run 3	0.015 ppb	0.006 ppb	108.716 %	109.176 %	0.029 ppb	0.119 ppb	109.929 %	106.709 %	104.656 %
Recovery Percentage 1	4.414 %				1.606 %	24.775 %			
Concentration RSD	39.7 %	58.2 %	0.4 %	2.0 %	57.0 %	10.7 %	1.2 %	3.8 %	1.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	103.852 %	0.149 ppb	0.027 ppb	104.081 %	104.538 %
Concentration per Run 1	107.956 %	0.090 ppb	0.027 ppb	102.832 %	108.095 %
Concentration per Run 2	101.818 %	0.180 ppb	0.029 ppb	105.558 %	102.828 %
Concentration per Run 3	101.781 %	0.179 ppb	0.024 ppb	103.854 %	102.692 %
Recovery Percentage 1		14.937 %	2.673 %		
Concentration RSD	3.4 %	34.5 %	9.1 %	1.3 %	2.9 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	111	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-04D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 8:34:55 PM	Vial	13		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	115.379 %	107.214 %	1.094 ppb	1.519 ppb	67.386 ppb	2,504.244 ppb	16,902.782 ppb	882.421 ppb	1,527.341 ppb
Concentration per Run 1	113.371 %	104.008 %	1.098 ppb	1.575 ppb	65.381 ppb	2,350.458 ppb	17,571.498 ppb	777.938 ppb	1,413.239 ppb
Concentration per Run 2	114.858 %	106.413 %	1.080 ppb	1.540 ppb	65.767 ppb	2,623.364 ppb	15,980.277 ppb	881.739 ppb	1,521.773 ppb
Concentration per Run 3	117.909 %	111.223 %	1.106 ppb	1.442 ppb	71.011 ppb	2,538.910 ppb	17,156.572 ppb	987.585 ppb	1,647.009 ppb
Concentration RSD	2.0 %	3.4 %	1.2 %	4.5 %	4.7 %	5.6 %	4.9 %	11.9 %	7.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	151.373 %	146.323 %	46.880 ppb	44.424 ppb	511.334 ppb	33,380.800 ppb	7.653 ppb	15.747 ppb	28.198 ppb
Concentration per Run 1	154.577 %	152.102 %	46.401 ppb	42.131 ppb	485.894 ppb	32,100.486 ppb	7.591 ppb	14.856 ppb	26.799 ppb
Concentration per Run 2	153.368 %	146.695 %	45.841 ppb	44.454 ppb	510.476 ppb	34,017.410 ppb	7.606 ppb	16.404 ppb	28.690 ppb
Concentration per Run 3	146.175 %	140.171 %	48.398 ppb	46.688 ppb	537.631 ppb	34,024.505 ppb	7.763 ppb	15.983 ppb	29.106 ppb
Concentration RSD	3.0 %	4.1 %	2.9 %	5.1 %	5.1 %	3.3 %	1.2 %	5.1 %	4.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	124.279 ppb	116.536 %	118.068 %	12.094 ppb	30.989 ppb	14.990 ppb	1.151 ppb	104.431 %	107.053 %
Concentration per Run 1	119.851 ppb	111.063 %	120.288 %	11.923 ppb	30.153 ppb	14.326 ppb	1.092 ppb	103.851 %	110.765 %
Concentration per Run 2	124.120 ppb	119.254 %	118.140 %	12.246 ppb	29.722 ppb	15.331 ppb	1.288 ppb	103.640 %	106.034 %
Concentration per Run 3	128.865 ppb	119.290 %	115.775 %	12.113 ppb	33.092 ppb	15.313 ppb	1.072 ppb	105.804 %	104.359 %
Concentration RSD	3.6 %	4.1 %	1.9 %	1.3 %	5.9 %	3.8 %	10.4 %	1.1 %	3.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.301 ppb	9.578 ppb	106.950 %	112.784 %	0.880 ppb	136.257 ppb	113.709 %	116.702 %	104.773 %
Concentration per Run 1	0.298 ppb	9.332 ppb	104.233 %	115.850 %	0.845 ppb	128.928 ppb	112.538 %	120.311 %	103.488 %
Concentration per Run 2	0.317 ppb	9.673 ppb	109.468 %	112.131 %	0.917 ppb	137.371 ppb	110.454 %	116.118 %	104.591 %
Concentration per Run 3	0.288 ppb	9.729 ppb	107.148 %	110.371 %	0.877 ppb	142.473 ppb	118.135 %	113.678 %	106.242 %
Concentration RSD	4.8 %	2.2 %	2.5 %	2.5 %	4.1 %	5.0 %	3.5 %	2.9 %	1.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	109.472 %	0.189 ppb	135.516 ppb	102.946 %	104.475 %
Concentration per Run 1	113.393 %	0.166 ppb	126.695 ppb	101.509 %	108.901 %
Concentration per Run 2	107.718 %	0.188 ppb	139.054 ppb	102.509 %	103.352 %
Concentration per Run 3	107.306 %	0.213 ppb	140.798 ppb	104.819 %	101.173 %
Concentration RSD	3.1 %	12.4 %	5.7 %	1.6 %	3.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	112	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-05D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 8:39:43 PM	Vial	14		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	111.896 %	118.036 %	1.277 ppb	1.241 ppb	44.351 ppb	2,616.229 ppb	18,760.298 ppb	1,077.969 ppb	1,803.548 ppb
Concentration per Run 1	110.958 %	126.854 %	1.294 ppb	1.233 ppb	32.908 ppb	2,320.890 ppb	19,639.104 ppb	899.689 ppb	1,470.302 ppb
Concentration per Run 2	110.588 %	117.235 %	1.298 ppb	1.269 ppb	43.737 ppb	2,582.267 ppb	18,503.234 ppb	1,051.795 ppb	1,957.621 ppb
Concentration per Run 3	114.143 %	110.020 %	1.239 ppb	1.220 ppb	56.409 ppb	2,945.529 ppb	18,138.558 ppb	1,282.422 ppb	1,982.720 ppb
Concentration RSD	1.7 %	7.2 %	2.6 %	2.0 %	26.5 %	12.0 %	4.2 %	17.9 %	16.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	124.665 %	118.547 %	48.773 ppb	54.766 ppb	828.703 ppb	33,000.400 ppb	8.480 ppb	17.228 ppb	24.871 ppb
Concentration per Run 1	118.253 %	129.918 %	43.860 ppb	47.774 ppb	740.452 ppb	28,688.596 ppb	7.841 ppb	15.413 ppb	22.473 ppb
Concentration per Run 2	128.278 %	122.835 %	47.051 ppb	53.425 ppb	811.807 ppb	33,108.247 ppb	8.364 ppb	17.041 ppb	25.806 ppb
Concentration per Run 3	127.463 %	102.889 %	55.407 ppb	63.100 ppb	933.849 ppb	37,204.356 ppb	9.234 ppb	19.231 ppb	26.334 ppb
Concentration RSD	4.5 %	11.8 %	12.2 %	14.2 %	11.8 %	12.9 %	8.3 %	11.1 %	8.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	104.849 ppb	113.233 %	108.953 %	11.885 ppb	28.886 ppb	16.267 ppb	1.020 ppb	101.746 %	101.844 %
Concentration per Run 1	96.004 ppb	112.410 %	114.511 %	9.889 ppb	24.655 ppb	14.150 ppb	0.964 ppb	99.065 %	108.629 %
Concentration per Run 2	103.327 ppb	114.255 %	107.902 %	12.261 ppb	32.287 ppb	16.965 ppb	1.069 ppb	104.515 %	101.302 %
Concentration per Run 3	115.216 ppb	113.033 %	104.445 %	13.504 ppb	29.715 ppb	17.687 ppb	1.028 ppb	101.658 %	95.601 %
Concentration RSD	9.2 %	0.8 %	4.7 %	15.5 %	13.4 %	11.5 %	5.2 %	2.7 %	6.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.384 ppb	0.865 ppb	103.391 %	103.130 %	0.563 ppb	164.817 ppb	110.437 %	107.418 %	102.247 %
Concentration per Run 1	0.349 ppb	0.763 ppb	100.792 %	110.542 %	0.549 ppb	151.812 ppb	108.523 %	114.407 %	101.225 %
Concentration per Run 2	0.396 ppb	0.820 ppb	102.392 %	104.936 %	0.527 ppb	162.541 ppb	109.377 %	107.598 %	102.017 %
Concentration per Run 3	0.408 ppb	1.013 ppb	106.991 %	93.911 %	0.613 ppb	180.098 ppb	113.410 %	100.250 %	103.500 %
Concentration RSD	8.1 %	15.2 %	3.1 %	8.2 %	7.9 %	8.7 %	2.4 %	6.6 %	1.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	100.848 %	0.185 ppb	81.267 ppb	101.778 %	95.811 %
Concentration per Run 1	105.576 %	0.158 ppb	73.424 ppb	100.725 %	102.100 %
Concentration per Run 2	100.832 %	0.181 ppb	81.619 ppb	101.644 %	95.112 %
Concentration per Run 3	96.136 %	0.217 ppb	88.759 ppb	102.966 %	90.222 %
Concentration RSD	4.7 %	16.1 %	9.4 %	1.1 %	6.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	113	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-06D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 8:44:31 PM	Vial	15		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.712 %	101.603 %	1.361 ppb	1.227 ppb	85.556 ppb	3,083.120 ppb	17,341.628 ppb	516.861 ppb	2,778.569 ppb
Concentration per Run 1	108.622 %	93.788 %	1.379 ppb	1.290 ppb	100.343 ppb	3,423.593 ppb	16,783.309 ppb	589.496 ppb	2,911.719 ppb
Concentration per Run 2	110.362 %	102.204 %	1.340 ppb	1.212 ppb	80.812 ppb	2,959.336 ppb	17,310.468 ppb	517.586 ppb	2,677.798 ppb
Concentration per Run 3	110.152 %	108.818 %	1.363 ppb	1.179 ppb	75.514 ppb	2,866.430 ppb	17,931.108 ppb	443.502 ppb	2,746.189 ppb
Concentration RSD	0.9 %	7.4 %	1.4 %	4.7 %	15.3 %	9.7 %	3.3 %	14.1 %	4.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	119.250 %	108.792 %	24.120 ppb	33.019 ppb	861.606 ppb	19,818.150 ppb	4.259 ppb	12.058 ppb	17.557 ppb
Concentration per Run 1	121.446 %	100.373 %	26.994 ppb	35.734 ppb	942.495 ppb	21,529.473 ppb	4.689 ppb	13.858 ppb	19.331 ppb
Concentration per Run 2	119.558 %	107.270 %	23.227 ppb	31.693 ppb	851.173 ppb	19,060.191 ppb	4.259 ppb	11.407 ppb	16.805 ppb
Concentration per Run 3	116.745 %	118.734 %	22.140 ppb	31.629 ppb	791.149 ppb	18,864.786 ppb	3.827 ppb	10.910 ppb	16.535 ppb
Concentration RSD	2.0 %	8.5 %	10.6 %	7.1 %	8.8 %	7.5 %	10.1 %	13.1 %	8.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	138.463 ppb	112.529 %	107.975 %	5.978 ppb	38.253 ppb	21.850 ppb	0.646 ppb	102.292 %	96.346 %
Concentration per Run 1	152.814 ppb	113.542 %	98.602 %	7.039 ppb	42.383 ppb	23.743 ppb	0.724 ppb	103.299 %	89.091 %
Concentration per Run 2	132.436 ppb	111.963 %	113.106 %	5.867 ppb	33.404 ppb	20.802 ppb	0.628 ppb	100.784 %	100.615 %
Concentration per Run 3	130.137 ppb	112.080 %	112.216 %	5.028 ppb	38.971 ppb	21.005 ppb	0.585 ppb	102.792 %	99.333 %
Concentration RSD	9.0 %	0.8 %	7.5 %	16.9 %	11.8 %	7.5 %	11.0 %	1.3 %	6.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.258 ppb	0.744 ppb	105.888 %	96.815 %	0.591 ppb	485.300 ppb	112.928 %	107.529 %	100.615 %
Concentration per Run 1	0.289 ppb	0.891 ppb	107.911 %	86.298 %	0.658 ppb	533.460 ppb	110.233 %	97.690 %	99.514 %
Concentration per Run 2	0.256 ppb	0.679 ppb	104.674 %	102.770 %	0.534 ppb	454.350 ppb	114.257 %	111.873 %	100.747 %
Concentration per Run 3	0.228 ppb	0.663 ppb	105.078 %	101.378 %	0.581 ppb	468.090 ppb	114.294 %	113.024 %	101.583 %
Concentration RSD	11.8 %	17.1 %	1.7 %	9.4 %	10.6 %	8.7 %	2.1 %	7.9 %	1.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	97.025 %	0.131 ppb	89.788 ppb	98.503 %	92.185 %
Concentration per Run 1	87.650 %	0.141 ppb	99.538 ppb	97.107 %	83.349 %
Concentration per Run 2	99.870 %	0.127 ppb	85.086 ppb	99.302 %	95.839 %
Concentration per Run 3	103.555 %	0.126 ppb	84.740 ppb	99.100 %	97.368 %
Concentration RSD	8.6 %	6.6 %	9.4 %	1.2 %	8.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	114	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-07D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 8:49:18 PM	Vial	16		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.875 %	111.623 %	0.842 ppb	1.137 ppb	32.769 ppb	3,874.226 ppb	11,005.714 ppb	2,189.242 ppb	1,337.548 ppb
Concentration per Run 1	112.321 %	113.026 %	0.870 ppb	1.148 ppb	31.589 ppb	3,773.566 ppb	10,604.793 ppb	2,123.913 ppb	1,156.647 ppb
Concentration per Run 2	114.113 %	120.842 %	0.813 ppb	1.117 ppb	27.759 ppb	3,775.117 ppb	11,643.766 ppb	2,256.698 ppb	1,250.077 ppb
Concentration per Run 3	112.191 %	101.002 %	0.843 ppb	1.146 ppb	38.959 ppb	4,073.994 ppb	10,768.582 ppb	2,187.114 ppb	1,605.919 ppb
Concentration RSD	1.0 %	9.0 %	3.4 %	1.5 %	17.4 %	4.5 %	5.1 %	3.0 %	17.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	133.136 %	129.017 %	41.112 ppb	28.229 ppb	487.396 ppb	25,087.406 ppb	9.711 ppb	14.145 ppb	19.572 ppb
Concentration per Run 1	134.973 %	132.248 %	39.488 ppb	26.097 ppb	461.427 ppb	24,356.056 ppb	8.951 ppb	13.207 ppb	18.159 ppb
Concentration per Run 2	129.458 %	124.140 %	42.923 ppb	29.728 ppb	507.773 ppb	25,739.831 ppb	10.351 ppb	15.085 ppb	20.287 ppb
Concentration per Run 3	134.976 %	130.664 %	40.926 ppb	28.862 ppb	492.988 ppb	25,166.330 ppb	9.831 ppb	14.143 ppb	20.269 ppb
Concentration RSD	2.4 %	3.3 %	4.2 %	6.7 %	4.9 %	2.8 %	7.3 %	6.6 %	6.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	67.823 ppb	112.552 %	117.258 %	6.087 ppb	14.650 ppb	10.652 ppb	0.521 ppb	104.109 %	106.861 %
Concentration per Run 1	63.483 ppb	112.598 %	124.331 %	6.092 ppb	12.892 ppb	10.336 ppb	0.457 ppb	102.258 %	109.105 %
Concentration per Run 2	70.460 ppb	112.031 %	113.665 %	5.734 ppb	16.883 ppb	10.940 ppb	0.563 ppb	103.224 %	105.734 %
Concentration per Run 3	69.525 ppb	113.026 %	113.777 %	6.436 ppb	14.176 ppb	10.680 ppb	0.543 ppb	106.843 %	105.743 %
Concentration RSD	5.6 %	0.4 %	5.2 %	5.8 %	13.9 %	2.8 %	10.8 %	2.3 %	1.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.174 ppb	0.192 ppb	105.048 %	106.244 %	0.359 ppb	131.815 ppb	107.777 %	111.560 %	103.995 %
Concentration per Run 1	0.158 ppb	0.210 ppb	106.617 %	109.294 %	0.366 ppb	126.274 ppb	106.453 %	113.874 %	103.321 %
Concentration per Run 2	0.185 ppb	0.144 ppb	103.213 %	105.316 %	0.352 ppb	133.870 ppb	107.942 %	110.864 %	105.785 %
Concentration per Run 3	0.181 ppb	0.222 ppb	105.315 %	104.122 %	0.358 ppb	135.301 ppb	108.935 %	109.942 %	102.879 %
Concentration RSD	8.4 %	21.9 %	1.6 %	2.5 %	1.9 %	3.7 %	1.2 %	1.8 %	1.5 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	104.639 %	0.160 ppb	29.821 ppb	99.288 %	102.421 %
Concentration per Run 1	106.832 %	0.148 ppb	28.689 ppb	98.109 %	105.022 %
Concentration per Run 2	103.971 %	0.158 ppb	30.071 ppb	98.738 %	102.354 %
Concentration per Run 3	103.113 %	0.173 ppb	30.704 ppb	101.018 %	99.886 %
Concentration RSD	1.9 %	7.8 %	3.5 %	1.5 %	2.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 115
Analysis label: I2352354-08D10 6020TS
Analysis started at: 9/14/2023 8:54:06 PM
User name ALPHALAB\ICPMSRQ
Rack 2
Vial 17
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	105.805 %	118.237 %	1.197 ppb	1.063 ppb	17.594 ppb	2,029.575 ppb	23,357.940 ppb	860.800 ppb	437.322 ppb
Concentration per Run 1	107.944 %	123.848 %	1.145 ppb	1.033 ppb	12.707 ppb	1,866.782 ppb	23,375.371 ppb	798.680 ppb	496.341 ppb
Concentration per Run 2	108.559 %	111.223 %	1.130 ppb	0.979 ppb	22.108 ppb	2,179.153 ppb	21,679.178 ppb	925.357 ppb	387.720 ppb
Concentration per Run 3	100.912 %	119.639 %	1.316 ppb	1.178 ppb	17.966 ppb	2,042.789 ppb	25,019.270 ppb	858.364 ppb	427.905 ppb
Concentration RSD	4.0 %	5.4 %	8.6 %	9.7 %	26.8 %	7.7 %	7.2 %	7.4 %	12.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	141.694 %	146.074 %	63.897 ppb	37.138 ppb	514.283 ppb	45,670.409 ppb	7.667 ppb	14.972 ppb	18.096 ppb
Concentration per Run 1	142.907 %	156.389 %	59.332 ppb	34.169 ppb	483.433 ppb	42,837.721 ppb	7.375 ppb	15.240 ppb	17.774 ppb
Concentration per Run 2	148.205 %	142.128 %	68.124 ppb	39.700 ppb	536.443 ppb	47,305.777 ppb	7.997 ppb	14.659 ppb	18.402 ppb
Concentration per Run 3	133.970 %	139.705 %	64.234 ppb	37.546 ppb	522.973 ppb	46,867.730 ppb	7.630 ppb	15.019 ppb	18.114 ppb
Concentration RSD	5.1 %	6.2 %	6.9 %	7.5 %	5.4 %	5.4 %	4.1 %	2.0 %	1.7 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	62.586 ppb	108.721 %	116.521 %	14.696 ppb	17.921 ppb	5.735 ppb	1.333 ppb	98.849 %	106.225 %
Concentration per Run 1	60.640 ppb	112.049 %	112.715 %	14.712 ppb	19.834 ppb	5.432 ppb	1.261 ppb	100.871 %	111.237 %
Concentration per Run 2	64.894 ppb	111.605 %	115.873 %	14.543 ppb	19.140 ppb	5.917 ppb	1.425 ppb	100.430 %	104.518 %
Concentration per Run 3	62.223 ppb	102.510 %	120.976 %	14.833 ppb	14.789 ppb	5.855 ppb	1.313 ppb	95.247 %	102.921 %
Concentration RSD	3.4 %	5.0 %	3.6 %	1.0 %	15.3 %	4.6 %	6.3 %	3.2 %	4.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.097 ppb	0.191 ppb	100.381 %	110.345 %	0.510 ppb	107.693 ppb	104.182 %	112.031 %	100.301 %
Concentration per Run 1	0.096 ppb	0.161 ppb	97.604 %	112.774 %	0.475 ppb	100.178 ppb	105.976 %	115.345 %	100.917 %
Concentration per Run 2	0.100 ppb	0.201 ppb	103.791 %	108.769 %	0.521 ppb	111.252 ppb	108.609 %	110.503 %	103.025 %
Concentration per Run 3	0.096 ppb	0.210 ppb	99.749 %	109.492 %	0.535 ppb	111.650 ppb	97.960 %	110.247 %	96.962 %
Concentration RSD	2.2 %	13.8 %	3.1 %	1.9 %	6.1 %	6.0 %	5.3 %	2.6 %	3.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	109.078 %	0.210 ppb	51.970 ppb	97.928 %	100.772 %
Concentration per Run 1	114.007 %	0.187 ppb	48.919 ppb	95.864 %	105.130 %
Concentration per Run 2	106.823 %	0.219 ppb	52.645 ppb	104.511 %	99.274 %
Concentration per Run 3	106.404 %	0.223 ppb	54.346 ppb	93.409 %	97.913 %
Concentration RSD	3.9 %	9.4 %	5.3 %	6.0 %	3.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	116	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-09D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 8:58:54 PM	Vial	18		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	108.405 %	119.239 %	1.866 ppb	0.795 ppb	24.238 ppb	1,671.350 ppb	27,393.920 ppb	577.310 ppb	744.140 ppb
Concentration per Run 1	108.266 %	131.062 %	1.899 ppb	0.825 ppb	13.967 ppb	1,510.262 ppb	28,700.687 ppb	497.410 ppb	829.849 ppb
Concentration per Run 2	107.453 %	114.229 %	1.841 ppb	0.826 ppb	31.743 ppb	1,771.665 ppb	27,239.581 ppb	627.623 ppb	569.871 ppb
Concentration per Run 3	109.497 %	112.425 %	1.858 ppb	0.732 ppb	27.004 ppb	1,732.123 ppb	26,241.492 ppb	606.899 ppb	832.701 ppb
Concentration RSD	0.9 %	8.6 %	1.6 %	6.8 %	38.0 %	8.4 %	4.5 %	12.1 %	20.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	129.459 %	123.705 %	36.909 ppb	27.194 ppb	427.082 ppb	27,184.863 ppb	7.520 ppb	14.952 ppb	10.550 ppb
Concentration per Run 1	125.293 %	130.384 %	35.348 ppb	25.969 ppb	399.124 ppb	26,374.812 ppb	7.060 ppb	13.675 ppb	10.204 ppb
Concentration per Run 2	132.057 %	118.174 %	38.492 ppb	27.277 ppb	450.608 ppb	27,507.385 ppb	7.707 ppb	15.875 ppb	10.653 ppb
Concentration per Run 3	131.029 %	122.555 %	36.887 ppb	28.336 ppb	431.515 ppb	27,672.392 ppb	7.793 ppb	15.307 ppb	10.793 ppb
Concentration RSD	2.8 %	5.0 %	4.3 %	4.4 %	6.1 %	2.6 %	5.3 %	7.6 %	2.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	56.613 ppb	113.190 %	115.666 %	4.562 ppb	44.068 ppb	14.023 ppb	1.328 ppb	103.028 %	107.318 %
Concentration per Run 1	53.733 ppb	111.308 %	119.316 %	4.010 ppb	39.505 ppb	12.882 ppb	1.304 ppb	100.675 %	112.144 %
Concentration per Run 2	58.326 ppb	113.889 %	113.533 %	4.248 ppb	48.850 ppb	14.770 ppb	1.343 ppb	105.442 %	105.488 %
Concentration per Run 3	57.781 ppb	114.373 %	114.149 %	5.429 ppb	43.850 ppb	14.416 ppb	1.338 ppb	102.968 %	104.323 %
Concentration RSD	4.4 %	1.5 %	2.7 %	16.7 %	10.6 %	7.2 %	1.6 %	2.3 %	3.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.078 ppb	0.323 ppb	103.975 %	106.826 %	0.303 ppb	156.664 ppb	113.572 %	116.865 %	104.084 %
Concentration per Run 1	0.080 ppb	0.316 ppb	103.315 %	110.475 %	0.237 ppb	148.015 ppb	110.425 %	121.267 %	104.056 %
Concentration per Run 2	0.077 ppb	0.332 ppb	103.440 %	106.130 %	0.317 ppb	164.284 ppb	113.459 %	115.950 %	103.155 %
Concentration per Run 3	0.076 ppb	0.322 ppb	105.171 %	103.872 %	0.357 ppb	157.693 ppb	116.831 %	113.378 %	105.040 %
Concentration RSD	2.5 %	2.4 %	1.0 %	3.1 %	20.1 %	5.2 %	2.8 %	3.4 %	0.9 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	107.430 %	0.136 ppb	17.613 ppb	100.471 %	99.299 %
Concentration per Run 1	111.514 %	0.122 ppb	16.627 ppb	97.225 %	104.041 %
Concentration per Run 2	106.366 %	0.132 ppb	17.713 ppb	99.827 %	99.044 %
Concentration per Run 3	104.410 %	0.154 ppb	18.498 ppb	104.360 %	94.812 %
Concentration RSD	3.4 %	12.1 %	5.3 %	3.6 %	4.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	117	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-10D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 9:03:41 PM	Vial	19		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	108.782 %	104.810 %	1.335 ppb	0.835 ppb	28.485 ppb	1,778.094 ppb	20,613.141 ppb	489.589 ppb	961.533 ppb
Concentration per Run 1	108.405 %	109.419 %	1.346 ppb	0.858 ppb	22.354 ppb	1,690.725 ppb	21,868.523 ppb	492.652 ppb	693.714 ppb
Concentration per Run 2	109.261 %	108.216 %	1.278 ppb	0.827 ppb	31.172 ppb	1,666.474 ppb	20,434.355 ppb	457.897 ppb	1,061.626 ppb
Concentration per Run 3	108.681 %	96.794 %	1.381 ppb	0.819 ppb	31.930 ppb	1,977.082 ppb	19,536.544 ppb	518.219 ppb	1,129.261 ppb
Concentration RSD	0.4 %	6.6 %	3.9 %	2.5 %	18.7 %	9.7 %	5.7 %	6.2 %	24.4 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	124.281 %	125.041 %	36.758 ppb	30.857 ppb	428.373 ppb	27,678.950 ppb	5.766 ppb	13.094 ppb	11.663 ppb
Concentration per Run 1	119.086 %	124.233 %	36.181 ppb	29.745 ppb	418.751 ppb	26,683.164 ppb	5.760 ppb	12.863 ppb	11.273 ppb
Concentration per Run 2	130.207 %	128.334 %	36.973 ppb	30.578 ppb	424.144 ppb	27,938.649 ppb	5.800 ppb	13.202 ppb	12.160 ppb
Concentration per Run 3	123.551 %	122.555 %	37.119 ppb	32.246 ppb	442.222 ppb	28,415.036 ppb	5.738 ppb	13.218 ppb	11.555 ppb
Concentration RSD	4.5 %	2.4 %	1.4 %	4.1 %	2.9 %	3.2 %	0.5 %	1.5 %	3.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	52.988 ppb	111.949 %	116.532 %	6.936 ppb	35.069 ppb	10.782 ppb	1.032 ppb	102.101 %	105.747 %
Concentration per Run 1	51.140 ppb	109.845 %	119.115 %	6.126 ppb	29.689 ppb	10.049 ppb	0.952 ppb	104.867 %	111.801 %
Concentration per Run 2	53.508 ppb	109.903 %	113.861 %	6.979 ppb	37.812 ppb	11.151 ppb	1.105 ppb	100.636 %	101.684 %
Concentration per Run 3	54.315 ppb	116.098 %	116.621 %	7.702 ppb	37.708 ppb	11.144 ppb	1.039 ppb	100.799 %	103.757 %
Concentration RSD	3.1 %	3.2 %	2.3 %	11.4 %	13.3 %	5.9 %	7.4 %	2.3 %	5.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.139 ppb	0.478 ppb	103.779 %	109.947 %	0.489 ppb	116.280 ppb	111.321 %	114.697 %	103.182 %
Concentration per Run 1	0.124 ppb	0.433 ppb	103.046 %	117.028 %	0.416 ppb	109.549 ppb	110.206 %	118.173 %	100.007 %
Concentration per Run 2	0.141 ppb	0.511 ppb	103.813 %	109.912 %	0.514 ppb	113.271 ppb	110.648 %	113.354 %	103.003 %
Concentration per Run 3	0.152 ppb	0.490 ppb	104.477 %	102.901 %	0.538 ppb	126.022 ppb	113.108 %	112.566 %	106.536 %
Concentration RSD	10.4 %	8.4 %	0.7 %	6.4 %	13.2 %	7.4 %	1.4 %	2.6 %	3.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.191 %	0.126 ppb	18.603 ppb	98.988 %	100.199 %
Concentration per Run 1	110.749 %	0.114 ppb	17.713 ppb	95.936 %	103.815 %
Concentration per Run 2	103.251 %	0.131 ppb	18.766 ppb	101.407 %	99.380 %
Concentration per Run 3	101.573 %	0.132 ppb	19.332 ppb	99.621 %	97.401 %
Concentration RSD	4.6 %	7.8 %	4.4 %	2.8 %	3.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	118	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-11D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 9:08:29 PM	Vial	20		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	103.708 %	115.832 %	1.217 ppb	1.283 ppb	59.931 ppb	2,596.392 ppb	24,241.855 ppb	607.339 ppb	1,304.246 ppb
Concentration per Run 1	104.746 %	133.467 %	1.226 ppb	1.302 ppb	49.539 ppb	2,257.049 ppb	24,336.276 ppb	618.003 ppb	1,365.573 ppb
Concentration per Run 2	102.459 %	110.621 %	1.224 ppb	1.296 ppb	55.909 ppb	2,718.624 ppb	23,655.597 ppb	611.351 ppb	1,121.330 ppb
Concentration per Run 3	103.919 %	103.407 %	1.202 ppb	1.250 ppb	74.344 ppb	2,813.501 ppb	24,733.693 ppb	592.663 ppb	1,425.835 ppb
Concentration RSD	1.1 %	13.5 %	1.1 %	2.2 %	21.5 %	11.5 %	2.2 %	2.2 %	12.4 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	135.835 %	138.338 %	58.291 ppb	39.287 ppb	359.957 ppb	40,449.439 ppb	15.569 ppb	17.837 ppb	12.789 ppb
Concentration per Run 1	131.843 %	140.357 %	57.937 ppb	38.010 ppb	348.847 ppb	38,029.823 ppb	15.475 ppb	17.466 ppb	12.071 ppb
Concentration per Run 2	140.021 %	138.586 %	56.787 ppb	39.112 ppb	356.587 ppb	40,862.847 ppb	15.247 ppb	17.104 ppb	12.571 ppb
Concentration per Run 3	135.641 %	136.070 %	60.149 ppb	40.739 ppb	374.436 ppb	42,455.649 ppb	15.986 ppb	18.941 ppb	13.725 ppb
Concentration RSD	3.0 %	1.6 %	2.9 %	3.5 %	3.6 %	5.5 %	2.4 %	5.5 %	6.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	50.024 ppb	108.176 %	107.100 %	10.115 ppb	23.380 ppb	11.595 ppb	0.941 ppb	101.844 %	102.382 %
Concentration per Run 1	47.189 ppb	105.475 %	107.533 %	8.566 ppb	22.716 ppb	11.016 ppb	0.868 ppb	102.249 %	107.267 %
Concentration per Run 2	49.197 ppb	109.065 %	111.895 %	10.099 ppb	23.170 ppb	11.346 ppb	0.958 ppb	101.878 %	102.417 %
Concentration per Run 3	53.686 ppb	109.987 %	101.872 %	11.679 ppb	24.253 ppb	12.424 ppb	0.999 ppb	101.405 %	97.462 %
Concentration RSD	6.6 %	2.2 %	4.7 %	15.4 %	3.4 %	6.4 %	7.1 %	0.4 %	4.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.090 ppb	0.276 ppb	100.994 %	105.759 %	0.280 ppb	132.481 ppb	104.423 %	108.252 %	97.972 %
Concentration per Run 1	0.078 ppb	0.256 ppb	100.011 %	110.765 %	0.264 ppb	125.876 ppb	104.199 %	113.231 %	94.563 %
Concentration per Run 2	0.090 ppb	0.306 ppb	99.385 %	106.945 %	0.258 ppb	132.577 ppb	102.974 %	107.279 %	97.876 %
Concentration per Run 3	0.101 ppb	0.267 ppb	103.585 %	99.567 %	0.317 ppb	138.989 ppb	106.094 %	104.246 %	101.479 %
Concentration RSD	12.7 %	9.4 %	2.2 %	5.4 %	11.6 %	4.9 %	1.5 %	4.2 %	3.5 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	102.352 %	0.181 ppb	21.358 ppb	95.228 %	98.603 %
Concentration per Run 1	106.845 %	0.170 ppb	20.026 ppb	94.285 %	104.085 %
Concentration per Run 2	102.723 %	0.171 ppb	21.405 ppb	93.884 %	98.886 %
Concentration per Run 3	97.490 %	0.200 ppb	22.643 ppb	97.516 %	92.837 %
Concentration RSD	4.6 %	9.3 %	6.1 %	2.1 %	5.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	119	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-12D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 9:13:17 PM	Vial	21		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	108.843 %	104.409 %	0.909 ppb	0.724 ppb	31.398 ppb	1,050.132 ppb	13,396.680 ppb	467.126 ppb	1,049.236 ppb
Concentration per Run 1	108.898 %	110.621 %	0.927 ppb	0.719 ppb	22.294 ppb	994.039 ppb	13,309.764 ppb	406.877 ppb	1,034.929 ppb
Concentration per Run 2	108.509 %	99.198 %	0.912 ppb	0.730 ppb	36.446 ppb	1,031.011 ppb	13,546.046 ppb	484.438 ppb	867.545 ppb
Concentration per Run 3	109.121 %	103.407 %	0.888 ppb	0.724 ppb	35.455 ppb	1,125.347 ppb	13,334.230 ppb	510.063 ppb	1,245.233 ppb
Concentration RSD	0.3 %	5.5 %	2.2 %	0.8 %	25.2 %	6.4 %	1.0 %	11.5 %	18.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	124.892 %	117.491 %	27.083 ppb	31.922 ppb	354.306 ppb	18,289.974 ppb	3.895 ppb	8.878 ppb	10.948 ppb
Concentration per Run 1	123.171 %	124.606 %	25.847 ppb	30.117 ppb	325.953 ppb	17,575.091 ppb	3.699 ppb	8.549 ppb	10.508 ppb
Concentration per Run 2	125.678 %	115.565 %	27.335 ppb	31.740 ppb	362.372 ppb	18,507.355 ppb	3.928 ppb	9.115 ppb	11.039 ppb
Concentration per Run 3	125.826 %	112.303 %	28.066 ppb	33.910 ppb	374.593 ppb	18,787.475 ppb	4.057 ppb	8.968 ppb	11.297 ppb
Concentration RSD	1.2 %	5.4 %	4.2 %	6.0 %	7.1 %	3.5 %	4.7 %	3.3 %	3.7 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	40.332 ppb	114.120 %	112.683 %	5.330 ppb	26.646 ppb	8.939 ppb	0.567 ppb	103.937 %	105.574 %
Concentration per Run 1	37.117 ppb	114.181 %	117.206 %	4.935 ppb	23.481 ppb	8.355 ppb	0.589 ppb	100.646 %	111.342 %
Concentration per Run 2	41.695 ppb	114.651 %	110.138 %	5.462 ppb	27.079 ppb	8.922 ppb	0.567 ppb	103.748 %	102.646 %
Concentration per Run 3	42.185 ppb	113.528 %	110.705 %	5.593 ppb	29.379 ppb	9.540 ppb	0.545 ppb	107.418 %	102.736 %
Concentration RSD	6.9 %	0.5 %	3.5 %	6.5 %	11.2 %	6.6 %	3.9 %	3.3 %	4.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.211 ppb	0.573 ppb	105.117 %	107.908 %	0.387 ppb	90.691 ppb	111.526 %	113.041 %	104.339 %
Concentration per Run 1	0.187 ppb	0.483 ppb	104.674 %	115.453 %	0.332 ppb	84.885 ppb	111.623 %	119.084 %	104.700 %
Concentration per Run 2	0.230 ppb	0.622 ppb	105.286 %	101.864 %	0.439 ppb	96.204 ppb	108.380 %	110.273 %	100.794 %
Concentration per Run 3	0.216 ppb	0.613 ppb	105.391 %	106.407 %	0.390 ppb	90.985 ppb	114.576 %	109.766 %	107.525 %
Concentration RSD	10.5 %	13.6 %	0.4 %	6.4 %	13.8 %	6.2 %	2.8 %	4.6 %	3.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.474 %	0.100 ppb	25.214 ppb	100.500 %	100.223 %
Concentration per Run 1	111.604 %	0.083 ppb	23.726 ppb	99.471 %	105.142 %
Concentration per Run 2	105.811 %	0.100 ppb	25.525 ppb	101.161 %	98.836 %
Concentration per Run 3	102.006 %	0.117 ppb	26.390 ppb	100.869 %	96.692 %
Concentration RSD	4.5 %	16.7 %	5.4 %	0.9 %	4.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	120	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-13D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 9:18:04 PM	Vial	22		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.795 %	109.820 %	1.578 ppb	1.055 ppb	33.564 ppb	1,494.029 ppb	19,412.217 ppb	572.815 ppb	1,631.814 ppb
Concentration per Run 1	109.524 %	115.431 %	1.592 ppb	1.057 ppb	24.447 ppb	1,381.239 ppb	19,607.950 ppb	607.908 ppb	1,347.826 ppb
Concentration per Run 2	109.880 %	103.407 %	1.582 ppb	1.054 ppb	44.843 ppb	1,589.143 ppb	19,950.574 ppb	580.489 ppb	2,047.858 ppb
Concentration per Run 3	109.982 %	110.621 %	1.561 ppb	1.054 ppb	31.403 ppb	1,511.705 ppb	18,678.127 ppb	530.048 ppb	1,499.757 ppb
Concentration RSD	0.2 %	5.5 %	1.0 %	0.2 %	30.9 %	7.0 %	3.4 %	6.9 %	22.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	127.300 %	124.823 %	32.753 ppb	63.731 ppb	655.350 ppb	22,570.881 ppb	6.709 ppb	14.250 ppb	18.630 ppb
Concentration per Run 1	130.703 %	130.011 %	31.922 ppb	60.387 ppb	614.838 ppb	20,927.751 ppb	6.022 ppb	12.979 ppb	17.566 ppb
Concentration per Run 2	122.239 %	119.666 %	32.722 ppb	65.755 ppb	685.397 ppb	24,137.351 ppb	7.167 ppb	14.973 ppb	19.477 ppb
Concentration per Run 3	128.957 %	124.792 %	33.616 ppb	65.051 ppb	665.815 ppb	22,647.540 ppb	6.937 ppb	14.798 ppb	18.848 ppb
Concentration RSD	3.5 %	4.1 %	2.6 %	4.6 %	5.6 %	7.1 %	9.0 %	7.7 %	5.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	68.178 ppb	116.178 %	114.504 %	6.476 ppb	39.626 ppb	13.648 ppb	0.784 ppb	105.732 %	108.457 %
Concentration per Run 1	63.841 ppb	115.935 %	121.263 %	8.489 ppb	39.385 ppb	12.123 ppb	0.819 ppb	104.913 %	113.048 %
Concentration per Run 2	71.316 ppb	115.836 %	106.876 %	5.938 ppb	42.865 ppb	14.723 ppb	0.678 ppb	105.547 %	107.147 %
Concentration per Run 3	69.376 ppb	116.765 %	115.372 %	5.000 ppb	36.629 ppb	14.097 ppb	0.856 ppb	106.735 %	105.178 %
Concentration RSD	5.7 %	0.4 %	6.3 %	27.9 %	7.9 %	9.9 %	12.0 %	0.9 %	3.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.443 ppb	0.906 ppb	107.953 %	108.980 %	0.610 ppb	157.281 ppb	116.304 %	116.087 %	104.956 %
Concentration per Run 1	0.416 ppb	0.834 ppb	108.087 %	111.040 %	0.602 ppb	149.165 ppb	115.180 %	119.928 %	102.486 %
Concentration per Run 2	0.455 ppb	0.903 ppb	107.815 %	104.988 %	0.641 ppb	167.028 ppb	116.064 %	113.142 %	103.824 %
Concentration per Run 3	0.458 ppb	0.982 ppb	107.956 %	110.910 %	0.588 ppb	155.651 ppb	117.667 %	115.191 %	108.559 %
Concentration RSD	5.2 %	8.2 %	0.1 %	3.2 %	4.5 %	5.7 %	1.1 %	3.0 %	3.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	107.358 %	0.130 ppb	39.186 ppb	103.354 %	102.651 %
Concentration per Run 1	111.028 %	0.116 ppb	36.983 ppb	100.235 %	107.331 %
Concentration per Run 2	105.796 %	0.134 ppb	39.457 ppb	103.714 %	102.521 %
Concentration per Run 3	105.250 %	0.140 ppb	41.118 ppb	106.114 %	98.101 %
Concentration RSD	3.0 %	9.5 %	5.3 %	2.9 %	4.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 121 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 9/14/2023 9:22:52 PM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.646 %	111.423 %	55.767 ppb	54.311 ppb	6,114.468 ppb	6,050.832 ppb	63.702 ppb	6,532.707 ppb	5,940.459 ppb
Concentration per Run 1	109.075 %	125.050 %	56.007 ppb	54.683 ppb	5,584.623 ppb	5,402.423 ppb	65.343 ppb	5,904.299 ppb	5,910.031 ppb
Concentration per Run 2	108.971 %	108.217 %	56.017 ppb	54.661 ppb	6,154.734 ppb	6,229.804 ppb	63.455 ppb	6,662.120 ppb	5,518.670 ppb
Concentration per Run 3	110.892 %	101.002 %	55.277 ppb	53.588 ppb	6,604.048 ppb	6,520.270 ppb	62.309 ppb	7,031.703 ppb	6,392.675 ppb
Recovery Percentage 1			92.945 %	90.518 %	101.908 %	100.847 %	106.171 %	108.878 %	99.008 %
Concentration RSD	1.0 %	11.1 %	0.8 %	1.2 %	8.4 %	9.6 %	2.4 %	8.8 %	7.4 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	120.143 %	120.039 %	57.841 ppb	56.686 ppb	64.327 ppb	6,529.022 ppb	62.814 ppb	62.901 ppb	60.404 ppb
Concentration per Run 1	116.310 %	127.681 %	51.868 ppb	52.530 ppb	60.058 ppb	5,981.221 ppb	58.426 ppb	56.834 ppb	55.238 ppb
Concentration per Run 2	122.309 %	121.437 %	60.568 ppb	57.806 ppb	65.342 ppb	6,636.958 ppb	63.047 ppb	66.694 ppb	63.033 ppb
Concentration per Run 3	121.809 %	110.998 %	61.086 ppb	59.721 ppb	67.580 ppb	6,968.887 ppb	66.970 ppb	65.174 ppb	62.941 ppb
Recovery Percentage 1			96.401 %	94.476 %	107.211 %	108.817 %	104.690 %	104.834 %	100.674 %
Concentration RSD	2.8 %	7.0 %	9.0 %	6.6 %	6.0 %	7.7 %	6.8 %	8.4 %	7.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	62.944 ppb	114.801 %	109.299 %	57.773 ppb	56.229 ppb	60.899 ppb	56.308 ppb	105.511 %	107.161 %
Concentration per Run 1	58.174 ppb	112.406 %	115.799 %	53.992 ppb	52.539 ppb	56.697 ppb	53.595 ppb	105.217 %	113.450 %
Concentration per Run 2	66.037 ppb	116.795 %	103.407 %	62.089 ppb	62.475 ppb	61.863 ppb	56.123 ppb	107.039 %	105.541 %
Concentration per Run 3	64.623 ppb	115.201 %	108.691 %	57.237 ppb	53.674 ppb	64.139 ppb	59.207 ppb	104.278 %	102.491 %
Recovery Percentage 1	104.907 %			96.288 %	93.715 %	101.499 %	93.847 %		
Concentration RSD	6.7 %	1.9 %	5.7 %	7.1 %	9.7 %	6.3 %	5.0 %	1.3 %	5.3 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	55.765 ppb	56.847 ppb	105.409 %	108.862 %	57.156 ppb	59.074 ppb	106.447 %	107.420 %	105.635 %
Concentration per Run 1	53.075 ppb	52.997 ppb	102.998 %	114.914 %	52.919 ppb	55.555 ppb	103.812 %	113.377 %	103.674 %
Concentration per Run 2	57.293 ppb	58.504 ppb	103.951 %	105.908 %	58.630 ppb	60.663 ppb	104.603 %	107.249 %	104.092 %
Concentration per Run 3	56.927 ppb	59.040 ppb	109.277 %	105.763 %	59.920 ppb	61.003 ppb	110.926 %	101.635 %	109.140 %
Recovery Percentage 1	92.942 %	94.745 %			95.260 %	98.457 %			
Concentration RSD	4.2 %	5.9 %	3.2 %	4.8 %	6.5 %	5.2 %	3.7 %	5.5 %	2.9 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	104.974 %	57.302 ppb	57.259 ppb	103.892 %	100.884 %
Concentration per Run 1	109.377 %	54.888 ppb	54.416 ppb	101.602 %	104.900 %
Concentration per Run 2	101.885 %	58.005 ppb	58.438 ppb	103.016 %	99.554 %
Concentration per Run 3	103.659 %	59.012 ppb	58.923 ppb	107.057 %	98.197 %
Recovery Percentage 1		95.503 %	95.432 %		
Concentration RSD	3.7 %	3.8 %	4.3 %	2.7 %	3.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 122 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCB Rack 0
Analysis started at: 9/14/2023 9:27:42 PM Vial 10

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.854 %	107.014 %	0.015 ppb	0.025 ppb	16.017 ppb	-0.525 ppb	1.483 ppb	19.847 ppb	-17.143 ppb
Concentration per Run 1	110.415 %	103.407 %	0.014 ppb	0.004 ppb	24.935 ppb	-1.747 ppb	1.494 ppb	34.363 ppb	-17.395 ppb
Concentration per Run 2	109.170 %	103.407 %	0.013 ppb	0.054 ppb	22.707 ppb	0.151 ppb	1.299 ppb	20.150 ppb	-16.072 ppb
Concentration per Run 3	109.976 %	114.229 %	0.016 ppb	0.018 ppb	0.408 ppb	0.022 ppb	1.657 ppb	5.029 ppb	-17.963 ppb
Recovery Percentage 1			2.909 %	0.253 %	16.017 %	-0.750 %	14.832 %	19.847 %	-17.143 %
Concentration RSD	0.6 %	5.8 %	10.4 %	102.3 %	84.7 %	202.0 %	12.1 %	73.9 %	5.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	116.095 %	102.361 %	0.013 ppb	0.058 ppb	0.193 ppb	11.560 ppb	0.011 ppb	0.133 ppb	0.033 ppb
Concentration per Run 1	114.127 %	95.247 %	0.016 ppb	0.103 ppb	0.190 ppb	10.502 ppb	0.022 ppb	0.186 ppb	0.076 ppb
Concentration per Run 2	121.087 %	106.245 %	0.031 ppb	0.019 ppb	0.179 ppb	11.175 ppb	0.001 ppb	0.079 ppb	0.016 ppb
Concentration per Run 3	113.071 %	105.592 %	-0.008 ppb	0.054 ppb	0.210 ppb	13.005 ppb	0.010 ppb	0.135 ppb	0.006 ppb
Recovery Percentage 1			0.257 %	5.845 %	19.291 %	23.121 %	2.158 %	6.661 %	3.292 %
Concentration RSD	3.8 %	6.0 %	152.5 %	71.9 %	8.0 %	11.2 %	98.0 %	40.1 %	114.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.393 ppb	112.175 %	100.297 %	0.183 ppb	0.234 ppb	0.048 ppb	0.170 ppb	106.007 %	100.207 %
Concentration per Run 1	1.627 ppb	112.678 %	87.982 %	0.467 ppb	-0.009 ppb	0.072 ppb	0.207 ppb	108.000 %	91.078 %
Concentration per Run 2	1.461 ppb	113.008 %	103.128 %	0.078 ppb	0.545 ppb	-0.008 ppb	0.125 ppb	105.091 %	105.056 %
Concentration per Run 3	1.090 ppb	110.840 %	109.780 %	0.005 ppb	0.164 ppb	0.080 ppb	0.179 ppb	104.929 %	104.487 %
Recovery Percentage 1	27.855 %			36.651 %	4.671 %	9.643 %	8.517 %		
Concentration RSD	19.8 %	1.0 %	11.1 %	135.6 %	121.5 %	100.8 %	24.3 %	1.6 %	7.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.013 ppb	0.008 ppb	108.439 %	100.889 %	0.052 ppb	0.122 ppb	104.756 %	101.194 %	100.109 %
Concentration per Run 1	0.019 ppb	0.014 ppb	107.971 %	92.086 %	0.055 ppb	0.141 ppb	106.121 %	91.555 %	98.180 %
Concentration per Run 2	0.009 ppb	0.006 ppb	107.722 %	105.448 %	0.062 ppb	0.103 ppb	104.666 %	106.487 %	101.739 %
Concentration per Run 3	0.010 ppb	0.003 ppb	109.622 %	105.133 %	0.037 ppb	0.122 ppb	103.480 %	105.540 %	100.408 %
Recovery Percentage 1	3.163 %				1.288 %	24.379 %			
Concentration RSD	44.3 %	73.2 %	1.0 %	7.6 %	25.5 %	15.6 %	1.3 %	8.3 %	1.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	97.341 %	0.154 ppb	0.027 ppb	102.018 %	96.251 %
Concentration per Run 1	88.191 %	0.118 ppb	0.031 ppb	100.259 %	90.386 %
Concentration per Run 2	101.424 %	0.169 ppb	0.025 ppb	104.466 %	97.104 %
Concentration per Run 3	102.409 %	0.173 ppb	0.026 ppb	101.330 %	101.263 %
Recovery Percentage 1		15.364 %	2.729 %		
Concentration RSD	8.2 %	19.9 %	11.1 %	2.1 %	5.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	123	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1825986-1D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 9:32:34 PM	Vial	30		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.050 %	108.818 %	0.005 ppb	-0.036 ppb	5.394 ppb	1.426 ppb	0.534 ppb	4.010 ppb	-8.142 ppb
Concentration per Run 1	108.289 %	107.615 %	0.004 ppb	-0.047 ppb	6.514 ppb	0.569 ppb	0.552 ppb	-1.414 ppb	-14.404 ppb
Concentration per Run 2	109.665 %	108.216 %	0.006 ppb	-0.034 ppb	6.410 ppb	1.871 ppb	0.529 ppb	-1.841 ppb	5.304 ppb
Concentration per Run 3	109.196 %	110.621 %	0.004 ppb	-0.026 ppb	3.257 ppb	1.838 ppb	0.520 ppb	15.284 ppb	-15.326 ppb
Concentration RSD	0.6 %	1.5 %	27.9 %	30.3 %	34.3 %	52.1 %	3.1 %	243.6 %	143.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	112.769 %	113.670 %	-0.009 ppb	-0.007 ppb	0.073 ppb	4.263 ppb	0.003 ppb	-0.006 ppb	-0.032 ppb
Concentration per Run 1	112.914 %	118.454 %	-0.010 ppb	-0.036 ppb	0.049 ppb	4.828 ppb	0.003 ppb	-0.002 ppb	-0.035 ppb
Concentration per Run 2	113.764 %	111.743 %	0.010 ppb	0.033 ppb	0.096 ppb	4.883 ppb	0.004 ppb	0.024 ppb	-0.026 ppb
Concentration per Run 3	111.630 %	110.811 %	-0.027 ppb	-0.019 ppb	0.073 ppb	3.078 ppb	0.001 ppb	-0.038 ppb	-0.034 ppb
Concentration RSD	1.0 %	3.7 %	201.1 %	492.5 %	32.8 %	24.1 %	63.7 %	565.2 %	15.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.099 ppb	112.435 %	109.985 %	-0.053 ppb	0.114 ppb	-0.042 ppb	-0.002 ppb	106.089 %	107.513 %
Concentration per Run 1	0.174 ppb	113.742 %	113.334 %	-0.009 ppb	0.169 ppb	-0.091 ppb	-0.003 ppb	104.999 %	111.246 %
Concentration per Run 2	0.081 ppb	109.223 %	104.109 %	-0.126 ppb	0.004 ppb	0.013 ppb	-0.001 ppb	106.210 %	104.917 %
Concentration per Run 3	0.041 ppb	114.341 %	112.513 %	-0.024 ppb	0.171 ppb	-0.047 ppb	-0.002 ppb	107.057 %	106.378 %
Concentration RSD	69.2 %	2.5 %	4.6 %	120.7 %	83.8 %	124.7 %	40.3 %	1.0 %	3.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.004 ppb	0.004 ppb	105.985 %	105.803 %	-0.001 ppb	0.085 ppb	103.236 %	107.845 %	100.176 %
Concentration per Run 1	0.006 ppb	0.003 ppb	104.687 %	111.015 %	-0.003 ppb	0.046 ppb	101.273 %	110.994 %	98.200 %
Concentration per Run 2	0.002 ppb	0.009 ppb	106.359 %	101.943 %	-0.008 ppb	0.105 ppb	105.019 %	106.951 %	101.937 %
Concentration per Run 3	0.004 ppb	0.000 ppb	106.909 %	104.450 %	0.007 ppb	0.104 ppb	103.416 %	105.590 %	100.391 %
Concentration RSD	59.0 %	117.4 %	1.1 %	4.4 %	587.0 %	39.9 %	1.8 %	2.6 %	1.9 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	102.169 %	0.025 ppb	0.006 ppb	99.875 %	102.119 %
Concentration per Run 1	106.972 %	0.014 ppb	0.004 ppb	98.573 %	107.126 %
Concentration per Run 2	98.537 %	0.027 ppb	0.005 ppb	102.441 %	100.269 %
Concentration per Run 3	100.996 %	0.035 ppb	0.009 ppb	98.610 %	98.963 %
Concentration RSD	4.2 %	40.9 %	39.5 %	2.2 %	4.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 124
Analysis label: I2352354-14D10 6020TS
Analysis started at: 9/14/2023 9:37:23 PM
User name ALPHALAB\ICPMSRQ
Rack 2
Vial 23
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	105.318 %	118.036 %	0.952 ppb	0.750 ppb	29.556 ppb	1,692.287 ppb	16,586.610 ppb	474.998 ppb	1,071.336 ppb
Concentration per Run 1	105.440 %	135.271 %	0.930 ppb	0.739 ppb	18.730 ppb	1,579.506 ppb	16,059.361 ppb	467.369 ppb	927.192 ppb
Concentration per Run 2	112.962 %	118.437 %	0.852 ppb	0.644 ppb	29.576 ppb	1,661.611 ppb	15,548.275 ppb	497.517 ppb	1,103.365 ppb
Concentration per Run 3	97.553 %	100.401 %	1.073 ppb	0.867 ppb	40.361 ppb	1,835.744 ppb	18,152.193 ppb	460.107 ppb	1,183.452 ppb
Concentration RSD	7.3 %	14.8 %	11.8 %	14.9 %	36.6 %	7.7 %	8.3 %	4.2 %	12.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	120.203 %	125.413 %	35.061 ppb	25.161 ppb	198.575 ppb	24,238.032 ppb	4.665 ppb	10.655 ppb	10.119 ppb
Concentration per Run 1	124.152 %	127.681 %	32.270 ppb	23.749 ppb	192.416 ppb	24,326.337 ppb	4.466 ppb	10.485 ppb	9.953 ppb
Concentration per Run 2	127.177 %	120.225 %	37.567 ppb	26.331 ppb	208.784 ppb	24,468.572 ppb	5.021 ppb	10.944 ppb	10.055 ppb
Concentration per Run 3	109.281 %	128.334 %	35.345 ppb	25.403 ppb	194.525 ppb	23,919.185 ppb	4.508 ppb	10.535 ppb	10.348 ppb
Concentration RSD	8.0 %	3.6 %	7.6 %	5.2 %	4.5 %	1.2 %	6.6 %	2.4 %	2.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	31.072 ppb	104.899 %	112.751 %	5.683 ppb	23.387 ppb	10.504 ppb	0.572 ppb	99.318 %	101.346 %
Concentration per Run 1	29.870 ppb	101.351 %	112.823 %	6.173 ppb	23.111 ppb	9.997 ppb	0.543 ppb	99.832 %	105.952 %
Concentration per Run 2	32.425 ppb	114.667 %	109.370 %	4.862 ppb	24.349 ppb	10.767 ppb	0.636 ppb	103.585 %	98.755 %
Concentration per Run 3	30.919 ppb	98.680 %	116.060 %	6.014 ppb	22.700 ppb	10.749 ppb	0.536 ppb	94.539 %	99.329 %
Concentration RSD	4.1 %	8.2 %	3.0 %	12.6 %	3.7 %	4.2 %	9.7 %	4.6 %	3.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.061 ppb	0.259 ppb	95.743 %	104.008 %	0.233 ppb	81.644 ppb	101.972 %	108.109 %	96.266 %
Concentration per Run 1	0.060 ppb	0.278 ppb	95.876 %	108.941 %	0.227 ppb	76.759 ppb	102.464 %	112.282 %	95.656 %
Concentration per Run 2	0.072 ppb	0.265 ppb	102.043 %	100.184 %	0.213 ppb	84.558 ppb	105.238 %	106.956 %	103.183 %
Concentration per Run 3	0.051 ppb	0.235 ppb	89.309 %	102.901 %	0.260 ppb	83.616 ppb	98.213 %	105.089 %	89.957 %
Concentration RSD	17.8 %	8.6 %	6.7 %	4.3 %	10.2 %	5.2 %	3.5 %	3.5 %	6.9 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	101.436 %	0.131 ppb	12.921 ppb	91.634 %	97.779 %
Concentration per Run 1	105.443 %	0.111 ppb	12.040 ppb	90.089 %	102.839 %
Concentration per Run 2	100.445 %	0.128 ppb	13.276 ppb	98.358 %	95.647 %
Concentration per Run 3	98.419 %	0.153 ppb	13.449 ppb	86.456 %	94.850 %
Concentration RSD	3.6 %	16.0 %	5.9 %	6.7 %	4.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	125	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-15D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 9:42:12 PM	Vial	24		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.623 %	105.210 %	1.182 ppb	0.691 ppb	48.373 ppb	1,464.219 ppb	15,028.985 ppb	410.920 ppb	1,030.717 ppb
Concentration per Run 1	110.020 %	113.627 %	1.174 ppb	0.720 ppb	43.940 ppb	1,346.125 ppb	15,528.934 ppb	426.571 ppb	909.833 ppb
Concentration per Run 2	109.090 %	104.609 %	1.182 ppb	0.680 ppb	49.886 ppb	1,454.534 ppb	14,921.379 ppb	392.795 ppb	1,138.132 ppb
Concentration per Run 3	109.760 %	97.395 %	1.190 ppb	0.674 ppb	51.294 ppb	1,591.998 ppb	14,636.643 ppb	413.392 ppb	1,044.186 ppb
Concentration RSD	0.4 %	7.7 %	0.7 %	3.7 %	8.1 %	8.4 %	3.0 %	4.1 %	11.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	118.710 %	113.577 %	28.077 ppb	31.015 ppb	605.067 ppb	19,645.044 ppb	6.524 ppb	11.016 ppb	11.162 ppb
Concentration per Run 1	116.498 %	110.159 %	28.776 ppb	32.235 ppb	620.094 ppb	20,624.502 ppb	6.787 ppb	11.938 ppb	11.443 ppb
Concentration per Run 2	122.368 %	118.081 %	26.861 ppb	29.424 ppb	581.063 ppb	19,314.136 ppb	6.320 ppb	10.445 ppb	10.784 ppb
Concentration per Run 3	117.263 %	112.489 %	28.593 ppb	31.387 ppb	614.042 ppb	18,996.494 ppb	6.466 ppb	10.667 ppb	11.260 ppb
Concentration RSD	2.7 %	3.6 %	3.8 %	4.6 %	3.5 %	4.4 %	3.7 %	7.3 %	3.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	42.968 ppb	107.357 %	109.626 %	4.375 ppb	31.591 ppb	8.817 ppb	0.722 ppb	104.828 %	102.022 %
Concentration per Run 1	43.533 ppb	105.914 %	109.708 %	3.556 ppb	34.204 ppb	8.888 ppb	0.709 ppb	102.825 %	99.863 %
Concentration per Run 2	41.309 ppb	108.939 %	109.140 %	3.271 ppb	26.145 ppb	8.817 ppb	0.798 ppb	104.529 %	101.917 %
Concentration per Run 3	44.064 ppb	107.217 %	110.030 %	6.299 ppb	34.424 ppb	8.745 ppb	0.658 ppb	107.132 %	104.285 %
Concentration RSD	3.4 %	1.4 %	0.4 %	38.2 %	14.9 %	0.8 %	9.8 %	2.1 %	2.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.182 ppb	0.417 ppb	103.100 %	102.118 %	0.568 ppb	112.869 ppb	110.076 %	108.834 %	103.379 %
Concentration per Run 1	0.186 ppb	0.418 ppb	101.231 %	101.523 %	0.545 ppb	114.580 ppb	106.429 %	106.715 %	102.126 %
Concentration per Run 2	0.182 ppb	0.412 ppb	103.985 %	101.668 %	0.593 ppb	112.570 ppb	110.558 %	109.085 %	106.086 %
Concentration per Run 3	0.177 ppb	0.420 ppb	104.083 %	103.164 %	0.566 ppb	111.456 ppb	113.241 %	110.702 %	101.924 %
Concentration RSD	2.3 %	1.1 %	1.6 %	0.9 %	4.2 %	1.4 %	3.1 %	1.8 %	2.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	100.625 %	0.132 ppb	20.314 ppb	98.652 %	97.958 %
Concentration per Run 1	98.421 %	0.122 ppb	20.038 ppb	95.329 %	98.390 %
Concentration per Run 2	102.286 %	0.139 ppb	20.648 ppb	99.515 %	95.743 %
Concentration per Run 3	101.167 %	0.136 ppb	20.257 ppb	101.111 %	99.741 %
Concentration RSD	2.0 %	6.6 %	1.5 %	3.0 %	2.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	126	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-16D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 9:47:01 PM	Vial	25		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.039 %	122.044 %	1.307 ppb	0.658 ppb	9.141 ppb	1,643.027 ppb	23,527.858 ppb	465.329 ppb	245.279 ppb
Concentration per Run 1	109.458 %	128.658 %	1.320 ppb	0.669 ppb	1.221 ppb	1,531.158 ppb	23,614.141 ppb	450.490 ppb	352.414 ppb
Concentration per Run 2	108.038 %	123.848 %	1.325 ppb	0.653 ppb	12.324 ppb	1,674.855 ppb	24,284.842 ppb	442.866 ppb	155.836 ppb
Concentration per Run 3	109.622 %	113.627 %	1.275 ppb	0.652 ppb	13.879 ppb	1,723.068 ppb	22,684.590 ppb	502.629 ppb	227.585 ppb
Concentration RSD	0.8 %	6.3 %	2.1 %	1.4 %	75.5 %	6.1 %	3.4 %	7.0 %	40.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	129.200 %	132.994 %	36.556 ppb	22.011 ppb	212.168 ppb	26,180.761 ppb	6.760 ppb	13.499 ppb	8.415 ppb
Concentration per Run 1	130.912 %	138.773 %	34.892 ppb	20.680 ppb	199.063 ppb	24,746.243 ppb	6.432 ppb	12.866 ppb	7.626 ppb
Concentration per Run 2	128.791 %	132.808 %	37.242 ppb	22.644 ppb	217.226 ppb	26,954.661 ppb	6.875 ppb	14.069 ppb	8.993 ppb
Concentration per Run 3	127.897 %	127.402 %	37.533 ppb	22.708 ppb	220.213 ppb	26,841.378 ppb	6.972 ppb	13.562 ppb	8.628 ppb
Concentration RSD	1.2 %	4.3 %	4.0 %	5.2 %	5.4 %	4.8 %	4.3 %	4.5 %	8.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	57.630 ppb	112.348 %	118.254 %	4.769 ppb	20.639 ppb	5.639 ppb	0.787 ppb	105.198 %	106.439 %
Concentration per Run 1	53.954 ppb	110.596 %	124.110 %	4.073 ppb	19.304 ppb	5.009 ppb	0.726 ppb	101.621 %	111.232 %
Concentration per Run 2	59.440 ppb	112.196 %	113.015 %	5.470 ppb	22.696 ppb	6.233 ppb	0.805 ppb	105.730 %	104.236 %
Concentration per Run 3	59.495 ppb	114.251 %	117.636 %	4.764 ppb	19.915 ppb	5.674 ppb	0.831 ppb	108.242 %	103.849 %
Concentration RSD	5.5 %	1.6 %	4.7 %	14.6 %	8.8 %	10.9 %	6.9 %	3.2 %	3.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.041 ppb	0.112 ppb	104.034 %	108.140 %	0.130 ppb	122.843 ppb	112.339 %	111.778 %	106.470 %
Concentration per Run 1	0.044 ppb	0.129 ppb	103.781 %	113.602 %	0.128 ppb	113.867 ppb	112.506 %	114.996 %	105.051 %
Concentration per Run 2	0.037 ppb	0.108 ppb	102.987 %	104.832 %	0.154 ppb	126.795 ppb	113.049 %	110.147 %	107.723 %
Concentration per Run 3	0.042 ppb	0.101 ppb	105.333 %	105.987 %	0.108 ppb	127.867 ppb	111.462 %	110.190 %	106.636 %
Concentration RSD	8.7 %	12.8 %	1.1 %	4.4 %	17.8 %	6.3 %	0.7 %	2.5 %	1.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.848 %	0.153 ppb	15.942 ppb	99.864 %	102.455 %
Concentration per Run 1	110.683 %	0.152 ppb	15.032 ppb	98.523 %	106.647 %
Concentration per Run 2	104.817 %	0.150 ppb	16.096 ppb	100.091 %	102.243 %
Concentration per Run 3	105.045 %	0.159 ppb	16.696 ppb	100.979 %	98.476 %
Concentration RSD	3.1 %	3.0 %	5.3 %	1.2 %	4.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 127
Analysis label: I2352354-17D10 6020TS
Analysis started at: 9/14/2023 9:51:50 PM
User name ALPHALAB\ICPMSRQ
Rack 2
Vial 26
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	107.933 %	109.619 %	1.249 ppb	0.873 ppb	22.954 ppb	1,590.588 ppb	16,295.905 ppb	566.358 ppb	398.382 ppb
Concentration per Run 1	107.063 %	102.806 %	1.268 ppb	0.911 ppb	33.259 ppb	1,645.638 ppb	16,356.037 ppb	569.920 ppb	338.929 ppb
Concentration per Run 2	107.550 %	111.824 %	1.223 ppb	0.841 ppb	23.113 ppb	1,565.249 ppb	17,001.455 ppb	571.377 ppb	448.781 ppb
Concentration per Run 3	109.187 %	114.229 %	1.255 ppb	0.869 ppb	12.491 ppb	1,560.877 ppb	15,530.221 ppb	557.777 ppb	407.437 ppb
Concentration RSD	1.0 %	5.5 %	1.8 %	4.0 %	45.2 %	3.0 %	4.5 %	1.3 %	13.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	126.324 %	127.681 %	32.877 ppb	21.642 ppb	272.583 ppb	23,819.122 ppb	6.203 ppb	11.731 ppb	9.353 ppb
Concentration per Run 1	121.442 %	125.351 %	31.193 ppb	21.712 ppb	266.567 ppb	23,929.960 ppb	6.146 ppb	11.537 ppb	8.621 ppb
Concentration per Run 2	127.477 %	125.631 %	33.201 ppb	21.732 ppb	277.580 ppb	23,831.706 ppb	6.262 ppb	12.085 ppb	9.635 ppb
Concentration per Run 3	130.054 %	132.062 %	34.237 ppb	21.482 ppb	273.604 ppb	23,695.700 ppb	6.202 ppb	11.571 ppb	9.802 ppb
Concentration RSD	3.5 %	3.0 %	4.7 %	0.6 %	2.0 %	0.5 %	0.9 %	2.6 %	6.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	39.560 ppb	114.290 %	119.686 %	4.148 ppb	27.479 ppb	7.226 ppb	0.669 ppb	105.393 %	109.177 %
Concentration per Run 1	38.180 ppb	114.624 %	124.501 %	4.283 ppb	23.250 ppb	6.753 ppb	0.656 ppb	104.881 %	113.979 %
Concentration per Run 2	42.281 ppb	113.241 %	116.300 %	3.533 ppb	28.988 ppb	7.518 ppb	0.744 ppb	103.877 %	105.371 %
Concentration per Run 3	38.219 ppb	115.005 %	118.257 %	4.627 ppb	30.198 ppb	7.407 ppb	0.607 ppb	107.420 %	108.181 %
Concentration RSD	6.0 %	0.8 %	3.6 %	13.5 %	13.5 %	5.7 %	10.4 %	1.7 %	4.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.080 ppb	0.074 ppb	105.009 %	111.216 %	0.378 ppb	111.273 ppb	112.040 %	116.412 %	104.633 %
Concentration per Run 1	0.066 ppb	0.068 ppb	103.863 %	113.811 %	0.362 ppb	106.247 ppb	112.690 %	121.735 %	104.525 %
Concentration per Run 2	0.087 ppb	0.089 ppb	104.867 %	110.292 %	0.414 ppb	113.697 ppb	112.875 %	114.077 %	103.688 %
Concentration per Run 3	0.088 ppb	0.065 ppb	106.297 %	109.544 %	0.357 ppb	113.874 ppb	110.555 %	113.425 %	105.685 %
Concentration RSD	15.8 %	17.7 %	1.2 %	2.0 %	8.3 %	3.9 %	1.2 %	4.0 %	1.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	109.777 %	0.124 ppb	18.621 ppb	101.590 %	102.012 %
Concentration per Run 1	113.706 %	0.118 ppb	17.427 ppb	100.358 %	105.481 %
Concentration per Run 2	108.056 %	0.125 ppb	19.240 ppb	99.514 %	99.426 %
Concentration per Run 3	107.569 %	0.130 ppb	19.195 ppb	104.899 %	101.131 %
Concentration RSD	3.1 %	5.1 %	5.6 %	2.9 %	3.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	128	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-18D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 9:56:37 PM	Vial	27		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	105.955 %	109.218 %	1.248 ppb	0.773 ppb	23.801 ppb	1,993.997 ppb	18,196.259 ppb	533.661 ppb	266.058 ppb
Concentration per Run 1	105.633 %	107.615 %	1.222 ppb	0.783 ppb	24.466 ppb	1,923.727 ppb	17,872.731 ppb	547.929 ppb	164.606 ppb
Concentration per Run 2	105.962 %	110.020 %	1.240 ppb	0.762 ppb	19.211 ppb	2,036.465 ppb	18,717.806 ppb	516.992 ppb	159.593 ppb
Concentration per Run 3	106.270 %	110.020 %	1.280 ppb	0.775 ppb	27.724 ppb	2,021.800 ppb	17,998.240 ppb	536.062 ppb	473.974 ppb
Concentration RSD	0.3 %	1.3 %	2.4 %	1.4 %	18.0 %	3.1 %	2.5 %	2.9 %	67.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	133.107 %	124.295 %	34.141 ppb	21.762 ppb	394.266 ppb	24,913.737 ppb	7.638 ppb	14.432 ppb	10.668 ppb
Concentration per Run 1	134.514 %	124.047 %	34.746 ppb	21.342 ppb	384.826 ppb	24,498.977 ppb	7.430 ppb	14.236 ppb	10.441 ppb
Concentration per Run 2	132.896 %	126.097 %	32.259 ppb	21.010 ppb	389.877 ppb	24,866.107 ppb	7.690 ppb	14.555 ppb	10.478 ppb
Concentration per Run 3	131.911 %	122.741 %	35.419 ppb	22.935 ppb	408.096 ppb	25,376.127 ppb	7.793 ppb	14.505 ppb	11.084 ppb
Concentration RSD	1.0 %	1.4 %	4.9 %	4.7 %	3.1 %	1.8 %	2.4 %	1.2 %	3.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	42.894 ppb	110.876 %	113.051 %	3.486 ppb	23.790 ppb	5.456 ppb	0.501 ppb	100.208 %	105.980 %
Concentration per Run 1	41.214 ppb	107.975 %	112.854 %	2.909 ppb	20.526 ppb	5.175 ppb	0.435 ppb	101.770 %	110.143 %
Concentration per Run 2	43.038 ppb	110.113 %	115.427 %	3.759 ppb	24.587 ppb	5.355 ppb	0.509 ppb	97.652 %	104.868 %
Concentration per Run 3	44.431 ppb	114.541 %	110.871 %	3.791 ppb	26.258 ppb	5.838 ppb	0.558 ppb	101.203 %	102.929 %
Concentration RSD	3.8 %	3.0 %	2.0 %	14.3 %	12.4 %	6.3 %	12.4 %	2.2 %	3.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.035 ppb	0.054 ppb	102.339 %	108.367 %	0.211 ppb	81.947 ppb	108.519 %	112.434 %	102.992 %
Concentration per Run 1	0.031 ppb	0.044 ppb	102.619 %	109.545 %	0.200 ppb	77.095 ppb	106.036 %	116.792 %	102.652 %
Concentration per Run 2	0.035 ppb	0.061 ppb	102.029 %	106.905 %	0.211 ppb	84.294 ppb	108.970 %	110.668 %	102.511 %
Concentration per Run 3	0.039 ppb	0.057 ppb	102.369 %	108.652 %	0.222 ppb	84.453 ppb	110.552 %	109.841 %	103.813 %
Concentration RSD	11.9 %	16.3 %	0.3 %	1.2 %	5.4 %	5.1 %	2.1 %	3.4 %	0.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.701 %	0.124 ppb	17.958 ppb	96.864 %	101.646 %
Concentration per Run 1	109.555 %	0.114 ppb	16.851 ppb	96.890 %	104.771 %
Concentration per Run 2	106.786 %	0.120 ppb	18.324 ppb	95.942 %	100.447 %
Concentration per Run 3	103.762 %	0.137 ppb	18.699 ppb	97.760 %	99.719 %
Concentration RSD	2.7 %	9.8 %	5.4 %	0.9 %	2.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	129	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-19D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 10:01:25 PM	Vial	28		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	106.949 %	103.407 %	1.041 ppb	1.102 ppb	22.069 ppb	2,100.180 ppb	15,747.869 ppb	678.294 ppb	278.711 ppb
Concentration per Run 1	107.369 %	103.407 %	1.023 ppb	1.112 ppb	19.329 ppb	2,079.582 ppb	15,803.584 ppb	626.169 ppb	177.618 ppb
Concentration per Run 2	106.657 %	105.812 %	1.059 ppb	1.074 ppb	18.241 ppb	2,091.813 ppb	15,617.519 ppb	656.170 ppb	258.664 ppb
Concentration per Run 3	106.820 %	101.002 %	1.042 ppb	1.121 ppb	28.638 ppb	2,129.143 ppb	15,822.505 ppb	752.542 ppb	399.850 ppb
Concentration RSD	0.3 %	2.3 %	1.7 %	2.2 %	25.9 %	1.2 %	0.7 %	9.7 %	40.4 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	130.377 %	129.079 %	39.836 ppb	29.078 ppb	383.311 ppb	30,279.023 ppb	6.874 ppb	13.934 ppb	11.281 ppb
Concentration per Run 1	135.016 %	133.180 %	38.521 ppb	27.294 ppb	361.248 ppb	29,108.985 ppb	6.461 ppb	13.528 ppb	10.237 ppb
Concentration per Run 2	128.813 %	130.011 %	41.295 ppb	29.887 ppb	392.485 ppb	30,653.572 ppb	7.252 ppb	13.917 ppb	12.541 ppb
Concentration per Run 3	127.302 %	124.046 %	39.691 ppb	30.053 ppb	396.199 ppb	31,074.513 ppb	6.910 ppb	14.358 ppb	11.065 ppb
Concentration RSD	3.1 %	3.6 %	3.5 %	5.3 %	5.0 %	3.4 %	5.8 %	3.0 %	10.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	47.296 ppb	109.407 %	116.210 %	6.981 ppb	20.883 ppb	7.076 ppb	0.673 ppb	103.423 %	105.886 %
Concentration per Run 1	43.363 ppb	110.886 %	123.007 %	7.424 ppb	19.716 ppb	6.599 ppb	0.630 ppb	98.864 %	111.667 %
Concentration per Run 2	49.897 ppb	108.840 %	108.159 %	6.075 ppb	21.942 ppb	7.261 ppb	0.693 ppb	102.776 %	102.209 %
Concentration per Run 3	48.629 ppb	108.495 %	117.463 %	7.443 ppb	20.990 ppb	7.369 ppb	0.695 ppb	108.627 %	103.782 %
Concentration RSD	7.3 %	1.2 %	6.5 %	11.2 %	5.3 %	5.9 %	5.5 %	4.8 %	4.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.059 ppb	0.092 ppb	101.931 %	108.315 %	0.213 ppb	85.989 ppb	109.601 %	112.966 %	103.925 %
Concentration per Run 1	0.050 ppb	0.107 ppb	100.440 %	110.910 %	0.208 ppb	82.777 ppb	107.573 %	116.778 %	101.502 %
Concentration per Run 2	0.068 ppb	0.088 ppb	101.214 %	108.007 %	0.227 ppb	85.918 ppb	109.464 %	111.898 %	104.343 %
Concentration per Run 3	0.059 ppb	0.080 ppb	104.138 %	106.026 %	0.204 ppb	89.270 ppb	111.767 %	110.221 %	105.932 %
Concentration RSD	15.8 %	15.5 %	1.9 %	2.3 %	5.8 %	3.8 %	1.9 %	3.0 %	2.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.467 %	0.113 ppb	19.945 ppb	98.293 %	102.604 %
Concentration per Run 1	113.223 %	0.099 ppb	18.540 ppb	97.994 %	105.070 %
Concentration per Run 2	101.313 %	0.119 ppb	20.590 ppb	98.074 %	101.988 %
Concentration per Run 3	104.865 %	0.121 ppb	20.705 ppb	98.810 %	100.753 %
Concentration RSD	5.7 %	10.7 %	6.1 %	0.5 %	2.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	130	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-20D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 10:06:13 PM	Vial	29		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	101.234 %	100.802 %	0.852 ppb	1.668 ppb	49.875 ppb	2,631.205 ppb	21,509.822 ppb	765.029 ppb	420.903 ppb
Concentration per Run 1	104.581 %	99.198 %	0.843 ppb	1.533 ppb	49.776 ppb	2,569.912 ppb	21,448.746 ppb	723.626 ppb	334.499 ppb
Concentration per Run 2	106.777 %	104.609 %	0.782 ppb	1.488 ppb	53.806 ppb	2,719.683 ppb	18,663.947 ppb	838.921 ppb	492.152 ppb
Concentration per Run 3	92.344 %	98.597 %	0.931 ppb	1.984 ppb	46.042 ppb	2,604.019 ppb	24,416.773 ppb	732.539 ppb	436.057 ppb
Concentration RSD	7.7 %	3.3 %	8.8 %	16.5 %	7.8 %	3.0 %	13.4 %	8.4 %	19.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	136.317 %	147.752 %	58.739 ppb	35.370 ppb	174.563 ppb	40,656.768 ppb	7.119 ppb	16.199 ppb	15.171 ppb
Concentration per Run 1	134.630 %	147.814 %	58.561 ppb	34.407 ppb	170.225 ppb	38,924.496 ppb	6.790 ppb	16.483 ppb	15.207 ppb
Concentration per Run 2	146.422 %	143.247 %	60.293 ppb	36.164 ppb	178.924 ppb	41,786.671 ppb	7.303 ppb	16.506 ppb	15.538 ppb
Concentration per Run 3	127.900 %	152.195 %	57.363 ppb	35.539 ppb	174.539 ppb	41,259.138 ppb	7.265 ppb	15.608 ppb	14.769 ppb
Concentration RSD	6.9 %	3.0 %	2.5 %	2.5 %	2.5 %	3.7 %	4.0 %	3.2 %	2.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	52.493 ppb	105.508 %	114.915 %	10.166 ppb	12.315 ppb	6.490 ppb	0.894 ppb	93.810 %	104.493 %
Concentration per Run 1	50.986 ppb	109.822 %	118.151 %	9.154 ppb	11.484 ppb	6.131 ppb	0.835 ppb	100.025 %	108.935 %
Concentration per Run 2	54.520 ppb	110.838 %	110.427 %	11.299 ppb	13.459 ppb	6.877 ppb	0.882 ppb	100.282 %	103.807 %
Concentration per Run 3	51.974 ppb	95.864 %	116.168 %	10.046 ppb	12.003 ppb	6.462 ppb	0.965 ppb	81.123 %	100.739 %
Concentration RSD	3.5 %	7.9 %	3.5 %	10.6 %	8.3 %	5.8 %	7.4 %	11.7 %	4.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.014 ppb	0.101 ppb	98.075 %	108.314 %	0.247 ppb	83.647 ppb	98.138 %	110.547 %	94.005 %
Concentration per Run 1	0.011 ppb	0.100 ppb	105.139 %	114.612 %	0.215 ppb	76.825 ppb	103.867 %	117.863 %	98.684 %
Concentration per Run 2	0.014 ppb	0.133 ppb	103.333 %	107.837 %	0.255 ppb	86.629 ppb	104.438 %	106.864 %	99.506 %
Concentration per Run 3	0.016 ppb	0.070 ppb	85.754 %	102.495 %	0.273 ppb	87.488 ppb	86.110 %	106.913 %	83.826 %
Concentration RSD	17.1 %	31.5 %	10.9 %	5.6 %	12.0 %	7.1 %	10.6 %	5.7 %	9.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	104.988 %	0.151 ppb	15.933 ppb	92.334 %	99.879 %
Concentration per Run 1	107.224 %	0.138 ppb	14.864 ppb	96.796 %	104.240 %
Concentration per Run 2	105.693 %	0.149 ppb	16.405 ppb	97.452 %	97.734 %
Concentration per Run 3	102.046 %	0.166 ppb	16.530 ppb	82.755 %	97.661 %
Concentration RSD	2.5 %	9.4 %	5.8 %	9.0 %	3.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	131	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-22D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 10:11:02 PM	Vial	37		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	106.595 %	113.227 %	2.187 ppb	1.309 ppb	25.102 ppb	2,270.478 ppb	24,550.743 ppb	593.729 ppb	1,043.810 ppb
Concentration per Run 1	108.238 %	113.627 %	2.200 ppb	1.289 ppb	24.708 ppb	2,162.050 ppb	24,250.205 ppb	551.998 ppb	862.715 ppb
Concentration per Run 2	106.876 %	105.812 %	2.204 ppb	1.306 ppb	31.646 ppb	2,384.810 ppb	24,870.429 ppb	634.929 ppb	1,071.929 ppb
Concentration per Run 3	104.670 %	120.241 %	2.158 ppb	1.334 ppb	18.954 ppb	2,264.574 ppb	24,531.596 ppb	594.260 ppb	1,196.784 ppb
Concentration RSD	1.7 %	6.4 %	1.2 %	1.7 %	25.3 %	4.9 %	1.3 %	7.0 %	16.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	123.498 %	124.699 %	42.778 ppb	27.179 ppb	1,762.747 ppb	35,436.097 ppb	9.438 ppb	19.115 ppb	22.332 ppb
Concentration per Run 1	128.748 %	129.639 %	40.612 ppb	25.589 ppb	1,662.297 ppb	32,929.918 ppb	8.939 ppb	17.232 ppb	21.057 ppb
Concentration per Run 2	117.120 %	121.157 %	42.899 ppb	28.120 ppb	1,811.589 ppb	35,479.466 ppb	9.967 ppb	20.721 ppb	22.786 ppb
Concentration per Run 3	124.628 %	123.301 %	44.821 ppb	27.828 ppb	1,814.354 ppb	37,898.907 ppb	9.409 ppb	19.390 ppb	23.155 ppb
Concentration RSD	4.8 %	3.5 %	4.9 %	5.1 %	4.9 %	7.0 %	5.5 %	9.2 %	5.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	197.224 ppb	113.601 %	118.795 %	12.256 ppb	52.902 ppb	15.285 ppb	1.381 ppb	106.383 %	106.459 %
Concentration per Run 1	186.001 ppb	111.613 %	125.138 %	10.228 ppb	49.857 ppb	14.334 ppb	1.261 ppb	103.647 %	110.519 %
Concentration per Run 2	203.539 ppb	116.065 %	115.072 %	13.207 ppb	54.148 ppb	16.080 ppb	1.513 ppb	106.516 %	104.276 %
Concentration per Run 3	202.131 ppb	113.125 %	116.175 %	13.333 ppb	54.702 ppb	15.441 ppb	1.369 ppb	108.985 %	104.583 %
Concentration RSD	4.9 %	2.0 %	4.6 %	14.3 %	5.0 %	5.8 %	9.2 %	2.5 %	3.3 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.190 ppb	0.519 ppb	105.590 %	107.933 %	0.660 ppb	226.584 ppb	117.746 %	119.380 %	105.759 %
Concentration per Run 1	0.175 ppb	0.464 ppb	101.541 %	111.382 %	0.613 ppb	218.059 ppb	116.167 %	123.437 %	104.797 %
Concentration per Run 2	0.197 ppb	0.529 ppb	107.320 %	104.227 %	0.716 ppb	233.859 ppb	118.864 %	117.467 %	105.110 %
Concentration per Run 3	0.199 ppb	0.563 ppb	107.909 %	108.191 %	0.649 ppb	227.834 ppb	118.208 %	117.235 %	107.371 %
Concentration RSD	7.1 %	9.7 %	3.3 %	3.3 %	7.9 %	3.5 %	1.2 %	2.9 %	1.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	107.638 %	0.196 ppb	218.005 ppb	103.923 %	101.461 %
Concentration per Run 1	112.429 %	0.184 ppb	204.589 ppb	100.359 %	106.185 %
Concentration per Run 2	106.813 %	0.192 ppb	221.278 ppb	106.404 %	100.754 %
Concentration per Run 3	103.671 %	0.212 ppb	228.150 ppb	105.005 %	97.443 %
Concentration RSD	4.1 %	7.1 %	5.6 %	3.0 %	4.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	132	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1825986-6d50 6020TS	Rack	2		
Analysis started at:	9/14/2023 10:15:51 PM	Vial	36		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	102.045 %	100.802 %	0.300 ppb	0.403 ppb	9.156 ppb	712.237 ppb	7,126.034 ppb	253.602 ppb	87.256 ppb
Concentration per Run 1	101.979 %	102.806 %	0.302 ppb	0.416 ppb	10.119 ppb	703.233 ppb	7,134.792 ppb	231.373 ppb	64.961 ppb
Concentration per Run 2	103.126 %	99.800 %	0.286 ppb	0.389 ppb	11.111 ppb	743.209 ppb	7,206.899 ppb	271.625 ppb	80.575 ppb
Concentration per Run 3	101.031 %	99.800 %	0.311 ppb	0.403 ppb	6.237 ppb	690.267 ppb	7,036.411 ppb	257.808 ppb	116.232 ppb
Concentration RSD	1.0 %	1.7 %	4.3 %	3.4 %	28.1 %	3.9 %	1.2 %	8.1 %	30.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	116.023 %	120.784 %	19.606 ppb	12.685 ppb	83.180 ppb	14,161.285 ppb	2.422 ppb	5.014 ppb	4.987 ppb
Concentration per Run 1	116.774 %	120.411 %	19.290 ppb	12.654 ppb	81.118 ppb	13,510.986 ppb	2.455 ppb	4.784 ppb	4.563 ppb
Concentration per Run 2	113.117 %	119.852 %	19.206 ppb	13.014 ppb	84.957 ppb	14,751.641 ppb	2.365 ppb	5.185 ppb	5.259 ppb
Concentration per Run 3	118.179 %	122.089 %	20.321 ppb	12.388 ppb	83.465 ppb	14,221.228 ppb	2.446 ppb	5.073 ppb	5.140 ppb
Concentration RSD	2.3 %	1.0 %	3.2 %	2.5 %	2.3 %	4.4 %	2.1 %	4.1 %	7.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	15.416 ppb	106.782 %	107.232 %	3.784 ppb	4.480 ppb	1.354 ppb	0.265 ppb	100.117 %	105.677 %
Concentration per Run 1	14.684 ppb	107.277 %	106.660 %	3.806 ppb	6.719 ppb	1.099 ppb	0.322 ppb	99.109 %	109.621 %
Concentration per Run 2	15.795 ppb	106.763 %	107.190 %	3.478 ppb	3.523 ppb	1.406 ppb	0.256 ppb	99.645 %	105.047 %
Concentration per Run 3	15.769 ppb	106.306 %	107.845 %	4.069 ppb	3.199 ppb	1.558 ppb	0.218 ppb	101.598 %	102.363 %
Concentration RSD	4.1 %	0.5 %	0.6 %	7.8 %	43.4 %	17.3 %	19.8 %	1.3 %	3.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.013 ppb	0.027 ppb	102.069 %	109.041 %	0.063 ppb	27.415 ppb	102.194 %	107.371 %	98.894 %
Concentration per Run 1	0.012 ppb	0.020 ppb	103.709 %	114.429 %	0.058 ppb	26.073 ppb	99.409 %	111.642 %	98.054 %
Concentration per Run 2	0.015 ppb	0.033 ppb	102.489 %	107.299 %	0.042 ppb	28.207 ppb	103.414 %	105.788 %	97.971 %
Concentration per Run 3	0.011 ppb	0.028 ppb	100.010 %	105.395 %	0.089 ppb	27.966 ppb	103.759 %	104.683 %	100.655 %
Concentration RSD	17.8 %	24.7 %	1.8 %	4.4 %	37.2 %	4.3 %	2.4 %	3.5 %	1.5 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.482 %	0.045 ppb	6.975 ppb	97.317 %	102.234 %
Concentration per Run 1	110.321 %	0.033 ppb	6.582 ppb	98.493 %	104.485 %
Concentration per Run 2	103.689 %	0.048 ppb	7.170 ppb	94.716 %	102.202 %
Concentration per Run 3	102.437 %	0.054 ppb	7.174 ppb	98.743 %	100.014 %
Concentration RSD	4.0 %	23.7 %	4.9 %	2.3 %	2.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 133 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 9/14/2023 10:20:40 PM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.742 %	97.595 %	56.881 ppb	55.186 ppb	6,656.812 ppb	6,467.645 ppb	61.607 ppb	7,052.358 ppb	6,542.846 ppb
Concentration per Run 1	109.606 %	93.788 %	56.345 ppb	55.749 ppb	6,707.853 ppb	6,318.313 ppb	62.968 ppb	7,199.839 ppb	5,843.288 ppb
Concentration per Run 2	108.186 %	99.800 %	58.250 ppb	55.447 ppb	6,512.522 ppb	6,254.130 ppb	61.339 ppb	6,655.157 ppb	6,823.238 ppb
Concentration per Run 3	111.434 %	99.198 %	56.049 ppb	54.363 ppb	6,750.060 ppb	6,830.493 ppb	60.513 ppb	7,302.078 ppb	6,962.013 ppb
Recovery Percentage 1			94.802 %	91.977 %	110.947 %	107.794 %	102.678 %	117.539 %	109.047 %
Concentration RSD	1.5 %	3.4 %	2.1 %	1.3 %	1.9 %	4.9 %	2.0 %	4.9 %	9.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	120.518 %	116.901 %	61.892 ppb	58.112 ppb	64.423 ppb	6,427.535 ppb	63.486 ppb	63.977 ppb	62.387 ppb
Concentration per Run 1	123.318 %	116.497 %	60.443 ppb	56.082 ppb	62.409 ppb	6,304.006 ppb	59.477 ppb	59.887 ppb	59.860 ppb
Concentration per Run 2	117.779 %	117.336 %	61.868 ppb	57.756 ppb	64.078 ppb	6,346.880 ppb	66.560 ppb	66.615 ppb	65.995 ppb
Concentration per Run 3	120.457 %	116.870 %	63.364 ppb	60.497 ppb	66.782 ppb	6,631.720 ppb	64.422 ppb	65.428 ppb	61.305 ppb
Recovery Percentage 1			103.153 %	96.853 %	107.371 %	107.126 %	105.811 %	106.628 %	103.978 %
Concentration RSD	2.3 %	0.4 %	2.4 %	3.8 %	3.4 %	2.8 %	5.7 %	5.6 %	5.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	63.952 ppb	114.176 %	103.505 %	60.046 ppb	58.551 ppb	62.305 ppb	56.559 ppb	107.333 %	104.028 %
Concentration per Run 1	61.025 ppb	111.887 %	108.487 %	55.404 ppb	54.613 ppb	56.711 ppb	52.464 ppb	106.080 %	107.668 %
Concentration per Run 2	65.989 ppb	114.471 %	98.872 %	62.086 ppb	65.577 ppb	64.763 ppb	59.306 ppb	107.840 %	102.449 %
Concentration per Run 3	64.842 ppb	116.171 %	103.155 %	62.648 ppb	55.463 ppb	65.442 ppb	57.907 ppb	108.079 %	101.966 %
Recovery Percentage 1	106.586 %			100.077 %	97.585 %	103.842 %	94.265 %		
Concentration RSD	4.1 %	1.9 %	4.7 %	6.7 %	10.4 %	7.8 %	6.4 %	1.0 %	3.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	55.413 ppb	56.573 ppb	108.432 %	105.719 %	57.277 ppb	58.299 ppb	108.564 %	106.293 %	108.353 %
Concentration per Run 1	51.797 ppb	52.440 ppb	107.752 %	110.555 %	52.673 ppb	56.924 ppb	105.687 %	106.944 %	106.289 %
Concentration per Run 2	56.138 ppb	57.188 ppb	109.127 %	104.057 %	58.742 ppb	57.722 ppb	111.550 %	105.140 %	108.479 %
Concentration per Run 3	58.305 ppb	60.091 ppb	108.416 %	102.546 %	60.417 ppb	60.253 ppb	108.455 %	106.795 %	110.292 %
Recovery Percentage 1	92.356 %	94.288 %			95.462 %	97.166 %			
Concentration RSD	6.0 %	6.8 %	0.6 %	4.0 %	7.1 %	3.0 %	2.7 %	0.9 %	1.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	102.451 %	57.178 ppb	57.252 ppb	102.981 %	99.829 %
Concentration per Run 1	106.181 %	54.990 ppb	55.776 ppb	102.009 %	100.795 %
Concentration per Run 2	99.083 %	59.015 ppb	57.172 ppb	101.106 %	99.256 %
Concentration per Run 3	102.089 %	57.530 ppb	58.809 ppb	105.829 %	99.436 %
Recovery Percentage 1		95.297 %	95.420 %		
Concentration RSD	3.5 %	3.6 %	2.7 %	2.4 %	0.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 134
Analysis label: CCB
Analysis started at: 9/14/2023 10:25:32 PM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 10
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	106.988 %	102.204 %	0.014 ppb	0.014 ppb	11.558 ppb	1.475 ppb	1.702 ppb	8.792 ppb	6.068 ppb
Concentration per Run 1	108.418 %	109.419 %	0.014 ppb	0.008 ppb	-4.480 ppb	2.341 ppb	1.787 ppb	12.012 ppb	26.317 ppb
Concentration per Run 2	107.285 %	91.984 %	0.014 ppb	0.016 ppb	22.634 ppb	1.117 ppb	1.689 ppb	5.289 ppb	9.882 ppb
Concentration per Run 3	105.261 %	105.210 %	0.013 ppb	0.017 ppb	16.521 ppb	0.965 ppb	1.631 ppb	9.074 ppb	-17.995 ppb
Recovery Percentage 1			2.770 %	0.138 %	11.558 %	2.106 %	17.024 %	8.792 %	6.068 %
Concentration RSD	1.5 %	8.9 %	4.9 %	36.2 %	123.0 %	51.2 %	4.6 %	38.3 %	369.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	106.763 %	103.045 %	0.034 ppb	-0.022 ppb	0.189 ppb	12.744 ppb	0.014 ppb	0.071 ppb	0.047 ppb
Concentration per Run 1	104.514 %	117.522 %	0.008 ppb	-0.074 ppb	0.179 ppb	11.303 ppb	0.020 ppb	0.057 ppb	0.024 ppb
Concentration per Run 2	106.257 %	98.881 %	0.076 ppb	0.015 ppb	0.156 ppb	18.804 ppb	0.004 ppb	0.088 ppb	0.049 ppb
Concentration per Run 3	109.518 %	92.730 %	0.017 ppb	-0.009 ppb	0.233 ppb	8.124 ppb	0.019 ppb	0.068 ppb	0.068 ppb
Recovery Percentage 1			0.670 %	-2.224 %	18.935 %	25.488 %	2.856 %	3.545 %	4.673 %
Concentration RSD	2.4 %	12.5 %	109.9 %	207.5 %	21.0 %	43.0 %	61.2 %	22.5 %	47.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.164 ppb	110.608 %	99.666 %	0.077 ppb	0.260 ppb	-0.020 ppb	0.139 ppb	104.705 %	99.209 %
Concentration per Run 1	0.952 ppb	111.119 %	109.780 %	0.116 ppb	0.004 ppb	-0.069 ppb	0.122 ppb	106.120 %	112.381 %
Concentration per Run 2	1.030 ppb	109.528 %	99.575 %	0.017 ppb	0.369 ppb	-0.088 ppb	0.159 ppb	105.020 %	96.756 %
Concentration per Run 3	1.508 ppb	111.177 %	89.644 %	0.098 ppb	0.408 ppb	0.098 ppb	0.136 ppb	102.976 %	88.491 %
Recovery Percentage 1	23.271 %			15.385 %	5.204 %	-3.926 %	6.954 %		
Concentration RSD	25.9 %	0.8 %	10.1 %	68.3 %	85.7 %	520.9 %	13.4 %	1.5 %	12.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.015 ppb	0.006 ppb	105.804 %	99.188 %	0.075 ppb	0.090 ppb	102.248 %	99.451 %	102.692 %
Concentration per Run 1	0.013 ppb	0.009 ppb	102.834 %	110.306 %	0.057 ppb	0.081 ppb	102.695 %	110.434 %	102.703 %
Concentration per Run 2	0.020 ppb	0.007 ppb	105.138 %	96.903 %	0.086 ppb	0.132 ppb	102.995 %	97.875 %	102.609 %
Concentration per Run 3	0.012 ppb	0.004 ppb	109.438 %	90.354 %	0.082 ppb	0.058 ppb	101.054 %	90.045 %	102.765 %
Recovery Percentage 1	3.801 %				1.873 %	18.078 %			
Concentration RSD	28.7 %	40.8 %	3.2 %	10.3 %	21.1 %	42.3 %	1.0 %	10.3 %	0.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	95.158 %	0.168 ppb	0.030 ppb	100.153 %	95.516 %
Concentration per Run 1	105.797 %	0.088 ppb	0.027 ppb	100.107 %	106.474 %
Concentration per Run 2	93.446 %	0.203 ppb	0.028 ppb	100.643 %	94.622 %
Concentration per Run 3	86.232 %	0.213 ppb	0.034 ppb	99.710 %	85.452 %
Recovery Percentage 1		16.806 %	2.972 %		
Concentration RSD	10.4 %	41.3 %	12.5 %	0.5 %	11.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 135
Analysis label: WG1825986-2D10 6020TS
Analysis started at: 9/14/2023 10:30:24 PM
User name ALPHALAB\ICPMSRQ
Rack 2
Vial 31
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	110.149 %	106.413 %	57.902 ppb	71.497 ppb	1,399.517 ppb	1,724.456 ppb	4,186.462 ppb	1,482.247 ppb	3,891.914 ppb
Concentration per Run 1	109.766 %	108.818 %	57.885 ppb	72.255 ppb	1,352.854 ppb	1,680.532 ppb	4,216.852 ppb	1,459.698 ppb	3,418.110 ppb
Concentration per Run 2	109.771 %	108.217 %	57.250 ppb	70.667 ppb	1,400.354 ppb	1,698.958 ppb	4,347.029 ppb	1,486.124 ppb	4,249.736 ppb
Concentration per Run 3	110.910 %	102.204 %	58.569 ppb	71.570 ppb	1,445.342 ppb	1,793.878 ppb	3,995.504 ppb	1,500.920 ppb	4,007.896 ppb
Concentration RSD	0.6 %	3.4 %	1.1 %	1.1 %	3.3 %	3.5 %	4.2 %	1.4 %	11.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	124.822 %	121.965 %	156.876 ppb	143.947 ppb	314.951 ppb	11,804.271 ppb	77.323 ppb	136.099 ppb	110.084 ppb
Concentration per Run 1	120.224 %	125.072 %	152.439 ppb	138.449 ppb	299.902 ppb	10,989.114 ppb	73.156 ppb	130.451 ppb	106.722 ppb
Concentration per Run 2	124.596 %	119.945 %	158.336 ppb	148.322 ppb	328.387 ppb	12,301.517 ppb	80.631 ppb	138.113 ppb	111.357 ppb
Concentration per Run 3	129.647 %	120.877 %	159.853 ppb	145.071 ppb	316.564 ppb	12,122.181 ppb	78.181 ppb	139.731 ppb	112.173 ppb
Concentration RSD	3.8 %	2.2 %	2.5 %	3.5 %	4.5 %	6.0 %	4.9 %	3.6 %	2.7 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	184.220 ppb	110.554 %	109.494 %	147.330 ppb	164.305 ppb	90.545 ppb	132.801 ppb	104.554 %	104.579 %
Concentration per Run 1	174.677 ppb	110.158 %	113.514 %	140.495 ppb	157.859 ppb	87.357 ppb	131.220 ppb	102.921 %	107.728 %
Concentration per Run 2	194.499 ppb	110.426 %	104.879 %	155.193 ppb	168.226 ppb	93.029 ppb	135.015 ppb	105.058 %	102.681 %
Concentration per Run 3	183.483 ppb	111.078 %	110.090 %	146.302 ppb	166.830 ppb	91.248 ppb	132.167 ppb	105.684 %	103.330 %
Concentration RSD	5.4 %	0.4 %	4.0 %	5.0 %	3.4 %	3.2 %	1.5 %	1.4 %	2.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	54.396 ppb	162.421 ppb	105.484 %	106.433 %	99.122 ppb	229.729 ppb	105.511 %	104.590 %	102.051 %
Concentration per Run 1	51.656 ppb	156.304 ppb	107.101 %	109.216 %	94.679 ppb	212.506 ppb	102.298 %	110.788 %	100.246 %
Concentration per Run 2	55.530 ppb	163.549 ppb	104.572 %	106.420 %	100.705 ppb	238.824 ppb	104.023 %	100.842 %	100.502 %
Concentration per Run 3	56.001 ppb	167.411 ppb	104.779 %	103.663 %	101.983 ppb	237.858 ppb	110.213 %	102.140 %	105.406 %
Concentration RSD	4.4 %	3.5 %	1.3 %	2.6 %	3.9 %	6.5 %	3.9 %	5.2 %	2.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	102.076 %	59.890 ppb	200.458 ppb	99.749 %	101.658 %
Concentration per Run 1	105.915 %	57.564 ppb	191.012 ppb	98.454 %	104.694 %
Concentration per Run 2	100.462 %	59.425 ppb	203.110 ppb	100.538 %	100.609 %
Concentration per Run 3	99.851 %	62.681 ppb	207.252 ppb	100.255 %	99.671 %
Concentration RSD	3.3 %	4.3 %	4.2 %	1.1 %	2.6 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 136
Analysis label: WG1825986-5D10 6020TS
Analysis started at: 9/14/2023 10:35:12 PM
User name ALPHALAB\ICPMSRQ
Rack 2
Vial 35
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	114.450 %	116.433 %	46.310 ppb	46.487 ppb	4,250.533 ppb	7,075.287 ppb	28,057.681 ppb	5,286.624 ppb	4,086.966 ppb
Concentration per Run 1	113.890 %	112.425 %	45.841 ppb	46.946 ppb	4,200.916 ppb	7,104.584 ppb	28,698.747 ppb	5,084.207 ppb	3,968.952 ppb
Concentration per Run 2	114.178 %	118.437 %	46.856 ppb	46.973 ppb	4,184.683 ppb	6,896.381 ppb	27,613.615 ppb	5,320.127 ppb	4,211.679 ppb
Concentration per Run 3	115.282 %	118.437 %	46.234 ppb	45.542 ppb	4,365.999 ppb	7,224.896 ppb	27,860.681 ppb	5,455.536 ppb	4,080.266 ppb
Concentration RSD	0.6 %	3.0 %	1.1 %	1.8 %	2.4 %	2.3 %	2.0 %	3.6 %	3.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	159.437 %	156.110 %	111.983 ppb	84.605 ppb	364.174 ppb	59,712.306 ppb	52.303 ppb	63.874 ppb	65.169 ppb
Concentration per Run 1	155.786 %	159.838 %	105.181 ppb	80.705 ppb	347.351 ppb	54,533.309 ppb	51.851 ppb	58.108 ppb	63.426 ppb
Concentration per Run 2	161.721 %	157.787 %	114.622 ppb	84.614 ppb	364.594 ppb	61,606.295 ppb	51.771 ppb	65.590 ppb	65.610 ppb
Concentration per Run 3	160.805 %	150.704 %	116.146 ppb	88.496 ppb	380.577 ppb	62,997.313 ppb	53.287 ppb	67.924 ppb	66.470 ppb
Concentration RSD	2.0 %	3.1 %	5.3 %	4.6 %	4.6 %	7.6 %	1.6 %	8.0 %	2.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	110.339 ppb	116.292 %	108.446 %	67.126 ppb	68.451 ppb	57.457 ppb	49.104 ppb	106.531 %	102.949 %
Concentration per Run 1	106.038 ppb	110.190 %	112.173 %	63.070 ppb	62.996 ppb	53.923 ppb	44.172 ppb	104.031 %	108.638 %
Concentration per Run 2	112.978 ppb	118.040 %	106.325 %	69.915 ppb	66.850 ppb	58.163 ppb	51.456 ppb	105.471 %	99.425 %
Concentration per Run 3	112.002 ppb	120.647 %	106.840 %	68.394 ppb	75.508 ppb	60.284 ppb	51.683 ppb	110.092 %	100.784 %
Concentration RSD	3.4 %	4.7 %	3.0 %	5.4 %	9.4 %	5.6 %	8.7 %	3.0 %	4.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	1.759 ppb	49.004 ppb	106.715 %	105.553 %	48.794 ppb	172.222 ppb	112.936 %	111.292 %	108.586 %
Concentration per Run 1	1.711 ppb	46.428 ppb	101.691 %	106.419 %	47.280 ppb	165.864 ppb	109.245 %	115.603 %	105.222 %
Concentration per Run 2	1.800 ppb	50.145 ppb	110.864 %	106.066 %	49.716 ppb	177.429 ppb	112.509 %	108.654 %	109.502 %
Concentration per Run 3	1.766 ppb	50.438 ppb	107.589 %	104.174 %	49.387 ppb	173.373 ppb	117.054 %	109.618 %	111.034 %
Concentration RSD	2.5 %	4.6 %	4.4 %	1.1 %	2.7 %	3.4 %	3.5 %	3.4 %	2.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.604 %	46.721 ppb	80.902 ppb	103.285 %	99.463 %
Concentration per Run 1	109.751 %	44.120 ppb	76.947 ppb	99.591 %	102.259 %
Concentration per Run 2	104.132 %	48.589 ppb	82.425 ppb	103.526 %	98.137 %
Concentration per Run 3	102.931 %	47.453 ppb	83.335 ppb	106.739 %	97.993 %
Concentration RSD	3.4 %	5.0 %	4.3 %	3.5 %	2.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 137
Analysis label: WG1825986-3D10 6020TS
Analysis started at: 9/14/2023 10:40:01 PM
User name ALPHALAB\ICPMSRQ
Rack 2
Vial 33
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	115.193 %	124.649 %	10.593 ppb	144.275 ppb	1,844.572 ppb	4,565.862 ppb	29,120.061 ppb	2,920.298 ppb	1,945.034 ppb
Concentration per Run 1	116.473 %	130.461 %	10.670 ppb	142.340 ppb	1,750.398 ppb	4,252.553 ppb	28,523.502 ppb	2,742.888 ppb	1,856.975 ppb
Concentration per Run 2	115.063 %	119.639 %	10.611 ppb	145.804 ppb	1,915.833 ppb	4,659.785 ppb	29,395.323 ppb	2,890.807 ppb	1,998.841 ppb
Concentration per Run 3	114.043 %	123.848 %	10.499 ppb	144.680 ppb	1,867.484 ppb	4,785.247 ppb	29,441.359 ppb	3,127.197 ppb	1,979.288 ppb
Concentration RSD	1.1 %	4.4 %	0.8 %	1.2 %	4.6 %	6.1 %	1.8 %	6.6 %	4.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	152.355 %	142.035 %	151.542 ppb	79.866 ppb	481.422 ppb	52,164.414 ppb	103.506 ppb	111.857 ppb	66.787 ppb
Concentration per Run 1	149.860 %	147.255 %	145.416 ppb	75.380 ppb	457.732 ppb	49,945.887 ppb	99.177 ppb	108.731 ppb	62.538 ppb
Concentration per Run 2	150.067 %	141.662 %	148.991 ppb	80.634 ppb	479.732 ppb	52,893.511 ppb	101.412 ppb	111.167 ppb	67.247 ppb
Concentration per Run 3	157.139 %	137.188 %	160.221 ppb	83.585 ppb	506.801 ppb	53,653.843 ppb	109.929 ppb	115.674 ppb	70.575 ppb
Concentration RSD	2.7 %	3.6 %	5.1 %	5.2 %	5.1 %	3.8 %	5.5 %	3.1 %	6.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	160.051 ppb	113.000 %	111.547 %	39.085 ppb	41.540 ppb	204.392 ppb	170.864 ppb	105.166 %	102.472 %
Concentration per Run 1	153.415 ppb	110.613 %	115.132 %	37.724 ppb	38.981 ppb	189.796 ppb	158.369 ppb	103.028 %	107.688 %
Concentration per Run 2	158.395 ppb	114.762 %	114.087 %	37.971 ppb	41.206 ppb	202.789 ppb	177.672 ppb	107.528 %	100.397 %
Concentration per Run 3	168.344 ppb	113.626 %	105.421 %	41.560 ppb	44.431 ppb	220.591 ppb	176.552 ppb	104.941 %	99.330 %
Concentration RSD	4.7 %	1.9 %	4.8 %	5.5 %	6.6 %	7.6 %	6.3 %	2.1 %	4.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	9.720 ppb	10.486 ppb	107.558 %	111.155 %	62.621 ppb	500.556 ppb	112.591 %	111.177 %	105.502 %
Concentration per Run 1	9.072 ppb	9.712 ppb	107.161 %	115.610 %	59.598 ppb	467.643 ppb	111.886 %	114.812 %	103.741 %
Concentration per Run 2	9.900 ppb	10.881 ppb	105.014 %	109.099 %	63.176 ppb	517.840 ppb	112.200 %	110.099 %	102.345 %
Concentration per Run 3	10.187 ppb	10.865 ppb	110.498 %	108.757 %	65.090 ppb	516.186 ppb	113.688 %	108.619 %	110.419 %
Concentration RSD	6.0 %	6.4 %	2.6 %	3.5 %	4.5 %	5.7 %	0.9 %	2.9 %	4.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	102.343 %	22.587 ppb	137.594 ppb	100.623 %	98.916 %
Concentration per Run 1	104.928 %	21.632 ppb	129.802 ppb	95.648 %	102.087 %
Concentration per Run 2	101.737 %	22.605 ppb	139.558 ppb	102.991 %	99.234 %
Concentration per Run 3	100.363 %	23.525 ppb	143.422 ppb	103.230 %	95.427 %
Concentration RSD	2.3 %	4.2 %	5.1 %	4.3 %	3.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	138	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	WG1825986-4D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 10:44:49 PM	Vial	34		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	107.390 %	102.605 %	1.399 ppb	2.584 ppb	16.546 ppb	2,961.853 ppb	29,504.491 ppb	1,102.612 ppb	332.406 ppb
Concentration per Run 1	106.330 %	109.419 %	1.422 ppb	2.654 ppb	13.676 ppb	2,971.059 ppb	31,113.387 ppb	1,118.172 ppb	418.441 ppb
Concentration per Run 2	107.775 %	101.603 %	1.404 ppb	2.521 ppb	15.047 ppb	2,999.027 ppb	27,615.140 ppb	1,092.440 ppb	274.587 ppb
Concentration per Run 3	108.066 %	96.794 %	1.372 ppb	2.577 ppb	20.917 ppb	2,915.473 ppb	29,784.947 ppb	1,097.223 ppb	304.191 ppb
Concentration RSD	0.9 %	6.2 %	1.8 %	2.6 %	23.2 %	1.4 %	6.0 %	1.2 %	22.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	152.075 %	150.952 %	78.050 ppb	48.548 ppb	340.846 ppb	56,950.351 ppb	10.025 ppb	20.543 ppb	21.067 ppb
Concentration per Run 1	148.109 %	147.907 %	77.271 ppb	49.638 ppb	342.510 ppb	59,796.901 ppb	10.361 ppb	21.018 ppb	21.373 ppb
Concentration per Run 2	156.318 %	152.568 %	77.818 ppb	49.032 ppb	340.999 ppb	54,404.643 ppb	9.637 ppb	19.787 ppb	21.237 ppb
Concentration per Run 3	151.798 %	152.381 %	79.061 ppb	46.973 ppb	339.029 ppb	56,649.509 ppb	10.076 ppb	20.824 ppb	20.591 ppb
Concentration RSD	2.7 %	1.7 %	1.2 %	2.9 %	0.5 %	4.8 %	3.6 %	3.2 %	2.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	65.337 ppb	111.207 %	110.473 %	18.583 ppb	21.021 ppb	6.626 ppb	1.999 ppb	102.614 %	102.358 %
Concentration per Run 1	65.662 ppb	110.743 %	108.952 %	18.261 ppb	15.978 ppb	6.341 ppb	2.066 ppb	103.976 %	104.866 %
Concentration per Run 2	66.386 ppb	110.916 %	111.782 %	18.991 ppb	23.480 ppb	6.634 ppb	1.937 ppb	101.420 %	101.461 %
Concentration per Run 3	63.963 ppb	111.962 %	110.684 %	18.496 ppb	23.607 ppb	6.903 ppb	1.996 ppb	102.445 %	100.746 %
Concentration RSD	1.9 %	0.6 %	1.3 %	2.0 %	20.8 %	4.2 %	3.2 %	1.3 %	2.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.067 ppb	0.133 ppb	103.387 %	106.161 %	0.541 ppb	134.532 ppb	109.882 %	111.609 %	103.559 %
Concentration per Run 1	0.070 ppb	0.123 ppb	101.473 %	108.927 %	0.459 ppb	129.909 ppb	105.676 %	117.335 %	99.407 %
Concentration per Run 2	0.062 ppb	0.147 ppb	106.234 %	104.305 %	0.580 ppb	137.727 ppb	112.364 %	106.860 %	104.539 %
Concentration per Run 3	0.071 ppb	0.130 ppb	102.455 %	105.251 %	0.583 ppb	135.958 ppb	111.608 %	110.632 %	106.731 %
Concentration RSD	7.4 %	9.1 %	2.4 %	2.3 %	13.1 %	3.0 %	3.3 %	4.8 %	3.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.920 %	0.462 ppb	37.640 ppb	101.996 %	100.099 %
Concentration per Run 1	111.249 %	0.387 ppb	35.852 ppb	99.666 %	105.401 %
Concentration per Run 2	104.115 %	0.484 ppb	38.002 ppb	103.235 %	98.630 %
Concentration per Run 3	105.398 %	0.513 ppb	39.066 ppb	103.086 %	96.265 %
Concentration RSD	3.6 %	14.3 %	4.4 %	2.0 %	4.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	139	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-21D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 10:49:43 PM	Vial	32		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.236 %	107.214 %	1.371 ppb	2.384 ppb	12.028 ppb	3,076.736 ppb	28,407.622 ppb	1,072.248 ppb	364.335 ppb
Concentration per Run 1	106.144 %	116.032 %	1.377 ppb	2.461 ppb	16.067 ppb	2,946.075 ppb	27,897.390 ppb	1,027.534 ppb	287.763 ppb
Concentration per Run 2	110.121 %	99.198 %	1.352 ppb	2.342 ppb	9.630 ppb	3,141.115 ppb	29,056.235 ppb	1,092.189 ppb	308.679 ppb
Concentration per Run 3	111.442 %	106.413 %	1.383 ppb	2.350 ppb	10.386 ppb	3,143.018 ppb	28,269.240 ppb	1,097.022 ppb	496.562 ppb
Concentration RSD	2.5 %	7.9 %	1.2 %	2.8 %	29.3 %	3.7 %	2.1 %	3.6 %	31.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	161.196 %	147.503 %	81.130 ppb	49.204 ppb	335.836 ppb	57,036.305 ppb	9.998 ppb	21.236 ppb	19.904 ppb
Concentration per Run 1	166.533 %	148.093 %	81.159 ppb	47.911 ppb	335.925 ppb	55,819.528 ppb	10.008 ppb	20.450 ppb	19.388 ppb
Concentration per Run 2	159.220 %	151.635 %	79.471 ppb	48.912 ppb	325.885 ppb	55,800.647 ppb	9.758 ppb	21.696 ppb	19.420 ppb
Concentration per Run 3	157.835 %	142.781 %	82.761 ppb	50.787 ppb	345.698 ppb	59,488.741 ppb	10.228 ppb	21.561 ppb	20.904 ppb
Concentration RSD	2.9 %	3.0 %	2.0 %	3.0 %	2.9 %	3.7 %	2.4 %	3.2 %	4.4 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	65.535 ppb	112.424 %	113.777 %	16.888 ppb	21.688 ppb	6.418 ppb	1.482 ppb	103.450 %	103.169 %
Concentration per Run 1	64.575 ppb	111.726 %	112.447 %	16.836 ppb	21.668 ppb	6.049 ppb	1.322 ppb	101.680 %	108.170 %
Concentration per Run 2	63.770 ppb	114.445 %	115.804 %	17.195 ppb	22.352 ppb	6.520 ppb	1.465 ppb	103.869 %	100.562 %
Concentration per Run 3	68.260 ppb	111.101 %	113.080 %	16.634 ppb	21.045 ppb	6.685 ppb	1.658 ppb	104.800 %	100.775 %
Concentration RSD	3.7 %	1.6 %	1.6 %	1.7 %	3.0 %	5.1 %	11.4 %	1.5 %	4.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.046 ppb	0.121 ppb	107.768 %	106.748 %	0.502 ppb	127.674 ppb	108.839 %	111.371 %	103.932 %
Concentration per Run 1	0.041 ppb	0.104 ppb	103.752 %	108.455 %	0.488 ppb	120.009 ppb	107.833 %	117.032 %	101.189 %
Concentration per Run 2	0.048 ppb	0.136 ppb	108.276 %	106.485 %	0.474 ppb	135.415 ppb	106.715 %	107.514 %	103.266 %
Concentration per Run 3	0.049 ppb	0.124 ppb	111.275 %	105.304 %	0.545 ppb	127.598 ppb	111.970 %	109.568 %	107.340 %
Concentration RSD	8.8 %	13.2 %	3.5 %	1.5 %	7.5 %	6.0 %	2.5 %	4.5 %	3.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.737 %	0.334 ppb	33.591 ppb	102.030 %	100.865 %
Concentration per Run 1	108.409 %	0.287 ppb	31.528 ppb	100.699 %	104.544 %
Concentration per Run 2	107.544 %	0.342 ppb	33.833 ppb	101.217 %	100.186 %
Concentration per Run 3	104.257 %	0.372 ppb	35.411 ppb	104.175 %	97.866 %
Concentration RSD	2.1 %	12.9 %	5.8 %	1.8 %	3.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	140	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-23D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 10:54:31 PM	Vial	38		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	108.263 %	103.006 %	1.303 ppb	1.188 ppb	22.728 ppb	2,961.045 ppb	25,168.462 ppb	705.676 ppb	495.202 ppb
Concentration per Run 1	108.383 %	119.038 %	1.287 ppb	1.181 ppb	13.218 ppb	2,666.965 ppb	25,220.332 ppb	618.425 ppb	314.869 ppb
Concentration per Run 2	108.918 %	91.383 %	1.293 ppb	1.180 ppb	32.134 ppb	3,167.059 ppb	24,819.714 ppb	762.062 ppb	508.974 ppb
Concentration per Run 3	107.488 %	98.597 %	1.328 ppb	1.203 ppb	22.832 ppb	3,049.110 ppb	25,465.339 ppb	736.540 ppb	661.764 ppb
Concentration RSD	0.7 %	13.9 %	1.7 %	1.1 %	41.6 %	8.8 %	1.3 %	10.9 %	35.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	135.385 %	131.348 %	60.767 ppb	41.212 ppb	196.610 ppb	45,006.250 ppb	8.346 ppb	19.017 ppb	14.237 ppb
Concentration per Run 1	138.498 %	145.577 %	52.683 ppb	35.584 ppb	172.457 ppb	39,134.470 ppb	7.567 ppb	17.078 ppb	12.961 ppb
Concentration per Run 2	133.358 %	123.394 %	65.261 ppb	45.403 ppb	212.521 ppb	48,788.096 ppb	9.031 ppb	20.294 ppb	15.397 ppb
Concentration per Run 3	134.297 %	125.072 %	64.357 ppb	42.649 ppb	204.853 ppb	47,096.184 ppb	8.438 ppb	19.678 ppb	14.352 ppb
Concentration RSD	2.0 %	9.4 %	11.5 %	12.3 %	10.8 %	11.5 %	8.8 %	9.0 %	8.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	55.969 ppb	107.529 %	102.233 %	11.714 ppb	22.883 ppb	8.692 ppb	1.084 ppb	103.579 %	99.877 %
Concentration per Run 1	49.015 ppb	105.893 %	112.094 %	11.002 ppb	22.658 ppb	7.902 ppb	1.041 ppb	103.964 %	108.096 %
Concentration per Run 2	61.536 ppb	108.021 %	94.079 %	11.951 ppb	24.193 ppb	9.491 ppb	1.102 ppb	102.312 %	94.244 %
Concentration per Run 3	57.354 ppb	108.672 %	100.527 %	12.190 ppb	21.799 ppb	8.683 ppb	1.109 ppb	104.460 %	97.292 %
Concentration RSD	11.4 %	1.4 %	8.9 %	5.4 %	5.3 %	9.1 %	3.4 %	1.1 %	7.3 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.033 ppb	0.265 ppb	101.991 %	103.965 %	0.232 ppb	142.208 ppb	108.851 %	105.978 %	104.791 %
Concentration per Run 1	0.029 ppb	0.214 ppb	98.758 %	113.220 %	0.194 ppb	124.201 ppb	108.179 %	114.825 %	104.403 %
Concentration per Run 2	0.029 ppb	0.319 ppb	103.561 %	98.386 %	0.285 ppb	152.391 ppb	107.295 %	98.362 %	104.934 %
Concentration per Run 3	0.040 ppb	0.263 ppb	103.652 %	100.289 %	0.216 ppb	150.032 ppb	111.080 %	104.747 %	105.036 %
Concentration RSD	20.4 %	19.8 %	2.7 %	7.8 %	20.4 %	11.0 %	1.8 %	7.8 %	0.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	101.305 %	0.266 ppb	24.978 ppb	98.070 %	94.829 %
Concentration per Run 1	108.909 %	0.220 ppb	22.164 ppb	94.160 %	102.494 %
Concentration per Run 2	96.171 %	0.280 ppb	26.601 ppb	99.455 %	90.150 %
Concentration per Run 3	98.837 %	0.297 ppb	26.170 ppb	100.594 %	91.842 %
Concentration RSD	6.6 %	15.2 %	9.8 %	3.5 %	7.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	141	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-24D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 10:59:20 PM	Vial	39		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	104.717 %	106.814 %	0.368 ppb	1.147 ppb	9.431 ppb	1,629.864 ppb	14,741.370 ppb	655.808 ppb	236.780 ppb
Concentration per Run 1	103.765 %	108.216 %	0.375 ppb	1.186 ppb	3.412 ppb	1,524.434 ppb	15,827.982 ppb	598.605 ppb	200.657 ppb
Concentration per Run 2	104.577 %	103.407 %	0.371 ppb	1.161 ppb	16.186 ppb	1,677.291 ppb	14,522.922 ppb	711.629 ppb	225.111 ppb
Concentration per Run 3	105.810 %	108.818 %	0.360 ppb	1.095 ppb	8.694 ppb	1,687.866 ppb	13,873.206 ppb	657.191 ppb	284.572 ppb
Concentration RSD	1.0 %	2.8 %	2.1 %	4.1 %	68.1 %	5.6 %	6.8 %	8.6 %	18.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	136.037 %	132.248 %	33.582 ppb	24.072 ppb	87.519 ppb	24,155.257 ppb	4.042 ppb	10.478 ppb	9.778 ppb
Concentration per Run 1	129.705 %	141.196 %	31.187 ppb	22.532 ppb	80.502 ppb	22,292.365 ppb	3.772 ppb	9.755 ppb	9.292 ppb
Concentration per Run 2	135.096 %	125.165 %	35.296 ppb	25.649 ppb	92.160 ppb	25,293.979 ppb	4.346 ppb	10.531 ppb	10.239 ppb
Concentration per Run 3	143.311 %	130.384 %	34.264 ppb	24.034 ppb	89.896 ppb	24,879.426 ppb	4.009 ppb	11.148 ppb	9.802 ppb
Concentration RSD	5.0 %	6.2 %	6.4 %	6.5 %	7.1 %	6.7 %	7.1 %	6.7 %	4.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	27.115 ppb	108.280 %	108.002 %	5.217 ppb	7.637 ppb	3.010 ppb	0.547 ppb	101.949 %	103.090 %
Concentration per Run 1	24.978 ppb	106.812 %	111.017 %	4.958 ppb	8.257 ppb	2.674 ppb	0.493 ppb	100.348 %	109.164 %
Concentration per Run 2	28.256 ppb	110.116 %	106.665 %	5.253 ppb	6.958 ppb	3.026 ppb	0.553 ppb	103.770 %	98.881 %
Concentration per Run 3	28.110 ppb	107.913 %	106.322 %	5.440 ppb	7.695 ppb	3.329 ppb	0.594 ppb	101.728 %	101.226 %
Concentration RSD	6.8 %	1.6 %	2.4 %	4.7 %	8.5 %	10.9 %	9.2 %	1.7 %	5.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.008 ppb	0.039 ppb	101.728 %	106.113 %	0.125 ppb	38.338 ppb	103.309 %	105.965 %	97.608 %
Concentration per Run 1	0.009 ppb	0.032 ppb	99.010 %	110.292 %	0.124 ppb	35.694 ppb	101.788 %	112.522 %	98.016 %
Concentration per Run 2	0.004 ppb	0.044 ppb	100.712 %	104.162 %	0.127 ppb	40.386 ppb	102.683 %	103.307 %	97.025 %
Concentration per Run 3	0.012 ppb	0.041 ppb	105.461 %	103.886 %	0.123 ppb	38.935 ppb	105.457 %	102.066 %	97.783 %
Concentration RSD	51.1 %	15.6 %	3.3 %	3.4 %	1.6 %	6.3 %	1.9 %	5.4 %	0.5 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	102.593 %	0.155 ppb	8.726 ppb	98.496 %	99.040 %
Concentration per Run 1	106.145 %	0.131 ppb	8.280 ppb	94.893 %	103.137 %
Concentration per Run 2	100.464 %	0.158 ppb	8.868 ppb	99.290 %	98.608 %
Concentration per Run 3	101.169 %	0.178 ppb	9.029 ppb	101.305 %	95.375 %
Concentration RSD	3.0 %	15.1 %	4.5 %	3.3 %	3.9 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	142	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-25D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 11:04:08 PM	Vial	40		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	119.071 %	115.431 %	1.519 ppb	5.866 ppb	2,137.555 ppb	8,874.763 ppb	18,806.204 ppb	3,631.010 ppb	11,626.657 ppb
Concentration per Run 1	116.220 %	104.008 %	1.544 ppb	6.010 ppb	2,155.232 ppb	8,966.676 ppb	19,486.159 ppb	3,559.070 ppb	10,927.804 ppb
Concentration per Run 2	119.316 %	119.038 %	1.493 ppb	5.806 ppb	2,117.472 ppb	8,847.962 ppb	18,775.424 ppb	3,504.439 ppb	11,220.167 ppb
Concentration per Run 3	121.677 %	123.247 %	1.520 ppb	5.783 ppb	2,139.960 ppb	8,809.653 ppb	18,157.030 ppb	3,829.523 ppb	12,732.000 ppb
Concentration RSD	2.3 %	8.8 %	1.7 %	2.1 %	0.9 %	0.9 %	3.5 %	4.8 %	8.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	145.708 %	137.437 %	66.955 ppb	231.987 ppb	795.982 ppb	39,359.757 ppb	14.952 ppb	30.508 ppb	57.962 ppb
Concentration per Run 1	138.629 %	141.756 %	61.861 ppb	222.103 ppb	754.922 ppb	37,528.369 ppb	13.556 ppb	28.492 ppb	53.925 ppb
Concentration per Run 2	149.635 %	139.332 %	67.842 ppb	232.477 ppb	816.557 ppb	39,843.457 ppb	16.057 ppb	31.158 ppb	60.791 ppb
Concentration per Run 3	148.860 %	131.223 %	71.162 ppb	241.381 ppb	816.468 ppb	40,707.446 ppb	15.243 ppb	31.873 ppb	59.169 ppb
Concentration RSD	4.2 %	4.0 %	7.0 %	4.2 %	4.5 %	4.2 %	8.5 %	5.8 %	6.2 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	213.522 ppb	114.056 %	111.367 %	57.817 ppb	21.349 ppb	131.221 ppb	2.366 ppb	106.194 %	104.013 %
Concentration per Run 1	195.648 ppb	112.121 %	118.772 %	53.360 ppb	19.950 ppb	121.386 ppb	2.196 ppb	104.198 %	105.805 %
Concentration per Run 2	225.316 ppb	113.005 %	103.234 %	62.109 ppb	23.060 ppb	138.369 ppb	2.369 ppb	108.967 %	105.057 %
Concentration per Run 3	219.603 ppb	117.042 %	112.094 %	57.981 ppb	21.037 ppb	133.909 ppb	2.532 ppb	105.416 %	101.178 %
Concentration RSD	7.4 %	2.3 %	7.0 %	7.6 %	7.4 %	6.7 %	7.1 %	2.3 %	2.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	1.631 ppb	3.912 ppb	107.713 %	107.369 %	1.139 ppb	165.616 ppb	114.800 %	111.634 %	107.438 %
Concentration per Run 1	1.566 ppb	3.818 ppb	107.352 %	112.498 %	1.083 ppb	153.456 ppb	110.643 %	114.865 %	103.449 %
Concentration per Run 2	1.609 ppb	3.724 ppb	108.311 %	106.551 %	1.151 ppb	171.304 ppb	115.899 %	110.547 %	108.181 %
Concentration per Run 3	1.717 ppb	4.195 ppb	107.477 %	103.059 %	1.184 ppb	172.089 ppb	117.859 %	109.491 %	110.684 %
Concentration RSD	4.8 %	6.4 %	0.5 %	4.4 %	4.5 %	6.4 %	3.3 %	2.6 %	3.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.098 %	0.368 ppb	385.979 ppb	105.769 %	102.223 %
Concentration per Run 1	109.793 %	0.335 ppb	360.851 ppb	100.606 %	106.377 %
Concentration per Run 2	103.368 %	0.374 ppb	396.491 ppb	107.684 %	100.122 %
Concentration per Run 3	105.134 %	0.394 ppb	400.596 ppb	109.016 %	100.172 %
Concentration RSD	3.1 %	8.1 %	5.7 %	4.3 %	3.5 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	143	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-26D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 11:08:57 PM	Vial	41		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	108.780 %	114.629 %	1.023 ppb	2.203 ppb	72.256 ppb	3,263.026 ppb	26,339.139 ppb	993.842 ppb	2,324.711 ppb
Concentration per Run 1	107.716 %	128.056 %	1.048 ppb	2.276 ppb	56.156 ppb	2,943.937 ppb	27,115.006 ppb	1,000.754 ppb	2,169.855 ppb
Concentration per Run 2	109.260 %	108.216 %	1.013 ppb	2.186 ppb	76.098 ppb	3,381.622 ppb	25,968.096 ppb	950.488 ppb	2,160.671 ppb
Concentration per Run 3	109.364 %	107.615 %	1.007 ppb	2.147 ppb	84.514 ppb	3,463.520 ppb	25,934.317 ppb	1,030.282 ppb	2,643.606 ppb
Concentration RSD	0.8 %	10.1 %	2.2 %	3.0 %	20.2 %	8.6 %	2.6 %	4.1 %	11.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	149.770 %	150.828 %	68.667 ppb	46.285 ppb	286.502 ppb	48,590.400 ppb	9.277 ppb	20.067 ppb	18.112 ppb
Concentration per Run 1	147.183 %	159.185 %	64.141 ppb	43.378 ppb	265.617 ppb	45,150.408 ppb	8.635 ppb	19.176 ppb	17.279 ppb
Concentration per Run 2	150.649 %	150.051 %	68.283 ppb	45.324 ppb	284.092 ppb	49,320.997 ppb	9.422 ppb	19.667 ppb	17.526 ppb
Concentration per Run 3	151.478 %	143.247 %	73.578 ppb	50.152 ppb	309.797 ppb	51,299.794 ppb	9.775 ppb	21.358 ppb	19.531 ppb
Concentration RSD	1.5 %	5.3 %	6.9 %	7.5 %	7.7 %	6.5 %	6.3 %	5.7 %	6.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	52.798 ppb	110.850 %	107.342 %	23.518 ppb	10.359 ppb	29.296 ppb	1.833 ppb	105.326 %	103.738 %
Concentration per Run 1	49.927 ppb	109.491 %	112.132 %	22.290 ppb	11.744 ppb	28.261 ppb	1.691 ppb	104.199 %	107.214 %
Concentration per Run 2	51.040 ppb	113.061 %	114.506 %	22.627 ppb	10.317 ppb	28.805 ppb	1.759 ppb	108.056 %	101.117 %
Concentration per Run 3	57.428 ppb	109.997 %	95.388 %	25.638 ppb	9.015 ppb	30.822 ppb	2.049 ppb	103.724 %	102.883 %
Concentration RSD	7.7 %	1.7 %	9.7 %	7.8 %	13.2 %	4.6 %	10.4 %	2.3 %	3.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.069 ppb	0.286 ppb	103.922 %	107.312 %	0.523 ppb	100.720 ppb	106.787 %	108.112 %	104.485 %
Concentration per Run 1	0.067 ppb	0.292 ppb	99.919 %	110.148 %	0.487 ppb	95.641 ppb	105.581 %	112.226 %	101.490 %
Concentration per Run 2	0.070 ppb	0.313 ppb	104.756 %	108.388 %	0.545 ppb	102.659 ppb	104.562 %	106.556 %	105.310 %
Concentration per Run 3	0.069 ppb	0.253 ppb	107.092 %	103.401 %	0.536 ppb	103.861 ppb	110.219 %	105.553 %	106.656 %
Concentration RSD	2.2 %	10.7 %	3.5 %	3.3 %	5.9 %	4.4 %	2.8 %	3.3 %	2.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.179 %	0.216 ppb	44.744 ppb	101.663 %	98.872 %
Concentration per Run 1	107.500 %	0.191 ppb	43.253 ppb	98.289 %	101.057 %
Concentration per Run 2	103.995 %	0.224 ppb	44.864 ppb	103.684 %	98.821 %
Concentration per Run 3	104.043 %	0.233 ppb	46.114 ppb	103.015 %	96.739 %
Concentration RSD	1.9 %	10.3 %	3.2 %	2.9 %	2.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	144	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-27D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 11:13:45 PM	Vial	42		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.061 %	107.014 %	1.754 ppb	1.336 ppb	46.607 ppb	3,184.573 ppb	22,134.167 ppb	1,063.071 ppb	1,727.061 ppb
Concentration per Run 1	108.319 %	116.032 %	1.735 ppb	1.309 ppb	39.115 ppb	3,008.132 ppb	22,155.303 ppb	1,010.005 ppb	1,660.900 ppb
Concentration per Run 2	109.279 %	106.413 %	1.731 ppb	1.323 ppb	43.039 ppb	3,115.568 ppb	21,858.852 ppb	1,129.973 ppb	1,355.249 ppb
Concentration per Run 3	109.583 %	98.597 %	1.797 ppb	1.375 ppb	57.665 ppb	3,430.018 ppb	22,388.348 ppb	1,049.236 ppb	2,165.033 ppb
Concentration RSD	0.6 %	8.2 %	2.1 %	2.6 %	21.0 %	6.9 %	1.2 %	5.8 %	23.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	131.894 %	130.788 %	50.096 ppb	37.220 ppb	1,219.297 ppb	35,880.903 ppb	15.893 ppb	21.789 ppb	13.923 ppb
Concentration per Run 1	133.312 %	134.019 %	47.228 ppb	35.425 ppb	1,161.518 ppb	35,347.848 ppb	14.842 ppb	20.922 ppb	13.190 ppb
Concentration per Run 2	133.514 %	131.969 %	50.216 ppb	37.085 ppb	1,228.763 ppb	35,379.675 ppb	16.228 ppb	21.665 ppb	14.191 ppb
Concentration per Run 3	128.856 %	126.377 %	52.843 ppb	39.150 ppb	1,267.610 ppb	36,915.185 ppb	16.609 ppb	22.780 ppb	14.387 ppb
Concentration RSD	2.0 %	3.0 %	5.6 %	5.0 %	4.4 %	2.5 %	5.9 %	4.3 %	4.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	78.286 ppb	110.484 %	113.459 %	41.949 ppb	28.065 ppb	27.886 ppb	1.606 ppb	104.423 %	104.262 %
Concentration per Run 1	73.452 ppb	108.679 %	117.871 %	38.998 ppb	24.204 ppb	25.920 ppb	1.454 ppb	100.366 %	108.445 %
Concentration per Run 2	78.901 ppb	110.649 %	111.375 %	43.992 ppb	29.207 ppb	28.705 ppb	1.588 ppb	105.513 %	103.249 %
Concentration per Run 3	82.504 ppb	112.125 %	111.132 %	42.859 ppb	30.785 ppb	29.033 ppb	1.776 ppb	107.390 %	101.092 %
Concentration RSD	5.8 %	1.6 %	3.4 %	6.2 %	12.2 %	6.1 %	10.1 %	3.5 %	3.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.125 ppb	0.404 ppb	104.136 %	105.523 %	0.692 ppb	185.999 ppb	111.454 %	110.405 %	104.303 %
Concentration per Run 1	0.110 ppb	0.375 ppb	102.263 %	110.793 %	0.631 ppb	176.897 ppb	107.175 %	114.657 %	102.480 %
Concentration per Run 2	0.134 ppb	0.370 ppb	104.476 %	102.770 %	0.682 ppb	188.658 ppb	113.189 %	108.050 %	105.833 %
Concentration per Run 3	0.129 ppb	0.466 ppb	105.670 %	103.007 %	0.761 ppb	192.441 ppb	113.997 %	108.507 %	104.596 %
Concentration RSD	10.1 %	13.4 %	1.7 %	4.3 %	9.5 %	4.4 %	3.3 %	3.3 %	1.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.437 %	0.227 ppb	52.536 ppb	100.430 %	100.071 %
Concentration per Run 1	109.326 %	0.206 ppb	50.454 ppb	97.298 %	102.652 %
Concentration per Run 2	103.243 %	0.230 ppb	53.179 ppb	101.632 %	98.980 %
Concentration per Run 3	103.742 %	0.244 ppb	53.973 ppb	102.359 %	98.580 %
Concentration RSD	3.2 %	8.4 %	3.5 %	2.7 %	2.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 145
Analysis label: CCV
Analysis started at: 9/14/2023 11:18:33 PM
User name ALPHALAB\ICPMSRQ
Rack 0
Vial 9
Comment <Comment>

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	105.529 %	102.204 %	57.744 ppb	55.725 ppb	6,305.339 ppb	6,312.172 ppb	83.580 ppb	6,705.263 ppb	6,421.461 ppb
Concentration per Run 1	105.361 %	101.603 %	59.120 ppb	56.569 ppb	5,985.638 ppb	5,935.872 ppb	94.386 ppb	6,321.656 ppb	6,513.742 ppb
Concentration per Run 2	105.089 %	111.222 %	57.526 ppb	55.631 ppb	6,111.909 ppb	6,289.308 ppb	77.490 ppb	6,994.177 ppb	6,484.635 ppb
Concentration per Run 3	106.138 %	93.788 %	56.585 ppb	54.974 ppb	6,818.469 ppb	6,711.335 ppb	78.864 ppb	6,799.955 ppb	6,266.006 ppb
Recovery Percentage 1			96.239 %	92.874 %	105.089 %	105.203 %	139.300 %	111.754 %	107.024 %
Concentration RSD	0.5 %	8.5 %	2.2 %	1.4 %	7.1 %	6.2 %	11.2 %	5.2 %	2.1 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	116.755 %	113.732 %	61.319 ppb	58.343 ppb	64.516 ppb	6,230.309 ppb	63.039 ppb	62.368 ppb	62.121 ppb
Concentration per Run 1	112.081 %	121.716 %	54.666 ppb	53.573 ppb	59.705 ppb	5,902.194 ppb	56.856 ppb	59.252 ppb	57.929 ppb
Concentration per Run 2	116.455 %	107.363 %	66.128 ppb	61.940 ppb	68.300 ppb	6,597.428 ppb	67.806 ppb	64.043 ppb	65.186 ppb
Concentration per Run 3	121.729 %	112.116 %	63.162 ppb	59.517 ppb	65.543 ppb	6,191.304 ppb	64.456 ppb	63.809 ppb	63.247 ppb
Recovery Percentage 1			102.198 %	97.239 %	107.526 %	103.838 %	105.065 %	103.946 %	103.535 %
Concentration RSD	4.1 %	6.4 %	9.7 %	7.4 %	6.8 %	5.6 %	8.9 %	4.3 %	6.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	61.990 ppb	114.320 %	101.228 %	60.099 ppb	57.769 ppb	62.560 ppb	56.766 ppb	106.795 %	103.157 %
Concentration per Run 1	57.545 ppb	110.331 %	104.982 %	57.711 ppb	53.507 ppb	59.317 ppb	54.114 ppb	107.443 %	107.869 %
Concentration per Run 2	64.865 ppb	115.915 %	100.287 %	60.732 ppb	61.442 ppb	62.887 ppb	56.328 ppb	106.033 %	102.295 %
Concentration per Run 3	63.560 ppb	116.715 %	98.417 %	61.853 ppb	58.358 ppb	65.474 ppb	59.857 ppb	106.910 %	99.306 %
Recovery Percentage 1	103.316 %			100.164 %	96.282 %	104.266 %	94.610 %		
Concentration RSD	6.3 %	3.0 %	3.3 %	3.6 %	6.9 %	4.9 %	5.1 %	0.7 %	4.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	56.127 ppb	56.792 ppb	107.013 %	105.877 %	57.159 ppb	58.490 ppb	106.969 %	105.701 %	105.851 %
Concentration per Run 1	53.784 ppb	53.041 ppb	104.318 %	110.857 %	54.029 ppb	55.017 ppb	103.728 %	110.945 %	105.117 %
Concentration per Run 2	56.969 ppb	57.919 ppb	108.113 %	105.159 %	58.222 ppb	58.820 ppb	106.322 %	105.002 %	105.754 %
Concentration per Run 3	57.628 ppb	59.416 ppb	108.609 %	101.614 %	59.226 ppb	61.632 ppb	110.858 %	101.156 %	106.681 %
Recovery Percentage 1	93.545 %	94.654 %			95.265 %	97.483 %			
Concentration RSD	3.7 %	5.9 %	2.2 %	4.4 %	4.8 %	5.7 %	3.4 %	4.7 %	0.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	103.566 %	56.209 ppb	56.719 ppb	104.132 %	100.118 %
Concentration per Run 1	107.270 %	53.943 ppb	54.285 ppb	103.425 %	103.816 %
Concentration per Run 2	101.137 %	56.877 ppb	57.799 ppb	102.019 %	98.862 %
Concentration per Run 3	102.290 %	57.806 ppb	58.073 ppb	106.953 %	97.676 %
Recovery Percentage 1		93.681 %	94.532 %		
Concentration RSD	3.1 %	3.6 %	3.7 %	2.4 %	3.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	146	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/14/2023 11:23:27 PM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	110.520 %	106.814 %	0.018 ppb	0.024 ppb	-3.102 ppb	0.039 ppb	1.015 ppb	5.583 ppb	6.142 ppb
Concentration per Run 1	112.102 %	114.229 %	0.020 ppb	0.014 ppb	-3.780 ppb	1.169 ppb	1.050 ppb	7.369 ppb	28.034 ppb
Concentration per Run 2	110.208 %	104.008 %	0.014 ppb	0.014 ppb	-5.717 ppb	0.068 ppb	1.070 ppb	-5.108 ppb	6.295 ppb
Concentration per Run 3	109.251 %	102.204 %	0.022 ppb	0.045 ppb	0.191 ppb	-1.122 ppb	0.924 ppb	14.488 ppb	-15.902 ppb
Recovery Percentage 1			3.700 %	0.242 %	-3.102 %	0.055 %	10.147 %	5.583 %	6.142 %
Concentration RSD	1.3 %	6.1 %	22.8 %	73.2 %	97.1 %	2,970.2 %	7.8 %	177.7 %	357.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	111.796 %	109.569 %	-0.015 ppb	0.029 ppb	0.193 ppb	9.949 ppb	0.002 ppb	0.095 ppb	0.047 ppb
Concentration per Run 1	111.785 %	110.625 %	-0.027 ppb	0.008 ppb	0.263 ppb	16.791 ppb	0.004 ppb	0.101 ppb	0.052 ppb
Concentration per Run 2	111.613 %	113.048 %	0.009 ppb	0.029 ppb	0.194 ppb	7.256 ppb	0.001 ppb	0.151 ppb	0.047 ppb
Concentration per Run 3	111.992 %	105.033 %	-0.027 ppb	0.051 ppb	0.121 ppb	5.798 ppb	0.001 ppb	0.032 ppb	0.042 ppb
Recovery Percentage 1			-0.304 %	2.938 %	19.263 %	19.898 %	0.356 %	4.731 %	4.693 %
Concentration RSD	0.2 %	3.8 %	139.1 %	74.2 %	36.8 %	60.0 %	89.3 %	63.2 %	10.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.089 ppb	114.390 %	103.857 %	0.145 ppb	0.219 ppb	-0.033 ppb	0.130 ppb	107.568 %	105.595 %
Concentration per Run 1	0.712 ppb	115.521 %	108.869 %	0.056 ppb	0.133 ppb	-0.038 ppb	0.090 ppb	109.319 %	110.948 %
Concentration per Run 2	1.158 ppb	113.212 %	106.226 %	0.112 ppb	0.532 ppb	-0.052 ppb	0.174 ppb	104.996 %	104.424 %
Concentration per Run 3	1.396 ppb	114.436 %	96.477 %	0.267 ppb	-0.008 ppb	-0.009 ppb	0.125 ppb	108.390 %	101.413 %
Recovery Percentage 1	21.775 %			28.930 %	4.381 %	-6.610 %	6.486 %		
Concentration RSD	31.9 %	1.0 %	6.3 %	75.5 %	127.9 %	65.9 %	32.3 %	2.1 %	4.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.010 ppb	0.008 ppb	108.194 %	107.724 %	0.052 ppb	0.110 ppb	104.832 %	105.415 %	103.109 %
Concentration per Run 1	0.019 ppb	0.006 ppb	106.877 %	111.907 %	0.064 ppb	0.062 ppb	104.122 %	112.281 %	104.871 %
Concentration per Run 2	0.006 ppb	0.015 ppb	110.384 %	106.040 %	0.054 ppb	0.124 ppb	104.053 %	101.272 %	101.387 %
Concentration per Run 3	0.006 ppb	0.003 ppb	107.319 %	105.225 %	0.039 ppb	0.142 ppb	106.320 %	102.691 %	103.069 %
Recovery Percentage 1	2.525 %				1.312 %	21.911 %			
Concentration RSD	74.9 %	79.5 %	1.8 %	3.4 %	23.5 %	38.2 %	1.2 %	5.7 %	1.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	102.945 %	0.151 ppb	0.027 ppb	104.686 %	102.502 %
Concentration per Run 1	109.941 %	0.104 ppb	0.038 ppb	105.607 %	105.789 %
Concentration per Run 2	98.642 %	0.166 ppb	0.024 ppb	104.753 %	100.877 %
Concentration per Run 3	100.251 %	0.182 ppb	0.019 ppb	103.699 %	100.840 %
Recovery Percentage 1		15.090 %	2.693 %		
Concentration RSD	5.9 %	27.2 %	37.1 %	0.9 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	147	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-28D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 11:28:19 PM	Vial	43		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	111.485 %	112.024 %	1.066 ppb	2.036 ppb	20.395 ppb	3,069.374 ppb	20,547.249 ppb	1,079.103 ppb	2,133.503 ppb
Concentration per Run 1	112.092 %	126.253 %	1.045 ppb	2.031 ppb	8.883 ppb	2,840.675 ppb	21,038.772 ppb	1,008.642 ppb	1,824.528 ppb
Concentration per Run 2	111.022 %	97.395 %	1.070 ppb	2.085 ppb	32.056 ppb	3,305.234 ppb	20,312.352 ppb	1,087.319 ppb	2,687.309 ppb
Concentration per Run 3	111.343 %	112.425 %	1.083 ppb	1.992 ppb	20.246 ppb	3,062.214 ppb	20,290.624 ppb	1,141.348 ppb	1,888.673 ppb
Concentration RSD	0.5 %	12.9 %	1.8 %	2.3 %	56.8 %	7.6 %	2.1 %	6.2 %	22.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	139.473 %	134.206 %	54.756 ppb	58.016 ppb	1,155.521 ppb	37,189.592 ppb	20.231 ppb	21.545 ppb	26.423 ppb
Concentration per Run 1	137.829 %	142.035 %	53.219 ppb	54.603 ppb	1,083.522 ppb	33,482.022 ppb	19.981 ppb	19.471 ppb	26.589 ppb
Concentration per Run 2	138.250 %	131.316 %	55.680 ppb	59.227 ppb	1,158.971 ppb	38,788.357 ppb	20.305 ppb	22.563 ppb	26.391 ppb
Concentration per Run 3	142.340 %	129.266 %	55.370 ppb	60.217 ppb	1,224.071 ppb	39,298.396 ppb	20.409 ppb	22.601 ppb	26.290 ppb
Concentration RSD	1.8 %	5.1 %	2.4 %	5.2 %	6.1 %	8.7 %	1.1 %	8.3 %	0.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	89.177 ppb	113.253 %	110.431 %	135.708 ppb	15.857 ppb	12.511 ppb	1.267 ppb	104.807 %	103.390 %
Concentration per Run 1	84.899 ppb	112.433 %	111.880 %	130.928 ppb	14.998 ppb	12.149 ppb	1.253 ppb	101.879 %	107.052 %
Concentration per Run 2	89.723 ppb	113.621 %	110.658 %	137.799 ppb	15.680 ppb	12.347 ppb	1.205 ppb	107.807 %	101.834 %
Concentration per Run 3	92.909 ppb	113.705 %	108.754 %	138.396 ppb	16.892 ppb	13.037 ppb	1.344 ppb	104.735 %	101.282 %
Concentration RSD	4.5 %	0.6 %	1.4 %	3.1 %	6.0 %	3.7 %	5.6 %	2.8 %	3.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.384 ppb	1.263 ppb	105.718 %	105.706 %	1.242 ppb	151.395 ppb	110.876 %	108.249 %	106.334 %
Concentration per Run 1	0.349 ppb	1.169 ppb	103.261 %	109.478 %	1.114 ppb	144.078 ppb	107.125 %	111.238 %	104.493 %
Concentration per Run 2	0.392 ppb	1.390 ppb	108.293 %	103.163 %	1.324 ppb	156.281 ppb	111.758 %	106.820 %	105.879 %
Concentration per Run 3	0.410 ppb	1.231 ppb	105.601 %	104.476 %	1.288 ppb	153.825 ppb	113.746 %	106.690 %	108.629 %
Concentration RSD	8.2 %	9.0 %	2.4 %	3.2 %	9.0 %	4.3 %	3.1 %	2.4 %	2.0 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	104.043 %	0.387 ppb	233.690 ppb	103.279 %	100.621 %
Concentration per Run 1	108.721 %	0.351 ppb	221.772 ppb	102.469 %	103.773 %
Concentration per Run 2	100.529 %	0.397 ppb	237.745 ppb	101.317 %	99.852 %
Concentration per Run 3	102.881 %	0.414 ppb	241.555 ppb	106.050 %	98.238 %
Concentration RSD	4.1 %	8.4 %	4.5 %	2.4 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	148	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-29D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 11:33:08 PM	Vial	44		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	110.297 %	110.220 %	1.448 ppb	1.747 ppb	37.727 ppb	6,176.200 ppb	20,829.816 ppb	4,076.135 ppb	2,012.858 ppb
Concentration per Run 1	110.019 %	110.020 %	1.446 ppb	1.729 ppb	37.589 ppb	5,939.118 ppb	21,022.471 ppb	3,898.652 ppb	2,126.290 ppb
Concentration per Run 2	110.469 %	110.621 %	1.441 ppb	1.754 ppb	36.841 ppb	6,409.907 ppb	20,601.933 ppb	4,059.489 ppb	1,953.358 ppb
Concentration per Run 3	110.404 %	110.020 %	1.458 ppb	1.759 ppb	38.751 ppb	6,179.574 ppb	20,865.044 ppb	4,270.264 ppb	1,958.925 ppb
Concentration RSD	0.2 %	0.3 %	0.6 %	0.9 %	2.6 %	3.8 %	1.0 %	4.6 %	4.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	138.498 %	135.635 %	58.029 ppb	63.466 ppb	768.329 ppb	38,631.770 ppb	14.001 ppb	20.149 ppb	42.568 ppb
Concentration per Run 1	139.166 %	143.247 %	53.641 ppb	57.221 ppb	711.111 ppb	35,571.986 ppb	13.226 ppb	18.421 ppb	39.949 ppb
Concentration per Run 2	134.770 %	133.367 %	57.345 ppb	66.302 ppb	794.830 ppb	39,965.245 ppb	14.590 ppb	20.675 ppb	43.760 ppb
Concentration per Run 3	141.557 %	130.291 %	63.102 ppb	66.875 ppb	799.045 ppb	40,358.079 ppb	14.187 ppb	21.349 ppb	43.994 ppb
Concentration RSD	2.5 %	5.0 %	8.2 %	8.5 %	6.5 %	6.9 %	5.0 %	7.6 %	5.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	148.258 ppb	110.798 %	110.314 %	38.958 ppb	22.803 ppb	16.323 ppb	0.973 ppb	105.463 %	103.256 %
Concentration per Run 1	137.685 ppb	109.546 %	117.925 %	35.430 ppb	20.984 ppb	14.507 ppb	0.928 ppb	104.536 %	108.782 %
Concentration per Run 2	152.977 ppb	111.401 %	106.701 %	38.497 ppb	23.943 ppb	17.035 ppb	1.049 ppb	103.835 %	101.575 %
Concentration per Run 3	154.112 ppb	111.446 %	106.315 %	42.947 ppb	23.481 ppb	17.427 ppb	0.943 ppb	108.017 %	99.410 %
Concentration RSD	6.2 %	1.0 %	6.0 %	9.7 %	7.0 %	9.7 %	6.7 %	2.1 %	4.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.951 ppb	1.302 ppb	104.829 %	104.967 %	0.925 ppb	177.334 ppb	111.758 %	109.589 %	107.284 %
Concentration per Run 1	0.892 ppb	1.268 ppb	101.620 %	109.164 %	0.832 ppb	169.294 ppb	111.012 %	112.161 %	104.728 %
Concentration per Run 2	0.989 ppb	1.329 ppb	105.975 %	103.060 %	0.962 ppb	182.636 ppb	111.685 %	106.748 %	107.447 %
Concentration per Run 3	0.972 ppb	1.307 ppb	106.892 %	102.678 %	0.981 ppb	180.074 ppb	112.578 %	109.858 %	109.678 %
Concentration RSD	5.4 %	2.4 %	2.7 %	3.5 %	8.8 %	4.0 %	0.7 %	2.5 %	2.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	103.909 %	0.328 ppb	144.770 ppb	102.747 %	101.167 %
Concentration per Run 1	105.632 %	0.306 ppb	134.051 ppb	100.453 %	106.742 %
Concentration per Run 2	103.102 %	0.330 ppb	147.953 ppb	102.903 %	100.422 %
Concentration per Run 3	102.995 %	0.347 ppb	152.307 ppb	104.887 %	96.337 %
Concentration RSD	1.4 %	6.2 %	6.6 %	2.2 %	5.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	149	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-30D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 11:37:56 PM	Vial	45		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	111.802 %	108.417 %	1.575 ppb	1.711 ppb	31.793 ppb	8,012.860 ppb	23,452.560 ppb	6,034.841 ppb	2,342.483 ppb
Concentration per Run 1	111.539 %	120.241 %	1.578 ppb	1.715 ppb	18.230 ppb	7,203.695 ppb	24,006.445 ppb	5,499.552 ppb	2,378.331 ppb
Concentration per Run 2	112.301 %	96.794 %	1.567 ppb	1.733 ppb	42.422 ppb	8,583.266 ppb	23,596.960 ppb	6,236.862 ppb	2,367.428 ppb
Concentration per Run 3	111.565 %	108.216 %	1.580 ppb	1.685 ppb	34.727 ppb	8,251.618 ppb	22,754.274 ppb	6,368.108 ppb	2,281.690 ppb
Concentration RSD	0.4 %	10.8 %	0.4 %	1.4 %	38.9 %	9.0 %	2.7 %	7.8 %	2.3 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	148.313 %	143.216 %	60.747 ppb	57.109 ppb	1,377.484 ppb	43,975.747 ppb	25.706 ppb	29.471 ppb	44.603 ppb
Concentration per Run 1	147.048 %	149.119 %	58.243 ppb	55.200 ppb	1,300.542 ppb	42,860.855 ppb	24.646 ppb	28.549 ppb	44.904 ppb
Concentration per Run 2	147.330 %	139.891 %	62.640 ppb	57.914 ppb	1,418.915 ppb	44,317.725 ppb	26.341 ppb	29.984 ppb	45.620 ppb
Concentration per Run 3	150.560 %	140.637 %	61.358 ppb	58.213 ppb	1,412.994 ppb	44,748.660 ppb	26.132 ppb	29.880 ppb	43.284 ppb
Concentration RSD	1.3 %	3.6 %	3.7 %	2.9 %	4.8 %	2.2 %	3.6 %	2.7 %	2.7 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	167.463 ppb	113.399 %	112.760 %	45.932 ppb	27.571 ppb	20.192 ppb	1.532 ppb	106.270 %	101.504 %
Concentration per Run 1	162.754 ppb	110.472 %	114.694 %	43.900 ppb	26.035 ppb	19.791 ppb	1.529 ppb	103.335 %	102.859 %
Concentration per Run 2	172.447 ppb	114.080 %	111.054 %	48.248 ppb	31.265 ppb	20.295 ppb	1.418 ppb	109.924 %	102.898 %
Concentration per Run 3	167.189 ppb	115.644 %	112.533 %	45.649 ppb	25.415 ppb	20.491 ppb	1.648 ppb	105.551 %	98.757 %
Concentration RSD	2.9 %	2.3 %	1.6 %	4.8 %	11.7 %	1.8 %	7.5 %	3.2 %	2.3 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.824 ppb	1.242 ppb	104.972 %	104.884 %	0.915 ppb	267.260 ppb	112.793 %	110.590 %	107.291 %
Concentration per Run 1	0.801 ppb	1.221 ppb	102.735 %	106.591 %	0.891 ppb	263.319 ppb	112.710 %	113.657 %	104.475 %
Concentration per Run 2	0.825 ppb	1.305 ppb	105.801 %	105.238 %	0.880 ppb	269.112 ppb	112.276 %	109.080 %	109.974 %
Concentration per Run 3	0.846 ppb	1.201 ppb	106.381 %	102.822 %	0.975 ppb	269.351 ppb	113.392 %	109.034 %	107.425 %
Concentration RSD	2.7 %	4.5 %	1.9 %	1.8 %	5.7 %	1.3 %	0.5 %	2.4 %	2.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.929 %	0.426 ppb	193.344 ppb	105.873 %	102.117 %
Concentration per Run 1	109.039 %	0.384 ppb	187.900 ppb	102.366 %	105.689 %
Concentration per Run 2	103.888 %	0.458 ppb	197.031 ppb	108.095 %	99.519 %
Concentration per Run 3	104.862 %	0.436 ppb	195.100 ppb	107.157 %	101.144 %
Concentration RSD	2.6 %	8.9 %	2.5 %	2.9 %	3.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	150	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-31D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 11:42:44 PM	Vial	46		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	110.499 %	113.427 %	1.051 ppb	2.393 ppb	31.532 ppb	3,857.200 ppb	24,077.602 ppb	945.799 ppb	2,037.448 ppb
Concentration per Run 1	109.825 %	116.633 %	1.061 ppb	2.429 ppb	31.792 ppb	3,678.232 ppb	23,963.081 ppb	886.946 ppb	1,894.861 ppb
Concentration per Run 2	111.832 %	102.204 %	1.060 ppb	2.367 ppb	39.191 ppb	4,089.576 ppb	23,378.675 ppb	1,025.109 ppb	1,921.534 ppb
Concentration per Run 3	109.840 %	121.443 %	1.033 ppb	2.382 ppb	23.614 ppb	3,803.791 ppb	24,891.051 ppb	925.342 ppb	2,295.949 ppb
Concentration RSD	1.0 %	8.8 %	1.6 %	1.3 %	24.7 %	5.5 %	3.2 %	7.5 %	11.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	153.818 %	151.511 %	64.261 ppb	40.329 ppb	383.495 ppb	46,972.753 ppb	12.230 ppb	19.579 ppb	20.665 ppb
Concentration per Run 1	154.696 %	153.127 %	63.053 ppb	39.691 ppb	378.185 ppb	46,218.461 ppb	12.213 ppb	19.379 ppb	20.231 ppb
Concentration per Run 2	153.732 %	148.373 %	65.418 ppb	41.559 ppb	393.744 ppb	47,583.433 ppb	12.564 ppb	19.593 ppb	20.582 ppb
Concentration per Run 3	153.026 %	153.034 %	64.312 ppb	39.737 ppb	378.555 ppb	47,116.365 ppb	11.911 ppb	19.765 ppb	21.181 ppb
Concentration RSD	0.5 %	1.8 %	1.8 %	2.6 %	2.3 %	1.5 %	2.7 %	1.0 %	2.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	61.202 ppb	110.408 %	107.290 %	32.382 ppb	11.965 ppb	17.786 ppb	1.397 ppb	104.484 %	104.131 %
Concentration per Run 1	60.918 ppb	111.211 %	104.505 %	32.768 ppb	10.652 ppb	16.520 ppb	1.400 ppb	103.995 %	108.651 %
Concentration per Run 2	60.868 ppb	112.848 %	108.492 %	31.785 ppb	11.526 ppb	18.223 ppb	1.315 ppb	104.442 %	102.153 %
Concentration per Run 3	61.821 ppb	107.166 %	108.874 %	32.594 ppb	13.717 ppb	18.617 ppb	1.475 ppb	105.015 %	101.588 %
Concentration RSD	0.9 %	2.6 %	2.3 %	1.6 %	13.2 %	6.3 %	5.7 %	0.5 %	3.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.061 ppb	0.210 ppb	105.908 %	106.879 %	0.834 ppb	100.936 ppb	108.005 %	109.697 %	104.708 %
Concentration per Run 1	0.056 ppb	0.210 ppb	104.766 %	109.072 %	0.705 ppb	96.407 ppb	104.518 %	114.952 %	101.538 %
Concentration per Run 2	0.064 ppb	0.189 ppb	106.911 %	107.810 %	0.916 ppb	101.629 ppb	110.233 %	106.872 %	105.770 %
Concentration per Run 3	0.065 ppb	0.232 ppb	106.046 %	103.755 %	0.880 ppb	104.771 ppb	109.264 %	107.268 %	106.815 %
Concentration RSD	7.5 %	10.2 %	1.0 %	2.6 %	13.5 %	4.2 %	2.8 %	4.2 %	2.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	104.394 %	0.239 ppb	54.357 ppb	101.344 %	99.580 %
Concentration per Run 1	107.385 %	0.226 ppb	51.229 ppb	99.202 %	103.657 %
Concentration per Run 2	103.477 %	0.240 ppb	55.856 ppb	101.949 %	96.350 %
Concentration per Run 3	102.319 %	0.250 ppb	55.987 ppb	102.882 %	98.732 %
Concentration RSD	2.5 %	5.1 %	5.0 %	1.9 %	3.7 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	151	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-32D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 11:47:34 PM	Vial	47		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	107.639 %	97.996 %	1.187 ppb	1.364 ppb	39.880 ppb	2,849.643 ppb	20,452.433 ppb	889.151 ppb	2,058.448 ppb
Concentration per Run 1	108.457 %	108.818 %	1.187 ppb	1.346 ppb	33.121 ppb	2,484.055 ppb	20,729.913 ppb	804.876 ppb	1,851.703 ppb
Concentration per Run 2	106.964 %	88.377 %	1.210 ppb	1.385 ppb	48.973 ppb	2,980.704 ppb	19,857.577 ppb	861.457 ppb	2,233.357 ppb
Concentration per Run 3	107.496 %	96.794 %	1.164 ppb	1.361 ppb	37.546 ppb	3,084.171 ppb	20,769.810 ppb	1,001.121 ppb	2,090.283 ppb
Concentration RSD	0.7 %	10.5 %	2.0 %	1.4 %	20.5 %	11.3 %	2.5 %	11.4 %	9.4 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	129.643 %	125.041 %	57.474 ppb	42.002 ppb	784.909 ppb	38,899.400 ppb	13.164 ppb	18.656 ppb	14.735 ppb
Concentration per Run 1	124.520 %	131.782 %	52.595 ppb	39.850 ppb	730.241 ppb	36,827.452 ppb	11.959 ppb	17.469 ppb	13.857 ppb
Concentration per Run 2	132.362 %	125.911 %	55.879 ppb	42.382 ppb	800.619 ppb	39,428.540 ppb	13.853 ppb	18.975 ppb	15.362 ppb
Concentration per Run 3	132.047 %	117.429 %	63.948 ppb	43.774 ppb	823.868 ppb	40,442.206 ppb	13.682 ppb	19.524 ppb	14.985 ppb
Concentration RSD	3.4 %	5.8 %	10.2 %	4.7 %	6.2 %	4.8 %	8.0 %	5.7 %	5.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	53.498 ppb	110.038 %	105.418 %	18.480 ppb	17.395 ppb	25.005 ppb	1.056 ppb	105.757 %	98.490 %
Concentration per Run 1	49.294 ppb	107.392 %	110.492 %	17.195 ppb	17.575 ppb	23.114 ppb	0.935 ppb	104.950 %	104.204 %
Concentration per Run 2	55.580 ppb	111.298 %	98.952 %	19.092 ppb	17.250 ppb	25.034 ppb	1.061 ppb	108.338 %	100.178 %
Concentration per Run 3	55.620 ppb	111.425 %	106.809 %	19.152 ppb	17.361 ppb	26.867 ppb	1.173 ppb	103.982 %	91.087 %
Concentration RSD	6.8 %	2.1 %	5.6 %	6.0 %	0.9 %	7.5 %	11.2 %	2.2 %	6.8 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.085 ppb	0.356 ppb	105.462 %	101.318 %	0.507 ppb	151.284 ppb	107.577 %	101.364 %	103.548 %
Concentration per Run 1	0.070 ppb	0.334 ppb	103.475 %	107.155 %	0.481 ppb	136.923 ppb	105.590 %	110.802 %	103.083 %
Concentration per Run 2	0.088 ppb	0.315 ppb	102.949 %	101.642 %	0.482 ppb	151.992 ppb	108.198 %	97.099 %	103.299 %
Concentration per Run 3	0.097 ppb	0.419 ppb	109.963 %	95.157 %	0.559 ppb	164.938 ppb	108.942 %	96.190 %	104.261 %
Concentration RSD	16.5 %	15.5 %	3.7 %	5.9 %	8.8 %	9.3 %	1.6 %	8.1 %	0.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	97.409 %	0.215 ppb	49.781 ppb	100.602 %	93.944 %
Concentration per Run 1	105.867 %	0.189 ppb	45.863 ppb	98.337 %	100.961 %
Concentration per Run 2	96.372 %	0.219 ppb	49.415 ppb	99.914 %	93.808 %
Concentration per Run 3	89.987 %	0.237 ppb	54.065 ppb	103.555 %	87.062 %
Concentration RSD	8.2 %	11.3 %	8.3 %	2.7 %	7.4 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	152	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-33D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 11:52:23 PM	Vial	48		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	106.929 %	99.800 %	0.512 ppb	0.927 ppb	-4.056 ppb	1,314.417 ppb	10,398.442 ppb	459.763 ppb	646.073 ppb
Concentration per Run 1	106.414 %	102.204 %	0.526 ppb	0.941 ppb	0.794 ppb	1,324.109 ppb	10,377.305 ppb	472.485 ppb	623.050 ppb
Concentration per Run 2	106.425 %	102.204 %	0.498 ppb	0.914 ppb	-10.929 ppb	1,313.537 ppb	10,384.289 ppb	459.603 ppb	565.116 ppb
Concentration per Run 3	107.947 %	94.990 %	0.511 ppb	0.926 ppb	-2.034 ppb	1,305.604 ppb	10,433.731 ppb	447.200 ppb	750.053 ppb
Concentration RSD	0.8 %	4.2 %	2.8 %	1.5 %	150.8 %	0.7 %	0.3 %	2.7 %	14.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	141.464 %	144.023 %	52.933 ppb	27.077 ppb	158.876 ppb	28,159.479 ppb	3.736 ppb	7.886 ppb	20.831 ppb
Concentration per Run 1	140.845 %	140.637 %	52.832 ppb	26.434 ppb	158.688 ppb	28,260.853 ppb	3.704 ppb	8.084 ppb	20.115 ppb
Concentration per Run 2	143.118 %	143.060 %	52.856 ppb	27.788 ppb	160.078 ppb	29,308.877 ppb	3.711 ppb	7.989 ppb	21.557 ppb
Concentration per Run 3	140.428 %	148.373 %	53.110 ppb	27.010 ppb	157.863 ppb	26,908.705 ppb	3.793 ppb	7.585 ppb	20.821 ppb
Concentration RSD	1.0 %	2.7 %	0.3 %	2.5 %	0.7 %	4.3 %	1.3 %	3.4 %	3.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	71.291 ppb	110.173 %	116.620 %	34.961 ppb	16.027 ppb	5.541 ppb	0.912 ppb	106.155 %	105.097 %
Concentration per Run 1	70.560 ppb	107.798 %	116.810 %	34.647 ppb	14.656 ppb	5.391 ppb	0.809 ppb	105.963 %	109.358 %
Concentration per Run 2	70.378 ppb	112.452 %	118.257 %	34.473 ppb	15.087 ppb	5.310 ppb	1.050 ppb	103.782 %	101.624 %
Concentration per Run 3	72.935 ppb	110.268 %	114.794 %	35.764 ppb	18.339 ppb	5.923 ppb	0.876 ppb	108.722 %	104.310 %
Concentration RSD	2.0 %	2.1 %	1.5 %	2.0 %	12.6 %	6.0 %	13.7 %	2.3 %	3.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.057 ppb	0.450 ppb	104.268 %	108.148 %	0.369 ppb	53.537 ppb	109.211 %	109.820 %	103.690 %
Concentration per Run 1	0.055 ppb	0.421 ppb	103.894 %	111.763 %	0.321 ppb	52.552 ppb	108.328 %	112.782 %	102.862 %
Concentration per Run 2	0.063 ppb	0.506 ppb	105.423 %	106.025 %	0.396 ppb	54.072 ppb	110.588 %	108.201 %	104.545 %
Concentration per Run 3	0.053 ppb	0.423 ppb	103.489 %	106.655 %	0.390 ppb	53.988 ppb	108.718 %	108.478 %	103.664 %
Concentration RSD	10.0 %	10.7 %	1.0 %	2.9 %	11.3 %	1.6 %	1.1 %	2.3 %	0.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	104.808 %	0.099 ppb	81.710 ppb	100.737 %	102.572 %
Concentration per Run 1	109.901 %	0.083 ppb	78.714 ppb	100.378 %	105.651 %
Concentration per Run 2	101.594 %	0.101 ppb	82.229 ppb	100.015 %	101.126 %
Concentration per Run 3	102.927 %	0.113 ppb	84.187 ppb	101.817 %	100.940 %
Concentration RSD	4.3 %	15.3 %	3.4 %	0.9 %	2.6 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	153	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-34D10 6020TS	Rack	2		
Analysis started at:	9/14/2023 11:57:20 PM	Vial	49		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	110.401 %	111.022 %	1.068 ppb	1.595 ppb	23.778 ppb	3,806.299 ppb	22,817.987 ppb	1,320.475 ppb	1,050.633 ppb
Concentration per Run 1	110.392 %	120.241 %	1.092 ppb	1.663 ppb	16.916 ppb	3,419.965 ppb	23,695.071 ppb	1,124.452 ppb	942.926 ppb
Concentration per Run 2	108.596 %	102.806 %	1.088 ppb	1.568 ppb	27.858 ppb	3,991.845 ppb	22,919.439 ppb	1,406.799 ppb	1,172.627 ppb
Concentration per Run 3	112.215 %	110.020 %	1.024 ppb	1.553 ppb	26.560 ppb	4,007.087 ppb	21,839.450 ppb	1,430.175 ppb	1,036.346 ppb
Concentration RSD	1.6 %	7.9 %	3.6 %	3.8 %	25.1 %	8.8 %	4.1 %	12.9 %	11.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	149.054 %	141.321 %	63.654 ppb	43.436 ppb	495.235 ppb	45,453.635 ppb	13.997 ppb	20.542 ppb	24.542 ppb
Concentration per Run 1	145.314 %	149.492 %	60.222 ppb	40.205 ppb	460.330 ppb	41,792.326 ppb	13.333 ppb	18.785 ppb	23.618 ppb
Concentration per Run 2	144.479 %	138.586 %	67.305 ppb	44.614 ppb	503.167 ppb	46,050.268 ppb	13.788 ppb	21.574 ppb	24.880 ppb
Concentration per Run 3	157.368 %	135.884 %	63.435 ppb	45.487 ppb	522.208 ppb	48,518.312 ppb	14.869 ppb	21.267 ppb	25.128 ppb
Concentration RSD	4.8 %	5.1 %	5.6 %	6.5 %	6.4 %	7.5 %	5.6 %	7.4 %	3.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	60.883 ppb	110.173 %	108.018 %	65.146 ppb	14.872 ppb	10.469 ppb	1.179 ppb	105.071 %	102.090 %
Concentration per Run 1	56.343 ppb	110.932 %	114.355 %	59.858 ppb	12.639 ppb	9.834 ppb	1.122 ppb	103.120 %	105.453 %
Concentration per Run 2	60.917 ppb	108.165 %	107.924 %	64.729 ppb	14.852 ppb	10.690 ppb	1.223 ppb	105.292 %	100.782 %
Concentration per Run 3	65.388 ppb	111.423 %	101.776 %	70.850 ppb	17.124 ppb	10.884 ppb	1.192 ppb	106.803 %	100.036 %
Concentration RSD	7.4 %	1.6 %	5.8 %	8.5 %	15.1 %	5.3 %	4.4 %	1.8 %	2.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.039 ppb	0.312 ppb	105.691 %	104.918 %	0.822 ppb	88.086 ppb	108.836 %	108.123 %	102.579 %
Concentration per Run 1	0.034 ppb	0.340 ppb	104.602 %	103.912 %	0.848 ppb	85.209 ppb	105.628 %	111.689 %	101.168 %
Concentration per Run 2	0.044 ppb	0.267 ppb	105.083 %	105.395 %	0.805 ppb	89.638 ppb	110.025 %	106.594 %	101.246 %
Concentration per Run 3	0.039 ppb	0.330 ppb	107.387 %	105.447 %	0.814 ppb	89.410 ppb	110.854 %	106.087 %	105.324 %
Concentration RSD	13.7 %	12.6 %	1.4 %	0.8 %	2.8 %	2.8 %	2.6 %	2.9 %	2.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	103.970 %	0.194 ppb	51.120 ppb	101.559 %	99.363 %
Concentration per Run 1	107.840 %	0.183 ppb	49.706 ppb	99.906 %	100.427 %
Concentration per Run 2	102.191 %	0.191 ppb	51.642 ppb	102.973 %	99.525 %
Concentration per Run 3	101.878 %	0.209 ppb	52.012 ppb	101.799 %	98.136 %
Concentration RSD	3.2 %	6.8 %	2.4 %	1.5 %	1.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	154	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-35D10 6020TS	Rack	2		
Analysis started at:	9/15/2023 12:02:08 AM	Vial	50		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	107.545 %	97.395 %	0.373 ppb	0.647 ppb	11.355 ppb	706.347 ppb	9,771.576 ppb	632.124 ppb	1,539.089 ppb
Concentration per Run 1	106.729 %	86.573 %	0.379 ppb	0.684 ppb	19.419 ppb	764.000 ppb	10,304.122 ppb	662.593 ppb	1,721.146 ppb
Concentration per Run 2	107.205 %	102.806 %	0.369 ppb	0.621 ppb	5.136 ppb	698.501 ppb	9,578.137 ppb	650.575 ppb	1,500.982 ppb
Concentration per Run 3	108.702 %	102.806 %	0.371 ppb	0.636 ppb	9.510 ppb	656.539 ppb	9,432.468 ppb	583.205 ppb	1,395.137 ppb
Concentration RSD	1.0 %	9.6 %	1.5 %	5.1 %	64.4 %	7.7 %	4.8 %	6.8 %	10.8 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	132.286 %	122.928 %	49.781 ppb	47.375 ppb	40.330 ppb	30,008.352 ppb	1.860 ppb	5.202 ppb	14.735 ppb
Concentration per Run 1	126.769 %	113.048 %	55.705 ppb	51.078 ppb	42.941 ppb	32,923.779 ppb	1.906 ppb	5.189 ppb	15.841 ppb
Concentration per Run 2	135.503 %	125.165 %	49.353 ppb	46.471 ppb	38.613 ppb	28,956.086 ppb	1.949 ppb	5.432 ppb	14.501 ppb
Concentration per Run 3	134.586 %	130.571 %	44.284 ppb	44.577 ppb	39.436 ppb	28,145.191 ppb	1.725 ppb	4.986 ppb	13.863 ppb
Concentration RSD	3.6 %	7.3 %	11.5 %	7.1 %	5.7 %	8.5 %	6.4 %	4.3 %	6.9 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	14.725 ppb	112.918 %	99.058 %	32.454 ppb	7.752 ppb	8.513 ppb	1.307 ppb	104.972 %	99.224 %
Concentration per Run 1	15.343 ppb	111.060 %	95.093 %	34.036 ppb	9.404 ppb	9.239 ppb	1.295 ppb	103.327 %	91.028 %
Concentration per Run 2	14.486 ppb	115.307 %	100.404 %	31.752 ppb	7.629 ppb	7.960 ppb	1.208 ppb	104.676 %	102.863 %
Concentration per Run 3	14.346 ppb	112.386 %	101.675 %	31.573 ppb	6.223 ppb	8.340 ppb	1.417 ppb	106.915 %	103.780 %
Concentration RSD	3.7 %	1.9 %	3.5 %	4.2 %	20.6 %	7.7 %	8.0 %	1.7 %	7.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.026 ppb	0.129 ppb	106.503 %	101.190 %	0.885 ppb	39.018 ppb	107.604 %	100.692 %	103.361 %
Concentration per Run 1	0.031 ppb	0.125 ppb	105.666 %	93.569 %	1.017 ppb	41.888 ppb	104.237 %	95.286 %	101.267 %
Concentration per Run 2	0.031 ppb	0.127 ppb	105.632 %	104.804 %	0.820 ppb	37.022 ppb	109.684 %	101.969 %	104.418 %
Concentration per Run 3	0.015 ppb	0.135 ppb	108.211 %	105.198 %	0.817 ppb	38.145 ppb	108.890 %	104.820 %	104.399 %
Concentration RSD	34.7 %	4.3 %	1.4 %	6.5 %	12.9 %	6.5 %	2.7 %	4.9 %	1.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	99.537 %	0.093 ppb	19.482 ppb	102.801 %	95.734 %
Concentration per Run 1	90.213 %	0.101 ppb	21.295 ppb	100.078 %	87.477 %
Concentration per Run 2	102.054 %	0.093 ppb	18.632 ppb	103.496 %	98.627 %
Concentration per Run 3	106.345 %	0.084 ppb	18.518 ppb	104.830 %	101.097 %
Concentration RSD	8.4 %	9.2 %	8.1 %	2.4 %	7.6 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	155	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-36D10 6020TS	Rack	2		
Analysis started at:	9/15/2023 12:06:58 AM	Vial	51		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	113.593 %	100.000 %	1.307 ppb	2.477 ppb	14.735 ppb	3,678.251 ppb	28,243.798 ppb	1,373.589 ppb	169.756 ppb
Concentration per Run 1	114.602 %	106.413 %	1.290 ppb	2.412 ppb	11.999 ppb	3,470.416 ppb	27,790.726 ppb	1,343.746 ppb	281.203 ppb
Concentration per Run 2	113.642 %	104.609 %	1.316 ppb	2.536 ppb	8.965 ppb	3,527.703 ppb	29,996.533 ppb	1,309.157 ppb	78.726 ppb
Concentration per Run 3	112.534 %	88.978 %	1.314 ppb	2.481 ppb	23.242 ppb	4,036.635 ppb	26,944.135 ppb	1,467.863 ppb	149.337 ppb
Concentration RSD	0.9 %	9.6 %	1.1 %	2.5 %	51.0 %	8.5 %	5.6 %	6.1 %	60.5 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	172.814 %	167.730 %	80.024 ppb	50.731 ppb	234.548 ppb	54,661.033 ppb	9.807 ppb	25.298 ppb	26.077 ppb
Concentration per Run 1	170.618 %	176.615 %	76.482 ppb	46.604 ppb	216.695 ppb	50,179.453 ppb	9.228 ppb	22.855 ppb	23.892 ppb
Concentration per Run 2	164.952 %	173.633 %	75.256 ppb	49.263 ppb	229.527 ppb	52,423.860 ppb	9.380 ppb	25.340 ppb	25.534 ppb
Concentration per Run 3	182.872 %	152.940 %	88.334 ppb	56.326 ppb	257.422 ppb	61,379.785 ppb	10.813 ppb	27.701 ppb	28.804 ppb
Concentration RSD	5.3 %	7.7 %	9.0 %	9.9 %	8.9 %	10.8 %	8.9 %	9.6 %	9.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	77.044 ppb	112.415 %	108.993 %	28.236 ppb	11.131 ppb	6.426 ppb	1.594 ppb	108.790 %	100.787 %
Concentration per Run 1	68.271 ppb	111.548 %	120.108 %	24.710 ppb	10.536 ppb	5.930 ppb	1.366 ppb	108.150 %	106.306 %
Concentration per Run 2	77.283 ppb	113.164 %	106.504 %	28.641 ppb	12.235 ppb	6.156 ppb	1.535 ppb	107.733 %	104.142 %
Concentration per Run 3	85.578 ppb	112.535 %	100.366 %	31.357 ppb	10.621 ppb	7.194 ppb	1.882 ppb	110.488 %	91.913 %
Concentration RSD	11.2 %	0.7 %	9.3 %	11.8 %	8.6 %	10.5 %	16.5 %	1.4 %	7.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.057 ppb	0.232 ppb	107.136 %	103.470 %	0.375 ppb	135.510 ppb	111.008 %	105.508 %	108.861 %
Concentration per Run 1	0.056 ppb	0.215 ppb	102.318 %	108.913 %	0.323 ppb	126.288 ppb	108.667 %	110.791 %	106.046 %
Concentration per Run 2	0.056 ppb	0.259 ppb	108.510 %	106.852 %	0.350 ppb	129.507 ppb	113.427 %	106.945 %	109.664 %
Concentration per Run 3	0.057 ppb	0.224 ppb	110.581 %	94.645 %	0.452 ppb	150.735 ppb	110.930 %	98.788 %	110.874 %
Concentration RSD	1.2 %	10.0 %	4.0 %	7.5 %	18.1 %	9.8 %	2.1 %	5.8 %	2.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	101.185 %	0.286 ppb	41.082 ppb	105.751 %	96.881 %
Concentration per Run 1	106.087 %	0.276 ppb	37.860 ppb	101.999 %	102.823 %
Concentration per Run 2	103.366 %	0.288 ppb	40.109 ppb	108.772 %	98.520 %
Concentration per Run 3	94.100 %	0.296 ppb	45.275 ppb	106.480 %	89.300 %
Concentration RSD	6.2 %	3.4 %	9.3 %	3.3 %	7.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	156	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-37D10 6020TS	Rack	2		
Analysis started at:	9/15/2023 12:11:49 AM	Vial	52		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.201 %	104.810 %	1.067 ppb	2.256 ppb	11.374 ppb	3,753.978 ppb	25,490.696 ppb	1,203.302 ppb	255.775 ppb
Concentration per Run 1	112.456 %	105.812 %	1.062 ppb	2.259 ppb	10.053 ppb	3,725.977 ppb	24,365.810 ppb	1,175.454 ppb	176.858 ppb
Concentration per Run 2	111.106 %	102.204 %	1.084 ppb	2.251 ppb	12.552 ppb	3,862.793 ppb	26,730.905 ppb	1,215.021 ppb	260.804 ppb
Concentration per Run 3	113.042 %	106.413 %	1.054 ppb	2.259 ppb	11.517 ppb	3,673.166 ppb	25,375.374 ppb	1,219.432 ppb	329.662 ppb
Concentration RSD	0.9 %	2.2 %	1.5 %	0.2 %	11.0 %	2.6 %	4.7 %	2.0 %	29.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	163.820 %	151.915 %	75.659 ppb	48.833 ppb	202.210 ppb	46,191.941 ppb	9.093 ppb	23.251 ppb	20.687 ppb
Concentration per Run 1	168.902 %	155.830 %	71.695 ppb	46.106 ppb	189.505 ppb	44,275.705 ppb	8.437 ppb	21.768 ppb	20.081 ppb
Concentration per Run 2	159.702 %	151.822 %	76.952 ppb	49.519 ppb	208.288 ppb	47,238.017 ppb	9.557 ppb	23.673 ppb	21.112 ppb
Concentration per Run 3	162.857 %	148.094 %	78.330 ppb	50.873 ppb	208.837 ppb	47,062.101 ppb	9.285 ppb	24.311 ppb	20.870 ppb
Concentration RSD	2.9 %	2.5 %	4.6 %	5.0 %	5.4 %	3.6 %	6.4 %	5.7 %	2.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	72.157 ppb	110.454 %	107.717 %	14.883 ppb	14.559 ppb	6.679 ppb	1.129 ppb	106.594 %	104.270 %
Concentration per Run 1	68.559 ppb	109.923 %	114.302 %	13.800 ppb	11.681 ppb	6.227 ppb	1.078 ppb	105.432 %	107.749 %
Concentration per Run 2	73.661 ppb	106.752 %	103.047 %	15.379 ppb	16.008 ppb	6.829 ppb	1.051 ppb	105.917 %	102.699 %
Concentration per Run 3	74.251 ppb	114.687 %	105.802 %	15.469 ppb	15.987 ppb	6.979 ppb	1.259 ppb	108.433 %	102.361 %
Concentration RSD	4.3 %	3.6 %	5.4 %	6.3 %	17.1 %	6.0 %	10.0 %	1.5 %	2.9 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.050 ppb	0.213 ppb	105.160 %	108.165 %	0.329 ppb	121.756 ppb	109.826 %	108.120 %	106.334 %
Concentration per Run 1	0.045 ppb	0.241 ppb	102.875 %	108.914 %	0.347 ppb	117.869 ppb	107.907 %	112.514 %	105.531 %
Concentration per Run 2	0.052 ppb	0.214 ppb	106.003 %	107.063 %	0.288 ppb	122.194 ppb	109.967 %	106.654 %	108.852 %
Concentration per Run 3	0.054 ppb	0.185 ppb	106.602 %	108.520 %	0.353 ppb	125.205 ppb	111.605 %	105.193 %	104.620 %
Concentration RSD	9.9 %	13.1 %	1.9 %	0.9 %	10.9 %	3.0 %	1.7 %	3.6 %	2.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	106.752 %	0.235 ppb	44.515 ppb	104.095 %	101.082 %
Concentration per Run 1	109.932 %	0.225 ppb	41.767 ppb	101.938 %	106.739 %
Concentration per Run 2	104.202 %	0.233 ppb	46.119 ppb	104.739 %	97.295 %
Concentration per Run 3	106.123 %	0.246 ppb	45.659 ppb	105.609 %	99.212 %
Concentration RSD	2.7 %	4.5 %	5.4 %	1.8 %	4.9 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	157	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/15/2023 12:16:37 AM	Vial	9		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	107.924 %	100.601 %	55.972 ppb	54.506 ppb	6,218.575 ppb	6,318.440 ppb	58.342 ppb	6,682.694 ppb	6,452.134 ppb
Concentration per Run 1	107.506 %	104.008 %	55.939 ppb	54.084 ppb	5,955.675 ppb	6,146.172 ppb	61.042 ppb	6,658.250 ppb	5,770.219 ppb
Concentration per Run 2	109.183 %	100.401 %	55.910 ppb	54.728 ppb	6,499.456 ppb	6,281.733 ppb	57.478 ppb	6,628.671 ppb	6,771.554 ppb
Concentration per Run 3	107.083 %	97.395 %	56.065 ppb	54.705 ppb	6,200.594 ppb	6,527.415 ppb	56.507 ppb	6,761.163 ppb	6,814.628 ppb
Recovery Percentage 1			93.286 %	90.843 %	103.643 %	105.307 %	97.237 %	111.378 %	107.536 %
Concentration RSD	1.0 %	3.3 %	0.1 %	0.7 %	4.4 %	3.1 %	4.1 %	1.0 %	9.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	121.024 %	115.876 %	58.441 ppb	57.654 ppb	61.842 ppb	6,284.108 ppb	59.957 ppb	58.817 ppb	58.861 ppb
Concentration per Run 1	118.367 %	116.683 %	54.359 ppb	56.825 ppb	59.456 ppb	6,080.041 ppb	56.326 ppb	55.015 ppb	54.823 ppb
Concentration per Run 2	122.880 %	111.930 %	63.028 ppb	59.229 ppb	64.941 ppb	6,342.283 ppb	63.585 ppb	60.945 ppb	61.539 ppb
Concentration per Run 3	121.824 %	119.013 %	57.936 ppb	56.910 ppb	61.130 ppb	6,430.000 ppb	59.961 ppb	60.493 ppb	60.222 ppb
Recovery Percentage 1			97.401 %	96.091 %	103.071 %	104.735 %	99.929 %	98.029 %	98.102 %
Concentration RSD	2.0 %	3.1 %	7.5 %	2.4 %	4.5 %	2.9 %	6.1 %	5.6 %	6.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	58.004 ppb	111.775 %	107.094 %	56.178 ppb	54.634 ppb	60.473 ppb	55.796 ppb	105.400 %	102.419 %
Concentration per Run 1	54.697 ppb	112.643 %	110.423 %	52.678 ppb	52.668 ppb	56.961 ppb	52.054 ppb	102.814 %	106.593 %
Concentration per Run 2	60.919 ppb	114.293 %	105.749 %	57.200 ppb	56.812 ppb	62.664 ppb	57.204 ppb	106.454 %	99.129 %
Concentration per Run 3	58.397 ppb	108.390 %	105.112 %	58.654 ppb	54.421 ppb	61.793 ppb	58.130 ppb	106.932 %	101.534 %
Recovery Percentage 1	96.674 %			93.629 %	91.057 %	100.788 %	92.993 %		
Concentration RSD	5.4 %	2.7 %	2.7 %	5.5 %	3.8 %	5.1 %	5.9 %	2.1 %	3.7 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	55.279 ppb	56.966 ppb	108.369 %	104.271 %	57.559 ppb	60.212 ppb	108.087 %	106.253 %	107.647 %
Concentration per Run 1	52.426 ppb	53.761 ppb	108.149 %	110.306 %	52.704 ppb	54.489 ppb	107.027 %	113.150 %	103.796 %
Concentration per Run 2	57.934 ppb	59.357 ppb	109.319 %	100.197 %	59.120 ppb	63.084 ppb	109.378 %	104.290 %	109.133 %
Concentration per Run 3	55.477 ppb	57.780 ppb	107.638 %	102.310 %	60.855 ppb	63.064 ppb	107.856 %	101.320 %	110.013 %
Recovery Percentage 1	92.132 %	94.944 %			95.932 %	100.354 %			
Concentration RSD	5.0 %	5.1 %	0.8 %	5.1 %	7.5 %	8.2 %	1.1 %	5.8 %	3.1 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	103.862 %	57.011 ppb	56.974 ppb	102.115 %	100.424 %
Concentration per Run 1	108.990 %	52.856 ppb	53.286 ppb	101.170 %	106.165 %
Concentration per Run 2	102.756 %	59.368 ppb	58.797 ppb	103.404 %	97.177 %
Concentration per Run 3	99.841 %	58.810 ppb	58.840 ppb	101.770 %	97.929 %
Recovery Percentage 1		95.019 %	94.957 %		
Concentration RSD	4.5 %	6.3 %	5.6 %	1.1 %	5.0 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	158	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/15/2023 12:21:29 AM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	107.524 %	102.204 %	0.010 ppb	0.016 ppb	-13.168 ppb	-0.079 ppb	0.978 ppb	9.108 ppb	45.666 ppb
Concentration per Run 1	107.562 %	113.026 %	0.013 ppb	0.025 ppb	-17.714 ppb	-0.645 ppb	0.929 ppb	8.717 ppb	5.840 ppb
Concentration per Run 2	108.654 %	106.413 %	0.006 ppb	0.015 ppb	-17.920 ppb	0.659 ppb	1.018 ppb	11.655 ppb	26.600 ppb
Concentration per Run 3	106.356 %	87.174 %	0.012 ppb	0.008 ppb	-3.871 ppb	-0.251 ppb	0.986 ppb	6.952 ppb	104.557 ppb
Recovery Percentage 1			2.057 %	0.158 %	-13.168 %	-0.113 %	9.775 %	9.108 %	45.666 %
Concentration RSD	1.1 %	13.1 %	39.5 %	53.4 %	61.2 %	848.8 %	4.6 %	26.1 %	114.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	110.621 %	109.010 %	0.030 ppb	-0.019 ppb	0.175 ppb	7.956 ppb	0.004 ppb	0.096 ppb	0.041 ppb
Concentration per Run 1	111.905 %	114.446 %	-0.009 ppb	-0.034 ppb	0.112 ppb	6.728 ppb	0.009 ppb	0.070 ppb	0.006 ppb
Concentration per Run 2	107.330 %	112.675 %	0.066 ppb	-0.001 ppb	0.202 ppb	8.038 ppb	0.001 ppb	0.100 ppb	0.068 ppb
Concentration per Run 3	112.630 %	99.907 %	0.034 ppb	-0.020 ppb	0.210 ppb	9.102 ppb	0.001 ppb	0.119 ppb	0.048 ppb
Recovery Percentage 1			0.604 %	-1.855 %	17.461 %	15.912 %	0.739 %	4.820 %	4.061 %
Concentration RSD	2.6 %	7.3 %	125.1 %	87.6 %	31.2 %	14.9 %	128.9 %	26.1 %	78.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.031 ppb	108.769 %	101.512 %	0.052 ppb	0.051 ppb	-0.006 ppb	0.153 ppb	103.692 %	105.719 %
Concentration per Run 1	0.883 ppb	111.009 %	107.867 %	-0.013 ppb	-0.007 ppb	-0.047 ppb	0.098 ppb	102.655 %	110.862 %
Concentration per Run 2	1.052 ppb	109.494 %	96.750 %	-0.020 ppb	-0.020 ppb	0.024 ppb	0.183 ppb	105.482 %	101.962 %
Concentration per Run 3	1.158 ppb	105.804 %	99.918 %	0.189 ppb	0.178 ppb	0.007 ppb	0.177 ppb	102.939 %	104.333 %
Recovery Percentage 1	20.625 %			10.409 %	1.011 %	-1.104 %	7.626 %		
Concentration RSD	13.5 %	2.5 %	5.6 %	227.6 %	218.9 %	667.9 %	31.3 %	1.5 %	4.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.006 ppb	0.006 ppb	105.968 %	106.537 %	0.045 ppb	0.060 ppb	104.766 %	104.172 %	104.060 %
Concentration per Run 1	0.007 ppb	0.006 ppb	108.820 %	109.111 %	0.043 ppb	0.082 ppb	103.003 %	108.707 %	102.427 %
Concentration per Run 2	0.006 ppb	0.006 ppb	105.608 %	106.051 %	0.041 ppb	0.012 ppb	106.380 %	101.821 %	105.645 %
Concentration per Run 3	0.006 ppb	0.006 ppb	103.475 %	104.449 %	0.051 ppb	0.087 ppb	104.916 %	101.987 %	104.109 %
Recovery Percentage 1	1.565 %				1.126 %	12.087 %			
Concentration RSD	14.6 %	2.8 %	2.5 %	2.2 %	11.1 %	69.5 %	1.6 %	3.8 %	1.5 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	102.706 %	0.147 ppb	0.018 ppb	102.779 %	101.722 %
Concentration per Run 1	105.787 %	0.086 ppb	0.018 ppb	103.540 %	104.949 %
Concentration per Run 2	100.898 %	0.164 ppb	0.019 ppb	102.290 %	100.700 %
Concentration per Run 3	101.433 %	0.191 ppb	0.018 ppb	102.506 %	99.515 %
Recovery Percentage 1		14.713 %	1.817 %		
Concentration RSD	2.6 %	37.0 %	2.3 %	0.7 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	159	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-38D10 6020TS	Rack	2		
Analysis started at:	9/15/2023 12:26:21 AM	Vial	53		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	112.770 %	103.607 %	1.460 ppb	1.227 ppb	9.929 ppb	3,248.208 ppb	22,511.758 ppb	774.455 ppb	219.996 ppb
Concentration per Run 1	113.641 %	103.407 %	1.458 ppb	1.177 ppb	7.713 ppb	3,211.614 ppb	22,518.405 ppb	726.627 ppb	209.545 ppb
Concentration per Run 2	113.950 %	101.603 %	1.462 ppb	1.227 ppb	14.122 ppb	3,293.420 ppb	22,654.666 ppb	814.086 ppb	237.687 ppb
Concentration per Run 3	110.720 %	105.812 %	1.460 ppb	1.278 ppb	7.952 ppb	3,239.590 ppb	22,362.202 ppb	782.652 ppb	212.756 ppb
Concentration RSD	1.6 %	2.0 %	0.1 %	4.1 %	36.6 %	1.3 %	0.7 %	5.7 %	7.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	143.416 %	140.420 %	55.504 ppb	40.492 ppb	491.543 ppb	34,913.715 ppb	10.416 ppb	20.889 ppb	21.847 ppb
Concentration per Run 1	143.116 %	140.730 %	53.688 ppb	39.149 ppb	476.267 ppb	33,775.863 ppb	10.437 ppb	20.153 ppb	20.486 ppb
Concentration per Run 2	145.007 %	140.078 %	58.336 ppb	41.563 ppb	498.270 ppb	35,001.307 ppb	10.584 ppb	21.145 ppb	22.703 ppb
Concentration per Run 3	142.126 %	140.450 %	54.490 ppb	40.764 ppb	500.090 ppb	35,963.974 ppb	10.228 ppb	21.369 ppb	22.353 ppb
Concentration RSD	1.0 %	0.2 %	4.5 %	3.0 %	2.7 %	3.1 %	1.7 %	3.1 %	5.5 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	75.087 ppb	109.242 %	105.593 %	48.205 ppb	24.638 ppb	7.532 ppb	0.957 ppb	106.694 %	101.037 %
Concentration per Run 1	71.958 ppb	106.428 %	109.317 %	43.903 ppb	23.977 ppb	6.793 ppb	0.849 ppb	103.720 %	104.007 %
Concentration per Run 2	76.896 ppb	110.453 %	102.826 %	51.799 ppb	29.017 ppb	7.679 ppb	1.027 ppb	109.674 %	100.151 %
Concentration per Run 3	76.408 ppb	110.845 %	104.637 %	48.912 ppb	20.919 ppb	8.122 ppb	0.995 ppb	106.687 %	98.953 %
Concentration RSD	3.6 %	2.2 %	3.2 %	8.3 %	16.6 %	9.0 %	9.9 %	2.8 %	2.6 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.112 ppb	0.588 ppb	105.273 %	103.903 %	0.495 ppb	136.256 ppb	112.354 %	108.608 %	107.485 %
Concentration per Run 1	0.103 ppb	0.578 ppb	105.524 %	105.973 %	0.503 ppb	132.542 ppb	110.626 %	112.812 %	107.157 %
Concentration per Run 2	0.111 ppb	0.564 ppb	104.126 %	105.225 %	0.476 ppb	134.853 ppb	112.769 %	107.856 %	108.234 %
Concentration per Run 3	0.121 ppb	0.622 ppb	106.170 %	100.512 %	0.507 ppb	141.372 ppb	113.668 %	105.156 %	107.064 %
Concentration RSD	8.3 %	5.2 %	1.0 %	2.8 %	3.3 %	3.4 %	1.4 %	3.6 %	0.6 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	102.972 %	0.253 ppb	82.511 ppb	103.867 %	99.440 %
Concentration per Run 1	104.851 %	0.240 ppb	77.207 ppb	102.017 %	104.391 %
Concentration per Run 2	102.388 %	0.258 ppb	84.549 ppb	105.203 %	97.472 %
Concentration per Run 3	101.677 %	0.261 ppb	85.776 ppb	104.381 %	96.456 %
Concentration RSD	1.6 %	4.4 %	5.6 %	1.6 %	4.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	160	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-39D10 6020TS	Rack	2		
Analysis started at:	9/15/2023 12:31:10 AM	Vial	54		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	113.710 %	94.389 %	1.225 ppb	2.147 ppb	22.273 ppb	4,644.137 ppb	24,083.677 ppb	1,298.871 ppb	1,854.044 ppb
Concentration per Run 1	115.098 %	91.383 %	1.176 ppb	2.136 ppb	25.564 ppb	4,720.924 ppb	23,238.916 ppb	1,267.948 ppb	1,971.995 ppb
Concentration per Run 2	112.558 %	87.174 %	1.233 ppb	2.163 ppb	27.759 ppb	5,038.466 ppb	25,439.502 ppb	1,428.868 ppb	1,997.176 ppb
Concentration per Run 3	113.476 %	104.609 %	1.267 ppb	2.141 ppb	13.497 ppb	4,173.022 ppb	23,572.614 ppb	1,199.799 ppb	1,592.962 ppb
Concentration RSD	1.1 %	9.6 %	3.8 %	0.7 %	34.5 %	9.4 %	4.9 %	9.1 %	12.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	155.058 %	142.936 %	72.796 ppb	43.580 ppb	545.558 ppb	45,420.857 ppb	13.173 ppb	23.737 ppb	33.294 ppb
Concentration per Run 1	154.371 %	143.154 %	72.845 ppb	44.376 ppb	551.362 ppb	45,499.612 ppb	13.300 ppb	24.584 ppb	34.716 ppb
Concentration per Run 2	150.725 %	135.418 %	76.748 ppb	45.380 ppb	573.862 ppb	48,599.818 ppb	13.810 ppb	24.958 ppb	34.480 ppb
Concentration per Run 3	160.080 %	150.237 %	68.795 ppb	40.984 ppb	511.452 ppb	42,163.142 ppb	12.410 ppb	21.669 ppb	30.686 ppb
Concentration RSD	3.0 %	5.2 %	5.5 %	5.3 %	5.8 %	7.1 %	5.4 %	7.6 %	6.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	97.887 ppb	114.072 %	103.531 %	132.681 ppb	17.426 ppb	15.633 ppb	1.604 ppb	106.436 %	98.088 %
Concentration per Run 1	101.588 ppb	113.167 %	97.082 %	139.635 ppb	18.845 ppb	16.601 ppb	1.588 ppb	105.695 %	95.463 %
Concentration per Run 2	103.540 ppb	114.476 %	98.683 %	137.143 ppb	17.700 ppb	16.156 ppb	1.684 ppb	107.498 %	97.485 %
Concentration per Run 3	88.532 ppb	114.573 %	114.828 %	121.266 ppb	15.733 ppb	14.143 ppb	1.539 ppb	106.114 %	101.315 %
Concentration RSD	8.3 %	0.7 %	9.5 %	7.5 %	9.0 %	8.4 %	4.6 %	0.9 %	3.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.043 ppb	0.251 ppb	106.785 %	99.506 %	2.096 ppb	155.619 ppb	113.394 %	102.220 %	107.903 %
Concentration per Run 1	0.045 ppb	0.248 ppb	104.933 %	94.357 %	2.245 ppb	165.064 ppb	109.464 %	97.008 %	104.760 %
Concentration per Run 2	0.042 ppb	0.287 ppb	106.773 %	99.515 %	2.054 ppb	158.263 ppb	116.403 %	102.596 %	107.246 %
Concentration per Run 3	0.043 ppb	0.218 ppb	108.650 %	104.647 %	1.989 ppb	143.531 ppb	114.315 %	107.055 %	111.704 %
Concentration RSD	3.4 %	13.8 %	1.7 %	5.2 %	6.3 %	7.1 %	3.1 %	4.9 %	3.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	97.312 %	0.287 ppb	42.425 ppb	104.779 %	94.315 %
Concentration per Run 1	93.516 %	0.283 ppb	43.780 ppb	103.119 %	91.866 %
Concentration per Run 2	94.346 %	0.283 ppb	42.814 ppb	104.473 %	93.304 %
Concentration per Run 3	104.073 %	0.294 ppb	40.680 ppb	106.746 %	97.774 %
Concentration RSD	6.0 %	2.2 %	3.7 %	1.7 %	3.3 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	161	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	I2352354-40D10 6020TS	Rack	2		
Analysis started at:	9/15/2023 12:35:58 AM	Vial	55		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	110.487 %	100.200 %	1.178 ppb	2.247 ppb	29.235 ppb	4,414.891 ppb	21,910.901 ppb	1,163.225 ppb	1,533.372 ppb
Concentration per Run 1	114.064 %	87.776 %	1.135 ppb	2.101 ppb	45.843 ppb	4,893.475 ppb	20,770.786 ppb	1,244.804 ppb	1,724.751 ppb
Concentration per Run 2	109.443 %	108.216 %	1.222 ppb	2.341 ppb	17.302 ppb	4,042.845 ppb	21,967.630 ppb	1,094.147 ppb	1,279.524 ppb
Concentration per Run 3	107.954 %	104.609 %	1.176 ppb	2.298 ppb	24.558 ppb	4,308.355 ppb	22,994.286 ppb	1,150.725 ppb	1,595.840 ppb
Concentration RSD	2.9 %	10.9 %	3.7 %	5.7 %	50.7 %	9.9 %	5.1 %	6.5 %	14.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	156.704 %	147.752 %	67.566 ppb	40.888 ppb	363.821 ppb	50,638.067 ppb	11.710 ppb	21.546 ppb	28.140 ppb
Concentration per Run 1	162.952 %	138.120 %	72.490 ppb	44.831 ppb	390.505 ppb	54,293.447 ppb	12.039 ppb	23.235 ppb	30.356 ppb
Concentration per Run 2	155.478 %	156.202 %	61.393 ppb	36.602 ppb	332.914 ppb	47,165.799 ppb	11.234 ppb	19.815 ppb	25.337 ppb
Concentration per Run 3	151.681 %	148.932 %	68.814 ppb	41.231 ppb	368.044 ppb	50,454.955 ppb	11.857 ppb	21.587 ppb	28.728 ppb
Concentration RSD	3.7 %	6.2 %	8.4 %	10.1 %	8.0 %	7.0 %	3.6 %	7.9 %	9.1 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	65.321 ppb	112.402 %	109.512 %	27.046 ppb	15.269 ppb	14.390 ppb	1.234 ppb	104.277 %	101.583 %
Concentration per Run 1	69.393 ppb	115.307 %	102.076 %	30.060 ppb	18.695 ppb	15.398 ppb	1.550 ppb	106.206 %	91.583 %
Concentration per Run 2	59.261 ppb	111.036 %	122.048 %	23.358 ppb	9.834 ppb	13.343 ppb	1.094 ppb	103.702 %	110.760 %
Concentration per Run 3	67.310 ppb	110.864 %	104.413 %	27.720 ppb	17.278 ppb	14.429 ppb	1.056 ppb	102.922 %	102.404 %
Concentration RSD	8.2 %	2.2 %	10.0 %	12.6 %	31.2 %	7.1 %	22.3 %	1.6 %	9.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.036 ppb	0.145 ppb	106.844 %	105.541 %	0.512 ppb	91.538 ppb	111.451 %	105.046 %	106.026 %
Concentration per Run 1	0.046 ppb	0.171 ppb	109.725 %	95.618 %	0.585 ppb	102.885 ppb	112.466 %	96.116 %	107.649 %
Concentration per Run 2	0.025 ppb	0.147 ppb	104.758 %	115.506 %	0.465 ppb	81.496 ppb	110.707 %	113.765 %	104.936 %
Concentration per Run 3	0.038 ppb	0.117 ppb	106.050 %	105.500 %	0.486 ppb	90.235 ppb	111.181 %	105.259 %	105.492 %
Concentration RSD	28.9 %	18.5 %	2.4 %	9.4 %	12.5 %	11.7 %	0.8 %	8.4 %	1.4 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	101.590 %	0.238 ppb	28.724 ppb	103.408 %	99.040 %
Concentration per Run 1	91.396 %	0.253 ppb	31.520 ppb	104.471 %	91.625 %
Concentration per Run 2	111.492 %	0.214 ppb	26.214 ppb	102.207 %	105.925 %
Concentration per Run 3	101.880 %	0.246 ppb	28.439 ppb	103.545 %	99.571 %
Concentration RSD	9.9 %	8.8 %	9.3 %	1.1 %	7.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 162 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCV Rack 0
Analysis started at: 9/15/2023 12:40:47 AM Vial 9

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	105.986 %	97.996 %	57.640 ppb	56.460 ppb	6,410.162 ppb	6,489.104 ppb	61.617 ppb	6,691.825 ppb	6,519.662 ppb
Concentration per Run 1	105.607 %	96.794 %	57.724 ppb	56.620 ppb	6,057.994 ppb	6,111.816 ppb	65.159 ppb	6,241.687 ppb	6,124.426 ppb
Concentration per Run 2	104.916 %	111.223 %	58.102 ppb	58.130 ppb	6,099.532 ppb	6,458.181 ppb	63.211 ppb	7,006.062 ppb	7,247.970 ppb
Concentration per Run 3	107.437 %	85.972 %	57.094 ppb	54.629 ppb	7,072.961 ppb	6,897.315 ppb	56.480 ppb	6,827.725 ppb	6,186.590 ppb
Recovery Percentage 1			96.066 %	94.099 %	106.836 %	108.152 %	102.694 %	111.530 %	108.661 %
Concentration RSD	1.2 %	12.9 %	0.9 %	3.1 %	9.0 %	6.1 %	7.4 %	6.0 %	9.7 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	113.547 %	111.992 %	60.336 ppb	60.867 ppb	64.314 ppb	6,485.240 ppb	61.512 ppb	60.907 ppb	61.244 ppb
Concentration per Run 1	109.181 %	120.971 %	54.659 ppb	54.368 ppb	59.956 ppb	6,156.266 ppb	56.616 ppb	58.127 ppb	59.862 ppb
Concentration per Run 2	111.838 %	104.660 %	63.799 ppb	65.665 ppb	67.438 ppb	6,575.932 ppb	64.630 ppb	63.364 ppb	61.960 ppb
Concentration per Run 3	119.623 %	110.345 %	62.549 ppb	62.569 ppb	65.547 ppb	6,723.523 ppb	63.291 ppb	61.230 ppb	61.910 ppb
Recovery Percentage 1			100.559 %	101.446 %	107.190 %	108.087 %	102.520 %	101.511 %	102.073 %
Concentration RSD	4.8 %	7.4 %	8.2 %	9.6 %	6.0 %	4.5 %	7.0 %	4.3 %	2.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	61.419 ppb	112.803 %	102.347 %	58.703 ppb	59.770 ppb	60.767 ppb	55.804 ppb	106.223 %	103.107 %
Concentration per Run 1	58.236 ppb	109.953 %	105.025 %	56.433 ppb	60.554 ppb	57.205 ppb	51.455 ppb	107.663 %	110.337 %
Concentration per Run 2	63.295 ppb	115.075 %	101.905 %	58.558 ppb	57.730 ppb	61.297 ppb	57.467 ppb	104.307 %	101.552 %
Concentration per Run 3	62.726 ppb	113.382 %	100.110 %	61.118 ppb	61.025 ppb	63.800 ppb	58.490 ppb	106.699 %	97.433 %
Recovery Percentage 1	102.365 %			97.838 %	99.616 %	101.279 %	93.006 %		
Concentration RSD	4.5 %	2.3 %	2.4 %	4.0 %	3.0 %	5.5 %	6.8 %	1.6 %	6.4 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	56.625 ppb	57.875 ppb	105.806 %	106.634 %	56.680 ppb	58.220 ppb	105.991 %	106.458 %	105.085 %
Concentration per Run 1	53.430 ppb	54.481 ppb	104.653 %	113.154 %	52.244 ppb	55.544 ppb	104.223 %	110.305 %	105.125 %
Concentration per Run 2	57.263 ppb	59.892 ppb	106.471 %	104.620 %	57.889 ppb	58.319 ppb	106.470 %	102.833 %	103.437 %
Concentration per Run 3	59.182 ppb	59.253 ppb	106.294 %	102.126 %	59.909 ppb	60.796 ppb	107.281 %	106.237 %	106.691 %
Recovery Percentage 1	94.375 %	96.459 %			94.467 %	97.033 %			
Concentration RSD	5.2 %	5.1 %	0.9 %	5.4 %	7.0 %	4.5 %	1.5 %	3.5 %	1.5 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	105.075 %	57.792 ppb	57.371 ppb	105.929 %	100.695 %
Concentration per Run 1	110.589 %	55.651 ppb	54.941 ppb	103.865 %	104.255 %
Concentration per Run 2	101.851 %	58.493 ppb	58.325 ppb	106.678 %	99.275 %
Concentration per Run 3	102.784 %	59.231 ppb	58.846 ppb	107.243 %	98.556 %
Recovery Percentage 1		96.319 %	95.618 %		
Concentration RSD	4.6 %	3.3 %	3.7 %	1.7 %	3.1 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	163	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCB	Rack	0		
Analysis started at:	9/15/2023 12:45:40 AM	Vial	10		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	110.205 %	97.996 %	0.018 ppb	0.023 ppb	-12.067 ppb	0.607 ppb	1.052 ppb	5.802 ppb	-8.096 ppb
Concentration per Run 1	108.800 %	99.198 %	0.019 ppb	0.040 ppb	-13.982 ppb	2.757 ppb	1.029 ppb	-1.950 ppb	5.451 ppb
Concentration per Run 2	111.018 %	94.389 %	0.022 ppb	0.031 ppb	-9.969 ppb	-1.083 ppb	1.069 ppb	8.947 ppb	-14.386 ppb
Concentration per Run 3	110.798 %	100.401 %	0.014 ppb	-0.002 ppb	-12.251 ppb	0.147 ppb	1.059 ppb	10.408 ppb	-15.351 ppb
Recovery Percentage 1			3.677 %	0.229 %	-12.067 %	0.867 %	10.525 %	5.802 %	-8.096 %
Concentration RSD	1.1 %	3.2 %	24.6 %	97.9 %	16.7 %	323.1 %	2.0 %	116.4 %	145.0 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	115.666 %	109.196 %	0.011 ppb	-0.068 ppb	0.147 ppb	11.212 ppb	0.011 ppb	0.126 ppb	0.014 ppb
Concentration per Run 1	117.624 %	109.786 %	-0.009 ppb	-0.041 ppb	0.151 ppb	16.267 ppb	0.012 ppb	0.129 ppb	0.018 ppb
Concentration per Run 2	115.257 %	107.736 %	0.030 ppb	-0.039 ppb	0.141 ppb	9.964 ppb	0.007 ppb	0.165 ppb	0.011 ppb
Concentration per Run 3	114.117 %	110.066 %	0.010 ppb	-0.125 ppb	0.148 ppb	7.406 ppb	0.012 ppb	0.084 ppb	0.014 ppb
Recovery Percentage 1			0.211 %	-6.832 %	14.669 %	22.425 %	2.102 %	6.297 %	1.420 %
Concentration RSD	1.5 %	1.2 %	186.6 %	72.0 %	3.5 %	40.7 %	29.0 %	32.3 %	25.0 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	0.971 ppb	110.456 %	105.649 %	0.066 ppb	0.062 ppb	-0.040 ppb	0.120 ppb	107.538 %	105.831 %
Concentration per Run 1	0.876 ppb	110.980 %	111.694 %	0.038 ppb	0.004 ppb	0.013 ppb	0.071 ppb	109.533 %	108.506 %
Concentration per Run 2	0.983 ppb	110.442 %	99.119 %	0.073 ppb	0.191 ppb	-0.091 ppb	0.135 ppb	107.887 %	104.665 %
Concentration per Run 3	1.055 ppb	109.945 %	106.135 %	0.088 ppb	-0.007 ppb	-0.041 ppb	0.153 ppb	105.194 %	104.321 %
Recovery Percentage 1	19.427 %			13.195 %	1.248 %	-8.005 %	5.982 %		
Concentration RSD	9.2 %	0.5 %	6.0 %	38.9 %	178.1 %	129.7 %	35.8 %	2.0 %	2.2 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.012 ppb	0.005 ppb	111.084 %	108.734 %	0.059 ppb	0.083 ppb	106.764 %	107.997 %	103.743 %
Concentration per Run 1	0.010 ppb	0.000 ppb	110.768 %	112.130 %	0.054 ppb	0.080 ppb	106.041 %	111.070 %	101.648 %
Concentration per Run 2	0.015 ppb	0.009 ppb	108.823 %	107.981 %	0.063 ppb	0.084 ppb	108.313 %	104.936 %	106.364 %
Concentration per Run 3	0.010 ppb	0.006 ppb	113.661 %	106.092 %	0.060 ppb	0.084 ppb	105.938 %	107.983 %	103.217 %
Recovery Percentage 1	2.902 %				1.472 %	16.537 %			
Concentration RSD	26.0 %	91.4 %	2.2 %	2.8 %	8.1 %	2.8 %	1.3 %	2.8 %	2.3 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	104.710 %	0.149 ppb	0.025 ppb	106.826 %	104.397 %
Concentration per Run 1	105.361 %	0.095 ppb	0.026 ppb	104.611 %	107.726 %
Concentration per Run 2	104.974 %	0.164 ppb	0.025 ppb	110.777 %	102.915 %
Concentration per Run 3	103.797 %	0.188 ppb	0.024 ppb	105.089 %	102.550 %
Recovery Percentage 1		14.899 %	2.506 %		
Concentration RSD	0.8 %	32.6 %	5.3 %	3.2 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	164	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	CCV	Rack	0		
Analysis started at:	9/15/2023 12:50:33 AM	Vial	9		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	106.971 %	104.810 %	57.115 ppb	55.836 ppb	5,962.172 ppb	5,775.381 ppb	58.179 ppb	6,146.143 ppb	5,654.319 ppb
Concentration per Run 1	106.909 %	90.180 %	56.143 ppb	56.417 ppb	6,136.418 ppb	5,865.167 ppb	61.748 ppb	5,909.728 ppb	5,211.645 ppb
Concentration per Run 2	107.037 %	111.223 %	57.118 ppb	56.220 ppb	5,846.139 ppb	6,026.712 ppb	57.628 ppb	6,270.591 ppb	5,806.926 ppb
Concentration per Run 3	106.966 %	113.026 %	58.083 ppb	54.872 ppb	5,903.959 ppb	5,434.264 ppb	55.159 ppb	6,258.109 ppb	5,944.385 ppb
Recovery Percentage 1			95.191 %	93.061 %	99.370 %	96.256 %	96.964 %	102.436 %	94.239 %
Concentration RSD	0.1 %	12.1 %	1.7 %	1.5 %	2.6 %	5.3 %	5.7 %	3.3 %	6.9 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	119.676 %	119.666 %	59.512 ppb	55.743 ppb	60.098 ppb	5,933.108 ppb	58.351 ppb	57.720 ppb	56.992 ppb
Concentration per Run 1	112.554 %	124.233 %	54.885 ppb	51.715 ppb	55.044 ppb	5,708.786 ppb	54.212 ppb	54.574 ppb	54.022 ppb
Concentration per Run 2	122.946 %	117.522 %	64.089 ppb	57.696 ppb	63.322 ppb	6,013.523 ppb	60.641 ppb	60.572 ppb	57.615 ppb
Concentration per Run 3	123.528 %	117.242 %	59.563 ppb	57.819 ppb	61.927 ppb	6,077.015 ppb	60.199 ppb	58.012 ppb	59.338 ppb
Recovery Percentage 1			99.187 %	92.905 %	100.163 %	98.885 %	97.251 %	96.199 %	94.986 %
Concentration RSD	5.2 %	3.3 %	7.7 %	6.3 %	7.4 %	3.3 %	6.2 %	5.2 %	4.8 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	59.939 ppb	113.248 %	100.748 %	58.976 ppb	58.248 ppb	62.354 ppb	56.920 ppb	108.045 %	99.517 %
Concentration per Run 1	54.514 ppb	112.524 %	106.027 %	54.129 ppb	54.404 ppb	58.223 ppb	51.989 ppb	109.878 %	101.183 %
Concentration per Run 2	64.000 ppb	112.778 %	95.501 %	62.310 ppb	60.084 ppb	64.668 ppb	59.380 ppb	106.552 %	98.993 %
Concentration per Run 3	61.303 ppb	114.442 %	100.716 %	60.488 ppb	60.256 ppb	64.169 ppb	59.390 ppb	107.704 %	98.374 %
Recovery Percentage 1	99.898 %			98.293 %	97.080 %	103.923 %	94.866 %		
Concentration RSD	8.2 %	0.9 %	5.2 %	7.3 %	5.7 %	5.8 %	7.5 %	1.6 %	1.5 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	56.549 ppb	57.192 ppb	107.223 %	103.291 %	57.519 ppb	59.590 ppb	107.059 %	104.677 %	106.352 %
Concentration per Run 1	53.239 ppb	54.549 ppb	104.564 %	104.607 %	55.634 ppb	57.615 ppb	105.206 %	106.255 %	107.200 %
Concentration per Run 2	57.991 ppb	58.728 ppb	107.728 %	102.297 %	58.832 ppb	60.352 ppb	107.899 %	103.684 %	105.863 %
Concentration per Run 3	58.417 ppb	58.299 ppb	109.378 %	102.967 %	58.090 ppb	60.804 ppb	108.071 %	104.093 %	105.992 %
Recovery Percentage 1	94.248 %	95.320 %			95.864 %	99.317 %			
Concentration RSD	5.1 %	4.0 %	2.3 %	1.2 %	2.9 %	2.9 %	1.5 %	1.3 %	0.7 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	103.710 %	57.052 ppb	57.289 ppb	107.211 %	98.976 %
Concentration per Run 1	105.101 %	54.041 ppb	54.009 ppb	103.554 %	102.319 %
Concentration per Run 2	102.908 %	57.760 ppb	58.129 ppb	109.511 %	98.559 %
Concentration per Run 3	103.122 %	59.356 ppb	59.728 ppb	108.567 %	96.049 %
Recovery Percentage 1		95.087 %	95.482 %		
Concentration RSD	1.2 %	4.8 %	5.2 %	3.0 %	3.2 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index: 165 User name ALPHALAB\ICPMSRQ Comment <Comment>
Analysis label: CCB Rack 0
Analysis started at: 9/15/2023 12:55:25 AM Vial 10

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	109.408 %	95.591 %	0.025 ppb	0.025 ppb	-10.995 ppb	0.726 ppb	1.014 ppb	-1.841 ppb	14.240 ppb
Concentration per Run 1	108.846 %	100.401 %	0.033 ppb	0.033 ppb	-13.127 ppb	0.179 ppb	1.071 ppb	-5.813 ppb	29.406 ppb
Concentration per Run 2	110.094 %	93.186 %	0.020 ppb	0.029 ppb	-15.441 ppb	0.268 ppb	0.986 ppb	11.993 ppb	6.538 ppb
Concentration per Run 3	109.283 %	93.186 %	0.023 ppb	0.013 ppb	-4.417 ppb	1.730 ppb	0.986 ppb	-11.702 ppb	6.775 ppb
Recovery Percentage 1			5.087 %	0.250 %	-10.995 %	1.037 %	10.145 %	-1.841 %	14.240 %
Concentration RSD	0.6 %	4.4 %	26.3 %	43.5 %	52.9 %	120.0 %	4.9 %	670.2 %	92.2 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	112.269 %	105.934 %	0.005 ppb	0.018 ppb	0.168 ppb	8.193 ppb	0.006 ppb	0.122 ppb	0.052 ppb
Concentration per Run 1	110.619 %	107.270 %	0.010 ppb	-0.018 ppb	0.121 ppb	6.552 ppb	0.012 ppb	0.072 ppb	0.019 ppb
Concentration per Run 2	114.960 %	108.295 %	0.011 ppb	0.018 ppb	0.212 ppb	8.695 ppb	0.004 ppb	0.198 ppb	0.012 ppb
Concentration per Run 3	111.227 %	102.237 %	-0.007 ppb	0.054 ppb	0.172 ppb	9.332 ppb	0.001 ppb	0.094 ppb	0.125 ppb
Recovery Percentage 1			0.095 %	1.798 %	16.834 %	16.386 %	1.152 %	6.087 %	5.178 %
Concentration RSD	2.1 %	3.1 %	221.6 %	201.2 %	27.2 %	17.8 %	102.3 %	55.3 %	122.3 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	1.118 ppb	110.351 %	103.159 %	-0.026 ppb	-0.011 ppb	-0.006 ppb	0.159 ppb	107.685 %	104.250 %
Concentration per Run 1	1.039 ppb	112.197 %	110.600 %	0.006 ppb	-0.017 ppb	-0.037 ppb	0.160 ppb	106.650 %	107.747 %
Concentration per Run 2	1.093 ppb	107.252 %	97.388 %	0.068 ppb	-0.008 ppb	-0.012 ppb	0.173 ppb	106.780 %	103.184 %
Concentration per Run 3	1.224 ppb	111.605 %	101.488 %	-0.153 ppb	-0.008 ppb	0.030 ppb	0.144 ppb	109.625 %	101.818 %
Recovery Percentage 1	22.369 %			-5.242 %	-0.216 %	-1.258 %	7.959 %		
Concentration RSD	8.5 %	2.4 %	6.6 %	434.4 %	49.5 %	531.6 %	9.2 %	1.6 %	3.0 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.014 ppb	0.011 ppb	107.845 %	104.394 %	0.056 ppb	0.131 ppb	106.677 %	103.138 %	104.359 %
Concentration per Run 1	0.010 ppb	0.006 ppb	105.760 %	107.366 %	0.063 ppb	0.101 ppb	108.944 %	107.504 %	104.047 %
Concentration per Run 2	0.015 ppb	0.019 ppb	108.613 %	103.111 %	0.051 ppb	0.106 ppb	106.164 %	102.138 %	106.416 %
Concentration per Run 3	0.017 ppb	0.009 ppb	109.162 %	102.704 %	0.054 ppb	0.184 ppb	104.924 %	99.772 %	102.615 %
Recovery Percentage 1	3.502 %				1.407 %	26.156 %			
Concentration RSD	25.1 %	57.9 %	1.7 %	2.5 %	10.9 %	35.6 %	1.9 %	3.8 %	1.8 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	101.577 %	0.173 ppb	0.025 ppb	106.422 %	103.833 %
Concentration per Run 1	102.624 %	0.116 ppb	0.027 ppb	105.500 %	107.154 %
Concentration per Run 2	100.965 %	0.199 ppb	0.022 ppb	107.127 %	102.042 %
Concentration per Run 3	101.142 %	0.204 ppb	0.025 ppb	106.639 %	102.302 %
Recovery Percentage 1		17.289 %	2.493 %		
Concentration RSD	0.9 %	28.6 %	9.8 %	0.8 %	2.8 %

Alpha ICPMSRQ Data

9/15/2023 5:14:13 AM

Analysis index:	166	User name	ALPHALAB\ICPMSRQ	Comment	<Comment>
Analysis label:	LLCCV	Rack	4		
Analysis started at:	9/15/2023 1:00:19 AM	Vial	51		

Category	6Li (STD_DEF)	6Li (KED_DEF)	9Be (STD_DEF)	11B (STD_DEF)	23Na (KED_DEF)	24Mg (KED_DEF)	27Al (STD_DEF)	39K (KED_DEF)	44Ca (KED_DEF)
Concentration average	113.114 %	100.000 %	0.313 ppb	96.083 ppb	126.197 ppb	90.109 ppb	11.004 ppb	130.871 ppb	183.867 ppb
Concentration per Run 1	113.418 %	84.769 %	0.310 ppb	95.488 ppb	166.491 ppb	106.175 ppb	10.930 ppb	145.995 ppb	80.439 ppb
Concentration per Run 2	112.460 %	99.198 %	0.301 ppb	96.427 ppb	117.547 ppb	86.019 ppb	11.513 ppb	110.199 ppb	324.467 ppb
Concentration per Run 3	113.463 %	116.032 %	0.327 ppb	96.335 ppb	94.554 ppb	78.134 ppb	10.567 ppb	136.420 ppb	146.695 ppb
Recovery Percentage 1			62.561 %	960.831 %	126.197 %	128.727 %	110.036 %	130.871 %	183.867 %
Concentration RSD	0.5 %	15.6 %	4.3 %	0.5 %	29.1 %	16.0 %	4.3 %	14.2 %	68.6 %

Category	45Sc (STD_DEF)	45Sc (KED_DEF)	51V (KED_DEF)	52Cr (KED_DEF)	55Mn (KED_DEF)	57Fe (KED_DEF)	59Co (KED_DEF)	60Ni (KED_DEF)	65Cu (KED_DEF)
Concentration average	113.757 %	100.932 %	6.631 ppb	0.650 ppb	1.685 ppb	44.249 ppb	0.667 ppb	2.649 ppb	1.350 ppb
Concentration per Run 1	114.740 %	89.375 %	7.901 ppb	0.766 ppb	1.911 ppb	50.107 ppb	0.901 ppb	2.711 ppb	1.504 ppb
Concentration per Run 2	113.268 %	102.237 %	6.109 ppb	0.625 ppb	1.644 ppb	42.699 ppb	0.545 ppb	2.527 ppb	1.325 ppb
Concentration per Run 3	113.264 %	111.184 %	5.881 ppb	0.559 ppb	1.501 ppb	39.941 ppb	0.556 ppb	2.708 ppb	1.222 ppb
Recovery Percentage 1			132.614 %	65.001 %	168.527 %	88.498 %	133.427 %	132.445 %	135.024 %
Concentration RSD	0.7 %	10.9 %	16.7 %	16.2 %	12.3 %	11.9 %	30.4 %	4.0 %	10.6 %

Category	66Zn (KED_DEF)	74Ge (STD_DEF)	74Ge (KED_DEF)	75As (KED_DEF)	78Se (KED_DEF)	88Sr (KED_DEF)	95Mo (KED_DEF)	103Rh (STD_DEF)	103Rh (KED_DEF)
Concentration average	12.157 ppb	112.650 %	92.461 %	0.628 ppb	5.393 ppb	0.637 ppb	2.292 ppb	108.131 %	97.107 %
Concentration per Run 1	14.156 ppb	113.541 %	80.623 %	0.733 ppb	6.431 ppb	0.628 ppb	2.733 ppb	108.585 %	85.790 %
Concentration per Run 2	10.947 ppb	111.858 %	101.831 %	0.653 ppb	6.055 ppb	0.675 ppb	1.958 ppb	109.637 %	101.740 %
Concentration per Run 3	11.366 ppb	112.549 %	94.928 %	0.497 ppb	3.693 ppb	0.608 ppb	2.184 ppb	106.172 %	103.790 %
Recovery Percentage 1	121.566 %			125.548 %	107.855 %	63.701 %	114.576 %		
Concentration RSD	14.3 %	0.8 %	11.7 %	19.1 %	27.5 %	5.4 %	17.4 %	1.6 %	10.1 %

Category	107Ag (KED_DEF)	111Cd (KED_DEF)	115In (STD_DEF)	115In (KED_DEF)	123Sb (KED_DEF)	137Ba (KED_DEF)	159Tb (STD_DEF)	159Tb (KED_DEF)	175Lu (STD_DEF)
Concentration average	0.311 ppb	0.242 ppb	107.598 %	97.589 %	4.425 ppb	1.098 ppb	106.762 %	96.438 %	103.624 %
Concentration per Run 1	0.373 ppb	0.265 ppb	107.413 %	86.888 %	5.073 ppb	1.233 ppb	106.696 %	84.768 %	101.378 %
Concentration per Run 2	0.291 ppb	0.248 ppb	109.017 %	101.431 %	4.095 ppb	1.087 ppb	108.595 %	100.230 %	105.960 %
Concentration per Run 3	0.271 ppb	0.213 ppb	106.363 %	104.449 %	4.105 ppb	0.975 ppb	104.994 %	104.315 %	103.535 %
Recovery Percentage 1	77.848 %	120.928 %			110.613 %	219.649 %			
Concentration RSD	17.4 %	10.8 %	1.2 %	9.6 %	12.7 %	11.8 %	1.7 %	10.7 %	2.2 %

Category	175Lu (KED_DEF)	205Tl (KED_DEF)	208Pb (KED_DEF)	209Bi (STD_DEF)	209Bi (KED_DEF)
Concentration average	94.140 %	0.623 ppb	0.634 ppb	104.172 %	90.719 %
Concentration per Run 1	84.408 %	0.661 ppb	0.713 ppb	103.423 %	82.947 %
Concentration per Run 2	98.209 %	0.605 ppb	0.607 ppb	106.432 %	93.597 %
Concentration per Run 3	99.802 %	0.604 ppb	0.581 ppb	102.662 %	95.613 %
Recovery Percentage 1		124.684 %	126.724 %		
Concentration RSD	9.0 %	5.2 %	11.0 %	1.9 %	7.5 %

Interference Check Solutions
(ICP-MS)

Solution Component	Solution A Concentration (ug/L)	Solution AB Concentration (ug/L)
Al	20,000	20,000
Ca	60,000	60,000
Fe	50,000	50,000
Mg	20,000	20,000
Na	50,000	50,000
K	20,000	20,000
Mo	400	400
As	0.0	20
Cd	0.0	20
Cr	0.0	40
Co	0.0	40
Cu	0.0	40
Mn	0.0	40
Ni	0.0	40
Se	0.0	20
Ag	0.0	10
V	0.0	40
Zn	0.0	20

LCS & MS Concentrations
(ICP-MS)

Element	Liquid Concentration (mg/L)
Aluminum	2.00
Antimony	0.5
Arsenic	0.12
Barium	2.00
Beryllium	0.05
Cadmium	0.051
Calcium	10.0
Chromium	0.20
Cobalt	0.50
Copper	0.25
Iron	1.00
Lead	0.51
Magnesium	10.0
Manganese	0.50
Molybdenum	1.00
Nickel	0.50
Potassium	10.0
Selenium	0.12
Silver	0.05
Sodium	10.0
Thallium	0.12
Vanadium	0.50
Zinc	0.50

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D102-540
Certificate Issue Date: June 22, 2018
Expiration Date: January 31, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8160	6.36	3960 - 12400	4080 - 12200
Antimony	120	60.9	9.42	0.822 - 121	12.0 - 166
Arsenic	144	135	5.08	112 - 158	94.6 - 176
Barium	469	443	6.77	366 - 521	332 - 554
Beryllium	207	197	5.86	164 - 229	148 - 246
Boron	213	174	12.6	127 - 221	105 - 244
Cadmium	224	204	6.65	169 - 240	153 - 256
Calcium	5190	4830	9.12	3950 - 5700	3510 - 6150
Chromium	138	132	8.56	109 - 155	92.2 - 171
Cobalt	182	179	7.93	151 - 207	134 - 224
Copper	191	184	6.72	155 - 213	138 - 230
Iron	15000	14400	10.7	8770 - 20000	5120 - 23600
Lead	225	216	7.72	178 - 254	159 - 274
Magnesium	2570	2340	6.13	1780 - 2900	1460 - 3230
Manganese	331	323	6.71	266 - 380	242 - 404
Mercury	16.8	13.2	16.0	8.64 - 17.7	7.89 - 18.5
Molybdenum	193	175	2.39	141 - 209	125 - 226
Nickel	163	152	5.95	126 - 178	106 - 197
Potassium	2420	2050	6.31	1440 - 2660	1210 - 2890
Selenium	81.9	74.9	4.13	59.3 - 90.5	47.0 - 103
Silver	57.6	53.9	9.00	43.0 - 64.8	37.8 - 70.0
Sodium	161	149	12.1	111 - 188	57.7 - 241
Strontium	100	96.2	4.04	78.1 - 114	69.0 - 123
Thallium	253	232	3.54	188 - 276	168 - 296

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Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	146	134	10.8	106 - 163	79.5 - 189
Titanium	449	340	7.20	70.2 - 609	44.9 - 711
Uranium	114	113	7.10	85.5 - 140	71.9 - 153
Vanadium	180	172	8.85	137 - 207	126 - 218
Zinc	217	211	6.58	171 - 250	147 - 274

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8160	80.8	138	-	-
Antimony	120	60.9	50.8	135	-	-
Arsenic	144	135	93.8	184	-	-
Barium	469	443	94.5	158	-	-
Beryllium	207	197	95.0	148	-	-
Boron	213	174	81.8	107	-	-
Cadmium	224	204	91.3	199	-	-
Calcium	5190	4830	93.0	122	-	-
Chromium	138	132	95.5	172	-	-
Cobalt	182	179	98.4	140	-	-
Copper	191	184	96.3	183	-	-
Iron	15000	14400	95.6	133	-	-
Lead	225	216	96.2	204	-	-
Magnesium	2570	2340	91.2	122	-	-
Manganese	331	323	97.6	147	-	-
Mercury	16.8	13.2	78.3	128	-	-
Molybdenum	193	175	90.8	143	-	-
Nickel	163	152	93.1	185	-	-
Potassium	2420	2050	84.7	121	-	-
Selenium	81.9	74.9	91.5	163	-	-

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Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	57.6	53.9	93.6	150	-	-
Sodium	161	149	92.8	105	-	-
Strontium	100	96.2	96.2	90	-	-
Thallium	253	232	91.6	147	-	-
Tin	146	134	92.0	100	-	-
Titanium	449	340	75.6	93	-	-
Uranium	114	113	98.8	35	-	-
Vanadium	180	172	95.4	139	-	-
Zinc	217	211	97.0	180	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller

Quality Officer

Matthew Seebeck

ISO/IEC GUIDE 34:2009 ACCREDITED REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02

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Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D105-540
Certificate Issue Date: March 19, 2019
Expiration Date: October 12, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8800	8.32	4600 - 13000	4470 - 13100
Antimony	282	147	7.70	6.17 - 289	28.2 - 366
Arsenic	155	143	6.34	119 - 168	100 - 186
Barium	439	415	5.37	343 - 488	311 - 519
Beryllium	192	179	2.78	149 - 210	134 - 224
Boron	216	160	7.08	113 - 208	96.1 - 238
Cadmium	61.5	56.2	0.528	46.6 - 65.9	42.2 - 70.3
Calcium	5190	4960	6.64	4090 - 5840	3610 - 6310
Chromium	104	101	4.75	83.2 - 118	70.5 - 131
Cobalt	196	189	0.500	158 - 219	141 - 236
Copper	65.0	63.1	2.65	53.1 - 73.1	47.3 - 78.9
Iron	15000	15700	8.94	10100 - 21300	6000 - 25400
Lead	126	125	4.77	103 - 146	89.3 - 160
Magnesium	2570	2410	6.26	1860 - 2970	1520 - 3310
Manganese	387	382	5.37	315 - 449	290 - 474
Mercury	7.76	7.61	13.7	5.53 - 9.69	4.57 - 10.7
Molybdenum	120	107	0.500	86.0 - 128	75.5 - 139
Nickel	117	108	0.514	89.5 - 127	75.7 - 141
Potassium	2420	2110	5.62	1500 - 2720	1260 - 2960
Selenium	84.6	77.9	7.10	61.8 - 94.0	49.2 - 107
Silver	34.6	34.3	8.34	27.8 - 40.9	23.6 - 45.1
Sodium	161	145	6.72	106 - 183	54.3 - 235
Strontium	104	104	3.95	85.1 - 123	74.8 - 133
Thallium	123	113	0.500	91.3 - 134	77.1 - 149

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Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	118	107	0.500	83.5 - 130	61.2 - 152
Titanium	512	421	5.80	114 - 728	0.00 - 854
Uranium	103	104	6.18	79.1 - 128	71.9 - 135
Vanadium	87.3	83.7	8.55	66.8 - 101	54.2 - 113
Zinc	251	240	3.98	194 - 285	168 - 312

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8800	87.1	193	-	-
Antimony	282	147	52.3	216	-	-
Arsenic	155	143	92.5	240	-	-
Barium	439	415	94.6	222	-	-
Beryllium	192	179	93.4	220	-	-
Boron	216	160	74.2	152	-	-
Cadmium	61.5	56.2	91.5	239	-	-
Calcium	5190	4960	95.6	175	-	-
Chromium	104	101	96.8	237	-	-
Cobalt	196	189	96.2	215	-	-
Copper	65.0	63.1	97.1	237	-	-
Iron	15000	15700	105	195	-	-
Lead	126	125	99.0	243	-	-
Magnesium	2570	2410	93.9	177	-	-
Manganese	387	382	98.7	215	-	-
Mercury	7.76	7.61	98.0	157	-	-
Molybdenum	120	107	89.4	216	-	-
Nickel	117	108	92.5	235	-	-
Potassium	2420	2110	87.2	181	-	-
Selenium	84.6	77.9	92.1	231	-	-

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Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	34.6	34.3	99.3	216	-	-
Sodium	161	145	89.8	166	-	-
Strontium	104	104	99.9	148	-	-
Thallium	123	113	91.8	215	-	-
Tin	118	107	90.4	164	-	-
Titanium	512	421	82.2	157	-	-
Uranium	103	104	101	61	-	-
Vanadium	87.3	83.7	95.9	214	-	-
Zinc	251	240	95.5	234	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller

Brian Miller

Quality Officer

Matthew Seebeck

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Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D109-540
Certificate Issue Date: March 24, 2020
Expiration Date: October 03, 2023
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8130	2.54	3920 - 12300	4060 - 12200
Antimony	259	134	5.03	4.56 - 264	25.9 - 335
Arsenic	171	156	3.38	129 - 183	109 - 203
Barium	253	239	4.81	197 - 280	179 - 298
Beryllium	179	169	6.59	141 - 198	127 - 212
Boron	114	87.5	10.3	62.5 - 113	52.5 - 125
Cadmium	149	137	5.43	113 - 160	103 - 171
Calcium	5190	4760	3.48	3890 - 5640	3460 - 6070
Chromium	163	154	3.79	126 - 181	108 - 200
Cobalt	127	121	5.07	101 - 141	90.8 - 151
Copper	57.0	54.9	4.13	46.1 - 63.6	41.1 - 68.6
Iron	15000	14100	6.27	8470 - 19700	4920 - 23200
Lead	133	130	3.00	107 - 152	93.3 - 167
Magnesium	2570	2320	3.32	1760 - 2880	1440 - 3200
Manganese	277	269	2.67	221 - 317	199 - 340
Mercury	21.6	20.5	7.72	14.7 - 26.3	12.3 - 28.6
Molybdenum	108	95.4	2.61	76.4 - 114	66.9 - 124
Nickel	58.7	53.9	4.97	44.5 - 63.3	37.7 - 70.0
Potassium	2420	2020	3.06	1410 - 2630	1190 - 2850
Selenium	181	167	5.63	132 - 201	113 - 221
Silver	35.5	33.6	5.20	26.8 - 40.3	23.0 - 44.1
Sodium	161	133	2.76	95.1 - 171	46.5 - 220
Strontium	89.7	87.9	4.59	71.7 - 104	62.8 - 113
Thallium	121	112	5.19	90.3 - 133	76.1 - 147

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▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	83.5	74.0	5.42	57.6 - 90.4	39.7 - 108
Titanium	474	333	7.17	48.6 - 617	46.3 - 620
Uranium	51.9	51.9	3.36	39.6 - 64.3	35.9 - 68.0
Vanadium	68.1	62.6	6.00	49.4 - 75.8	37.0 - 88.3
Zinc	165	158	2.34	128 - 188	111 - 205

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ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number[6]	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8130	80.5	196	-	-
Antimony	259	134	51.8	217	-	-
Arsenic	171	156	91.3	243	-	-
Barium	253	239	94.3	230	-	-
Beryllium	179	169	94.6	223	-	-
Boron	114	87.5	76.7	150	-	-
Cadmium	149	137	91.8	249	-	-
Calcium	5190	4760	91.8	184	-	-
Chromium	163	154	94.4	245	-	-
Cobalt	127	121	95.3	221	-	-
Copper	57.0	54.9	96.2	243	-	-
Iron	15000	14100	93.9	199	-	-
Lead	133	130	97.7	251	-	-
Magnesium	2570	2320	90.1	182	-	-
Manganese	277	269	97.2	220	-	-
Mercury	21.6	20.5	94.7	172	-	-
Molybdenum	108	95.4	88.3	218	-	-
Nickel	58.7	53.9	91.8	242	-	-
Potassium	2420	2020	83.5	187	-	-
Selenium	181	167	92.2	235	-	-
Silver	35.5	33.6	94.5	222	-	-
Sodium	161	133	82.7	177	-	-
Strontium	89.7	87.9	98.0	151	-	-
Thallium	121	112	92.2	219	-	-
Tin	83.5	74.0	88.6	170	-	-
Titanium	474	333	70.3	157	-	-
Uranium	51.9	51.9	100	60	-	-
Vanadium	68.1	62.6	91.9	213	-	-
Zinc	165	158	95.8	238	-	-

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▪ Certificate of Analysis ▪

1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

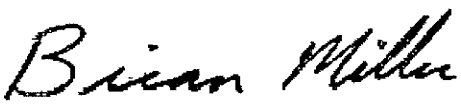
8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller



Quality Officer

Matthew Seebeck

ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D113-540
Certificate Issue Date: March 23, 2021
Expiration Date: October 13, 2024
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8630	12.0	4420 - 12800	4370 - 12900
Antimony	256	129	16.8	0.742 - 257	25.6 - 323
Arsenic	91.6	84.5	15.1	70.0 - 99.0	59.2 - 110
Barium	259	249	9.94	206 - 292	187 - 311
Beryllium	175	163	3.89	135 - 191	122 - 204
Boron	95.7	76.7	12.8	55.7 - 97.7	48.0 - 107
Cadmium	107	99.0	11.5	82.2 - 116	74.2 - 124
Calcium	5190	4760	11.8	3890 - 5640	3460 - 6070
Chromium	129	122	14.6	101 - 144	85.7 - 159
Cobalt	63.6	61.7	11.5	51.9 - 71.6	46.3 - 77.2
Copper	62.3	61.5	12.3	51.9 - 71.0	46.1 - 76.8
Iron	15000	14500	15.7	8860 - 20100	5190 - 23800
Lead	122	123	13.9	103 - 144	88.3 - 158
Lithium	6.42	7.30	18.7	5.13 - 9.48	3.20 - 11.4
Magnesium	2570	2360	8.87	1810 - 2920	1480 - 3250
Manganese	470	456	13.4	375 - 538	350 - 563
Mercury	22.1	18.9	14.5	13.0 - 24.8	11.3 - 26.4
Molybdenum	80.1	72.8	11.0	58.7 - 87.0	50.5 - 95.2
Nickel	143	135	14.2	112 - 158	94.7 - 176
Potassium	2420	2090	8.21	1480 - 2700	1240 - 2940
Selenium	128	121	11.7	96.9 - 146	80.4 - 162
Silver	45.4	44.1	6.69	35.5 - 52.8	30.7 - 57.6
Sodium	161	136	9.34	97.4 - 174	48.1 - 223
Strontium	82.2	82.3	8.42	67.4 - 97.1	58.6 - 106

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▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Thallium	154	144	7.54	117 - 171	101 - 187
Tin	89.7	79.8	14.0	62.2 - 97.4	43.5 - 116
Titanium	705	546	10.3	123 - 969	118 - 974
Uranium	29.5	30.9	3.38	23.9 - 37.9	21.3 - 40.5
Vanadium	196	186	14.2	148 - 224	138 - 235
Zinc	307	295	10.4	240 - 351	207 - 384

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Calculation of Method 6020 Metals

Aqueous Samples

The instrument will calculate the concentration (µg/L). This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

$$\text{Result, mg/L} = C_s \times (1\text{mg}/1000\mu\text{g}) \times (DF)$$

Where:

C_s = Concentration of sample (µg/L)

DF = Dilution Factor

Alpha ICPMSQ Seq

9/3/2023 6:34:43 PM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	9/3/2023 2:01:59 PM
2	CAL LOT #M22-1040	0	1	3	1	9/3/2023 2:06:36 PM
3	Blank WKP ICPMSQ	4	49	3	1	9/3/2023 2:11:12 PM
4	0.2/20 Cal	0	2	3	1	9/3/2023 2:15:54 PM
5	1/100 Cal	0	3	3	1	9/3/2023 2:20:31 PM
6	10/1000 Cal	0	4	3	1	9/3/2023 2:25:10 PM
7	60/6000 Cal	0	5	3	1	9/3/2023 2:29:48 PM
8	120/12000 Cal	0	6	3	1	9/3/2023 2:34:27 PM
9	Sr 200ppb	4	55	3	1	9/3/2023 2:39:07 PM
10	ICV	0	7	3	1	9/3/2023 2:43:49 PM
11	ICB	0	10	3	1	9/3/2023 2:48:30 PM
12	ICV	0	7	3	1	9/3/2023 2:54:46 PM
13	ICB	0	10	3	1	9/3/2023 2:59:26 PM
14	LLCCV	4	51	3	1	9/3/2023 3:07:49 PM
15	ICSA	4	53	3	1	9/3/2023 3:12:32 PM
16	Rinse	0	1	3	1	9/3/2023 3:17:14 PM
17	CCV	0	9	3	1	9/3/2023 3:21:50 PM
18	CCB	0	10	3	1	9/3/2023 3:27:31 PM
19	CCV	0	9	3	1	9/3/2023 3:33:06 PM
20	CCB	0	10	3	1	9/3/2023 3:37:46 PM
21	wg1822899-1 2008TL	1	1	3	1	9/3/2023 3:44:00 PM
22	wg1822899-2D5 2008TL	1	2	3	1	9/3/2023 3:54:27 PM
23	wg1822899-3d10 2008TL	1	4	3	1	9/3/2023 3:59:04 PM
24	wg1822899-4 2008TL	1	5	3	1	9/3/2023 4:03:42 PM
25	L2350518-04 2008TL	1	3	3	1	9/3/2023 4:08:21 PM
26	zL2350518-02D5 2008TL	1	6	3	1	9/3/2023 4:12:58 PM
27	L2350518-02 2008TL	1	7	3	1	9/3/2023 4:17:40 PM
28	CCV	0	9	3	1	9/3/2023 4:22:22 PM
29	CCB	0	10	3	1	9/3/2023 4:27:04 PM
30	WG1822783-1 6020TL	1	8	3	1	9/3/2023 4:36:11 PM
31	L2350664-20 6020TL	1	15	3	1	9/3/2023 4:40:51 PM
32	L2350787-16 6020TL	1	16	3	1	9/3/2023 4:45:28 PM
33	WG1822783-2D5 6020TL	1	9	3	1	9/3/2023 4:55:14 PM
34	WG1822783-3d10 6020TL	1	11	3	1	9/3/2023 4:59:52 PM
35	WG1822783-4d10 6020TL	1	12	3	1	9/3/2023 5:04:32 PM
36	WG1822783-5d10 6020TL	1	13	3	1	9/3/2023 5:09:13 PM
37	WG1822783-6d5 6020TL	1	14	3	1	9/3/2023 5:13:49 PM
38	L2350269-08 6020TL	1	10	3	1	9/3/2023 5:18:26 PM
39	I2348453-02 6020TL	1	17	3	1	9/3/2023 5:23:06 PM
40	CCV	0	9	3	1	9/3/2023 5:27:44 PM
41	CCB	0	10	3	1	9/3/2023 5:33:14 PM
42	CCV	0	9	3	1	9/3/2023 5:46:22 PM
43	CCB	0	10	3	1	9/3/2023 5:52:19 PM
44	I2348453-07 6020TL	1	18	3	1	9/3/2023 5:58:25 PM
45	I2348453-10 6020TL	1	19	3	1	9/3/2023 6:03:03 PM
46	CCV	0	9	3	1	9/3/2023 6:08:20 PM
47	CCB	0	10	3	1	9/3/2023 6:13:02 PM

Alpha ICPMSQ Seq

9/5/2023 8:01:26 AM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	9/3/2023 6:18:05 PM
2	CAL LOT #M22-1040	0	1	3	1	9/3/2023 6:22:40 PM
3	Blank WKP ICPMSQ	4	49	3	1	9/3/2023 6:27:17 PM
4	0.2/20 Cal	0	2	3	1	9/3/2023 6:31:59 PM
5	1/100 Cal	0	3	3	1	9/3/2023 6:36:36 PM
6	10/1000 Cal	0	4	3	1	9/3/2023 6:41:14 PM
7	60/6000 Cal	0	5	3	1	9/3/2023 6:45:53 PM
8	120/12000 Cal	0	6	3	1	9/3/2023 6:50:32 PM
9	Sr 200ppb	4	55	3	1	9/3/2023 6:55:12 PM
10	ICV	0	7	3	1	9/3/2023 6:59:54 PM
11	ICB	0	10	3	1	9/3/2023 7:04:34 PM
12	xwg1822899-2D5 2008TL	1	2	3	1	9/3/2023 7:11:37 PM
13	xWG1822783-2D5 6020TL	1	9	3	1	9/3/2023 7:16:14 PM
14	wg1822899-2D5 2008TL	1	2	3	1	9/3/2023 7:22:59 PM
15	WG1822783-2D5 6020TL	1	9	3	1	9/3/2023 7:27:35 PM
16	WG1822783-3d10 6020TL	1	11	3	1	9/3/2023 7:35:51 PM
17	WG1822783-4d10 6020TL	1	12	3	1	9/3/2023 7:40:31 PM
18	WG1822783-5d10 6020TL	1	13	3	1	9/3/2023 7:45:11 PM
19	WG1822783-6d5 6020TL	1	14	3	1	9/3/2023 7:49:48 PM
20	CCV	0	9	3	1	9/3/2023 7:55:00 PM
21	CCB	0	10	3	1	9/3/2023 7:59:42 PM
22	WG1822896-1 A2-6020S	1	20	3	1	9/3/2023 8:10:01 PM
23	WG1822896-2D5 A2-6020S	1	21	3	1	9/3/2023 8:14:40 PM
24	WG1822896-3d10 A2-6020S	1	23	3	1	9/3/2023 8:19:18 PM
25	WG1822896-4d10 A2-6020S	1	24	3	1	9/3/2023 8:24:32 PM
26	WG1822896-5d10 A2-6020S	1	25	3	1	9/3/2023 8:29:11 PM
27	WG1822896-6d5 A2-6020S	1	26	3	1	9/3/2023 8:33:47 PM
28	L2343836-06 A2-6020S	1	22	3	1	9/3/2023 8:38:24 PM
29	L2343526-01 A2-6020S	1	27	3	1	9/3/2023 8:43:03 PM
30	L2343526-02 A2-6020S	1	28	3	1	9/3/2023 8:47:40 PM
31	L2343526-03 A2-6020S	1	29	3	1	9/3/2023 8:52:17 PM
32	CCV	0	9	3	1	9/3/2023 8:56:55 PM
33	CCB	0	10	3	1	9/3/2023 9:01:37 PM
34	WG1822892-1 A2-6020T	1	39	3	1	9/3/2023 9:06:19 PM
35	L2343526-06 A2-6020S	1	32	3	1	9/3/2023 9:10:56 PM
36	L2343836-07 A2-6020S	1	38	3	1	9/3/2023 9:15:35 PM
37	L2343526-04 A2-6020S	1	30	3	1	9/3/2023 9:20:12 PM
38	L2343526-05 A2-6020S	1	31	3	1	9/3/2023 9:24:50 PM
39	L2343836-01 A2-6020S	1	33	3	1	9/3/2023 9:29:28 PM
40	L2343836-02 A2-6020S	1	34	3	1	9/3/2023 9:34:07 PM
41	L2343836-03 A2-6020S	1	35	3	1	9/3/2023 9:38:46 PM
42	L2343836-04 A2-6020S	1	36	3	1	9/3/2023 9:43:25 PM
43	L2343836-05 A2-6020S	1	37	3	1	9/3/2023 9:48:05 PM
44	CCV	0	9	3	1	9/3/2023 9:52:42 PM
45	CCB	0	10	3	1	9/3/2023 9:57:24 PM
46	WG1822892-2D5 A2-6020T	1	40	3	1	9/3/2023 10:02:07 PM
47	L2343836-06 A2-6020T	1	41	3	1	9/3/2023 10:06:44 PM
48	WG1822892-3d10 A2-6020T	1	42	3	1	9/3/2023 10:11:22 PM
49	WG1822892-4d10 A2-6020T	1	43	3	1	9/3/2023 10:16:00 PM
50	WG1822892-5d10 A2-6020T	1	44	3	1	9/3/2023 10:20:38 PM
51	WG1822892-6d5 A2-6020T	1	45	3	1	9/3/2023 10:25:17 PM

Alpha ICPMSQ Seq

9/5/2023 8:01:26 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	L2343526-01 A2-6020T	1	46	3	1	9/3/2023 10:29:56 PM
53	L2343526-02 A2-6020T	1	47	3	1	9/3/2023 10:34:35 PM
54	L2343526-03 A2-6020T	1	48	3	1	9/3/2023 10:39:15 PM
55	L2343526-04 A2-6020T	1	49	3	1	9/3/2023 10:43:54 PM
56	CCV	0	9	3	1	9/3/2023 10:48:32 PM
57	CCB	0	10	3	1	9/3/2023 10:53:14 PM
58	L2343526-06 A2-6020T	1	51	3	1	9/3/2023 10:57:57 PM
59	L2343836-07 A2-6020T	1	57	3	1	9/3/2023 11:02:35 PM
60	L2343526-05 A2-6020T	1	50	3	1	9/3/2023 11:07:14 PM
61	L2343836-01 A2-6020T	1	52	3	1	9/3/2023 11:11:52 PM
62	L2343836-02 A2-6020T	1	53	3	1	9/3/2023 11:16:30 PM
63	L2343836-03 A2-6020T	1	54	3	1	9/3/2023 11:21:08 PM
64	L2343836-04 A2-6020T	1	55	3	1	9/3/2023 11:25:46 PM
65	L2343836-05 A2-6020T	1	56	3	1	9/3/2023 11:30:25 PM
66	L2344255-01D5 A2-SEM	1	58	3	1	9/3/2023 11:35:04 PM
67	L2344255-02D5 A2-SEM	1	59	3	1	9/3/2023 11:39:43 PM
68	CCV	0	9	3	1	9/3/2023 11:44:23 PM
69	CCB	0	10	3	1	9/3/2023 11:49:05 PM
70	L2344255-03D5 A2-SEM	1	60	3	1	9/3/2023 11:53:48 PM
71	L2344255-04D5 A2-SEM	2	1	3	1	9/3/2023 11:58:28 PM
72	L2344255-05D5 A2-SEM	2	2	3	1	9/4/2023 12:03:07 AM
73	L2344255-06D5 A2-SEM	2	3	3	1	9/4/2023 12:07:45 AM
74	L2344255-07D5 A2-SEM	2	4	3	1	9/4/2023 12:12:24 AM
75	L2344255-08D5 A2-SEM	2	5	3	1	9/4/2023 12:17:03 AM
76	CCV	0	9	3	1	9/4/2023 12:21:41 AM
77	CCB	0	10	3	1	9/4/2023 12:26:24 AM
78	CCV	0	9	3	1	9/4/2023 12:31:07 AM
79	CCB	0	10	3	1	9/4/2023 12:35:49 AM
80	LLCCV	4	51	3	1	9/4/2023 12:40:32 AM
81	CCB	0	10	3	1	9/4/2023 12:45:15 AM

Alpha ICPMSQ Seq

9/6/2023 11:56:45 AM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	9/5/2023 5:24:23 AM
2	CAL LOT #M22-1040	0	1	3	1	9/5/2023 5:29:00 AM
3	Blank EJF ICPMSQ	4	49	3	1	9/5/2023 5:33:36 AM
4	0.2/20 Cal	0	2	3	1	9/5/2023 5:38:18 AM
5	1/100 Cal	0	3	3	1	9/5/2023 5:42:55 AM
6	10/1000 Cal	0	4	3	1	9/5/2023 5:47:33 AM
7	60/6000 Cal	0	5	3	1	9/5/2023 5:52:12 AM
8	120/12000 Cal	0	6	3	1	9/5/2023 5:56:51 AM
9	Sr 200ppb	4	55	3	1	9/5/2023 6:01:31 AM
10	ICV	0	7	3	1	9/5/2023 6:06:13 AM
11	ICB	0	10	3	1	9/5/2023 6:10:53 AM
12	LLCCV	4	51	3	1	9/5/2023 6:16:40 AM
13	ICSA	4	53	3	1	9/5/2023 6:21:22 AM
14	Rinse	0	1	3	1	9/5/2023 6:26:04 AM
15	CCV	0	9	3	1	9/5/2023 6:30:41 AM
16	CCB	0	10	3	1	9/5/2023 6:35:23 AM
17	CCB	0	10	3	1	9/5/2023 7:01:00 AM
18	WG1821639-1 6020tl	1	1	3	1	9/5/2023 7:10:57 AM
19	WG1821639-2D5 6020tl	1	2	3	1	9/5/2023 7:15:35 AM
20	WG1821639-3D10 6020tl	1	4	3	1	9/5/2023 7:20:12 AM
21	WG1821639-5D10 6020tl	1	6	3	1	9/5/2023 7:24:50 AM
22	WG1821639-4 6020tl	1	5	3	1	9/5/2023 7:29:29 AM
23	I2349927-01 6020tl	1	3	3	1	9/5/2023 7:34:07 AM
24	I2349986-10 6020tl	1	8	3	1	9/5/2023 7:38:45 AM
25	L2344001-02d5 A2-SEM	1	14	3	1	9/5/2023 7:43:25 AM
26	L2344001-03d5 A2-SEM	1	15	3	1	9/5/2023 7:48:01 AM
27	WG1821639-6D5 6020tl	1	7	3	1	9/5/2023 7:52:38 AM
28	CCV	0	9	3	1	9/5/2023 7:57:17 AM
29	CCB	0	10	3	1	9/5/2023 8:01:59 AM
30	WG1813067-1d5 A2-SEM	1	9	3	1	9/5/2023 8:09:19 AM
31	WG1813067-2d10 A2-SEM	1	10	3	1	9/5/2023 8:13:59 AM
32	zWG1821639-2D5 6020tl	1	2	3	1	9/5/2023 8:18:38 AM
33	WG1813067-3d10 A2-SEM	1	12	3	1	9/5/2023 8:23:16 AM
34	WG1813067-4d5 A2-SEM	1	13	3	1	9/5/2023 8:27:56 AM
35	L2344001-01d5 A2-SEM	1	11	3	1	9/5/2023 8:32:33 AM
36	L2344001-04d5 A2-SEM	1	16	3	1	9/5/2023 8:37:13 AM
37	L2344001-05d5 A2-SEM	1	17	3	1	9/5/2023 8:41:50 AM
38	L2344001-06d5 A2-SEM	1	18	3	1	9/5/2023 8:46:28 AM
39	xL2344255-06d10 A2-SEM	1	23	3	1	9/5/2023 8:51:06 AM
40	CCV	0	9	3	1	9/5/2023 8:55:45 AM
41	CCB	0	10	3	1	9/5/2023 9:00:27 AM
42	L2344001-07d5 A2-SEM	1	19	3	1	9/5/2023 9:14:34 AM
43	L2344001-08d5 A2-SEM	1	20	3	1	9/5/2023 9:19:12 AM
44	L2344001-09d5 A2-SEM	1	21	3	1	9/5/2023 9:23:51 AM
45	L2344255-09d5 A2-SEM	1	22	3	1	9/5/2023 9:28:29 AM
46	L2348473-10 6020TL	1	24	3	1	9/5/2023 9:33:08 AM
47	L2344255-06d20 A2-SEM	1	25	3	1	9/5/2023 9:37:48 AM
48	WG1823522-3d10 SPLP-6020T	1	29	3	1	9/5/2023 9:42:24 AM
49	WG1823522-4d10 SPLP-6020T	1	30	3	1	9/5/2023 9:47:02 AM
50	L2350871-01d10 SPLP-6020T	1	28	3	1	9/5/2023 9:51:40 AM
51	WG1823522-6d50 SPLP-6020T	1	32	3	1	9/5/2023 9:56:17 AM

Alpha ICPMSQ Seq

9/6/2023 11:56:45 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	CCV	0	9	3	1	9/5/2023 10:00:56 AM
53	CCB	0	10	3	1	9/5/2023 10:05:38 AM
54	WG1823522-1d10 SPLP-6020T	1	26	3	1	9/5/2023 10:20:23 AM
55	WG1823522-2d10 SPLP-6020T	1	27	3	1	9/5/2023 10:28:16 AM
56	WG1823522-5d10 SPLP-6020T	1	31	3	1	9/5/2023 10:32:53 AM
57	L2347019-01 6020TL	1	33	3	1	9/5/2023 10:37:32 AM
58	L2347019-02 6020TL	1	34	3	1	9/5/2023 10:42:10 AM
59	L2347019-03 6020TL	1	35	3	1	9/5/2023 10:46:50 AM
60	L2347019-04 6020TL	1	36	3	1	9/5/2023 10:51:29 AM
61	L2347019-05 6020TL	1	37	3	1	9/5/2023 10:56:08 AM
62	L2347019-06 6020TL	1	38	3	1	9/5/2023 11:00:46 AM
63	WG1813067-2d10 A2-SEM	1	42	3	1	9/5/2023 11:05:24 AM
64	CCV	0	9	3	1	9/5/2023 11:10:01 AM
65	CCB	0	10	3	1	9/5/2023 11:14:44 AM
66	L2347019-07 6020TL	1	39	3	1	9/5/2023 11:55:06 AM
67	L2347019-08 6020TL	1	40	3	1	9/5/2023 11:59:43 AM
68	L2347070-02 6020TL	1	41	3	1	9/5/2023 12:04:21 PM
69	L2348791-08 6020TL	1	45	3	1	9/5/2023 12:10:36 PM
70	WG1819212-2d5 6020TL	1	44	3	1	9/5/2023 12:15:15 PM
71	WG1819212-3d10 6020TL	1	46	3	1	9/5/2023 12:19:54 PM
72	WG1819212-4d10 6020TL	1	47	3	1	9/5/2023 12:24:33 PM
73	WG1819212-5d10 6020TL	1	48	3	1	9/5/2023 12:29:13 PM
74	L2348742-01 6020TL	1	50	3	1	9/5/2023 12:33:53 PM
75	WG1819212-6d5 6020TL	1	49	3	1	9/5/2023 12:38:31 PM
76	CCV	0	9	3	1	9/5/2023 12:43:09 PM
77	CCB	0	10	3	1	9/5/2023 12:47:51 PM
78	WG1819212-1 6020TL	1	43	3	1	9/5/2023 1:19:24 PM
79	L2348742-02 6020TL	1	51	3	1	9/5/2023 1:24:02 PM
80	L2348791-02 6020TL	1	52	3	1	9/5/2023 1:28:40 PM
81	L2348791-03 6020TL	1	53	3	1	9/5/2023 1:33:18 PM
82	L2348791-04 6020TL	1	54	3	1	9/5/2023 1:37:57 PM
83	L2348791-05 6020TL	1	55	3	1	9/5/2023 1:42:35 PM
84	L2348791-06 6020TL	1	56	3	1	9/5/2023 1:47:14 PM
85	L2348791-07 6020TL	1	57	3	1	9/5/2023 1:51:53 PM
86	L2348791-09 6020TL	1	58	3	1	9/5/2023 1:56:33 PM
87	L2348791-10 6020TL	1	59	3	1	9/5/2023 2:01:12 PM
88	CCV	0	9	3	1	9/5/2023 2:05:52 PM
89	CCB	0	10	3	1	9/5/2023 2:10:35 PM
90	L2348791-11 6020TL	1	60	3	1	9/5/2023 2:17:49 PM
91	WG1823074-2d5 6020TL	2	2	3	1	9/5/2023 2:34:15 PM
92	WG1823074-3d10 6020TL	2	4	3	1	9/5/2023 2:38:52 PM
93	WG1823074-5d10 6020TL	2	6	3	1	9/5/2023 2:43:31 PM
94	WG1823074-4 6020TL	2	5	3	1	9/5/2023 2:48:10 PM
95	I2350799-03 6020TL	2	3	3	1	9/5/2023 2:52:49 PM
96	I2350799-04 6020TL	2	8	3	1	9/5/2023 2:57:28 PM
97	I2350799-05 6020TL	2	9	3	1	9/5/2023 3:02:07 PM
98	I2350799-08 6020TL	2	10	3	1	9/5/2023 3:06:47 PM
99	WG1823074-6d5 6020TL	2	7	3	1	9/5/2023 3:11:26 PM
100	CCV	0	9	3	1	9/5/2023 3:16:05 PM
101	CCB	0	10	3	1	9/5/2023 3:20:48 PM
102	WG1823074-1 6020TL	2	1	3	1	9/5/2023 3:27:07 PM
103	WG1822316-1 6020TL	2	13	3	1	9/5/2023 3:31:46 PM
104	WG1822316-2d5 6020TL	2	14	3	1	9/5/2023 3:41:57 PM
105	WG1822316-3d10 6020TL	2	16	3	1	9/5/2023 3:46:35 PM
106	WG1822316-5d10 6020TL	2	18	3	1	9/5/2023 3:51:14 PM
107	WG1822316-4 6020TL	2	17	3	1	9/5/2023 3:55:53 PM

Alpha ICPMSQ Seq

9/6/2023 11:56:45 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
108	L2350250-01 6020TL	2	15	3	1	9/5/2023 4:01:39 PM
109	I2350799-09 6020TL	2	11	3	1	9/5/2023 4:06:18 PM
110	I2350799-05D10 6020TL	2	12	3	1	9/5/2023 4:10:58 PM
111	WG1822316-6d5 6020TL	2	19	3	1	9/5/2023 4:15:39 PM
112	CCV	0	9	3	1	9/5/2023 4:20:18 PM
113	CCB	0	10	3	1	9/5/2023 4:25:01 PM
114	WG1822318-1 6020SL	2	22	3	1	9/5/2023 4:32:16 PM
115	WG1819212-2d5 6020TL	1	44	3	1	9/5/2023 4:36:56 PM
116	WG1822318-2d5 6020SL	2	23	3	1	9/5/2023 4:41:35 PM
117	WG1822318-3d10 6020SL	2	25	3	1	9/5/2023 4:46:15 PM
118	WG1822318-4d10 6020SL	2	26	3	1	9/5/2023 4:50:55 PM
119	WG1822318-5d10 6020SL	2	27	3	1	9/5/2023 4:55:34 PM
120	WG1822318-6d5 6020SL	2	28	3	1	9/5/2023 5:00:14 PM
121	I2350269-08 6020SL	2	24	3	1	9/5/2023 5:04:54 PM
122	L2350282-01 6020TL	2	20	3	1	9/5/2023 5:09:34 PM
123	L2350283-01 6020TL	2	21	3	1	9/5/2023 5:14:14 PM
124	xCCV	0	9	3	1	9/5/2023 5:18:54 PM
125	xCCB	0	10	3	1	9/5/2023 5:23:36 PM
126	CCV	0	9	3	1	9/5/2023 5:29:44 PM
127	CCB	0	10	3	1	9/5/2023 5:34:26 PM
128	WG1819196-1 6020TL	2	31	3	1	9/5/2023 5:45:42 PM
129	WG1819196-2D5 6020TL	2	32	3	1	9/5/2023 5:50:22 PM
130	WG1819196-3d10 6020TL	2	34	3	1	9/5/2023 5:55:02 PM
131	WG1819196-4d10 6020TL	2	35	3	1	9/5/2023 5:59:42 PM
132	WG1819196-5d10 6020TL	2	36	3	1	9/5/2023 6:04:22 PM
133	WG1819196-6d5 6020TL	2	37	3	1	9/5/2023 6:09:03 PM
134	L2348762-07 6020TL	2	33	3	1	9/5/2023 6:13:44 PM
135	I2350282-01 6020SL	2	29	3	1	9/5/2023 6:18:24 PM
136	I2350283-01 6020SL	2	30	3	1	9/5/2023 6:23:04 PM
137	L2348692-01 6020TL	2	38	3	1	9/5/2023 6:27:44 PM
138	CCV	0	9	3	1	9/5/2023 6:32:24 PM
139	CCB	0	10	3	1	9/5/2023 6:37:08 PM
140	xL2348692-02 6020TL	2	39	3	1	9/5/2023 6:43:31 PM
141	xL2348692-03 6020TL	2	40	3	1	9/5/2023 6:48:12 PM
142	xL2348762-01 6020TL	2	41	3	1	9/5/2023 6:52:52 PM
143	xL2348762-02 6020TL	2	42	3	1	9/5/2023 6:57:32 PM
144	xL2348762-03 6020TL	2	43	3	1	9/5/2023 7:02:13 PM
145	xL2348762-04 6020TL	2	44	3	1	9/5/2023 7:06:53 PM
146	xL2348762-05 6020TL	2	45	3	1	9/5/2023 7:11:34 PM
147	xL2348762-06 6020TL	2	46	3	1	9/5/2023 7:16:14 PM
148	xL2348762-08 6020TL	2	47	3	1	9/5/2023 7:20:55 PM
149	xL2348762-09 6020TL	2	48	3	1	9/5/2023 7:25:35 PM
150	CCV	0	9	3	1	9/5/2023 7:30:16 PM
151	CCB	0	10	3	1	9/5/2023 7:34:59 PM
152	CCV	0	9	3	1	9/5/2023 7:54:27 PM
153	CCB	0	10	3	1	9/5/2023 7:59:11 PM
154	OB SCAN 7019-07E TOT	2	50	3	1	9/5/2023 8:05:07 PM
155	OB SCAN 7019-07F DIS	2	51	3	1	9/5/2023 8:09:48 PM

Alpha ICPMSQ Seq

9/6/2023 11:54:57 AM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	9/5/2023 8:15:18 PM
2	CAL LOT #M22-1040	0	1	3	1	9/5/2023 8:19:55 PM
3	Blank WKP ICPMSQ	4	49	3	1	9/5/2023 8:24:31 PM
4	0.2/20 Cal	0	2	3	1	9/5/2023 8:29:13 PM
5	1/100 Cal	0	3	3	1	9/5/2023 8:33:51 PM
6	10/1000 Cal	0	4	3	1	9/5/2023 8:38:29 PM
7	60/6000 Cal	0	5	3	1	9/5/2023 8:43:07 PM
8	120/12000 Cal	0	6	3	1	9/5/2023 8:47:47 PM
9	Sr 200ppb	4	55	3	1	9/5/2023 8:52:26 PM
10	ICV	0	7	3	1	9/5/2023 8:57:08 PM
11	ICB	0	10	3	1	9/5/2023 9:01:48 PM
12	L2346993-01 A2-6020T	2	55	3	1	9/5/2023 9:06:30 PM
13	L2346993-02 A2-6020T	2	56	3	1	9/5/2023 9:11:09 PM
14	WG1819196-2D5 6020TL	2	32	3	1	9/5/2023 9:18:24 PM
15	L2348762-01d10 6020TL	2	54	3	1	9/5/2023 9:23:01 PM
16	L2348762-01 6020TL	2	41	3	1	9/5/2023 9:27:40 PM
17	L2348762-02 6020TL	2	42	3	1	9/5/2023 9:32:19 PM
18	L2348762-03 6020TL	2	43	3	1	9/5/2023 9:36:57 PM
19	L2348762-04 6020TL	2	44	3	1	9/5/2023 9:41:36 PM
20	L2348762-05 6020TL	2	45	3	1	9/5/2023 9:46:15 PM
21	L2348762-06 6020TL	2	46	3	1	9/5/2023 9:50:54 PM
22	CCV	0	9	3	1	9/5/2023 9:55:32 PM
23	CCB	0	10	3	1	9/5/2023 10:00:14 PM
24	CCV	0	9	3	1	9/5/2023 10:18:37 PM
25	CCB	0	10	3	1	9/5/2023 10:23:53 PM
26	L2348762-08 6020TL	2	47	3	1	9/5/2023 10:28:37 PM
27	L2348762-09 6020TL	2	48	3	1	9/5/2023 10:33:16 PM
28	L2348762-10 6020TL	2	49	3	1	9/5/2023 10:37:56 PM
29	L2348692-02D10 6020TL	2	52	3	1	9/5/2023 10:42:35 PM
30	L2348692-03d10 6020TL	2	53	3	1	9/5/2023 10:47:14 PM
31	CCV	0	9	3	1	9/5/2023 10:51:53 PM
32	CCB	0	10	3	1	9/5/2023 10:56:35 PM
33	CCV	0	9	3	1	9/5/2023 11:01:18 PM
34	CCB	0	10	3	1	9/5/2023 11:05:59 PM
35	LLCCV	4	51	3	1	9/5/2023 11:10:42 PM
36	CCB	0	10	3	1	

Alpha ICPMSQ Seq

9/14/2023 7:47:20 PM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	9/14/2023 5:40:05 AM
2	CAL LOT #M22-1040	0	1	3	1	9/14/2023 5:44:42 AM
3	Blank EJF ICPMSQ	4	49	3	1	9/14/2023 5:49:19 AM
4	0.2/20 Cal	0	2	3	1	9/14/2023 5:54:01 AM
5	1/100 Cal	0	3	3	1	9/14/2023 5:58:39 AM
6	10/1000 Cal	0	4	3	1	9/14/2023 6:03:17 AM
7	60/6000 Cal	0	5	3	1	9/14/2023 6:07:56 AM
8	120/12000 Cal	0	6	3	1	9/14/2023 6:12:35 AM
9	Sr 200ppb	4	55	3	1	9/14/2023 6:17:15 AM
10	ICV	0	7	3	1	9/14/2023 6:21:58 AM
11	ICB	0	10	3	1	9/14/2023 6:26:38 AM
12	LLCCV	4	51	3	1	9/14/2023 6:41:31 AM
13	ICSA	4	53	3	1	9/14/2023 6:46:13 AM
14	Rinse	0	1	3	1	9/14/2023 6:50:55 AM
15	CCV	0	9	3	1	9/14/2023 6:55:32 AM
16	CCB	0	10	3	1	9/14/2023 7:00:13 AM
17	WG1825220-1 6020TL	1	1	3	1	9/14/2023 7:23:39 AM
18	WG1825220-2d5 6020TL	1	2	3	1	9/14/2023 7:34:01 AM
19	xWG1825220-3d10 6020TL	1	4	3	1	9/14/2023 7:38:37 AM
20	xWG1825220-5d10 6020TL	1	6	3	1	9/14/2023 7:43:15 AM
21	WG1825220-4 6020TL	1	5	3	1	9/14/2023 7:47:54 AM
22	L2351774-05 6020TL	1	3	3	1	9/14/2023 7:52:32 AM
23	L2351774-06d10 6020TL	1	8	3	1	9/14/2023 7:57:11 AM
24	L2351774-07 6020TL	1	9	3	1	9/14/2023 8:01:50 AM
25	xL2352016-01 6020sL	1	10	3	1	9/14/2023 8:06:30 AM
26	WG1825220-6d5 6020TL	1	7	3	1	9/14/2023 8:11:10 AM
27	CCV	0	9	3	1	9/14/2023 8:15:49 AM
28	CCB	0	10	3	1	9/14/2023 8:20:31 AM
29	L2352025-25 6020TL	1	15	3	1	9/14/2023 8:33:41 AM
30	L2352160-09 6020TL	1	16	3	1	9/14/2023 8:38:17 AM
31	L2352016-02 6020TL	1	11	3	1	9/14/2023 8:42:54 AM
32	L2352025-22 6020TL	1	12	3	1	9/14/2023 8:47:35 AM
33	L2352025-23d10 6020TL	1	13	3	1	9/14/2023 8:52:15 AM
34	L2352025-24 6020TL	1	14	3	1	9/14/2023 8:56:52 AM
35	xWG1825203-2d10 A2-6020T	1	17	3	1	9/14/2023 9:01:28 AM
36	xL2352188-03d2 A2-6020T	1	18	3	1	9/14/2023 9:06:06 AM
37	xL2352188-04d2 A2-6020T	1	19	3	1	9/14/2023 9:10:44 AM
38	L2352016-01 6020sL	1	10	3	1	9/14/2023 9:15:22 AM
39	CCV	0	9	3	1	9/14/2023 9:20:02 AM
40	CCB	0	10	3	1	9/14/2023 9:24:44 AM
41	L2351774-07d10 6020TL	1	20	3	1	9/14/2023 9:36:37 AM
42	L2352016-01d10 6020sL	1	21	3	1	9/14/2023 9:41:14 AM
43	L2351602-04d10 6020SL	1	22	3	1	9/14/2023 9:45:53 AM
44	L2352016-01d10 6020tL	1	23	3	1	9/14/2023 9:50:32 AM
45	l2350028-03 6020SL	1	24	3	1	9/14/2023 9:55:11 AM
46	L2350187-03d10 6020TL	1	25	3	1	9/14/2023 9:59:51 AM
47	wg1825273-3d10 6020TL	1	29	3	1	9/14/2023 10:04:28 AM
48	wg1825273-4d10 6020TL	1	30	3	1	9/14/2023 10:09:06 AM
49	L2351953-01 6020TL	1	28	3	1	9/14/2023 10:13:43 AM
50	wg1825273-6d5 6020TL	1	32	3	1	9/14/2023 10:18:21 AM
51	CCV	0	9	3	1	9/14/2023 10:23:00 AM

Alpha ICPMSQ Seq

9/14/2023 7:47:20 PM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	CCB	0	10	3	1	9/14/2023 10:27:42 AM
53	wg1825273-1 6020TL	1	26	3	1	9/14/2023 10:40:52 AM
54	wg1825273-2d5 6020TL	1	27	3	1	9/14/2023 10:45:29 AM
55	wg1825273-5d10 6020TL	1	31	3	1	9/14/2023 10:50:06 AM
56	L2351546-01 6020TL	1	33	3	1	9/14/2023 10:54:44 AM
57	L2350268-01 6020TL	1	34	3	1	9/14/2023 10:59:23 AM
58	WG1825220-3d10 6020TL	1	38	3	1	9/14/2023 11:04:02 AM
59	WG1825203-2d5 A2-6020T	1	39	3	1	9/14/2023 11:08:39 AM
60	L2350268-02 6020TL	1	35	3	1	9/14/2023 11:13:17 AM
61	L2350268-03 6020TL	1	36	3	1	9/14/2023 11:17:56 AM
62	L2350268-04 6020TL	1	37	3	1	9/14/2023 11:22:36 AM
63	CCV	0	9	3	1	9/14/2023 11:27:13 AM
64	CCB	0	10	3	1	9/14/2023 11:31:55 AM
65	WG1826010-1 6020TL	1	40	3	1	9/14/2023 11:44:02 AM
66	zWG1826010-2d10 6020TL	1	41	3	1	9/14/2023 11:48:39 AM
67	zl2351877-01 6020TL	1	42	3	1	9/14/2023 11:53:17 AM
68	zWG1826010-3d10 6020TL	1	43	3	1	9/14/2023 11:57:55 AM
69	zWG1826010-4 6020TL	1	44	3	1	9/14/2023 12:02:34 PM
70	zWG1826010-5d10 6020TL	1	45	3	1	9/14/2023 12:07:13 PM
71	zWG1826010-6d5 6020TL	1	46	3	1	9/14/2023 12:11:52 PM
72	zl2351877-02 6020TL	1	47	3	1	9/14/2023 12:16:31 PM
73	CCV	0	9	3	1	9/14/2023 12:21:10 PM
74	CCB	0	10	3	1	9/14/2023 12:25:53 PM
75	xCCV	0	9	3	1	9/14/2023 12:32:21 PM

Alpha ICPMSQ Seq

9/15/2023 5:03:03 AM

Sample List Summary:

Instrument ID: iCAP Q

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	9/14/2023 1:04:45 PM
2	CAL LOT #M22-1040	0	1	3	1	9/14/2023 1:09:21 PM
3	Blank EJF ICPMSQ	4	49	3	1	9/14/2023 1:13:57 PM
4	0.2/20 Cal	0	2	3	1	9/14/2023 1:18:39 PM
5	1/100 Cal	0	3	3	1	9/14/2023 1:23:16 PM
6	10/1000 Cal	0	4	3	1	9/14/2023 1:27:54 PM
7	60/6000 Cal	0	5	3	1	9/14/2023 1:32:33 PM
8	120/12000 Cal	0	6	3	1	9/14/2023 1:37:12 PM
9	Sr 200ppb	4	55	3	1	9/14/2023 1:41:52 PM
10	ICV	0	7	3	1	9/14/2023 1:46:34 PM
11	ICB	0	10	3	1	9/14/2023 1:51:14 PM
12	WG1827286-1 6020TL	1	48	3	1	9/14/2023 1:56:48 PM
13	I2351877-02 6020TL	1	47	3	1	9/14/2023 2:01:26 PM
14	WG1827286-2D5 6020TL	1	49	3	1	9/14/2023 2:16:05 PM
15	WG1826010-2d10 6020TL	1	41	3	1	9/14/2023 2:20:41 PM
16	WG1826010-3d10 6020TL	1	43	3	1	9/14/2023 2:25:19 PM
17	WG1826010-5d10 6020TL	1	45	3	1	9/14/2023 2:29:57 PM
18	WG1826010-4 6020TL	1	44	3	1	9/14/2023 2:34:35 PM
19	I2351877-01 6020TL	1	42	3	1	9/14/2023 2:39:13 PM
20	L2353359-01D10 6020TL	1	55	3	1	9/14/2023 2:43:51 PM
21	WG1826010-6d5 6020TL	1	46	3	1	9/14/2023 2:48:29 PM
22	CCV	0	9	3	1	9/14/2023 2:53:07 PM
23	CCB	0	10	3	1	9/14/2023 2:57:49 PM
24	WG1827286-3D10 6020TL	1	51	3	1	9/14/2023 3:03:22 PM
25	WG1827286-4D10 6020TL	1	52	3	1	9/14/2023 3:07:59 PM
26	WG1825220-5d10 6020TL	1	56	3	1	9/14/2023 3:12:36 PM
27	WG1827286-5D10 6020TL	1	53	3	1	9/14/2023 3:17:14 PM
28	WG1827286-6D5 6020TL	1	54	3	1	9/14/2023 3:21:52 PM
29	L2353442-01 6020TL	1	50	3	1	9/14/2023 3:26:30 PM
30	CCV	0	9	3	1	9/14/2023 3:33:55 PM
31	CCB	0	10	3	1	9/14/2023 3:38:37 PM
32	I2349882-01 6020SL	1	57	3	1	9/14/2023 3:58:39 PM
33	I2349882-02 6020SL	1	58	3	1	9/14/2023 4:03:18 PM
34	I2350250-06 6020SL	1	59	3	1	9/14/2023 4:07:56 PM
35	I2350269-01 6020SL	1	60	3	1	9/14/2023 4:12:35 PM
36	I2350269-02 6020SL	2	1	3	1	9/14/2023 4:17:15 PM
37	I2350269-03 6020SL	2	2	3	1	9/14/2023 4:21:53 PM
38	I2350269-04 6020SL	2	3	3	1	9/14/2023 4:26:31 PM
39	I2350269-05 6020SL	2	4	3	1	9/14/2023 4:31:09 PM
40	I2350269-06 6020SL	2	5	3	1	9/14/2023 4:35:47 PM
41	I2350269-07 6020SL	2	6	3	1	9/14/2023 4:40:26 PM
42	CCV	0	9	3	1	9/14/2023 4:45:04 PM
43	CCB	0	10	3	1	9/14/2023 4:50:31 PM
44	WG1825239-1 6020SL	2	9	3	1	9/14/2023 4:55:44 PM
45	I2350269-11 6020SL	2	8	3	1	9/14/2023 5:00:22 PM
46	WG1825239-2d5 6020SL	2	10	3	1	9/14/2023 5:09:59 PM
47	WG1825239-3d10 6020SL	2	12	3	1	9/14/2023 5:14:36 PM
48	WG1825239-4d10 6020SL	2	13	3	1	9/14/2023 5:19:15 PM
49	WG1825239-5d10 6020SL	2	14	3	1	9/14/2023 5:23:53 PM
50	WG1825239-6d5 6020SL	2	15	3	1	9/14/2023 5:28:31 PM
51	I2351953-06 6020SL	2	11	3	1	9/14/2023 5:33:10 PM

Alpha ICPMSQ Seq

9/15/2023 5:03:03 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	I2350269-09 6020SL	2	7	3	1	9/14/2023 5:37:49 PM
53	I2350028-01 6020SL	2	16	3	1	9/14/2023 5:42:28 PM
54	CCV	0	9	3	1	9/14/2023 5:47:06 PM
55	CCB	0	10	3	1	9/14/2023 5:51:49 PM
56	CCV	0	9	3	1	9/14/2023 5:57:50 PM
57	CCB	0	10	3	1	9/14/2023 6:02:32 PM
58	I2350359-11 6020SL	2	23	3	1	9/14/2023 6:10:02 PM
59	I2350359-12 6020SL	2	24	3	1	9/14/2023 6:14:40 PM
60	L2350766-01 6020TL	2	17	3	1	9/14/2023 6:19:20 PM
61	zL2350766-02 6020TL	2	18	3	1	9/14/2023 6:23:59 PM
62	I2350359-07 6020SL	2	19	3	1	9/14/2023 6:28:38 PM
63	I2350359-08 6020SL	2	20	3	1	9/14/2023 6:33:17 PM
64	I2350359-09 6020SL	2	21	3	1	9/14/2023 6:37:55 PM
65	I2350359-10 6020SL	2	22	3	1	9/14/2023 6:42:34 PM
66	I2350359-13 6020SL	2	25	3	1	9/14/2023 6:47:12 PM
67	I2350359-14 6020SL	2	26	3	1	9/14/2023 6:51:52 PM
68	CCV	0	9	3	1	9/14/2023 6:56:31 PM
69	CCB	0	10	3	1	9/14/2023 7:01:13 PM
70	zWG1825239-1 6020SL	2	30	3	1	9/14/2023 7:06:24 PM
71	I2350405-07 6020SL	2	29	3	1	9/14/2023 7:11:03 PM
72	WG1825239-2D5 6020SL	2	31	3	1	9/14/2023 7:15:42 PM
73	L2350766-02 6020TL	2	18	3	1	9/14/2023 7:20:22 PM
74	I2350359-15 6020SL	2	27	3	1	9/14/2023 7:25:00 PM
75	I2350405-06 6020SL	2	28	3	1	9/14/2023 7:29:40 PM
76	L2350766-02d10 6020TL	2	32	3	1	9/14/2023 7:53:29 PM
77	CCV	0	9	3	1	9/14/2023 7:59:47 PM
78	CCB	0	10	3	1	9/14/2023 8:04:29 PM
79	WG1822954-1 6020SL	2	33	3	1	9/14/2023 8:16:41 PM
80	WG1822954-2d5 6020SL	2	34	3	1	9/14/2023 8:21:21 PM
81	WG1822954-3d10 6020SL	2	36	3	1	9/14/2023 8:26:00 PM
82	WG1822954-5d10 6020SL	2	38	3	1	9/14/2023 8:32:20 PM
83	WG1822954-4 6020SL	2	37	3	1	9/14/2023 8:37:00 PM
84	L2350359-16 6020SL	2	35	3	1	9/14/2023 8:41:39 PM
85	L2350359-17 6020SL	2	40	3	1	9/14/2023 8:46:19 PM
86	L2350359-18 6020SL	2	41	3	1	9/14/2023 8:50:59 PM
87	L2350359-19 6020SL	2	42	3	1	9/14/2023 8:55:38 PM
88	WG1822954-6d5 6020SL	2	39	3	1	9/14/2023 9:00:18 PM
89	CCV	0	9	3	1	9/14/2023 9:04:57 PM
90	CCB	0	10	3	1	9/14/2023 9:09:40 PM
91	L2350435-01 6020SL	2	48	3	1	9/14/2023 9:21:56 PM
92	L2350359-20 6020SL	2	43	3	1	9/14/2023 9:26:36 PM
93	L2350359-21 6020SL	2	44	3	1	9/14/2023 9:31:15 PM
94	L2350359-22 6020SL	2	45	3	1	9/14/2023 9:35:55 PM
95	L2350359-23 6020SL	2	46	3	1	9/14/2023 9:40:34 PM
96	L2350359-24 6020SL	2	47	3	1	9/14/2023 9:45:14 PM
97	L2350435-02 6020SL	2	49	3	1	9/14/2023 9:49:55 PM
98	L2350435-03 6020SL	2	50	3	1	9/14/2023 9:54:35 PM
99	L2350435-04 6020SL	2	51	3	1	9/14/2023 9:59:15 PM
100	L2350435-05 6020SL	2	52	3	1	9/14/2023 10:03:55 PM
101	CCV	0	9	3	1	9/14/2023 10:08:35 PM
102	CCB	0	10	3	1	9/14/2023 10:13:18 PM
103	WG1825988-1D10 6020TS	2	55	3	1	9/14/2023 10:18:01 PM
104	WG1825988-2D10 6020TS	2	56	3	1	9/14/2023 10:22:42 PM
105	WG1825988-3D10 6020TS	2	58	3	1	9/14/2023 10:27:22 PM
106	WG1825988-5D10 6020TS	2	60	3	1	9/14/2023 10:32:02 PM
107	WG1825988-4D10 6020TS	2	59	3	1	9/14/2023 10:36:43 PM

Alpha ICPMSQ Seq

9/15/2023 5:03:03 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
108	I2352354-41D10 6020TS	2	57	3	1	9/14/2023 10:41:23 PM
109	L2350435-06 6020SL	2	53	3	1	9/14/2023 10:46:03 PM
110	L2350435-07 6020SL	2	54	3	1	9/14/2023 10:50:44 PM
111	I2352354-42D10 6020TS	3	2	3	1	9/14/2023 10:55:24 PM
112	WG1825988-6d50 6020TS	3	1	3	1	9/14/2023 11:00:05 PM
113	CCV	0	9	3	1	9/14/2023 11:04:45 PM
114	CCB	0	10	3	1	9/14/2023 11:09:28 PM
115	I2352354-43D10 6020TS	3	3	3	1	9/14/2023 11:14:12 PM
116	I2352354-44D10 6020TS	3	4	3	1	9/14/2023 11:18:52 PM
117	I2352354-45D10 6020TS	3	5	3	1	9/14/2023 11:23:33 PM
118	I2352354-46D10 6020TS	3	6	3	1	9/14/2023 11:28:14 PM
119	I2352354-47D10 6020TS	3	7	3	1	9/14/2023 11:32:55 PM
120	I2352354-48D10 6020TS	3	8	3	1	9/14/2023 11:37:36 PM
121	I2352354-49D10 6020TS	3	9	3	1	9/14/2023 11:42:17 PM
122	I2352354-50D10 6020TS	3	10	3	1	9/14/2023 11:46:58 PM
123	I2352354-51D10 6020TS	3	11	3	1	9/14/2023 11:51:38 PM
124	I2352354-52D10 6020TS	3	12	3	1	9/14/2023 11:56:19 PM
125	CCV	0	9	3	1	9/15/2023 12:01:00 AM
126	CCB	0	10	3	1	9/15/2023 12:05:43 AM
127	CCV	0	9	3	1	9/15/2023 12:10:27 AM
128	CCB	0	10	3	1	9/15/2023 12:15:10 AM
129	LLCCV	4	51	3	1	9/15/2023 12:19:54 AM
130	CCB	0	10	3	1	

Alpha ICPMSRQ Seq

9/15/2023 5:15:27 AM

Sample List Summary:

Instrument ID: iCAP RQ

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
1	Rinse	0	1	3	1	9/14/2023 10:22:44 AM
2	CAL LOT #M22-1040	0	1	3	1	9/14/2023 10:27:28 AM
3	Blank SMV ICPMSRQ	4	49	3	1	9/14/2023 10:32:12 AM
4	0.2/20 Cal	0	2	3	1	9/14/2023 10:37:01 AM
5	1/100 Cal	0	3	3	1	9/14/2023 10:41:47 AM
6	10/10000 Cal	0	4	3	1	9/14/2023 10:46:33 AM
7	60/6000 Cal	0	5	3	1	9/14/2023 10:51:20 AM
8	120/120000 Cal	0	6	3	1	9/14/2023 10:56:07 AM
9	Sr 200ppb	4	55	3	1	9/14/2023 11:00:55 AM
10	ICV	0	7	3	1	9/14/2023 11:05:44 AM
11	ICB	0	10	3	1	9/14/2023 11:10:32 AM
12	LLCCV	4	51	3	1	9/14/2023 11:16:45 AM
13	ICSA	4	53	3	1	9/14/2023 11:21:33 AM
14	Rinse	0	1	3	1	9/14/2023 11:26:22 AM
15	CCV	0	9	3	1	9/14/2023 11:31:07 AM
16	CCB	0	10	3	1	9/14/2023 11:35:57 AM
17	WG1827291-1 2008TL	1	1	3	1	9/14/2023 11:43:08 AM
18	WG1825351-1 2008TL	1	6	3	1	9/14/2023 11:47:53 AM
19	WG1825351-2D5 2008TL	1	7	3	1	9/14/2023 11:52:39 AM
20	WG1827291-2D10 2008TL	1	2	3	1	9/14/2023 11:57:26 AM
21	WG1827291-3D10 2008TL	1	4	3	1	9/14/2023 12:02:10 PM
22	WG1827291-4 2008TL	1	5	3	1	9/14/2023 12:06:55 PM
23	L2353167-01 2008TL	1	3	3	1	9/14/2023 12:11:41 PM
24	WG1825351-3D10 2008TL	1	9	3	1	9/14/2023 12:16:26 PM
25	WG1825351-4 2008TL	1	10	3	1	9/14/2023 12:21:13 PM
26	L2352110-01 2008TL	1	8	3	1	9/14/2023 12:26:00 PM
27	CCV	0	9	3	1	9/14/2023 12:30:47 PM
28	CCB	0	10	3	1	9/14/2023 12:35:37 PM
29	CCV	0	9	3	1	9/14/2023 12:50:06 PM
30	CCB	0	10	3	1	9/14/2023 12:54:56 PM
31	I2351336-07 6020TL	1	14	3	1	9/14/2023 1:06:18 PM
32	L2352110-02 2008TL	1	11	3	1	9/14/2023 1:11:02 PM
33	L2352203-01 2008TL	1	12	3	1	9/14/2023 1:17:17 PM
34	L2352205-01 2008TL	1	13	3	1	9/14/2023 1:22:04 PM
35	WG1827291-2D5 2008TL	1	15	3	1	9/14/2023 1:33:30 PM
36	CCV	0	9	3	1	9/14/2023 1:44:29 PM
37	CCB	0	10	3	1	9/14/2023 1:51:26 PM
38	L2350269-11 6020TL	1	18	3	1	9/14/2023 1:59:20 PM
39	L2350484-01 6020TL	1	19	3	1	9/14/2023 2:04:05 PM
40	L2350484-02 6020TL	1	20	3	1	9/14/2023 2:08:51 PM
41	L2350484-03 6020TL	1	21	3	1	9/14/2023 2:13:37 PM
42	L2350166-01 6020TL	1	16	3	1	9/14/2023 2:18:23 PM
43	L2350269-09 6020TL	1	17	3	1	9/14/2023 2:23:08 PM
44	L2350484-02D5 6020TL	1	22	3	1	9/14/2023 2:31:43 PM
45	L2350484-03D25 6020TL	1	23	3	1	9/14/2023 2:39:38 PM
46	CCV	0	9	3	1	9/14/2023 2:48:17 PM
47	CCB	0	10	3	1	9/14/2023 2:53:07 PM
48	L2350250-02 6020TL	1	24	3	1	9/14/2023 3:02:31 PM
49	L2350250-03 6020TL	1	25	3	1	9/14/2023 3:07:19 PM
50	L2350250-04 6020TL	1	26	3	1	9/14/2023 3:12:04 PM
51	L2350250-05 6020TL	1	27	3	1	9/14/2023 3:16:48 PM

Alpha ICPMSRQ Seq

9/15/2023 5:15:27 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
52	L2350250-06 6020TL	1	28	3	1	9/14/2023 3:21:33 PM
53	L2350250-07 6020TL	1	29	3	1	9/14/2023 3:26:18 PM
54	L2350250-08 6020TL	1	30	3	1	9/14/2023 3:31:04 PM
55	L2350250-09 6020TL	1	31	3	1	9/14/2023 3:35:49 PM
56	L2350250-10 6020TL	1	32	3	1	9/14/2023 3:40:36 PM
57	L2350250-11 6020TL	1	33	3	1	9/14/2023 3:45:22 PM
58	CCV	0	9	3	1	9/14/2023 3:50:09 PM
59	CCB	0	10	3	1	9/14/2023 3:54:59 PM
60	L2350269-01 6020TL	1	34	3	1	9/14/2023 4:04:25 PM
61	L2350269-02 6020TL	1	35	3	1	9/14/2023 4:09:11 PM
62	L2350269-03 6020TL	1	36	3	1	9/14/2023 4:13:58 PM
63	L2350269-04 6020TL	1	37	3	1	9/14/2023 4:18:45 PM
64	L2350269-05 6020TL	1	38	3	1	9/14/2023 4:23:30 PM
65	L2350269-06 6020TL	1	39	3	1	9/14/2023 4:28:15 PM
66	L2350269-07 6020TL	1	40	3	1	9/14/2023 4:33:00 PM
67	L2350250-06d10 6020TL	1	41	3	1	9/14/2023 4:37:45 PM
68	L2350250-10D10 6020TL	1	42	3	1	9/14/2023 4:42:31 PM
69	CCV	0	9	3	1	9/14/2023 4:48:09 PM
70	CCB	0	10	3	1	9/14/2023 4:52:59 PM
71	CCV	0	9	3	1	9/14/2023 4:59:42 PM
72	CCB	0	10	3	1	9/14/2023 5:04:31 PM
73	xTEST 120	1	43	3	1	9/14/2023 5:10:58 PM
74	L2350359-11 6020TL	1	48	3	1	9/14/2023 5:20:27 PM
75	L2350359-07 6020TL	1	44	3	1	9/14/2023 5:25:15 PM
76	L2350359-08 6020TL	1	45	3	1	9/14/2023 5:30:02 PM
77	L2350359-09 6020TL	1	46	3	1	9/14/2023 5:34:49 PM
78	L2350359-10 6020TL	1	47	3	1	9/14/2023 5:39:36 PM
79	L2350454-01 6020TL	1	49	3	1	9/14/2023 5:44:23 PM
80	L2350454-02 6020TL	1	50	3	1	9/14/2023 5:49:09 PM
81	L2350454-03 6020TL	1	51	3	1	9/14/2023 5:53:55 PM
82	L2350478-03 6020TL	1	52	3	1	9/14/2023 5:58:41 PM
83	CCV	0	9	3	1	9/14/2023 6:03:26 PM
84	CCB	0	10	3	1	9/14/2023 6:08:17 PM
85	L2350478-04 6020TL	1	53	3	1	9/14/2023 6:15:03 PM
86	L2350478-05 6020TL	1	54	3	1	9/14/2023 6:19:48 PM
87	L2350478-06 6020TL	1	55	3	1	9/14/2023 6:24:34 PM
88	L2350478-07 6020TL	1	56	3	1	9/14/2023 6:29:21 PM
89	L2350478-08 6020TL	1	57	3	1	9/14/2023 6:34:08 PM
90	L2350478-09 6020TL	1	58	3	1	9/14/2023 6:38:55 PM
91	L2350478-11 6020TL	1	59	3	1	9/14/2023 6:43:43 PM
92	L2350478-03D10 6020TL	1	60	3	1	9/14/2023 6:48:31 PM
93	L2350478-05D10 6020TL	2	1	3	1	9/14/2023 6:56:16 PM
94	L2350478-06d10 6020TL	2	2	3	1	9/14/2023 7:01:02 PM
95	CCV	0	9	3	1	9/14/2023 7:05:49 PM
96	CCB	0	10	3	1	9/14/2023 7:10:39 PM
97	CCV	0	9	3	1	9/14/2023 7:16:48 PM
98	CCB	0	10	3	1	9/14/2023 7:21:38 PM
99	L2350478-07d10 6020TL	2	3	3	1	9/14/2023 7:28:22 PM
100	WG1825983-1D10 6020TS	2	4	3	1	9/14/2023 7:39:02 PM
101	WG1825983-2D10 6020TS	2	5	3	1	9/14/2023 7:43:48 PM
102	WG1825983-3D10 6020TS	2	7	3	1	9/14/2023 7:48:35 PM
103	WG1825983-5D10 6020TS	2	9	3	1	9/14/2023 7:53:22 PM
104	WG1825983-4D10 6020TS	2	8	3	1	9/14/2023 7:58:09 PM
105	I2352354-01D10 6020TS	2	6	3	1	9/14/2023 8:02:57 PM
106	I2352354-02D10 6020TS	2	11	3	1	9/14/2023 8:07:44 PM
107	I2352354-03D10 6020TS	2	12	3	1	9/14/2023 8:12:32 PM

Alpha ICPMSRQ Seq

9/15/2023 5:15:27 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
108	WG1825983-6d50 6020TS	2	10	3	1	9/14/2023 8:17:20 PM
109	CCV	0	9	3	1	9/14/2023 8:22:08 PM
110	CCB	0	10	3	1	9/14/2023 8:26:59 PM
111	I2352354-04D10 6020TS	2	13	3	1	9/14/2023 8:34:55 PM
112	I2352354-05D10 6020TS	2	14	3	1	9/14/2023 8:39:43 PM
113	I2352354-06D10 6020TS	2	15	3	1	9/14/2023 8:44:31 PM
114	I2352354-07D10 6020TS	2	16	3	1	9/14/2023 8:49:18 PM
115	I2352354-08D10 6020TS	2	17	3	1	9/14/2023 8:54:06 PM
116	I2352354-09D10 6020TS	2	18	3	1	9/14/2023 8:58:54 PM
117	I2352354-10D10 6020TS	2	19	3	1	9/14/2023 9:03:41 PM
118	I2352354-11D10 6020TS	2	20	3	1	9/14/2023 9:08:29 PM
119	I2352354-12D10 6020TS	2	21	3	1	9/14/2023 9:13:17 PM
120	I2352354-13D10 6020TS	2	22	3	1	9/14/2023 9:18:04 PM
121	CCV	0	9	3	1	9/14/2023 9:22:52 PM
122	CCB	0	10	3	1	9/14/2023 9:27:42 PM
123	WG1825986-1D10 6020TS	2	30	3	1	9/14/2023 9:32:34 PM
124	I2352354-14D10 6020TS	2	23	3	1	9/14/2023 9:37:23 PM
125	I2352354-15D10 6020TS	2	24	3	1	9/14/2023 9:42:12 PM
126	I2352354-16D10 6020TS	2	25	3	1	9/14/2023 9:47:01 PM
127	I2352354-17D10 6020TS	2	26	3	1	9/14/2023 9:51:50 PM
128	I2352354-18D10 6020TS	2	27	3	1	9/14/2023 9:56:37 PM
129	I2352354-19D10 6020TS	2	28	3	1	9/14/2023 10:01:25 PM
130	I2352354-20D10 6020TS	2	29	3	1	9/14/2023 10:06:13 PM
131	I2352354-22D10 6020TS	2	37	3	1	9/14/2023 10:11:02 PM
132	WG1825986-6d50 6020TS	2	36	3	1	9/14/2023 10:15:51 PM
133	CCV	0	9	3	1	9/14/2023 10:20:40 PM
134	CCB	0	10	3	1	9/14/2023 10:25:32 PM
135	WG1825986-2D10 6020TS	2	31	3	1	9/14/2023 10:30:24 PM
136	WG1825986-5D10 6020TS	2	35	3	1	9/14/2023 10:35:12 PM
137	WG1825986-3D10 6020TS	2	33	3	1	9/14/2023 10:40:01 PM
138	WG1825986-4D10 6020TS	2	34	3	1	9/14/2023 10:44:49 PM
139	I2352354-21D10 6020TS	2	32	3	1	9/14/2023 10:49:43 PM
140	I2352354-23D10 6020TS	2	38	3	1	9/14/2023 10:54:31 PM
141	I2352354-24D10 6020TS	2	39	3	1	9/14/2023 10:59:20 PM
142	I2352354-25D10 6020TS	2	40	3	1	9/14/2023 11:04:08 PM
143	I2352354-26D10 6020TS	2	41	3	1	9/14/2023 11:08:57 PM
144	I2352354-27D10 6020TS	2	42	3	1	9/14/2023 11:13:45 PM
145	CCV	0	9	3	1	9/14/2023 11:18:33 PM
146	CCB	0	10	3	1	9/14/2023 11:23:27 PM
147	I2352354-28D10 6020TS	2	43	3	1	9/14/2023 11:28:19 PM
148	I2352354-29D10 6020TS	2	44	3	1	9/14/2023 11:33:08 PM
149	I2352354-30D10 6020TS	2	45	3	1	9/14/2023 11:37:56 PM
150	I2352354-31D10 6020TS	2	46	3	1	9/14/2023 11:42:44 PM
151	I2352354-32D10 6020TS	2	47	3	1	9/14/2023 11:47:34 PM
152	I2352354-33D10 6020TS	2	48	3	1	9/14/2023 11:52:23 PM
153	I2352354-34D10 6020TS	2	49	3	1	9/14/2023 11:57:20 PM
154	I2352354-35D10 6020TS	2	50	3	1	9/15/2023 12:02:08 AM
155	I2352354-36D10 6020TS	2	51	3	1	9/15/2023 12:06:58 AM
156	I2352354-37D10 6020TS	2	52	3	1	9/15/2023 12:11:49 AM
157	CCV	0	9	3	1	9/15/2023 12:16:37 AM
158	CCB	0	10	3	1	9/15/2023 12:21:29 AM
159	I2352354-38D10 6020TS	2	53	3	1	9/15/2023 12:26:21 AM
160	I2352354-39D10 6020TS	2	54	3	1	9/15/2023 12:31:10 AM
161	I2352354-40D10 6020TS	2	55	3	1	9/15/2023 12:35:58 AM
162	CCV	0	9	3	1	9/15/2023 12:40:47 AM
163	CCB	0	10	3	1	9/15/2023 12:45:40 AM

Alpha ICPMSRQ Seq

9/15/2023 5:15:27 AM

Index:	Label:	Rack	Vial	Main Runs:	Survey Runs:	Start Time:
164	CCV	0	9	3	1	9/15/2023 12:50:33 AM
165	CCB	0	10	3	1	9/15/2023 12:55:25 AM
166	LLCCV	4	51	3	1	9/15/2023 1:00:19 AM
167	CCB	0	10	3	1	

METALS ELN REPORT

Workgroup: WG1822318

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 3005A	1:1 HNO3	tHNO323342 31853CLH	1:1 HCl	tHCL233316 0345CLH	METALS	METSPIKE2	IPS, FPS, MIX	METPSMS	IPS, FPS, MIX	326,140

Additional Reagent/Std

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol ml	Comments
L2349034-07 SAMP	09/01/23 00:03	Faustina Owusu	08-24-23 04:33	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2349882-01 WATER	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2349882-02 WATER	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2350250-06 SAMP	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2350269-01 WATER	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2350269-02 WATER	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2350269-03 WATER	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2350269-04 WATER	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2350269-05 WATER	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2350269-06 WATER	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2350269-07 WATER	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2350269-08 WATER	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2350269-09 WATER	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2350269-11 WATER	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	

Reported: 15-SEP-23 08:17 AM

METALS ELN REPORT

Workgroup: WG1822318

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol ml	Comments
L2350282-01 SAMP	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
L2350283-01 SAMP	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
WG1822318-1 BLANK	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	ELN:FAC
WG1822318-2 LCS	09/01/23 00:03	Faustina Owusu	NA	50	<2	.5	09/01/23 00:03	9	95.0	09/01/23 03:03	50	
WG1822318-3 MS	09/01/23 00:03	Faustina Owusu	NA	50	<2	.5	09/01/23 00:03	9	95.0	09/01/23 03:03	50	FM2334230253 CLH
WG1822318-4 MSD	09/01/23 00:03	Faustina Owusu	NA	50	<2	.5	09/01/23 00:03	9	95.0	09/01/23 03:03	50	IPS2333162036 CLH
WG1822318-5 PS	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	
WG1822318-6 SERDIL	09/01/23 00:03	Faustina Owusu	NA	50	<2		09/01/23 00:03	9	95.0	09/01/23 03:03	50	

Reagent	Actual Volume	Units
1:1 Hydrochloric Acid (H	.5	ml
1:1 Nitric Acid (HNO3)	1	ml

Reported: 15-SEP-23 08:17 AM

METALS ELN REPORT

Workgroup: WG1822316

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 3005A	1:1 HNO3	tHNO323342 31853CLH	1:1 HCl	tHCL233316 0345CLH	METALS	METSPIKE2	IPS, FPS, MIX	METPSMS	IPS, FPS, MIX	326, 140

Additional Reagent/Std

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2350250-01 SAMP	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350250-02 SAMP	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350250-03 SAMP	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350250-04 SAMP	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350250-05 SAMP	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350250-06 SAMP	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350250-07 SAMP	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350250-08 SAMP	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350250-09 SAMP	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350250-10 SAMP	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350250-11 WATER	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350269-01 WATER	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350269-02 WATER	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350269-03 WATER	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	

Reported: 15-SEP-23 08:17 AM

METALS ELN REPORT

Workgroup: WG1822316

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2350269-04 WATER	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350269-05 WATER	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350269-06 WATER	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350269-07 WATER	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350282-01 SAMP	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
L2350283-01 SAMP	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
WG1822316-1 BLANK	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
WG1822316-2 LCS	08/31/23 13:36	Michelle Mattson	50	<2	0.50	08/31/23 13:36	9	94.3	08/31/23 16:36	50	FM2334230253 CLH
WG1822316-3 MS	08/31/23 13:36	Michelle Mattson	50	<2	0.50	08/31/23 13:36	9	94.3	08/31/23 16:36	50	IPS2333162036 CLH
WG1822316-4 DUP	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	
WG1822316-5 PS	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	ELN: JDH
WG1822316-6 SERDIL	08/31/23 13:36	Michelle Mattson	50	<2		08/31/23 13:36	9	94.3	08/31/23 16:36	50	

METALS ELN REPORT

Workgroup: WG1822316

Reagent	Actual Volume	Units
1:1 Hydrochloric Acid (H	.5	ml
1:1 Nitric Acid (HNO3)	1	ml

METALS ELN REPORT

Workgroup: WG1822783

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 3005A	1:1 HNO3	tHNO323342 31853CLH	1:1 HCl	tHCL233316 0345CLH	METALS	METSPIKE2	IPS, FPS, MIX	METPSMS	IPS, FPS, MIX	326, 140

Additional Reagent/Std

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2349882-01 WATER	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2349882-02 WATER	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350166-01 WATER	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350269-08 WATER	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350269-09 WATER	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350269-11 WATER	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350484-01 WATER	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350484-02 WATER	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350484-03 WATER	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350505-07 SAMP	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350664-20 SAMP	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350787-16 SAMP	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350820-01 SAMP	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350820-02 SAMP	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	

Reported: 15-SEP-23 08:17 AM

METALS ELN REPORT

Workgroup: WG1822783

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Ph	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2350820-04 SAMP	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350820-05 SAMP	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350820-06 SAMP	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350820-07 SAMP	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
L2350820-08 SAMP	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
WG1822783-1 BLANK	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	
WG1822783-2 LCS	09/01/23 09:07	Alexander Gonatas	50	<2	0.5	09/01/23 09:07	10	95.0	09/01/23 12:07	50	FM2334230253 CLH
WG1822783-3 MS	09/01/23 09:07	Alexander Gonatas	50	<2	0.5	09/01/23 09:07	10	95.0	09/01/23 12:07	50	IPS2333162036 CLH
WG1822783-4 MSD	09/01/23 09:07	Alexander Gonatas	50	<2	0.5	09/01/23 09:07	10	95.0	09/01/23 12:07	50	
WG1822783-5 PS	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	ELN: REB
WG1822783-6 SERDIL	09/01/23 09:07	Alexander Gonatas	50	<2		09/01/23 09:07	10	95.0	09/01/23 12:07	50	

Reagent	Actual Volume	Units
1:1 Hydrochloric Acid (H	.5	ml
1:1 Nitric Acid (HNO3)	1	ml

Reported: 15-SEP-23 08:17 AM

Inorganic Data
(Mercury Analysis)

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 21:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	0.00009	0.00020	0.00009	J

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 21:28
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 21:54
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 21:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	0.00013	0.00020	0.00009	J

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 22:00
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	0.00015	0.00020	0.00009	J

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 22:04
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	0.00011	0.00020	0.00009	J

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 22:07
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	0.00010	0.00020	0.00009	J

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822317-1	**Date Collected**	: NA
Client ID	: WG1822317-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/01/23 21:11
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822317-4	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1SDUP	**Date Received**	: 08/29/23
Sample Location	:	**Date Analyzed**	: 09/01/23 21:25
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1822758.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	0.00010	0.00020	0.0001	J

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:41
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:44
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:47
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:54
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 14:00
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:31
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 14:10
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 14:14
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822319-1	**Date Collected**	: NA
Client ID	: WG1822319-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/05/23 13:14
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1823531.pdf	**Instrument ID**	: NIC2
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 245.1	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Dissolved	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 09:19
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1824497.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 09:39
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1824497.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-11	**Date Collected**	: 08/29/23 08:15
Client ID	: EQUIPMENT BLANK	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 09:43
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1824497.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 1
METALS

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822784-1	**Date Collected**	: NA
Client ID	: WG1822784-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/07/23 09:13
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 1,7470A	**Analyst**	: GMG
Lab File ID	: WG1824497.pdf	**Instrument ID**	: NIC4
Sample Amount	: 25ml	**%Solids**	: N/A
Digestion Method	: EPA 7470A	**Date Digested**	: 09/01/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7439-97-6	Mercury, Total	ND	0.00020	0.00009	U

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Units**	: mg/l

		Initial Calibration			Continuing Calibration(s)						
Lab ID	:	R1736450-1			R1736450-3			R1736450-5		R1736450-7	
Date Analyzed	:	09/01/23 07:05			09/01/23 08:42			09/01/23 09:48		09/01/23 11:11	
Parameter		**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury		0.00300	0.0029	97	0.0050	0.00490	98	0.00500	99	0.00500	100

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1736450-9			R1736450-11		R1736450-13	
Date Analyzed :				09/01/23 11:51			09/01/23 16:54		09/01/23 17:27	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				0.0050	0.00490	98	0.00470	94	0.00490	98

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1736450-15			R1736450-17		R1736450-19	
Date Analyzed :				09/01/23 19:03			09/01/23 21:00		09/01/23 21:31	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				**0.0050**	**0.00480**	**97**	**0.00480**	**96**	**0.00490**	**99**

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1736450-21						
Date Analyzed :				09/01/23 22:23						
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				0.0050	0.00490	98				

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1737124-1			R1737124-3			R1737124-5		R1737124-7	
Date Analyzed :	09/05/23 07:06			09/05/23 10:00			09/05/23 10:30		09/05/23 11:19	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury	0.00300	0.0029	96	0.0050	0.00490	98	0.00500	100	0.00500	99

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1737124-9			R1737124-11		R1737124-13	
Date Analyzed:				09/05/23 11:59			09/05/23 12:41		09/05/23 13:21	
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				0.0050	0.00500	100	0.00500	100	0.00500	100

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :				R1737124-15			R1737124-17			
Date Analyzed :				09/05/23 14:04			09/05/23 14:24			
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury				**0.0050**	**0.00500**	**100**	**0.00500**	**100**		

Acceptance Criteria:

ICV:	**95-105%**	**(Methods 200.7, 245.1)**
	90-110%	**(Methods 200.8, 6010, 6020, 7470, 7471, 7474)**
	85-115%	**(Method 1631)**
CCV:	**90-110%**	**(Methods 200.7, 245.1, 6010, 6020, 7474)**
	85-115%	**(Methods 200.8, 1631)**
	80-120%	**(Methods 7470, 7471)**

Form 2A
Initial and Continuing Calibration Verification

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC4	**Units**	: mg/l

	Initial Calibration			Continuing Calibration(s)						
Lab ID :	R1738062-1			R1738062-3			R1738062-5			
Date Analyzed :	09/07/23 07:37			09/07/23 08:54			09/07/23 09:46			
Parameter	**True**	**Found**	**%R**	**True**	**Found**	**%R**	**Found**	**%R**	**Found**	**%R**
Mercury	0.00300	0.0028	94	0.0050	0.00470	95	0.00470	95		

Acceptance Criteria:

ICV:	95-105%	(Methods 200.7, 245.1)
	90-110%	(Methods 200.8, 6010, 6020, 7470, 7471, 7474)
	85-115%	(Method 1631)
CCV:	90-110%	(Methods 200.7, 245.1, 6010, 6020, 7474)
	85-115%	(Methods 200.8, 1631)
	80-120%	(Methods 7470, 7471)

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2		

	Initial Calibration Blank	Continuing Calibration Blank(s)			Preparation Blank
Lab ID :	R1736450-2	R1736450-4	R1736450-6	R1736450-8	WG1822317-1
Date Analyzed :	09/01/23 07:08	09/01/23 08:45	09/01/23 09:58	09/01/23 11:14	09/01/23 21:11
Parameter	mg/l Q	mg/l Q	mg/l Q	mg/l Q	mg/l Q
Mercury	0.0000915 U	0.0000915 U	0.0000915 U	0.0000915 U	0.00009 U

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1736450-10		R1736450-12		R1736450-14			
Date Analyzed :			09/01/23 11:54		09/01/23 16:57		09/01/23 17:45			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000915	U	0.0000915	U	0.0000915	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1736450-16		R1736450-18		R1736450-20			
Date Analyzed :			09/01/23 20:19		09/01/23 21:08		09/01/23 21:50			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000915	U	0.0000915	U	0.0000915	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1736450-22							
Date Analyzed :			09/01/23 22:27							
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000915	U						

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2		

	Initial Calibration Blank	Continuing Calibration Blank(s)			Preparation Blank
Lab ID :	R1737124-2	R1737124-4	R1737124-6	R1737124-8	WG1822319-1
Date Analyzed :	09/05/23 07:22	09/05/23 10:03	09/05/23 10:33	09/05/23 11:22	09/05/23 13:14
Parameter	mg/l Q	mg/l Q	mg/l Q	mg/l Q	mg/l Q
Mercury	0.0000915 U	0.0000915 U	0.0000915 U	0.0000915 U	0.00009 U

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1737124-10		R1737124-12		R1737124-14			
Date Analyzed :			09/05/23 12:04		09/05/23 12:45		09/05/23 13:27			
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000915	U	0.0000915	U	0.0000915	U		

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :			R1737124-16		R1737124-18					
Date Analyzed :			09/05/23 14:07		09/05/23 14:27					
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q		Q
Mercury			0.0000915	U	0.0000915	U				

Form 3
Blanks

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC4		

	Initial Calibration Blank		Continuing Calibration Blank(s)						Preparation Blank	
Lab ID :	R1738062-2		R1738062-4		R1738062-6				WG1822784-1	
Date Analyzed :	09/07/23 08:14		09/07/23 08:57		09/07/23 09:50				09/07/23 09:13	
Parameter	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q	mg/l	Q
Mercury	0.0000915	U	0.0000915	U	0.0000915	U			0.00009	U

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-1S	**Matrix**	: WATER
Lab Sample ID	: L2350269-01		
Matrix Spike	: WG1822317-3	**MS Analysis Date**	: 09/01/23 21:21
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Mercury, Total	0.00009J	0.005	0.00479	96					75-125	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix**	: WATER
Lab Sample ID	: L2350269-08		
Matrix Spike	: WG1822319-3	**MS Analysis Date**	: 09/05/23 13:34
Matrix Spike Dup	: WG1822319-4	**MSD Analysis Date**	: 09/05/23 13:37

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Mercury, Dissolved	ND	0.005	0.00464	93	0.005	0.00473	95	2	75-125	20

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-8S	**Matrix**	: WATER
Lab Sample ID	: L2350269-08		
Matrix Spike	: WG1822784-3	**MS Analysis Date**	: 09/07/23 09:23
Matrix Spike Dup	: WG1822784-4	**MSD Analysis Date**	: 09/07/23 09:26

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Mercury, Total	ND	0.005	0.00472	94	0.005	0.00477	95	1	75-125	20

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-1S	**Matrix**	: WATER
Lab Sample ID	: L2350269-01	**Analysis Date**	: 09/01/23 21:18
Dup Sample ID	: WG1822317-4	**DUP Analysis Date**	: 09/01/23 21:25

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Mercury, Total	0.00009J	0.00010J	NC	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1822317-2	**LCS Analysis Date**	: 09/01/23 21:15
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Mercury, Total	0.00100	0.00104	104.					80-120	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1822319-2	**LCS Analysis Date**	: 09/05/23 13:18
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Mercury, Dissolved	**0.00100**	**0.000870**	**88.**					**80-120**	**20**

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1822784-2	**LCS Analysis Date**	: 09/07/23 09:16
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Mercury, Total	0.00100	0.000940	95.					80-120	20

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 7470A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2350269-01	08/31/23 14:12	-	25
L2350269-02	08/31/23 14:12	-	25
L2350269-03	08/31/23 14:12	-	25
L2350269-04	08/31/23 14:12	-	25
L2350269-05	08/31/23 14:12	-	25
L2350269-06	08/31/23 14:12	-	25
L2350269-07	08/31/23 14:12	-	25
WG1822317-1	08/31/23 14:12	-	25
WG1822317-2	08/31/23 14:12	-	25
WG1822317-3	08/31/23 14:12	-	25
WG1822317-4	08/31/23 14:12	-	25

Form 12
Preparation Log

Client	: **Alpha Geoscience**	**Lab Number**	: **L2350269**
Project Name	: **HUNTINGTON READY MIX**	**Project Number**	: **20116**
Matrix	: **WATER**	**Prep Method**	: **EPA 245.1**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2350269-01	09/01/23 00:50	-	25
L2350269-02	09/01/23 00:50	-	25
L2350269-03	09/01/23 00:50	-	25
L2350269-04	09/01/23 00:50	-	25
L2350269-05	09/01/23 00:50	-	25
L2350269-06	09/01/23 00:50	-	25
L2350269-07	09/01/23 00:50	-	25
L2350269-08	09/01/23 00:50	-	25
L2350269-09	09/01/23 00:50	-	25
L2350269-11	09/01/23 00:50	-	25
WG1822319-1	09/01/23 00:50	-	25
WG1822319-2	09/01/23 00:50	-	25
WG1822319-3	09/01/23 00:50	-	25
WG1822319-4	09/01/23 00:50	-	25

Form 12
Preparation Log

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Matrix	:	**WATER**	**Prep Method**	:	**EPA 7470A**

Sample Number	Preparation Date	Weight (gram)	Volume (mL)
L2350269-08	09/01/23 10:25	-	25
L2350269-09	09/01/23 10:25	-	25
L2350269-11	09/01/23 10:25	-	25
WG1822784-1	09/01/23 10:25	-	25
WG1822784-2	09/01/23 10:25	-	25
WG1822784-3	09/01/23 10:25	-	25
WG1822784-4	09/01/23 10:25	-	25

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Analysis Method**	: 1,7470A
Start Date	: 09/01/23 07:05	**End Date**	: 09/01/23 22:27

Sample Number	Dilution Factor	Analysis Time	Mercury, Total
R1736450-1 ICV	1	07:05:23	X
R1736450-2 ICB	1	07:08:43	X
R1736450-3 CCV	1	08:42:14	X
R1736450-4 CCB	1	08:45:34	X
R1736450-5 CCV	1	09:48:33	X
R1736450-6 CCB	1	09:58:15	X
R1736450-7 CCV	1	11:11:09	X
R1736450-8 CCB	1	11:14:28	X
R1736450-9 CCV	1	11:51:13	X
R1736450-10 CCB	1	11:54:31	X
R1736450-11 CCV	1	16:54:26	X
R1736450-12 CCB	1	16:57:43	X
R1736450-13 CCV	1	17:27:22	X
R1736450-14 CCB	1	17:45:51	X
R1736450-15 CCV	1	19:03:58	X
R1736450-16 CCB	1	20:19:16	X
R1736450-17 CCV	1	21:00:09	X
R1736450-18 CCB	1	21:08:29	X
WG1822317-1 BLANK	1	21:11:49	X
WG1822317-2 LCS	1	21:15:09	X
L2350269-01	1	21:18:29	X
WG1822317-3 MS	1	21:21:48	X
WG1822317-4 DUP	1	21:25:07	X
L2350269-02	1	21:28:26	X
R1736450-19 CCV	1	21:31:45	X
R1736450-20 CCB	1	21:50:45	X
L2350269-03	1	21:54:05	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Analysis Method**	: 1,7470A
Start Date	: 09/01/23 07:05	**End Date**	: 09/01/23 22:27

Sample Number	Dilution Factor	Analysis Time	Mercury, Total
L2350269-04	1	21:57:25	X
L2350269-05	1	22:00:44	X
L2350269-06	1	22:04:03	X
L2350269-07	1	22:07:22	X
R1736450-21 CCV	1	22:23:29	X
R1736450-22 CCB	1	22:27:36	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Analysis Method**	: 1,7470A
Start Date	: 09/05/23 07:06	**End Date**	: 09/05/23 14:27

Sample Number	Dilution Factor	Analysis Time	Mercury, Dissolved
R1737124-1 ICV	1	07:06:30	X
R1737124-2 ICB	1	07:22:03	X
R1737124-3 CCV	1	10:00:04	X
R1737124-4 CCB	1	10:03:24	X
R1737124-5 CCV	1	10:30:01	X
R1737124-6 CCB	1	10:33:21	X
R1737124-7 CCV	1	11:19:35	X
R1737124-8 CCB	1	11:22:54	X
R1737124-9 CCV	1	11:59:15	X
R1737124-10 CCB	1	12:04:07	X
R1737124-11 CCV	1	12:41:30	X
R1737124-12 CCB	1	12:45:04	X
WG1822319-1 BLANK	1	13:14:47	X
WG1822319-2 LCS	1	13:18:05	X
R1737124-13 CCV	1	13:21:22	X
R1737124-14 CCB	1	13:27:48	X
L2350269-08	1	13:31:07	X
WG1822319-3 MS	1	13:34:25	X
WG1822319-4 MSD	1	13:37:43	X
L2350269-01	1	13:41:01	X
L2350269-02	1	13:44:19	X
L2350269-03	1	13:47:37	X
L2350269-04	1	13:50:55	X
L2350269-05	1	13:54:11	X
L2350269-06	1	13:57:30	X
L2350269-07	1	14:00:48	X
R1737124-15 CCV	1	14:04:06	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC2	**Analysis Method**	: 1,7470A
Start Date	: 09/05/23 07:06	**End Date**	: 09/05/23 14:27

Sample Number	Dilution Factor	Analysis Time	Mercury, Dissolved
R1737124-16 CCB	1	14:07:23	X
L2350269-09	1	14:10:44	X
L2350269-11	1	14:14:03	X
R1737124-17 CCV	1	14:24:02	X
R1737124-18 CCB	1	14:27:22	X

Form 13
Analysis Run Log

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Instrument ID	: NIC4	**Analysis Method**	: 1,7470A
Start Date	: 09/07/23 07:37	**End Date**	: 09/07/23 09:50

Sample Number	Dilution Factor	Analysis Time	Mercury, Total
R1738062-1 ICV	1	07:37:43	X
R1738062-2 ICB	1	08:14:53	X
R1738062-3 CCV	1	08:54:09	X
R1738062-4 CCB	1	08:57:42	X
WG1822784-1 BLANK	1	09:13:23	X
WG1822784-2 LCS	1	09:16:41	X
L2350269-08	1	09:19:59	X
WG1822784-3 MS	1	09:23:18	X
WG1822784-4 MSD	1	09:26:36	X
L2350269-09	1	09:39:50	X
L2350269-11	1	09:43:07	X
R1738062-5 CCV	1	09:46:26	X
R1738062-6 CCB	1	09:50:49	X

Date Created: 03/19/18
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File: PM4631-1
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MERCURY by 7470A, 245.1 (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Mercury, Total	7439-97-6	0.0002	0.0000915	mg/l	80-120	20	75-125	20	20		28 days	1 - Plastic 500ml HNO3 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. ***(Soil/Solids only)***
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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METALS by 7470A (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Mercury, Total	7439-97-6	0.0002	0.0000915	mg/l	80-120		75-125	20	20		28 days	1 - Plastic 500ml HNO3 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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METALS by 7471B (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Surrogate Criteria	Holding Time	Container/Sample Preservation
Mercury, Total	7439-97-6	0.08	0.05216	mg/kg	72-128		80-120	20	20		28 days	Metals Only-Glass 60mL/2oz unpreserv

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Title :
Date : 9/1/2023
Name :

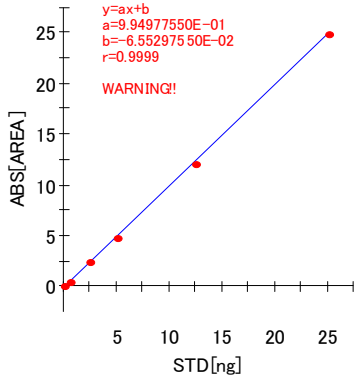
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib



STD

No.	STD [ug/L]	SVOL [mL]	CVOL [mL]	DVOL [mL]	STD [ng]	AREA [ON]	MEAS [ng]	Dev [%]	M. TIME	Note
1	0.000	2.500	2.500	2.500	0.000	0.0574	0.1236	-	09/01/2023 06:41	GMG,NIC2
2	0.200	2.500	2.500	2.500	0.500	0.5208	0.5893	17.9	09/01/2023 06:45	GMG,NIC2
3	1.000	2.500	2.500	2.500	2.500	2.3958	2.4738	1.0	09/01/2023 06:48	GMG,NIC2
4	2.000	2.500	2.500	2.500	5.000	4.8138	4.9040	1.9	09/01/2023 06:51	GMG,NIC2
5	5.000	2.500	2.500	2.500	12.500	12.1516	12.2788	1.8	09/01/2023 06:55	GMG,NIC2
6	10.000	2.500	2.500	2.500	25.000	24.9389	25.1306	0.5	09/01/2023 06:58	GMG,NIC2

SMP

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
1	ICV	2.500	2.500	2.500	7.1502	7.2522	2.901	-	09/01/2023 07:05	GMG,NIC2
2	ICB	2.500	2.500	2.500	0.0398	0.1059	0.042	-	09/01/2023 07:08	GMG,NIC2
3	0.2 PPB	2.500	2.500	2.500	0.5296	0.5981	0.239	-	09/01/2023 07:12	GMG,NIC2
4	XCLEARING SOLUTION CHECK	2.500	2.500	2.500	0.0425	0.1086	0.043	-	09/01/2023 07:15	GMG,NIC2
5	wg1819697-1 wg1819697	2.500	2.500	2.500	0.0285	0.0945	0.038	-	09/01/2023 08:15	GMG,NIC2
6	wg1819697-2 wg1819697	2.500	2.500	2.500	2.3147	2.3922	0.957	-	09/01/2023 08:18	GMG,NIC2

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
7	I2348435-01 wg1819697	2.500	2.500	2.500	0.0306	0.0966	0.039	-	09/01/2023 08:22	GMG,NIC2
8	wg1819697-3 wg1819697	2.500	2.500	2.500	11.5934	11.7178	4.687	-	09/01/2023 08:25	GMG,NIC2
9	wg1819697-4 wg1819697	2.500	2.500	2.500	0.0302	0.0962	0.038	-	09/01/2023 08:28	GMG,NIC2
10	I2348436-09 wg1819697	2.500	2.500	2.500	0.0250	0.0910	0.036	-	09/01/2023 08:32	GMG,NIC2
11	I2348436-13 wg1819697	2.500	2.500	2.500	0.0273	0.0933	0.037	-	09/01/2023 08:35	GMG,NIC2
12	I2348436-18 wg1819697	2.500	2.500	2.500	0.0270	0.0930	0.037	-	09/01/2023 08:38	GMG,NIC2
13	Check STD(5ug/L)	2.500	2.500	2.500	12.1567	12.2839	4.914	98.3	09/01/2023 08:42	GMG,NIC2
14	Check Blank	2.500	2.500	2.500	0.0330	0.0990	0.040	-	09/01/2023 08:45	GMG,NIC2
15	I2348436-24 wg1819697	2.500	2.500	2.500	0.0250	0.0910	0.036	-	09/01/2023 08:48	GMG,NIC2
16	wg1819309-1 wg1819309	2.500	2.500	2.500	0.0300	0.0960	0.038	-	09/01/2023 09:04	GMG,NIC2
17	wg1819309-2 wg1819309	2.500	2.500	2.500	2.3137	2.3912	0.956	-	09/01/2023 09:07	GMG,NIC2
18	I2348426-03 wg1819309	2.500	2.500	2.500	0.2384	0.3055	0.122	-	09/01/2023 09:11	GMG,NIC2
19	wg1819309-3 wg1819309	2.500	2.500	2.500	12.7234	12.8535	5.141	-	09/01/2023 09:14	GMG,NIC2
20	wg1819309-4 wg1819309	2.500	2.500	2.500	1.1324	1.2040	0.482	-	09/01/2023 09:17	GMG,NIC2
21	wg1822713-1 wg1822713	2.500	2.500	2.500	0.0392	0.1053	0.042	-	09/01/2023 09:35	GMG,NIC2
22	wg1822713-2 wg1822713	2.500	2.500	2.500	2.5711	2.6499	1.060	-	09/01/2023 09:38	GMG,NIC2
23	L2200085-16 wg1822713	2.500	2.500	2.500	0.0502	0.1163	0.047	-	09/01/2023 09:41	GMG,NIC2
24	wg1822713-3 wg1822713	2.500	2.500	2.500	12.4628	12.5916	5.037	-	09/01/2023 09:45	GMG,NIC2
25	Check STD(5ug/L)	2.500	2.500	2.500	12.3025	12.4305	4.972	99.4	09/01/2023 09:48	GMG,NIC2
26	Check Blank	2.500	2.500	2.500	0.0299	0.0959	0.038	-	09/01/2023 09:58	GMG,NIC2
27	wg1822713-4 wg1822713	2.500	2.500	2.500	0.0332	0.0992	0.040	-	09/01/2023 10:01	GMG,NIC2
28	I2350518-01 wg1822713	2.500	2.500	2.500	0.0464	0.1125	0.045	-	09/01/2023 10:04	GMG,NIC2
29	I2350518-03 wg1822713	2.500	2.500	2.500	0.0424	0.1085	0.043	-	09/01/2023 10:08	GMG,NIC2
30	wg1822727-1 wg1822727	2.500	2.500	2.500	0.0315	0.0975	0.039	-	09/01/2023 10:48	GMG,NIC2
31	wg1822727-2 wg1822727	2.500	2.500	2.500	2.5417	2.6204	1.048	-	09/01/2023 10:51	GMG,NIC2
32	I2349937-07 wg1822727	2.500	2.500	2.500	0.0306	0.0966	0.039	-	09/01/2023 10:54	GMG,NIC2
33	wg1822727-3 wg1822727	2.500	2.500	2.500	12.5316	12.6607	5.064	-	09/01/2023 10:57	GMG,NIC2
34	wg1822727-4 wg1822727	2.500	2.500	2.500	0.0293	0.0953	0.038	-	09/01/2023 11:01	GMG,NIC2
35	I2349994-01 wg1822727	2.500	2.500	2.500	0.0287	0.0947	0.038	-	09/01/2023 11:04	GMG,NIC2
36	I2349994-02 wg1822727	2.500	2.500	2.500	0.0267	0.0927	0.037	-	09/01/2023 11:07	GMG,NIC2
37	Check STD(5ug/L)	2.500	2.500	2.500	12.3482	12.4764	4.991	99.8	09/01/2023 11:11	GMG,NIC2
38	Check Blank	2.500	2.500	2.500	0.0246	0.0906	0.036	-	09/01/2023 11:14	GMG,NIC2

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
39	I2350196-01 wg1822727	2.500	2.500	2.500	0.0263	0.0923	0.037	-	09/01/2023 11:18	GMG,NIC2
40	I2350196-02 wg1822727	2.500	2.500	2.500	0.0234	0.0894	0.036	-	09/01/2023 11:21	GMG,NIC2
41	WG1818727-1 WG1818727	2.500	2.500	2.500	0.0541	0.1202	0.048	-	09/01/2023 11:28	GMG,NIC2
42	WG1818727-2 WG1818727	2.500	2.500	2.500	2.2545	2.3317	0.933	-	09/01/2023 11:31	GMG,NIC2
43	I2347531-01 WG1818727	2.500	2.500	2.500	0.0699	0.1361	0.054	-	09/01/2023 11:34	GMG,NIC2
44	WG1818727-3 WG1818727	2.500	2.500	2.500	11.0350	11.1566	4.463	-	09/01/2023 11:38	GMG,NIC2
45	WG1818727-4 WG1818727	2.500	2.500	2.500	0.0431	0.1092	0.044	-	09/01/2023 11:41	GMG,NIC2
46	I2347349-01 WG1818727	2.500	2.500	2.500	0.0385	0.1046	0.042	-	09/01/2023 11:44	GMG,NIC2
47	I2347531-02 WG1818727	2.500	2.500	2.500	0.0371	0.1031	0.041	-	09/01/2023 11:47	GMG,NIC2
48	Check STD(5ug/L)	2.500	2.500	2.500	12.1166	12.2436	4.897	97.9	09/01/2023 11:51	GMG,NIC2
49	Check Blank	2.500	2.500	2.500	0.0245	0.0905	0.036	-	09/01/2023 11:54	GMG,NIC2
50	Check STD(5ug/L)	2.500	2.500	2.500	11.6734	11.7982	4.719	94.4	09/01/2023 16:54	DJR,NIC2
51	Check Blank	2.500	2.500	2.500	0.0134	0.0793	0.032	-	09/01/2023 16:57	DJR,NIC2
52	wg1819354-1 wg1819354	2.500	2.500	2.500	0.0091	0.0750	0.030	-	09/01/2023 17:01	DJR,NIC2
53	wg1819354-2 wg1819354	2.500	2.500	2.500	2.4619	2.5402	1.016	-	09/01/2023 17:04	DJR,NIC2
54	L2348458-01 wg1819354	2.500	2.500	2.500	0.0055	0.0714	0.029	-	09/01/2023 17:07	DJR,NIC2
55	wg1819354-3 wg1819354	2.500	2.500	2.500	12.8968	13.0278	5.211	-	09/01/2023 17:10	DJR,NIC2
56	wg1819354-4 wg1819354	2.500	2.500	2.500	0.0100	0.0759	0.030	-	09/01/2023 17:14	DJR,NIC2
57	L2347733-01 wg1819354	2.500	2.500	2.500	0.0088	0.0747	0.030	-	09/01/2023 17:17	DJR,NIC2
58	L2347733-02 wg1819354	2.500	2.500	2.500	0.0100	0.0759	0.030	-	09/01/2023 17:20	DJR,NIC2
59	L2347733-03 wg1819354	2.500	2.500	2.500	0.0162	0.0821	0.033	-	09/01/2023 17:24	DJR,NIC2
60	Check STD(5ug/L)	2.500	2.500	2.500	12.1481	12.2753	4.910	98.2	09/01/2023 17:27	DJR,NIC2
61	Check Blank	2.500	2.500	2.500	0.0212	0.0872	0.035	-	09/01/2023 17:45	DJR,NIC2
62	L2348458-02 wg1819354	2.500	2.500	2.500	0.0101	0.0760	0.030	-	09/01/2023 17:49	DJR,NIC2
63	wg1822444-1 wg1822444	2.500	2.500	2.500	0.0320	0.0980	0.039	-	09/01/2023 17:52	DJR,NIC2
64	wg1822444-2 wg1822444	2.500	2.500	2.500	2.3689	2.4467	0.979	-	09/01/2023 17:55	DJR,NIC2
65	L2350416-07 wg1822444	2.500	2.500	2.500	0.0605	0.1267	0.051	-	09/01/2023 17:59	DJR,NIC2
66	wg1822444-3 wg1822444	2.500	2.500	2.500	12.3786	12.5069	5.003	-	09/01/2023 18:02	DJR,NIC2
67	wg1822444-4 wg1822444	2.500	2.500	2.500	0.0555	0.1216	0.049	-	09/01/2023 18:05	DJR,NIC2
68	wg1822723-1 wg1822723	2.500	2.500	2.500	0.0216	0.0876	0.035	-	09/01/2023 18:50	DJR,NIC2
69	wg1822723-2 wg1822723	2.500	2.500	2.500	2.5736	2.6525	1.061	-	09/01/2023 18:54	DJR,NIC2
70	I2350663-01 wg1822723	2.500	2.500	2.500	1.5517	1.6254	0.650	-	09/01/2023 18:57	DJR,NIC2

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
71	wg1822723-3 wg1822723	2.500	2.500	2.500	14.6117	14.7513	5.901	-	09/01/2023 19:00	DJR,NIC2
72	Check STD(5ug/L)	2.500	2.500	2.500	11.9844	12.1108	4.844	96.9	09/01/2023 19:03	DJR,NIC2
73	Check Blank	2.500	2.500	2.500	0.0313	0.0973	0.039	-	09/01/2023 20:19	DJR,NIC2
74	wg1822723-4 wg1822723	2.500	2.500	2.500	1.5852	1.6591	0.664	-	09/01/2023 20:22	DJR,NIC2
75	I2350663-03 wg1822723	2.500	2.500	2.500	3.6224	3.7065	1.483	-	09/01/2023 20:25	DJR,NIC2
76	Check STD(5ug/L)	2.500	2.500	2.500	11.9232	12.0492	4.820	96.4	09/01/2023 21:00	DJR,NIC2
77	Check Blank	2.500	2.500	2.500	0.0273	0.0933	0.037	-	09/01/2023 21:08	DJR,NIC2
78	WG1822317-1 WG1822317	2.500	2.500	2.500	0.1434	0.2100	0.084	-	09/01/2023 21:11	DJR,NIC2
79	WG1822317-2 WG1822317	2.500	2.500	2.500	2.5328	2.6114	1.045	-	09/01/2023 21:15	DJR,NIC2
80	L2350269-01 WG1822317	2.500	2.500	2.500	0.1779	0.2447	0.098	-	09/01/2023 21:18	DJR,NIC2
81	WG1822317-3 WG1822317	2.500	2.500	2.500	11.8512	11.9769	4.791	-	09/01/2023 21:21	DJR,NIC2
82	WG1822317-4 WG1822317	2.500	2.500	2.500	0.1868	0.2536	0.101	-	09/01/2023 21:25	DJR,NIC2
83	L2350269-02 WG1822317	2.500	2.500	2.500	0.1552	0.2218	0.089	-	09/01/2023 21:28	DJR,NIC2
84	Check STD(5ug/L)	2.500	2.500	2.500	12.2454	12.3731	4.949	99.0	09/01/2023 21:31	DJR,NIC2
85	Check Blank	2.500	2.500	2.500	0.0328	0.0988	0.040	-	09/01/2023 21:50	DJR,NIC2
86	L2350269-03 WG1822317	2.500	2.500	2.500	0.1505	0.2171	0.087	-	09/01/2023 21:54	DJR,NIC2
87	L2350269-04 WG1822317	2.500	2.500	2.500	0.2600	0.3272	0.131	-	09/01/2023 21:57	DJR,NIC2
88	L2350269-05 WG1822317	2.500	2.500	2.500	0.3122	0.3796	0.152	-	09/01/2023 22:00	DJR,NIC2
89	L2350269-06 WG1822317	2.500	2.500	2.500	0.2104	0.2773	0.111	-	09/01/2023 22:04	DJR,NIC2
90	L2350269-07 WG1822317	2.500	2.500	2.500	0.1881	0.2549	0.102	-	09/01/2023 22:07	DJR,NIC2
91	L2350282-01 WG1822317	2.500	2.500	2.500	0.1629	0.2296	0.092	-	09/01/2023 22:10	DJR,NIC2
92	L2350283-01 WG1822317	2.500	2.500	2.500	0.1594	0.2261	0.090	-	09/01/2023 22:14	DJR,NIC2
93	HG2335011420JDH CHECK	2.500	2.500	2.500	2.4599	2.5382	1.015	-	09/01/2023 22:17	DJR,NIC2
94	Check STD(5ug/L)	2.500	2.500	2.500	12.1026	12.2296	4.892	97.8	09/01/2023 22:23	DJR,NIC2
95	Check Blank	2.500	2.500	2.500	0.0321	0.0981	0.039	-	09/01/2023 22:27	DJR,NIC2
96	Check STD(5ug/L)	2.500	2.500	2.500	12.0583	12.1850	4.874	97.5	09/01/2023 23:54	DJR,NIC2
97	Check Blank	2.500	2.500	2.500	0.0350	0.1010	0.040	-	09/01/2023 23:57	DJR,NIC2
98	WG1821353-1 WG1821353	2.500	2.500	2.500	0.0349	0.1009	0.040	-	09/02/2023 00:00	DJR,NIC2
99	WG1821353-2 WG1821353	2.500	2.500	2.500	2.3886	2.4665	0.987	-	09/02/2023 00:04	DJR,NIC2
100	I2349894-01 WG1821353	2.500	2.500	2.500	0.0687	0.1349	0.054	-	09/02/2023 00:07	DJR,NIC2
101	WG1821353-3 WG1821353	2.500	2.500	2.500	12.0131	12.1396	4.856	-	09/02/2023 00:10	DJR,NIC2
102	WG1821353-4 WG1821353	2.500	2.500	2.500	0.0722	0.1384	0.055	-	09/02/2023 00:14	DJR,NIC2

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
103	I2349894-02 WG1821353	2.500	2.500	2.500	0.0426	0.1087	0.043	-	09/02/2023 00:17	DJR,NIC2
104	I2349925-01 WG1821353	2.500	2.500	2.500	0.0662	0.1324	0.053	-	09/02/2023 00:20	DJR,NIC2
105	I2349925-02 WG1821353	2.500	2.500	2.500	0.0818	0.1481	0.059	-	09/02/2023 00:23	DJR,NIC2
106	Check STD(5ug/L)	2.500	2.500	2.500	12.0737	12.2005	4.880	97.6	09/02/2023 00:27	DJR,NIC2
107	Check Blank	2.500	2.500	2.500	0.0328	0.0988	0.040	-	09/02/2023 00:30	DJR,NIC2
108	I2349951-01 WG1821353	2.500	2.500	2.500	0.0554	0.1215	0.049	-	09/02/2023 00:33	DJR,NIC2
109	I2349951-02 WG1821353	2.500	2.500	2.500	0.2674	0.3346	0.134	-	09/02/2023 00:37	DJR,NIC2
110	Check STD(5ug/L)	2.500	2.500	2.500	12.4429	12.5716	5.029	100.6	09/02/2023 00:40	DJR,NIC2
111	Check Blank	2.500	2.500	2.500	0.0364	0.1024	0.041	-	09/02/2023 00:43	DJR,NIC2

Title :
Date : 9/5/2023
Name :

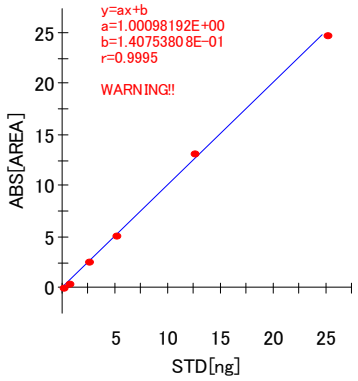
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib



STD

No.	STD [ug/L]	SVOL [mL]	CVOL [mL]	DVOL [mL]	STD [ng]	AREA [ON]	MEAS [ng]	Dev [%]	M. TIME	Note
1	0.000	2.500	2.500	2.500	0.000	0.0341	-0.1065	-	09/05/2023 06:46	GMG,NIC2
2	0.200	2.500	2.500	2.500	0.500	0.5252	0.3841	23.2	09/05/2023 06:49	GMG,NIC2
3	1.000	2.500	2.500	2.500	2.500	2.5896	2.4464	2.1	09/05/2023 06:53	GMG,NIC2
4	2.000	2.500	2.500	2.500	5.000	5.0939	4.9483	1.0	09/05/2023 06:56	GMG,NIC2
5	5.000	2.500	2.500	2.500	12.500	13.273	13.1195	5.0	09/05/2023 06:59	GMG,NIC2
6	10.000	2.500	2.500	2.500	25.000	24.873	24.7083	1.2	09/05/2023 07:03	GMG,NIC2

SMP

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
1	ICV	2.500	2.500	2.500	7.3498	7.2020	2.881	-	09/05/2023 07:06	GMG,NIC2
2	ICB	2.500	2.500	2.500	0.0364	-0.1043	-0.042	-	09/05/2023 07:22	GMG,NIC2
3	0.2 PPB	2.500	2.500	2.500	0.5274	0.3863	0.155	-	09/05/2023 07:25	GMG,NIC2
4	Check STD(5ug/L)	2.500	2.500	2.500	12.449	12.2964	4.919	98.4	09/05/2023 10:00	GMG,NIC2
5	Check Blank	2.500	2.500	2.500	0.0249	-0.1157	-0.046	-	09/05/2023 10:03	GMG,NIC2
6	wg1823519-1 wg1823519	2.500	2.500	2.500	0.0276	-0.1130	-0.045	-	09/05/2023 10:06	GMG,NIC2

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
7	wg1823519-2 wg1823519	2.500	2.500	2.500	2.5595	2.4164	0.967	-	09/05/2023 10:10	GMG,NIC2
8	I2350380-01 wg1823519	2.500	2.500	2.500	0.4006	0.2596	0.104	-	09/05/2023 10:13	GMG,NIC2
9	wg1823519-3 wg1823519	2.500	2.500	2.500	13.107	12.9539	5.182	-	09/05/2023 10:16	GMG,NIC2
10	wg1823519-4 wg1823519	2.500	2.500	2.500	1.2115	1.0697	0.428	-	09/05/2023 10:20	GMG,NIC2
11	I2350380-02 wg1823519	2.500	2.500	2.500	1.0571	0.9154	0.366	-	09/05/2023 10:23	GMG,NIC2
12	I2350686-01 wg1823519	2.500	2.500	2.500	0.9038	0.7623	0.305	-	09/05/2023 10:26	GMG,NIC2
13	Check STD(5ug/L)	2.500	2.500	2.500	12.685	12.5320	5.013	100.3	09/05/2023 10:30	GMG,NIC2
14	Check Blank	2.500	2.500	2.500	0.0265	-0.1141	-0.046	-	09/05/2023 10:33	GMG,NIC2
15	WG1822010-1 WG1822010	2.500	2.500	2.500	0.0321	-0.1085	-0.043	-	09/05/2023 10:46	GMG,NIC2
16	WG1822010-2 WG1822010	2.500	2.500	2.500	2.4919	2.3488	0.940	-	09/05/2023 10:49	GMG,NIC2
17	I2350202-03 WG1822010	2.500	2.500	2.500	0.0287	-0.1119	-0.045	-	09/05/2023 10:53	GMG,NIC2
18	WG1822010-3 WG1822010	2.500	2.500	2.500	12.389	12.2367	4.895	-	09/05/2023 10:56	GMG,NIC2
19	WG1822010-4 WG1822010	2.500	2.500	2.500	0.0171	-0.1235	-0.049	-	09/05/2023 10:59	GMG,NIC2
20	I2350202-04 WG1822010	2.500	2.500	2.500	0.0161	-0.1245	-0.050	-	09/05/2023 11:03	GMG,NIC2
21	WG1822010-5 WG1822010	2.500	2.500	2.500	12.150	11.9981	4.799	-	09/05/2023 11:06	GMG,NIC2
22	WG1822010-6 WG1822010	2.500	2.500	2.500	0.0229	-0.1177	-0.047	-	09/05/2023 11:09	GMG,NIC2
23	I2350148-01 WG1822010	2.500	2.500	2.500	0.0237	-0.1169	-0.047	-	09/05/2023 11:12	GMG,NIC2
24	I2350148-02 WG1822010	2.500	2.500	2.500	0.0218	-0.1188	-0.048	-	09/05/2023 11:16	GMG,NIC2
25	Check STD(5ug/L)	2.500	2.500	2.500	12.579	12.4264	4.971	99.4	09/05/2023 11:19	GMG,NIC2
26	Check Blank	2.500	2.500	2.500	0.0166	-0.1240	-0.050	-	09/05/2023 11:22	GMG,NIC2
27	I2350148-03 WG1822010	2.500	2.500	2.500	0.0218	-0.1188	-0.048	-	09/05/2023 11:26	GMG,NIC2
28	I2350148-04 WG1822010	2.500	2.500	2.500	0.0224	-0.1182	-0.047	-	09/05/2023 11:29	GMG,NIC2
29	I2350202-01 WG1822010	2.500	2.500	2.500	0.0225	-0.1181	-0.047	-	09/05/2023 11:32	GMG,NIC2
30	I2350202-02 WG1822010	2.500	2.500	2.500	0.0380	-0.1027	-0.041	-	09/05/2023 11:36	GMG,NIC2
31	I2350202-05 WG1822010	2.500	2.500	2.500	0.0230	-0.1176	-0.047	-	09/05/2023 11:39	GMG,NIC2
32	I2350202-06 WG1822010	2.500	2.500	2.500	0.0209	-0.1197	-0.048	-	09/05/2023 11:42	GMG,NIC2
33	I2350202-07 WG1822010	2.500	2.500	2.500	0.0225	-0.1181	-0.047	-	09/05/2023 11:46	GMG,NIC2
34	I2350202-08 WG1822010	2.500	2.500	2.500	0.0194	-0.1212	-0.048	-	09/05/2023 11:49	GMG,NIC2
35	I2350202-09 WG1822010	2.500	2.500	2.500	0.0220	-0.1186	-0.047	-	09/05/2023 11:52	GMG,NIC2
36	I2350202-10 WG1822010	2.500	2.500	2.500	0.0213	-0.1193	-0.048	-	09/05/2023 11:55	GMG,NIC2
37	Check STD(5ug/L)	2.500	2.500	2.500	12.640	12.4876	4.995	99.9	09/05/2023 11:59	GMG,NIC2
38	Check Blank	2.500	2.500	2.500	0.0212	-0.1194	-0.048	-	09/05/2023 12:04	GMG,NIC2

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
39	I2350246-01 WG1822010	2.500	2.500	2.500	0.0235	-0.1171	-0.047	-	09/05/2023 12:07	GMG,NIC2
40	wg1823601-1 wg1823601	2.500	2.500	2.500	0.1622	0.0214	0.009	-	09/05/2023 12:11	GMG,NIC2
41	wg1823601-2 wg1823601	2.500	2.500	2.500	2.5737	2.4306	0.972	-	09/05/2023 12:14	GMG,NIC2
42	L2350795-01 wg1823601	2.500	2.500	2.500	0.1897	0.0489	0.020	-	09/05/2023 12:17	GMG,NIC2
43	wg1823601-3 wg1823601	2.500	2.500	2.500	12.586	12.4337	4.973	-	09/05/2023 12:21	GMG,NIC2
44	wg1823601-4 wg1823601	2.500	2.500	2.500	0.1156	-0.0251	-0.010	-	09/05/2023 12:24	GMG,NIC2
45	wg1823539-1 wg1823539	2.500	2.500	2.500	0.1109	-0.0298	-0.012	-	09/05/2023 12:28	GMG,NIC2
46	wg1823539-2 wg1823539	2.500	2.500	2.500	2.6804	2.5372	1.015	-	09/05/2023 12:31	GMG,NIC2
47	I2350750-01 wg1823539	2.500	2.500	2.500	0.1961	0.0553	0.022	-	09/05/2023 12:34	GMG,NIC2
48	wg1823539-3 wg1823539	2.500	2.500	2.500	12.956	12.8027	5.121	-	09/05/2023 12:38	GMG,NIC2
49	Check STD(5ug/L)	2.500	2.500	2.500	12.591	12.4384	4.975	99.5	09/05/2023 12:41	GMG,NIC2
50	Check Blank	2.500	2.500	2.500	0.0173	-0.1233	-0.049	-	09/05/2023 12:45	GMG,NIC2
51	wg1823539-4 wg1823539	2.500	2.500	2.500	0.0938	-0.0469	-0.019	-	09/05/2023 12:48	GMG,NIC2
52	I2350750-02 wg1823539	2.500	2.500	2.500	0.1018	-0.0389	-0.016	-	09/05/2023 12:51	GMG,NIC2
53	I2350750-03 wg1823539	2.500	2.500	2.500	0.0882	-0.0525	-0.021	-	09/05/2023 12:54	GMG,NIC2
54	wg1816676-1 wg1816676	2.500	2.500	2.500	0.0278	-0.1128	-0.045	-	09/05/2023 12:58	GMG,NIC2
55	wg1816676-2 wg1816676	2.500	2.500	2.500	2.1961	2.0533	0.821	-	09/05/2023 13:01	GMG,NIC2
56	L2347070-02 wg1816676	2.500	2.500	2.500	0.4387	0.2977	0.119	-	09/05/2023 13:04	GMG,NIC2
57	wg1816676-3 wg1816676	2.500	2.500	2.500	11.616	11.4644	4.586	-	09/05/2023 13:08	GMG,NIC2
58	wg1816676-4 wg1816676	2.500	2.500	2.500	0.4379	0.2969	0.119	-	09/05/2023 13:11	GMG,NIC2
59	wg1822319-1 wg1822319	2.500	2.500	2.500	0.0367	-0.1040	-0.042	-	09/05/2023 13:14	GMG,NIC2
60	wg1822319-2 wg1822319	2.500	2.500	2.500	2.3317	2.1888	0.876	-	09/05/2023 13:18	GMG,NIC2
61	Check STD(5ug/L)	2.500	2.500	2.500	12.605	12.4521	4.981	99.6	09/05/2023 13:21	GMG,NIC2
62	Check Blank	2.500	2.500	2.500	0.0213	-0.1193	-0.048	-	09/05/2023 13:27	GMG,NIC2
63	I2350269-08 wg1822319	2.500	2.500	2.500	0.0482	-0.0925	-0.037	-	09/05/2023 13:31	GMG,NIC2
64	wg1822319-3 wg1822319	2.500	2.500	2.500	11.759	11.6073	4.643	-	09/05/2023 13:34	GMG,NIC2
65	wg1822319-4 wg1822319	2.500	2.500	2.500	11.999	11.8469	4.739	-	09/05/2023 13:37	GMG,NIC2
66	I2350269-01 wg1822319	2.500	2.500	2.500	0.0522	-0.0885	-0.035	-	09/05/2023 13:41	GMG,NIC2
67	I2350269-02 wg1822319	2.500	2.500	2.500	0.0324	-0.1082	-0.043	-	09/05/2023 13:44	GMG,NIC2
68	I2350269-03 wg1822319	2.500	2.500	2.500	0.0338	-0.1068	-0.043	-	09/05/2023 13:47	GMG,NIC2
69	I2350269-04 wg1822319	2.500	2.500	2.500	0.0419	-0.0988	-0.040	-	09/05/2023 13:50	GMG,NIC2
70	I2350269-05 wg1822319	2.500	2.500	2.500	0.0427	-0.0980	-0.039	-	09/05/2023 13:54	GMG,NIC2

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
71	I2350269-06 wg1822319	2.500	2.500	2.500	0.0414	-0.0993	-0.040	-	09/05/2023 13:57	GMG,NIC2
72	I2350269-07 wg1822319	2.500	2.500	2.500	0.0421	-0.0986	-0.039	-	09/05/2023 14:00	GMG,NIC2
73	Check STD(5ug/L)	2.500	2.500	2.500	12.605	12.4522	4.981	99.6	09/05/2023 14:04	GMG,NIC2
74	Check Blank	2.500	2.500	2.500	0.0119	-0.1287	-0.051	-	09/05/2023 14:07	GMG,NIC2
75	I2350269-09 wg1822319	2.500	2.500	2.500	0.0370	-0.1037	-0.041	-	09/05/2023 14:10	GMG,NIC2
76	I2350269-11 wg1822319	2.500	2.500	2.500	0.0237	-0.1169	-0.047	-	09/05/2023 14:14	GMG,NIC2
77	I2350282-01 wg1822319	2.500	2.500	2.500	0.0289	-0.1117	-0.045	-	09/05/2023 14:17	GMG,NIC2
78	I2350283-01 wg1822319	2.500	2.500	2.500	0.0279	-0.1127	-0.045	-	09/05/2023 14:20	GMG,NIC2
79	Check STD(5ug/L)	2.500	2.500	2.500	12.595	12.4428	4.977	99.5	09/05/2023 14:24	GMG,NIC2
80	Check Blank	2.500	2.500	2.500	0.0109	-0.1297	-0.052	-	09/05/2023 14:27	GMG,NIC2

Title :
Date : 9/7/2023
Name :

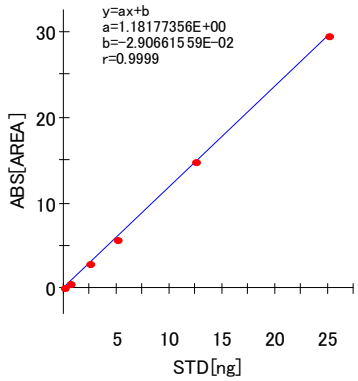
Method

STD
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

SMP
HONH3Cl : 0.0mL
(1+1)H2SO4 : 0.0mL
10w/v% SnCl2 : 0.3mL

Measurement Time(sec) : 120sec

Calib



STD

No.	STD [ug/L]	SVOL [mL]	CVOL [mL]	DVOL [mL]	STD [ng]	AREA [ON]	MEAS [ng]	Dev [%]	M. TIME	Note
1	0.000	2.500	2.500	2.500	0.000	0.1135	0.1206	-	09/07/2023 07:00	GMG,NIC4
2	0.200	2.500	2.500	2.500	0.500	0.6239	0.5525	10.5	09/07/2023 07:03	GMG,NIC4
3	1.000	2.500	2.500	2.500	2.500	2.9689	2.5368	1.5	09/07/2023 07:07	GMG,NIC4
4	2.000	2.500	2.500	2.500	5.000	5.6102	4.7719	4.6	09/07/2023 07:10	GMG,NIC4
5	5.000	2.500	2.500	2.500	12.500	14.689	12.4545	0.4	09/07/2023 07:13	GMG,NIC4
6	10.000	2.500	2.500	2.500	25.000	29.590	25.0637	0.3	09/07/2023 07:17	GMG,NIC4

SMP

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
1	XICV	2.500	2.500	2.500	8.1294	6.9036	2.761	-	09/07/2023 07:23	GMG,NIC4
2	ICV	2.500	2.500	2.500	8.3026	7.0501	2.820	-	09/07/2023 07:37	GMG,NIC4
3	ICB	2.500	2.500	2.500	0.0620	0.0771	0.031	-	09/07/2023 08:14	GMG,NIC4
4	0.2 PPB	2.500	2.500	2.500	0.6253	0.5537	0.221	-	09/07/2023 08:18	GMG,NIC4
5	wg1819789-1 wg1819789	2.500	2.500	2.500	0.0269	0.0474	0.019	-	09/07/2023 08:24	GMG,NIC4
6	wg1819789-2 wg1819789	2.500	2.500	2.500	2.8086	2.4012	0.960	-	09/07/2023 08:27	GMG,NIC4

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
7	wg1819789-3 wg1819789	2.500	2.500	2.500	2.8889	2.4691	0.988	-	09/07/2023 08:30	GMG,NIC4
8	L2348816-03 wg1819789	2.500	2.500	2.500	0.0271	0.0475	0.019	-	09/07/2023 08:34	GMG,NIC4
9	wg1819789-4 wg1819789	2.500	2.500	2.500	14.149	11.9977	4.799	-	09/07/2023 08:37	GMG,NIC4
10	wg1819789-5 wg1819789	2.500	2.500	2.500	14.913	12.6443	5.058	-	09/07/2023 08:40	GMG,NIC4
11	L2348816-01 wg1819789	2.500	2.500	2.500	0.0277	0.0480	0.019	-	09/07/2023 08:44	GMG,NIC4
12	L2348816-02 wg1819789	2.500	2.500	2.500	0.0225	0.0436	0.017	-	09/07/2023 08:47	GMG,NIC4
13	L2348816-04 wg1819789	2.500	2.500	2.500	0.0246	0.0454	0.018	-	09/07/2023 08:50	GMG,NIC4
14	Check STD(5ug/L)	2.500	2.500	2.500	13.974	11.8498	4.740	94.8	09/07/2023 08:54	GMG,NIC4
15	Check Blank	2.500	2.500	2.500	0.0571	0.0729	0.029	-	09/07/2023 08:57	GMG,NIC4
16	WG1822784-1 WG1822784	2.500	2.500	2.500	0.0264	0.0469	0.019	-	09/07/2023 09:13	GMG,NIC4
17	WG1822784-2 WG1822784	2.500	2.500	2.500	2.7653	2.3646	0.946	-	09/07/2023 09:16	GMG,NIC4
18	L2350269-08 WG1822784	2.500	2.500	2.500	0.0301	0.0501	0.020	-	09/07/2023 09:19	GMG,NIC4
19	WG1822784-3 WG1822784	2.500	2.500	2.500	13.919	11.8027	4.721	-	09/07/2023 09:23	GMG,NIC4
20	WG1822784-4 WG1822784	2.500	2.500	2.500	14.074	11.9344	4.774	-	09/07/2023 09:26	GMG,NIC4
21	L2349882-01 WG1822784	2.500	2.500	2.500	0.0388	0.0574	0.023	-	09/07/2023 09:29	GMG,NIC4
22	L2349882-02 WG1822784	2.500	2.500	2.500	0.0231	0.0441	0.018	-	09/07/2023 09:33	GMG,NIC4
23	L2350166-01 WG1822784	2.500	2.500	2.500	0.0546	0.0708	0.028	-	09/07/2023 09:36	GMG,NIC4
24	L2350269-09 WG1822784	2.500	2.500	2.500	0.0464	0.0639	0.026	-	09/07/2023 09:39	GMG,NIC4
25	L2350269-11 WG1822784	2.500	2.500	2.500	0.0180	0.0398	0.016	-	09/07/2023 09:43	GMG,NIC4
26	Check STD(5ug/L)	2.500	2.500	2.500	13.951	11.8302	4.732	94.6	09/07/2023 09:46	GMG,NIC4
27	Check Blank	2.500	2.500	2.500	0.0529	0.0694	0.028	-	09/07/2023 09:50	GMG,NIC4
28	L2350484-01 WG1822784	2.500	2.500	2.500	0.0214	0.0427	0.017	-	09/07/2023 09:54	GMG,NIC4
29	L2350484-02 WG1822784	2.500	2.500	2.500	0.0188	0.0405	0.016	-	09/07/2023 09:57	GMG,NIC4
30	L2350484-03 WG1822784	2.500	2.500	2.500	0.0185	0.0402	0.016	-	09/07/2023 10:00	GMG,NIC4
31	L2350505-07 WG1822784	2.500	2.500	2.500	0.0178	0.0397	0.016	-	09/07/2023 10:04	GMG,NIC4
32	L2350787-16 WG1822784	2.500	2.500	2.500	0.0183	0.0401	0.016	-	09/07/2023 10:07	GMG,NIC4
33	WG1823669-1 WG1823669	2.500	2.500	2.500	0.0415	0.0597	0.024	-	09/07/2023 10:42	GMG,NIC4
34	WG1823669-2 WG1823669	2.500	2.500	2.500	2.5980	2.2230	0.889	-	09/07/2023 10:45	GMG,NIC4
35	L2351148-02 WG1823669	2.500	2.500	2.500	0.0436	0.0615	0.025	-	09/07/2023 10:48	GMG,NIC4
36	WG1823669-3 WG1823669	2.500	2.500	2.500	13.454	11.4099	4.564	-	09/07/2023 10:51	GMG,NIC4
37	WG1823669-4 WG1823669	2.500	2.500	2.500	0.0440	0.0618	0.025	-	09/07/2023 10:55	GMG,NIC4
38	Check STD(5ug/L)	2.500	2.500	2.500	13.950	11.8293	4.732	94.6	09/07/2023 10:58	GMG,NIC4

NIC NIPPON INSTRUMENTS CORPORATION

No.	NAME	SVOL [mL]	CVOL [mL]	DVOL [mL]	AREA [ON]	MEAS [ng]	CONC [ug/L]	Recovery [%]	M. TIME	Note
39	Check Blank	2.500	2.500	2.500	0.0456	0.0632	0.025	-	09/07/2023 11:08	GMG,NIC4
40	L2350654-03 WG1823669	2.500	2.500	2.500	0.0414	0.0596	0.024	-	09/07/2023 11:11	GMG,NIC4
41	L2350766-01 WG1823669	2.500	2.500	2.500	0.0400	0.0584	0.023	-	09/07/2023 11:15	GMG,NIC4
42	L2350766-02 WG1823669	2.500	2.500	2.500	0.0420	0.0601	0.024	-	09/07/2023 11:18	GMG,NIC4
43	XWG1822456-1 WG1822456	2.500	2.500	2.500	0.0636	0.0784	0.031	-	09/07/2023 11:24	GMG,NIC4

MERCURY TRUE VALUE CRITERIA

ICV	3 ug/l
LCSW	1 ug/l
MS	1 ug/l
CCV	5 ug/l

As of 6/1/13, Mercury True Value criteria is as follows:

ICV	3 ug/l
LCSW	1 ug/l
MS(aq)	5 ug/l
MS(soil)	1 ug/l
CCV	10 ug/l

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D102-540
Certificate Issue Date: June 22, 2018
Expiration Date: January 31, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8160	6.36	3960 - 12400	4080 - 12200
Antimony	120	60.9	9.42	0.822 - 121	12.0 - 166
Arsenic	144	135	5.08	112 - 158	94.6 - 176
Barium	469	443	6.77	366 - 521	332 - 554
Beryllium	207	197	5.86	164 - 229	148 - 246
Boron	213	174	12.6	127 - 221	105 - 244
Cadmium	224	204	6.65	169 - 240	153 - 256
Calcium	5190	4830	9.12	3950 - 5700	3510 - 6150
Chromium	138	132	8.56	109 - 155	92.2 - 171
Cobalt	182	179	7.93	151 - 207	134 - 224
Copper	191	184	6.72	155 - 213	138 - 230
Iron	15000	14400	10.7	8770 - 20000	5120 - 23600
Lead	225	216	7.72	178 - 254	159 - 274
Magnesium	2570	2340	6.13	1780 - 2900	1460 - 3230
Manganese	331	323	6.71	266 - 380	242 - 404
Mercury	16.8	13.2	16.0	8.64 - 17.7	7.89 - 18.5
Molybdenum	193	175	2.39	141 - 209	125 - 226
Nickel	163	152	5.95	126 - 178	106 - 197
Potassium	2420	2050	6.31	1440 - 2660	1210 - 2890
Selenium	81.9	74.9	4.13	59.3 - 90.5	47.0 - 103
Silver	57.6	53.9	9.00	43.0 - 64.8	37.8 - 70.0
Sodium	161	149	12.1	111 - 188	57.7 - 241
Strontium	100	96.2	4.04	78.1 - 114	69.0 - 123
Thallium	253	232	3.54	188 - 276	168 - 296

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Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	146	134	10.8	106 - 163	79.5 - 189
Titanium	449	340	7.20	70.2 - 609	44.9 - 711
Uranium	114	113	7.10	85.5 - 140	71.9 - 153
Vanadium	180	172	8.85	137 - 207	126 - 218
Zinc	217	211	6.58	171 - 250	147 - 274

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8160	80.8	138	-	-
Antimony	120	60.9	50.8	135	-	-
Arsenic	144	135	93.8	184	-	-
Barium	469	443	94.5	158	-	-
Beryllium	207	197	95.0	148	-	-
Boron	213	174	81.8	107	-	-
Cadmium	224	204	91.3	199	-	-
Calcium	5190	4830	93.0	122	-	-
Chromium	138	132	95.5	172	-	-
Cobalt	182	179	98.4	140	-	-
Copper	191	184	96.3	183	-	-
Iron	15000	14400	95.6	133	-	-
Lead	225	216	96.2	204	-	-
Magnesium	2570	2340	91.2	122	-	-
Manganese	331	323	97.6	147	-	-
Mercury	16.8	13.2	78.3	128	-	-
Molybdenum	193	175	90.8	143	-	-
Nickel	163	152	93.1	185	-	-
Potassium	2420	2050	84.7	121	-	-
Selenium	81.9	74.9	91.5	163	-	-

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Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	57.6	53.9	93.6	150	-	-
Sodium	161	149	92.8	105	-	-
Strontium	100	96.2	96.2	90	-	-
Thallium	253	232	91.6	147	-	-
Tin	146	134	92.0	100	-	-
Titanium	449	340	75.6	93	-	-
Uranium	114	113	98.8	35	-	-
Vanadium	180	172	95.4	139	-	-
Zinc	217	211	97.0	180	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller

Quality Officer

Matthew Seebeck

ISO/IEC GUIDE 34:2009 ACCREDITED REFERENCE MATERIAL PRODUCER CERTIFICATE NO. 1539.03

ISO/IEC 17025:2005 ACCREDITED CHEMICAL TESTING LABORATORY CERTIFICATE NO. 1539.02

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Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D105-540
Certificate Issue Date: March 19, 2019
Expiration Date: October 12, 2022
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 030512.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8800	8.32	4600 - 13000	4470 - 13100
Antimony	282	147	7.70	6.17 - 289	28.2 - 366
Arsenic	155	143	6.34	119 - 168	100 - 186
Barium	439	415	5.37	343 - 488	311 - 519
Beryllium	192	179	2.78	149 - 210	134 - 224
Boron	216	160	7.08	113 - 208	96.1 - 238
Cadmium	61.5	56.2	0.528	46.6 - 65.9	42.2 - 70.3
Calcium	5190	4960	6.64	4090 - 5840	3610 - 6310
Chromium	104	101	4.75	83.2 - 118	70.5 - 131
Cobalt	196	189	0.500	158 - 219	141 - 236
Copper	65.0	63.1	2.65	53.1 - 73.1	47.3 - 78.9
Iron	15000	15700	8.94	10100 - 21300	6000 - 25400
Lead	126	125	4.77	103 - 146	89.3 - 160
Magnesium	2570	2410	6.26	1860 - 2970	1520 - 3310
Manganese	387	382	5.37	315 - 449	290 - 474
Mercury	7.76	7.61	13.7	5.53 - 9.69	4.57 - 10.7
Molybdenum	120	107	0.500	86.0 - 128	75.5 - 139
Nickel	117	108	0.514	89.5 - 127	75.7 - 141
Potassium	2420	2110	5.62	1500 - 2720	1260 - 2960
Selenium	84.6	77.9	7.10	61.8 - 94.0	49.2 - 107
Silver	34.6	34.3	8.34	27.8 - 40.9	23.6 - 45.1
Sodium	161	145	6.72	106 - 183	54.3 - 235
Strontium	104	104	3.95	85.1 - 123	74.8 - 133
Thallium	123	113	0.500	91.3 - 134	77.1 - 149

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▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	118	107	0.500	83.5 - 130	61.2 - 152
Titanium	512	421	5.80	114 - 728	0.00 - 854
Uranium	103	104	6.18	79.1 - 128	71.9 - 135
Vanadium	87.3	83.7	8.55	66.8 - 101	54.2 - 113
Zinc	251	240	3.98	194 - 285	168 - 312

ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8800	87.1	193	-	-
Antimony	282	147	52.3	216	-	-
Arsenic	155	143	92.5	240	-	-
Barium	439	415	94.6	222	-	-
Beryllium	192	179	93.4	220	-	-
Boron	216	160	74.2	152	-	-
Cadmium	61.5	56.2	91.5	239	-	-
Calcium	5190	4960	95.6	175	-	-
Chromium	104	101	96.8	237	-	-
Cobalt	196	189	96.2	215	-	-
Copper	65.0	63.1	97.1	237	-	-
Iron	15000	15700	105	195	-	-
Lead	126	125	99.0	243	-	-
Magnesium	2570	2410	93.9	177	-	-
Manganese	387	382	98.7	215	-	-
Mercury	7.76	7.61	98.0	157	-	-
Molybdenum	120	107	89.4	216	-	-
Nickel	117	108	92.5	235	-	-
Potassium	2420	2110	87.2	181	-	-
Selenium	84.6	77.9	92.1	231	-	-

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Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number	Recovery
	mg/kg	mg/kg	%			%
Silver	34.6	34.3	99.3	216	-	-
Sodium	161	145	89.8	166	-	-
Strontium	104	104	99.9	148	-	-
Thallium	123	113	91.8	215	-	-
Tin	118	107	90.4	164	-	-
Titanium	512	421	82.2	157	-	-
Uranium	103	104	101	61	-	-
Vanadium	87.3	83.7	95.9	214	-	-
Zinc	251	240	95.5	234	-	-

1. The **Certified Values** are the actual "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this reference material during the period of validity of this certificate.

2. The **Uncertainty** is the total propagated uncertainty at the 95% confidence interval. The uncertainty is based on the preparation and internal analytical verification of the product by ERA, multiplied by a coverage factor. The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product.

3. The **QC Performance Acceptance Limits (QC PALs™)**are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this QC standard alongside USEPA and NELAC compliant PT standards. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and, therefore, the acceptance limits of this QC standard and any PT standard may differ relative to their difference in concentrations.

5. The **PT Data/Traceability** data include the mean value, percent recovery and number of data points reported by the laboratories in our Proficiency Testing study compared to the Certified Values. In addition, where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. This product is traceable to the lot numbers of its starting materials. All gravimetric and volumetric measurements related to its manufacture are traceable to NIST through an unbroken chain of comparisons.
Traceability Recovery (%) = [(% recovery certified standard)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing the ERA standards or their associated stock solutions against the applicable NIST SRMs.

6. For additional information on this product such as intended use, instructions for use, level of homogeneity, and safety information, please refer to the provided Instruction Sheet

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller

Brian Miller

Quality Officer

Matthew Seebeck

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Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D109-540
Certificate Issue Date: March 24, 2020
Expiration Date: October 03, 2023
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8130	2.54	3920 - 12300	4060 - 12200
Antimony	259	134	5.03	4.56 - 264	25.9 - 335
Arsenic	171	156	3.38	129 - 183	109 - 203
Barium	253	239	4.81	197 - 280	179 - 298
Beryllium	179	169	6.59	141 - 198	127 - 212
Boron	114	87.5	10.3	62.5 - 113	52.5 - 125
Cadmium	149	137	5.43	113 - 160	103 - 171
Calcium	5190	4760	3.48	3890 - 5640	3460 - 6070
Chromium	163	154	3.79	126 - 181	108 - 200
Cobalt	127	121	5.07	101 - 141	90.8 - 151
Copper	57.0	54.9	4.13	46.1 - 63.6	41.1 - 68.6
Iron	15000	14100	6.27	8470 - 19700	4920 - 23200
Lead	133	130	3.00	107 - 152	93.3 - 167
Magnesium	2570	2320	3.32	1760 - 2880	1440 - 3200
Manganese	277	269	2.67	221 - 317	199 - 340
Mercury	21.6	20.5	7.72	14.7 - 26.3	12.3 - 28.6
Molybdenum	108	95.4	2.61	76.4 - 114	66.9 - 124
Nickel	58.7	53.9	4.97	44.5 - 63.3	37.7 - 70.0
Potassium	2420	2020	3.06	1410 - 2630	1190 - 2850
Selenium	181	167	5.63	132 - 201	113 - 221
Silver	35.5	33.6	5.20	26.8 - 40.3	23.0 - 44.1
Sodium	161	133	2.76	95.1 - 171	46.5 - 220
Strontium	89.7	87.9	4.59	71.7 - 104	62.8 - 113
Thallium	121	112	5.19	90.3 - 133	76.1 - 147

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▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Reference Value[7]	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Tin	83.5	74.0	5.42	57.6 - 90.4	39.7 - 108
Titanium	474	333	7.17	48.6 - 617	46.3 - 620
Uranium	51.9	51.9	3.36	39.6 - 64.3	35.9 - 68.0
Vanadium	68.1	62.6	6.00	49.4 - 75.8	37.0 - 88.3
Zinc	165	158	2.34	128 - 188	111 - 205

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ANALYTICAL VERIFICATION

Parameter	Certified Value[1]	Proficiency Testing Study			NIST Traceability	
		Mean	Recovery[5]	n	SRM Number[6]	Recovery
	mg/kg	mg/kg	%			%
Aluminum	10100	8130	80.5	196	-	-
Antimony	259	134	51.8	217	-	-
Arsenic	171	156	91.3	243	-	-
Barium	253	239	94.3	230	-	-
Beryllium	179	169	94.6	223	-	-
Boron	114	87.5	76.7	150	-	-
Cadmium	149	137	91.8	249	-	-
Calcium	5190	4760	91.8	184	-	-
Chromium	163	154	94.4	245	-	-
Cobalt	127	121	95.3	221	-	-
Copper	57.0	54.9	96.2	243	-	-
Iron	15000	14100	93.9	199	-	-
Lead	133	130	97.7	251	-	-
Magnesium	2570	2320	90.1	182	-	-
Manganese	277	269	97.2	220	-	-
Mercury	21.6	20.5	94.7	172	-	-
Molybdenum	108	95.4	88.3	218	-	-
Nickel	58.7	53.9	91.8	242	-	-
Potassium	2420	2020	83.5	187	-	-
Selenium	181	167	92.2	235	-	-
Silver	35.5	33.6	94.5	222	-	-
Sodium	161	133	82.7	177	-	-
Strontium	89.7	87.9	98.0	151	-	-
Thallium	121	112	92.2	219	-	-
Tin	83.5	74.0	88.6	170	-	-
Titanium	474	333	70.3	157	-	-
Uranium	51.9	51.9	100	60	-	-
Vanadium	68.1	62.6	91.9	213	-	-
Zinc	165	158	95.8	238	-	-

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▪ Certificate of Analysis ▪

1. The **Certified Values** are the actual gravimetric/volumetric "made-to" concentrations confirmed by ERA analytical verification. The certified values are monitored and purchasers will be notified of any significant changes resulting in recertification or withdrawal of this certified reference material during the period of validity of this certificate.

2. The **Uncertainty** represents an expanded uncertainty and approximates a 95% confidence interval. The uncertainty is based on the characterization, homogeneity and stability characteristics of the product, multiplied by a coverage factor (k=2). The uncertainty applies to the product as supplied and does not take into account any required or optional dilution and/or preparations the laboratory may perform while using this product. The formula used to calculate the expanded uncertainty is:
$U_{expanded} = k * SQRT((U_{char}^2) + (U_{homogen}^2) + (U_{LTS}^2) + (U_{STS}^2) + (U_{RSS}^2))$

Where:

$U_{expanded}$ = Expanded uncertainty.
k = Coverage factor.
U_{char} = Combined standard uncertainty of the manufacturing and/or analytical verification assessment.
$U_{homogen}$ = Standard uncertainty of the homogeneity assessment.
U_{LTS} = Standard uncertainty associated with long-term stability.
U_{STS} = Standard uncertainty associated with short-term (transport) stability.
U_{RSS} = Standard uncertainty associated with repeated sampling of the product (where permitted by product use instructions).

3. The **QC Performance Acceptance Limits (QC PALs™)** are based on actual historical data collected in ERA's Proficiency Testing program. The QC PALs™ reflect any inherent biases in the methods used to establish the limits and closely approximate a 95% confidence interval of the performance that experienced laboratories should achieve using accepted environmental methods. Use the QC PALs™ to realistically evaluate your performance against your peers.

4. The **PT Performance Acceptance Limits (PT PALs™)** are calculated using the regression equations and fixed acceptance criteria specified in the NELAC proficiency testing requirements. Use the PT PALs™ when analyzing this certified reference material alongside USEPA and NELAC compliant PT study materials. Please note that many PT study acceptance limits are concentration dependent (some non-linearly) and therefore, the acceptance limits of this certified reference material and any PT study material may differ relative to their difference in concentrations.

5. The **PT Performance Data** include the mean value, percent recovery and number of data points reported by laboratories in our Proficiency Testing study compared to the Certified Values. In the event this lot was not used in a proficiency testing scheme, the data displayed was generated internally by ERA.

6. Where NIST Standard Reference Materials (SRMs) are available, each analyte has been analytically traced to the NIST SRM listed. **Analytical Traceability Recovery (%)** = [(% recovery ERA certified reference material)/(% recovery NIST SRM)]*100
The traceability data shown were compiled by analyzing this ERA certified reference material and/or it's associated stock solution(s) against the applicable NIST SRMs.

7. The **Reference Values** are equal to the mean recoveries for the parameters as determined in an interlaboratory round robin study. The **Reference Values** represent the expected performance for the analytes in this standard. ERA recommends using the **Reference Values** when assessing or evaluating your results.

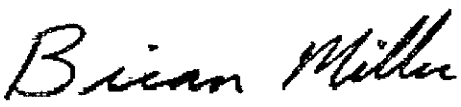
8. **Metrological Traceability**. This certified reference material is metrologically traceable to NIST mass reference materials through an unbroken chain of comparisons.

9. For additional information on this product such as intended use, storage information, instructions for use, minimum sample size, and safety information, please refer to the Product Use Instructions provided.

If you have any questions or need technical assistance, please call ERA technical assistance at 1-800-372-0122 or send an email to info@eraqc.com.

Certifying Officer

Brian Miller



Quality Officer

Matthew Seebeck

ERA
A Waters Company

Certified Reference Material

▪ Certificate of Analysis ▪

Product: Metals in Soil
Catalog Number: 540
Lot No. D113-540
Certificate Issue Date: March 23, 2021
Expiration Date: October 13, 2024
Revision Number: Original

Product use instructions are included as part of the certification packet and are paginated separately from this Certificate of Analysis. Please reference the product use instructions for catalog #540 revision 090119.

CERTIFICATION

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Aluminum	10100	8630	12.0	4420 - 12800	4370 - 12900
Antimony	256	129	16.8	0.742 - 257	25.6 - 323
Arsenic	91.6	84.5	15.1	70.0 - 99.0	59.2 - 110
Barium	259	249	9.94	206 - 292	187 - 311
Beryllium	175	163	3.89	135 - 191	122 - 204
Boron	95.7	76.7	12.8	55.7 - 97.7	48.0 - 107
Cadmium	107	99.0	11.5	82.2 - 116	74.2 - 124
Calcium	5190	4760	11.8	3890 - 5640	3460 - 6070
Chromium	129	122	14.6	101 - 144	85.7 - 159
Cobalt	63.6	61.7	11.5	51.9 - 71.6	46.3 - 77.2
Copper	62.3	61.5	12.3	51.9 - 71.0	46.1 - 76.8
Iron	15000	14500	15.7	8860 - 20100	5190 - 23800
Lead	122	123	13.9	103 - 144	88.3 - 158
Lithium	6.42	7.30	18.7	5.13 - 9.48	3.20 - 11.4
Magnesium	2570	2360	8.87	1810 - 2920	1480 - 3250
Manganese	470	456	13.4	375 - 538	350 - 563
Mercury	22.1	18.9	14.5	13.0 - 24.8	11.3 - 26.4
Molybdenum	80.1	72.8	11.0	58.7 - 87.0	50.5 - 95.2
Nickel	143	135	14.2	112 - 158	94.7 - 176
Potassium	2420	2090	8.21	1480 - 2700	1240 - 2940
Selenium	128	121	11.7	96.9 - 146	80.4 - 162
Silver	45.4	44.1	6.69	35.5 - 52.8	30.7 - 57.6
Sodium	161	136	9.34	97.4 - 174	48.1 - 223
Strontium	82.2	82.3	8.42	67.4 - 97.1	58.6 - 106

16341 Table Mountain Pkwy ▪ Golden, CO 80403 ▪ T: 800.372.0122 ▪ 303.431.8454 ▪ www.eraqc.com

▪ Certificate of Analysis ▪

Parameter	Certified Value[1]	Reference Value	Uncertainty[2]	QC Performance Acceptance Limits[3]	PT Performance Acceptance Limits[4]
	mg/kg	mg/kg	%	mg/kg	mg/kg
Thallium	154	144	7.54	117 - 171	101 - 187
Tin	89.7	79.8	14.0	62.2 - 97.4	43.5 - 116
Titanium	705	546	10.3	123 - 969	118 - 974
Uranium	29.5	30.9	3.38	23.9 - 37.9	21.3 - 40.5
Vanadium	196	186	14.2	148 - 224	138 - 235
Zinc	307	295	10.4	240 - 351	207 - 384

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Calculation of 7470A Mercury

Calculate Mercury concentration from the daily calibration curve. The curve is generated utilizing a straight-line equation defined as:

$$A = k1 + k2C$$

Where:

A = Average peak height of the sample/standard integrations
C = Sample/Standard Concentration, µg/L
k1 = y-intercept
k2 = slope

The instrument will plot peak height against concentration (µg/L). The result is generated in µg/L . This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, mg/L = (concentration, µg/L) x (1mg/1000µg) x (DF)

Calculation of 7471B Mercury

Calculate Mercury concentration from the daily calibration curve. The curve is generated utilizing a straight-line equation defined as:

$$A = k1 + k2C$$

Where:

A = Average peak height of the sample/standard integrations
C = Sample/Standard Concentration, µg/L
k1 = y-intercept
k2 = slope

The instrument will plot peak height against concentration (µg/L). The result is generated in µg/L . This value is divided by 1000 to convert the units to mg/L. If the sample is diluted (DF), the result is multiplied by the DF to generate the final result.

Result, mg/L = (concentration, µg/L) x (1mg/1000µg) x (DF)

The result in mg/kg is calculated on a dry weight basis using the sample weight digested(Wt), the final volume of the digestate(FV), and the percent total solids(%TS).

Result, mg/kg, wet = ((result, mg/L) x (FV)) /Wt

Result, mg/kg, dry wt = (Result, mg/kg wet)/(%TS)

No.	Sample No.	NAME
1	1	STD
2	2	STD
3	3	STD
4	4	STD
5	5	STD
6	6	STD
1	7	ICV
2	8	ICB
3	9	0.2 PPB
4	10	XCLEARING SOLUTION CHECK
5	11	wg1819697-1 wg1819697
6	12	wg1819697-2 wg1819697
7	13	l2348435-01 wg1819697
8	14	wg1819697-3 wg1819697
9	15	wg1819697-4 wg1819697
10	16	l2348436-09 wg1819697
11	17	l2348436-13 wg1819697
12	18	l2348436-18 wg1819697
13	19	Check STD(5ug/L)
14	20	Check Blank
15	21	l2348436-24 wg1819697
16	22	wg1819309-1 wg1819309
17	23	wg1819309-2 wg1819309
18	24	l2348426-03 wg1819309
19	25	wg1819309-3 wg1819309
20	26	wg1819309-4 wg1819309
21	27	wg1822713-1 wg1822713
22	28	wg1822713-2 wg1822713
23	29	L2200085-16 wg1822713
24	30	wg1822713-3 wg1822713
25	31	Check STD(5ug/L)
26	32	Check Blank
27	33	wg1822713-4 wg1822713
28	34	l2350518-01 wg1822713
29	35	l2350518-03 wg1822713
30	36	wg1822727-1 wg1822727
31	37	wg1822727-2 wg1822727
32	38	l2349937-07 wg1822727
33	39	wg1822727-3 wg1822727
34	40	wg1822727-4 wg1822727
35	41	l2349994-01 wg1822727
36	42	l2349994-02 wg1822727
37	43	Check STD(5ug/L)
38	44	Check Blank
39	45	l2350196-01 wg1822727
40	46	l2350196-02 wg1822727

41	47	WG1818727-1 WG1818727
42	48	WG1818727-2 WG1818727
43	49	l2347531-01 WG1818727
44	50	WG1818727-3 WG1818727
45	51	WG1818727-4 WG1818727
46	52	l2347349-01 WG1818727
47	53	l2347531-02 WG1818727
48	55	Check STD(5ug/L)
49	56	Check Blank
50	57	Check STD(5ug/L)
51	58	Check Blank
52	59	wg1819354-1 wg1819354
53	60	wg1819354-2 wg1819354
54	61	L2348458-01 wg1819354
55	62	wg1819354-3 wg1819354
56	63	wg1819354-4 wg1819354
57	64	L2347733-01 wg1819354
58	65	L2347733-02 wg1819354
59	66	L2347733-03 wg1819354
60	67	Check STD(5ug/L)
61	68	Check Blank
62	69	L2348458-02 wg1819354
63	70	wg1822444-1 wg1822444
64	71	wg1822444-2 wg1822444
65	72	L2350416-07 wg1822444
66	73	wg1822444-3 wg1822444
67	74	wg1822444-4 wg1822444
68	75	wg1822723-1 wg1822723
69	76	wg1822723-2 wg1822723
70	77	l2350663-01 wg1822723
71	78	wg1822723-3 wg1822723
72	79	Check STD(5ug/L)
73	80	Check Blank
74	1	wg1822723-4 wg1822723
75	2	l2350663-03 wg1822723
76	3	Check STD(5ug/L)
77	4	Check Blank
78	5	WG1822317-1 WG1822317
79	6	WG1822317-2 WG1822317
80	7	L2350269-01 WG1822317
81	8	WG1822317-3 WG1822317
82	9	WG1822317-4 WG1822317
83	10	L2350269-02 WG1822317
84	11	Check STD(5ug/L)
85	12	Check Blank
86	13	L2350269-03 WG1822317
87	14	L2350269-04 WG1822317

88	15	L2350269-05 WG1822317
89	16	L2350269-06 WG1822317
90	17	L2350269-07 WG1822317
91	18	L2350282-01 WG1822317
92	19	L2350283-01 WG1822317
93	20	HG2335011420JDH CHECK
94	23	Check STD(5ug/L)
95	24	Check Blank
96	25	Check STD(5ug/L)
97	26	Check Blank
98	27	WG1821353-1 WG1821353
99	28	WG1821353-2 WG1821353
100	29	l2349894-01 WG1821353
101	30	WG1821353-3 WG1821353
102	31	WG1821353-4 WG1821353
103	32	l2349894-02 WG1821353
104	33	l2349925-01 WG1821353
105	34	l2349925-02 WG1821353
106	35	Check STD(5ug/L)
107	36	Check Blank
108	37	l2349951-01 WG1821353
109	38	l2349951-02 WG1821353
110	39	Check STD(5ug/L)
111	40	Check Blank

No.	Sample No.	NAME
1	1	STD
2	2	STD
3	3	STD
4	4	STD
5	5	STD
6	6	STD
1	7	ICV
2	8	ICB
3	9	0.2 PPB
4	10	Check STD(5ug/L)
5	11	Check Blank
6	12	wg1823519-1 wg1823519
7	13	wg1823519-2 wg1823519
8	14	l2350380-01 wg1823519
9	15	wg1823519-3 wg1823519
10	16	wg1823519-4 wg1823519
11	17	l2350380-02 wg1823519
12	18	l2350686-01 wg1823519
13	19	Check STD(5ug/L)
14	20	Check Blank
15	21	WG1822010-1 WG1822010
16	22	WG1822010-2 WG1822010
17	23	l2350202-03 WG1822010
18	24	WG1822010-3 WG1822010
19	25	WG1822010-4 WG1822010
20	26	l2350202-04 WG1822010
21	27	WG1822010-5 WG1822010
22	28	WG1822010-6 WG1822010
23	29	l2350148-01 WG1822010
24	30	l2350148-02 WG1822010
25	31	Check STD(5ug/L)
26	32	Check Blank
27	33	l2350148-03 WG1822010
28	34	l2350148-04 WG1822010
29	35	l2350202-01 WG1822010
30	36	l2350202-02 WG1822010
31	37	l2350202-05 WG1822010
32	38	l2350202-06 WG1822010
33	39	l2350202-07 WG1822010
34	40	l2350202-08 WG1822010
35	41	l2350202-09 WG1822010
36	42	l2350202-10 WG1822010
37	43	Check STD(5ug/L)
38	44	Check Blank
39	45	l2350246-01 WG1822010
40	46	wg1823601-1 wg1823601

41	47	wg1823601-2 wg1823601
42	48	L2350795-01 wg1823601
43	49	wg1823601-3 wg1823601
44	50	wg1823601-4 wg1823601
45	51	wg1823539-1 wg1823539
46	52	wg1823539-2 wg1823539
47	53	l2350750-01 wg1823539
48	54	wg1823539-3 wg1823539
49	55	Check STD(5ug/L)
50	56	Check Blank
51	57	wg1823539-4 wg1823539
52	58	l2350750-02 wg1823539
53	59	l2350750-03 wg1823539
54	60	wg1816676-1 wg1816676
55	61	wg1816676-2 wg1816676
56	62	L2347070-02 wg1816676
57	63	wg1816676-3 wg1816676
58	64	wg1816676-4 wg1816676
59	65	wg1822319-1 wg1822319
60	66	wg1822319-2 wg1822319
61	67	Check STD(5ug/L)
62	68	Check Blank
63	69	l2350269-08 wg1822319
64	70	wg1822319-3 wg1822319
65	71	wg1822319-4 wg1822319
66	72	l2350269-01 wg1822319
67	73	l2350269-02 wg1822319
68	74	l2350269-03 wg1822319
69	75	l2350269-04 wg1822319
70	76	l2350269-05 wg1822319
71	77	l2350269-06 wg1822319
72	78	l2350269-07 wg1822319
73	79	Check STD(5ug/L)
74	80	Check Blank
75	1	l2350269-09 wg1822319
76	2	l2350269-11 wg1822319
77	3	l2350282-01 wg1822319
78	4	l2350283-01 wg1822319
79	5	Check STD(5ug/L)
80	6	Check Blank

No.	Sample No.	NAME
1	1	STD
2	2	STD
3	3	STD
4	4	STD
5	5	STD
6	6	STD
1	7	XICV
2	7	ICV
3	8	ICB
4	9	0.2 PPB
5	10	wg1819789-1 wg1819789
6	11	wg1819789-2 wg1819789
7	12	wg1819789-3 wg1819789
8	13	L2348816-03 wg1819789
9	14	wg1819789-4 wg1819789
10	15	wg1819789-5 wg1819789
11	16	L2348816-01 wg1819789
12	17	L2348816-02 wg1819789
13	18	L2348816-04 wg1819789
14	19	Check STD(5ug/L)
15	20	Check Blank
16	21	WG1822784-1 WG1822784
17	22	WG1822784-2 WG1822784
18	23	L2350269-08 WG1822784
19	24	WG1822784-3 WG1822784
20	25	WG1822784-4 WG1822784
21	26	L2349882-01 WG1822784
22	27	L2349882-02 WG1822784
23	28	L2350166-01 WG1822784
24	29	L2350269-09 WG1822784
25	30	L2350269-11 WG1822784
26	31	Check STD(5ug/L)
27	32	Check Blank
28	33	L2350484-01 WG1822784
29	34	L2350484-02 WG1822784
30	35	L2350484-03 WG1822784
31	36	L2350505-07 WG1822784
32	37	L2350787-16 WG1822784
33	38	WG1823669-1 WG1823669
34	39	WG1823669-2 WG1823669
35	40	L2351148-02 WG1823669
36	41	WG1823669-3 WG1823669
37	42	WG1823669-4 WG1823669
38	43	Check STD(5ug/L)
39	44	Check Blank
40	45	L2350654-03 WG1823669

41	46	L2350766-01 WG1823669
42	47	L2350766-02 WG1823669
43	48	XWG1822456-1 WG1822456

METALS ELN REPORT

Workgroup: WG1822784

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 7470A	HNO3	24000540	H2SO4	22380152	METALS	METSPIKE	HG23352907 00JDHV2	METSPIKE	HG23352907 00JDHV2	320, 344

Additional Reagent/Std	K2O8S2	PS2334252337FAC
	KMnO4	PP2335311211MMM
	NaCl-NH2OH.HCl	HH233508281030RJP
		ICV2334220435CLH

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2349882-01 WATER	09/01/23 10:25	Alexander Gonatas	12.5		09/01/23 10:25	5	94.6	09/01/23 12:25	25	2X dilution due to pH
L2349882-02 WATER	09/01/23 10:25	Alexander Gonatas	25		09/01/23 10:25	5	94.6	09/01/23 12:25	25	
L2350166-01 WATER	09/01/23 10:25	Alexander Gonatas	25		09/01/23 10:25	5	94.6	09/01/23 12:25	25	
L2350269-08 WATER	09/01/23 10:25	Alexander Gonatas	25		09/01/23 10:25	5	94.6	09/01/23 12:25	25	
L2350269-09 WATER	09/01/23 10:25	Alexander Gonatas	25		09/01/23 10:25	5	94.6	09/01/23 12:25	25	
L2350269-11 WATER	09/01/23 10:25	Alexander Gonatas	25		09/01/23 10:25	5	94.6	09/01/23 12:25	25	
L2350484-01 WATER	09/01/23 10:25	Alexander Gonatas	25		09/01/23 10:25	5	94.6	09/01/23 12:25	25	
L2350484-02 WATER	09/01/23 10:25	Alexander Gonatas	25		09/01/23 10:25	5	94.6	09/01/23 12:25	25	
L2350484-03 WATER	09/01/23 10:25	Alexander Gonatas	25		09/01/23 10:25	5	94.6	09/01/23 12:25	25	
L2350505-07 SAMP	09/01/23 10:25	Alexander Gonatas	25		09/01/23 10:25	5	94.6	09/01/23 12:25	25	
L2350787-16 SAMP	09/01/23 10:25	Alexander Gonatas	25		09/01/23 10:25	5	94.6	09/01/23 12:25	25	

Reported: 07-SEP-23 12:02 PM

METALS ELN REPORT

Workgroup: WG1822784

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
WG1822784-1 BLANK	09/01/23 10:25	Alexander Gonatas	25		09/01/23 10:25	5	94.6	09/01/23 12:25	25	ELN1:AJT
WG1822784-2 LCS	09/01/23 10:25	Alexander Gonatas	25	0.25	09/01/23 10:25	5	94.6	09/01/23 12:25	25	ELN2: JDH
WG1822784-3 MS	09/01/23 10:25	Alexander Gonatas	25	1.25	09/01/23 10:25	5	94.6	09/01/23 12:25	25	
WG1822784-4 MSD	09/01/23 10:25	Alexander Gonatas	25	1.25	09/01/23 10:25	5	94.6	09/01/23 12:25	25	

Reagent	Actual Volume	Units
Sulfuric Acid (H2SO4)	1.25	ml
Nitric Acid (HNO3)	.625	ml
Potassium Permanganat	3.75	ml
Potassium Persulfate (K	2	ml
NaCl-Hydroxylamine Hy	1.5	ml

Reported: 07-SEP-23 12:02 PM

METALS ELN REPORT

Workgroup: WG1822317

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 7470A	HNO3	24000540	H2SO4	22060216	METALS	METSPIKE	HG23331804 44CLHV1	METSPIKE	HG23331804 44CLHV1	320,344

Additional Reagent/Std	K2O8S2	PS2334252337FAC
	KMnO4	PP2335311211MMM
	NaCl-NH2OH.HCl	HH233508281030RJP
		ICV2334220435CLH

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2350269-01 WATER	08/31/23 14:12	Michelle Mattson	25		08/31/23 14:12	5	94.3	08/31/23 16:12	25	
L2350269-02 WATER	08/31/23 14:12	Michelle Mattson	25		08/31/23 14:12	5	94.3	08/31/23 16:12	25	
L2350269-03 WATER	08/31/23 14:12	Michelle Mattson	25		08/31/23 14:12	5	94.3	08/31/23 16:12	25	
L2350269-04 WATER	08/31/23 14:12	Michelle Mattson	25		08/31/23 14:12	5	94.3	08/31/23 16:12	25	
L2350269-05 WATER	08/31/23 14:12	Michelle Mattson	25		08/31/23 14:12	5	94.3	08/31/23 16:12	25	
L2350269-06 WATER	08/31/23 14:12	Michelle Mattson	25		08/31/23 14:12	5	94.3	08/31/23 16:12	25	
L2350269-07 WATER	08/31/23 14:12	Michelle Mattson	25		08/31/23 14:12	5	94.3	08/31/23 16:12	25	
L2350282-01 SAMP	08/31/23 14:12	Michelle Mattson	25		08/31/23 14:12	5	94.3	08/31/23 16:12	25	
L2350283-01 SAMP	08/31/23 14:12	Michelle Mattson	25		08/31/23 14:12	5	94.3	08/31/23 16:12	25	
WG1822317-1 BLANK	08/31/23 14:12	Michelle Mattson	25		08/31/23 14:12	5	94.3	08/31/23 16:12	25	
WG1822317-2 LCS	08/31/23 14:12	Michelle Mattson	25	0.25	08/31/23 14:12	5	94.3	08/31/23 16:12	25	ELN: hcr

METALS ELN REPORT

Workgroup: WG1822317

Sample/ Type	Digestion Date	Analyst	Sample Vol ml	Spike Amt ml	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
WG1822317-3 MS	08/31/23 14:12	Michelle Mattson	25	1.25	08/31/23 14:12	5	94.3	08/31/23 16:12	25	
WG1822317-4 DUP	08/31/23 14:12	Michelle Mattson	25		08/31/23 14:12	5	94.3	08/31/23 16:12	25	

Reagent	Actual Volume	Units
Sulfuric Acid (H2SO4)	1.25	ml
Nitric Acid (HNO3)	.625	ml
Potassium Permanganat	3.75	ml
Potassium Persulfate (K	2	ml
NaCl-Hydroxylamine Hy	1.5	ml

Reported: 07-SEP-23 12:02 PM

METALS ELN REPORT

Workgroup: WG1822319

Digestion

Prep Method	Acid Type 1	Acid 1 Lot	Acid Type 2	Acid 2 Lot	Spike Type	Lims Spike Lot	Spike Lot	Post Spike Spikelot	Spike Lot	Pipette Id
EPA 245.1	HNO3	24000540	H2SO4	22380152	METALS	METSPIKE	HG23352907 00JDHV2	METSPIKE	HG23352907 00JDHV2	320,344

Additional Reagent/Std	K2O8S2	PS2334252337FAC
	KMnO4	PP2335311211MMM
	NaCl-NH2OH.HCl	HH233508281030RJP
		ICV2334220435CLH

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol ml	Spike Amt	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
L2350269-01 WATER	09/01/23 00:50	Faustina Owusu	NA	25		09/01/23 00:50	8	95.0	09/01/23 02:50	25	
L2350269-02 WATER	09/01/23 00:50	Faustina Owusu	NA	25		09/01/23 00:50	8	95.0	09/01/23 02:50	25	
L2350269-03 WATER	09/01/23 00:50	Faustina Owusu	NA	25		09/01/23 00:50	8	95.0	09/01/23 02:50	25	
L2350269-04 WATER	09/01/23 00:50	Faustina Owusu	NA	25		09/01/23 00:50	8	95.0	09/01/23 02:50	25	
L2350269-05 WATER	09/01/23 00:50	Faustina Owusu	NA	25		09/01/23 00:50	8	95.0	09/01/23 02:50	25	
L2350269-06 WATER	09/01/23 00:50	Faustina Owusu	NA	25		09/01/23 00:50	8	95.0	09/01/23 02:50	25	
L2350269-07 WATER	09/01/23 00:50	Faustina Owusu	NA	25		09/01/23 00:50	8	95.0	09/01/23 02:50	25	
L2350269-08 WATER	09/01/23 00:50	Faustina Owusu	NA	25		09/01/23 00:50	8	95.0	09/01/23 02:50	25	
L2350269-09 WATER	09/01/23 00:50	Faustina Owusu	NA	25		09/01/23 00:50	8	95.0	09/01/23 02:50	25	
L2350269-11 WATER	09/01/23 00:50	Faustina Owusu	NA	25		09/01/23 00:50	8	95.0	09/01/23 02:50	25	
L2350282-01 SAMP	09/01/23 00:50	Faustina Owusu	NA	25		09/01/23 00:50	8	95.0	09/01/23 02:50	25	
L2350283-01 SAMP	09/01/23 00:50	Faustina Owusu	NA	25		09/01/23 00:50	8	95.0	09/01/23 02:50	25	

Reported: 07-SEP-23 12:02 PM

METALS ELN REPORT

Workgroup: WG1822319

Sample/ Type	Digestion Date	Analyst	Lab Filtration Date	Sample Vol ml	Spike Amt	Start Date/Time	Hot Block Unit	Temperature (C)	Stop Date/Time	Final Vol	Comments
WG1822319-1 BLANK	09/01/23 00:50	Faustina Owusu	NA	25		09/01/23 00:50	8	95.0	09/01/23 02:50	25	ELN:FAC
WG1822319-2 LCS	09/01/23 00:50	Faustina Owusu	NA	25	.25	09/01/23 00:50	8	95.0	09/01/23 02:50	25	
WG1822319-3 MS	09/01/23 00:50	Faustina Owusu	NA	25	1.25	09/01/23 00:50	8	95.0	09/01/23 02:50	25	
WG1822319-4 MSD	09/01/23 00:50	Faustina Owusu	NA	25	1.25	09/01/23 00:50	8	95.0	09/01/23 02:50	25	

Reagent	Actual Volume	Units
Sulfuric Acid (H2SO4)	1.25	ml
Nitric Acid (HNO3)	.625	ml
Potassium Permanganat	3.75	ml
Potassium Persulfate (K	2	ml
NaCl-Hydroxylamine Hy	1.5	ml

Reported: 07-SEP-23 12:02 PM

Wet Chemistry

Total Nitrogen Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/13/23 11:20
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: MRM
Lab File ID	: WG1826994.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	0.46	0.30	0.30	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 22:51
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: WMT
Lab File ID	: WG1826738.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	1.5	0.30	0.30	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 22:51
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: WMT
Lab File ID	: WG1826738.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	2.0	0.30	0.30	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 22:51
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: WMT
Lab File ID	: WG1826738.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	0.46	0.30	0.30	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-05**	**Date Collected**	:	**08/29/23 09:10**
Client ID	:	**MW-5S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/12/23 22:51**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**WMT**
Lab File ID	:	**WG1826738.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**0.92**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 22:51
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: WMT
Lab File ID	: WG1826738.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	2.6	0.30	0.30	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 22:51
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: WMT
Lab File ID	: WG1826738.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	10.	0.30	0.30	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-08**	**Date Collected**	:	**08/28/23 14:30**
Client ID	:	**MW-8S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/12/23 22:51**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**107,-**	**Analyst**	:	**WMT**
Lab File ID	:	**WG1826738.csv**	**Instrument ID**	:	
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Total Nitrogen**	**0.97**	**0.30**	**0.30**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 22:51
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 107,-	**Analyst**	: WMT
Lab File ID	: WG1826738.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Total Nitrogen	3.7	0.30	0.30	

Sample Raw Data

ALPHA ANALYTICAL LABS

WET CHEMISTRY DEPARTMENT

TOTAL NITROGEN

Last Change 3/5/13 GFF
File tnitrogen.xlt

Sample #: _____

Client: _____

Analysis: **Total Nitrogen**

Method: ***Calculation from TKN & NO3/NO2***

Product: **TNITROGEN**
Analyte: **Total Nitrogen,**
Analysis Date: 9/13/2023 11:20
Technician: MRM
Work group: WG1826994
RL: **0.3 mg/L**

	Sample Number	TKN (mg/L)	NO3/NO2 (mg/L)	RL Multiplier	Result (mg/L)
	L2350269-01	0.351	0.11	1.0	0.461
SAMP	L2350444-01	1.92	0	1.0	1.92
SAMP	L2350444-02	1.62	0	1.0	1.62
SAMP	L2350444-03	3.07	0	1.0	3.07

ALPHA ANALYTICAL LABS

WET CHEMISTRY DEPARTMENT

TOTAL NITROGEN

Last Change 3/5/13 GFF
File tnitrogen.xlt

Sample #: _____

Client: _____

Analysis: **Total Nitrogen**

Method: ***Calculation from TKN & NO3/NO2***

Product: **TNITROGEN**
Analyte: **Total Nitrogen,**
Analysis Date: 9/12/2023 22:51
Technician: WMT
Work group: WG1826738
RL: **0.3 mg/L**

	Sample Number	TKN (mg/L)	NO3/NO2 (mg/L)	RL Multiplier	Result (mg/L)
SAMP	L2350045-01	28.3	2.26	1.0	30.56
SAMP	L2350225-01	0.102	3.4	1.0	3.4
SAMP	L2350225-02	0.162	0.055	1.0	0
SAMP	L2350225-03	0	6.9	1.0	6.9
SAMP	L2350225-04	0.155	0	1.0	0
SAMP	L2350225-05	0.0806	7.5	1.0	7.5
SAMP	L2350225-06	0.105	0	1.0	0
	L2350269-02	0.301	1.2	1.0	1.501
	L2350269-03	0.173	2	1.0	2
	L2350269-04	0.268	0.46	1.0	0.46
	L2350269-05	0.168	0.92	1.0	0.92
	L2350269-06	1.39	1.2	1.0	2.59
	L2350269-07	0.21	10	1.0	10
	L2350269-08	0.435	0.53	1.0	0.965
	L2350269-09	3.54	0.14	1.0	3.68

Calculations of Total Nitrogen

Calculate the concentration value based on results for TKN-N and N03/NO2-N.

Aqueous samples:

mgTN-N/L = TKN-N(mg/l) + NO3/NO2-N (mg/l)

Soil samples:

mgTN-N/Kg = TKN-N(mg/Kg) + NO3/NO2-N(mg/Kg)

Total Kjeldahl Nitrogen Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/13/23 13:16
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230913-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/12/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	3.49	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/08/23 12:55
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230908-F	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.301	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 17:25
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: AVT
Lab File ID	: NH320230906-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.173	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 17:26
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: AVT
Lab File ID	: NH320230906-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.268	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/06/23 17:29
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: AVT
Lab File ID	: NH320230906-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.168	0.300	0.066	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/11/23 10:34
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230911-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/08/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	1.39	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/11/23 10:35
Sample Matrix	: WATER	**Dilution Factor**	: 2
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230911-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/08/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.210	0.600	0.132	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/11/23 10:36
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230911-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/08/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.435	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/11/23 10:37
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230911-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/08/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	3.54	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823843-1	**Date Collected**	: NA
Client ID	: WG1823843-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/06/23 17:10
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: AVT
Lab File ID	: NH320230906-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	ND	0.300	0.022	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823843-3	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4DDUP	**Date Received**	: 08/29/23
Sample Location	:	**Date Analyzed**	: 09/06/23 17:28
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: AVT
Lab File ID	: NH320230906-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.339	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823844-1	**Date Collected**	: NA
Client ID	: WG1823844-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/08/23 12:35
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230908-F	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.136	0.300	0.022	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823844-3	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2SDUP	**Date Received**	: 08/29/23
Sample Location	:	**Date Analyzed**	: 09/08/23 12:54
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230908-F	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.316	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1825392-1	**Date Collected**	: NA
Client ID	: WG1825392-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/11/23 10:29
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230911-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/08/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.061	0.300	0.022	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1825392-3	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6DDUP	**Date Received**	: 08/29/23
Sample Location	:	**Date Analyzed**	: 09/11/23 10:33
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230911-D	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/08/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	1.57	0.300	0.066	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1826711-1	**Date Collected**	: NA
Client ID	: WG1826711-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/13/23 13:13
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230913-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/12/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.266	0.300	0.022	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1826711-3	**Date Collected**	: 08/30/23 13:00
Client ID	: WG1826711-3 DUP	**Date Received**	: 08/31/23
Sample Location	:	**Date Analyzed**	: 09/13/23 13:19
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NH3-H	**Analyst**	: KEP
Lab File ID	: NH320230913-B	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/12/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Total Kjeldahl	0.390	0.300	0.066	

Sample Raw Data

Original Run Filename: OM_9-11-2023_07-57-07AM.OMN Created: 9/11/2023 7:57:07 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-11-2023_07-57-07AM.OMN Last Modified: 9/11/2023 8:37:42 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY A

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
STD 1	1	S1	10.00000				
STD 2	1	S2	8.00000				
STD 3	1	S3	4.00000				
STD 4	1	S4	2.00000				
STD 5	1	S5	1.00000				
STD 6	1	S6	0.40000				
STD 7	1	S7	0.20000				
STD 8	1	S8	0.10000				
STD 9	1	S9	0.05000				
STD 10	1	S10	0.00000				
CCV 0.4000	1	S6	0.37993				
	Known Conc:		100.00000				
	Calibration:		Table/Fig. : 1				
CCV 4.0000	1	S3	3.96102				
	Known Conc:		100.00000				
CCB	1	S10	0.01551				
	Known Conc:		100.00000				
HI ICV 8.0	1	1	8.05363				101%
LO ICV 1.0	1	2	0.95318				95%
ICB	1	3	0.00739				
WG1824942-1 T	1	4	0.01854				
WG1824942-2 T	1	5	41.84593		15.00		105%
LCS LO T	1	6	3.68249		3.00		
WG1824942-4 T	1	7	7.45159		3.00		
WG1824942-3 T	1	8	0.13807		3.00		
L2350250-09 T	1	9	0.08992		3.00		
L2350250-10 T	1	10	8.82499		3.00		
CCV 0.4000	1	S6	0.40166				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.96017				
	Known Conc:		100.00000				
CCB	1	S10	0.01586				
	Known Conc:		100.00000				
L2350250-11 T	1	11	0.14257		3.00		
L2350946-01 T	1	12	0.10285		3.00		
L2350946-02 T	1	13	0.07412		3.00		
L2350946-03 T	1	14	0.12954		3.00		
L2350946-04 T	1	15	0.00108		3.00		
L2350946-06 T	1	16	0.09618		3.00		
L2350441-01 T	1	17	0.29395		3.00		
L2350967-01 T	1	18	0.10986		3.00		
L2350967-02 T	1	19	0.06491		3.00		
CCV 0.4000	1	S6	0.37478				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.97594				
	Known Conc:		100.00000				
CCB	1	S10	0.00808				
	Known Conc:		100.00000				

WG1824945

Author: A1WETCHEMINSTRUMENT Date : 9/11/2023

Channel 2 (Ammonia High) - Current View

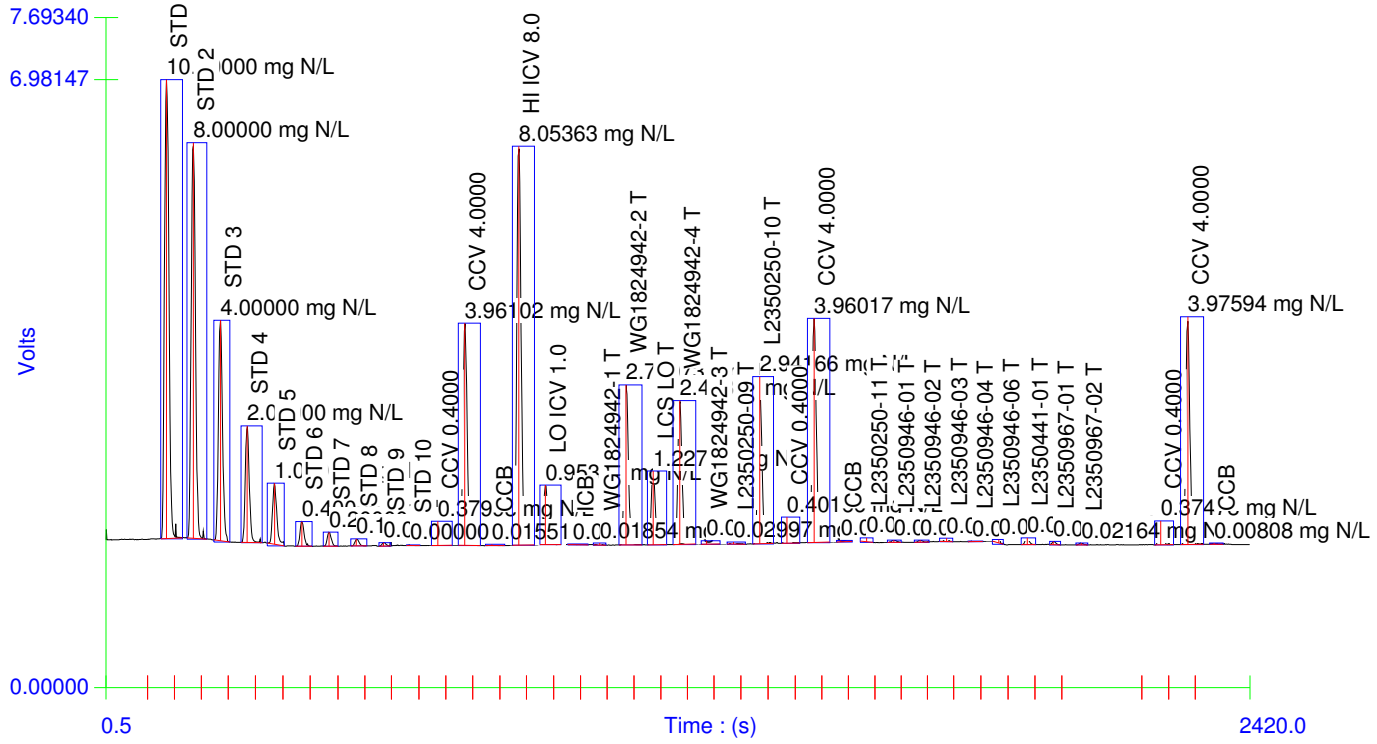
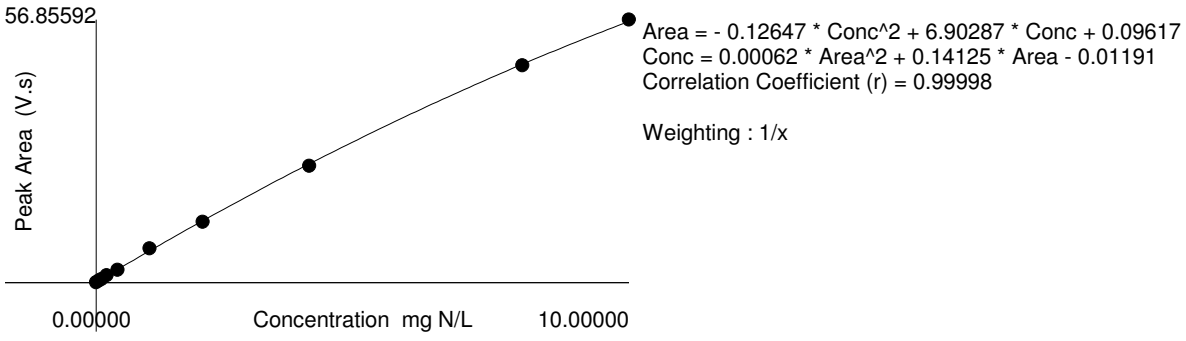


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.85592	5.27089	0.0	-0.7	10.03024	9/11/2023	7:58:46 AM
2	8.00000	1	46.98095	4.54059	0.0	0.5	7.99739	9/11/2023	7:59:43 AM
3	4.00000	1	25.22782	2.53355	0.0	1.8	3.94743	9/11/2023	8:00:40 AM
4	2.00000	1	13.12223	1.34068	0.0	2.0	1.94869	9/11/2023	8:01:37 AM
5	1.00000	1	7.41182	0.69942	0.0	-7.8	1.06915	9/11/2023	8:02:35 AM
6	0.40000	1	2.80639	0.28365	0.0	1.1	0.38937	9/11/2023	8:03:33 AM
7	0.20000	1	1.57371	0.16086	0.0	-6.9	0.21191	9/11/2023	8:04:31 AM
8	0.10000	1	0.78745	0.08223	0.0	-0.3	0.09969	9/11/2023	8:05:30 AM
9	0.05000	1	0.42450	0.04070	0.0	3.7	0.04816	9/11/2023	8:06:27 AM
10	0.00000	1	0.07509	0.00671			-0.00130	9/11/2023	8:07:24 AM

Figure : 1 (Ammonia)



Original Run Filename: OM_9-11-2023_08-45-10AM.OMN Created: 9/11/2023 8:45:10 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-11-2023_08-45-10AM.OMN Last Modified: 9/11/2023 9:14:34 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY B

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.36771				
			Known Conc:	100.00000				
			Calibration:	Table/Fig. : 1				
	CCV 4.0000	1	S3	3.91377				
			Known Conc:	100.00000				
	CCB	1	S10	0.01204				
			Known Conc:	100.00000				
	WG1825382-1	1	1	0.00443		1.50		
	WG1825382-2	1	2	20.27468		7.50		101%
	LCS LO	1	3	1.79169		1.50		
	L2347249-01	1	4	0.03985		1.50		
	L2349942-07	1	5	0.02373		1.50		
	L2349942-01	1	6	0.41541		1.50		
X	WG1825382-4	1	7	17.05112		1.50		
X	WG1825382-3	1	8	13.49469		1.50		
X	L2349942-02	1	9	13.39922		1.50		
X	L2349942-03	1	10	2.26044		1.50		
	CCV 0.4000	1	S6	0.40544				
			Known Conc:	100.00000				
	CCV 4.0000	1	S3	4.00087				
			Known Conc:	100.00000				
	CCB	1	S10	0.01398				
			Known Conc:	100.00000				
	L2349942-04	1	11	0.80594		1.50		
	L2349942-05	1	12	1.94394		1.50		
	L2349942-06	1	13	0.27371		1.50		
	L2349942-09	1	14	0.27885		1.50		
	WG1825382-4; 5X	1	7	16.88167		7.50		
	WG1825382-3; 5X	1	8	13.01243		7.50		
	L2349942-02; 5X	1	9	12.54960		7.50		
	L2349942-03	1	10	2.14001		1.50		
	CCV 0.4000	1	S6	0.38152				
			Known Conc:	100.00000				
	CCV 4.0000	1	S3	3.96177				
			Known Conc:	100.00000				
	CCB	1	S10	0.01548				
			Known Conc:	100.00000				

Author: A1WETCHEMINSTRUMENT Date : 9/11/2023

Channel 2 (Ammonia High) - Current View

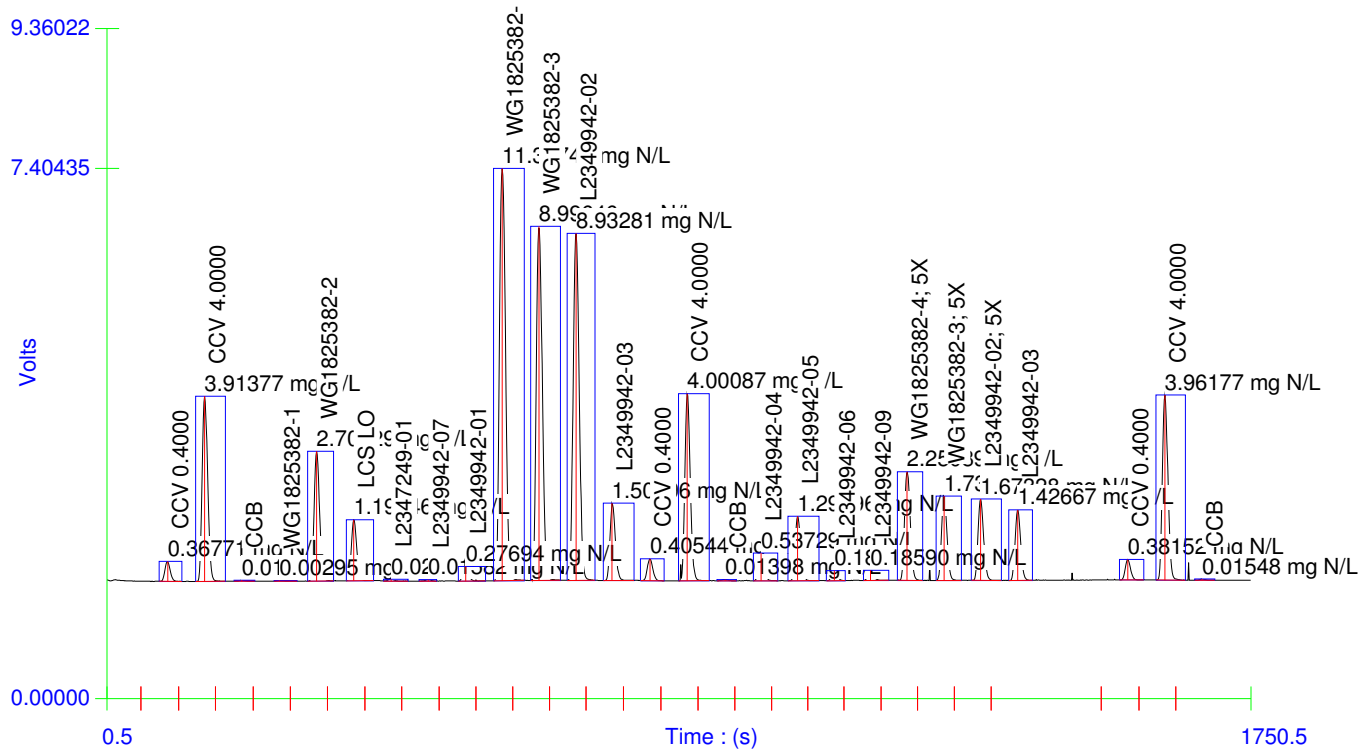
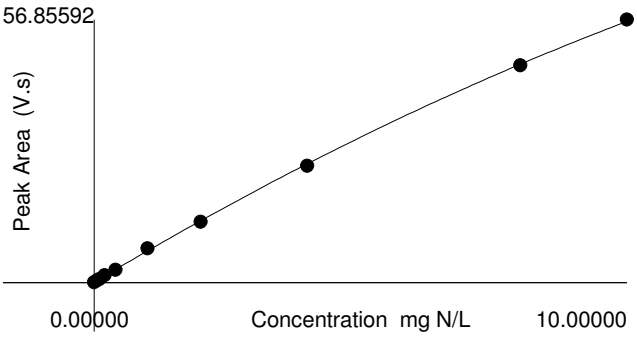


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.85592	5.27089	0.0	-0.7	10.03024	9/11/2023	7:58:46 AM
2	8.00000	1	46.98095	4.54059	0.0	0.5	7.99739	9/11/2023	7:59:43 AM
3	4.00000	1	25.22782	2.53355	0.0	1.8	3.94743	9/11/2023	8:00:40 AM
4	2.00000	1	13.12223	1.34068	0.0	2.0	1.94869	9/11/2023	8:01:37 AM
5	1.00000	1	7.41182	0.69942	0.0	-7.8	1.06915	9/11/2023	8:02:35 AM
6	0.40000	1	2.80639	0.28365	0.0	1.1	0.38937	9/11/2023	8:03:33 AM
7	0.20000	1	1.57371	0.16086	0.0	-6.9	0.21191	9/11/2023	8:04:31 AM
8	0.10000	1	0.78745	0.08223	0.0	-0.3	0.09969	9/11/2023	8:05:30 AM
9	0.05000	1	0.42450	0.04070	0.0	3.7	0.04816	9/11/2023	8:06:27 AM
10	0.00000	1	0.07509	0.00671			-0.00130	9/11/2023	8:07:24 AM

Figure : 1 (Ammonia)



Original Run Filename: OM_9-11-2023_09-16-18AM.OMN Created: 9/11/2023 9:16:18 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-11-2023_09-16-18AM.OMN Last Modified: 9/11/2023 9:42:54 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY C

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.38412				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.98565				
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCB	1	S10	0.01837				
		Known Conc:		100.00000				
	WG1825389-1	1	1	-0.00043		1.50		
	WG1825389-2	1	2	19.93986		7.50		100%
	LCS LO	1	3	1.97583		1.50		
	WG1825389-4	1	4	3.78169		1.50		
	WG1825389-3	1	5	0.04395		1.50		
	L2349956-09	1	6	0.02446		1.50		
	L2349956-11	1	7	5.97690		1.50		
	L2350057-01	1	8	0.05602		1.50		
	L2350057-02	1	9	0.06326		1.50		
	L2350057-03	1	10	0.02451		1.50		
	CCV 0.4000	1	S6	0.39344				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.01052				
		Known Conc:		100.00000				
	CCB	1	S10	0.01964				
		Known Conc:		100.00000				
	L2350057-04	1	11	0.05004		1.50		
	L2350057-05	1	12	0.03805		1.50		
X	L2350069-01	1	13	22.34086		1.50		
X	L2350069-02	1	14	21.36881		1.50		
X	L2350069-03	1	15	2.98233		15.00		
	CCV 0.4000	1	S6	0.38587				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.01979				
		Known Conc:		100.00000				
	CCB	1	S10	0.02710				
		Known Conc:		100.00000				

Author: A1WETCHEMINSTRUMENT Date : 9/11/2023

Channel 2 (Ammonia High) - Current View

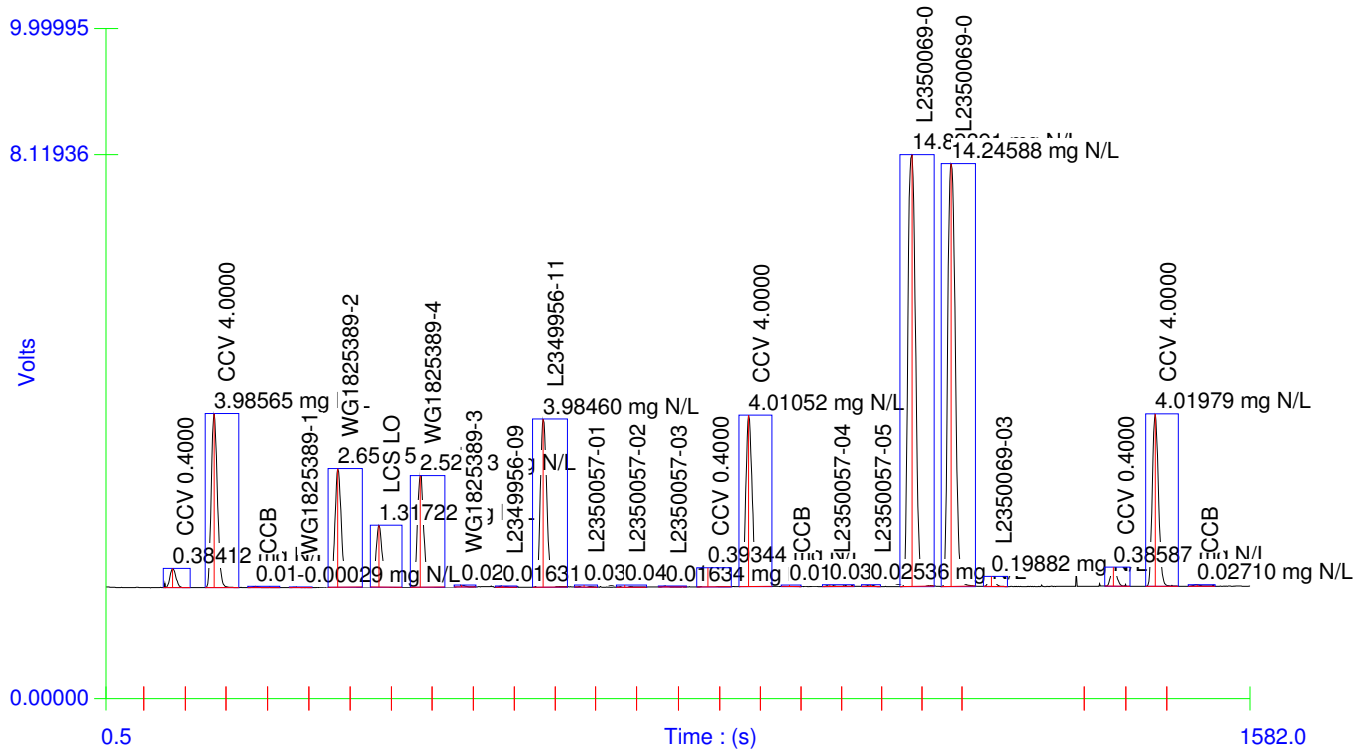
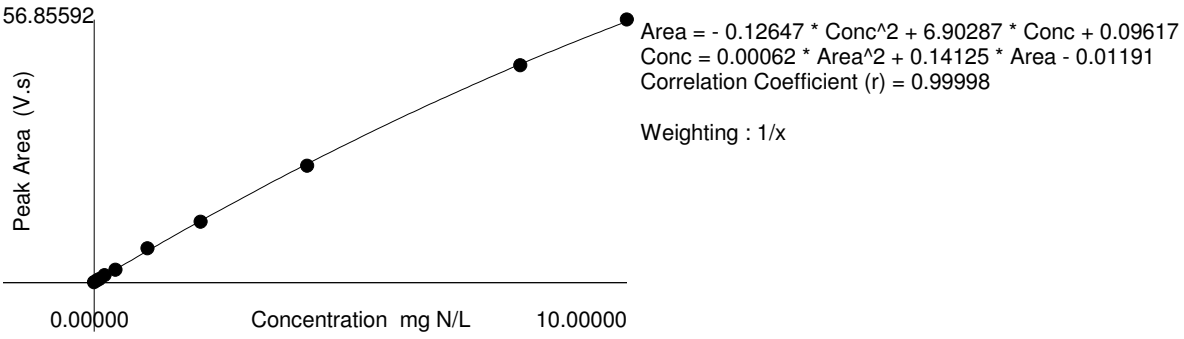


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.85592	5.27089	0.0	-0.7	10.03024	9/11/2023	7:58:46 AM
2	8.00000	1	46.98095	4.54059	0.0	0.5	7.99739	9/11/2023	7:59:43 AM
3	4.00000	1	25.22782	2.53355	0.0	1.8	3.94743	9/11/2023	8:00:40 AM
4	2.00000	1	13.12223	1.34068	0.0	2.0	1.94869	9/11/2023	8:01:37 AM
5	1.00000	1	7.41182	0.69942	0.0	-7.8	1.06915	9/11/2023	8:02:35 AM
6	0.40000	1	2.80639	0.28365	0.0	1.1	0.38937	9/11/2023	8:03:33 AM
7	0.20000	1	1.57371	0.16086	0.0	-6.9	0.21191	9/11/2023	8:04:31 AM
8	0.10000	1	0.78745	0.08223	0.0	-0.3	0.09969	9/11/2023	8:05:30 AM
9	0.05000	1	0.42450	0.04070	0.0	3.7	0.04816	9/11/2023	8:06:27 AM
10	0.00000	1	0.07509	0.00671			-0.00130	9/11/2023	8:07:24 AM

Figure : 1 (Ammonia)



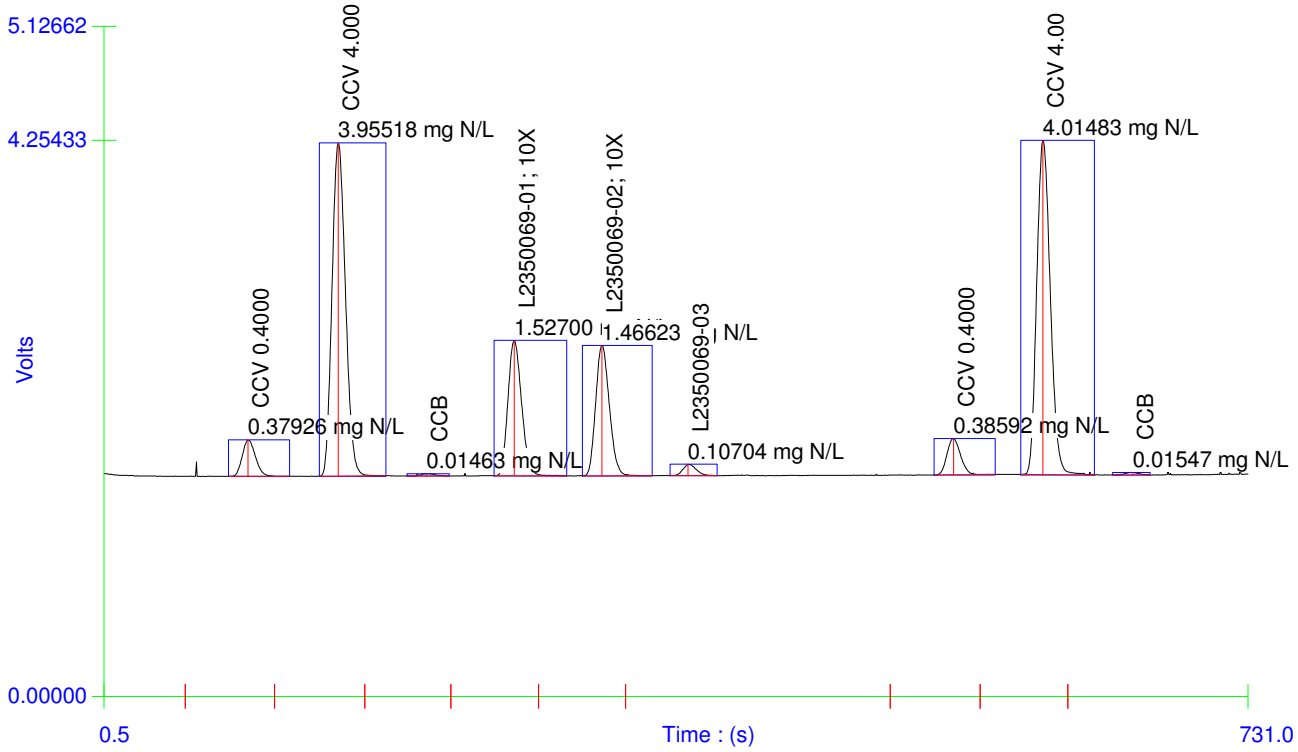
Author: A1WETCHEMINSTRUMENT Date : 9/11/2023

Original Run Filename: OM_9-11-2023_09-54-51AM.OMN Created: 9/11/2023 9:54:51 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-11-2023_09-54-51AM.OMN Last Modified: 9/11/2023 10:07:13 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY C

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.37926			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.95518			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.01463			
	Known Conc:		100.00000			
L2350069-01; 10X	1	13	22.90493		15.00	
L2350069-02; 10X	1	14	21.99338		15.00	
L2350069-03	1	15	1.60555		15.00	
CCV 0.4000	1	S6	0.38592			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.01483			
	Known Conc:		100.00000			
CCB	1	S10	0.01547			
	Known Conc:		100.00000			

Channel 2 (Ammonia High) - Current View

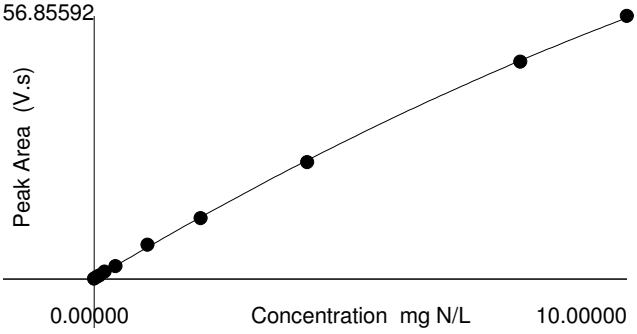


Author: A1WETCHEMINSTRUMENT Date : 9/11/2023

Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.85592	5.27089	0.0	-0.7	10.03024	9/11/2023	7:58:46 AM
2	8.00000	1	46.98095	4.54059	0.0	0.5	7.99739	9/11/2023	7:59:43 AM
3	4.00000	1	25.22782	2.53355	0.0	1.8	3.94743	9/11/2023	8:00:40 AM
4	2.00000	1	13.12223	1.34068	0.0	2.0	1.94869	9/11/2023	8:01:37 AM
5	1.00000	1	7.41182	0.69942	0.0	-7.8	1.06915	9/11/2023	8:02:35 AM
6	0.40000	1	2.80639	0.28365	0.0	1.1	0.38937	9/11/2023	8:03:33 AM
7	0.20000	1	1.57371	0.16086	0.0	-6.9	0.21191	9/11/2023	8:04:31 AM
8	0.10000	1	0.78745	0.08223	0.0	-0.3	0.09969	9/11/2023	8:05:30 AM
9	0.05000	1	0.42450	0.04070	0.0	3.7	0.04816	9/11/2023	8:06:27 AM
10	0.00000	1	0.07509	0.00671			-0.00130	9/11/2023	8:07:24 AM

Figure : 1 (Ammonia)



Area = - 0.12647 * Conc^2 + 6.90287 * Conc + 0.09617
Conc = 0.00062 * Area^2 + 0.14125 * Area - 0.01191
Correlation Coefficient (r) = 0.99998

Weighting : 1/x

Original Run Filename: OM_9-11-2023_10-25-10AM.OMN Created: 9/11/2023 10:25:10 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-11-2023_10-25-10AM.OMN Last Modified: 9/11/2023 11:01:12 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.37729				TRAY D
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCV 4.0000	1	S3	3.96449				
		Known Conc:		100.00000				
	CCB	1	S10	0.02376				
		Known Conc:		100.00000				
	WG1825392-1 T	1	1	0.02026				
	WG1825392-2 T	1	2	39.54620		15.00		99%
	LCS LO T	1	3	3.88406		3.00		
	L2347919-01 T	1	4	1.89994		3.00		
	WG1825392-4 T	1	5	10.54344		3.00		
	WG1825392-3 T	1	6	1.56740		3.00		
	L2350269-06 T	1	7	1.38632		3.00		
	L2350269-07 T	1	8	0.21024		6.00		
	L2350269-08 T	1	9	0.43481		3.00		
	L2350269-09 T	1	10	3.54306		3.00		
	CCV 0.4000	1	S6	0.39342				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.96956				
		Known Conc:		100.00000				
	CCB	1	S10	0.02970				
		Known Conc:		100.00000				
	L2350318-01 T	1	11	17.12788		15.00		
	L2350318-02 T	1	12	7.46902		3.00		
X	L2350318-03 T	1	13	31.13612		3.00		
X	L2350318-04 T	1	14	45.68753		15.00		
	L2350318-05 T	1	15	20.97807		3.00		
	L2351351-01 T	1	16	10.16362		3.00		
	L2351425-01 T	1	17	3.14570		3.00		
	L2351425-02 T	1	18	4.14011		3.00		
	L2352006-01 T	1	19	0.85132		3.00		
	L2352006-02 T	1	20	0.79957		3.00		
	CCV 0.4000	1	S6	0.39043				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.95401				
		Known Conc:		100.00000				
	CCB	1	S10	0.02949				
		Known Conc:		100.00000				
	L2350318-03 T; 5X	1	13	29.59501		15.00		
	L2350318-04 T	1	14	44.26488		15.00		
	CCV 0.4000	1	S6	0.39820				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.97924				
		Known Conc:		100.00000				
	CCB	1	S10	0.02755				
		Known Conc:		100.00000				

Channel 2 (Ammonia High) - Current View

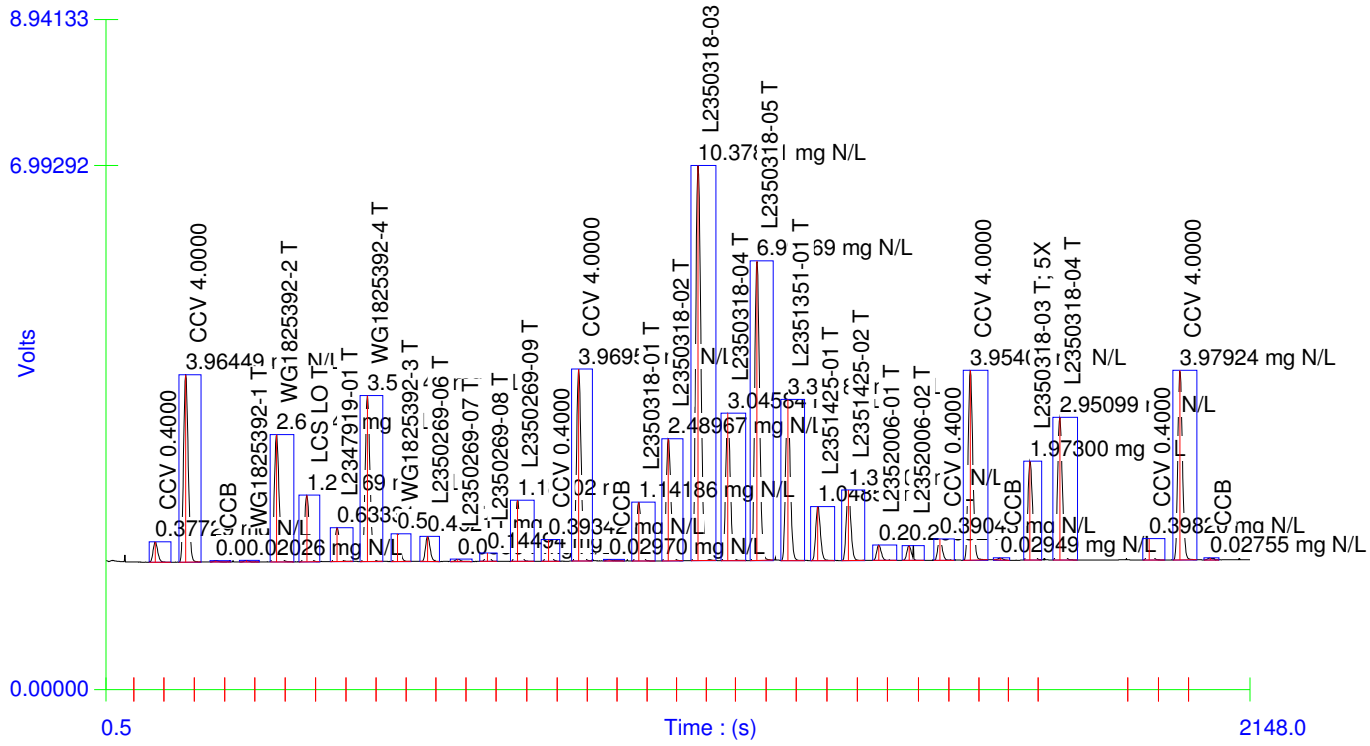
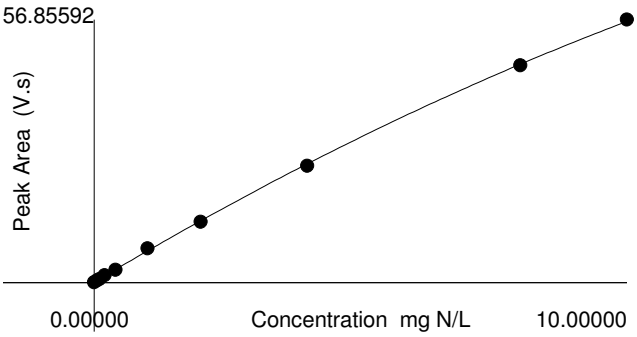


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	56.85592	5.27089	0.0	-0.7	10.03024	9/11/2023	7:58:46 AM
2	8.00000	1	46.98095	4.54059	0.0	0.5	7.99739	9/11/2023	7:59:43 AM
3	4.00000	1	25.22782	2.53355	0.0	1.8	3.94743	9/11/2023	8:00:40 AM
4	2.00000	1	13.12223	1.34068	0.0	2.0	1.94869	9/11/2023	8:01:37 AM
5	1.00000	1	7.41182	0.69942	0.0	-7.8	1.06915	9/11/2023	8:02:35 AM
6	0.40000	1	2.80639	0.28365	0.0	1.1	0.38937	9/11/2023	8:03:33 AM
7	0.20000	1	1.57371	0.16086	0.0	-6.9	0.21191	9/11/2023	8:04:31 AM
8	0.10000	1	0.78745	0.08223	0.0	-0.3	0.09969	9/11/2023	8:05:30 AM
9	0.05000	1	0.42450	0.04070	0.0	3.7	0.04816	9/11/2023	8:06:27 AM
10	0.00000	1	0.07509	0.00671			-0.00130	9/11/2023	8:07:24 AM

Figure : 1 (Ammonia)



Area = - 0.12647 * Conc^2 + 6.90287 * Conc + 0.09617
Conc = 0.00062 * Area^2 + 0.14125 * Area - 0.01191
Correlation Coefficient (r) = 0.99998

Weighting : 1/x

Original Run Filename: OM_9-13-2023_11-15-03AM.OMN Created: 9/13/2023 11:15:03 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-13-2023_11-15-03AM.OMN Last Modified: 9/13/2023 12:08:12 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY A

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
STD 1	1	S1	10.00000				
STD 2	1	S2	8.00000				
STD 3	1	S3	4.00000				
STD 4	1	S4	2.00000				
STD 5	1	S5	1.00000				
STD 6	1	S6	0.40000				
STD 7	1	S7	0.20000				
STD 8	1	S8	0.10000				
STD 9	1	S9	0.05000				
STD 10	1	S10	0.00000				
CCV 0.4000	1	S6	0.38879				
	Known Conc:		100.00000				
	Calibration:		Table/Fig. : 1				
CCV 4.0000	1	S3	3.99644				
	Known Conc:		100.00000				
CCB	1	S10	0.02927				
	Known Conc:		100.00000				
HI ICV 8.0	1	1	7.81281				98%
LO ICV 1.0	1	2	0.97407				97%
ICB	1	3	0.00092				
WG1826647 WG1826646-1	1	4	0.00823		1.50		
WG1826646-2	1	5	18.42007		7.50		92%
LCS LO	1	6	1.74568		1.50		
L2350244-05	1	7	1.49465		1.50		
L2350244-06	1	8	-0.02003		1.50		
L2350244-08	1	9	-0.03932		1.50		
L2350244-09	1	10	0.04489		1.50		
CCV 0.4000	1	S6	0.38479				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.96777				
	Known Conc:		100.00000				
CCB	1	S10	0.02890				
	Known Conc:		100.00000				
L2350244-10	1	11	0.73601		1.50		
L2350244-11	1	12	0.01339		1.50		
L2350244-12	1	13	0.03165		1.50		
L2350362-01	1	14	0.34793		1.50		
WG1826646-4	1	15	3.92455		1.50		
WG1826646-3	1	16	0.50296		1.50		
L2350365-01	1	17	0.35874		1.50		
L2352729-01	1	18	0.02801		75.00		
L2350244-13	1	19	-0.01411		1.50		
L2350244-14	1	20	-0.04518		1.50		
CCV 0.4000	1	S6	0.37009				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.90150				
	Known Conc:		100.00000				
CCB	1	S10	0.02401				
	Known Conc:		100.00000				
L2350244-15	1	21	-0.03520		1.50		
L2350244-16	1	22	0.07127		1.50		
L2350244-17	1	23	-0.01331		1.50		
L2350244-18	1	24	-0.07420		1.50		
L2350244-19	1	25	-0.07290		1.50		
L2350244-20	1	26	-0.04497		1.50		
L2350401-01	1	27	-0.04786		1.50		
L2350820-01	1	28	-0.03580		1.50		
WG1826647-4	1	29	3.32971		1.50		
WG1826647-3	1	30	0.08520		1.50		

CCV 0.4000	1	S6	0.37144			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.88713			
	Known Conc:		100.00000			
CCB	1	S10	0.02924			
	Known Conc:		100.00000			

Channel 2 (Ammonia High) - Current View

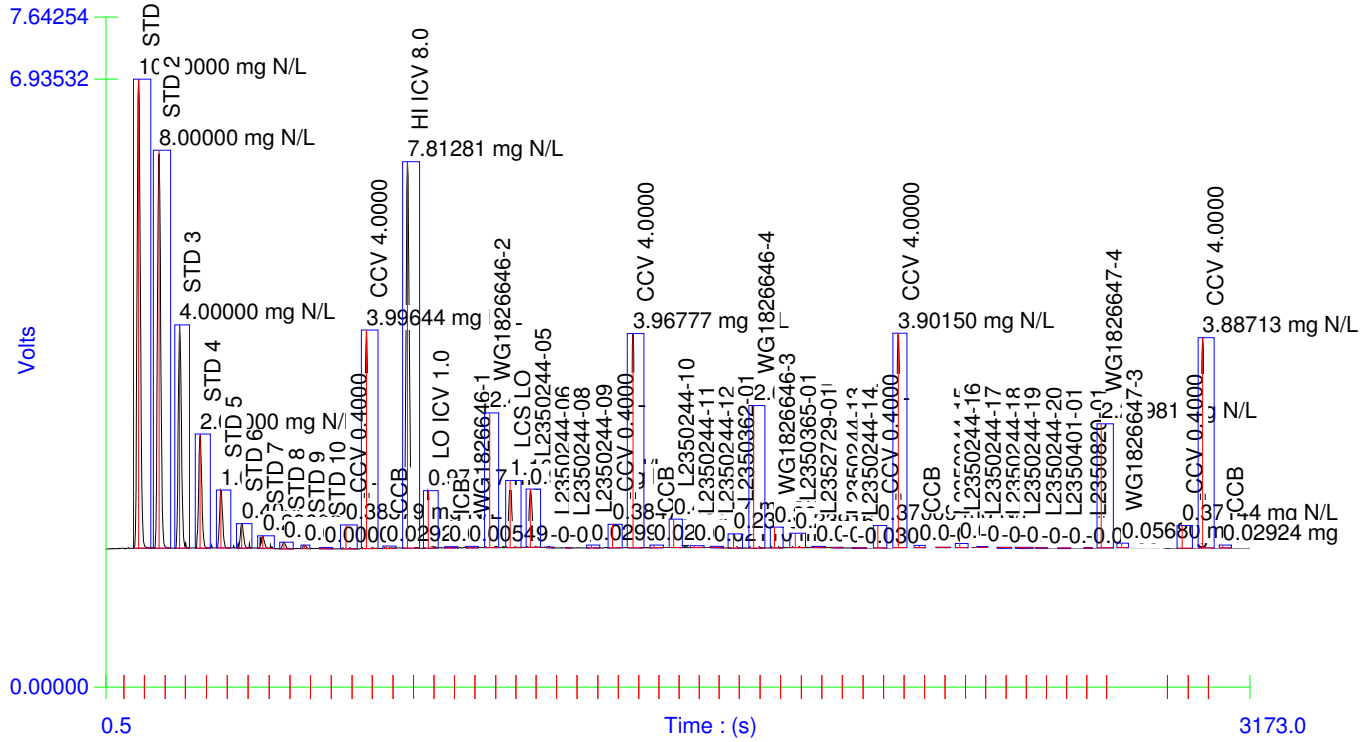
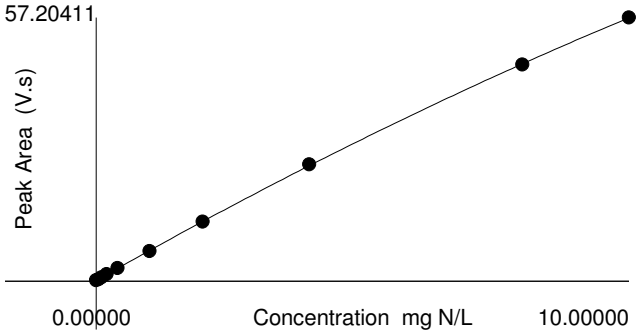


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	57.20411	5.35139	0.0	-0.1	9.98563	9/13/2023	11:16:03 AM
2	8.00000	1	46.99370	4.53912	0.0	0.4	7.99061	9/13/2023	11:17:00 AM
3	4.00000	1	25.33155	2.54488	0.0	-1.1	4.05883	9/13/2023	11:17:58 AM
4	2.00000	1	12.88838	1.30161	0.0	0.5	1.98521	9/13/2023	11:18:54 AM
5	1.00000	1	6.51966	0.66002	0.0	1.7	0.97608	9/13/2023	11:19:52 AM
6	0.40000	1	2.80701	0.28007	0.0	-1.7	0.40412	9/13/2023	11:20:51 AM
7	0.20000	1	1.49107	0.14248	0.0	-2.6	0.20427	9/13/2023	11:21:48 AM
8	0.10000	1	0.79472	0.07658	0.0	0.5	0.09912	9/13/2023	11:22:47 AM
9	0.05000	1	0.41344	0.04247	0.0	12.1	0.04173	9/13/2023	11:23:45 AM
10	0.00000	1	0.18953	0.01364			0.00809	9/13/2023	11:24:41 AM

Author: A1WETCHEMINSTRUMENT Date : 9/13/2023

Figure : 1 (Ammonia)



Area = - 0.08788 * Conc^2 + 6.58045 * Conc + 0.14140
Conc = 0.00044 * Area^2 + 0.15000 * Area - 0.02036
Correlation Coefficient (r) = 0.99999

Weighting : 1/x

Original Run Filename: OM_9-13-2023_01-10-04PM.OMN Created: 9/13/2023 1:10:04 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-13-2023_01-10-04PM.OMN Last Modified: 9/13/2023 1:41:23 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY B

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
CCV 0.4000	1	S6	0.40209				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	4.18281				
	Known Conc:		100.00000				
	Calibration:		Table/Fig. : 1				
CCB	1	S10	-0.00871				
	Known Conc:		100.00000				
WG1826711-1 T	1	1	0.00888				
WG1826711-2 T	1	2	41.56520		15.00		104%
LCS LO T	1	3	3.96374		3.00		
L2350269-01 T	1	4	3.49223		3.00		
L2350549-01 T	1	5	0.29458		3.00		
WG1826711-4 T	1	6	7.65164		3.00		
WG1826711-3 T	1	7	0.38973		3.00		
L2350563-01 T	1	8	0.51918		60.00		
L2350564-01 T	1	9	1.22419		3.00		
L2350873-02 T	1	10	0.84614		3.00		
CCV 0.4000	1	S6	0.41708				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	4.20928				
	Known Conc:		100.00000				
CCB	1	S10	0.04690				
	Known Conc:		100.00000				
L2350879-01 T	1	11	2.71120		3.00		
L2350881-01 T	1	12	7.01278		3.00		
L2350883-01 T	1	13	1.41835		30.00		
L2350888-01 T	1	14	5.56178		3.00		
L2351224-01 T	1	15	3.05894		3.00		
L2351225-01 T	1	16	1.35893		30.00		
L2351226-01 T	1	17	0.67592		3.00		
L2351228-01 T	1	18	2.26042		3.00		
L2351229-02 T	1	19	2.19486		3.00		
L2351252-01 T	1	20	1.30538		6.00		
CCV 0.4000	1	S6	0.41411				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	4.20439				
	Known Conc:		100.00000				
CCB	1	S10	-0.00791				
	Known Conc:		100.00000				

Channel 2 (Ammonia High) - Current View

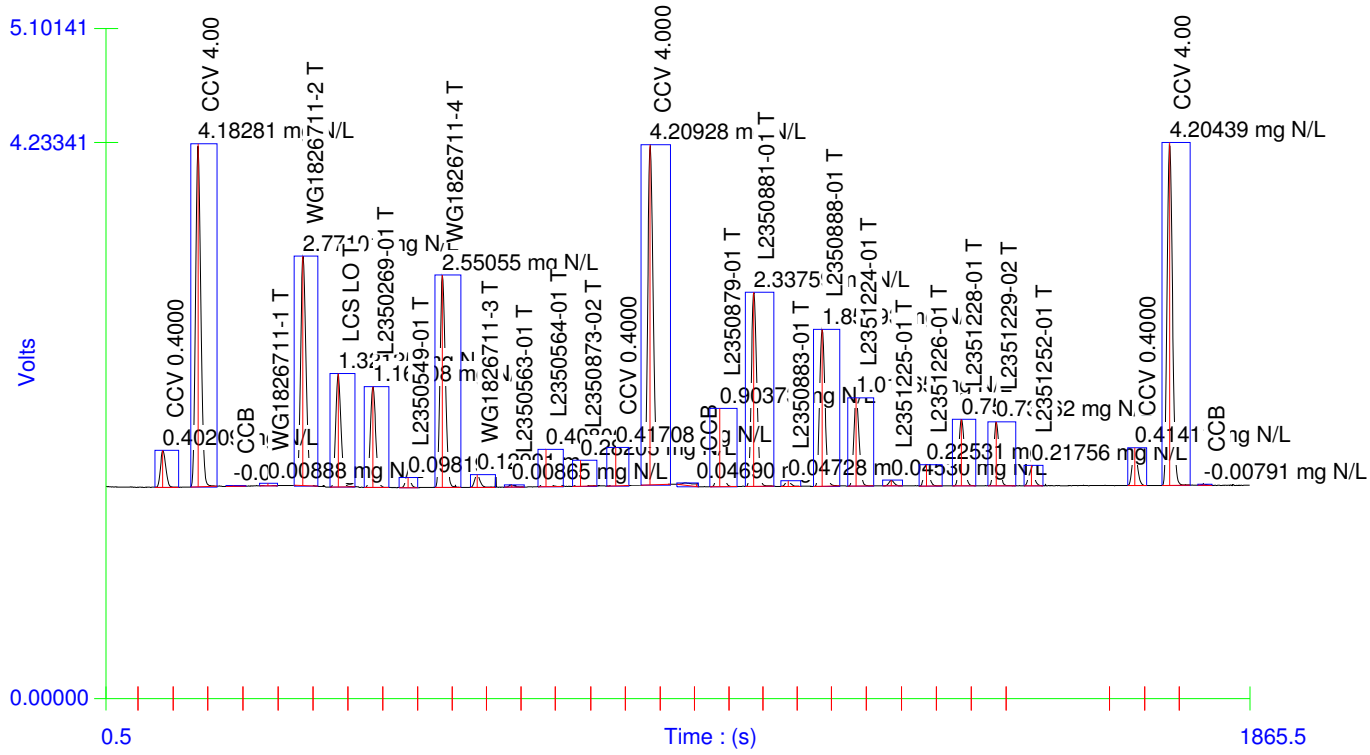
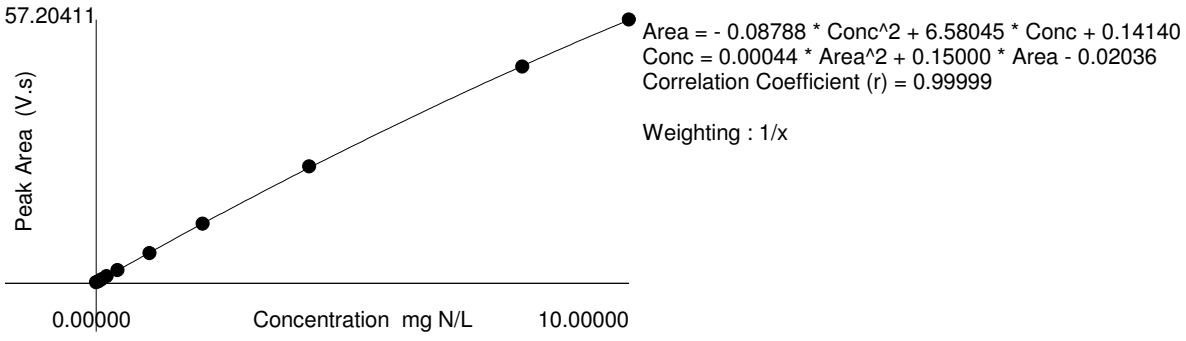


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	57.20411	5.35139	0.0	-0.1	9.98563	9/13/2023	11:16:03 AM
2	8.00000	1	46.99370	4.53912	0.0	0.4	7.99061	9/13/2023	11:17:00 AM
3	4.00000	1	25.33155	2.54488	0.0	-1.1	4.05883	9/13/2023	11:17:58 AM
4	2.00000	1	12.88838	1.30161	0.0	0.5	1.98521	9/13/2023	11:18:54 AM
5	1.00000	1	6.51966	0.66002	0.0	1.7	0.97608	9/13/2023	11:19:52 AM
6	0.40000	1	2.80701	0.28007	0.0	-1.7	0.40412	9/13/2023	11:20:51 AM
7	0.20000	1	1.49107	0.14248	0.0	-2.6	0.20427	9/13/2023	11:21:48 AM
8	0.10000	1	0.79472	0.07658	0.0	0.5	0.09912	9/13/2023	11:22:47 AM
9	0.05000	1	0.41344	0.04247	0.0	12.1	0.04173	9/13/2023	11:23:45 AM
10	0.00000	1	0.18953	0.01364			0.00809	9/13/2023	11:24:41 AM

Figure : 1 (Ammonia)



Original Run Filename: OM_9-8-2023_07-29-21AM.OMN Created: 9/8/2023 7:29:21 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-8-2023_07-29-21AM.OMN Last Modified: 9/8/2023 7:54:28 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY A

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	STD 1	1	S1	10.00000				
	STD 2	1	S2	8.00000				
	STD 3	1	S3	4.00000				
	STD 4	1	S4	2.00000				
	STD 5	1	S5	1.00000				
	STD 6	1	S6	0.40000				
	STD 7	1	S7	0.20000				
	STD 8	1	S8	0.10000				
	STD 9	1	S9	0.05000				
	STD 10	1	S10	0.00000				
	CCV 0.4000	1	S6	0.38189				
			Known Conc:	100.00000				
			Calibration:	Table/Fig. : 1				
	CCV 4.0000	1	S3	4.10542				
			Known Conc:	100.00000				
	CCB	1	S10	0.00410				
			Known Conc:	100.00000				
	HI ICV 8.0	1	1	7.88806				99%
	LO ICV 1.0	1	2	0.96446				96%
	ICB	1	3	-0.00621				
	WG1824836-1	1	4	0.03402		1.50		
	WG1824836-2	1	5	19.52040		7.50		98%
	LCS LO	1	6	1.78730		1.50		
	L2349077-01	1	7	4.50174		1.50		
X	WG1824836-4	1	8	19.58209		1.50		
X	WG1824836-3	1	9	16.53475		1.50		
X	L2349077-02	1	10	16.56823		1.50		
X	CCV 0.4000	1	S6	0.44752				RERUN OK
			Known Conc:	100.00000				

Author: A1WETCHEMINSTRUMENT Date : 9/8/2023

Channel 2 (Ammonia High) - Current View

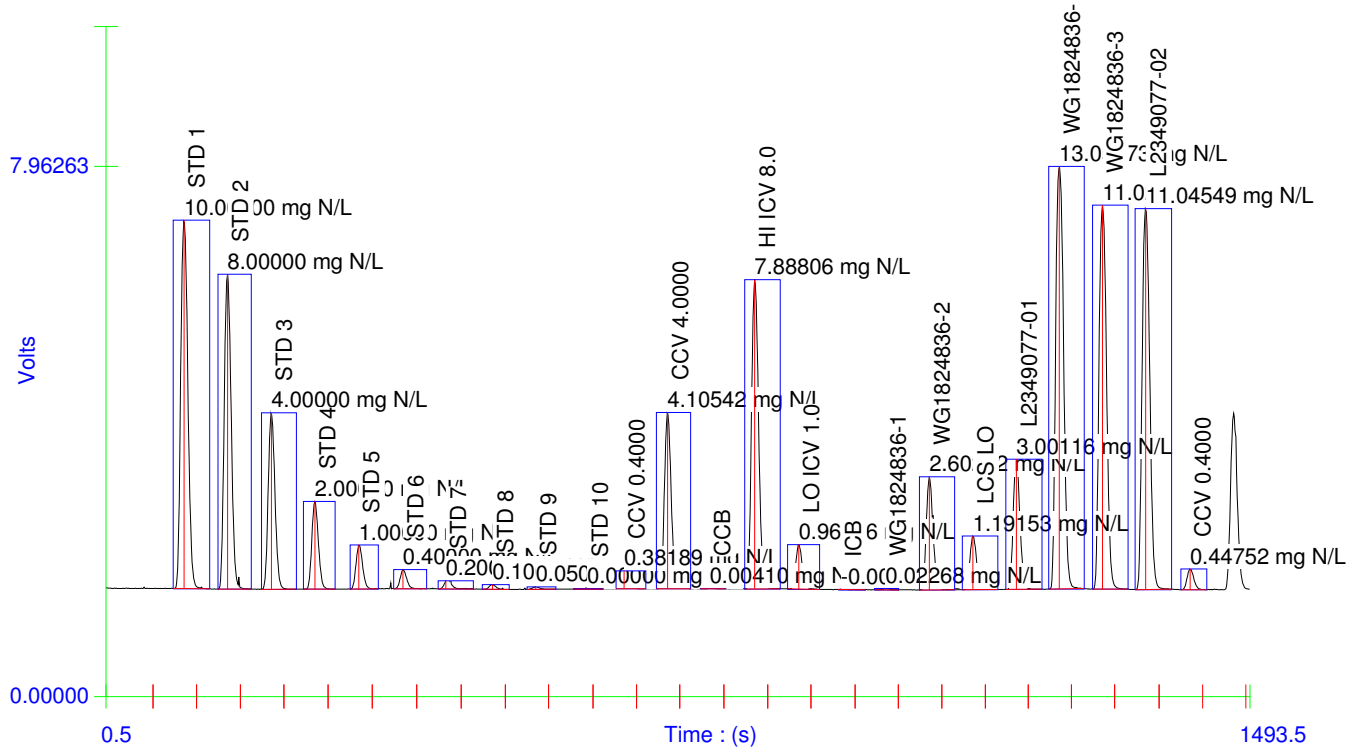
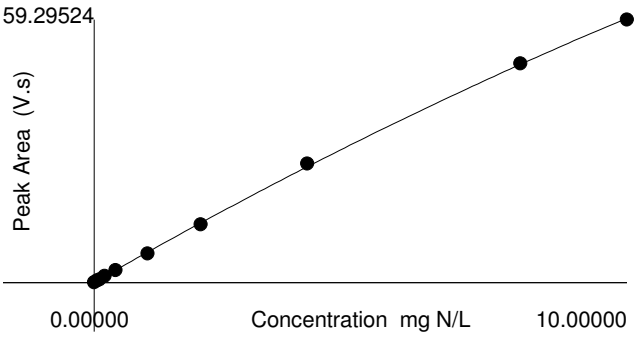


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.29524	5.53470	0.0	0.5	9.90985	9/8/2023	7:30:34 AM
2	8.00000	1	49.37766	4.73097	0.0	-0.4	8.05372	9/8/2023	7:31:30 AM
3	4.00000	1	26.80111	2.65350	0.0	-2.6	4.12411	9/8/2023	7:32:28 AM
4	2.00000	1	13.10554	1.31969	0.0	2.7	1.94056	9/8/2023	7:33:25 AM
5	1.00000	1	6.58791	0.66125	0.0	3.9	0.95453	9/8/2023	7:34:22 AM
6	0.40000	1	2.82710	0.28968	0.0	-1.0	0.40115	9/8/2023	7:35:20 AM
7	0.20000	1	1.50409	0.12127	0.0	-5.1	0.20919	9/8/2023	7:36:18 AM
8	0.10000	1	0.73082	0.07071	0.0	1.9	0.09765	9/8/2023	7:37:17 AM
9	0.05000	1	0.39848	0.03899	0.0	0.7	0.04986	9/8/2023	7:38:14 AM
10	0.00000	1	0.05943	0.00434			0.00119	9/8/2023	7:39:11 AM

Figure : 1 (Ammonia)



Original Run Filename: OM_9-8-2023_07-56-48AM.OMN Created: 9/8/2023 7:56:48 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-8-2023_07-56-48AM.OMN Last Modified: 9/8/2023 8:19:34 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY A

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
	CCV 0.4000	1	S6	0.39368			
			Known Conc:	100.00000			
	CCV 4.0000	1	S3	4.10561			
			Known Conc:	100.00000			
			Calibration:	Table/Fig. : 1			
	CCB	1	S10	0.01813			
			Known Conc:	100.00000			
	L2349077-03	1	11	0.02310		1.50	
X	L2349077-04	1	12	24.18302		1.50	
X	L2349077-05	1	13	1.70118		1.50	
	L2349077-06	1	14	12.13621		1.50	
	L2350658-10	1	15	0.13029		1.50	
	L2350911-01	1	16	7.31804		1.50	
	WG1824836-4; 10X	1	8	21.66354		15.00	
	WG1824836-3; 10X	1	9	17.30529		15.00	
	L2349077-02; 10X	1	10	17.78792		15.00	
	L2349077-05	1	13	1.55845		1.50	
	CCV 0.4000	1	S6	0.39644			
			Known Conc:	100.00000			
	CCV 4.0000	1	S3	4.12001			
			Known Conc:	100.00000			
	CCB	1	S10	0.01403			
			Known Conc:	100.00000			
	L2349077-04; 20X	1	12	29.27896		30.00	
	CCV 0.4000	1	S6	0.39325			
			Known Conc:	100.00000			
	CCV 4.0000	1	S3	4.11071			
			Known Conc:	100.00000			
	CCB	1	S10	0.01168			
			Known Conc:	100.00000			

Channel 2 (Ammonia High) - Current View

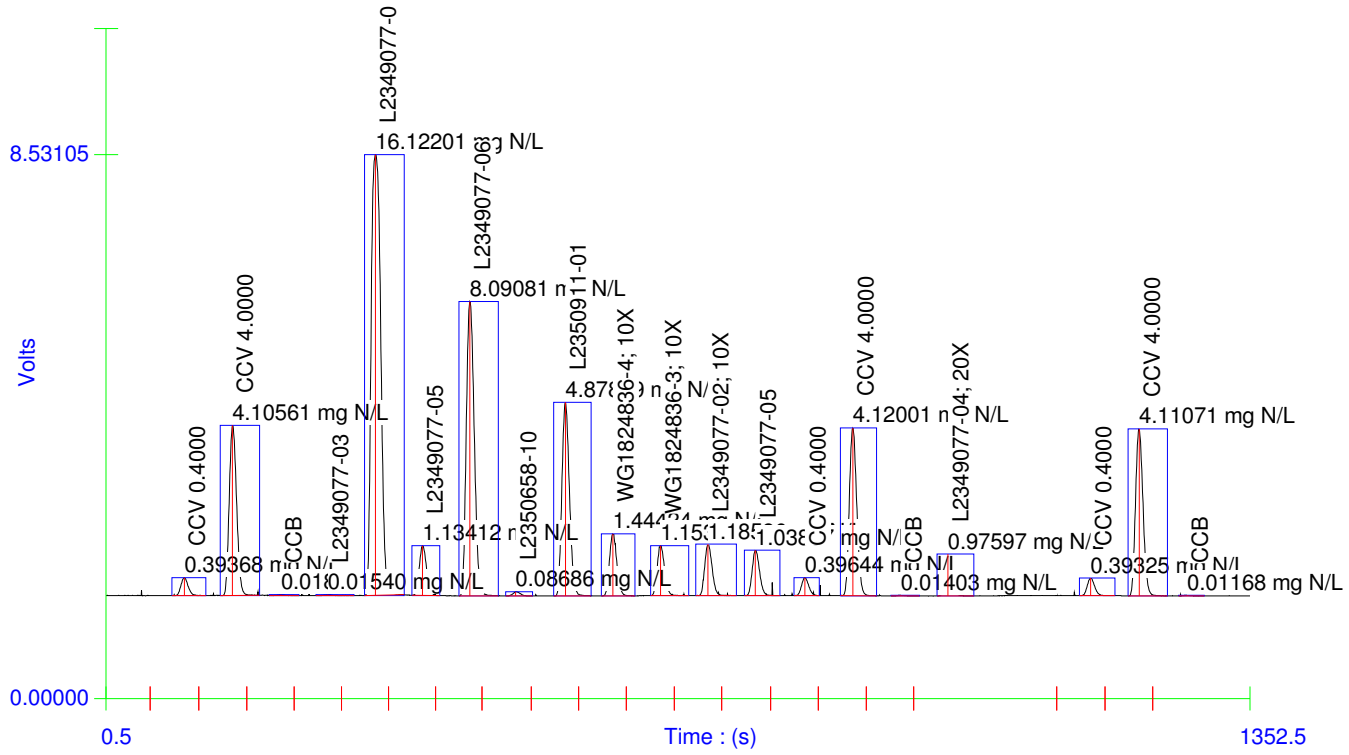
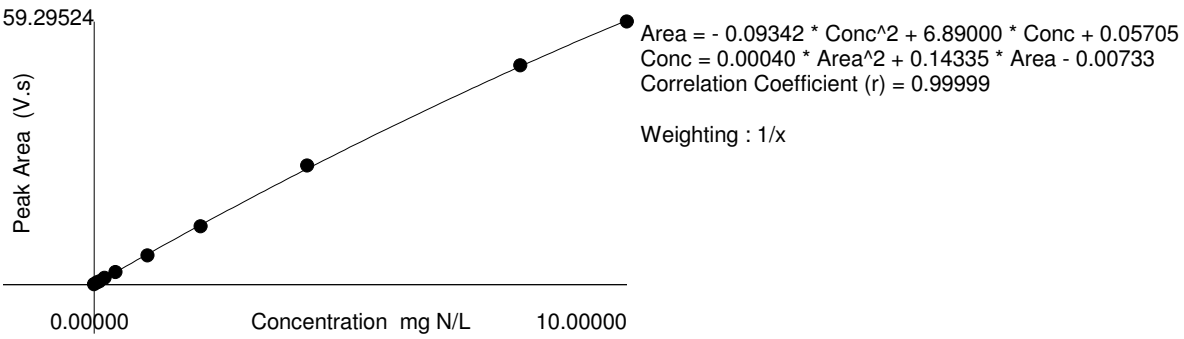


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.29524	5.53470	0.0	0.5	9.90985	9/8/2023	7:30:34 AM
2	8.00000	1	49.37766	4.73097	0.0	-0.4	8.05372	9/8/2023	7:31:30 AM
3	4.00000	1	26.80111	2.65350	0.0	-2.6	4.12411	9/8/2023	7:32:28 AM
4	2.00000	1	13.10554	1.31969	0.0	2.7	1.94056	9/8/2023	7:33:25 AM
5	1.00000	1	6.58791	0.66125	0.0	3.9	0.95453	9/8/2023	7:34:22 AM
6	0.40000	1	2.82710	0.28968	0.0	-1.0	0.40115	9/8/2023	7:35:20 AM
7	0.20000	1	1.50409	0.12127	0.0	-5.1	0.20919	9/8/2023	7:36:18 AM
8	0.10000	1	0.73082	0.07071	0.0	1.9	0.09765	9/8/2023	7:37:17 AM
9	0.05000	1	0.39848	0.03899	0.0	0.7	0.04986	9/8/2023	7:38:14 AM
10	0.00000	1	0.05943	0.00434			0.00119	9/8/2023	7:39:11 AM

Figure : 1 (Ammonia)



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Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-8-2023_08-54-18AM.OMN Last Modified: 9/8/2023 9:20:53 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY B

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.38110			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCV 4.0000	1	S3	4.10794			
	Known Conc:		100.00000			
CCB	1	S10	0.00663			
	Known Conc:		100.00000			
WG1824846-1 T	1	1	0.03814			
WG1824846-2 T	1	2	38.42222		15.00	
LCS LO T	1	3	3.80236		3.00	
L2349041-01 T	1	4	45.21346		6.00	
L2349956-06 T	1	5	1.78225		3.00	
WG1824846-4 T	1	6	8.02197		3.00	
WG1824846-3 T	1	7	0.53210		3.00	
L2349956-07 T	1	8	0.56788		3.00	
L2349956-08 T	1	9	0.41746		3.00	
L2349956-09 T	1	10	0.89490		3.00	
CCV 0.4000	1	S6	0.39137			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.11717			
	Known Conc:		100.00000			
CCB	1	S10	0.01633			
	Known Conc:		100.00000			
L2349956-11 T	1	11	8.19014		3.00	
L2350069-01 T	1	12	23.33177		3.00	
L2350069-02 T	1	13	23.56554		3.00	
L2350069-03 T	1	14	2.53582		6.00	
L2350250-08 T	1	15	0.33708		3.00	
CCV 0.4000	1	S6	0.39421			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.12978			
	Known Conc:		100.00000			
CCB	1	S10	0.02212			
	Known Conc:		100.00000			

96%

Author: A1WETCHEMINSTRUMENT Date : 9/8/2023

Channel 2 (Ammonia High) - Current View

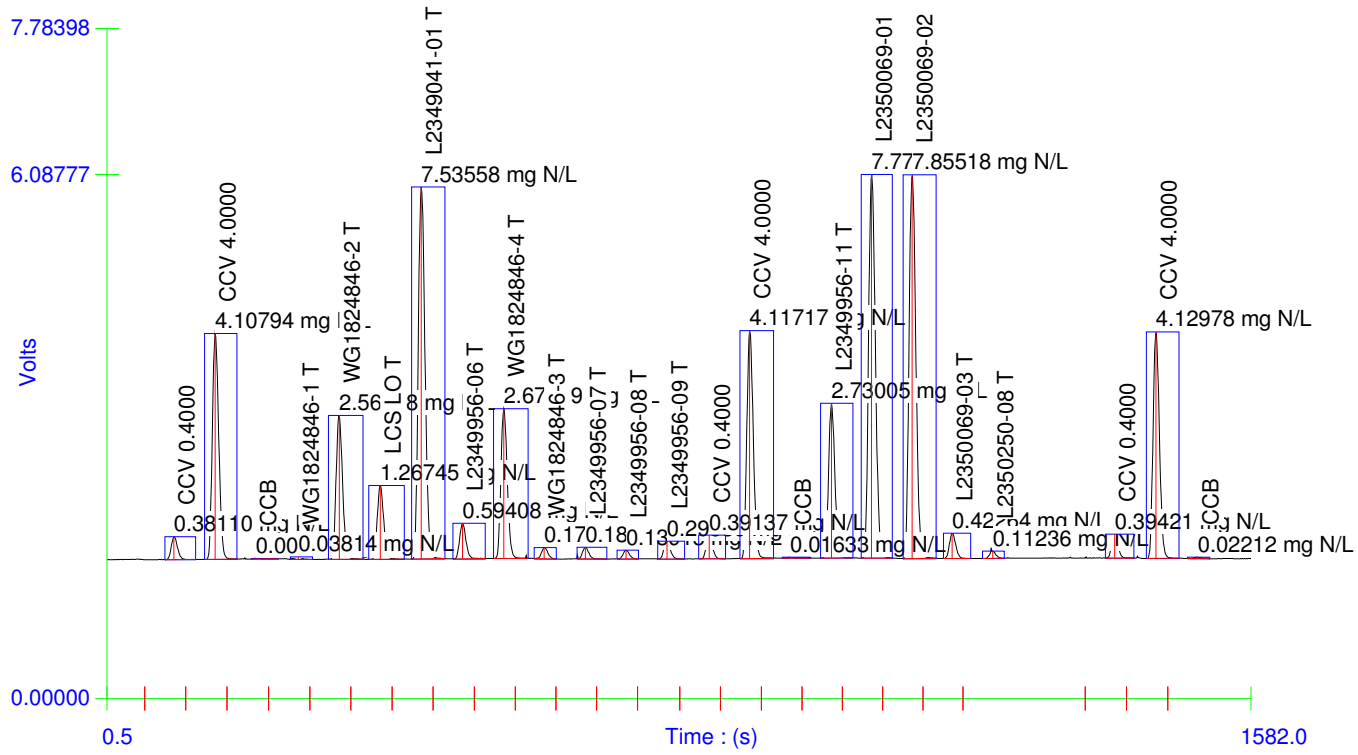
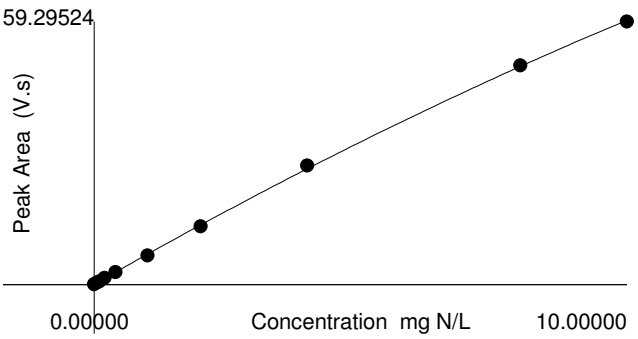


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.29524	5.53470	0.0	0.5	9.90985	9/8/2023	7:30:34 AM
2	8.00000	1	49.37766	4.73097	0.0	-0.4	8.05372	9/8/2023	7:31:30 AM
3	4.00000	1	26.80111	2.65350	0.0	-2.6	4.12411	9/8/2023	7:32:28 AM
4	2.00000	1	13.10554	1.31969	0.0	2.7	1.94056	9/8/2023	7:33:25 AM
5	1.00000	1	6.58791	0.66125	0.0	3.9	0.95453	9/8/2023	7:34:22 AM
6	0.40000	1	2.82710	0.28968	0.0	-1.0	0.40115	9/8/2023	7:35:20 AM
7	0.20000	1	1.50409	0.12127	0.0	-5.1	0.20919	9/8/2023	7:36:18 AM
8	0.10000	1	0.73082	0.07071	0.0	1.9	0.09765	9/8/2023	7:37:17 AM
9	0.05000	1	0.39848	0.03899	0.0	0.7	0.04986	9/8/2023	7:38:14 AM
10	0.00000	1	0.05943	0.00434			0.00119	9/8/2023	7:39:11 AM

Figure : 1 (Ammonia)



Area = - 0.09342 * Conc^2 + 6.89000 * Conc + 0.05705
Conc = 0.00040 * Area^2 + 0.14335 * Area - 0.00733
Correlation Coefficient (r) = 0.99999

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 9/8/2023

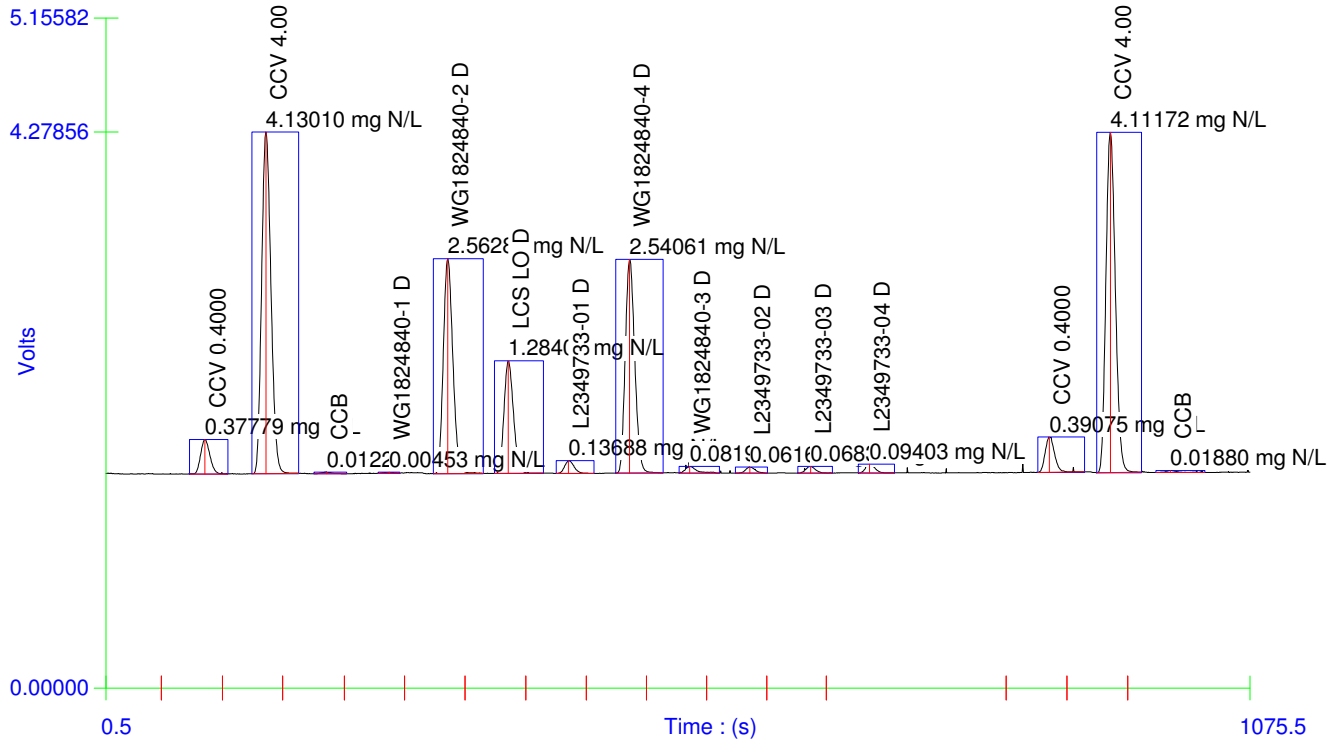
Original Run Filename: OM_9-8-2023_10-48-39AM.OMN Created: 9/8/2023 10:48:39 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-8-2023_10-48-39AM.OMN Last Modified: 9/8/2023 11:06:47 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY C

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.37779			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.13010			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.01221			
	Known Conc:		100.00000			
WG1824840-1 D	1	1	0.00680		1.50	
WG1824840-2 D	1	2	19.22138		7.50	
LCS LO D	1	3	1.92602		1.50	
L2349733-01 D	1	4	0.20531		1.50	
WG1824840-4 D	1	5	7.62182		3.00	
WG1824840-3 D	1	6	0.24582		3.00	
L2349733-02 D	1	7	0.18484		3.00	
L2349733-03 D	1	8	0.10247		1.50	
L2349733-04 D	1	9	0.14105		1.50	
CCV 0.4000	1	S6	0.39075			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.11172			
	Known Conc:		100.00000			
CCB	1	S10	0.01880			
	Known Conc:		100.00000			

96%

Channel 2 (Ammonia High) - Current View

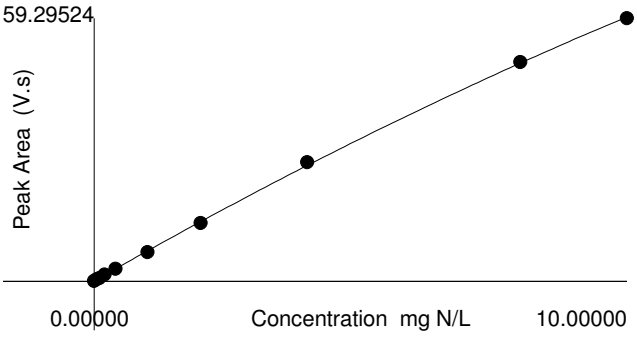


- 1 -

Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.29524	5.53470	0.0	0.5	9.90985	9/8/2023	7:30:34 AM
2	8.00000	1	49.37766	4.73097	0.0	-0.4	8.05372	9/8/2023	7:31:30 AM
3	4.00000	1	26.80111	2.65350	0.0	-2.6	4.12411	9/8/2023	7:32:28 AM
4	2.00000	1	13.10554	1.31969	0.0	2.7	1.94056	9/8/2023	7:33:25 AM
5	1.00000	1	6.58791	0.66125	0.0	3.9	0.95453	9/8/2023	7:34:22 AM
6	0.40000	1	2.82710	0.28968	0.0	-1.0	0.40115	9/8/2023	7:35:20 AM
7	0.20000	1	1.50409	0.12127	0.0	-5.1	0.20919	9/8/2023	7:36:18 AM
8	0.10000	1	0.73082	0.07071	0.0	1.9	0.09765	9/8/2023	7:37:17 AM
9	0.05000	1	0.39848	0.03899	0.0	0.7	0.04986	9/8/2023	7:38:14 AM
10	0.00000	1	0.05943	0.00434			0.00119	9/8/2023	7:39:11 AM

Figure : 1 (Ammonia)



Area = - 0.09342 * Conc^2 + 6.89000 * Conc + 0.05705
Conc = 0.00040 * Area^2 + 0.14335 * Area - 0.00733
Correlation Coefficient (r) = 0.99999

Weighting : 1/x

Original Run Filename: OM_9-8-2023_11-09-38AM.OMN Created: 9/8/2023 11:09:38 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-8-2023_11-09-38AM.OMN Last Modified: 9/8/2023 11:48:34 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY D

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.39903			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCV 4.0000	1	S3	4.19300			
	Known Conc:		100.00000			
CCB	1	S10	0.01826			
	Known Conc:		100.00000			
WG1824941-1	1	1	0.01639		1.50	
WG1824941-2	1	2	19.53936		7.50	
LCS LO	1	3	1.78481		1.50	
L2349931-01	1	4	2.30288		1.50	
L2349934-01	1	5	10.97882		15.00	
L2349946-01	1	6	0.05259		1.50	
L2349946-02	1	7	0.03052		1.50	
L2349946-03	1	8	0.07990		1.50	
L2349946-04	1	9	0.02216		1.50	
L2349968-01	1	10	0.01313		1.50	
CCV 0.4000	1	S6	0.40129			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.17698			
	Known Conc:		100.00000			
CCB	1	S10	0.02862			
	Known Conc:		100.00000			
L2349968-02	1	11	0.03927		1.50	
WG1824941-4	1	12	3.62885		1.50	
WG1824941-3	1	13	0.03811		1.50	
L2349968-03	1	14	0.02291		1.50	
L2349968-04	1	15	0.01984		1.50	
L2349968-05	1	16	0.01465		1.50	
L2349968-06	1	17	0.04155		1.50	
L2349968-07	1	18	0.01946		1.50	
L2350946-01	1	19	0.02199		1.50	
L2350946-02	1	20	0.00914		1.50	
CCV 0.4000	1	S6	0.40595			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.17769			
	Known Conc:		100.00000			
CCB	1	S10	0.02304			
	Known Conc:		100.00000			
L2350946-03	1	21	0.07175		1.50	
L2350946-04	1	22	0.05032		1.50	
L2350946-06	1	23	0.01177		1.50	
L2352006-01	1	24	0.24688		1.50	
L2352006-02	1	25	0.15411		3.00	
CCV 0.4000	1	S6	0.41225			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.15770			
	Known Conc:		100.00000			
CCB	1	S10	0.02703			
	Known Conc:		100.00000			

98%

Author: A1WETCHEMINSTRUMENT Date : 9/8/2023

Channel 2 (Ammonia High) - Current View

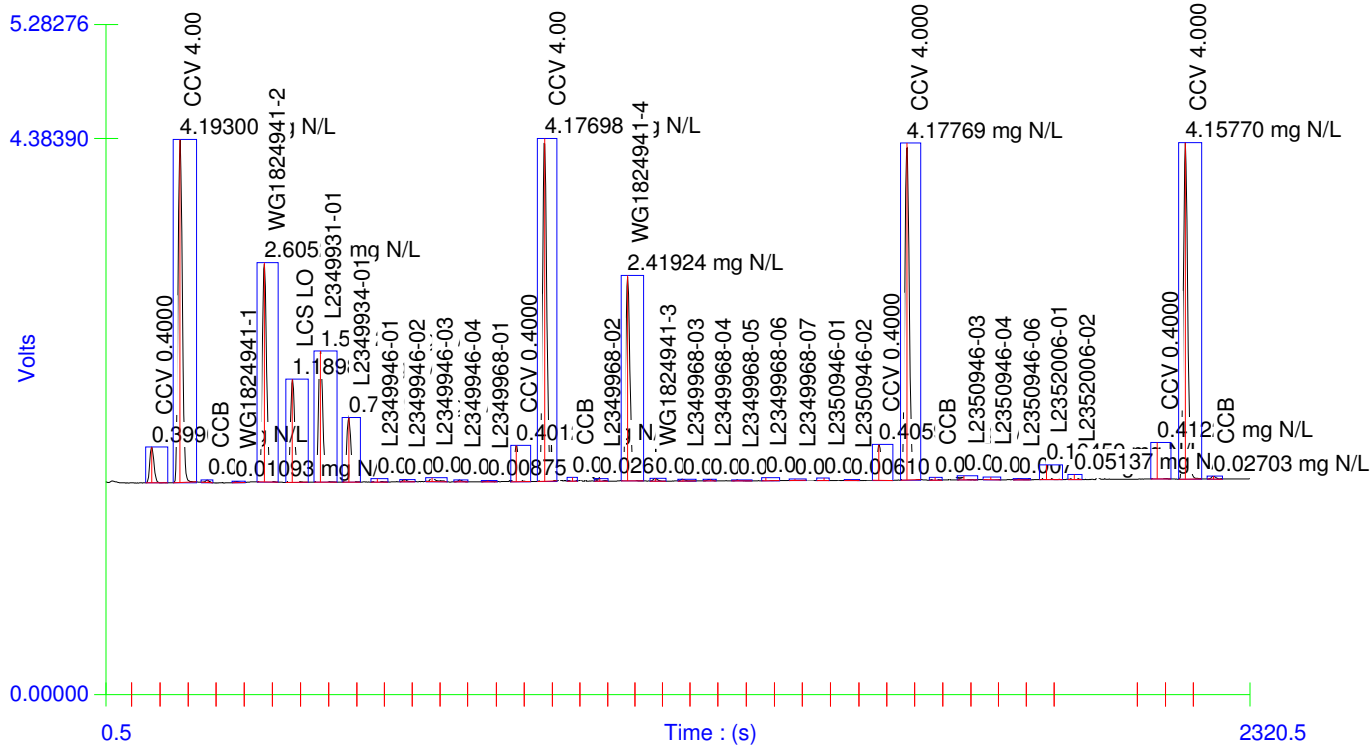
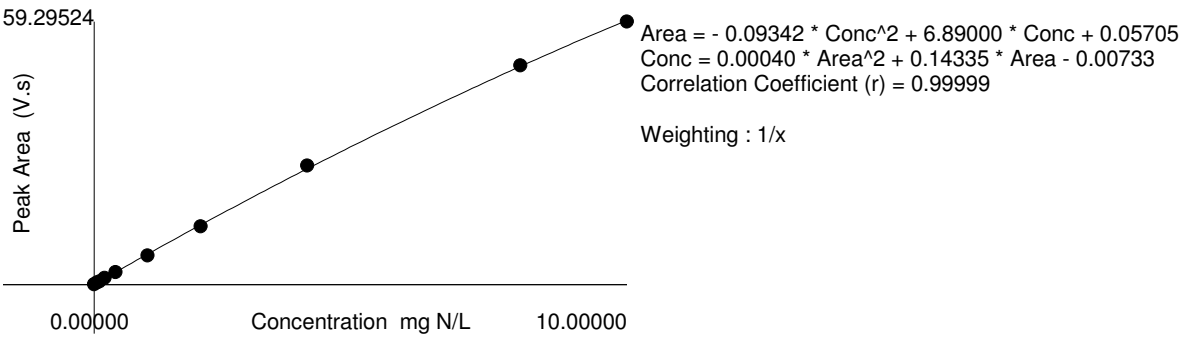


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.29524	5.53470	0.0	0.5	9.90985	9/8/2023	7:30:34 AM
2	8.00000	1	49.37766	4.73097	0.0	-0.4	8.05372	9/8/2023	7:31:30 AM
3	4.00000	1	26.80111	2.65350	0.0	-2.6	4.12411	9/8/2023	7:32:28 AM
4	2.00000	1	13.10554	1.31969	0.0	2.7	1.94056	9/8/2023	7:33:25 AM
5	1.00000	1	6.58791	0.66125	0.0	3.9	0.95453	9/8/2023	7:34:22 AM
6	0.40000	1	2.82710	0.28968	0.0	-1.0	0.40115	9/8/2023	7:35:20 AM
7	0.20000	1	1.50409	0.12127	0.0	-5.1	0.20919	9/8/2023	7:36:18 AM
8	0.10000	1	0.73082	0.07071	0.0	1.9	0.09765	9/8/2023	7:37:17 AM
9	0.05000	1	0.39848	0.03899	0.0	0.7	0.04986	9/8/2023	7:38:14 AM
10	0.00000	1	0.05943	0.00434			0.00119	9/8/2023	7:39:11 AM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT Date : 9/8/2023

Original Run Filename: OM_9-8-2023_11-51-42AM.OMN Created: 9/8/2023 11:51:42 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-8-2023_11-51-42AM.OMN Last Modified: 9/8/2023 12:08:01 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.40317				TRAY E
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.17388				
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCB	1	S10	0.01414				
		Known Conc:		100.00000				
	WG1824842-1	1	1	0.02595		1.50		
	WG1824842-2	1	2	19.29698		7.50		96%
	LCS LO	1	3	1.94254		1.50		
	L2349925-01	1	4	0.07115		1.50		
	L2349925-02	1	5	0.05484		3.00		
	L2349956-01	1	6	0.12492		1.50		
	L2349956-02	1	7	8.20552		1.50		
	L2349956-03	1	8	12.24293		1.50		
X	L2349956-04	1	9	22.54633		1.50		
X	L2349956-05	1	10	13.38304		1.50		
X	CCV 0.4000	1	S6	0.47252				RERUN OK
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.16927				
		Known Conc:		100.00000				

Channel 2 (Ammonia High) - Current View

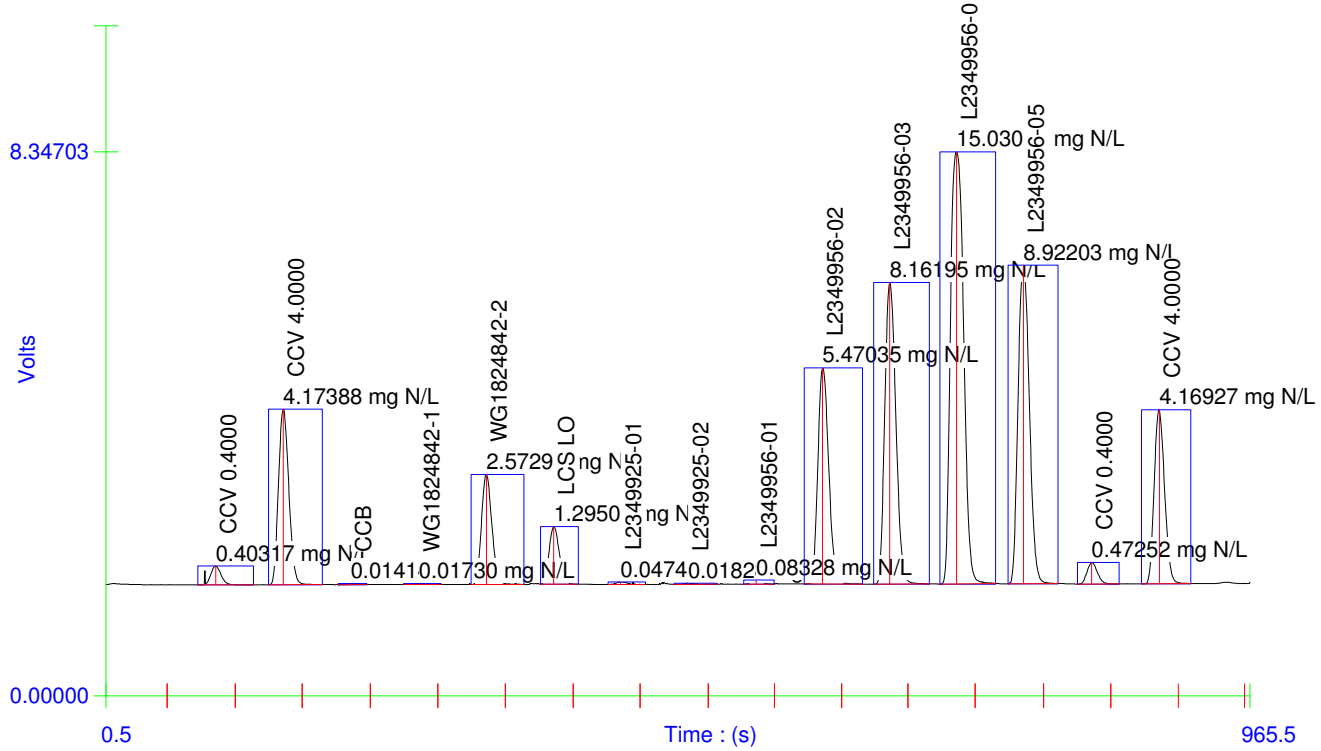
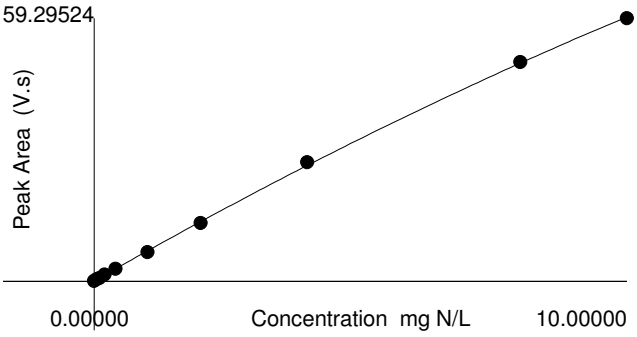


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.29524	5.53470	0.0	0.5	9.90985	9/8/2023	7:30:34 AM
2	8.00000	1	49.37766	4.73097	0.0	-0.4	8.05372	9/8/2023	7:31:30 AM
3	4.00000	1	26.80111	2.65350	0.0	-2.6	4.12411	9/8/2023	7:32:28 AM
4	2.00000	1	13.10554	1.31969	0.0	2.7	1.94056	9/8/2023	7:33:25 AM
5	1.00000	1	6.58791	0.66125	0.0	3.9	0.95453	9/8/2023	7:34:22 AM
6	0.40000	1	2.82710	0.28968	0.0	-1.0	0.40115	9/8/2023	7:35:20 AM
7	0.20000	1	1.50409	0.12127	0.0	-5.1	0.20919	9/8/2023	7:36:18 AM
8	0.10000	1	0.73082	0.07071	0.0	1.9	0.09765	9/8/2023	7:37:17 AM
9	0.05000	1	0.39848	0.03899	0.0	0.7	0.04986	9/8/2023	7:38:14 AM
10	0.00000	1	0.05943	0.00434			0.00119	9/8/2023	7:39:11 AM

Figure : 1 (Ammonia)



Area = - 0.09342 * Conc^2 + 6.89000 * Conc + 0.05705
Conc = 0.00040 * Area^2 + 0.14335 * Area - 0.00733
Correlation Coefficient (r) = 0.99999

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 9/8/2023

Original Run Filename: OM_9-8-2023_12-10-47PM.OMN Created: 9/8/2023 12:10:47 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-8-2023_12-10-47PM.OMN Last Modified: 9/8/2023 12:26:56 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY E

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.41140			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.15440			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.01781			
	Known Conc:		100.00000			
L2349956-04; 10X	1	9	26.70032		15.00	
L2349956-05	1	10	13.20128		1.50	
L2349956-06	1	11	1.33094		1.50	
WG1824842-4	1	12	3.98402		1.50	
WG1824842-3	1	13	0.04738		1.50	
L2349956-07	1	14	0.02552		1.50	
L2349956-08	1	15	0.05618		1.50	
CCV 0.4000	1	S6	0.41239			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.15326			
	Known Conc:		100.00000			
CCB	1	S10	0.02704			
	Known Conc:		100.00000			

Channel 2 (Ammonia High) - Current View

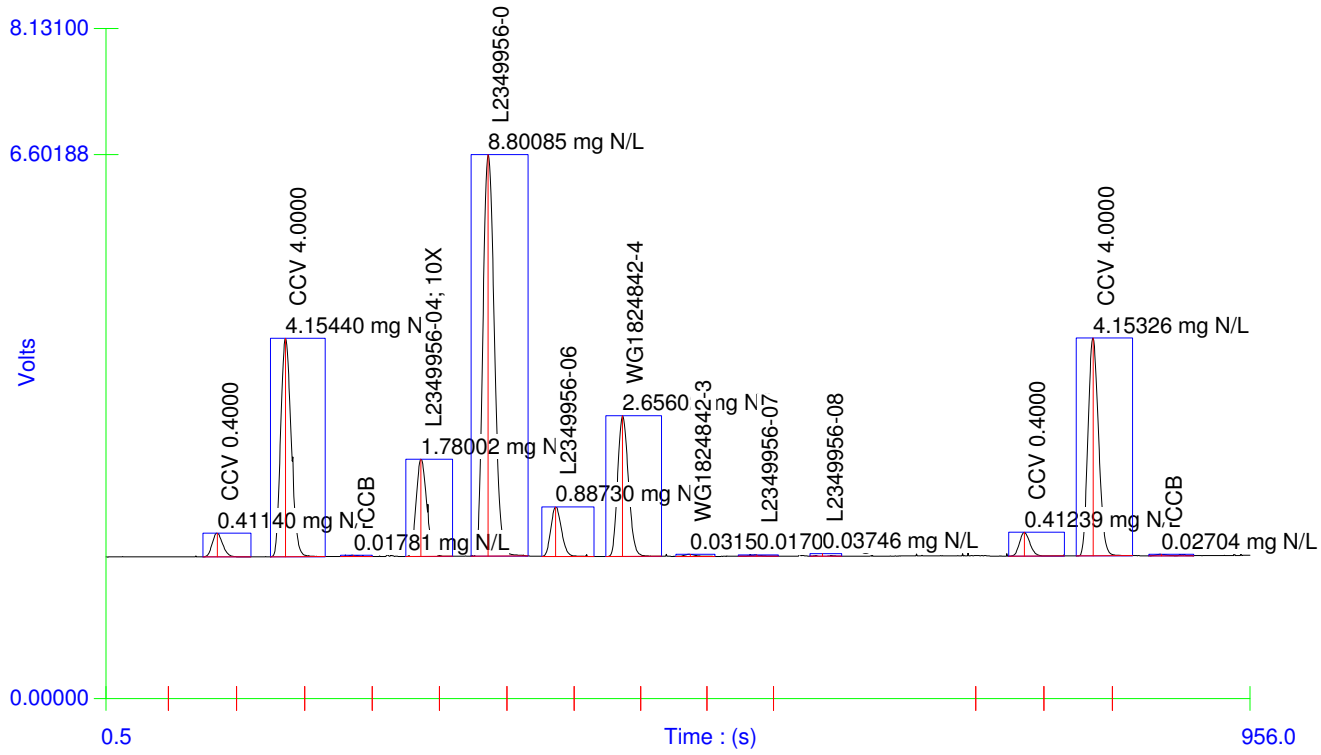
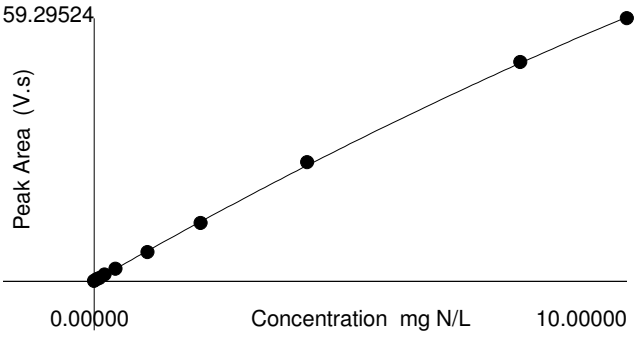


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.29524	5.53470	0.0	0.5	9.90985	9/8/2023	7:30:34 AM
2	8.00000	1	49.37766	4.73097	0.0	-0.4	8.05372	9/8/2023	7:31:30 AM
3	4.00000	1	26.80111	2.65350	0.0	-2.6	4.12411	9/8/2023	7:32:28 AM
4	2.00000	1	13.10554	1.31969	0.0	2.7	1.94056	9/8/2023	7:33:25 AM
5	1.00000	1	6.58791	0.66125	0.0	3.9	0.95453	9/8/2023	7:34:22 AM
6	0.40000	1	2.82710	0.28968	0.0	-1.0	0.40115	9/8/2023	7:35:20 AM
7	0.20000	1	1.50409	0.12127	0.0	-5.1	0.20919	9/8/2023	7:36:18 AM
8	0.10000	1	0.73082	0.07071	0.0	1.9	0.09765	9/8/2023	7:37:17 AM
9	0.05000	1	0.39848	0.03899	0.0	0.7	0.04986	9/8/2023	7:38:14 AM
10	0.00000	1	0.05943	0.00434			0.00119	9/8/2023	7:39:11 AM

Figure : 1 (Ammonia)



Area = - 0.09342 * Conc^2 + 6.89000 * Conc + 0.05705
Conc = 0.00040 * Area^2 + 0.14335 * Area - 0.00733
Correlation Coefficient (r) = 0.99999

Weighting : 1/x

Original Run Filename: OM_9-8-2023_12-31-10PM.OMN Created: 9/8/2023 12:31:10 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-8-2023_12-31-10PM.OMN Last Modified: 9/8/2023 1:02:34 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY F

100%

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.40962			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCV 4.0000	1	S3	4.13655			
	Known Conc:		100.00000			
CCB	1	S10	0.02883			
	Known Conc:		100.00000			
WG1823844-1 T	1	1	0.04526			
WG1823844-2 T	1	2	40.07848		15.00	
LCS LO T	1	3	4.06769		3.00	
L2350192-01 T	1	4	7.66883		3.00	
L2350195-01 T	1	5	0.82590		3.00	
L2350198-01 T	1	6	1.63199		3.00	
L2350225-01 T	1	7	0.10172		3.00	
L2350225-02 T	1	8	0.16212		3.00	
L2350225-03 T	1	9	0.06413		3.00	
L2350225-04 T	1	10	0.15497		3.00	
CCV 0.4000	1	S6	0.41953			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.13089			
	Known Conc:		100.00000			
CCB	1	S10	0.02581			
	Known Conc:		100.00000			
L2350225-05 T	1	11	0.08057		3.00	
L2350225-06 T	1	12	0.10515		3.00	
L2350226-01 T	1	13	0.40697		3.00	
L2350226-02 T	1	14	0.31455		3.00	
L2350226-03 T	1	15	0.35165		3.00	
L2350226-04 T	1	16	3.63143		3.00	
L2350269-01 T	1	17	0.35106		3.00	
WG1823844-4 T	1	18	7.91617		3.00	
WG1823844-3 T	1	19	0.31640		3.00	
L2350269-02 T	1	20	0.30116		3.00	
CCV 0.4000	1	S6	0.40892			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.12655			
	Known Conc:		100.00000			
CCB	1	S10	0.02207			
	Known Conc:		100.00000			

Author: A1WETCHEMINSTRUMENT Date : 9/8/2023

Channel 2 (Ammonia High) - Current View

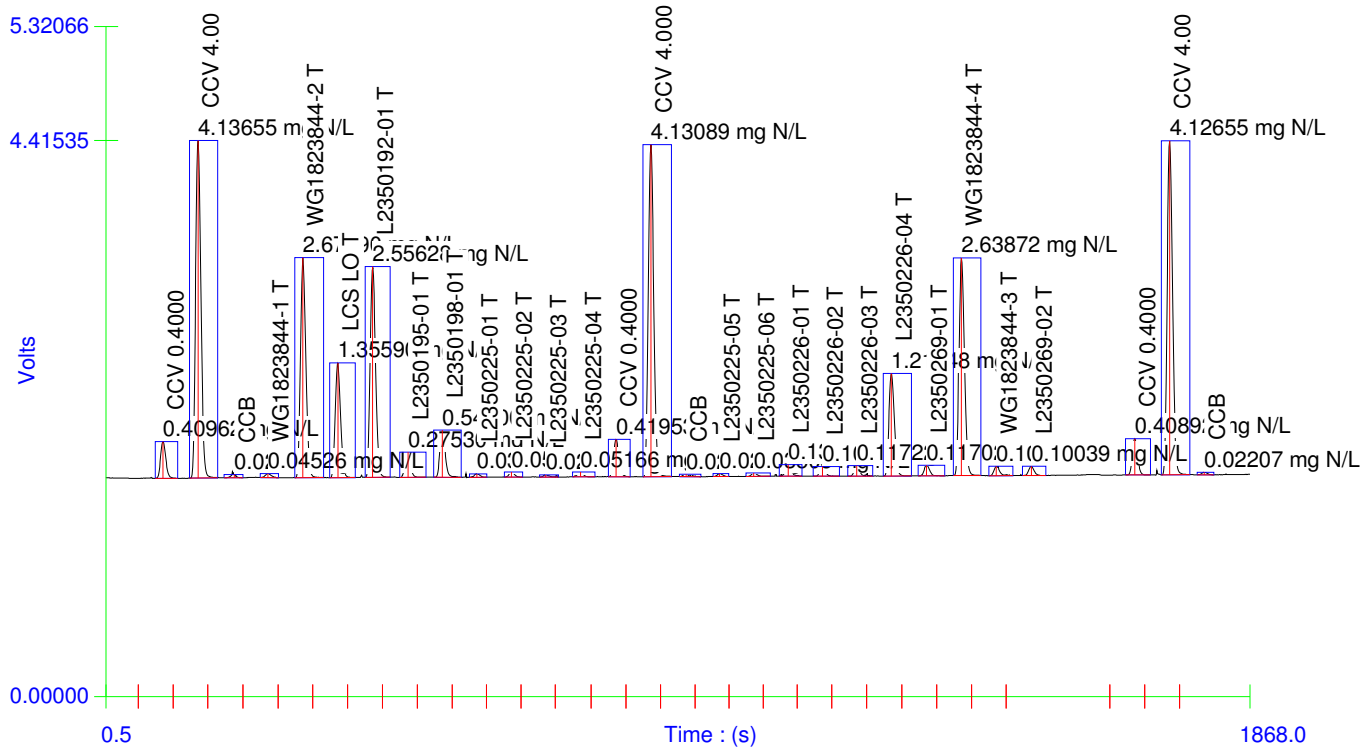
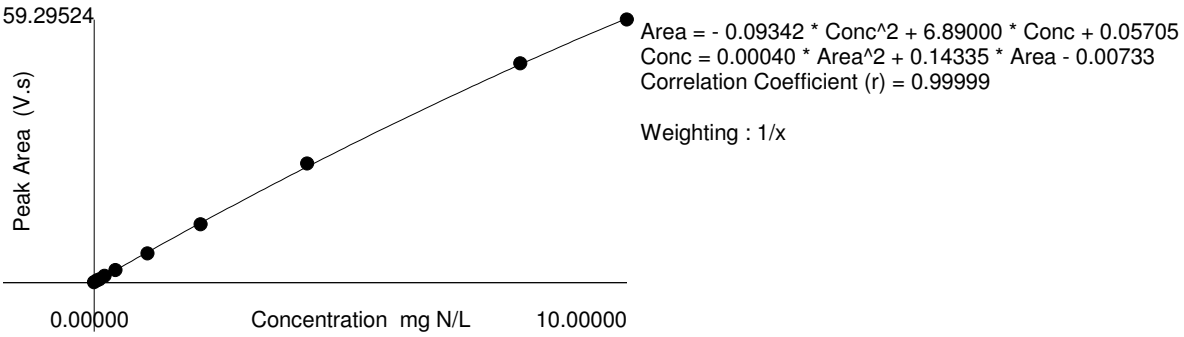


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.29524	5.53470	0.0	0.5	9.90985	9/8/2023	7:30:34 AM
2	8.00000	1	49.37766	4.73097	0.0	-0.4	8.05372	9/8/2023	7:31:30 AM
3	4.00000	1	26.80111	2.65350	0.0	-2.6	4.12411	9/8/2023	7:32:28 AM
4	2.00000	1	13.10554	1.31969	0.0	2.7	1.94056	9/8/2023	7:33:25 AM
5	1.00000	1	6.58791	0.66125	0.0	3.9	0.95453	9/8/2023	7:34:22 AM
6	0.40000	1	2.82710	0.28968	0.0	-1.0	0.40115	9/8/2023	7:35:20 AM
7	0.20000	1	1.50409	0.12127	0.0	-5.1	0.20919	9/8/2023	7:36:18 AM
8	0.10000	1	0.73082	0.07071	0.0	1.9	0.09765	9/8/2023	7:37:17 AM
9	0.05000	1	0.39848	0.03899	0.0	0.7	0.04986	9/8/2023	7:38:14 AM
10	0.00000	1	0.05943	0.00434			0.00119	9/8/2023	7:39:11 AM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Original Run Filename: OM_9-6-2023_12-02-48PM.OMN Created: 9/6/2023 12:02:48 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-6-2023_12-02-48PM.OMN Last Modified: 9/6/2023 12:50:56 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY A

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	STD 1	1	S1	10.00000				
	STD 2	1	S2	8.00000				
	STD 3	1	S3	4.00000				
	STD 4	1	S4	2.00000				
	STD 5	1	S5	1.00000				
	STD 6	1	S6	0.40000				
	STD 7	1	S7	0.20000				
	STD 8	1	S8	0.10000				
	STD 9	1	S9	0.05000				
	STD 10	1	S10	0.00000				
	CCV 0.4000	1	S6	0.37888				
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCV 4.0000	1	S3	3.94925				
		Known Conc:		100.00000				
	CCB	1	S10	0.02463				
		Known Conc:		100.00000				
	HI ICV 8.0	1	1	7.68100				
	LO ICV 1.0	1	2	0.95335				
	ICB	1	3	0.01664				
	WG1823887-1	1	4	0.05250		1.50		
	WG1823887-2	1	5	18.03229		7.50		90%
	LCS LO	1	6	1.63849		1.50		
	L2348527-01	1	7	4.18170		1.50		
	L2348704-03; 10X	1	8	260.36249		150.00		
	L2349514-01	1	9	0.08549		1.50		
	L2349514-04	1	10	0.07416		1.50		
	CCV 0.4000	1	S6	0.38483				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.96003				
		Known Conc:		100.00000				
	CCB	1	S10	0.03325				
		Known Conc:		100.00000				
	L2349514-07	1	11	-0.00514		1.50		
	L2349514-10	1	12	0.02763		1.50		
	L2349514-13	1	13	0.04307		1.50		
	L2349514-16	1	14	-0.00415		1.50		
	L2349514-19	1	15	0.00663		1.50		
	L2349514-22	1	16	0.06445		1.50		
	L2349514-25	1	17	0.04502		1.50		
	L2349514-28	1	18	-0.01860		1.50		
	L2349514-31	1	19	0.39222		1.50		
	L2349580-01	1	20	0.05484		1.50		
	CCV 0.4000	1	S6	0.38045				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.99335				
		Known Conc:		100.00000				
	CCB	1	S10	0.02569				
		Known Conc:		100.00000				
X	WG1823887-4	1	21	3.55331		1.50		
X	WG1823887-3	1	22	0.18079		1.50		
X	L2349918-01	1	23	0.86163		1.50		
X	CCV 0.4000	1	S6	0.50113				BASELINE SHIFT
		Known Conc:		100.00000				SAMPLES RERUN
X	CCV 4.0000	1	S3	3.95140				
		Known Conc:		100.00000				
X	CCB	1	S10	0.02674				
		Known Conc:		100.00000				

Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Channel 2 (Ammonia High) - Current View

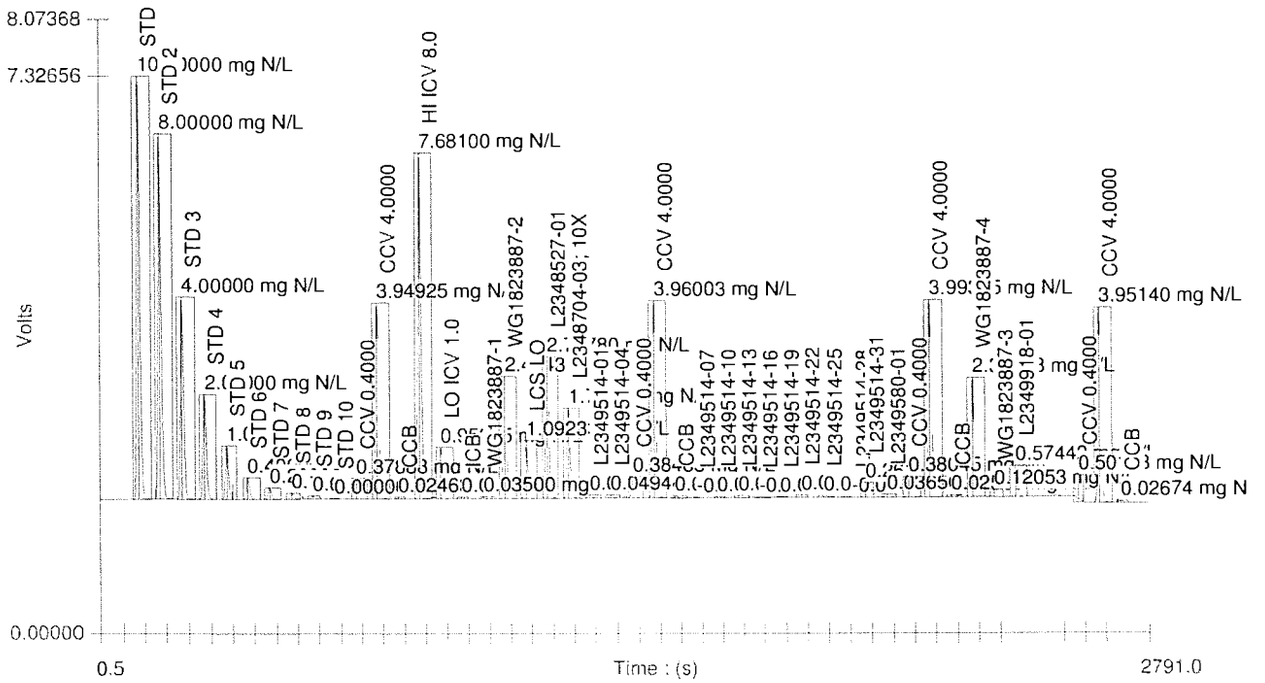


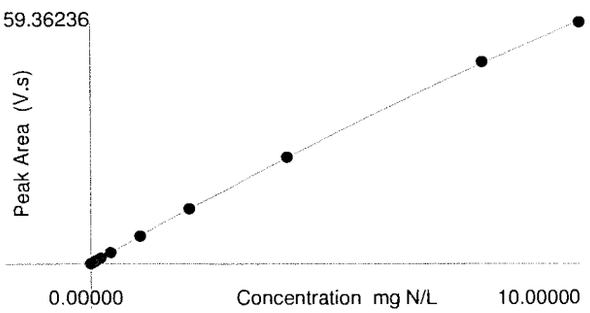
Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.36236	5.55508	0.0	0.5	9.90865	9/6/2023	12:05:23 PM
2	8.00000	1	49.71358	4.79559	0.0	-0.8	8.09633	9/6/2023	12:06:19 PM
3	4.00000	1	26.31706	2.65409	0.0	-0.2	4.02437	9/6/2023	12:07:17 PM
4	2.00000	1	13.50171	1.38088	0.0	0.4	1.98759	9/6/2023	12:08:14 PM
5	1.00000	1	6.88425	0.70148	0.0	0.5	0.98951	9/6/2023	12:09:11 PM
6	0.40000	1	2.79960	0.28160	0.0	1.3	0.39168	9/6/2023	12:10:10 PM
7	0.20000	1	1.47380	0.14823	0.0	-0.9	0.20063	9/6/2023	12:11:08 PM
8	0.10000	1	0.77433	0.07842	0.0	-0.7	0.10043	9/6/2023	12:12:07 PM
9	0.05000	1	0.40747	0.04029	0.0	3.6	0.04804	9/6/2023	12:13:04 PM
10	0.00000	1	0.09161	0.00868			0.00302	9/6/2023	12:14:01 PM

Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Figure : 1 (Ammonia)



Area = - 0.09784 * Conc^2 + 6.93862 * Conc + 0.07616
Conc = 0.00042 * Area^2 + 0.14232 * Area - 0.01002
Correlation Coefficient (r) = 1.00000

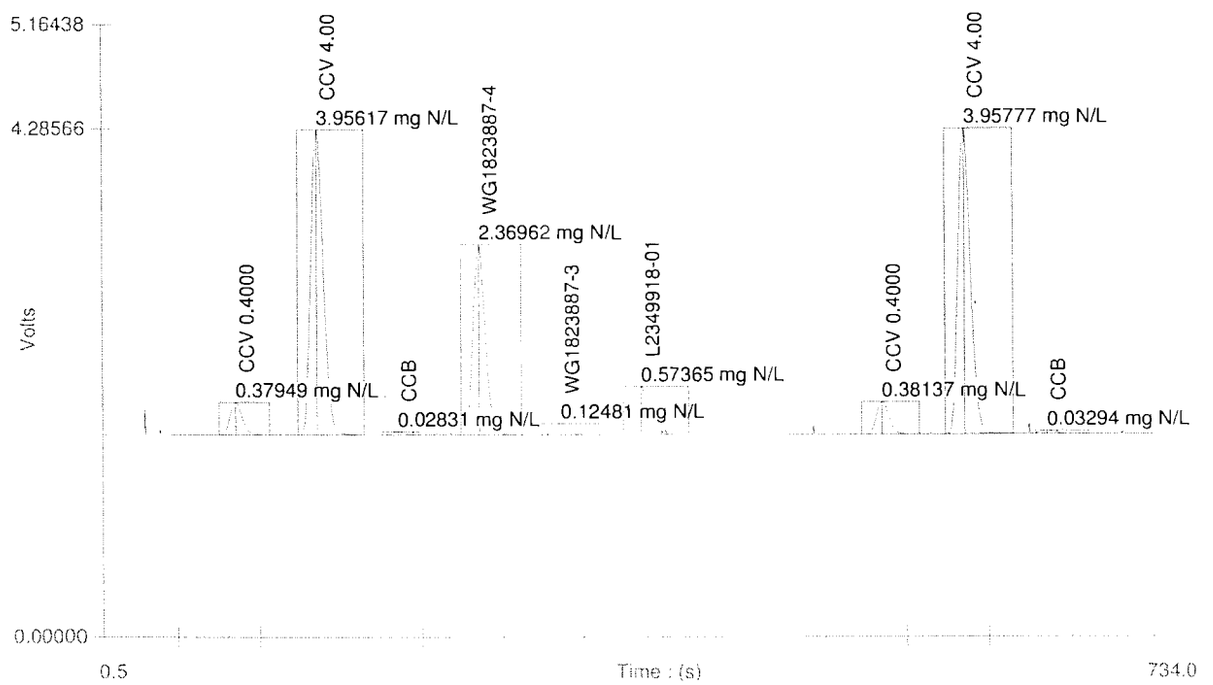
Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 9/6/2023

Original Run Filename: OM_9-6-2023_01-02-47PM.OMN Created: 9/6/2023 1:02:47 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-6-2023_01-02-47PM.OMN Last Modified: 9/6/2023 1:15:12 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.37949			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.95617			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.02831			
	Known Conc:		100.00000			
WG1823887-4	1	21	3.55444		1.50	
WG1823887-3	1	22	0.18721		1.50	
L2349918-01	1	23	0.86048		1.50	
CCV 0.4000	1	S6	0.38137			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.95777			
	Known Conc:		100.00000			
CCB	1	S10	0.03294			
	Known Conc:		100.00000			

Channel 2 (Ammonia High) - Current View



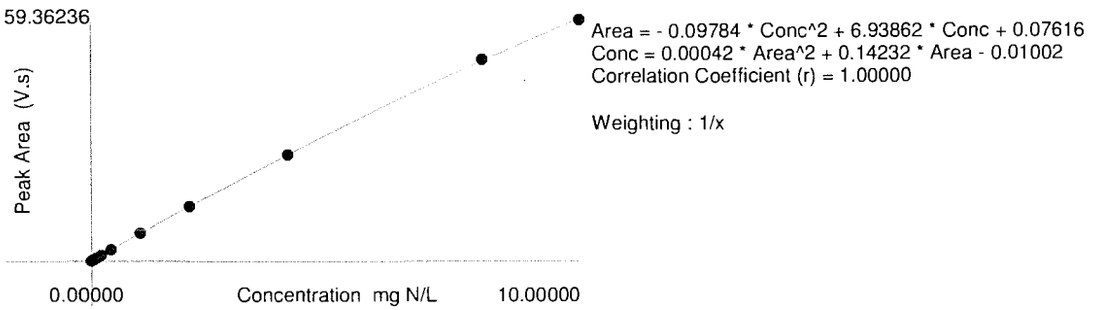
Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.36236	5.55508	0.0	0.5	9.90865	9/6/2023	12:05:23 PM
2	8.00000	1	49.71358	4.79559	0.0	-0.8	8.09633	9/6/2023	12:06:19 PM
3	4.00000	1	26.31706	2.65409	0.0	-0.2	4.02437	9/6/2023	12:07:17 PM
4	2.00000	1	13.50171	1.38088	0.0	0.4	1.98759	9/6/2023	12:08:14 PM
5	1.00000	1	6.88425	0.70148	0.0	0.5	0.98951	9/6/2023	12:09:11 PM
6	0.40000	1	2.79960	0.28160	0.0	1.3	0.39168	9/6/2023	12:10:10 PM
7	0.20000	1	1.47380	0.14823	0.0	-0.9	0.20063	9/6/2023	12:11:08 PM
8	0.10000	1	0.77433	0.07842	0.0	-0.7	0.10043	9/6/2023	12:12:07 PM
9	0.05000	1	0.40747	0.04029	0.0	3.6	0.04804	9/6/2023	12:13:04 PM
10	0.00000	1	0.09161	0.00868			0.00302	9/6/2023	12:14:01 PM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT Date : 9/6/2023

Original Run Filename: OM_9-6-2023_02-44-30PM.OMN Created: 9/6/2023 2:44:30 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-6-2023_02-44-30PM.OMN Last Modified: 9/6/2023 3:22:18 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.38091				TRAY B
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.96097				
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCB	1	S10	0.02725				
		Known Conc:		100.00000				
	WG1822678-1	1	1	0.01214		1.50		
	WG1822678-2	1	2	17.98450		7.50		90%
	LCS LO	1	3	1.82654		1.50		
	L2348895-01	1	4	0.57134		15.00		
	L2348895-02	1	5	0.11519		3.00		
	L2349021-01	1	6	0.01674		1.50		
	L2349021-02	1	7	0.53180		1.50		
	L2349021-03	1	8	2.41139		1.50		
	L2349079-01	1	9	0.06531		1.50		
	L2349079-02	1	10	0.04254		1.50		
	CCV 0.4000	1	S6	0.37209				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.85175				
		Known Conc:		100.00000				
	CCB	1	S10	0.03202				
		Known Conc:		100.00000				
	L2349079-03	1	11	0.10773		3.00		
	L2349079-04	1	12	0.02477		1.50		
	L2349079-05	1	13	0.01229		1.50		
	L2349191-01	1	14	5.49760		15.00		
	L2349192-01	1	15	0.02911		3.00		
	L2350354-01	1	16	6.53166		3.00		
	L2350433-01	1	17	0.11633		1.50		
	L2350433-02	1	18	0.01986		1.50		
	L2350433-03	1	19	0.03577		1.50		
	WG1822678-3	1	20	0.02403		1.50		
	CCV 0.4000	1	S6	0.36728				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.96620				
		Known Conc:		100.00000				
	CCB	1	S10	0.02714				
		Known Conc:		100.00000				
	WG1822678-4	1	21	3.53758		1.50		
	L2350433-04	1	22	0.25825		1.50		
	L2350433-05	1	23	0.06376		1.50		
	L2350433-06	1	24	0.04221		1.50		
	L2350466-01	1	25	0.16569		15.00		
X	CCV 0.4000	1	S6	0.35115				RERUN OK
		Known Conc:		100.00000				

Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Channel 2 (Ammonia High) - Current View

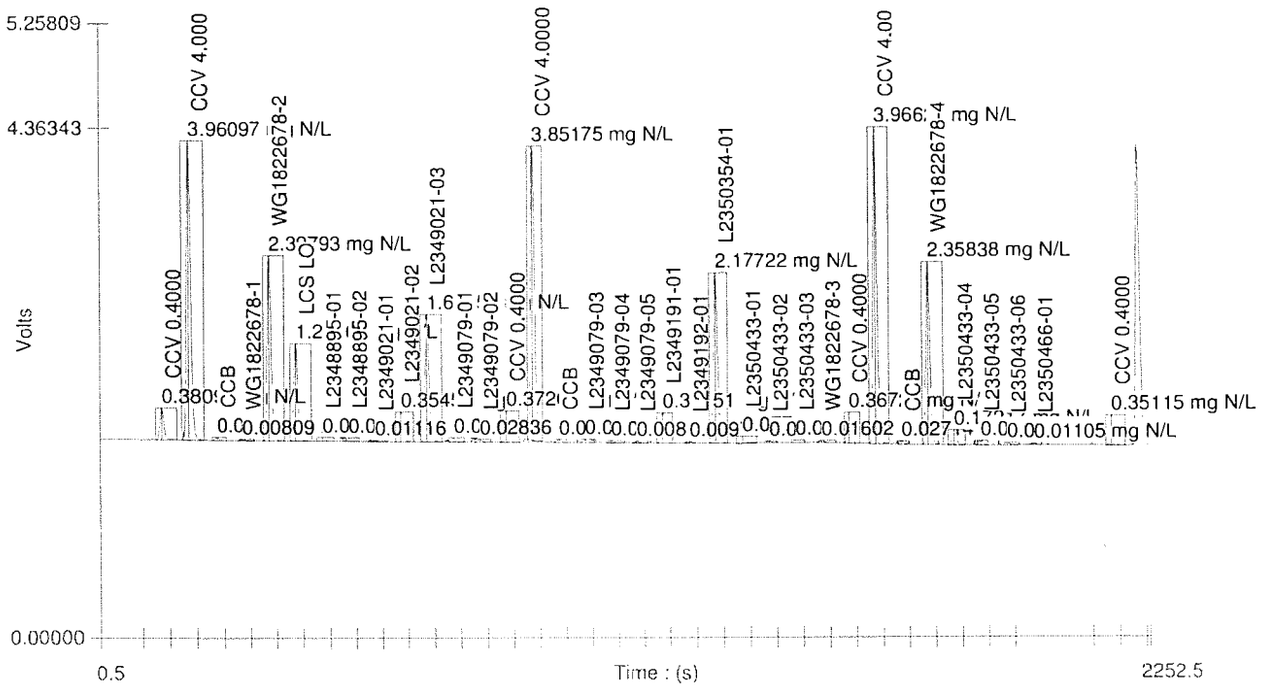
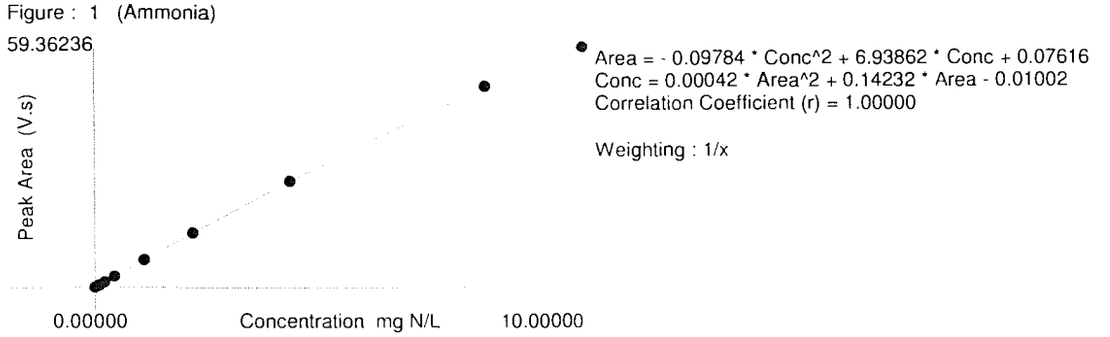


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.36236	5.55508	0.0	0.5	9.90865	9/6/2023	12:05:23 PM
2	8.00000	1	49.71358	4.79559	0.0	-0.8	8.09633	9/6/2023	12:06:19 PM
3	4.00000	1	26.31706	2.65409	0.0	-0.2	4.02437	9/6/2023	12:07:17 PM
4	2.00000	1	13.50171	1.38088	0.0	0.4	1.98759	9/6/2023	12:08:14 PM
5	1.00000	1	6.88425	0.70148	0.0	0.5	0.98951	9/6/2023	12:09:11 PM
6	0.40000	1	2.79960	0.28160	0.0	1.3	0.39168	9/6/2023	12:10:10 PM
7	0.20000	1	1.47380	0.14823	0.0	-0.9	0.20063	9/6/2023	12:11:08 PM
8	0.10000	1	0.77433	0.07842	0.0	-0.7	0.10043	9/6/2023	12:12:07 PM
9	0.05000	1	0.40747	0.04029	0.0	3.6	0.04804	9/6/2023	12:13:04 PM
10	0.00000	1	0.09161	0.00868			0.00302	9/6/2023	12:14:01 PM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Original Run Filename: OM_9-6-2023_03-22-57PM.OMN Created: 9/6/2023 3:22:57 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-6-2023_03-22-57PM.OMN Last Modified: 9/6/2023 4:02:51 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY C

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.36847				
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCV 4.0000	1	S3	3.85120				
		Known Conc:		100.00000				
	CCB	1	S10	0.03631				
		Known Conc:		100.00000				
	WG1822829-1	1	1	0.01018		1.50		
X	WG1822829-2	1	2	16.60975		7.50		RERUN
	LCS LO	1	3	1.67216		1.50		
	L2347456-01	1	4	0.07536		1.50		
	L2347476-01	1	5	0.02200		1.50		
	L2347476-02	1	6	0.00653		1.50		
	L2347476-03	1	7	0.18006		1.50		
	L2347478-01	1	8	0.01553		1.50		
	L2347743-01	1	9	0.01296		1.50		
	L2347743-02	1	10	0.03163		1.50		
	CCV 0.4000	1	S6	0.36709				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.87526				
		Known Conc:		100.00000				
	CCB	1	S10	0.03437				
		Known Conc:		100.00000				
	L2347743-03	1	11	0.01479		1.50		
	L2347743-04	1	12	0.04146		1.50		
	L2347743-05	1	13	0.02123		1.50		
	L2347743-06	1	14	0.06976		1.50		
	L2347743-07	1	15	0.01810		1.50		
	L2348861-01	1	16	0.00900		1.50		
	L2349150-01	1	17	0.03888		3.00		
	L2349152-01	1	18	1.42350		7.50		
	L2349220-01	1	19	3.74278		1.50		
	L2349261-01	1	20	0.08614		1.50		
	CCV 0.4000	1	S6	0.40952				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.90797				
		Known Conc:		100.00000				
	CCB	1	S10	0.04306				
		Known Conc:		100.00000				
	WG1822829-4	1	21	3.49288		1.50		
	WG1822829-3	1	22	0.08238		1.50		
	L2349261-02	1	23	0.03485		1.50		
	L2349261-03	1	24	0.05262		1.50		
	L2349261-04	1	25	0.25023		15.00		
	WG1822829-2	1	2	17.58388		7.50		88%
	CCV 0.4000	1	S6	0.37935				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.85177				
		Known Conc:		100.00000				
	CCB	1	S10	0.04495				
		Known Conc:		100.00000				

Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Channel 2 (Ammonia High) - Current View

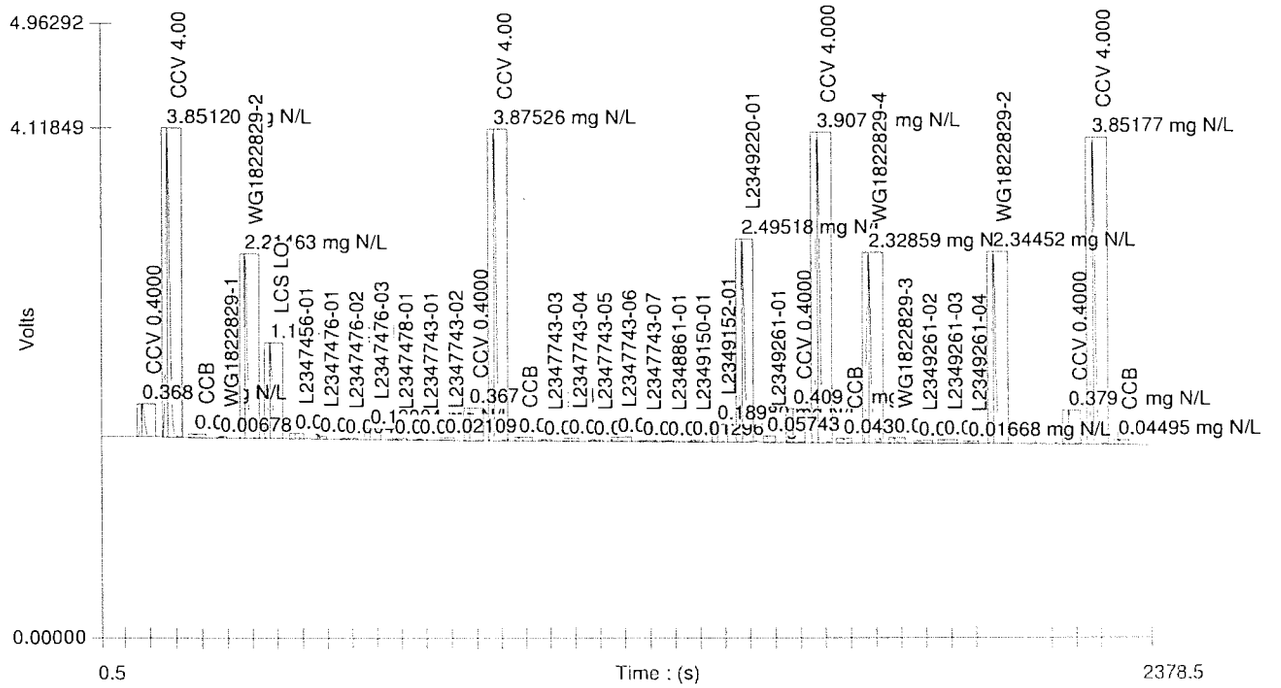
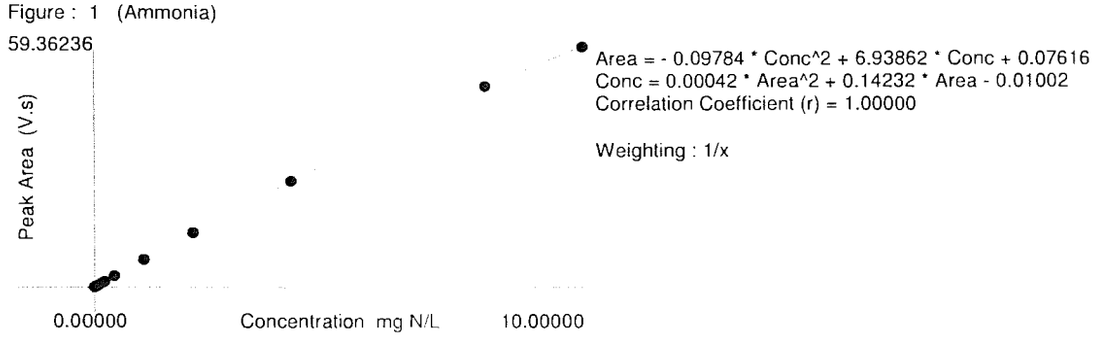


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.36236	5.55508	0.0	0.5	9.90865	9/6/2023	12:05:23 PM
2	8.00000	1	49.71358	4.79559	0.0	-0.8	8.09633	9/6/2023	12:06:19 PM
3	4.00000	1	26.31706	2.65409	0.0	-0.2	4.02437	9/6/2023	12:07:17 PM
4	2.00000	1	13.50171	1.38088	0.0	0.4	1.98759	9/6/2023	12:08:14 PM
5	1.00000	1	6.88425	0.70148	0.0	0.5	0.98951	9/6/2023	12:09:11 PM
6	0.40000	1	2.79960	0.28160	0.0	1.3	0.39168	9/6/2023	12:10:10 PM
7	0.20000	1	1.47380	0.14823	0.0	-0.9	0.20063	9/6/2023	12:11:08 PM
8	0.10000	1	0.77433	0.07842	0.0	-0.7	0.10043	9/6/2023	12:12:07 PM
9	0.05000	1	0.40747	0.04029	0.0	3.6	0.04804	9/6/2023	12:13:04 PM
10	0.00000	1	0.09161	0.00868			0.00302	9/6/2023	12:14:01 PM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Original Run Filename: OM_9-6-2023_05-05-35PM.OMN Created: 9/6/2023 5:05:35 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-6-2023_05-05-35PM.OMN Last Modified: 9/6/2023 5:42:18 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.36722			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.83185			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.02040			
	Known Conc:		100.00000			
WG1823843-1 T; BLK 9/5	1	1	0.00380			
WG1823843-2 T; HI LCS; 5X	1	2	39.51275		15.00	
LO LCS T	1	3	3.68392		3.00	
L2347180-06 T	1	4	0.46069		3.00	
L2350008-01 T	1	5	2.54571		3.00	
~~L2350014-01 T~~	~~1~~	~~6~~	~~33.61792~~		~~3.00~~	
~~L2350044-01 T~~	~~1~~	~~7~~	~~3.16163~~		~~3.00~~	
L2350045-01 T	1	8	28.29793		3.00	
L2350046-01 T	1	9	22.29834		3.00	
L2349918-01 T	1	10	19.06815		60.00	
CCV 0.4000	1	S6	0.40705			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.85048			
	Known Conc:		100.00000			
CCB	1	S10	0.04366			
	Known Conc:		100.00000			
L2350050-01 T	1	11	0.97443		3.00	
L2350047-01 T	1	12	5.51566		15.00	
L2350049-01 T	1	13	11.24777		15.00	
L2350269-03 T	1	14	0.17314		3.00	
L2350269-04 T	1	15	0.26820		3.00	
WG1823843-4 T; 50269.4 MS	1	16	6.80540		3.00	
WG1823843-3 T; 50269.4 DUP	1	17	0.33902		3.00	
L2350269-05 T	1	18	0.16811		3.00	
L2350015-01 T	1	19	0.65410		3.00	
L2350011-01 T	1	20	1.53947		60.00	
CCV 0.4000	1	S6	0.37348			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.82286			
	Known Conc:		100.00000			
CCB	1	S10	0.03115			
	Known Conc:		100.00000			
L2350014-01 T; 10X	1	21	38.56371		30.00	
L2350044-01 T	1	22	2.33768		3.00	
CCV 0.4000	1	S6	0.36925			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.81210			
	Known Conc:		100.00000			
CCB	1	S10	0.03097			
	Known Conc:		100.00000			

Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Channel 2 (Ammonia High) - Current View

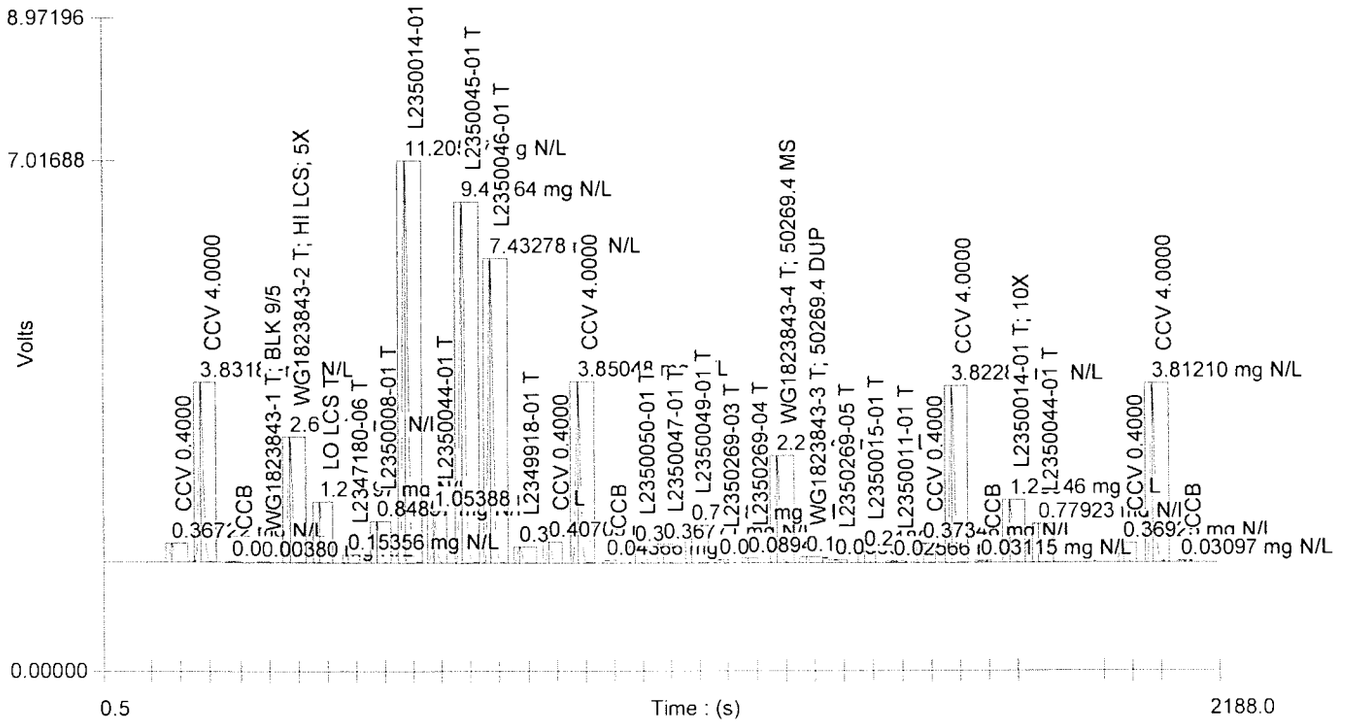
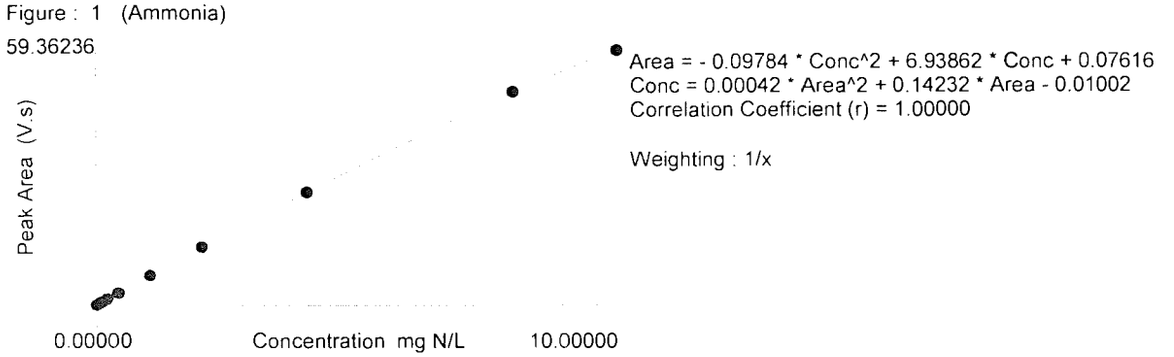


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.36236	5.55508	0.0	0.5	9.90865	9/6/2023	12:05:23 PM
2	8.00000	1	49.71358	4.79559	0.0	-0.8	8.09633	9/6/2023	12:06:19 PM
3	4.00000	1	26.31706	2.65409	0.0	-0.2	4.02437	9/6/2023	12:07:17 PM
4	2.00000	1	13.50171	1.38088	0.0	0.4	1.98759	9/6/2023	12:08:14 PM
5	1.00000	1	6.88425	0.70148	0.0	0.5	0.98951	9/6/2023	12:09:11 PM
6	0.40000	1	2.79960	0.28160	0.0	1.3	0.39168	9/6/2023	12:10:10 PM
7	0.20000	1	1.47380	0.14823	0.0	-0.9	0.20063	9/6/2023	12:11:08 PM
8	0.10000	1	0.77433	0.07842	0.0	-0.7	0.10043	9/6/2023	12:12:07 PM
9	0.05000	1	0.40747	0.04029	0.0	3.6	0.04804	9/6/2023	12:13:04 PM
10	0.00000	1	0.09161	0.00868			0.00302	9/6/2023	12:14:01 PM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT Date : 9/6/2023

Original Run Filename: OM_9-6-2023_05-47-00PM.OMN Created: 9/6/2023 5:47:00 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-6-2023_05-47-00PM.OMN Last Modified: 9/6/2023 6:27:19 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

E

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.37051			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.81525			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.03113			
	Known Conc:		100.00000			
WG1823132-1 T; BLK 9/2	1	1	0.00045			98%
WG1823132-2 T; HI LCS; 5X	1	2	39.21162		15.00	
LO LCS T	1	3	3.72317		3.00	93%
L2350433-01 T	1	4	0.46539		6.00	
L2350433-02 T	1	5	0.10266		3.00	
L2350433-03 T	1	6	0.29816		3.00	
L2350433-04 T	1	7	0.18892		3.00	
L2350433-05 T	1	8	0.02801		3.00	
L2350433-06 T	1	9	0.01578		3.00	
L2349302-04 T	1	10	0.31006		3.00	
CCV 0.4000	1	S6	0.37304			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.76908			
	Known Conc:		100.00000			
CCB	1	S10	0.03028			
	Known Conc:		100.00000			
L2349302-03 T	1	11	2.01335		6.00	
L2349302-02 T	1	12	0.93135		3.00	
L2349302-01 T	1	13	0.56336		3.00	
L2350658-01 T	1	14	0.04444		3.00	
L2350658-02 T	1	15	0.07274		3.00	NC
WG1823132-3 T; 50658.2 DUP	1	16	0.04412		3.00	
WG1823132-4 T; 50658.2 MS	1	17	6.49544		3.00	81%
L2350658-03 T	1	18	0.23019		3.00	
WG1823132-5 T; 50658.3 MS	1	19	5.62590		3.00	70%
L2350658-04 T	1	20	0.46948		6.00	
CCV 0.4000	1	S6	0.37517			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.78195			
	Known Conc:		100.00000			
CCB	1	S10	0.03229			
	Known Conc:		100.00000			
L2350658-05 T	1	21	0.04092		3.00	
L2350658-06 T	1	22	0.15345		6.00	
L2350658-07 T	1	23	0.02700		3.00	
L2350658-08 T	1	24	0.02864		3.00	
L2350658-09 T	1	25	0.02404		3.00	
L2350658-10 T	1	26	0.04447		3.00	
CCV 0.4000	1	S6	0.39433			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.79118			
	Known Conc:		100.00000			
CCB	1	S10	0.03230			
	Known Conc:		100.00000			

Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Channel 2 (Ammonia High) - Current View

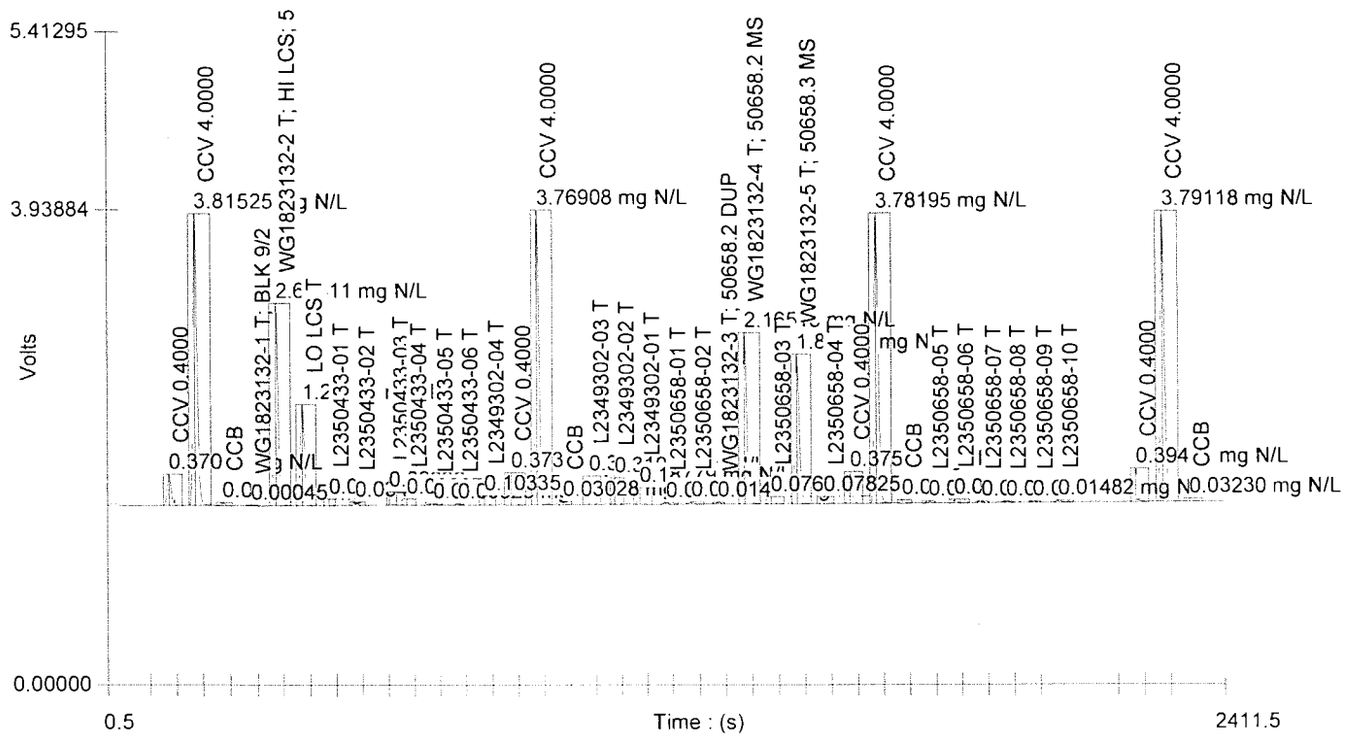
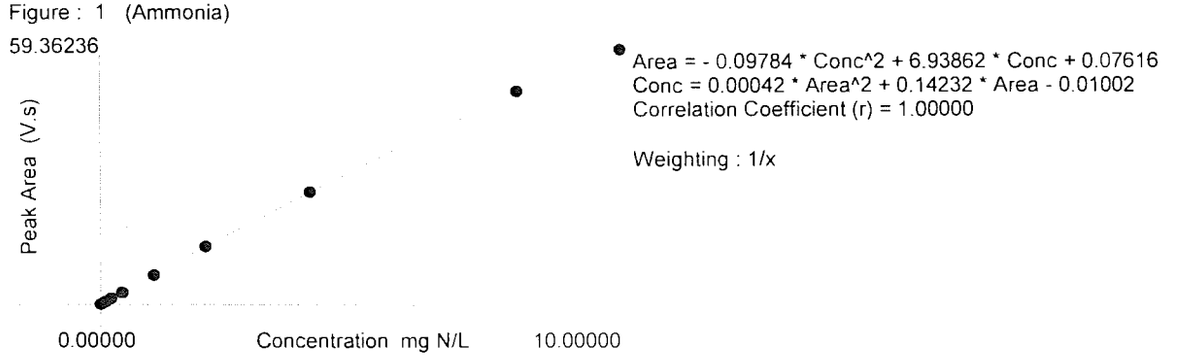


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.36236	5.55508	0.0	0.5	9.90865	9/6/2023	12:05:23 PM
2	8.00000	1	49.71358	4.79559	0.0	-0.8	8.09633	9/6/2023	12:06:19 PM
3	4.00000	1	26.31706	2.65409	0.0	-0.2	4.02437	9/6/2023	12:07:17 PM
4	2.00000	1	13.50171	1.38088	0.0	0.4	1.98759	9/6/2023	12:08:14 PM
5	1.00000	1	6.88425	0.70148	0.0	0.5	0.98951	9/6/2023	12:09:11 PM
6	0.40000	1	2.79960	0.28160	0.0	1.3	0.39168	9/6/2023	12:10:10 PM
7	0.20000	1	1.47380	0.14823	0.0	-0.9	0.20063	9/6/2023	12:11:08 PM
8	0.10000	1	0.77433	0.07842	0.0	-0.7	0.10043	9/6/2023	12:12:07 PM
9	0.05000	1	0.40747	0.04029	0.0	3.6	0.04804	9/6/2023	12:13:04 PM
10	0.00000	1	0.09161	0.00868			0.00302	9/6/2023	12:14:01 PM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT Date : 9/6/2023

Original Run Filename: OM_9-6-2023_07-10-33PM.OMN Created: 9/6/2023 7:10:33 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-6-2023_07-10-33PM.OMN Last Modified: 9/6/2023 7:37:42 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.36532			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.66034			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.02035			
	Known Conc:		100.00000			
WG1822996-1; BLK 9/1	1	1	-0.00333		1.50	
WG1822996-2; HI LCS; 5X	1	2	19.71444		7.50	
LO LCS	1	3	1.90367		1.50	
L2349644-02	1	4	0.06597		1.50	
WG1822996-4; 49644.2 MS	1	5	3.40112		1.50	
WG1822996-3; 49644.2 DUP	1	6	0.09385		1.50	
L2349302-01	1	7	0.06603		1.50	
L2349302-02	1	8	0.58593		1.50	
L2349302-03	1	9	1.66109		3.00	
L2349302-04	1	10	0.01903		1.50	
CCV 0.4000	1	S6	0.38357			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.72758			
	Known Conc:		100.00000			
CCB	1	S10	0.02628			
	Known Conc:		100.00000			
L2349020-07	1	11	0.01045		1.50	
L2349020-08	1	12	0.04033		1.50	
L2349020-09	1	13	-0.13188		1.50	
L2350583-01	1	14	0.01373		1.50	
L2350583-02	1	15	0.01397		3.00	
CCV 0.4000	1	S6	0.38503			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.62498			
	Known Conc:		100.00000			
CCB	1	S10	0.02103			
	Known Conc:		100.00000			

Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Channel 2 (Ammonia High) - Current View

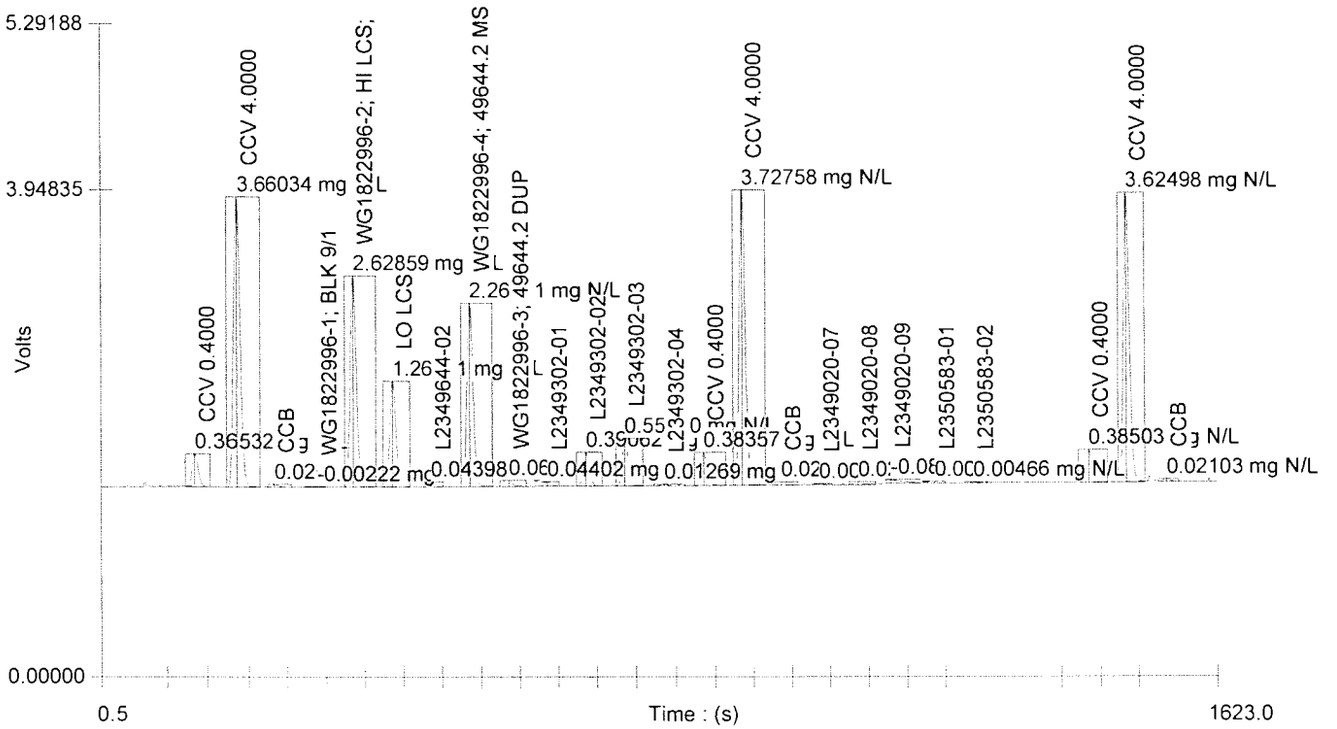
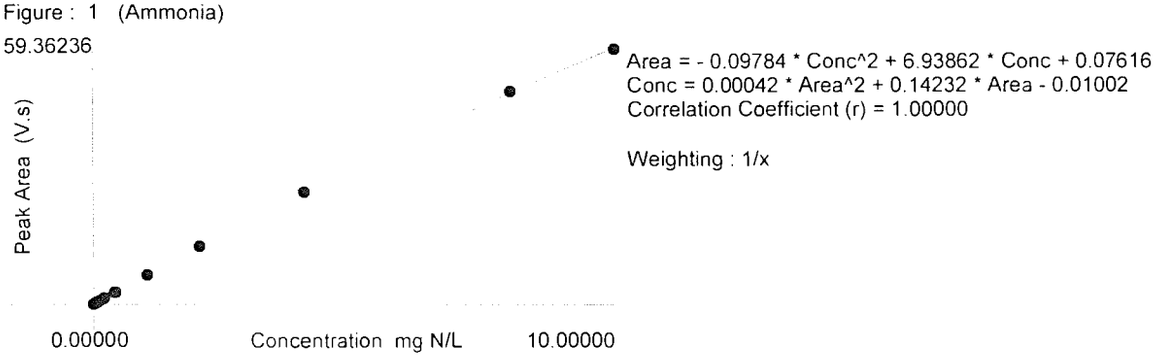


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.36236	5.55508	0.0	0.5	9.90865	9/6/2023	12:05:23 PM
2	8.00000	1	49.71358	4.79559	0.0	-0.8	8.09633	9/6/2023	12:06:19 PM
3	4.00000	1	26.31706	2.65409	0.0	-0.2	4.02437	9/6/2023	12:07:17 PM
4	2.00000	1	13.50171	1.38088	0.0	0.4	1.98759	9/6/2023	12:08:14 PM
5	1.00000	1	6.88425	0.70148	0.0	0.5	0.98951	9/6/2023	12:09:11 PM
6	0.40000	1	2.79960	0.28160	0.0	1.3	0.39168	9/6/2023	12:10:10 PM
7	0.20000	1	1.47380	0.14823	0.0	-0.9	0.20063	9/6/2023	12:11:08 PM
8	0.10000	1	0.77433	0.07842	0.0	-0.7	0.10043	9/6/2023	12:12:07 PM
9	0.05000	1	0.40747	0.04029	0.0	3.6	0.04804	9/6/2023	12:13:04 PM
10	0.00000	1	0.09161	0.00868			0.00302	9/6/2023	12:14:01 PM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

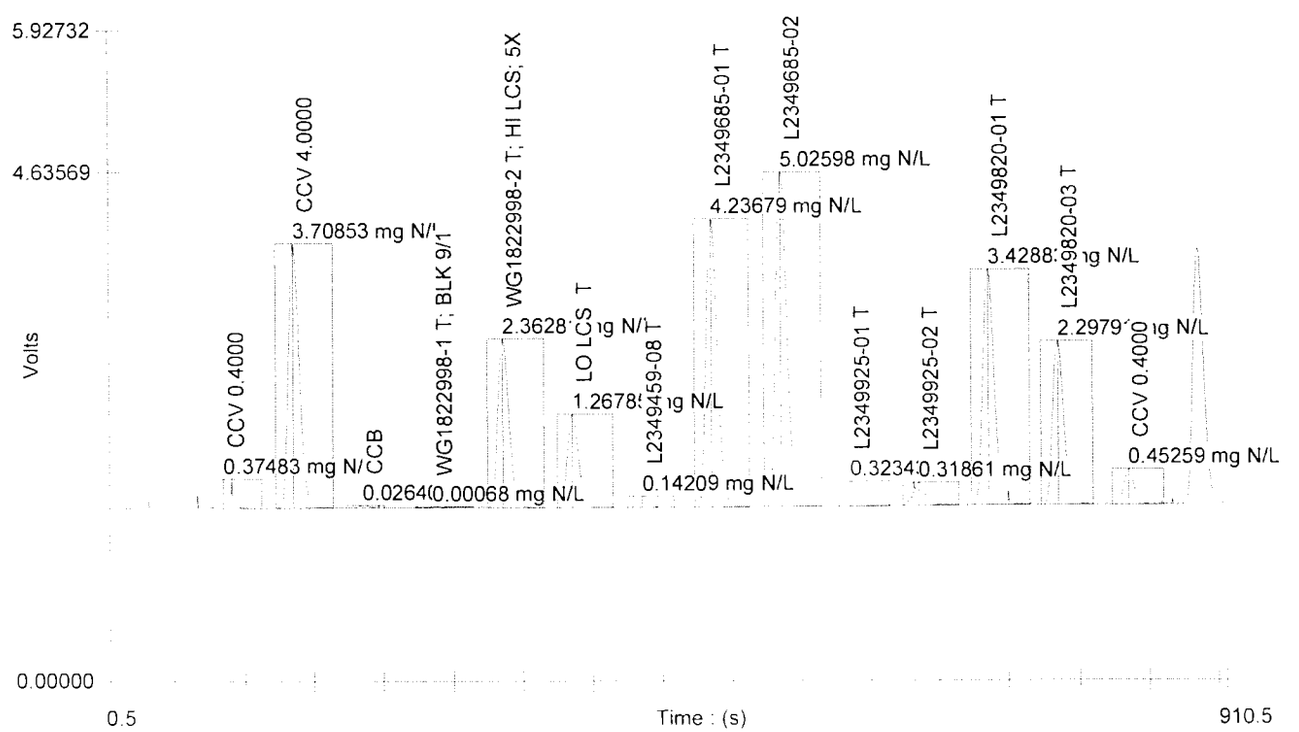
Original Run Filename: OM_9-6-2023_07-38-56PM.OMN Created: 9/6/2023 7:38:56 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-6-2023_07-38-56PM.OMN Last Modified: 9/6/2023 7:54:29 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

G

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.37483 ✓			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCV 4.0000	1	S3	3.70853 ✓			
	Known Conc:		100.00000			
CCB	1	S10	0.02640 ✓			
	Known Conc:		100.00000			
WG1822998-1 T; BLK 9/1	1	1	0.00068			
WG1822998-2 T; HI LCS; 5X	1	2	35.44216		15.00	8g/.
LO LCS T	1	3	3.80354		3.00	9<%
L2349459-08 T	1	4	0.42628		3.00	
L2349685-01 T	1	5	12.71036		3.00	
L2349685-02 T	1	6	15.07794		3.00	
L2349925-01 T	1	7	0.97028		3.00	
L2349925-02 T	1	8	0.95584		3.00	
L2349820-01 T	1	9	10.28650		3.00	
L2349820-03 T	1	10	6.89374		3.00	
CCV 0.4000	1	S6	0.45259			
	Known Conc:		100.00000			

reinject - OK

Channel 2 (Ammonia High) - Current View



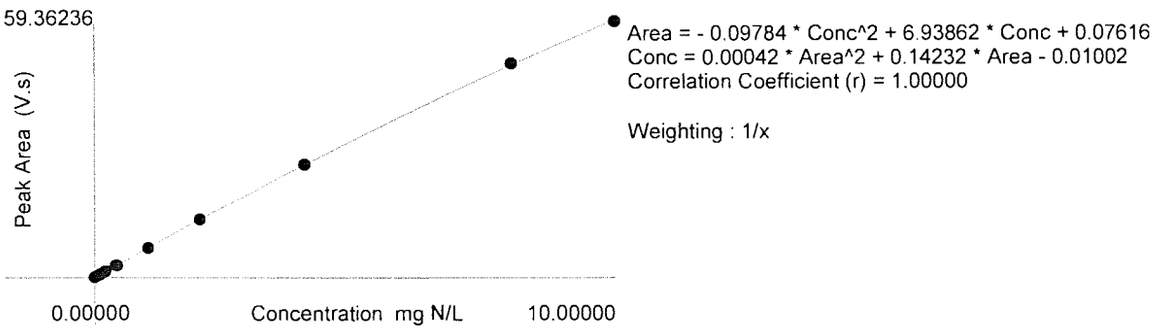
Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.36236	5.55508	0.0	0.5	9.90865	9/6/2023	12:05:23 PM
2	8.00000	1	49.71358	4.79559	0.0	-0.8	8.09633	9/6/2023	12:06:19 PM
3	4.00000	1	26.31706	2.65409	0.0	-0.2	4.02437	9/6/2023	12:07:17 PM
4	2.00000	1	13.50171	1.38088	0.0	0.4	1.98759	9/6/2023	12:08:14 PM
5	1.00000	1	6.88425	0.70148	0.0	0.5	0.98951	9/6/2023	12:09:11 PM
6	0.40000	1	2.79960	0.28160	0.0	1.3	0.39168	9/6/2023	12:10:10 PM
7	0.20000	1	1.47380	0.14823	0.0	-0.9	0.20063	9/6/2023	12:11:08 PM
8	0.10000	1	0.77433	0.07842	0.0	-0.7	0.10043	9/6/2023	12:12:07 PM
9	0.05000	1	0.40747	0.04029	0.0	3.6	0.04804	9/6/2023	12:13:04 PM
10	0.00000	1	0.09161	0.00868			0.00302	9/6/2023	12:14:01 PM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT Date : 9/6/2023

Original Run Filename: OM_9-6-2023_07-55-28PM.OMN Created: 9/6/2023 7:55:28 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-6-2023_07-55-28PM.OMN Last Modified: 9/6/2023 8:20:47 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

G2

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.37883			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.59606	90%		
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.03095			
	Known Conc:		100.00000			
L2349931-01 T	1	11	4.42820		3.00	
L2350670-01 T	1	12	15.41523		3.00	
L2350749-01 T	1	13	30.03569		3.00	
L2350749-02 T	1	14	1.91106		3.00	
L2349733-01 T	1	15	0.68005		3.00	
L2349733-02 T	1	16	0.46452		3.00	
L2349733-03 T	1	17	0.50131		3.00	
L2349733-04 T	1	18	0.41203		3.00	77%
WG1822998-4 T; 49733.4 MS	1	19	6.59893		3.00	39% (EFFLY)
WG1822998-3 T; 49733.4 DUP	1	20	0.61268		3.00	
CCV 0.4000	1	S6	0.38421			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.73853			
	Known Conc:		100.00000			
CCB	1	S10	0.04066			
	Known Conc:		100.00000			
L2349020-09	1	21	0.02380		1.50	
L2350749-01 T; 10X	1	22	32.57689		30.00	
L2350749-02 T	1	23	1.14891		3.00	
CCV 0.4000	1	S6	0.36667			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.74464			
	Known Conc:		100.00000			
CCB	1	S10	0.03611			
	Known Conc:		100.00000			

← Tray F

Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Channel 2 (Ammonia High) - Current View

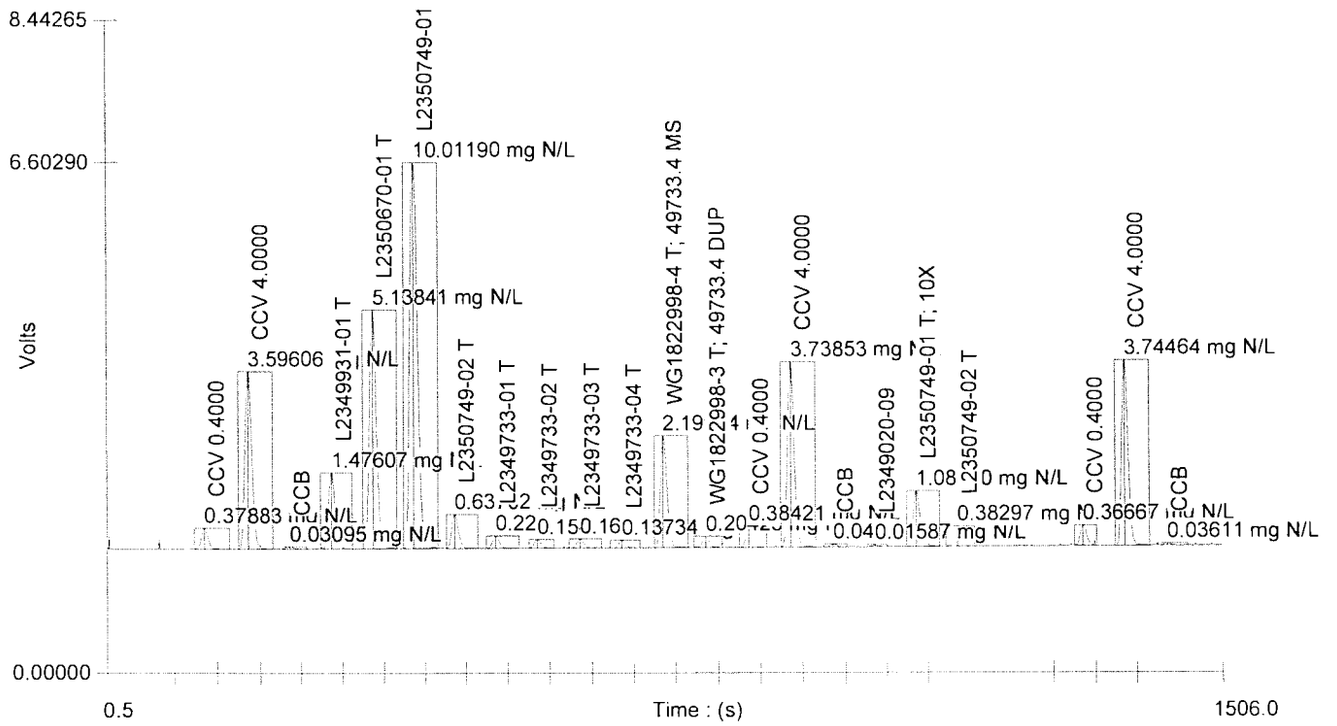
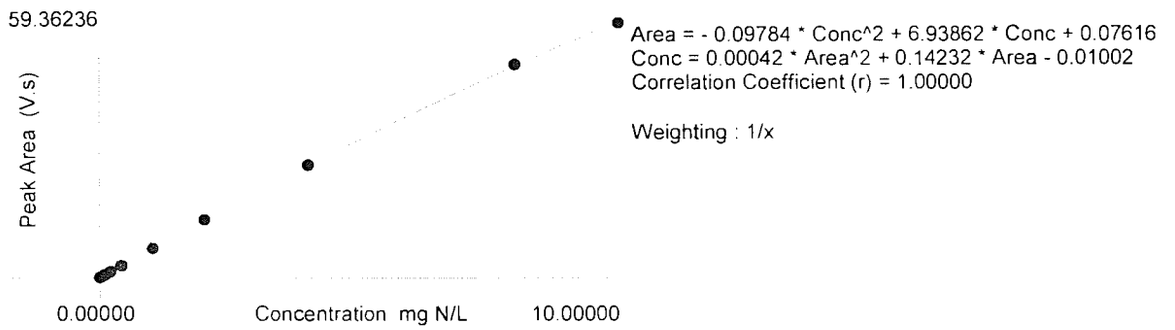


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.36236	5.55508	0.0	0.5	9.90865	9/6/2023	12:05:23 PM
2	8.00000	1	49.71358	4.79559	0.0	-0.8	8.09633	9/6/2023	12:06:19 PM
3	4.00000	1	26.31706	2.65409	0.0	-0.2	4.02437	9/6/2023	12:07:17 PM
4	2.00000	1	13.50171	1.38088	0.0	0.4	1.98759	9/6/2023	12:08:14 PM
5	1.00000	1	6.88425	0.70148	0.0	0.5	0.98951	9/6/2023	12:09:11 PM
6	0.40000	1	2.79960	0.28160	0.0	1.3	0.39168	9/6/2023	12:10:10 PM
7	0.20000	1	1.47380	0.14823	0.0	-0.9	0.20063	9/6/2023	12:11:08 PM
8	0.10000	1	0.77433	0.07842	0.0	-0.7	0.10043	9/6/2023	12:12:07 PM
9	0.05000	1	0.40747	0.04029	0.0	3.6	0.04804	9/6/2023	12:13:04 PM
10	0.00000	1	0.09161	0.00868			0.00302	9/6/2023	12:14:01 PM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Original Run Filename: OM_9-6-2023_08-21-35PM.OMN Created: 9/6/2023 8:21:35 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-6-2023_08-21-35PM.OMN Last Modified: 9/6/2023 8:49:39 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
CCV 0.4000	1	S6	0.36494				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.71806				
	Known Conc:		100.00000				
CCB	1	S10	0.03546				
	Known Conc:		100.00000				
WG1823324-1; BLK 9/3	1	1	0.01503		1.50		94%
WG1823324-2; HI LCS; 5X	1	2	18.84583		7.50		
LO LCS	1	3	1.66641		1.50		84%
	Calibration:		Table/Fig. : 1				
L2350670-01	1	4	6.92522		15.00		
L2350749-01	1	5	26.15155		15.00		
L2350749-02	1	6	0.15249		1.50		
L2350658-01	1	7	-0.00235		1.50		
L2350658-02	1	8	0.01981		1.50		80%
WG1823324-4; 50658.2 MS	1	9	3.21274		1.50		
WG1823324-3; 50658.2 DUP	1	10	0.04956		1.50		MC
CCV 0.4000	1	S6	0.37637				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.72252				
	Known Conc:		100.00000				
CCB	1	S10	0.03837				
	Known Conc:		100.00000				
L2350658-03	1	11	0.01067		1.50		
WG1823324-5; 50658.3 MS	1	12	3.23405		1.50		
L2350658-04	1	13	0.08321		3.00		
L2350658-05	1	14	-0.04445		1.50		
L2350658-06	1	15	0.00291		3.00		
L2350658-07	1	16	-0.00665		1.50		
L2350658-08	1	17	0.03504		1.50		
L2350658-09	1	18	-0.00015		1.50		
L2350658-10	1	19	-0.07697		1.50		reinject. - ref rep (negative peak again)
L2349459-02	1	20	0.00172		1.50		
CCV 0.4000	1	S6	0.35260				
	Known Conc:		100.00000				

reinject - OK

H

Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Channel 2 (Ammonia High) - Current View

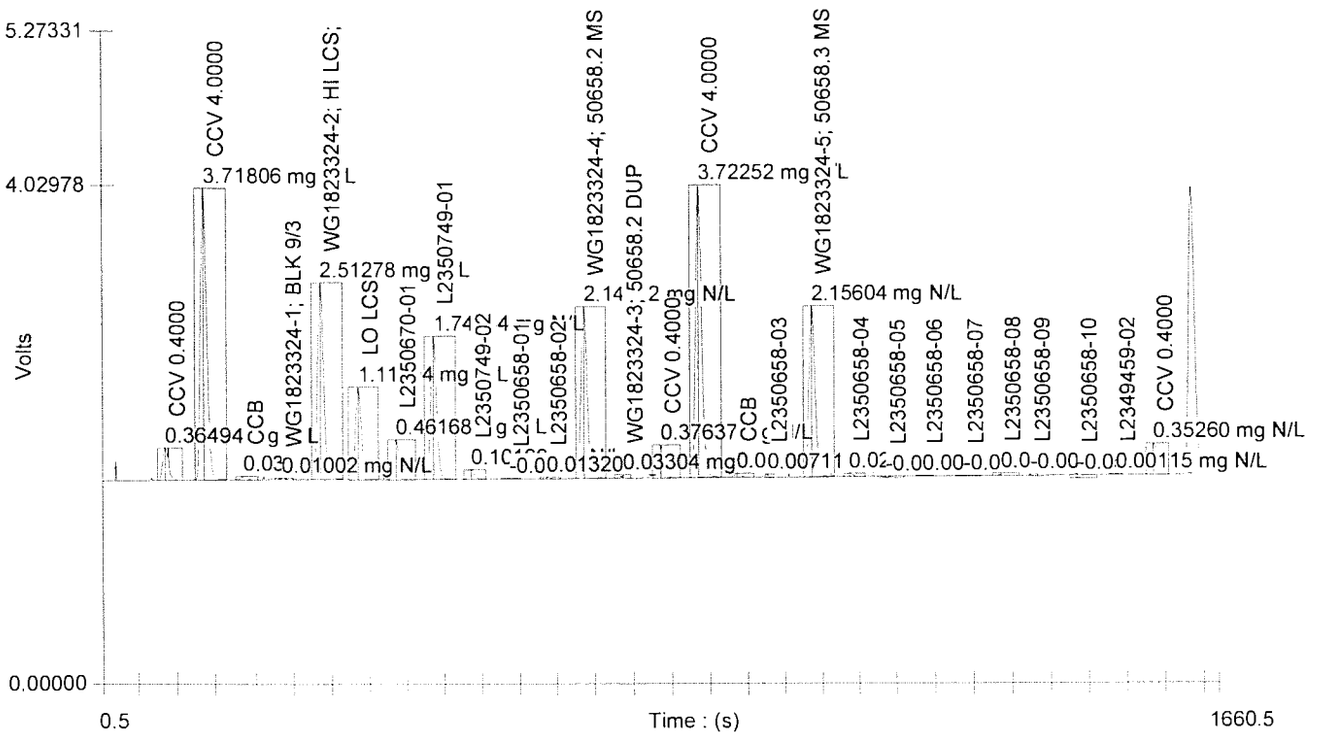
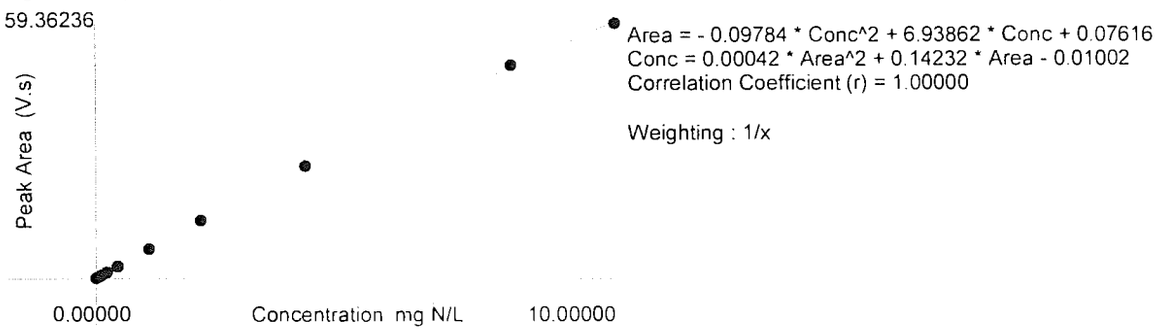


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.36236	5.55508	0.0	0.5	9.90865	9/6/2023	12:05:23 PM
2	8.00000	1	49.71358	4.79559	0.0	-0.8	8.09633	9/6/2023	12:06:19 PM
3	4.00000	1	26.31706	2.65409	0.0	-0.2	4.02437	9/6/2023	12:07:17 PM
4	2.00000	1	13.50171	1.38088	0.0	0.4	1.98759	9/6/2023	12:08:14 PM
5	1.00000	1	6.88425	0.70148	0.0	0.5	0.98951	9/6/2023	12:09:11 PM
6	0.40000	1	2.79960	0.28160	0.0	1.3	0.39168	9/6/2023	12:10:10 PM
7	0.20000	1	1.47380	0.14823	0.0	-0.9	0.20063	9/6/2023	12:11:08 PM
8	0.10000	1	0.77433	0.07842	0.0	-0.7	0.10043	9/6/2023	12:12:07 PM
9	0.05000	1	0.40747	0.04029	0.0	3.6	0.04804	9/6/2023	12:13:04 PM
10	0.00000	1	0.09161	0.00868			0.00302	9/6/2023	12:14:01 PM

Figure : 1 (Ammonia)

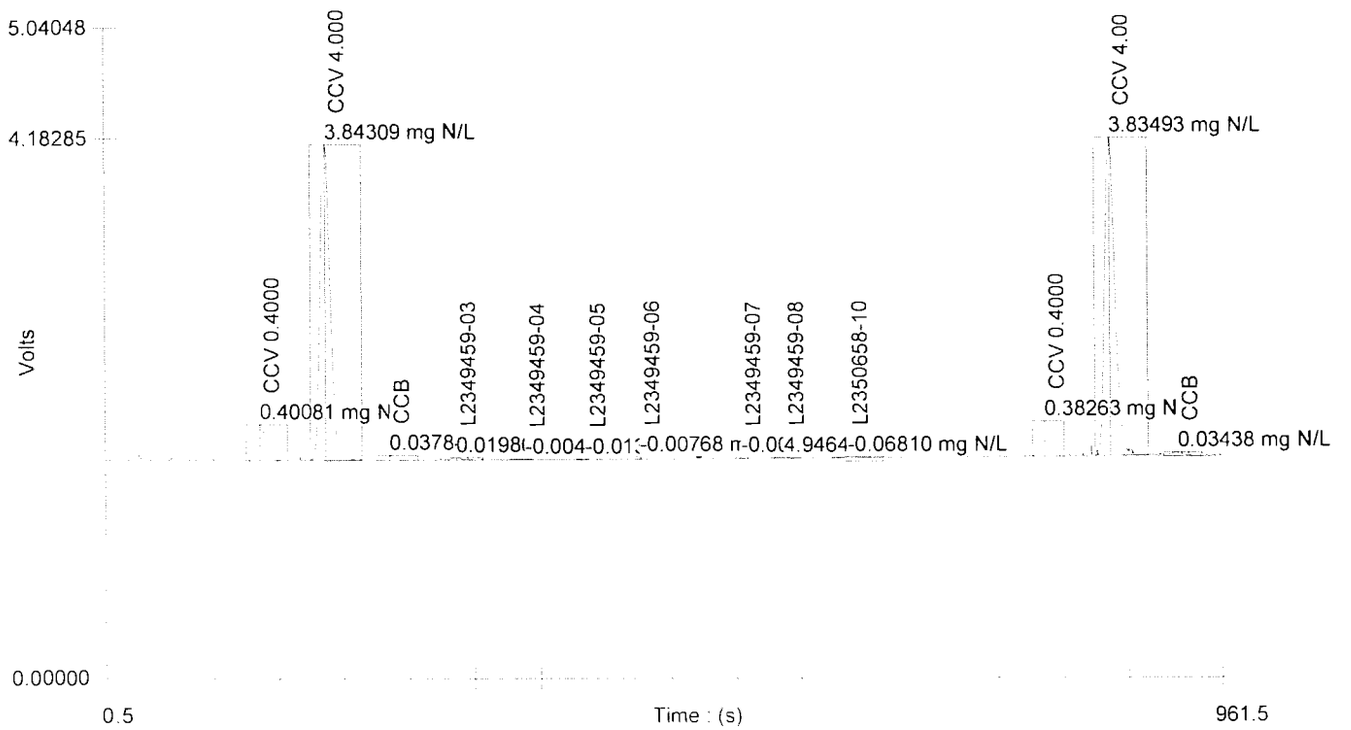


Author: A1WETCHEMINSTRUMENT Date : 9/6/2023

Original Run Filename: OM_9-6-2023_08-51-38PM.OMN Created: 9/6/2023 8:51:38 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-6-2023_08-51-38PM.OMN Last Modified: 9/6/2023 9:08:28 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.40081			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.84309			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.03784			
	Known Conc:		100.00000			
L2349459-03	1	21	0.02979		1.50	
L2349459-04	1	22	-0.00720		1.50	
L2349459-05	1	23	-0.02094		1.50	
L2349459-06	1	24	-0.01152		1.50	
L2349459-07	1	25	-0.01164		1.50	
L2349459-08	1	26	7.41972e-5		1.50	
L2350658-10	1	27	-0.10214		1.50	
CCV 0.4000	1	S6	0.38263			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.83493			
	Known Conc:		100.00000			
CCB	1	S10	0.03438			
	Known Conc:		100.00000			

Channel 2 (Ammonia High) - Current View



- 1 -

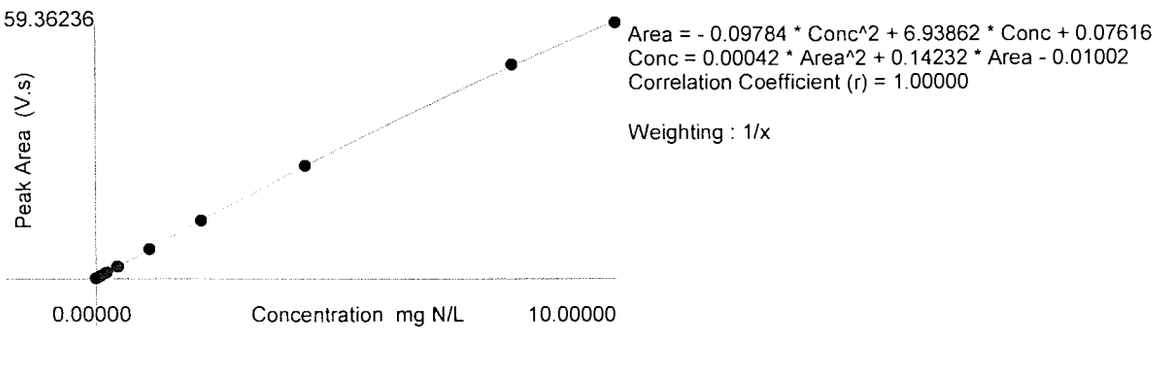
Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.36236	5.55508	0.0	0.5	9.90865	9/6/2023	12:05:23 PM
2	8.00000	1	49.71358	4.79559	0.0	-0.8	8.09633	9/6/2023	12:06:19 PM
3	4.00000	1	26.31706	2.65409	0.0	-0.2	4.02437	9/6/2023	12:07:17 PM
4	2.00000	1	13.50171	1.38088	0.0	0.4	1.98759	9/6/2023	12:08:14 PM
5	1.00000	1	6.88425	0.70148	0.0	0.5	0.98951	9/6/2023	12:09:11 PM
6	0.40000	1	2.79960	0.28160	0.0	1.3	0.39168	9/6/2023	12:10:10 PM
7	0.20000	1	1.47380	0.14823	0.0	-0.9	0.20063	9/6/2023	12:11:08 PM
8	0.10000	1	0.77433	0.07842	0.0	-0.7	0.10043	9/6/2023	12:12:07 PM
9	0.05000	1	0.40747	0.04029	0.0	3.6	0.04804	9/6/2023	12:13:04 PM
10	0.00000	1	0.09161	0.00868			0.00302	9/6/2023	12:14:01 PM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT Date : 9/6/2023

Original Run Filename: OM_9-6-2023_09-17-35PM.OMN Created: 9/6/2023 9:17:35 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-6-2023_09-17-35PM.OMN Last Modified: 9/6/2023 9:58:22 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.40633			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.84466			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.03415			
	Known Conc:		100.00000			
WG1823762-1; BLK 9/5 SOIL	1	1	-0.05013		150.00	1.20120 g
WG1823762-2; HI LCS SOIL; 5X	1	2	1507.31604		750.00	1.20220 g
LO LCS SOIL	1	3	139.55060		150.00	1.20400 g
~~L2347901-01; 10X~~	1	4	52.62980		1500.00	1.20410 g
~~WG1823762-4; 47901.1 MS~~; 10X	1	5	294.64523		1500.00	1.20330 g
~~WG1823762-3; 47901.1 DUP~~; 10X	1	6	18.30957		1500.00	1.20290 g
L2349484-01	1	7	34.36090		150.00	1.20440 g
L2349484-02	1	8	21.22028		150.00	1.20110 g
L2349484-03	1	9	34.14526		150.00	1.20170 g
L2349484-04	1	10	41.71518		150.00	1.20840 g
CCV 0.4000	1	S6	0.40446			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.89666			
	Known Conc:		100.00000			
CCB	1	S10	0.04518			
	Known Conc:		100.00000			
L2349484-05	1	11	41.25636		150.00	1.20050 g
L2349484-06	1	12	31.80811		150.00	1.20620 g
L2349484-07	1	13	35.39931		150.00	1.20470 g
L2349484-08	1	14	13.71984		150.00	1.20560 g
L2349484-09	1	15	26.70224		150.00	1.20850 g
L2349484-10	1	16	39.80739		150.00	1.20160 g
L2349484-11	1	17	35.00530		150.00	1.20130 g
L2349484-12	1	18	31.10861		150.00	1.20150 g
L2349484-13	1	19	9.26427		150.00	1.20430 g
L2349484-14	1	20	29.28617		150.00	1.20140 g
CCV 0.4000	1	S6	0.40423			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.86476			
	Known Conc:		100.00000			
CCB	1	S10	0.03400			
	Known Conc:		100.00000			
L2349484-15	1	21	25.14993		150.00	1.20190 g
L2349484-16	1	22	26.04418		150.00	1.20800 g
L2349484-17	1	23	18.77509		150.00	1.20110 g
L2349484-18	1	24	18.36749		150.00	1.20310 g
L2347901-01	1	25	7.44722		150.00	1.20410 g
WG1823762-4; 47901.1 MS	1	26	265.98605		150.00	1.20330 g
WG1823762-3; 47901.1 DUP	1	27	16.22272		150.00	1.20290 g
CCV 0.4000	1	S6	0.39723			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.83377			
	Known Conc:		100.00000			
CCB	1	S10	0.03588			
	Known Conc:		100.00000			

I

LCS=166 mg/kg
10 LCS =166 mg/kg
MS=532 mg/kg

91%
84%
80%
NC(<5+RL)

Author: A1WETCHEMINSTRUMENT

Date : 9/6/2023

Channel 2 (Ammonia High) - Current View

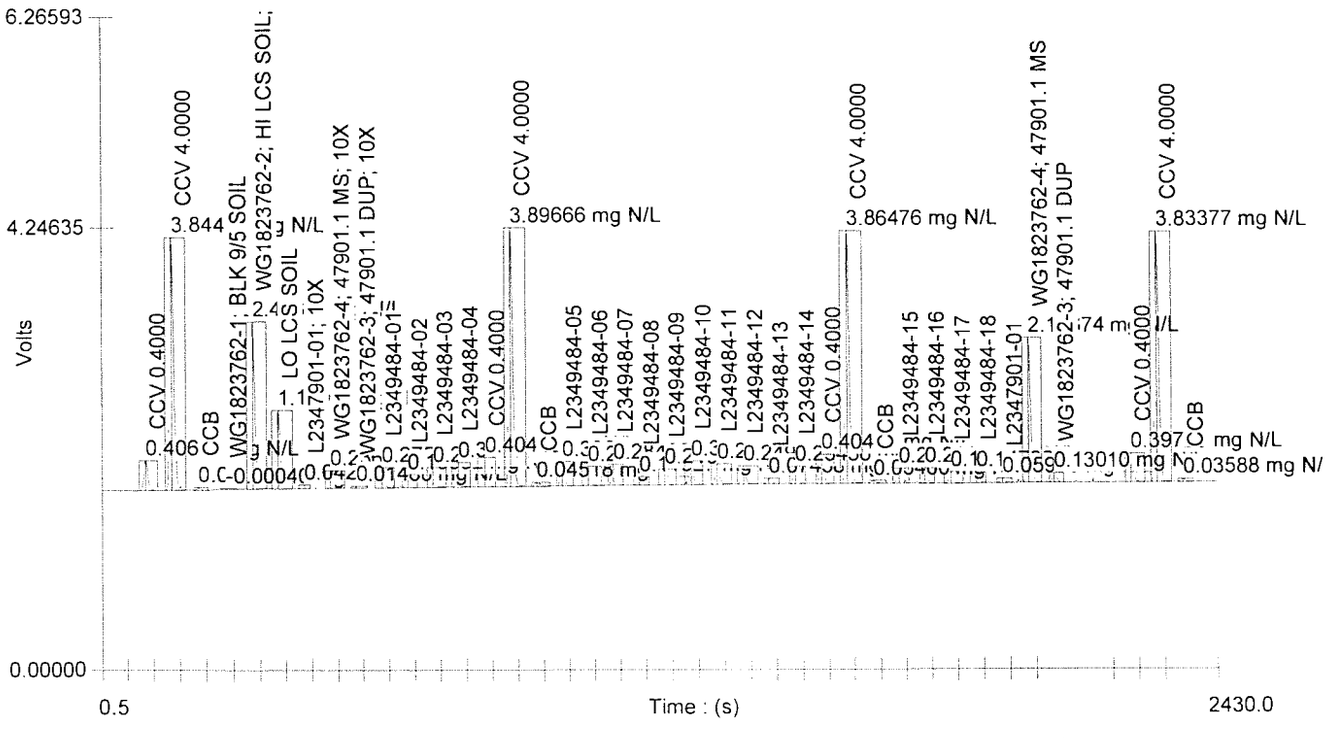
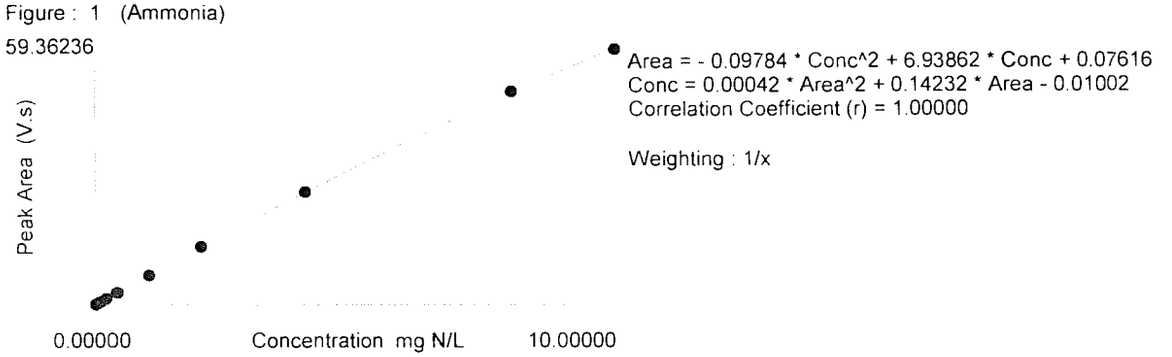


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	59.36236	5.55508	0.0	0.5	9.90865	9/6/2023	12:05:23 PM
2	8.00000	1	49.71358	4.79559	0.0	-0.8	8.09633	9/6/2023	12:06:19 PM
3	4.00000	1	26.31706	2.65409	0.0	-0.2	4.02437	9/6/2023	12:07:17 PM
4	2.00000	1	13.50171	1.38088	0.0	0.4	1.98759	9/6/2023	12:08:14 PM
5	1.00000	1	6.88425	0.70148	0.0	0.5	0.98951	9/6/2023	12:09:11 PM
6	0.40000	1	2.79960	0.28160	0.0	1.3	0.39168	9/6/2023	12:10:10 PM
7	0.20000	1	1.47380	0.14823	0.0	-0.9	0.20063	9/6/2023	12:11:08 PM
8	0.10000	1	0.77433	0.07842	0.0	-0.7	0.10043	9/6/2023	12:12:07 PM
9	0.05000	1	0.40747	0.04029	0.0	3.6	0.04804	9/6/2023	12:13:04 PM
10	0.00000	1	0.09161	0.00868			0.00302	9/6/2023	12:14:01 PM

Figure : 1 (Ammonia)



Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-4D	**Matrix**	: WATER
Lab Sample ID	: L2350269-04		
Matrix Spike	: WG1823843-4	**MS Analysis Date**	: 09/06/23 17:27
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Total Kjeldahl	0.268J	8	6.80	85					77-111	24

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-2S	**Matrix**	: WATER
Lab Sample ID	: L2350269-02		
Matrix Spike	: WG1823844-4	**MS Analysis Date**	: 09/08/23 12:54
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Total Kjeldahl	0.301	8	7.92	95					77-111	24

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-6D	**Matrix**	: WATER
Lab Sample ID	: L2350269-06		
Matrix Spike	: WG1825392-4	**MS Analysis Date**	: 09/11/23 10:32
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Total Kjeldahl	1.39	8	10.5	114	Q					77-111	24

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: L2350549-01		
Matrix Spike	: WG1826711-4	**MS Analysis Date**	: 09/13/23 13:18
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Total Kjeldahl	0.294J	8	7.65	96					77-111	24

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-4D	**Matrix**	: WATER
Lab Sample ID	: L2350269-04	**Analysis Date**	: 09/06/23 17:26
Dup Sample ID	: WG1823843-3	**DUP Analysis Date**	: 09/06/23 17:28

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Total Kjeldahl	0.268J	0.339	NC	24

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-2S	**Matrix**	: WATER
Lab Sample ID	: L2350269-02	**Analysis Date**	: 09/08/23 12:55
Dup Sample ID	: WG1823844-3	**DUP Analysis Date**	: 09/08/23 12:54

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Total Kjeldahl	0.301	0.316	5	24

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-6D	**Matrix**	: WATER
Lab Sample ID	: L2350269-06	**Analysis Date**	: 09/11/23 10:34
Dup Sample ID	: WG1825392-3	**DUP Analysis Date**	: 09/11/23 10:33

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Total Kjeldahl	1.39	1.57	12	24

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 09/13/23 13:17
Dup Sample ID	: WG1826711-3	**DUP Analysis Date**	: 09/13/23 13:19

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Total Kjeldahl	0.294J	0.390	NC	24

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1823843-2	**LCS Analysis Date**	: 09/06/23 17:11
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Nitrogen, Total Kjeldahl	**40.0**	**39.5**	**99.**					**78-122**	**24**

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1823844-2	**LCS Analysis Date**	: 09/08/23 12:36
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Total Kjeldahl	40.0	40.1	100.					78-122	24

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1825392-2	**LCS Analysis Date**	: 09/11/23 10:30
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Total Kjeldahl	40.0	39.5	99.					78-122	24

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1826711-2	**LCS Analysis Date**	: 09/13/23 13:14
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Nitrogen, Total Kjeldahl	**40.0**	**41.6**	**104.**					**78-122**	**24**

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Nitrogen, Total Kjeldahl	NONE	0.3	0.066	mg/l	78-122		77-111	24	24	4500NH3-H	28 days	1 - Plastic 500ml H2SO4 preserved
Nitrogen, Total Kjeldahl	NONE	0.3	0.066	mg/l	78-122		77-111	24	24	351.1	28 days	1 - Plastic 500ml H2SO4 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11468-1
Page: 1

WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Nitrogen, Total Kjeldahl	NONE	150	31.5	mg/kg	81-115	26	43-160	26	26	4500NH3-H	28 days	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of Nitrogen in TKN

Aqueous samples:

Compute sample TKN –N concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

If the sample has a concentration of less than 2ppm, calculate results by using the low curve generated on Channel 1.

If the sample concentration is greater than 2ppm, calculate the results by using the high curve generated on Channel 2.

To Compute the final results for aqueous samples, multiply the direct reading by the dilution factor based on the initial preparation volume. (also done using software)

TKN-N mg/L = mg/L direct reading x dilution factor

Sequence Logs

Project No. _____

ntial Book No. _____ TITLE NH3 9/6/23 KEP

ge No. ____

y A (12-02-48PM, 01-02-47PM)
p 9/5/23 @ 23:23

Hi ICV 8.0
Lo ICV 1.0
ICB
WG1823887-1. Blk
-2; LCS Hi; 5x
LCS Lo
48527-01
48704-03 (10x) ⊗; 10x
49514-01 ⊗
-04
-07
-10
-13
-16
-19
-22
-25
-28
-31
49580-01
-01 MS
-01 Dup
49918-01

Tray B (02-44-30PM)
prep 9/1/23 @ 9:34

1 WG1822678-1. Blk
2 -2; LCS Hi; 5x
3 LCS Lo
4 48895-01 (10x)
5 -02 (2x)
6 49021-01
7 -02
8 -03
9 49079-01
10 -02
11 -03 (2x)
12 -04
13 -05
14 49191-01 (10x)
15 49192-01 (2x)
16 50354-01 (2x)
17 50433-01
18 -02
19 -03
20 -03 Dup
21 -03 MS
22 -04
23 -05
24 -06
25 50466-01 (10x)

KEP

Date: 9/6/23
Sodium Phenolate: 9/5/23 R-3947
Sodium Hypochlorate: 9/5/23 stop+stop
Sodium Nitropruisside: 9/5/23 ~~R-3957~~ R-3699
Borric Acid Soln.: 9/5/23 R-3939
ICV 1.0: 8/30/23 WC-3293
ICV 8.0:
Cal. Std: 9/6/23 WC-3294
See Front Page for Instructions:

To Page No. ____

ed & Understood by me, | Date | Invented by: | Date

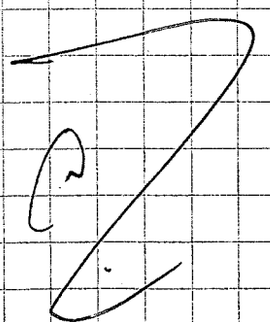
Recorded by:

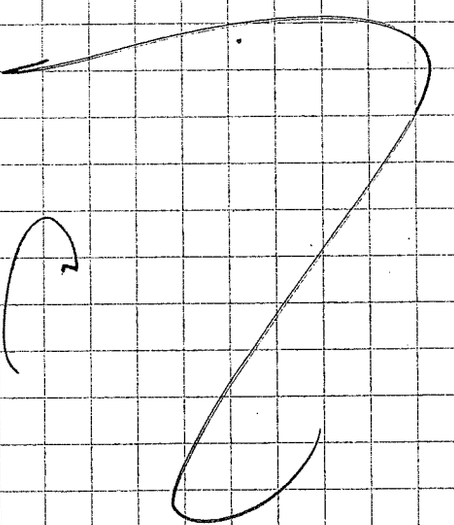
TITLE NH3 9/6/23 KEP cont. Project No. Book No. Cont

From Page No.

Tray C (03-22-57PM)
prep 9/1/23 @15:25

1	WG1822829-1, Blk	1	WG1823843-1 T. Blk 9/5
2	-2, LCS Hi; 5x	2	WG1823843-2 T. Hi 9/5
3	LCS Lo	3	WG T
4	47456-01	4	47180.6 T
5	47476-01	5	50008.1 T
6	-02	X 6	50014.1 T -10 T
7	-03	X 7	50044.1 T
8	47478-01	8	50045.1 T
9	47743-01	9	50046.1 T
10	-02	10	49918.1 T (20x)
11	-03	11	50050.1 T
12	-04	12	50047.1 T (5x)
13	-05	13	50049.1 T (1x)
14	-06	14	50269.3 T
15	-07	15	-4 T
16	48861-01	16	WG1823843-4 T - 50269.4 MS
17	49150-01 (2x)	17	WG1823843-3 T - 50269.4 Dup
18	49152-01 (5x)	18	50269.5 T
19	49220-01	19	50015.1 T
20	49261-01	20	50011.1 T (20x)
21	-01 MS		
22	-01 Dup		
23	-02		
24	-03		
25	-04		





To Page

Witnessed & Understood by me,	Date	Invented by:	Dat
		Recorded by:	

tg: E (0547.00pm)
yp 9/23 @ 0744

WC-1823132-1 T: Blue 9/23
WC-1823132-2 T; Hi vis T yp
6 wks T
50433.1 T (2σ)
.2 T
.3 T
.4 T
.5 T
.6 T
49302.4 T
.3 T (2σ)
.2 T
.1 T
50658.1 T
.2 T
WC-1823132-3 T; 50658.2 ng
WC-1823132-4 T; 50658.2 ms
50658.3 T
WC-1823132-5 T; 50658.3 ms
50658.4 T (2σ)
.5 T
.6 T (2σ)
.7 T
.8 T
.9 T
.10 T

tg: F (0710-33pm)
yp 9/23 @ 2124

1 WC-1822996-1; Blue 9/23
2 WC-1822996-2; Hi vis T yp
3 6 wks
4 49644.2
5 WC-1822996-4; 49644.2 ms
6 WC-1822996-3; 49644.2 ng
7 49302.1
8 .2
9 .3 (2σ)
10 .4
11 49020.7
12 .8
X 13 .9 - Tg G
14 50585.1
15 .2 (2T)

To Page No. ____

#3 tgt. G (07-56 PM)
P-p 9/12/13 C2057

1 wu182998-1 T- Bkg 9/1
2 wu182998-2 T- H-wg-Tx
3 bwg T
4 49439.8 T
5 49645.1 T
6 .2 T
7 49925.1 T
8 .2 T
9 49820.1 T
10 .3 T
11 49931.1 T
12 50670.1 T
13 50749.1 T -10 t
14 .2 t
15 49733.1 T
16 .2 T
17 .3 T
18 .4 T
19 wu182998-4 T- 49733.4 mg
20 wu182998-3 T- 49733.4 bp
21 49020.9 - T y F

07-55-28 pm

#1 tgt. H (08-21-35 PM)
P-p 9/3/13 C0740

1 wu182324-1 Bkg 9/3
2 wu182324-2 Hi wg-Tx
3 bwg
4 50670.1 (10 t)
5 50749.1 (10 t)
6 .2
7 50658.1
8 .2
9 wu182324-4 50658.2 mg
10 wu182324-3 50658.2 bp
11 50658.3
12 wu182324-5 50658.5 mg
13 50658.4 (2 t)
14 .5
15 .6 (2 t)
16 .7
17 .8
18 .9
19 .10
20 4949.2
21 .3
22 .4
23 .5
24 .6
25 .7
26 .8

08-51-58 pm

Witnessed & Understood by me,	Date	Invented by:	Da
		Recorded by:	

NH3 9/6/23 (1st Cont).

Project No. _____

Book No. _____ TITLE _____

e No. ____

9/5/23 (09-17-35 PM)
9/5/23 9655

1	wh-823762-1 ; 3m 915 soil	(1.2012)	
2	wh-823762-2 . 11 ws soil	(1.2022)	
3	4 ws soil	(1.2040)	
4	47901.1 -10 +	(1.2041)	(w/ +
5	wh-823762-4 ; 47901.1 ws -10 +	(1.2033)	
6	wh-823762-3 ; 47901.1 ws -10 -	(1.2029)	
7	49-84 . 1	(1.2044)	
8	. 2	(1.2011)	
9	. 3	(1.2017)	
10	. 4	(1.2014)	
11	. 5	(1.2005)	
12	. 6	(1.2062)	
13	. 7	(1.2047)	
14	. 8	(1.2056)	
15	. 9	(1.2065)	
16	. 10	(1.2016)	
17	. 11	(1.2013)	
18	. 12	(1.2015)	
19	. 13	(1.2043)	
20	. 14	(1.2014)	
21	. 15	(1.2019)	
22	. 16	(1.2060)	
23	. 17	(1.2011)	
24	. 18	(1.2031)	

To Page No. ____

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Tray A (07-29-21AM, 07-56-48AM)
prep 9/7/23 21:29

1	Hi ICV 8.0	
2	Lo ICV 1.0	
3	ICB	
4	WG182483G-1; Blk	
5	-2; LCS Hi; 5x	
6	LCS Lo	
7	49077	-01
x 8		-02 MS ⊗; 10x
x 9		-02 Dup ⊗; 10x
x 10		-02 ~~MS~~ MSP 9/8 ⊗; 10x
11		-03
x 12		-04 ⊗; 20x
x 13		-05 ⊗
14		-06
15	50658	-10
16	50911	-01

Date: 9/8/23
Sodium Phenolate: 9/5/23 R-3947
Sodium Hypochlorate: 9/5/23 Stop'n'shop
Sodium Nitropruisside: 9/5/23 R-3629
Borric Acid Soln.: 9/5/23 R-3939
ICV 1.0: 9/6/23 WC-3293
ICV 8.0:
Cal. Std: 9/6/23 WC-3294
See Front Page for Instructions:

KEP

Tray B (08-54-18AM)
prep 9/7/23 C21:21

1	WG182484G-1T; Blk	
2		-2T; LCS Hi; 5x
3	LCS LOT	
4	49041-01T (2x)	
5	49956-06T	
6		-07T MS
6		-07T Dup
8		-07T
9		-08T
10		-09T
11		-11T
12	50069	-01T
13		-02T
14		-03T (2x)
15	50250	-08T

KEP

Tray C (10-48-39AM)
prep 9/7/23 C21:36

1	WG182484D-1D; Blk	
2		-2D; LCS Hi; 5x
3	LCS Lo D	
4	49733	-01D
5		-02D MS (2x)
6		-02D Dup (2x)
7		-02D (2x)
8		-03D
9		-04D

KEP

To Page No. ____

Witnessed & Understood by me, | Date | Invented by: | Date
Recorded by:

From Page No.

Tray D (11-09-38AM)
prep 9/8/23 @ 9:11

1	WG1824941-1; Blk		
2		-2; LCS Hi; 5x	
3	LCS LO		
4	49931	-01	
5	49934	-01 (5x)	
6	49946	-01	
7		-02	
8		-03	
9		-04	
10	49968	-01	
11		-02	
12		-03	MS
13		-03	Dup
14		-03	
15		-04	
16		-05	
17		-06	
18		-07	
19	50946	-01	
20		-02	
21		-03	
22		-04	
23		-06	
24	52006	-01	
25		-02 (2x)	

KEP

Tray E (11-51-42AM, 12-10-47 PM)
prep 9/7/23 @ 21:44

1	WG1824842-1; Blk		
2		-2; LCS Hi; 5x	
3	LCS LO		
4	49925	-01	
5		-02 (2x)	
6	49956	-01	
7		-02	
8		-03	
x 9		-04 ⊗	; 10x
x 10		-05 ⊗	
11		-06	
12		-07	
13		-07	
14		-07	
15		-08	

KEP

To Page No.

Witnessed & Understood by me,	Date	Invented by:	Date
		Recorded by:	

From Page No. ___

Try F (12-31-10PM)
prep 9/5/23 @22:11

1 WG1823844-1T, Blk
2 -2T, LCS Hi; 5x
3 LCS LOT
4 50192-01T
5 50195-01T
6 50198-01T
7 50225-01T
8 02T
9 03T
10 04T
11 05T
12 06T
13 50226-01T
14 02T
15 03T
16 04T
17 50269-01T
18 02T NS
19 02T Dup
20 02T

VEP

VEP

To Page No. ___

Witnessed & Understood by me,	Date	Invented by:	Date
		Recorded by:	

From Page No.

Tray A (07-57-07AM)
prep 9/8/23 @9:26

1	Hi ICV 8.0	
2	Lo ICV 1.0	
3	ICB	
4	WG1824942-1T. Blk	
5	(4945)-2T; LCS Hi; 5x	
6	LCS Lo T	
7	50250-09T	MS
8	-09T	Dup
9	-09T	
10	-10T	
11	-11T	
12	50946-01T	
13	-02T	
14	-03T	
15	-04T	
16	-06T	
17	50441-01T	
18	50967-01T	
19	-02T	

Date: 9/11/23
Sodium Phenolate: 9/5/23 R-3947
Sodium Hypochlorate 9/5/23 stop+shop
Sodium Nitropruisside: 9/5/23 R-3679
Borric Acid Soln.: 9/5/23 R-3939
ICV 1.0: 9/6/23 WC-3293
ICV 8.0:
Cal. Std: 9/6/23 WC-3294
See Front Page for Instructions:

KEP

Tray B (08-45-10AM)
prep 9/8/23 @22:24

1	WG1825382-1. Blk	
2	-2; LCS Hi; 5x	
3	LCS Lo	
4	47249-01	
5	9/11 49942-07	
6	-01	
x 7	-02	MS @ 5x
x 8	-02	Dup @ 5x
x 9	-02 @; 5x	
x 10	-03 @	
11	-04	
12	-05	
13	-06	
14	-09	

KEP

Tray C (09-16-18AM)
prep 9/8/23 @22:29

1	WG1825389-1. Blk	
2	-2; LCS Hi; 5x	
3	LCS Lo	
4	49956-09	MS
5	-09	Dup
6	-09	
7	-11	
8	50057-01	
9	-02	
10	-03	
11	-04	
12	-05	
x 13	50069-01 @	; 10x
x 14	-02 @	; 10x
15	-03 (10x)	

To Page No.

Witnessed & Understood by me,	Date	Invented by:	Date
		Recorded by:	

From Page No. ___

Tray D (10-25-10AM)
prep 9/8/23 @ 17:24

1	WG1825392-1	T. Blk
2		-2 T; LCS Hi; 5x
3	LCS Lo	T
4	47919	-01 T
5	50269	-06 T MS
6		-06 T Dup
7		-06 T
8		-07 T (2x)
9		-08 T
10		-09 T
11	50318	-01 T (5x)
12		-02 T
⊗13		-03 T ⊗; 5x
⊗14		-04 T (5x) ⊗
15		-05 T
16	51351	-01 T
17	51425	-01 T
18		-02 T
19	52006	-01 T
20		-02 T

KEP

Tray E
prep 9/9/23 @ 9:06

1	WG1825472-1	; Blk
2	(5473)	-2; LCS Hi; 5x
3	LCS Lo	
4	50250	-01
5		-02
6		-03
7		-04
8		-05
9		-06 (2x)
10		-07
11		-07 MS
12		-07 Dup
13		-08
14		-09
15		-10 (2x)
16	48618	-01
17		-02
18		-03
19	50250	-11
20	51249	-01
21		-01 MS
22		-01 Dup
23		-02 (5x)
24	51592	-01 (2x)
25		-02
26		-03
27		-04

To Page No. ___

Witnessed & Understood by me,	Date	Invented by:	Date
		Recorded by:	

From Page No. ____

Tray A (11-15-03AM)
prep 9/12/23 @ 21:30

1	Hi ICV 8.0
2	Lo ICV 1.0
3	ICB
4	WG826646-1, Blk
5	(6647)-2, LCS Hi, 5x
6	LCS Lo
7	50244-05
8	-06
9	-08
10	-09
11	-10
12	-11
13	-12
14	50362-01
15	-01 MS
16	-01 Dup
17	50365-01
18	KLP 9/13 ~~50~~ 52729-01 (50x)
19	50244-13
20	-14
21	-15
22	-16
23	-17
24	-18
25	-19
26	-20
27	50401-01
28	50820-01
29	-01 MS
30	-01 Dup

KLP

Tray B (01-10-04PM)
prep 9/12/23 @ 22:17

1	WG826711-1T, Blk
2	-2T, LCS Hi, 5x
3	LCS LOT
4	50269-01T
5	50549-01T
6	-01T MS
7	-01T Dup
8	50563-01T (20x)
9	50564-01T
10	50873-02T
11	50879-01T
12	50881-01T
13	50883-01T (10x)
14	50888-01T
15	51224-01T
16	51225-01T (10x)
17	51226-01T
18	51228-01T
19	51229-02T
20	51252-01T (2x)

Date: 9/13/23
Sodium Phenolate: 9/5/23 R-3947
Sodium Hypochlorate: 9/5/23 stop+shop
Sodium Nitropruisside: 9/5/23 R-3679
Borric Acid Soln.: 9/5/23 R-3939
ICV 1.0: 9/12/23 wc-3293
ICV 8.0:
Cal. Std: 9/6/23 wc-3294
See Front Page for Instructions:

KLP

To Page No. ____

Witnessed & Understood by me,	Date	Invented by:	Date
		Recorded by:	

Sample Preparation

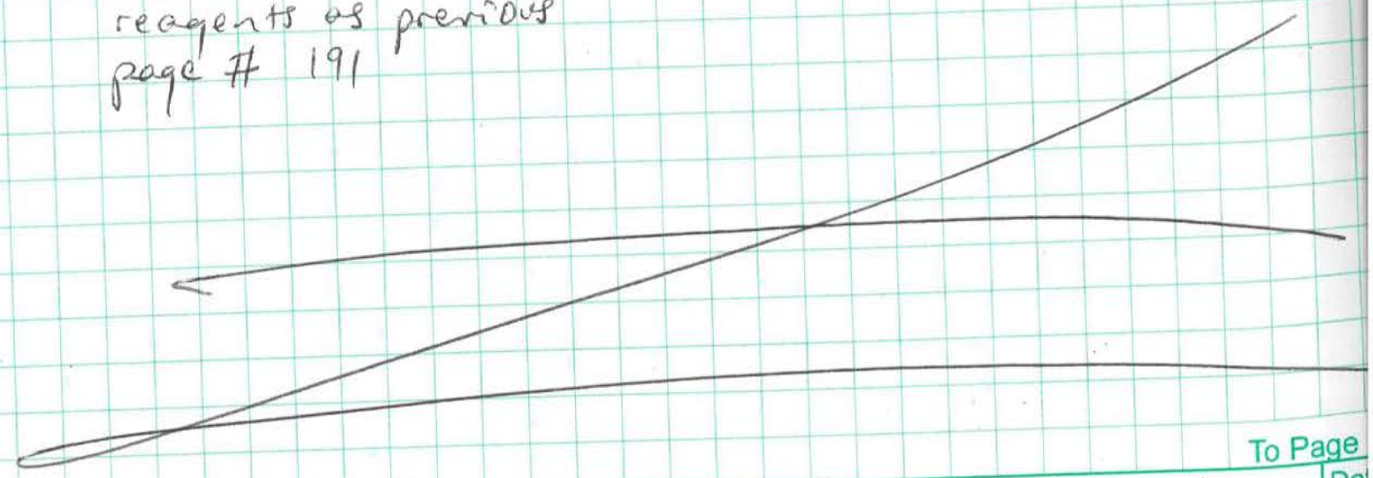
WG1825392 – 1 Mat:1
TKN – 4500
WG1825392 / BLANK

Sample	Volume	dilution	final vol
	50mL	1X	150mL
Blank			
Low			
High			
L2347919 – 01			
3502 69 – 06 PA			
– 06 DUP			
– 06 MS			
– 07			
– 08			
– 09			
0318 – 01			
– 02			
– 03			
– 04			
– 05			
1351 – 01			
1425 – 01			
– 02			
2006 – 01			
– 02			

2x (25↑50)
1X
|
5x (10↑50)
1X
|
5x (10↑50)
1X

Same standards as reagents as previous page # 191

09/08/23 @ 21:30 GTF



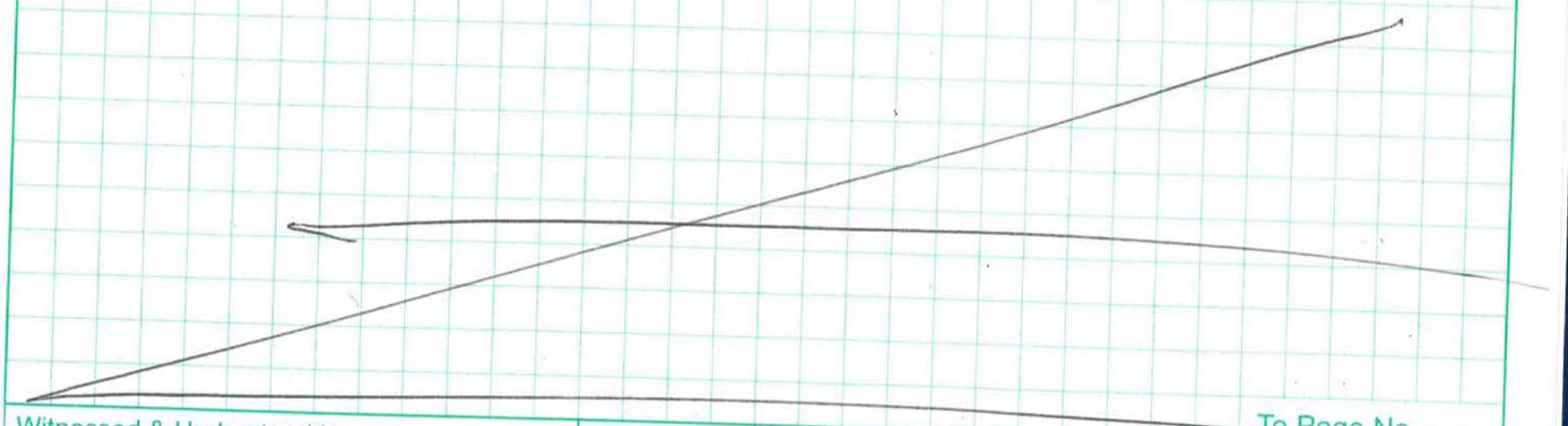
To Page

Wit
Witnessed & Understood by me,
Date
Invented by:
Da

WG1823844 – 1 Mat:1
TKN – 4500
WG1823844 / BLANK

Sample	Volume	Dilution	final vol
	50mL	1x	150mL
Blank			
Low			
High			
L2 35 01 92 – 01			
01 95 – 01			
01 98 – 01			
02 25 – 01			
– 02			
– 03			
– 04			
– 05			
– 06			
02 26 – 01			
– 02			
– 03			
– 04			
02 69 – 01			
– 02 PA			
– 02 DUP			
– 02 MS			

Same standards as reagents as page # 186 09/05/23 @ 22:11 CET



WG1823843 – 1 Mat:1
TKN – 4500
WG1823843 / BLANK

Sample	Volume	Dilution	final vol
	50mL	1X	150mL
Blank			
Low			
High			
L2347180 – 06			
9918 – 01		20x (2.5↑50)	
3500 08 – 01		1X	
0011 – 01		20x (2.5↑50)	
0014 – 01		1X	
0015 – 01			
0044 – 01			
0045 – 01			
0046 – 01			
0047 – 01		5x (10↑50)	
0049 – 01			
0050 – 01		1X	
0269 – 03			
– 04 PA			
– 04 Dup			
– 04 MS			
– 05			

Same standards as reagents as previous page # 187

09/05/23 @ 22:19 EFF

WG1826711 – 1 Mat:1
TKN – 4500
WG1826711 / BLANK

Sample	Volume	dilution	final vol
	50mL	1x	150mL
Blank			
Lab			
High			
L235-0269 – 01 ✱			
0549 – 01 PA			
– 01 DUP			
– 01 MS			
0563 – 01		20x (2.5↑50)	
0564 – 01		1x	
0873 – 02			
0879 – 01			
0881 – 01			
0883 – 01		10x (5↑50)	
0888 – 01		1x	
1224 – 01			
1225 – 01		10x (5↑50)	
1226 – 01		1x	
1228 – 01			
1229 – 02			
1252 – 01		2x (25↑50)	

Same standards & reagents as previous page # 05

09/12/23 @ 22:17 CET

Witnessed & Understood by me, | Date | Invented by: | Date

Ammonia Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 14:13
Sample Matrix	: WATER	**Dilution Factor**	: 2
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	2.65	0.150	0.048	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 14:16
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.034	0.075	0.024	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 14:17
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	ND	0.075	0.024	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 14:18
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	ND	0.075	0.024	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 14:19
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.033	0.075	0.024	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 14:22
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	1.09	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 14:23
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	ND	0.075	0.024	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 14:41
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	ND	0.075	0.024	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/12/23 14:25
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	2.45	0.075	0.024	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1826055-1	**Date Collected**	: NA
Client ID	: WG1826055-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/12/23 14:10
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	ND	0.075	0.024	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1826055-3	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2SDUP	**Date Received**	: 08/29/23
Sample Location	:	**Date Analyzed**	: 09/12/23 14:15
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,350.1	**Analyst**	: KEP
Lab File ID	: NH320230912-H	**Instrument ID**	: LACHAT5
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/11/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7664-41-7	Nitrogen, Ammonia	0.054	0.075	0.024	J

Sample Raw Data

Original Run Filename: OM_9-12-2023_08-38-53AM.OMN Created: 9/12/2023 8:38:53 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-12-2023_08-38-53AM.OMN Last Modified: 9/12/2023 9:27:04 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY A

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
STD 1	1	S1	10.00000				
STD 2	1	S2	8.00000				
STD 3	1	S3	4.00000				
STD 4	1	S4	2.00000				
STD 5	1	S5	1.00000				
STD 6	1	S6	0.40000				
STD 7	1	S7	0.20000				
STD 8	1	S8	0.10000				
STD 9	1	S9	0.05000				
STD 10	1	S10	0.00000				
CCV 0.4000	1	S6	0.39194				
	Known Conc:		100.00000				
	Calibration:		Table/Fig. : 1				
CCV 4.0000	1	S3	4.01487				
	Known Conc:		100.00000				
CCB	1	S10	0.00782				
	Known Conc:		100.00000				
HI ICV 8.0	1	1	8.00135				100%
LO ICV 1.0	1	2	0.96251				96%
ICB	1	3	0.00965				
WG1826134-1	1	4	-0.03557		1.50		
WG1826134-2	1	5	19.08833		7.50		95%
LCS LO	1	6	1.94292		1.50		
L2349685-02	1	7	7.16101		7.50		
L2350329-01	1	8	5.39744		1.50		
L2350329-02	1	9	0.05664		1.50		
L2350357-01	1	10	14.71594		7.50		
CCV 0.4000	1	S6	0.40723				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	4.03286				
	Known Conc:		100.00000				
CCB	1	S10	0.00446				
	Known Conc:		100.00000				
L2350357-02	1	11	0.75465		1.50		
L2350358-01	1	12	11.96970		7.50		
L2350358-02	1	13	0.08245		1.50		
L2350386-01	1	14	1.29868		7.50		
L2350444-01	1	15	-4.80918e-5		1.50		
L2350444-02	1	16	0.07924		1.50		
L2350444-03	1	17	0.00114		1.50		
L2350487-01	1	18	-0.02970		1.50		
L2350487-02	1	19	-0.05221		1.50		
L2350487-03	1	20	-0.04992		1.50		
CCV 0.4000	1	S6	0.39192				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	4.01838				
	Known Conc:		100.00000				
CCB	1	S10	0.01031				
	Known Conc:		100.00000				
L2350487-04	1	21	-0.05132		1.50		
WG1826134-4	1	22	14.28878		3.00		
WG1826134-3	1	23	6.51463		3.00		
L2350555-01	1	24	6.57290		3.00		
CCV 0.4000	1	S6	0.40800				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	4.02669				
	Known Conc:		100.00000				
CCB	1	S10	0.01203				
	Known Conc:		100.00000				

Channel 2 (Ammonia High) - Current View

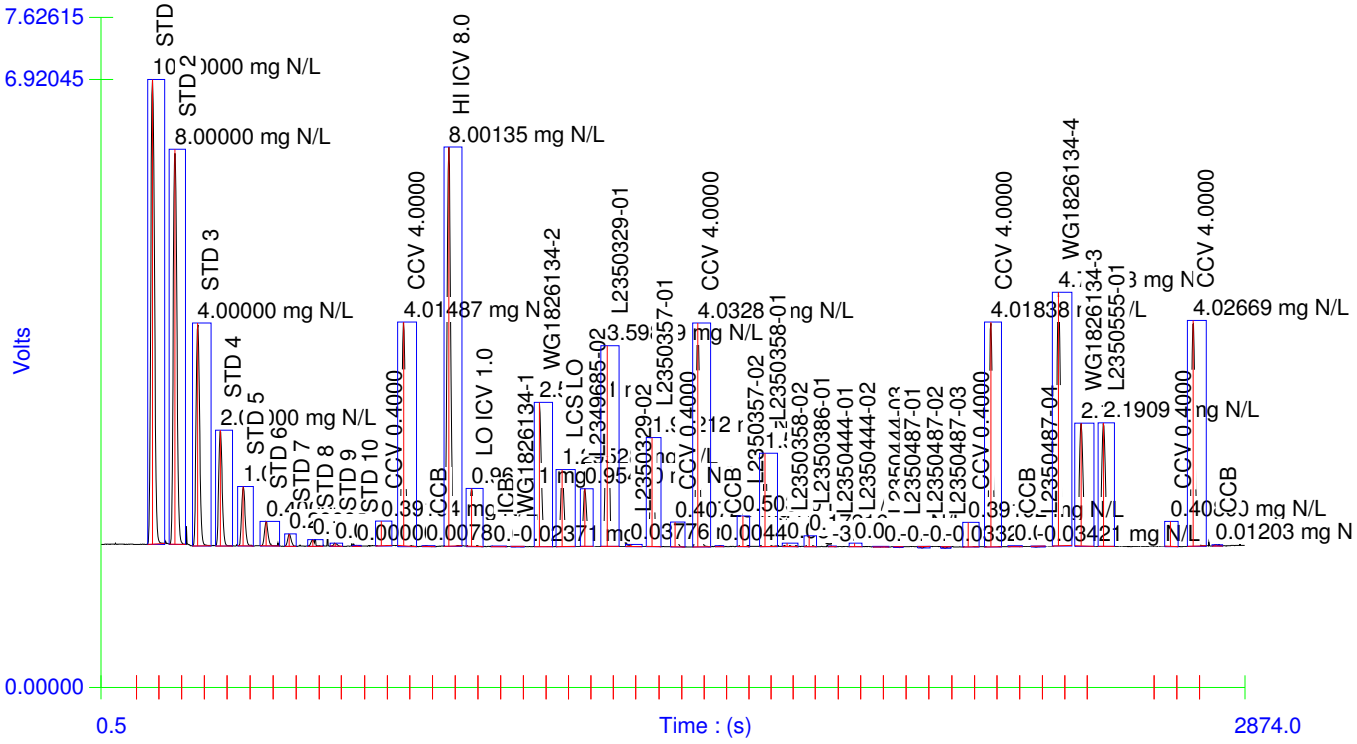
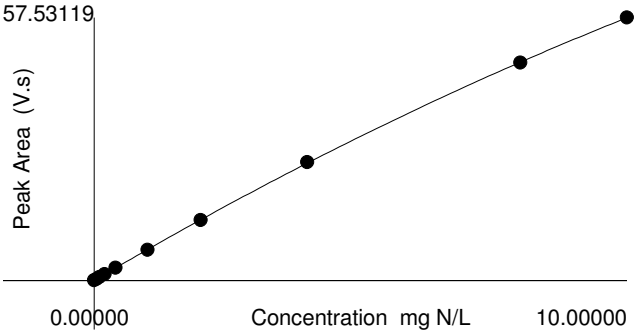


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	57.53119	5.29050	0.0	-0.1	9.97202	9/12/2023	8:40:32 AM
2	8.00000	1	47.65342	4.49703	0.0	0.3	8.00983	9/12/2023	8:41:29 AM
3	4.00000	1	25.91123	2.53552	0.0	-0.8	4.05375	9/12/2023	8:42:26 AM
4	2.00000	1	13.24391	1.31774	0.0	0.7	1.97898	9/12/2023	8:43:24 AM
5	1.00000	1	6.76722	0.67468	0.0	0.7	0.98362	9/12/2023	8:44:21 AM
6	0.40000	1	2.84708	0.27810	0.0	-1.8	0.40268	9/12/2023	8:45:19 AM
7	0.20000	1	1.43126	0.14238	0.0	0.5	0.19685	9/12/2023	8:46:17 AM
8	0.10000	1	0.80445	0.07464	0.0	-6.3	0.10640	9/12/2023	8:47:15 AM
9	0.05000	1	0.35810	0.03636	0.0	13.6	0.04224	9/12/2023	8:48:12 AM
10	0.00000	1	0.10363	0.00788			0.00576	9/12/2023	8:49:09 AM

Figure : 1 (Ammonia)



Area = - 0.11163 * Conc^2 + 6.85726 * Conc + 0.07212
Conc = 0.00053 * Area^2 + 0.14312 * Area - 0.00908
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Original Run Filename: OM_9-12-2023_10-15-21AM.OMN Created: 9/12/2023 10:15:21 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-12-2023_10-15-21AM.OMN Last Modified: 9/12/2023 10:39:11 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY B

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
CCV 0.4000	1	S6	0.37789				
	Known Conc:		100.00000				
	Calibration:		Table/Fig. : 1				
CCV 4.0000	1	S3	4.00717				
	Known Conc:		100.00000				
CCB	1	S10	0.00501				
	Known Conc:		100.00000				
WG1825814-1	1	1	6.36369		150.00	1.14800 g	
WG1825814-2	1	2	1790.40625		750.00	1.02580 g	90%
LCS LO	1	3	163.43625		150.00	1.07220 g	
L2348757-03	1	4	114.06938		150.00	1.05460 g	
L2348757-04	1	5	257.84256		150.00	1.02010 g	
L2349975-01; 10X	1	6	5704.42969		1500.00	1.01890 g	
L2350113-01; 10X	1	7	3901.56934		1500.00	1.10620 g	
WG1825814-4; 10X	1	8	5681.50635		1500.00	1.08840 g	
WG1825814-3; 10X	1	9	5523.86719		1500.00	1.10110 g	
L2351421-01; 10X	1	10	5981.98340		1500.00	1.03430 g	
CCV 0.4000	1	S6	0.43351				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	4.03901				
	Known Conc:		100.00000				
CCB	1	S10	0.01504				
	Known Conc:		100.00000				
L2351451-08; ~~10X~~	1	11	~~1054.40454~~	150	~~1500.00~~	1.05480 g	105.44
L2351876-01; 10X	1	12	1422.64966		1500.00	1.04580 g	
CCV 0.4000	1	S6	0.39010				
	Known Conc:		100.00000				
CCV 4.0000	1	S3	3.99917				
	Known Conc:		100.00000				
CCB	1	S10	0.01712				
	Known Conc:		100.00000				

Author: A1WETCHEMINSTRUMENT Date : 9/12/2023

Channel 2 (Ammonia High) - Current View

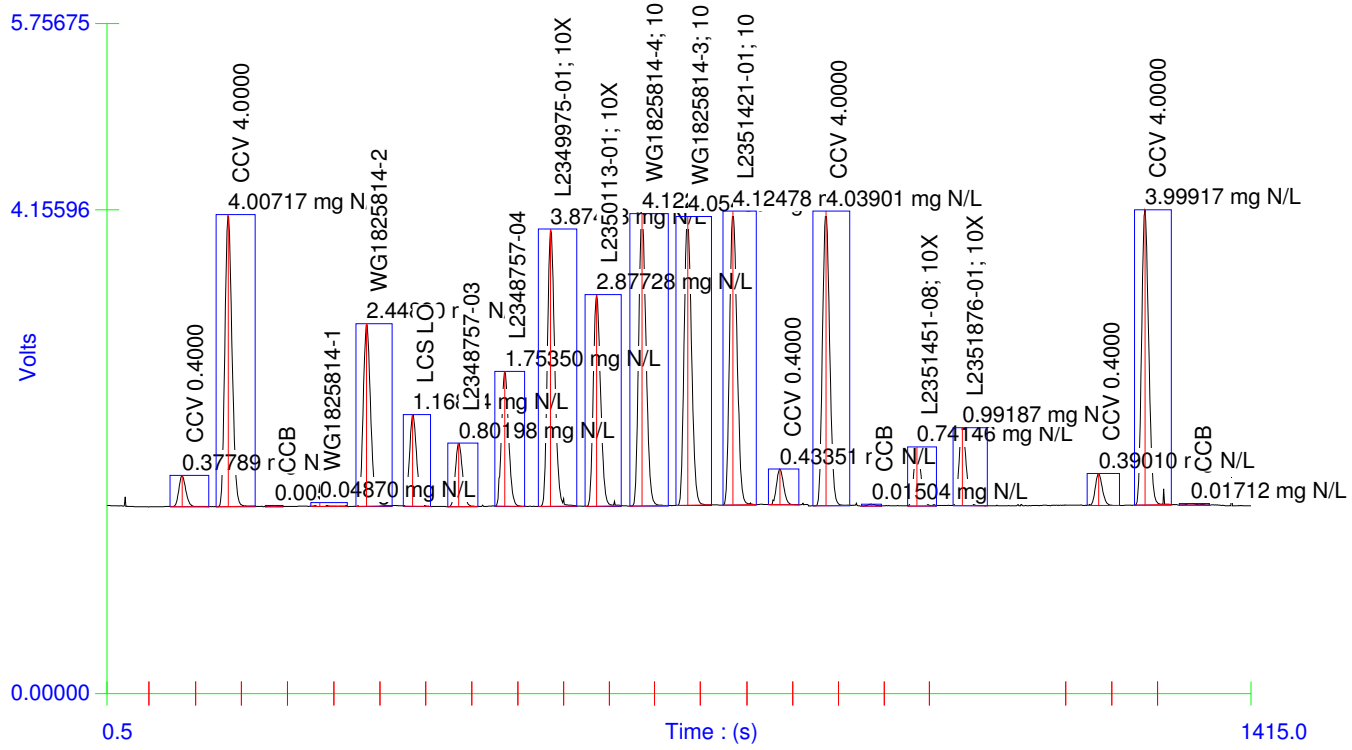
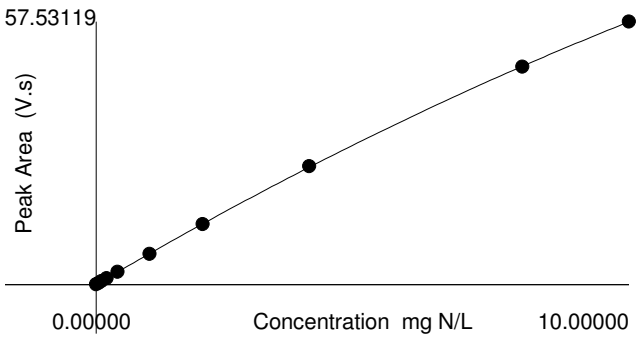


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	57.53119	5.29050	0.0	-0.1	9.97202	9/12/2023	8:40:32 AM
2	8.00000	1	47.65342	4.49703	0.0	0.3	8.00983	9/12/2023	8:41:29 AM
3	4.00000	1	25.91123	2.53552	0.0	-0.8	4.05375	9/12/2023	8:42:26 AM
4	2.00000	1	13.24391	1.31774	0.0	0.7	1.97898	9/12/2023	8:43:24 AM
5	1.00000	1	6.76722	0.67468	0.0	0.7	0.98362	9/12/2023	8:44:21 AM
6	0.40000	1	2.84708	0.27810	0.0	-1.8	0.40268	9/12/2023	8:45:19 AM
7	0.20000	1	1.43126	0.14238	0.0	0.5	0.19685	9/12/2023	8:46:17 AM
8	0.10000	1	0.80445	0.07464	0.0	-6.3	0.10640	9/12/2023	8:47:15 AM
9	0.05000	1	0.35810	0.03636	0.0	13.6	0.04224	9/12/2023	8:48:12 AM
10	0.00000	1	0.10363	0.00788			0.00576	9/12/2023	8:49:09 AM

Figure : 1 (Ammonia)



Area = - 0.11163 * Conc^2 + 6.85726 * Conc + 0.07212
Conc = 0.00053 * Area^2 + 0.14312 * Area - 0.00908
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Original Run Filename: OM_9-12-2023_10-40-38AM.OMN Created: 9/12/2023 10:40:38 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-12-2023_10-40-38AM.OMN Last Modified: 9/12/2023 11:04:25 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY C

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.39150			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.99211			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.02131			
	Known Conc:		100.00000			
WG1825812-1 T	1	1	0.01699			1.00000 g
WG1825812-2 T	1	2	16714.11719		750.00	0.11360 g
LCS LO T	1	3	1825.17102		150.00	0.10560 g
L2348757-03 T	1	4	845.71246		150.00	0.11210 g
L2348757-04 T	1	5	1310.55066		150.00	0.15690 g
L2349975-01 T; 10X	1	6	27371.81641		1500.00	0.13390 g
L2350113-01 T; 10X	1	7	14022.92285		1500.00	0.15870 g
WG1825812-4 T; 10X	1	8	29858.93750		1500.00	0.13380 g
WG1825812-3 T; 10X	1	9	24076.79297		1500.00	0.14920 g
L2351421-01 T; 10X	1	10	25340.38672		1500.00	0.10580 g
CCV 0.4000	1	S6	0.42103			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.01493			
	Known Conc:		100.00000			
CCB	1	S10	0.01898			
	Known Conc:		100.00000			
L2351876-01 T; 10X	1	11	8653.82910		1500.00	0.14180 g
~~L2351451-08~~	~~1~~	~~12~~	~~104.43876~~		~~150.00~~	~~1.05480 g~~
CCV 0.4000	1	S6	0.40078			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.99428			
	Known Conc:		100.00000			
CCB	1	S10	0.02074			
	Known Conc:		100.00000			

95%

Author: A1WETCHEMINSTRUMENT Date : 9/12/2023

Channel 2 (Ammonia High) - Current View

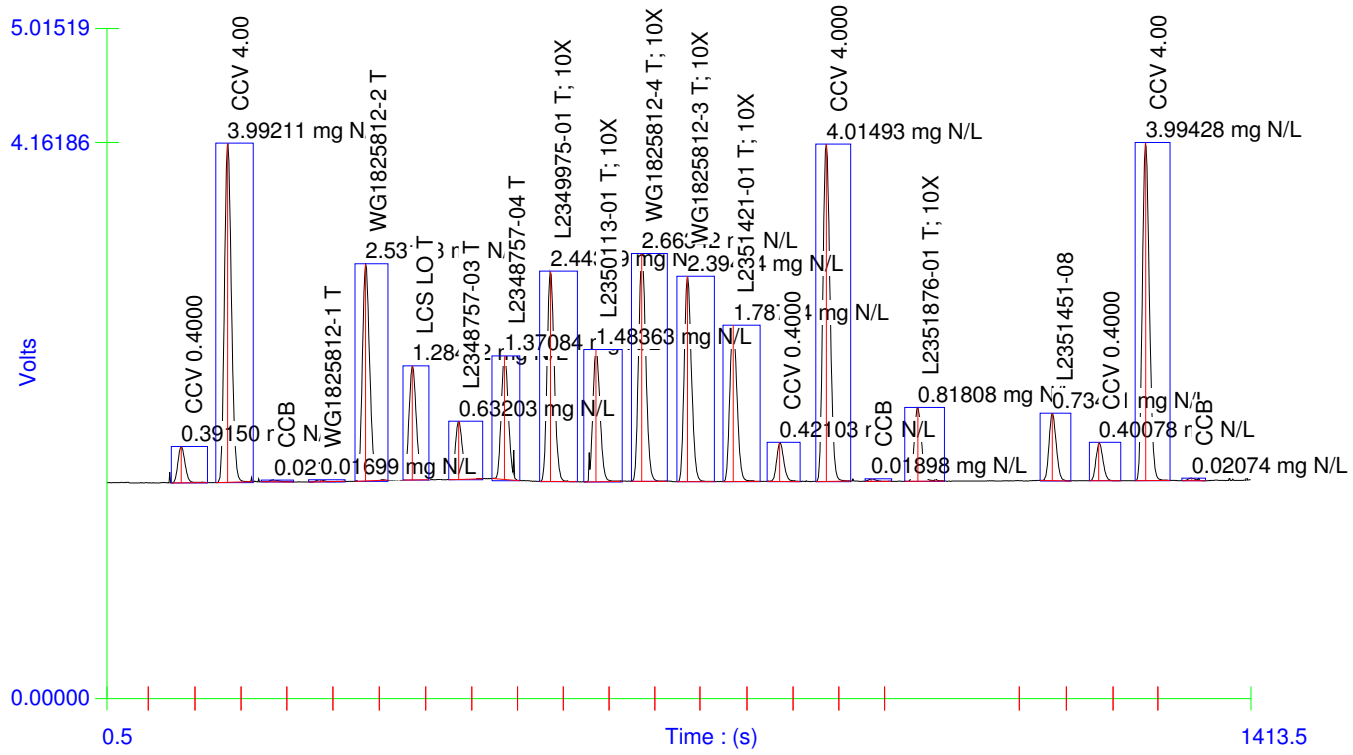
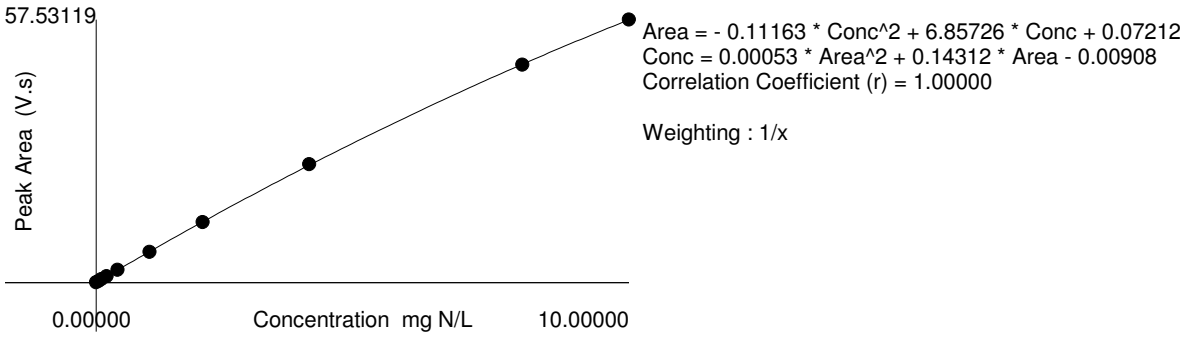


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	57.53119	5.29050	0.0	-0.1	9.97202	9/12/2023	8:40:32 AM
2	8.00000	1	47.65342	4.49703	0.0	0.3	8.00983	9/12/2023	8:41:29 AM
3	4.00000	1	25.91123	2.53552	0.0	-0.8	4.05375	9/12/2023	8:42:26 AM
4	2.00000	1	13.24391	1.31774	0.0	0.7	1.97898	9/12/2023	8:43:24 AM
5	1.00000	1	6.76722	0.67468	0.0	0.7	0.98362	9/12/2023	8:44:21 AM
6	0.40000	1	2.84708	0.27810	0.0	-1.8	0.40268	9/12/2023	8:45:19 AM
7	0.20000	1	1.43126	0.14238	0.0	0.5	0.19685	9/12/2023	8:46:17 AM
8	0.10000	1	0.80445	0.07464	0.0	-6.3	0.10640	9/12/2023	8:47:15 AM
9	0.05000	1	0.35810	0.03636	0.0	13.6	0.04224	9/12/2023	8:48:12 AM
10	0.00000	1	0.10363	0.00788			0.00576	9/12/2023	8:49:09 AM

Figure : 1 (Ammonia)



Author: A1WETCHEMINSTRUMENT Date : 9/12/2023

Original Run Filename: OM_9-12-2023_11-06-47AM.OMN Created: 9/12/2023 11:06:47 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-12-2023_11-06-47AM.OMN Last Modified: 9/12/2023 11:23:02 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY D

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.39049			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.99134			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.02490			
	Known Conc:		100.00000			
WG1826136-1 T	1	1	0.06576			
WG1826136-2 T	1	2	36.21350		15.00	
LCS LO T	1	3	3.84878		3.00	
L2351425-01 T	1	4	2.96126		3.00	
WG1826136-4 T	1	5	12.21447		3.00	
WG1826136-3 T	1	6	4.49700		3.00	
L2351425-02 T	1	7	4.20389		3.00	
CCV 0.4000	1	S6	0.39128			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.99983			
	Known Conc:		100.00000			
CCB	1	S10	0.01805			
	Known Conc:		100.00000			

91%

Channel 2 (Ammonia High) - Current View

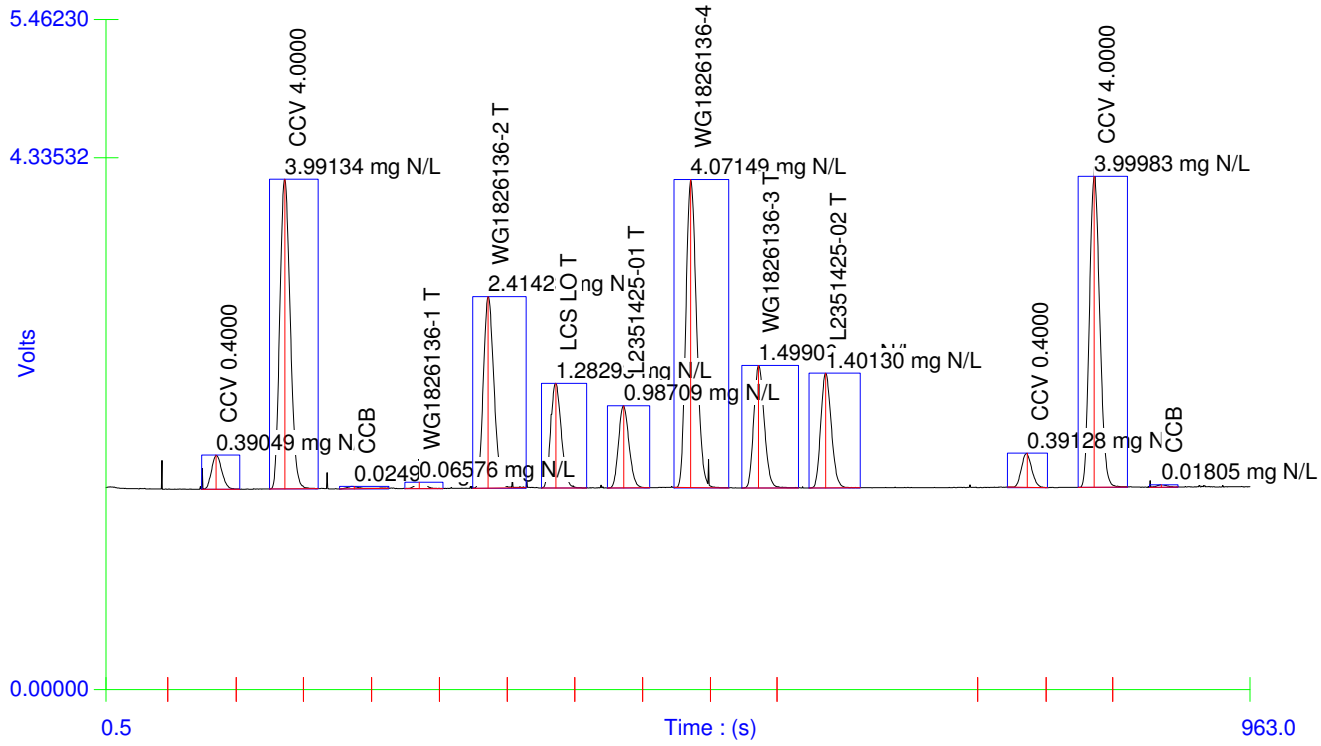
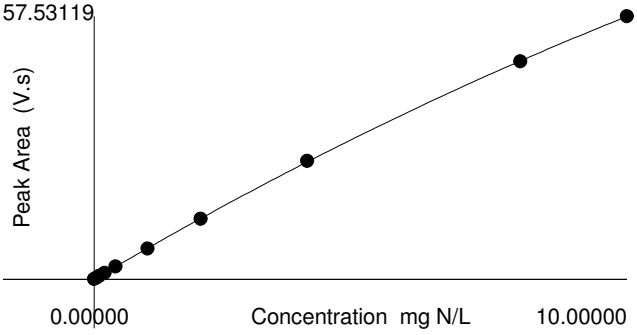


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	57.53119	5.29050	0.0	-0.1	9.97202	9/12/2023	8:40:32 AM
2	8.00000	1	47.65342	4.49703	0.0	0.3	8.00983	9/12/2023	8:41:29 AM
3	4.00000	1	25.91123	2.53552	0.0	-0.8	4.05375	9/12/2023	8:42:26 AM
4	2.00000	1	13.24391	1.31774	0.0	0.7	1.97898	9/12/2023	8:43:24 AM
5	1.00000	1	6.76722	0.67468	0.0	0.7	0.98362	9/12/2023	8:44:21 AM
6	0.40000	1	2.84708	0.27810	0.0	-1.8	0.40268	9/12/2023	8:45:19 AM
7	0.20000	1	1.43126	0.14238	0.0	0.5	0.19685	9/12/2023	8:46:17 AM
8	0.10000	1	0.80445	0.07464	0.0	-6.3	0.10640	9/12/2023	8:47:15 AM
9	0.05000	1	0.35810	0.03636	0.0	13.6	0.04224	9/12/2023	8:48:12 AM
10	0.00000	1	0.10363	0.00788			0.00576	9/12/2023	8:49:09 AM

Figure : 1 (Ammonia)



Area = - 0.11163 * Conc^2 + 6.85726 * Conc + 0.07212
Conc = 0.00053 * Area^2 + 0.14312 * Area - 0.00908
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 9/12/2023

Original Run Filename: OM_9-12-2023_11-24-14AM.OMN Created: 9/12/2023 11:24:14 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-12-2023_11-24-14AM.OMN Last Modified: 9/12/2023 11:39:32 AM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY E

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.39245			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	3.99281			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.02740			
	Known Conc:		100.00000			
WG1826058-1 D	1	1	0.00132		1.50	
WG1826058-2 D	1	2	18.17971		7.50	
LCS LO D	1	3	1.83194		1.50	
WG1826058-4 D	1	4	3.49660		1.50	
WG1826058-3 D	1	5	-0.03274		1.50	
L2351592-01 D	1	6	-0.05030		1.50	
CCV 0.4000	1	S6	0.38323			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.07014			
	Known Conc:		100.00000			
CCB	1	S10	0.02124			
	Known Conc:		100.00000			

91%

Channel 2 (Ammonia High) - Current View

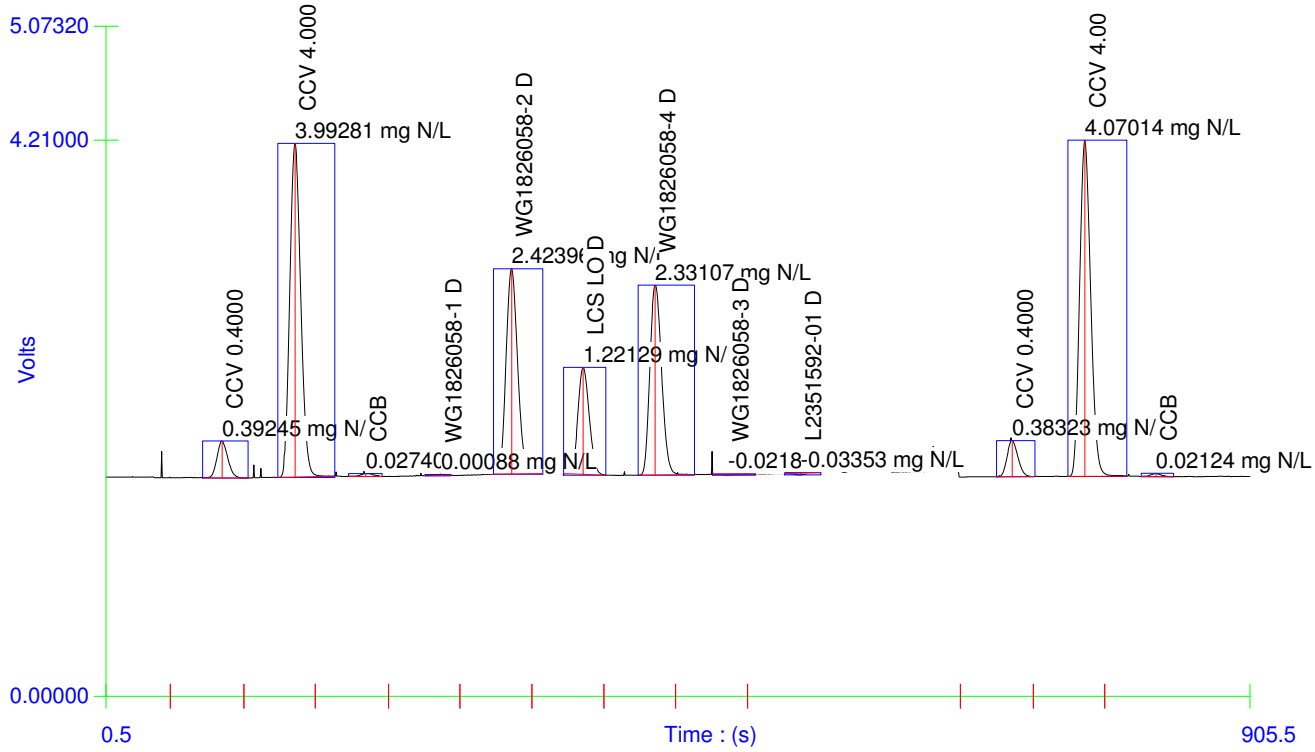
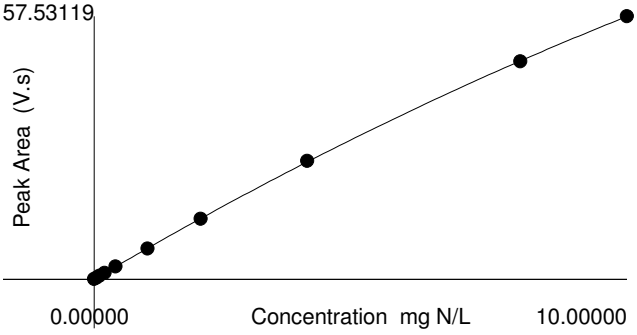


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	57.53119	5.29050	0.0	-0.1	9.97202	9/12/2023	8:40:32 AM
2	8.00000	1	47.65342	4.49703	0.0	0.3	8.00983	9/12/2023	8:41:29 AM
3	4.00000	1	25.91123	2.53552	0.0	-0.8	4.05375	9/12/2023	8:42:26 AM
4	2.00000	1	13.24391	1.31774	0.0	0.7	1.97898	9/12/2023	8:43:24 AM
5	1.00000	1	6.76722	0.67468	0.0	0.7	0.98362	9/12/2023	8:44:21 AM
6	0.40000	1	2.84708	0.27810	0.0	-1.8	0.40268	9/12/2023	8:45:19 AM
7	0.20000	1	1.43126	0.14238	0.0	0.5	0.19685	9/12/2023	8:46:17 AM
8	0.10000	1	0.80445	0.07464	0.0	-6.3	0.10640	9/12/2023	8:47:15 AM
9	0.05000	1	0.35810	0.03636	0.0	13.6	0.04224	9/12/2023	8:48:12 AM
10	0.00000	1	0.10363	0.00788			0.00576	9/12/2023	8:49:09 AM

Figure : 1 (Ammonia)



Area = - 0.11163 * Conc^2 + 6.85726 * Conc + 0.07212
Conc = 0.00053 * Area^2 + 0.14312 * Area - 0.00908
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Original Run Filename: OM_9-12-2023_11-44-21AM.OMN Created: 9/12/2023 11:44:21 AM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-12-2023_11-44-21AM.OMN Last Modified: 9/12/2023 12:26:04 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.38340				TRAY F
			Known Conc:	100.00000				
			Calibration:	Table/Fig. : 1				
	CCV 4.0000	1	S3	4.00718				
			Known Conc:	100.00000				
	CCB	1	S10	0.02021				
			Known Conc:	100.00000				
	WG1825879-1	1	1	0.01149		1.50		
	WG1825879-2	1	2	21.73962		7.50		109%
	LCS LO	1	3	1.87666		1.50		
	L2347919-01	1	4	0.11763		1.50		
	L2350008-01	1	5	1.14208		1.50		
X	L2350045-01	1	6	22.90806		1.50		
X	L2350070-01	1	7	0.47683		1.50		
	L2350070-02	1	8	0.14883		1.50		
	L2350071-01	1	9	0.08860		1.50		
	L2350728-02	1	10	0.43403		1.50		
	CCV 0.4000	1	S6	0.39040				
			Known Conc:	100.00000				
	CCV 4.0000	1	S3	4.02725				
			Known Conc:	100.00000				
	CCB	1	S10	0.02845				
			Known Conc:	100.00000				
	L2350728-03	1	11	0.61216		1.50		
	L2350728-04	1	12	0.03099		1.50		
	L2350728-05	1	13	0.01836		1.50		
X	L2350728-06	1	14	20.44279		1.50		
X	L2351830-01	1	15	0.34027		1.50		
	WG1825879-4	1	16	3.80099		1.50		
X	WG1825879-3	1	17	0.07828		1.50		RERUN TO CONFIRM
	L2351830-02	1	18	0.04112		1.50		
	L2351830-03	1	19	0.01223		1.50		
	L2351830-04	1	20	0.02010		1.50		
	CCV 0.4000	1	S6	0.39551				
			Known Conc:	100.00000				
	CCV 4.0000	1	S3	4.01012				
			Known Conc:	100.00000				
	CCB	1	S10	0.02805				
			Known Conc:	100.00000				
X	L2351830-01	1	15	0.10302		1.50		RERUN TO CONFIRM
	WG1825879-3	1	17	0.02951		1.50		
	L2350045-01; 10X	1	6	24.58306		15.00		
	L2350070-01	1	7	0.25015		1.50		
	L2350728-06; 10X	1	14	24.18311		15.00		
X	L2351830-01	1	15	0.10291		1.50		SAMPLE READING POSITIVE, NEEDS REPREP
	CCV 0.4000	1	S6	0.39631				
			Known Conc:	100.00000				
	CCV 4.0000	1	S3	4.04341				
			Known Conc:	100.00000				
	CCB	1	S10	0.02999				
			Known Conc:	100.00000				

Channel 2 (Ammonia High) - Current View

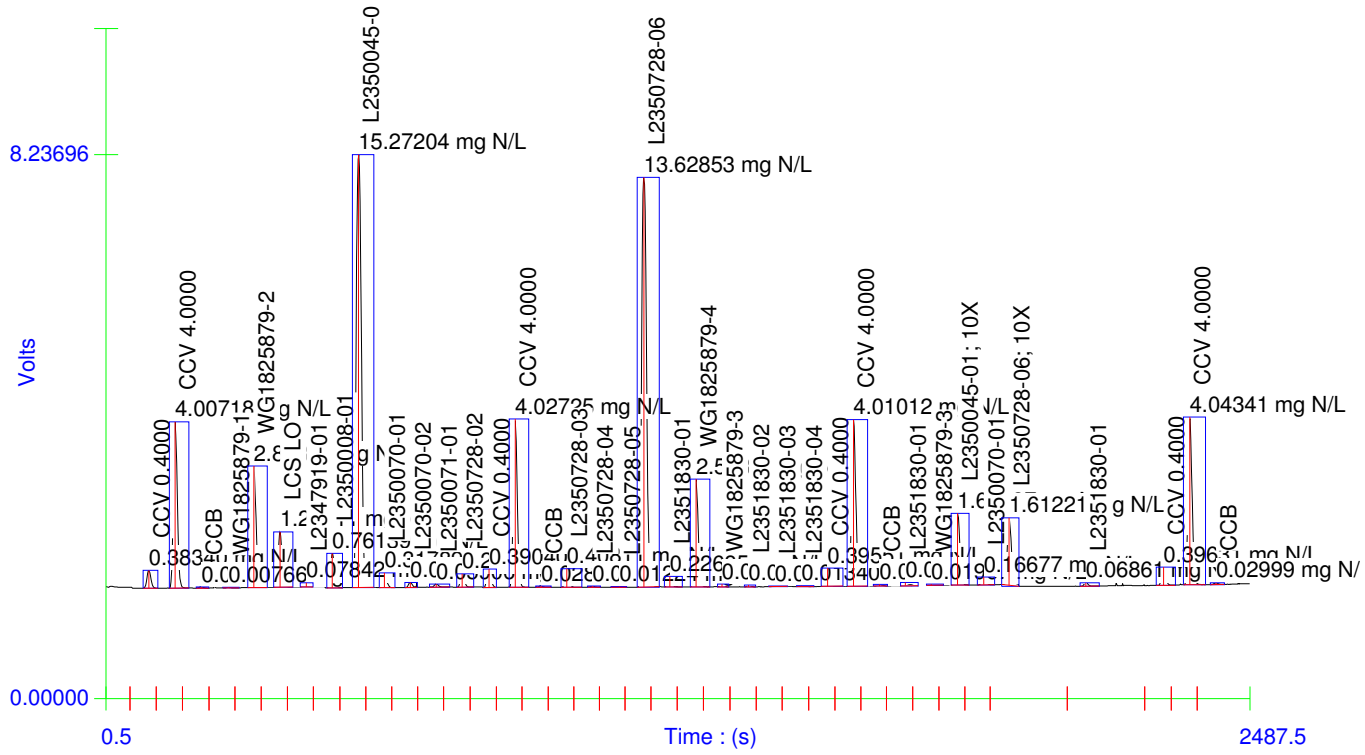
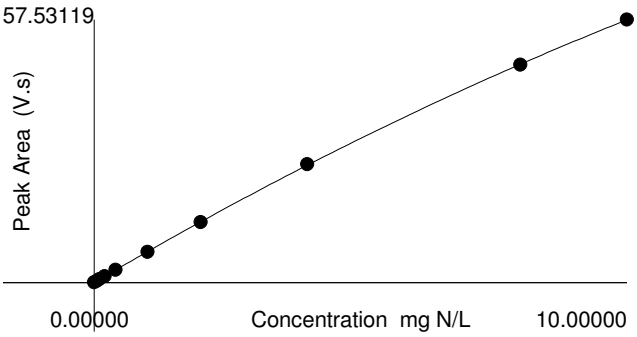


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	57.53119	5.29050	0.0	-0.1	9.97202	9/12/2023	8:40:32 AM
2	8.00000	1	47.65342	4.49703	0.0	0.3	8.00983	9/12/2023	8:41:29 AM
3	4.00000	1	25.91123	2.53552	0.0	-0.8	4.05375	9/12/2023	8:42:26 AM
4	2.00000	1	13.24391	1.31774	0.0	0.7	1.97898	9/12/2023	8:43:24 AM
5	1.00000	1	6.76722	0.67468	0.0	0.7	0.98362	9/12/2023	8:44:21 AM
6	0.40000	1	2.84708	0.27810	0.0	-1.8	0.40268	9/12/2023	8:45:19 AM
7	0.20000	1	1.43126	0.14238	0.0	0.5	0.19685	9/12/2023	8:46:17 AM
8	0.10000	1	0.80445	0.07464	0.0	-6.3	0.10640	9/12/2023	8:47:15 AM
9	0.05000	1	0.35810	0.03636	0.0	13.6	0.04224	9/12/2023	8:48:12 AM
10	0.00000	1	0.10363	0.00788			0.00576	9/12/2023	8:49:09 AM

Figure : 1 (Ammonia)



Area = - 0.11163 * Conc^2 + 6.85726 * Conc + 0.07212
Conc = 0.00053 * Area^2 + 0.14312 * Area - 0.00908
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Author: A1WETCHEMINSTRUMENT Date : 9/12/2023

Original Run Filename: OM_9-12-2023_01-08-18PM.OMN Created: 9/12/2023 1:08:18 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-12-2023_01-08-18PM.OMN Last Modified: 9/12/2023 1:23:53 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.37795				TRAY G
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.04081				
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCB	1	S10	0.00767				
		Known Conc:		100.00000				
	WG1825817-1	1	1	0.02945		1.50		
	WG1825817-2	1	2	18.06418		7.50		90%
	LCS LO	1	3	1.78066		1.50		
	L2348618-05	1	4	0.05290		1.50		
	L2348618-06	1	5	0.03543		1.50		
X	L2348618-07	1	6	17.95354		1.50		
X	L2350076-01	1	7	2.30552		1.50		
	L2350076-02	1	8	0.07477		1.50		
	L2350211-02	1	9	0.27475		1.50		
X	L2350211-03	1	10	26.52109		1.50		
X	CCV 0.4000	1	S6	0.57365				RERUN OK
		Known Conc:		100.00000				

Channel 2 (Ammonia High) - Current View

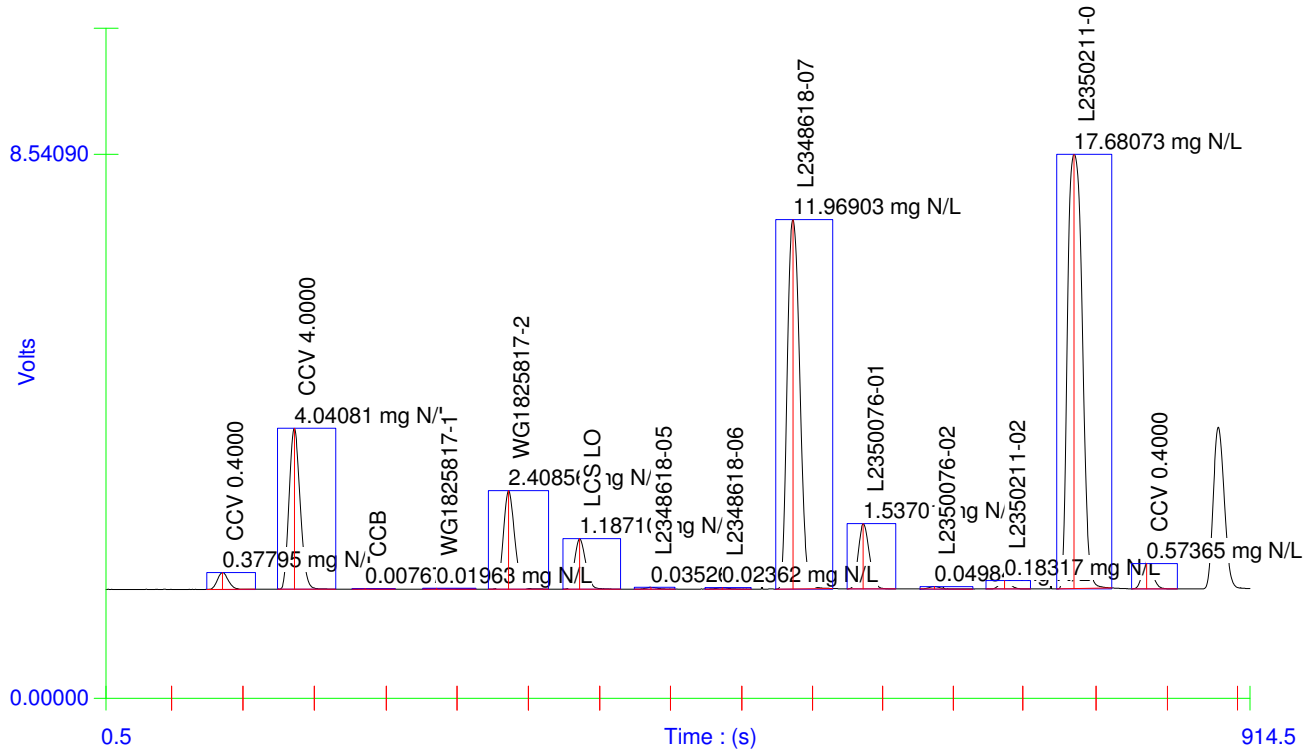
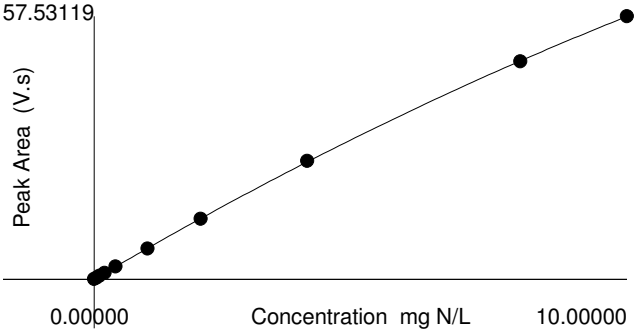


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	57.53119	5.29050	0.0	-0.1	9.97202	9/12/2023	8:40:32 AM
2	8.00000	1	47.65342	4.49703	0.0	0.3	8.00983	9/12/2023	8:41:29 AM
3	4.00000	1	25.91123	2.53552	0.0	-0.8	4.05375	9/12/2023	8:42:26 AM
4	2.00000	1	13.24391	1.31774	0.0	0.7	1.97898	9/12/2023	8:43:24 AM
5	1.00000	1	6.76722	0.67468	0.0	0.7	0.98362	9/12/2023	8:44:21 AM
6	0.40000	1	2.84708	0.27810	0.0	-1.8	0.40268	9/12/2023	8:45:19 AM
7	0.20000	1	1.43126	0.14238	0.0	0.5	0.19685	9/12/2023	8:46:17 AM
8	0.10000	1	0.80445	0.07464	0.0	-6.3	0.10640	9/12/2023	8:47:15 AM
9	0.05000	1	0.35810	0.03636	0.0	13.6	0.04224	9/12/2023	8:48:12 AM
10	0.00000	1	0.10363	0.00788			0.00576	9/12/2023	8:49:09 AM

Figure : 1 (Ammonia)



Area = - 0.11163 * Conc^2 + 6.85726 * Conc + 0.07212
Conc = 0.00053 * Area^2 + 0.14312 * Area - 0.00908
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Original Run Filename: OM_9-12-2023_01-26-50PM.OMN Created: 9/12/2023 1:26:50 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-12-2023_01-26-50PM.OMN Last Modified: 9/12/2023 1:56:57 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

TRAY G

Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight
CCV 0.4000	1	S6	0.39854			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.04089			
	Known Conc:		100.00000			
	Calibration:		Table/Fig. : 1			
CCB	1	S10	0.01711			
	Known Conc:		100.00000			
L2350211-03; 20X	1	10	31.63873		30.00	
WG1825817-4	1	11	3.56892		1.50	
WG1825817-3	1	12	0.06329		1.50	
L2350225-01	1	13	0.02520		1.50	
L2350225-02	1	14	0.01345		1.50	
L2350225-03	1	15	0.04826		1.50	
L2350225-04	1	16	0.06661		1.50	
L2350225-05	1	17	0.00689		1.50	
L2350225-06	1	18	0.03017		1.50	
L2350226-01	1	19	0.04484		1.50	
CCV 0.4000	1	S6	0.39251			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.04786			
	Known Conc:		100.00000			
CCB	1	S10	0.01656			
	Known Conc:		100.00000			
L2350226-02	1	20	0.02053		1.50	
L2350226-03	1	21	-0.00020		1.50	
L2350226-04	1	22	0.01835		1.50	
L2351203-01	1	23	0.04040		1.50	
L2351727-01	1	24	2.02506		1.50	
L2351727-02	1	25	0.84579		1.50	
L2348618-07; 10X	1	6	18.00386		15.00	
L2350076-01	1	7	2.14372		1.50	
CCV 0.4000	1	S6	0.39278			
	Known Conc:		100.00000			
CCV 4.0000	1	S3	4.01778			
	Known Conc:		100.00000			
CCB	1	S10	0.02098			
	Known Conc:		100.00000			

Author: A1WETCHEMINSTRUMENT Date : 9/12/2023

Channel 2 (Ammonia High) - Current View

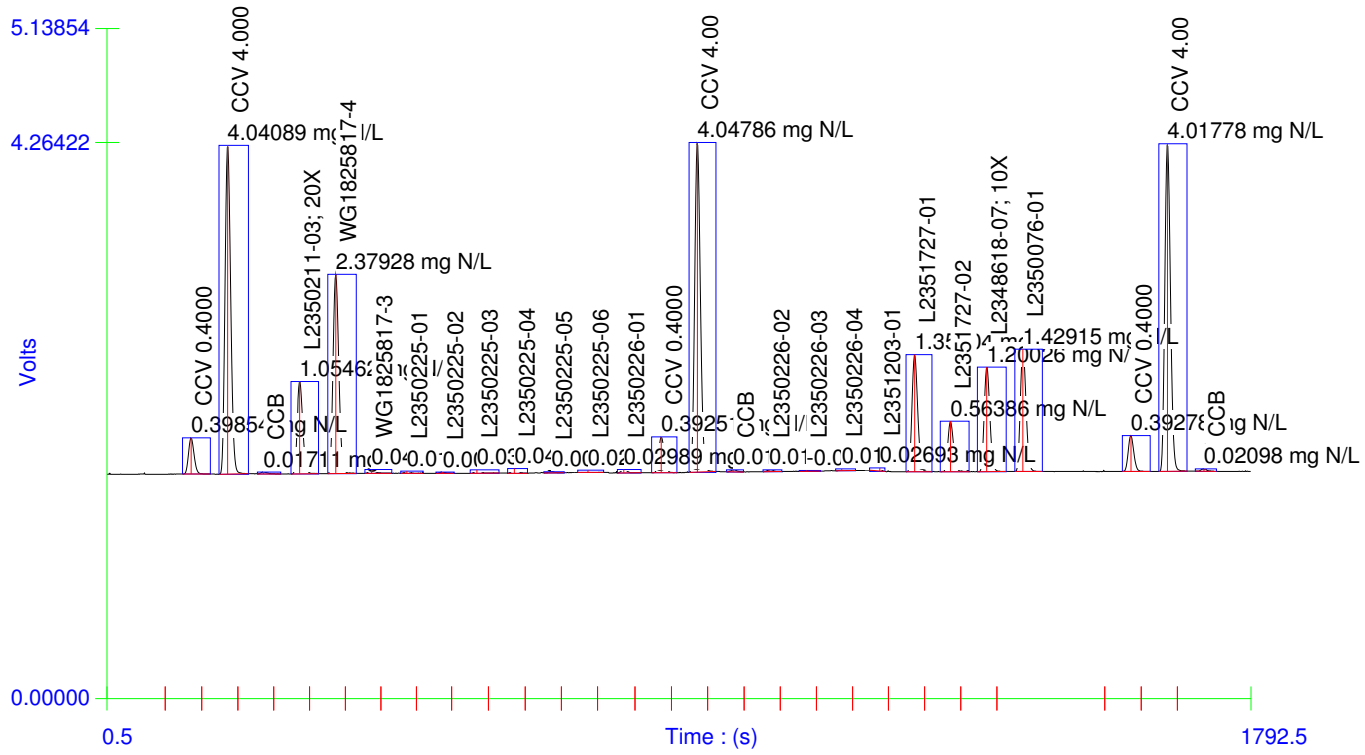
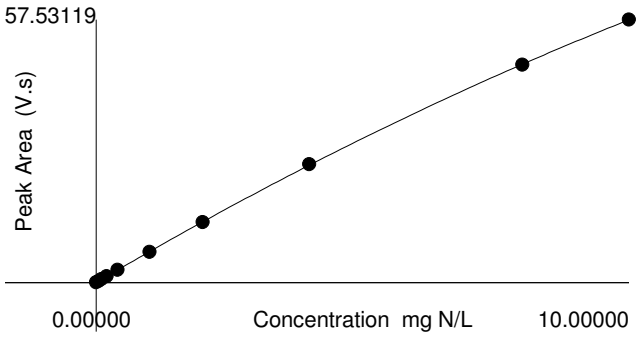


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	57.53119	5.29050	0.0	-0.1	9.97202	9/12/2023	8:40:32 AM
2	8.00000	1	47.65342	4.49703	0.0	0.3	8.00983	9/12/2023	8:41:29 AM
3	4.00000	1	25.91123	2.53552	0.0	-0.8	4.05375	9/12/2023	8:42:26 AM
4	2.00000	1	13.24391	1.31774	0.0	0.7	1.97898	9/12/2023	8:43:24 AM
5	1.00000	1	6.76722	0.67468	0.0	0.7	0.98362	9/12/2023	8:44:21 AM
6	0.40000	1	2.84708	0.27810	0.0	-1.8	0.40268	9/12/2023	8:45:19 AM
7	0.20000	1	1.43126	0.14238	0.0	0.5	0.19685	9/12/2023	8:46:17 AM
8	0.10000	1	0.80445	0.07464	0.0	-6.3	0.10640	9/12/2023	8:47:15 AM
9	0.05000	1	0.35810	0.03636	0.0	13.6	0.04224	9/12/2023	8:48:12 AM
10	0.00000	1	0.10363	0.00788			0.00576	9/12/2023	8:49:09 AM

Figure : 1 (Ammonia)



Area = - 0.11163 * Conc^2 + 6.85726 * Conc + 0.07212
Conc = 0.00053 * Area^2 + 0.14312 * Area - 0.00908
Correlation Coefficient (r) = 1.00000

Weighting : 1/x

Original Run Filename: OM_9-12-2023_02-06-37PM.OMN Created: 9/12/2023 2:06:37 PM
Original Run Author's Signature: [A1WETCHEMINSTRUMENT]
Current Run Filename: OM_9-12-2023_02-06-37PM.OMN Last Modified: 9/12/2023 2:48:22 PM
Current Run Author's Signature: [A1WETCHEMINSTRUMENT]
Description: Default New Run

	Sample	Rep.	Cup No.	Channel 2 Ammonia (mg N/L)	ADF	MDF	Weight	
	CCV 0.4000	1	S6	0.38217				TRAY H
		Known Conc:		100.00000				
		Calibration:		Table/Fig. : 1				
	CCV 4.0000	1	S3	4.01728				
		Known Conc:		100.00000				
	CCB	1	S10	0.02097				
		Known Conc:		100.00000				
WG1826056	WG1826055-1	1	1	0.01195		1.50		
	WG1826055-2	1	2	18.48522		7.50		92%
	LCS LO	1	3	1.64533		1.50		
	L2350269-01	1	4	2.64798		3.00		
	WG1826055-4	1	5	3.63017		1.50		
	WG1826055-3	1	6	0.05492		1.50		
	L2350269-02	1	7	0.03420		1.50		
	L2350269-03	1	8	-0.06268		1.50		
	L2350269-04	1	9	-0.02627		1.50		
	L2350269-05	1	10	0.03329		1.50		
	CCV 0.4000	1	S6	0.39086				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	4.00650				
		Known Conc:		100.00000				
	CCB	1	S10	0.01595				
		Known Conc:		100.00000				
	L2350269-06	1	11	1.08879		1.50		
	L2350269-07	1	12	-0.01887		1.50		
X	L2350269-08	1	13	-0.05255		1.50		BASELINE SHIFT, RERUN
	L2350269-09	1	14	2.44664		1.50		
	L2350351-01	1	15	1.41370		1.50		
	L2350244-01	1	16	1.49862		1.50		
	L2350244-02	1	17	0.06148		1.50		
	L2350244-03	1	18	0.66720		1.50		
	L2350244-04	1	19	1.77399		1.50		
	L2350244-07	1	20	0.02285		1.50		
	CCV 0.4000	1	S6	0.38761				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.95124				
		Known Conc:		100.00000				
	CCB	1	S10	0.02018				
		Known Conc:		100.00000				
	WG1826056-4	1	21	3.46657		1.50		
	WG1826056-3	1	22	0.01600		1.50		
	L2350351-02	1	23	2.46530		1.50		
	L2350352-01	1	24	4.72813		1.50		
	L2350352-02	1	25	0.31604		1.50		
	L2351822-01	1	26	0.04113		1.50		
	L2351822-02	1	27	0.01114		1.50		
	L2350269-08	1	13	0.01024		1.50		
	CCV 0.4000	1	S6	0.40241				
		Known Conc:		100.00000				
	CCV 4.0000	1	S3	3.97495				
		Known Conc:		100.00000				
	CCB	1	S10	0.02193				
		Known Conc:		100.00000				

Author: A1WETCHEMINSTRUMENT Date : 9/12/2023

Channel 2 (Ammonia High) - Current View

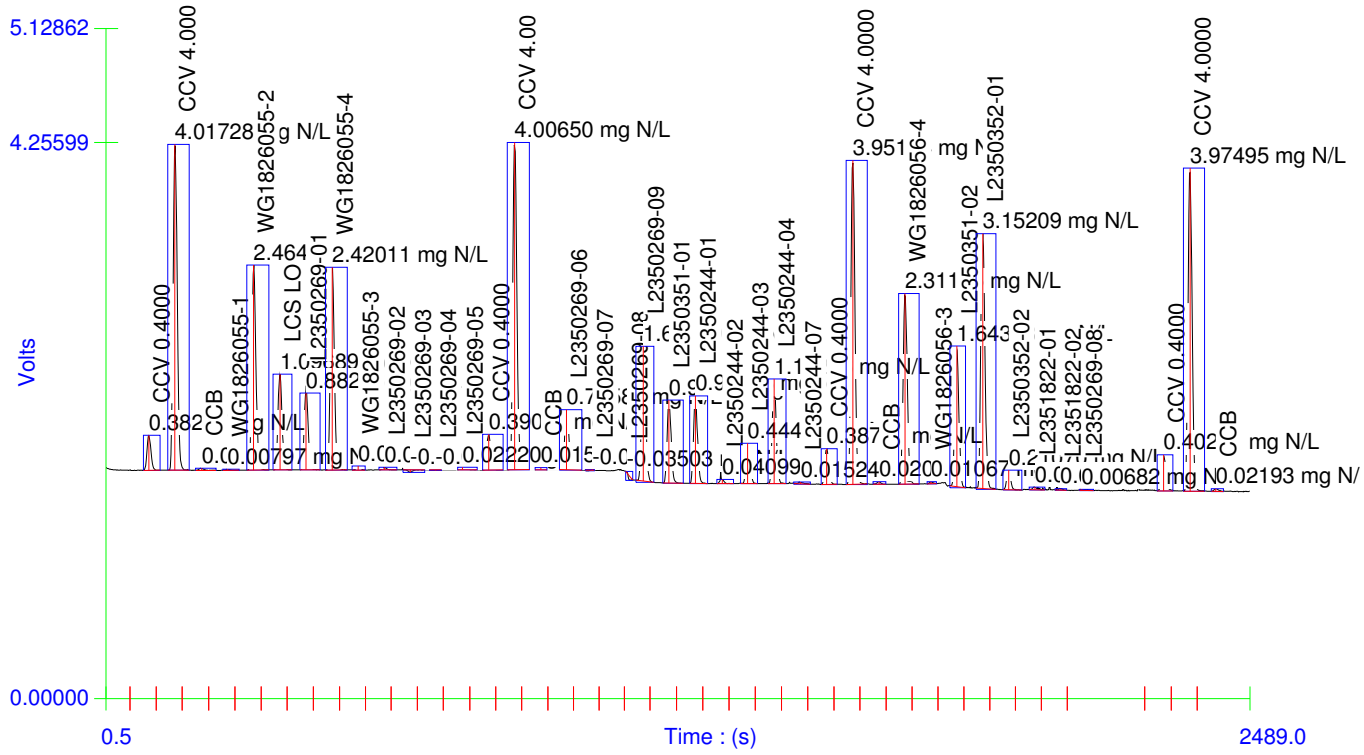
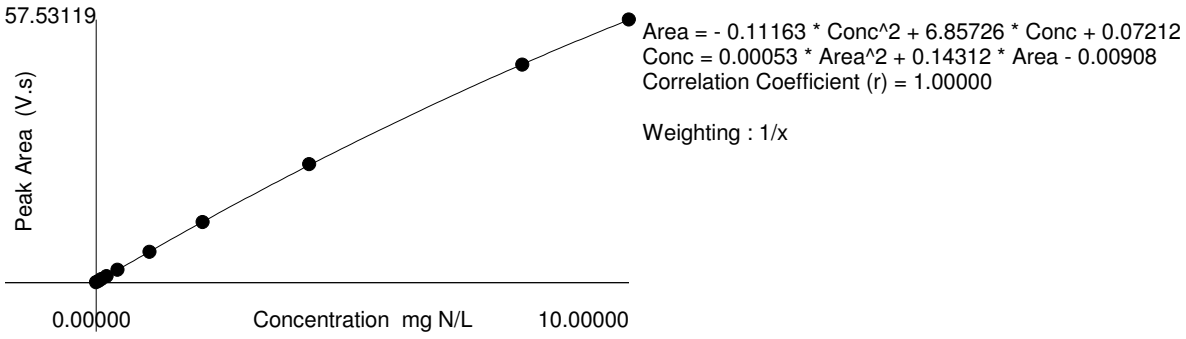


Table : 1 (Ammonia)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	10.00000	1	57.53119	5.29050	0.0	-0.1	9.97202	9/12/2023	8:40:32 AM
2	8.00000	1	47.65342	4.49703	0.0	0.3	8.00983	9/12/2023	8:41:29 AM
3	4.00000	1	25.91123	2.53552	0.0	-0.8	4.05375	9/12/2023	8:42:26 AM
4	2.00000	1	13.24391	1.31774	0.0	0.7	1.97898	9/12/2023	8:43:24 AM
5	1.00000	1	6.76722	0.67468	0.0	0.7	0.98362	9/12/2023	8:44:21 AM
6	0.40000	1	2.84708	0.27810	0.0	-1.8	0.40268	9/12/2023	8:45:19 AM
7	0.20000	1	1.43126	0.14238	0.0	0.5	0.19685	9/12/2023	8:46:17 AM
8	0.10000	1	0.80445	0.07464	0.0	-6.3	0.10640	9/12/2023	8:47:15 AM
9	0.05000	1	0.35810	0.03636	0.0	13.6	0.04224	9/12/2023	8:48:12 AM
10	0.00000	1	0.10363	0.00788			0.00576	9/12/2023	8:49:09 AM

Figure : 1 (Ammonia)



Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-2S	**Matrix**	: WATER
Lab Sample ID	: L2350269-02		
Matrix Spike	: WG1826055-4	**MS Analysis Date**	: 09/12/23 14:14
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Ammonia	0.034J	4	3.63	91					90-110	20

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-2S	**Matrix**	: WATER
Lab Sample ID	: L2350269-02	**Analysis Date**	: 09/12/23 14:16
Dup Sample ID	: WG1826055-3	**DUP Analysis Date**	: 09/12/23 14:15

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Ammonia	0.034J	0.054J	NC	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1826055-2	**LCS Analysis Date**	: 09/12/23 14:11
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Ammonia	20.0	18.5	92.					90-110	20

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Nitrogen, Ammonia	7664-41-7	0.075	0.024	mg/l	80-120	20	80-120	20	20	4500NH3-BH	28 days	1 - Plastic 500ml H2SO4 preserved
Nitrogen, Ammonia	7664-41-7	0.075	0.024	mg/l	90-110	20	90-110	20	20	350.1	28 days	1 - Plastic 500ml H2SO4 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11468-1
Page: 1

WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Nitrogen, Ammonia	7664-41-7	7.5	2.79	mg/kg	83-115	20	55-144	20	20	4500NH3-BH	28 days	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Westborough, MA • Mansfield, MA • Bangor, ME • Portsmouth, NH • Mahwah, NJ • Albany, NY • Buffalo, NY • Holmes, PA

Calculations of Nitrogen in Ammonia

Aqueous samples:

Compute sample NH_3 –N concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

If the sample has a concentration of less than 2ppm, calculate results by using the low curve generated on Channel 1.

If the sample concentration is greater than 2ppm, calculate the results by using the high curve generated on Channel 2.

To Compute the final results for aqueous samples, multiply the direct reading by the dilution factor based on the initial preparation volume. (also done using software)

NH_3-N mg/L = mg/L direct reading x dilution factor

Sequence Logs

From Page No.

Tray A (08-38-53AM)
prep 9/11/23 @ 20:20

1	Hi ICV 8.0	
2	Lo ICV 1.0	
3	ICB	
4	WG1826134-1. Blk	
5	-2, LCS Hi; 5x	
6	LCS Lo	
7	49685-02 (5x)	
8	50329-01	
9	-02	
10	50357-01 (5x)	
11	-02	
12	50358-01 (5x)	
13	-02	
14	50386-01 (5x)	
15	50444-01	
16	-02	
17	-03	
18	50487-01	
19	-02	
20	-03	
21	-04	
22	50555-~~02~~ KEP 9/12/23 -01 MS (2x)	
23	-01 Dup (2x)	
24	-01 (2x)	

Date: 9/12/23
Sodium Phenolate: 9/5/23 R-3947
Sodium Hypochlorate: 9/5/23 Stop+Shop
Sodium Nitropruisside: 9/5/23 R-3679
Borric Acid Soln.: 9/5/23 R-3939
ICV 1.0: 9/6/23 WC-3293
ICV 8.0:
Cal. Std: 9/6/23 WC-3294
See Front Page for Instructions:

Tray B (10-15-21AM)
prep 9/11/23 @ 5:34

1	WG1825814-1. Blk soil	(1.1480)
2	-2, LCS Hi; 5x	(1.0258)
3	LCS Lo	(1.0722)
4	48757-03	(1.0546)
5	-04	(1.0201)
6	49975-01; 10x	(1.0189)
7	50113-01; 10x	(1.1062)
8	51421-01 MS; 10x	(1.0884)
9	-01 Dup; 10x	(1.1011)
10	-01; 10x	(1.0343)
11	51451-08	(1.0548)
12	51876-01; 10x	(1.0458)

KEP

Tray C (10-40-38PM)
prep 9/11/23 @ 5:50

1	WG1825812-1T. Blk soil	(0.1164)
2	-2T. LCS Hi; 5x	(0.1136)
3	LCS LoT	(0.1056)
4	48757-03T	(0.1121)
5	-04T	(0.1569)
6	49975-01T; 10x	(0.1339)
7	50113-01T; 10x	(0.1587)
8	51421-01T MS; 10x	(0.1338)
9	-01T Dup; 10x	(0.1492)
10	-01T; 10x	(0.1058)
11	51876-01T; 10x	(0.1418)

KEP

To Page No.

Witnessed & Understood by me, | Date | Invented by: | Date
Recorded by:

From Page No. ____

Tray D (11-06-47AM)
prep 9/11/23 @22:55

1	WG1826136-1T. Blk
2	-2T; LCS Hi; 5x
3	LCS Lo T
4	51425-01T
5	-02T MS
6	-02T Dup
7	-02T

KOP

Tray E (11-24-14AM)
prep 9/11/23 @19:55

1	WG1826058-1D; Blk
2	-2D; LCS Hi; 5x
3	LCS Lo D
4	51592-01D MS
5	-01D Dup
6	-01D

KOP

Tray F (11-44-21AM)
prep 9/11/23 @13:58

1	WG1825879-1; Blk
2	-2; LCS Hi; 5x
3	LCS Lo
4	47919-01
5	50008-01
⊗6	50045-01⊗ ; 10x
⊗7	50070-01⊗
8	-02
9	50071-01
10	50728-02
11	-03
12	-04
13	-05
⊗14	-06⊗; 10x
⊗15	51830-01⊗
16	-01 MS
⊗17	-01 Dup⊗ rerun
18	-02
19	-03
20	-04

KOP

To Page No. ____

Witnessed & Understood by me,	Date	Invented by:	Date
		Recorded by:	

From Page No.

Tray G (01-08-18PM, 01-26-50PM)
prep 9/11/23 @ 5:43

1	WG1825817-1	BLK
2		-2; LCS Hi; 5x
3	LCS LO	
4	48618	-05
5		06
⊗ 6		07 ⊗; 10x
⊗ 7	500716	-01 (5x) ⊗,
8		02
9	50211	02
⊗ 10		03 (5x) ⊗; 20x
11	50225	01 MS
12		01 Dup
13		01
14		02
15		03
16		04
17		05
18		06
19	50226	01
20		02
21		03
22		04
23	51203	01
24	51727	01 (2x)
25		02 (5x)

KEP

Tray ~~F~~ H (02-06-37PM) KEP 9/12
prep 9/11/23 @ 19:48

1	WG1826055	-1; BLK
2		(6056)-2; LCS Hi; 5x
3	LCS LO	
4	50269	-01 (2x)
5		-02 MS
6		~~-03~~ -02 Dup KEP 9/12
7		02
8		03
9		04
10		05
11		06
12		07
⊗ 13		08 ⊗ baseline shift, rerun
14		09
15	50351	01
16	50244	01
17		02
18		03
19		04
20		07
21		07 MS
22		07 Dup
23	50351	02
24	50352	01
25		02
26	51822	01
27		02

KEP

To Page No.

Witnessed & Understood by me, Date | Invented by: Date | Recorded by:

Sample Preparation

WG1826055 – 1 Mat:1
NH3 – 350
WG1826055 / BLANK

WG1826056 – 1 Mat:1
NH3 – 350
WG1826056 / BLANK

Sample	Volume	Dilution	Int. pH	Adj. pH	Final Volume
BLANK	100ml	1x	2.2	~9.5	150mL
LCS LOW					1ml
LCS HIGH					10ml
50269-01		2x			
-02		1x			
50269-02 DUP					
-02 MS					2ml
-03					
-04					
-05					
-06					
-07					
-08					
50269-09					
50351-01					
2nd 50244-01					
-02					
-03					
-04					
-07					
-07 DUP					
50244-07 MS					2ml
50351-02					
50352-01					
-02					
51822-01					
-02					

The same Standards and Reagents as page #161

09-11-23 @ 19:48 ANT

Witnessed & Understood by me, Date

Invented by: Date

Recorded by:

Nitrate and Nitrite Analysis

Results

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-01**	**Date Collected**	:	**08/28/23 16:52**
Client ID	:	**MW-1S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/31/23 04:52**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3230831-A1**	**Instrument ID**	:	**LACHAT**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**0.11**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-02**	**Date Collected**	:	**08/28/23 15:34**
Client ID	:	**MW-2S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/31/23 04:56**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3230831-A1**	**Instrument ID**	:	**LACHAT**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**1.2**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 04:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3230831-A1	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	2.0	0.10	0.046	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-04**	**Date Collected**	:	**08/29/23 10:16**
Client ID	:	**MW-4D**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/31/23 04:58**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3230831-A1**	**Instrument ID**	:	**LACHAT**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**0.46**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 05:03
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3230831-A1	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	0.92	0.10	0.046	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 05:05
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3230831-A1	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	1.2	0.10	0.046	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-07**	**Date Collected**	:	**08/28/23 16:35**
Client ID	:	**MW-7S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/31/23 05:23**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**5**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3230831-A1**	**Instrument ID**	:	**LACHAT**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**10.**	**0.50**	**0.23**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-08**	**Date Collected**	:	**08/28/23 14:30**
Client ID	:	**MW-8S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/31/23 05:24**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500NO3-F**	**Analyst**	:	**KAF**
Lab File ID	:	**NO3230831-A1**	**Instrument ID**	:	**LACHAT**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Nitrogen, Nitrate/Nitrite**	**0.53**	**0.10**	**0.046**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 05:09
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3230831-A1	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	0.14	0.10	0.046	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822231-1	**Date Collected**	: NA
Client ID	: WG1822231-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/31/23 03:19
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3230831-A1	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	ND	0.10	0.046	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822231-3	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1SDUP	**Date Received**	: 08/29/23
Sample Location	:	**Date Analyzed**	: 08/31/23 04:53
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500NO3-F	**Analyst**	: KAF
Lab File ID	: NO3230831-A1	**Instrument ID**	: LACHAT
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Nitrogen, Nitrate/Nitrite	0.10	0.10	0.05	

Sample Raw Data

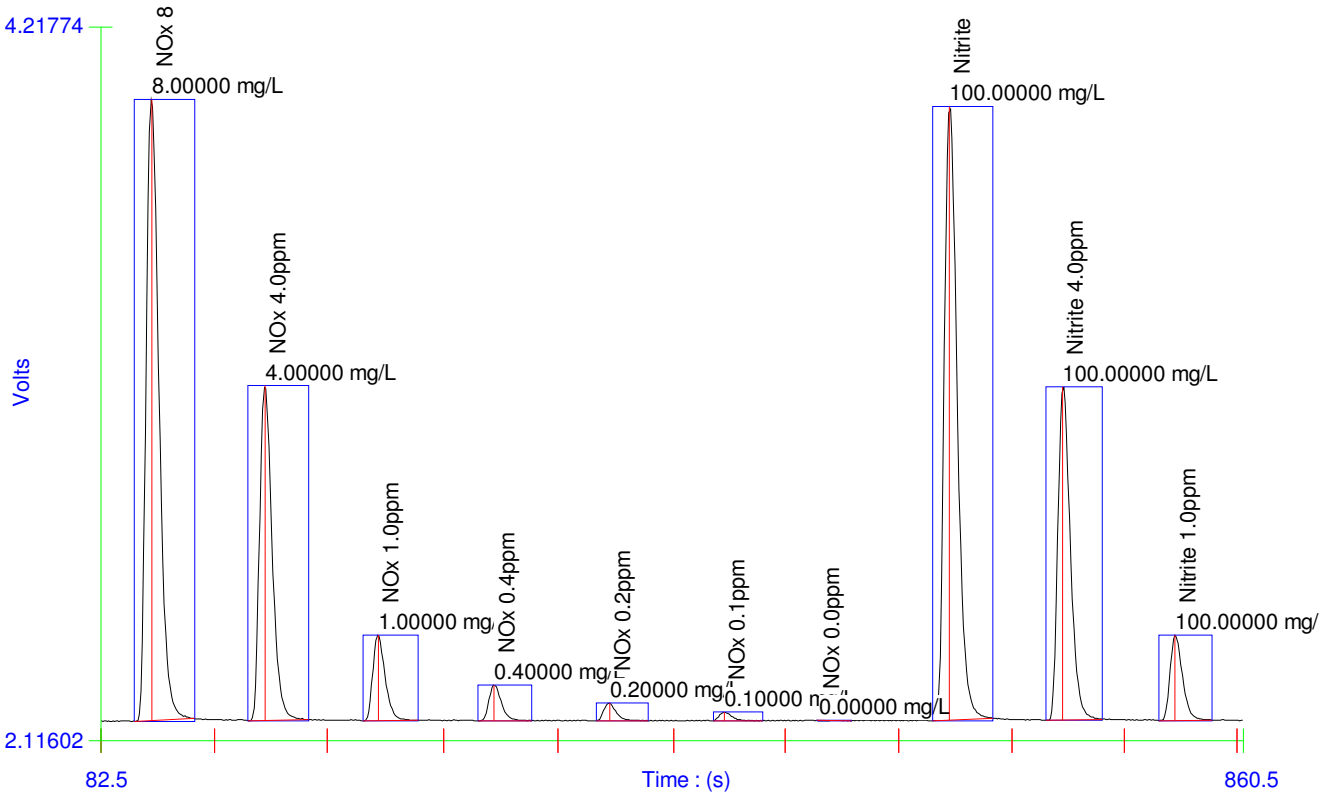
Original Run Filename: OM_8-31-2023_02-18-10AM.OMN Created: 8/31/2023 2:18:10 AM
Original Run Author's Signature: [A1wetcheminstrument]
Current Run Filename: OM_8-31-2023_02-18-10AM.OMN Last Modified: 8/31/2023 5:50:52 AM
Current Run Author's Signature: [A1wetcheminstrument]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 NO3+NO2 (mg/L)	Channel 2 Nitrite (mg N/L)	ADF	MDF	Weight
NOx 8.0ppm	1	S3	8.00000	100.00000			
NOx 4.0ppm	1	S4	4.00000	100.00000			
NOx 1.0ppm	1	S2	1.00000	100.00000			
NOx 0.4ppm	1	S5	0.40000	100.00000			
NOx 0.2ppm	1	S6	0.20000	100.00000			
NOx 0.1ppm	1	S7	0.10000	100.00000			
NOx 0.0ppm	1	S1	0.00000	100.00000			
Nitrite 8.0ppm	1	S10	100.00000	8.00000			
Nitrite 4.0ppm	1	S11	100.00000	4.00000			
Nitrite 1.0ppm	1	S9	100.00000	1.00000			
Nitrite 0.4ppm	1	S12	100.00000	0.40000			
Nitrite 0.1ppm	1	S13	100.00000	0.10000			
Nitrite 0.05ppm	1	S14	100.00000	0.05000			
Nitrite 0.0ppm	1	S1	100.00000	0.00000			
CCV NO3	1	S2	1.02968	-0.00555			
	Known Conc:		1.00000	0.00000			
	Calibration:		Table/Fig. : 1	Table/Fig. : 2			
CCV NO2	1	S9	1.01732	1.02452			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.01877	-0.00606			
	Known Conc:		0.00000	0.00000			
ICV NO3 5.0	1	1	5.02784	-0.00209			
ICV NO2 5.0	1	2	4.80199	4.91801			
ICV NO3 0.5	1	3	0.50489	-0.00878			
ICV NO2 0.5	1	4	0.47327	0.47914			
ICB	1	5	-0.01741	-0.00883			
DILUTER CHK 8PPM	1	6	8.24314	-0.01968	5.00		
BLK NO3	1	7	-0.01608	-0.00756			
LCS NO3	1	8	5.01031	-0.00263			
BLK NO2	1	9	-0.02234	-0.00023			
LCS NO2	1	10	4.81153	4.92678			
CCV NO3	1	S2	1.03149	-0.01034			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.02994	1.04700			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	0.00306	-0.00200			
	Known Conc:		0.00000	0.00000			
WG1822224-1; NO2	1	11	-0.02577	-0.00403			
WG1822224-2; NO2	1	12	4.80941	4.90332			
WG1822225-1; NO2	1	13	-0.01737	-0.01199			
WG1822225-2; NO2	1	14	4.87711	4.96817			
WG1822226-1; NO3	1	15	-0.01998	-0.00891			
WG1822226-2; NO3	1	16	5.02750	-0.00205			
WG1822227/230-1; NO3	1	17	0.00270	-0.00341			
WG1822227/230-2; NO3	1	18	5.02475	-0.00157			
WG1822228-1; NO3	1	19	-0.02225	-0.00401			
WG1822228-2; NO3	1	20	5.06830	-0.00899			
CCV NO3	1	S2	1.03434	-0.00369			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.03145	1.04375			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.00071	-0.00161			
	Known Conc:		0.00000	0.00000			
WG1822229-1; NO3	1	21	0.00161	-0.00085			
WG1822229-2; NO3	1	22	5.01305	-0.00181			
WG1822231-1; CNO3	1	23	-0.01291	-0.00657			
WG1822231-2; CNO3	1	24	5.02793	-0.00025			
L2350148-01M	1	25	0.77331	0.00248			

WG1822227/230-3; DUP NO3 148-01	1	26	0.76517	-0.00399			
WG1822227/230-4; MS NO3 148-01	1	27	4.56777	0.00121			
WG1822225-3; DUP NO2 148-01	1	28	0.76459	-0.00441			
WG1822225-4; MS NO2 148-01	1	29	4.83130	4.18888			
L2350148-02M	1	30	0.35037	0.00977			
CCV NO3	1	S2	1.03223	-0.00247			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.02815	1.04872			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.01816	-0.00214			
	Known Conc:		0.00000	0.00000			
L2350148-03M	1	31	0.60011	0.00266			
L2350148-04M	1	32	1.91990	0.00434			
L2350225-01C	1	33	3.38451	0.00358			
L2350225-02C	1	34	0.05467	0.00280			
L2350225-03C	1	35	6.86441	0.00330			
L2350225-04C	1	36	0.02315	0.00279			
L2350225-05C	1	37	7.53442	0.00314			
L2350225-06H	1	38	-0.01780	-0.00434			
L2350444-01K	1	39	0.00749	0.00386			
L2350444-02K	1	40	0.00686	0.00448			
CCV NO3	1	S2	1.02692	-0.00243			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.01255	1.03450			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.01692	-0.00601			
	Known Conc:		0.00000	0.00000			
L2350444-03K	1	41	0.00483	0.00367			
L2350314-01A	1	42	0.05335	0.00629			
WG1822228-3; DUP NO3 314-01	1	43	0.04413	0.00011			
WG1822228-4; MS NO3 314-01	1	44	3.96564	0.02053			
L2350314-02A	1	45	0.06579	0.00755			
L2350487-01F	1	46	0.01839	0.00830			
L2350487-02F	1	47	0.15358	0.00814			
L2350487-03F	1	48	0.09352	0.00870			
L2350487-04F	1	49	0.04398	0.01411			
L2350362-01H	1	50	0.10986	0.02594			
CCV NO3	1	S2	1.03361	-0.00388			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.02533	1.04759			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.01687	-0.00506			
	Known Conc:		0.00000	0.00000			
L2350365-01H	1	51	0.14641	0.05938			
L2350386-03A; PINK	1	52	0.03601	0.02980			
L2350386-03A; PINK	1	52	0.02933	0.01526	5.00		
L2350401-01T	1	53	0.01198	0.01020			
L2350409-01A	1	54	12.47010	0.02568			
L2350440-01A	1	55	22.97535	0.49949			
WG1822226-3; DUP NO3 440-01	1	56	22.96023	0.50483			
WG1822226-4; MS NO3 440-01	1	57	51.46501	0.44048	10.00		
WG1822224-3; DUP NO2 440-01	1	58	23.04121	0.49352			
L2350409-01A	1	54	14.46499	0.01201	5.00		
CCV NO3	1	S2	1.03382	-0.00681			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.02232	1.04151			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.00013	-0.00622			
	Known Conc:		0.00000	0.00000			
WG1822224-4; MS NO2 440-01	1	59	23.53119	4.69568			
L2350440-01A	1	55	48.66026	0.45810	10.00		
WG1822226-3; DUP NO3 440-01	1	56	48.92227	0.47402	10.00		
L2350175-01F	1	60	2.81478	0.05419			
WG1822229-3; DUP NO3 175-01	1	61	2.76371	0.05363			
WG1822229-4; MS NO3 175-01	1	62	6.54315	0.07744			
L2350175-02F	1	63	8.82148	0.04006			
L2350175-03F	1	64	2.26018	0.03978			

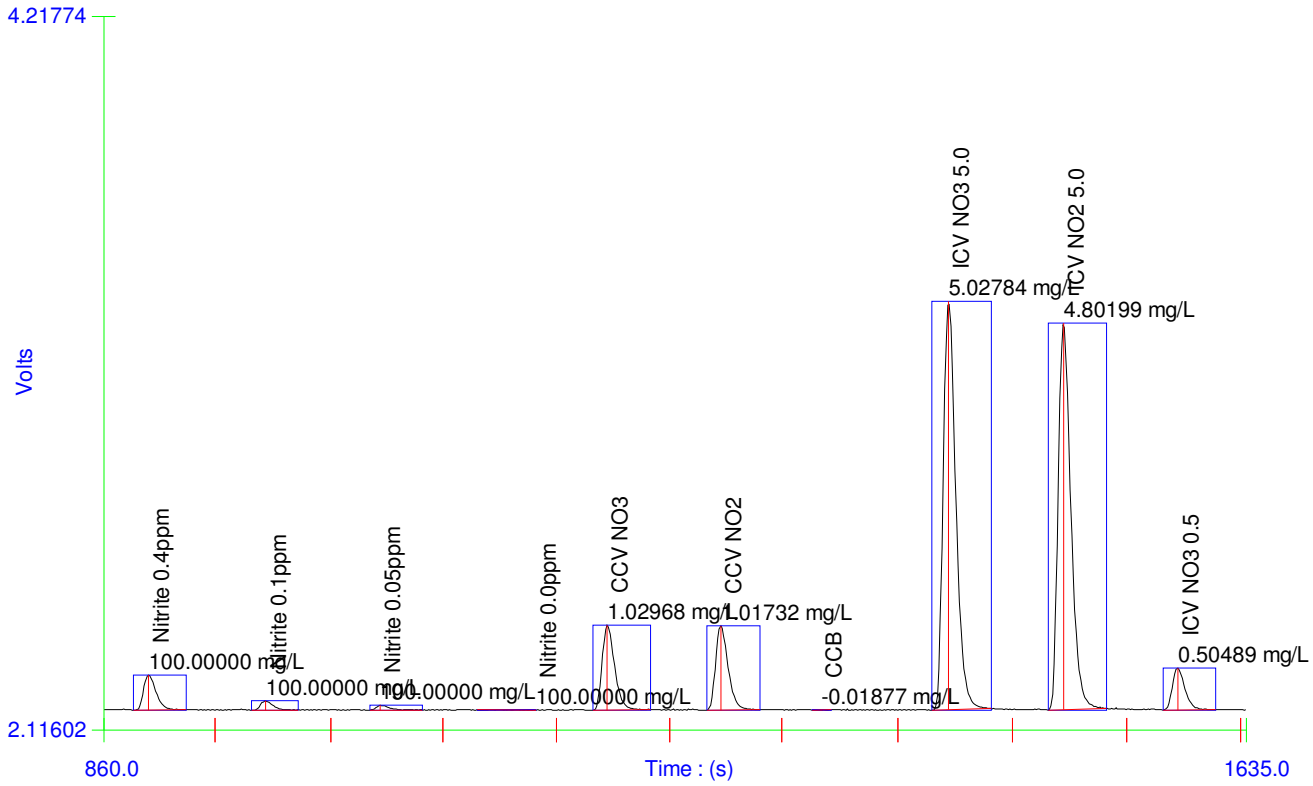
L2350175-04F	1	65	0.28511	0.05435			
L2350175-05F	1	66	1.69501	0.06168			
CCV NO3	1	S2	1.02887	-0.00520			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.03148	1.05705			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.01681	-0.00639			
	Known Conc:		0.00000	0.00000			
L2350175-06F	1	67	1.59434	0.05094			
L2350175-07F	1	68	0.54417	0.21912			
L2350175-08F	1	69	4.50622	0.52249			
L2350175-09F	1	70	-0.02145	-0.00303			
L2350269-01M	1	71	0.11131	0.08247			
WG1822231-3; DUP CNO3 269-01	1	72	0.10020	0.07272			
WG1822231-4; MS CNO3 269-01	1	73	4.06638	0.07547			
L2350269-02M	1	74	1.15094	0.00724			
L2350269-03M	1	75	2.04105	0.00627			
L2350269-04M	1	76	0.46213	0.00515			
CCV NO3	1	S2	1.03234	-0.00341			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.02391	1.04389			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.01880	-0.00489			
	Known Conc:		0.00000	0.00000			
L2350269-05M	1	77	0.91736	0.00673			
L2350269-06M	1	78	1.17972	0.00776			
L2350269-07M	1	79	9.23644	0.00843			
L2350269-08M	1	80	0.53492	0.04280			
L2350269-09M	1	81	0.13820	0.07528			
L2350405-01K	1	82	12.91189	0.01239			
WG1822255-3; DUP NO2 405-01	1	83	12.93414	0.00124			
WG1822255-4; MS NO2 405-01	1	84	15.01293	4.23512			
L2350175-02F	1	63	9.64321	0.03488	5.00		
L2350175-03F	1	64	2.25493	0.04139			
CCV NO3	1	S2	1.03083	-0.00300			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.02722	1.05119			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.01691	-0.00568			
	Known Conc:		0.00000	0.00000			
L2350269-07M	1	79	10.15749	-0.00209	5.00		
L2350269-08M	1	80	0.53368	0.04429			
L2350405-01K	1	82	15.05340	0.00151	5.00		
L2350405-02K	1	85	0.01610	0.00717			
L2350405-03K	1	86	3.05678	0.00848			
L2350405-04K	1	87	0.01624	0.00774			
L2350405-05K	1	88	0.88592	0.01210			
L2350405-06K	1	89	0.40047	0.00694			
L2350405-07K	1	90	-0.01627	-0.00168			
L2350457-01G	1	91	0.04107	0.01039			
CCV NO3	1	S2	1.03319	-0.00257			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.02888	1.04545			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.01549	-0.00386			
	Known Conc:		0.00000	0.00000			
WG1822256-3; DUP NO3 457-01	1	92	0.02537	0.00048			
WG1822256-4; MS NO3 457-01	1	93	4.05906	0.02708			
L2350458-01G	1	94	4.93336	0.00781			
CCV NO3	1	S2	1.02698	-0.00075			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.02785	1.04281			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.01561	-0.00655			
	Known Conc:		0.00000	0.00000			

Channel 1 (NO3+NO2) - Set: 1 / 16



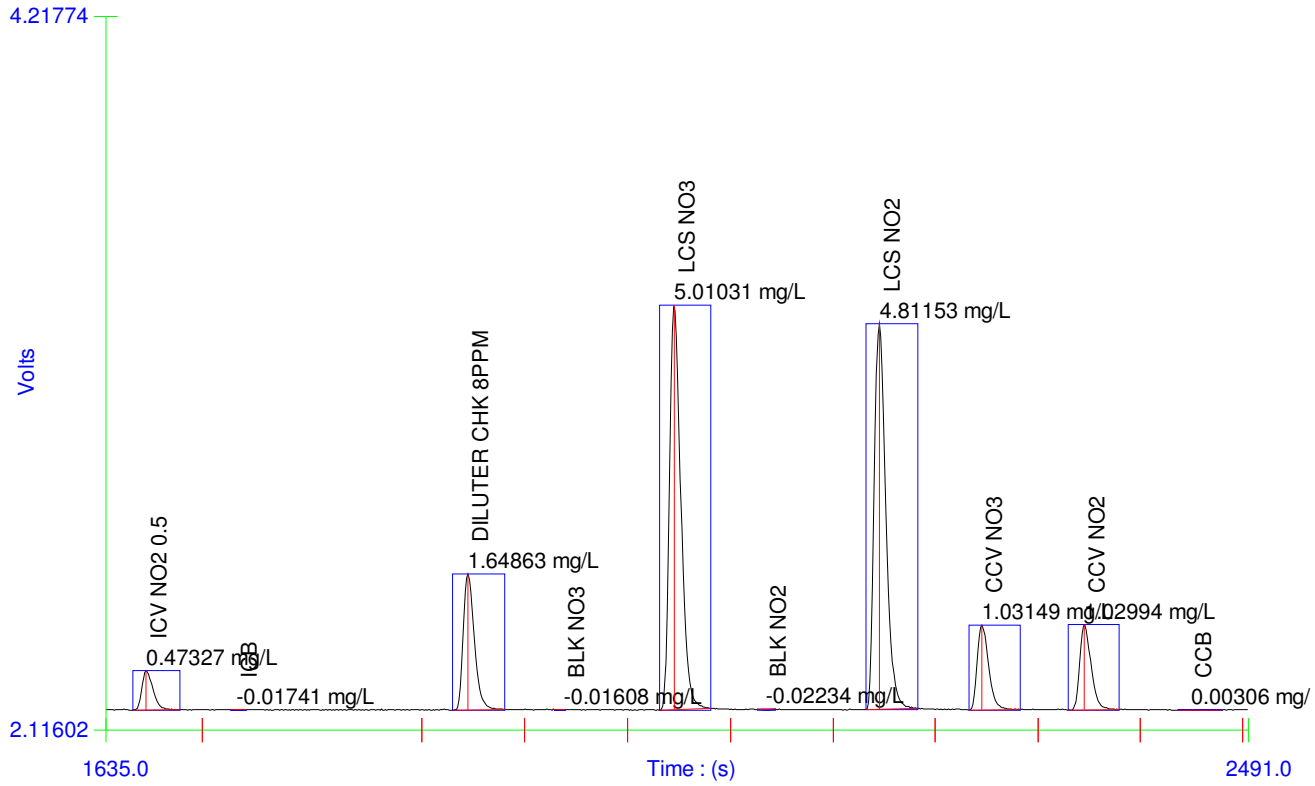
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 2 / 16



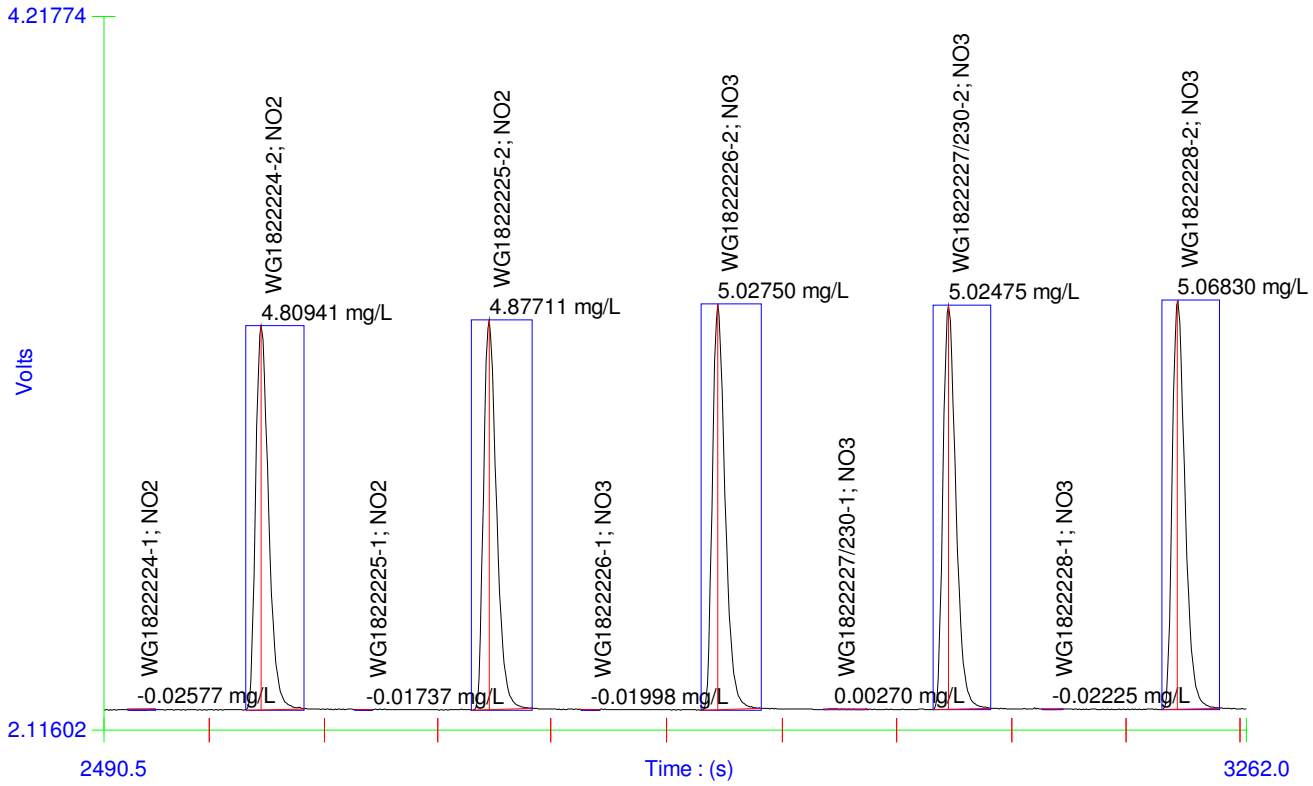
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 3 / 16



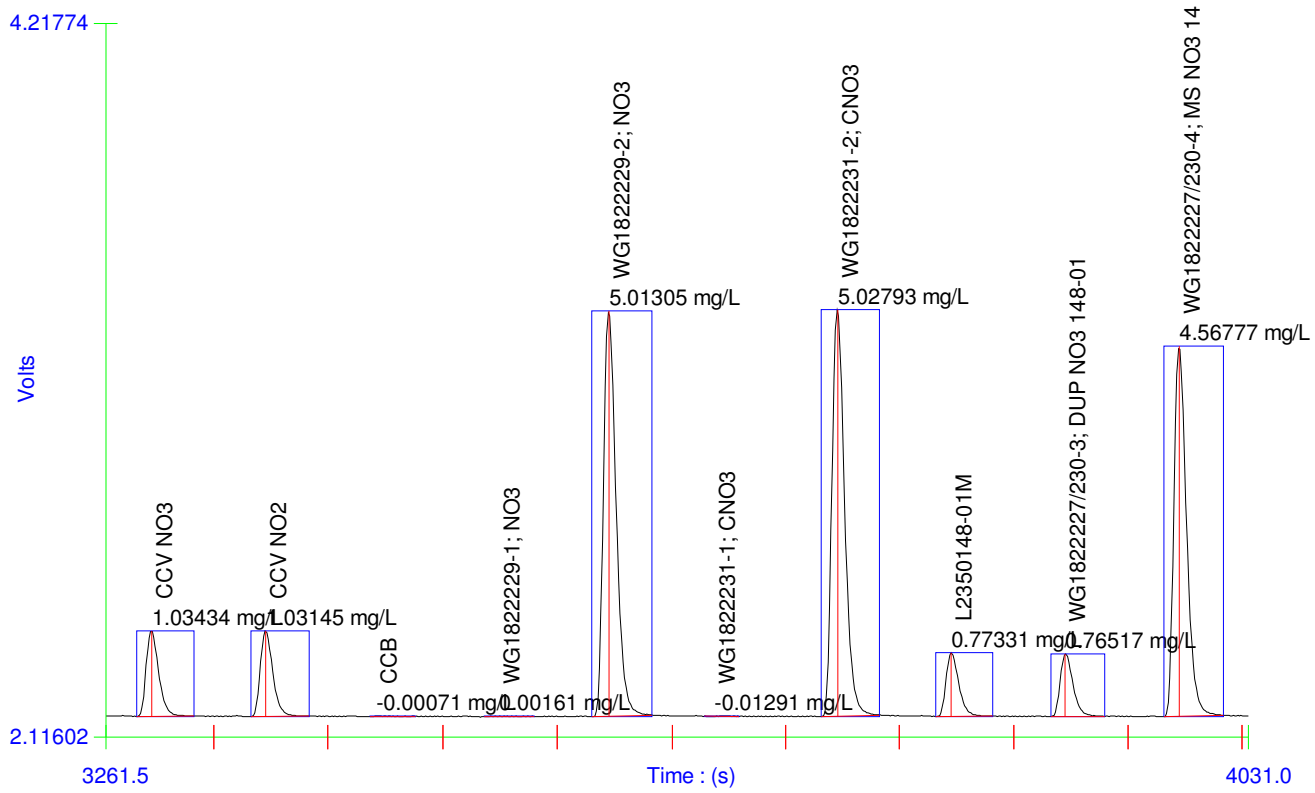
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 4 / 16



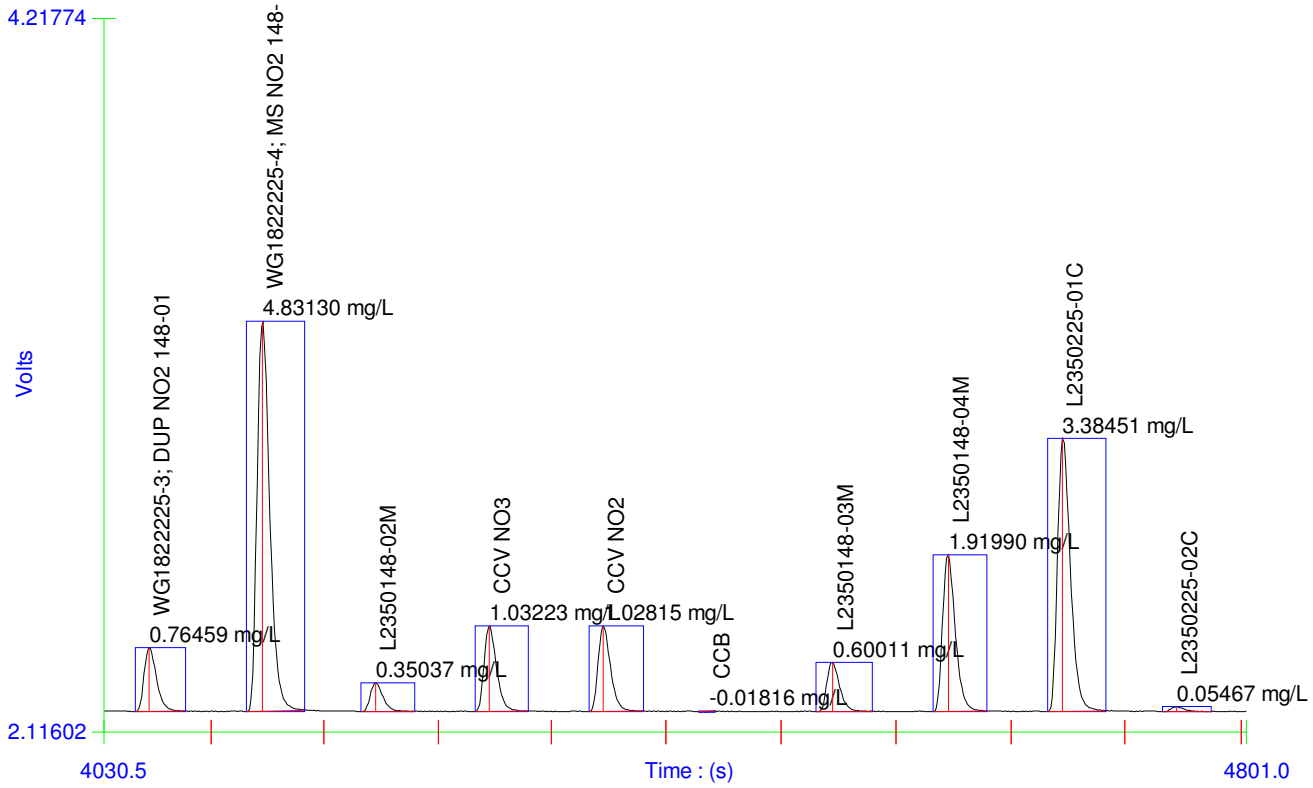
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 5 / 16



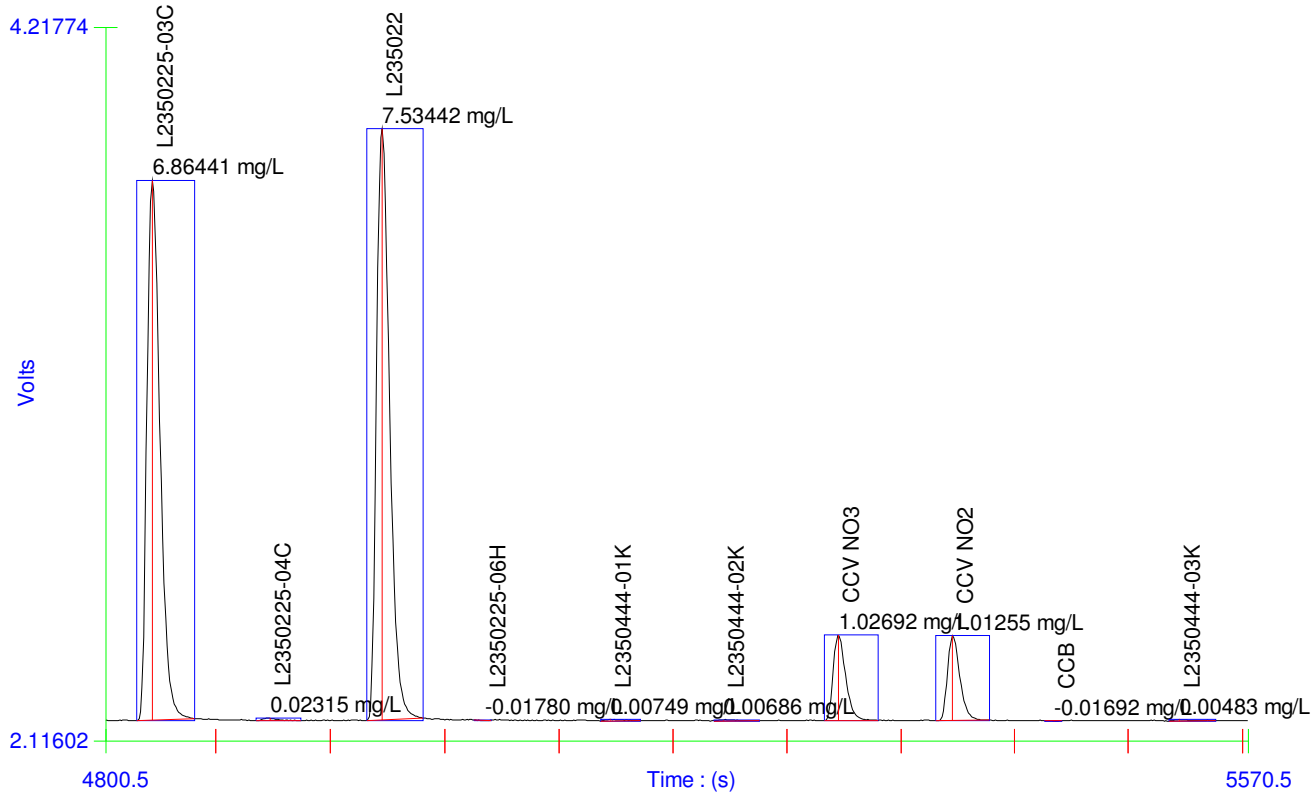
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 6 / 16



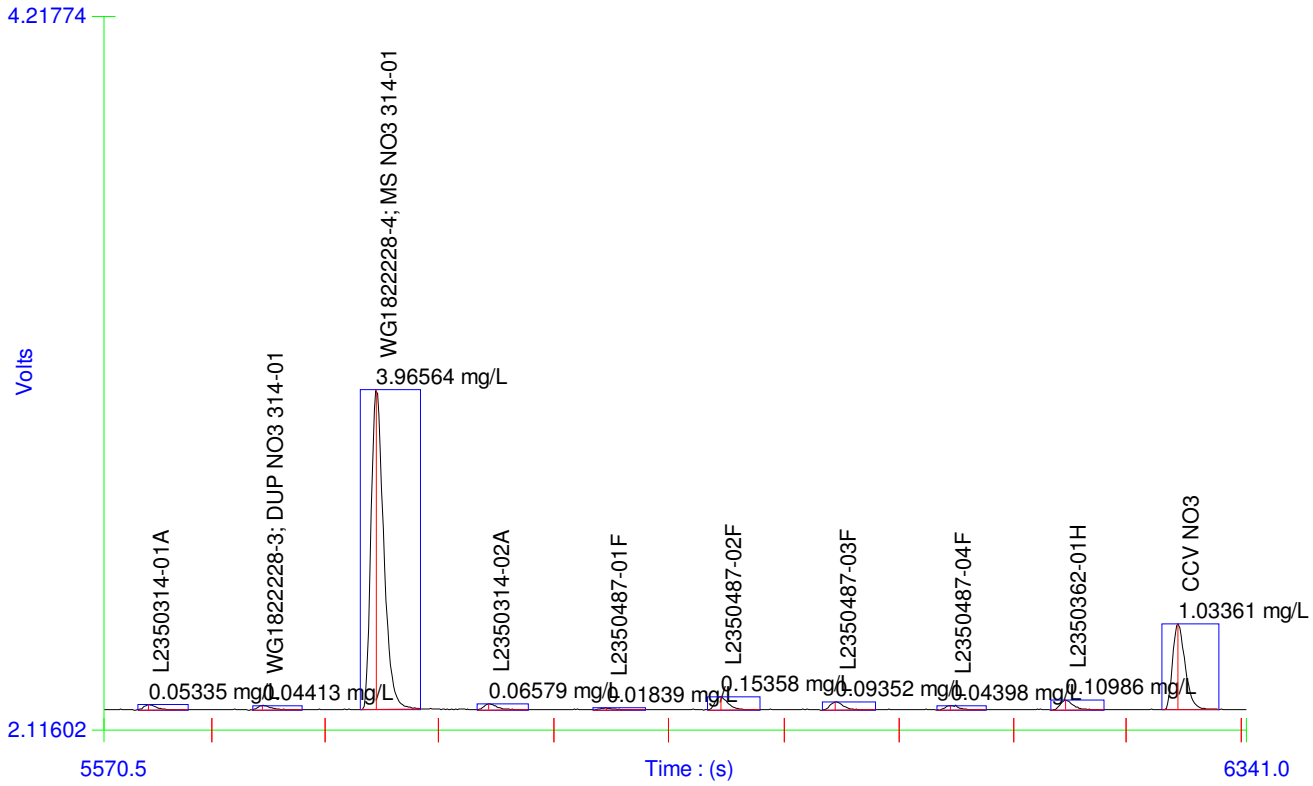
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 7 / 16



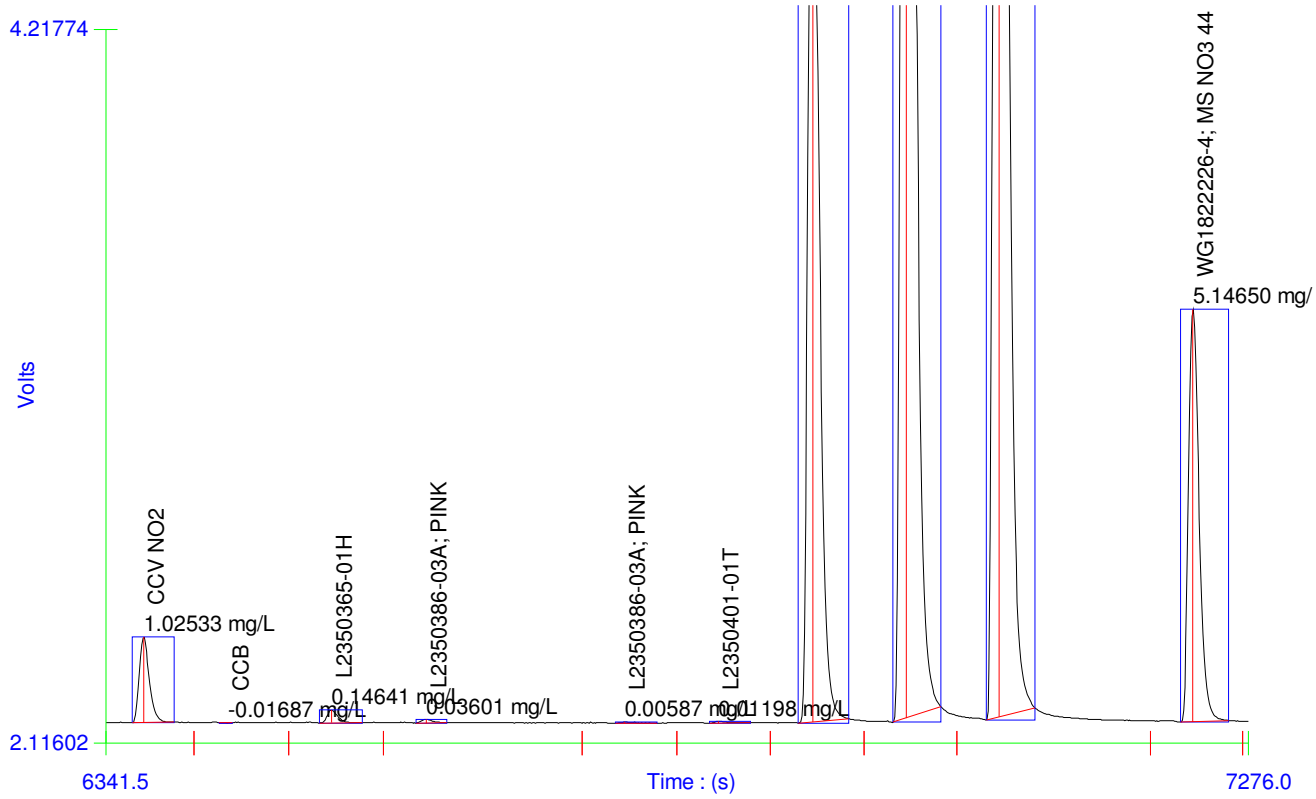
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 8 / 16



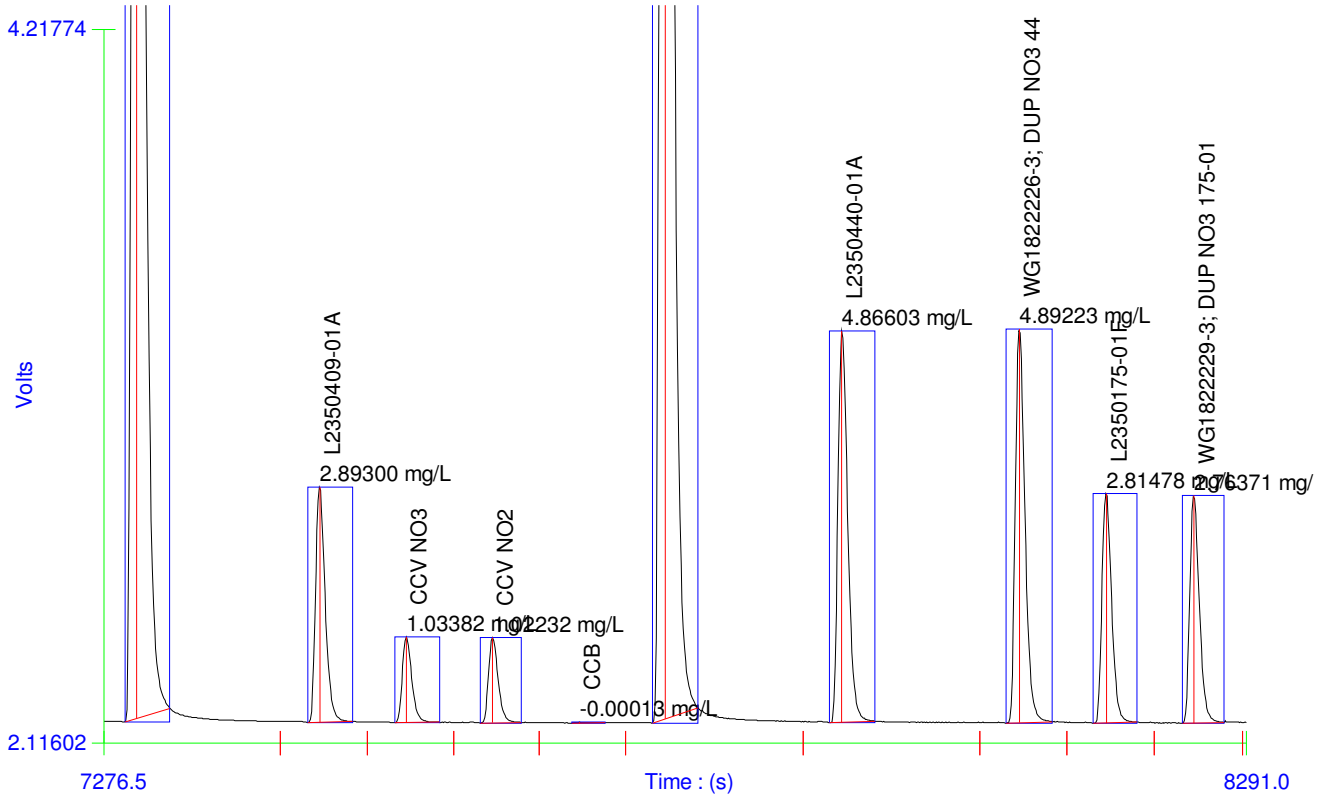
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 9 / 16



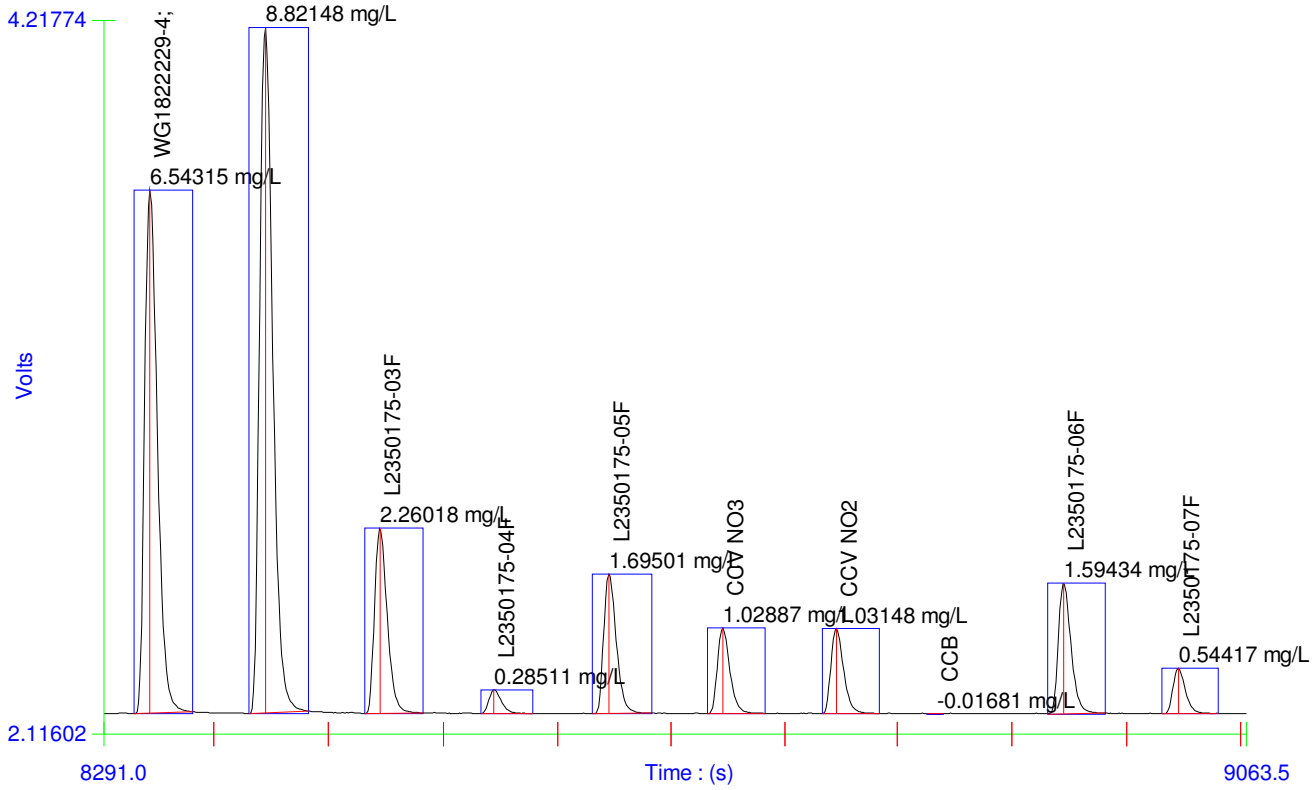
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 10 / 16



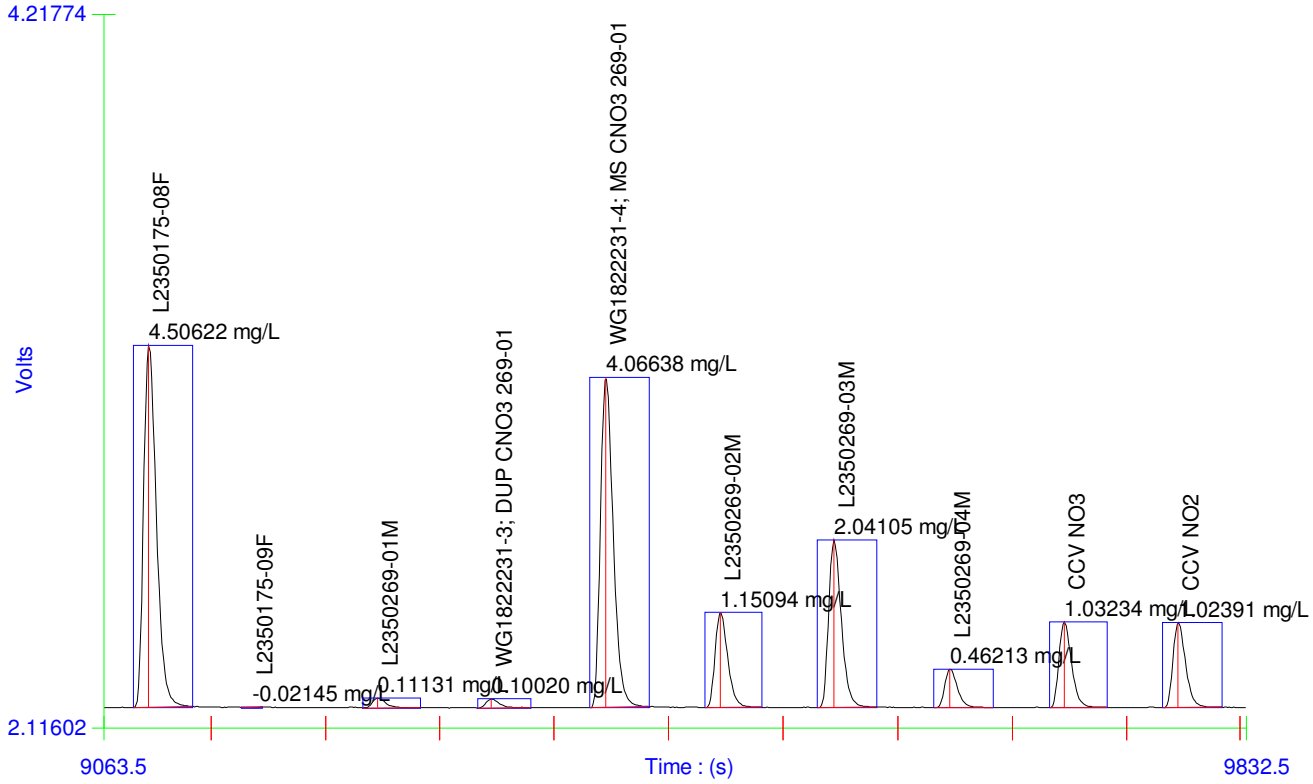
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 11 / 16



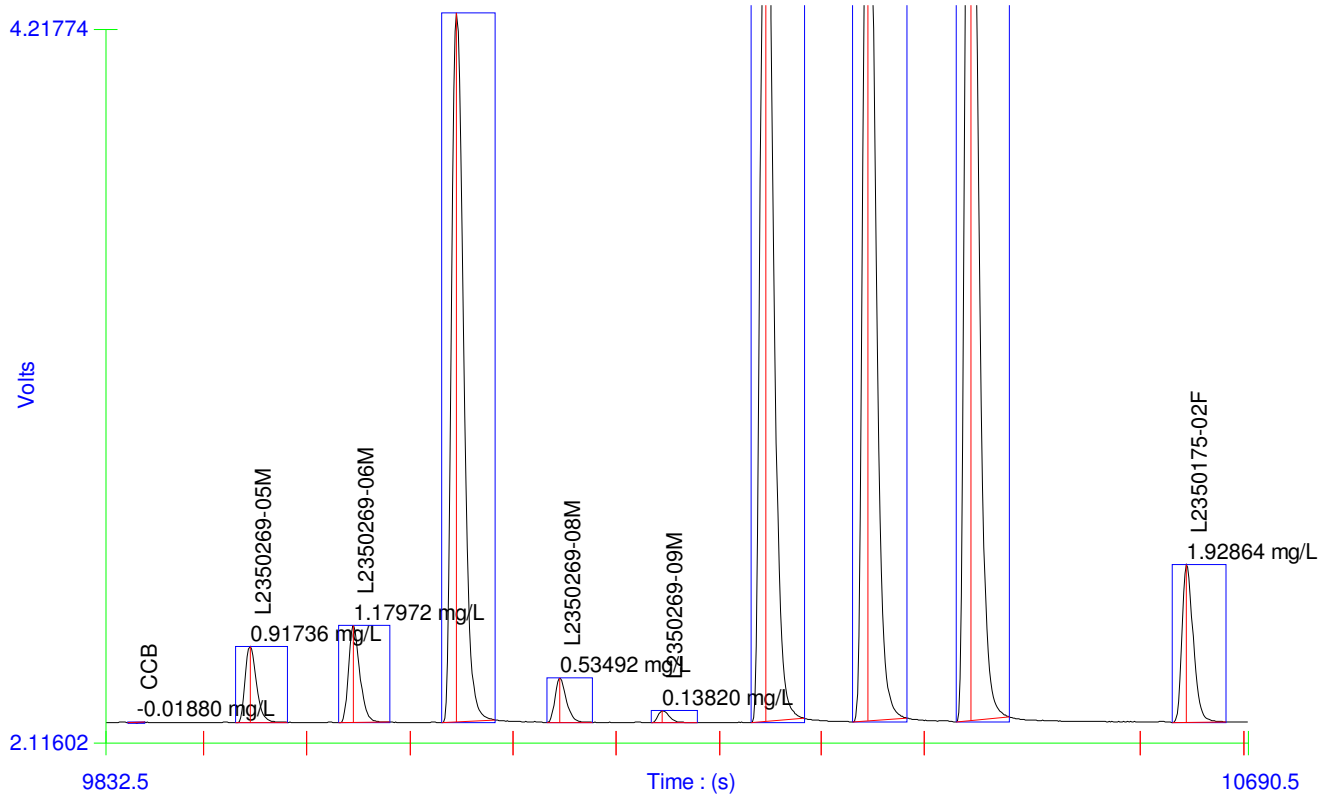
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 12 / 16



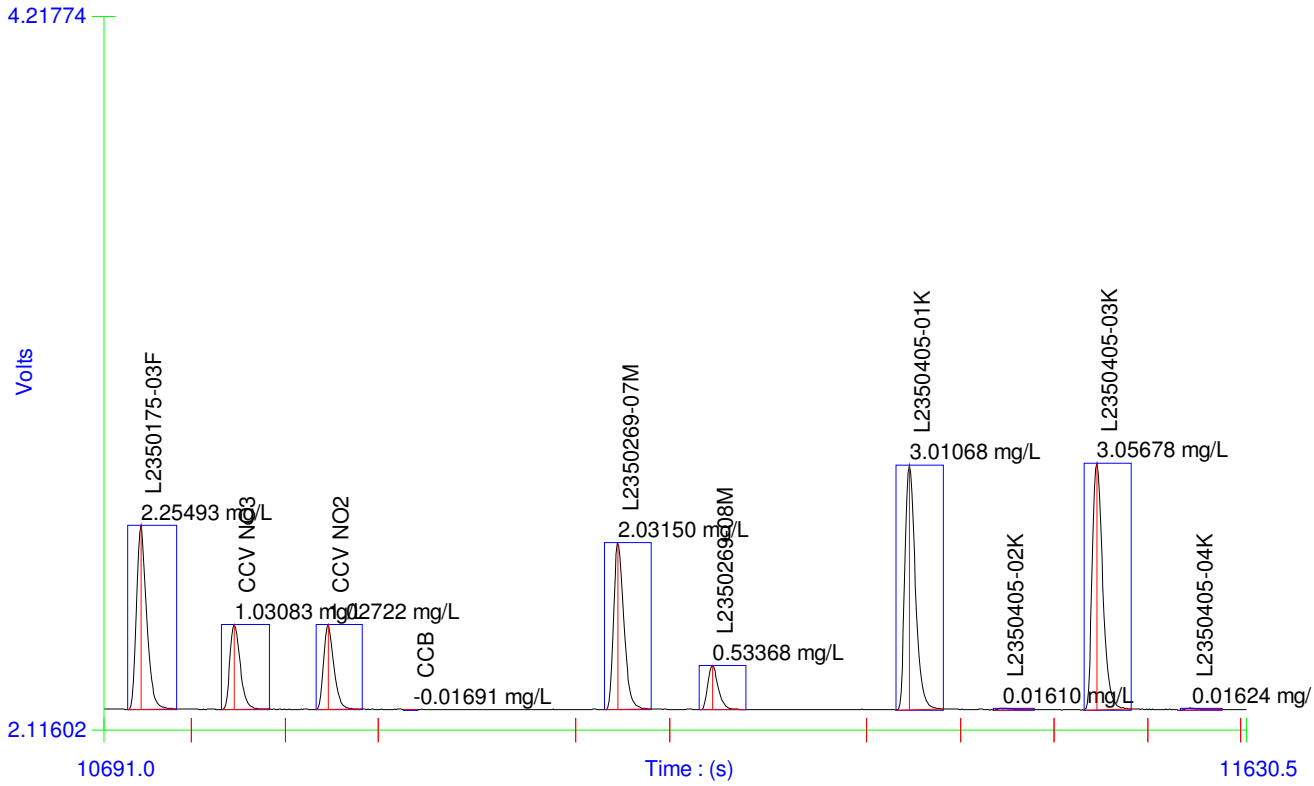
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 13 / 16



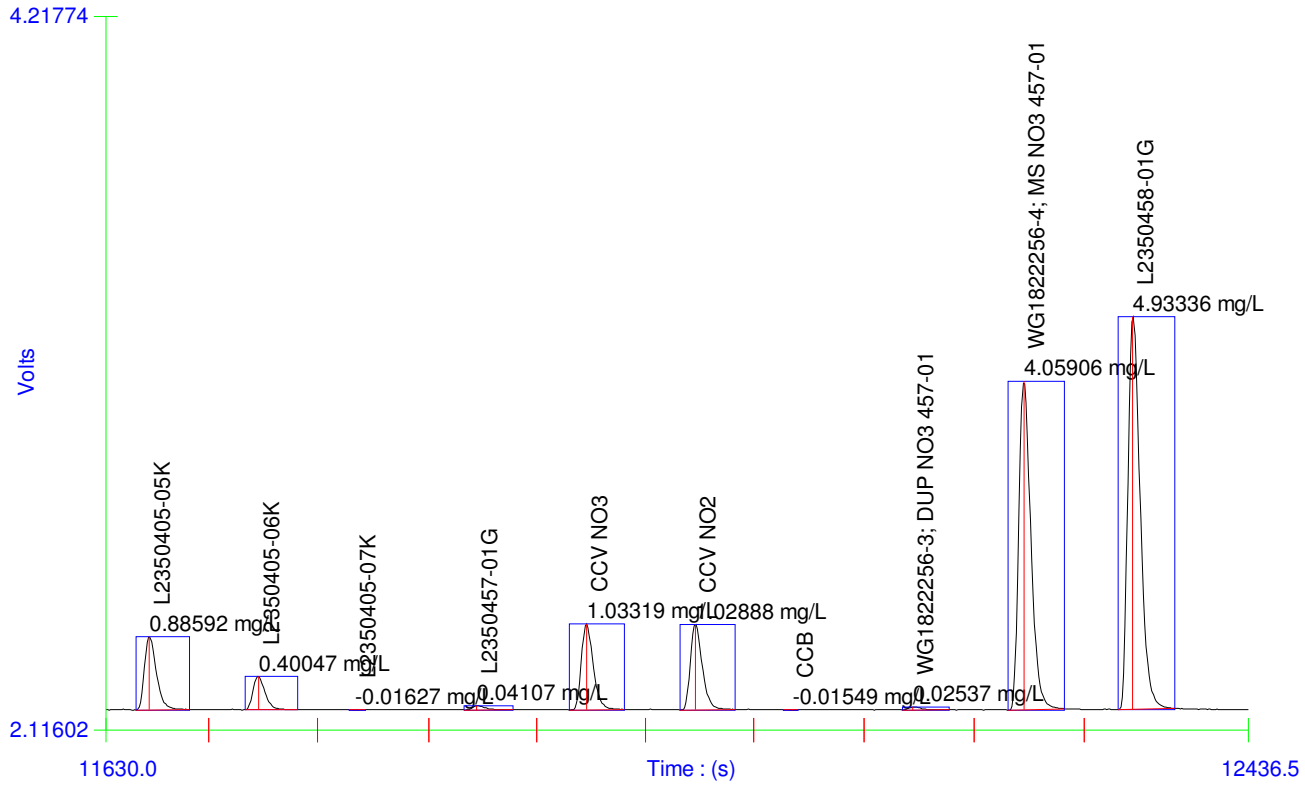
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 14 / 16



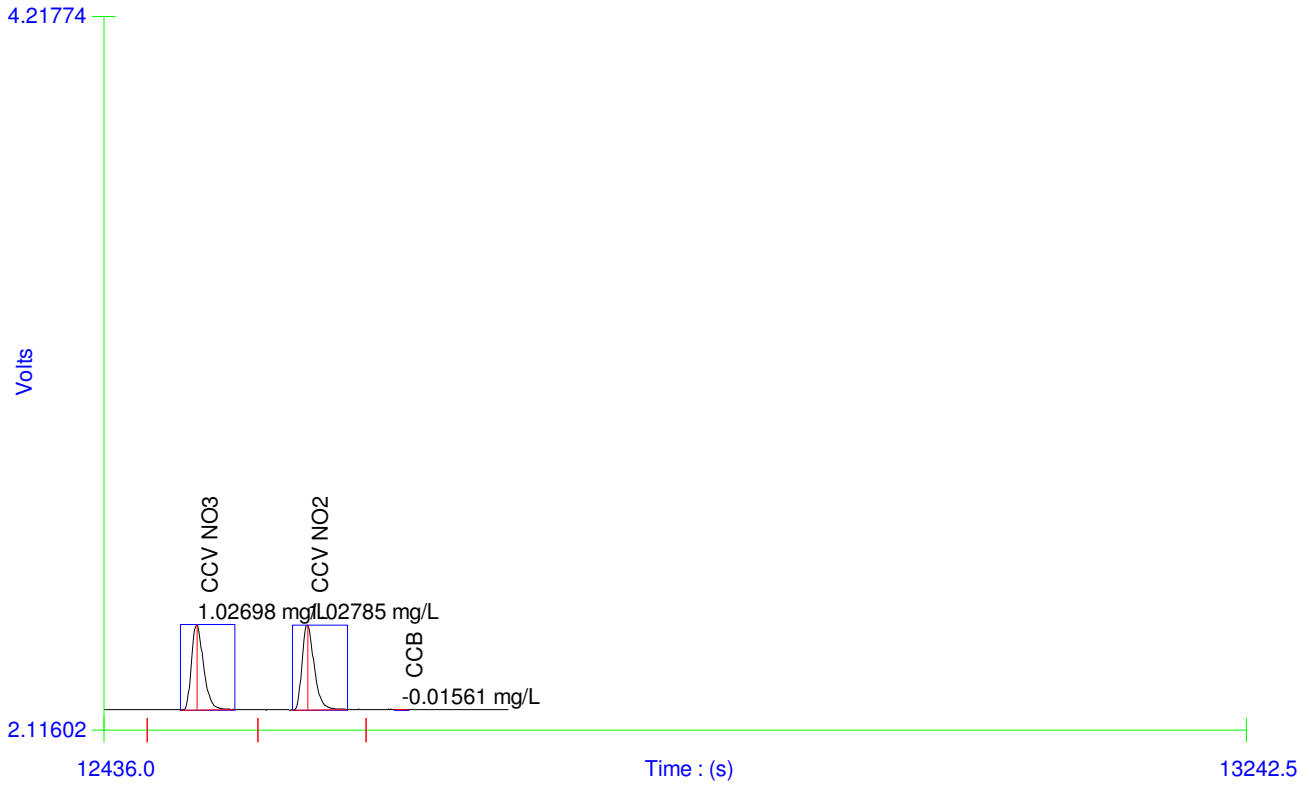
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 15 / 16



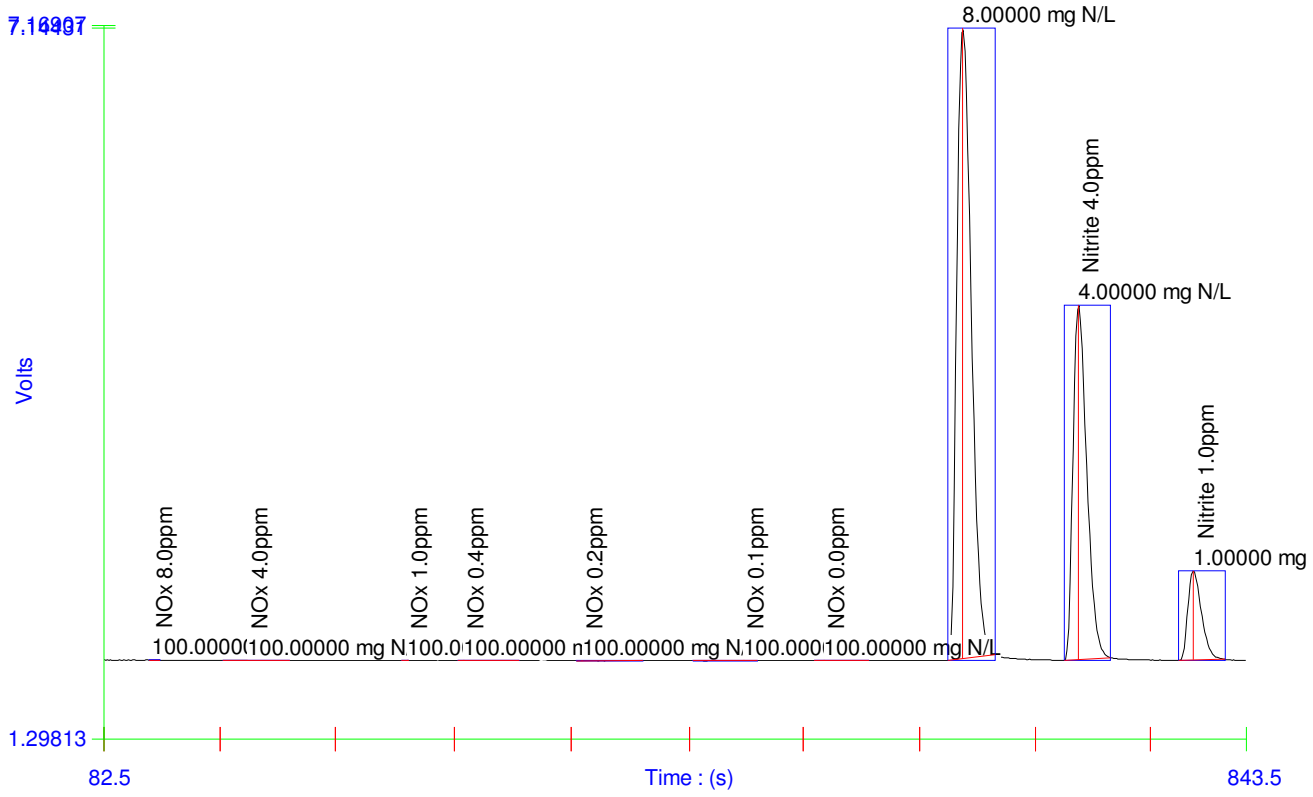
Author: KAF TRAY 1 Date : 230831-1

Channel 1 (NO3+NO2) - Set: 16 / 16



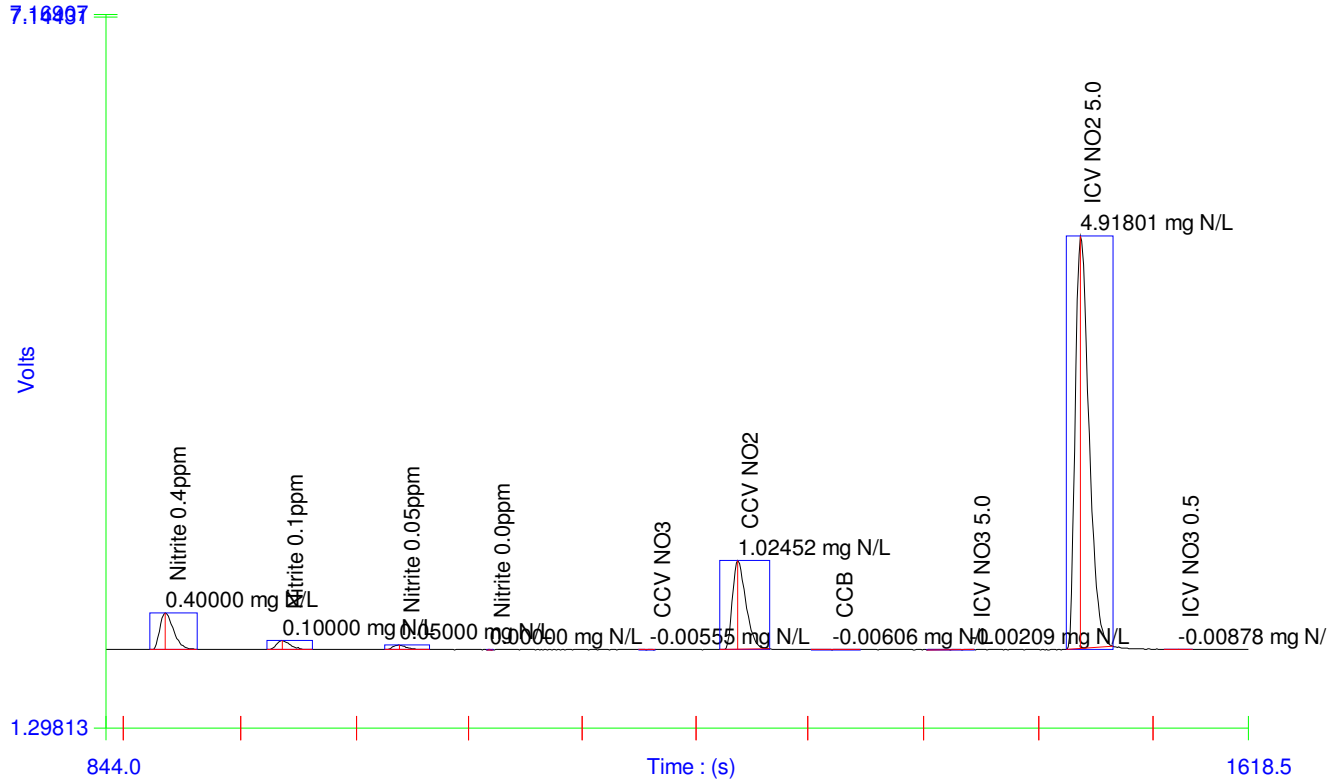
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 1 / 16



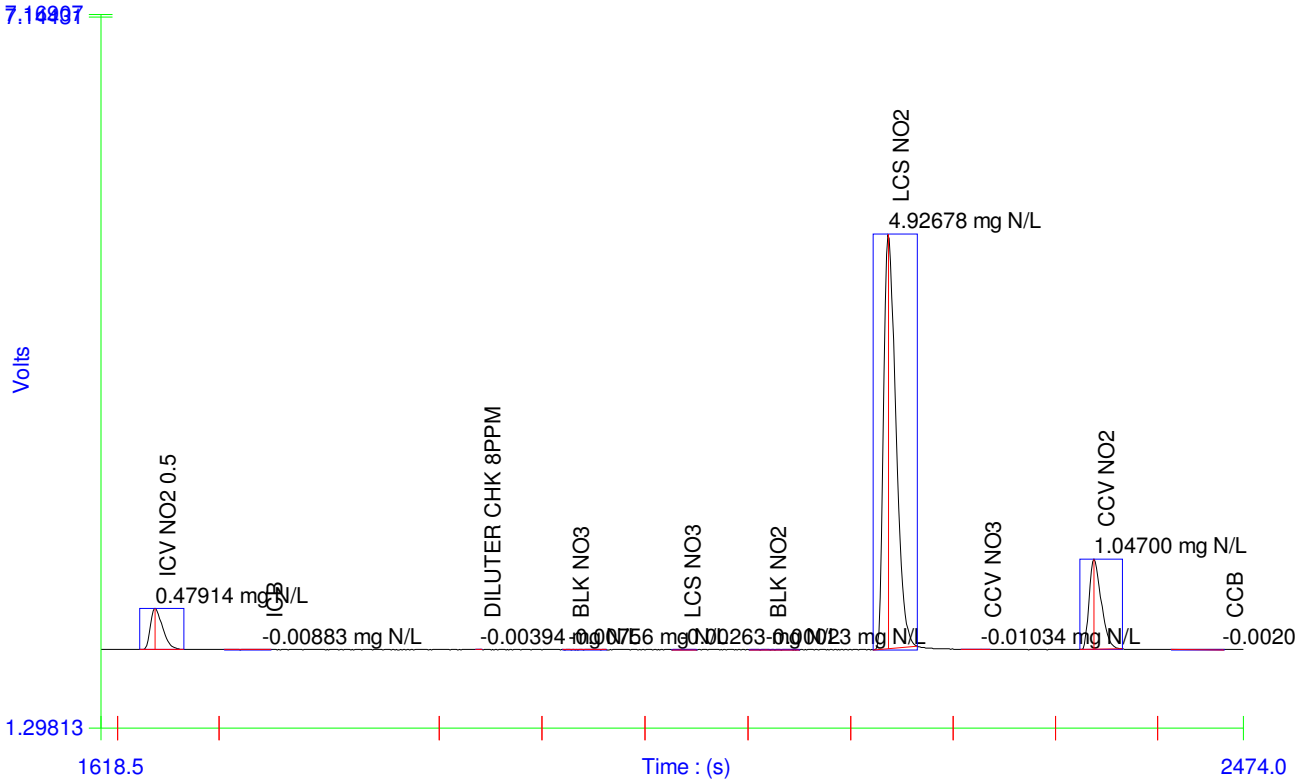
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 2 / 16



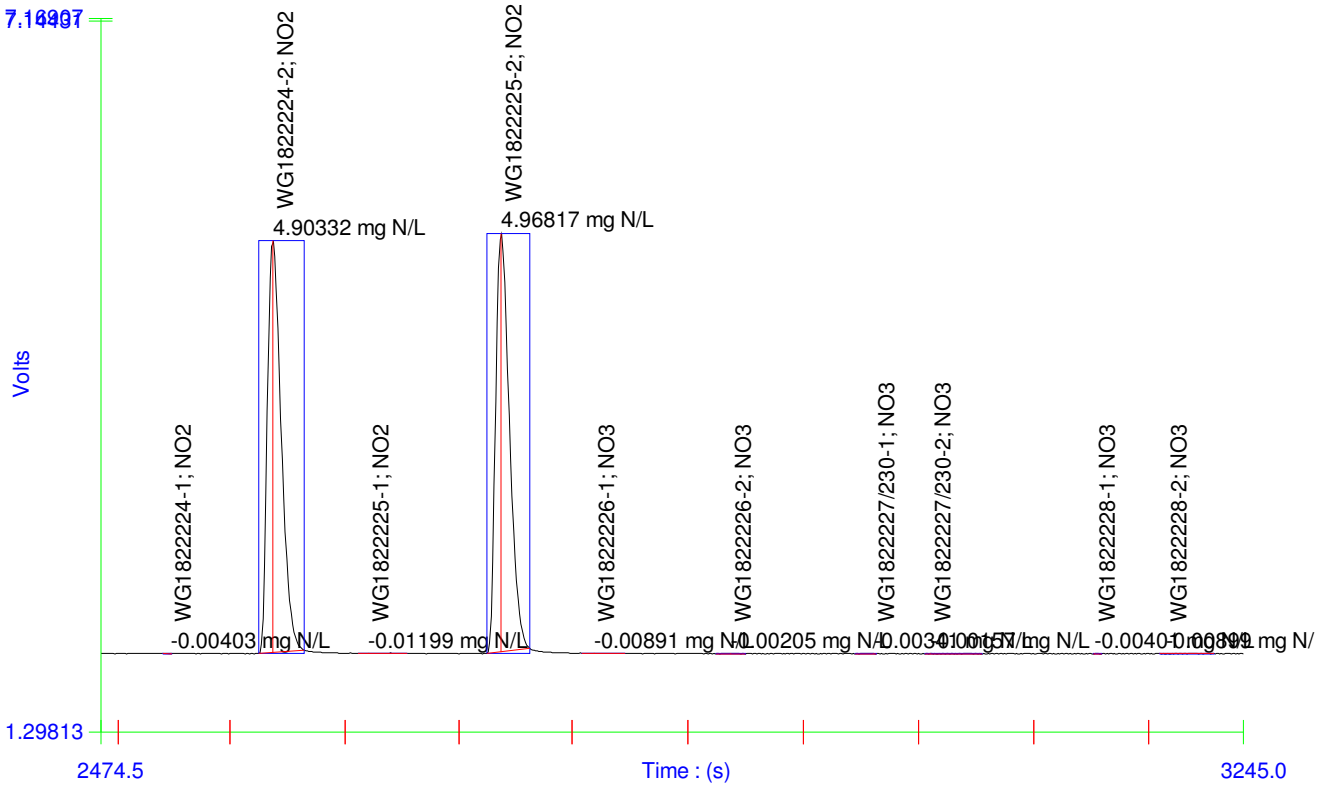
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 3 / 16



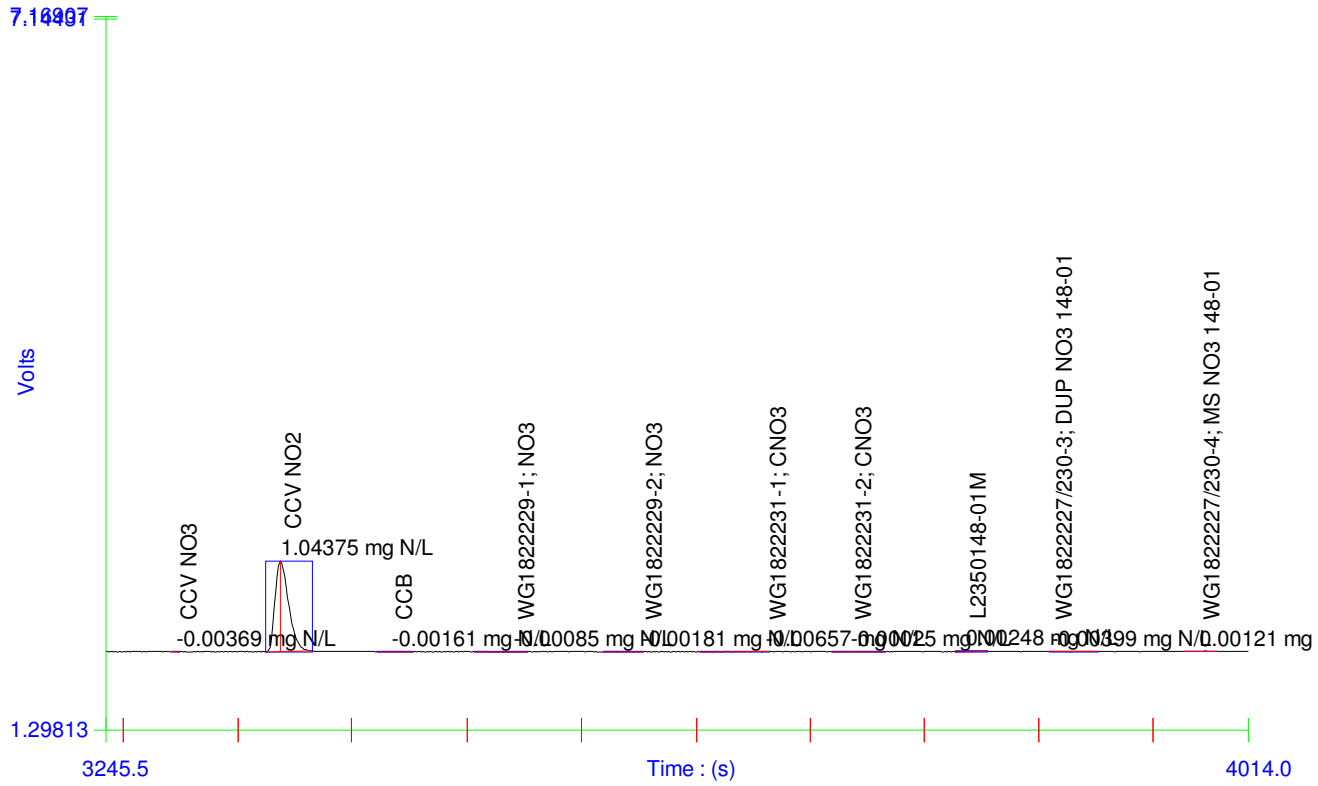
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 4 / 16



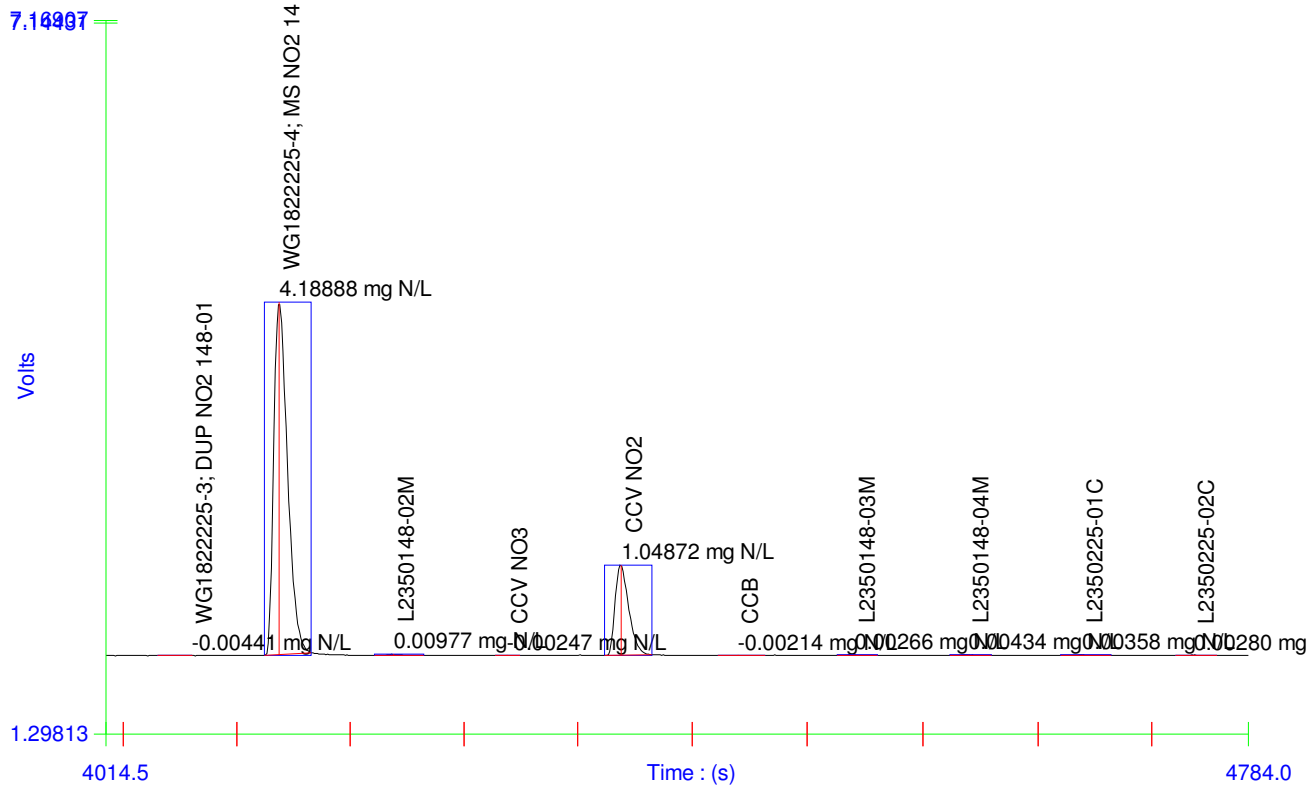
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 5 / 16



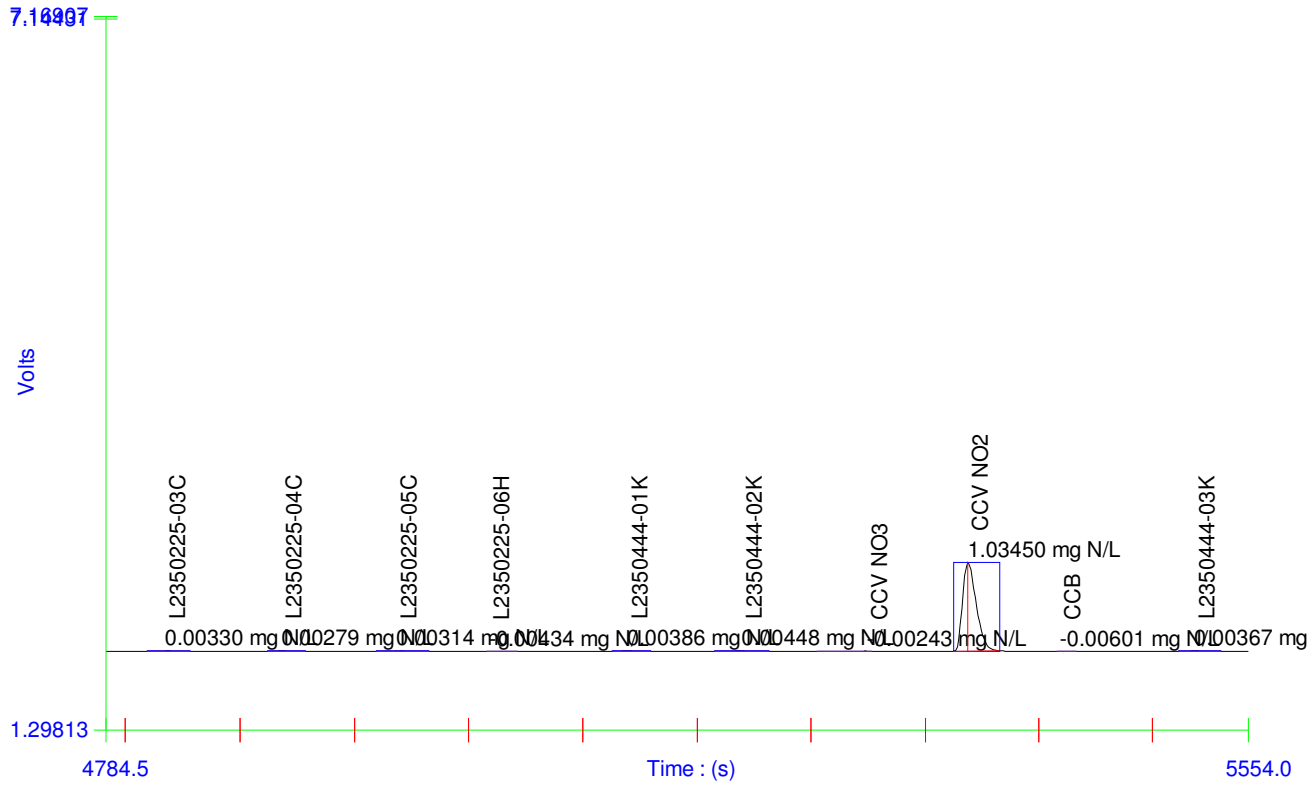
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 6 / 16



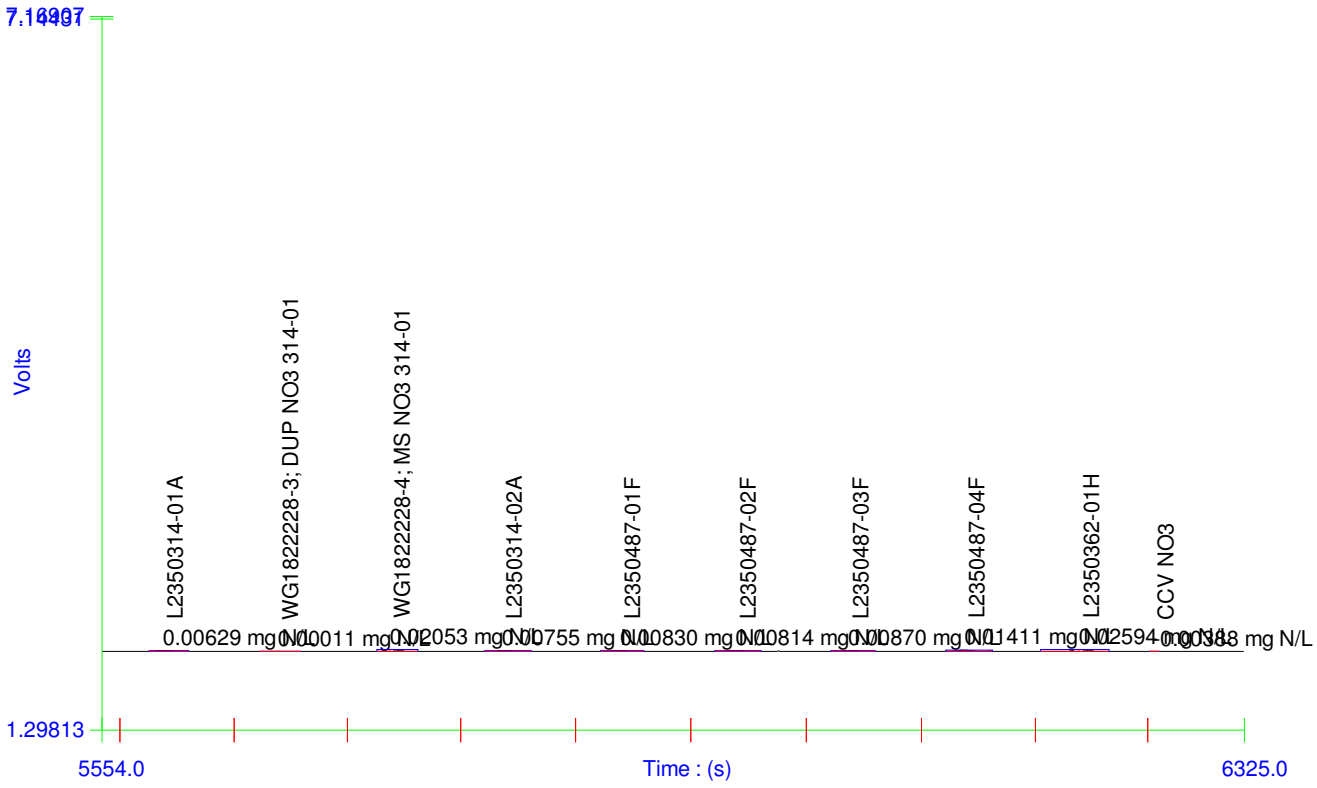
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 7 / 16



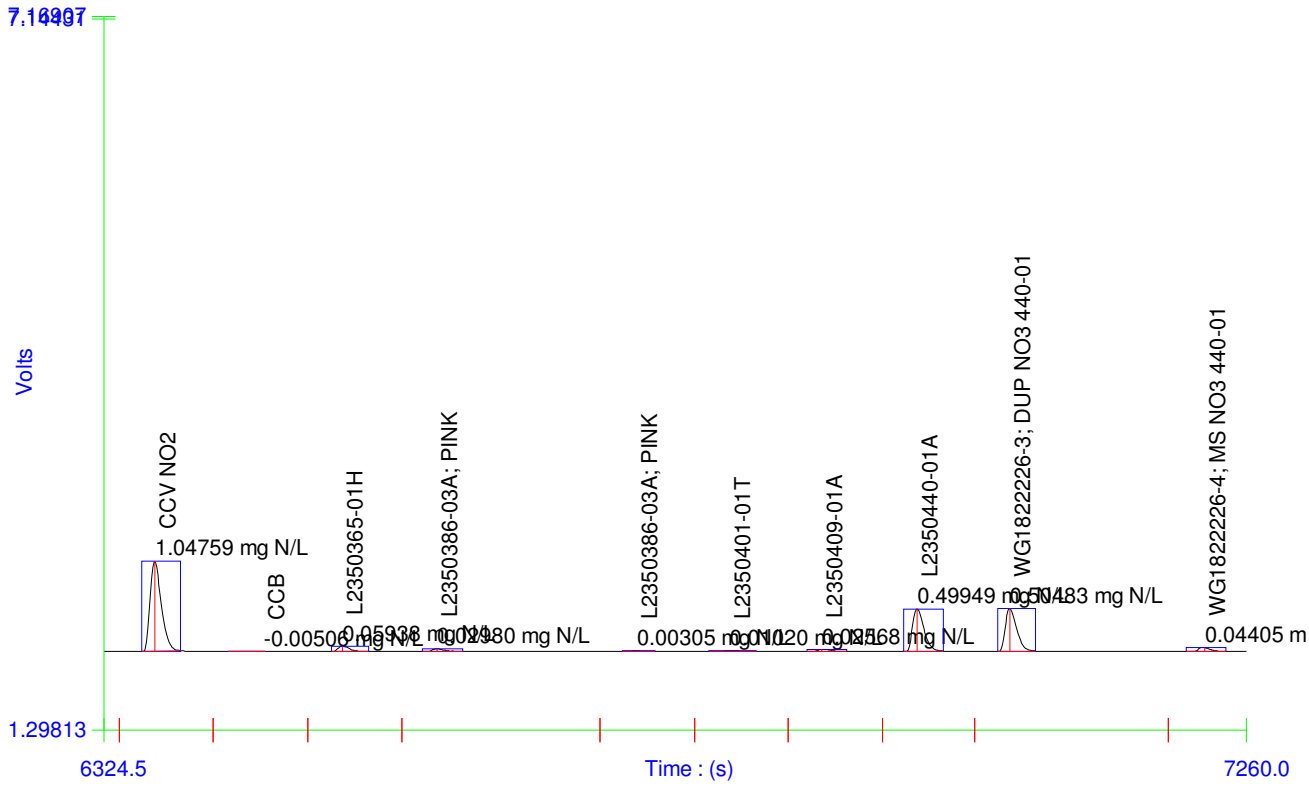
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 8 / 16



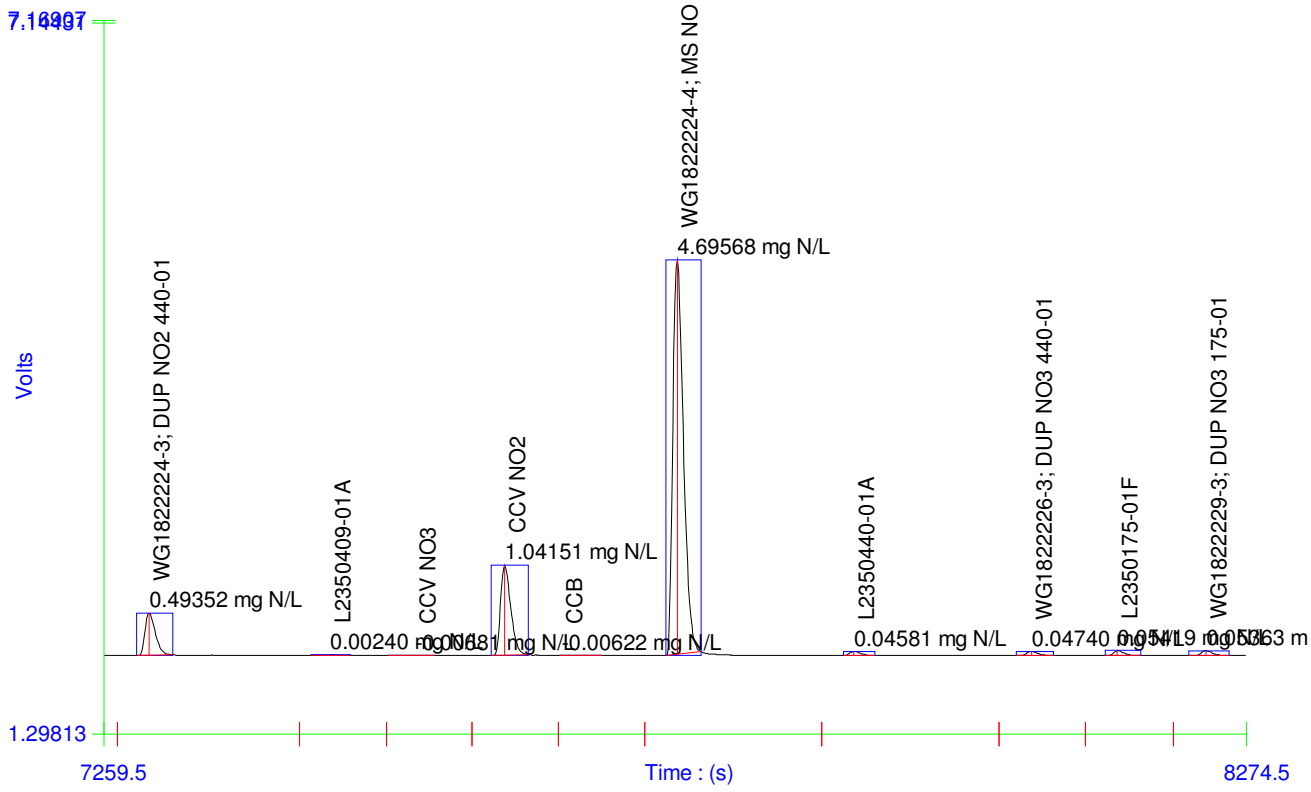
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 9 / 16



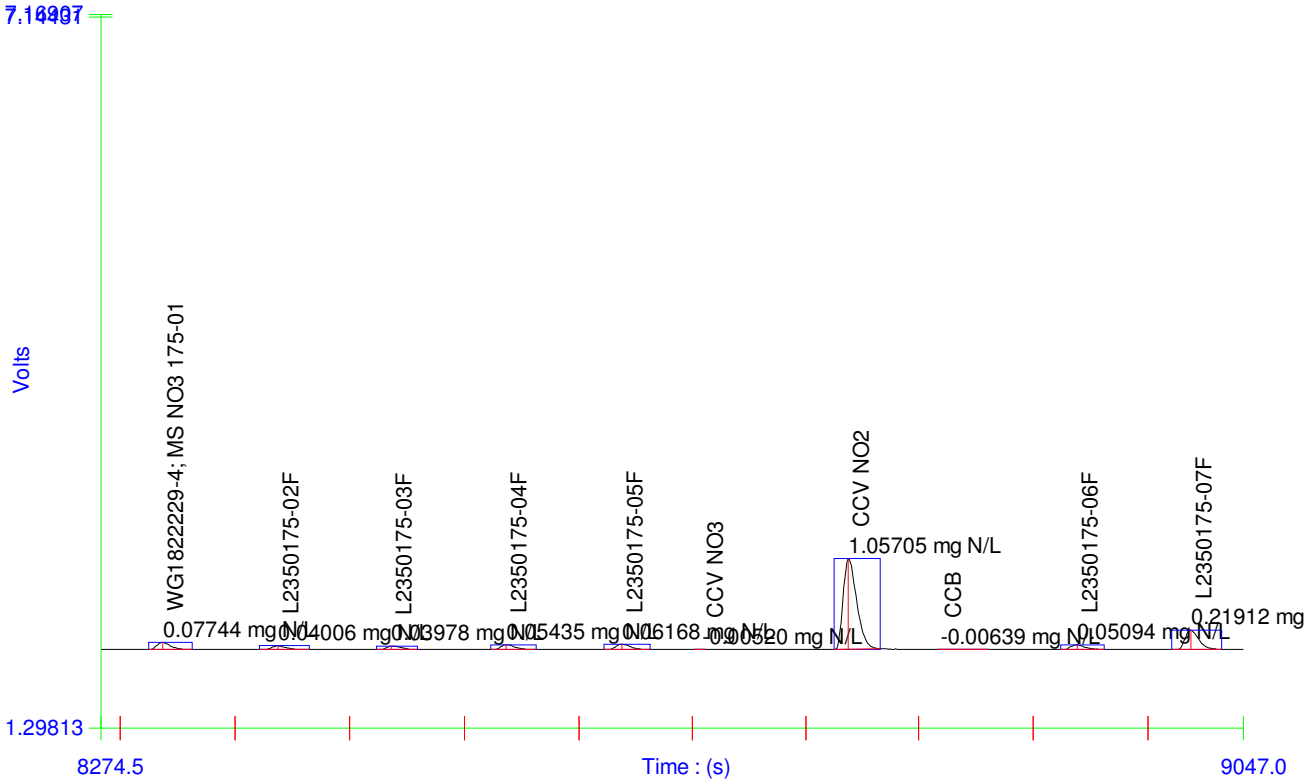
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 10 / 16



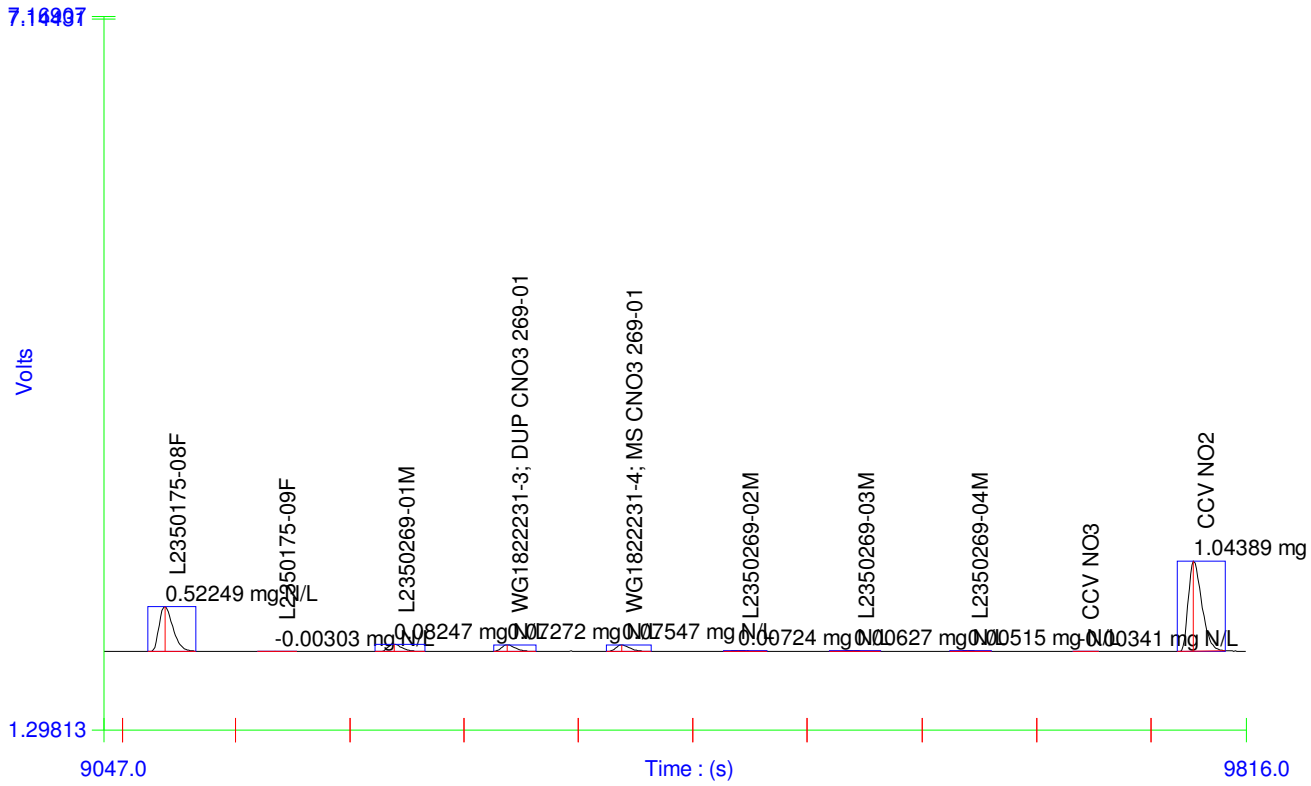
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 11 / 16



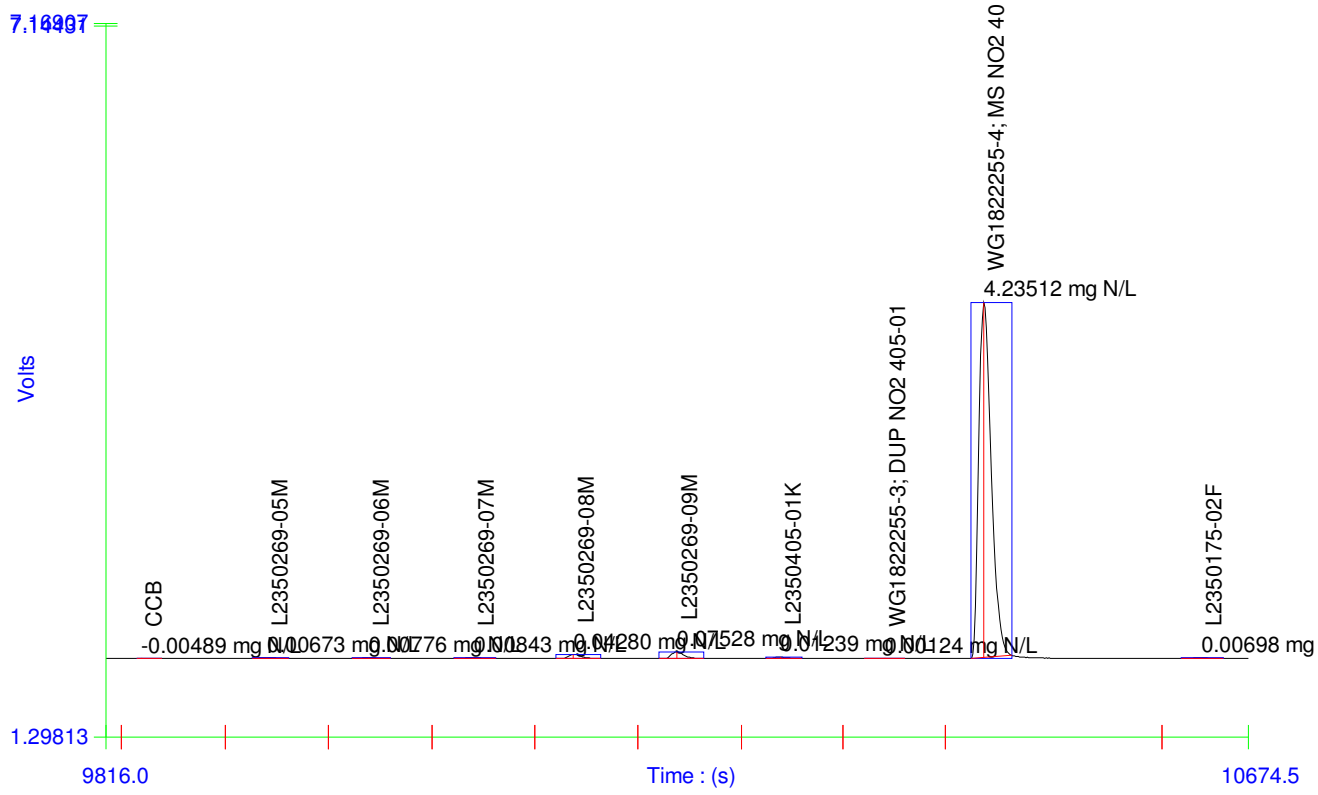
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 12 / 16



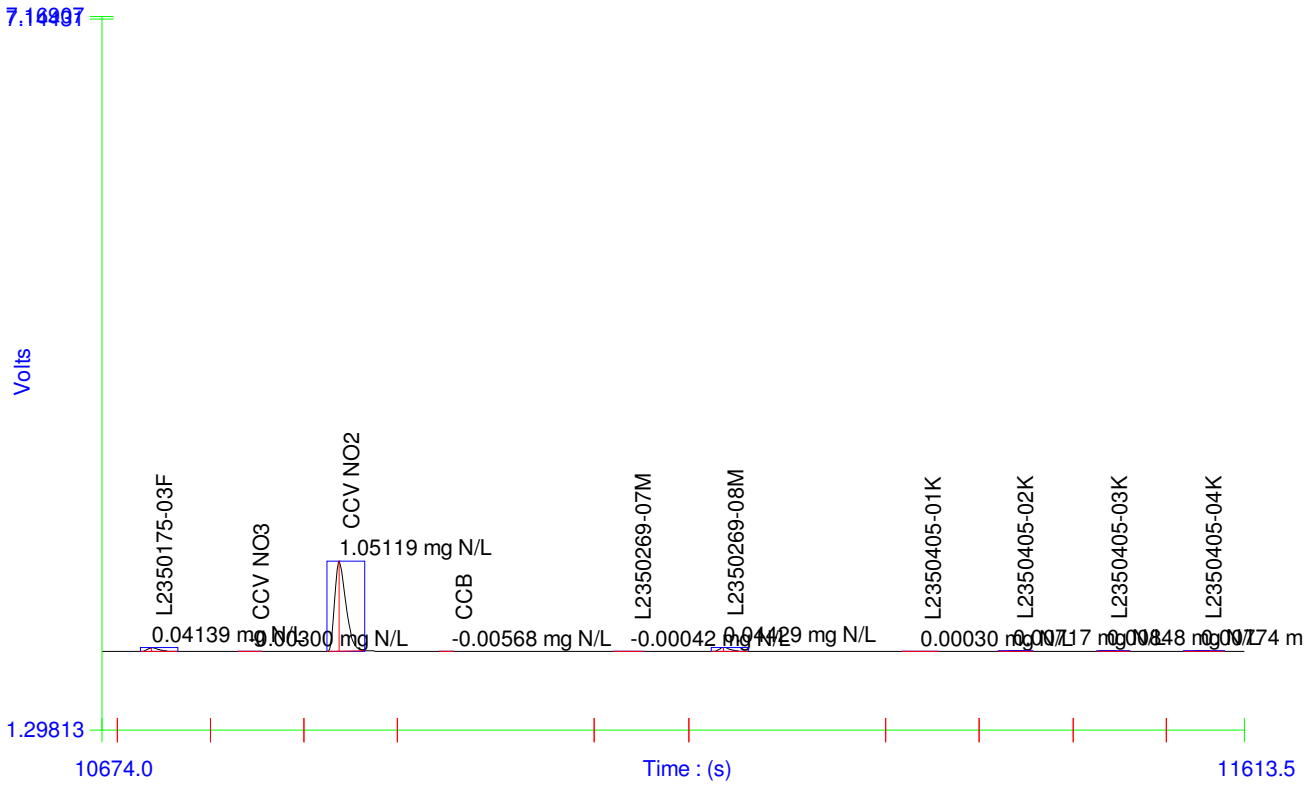
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 13 / 16



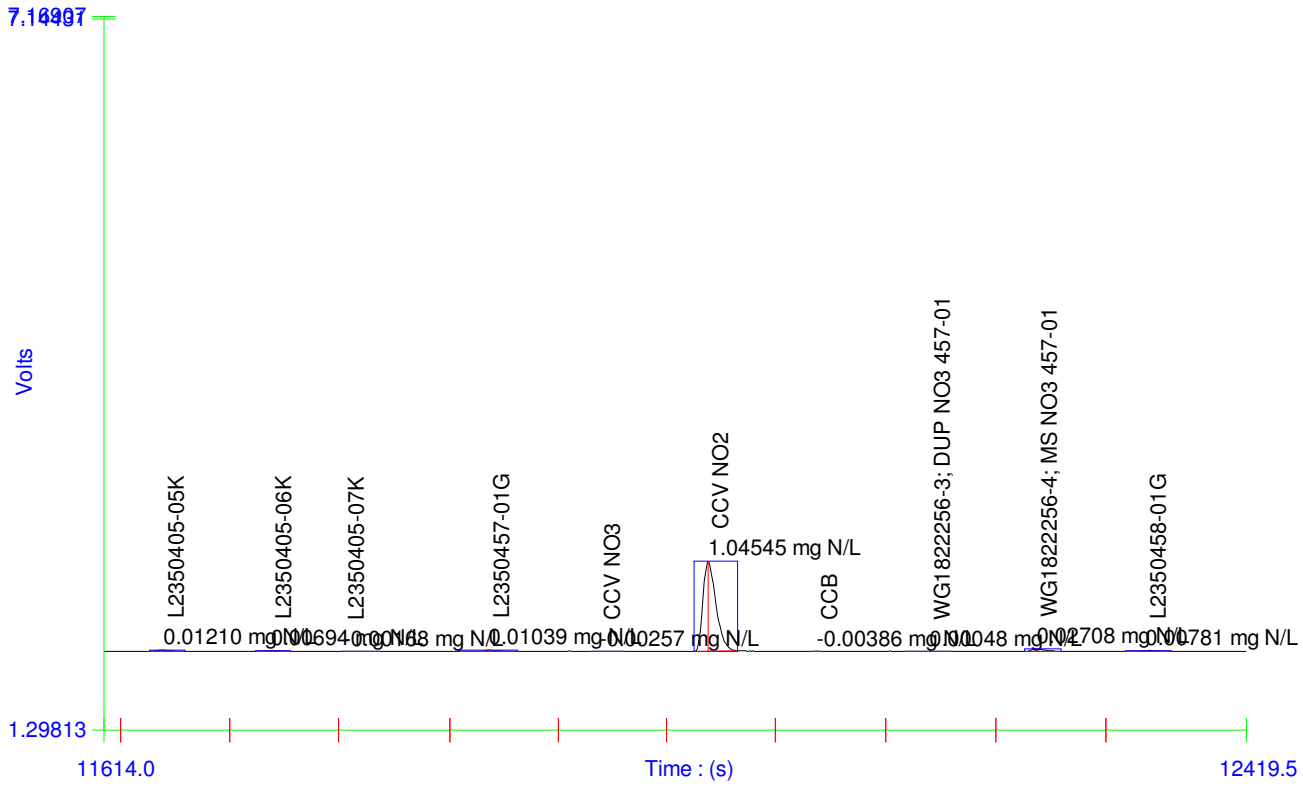
Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 14 / 16



Author: KAF TRAY 1 Date : 230831-1

Channel 2 (NO2) - Set: 15 / 16



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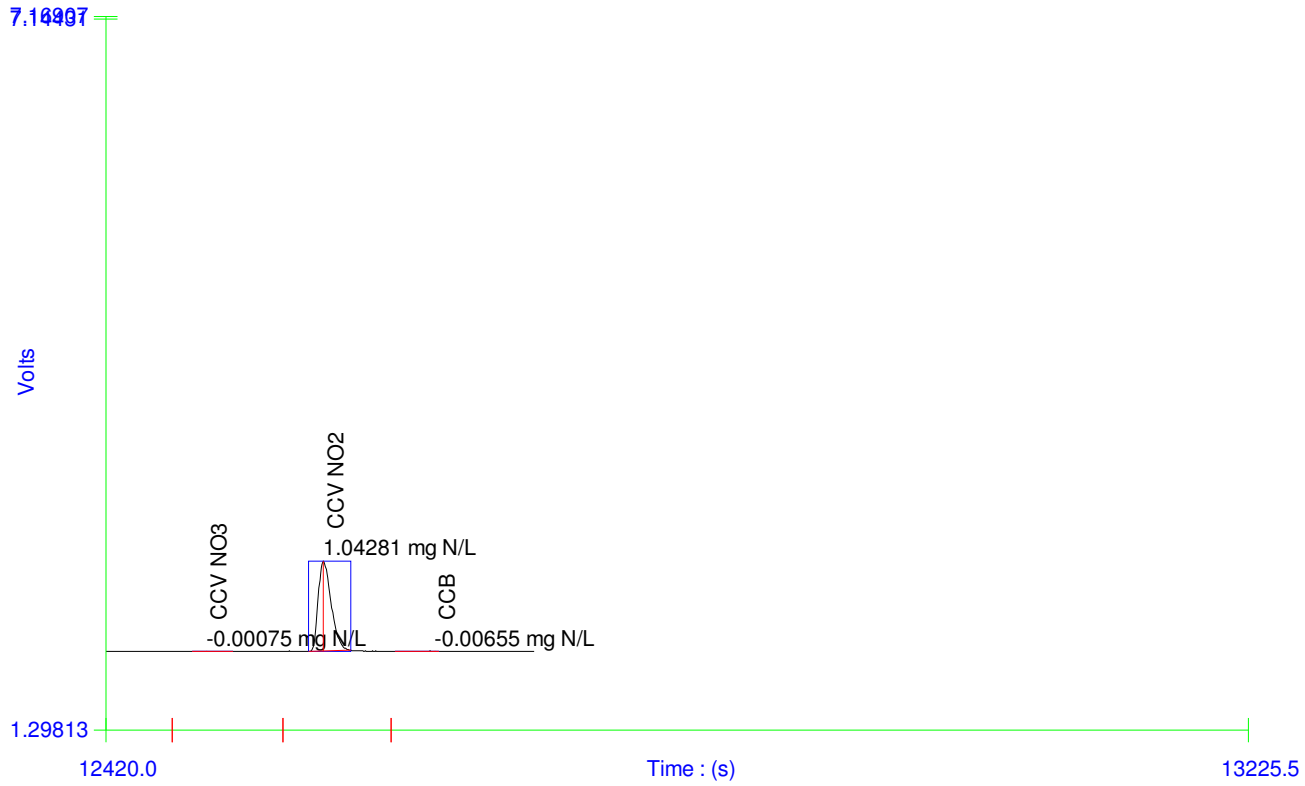


Table : 1 (NO3+NO2)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	8.00000	1	18.54758	1.82808	0.0	1.9	7.83845	8/31/2023	2:19:46 AM
2	4.00000	1	9.69740	0.98594	0.0	-2.4	4.09199	8/31/2023	2:21:03 AM
3	1.00000	1	2.45076	0.25155	0.0	-2.5	1.02434	8/31/2023	2:22:20 AM
4	0.40000	1	1.04309	0.10611	0.0	-6.9	0.42844	8/31/2023	2:23:40 AM
5	0.20000	1	0.52412	0.05260	0.0	-4.1	0.20875	8/31/2023	2:24:58 AM
6	0.10000	1	0.26273	0.02637	0.0	1.8	0.09810	8/31/2023	2:26:16 AM
7	0.00000	1	0.00192	-0.00156			-0.01230	8/31/2023	2:27:33 AM

Figure : 1 (NO3+NO2)

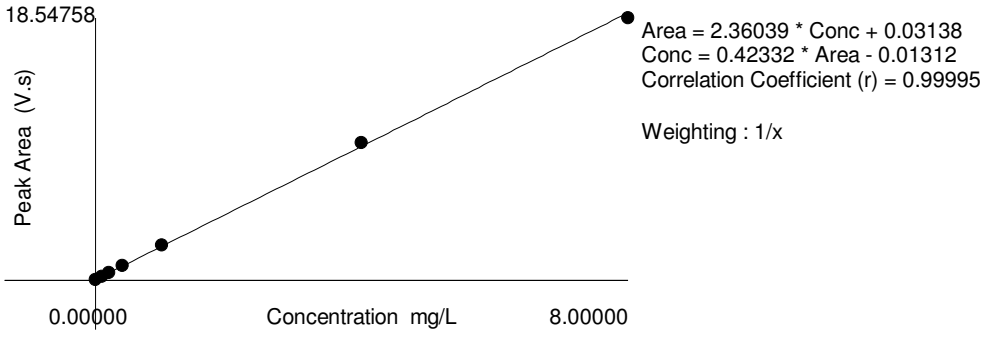
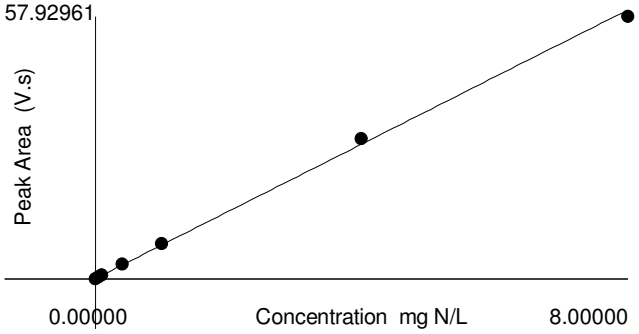


Table : 2 (Nitrite)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	8.00000	1	57.92961	5.18436	0.0	2.5	7.78821	8/31/2023	2:28:50 AM
2	4.00000	1	30.87172	2.91529	0.0	-3.8	4.14836	8/31/2023	2:30:07 AM
3	1.00000	1	7.68930	0.73360	0.0	-3.1	1.02984	8/31/2023	2:31:24 AM
4	0.40000	1	3.16302	0.29854	0.0	-5.3	0.42096	8/31/2023	2:32:41 AM
5	0.10000	1	0.77218	0.07262	0.0	0.6	0.09935	8/31/2023	2:34:00 AM
6	0.05000	1	0.40403	0.03691	0.0	0.4	0.04982	8/31/2023	2:35:19 AM
7	0.00000	1	0.00288	0.00182			-0.00414	8/31/2023	2:36:35 AM

Figure : 2 (Nitrite)



Area = 7.42603 * Conc + 0.03452
Conc = 0.13452 * Area - 0.00453
Correlation Coefficient (r) = 0.99996

Weighting : 1/x

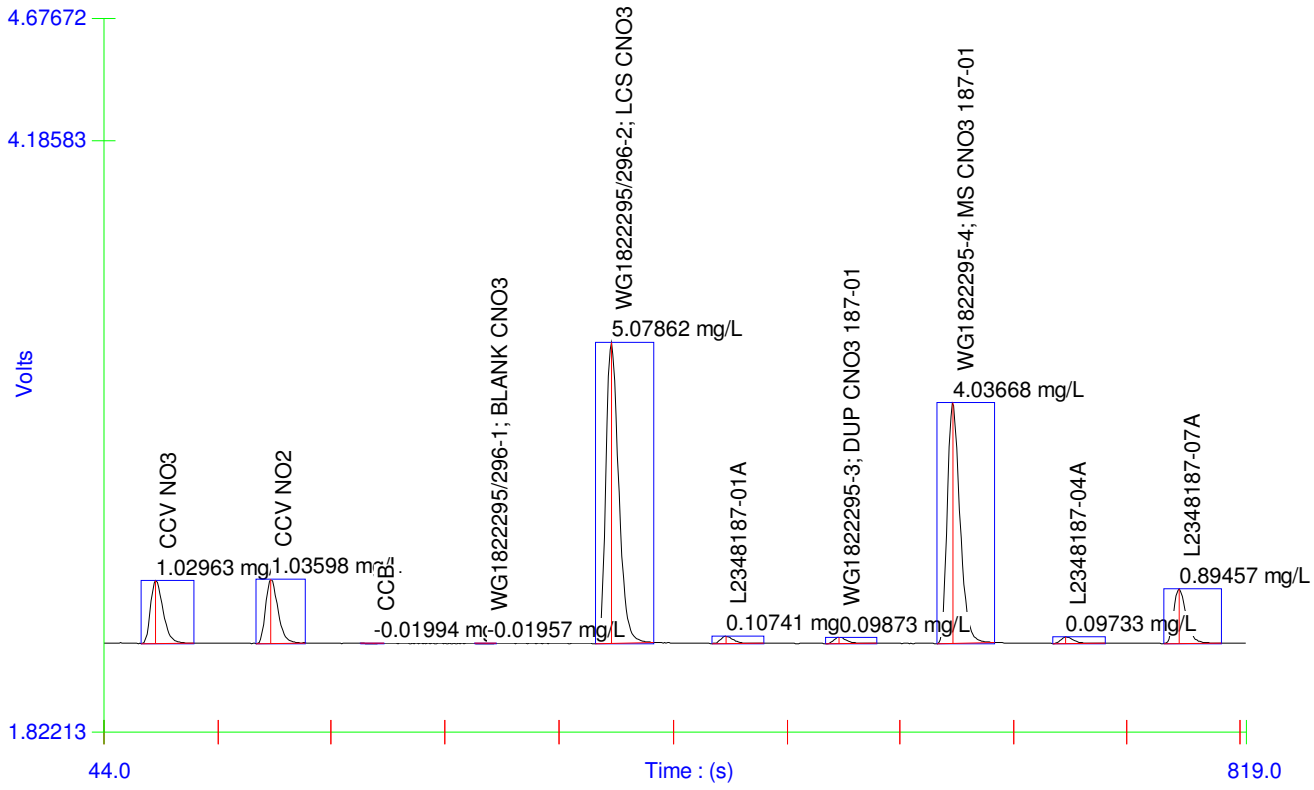
Original Run Filename: OM_8-31-2023_07-03-51AM.OMN Created: 8/31/2023 7:03:51 AM
Original Run Author's Signature: [A1wetcheminstrument]
Current Run Filename: OM_8-31-2023_07-03-51AM.OMN Last Modified: 8/31/2023 8:50:07 AM
Current Run Author's Signature: [A1wetcheminstrument]
Description: Default New Run

Sample	Rep.	Cup No.	Channel 1 NO3+NO2 (mg/L)	Channel 2 Nitrite (mg N/L)	ADF	MDF	Weight
CCV NO3	1	S2	1.02963	-0.00165			
	Known Conc:		1.00000	0.00000			
	Calibration:			Table/Fig. : 1			
CCV NO2	1	S9	1.03598	1.05345			
	Known Conc:		0.00000	1.00000			
	Calibration:		Table/Fig. : 2				
CCB	1	S1	-0.01994	-0.00271			
	Known Conc:		0.00000	0.00000			
WG1822295/296-1; BLANK CNO3	1	95	-0.01957	-0.00387			
WG1822295/296-2; LCS CNO3	1	96	5.07862	-0.00330			
L2348187-01A	1	97	0.10741	0.00694			
WG1822295-3; DUP CNO3 187-01	1	98	0.09873	-0.00294			
WG1822295-4; MS CNO3 187-01	1	99	4.03668	0.00256			
L2348187-04A	1	100	0.09733	0.00839			
L2348187-07A	1	101	0.89457	0.01079			
L2348187-10A	1	102	1.22645	0.01659			
L2348187-13A	1	103	1.21618	0.01230			
L2348187-16A	1	104	0.01242	0.00784			
CCV NO3	1	S2	1.03516	-0.00123			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.02679	1.04060			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.01711	-0.00515			
	Known Conc:		0.00000	0.00000			
L2348187-19A	1	105	0.25078	0.01375			
L2348187-22A	1	106	0.50862	0.01424			
L2348187-25A	1	107	1.03179	0.02486			
L2348187-28A	1	108	1.05518	0.01510			
L2348187-31A	1	109	1.34218	0.01558			
L2348187-34A	1	110	1.27615	0.01035			
L2349577-01A	1	111	0.13660	0.01098			
L2349577-02A	1	112	4.26360	0.24458			
L2350200-02A	1	113	7.84331	0.01512			
WG1822296-3; DUP CNO3 200-02	1	114	7.84457	-0.01771			
CCV NO3	1	S2	1.03870	-0.00702			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.03811	1.05895			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.01974	-0.00697			
	Known Conc:		0.00000	0.00000			
L2350200-02A	1	113	8.32257	-0.00215	5.00		
WG1822296-3; DUP CNO3 200-02	1	114	8.44954	0.00187	5.00		
WG1822296-4; MS CNO3 200-02	1	115	12.01029	-0.02165	5.00		
L2350200-03A	1	116	2.22134	0.01227			
L2350200-04A	1	117	0.24098	0.01238			
L2350200-05A	1	118	0.45770	0.02003			
L2350200-06A	1	119	0.12691	0.01232			
L2350200-07A	1	120	0.89197	0.01017			
WG1822332-1; BLANK NO3	1	121	-0.01788	-0.00447			
WG1822332-2; LCS NO3	1	122	5.01004	-0.00560			
CCV NO3	1	S2	1.03715	-0.00021			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.02217	1.04286			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.01999	-0.00315			
	Known Conc:		0.00000	0.00000			
L2350244-09F	1	123	5.21954	0.01038			
WG1822332-3; DUP NO3 244-09	1	124	5.22251	-0.00137			

WG1822332-4; MS NO3 244-09	1	125	8.51069	0.00261			
L2350244-10F	1	126	0.02628	0.01174			
L2350244-11F	1	127	2.84685	0.01306			
L2350244-12F	1	128	0.01881	0.01206			
L2350244-13F	1	129	0.01673	0.00949			
L2350244-14F	1	130	0.16592	0.01034			
L2350244-15F	1	131	5.57053	0.00943			
WG1822332-4; MS NO3 244-09	1	125	9.04099	-0.01350	5.00		
CCV NO3	1	S2	1.03515	-0.00220			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.02469	1.04076			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.02105	-0.00362			
	Known Conc:		0.00000	0.00000			
L2350244-10F	1	126	0.01982	0.01127			
L2350244-16F	1	132	6.82781	0.01206			
L2350244-17F	1	133	0.04506	0.01045			
L2350244-18F	1	134	2.02651	0.01064			
L2350244-19F	1	135	0.32773	0.01176			
L2350244-20F	1	136	0.01096	0.01141			
L2350433-01M	1	137	8.90144	0.01168			
L2350433-02M	1	138	2.27345	0.01311			
L2350433-03M	1	139	1.66488	0.01163			
L2350433-04M	1	140	1.69076	0.00956			
CCV NO3	1	S2	1.04258	-0.00245			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.02616	1.03820			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.02070	-0.00151			
	Known Conc:		0.00000	0.00000			
L2350433-01M	1	137	9.75373	0.00801	5.00		
L2350433-02M	1	138	2.26229	0.01198			
L2350433-05M	1	141	3.28089	0.01016			
L2350433-06M	1	142	4.41263	0.01014			
CCV NO3	1	S2	1.03699	-0.00415			
	Known Conc:		1.00000	0.00000			
CCV NO2	1	S9	1.02690	1.03694			
	Known Conc:		0.00000	1.00000			
CCB	1	S1	-0.02042	-0.00093			
	Known Conc:		0.00000	0.00000			

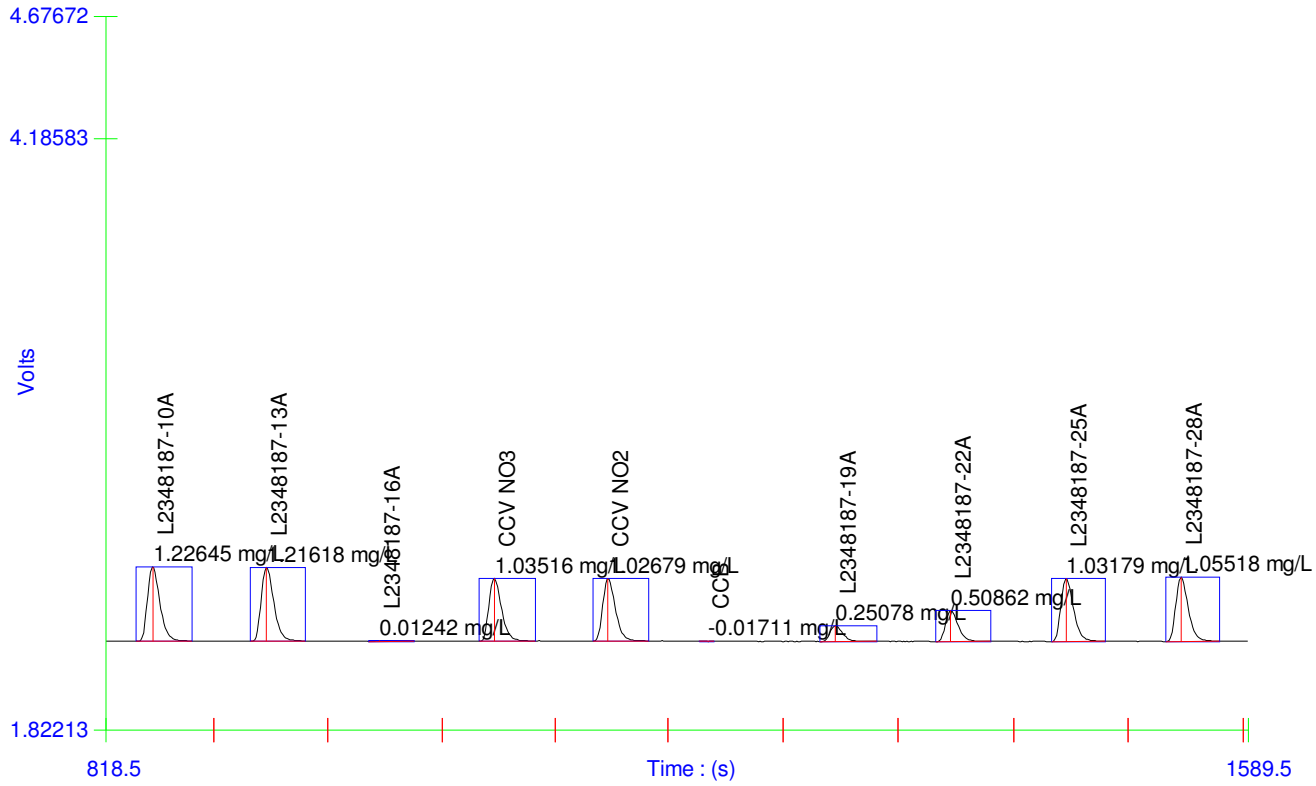
Author: KAF TRAY 2 Date : 230831-2

Channel 1 (NO3+NO2) - Set: 1 / 8



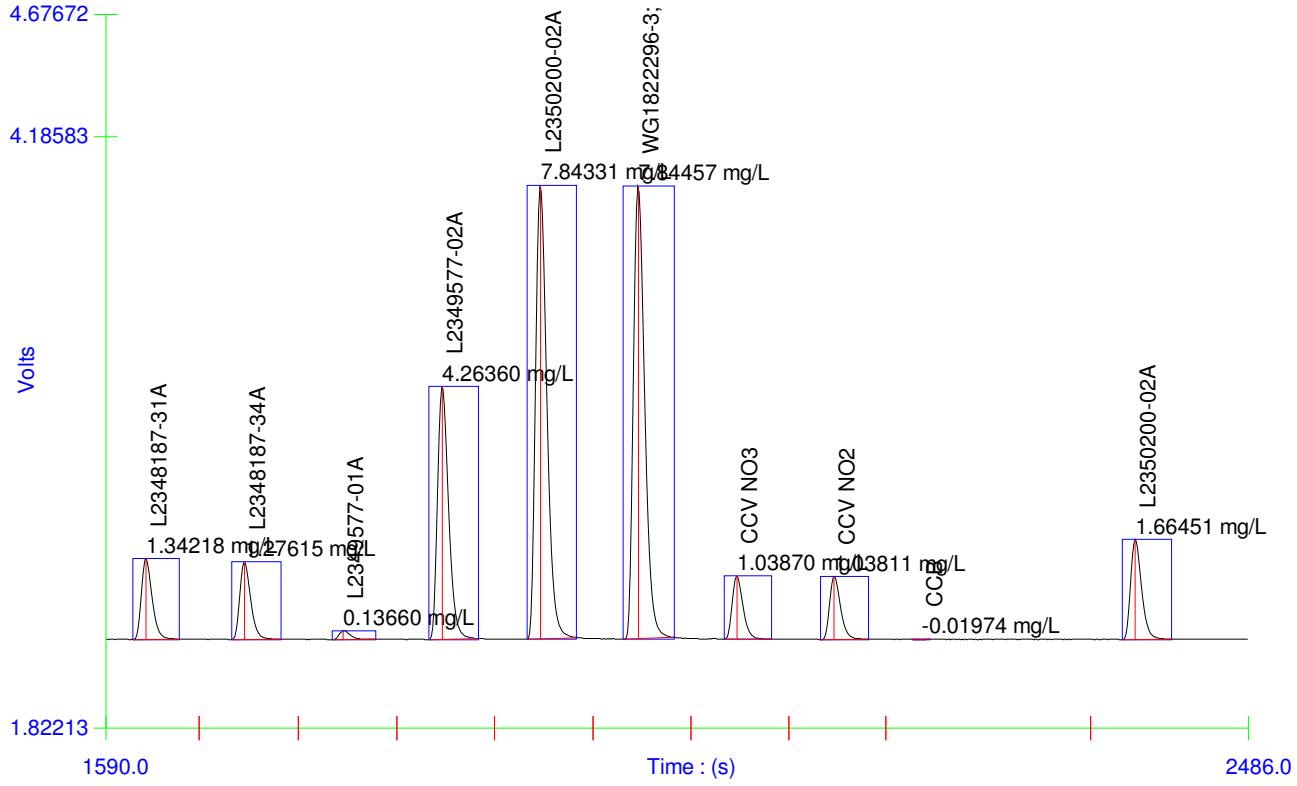
Author: KAF TRAY 2 Date : 230831-2

Channel 1 (NO3+NO2) - Set: 2 / 8



Author: KAF TRAY 2 Date : 230831-2

Channel 1 (NO3+NO2) - Set: 3 / 8



Author: KAF TRAY 2 Date : 230831-2

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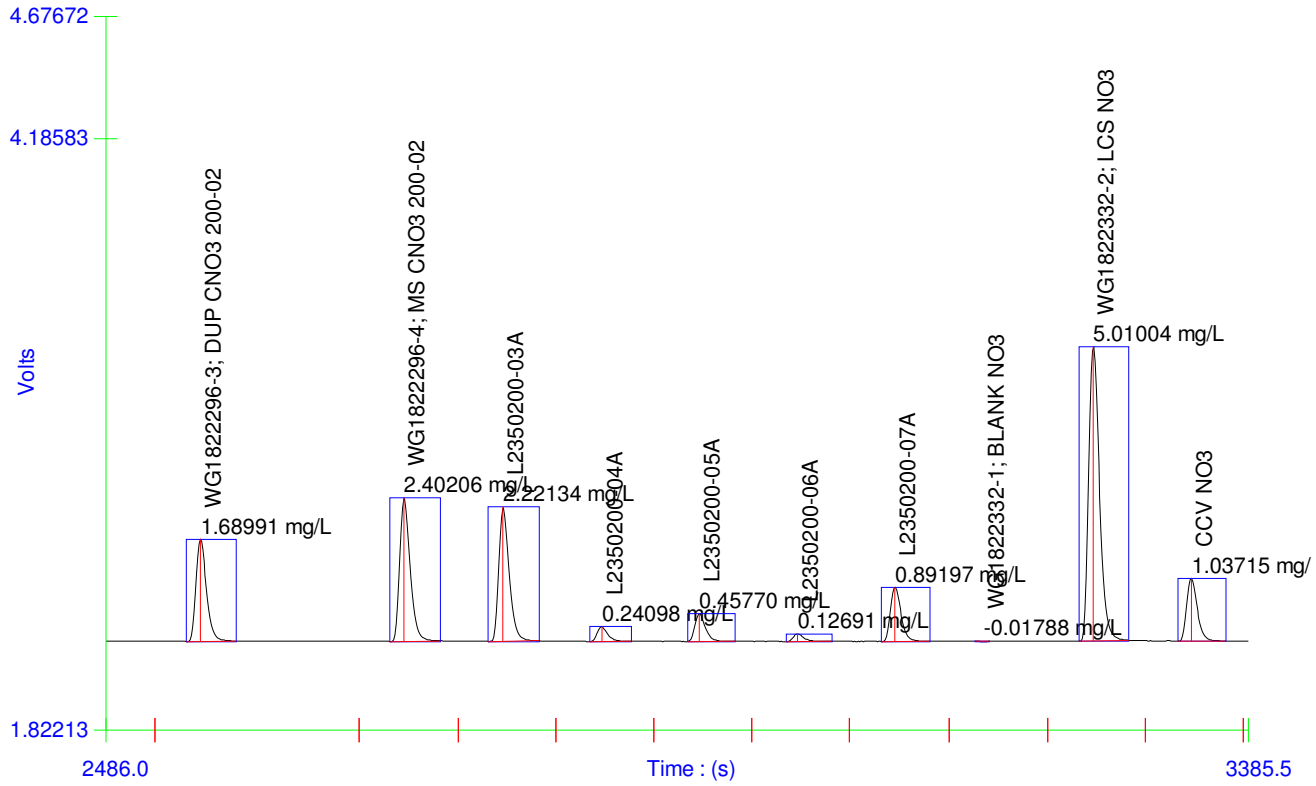

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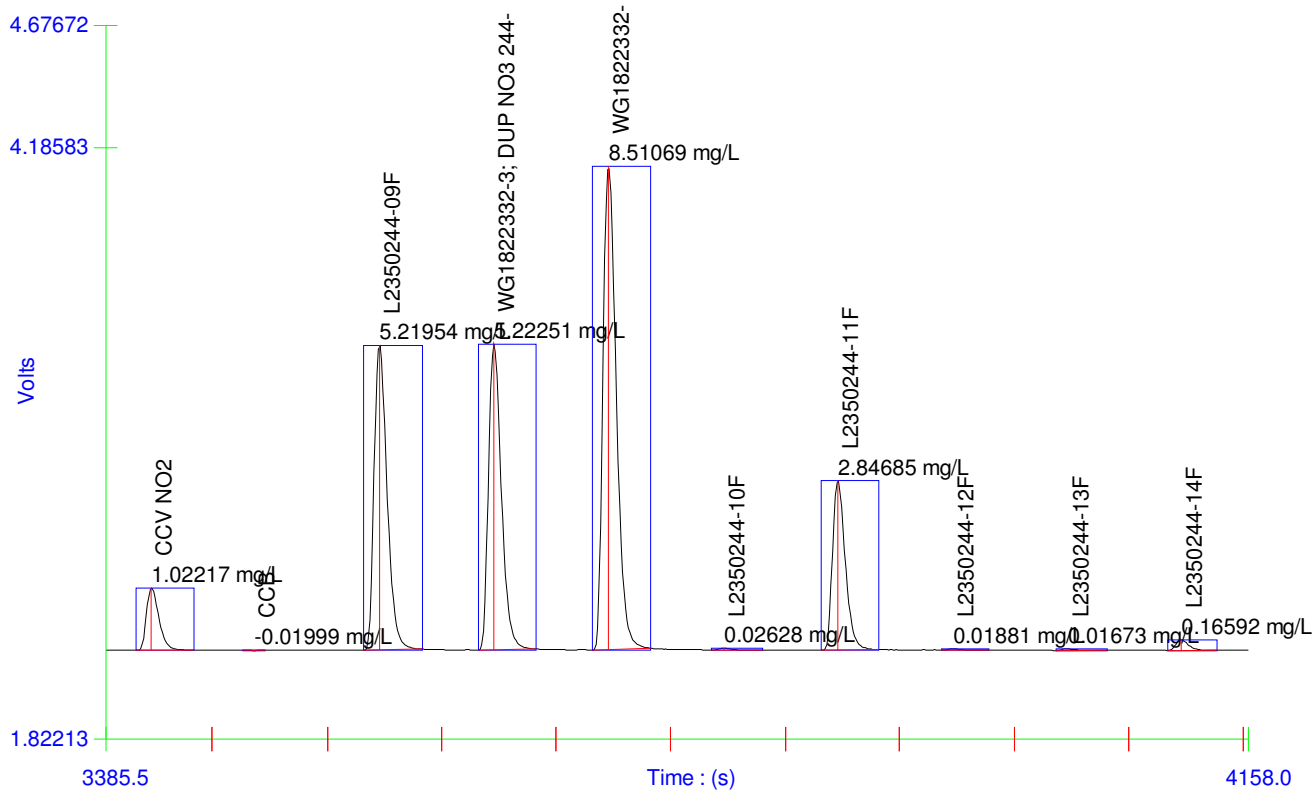

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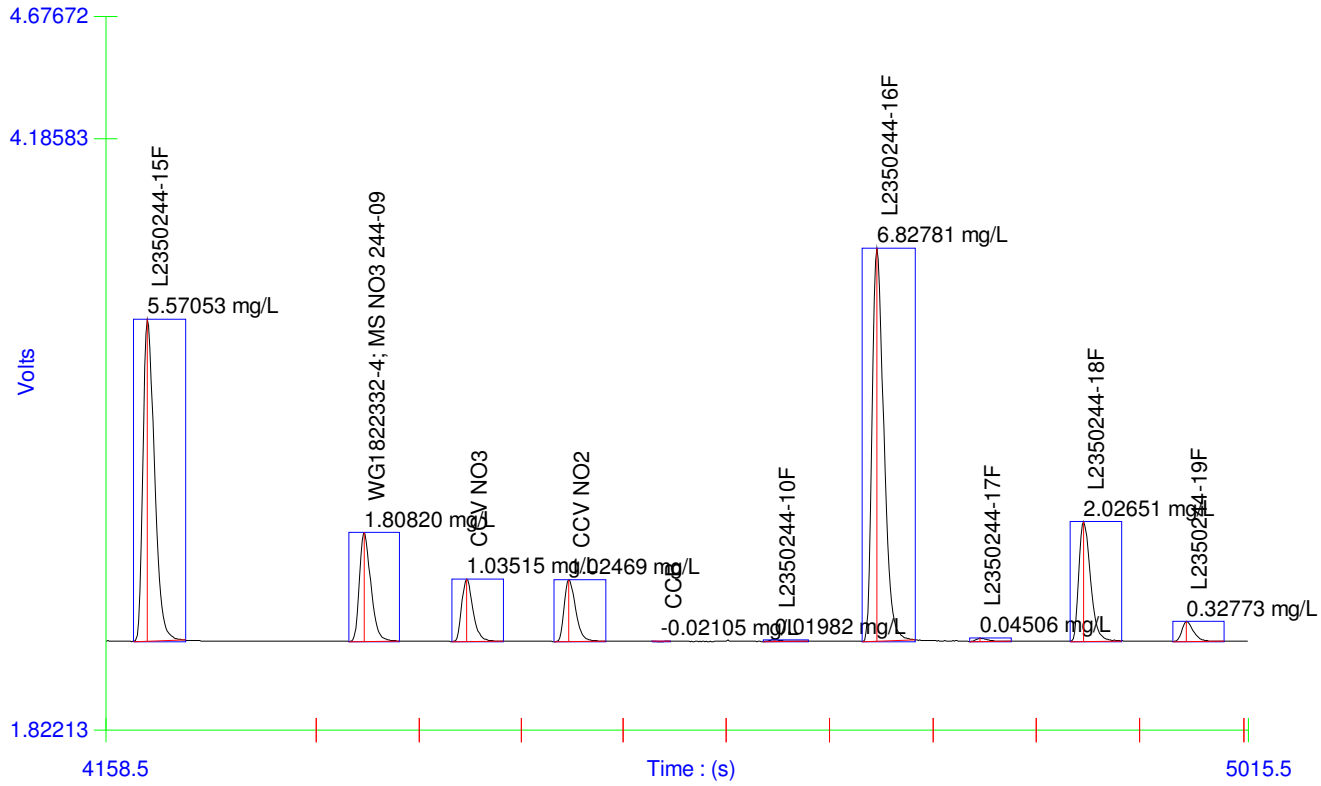
Channel 1 (NO3+NO2) - Set: 6 / 8



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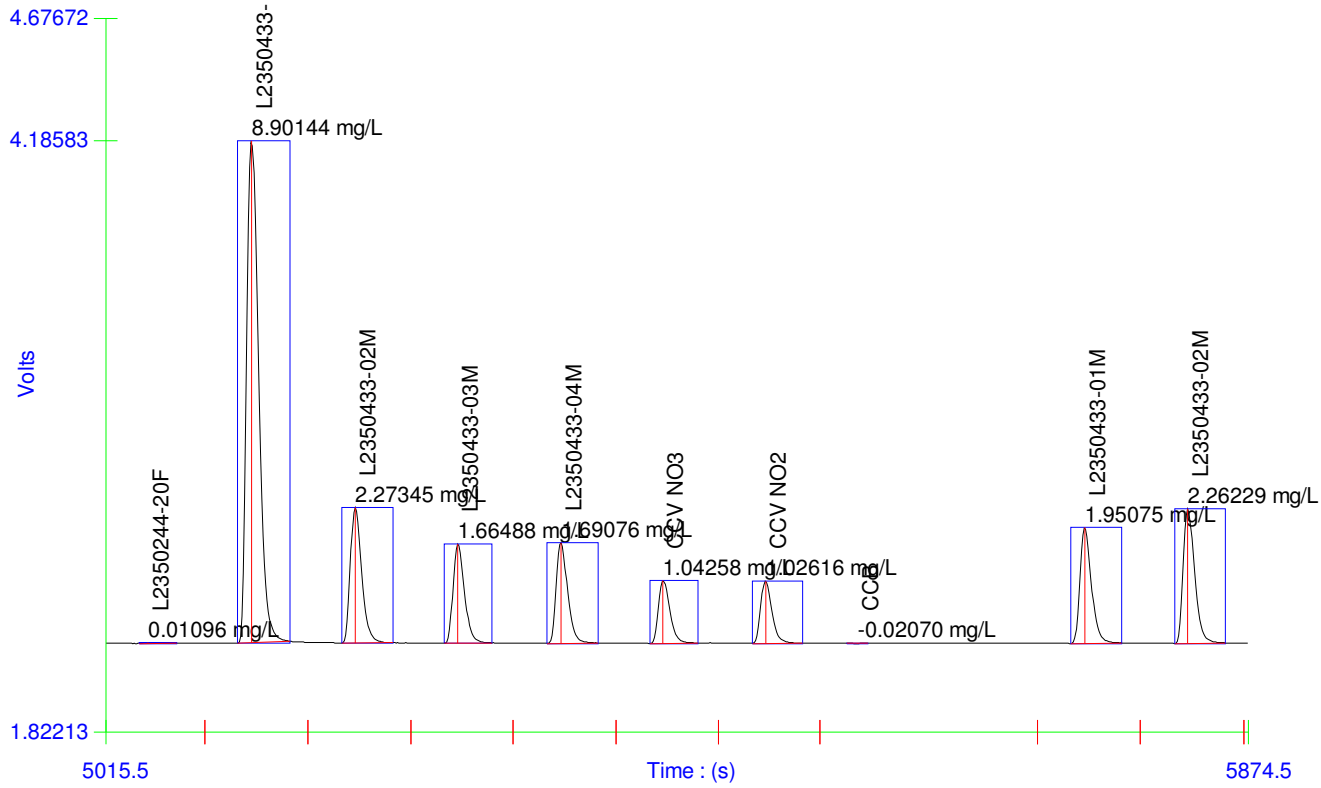
Channel 1 (NO3+NO2) - Set: 7 / 8



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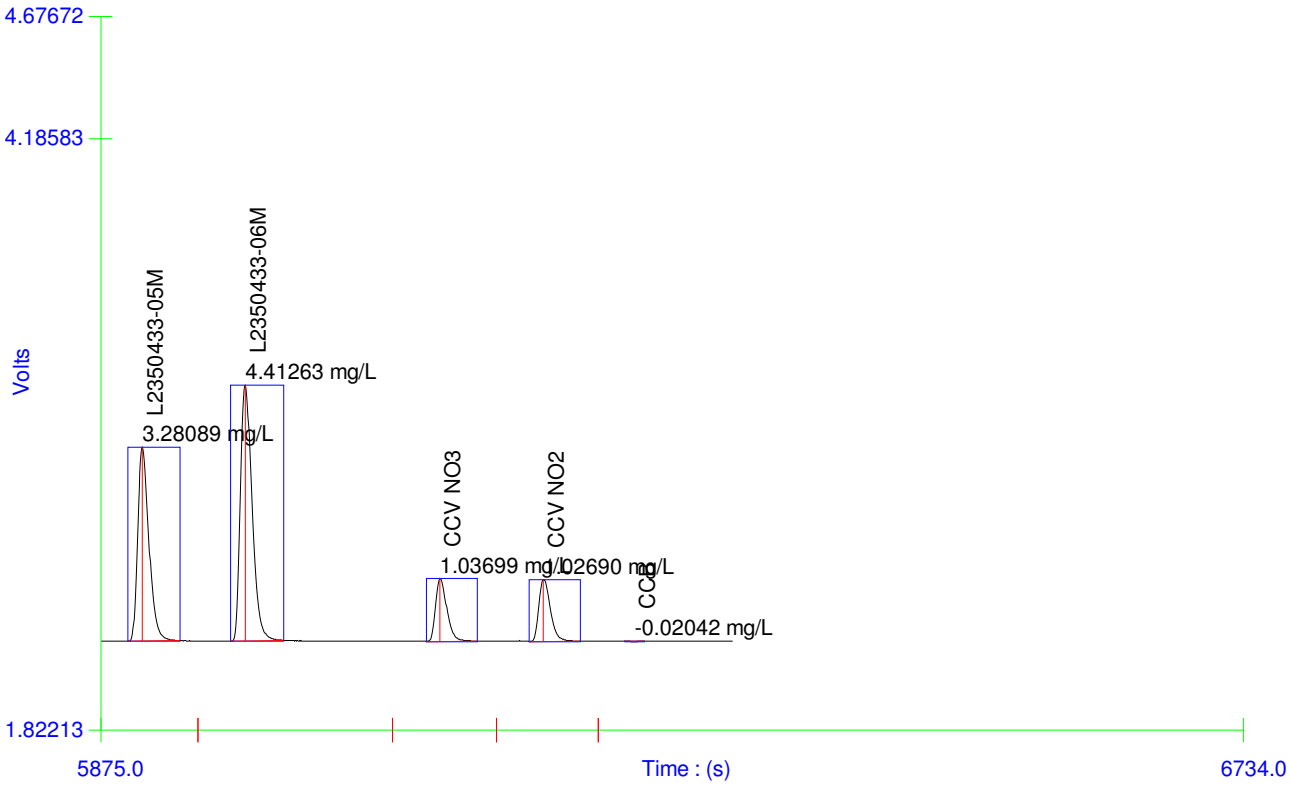

Author: KAF TRAY 2 Date : 230831-2

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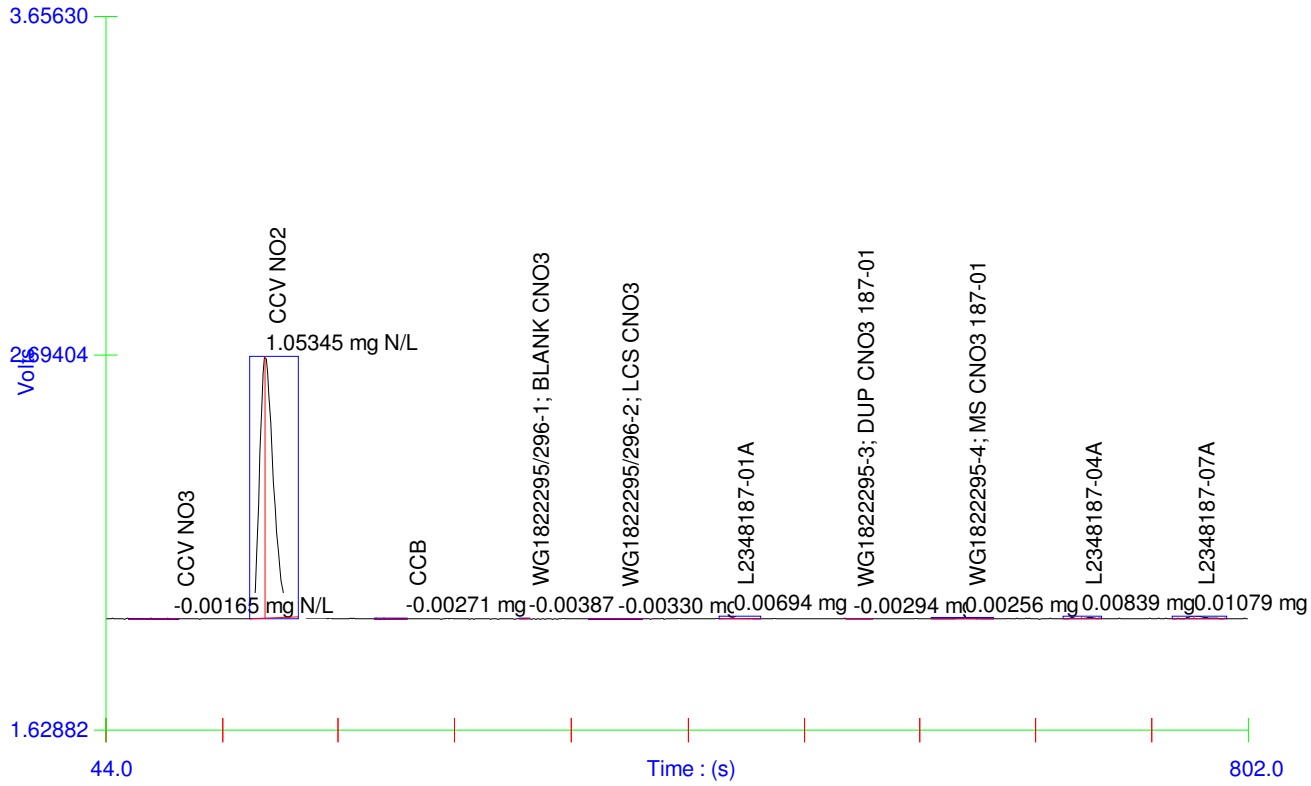
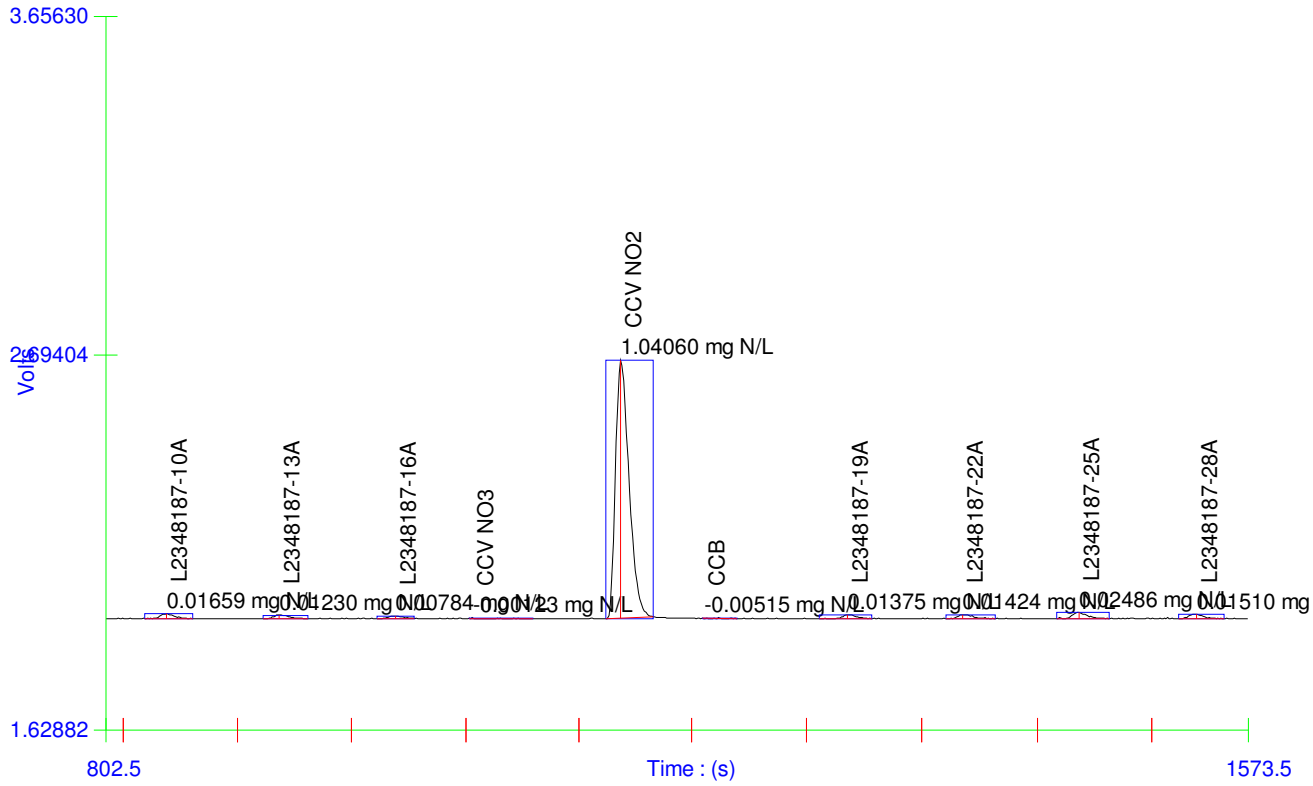


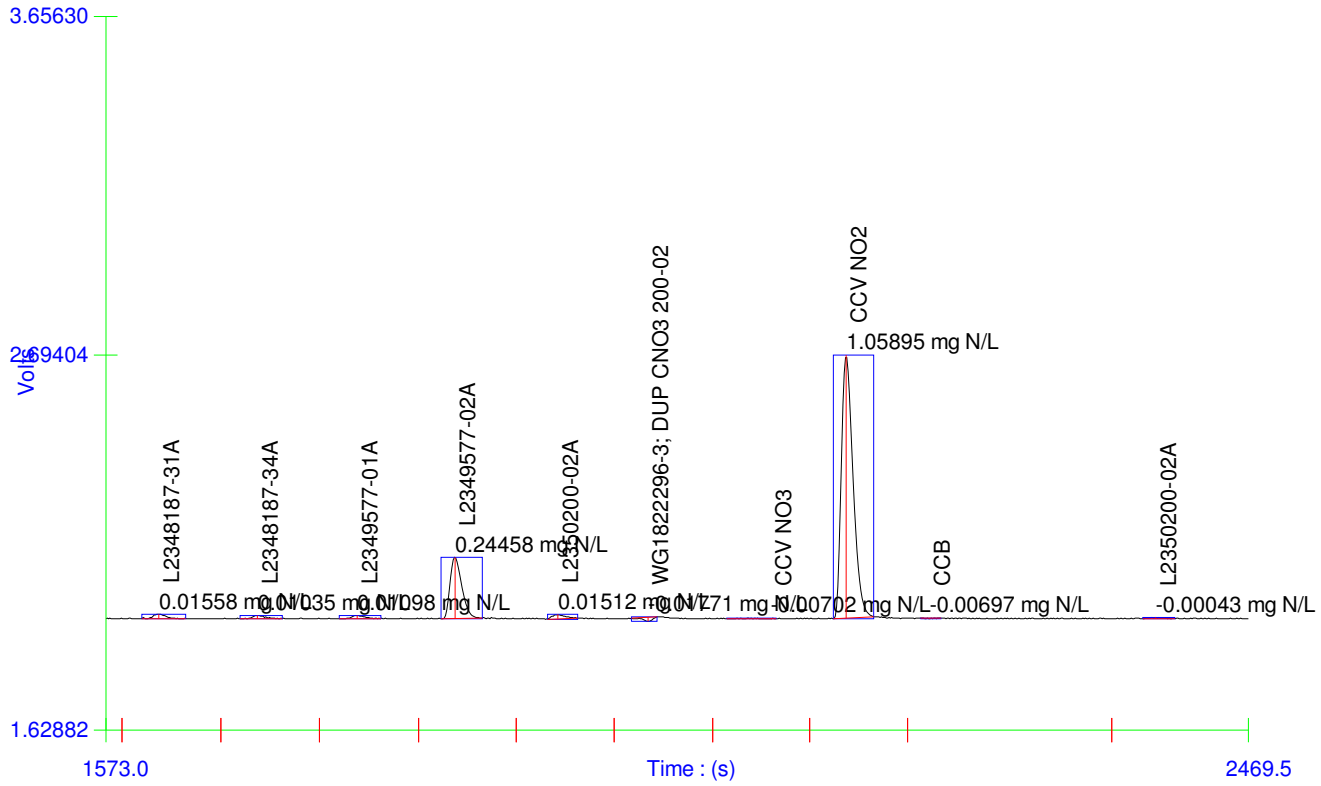
Author: KAF TRAY 2 Date : 230831-2

Channel 2 (NO2) - Set: 2 / 8



Author: KAF TRAY 2 Date : 230831-2

Channel 2 (NO2) - Set: 3 / 8



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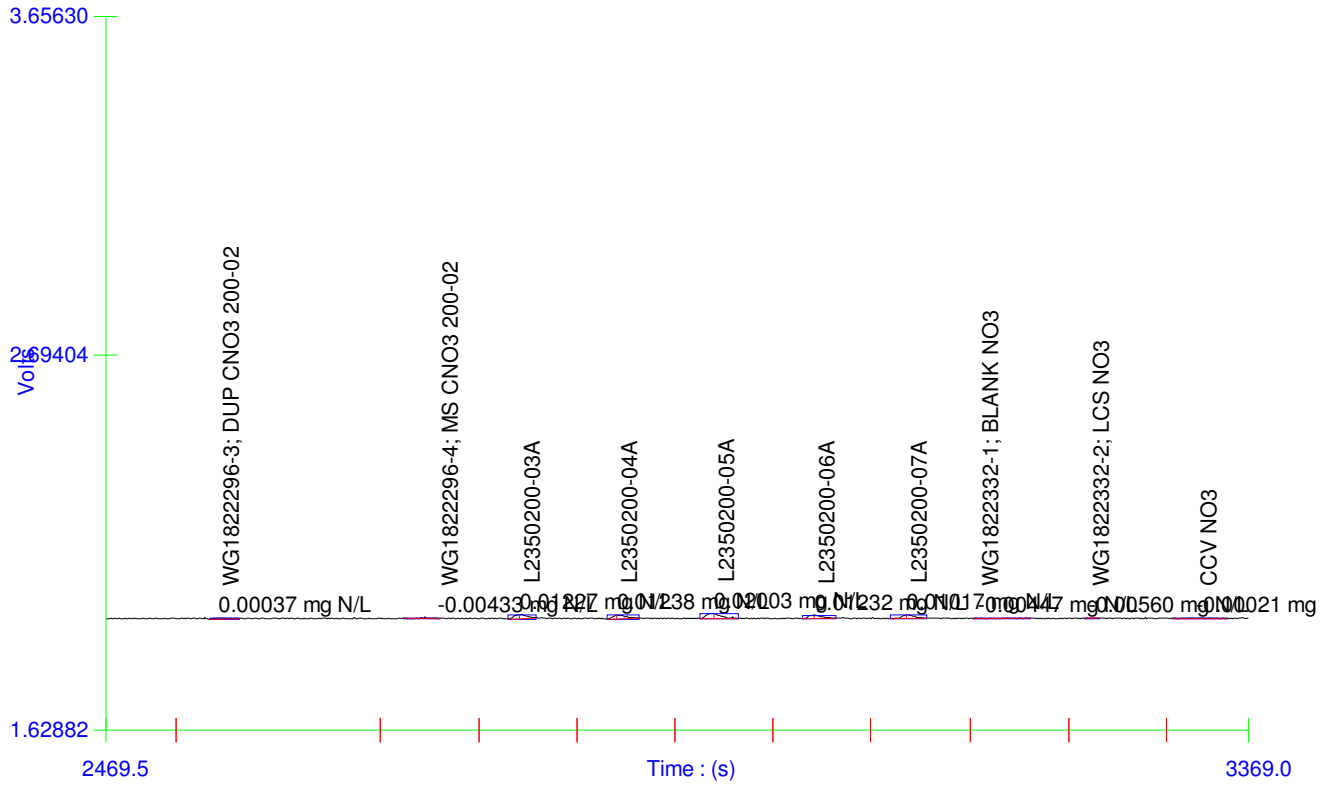
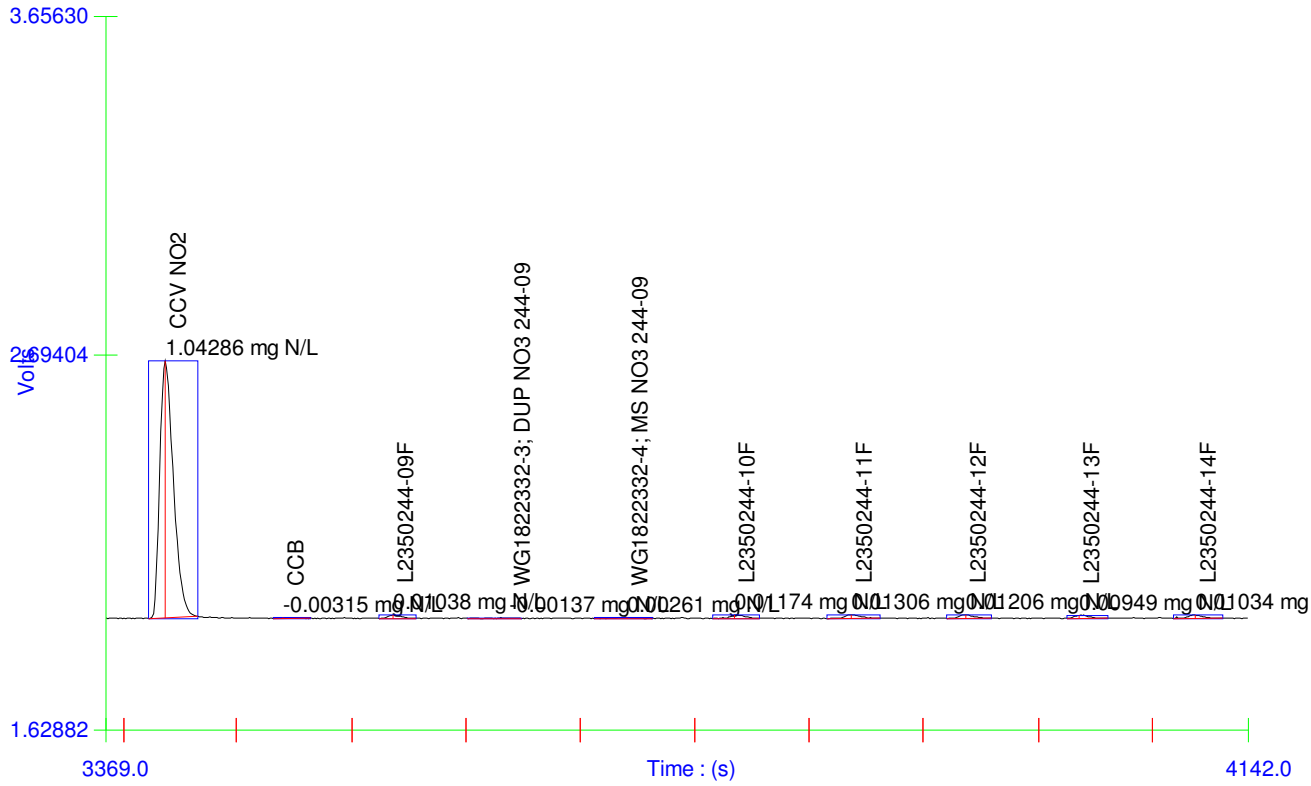
Channel 2 (NO2) - Set: 4 / 8



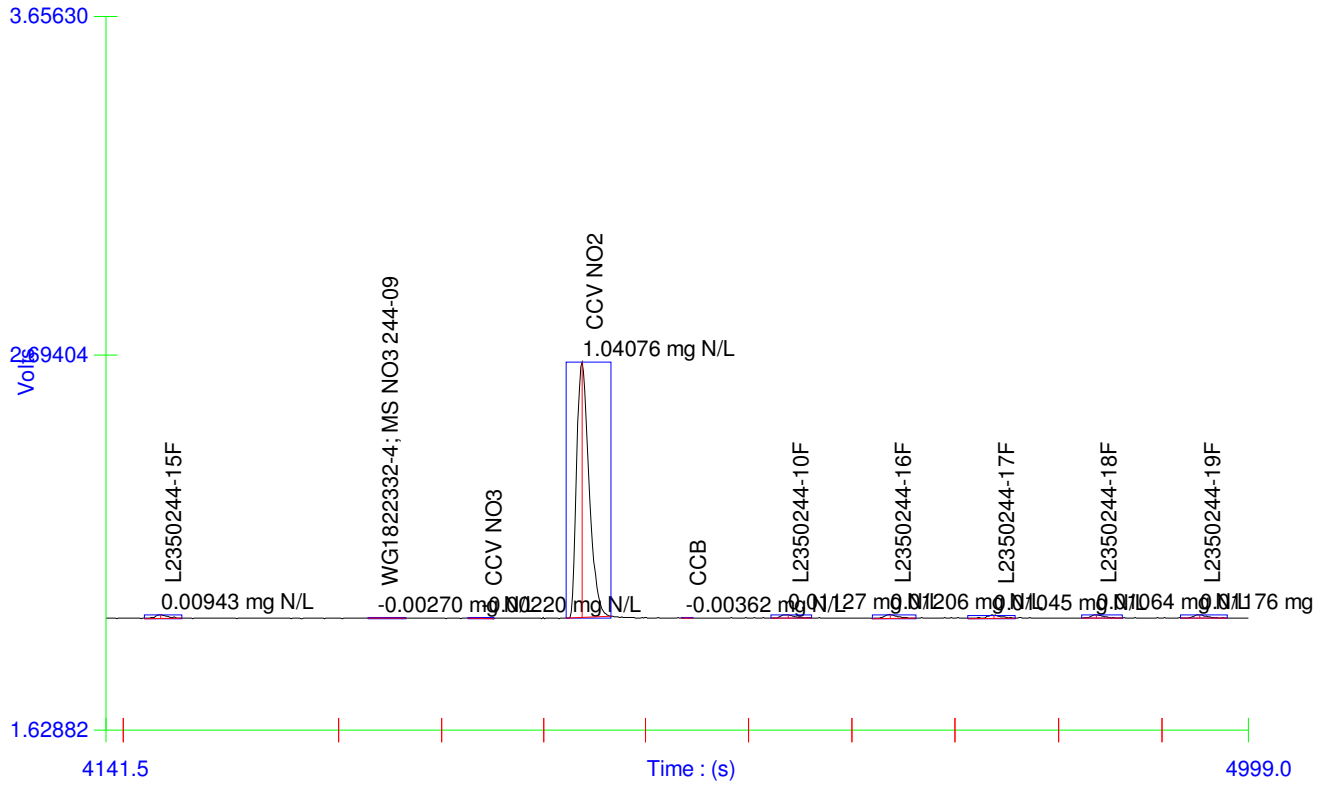
Author: KAF TRAY 2 Date : 230831-2

Channel 2 (NO2) - Set: 5 / 8



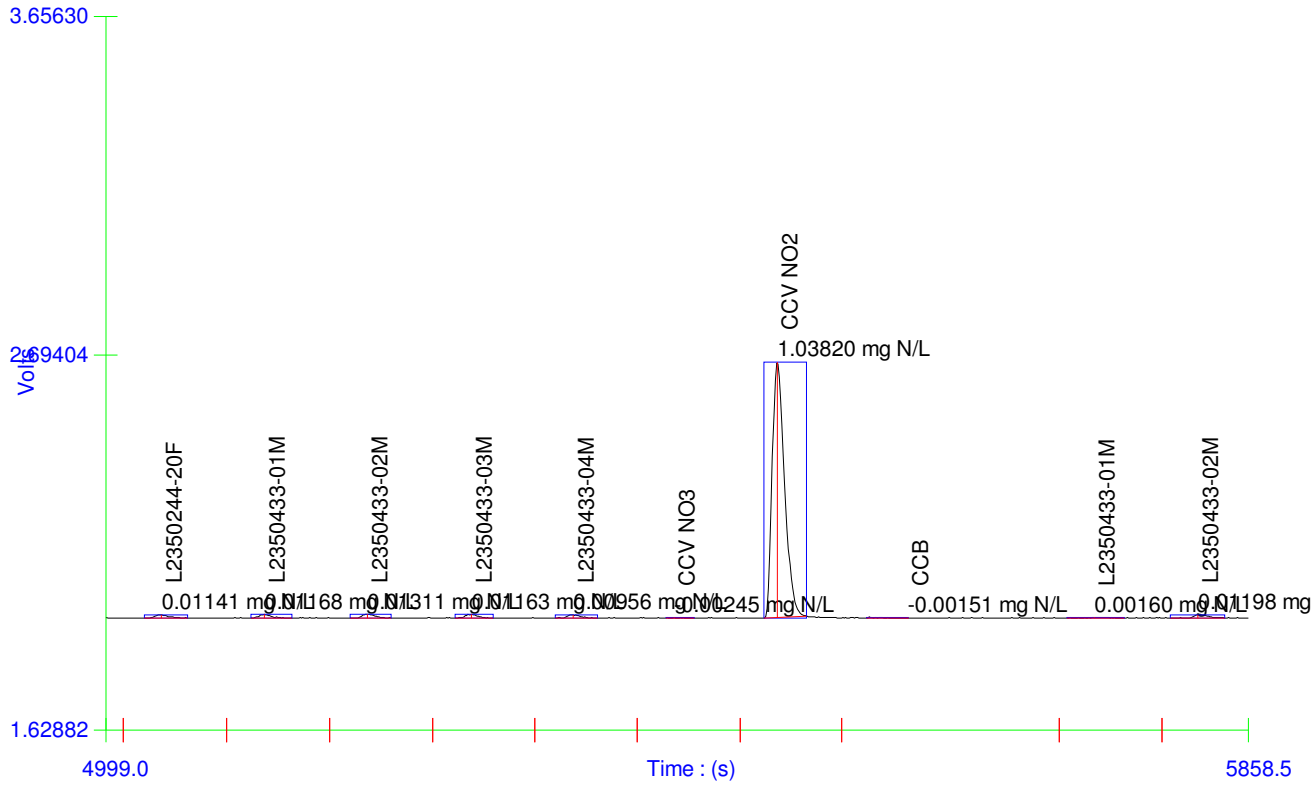
Author: KAF TRAY 2 Date : 230831-2

Channel 2 (NO2) - Set: 6 / 8



Author: KAF TRAY 2 Date : 230831-2

Channel 2 (NO2) - Set: 7 / 8



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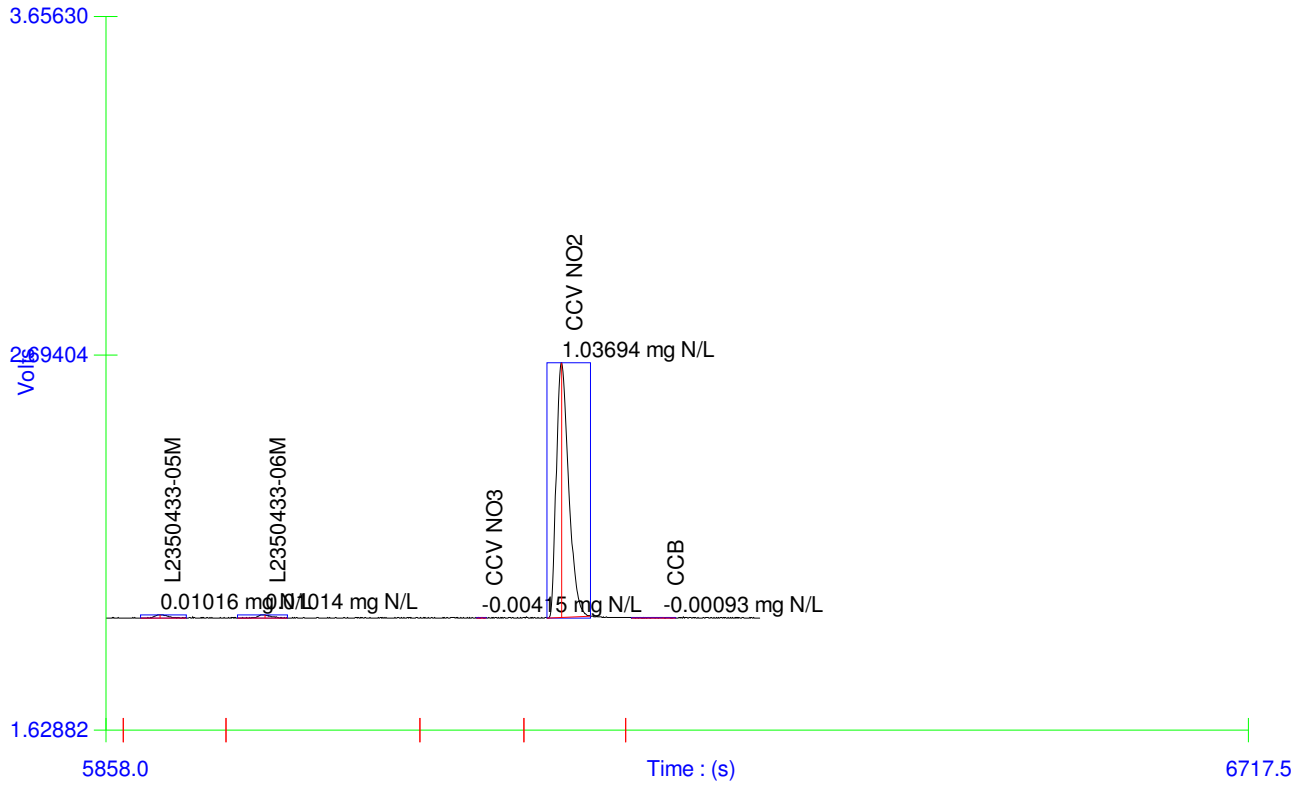


Table : 1 (Nitrite)

	Known Conc. (mg N/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg N/L)	Detection Date	Detection Time
1	8.00000	1	57.92961	5.18436	0.0	2.5	7.78821	8/31/2023	2:28:50 AM
2	4.00000	1	30.87172	2.91529	0.0	-3.8	4.14836	8/31/2023	2:30:07 AM
3	1.00000	1	7.68930	0.73360	0.0	-3.1	1.02984	8/31/2023	2:31:24 AM
4	0.40000	1	3.16302	0.29854	0.0	-5.3	0.42096	8/31/2023	2:32:41 AM
5	0.10000	1	0.77218	0.07262	0.0	0.6	0.09935	8/31/2023	2:34:00 AM
6	0.05000	1	0.40403	0.03691	0.0	0.4	0.04982	8/31/2023	2:35:19 AM
7	0.00000	1	0.00288	0.00182			-0.00414	8/31/2023	2:36:35 AM

Figure : 1 (Nitrite)

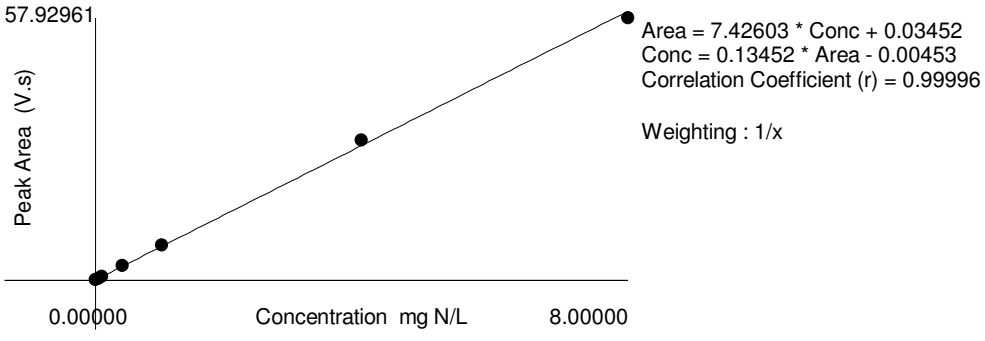
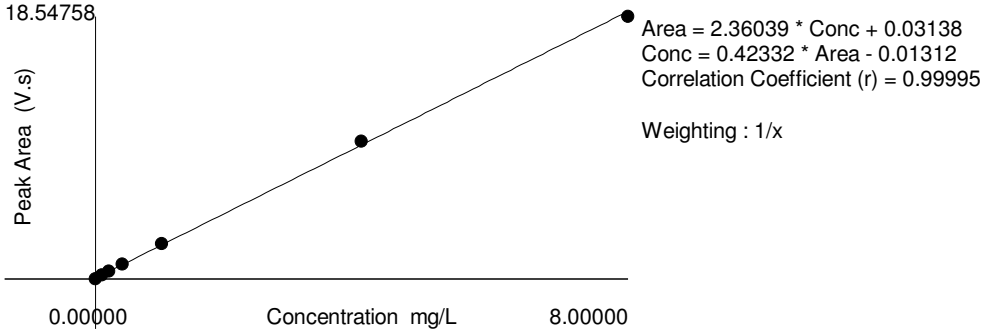


Table : 2 (NO3+NO2)

	Known Conc. (mg/L)	Rep.	Peak Area (V.s)	Peak Height (V)	% RSD	% Residual	Det. Conc (mg/L)	Detection Date	Detection Time
1	8.00000	1	18.54758	1.82808	0.0	1.9	7.83845	8/31/2023	2:19:46 AM
2	4.00000	1	9.69740	0.98594	0.0	-2.4	4.09199	8/31/2023	2:21:03 AM
3	1.00000	1	2.45076	0.25155	0.0	-2.5	1.02434	8/31/2023	2:22:20 AM
4	0.40000	1	1.04309	0.10611	0.0	-6.9	0.42844	8/31/2023	2:23:40 AM
5	0.20000	1	0.52412	0.05260	0.0	-4.1	0.20875	8/31/2023	2:24:58 AM
6	0.10000	1	0.26273	0.02637	0.0	1.8	0.09810	8/31/2023	2:26:16 AM
7	0.00000	1	0.00192	-0.00156			-0.01230	8/31/2023	2:27:33 AM

Figure : 2 (NO3+NO2)



Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-1S	**Matrix**	: WATER
Lab Sample ID	: L2350269-01		
Matrix Spike	: WG1822231-4	**MS Analysis Date**	: 08/31/23 04:54
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Nitrogen, Nitrate/Nitrite	0.11	4	4.1	100					80-120	20

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-1S	**Matrix**	: WATER
Lab Sample ID	: L2350269-01	**Analysis Date**	: 08/31/23 04:52
Dup Sample ID	: WG1822231-3	**DUP Analysis Date**	: 08/31/23 04:53

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Nitrogen, Nitrate/Nitrite	0.11	0.10	10	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1822231-2	**LCS Analysis Date**	: 08/31/23 03:20
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	**True (mg/l)**	**Found (mg/l)**	**%R**	**True (mg/l)**	**Found (mg/l)**	**%R**	**RPD**	**Recovery Limits**	**RPD Limit**
Nitrogen, Nitrate/Nitrite	**5.00**	**5.00**	**100.**					**90-110**	**20**

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Nitrogen, Nitrate	14797-55-8	0.1	0.0228	mg/l	90-110		83-113	6	6	353.2	48 hours	1 - Plastic 250ml unpreserved
Nitrogen, Nitrate	14797-55-8	0.1	0.0228	mg/l	90-110		83-113	17	17	4500NO3-F	48 hours	1 - Plastic 250ml unpreserved
Nitrogen, Nitrite	NONE	0.05	0.0143	mg/l	90-110	20	80-120	20	20	353.2	48 hours	1 - Plastic 250ml unpreserved
Nitrogen, Nitrite	NONE	0.05	0.0143	mg/l	90-110	20	80-120	20	20	4500NO3-F	48 hours	1 - Plastic 250ml unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11468-1
Page: 1

WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Nitrogen, Nitrate	14797-55-8	1	0.261	mg/kg	90-110	20	80-120	20	20	4500NO3-F	48 hours	1 - Glass 250ml/8oz unpreserved
Nitrogen, Nitrite	NONE	1	0.282	mg/kg	90-110	20	80-120	20	20	4500NO3-F	48 hours	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of Nitrogen, Nitrate

Aqueous Samples:
Compute sample N in NO3 concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 1 (NO3+NO2) and Channel 2 (NO2)

$$NO3\ mg/I = (NO3+NO2)\ mg/L - (NO2)\ mg/L$$

To compute final results for aqueous samples, multiply the direct reading by the dilution factor (also done using software)

$$(NO3)\text{-}N\ mg/L = mg/L\ direct\ reading \times dilution\ factor$$

Calculations of Nitrogen, Nitrite

Aqueous Samples:
Compute sample N in NO2 concentration by comparing sample peak areas with standard curve, as determined by the Lachat instrument software.

Calculate results by using reading on Channel 2 (NO2)

To compute final results for aqueous samples, multiply the direct reading by the dilution factor (also done using software)

$$(NO2)\text{-}N\ mg/L = mg/L\ direct\ reading \times dilution\ factor$$

Sequence Logs

Date: 083123

Initals: KAF

Syringe Lot: 20230410

Filter Lot: 15904235A

Cup #:	Sample ID:	Comments:
1	**ICV NO3 5**	*Buffer: NO3NO2_082523_BUFFER*
2	**ICV NO2 5**	*Color: NO3NO2_082323_COLOR*
3	**ICV NO3 0.5**	*NO3 MS: NO3_072523_200PPM_CAL*
4	**ICV NO2 0.5**	*NO2 MS: NO2_080423_200PPM_CAL*
5	**ICB**	*ICV NO3 5: NO3_083123_5PPM_ICV*
6	**5X DILUTER CHECK**	*ICV NO2 5: NO2_083023_5PPM_ICV*
7	**BLANK NO3**	*ICV NO3 0.5: NO3_083123_0.5PPM_ICV*
8	**LCS NO3**	*ICV NO2 0.5: NO2_083123_0.5PPM_ICV*
9	**BLANK NO2**	
10	**LCS NO2**	
11	**WG1822224-1; NO2/255**	*OOH*
12	**WG1822224-2; NO2/255**	*DW*
13	**WG1822225-1; NO2**	*GOING OOH*
14	**WG1822225-2; NO2**	**FIELD BLANK**
15	**WG1822226-1; NO3/256**	
16	**WG1822226-2; NO3/256**	
17	**WG1822227/230-1; NO3**	
18	**WG1822227/230-2; NO3**	
19	**WG1822228-1; NO3**	
20	**WG1822228-2; NO3**	
21	**WG1822229-1; NO3**	
22	**WG1822229-2; NO3**	
23	**WG1822231-1; CNO3**	
24	**WG1822231-2; CNO3**	
25	**L2350148-01**	
26	**WG1822227/230-3; NO3**	
27	**WG1822227/230-4; NO3**	
28	**WG1822225-3; NO2**	
29	**WG1822225-4; NO2**	
30	**L2350148-02**	
31	**L2350148-03**	
32	**L2350148-04**	
33	**L2350225-01**	
34	**L2350225-02**	
35	**L2350225-03**	
36	**L2350225-04**	
37	**L2350225-05**	
38	**L2350225-06**	
39	**L2350444-01**	
40	**L2350444-02**	
41	**L2350444-03**	
42	**L2350314-01**	
43	**WG1822228-3; NO3**	

Cup #:	Sample ID:	Comments:
44	**WG1822228-4; NO3**	
45	**L2350314-02**	
46	**L2350487-01**	
47	**L2350487-02**	
48	**L2350487-03**	
49	**L2350487-04**	
50	**L2350362-01**	
51	**L2350365-01**	
52	**L2350386-03**	
53	**L2350401-01**	
54	**L2350409-01**	
55	**L2350440-01**	
56	**WG1822226-3; NO3**	
57	**WG1822226-4; NO3**	
58	**WG1822224-3; NO2**	
59	**WG1822224-4; NO2**	
60	**L2350175-01**	
61	**WG1822229-3; NO3**	
62	**WG1822229-4; NO3**	
63	**L2350175-02**	
64	**L2350175-03**	
65	**L2350175-04**	
66	**L2350175-05**	
67	**L2350175-06**	
68	**L2350175-07**	
69	**L2350175-08**	
70	**L2350175-09**	
71	**L2350269-01**	
72	**WG1822231-3; CNO3**	
73	**WG1822231-4; CNO3**	
74	**L2350269-02**	
75	**L2350269-03**	
76	**L2350269-04**	
77	**L2350269-05**	
78	**L2350269-06**	
79	**L2350269-07**	
80	**L2350269-08**	
81	**L2350269-09**	
82	**L2350405-01**	
83	**WG1822255-3; NO2**	
84	**WG1822255-4; NO2**	
85	**L2350405-02**	
86	**L2350405-03**	
87	**L2350405-04**	
88	**L2350405-05**	
89	**L2350405-06**	

Cup #:	Sample ID:	Comments:
90	**L2350405-07**	
91	**L2350457-01**	
92	**WG1822256-3; NO3**	
93	**WG1822256-4; NO3**	
94	**L2350458-01**	
95	**WG1822295/296-1; CNO3**	TRAY 2
96	**WG1822295/296-2; CNO3**	
97	**L2348187-01**	
98	**WG1822295-3; CNO3**	
99	**WG1822295-4; CNO3**	
100	**L2348187-04**	
101	**L2348187-07**	
102	**L2348187-10**	
103	**L2348187-13**	
104	**L2348187-16**	
105	**L2348187-19**	
106	**L2348187-22**	
107	**L2348187-25**	
108	**L2348187-28**	
109	**L2348187-31**	
110	**L2348187-34**	
111	**L2349577-01**	
112	**L2349577-02**	
113	**L2350200-02**	
114	**WG1822296-3; CNO3**	
115	**WG1822296-4; CNO3**	
116	**L2350200-03**	
117	**L2350200-04**	
118	**L2350200-05**	
119	**L2350200-06**	
120	**L2350200-07**	
121	**WG1822332-1; NO3**	
122	**WG1822332-2; NO3**	
123	**L2350244-09**	
124	**WG1822332-3; NO3**	
125	**WG1822332-4; NO3**	
126	**L2350244-10**	
127	**L2350244-11**	
128	**L2350244-12**	
129	**L2350244-13**	
130	**L2350244-14**	
131	**L2350244-15**	
132	**L2350244-16**	
133	**L2350244-17**	
134	**L2350244-18**	
135	**L2350244-19**	

Cup #:	Sample ID:	Comments:
136	**L2350244-20**	
137	**L2350433-01**	
138	**L2350433-02**	
139	**L2350433-03**	
140	**L2350433-04**	
141	**L2350433-05**	
142	**L2350433-06**	
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Total Dissolved Solids Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 04:50
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1822690.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	520	13	4.0	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 04:50
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1822690.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	280	13	4.0	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 04:50
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1822690.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	300	13	4.0	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 04:50
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1822690.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	240	13	4.0	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-05**	**Date Collected**	:	**08/29/23 09:10**
Client ID	:	**MW-5S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/01/23 04:50**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1.3**
Analytical Method	:	**121,2540C**	**Analyst**	:	**DEW**
Lab File ID	:	**WG1822690.pdf**	**Instrument ID**	:	**BALANCE#22**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	**Solids, Total Dissolved**	**82.**	**13**	**4.0**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 04:50
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1822690.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	400	13	4.0	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 04:50
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1822690.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	600	13	4.0	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 04:50
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1822690.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	330	13	4.0	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/01/23 04:50
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1822690.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	600	13	4.0	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822690-1	**Date Collected**	: NA
Client ID	: WG1822690-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/01/23 04:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1822690.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	ND	10	3.1	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822690-3	**Date Collected**	: 08/28/23 09:15
Client ID	: WG1822690-3 DUP	**Date Received**	: 08/28/23
Sample Location	:	**Date Analyzed**	: 09/01/23 04:50
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1822690.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	1700	13	4.0	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822690-4	**Date Collected**	: 08/28/23 13:40
Client ID	: WG1822690-4 DUP	**Date Received**	: 08/28/23
Sample Location	:	**Date Analyzed**	: 09/01/23 04:50
Sample Matrix	: WATER	**Dilution Factor**	: 1.3
Analytical Method	: 121,2540C	**Analyst**	: DEW
Lab File ID	: WG1822690.pdf	**Instrument ID**	: BALANCE#22
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
NONE	Solids, Total Dissolved	740	13	4.0	

Sample Raw Data

Alpha Analytical

Wet Chemistry Gravimetric ELN

Printed: SEP-05-23 10:15:15

WorkGroup	WG1822690	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**		**Temp In (C)**					
Title	Solids, Total Dissolved	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**		**Temp Out (C)**					
Method	SM2540C	**Time In**	05-SEP-23 02:30	**Time In**	05-SEP-23 06:18	**Time In**	05-SEP-23 08:36	**Time In**		**Time In**					
Instrument	BALANCE#22	**Time Out**	05-SEP-23 05:19	**Time Out**	05-SEP-23 08:23	**Time Out**	05-SEP-23 10:14	**Time Out**		**Time Out**					
		Evaporation	**Temp In (C)** 90	**Time In** 01-SEP-23 11:20								**LCS Lot #** 080223C	**TrueValue** 500	**Units** mg/l	

Sample #	Analysis Date	Analyst	Cup ID	Filter Lot	Tare Weight (gm)	Sample Volume (ml)	Net Weight (1) (gm)	Net Weight (2) (gm)	Net Weight (3) (gm)	Net Weight (4) (gm)	Net Weight (5) (gm)	Result mg/L	Dil	Comment
L2349935-10	01-SEP-23 04:50	DEB WHELAN	F8	71156397	64.9819	80	65.1597	65.1598				2222.50	1.3	
L2349935-11	01-SEP-23 04:50	DEB WHELAN	R4	71156397	66.3246	80	66.4196	66.4198				1187.50	1.3	
L2349935-12	01-SEP-23 04:50	DEB WHELAN	W2	71156397	69.2862	80	69.3788	69.3788				1157.50	1.3	
L2349935-13	01-SEP-23 04:50	DEB WHELAN	W10	71156397	62.6466	80	62.7473	62.7472				1257.50	1.3	
L2349935-14	01-SEP-23 04:50	DEB WHELAN	F8	71156397	67.4914	80	67.5814	67.5815				1125.00	1.3	
L2349951-01	01-SEP-23 04:50	DEB WHELAN	HE	71156397	64.0709	80	64.1576	64.1578				1083.75	1.3	
L2349951-02	01-SEP-23 04:50	DEB WHELAN	PQ	71156397	61.6572	80	61.7211	61.7215				798.75	1.3	
L2349951-03	01-SEP-23 04:50	DEB WHELAN	GB	71156397	61.2618	80	61.3224	61.3228				757.50	1.3	
L2349951-04	01-SEP-23 04:50	DEB WHELAN	W12	71156397	64.6141	80	64.6211	64.6215				87.50	1.3	T2
L2349951-05	01-SEP-23 04:50	DEB WHELAN	RR	71156397	65.3308	80	65.3437	65.3441				161.25	1.3	
L2349951-06	01-SEP-23 04:50	DEB WHELAN	W6	71156397	72.5552	80	72.5722	72.5726				212.50	1.3	
L2350269-01	01-SEP-23 04:50	DEB WHELAN	X	71156397	65.4911	80	65.5329	65.5348	65.5347			522.50	1.3	
L2350269-02	01-SEP-23 04:50	DEB WHELAN	X9	71156397	65.6955	80	65.7176	65.7183	65.7186			276.25	1.3	
L2350269-03	01-SEP-23 04:50	DEB WHELAN	P3	71156397	66.9414	80	66.9656	66.9658				302.50	1.3	
L2350269-04	01-SEP-23 04:50	DEB WHELAN	J7	71156397	68.6007	80	68.6198	68.6207	68.6203			238.75	1.3	
L2350269-05	01-SEP-23 04:50	DEB WHELAN	A11	71156397	69.669	80	69.6756	69.6758				82.50	1.3	
L2350269-06	01-SEP-23 04:50	DEB WHELAN	XZ	71156397	71.041	80	71.0727	71.0731				396.25	1.3	
L2350269-07	01-SEP-23 04:50	DEB WHELAN	RZ	71156397	68.7481	80	68.7965	68.7967				605.00	1.3	
L2350269-08	01-SEP-23 04:50	DEB WHELAN	F1	71156397	62.0511	80	62.0777	62.0782	62.078			332.50	1.3	
L2350269-09	01-SEP-23 04:50	DEB WHELAN	A5	71156397	63.9826	80	64.0311	64.0307				601.25	1.3	
WG1822690-1	01-SEP-23 04:50	DEB WHELAN	F6	71156397	62.5173	100	62.517	62.5168				-5.00	1	T1
WG1822690-2	01-SEP-23 04:50	DEB WHELAN	TL	71156397	65.2389	50	65.2627	65.2626				474.00	2	
WG1822690-3	01-SEP-23 04:50	DEB WHELAN	F4	71156397	66.2659	80	66.3996	66.3992				1666.25	1.3	

Alpha Analytical

Wet Chemistry Gravimetric ELN

Printed: SEP-05-23 10:15:15

WorkGroup	WG1822690	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**	180	**Temp In (C)**		**Temp In (C)**	
Title	Solids, Total Dissolved	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**	180	**Temp Out (C)**		**Temp Out (C)**	
Method	SM2540C	**Time In**	05-SEP-23 02:30	**Time In**	05-SEP-23 06:18	**Time In**	05-SEP-23 08:36	**Time In**		**Time In**	
Instrument	BALANCE#22	**Time Out**	05-SEP-23 05:19	**Time Out**	05-SEP-23 08:23	**Time Out**	05-SEP-23 10:14	**Time Out**		**Time Out**	

Temp In (C)	**Time In**
90	01-SEP-23 11:20

LCS Lot #	**TrueValue**	**Units**
080223C	500	mg/l

Sample #	**Analysis Date**	**Analyst**	**Cup ID**			**Sample Volume (ml)**					**Result mg/L**	**Dil**	**Comment**
WG1822690-4	01-SEP-23 04:50	DEB WHELAN	BA	71156397	76.1134	80		76.1724	76.1722		735.00	1.3	

Quality Control

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 09/01/23 04:50
Dup Sample ID	: WG1822690-3	**DUP Analysis Date**	: 09/01/23 04:50

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Solids, Total Dissolved	1100	1700	43 Q	10

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 09/01/23 04:50
Dup Sample ID	: WG1822690-4	**DUP Analysis Date**	: 09/01/23 04:50

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Solids, Total Dissolved	800	740	8	10

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1822690-2	**LCS Analysis Date**	: 09/01/23 04:50
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Solids, Total Dissolved	500.	470.	95.					80-120	10

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Solids, Total Dissolved	NONE	10	3.07	mg/l	80-120			10	10	2540C	7 days	1 - Plastic 500ml unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of TDS

$$\text{mgTDS/L} = \frac{(A - B) \times 1000}{\text{Sample volume, (L)}}$$

Where:

A = Final weight (weight of dish + dried residue, g)
B = Initial weight (weight of clean dish, g)

Sulfide Analysis

Results

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-01**	**Date Collected**	:	**08/28/23 16:52**
Client ID	:	**MW-1S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/31/23 12:49**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500S2-D**	**Analyst**	:	**LOF**
Lab File ID	:	**WG1822398.csv**	**Instrument ID**	:	**GENSYS10VI**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	**08/31/23**

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
18496-25-8	**Sulfide**	**ND**	**0.10**	**0.10**	**U**

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-02**	**Date Collected**	:	**08/28/23 15:34**
Client ID	:	**MW-2S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/31/23 12:49**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500S2-D**	**Analyst**	:	**LOF**
Lab File ID	:	**WG1822398.csv**	**Instrument ID**	:	**GENSYS10VI**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	**08/31/23**

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
18496-25-8	**Sulfide**	**ND**	**0.10**	**0.10**	**U**

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:46
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500S2-D	**Analyst**	: LOF
Lab File ID	: WG1822398.csv	**Instrument ID**	: GENSYS10VI
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
18496-25-8	Sulfide	ND	0.10	0.10	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:47
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500S2-D	**Analyst**	: LOF
Lab File ID	: WG1822398.csv	**Instrument ID**	: GENSYS10VI
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
18496-25-8	Sulfide	ND	0.10	0.10	U

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-05**	**Date Collected**	:	**08/29/23 09:10**
Client ID	:	**MW-5S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**08/31/23 15:47**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500S2-D**	**Analyst**	:	**LOF**
Lab File ID	:	**WG1822398.csv**	**Instrument ID**	:	**GENSYS10VI**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	**08/31/23**

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
18496-25-8	**Sulfide**	**ND**	**0.10**	**0.10**	**U**

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:48
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500S2-D	**Analyst**	: LOF
Lab File ID	: WG1822398.csv	**Instrument ID**	: GENSYS10VI
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
18496-25-8	Sulfide	ND	0.10	0.10	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:49
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500S2-D	**Analyst**	: LOF
Lab File ID	: WG1822398.csv	**Instrument ID**	: GENSYS10VI
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
18496-25-8	Sulfide	ND	0.10	0.10	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:49
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500S2-D	**Analyst**	: LOF
Lab File ID	: WG1822398.csv	**Instrument ID**	: GENSYS10VI
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
18496-25-8	Sulfide	ND	0.10	0.10	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 08/31/23 15:49
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500S2-D	**Analyst**	: LOF
Lab File ID	: WG1822398.csv	**Instrument ID**	: GENSYS10VI
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
18496-25-8	Sulfide	ND	0.10	0.10	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822398-1	**Date Collected**	: NA
Client ID	: WG1822398-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 08/31/23 12:47
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500S2-D	**Analyst**	: LOF
Lab File ID	: WG1822398.csv	**Instrument ID**	: GENSYS10VI
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
18496-25-8	Sulfide	ND	0.10	0.10	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1822398-3	**Date Collected**	: 08/29/23 07:47
Client ID	: WG1822398-3 DUP	**Date Received**	: 08/29/23
Sample Location	:	**Date Analyzed**	: 08/31/23 12:48
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500S2-D	**Analyst**	: LOF
Lab File ID	: WG1822398.csv	**Instrument ID**	: GENSYS10VI
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 08/31/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
18496-25-8	Sulfide	ND	0.10	0.10	U

Sample Raw Data

ALPHA ANALYTICAL

WET CHEMISTRY DEPARTMENT

Sulfide, Total

Last Change3/5/13
File Sulfide-Total-L.xlt

SOP No.: 07-30

Product: SULFIDE-4500
Curve Calibration Date : 5/22/2023
Curve Identifier: 052223
Analysis: Sulfide, Total
Analyte: Sulfide,
Method: SM 4500S2-AD
Prep Date/Time: 8/31/23 11:11
Instrument: GENSYS10vis
Technician: LOF
Wavelength: 664 nm
Work group: WG1822398
LCS Volume(ml): 250.0
RDL: 0.1 mg/L
LCS Concentration (mg/l): 0.263
Cell: 1 cm

Standard ID ug/100ml	Peak Area abs	Dilution
0	0.000	1.0
5.485	0.043	1.0
10.97	0.075	1.0
21.94	0.146	1.0
43.88	0.285	1.0
87.76	0.542	1.0
131.64	0.828	1.0
175.52	1.044	1.0

Calibration Curve
Volume: 50ml

Slope	y-intercept
0.006008	0.01198643

Correlation Coefficient: 0.999356

ICV/LCS Concentration (mg/l): 0.26

Reagents/Media Information

Material	Lot No.
ICV/LCS:	S2_083123_LCS
CCV:	S2_083123_SPK
MS:	S2_083123_SPK
2N HCl:	2023022381
1N NaOH:	081423_NaOH 1N
Sulfide 1 Reagent:	A2102
Sulfide 2 Reagent:	A3059
0.2N NaOH:	

Get Samples
CHOOSE M
SM4500
SM4500 (PPB)

Time	Date	Sample number	Sample Volume (ml)		Absorbance	Conc. (ug S/100ml)	Coloring Dilution Factor		RDL Multiplier	FINAL RESULT (mg/l)	Recovery
12:46	8/31/2023	ICV	250		0.492	79.896	1		1.0	0.32	123%
12:46	8/31/2023	ICB	250		0	0.000	1		1.0	0.00	
12:47	8/31/2023	BLANK	250		0.002	0.000	1		1.0	0.00	Recovery
12:47	8/31/2023	LCS	250		0.419	67.745	1		1.0	0.27	104%
12:47	8/31/2023	L2350098-01	305		0.006	0.000	1		1.0	0.00	
12:48	8/31/2023	L2350098-02	305		-0.006	0.000	1		1.0	0.00	
12:49	8/31/2023	L2350269-01	300		0.017	0.834	1		1.0	0.00	
12:49	8/31/2023	L2350269-02	295		0.004	0.000	1		1.0	0.00	
15:46	8/31/2023	L2350269-03	300		0.008	0.000	1		1.0	0.00	
15:47	8/31/2023	L2350269-04	295		0.009	0.000	1		1.0	0.00	
15:46	8/31/2023	CCV	250		0.49	79.563	1		1.0	0.32	123%
15:45	8/31/2023	CCB	250		0	0.000	1		1.0	0.00	
15:47	8/31/2023	L2350269-05	300		0.006	0.000	1		1.0	0.00	
15:48	8/31/2023	L2350269-06	290		0.01	0.000	1		1.0	0.00	
15:49	8/31/2023	L2350269-07	280		0.006	0.000	1		1.0	0.00	
15:49	8/31/2023	L2350269-08	280		0.002	0.000	1		1.0	0.00	
15:49	8/31/2023	L2350269-09	290		0.013	0.169	1		1.0	0.00	
15:50	8/31/2023	CCV	250		0.473	76.733	1		1.0	0.31	119%
15:49	8/31/2023	CCB	250		0.004	0.000	1		1.0	0.00	
						0.000	1				
12:47	8/31/2023	WG1822398-1	250		0.002	0.000	1		1.0	0.00	
12:48	8/31/2023	WG1822398-3	300		0.002	0.000	1		1.0	0.00	DUP

		Sample number	Sample volume		Absorbance	Sample Result mg/l	Dilution Factor	Spike conc. mg/l	RDL Multiplier	Spike Result mg/l	Recovery %
12:48	8/31/2023	WG1822398-4	300		0.409		1	0.52	1.0	0.22	42
							1	0.00			
12:47	8/31/2023	WG1822398-2	250		0.419		1	0.26	1.0	0.27	104%

COMMENTS & OBSERVATIONS	SAMPLE RESULT
	ICV
	ICB
	L2350098-01
	L2350098-02
	L2350269-01
	L2350269-02
	L2350269-05
	L2350269-06
	L2350269-07
	L2350269-08
	L2350269-09
	CCV
	CCB
	0
	WG1822398-1
L2350098-01	WG1822398-3

L2350098-02	WG1822398-4
	0
LCS	WG1822398-2

Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: L2350098-02		
Matrix Spike	: WG1822398-4	**MS Analysis Date**	: 08/31/23 12:48
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Sulfide	ND	0.52	0.22	42	Q					70-130	20

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 08/31/23 12:47
Dup Sample ID	: WG1822398-3	**DUP Analysis Date**	: 08/31/23 12:48

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Sulfide	ND	ND	NC	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1822398-2	**LCS Analysis Date**	: 08/31/23 12:47
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Sulfide	0.260	0.270	104.					75-125	20

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Sulfide	18496-25-8	0.1	0.1	mg/l	75-125		70-130	20	20	4500S2-D	7 days	2 - Plastic 250ml Zn Acetate/NaOH preserved
Sulfide	18496-25-8	0.1	0.1	mg/l	75-125		70-130	20	20	9030B	7 days	2 - Plastic 250ml Zn Acetate/NaOH preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Created By: Jason Hebert
File: PM11468-1
Page: 1

WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Sulfide	18496-25-8	0.5	0.156	mg/kg	75-125	25	70-130	25	25	9030B	7 days	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of Total Sulfide

Aqueous samples:

Calculate the concentration value of the sample (in mgS/100ml) directly from the standard curve.

$$\text{mgS/100ml} = \frac{\text{absorbance - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

Calculate the final concentration value of Sulfide in the sample:

$$\text{mgS/L} = \frac{\text{mgS/100ml}}{\text{Sample volume (ml)}}$$

Alkalinity Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/11/23 12:22
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 230911.csv	**Instrument ID**	: METTLER
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U
71-52-3	Alkalinity, Bicarbonate	85.2	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1826022-1	**Date Collected**	: NA
Client ID	: WG1826022-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/11/23 12:11
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 230911.csv	**Instrument ID**	: METTLER
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1826022-2	**Date Collected**	: 08/29/23 16:00
Client ID	: WG1826022-2 DUP	**Date Received**	: 08/31/23
Sample Location	:	**Date Analyzed**	: 09/11/23 12:40
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT
Lab File ID	: 230911-Copy.csv	**Instrument ID**	: METTLER
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	502.	2.00	NA	
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824053.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	41.2	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824053.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824053.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824053.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825164.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825164.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825164.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825164.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	36.8	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1824053-1	**Date Collected**	: NA
Client ID	: WG1824053-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824053.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1824053-2	**Date Collected**	: 08/31/23 10:00
Client ID	: WG1824053-2 DUP	**Date Received**	: 08/31/23
Sample Location	:	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/MRS
Lab File ID	: WG1824053.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1825164-1	**Date Collected**	: NA
Client ID	: WG1825164-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825164.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1825164-2	**Date Collected**	: 08/28/23 00:00
Client ID	: DUPDUP	**Date Received**	: 08/29/23
Sample Location	:	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825164.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
3812-32-6	Alkalinity, Carbonate	33.2	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824049.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824049.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	154.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824049.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	154.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824049.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	57.0	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825166.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	21.8	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825166.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	161.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825166.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	286.	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825166.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	2.60	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1824049-1	**Date Collected**	: NA
Client ID	: WG1824049-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/M
Lab File ID	: WG1824049.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1824049-2	**Date Collected**	: 08/31/23 08:20
Client ID	: WG1824049-2 DUP	**Date Received**	: 08/31/23
Sample Location	:	**Date Analyzed**	: 09/05/23 15:50
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MKT/MRS
Lab File ID	: WG1824049.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	72.6	2.00	NA	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1825166-1	**Date Collected**	: NA
Client ID	: WG1825166-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825166.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	ND	2.00	NA	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1825166-2	**Date Collected**	: 08/28/23 00:00
Client ID	: DUPDUP	**Date Received**	: 08/29/23
Sample Location	:	**Date Analyzed**	: 09/07/23 15:01
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,2320B	**Analyst**	: MRS
Lab File ID	: WG1825166.csv	**Instrument ID**	:
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg CaCO3/L			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
71-52-3	Alkalinity, Bicarbonate	7.60	2.00	NA	

Sample Raw Data

From Page No.

Sample	initial pH 8.3		4.5	4.2	
Blank	5.12	–	0.04	–	
LCS	11.11	–	5.23	–	
S1489-01	6.52	–	2.06	–	
Dup	6.46	–	2.02	–	
MS	9.52	–	7.36	–	
-02	6.24	–	1.49	–	
-03	6.33	–	2.01	–	
-04	8.36	–	4.20	–	
CCV	11.09	–	5.20		
CCB	5.52	–	0.04		

1	Blank	~~MS 7.46~~ 5.51		0.05	–	3:01PM
2	LCS	11.08	–	5.19	–	
3	50269-05	6.30	–	1.09	–	
4	50269-06	6.57	–	8.03	–	
5	50269-07	6.98	–	14.30	–	
6	50269-08	6.94	–	3.87	–	
7	50269-09	9.67	0.92	1.97	–	
8	DUP	9.67	0.83	2.04	–	
MWH 50489 9	~~50289~~-02	7.88	–	6.22	–	
10	50289-04	7.92	–	3.85	–	
11	~~50289~~-07	7.85	–	5.21	–	
12	50565-01	7.04	–	23.11	–	
13	50565-02	6.47	–	8.72	–	
14	50565-03	4.15	–	–	–	
15	50565-04	8.95	10.52	41.5	–	
16	50946-01	6.43	–	1.27	–	
17	50946-02	6.13	–	1.20	–	
18	50946-03	7.11	–	2.23	–	
19	50946-04	6.00	–	1.15	–	
20	50946-06	5.76	–	0.2	0.4	
21	50418-01	8.02	–	9.74	–	
22	50418-02	7.94	–	9.60	–	
MWH 23	50487-01	7.81	–	5.49	–	
	~~24 DUP~~					
	25 50487-02	7.81	–	5.32	–	

To Page No.

Witnessed & Understood by me, | Date | Invented by: | Date | Recorded by:

	Sample	Initial PH	8.3	4.5	4.2
26	50487-03	6.50	—	3.34	—
27	DUP	6.50	—	3.30	—
28	50487-04	7.61	—	11.50	—
29	CCV	11.15	—	5.30	—
30	CCB	5.69	—	.08	—

To Pa

[Read-Only] - Results Editor

LabX

Results

Sample ID 1	Sample ID 2	Sample ID 3	Sample ID 4	Sample ID 5	Sample ID 6	Creation tim	mple cycle na	Sample	Sensor type	st of standar	Standard	Comment	mperature ['	point 1 (Cal	lope 1 (Cal1.S1
						9/11/2023								7.006 pH	-57.21 mV/p

[Read-Only] - Results Editor

LabX

Results

Sample ID 1	Sample ID 2	Sample ID 3	Sample ID 4	Sample ID 5	Sample ID 6	Creation time	mple cycle na	Sample	Volume [mL]	Density [g/mL	orrection fact	mperature [°	Comment	Potential (R1)
--						9/11/2023 1	S1	1	0 mL	1.0 g/mL	1.0	25.0 °C		7.03 pH

[Read-Only] - Results Editor

LabX

Results

Sample ID 1	Potential (R4)	sumption 8.3	Consumption 4.5 (R2	sumption 4.2	Content (R5)	ALK LOW (R6)	Creation time	Comment	e cycl	amp	ume [	sity [g/	tion	mperature [	mple	mple	mple	mple	mple
Rinse,MKT	8.12 pH	NaN mL	0.447 mL	0.447 mL	8.940 mg/L	8.940 mg/L	9/11/2023 12:09:59		S1	1	50 m	1.0 g/	1.0	25.0 °C					
WG1826022-	5.67 pH	NaN mL	0.089 mL	0.132 mL	1.780 mg/L	0.920 mg/L	9/11/2023 12:11:37	WG1826022	S1	2	50 m	1.0 g/	1.0	25.0 °C					
xLCS	11.27 pH	5.740 mL	6.214 mL	6.214 mL	124.280 mg/	124.280 mg/	9/11/2023 12:14:29		S1	3	50 m	1.0 g/	1.0	25.0 °C					
xLCS	11.24 pH	5.013 mL	5.392 mL	5.392 mL	107.840 mg/	107.840 mg/	9/11/2023 12:18:58	WG1826022	S1	4	50 m	1.0 g/	1.0	25.0 °C					
I2350269-08	6.18 pH	NaN mL	4.258 mL	4.260 mL	85.160 mg/L	85.120 mg/L	9/11/2023 12:22:43		S1	5	50 m	1.0 g/	1.0	25.0 °C					
I2350565-01	6.91 pH	NaN mL	25.344 mL	25.998 mL	506.880 mg/	493.800 mg/	9/11/2023 12:26:02	WG1826022	S1	6	50 m	1.0 g/	1.0	25.0 °C					
WG1826022-	6.96 pH	NaN mL	25.116 mL	25.763 mL	502.320 mg/	489.380 mg/	9/11/2023 12:40:03	WG1826022	S1	7	50 m	1.0 g/	1.0	25.0 °C					
I2350565-02	6.52 pH	NaN mL	8.742 mL	8.936 mL	174.840 mg/	170.960 mg/	9/11/2023 12:53:22	WG1826022	S1	8	50 m	1.0 g/	1.0	25.0 °C					
I2350797-03	6.97 pH	NaN mL	7.192 mL	7.198 mL	143.840 mg/	143.720 mg/	9/11/2023 12:58:58	WG1826022	S1	9	50 m	1.0 g/	1.0	25.0 °C					
I2351101-06	6.69 pH	NaN mL	NaN mL	NaN mL	NaN mg/L	NaN mg/L	9/11/2023 1:03:45 P	WG1826022	S1	10	50 m	1.0 g/	1.0	25.0 °C					
I2351101-08	6.57 pH	NaN mL	13.261 mL	13.396 mL	265.220 mg/	262.520 mg/	9/11/2023 1:20:29 P	WG1826022	S1	11	50 m	1.0 g/	1.0	25.0 °C					
I2351101-10	7.76 pH	NaN mL	12.451 mL	12.543 mL	249.020 mg/	247.180 mg/	9/11/2023 1:28:11 P	WG1826022	S1	12	50 m	1.0 g/	1.0	25.0 °C					
I2351101-12	6.59 pH	NaN mL	19.068 mL	19.274 mL	381.360 mg/	377.240 mg/	9/11/2023 1:35:27 P	WG1826022	S1	13	50 m	1.0 g/	1.0	25.0 °C					
I2350694-03	7.04 pH	NaN mL	12.037 mL	12.850 mL	240.740 mg/	224.480 mg/	9/11/2023 1:45:41 P	WG1826046	S1	14	50 m	1.0 g/	1.0	25.0 °C					
I2350694-05	7.05 pH	NaN mL	12.191 mL	12.277 mL	243.820 mg/	242.100 mg/	9/11/2023 2:00:13 P	WG1826046	S1	15	50 m	1.0 g/	1.0	25.0 °C					
I2350694-06	7.16 pH	NaN mL	21.110 mL	21.396 mL	422.200 mg/	416.480 mg/	9/11/2023 2:07:20 P	WG1826046	S1	16	50 m	1.0 g/	1.0	25.0 °C					
I2350694-07	6.28 pH	NaN mL	0.332 mL	0.334 mL	6.640 mg/L	6.600 mg/L	9/11/2023 2:18:35 P	WG1826046	S1	17	50 m	1.0 g/	1.0	25.0 °C					
I2351415-05	5.42 pH	NaN mL	0.146 mL	0.181 mL	2.920 mg/L	2.220 mg/L	9/11/2023 2:20:26 P	WG1826046	S1	18	50 m	1.0 g/	1.0	25.0 °C					
I2351415-06	6.38 pH	NaN mL	8.316 mL	8.345 mL	166.320 mg/	165.740 mg/	9/11/2023 2:22:11 P	WG1826046	S1	19	50 m	1.0 g/	1.0	25.0 °C					
WG1826046-	6.43 pH	NaN mL	8.213 mL	8.254 mL	164.260 mg/	163.440 mg/	9/11/2023 2:27:31 P	WG1826046	S1	20	50 m	1.0 g/	1.0	25.0 °C					
WG1826046-	8.88 pH	1.839 mL	13.338 mL	13.402 mL	266.760 mg/	265.480 mg/	9/11/2023 2:32:45 P	WG1826046	S1	21	50 m	1.0 g/	1.0	25.0 °C					
I2351101-06	7.41 pH	NaN mL	8.873 mL	8.912 mL	177.460 mg/	176.680 mg/	9/11/2023 2:40:40 P	WG1826022	S1	22	50 m	1.0 g/	1.0	25.0 °C					
WG1826046-	11.10 pH	4.518 mL	5.019 mL	5.019 mL	100.380 mg/	100.380 mg/	9/11/2023 2:46:17 P	WG1826046	S1	23	50 m	1.0 g/	1.0	25.0 °C					
WG1826046-	6.29 pH	NaN mL	0.294 mL	0.298 mL	5.880 mg/L	5.800 mg/L	9/11/2023 2:52:05 P	WG1826046	S1	24	50 m	1.0 g/	1.0	25.0 °C					

[Read-Only] - Results Editor

LabX

Sample ID 1	Potential (R4)	sumption 8.3	Consumption 4.5 (R2	sumption 4.2	Content (R5)	ALK LOW (R6)	Creation time	Comment	e cycl	amp	ume [	isity [g/	tion	mperature [	nple	nple	nple	nple	nple
WG1826046-	6.24 pH	NaN mL	0.014 mL	0.014 mL	0.280 mg/L	0.280 mg/L	9/11/2023 2:54:16 P	WG1826046	S1	25	50 m	1.0 g/	1.0	25.0 °C					

From Page No.

Sample	initial pH 8.3		4.5	4.2	
Blank	5.12	-	0.04	-	
LCS	11.11	-	5.23	-	
S1489-01	6.52	-	2.06	-	
Dup	6.46	-	2.02	-	
MS	9.52	-	7.36	-	
-02	6.24	-	1.49	-	
-03	6.33	-	2.01	-	
-04	8.36	-	4.20	-	
CCV	11.09	-	5.20		
CCB	5.52	-	0.04		
1 Blank	~~MS 7.46~~ 5.51		0.05	-	3:01PM
2 LCS	11.08	-	5.19	-	
3 50269-05	6.30	-	1.09	-	
4 50269-06	6.57	-	8.03	-	
5 50269-07	6.98	-	14.30	-	
6 50269-08	6.94	-	3.87	-	
7 50269-09	9.67	0.92	1.97	-	
8 DUP	9.67	0.83	2.04	-	
MWH 9 ~~50289~~-02	7.88	-	6.22	-	
10 50289-04	7.92	-	3.85	-	
11 ~~50289~~-07	7.85	-	5.21	-	
12 50565-01	7.04	-	23.11	-	
13 50565-02	6.47	-	8.72	-	
14 50565-03	4.15	-	-	-	
15 50565-04	8.95	10.52	41.5	-	
16 50946-01	6.43	-	1.27	-	
17 50946-02	6.13	-	1.20	-	
18 50946-03	7.11	-	2.23	-	
19 50946-04	6.00	-	1.15	-	
20 50946-06	5.76	-	0.2	0.4	
21 50418-01	8.02	-	9.74	-	
22 50418-02	7.94	-	9.60	-	
MWH 23 50487-01	7.81	-	5.49	-	
~~24 DUP~~					
25 50487-02	7.81	-	5.32	-	

To Page No.

Witnessed & Understood by me, | Date | Invented by: | Date | Recorded by:

	Sample	Initial PH	8.3	4.5	4.2
26	50487-03	6.50	—	3.34	—
27	DUP	6.50	—	3.30	—
28	50487-04	7.61	—	11.50	—
29	CCV	11.15	—	5.30	—
30	CCB	5.69	—	.08	—

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Book No.
Confidential

TITLE 9/5/23 Alks (cont.)

From Page No.

	Sample	initial pH	8.3	4.5	4.2
1	Blank	5.12	–	0.07	–
2	LCS	11.15	–	5.26	–
3	50433-01	6.82	–	15.00	–
4	50433-02	6.25 6.18 6.19	–	1.26	–
5	50433-03	6.31	–	2.00	–
6	50433-04	6.90	–	9.55	–
7	50433-05	5.82	–	1.51	–
8	50433-06	6.17	–	0.89	1.01
9	50658-01	6.27	–	2.13	–
10	50658-02	7.21	–	3.74	–
11	DUP	7.17	–	3.63	–
12	50658-03	6.40	–	2.36	–
13	DUP	6.37	–	2.40	–
14	50658-04	6.40	–	1.31	–
15	50658-05	5.96	–	0.71	0.87
16	50658-06	6.40	–	1.14	–
17	50658-07	6.32	–	1.52	–
18	50658-08	6.26	–	1.09	–
19	50658-09	5.95	–	0.68	0.80
20	50658-10	5.48	–	0.09	0.16
21	50269-01	9.70	1.03	2.14 2.14	–
22	50269-02	7.26	–	7.71	–
23	50269-03	7.08	–	7.71	–
24	50269-04	6.94	–	2.85	–
25	CCV	11.20	–	5.24	–
26	BLANK	5.67	–	0.07	–

15:50 MRS

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Witnessed & Understood by me,

Date

Invented by:

Recorded by:

Date

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Book No.
Confidential

TITLE 9/5/23 Alks (cont.)

From Page No.

	Sample	initial pH	8.3	4.5	4.2
1	Blank	5.12	–	0.07	–
2	LCS	11.15	–	5.26	–
3	50433-01	6.82	–	15.00	–
4	50433-02	6.25 6.18 6.19	–	1.26	–
5	50433-03	6.31	–	2.00	–
6	50433-04	6.90	–	9.55	–
7	50433-05	5.82	–	1.51	–
8	50433-06	6.17	–	0.89	1.01
9	50658-01	6.27	–	2.13	–
10	50658-02	7.21	–	3.74	–
11	DUP	7.17	–	3.63	–
12	50658-03	6.40	–	2.36	–
13	DUP	6.37	–	2.40	–
14	50658-04	6.40	–	1.31	–
15	50658-05	5.96	–	0.71	0.87
16	50658-06	6.40	–	1.14	–
17	50658-07	6.32	–	1.52	–
18	50658-08	6.26	–	1.09	–
19	50658-09	5.95	–	0.68	0.80
20	50658-10	5.48	–	0.09	0.16
21	50269-01	9.70	1.03	2.14 2.14	–
22	50269-02	7.26	–	7.71	–
23	50269-03	7.08	–	7.71	–
24	50269-04	6.94	–	2.85	–
25	CCV	11.20	–	5.24	–
26	BLANK	5.67	–	0.07	–

15:50 MRS

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Witnessed & Understood by me,
Date
Invented by:
Recorded by:
Date

Quality Control

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 09/11/23 12:26
Dup Sample ID	: WG1826022-2	**DUP Analysis Date**	: 09/11/23 12:40

Parameter	Sample Concentration (mg CaCO3/L)	Duplicate Concentration (mg CaCO3/L)	RPD	RPD Limit
Alkalinity, Carbonate	ND	ND	NC	10
Alkalinity, Bicarbonate	507	502.	1	9

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 09/05/23 15:50
Dup Sample ID	: WG1824053-2	**DUP Analysis Date**	: 09/05/23 15:50

Parameter	Sample Concentration (mg CaCO3/L)	Duplicate Concentration (mg CaCO3/L)	RPD	RPD Limit
Alkalinity, Carbonate	ND	ND	NC	10

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: DUP	**Matrix**	: DW
Lab Sample ID	: L2350269-09	**Analysis Date**	: 09/07/23 15:01
Dup Sample ID	: WG1825164-2	**DUP Analysis Date**	: 09/07/23 15:01

Parameter	Sample Concentration (mg CaCO3/L)	Duplicate Concentration (mg CaCO3/L)	RPD	RPD Limit
Alkalinity, Carbonate	36.8	33.2	10	10

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 09/05/23 15:50
Dup Sample ID	: WG1824049-2	**DUP Analysis Date**	: 09/05/23 15:50

Parameter	Sample Concentration (mg CaCO3/L)	Duplicate Concentration (mg CaCO3/L)	RPD	RPD Limit
Alkalinity, Bicarbonate	74.8	72.6	3	9

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: DUP	**Matrix**	: WATER
Lab Sample ID	: L2350269-09	**Analysis Date**	: 09/07/23 15:01
Dup Sample ID	: WG1825166-2	**DUP Analysis Date**	: 09/07/23 15:01

Parameter	Sample Concentration (mg CaCO3/L)	Duplicate Concentration (mg CaCO3/L)	RPD	RPD Limit
Alkalinity, Bicarbonate	2.60	7.60	98 Q	9

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Alkalinity, Total	471-34-1	2		mg CaCO3/L	90-110	10	86-116	10	10	2320B	14 days	1 - Plastic 250ml unpreserved/No Headspace

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of Alkalinity

$$\text{Alkalinity, mg } CaCO_3/L = \frac{A \times N \times 50{,}000}{\text{mL Sample}}$$

Where:

A = mL of the standard acid titrated

N = normality of the standard acid

Results are calculated using Mettler Toledo software.

Standard sample size is 50mL, 0.02N Sulfuric acid for titration

Sequence Logs

Project No. _____ Confidential
Book No. _____

TITLE 9/5/23 Alks (cont.)

From Page No. ____

	Sample	initial pH	8.3	4.5	4.2
1	Blank	5.12	–	0.07	–
2	LCS	11.15	–	5.26	–
3	50433-01	6.82	–	15.00	–
4	50433-02	6.25 6.18 6.19	–	1.26	–
5	50433-03	6.31	–	2.00	–
6	50433-04	6.90	–	9.55	–
7	50433-05	5.82	–	1.51	–
8	50433-06	6.17	–	0.89	1.01
9	50658-01	6.27	–	2.13	–
10	50658-02	7.21	–	3.74	–
11	DUP	7.17	–	3.63	–
12	50658-03	6.40	–	2.36	–
13	DUP	6.37	–	2.40	–
14	50658-04	6.40	–	1.31	–
15	50658-05	5.96	–	0.71	0.87
16	50658-06	6.40	–	1.14	–
17	50658-07	6.32	–	1.52	–
18	50658-08	6.26	–	1.09	–
19	50658-09	5.95	–	0.68	0.80
20	50658-10	5.48	–	0.09	0.16
21	50269-01	9.70	1.03	11.6 2.14	–
22	50269-02	7.26	–	7.71	–
23	50269-03	7.08	–	7.71	–
24	50269-04	6.94	–	2.85	–
25	CCV	11.20	–	5.24	–
26	BLANK	5.67	–	0.07	–

15:50 MRS

To Page No. ____

Witnessed & Understood by me, Date

Invented by:

Recorded by:

Date

Project No.
Book No.
Confidential

TITLE 9/5/23 Alks (cont.)

From Page No.

	Sample	initial pH	8.3	4.5	4.2
1	Blank	5.12	–	0.07	–
2	LCS	11.15	–	5.26	–
3	50433-01	6.82	–	15.00	–
4	50433-02	6.25 6.18 6.19	–	1.26	–
5	50433-03	6.31	–	2.00	–
6	50433-04	6.90	–	9.55	–
7	50433-05	5.82	–	1.51	–
8	50433-06	6.17	–	0.89	1.01
9	50658-01	6.27	–	2.13	–
10	50658-02	7.21	–	3.74	–
11	DUP	7.17	–	3.63	–
12	50658-03	6.40	–	2.36	–
13	DUP	6.37	–	2.40	–
14	50658-04	6.40	–	1.31	–
15	50658-05	5.96	–	0.71	0.87
16	50658-06	6.40	–	1.14	–
17	50658-07	6.32	–	1.52	–
18	50658-08	6.26	–	1.09	–
19	50658-09	5.95	–	0.68	0.80
20	50658-10	5.48	–	0.09	0.16
21	50269-01	9.70	1.03	2.14	–
22	50269-02	7.26	–	7.71	–
23	50269-03	7.08	–	7.71	–
24	50269-04	6.94	–	2.85	–
25	CCV	11.20	–	5.24	–
26	BLANK	5.67	–	0.07	–

15:50 MRS

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Witnessed & Understood by me,
Date
Invented by:
Recorded by:
Date

From Page No.

Sample	initial pH	8.3	4.5	4.2	
Blank	5.12	-	0.04	-	
LCS	11.11	-	5.23	-	
S1489-01	6.52	-	2.06	-	
Dup	6.46	-	2.02	-	
MS	9.52	-	7.36	-	
-02	6.24	-	1.49	-	
-03	6.33	-	2.01	-	
-04	8.36	-	4.20	-	
CCV	11.09	-	5.20		
CCB	5.52	-	0.04		

1	Blank	~~MS 7.46~~ 5.51		0.05	—	3:01PM
2	LCS	11.08	—	5.19	—	
3	50269-05	6.30	—	1.09	—	
4	50269-06	6.57	—	8.03	—	
5	50269-07	6.98	—	14.30	—	
6	50269-08	6.94	—	3.87	—	
7	50269-09	9.67	0.92	1.97	—	
8	DUP	9.67	0.83	2.04	—	
MWH 50489 9	~~50289~~-02	7.88	—	6.22	—	
10	50289-04	7.92	—	3.85	—	
11	~~50289~~-07	7.85	—	5.21	—	
12	50565-01	7.04	—	23.11	—	
13	50565-02	6.47	—	8.72	—	
14	50565-03	4.15	—	—	—	
15	50565-04	8.95	10.52	41.5	—	
16	50946-01	6.43	—	1.27	—	
17	50946-02	6.13	—	1.20	—	
18	50946-03	7.11	—	2.23	—	
19	50946-04	6.00	—	1.15	—	
20	50946-06	5.76	—	0.2	0.4	
21	50418-01	8.02	—	9.74	—	
22	50418-02	7.94	—	9.60	—	
MWH 23	50487-01	7.81	—	5.49	—	
	~~24 DUP~~					
25	50487-02	7.81	—	5.32	—	

To Page No.

Witnessed & Understood by me, | Date | Invented by: | Date | Recorded by:

From Page No. ___

	Sample	Initial PH	8.3	4.5	4.2
26	50487-03	6.50	—	3.34	—
27	DUP	6.50	—	3.30	—
28	50487-04	7.61	—	11.50	—
29	CCV	11.15	—	5.30	—
30	CCB	5.69	—	.08	—

To Pa

Witnessed & Understood by me,

Date

Invented by:

From Page No.

Sample	initial pH	8.3	4.5	4.2	
Blank	5.12	-	0.04	-	
LCS	11.11	-	5.23	-	
S1489-01	6.52	-	2.06	-	
Dup	6.46	-	2.02	-	
MS	9.52	-	7.36	-	
-02	6.24	-	1.49	-	
-03	6.33	-	2.01	-	
-04	8.36	-	4.20	-	
CCV	11.09	-	5.20		
CCB	5.52	-	0.04		
1 Blank	~~MS 7.46~~ 5.51		0.05	-	3:01PM
2 LCS	11.08	-	5.19	-	
3 50269-05	6.30	-	1.09	-	
4 50269-06	6.57	-	8.03	-	
5 50269-07	6.98	-	14.30	-	
6 50269-08	6.94	-	3.87	-	
7 50269-09	9.67	0.92	1.97	-	
8 DUP	9.67	0.83	2.04	-	
MWH 50489 9 ~~50289~~-02	7.88	-	6.22	-	
10 50289-04	7.92	-	3.85	-	
11 ~~50289~~-07	7.85	-	5.21	-	
12 50565-01	7.04	-	23.11	-	
13 50565-02	6.47	-	8.72	-	
14 50565-03	4.15	-	-	-	
15 50565-04	8.95	10.52	41.5	-	
16 50946-01	6.43	-	1.27	-	
17 50946-02	6.13	-	1.20	-	
18 50946-03	7.11	-	2.23	-	
19 50946-04	6.00	-	1.15	-	
20 50946-06	5.76	-	0.2	0.4	
21 50418-01	8.02	-	9.74	-	
22 50418-02	7.94	-	9.60	-	
MWH 23 50487-01	7.81	-	5.49	-	
~~24 DUP~~					
25 50487-02	7.81	-	5.32	-	

To Page No.

Witnessed & Understood by me, Date

Invented by: Date

Recorded by:

From Page No. ___

	Sample	Initial PH	8.3	4.5	4.2
26	50487-03	6.50	—	3.34	—
27	DUP	6.50	—	3.30	—
28	50487-04	7.61	—	11.50	—
29	CCV	11.15	—	5.30	—
30	CCB	5.69	—	.08	—

To Pa

Witnessed & Understood by me,

Date

Invented by:

CAL	230911	LCS 7.0	7.03	INT:	MKT
pH 4	3296	Titrant:	3303		
pH 7	3297	LCS:	3085		
pH 10	3298	MS:	2936		
LCS	3305				

1	RINSE	42	
2	BLANK	43	
3	LCS	44	
4	LCS	45	
5	L2350269-08L	46	CCV
6	L2350565-01N	47	CCB
7	DUP	48	
8	L2350565-02N	49	
9	L2350797-03A	50	
10	L2351101-06A	51	
11	L2351101-08A	52	
12	L2351101-10A	53	
13	L2351101-12A	54	
14	L2350694-03I	55	
15	L2350694-05I	56	
16	L2350694-06I	57	
17	L2350694-07I	58	
18	L2351415-05I	59	
19	L2351415-06I	60	
20	DUP	61	
21	MS	62	
22	L2351101-06A 5X	63	
23	CCV	64	
24	CCB	65	
25	CCB	66	
26		67	
27		68	CCV
28		69	CCB
29		70	
30		71	
31		72	
32		73	
33		74	
34		75	
35		76	
36		77	
37		78	
38		79	
39			
40			
41			

Phosphates Analysis

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:29
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: RDS
Lab File ID	: PHOS090523-WG1823610.csv	**Instrument ID**	: SEAL
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.095	0.031	0.012	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-02**	**Date Collected**	:	**08/28/23 15:34**
Client ID	:	**MW-2S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/05/23 13:30**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500P-E(M)**	**Analyst**	:	**RDS**
Lab File ID	:	**PHOS090523-WG1823610.csv**	**Instrument ID**	:	**SEAL**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	**09/05/23**

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	**Phosphate, Total**	**ND**	**0.031**	**0.012**	**U**

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:31
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: RDS
Lab File ID	: PHOS090523-WG1823610.csv	**Instrument ID**	: SEAL
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-04**	**Date Collected**	:	**08/29/23 10:16**
Client ID	:	**MW-4D**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/05/23 13:32**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500P-E(M)**	**Analyst**	:	**RDS**
Lab File ID	:	**PHOS090523-WG1823610.csv**	**Instrument ID**	:	**SEAL**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	**09/05/23**

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	**Phosphate, Total**	**0.043**	**0.031**	**0.012**	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-05**	**Date Collected**	:	**08/29/23 09:10**
Client ID	:	**MW-5S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/05/23 13:36**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500P-E(M)**	**Analyst**	:	**RDS**
Lab File ID	:	**PHOS090523-WG1823610.csv**	**Instrument ID**	:	**SEAL**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	**09/05/23**

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	**Phosphate, Total**	**ND**	**0.031**	**0.012**	**U**

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:37
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: RDS
Lab File ID	: PHOS090523-WG1823610.csv	**Instrument ID**	: SEAL
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.061	0.031	0.012	

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-07**	**Date Collected**	:	**08/28/23 16:35**
Client ID	:	**MW-7S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/05/23 13:38**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**1**
Analytical Method	:	**121,4500P-E(M)**	**Analyst**	:	**RDS**
Lab File ID	:	**PHOS090523-WG1823610.csv**	**Instrument ID**	:	**SEAL**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	**09/05/23**

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	**Phosphate, Total**	**ND**	**0.031**	**0.012**	**U**

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:39
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: RDS
Lab File ID	: PHOS090523-WG1823610.csv	**Instrument ID**	: SEAL
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/05/23 13:40
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: RDS
Lab File ID	: PHOS090523-WG1823610.csv	**Instrument ID**	: SEAL
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.086	0.031	0.012	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823610-1	**Date Collected**	: NA
Client ID	: WG1823610-1BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/05/23 13:26
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: RDS
Lab File ID	: PHOS090523-WG1823610.csv	**Instrument ID**	: SEAL
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	ND	0.031	0.012	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823610-3	**Date Collected**	: 08/31/23 08:20
Client ID	: WG1823610-3 DUP	**Date Received**	: 08/31/23
Sample Location	:	**Date Analyzed**	: 09/05/23 13:52
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 121,4500P-E(M)	**Analyst**	: RDS
Lab File ID	: PHOS090523-WG1823610.csv	**Instrument ID**	: SEAL
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	0.092	0.031	0.012	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823610-5	**Date Collected**	: 08/29/23 16:00
Client ID	: WG1823610-5 DUP	**Date Received**	: 08/31/23
Sample Location	:	**Date Analyzed**	: 09/05/23 14:35
Sample Matrix	: WATER	**Dilution Factor**	: 50
Analytical Method	: 121,4500P-E(M)	**Analyst**	: RDS
Lab File ID	: PHOS090523-WG1823610.csv	**Instrument ID**	: SEAL
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	: 09/05/23

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
7723-14-0	Phosphate, Total	37.2	1.54	0.614	

Sample Raw Data

Logo

AQ-2 Tray Report

Serial Number:	090856
Report Requested By:	rstanton
Date & Time:	05-Sep-2023 14:41:49
Tray Number:	1
Tray Name:	WG1823610

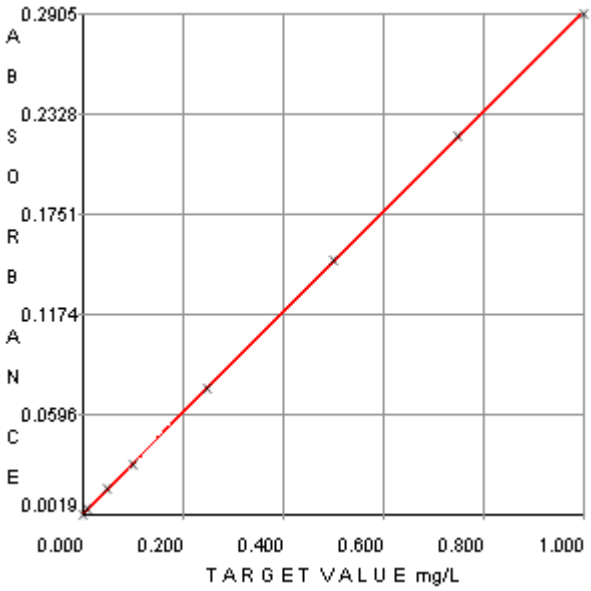
T-Phos 1

Calibration Chart

Type	Observed	Calculated	Target	% Error
S1	0.0019	-0.001	0.000	
S90	0.0047	0.009	0.010	-10.57
S91	0.0163	0.049	0.050	-2.57
S92	0.0307	0.098	0.100	-1.55
S93	0.0750	0.251	0.250	0.56
S94	0.1486	0.506	0.500	1.12
S95	0.2201	0.752	0.750	0.32
S96	0.2905	0.995	1.000	-0.47
S0	0.0020	-0.001	0.000	

Polynomial Order:	1
Correlation Coefficient:	1.0000
Carryover(%):	0.0
Calibration Equation:	y = bx + a
y =:	Concentration mg/L
x =:	Measured Absorbance
a =:	-7.433997E-003
b =:	3.451761E+000
Date & Time:	05-Sep-2023 08:29:12

Calibration Graph



Reagents

Name	Batch	Prepared By	Expiry Date
TP color	082823-tp color	Maeve Flaherty	18-Sep-2023 22:00:00
TP ascorbic	090423-aa	Richard Stanto	11-Sep-2023 22:00:00

curve/spike: WC3263 082423 LCS: WC3262 082423
11N H2SO4: tp-082823-11h2so4 Persulfate: R-3990

Test Results

Cup	Type	ID	Result	Units	Raw Data	Test Dil.	Cup Dil.	User	Time/Date
2	ICV	ICV	0.518	mg/L	0.152083			RDS	05-Sep-2023 13:23:45
3	ICB	ICB	-0.003	mg/L	0.001309			RDS	05-Sep-2023 13:24:52
4	U1	WG1823610-1	-0.003ELL	mg/L	0.001225			RDS	05-Sep-2023 13:26:00
5	U2	WG1823610-2	0.515	mg/L	0.151234			RDS	05-Sep-2023 13:27:08
6	U3	L2350110-01O25	63.790	mg/L	0.149997	x5.0000	x25.0000	RDS	05-Sep-2023 14:12:06
6	U3	L2350110-01O25	~~53.255~~	mg/L	0.619286		x25.0000	RDS	05-Sep-2023 13:28:16
7	U4	L2350269-01O	0.031	mg/L	0.011026			RDS	05-Sep-2023 13:29:24
8	U5	L2350269-02O	-0.001	mg/L	0.001992			RDS	05-Sep-2023 13:30:32
9	U6	L2350269-03O	0.003	mg/L	0.002970			RDS	05-Sep-2023 13:31:40
10	U7	L2350269-04O	0.014	mg/L	0.006339			RDS	05-Sep-2023 13:32:48
	CCV	C C V	0.517	mg/L	0.151893			RDS	05-Sep-2023 13:33:56
	CCB	C C B	-0.003	mg/L	0.001336			RDS	05-Sep-2023 13:35:06
11	U8	L2350269-05O	0.000	mg/L	0.002242			RDS	05-Sep-2023 13:36:15

12	U9	L2350269-06O	0.020	mg/L	0.007974			RDS	05-Sep-2023 13:37:23
13	U10	L2350269-07O	0.001	mg/L	0.002451			RDS	05-Sep-2023 13:38:31
14	U11	L2350269-08O	0.003	mg/L	0.002981			RDS	05-Sep-2023 13:39:38
15	U12	L2350269-09O	0.028	mg/L	0.010353			RDS	05-Sep-2023 13:40:45
16	U13	L2350296-01O5	8.189	mg/L	0.097052	x5.0000	x5.0000	RDS	05-Sep-2023 14:13:00
16	U13	L2350296-01O5	~~7.460~~	mg/L	0.434378		x5.0000	RDS	05-Sep-2023 13:41:52
17	U14	L2350565-01O2	12.377	mg/L	0.073867	x25.0000	x2.0000	RDS	05-Sep-2023 14:34:20
17	U14	L2350565-01O2	~~12.214~~	mg/L	0.355992	x5.0000	x2.0000	RDS	05-Sep-2023 14:13:53
17	U14	L2350565-01O2	~~4.922~~	mg/L	0.715107		x2.0000	RDS	05-Sep-2023 13:42:59
18	U15	WG1823610-5O2	12.126	mg/L	0.072415	x25.0000	x2.0000	RDS	05-Sep-2023 14:35:14
18	U15	WG1823610-5O2	~~11.641~~	mg/L	0.339401	x5.0000	x2.0000	RDS	05-Sep-2023 14:14:47
18	U15	WG1823610-5O2	~~5.224~~	mg/L	0.758832		x2.0000	RDS	05-Sep-2023 13:44:08
19	U16	WG1823610-6O2	13.923	mg/L	0.082826	x25.0000	x2.0000	RDS	05-Sep-2023 14:36:07
19	U16	WG1823610-6O2	~~13.080~~	mg/L	0.381083	x5.0000	x2.0000	RDS	05-Sep-2023 14:15:40
19	U16	WG1823610-6O2	~~3.700~~	mg/L	0.538043		x2.0000	RDS	05-Sep-2023 13:45:17
20	U17	L2350565-02O	0.890	mg/L	0.259983			RDS	05-Sep-2023 13:46:11
	CCV	C C V	0.514	mg/L	0.151057			RDS	05-Sep-2023 13:47:13
	CCB	C C B	-0.001	mg/L	0.001822			RDS	05-Sep-2023 13:48:08
21	U18	L2350565-03O	0.459	mg/L	0.135137			RDS	05-Sep-2023 13:49:02
22	U19	L2350565-04O2	0.893	mg/L	0.131454		x2.0000	RDS	05-Sep-2023 13:49:56
23	U20	L2350576-01O5	12.879	mg/L	0.151404	x5.0000	x5.0000	RDS	05-Sep-2023 14:16:34
23	U20	L2350576-01O5	10.643	mg/L	0.618809		x5.0000	RDS	05-Sep-2023 13:50:49
24	U21	L2350658-02O	0.030	mg/L	0.010878			RDS	05-Sep-2023 13:51:43
25	U22	WG1823610-3O	0.030	mg/L	0.010873			RDS	05-Sep-2023 13:52:36
26	U23	WG1823610-4O	0.574	mg/L	0.168332			RDS	05-Sep-2023 13:53:30
	CCV	C C V	0.509	mg/L	0.149624			RDS	05-Sep-2023 13:54:24
	CCB	C C B	-0.001	mg/L	0.001919			RDS	05-Sep-2023 13:55:18
	CCV	CCV	0.503	mg/L	0.147784				05-Sep-2023 14:10:15
	CCB	CCB	-0.001	mg/L	0.001821				05-Sep-2023 14:11:10
	CCV	CCV	0.513	mg/L	0.150821				05-Sep-2023 14:17:27
	CCB	CCB	-0.004	mg/L	0.001097				05-Sep-2023 14:18:22
	CCV	CCV	0.497	mg/L	0.146017				05-Sep-2023 14:32:30
	CCB	CCB	-0.003	mg/L	0.001333				05-Sep-2023 14:33:25
	CCV	CCV	0.509	mg/L	0.149700				05-Sep-2023 14:37:01
	CCB	CCB	-0.003	mg/L	0.001403				05-Sep-2023 14:37:56

Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: L2350658-02		
Matrix Spike	: WG1823610-4	**MS Analysis Date**	: 09/05/23 13:53
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample			Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Phosphate, Total	0.092	1.53	1.76	109					80-120	15

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: L2350565-01		
Matrix Spike	: WG1823610-6	**MS Analysis Date**	: 09/05/23 14:36
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Phosphate, Total	38.0	1.53	42.7	154	Q					80-120	15

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 09/05/23 13:51
Dup Sample ID	: WG1823610-3	**DUP Analysis Date**	: 09/05/23 13:52

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Phosphate, Total	0.092	0.092	0	15

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: NA	**Analysis Date**	: 09/05/23 14:34
Dup Sample ID	: WG1823610-5	**DUP Analysis Date**	: 09/05/23 14:35

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Phosphate, Total	38.0	37.2	2	15

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1823610-2	**LCS Analysis Date**	: 09/05/23 13:27
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
	True	Found	%R	True	Found	%R	RPD	Recovery	RPD
Parameter	(mg/l)	(mg/l)		(mg/l)	(mg/l)			Limits	Limit
Phosphate, Total	1.53	1.58	103.					84-118	15

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
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WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Phosphorus, Total	7723-14-0	0.01	0.004	mg/l	80-120		75-125	20	20	4500P-E	28 days	1 - Plastic 500ml H2SO4 preserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Created By: Jason Hebert
File: PM11468-1
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WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Phosphorus, Total	7723-14-0	5	1.67	mg/kg	52-148	20	75-125	20	20	4500P-E	28 days	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Phosphorus, Orthophosphate	7723-14-0	0.005	0.001	mg/l	90-110		80-120	20	20	4500P-E	48 hours	1 - Plastic 500ml unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Created By: Jason Hebert
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WETCHEM (SOIL)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Phosphorus, Orthophosphate	7723-14-0	0.05	0.05	mg/kg						4500P-E	48 hours	1 - Glass 250ml/8oz unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

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Calculations of TPhosphorus

Aqueous samples:

Calculate the concentration value of the sample directly from the standard curve. All calculations are done by SEAL (segmant flow spectrometer).

$$\text{Mg TPhosphorus/L} = \frac{\text{absorbance - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

Wet Chemistry
By
IC Methods

Results

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 17:20
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.124	0.050	0.013	
16887-00-6	Chloride	49.6	0.500	0.083	
16984-48-8	Fluoride	0.113	0.050	0.037	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-01	**Date Collected**	: 08/28/23 16:52
Client ID	: MW-1S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 10:53
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 44,300.0	**Analyst**	: CVN
Lab File ID	: WG1823254	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	301.	10.0	4.54	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-02	**Date Collected**	: 08/28/23 15:34
Client ID	: MW-2S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 17:32
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	ND	0.050	0.013	U
16887-00-6	Chloride	7.39	0.500	0.083	
16984-48-8	Fluoride	0.088	0.050	0.037	
14808-79-8	Sulfate	72.9	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-03	**Date Collected**	: 08/28/23 14:38
Client ID	: MW-3S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 17:44
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.071	0.050	0.013	
16887-00-6	Chloride	8.41	0.500	0.083	
16984-48-8	Fluoride	0.087	0.050	0.037	
14808-79-8	Sulfate	81.0	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 11:29
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16887-00-6	Chloride	129.	5.00	0.839	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-04	**Date Collected**	: 08/29/23 10:16
Client ID	: MW-4D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 17:56
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.074	0.050	0.013	
16984-48-8	Fluoride	0.045	0.050	0.037	J
14808-79-8	Sulfate	5.93	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-05	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 18:32
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.079	0.050	0.013	
16887-00-6	Chloride	12.5	0.500	0.083	
16984-48-8	Fluoride	ND	0.050	0.037	U
14808-79-8	Sulfate	24.0	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 18:44
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.123	0.050	0.013	
16887-00-6	Chloride	43.3	0.500	0.083	
16984-48-8	Fluoride	0.037	0.050	0.037	J

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-06	**Date Collected**	: 08/28/23 17:51
Client ID	: MW-6D	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 11:53
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254C	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	115.	10.0	4.54	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 12:30
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254B	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	158.	10.0	4.54	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-07	**Date Collected**	: 08/28/23 16:35
Client ID	: MW-7S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 18:56
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.141	0.050	0.013	
16887-00-6	Chloride	23.4	0.500	0.083	
16984-48-8	Fluoride	0.038	0.050	0.037	J

Form 1
WETCHEM

Client	:	**Alpha Geoscience**	**Lab Number**	:	**L2350269**
Project Name	:	**HUNTINGTON READY MIX**	**Project Number**	:	**20116**
Lab ID	:	**L2350269-08**	**Date Collected**	:	**08/28/23 14:30**
Client ID	:	**MW-8S**	**Date Received**	:	**08/29/23**
Sample Location	:	**SPEONK, NY**	**Date Analyzed**	:	**09/02/23 12:42**
Sample Matrix	:	**WATER**	**Dilution Factor**	:	**10**
Analytical Method	:	**44,300.0**	**Analyst**	:	**CVN,**
Lab File ID	:	**WG1823254**	**Instrument ID**	:	**IC3**
Sample Amount	:		**%Solids**	:	**N/A**
Digestion Method	:		**Date Digested**	:	

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16887-00-6	**Chloride**	**71.2**	**5.00**	**0.839**	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-08	**Date Collected**	: 08/28/23 14:30
Client ID	: MW-8S	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 19:45
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.197	0.050	0.013	
16984-48-8	Fluoride	0.039	0.050	0.037	J
14808-79-8	Sulfate	90.3	1.00	0.454	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 19:57
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	0.120	0.050	0.013	
16984-48-8	Fluoride	0.115	0.050	0.037	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: L2350269-09	**Date Collected**	: 08/28/23 00:00
Client ID	: DUP	**Date Received**	: 08/29/23
Sample Location	: SPEONK, NY	**Date Analyzed**	: 09/02/23 12:54
Sample Matrix	: WATER	**Dilution Factor**	: 10
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254B	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
16887-00-6	Chloride	50.7	5.00	0.839	
14808-79-8	Sulfate	313.	10.0	4.54	

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823254-5	**Date Collected**	: NA
Client ID	: WG1823254-5BLANK	**Date Received**	: NA
Sample Location	:	**Date Analyzed**	: 09/02/23 10:29
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
24959-67-9	Bromide	ND	0.050	0.013	U
16887-00-6	Chloride	ND	0.500	0.083	U
16984-48-8	Fluoride	ND	0.050	0.037	U
14808-79-8	Sulfate	ND	1.00	0.454	U

Form 1
WETCHEM

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Lab ID	: WG1823254-8	**Date Collected**	: 08/29/23 09:10
Client ID	: MW-5SDUP	**Date Received**	: 08/29/23
Sample Location	:	**Date Analyzed**	: 09/02/23 18:20
Sample Matrix	: WATER	**Dilution Factor**	: 1
Analytical Method	: 44,300.0	**Analyst**	: CVN,
Lab File ID	: WG1823254B	**Instrument ID**	: IC3
Sample Amount	:	**%Solids**	: N/A
Digestion Method	:	**Date Digested**	:

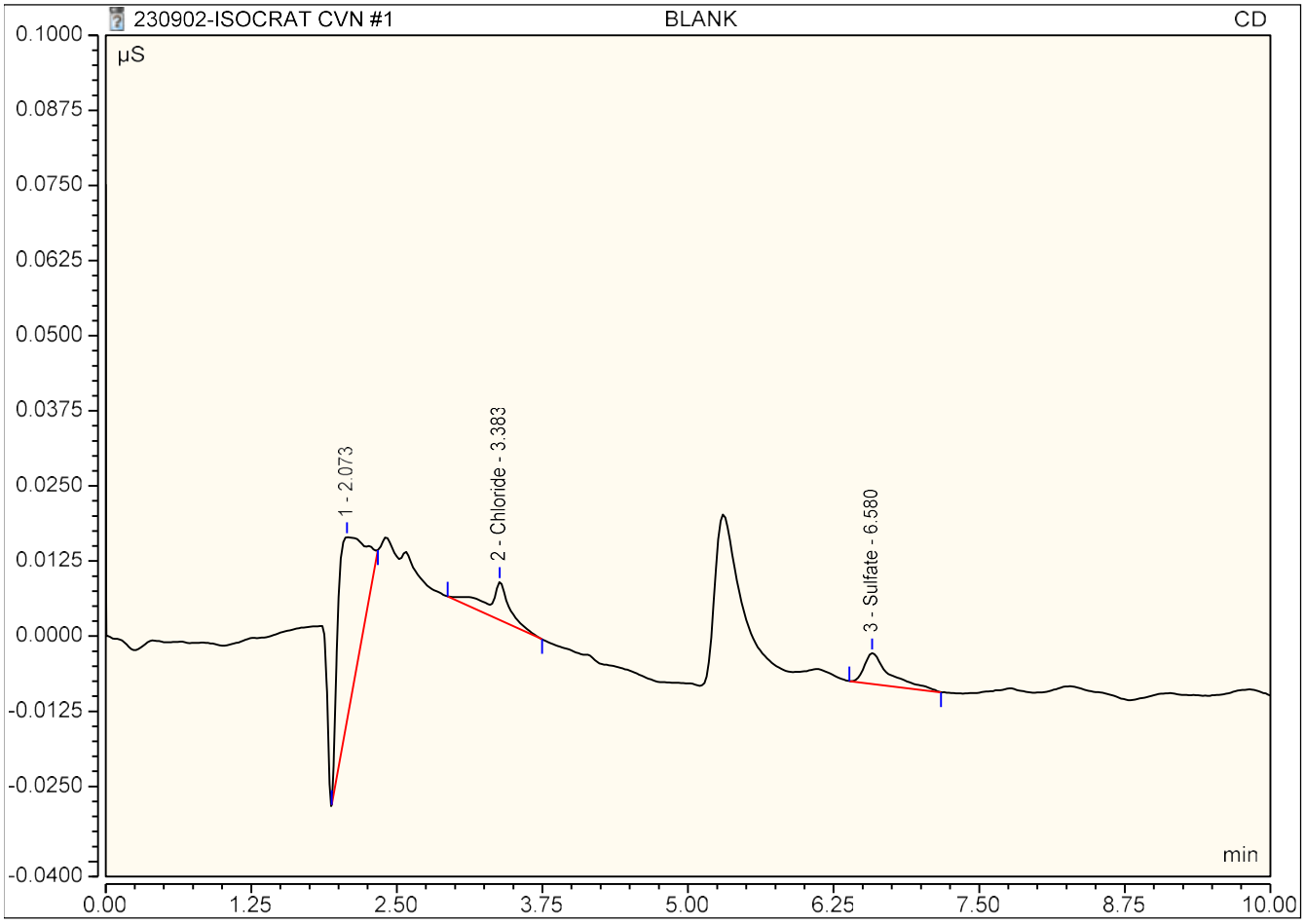
		mg/l			
CAS NO.	**Parameter**	**Results**	**RL**	**MDL**	**Qualifier**
14808-79-8	Sulfate	23.9	1.00	0.454	
16887-00-6	Chloride	12.5	0.500	0.084	
24959-67-9	Bromide	0.078	0.050	0.013	
16984-48-8	Fluoride	ND	0.050	0.037	U

Sample Raw Data

Peak Integration Report

Sample Name:	**BLANK**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Jul-2023 / 16:39**	*Run Time:*	**10.00**

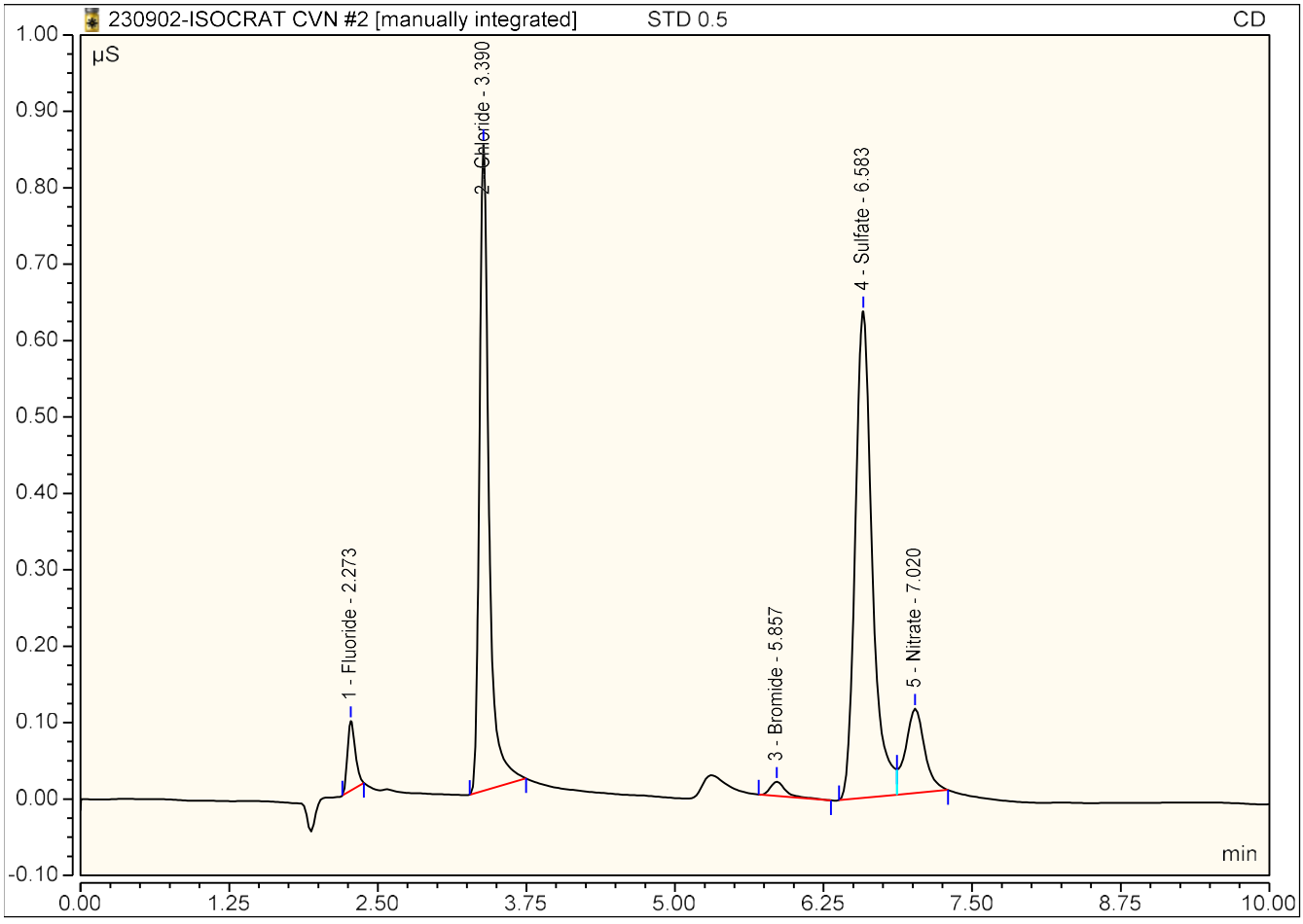
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.38	**Chloride**	BMB	0.001	0.006	0.0513
3	6.58	**Sulfate**	BMB	0.001	0.005	0.0585
TOTAL:				0.00	0.01	0.11



Peak Integration Report

Sample Name:	**STD 0.5**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Jul-2023 / 16:52**	*Run Time:*	**10.00**

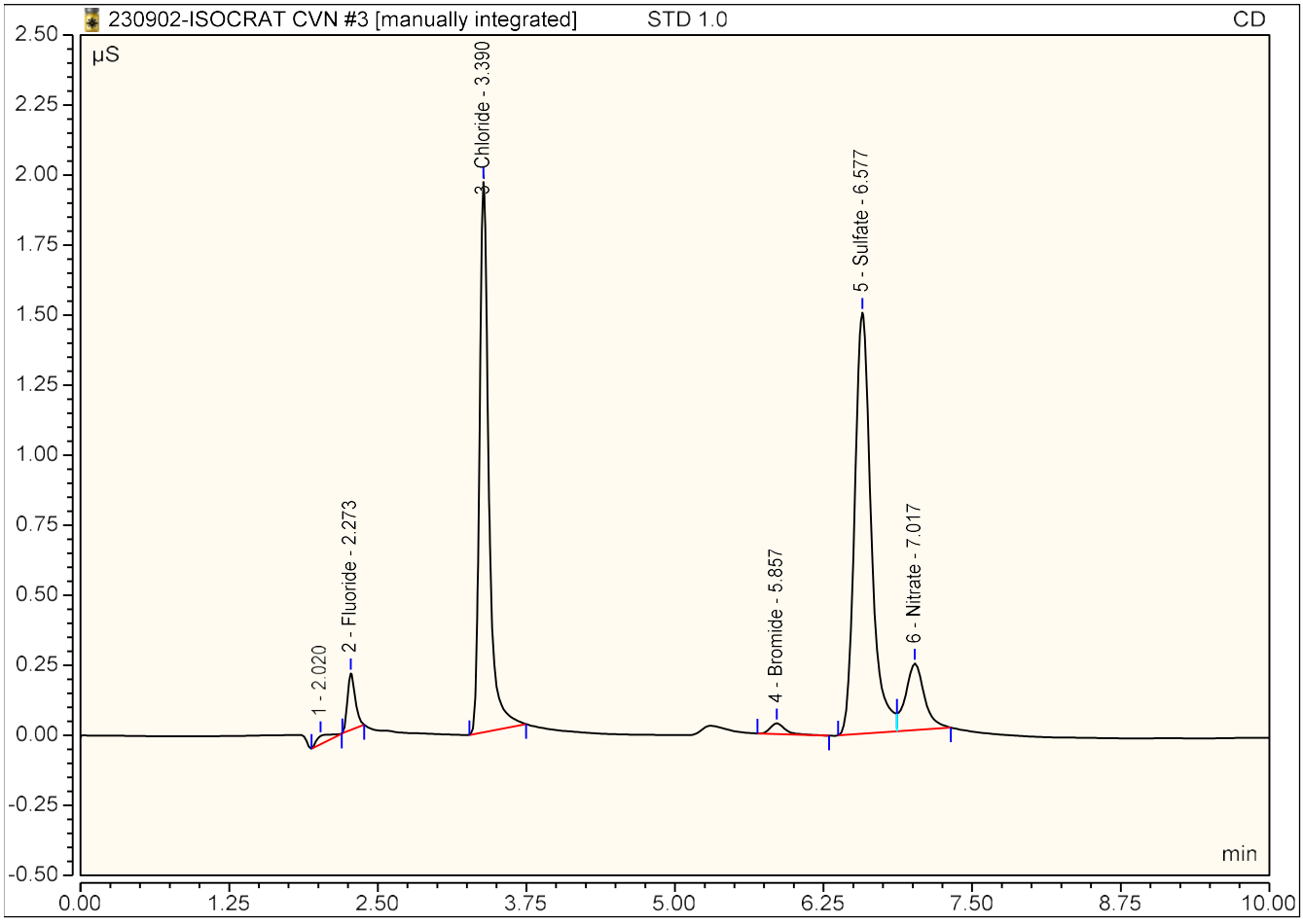
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.27	**Fluoride**	BMB*	0.007	0.091	0.0445
2	3.39	**Chloride**	BMB	0.079	0.847	0.2357
3	5.86	**Bromide**	BMB	0.003	0.019	0.0812
4	6.58	**Sulfate**	BM *	0.105	0.637	0.4012
5	7.02	**Nitrate**	MB*	0.021	0.110	0.0409
TOTAL:				0.21	1.70	0.80



Peak Integration Report

Sample Name:	**STD 1.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Jul-2023 / 17:04**	*Run Time:*	**10.00**

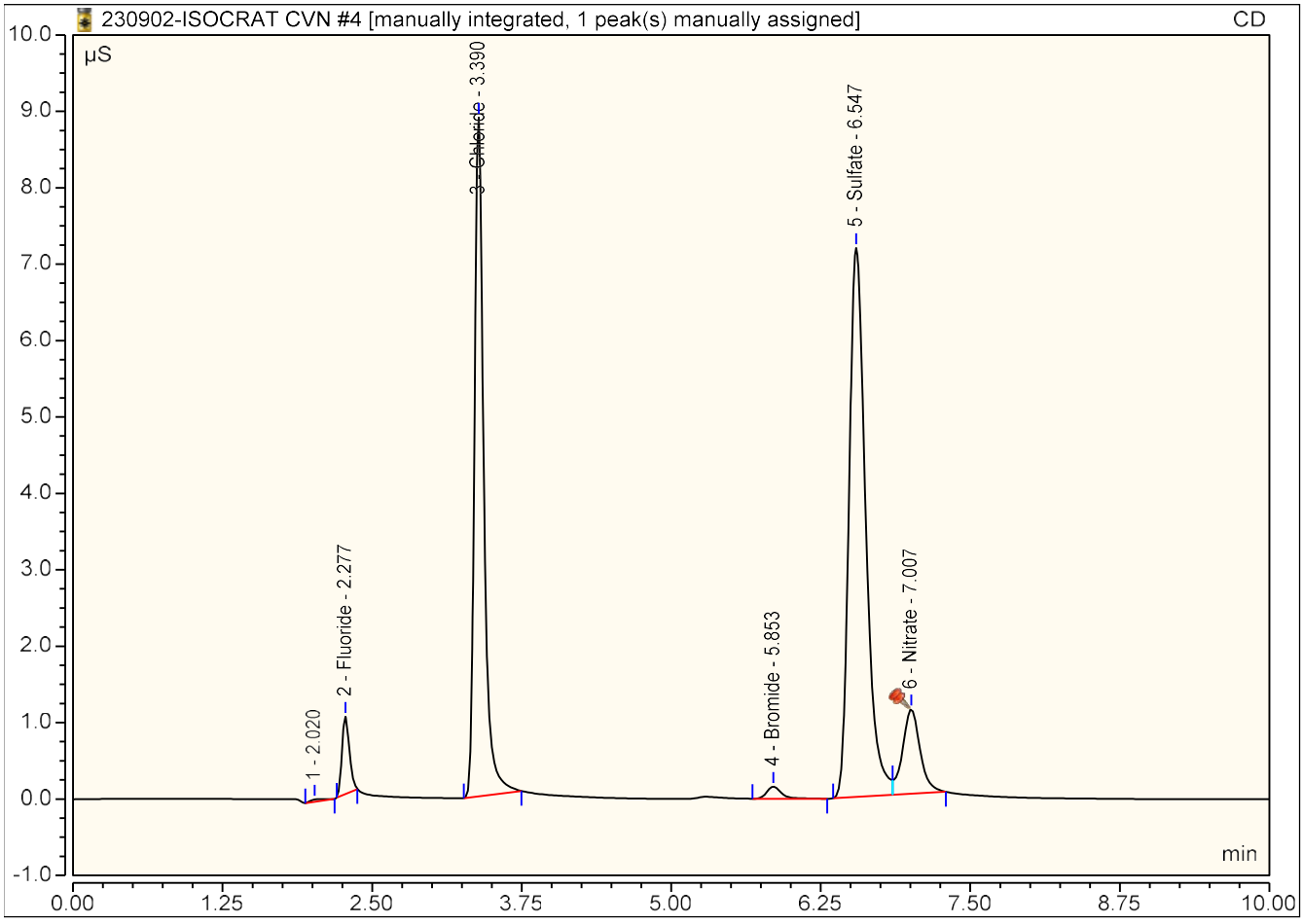
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.27	**Fluoride**	BMB*	0.015	0.202	0.0618
3	3.39	**Chloride**	BMB	0.179	1.964	0.4734
4	5.86	**Bromide**	BMB	0.006	0.039	0.0990
5	6.58	**Sulfate**	BM *	0.242	1.503	0.8517
6	7.02	**Nitrate**	MB*	0.044	0.237	0.0617
TOTAL:				0.49	3.95	1.55



Peak Integration Report

Sample Name:	**STD 2.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Jul-2023 / 17:16**	*Run Time:*	**10.00**

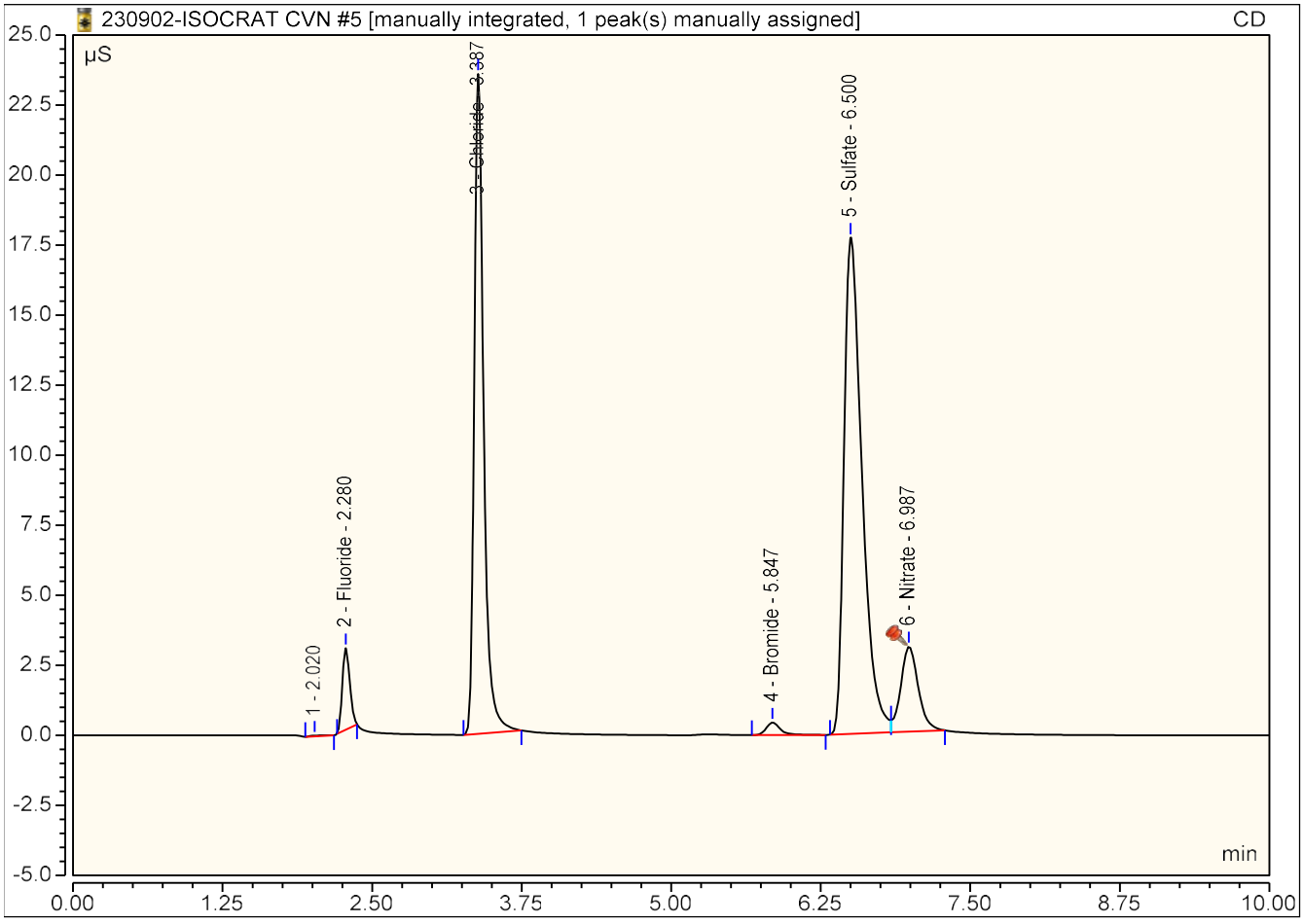
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.28	**Fluoride**	BMB*	0.073	1.013	0.1823
3	3.39	**Chloride**	BMB	0.802	8.885	1.9558
4	5.85	**Bromide**	BMB	0.023	0.159	0.2073
5	6.55	**Sulfate**	BM *	1.164	7.184	3.8911
6	7.01	**Nitrate**	MB*^	0.189	1.109	0.1933
TOTAL:				2.25	18.35	6.43



Peak Integration Report

Sample Name:	**STD 3.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Jul-2023 / 17:28**	*Run Time:*	**10.00**

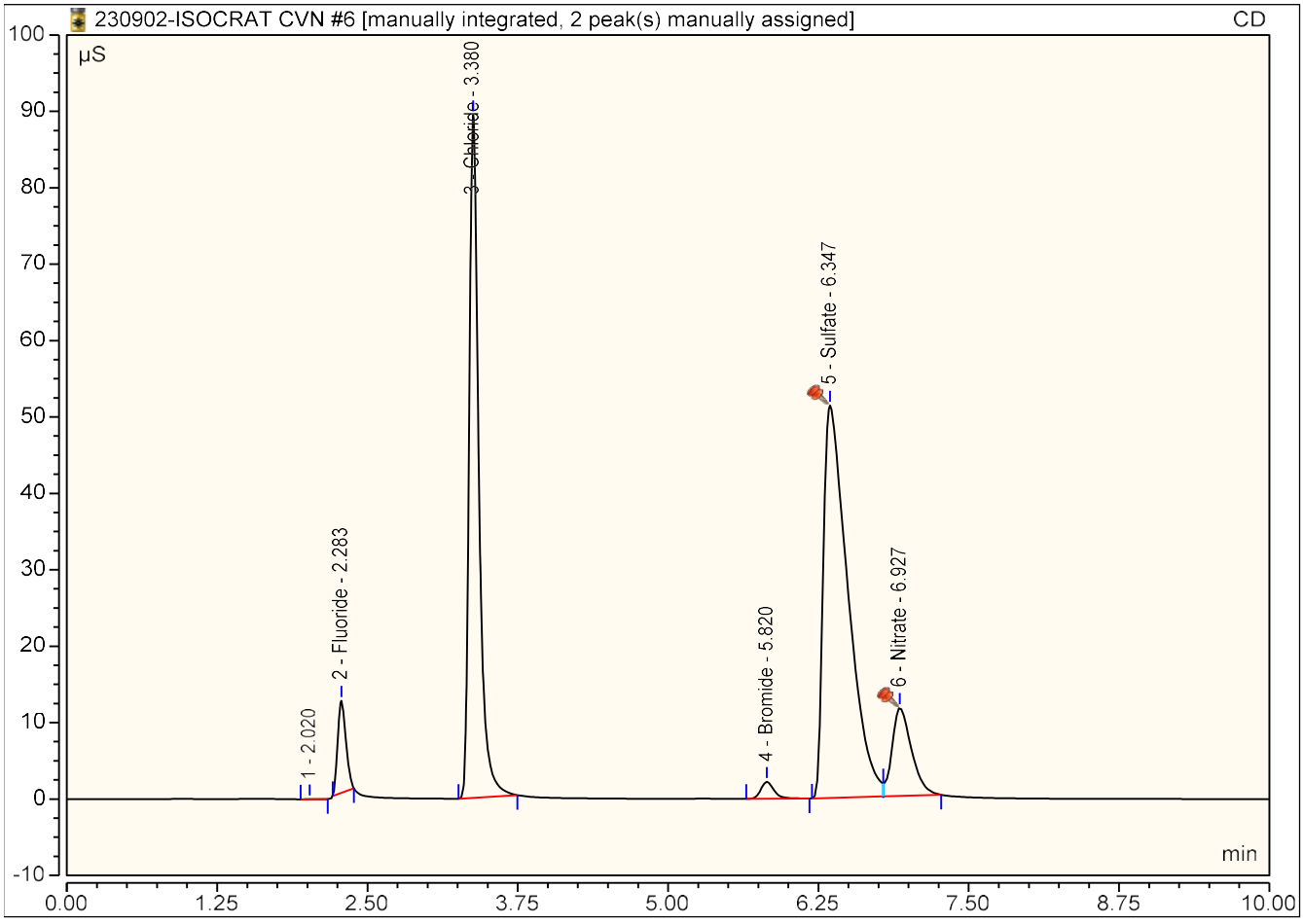
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.28	**Fluoride**	BMB*	0.210	2.905	0.4682
3	3.39	**Chloride**	BMB	2.137	23.556	5.1293
4	5.85	**Bromide**	BMB	0.062	0.450	0.4564
5	6.50	**Sulfate**	BM *	3.095	17.706	10.2541
6	6.99	**Nitrate**	MB*^	0.517	3.045	0.4904
TOTAL:				6.02	47.66	16.80



Peak Integration Report

Sample Name:	**STD 4.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Jul-2023 / 17:40**	*Run Time:*	**10.00**

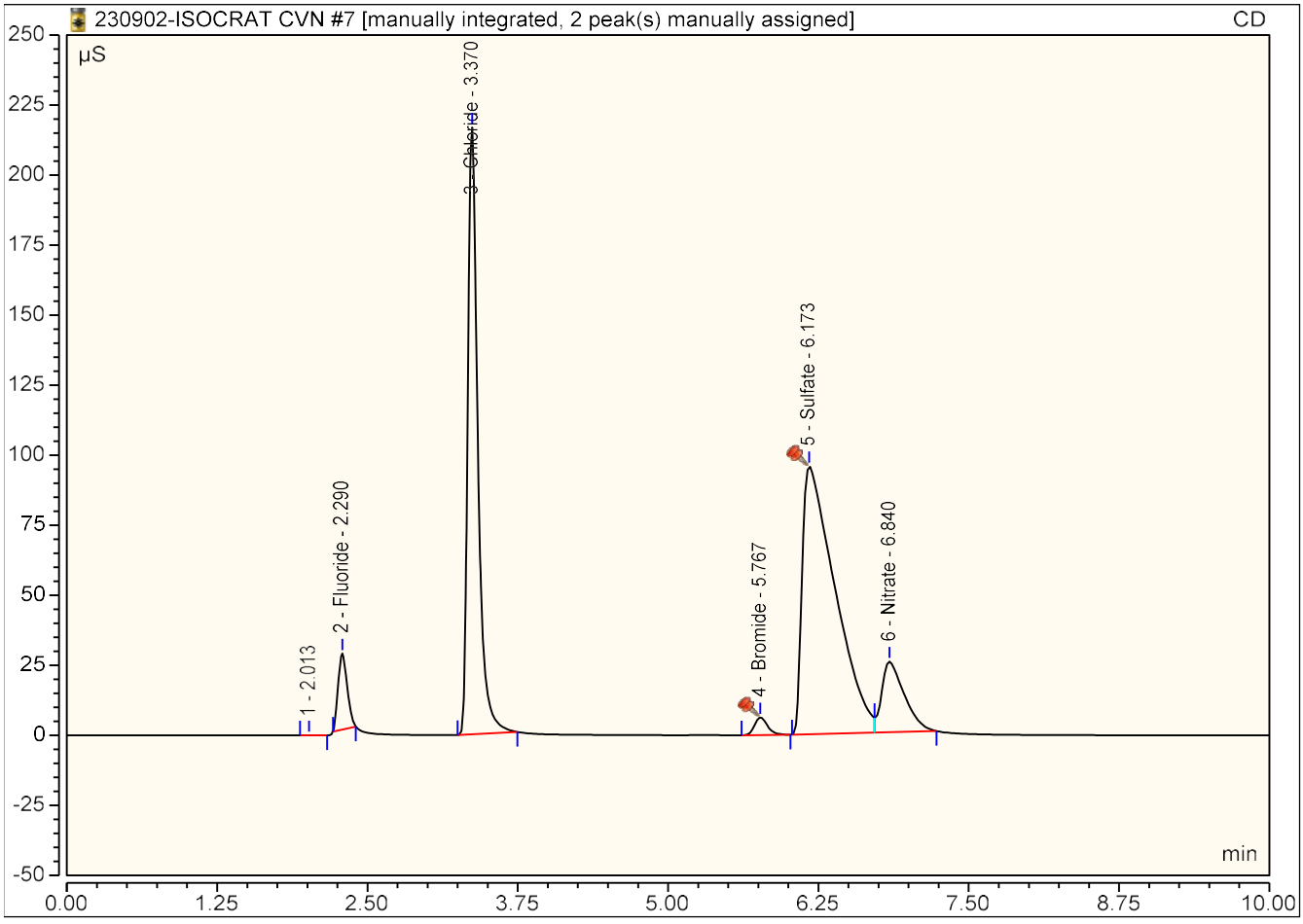
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.28	**Fluoride**	BMB*	0.954	12.067	2.0241
3	3.38	**Chloride**	BMB	8.369	89.361	19.9443
4	5.82	**Bromide**	BMB	0.285	2.229	1.8797
5	6.35	**Sulfate**	BM *^	12.181	51.365	40.2016
6	6.93	**Nitrate**	MB*^	2.160	11.543	1.9796
TOTAL:				23.95	166.56	66.03



Peak Integration Report

Sample Name:	**STD 5.0**	*Inj. Vol.:*	**25.00**
Injection Type:	**Calibration Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Jul-2023 / 17:52**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.29	**Fluoride**	BMB*	2.374	27.095	4.9940
3	3.37	**Chloride**	BMB	21.016	216.656	50.0115
4	5.77	**Bromide**	BMB^	0.783	6.287	5.0514
5	6.17	**Sulfate**	BM *^	30.295	95.642	99.9003
6	6.84	**Nitrate**	MB*	5.503	25.207	5.0092
TOTAL:				59.97	370.89	164.97



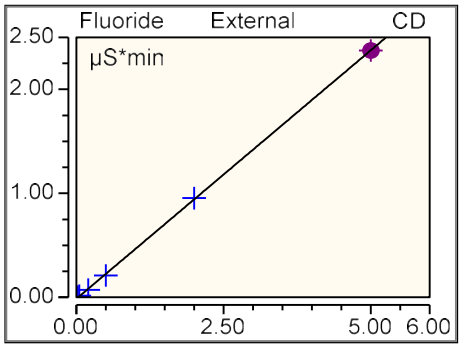
Calibration Batch Report

Sequence:	**230902-ISOCRAT CVN**	*Injection Volume:*	**25.00**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**17-Jul-2023 / 17:52**	*Run Time:*	**10**

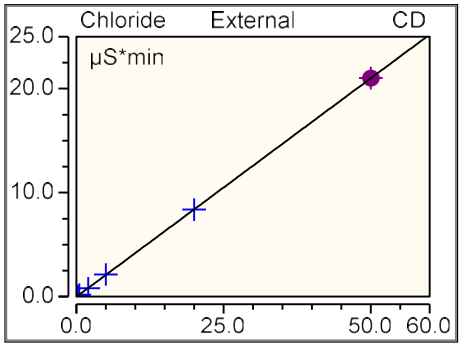
Calibration Summary

Peak Name	Eval.Type	Cal.Type	Points	Offset (C0)	Slope (C1)	Curve (C2)	Coeff.Det. %
Fluoride	Area	in, WithOffse	6.000	-0.014	0.478	0.000	99.9872
Chloride	Area	in, WithOffse	6.000	-0.020	0.421	0.000	99.9988
Bromide	Area	in, WithOffse	6.000	-0.010	0.157	0.000	99.8720
Sulfate	Area	in, WithOffse	6.000	-0.016	0.303	0.000	99.9979
Nitrate	Area	in, WithOffse	6.000	-0.024	1.103	0.000	99.9947
		AVERAGE:		-0.0171	0.4925	0.0000	99.9701

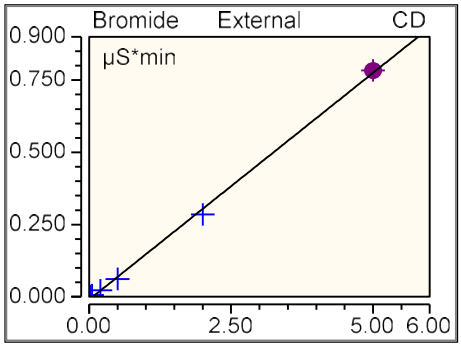
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Fluoride	Fluoride	Fluoride	Fluoride
STD 0.5	2.273	0.0069	0.091	0.044
STD 1.0	2.273	0.0152	0.202	0.062
STD 2.0	2.277	0.0728	1.013	0.182
STD 3.0	2.280	0.2095	2.905	0.468
STD 4.0	2.283	0.9536	12.067	2.024
STD 5.0	2.290	2.3738	27.095	4.994
Average	2.279			
Rel. Std. Dev.	0.284 %			



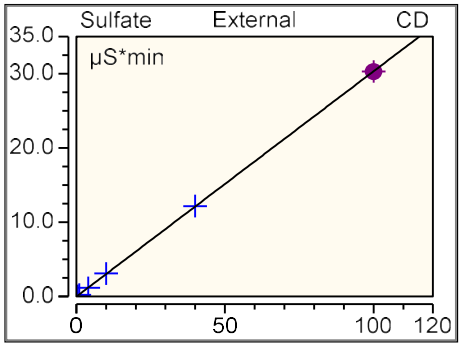
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Chloride	Chloride	Chloride	Chloride
STD 0.5	3.390	0.0789	0.847	0.236
STD 1.0	3.390	0.1789	1.964	0.473
STD 2.0	3.390	0.8024	8.885	1.956
STD 3.0	3.387	2.1373	23.556	5.129
STD 4.0	3.380	8.3688	89.361	19.944
STD 5.0	3.370	21.0157	216.656	50.011
Average	3.384			
Rel. Std. Dev.	0.239 %			



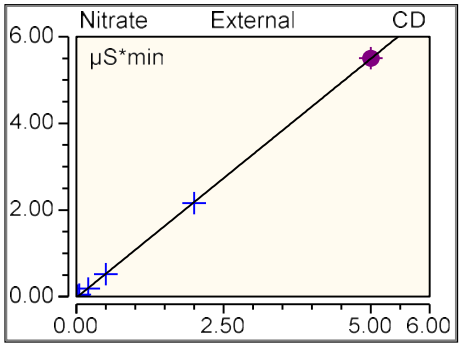
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Bromide	Bromide	Bromide	Bromide
STD 0.5	5.857	0.0028	0.019	0.081
STD 1.0	5.857	0.0056	0.039	0.099
STD 2.0	5.853	0.0226	0.159	0.207
STD 3.0	5.847	0.0618	0.450	0.456
STD 4.0	5.820	0.2853	2.229	1.880
STD 5.0	5.767	0.7833	6.287	5.051
Average	5.833			
Rel. Std. Dev.	0.608 %			



Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Sulfate	Sulfate	Sulfate	Sulfate
STD 0.5	6.583	0.1053	0.637	0.401
STD 1.0	6.577	0.2420	1.503	0.852
STD 2.0	6.547	1.1642	7.184	3.891
STD 3.0	6.500	3.0948	17.706	10.254
STD 4.0	6.347	12.1813	51.365	40.202
STD 5.0	6.173	30.2948	95.642	99.900
Average	6.454			
Rel. Std. Dev.	2.525 %			



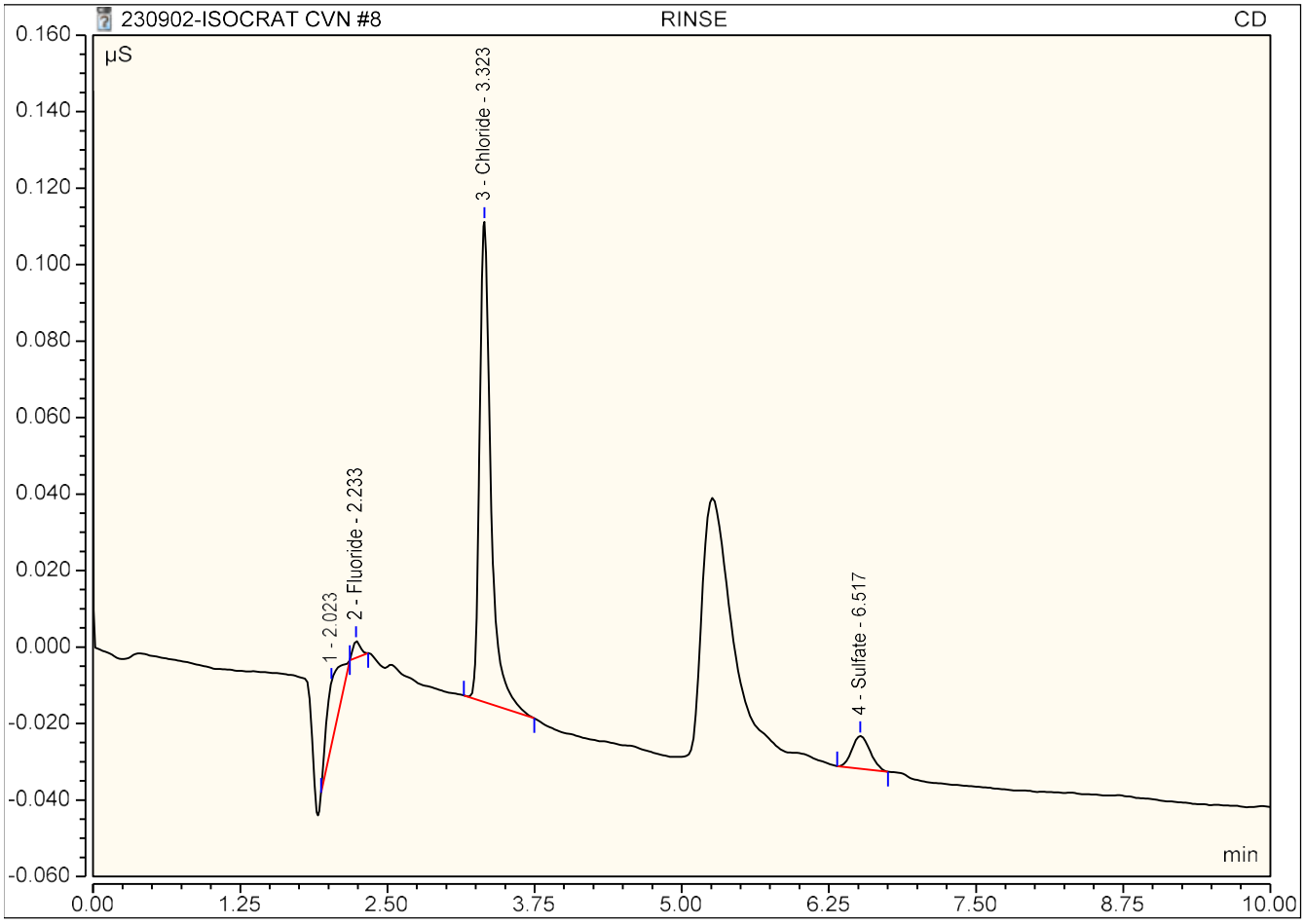
Injection Name	Ret.Time min CD	Area µS*min CD	Height µS CD	Amount CD
	Nitrate	Nitrate	Nitrate	Nitrate
STD 0.5	7.020	0.0207	0.110	0.041
STD 1.0	7.017	0.0436	0.237	0.062
STD 2.0	7.007	0.1889	1.109	0.193
STD 3.0	6.987	0.5167	3.045	0.490
STD 4.0	6.927	2.1599	11.543	1.980
STD 5.0	6.840	5.5028	25.207	5.009
Average	6.966			
Rel. Std. Dev.	1.015 %			



Peak Integration Report

Sample Name:	**RINSE**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 09:28**	*Run Time:*	**10.00**

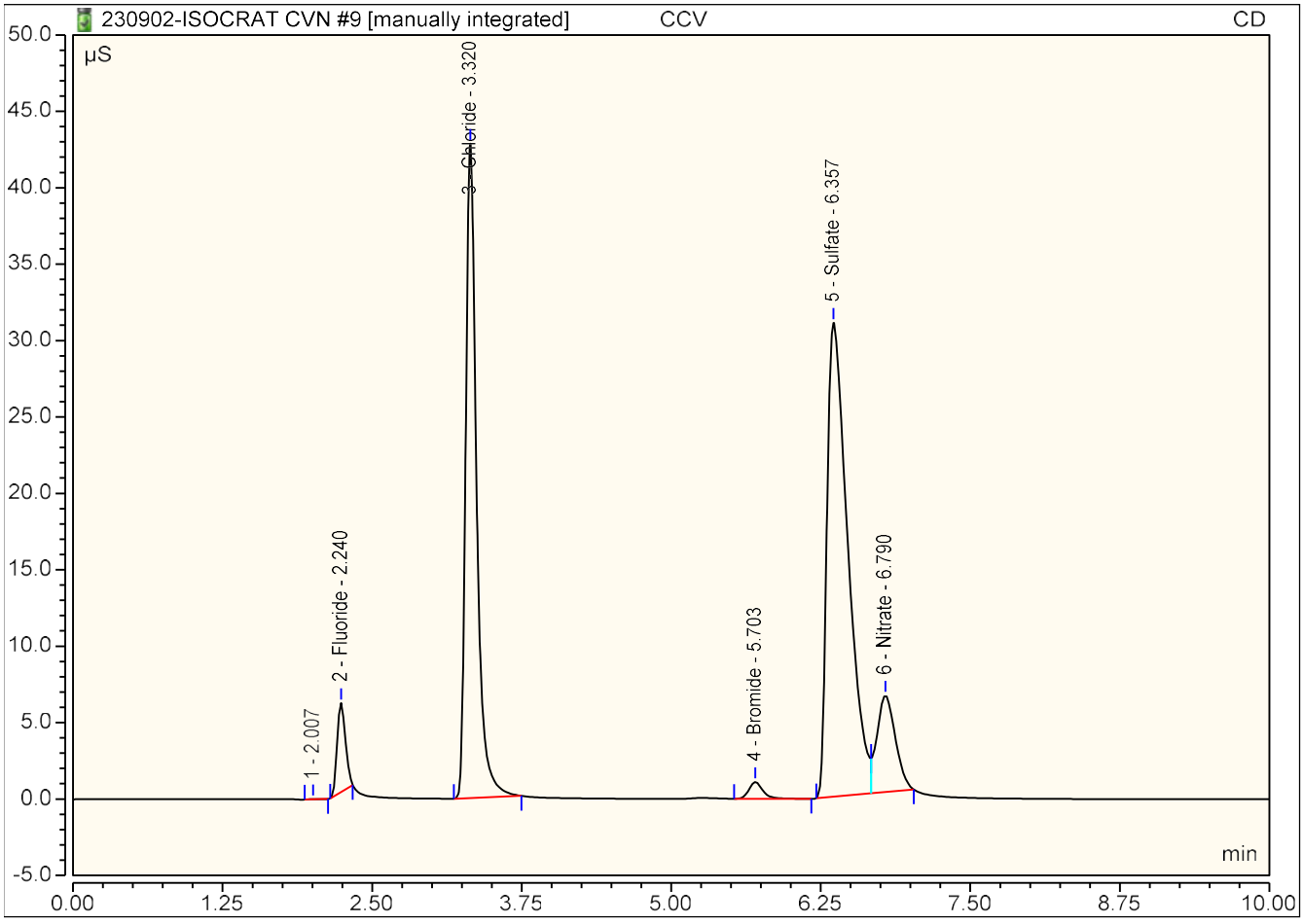
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.000	0.004	0.0308
3	3.32	**Chloride**	BMB	0.014	0.126	0.0815
4	6.52	**Sulfate**	BMB	0.002	0.009	0.0592
TOTAL:				0.02	0.14	0.17



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 09:40**	*Run Time:*	**10.00**

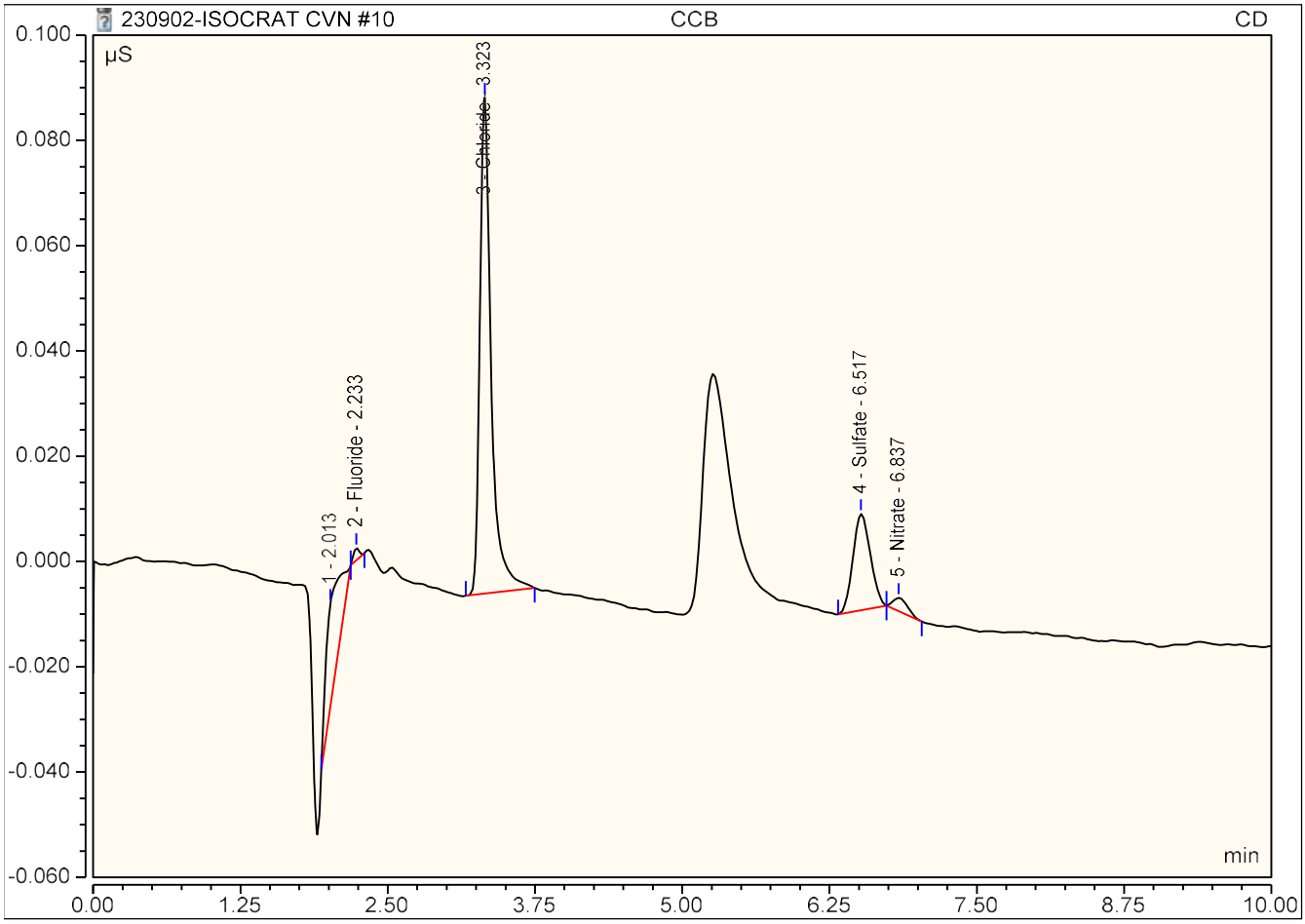
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	0.469	5.820	1.0110
3	3.32	**Chloride**	BMB	4.515	42.827	10.7816
4	5.70	**Bromide**	BMB	0.150	1.094	1.0205
5	6.36	**Sulfate**	BM *	6.243	31.006	20.6291
6	6.79	**Nitrate**	MB*	1.137	6.317	1.0529
TOTAL:				12.51	87.06	34.50



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 09:52**	*Run Time:*	**10.00**

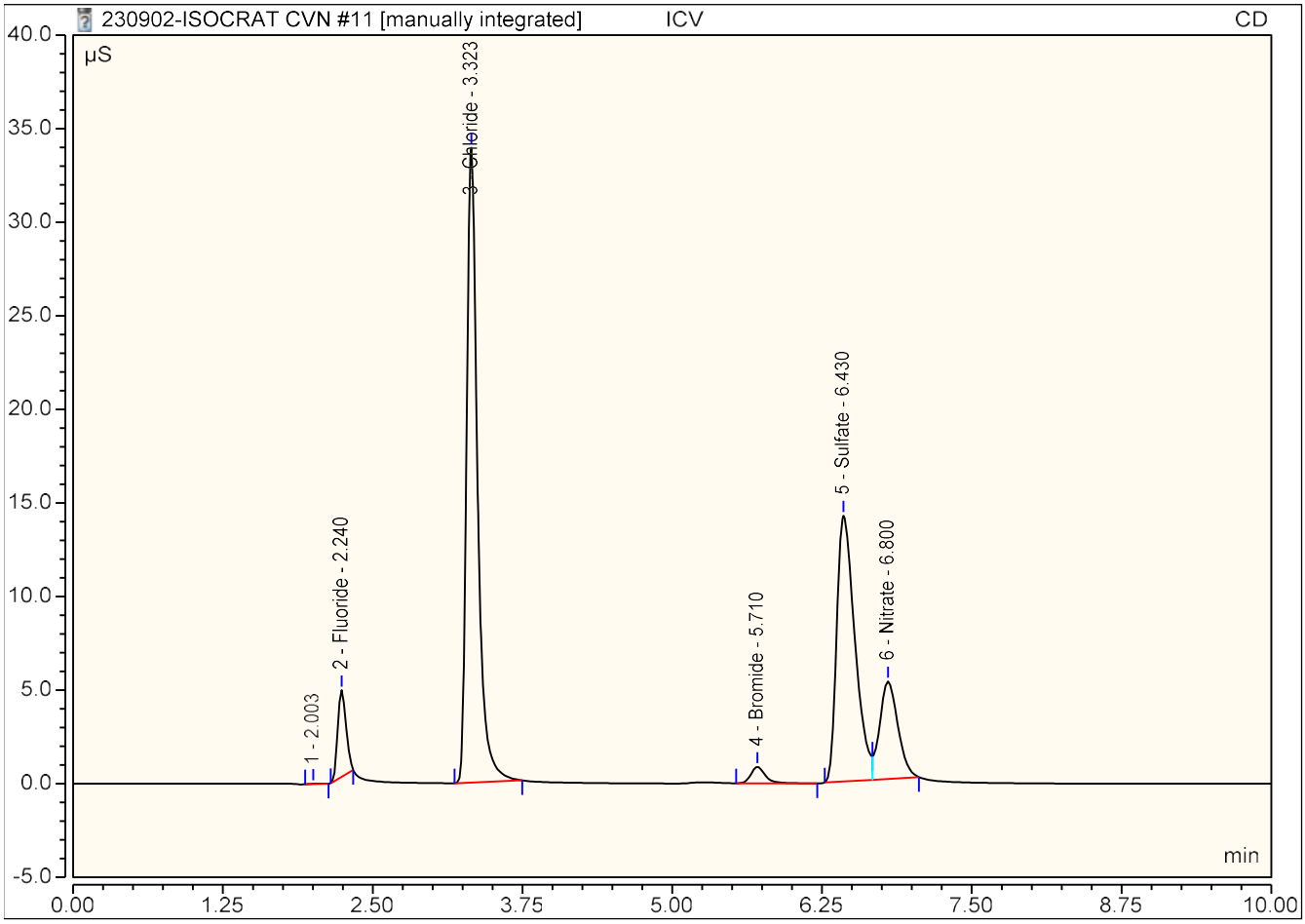
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.000	0.002	0.0304
3	3.32	**Chloride**	BMB	0.011	0.094	0.0732
4	6.52	**Sulfate**	BMB	0.003	0.018	0.0645
5	6.84	**Nitrate**	BMB	0.000	0.003	0.0225
TOTAL:				0.01	0.12	0.19



Peak Integration Report

Sample Name:	**ICV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 10:04**	*Run Time:*	**10.00**

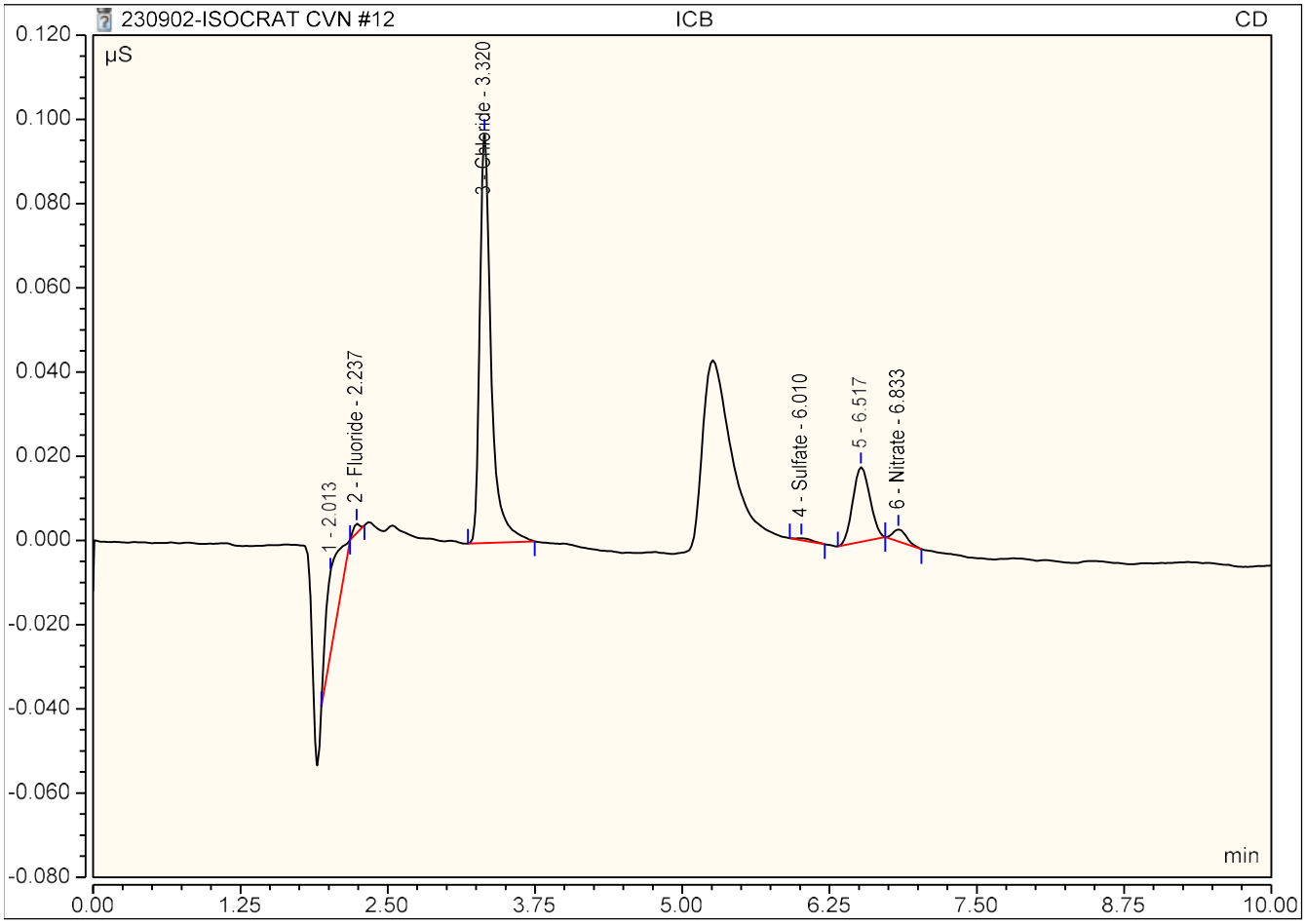
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	0.372	4.627	0.8089
3	3.32	**Chloride**	BMB	3.592	33.919	8.5889
4	5.71	**Bromide**	BMB	0.124	0.878	0.8504
5	6.43	**Sulfate**	BM *	2.495	14.203	8.2780
6	6.80	**Nitrate**	MB*	0.922	5.220	0.8575
TOTAL:				7.51	58.85	19.38



Peak Integration Report

Sample Name:	**ICB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 10:16**	*Run Time:*	**10.00**

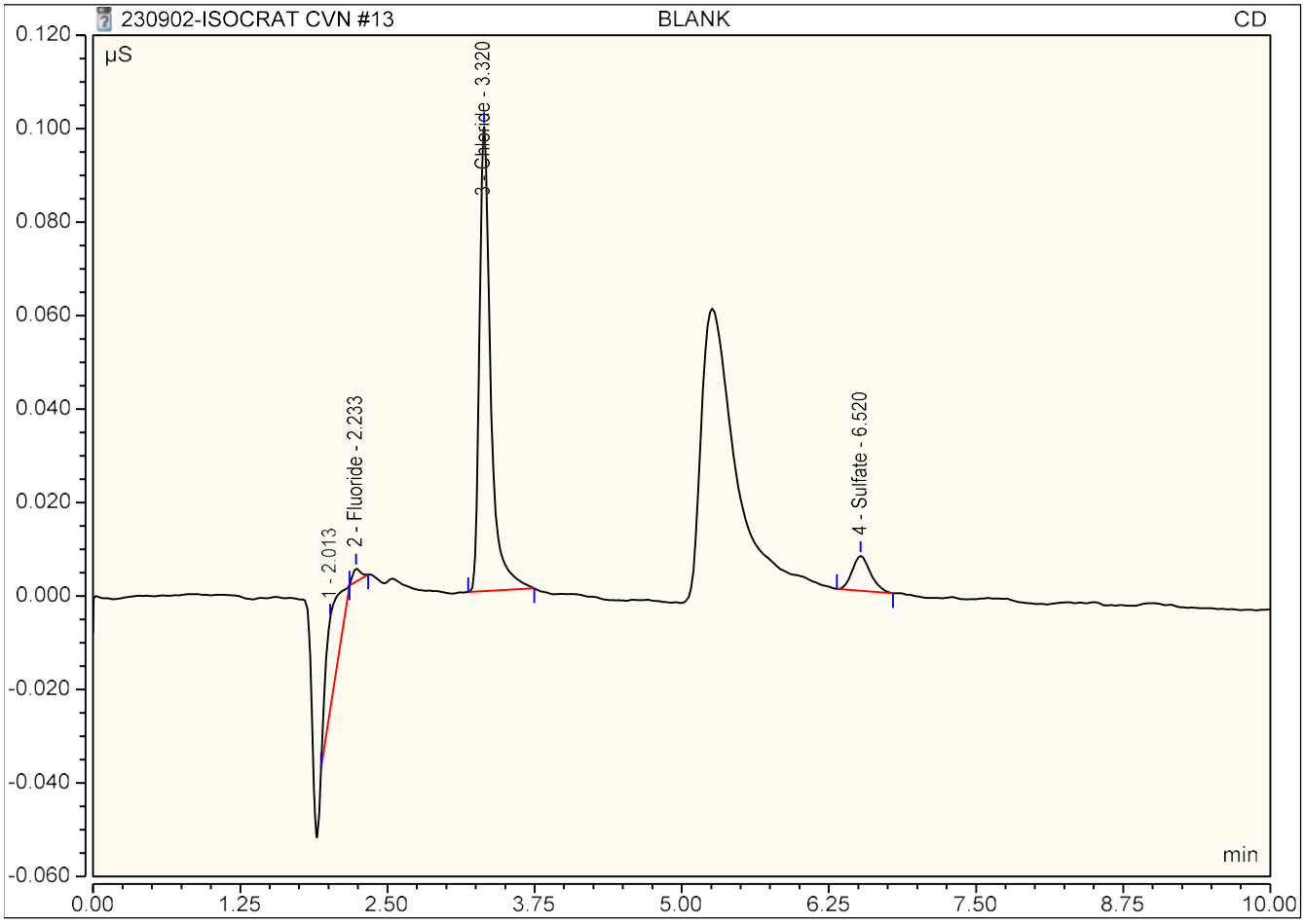
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	0.000	0.002	0.0304
3	3.32	**Chloride**	BMB	0.011	0.097	0.0740
4	6.01	**Sulfate**	BMB	0.000	0.000	0.0545
6	6.83	**Nitrate**	BMB	0.000	0.003	0.0225
TOTAL:				0.01	0.10	0.18



Peak Integration Report

Sample Name:	**BLANK**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 10:29**	*Run Time:*	**10.00**

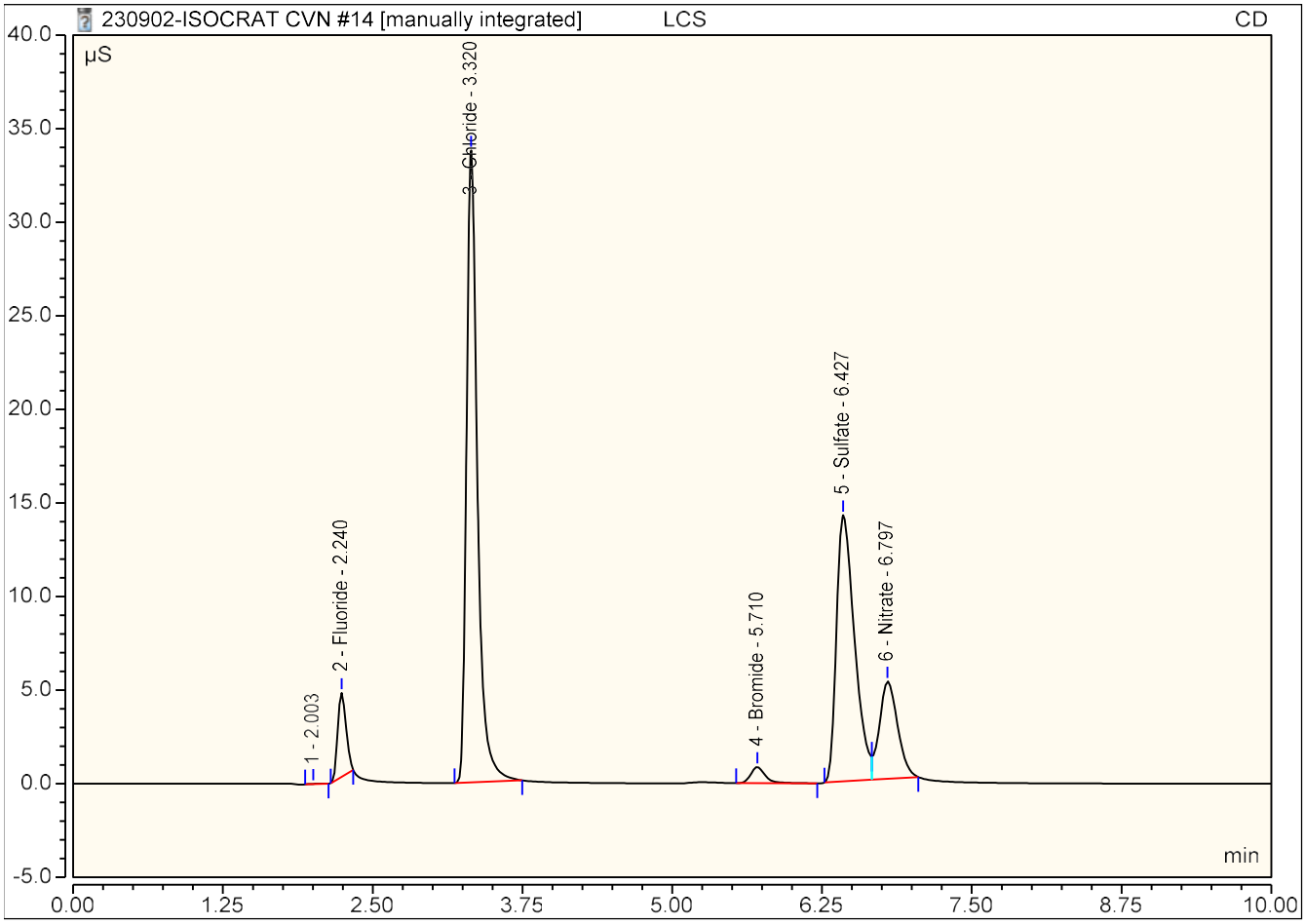
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.000	0.003	0.0306
3	3.32	**Chloride**	BMB	0.011	0.099	0.0744
4	6.52	**Sulfate**	BMB	0.001	0.007	0.0586
TOTAL:				0.01	0.11	0.16



Peak Integration Report

Sample Name:	**LCS**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 10:41**	*Run Time:*	**10.00**

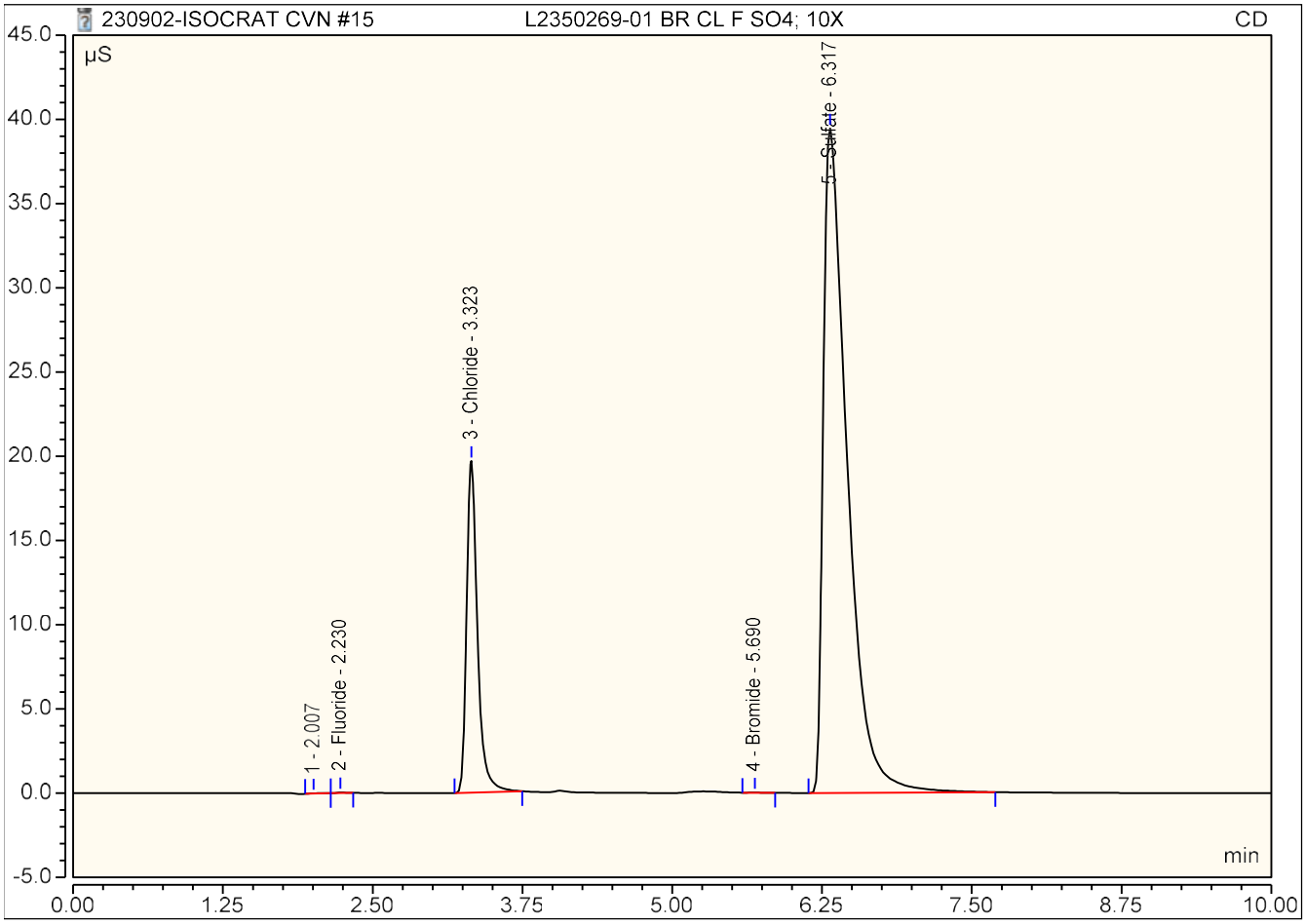
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	0.363	4.491	0.7889
3	3.32	**Chloride**	BMB	3.582	33.770	8.5636
4	5.71	**Bromide**	BMB	0.122	0.865	0.8388
5	6.43	**Sulfate**	BM *	2.488	14.216	8.2530
6	6.80	**Nitrate**	MB*	0.915	5.198	0.8518
TOTAL:				7.47	58.54	19.30



Peak Integration Report

Sample Name:	**L2350269-01 BR CL F SO4; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 10:53**	*Run Time:*	**10.00**

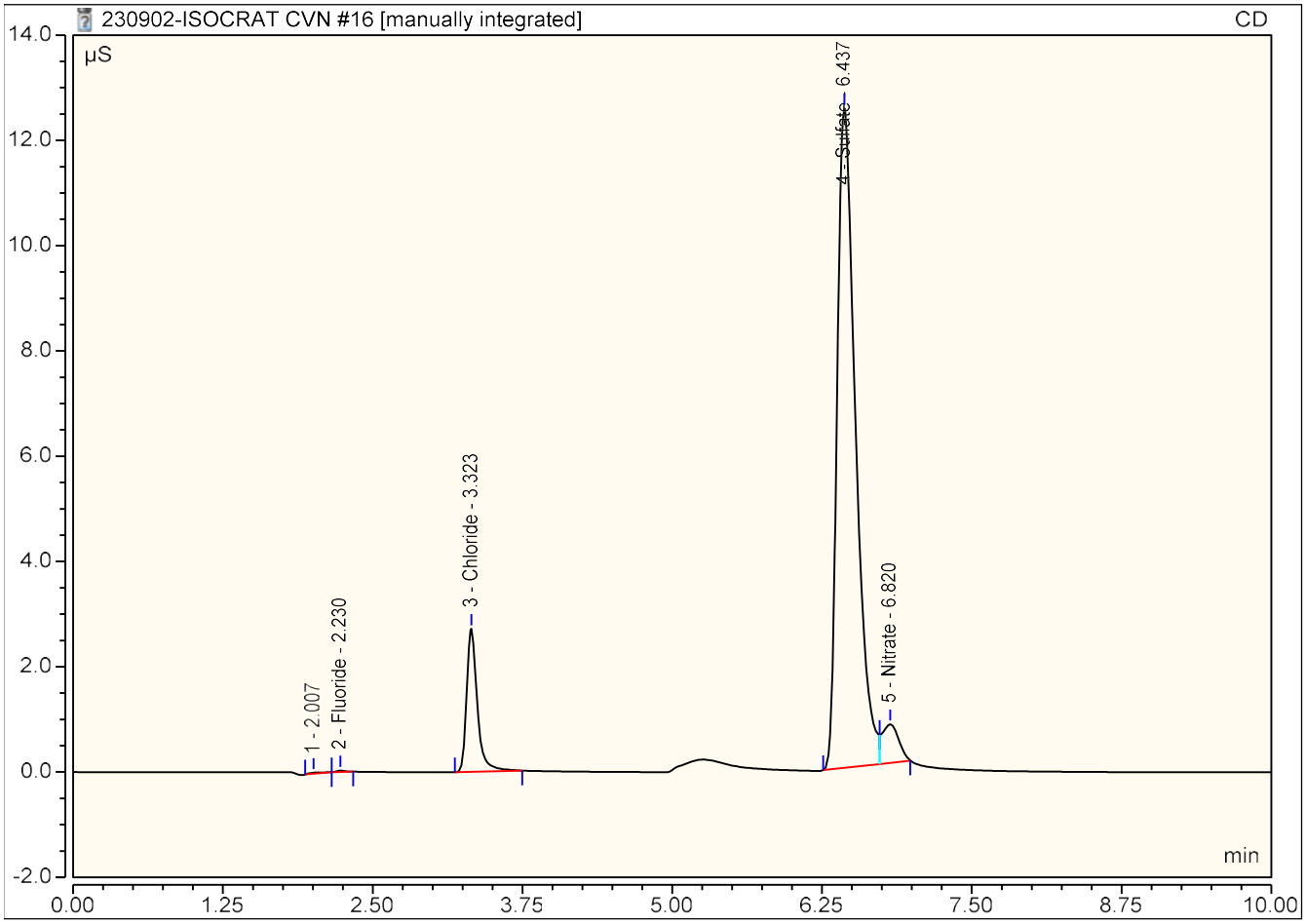
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.003	0.042	0.3709
3	3.32	**Chloride**	BMB	2.065	19.684	49.5702
4	5.69	**Bromide**	BMB	0.001	0.011	0.7135
5	6.32	**Sulfate**	BMB	9.120	39.445	301.1088
TOTAL:				11.19	59.18	351.76



Peak Integration Report

Sample Name:	**XL2350269-02;10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 11:05**	*Run Time:*	**10.00**

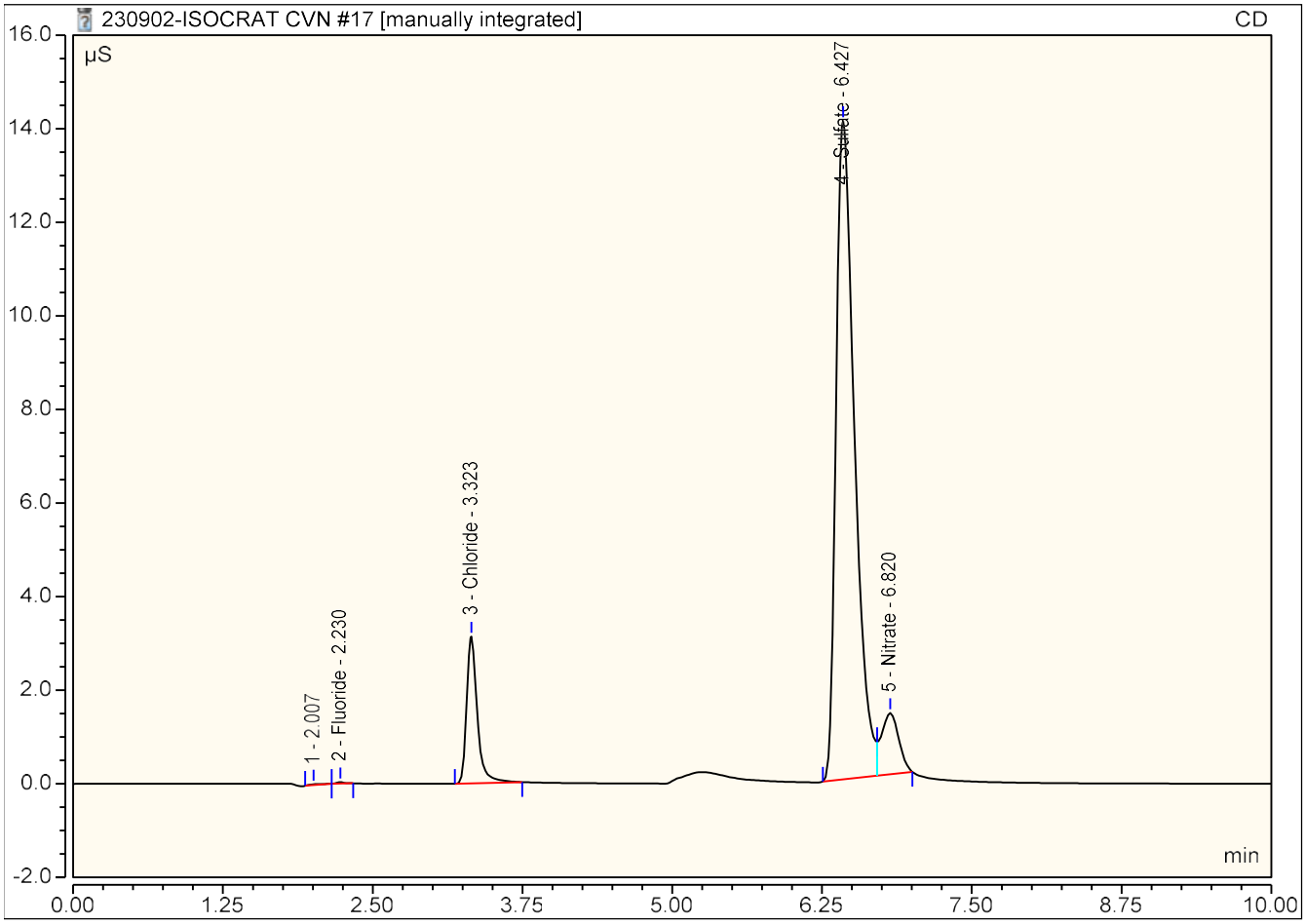
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.002	0.030	0.3503
3	3.32	**Chloride**	BMB	0.280	2.715	7.1333
4	6.44	**Sulfate**	BM *	2.227	12.529	73.9362
5	6.82	**Nitrate**	MB*	0.118	0.735	1.2895
TOTAL:				2.63	16.01	82.71



Peak Integration Report

Sample Name:	**XL2350269-03; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 11:17**	*Run Time:*	**10.00**

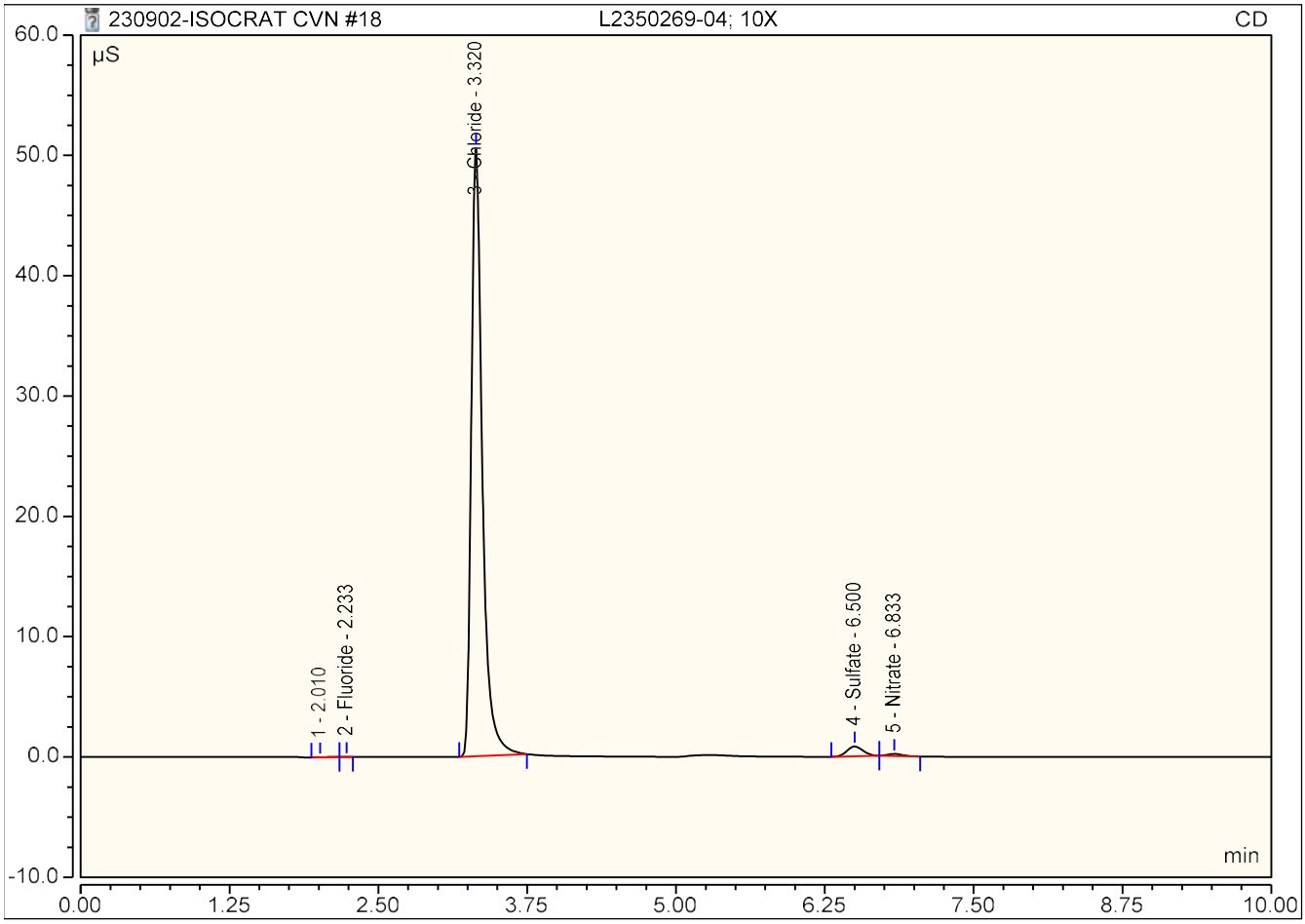
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.002	0.029	0.3486
3	3.32	**Chloride**	BMB	0.324	3.137	8.1727
4	6.43	**Sulfate**	BM *	2.514	14.072	83.3945
5	6.82	**Nitrate**	MB*	0.220	1.307	2.2107
TOTAL:				3.06	18.54	94.13



Peak Integration Report

Sample Name:	**L2350269-04; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 11:29**	*Run Time:*	**10.00**

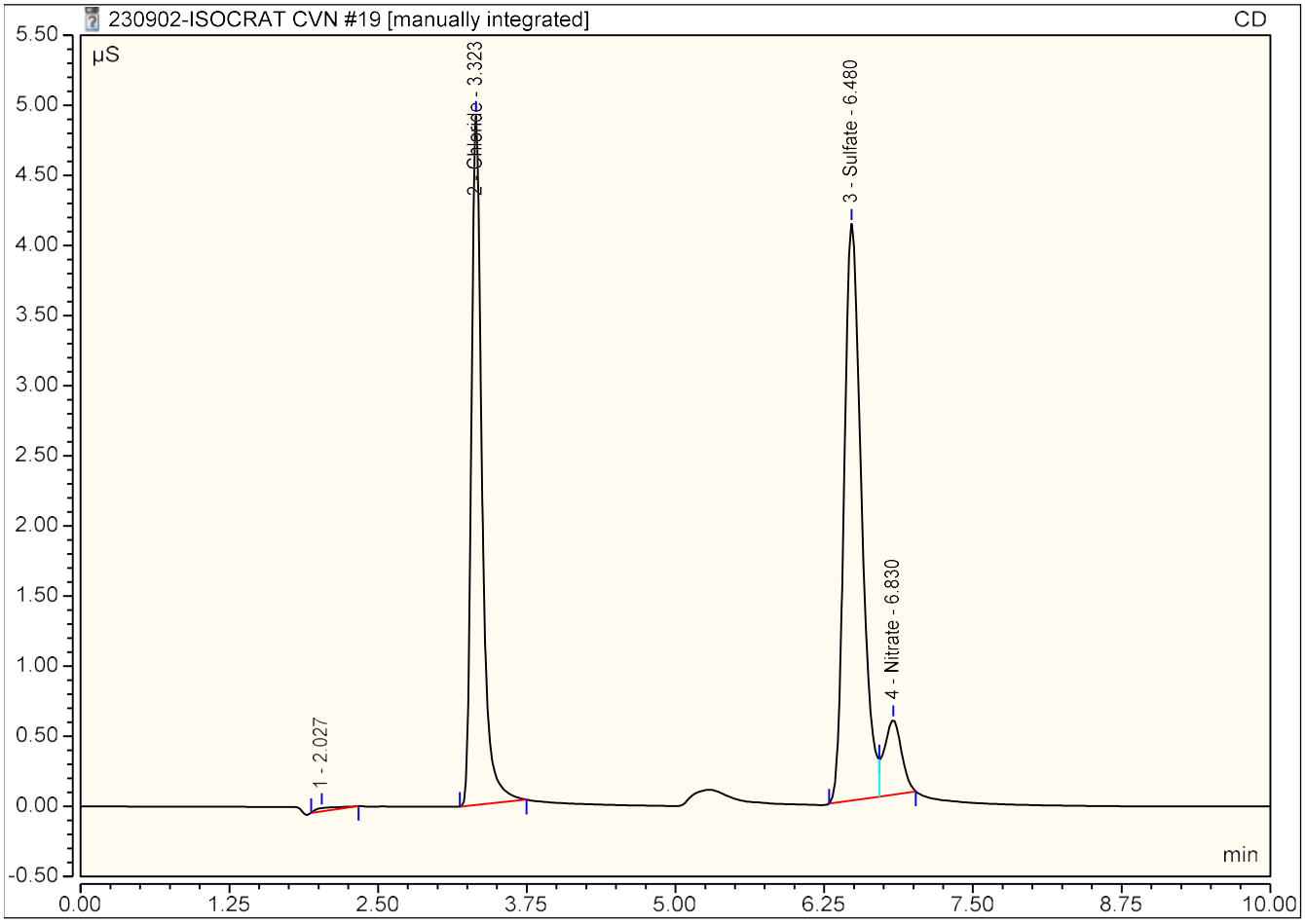
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.000	0.005	0.3079
3	3.32	**Chloride**	BMB	5.406	50.548	129.0091
4	6.50	**Sulfate**	BMB	0.128	0.821	4.7626
5	6.83	**Nitrate**	BMB	0.025	0.176	0.4480
TOTAL:				5.56	51.55	134.53



Peak Integration Report

Sample Name:	**XL2350269-05; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 11:41**	*Run Time:*	**10.00**

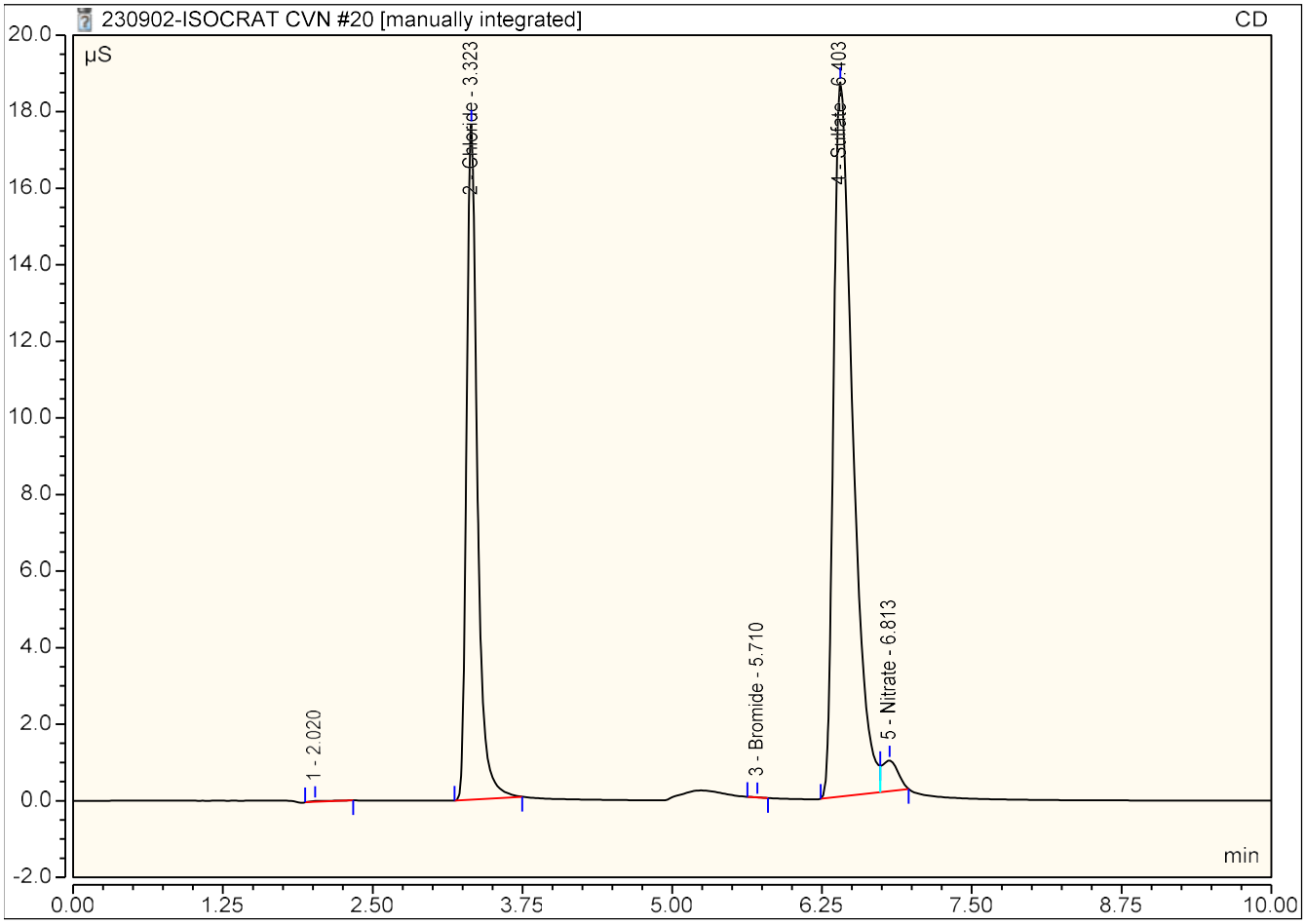
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.32	**Chloride**	BMB	0.511	4.917	12.6347
3	6.48	**Sulfate**	BM *	0.692	4.114	23.3442
4	6.83	**Nitrate**	MB*	0.090	0.533	1.0375
TOTAL:				1.29	9.56	37.02



Peak Integration Report

Sample Name:	**L2350269-06;10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 11:53**	*Run Time:*	**10.00**

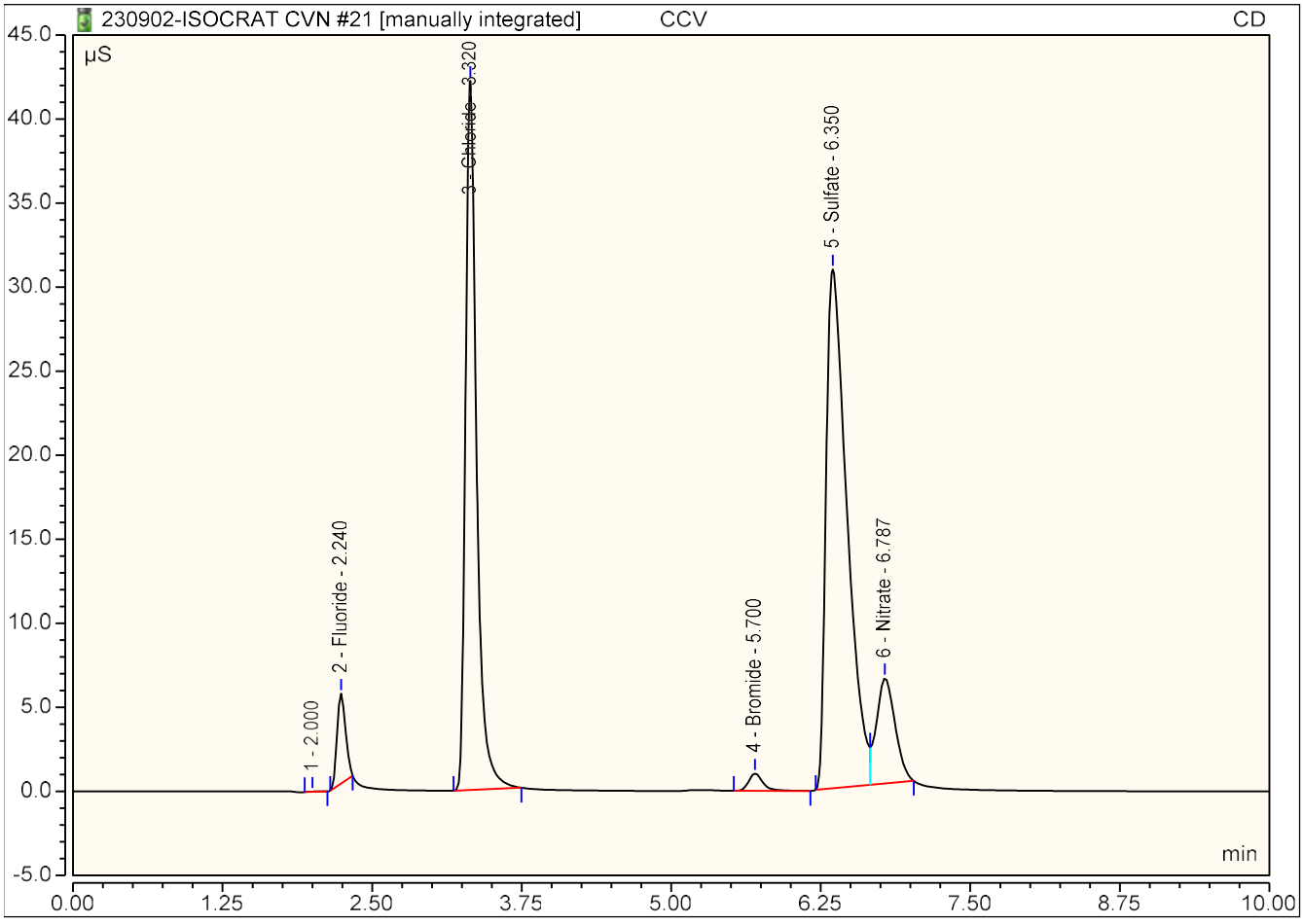
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.32	**Chloride**	BMB	1.847	17.627	44.3976
3	5.71	**Bromide**	BMB	0.000	0.003	0.6494
4	6.40	**Sulfate**	BM *	3.470	18.660	114.9132
5	6.81	**Nitrate**	MB*	0.123	0.803	1.3380
TOTAL:				5.44	37.09	161.30



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 12:05**	*Run Time:*	**10.00**

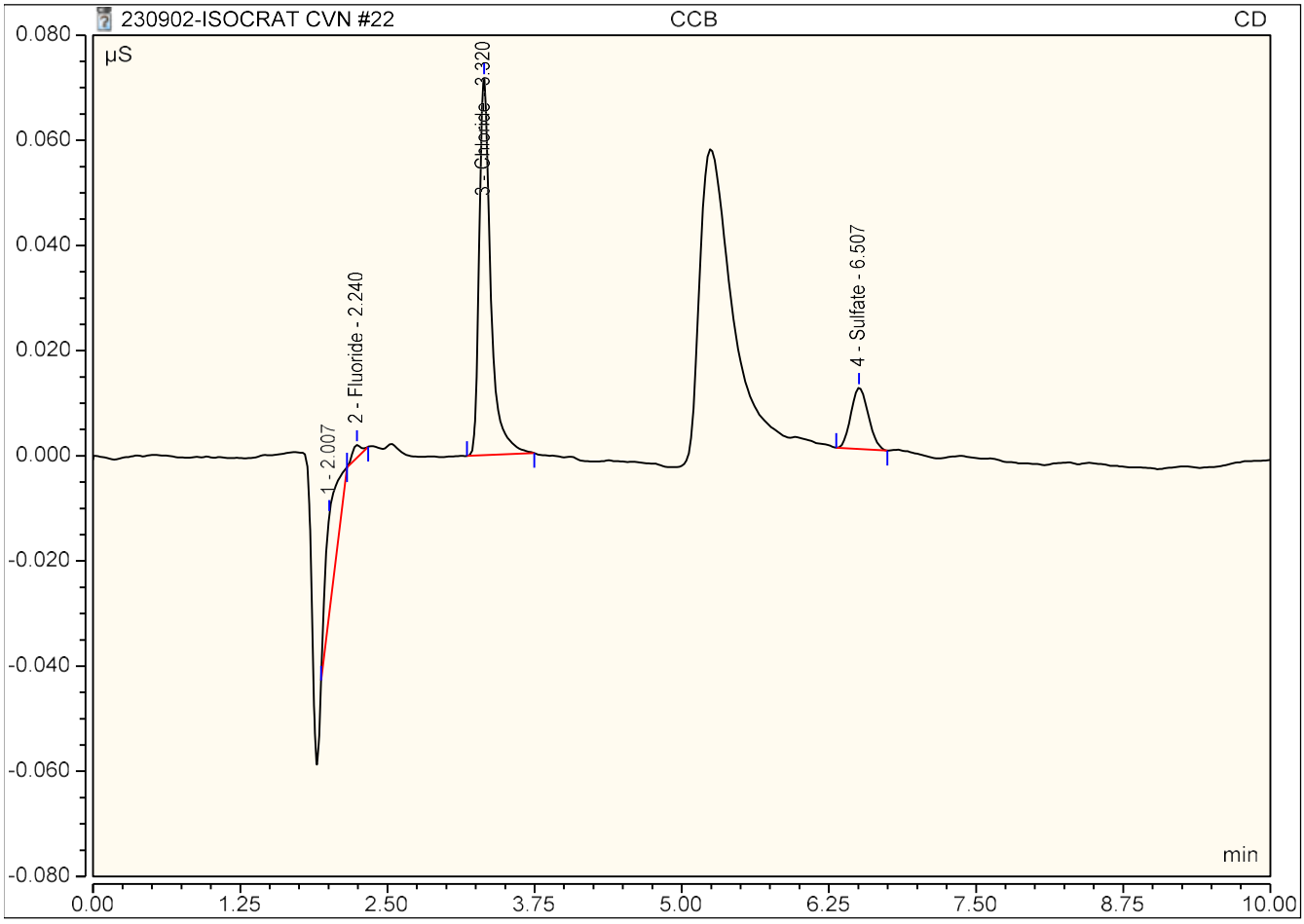
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	0.440	5.345	0.9506
3	3.32	**Chloride**	BMB	4.522	42.192	10.8000
4	5.70	**Bromide**	BMB	0.143	1.033	0.9766
5	6.35	**Sulfate**	BM *	6.252	30.877	20.6590
6	6.79	**Nitrate**	MB*	1.139	6.261	1.0548
TOTAL:				12.50	85.71	34.44



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 12:17**	*Run Time:*	**10.00**

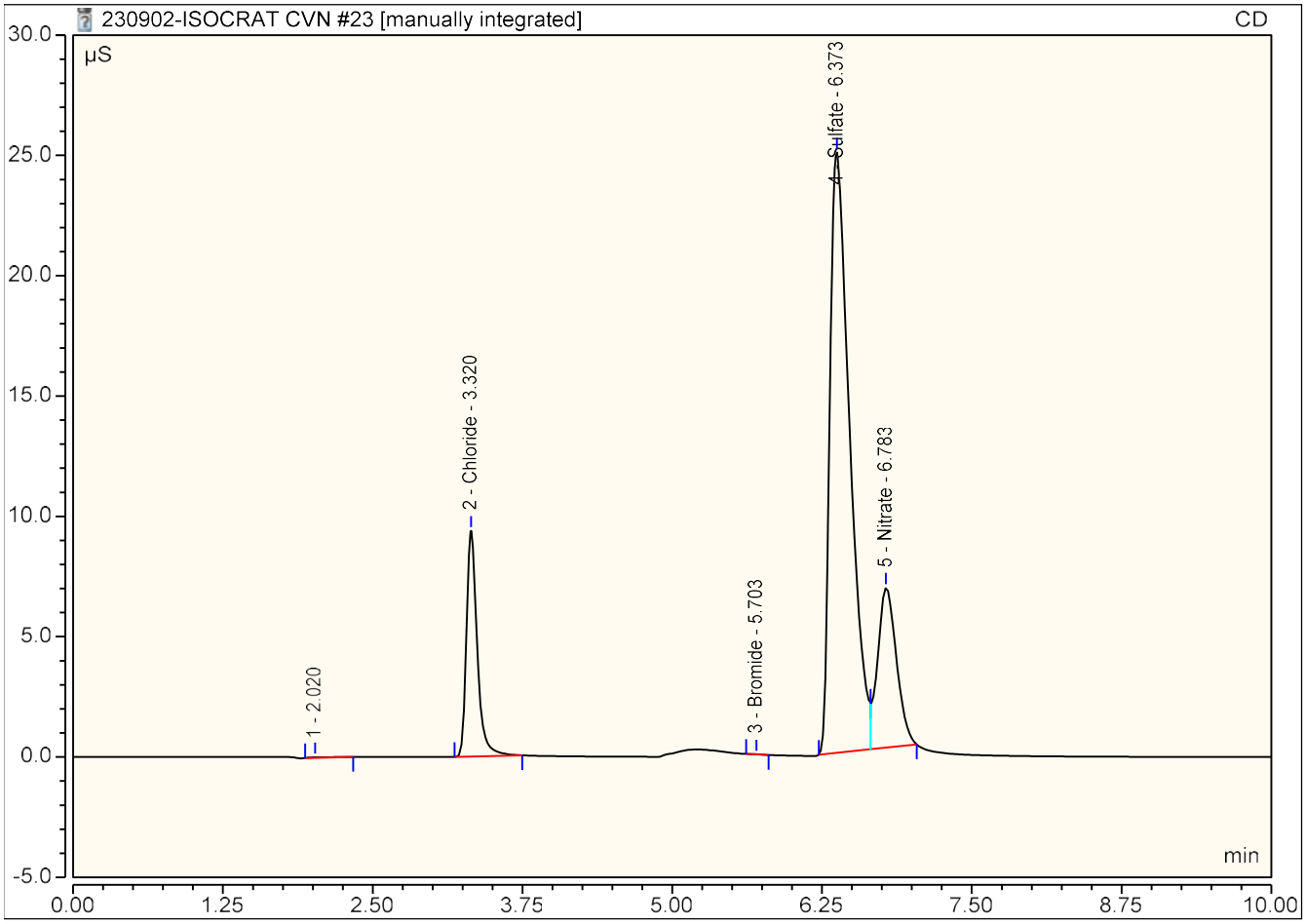
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	0.000	0.002	0.0306
3	3.32	**Chloride**	BMB	0.008	0.072	0.0673
4	6.51	**Sulfate**	BMB	0.002	0.012	0.0608
TOTAL:				0.01	0.09	0.16



Peak Integration Report

Sample Name:	**L2350267-07; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 12:30**	*Run Time:*	**10.00**

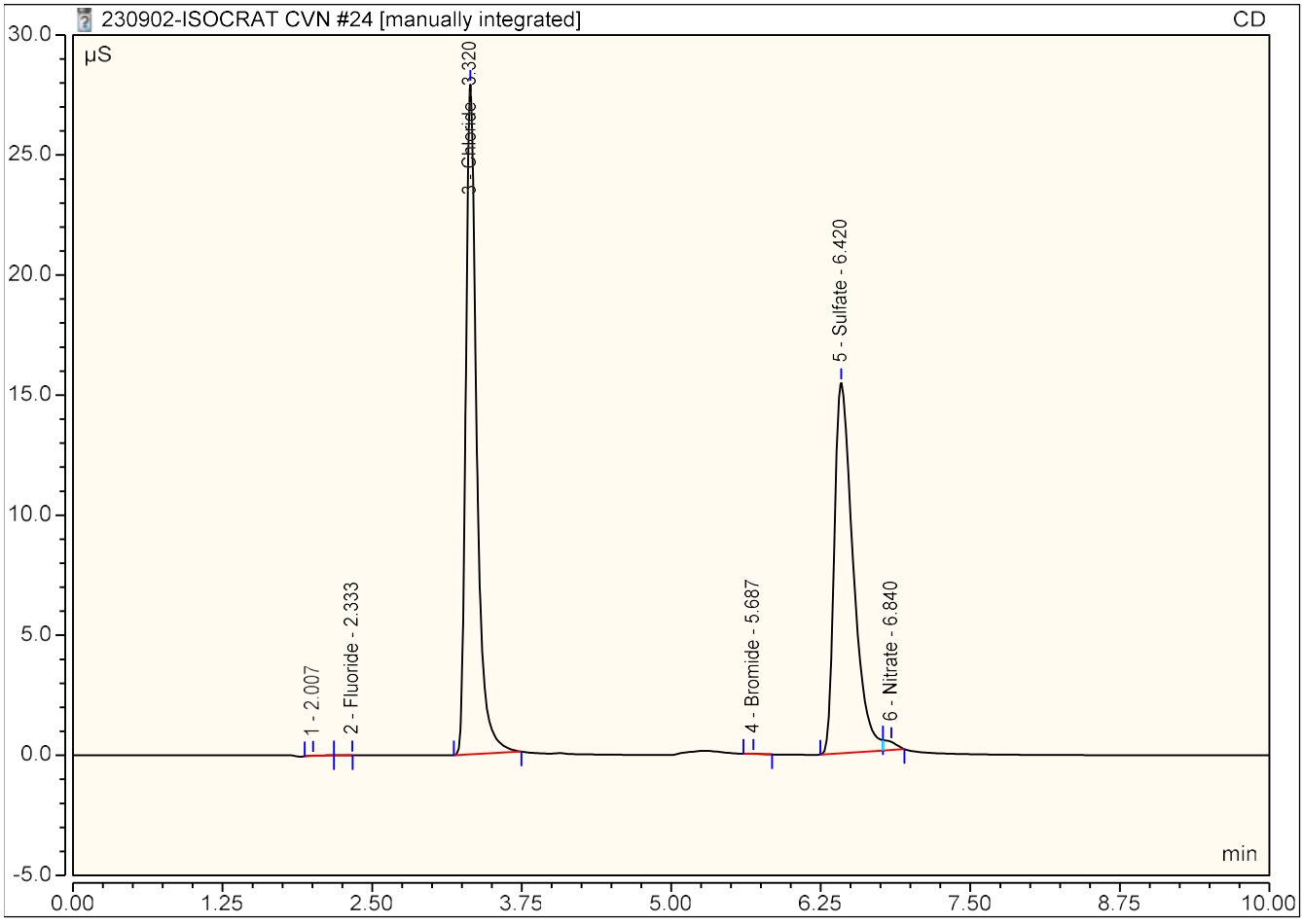
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.32	**Chloride**	BMB	0.976	9.386	23.6746
3	5.70	**Bromide**	BMB	0.000	0.005	0.6573
4	6.37	**Sulfate**	BM *	4.788	24.949	158.3560
5	6.78	**Nitrate**	MB*	1.210	6.647	11.1889
TOTAL:				6.97	40.99	193.88



Peak Integration Report

Sample Name:	**L2350269-08; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 12:42**	*Run Time:*	**10.00**

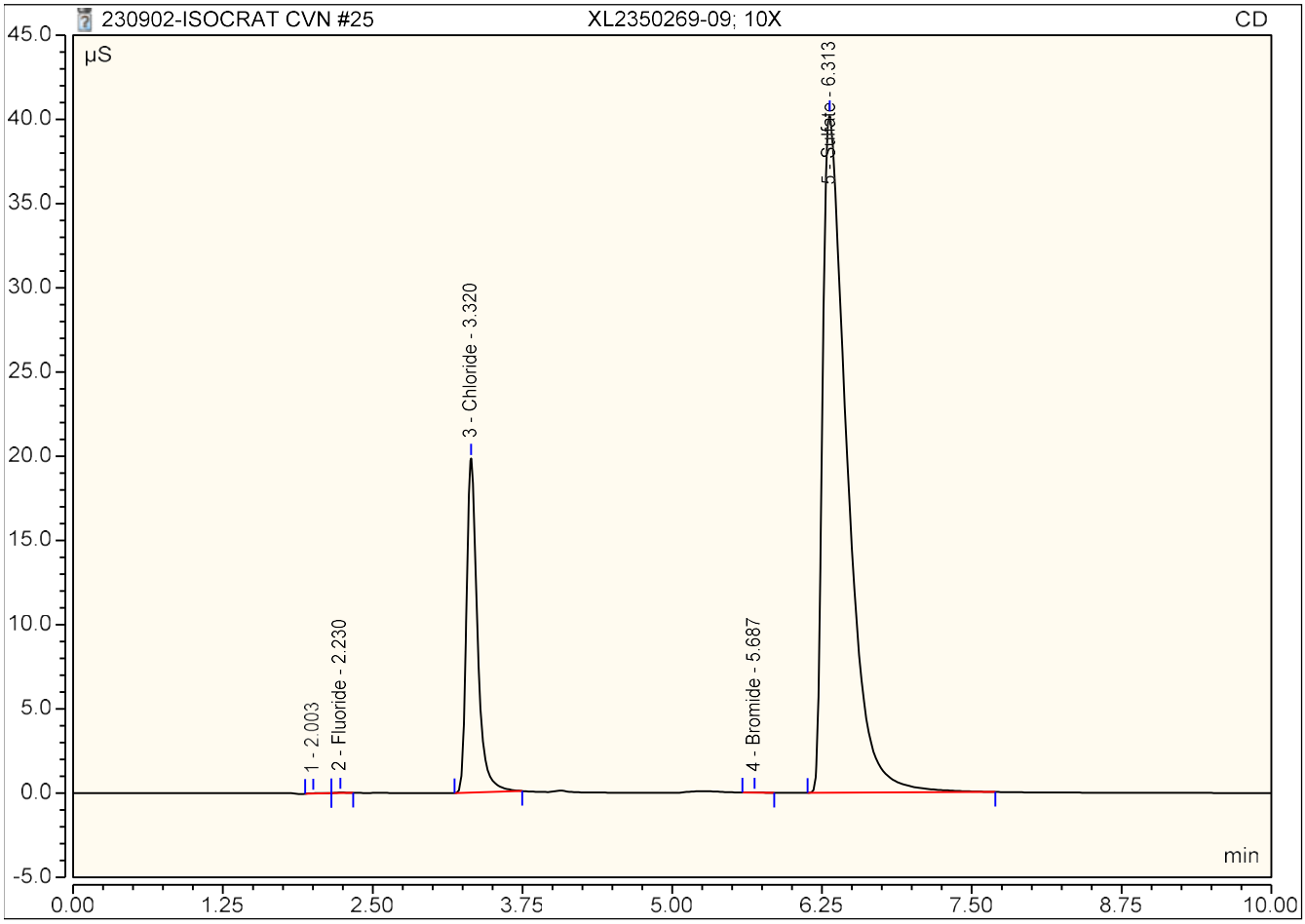
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.33	**Fluoride**	BMB	0.000	0.000	0.3075
3	3.32	**Chloride**	BMB	2.973	27.896	71.1593
4	5.69	**Bromide**	BMB	0.001	0.010	0.7080
5	6.42	**Sulfate**	BM *	2.813	15.421	93.2454
6	6.84	**Nitrate**	MB*	0.046	0.340	0.6364
TOTAL:				5.83	43.67	166.06



Peak Integration Report

Sample Name:	**XL2350269-09; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 12:54**	*Run Time:*	**10.00**

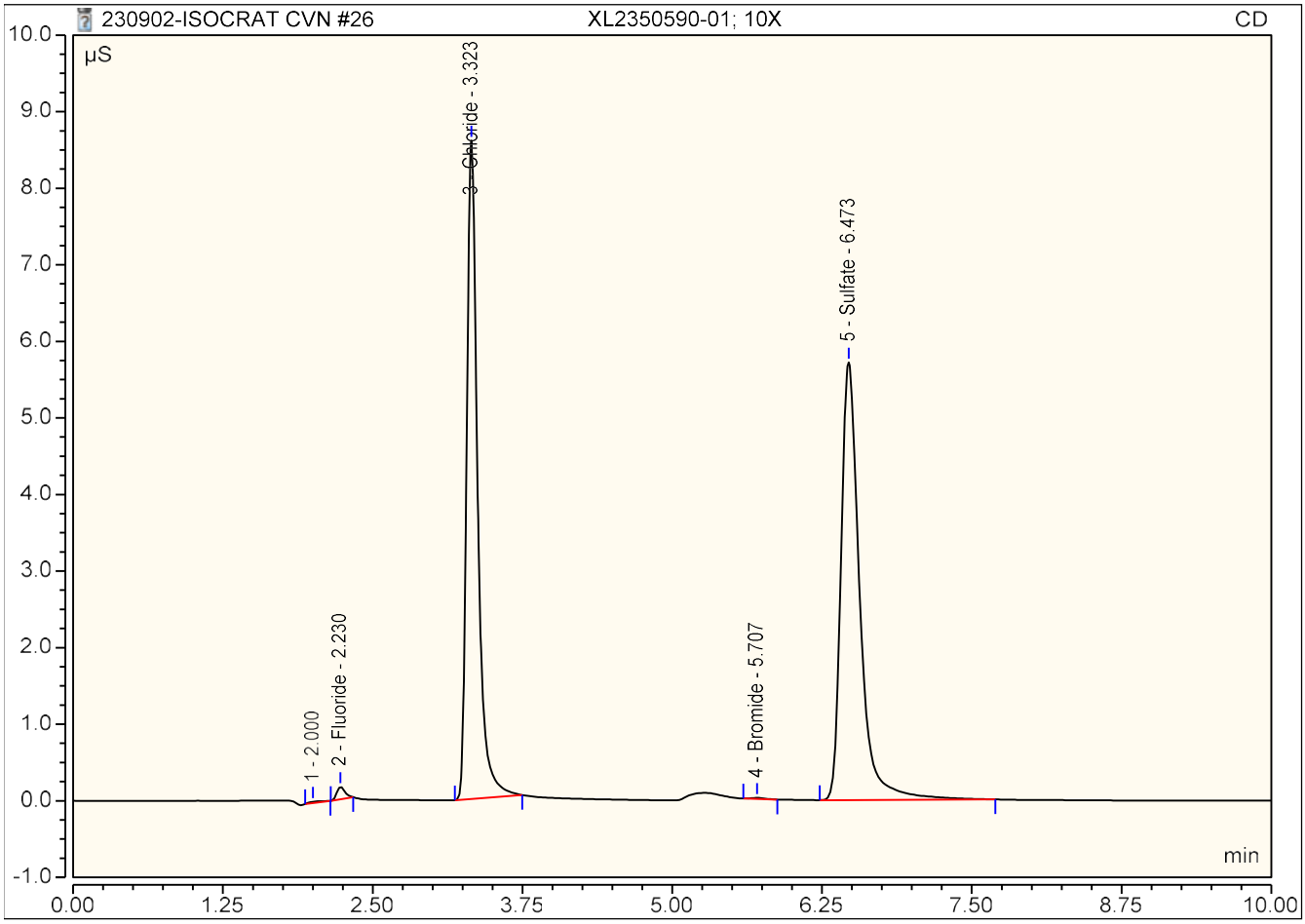
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.003	0.036	0.3620
3	3.32	**Chloride**	BMB	2.113	19.828	50.7260
4	5.69	**Bromide**	BMB	0.001	0.010	0.7077
5	6.31	**Sulfate**	BMB	9.490	40.239	313.3184
TOTAL:				11.61	60.11	365.11



Peak Integration Report

Sample Name:	**XL2350590-01; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 13:06**	*Run Time:*	**10.00**

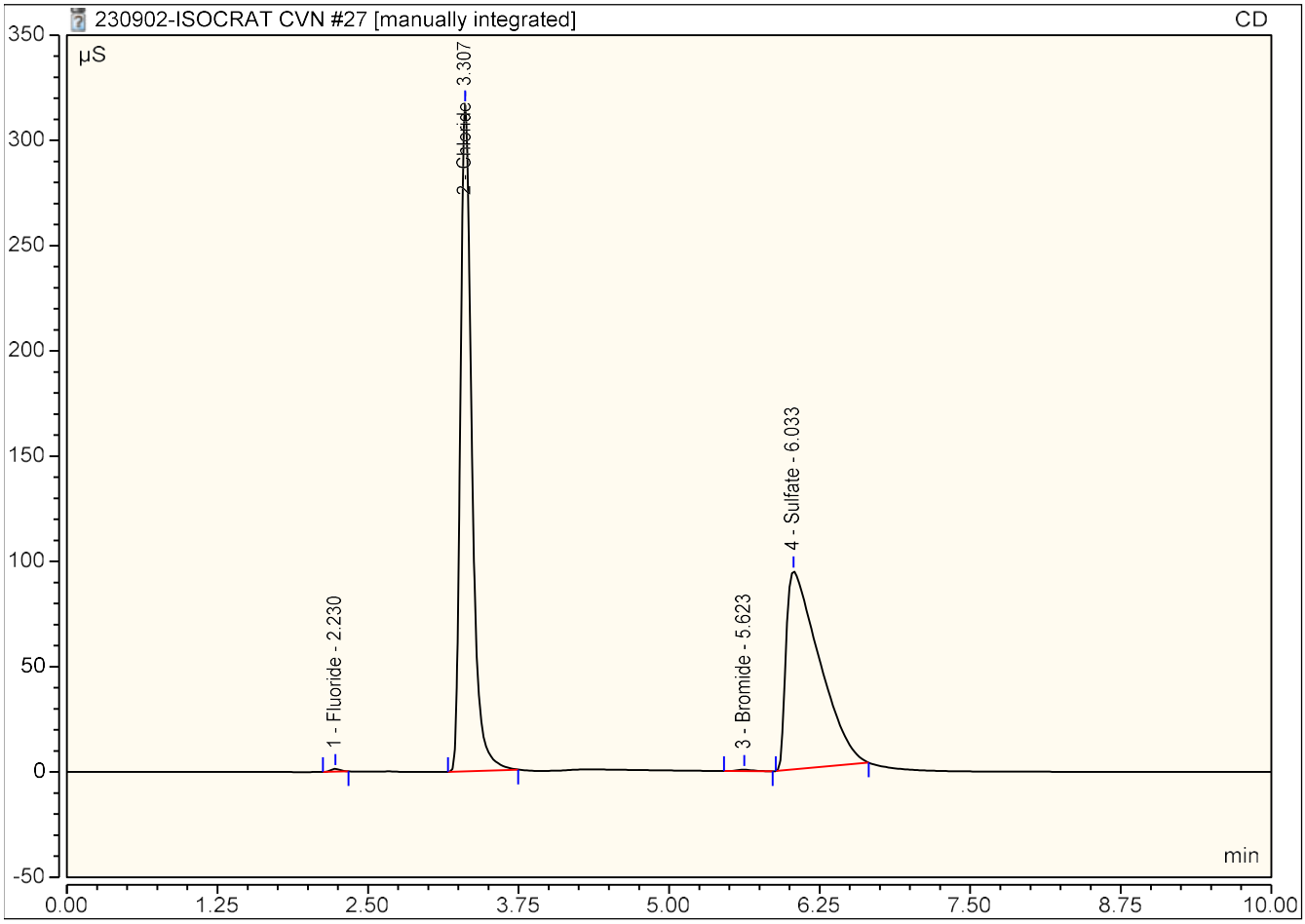
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.013	0.163	0.5711
3	3.32	**Chloride**	BMB	0.907	8.601	22.0376
4	5.71	**Bromide**	BMB	0.002	0.014	0.7408
5	6.47	**Sulfate**	BMB	1.038	5.717	34.7662
TOTAL:				1.96	14.50	58.12



Peak Integration Report

Sample Name:	**L2351101-06 BR CL SO4**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 13:18**	*Run Time:*	**10.00**

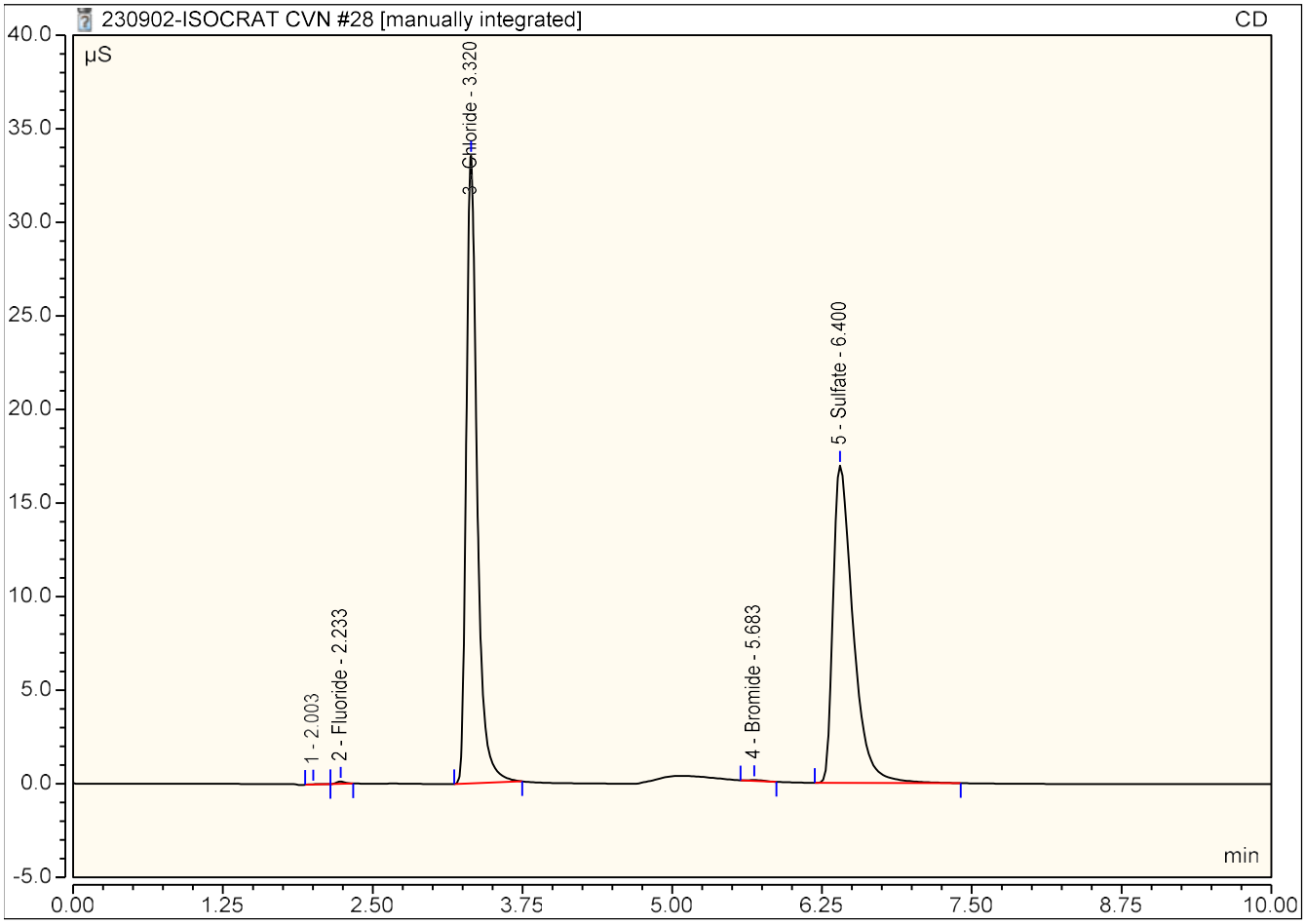
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.23	**Fluoride**	BMB	0.124	1.348	0.2892
2	3.31	**Chloride**	BMB	34.935	316.466	83.1034
3	5.62	**Bromide**	BMB	0.099	0.707	0.6907
4	6.03	**Sulfate**	BMB*	30.164	94.173	99.4695
TOTAL:				65.32	412.69	183.55



Peak Integration Report

Sample Name:	**L2351101-06; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 13:30**	*Run Time:*	**10.00**

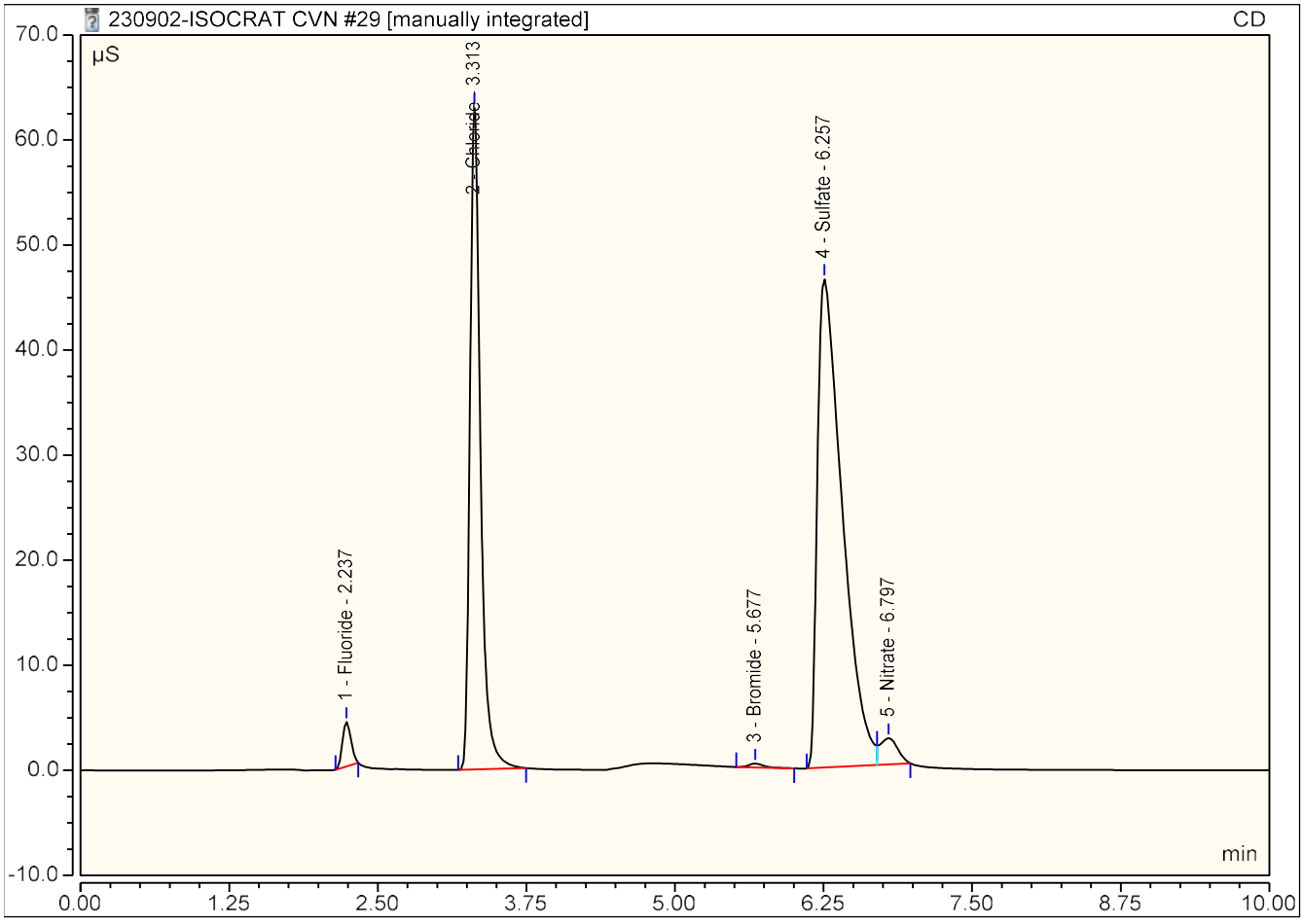
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.010	0.118	0.5028
3	3.32	**Chloride**	BMB	3.538	33.540	84.5828
4	5.68	**Bromide**	BMB	0.006	0.047	1.0284
5	6.40	**Sulfate**	BMB*	3.290	16.957	108.9581
TOTAL:				6.84	50.66	195.07



Peak Integration Report

Sample Name:	**L2351101-08 MS**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 13:42**	*Run Time:*	**10.00**

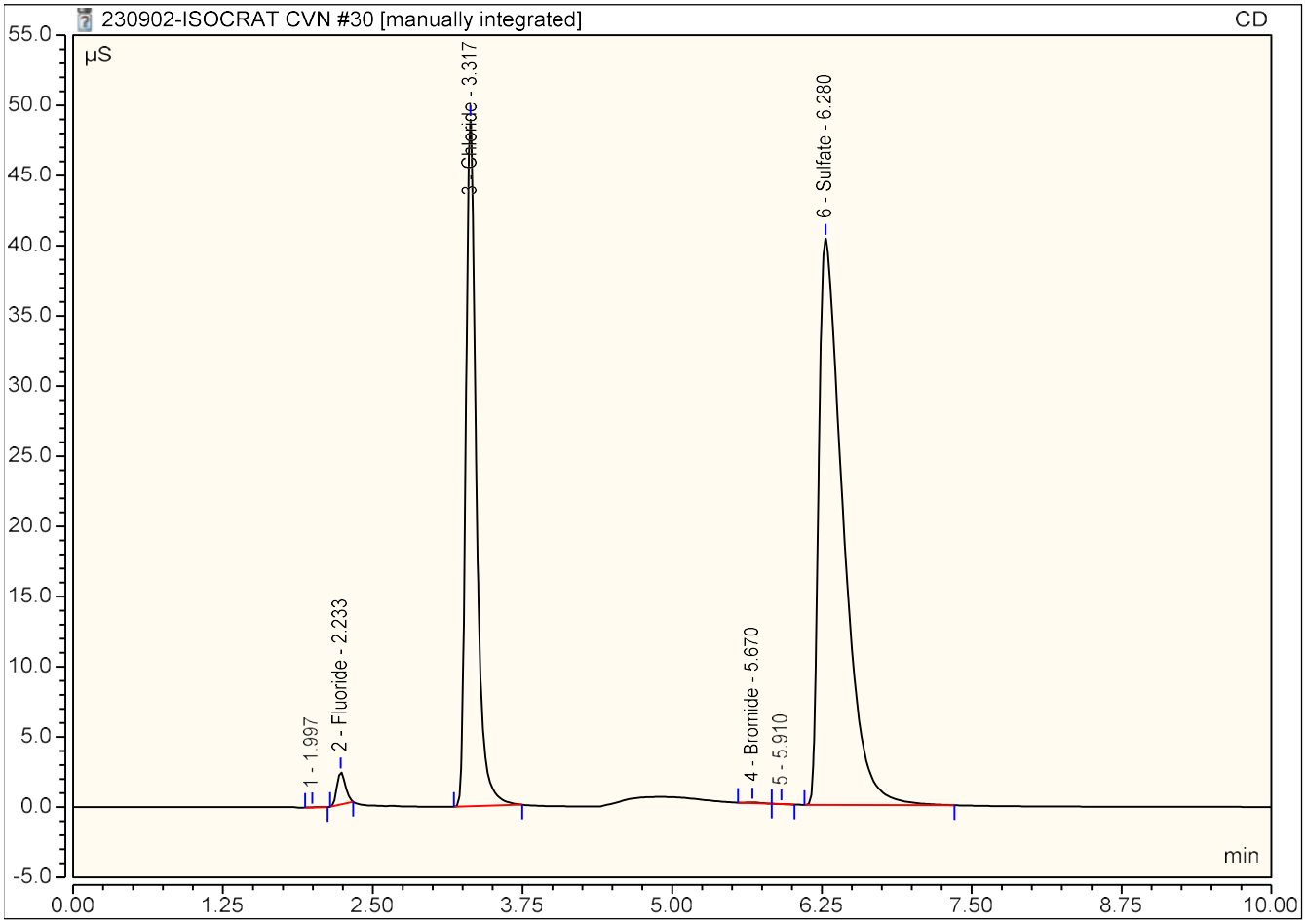
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.24	**Fluoride**	BMB	0.358	4.247	0.7785
2	3.31	**Chloride**	BMB	6.484	62.971	15.4644
3	5.68	**Bromide**	BMB	0.053	0.365	0.4024
4	6.26	**Sulfate**	BM *	11.266	46.510	37.1861
5	6.80	**Nitrate**	MB*	0.434	2.506	0.4155
TOTAL:				18.60	116.60	54.25



Peak Integration Report

Sample Name:	**L2351101-08 DUP**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 13:54**	*Run Time:*	**10.00**

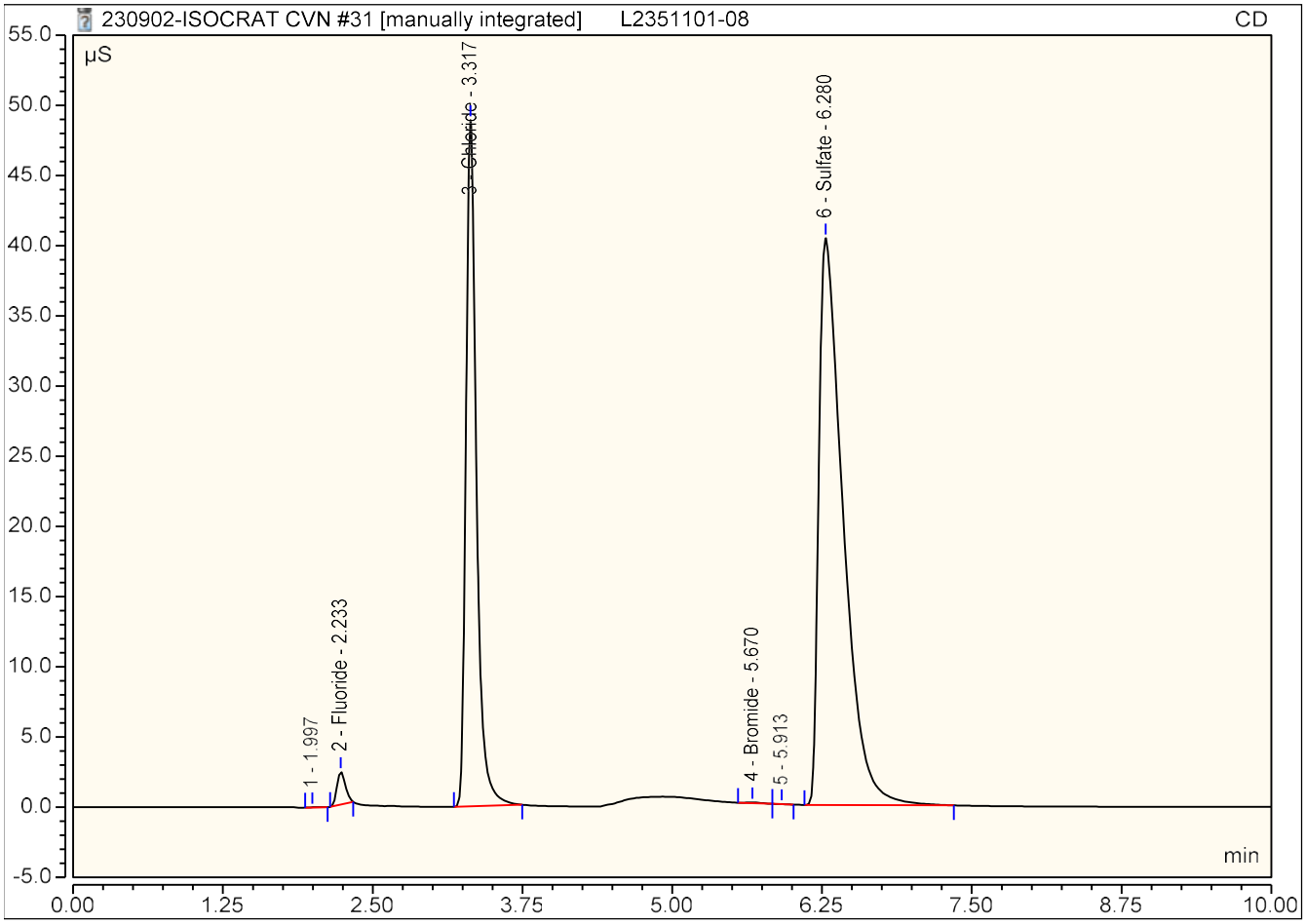
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.190	2.315	0.4277
3	3.32	**Chloride**	BMB	4.997	48.917	11.9272
4	5.67	**Bromide**	BMB	0.007	0.060	0.1106
6	6.28	**Sulfate**	BMB*	9.522	40.349	31.4369
TOTAL:				14.72	91.64	43.90



Peak Integration Report

Sample Name:	**L2351101-08**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 14:06**	*Run Time:*	**10.00**

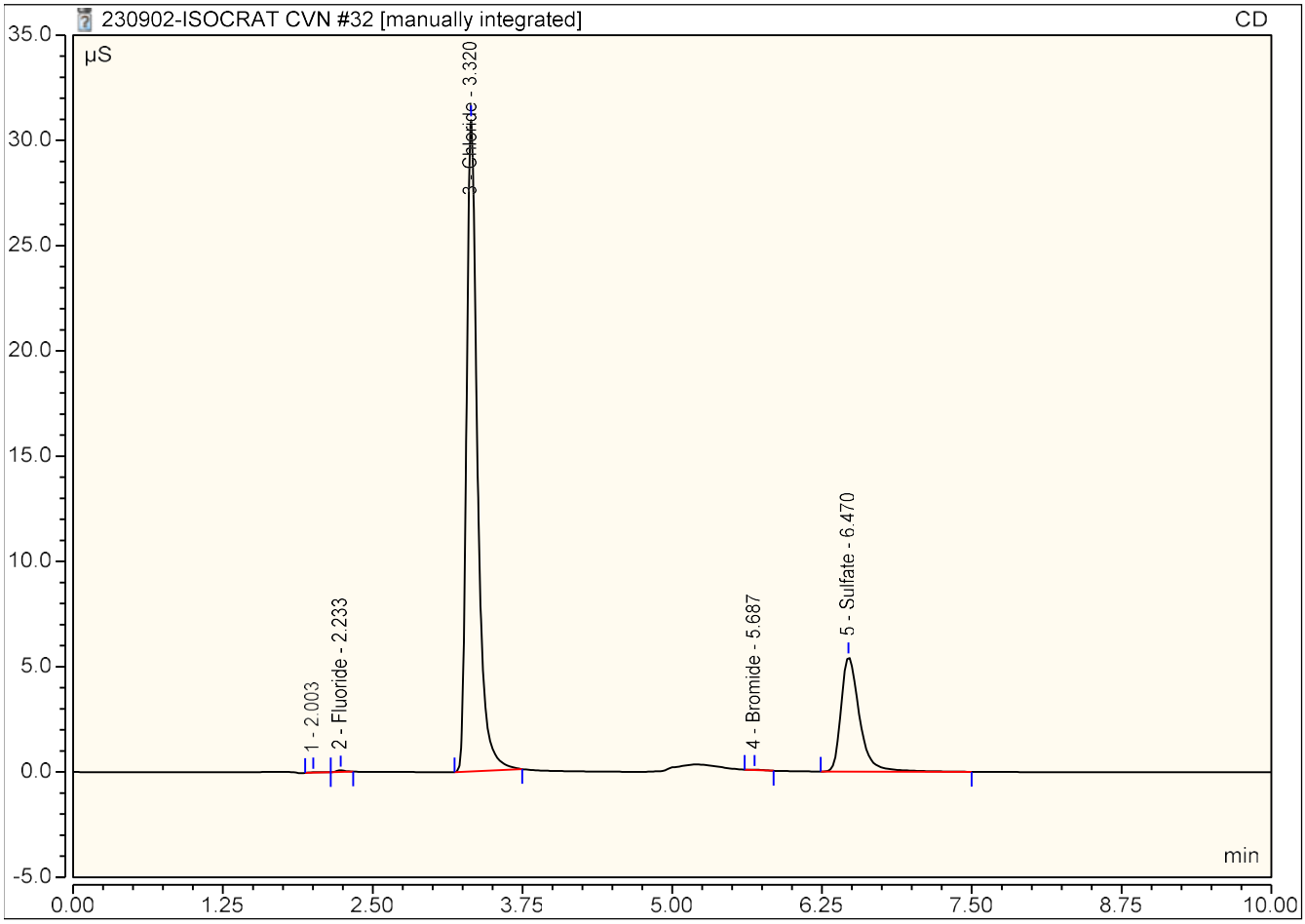
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.191	2.329	0.4294
3	3.32	**Chloride**	BMB	4.989	48.893	11.9099
4	5.67	**Bromide**	BMB	0.008	0.060	0.1115
6	6.28	**Sulfate**	BMB*	9.505	40.371	31.3798
TOTAL:				14.69	91.65	43.83



Peak Integration Report

Sample Name:	**L2351101-10; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 14:18**	*Run Time:*	**10.00**

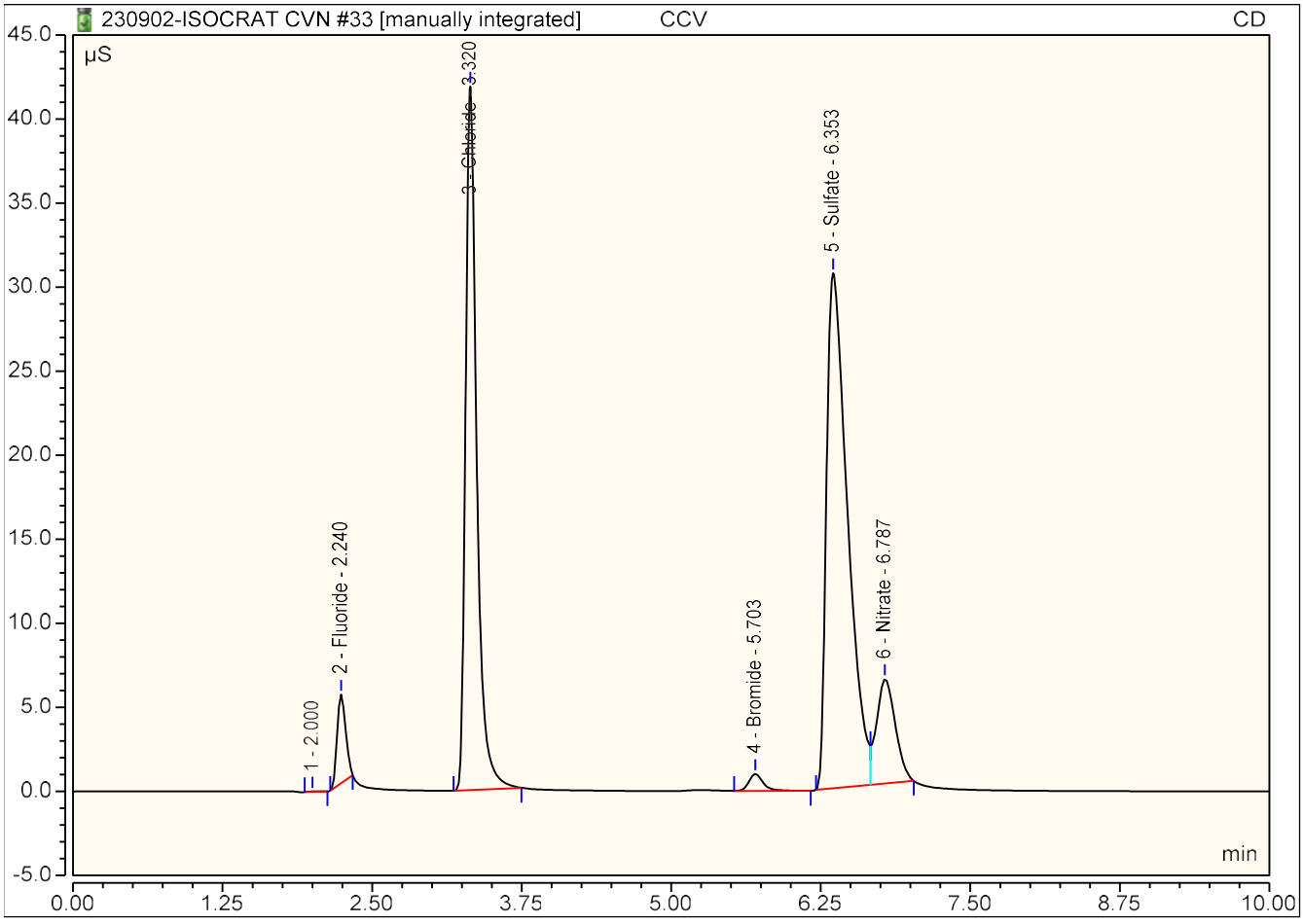
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.006	0.074	0.4289
3	3.32	**Chloride**	BMB	3.297	30.934	78.8718
4	5.69	**Bromide**	BMB	0.003	0.020	0.7992
5	6.47	**Sulfate**	BMB*	0.976	5.441	32.6941
TOTAL:				4.28	36.47	112.79



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 14:30**	*Run Time:*	**10.00**

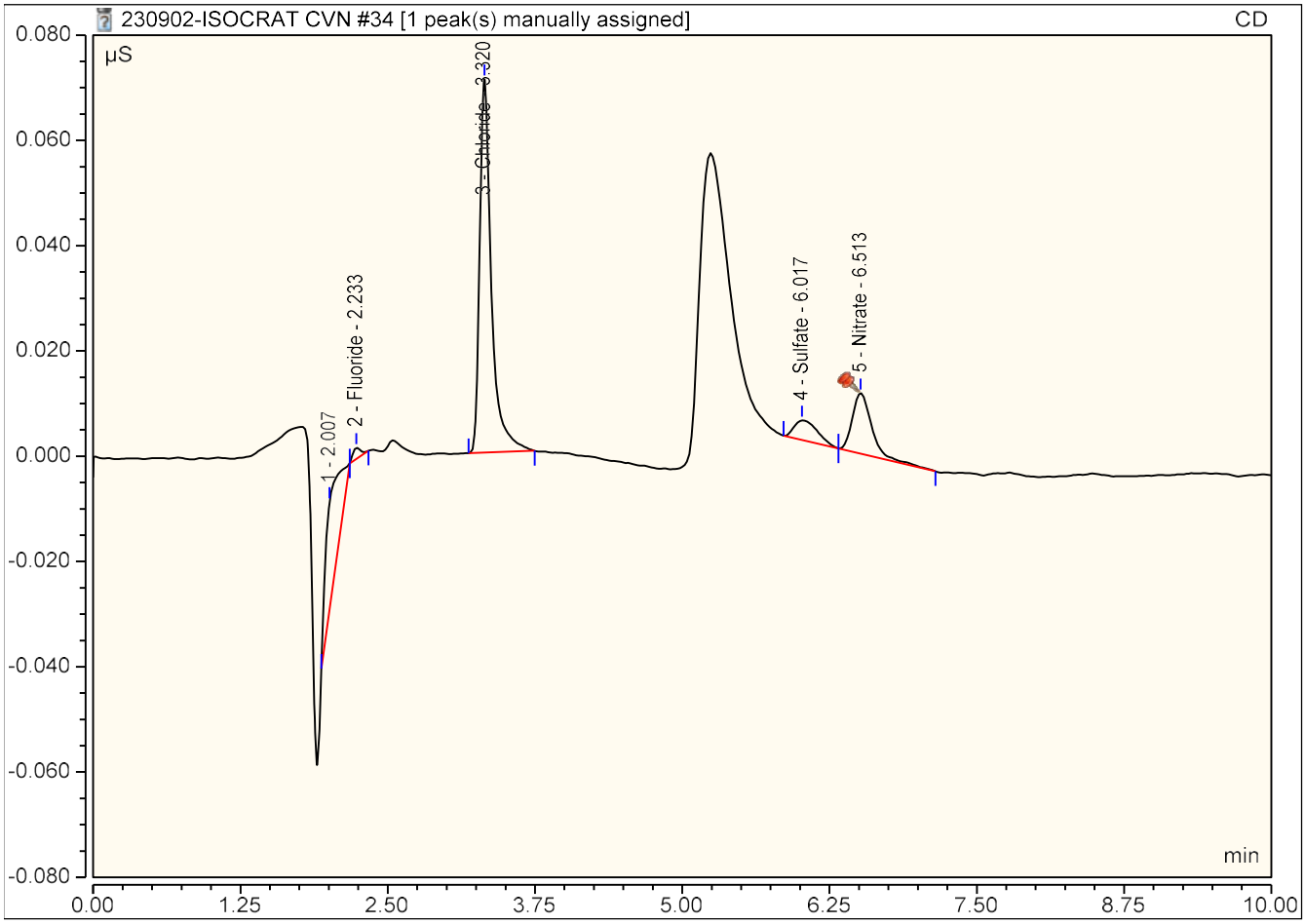
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	0.436	5.274	0.9421
3	3.32	**Chloride**	BMB	4.519	41.855	10.7923
4	5.70	**Bromide**	BMB	0.141	1.005	0.9602
5	6.35	**Sulfate**	BM *	6.245	30.654	20.6349
6	6.79	**Nitrate**	MB*	1.135	6.212	1.0510
TOTAL:				12.48	85.00	34.38



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 14:42**	*Run Time:*	**10.00**

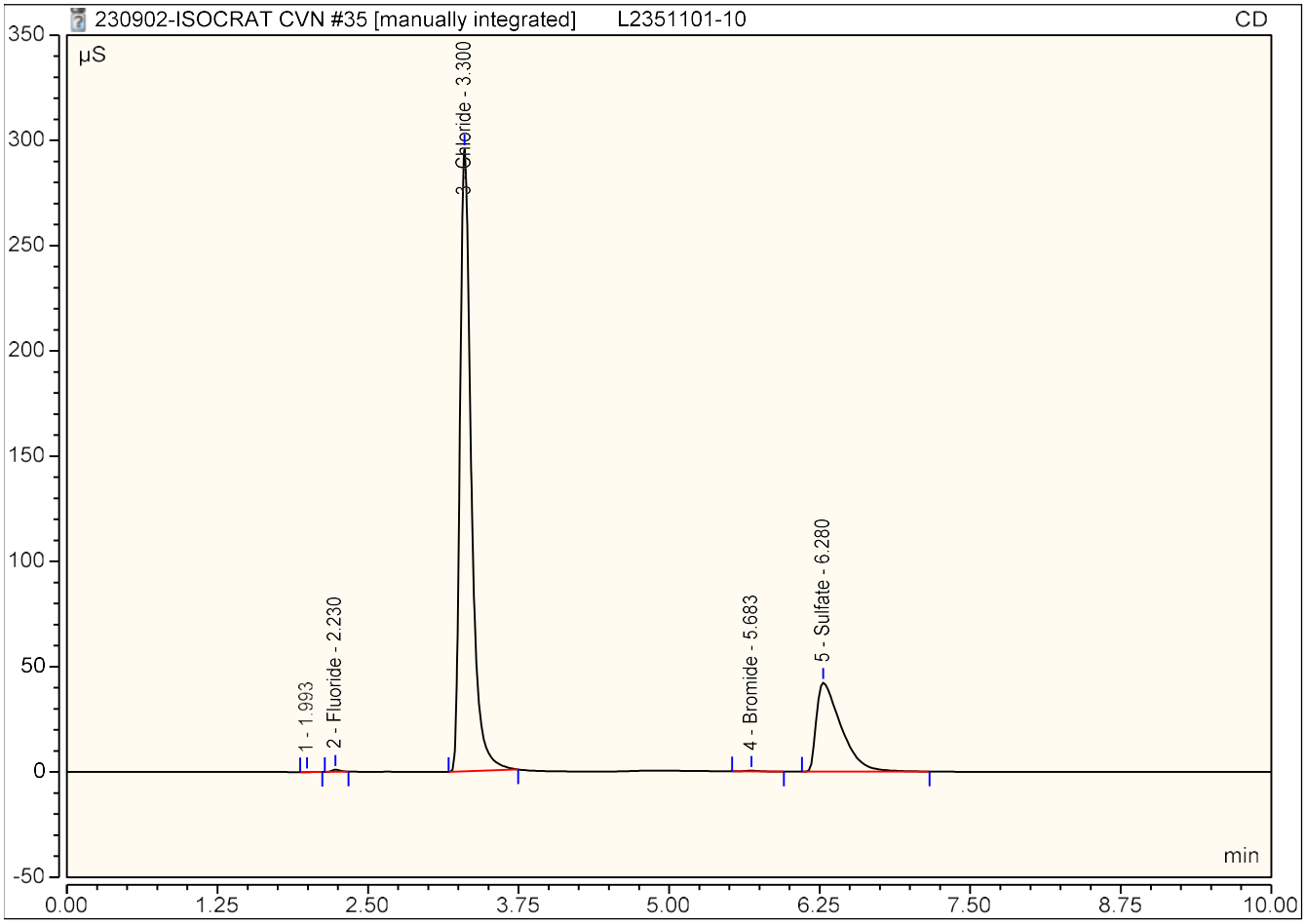
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.000	0.002	0.0305
3	3.32	**Chloride**	BMB	0.008	0.071	0.0674
4	6.02	**Sulfate**	BMB	0.001	0.004	0.0570
5	6.51	**Nitrate**	BMB^	0.002	0.011	0.0241
TOTAL:				0.01	0.09	0.18



Peak Integration Report

Sample Name:	**L2351101-10**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 14:55**	*Run Time:*	**10.00**

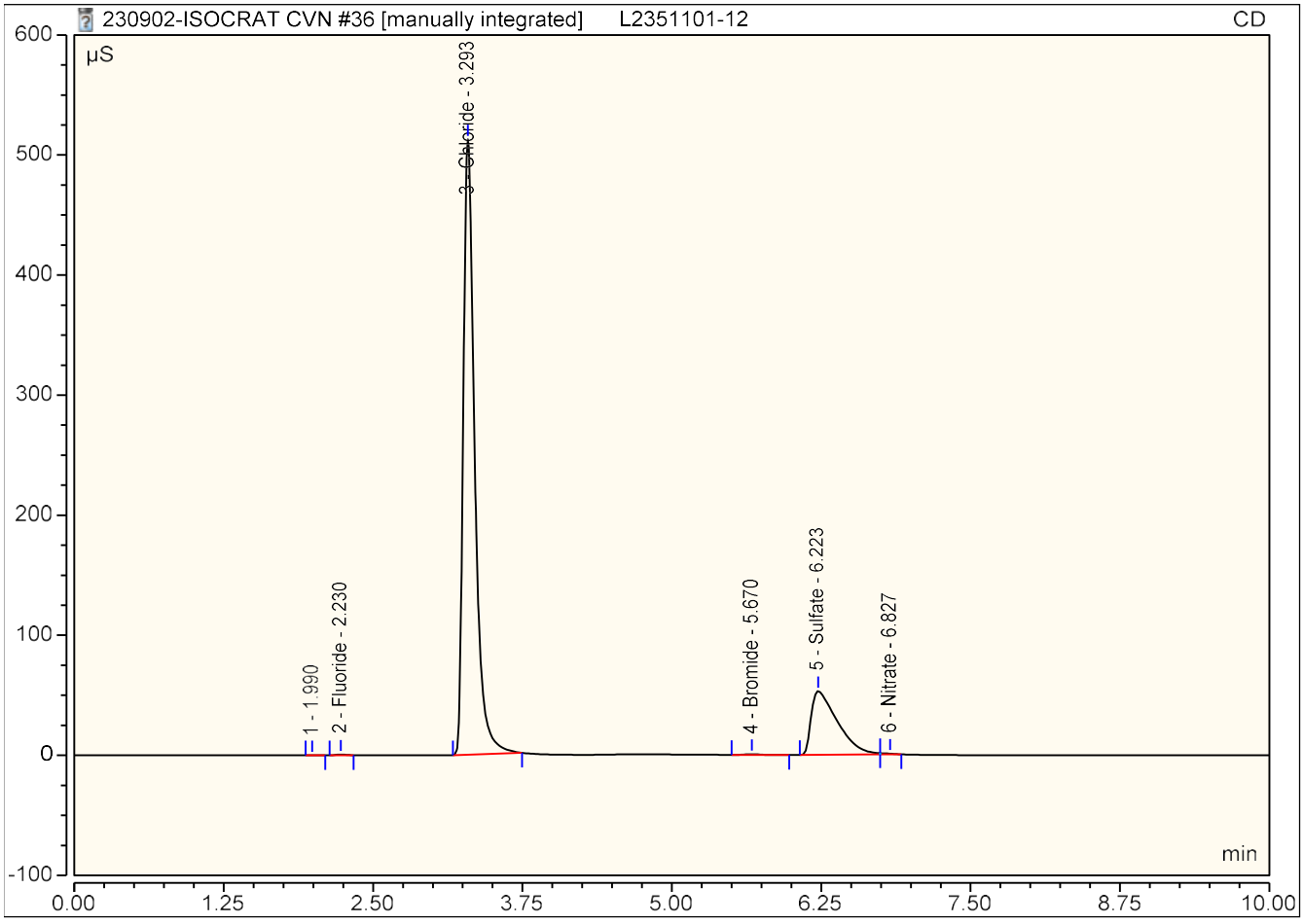
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.080	0.974	0.1969
3	3.30	**Chloride**	BMB	32.203	295.568	76.6076
4	5.68	**Bromide**	BMB	0.050	0.363	0.3811
5	6.28	**Sulfate**	BMB*	10.034	42.311	33.1258
TOTAL:				42.37	339.21	110.31



Peak Integration Report

Sample Name:	**L2351101-12**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 15:07**	*Run Time:*	**10.00**

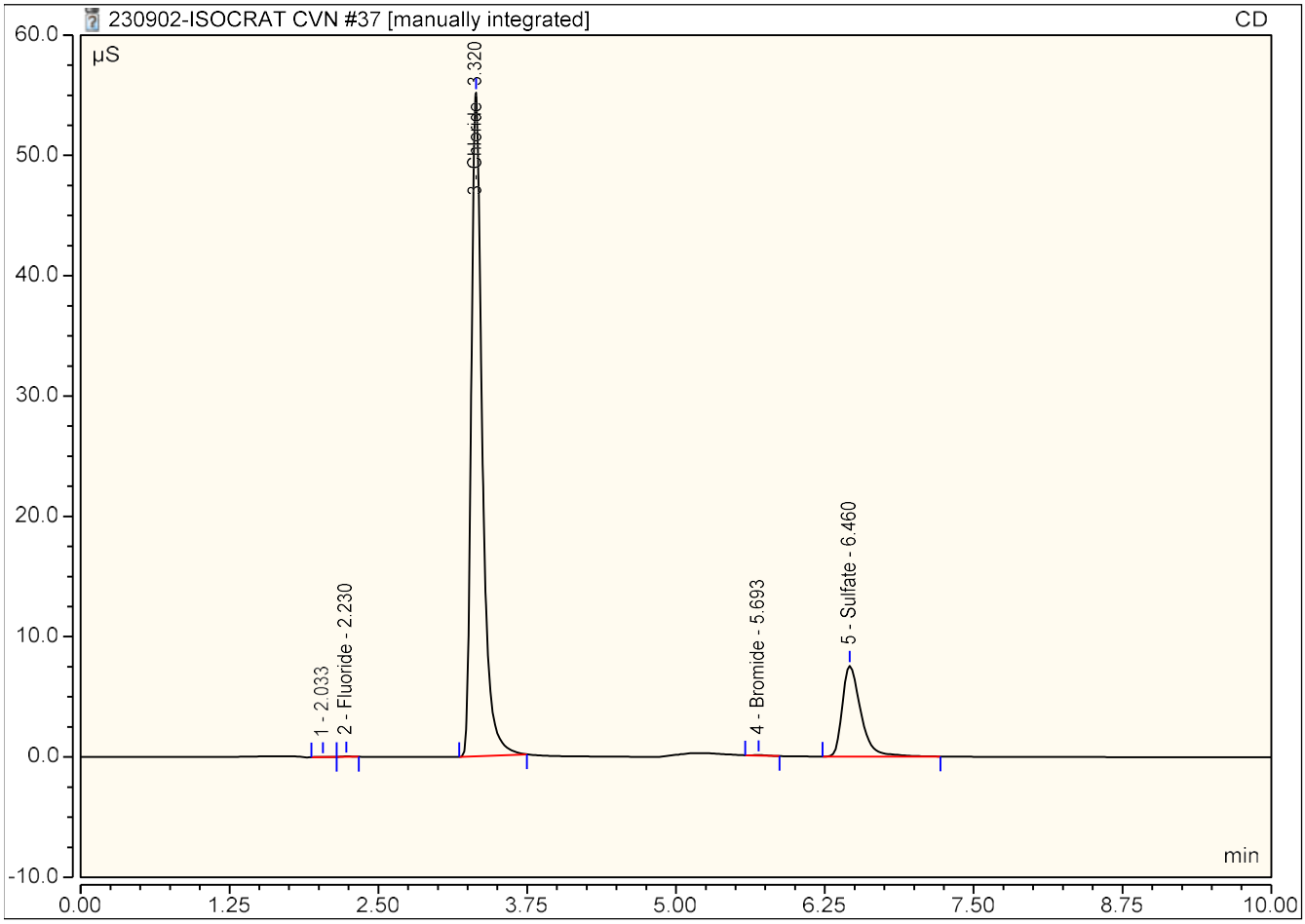
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.048	0.576	0.1313
3	3.29	**Chloride**	BMB	56.867	512.493	135.2452
4	5.67	**Bromide**	BMB	0.089	0.632	0.6301
5	6.22	**Sulfate**	BM *	13.473	53.043	44.4571
6	6.83	**Nitrate**	MB*	0.099	0.635	0.1123
TOTAL:				70.58	567.38	180.58



Peak Integration Report

Sample Name:	**L2351101-12; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 15:19**	*Run Time:*	**10.00**

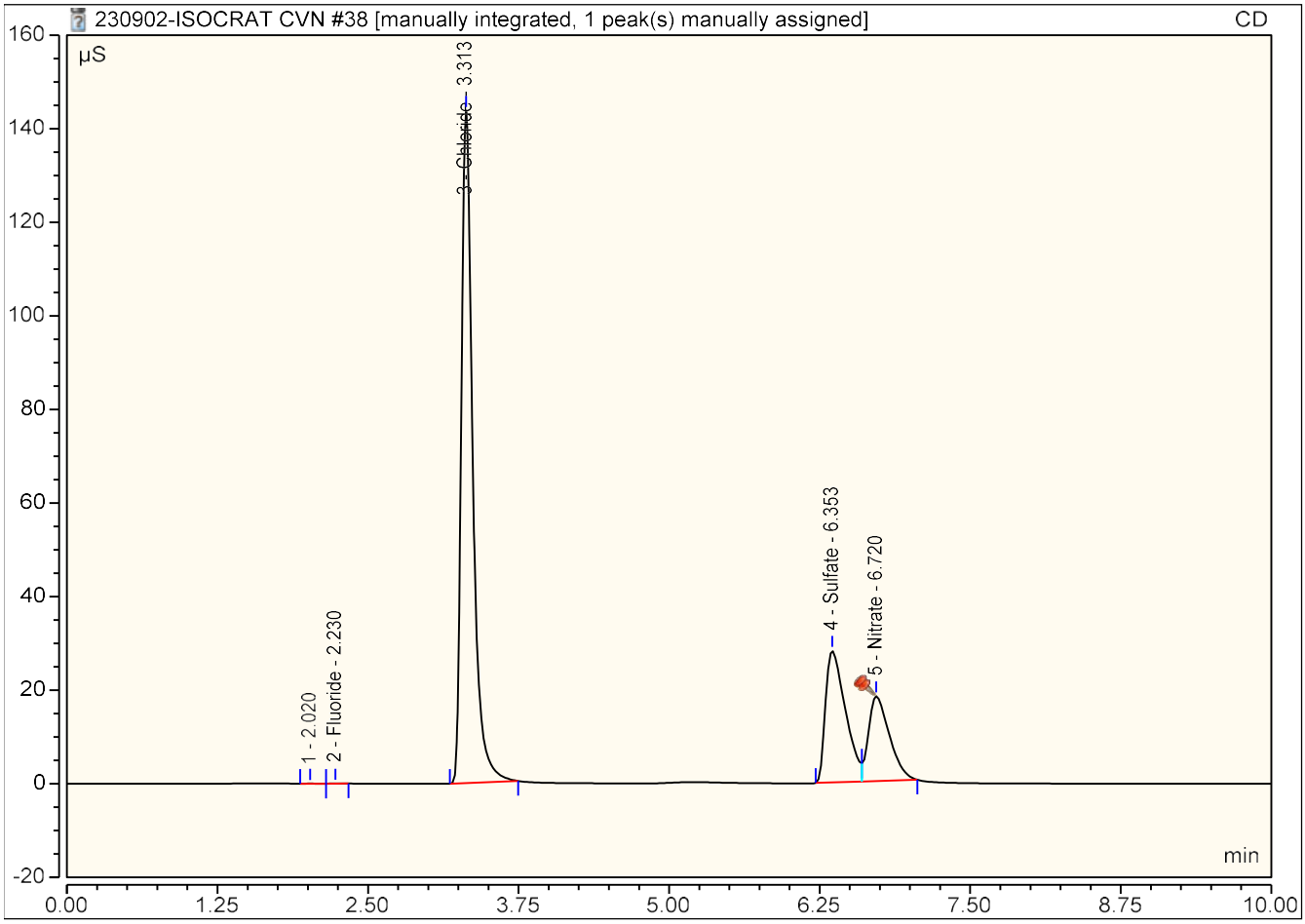
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.004	0.049	0.3842
3	3.32	**Chloride**	BMB	5.921	55.138	141.2487
4	5.69	**Bromide**	BMB	0.005	0.043	0.9811
5	6.46	**Sulfate**	BMB*	1.363	7.552	45.4637
TOTAL:				7.29	62.78	188.08



Peak Integration Report

Sample Name:	**L2350946-01 BR**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 15:31**	*Run Time:*	**10.00**

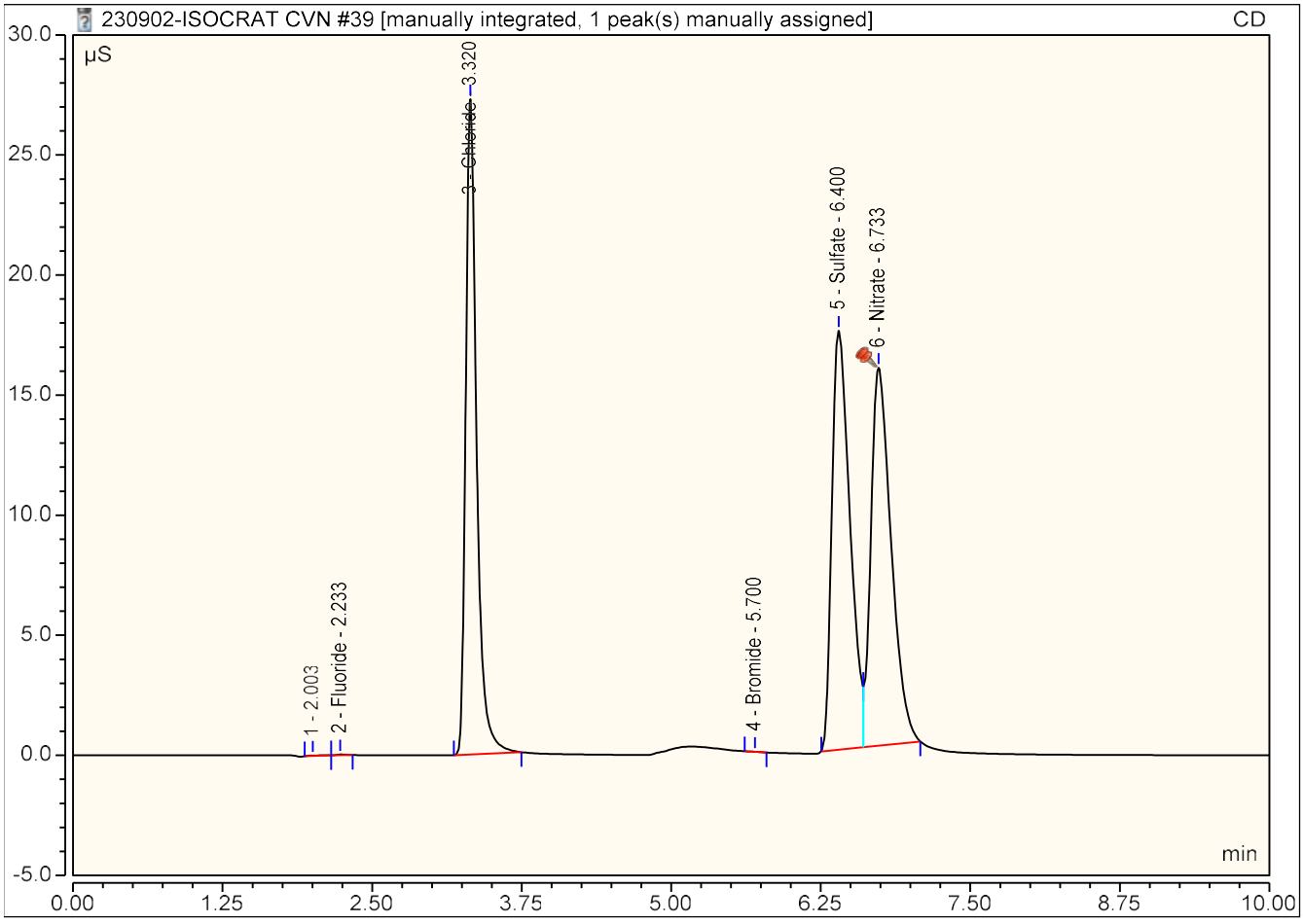
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.005	0.062	0.0405
3	3.31	**Chloride**	BMB	15.772	143.705	37.5447
4	6.35	**Sulfate**	BM *	5.398	28.173	17.8434
5	6.72	**Nitrate**	MB*^	3.650	18.166	3.3303
TOTAL:				24.82	190.11	58.76



Peak Integration Report

Sample Name:	**L2350946-02**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 15:43**	*Run Time:*	**10.00**

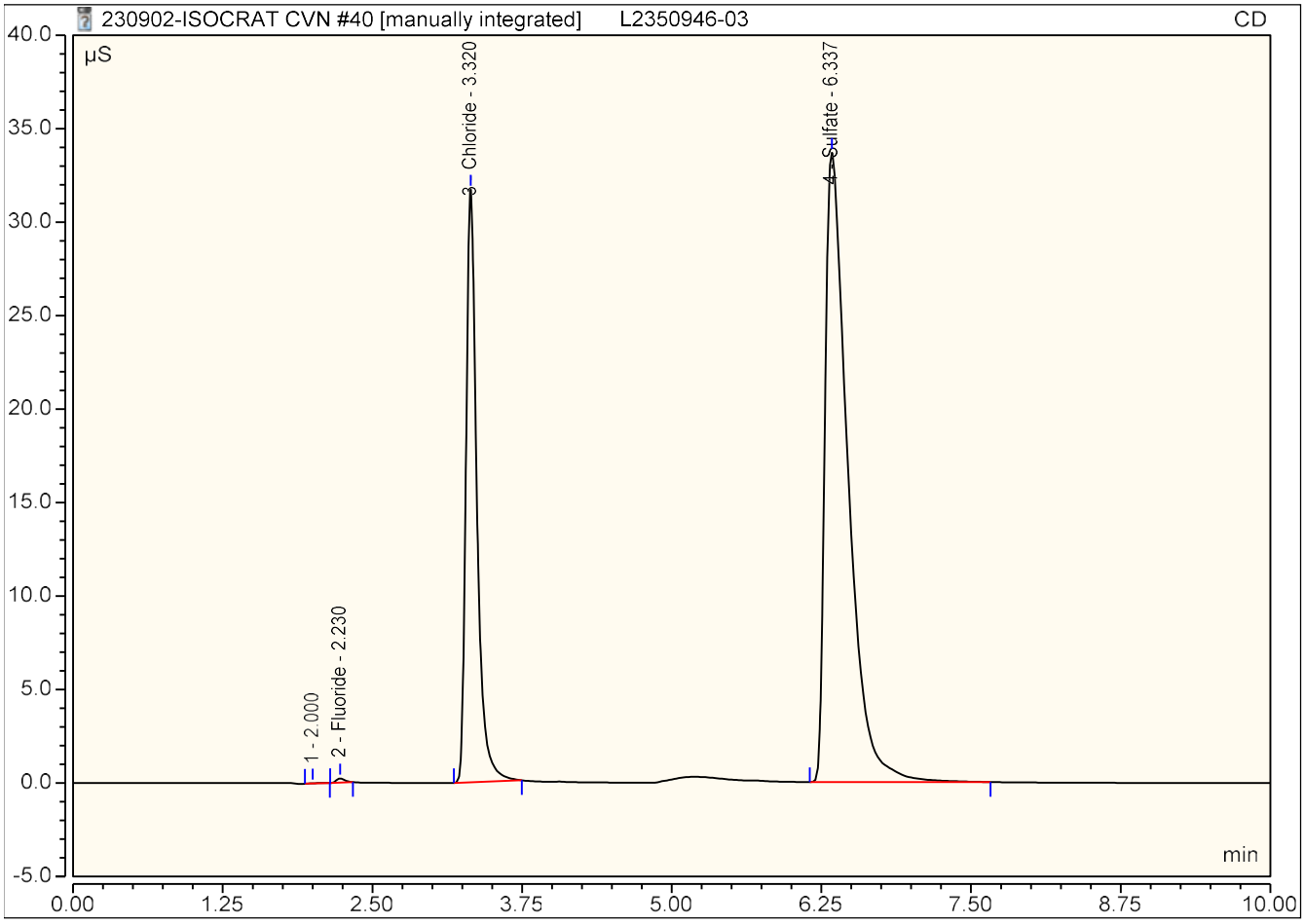
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.003	0.031	0.0355
3	3.32	**Chloride**	BMB	2.872	27.295	6.8761
4	5.70	**Bromide**	BMB	0.000	0.004	0.0657
5	6.40	**Sulfate**	BM *	3.052	17.444	10.1118
6	6.73	**Nitrate**	MB*^	3.085	15.737	2.8182
TOTAL:				9.01	60.51	19.91



Peak Integration Report

Sample Name:	**L2350946-03**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 15:55**	*Run Time:*	**10.00**

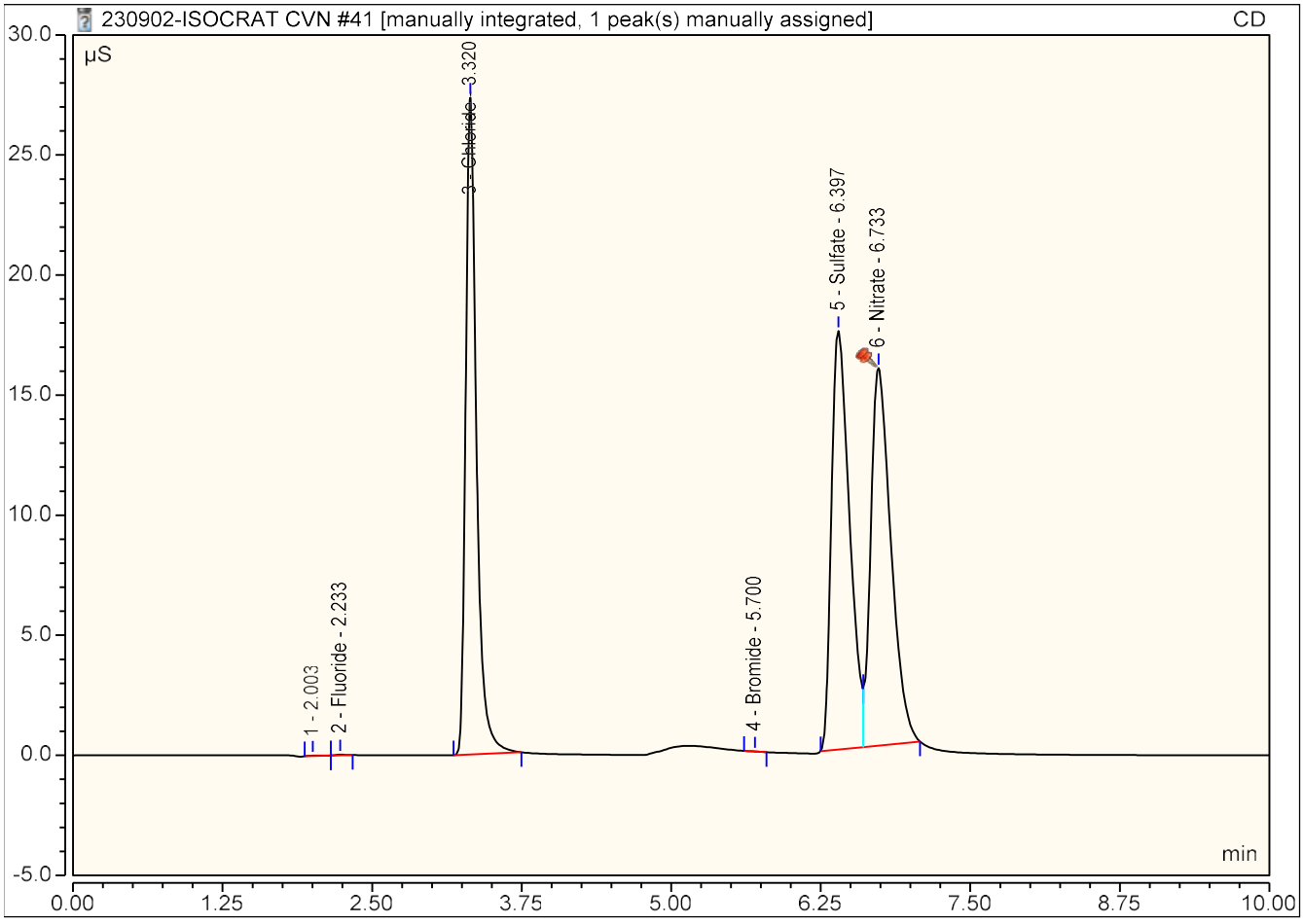
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.018	0.229	0.0684
3	3.32	**Chloride**	BMB	3.352	31.710	8.0176
4	6.34	**Sulfate**	BMB*	7.487	33.671	24.7303
TOTAL:				10.86	65.61	32.82



Peak Integration Report

Sample Name:	**L2350946-04**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 16:07**	*Run Time:*	**10.00**

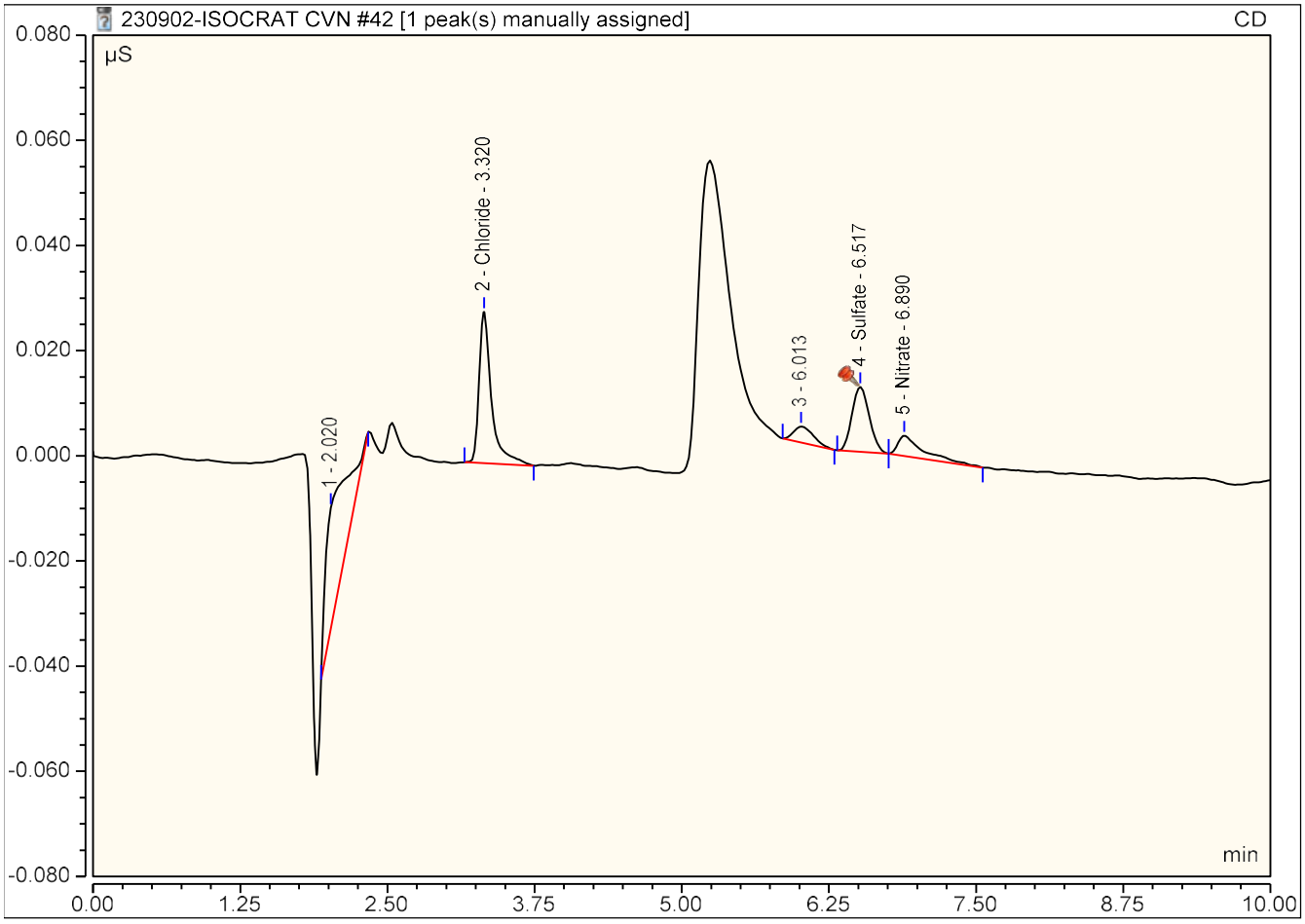
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.003	0.031	0.0356
3	3.32	**Chloride**	BMB	2.865	27.357	6.8593
4	5.70	**Bromide**	BMB	0.000	0.004	0.0656
5	6.40	**Sulfate**	BM *	3.053	17.422	10.1150
6	6.73	**Nitrate**	MB*^	3.065	15.714	2.7996
TOTAL:				8.99	60.53	19.88



Peak Integration Report

Sample Name:	**L2350946-06**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 16:19**	*Run Time:*	**10.00**

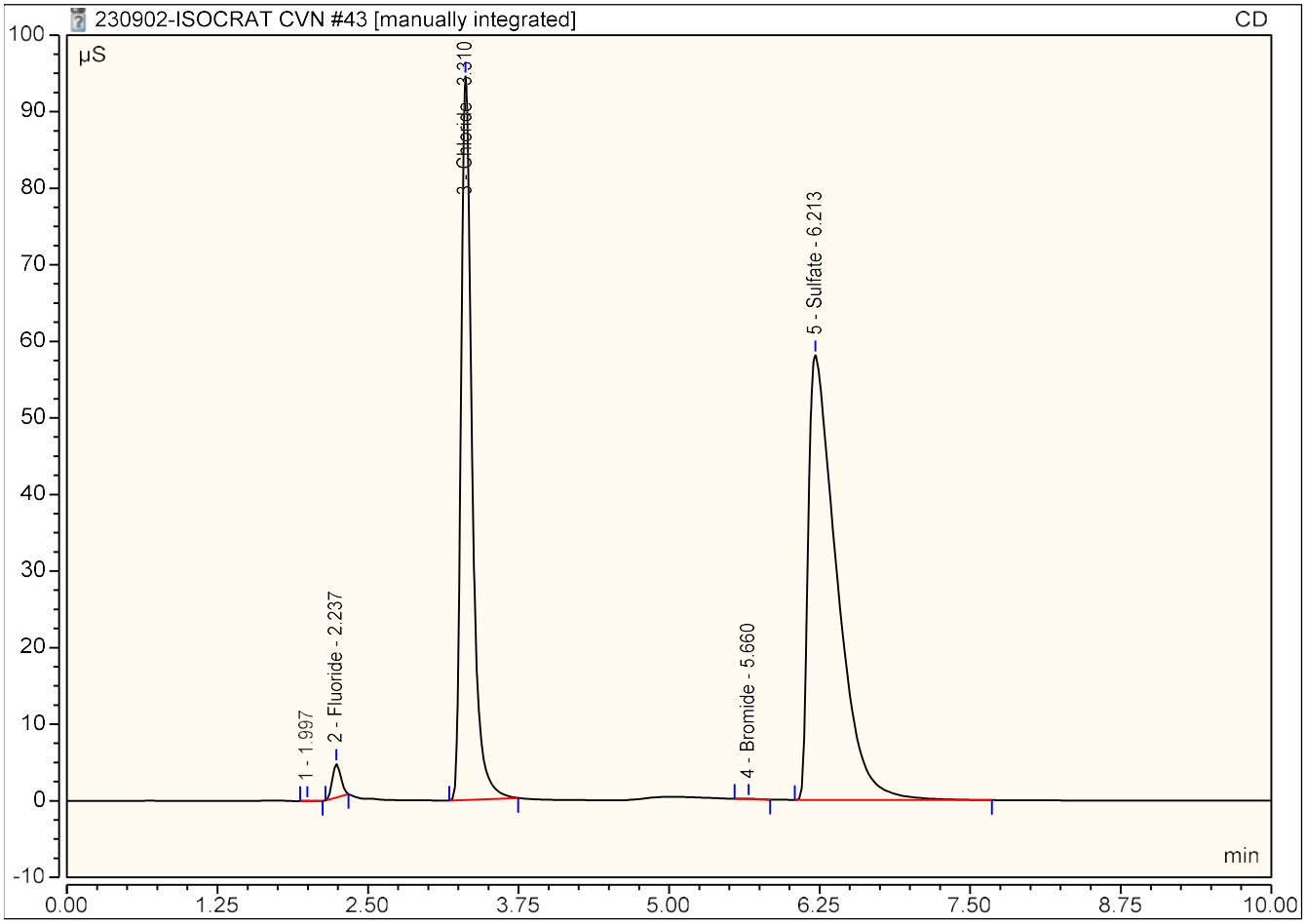
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.32	**Chloride**	BMB	0.004	0.029	0.0564
4	6.52	**Sulfate**	BMB^	0.002	0.012	0.0611
5	6.89	**Nitrate**	BMB	0.001	0.004	0.0230
TOTAL:				0.01	0.04	0.14



Peak Integration Report

Sample Name:	**L2350797-03 BR CL SO4**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 16:31**	*Run Time:*	**10.00**

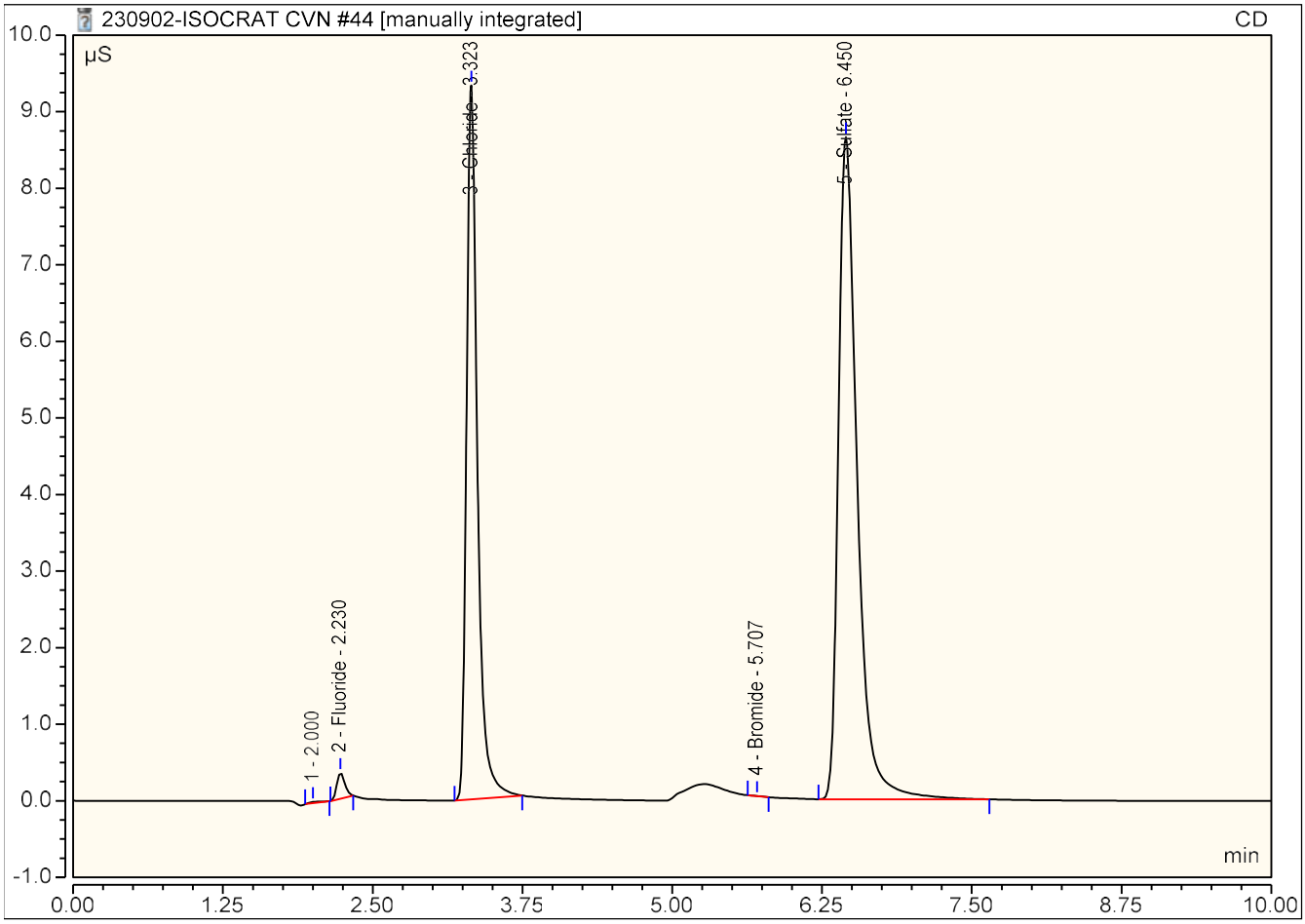
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	0.361	4.376	0.7860
3	3.31	**Chloride**	BMB	10.076	94.500	24.0034
4	5.66	**Bromide**	BMB	0.008	0.063	0.1141
5	6.21	**Sulfate**	BMB*	15.878	58.085	52.3848
TOTAL:				26.32	157.02	77.29



Peak Integration Report

Sample Name:	**XL2350797-03; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**10.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 16:43**	*Run Time:*	**10.00**

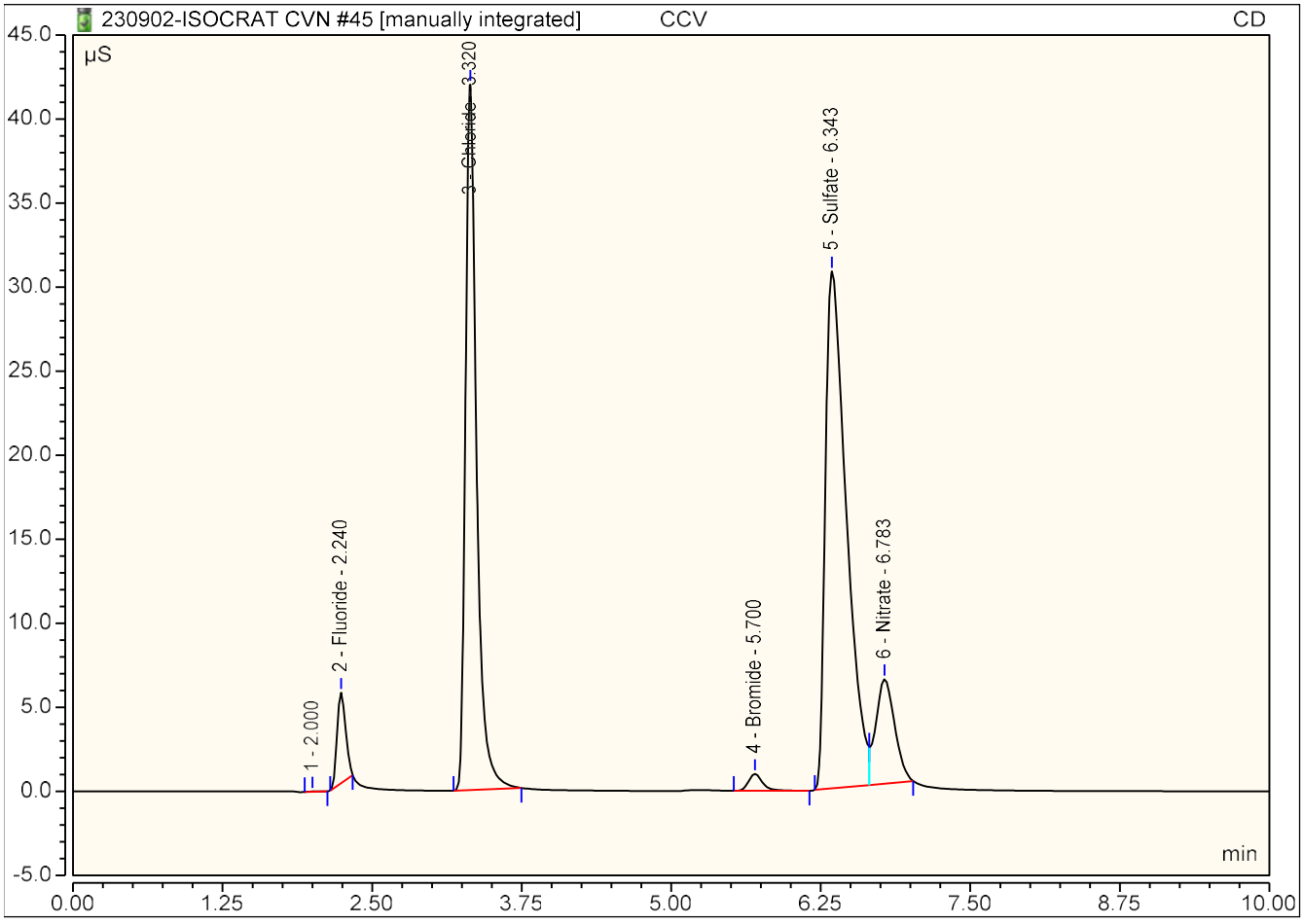
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.026	0.337	0.8521
3	3.32	**Chloride**	BMB	0.981	9.324	23.7939
4	5.71	**Bromide**	BMB	0.000	0.003	0.6460
5	6.45	**Sulfate**	BMB*	1.576	8.646	52.4705
TOTAL:				2.58	18.31	77.76



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 16:55**	*Run Time:*	**10.00**

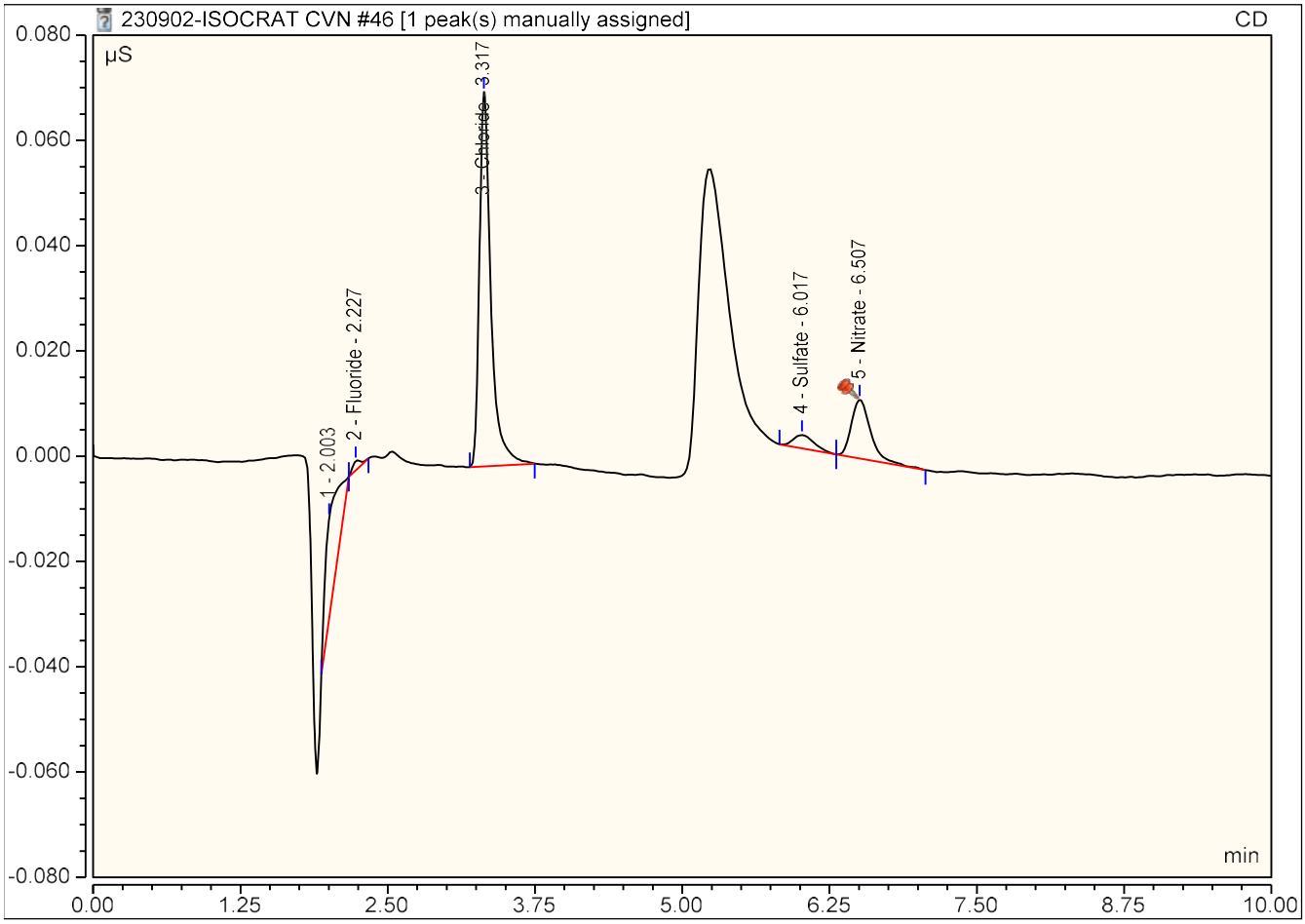
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	0.446	5.389	0.9619
3	3.32	**Chloride**	BMB	4.523	41.980	10.8017
4	5.70	**Bromide**	BMB	0.141	1.004	0.9580
5	6.34	**Sulfate**	BM *	6.257	30.757	20.6763
6	6.78	**Nitrate**	MB*	1.142	6.218	1.0571
TOTAL:				12.51	85.35	34.45



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 17:07**	*Run Time:*	**10.00**

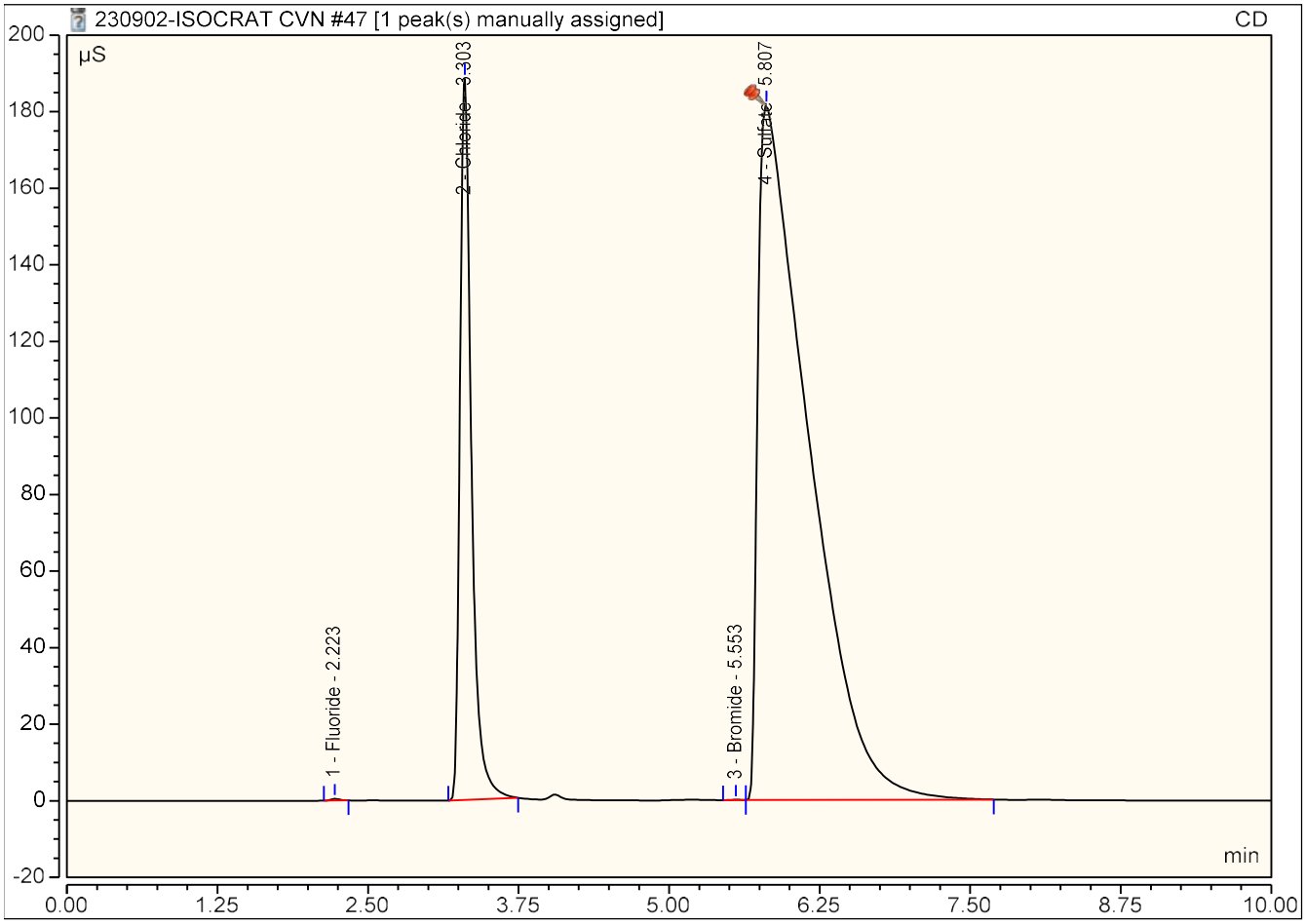
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.000	0.002	0.0304
3	3.32	**Chloride**	BMB	0.008	0.071	0.0671
4	6.02	**Sulfate**	BMB	0.001	0.003	0.0559
5	6.51	**Nitrate**	BMB^	0.002	0.011	0.0240
TOTAL:				0.01	0.09	0.18



Peak Integration Report

Sample Name:	**L2350269-01**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 17:20**	*Run Time:*	**10.00**

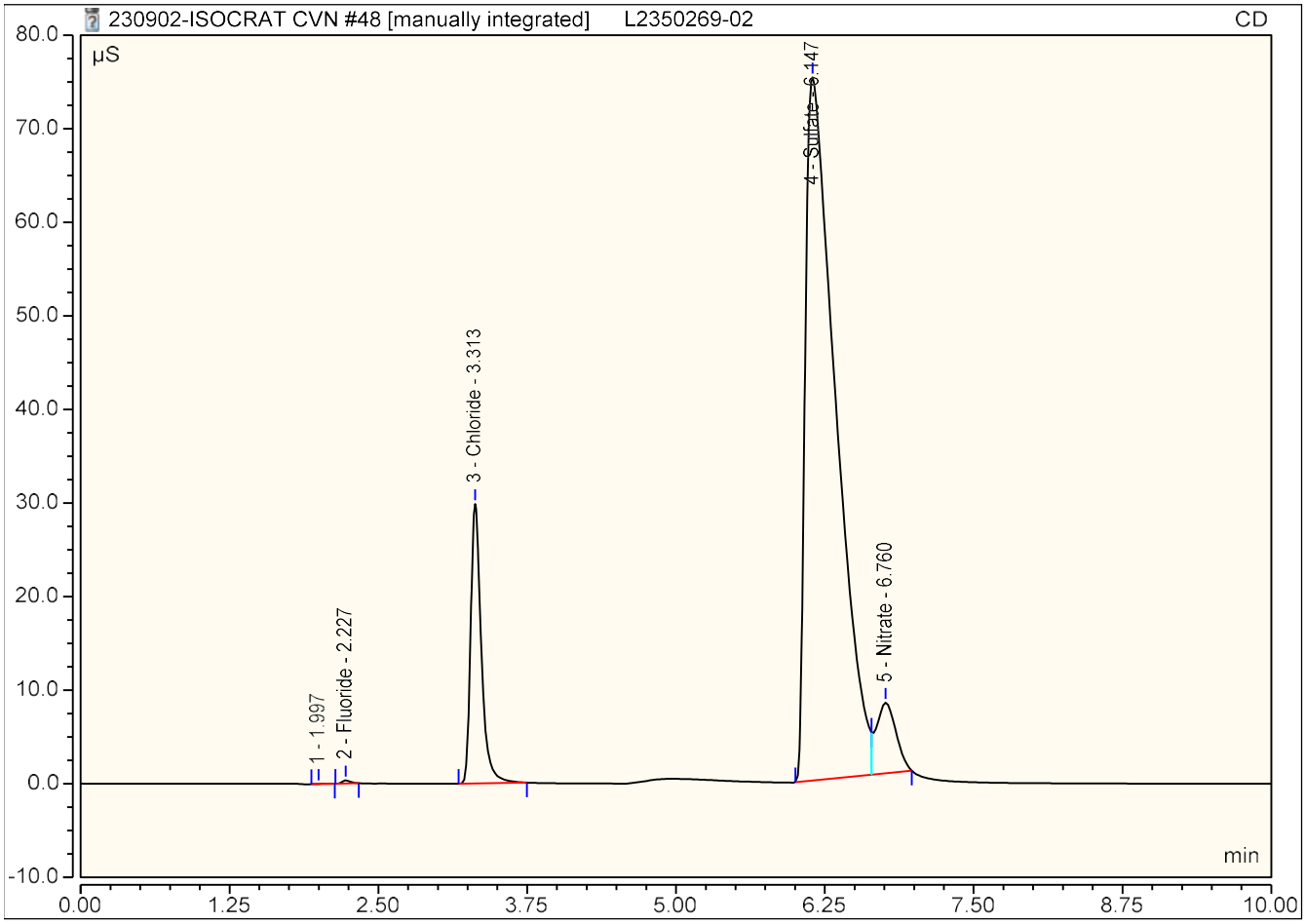
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.22	**Fluoride**	BMB	0.040	0.480	0.1133
2	3.30	**Chloride**	BMB	20.858	188.486	49.6373
3	5.55	**Bromide**	BMB	0.010	0.100	0.1242
4	5.81	**Sulfate**	BMB^	88.752	181.473	292.5645
TOTAL:				109.66	370.54	342.44



Peak Integration Report

Sample Name:	**L2350269-02**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 17:32**	*Run Time:*	**10.00**

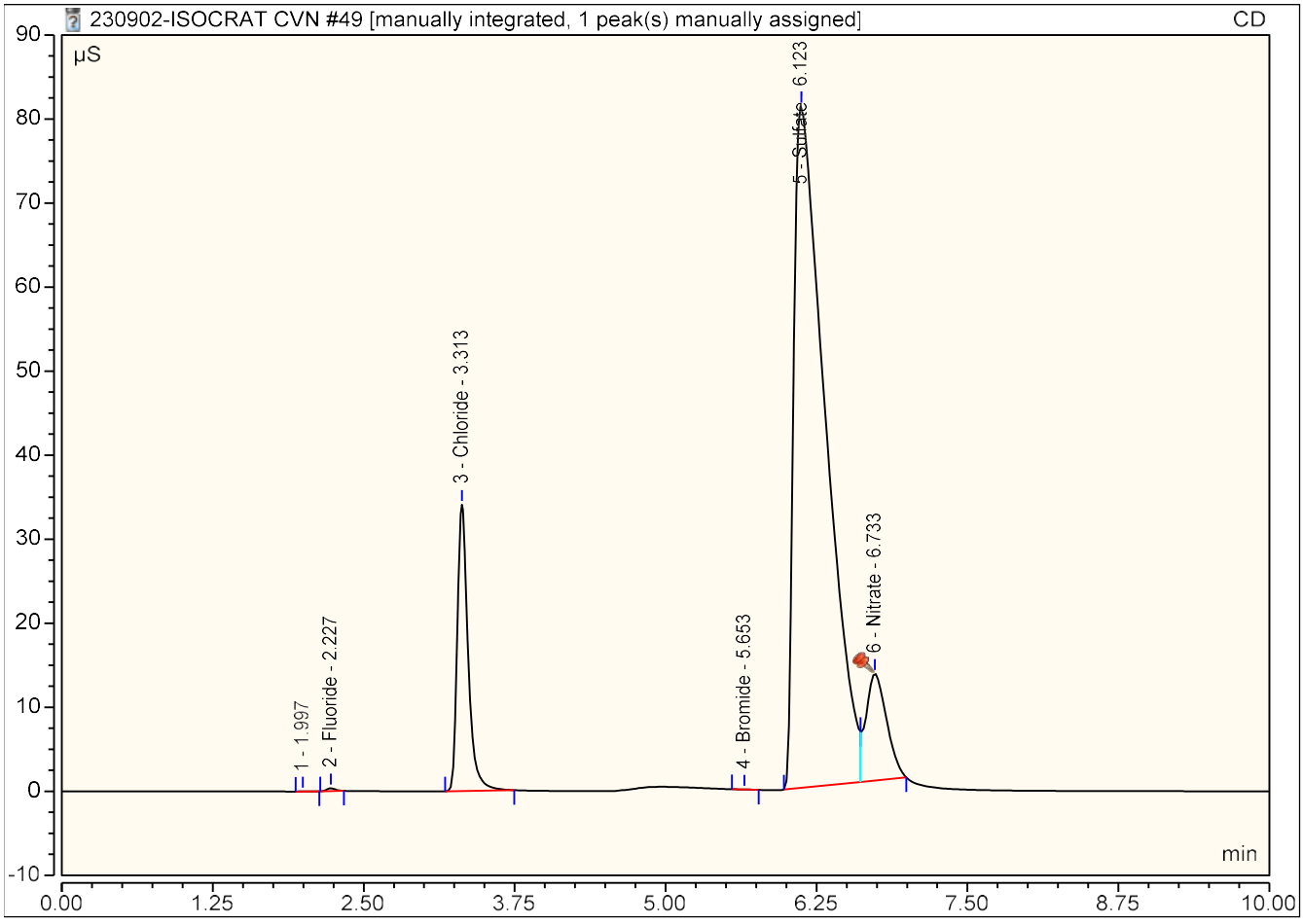
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.028	0.347	0.0888
3	3.31	**Chloride**	BMB	3.087	29.871	7.3867
4	6.15	**Sulfate**	BM *	22.105	75.141	72.9065
5	6.76	**Nitrate**	MB*	1.456	7.542	1.3415
TOTAL:				26.68	112.90	81.72



Peak Integration Report

Sample Name:	**L2350269-03**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 17:44**	*Run Time:*	**10.00**

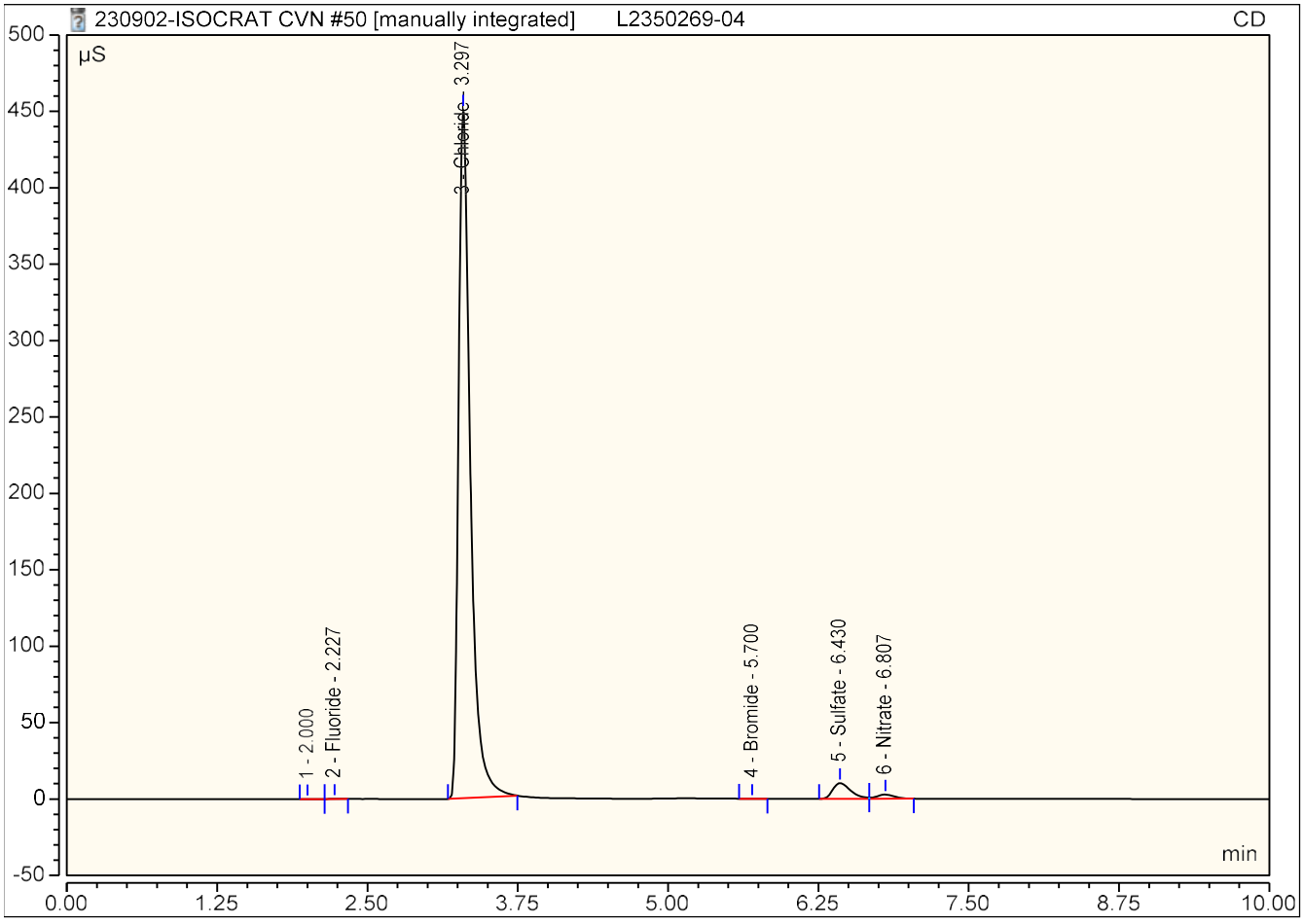
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.028	0.341	0.0879
3	3.31	**Chloride**	BMB	3.519	34.074	8.4144
4	5.65	**Bromide**	BMB	0.001	0.013	0.0718
5	6.12	**Sulfate**	BM *	24.563	81.107	81.0097
6	6.73	**Nitrate**	MB*^	2.537	12.723	2.3217
TOTAL:				30.65	128.26	91.91



Peak Integration Report

Sample Name:	**L2350269-04**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 17:56**	*Run Time:*	**10.00**

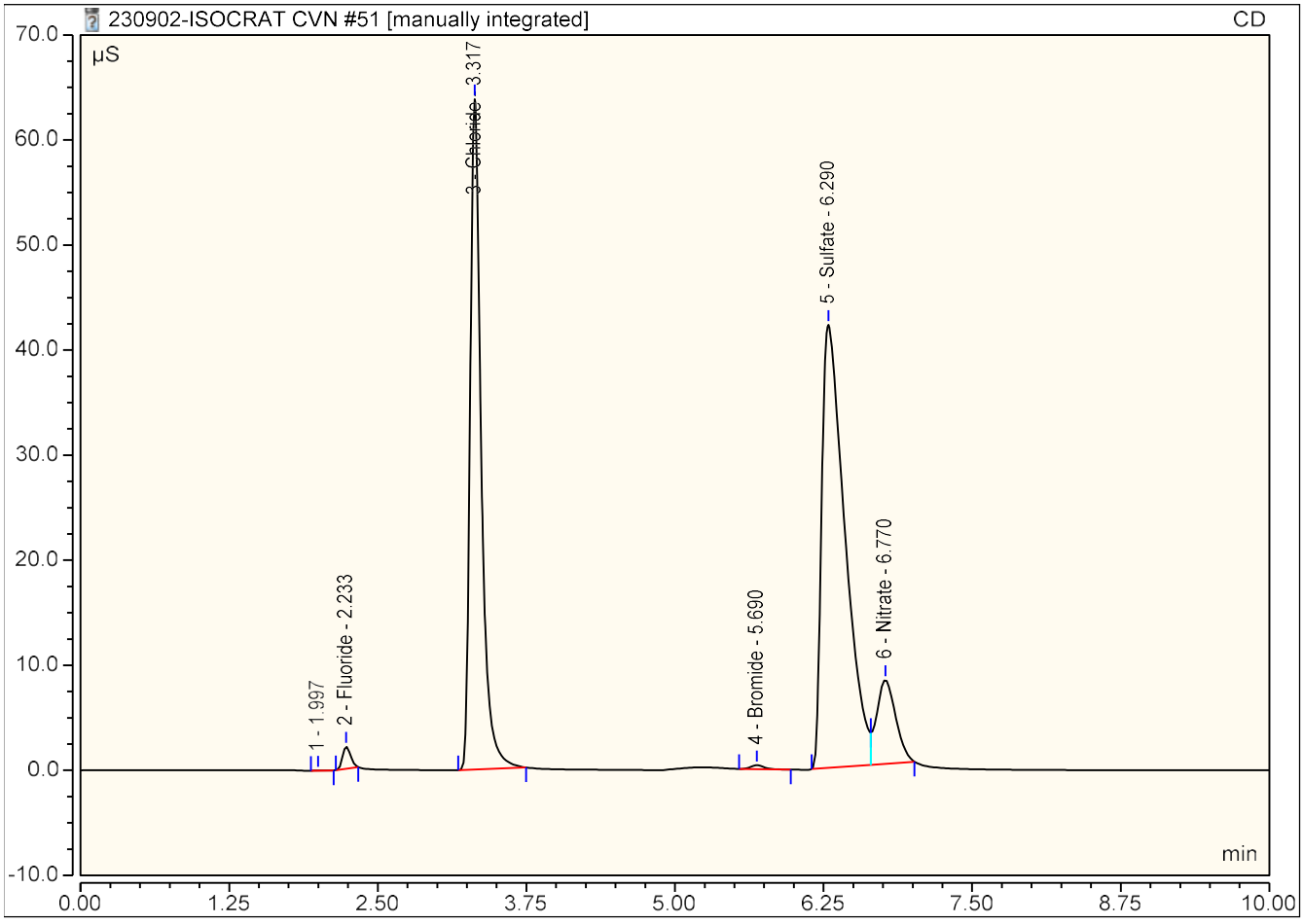
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.007	0.087	0.0451
3	3.30	**Chloride**	BMB	51.565	450.667	122.6407
4	5.70	**Bromide**	BMB	0.002	0.016	0.0742
5	6.43	**Sulfate**	BM *	1.782	10.286	5.9271
6	6.81	**Nitrate**	MB*	0.462	2.693	0.4408
TOTAL:				53.82	463.75	129.13



Peak Integration Report

Sample Name:	**L2350269-05 MS**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 18:08**	*Run Time:*	**10.00**

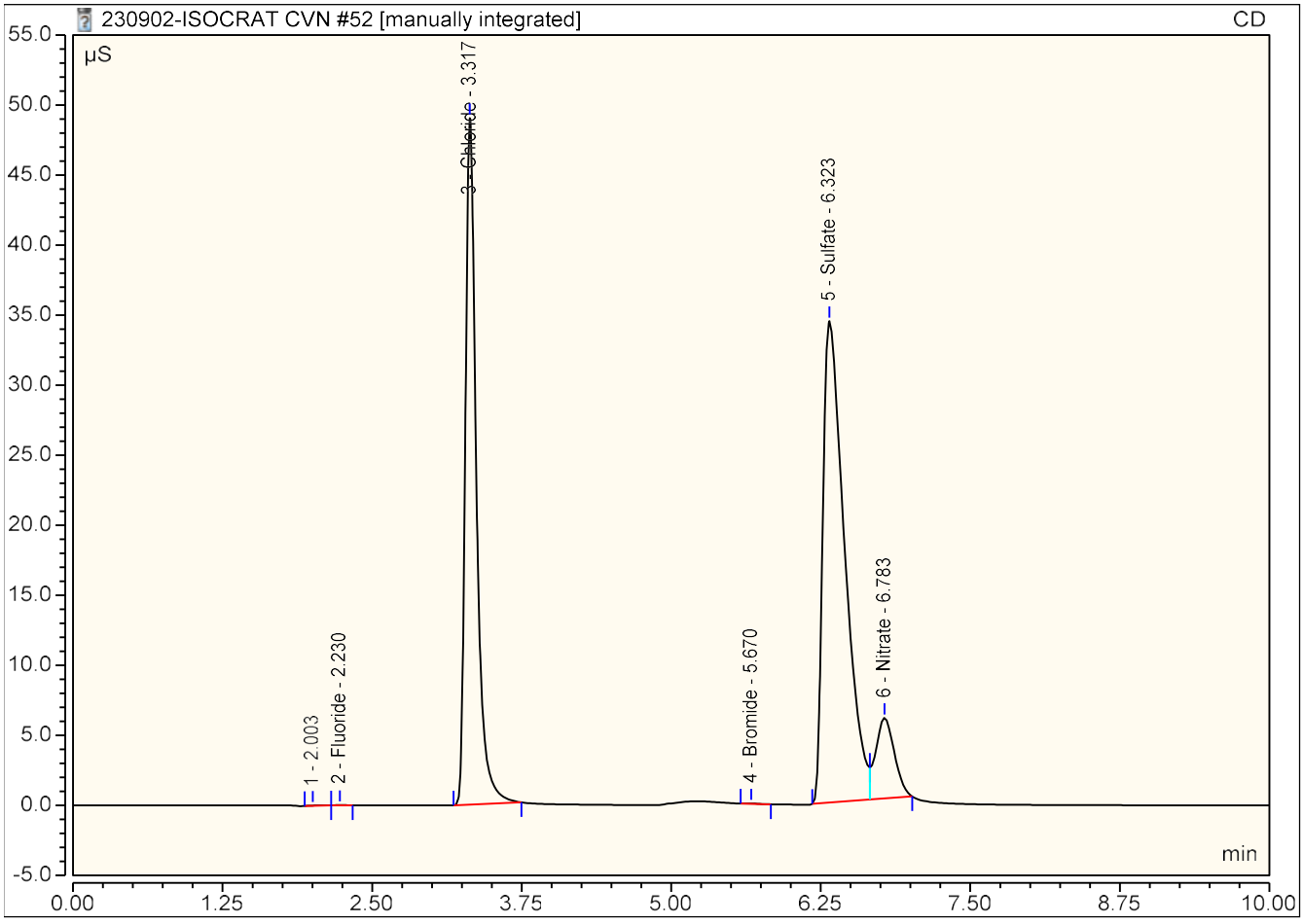
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.169	2.119	0.3846
3	3.32	**Chloride**	BMB	6.875	63.814	16.3936
4	5.69	**Bromide**	BMB	0.048	0.370	0.3693
5	6.29	**Sulfate**	BM *	9.508	42.174	31.3905
6	6.77	**Nitrate**	MB*	1.490	7.983	1.3725
TOTAL:				18.09	116.46	49.91



Peak Integration Report

Sample Name:	**L2350269-05 DUP**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 18:20**	*Run Time:*	**10.00**

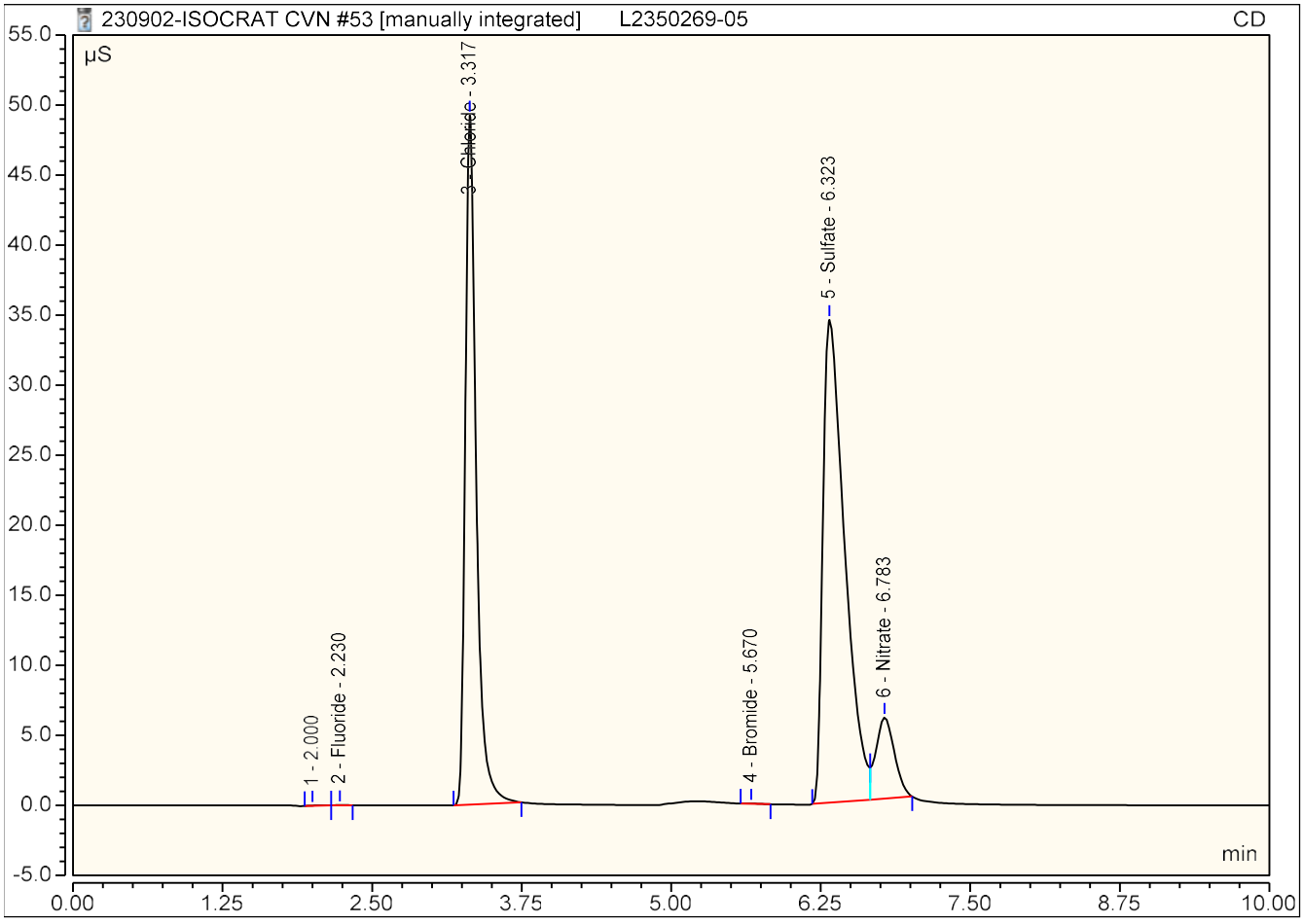
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.002	0.021	0.0337
3	3.32	**Chloride**	BMB	5.234	49.007	12.4915
4	5.67	**Bromide**	BMB	0.002	0.019	0.0787
5	6.32	**Sulfate**	BM *	7.249	34.369	23.9461
6	6.78	**Nitrate**	MB*	1.049	5.743	0.9726
TOTAL:				13.54	89.16	37.52



Peak Integration Report

Sample Name:	**L2350269-05**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 18:32**	*Run Time:*	**10.00**

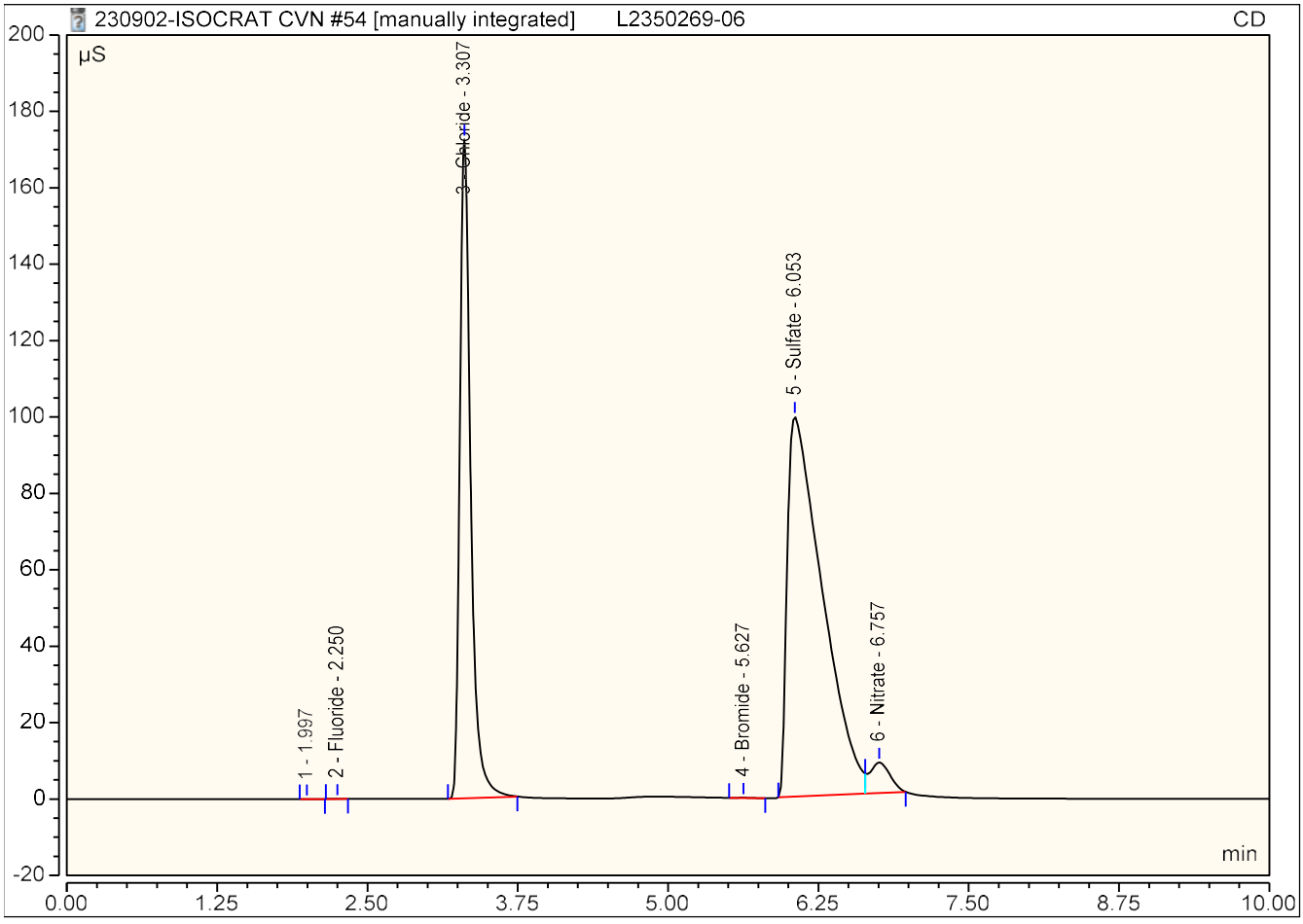
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.002	0.020	0.0336
3	3.32	**Chloride**	BMB	5.241	49.208	12.5094
4	5.67	**Bromide**	BMB	0.002	0.020	0.0790
5	6.32	**Sulfate**	BM *	7.266	34.478	24.0000
6	6.78	**Nitrate**	MB*	1.044	5.774	0.9686
TOTAL:				13.56	89.50	37.59



Peak Integration Report

Sample Name:	**L2350269-06**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 18:44**	*Run Time:*	**10.00**

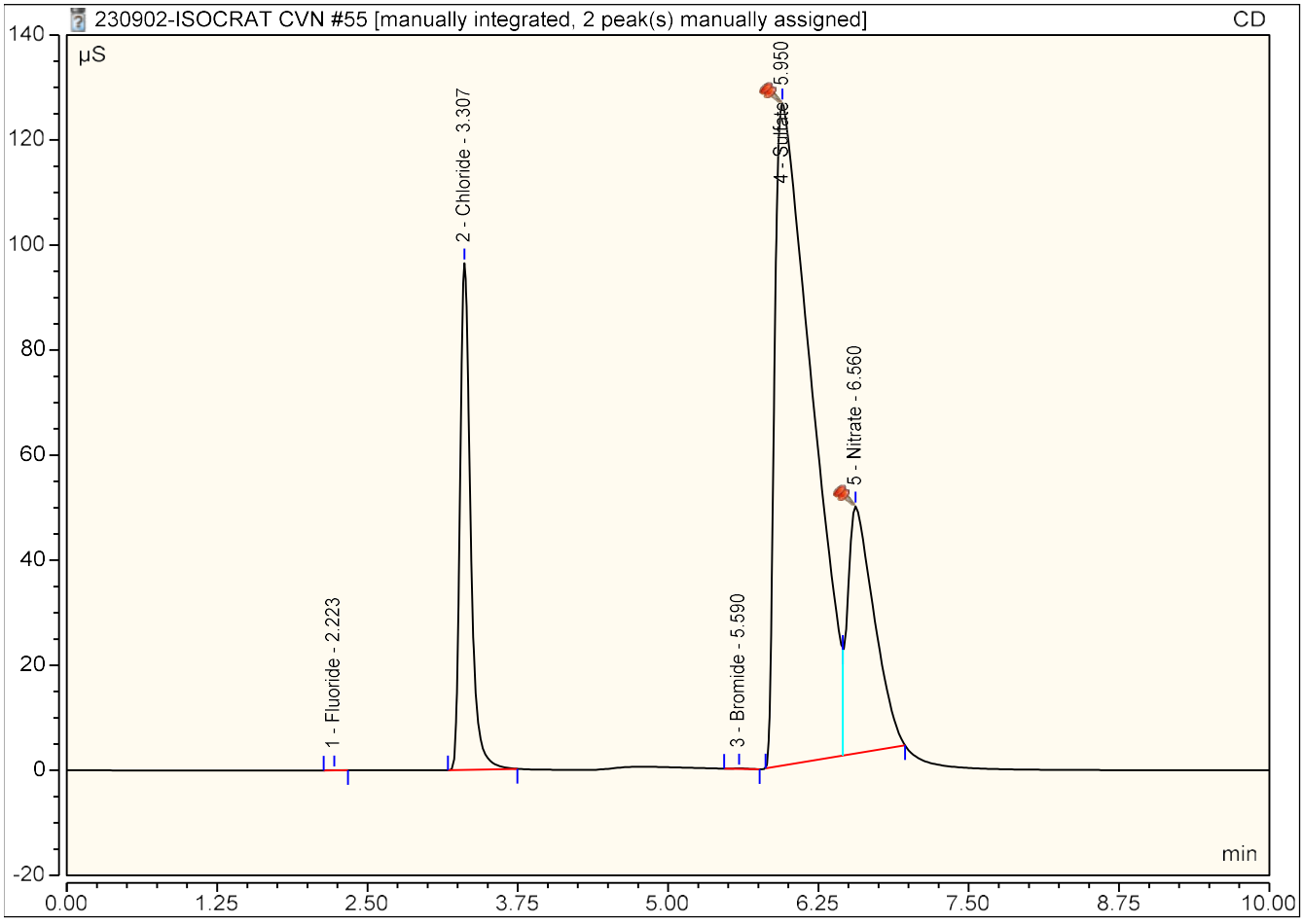
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.25	**Fluoride**	BMB	0.004	0.037	0.0378
3	3.31	**Chloride**	BMB	18.183	172.544	43.2765
4	5.63	**Bromide**	BMB	0.009	0.075	0.1227
5	6.05	**Sulfate**	BM *	33.446	99.492	110.2874
6	6.76	**Nitrate**	MB*	1.579	8.046	1.4531
TOTAL:				53.22	280.19	155.18



Peak Integration Report

Sample Name:	**L2350269-07**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 18:56**	*Run Time:*	**10.00**

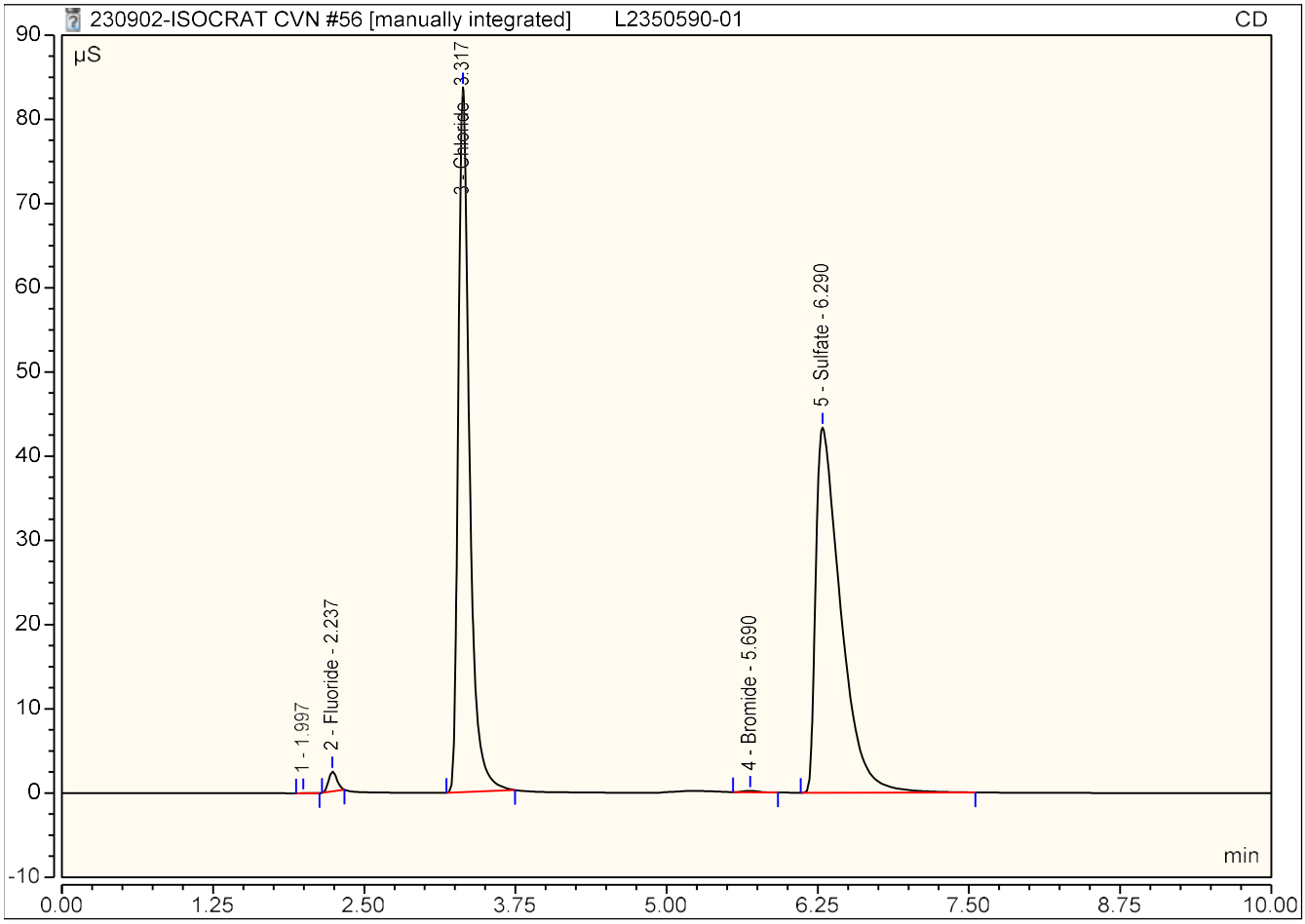
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.22	**Fluoride**	BMB	0.004	0.049	0.0388
2	3.31	**Chloride**	BMB	9.825	96.504	23.4075
3	5.59	**Bromide**	BMB	0.012	0.101	0.1413
4	5.95	**Sulfate**	BM *^	44.897	126.073	148.0280
5	6.56	**Nitrate**	MB*^	12.020	47.061	10.9154
TOTAL:				66.76	269.79	182.53



Peak Integration Report

Sample Name:	**L2350590-01**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 19:08**	*Run Time:*	**10.00**

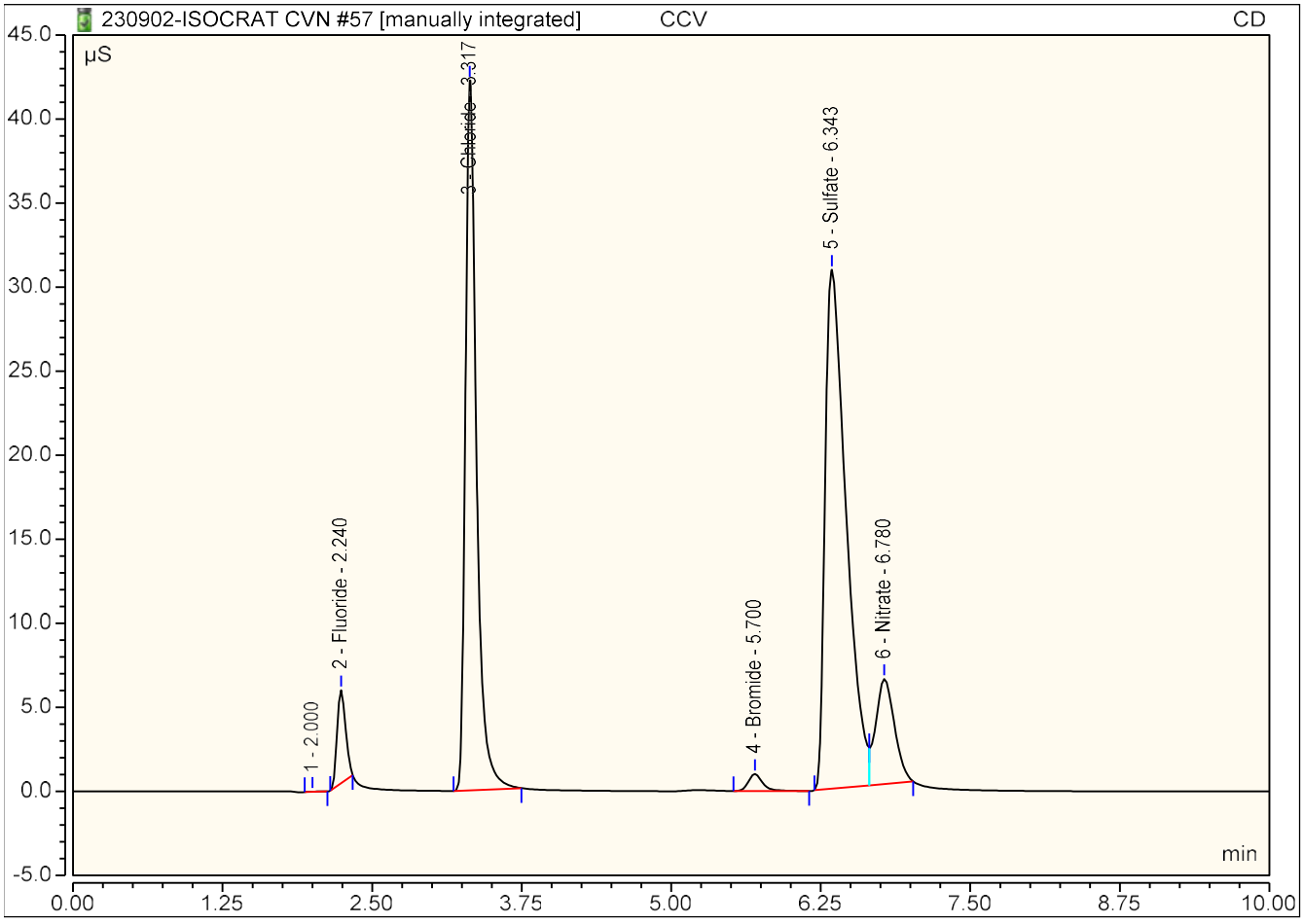
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	0.190	2.385	0.4284
3	3.32	**Chloride**	BMB	9.061	83.678	21.5891
4	5.69	**Bromide**	BMB	0.023	0.179	0.2104
5	6.29	**Sulfate**	BMB*	10.385	43.352	34.2810
TOTAL:				19.66	129.59	56.51



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 19:20**	*Run Time:*	**10.00**

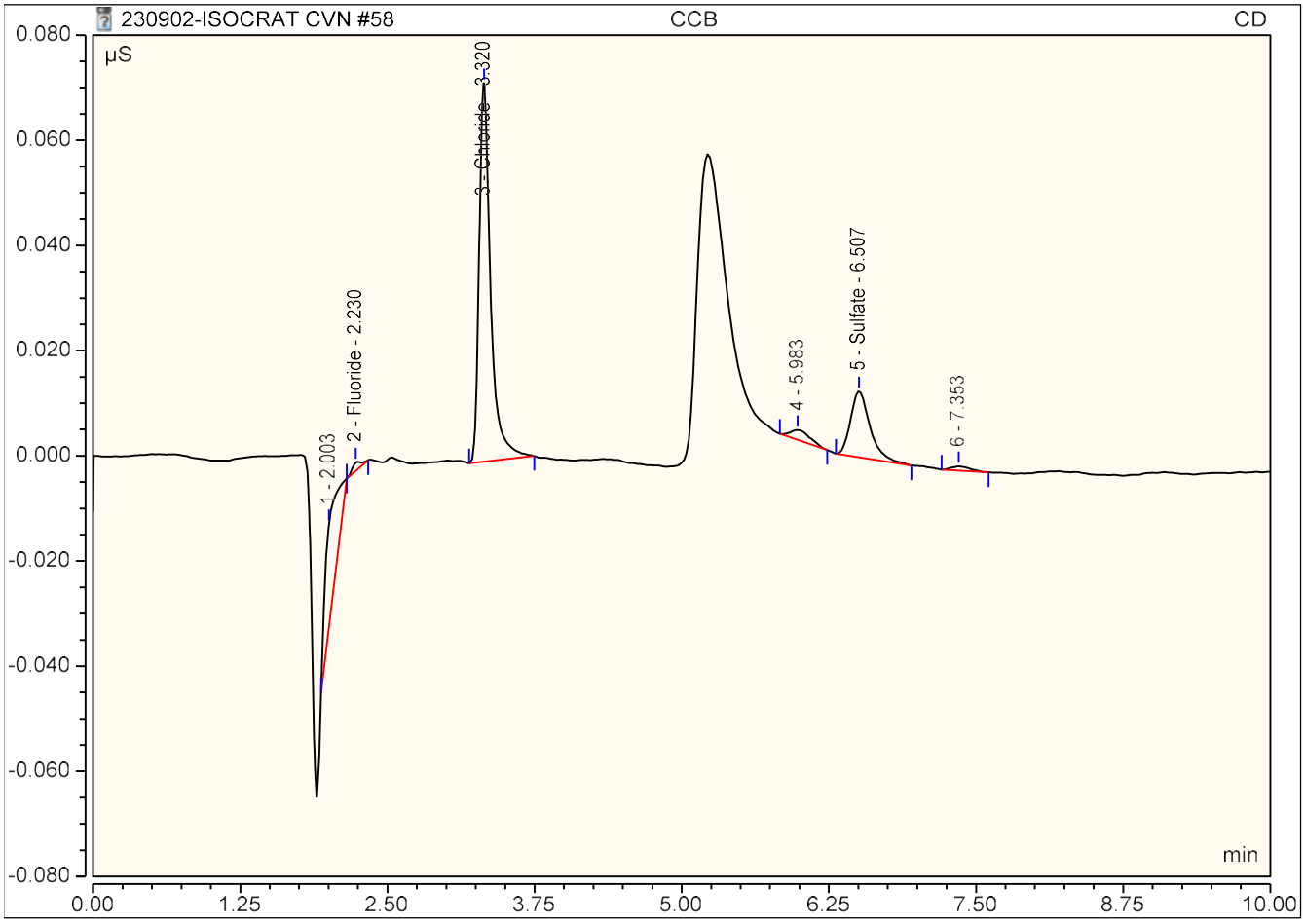
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	0.455	5.536	0.9824
3	3.32	**Chloride**	BMB	4.527	42.233	10.8100
4	5.70	**Bromide**	BMB	0.141	1.012	0.9636
5	6.34	**Sulfate**	BM *	6.279	30.860	20.7475
6	6.78	**Nitrate**	MB*	1.142	6.249	1.0567
TOTAL:				12.54	85.89	34.56



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 19:32**	*Run Time:*	**10.00**

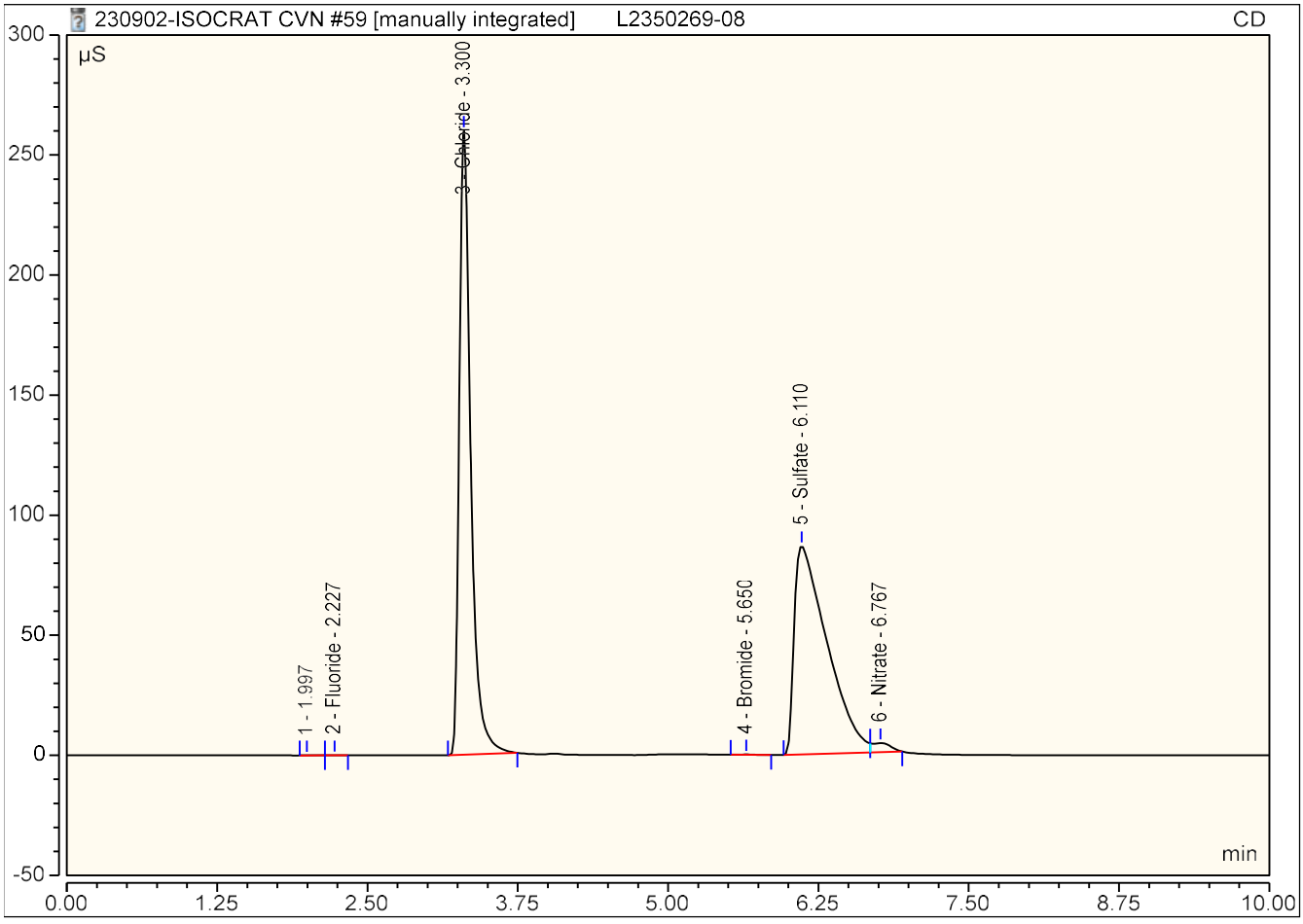
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.000	0.002	0.0304
3	3.32	**Chloride**	BMB	0.008	0.072	0.0674
5	6.51	**Sulfate**	BMB	0.002	0.013	0.0621
TOTAL:				0.01	0.09	0.16



Peak Integration Report

Sample Name:	**L2350269-08**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 19:45**	*Run Time:*	**10.00**

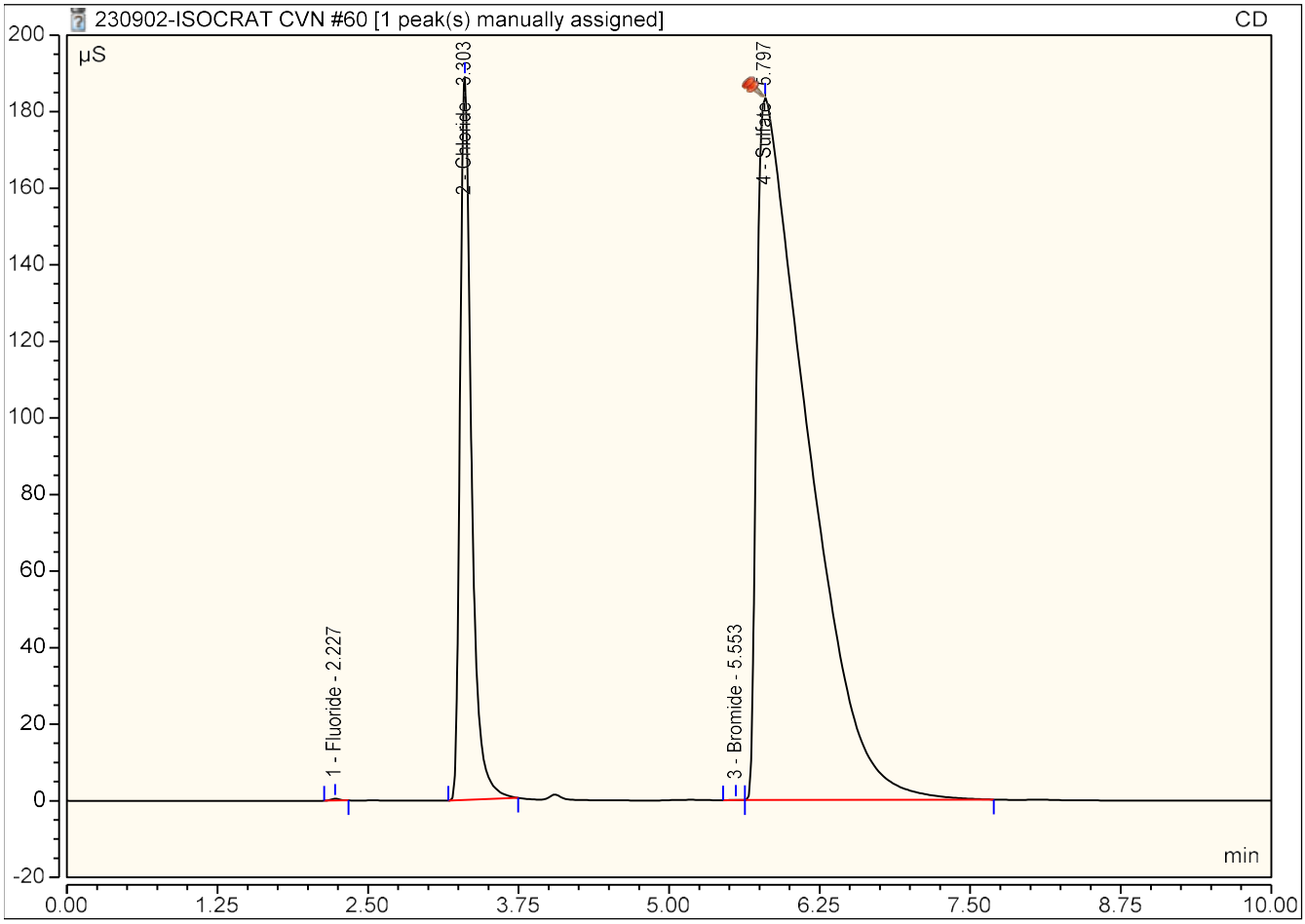
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.004	0.054	0.0394
3	3.30	**Chloride**	BMB	28.781	259.860	68.4738
4	5.65	**Bromide**	BMB	0.021	0.169	0.1966
5	6.11	**Sulfate**	BM *	27.394	86.812	90.3412
6	6.77	**Nitrate**	MB*	0.687	3.805	0.6444
TOTAL:				56.89	350.70	159.70



Peak Integration Report

Sample Name:	**L2350269-09**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 19:57**	*Run Time:*	**10.00**

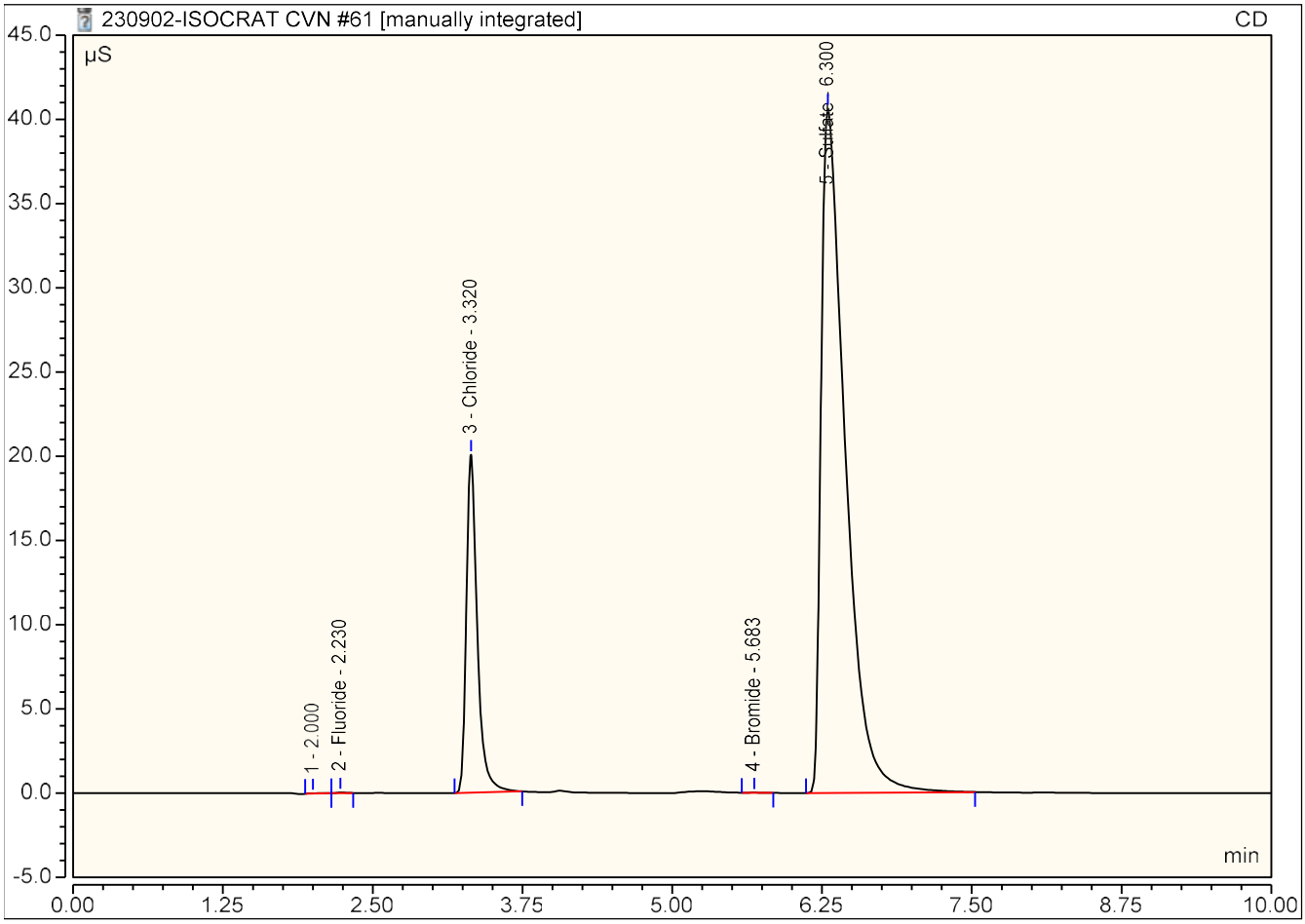
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
1	2.23	**Fluoride**	BMB	0.041	0.490	0.1149
2	3.30	**Chloride**	BMB	20.801	188.898	49.5021
3	5.55	**Bromide**	BMB	0.009	0.095	0.1197
4	5.80	**Sulfate**	BMB^	89.834	183.509	296.1298
TOTAL:				110.68	372.99	345.87



Peak Integration Report

Sample Name:	**L2350269-09; 10X**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 20:09**	*Run Time:*	**10.00**

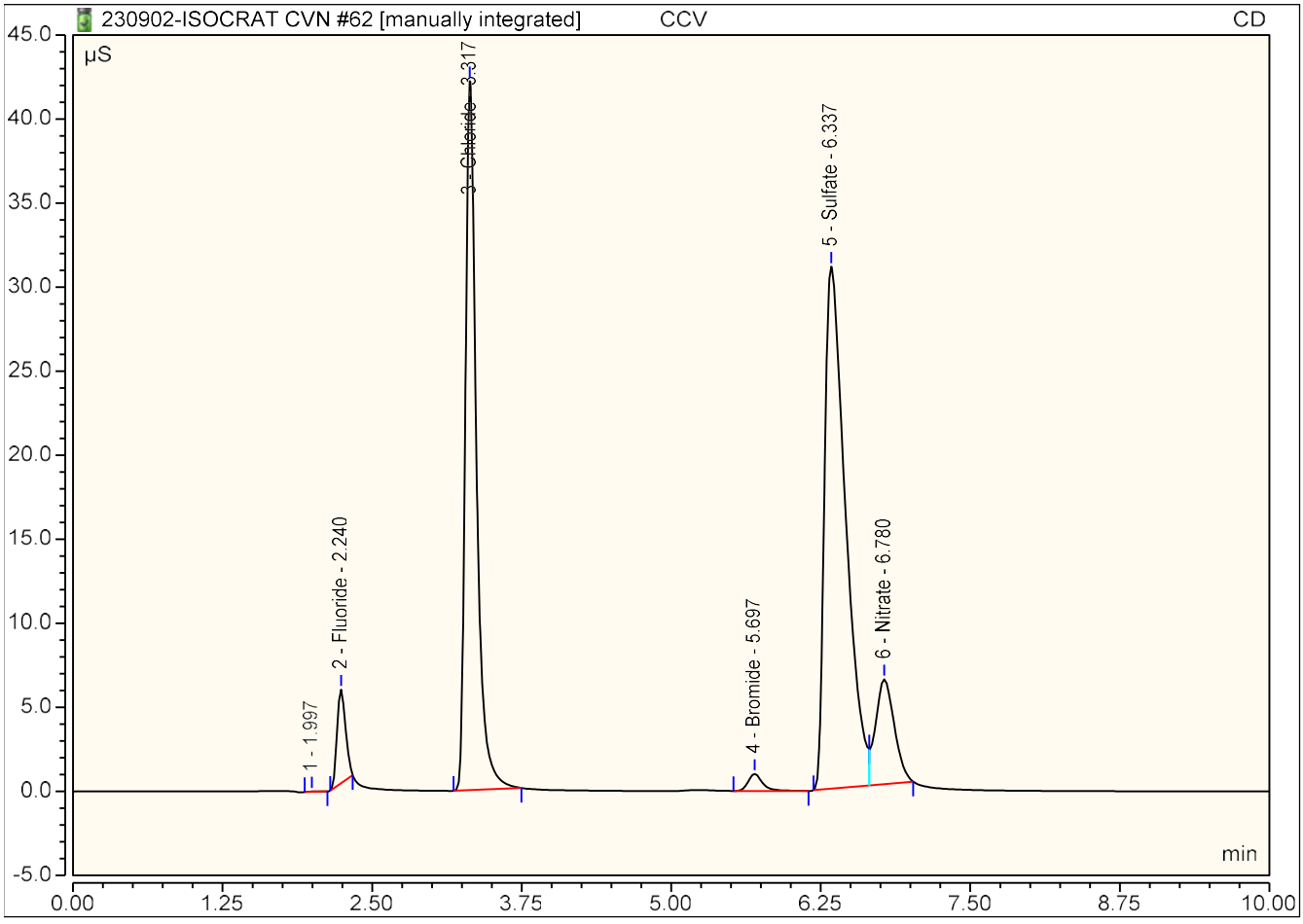
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.23	**Fluoride**	BMB	0.003	0.039	0.0367
3	3.32	**Chloride**	BMB	2.117	20.060	5.0815
4	5.68	**Bromide**	BMB	0.001	0.011	0.0713
5	6.30	**Sulfate**	BMB*	9.504	40.632	31.3788
TOTAL:				11.63	60.74	36.57



Peak Integration Report

Sample Name:	**CCV**	*Inj. Vol.:*	**25.00**
Injection Type:	**Check Standard**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 20:21**	*Run Time:*	**10.00**

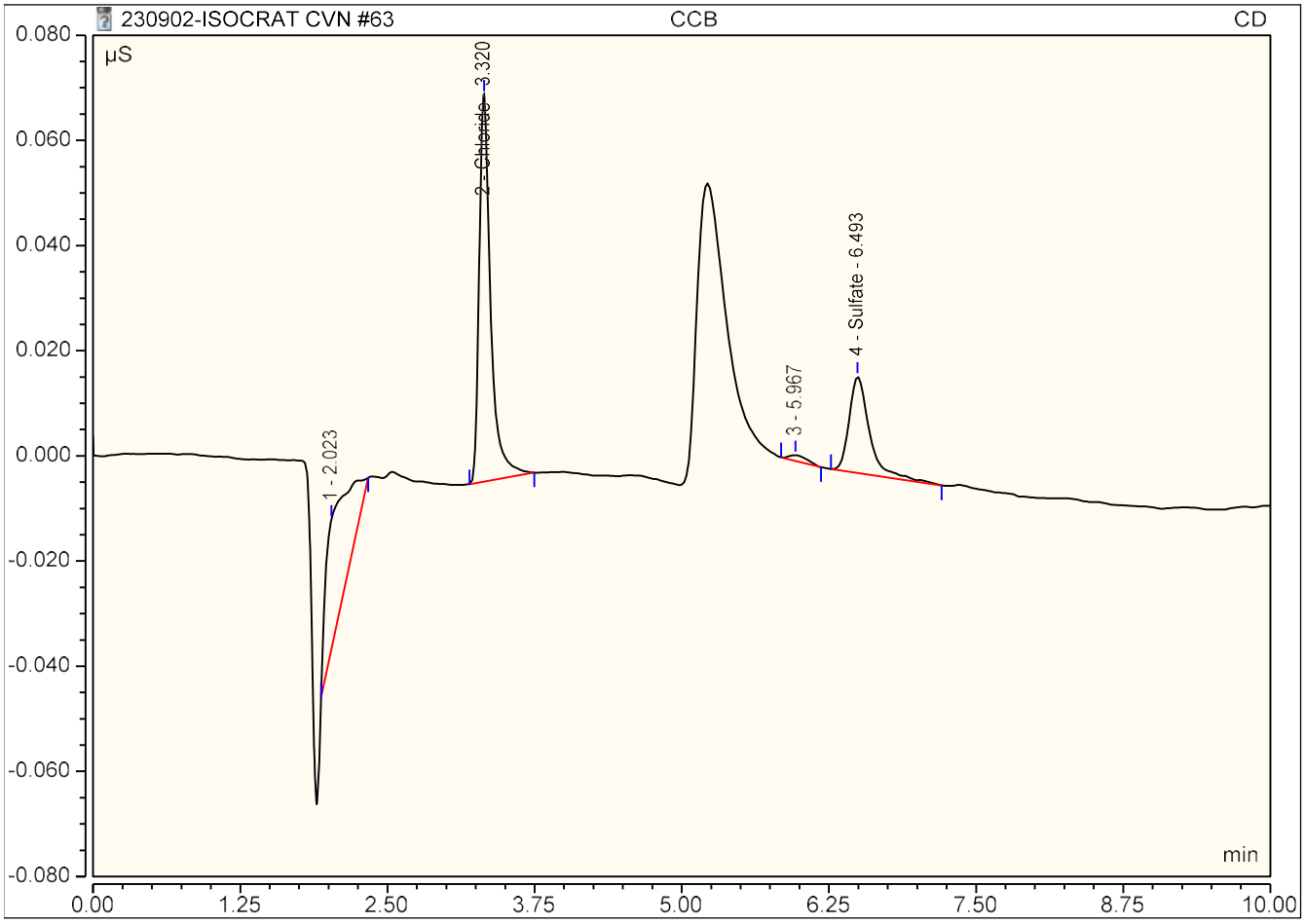
No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	2.24	**Fluoride**	BMB	0.459	5.574	0.9890
3	3.32	**Chloride**	BMB	4.526	42.187	10.8076
4	5.70	**Bromide**	BMB	0.142	1.014	0.9664
5	6.34	**Sulfate**	BM *	6.312	31.047	20.8575
6	6.78	**Nitrate**	MB*	1.134	6.237	1.0495
TOTAL:				12.57	86.06	34.67



Peak Integration Report

Sample Name:	**CCB**	*Inj. Vol.:*	**25.00**
Injection Type:	**Unknown**	*Dilution Factor:*	**1.0000**
Instrument Method:	**Anions_050420_ThermoFisher**	*Operator:*	**IC 4**
Inj. Date / Time:	**02-Sep-2023 / 20:33**	*Run Time:*	**10.00**

No.	Time min	Peak Name	Peak Type	Area µS*min	Height µS	Amount
2	3.32	**Chloride**	BMB	0.008	0.074	0.0678
4	6.49	**Sulfate**	BMB	0.004	0.018	0.0663
TOTAL:				0.01	0.09	0.13



Anion Summary Report

No.	Name	Dilution	Amount CD Fluoride	Amount CD Chloride	Amount CD Nitrate	Amount CD Sulfate	Amount CD Bromide
1	BLANK	1.0	n.a.	0.0513	n.a.	0.0585	n.a.
2	STD 0.5	1.0	0.0445	0.2357	0.0409	0.4012	0.0812
3	STD 1.0	1.0	0.0618	0.4734	0.0617	0.8517	0.0990
4	STD 2.0	1.0	0.1823	1.9558	0.1933	3.8911	0.2073
5	STD 3.0	1.0	0.4682	5.1293	0.4904	10.2541	0.4564
6	STD 4.0	1.0	2.0241	19.9443	1.9796	40.2016	1.8797
7	STD 5.0	1.0	4.9940	50.0115	5.0092	99.9003	5.0514
8	RINSE	1.0	0.0308	0.0815	n.a.	0.0592	n.a.
9	CCV	1.0	1.0110	10.7816	1.0529	20.6291	1.0205
10	CCB	1.0	0.0304	0.0732	0.0225	0.0645	n.a.
11	ICV	1.0	0.8089	8.5889	0.8575	8.2780	0.8504
12	ICB	1.0	0.0304	0.0740	0.0225	0.0545	n.a.
13	BLANK	1.0	0.0306	0.0744	n.a.	0.0586	n.a.
14	LCS	1.0	0.7889	8.5636	0.8518	8.2530	0.8388
15	L2350269-01 BR CL F SO4; 10X	10.0	0.3709	49.5702	n.a.	301.1088	0.7135
16	XL2350269-02;10X	10.0	0.3503	7.1333	1.2895	73.9362	n.a.
17	XL2350269-03; 10X	10.0	0.3486	8.1727	2.2107	83.3945	n.a.
18	L2350269-04; 10X	10.0	0.3079	129.0091	0.4480	4.7626	n.a.
19	XL2350269-05; 10X	10.0	n.a.	12.6347	1.0375	23.3442	n.a.
20	L2350269-06;10X	10.0	n.a.	44.3976	1.3380	114.9132	0.6494
21	CCV	1.0	0.9506	10.8000	1.0548	20.6590	0.9766
22	CCB	1.0	0.0306	0.0673	n.a.	0.0608	n.a.
23	L2350267-07; 10X	10.0	n.a.	23.6746	11.1889	158.3560	0.6573
24	L2350269-08; 10X	10.0	0.3075	71.1593	0.6364	93.2454	0.7080
25	XL2350269-09; 10X	10.0	0.3620	50.7260	n.a.	313.3184	0.7077
26	XL2350590-01; 10X	10.0	0.5711	22.0376	n.a.	34.7662	0.7408
27	L2351101-06 BR CL SO4	1.0	0.2892	83.1034	n.a.	99.4695	0.6907
28	L2351101-06; 10X	10.0	0.5028	84.5828	n.a.	108.9581	1.0284
29	L2351101-08 MS	1.0	0.7785	15.4644	0.4155	37.1861	0.4024
30	L2351101-08 DUP	1.0	0.4277	11.9272	n.a.	31.4369	0.1106
31	L2351101-08	1.0	0.4294	11.9099	n.a.	31.3798	0.1115
32	L2351101-10; 10X	10.0	0.4289	78.8718	n.a.	32.6941	0.7992
33	CCV	1.0	0.9421	10.7923	1.0510	20.6349	0.9602
34	CCB	1.0	0.0305	0.0674	0.0241	0.0570	n.a.
35	L2351101-10	1.0	0.1969	76.6076	n.a.	33.1258	0.3811
36	L2351101-12	1.0	0.1313	135.2452	0.1123	44.4571	0.6301
37	L2351101-12; 10X	10.0	0.3842	141.2487	n.a.	45.4637	0.9811
38	L2350946-01 BR	1.0	0.0405	37.5447	3.3303	17.8434	n.a.
39	L2350946-02	1.0	0.0355	6.8761	2.8182	10.1118	0.0657
40	L2350946-03	1.0	0.0684	8.0176	n.a.	24.7303	n.a.
41	L2350946-04	1.0	0.0356	6.8593	2.7996	10.1150	0.0656
42	L2350946-06	1.0	n.a.	0.0564	0.0230	0.0611	n.a.
43	L2350797-03 BR CL SO4	1.0	0.7860	24.0034	n.a.	52.3848	0.1141

44	XL2350797-03; 10X	10.0	0.8521	23.7939	n.a.	52.4705	0.6460
45	CCV	1.0	0.9619	10.8017	1.0571	20.6763	0.9580
46	CCB	1.0	0.0304	0.0671	0.0240	0.0559	n.a.
47	L2350269-01	1.0	0.1133	49.6373	n.a.	292.5645	0.1242
48	L2350269-02	1.0	0.0888	7.3867	1.3415	72.9065	n.a.
49	L2350269-03	1.0	0.0879	8.4144	2.3217	81.0097	0.0718
50	L2350269-04	1.0	0.0451	122.6407	0.4408	5.9271	0.0742
51	L2350269-05 MS	1.0	0.3846	16.3936	1.3725	31.3905	0.3693
52	L2350269-05 DUP	1.0	0.0337	12.4915	0.9726	23.9461	0.0787
53	L2350269-05	1.0	0.0336	12.5094	0.9686	24.0000	0.0790
54	L2350269-06	1.0	0.0378	43.2765	1.4531	110.2874	0.1227
55	L2350269-07	1.0	0.0388	23.4075	10.9154	148.0280	0.1413
56	L2350590-01	1.0	0.4284	21.5891	n.a.	34.2810	0.2104
57	CCV	1.0	0.9824	10.8100	1.0567	20.7475	0.9636
58	CCB	1.0	0.0304	0.0674	n.a.	0.0621	n.a.
59	L2350269-08	1.0	0.0394	68.4738	0.6444	90.3412	0.1966
60	L2350269-09	1.0	0.1149	49.5021	n.a.	296.1298	0.1197
61	L2350269-09; 10X	1.0	0.0367	5.0815	n.a.	31.3788	0.0713
62	CCV	1.0	0.9890	10.8076	1.0495	20.8575	0.9664
63	CCB	1.0	n.a.	0.0678	n.a.	0.0663	n.a.
	Sum:	189.000	24.9419		63.9781	3372.0569	27.1720
	Average:	3.000	0.4376		1.5995	53.5247	0.6038
	Rel.Std.Dev:	125.724 %	1.6673		1.5189	1.4110	1.3108

Inject Time	Comment
17/Jul/2023 16:39	AU
17/Jul/2023 16:52	LOT#230717-0.5
17/Jul/2023 17:04	LOT#230717-1.0
17/Jul/2023 17:16	LOT#230717-2.0
17/Jul/2023 17:28	LOT#230717-3.0
17/Jul/2023 17:40	LOT#230717-4.0
17/Jul/2023 17:52	LOT#230717-5.0
02/Sep/2023 09:28	WG1823251-3254
02/Sep/2023 09:40	LOT#230901-C
02/Sep/2023 09:52	CVN
02/Sep/2023 10:04	LOT#230826-I
02/Sep/2023 10:16	CVN
02/Sep/2023 10:29	CVN
02/Sep/2023 10:41	LOT#230826-I
02/Sep/2023 10:53	CVN
02/Sep/2023 11:05	CVN
02/Sep/2023 11:17	CVN
02/Sep/2023 11:29	CVN
02/Sep/2023 11:41	CVN
02/Sep/2023 11:53	CVN
02/Sep/2023 12:05	LOT#230901-C
02/Sep/2023 12:17	CVN
02/Sep/2023 12:30	CVN
02/Sep/2023 12:42	CVN
02/Sep/2023 12:54	CVN
02/Sep/2023 13:06	CVN
02/Sep/2023 13:18	CVN
02/Sep/2023 13:30	CVN
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02/Sep/2023 15:07	CVN
02/Sep/2023 15:19	CVN
02/Sep/2023 15:31	CVN
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02/Sep/2023 16:07	CVN
02/Sep/2023 16:19	CVN
02/Sep/2023 16:31	CVN

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02/Sep/2023 17:44	CVN
02/Sep/2023 17:56	CVN
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02/Sep/2023 18:32	CVN
02/Sep/2023 18:44	CVN
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02/Sep/2023 19:45	CVN
02/Sep/2023 19:57	CVN
02/Sep/2023 20:09	CVN
02/Sep/2023 20:21	LOT#230901-C
02/Sep/2023 20:33	CVN
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Quality Control

Form 5a
Matrix Spike

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-5S	**Matrix**	: WATER
Lab Sample ID	: L2350269-05		
Matrix Spike	: WG1823254-7	**MS Analysis Date**	: 09/02/23 18:08
Matrix Spike Dup	:	**MSD Analysis Date**	:

		Matrix Spike Sample				Matrix Spike Duplicate					
Parameter	Sample Conc. (mg/l)	Spike Added (mg/l)	Spike Conc. (mg/l)	%R		Spike Added (mg/l)	Spike Conc. (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Bromide	0.079	0.4	0.369	72	Q					90-110	20
Chloride	12.5	4	16.4	98						90-110	18
Fluoride	ND	0.4	0.385	96						90-110	15
Sulfate	24.0	8	31.4	92						90-110	20

Form 6
Lab Duplicates

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: MW-5S	**Matrix**	: WATER
Lab Sample ID	: L2350269-05	**Analysis Date**	: 09/02/23 18:32
Dup Sample ID	: WG1823254-8	**DUP Analysis Date**	: 09/02/23 18:20

Parameter	Sample Concentration (mg/l)	Duplicate Concentration (mg/l)	RPD	RPD Limit
Bromide	0.079	0.078	0	20
Chloride	12.5	12.5	0	18
Fluoride	ND	ND	NC	15
Sulfate	24.0	23.9	0	20

Form 7
Laboratory Control Sample

Client	: Alpha Geoscience	**Lab Number**	: L2350269
Project Name	: HUNTINGTON READY MIX	**Project Number**	: 20116
Client Sample ID	: NA	**Matrix**	: WATER
Lab Sample ID	: WG1823254-6	**LCS Analysis Date**	: 09/02/23 10:41
Dup Sample ID	:	**LCSD Analysis Date**	:

	Laboratory Control Sample			Laboratory Control Duplicate					
Parameter	True (mg/l)	Found (mg/l)	%R	True (mg/l)	Found (mg/l)	%R	RPD	Recovery Limits	RPD Limit
Bromide	0.800	0.839	105.					90-110	20
Chloride	8.00	8.56	107.					90-110	18
Fluoride	0.800	0.789	99.					90-110	15
Sulfate	8.00	8.25	103.					90-110	20

Date Created: 11/11/21
Created By: Jason Hebert
File: PM11467-1
Page: 1

WETCHEM (WATER)

Analyte	CAS #	RL	MDL	Units	LCS Criteria	LCS RPD	MS Criteria	MS RPD	Duplicate RPD	Method	Holding Time	Container/Sample Preservation
Bromide	24959-67-9	0.05	0.0132	mg/l	90-110		90-110	20	20	300.0	28 days	1 - Plastic 250ml unpreserved
Chloride	16887-00-6	0.5	0.0839	mg/l	90-110		64-148	18	18	9056	28 days	1 - Plastic 250ml unpreserved
Chloride	16887-00-6	0.5	0.0839	mg/l	90-110		90-110	18	18	300.0	28 days	1 - Plastic 250ml unpreserved
Fluoride	16984-48-8	0.05	0.037	mg/l	90-110		81-124	15	15	9056	28 days	1 - Plastic 500ml unpreserved
Fluoride	16984-48-8	0.05	0.037	mg/l	90-110		90-110	15	15	300.0	28 days	1 - Plastic 500ml unpreserved
Nitrogen, Nitrate	14797-55-8	0.05	0.0128	mg/l	90-110		90-110	15	15	300.0	48 hours	1 - Plastic 250ml unpreserved
Nitrogen, Nitrate	14797-55-8	0.05	0.0128	mg/l	90-110		80-120	15	15	9056	48 hours	1 - Plastic 250ml unpreserved
Sulfate	14808-79-8	1	0.454	mg/l	90-110		72-124	20	20	9056	28 days	1 - Plastic 500ml unpreserved
Sulfate	14808-79-8	1	0.454	mg/l	90-110		90-110	20	20	300.0	28 days	1 - Plastic 500ml unpreserved

Please Note that the RL information provided in this table is calculated using a 100% Solids factor. (Soil/Solids only)
Please Note that the information provided in this table is subject to change at anytime at the discretion of Alpha Analytical, Inc.

Calculations of Anions by Ion Chromatography

Aqueous samples:

The Dionex calculates the area of the peaks produced by the instrument, compares them to the peak area of the calibration standard stored in its memory, and calculates result in mg/L.

If the sample was manually diluted prior to analysis, the calculated mean must be manually multiplied by the dilution factor. The Reported Detection Limit is also multiplied by the same dilution factor.

$$\text{Result, mg/L} = \frac{\text{area - y-intercept}}{\text{slope}} \times \text{Dilution Factor}$$

Subcontracted Data

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

September 19, 2023

Melissa Gulli
Alpha Analytical
8 Walkup Drive
Westborough, MA 01581

RE: Project: L2350269
Pace Project No.: 30618113

Dear Melissa Gulli:

Enclosed are the analytical results for sample(s) received by the laboratory on August 31, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Indianapolis

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Skyler C. Richmond
skyler.richmond@pacelabs.com
(724)850-5600
Project Manager

Enclosures

cc: Customer Service, Alpha Analytical

Pace Analytical Services, LLC
1638 Roseytown Road - Suites 2,3,4
Greensburg, PA 15601
(724)850-5600

CERTIFICATIONS

Project: L2350269
Pace Project No.: 30618113

Pace Analytical Services Indianapolis
7726 Moller Road, Indianapolis, IN 46268
Illinois Accreditation #: 200074
Indiana Drinking Water Laboratory #: C-49-06
Kansas/TNI Certification #: E-10177
Kentucky UST Agency Interest #: 80226
Kentucky WW Laboratory ID #: 98019
Michigan Drinking Water Laboratory #9050
Ohio VAP Certified Laboratory #: CL0065
Oklahoma Laboratory #: 9204
Texas Certification #: T104704355
Wisconsin Laboratory #: 999788130
USDA Foreign Soil Permit #: 525-23-13-23119
USDA Compliance Agreement #: IN-SL-22-001

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: L2350269
Pace Project No.: 30618113

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
30618113001	**MW-1S**	EPA 9056	KBB	1	PASI-I
30618113002	**MW-2S**	EPA 9056	KBB	1	PASI-I
30618113003	**MW-3S**	EPA 9056	KBB	1	PASI-I
30618113004	**MW-4D**	EPA 9056	KBB	1	PASI-I
30618113005	**MW-5S**	EPA 9056	KBB	1	PASI-I
30618113006	**MW-6D**	EPA 9056	KBB	1	PASI-I
30618113007	**MW-7S**	EPA 9056	KBB	1	PASI-I
30618113008	**MW-8S**	EPA 9056	KBB	1	PASI-I
30618113009	**DUP**	EPA 9056	KBB	1	PASI-I

PASI-I = Pace Analytical Services - Indianapolis

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ANALYTICAL RESULTS

Project: L2350269
Pace Project No.: 30618113

Sample: MW-1S **Lab ID: 30618113001** Collected: 08/28/23 16:52 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 13:58		

Sample: MW-2S **Lab ID: 30618113002** Collected: 08/28/23 15:34 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 14:24		

Sample: MW-3S **Lab ID: 30618113003** Collected: 08/28/23 14:38 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 14:49		

Sample: MW-4D **Lab ID: 30618113004** Collected: 08/29/23 10:16 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 16:05		

Sample: MW-5S **Lab ID: 30618113005** Collected: 08/29/23 09:10 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 16:31		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: L2350269
Pace Project No.: 30618113

Sample: MW-6D **Lab ID: 30618113006** Collected: 08/28/23 17:51 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 18:12		

Sample: MW-7S **Lab ID: 30618113007** Collected: 08/28/23 16:35 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 18:38		

Sample: MW-8S **Lab ID: 30618113008** Collected: 08/28/23 14:30 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 19:03		

Sample: DUP **Lab ID: 30618113009** Collected: 08/28/23 00:00 Received: 08/31/23 10:05 Matrix: Water

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
9056 Iodide by IC	Analytical Method: EPA 9056 Pace Analytical Services - Indianapolis							
Iodide	ND	mg/L	0.50	1		09/13/23 19:28		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: L2350269
Pace Project No.: 30618113

QC Batch: 751654 — Analysis Method: EPA 9056
QC Batch Method: EPA 9056 — Analysis Description: 9056 Iodide by IC
Laboratory: Pace Analytical Services - Indianapolis
Associated Lab Samples: 30618113001, 30618113002, 30618113003, 30618113004, 30618113005, 30618113006, 30618113007, 30618113008, 30618113009

METHOD BLANK: 3444519 — Matrix: Water
Associated Lab Samples: 30618113001, 30618113002, 30618113003, 30618113004, 30618113005, 30618113006, 30618113007, 30618113008, 30618113009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iodide	mg/L	ND	0.50	09/13/23 13:07	

LABORATORY CONTROL SAMPLE: 3444520

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iodide	mg/L	5	5.3	106	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3444521 3444522

Parameter	Units	30618113001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Qual
Iodide	mg/L	ND	5	5	4.7	4.7	93	93	80-120	0	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: L2350269
Pace Project No.: 30618113

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

TNTC - Too Numerous To Count

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: L2350269
Pace Project No.: 30618113

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
30618113001	**MW-1S**	EPA 9056	751654		
30618113002	**MW-2S**	EPA 9056	751654		
30618113003	**MW-3S**	EPA 9056	751654		
30618113004	**MW-4D**	EPA 9056	751654		
30618113005	**MW-5S**	EPA 9056	751654		
30618113006	**MW-6D**	EPA 9056	751654		
30618113007	**MW-7S**	EPA 9056	751654		
30618113008	**MW-8S**	EPA 9056	751654		
30618113009	**DUP**	EPA 9056	751654		

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Subcontract Chain of Custody

Pace Analytical
1638 Roseytown Rd, Suite 2
Greensburg, PA 15601

Alpha Job Number
L2350269

Client Information

Client: Alpha Analytical Labs
Address: Eight Walkup Drive
Westborough, MA 01581-1019

Phone: 716.427.5229
Email: mdeyo@alphalab.com

Project Information

Project Location: NY
Project Manager: Melissa Deyo

Turnaround & Deliverables Information

Due Date: 09/13/23
Deliverables:

Regulatory Requirements/Report Limits

State/Federal Program:
Regulatory Criteria:

Project Specific Requirements and/or Report Requirements

Reference following Alpha Job Number on final report/deliverables: L2350269

Report to include Method Blank, LCS/LCSD:

Additional Comments: Send all results/reports to subreports@alphalab.com ; report to the MDL

Lab ID	Client ID	Collection Date/Time	Sample Matrix	Analysis	Batch QC
	MW-1S	08-28-23 16:52	WATER	Iodide	001
	MW-2S	08-28-23 15:34	WATER	Iodide	002
	MW-3S	08-28-23 14:38	WATER	Iodide	003
	MW-4D	08-29-23 10:16	WATER	Iodide	004
	MW-5S	08-29-23 09:10	WATER	Iodide	005
	MW-6D	08-28-23 17:51	WATER	Iodide	006
	MW-7S	08-28-23 16:35	WATER	Iodide	007
	MW-8S.	08-28-23 14:30	WATER	Iodide	008
	DUP	08-28-23 00:00	WATER	Iodide	009

WO#: 30618113

30618113

Received by Pace Greensburg
Therm ID 11 Corr Factor +/- 0.0
Receipt Temp 0.8
Corrected Temp 0.8
Correct Preservation Y N

Relinquished By:	Date/Time:	Received By:	Date/Time:
	8/30/23		8/31/23 1005

Form No: AL_subcoc

DC#_Title: ENV-FRM-GBUR-0088 v05_Sample Condition Upon Receipt-Pittsburgh

Effective Date: 07/06/2023

WO#: 30618113

PM: SCR Due Date: 09/22/23

CLIENT: ALPHA ANALYT

Client Name: Alpha

Courier: ☐ Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other

Tracking Number: 1Z E30664 01 9295 0824

Initial / Date

Examined By: TH 8/31/23

Labeled By: TH 8/31/23

Temped By: LA 8-31-23

Custody Seal on Cooler/Box Present: ☐ Yes ☑ No **Seals Intact:** ☐ Yes ☑ No

Thermometer Used: 17 **Type of Ice:** (Wet) Blue None

Cooler Temperature: Observed Temp 0.8 °C Correction Factor: +0.0 °C Final Temp: 0.8 °C

Temp should be above freezing to 6°C

pH paper Lot# WQ0931 | D.P.D. Residual Chlorine Lot # —

Comments:	Yes	No	NA	
Chain of Custody Present	J			1.
Chain of Custody Filled Out:	J			2.
-Were client corrections present on COC		J		
Chain of Custody Relinquished	J			3.
Sampler Name & Signature on COC:		J		4.
Sample Labels match COC:	J			5.
-Includes date/time/ID Matrix:	WT			
Samples Arrived within Hold Time:	J			6.
Short Hold Time Analysis (<72hr remaining):		J		7.
Rush Turn Around Time Requested:		J		8.
Sufficient Volume:	J			9.
Correct Containers Used:	J			10.
-Pace Containers Used		J		
Containers Intact:	J			11.
Orthophosphate field filtered:			J	12.
Hex Cr Aqueous samples field filtered:			J	13.
Organic Samples checked for dechlorination			J	14:
Filtered volume received for dissolved tests:			J	15:
All containers checked for preservation:	J			16.
exceptions: VOA, coliform, TOC, O&G, Phenolics, Radon, non-aqueous matrix				unpreserved.
All containers meet method preservation requirements:	J			Initial when completed TH; Date/Time of Preservation; Lot# of added Preservative
8260C/D: Headspace in VOA Vials (> 6mm)			J	17.
624.1: Headspace in VOA Vials (0mm)			J	18.
Trip Blank Present:			J	Trip blank custody seal present? YES or NO
Rad Samples Screened <0.5 mrem/hr.	/			Initial when completed JS; Date: 8/31/23; Survey Meter SN: 1563

Comments:

Note: For NC compliance samples with discrepancies, a copy of this form must be sent to the DEHNR Certification office.
PM Review is documented electronically in LIMS through the SRF Review schedule in the Workorder Edit Screen.

Qualtrax ID: 55680

Page 1 of 1